ENFIELD PLANNING AND ZONING COMMISSION
REGULAR MEETING
AGENDA
THURSDAY, JULY 23, 2020 – 7:00 p.m.

Join OfficeSuite Meeting
https://meeting.windstream.com/j/1127920944

Meeting ID: 112 792 0944

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Meeting ID: 112 792 0944

Application materials are available for review at: https://www.enfield-ct.gov/707/Planning-Zoning-Commission

The meeting will be streamed live on YouTube at: https://youtu.be/yQrdsim4AgA

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1. **Call to Order & Pledge of Allegiance**
2. **Roll Call**
3. **Approval of Minutes**
   a. July 9, 2020 – Regular Meeting
4. **Public Participation**
5. **Bond Release(s)**
6. **Continued Public Hearings**
7. **New Public Hearings**
   a. **PH# 2973 –** 55 Cottage Road – Special Permit application for a home addition located within the Lake Overlay District; Randy Daigle, owner/applicant; Map 80/Lot 178; R-33 Zone. - ***Tabled***
   b. **PH# 2979 –** 25 & 39 Hazard Avenue – Special Use Permit application to demolish the existing building at 39 Hazard Avenue and replace with a new building with a restaurant tenant with a drive-thru and two outdoor dining areas. Leo BHW LTD, LLC, Owner; Eric Kelly, Applicant Representative; Map 45/ Lot 002 and 008; BR Zone.
   c. **PH# 2080 –** 118 Hazard Avenue – Site Plan Review application for the proposed construction of a new two-story 29,000 sq. ft. 'All American Assisted Living' facility along with new paved parking areas, landscaping, storm water management components and associated utilities; Ward Manor, LLC, Owner; Ben Wells, Applicant Representative; Map 65/ Lot 59; B-P and R-44 Zone.
8. **Old Business**
9. **New Business**

DoR – Date of Receipt
MAD – Mandatory Action Date (65 days after Date of Receipt or close of Public Hearing)
MOPH – Mandatory Open Public Hearing Date (65 days after Date of Receipt)
MCPH – Mandatory Close Public Hearing Date (35 days after opening the Public Hearing)

8-24 Referral(s)

a. 32 Church Street – 8-24 Referral from Town Council for Property Conveyance
b. 28 South River Street – 8-24 Referral from Town Council for Property Conveyance

Flood Permits

a. **FLD# 40 –** 55 Cottage Road – Application for a Permit for Development within the Special Flood Hazard Area to accommodate a proposed residential addition; Randy Daigle, owner/applicant; Map 80/Lot 178; R-33 Zone; Lake Overlay District. - ***Tabled***
b. **FLD# 41 –** 25 & 39 Hazard Avenue – Application for a Permit for Development within the Special Flood Hazard area to allow excavation and limited fill in the AE Zone; Paramount Newco Realty Owner/Applicant; Map 045/Lot 0002, 0008; BR Zone.

Site Plan Review

a. **SPR# 1829 –** 10 Hazard Avenue – Site Plan approval application for a 6,300 square foot rear building addition to the former Walgreens space with minor site modifications to accommodate Burlington Coat Factory; Equity One (Northeast Portfolio) LLC., c/o Michael Lai, owner; Regency Centers, c/o Michael Lai, applicant; Map 56/Lot 22; Business Regional Zone.
a. **SPR# 1830 –** 74 Palomba Drive – Site Plan Review application to combine 3 units (Unit H, I, and J) into one restaurant area on the property known as 74 Palomba Drive. Dimitris Patestos, Applicant; Map 056/ Lot 0025; BR Zone.
b. **SPR# 1831 –** 74 Palomba Drive – Site Plan Review application to create a permanent outside dining area on the property known as 74 Palomba Drive. Dimitris Patestos, Applicant; Map 056/ Lot 0025; BR Zone.

10. **Other Business**
    a. General Discussion of Regulations and Procedures – Review of Request for Proposals for Plan of Conservation & Development and Zoning Regulation Updates
11. **Correspondence**
12. **Commissioner's Correspondence**
13. **Town Planner Report**
14. **Administrative Approval Report**
    a. **SPR# 1834 –** 10 Lego Way – Administrative Approval application to install a full height partition to create two tenant spaces on the property known as 10 Lego Way; Rock Ridge Realty LLC, Owner; Scott Grodsky, Applicant Representative; Map 075/ Lot 0104; I-1 Zone.
    b. **SPR# 1832 –** 83 Freshwater Boulevard- Site Plan Review application to install a new exterior concrete patio with a metal fence on the property known as 83 Freshwater Boulevard. Mercury Realty Company, Owner; Hot Table LLC, Applicant; John Devole, Applicant Representative; Map 056/Lot 0030; BL Zone.
15. **Applications to be Received**
16. **Opportunities/Unresolved Issues**
    a. Discussion – Combining Planning & Zoning Commission and the Inland Wetlands & Watercourses Agency
17. **Adjournment**

Note: The next Regular Meeting is September 10, 2020. All materials are available for review on the Enfield Planning & Zoning Commission website: https://www.enfield-ct.gov/707/Planning-Zoning-Commission

Ken Nelson, Jr., Chairman; Richard Szewczak, Secretary

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ENFIELD PLANNING AND ZONING COMMISSION
REGULAR MEETING
DRAFT MINUTES FOR COMMISSION CONSIDERATION
THURSDAY, July 9, 2020 – 7:00 p.m.
Virtual Meeting

Call to Order & Pledge of Allegiance
Chairman Nelson called the meeting to order at 7:00 PM.

Roll Call
Commissioner Szewczak took the roll and present were Commissioners Richard Szewczak, Virginia Higley, Ken Nelson, Frank Alaimo, Charles Ladd and Alternate Commissioners John Petronella and Vinnie Grillo. Absent were Commissioners Mary Scutt, Linda DeGray and Dane Thorogood.

Also present were Laurie Whitten, Director of Development Services; Jennifer Pacacha, Assistant Town Planner; James Tallberg, Town Attorney, and Elizabeth Bouley, Recording Secretary.

Chairman Nelson seated Commissioner Grillo.

Approval of Minutes

a. June 25, 2020 – Regular Meeting

Motion: Commissioner Ladd made a motion, seconded by Commissioner Higley, to approve the minutes of the June 25, 2020 Regular Meeting.

The motion passed with a 6-0-0 vote.

Votes: 6-0-0

Public Participation
Chairman Nelson asked three times if anyone in the public would like to speak regarding items not on the agenda; no one came forward.

Bond Release(s)

a. **PH# 2904** – 130 Elm Street – Bond Release Request for the Erosion & Sedimentation Control Bond in the amount of $3,800.00 and the Site Restoration Bond in the amount of $75,100.00.

Motion: Commissioner Szewczak made a motion, seconded by Commissioner Ladd, to release the Erosion & Sedimentation Control Bond in the amount of $3,800.00 and the Site Restoration Bond in the amount of $75,100.00.

The motion passed with a 6-0-0 vote.

Votes: 6-0-0

New Public Hearings

a. **PH# 2973 –** 55 Cottage Road – Special Permit application for a home addition located within the Lake Overlay District; Randy Daigle, owner/applicant; Map 80/Lot 178; R-33 Zone.

Ms. Pacacha stated that this will be tabled until the amendment is done.

b. **PH# 2978 –** 37 Post Road – Special Permit application to allow a hair stylist to operate as a home occupation; Alisa Kraushaar, owner/applicant; Map 54/Lot 292; R-33 Zone.

Commissioner DeGray arrived at the meeting.

Commissioner Szewczak took the roll and present were Commissioners Richard Szewczak, Virginia Higley, Ken Nelson, Frank Alaimo, Charles Ladd, Linda DeGray and Alternate Commissioners John Petronella and Vinnie Grillo. Absent were Commissioners Mary Scutt and Dane Thorogood.

Alisa Kraushaar, 37 Post Road, stated that she is seeking the Commission's approval to open a salon at her home.

Commissioner Higley asked about the hours of operation which Ms. Kraushaar confirmed to be 9 a.m. to 6 p.m. Monday through Saturday.

Commissioner Alaimo asked if the applicant had proper licensing through the state to operate a salon. Ms. Kraushaar stated that she has been licensed for fifteen years and has maintained all of her licensing.

Chairman Nelson stated that Post Road is busy and asked if the applicant has available off-street parking. Ms. Kraushaar stated that she has off-street parking as well as a very long double driveway. She stated that she is only taking one client at a time and does not expect to have to use the road for parking.

Chairman Nelson asked if the applicant would be ok with a condition of approval stating that there will be no more than two clients at the property at a time. Ms. Kraushaar stated that she would be fine with this.

Chairman Nelson if anyone would like to speak in favor or against the application.

Lisa Batchelor, 6 Deer Run, stated that she would not be opposed to the application.

Chairman Nelson asked three times if anyone would like to speak in favor or against the application; no one came forward.

Motion: Commissioner Ladd made a motion, seconded by Commissioner Higley, to close the Public Hearing.

The motion passed with a 7-0-0 vote.

Votes: 7-0-0

Motion: Commissioner Szewczak made motion, seconded by Commissioner Ladd, to approve PH# 2978 with conditions.

The motion passed with a 7-0-0 vote.

General Conditions:

1. This approval is for the specific use, site, and structure identified in the application. Any change in the nature of the use, site, or the structure will require new approvals from the Enfield Planning and Zoning Commission.
2. This approval does not include signage permits.
3. This project shall be constructed and maintained in accordance with the referenced plans.
4. By acceptance of this permit and conditions, the applicant and owner acknowledge the right of Town staff to periodically enter upon the subject property for the purpose of determining compliance with the terms of this approval.

Site Specific Conditions:

Conditions to be met prior to signing of plans:

5. A copy of the approval letter and conditions shall be incorporated into the final plans submitted for signature, preferably located on the cover sheet or first sheet of the plan set.
6. A list outlining how the conditions of approval have been met shall be submitted along with final plans submitted for signature.
7. A list outlining all changes to the plans shall be submitted along with final plans submitted for signature. The list should cite the sheet number where each change has been made.
8. The conditions of this approval shall be binding on the applicant, land owners, and their successors and assigns.
9. The hours of operation will be 9 a.m. to 6 p.m. Monday through Friday.
10. Parking will be off-street only.

Conditions to be met prior to the issuance of permits:

11. Two sets of paper plans with any required revisions incorporated shall be submitted to the Planning Department for signature of the Commission.
12. This approval will become effective upon the filing of a Special Use Zoning Certificate signed by the Commission Secretary on the Land Records by the applicant. Such certificate must be filed within 120 days of approval by Commission. Proof of such filing shall be in the file prior to the issuance of any permits.

Note: The Conditions of Approvals do not take the place of other requirements found in the Town Codes, Regulations, and Application Instructions.

Votes: 7-0-0

c. **SPR# 1826 –** 113 North Maple Street – Site Plan Review application for a proposed 501,500 square foot industrial warehouse building with associated parking and drainage; WE 113 North Maple Street, LLC, owner/applicant; Map 82/Lots 1-4; Industrial-1 Zone.

Commissioner Szewczak took the roll and present were Commissioners Richard Szewczak, Virginia Higley, Ken Nelson, Frank Alaimo, Charles Ladd, Linda DeGray and Alternate Commissioners John Petronella and Vinnie Grillo. Absent were Commissioners Mary Scutt and Dane Thorogood.

Val Ferro of Good Earth Advisors introduced the team present for the applicant, which consisted of the following: Adam Winstanley, Principal at Winstanley Enterprises, LLC; Jeff Saforek, COO of Agri-Mark; Linda Constanzo, Senior Vice President at Winstanley Enterprises, LLC; Jim Petropulos, President of Hayner/Swanson, Inc.; and Matthew Skelly of Fuss & O'Neill, Inc.

Ms. Ferro stated that they will be providing their technical presentation in full for the record and for the residents.

Town Attorney James Tallberg reminded the Commissioners that their actions tonight must be based upon what is brought before them at the Public Hearing. He stated that Commissioners should not speak to the media or take information outside of the Public Hearing and advised any Commissioners who had spoken to the media to recuse themselves.

Mr. Winstanley provided a brief history of his firm's past projects in Enfield, including the Hallmark campus. He went over the size and physical features of the property, stating that they could go with a significantly larger building size on this lot and still meet all zoning regulations. Mr. Winstanley stated that Agri-Mark is a much less intensive use than other possible tenants they had met with.

Mr. Saforek provided a description of Agri-Mark as a company, including the products they produce. He stated that they are family-owned and strive to be a good neighbor and good stewards of the environment.

Ms. Ferro described the proposed development. She utilized an aerial photograph to illustrate the previous approved site plan from the 1990s. Ms. Ferro explained the subdivision of the original property, stating that there had been a lot of industrial development planned for this land. She stated that the Industrial zone designation is supported by the town's Plan of Conservation & Development (POCD) and utilized a color-coded map to illustrate the Industrial zoned land in town.

Ms. Ferro went over some of the site specifics including adjacent properties and buffers, stating that all of the land is zoned Industrial. She described the inspections and studies that had been

performed as due diligence in order to best develop the property. Ms. Ferro stated that the proposed facility is a distribution and warehousing which is an allowed use and requires a Site Plan Review rather than a Special Permit. She went over the requirements of the Site Plan Review regarding building coverage, impervious coverage, building height, setbacks and parking, and described how the plan adheres to these requirements.

Ms. Ferro described the operations of the proposed facility including hours of operation and truck activity/noise. She stated that there would not be more than 15 minutes of truck idling and there is no queuing expected.

Mr. Petropulos went over some of the key engineering points such as topography of the property, soil testing results, utilities and stormwater management.

Mr. Skelly stated that North Maple Street is a state owned roadway. He described the routes to the highway from the access driveways of the property. Mr. Skelly went over the details of the traffic study that had been performed.

Mr. Skelly addressed the comments they had received from the Police Department one by one. He concluded that the Office of the State Traffic Administration (OSTA) is in the process of reviewing their findings and will need to sign off on all of it before any of it can be approved.

Ms. Ferro described the site lighting plan, stating that all fixtures will be LED and dark sky compliant. She utilized elevation drawings to illustrate the architecture and design details of the building and materials that will be used.

Ms. Ferro went over the full landscaping plan for the property.

Ms. Ferro stated that this is a distribution use in an Industrial zone. She stated that there are no air quality emissions or hazardous wastes being produced. Ms. Ferro concluded that this application meets all criteria and is ready to be approved.

Commissioner DeGray asked about wetlands, to which Chairman Nelson replied that Inland Wetlands and Watercourses Agency (IWWA) approved this application a month ago so they need to focus on the Planning & Zoning issues in front of them. Ms. Ferro stated that they are voluntarily treating the wetland as a vernal pool.

Chairman Nelson asked if the owner of the building could make a contract with the snow removal company to use the low decibel backup alarms. Ms. Ferro stated that this is a possibility and there are a few options to keep the snow plow noise down.

Chairman Nelson asked when this parcel was designated I1, to which Ms. Ferro replied that it had to have happened prior to 1990.

Chairman Nelson asked how many waivers are being requested with this application, to which Ms. Ferro replied that technically there are none.

Chairman Nelson stated that he cannot find sidewalk details on the plans, to which Mr. Petropulos replied that sidewalks will be added. Chairman Nelson stated that sidewalks should be a condition of approval.

Chairman Nelson requested that I-91 signs should be placed at the exits, to which Ms. Ferro agreed.

Ms. Whitten went over the rules for the Public Hearing.

Dale Butrymowicz, 11 Winter Way, stated that they had only learned about this application thirteen days ago and have had to scramble to put together their concerns. He stated that the town and the applicant have had much more time to discuss it. Mr. Butrymowicz stated that an attorney had been retained and a petition had been submitted from people opposing the application. He stated that there should be accommodations made for people who cannot get into the meeting.

Celeste and Ken Estvanik, 14 Winter Way, stated that they are abutting property owners. They brought up their concerns regarding the second tenant being unknown, the traffic study not accounting for school bus and drop-off traffic, and soil contamination on the property. Mr. Estvanik asked what recourse the Commission and taxpayers will have if tenants change in the future. Ms. Estvanik stated that their property values are being impacted by this project. Mr. Estvanik asked what the value this project will have for the town of Enfield in the form of tax dollars or jobs.

Chairman Nelson stated that the Commission has no authority to discuss or control tax abatement and the Town Council deals with this.

Ms. Estvanik stated that this project as proposed is going to negatively impact the town as a whole. She stated that more conditions should be added to protect quality of life and safety.

Mr. Estvanik stated that the proposed berm should be higher and planted densely with mature trees. He suggested a tall attractive barrier if the soil is contaminated. Ms. Estvanik asked if the truck bays can be shielded from sight and sound; they went on to express concerns with the trucks as far as safety, queuing, light spillage and noise for both the known tenant and any future tenants.

Ms. Estvanik stated that they are seeking a continuance in order to address some of the outstanding issues and questions.

Discussion took place as to whether emails from Karen LaPlante should be read into the record. Ms. Pacacha stated for the record that Ms. LaPlante is commenting as a resident and not as a representative for the Enfield Conservation Commission. Ms. Whitten stated that she will read Ms. LaPlante's last memo when they get to that batch.

Anthony Renna, 12 Ryefield Drive, asked what prime time hours are in terms of the traffic study and asked if there had been any thought given to rerouting the traffic coming down North Maple Street.

Mr. Renna asked if the CO2 is a definite for the refrigerant being used for this building.

Kathleen Sarno, 102B North Maple Street, addressed the Commission on behalf of the list of names she had provided to Ms. Whitten. She stated that there are forty-five abutters at Maple Heights. Ms. Sarno stated that the expected trip generation seems excessive for the area, particularly with Hazardville Memorial School down the road. She stated that she is concerned with the noise of the trucks and the times they will be running, and asked if the applicant would consider putting a buffer up in front of Maple Heights. Ms. Sarno asked what will be done with the feral cats in the area and stated that a big concern is the identity of Tenant B as well as the parking lot, the lights and the noise. She stated that she is all for development but they should do light industrial rather than this.

Tracy Hoover, 34 David Street, stated that she is the PTO President for Hazardville Memorial School. Ms. Hoover asked for clarification on the traffic study and the date that was utilized. She stated that the sidewalk and I-91 signs would be very helpful as well as No Right Turn signs at both entrances during drop-off/pickup hours in order to accommodate health and safety concerns for the children and school staff. She stated that school drop-off/pickup traffic is expected to increase due to transportation concerns with COVID-19.

Owen Jarmoc, 33 School Street, stated that the Winstanley buildings are beautiful and he appreciates Winstanley being transparent and communicative. He urged the Commission to make their decision based on the facts. Mr. Jarmoc stated that many people in Enfield are very happy about this project.

Tom Grigley, 18 Deer Run, stated that there are many people opposed to this plan and it is not in harmony with the neighborhood. He stated that a facility of this size this would be better placed in an industrial park with no residential abutment. Mr. Grigley asked who Tenant B is going to be, and stated that it is irresponsible for the town to approve a facility when they do not know what is going into it.

Mr. Grigley asked about garbage and recycling storage location, screening and pickup plans.

David Bruton asked how the easement diagonally across from the property will be addressed. He asked if there is a way to get rid of the driveway behind Winter Way and whether there could be a truck turnaround on the property so trucks could exit onto Moody. Mr. Bruton asked if the conservation easement can be extended so there is a permanent berm that can never be removed. He asked if a Phase 1 environmental inspection had been performed and if the utilities have adequate capacity for this project. Mr. Bruton asked why the lighting poles need to be so high and suggested that they use evergreens rather than deciduous trees for buffering.

Mr. Bruton suggested enforcing specific truck traffic in the area and concluded that it is highly unusual that the Town Engineer has not commented on this project or addressed any of the issues.

Rob Lessard, 5 Deer Run, asked what this project would do the neighborhood property values. He stated that he agrees with the signs pointing traffic to I-91.

Bob LaFlamme, 337 Elm Street, stated that the driveway on the South side to North Maple Street is quite a distance from the building. He stated that if the driveway were closer to the building it would reduce the truck traffic from the proximity of Misty Meadow. He stated that he is concerned with the noise associated with this facility. Mr. LaFlamme read a portion of the zoning regulations pertaining to the purpose of the regulations and implored everyone to keep that purpose in mind.

Attorney Ken Slater of Halloran & Sage addressed the Commission as a representative for several of the neighbors on Winter Way and Deer Run, who he named for the record. Mr. Slater stated that the plans require more review and need to be modified to include any changes.

Scott Noble, 17 Deer Run, suggested that exits 46 and 49 should be included as some people may use those exits to cut through when exits 47 and 48 are too congested. Mr. Noble stated that the corner of North Maple and North Street is busy and he is concerned with traffic and safety. He stated that there will be additional truck turns and employees associated with Tenant B, which will add more congestion.

Ryan Moore, 10 Ryefield Drive, stated that he has concerns with the traffic survey and the school when kids are picked up. Mr. Moore asked the Commission to pause this project and give them more time.

Craig Comfrey, 10 Deer Run, stated that the property is huge and asked why the development was not considered for a different location. Mr. Comfrey asked how they can find out exactly what kind of tax revenue this building is going to give the town. Chairman Nelson stated that the Town Council can address any questions about the taxes.

Jerry Hamilton, 110 North Maple Street, stated that this project is going to be right in his front yard. He asked if the existing vegetative buffer will stay in place, and stated that he is concerned with who the second tenant is going to be. Mr. Hamilton stated that Winstanley is getting a fifteen year tax break while his property taxes are going up again this year.

Mr. Hamilton stated that soil contamination had been found at Fermi and this property may have contaminated soil as well. He stated that he is in communication with CTDEEP and will be working with them to make sure these issues are looked at in depth. Mr. Hamilton stated that this is going to have a negative impact on the marketability of their homes and he does not understand why this project has been so secretive.

Susan Fracasso, 50 North Street, stated that she has lived in the area all of her life and has serious concerns. She stated that the roads are already in bad shape and increased traffic will make them worse. Ms. Fracasso stated that she is concerned about storm drainage and the identity of Tenant B.

Stephen Jarmoc, 33 School Street, stated that he has been a farmer on the property for many years and all of the pesticides used have been approved and not found to be a problem. Mr. Jarmoc stated that Mr. Winstanley is allowing him to still farm the property, and it has always been zoned Industrial. He concluded that there will be increased revenue for the town and he is all for the project.

Art Latulippe, 8 Misty Meadow Road, described the hours of operation and how many trucks an hour this will end up being just for Agri-Mark. He went over the potential volumes of trucks that will be on the roads once Tenant B is added.

Steve and Kathy Meade, 3 Deer Run, addressed the Commission. Mr. Meade stated that they are concerned about the berm and read through some of the regulations pertaining to a berm. He stated that the town has a history of not adequately describing berms. He expressed concern about the maintenance of the berm as well noise attenuation issues.

Mrs. Meade stated that she is concerned with safety at the crosswalk at the intersection of North Maple Street and Winter Way.

Vinnie Weseliza, 12 Deer Run, asked when the separate lots became one merged lot and whether it had been done properly. He went on to state that none of the abutters have been contacted by the town or Winstanley regarding the project. He stated that he would like to see the sound and sight buffers improved and he is concerned about contamination of the soil. Mr. Weseliza suggested that an electronic crosswalk may improve safety in the area.

Mike Lizzy, 15 North Maple Street, asked if the gas main on the street and the water main are large enough to accommodate the needs of the building.

Jamie Dickman, 14 Deer Run, asked the Commission to consider congestion and surrounding building structures as well as safety. She stated that the future plans for the Annex should not be impacted by this project and that tax revenue should be disclosed. Ms. Dickman voiced concerns with the traffic study being done during COVID-19 restrictions, stating that trucks cannot be accommodated in this area due to safety concerns. She stated that she would like to add a conditional requirement that trucks should only be allowed to enter and exit from Moody Road with only employee parking available via North Maple.

Ms. Dickman stated that this use does not compliment the heritage and charm of Hazardville and the plans do not comply with recommended building heights for the area.

Ms. Dickman requested that a noise study be performed and brought up concerns regarding pollution. She requested that any meat products not be permitted in order to protect the neighborhood.

William Bleau, 15 Deer Run, stated that given the proximity of the school to the site and the fact that Lego employees are currently working at home, he would like more clarification on the accuracy of the traffic study. He stated that he is concerned about the unknowns including Tenant B and future expansion. Mr. Bleau stated that reputation should not be used to make a decision.

Ron Isabelle, 9 Deer Run, stated that he would like to see safeguards in place including restrictions on the building height and the future development of other lots on the property. He suggested a four-way stop sign be installed in order to deter tractor trailer trucks.

BJ and Chris Gomeau, 19 Winter Way, addressed the Commission. Mr. Gomeau stated that he has concerns with truck traffic and safety. Ms. Gomeau stated that she is concerned with trucks idling and not knowing the identity of Tenant B. She stated that more time is needed to work out some of these concerns.

Matthew Rogers, 8 Winter Way, questioned why they are only just now hearing about this project. He stated that he is concerned with noise, traffic, proximity to schools and the berm filled with questionable soil. Mr. Rogers stated that he thought a landscape setback with specific standards was required, and he would like more time to look at the plans more closely and understand what is being done.

Lisa Batchelor, 6 Deer Run, asked why the driveway to the southern entrance on North Maple needs to be wide enough to accommodate trucks since the truck traffic is being diverted to Moody Road. She stated that a four-way stop and electronic crosswalk could help. Ms. Batchelor asked if there is a plan to protect residents while construction is taking place. She asked whether the construction crews will be from Connecticut and surrounding states that have not been ordered to quarantine due to the COVID-19 pandemic.

Warren Kessler, 56 Moody Road, stated that the section of Moody Road he lives on is already overburdened with tractor trailer traffic. He stated that the increased noise and vibrations will decrease his quality of life. Mr. Kessler stated that the building proposal will create a nightmare scenario for his neighborhood.

Sandy Borawski, 9 Winter Way, asked that a new traffic study be performed which takes into consideration traffic from cars and school buses. Ms. Borawski stated that it is unacceptable to approve the plan without knowing the identity of Tenant B. She asked what the bumpouts at the entrances on the site plan are for and whether there will be trucks idling in these areas. Ms. Borawski stated that berms and trees will not stop the noise from hitting the second floors of the houses in the neighborhoods. She stated that Industrial next to Residential is not compatible.

Brian Borawski, 9 Winter Way, stated that he has worked for distribution for years and they are always noisy. He provided examples of the noise produced by trucks at facilities like the proposed one. Mr. Borawski concluded that this belongs in an industrial park.

Debbie Chicorka, 19 Misty Meadow Road, stated that she concurs with everything that has been said tonight and would like to know if the soil is going to be tested. She stated that she would like a guarantee that moving the soil will not endanger the people and animals in the neighborhood.

Tim Prosinski, 8 Ryefield Drive, stated that he is concerned with the soil contamination.

Dina St. George, 25 Misty Meadow Road, stated that this development needs to be in an industrial park. She stated that she hopes the Commission delays the project and she would not like to see this industrial factory.

Bill Kiner, 4 Abbewood Drive, stated that his views tonight are his own and not representative of the Town Council. Mr. Kiner stated that this application in its current form is not beneficial to the

residents of Enfield. He stated that adverse conditions will arise if this project moves forward. Mr. Kiner concluded that there should not be a rush by the Commission to get this done.

Lisa Rogers, 8 Winter Way, stated that the neighbors should have known about this earlier and this plan is similar to a truck stop. She stated that there are many concerns including the environment and safety. Ms. Rogers asked how the citizens will be protected during the construction period and when the construction will be happening. She concluded that she hopes the Commission is listening and will put this on pause.

Ms. Hoover requested that the Commission show their faces on the screen, to which Chairman Nelson replied that they are all present and just trying not to slow down Zoom.

Sharen Santoski, 102 North Maple Street 13A, stated that the Connecticut State idling law allows for three minutes of truck idling but the applicant mentioned fifteen minutes. Ms. Santoski asked how the rooftop refrigeration units will be screened, and where the full list of items that can harm an aquifer are located. She asked what safeguards are in place for the residents, and brought up the issue of Manning Road, stating that they should be able to learn from it. Ms. Santoski requested that the hearing remain open in order to allow them to address these issues.

Kurt Ehrhardt, 10 High Meadow Lane, asked how far from the road this building will be set back. He asked where the buildout will be with the current design. Mr. Ehrhardt asked if they had gone to the DOT and had an independent traffic study done. He stated that the trucks are still very loud even if they are the quietest ones in the industry.

Motion: Commissioner Alaimo made a motion, seconded by Commissioner Szewczak, to extend the meeting.

The motion passed with a 7-0-0 vote.

Votes: 7-0-0

Ms. Ferro requested that the chat box be recorded, reproduced and entered into the record. She went on to state that this project has not been discussed with the town for two years, but rather the town was notified of this project on May 19, 2020.

Ms. Ferro stated that Winstanley always pursues environmental investigations and in this case they conducted Phase 1 investigations on all of the parcels as well as targeted Phase 2's at Lot 1 and Lot 3. She stated that everything was well below reporting criteria and no remediation was found to be necessary.

Chairman Nelson stated that he was involved with the Town Council at the time that Fermi's contamination came into light, and that contamination was from hauled-in fill rather than the land itself.

Ms. Ferro stated that there is a process for merging lots and that they had filed the merge applications and other documents with the town according to town requirements.

Ms. Ferro stated that if there was a change of use, parking, or intensity of use, they would have to go back before the Commission for permission. She stated that town Staff ensure that site plan conditions are upheld, and there are rigorous processes in place to ensure construction is being performed as required.

Ms. Ferro stated that there is some gray area with enforcement regarding the idling of trucks, but they will meet whatever threshold they have to meet.

Ms. Ferro explained that the berm is not being constructed as a requirement, but rather to help with noise attenuation and landscape screening. She stated that a mix of vegetation was used on the berm as studies indicate that a mixture of both deciduous and evergreen trees work best for noise attenuation.

Mr. Petropulos explained the purpose of the bumpouts on the driveways, which he stated are for portable snow scrapers. He stated that they have been in contact with various companies regarding the utilities and they have adequate capacity to service the facility.

Mr. Petropulos stated that the project will take approximately fifteen months from start to finish and the berm will be the first thing built to protect the residents. He went over some of the distances from the building to property lines and abutters.

Ms. Ferro stated that the zoning regulations do not address speculative development, so not having a tenant lined up is acceptable.

Mr. Skelly stated that the traffic study does account for a second tenant. He explained how the trip generations are calculated, what is meant by morning and afternoon peak hours, and the potential for rerouting trucks. Mr. Skelly stated that they expect the trucks to make their way to the nearest highway as quickly as possible.

Mr. Skelly explained the timing of the 2019 and 2020 traffic studies and stated that school drop-off/pickup has been accounted for. He stated that the traffic study has been done according to DOT standards.

Mr. Skelly stated that the crosswalk to Winter Way has good site distance in both directions; however, if the town chooses to enhance the crosswalk they can. He went on to state that the four-way stop is likely not going to work there, but the town has the ability to do it if they want to.

Mr. Skelly clarified that the DOT compared the 2020 study to a comparable date a year prior, but not one year ago exactly. He described the OSTA process and stated that there will be a lot of DOT oversight and review for this project.

Chairman Nelson stated that proper berm height is five feet, and asked how this berm became ten feet. Ms. Whitten stated that this is not a required berm but rather a proposed berm because the applicant feels it is warranted. Chairman Nelson asked if the landscaped berm to protect the neighbors is against the regulations. Ms. Ferro stated that it is not required and does not have to

be referred to as a berm. Ms. Pacacha clarified the regulations as they pertain to berm height maximums.

Chairman Nelson asked if the landscaping standards are being met for the amount of trees that need to be planted. Mr. Petropulos stated that they are taking into consideration the vegetation that currently exists. Ms. Ferro stated that Staff had reviewed it and if there is a miscount and more vegetation is required, they will provide more vegetation. Chairman Nelson stated that this would get caught during final inspections prior to the release of bonds.

Chairman Nelson asked about the screening of the rooftop units. Ms. Ferro explained how the parapets offer screening from ground level.

Mr. Petropulos described the location of the trash compactors at the loading docks. Ms. Costanzo stated that each tenant is responsible for the removal of their trash. Chairman Nelson asked where dumpster containers will be placed, to which Ms. Costanzo replied that it will just be the compactors at the loading docks.

Chairman Nelson asked how the trash compactors work with the dumpster screening requirements, to which Ms. Whitten replied that if the compactors are in the loading dock they are not visible but if they are outside of the building they will still need to be screened. Chairman Nelson stated that he has never seen compactors screened in anywhere in Enfield and that he does not want to end up with two or three dumpsters throughout the parking lot. Ms. Ferro stated that they are not proposing dumpsters outside of the compactor area.

Commissioner Higley asked if Staff had reviewed the parking and confirmed that it is adequate. Ms. Pacacha read through the portion of the regulations pertaining to this issue, with Commissioner Higley concluding that they do adhere to the regulations.

Commissioner Szewczak asked if the light poles need to be as high as they are in the parking areas. He added that he did not see comments from the Town Engineer, which should be addressed. Commissioner Szewczak stated that he is concerned with the traffic associated with Hazardville Memorial School drop-off and pickup. He stated that they need to explore this school traffic more and how it will be integrated with the truck traffic.

Commissioner Szewczak stated that the GPS monitors used by truckers may have them coming from a different direction and not just I-91.

Ms. Ferro stated that a lighting consultant examined the lights and they were tweaked to ensure everything was as dark as possible. She stated that the lights are at standard heights and she cannot guarantee that a shorter light pole will be feasible.

Ms. Ferro reiterated that the school traffic was included in the traffic study. Commissioner Szewczak questioned whether Mr. Skelly could state as a fact that the school traffic was definitely included in the study. Mr. Skelly stated that the school traffic was absolutely accounted for and he can provide certification from the DOT that this is the case. Mr. Skelly explained the methods used to count the traffic and stated that this includes school buses and drop-off/pickup cars.

Additional discussion took place regarding the accuracy of the traffic study. Chairman Nelson stated that they have no other choice but to rely on past data from the DOT.

Commissioner Ladd asked about the Fire Department's request to connect the driveway. Ms. Ferro replied that they did commit to the sidewalks and that connection, but they received the comments late and were not able to get the plans adjusted.

Discussion took place regarding ending the meeting and whether the bylaws allow the Commission to extend the meeting past midnight.

Motion: Commissioner Alaimo made a motion to suspend the rules and extend the meeting past midnight.

There was no second to the motion.

Discussion took place regarding when the Commission can meet next regarding the outstanding concerns.

Commissioner Alaimo asked if the traffic studies are validated by the state and sealed, to which Mr. Skelly replied that when they sign off on it there is a signature from the director of OSTA but it does not have a seal. Mr. Skelly stated that all of the information they receive from the state is accurate to the best of his knowledge as an engineer.

Attorney Tallberg reminded the Commission that this application does not require a Public Hearing and advised against delaying a Public Hearing that did not need to happen in the first place. He suggested that the Commission find a sensible way to move forward without more delay.

Motion: Commissioner Alaimo made a motion, seconded by Commissioner Higley, to close the Public Hearing.

The motion passed with a 5-1-0 vote with Commissioner Szewczak voting against and Commissioner DeGray having left the virtual meeting.

Votes: 5-1-0

Commissioner Szewczak stated that there were additional site specific conditions to be added based on today's meeting, including the additional signage, addition of sidewalks, and the connection between the two driveways.

Chairman Nelson stated that if there is a miscount in the number of plantings, it will be caught during final inspections. He stated that the berm is not under the regulations and is more of a landscaped island than a buffer or berm. Chairman Nelson stated that the sidewalks should be on the site plan and he is in agreement with the signage directing traffic to Moody Road and to I-91.

Chairman Nelson stated that past members had the ability to change the regulations and are now in the meeting challenging the very regulations they were in a position to change. He stated that they are not currently in the position to change the regulations, and are bound to the regulations in front of them.

Commissioner Szewczak stated that there should be another condition that the light pole heights should be reduced. He stated that their hands are tied due to the regulations and the area being zoned Industrial. Ms. Ferro stated that they are willing to try to lower the light poles but they do not want to do it at the risk of compromising illumination.

Commissioner Alaimo asked if it is possible to put a guardrail along the road for the safety of the children, to which Chairman Nelson replied that the applicant does not own the property and they cannot ask them to do this.

Ms. Pacacha stated that Commissioner DeGray is still on the call.

Motion: Commissioner Szewczak made a motion, seconded by Commissioner Alaimo, to approve SPR #1826 with four additional conditions for the signage, sidewalks, review of light pole heights and the connection between the two parking lots in front of the building.

The motion passed with a 7-0-0 vote.

Votes: 7-0-0

MOTION TO APPROVE SPR# 1826 for a proposed one-store 501,500 square foot distribution center that would accommodate two tenants, with the associated parking lots, landscaping, and drainage at 113 North Maple Street; WE 113 North Maple Street, LLC owner/applicant; Map 82/Lot 1-4; I-1 Zone according to the below referenced plans and with the following conditions of approval:

General Conditions:

1. This approval is for the specific use, site, and structure identified in the application. Any change in the nature of the use, site, or the structure will require new approvals from the Enfield Planning and Zoning Commission.
2. This approval does not include signage permits.
3. There is to be no exterior sheet metal venting pipes visible from the street.
4. Exterior mechanicals and electricals are to be boxed and screened.
5. This project shall be constructed and maintained in accordance with the referenced plans.
6. A building permit for the construction of facilities as approved must be obtained within 24 months of approval or this approval shall be rendered null and void, unless an extension is granted by the Commission.
7. All construction authorized by this approval shall be completed within five (5) years or this approval shall be considered null and void, unless an extension is granted by the Commission.
8. By acceptance of this permit and conditions, the applicant and owner acknowledge the right of Town staff to periodically enter upon the subject property for the purpose of determining compliance with the terms of this approval.

Site Specific Conditions:

9. Parking of trucks in the open within one-hundred fifty (150) feet of a Residence District boundary line shall be limited to vehicles of not over 26,000 pounds gross vehicle weight. Trucks in excess of 26,000 pounds of gross vehicle weight-used in conjunction with operation of any business permitted in this district shall not be parked in the open within 150 feet of a Residence District, except during normal business hours.
10. Any lighting used to illuminate off-street parking areas shall be directed away from residential properties so as not to create a nuisance. In a parking area containing three (3) or more parking spaces, such lighting shall be extinguished one-half (1/2) hour after the close of the business.
11. A sidewalk not less than four (4) feet wide shall be constructed and may be located in either the landscaped setback or street right-of-way.
12. No motor vehicle repair work shall be permitted in conjunction with loading facilities.
13. The comments of the Traffic Safety Officer must be addressed.
14. If a well is found on the property it must be properly abandoned per the requirements of the North Central District Health Department.
15. Addition directional signage for access to I-91 must be added to the final plans.
16. Sidewalks must be constructed along both road frontages.
17. Final review of the site lighting is required for the possible lowering of lighting posts.
18. The two front parking lots along the frontage of the building must be connected.
19. The landscaping must be checked in the final plan review for compliance with Enfield Zoning Regulation requirements.

Conditions to be met prior to signing of plans:

20. All plans submitted for signature shall bear the seal and live signature of the appropriate professional(s) responsible for the preparation of the plans.
21. The application number shall be displayed on the plans in or near the Title Block area.
22. A copy of the approval letter and conditions shall be incorporated into the final plans submitted for signature, preferably located on the cover sheet or first sheet of the plan set.
23. A list outlining how the conditions of approval have been met shall be submitted along with final plans submitted for signature.
24. A list outlining all changes to the plans shall be submitted along with final plans submitted for signature. The list should cite the sheet number where each change has been made.
25. The conditions of this approval shall be binding on the applicant, land owners, and their successors and assigns.

Conditions to be met prior to the issuance of permits:

26. Four sets of paper plans with any required revisions incorporated shall be submitted to the Planning Department for signature of the Commission. The Director of Planning may require Mylars.
27. The applicant shall also submit final plans as approved by the Commission in a digital format compatible with the Enfield Geographic Information Systems Electronic Submittals Ordinance.
28. The applicant shall post a bond for Site Restoration in an amount to be determined by the Town Engineer and the Director of Planning.

29. The applicant shall post a separate bond for Erosion and Sediment Control submitted in the form of cash or certified check, pledged to the Town, in an amount to be determined by the Town Engineer and the Director of Planning.
30. The applicant shall post a Landscaping Bond to the Town, in an amount and format determined by the Director of Planning.
31. A pre-construction meeting between the applicant, site contractors, project engineer and Town Staff shall be held.
32. Any required certificates and/or approvals from State or Federal agencies (i.e. CT-DOT, DEEP, Army Corps of Engineers) shall be obtained by the applicant and reported to the Planning and Zoning Commission file. Any changes to the plans required by such entities may require a plan modification from the Enfield Planning and Zoning Commission.

Conditions which must be met prior to the Issuance of a Certificate of Compliance:

33. Complete as-built plans certified to Class A-2 accuracy shall be submitted prior to the issuance of any certificates of zoning compliance. The as-built plan shall also contain a certification by a Professional Engineer that they have inspected the site improvements and that they have been installed in accordance with the approved plans. Any deviations or omissions must be noted.
34. The design professional who prepared the approved PZC architectural drawings, shall provide as-built drawings with a certification that they have complied with approved plans. Any changes need to be noted on the plans and a list of changes submitted.
35. No Certificate of Occupancy or other final approval may be issued until the Zoning Enforcement Officer has signed off on the final work. When minor site work cannot be completed because of weather or other pertinent reason, a conditional approval may be issued for a period not to exceed 180 days, providing satisfactory surety shall be posted with the Town of Enfield in an amount sufficient to complete the site work and with surety acceptable to the Town of Enfield.
36. A request for final project review and certificate of zoning compliance must be made to the Planning Department not less than 10 days before a Certificate of Occupancy or other final approval is requested from the Building Official.

Note: The Conditions of Approvals do not take the place of other requirements found in the Town Codes, Regulations, and Application Instructions.

REFERENCE PLANS:

Map 82, Lots 1,2,3,4 Proposed Agri-Mark Distribution Facility, 113 North Maple St., Enfield CT, prepared for record owner WE 113 North Maple ST, LLC, c/o Winstanley Enterprises, LLC 150 Baker Ave. Ext, Concord MA 01742;978-287-5000, www.winent.com, prepared by HIS Civil Engineers/Land Surveyors, 3 Congress St., Nashua NH 03062, 603-883-2057; 131 Middlesex Turnpike, Burlington MA 01803, 781-203 1501; dated June 1, 2020

1/22	Master Site Plan
2/22	Abuttors, Notes and Legend
3-4/22	Existing Conditions
5-6/22	Site Grading & Utility Plan
7-8/22	Site Layout Plan
9/22	Erosion Control Plan – Phase1

10/22	Erosion Control Plan – Phase 2
11-13/22	Utility Profiles
14-17/22	Detail Sheet – General Site
18/22	Detail Sheet – Erosion Controls
19-20/22	Landscape Plan
21/22	Detail Sheet – Landscaping
22/22	Photometric Plan

Map 82, Lots 1, 2, 3, 4 113 North Main Street Warehouse, Enfield, CT, prepared for Winstanley Enterprises, 150 Baker Avenue Ext., Concord, MA 01742; 978-287-5000, www.winent.com, prepared by HIS Civil Engineers/Land Surveyors, 3 Congress St., Nashua, NH 03062; 603-883-2057; also prepared by NV5 200 Brickstone Square, Andover MA 01810; 978-296-6200; dated June 9, 2020.

T-001	Cover Sheet
A-001	Proposed Site Plan
A-100	Overall First Floor Plan
A-111	Quadrant Plans – Zone 1
A-112	Quadrant Plans – Zone 2
A-113	Quadrant Plans – Zone 3
A-114	Quadrant Plans – Zone 4
A-115	Quadrant Plans – Zone 5
A-116	Quadrant Plans – Zone 6
A-500	Overall Building Elevations

Chairman Nelson stated that by having a Public Hearing the people were given false hope as the Commission is bound by the regulations. He stated that the residents should be thankful that Winstanley is the partner they have next to them.

Ms. Whitten stated that the Commission should adjourn and everything else on the agenda should be tabled until the next meeting.

Adjournment

Motion: Commissioner Ladd made a motion, seconded by Commissioner DeGray, to adjourn.

The motion passed with a 7-0-0 vote.

Votes: 7-0-0

Prepared by: Elizabeth Bouley

Respectfully Submitted,

_____

Richard Szewczak, Secretary

TOWN OF ENFIELD

Special Use Permit & Site Plan Review Application

Planning Division • 820 Enfield Street Enfield, CT 06082
Telephone: 860-253-6355 Website: www.enfield-ct.gov

Special Use Permit

Application For: ☒ New Special Use Permit ☐ Other _____
☐ Modification of Plan Previously Approved _____
☐ Modification of Conditions of Approval of a Special Permit: _____

Site Plan Review

Application For: ☒ New Site Plan Review ☐ Other _____
☐ Modification of Plan Previously Approved _____
☐ Modification of Conditions of Approval of a Site Plan: _____

Staff Use Only					
PH #:		**SPR #:**		**XSP #:**	
View Permit #:					
Zoning Regulation Section:					

PLEASE REVIEW LAND USE APPLICATION GUIDE FOR INSTRUCTIONS

Property Address: 55 COTTAGE RD **Map #:** 80 **Lot #:** 178
Zone(s): R-33 **Size of Parcel:** 140' x 70' **Account #:** _____
Current Use: RESIDENTIAL
Project Name: ADDITIONS & RENOVATIONS
Summary Description: INTERIOR RENOVATIONS - NEW MASTER BATH AND BEDROOM. NEW 2 CAR GARAGE.

Applicant's Name: RANDY DAIGLE
Applicant's Address: 55 COTTAGE RD. ENFIELD CT. 06082
Contact #: 860-559-0087 **Email:** RDAIGLE6@COX.NET

TOWN OF ENFIELD

Applicant's Representative: N/A

Representative Address: _____

Contact #: _____ **Email:** _____

Does Applicant own the Property? ☐ Yes (Attach Copy of DEED)
☐ No (Provide Information Below & Attach Letter of Authorization)

Owner's Name: _____

Owner's Contact #: _____

Owner's Address: _____

Owner's Email: _____

Project Information:

Septic: ☐ Yes ☒ No

Public Sewer: ☒ Yes ☐ No

Well Water: ☐ Yes ☒ No

Public Water: ☒ Yes ☐ No

Outdoor Storage: ☒ Yes ☐ No

Design District: ☐ Yes ☐ No

Do wetlands and watercourses affect this application? ☐ Yes ☒ No

Is the property within a Level A or Level B Aquifer Protection Area? ☐ Yes ☒ No

Does this application include any regulated activity in a floodplain ☐ Yes ☒ No

(If yes, you will need to also submit a Flood Hazard Development Permit application to the Planning & Zoning Commission)

What is the total lot acreage? _____

What is the length of the property frontage? (List by Street) 75 FEET WIDE X 140 FEET LONG.

Name the abutting street(s): BRIDGES RD & NORTH MAPLE ST.

TOWN OF ENFIELD

What are the existing land uses and zoning districts for abutting properties or across the street(s)?

North RESIDENTIAL

East " "

South " "

West LAKE

Environmental History:

Phase I: Land Records reviewed for environmental hazards? ☐ Yes ☒ No

Phase II: Environmental Hazards Identified? ☐ Yes ☒ No

If yes, please list the environmental conditions found:

Phase 3: Is there a remediation plan? ☐ Yes ☒ No

If yes, please describe the remediation plan:

Are there environmental restrictions on the property? ☐ Yes ☒ No

If yes, please list environmental restrictions:

TOWN OF ENFIELD

The undersigned hereby permits town staff and commission members to enter into and inspect this site during reasonable hours for the purpose of reviewing this application and accompanying plans. I hereby depose and say that all of the above statements as well as the statements contained in all papers filed herewith are true.

☒ **I have reviewed and acknowledge the Land Use Application Guide for further instructions on how to complete my application.**

Applicant Signature: _____ **Date:** 4-20-20

Print Name: RANDY PAIGE

Subscribed and sworn to before me 20th **day of** April, 20 20.

Lori D LaRusso

Notary Public

LORI D. LARUSSO
NOTARY PUBLIC
MY COMMISSION EXPIRES AUG. 31, 2021

My Commission Expires:

INSTR # 2018014874
VOL 2692 PG 834 04/30/2018 03:33:24 PM
RECORDED IN ENFIELD CT
SUZANNE F. OLECHNICKI TOWN CLERK
TOWN CONVEYANCE TAX RECEIVED $450.00
STATE CONVEYANCE TAX RECEIVED $1,350.00

After Recording Return to:
McCaffrey Law Firm, PC
PO Box 172
Enfield, CT 06083

STATUTORY WARRANTY DEED

KNOW YE THAT We, Bruce F. Belanger and Machelle D. Belanger, both now or formerly of the Town of Enfield, County of Hartford and State of Connecticut

for the consideration of **One Hundred Eighty Thousand and 00/100 ($180,000.00) Dollars**

received to our full satisfaction of **Randy Daigle,** now or formerly of the Town of Enfield, County of Hartford and State of Connecticut

do give, grant, bargain, sell and confirm unto the said **Randy Daigle,** his heirs and assigns forever with **WARRANTY COVENANTS**,

See Schedule A attached hereto and made a part hereof

Being the same premises conveyed to the Grantors herein by Warranty Deed of Martha Androulidakis dated June 29, 2000 and recorded on June 30, 2000 in Volume 1294 at Page 232 of the Enfield Land Records.

Said premises are conveyed subject to Restrictive Covenants as set forth in Deed dated March 19, 1926 and recorded September 18, 1926 in Volume 69 at Page 223 of the Enfield Land Records.

Said premises are further conveyed subject to restrictions appearing of record, taxes to the Town of Enfield on the List of October 1, 2017, and thereafter, which the Grantee herein assumes and agrees to pay and to any and all provisions of any ordinance, municipal regulation, and public or private law, and to building, building line, zoning and inland-wetland regulations as of record may appear.

Signed this 27 day of April, 2018
Signed and delivered in the presence of:

Maureen A Rochette
~~Bridgid Tyler Murray~~ Maureen A. Rochette

Bruce F. Belanger

Linda M. Picard

Machelle Belanger
Machelle D. Belanger

STATE OF CONNECTICUT)
: ss. Enfield April 27, 2018
COUNTY OF HARTFORD)

Personally Appeared, Bruce F. Belanger and Machelle D. Belanger, as aforesaid, Signers of the foregoing Instrument, and acknowledged the same to be their free act and deed, before me.

LINDA M. PICARD
NOTARY PUBLIC
STATE OF CONNECTICUT
MY COMMISSION EXPIRES MAR. 31, 2023

Grantee's Address:
55 Cottage Road
Enfield, CT 06082

SCHEDULE A

, a certain piece or parcel of land, with all buildings and improvements located thereon, situated in the Town of Enfield, County of Hartford and State of Connecticut, being known as 55 Cottage Road and being shown and designated as "Lot 4" and "Portion of Lot #3" on a map or plan entitled "Plan Prepared for Robert M. Baillargeon Enfield, Conn. William R. Palmberg Land Surveyor 19 East Road Broad Brook, Connecticut 06016 528-8501 623-7018 by WP Scale 1" = 20' Date 10-21-91 Sheet 1 Check WP No. 91045 Certified Class A2" which map or plan is on file in the Office of the Town Clerk of said Town of Enfield for a more particular description.

Said premises are more particularly bounded and described as follows:

NORTHWESTERLY: By Pine Point Lake, as shown on said map referenced by a closing line, a distance of seventy-five and sixty-six one-hundredths (75.66) feet;

NORTHEASTERLY: By land now or formerly of Lorraine A. Goulet & Betty Jane Zavatsky, Lot 5, as shown on said map, a distance of one hundred twenty-five (125) feet;

SOUTHEASTERLY: By Cottage Road, a distance of seventy-five (75) feet; and

SOUTHWESTERLY: By land now or formerly of Richard M. & Cheryle L. Dunne, a Remaining Portion of Lot 3, as shown on said map, a distance of one hundred thirty-five (135) feet.

Said premises consists of an area of .24 acres, more or less.

Said premises are also known as follows:

Two certain pieces or parcels of land, situated in the Town of Enfield, County of Hartford and State of Connecticut, located on the westerly side of Cottage Road in said Town of Enfield, more particularly described as follows:

FIRST PARCEL:

A certain piece or parcel of land, located in the Town Enfield, County of Hartford and State of Connecticut, with all buildings and improvements located thereon, being designated as Lot No. 4 according to a map or plan of lots known as "Plan of Shaker Pines" which map is on file in the office of the Town Clerk of said Town of Enfield, Book of Maps, Volume 2, Page 8 to which reference may be had for a more particular description, together with the usual riparian rights in Pine Point Lake.

SECOND PARCEL:

A certain piece or parcel of land, located in the Town of Enfield, County of Hartford and State of Connecticut, bounded and described as follows:

BEGINNING at a point at the intersection of the westerly line of Cottage Road, so-called, with the southerly line of Lot No. 4 according to a map or plan of Lots known as "Shaker Pines Lake" which said map is on file in the Office of the Town Clerk of the Town of Enfield, Book of Maps, Volume 2, Page 8 and running:

THENCE southerly along the westerly line of said Cottage Road, so-called, 25 feet to an iron pin;

THENCE westerly in a line parallel with the southerly line of Lot No. 4, 135 feet, more or less, to the shore of Pine Point Lake;

THENCE northerly along the shore of Pine Point Lake, 25 feet to the southerly line of said Lot 4;

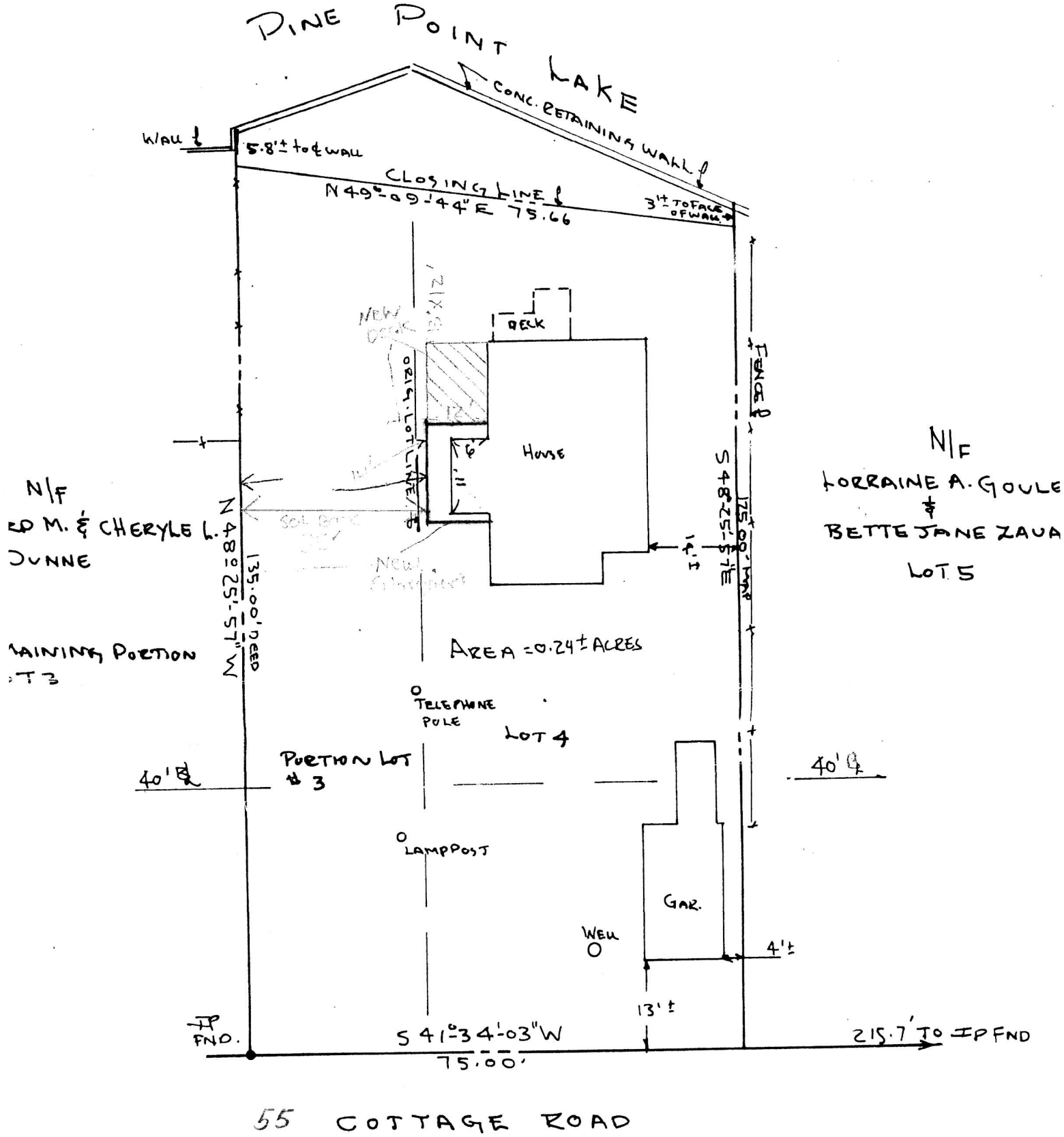
THENCE easterly along the southerly along the line of Lot 4, 148 feet to the place of beginning.

BOUNDED:

NORTH by Lot No. 4; EAST by the highway, Cottage Road, so-called; SOUTH by land now or formerly of Norman Slevin et al; and WEST by Pine Point Lake.

Randy Daigle
55 Cottage Road Enfield Ct. 06082
(860) 559-0087
Addition and Renovation Description

1. Removing existing 2nd bedroom interior wall at front of the house (lake side) and existing 2”x 4” floor joists and installing new 2”x 10” floor joist, new Batt insulation and ¾” T&G plywood subflooring glued and screwed.
2. Remove existing exterior storage area on back-right of the house (street side) and install new exterior wall out 4 feet from existing and install new 2”x 10” floor joists with new Batt insulation and ¾” T&G plywood subflooring glued and screwed for new master bathroom.
3. Bump out the back of the house 4 feet from existing (street side) install new 2”x 10” floor joists with new Batt insulation and ¾” T&G plywood subflooring glued and screwed for new foyer/entrance area.
4. Bump out the back-left rear of the house 10 feet from existing (street side) attached to the existing closet install new 2”x 10” floor joists with new Batt insulation and ¾” T&G plywood subflooring glued and screwed for new bedroom.
5. Extending existing roof as required with new pre-engineered roof joists per code.
6. Build new 2 car garage with 2nd floor in rear attached to the new bedroom. (street side)
7. All new exterior walls construction shall be 2”x 6” wood studs @ 16” O.C. w/ Batt insulation, exterior plywood, vapor barrow and vinyl siding on exterior side and ½” sheetrock painted on interior side.
8. All new floor areas shall be poured concrete slab with footing per code and 2X wood sleepers with Batt insulation and ¾” T&G plywood subflooring glued and screwed.
9. Remove existing kitchen cabinets and appliances and replace with new.
10. Entire roof shall be stripped to existing plywood, plywood repaired as required. New 25 year architectural shingles.
11. New 200 amp Electrical panel in existing house wired for Generator hookup.
12. New Electrical sub panel in garage.
13. New forced air mechanical system with heat and AC.
14. Entire house to be vinyl sided.
15. All new energy efficient Windows and Doors throughout.
16. Remove existing gravel driveway and install new paved driveway.



55 COTTAGE ROAD

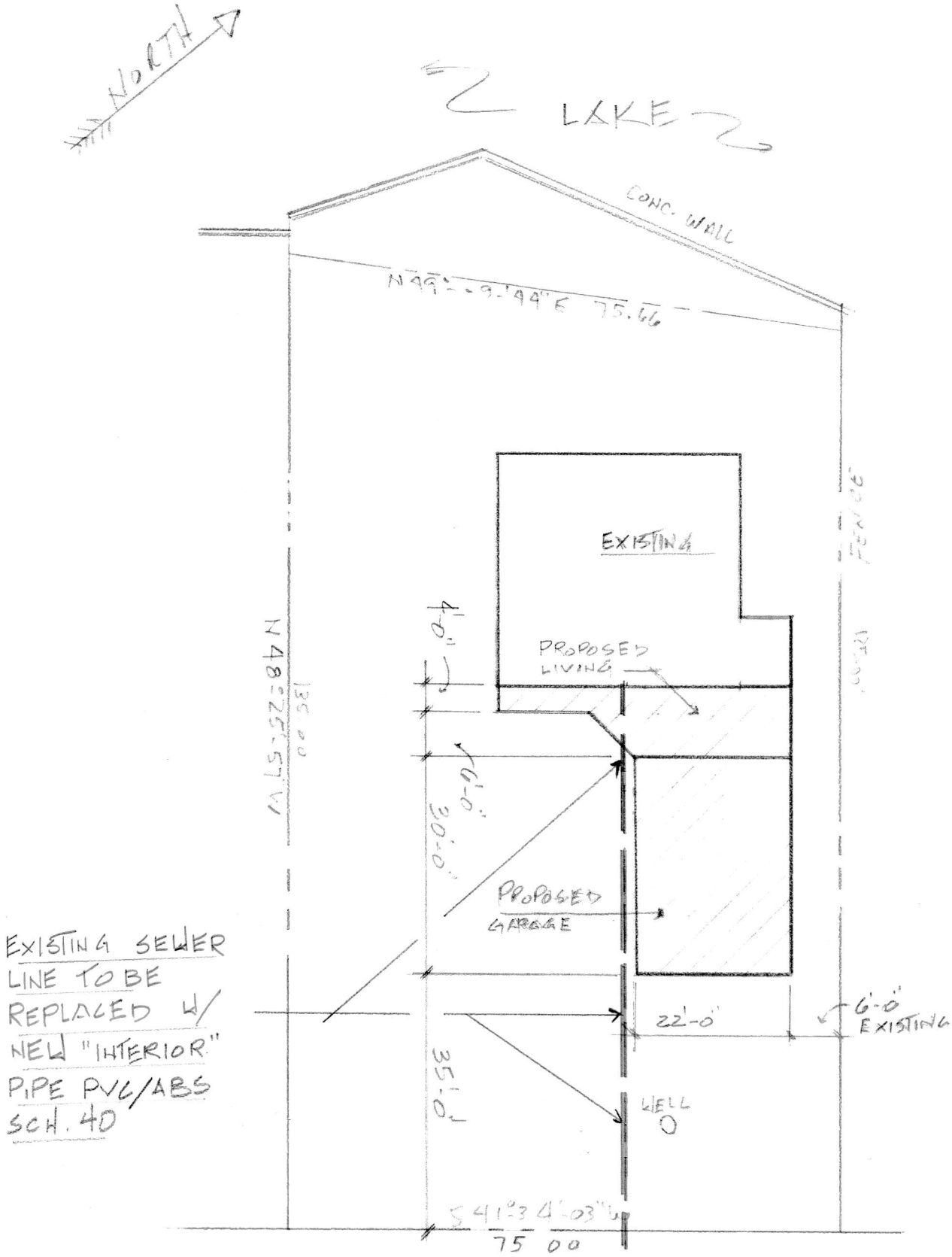
IES:

p - Plan of Shaker Pines 1" = 80' -
Merrill & Sears C.E.

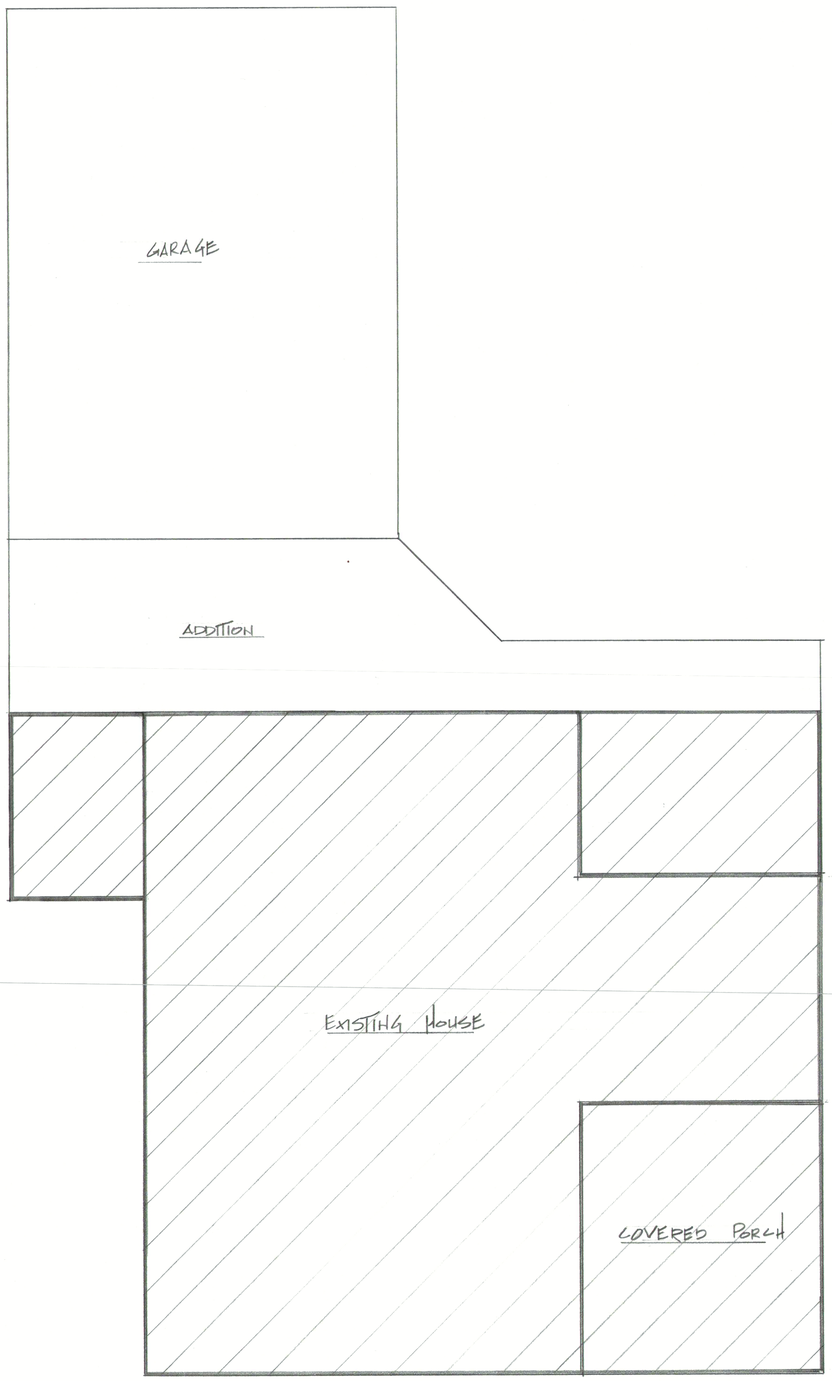
monumentation for Cottage Road and
is established from existing Iron
assumed.

forming to side line and rear line,
nforming to side and setback requirements.

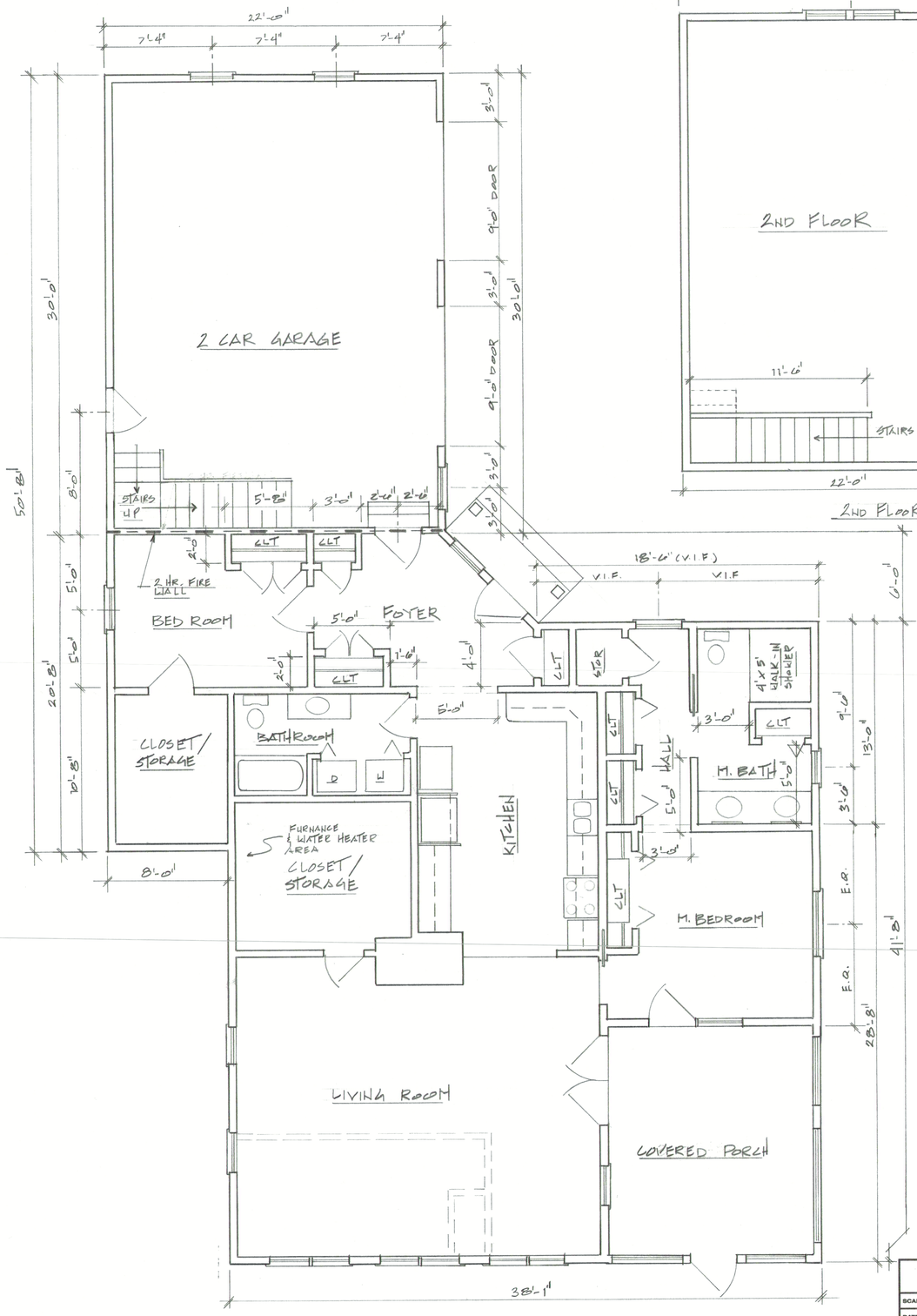
R-33



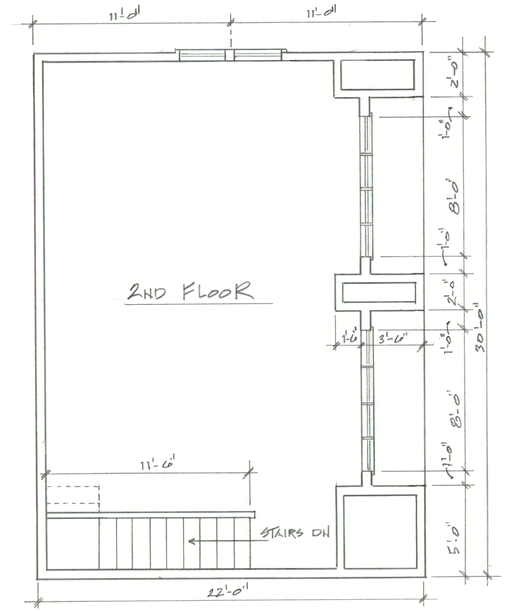
55 COTTAGE ROAD



EXISTING / NEW OVERALL
1/4"=1'-0"



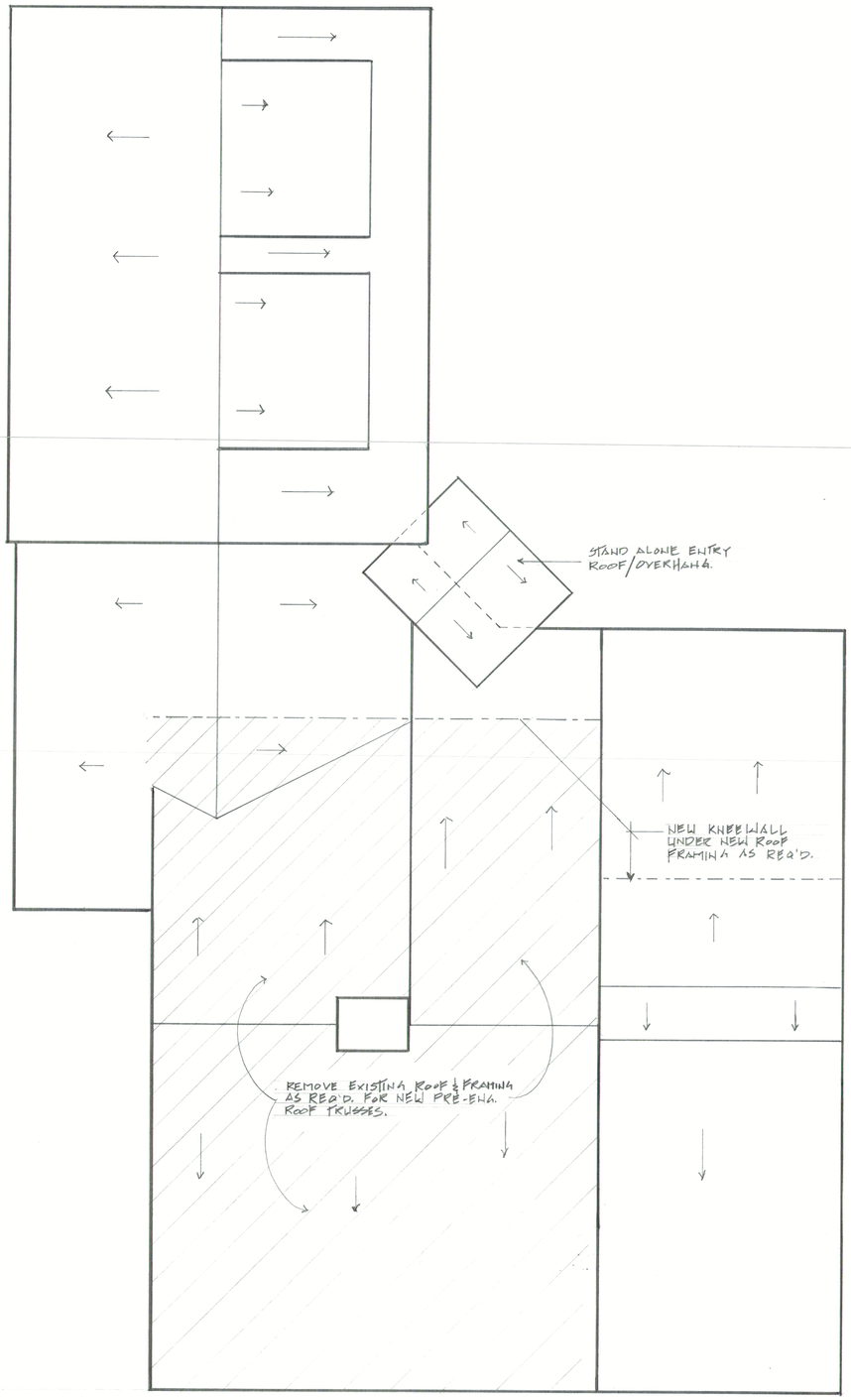
FLOOR PLAN
1/4"=1'-0"



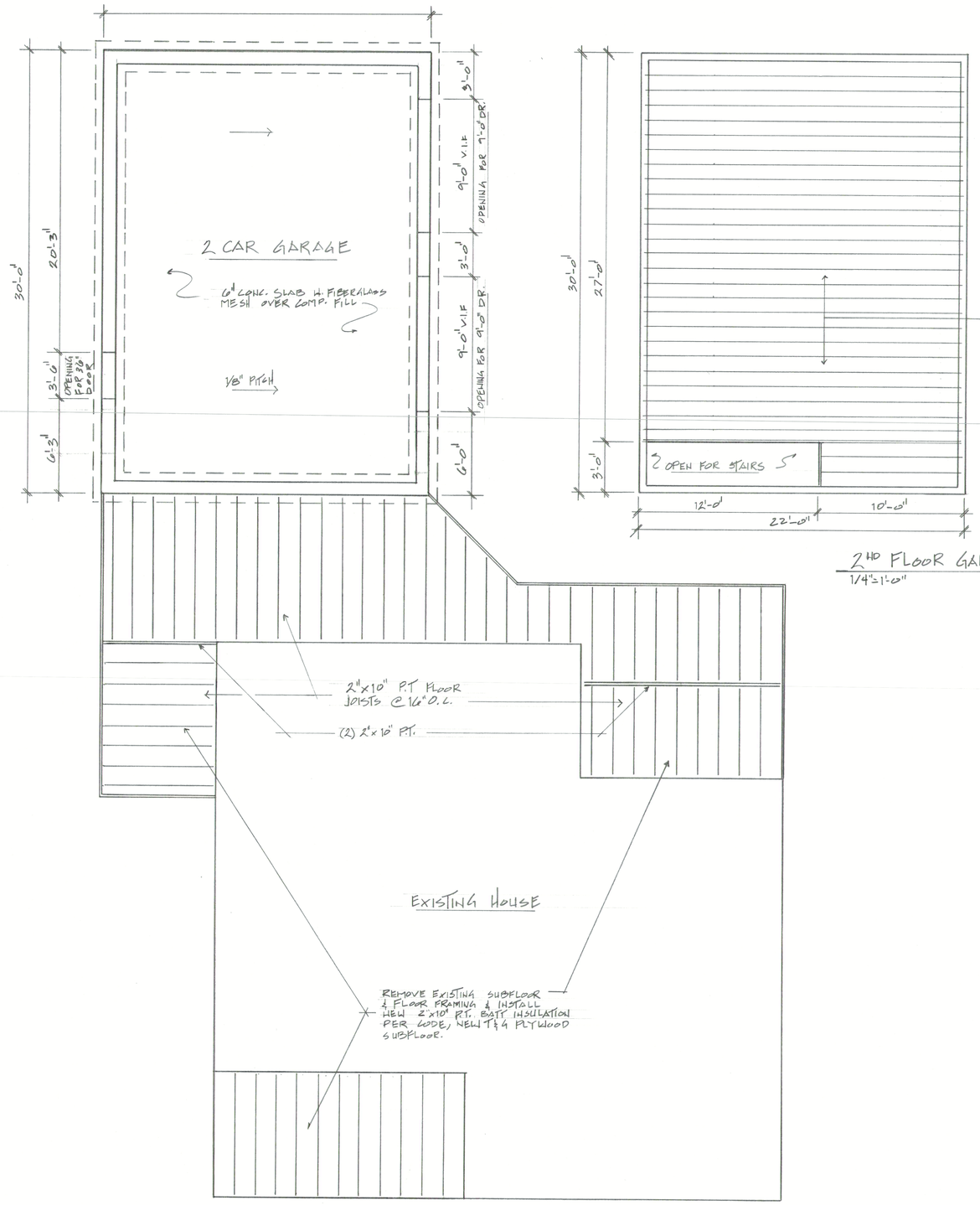
2ND FLOOR ABOVE GARAGE
1/4"=1'-0"

55 COTTAGE RD ENFIELD, CT.

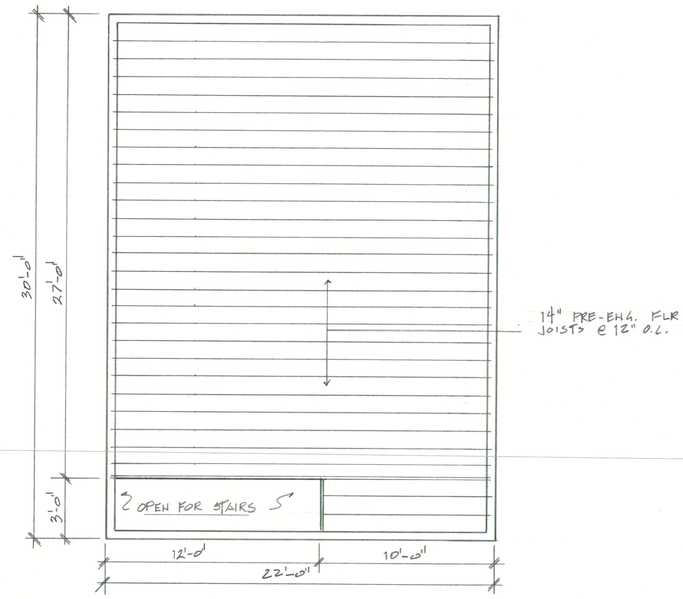
SCALE:	APPROVED BY:	DRAWN BY
DATE:		REVISED
RANDY DAIGLE		
		DRAWING NUMBER



ROOF PLAN
1/4"=1'-0"



FOUNDATION & FLOOR FRAMING PLAN
1/4"=1'-0"



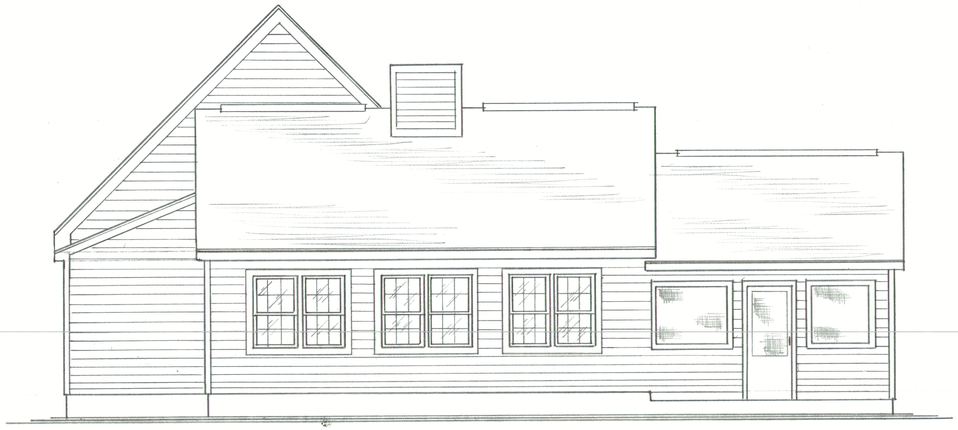
2ND FLOOR GARAGE FRAMING PLAN
1/4"=1'-0"

55 COTTAGE RD ENFIELD, CT

SCALE:	APPROVED BY:	DRAWN BY
DATE:		REVISED

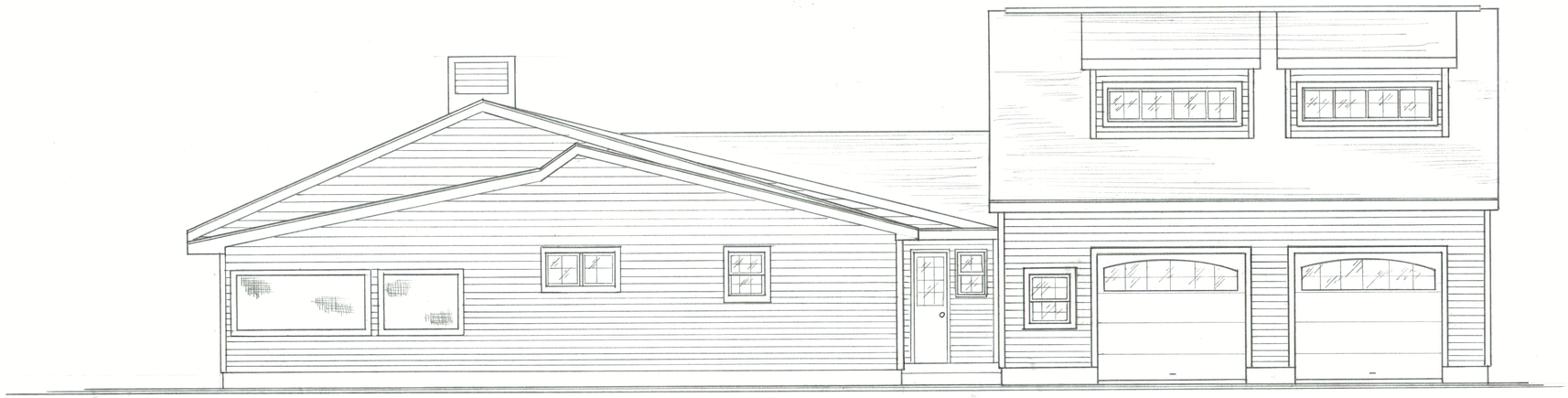
RANDY DAIGLE

DRAWING NUMBER



WEST EXTERIOR ELEVATION
1/4"=1'-0" (LAKE SIDE)

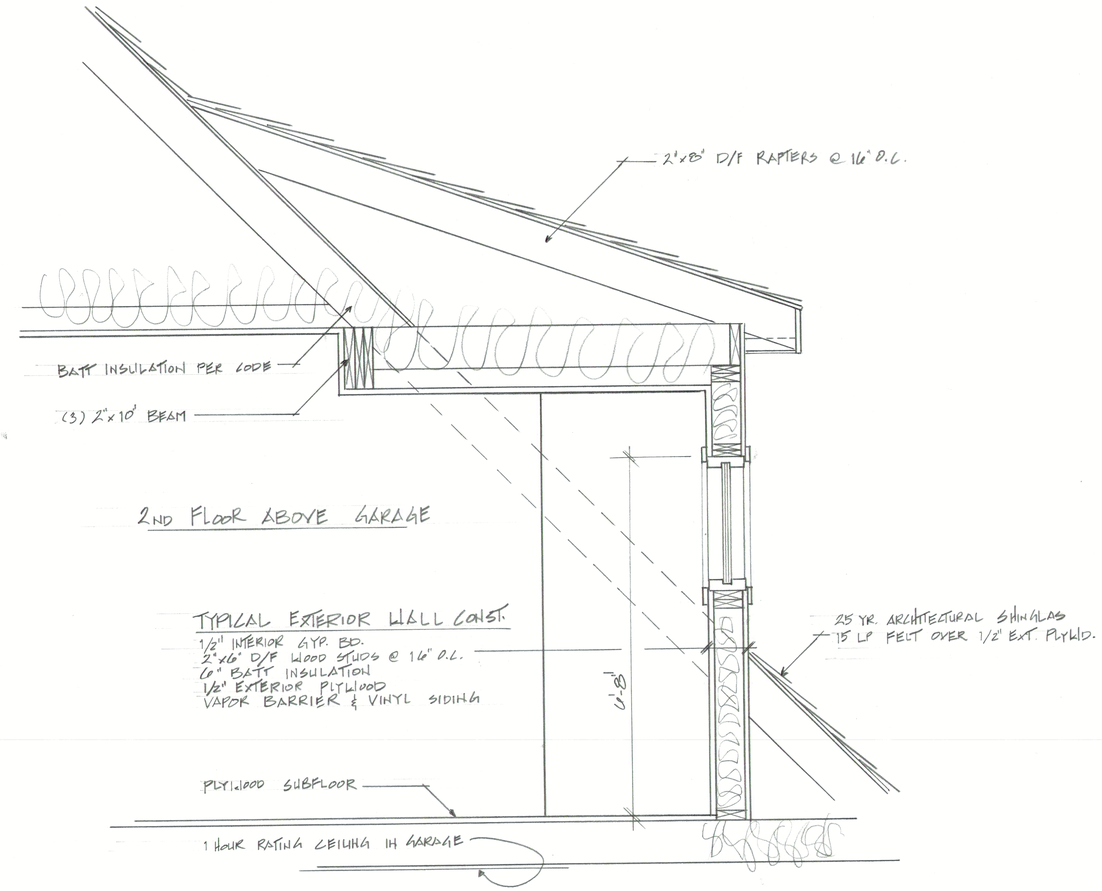
EAST EXTERIOR ELEVATION
1/4"=1'-0" (STREET SIDE)



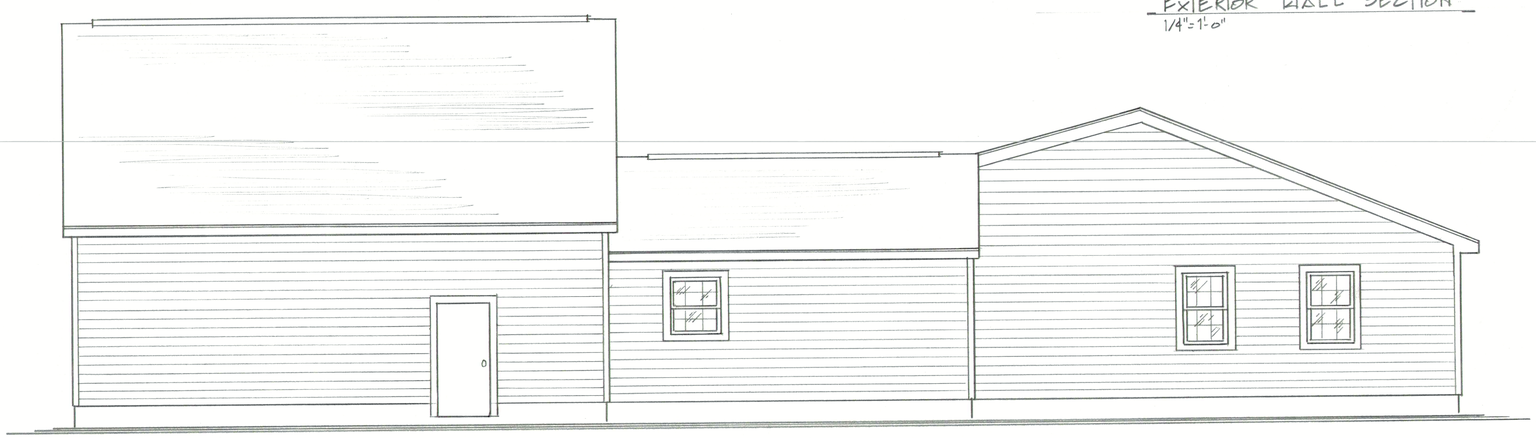
SOUTH EXTERIOR ELEVATION
1/4"=1'-0"

55 COTTAGE RD. ENFIELD CT

SCALE:	APPROVED BY:	DRAWN BY
DATE:		REVISED
RANDY DAIGLE		
		DRAWING NUMBER



EXTERIOR WALL SECTION
1/4" = 1'-0"



NORTH EXTERIOR ELEVATION
1/4" = 1'-0"

55 COTTAGE RD. ENFIELD, CT

SCALE:	APPROVED BY:	DRAWN BY
DATE:		REVISED
RANDY DAIGLE		
		DRAWING NUMBER

To: Town of Enfield Planning and Zoning Commission

Re: **Public Hearing #2973 – 55 Cottage Road, Special Permit Application for a Home Addition within the Lake Overlay District** as an expansion of an existing non-conforming use. Randy Daigle, Owner/Applicant; Map 80 Lot 178; R-33 Zone

We have reviewed the documents and plans submitted with this application along with Specific Regulations in the Town of Enfield Planning and Zoning Regulations, amended through 9/21/18, as they relate to this application.

The applicant has submitted an Existing Plot Plan which is described in Deed Page 3 of the submittal package.

This plot plan shows that the side yard on the right towards Lot 5 (57 Cottage Road) as being 14 feet +/- in October of 1991. A storage shed (accessory building) was constructed at the right front corner of the house in 2015 or 2016 . This is evidenced by the Town of Enfield Assessors records for 55 Cottage Road. The Assessors card shows this area as an unfinished utility area. In addition, the file picture of the house shown on the Assessors Card clearly shows that no shed existed until after the picture was taken. **(See Attachment "A")** (pgs 3-6)

This shed was constructed as an accessory building for storage only with no building permit being issued, as allowed by the Town Building Department. (Shed Building Permit for a Residence, section 1 and 4)

This shed, when constructed, generally met the regulations set forth in **Section 3.30.7 Accessory Buildings paragraph A.i**. in that it was 5 feet from the side property line. The roof of this shed was subsequently flashed into the existing principal building.

This does not make this shed/storage/accessory building an integral part of the principal building.

Various Sections of the Zoning Regulations establish what is considered part of a principal structure and what is considered an accessory structure.

Section 2.30 Definitions – 3. Accessory Building or Use: Structures that provide access to the principal building are considered part of the principal structure. **DOES NOT APPLY IN THIS CASE**

Section3.30.7 Accessory Buildings – paragraph A.v. Any buildings attached to a principal building by structural members shall be considered as an integral part of the principal building. **DOES NOT APPLY IN THIS CASE**

The bearing walls of the shed are independent of the principal building and are attached only at the exterior wall of the principal building with mechanical fasteners. The flashing at the shed roof is not a structural member.

The removal of this entire accessory building would have no structural impact on the principal structure.

THEREFORE, BEING CONSIDERED A PART OF THE PRINCIPAL STRUCTURE DOES NOT APPLY IN THIS CASE

We realize that this Public hearing for a Special Use Permit is required to address various Sections of the Zoning Regulations including Section 4.80 - Special Provisions related to the Lake Overlay District, possibly Section 3.40.2 – Non-conforming Structures, paragraphs A and B. and possibly Section 4.10.3 – Special Requirements for Legal Non-Conforming Lots under 33,000 square feet.

Section 4.80 – Special Provisions related to the Lake Overlay District

Paragraph B. – The last sentence states, " The front yard of the properties is defined as the lake side elsewhere in these regulations. " **IN WHAT SECTION OF THE REGULATIONS ??** The Minutes of Public Hearing XZA 09-07 held on 11/5/2009 is the only reference found that states that the regulations specifically define the front yard as being the part of the property that between the house and the street line.

Paragraph D.- The second sentence states, " The Commission may reduce the front, rear or side by no more than what is consistent with the average front rear or side yards existing for the BLOCK FACE on which the property is located as of July,1 2017. "

The Interpretation and Definitions of terms is set forth in Section 2.20 of the Regulations. Section 2.20 sets the interpretation of other terms including BLOCK FACE.

The **definition** of BLOCK FACE based upon research of the listed documents was as follows - **BLOCK FACE:** One side of street between two consecutive features intersecting that street. Features can be intersecting streets, geometric boundaries or limits of map tiles.

WE REQUEST THAT THE COMMISSION REVIEW THE BLOCK FACE ON THE NORTH SIDE OF COTTAGE ROAD IN REGARDS TO AVERAGE SIDE YARD AND AVERAGE FRONT YARDS PRIOR TO ANY ACTION ON THIS APPLICATION.

NOTE: Our personal review of this Block Face shows that the average front yard to be in excess of 35 feet and the average side yard (left and right) to be in excess of 10 feet.

ASSUMPTIONS BASED UPON SPECIAL USE PERMIT & SITE PLAN REVIEW APPLICATION DOCUMENTS

1) Applicant is **requesting a reduction in existing side yard** from 14 feet+/- to 6 feet +/- on the right hand side of 55 Cottage Road.
2) Applicant appears to be **requesting a reduction in the front yard setback** to 30 feet based upon the existing survey map submitted with his documents. The building shown on said map scales out at 70 feet from the street line less a 40 foot deep addition = 30 foot front yard.

CONCLUSION COMMENTS:

WE ARE OPPOSED TO A REDUCTION OF THE SIDE LINE TO ANYTHING LESS THAN 10 FEET
WE ARE OPPOSED TO A REDUCTION OF THE FRONT YARD TO ANYTHING LESS THAN 35 FEET

WE AS IMMEDIATELY ADJACENT NEIGHBORS AT 57 COTTAGE ROAD **ARE IN FAVOR** OF THE SPECIAL REQUIREMENTS FOR LEGAL NON-CONFORMING LOTS SET FORTH IN SECTION 4.10.3 WHICH ALLOWS FOR A **FRONT YARD OF 35 FEET AND SIDE YARDS OF 10 FEET.**

ADDITIONALY WE HAVE NO CONCERNS REGARDING THE EXISTING ACCESSORY SHED LOCATION OR PRESENT USE.

Respectively submitted for your review and comments,

Lorraine A. and William J. Creedon
57 Cottage Road, Enfield, CT

ASSESSORS CARD INFO

ATTACHMENT "A"

55 COTTAGE RD

Location	55 COTTAGE RD	**Mblu**	080/ / 0178/ /
Acct#	052700010050	**Owner**	DAIGLE RANDY
Assessment	$98,410	**Appraisal**	$140,590
PID	7171	**Building Count**	1
Fire District	5		

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2017	$67,090	$73,500	$140,590

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2017	$46,960	$51,450	$98,410

Owner of Record

Owner DAIGLE RANDY
Co-Owner
Address 55 COTTAGE RD
ENFIELD, CT 06082

Sale Price $180,000
Certificate
Book & Page 2692/0834
Sale Date 04/30/2018
Instrument 00

Ownership History

Ownership History					
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Instrument**	**Sale Date**
DAIGLE RANDY	$180,000		2692/0834	00	04/30/2018
BELANGER BRUCE F + MACHELLE D	$102,000	1	1294/0232	UNKQ	06/30/2000
ANDROULIDAKIS MARTHA	$0	2	1218/0104	01	06/23/1999
BOER LASZLO	$61,000	3	1218/0078	14	06/23/1999
AMERICAN SAVINGS BANK	$0	4	0000/0000		04/08/1998

Building Information

Building 1 : Section 1

Year Built:	1900
Living Area:	1,140
Replacement Cost:	$109,988
Building Percent Good:	61
Replacement Cost Less Depreciation:	$67,090

Building Attributes

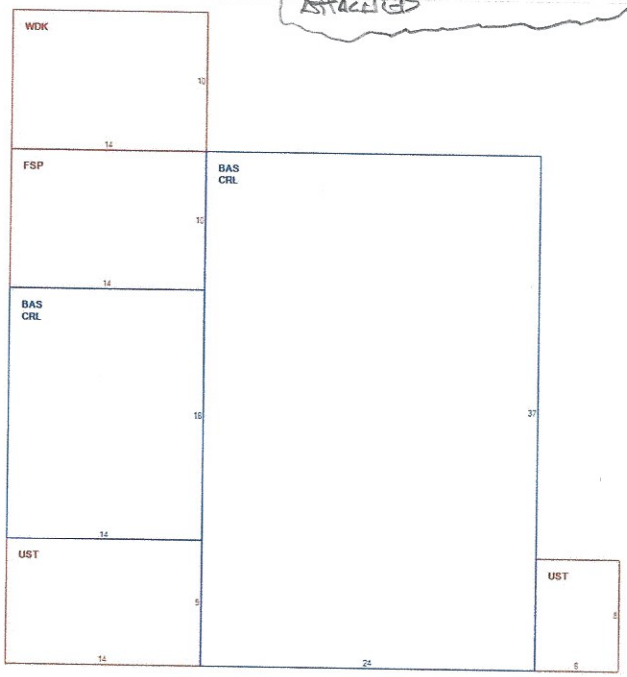
Field	Description
Style	Ranch
Model	Residential
Grade:	
Stories	1.00
Occupancy	1
Exterior Wall 1	Wood on Sheath
Exterior Wall 2	
Roof Structure	Gable
Roof Cover	Arch Shingles
Interior Wall 1	Drywall
Interior Wall 2	
Interior Flr 1	Hardwood
Interior Flr 2	Carpet
Heat Fuel	Propane
Heat Type:	Forced Hot Air
AC Type:	None
Total Bedrooms:	2 Bedrooms
Full Bthrms:	1
Half Baths:	0
Extra Fixtures	
Total Rooms:	4
Bath Style:	Average
Kitchen Style:	Average
Extra Kitchens	
Fireplace(s)	1
Extra Opening(s)	0
Gas Fireplace(s)	
Blocked FPL(s)	
Usrfld 106	
Bsmt Garage(s)	
Fin Bsmt	
FBM Quality	
Whirlpool(s)	

Building Photo

(http://images.vgsi.com/photos2/EnfieldCTPhotos/\00\02\38\66.JPG)

Building Layout

SEE ENLARGED PICTURE ATTACHED



(ParcelSketch.ashx?pid=7171&bid=7171)

Building Sub-Areas (sq ft) Legend

Code	Description	Gross Area	Living Area
BAS	First Floor	1,140	1,140
CRL	Crawl Space	1,140	0
FSP	Screened Porch	140	0
UST	Unfinished Utility Area	174	0
WDK	Deck	140	0
		2,734	1,140

Pg 4 of 6

Sauna	
Walk Out	No
Solar	
Usrfld 300	
Usrfld 301	

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use

Use Code	101
Description	Res Dwelling
Zone	R33
Neighborhood	050
Alt Land Appr	No
Category	

Land Line Valuation

Size (Acres)	0.25
Frontage	75
Depth	
Assessed Value	$51,450
Appraised Value	$73,500

Outbuildings

Outbuildings	Legend
No Data for Outbuildings	

Valuation History

Appraisal

Valuation Year	Improvements	Land	Total
2019	$67,090	$73,500	$140,590
2018	$67,090	$73,500	$140,590
2017	$67,090	$73,500	$140,590

Assessment

Valuation Year	Improvements	Land	Total
2019	$46,960	$51,450	$98,410
2018	$46,960	$51,450	$98,410
2017	$46,960	$51,450	$98,410

Pg 5 of 6

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ENLARGED PHOTO OF 55 COTTAGE ROAD, ENFIELD, CT.
FROM ASSESSORS CARD

Enfield Planning and Zoning Commission

Re: Public Hearing #2973 – Request for Additional Information regarding Application.

1) Request that the PZC review the information submitted to make a determination regarding the existing Accessory Storage shed.
2) Request that the PZC make a determination whether the Principal Building or Accessory buildings establish the average Block Face.
3) Request that the PZC make a determination for this particular Public Hearing the limits of the Block Face used for determining any averages of yard areas. (1000 feet ?, length of road?, beach lot to beach lot?)
4) Request that the members of the PZC after determining the Block Face limits visually review the North side of Cottage Road in this area in regards to average side yard and average front yards prior to any Action on Public Hearing #2973

We also request a definitive answer on Section 4.80 of the Zoning Regulations, paragraph B . that states " The front yard of the properties is defined as the lake side elsewhere in these regulations. **IN WHAT SECTION OF THE REGULATIONS ??**

We as Owner/Occupants of 57 Cottage Road (adjacent property) are **in favor of improvements** to properties on Shaker Pines Lake. All lots have certain physical restrictions in regards to frontages, lot areas and configuration based upon their original subdivision approvals.

Historically, reductions in side yards or front yards have **not** been approved by either the Planning and Zoning Commission or the Zoning Board of Appeals unless there was a **hardship** proven. I can find no evidence of reductions of side yard or front yard requirements being approved by either Commission when the hardship was **self-imposed.**

We are in favor of the following Actions on Public Hearing #2973

Reduce Side Line to Minimum: 10 feet

Reduce Front Yard to Minimum: 35 feet

Lorraine A. and William J. Creedon

57 Cottage Road, Enfield, CT.

May 6, 2020

Jennifer Pacacha

Assistant Town Planner

Town of Enfield

820 Enfield Street

Enfield, CT 06082

Re: Public Hearing #2973 – 55 Cottage Road, Special Use Permit Applicion

Dear Ms. Pacacha,

Attached herewith are copies of the E-mails that I attempted to send to you on May 5, 2020 requesting review and comments regarding the Subject Application.

I would request that these items be addressed in written form Prior to the Public Hearing Opening if possible. I believe that all these items must be addressed Prior to the Closing of the Public Hearing.

Please contact me at (860) 977-8278 with any questions. Please forward written comment to my E-mail at wjcreedon@yahoo.com.

Thank you for your consideration.

William J. Creedon

57 Cottage Road

Enfield, CT 06082

Randy Daigle

55 Cottage Road Enfield Ct. 06082
(860) 559-0087

Addition and Renovation Description

The following are the Existing Side and Rear Setbacks (from Property Lines) for the 5 properties North and 5 properties South of our Property (55 Cottage Rd.)(from the Towns GIS Plot Plan)

Property Address/#	Existing Side Setback	Existing Rear Setback
#57	8’-0”	31’-8”
#59	6’-8”	28’-6”
#63	0” (sits on/over property line)	21’-6”
#65	4’-6”	24’-6”
#67	3’-6”	28’-6”
#51	9’-0”	24’-0”
#49	6’-0”	39’-0”
#47	6’-6”	56’-6”
#37	11’-0”	36’-0”
#31	3’-8”	0” (sits on/over property line)
Totals	**58’-10”. /’10 = 5’-10”**	**290’-2”. /’ 10 = 29’-0”**

Note:
Lots #33 and #35 Show no houses and #39 is the Beach/Boat Launch area.

The Average Side Setbacks is 5’-10” and the Average Rear Setback is 29’-0” (street side) for the 5 properties North and 5 properties South of our Property (55 Cottage Rd.)

55 Cottage Road
- Front Yard (Lake Side) – 20 feet
- Rear Yard (Street Side) – 66 feet
- Side Yard 1 – 13 feet
- Side Yard 2 – 31 feet

57 Cottage Road
- Front Yard (Lake Side) – 42 feet
- Rear Yard (Street Side) – 32 feet
- Side Yard 1 – 8 feet
- Side Yard 2 – 14 feet

59 Cottage Road
- Front Yard (Lake Side) – 24 feet
- Rear Yard (Street Side) – 60 feet
- Side Yard 1 – 20 feet
- Side Yard 2 – 2 feet

63 Cottage Road
- Front Yard (Lake Side) – 18 feet
- Rear Yard (Street Side) – 90 feet
- Side Yard 1 – 10 feet
- Side Yard 2 – 10 feet

65 Cottage Road
- Front Yard (Lake Side) – 33 feet
- Rear Yard (Street Side) – 106 feet
- Side Yard 1 – 4 feet
- Side Yard 2 – 8.5 feet

67 Cottage Road
- Front Yard (Lake Side) – 100 feet
- Rear Yard (Street Side) – 28 feet
- Side Yard 1 – 7.5 feet
- Side Yard 2 – 12 feet

51 Cottage Road
- Front Yard (Lake Side) – 46 feet
- Rear Yard (Street Side) – 53.5 feet
- Side Yard 1 – 9 feet
- Side Yard 2 – 18 feet

49 Cottage Road
- Front Yard (Lake Side) – 35 feet
- Rear Yard (Street Side) – 56 feet
- Side Yard 1 – 8 feet
- Side Yard 2 – 25 feet

47 Cottage Road
- Front Yard (Lake Side) – 58 feet
- Rear Yard (Street Side) – 58 feet
- Side Yard 1 – 7 feet
- Side Yard 2 – 13 feet

37 Cottage Road
- Front Yard (Lake Side) – 64 feet
- Rear Yard (Street Side) – 36 feet
- Side Yard 1 – 11 feet
- Side Yard 2 – 14 feet

AVERAGES
- Front Yard (Lake Side) – 49.8 feet
- Rear Yard (Street Side) – 58.55 feet
- Side Yards – 12.25 feet

55 COTTAGE RD

Location	55 COTTAGE RD	**Mblu**	080/ / 0178/ /
Acct#	052700010050	**Owner**	DAIGLE RANDY
Assessment	$98,410	**Appraisal**	$140,590
PID	7171	**Building Count**	1
Fire District	5		

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2017	$67,090	$73,500	$140,590

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
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Owner of Record

Owner	DAIGLE RANDY	**Sale Price**	$180,000
Co-Owner		**Certificate**	
Address	55 COTTAGE RD ENFIELD, CT 06082	**Book & Page**	2692/0834
		Sale Date	04/30/2018
		Instrument	00

Ownership History

Ownership History					
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Instrument**	**Sale Date**
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Building Percent Good:	61
Replacement Cost Less Depreciation:	$67,090

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Model	Residential
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Occupancy	1
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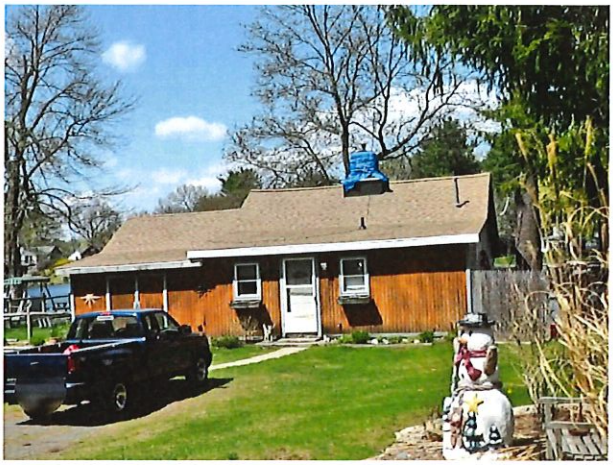
Exterior Wall 2	
Roof Structure	Gable
Roof Cover	Arch Shingles
Interior Wall 1	Drywall
Interior Wall 2	
Interior Flr 1	Hardwood
Interior Flr 2	Carpet
Heat Fuel	Propane
Heat Type:	Forced Hot Air
AC Type:	None
Total Bedrooms:	2 Bedrooms
Full Bthrms:	1
Half Baths:	0
Extra Fixtures	
Total Rooms:	4
Bath Style:	Average
Kitchen Style:	Average
Extra Kitchens	
Fireplace(s)	1
Extra Opening(s)	0
Gas Fireplace(s)	
Blocked FPL(s)	
Usrfld 106	
Bsmt Garage(s)	
Fin Bsmt	
FBM Quality	

Building Photo



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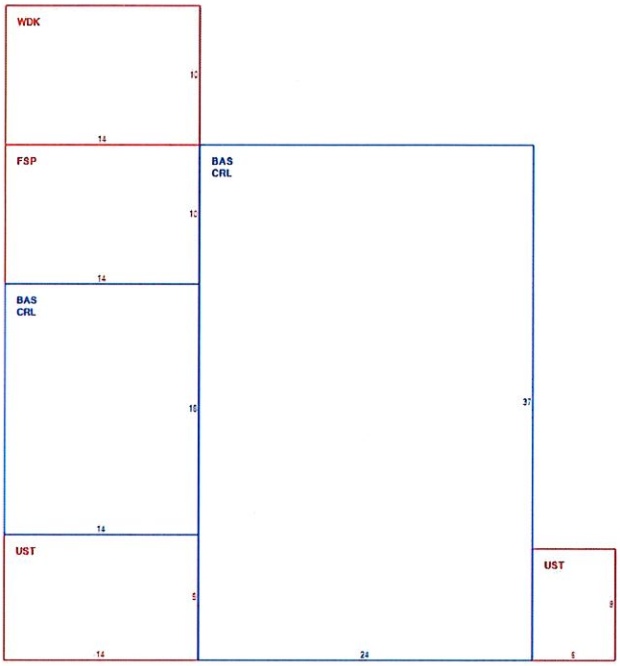
Building Layout



(ParcelSketch.ashx?pid=7171&bid=7171)

Building Sub-Areas (sq ft)			Legend
Code	**Description**	**Gross Area**	**Living Area**
BAS	First Floor	1,140	1,140
CRL	Crawl Space	1,140	0
FSP	Screened Porch	140	0
UST	Unfinished Utility Area	174	0
WDK	Deck	140	0
		2,734	1,140

Whirlpool(s)	
Sauna	
Walk Out	No
Solar	
Usrfld 300	
Usrfld 301	

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use

Use Code	101
Description	Res Dwelling
Zone	R33
Neighborhood	050
Alt Land Appr	No
Category	

Land Line Valuation

Size (Acres)	0.25
Frontage	75
Depth	
Assessed Value	$51,450
Appraised Value	$73,500

Outbuildings

Outbuildings	Legend
No Data for Outbuildings	

Valuation History

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
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2017	$67,090	$73,500	$140,590

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
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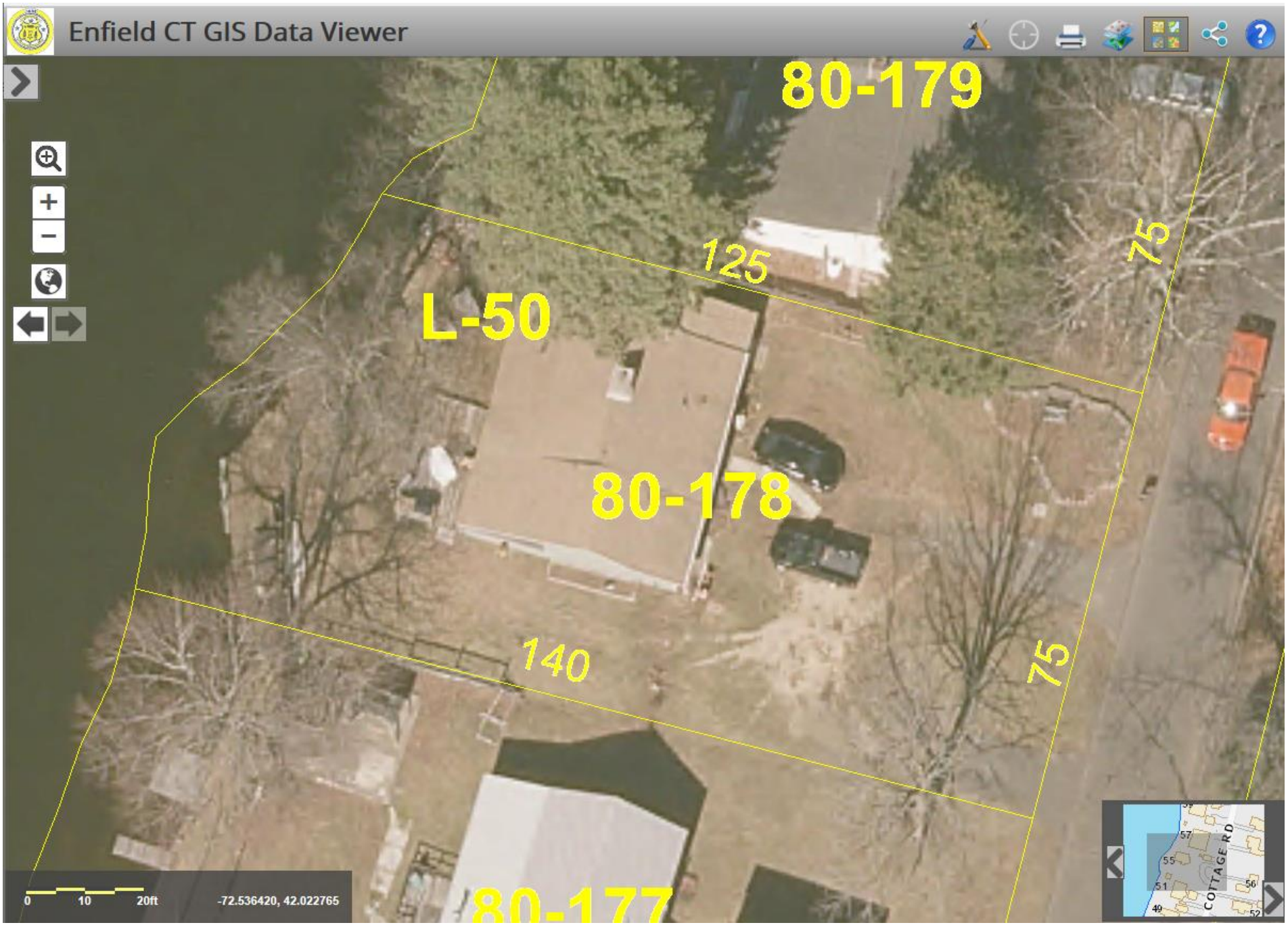

Enfield CT GIS Data Viewer
80-179
125
75
L-50
80-178
140
75
80-177
0
10
20ft
-72.536420, 42.022765
COTTAGE RD

TOWN OF ENFIELD, CONNECTICUT, BUILDING DEPARTMENT

820 Enfield St. • Enfield, CT 06082

For Assistance Call: (860) 253-6370

APPLICATION FOR PLAN EXAMINATION AND BUILDING PERMIT

6

***IMPORTANT** – Applicant to complete all items in sections: I, II, III, IV, and VIII.*

NO. 55 STREET Cottage rd

I. LOCATION OF BUILDING

AT (LOCATION) 55 (NO.) Cottage rd (STREET) ZONING DISTRICT _____

BETWEEN _____ (CROSS STREET) AND _____ (CROSS STREET)

SUBDIVISION _____ LOT _____ BLOCK _____ LOT SIZE .24

II. TYPE AND COST OF BUILDING – *All applicants complete Parts A – D*

A. TYPE OF IMPROVEMENT

1 ☐ New building
2 ☒ Addition *(If residential, enter number of new housing units added, if any, in Part D, 13)*
3 ☐ Alteration *(See 2 above)*
4 ☐ Repair, replacement
5 ☐ Wrecking *(If multifamily residential, enter number of units in building in Part D, 13)*
6 ☐ Moving (relocation)
7 ☐ Foundation only

B. OWNERSHIP

8 ☒ Private (individual, corporation, nonprofit institution, etc.)
9 ☐ Public (Federal, State, or local government)

D. PROPOSED USE – *For "Wrecking" most recent use*

Residential

12 ☒ One family
13 ☐ Two or more family – *Enter number of units* → _____
14 ☐ Transient hotel, motel, or dormitory – *Enter number of units* → _____
15 ☐ Garage
16 ☐ Carport
17 ☒ Other – *Specify* Front Porch

Nonresidential

18 ☐ Amusement, recreational
19 ☐ Church, other religious
20 ☐ Industrial
21 ☐ Parking garage
22 ☐ Service station, repair garage
23 ☐ Hospital, institutional
24 ☐ Office, bank, professional
25 ☐ Public utility
26 ☐ School, library, other educational
27 ☐ Stores, mercantile
28 ☐ Tanks, towers
29 ☐ Other – *Specify* _____

C. COST

	(Omit cents)
10. Cost of improvement	$ 2000.00
To be installed but not included in the above cost	
a. Electrical	Ø
b. Plumbing	Ø
c. Heating, air conditioning	Ø
d. Other (elevator, etc.)	Ø
11. TOTAL COST OF IMPROVEMENT	$ 2000.00

Nonresidential – Describe in detail proposed use of buildings, e.g., food processing plant, machine shop, laundry building at hospital, elementary school, secondary school, college, parochial school, parking garage for department store, rental office building, office building at industrial plant. If use of existing building is being changed, enter proposed use.

III. SELECTED CHARACTERISTICS OF BUILDING – *For new buildings and additions, complete Parts E – L; for wrecking, complete only Part J, for all others skip to IV.*

E. PRINCIPAL TYPE OF FRAME

30 ☐ Masonry (wall bearing)
31 ☒ Wood frame
32 ☐ Structural steel
33 ☐ Reinforced concrete
34 ☐ Other – *Specify* _____

F. PRINCIPAL TYPE OF HEATING FUEL

35 ☐ Gas
36 ☐ Oil
37 ☐ Electricity
38 ☐ Coal
39 ☒ Other – *Specify* none

G. TYPE OF SEWAGE DISPOSAL

40 ☒ Public or private company
41 ☐ Private (septic tank, etc.)

H. TYPE OF WATER SUPPLY

42 ☒ Public or private company
43 ☐ Private (well, cistern)

I. TYPE OF MECHANICAL

Will there be central air conditioning?

44 ☐ Yes 45 ☒ No

Will there be an elevator?

46 ☐ Yes 47 ☒ No

J. DIMENSIONS

48. Number of stories: 1
49. Total square feet of floor area, all floors, based on exterior dimensions: 1,107
50. Total land area, sq. ft.: .24 Acres

K. NUMBER OF OFF-STREET PARKING SPACES

51. Enclosed: 0
52. Outdoors: 0

L. RESIDENTIAL BUILDINGS ONLY

53. Number of bedrooms: _____
54. Number of bathrooms: Full _____ Partial _____

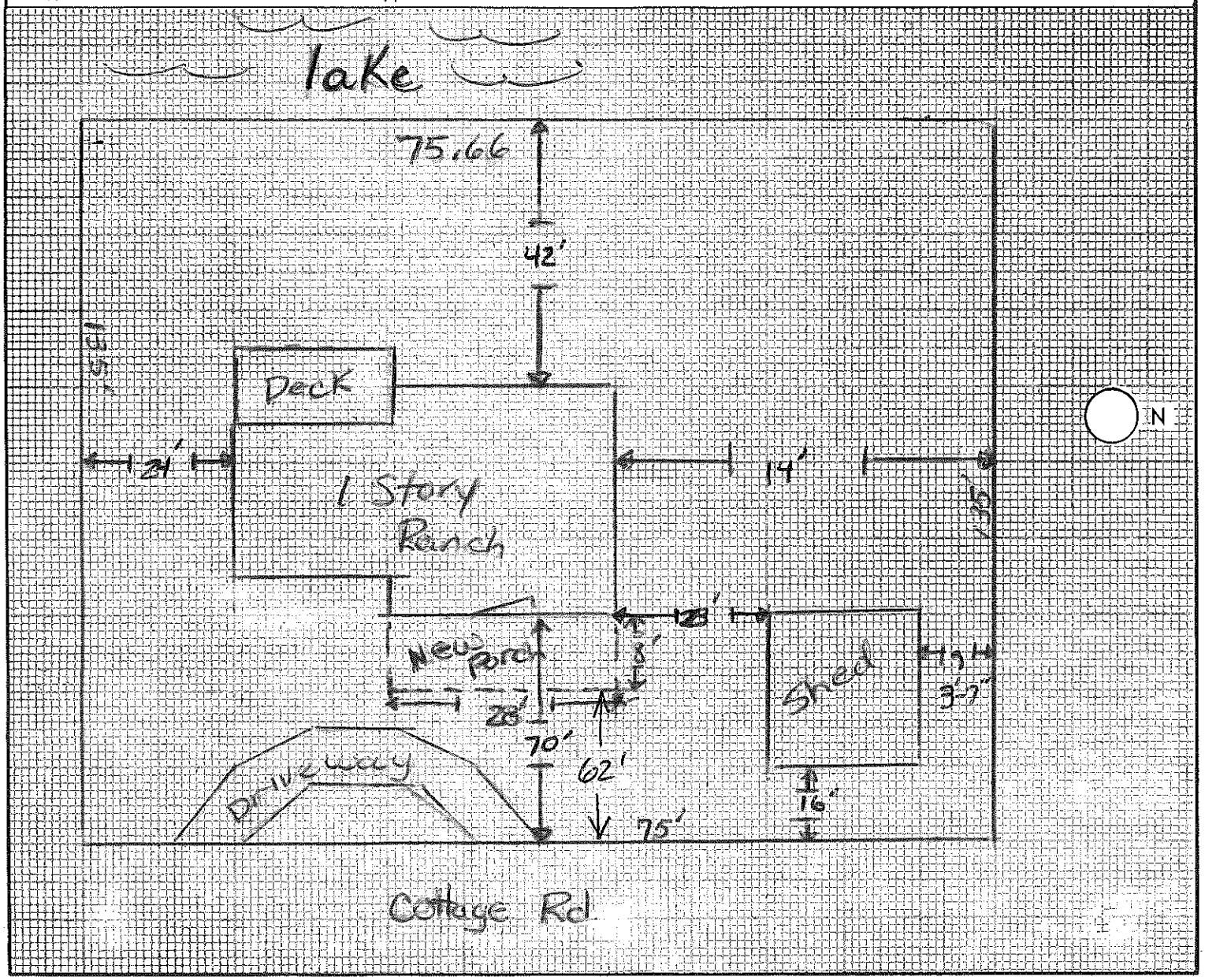
8.11.14

VII. ZONING PLAN EXAMINERS NOTES

DISTRICT	
USE	
FRONT YARD	
SIDE YARD	SIDE YARD
REAR YARD	
NOTES	THIS APPLICATION COMPLIES WITH SEC. 9-2 OF THE ZONING ORD.

MWB 10-9-96

VIII. SITE OR PLOT PLAN – *For Applicant Use*



TOWN OF ENFIELD, CONNECTICUT, BUILDING DEPARTMENT

820 Enfield St. • Enfield, CT 06082
For Assistance Call: (203) 745-0371, Ext. 337
Between 8-9 a.m. 741-5927

APPLICATION FOR PLAN EXAMINATION AND BUILDING PERMIT

***IMPORTANT** – Applicant to complete all items in sections: I, II, III, IV, and VIII.*

I. LOCATION OF BUILDING

AT (LOCATION) 55 (NO.) Cottage Rd (STREET) ZONING DISTRICT _____

BETWEEN _____ (CROSS STREET) AND _____ (CROSS STREET)

SUBDIVISION _____ LOT _____ BLOCK _____ LOT SIZE _____

NO. 55 STREET Cottage Rd

II. TYPE AND COST OF BUILDING – *All applicants complete Parts A – D*

A. TYPE OF IMPROVEMENT

- 1 [ ] New building
- 2 [ ] Addition *(If residential, enter number of new housing units added, if any, in Part D, 13)*
- 3 [✓] Alteration *(See 2 above)*
- 4 [ ] Repair, replacement
- 5 [ ] Wrecking *(If multifamily residential, enter number of units in building in Part D, 13)*
- 6 [ ] Moving (relocation)
- 7 [ ] Foundation only

B. OWNERSHIP

- 8 [✓] Private (individual, corporation, nonprofit institution, etc.)
- 9 [ ] Public (Federal, State, or local government)

D. PROPOSED USE – *For "Wrecking" most recent use*

Residential
- 12 [ ] One family
- 13 [ ] Two or more family – *Enter number of units* → _____
- 14 [ ] Transient hotel, motel, or dormitory – *Enter number of units* → _____
- 15 [ ] Garage
- 16 [ ] Carport
- 17 [✓] Other – *Specify* Enlarge Existing Room.

Nonresidential
- 18 [ ] Amusement, recreational
- 19 [ ] Church, other religious
- 20 [ ] Industrial
- 21 [ ] Parking garage
- 22 [ ] Service station, repair garage
- 23 [ ] Hospital, institutional
- 24 [ ] Office, bank, professional
- 25 [ ] Public utility
- 26 [ ] School, library, other educational
- 27 [ ] Stores, mercantile
- 28 [ ] Tanks, towers
- 29 [ ] Other – *Specify* _____

C. COST

	(Omit cents)
10. Cost of improvement	$ 1000.00
To be installed but not included in the above cost	
a. Electrical	300.00
b. Plumbing	N/A
c. Heating, air conditioning	N/A
d. Other (elevator, etc.)	
11. TOTAL COST OF IMPROVEMENT	$ 1300.00

Nonresidential – Describe in detail proposed use of buildings, e.g., food processing plant, machine shop, laundry building at hospital, elementary school, secondary school, college, parochial school, parking garage for, department store, rental office building, office building at industrial plant. If use of existing building is being changed, enter proposed use.

III. SELECTED CHARACTERISTICS OF BUILDING – *For new buildings and additions, complete Parts E – L; for wrecking, complete only Part J, for all others skip to IV.*

E. PRINCIPAL TYPE OF FRAME

- 30 [ ] Masonry (wall bearing)
- 31 [✓] Wood frame
- 32 [ ] Structural steel
- 33 [ ] Reinforced concrete
- 34 [ ] Other – *Specify* _____

F. PRINCIPAL TYPE OF HEATING FUEL

- 35 [ ] Gas
- 36 [ ] Oil
- 37 [✓] Electricity
- 38 [ ] Coal
- 39 [ ] Other – *Specify* _____

G. TYPE OF SEWAGE DISPOSAL

- 40 [✓] Public or private company
- 41 [ ] Private (septic tank, etc.)

H. TYPE OF WATER SUPPLY

- 42 [✓] Public or private company
- 43 [ ] Private (well, cistern)

I. TYPE OF MECHANICAL

Will there be central air conditioning?
44 [ ] Yes 45 [✓] No

Will there be an elevator?
46 [ ] Yes 47 [✓] No

J. DIMENSIONS

48. Number of stories	1
49. Total square feet of floor area, all floors, based on exterior dimensions	168
50. Total land area, sq. ft.	

K. NUMBER OF OFF-STREET PARKING SPACES

51. Enclosed	
52. Outdoors	

L. RESIDENTIAL BUILDINGS ONLY

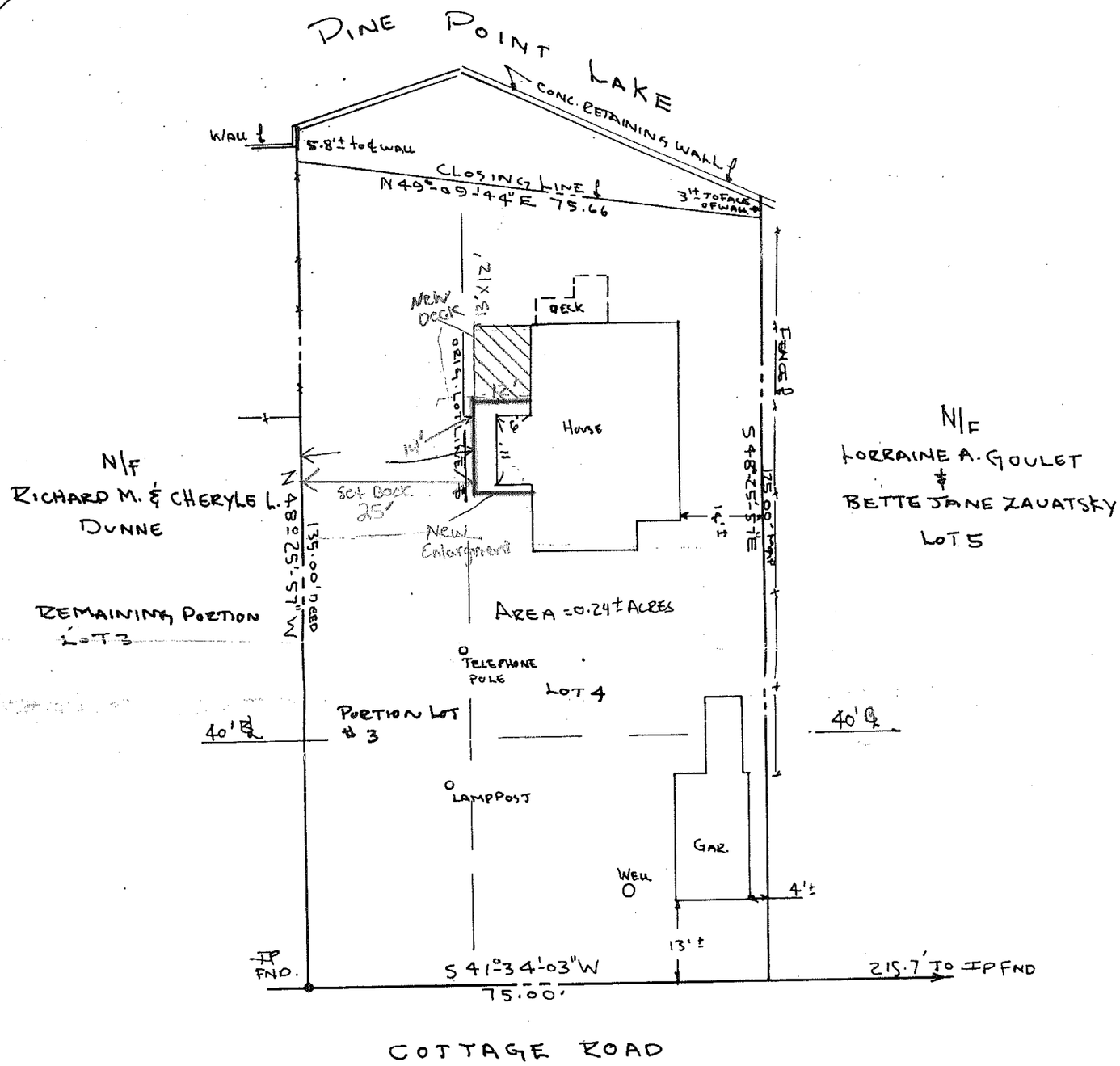
53. Number of bedrooms	
54. Number of bathrooms – Full	
54. Number of bathrooms – Partial	

VII. ZONING PLAN EXAMINERS NOTES

DISTRICT	
USE	
FRONT YARD	
SIDE YARD	SIDE YARD
REAR YARD	
NOTES	COMPLIES WITH SEC 9-2 OF THE ZONING ORD
	CWB 3-18-93

VIII. SITE OR PLOT PLAN – *For Applicant Use*

N



NOTES:

1. Reference Map - Plan of Shaker Pines 1" = 80' - June, 1924 Merrill & Sears C.E.
2. There is no monumentation for Cottage Road and street line is established from existing Iron Pins and is assumed.
3. House nonconforming to side line and rear line. Garage nonconforming to side and setback requirements. Built prior to present Zoning Regulations.
4. Building located as shown.
5. Parcel is located in a 100-Year Flood Zone based on Panel 090028-0005B.

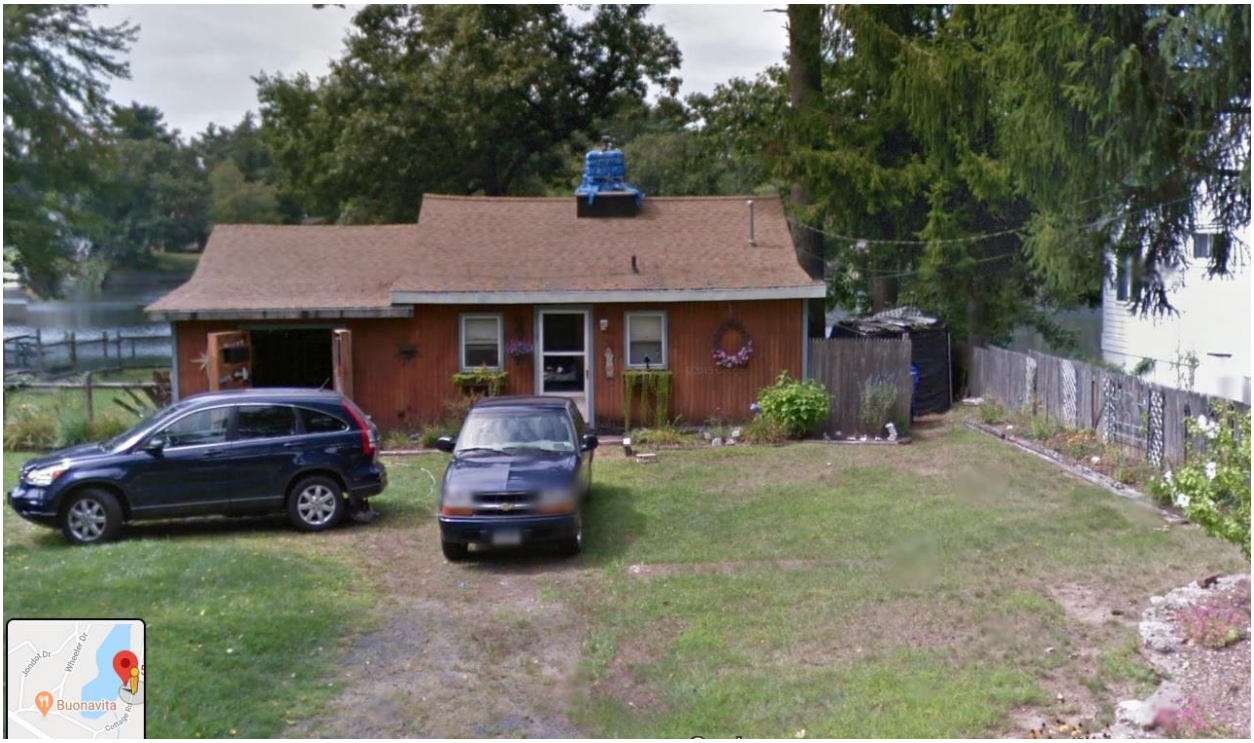
TO CONSTITUTION MORTGAGE BANK INC & CT ATTORNEYS TITLE INS CO.

I HEREBY DECLARE THAT THIS MAP AND SURVEY WERE PREPARED IN ACCORDANCE WITH THE STANDARDS OF A CLASS A2 SURVEY AS DEFINED IN THE CODE OF PRACTICE FOR STANDARDS OF ACCURACY OF SURVEYS AND MAPS, ADOPTED DECEMBER 10, 1975 AS AMENDED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC.

STATE OF CONNECTICUT WILLIAM R. PALMBERG

PLAN PREPARED FOR
ROBERT M. BAILLARGEON
ENFIELD, CONN.

William R. Palmberg
Land Surveyor
19 East Road
Broad Brook, Connecticut 06016



Google Street View – 2012 through present

Bing Street View – 2014 through present

Randy Daigle
55 Cottage Road Enfield Ct. 06082
(860) 559-0087
Addition and Renovation Description

Maximum Allowable Lot Coverage Waiver Request;

Currently as per Table 4.10 of the Town of Enfield's Zoning Regulations it only allows 20% Lot Coverage. I am requesting a Waiver of the 20% and asking for 22.6% coverage allowed.

Existing Lot sq.ft. =	10,890
20% sq.ft. =	2,178
	8,712

Existing House 38' x 37'=	1,406
Legal Non-Conforming Addition 8' X 10'=	80
	1,486 sq.ft.

Proposed Addition = 976 sq.ft.

Existing + Proposed = 1486 + 976 = 2,462 sq.ft.

The difference from the allowed 2,178 sq.ft. and our Proposed of 2,462sq.ft. is **284 sq.ft. or 2.6%**

Hardship Waiver Request;

The 284 sq.ft. is for the Garage and a Handicap bathroom. My fiancé has had multiple knee injuries and that is only one of the reasons we are doing this addition and renovations. We are making all the doors 36" wide, making all the finish floors one level and installing a new walk in shower. Also as I'm sure your all aware there has been a lot of car break ins in this area and we would like a safe and secure place to store our vehicles, as well as a safe way to enter our house from our vehicles.

Randy Daigle
55 Cottage Road Enfield Ct. 06082
(860) 559-0087
Addition and Renovation Description

Clarifications & A2 Survey Waiver Request;

1. Regarding the Existing Sewer Location, as show on the resubmitted Plot Plan, we plan to remove the existing Sewer line and replace it with New PVC/ABS Schedule 40.

2. Regarding the Existing Structure on the North/East of the Existing House, as shown on the Towns CIS "Aerial View" Map; The Structure was built on or before 2014 without a permit. As per the State Statute the Structure has been there for more than three (3) years therefore is now considered a "Legal Non-Conforming Structure". We plan on increasing the existing 2"x4" Exterior walls to 2"X6" (for greater "R" Value) by installing them right next to the Existing Studs.

3. I am Formally Requesting a Waiver of the requirements of Section 9.10.2. for a A2 Survey. This is a Residential Property and this Waiver Request has been granted to numerus Shaker Pines Lake Community Property owners.

4. Regarding the Existing Well, as shown on the Existing Plot Plan; The Well has not been in use for many years and was Capped off. The Property water source is through Connecticut Water Company. Please see a resent Bill attached.

ConnecticutWater

REMINDER NOTICE

Notice Date: 04-27-2020

Your Balance With Us

Customer:	**Randy Daigle**
Account Number:	**00340124**
Premise Served:	**55 Cottage Rd Enfield CT, 06082**

Regulated Water Portion Due:		$99.30
Non-Regulated Water Portion Due:		$0.00
Interest on Regulated Past Due:		$1.49
Amount Due:	**Payable upon receipt.**	**$100.79**

GO PAPERLESS

Sign Up for Electronic Billing Today!

Convenience • Security • Savings • Accessibility

Visit our Web site at www.ctwater.com and click 'Pay Your Bill.' From there, you can make payments by Visa or Master Card, debit card or through your checking account. You can eliminate your paper statements and view your account online.

It's fast, easy and environmentally friendly!

Dear Customer,

You recently received a bill for Water Service. As of the above date, all or part of your account remains unpaid. If you have not yet sent your payment, please mail it to the P.O. Box shown below.

We are here to work with you if you are having trouble paying your bill or need assistance with your account. Please contact us at 1-800-286-5700.

Payment is due immediately.

If your payment has already been forwarded, please accept our thanks and disregard this notice.

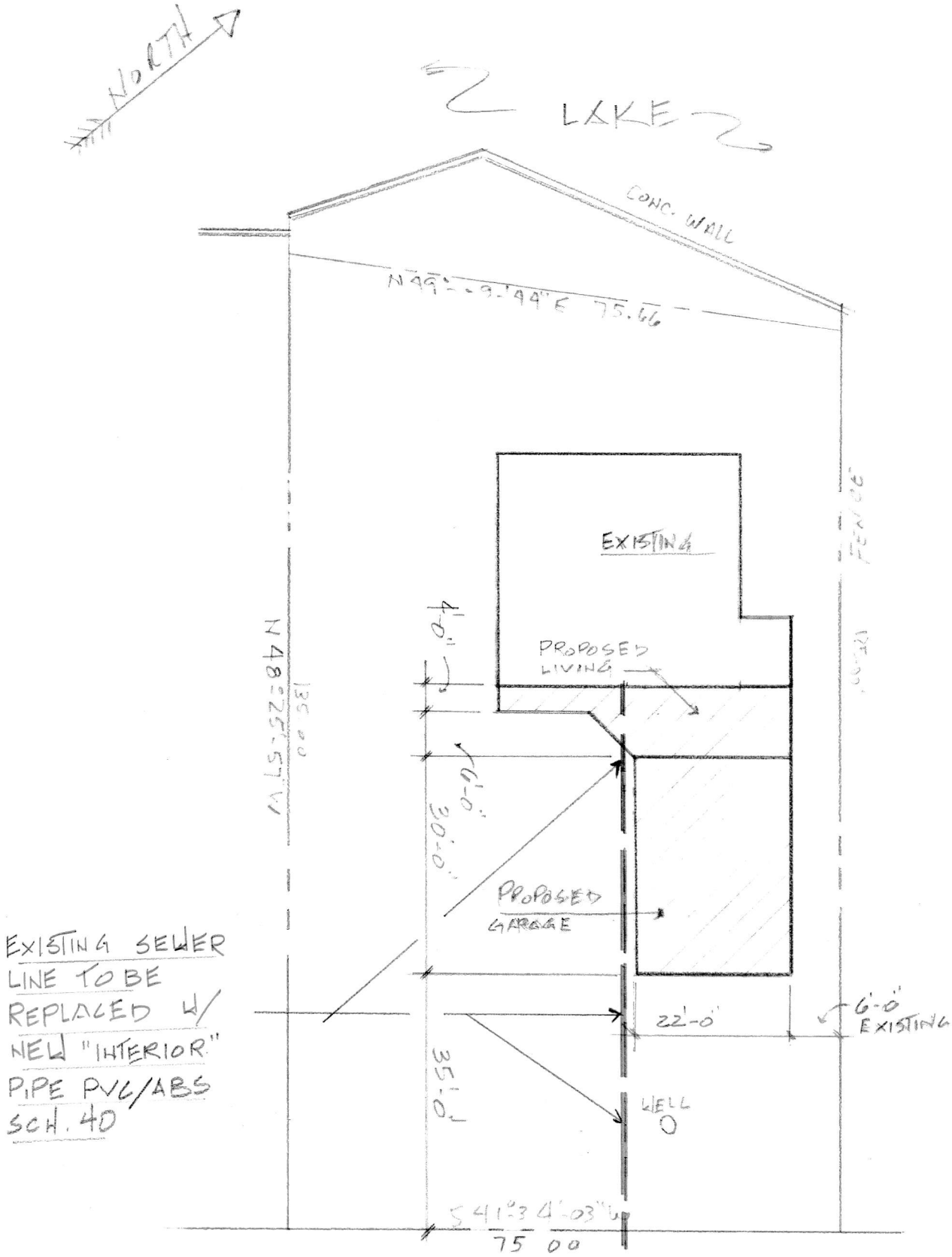
Convenient Ways to Pay Your Bill

- Online with a Visa or Master Card, debit card, or through your checking account at www.ctwater.com.
- Mail us a check in the envelope provided. Write your account number on the check and include your bill payment stub.
- Over the phone using your Visa or Master Card, debit card or through your checking account during normal business hours by calling 1-800-286-5700.
- Pay with cash at many convenient retail locations including Big Y, Kmart, Price Chopper, Rite Aid, Shop Rite, Stop & Shop and Walmart. Visit www.ctwater.com > Customers > Rates and Billing or call 1-800-286-5700 for details and additional locations.
- A check issued via online banking from your bank to our processing center.

DETACH HERE AND RETURN WITH YOUR CHECK MADE PAYABLE TO CWC

Any Account with a Past Due Amount is subject to interest charges of 1.50% monthly and further collection activity

W3JX1627



55 COTTAGE ROAD

RECEIVED
ENFIELD PLANNING DEPT.
2020 JUL -9 PM 4:40

TOWN OF ENFIELD

Special Use Permit & Site Plan Review Application

Planning Division • 820 Enfield Street Enfield, CT 06082
Telephone: 860-253-6355 Website: www.enfield-ct.gov

Special Use Permit

Application For: ☒ New Special Use Permit ☐ Other _____
☐ Modification of Plan Previously Approved _____
☐ Modification of Conditions of Approval of a Special Permit: _____

Site Plan Review

Application For: ☐ New Site Plan Review ☐ Other _____
☐ Modification of Plan Previously Approved _____
☐ Modification of Conditions of Approval of a Site Plan: _____

Staff Use Only					
PH #:	2979	**SPR #:**		**XSP #:**	
View Permit #:	TPL-20-78				
Zoning Regulation Section:					

PLEASE REVIEW LAND USE APPLICATION GUIDE FOR INSTRUCTIONS

Property Address: 25 & 39 HAZARD AVE **Map #:** 45 **Lot #:** 0002 0008
Zone(s): BR **Size of Parcel:** 32.97 + 0.70 **Account #:** 001000010020 001000010015
Current Use: RETAIL & RESTAURANTS (ENFIELD COMMONS)
Project Name: 25 & 39 HAZARD AVENUE
Summary Description: DEMOLISH EXIST BUILDING @ 39 HAZARD AVE AND REPLACE WITH NEW BUILDING WITH RESTAURANT TENANT WITH DRIVE-THRU AND TWO OUTDOOR DINING AREAS
Applicant's Name: PARAMOUNT NEWCO REALTY
Applicant's Address: 1195 ROUTE 70 SUITE 2000 LAKEWOOD, NJ 08701
Contact #: 732-961-8132 **Email:** lz@paramountrealty.com

TOWN OF ENFIELD

Applicant's Representative: ERIC KELLY - PARAMOUNT

Representative Address:

Contact #: 732-961-8132 **Email:** ekelly@paramountrealty.com

Does Applicant own the Property? ☒ Yes (Attach Copy of DEED) 25 IS OWNED BY PARAMOUNT
☒ No (Provide Information Below & Attach Letter of Authorization) 39 IS OWNED BY LEO BHW

Owner's Name: LEO BHW LTD, LLC

Owner's Contact #: 860-232-1729

Owner's Address: 8 ELLSWORTH ROAD SUITE 401 WEST HARTFORD, CT

Owner's Email:

Project Information:

Septic: ☐ Yes ☒ No

Public Sewer: ☒ Yes ☐ No

Well Water: ☐ Yes ☒ No

Public Water: ☒ Yes ☐ No

Outdoor Storage: ☐ Yes ☒ No

Design District: ☐ Yes ☒ No

Do wetlands and watercourses affect this application? ☒ Yes ☐ No

Is the property within a Level A or Level B Aquifer Protection Area? ☐ Yes ☒ No

Does this application include any regulated activity in a floodplain ☒ Yes ☐ No

(If yes, you will need to also submit a Flood Hazard Development Permit application to the Planning & Zoning Commission)

What is the total lot acreage? 32.97 + 0.70 = 33.67 AC

What is the length of the property frontage? (List by Street)

HAZARD AVE ~ 1454.34' TOTAL (133.62' 39 HAZARD)
FRESHWATER BLVD ~ 869.99'

Name the abutting street(s): HAZARD AVE & FRESHWATER BLVD

TOWN OF ENFIELD

What are the existing land uses and zoning districts for abutting properties or across the street(s)?

North BR ↑

East BR RETAIL & RESTAURANTS

South BR ↓

West BR

Environmental History:

Phase I: Land Records reviewed for environmental hazards? ☐ Yes ☒ No

Phase II: Environmental Hazards Identified? ☐ Yes ☒ No

If yes, please list the environmental conditions found: _____

Phase 3: Is there a remediation plan? ☐ Yes ☐ No

If yes, please describe the remediation plan: _____

N/A

Are there environmental restrictions on the property? ☐ Yes ☒ No

If yes, please list environmental restrictions: _____

TOWN OF ENFIELD

The undersigned hereby permits town staff and commission members to enter into and inspect this site during reasonable hours for the purpose of reviewing this application and accompanying plans. I hereby depose and say that all of the above statements as well as the statements contained in all papers filed herewith are true.

☒ **I have reviewed and acknowledge the Land Use Application Guide for further instructions on how to complete my application.**

Applicant Signature: _____ **Date:** 7/1/20
AGENT FOR APPLICANT

Print Name: DAVID S. ZIAKS P.E.
F.A. HESKETH & ASSOCIATES, INC.

Subscribed and sworn to before me 1 **day of** July, **20** 20.

Joanne Marie O'Neill

Notary Public

My Commission Expires:

JOANNE MARIE O'NEILL
NOTARY PUBLIC
MY COMMISSION EXPIRES MAR. 31, 2023

RECEIVED
ENFIELD PLANNING DEPT
2020 JUL -9 PM 4:00

July 1, 2020

TPZ Special Use Application 25 & 39 Hazard Avenue -- Supplemental Project Narrative

- The project site includes the parcel 39 Hazard Avenue and a small portion of adjoining 25 Hazard Avenue. The two lots are part of Enfield Commons Shopping Center and have been developed under a unified site plan process included in various Special Permit applications over the past 25-30 years.
- The project involves the demolition of the existing 8,484 s.f. restaurant building at 39 Hazard Avenue and the construction of a new 6,986 s.f. retail/restaurant building that fits in a slightly smaller footprint.
- The new building will have three tenant spaces with a single drive-thru for the west tenant and two outside dining areas in front.
- The plan includes reworking existing parking and driveways to accommodate the new drive-thru.
- Work on adjacent 25 Hazard Avenue involves reconstructing parking and loading areas next to Aspen Dental and minor work north of the new building.
- There is no additional impervious coverage proposed.
- There is a slight increase in landscape area.
- The only new site lighting will be units mounted on the façade of the building for security and nighttime aesthetics and all will be dark sky compliant .
- The applicant is proposing upgrades to the on-site drainage system with the installation of trap hoods at the outlet catch basin prior to connection to the existing site drainage system and the implementation of a maintenance plan as outlined on Sheet NT-1.
- With the site grading changes, there is a small loss of net 100-year flood storage volume which is compensated for in the underground drainage design, so there will be no impact to the floodplain. A separate Flood Hazard Application has been filed.
- There will be no short or long-term environmental impacts associated with the construction or operation of the new facility. During construction appropriate erosion control measures will be installed and maintained. Stormwater discharge will be to existing on-site drainage systems and trap hoods will be installed in the new catch basin outlet to improve water quality treatment.
- The project site is completely developed for commercial purposes at this time. This application is for reconstruction of the project site and blending into the surrounding shopping center. The property is zoned for commercial uses as permitted in the BR Zone. There are no wetland or watercourse resources affected by this project. The Wetlands Commission did previously approve an amendment to the town official map to remove all wetlands from the project site.
- Erosion and Sedimentation Control will consist of installation of protection to existing catch basins and placement of silt fencing along the north side of the project limits. Details for installation are included on the SD detail sheets and notes and narrative are included on Sheet NT-1.
- The new building will be served by public water, sanitary sewer and gas utilities.

VL2470 PG296

#25

Special Warranty Deed

April 7, 2009 $240,000.00 State Conveyance Tax Received
$60,000.00 Town Conveyance Tax Received

CENTRO GA ENFIELD COMMONS, LLC, a Delaware limited liability company, with a mailing address c/o Centro Properties Group, 420 Lexington Avenue, 7th Floor, New York, New York 10170, (hereinafter referred to as "Grantor"), for $10.00 and other good and valuable consideration paid, does hereby give, grant, bargain, sell and confirm unto Paramount Commons at Enfield LLC, with a mailing address at 1195 Route 70, Suite 2000, Lakewood, New Jersey 08701 (hereinafter referred to as "Grantee") all that certain piece or parcel of land, with the buildings and improvements located thereon, situated in the Town of Enfield, County of Hartford and State of Connecticut, as more particularly described in Exhibit A attached hereto and made a part hereof ("Property").

Subject to restrictions, easements, covenants and other matters of record, the rights of tenants in possession and to the state of facts shown on that certain survey of the Property dated March 27, 2009, prepared by F.A. Hesketh & Associates, Inc.

Real Estate Taxes due the Town of Enfield on the Grand List of October 1, 2008, which taxes the Grantee herein assumes and agrees to pay as part consideration for this deed.

This conveyance has been authorized by the written consent of the Grantor.

TO HAVE AND TO HOLD, the above granted premises with the appurtenances thereof, unto the said Grantee, and unto its successors and assigns forever, to it and their proper use and behoof.

AND FURTHERMORE, the said Grantor does by these presents, bind itself and its successors and assigns forever to Warrant and Defend the above granted premises to the said Grantee, its successors and assigns, against all acts of the Grantor and against all claims and demands whatsoever of any person or persons claiming by, from and under said Grantor, except as hereinbefore mentioned.

Dated this 6th day of April, 2009

CENTRO GA ENFIELD COMMONS, LLC, a
Delaware limited liability company

By: _____
Name: Lee Reeves
Title: Senior Vice President

1591830 v1

STATE OF NEW YORK)
) ss:
COUNTY OF NEW YORK)

The foregoing instrument was acknowledged before me this 2nd day of April, 2009, by Lee Reves, the Senior V.P. of Centro GA Enfield Commons, LLC a Delaware limited liability company.

Joel F. Crystal
Notary Public

My Commission Expires:

JOEL FROME CRYSTAL
NOTARY PUBLIC, State of New York
No. 02 CR 5871065
Qualified in Westchester County
Commission Expires November 30, 2010

Exhibit A

ALL THAT CERTAIN PIECE OR PARCEL OF LAND SITUATED IN THE TOWN OF ENFIELD, COUNTY OF HARTFORD AND STATE OF CONNECTICUT SHOWN AND DESIGNATED AS "SUBJECT PARCEL AREA = 32.97± ACRES" ON A CERTAIN MAP OR PLAN ENTITLED "ALTA/ACSM LAND TITLE SURVEY PROPERTY SURVEY PREPARED FOR GALILEO ENFIELD COMMONS LLC ENFIELD COMMONS HAZARD AVENUE & FRESHWATER BOULEVARD, ENFIELD, CONNECTICUT, DATED 08-30-90 REVISED THROUGH 04-27-05, SCALE 1"= 60' SHEETS 1 AND 2 OF 2 BY F.A. HESKETH & ASSOCIATES, INC., BEING MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT A CHD MONUMENT IN THE NORTHERLY STREET LINE OF HAZARD AVENUE, CONNECTICUT ROUTE 190, SAID POINT BEING LOCATED N 86° 22' 57" W A DISTANCE OF 30.15 FEET FROM AN ANGLE POINT IN THE NORTHERLY STREET LINE OF HAZARD AVENUE. SAID POINT ALSO BEING LOCATED S 48° 47' 02" W A DISTANCE OF 28.28 FEET FROM AN ANGLE POINT IN THE WESTERLY STREET LINE OF FRESHWATER BOULEVARD.

THENCE, N 86° 22' 57" W A DISTANCE OF 319.37 FEET ALONG THE NORTHERLY STREET LINE OF HAZARD AVENUE TO THE POINT OF BEGINNING.

THENCE, N 86° 22' 57" W A DISTANCE OF 130.23 FEET TO A CHD MONUMENT.

THENCE, N 86° 23' 19" W A DISTANCE OF 605.49 FEET TO A POINT.

THENCE, N 86° 48' 55" W A DISTANCE OF 532.84 FEET TO A POINT AT THE SOUTHWEST CORNER OF THE PARCEL HEREIN DESCRIBED AND THE SOUTHEAST CORNER OF LAND NOW OR FORMERLY OF THE MAY STORES SHOPPING CENTERS, INC., THE LAST THREE COURSES BEING ALONG THE NORTHERLY STREET LINE OF HAZARD AVENUE ALSO KNOWN AS CONNECTICUT ROUTE 190.

THENCE, N 02° 00' 10" W A DISTANCE OF 945.00 FEET TO A POINT AT THE NORTHWEST CORNER OF THE PARCEL HEREIN DESCRIBED, SAID POINT LYING IN THE CENTER LINE OF FRESHWATER BROOK THE LAST COURSE BEING ALONG LAND NOW OR FORMERLY OF THE MAY STORES SHOPPING CENTERS, INC., AND LAND NOW OR FORMERLY OF SIXPENCE INN OF ENFIELD, PARTLY BY EACH.

THENCE, EASTERLY ALONG THE CENTER LINE OF FRESHWATER BROOK A DISTANCE OF 1,130.00 FEET MORE OR LESS, TO A POINT IN THE CENTERLINE OF FRESHWATER BROOK SAID POINT CAN BE FOUND 1,092.56 FEET AT BEARING S 80° 53' 48" E FROM THE LAST COURSE HEREON DESCRIBED.

THENCE, N 10° 22' 20" W A DISTANCE OF 306.88 FEET TO A POINT.

THENCE, N 75° 52' 10" E A DISTANCE OF 312.84 FEET TO A POINT, THE LAST TWO COURSES BEING ALONG LAND NOW OR FORMERLY OF THE MAY STORES SHOPPING CENTERS INC.

THENCE, S 05° 49' 10" E A DISTANCE OF 313.83 FEET TO A POINT.

Exhibit A

THENCE, N 84° 10' 50" E A DISTANCE OF 241.76 FEET TO A POINT AT THE NORTHWEST CORNER OF LAND NOW OR FORMERLY OF SIMON KONOVER, AND STANLEY M. BASKIND; MARSHALL J. MOTT, TRUSTEES, THE LAST TWO COURSES BEING ALONG LAND NOW OR FORMERLY OF AAM PROPERTIES, INC.

THENCE, S 01° 08' 30" E A DISTANCE OF 74.26 FEET TO A POINT.

THENCE, N 88° 12' 37" E A DISTANCE OF 93.51 FEET TO A POINT IN THE WESTERLY STREET LINE OF FRESHWATER BOULEVARD. THE LAST TWO COURSES BEING ALONG LAND NOW OR FORMERLY OF SIMON KONOVER, AND STANLEY M. BASKIND, MARSHALL J. MOTT, TRUSTEES.

THENCE, S 03° 37' 00" W A DISTANCE OF 730.45 FEET ALONG THE WESTERLY STREET LINE OF FRESHWATER BOULEVARD TO A POINT.

THENCE, N 86° 23' 00" W A DISTANCE OF 89.00 FEET TO A POINT.

THENCE, N 03° 37' 03" E A DISTANCE OF 93.52 FEET TO A POINT.

THENCE, N 86° 22' 57" W A DISTANCE OF 225.42 TO A POINT.

THENCE, S 03° 37' 01" W A DISTANCE OF 129.00 FEET TO A POINT.

THENCE, N 86° 22' 57" W A DISTANCE OF 25.00 FEET TO A POINT.

THENCE, S 03° 37' 03" W A DISTANCE OF 124.00 FEET TO THE POINT AND PLACE OF BEGINNING, THE LAST SIX COURSES BEING THROUGH LAND OF PARKSIDE ASSOCIATES LIMITED PARTNERSHIP.

EXCEPTING FROM THE PREVIOUSLY DESCRIBED PARCEL IS LAND NOW OR FORMERLY RR REALTY ENFIELD, LLC DESCRIBED AS FOLLOWS:

LESS AND EXCEPT LAND NOW OR FORMERLY DEPICTED AS "RR REALTY OF ENDFIELD, LLC" BEING DESCRIBED" AS FOLLOWS:

A CERTAIN PIECE OR PARCEL OF LAND SITUATED ON THE NORTHERLY SIDE OF HAZARD AVENUE (CONNECTICUT ROUTE 190) IN THE TOWN OF ENFIELD, COUNTY OF HARTFORD, STATE OF CONNECTICUT. BEING BOUNDED AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT OF REFERENCE MARKING THE SOUTHWESTERLY CORNER OF THE PROPERTY KNOWN AS "ENFIELD COMMONS" AND THE SOUTHEASTERLY CORNER OF LAND NOW OR FORMERLY THE MAY STORES SHOPPING CENTERS, INC.

THENCE, N 59° 59' 53" E A DISTANCE OF 165.22 FEET ALONG A TIE LINE TO THE POINT OF BEGINNING.

THENCE, N04°02'38"E A DISTANCE OF 49.03 FEET TO A POINT.

Exhibit A

THENCE, ALONG A CURVE TO THE RIGHT HAVING A CENTRAL ANGLE OF 90° 00' 00" A RADIUS OF 3.00 FEET AND AN ARC LENGTH OF 4.71 FEET TO A POINT. SAID POINT CAN BE LOCATED N 49° 02' 38" W A CHORD DISTANCE OF 4.24 FEET FROM THE LAST COURSE HEREIN DESCRIBED.

THENCE, S 85° 57' 22" E A DISTANCE OF 4.50 FEET TO A POINT.

THENCE, N 04° 02' 38" E A DISTANCE OF 21.00 FEET TO A POINT.

THENCE, N 85° 57' 22" W A DISTANCE OF 1.33 FEET TO A POINT.

THENCE, N 04° 02' 38" E A DISTANCE OF 26.17 FEET TO A POINT.

THENCE, ALONG A CURVE TO THE RIGHT HAVING A CENTRAL ANGLE OF 90° 00' 00" A RADIUS OF 20.00 FEET AND AN ARC LENGTH OF 31.42 FEET TO A POINT. SAID POINT CAN BE LOCATED N 49° 02' 38" E A CHORD DISTANCE OF 28.28 FEET FROM THE LAST COURSE HEREIN DESCRIBED.

THENCE, S 85° 57' 22" E A DISTANCE OF 97.67 FEET TO A POINT.

THENCE, S 04° 02' 38" W A DISTANCE OF 119.19' FEET TO A POINT.

THENCE, N 85° 57' 22" W A DISTANCE OF 123.83 FEET TO THE POINT AND PLACE OF BEGINNING.

SAID EXCEPTION PARCEL DESCRIBED HEREIN CONTAINS 14,230 SQUARE FEET OR 0.33 ACRES MORE OR LESS.

SAID SUBJECT PARCEL CONTAINS 32.97± ACRES.

TOGETHER WITH THE RIGHTS, PRIVILEGES AND EASEMENTS AS CONTAINED IN A RECIPROCAL EASEMENT AGREEMENT BY AND BETWEEN PARKSIDE ASSOCIATES LIMITED PARTNERSHIP AND GMRI, INC. DATED MAY 10, 1995 AND RECORDED IN VOLUME 921 AT PAGE 169 OF THE ENFIELD LAND RECORDS AND ALSO TOGETHER WITH THE RIGHTS, PRIVILEGES AND EASEMENTS AS CONTAINED IN A RECIPROCAL OPERATING AGREEMENT BY AND BETWEEN PARKSIDE ASSOCIATES LIMITED PARTNERSHIP AND GMRI, INC. DATED MAY 10, 1995 AND RECORDED IN VOLUME 921 AT PAGE 188 OF THE ENFIELD LAND RECORDS.

TOGETHER WITH THE RIGHTS, PRIVILEGES AND EASEMENTS AS CONTAINED IN a Reciprocal Easement Agreement by and between Sea Enfield Commons LLC and RR Realty of Enfield LLC dated April 6, 2005 and recorded April 7, 2005 in volume 1998 page 148 of the Enfield Land Records.

TOGETHER WITH THE RIGHTS, PRIVILEGES AND EASEMENTS AS CONTAINED IN a Reciprocal Operating Agreement by and between Sea Enfield Commons LLC and RR Realty of Enfield LLC dated April 6, 2005 and recorded April 7, 2005 in volume 1998 page 175 of the Enfield Land Records.

RECORDED IN
ENFIELD LAND RECORDS

2009 APR -7 PM 1:38 41

SUZANNE F. OLECHNICKI
TOWN CLERK

MAP 238
P. 3919

VL1343 PG243

#39

02/27/2001 $6,750.00 State Conveyance Tax Received
$742.50 Town Conveyance Tax Received

WARRANTY DEED

GMRI, Inc., a Florida corporation with an address of 1751 Directors Row, Orlando, Florida 32809 ("Grantor"), in consideration of $10.00 and other good and valuable consideration to Grantor paid, the receipt of which is acknowledged, does hereby grant, bargain, sell, convey and warrant to LEO BHW LTD., LLC, with an address of 8786 Marlamoore Lane, West Palm Beach, Florida 33412, ("Grantee"), all the following real estate:

See Exhibit "A" Attached Hereto

Subject to: Reciprocal Easement Agreement dated May 10, 1995, by and between Parkside Associates Limited Parntership and GMRI, Inc., recorded May 11, 1995 at Volume 0921, Page 169 of the Public Records of Hartford County, Connecticut and Reciprocal Operating Agreement dated May 10, 1995, by and between Parkside Associates Limited Partnership and GMRI, Inc., recorded May 11, 1995 at Volume 0921, Page 188 of the Public Records of Hartford County, Connecticut.

Subject to real estate taxes and assessments for the current year and subsequent years.

Subject to all valid easements, rights of way, covenants, conditions, reservations and restrictions of record, if any, and also to applicable zoning, land use and other laws and regulations.

To have and to hold the same, together with all the buildings, improvements and appurtenances belonging thereto, if any, to the Grantee and Grantee's heirs, successors and assigns forever.

Grantor, for Grantor and Grantor's heirs and successors, covenants with Grantee and Grantee's heirs, successors and assigns, that:

1. Grantor is lawfully seized in fee simple of the above property, and has good right to convey the same;

2. The above property is free from all encumbrances, except as set forth above;

3. Grantee shall quietly enjoy the above property; and

4. Grantor will forever warrant and defend the title to the above property against the lawful claims and demands of all persons, except as set forth above.

This property was acquired by the Grantor by: Special Warranty Deed dated May 10, 1995, recorded May 11, 1995 at Volume 0921, Page 166 of the Public Records of Hartford County, Connecticut.

IN WITNESS WHEREOF, this Warranty Deed is executed under seal on this 20th day of February, 2001.

Signed, Sealed and Delivered in the Presence of:

Witness: Susan VanderJagt

Witness: Sally Blackmun

GMRI, INC., a Florida corporation

By: _____
Laurie B. Burns
Vice President

STATE OF FLORIDA
COUNTY OF ORANGE

The foregoing instrument was acknowledged before me this 20th day of February, 2001 by Laurie B. Burns, Vice President of GMRI, Inc., a Florida corporation, on behalf of the corporation. (S)He is personally known to me and did not take an oath.

_____ (Signature)
_____ (Print or Type Name)
Notary Public (Title or Rank)
_____ (Serial/Commission Number)
My Commission Expires:

(NOTARY'S SEAL) Susan S. VanderJagt
Commission # CC 906350
Expires Feb. 1, 2004
Bonded Thru
Atlantic Bonding Co., Inc.

EXHIBIT "A"
LEGAL DESCRIPTION
39 HAZARD AVENUE, ENFIELD, CT

PARCEL 1A

A CERTAIN PIECE OR PARCEL OF LAND SITUATED ON THE NORTHERLY SIDE OF HAZARD AVENUE (CONNECTICUT ROUTE 190) IN THE TOWN OF ENFIELD, COUNTY OF HARTFORD, STATE OF CONNECTICUT. SAID PARCEL BEING DEPICTED AS "PARCEL 1A" ON A MAP ENTITLED "RE-SUBDIVISION PLAN PARCEL 1 ENFIELD COMMONS PREPARED FOR GMRI, INC. HAZARD AVENUE (ROUTE 190) FRESHWATER BOULEVARD ENFIELD, CONNECTICUT. DATED: 01-16-98 SCALE: 1" = 40' SHEET 1 OF 1 F. A. KESKETH & ASSOCIATES, INC." BEING BOUND AND MORE PARTICULARLY DESCRIBED AS FOLLOWS.

BEGINNING AT A POINT MARKING THE SOUTHWESTERLY CORNER OF PARCEL 1B DEPICTED ON SAID MAP AND THE SOUTHEASTERLY CORNER OF THE PARCEL HEREIN DESCRIBED. SAID POINT OF BEGINNING BEING LOCATED NORTH 86° 22' 57" WEST A DISTANCE 183.75 FEET FROM A CONNECTICUT HIGHWAY DEPARTMENT MONUMENT FOUND MARKING THE INTERSECTION OF THE NORTHERLY HIGHWAY LINE OF HAZARD AVENUE (CONNECTICUT ROUTE 190) AND THE EASTERLY STREET LINE OF FRESHWATER BOULEVARD.

THENCE, NORTH 86° 22' 57" WEST A DISTANCE OF 153.62 FEET ALONG THE NORTHERLY HIGHWAY LINE OF HAZARD AVENUE (CONNECTICUT ROUTE 190) TO A POINT MARKING THE SOUTHEASTERLY CORNER OF PARCEL 2 DEPICTED ON SAID MAP.

THENCE, NORTH 03° 37' 03" EAST A DISTANCE OF 124.00 FEET TO A POINT.

THENCE, SOUTH 86° 22' 57" EAST A DISTANCE OF 25.00 FEET TO A POINT.

THENCE, NORTH 03° 37' 00" EAST A DISTANCE OF 129.00 FEET TO A POINT.

THENCE, SOUTH 86° 22' 57" EAST A DISTANCE OF 108.62 FEET TO THE NORTHWESTERLY CORNER OF PARCEL B DEPICTED ON SAID MAP. THE LAST FOUR COURSES BEING ALONG LAND NOW OR FORMERLY PARKSIDE ASSOCIATES LIMITED PARTNERSHIP BEING PARCEL 2 DEPICTED ON SAID MAP.

THENCE, SOUTH 03° 37' 03" EAST A DISTANCE OF 253.00 FEET ALONG THE WESTERLY LINE OF PARCEL 1B DEPICTED ON SAID MAP TO THE POINT AND PLACE OF BEGINNING.

SAID PARCEL CONTAINING 30,581 SQ. FEET ON 0.702 ACRES MORE OR LESS.

Subject to: Reciprocal Easement Agreement dated May 10, 1995, by and between Parkside Associates Limited Parntership and GMRI, Inc., recorded May 11, 1995 at Volume 0921, Page 169 of the Public Records of Hartford County, Connecticut and Reciprocal Operating Agreement dated May 10, 1995, by and between Parkside Associates Limited Partnership and GMRI, Inc., recorded May 11, 1995 at Volume 0921, Page 188 of the Public Records of Hartford County, Connecticut.

RECORDED IN
ENFIELD LAND RECORDS
2001 FEB 27 PM 2:45
SUZANNE F. OLECHNICKI
TOWN CLERK

DOC#0105613

Udolf Properties
8 Ellsworth Road Suite 401
West Hartford, CT 06107

RECEIVED
ENFIELD PLANNING DEPT.
2020 JUL -9 PM 4:00

12/20/2019

Planning & Zoning
Town of Enfield
820 Enfield Street
Enfield, CT 06082

RE: 39 Hazard Avenue, Enfield, Connecticut ("Property")

Dear Sir or Madam:

LEO BHW LTD, LLC, being the owner of the Property, does hereby by provide consent and permission to Paramount Newco Realty LLC to file applications and make submittals to the Planning & Zoning Department of the Town of Enfield regarding changes in the use and occupancy of the Property.

LEO BHW LTD, LLC, a Connecticut limited liability company

By:_____
Name: Robert Udolf
Title: Manager

SITE ENGINEERING
DRAINAGE REPORT
FLOOD HAZARD ANALYSIS

25 & 39 HAZARD AVENUE
ENFIELD COMMONS
ENFIELD, CT

Prepared for:

Paramount Newco Realty
Enfield, CT
Applicant

Prepared by:

F. A. Hesketh
& Associates, Inc.

3 Creamery Brook
East Granby, CT 06026

860-653-8000

STATE OF CONNECTICUT
DAVID S. ZIAKIS
No. 13336
LICENSED
PROFESSIONAL ENGINEER

January 29, 2020
Revised July 1, 2020

FAHA Project #19001

SITE ENGINEERING
DRAINAGE REPORT
FLOOD HAZARD ANALYSIS

Prepared For

25 & 39 HAZARD AVENUE
ENFIELD COMMONS
ENFIELD, CT
July 1, 2020

A. INTRODUCTION

The project is part of Enfield Commons Shopping Center and falls in the BR Zone. The applicant, Paramount Newco Realty, is proposing to demolish the existing 8,484 s.f. restaurant at 39 Hazard Avenue and replace it with a new 6,986 s.f building with the addition of a drive-thru. The revised site with be blended into the surrounding tenant layout and access. There will be no increase in impervious coverage.

B. WATER SUPPLY

The new building will be connected with minor modifications to the existing water supply to the current building.

C. SANITARY SEWAGE DISPOSAL

The new building addition will be connected with minor modifications to the existing sanitary sewer serving the current building. New 6" sanitary laterals will be installed for the new tenant spaces and one new grease trap will be installed on the east side. The existing grease trap on the west side will be reused for that tenant space.

D. GAS, ELECTRIC, TELEPHONE/COMMUNICATION SERVICES

The new building will be serviced through modifications and extensions from the systems serving the existing building.

E. LIGHTING

New building and site lighting will be provided by LED lights mounted on the side of the building and will be dark sky compliant.

F. DRAINAGE SYSTEM

Runoff from the project site will be collected by new catch basins installed over the existing drainage system. There are no new discharge points. The system has been analyzed for the 25-year storm and the results are attached. In general, the existing system has sufficient capacity to handle the design storm.

Maintenance of the On-Site Storm Water System:

1. Maintenance of the on-site storm water system is the responsibility of the property owner. This includes all catch basins, system piping, manholes and roof leaders and underground flood compensation piping.

2. The following schedule of maintenance shall be followed:

   In general, good housekeeping practices shall be incorporated into the routine site and facility maintenance plan to minimize deposition of sediment, litter and contaminants into the storm drainage system.

   Paved parking and loading areas and walks shall be swept of debris, sand, and litter at least twice annually, in particular, late spring after winter sanding operations, and in late fall after leaf litter cleanup.

   Catch basins and storm drains shall be inspected annually, following spring site cleanup. Accumulated sediment and debris shall be removed and disposed of to approved off-site locations.

3. Maintenance records documenting system inspection and cleaning operations shall be maintained by the property owner and shall be made available for inspection by the Town as requested.

4. The owner is responsible for managing the on-site storm water system to prevent mosquito breeding between April 1 and September 30.

G. SOIL EROSION CONTROL PLAN

A soil and erosion control plan has been prepared in accordance with town and CT DEEP requirements. Prior to the start of site construction, the project limits will be carefully staked out in the field and reviewed with town staff. Soil erosion and

sedimentation control measures will be installed prior to construction and maintained throughout the work.

H. OSTA PERMIT

The project is included with additional parcels under a prior OSTA approval. A revision to that approval is being submitted.

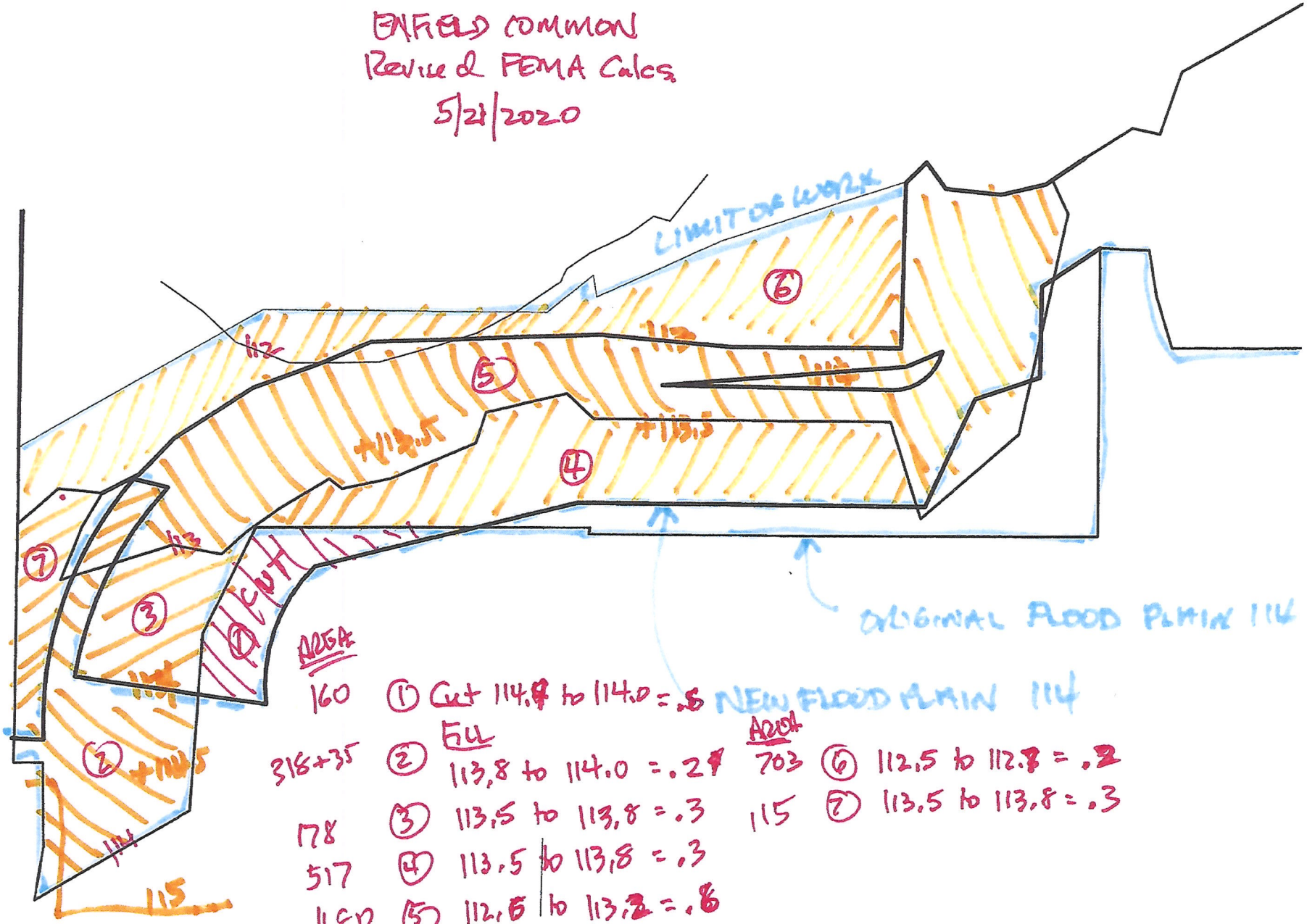
I. FLOOD HAZARD ANALYSIS

The 100-year BFE is 114.00 (NAVD 88) based on the current FEMA mapping. With the site grading changes, there is a small loss of net 100-year flood storage volume which is compensated for in the underground drainage design, so there will be no impact to the floodplain. The attached calculations show the need for 1,066.2 c.f. of compensatory storage to replace the flood stage capacity lost with the redevelopment of 39 Hazard Avenue. The design calls for approximately 1,165 c.f. of compensatory storage in underground 36" dia. piping as shown on Sheet GR-1.

The compensatory storage piping has been integrated into the site drainage system. As flood elevations rise, they will backwater into the storage piping and remain there until the flood elevation subsides. The piping will drain back through the overall site piping system.

FEMA CALCULATIONS			
NUMBER	AREA	GRADE CHANGE	
	SQ. FT.	ELEV	VOL
		feet	cu. Ft.
1	160	-0.6	-96.0
2	353	0.2	70.6
3	178	0.3	53.4
4	517	0.3	155.1
5	1180	0.6	708.0
6	703	0.2	140.6
7	115	0.3	34.5
		net change	1066.2
NOTE: The elevation change only includes up to elev. 114			
total change		**1066**	
cf/ft 36" pipe		7.068375	
required length		151	

ENFIELD COMMON
Revise d FEMA Calcs
5/21/2020

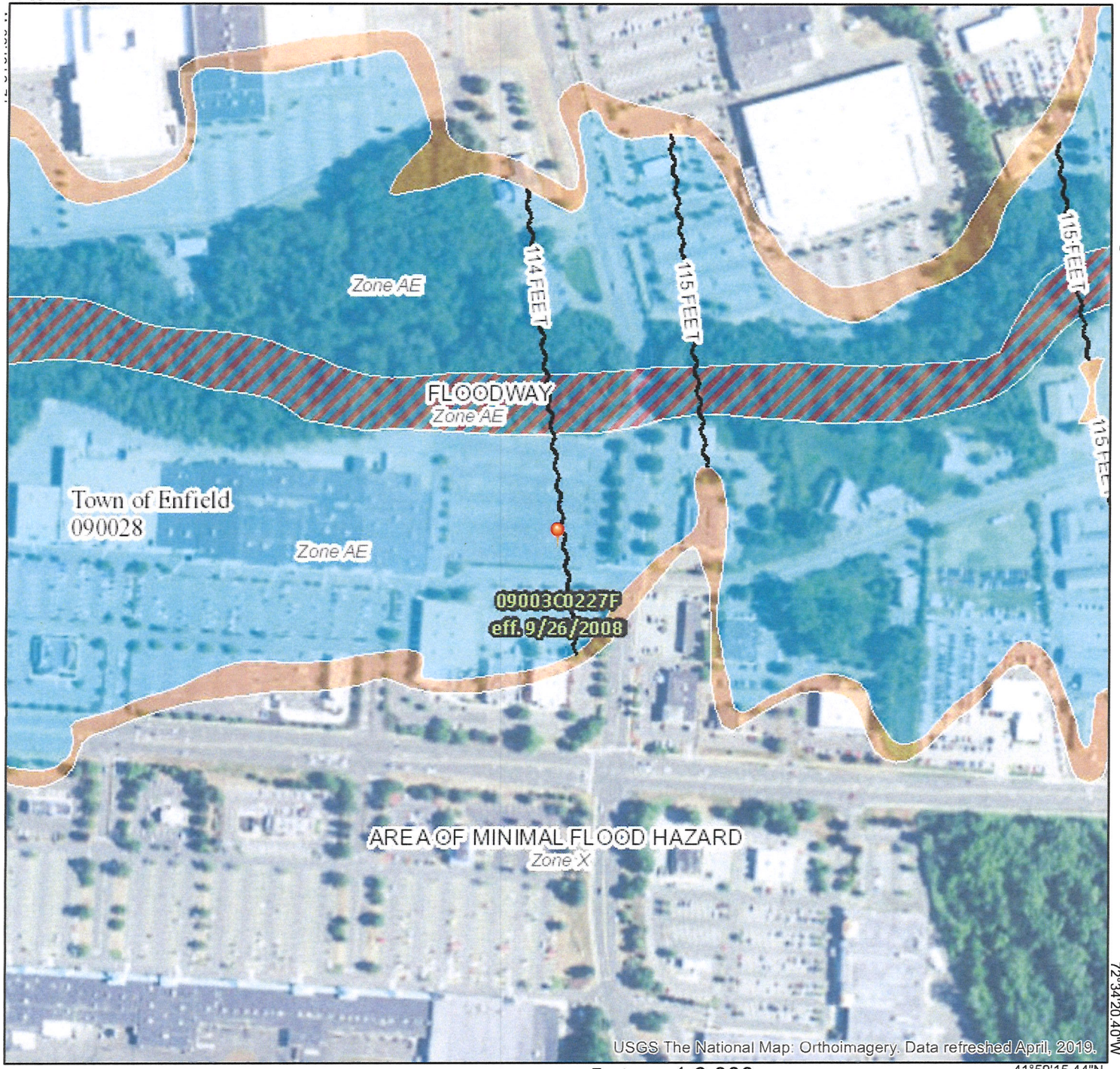


AREA			AREA		
160	①	Cut 114.[illegible] to 114.0 = .5			
		FILL			
316+35	②	113.8 to 114.0 = .2[illegible]	703	⑥	112.5 to 112.[illegible] = .2
178	③	113.5 to 113.8 = .3	115	⑦	113.5 to 113.8 = .3
517	④	113.5 to 113.8 = .3			
1180	⑤	112.5 to 113.2 = .8			

National Flood Hazard Layer FIRMette

FEMA

41°59'42.18"N



72°34'20.40"W

41°59'15.44"N

Feet 1:6,000

0 250 500 1,000 1,500 2,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainag areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

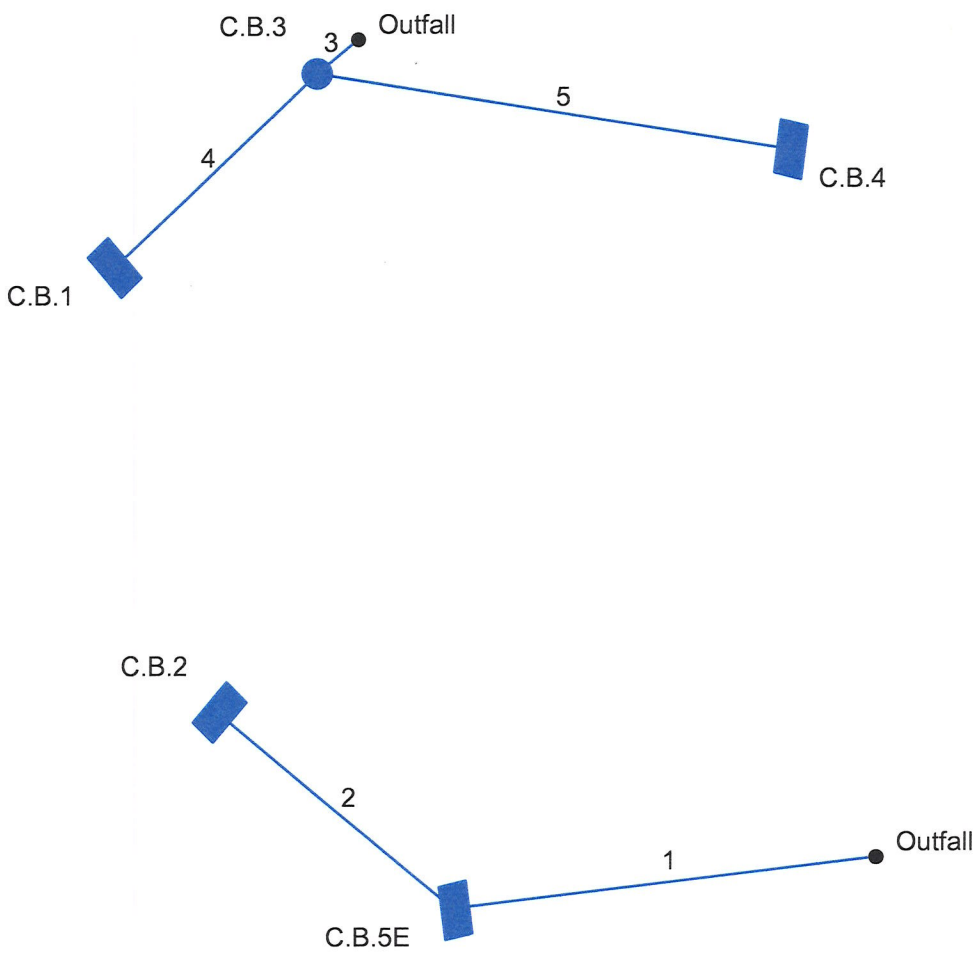
The pin displayed on the map is an approximate point selected by the user and does not represe an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/19/2020 at 2:31:39 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Hydraflow Storm Sewers Plan



Project File: 2020-01-31.stm	Number of lines: 5	Date: 06-29-2020

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	64	0.15	0.34	0.53	0.08	0.24	5.0	5.3	8.2	2.01	4.19	3.44	15	0.42	110.65	110.92	111.22	111.56	115.95	115.50	OUTFALL-C.B.5
2	1	46	0.19	0.19	0.87	0.17	0.17	5.0	5.0	8.4	1.39	4.36	4.23	12	1.50	112.81	113.50	113.20	114.00	115.50	115.70	C.B.2-C.B.5E
3	End	8	0.13	0.33	0.86	0.11	0.27	5.0	5.4	8.1	2.17	0.00	0.00	12	4.00	108.24	108.56	108.81	109.13	113.00	111.69	C.B.3-OUTFALL
4	3	42	0.15	0.15	0.80	0.12	0.12	5.0	5.0	8.4	1.01	0.00	0.00	15	4.50	108.31	110.20	109.55	110.63	111.69	114.00	C.B.1-C.B.3
5	3	72	0.05	0.05	0.70	0.04	0.04	5.0	5.0	8.4	0.29	0.00	0.00	12	0.51	108.31	108.68	109.36	109.36	111.69	114.20	C.B.4-C.B.3

Project File: 2020-01-31.stm | Number of lines: 5 | Run Date: 06-29-2020

NOTES: Intensity = 39.66 / (Inlet time + 3.70) ^ 0.72; Return period = 25 Yrs. ; c = cir e = ellip b = box

Inlet Report

Line No	Inlet ID	Q = CIA (cfs)	Q carry (cfs)	Q capt (cfs)	Q byp (cfs)	Junc type	Curb Inlet		Grate Inlet			Gutter							Inlet			Byp line No
							Ht (in)	L (ft)	area (sqft)	L (ft)	W (ft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	Depr (in)	
1	C.B.5E	0.67	0.00	0.67	0.00	Grate	3.0	5.83	2.00	5.83	2.08	Sag	5.00	0.030	0.030	0.013	-0.09	-2.92	0.08	1.25	2.0	Off
2	C.B.2	1.39	0.00	1.39	0.00	Comb	3.0	5.83	2.00	5.83	2.08	Sag	5.00	0.030	0.030	0.013	-0.04	-1.22	0.13	2.05	2.0	1
3	C.B.3	0.94	0.00	0.94	0.00	Comb	3.0	5.83	2.00	5.83	2.08	Sag	5.00	0.030	0.030	0.013	-0.07	-2.22	0.10	1.58	2.0	Off
4	C.B.1	1.01	0.00	1.01	0.00	Curb	3.0	5.83	2.00	5.83	2.08	Sag	5.00	0.030	0.030	0.013	0.09	3.15	0.26	4.12	2.0	3
5	C.B.4	0.29	0.00	0.29	0.00	Curb	3.0	5.83	2.00	5.83	2.08	Sag	5.00	0.030	0.030	0.013	0.04	1.38	0.21	3.28	2.0	4

Project File: 2020-01-31.stm | Number of lines: 5 | Run Date: 06-29-2020

NOTES: Inlet N-Values = 0.013 ; Intensity = 39.66 / (Inlet time + 3.70) ^ 0.72; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

Storm Sewer Inventory Report

Line No.	Alignment				Flow Data				Physical Data								Line ID
	Dnstr line No.	Line length (ft)	Defl angle (deg)	Junc type	Known Q (cfs)	Drng area (ac)	Runoff coeff (C)	Inlet time (min)	Invert El Dn (ft)	Line slope (%)	Invert El Up (ft)	Line size (in)	Line shape	N value (n)	J-loss coeff (K)	Inlet/ Rim El (ft)	
1	End	64	173	Grate	0.00	0.15	0.53	5.0	110.65	0.42	110.92	15	Cir	0.013	1.16	115.50	OUTFALL-C.B.5E
2	1	46	47	Comb	0.00	0.19	0.87	5.0	112.81	1.50	113.50	12	Cir	0.013	1.00	115.70	C.B.2-C.B.5E
3	End	8	140	Comb	0.00	0.13	0.86	5.0	108.24	4.00	108.56	12	Cir	0.013	1.50	111.69	C.B.3-OUTFALL
4	3	42	-4	Curb	0.00	0.15	0.80	5.0	108.31	4.50	110.20	15	Cir	0.013	1.00	114.00	C.B.1-C.B.3
5	3	72	-131	Curb	0.00	0.05	0.70	5.0	108.31	0.51	108.68	12	Cir	0.013	1.00	114.20	C.B.4-C.B.3

Project File: 2020-01-31.stm | Number of lines: 5 | Date: 06-29-2020

Storm Sewer Summary Report

Line No.	Line ID	Flow rate (cfs)	Line size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line slope (%)	HGL down (ft)	HGL up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns line No.	Junction Type
1	OUTFALL-C.B.5E	2.01	15	Cir	64	110.65	110.92	0.422	111.22	111.56	0.18	111.74	End	Grate
2	C.B.2-C.B.5E	1.39	12	Cir	46	112.81	113.50	1.500	113.20	114.00	0.19	114.00	1	Combination
3	C.B.3-OUTFALL	2.17	12	Cir	8	108.24	108.56	4.000	108.81	109.13	n/a	109.13	End	Combination
4	C.B.1-C.B.3	1.01	15	Cir	42	108.31	110.20	4.500	109.55	110.63	n/a	110.63	3	Curb-Horiz
5	C.B.4-C.B.3	0.29	12	Cir	72	108.31	108.68	0.514	109.36	109.36	n/a	109.37	3	Curb-Horiz

Project File: 2020-01-31.stm | Number of lines: 5 | Run Date: 06-29-2020

NOTES: Return period = 25 Yrs.

Proposed

Retail / Restaurant Building at Enfield Commons

25 & 39 Hazard Avenue

Enfield, Connecticut

Inland Wetlands & Watercourses, Special Use and Site Plan Applications

January 24, 2020

Revised July 01, 2020

PH#

File IW #

DEVELOPMENT TEAM

Property Owner	LEO BHW LTD, LLC 8 Ellsworth Road Suite 401 West Hartford, CT 06107
Applicant/Developer	Paramount Newco Realty 1195 Route 70 Suite 2000 Lakewood, NJ 08701
Legal Counsel	Daniel J. Ivler, Esquire
Civil Engineer	F. A. Hesketh & Associates, Inc.
Landscape Architect	F. A. Hesketh & Associates, Inc.
Architect	Ni Design
Surveyor	F. A. Hesketh & Associates, Inc.

LIST OF DRAWINGS

	Title Sheet
MA-1	Master Layout Plan
LA-1	Layout Plan
LS-1 and LS-2	Landscape Plan
GR-1	Grading and Soil Erosion & Sediment Control Plan
UT-1	Utility and Drainage Plan
SD-1 thru SD-3	Site Details
NT-1	Notes
PS-1	Property Survey
A.2	Construction Plan
A.3 and A.3a	Exterior Elevations

David S. Ziaks P.E. #13336

F. A. Hesketh & Associates, Inc.
3 Creamery Brook, East Granby, CT 06026
Phone (860) 653-8000 · Fax (860) 844-8600
Civil & Traffic Engineers · Surveyors · Planners · Landscape Architects

G:\2019\19001 – Enfield Common\Submittals\2020-07-01\ESMtp104.dwg, TP-1, Jun 29, 2020 – 11:52:23 AM

ZONING INFORMATION (ENTIRE PARCEL)

LOCATION: ENFIELD, CONNECTICUT

ZONE: B–R (BUSINESS REGIONAL SHOPPING DISTRICT)

USE: RETAIL / MOTOR VEHICLE REPAIR GARAGE (SPECIAL PERMIT) / RESTAURANT WITH DRIVE-THRU (SPECIAL PERMIT)

ITEM #	ITEM	REQUIREMENTS	EXISTING	PROPOSED	VARIANCE
1	MINIMUM LOT AREA	217,800 S.F. (5.00 AC.)	1,438,430 S.F. (33.02 AC.)	1,438,430 S.F. (33.02 AC.)	NO
2	MINIMUM LOT WIDTH	NONE REQUIRED	287.26 FEET	287.26 FEET	NO
3	MINIMUM LOT FRONTAGE	250 FEET	1,268 FEET	1,268 FEET	NO
4	MINIMUM FRONT SETBACK	35 FEET	75 FEET	75 FEET	NO
5	MINIMUM SIDE SETBACK	30 FEET	115.42 FEET	115.42 FEET	NO
6	MINIMUM REAR SETBACK	30 FEET	95.56 FEET	95.56 FEET	NO
7	MAXIMUM BUILDING HEIGHT	72 FEET	<25'/ 1 STORY	<25'/ 1 STORY	NO
8	MAXIMUM BUILDING COVERAGE	45 PERCENT	21.6 PERCENT	22.3 PERCENT	NO
9	MAXIMUM IMPERVIOUS COVERAGE	66 PERCENT	71.9 PERCENT	71.5 PERCENT	YES
10	MINIMUM GROSS LANDSCAPE	15 PERCENT	******	******	EXISTING NON-CONFORMITY

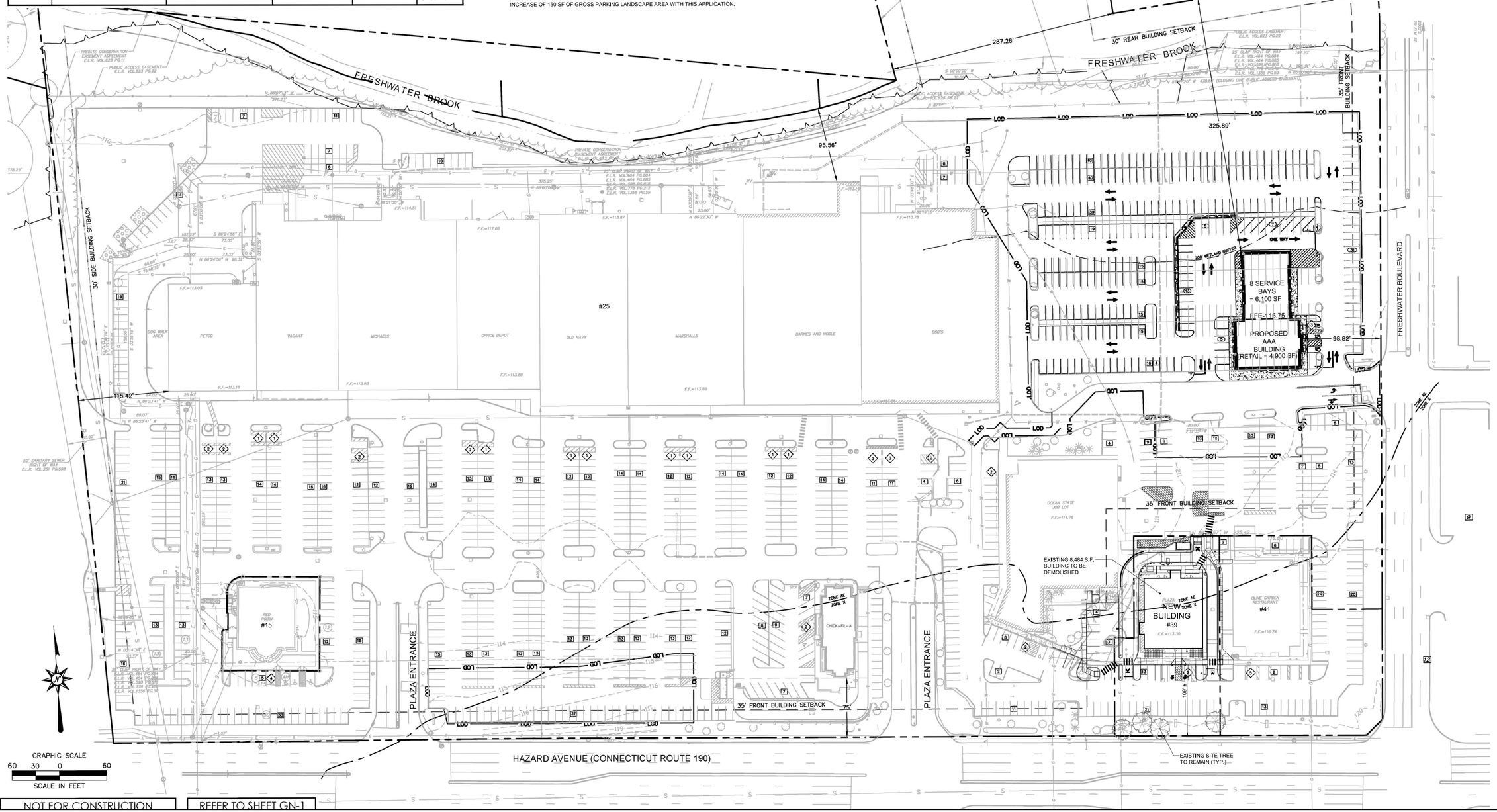
PARKING INFORMATION (DEVELOPMENT)

	USE	PARKING REQUIREMENT	BUILDING AREA	GROSS FLOOR AREA	PARKING REQUIRED
Enfield Commons*	SHOPPING CENTER	4/1000	236,313	218,191	873
Ocean State*	SHOPPING CENTER	4/1000	22,775	22,775	92
Moe's***	RESTAURANT-FF	1/75	2,769	2,769	37
NEW BUILDING	RESTAURANT	15/1000	6,986	4,541*****	46
Olive Garden**	RESTAURANT	15/1000	9,230	6,211	94
Red Robin*	RESTAURANT	15/1000	6,348	4,582	69
Aspen Dental*	SHOPPING CENTER	4/1000	3,200	3,046	13
Chick-Fil-A****	RESTAURANT-FF	1/3	4,891	131 SEATS	44
Storage	SHOPPING CENTER	4/1000	73	0	0
			EXISTING TOTALS		1,268
AAA OFFICE	BUSINESS SERVICES	1/250	4,900	4,900	20
AAA SERVICE	AUTOMOTIVE	6/SERVICE BAY	6,100	8 BAYS	48
				PROPOSED REQUIRED TOTALS	68
				TOTAL REQUIRED	1,336
				TOTAL PROPOSED	1,407

*G.F.A. or "GROSS USABLE FLOOR AREA" DETERMINED THROUGH MEASUREMENTS TAKEN DURING BUILDING WALK-THROUGH ON 1/17/2014. FIGRES INCLUDE ONLY AREAS ACCESSIBLE TO THE PUBLIC. TOTAL G.F.A. MAY BE LOWER THAN INDICATED IN CHART.
**G.F.A. or "GROSS USABLE FLOOR AREA" DETERMINED THROUGH MEASUREMENTS TAKEN DURING BUILDING WALK-THROUGH ON 4/21/2015 FIGURES INCLUDE ONLY AREAS ACCESSIBLE TO THE PUBLIC. TOTAL G.F.A. MAY BE LOWER THAN INDICATED IN CHART.
***PARKING REQUIRED FOR MOE'S, AS A FAST FOOD RESTAURANT, HAS BEEN CALUCLATED AT A RATE OF 1 SPACE FOR EVERY 75 S.F. OF GROSS LEASABLE FLOOR AREA PER THE TOWN OF ENFIELD ZONING REGULATIONS.
****PARKING REQUIRED FOR CHICK-FIL-A, AS A FAST FOOD RESTAURANT, HAS BEEN CALUCLATED AT A RATE OF 1 SPACE FOR EVERY 3 PATRON SEATS PER THE TOWN OF ENFIELD ZONING REGULATIONS.
***** ASSUME 65% GROSS USABLE FLOOR AREA FOR 'NEW BUILDING'
****** THE SHOPPING CENTER IS AN EXISTING NON-CONFORMING USE WITH REGARDS TO SECTION 10.10.7. THERE IS A SLIGHT INCREASE OF 150 SF OF GROSS PARKING LANDSCAPE AREA WITH THIS APPLICATION.

PARKING LEGEND

- HANDICAP PARKING SPACES
- AAA BUILDING PARKING SPACES
- ENFIELD COMMONS PARKING SPACES



NOT FOR CONSTRUCTION

REFER TO SHEET GN-1

F. A. Hesketh & Associates, Inc.
6 Creamery Brook, East Granby, CT 06026
Civil & Traffic Engineers · Surveyors · Planners · Landscape Architects
Phone (860) 653-8000
Fax (860) 844-8600
e-mail hesketh@snet.net

Revisions:

No.	Date	Description
1	01–24–2020	Town comments
2	03–30–2020	Miscellaneous revisions
3	07–01–2020	TPZ Filing

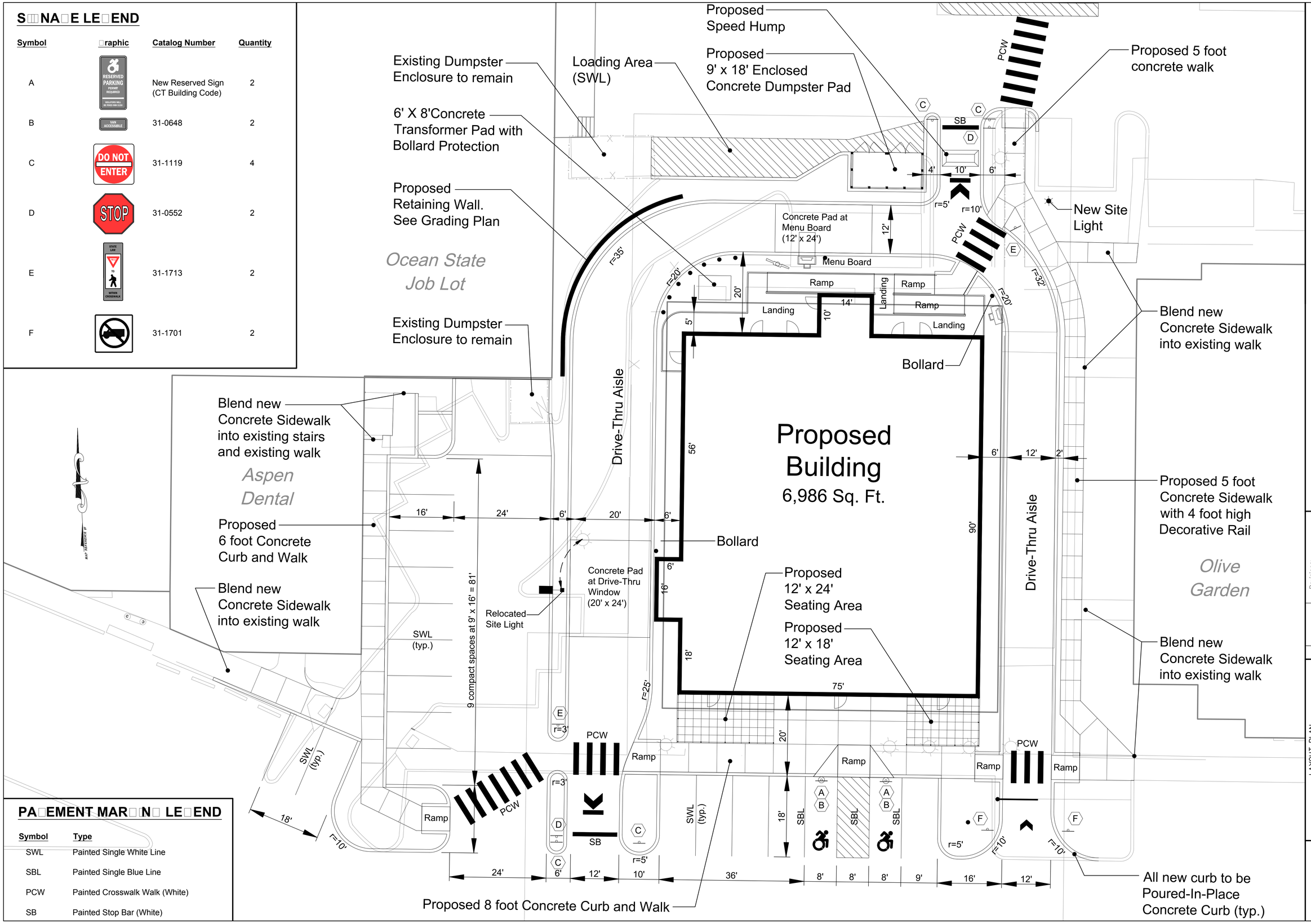
MASTER PLAN
PREPARED FOR
PARAMOUNT NEWCO REALTY
ENFIELD COMMONS
25 & 39 HAZARD AVENUE
ENFIELD, CONNECTICUT

date: 12–24–2019 | drawn by: KLL | job no: 19001
scale: 1" = 60' | checked by: DSZ | sheet no: 1 OF 1

MA–1

SIGNAGE LEGEND

Symbol	Graphic	Catalog Number	Quantity
A	RESERVED PARKING PERMIT REQUIRED	New Reserved Sign (CT Building Code)	2
B	VAN ACCESSIBLE	31-0648	2
C	DO NOT ENTER	31-1119	4
D	STOP	31-0552	2
E	STATE LAW YIELD TO PEDESTRIANS WITHIN CROSSWALK	31-1713	2
F		31-1701	2



PAVEMENT MARKING LEGEND

Symbol	Type
SWL	Painted Single White Line
SBL	Painted Single Blue Line
PCW	Painted Crosswalk Walk (White)
SB	Painted Stop Bar (White)

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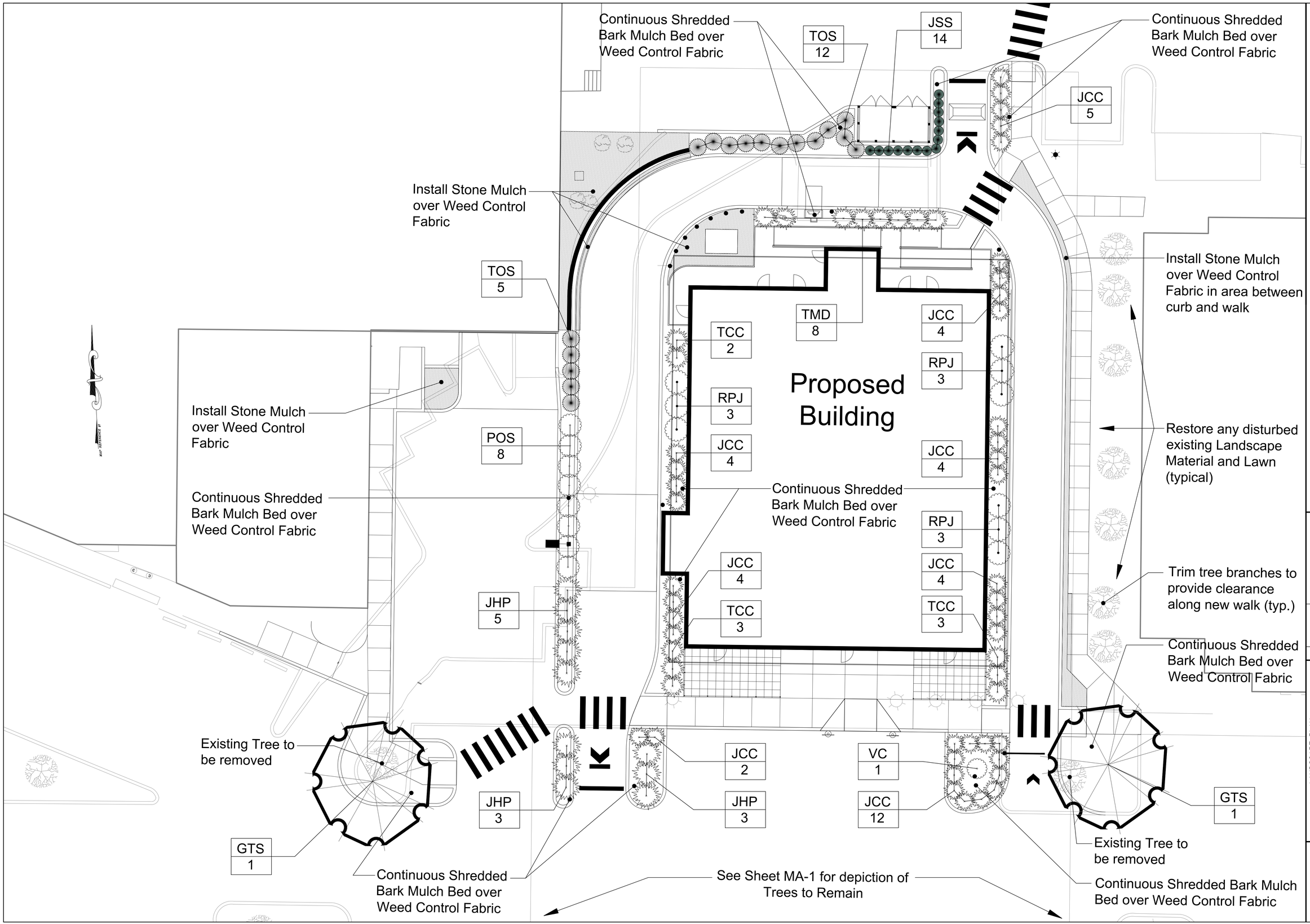
LAYOUT PLAN
PREPARED FOR
PARAMOUNT NEWCO REALTY
ENFIELD COMMONS
25 & 39 HAZARD AVENUE
ENFIELD, CONNECTICUT

date: 12-24-2019 | drawn by: KLL | job no: 19001
scale: 1" = 10' | checked by: DSZ | sheet no: 1 OF 1

LA-1



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Revisions:

No.	Date	Description
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LANDSCAPE PLAN
PREPARED FOR
PARAMOUNT NEWCO REALTY
ENFIELD COMMONS
25 & 39 HAZARD AVENUE
ENFIELD, CONNECTICUT

date: 12-24-2019 | drawn by: KLL | job no: 19001
scale: 1" = 10' | checked by: DSZ | sheet no: 1 OF 1

LS-1

LANDSCAPE SCHEDULE

Deciduous Canopy Trees

Symbol	Botanical Name	Common Name	Quantity	Size	Root	Mature Height
GTS	*Gleditsia triacanthos 'Shademaster'*	Shademaster Honeylocust	2	4 to 4 ½ inch caliper	Balled and Burlapped	40 Feet

Evergreen Trees

Symbol	Botanical Name	Common Name	Quantity	Size	Root	Mature Height
JSS	*Juniperus scopulorum 'Skyrocket'*	Skyrocket Upright Juniper	12	5 to 6 foot height	Balled and Burlapped	15 Feet
TOS	*Thuja occidentalis 'Smaragd'*	Emerald Green Arborvitae	17	6 to 8 foot height	Balled and Burlapped	15 Feet

Deciduous Shrubs

Symbol	Botanical Name	Common Name	Quantity	Size	Root	Mature Height
POS	*Physocarpus opulus 'Summerwine'*	Summerwine Ninebark	8	24 to 30 inch height	#3 Container	6 Feet
VC	*Viburnum carlesii*	Korean Spice Viburnum	1	3 to 4 foot height	Balled and Burlapped	6 Feet

Evergreen Shrubs

Symbol	Botanical Name	Common Name	Quantity	Size	Root	Mature Height
JCC	*Juniperus chin. 'Pfitzeriana Compacta'*	Compact Pfitzer Juniper	39	24 to 30 inch spread	#3 Container	4 Feet
JHP	*Juniperus horizontalis depressa plumosa*	Andorra Juniper	11	24 to 30 inch spread	#3 Container	2 Feet
TCC	*Taxus cuspidata 'Capitata'*	Upright Yew	8	36 to 42 inch height	Balled and Burlapped	Prune to height
TMD	*Taxus x media 'Densiformis'*	Spreading Yew	8	18 to 24 inch height	Balled and Burlapped	4 Feet

Broadleaf Evergreen Shrubs

Symbol	Botanical Name	Common Name	Quantity	Size	Root	Mature Height
RPJ	*Rhododendron 'P.J.M.'*	R.P.J. Rhododendron	9	24 to 30 inch height	#3 Container	5 Feet

LANDSCAPE NOTES

1. All plants shall meet or exceed the specifications of Federal, State and County laws requiring inspection for plant disease and insect control.

2. Plant material shall conform with the "American Standard for Nursery Stock" by the American Association of Nurserymen, Inc. (ANSI Z60.1-2004).

3. All plants shall be certified true to name by the nursery source. Plant names shall be in accordance with "Hortis Third" (1976) by the staff of the Liberty Hyde Bailey Hortorium, Cornell University. One plant from each species shall be tagged with name and size of the plant in accordance with the standards of practice of the American Association of Nurserymen. Botanical names shall take precedence over common names.

4. Plant material shall be typical of their species and/or variety, with a normal habit of growth, sound, healthy and vigorous. They shall be well branched and densely foliated when in leaf, free of disease, insect pest, eggs or larvae. They shall have healthy well-developed root systems. All trees shall have straight single trunks with their main leader intact unless otherwise noted or approved.

5. All landscaped areas to have 2" shredded bark mulch (color: black) over weed control fabric. No weed control fabric in areas of groundcover or perennial plantings.

6. Provide protective covering of plant material during delivery and storage. Root balls shall not be cracked or broken. Do not prune plants prior to delivery. Remove unacceptable plant material immediately from the job site.

7. Plant locations on the Drawings are approximate and are to be used only as a guide. Contractor shall provide all field engineering services to accurately stake out locations for all plants prior to installation. Do not begin excavation until Project Landscape Architect has approved specific layout.

8. If requested by Project Landscape Architect, stake and guy each tree as shown on the applicable Drawings immediately after planting. Keep trees plumb and taut.

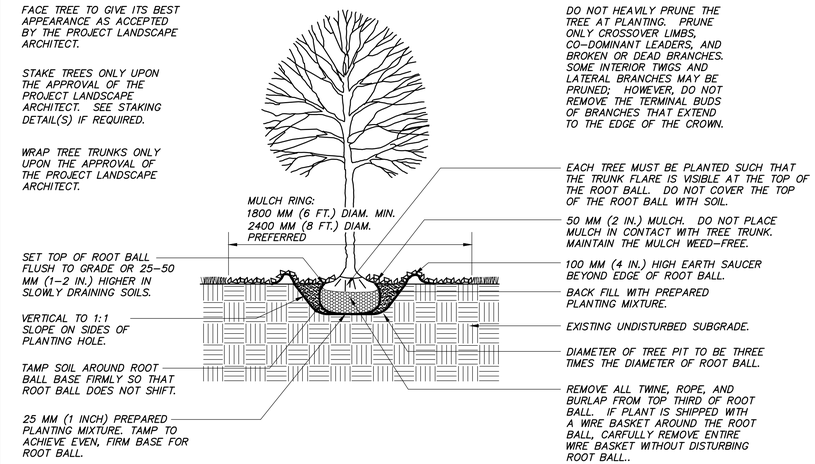
9. If requested by Project Landscape Architect, wrap the trunks of all trees spirally from the ground line to above the lowest main branch.

10. Perform all cultural care necessary to properly maintain plant viability and keep planted areas in a neat and orderly condition, including but not limited to:

a. Watering
b. Weed removal
c. Apply lime or sulphur to adjust soil pH to specific plant requirements
d. Restore or reshape earth saucers
e. Pruning
f. Adjust and tighten tree supports to maintain plants at their proper grades and vertical position
g. Replace mulch to maintain proper depth

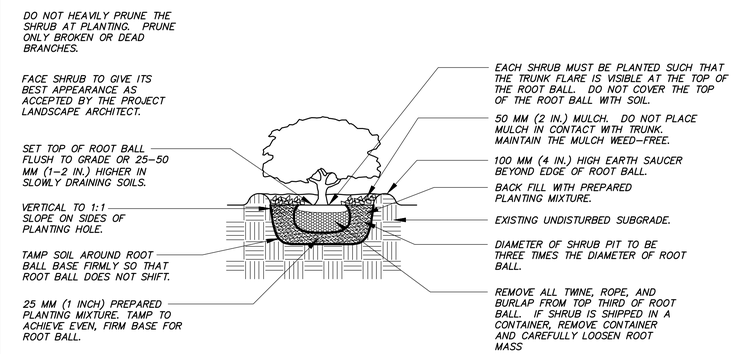
11. All planted and lawn areas within development area (building and parking areas) to receive an automatic, mechanical irrigation system.

12. A minimum of 4 inches of topsoil shall be placed on all areas of disturbance to be reseeded.



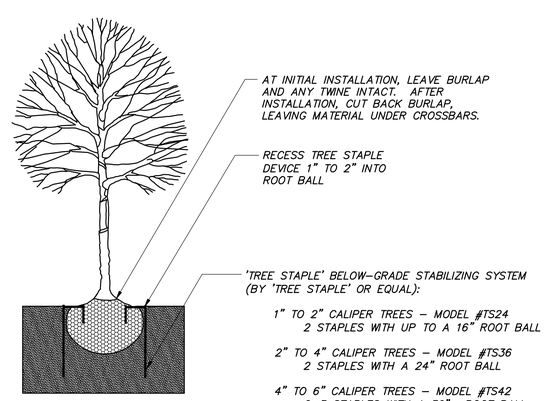
B&B TREE PLANTING DETAIL

N.T.S.



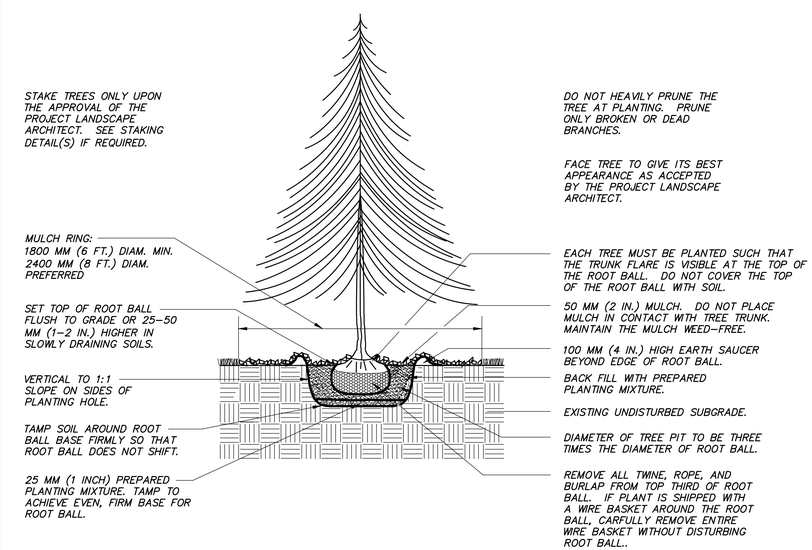
SHRUB PLANTING DETAIL

N.T.S.



TREE STAKING DETAIL

N.T.S.



EVERGREEN B&B TREE PLANTING DETAIL

N.T.S.

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Revisions:

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2	03–30–2020	Miscellaneous revisions
3	07–01–2020	TPZ Filing

LANDSCAPE SCHEDULE, DETAILS AND NOTES

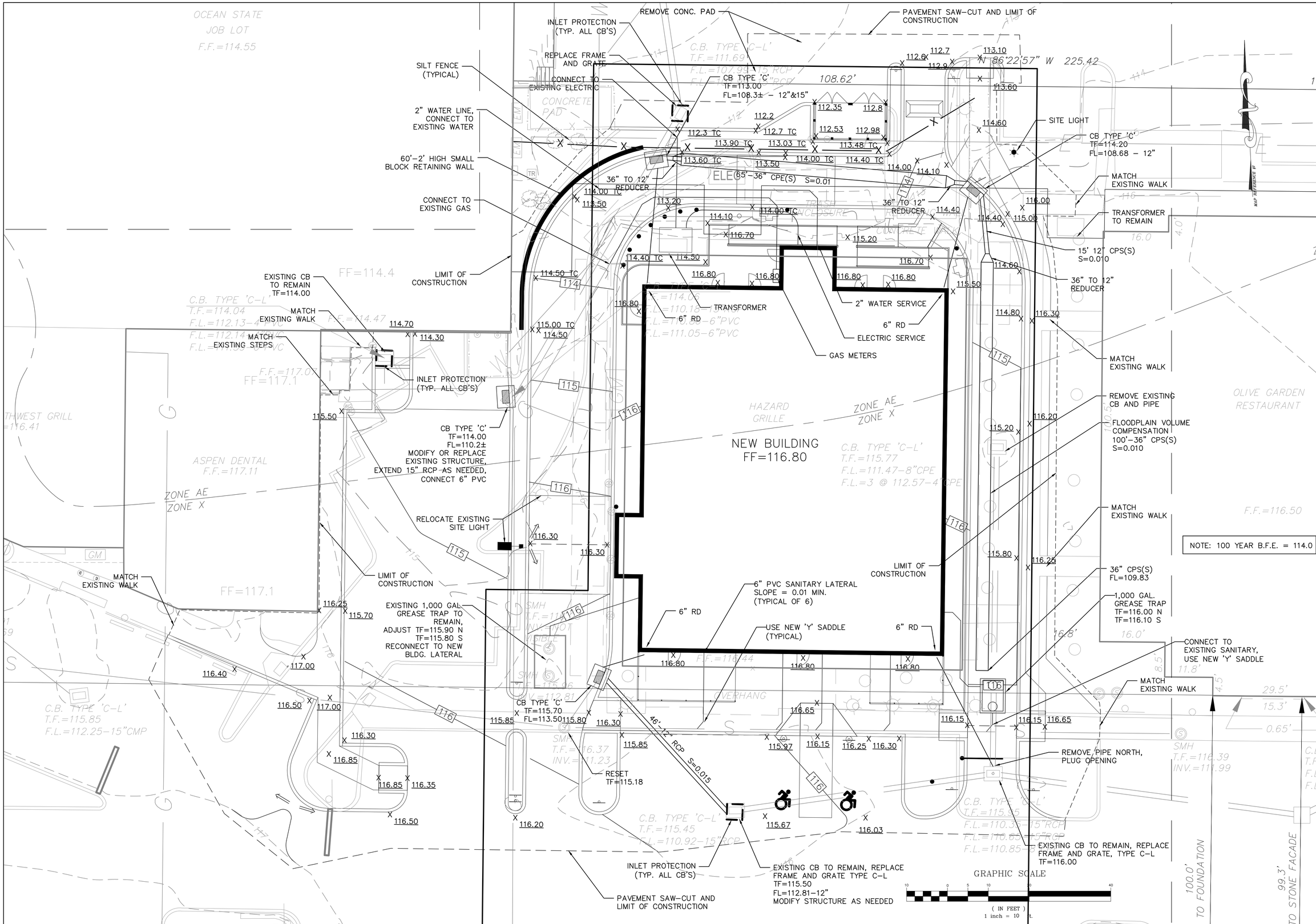
PREPARED FOR

PARAMOUNT NEWCO REALTY

ENFIELD COMMONS
25 & 39 HAZARD AVENUE
ENFIELD, CONNECTICUT

date: 12–24–2019 | drawn by: KLL | job no: 19001
scale: NO SCALE | checked by: DSZ | sheet no: 1 OF 1

LS–2



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revisions:

no.	date	description
1	10-24-20	Town comments
2	03-30-20	Miscellaneous Revisions
3	07-01-20	IWZ Filing

GRADING AND SOIL EROSION CONTROL PLAN

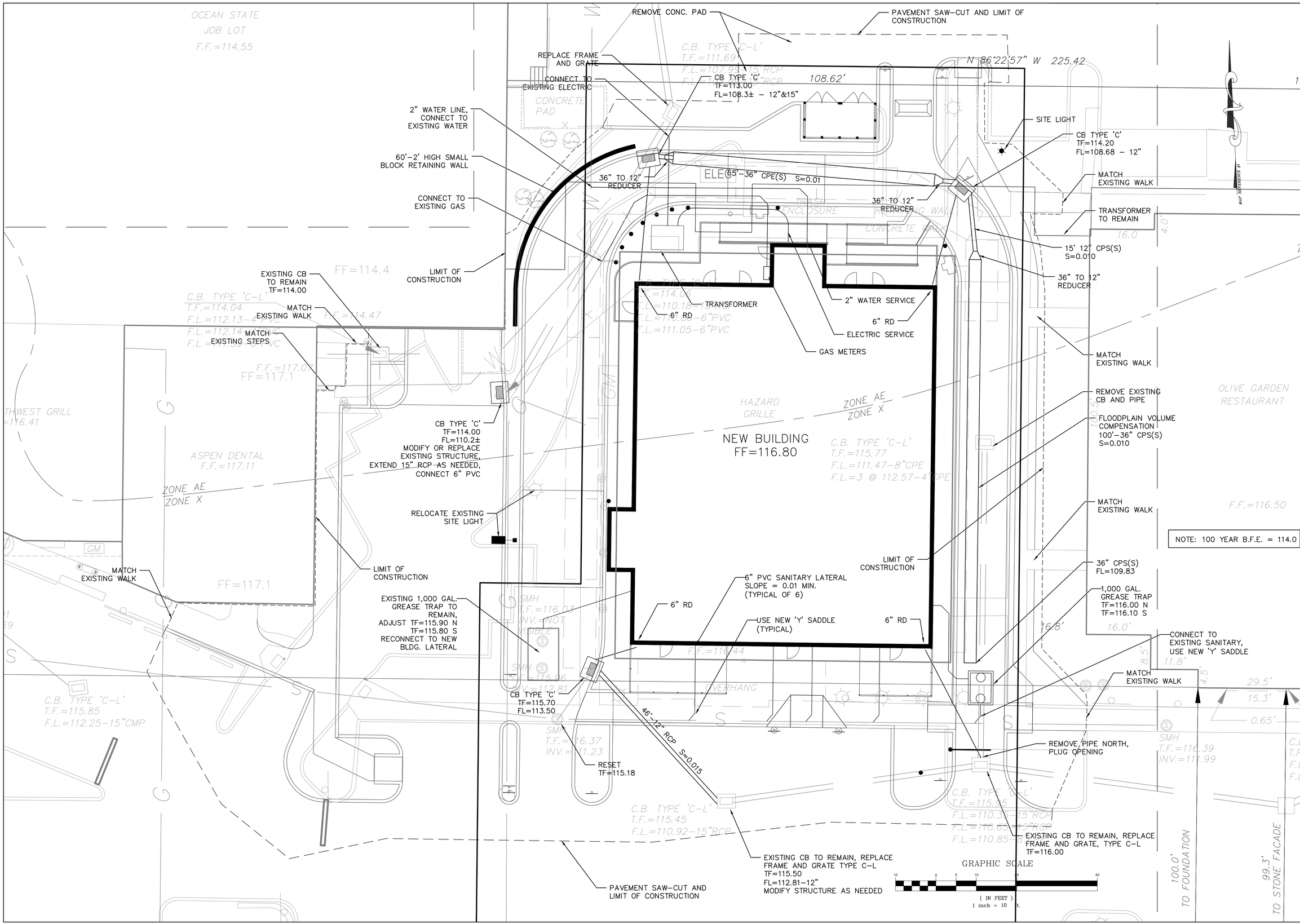
PREPARED FOR

PARAMOUNT NEWCO REALTY

25 & 39 HAZARD AVENUE
ENFIELD, CONNECTICUT

date: 12-24-2019 | drawn by: R.K | job no: 19001
scale: 1" = 10' | checked by: DSZ | sheet no: 1 OF 1

GR-1



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revisions:

no.	date	description
1	10-24-20	Town comments
2	03-30-20	Miscellaneous Revisions
3	07-01-20	TPZ Filing

UTILITY AND DRAINAGE PLAN

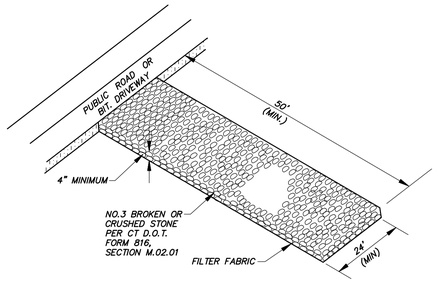
PREPARED FOR

PARAMOUNT NEWCO REALTY

25 & 39 HAZARD AVENUE
ENFIELD, CONNECTICUT

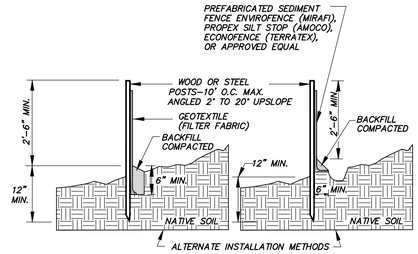
date: 12-24-2019 | drawn by: RJK | job no: 19001
scale: 1" = 10' | checked by: DSZ | sheet no: 1 OF 1

UT-1



CONSTRUCTION EXIT (CE)

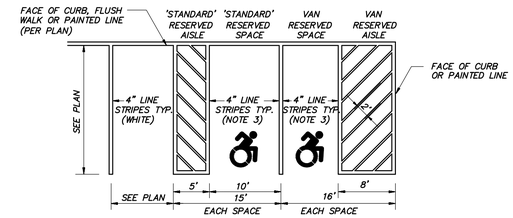
N.T.S.



NOTE:
1. WOOD POSTS SHALL BE HARDWOOD 1 1/2" x 1 1/2" x 48" MIN. STEEL POST SHALL BE A MINIMUM OF 0.5 POUNDS PER LINEAR FOOT X 48".
2. JOINTS, WHEN REQUIRED, SHALL BE SPLICED & SECURELY SEALED TOGETHER, AT POST LOCATIONS ONLY, WITH A MINIMUM 6" OVERLAP.

SEDIMENT FENCE EROSION CONTROL (SFEC)

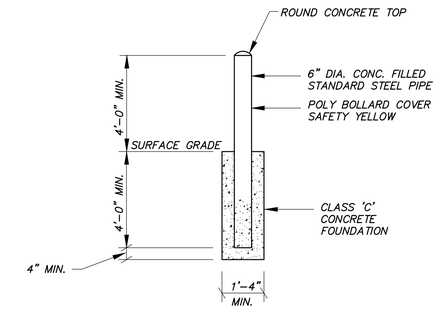
N.T.S.



NOTES:
1. AISLE CONFIGURATION PER PLAN.
2. SIGN/BOLLARD LOCATION PER PLAN.
3. LINE STRIPING COLOR AND ADA SYMBOL SPECIFICS NEED TO COORDINATED WITH ENFIELD BUILDING INSPECTOR BEFORE INSTALLATION
4. ADJACENT 'STANDARD' RESERVED PARKING SPACES MAY SHARE COMMON AISLE. ADJACENT 'VAN' RESERVED PARKING SPACES MAY SHARE A COMMON AISLE.

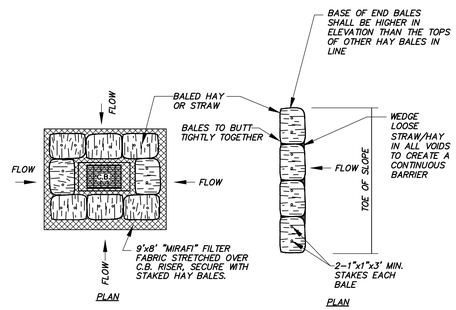
RESERVED PARKING SPACE LAYOUT

N.T.S.



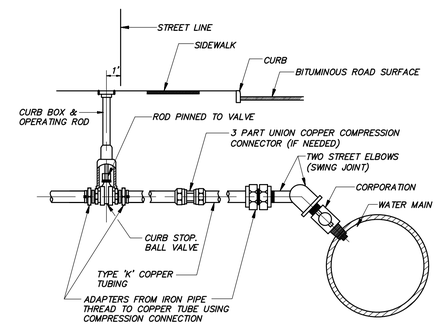
BOLLARD DETAIL

N.T.S.



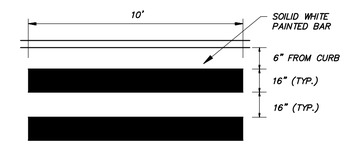
HAYBALE EROSION CONTROL (HBEC)

N.T.S.



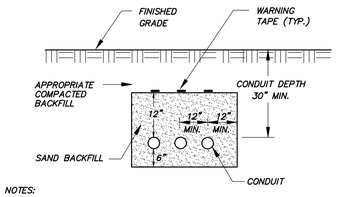
1" SERVICE TAP OFF HORIZ. CENTER LINE & ALL 1 1/2" AND 2" TAPS

N.T.S.



PAINTED PEDESTRIAN CROSSWALK

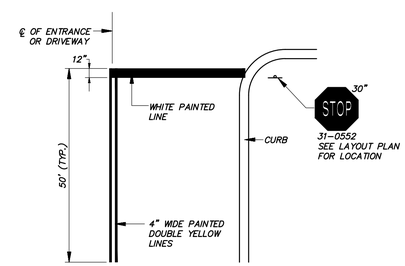
N.T.S.



NOTES:
1. CONDUIT – TYPE DB PVC SCH. 40
2. SAND FILL PER DOT OR UTILITY CO. SPECIFICATIONS
3. SHOWN FOR ILLUSTRATIVE PURPOSED ONLY, FOLLOW CUSTODIAL UTILITY COMPANY SPECIFICATIONS.

ELECTRIC/TELEPHONE/CATV TRENCH

N.T.S.



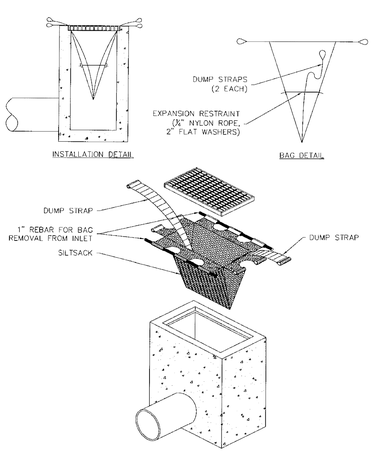
TYPICAL PAVEMENT MARKINGS AT STOP BAR

N.T.S.

NOTES:
1. PREMIUM SPEED HUMP BY BARCO PRODUCTS OR APPROVED EQUAL.
2. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

SPEED HUMP

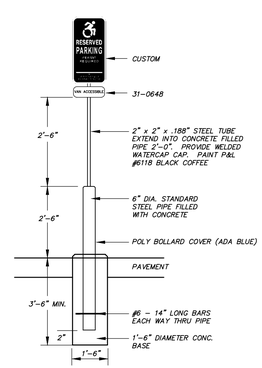
N.T.S.



1. INSTALL AND MAINTAIN IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS

INLET PROTECTION (IP) [SILT SACK INSERT]

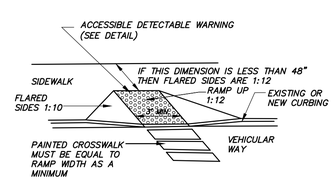
N.T.S.



ACCESSIBLE SPACE SIGN POST/BASE

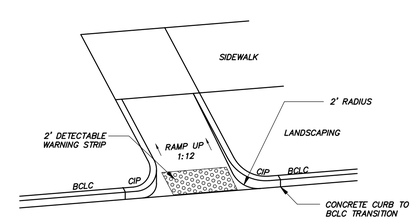
N.T.S.

NOTES:
1. CLASS 'C' CONCRETE.
2. ALL ACCESSIBLE RAMPS TO RECEIVE BROOM FINISH 90° TO THE SLOPE OF THE RAMP.
3. IF CURRENT BUILDING CODE REQUIRES ALTERNATE DESIGN, CONSTRUCT RAMP TO MEET CURRENT CODE REQUIREMENTS.
4. INTEGRATE TRUNCATED DOME TACTILE STRIPS IN ACCORDANCE WITH THE LATEST ADA STANDARDS.



ACCESSIBLE RAMP (TYPE A)

N.T.S.



ACCESSIBLE RAMP (TYPE C)

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PH#

File IW #

F. A. Hesketh & Associates, Inc.
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www.fahesketh.com - mail@fahesketh.com
Civil & Traffic Engineers - Surveyors - Planners - Landscape Architects

Revisions:

No.	Date	Description
1	01–24–2020	Town comments
2	03–30–2020	Miscellaneous revisions
3	07–01–2020	TPX Filing

DETAILS
PREPARED FOR
PARAMOUNT NEWCO REALTY
25 & 39 HAZARD AVENUE
ENFIELD, CONNECTICUT

Date: 12–24–2019	Drawn by: RJK	Job no: 19001	Sheet no: 1 OF 3
Scale: NTS	Checked by: DSZ		

SD–1

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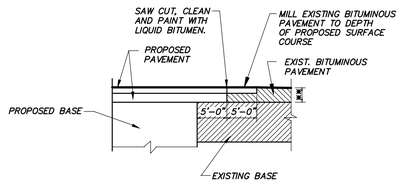
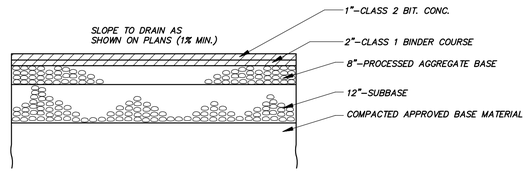


NOTES:
1. OVERLAP BOTH PROPOSED BITUMINOUS CONCRETE COURSES (CLASS I AND CLASS 2) OVER EXISTING SUBBASE.
2. ** MINIMUM THICKNESS TO BE SAME AS PROPOSED BITUMINOUS CONCRETE OR MATCH THICKNESS OF EXISTING PAVEMENT, WHICH EVER IS GREATER.

PAVEMENT MATCH TREATMENT

N.T.S.



PAVEMENT SECTION

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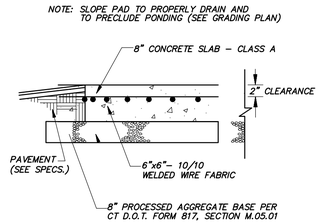

CONCRETE PAD

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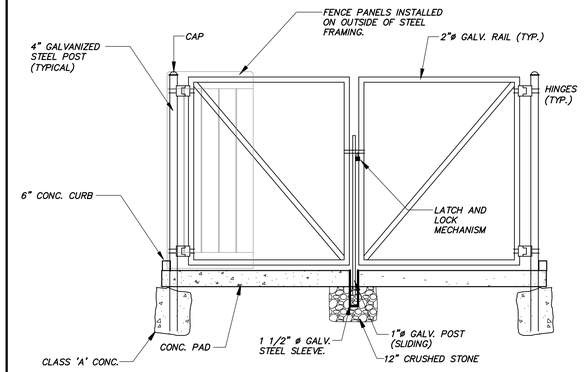

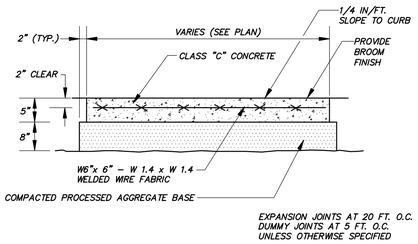

CONCRETE SIDEWALK

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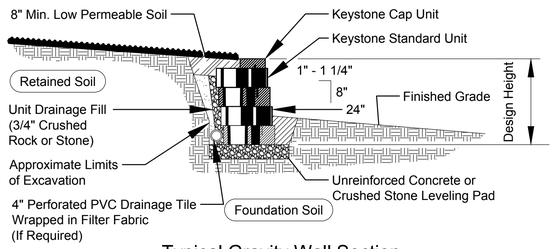
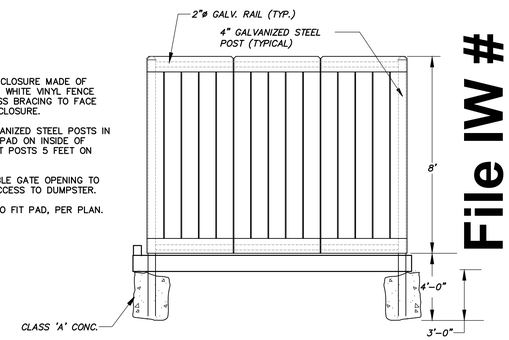


Typical Gravity Wall Section

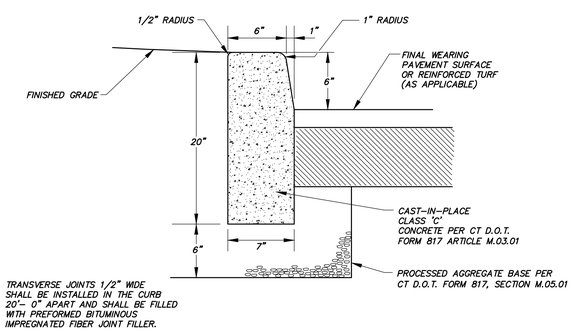
Standard Unit - 1" Setback

NOTES:
1. DUMPSTER ENCLOSURE MADE OF 8-FOOT-HIGH WHITE VINYL FENCE PANELS. CROSS BRACING TO FACE INSIDE OF ENCLOSURE.
2. INSTALL GALVANIZED STEEL POSTS IN CORNERS OF PAD ON INSIDE OF FENCING. SET POSTS 5 FEET ON CENTER.
3. INSTALL DOUBLE GATE OPENING TO FACILITATE ACCESS TO DUMPSTER.
4. DIMENSIONS TO FIT PAD, PER PLAN.



DUMPSTER ENCLOSURE

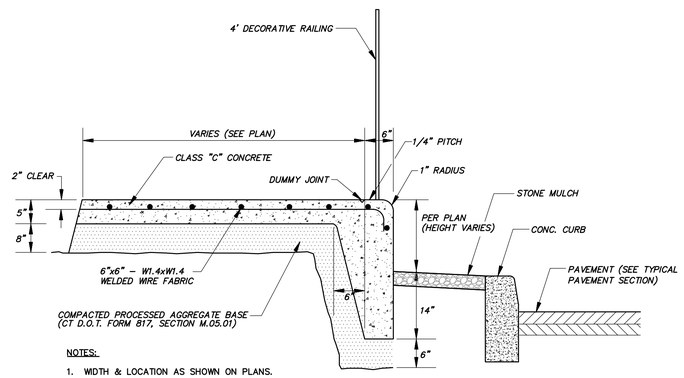
N.T.S.



NOTE: TRANSVERSE JOINTS 1/2" WIDE SHALL BE INSTALLED IN THE CURB 20'- 0" APART AND SHALL BE FILLED WITH PREFORMED BITUMINOUS IMPREGNATED FIBER JOINT FILLER.

CONCRETE CURBING

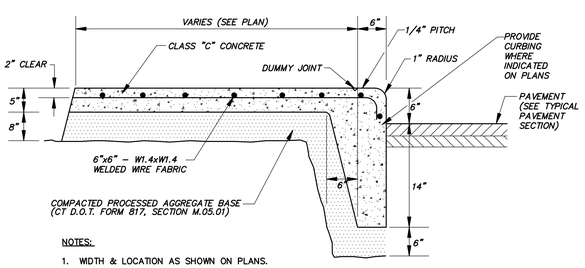
N.T.S.



NOTES:
1. WIDTH & LOCATION AS SHOWN ON PLANS.
2. PREMOLDED EXPANSION JOINTS AT 20 FT. O.C.
3. DUMMY JOINTS AT 5 FT. O.C.

CONCRETE SIDEWALK WITH DECORATIVE FENCE

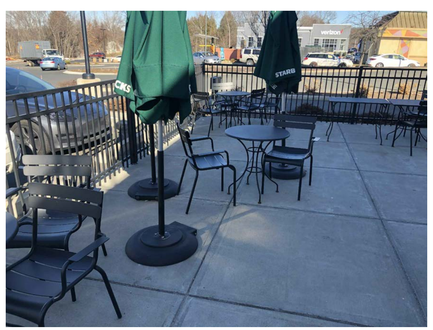
N.T.S.



NOTES:
1. WIDTH & LOCATION AS SHOWN ON PLANS.
2. PREMOLDED EXPANSION JOINTS AT 20 FT. O.C.
3. DUMMY JOINTS AT 5 FT. O.C.

CONCRETE CURB AND WALK

N.T.S.



TYPICAL PATIO SEATING AND FENCING

N.T.S.

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DETAILS
PREPARED FOR
PARAMOUNT NEWCO REALTY
25 & 39 HAZARD AVENUE
ENFIELD, CONNECTICUT

Date: 12-24-2019 | Drawn by: RJK | Job no: 19001
Scale: NTS | Checked by: DSZ | Sheet no: 2 OF 3

SD-2

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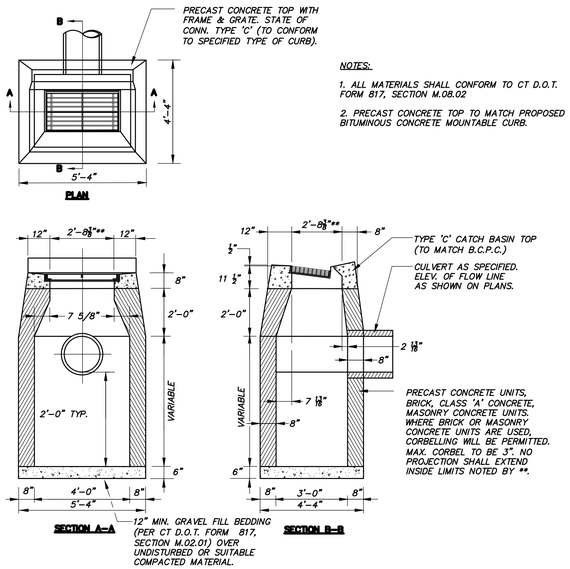
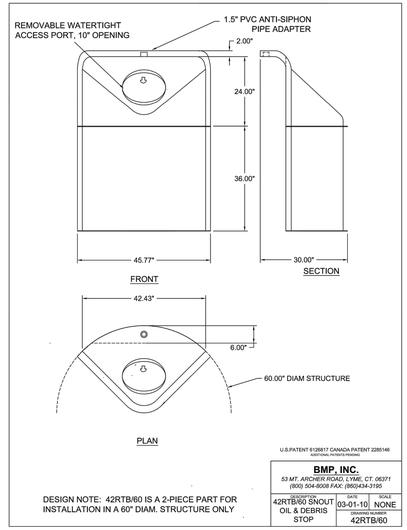


NOTES:

1. ALL MATERIALS SHALL CONFORM TO CT D.O.T. FORM 817, SECTION M.08.02
2. PRECAST CONCRETE TOP TO MATCH PROPOSED BITUMINOUS CONCRETE MOUNTABLE CURB.

TYPE 'C' CATCH BASIN

N.T.S.

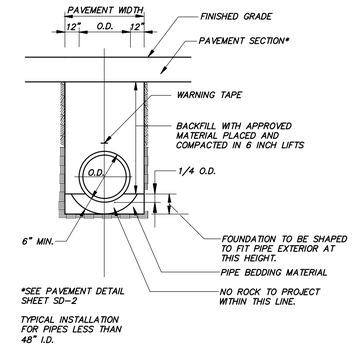


DESIGN NOTE: 42RTB/60 IS A 2-PIECE PART FOR INSTALLATION IN A 60" DIAM. STRUCTURE ONLY

ALL NEW C.B'S TO HAVE TRAP HOODS

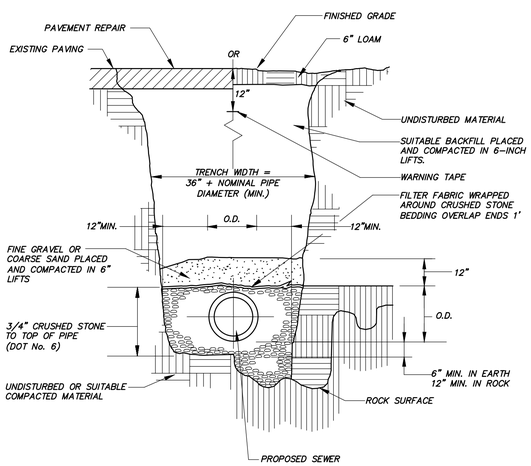
TRAP HOOD DETAIL

N.T.S.



STORM SEWER TRENCH

N.T.S.



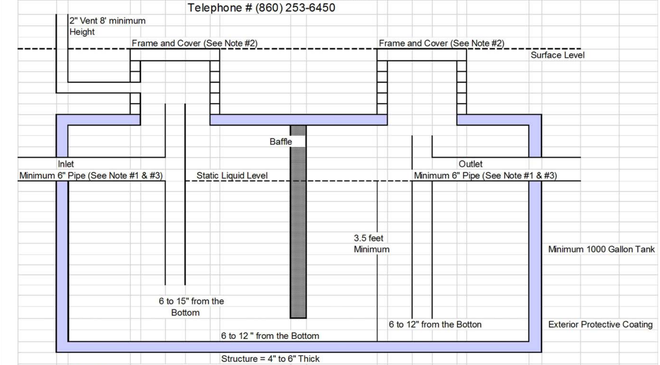
GRAVITY SEWER TRENCH

N.T.S.

New Construction Requirement

EXTERNAL FOG TREATMENT UNIT

Town of Enfield
Department of Public Works, Water Pollution Control Divisiion
820 Enfield Street, Enfield, Ct. 06082
Telephone # (860) 253-6450



NOTE:
1) All pipe joints water tight.
2) Frame and Cover shall be installed according to Town of Enfield Subdivision Regulations.revised to 02-12-02.
3) All internal pipe shall be schedule 80 and be glued.

(IV)

GREASE TRAP

N.T.S.

File IW # PH#

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Scale: NTS | Checked by: DSZ | Sheet no: 3 OF 3

SD-3

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I. PROJECT DESCRIPTION

THE PROJECT CONSISTS OF THE REMOVAL OF AN EXISTING OUTPARCEL BUILDING (AZTECA) AND ASSOCIATED APPURTENANCES RELATED TO THIS EXISTING BUILDING.

IN ITS PLACE A NEW 6,986 SQUARE FOOT MULTI–TENANT BUILDING WILL BE CONSTRUCTED. THE NEW BUILDING WILL HAVE A DRIVE–THRU WINDOW AND DEDICATED DRIVE –THRU LANE. A SLIGHT RECONFIGURATION OF THE EXISTING PARKING SPACES AND PEDESTRIAN WALKWAY SYSTEM WILL BE CONSTRUCTED TO ACCOMMODATE THE NEW BUILDING DESIGN.

ACCESS TO THE NEW BUILDING WILL BE VIA THE EXISTING DRIVEWAY SYSTEM FOR THE BALANCE OF THE ENFIELD COMMONS DEVELOPMENT.

THE SITE WILL BE SERVED WITH PUBLIC UTILITIES FROM HAZARD AVENUE AND FRESHWATER BOULEVARD. SANITARY SEWAGE WILL FLOW BY GRAVITY TO THE EXISTING ENFIELD COMMONS SEWER SYSTEM. A NEW GREASE TRAP WILL BE INSTALLED AND CONNECTED TO THIS SAME SEWER SYSTEM. STORM WATER WILL BE HANDLED WITH CONVENTIONAL STORM DRAIN SYSTEMS COMPRISED OF CATCH BASINS, MANHOLES AND WILL BE CONNECTED TO THE EXISTING ENFIELD COMMONS DRAINAGE SYSTEM.

THE PROJECT WILL BE LANDSCAPED WITH TREES AND SHRUBS IN THE PARKING LOT ISLANDS WITH ADDITIONAL FOUNDATIONS PLANTINGS AROUND THE NEW BUILDINGS AND WALKS.

II. CONSTRUCTION SEQUENCE:

IN GENERAL, THE OVERALL PROJECT WILL FOLLOW THE SEQUENCE BELOW:

1. CONTACT "CALL BEFORE YOU DIG" AT 1–800–922–4455 AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION TO HAVE EXISTING UTILITIES MARKED.
2. ATTEND PRECONSTRUCTION MEETING WITH THE TOWN OF ENFIELD OFFICIALS.
3. INSTALL EROSION CONTROL MEASURES PRIOR TO THE START OF CONSTRUCTION.
4. DEMOLISH EXISTING BUILDING
5. CUT TREES, REMOVE STUMPS, STRIP AND STOCKPILE TOPSOIL.
6. ROUGH GRADE SITE.
7. INSTALL BUILDING FOUNDATIONS.
8. INSTALL UNDERGROUND UTILITIES, LIGHT STANDARDS, AND MAKE UTILITY CONNECTIONS.
9. PREPARE SUBGRADE, INSTALL PAVEMENT BINDER COURSE AND CURBING.
10. INSTALL PAVEMENT WEARING SURFACE.
11. INSTALL SITE AMENITIES. APPLY PAVEMENT MARKINGS AND SIGNS.
12. PLACE TOPSOIL AND LANDSCAPE MATERIALS.
13. REMOVE EROSION CONTROLS AFTER DISTURBED AREAS ARE LANDSCAPED AND MULCHED OR NEW LAWN AREAS STABILIZE. COMPLETE FINAL CLEANING OF STORM SEWER SYSTEM.
14. THE APPROXIMATE DATE FOR START OF CONSTRUCTION IS FALL 2020. THE ESTIMATED COMPLETION DATE IS LATE SPRING 2021.

III. EROSION CONTROL DEVICES:

REFER TO THE "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL – 2002" (SEE GENERAL EROSION AND SEDIMENT CONTROL NOTE 3) WHEN CONSTRUCTING EROSION CONTROL DEVICES SHOWN ON THESE PLANS.

CE – CONSTRUCTION EXIT IS A CRUSHED STONE PAD ON GEOTEXTILE PROVIDING A CLEANING SURFACE AT POINTS WHERE VEHICLES LEAVE A DISTURBED AREA AND REDUCE TRACKING OF DIRT ONTO PAVED AREAS. THE STONE MUST BE REMOVED AND REPLACED WHEN IT BECOMES FILLED WITH SEDIMENT.

ECB – EROSION CONTROL BLANKET – A MANUFACTURED BLANKET COMPOSED OF BIODEGRADABLE PHOTODEGRADABLE NATURAL OR POLYMER FIBERS AND/OR FILAMENTS THAT HAVE BEEN MECHANICALLY, STRUCTURALLY OR CHEMICALLY BOUND TOGETHER TO FORM A CONTINUOUS MATRIX.

GRSW – GRASSED SWALE: A SHAPED SHALLOW EARTH DRAINAGE WAY USED TO CONVEY EXCESS SURFACE RUNOFF. GRASS VEGETATION SHOULD BE WELL ESTABLISHED BEFORE USE. STABILIZATION WITH NETTING OR MULCH MAY BE REQUIRED.

HBCD – HAYBALE CHECK DAMS SHALL BE STAKED IN A SINGLE ROW ORIENTED PERPENDICULAR TO THE FLOW ALONG THE BOTTOM AND SIDES OF DRAINAGE CHANNELS AND DITCHES. DAMS SHALL BE INSTALLED AT 100' INTERVALS UNLESS OTHERWISE SHOWN ON THE PLANS. THE HAYBALES MUST BE REPLACED WHENEVER THEY BECOME DETERIORATED.

HBEC – HAYBALE EROSION CHECKS SHALL BE STAKED A MINIMUM OF FIVE (5) FEET FROM THE BASE OF DISTURBED SLOPES EXCEEDING EIGHT (8) FEET IN HEIGHT, OR AT LOCATIONS SHOWN ON THE PLANS. LINE OF HAYBALES MUST BE INSTALLED FOLLOWING ELEVATION CONTOURS. PLACE HAYBALES BEFORE STARTING A FILL SLOPE AND AFTER DIGGING A CUT SLOPE. HEEL HAYBALES 4" INTO THE SOIL. STAKE HAYBALES AROUND THE PERIMETER OF ALL CATCH BASINS AND INSTALL FILTER FABRIC WRAP ON CATCH BASIN INLET GRATES. REMOVE ALL SEDIMENT WHEN DEPOSITS REACH ½ BALE HEIGHT. HAYBALES MUST BE REPLACED PERIODICALLY.

IP – INLET PROTECTION: A SEDIMENT CONTROL DEVICE USED DURING CONSTRUCTION THAT MOUNTS UNDER THE GRATE OF A CATCH BASIN, RESIDING INSIDE THE STRUCTURE. IT IS MADE OF PERMEABLE GEOTEXTILE THAT ALLOWS WATER TO PASS, BUT TRAPS SILT AND SEDIMENT. (SILT SACK OR APPROVED EQUAL.) THE SILT SACK MUST BE REMOVED WHEN SILT/SEDIMENT REACHES ONE HALF THE HEIGHT OF THE DEVICE. REMOVE SEDIMENTS AND DEPOSIT ON STABLE AREA OF SITE AND RINSE DEVISE FOR REUSE. REPLACE WHEN DAMAGED.

RRLS – RIP RAP LEVEL SPREADER: A RIPRAP LINED APRON INSTALLED AT A ZERO PERCENT GRADE TO ABSORB THE INITIAL IMPACT OF STORMWATER DISCHARGE FROM THE STORM DRAINAGE SYSTEM AND FURTHER REDUCE FLOW VELOCITIES TO PREVENT EROSION DOWNSTREAM.

RRPP – RIPRAP PLUNGE POOL: A RIPRAP DISSIPATION DEVICE INSTALLED AT THE ENDS OF DRAINAGE CULVERTS CREATING A POOL WITH BOTTOM BELOW THE CULVERT. WATER IN THE POOL REDUCES VELOCITY AND THE POOL COLLECTS HEAVY SEDIMENT. RIPRAP PLUNGE POOLS REQUIRE PERIODIC REMOVAL OF ACCUMULATED DEPOSITS. RRPP IS DESIGNED PER THE "CONNECTICUT DEPARTMENT OF TRANSPORTATION, DRAINAGE MANUAL – 2000"

SFEC – SEDIMENT FENCE EROSION CHECK IS A SYNTHETIC TEXTILE BARRIER DESIGNED TO FILTER SEDIMENT FROM SURFACE WATER. PLACEMENT SHALL BE SIMILAR TO HBEC AND INSTALLATION REQUIRES ANCHORING THE FENCE BOTTOM TO PREVENT BYPASS. ALL SEDIMENT SHALL BE REMOVED IF DEPOSITS REACH ONE (1) FOOT IN DEPTH. ADDITIONAL SUPPORT (SUCH AS SNOW FENCE OR WIRE FENCE) ON THE DOWNHILL FACE MAY BE REQUIRED TO STRENGTHEN SEDIMENT FENCE IN HIGH FLOW LOCATIONS.

SL – SEDIMENT LOGS: A SEDIMENT CONTROL DEVICE CONSISTING OF AN OUTSIDE, OPEN WEAVE CONTAINMENT FABRIC FILLED WITH FIBERS. IT IS DESIGNED TO PROVIDE A FLEXIBLE, LIGHTWEIGHT, POROUS, SEDIMENT CONTROL DEVICE WITH THE ABILITY TO CONFORM TO THE TERRAIN UPON WHICH IT IS INSTALLED. IT IS DESIGNED TO DISSIPATE VELOCITY OF FLOW AND FILTER AND TRAP SEDIMENTS UPGRADIENT AND WITHIN THE DEVICE.

IV. GENERAL NOTES:

1. EXISTING TOPOGRAPHY FROM A SURVEY ENTITLED "LIMITED TOPOGRAPHIC SURVEY, PREPARED FOR LEO BHW LTD, LLC, PARCEL 1A ENFIELD COMMONS, 39 HAZARD AVENUE, ENFIELD, CONNECTICUT" BY F. A. HESKETH AND ASSOCIATES, INC. AND DATED 12–24–2019.
2. N.G.V.D. (1983) VERTICAL DATUM USED. AN ASSUMED HORIZONTAL DATUM WAS USED. SEE TOPOGRAPHIC SURVEY FOR HORIZONTAL CONTROL POINTS AND BENCHMARKS.
3. ALL WORK AND MATERIALS TO CONFORM TO THE PROJECT SPECIFICATIONS, CT DOT FORM 817, TOWN OF ENFIELD STANDARD DETAILS AND CUSTODIAL UTILITY COMPANY DETAILS AND SPECIFICATIONS, AND THE DETAILS SHOWN ON THESE PLANS, AS APPLICABLE.
4. PRIOR TO ANY EXCAVATION THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES BY CALLING 1–800–922–4455 AT LEAST 48 HOURS IN ADVANCE.
5. THE LOCATION OF ALL UTILITIES SHOWN IS APPROXIMATE AND ARE BASED ON AVAILABLE AS–BUILT INFORMATION FROM UTILITY COMPANY RECORDS, THE PROPERTY OWNER, AND LIMITED SURVEY DATA BY F. A. HESKETH AND ASSOC., INC. ALL EXISTING UTILITIES MAY NOT BE SHOWN, AND THE LOCATIONS SHOWN MAY NOT BE ACCURATE. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES ON THE SITE PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY AND NOTIFYING THE DESIGN SITE ENGINEER OR ARCHITECT, AS APPLICABLE, OF ANY ADJUSTMENTS TO THE PLANS WHICH ARE NECESSARY. TEST PITS WILL BE REQUIRED AT ALL PROPOSED UTILITY CROSSINGS IN ORDER TO DETERMINE UNDERGROUND UTILITY LOCATIONS AND TO IDENTIFY POTENTIAL CONFLICTS WITH VERTICAL AND HORIZONTAL ALIGNMENTS SHOWN ON THE PLANS. TEST PITS SHALL BE COMPLETED BY THE CONTRACTOR AT HIS EXPENSE.
6. ALL UTILITIES TO BE INSTALLED, RELOCATED, AND/OR PROTECTED IN ACCORDANCE WITH THE CUSTODIAL UTILITY COMPANY STANDARDS AND WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS. FINAL LOCATION OF UTILITY CONNECTIONS OR METHODS OF PROTECTION ARE SUBJECT TO REVISION BY INDIVIDUAL UTILITY COMPANIES PRIOR TO THE INSTALLATION OR IMPLEMENTATION OF PROTECTION. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE WORK WITH THE APPLICABLE UTILITY COMPANIES, FOR COORDINATING UTILITY CONNECTIONS AND/OR RELOCATIONS WITH THE SITE WORK AND BUILDING CONSTRUCTION, AND COORDINATING THE PROTECTION OF ALL UTILITIES NECESSARY TO PERFORM THE WORK SHOWN ON THE PLANS. COORDINATION ACTIVITIES SHALL BE SCHEDULED AND TAKE PLACE PRIOR TO THE START OF CONSTRUCTION ACTIVITIES EFFECTING THE UTILITIES INSTALLATION, REPLACEMENT, AND/OR PROTECTION.
7. INSTALLATION OF UTILITIES SHALL BE COMPLETED IN STRICT ACCORDANCE WITH THE PLANS BOTH IN VERTICAL AND HORIZONTAL ALIGNMENTS, UNLESS SPECIFICALLY APPROVED BY THE SITE ENGINEER.
8. A PRE–CONSTRUCTION MEETING AND AUTHORIZATION TO PROCEED WILL BE REQUIRED PRIOR TO START OF ANY CONSTRUCTION INCLUDING REMOVAL OF TREES OR DEMOLITION ACTIVITIES. PROCEDURES FOR SUCH PRE–CONSTRUCTION MEETING AND AUTHORIZATION TO PROCEED SHALL BE IN ACCORDANCE WITH STATE, TOWN AND OWNER REQUIREMENTS. THE CONTRACTOR SHALL COORDINATE THIS MEETING.
9. ALL WORK ON THIS PROJECT SHALL BE COMPLETED IN CONFORMANCE WITH THE REQUIREMENTS OF ALL FEDERAL, STATE, AND LOCAL PERMITS ISSUED FOR THIS PROJECT.
10. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE PLAN, SPECIFICATIONS, AND THE EROSION AND SEDIMENTATION CONTROL NOTES.
11. TREES SHALL BE FLAGGED AND APPROVED BY THE SITE ENGINEER PRIOR TO REMOVAL.
12. NO STUMPS ARE TO BE BURIED ON SITE.
13. ALL DEBRIS SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.
14. DRAINAGE SHALL BE MAINTAINED THROUGHOUT THE PROJECT SO AS NOT TO CAUSE FLOODING OF ROADWAYS OR DAMAGE TO PRIVATE PROPERTY.
15. ALL SANITARY SEWER WORK SHALL BE COORDINATED WITH THE ENFIELD WATER POLLUTION CONTROL (WPC). WPC TEL. NUMBER: 860–253–6450.
16. ELECTRIC, WATER, GAS, TELEPHONE AND SANITARY SEWER CUSTODIAL UTILITY COMPANY IS THE CONNECTICUT LIGHT & POWER, THE CONNECTICUT WATER COMPANY, HAZARDVILLE WATER COMPANY, YANKEE GAS, SOUTHERN NEW ENGLAND TELEPHONE COMPANY AND ENFIELD WATER POLLUTION CONTROL, RESPECTIVELY.
17. NO VEHICLES OR FLUID FILLED MATERIALS (INCLUDING SANI–CANS, HYDRAULIC EQUIPMENT, ETC.) SHOULD BE STORED WITHIN 50 FEET OF WETLANDS OR WATERCOURSES.

V. STANDARD TOWN OF ENFIELD NOTES:

1. THE DEVELOPER OF A SUBDIVISION SHALL NOTIFY THE TOWN ENGINEER'S OFFICE 24 HOURS IN ADVANCE TO SCHEDULE INSPECTION OF SUBBASE GRAVEL, PAVEMENT, SIDEWALKS, DRAINAGE STRUCTURES AND PIPES, SANITARY SEWERS AND MANHOLES. TELEPHONE 8 A.M. – 4 P.M. AT 253–6363. PRIVATE SITES WILL BE INSPECTED FOR SANITARY SEWERS AND ANY IMPROVEMENT TO BE TURNED OVER TO THE TOWN.
2. ALL SITE WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TOWN OF ENFIELD SPECIFICATIONS AS OUTLINED IN THE SUBDIVISION REGULATIONS.
3. EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED IN ACCORDANCE WITH THE "EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY THE SOIL CONSERVATION SERVICE 2002.
4. ALL EXCAVATIONS WITHIN TOWN RIGHT–OF–WAY REQUIRES A STREET EXCAVATION PERMIT ISSUED BY THE ENGINEERING DEPARTMENT.
5. NO SITE IMPROVEMENTS SUCH AS DRAINAGE, SANITARY SEWERS, SIDEWALKS, EXCAVATIONS, FILLING, PAVEMENT OPERATIONS, ETC., SHALL COMMENCE UNTIL THE SITE ENGINEERING BOND, AS REQUIRED BY THE ENFIELD PLANNING AND ZONING COMMISSION, IS POSTED WITH THE TOWN OF ENFIELD.
6. NO STUMPS TO BE BURIED ON SITE.
7. PRE–CONSTRUCTION CONFERENCE FOR CONSTRUCTION OF A SUBDIVISION ONLY, SHALL INCLUDE THE TOWN ENGINEER OR HIS AGENT. NOTIFICATION OF CONFERENCE SHALL BE 48 HOURS IN ADVANCE.
8. THE DEVELOPER SHALL HIRE A REGISTERED PROFESSIONAL ENGINEER TO INSPECT THE SITE DURING CONSTRUCTION. TO INSURE THE WORK IS CONSTRUCTED IN ACCORDANCE WITH APPROVED PLANS, THE ENGINEER WILL BE REQUIRED TO CERTIFY ON AN AS–BUILT PLAN THAT THE PROJECT WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS AND ALL MATERIALS WERE PLACED IN ACCORDANCE WITH THE SITE PLANS AND SPECIFICATIONS, PRIOR TO RELEASE OF ANY BONDS.

VI. LONG TERM STORMWATER SYSTEM AND OVERALL SITE MAINTENANCE PLAN

IT IS IMPORTANT THAT A LONG TERM MAINTENANCE PLAN BE IMPLEMENTED AND EXECUTED THROUGHOUT THE LIFE OF THE FACILITY.

STORMWATER SYSTEM

1. MAINTENANCE OF THE ON–SITE STORM WATER SYSTEM IS THE RESPONSIBILITY OF THE PROPERTY OWNER. THIS INCLUDES ALL CATCH BASINS, YARD DRAINS, PIPING, MANHOLES, OUTLET STRUCTURE, ROOF LEADERS AND THE DRAINAGE PIPES.
2. THE FOLLOWING SCHEDULE OF MAINTENANCE SHALL BE FOLLOWED:

   A. IN GENERAL, GOOD HOUSEKEEPING PRACTICES SHALL BE INCORPORATED INTO THE ROUTINE SITE AND FACILITY MAINTENANCE PLAN TO MINIMIZE DEPOSITION OF SEDIMENT, LITER AND CONTAMINANTS INTO THE STORM DRAINAGE SYSTEM.

   B. PAVED PARKING AND LOADING AREAS AND WALKS SHALL BE SWEPT OF DEBRIS, SAND, AND LITTER AT LEAST TWICE ANNUALLY, IN PARTICULAR, LATE SPRING AFTER WINTER SANDING OPERATIONS, AND IN LATE FALL AFTER LEAF LITTER CLEANUP.

   C. CATCH BASINS AND THE OUTLET STRUCTURE SHALL BE INSPECTED SEMIANNUALLY, FOLLOWING SPRING AND FALL SITE CLEANUP. ACCUMULATED SEDIMENT AND DEBRIS SHALL BE REMOVED AND DISPOSED OF TO APPROVED OFF–SITE LOCATIONS.
3. MAINTENANCE RECORDS DOCUMENTING SYSTEM INSPECTIONS AND CLEANING OPERATIONS SHALL BE MAINTAINED BY THE PROPERTY OWNER AND SHALL BE MADE AVAILABLE FOR INSPECTION BY THE TOWN AS REQUESTED.

SITE MAINTENANCE

1. ONGOING GENERAL MAINTENANCE OF THE SITE IS THE RESPONSIBILITY OF THE PROPERTY OWNER. THIS INCLUDES LITTER CONTROL, FERTILIZER AND PESTICIDE MANAGEMENT, SNOWPLOWING, SANDING/SALTING AND SNOWPILE STOCKPILING. IN GENERAL, GOOD HOUSEKEEPING PRACTICES SHALL BE INCORPORATED INTO THE ROUTINE SITE AND FACILITY MAINTENANCE PLAN TO MINIMIZE DEPOSITION OF SEDIMENT, LITER AND OTHER POTENTIAL CONTAMINANTS.
2. WITH REGARD TO LAWN AND LANDSCAPE MANAGEMENT, IT IS IMPERATIVE THAT THE PROPOSED LANDSCAPING BE MAINTAINED FOLLOWING CURRENT HORTICULTURAL PRACTICES TO INSURE THE HEALTH OF THE LAWN AND PLANTINGS AND MINIMIZE THE NEED TO USE FERTILIZERS AND PESTICIDES. THE APPLICATION OF FERTILIZERS AND PESTICIDES SHALL BE COMPLETED FOLLOWING AN INTEGRATED PEST MANAGEMENT PLAN PREPARED AND APPLIED BY A LICENSED PROFESSIONAL IN STRICT CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND IN COMPLIANCE WITH ALL APPLICABLE GOVERNMENTAL LAWS AND REGULATIONS.
3. SNOW FROM THE PARKING AND SIDEWALK AREAS SHALL BE STOCKPILED AT LOCATIONS AS DEPICTED ON THE PLANS AROUND THE SITE TO AVOID THE CREATION OF LARGE SNOWPILE AREAS.
4. THE APPLICATION RATE OF SAND AND ICE MELT MATERIALS SHALL BE MINIMIZED TO THE SMALLEST AMOUNT NECESSARY TO MAINTAIN SAFE TRAVEL AND PEDESTRIAN CONDITIONS.

   APPLICATION OF ICE MELT MATERIALS SHALL BE LIMITED TO PEDESTRIAN ACCESS ROUTES AND BUILDING ENTRANCES, AND GENERALLY PROHIBITED FROM PAVED PARKING AND DRIVEWAY AREAS, UNLESS ABSOLUTELY NECESSARY DUE TO EXCESSIVE ICE BUILDUP.

   ALTERNATIVES TO STANDARD NACL ROAD SALT SHALL BE EVALUATED AND UTILIZED ON AN ANNUAL BASIS. AT THIS TIME, CALCIUM CHLORIDE AND/OR MAGNESIUM CHLORIDE ARE PREFERRED ALTERNATIVES.

File IW # PH#

F. A. Hesketh & Associates, Inc.
3 Creamery Brook, East Granby, CT 06026 · 146 N W Broad Street, Southern Pines, NC 28387
Phone (860) 653-8000 · Fax (860) 844-8600 · Phone (910) 692-2844 Fax (910) 692-3356
Civil & Traffic Engineers · Surveyors · Planners · Landscape Architects www.fahesketh.com · mail@fahesketh.com

Revisions:

No.	Date	Description
1	03–30–2020	Miscellaneous revisions
2	07–01–2020	TPZ Filing

NOTES
PREPARED FOR
PARAMOUNT NEWCO REALTY
39 HAZARD AVENUE
ENFIELD, CONNECTICUT

Date: 12–24–2019 | Drawn by: KLL | Job no: 05186
Scale: NTS | Checked by: DSZ | Sheet no: 1 OF 1

NT–1

Q:\2019\19001 – Enfield Common\Submittals\2020–07–01\ECMnt102.dwg, NT–1, Jun. 26, 2020 – 4:57:31 PM

LEGEND

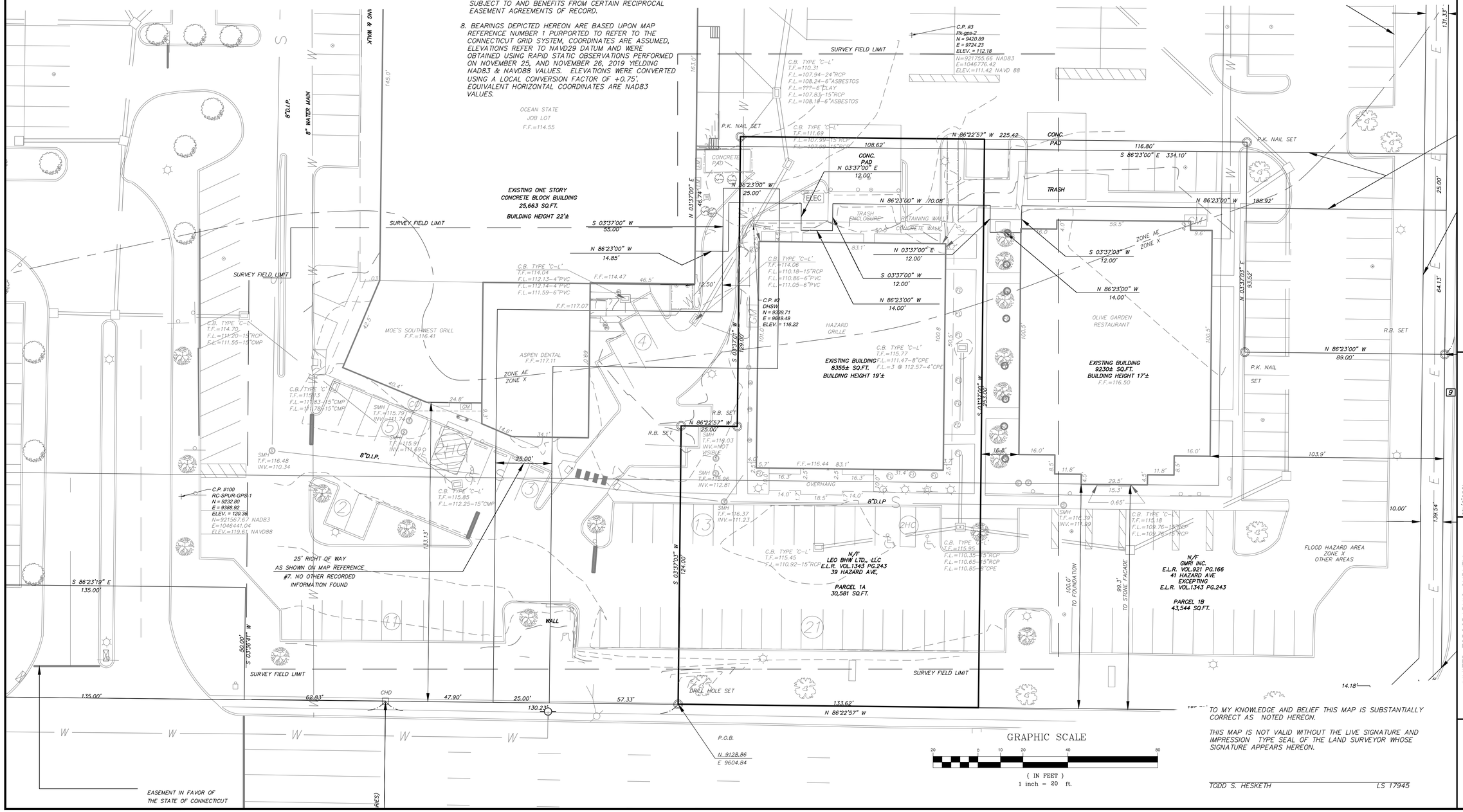
N/F	= NOW OR FORMERLY	F/F	= FINISHED FLOOR
E.L.R.	= ENFIELD LAND RECORD	—E—E—	= ELECTRIC LINE
VOL.	= VOLUME		= SANITARY LINE
PG.	= PAGE		= LOOP DETECTOR
CP	= CONTROL POINT	(#)	= # OF PARKING SPACES
ELEV.	= ELEVATION	→	= DIRECTION OF FLOW
SQ.FT.	= SQUARE FEET	2	= FIDELITY NATIONAL TITLE INSURANCE COMPANY ALTA COMMITMENT FOR TITLE INSURANCE (8/1/16), COMMITMENT DATE: 01/08/2019 AT 8:00 A.M. EXCEPTIONS
☼	= LIGHT STANDARD		
Ⓢ	= SANITARY MANHOLE		
□	= CATCH BASIN		
WG	= WATERGATE		
GG	= GAS GATE		
	= SIGN		
—G—G—	= GAS LINE		
—W—W—	= WATER LINE		
TR	= TRANSFORMER		
WG	= WATERGATE		
GM	= GAS METER		
P.O.B.	= POINT OF BEGINNING		
P.O.C.	= POINT OF COMMENCEMENT		

NOTES:

1. THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20–300B–1 THROUGH 20–300B–20.
2. IT IS A LIMITED TOPOGRAPHIC SURVEY INTENDED TO BE USED FOR DESIGN PURPOSES.
3. THE BOUNDARY DETERMINATION CATEGORY IS THAT OF A RESURVEY AND IS DEPENDENT IN NATURE AND IS BASED UPON MAP REFERENCE NUMBER 1.
4. THIS SURVEY CONFORMS TO CLASS A–2 / T–2 ACCURACY STANDARDS.
5. THE SUBJECT PARCEL IS CURRENTLY OWNED BY LEO BHW LTD, LLC ENFIELD LAND RECORDS VOLUME 1343 PAGE 243.
6. THE SUBJECT PARCEL IS LOCATED IN THE BUSINESS REGIONAL (BR) ZONE IN THE TOWN OF ENFIELD, CONNECTICUT.
7. 25 HAZARD AVENUE, 15 HAZARD AVENUE, 39 HAZARD AVENUE AND 41 HAZARD AVENUE ARE CONSIDERED ONE PARCEL FOR ZONING PURPOSES BY THE TOWN OF ENFIELD. THE PARCEL DEPICTED HEREON MAY BE SUBJECT TO AND BENEFITS FROM CERTAIN RECIPROCAL EASEMENT AGREEMENTS OF RECORD.
8. BEARINGS DEPICTED HEREON ARE BASED UPON MAP REFERENCE NUMBER 1 PURPORTED TO REFER TO THE CONNECTICUT GRID SYSTEM, COORDINATES ARE ASSUMED, ELEVATIONS REFER TO NAVD29 DATUM AND WERE OBTAINED USING RAPID STATIC OBSERVATIONS PERFORMED ON NOVEMBER 25, AND NOVEMBER 26, 2019 YIELDING NAD83 & NAVD88 VALUES. ELEVATIONS WERE CONVERTED USING A LOCAL CONVERSION FACTOR OF +0.75'. EQUIVALENT HORIZONTAL COORDINATES ARE NAD83 VALUES.
9. UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED HEREON HAVE BEEN COMPILED IN PART FROM RECORD MAPS, VISIBLE FEATURES AND OTHER SOURCES OF INFORMATION. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXSIST ON THE SITE. THE SIZE, LOCATIONS AND EXITENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BTY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION CALL–BEFORE –YOU– DIG 1–800–922–4455.
10. THE FLOOD ZONE LINES DEPICTED HEREON WERE OBTAINED AND DIGITIZED FROM AN ELECTRONIC FILE OBTAINED FROM THE FEMA WEBSITE OF A MAP ENTITLED "FIRM FLOOD INSURANCE RATE MAP HARTFORD COUNTY CONNECTICUT (ALL JURISDICTIONS) PANEL 227 OF 675 MAP NUMBER 09003C0227F EFFECTIVE DATE SEPTEMBER 26, 2008 FEDERAL EMERGENCY MANAGEMENT AGENCY"

MAP REFERENCES:

1. AS–BUILT PLAN OF ENFIELD COMMONS PREPARED FOR PARKSIDE ASSOCIATES LIMITED PARTNERSHIP 25,39,41,43,45 HAZARD AVENUE (ROUTE 190) ENFIELD, CONNECTICUT DATE: 08–30–90 REVISED TO 03–22–95 SCALE 1"=40' SHEETS 1–3 OF 3 BY F.A. HESKETH & ASSOCIATES, INC.



TO MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

THIS MAP IS NOT VALID WITHOUT THE LIVE SIGNATURE AND IMPRESSION TYPE SEAL OF THE LAND SURVEYOR WHOSE SIGNATURE APPEARS HEREON.

TODD S. HESKETH LS 17945

F. A. Hesketh & Associates, Inc.
3 Creamery Brook, East Granby, CT 06026
Civil & Traffic Engineers · Surveyors · Planners · Landscape Architects
Phone (860) 653-8000
Fax. (860) 844-8600
e-mail heskethmail.net

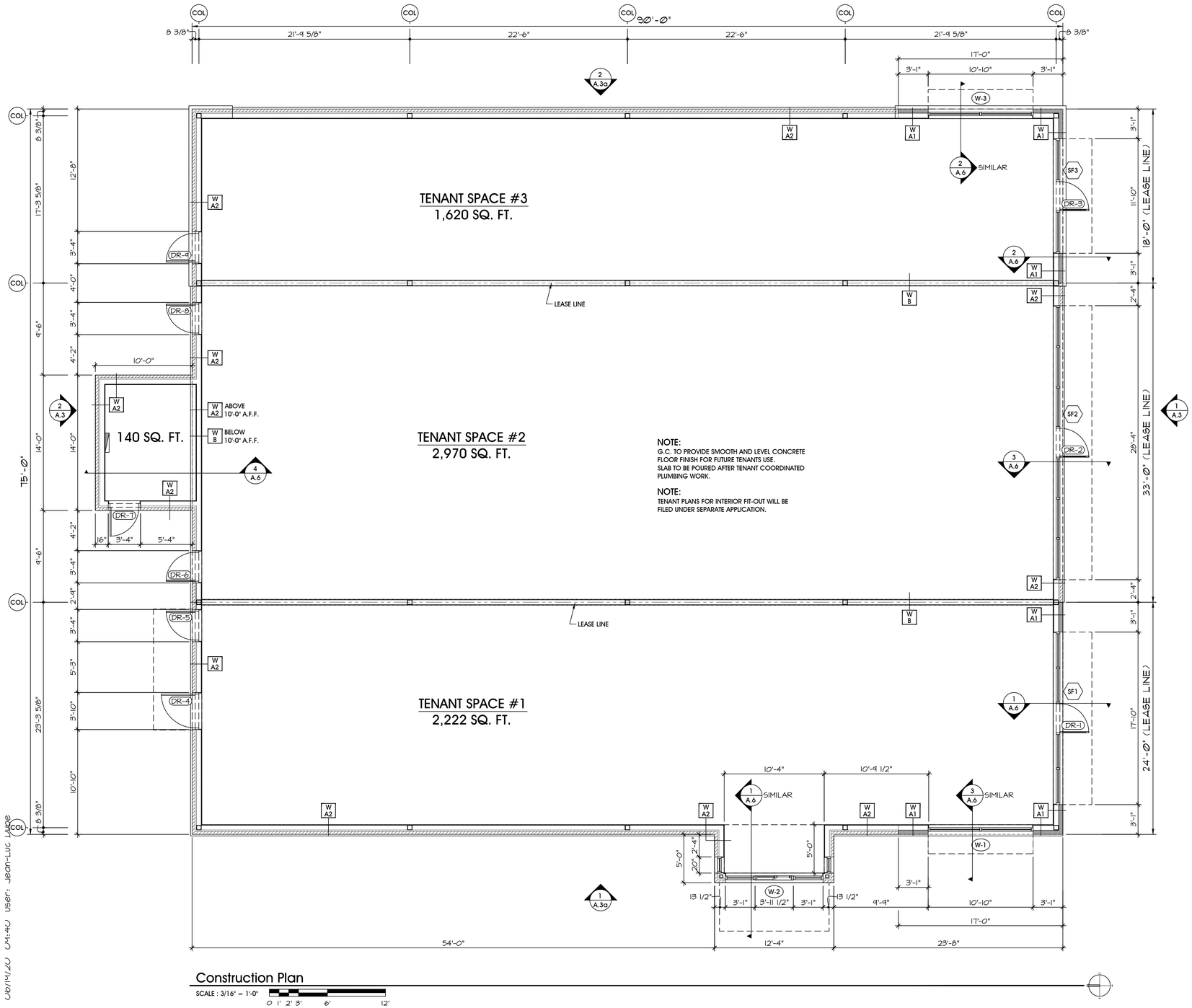
revisions:		
no.	date	description

LIMITED TOPOGRAPHIC SURVEY
PREPARED FOR
LEO BHW LTD, LLC
PARCEL 1A ENFIELD COMMONS
39 HAZARD AVENUE
ENFIELD, CONNECTICUT

date: 12–24–2019	drawn by: CAD	job no: 19001	Sheet no: 1 OF 1
Scale: 1" = 20'	checked by: TSH		

PS–1

Q:\2019\19001 – Enfield Commons\SURVEY\LIMITED TOPOGRAPHIC SURVEY-2.dwg, Layout1, Dec. 19, 2019 – 9:26:02 AM



Construction Plan

SCALE : 3/16" = 1'-0"

0 1' 2' 3' 6' 12'

Drawing Symbol Legend

- SOFFIT / CEILING LINE
- NEW WALL CONSTRUCTION (REFER TO WALL TYPES)
- EXG. DOOR
- NEW DOOR
- DR-# — DOOR TYPE SYMBOL, DOOR TYPE NUMBER (REFER TO SCHEDULE ON A.2a)
- W # — WALL TYPE SYMBOL, WALL TYPE NUMBER (REFER TO SCHEDULE)
- SF# — STOREFRONT TYPE SYMBOL, STOREFRONT TYPE NUMBER (REFER TO DETAILS ON A.2a)
- W# — WINDOW TYPE SYMBOL, WINDOW TYPE NUMBER (REFER TO DETAILS ON A.2a)
- DETAIL NUMBER, DETAIL SYMBOL, DRAWING NUMBER

Wall Type Schedule

W A1	NEW EXTERIOR WALL: 6" METAL STUDS AT 16" O.C. W/ R19 BATT INSULATION, 5/8" DENS-GLASS & 4" STONE VENEER ON EXTERIOR SIDE. PROVIDE (1) LAYER OF 5/8" TYPE 'X' GYP. BD. ON INTERIOR SIDE FROM FLOOR TO 12'-0" ABOVE SLAB. BRACE ABOVE CEILING(S) AS REQUIRED. USE MOISTURE RESISTANT GYP. BD. AT WET LOCATIONS.
W A2	NEW EXTERIOR WALL: 6" METAL STUDS AT 16" O.C. W/ R19 BATT INSULATION, 5/8" DENS-GLASS & E.F.I.S. FINISH ON EXTERIOR SIDE. PROVIDE (1) LAYER OF 5/8" TYPE 'X' GYP. BD. ON INTERIOR SIDE. FROM FLOOR TO 12'-0" ABOVE SLAB. BRACE ABOVE CEILINGS AS REQUIRED. USE MOISTURE RESISTANT GYP. BD. AT WET LOCATIONS.
W B	NEW INTERIOR 1 HR. UL RATED TENANT DEMISING PARTITION W/ 20 GA. 6" METAL STUDS AT 16" O.C. & (1) LAYER OF 5/8" TYPE 'X' GYP. BD. ON BOTH SIDES, FIRE-STOPPED TO UNDERSIDE OF ROOF DECK ABOVE.

Ni Design
11 Talcott Notch Road
Farmington, CT 06032
T. 860 · 678 · 1946
F. 860 · 678 · 7111
nidesign@nidesign.net

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Charles Georgie Associates
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365 New Haven Ave., Ste. 4
Milford, CT 06460
Tel: (203) 934-2855
Fax. (203) 504-7987
E-mail: cgeorgie@cgassoc.net

DRAWING CHRONOLOGY:

index:	date:	description:
03 . 23 . 20		NOT FOR CONSTRUCTION
04 . 20 . 20		REVISED PER TENANT COMMENTS
06 . 22 . 20		ISSUED FOR PRELIMINARY FIRE MARSHAL REVIEW

TITLE:

Construction Plan

date: 04 . 20 . 20 drawn by: WJK scale: AS NOTED

PROJECT:

Enfield Commons
39 Hazard Avenue
Enfield, Connecticut

space #: - sq. ft.: 6,812 job #: 19101 file: -

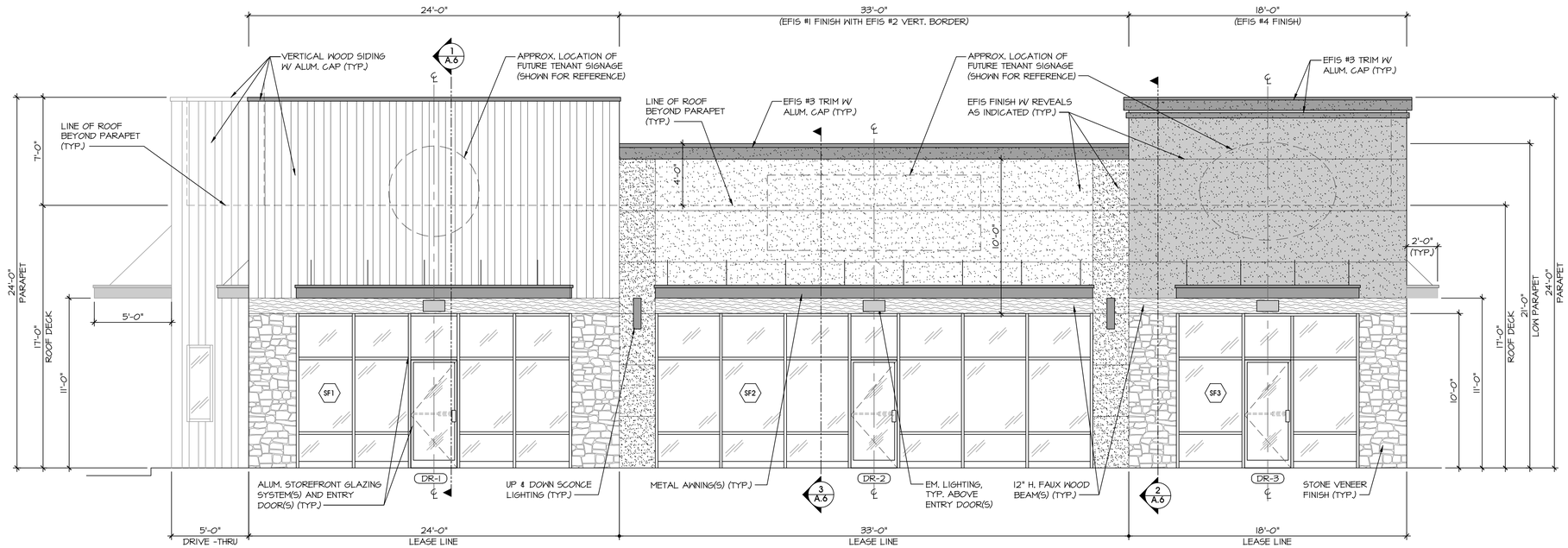
A.2

Building Signage Note

TENANT SIGNAGE SHOWN HERE FOR REFERENCE ONLY. FINAL SIGNAGE (SIZE, MATERIALS, ETC.) SHALL BE PREPARED & SUBMITTED BY TENANT UNDER SEPARATE APPLICATION(S).

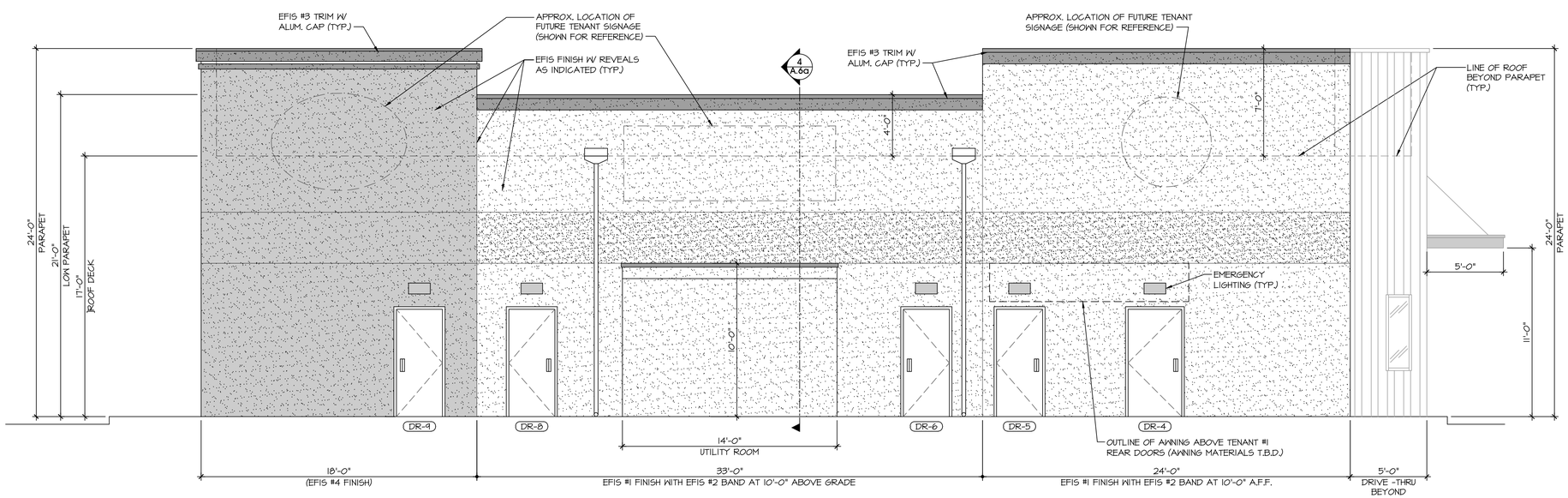
Exterior Building Finishes

MATERIAL TYPE	COLOR DESCRIPTION
ALUM. STOREFRONT GLAZING SYSTEM	SATIN ALUMINUM (CLEAR ANODIZED)
METAL CANOPY & PARAPET ALUM. CAP	TO MATCH RAL #4021 (MATTE FIN.) (FINAL SPEC. T.B.D.)
STONE VENEER	MULTI-COLORED (GRAY & TAN SHADES)
FAUX WOOD BEAM	LIGHT RUSTIC PINE (FINAL SPEC. T.B.D.)
VERTICAL WOOD SIDING	TO MATCH "NIGIRI" ACCOYA (FINAL SPEC. T.B.D.)
EFIS #1	SIM. TO SW 6147 "PANDA WHITE" (FINAL SPEC. T.B.D.)
EFIS #2 (BAND AT 10'-0")	SIM. TO SW 7024 "FUNCTIONAL GRAY" (FINAL SPEC. T.B.D.)
EFIS #3 (TRIM AT PARAPET)	SIM. TO SW 7069 "IRON ORE" (FINAL SPEC. T.B.D.)
EFIS #4 (TENANT #3)	GREY (FINAL SPEC. T.B.D.)



1 Exterior Front (South) Elevation

SCALE : 1/4" = 1'-0"



2 Exterior Rear (North) Elevation

SCALE : 1/4" = 1'-0"

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Farmington, CT 06032
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nidesign@nidesign.net

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Fax. (203) 504-7987
E-mail: cgeorgie@cgassoc.net

DRAWING CHRONOLOGY:

index:	date:	description:
03	23 . 20	NOT FOR CONSTRUCTION
04	20 . 20	REVISED EXTERIOR FACADE DESIGN
06	22 . 20	ISSUED FOR PRELIMINARY FIRE MARSHAL REVIEW

TITLE:

Exterior Elevations

date: 04 . 20 . 20 drawn by: WJK scale: AS NOTED

PROJECT:

Enfield Commons
39 Hazard Avenue
Enfield, Connecticut

space #: - sq. ft.: 6,812 job #: 19101 file: -

A.3

Building Signage Note

TENANT SIGNAGE SHOWN HERE FOR REFERENCE ONLY. FINAL SIGNAGE (SIZE, MATERIALS, ETC.) SHALL BE PREPARED & SUBMITTED BY TENANT UNDER SEPARATE APPLICATION(S).

Exterior Building Finishes

MATERIAL TYPE	COLOR DESCRIPTION
ALUM. STOREFRONT GLAZING SYSTEM	SATIN ALUMINUM (CLEAR ANODIZED)
METAL CANOPY & PARAPET ALUM. CAP	TO MATCH RAL #4021 (MATTE FIN.) (FINAL SPEC. T.B.D.)
STONE VENEER	MULTI-COLORED (GRAY & TAN SHADES)
FAUX WOOD BEAM	LIGHT RUSTIC PINE (FINAL SPEC. T.B.D.)
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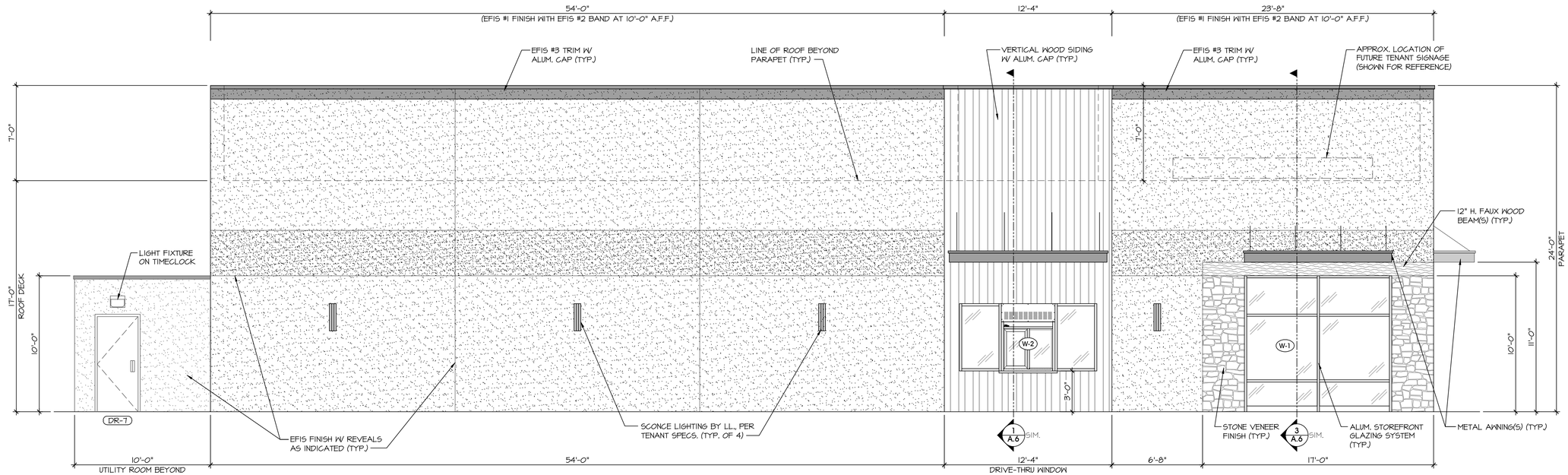
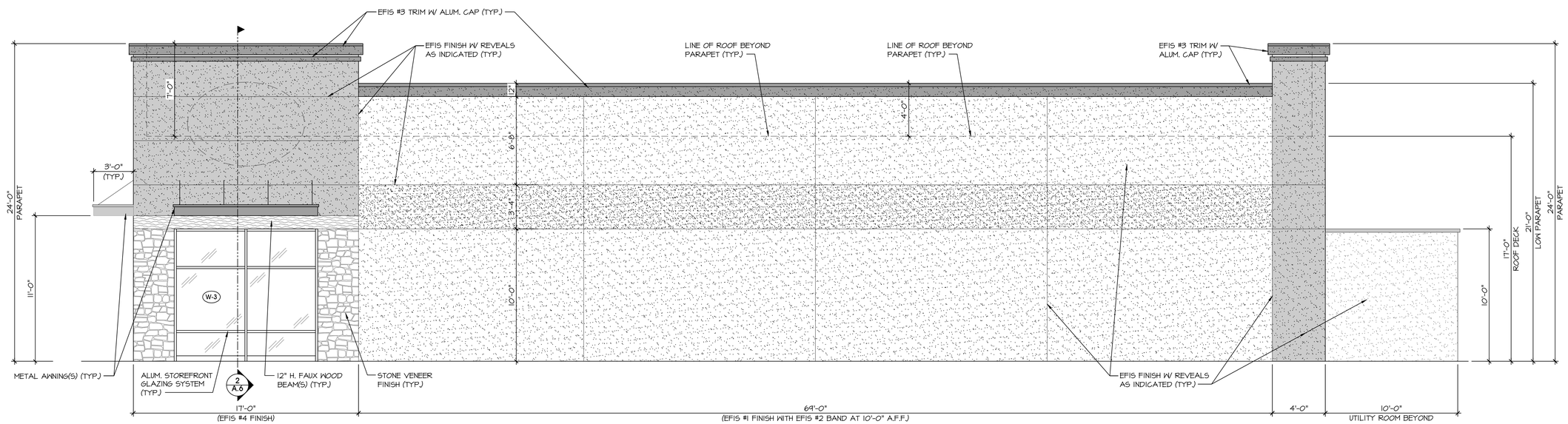
EFIS #4 (TENANT #3)	GREY (FINAL SPEC. T.B.D.)



1 Exterior Side (West) Elevation

SCALE : 1/4" = 1'-0"



2 Exterior Side (East) Elevation

SCALE : 1/4" = 1'-0"

PR19101_A3-A3A.DWG 06/19/20 09:36 User: Jean-Luc Dube

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Tel: (203) 934-2855
Fax. (203) 504-7987

DRAWING CHRONOLOGY:

index:	date:	description:
03	23 . 20	NOT FOR CONSTRUCTION
04	20 . 20	REVISED EXTERIOR FACADE DESIGN
06	22 . 20	ISSUED FOR PRELIMINARY FIRE MARSHAL REVIEW

TITLE:

Exterior Elevations

date: 04 . 20 . 20 drawn by: WJK scale: AS NOTED

PROJECT:

Enfield Commons
39 Hazard Avenue
Enfield, Connecticut

space #: - sq. ft.: 6,812 job #: 19101 file: -

A.3a

Hesketh

3 Creamery Brook • East Granby, CT 06026

F. A. Hesketh
& Associates, Inc.

LETTER OF TRANSMITTAL

TO: ENFIELD PLANNING DEPT

DATE: 7/1/2020

OFFICE JOB FILE NO: 19001

PROJECT NAME: ENF. COMMONS

ATTN:

PROJECT LOCATION: #25 & 39 HAZARD

WE ARE SENDING YOU HEREWITH:

NO OF COPIES	ITEM TITLE	MADE BY	ORIGINALS	PAPER PRINTS	MYLAR COPY	OTHER	REMARKS
14	PLAN SET			X			DATED 7/1/20
3	ENGINEERING REPORT			X			DATED 7/1/20
1	APPL & $70.00 FEE		X				SPECIAL FLOOD
1	APPL & $468.00 FEE		X				SPECIAL USE SITE PLAN

COMMENTS:

SENT BY:

MAIL
SPECIAL DELIVERY
FEDEX
MESSENGER
OTHER

C.C:

F. A. Hesketh & Associates, Inc.
By:

IF ENCLOSURES LISTED ABOVE ARE NOT RECEIVED KINDLY NOTIFY AT ONCE

RECEIVED
ENFIELD PLANNING DEPT.
2020 JUL 10 PM 3:13

Ocean State Job Lot of Enfield, LLC
375 Commerce Park Road, North Kingstown, RI 02852
401-295-2672 / Fax 401-294-8750

Via Email and U.S. Certified Mail Ref. No. 7017 2680 0000 0275 9206

June 23, 2020

Thompsonville Fire Department
25 North Main Street
Enfield, Connecticut 06082
Attn: Scott Ellis, Fire Marshal

RE: **Proposed Building Expansion at Property Located at 39 Hazard Avenue, Enfield, Connecticut 06082 (the "Restaurant Property"), Pursuant to a Special Use and Site Plan Application Dated December 24, 2019 (the "Application"), Submitted to the Town of Enfield on Behalf of Paramount Newco Realty (the "Applicant").**

Dear Marshal Ellis,

Reference is hereby made to the above referenced Application, which is currently under review by the Thompsonville Fire Department ("Department"). As you are aware, Ocean State Job Lot of Enfield, LLC d/b/a Ocean State Job Lot ("OSJL") currently leases certain premises ("OSJL Property") within the Enfield Commons shopping center ("Shopping Center") located adjacent to the Restaurant Property. Pursuant to the Application, the Applicant is seeking approval to demolish the existing Plaza Azteca restaurant building within the Shopping Center and construct a new restaurant building (the "Proposed Building").

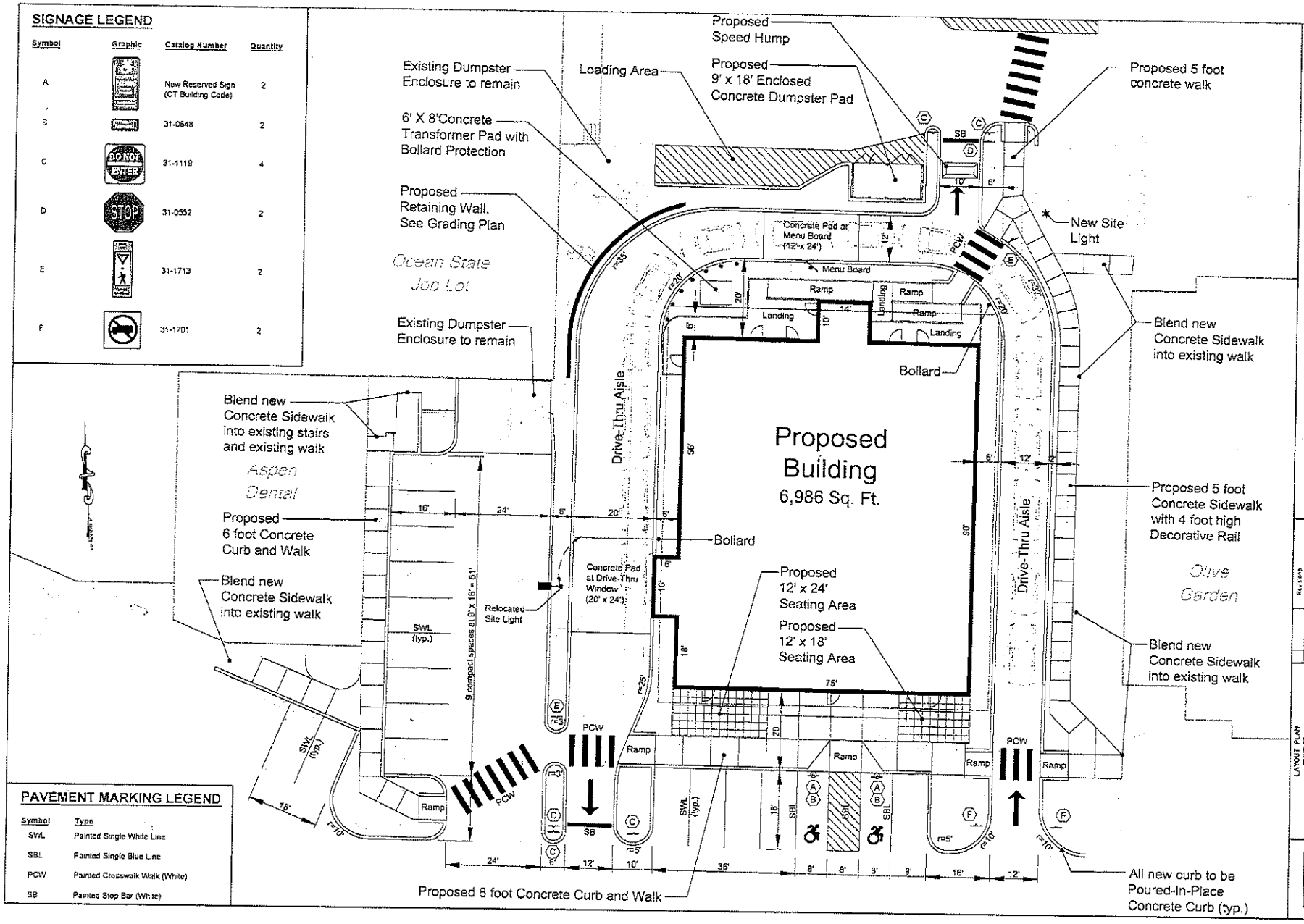
This correspondence is in follow-up to prior correspondence dated January 23, 2020 sent to the Department by OSJL, setting forth the concerns of OSJL with the plans for the Proposed Building. Since that time, OSJL has had several discussions with Landlord regarding any safety concerns OSJL had with the plans for the Proposed Building. As a result of those discussions, Landlord has agreed to certain revisions to the plans for the Proposed Building to alleviate such safety concerns as set forth in the updated plans attached hereto as **Exhibit A**. Based upon the attached updated plans, OSJL has no further safety concerns with this proposed project at this time.

OSJL kindly requests that the Department take the updated information provided above into consideration while reviewing the Application. Please feel free to contact me with any questions or comments you may have. Thank you for your assistance with this matter.

EXHIBIT A

SIGNAGE LEGEND

Symbol	Graphic	Catalog Number	Quantity
A		New Reserved Sign (CT Building Code)	2
B		31-0648	2
C	DO NOT ENTER	31-1119	4
D	STOP	31-0552	2
E		31-1713	2
F		31-1701	2



PAVEMENT MARKING LEGEND

Symbol	Type
SWL	Painted Single White Line
SBL	Painted Single Blue Line
PCW	Painted Crosswalk Walk (White)
SB	Painted Stop Bar (White)

TOWN OF ENFIELD

NOTICE OF DECISION

January 22, 2020

Certified Mail #:
7019 0140 0000 4420 1559

Paramount Newco Realty
c/o Eric Kelly
1195 Route 70 Suite 200
Lakewood, NJ 08701

Re: DPN # 2019-12-23- 39 Hazard Avenue- Determination of Permit Need application for the demolition of an existing restaurant building and the construction of a 6,986 sq. ft. new retail/restaurant building with drive thru, the installation of an underground 100' Twin 36" floodplain volume compensation tanks and a 1,000 gallon grease trap; LEO BHW LTD, LLC, and UDOLF Properties, Owner; Paramount Newco Realty c/o Eric Kelly, Applicant; Map 056/ Lot 0002; Business Regional (BR) Zone.

Dear Mr. Eric Kelly:

At the January 21, 2020 regular meeting of the Inland Wetland and Watercourses Commission, the following decision was made regarding your application:

Motion: Commissioner Zorda made a motion to authorize administrative approval for DPN # 2019-12-23 in cooperation with other Town Departments, seconded by Commissioner Smith.

The motion passed with a 5-0-0 vote.

Applicant is to address the concerns of the Fire Department:

- I stopped by the site today to determine possible location of both fire hydrant and location of the Fire Department connection (FDC) at 39 Hazard avenue. Site visits revealed that currently there is no realistic location for another fire hydrant, and we will be utilizing the current fire hydrant located in the access road to the mall. The current water supply to the building comes from the Northern side of the project and due to the location of the hydrant on the Northern side of the proposed building the fire department connection (FDC) should be located on the Northern side of the new building. Designer needs to show location of the proposed FDC connection to determine any further conflicts including the ramp on that side. Can you please forward this also to the applicant so that they can incorporate it final design or approvals? Any questions let me know.

Department of Development Services
Building/Community & Economic Development/Planning & Zoning
820 Enfield Street
Enfield, Connecticut 06082

Telephone (860) 253-6355
Fax (860) 253-6310

www.enfield-ct.gov

Applicant is to address the concerns of the Water Pollution Control Agency:

- The WPC has comments for this application. Please create just a utility plan, the Sheet GR-1 is very busy and hard to read. The demolition for the existing building, the existing sanitary connections will need to be cut, capped and inspected prior to demolition. The sanitary sewer trench detail needs to be 6" of stone above and below the pipe covered by filter fabric and warning tape. The minimum slope for 6" Pvc is 2%. Show on the plans how the new connections will be made. See the attached grease interceptor detail to used, with venting on the inlet and outlet side of the tank. Please note on the plans to call 24hours in advance for any inspections at 860-253-5246, if there is no answer please leave a message. There will be a $3,000 connection fee, $100 inspection fee and a $50 permit fee per unit. Any questions do not hesitate to contact me.

Applicant is to address the concerns of the Planning Department:

- Applicant is to provide all cross-access easement agreements.
- Applicant is to provide Technical Reports- Stormwater, Soil Reports, etc.
- If there are any proposed modifications that are greater in impact to what has been approved, then a resubmission to the Inland Wetlands and Watercourses Agency is required.

REFERENCE PLANS

1/13 "Proposed Retail/ Restaurant at Enfield Commons", 39 Hazard Avenue, Enfield, CT 06082; Coversheet with Location Map, Development Team, List of Drawings; Scale: None; Prepared by F.A. Hesketh & Associates, Inc. 3 Creamery Brook East Granby, CT 06026. Prepared for Paramount Newco Realty 1195 Route 70 Suite 200 Lakewood, NJ 08701. Dated December 24, 2019.

2/13 "Master Plan" – Scale: 1" = 60'

3/13 "Layout Plan" – Scale: 1" = 10'

4/13 "Landscape Plan" – Scale: 1" = 10'

5/13 "Landscape Schedule, Details and Notes" – Scale: No Scale

6/13 "Grading, Drainage, SE&SC, and Utility Plan" – Scale: 1" = 10'

7/13 "Details" – Scale: NTS

8/13 "Details" - Scale: NTS

Department of Development Services
Building/Community & Economic Development/Planning & Zoning
820 Enfield Street
Enfield, Connecticut 06082

Telephone (860) 253-6355
Fax (860) 253-6310

www.enfield-ct.gov

9/13 "Details" - Scale: NTS

10/13 "Notes" – Scale: NTS

11/13 "Limited Topographic Survey" – Scale: 1" = 20'

12/13 "Preliminary Plan", 39 Hazard Avenue, Enfield, CT 06082; Scale: As Noted; Prepared by NI Design 11 Talcott Notch Road Farmington, CT 06032 and Charles Georgie Associates Architects & Engineers, LLC 365 New Haven Avenue., Ste. 4 Milford, CT 06460; Prepared for Paramount Newco Realty 1195 Route 70 Suite 200 Lakewood, NJ 08701. Dated December 10, 2019; Revised to December 20, 2019.

13/13 "Preliminary Front and Rear Elevation"- Scale: As Noted

14/14 "Preliminary Side Elevations" – Scale: As Noted

DATED this day 21st day of January 2020.

Votes: 5-0-0

If you have any further questions, please feel free to contact me at (860) 253-6356.

Sincerely,

Raquel Ocasio, MS
Assistant Town Planner

cc: File DPN # 2019-12-23

Department of Development Services
Building/Community & Economic Development/Planning & Zoning
820 Enfield Street
Enfield, Connecticut 06082

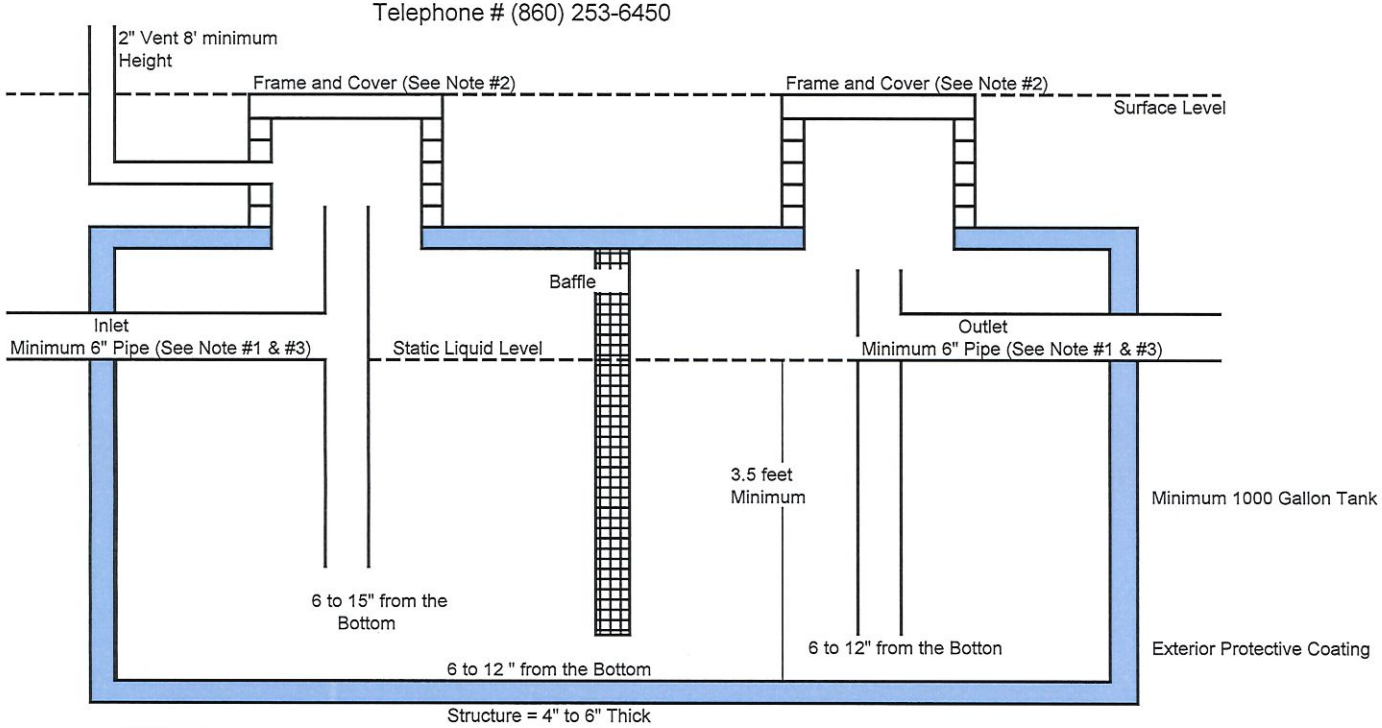
Telephone (860) 253-6355
Fax (860) 253-6310

www.enfield-ct.gov

New Construction Requirement

EXTERNAL FOG TREATMENT UNIT

Town of Enfield
Department of Public Works, Water Pollution Control Divisiion
820 Enfield Street, Enfield, Ct. 06082
Telephone # (860) 253-6450



NOTE:

1) All pipe joints water tight.
2) Frame and Cover shall be installed according to Town of Enfield Subdivision Regulations.revised to 02-12-02.
3) All internal pipe shall be schedule 80 and be glued.

Ocean State Job Lot of Enfield, LLC
375 Commerce Park Road, North Kingstown, RI 02852
401-295-2672 / Fax 401-294-8750

Via Email and U.S. Certified Mail Ref. No. 7017 2680 0000 0275 9206

June 23, 2020

Thompsonville Fire Department
25 North Main Street
Enfield, Connecticut 06082
Attn: Scott Ellis, Fire Marshal

RE: **Proposed Building Expansion at Property Located at 39 Hazard Avenue, Enfield, Connecticut 06082 (the "Restaurant Property"), Pursuant to a Special Use and Site Plan Application Dated December 24, 2019 (the "Application"), Submitted to the Town of Enfield on Behalf of Paramount Newco Realty (the "Applicant").**

Dear Marshal Ellis,

Reference is hereby made to the above referenced Application, which is currently under review by the Thompsonville Fire Department ("Department"). As you are aware, Ocean State Job Lot of Enfield, LLC d/b/a Ocean State Job Lot ("OSJL") currently leases certain premises ("OSJL Property") within the Enfield Commons shopping center ("Shopping Center") located adjacent to the Restaurant Property. Pursuant to the Application, the Applicant is seeking approval to demolish the existing Plaza Azteca restaurant building within the Shopping Center and construct a new restaurant building (the "Proposed Building").

This correspondence is in follow-up to prior correspondence dated January 23, 2020 sent to the Department by OSJL, setting forth the concerns of OSJL with the plans for the Proposed Building. Since that time, OSJL has had several discussions with Landlord regarding any safety concerns OSJL had with the plans for the Proposed Building. As a result of those discussions, Landlord has agreed to certain revisions to the plans for the Proposed Building to alleviate such safety concerns as set forth in the updated plans attached hereto as **Exhibit A**. Based upon the attached updated plans, OSJL has no further safety concerns with this proposed project at this time.

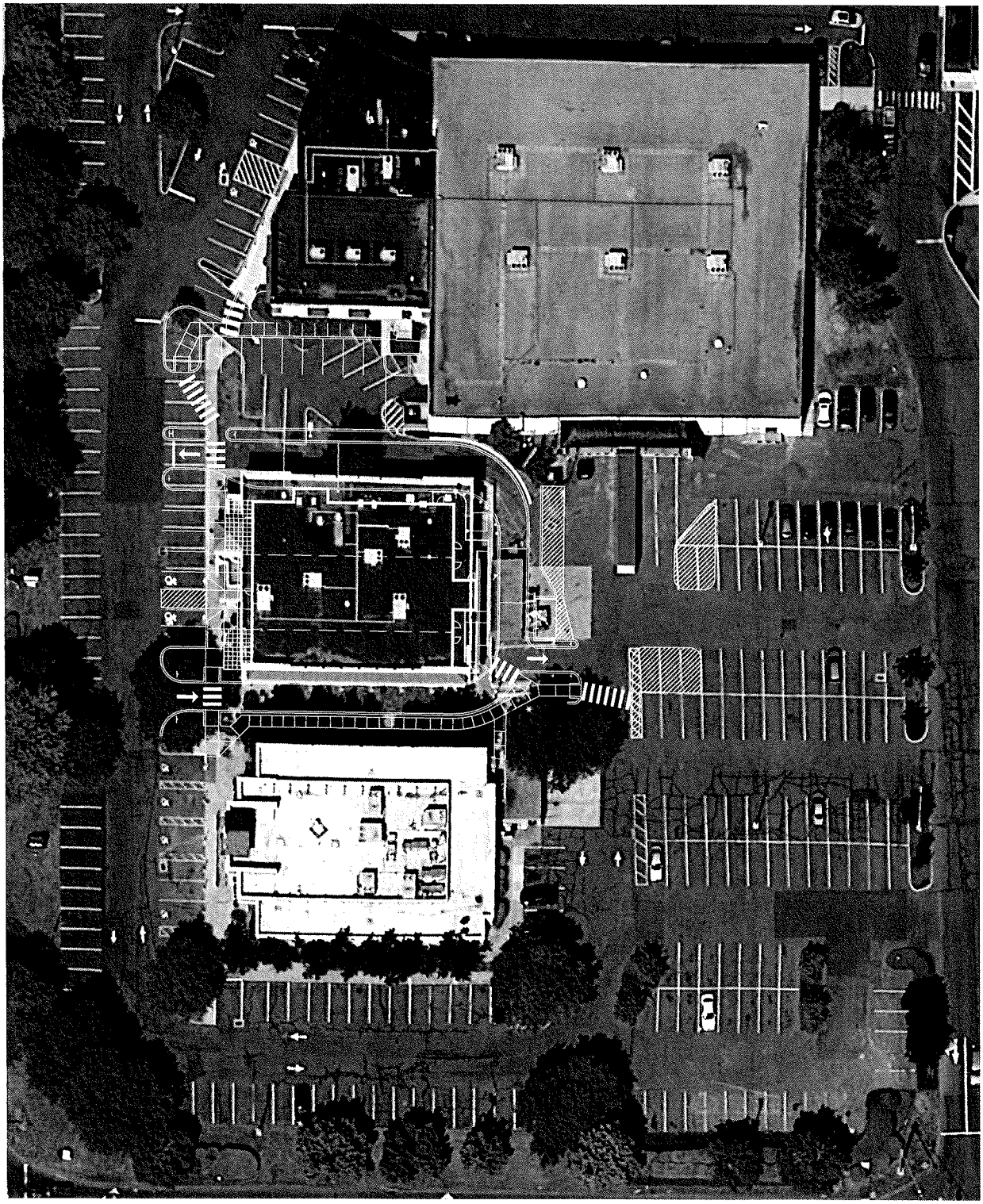
OSJL kindly requests that the Department take the updated information provided above into consideration while reviewing the Application. Please feel free to contact me with any questions or comments you may have. Thank you for your assistance with this matter.

Sincerely,

Caitlin Wolstencroft, Esq.
Corporate Counsel
c.wolstencroft@osjl.com
(401) 443-9767

cc: John D. Conforti (via email)
David Steinberg (via email)
Deborah Kern (via email)

EXHIBIT A



ENLARGED AREA PLAN

PREPARED FOR

PARAMOUNT NEWCO REALTY

PARCEL 1A ENFIELD COMMONS

25 & 39 HAZARD AVENUE

ENFIELD, CONNECTICUT

date 01-28-2020	drawn by KEL	job no 19001
scale 1" = 20'	checked by DSZ	sheet no 1 OF 1

Revisions

No	Date	Description
1	02-12-2020	Client comments

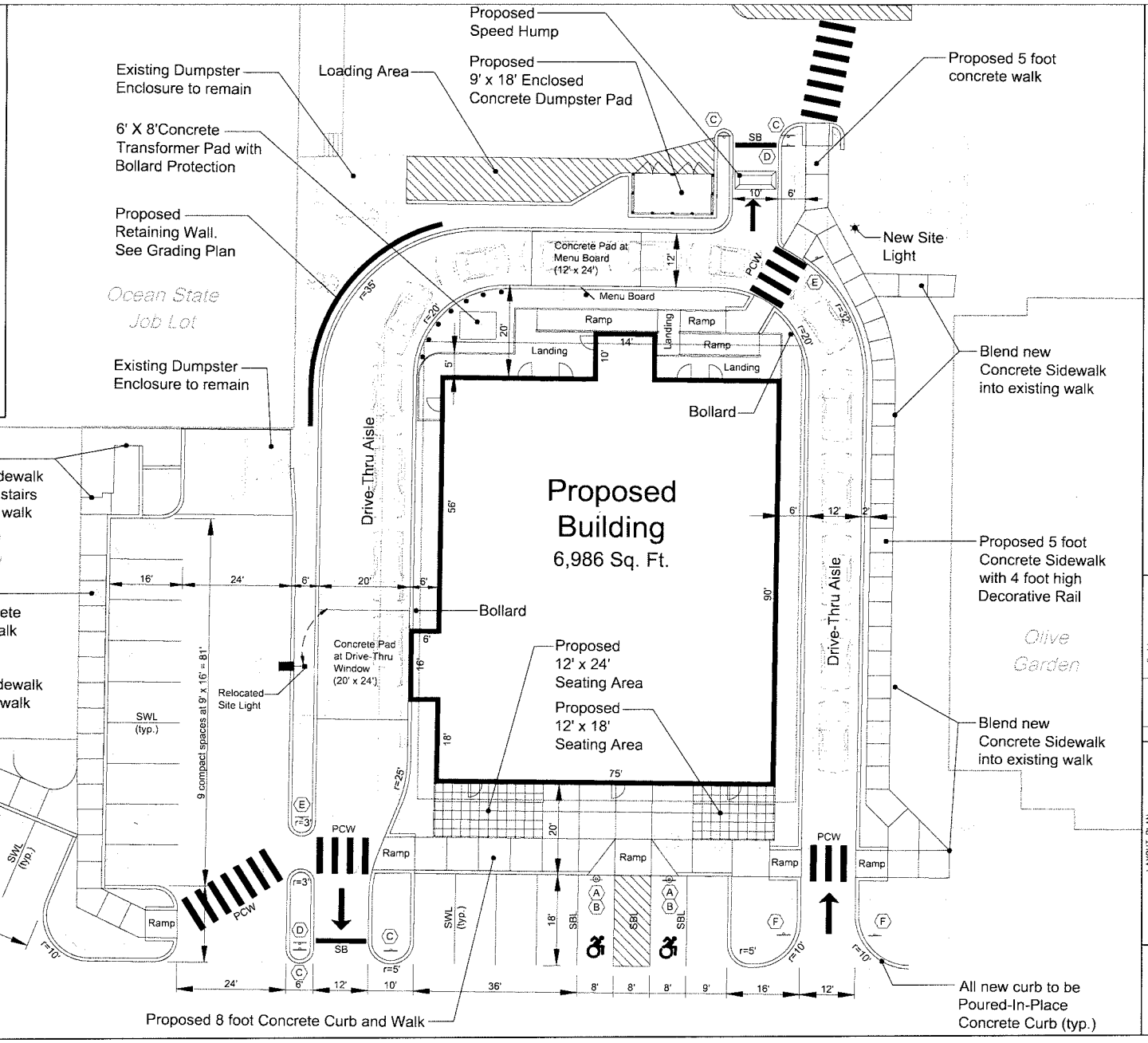
FAH F. A. Hesketh & Associates, Inc.
3 Creamery Brook, East Granby, CT 06026
Civil & Traffic Engineers • Surveyors • Planners • Landscape Architects

Phone (860) 653-8000
Fax (860) 844-8600
e-mail hesketh@snet.net

G:\2019\19001 - Enfield Commons\Sub-Divs\2020-01-24\Area Plan 3.dwg, Area Plan, Feb 12, 2020 - 7:30:17 AM

SIGNAGE LEGEND

Symbol	Graphic	Catalog Number	Quantity
A		New Reserved Sign (CT Building Code)	2
B		31-0648	2
C	DO NOT ENTER	31-1119	4
D	STOP	31-0552	2
E		31-1713	2
F		31-1701	2



PAVEMENT MARKING LEGEND

Symbol	Type
SWL	Painted Single White Line
SBL	Painted Single Blue Line
PCW	Painted Crosswalk Walk (White)
SB	Painted Stop Bar (White)

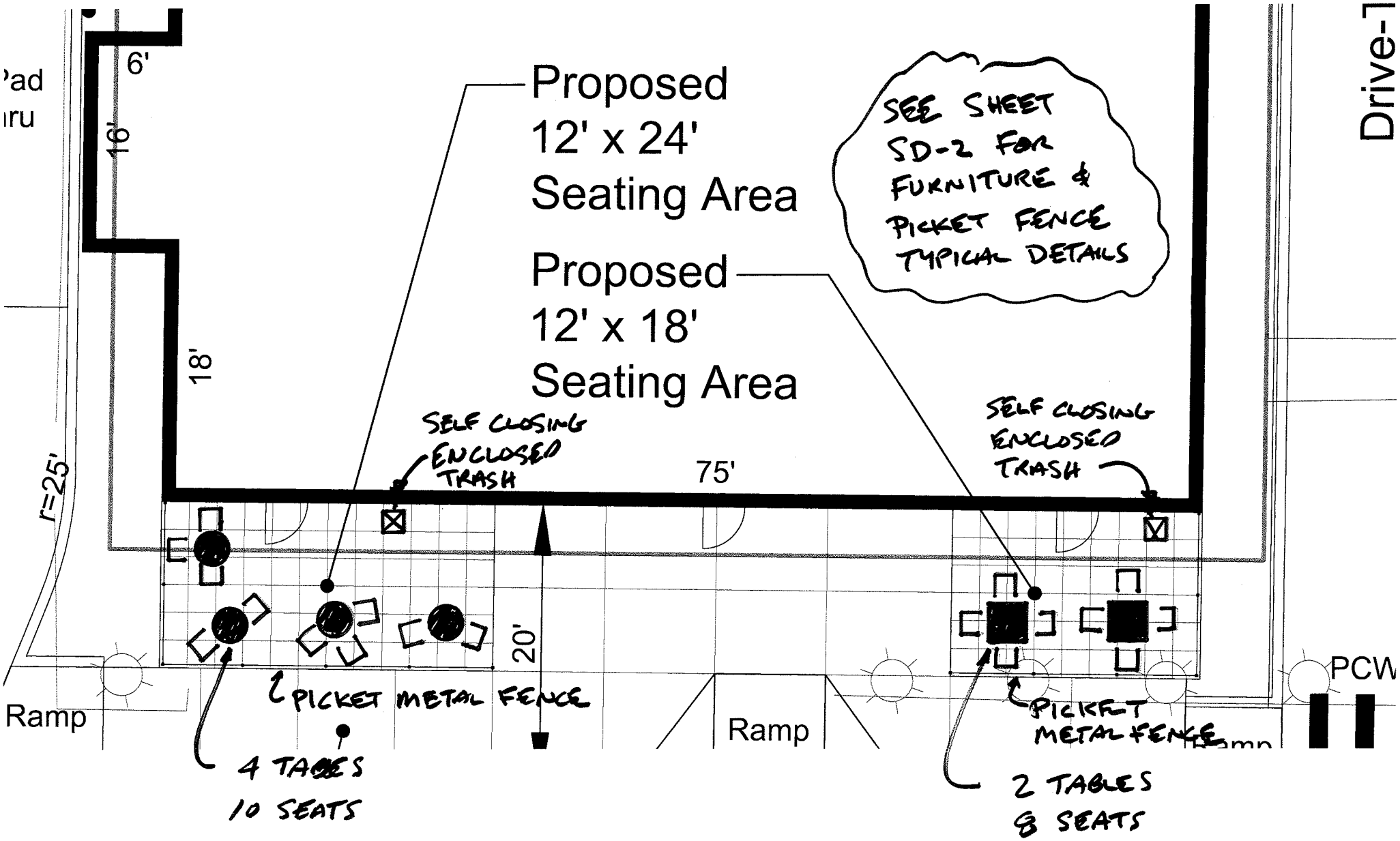
F. A. Hesketh & Associates, Inc.
6 Creamery Brook, East Granby, CT 06026
Phone (860) 653-8000
Fax (860) 844-8600
e-mail fah@snet.net
Civil & Traffic Engineers · Surveyors · Planners · Landscape Architects

No	Date	Description
1	01-24-2020	Town comments
2	03-30-2020	Miscellaneous revisions

LAYOUT PLAN
PARAMOUNT NEWCO REALTY
ENFIELD COMMONS
25 & 39 HAZARD AVENUE
ENFIELD, CONNECTICUT

date 12-24-2019 | drawn by KLL | job no 19001
scale 1" = 10' | checked by DSF | sheet no 1 OF 1

LA-1



OUTDOOR DINING LAYOUT

TYPICAL PATIO SEATING AND FENCING

N.T.S.

SEE SHEET SD-2

TOWN OF ENFIELD

ENFIELD PLANNING & ZONING COMMISSION
STAFF REPORT & DRAFT RESOLUTION

Application #	PH# 2979	**Meeting Date:**	July 23, 2020
Address:	25 & 39 Hazard Avenue	**Prepared By:**	Jennifer Pacacha, AICP, MRP
Applicant:	Paramount Newco		Assistant Town Planner
Property Owner:	LEO BHW LTD, LLC.	**Wetlands/Watercourses:**	Yes – approved
Zone:	Business Regional	**Aquifer Protection Areas:**	No
Current Use:	Vacant Restaurant	**Flood Zones:**	Yes
Proposed Use:	Three Tenant Commercial/Restaurant	**Variances:**	Yes
Map/Lot:	56/2	**Applicable Zoning Regulations:**	See below

SPECIAL PERMIT/SITE PLAN REVIEW

PROPOSAL:
This is a Special Permit application for a three-tenant commercial building with a drive thru and two outdoor dining patio located on the former Plaza Azteca building property.

39 Hazard Avenue – this property is zoned Business Regional and is .70 acres in size, or 30,492 square feet. There is an existing vacant restaurant building (former Plaza Azteca) which is 8,484 square feet.

Development – the entire shopping plaza has been developed historically as one plaza under 25 Hazard Avenue. As the Commission has seen in the past, Business Regional Zoned shopping plazas can be split so that tenants may own their own property, but the overall site plan is still reviewed as one.

25 Hazard Avenue – this is the address used for the entire shopping plaza property. It is zoned Business Regional and is approximately 33 acres in size.

Proposal – The applicant (owner of the shopping plaza) would like to redevelop 39 Hazard Avenue by demolishing the existing 8,484 square foot former restaurant building and replacing it with a smaller 6,986 square foot three-tenant building with a drive thru and two outdoor dining areas.

Wetlands – There are wetlands on this property. The Planning Office does not have a record of the wetlands re-delineation on file for this project. The Inland Wetlands & Watercourses Agency did provide Agent Approval to the Planning Office in 2019 under DPN# 2019-12-23.

Flood Hazard Area – This property is located within the flood hazard area and therefore the applicants have submitted a Permit Application for Development within the Special Flood Hazard Area under FLD# 41.

ADJACENT USES:
North: Business Regional – Rest of the Shopping Center - Retail
South: Business Regional – Brookside Plaza – More Retail & Restaurants
East: Business Regional – Olive Garden Restaurant
West: Business Regional – Rest of Shopping Center – Chick-fil-A and Red Robin Restaurants

APPLICABLE ZONING REGULATIONS:
Table 5.10 – Lot and Bulk Requirements

Business Regional (Footnote 9: The requirements of this section with respect to the Business R District shall apply only to the area of the entire site included in the approved Special Permit plan and, except for the maximum building height, shall not apply as a restriction to any subdivision of the original Special Permit plan area.

Min. Lot Area – 9 Acres
Min. Frontage – 250 feet (Footnote 3: Except for as provided in Section 5.30.2)
Min. Front Yard – 35 feet (Footnote 3: Except for as provided in Section 5.30.2)
Min. Side Yard – 30 feet
Min. Rear Yard – 30 feet
Min. Floor Area – 80,000 square feet
Max. Impervious Coverage – 66% (Footnote 4: May be increased to 70% for a regional shopping center when the Commission determines that offsite drainage will not be increased in a manner to be detrimental to downstream properties.) (A variance was issued allowing lot coverage to be up to 72%.)
Max. Building Coverage – 45%
Max. Building Height – 72 feet (Footnote 1: For each additional five (5) feet of front yard setback above the minimum requirement, an additional one (1) foot of building height is permitted, but in no case shall such additional height exceed 24-feet. If the building height listed in the table above is to be exceeded, then the minimum side and rear yards shall be increased by one (1) foot for each one (1) foot of additional building height permitted.

Proposed Lot and Bulk – According to Footnote 9, the lot and bulk requirements must be applied to the entire shopping center as a whole, which meets all lot and bulk requirements except for impervious coverage, for which they have a variance and no

increase in impervious coverage is proposed. (See Sheet MA-1 Master Plan for Zoning Table).

Table 5.20 Use Requirements –

Retail Stores – Allowed in BR Zones with a Special Permit

Footnote 1: Retail Sales include the retail sales of goods and/or services to the general public for personal or household use. Repairs to goods sold on the premises or goods similar to those sold on the premises are permitted.

Footnote 16: Outdoor display of merchandise is permitted on a seasonal basis, including sidewalk sales.

Restaurants – Allowed in BR Zones with a Special Permit

Footnote 2: The sale of liquor is permitted only with a Special Permit obtained from the Commission

Proposed Uses: The applicant is only proposing Retail and Restaurant uses at this time. No liquor permits are part of this application.

Section 5.20.2 Other Use Requirements –

A. Uses determined by the Commission to be similar to and compatible with uses listed in Table 5-2 may be permitted as a Special Permit use – **Under this regulation, PZC approves drive thru facilities. A drive thru is proposed on the west side of the building.**

F. In any Business District, except BP, the Planning & Zoning Commission may grant approval for seasonal outdoor dining areas for restaurants, as defined in these Regulations, as an accessory use, subject to the following conditions:

i. Outdoor dining area cannot be located on public property (Town sidewalk, right-of-way, etc.). – **Not proposed on public property.**

ii. Outdoor dining does not result in interference with or hazards to, or visibility problems for pedestrians on sidewalks or vehicular traffic. – **Not proposed to interfere with pedestrians or traffic.**

iii. Any non-vegetative shading devices shall be of a nonpermanent type (umbrellas, retractable awnings, etc.) and shall be safely anchored. – **Sheet SD-2 shows anchored umbrellas.**

iv. Areas on which required parking exists cannot be used for outdoor dining (including the restaurant site and surrounding areas). – **Not proposed**

v. If required, additional parking must be provided to accommodate additional patrons. – **Ample parking is shown in the front, side, and rear of the proposed new building.**

vi. Adequate self-closing trash receptacles must be provided, and the restaurant is responsible for cleanup of all trash generated from the outdoor dining (including

the restaurant site and surrounding areas). – **One self-closing trash receptacle is proposed for each patio.**

vii. Tables must be located in such a manner as to maintain access to the building for emergency services. – **The layout does not appear to impede access for emergency services. We are awaiting comments from Fire Department.**

viii. The Commission may approve outdoor audio systems with a Special Use Permit, upon review of surrounding uses, and compliance with the Town of Enfield Noise Ordinance. The Commission may also revoke said permit with non-compliance with conditions of approval. – **No outdoor audio has been proposed at this time.**

ix. In addition to required parking for indoor seating, outdoor dining requires on parking space for every 4 seats. – **Ample parking is shown in the front, side and rear of the proposed new building.**

x. All tables, chairs, trash receptacles, etc., shall be removed at the end of each outdoor dining season. – **This can be a condition of approval.**

xi. Outdoor dining area cannot exceed 4 tables/16 seats unless there are waitpersons to serve patrons. Where all food service is conducted by waitpersons, outdoor dining area cannot exceed 50% of the floor area of the indoor dining area; and cannot exceed 50% of the number of tables/seats within the indoor dining area. – **The patios do not appear to be 50% or greater than the interior space. Neither patio has 16 chairs, so no waitperson is proposed.**

Section 7.10.6 Outdoor Lighting – All external illumination shall be directed or shielded in such a manner that the source (bulb, tube, etc.) of light will not be visible from any street or from any adjoining property. No light shall be directed outside the lot where it originates. All lighting shall be shielded or otherwise designed to provide down lighting so as to minimize night glare. – **This is addressed in the narrative – all site lighting will be security lighting mounted to the building and will be dark sky compliant.**

Section 7.10.7 Drainage - No structure shall be used, erected or expanded and no land shall be graded or paved unless provisions have been made for the proper disposal of drainage water, particularly from parking areas and driveways, from the areas contiguous to property lines and from low areas which tend to collect water. – **A drainage plan and report have been prepared to attenuate drainage concerns.**

Section 7.10.10 Storm Water Runoff - Uses requiring Site Plan approval shall, when appropriate and practical, provide a storm water and site development design that maximizes the amount of storm water runoff that can directly precipitate on and percolate into the soil. Alternatively, wherever commercial and/or industrial use(s) greatly inhibit natural percolation, said use(s) shall detain all storm water runoff from parking areas and roof drains, for discharge to surface watercourses during and after site development, so as to minimize adverse ground water quality impacts. Mechanisms for this purpose shall be designed to accommodate storm water

runoff in amounts up to and including the fifty (50) year, twenty-four (24) hour storm peak discharge. – **A drainage plan and report have been submitted for a 25-year storm (not a 50-year storm). The Engineering Office has reviewed the proposed drainage plan and had the below comments.**

Section 7.20 Erosion and Sedimentation Control Requirements
7.20.1 Activities Requiring a Certified Soil Erosion and Sedimentation Control Plan - A soil erosion and sediment control plan shall be submitted with any application for development when the disturbed area of such development is cumulatively more than one-half (½) acre. – **Silt Fences Inlet Protection along with Limits of Disturbance are shown on sheet GD-1.**

Section 10.10.2 – Number of Required Parking and Loading Spaces
Retail Sales – 1 space per 150 square feet of sales/customer area
Restaurants – 15 spaces per 1,000 square feet of Patron Floor Area
Shopping Centers – 4 spaces per 1,000 square feet of Gross Leasable Floor Area

A parking table has been included on sheet MA-1 Master Plan depicting the parking requirements for all uses in the shopping center along with the number of spaces located within the center. The shopping center, and the uses proposed within the new building, will have enough parking to exceed the requirements.

Section 10.10.6 Parking Design, Layout and Location
All parking is proposed to be off-street and includes drainage design. The Engineering Office will review for compliance with Town Standards. The lighting will not effect any residential properties, as none are located nearby. Lighting is required to be extinguished 30 minutes after the close of business unless otherwise permitted by the Commission. All parking is designed to provide safety for vehicles, pedestrians, landscaping and signage. No compact car spaes are proposed.

All parking areas are existing, or are designed to allow safe turn movements. All parking spaces meet the requirements of the 90-degree parking stalls with 24-foot drive aisles. The drive-thru is a separate entity which is 12-feet wide widening to 20-feet wide, then narrowing back to 12-feet wide before allowing traffic to enter the parking and drive aisle area.

Section 10.10.7 Parking Area Setbacks and Landscaping Standards
This is an existing shopping center which appears to have at least 10-feet of setback from the right of way. The shopping center does not appear to have the required amount of canopy trees per 50-feet of frontage. There are trees located along Hazard Avenue on the 39 Hazard Avenue property already, making that section of the shopping center compliant with this requirement. There is also already a sidewalk in front of the shopping center.

The shopping center exits without the required 15% of interior landscaping within parking areas with interior and end parking lot islands of at least 10-feet in width. The shopping center also does not appear to meet the requirement for one canopy tree per five parking spaces. The proposed facility will include more landscaping as detailed on sheets LS-1 and LS-2 of the plan set, making the shopping center more conforming as opposed to less. The Commission may approve location and size of landscaped areas for existing facilities to be expanded.

DEPARTMENT COMMENTS:

Engineering Department – In the Enfield Town Notes, the phone number, in note number one, for Engineering should be revised from 253-6363 to 253-6366. It is also recommended that Town note number eight state the certified as-built should be submitted prior to issuance of certificate of occupancy, instead of bond release.

The catchbasin near the southwest corner of the proposed building does not have the minimum required pipe coverage of two feet. Although this pipe location is not under pavement, the catchbasin penetration will be in the top section of the catchbasin, according to the detail on the plans.

The proposed flood compensation piping system shows pipes reducing from 36" diameter to 12" diameter pipes and the section along the east side of the proposed building shows a flat pipe end closure. Details for the reducers and the pipe end closure should be submitted. It should also be noted or shown that the inverts of the 36" and 12" pipes match at the reducer connections so the system will properly drain out after storms subside. To be effective, this flood compensation pipe system should be water tight to protect from groundwater infiltration. If the pipe system is not water tight these pipes will be filled with groundwater before the flood water rises to flood elevation, which is about five feet above the pipe inverts. Making the system water tight should also be noted on the plans.

Health Department – None received

Building Department – For 25/39 Hazard, as long as the rear egress path is not steeper than 1:20 to the public way, I have no concerns at this time, a full review will be performed when a building permit is applied for.

Water Pollution Control Authority – The minimum slope for 6"pvc is 2%. The sewer trench details needs to show 6" of stone above and below the pipe, then filter fabric, sewer tape. The existing FOG system will need to be cleaned and inspected.
Fees - $3,000.00 connection fee per unit separate check, $100.00 inspection fee per unit and $200.00 permit fee per unit.

Police Department – No comments or concerns regarding 25 and 39 Hazard Ave.

TOWN OF ENFIELD

Fire Department – None yet received

MOTION TO APPROVE PH# 2979 – 25 & 39 Hazard Avenue for a new three-tenant commercial building with retail/restaurant space, a drive thru, and two outdoor dining patios according to the below referenced plans and with the following conditions of approval:

General Conditions:

1. This approval is for the specific use, site, and structure identified in the application. Any change in the nature of the use, site, or the structure will require new approvals from the Enfield Planning and Zoning Commission.
2. This approval does not include signage permits.
3. There is to be no exterior sheet metal venting pipes visible from the street.
4. Exterior mechanicals and electricals are to be boxed and screened.
5. This project shall be constructed and maintained in accordance with the referenced plans.
6. A building permit for the construction of facilities as approved must be obtained within 24 months of approval or this approval shall be rendered null and void, unless an extension is granted by the Commission.
7. All construction authorized by this approval shall be completed within five (5) years or this approval shall be considered null and void, unless an extension is granted by the Commission.
8. By acceptance of this permit and conditions, the applicant and owner acknowledge the right of Town staff to periodically enter upon the subject property for the purpose of determining compliance with the terms of this approval.

Site Specific Conditions:

9. All outdoor tables, chairs, trash receptacles, etc., shall be removed at the end of each outdoor dining season.
10. Comments of the Assistant Town Engineer must be addressed.
11. All Comments of the Water Pollution Control Authority must be addressed.

Conditions to be met prior to signing of plans:

12. All plans submitted for signature shall bear the seal and live signature of the appropriate professional(s) responsible for the preparation of the plans.
13. The application number shall be displayed on the plans in or near the Title Block area.
14. A copy of the approval letter and conditions shall be incorporated into the final plans submitted for signature, preferably located on the cover sheet or first sheet of the plan set.
15. A list outlining how the conditions of approval have been met shall be submitted along with final plans submitted for signature.
16. A list outlining all changes to the plans shall be submitted along with final plans submitted for signature. The list should cite the sheet number where each change has been made.

17. The conditions of this approval shall be binding on the applicant, land owners, and their successors and assigns.

Conditions to be met prior to the issuance of permits:

18. Two sets of paper plans with any required revisions incorporated shall be submitted to the Planning Department for signature of the Commission. The Director of Planning may require Mylars.
19. This approval will become effective upon the filing of a Special Use Zoning Certificate signed by the Commission Secretary on the Land Records by the applicant. Such certificate must be filed within 120 days of approval by Commission. Proof of such filing shall be in the file prior to the issuance of any permits.
20. The applicant shall also submit final plans as approved by the Commission in a digital format compatible with the Enfield Geographic Information Systems Electronic Submittals Ordinance.
21. The applicant shall post a separate bond for Erosion and Sediment Control submitted in the form of cash or certified check, pledged to the Town, in an amount to be determined by the Town Engineer and the Director of Planning.
22. The applicant shall post a Landscaping Bond to the Town, in an amount and format determined by the Director of Planning.
23. A pre-construction meeting between the applicant, site contractors, project engineer and Town Staff shall be held.
24. Any required certificates and/or approvals from State or Federal agencies (i.e. CT-DOT, DEEP, Army Corps of Engineers) shall be obtained by the applicant and reported to the Planning and Zoning Commission file. Any changes to the plans required by such entities may require a plan modification from the Enfield Planning and Zoning Commission.

Conditions which must be met prior to the Issuance of a Certificate of Compliance:

25. Complete as-built plans certified to Class A-2 accuracy shall be submitted prior to the issuance of any certificates of zoning compliance. The as-built plan shall also contain a certification by a Professional Engineer that they have inspected the site improvements and that they have been installed in accordance with the approved plans. Any deviations or omissions must be noted.
26. The design professional who prepared the approved PZC architectural drawings, shall provide as-built drawings with a certification that they have complied with approved plans. Any changes need to be noted on the plans and a list of changes submitted.
27. No Certificate of Occupancy or other final approval may be issued until the Zoning Enforcement Officer has signed off on the final work. When minor site work cannot be completed because of weather or other pertinent reason, a conditional approval may be issued for a period not to exceed 180 days, providing satisfactory surety shall be posted with the Town of Enfield in an amount sufficient to complete the site work and with surety acceptable to the Town of Enfield.
28. A request for final project review and certificate of zoning compliance must be made to the Planning Department not less than 10 days before a Certificate of Occupancy or other final approval is requested from the Building Official.

Note: The Conditions of Approvals do not take the place of other requirements found in the Town Codes, Regulations, and Application Instructions.

REFERENCE PLANS

1/15 – Title Sheet – "Proposed Retail/Restaurant Building at Enfield Commons" – 25 * 39 Hazard Avenue, Enfield, Connecticut; Inland Wetlands & Watercourses, Special Use and Site Plan Applications; Prepared for Paramount Newco Realty; 1195 Route 70, Suite 2000, Lakewood, NJ 08701; Prepared by LEO BHW Ltd, LLC., 8 Ellsworth Road, Suite 401, West Hartford, CT 06107; Prepared on January 24, 2020; Revised July 1, 2020.

2/15 – Sheet MA-1 – Master Plan

3/15 – Sheet LA-1 – Layout Plan

4/15 – Sheet LS-1 – Landscape Plan

5/15 – Sheet LS-2 – Landscape Schedule, Details and Notes

6/15 – Sheet GR-1 – Grading and Soil Erosion

7/15 – Sheet UT-1 – Utility & Drainage Plan

8/15 – Sheet SD-1 – Details

9/15 – Sheet SD-2 – Details

10/15 – Sheet SD-3 – Details

11/15 – Sheet NT-1 – Notes

12/15 – Sheet PS-1 – Limited Topographic Survey

13/15 – Sheet A.2 – Construction Plan

14/15 – Sheet A.3 – Exterior Elevations

15/15 – Sheet A.3a – Exterior Elevations

RECEIVED
ENFIELD PLANNING DEPT.
2020 JUL 10 PM 3:37

TOWN OF ENFIELD

Special Use Permit & Site Plan Review Application

Planning Division • 820 Enfield Street Enfield, CT 06082
Telephone: 860-253-6355 Website: www.enfield-ct.gov

Special Use Permit

Application For: ☐ New Special Use Permit ☐ Other _____
☐ Modification of Plan Previously Approved _____
☐ Modification of Conditions of Approval of a Special Permit: _____

Site Plan Review

Application For: ☒ New Site Plan Review ☐ Other _____
☐ Modification of Plan Previously Approved _____
☐ Modification of Conditions of Approval of a Site Plan: _____

Staff Use Only					
PH #:	2980	**SPR #:**		**XSP #:**	
View Permit #:					
Zoning Regulation Section:					

PLEASE REVIEW LAND USE APPLICATION GUIDE FOR INSTRUCTIONS

Property Address: 118 Hazard Avenue **Map #:** 65 **Lot #:** 59

Zone(s): B-P & R-44 **Size of Parcel:** 19.435 Acres **Account #:** _____

Current Use: Vacant Land

Project Name: Kaplan Development - Adult Assisted Living Facility

Summary Description: The proposed project includes the construction of a new two-story 29,000 SF footprint freestanding "All American Assisted Living" facility along with new paved parking areas, landscaping, storm water management components and associative utilities.

Applicant's Name: Kaplan Development Group, LLC

Applicant's Address: 100 Jericho Quadrangle, STE 142, Jericho, NY 11753

Contact #: (516) 496-1505 **Email:** bwells@kapdev.com

TOWN OF ENFIELD

Applicant's Representative: Ben Wells

Representative Address: _____

Contact #: _____ **Email:** _____

Does Applicant own the Property? ☐ Yes (Attach Copy of DEED)
☒ No (Provide Information Below & Attach Letter of Authorization)

Owner's Name: Ward Manor, LLC

Owner's Contact #: _____

Owner's Address: 82 Potter School Road, Willington, CT 06279

Owner's Email: _____

Project Information:

Septic: ☐ Yes ☒ No

Public Sewer: ☒ Yes ☐ No

Well Water: ☐ Yes ☒ No

Public Water: ☒ Yes ☐ No

Outdoor Storage: ☐ Yes ☒ No

Design District: ☐ Yes ☒ No

Do wetlands and watercourses affect this application? ☒ Yes ☐ No

Is the property within a Level A or Level B Aquifer Protection Area? ☒ Yes ☐ No

Does this application include any regulated activity in a floodplain ☒ Yes ☐ No

(If yes, you will need to also submit a Flood Hazard Development Permit application to the Planning & Zoning Commission)

What is the total lot acreage? 19.435 Acres

What is the length of the property frontage? (List by Street) Hazard Avenue: 689.37'
Middle Road: 674.69'

Name the abutting street(s): Hazard Avenue, Middle Road

TOWN OF ENFIELD

What are the existing land uses and zoning districts for abutting properties or across the street(s)?

North B-P: Business Professional

East B-G: Business General, B-P: Business Professional, R-44: One Family Residence

South R-33: One Family Residence

West B-P: Business Professional, R-44: One Family Residence

Environmental History:

Phase I: Land Records reviewed for environmental hazards? ☒ Yes ☐ No

Phase II: Environmental Hazards Identified? ☐ Yes ☒ No

If yes, please list the environmental conditions found: _____

Phase 3: Is there a remediation plan? ☐ Yes ☒ No

If yes, please describe the remediation plan: _____

Are there environmental restrictions on the property? ☐ Yes ☒ No

If yes, please list environmental restrictions: _____

TOWN OF ENFIELD

The undersigned hereby permits town staff and commission members to enter into and inspect this site during reasonable hours for the purpose of reviewing this application and accompanying plans. I hereby depose and say that all of the above statements as well as the statements contained in all papers filed herewith are true.

☐ **I have reviewed and acknowledge the Land Use Application Guide for further instructions on how to complete my application.**

Applicant Signature: _____ **Date:** _____

Print Name: _____

Subscribed and sworn to before me _____ **day of** _____, **20**_____.

_____ _____

Notary Public **My Commission Expires:**

July 7, 2020

RE: Hazard Ave and Middle Road, Enfield

Enfield Planning and Zoning Commission
Enfield, CT

To whom it may concern,
Please accept this letter as full Authorization for Ben Wells, of Kaplan Development Group, on behalf of Senior Housing Development LLC, to apply for and obtain any or all approvals regarding the development of our property.

Sincerely,

Noreen Passardi

Noreen Passardi
Member
Ward Manor, LLC

PROPOSED SITE PLAN DOCUMENTS

FOR

KAPLAN DEVELOPMENT GROUP, LLC

PROPOSED

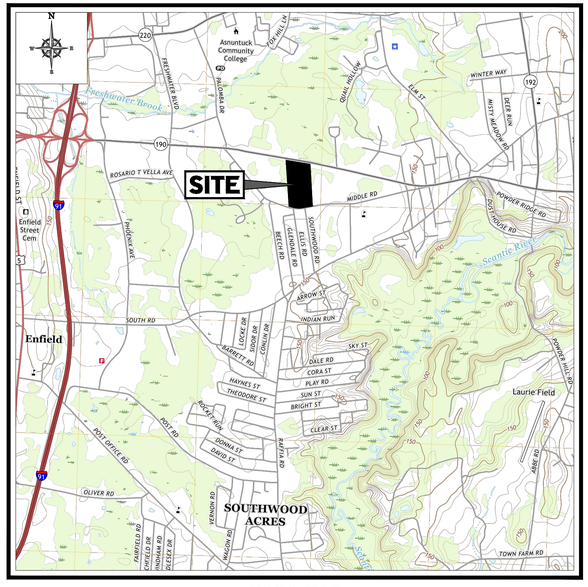
"ALL-AMERICAN ASSISTED LIVING" FACILITY

LOCATION OF SITE

118 HAZARD AVENUE, TOWN OF ENFIELD

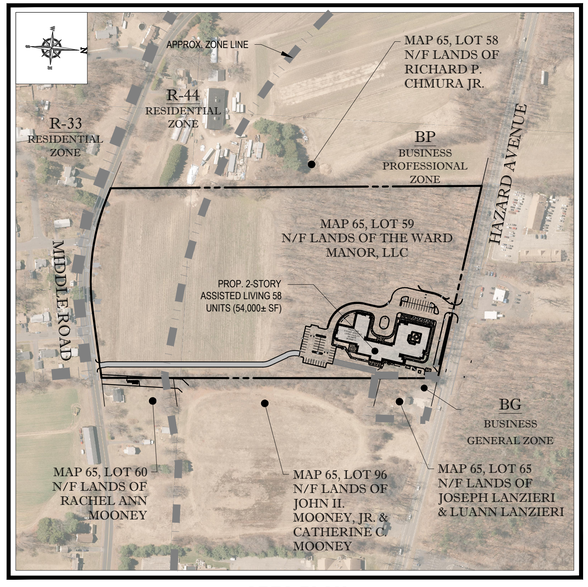
HARTFORD COUNTY, CONNECTICUT

MAP 65, LOT 59



USGS MAP

SCALE: 1" = 2,000'
SOURCE: BROAD BROOK, CT USGS QUADRANGLE



AREA PLAN

SCALE: 1" = 250'
SOURCE: CTECO 2016 AERIAL IMAGERY

DRAWING SHEET INDEX

SHEET TITLE	SHEET NUMBER
COVER SHEET	C-101
GENERAL NOTES SHEET	C-102
DEMOLITION PLAN	C-201
SITE LAYOUT PLAN	C-301
GRADING AND DRAINAGE PLAN	C-401
SOIL EROSION AND SEDIMENT CONTROL PLAN	C-402
SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS	C-403
UTILITY PLAN	C-501
LANDSCAPE PLAN	C-601
LANDSCAPE NOTES AND DETAILS	C-602
LIGHTING PLAN	C-701
DETAIL SHEET	C-901
DETAIL SHEET	C-902
DETAIL SHEET	C-903
DETAIL SHEET	C-904
DETAIL SHEET	C-905
DETAIL SHEET	C-906
BOUNDARY & TOPOGRAPHIC SURVEY (BY OTHERS)	1 OF 5
BOUNDARY & TOPOGRAPHIC SURVEY (BY OTHERS)	2 OF 5
BOUNDARY & TOPOGRAPHIC SURVEY (BY OTHERS)	3 OF 5
BOUNDARY & TOPOGRAPHIC SURVEY (BY OTHERS)	4 OF 5
BOUNDARY & TOPOGRAPHIC SURVEY (BY OTHERS)	5 OF 5

PREPARED BY

BOHLER

BOHLER™
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	1/20/20	ART COMMENTS	MLT / JGB
2	3/10/20	EMERGENCY ACCESS	MLT / JGB
3	6/4/20	UPDATED WETLAND DELINEATION	BTJ / JGB
4	7/8/20	PLANNING & ZONING SUBMISSION	BTJ / JGB

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PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: CT191016
DRAWN BY: MLT / DE
CHECKED BY: JGB / PM
DATE: 12/06/19
CAD I.D.: CT191016ss2

PROJECT:

PROPOSED SITE PLAN DOCUMENTS

FOR

KAPLAN DEVELOPMENT GROUP, LLC

PROPOSED DEVELOPMENT

118 HAZARD AVENUE
HARTFORD COUNTY
TOWN OF ENFIELD, CT
MAP & LOT: 65 - 59

BOHLER

16 OLD FORGE ROAD, SUITE A
ROCKY HILL, CT 06067
Phone: (860) 333-8900
Fax: (508) 480-9080
www.BohlerEngineering.com

J.G. BORD
STATE OF CONNECTICUT
JEFFREY G. BORD
No. 30414
LICENSED PROFESSIONAL ENGINEER
PROFESSIONAL ENGINEER
CONNECTICUT LICENSE No. 30414

SHEET TITLE:

COVER SHEET

SHEET NUMBER:

C-101

REVISION 4 - 7/8/20

P:\19\CT191016\DRAWINGS\PLAN SETS\REV3 - WETLAND FLAG REVISIONS\CT191016SS3----ALAYOUT C-101 COVER

GENERAL NOTES

CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH THE NOTES AND SPECIFICATIONS CONTAINED HEREIN. CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS.

1. THE FOLLOWING DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THIS SITE PLAN:
   - “BOUNDARY & TOPOGRAPHIC SURVEY” - PREPARED BY CONTROL POINT ASSOCIATES, INC. DATED 09/05/19 REVISED 06/04/20.
   - “REPORT OF GEOTECHNICAL INVESTIGATION" - PREPARED BY WHITESTONE ASSOCIATES, INC. DATED 10/31/19.
   - “PHASE I ENVIRONMENTAL SITE ASSESSMNET" - PREPARED BY WHITESTONE ASSOCIATES, INC. DATED 08/19/19

   PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST VERIFY THAT HE/SHE HAS THE LATEST EDITION OF THE DOCUMENTS REFERENCED ABOVE. THIS IS CONTRACTOR'S RESPONSIBILITY.
2. ALL ACCESSIBLE (A/K/A ADA) PARKING SPACES MUST BE CONSTRUCTED TO MEET, AT A MINIMUM, THE MORE STRINGENT OF THE REQUIREMENTS OF THE “AMERICANS WITH DISABILITIES ACT” (ADA) CODE (42 U.S.C. § 12101 et seq. AND 42 U.S.C. § 4151 et seq.) OR THE REQUIREMENTS OF THE JURISDICTION WHERE THE PROJECT IS TO BE CONSTRUCTED, AND ANY AND ALL AMENDMENTS TO BOTH WHICH ARE IN EFFECT WHEN THESE PLANS ARE COMPLETED.
3. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE COMMENTS TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES AND CONFIRMED THAT ALL NECESSARY OR REQUIRED PERMITS HAVE BEEN OBTAINED. CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.
4. THE OWNER/CONTRACTOR MUST BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
5. ALL WORK MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS AND CONDITIONS OF APPROVAL, AND ALL APPLICABLE REQUIREMENTS, RULES, REGULATIONS, STATUTORY REQUIREMENTS, CODES, LAWS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES WITH JURISDICTION OVER THIS PROJECT.
6. THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH HEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND, IN CASE OF CONFLICT, DISCREPANCY OR AMBIGUITY, THE MORE STRINGENT REQUIREMENTS AND/OR RECOMMENDATIONS CONTAINED IN THE PLANS AND THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR MUST NOTIFY THE ENGINEER, IN WRITING, OF ANY SUCH CONFLICT, DISCREPANCY OR AMBIGUITY BETWEEN THE GEOTECHNICAL REPORTS AND PLANS AND SPECIFICATIONS PRIOR TO PROCEEDING WITH ANY FURTHER WORK.
7. THESE PLANS ARE BASED ON INFORMATION PROVIDED TO BOHLER ENGINEERING BY THE OWNER AND OTHERS PRIOR TO THE TIME OF PLAN PREPARATION. CONTRACTOR MUST FIELD VERIFY EXISTING CONDITIONS AND NOTIFY BOHLER ENGINEERING, IN WRITING, IMMEDIATELY IF ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES.
8. ALL DIMENSIONS SHOWN ON THE PLANS MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR MUST NOTIFY ENGINEER, IN WRITING, IF ANY CONFLICTS, DISCREPANCIES, OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK WHICH HAS TO BE REDONE OR REPAIRED DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO CONTRACTOR GIVING ENGINEER WRITTEN NOTIFICATION OF SAME AND ENGINEER, THEREAFTER, PROVIDING CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK.
9. CONTRACTOR MUST REFER TO THE ARCHITECTURAL/BUILDING PLANS “OF RECORD” FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.
10. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST COORDINATE THE BUILDING LAYOUT BY CAREFUL REVIEW OF THE ENTIRE SITE PLAN AND THE LATEST ARCHITECTURAL PLANS (INCLUDING, BUT NOT LIMITED TO, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLAN, WHERE APPLICABLE). CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND SITE ENGINEER, IN WRITING, OF ANY CONFLICTS, DISCREPANCIES OR AMBIGUITIES WHICH EXIST.
11. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE AND ALL UNSUITABLE EXCAVATED MATERIAL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ANY AND ALL GOVERNMENTAL AUTHORITIES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER CONTRACTOR.
12. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN SHORING IS REQUIRED AND FOR INSTALLING ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PRECAUTIONS TO BE TAKEN TO ASSURE THE STABILITY OF ADJACENT, NEARBY AND CONTIGUOUS STRUCTURES AND PROPERTIES.
13. THE CONTRACTOR IS TO EXERCISE EXTREME CARE WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. WHICH ARE TO REMAIN EITHER FOR AN INITIAL PHASE OF THE PROJECT OR AS PART OF THE FINAL CONDITION. CONTRACTOR IS RESPONSIBLE FOR TAKING ALL APPROPRIATE MEASURES REQUIRED TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT, UTILITIES, BUILDINGS, AND INFRASTRUCTURE WHICH ARE TO REMAIN, AND TO PROVIDE A SAFE WORK AREA FOR THIRD PARTIES, PEDESTRIANS AND ANYONE INVOLVED WITH THE PROJECT.
14. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. AND SHALL BEAR ALL COSTS ASSOCIATED WITH SAME TO INCLUDE, BUT NOT BE LIMITED TO, REDESIGN, RE-SURVEY, RE-PERMITTING AND CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST REPLACE ALL SIGNAL INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY MUST RESTORE SUCH CONSTRUCTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE CONDITIONS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION, AND IN CONFORMANCE WITH APPLICABLE CODES, LAWS RULES, REGULATIONS, STATUTORY REQUIREMENTS AND STATUTES. CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND TO NOTIFY THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.
15. ALL CONCRETE MUST BE AIR ENTRAINED AND HAVE THE MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS UNLESS OTHERWISE NOTED ON THE PLANS, DETAILS AND/OR GEOTECHNICAL REPORT.
16. THE ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES OR PROCEDURES, GENERALLY OR FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES OR PROCEDURES FOR COMPLETION OF THE WORK DEPICTED BOTH ON THESE PLANS, AND FOR ANY CONFLICTS/SCOPE REVISIONS WHICH RESULT FROM SAME. CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE METHODS/MEANS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
17. THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY. THE ENGINEER OF RECORD HAS NOT BEEN RETAINED TO PERFORM OR BE RESPONSIBLE FOR JOB SITE SAFETY, SAME BEING WHOLLY OUTSIDE OF ENGINEER'S SERVICES AS RELATED TO THE PROJECT. THE ENGINEER OF RECORD IS NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES, AT ANY TIME.
18. ALL CONTRACTORS MUST CARRY THE SPECIFIED STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE (CGL). ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME BOHLER ENGINEERING, AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AS ADDITIONAL NAMED INSURED AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE THIS HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED BY THE CONTRACTORS. ALL CONTRACTORS MUST FURNISH BOHLER ENGINEERING WITH CERTIFICATIONS OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE PRIOR TO COMMENCING WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION AND FOR ONE YEAR AFTER THE COMPLETION OF CONSTRUCTION. IN ADDITION, ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, INDEMNIFY, DEFEND AND HOLD HARMLESS BOHLER ENGINEERING AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS FROM AND AGAINST ANY DAMAGES, INJURIES, CLAIMS, ACTIONS, PENALTIES, EXPENSES, PUNITIVE DAMAGES, TORT DAMAGES, STATUTORY CLAIMS, STATUTORY CAUSES OF ACTION, LOSSES, CAUSES OF ACTION, LIABILITIES OR COSTS, INCLUDING, BUT NOT LIMITED TO, REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH OR TO THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTORS, ALL CLAIMS BY THIRD PARTIES AND ALL CLAIMS RELATED TO THE PROJECT. CONTRACTOR MUST NOTIFY ENGINEER, IN WRITING, AT LEAST THIRTY (30) DAYS PRIOR TO ANY TERMINATION, SUSPENSION OR CHANGE OF ITS INSURANCE HEREUNDER.
19. BOHLER ENGINEERING WILL REVIEW OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND/OR METHODS AND/OR TECHNIQUES OR PROCEDURES, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND BOHLER HAS NO RESPONSIBILITY OR LIABILITY FOR SAME HEREUNDER. BOHLER ENGINEERING'S SHOP DRAWING REVIEW WILL BE CONDUCTED WITH REASONABLE PROMPTNESS WHILE ALLOWING SUFFICIENT TIME TO PERMIT ADEQUATE REVIEW. REVIEW OF A SPECIFIC ITEM MUST NOT INDICATE THAT BOHLER ENGINEERING HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER ENGINEERING WILL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOT PROMPTLY AND IMMEDIATELY BROUGHT TO ITS ATTENTION, IN WRITING, BY THE CONTRACTOR. BOHLER ENGINEERING WILL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
20. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER ENGINEERING, NOR THE PRESENCE OF BOHLER ENGINEERING AND/OR ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE, SHALL RELIEVE THE GENERAL CONTRACTOR OF ITS OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE WITH ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES WITH JURISDICTION OVER THE PROJECT AND/OR PROPERTY. BOHLER ENGINEERING AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. BOHLER ENGINEERING SHALL BE INDEMNIFIED BY THE GENERAL CONTRACTOR AND MUST BE NAMED AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE AS DESCRIBED ABOVE IN NOTE 19 FOR JOB SITE SAFETY.
21. IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE ENGINEER FOR SUCH DEVIATIONS, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK DONE WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND, FURTHER, SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS THE ENGINEER, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, IN ACCORDANCE WITH PARAGRAPH 19 HEREIN, FOR AND FROM ALL FEES, ATTORNEYS' FEES, DAMAGES, COSTS, JUDGMENTS, PENALTIES AND THE LIKE RELATED TO SAME.
22. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND PROTECTION OF TRAFFIC PLAN FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE R.O.W. OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTOR'S PRICE.
23. ALL SIGNING AND PAVEMENT STRIPING MUST CONFORM TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES OR LOCALLY APPROVED SUPPLEMENT.
24. ENGINEER IS NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS. IF CONTRACTOR AND/OR OWNER FAIL TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, THEY AGREE TO JOINTLY AND SEVERALLY INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS.
25. OWNER MUST MAINTAIN AND PRESERVE ALL PHYSICAL SITE FEATURES AND DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, IN STRICT ACCORDANCE WITH THE APPROVED PLAN(S) AND DESIGN AND, FURTHER ENGINEER IS NOT RESPONSIBLE FOR ANY FAILURE TO SO MAINTAIN OR PRESERVE SITE AND/OR DESIGN FEATURES. IF OWNER FAILS TO MAINTAIN AND/OR PRESERVE ALL PHYSICAL SITE FEATURES AND/OR DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, OWNER AGREES TO INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE.
26. ALL DIMENSIONS MUST BE TO FACE OF CURB, EDGE OF PAVEMENT, OR EDGE OF BUILDING, UNLESS NOTED OTHERWISE.
27. ALL CONSTRUCTION AND MATERIALS MUST COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, LAWS, ORDINANCES, RULES AND CODES, AND ALL APPLICABLE OSHA REQUIREMENTS.
28. CONTRACTOR AND OWNER MUST INSTALL ALL ELEMENTS AND COMPONENTS IN STRICT COMPLIANCE WITH AND ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDED INSTALLATION CRITERIA AND SPECIFICATIONS. IF CONTRACTOR AND/OR OWNER FAIL TO DO SO, THEY AGREE TO JOINTLY AND SEVERALLY INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE.
29. CONTRACTOR IS RESPONSIBLE TO MAINTAIN ON-SITE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN COMPLIANCE WITH EPA REQUIREMENTS FOR SITES WHERE ONE (1) ACRE OR MORE (UNLESS THE LOCAL JURISDICTION REQUIRES FEWER) IS DISTURBED BY CONSTRUCTION ACTIVITIES. CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL ACTIVITIES, INCLUDING THOSE OF SUBCONTRACTORS, ARE IN COMPLIANCE WITH THE SWPPP, INCLUDING BUT NOT LIMITED TO LOGGING ACTIVITIES (MINIMUM ONCE PER WEEK AND AFTER RAINFALL EVENTS) AND CORRECTIVE MEASURES, AS APPROPRIATE.
30. AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED APPLICATION DOCUMENTS PREPARED BY THE SIGNATORY PROFESSIONAL ENGINEER, THE USE OF THE WORDS CERTIFY OR CERTIFICATION CONSTITUTES AN EXPRESSION OF “PROFESSIONAL OPINION” REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE UNDERSIGNED PROFESSIONAL'S KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EITHER EXPRESSED OR IMPLIED.

GENERAL GRADING & UTILITY PLAN NOTES

1. LOCATIONS OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE INDEPENDENTLY CONFIRMED WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINTS MUST BE INDEPENDENTLY CONFIRMED BY THE CONTRACTOR IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES MUST IMMEDIATELY BE REPORTED, IN WRITING, TO THE ENGINEER. CONSTRUCTION MUST COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. CONTRACTOR MUST VERTICALLY AND HORIZONTALLY LOCATE ALL UTILITIES AND SERVICES INCLUDING, BUT NOT LIMITED TO, GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE OR WORK SPACE, WHICHEVER IS GREATER. THE CONTRACTOR MUST USE, REFER TO, AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION, AT NO COST TO THE OWNER. CONTRACTOR SHALL BEAR ALL COSTS ASSOCIATED WITH DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION.
3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CONSTRUCTION CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION AND COMMENCEMENT OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT AND/OR DISCREPANCY BETWEEN THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE OR APPLICABLE CODES, REGULATIONS, LAWS, RULES, STATUTES AND/OR ORDINANCES, IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD, IN WRITING, OF SAID CONFLICT AND/OR DISCREPANCY PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR'S FAILURE TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE CONTRACTOR'S FULL AND COMPLETE ACCEPTANCE OF ALL RESPONSIBILITY TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, LAWS, STATUTES, ORDINANCES AND CODES AND, FURTHER, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH SAME.
4. THE CONTRACTOR MUST LOCATE AND CLEARLY AND UNAMBIGUOUSLY DEFINE VERTICALLY AND HORIZONTALLY ALL ACTIVE AND INACTIVE UTILITY AND/OR SERVICE SYSTEMS THAT ARE TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE AND INACTIVE SYSTEMS THAT ARE NOT BEING REMOVED/RELOCATED DURING SITE ACTIVITY.
5. THE CONTRACTOR MUST FAMILIARIZE ITSELF WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AS IDENTIFIED OR REQUIRED FOR THE PROJECT. THE CONTRACTOR MUST PROVIDE THE OWNER WITH WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH THE JURISDICTION AND UTILITY COMPANY REQUIREMENTS AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.
6. THE CONTRACTOR MUST INSTALL ALL STORM SEWER AND SANITARY SEWER COMPONENTS WHICH FUNCTION BY GRAVITY PRIOR TO THE INSTALLATION OF ALL OTHER UTILITIES.
7. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SITE PLAN DOCUMENTS AND ARCHITECTURAL DESIGN FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, GREASE TRAP REQUIREMENTS/DETAILS, DOOR ACCESS, AND EXTERIOR GRADING. THE ARCHITECT WILL DETERMINE THE UTILITY SERVICE SIZES. THE CONTRACTOR MUST COORDINATE INSTALLATION OF UTILITIES/SERVICES WITH THE INDIVIDUAL COMPANIES, TO AVOID CONFLICTS AND TO ENSURE THAT PROPER DEPTHS ARE ACHIEVED. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT INSTALLATION OF ALL IMPROVEMENTS COMPLIES WITH ALL UTILITY REQUIREMENTS WITH JURISDICTION AND/OR CONTROL OF THE SITE, AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES AND, FURTHER, IS RESPONSIBLE FOR COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE A CONFLICT(S) EXISTS BETWEEN THESE SITE PLANS AND THE ARCHITECTURAL PLANS, OR WHERE ARCHITECTURAL PLAN UTILITY CONNECTION POINTS DIFFER, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER, IN WRITING, AND PRIOR TO CONSTRUCTION, RESOLVE SAME.
8. WATER SERVICE MATERIALS, BURIAL DEPTH, AND COVER REQUIREMENTS MUST BE SPECIFIED BY THE LOCAL UTILITY COMPANY. CONTRACTOR'S PRICE FOR WATER SERVICE MUST INCLUDE ALL FEES, COSTS AND APPURTENANCES REQUIRED BY THE UTILITY TO PROVIDE FULL AND COMPLETE WORKING SERVICE. CONTRACTOR MUST CONTACT THE APPLICABLE MUNICIPALITY TO CONFIRM THE PROPER WATER METER AND VAULT, PRIOR TO COMMENCING CONSTRUCTION.
9. ALL NEW UTILITIES/SERVICES, INCLUDING ELECTRIC, TELEPHONE, CABLE TV, ETC. ARE TO BE INSTALLED UNDERGROUND. ALL NEW UTILITIES/SERVICES MUST BE INSTALLED IN ACCORDANCE WITH THE UTILITY/SERVICE PROVIDER INSTALLATION SPECIFICATIONS AND STANDARDS.
10. SITE GRADING MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT REFERENCED IN THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND REPLACING UNSUITABLE MATERIALS WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT. ALL EXCAVATED OR FILLED AREAS MUST BE COMPACTED AS OUTLINED IN THE GEOTECHNICAL REPORT. MOISTURE CONTENT AT TIME OF PLACEMENT MUST BE SUBMITTED IN A COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT MUST BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE BY OWNER/DEVELOPER, OR OWNER/DEVELOPER'S REPRESENTATIVE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED AS DIRECTED BY THE GEOTECHNICAL REPORT. EARTHWORK ACTIVITIES INCLUDING, BUT NOT LIMITED TO, EXCAVATION, BACKFILL, AND COMPACTING MUST COMPLY WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. EARTHWORK ACTIVITIES MUST COMPLY WITH THE STANDARD STATE DOT SPECIFICATIONS FOR ROADWAY CONSTRUCTION (LATEST EDITION) AND ANY AMENDMENTS OR REVISIONS THERETO.
11. ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION MUST BE AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND MUST BE COORDINATED WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS. WHEN THE PROJECT DOES NOT HAVE GEOTECHNICAL RECOMMENDATIONS, FILL AND COMPACTION MUST, AT A MINIMUM, COMPLY WITH THE STATE DOT REQUIREMENTS AND SPECIFICATIONS AND CONSULTANT SHALL HAVE NO LIABILITY OR RESPONSIBILITY FOR OR AS RELATED TO FILL, COMPACTION AND BACKFILL. FURTHER, CONTRACTOR IS FULLY RESPONSIBLE FOR EARTHWORK BALANCE.
12. THE CONTRACTOR MUST COMPLY, TO THE FULLEST EXTENT, WITH THE LATEST OSHA STANDARDS AND REGULATIONS, AND/OR ANY OTHER AGENCY WITH JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE “MEANS AND METHODS” REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES AND CONSULTANT SHALL HAVE NO RESPONSIBILITY FOR OR AS RELATED FOR OR AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES.
13. PAVEMENT MUST BE SAW CUT IN STRAIGHT LINES, AND EXCEPT FOR EDGE OF BUTT JOINTS, MUST EXTEND TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS MUST BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.
14. THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT TOPS MUST BE ADJUSTED, AS NECESSARY, TO MATCH PROPOSED GRADES IN ACCORDANCE WITH ALL APPLICABLE STANDARDS, REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.
15. DURING THE INSTALLATION OF SANITARY SEWER, STORM SEWER, AND ALL UTILITIES, THE CONTRACTOR MUST MAINTAIN A CONTEMPORANEOUS AND THOROUGH RECORD OF CONSTRUCTION TO IDENTIFY THE AS-INSTALLED LOCATIONS OF ALL UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR MUST CAREFULLY NOTE ANY INSTALLATIONS THAT DEVIATE FROM THE INFORMATION CONTAINED IN THE UTILITY PLAN. THIS RECORD MUST BE KEPT ON A CLEAN COPY OF THE DRAINAGE OR UTILITY PLAN, WHICH CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER AT THE COMPLETION OF WORK.
16. WHEN THE SITE IMPROVEMENT PLANS INVOLVE MULTIPLE BUILDINGS, SOME OF WHICH MAY BE BUILT AT A LATER DATE, THE CONTRACTOR MUST EXTEND ALL LINES, INCLUDING BUT NOT LIMITED TO STORM SEWER, SANITARY SEWER, UTILITIES, AND IRRIGATION LINE, TO A POINT AT LEAST FIVE (5) FEET BEYOND THE PAVED AREAS FOR WHICH THE CONTRACTOR IS RESPONSIBLE. CONTRACTOR MUST CAP ENDS AS APPROPRIATE, MARK LOCATIONS WITH A 2X4, AND MUST NOTE THE LOCATION OF ALL OF THE ABOVE ON A CLEAN COPY OF THE DRAINAGE OR UTILITY PLAN, WHICH CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER UPON COMPLETION OF THE WORK.
17. THE CONTRACTOR IS FULLY RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCING ANY CONSTRUCTION. CONTRACTOR MUST CONFIRM AND ENSURE 0.75% MINIMUM SLOPE AGAINST ALL ISLANDS, GUTTERS, AND CURBS; 1.0% ON ALL CONCRETE SURFACES; AND 1.5% MINIMUM ON ASPHALT (EXCEPT WHERE ADA REQUIREMENTS OR EXISTING TOPOGRAPHY LIMIT GRADES), TO PREVENT PONDING. CONTRACTOR MUST IMMEDIATELY IDENTIFY, IN WRITING TO THE ENGINEER, ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE, OR PROJECT COST. IF CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER NOTIFICATION, MUST BE AT THE CONTRACTOR'S OWN RISK AND, FURTHER, CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS THE DESIGN ENGINEER FOR ANY DAMAGES, COSTS, INJURIES, ATTORNEY'S FEES AND THE LIKE WHICH RESULT FROM SAME.
18. PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 6” ABOVE EXISTING LOCAL ASPHALT GRADE UNLESS OTHERWISE NOTED. FIELD ADJUST TO CREATE A MINIMUM OF .075% GUTTER GRADE ALONG CURB FACE. IT IS CONTRACTOR'S OBLIGATION TO ENSURE THAT DESIGN ENGINEER APPROVES FINAL CURBING CUT SHEETS PRIOR TO INSTALLATION OF SAME.
19. REFER TO THIS SHEET FOR ADDITIONAL NOTES.
20. IN THE EVENT OF DISCREPANCIES AND/OR CONFLICTS BETWEEN PLANS OR RELATIVE TO OTHER PLANS, THE SITE PLAN WILL TAKE PRECEDENCE AND CONTROL. CONTRACTOR MUST IMMEDIATELY NOTIFY THE DESIGN ENGINEER, IN WRITING, OF ANY DISCREPANCIES AND/OR CONFLICTS.
21. CONTRACTOR IS REQUIRED TO SECURE ALL NECESSARY AND/OR REQUIRED PERMITS AND APPROVALS FOR ALL OFF SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. CONTRACTOR MUST SUPPLY A COPY OF APPROVALS TO ENGINEER AND OWNER PRIOR TO INITIATING ANY WORK.
22. WHERE RETAINING WALLS (WHETHER OR NOT THEY MEET THE JURISDICTIONAL DEFINITION) ARE IDENTIFIED ON PLANS, ELEVATIONS IDENTIFIED ARE FOR THE EXPOSED PORTION OF THE WALL. WALL FOOTINGS/FOUNDATION ELEVATIONS ARE NOT IDENTIFIED HEREIN AND ARE TO BE SET/DETERMINED BY THE CONTRACTOR BASED ON FINAL STRUCTURAL DESIGN SHOP DRAWINGS PREPARED BY THE APPROPRIATE PROFESSIONAL LICENSED IN THE STATE WHERE THE CONSTRUCTION OCCURS.
23. STORM DRAINAGE PIPE:UNLESS INDICATED OTHERWISE, ALL STORM SEWER PIPE MUST BE REINFORCED CONCRETE PIPE (RCP) CLASS III WITH SILT TIGHT JOINTS. WHEN HIGH-DENSITY POLYETHYLENE PIPE (HDPE) IS CALLED FOR ON THE PLANS, IT MUST CONFORM TO AASHTO M294 AND TYPE S (SMOOTH INTERIOR WITH ANGULAR CORRUGATIONS) WITH GASKET FOR SILT TIGHT JOINT. PVC PIPE FOR ROOF DRAIN CONNECTION MUST BE SDR 26 OR SCHEDULE 40 UNLESS INDICATED OTHERWISE.
24. UNLESS INDICATED OTHERWISE ON THE DRAWINGS, SANITARY SEWER PIPE SHALL BE AS FOLLOWS:
    - FOR PIPES LESS THAN 12 FT. DEEP: POLYVINYL CHLORIDE (PVC) SDR 35 PER ASTM D3034
    - FOR PIPES MORE THAN 12 FT. DEEP: POLYVINYL CHLORIDE (PVC) SDR 26 PER ASTM D3034
    - FOR PIPE WITHIN 10 FT. OF BUILDING, PIPE MATERIAL SHALL COMPLY WITH APPLICABLE BUILDING AND PLUMBING CODES. CONTRACTOR TO VERIFY WITH LOCAL OFFICIALS.
25. STORM AND SANITARY SEWER PIPE LENGTHS INDICATED ARE NOMINAL AND MEASURED CENTER OF INLET AND/OR MANHOLES STRUCTURE TO CENTER OF STRUCTURE.
26. STORMWATER ROOF DRAIN LOCATIONS ARE BASED ON PRELIMINARY ARCHITECTURAL PLANS. CONTRACTOR IS RESPONSIBLE TO AND FOR VERIFYING LOCATIONS OF SAME BASED ON FINAL ARCHITECTURAL PLANS.
27. SEWERS CROSSING STREAMS AND/OR LOCATION WITHIN 10 FEET OF THE STREAM EMBANKMENT, OR WHERE SITE CONDITIONS SO INDICATE, MUST BE CONSTRUCTED OF STEEL, REINFORCED CONCRETE, DUCTILE IRON OR OTHER SUITABLE MATERIAL. SEWERS CONVEYING SANITARY FLOW COMBINED SANITARY AND STORMWATER FLOW OR INDUSTRIAL FLOW MUST BE SEPARATED FROM WATER MAINS BY A DISTANCE OF AT LEAST 10 FEET HORIZONTALLY. IF SUCH LATERAL SEPARATION IS NOT POSSIBLE, THE PIPES MUST BE IN SEPARATE TRENCHES WITH THE SEWER AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN, OR SUCH OTHER SEPARATION AS APPROVED BY THE GOVERNMENT AGENCY WITH JURISDICTION OVER SAME.
    - WHERE APPROPRIATE SEPARATION FROM A WATER MAIN IS NOT POSSIBLE, THE SEWER MUST BE ENCASED IN CONCRETE, OR CONSTRUCTED OF DUCTILE IRON PIPE USING MECHANICAL OR SLIP-ON JOINTS FOR A DISTANCE OF AT LEAST 10 FEET ON EITHER SIDE OF THE CROSSING. IN ADDITION, ONE FULL LENGTH OF SEWER PIPE SHOULD BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE WATER LINE AS POSSIBLE. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWER MUST BE PROVIDED.
28. WATER MAIN PIPING MUST BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE LOCAL WATER PURVEYOR. IN THE ABSENCE OF SUCH REQUIREMENTS, WATER MAIN PIPING MUST BE CEMENT-LINED DUCTILE IRON (DIP) MINIMUM CLASS 52 THICKNESS. ALL PIPE AND APPURTENANCES MUST COMPLY WITH THE APPLICABLE AWWA STANDARDS IN EFFECT AT THE TIME OF APPLICATION.
29. CONTRACTOR MUST ENSURE THAT ALL UTILITY TRENCHES LOCATED IN EXISTING PAVED ROADWAYS INCLUDING SEWER, WATER AND STORM SYSTEMS, MUST BE REPAIRED IN ACCORDANCE WITH REFERENCED MUNICIPAL, COUNTY AND/OR DOT DETAILS AS APPLICABLE. CONTRACTOR MUST COORDINATE INSPECTION AND APPROVAL OF COMPLETED WORK WITH THE AGENCY WITH JURISDICTION OVER SAME.
30. LOCATION OF PROPOSED UTILITY POLE RELOCATION IS AT THE SOLE DISCRETION OF UTILITY COMPANY.
31. CONSULTANT IS NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, SHALL HAVE NO LIABILITY FOR ANY HAZARDOUS MATERIALS, HAZARDOUS SUBSTANCES, OR POLLUTANTS ON, ABOUT OR UNDER THE PROPERTY.

GENERAL DEMOLITION NOTES

1. THIS PLAN REFERENCES DOCUMENTS AND INFORMATION BY:
   - “BOUNDARY & TOPOGRAPHIC SURVEY” - PREPARED BY CONTROL POINT ASSOCIATES, INC. DATED 09/05/19.
2. CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, (29 U.S.C. 651 et seq.), AS AMENDED AND ANY MODIFICATIONS, AMENDMENTS OR REVISIONS TO SAME.
3. BOHLER ENGINEERING HAS NO CONTRACTUAL, LEGAL, OR OTHER RESPONSIBILITY FOR JOB SITE SAFETY OR JOB SITE SUPERVISION, OR ANYTHING RELATED TO SAME.
4. THE DEMOLITION PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION, ONLY, REGARDING ITEMS TO BE DEMOLISHED AND/OR REMOVED. THE CONTRACTOR MUST ALSO REVIEW THE OTHER SITE PLAN DRAWINGS AND INCLUDE IN DEMOLITION ACTIVITIES ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS.
5. CONTRACTOR MUST RAISE ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS OR SPECIFICATIONS, CONCERNS REGARDING THE APPLICABLE SAFETY STANDARDS, OR THE SAFETY OF THE CONTRACTOR OR THIRD PARTIES IN PERFORMING THE WORK ON THIS PROJECT, WITH BOHLER ENGINEERING, IN WRITING, AND RESPONDED TO BY BOHLER, IN WRITING, PRIOR TO THE INITIATION OF ANY SITE ACTIVITY AND ANY DEMOLITION ACTIVITY. ALL DEMOLITION ACTIVITIES MUST BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, RULES, REQUIREMENTS, STATUTES, ORDINANCES AND CODES.
6. PRIOR TO STARTING ANY DEMOLITION, CONTRACTOR IS RESPONSIBLE FOR/TO:
   - A. OBTAINING ALL REQUIRED PERMITS AND MAINTAINING THE SAME ON SITE FOR REVIEW BY THE ENGINEER AND OTHER PUBLIC AGENCIES WITH JURISDICTION THROUGHOUT THE DURATION OF THE PROJECT, SITE WORK, AND DEMOLITION WORK.
   - B. NOTIFYING, AT A MINIMUM, THE MUNICIPAL ENGINEER, DESIGN ENGINEER, AND LOCAL SOIL CONSERVATION DISTRICT, 72 HOURS PRIOR TO THE START OF WORK.
   - C. INSTALLING THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE.
   - D. IN ACCORDANCE WITH STATE LAW, THE CONTRACTOR MUST CALL THE STATE ONE-CALL DAMAGE PROTECTION SYSTEM FOR UTILITY MARKOUT, IN ADVANCE OF ANY EXCAVATION.
   - E. LOCATING AND PROTECTING ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN AND ADJACENT TO THE LIMITS OF PROJECT ACTIVITIES. THE CONTRACTOR MUST USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES.
   - F. PROTECTING AND MAINTAINING IN OPERATION, ALL ACTIVE UTILITIES AND SYSTEMS THAT ARE NOT BEING REMOVED DURING ALL DEMOLITION ACTIVITIES.
   - G. ARRANGING FOR AND COORDINATING WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) FOR THE TEMPORARY OR PERMANENT TERMINATION OF SERVICE REQUIRED BY THE PROJECT PLANS AND SPECIFICATIONS. THE CONTRACTOR MUST PROVIDE THE UTILITY ENGINEER AND OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTIONAL AND UTILITY COMPANY REQUIREMENTS.
   - H. COORDINATION WITH UTILITY COMPANIES REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS MAY BE REQUIRED TO MINIMIZE THE IMPACT ON THE AFFECTED PARTIES. WORK REQUIRED TO BE DONE "OFF-PEAK" IS TO BE DONE AT NO ADDITIONAL COST TO THE OWNER.
   - I. IN THE EVENT THE CONTRACTOR DISCOVERS ANY HAZARDOUS MATERIAL, THE REMOVAL OF WHICH IS NOT ADDRESSED IN THE PROJECT PLANS AND SPECIFICATIONS, THE CONTRACTOR MUST IMMEDIATELY CEASE ALL WORK AND IMMEDIATELY NOTIFY THE OWNER AND ENGINEER OF THE DISCOVERY OF SUCH MATERIALS.
7. THE FIRM OR ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. CONTRACTOR MUST PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, FOLLOWING ALL THE OSHA REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY.
8. THE CONTRACTOR MUST PROVIDE ALL “MEANS AND METHODS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS OF DAMAGE TO ALL ITEMS THAT ARE TO REMAIN. CONTRACTOR MUST USE NEW MATERIAL FOR ALL REPAIRS. CONTRACTOR'S REPAIR MUST INCLUDE THE RESTORATION OF ANY ITEMS REPAIRED TO THE PRE-DEMOLITION CONDITION, OR BETTER. CONTRACTOR SHALL PERFORM ALL REPAIRS AT THE CONTRACTOR'S SOLE EXPENSE.
9. THE CONTRACTOR MUST NOT PERFORM ANY EARTH MOVEMENT ACTIVITIES, DEMOLITION OR REMOVAL OF FOUNDATION WALLS, FOOTINGS, OR OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE UNLESS SAME IS IN STRICT ACCORDANCE AND CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, AND/OR UNDER THE WRITTEN DIRECTION OF THE OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER.
10. CONTRACTOR MUST BACKFILL ALL EXCAVATION RESULTING FROM, OR INCIDENTAL TO, DEMOLITION ACTIVITIES. BACKFILL MUST BE ACCOMPLISHED WITH APPROVED BACKFILL MATERIALS, AND MUST BE SUFFICIENTLY COMPACTED TO SUPPORT NEW IMPROVEMENTS AND PERFORMED IN COMPLIANCE WITH THE RECOMMENDATIONS AND GUIDANCE IN THE GEOTECHNICAL REPORT. BACKFILLING MUST OCCUR IMMEDIATELY AFTER DEMOLITION ACTIVITIES, AND MUST BE DONE SO AS TO PREVENT WATER ENTERING THE EXCAVATION. FINISHED SURFACES MUST BE GRADED TO PROMOTE POSITIVE DRAINAGE.
11. EXPLOSIVES MUST NOT BE USED WITHOUT PRIOR WRITTEN CONSENT OF BOTH THE OWNER AND ALL APPLICABLE GOVERNMENTAL AUTHORITIES. ALL THE REQUIRED PERMITS AND EXPLOSIVE CONTROL MEASURES THAT ARE REQUIRED BY THE FEDERAL, STATE, AND LOCAL GOVERNMENTS MUST BE IN PLACE PRIOR TO CONTRACTOR STARTING AN EXPLOSIVE PROGRAM AND/OR ANY DEMOLITION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL INSPECTION AND SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES.
12. CONTRACTOR MUST PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FHWA "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AND THE FEDERAL, STATE, AND LOCAL REGULATIONS WHEN DEMOLITION RELATED ACTIVITIES IMPACT ROADWAYS AND/OR ROADWAY RIGHT-OF-WAY.
13. CONTRACTOR MUST CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES. STREET CLOSURE PERMITS MUST BE RECEIVED FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES IN OR ADJACENT TO THE RIGHT-OF-WAY.
14. DEMOLITION ACTIVITIES AND EQUIPMENT MUST NOT USE AREAS OUTSIDE THE DEFINED PROJECT LIMIT LINE, WITHOUT WRITTEN PERMISSION OF THE OWNER AND ALL GOVERNMENTAL AGENCIES WITH JURISDICTION.
15. THE CONTRACTOR MUST USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL STANDARDS. AFTER THE DEMOLITION IS COMPLETE, CONTRACTOR MUST CLEAN ALL ADJACENT STRUCTURES AND IMPROVEMENTS TO REMOVE ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION.
16. CONTRACTOR IS RESPONSIBLE TO SAFEGUARD THE SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF UNAUTHORIZED PERSONS AT ANY TIME.
17. CONTRACTOR IS RESPONSIBLE FOR SITE JOB SAFETY, WHICH MUST INCLUDE, BUT NOT BE LIMITED TO, THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING AND OTHER APPROPRIATE SAFETY ITEMS NECESSARY TO PROTECT THE PUBLIC FROM AREAS OF CONSTRUCTION AND CONSTRUCTION ACTIVITY.
18. THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING ITEMS/CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION AS TO THE MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE USED TO ACCOMPLISH THAT WORK. ALL MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE USED MUST BE IN STRICT ACCORDANCE WITH ALL STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR MUST COMPLY WITH ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE.
19. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION WASTES AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES. THE CONTRACTOR MUST MAINTAIN RECORDS TO DEMONSTRATE PROPER DISPOSAL ACTIVITIES, TO BE PROMPTLY PROVIDED TO THE OWNER UPON REQUEST.
20. CONTRACTOR MUST MAINTAIN A RECORD SET OF PLANS UPON WHICH IS INDICATED THE LOCATION OF EXISTING UTILITIES THAT ARE CAPPED, ABANDONED IN PLACE, OR RELOCATED DUE TO DEMOLITION ACTIVITIES. THIS RECORD DOCUMENT MUST BE PREPARED IN A NEAT AND WORKMAN-LIKE MANNER, AND TURNED OVER TO THE OWNER/DEVELOPER UPON COMPLETION OF THE WORK.

ADA INSTRUCTIONS TO CONTRACTOR:

CONTRACTORS MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ADA (ACCESSIBLE) ACCESSIBLE COMPONENTS AND ACCESS ROUTES FOR THE SITE. THESE COMPONENTS, AS CONSTRUCTED, MUST COMPLY WITH ALL APPLICABLE STATE AND LOCAL ACCESSIBILITY LAWS AND REGULATIONS AND THE CURRENT ADA AND/OR STATE ARCHITECTURAL ACCESS BOARD STANDARDS AND REGULATIONS' BARRIER FREE ACCESS AND ANY MODIFICATIONS, REVISIONS OR UPDATES TO SAME. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACE, PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EXIT, MUST COMPLY WITH THESE ADA AND/OR ARCHITECTURAL ACCESS BOARD CODE REQUIREMENTS. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

- PARKING SPACES AND PARKING AISLES - SLOPE SHALL NOT EXCEED 1:50 (1/4” PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.
- CURB RAMPS - SLOPE MUST NOT EXCEED 1:12 (8.3%) FOR A MAXIMUM OF SIX (6) FEET.
- LANDINGS - MUST BE PROVIDED AT EACH END OF RAMPS, MUST PROVIDE POSITIVE DRAINAGE, AND MUST NOT EXCEED 1:50 (1/4” PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.
- PATH OF TRAVEL ALONG ACCESSIBLE ROUTE - MUST PROVIDE A 36-INCH OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL (CAR OVERHANGS AND/OR HANDRAILS CANNOT REDUCE THIS MINIMUM WIDTH). THE SLOPE MUST BE NO GREATER THAN 1:20 (5.0%) IN THE DIRECTION OF TRAVEL, AND MUST NOT EXCEED 1:50 (1/4” PER FOOT OR NOMINALLY 2.0%) IN CROSS SLOPE. WHERE PATH OF TRAVEL WILL BE GREATER THAN 1:20 (5.0%), ADA RAMP MUST BE ADHERED TO. A MAXIMUM SLOPE OF 1:12 (8.3%), FOR A MAXIMUM RISE OF 2.5 FEET, MUST BE PROVIDED. THE RAMP MUST HAVE ADA HAND RAILS AND “LEVEL” LANDINGS ON EACH END THAT ARE CROSS SLOPED NO MORE THAN 1:50 IN ANY DIRECTION (1/4” PER FOOT OR NOMINALLY 2.0%) FOR POSITIVE DRAINAGE.
- DOORWAYS - MUST HAVE A “LEVEL” LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED AWAY FROM THE DOOR NO MORE THAN 1:50 (1/4” PER FOOT OR NOMINALLY 2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA MUST BE NO LESS THAN 60 INCHES (5 FEET) LONG, EXCEPT WHERE OTHERWISE PERMITTED BY ADA STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS. (SEE ICC/ANSI A117.1-2003 AND OTHER REFERENCED INCORPORATED BY CODE.)
- WHEN THE PROPOSED CONSTRUCTION INVOLVES RECONSTRUCTION, MODIFICATION, REVISION OR EXTENSION OF OR TO ADA COMPONENTS FROM EXISTING DOORWAYS OR SURFACES, CONTRACTOR MUST VERIFY EXISTING ELEVATIONS SHOWN ON THE PLAN. NOTE THAT TABLE 405.2 OF THE DEPARTMENT OF JUSTICE'S ADA STANDARDS FOR ACCESSIBLE DESIGN ALLOWS FOR STEEPER RAMP SLOPES, IN RARE CIRCUMSTANCES. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES AND/OR FIELD CONDITIONS THAT DIFFER IN ANY WAY OR ANY RESPECT FROM WHAT IS SHOWN ON THE PLANS, IN WRITING, BEFORE COMMENCEMENT OF WORK. CONSTRUCTED IMPROVEMENTS MUST FALL WITHIN THE MAXIMUM AND MINIMUM LIMITATIONS IMPOSED BY THE BARRIER FREE REGULATIONS AND THE ADA REQUIREMENTS.
- THE CONTRACTOR MUST VERIFY THE SLOPES OF CONTRACTOR'S FORMS PRIOR TO POURING CONCRETE. IF ANY NON-CONFORMANCE IS OBSERVED OR EXISTS, CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER PRIOR TO POURING CONCRETE. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR AND REPLACE NON-CONFORMING CONCRETE.

IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION WITH THE LOCAL BUILDING CODE PRIOR TO COMMENCEMENT OF CONSTRUCTION.

TYPICAL ABBREVIATIONS

KEY	DESCRIPTION	KEY	DESCRIPTION
BC	BOTTOM CURB	PROP.	PROPOSED
TC	TOP CURB	TBR/R	TO BE REMOVED AND REPLACED
BOC	BACK OF CURB	TBR	TO BE REMOVED
BW	BOTTOM OF WALL GRADE	TPF	TREE PROTECTION FENCE
TW	TOP OF WALL	BLDG.	BUILDING
EXIST.	EXISTING	SF	SQUARE FEET
BM.	BENCHMARK	SMH	SEWER MANHOLE
EOP	EDGE OF PAVEMENT	DMH	DRAIN MANHOLE
℄	CENTERLINE	STM.	STORM
FF	FINISHED FLOOR	SAN.	SANITARY
V.I.F.	VERIFY IN FIELD	CONC.	CONCRETE
GC	GENERAL CONTRACTOR	ARCH.	ARCHITECTURAL
HP	HIGH POINT	DEP.	DEPRESSED
LP	LOW POINT	R	RADIUS
TYP.	TYPICAL	MIN.	MINIMUM
INT.	INTERSECTION	MAX.	MAXIMUM
PC.	POINT OF CURVATURE	No. / #	NUMBER
PT.	POINT OF TANGENCY	W.	WIDE
PI.	POINT OF INTERSECTION	DEC.	DECORATIVE
PVI.	POINT OF VERTICAL INTERSECTION	ELEV.	ELEVATION
STA.	STATION	UNG.	UNDERGROUND
GRT	GRATE	R.O.W.	RIGHT OF WAY
INV.	INVERT	LF	LINEAR FOOT
DIP	DUCTILE IRON PIPE	LOD	LIMIT OF DISTURBANCE
PVC	POLYVINYL CHLORIDE PIPE	LOW	LIMIT OF WORK
HDPE	HIGH DENSITY POLYETHYLENE PIPE	L.S.A.	LANDSCAPED AREA
RCP	REINFORCED CONCRETE PIPE	±	PLUS OR MINUS
S	SLOPE	°	DEGREE
ME	MEET EXISTING	Ø / DIA.	DIAMETER

TYPICAL LEGEND

EXISTING		PROPOSED
	PROPERTY LINE	
	SETBACK	
	EASEMENT	
	CURB	
	STORM MANHOLE	
	SEWER MANHOLE	
	CATCH BASIN	
WF#5	WETLAND FLAG	
	WETLAND LINE	
54.83	SPOT ELEVATION	53.52
TC 54.58 G 53.78	TOP & BOTTOM OF CURB	TC=54.32 BC=53.82
53	CONTOUR	50
	FLOW ARROW	5%
	PAINTED ARROW	
	RIDGE LINE	
G G	GAS LINE	G G
T T	TELEPHONE LINE	T T
E E	ELECTRIC LINE	E E
W W	WATER LINE	W W
OH OH	OVERHEAD WIRE	OH OH
	STORM PIPE	
	SANITARY LINE	S S
10	PARKING COUNT	4
	SIGN	
	LIGHT POLE	
	GUIDE RAIL	
	UTILITY POLE	

REFER TO SITE PLAN FOR ZONING ANALYSIS TABLE AND LAND USE/ ZONING INFORMATION & NOTES

REFER TO SOIL EROSION CONTROL NOTES & DETAILS SHEET FOR TYPICAL EROSION NOTES AND DETAILS

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DRAWN BY:	MLT / DE
CHECKED BY:	JGB / PM
DATE:	12/06/19
CAD I.D.:	CT191016ss2

PROJECT:

PROPOSED SITE PLAN DOCUMENTS

FOR

KAPLAN DEVELOPMENT GROUP, LLC

PROPOSED DEVELOPMENT

118 HAZARD AVENUE
HARTFORD COUNTY
TOWN OF ENFIELD, CT
MAP & LOT: 65 - 59

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CONNECTICUT LICENSE No. 30414

SHEET TITLE:

GENERAL NOTES SHEET

SHEET NUMBER:

C-102

REVISION 4 - 7/8/20

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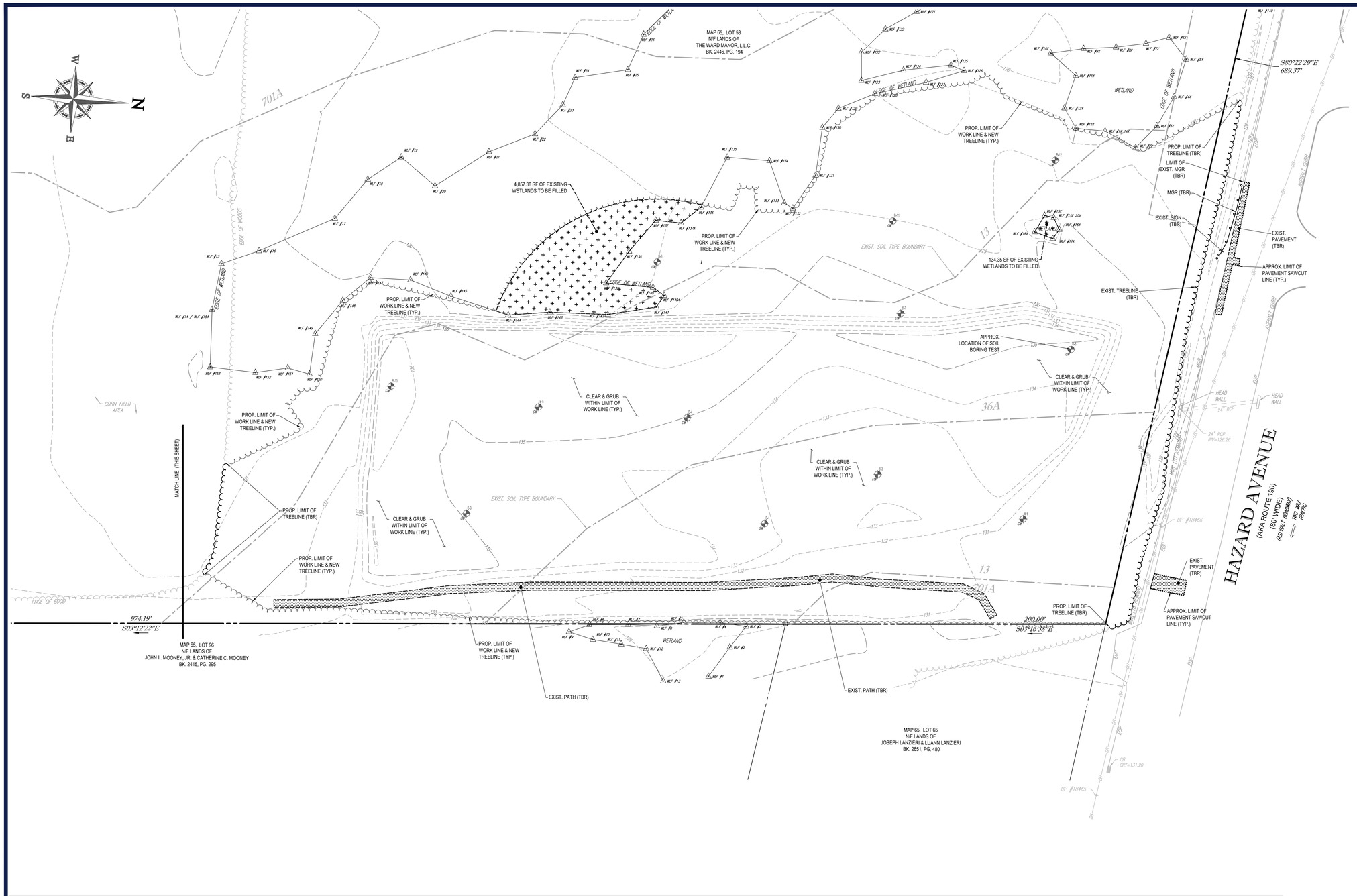

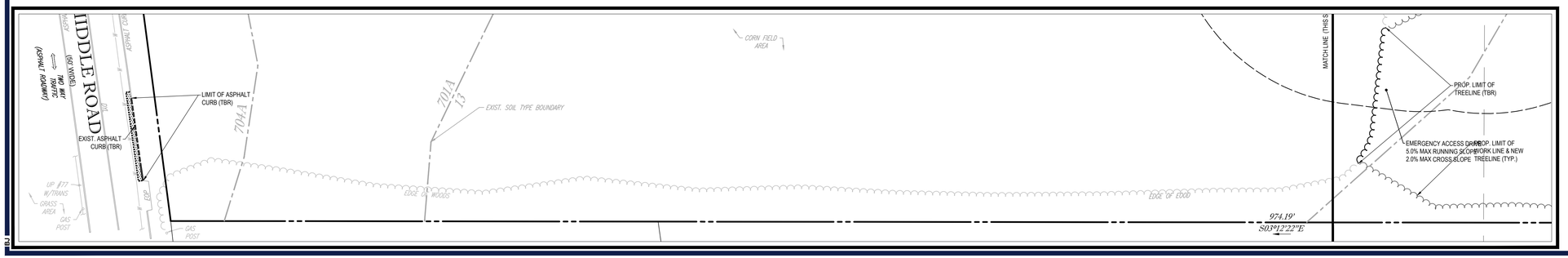

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4	7/8/20	PLANNING & ZONING SUBMISSION	BTJ / JGB

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DRAWN BY:	MLT / DE
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CAD I.D.:	CT191016es2

PROJECT:

PROPOSED SITE PLAN DOCUMENTS

FOR

KAPLAN DEVELOPMENT GROUP, LLC

PROPOSED DEVELOPMENT

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HARTFORD COUNTY
TOWN OF ENFIELD, CT
MAP & LOT: 65 - 59

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PROFESSIONAL ENGINEER
CONNECTICUT LICENSE NO. 30414

SHEET TITLE:

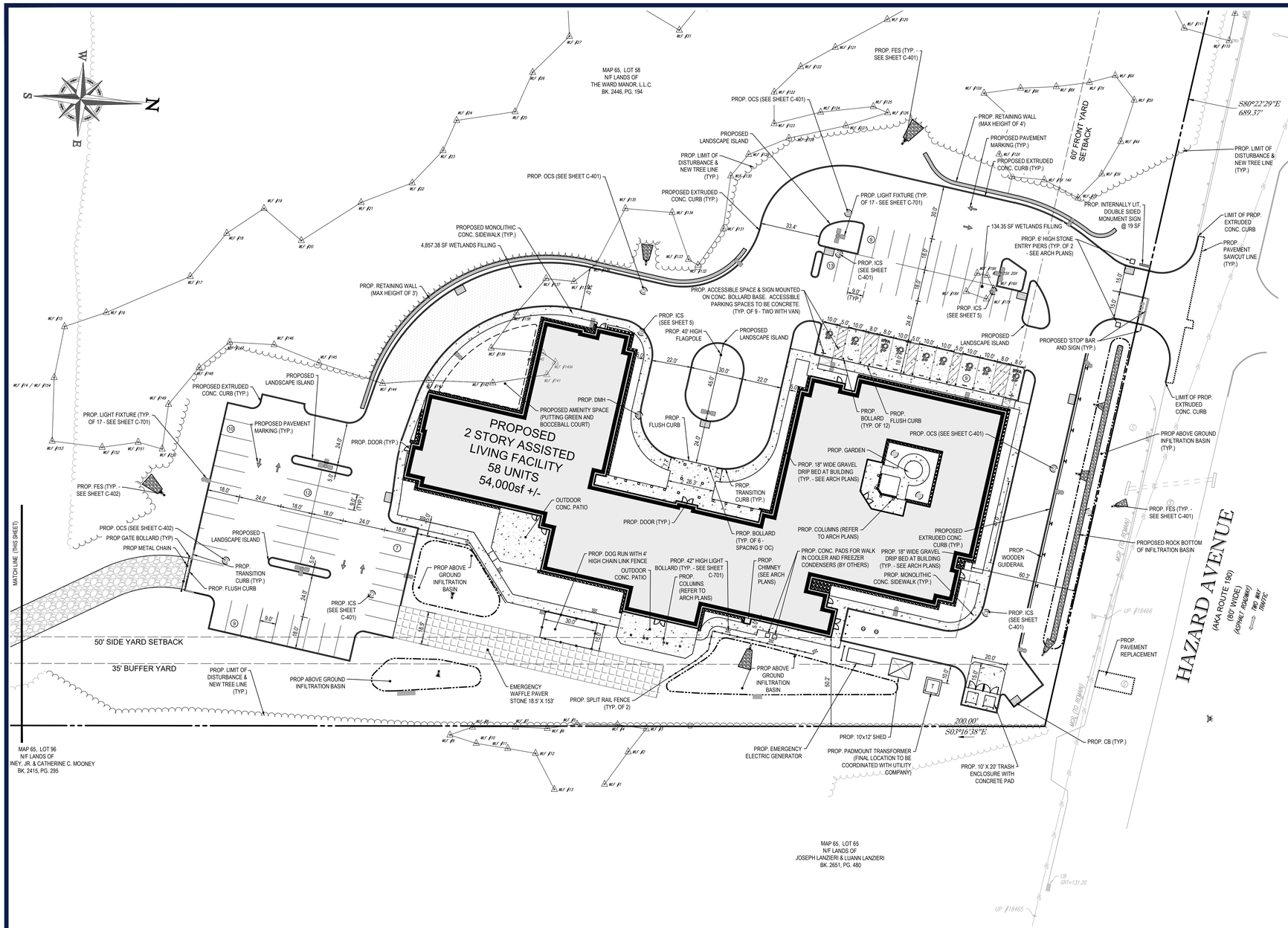
DEMOLITION PLAN

SHEET NUMBER:

C-201

REVISION 4 - 7/8/20

P:\19\CT191016\DRAWINGS\PLAN SETS\REVS - WETLAND FLAG REVISION\SCT191016SS3----\LAYOUT: C-201 DEMO



LAND USE / ZONING INFORMATION & NOTES

1. APPLICANT:
   KAPLAN DEVELOPMENT GROUP, LLC
   100 JERICHO QUADRANGLE, STE 142
   JERICHO, NY 11753
2. OWNER:
   WARD MANOR, LLC
   82 POTTER SCHOOL ROAD
   WILLINGTON, CT 06279
3. PARCEL:
   MAP 65, LOT 59
   118 HAZARD AVENUE
   TOWN OF ENFIELD
   HARTFORD COUNTY, CT

ZONING ANALYSIS TABLE

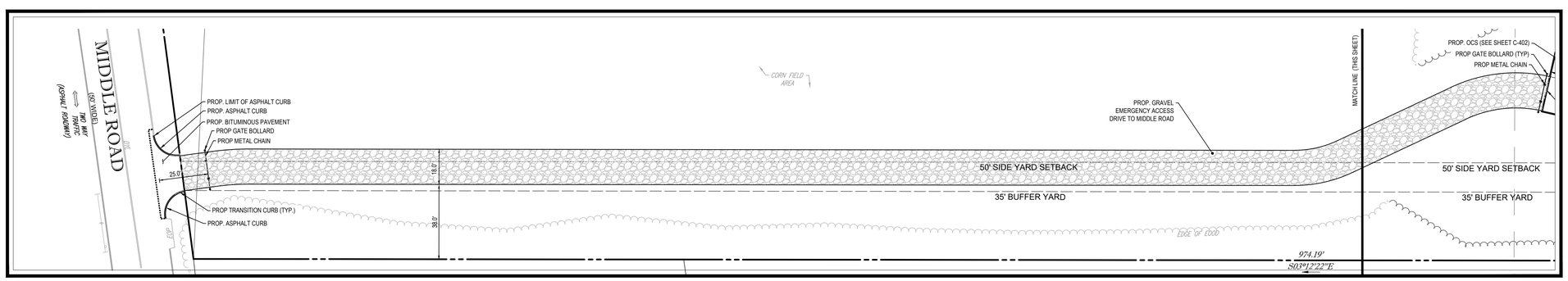
ZONING DISTRICT: B-P BUSINESS PROFESSIONAL	PERMITTED USES: ASSISTED LIVING FACILITY		
ZONE CRITERIA	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT AREA	10 ACRES	19.435 Ac.	NO CHANGE
MINIMUM LOT WIDTH	N/A	N/A	N/A
MAX. BUILDING COVERAGE	25%	N/A	4%
MIN. FRONT SETBACK	60'	N/A	60.3'
MIN. SIDE SETBACK	50'	N/A	50.2'
MIN. REAR SETBACK	50'	N/A	823.6'
MAX. BUILDING HEIGHT	35'	N/A	2 STORIES (24')
MAX. IMPERVIOUS COVERAGE	60%	0%	100,443 SF / 846,574 SF = 11.86%
PARKING SPACES	TBD	0	69
ACCESSIBLE PARKING SPACES	9	0	9
PARKING CRITERIA	- ONE (1) SPACE FOR EVERY TWO (2) DWELLING UNITS. ONE (1) SPACE FOR EVERY TWO(2) EMPLOYEES. ONE (1) PARKING SPOT FOR SHUTTLE OR FACILITY VEHICLE.		
ACCESSIBLE PARKING CRITERIA (STANDARD SPACE- 8'x18' W/ 5' ACCESS AISLE) (VAN ACCESSIBLE SPACE-8'x18' W/ 8' ACCESS AISLE)	TOTAL PARKING 51 TO 75 = 3 ACCESSIBLE SPACES + 1 ACCESSIBLE SPACE FOR EACH ACCESSIBLE UNIT (6 UNITS) VAN ACCESSIBLE SPACES= 1 / 6 SPACES		

(N/A): NOT APLLICABLE

SIGN SUMMARY TABLE

TYPE	ALLOWED	EXISTING	PROPOSED
SITE SIGNAGE			
FREESTANDING I.D. SIGN	ONE (1) @ 50 SF MAX @ 20' HIGH	-	ONE (1) DOUBLE SIDED @ 19 SF 6' HIGH
BUILDING SIGNAGE			
FRONT WALL SIGN	ONE PER FRONTAGE MAX 32 SF	-	-
NON DRIVE THRU WALL SIGN		-	-
DRIVE THRU WALL SIGN		-	-
REAR WALL SIGN		-	-
TOTAL BUILDING SIGNAGE	82 SF	-	1 @ 38 SF

NOTE: ALL SIGNS AREAS ARE "BOXED" FOR CALCULATIONS



REFER TO GENERAL NOTES SHEET FOR NOTES

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DATE:	12/06/19
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PROJECT:

PROPOSED SITE PLAN DOCUMENTS

FOR

KAPLAN DEVELOPMENT GROUP, LLC

PROPOSED DEVELOPMENT

118 HAZARD AVENUE
HARTFORD COUNTY
TOWN OF ENFIELD, CT
MAP & LOT: 65 - 59

BOHLER
16 OLD FORGE ROAD, SUITE A
ROCKY HILL, CT 06067
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CONNECTICUT LICENSE NO. 30414

SHEET TITLE:

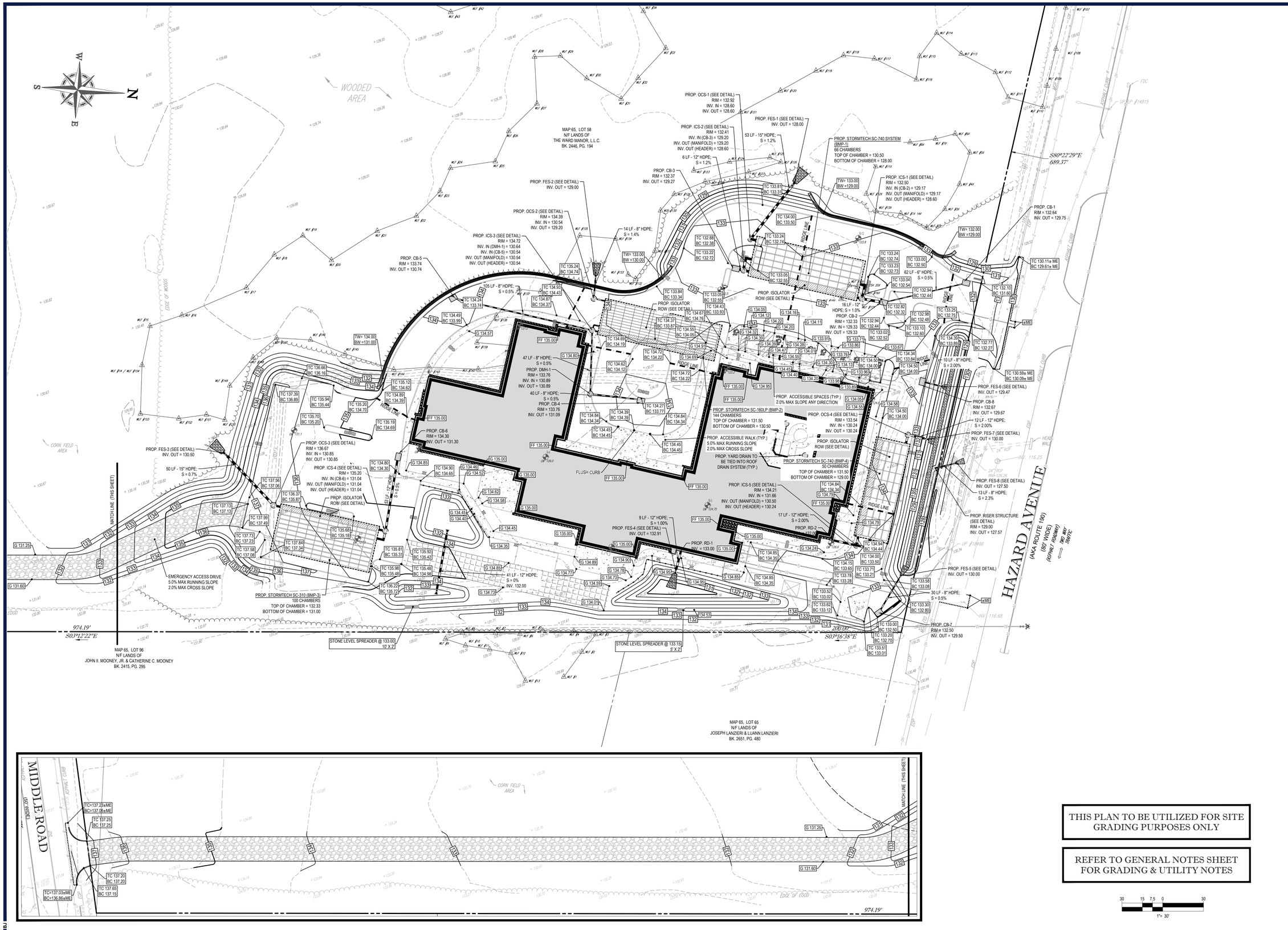
SITE LAYOUT PLAN

SHEET NUMBER:

C-301

REVISION 4 - 7/8/20

P:\BOCT191016\DRAWINGS\PLAN SETS\REV3 - WETLAND FLAG REVISIONS\CT191016SS3----LAYOUT C-301 SITE



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PROPOSED DEVELOPMENT

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CONNECTICUT LICENSE No. 30414

SHEET TITLE:

GRADING & DRAINAGE PLAN

SHEET NUMBER:

C-401

REVISION 4 - 7/8/20

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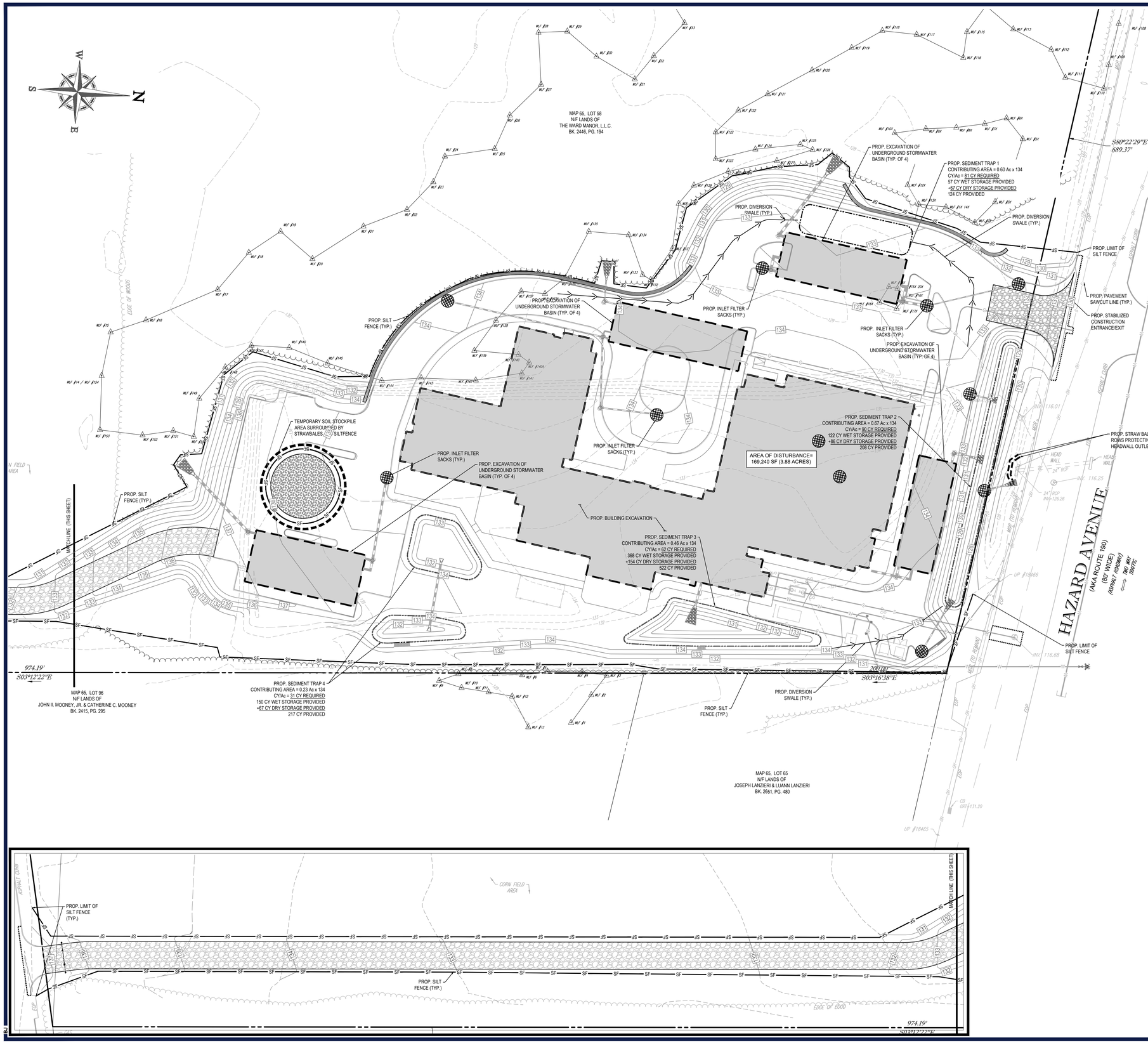

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SHEET TITLE:

SOIL EROSION & SEDIMENT CONTROL PLAN

SHEET NUMBER:

C-402

REVISION 4 - 7/8/20

P:\19\CT191016\DRAWINGS\PLAN SETS\REV3 - WETLAND FLAG REVISION\SCT191016SS3----LAYOUT: C-402 EROS

EROSION & SEDIMENT CONTROL NOTES

1. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DONE AS SET FORTH IN THE MOST CURRENT STATE SEDIMENT AND EROSION CONTROL MANUAL.

2. THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE LEFT IN AN UNTREATED OR UNVEGETATED CONDITION FOR A MINIMUM TIME. AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING AND TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF THE SOIL. IF THE DISTURBANCE IS WITHIN 100 FEET OF A STREAM OR POND, THE AREA SHALL BE STABILIZED WITHIN 7 DAYS OR PRIOR TO ANY STORM EVENT (THIS WOULD INCLUDE WETLANDS).

3. SEDIMENT BARRIERS (SILT FENCE, STRAW BARRIERS, ETC.) SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15% AFTER OCTOBER 1ST THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.

4. INSTALL SILTATION BARRIER AT TOE OF SLOPE TO FILTER SILT FROM RUNOFF. SEE SILTATION BARRIER DETAILS FOR PROPER INSTALLATION. SILTATION BARRIER WILL REMAIN IN PLACE PER NOTE #5.

5. ALL EROSION CONTROL STRUCTURES WILL BE INSPECTED, REPLACED AND/OR REPAIRED EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT OR WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSITION. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE STABILIZED BY TURF.

6. NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN TWO TO ONE (2:1).

7. IF FINAL SEEDING OF THE DISTURBED AREAS IS NOT COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST, USE TEMPORARY MULCH (DORMANT SEEDING MAY BE ATTEMPTED AS WELL) TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.

8. TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINAL GRADED SHALL BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST TO PROTECT FROM SPRING RUNOFF PROBLEMS.

9. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND REGRADED ONTO OPEN AREAS.

10. REVEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION EXCEPT AS NOTED ABOVE. ALL DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE GRADED, SMOOTHED, AND PREPARED FOR FINAL SEEDING AS FOLLOWS:

    10.1. SIX INCHES OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE.

    10.2. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 800 LB PER ACRE OR 18.4 LB PER 1,000 SF USING 10-20-20 OR EQUIVALENT. APPLY GROUND LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB PER1,000 SF).

    10.3. FOLLOWING SEED BED PREPARATION, DITCHES AND BACK SLOPES WILL BE SEEDED TO A MIXTURE OF 47% CREEPING RED FESCUE, 5% REDTOP, AND 48% TALL FESCUE. THE LAWN AREAS WILL BE SEEDED TO A PREMIUM TURF MIXTURE OF 44% KENTUCKY BLUE-GRASS, 44% CREEPING RED FESCUE, AND 12% PERENNIAL RYEGRASS. SEEDING RATE IS 1.03 LBS PER 1,000 SF LAWN QUALITY SOD MAY BE SUBSTITUTED FOR SEED.

    10.4. STRAW MULCH AT THE RATE OF 70-90 LBS PER 1,000 SF. A HYDRO-APPLICATION OF WOOD OR PAPER FIBER SHALL BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL OR RMB PLUS WILL BE USED ON STRAW MULCH FOR WIND CONTROL.

11. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE IS STABILIZED.

12. WETLANDS WILL BE PROTECTED W/STRAW BALES AND/OR SILT FENCE INSTALLED AT THE EDGE OF THE WETLAND OR THE BOUNDARY OF WETLAND DISTURBANCE.

13. ALL AREAS WITHIN 100 FEET OF A FLAGGED WETLAND OR STREAM SHALL HAVE AN EXPOSURE WINDOW OF NOT MORE THAN 7 DAYS.

14. ALL AREAS WITHIN 100 FEET OF A FLAGGED WETLAND OR STREAM SHALL FOLLOW APPROPRIATE EROSION CONTROL MEASURES PRIOR TO EACH STORM IF NOT BEING ACTIVELY WORKED,

MULCH

LOCATION	MULCH	RATE (1000 SF)
PROTECT AREA	STRAW	100 POUNDS
WINDY AREA	SHREDDED OR CHOPPED CORNSTALKS STRAW (ANCHORED)*	185-275 POUNDS 100 POUNDS
MODERATE TO HIGH VELOCITY AREAS OR STEEP SLOPES GREATER THAN 3:1	JUTE MESH OR EXCELSIOR MAT	AS REQUIRED
GREATER THAN 3:1	(REFER TO GEOTECHNICAL REPORT FOR FINAL DESIGN REQUIREMENT)	

* A HYDRO-APPLICATION OF WOOD, OR PAPER FIBER MAY BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL OR RMB PLUS SHALL BE USED ON STRAW MULCH FOR WIND CONTROL.

MULCH ANCHORING
ANCHOR MULCH WITH PEG AND TWINE (1 SQ. YD/BLOCK); MULCH NETTING (AS PER MANUFACTURER); WOOD CELLULOSE FIBER (750 LBS/ACRE); CHEMICAL TACK (AS PER MANUFACTURER'S SPECIFICATIONS); USE OF A SERRATED STRAIGHT DISK. WETTING FOR SMALL AREAS AND ROAD DITCHES MAY BE PERMITTED.

EROSION CONTROL NOTES DURING WINTER CONSTRUCTION

1. WINTER CONSTRUCTION PERIOD: NOVEMBER 1 THROUGH APRIL 15.

2. WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.

3. EXPOSED AREA SHOULD BE LIMITED TO THAT WHICH CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT.

4. CONTINUATION OF EARTHWORK OPERATION ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED SUCH THAT NO LARGER AREA OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION AS LISTED IN ITEM 2 ABOVE.

5. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR straw AT A RATE OF 100 LB. PER 1,000 SQUARE FEET (WITH OR WITHOUT SEEDING) OR DORMANT SEEDED, MULCHED AND ADEQUATELY ANCHORED BY AN APPROVED ANCHORING TECHNIQUE.

6. BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1ST, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED AND IS SMOOTH, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 200 - 300% HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, ALL EXPOSED AREAS SHALL BE CONTINUOUSLY GRADED BEFORE FREEZING AND THE SURFACE TEMPORARILY PROTECTED FROM EROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT UNEXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF straw OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS.

7. MULCHING REQUIREMENTS:

    7.1. BETWEEN THE DATES OF NOVEMBER 1ST AND APRIL 15TH ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING OR WOOD CELLULOSE FIBER.

    7.2. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPE EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%.

    7.3. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15% AFTER OCTOBER 1ST THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.

8. AFTER NOVEMBER 1ST THE CONTRACTOR SHALL APPLY DORMANT SEEDING OR MULCH AND ANCHORING ON ALL BARE EARTH AT THE END OF EACH WORKING DAY.

9. DURING THE WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT.

10. STOCKPILING OF MATERIALS (DIRT, WOOD, CONSTRUCTION MATERIALS, ETC.) MUST REMAIN COVERED AT ALL TIMES TO MINIMIZE ANY DUST PROBLEMS THAT MAY OCCUR WITH ADJACENT PROPERTIES AND TO PROVIDE MAXIMUM PROTECTION AGAINST EROSION RUNOFF.

11. EXISTING CATCH BASIN STRUCTURES SHALL BE PROTECTED UNTIL SUCH TIME AS THEY ARE REMOVED.

CONSTRUCTION SEQUENCE

THE FOLLOWING CONSTRUCTION SEQUENCE IS RECOMMENDED:

-INSTALLATION OF STABILIZED CONSTRUCTION ENTRANCE/EXIT (AS SHOWN)

-INSTALLATION OF EROSION CONTROL BARRIER (STRAW BALES AND SILT FENCE) (AS SHOWN)

-INSTALLATION OF INLET PROTECTION IN STREET (AS SHOWN)

-DEMOLITION OF EXISTING SITE STRUCTURES (SEE DEMOLITION PLAN)

-DEMOLITION OF EXISTING SITE PAVEMENT AND AMENITIES (SEE DEMOLITION PLAN)

-CLEARING AND GRUBBING

-INSTALLATION OF TEMPORARY SWALES AND SEDIMENT BASINS

-EARTHWORK AND EXCAVATION/FILLING AS NECESSARY

-CONSTRUCTION OF UTILITIES

-STABILIZE PERMANENT LAWN AREAS AND SLOPES WITH TEMPORARY SEEDING

-INSTALLATION OF INLET PROTECTION OF ON-SITE UTILITIES (AS SHOWN)

-CONSTRUCTION OF BUILDINGS

-CONSTRUCTION OF ALL CURBING AND LANDSCAPE ISLANDS AS INDICATED ON THE PLANS

-SPREAD TOPSOIL ON SLOPED AREAS AND SEED AND MULCH

-FINAL GRADING OF ALL SLOPED AREAS

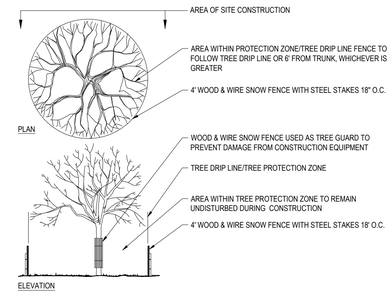
-PLACE 6" TOPSOIL ON SLOPES AFTER FINAL GRADING COMPLETED. FERTILIZE, SEED, AND MULCH SEED MIXTURE TO BE INSTALLED AS REQUIRED.

-REMOVAL OF THE TEMPORARY SEDIMENT BASINS

-PAVE PARKING LOT

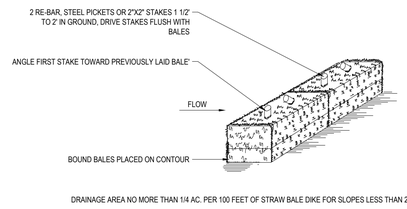
-LANDSCAPING PER LANDSCAPING PLAN

-REMOVE EROSION CONTROLS AS DISTURBED AREAS BECOME STABILIZED TO 70% STABILIZATION OR GREATER.



TREE PROTECTION DURING CONSTRUCTION

N.T.S.



DRAINAGE AREA NO MORE THAN 1/4 AC. PER 100 FEET OF STRAW BALE DIKE FOR SLOPES LESS THAN 25%

NOTES:
1. BALES SHALL BE PLACED AT THE TOP OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.

2. EACH BALE SHALL BE PLACED SO THE BINDINGS ARE HORIZONTAL.

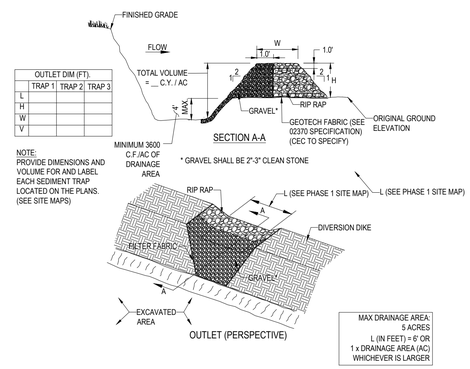
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.

4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE PROMPTLY AS NEEDED.

5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

STRAW BALE DETAIL

N.T.S.



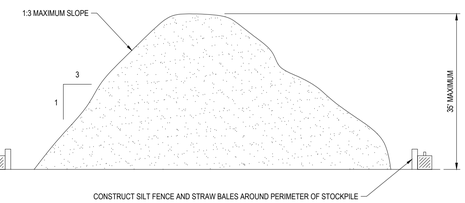
OUTLET DIM (FT).			
	TRAP 1	TRAP 2	TRAP 3
L			
H			
W			
V			

NOTE:
PROVIDE DIMENSIONS AND VOLUME FOR AND LABEL EACH SEDIMENT TRAP LOCATED ON THE PLANS. (SEE SITE MAPS)

CEC TO PROVIDE, IN THE 02370 SPECIFICATION, DRAINAGE AREAS AND VOLUME CALCULATIONS FOR ALL SEDIMENT TRAPS SHOWN ON THE SITE MAPS (AS STIPULATED IN THE GENERAL PERMIT, AGENCY REQUIREMENTS, OR STANDARD ENGINEERING PRACTICES) TO DEMONSTRATE ADEQUATE VOLUME TO RETAIN RUNOFF AND ALLOW SETTLEMENT OF SUSPENDED SOILS BEFORE DISCHARGING DOWNSTREAM.

TEMPORARY SEDIMENT TRAP

N.T.S.

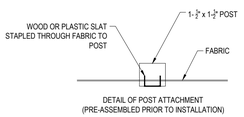


CONSTRUCT SILT FENCE AND STRAW BALES AROUND PERIMETER OF STOCKPILE

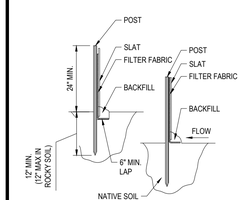
TEMPORARY STOCKPILE DETAIL

N.T.S.

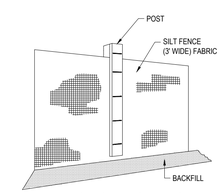
INSTALLATION:
1. EXCAVATE A 6"x 6" TRENCH ALONG THE LINE OF EROSION CONTROL OF THE SITE.
2. UNROLL SILTATION FENCE AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH (NET SIDE AWAY FROM FLOW DIRECTION).
3. DRIVE THE POST INTO THE GROUND UNTIL THE NETTING IS LAYING ACROSS THE TRENCH BOTTOM.
4. LAY THE TOE-IN FLAP OF THE FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH, BACKFILL THE TRENCH AND TAMP THE SOIL. TOE-IN CAN ALSO BE ACCOMPLISHED BY LAYING FABRIC FLAP ON UNDISTURBED GROUND AND PILING & TAMP- ING FILL AT THE BASE.



DETAIL OF POST ATTACHMENT
(PRE-ASSEMBLED PRIOR TO INSTALLATION)



TOE-IN METHODS



PERSPECTIVE OF FENCE

TYP. SILTATION FENCE DETAIL

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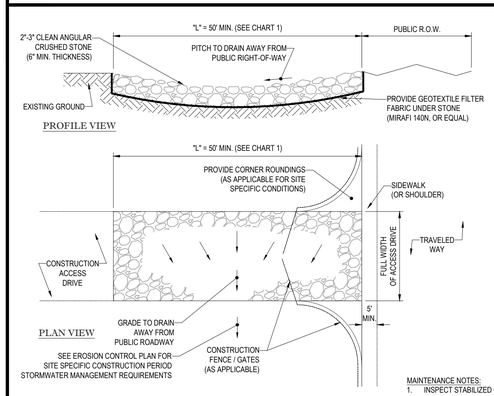


CHART 1

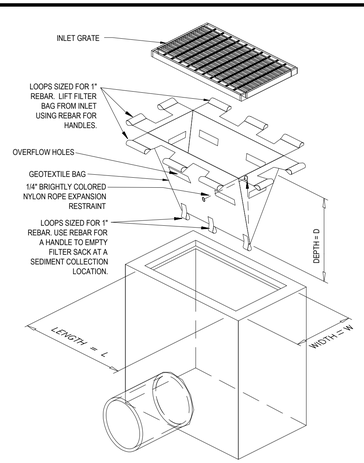
PERCENT SLOPE OF ROADWAY	LENGTH OF STONE REQUIRED	
	COARSE GRAINED SOILS	FINE GRAINED SOILS
0 TO 2%	50 FT	100 FT
2% TO 5%	100 FT	200FT
>5%	ENTIRE ENTRANCE STABILIZED WITH FABC BASE COURSE (1)	

(1) AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING AUTHORITY.

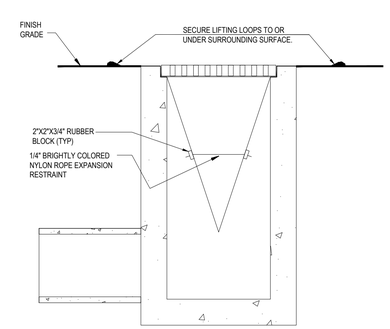
MAINTENANCE NOTES:
1. INSPECT STABILIZED CONSTRUCTION ENTRANCE / ANTI-TRACKING PAD AND SEDIMENT DISPOSAL AREA WEEKLY OR AFTER EVERY MAJOR RAIN STORM EVENT.
2. WASH WATER (IF USED) SHALL BE DIRECTED TOWARD A SEDIMENT TRAP. SUFFICIENTLY SIZED FOR SPECIFIC SITE CONDITIONS.
3. EXCESSIVELY MUD-CLOGGED STONE SHALL BE REMOVED AND REPLACED, AS NEEDED.

STABILIZED CONSTRUCTION EXIT

N.T.S.



ISOMETRIC VIEW



SECTION VIEW
PROFILE VIEW OF INSTALLED FILTER SACK

LOW TO MODERATE FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	120 LBS
MULLEN BURST	ASTM D-3786	800 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4355	80 %
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	0.55 SEC -1

MODERATE TO HIGH FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1

1. REMOVE TRAPPED SEDIMENT WHEN BRIGHTLY COLORED EXPANSION RESTRAINT CAN NO LONGER BE SEEN.
2. GEOTEXTILE SHALL BE A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS REQUIREMENTS IN THE SPECIFICATIONS TABLE.
3. PLACE AN OIL ADSORBENT PAD OR PILLOW OVER INLET GRATE WHEN OIL SPILLS ARE A CONCERN.
4. INSPECT PER REGULATORY REQUIREMENTS.
5. THE WIDTH, "W", OF THE FILTER SACK SHALL MATCH THE INSIDE WIDTH OF THE GRATED INLET BOX.
6. THE DEPTH, "D", OF THE FILTER SACK SHALL BE BETWEEN 18 INCHES AND 36 INCHES
7. THE LENGTH, "L", OF THE FILTER SACK SHALL MATCH THE INSIDE LENGTH OF THE GRATED INLET BOX.

DO NOT USE IN PAVED AREAS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

TO BE USED IN EXISTING RIGHT OF WAY

FILTER SACKS (GRATED INLETS)

N.T.S.

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	1/20/20	ART COMMENTS	MLT JGB
2	3/10/20	EMERGENCY ACCESS	MLT JGB
3	6/4/20	UPDATED WETLAND DELINEATION	BTJ JGB
4	7/8/20	PLANNING & ZONING SUBMISSION	BTJ JGB

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PROJECT No.: CT191016
DRAWN BY: MLT / DE
CHECKED BY: JGB / PM
DATE: 12/06/19
CAD I.D.: CT191016ss2

PROJECT:
PROPOSED SITE PLAN DOCUMENTS
FOR
KAPLAN DEVELOPMENT GROUP LLC

PROPOSED DEVELOPMENT
118 HAZARD AVENUE
HARTFORD COUNTY
TOWN OF ENFIELD, CT
MAP & LOT: 65 - 59

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STATE OF CONNECTICUT
JEFFREY G. BORD
30414
LICENSED PROFESSIONAL ENGINEER
PROFESSIONAL ENGINEER
CONNECTICUT LICENSE No. 30414

SHEET TITLE:
SOIL EROSION & SEDIMENT CONTROL NOTES & DETAILS

SHEET NUMBER:
C-403

REVISION 4 - 7/8/20

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CONNECTICUT LICENSE No. 30414

SHEET TITLE:

UTILITY PLAN

SHEET NUMBER:

C-501

REVISION 4 - 7/8/20

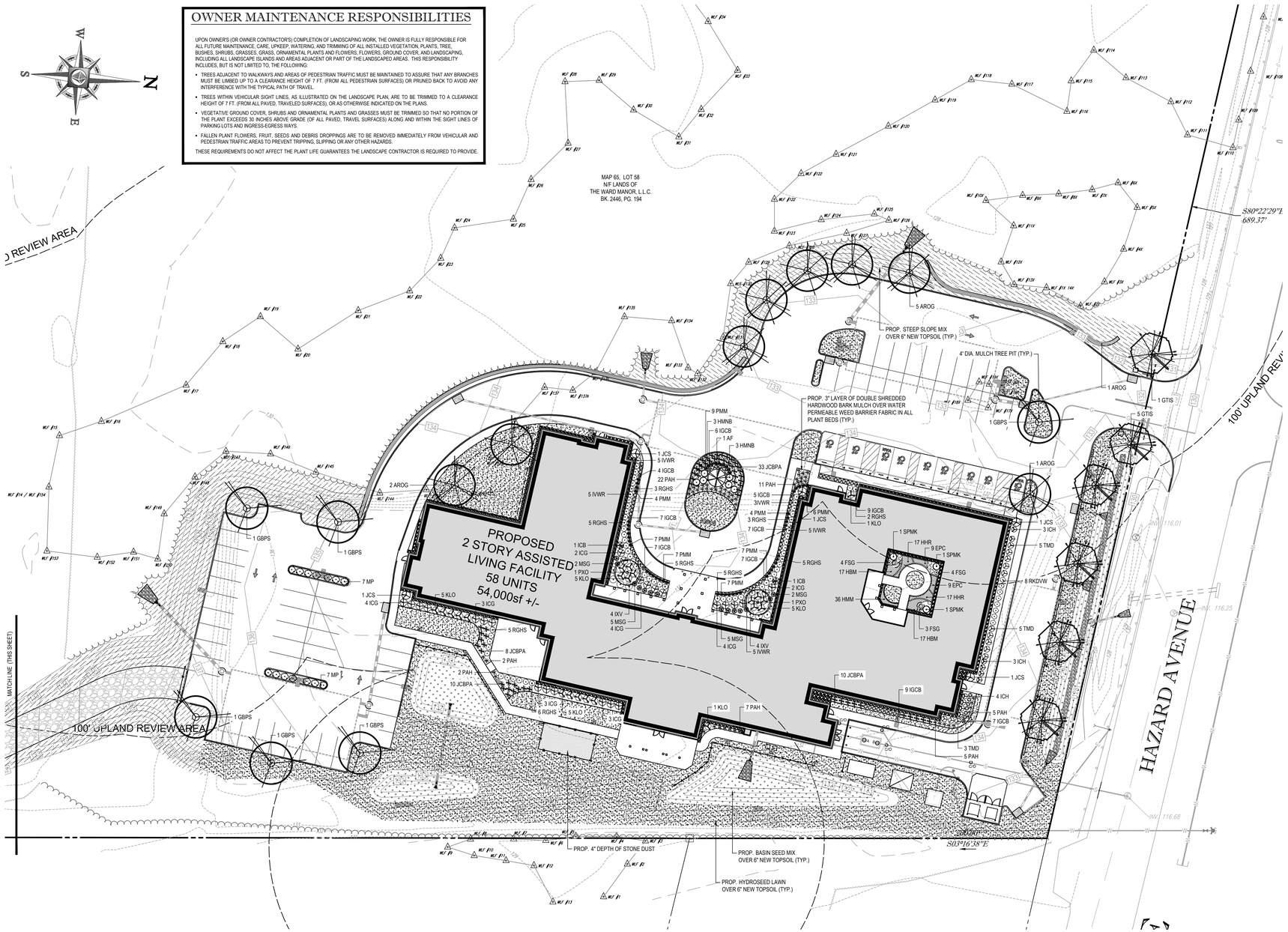
P:\19\CT191016\DRAWINGS\PLAN SETS\REV3 - WETLAND FLAG REVISIONS\CT191016SS3----LAYOUT, C-501 UTIL

OWNER MAINTENANCE RESPONSIBILITIES

UPON OWNER'S (OR OWNER CONTRACTORS') COMPLETION OF LANDSCAPING WORK, THE OWNER IS FULLY RESPONSIBLE FOR ALL FUTURE MAINTENANCE, CARE, UPKEEP, WATERING, AND TRIMMING OF ALL INSTALLED VEGETATION, PLANTS, TREE, BUSHES, SHRUBS, GRASSES, GRASS, ORNAMENTAL PLANTS AND FLOWERS, FLOWERS, GROUND COVER, AND LANDSCAPING, INCLUDING ALL LANDSCAPE ISLANDS AND AREAS ADJACENT OR PART OF THE LANDSCAPED AREAS. THIS RESPONSIBILITY INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING:

- TREES ADJACENT TO WALKWAYS AND AREAS OF PEDESTRIAN TRAFFIC MUST BE MAINTAINED TO ASSURE THAT ANY BRANCHES MUST BE LIMBED UP TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PEDESTRIAN SURFACES) OR PRUNED BACK TO AVOID ANY INTERFERENCE WITH THE TYPICAL PATH OF TRAVEL.
- TREES WITHIN VEHICULAR SIGHT LINES, AS ILLUSTRATED ON THE LANDSCAPE PLAN, ARE TO BE TRIMMED TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PAVED, TRAVELED SURFACES), OR AS OTHERWISE INDICATED ON THE PLANS.
- VEGETATIVE GROUND COVER, SHRUBS AND ORNAMENTAL PLANTS AND GRASSES MUST BE TRIMMED SO THAT NO PORTION OF THE PLANT EXCEEDS 30 INCHES ABOVE GRADE (OF ALL PAVED, TRAVEL SURFACES) ALONG AND WITHIN THE SIGHT LINES OF PARKING LOTS AND INGRESS-EGRESS WAYS.
- FALLEN PLANT FLOWERS, FRUIT, SEEDS AND DEBRIS DROPPINGS ARE TO BE REMOVED IMMEDIATELY FROM VEHICULAR AND PEDESTRIAN TRAFFIC AREAS TO PREVENT TRIPPING, SLIPPING OR ANY OTHER HAZARDS.

THESE REQUIREMENTS DO NOT AFFECT THE PLANT LIFE GUARANTEES THE LANDSCAPE CONTRACTOR IS REQUIRED TO PROVIDE.

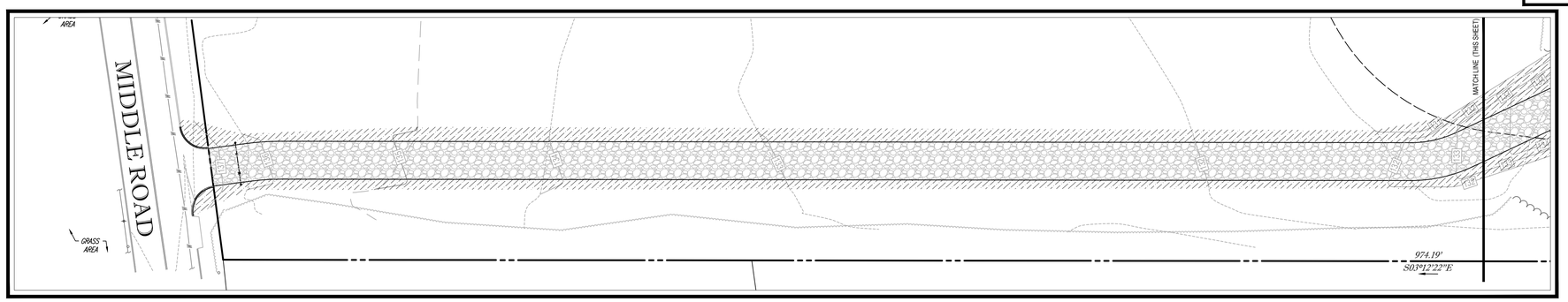


TOWN OF ENFIELD
LANDSCAPE REQUIREMENTS

SECTION	REQUIREMENTS	CALCULATIONS/PROPOSED
10.10.7 A	ii. ANY PARKING AREA DESIGNED OR INTENDED FOR USE BY MORE THAN 25 PARKING SPACES SHALL HAVE A MINIMUM LANDSCAPED SETBACK FROM THE RIGHT OF WAY OF 8 FEET	PROVIDED
	iv. LANDSCAPED AREAS SHALL BE PLANTED WITH GROUND COVER AND ONE CANOPY TREE FOR EACH 50 FEET OF FRONTAGE	HAZARD AVENUE FRONTAGE: 258 LF REQUIRED: 258 LF/ 50= 5.1, OR 6TREES PROVIDED: 6 TREES
	vi. ANY PARKING AREA WITH AT LEAST 3 PARKING SPACES SHALL HAVE A MINIMUM LANDSCAPED SETBACK OF ALL PARKING SPACES/DRIVEWAYS/AISLES/ FROM ALL SIDE AND REAR PROPERTY LINES OF 10 FEET, AS WELL AS 10 FEET OF SEPARATION FROM BUIDLINGS	WAIVER REQUESTED
10.10.7 D	i. ANY PARKING AREA DESIGNED OR INTENDED FOR USE BY AT LEAST 3 PARKING SPACES SHALL HAVE A MINIMUM OF 15 PERCENT GROSS PARKING AREA IN LANDSCAPES AREAS. LANDSCAPE AREAS SHALL OCCUR IN INTERIOR OR END ISLANDS AT 10 FEET IN WIDTH.	NUMBER OR PROPOSED PARKING SPACES: 72 REQUIRED: 72 SPACES/ 5= 14.4, OR 15 TREES PROVIDED: 15 TREES
	vi. LANDSCAPE AREAS SHALL HAVE A MINIMUM OF GROUNDCOVER AND 1 TREE PER 5 PARKING SPACES	
10.20 A	i. CANOPY TREES SHALL BE A MINIMUM OF TWO AND ONE-HALF (2 1/2) INCHES IN CALIPER. ii. EVERGREEN TREES SHALL BE A MINIMUM OF SIX (6) FEET IN HEIGHT. iii. UNDERSTORY TREES SHALL BE A MINIMUM OF ONE AND ONE-HALF (1 1/2) INCHES IN CALIPER. iv. DECIDUOUS SHRUBS SHALL BE A MINIMUM OF TWO AND ONE-HALF (1/2) FEET IN SPREAD. v. EVERGREEN SHRUBS SHALL BE A MINIMUM OF TWO AND ONE-HALF (1/2) FEET IN HEIGHT WITH A MATURE HEIGHT OF AT LEAST SIX (6) FEET	PROVIDED

LANDSCAPE SCHEDULE

KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	CONT.
SHADE TREES					
AROG	8	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	2 1/2-3" CAL.	B+B
GBPS	6	GINKGO BILOBA 'PRINCETON SENTRY'	PRINCETON SENTRY BRAND GINKGO	2 1/2-3" CAL.	B+B
GTIS	6	GLEDITSIA TRIACANTHOS VAR. INERMIS 'SHADEMASTER'	SHADEMASTER HONEYLOCUST	2 1/2-3" CAL.	B+B
SUBTOTAL:	20				
ORNAMENTAL TREES					
PXO	2	PRUNUS X 'OKAME'	OKAME CHERRY	2-2 1/2" CAL.	B+B
SUBTOTAL:	2				
EVERGREEN TREES					
AF	1	ABIES FRASERI	FRASER FIR	7-8'	B+B
SUBTOTAL:	1				
DECIDUOUS SHRUBS					
FSG	11	FORSYTHIA X INTERMEDIA 'GOLD TIDE'	COMPACT FORSYTHIA	18-24"	CONTAINER
HMNB	6	HYDRANGEA MACROPHYLLA 'NIKKO BLUE'	NIKKO BLUE HORTENSIA HYDRANGEA	18-24"	CONTAINER
IVWR	26	ILEX VERTICILLATA 'WINTER RED'	WINTER RED WINTERBERRY HOLLY	30-36"	CONTAINER
IXV	8	ILEX X VERTICILLATA 'HARVEST RED'	HARVEST RED WINTERBERRY	30-36"	CONTAINER
MP	14	MYRICA PENSYLVANICA	NORTHERN BAYBERRY	30-36"	B+B
SPMK	3	SYRINGA PATTULA 'MISS KIM'	MISS KIM LILAC	24-30"	B+B
SUBTOTAL:	68				
EVERGREEN SHRUBS					
ICB	2	ILEX X MESERVEAE 'CHINA BOY'	CHINA BOY HOLLY	30-36"	CONTAINER
ICG	25	ILEX X MESERVEAE 'CHINA GIRL'	CHINA GIRL HOLLY	30-36"	B+B
ICH	10	ILEX CRENATA 'HELLERI'	HELLERI JAPANESE HOLLY	30-36"	B+B
IGCB	68	ILEX GLABRA 'GEM BOX'	DWARF INKBERRY HOLLY	18-24"	CONTAINER
JCS	5	JUNIPERUS CHINENSIS 'SPARTAN'	SPARTAN JUNIPER	3-4'	B+B
KLO	22	KALMIA LATIFOLIA 'OLYMPIC FIRE'	OLYMPIC FIRE MOUNTAIN LAUREL	30-36"	B+B
PMM	50	PINUS MUGO MUGUS	DWARF MUGO PINE	30-36"	CONTAINER
RGHS	39	RHODODENDRON X GIRARD 'GIRARD HOT SHOT'	GIRARD HOT SHOT AZALEA	30-36"	CONTAINER
RKDVW	8	RHODODENDRON X KURUME 'DELAWARE VALLEY WHITE'	'DELAWARE VALLEY WHITE' AZALEA	30-36"	CONTAINER
TMD	13	TAXUS X MEDIA 'DENSIFORMIS'	DENSIFORMIS YEW	30-36"	B+B
SUBTOTAL:	242				
GROUND COVERS					
JCBPA	61	JUNIPERUS CONFERTA 'BLUE PACIFIC'	BLUE PACIFIC SHORE JUNIPER	15-18" SPRD.	CONTAINER
SUBTOTAL:	61				
PERENNIALS					
EPC	18	ECHINACEA PURPUREA 'CHEYENNE SPIRIT'	CONEFLOWER	2 GAL.	CONTAINER
HBM	34	HOSTA 'BLUEBERRY MUFFIN'	BLUEBERRY MUFFIN HOSTA	2 GAL.	CONTAINER
HHR	34	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	2 GAL.	CONTAINER
HMM	36	HOSTA 'MINUTEMAN'	MINUTEMAN HOSTA	2 GAL.	CONTAINER
SUBTOTAL:	122				
ORNAMENTAL GRASSES					
MSG	14	MISCANTHUS SINENSIS 'GRACILLIMUS'	MAIDEN GRASS	2 GAL.	CONTAINER
PAH	54	PENNISETUM ALOPECUROIDES 'HAMELN'	DWARF FOUNTAIN GRASS	2 GAL.	CONTAINER
SUBTOTAL:	68				



SEED MIX KEY

- PROPOSED HYDROSEED
- PROPOSED STEEP SLOPE MIX
- PROPOSED BASIN SEED MIX

THIS PLAN TO BE UTILIZED FOR LANDSCAPE PURPOSES ONLY

REFER LANDSCAPE NOTES & DETAILS SHEET FOR LANDSCAPE NOTES AND DETAILS

30 15 7.5 0 30
1"= 30'

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	1/20/20	ART COMMENTS	MLT / JGB
2	3/10/20	EMERGENCY ACCESS	MLT / JGB
3	6/4/20	UPDATED WETLAND DELINEATION	BTJ / JGB
4	7/8/20	PLANNING & ZONING SUBMISSION	BTJ / JGB

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PROJECT No.:	CT191016
DRAWN BY:	MLT / DE
CHECKED BY:	JGB / PM
DATE:	12/06/19
CAD I.D.:	CT191016ss2

PROJECT:

PROPOSED SITE PLAN DOCUMENTS

FOR

KAPLAN DEVELOPMENT GROUP, LLC

PROPOSED DEVELOPMENT

118 HAZARD AVENUE
HARTFORD COUNTY
TOWN OF ENFIELD, CT
MAP & LOT: 65 - 59

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CONNECTICUT No. 1359

SHEET TITLE:

LANDSCAPE PLAN

SHEET NUMBER:

C-601

REVISION 4 - 7/8/20

P:\19\CT191016\DRAWINGS\PLAN SETS\REV3 - WETLAND FLAG REVISIONS\X-LANDSCAPE ----\LAYOUT: L-1 LAND

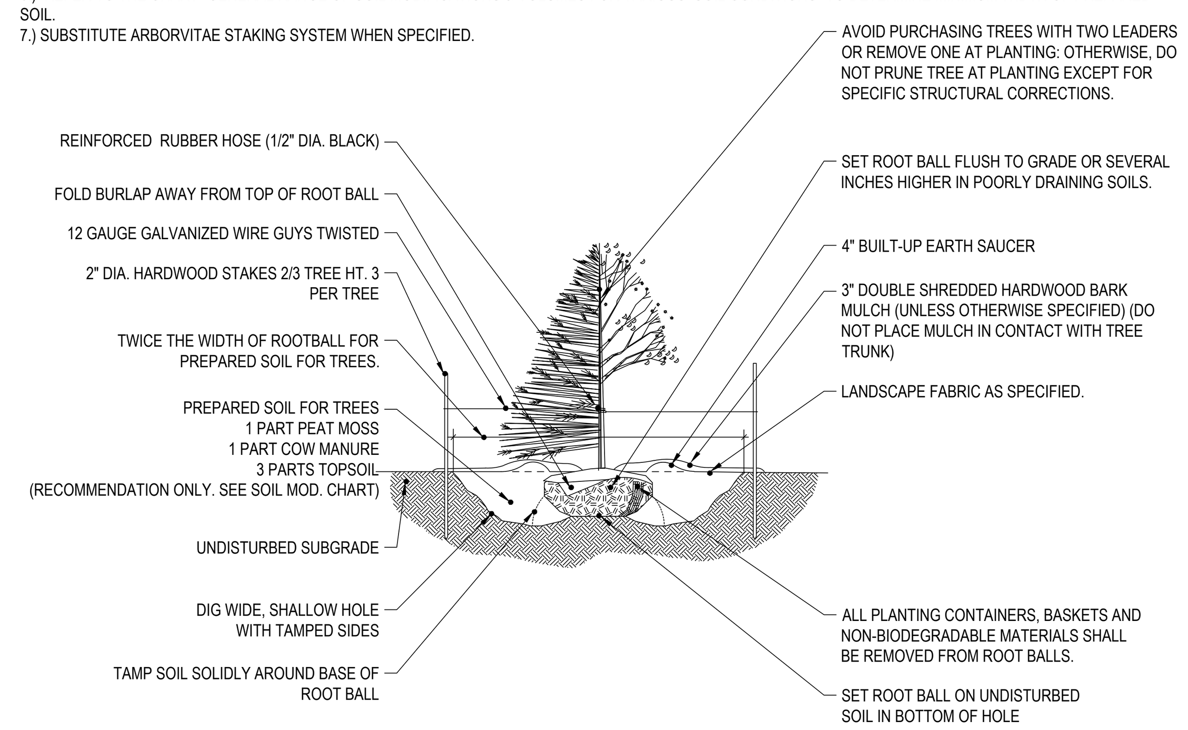
LANDSCAPE SPECIFICATIONS

1. SCOPE OF WORK:
   - 1.1. THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.
2. MATERIALS
   - 2.1. GENERAL - ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS.
   - 2.2. TOPSOIL - NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 4.5-7.0. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.
   - 2.3. LAWN - ALL DISTURBED AREAS ARE TO BE TREATED WITH A MINIMUM 6" THICK LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, AND SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED ON THE LANDSCAPE PLAN
     - 2.3.1. LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED.
     - 2.3.2. SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM THICKNESS. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.
   - 2.4. MULCH - ALL PLANTING BEDS SHALL BE MULCHED WITH A 3" THICK LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN AND/OR LANDSCAPE PLAN NOTES /DETAILS.
   - 2.5. FERTILIZER
     - 2.5.1. FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE.
     - 2.5.2. FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT. A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.
   - 2.6. PLANT MATERIAL
     - 2.6.1. ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION, AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION (FORMERLY THE AMERICAN ASSOCIATION OF NURSERYMEN).
     - 2.6.2. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL.
     - 2.6.3. PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.
     - 2.6.4. TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1¼", WHICH HAVE NOT BEEN COMPLETELY CALLUSED, SHALL BE REJECTED. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.
     - 2.6.5. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH: WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE.
     - 2.6.6. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE.
     - 2.6.7. SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.
     - 2.6.8. TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.
3. GENERAL WORK PROCEDURES
   - 3.1. CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF.
   - 3.2. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.
4. SITE PREPARATIONS
   - 4.1. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.
   - 4.2. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE BRANCH COLLAR. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.
   - 4.3. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.
5. TREE PROTECTION
   - 5.1. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.
   - 5.2. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY 'VISI-FENCE', OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.
   - 5.3. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.
   - 5.4. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.
6. SOIL MODIFICATIONS
   - 6.1. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY.
   - 6.2. LANDSCAPE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE LANDSCAPE CONTRACTOR DEPENDING ON SITE CONDITIONS.
   - 6.3. THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY.
     - 6.3.1. TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6-12". USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5.
     - 6.3.2. TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE.
     - 6.3.3. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.
7. FINISHED GRADING
   - 7.1. UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.
   - 7.2. LANDSCAPE CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1"±).
   - 7.3. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.
   - 7.4. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.
8. TOPSOILING
   - 8.1. CONTRACTOR SHALL PROVIDE A 6" THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS.
   - 8.2. ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.
   - 8.3. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.
   - 8.4. ALL LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA - FOR BID PURPOSES ONLY [SEE SPECIFICATION 6.A.]):
     - 8.4.1. 20 POUNDS 'GRO-POWER' OR APPROVED SOIL CONDITIONER/FERTILIZER
     - 8.4.2. 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHIP OR APPROVED NITROGEN FERTILIZER
   - 8.5. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.
9. PLANTING
   - 9.1. INSOFAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, LANDSCAPE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.
   - 9.2. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.
   - 9.3. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.
   - 9.4. ALL PLANTING CONTAINERS, BASKETS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.
   - 9.5. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.
   - 9.6. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:
     - 9.6.1. PLANTS: MARCH 15 TO DECEMBER 15
     - 9.6.2. LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1
     - 9.6.3. PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.
   - 9.7. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON:

ACER RUBRUM	PLATANUS X ACERIFOLIA
BETULA VARIETIES	POPULUS VARIETIES
CARPINUS VARIETIES	PRUNUS VARIETIES
CRATAEGUS VARIETIES	PYRUS VARIETIES
KOELREUTERIA	QUERCUS VARIETIES
LIQUIDAMBAR STYRACIFLUA	TILIA TOMENTOSA
LIRIODENDRON TULIPIFERA	ZELKOVA VARIETIES

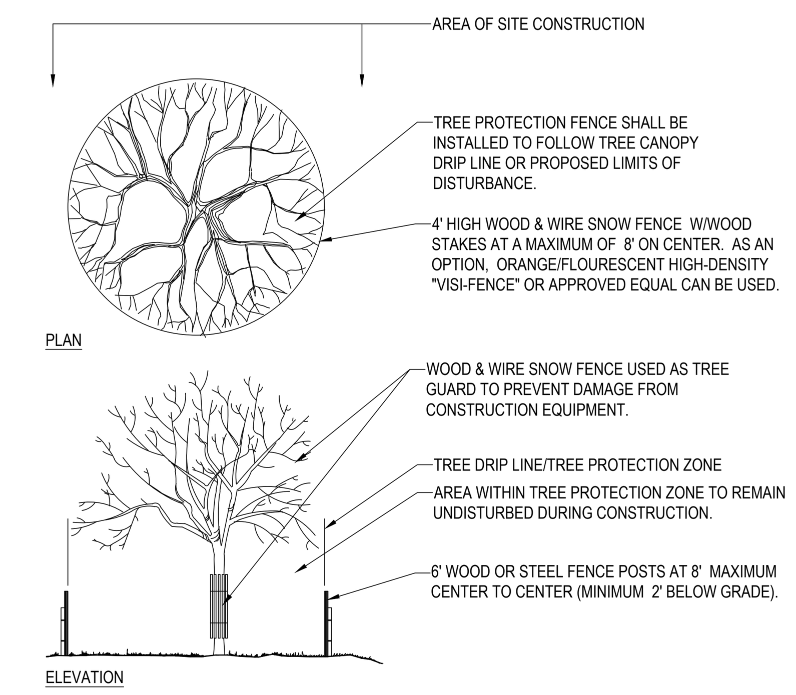
   - 9.8. PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:
     - 9.8.1. 1 PART PEAT MOSS
     - 9.8.2. 1 PART COMPOSTED COW MANURE BY VOLUME
     - 9.8.3. 3 PARTS TOPSOIL BY VOLUME
     - 9.8.4. 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:
       - 9.8.4.1. 2 TABLETS PER 1 GALLON PLANT
       - 9.8.4.2. 3 TABLETS PER 5 GALLON PLANT
       - 9.8.4.3. 4 TABLETS PER 15 GALLON PLANT
       - 9.8.4.4. LARGER PLANTS: 2 TABLETS PER ½" CALIPER OF TRUNK
   - 9.9. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.
   - 9.10. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.
   - 9.11. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE.
   - 9.12. GROUND COVER AREAS SHALL RECEIVE A ¼" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.
   - 9.13. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.
   - 9.14. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.
   - 9.15. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.
10. TRANSPLANTING (WHEN REQUIRED)
   - 10.1. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.
   - 10.2. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.
   - 10.3. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.
   - 10.4. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.
   - 10.5. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.
   - 10.6. F TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.
11. WATERING
   - 11.1. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.
   - 11.2. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES.
   - 11.3. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.
12. GUARANTEE
   - 12.1. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF 1 YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.
   - 12.2. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION.
   - 12.3. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS SPECIFIED HEREIN. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.
   - 12.4. LAWNS SHALL BE MAINTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.
13. CLEANUP
   - 13.1. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.
   - 13.2. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.
14. MAINTENANCE (ALTERNATIVE BID):
   - 14.1. A 90 DAY MAINTENANCE PERIOD SHALL COMMENCE AT THE END OF ALL LANDSCAPE INSTALLATION OPERATIONS. THE 90 DAY MAINTENANCE PERIOD ENSURES TO THE OWNER/OPERATOR THAT THE NEWLY INSTALLED LANDSCAPING HAS BEEN MAINTAINED AS SPECIFIED ON THE APPROVED LANDSCAPE PLAN. ONCE THE INITIAL 90 DAY MAINTENANCE PERIOD HAS EXPIRED, THE OWNER/OPERATOR MAY REQUEST THAT BIDDERS SUBMIT AN ALTERNATE MAINTENANCE BID FOR A MONTHLY MAINTENANCE CONTRACT. THE ALTERNATE MAINTENANCE CONTRACT WILL ENCOMPASS ANY WORK THAT IS CONSIDERED APPROPRIATE TO ENSURE THAT PLANT AND LAWN AREAS ARE HEALTHY AND MANICURED TO THE APPROVAL OF THE OWNER/OPERATOR.

NOTES:
1.) NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2.) REMOVE ALL NON-BIODEGRADABLE MATERIAL AND ROPE FROM TRUNK & TOP OF ROOT BALL. FOLD BURLAP BACK 1/3 FROM ROOT BALL.
3.) PLANTING DEPTH SHALL BE THE SAME AS GROWN IN NURSERY.
4.) THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
5.) THE BOTTOM OF PLANTING PIT EXCAVATIONS SHOULD BE ROUGH TO AVOID MATTING OF SOIL LAYERS AS NEW SOIL IS ADDED. IT IS PREFERABLE TO TILL THE FIRST LIFT (2 TO 3 IN.) OF PLANTING SOIL INTO THE SUBSOIL.
6.) REFER TO THE CHART "GENERAL RANGE OF SOIL MODIFICATIONS & VOLUMES FOR VARIOUS SOIL CONDITIONS" TO DETERMINE MINIMUM WIDTH OF PREPARED SOIL.
7.) SUBSTITUTE ARBORVITAE STAKING SYSTEM WHEN SPECIFIED.



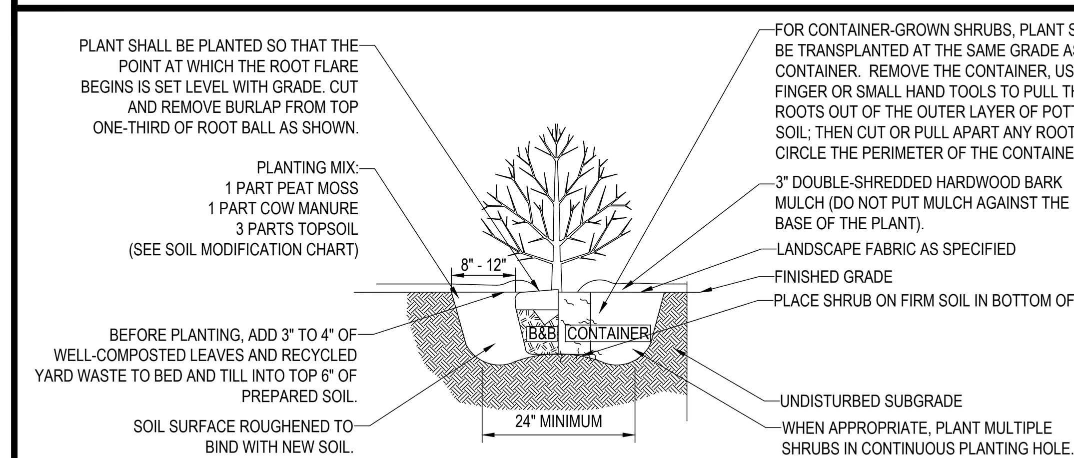
TREE PLANTING DETAIL

N.T.S.



TREE PROTECTION DURING SITE CONSTRUCTION

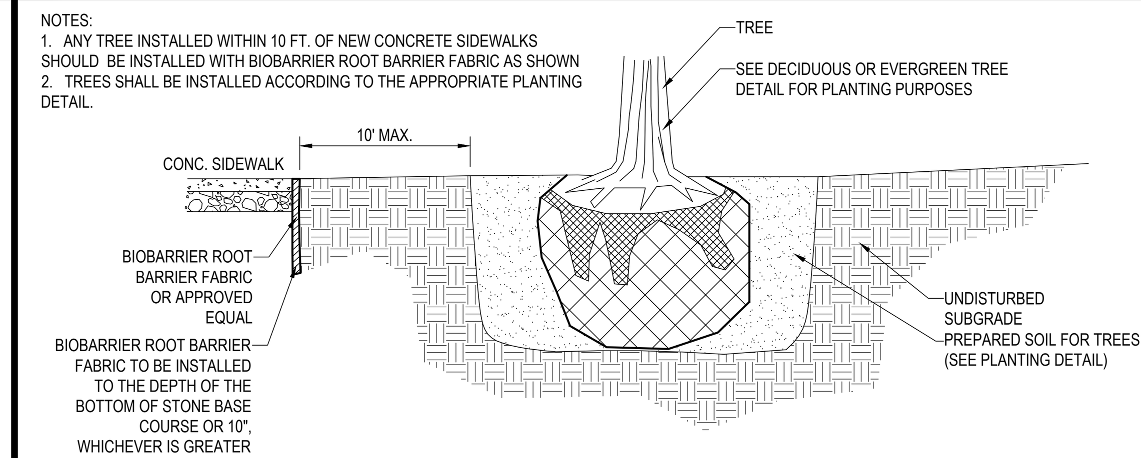
N.T.S.



SHRUB PLANTING DETAIL

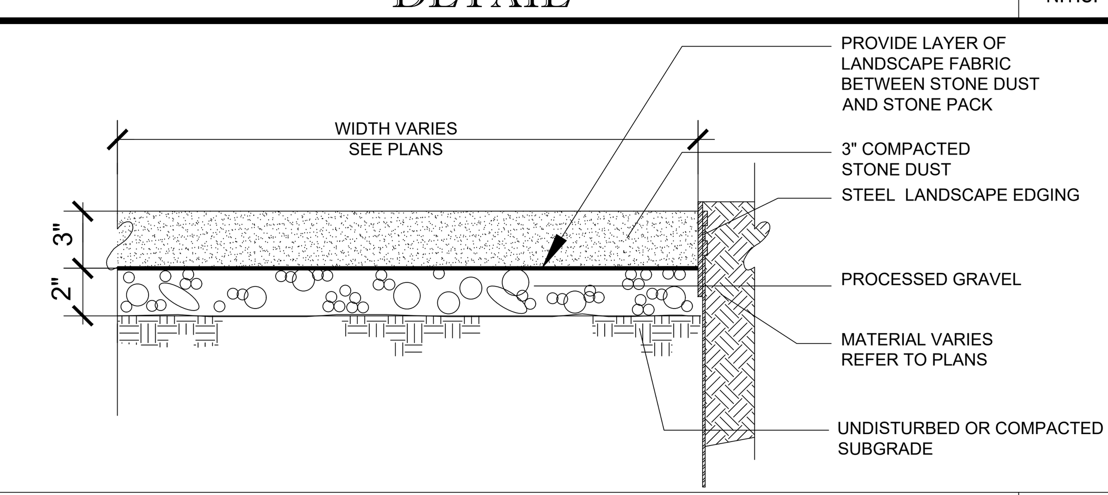
N.T.S.

NOTES:
1. ANY TREE INSTALLED WITHIN 10 FT. OF NEW CONCRETE SIDEWALKS SHOULD BE INSTALLED WITH BIOBARRIER ROOT BARRIER FABRIC AS SHOWN
2. TREES SHALL BE INSTALLED ACCORDING TO THE APPROPRIATE PLANTING DETAIL.



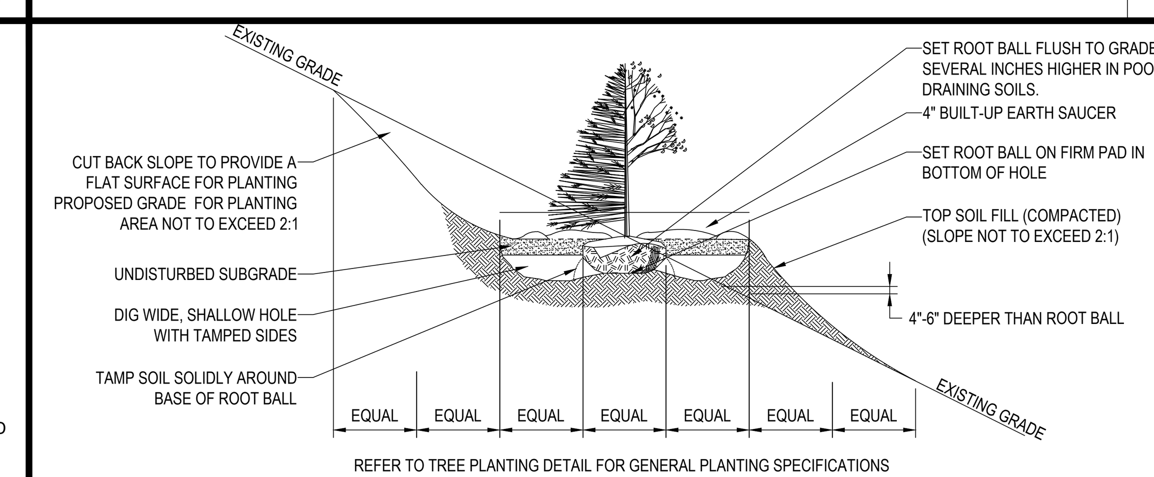
BIOBARRIER ROOT BARRIER DETAIL

N.T.S.



STONE DUST PAVING

N.T.S.



TREE PLANTING DETAIL - ON SLOPE

N.T.S.

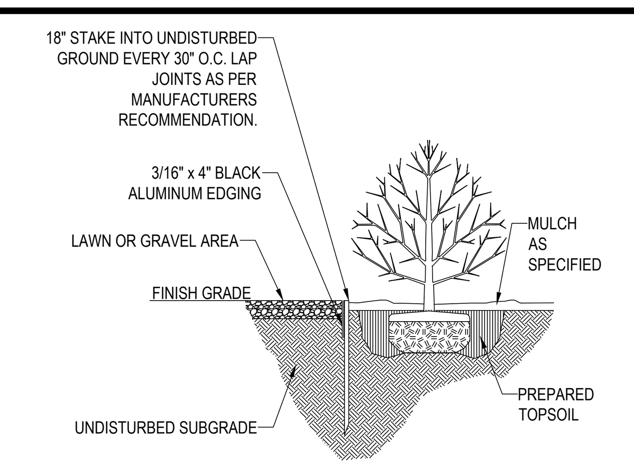
"NATIVE DETENTION AREA MIX" AS PREPARED BY:

ERNST CONSERVATION SEEDS, INC.
8884 MERCER PIKE, MEADVILLE, PA 16335
PHONE: 800-873-3321 / 814-336-2404
EMAIL: SALES@ERNSTSEED.COM
WEBSITE: WWW.ERNSTSEED.COM

APPLICATION RATE: 1/2 LB. / 1000 SQ. FT. (20 LBS. / ACRE)

MIX COMPOSITION:
25.0% PANICUM VIRGATUM, 'SHELTER' (SWITCHGRASS, 'SHELTER')
24.0% PANICUM CLANDESTINUM, 'TIOGA' (DEERTONGUE, 'TIOGA')
22.0% CAREX VULPINOIDEA, PA ECOTYPE (FOX SEDGE, PA ECOTYPE)
21.0% ELYMUS VIRGINICUS, PA ECOTYPE (VIRGINIA WILDRYE, PA ECOTYPE)
6.0% AGROSTIS PERENNANS, ALBANY PINE BUSH-NY ECOTYPE (AUTUMN BENTGRASS, ALBANY PINE BUSH-NY ECOTYPE)
1.0% JUNCUS EFFUSUS (SOFT RUSH)
1.0% PANICUM RIGIDULUM, PA ECOTYPE (REDTOP PANICGRASS, PA ECOTYPE)

BASIN SEED MIX SPECIFICATIONS



BLACK ALUMINUM EDGING

N.T.S.

1. PRIOR TO SEEDING, AREA IS TO BE TOPSOILED, FINE GRADED, AND RAKED OF ALL DEBRIS LARGER THAN 2" DIAMETER.
2. PRIOR TO SEEDING, CONSULT MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS.
3. SEEDING RATES:

• PERENNIAL RYEGRASS	1/2 LB/1000 SQ FT
• KENTUCKY BLUEGRASS	1 LB/1000 SQ FT
• RED FESCUE	1/2 LB/1000 SQ FT
• SPREADING FESCUE	1/2 LB/1000 SQ FT
• FERTILIZER (16.32.16)	2 LB/1000 SQ FT
• LIQUID LIME	1 GAL/800 GAL.
• TANK TACKIFIER	35 LB/800 GAL.
• TANK FIBER MULCH	30 LB/1000 SQ FT

4. GERMINATION RATES WILL VARY AS TO TIME OF YEAR FOR SOWING. CONTRACTOR TO IRRIGATE SEEDED AREA UNTIL AN ACCEPTABLE STAND OF COVER IS ESTABLISHED BY OWNER.

HYDROSEED SPECIFICATIONS

"QUICK EROSION CONTROL COVER MIX" AS PREPARED BY:

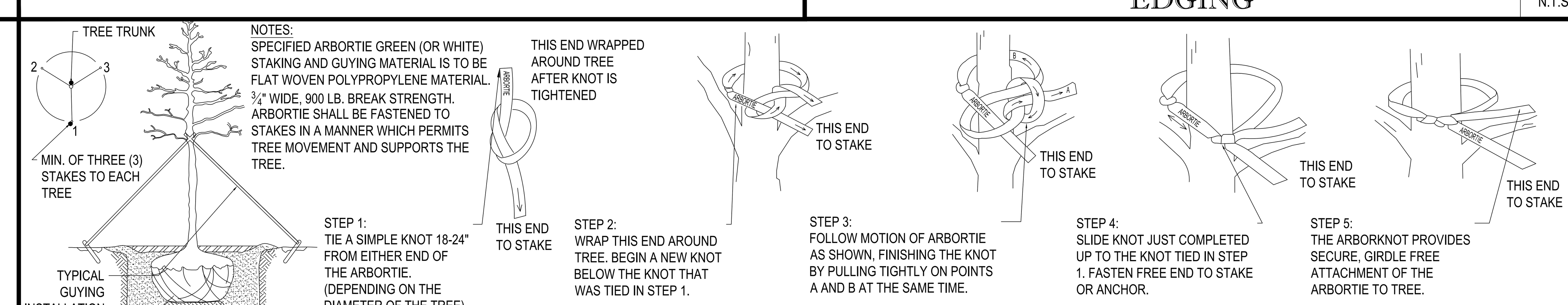
ERNST CONSERVATION SEEDS, INC.
8884 MERCER PIKE, MEADVILLE, PA 16335
PHONE: 800-873-3321 / 814-336-2404
EMAIL: SALES@ERNSTSEED.COM
WEBSITE: WWW.ERNSTSEED.COM

APPLICATION RATE: 50 LBS. / ACRE

MIX COMPOSITION:
50.0% Lolium multiflorum (Annual Ryegrass)
50.0% Lolium perenne, 'Blackcat II' (Perennial Ryegrass)

SLOPE SEED MIX SPECIFICATIONS

NOTES:
SPECIFIED ARBORTIE GREEN (OR WHITE) STAKING AND GUYING MATERIAL IS TO BE FLAT WOVEN POLYPROPYLENE MATERIAL. ¾" WIDE, 900 LB. BREAK STRENGTH. ARBORTIE SHALL BE FASTENED TO STAKES IN A MANNER WHICH PERMITS TREE MOVEMENT AND SUPPORTS THE TREE.



ARBORTIE STAKING DETAIL

N.T.S.

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SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	1/20/20	ART COMMENTS	MLT / JGB
2	3/10/20	EMERGENCY ACCESS	MLT / JGB
3	6/4/20	UPDATED WETLAND DELINEATION	BTJ / JGB
4	7/8/20	PLANNING & ZONING SUBMISSION	BTJ / JGB

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PROJECT No.:	CT191016
DRAWN BY:	MLT / DE
CHECKED BY:	JGB / PM
DATE:	12/06/19
CAD I.D.:	CT191016ss2

PROJECT:

PROPOSED SITE PLAN DOCUMENTS

FOR

KAPLAN DEVELOPMENT GROUP, LLC

PROPOSED DEVELOPMENT

118 HAZARD AVENUE
HARTFORD COUNTY
TOWN OF ENFIELD, CT
MAP & LOT: 65 - 59

BOHLER
16 OLD FORGE ROAD, SUITE A
ROCKY HILL, CT 06067
Phone: (860) 333-8900
Fax: (508) 480-9080
www.BohlerEngineering.com

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LANDSCAPE ARCHITECT
MASSACHUSETTS No. 1217
RHODE ISLAND No. 419
NEW YORK No. 002359
NEW HAMPSHIRE No. 109
CONNECTICUT No. 1359

SHEET TITLE:

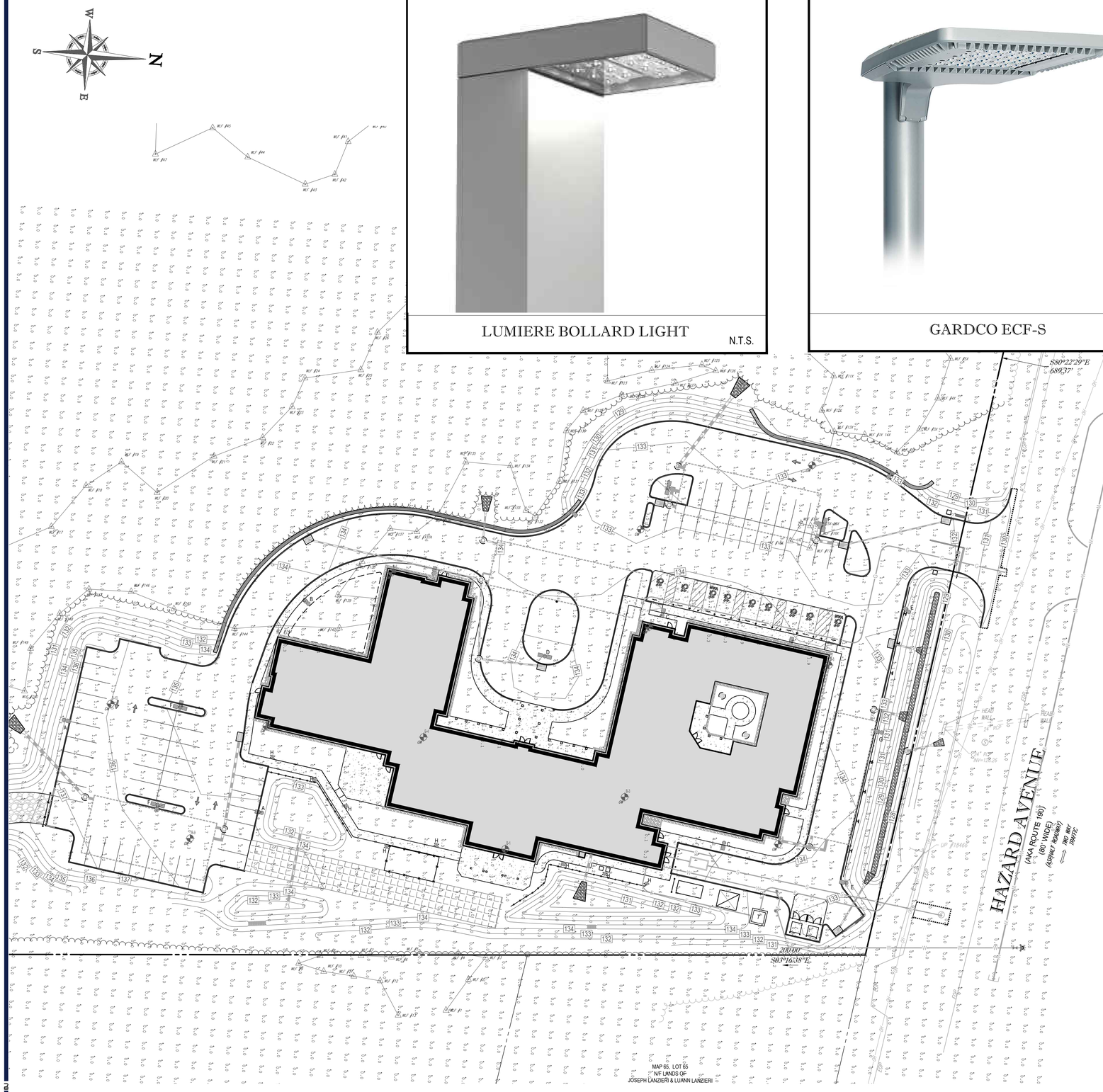
LANDSCAPE NOTES & DETAILS

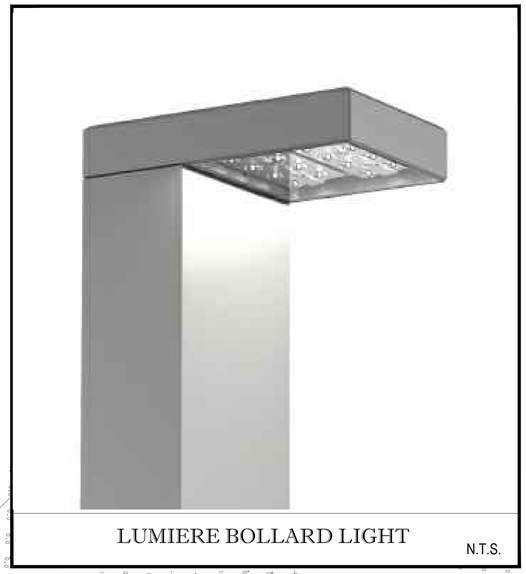
SHEET NUMBER:

C-602

REVISION 4 - 7/8/20

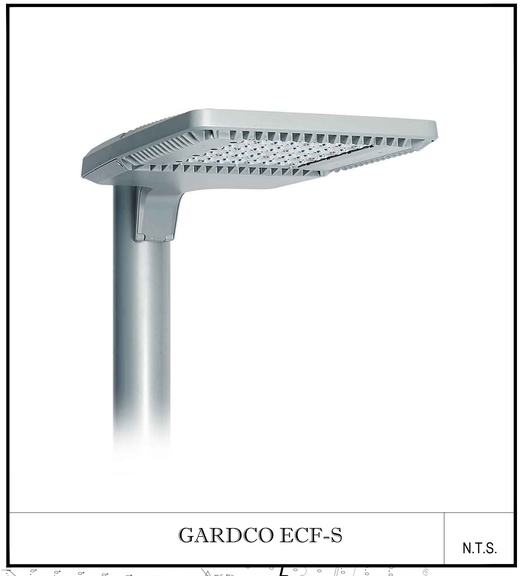
P:\19\CT191016\DRAWINGS\PLAN SETS\REV3 - WETLAND FLAG REVISIONS\X-LANDSCAPE---->LAYOUT: L-2 LNOTE





LUMIERE BOLLARD LIGHT

N.T.S.



GARDCO ECF-S

N.T.S.

LIGHTING NOTES:

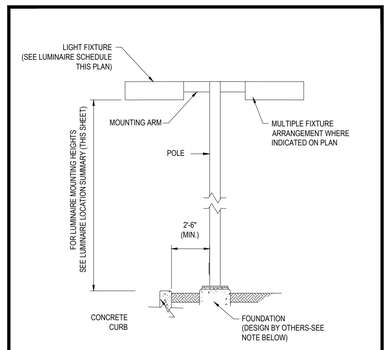
1. THIS LIGHTING PLAN DEPICTS PROPOSED SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER(S). ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES AND OTHER RELATED VARIABLE FIELD CONDITIONS.
2. THE LIGHT LOSS FACTORS USED IN THESE LIGHTING CALCULATIONS ARE 0.85 FOR ALL LED LUMINAIRES, 0.80 FOR ALL HIGH PRESSURE SODIUM LUMINAIRES OR 0.72 FOR ALL METAL HALIDE LUMINAIRES UNLESS OTHERWISE SPECIFIED. THESE FACTORS ARE INDICATIVE OF TYPICAL LIGHTING INDUSTRY MODELING STANDARDS.
3. THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ALL ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT ELEVATION ZERO (GROUND LEVEL) UNLESS OTHERWISE NOTED. THE VALUES DEPICTED ON THIS PLAN ARE IN FOOTCANDLES.
4. THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY. THIS WORK SHOULD INCLUDE, BUT NOT BE LIMITED TO, FREQUENT VISUAL INSPECTIONS, CLEANING OF LENSES, AND RELAMPING (IF NECESSARY) AT LEAST ONCE EVERY SIX (6) MONTHS. FAILURE TO FOLLOW THE ABOVE STEPS COULD CAUSE THE LUMINAIRES, LAMPS AND LENSES TO FAIL PROPERLY TO FUNCTION.
5. WHERE APPLICABLE, THE EXISTING CONDITION LIGHT LEVELS ILLUSTRATED ARE REPRESENTATIVE OF AN APPROXIMATION UTILIZING LABORATORY DATA FOR SIMILAR FIXTURES, UNLESS ACTUAL FIELD MEASUREMENTS ARE TAKEN WITH A LIGHT METER AND ARE, CONSEQUENTLY, APPROXIMATIONS ONLY. DUE TO FACTORS SUCH AS FIXTURE MAINTENANCE, EQUIPMENT TOLERANCES, WEATHER CONDITIONS, ETC, ACTUAL LIGHT LEVELS MAY DIFFER. EXISTING LIGHT LEVELS DEPICTED ON THIS PLAN SHOULD BE CONSIDERED APPROXIMATE.
6. THIS LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES, ONLY. POWER SYSTEM, CONDUITS, WIRING, VOLTAGES AND OTHER ELECTRICAL COMPONENTS ARE THE RESPONSIBILITY OF THE ARCHITECT, MEP AND/OR LIGHTING CONTRACTOR, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY STATE AND LOCAL REGULATIONS. LIGHT POLE BASES ARE THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR INSTALLING LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES AND ALL OTHER APPLICABLE RULES, REGULATIONS, LAWS AND STATUTES.
7. CONTRACTOR MUST BRING TO DESIGNER'S ATTENTION, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURES.
8. IT IS LIGHTING CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE PROJECT ARCHITECT OR OWNER REGARDING THE POWER SOURCE(S) FROM WITHIN THE BUILDING, AND TIMING DEVICES NECESSARY TO MEET THE DESIGN INTENT.
9. THE LIGHTING CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THE SITE PLAN, INCLUDING BUT NOT LIMITED TO, GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND ALL GOVERNMENTAL RULES, LAWS, ORDINANCES, REGULATIONS AND THE LIKE.
10. THE CONTRACTOR MUST VERIFY THAT INSTALLATION OF LIGHTING FIXTURES COMPLIES WITH THE REQUIREMENTS FOR SEPARATION FROM OVERHEAD ELECTRICAL WIRES PER STATE REGULATIONS.
11. WHEN A BANK ATM IS INCLUDED IN THE PLAN, THE LIGHTING DESIGN REPRESENTS BOHLER'S UNDERSTANDING AND INTERPRETATION OF THE REGULATORY LIGHTING LEVELS INTENDED BY PUBLISHED STANDARDS.
12. UPON OWNER'S ACCEPTANCE OF THE COMPLETED PROJECT, THE OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE, SERVICING, REPAIR AND INSPECTION OF THE LIGHTING SYSTEM AND ALL OF ITS COMPONENTS AND RELATED SYSTEMS, TO ENSURE ADEQUATE LIGHTING LEVELS ARE PRESENT AND FUNCTIONING AT ALL TIMES.

NUMERIC SUMMARY

LABEL	CALCTYPE	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN
AREA SUMMARY	ILLUMINANCE	FC	0.47	15.1	0.0	N.A	N.A

LUMINAIRE SCHEDULE

SYMBOL	QTY	ARRANGEMENT	LUMENS	LLF	BUG RATING	LUM. WATTS	DESCRIPTION
A	3	SINGLE	6864	0.85	B2-U0-G2	55.7	GARDCO ECF-S-32L-530-G2-2 @ 14' HIGH
B	3	SINGLE	6715	0.85	B1-U0-G2	55.7	GARDCO ECF-S-32L-530-NW-G2-3 @ 14' HIGH
C	4	SINGLE	7025	0.85	B1-U0-G2	55.7	GACRDCO-ECF-S-32L-530-NW-G2-4 @ 14' HIGH
D	1	DOUBLE	7025	0.85	B1-U0-G2	55.7	GARDCO-ECF-S-32L-530-NW-G2-4 BACK TO BACK @ 14' HIGH
E	1	SINGLE	5348	0.85	B1-U0-G2	55.7	GARDCO-ECF-S-32L-530-NW-G2-3-HIS @ 14' HIGH
F	4	TRIPLE @ 90	7025	0.85	B1-U0-G2	55.7	GARDCO-ECF-S-32L-530-NW-G2-4 @ 14' HIGH
G	1	SINGLE	5509	0.85	B1-U0-G2	55.7	GARDCO-ECF-S-32L-530-NW-G2-4-HIS @ 14' HIGH
H	8	SINGLE	1300	0.85	B1-U0-G1	15.5	LUMIERE EON LED 303-B1-LED82-3000-UNV-T2-DIM10-BK @ 3.5' HIGH



AREA LIGHT DETAIL

N.T.S.

NOTE: THIS DETAIL IS FOR BID AND BUDGETARY PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING A FOUNDATION DESIGN PREPARED BY A QUALIFIED STRUCTURAL ENGINEER CONSIDERING LIGHTING MANUFACTURER REQUIREMENTS, LOCAL WIND LOADS AND SITE SPECIFIC SOIL PARAMETERS.

- SOME SITE CONDITIONS AND/OR LOCATIONS MAY REQUIRE VIBRATION DAMPENING MEASURES AS DETERMINED BY A STRUCTURAL ENGINEER.
- THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF THE INTENT TO MOUNT ANYTHING TO THE POLE, ASIDE FROM THE LIGHT FIXTURES, INCLUDING BUT NOT LIMITED TO CAMERAS, BANNERS, FLAGS, SIGNAGE, ETC. AS IT WILL IMPACT THE POLE AND FOUNDATION DESIGN.

THIS PLAN TO BE UTILIZED FOR LIGHTING PURPOSES ONLY

30 15 7.5 0 30

1"= 30'

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SUSTAINABLE DESIGN
PERMITTING SERVICES
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4	7/8/20	PLANNING & ZONING SUBMISSION	BTJ / JGB

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PROJECT:

PROPOSED SITE PLAN DOCUMENTS

FOR

KAPLAN DEVELOPMENT GROUP, LLC

PROPOSED DEVELOPMENT

118 HAZARD AVENUE
HARTFORD COUNTY
TOWN OF ENFIELD, CT
MAP & LOT: 65 - 59

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JEFFREY G. BORD
No. 30414
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PROFESSIONAL ENGINEER
CONNECTICUT LICENSE NO. 30414

SHEET TITLE:

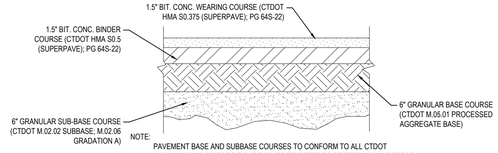
LIGHTING PLAN

SHEET NUMBER:

C-701

REVISION 4 - 7/8/20

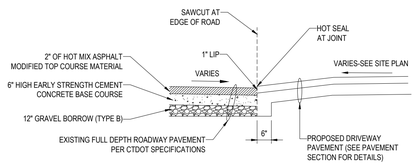
P:\19\CT191016\DRAWINGS\PLAN SETS\REV3 - WETLAND FLAG REVISION\SCT191016SS3----\LAYOUT: C-701 LIGHT



NOTE: PAVEMENT BASE AND SUBBASE COURSES TO CONFORM TO ALL CTDOT HIGHWAY DIVISION SPECIFICATIONS. GC TO REFER TO GEOTECHNICAL REPORT PREPARED BY WHITESTONE ASSOCIATES INC. DATED 10/31/19 FOR PAVEMENT SPECIFICATIONS.

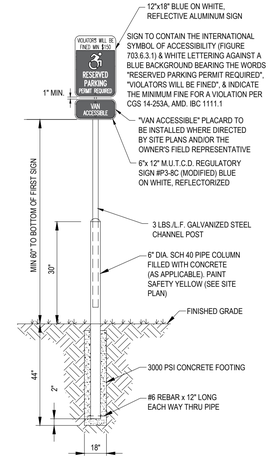
TYPICAL PAVEMENT SECTION

N.T.S.



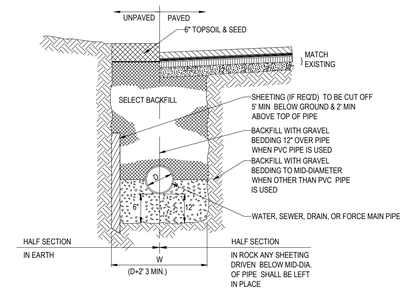
DRIVEWAY CONSTRUCTION DETAIL

N.T.S.



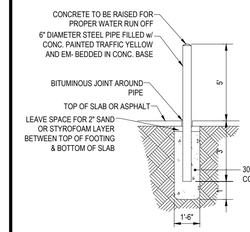
STATE OF CT 'ACCESSIBLE PARKING ONLY' SIGN

N.T.S.



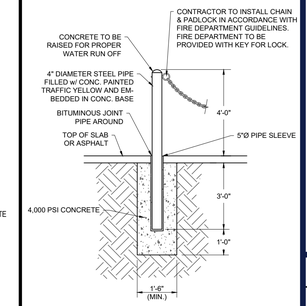
TYPICAL UTILITY TRENCH

N.T.S.



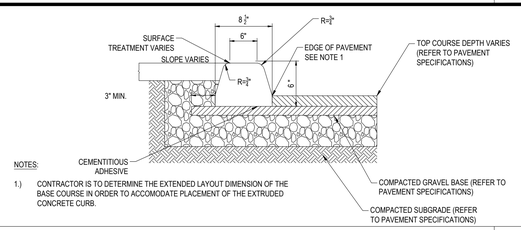
BOLLARD DETAIL

N.T.S.



FIRE GATE BOLLARD DETAIL

N.T.S.

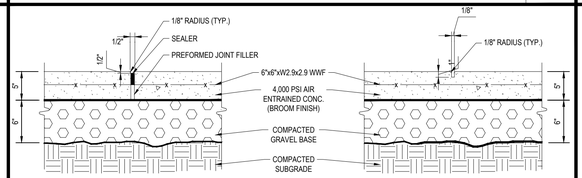


NOTES:

1.) CONTRACTOR IS TO DETERMINE THE EXTENDED LAYOUT DIMENSION OF THE BASE COURSE IN ORDER TO ACCOMODATE PLACEMENT OF THE EXTRUDED CONCRETE CURB.

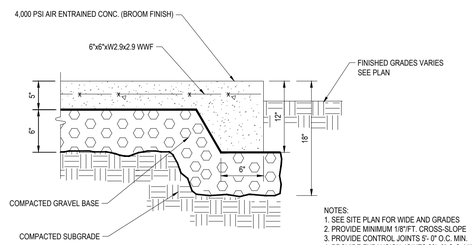
EXTRUDED CONCRETE CURB

N.T.S.



EXPANSION JOINT

CONTROL JOINT

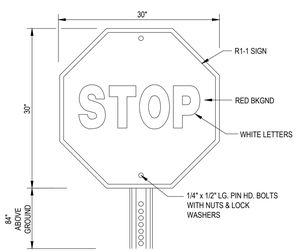


END SECTION
TO BE USED FOR BUILDING SURROUND AND OTHER CONCRETE WALKS. USE CHAIRS TO SUPPORT REINFORCING STEEL DURING POUR.

NOTES:
1. SEE SITE PLAN FOR WIDE AND GRADES
2. PROVIDE MINIMUM 1/8"/FT. CROSS-SLOPE
3. PROVIDE CONTROL JOINTS 5'- 0" O.C. MIN.
4. PROVIDE EXPANSION JOINTS 20'- 0" O.C. MIN.

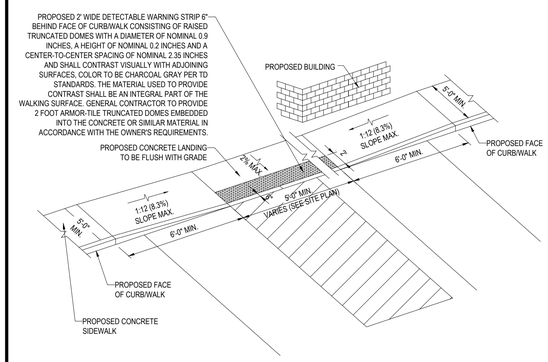
MONOLITHIC CONC. SIDEWALK DETAILS

N.T.S.



'STOP' SIGN

N.T.S.

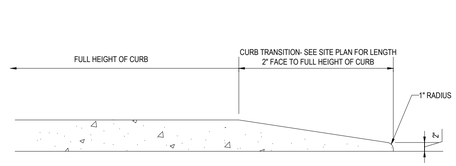


(FOR SIDEWALK SLOPES LESS THAN 1:20 (5.0%) MAX.)

NOTE: SLOPES OF ACCESSIBLE PARKING SPACES AND PARKING ACCESS AISLES SHALL NOT EXCEED 1:50 (2.0%) MAX. IN ANY DIRECTION.

SLOPED WALK DETAIL

N.T.S.

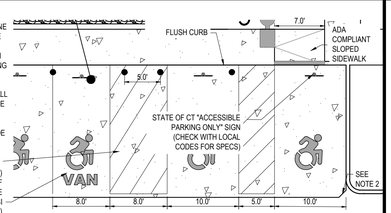


TRANSITION CURB DETAIL

N.T.S.

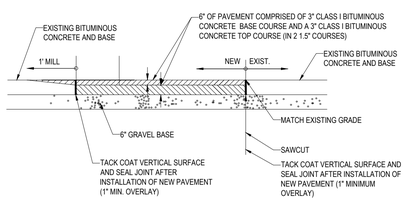
NOTES:

1. ALL MINIMUM DIMENSIONS ARE FROM CENTERLINE OF STRIPE TO CENTERLINE OF STRIPE OR INSIDE FACE OF CURB.
2. POUR CONCRETE MAT 3-INCHES WIDER ON BOTH SIDES TO ENSURE ENTIRE WIDTH OF ADA PARKING SPACE STRIPE IS LOCATED ENTIRELY WITHIN CONCRETE MAT.
3. A DESIGNATED 5-FOOT WIDE STRIPED AISLE SHALL ONLY BE REQUIRED IF A 3RD ADA PARKING SPACE IS PROVIDED.
4. ENSURE ACCESSIBLE VAN PARKING SPACE WILL PROVIDE ACCESS AISLE ON THE PASSENGER SIDE WHEN ANGLED PARKING IS USED.



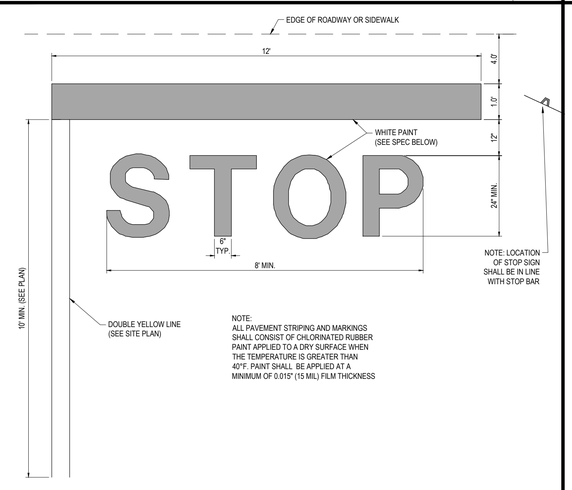
ACCESSIBLE SPACE DETAIL

N.T.S.



ROADWAY PATCHING DETAIL

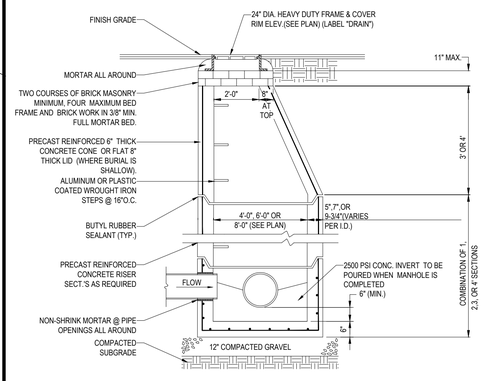
N.T.S.



NOTE:
ALL PAVEMENT STRIPING AND MARKINGS SHALL CONSIST OF CHLORINATED RUBBER PAINT APPLIED TO A DRY SURFACE WHEN THE TEMPERATURE IS GREATER THAN 40°F. PAINT SHALL BE APPLIED AT A MINIMUM OF 0.015" (15 MIL) FILM THICKNESS

'STOP' BAR DETAIL

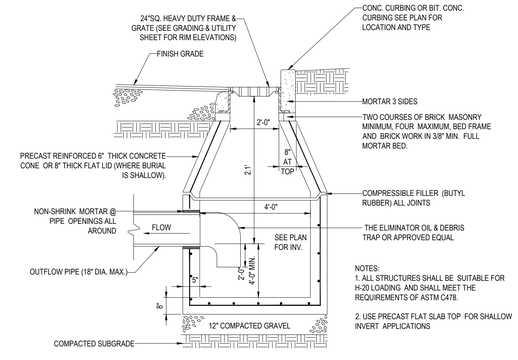
N.T.S.



NOTE:
ALL STRUCTURES SHALL BE SUITABLE FOR H-20 LOADING AND SHALL MEET THE REQUIREMENTS OF ASTM C478.

TYP. PRECAST CONCRETE MANHOLE STORM DRAIN

N.T.S.



NOTES:
1. ALL STRUCTURES SHALL BE SUITABLE FOR H-20 LOADING AND SHALL MEET THE REQUIREMENTS OF ASTM C478.

2. USE PRECAST FLAT SLAB TOP FOR SHALLOW INVERT APPLICATIONS

PRECAST CONCRETE DEEP SUMP CATCH BASIN DETAIL

N.T.S.

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	1/20/20	ART COMMENTS	MLT / JGB
2	3/10/20	EMERGENCY ACCESS	MLT / JGB
3	6/4/20	UPDATED WETLAND DELINEATION	BTJ / JGB
4	7/8/20	PLANNING & ZONING SUBMISSION	BTJ / JGB

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PROJECT No.:	CT191016
DRAWN BY:	MLT / DE
CHECKED BY:	JGB / PM
DATE:	12/06/19
CAD I.D.:	CT191016ss2

PROJECT:

PROPOSED SITE PLAN DOCUMENTS

FOR

KAPLAN DEVELOPMENT GROUP, LLC

PROPOSED DEVELOPMENT

118 HAZARD AVENUE
HARTFORD COUNTY
TOWN OF ENFIELD, CT
MAP & LOT: 65 - 59

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ROCKY HILL, CT 06067
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JEFFREY G. BORD
No. 30414
LICENSED PROFESSIONAL ENGINEER
PROFESSIONAL ENGINEER
CONNECTICUT LICENSE NO. 30414

SHEET TITLE:

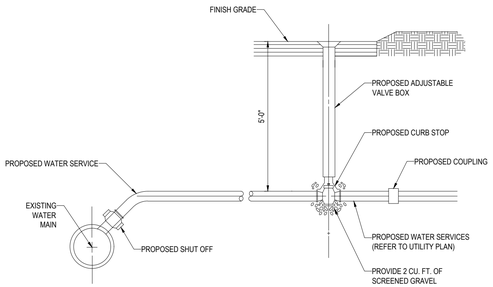
DETAIL SHEET

SHEET NUMBER:

C-901

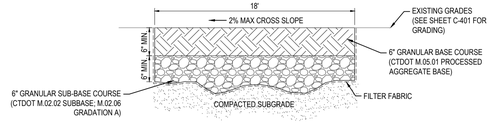
REVISION 4 - 7/8/20

P:\19\CT191016\DRAWINGS\PLAN SETS\REV3 - WETLAND FLAG REVISIONS\CT191016SS3----LAYOUT, C-901 DETAIL



WATER SERVICE CONNECTION DETAIL

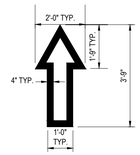
N.T.S.



NOTE:
BASE AND SUBBASE COURSES TO CONFORM TO ALL CTDOT HIGHWAY DIVISION SPECIFICATIONS.

EMERGENCY ACCESS DRIVE DETAIL

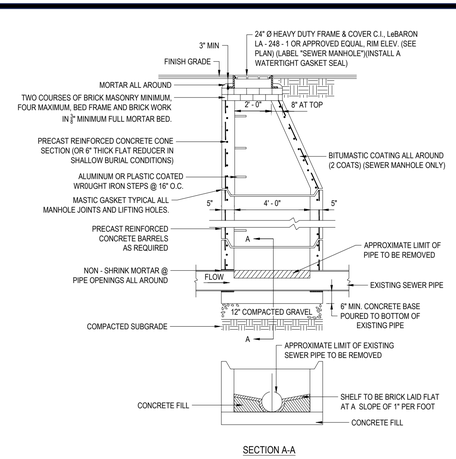
N.T.S.



NOTE: ALL TRAFFIC FLOW ARROWS TO BE REFLECTIVE WHITE PAINT PER SPECS.

TRAFFIC FLOW ARROW

N.T.S.

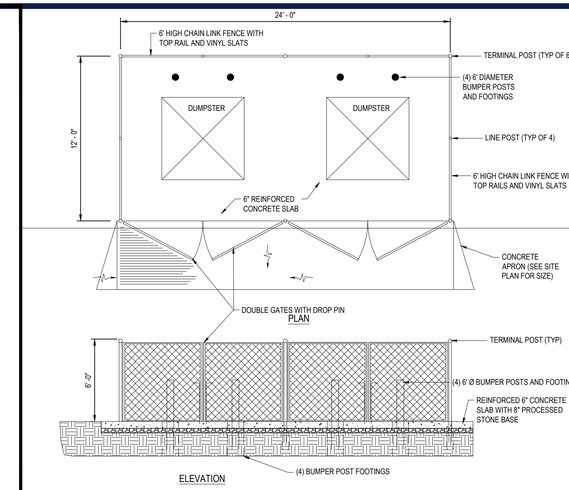


SECTION A-A

NOTE:
1. ALL STRUCTURES SHALL BE SUITABLE FOR H - 20 LOADING AND SHALL MEET THE REQUIREMENTS OF ASTM C478.
2. PROVIDE SUPPORT FOR EXISTING DRAIN PIPE WHEN POURING CONCRETE BASE

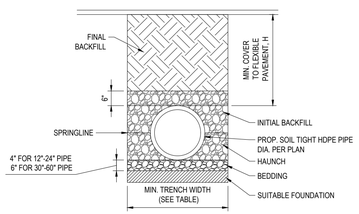
DETAIL OF PRECAST CONCRETE MANHOLE CONSTRUCTED ON EXIST. SEWER LINE

N.T.S.



TRASH ENCLOSURE CHAIN LINK FENCE WITH VINYL SLATS

N.T.S.



RECOMMENDED MIN. TRENCH WIDTH	
PIPE DIA.	MIN. TRANCH WIDTH
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
48"	80"
60"	96"

NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321 , "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION.

2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.

3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.

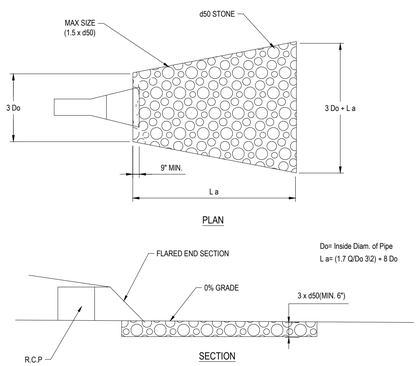
4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-900mm).

5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

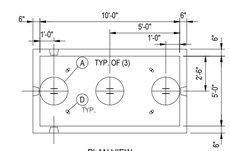
HDPE STORM DRAINAGE TRENCH

N.T.S.



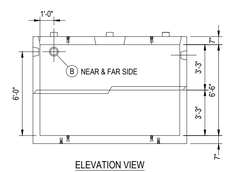
FLARED END RIP RAP DETAIL

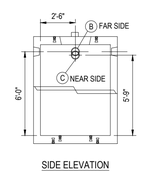
N.T.S.



GENERAL NOTES:

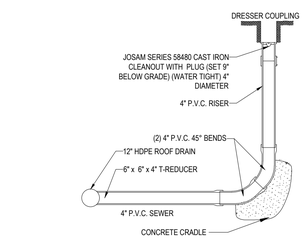
1. CONCRETE: 28 DAY COMPRESSIVE STRENGTH F'C = 5,000 PSI TYPE I OR III.
2. REBAR: GRADE 60 PER ASTM A615 (BLACK).
3. DESIGN LOADING: AASHTO HS20-44 (2'-5' COVER).
4. GENERAL CONTRACTOR TO VERIFY ALL OPENINGS SIZES AND LOCATIONS.
5. ALL PIPE AND ROOF OPENINGS HAVE ADDITIONAL REBAR REINFORCEMENT.
6. JOINT TO BE SEALED WITH 1" BUTYL RUBBER.
7. ANY HARDWARE SHOWN BUT NOT DIMENSIONED IS FOR VISUAL REFERENCE ONLY-DO NOT SCALE FOR PLACEMENT.





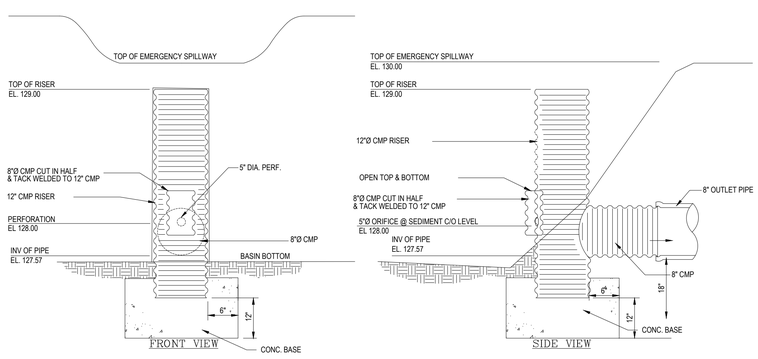
5' - 0" X 10' - 0" X 6' - 6" ID GREASE TRAP 2,000 GALLON CAPACITY

N.T.S.



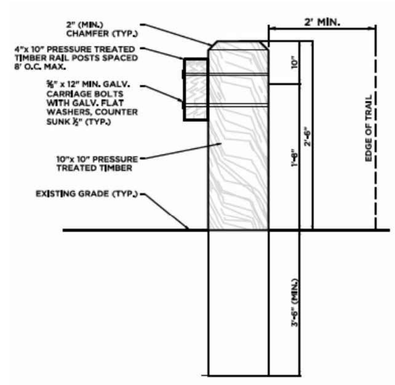
CLEANOUT DETAIL

N.T.S.



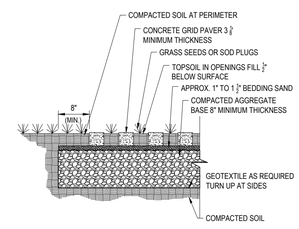
RISER STRUCTURE DETAIL

N.T.S.



TIMBER GUARDRAIL DETAIL

N.T.S.



WAFFLE PAVER STONE

N.T.S.

P:\19\CT191016\DRAWINGS\PLAN SETS\REV3 - WETLAND FLAG REVISIONS\CT191016SS3-----LAYOUT: C-902 DETAIL

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PROJECT No.:	CT191016
DRAWN BY:	MLT / DE
CHECKED BY:	JGB / PM
DATE:	12/06/19
CAD I.D.:	CT191016ss2

PROJECT:

PROPOSED SITE PLAN DOCUMENTS

FOR

KAPLAN DEVELOPMENT GROUP, LLC

PROPOSED DEVELOPMENT

118 HAZARD AVENUE
HARTFORD COUNTY
TOWN OF ENFIELD, CT
MAP & LOT: 65 - 59

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CONNECTICUT LICENSE NO. 30414

SHEET TITLE:

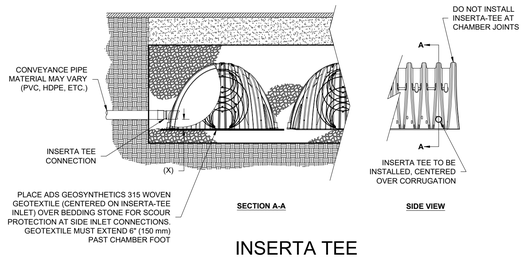
DETAIL SHEET

SHEET NUMBER:

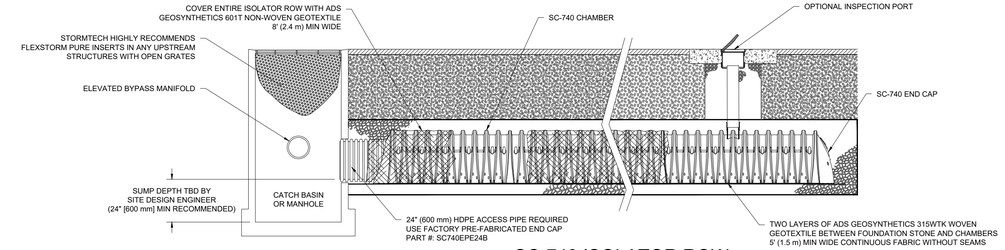
C-902

REVISION 4 - 7/8/20

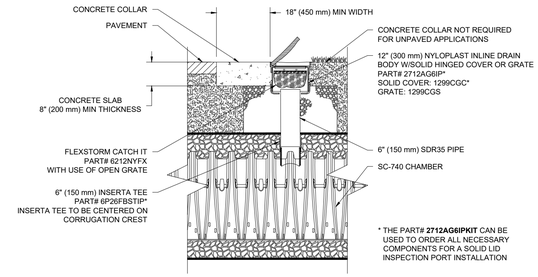
CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-740	10" (250 mm)	4" (100 mm)



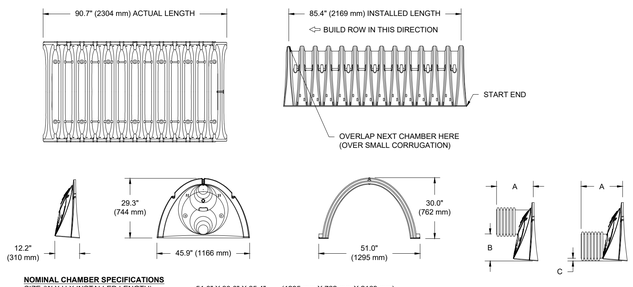
INSERTA TEE



SC-740 ISOLATOR ROW



SC-740 6" (150 mm) INSPECTION PORT



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	51.0" X 30.0" X 85.4"	(1295 mm X 762 mm X 2169 mm)
CHAMBER STORAGE	45.9 CUBIC FEET	(1.30 m^3)
MINIMUM INSTALLED STORAGE*	74.9 CUBIC FEET	(2.12 m^3)
WEIGHT	75.0 lbs.	(33.6 kg)

*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS

PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE-CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC740EPE06T / SC740EPE06TPC	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	---
SC740EPE06B / SC740EPE06BPC			---	0.5" (13 mm)
SC740EPE08T /SC740EPE08TPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	---
SC740EPE08B / SC740EPE08BPC			---	0.6" (15 mm)
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	---
SC740EPE10B / SC740EPE10BPC			---	0.7" (18 mm)
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	---
SC740EPE12B / SC740EPE12BPC			---	1.2" (30 mm)
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---
SC740EPE15B / SC740EPE15BPC			---	1.3" (33 mm)
SC740EPE18T / SC740EPE18TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	
SC740EPE18B / SC740EPE18BPC				1.6" (41 mm)
SC740EPE24B*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)

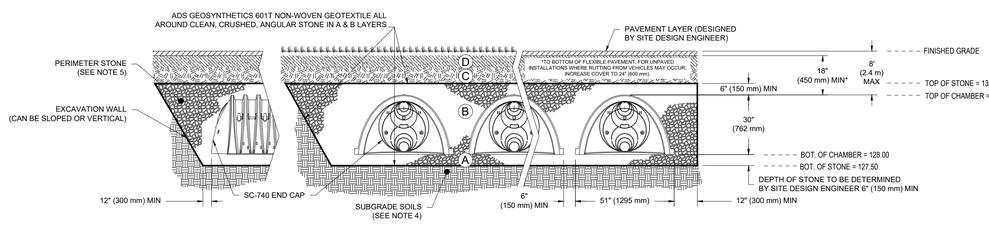
ALL STUBS, EXCEPT FOR THE SC740EPE24B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.
* FOR THE SC740EPE24B THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.
NOTE: ALL DIMENSIONS ARE NOMINAL

SC-740 TECHNICAL SPECIFICATIONS

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



SC-740 CROSS SECTION

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

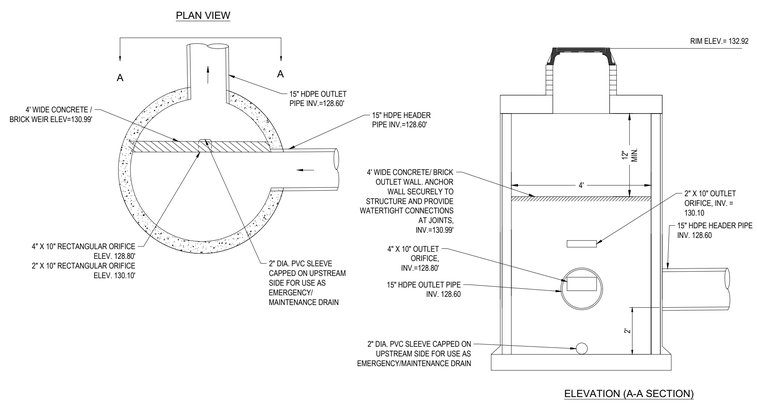
1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

NOTES:

1. SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
5. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
6. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

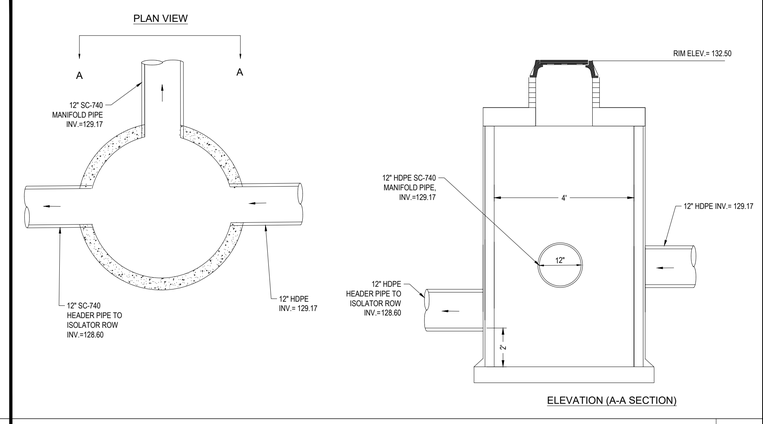
STORMTECH SC-740 SUBSURFACE DETENTION/INFILTRATION BASIN DETAILS (BMP-1)

N.T.S.



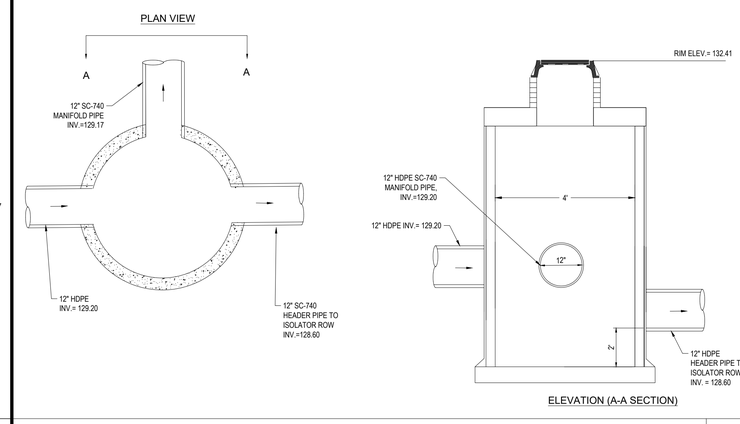
OUTLET CONTROL STRUCTURE (OCS-1)

N.T.S.



INLET CONTROL STRUCTURE (ICS-1)

N.T.S.



INLET CONTROL STRUCTURE (ICS-2)

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	1/20/20	ART COMMENTS	MLT / JGB
2	3/10/20	EMERGENCY ACCESS	MLT / JGB
3	6/4/20	UPDATED WETLAND DELINEATION	BTJ / JGB
4	7/8/20	PLANNING & ZONING SUBMISSION	BTJ / JGB

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PROJECT No.:	CT191016
DRAWN BY:	MLT / DE
CHECKED BY:	JGB / PM
DATE:	12/06/19
CAD I.D.:	CT191016ss2

PROJECT:

PROPOSED SITE PLAN DOCUMENTS

FOR

KAPLAN DEVELOPMENT GROUP, LLC

PROPOSED DEVELOPMENT

118 HAZARD AVENUE
HARTFORD COUNTY
TOWN OF ENFIELD, CT
MAP & LOT: 65 - 59

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SHEET TITLE:

DETAIL SHEET

SHEET NUMBER:

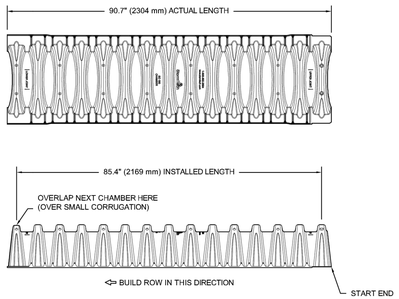
C-903

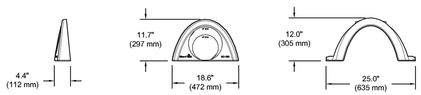
REVISION 4 - 7/8/20

P:\19\CT191016\DRAWINGS\PLAN SETS\REV3 - WETLAND FLAG REVISIONS\CT191016SS3----LAYOUT C-903 DETAIL
BJ

SC-160LP TECHNICAL SPECIFICATION

NTS



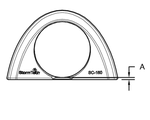


NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	25.0" X 12.0" X 85.4"	(635 mm X 305 mm X 2169 mm)
CHAMBER STORAGE	6.85 CUBIC FEET	(0.19 m^3)
MINIMUM INSTALLED STORAGE*	16.0 CUBIC FEET	(0.45 m^3)
WEIGHT	24.0 lbs.	(10.9 kg)

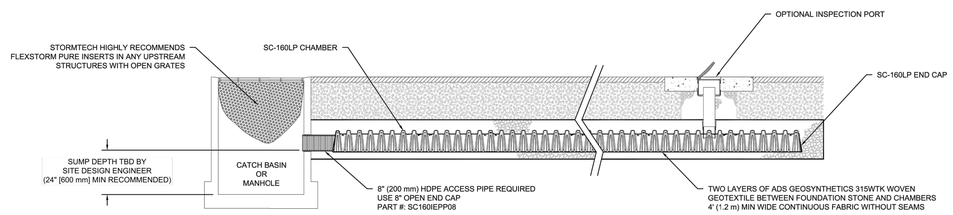
*ASSUMES 6" (152 mm) ABOVE, 6" (152 mm) BELOW, AND STONE BETWEEN CHAMBERS WITH 40% STONE POROSITY.

PART #	STUB	A
SC160IEPP	6" (150 mm)	0.66" (16 mm)
	8" (200 mm)	0.80" (20 mm)
SC160IEPP08	8" (200 mm)	0.96" (24 mm)



ALL STUBS ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

NOTE: ALL DIMENSIONS ARE NOMINAL



SC-160LP ISOLATOR ROW DETAIL

NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

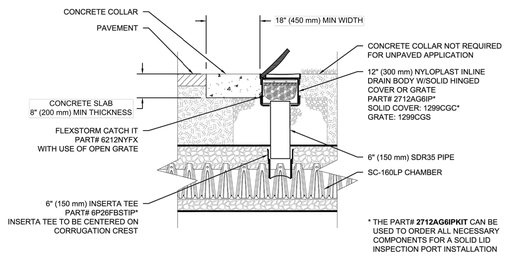
NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

ACCEPTABLE FILL MATERIALS: STORMTECH SC-160LP CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ("B" LAYER) TO 14" (355 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ("A" LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. [2,3]

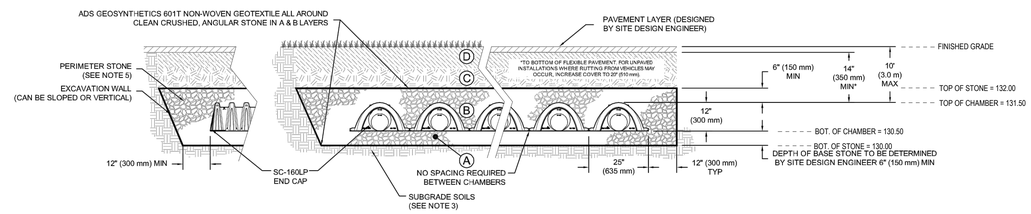
PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



* THE PART# **2712AG6IPKIT** CAN BE USED TO ORDER ALL NECESSARY COMPONENTS FOR A SOLID LID INSPECTION PORT INSTALLATION

SC-160LP 6" INSPECTION PORT DETAIL

NTS

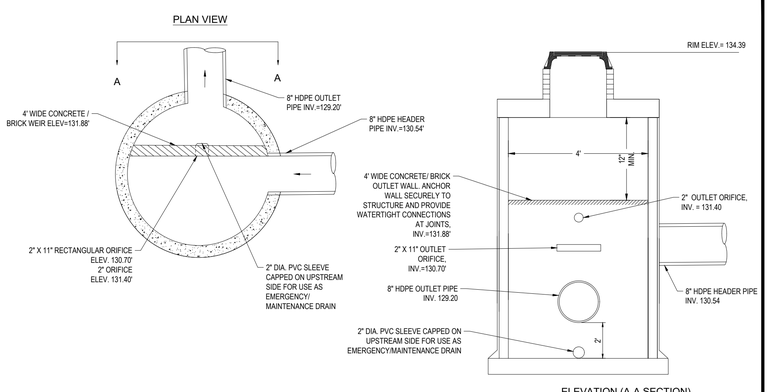


NOTES:

1. SC-160LP CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

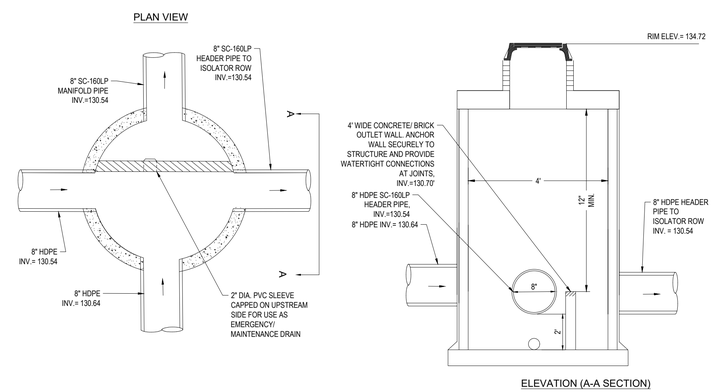
STORMTECH SC-160LP SUBSURFACE DETENTION/INFILTRATION BASIN DETAILS (BMP-2)

N.T.S.



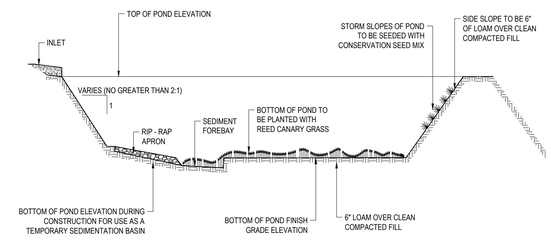
OUTLET CONTROL STRUCTURE (OCS-2)

N.T.S.



INLET CONTROL STRUCTURE (ICS-3)

N.T.S.



NOTE:
1. THE SIDE SLOPES OF THE DETENTION POND SHALL BE PLANTED WITH A SEED MIX CONSISTING OF CREEPING RED FESCUE, TALL FESCUE, AND LADINO CLOVER.
2. SIDE SLOPES CONSISTING OF SLOPES STEEPER THAN 3:1 SHALL USE SLOPE STABILIZATION FABRIC.

INFILTRATION BASIN DETAIL

N.T.S.

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LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	1/20/20	ART COMMENTS	MLT / JGB
2	3/10/20	EMERGENCY ACCESS	MLT / JGB
3	6/4/20	UPDATED WETLAND DELINEATION	BTJ / JGB
4	7/8/20	PLANNING & ZONING SUBMISSION	BTJ / JGB

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PERMIT SET

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PROJECT No.:	CT191016
DRAWN BY:	MLT / DE
CHECKED BY:	JGB / PM
DATE:	12/06/19
CAD I.D.:	CT191016ss2

PROJECT:

PROPOSED SITE PLAN DOCUMENTS

FOR

KAPLAN DEVELOPMENT GROUP, LLC

PROPOSED DEVELOPMENT

118 HAZARD AVENUE
HARTFORD COUNTY
TOWN OF ENFIELD, CT
MAP & LOT: 65 - 59

BOHLER

16 OLD FORGE ROAD, SUITE A
ROCKY HILL, CT 06067
Phone: (860) 333-8900
Fax: (508) 480-9080
www.BohlerEngineering.com

J. G. BORD
STATE OF CONNECTICUT
JEFFREY G. BORD
No. 30414
LICENSED PROFESSIONAL ENGINEER
PROFESSIONAL ENGINEER
CONNECTICUT LICENSE NO. 30414

SHEET TITLE:

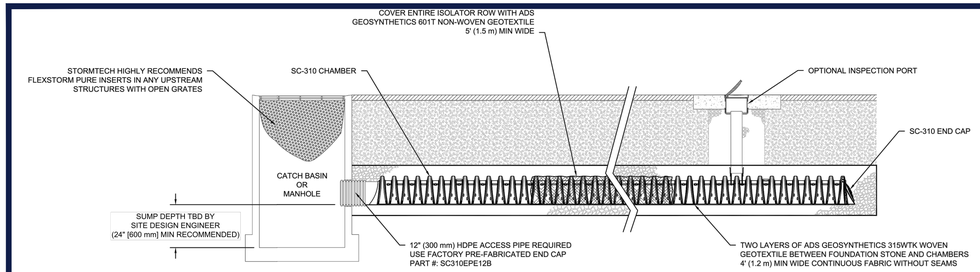
DETAIL SHEET

SHEET NUMBER:

C-904

REVISION 4 - 7/8/20

P:\19\CT191016\DRAWINGS\PLAN SETS\REV3 - WETLAND FLAG REVISIONS\CT191016SS3----LAYOUT C-904 DETAIL



SC-310 ISOLATOR ROW DETAIL
NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

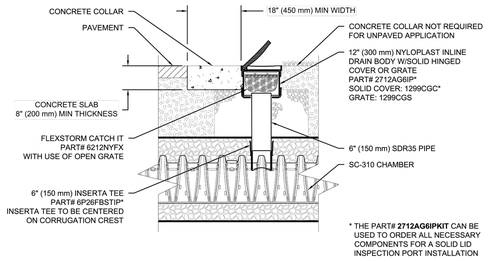
STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

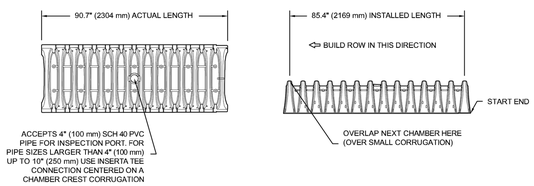
1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

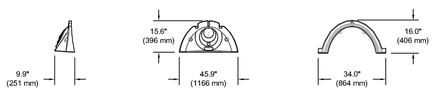


SC-310 6" INSPECTION PORT DETAIL
NTS

SC-310 TECHNICAL SPECIFICATION

NTS

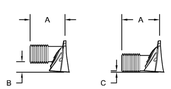




NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	34.0" X 16.0" X 85.4"	(864 mm X 406 mm X 2169 mm)
CHAMBER STORAGE	14.7 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	31.0 CUBIC FEET	(0.88 m³)
WEIGHT	35.0 lbs.	(16.8 kg)

*ASSUMES 6" (152 mm) ABOVE, BELOW, AND BETWEEN CHAMBERS



STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"

PART #	STUB	A	B	C
SC310EPE06T / SC310EPE06TPC	6" (150 mm)	9.6" (244 mm)	5.8" (147 mm)	---
SC310EPE06B / SC310EPE06BPC			---	0.5" (13 mm)
SC310EPE08T / SC310EPE08TPC	8" (200 mm)	11.9" (302 mm)	3.5" (89 mm)	---
SC310EPE08B / SC310EPE08BPC			---	0.6" (15 mm)
SC310EPE10T / SC310EPE10TPC	10" (250 mm)	12.7" (323 mm)	1.4" (36 mm)	---
SC310EPE10B / SC310EPE10BPC			---	0.7" (18 mm)
SC310EPE12B	12" (300 mm)	13.5" (343 mm)	---	0.9" (23 mm)

ALL STUBS, EXCEPT FOR THE SC310EPE12B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

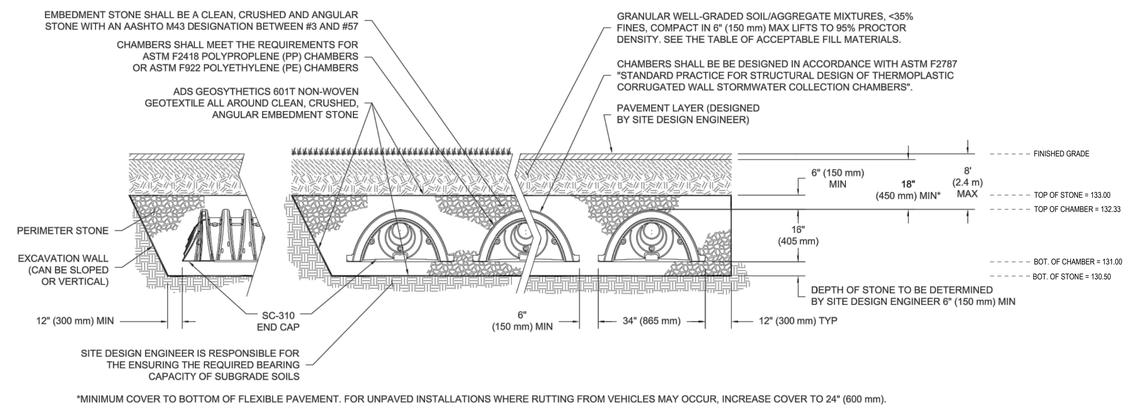
* FOR THE SC310EPE12B THE 12" (300 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25" (6 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL**: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL**: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. [2 3]

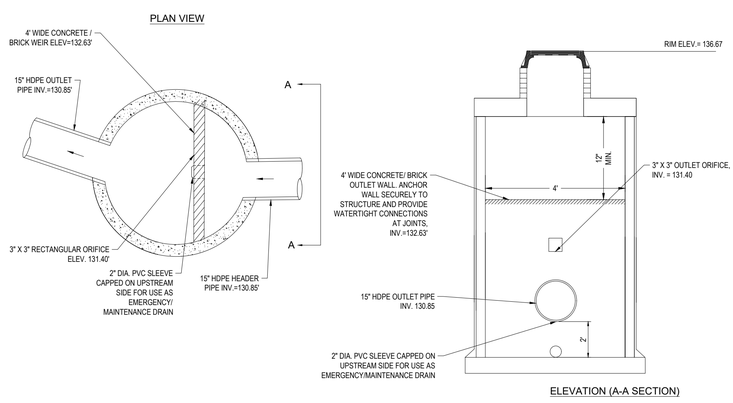
PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



*MINIMUM COVER TO BOTTOM OF FLEXIBLE PAVEMENT. FOR UNPAVED INSTALLATIONS WHERE RUTTING FROM VEHICLES MAY OCCUR, INCREASE COVER TO 24" (600 mm).

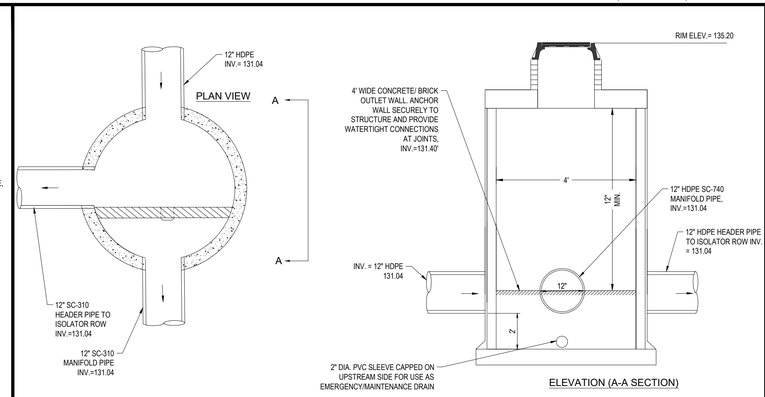
STORMTECH SC-310 SUBSURFACE DETENTION/INFILTRATION BASIN DETAILS (BMP-3)

N.T.S.



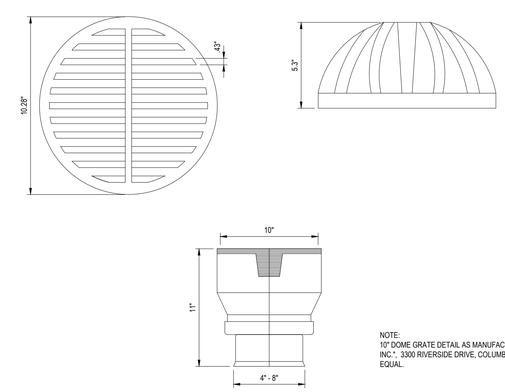
OUTLET CONTROL STRUCTURE (OCS-3)

N.T.S.



INLET CONTROL STRUCTURE (ICS-4)

N.T.S.



NOTE:
10" DOME GRATE DETAIL AS MANUFACTURED BY "ADVANCED DRAINAGE SYSTEMS, INC.", 3300 RIVERSIDE DRIVE, COLUMBUS, OH 43221, (800) 821-6710, OR APPROVED EQUAL.

YARD DRAIN

N.T.S.

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REVISIONS

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PROJECT No.: CT191016
DRAWN BY: MLT / DE
CHECKED BY: JGB / PM
DATE: 12/06/19
CAD I.D.: CT191016ss2

PROJECT:
PROPOSED SITE PLAN DOCUMENTS
FOR
KAPLAN DEVELOPMENT GROUP, LLC

PROPOSED DEVELOPMENT
118 HAZARD AVENUE
HARTFORD COUNTY
TOWN OF ENFIELD, CT
MAP & LOT: 65 - 59

BOHLER
16 OLD FORGE ROAD, SUITE A
ROCKY HILL, CT 06067
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J.G. BORD
STATE OF CONNECTICUT · JEFFREY G. BORD · No. 30414 · LICENSED PROFESSIONAL ENGINEER
PROFESSIONAL ENGINEER
CONNECTICUT LICENSE NO. 30414

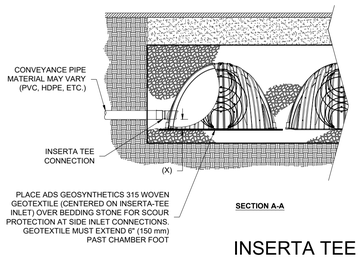
SHEET TITLE:
DETAIL SHEET

SHEET NUMBER:
C-905

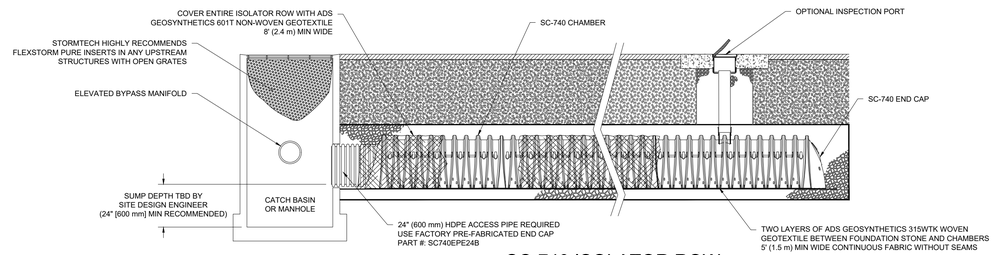
REVISION 4 - 7/8/20

P:\19\CT191016\DRAWING\SP\PLAN SETS\REV3 - WETLAND FLAG REVISIONS\CT191016SS3----LAYOUT: C-905 DETAIL
BJ

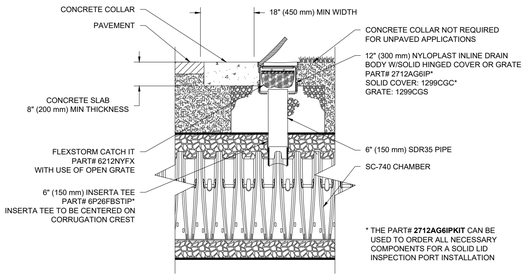
CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-740	10" (250 mm)	4" (100 mm)



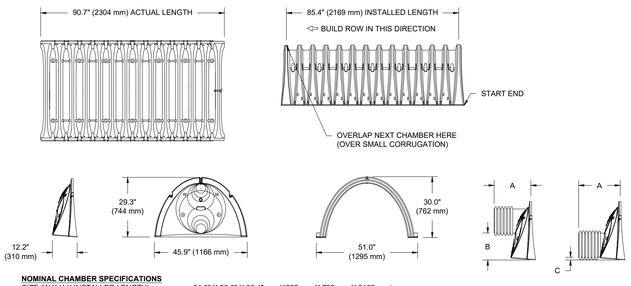
INSERTA TEE



SC-740 ISOLATOR ROW



SC-740 6" (150 mm) INSPECTION PORT



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	51.0" X 30.0" X 85.4"	(1295 mm X 762 mm X 2169 mm)
CHAMBER STORAGE	45.9 CUBIC FEET	(1.30 m³)
MINIMUM INSTALLED STORAGE*	74.9 CUBIC FEET	(2.12 m³)
WEIGHT	75.0 lbs.	(33.6 kg)

*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS

PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE-CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC740EPE06T / SC740EPE06TPC	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	---
SC740EPE06B / SC740EPE06BPC			---	0.5" (13 mm)
SC740EPE08T /SC740EPE08TPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	---
SC740EPE08B / SC740EPE08BPC			---	0.6" (15 mm)
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	---
SC740EPE10B / SC740EPE10BPC			---	0.7" (18 mm)
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	---
SC740EPE12B / SC740EPE12BPC			---	1.2" (30 mm)
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---
SC740EPE15B / SC740EPE15BPC			---	1.3" (33 mm)
SC740EPE18T / SC740EPE18TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	---
SC740EPE18B / SC740EPE18BPC			---	1.6" (41 mm)
SC740EPE24B*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)

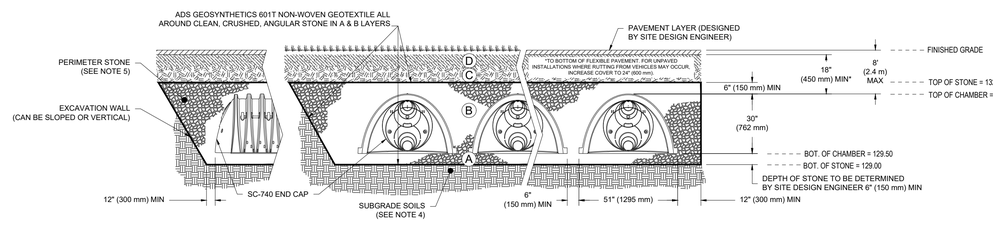
ALL STUBS, EXCEPT FOR THE SC740EPE24B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.
* FOR THE SC740EPE24B THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.
NOTE: ALL DIMENSIONS ARE NOMINAL

SC-740 TECHNICAL SPECIFICATIONS

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



SC-740 CROSS SECTION

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

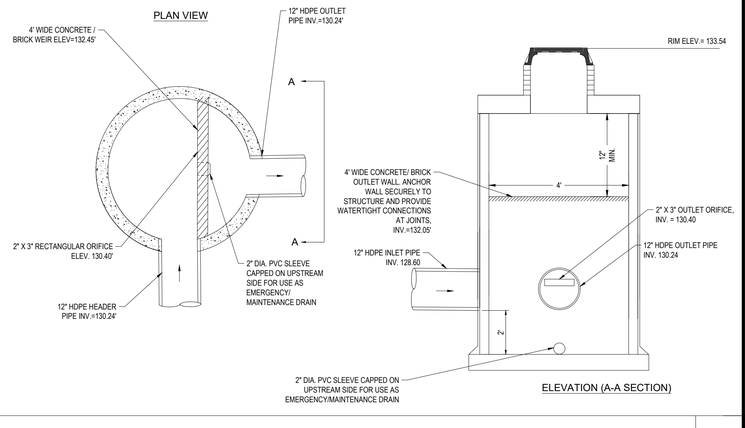
1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

NOTES:

1. SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
5. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
6. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

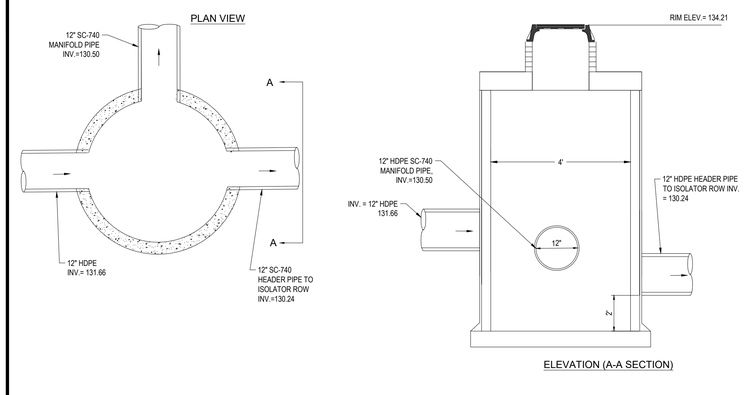
STORMTECH SC-740 SUBSURFACE DETENTION/INFILTRATION BASIN DETAILS (BMP-4)

N.T.S.



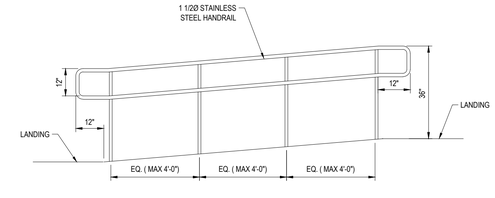
OUTLET CONTROL STRUCTURE (OCS-4)

N.T.S.



INLET CONTROL STRUCTURE (ICS-5)

N.T.S.



SPLIT RAIL FENCE DETAIL

N.T.S.

BOHLER™

SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	1/20/20	ART COMMENTS	MLT / JGB
2	3/10/20	EMERGENCY ACCESS	MLT / JGB
3	6/4/20	UPDATED WETLAND DELINEATION	BTJ / JGB
4	7/8/20	PLANNING & ZONING SUBMISSION	BTJ / JGB

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PERMIT SET

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PROJECT No.: CT191016
DRAWN BY: MLT / DE
CHECKED BY: JGB / PM
DATE: 12/06/19
CAD I.D.: CT191016ss2

PROJECT:

PROPOSED SITE PLAN DOCUMENTS

FOR

KAPLAN DEVELOPMENT GROUP, LLC

PROPOSED DEVELOPMENT

118 HAZARD AVENUE
HARTFORD COUNTY
TOWN OF ENFIELD, CT
MAP & LOT: 65 - 59

BOHLER
16 OLD FORGE ROAD, SUITE A
ROCKY HILL, CT 06067
Phone: (860) 333-8900
Fax: (508) 480-9080
www.BohlerEngineering.com

J.G. BORD
STATE OF CONNECTICUT · JEFFREY G. BORD · No. 30414 · LICENSED PROFESSIONAL ENGINEER
PROFESSIONAL ENGINEER
CONNECTICUT LICENSE NO. 30414

SHEET TITLE:

DETAIL SHEET

SHEET NUMBER:

C-906

REVISION 4 - 7/8/20

P:\19\CT191016\DRAWINGS\PLAN SETS\REV3 - WETLAND FLAG REVISION\SCT191016SS3------LAYOUT: C-906 DETAIL

LEGEND

124	EXISTING CONTOUR
125	EXISTING CONTOUR
× 123.45	EXISTING SPOT ELEVATION
× TC 123.45	EXISTING TOP OF CURB ELEVATION
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× TW 123.45	EXISTING TOP OF WALL ELEVATION
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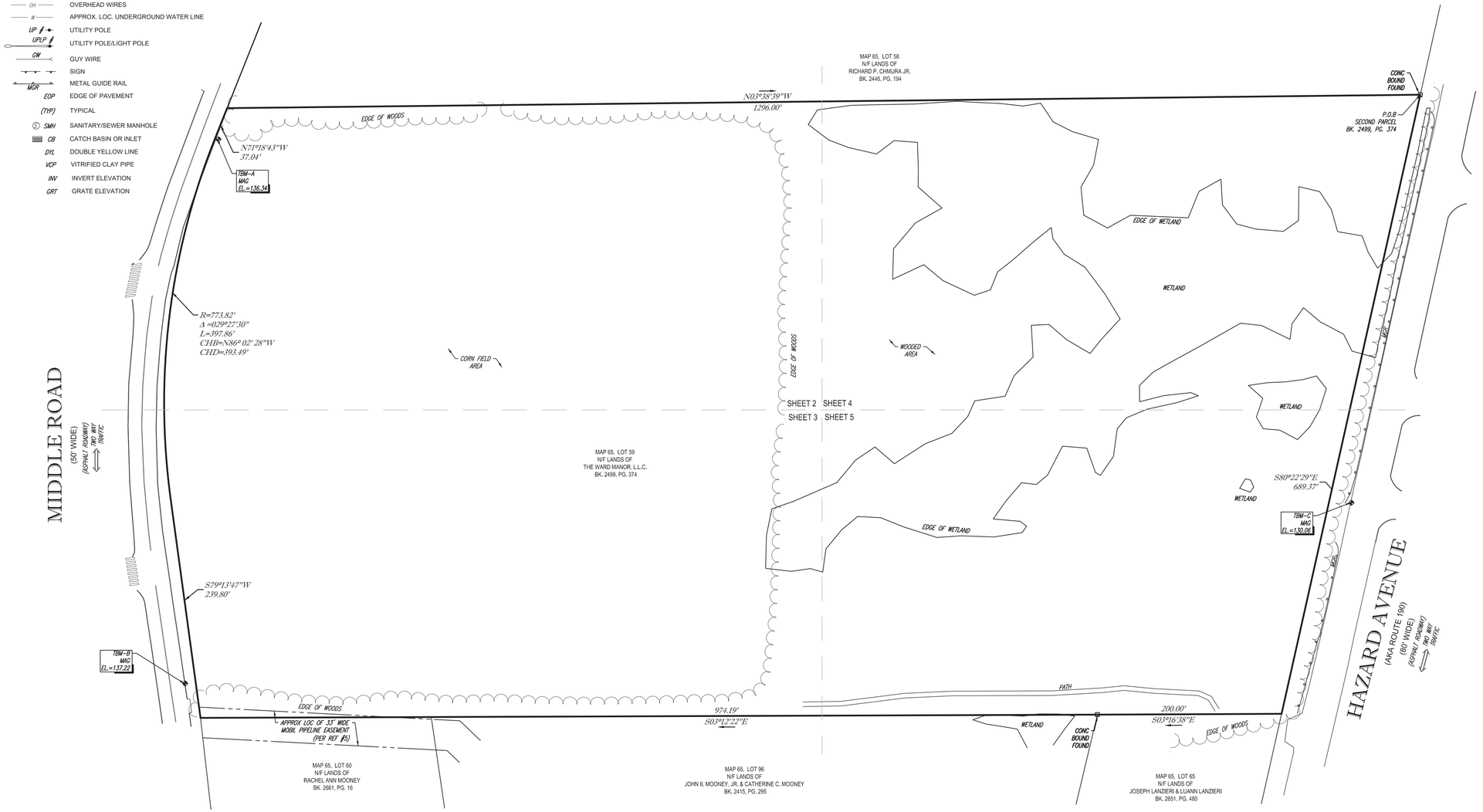

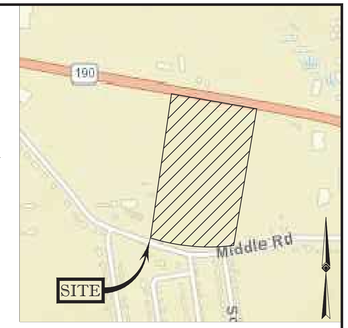

LOCUS MAP
©2013 ESRI WORLD STREET MAPS
NOT TO SCALE

NOTES:

1. THIS IS A BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED IN ACCORDANCE WITH THE STANDARDS OF A CLASS A-2 AND T-2 SURVEY AS DEFINED IN THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTION 20-300B, EFFECTIVE DATE JUNE 21, 1996. THIS SURVEY IS ALSO PREPARED IN ACCORDANCE WITH THE MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT, ADOPTED ON SEPTEMBER 26, 1996, BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS INC., THE BOUNDARY LINES SHOWN HEREON ARE BASED UPON A RESURVEY OF THE SUBJECT PROPERTY.

   PROPERTY KNOWN AS LOT 59 AS SHOWN ON THE TOWN OF ENFIELD, HARTFORD COUNTY, STATE OF CONNECTICUT; MAP NO. 65.

2. AREA = 846,574 SQUARE FEET OR 19.435 ACRES.

3. LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE. LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD, AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE AS-BUILT PLANS AND UTILITY MARKOUT DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. BEFORE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES. CONTROL POINT ASSOCIATES, INC. DOES NOT GUARANTEE THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED.

4. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON.

5. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO THE RESTRICTIONS, COVENANTS AND/OR EASEMENTS THAT MAY BE CONTAINED THEREIN.

6. BY GRAPHIC PLOTTING ONLY PROPERTY IS LOCATED IN FLOOD HAZARD ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER REF. #2

7. ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), BASED ON GPS OBSERVATIONS UTILIZING THE KEYSTONE VRS NETWORK (KEYNETGPS) TAKEN AT THE TIME OF THE FIELD SURVEY.

   TEMPORARY BENCH MARKS SET:
   - TBM-A: MAG NAIL SET AT ELEVATION 136.34.
   - TBM-B: SPIKE SET AT ELEVATION 137.22.
   - TBM-C: MAG NAIL SET AT ELEVATION 130.06.

   PRIOR TO CONSTRUCTION IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE BENCHMARKS ILLUSTRATED ON THIS SKETCH HAVE NOT BEEN DISTURBED AND THEIR ELEVATIONS HAVE BEEN CONFIRMED. ANY CONFLICTS MUST BE REPORTED PRIOR TO CONSTRUCTION.

REFERENCES:

1. THE TAX ASSESSOR'S MAP OF ENFIELD, HARTFORD COUNTY, MAP 65.
2. MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, HARTFORD COUNTY, CONNECTICUT PANEL 227 OF 675," COMMUNITY-PANEL NUMBER 090028 0227 F, EFFECTIVE DATE: SEPTEMBER 26, 2008.
3. MAP ENTITLED "CONNECTICUT STATE HIGHWAY DEPARTMENT RIGHT OF WAY MAP TOWN OF ENFIELD HAZARD AVENUE FROM MIDDLE ROAD WESTERLY ABOUT 5,700.0 FEET ROUTE NO.105" DATED AUGUST 29, 1930.
4. MAP ENTITLED "PROPERTY OF RICHARD P. CHMURA" DATED DECEMBER 7, 1960, FILED WITH THE ENFIELD LAND RECORDS AS PLAN #1072.
5. MAP ENTITLED "RESUBDIVISION PREPARED FOR JOHN H. CATHERINE C. MOONEY" DATED APRIL 11, 1990. FILED WITH THE ENFIELD LAND RECORDS AS VOLUME 226, PAGE 3310.
6. MAP ENTITLED "TOWN OF ENFIELD PLAN MIDDLE ROAD" DATED APRIL 1968, FILED WITH THE TOWN OF ENFIELD ENGINEERS OFFICE.

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UTILITIES:

THE FOLLOWING COMPANIES WERE NOTIFIED BY CONNECTICUT ONE-CALL SYSTEM (1-888-344-7233) AND REQUESTED TO MARK OUT UNDERGROUND FACILITIES AFFECTING AND SERVICING THIS SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES RESPONSE TO THIS REQUEST.
REQUEST NUMBER: 20193102803

UTILITY COMPANY	PHONE NUMBER
BUCKEYE PARTNERS, LP	1-610-904-4940
COX COMMUNICATIONS	1-800-778-9140
EVERSOURCE ELECTRIC	1-800-778-9140
EVERSOURCE GAS	1-203-206-5702
FRONTIER COMMUNICATIONS	1-800-778-9140
HAZARDVILLE WATER CO	1-860-749-0779
TOWN OF ENFIELD	1-860-209-1615

1-800-922-4455
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GRAPHIC SCALE
60' 0 30' 60' 120' 240'
(IN FEET)
1 inch = 60' ft.

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

NOT A VALID ORIGINAL DOCUMENT UNLESS EMBOSSED WITH RAISED IMPRESSION OR BLUE INK SEAL

STATE OF CONNECTICUT
WILLIAM THEODORE WHIMPLE
No. 70290
LICENSED
LAND SURVEYOR

6-4-2020
DATE

WILLIAM T. WHIMPLE
CONNECTICUT PROFESSIONAL LAND SURVEYOR #70290

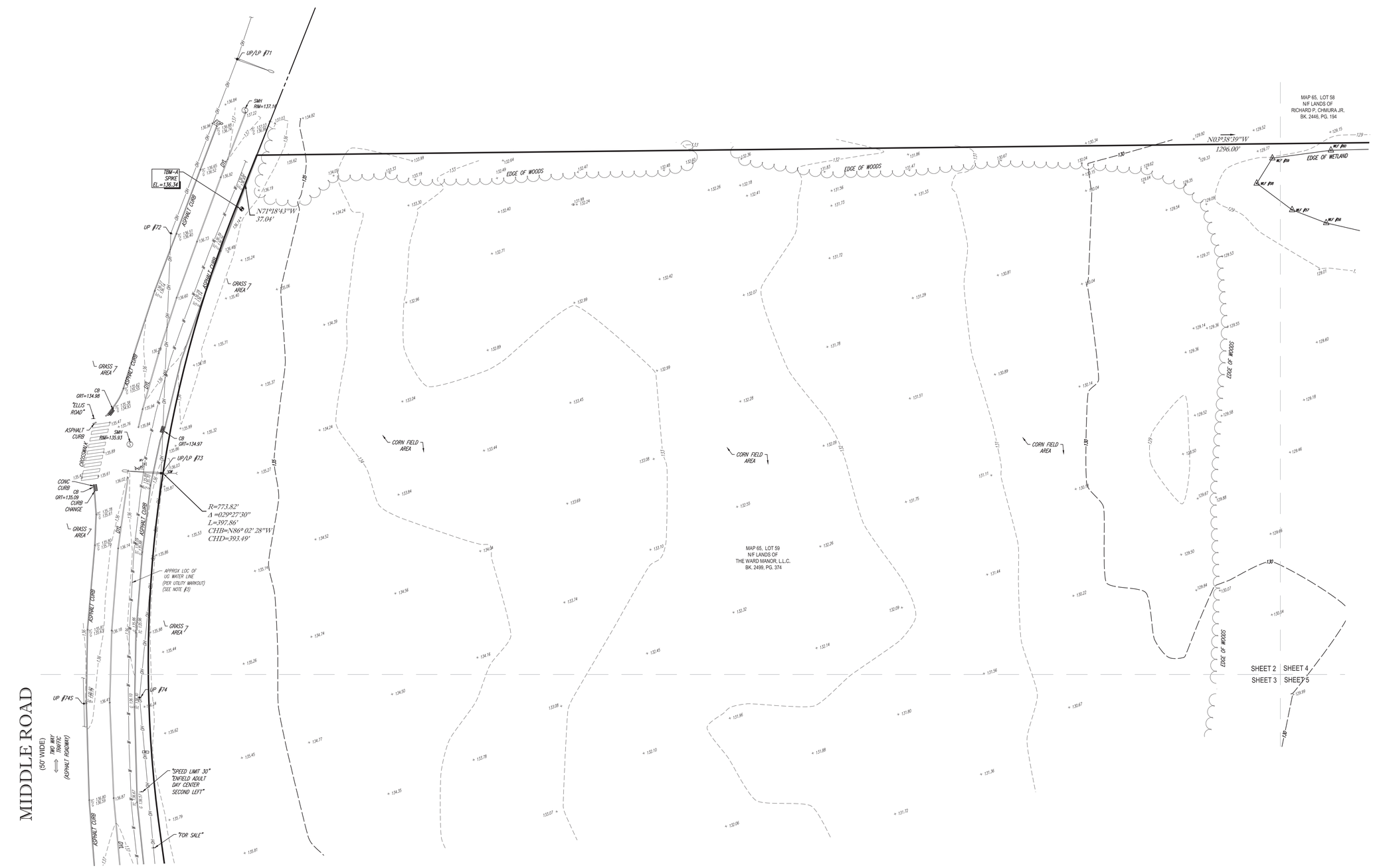
No.	DESCRIPTION OF REVISION	FIELD CREW	DRAWN:	APPROVED:	DATE
1	REVISED PER CLIENT COMMENTS	N/A	R.J.K.	G.L.H.	6-4-2020

FIELD DATE	8-30-19
FIELD BOOK NO.	19-12
FIELD BOOK PG.	47
FIELD CREW	J.O.
DRAWN:	P.V.
REVIEWED:	A.J.D.

BOUNDARY & TOPOGRAPHIC SURVEY
118 HAZARD AVENUE
PREPARED FOR BOHLER ENGINEERING
LOT 59, MAP 65
TOWN OF ENFIELD, HARTFORD COUNTY
STATE OF CONNECTICUT

CONTROL POINT ASSOCIATES, INC.
352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
508.948.3000 - 508.948.3003 FAX
ALBANY, NY 5182175010
CHALFONT, PA 2157129800
MANHATTAN, NY 6467800411
MT LAUREL, NJ 6098572099
WARREN, NJ 9086680099

APPROVED:	DATE	SCALE	FILE NO.	DWG. NO.
W.T.W.	9-5-19	1"=60'	03-190182-00	1 OF 5



LEGEND

124 / 125	EXISTING CONTOUR
× 123.45	EXISTING SPOT ELEVATION
× TC 123.45	EXISTING TOP OF CURB ELEVATION
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MGR	METAL GUIDE RAIL
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(TYP)	TYPICAL
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CB	CATCH BASIN OR INLET
DYL	DOUBLE YELLOW LINE
VCP	VITRIFIED CLAY PIPE
INV	INVERT ELEVATION
GRT	GRATE ELEVATION

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GRAPHIC SCALE

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No. 70290
LICENSED
LAND SURVEYOR

6-4-2020
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FIELD DATE: 8-30-19
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FIELD CREW: J.O.
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LOT 59, MAP 65
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REVIEWED:	APPROVED:	DATE	SCALE	FILE NO.	DWG. NO.
A.J.D.	W.T.W.	9-5-19	1"=30'	03-190182-00	2 OF 5

CONNECTICUT STATE PLANE COORDINATE SYSTEM (NAD 83)

LEGEND

124	EXISTING CONTOUR
125	EXISTING CONTOUR
× 123.45	EXISTING SPOT ELEVATION
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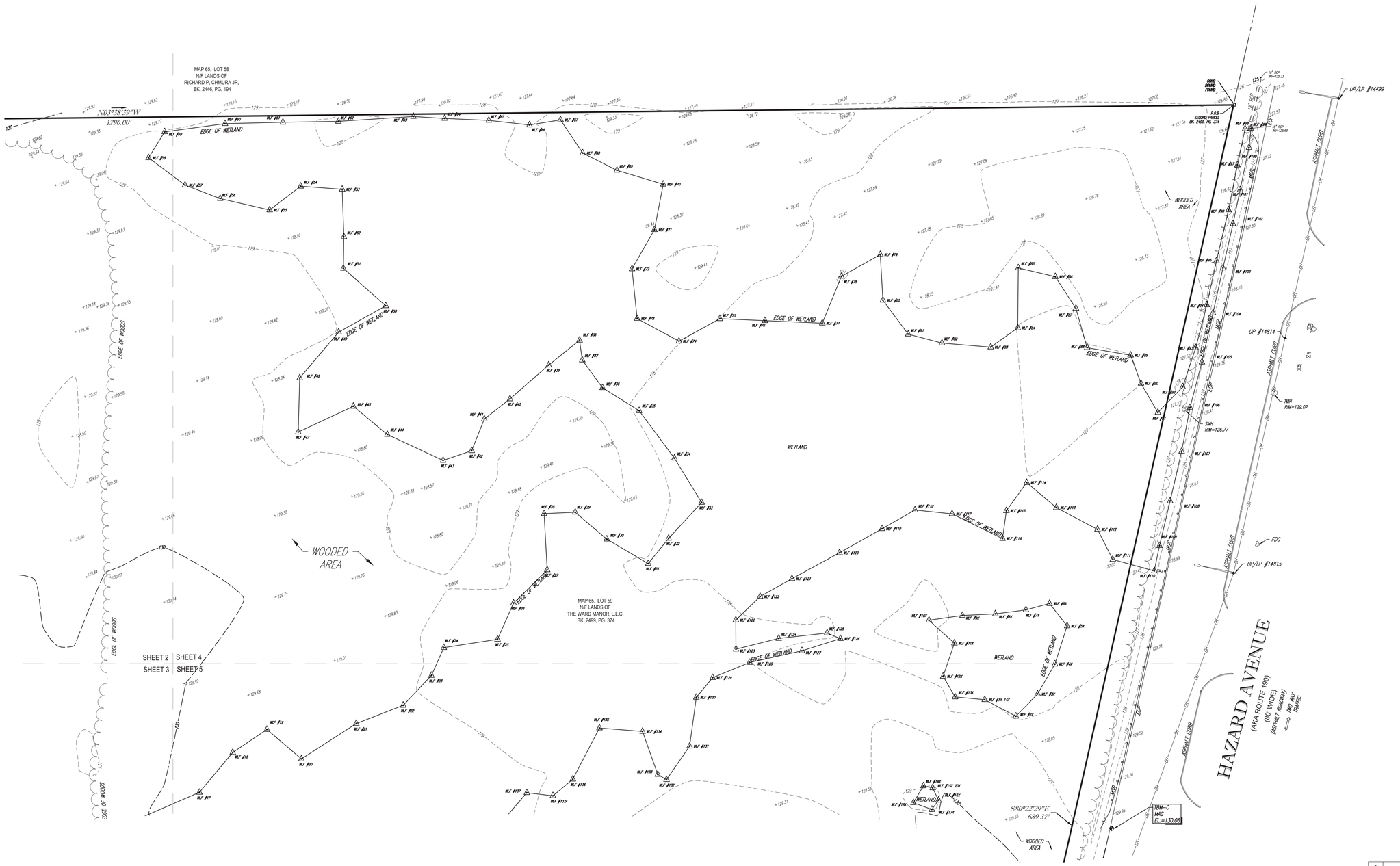

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TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

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STATE OF CONNECTICUT
WILLIAM THEODORE WHIMPLE
No. 70290
LICENSED
LAND SURVEYOR

6-4-2020
DATE

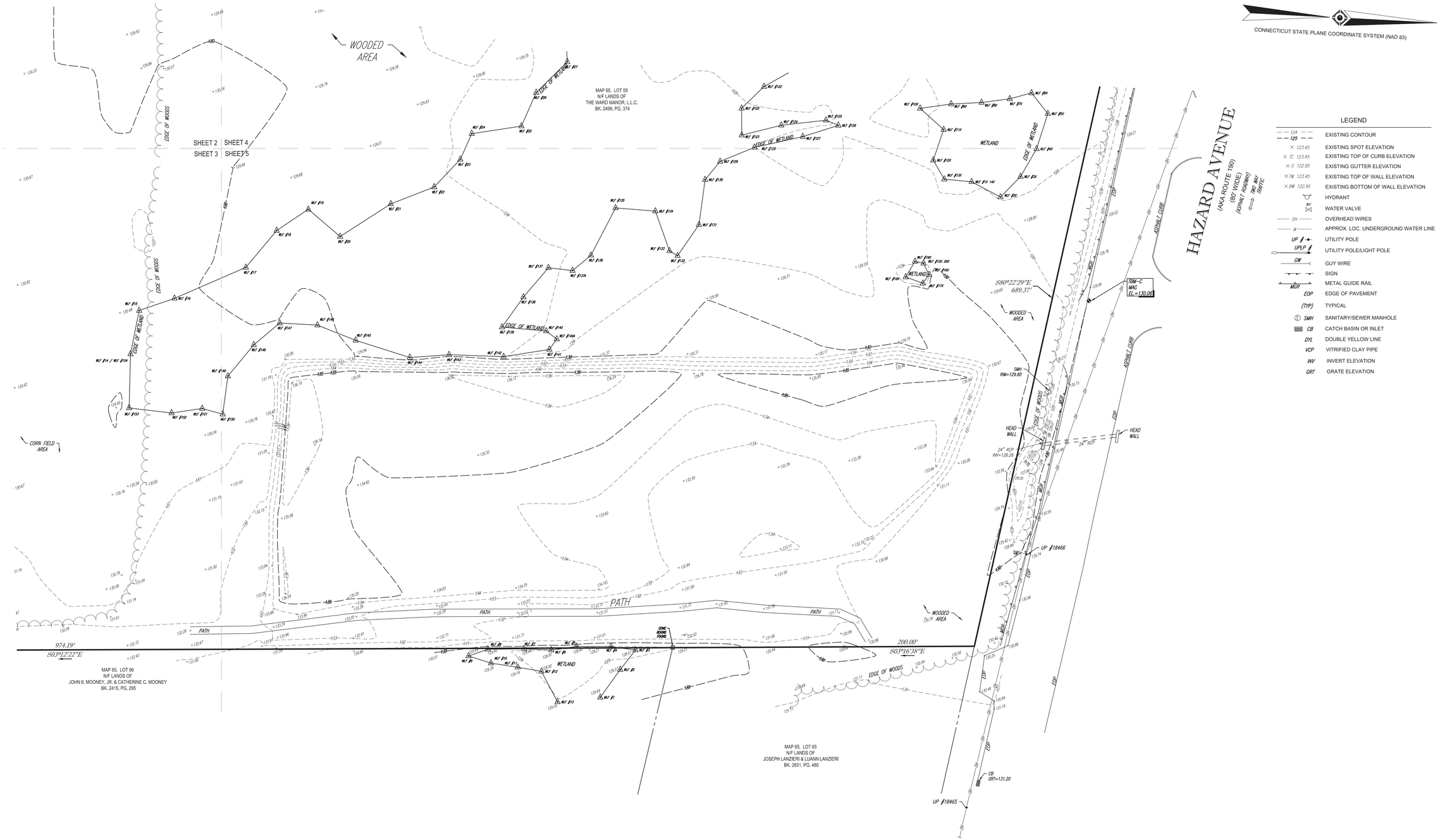
WILLIAM T. WHIMPLE
CONNECTICUT PROFESSIONAL LAND SURVEYOR #70290

FIELD DATE: 8-30-19
FIELD BOOK NO.: 19-12
FIELD BOOK PG.: 47
FIELD CREW: J.O.
DRAWN: P.V.

BOUNDARY & TOPOGRAPHIC SURVEY
118 HAZARD AVENUE
PREPARED FOR BOHLER ENGINEERING
LOT 59, MAP 65
TOWN OF ENFIELD, HARTFORD COUNTY
STATE OF CONNECTICUT

CONTROL POINT ASSOCIATES, INC.
352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
508.948.3000 - 508.948.3003 FAX
ALBANY, NY 5182175010
CHALFONT, PA 2157129800
MANHATTAN, NY 6467800411
MT LAUREL, NJ 6098572099
WARREN, NJ 9086680099

REVIEWED:	APPROVED:	DATE	SCALE	FILE NO.	DWG. NO.
A.J.D.	W.T.W.	9-5-19	1"=30'	03-190182-00	4 OF 5



LEGEND

124 / 125	EXISTING CONTOUR
× 123.45	EXISTING SPOT ELEVATION
× TC 123.45	EXISTING TOP OF CURB ELEVATION
× G 122.95	EXISTING GUTTER ELEVATION
× TW 123.45	EXISTING TOP OF WALL ELEVATION
× BW 122.95	EXISTING BOTTOM OF WALL ELEVATION
	HYDRANT
WV	WATER VALVE
OH	OVERHEAD WIRES
W	APPROX. LOC. UNDERGROUND WATER LINE
UP	UTILITY POLE
UPLP	UTILITY POLE/LIGHT POLE
GW	GUY WIRE
	SIGN
MGR	METAL GUIDE RAIL
EOP	EDGE OF PAVEMENT
(TYP)	TYPICAL
SMH	SANITARY/SEWER MANHOLE
CB	CATCH BASIN OR INLET
DYL	DOUBLE YELLOW LINE
VCP	VITRIFIED CLAY PIPE
INV	INVERT ELEVATION
GRT	GRATE ELEVATION

UTILITIES:

THE FOLLOWING COMPANIES WERE NOTIFIED BY CONNECTICUT ONE-CALL SYSTEM (1-888-344-7233) AND REQUESTED TO MARK OUT UNDERGROUND FACILITIES AFFECTING AND SERVICING THIS SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES RESPONSE TO THIS REQUEST.
REQUEST NUMBER: 20193102803

UTILITY COMPANY	PHONE NUMBER
BUCKEYE PARTNERS, LP	1-610-904-4940
COX COMMUNICATIONS	1-800-778-9140
EVERSOURCE ELECTRIC	1-800-778-9140
EVERSOURCE GAS	1-203-206-5702
FRONTIER COMMUNICATIONS	1-800-778-9140
HAZARDVILLE WATER CO	1-860-749-0779
TOWN OF ENFIELD	1-860-209-1615

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GRAPHIC SCALE

30' 0 15' 30' 60' 120'

(IN FEET)
1 inch = 30' ft.

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STATE OF CONNECTICUT
WILLIAM THEODORE WHIMPLE
No. 70290
LICENSED
LAND SURVEYOR

6-4-2020
DATE

WILLIAM T. WHIMPLE
CONNECTICUT PROFESSIONAL LAND SURVEYOR #70290

No.	DESCRIPTION OF REVISION	FIELD CREW	DRAWN:	APPROVED:	DATE
1	REVISED PER CLIENT COMMENTS	N/A	R.J.K.	G.L.H.	6-4-2020

FIELD DATE 8-30-19
FIELD BOOK NO. 19-12
FIELD BOOK PG. 47
FIELD CREW J.O.
DRAWN: P.V.
REVIEWED: A.J.D.

BOUNDARY & TOPOGRAPHIC SURVEY
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COLOR LEGEND

- ASSISTED LIVING
- MEMORY CARE
- COMMONS
- ADMINISTRATION
- RES. SERVICE
- SERVICE
- CIRCULATION
- STAIRS/ELEVATOR

BUILDING AREA

LEVEL 1	28,044 sf
LEVEL 2	26,700 sf
TOTAL	54,744 sf

UNIT SUMMARY

	LEVEL 1	LEVEL 2	TOTAL
MEMORY CARE			
SINGLE	2		2
DOUBLE	11		11
ASSISTED LIVING			
SINGLE	0	2	2
DOUBLE	10	33	43
TOTALS	23	35	58

TOTAL BEDS 112

1 LEVEL 1 FLOOR PLAN
3/32" = 1'-0"

STATE OF CONNECTICUT
GERALD A. BERGER
ARI6739
LICENSED ARCHITECT

EGA
ARCHITECTS

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CIVIL ENGINEER: Bohler Engineering
STRUCTURAL ENGINEER: Shelley Engineering, Inc
MEP ENGINEER: BLW Engineering, Inc
INTERIOR DESIGNER: Merlino Design, Inc

All American Assisted Living
at Enfield
118 Hazard Ave.
Town of Enfield, CT 06082

Issued For:	Date:
TOWN REVIEW	7/8/2020

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Building Key:

Sheet Title:
Level 1 Floor Plan

Sheet Number:
A1-1

1 LEVEL 2 FLOOR PLAN
3/32" = 1'-0"

COLOR LEGEND

- ASSISTED LIVING
- MEMORY CARE
- COMMONS
- ADMINISTRATION
- RES. SERVICE
- SERVICE
- CIRCULATION
- STAIRS/ELEVATOR

BUILDING AREA

LEVEL 1	28,044 sf
LEVEL 2	26,700 sf
TOTAL	54,744 sf

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SINGLE	0	2	2
DOUBLE	10	33	43
TOTALS	23	35	58

TOTAL BEDS 112

N

STATE OF CONNECTICUT GERALD R. METSKI ARI9739 LICENSED ARCHITECT

EGA ARCHITECTS

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Phone 978-462-5515
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CIVIL ENGINEER: Bohler Engineering
STRUCTURAL ENGINEER: Shelley Engineering, Inc
MEP ENGINEER: BLW Engineering, Inc
INTERIOR DESIGNER: Merlino Design, Inc

All American Assisted Living
at Enfield
118 Hazard Ave.
Town of Enfield, CT 06082

Issued For:	Date:
TOWN REVIEW	1/8/2020

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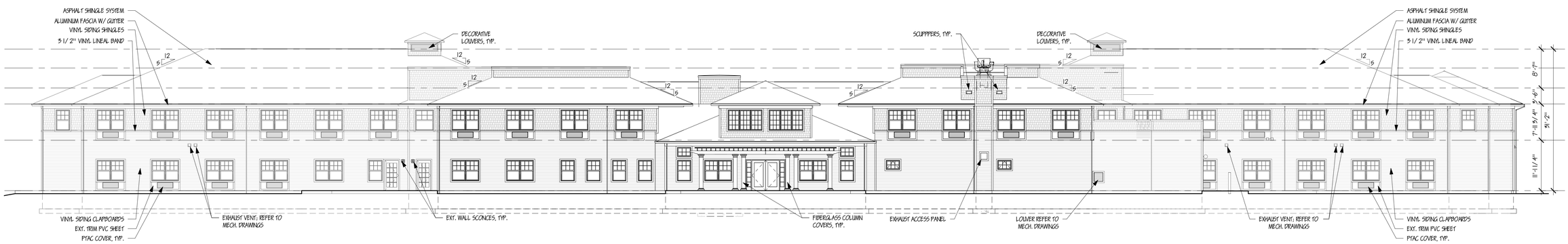
Building Key:

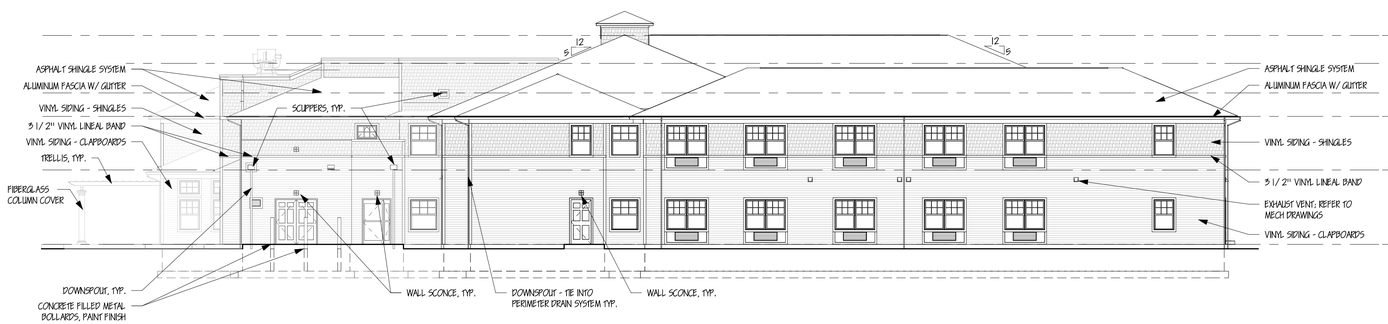
Sheet Title:
Level 2 Floor Plan

Sheet Number:
A1-2

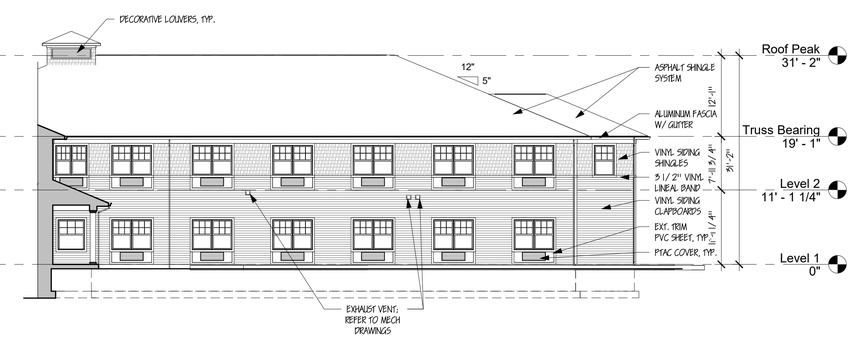
1 Building Elevation-West
3/32" = 1'-0"



2 Building Elevation-East
3/32" = 1'-0"



3 Building Elevation-North
3/32" = 1'-0"



4 Building Elevation-South Courtyard
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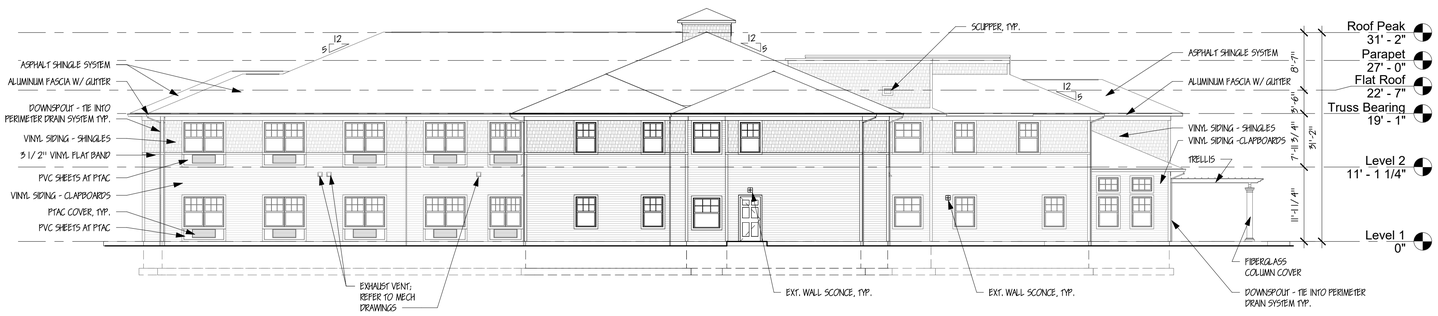
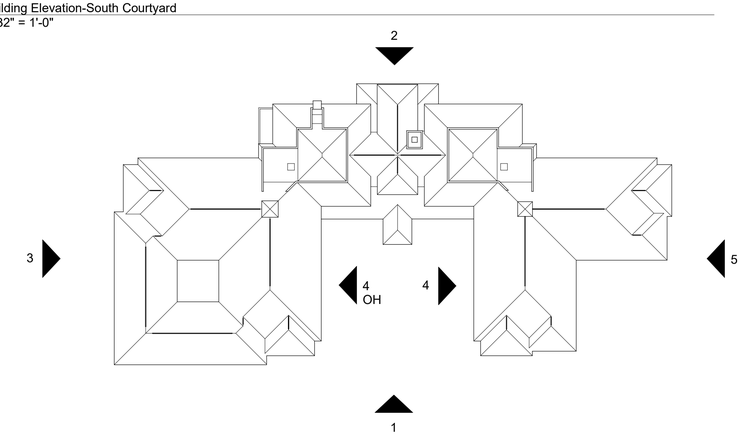


5 Building Elevation-South
3/32" = 1'-0"



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CIVIL ENGINEER: Bohler Engineering
STRUCTURAL ENGINEER: Shelley Engineering, Inc
MEP ENGINEER: BLW Engineering, Inc
INTERIOR DESIGNER: Merlino Design, Inc

All American Assisted Living
at Enfield
118 Hazard Ave.
Town of Enfield, CT 06082

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TOWN REVIEW	7/ 8/ 2020

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Building Key:

Sheet Title:
Elevations

Sheet Number:
A1-3

PROPOSED FRONT ENTRY RENDERING

KAPLAN
DEVELOPMENT GROUP, LLC

All American
ASSISTED LIVING

STATE OF CONNECTICUT
GERALD A. MEYER
ARI0739
LICENSED ARCHITECT

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Shelley Engineering, Inc
MEP ENGINEER:
BLW Engineering, Inc
INTERIOR DESIGNER:
Merlino Design, Inc

All American Assisted Living
at Enfield
118 Hazard Ave.
Town of Enfield, CT 06082

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Building Key:

Sheet Title:
Front Entry Rendering

Sheet Number:
A1-4

DRAINAGE REPORT

For

KAPLAN
DEVELOPMENT GROUP. LLC

PROPOSED

"All American Assisted Living" Facility

118 Hazard Avenue
Enfield, Connecticut
Hartford County

Prepared by:

BOHLER ENGINEERING
16 Old Forge Road
Rocky Hill, CT 06067
(860) 333-8900 TEL.

Jeff G. Bord
Connecticut P.E. Lic. #30414

BOHLER

June 4th, 2020
#CT191016

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I. EXECUTIVE SUMMARY

This report examines the changes in drainage that can be expected as the result of the development of a proposed assisted living facility located on the southerly side of Hazard Avenue in the Town of Enfield, Connecticut. The site, which contains approximately ±19.43 acres of land, contains existing wetlands and wooded areas. The proposed project will disturb approximately ±3.60 acres.

The proposed project includes the construction of a new two-story 29,000 SF footprint freestanding "All American Assisted Living" facility along with new paved parking areas, landscaping, storm water management components and associated utilities. This report addresses a comparative analysis of the pre- and post-development site runoff conditions. Additionally, this report provides calculations documenting the design of the proposed stormwater conveyance/management system as illustrated within the accompanying Site Development Plans prepared by Bohler Engineering. The best management practices (BMPs) incorporated into the proposed stormwater management system have been designed to meet the requirements as set forth in the 2004 Connecticut Stormwater Quality Manual. This correlates to a total required water quality storage volume of 7,058 cubic feet, where we will be providing 11,183 cubic feet of water quality storage volume. The project will also provide erosion and sedimentation controls during the demolition and construction periods, as well as long term stabilization of the site.

On-Site Soil Information

The majority of the soils at the site are mapped as Walpole sandy loam which is classified by the Natural Resource Conservation Service (NRCS) as Hydrologic Soil Group (HSG) "B/D". There is also a portion in the middle of the site that is mapped as Windsor loamy sand which is classified by the NRCS as HSG "A". The remaining soils at the site are Udorthents-Urban land complex and Ninigret fine sandy loam, which are classified by the NRCS as HSG "B" and "C" respectively. Refer to **Appendix B** for additional information.

Design Point Descriptions

For the purposes of this analysis the pre- and post-development drainage conditions were analyzed at three (3) "design points" where stormwater runoff currently drains to under existing conditions. Refer to **Appendix C** for Existing Drainage Map

Design Point #1 (DP-1) is the 24" RCP within the Hazard Avenue right-of-way. Under existing conditions, this design point receives storm water flows from approximately 0.50 acres of land designated as watershed "ED-1". This watershed is entirely made up of wooded and grass areas. This area has a calculated curve number of 63 and a calculated time of concentration of 12.0 minutes.

Design Point #2 (DP-2) is the area of wetlands on the western portion of the site. Under existing conditions, this design point receives storm water flows from 1.68 acres of land designated as watersheds "ED-2a" and "ED-2b". These watersheds are entirely made up of wooded and grass areas as well as portions of the existing wetlands. Watershed "ED-2a" and "ED-2b" have a calculated curve number of 62 and 65, respectively as well as calculated time of concentrations of 11.5 minutes and 11.4 minutes, respectively.

Design Point #3 (DP-3) is the area of wetlands off-site to the east. Under existing conditions, this design point receives storm water flows from 1.42 acres of land designated as watershed "ED-3". This watershed is entirely made up of wooded and grass areas. This area has a calculated curve number of 55 and a calculated time of concentration of 14.5 minutes.

A summary of the existing and proposed conditions peak runoff rates and volumes for the 1-, 2-, 10-, 25-, and 100-year storms can be found in **Table 1.1** below. In addition, the project has been designed to meet or exceed the 2004 Connecticut Stormwater Quality Manual as detailed herein.

Table 1.1: Design Point Peak Runoff Rate Summary

Point of Analysis	1-Year Storm			2-Year Storm			10-Year Storm			25-Year Storm			100-Year Storm		
	Pre	Post	Δ	Pre	Post	Δ	Pre	Post	Δ	Pre	Post	Δ	Pre	Post	Δ
DP1	0.03	0.00	**-0.03**	0.07	0.00	**-0.07**	0.36	0.22	**-0.14**	0.59	0.30	**-0.29**	1.00	1.00	**0**
DP2	0.40	0.34	**-0.06**	0.62	0.42	**-0.20**	2.40	2.39	**-0.01**	3.76	3.54	**-0.22**	6.05	6.00	**-0.05**
DP3	0.03	0.03	**0**	0.18	0.07	**-0.11**	1.34	1.04	**-0.30**	2.41	2.38	**-0.03**	4.29	4.02	**-0.27**

**Flows are represented in cubic feet per second (cfs)*

II. EXISTING SITE CONDITIONS

Existing Site Description and Collection/Conveyance

The site consists of approximately 19.44 acres, of which approximately 3.60 acres are being developed. The site is located along the southerly side of Hazard Avenue in the Town of Enfield, Connecticut. Located in the B-P (Business Professional) Zone and Flood Zone X which correlates to a 0.2% annual chance of flood hazard. The site is entirely made up of existing wooded and wetland areas, with slopes varying from 1%-50% with on-site elevations ranging from 136 at the northwesterly corner of the site to 127 at the southern edge of the site. The surrounding area has an existing shopping center and restaurant along the frontage of Hazard Avenue. Refer to **Appendix A** for additional information.

The northeastern portion of the site drains from southwest to the northern edge of the site where it is collected by a 24" RCP within the Hazard Avenue municipal drainage system. The northwestern portion of the site drains from east to west into the existing areas of wetlands. The southwestern portion of the site also drains from east to west into the existing areas of wetlands. The remaining easterly portion of the site drains from west to east off-site into the adjacent property where there is also an area of existing wetlands.

Existing Watersheds and Design Point Information

The site was subdivided into four (4) separate sub catchments for the existing conditions as described below to analyze existing and proposed flow rates at each design point. The minimum time of concentration for all proposed areas is calculated as 6 minutes (0.1 hr).

Subcatchment ED-1 in total is 0.33 acres with existing wooded and grass areas. This area flows overland from southwest to north across the site where it is collected by an existing 24" RCP in the Hazard Avenue right-of-way. The stormwater runoff from this Subcatchment is not treated or attenuated. This subcatchment has a calculated curve number of 60 and a calculated time of concentration of 12.0 minutes

Subcatchment ED-2a in total is 0.79 acres with existing wooded, grass, and wetland areas. This area flows overland from east to west across the site where it drains into the existing wetland area at the western portion of the site. The stormwater runoff from this subcatchment is not treated or

attenuated. This subcatchment has a calculated curve number of 62 and a calculated time of concentration of 11.6 minutes.

Subcatchment ED-2b in total is 0.89 acres with existing wooded, grass, and wetland areas. This area flows from east to west across the site where it drains into the existing wetland area at the western portion of the site. The stormwater runoff from this subcatchment is not treated or attenuated. This subcatchment has a calculated curve number of 65 and a calculated time of concentration of 11.4 minutes.

Subcatchment ED-3 in total is 1.59 acres with existing wooded and grass areas. This area flows from west to east across the site where it drains off-site into the existing wetland area off the subject property. The stormwater runoff from this subcatchment is not treated or attenuated. This subcatchment has a calculated curve number of 56 and a calculated time of concentration of 14.5 minutes.

Refer to **Table 2.1,** for the calculated existing conditions peak rates of runoff and volumes. For additional hydrologic information, refer to **Appendix D** and the Drainage Area Maps in the appendices of this report for a graphical representation of the existing drainage areas.

Table 2.1: Existing Conditions Peak Runoff Rates*

Point of Analysis	1-Year Storm	2-Year Storm	10-Year Storm	25-Year Storm	100-Year Storm
DP1	0.03	0.07	0.36	0.59	1.00
DP2	0.40	0.62	2.40	3.76	6.05
DP3	0.03	0.07	1.04	2.38	4.02

**Flows are represented in cubic feet per second (cfs)*

III. PROPOSED SITE CONDITIONS

Proposed Development Description

The proposed project includes the construction of a new two-story 29,000 SF footprint freestanding "All American Assisted Living" facility along with new paved parking areas, landscaping, storm water management components and associated utilities. The site, including the proposed parking areas, has been designed to drain to deep-sump hooded catch basins. The catch basins will capture and convey stormwater runoff, via an underground pipe system, to one of four (4) subsurface infiltration basins with isolator rows to handle and treat the first inch of runoff pursuant to the 2004 Stormwater Quality Manual. Additionally, three (3) above ground infiltration basins have been proposed to provide treatment for part of the rooftop runoff and remaining impervious runoff.

The project has been designed to maintain existing drainage patterns to the maximum extent practical, utilizing the same design points described in **Section I** above.

Proposed Development Collection and Conveyance

Deep sump hooded catch basins are proposed to collect and route runoff from the paved parking areas to the proposed subsurface basins. Pipes have been designed for the 10-year storm using the Rational Method. Outlet protection sizing calculations are included in **Appendix E**.

The best management practices (BMPs) incorporated into the proposed stormwater management system have been designed to meet or exceed the requirements as set forth in the 2004 Connecticut Stormwater Quality manual. Refer to **Appendix E** for calculations. In addition, a Stormwater Operation and Maintenance (O&M) Plan, attached in **Appendix F**, has been developed which includes scheduled maintenance and periodic inspections of stormwater management structures.

Proposed Watersheds and Design Point Information

The project has been designed to maintain existing drainage watersheds to the greatest extent possible, with the same design points described in **Section II** above. The site was subdivided into ten (10) separate sub catchments for the proposed conditions as described below. The minimum time of concentration for all proposed areas is calculated as 6 minutes (0.1 hr).

Subcatchment PD-1 consists of 0.67 acres of pavement, landscaping and roofing. This area drains to proposed catch basins and is routed to an above ground infiltration basin for water quality treatment. The roof runoff from this area is routed through a SC-740 StormTech. This SC-740 StormTech contains isolator rows for the purpose of water quality treatment prior to discharging into an above ground infiltration basin. From which, it will flow into a 24" RCP headwall, as it does in existing conditions. A 6-minute time of concentration was assumed based on surface cover types and slopes.

Subcatchment PD-2a consists of 0.60 acres of pavement, and landscaping. This area drains to proposed catch basins and is routed through a SC-740 StormTech infiltration basin. This SC-740 infiltration basin contains isolator rows for the purpose of water quality treatment prior to discharging. A 6-minute time of concentration was assumed based on surface cover types and slopes.

Subcatchment PD-2b consists of 0.22 acres of landscaping and woodlands to remain. This area flows overland from east to west, as it does in existing conditions, to existing areas of wetlands to remain. A 6-minute of time of concentration was assumed based on surface cover types and slopes.

Subcatchment PD-2c consists of 0.36 acres of landscaping and pavement. This area drains to proposed catch basins and is routed through a SC-160LP StormTech infiltration basin prior to discharging. A 6-minute time of concentration was assumed based on surface cover types and slopes.

Subcatchment PD-2d consists of 0.03 acres of landscaping and woodlands to remain. This area flows overland from east to west, as it does in existing conditions, to existing areas of wetlands to remain. A 6-minute time of concentration was assumed based on surface cover types and slopes.

Subcatchment PD-2e consists of 0.36 acres of pavement, and landscaping. This area drains to a proposed catch basin and is routed through a SC-310 StormTech infiltration basin. This SC-310 StormTech contains isolator rows for the purpose of water quality treatment prior to discharging. A 6-minute time of concentration was assumed based on surface cover types and slopes.

Subcatchment PD-2f consists of 0.34 acres of landscaping and woodlands to remain. This area drains from east to west, as it does in existing conditions, to existing areas of wetlands to remain. A 12.8 minute time of concentration was calculated based on surface cover types and slopes.

Subcatchment PD-3a consists of 0.23 acres of entirely area consisting of pavement and landscaping. This area drains to proposed above ground infiltration basins prior to discharging. A 6-minute time of concentration was assumed based on surface cover types and slopes.

Subcatchment PD-3b consists of 0.46 acres of entirely area consisting of pavement, landscaping and roofing. This area drains to a proposed above ground infiltration basin prior to discharging. A 6-minute time of concentration was assumed based on surface cover types and slopes.

Subcatchment PD-3c consists of 0.33 acres of entirely area consisting of landscaping and woodlands to remain. This area drains from west to east, as it does in existing conditions, to existing areas of wetlands to remain. A 12.4-minute time of concentration was calculated based on surface cover types and slopes.

Refer to **Table 3.1** for the calculated proposed conditions peak rates of runoff. For additional hydrologic information, refer to **Appendix D** and the Drainage Area Maps in the appendices of this report for a graphical representation of the proposed drainage areas.

Table 3.1: Proposed Conditions Peak Runoff Rates*

Point of Analysis	1-Year Storm	2-Year Storm	10-Year Storm	25-Year Storm	100-Year Storm
DP1	0	0	0.22	0.30	1.00
DP2	0.34	0.42	2.39	3.54	6.00
DP3	0.03	0.07	0.74	2.22	4.13

**Flows are represented in cubic feet per second (cfs)*

IV. METHODOLOGY

Peak Flow Calculations

Methodology utilized to design the proposed stormwater management system includes compliance with the guidelines set forth in the 2004 Connecticut Stormwater Quality Manual. The pre- and post-development runoff rates being discharged from the site were computed using the HydroCAD

computer program. The drainage area and outlet information were entered into the program, which routes storm flows based on NRCS TR-20 and TR-55 methods. The other components of the model were determined following standard NRCS procedures for Curve Numbers (CNs) and times of concentrations documented in the appendices of this report. The rainfall data utilized and listed below in **Table 4.1** below for stormwater calculations was obtained from NOAA. Refer to **Appendix E** for more information.

Table 4.1: NOAA Rainfall Intensities

Frequency	1 year	2 year	10 year	25 year	100 year
Rainfall* (inches)	2.55	3.18	5.07	6.26	8.08

*Values derived from NOAA ATLAS on 10/24/2019

The proposed stormwater management as designed will provide a decrease in peak rates of runoff from the proposed facility for the 1-, 2-, 10-, 25- and 100-year design storm events. Additionally, the proposed project meets, or exceeds, the CTDEEP standards. Compliance with these standards is described further below.

V. SUMMARY

In summary, the proposed stormwater management system illustrated on the drawings prepared by Bohler Engineering results in a reduction in peak rates of runoff from the subject site when compared to pre-development conditions for the1-, 2-, 10-, 25- and 100-year storm frequencies. In addition, the proposed best management practices will result in an effective removal of total suspended solids from the post-development runoff. The pre-development versus post-development stormwater discharge comparisons are contained in **Table 5.1**:

Table 5.1: Design Point Peak Runoff Rate Summary

Point of Analysis	1-Year Storm			2-Year Storm			10-Year Storm			25-Year Storm			100-Year Storm		
	Pre	Post	Δ	Pre	Post	Δ	Pre	Post	Δ	Pre	Post	Δ	Pre	Post	Δ
DP1	0.03	0.00	**-0.03**	0.07	0.00	**-0.07**	0.36	0.22	**-0.14**	0.59	0.30	**-0.29**	1.00	1.00	**0**
DP2	0.40	0.34	**-0.06**	0.62	0.42	**-0.20**	2.40	2.39	**-0.01**	3.76	3.54	**-0.22**	6.05	6.00	**-0.05**
DP3	0.03	0.03	**0**	0.18	0.07	**-0.11**	1.34	1.04	**-0.30**	2.41	2.38	**-0.03**	4.29	4.02	**-0.27**

**Flows are represented in cubic feet per second (cfs)*

As outlined in the table above, the proposed stormwater management system as designed will provide a decrease in peak rates of runoff from the proposed facility for the 1-, 2-, 10-, 25- and 100-year storm events. Additionally, the project meets, or exceeds the CTDEEP Stormwater Management Standards as described further herein.

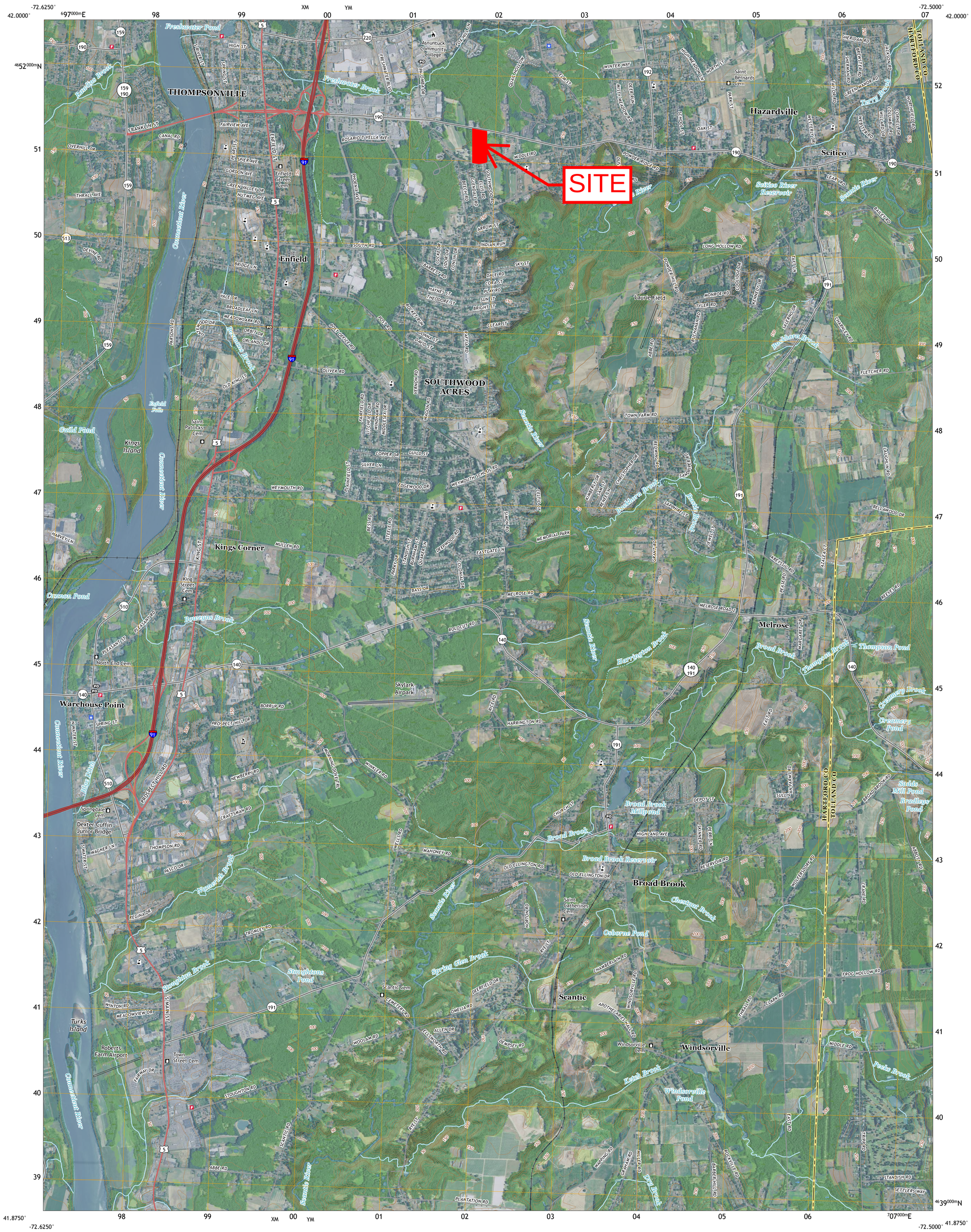
APPENDIX A: PROJECT LOCATION MAPS

- *USGS MAP*
- *FEMA FIRMETTE*

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map
US Topo

BROAD BROOK QUADRANGLE
CONNECTICUT
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 18T

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery....NAIP, July 2016 - September 2016
Roads.... U.S. Census Bureau, 2016
Names....GNIS, 1979 - 2017
Hydrography....National Hydrography Dataset, 2004
Contours....National Elevation Dataset, 2012
Boundaries....Multiple sources; see metadata file 2016 - 2017

Wetlands....FWS National Wetlands Inventory 2010

MN
GN
13°55′
247 MILS
1°38′
29 MILS
UTM GRID AND 2017 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000 - m Square ID
'00
XM
YM
Grid Zone Designation
18T

SCALE 1:24 000

KILOMETERS 1 0.5 0 1 2
METERS 1000 500 0 1000 2000
MILES 1 0.5 0 1
FEET 1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the
National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.18

CONNECTICUT
QUADRANGLE LOCATION

1	2	3
4		5
6	7	8

ADJOINING QUADRANGLES
1 West Springfield
2 Springfield South
3 Hampden
4 Windsor Locks
5 Ellington
6 Hartford North
7 Manchester
8 Rockville

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

BROAD BROOK, CT
2018

7643016360098
NSN. 7643016360098
NGA REF NO. USGSX24K5534

National Flood Hazard Layer FIRMette

FEMA

0 250 500 1,000 1,500 2,000 Feet 1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/7/2019 at 10:53:09 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX B: SOIL AND WETLAND INFORMATION

- *NCRS CUSTOM SOIL RESOURCE REPORT*

United States Department of Agriculture

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for State of Connecticut

October 24, 2019

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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36A—Windsor loamy sand, 0 to 3 percent slopes.....11
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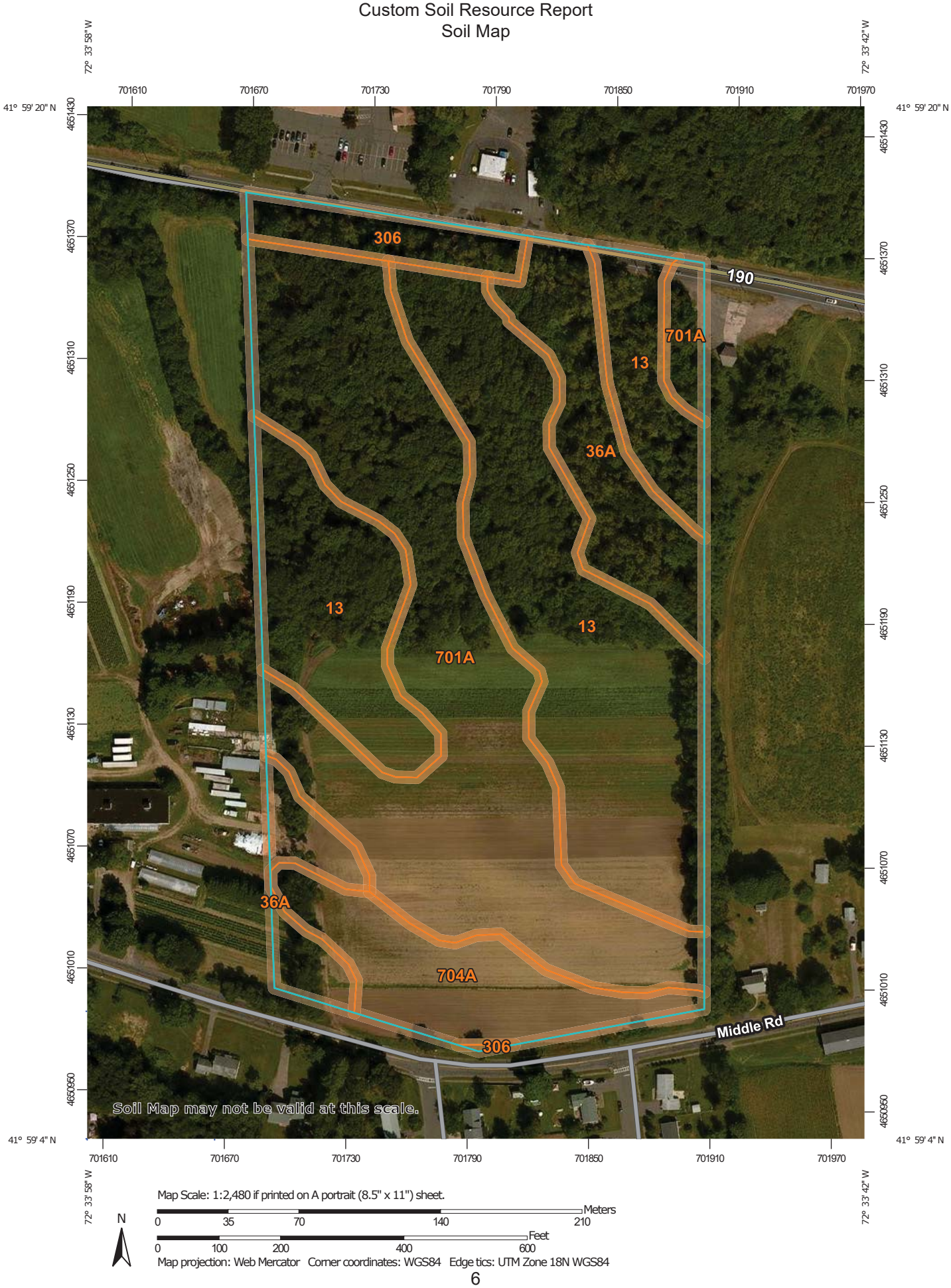
704A—Enfield silt loam, 0 to 3 percent slopes.....15

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut
Survey Area Data: Version 19, Sep 13, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 25, 2013—Sep 9, 2013

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
13	Walpole sandy loam, 0 to 3 percent slopes	8.4	39.5%
36A	Windsor loamy sand, 0 to 3 percent slopes	2.6	12.2%
306	Udorthents-Urban land complex	0.8	3.7%
701A	Ninigret fine sandy loam, 0 to 3 percent slopes	7.6	35.8%
704A	Enfield silt loam, 0 to 3 percent slopes	1.9	8.8%
Totals for Area of Interest		**21.3**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

State of Connecticut

13—Walpole sandy loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2svkl
Elevation: 0 to 1,020 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 250 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Walpole and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Walpole

Setting

Landform: Outwash plains, depressions, deltas, outwash terraces, depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread, dip, talf
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Sandy glaciofluvial deposits derived from igneous, metamorphic and sedimentary rock

Typical profile

Oe - 0 to 1 inches: mucky peat
A - 1 to 7 inches: sandy loam
Bg - 7 to 21 inches: sandy loam
BC - 21 to 25 inches: gravelly sandy loam
C - 25 to 65 inches: very gravelly sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: About 0 to 4 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water storage in profile: Moderate (about 6.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: B/D
Hydric soil rating: Yes

Minor Components

Sudbury

Percent of map unit: 10 percent
Landform: Outwash plains, terraces, deltas
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread, dip
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Scarboro

Percent of map unit: 10 percent
Landform: Outwash terraces, outwash plains, deltas
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread, dip
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

36A—Windsor loamy sand, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2svkg
Elevation: 0 to 990 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Windsor, loamy sand, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Windsor, Loamy Sand

Setting

Landform: Deltas, outwash terraces, dunes, outwash plains
Landform position (three-dimensional): Riser, tread
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Parent material: Loose sandy glaciofluvial deposits derived from granite and/or loose sandy glaciofluvial deposits derived from schist and/or loose sandy glaciofluvial deposits derived from gneiss

Typical profile

O - 0 to 1 inches: moderately decomposed plant material
A - 1 to 3 inches: loamy sand
Bw - 3 to 25 inches: loamy sand

C - 25 to 65 inches: sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water storage in profile: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Deerfield, loamy sand

Percent of map unit: 10 percent
Landform: Outwash plains, terraces, deltas
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Hinckley, loamy sand

Percent of map unit: 5 percent
Landform: Kames, outwash plains, deltas, eskers
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Nose slope, side slope, crest, head slope, rise
Down-slope shape: Convex
Across-slope shape: Convex, linear
Hydric soil rating: No

306—Udorthents-Urban land complex

Map Unit Setting

National map unit symbol: 9lmg
Elevation: 0 to 2,000 feet
Mean annual precipitation: 43 to 56 inches
Mean annual air temperature: 45 to 55 degrees F
Frost-free period: 120 to 185 days
Farmland classification: Not prime farmland

Map Unit Composition

Udorthents and similar soils: 50 percent
Urban land: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents

Setting

Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Drift

Typical profile

A - 0 to 5 inches: loam
C1 - 5 to 21 inches: gravelly loam
C2 - 21 to 80 inches: very gravelly sandy loam

Properties and qualities

Slope: 0 to 25 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 1.98 in/hr)
Depth to water table: About 54 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 6.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Hydric soil rating: No

Description of Urban Land

Typical profile

H - 0 to 6 inches: material

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Hydric soil rating: Unranked

Minor Components

Unnamed, undisturbed soils

Percent of map unit: 8 percent
Hydric soil rating: No

Udorthents, wet substratum

Percent of map unit: 5 percent
Down-slope shape: Convex
Across-slope shape: Linear

Hydric soil rating: No

Rock outcrop

Percent of map unit: 2 percent
Hydric soil rating: No

701A—Ninigret fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2y07d
Elevation: 0 to 1,260 feet
Mean annual precipitation: 43 to 54 inches
Mean annual air temperature: 45 to 55 degrees F
Frost-free period: 140 to 185 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Ninigret and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ninigret

Setting

Landform: Outwash plains, kame terraces, outwash terraces, kames, moraines
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope, tread
Down-slope shape: Convex, linear
Across-slope shape: Convex, concave
Parent material: Coarse-loamy eolian deposits over sandy and gravelly glaciofluvial deposits derived from gneiss, granite, schist, and/or phyllite

Typical profile

Ap - 0 to 8 inches: fine sandy loam
Bw1 - 8 to 16 inches: fine sandy loam
Bw2 - 16 to 26 inches: fine sandy loam
2C - 26 to 65 inches: stratified loamy sand to loamy fine sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 18 to 38 inches to strongly contrasting textural stratification
Natural drainage class: Moderately well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: About 17 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water storage in profile: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Merrimac

Percent of map unit: 5 percent
Landform: Eskers, outwash terraces, kames, moraines, outwash plains
Landform position (two-dimensional): Shoulder, summit
Landform position (three-dimensional): Side slope, crest, tread
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Agawam

Percent of map unit: 5 percent
Landform: Moraines, outwash plains, kame terraces, outwash terraces, kames
Landform position (two-dimensional): Shoulder, summit
Landform position (three-dimensional): Side slope, crest, tread
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Tisbury

Percent of map unit: 3 percent
Landform: Outwash terraces, outwash plains, deltas, valley trains
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: No

Raypol

Percent of map unit: 2 percent
Landform: Drainageways, depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

704A—Enfield silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2y07p
Elevation: 0 to 1,200 feet
Mean annual precipitation: 43 to 54 inches
Mean annual air temperature: 45 to 55 degrees F
Frost-free period: 140 to 185 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Enfield and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Enfield

Setting

Landform: Outwash terraces, outwash plains
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Coarse-silty eolian deposits over sandy and gravelly glaciofluvial deposits derived from granite, schist, and/or gneiss

Typical profile

Ap - 0 to 7 inches: silt loam
Bw1 - 7 to 15 inches: silt loam
Bw2 - 15 to 25 inches: silt loam
2C - 25 to 60 inches: stratified very gravelly coarse sand to loamy sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 16 to 39 inches to strongly contrasting textural stratification
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Haven

Percent of map unit: 5 percent
Landform: Outwash terraces, outwash plains
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Tisbury

Percent of map unit: 5 percent
Landform: Outwash terraces, outwash plains, deltas, valley trains
Landform position (three-dimensional): Tread
Down-slope shape: Concave

Across-slope shape: Concave
Hydric soil rating: No

Agawam

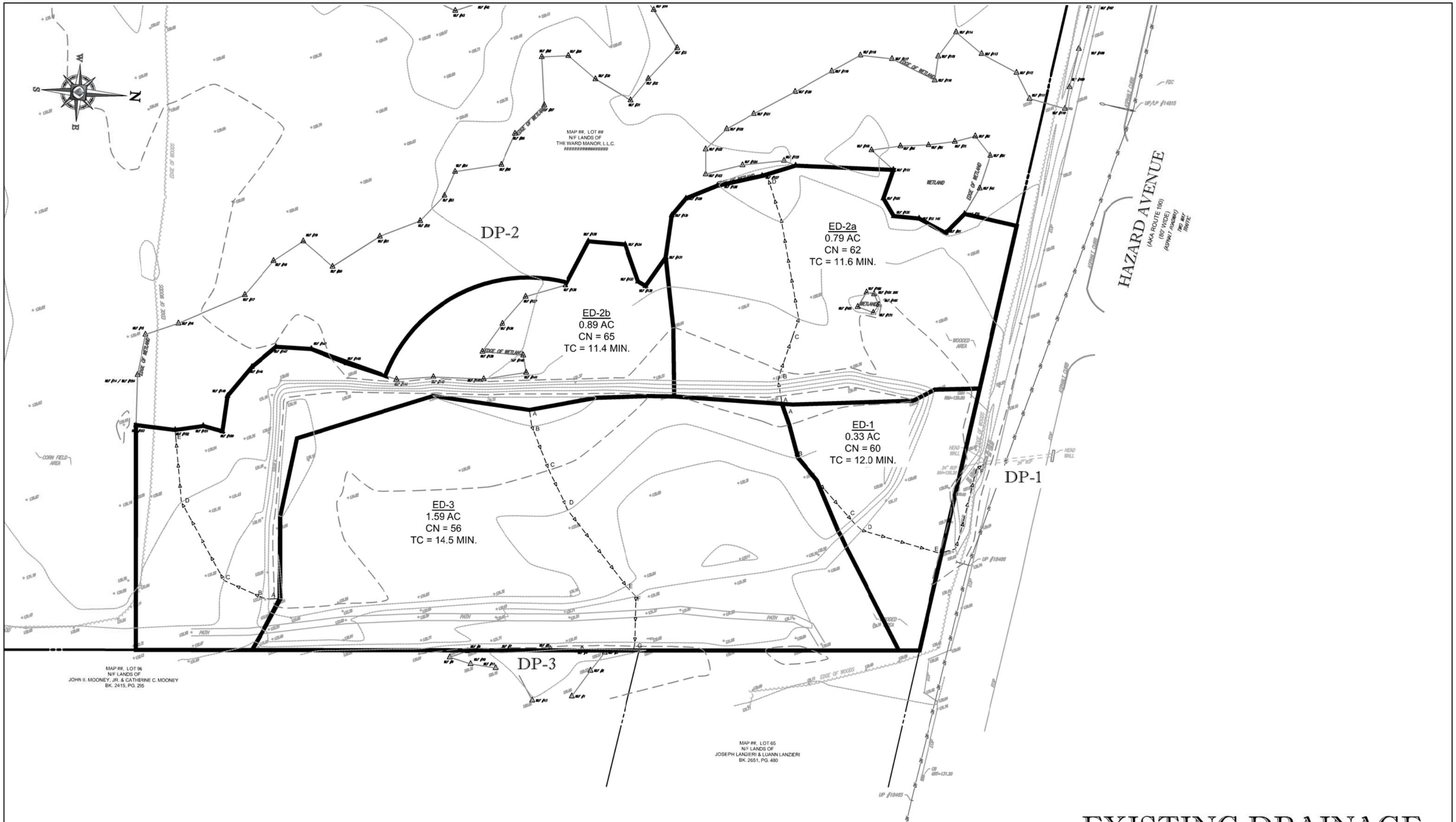
Percent of map unit: 3 percent
Landform: Kame terraces, outwash terraces, kames, moraines, outwash plains
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Side slope, crest, tread
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Raypol

Percent of map unit: 2 percent
Landform: Drainageways, depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

APPENDIX C: EXISTING CONDITIONS HYDROLOGIC ANALYSIS

- *EXISTING CONDITIONS DRAINAGE MAP*
- *EXISTING CONDITIONS HYDROCAD COMPUTATIONS*

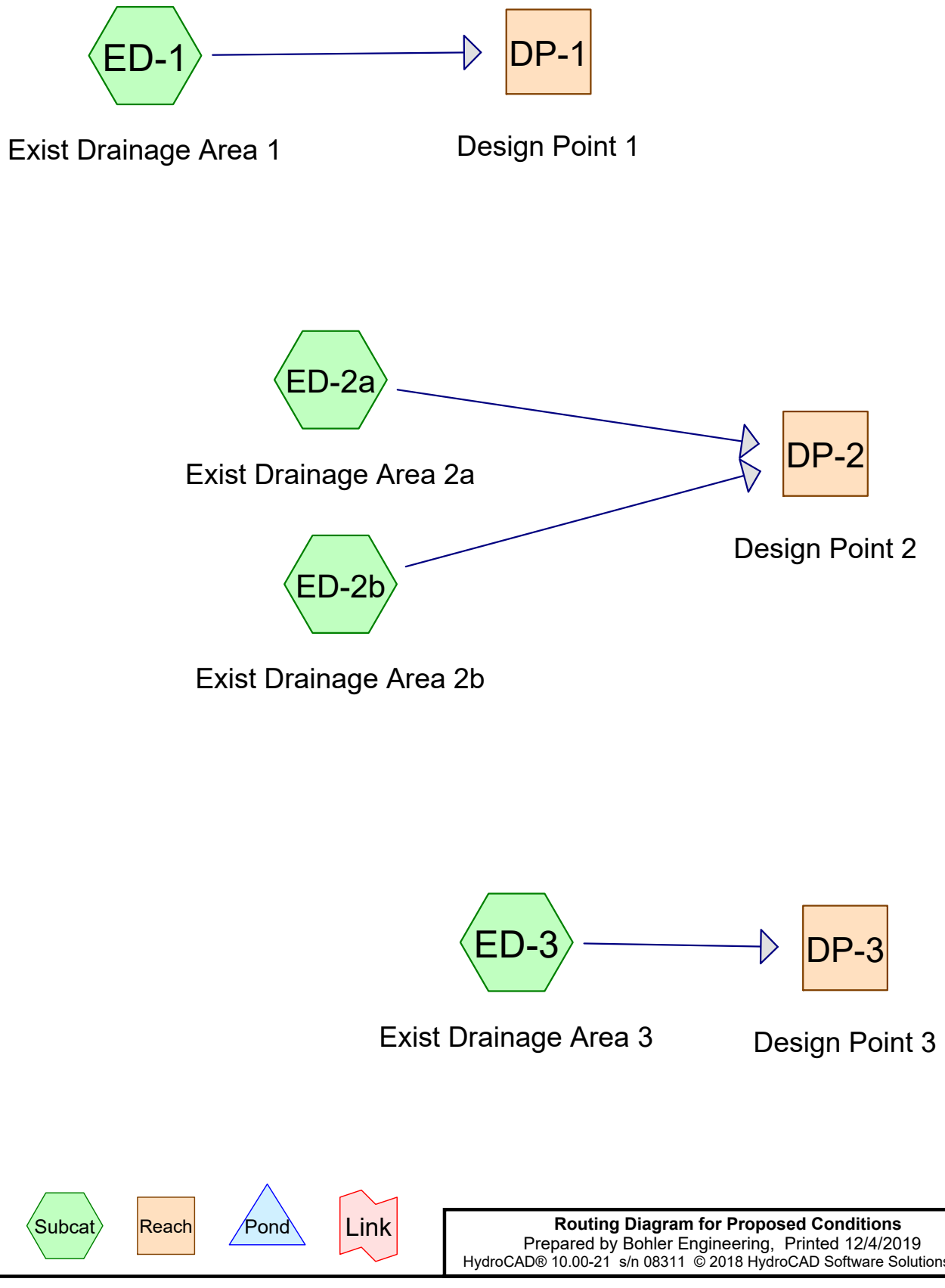


EXISTING DRAINAGE TRIBUTARY MAP

PREPARED BY

BOHLER

NOT TO SCALE



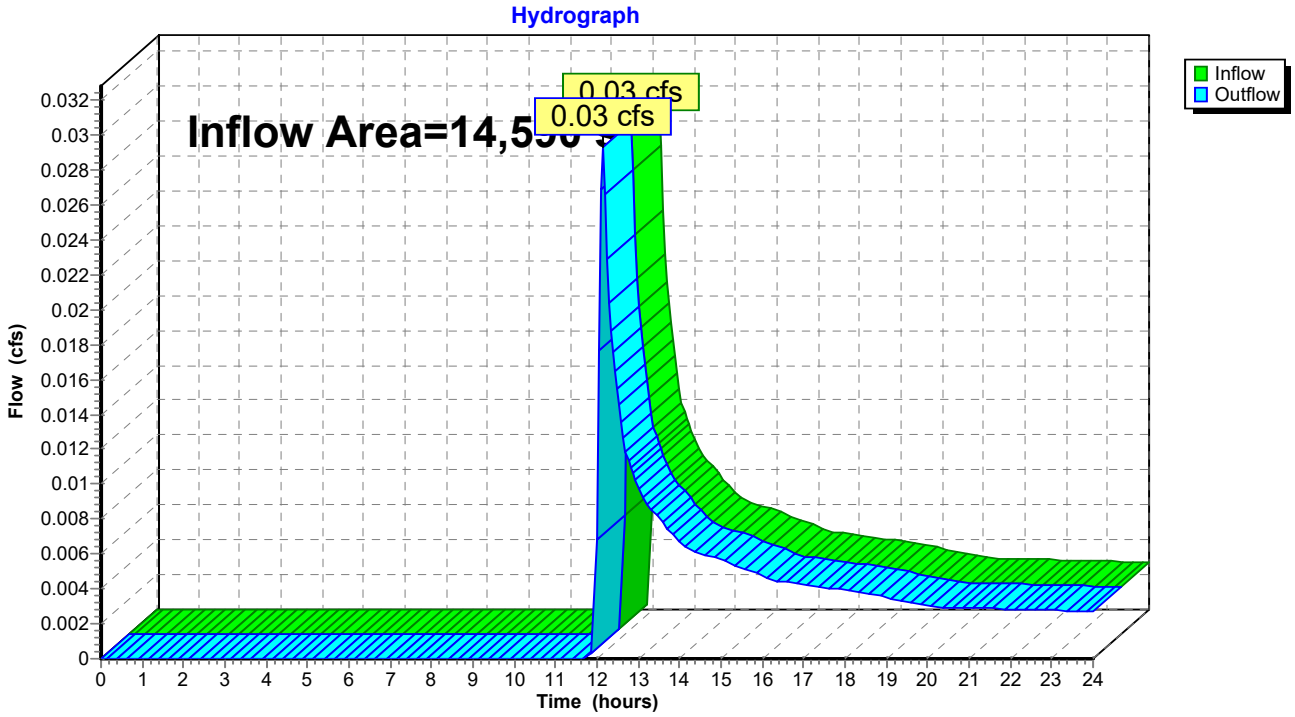
Routing Diagram for Proposed Conditions
Prepared by Bohler Engineering, Printed 12/4/2019
HydroCAD® 10.00-21 s/n 08311 © 2018 HydroCAD Software Solutions LLC

Summary for Reach DP-1: Design Point 1

Inflow Area = 14,590 sf, 0.00% Impervious, Inflow Depth > 0.19" for 1-YR event
Inflow = 0.03 cfs @ 12.15 hrs, Volume= 226 cf
Outflow = 0.03 cfs @ 12.15 hrs, Volume= 226 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-1: Design Point 1

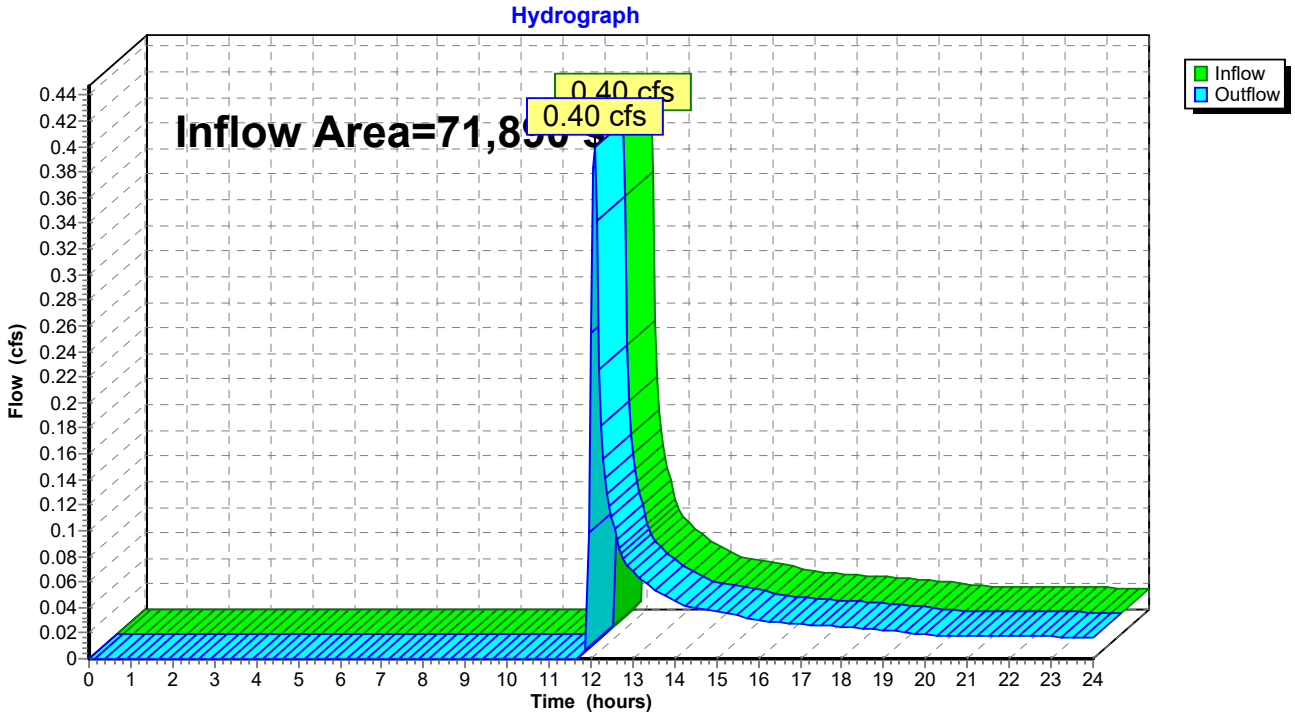


Summary for Reach DP-2: Design Point 2

Inflow Area = 71,890 sf, 0.00% Impervious, Inflow Depth > 0.28" for 1-YR event
Inflow = 0.40 cfs @ 12.07 hrs, Volume= 1,662 cf
Outflow = 0.40 cfs @ 12.07 hrs, Volume= 1,662 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-2: Design Point 2

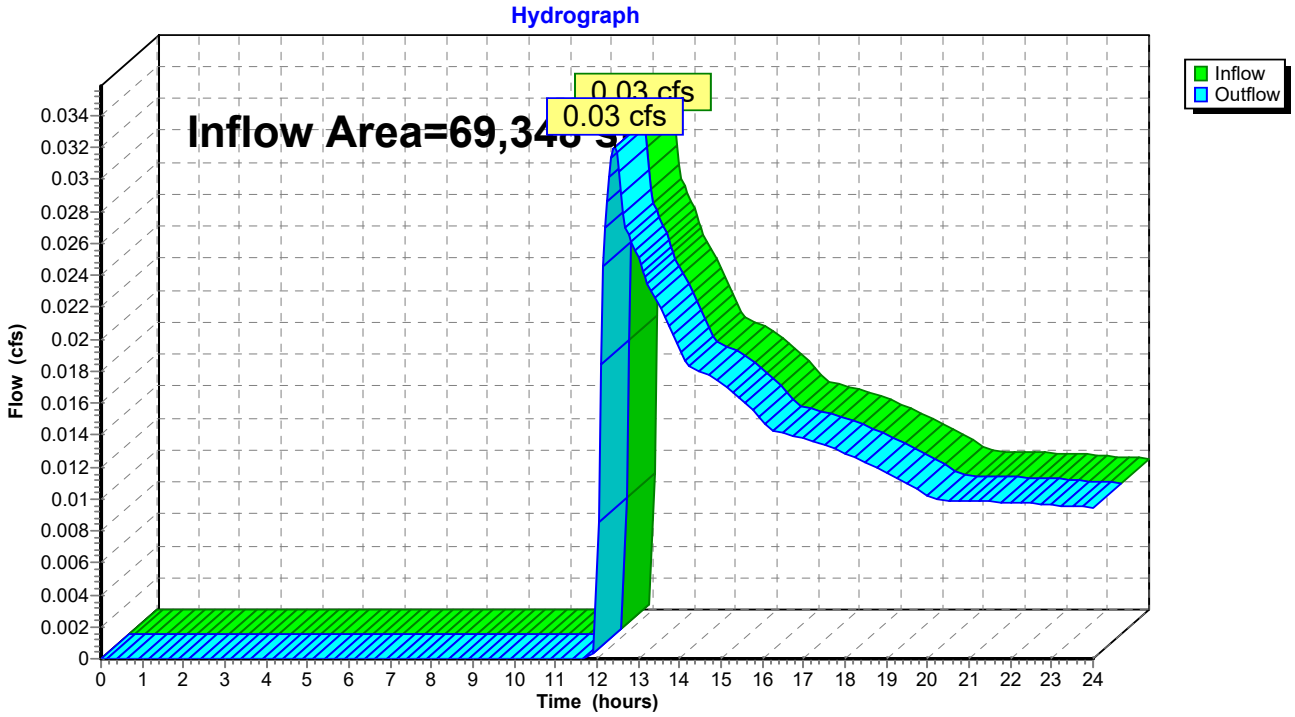


Summary for Reach DP-3: Design Point 3

Inflow Area = 69,348 sf, 0.00% Impervious, Inflow Depth > 0.11" for 1-YR event
Inflow = 0.03 cfs @ 12.43 hrs, Volume= 621 cf
Outflow = 0.03 cfs @ 12.43 hrs, Volume= 621 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-3: Design Point 3

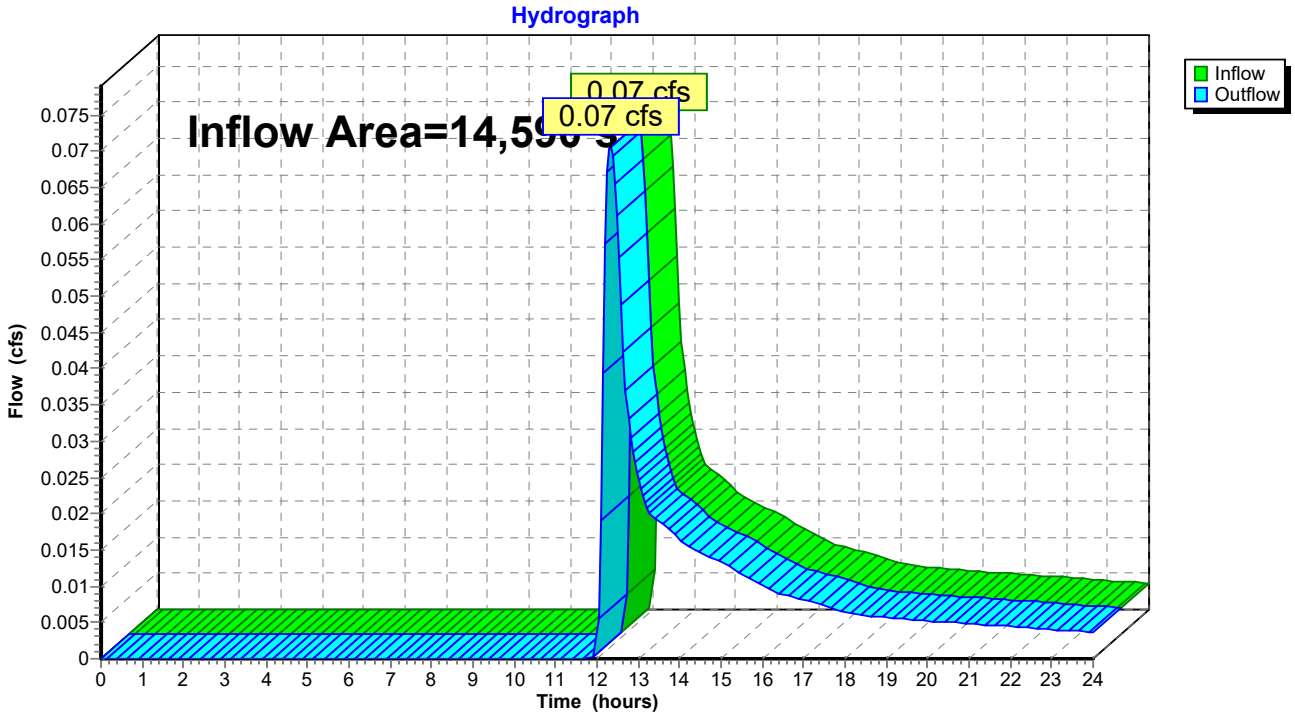


Summary for Reach DP-1: Design Point 1

Inflow Area = 14,590 sf, 0.00% Impervious, Inflow Depth > 0.40" for 2-YR event
Inflow = 0.07 cfs @ 12.32 hrs, Volume= 484 cf
Outflow = 0.07 cfs @ 12.32 hrs, Volume= 484 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-1: Design Point 1

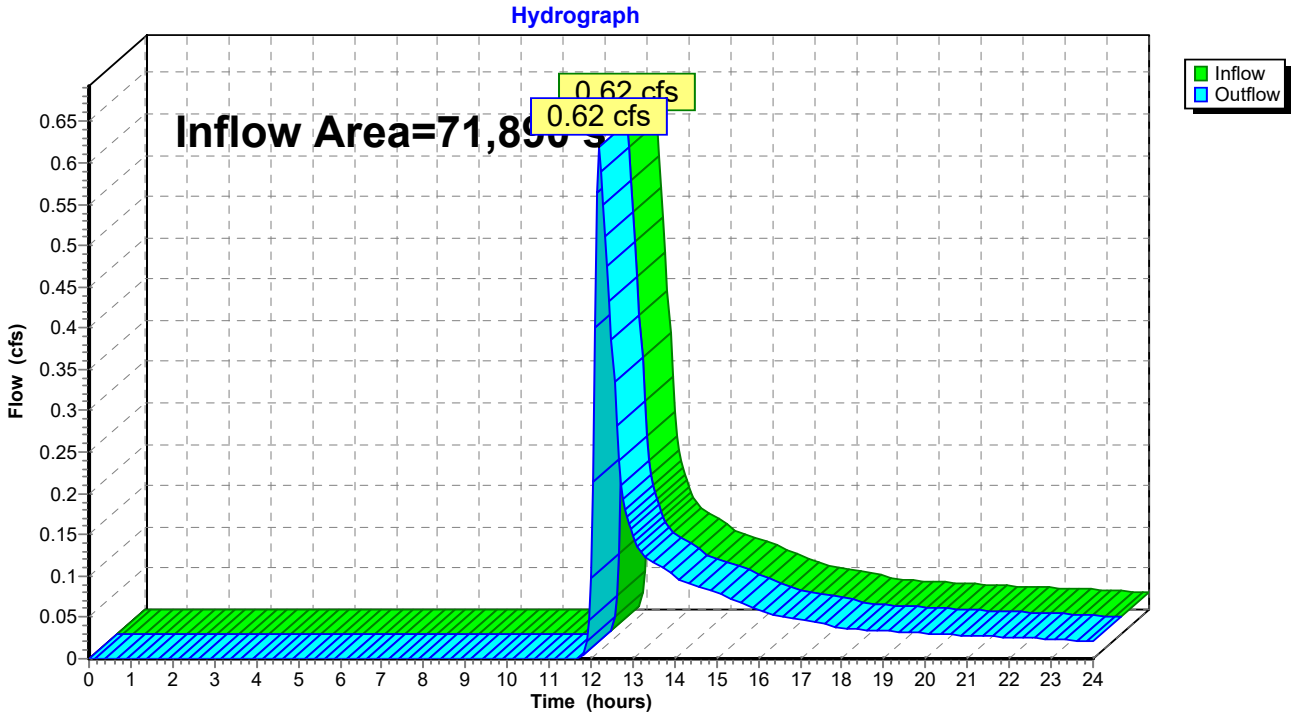


Summary for Reach DP-2: Design Point 2

Inflow Area = 71,890 sf, 0.00% Impervious, Inflow Depth > 0.53" for 2-YR event
Inflow = 0.62 cfs @ 12.21 hrs, Volume= 3,201 cf
Outflow = 0.62 cfs @ 12.21 hrs, Volume= 3,201 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-2: Design Point 2

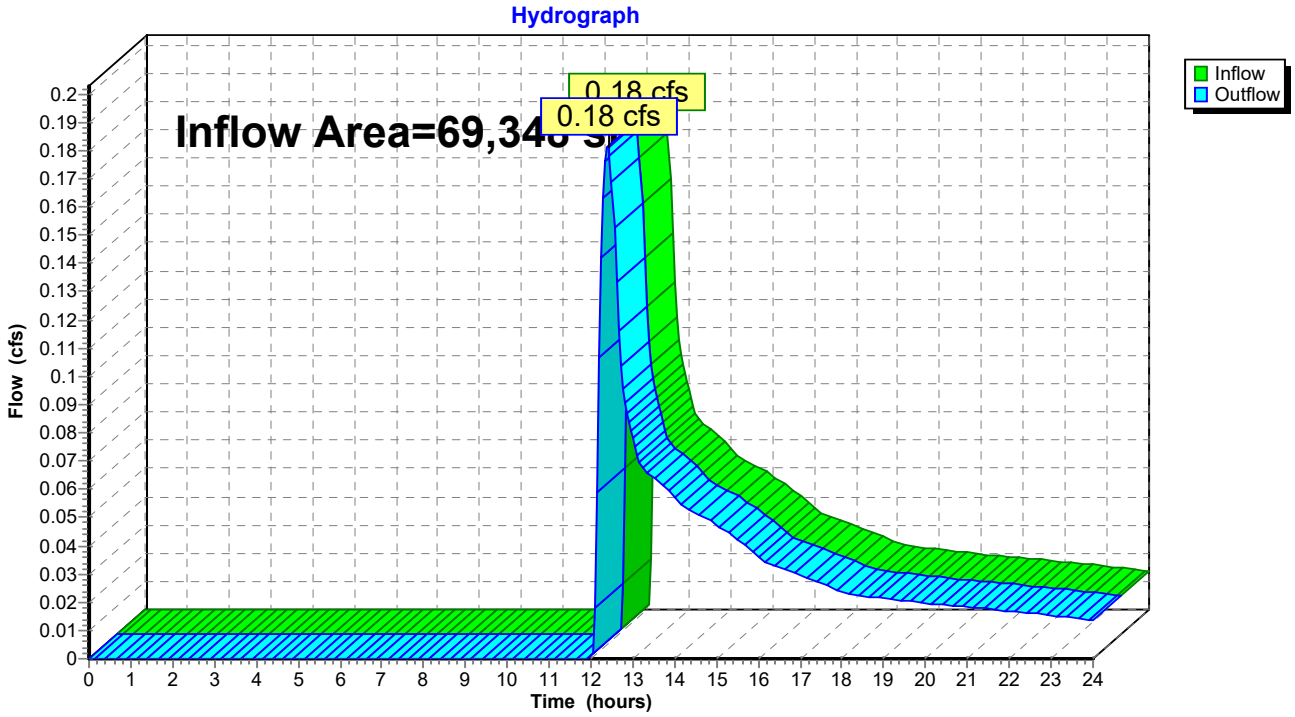


Summary for Reach DP-3: Design Point 3

Inflow Area = 69,348 sf, 0.00% Impervious, Inflow Depth > 0.27" for 2-YR event
Inflow = 0.18 cfs @ 12.41 hrs, Volume= 1,572 cf
Outflow = 0.18 cfs @ 12.41 hrs, Volume= 1,572 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-3: Design Point 3

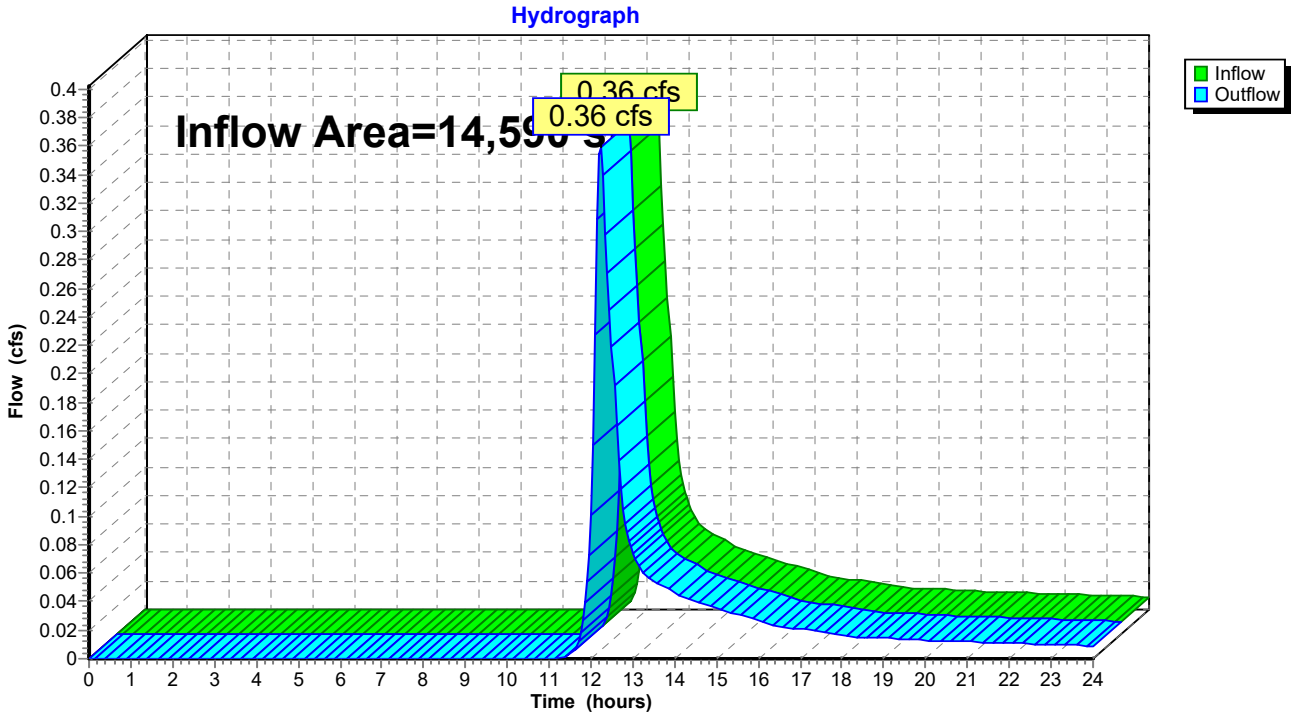


Summary for Reach DP-1: Design Point 1

Inflow Area = 14,590 sf, 0.00% Impervious, Inflow Depth > 1.34" for 10-YR event
Inflow = 0.36 cfs @ 12.22 hrs, Volume= 1,626 cf
Outflow = 0.36 cfs @ 12.22 hrs, Volume= 1,626 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-1: Design Point 1

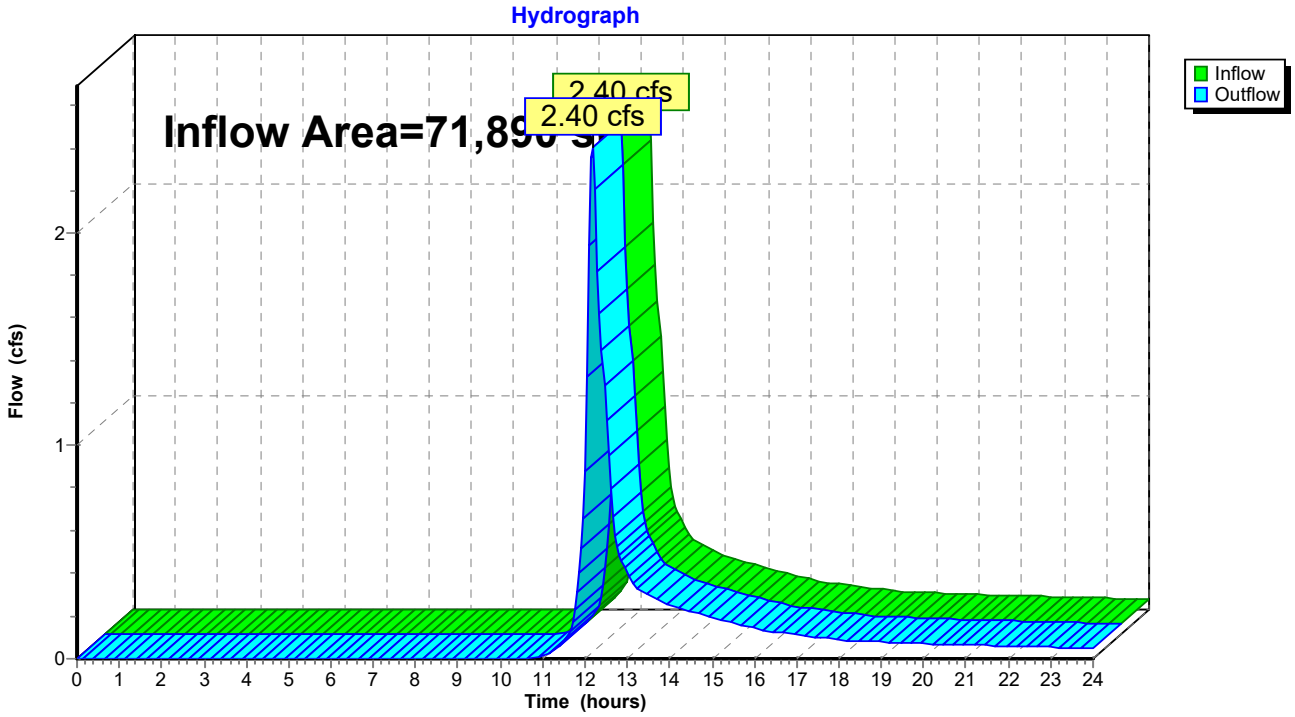


Summary for Reach DP-2: Design Point 2

Inflow Area = 71,890 sf, 0.00% Impervious, Inflow Depth > 1.60" for 10-YR event
Inflow = 2.40 cfs @ 12.17 hrs, Volume= 9,557 cf
Outflow = 2.40 cfs @ 12.17 hrs, Volume= 9,557 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-2: Design Point 2

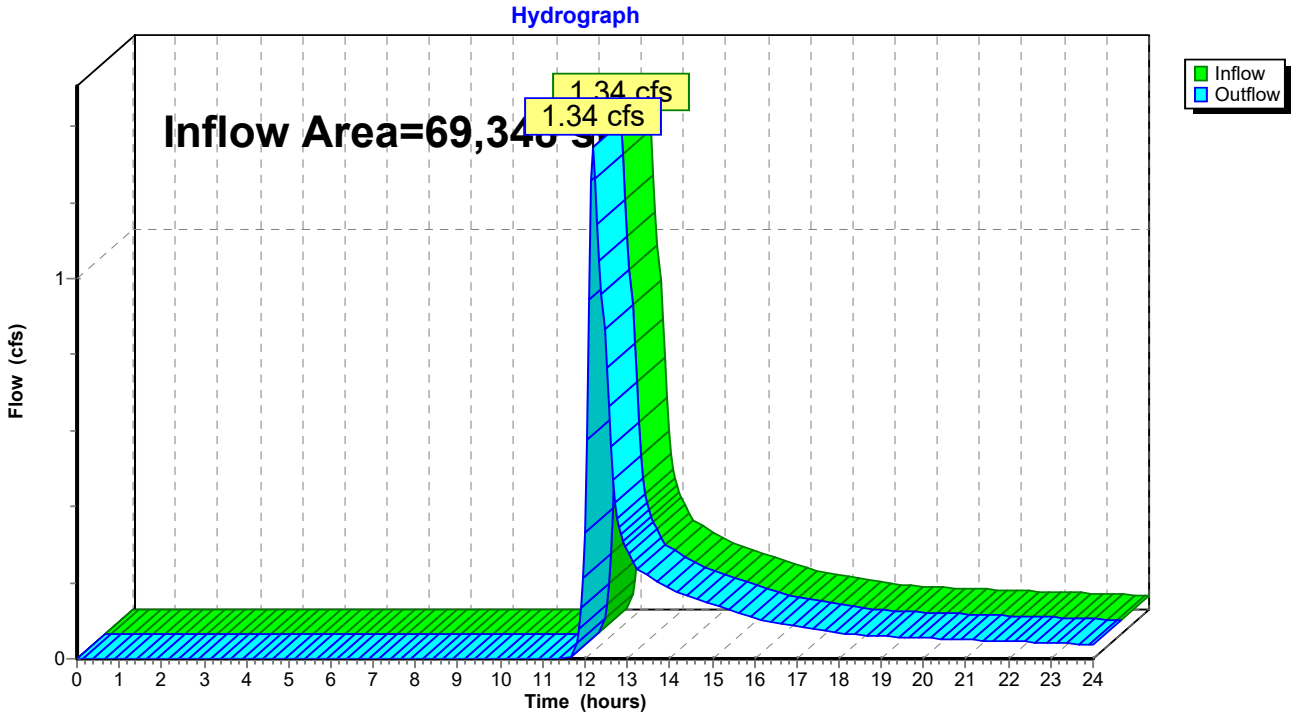


Summary for Reach DP-3: Design Point 3

Inflow Area = 69,348 sf, 0.00% Impervious, Inflow Depth > 1.07" for 10-YR event
Inflow = 1.34 cfs @ 12.20 hrs, Volume= 6,208 cf
Outflow = 1.34 cfs @ 12.20 hrs, Volume= 6,208 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-3: Design Point 3

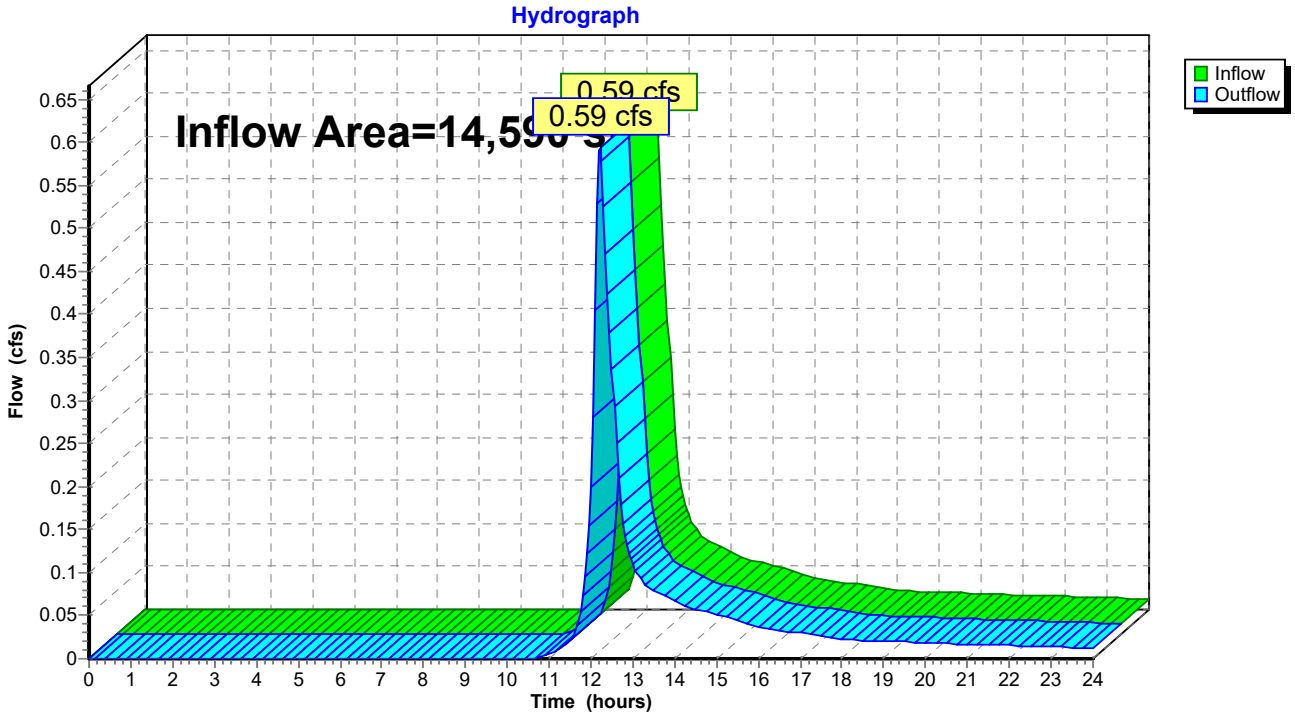


Summary for Reach DP-1: Design Point 1

Inflow Area = 14,590 sf, 0.00% Impervious, Inflow Depth > 2.09" for 25-YR event
Inflow = 0.59 cfs @ 12.22 hrs, Volume= 2,537 cf
Outflow = 0.59 cfs @ 12.22 hrs, Volume= 2,537 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-1: Design Point 1

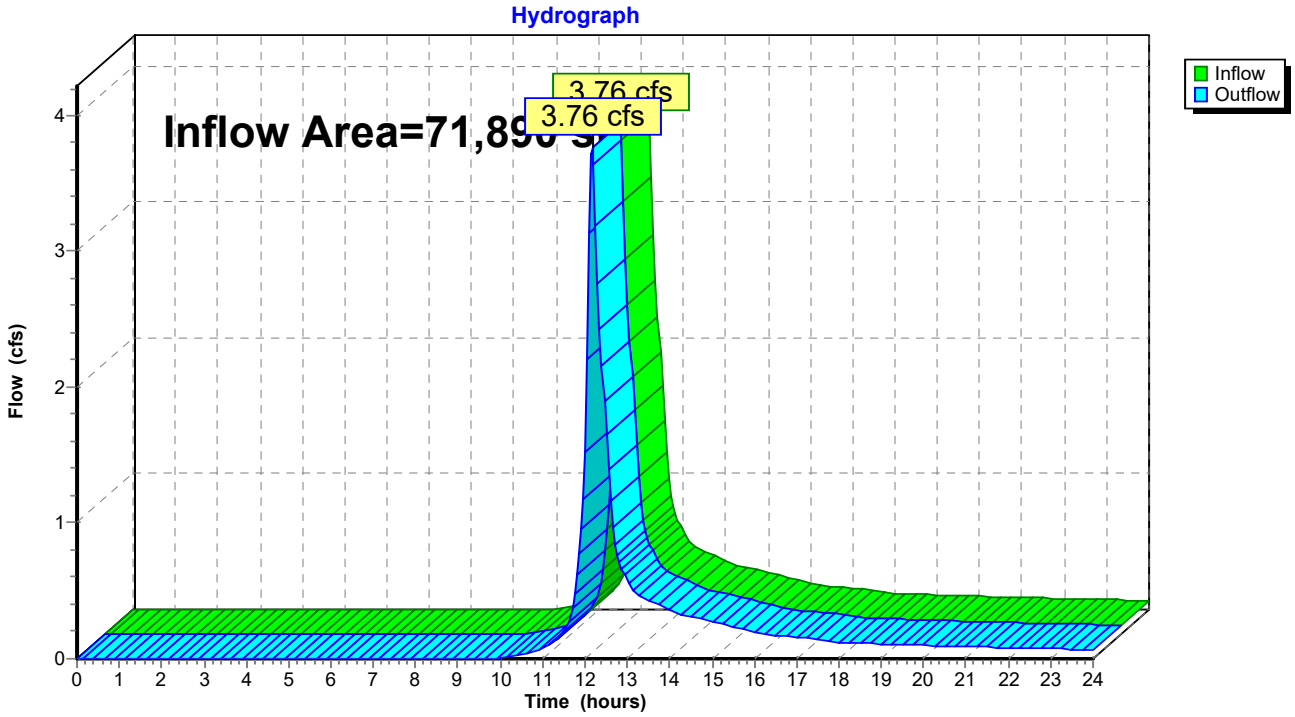


Summary for Reach DP-2: Design Point 2

Inflow Area = 71,890 sf, 0.00% Impervious, Inflow Depth > 2.41" for 25-YR event
Inflow = 3.76 cfs @ 12.17 hrs, Volume= 14,443 cf
Outflow = 3.76 cfs @ 12.17 hrs, Volume= 14,443 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-2: Design Point 2

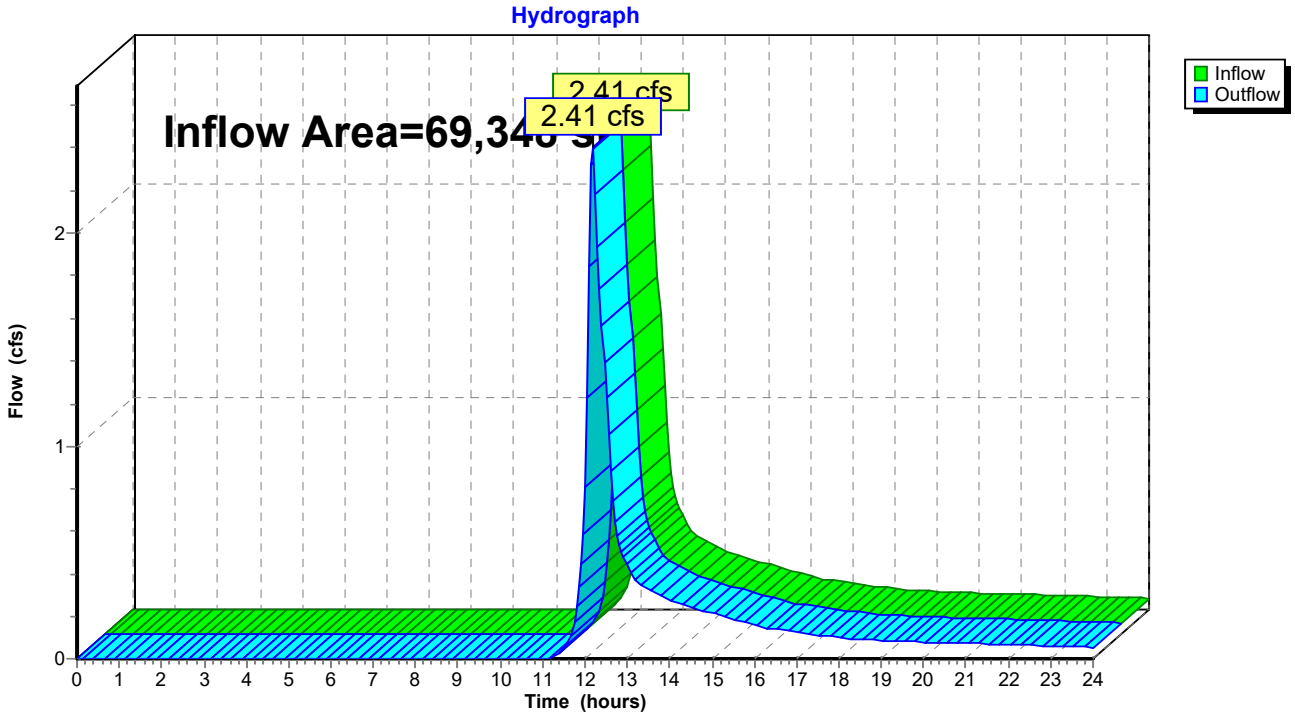


Summary for Reach DP-3: Design Point 3

Inflow Area = 69,348 sf, 0.00% Impervious, Inflow Depth > 1.75" for 25-YR event
Inflow = 2.41 cfs @ 12.19 hrs, Volume= 10,096 cf
Outflow = 2.41 cfs @ 12.19 hrs, Volume= 10,096 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-3: Design Point 3

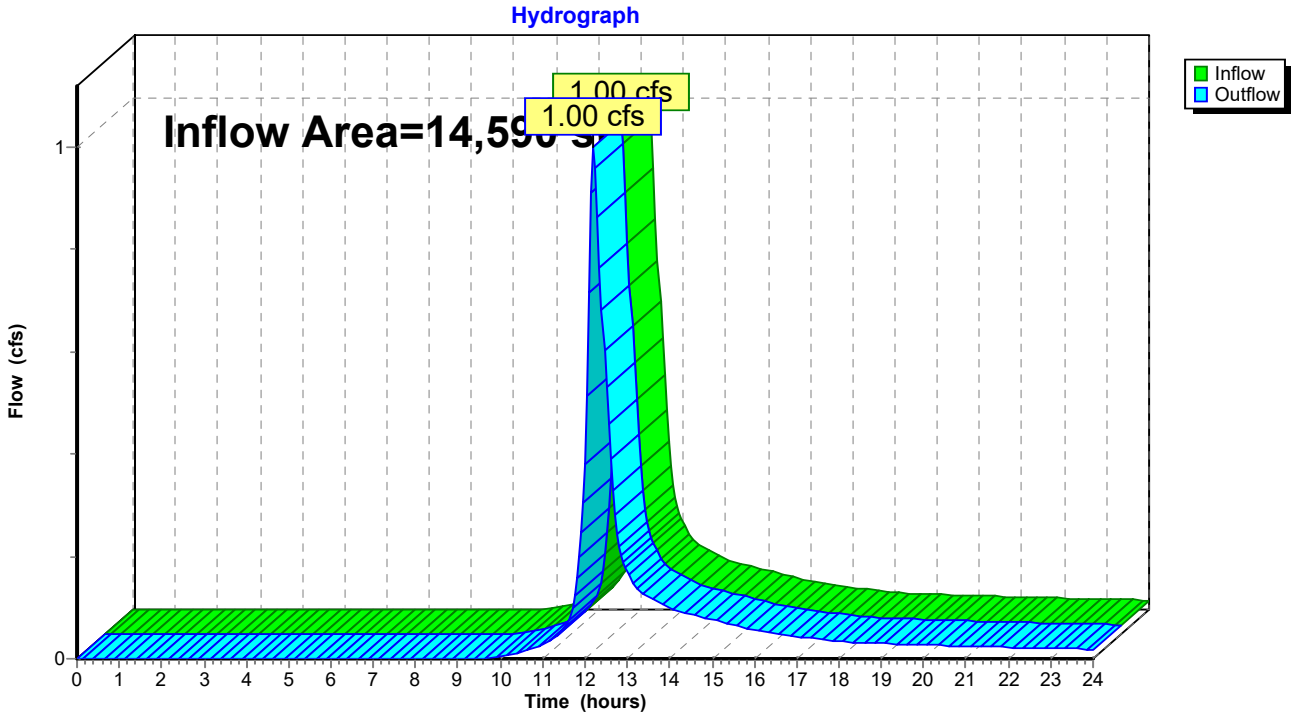


Summary for Reach DP-1: Design Point 1

Inflow Area = 14,590 sf, 0.00% Impervious, Inflow Depth > 3.38" for 100-YR event
Inflow = 1.00 cfs @ 12.21 hrs, Volume= 4,113 cf
Outflow = 1.00 cfs @ 12.21 hrs, Volume= 4,113 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-1: Design Point 1

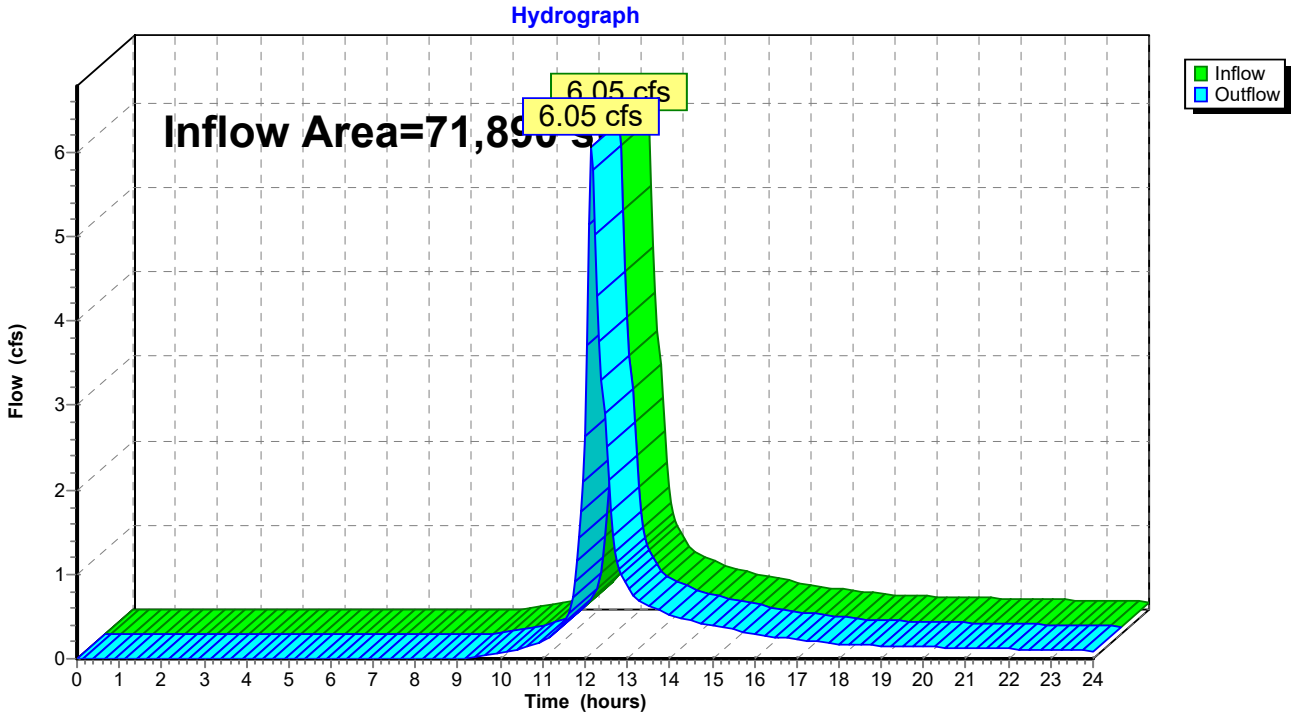


Summary for Reach DP-2: Design Point 2

Inflow Area = 71,890 sf, 0.00% Impervious, Inflow Depth > 3.79" for 100-YR event
Inflow = 6.05 cfs @ 12.16 hrs, Volume= 22,727 cf
Outflow = 6.05 cfs @ 12.16 hrs, Volume= 22,727 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-2: Design Point 2

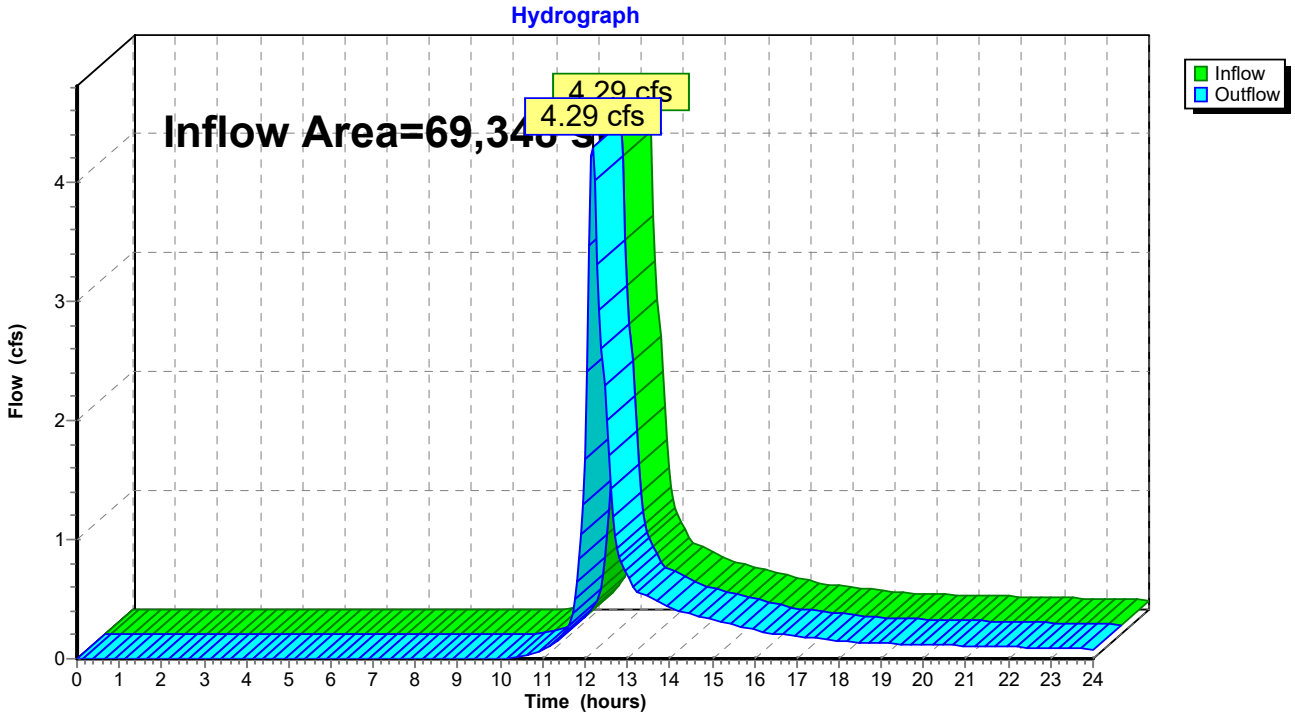


Summary for Reach DP-3: Design Point 3

Inflow Area = 69,348 sf, 0.00% Impervious, Inflow Depth > 2.94" for 100-YR event
Inflow = 4.29 cfs @ 12.18 hrs, Volume= 16,996 cf
Outflow = 4.29 cfs @ 12.18 hrs, Volume= 16,996 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-3: Design Point 3



APPENDIX D: PROPOSED CONDITIONS HYDROLOGIC ANALYSIS

- *PROPOSED CONDITIONS DRAINAGE MAP*
- *PROPOSED CONDITIONS HYDROCAD CALCULATIONS*

N/F LANDS OF
THE WARD MANOR, L.L.C.
##################

PD-2d
0.03 AC
CN = 74
TC = 6 MIN.

PD-2b
0.22 AC
CN = 70
TC = 6 MIN.

DP-2

PD-2c
0.36 AC
CN = 86
TC = 6 MIN.

PD-2a
0.60 AC
CN = 94
TC = 6 MIN.

PROPOSED
2 STORY ASSISTED
LIVING FACILITY
58 UNITS
54,000sf +/-

PD-1
0.67 AC
CN = 86
TC = 6 MIN.

PD-3b
0.46 AC
CN = 93
TC = 6 MIN.

PD-2e
0.36 AC
CN = 95
TC = 6 MIN.

PD-3a
0.23 AC
CN = 66
TC = 6 MIN.

PD-2f
0.34 AC
CN = 70
TC = 12.8 MIN.

DP-1

HAZARD A

DP-3

PD-3c
0.33 AC
CN = 60
TC = 12.4 MIN.

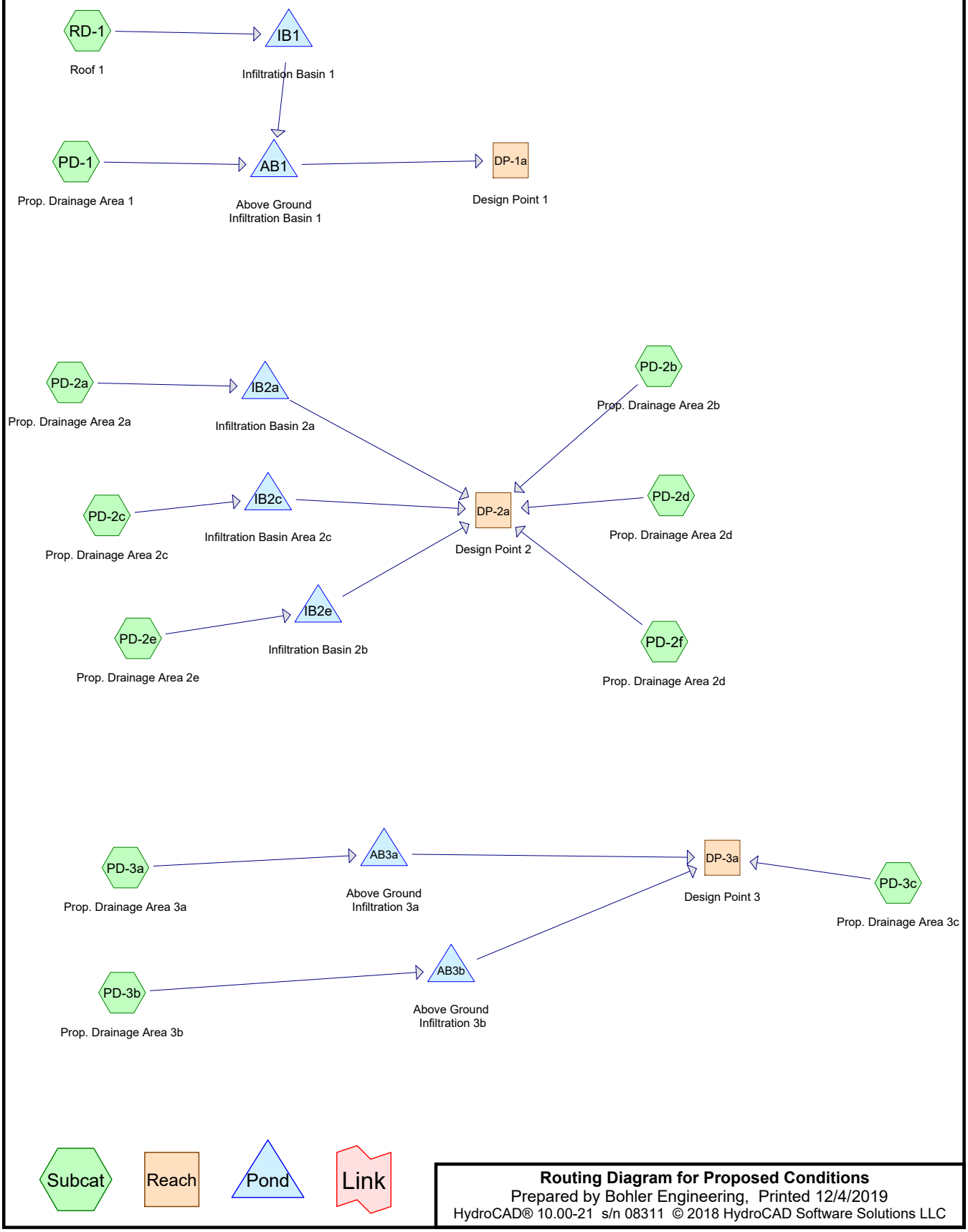
PROPOSED DRAINAGE TRIBUTARY MAP

PREPARED BY

BOHLER

NOT TO SCALE

MAP ##, LOT 65
N/F LANDS OF



Routing Diagram for Proposed Conditions
Prepared by Bohler Engineering, Printed 12/4/2019
HydroCAD® 10.00-21 s/n 08311 © 2018 HydroCAD Software Solutions LLC

Area Listing (selected nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
13,721	49	50-75% Grass cover, Fair, HSG A, 36A (PD-1, PD-2a, PD-2c, PD-2e, PD-3a)
14,113	77	50-75% Grass cover, Fair, HSG B/D, 13 (PD-1, PD-2a, PD-2c, PD-3a, PD-3b)
738	77	50-75% Grass cover, Fair, HSG C (PD-3c)
828	79	50-75% Grass cover, Fair, HSG C, 701A (PD-3b)
48,700	98	Paved parking (PD-1, PD-2a, PD-2e, PD-3a, PD-3b)
10,149	98	Paved parking, HSG D (PD-2c)
14,505	98	Roofing (PD-3b)
14,505	98	Unconnected roofs (RD-1)
2,091	43	Woods/grass comb., Fair, HSG A (PD-2f)
6,858	43	Woods/grass comb., Fair, HSG A, 36A (PD-2e, PD-3c)
784	43	Woods/grass comb., Fair, HSG A. 36A (PD-2b)
1,045	65	Woods/grass comb., Fair, HSG B (PD-2b)
21,824	74	Woods/grass comb., Fair, HSG B/D, 13 (PD-2b, PD-2d, PD-2f)
5,545	74	Woods/grass comb., Fair, HSG C (PD-3c)
1,501	76	Woods/grass comb., Fair, HSG C (PD-3c)
156,909	**84**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
23,455	HSG A	PD-1, PD-2a, PD-2b, PD-2c, PD-2e, PD-2f, PD-3a, PD-3c
36,982	HSG B	PD-1, PD-2a, PD-2b, PD-2c, PD-2d, PD-2f, PD-3a, PD-3b
8,612	HSG C	PD-3b, PD-3c
10,149	HSG D	PD-2c
77,711	Other	PD-1, PD-2a, PD-2e, PD-3a, PD-3b, RD-1
156,909		**TOTAL AREA**

Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	AB1	127.57	127.50	13.0	0.0054	0.025	8.0	0.0	0.0
2	IB1	130.24	130.00	10.0	0.0240	0.012	12.0	0.0	0.0
3	IB2a	128.60	128.00	55.0	0.0109	0.012	15.0	0.0	0.0
4	IB2c	129.20	129.00	14.0	0.0143	0.012	8.0	0.0	0.0
5	IB2e	130.85	130.50	69.0	0.0051	0.012	15.0	0.0	0.0

Summary for Subcatchment PD-1: Prop. Drainage Area 1

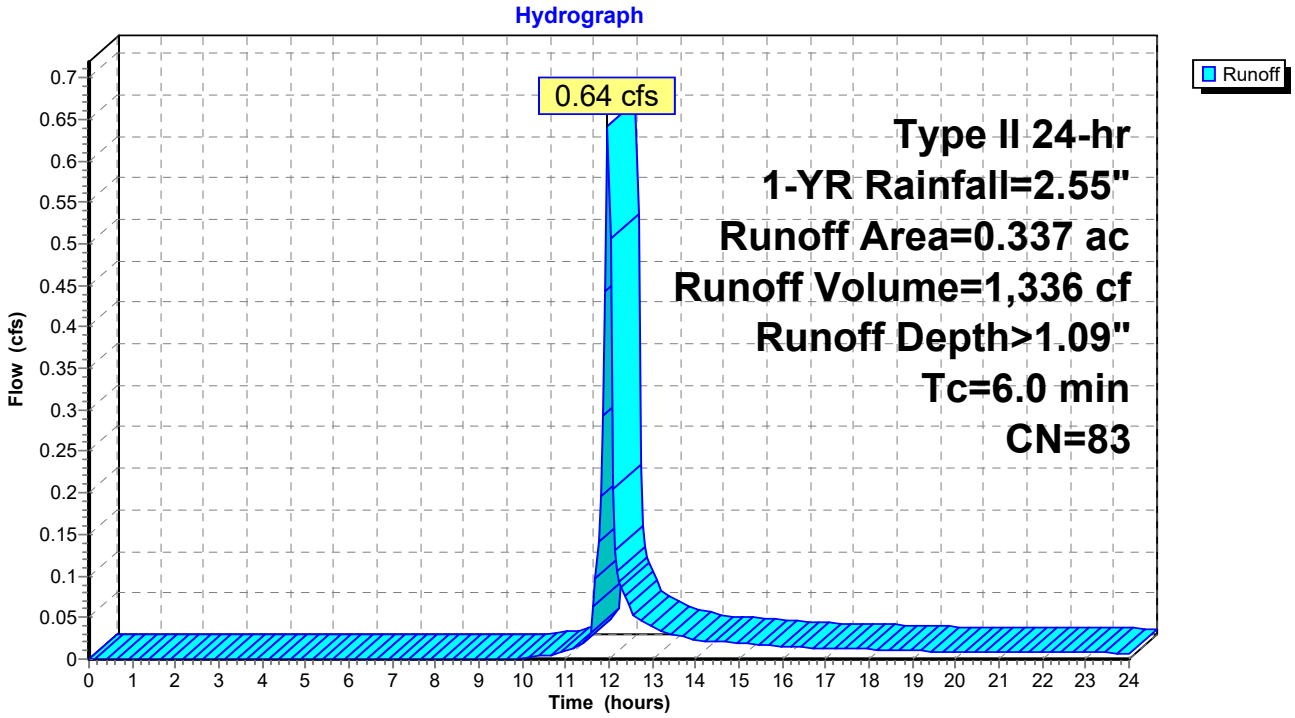
Runoff = 0.64 cfs @ 11.98 hrs, Volume= 1,336 cf, Depth> 1.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.55"

	Area (ac)	CN	Description
*	0.074	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.070	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.193	98	Paved parking
	0.337	83	Weighted Average
	0.144		42.73% Pervious Area
	0.193		57.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-1: Prop. Drainage Area 1



Summary for Subcatchment PD-2a: Prop. Drainage Area 2a

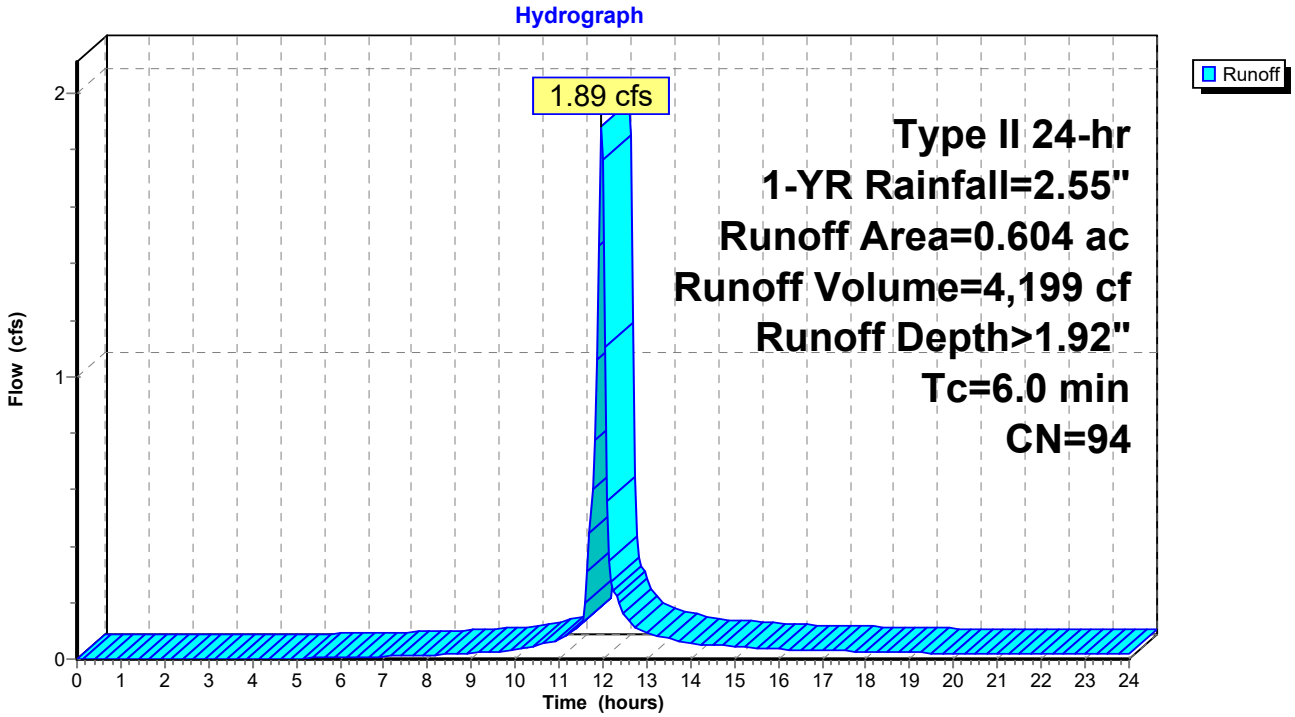
Runoff = 1.89 cfs @ 11.96 hrs, Volume= 4,199 cf, Depth> 1.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.55"

	Area (ac)	CN	Description
*	0.038	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.029	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.537	98	Paved parking
	0.604	94	Weighted Average
	0.067		11.09% Pervious Area
	0.537		88.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct**

Subcatchment PD-2a: Prop. Drainage Area 2a



Summary for Subcatchment PD-2b: Prop. Drainage Area 2b

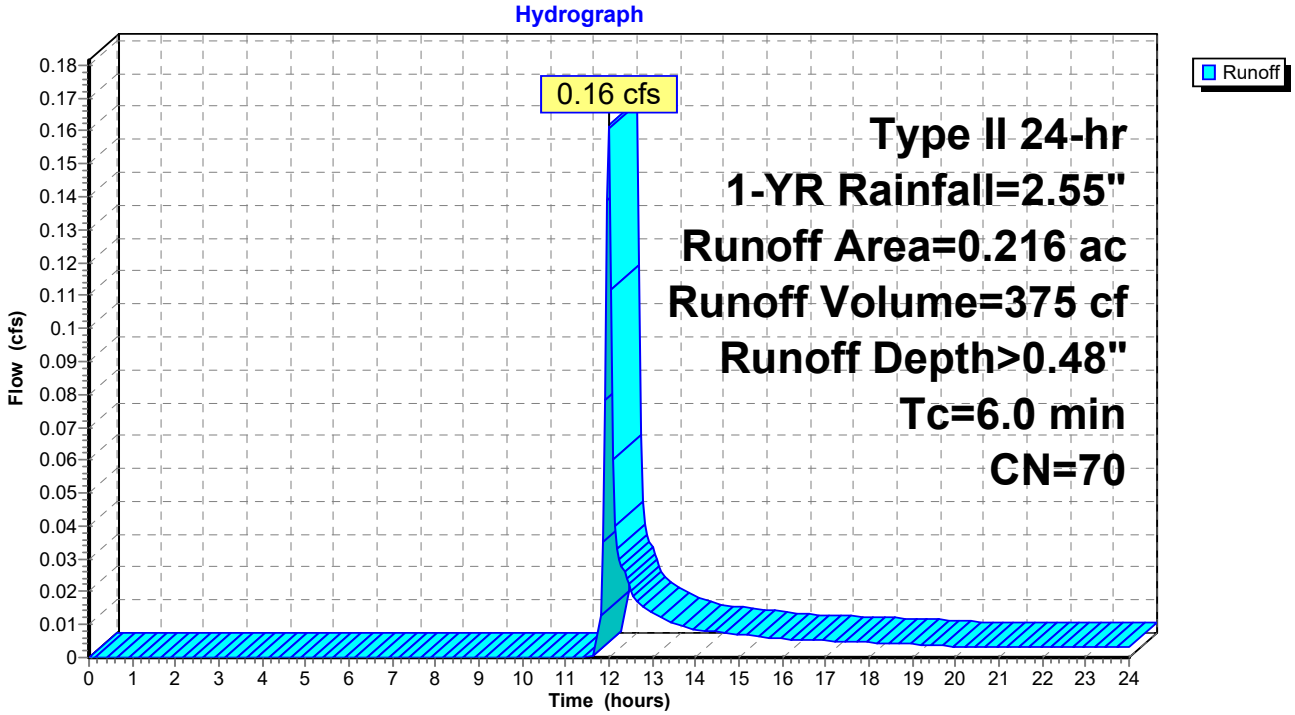
Runoff = 0.16 cfs @ 11.99 hrs, Volume= 375 cf, Depth> 0.48"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.55"

	Area (ac)	CN	Description
*	0.174	74	Woods/grass comb., Fair, HSG B/D, 13
*	0.018	43	Woods/grass comb., Fair, HSG A. 36A
	0.024	65	Woods/grass comb., Fair, HSG B
	0.216	70	Weighted Average
	0.216		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-2b: Prop. Drainage Area 2b



Summary for Subcatchment PD-2c: Prop. Drainage Area 2c

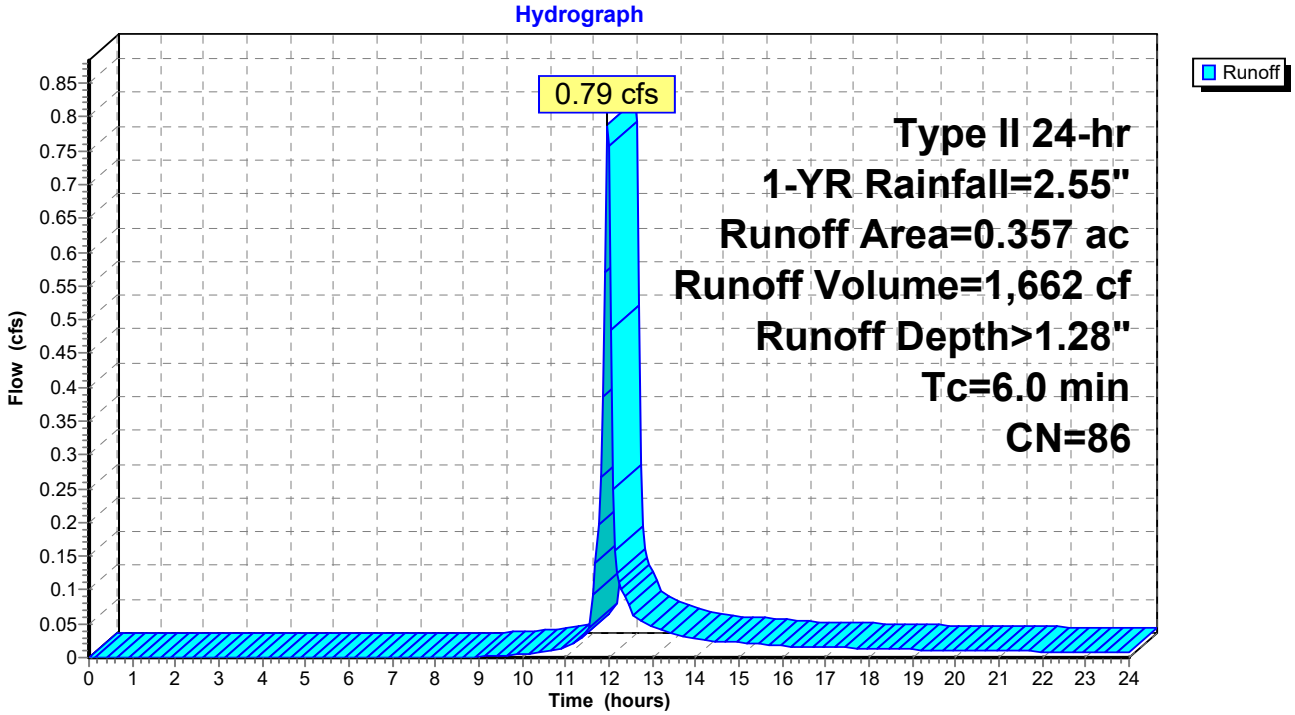
Runoff = 0.79 cfs @ 11.97 hrs, Volume= 1,662 cf, Depth> 1.28"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.55"

	Area (ac)	CN	Description
*	0.061	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.042	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.021	49	50-75% Grass cover, Fair, HSG A, 36A
	0.233	98	Paved parking, HSG D
	0.357	86	Weighted Average
	0.124		34.73% Pervious Area
	0.233		65.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-2c: Prop. Drainage Area 2c



Summary for Subcatchment PD-2d: Prop. Drainage Area 2d

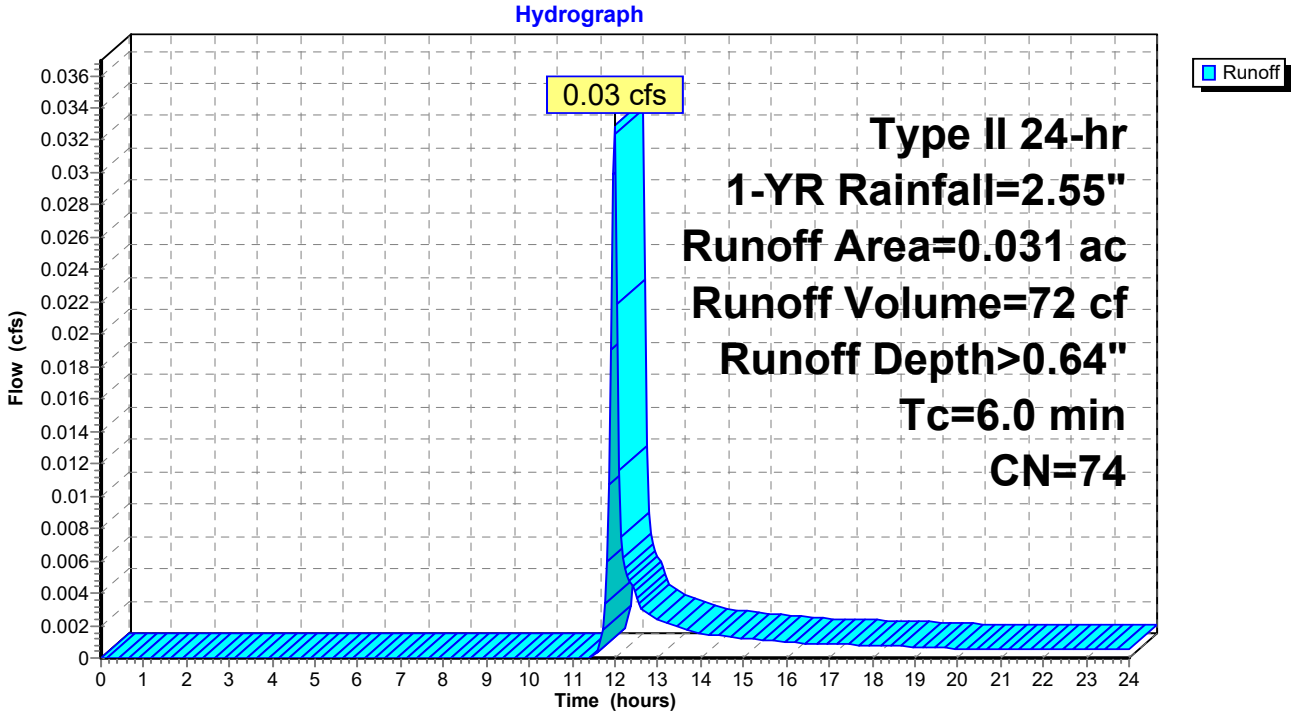
Runoff = 0.03 cfs @ 11.98 hrs, Volume= 72 cf, Depth> 0.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.55"

	Area (ac)	CN	Description
*	0.031	74	Woods/grass comb., Fair, HSG B/D, 13
	0.031		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-2d: Prop. Drainage Area 2d



Summary for Subcatchment PD-2e: Prop. Drainage Area 2e

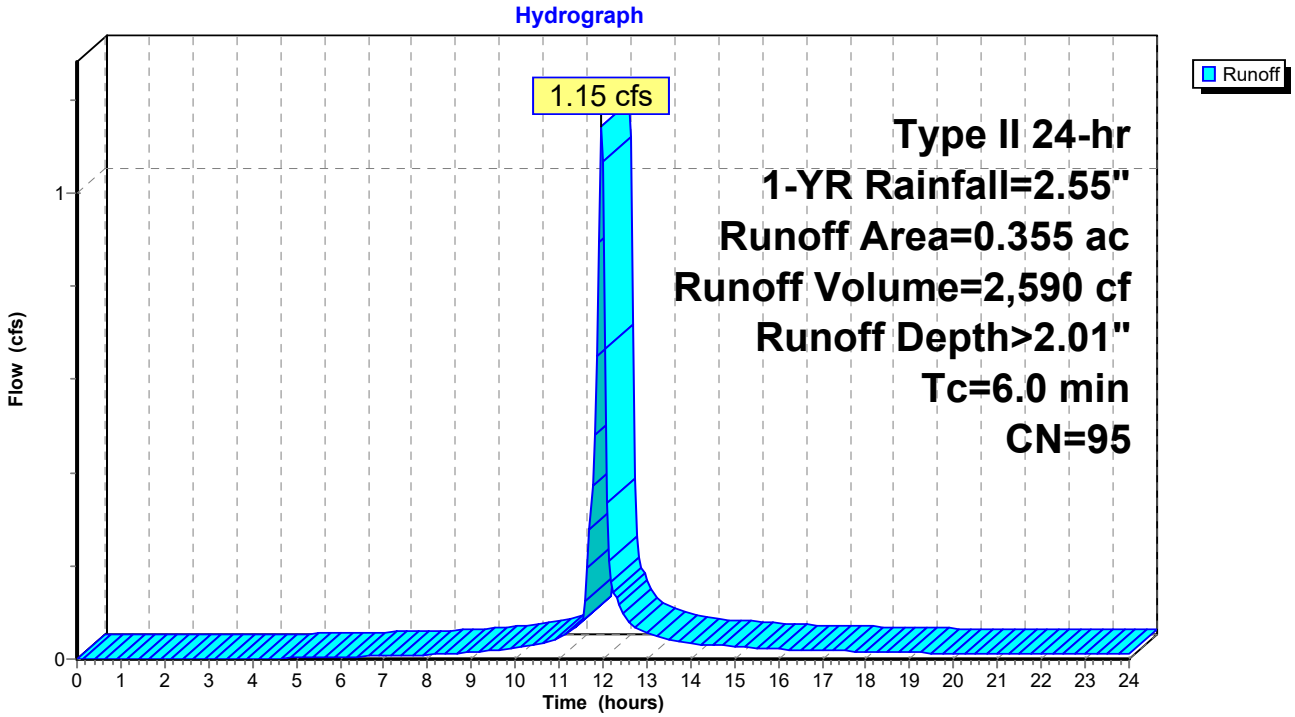
Runoff = 1.15 cfs @ 11.96 hrs, Volume= 2,590 cf, Depth> 2.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.55"

	Area (ac)	CN	Description
*	0.004	43	Woods/grass comb., Fair, HSG A, 36A
*	0.020	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.331	98	Paved parking
	0.355	95	Weighted Average
	0.024		6.76% Pervious Area
	0.331		93.24% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-2e: Prop. Drainage Area 2e



Summary for Subcatchment PD-2f: Prop. Drainage Area 2d

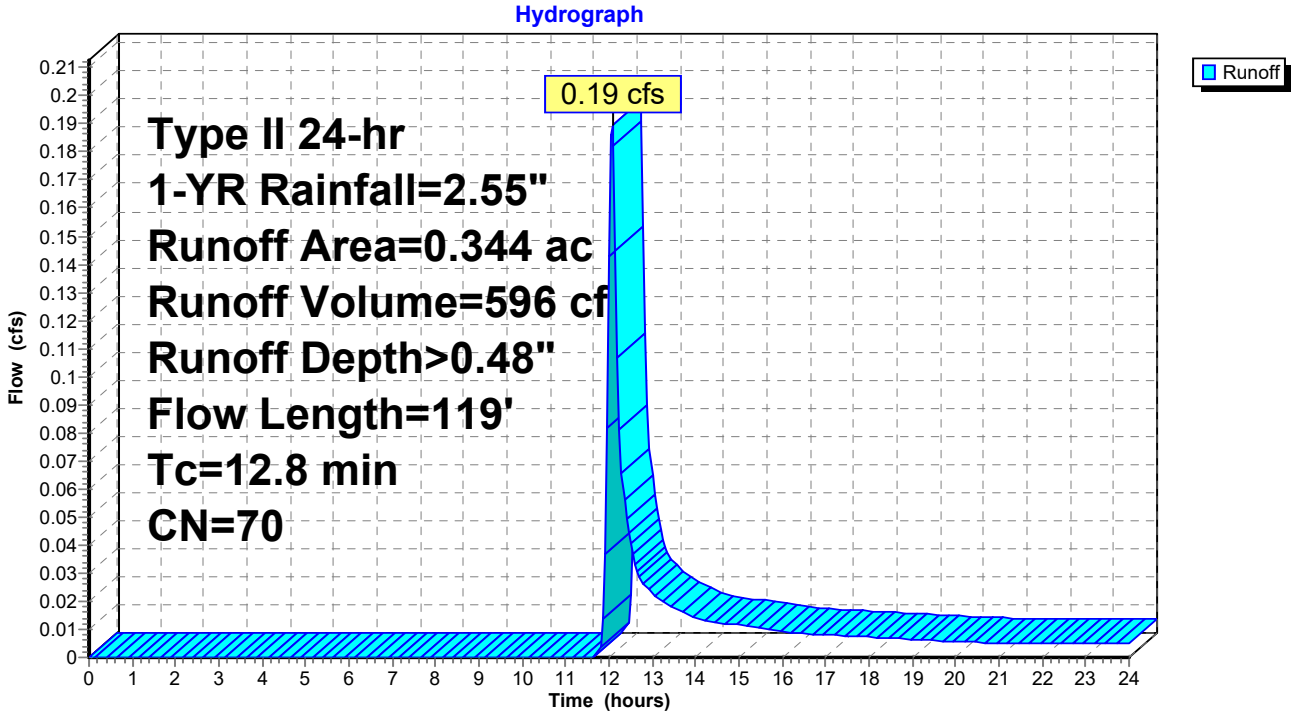
Runoff = 0.19 cfs @ 12.07 hrs, Volume= 596 cf, Depth> 0.48"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.55"

	Area (ac)	CN	Description
*	0.296	74	Woods/grass comb., Fair, HSG B/D, 13
	0.048	43	Woods/grass comb., Fair, HSG A
	0.344	70	Weighted Average
	0.344		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.9	23	0.1600	0.13		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.18"
8.4	36	0.0270	0.07		**Sheet Flow, B-C** Woods: Light underbrush n= 0.400 P2= 3.18"
1.5	60	0.0167	0.65		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
12.8	119	Total			

Subcatchment PD-2f: Prop. Drainage Area 2d



Summary for Subcatchment PD-3a: Prop. Drainage Area 3a

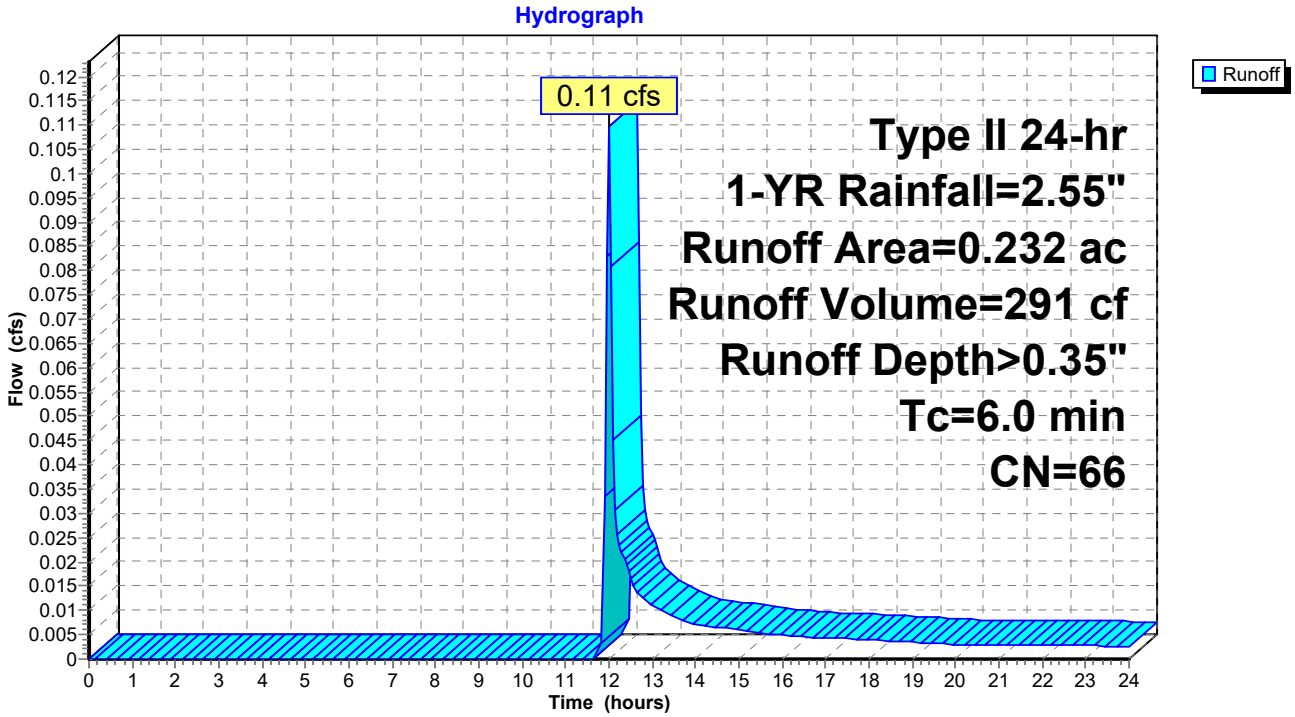
Runoff = 0.11 cfs @ 12.00 hrs, Volume= 291 cf, Depth> 0.35"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.55"

	Area (ac)	CN	Description
*	0.120	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.071	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.041	98	Paved parking
	0.232	66	Weighted Average
	0.191		82.33% Pervious Area
	0.041		17.67% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct**

Subcatchment PD-3a: Prop. Drainage Area 3a



Summary for Subcatchment PD-3b: Prop. Drainage Area 3b

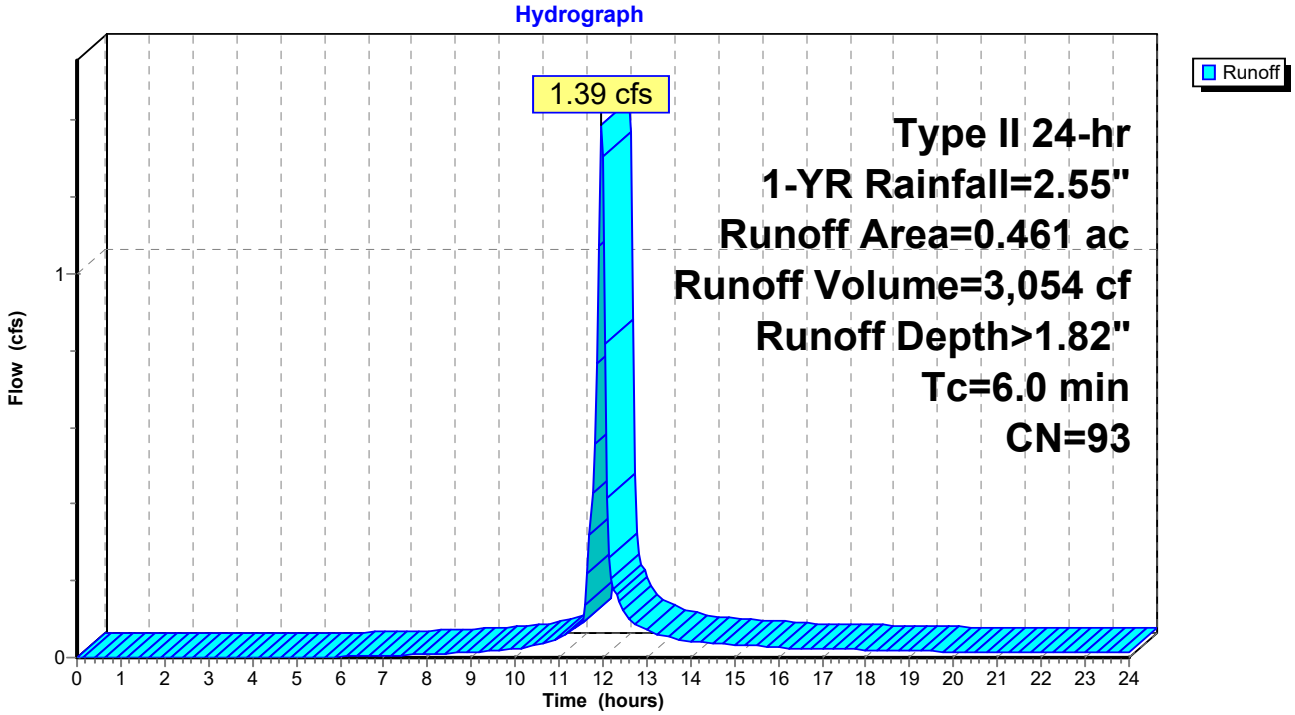
Runoff = 1.39 cfs @ 11.97 hrs, Volume= 3,054 cf, Depth> 1.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.55"

	Area (ac)	CN	Description
*	0.093	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.019	79	50-75% Grass cover, Fair, HSG C, 701A
*	0.016	98	Paved parking
*	0.333	98	Roofing
	0.461	93	Weighted Average
	0.112		24.30% Pervious Area
	0.349		75.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-3b: Prop. Drainage Area 3b



Summary for Subcatchment PD-3c: Prop. Drainage Area 3c

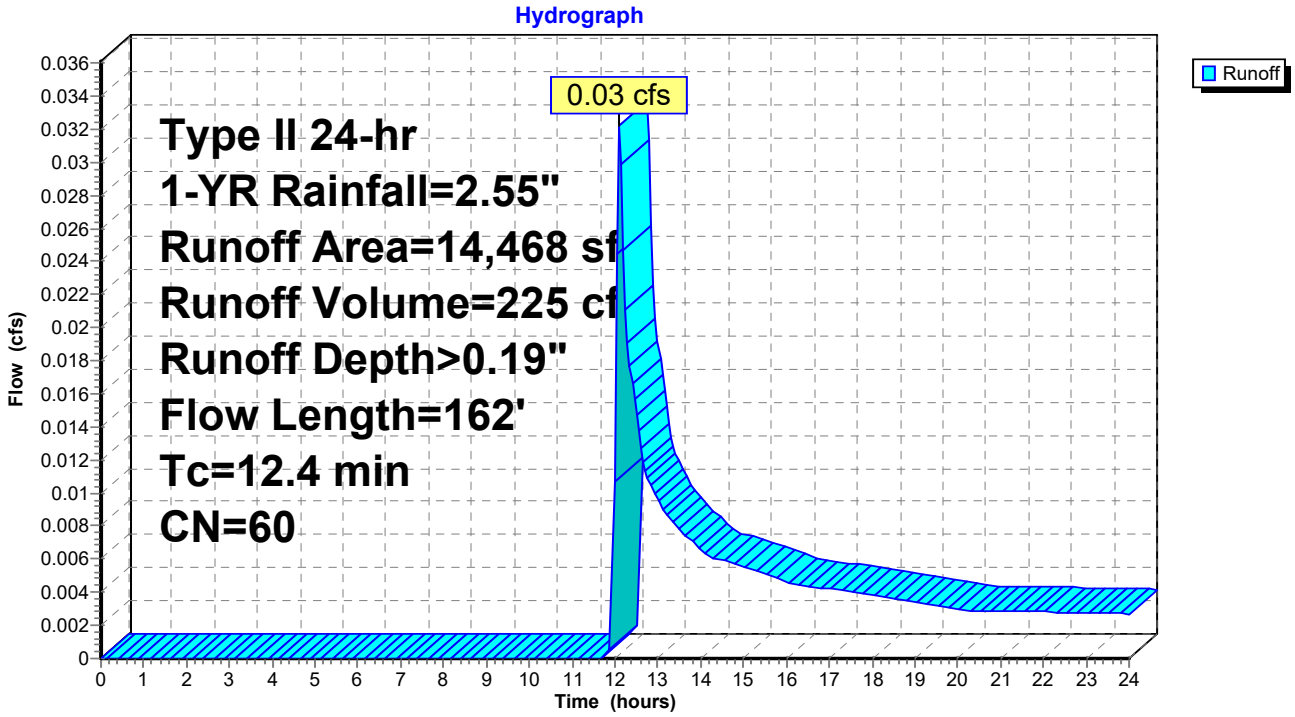
Runoff = 0.03 cfs @ 12.11 hrs, Volume= 225 cf, Depth> 0.19"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.55"

	Area (sf)	CN	Description
*	6,684	43	Woods/grass comb., Fair, HSG A, 36A
*	5,545	74	Woods/grass comb., Fair, HSG C
	1,501	76	Woods/grass comb., Fair, HSG C
*	738	77	50-75% Grass cover, Fair, HSG C
	14,468	60	Weighted Average
	14,468		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.8	8	0.0625	0.07		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.18"
3.4	17	0.0580	0.08		**Sheet Flow, B-C** Woods: Light underbrush n= 0.400 P2= 3.18"
3.2	16	0.0625	0.08		**Sheet Flow, C-D** Woods: Light underbrush n= 0.400 P2= 3.18"
1.5	9	0.1250	0.10		**Sheet Flow, D-E** Woods: Light underbrush n= 0.400 P2= 3.18"
2.5	112	0.0220	0.74		**Shallow Concentrated Flow, E-F** Woodland Kv= 5.0 fps
12.4	162	Total			

Subcatchment PD-3c: Prop. Drainage Area 3c



Summary for Subcatchment RD-1: Roof 1

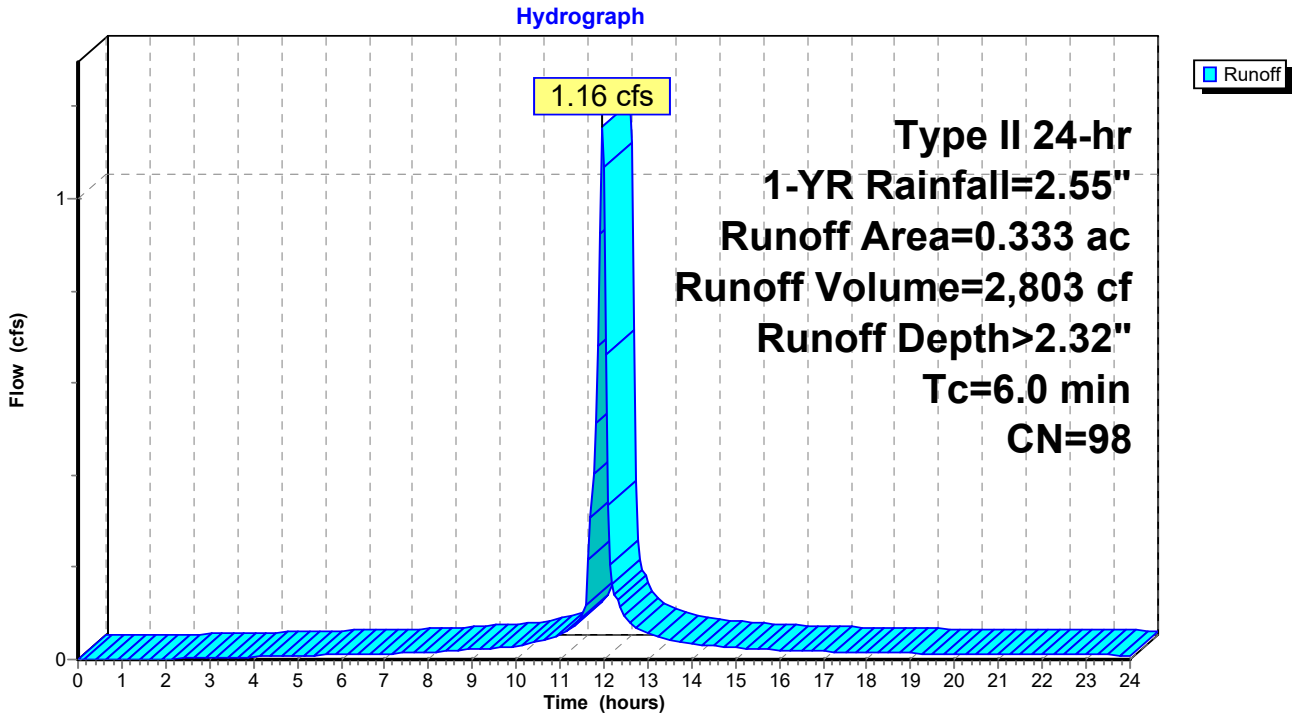
Runoff = 1.16 cfs @ 11.96 hrs, Volume= 2,803 cf, Depth> 2.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YR Rainfall=2.55"

	Area (ac)	CN	Description
*	0.333	98	Unconnected roofs
	0.333		100.00% Impervious Area
	0.333		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment RD-1: Roof 1

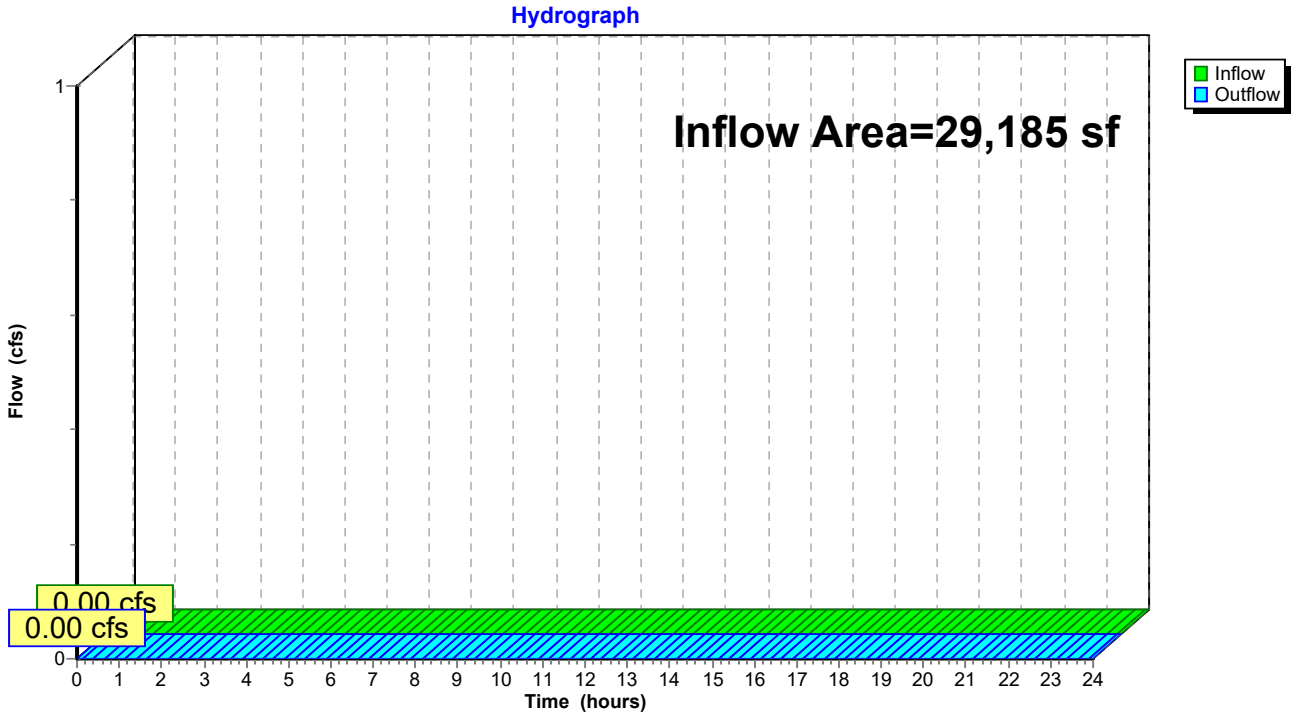


Summary for Reach DP-1a: Design Point 1

Inflow Area = 29,185 sf, 78.51% Impervious, Inflow Depth = 0.00" for 1-YR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-1a: Design Point 1

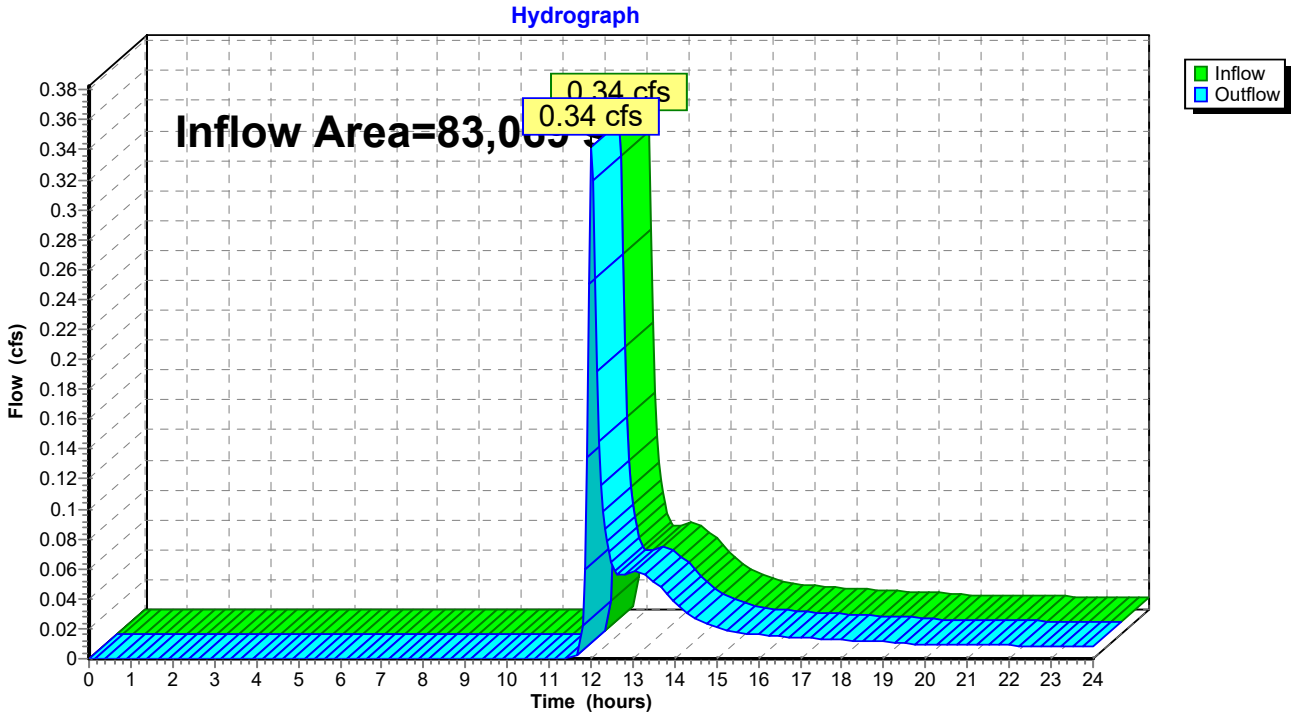


Summary for Reach DP-2a: Design Point 2

Inflow Area = 83,069 sf, 57.73% Impervious, Inflow Depth > 0.17" for 1-YR event
Inflow = 0.34 cfs @ 12.02 hrs, Volume= 1,154 cf
Outflow = 0.34 cfs @ 12.02 hrs, Volume= 1,154 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-2a: Design Point 2

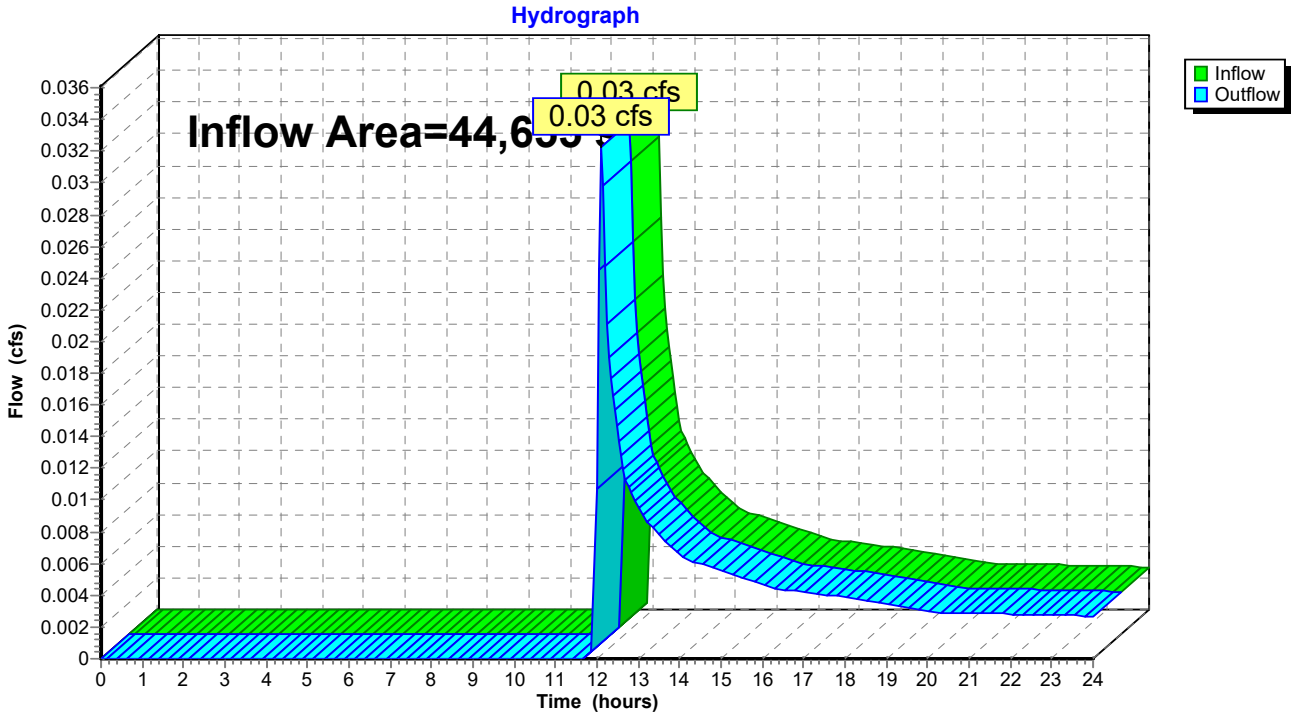


Summary for Reach DP-3a: Design Point 3

Inflow Area = 44,655 sf, 38.04% Impervious, Inflow Depth > 0.06" for 1-YR event
Inflow = 0.03 cfs @ 12.11 hrs, Volume= 225 cf
Outflow = 0.03 cfs @ 12.11 hrs, Volume= 225 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-3a: Design Point 3



Summary for Pond AB1: Above Ground Infiltration Basin 1

Inflow Area =	29,185 sf, 78.51% Impervious, Inflow Depth > 0.55" for 1-YR event				
Inflow =	0.64 cfs @	11.98 hrs,	Volume=	1,336 cf	
Outflow =	0.06 cfs @	12.50 hrs,	Volume=	1,335 cf,	Atten= 90%, Lag= 31.5 min
Discarded =	0.06 cfs @	12.50 hrs,	Volume=	1,335 cf	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 127.83' @ 12.50 hrs Surf.Area= 1,100 sf Storage= 517 cf

Plug-Flow detention time= 74.4 min calculated for 1,332 cf (100% of inflow)
Center-of-Mass det. time= 73.6 min (913.7 - 840.1)

Volume	Invert	Avail.Storage	Storage Description
#1	127.00'	4,542 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc) 4,798 cf Overall - 256 cf Embedded = 4,542 cf
#2	127.00'	102 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc) Inside #1 256 cf Overall x 40.0% Voids
		4,644 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
127.00	512	0	0
128.00	1,218	865	865
129.00	1,949	1,584	2,449
130.00	2,749	2,349	4,798

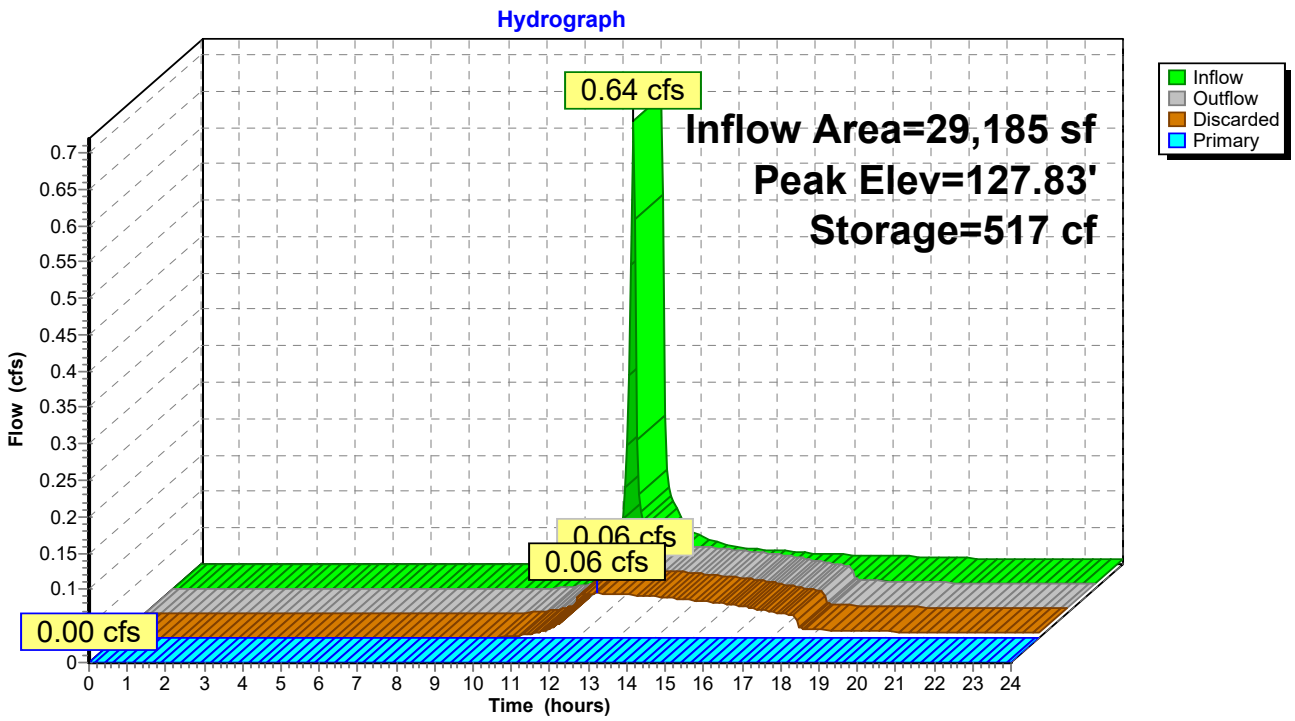
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
127.00	512	0	0
127.50	512	256	256

Device	Routing	Invert	Outlet Devices
#1	Primary	127.57'	**8.0" Round Culvert Barrel** L= 13.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 127.57' / 127.50' S= 0.0054 '/' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 0.35 sf
#2	Device 1	129.00'	**12.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Discarded	127.00'	**2.410 in/hr Exfiltration over Surface area**
#4	Device 1	128.00'	**5.0" Vert. Orifice/Grate** C= 0.600

Discarded OutFlow Max=0.06 cfs @ 12.50 hrs HW=127.83' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=127.00' (Free Discharge)
└─**1=Culvert Barrel** (Controls 0.00 cfs)
  ├─**2=Orifice/Grate** (Controls 0.00 cfs)
  └─**4=Orifice/Grate** (Controls 0.00 cfs)

Pond AB1: Above Ground Infiltration Basin 1



Stage-Area-Storage for Pond AB1: Above Ground Infiltration Basin 1

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
127.00	512	0
127.05	547	11
127.10	583	24
127.15	618	39
127.20	653	55
127.25	689	73
127.30	724	93
127.35	759	115
127.40	794	138
127.45	830	164
127.50	865	191
127.55	900	235
127.60	936	281
127.65	971	328
127.70	1,006	378
127.75	1,042	429
127.80	1,077	482
127.85	1,112	537
127.90	1,147	593
127.95	1,183	651
128.00	1,218	711
128.05	1,255	773
128.10	1,291	837
128.15	1,328	902
128.20	1,364	970
128.25	1,401	1,039
128.30	1,437	1,110
128.35	1,474	1,182
128.40	1,510	1,257
128.45	1,547	1,334
128.50	1,584	1,412
128.55	1,620	1,492
128.60	1,657	1,574
128.65	1,693	1,658
128.70	1,730	1,743
128.75	1,766	1,830
128.80	1,803	1,920
128.85	1,839	2,011
128.90	1,876	2,104
128.95	1,912	2,198
129.00	1,949	2,295
129.05	1,989	2,393
129.10	2,029	2,494
129.15	2,069	2,596
129.20	2,109	2,701
129.25	2,149	2,807
129.30	2,189	2,916
129.35	2,229	3,026
129.40	2,269	3,139
129.45	2,309	3,253
129.50	2,349	3,369
129.55	2,389	3,488
129.60	2,429	3,608
129.65	2,469	3,731
129.70	2,509	3,855
129.75	2,549	3,982
129.80	2,589	4,110
129.85	2,629	4,241
129.90	2,669	4,373
129.95	2,709	4,507
130.00	**2,749**	**4,644**

Summary for Pond AB3a: Above Ground Infiltration 3a

Inflow Area =	10,106 sf, 17.67% Impervious, Inflow Depth > 0.35" for 1-YR event				
Inflow =	0.11 cfs @	12.00 hrs, Volume=	291 cf		
Outflow =	0.05 cfs @	12.10 hrs, Volume=	290 cf, Atten= 53%, Lag= 5.9 min		
Discarded =	0.05 cfs @	12.10 hrs, Volume=	290 cf		
Primary =	0.00 cfs @	0.00 hrs, Volume=	0 cf		

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 132.03' @ 12.10 hrs Surf.Area= 929 sf Storage= 30 cf

Plug-Flow detention time= 6.3 min calculated for 290 cf (100% of inflow)
Center-of-Mass det. time= 4.6 min (918.3 - 913.7)

Volume	Invert	Avail.Storage	Storage Description
#1	132.00'	3,206 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

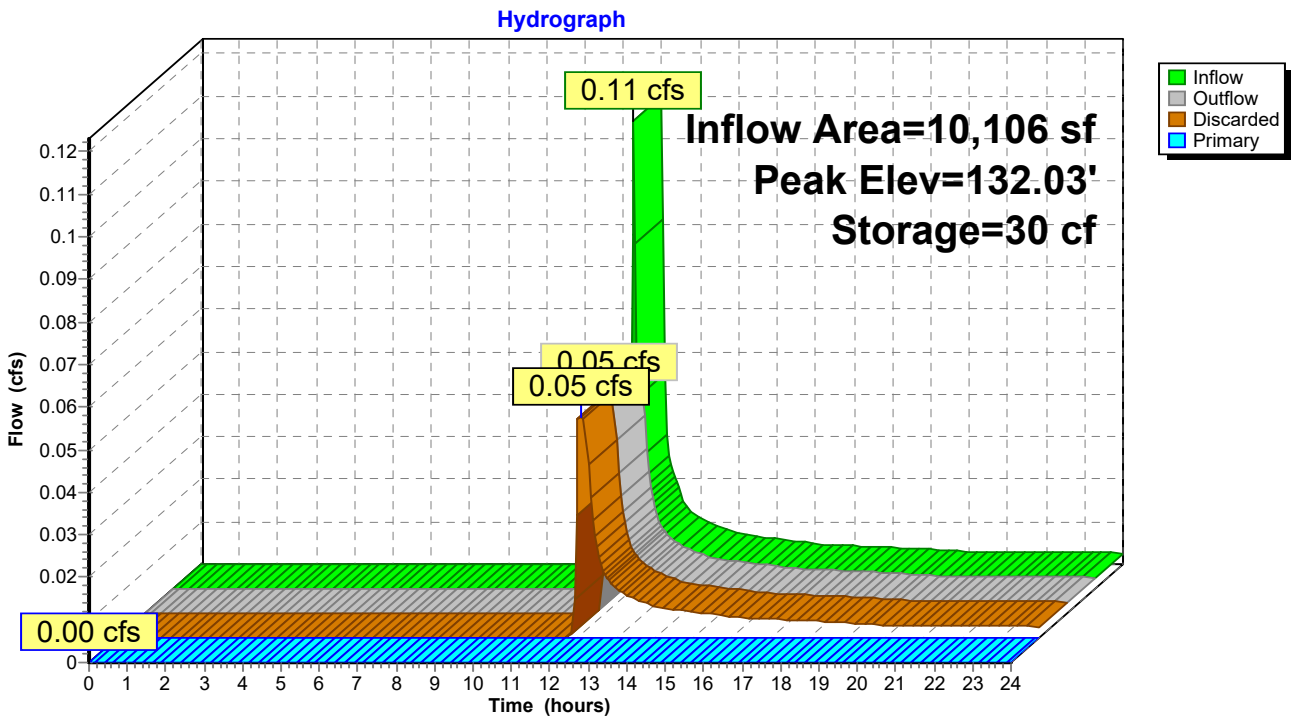
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
132.00	906	0	0
133.00	1,593	1,250	1,250
134.00	2,319	1,956	3,206

Device	Routing	Invert	Outlet Devices
#1	Discarded	132.00'	**2.410 in/hr Exfiltration over Surface area**
#2	Primary	133.00'	**10.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.05 cfs @ 12.10 hrs HW=132.03' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=132.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond AB3a: Above Ground Infiltration 3a



Stage-Area-Storage for Pond AB3a: Above Ground Infiltration 3a

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
132.00	906	0
132.02	920	18
132.04	933	37
132.06	947	56
132.08	961	75
132.10	975	94
132.12	988	114
132.14	1,002	134
132.16	1,016	154
132.18	1,030	174
132.20	1,043	195
132.22	1,057	216
132.24	1,071	237
132.26	1,085	259
132.28	1,098	281
132.30	1,112	303
132.32	1,126	325
132.34	1,140	348
132.36	1,153	371
132.38	1,167	394
132.40	1,181	417
132.42	1,195	441
132.44	1,208	465
132.46	1,222	489
132.48	1,236	514
132.50	1,250	539
132.52	1,263	564
132.54	1,277	589
132.56	1,291	615
132.58	1,304	641
132.60	1,318	667
132.62	1,332	694
132.64	1,346	721
132.66	1,359	748
132.68	1,373	775
132.70	1,387	803
132.72	1,401	830
132.74	1,414	859
132.76	1,428	887
132.78	1,442	916
132.80	1,456	945
132.82	1,469	974
132.84	1,483	1,003
132.86	1,497	1,033
132.88	1,511	1,063
132.90	1,524	1,094
132.92	1,538	1,124
132.94	1,552	1,155
132.96	1,566	1,186
132.98	1,579	1,218
133.00	1,593	1,250
133.02	1,608	1,282
133.04	1,622	1,314
133.06	1,637	1,346
133.08	1,651	1,379
133.10	1,666	1,412
133.12	1,680	1,446
133.14	1,695	1,480
133.16	1,709	1,514
133.18	1,724	1,548
133.20	1,738	1,583
133.22	1,753	1,618
133.24	1,767	1,653
133.26	1,782	1,688
133.28	1,796	1,724
133.30	1,811	1,760
133.32	1,825	1,796
133.34	1,840	1,833
133.36	1,854	1,870
133.38	1,869	1,907
133.40	1,883	1,945
133.42	1,898	1,983
133.44	1,912	2,021
133.46	1,927	2,059
133.48	1,941	2,098
133.50	1,956	2,137
133.52	1,971	2,176
133.54	1,985	2,216
133.56	2,000	2,255
133.58	2,014	2,296
133.60	2,029	2,336
133.62	2,043	2,377
133.64	2,058	2,418
133.66	2,072	2,459
133.68	2,087	2,501
133.70	2,101	2,542
133.72	2,116	2,585
133.74	2,130	2,627
133.76	2,145	2,670
133.78	2,159	2,713
133.80	2,174	2,756
133.82	2,188	2,800
133.84	2,203	2,844
133.86	2,217	2,888
133.88	2,232	2,932
133.90	2,246	2,977
133.92	2,261	3,022
133.94	2,275	3,068
133.96	2,290	3,113
133.98	2,304	3,159
134.00	**2,319**	**3,206**

Summary for Pond AB3b: Above Ground Infiltration 3b

Inflow Area =	20,081 sf, 75.70% Impervious, Inflow Depth > 1.82" for 1-YR event				
Inflow =	1.39 cfs @	11.97 hrs,	Volume=	3,054 cf	
Outflow =	0.03 cfs @	14.99 hrs,	Volume=	1,556 cf,	Atten= 98%, Lag= 181.4 min
Discarded =	0.03 cfs @	14.99 hrs,	Volume=	1,556 cf	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 132.40' @ 14.99 hrs Surf.Area= 1,429 sf Storage= 1,936 cf

Plug-Flow detention time= 334.2 min calculated for 1,556 cf (51% of inflow)
Center-of-Mass det. time= 222.5 min (1,019.5 - 797.0)

Volume	Invert	Avail.Storage	Storage Description
#1	130.00'	5,050 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

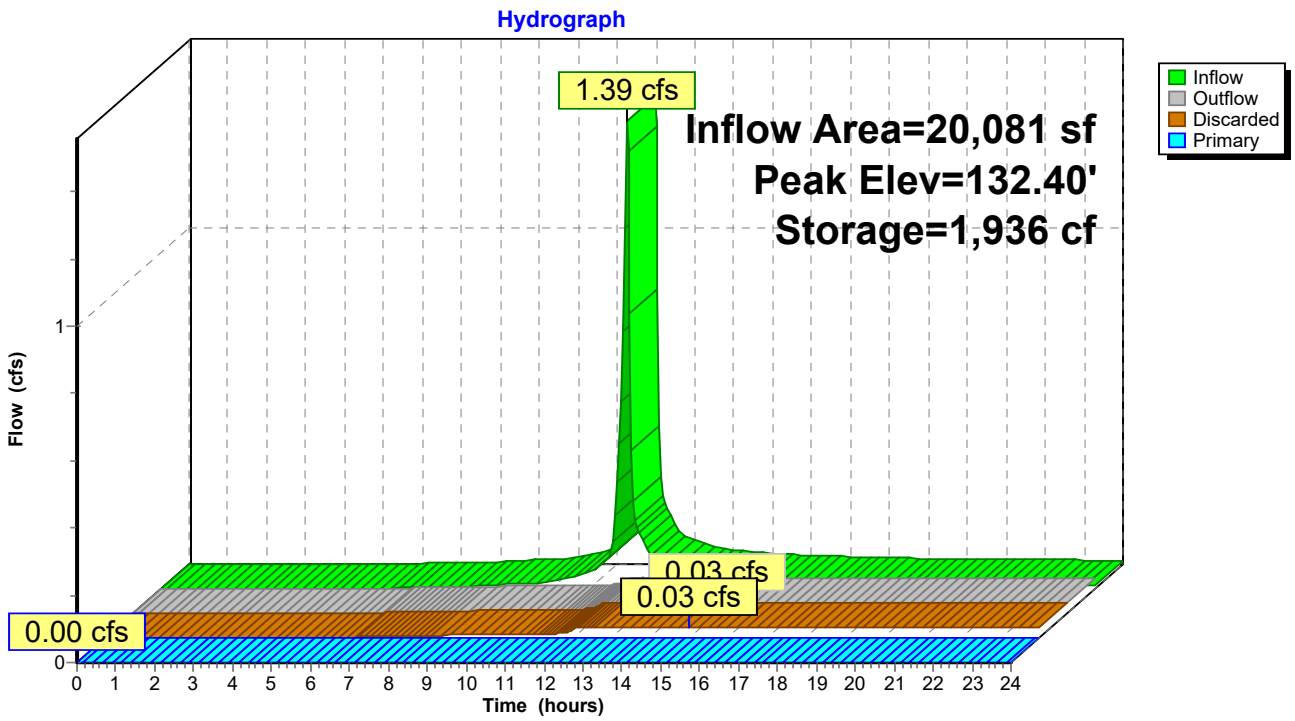
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
130.00	307	0	0
131.00	671	489	489
132.00	1,175	923	1,412
133.00	1,806	1,491	2,903
134.00	2,488	2,147	5,050

Device	Routing	Invert	Outlet Devices
#1	Primary	133.15'	**5.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32
#2	Discarded	130.00'	**1.020 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.03 cfs @ 14.99 hrs HW=132.40' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.03 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=130.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond AB3b: Above Ground Infiltration 3b



Stage-Area-Storage for Pond AB3b: Above Ground Infiltration 3b

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
130.00	307	0
130.05	325	16
130.10	343	33
130.15	362	50
130.20	380	69
130.25	398	88
130.30	416	108
130.35	434	130
130.40	453	152
130.45	471	175
130.50	489	199
130.55	507	224
130.60	525	250
130.65	544	276
130.70	562	304
130.75	580	333
130.80	598	362
130.85	616	392
130.90	635	424
130.95	653	456
131.00	671	489
131.05	696	523
131.10	721	559
131.15	747	595
131.20	772	633
131.25	797	673
131.30	822	713
131.35	847	755
131.40	873	798
131.45	898	842
131.50	923	888
131.55	948	934
131.60	973	982
131.65	999	1,032
131.70	1,024	1,082
131.75	1,049	1,134
131.80	1,074	1,187
131.85	1,099	1,241
131.90	1,125	1,297
131.95	1,150	1,354
132.00	1,175	1,412
132.05	1,207	1,472
132.10	1,238	1,533
132.15	1,270	1,595
132.20	1,301	1,660
132.25	1,333	1,725
132.30	1,364	1,793
132.35	1,396	1,862
132.40	1,427	1,932
132.45	1,459	2,005
132.50	1,491	2,078
132.55	1,522	2,154
132.60	1,554	2,231
132.65	1,585	2,309
132.70	1,617	2,389
132.75	1,648	2,471
132.80	1,680	2,554
132.85	1,711	2,639
132.90	1,743	2,725
132.95	1,774	2,813
133.00	1,806	2,903
133.05	1,840	2,994
133.10	1,874	3,087
133.15	1,908	3,181
133.20	1,942	3,277
133.25	1,977	3,375
133.30	2,011	3,475
133.35	2,045	3,576
133.40	2,079	3,679
133.45	2,113	3,784
133.50	2,147	3,891
133.55	2,181	3,999
133.60	2,215	4,109
133.65	2,249	4,220
133.70	2,283	4,334
133.75	2,318	4,449
133.80	2,352	4,566
133.85	2,386	4,684
133.90	2,420	4,804
133.95	2,454	4,926
134.00	**2,488**	**5,050**

Summary for Pond IB1: Infiltration Basin 1

Inflow Area = 14,505 sf,100.00% Impervious, Inflow Depth > 2.32" for 1-YR event
Inflow = 1.16 cfs @ 11.96 hrs, Volume= 2,803 cf
Outflow = 0.11 cfs @ 11.65 hrs, Volume= 2,800 cf, Atten= 91%, Lag= 0.0 min
Discarded = 0.11 cfs @ 11.65 hrs, Volume= 2,800 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 129.91' @ 12.43 hrs Surf.Area= 1,889 sf Storage= 1,012 cf

Plug-Flow detention time= 62.2 min calculated for 2,794 cf (100% of inflow)
Center-of-Mass det. time= 61.5 min (818.6 - 757.1)

Volume	Invert	Avail.Storage	Storage Description
#1A	129.00'	1,726 cf	**25.25'W x 74.82'L x 3.50'H Field A** 6,612 cf Overall - 2,297 cf Embedded = 4,315 cf x 40.0% Voids
#2A	129.50'	2,297 cf	**ADS_StormTech SC-740 +Cap** x 50 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 5 Rows of 10 Chambers
		4,023 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	130.24'	**12.0" Round Culvert** L= 10.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 130.24' / 130.00' S= 0.0240 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.79 sf
#2	Discarded	129.00'	**2.410 in/hr Exfiltration over Surface area**
#3	Device 1	130.40'	**3.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600
#4	Device 1	132.05'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.11 cfs @ 11.65 hrs HW=129.05' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.11 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=129.00' (Free Discharge)
└─**1=Culvert** (Controls 0.00 cfs)
  ├─**3=Orifice/Grate** (Controls 0.00 cfs)
  └─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond IB1: Infiltration Basin 1 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

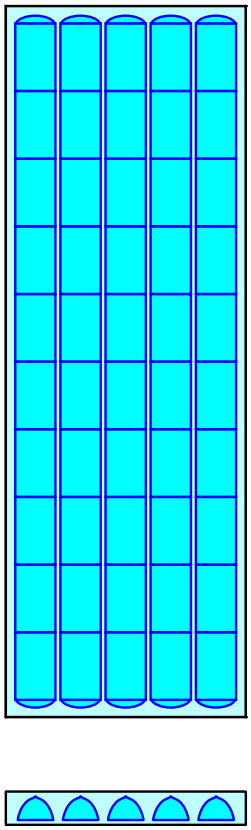
10 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 72.82' Row Length +12.0" End Stone x 2 = 74.82' Base Length
5 Rows x 51.0" Wide + 6.0" Spacing x 4 + 12.0" Side Stone x 2 = 25.25' Base Width
6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

50 Chambers x 45.9 cf = 2,297.0 cf Chamber Storage

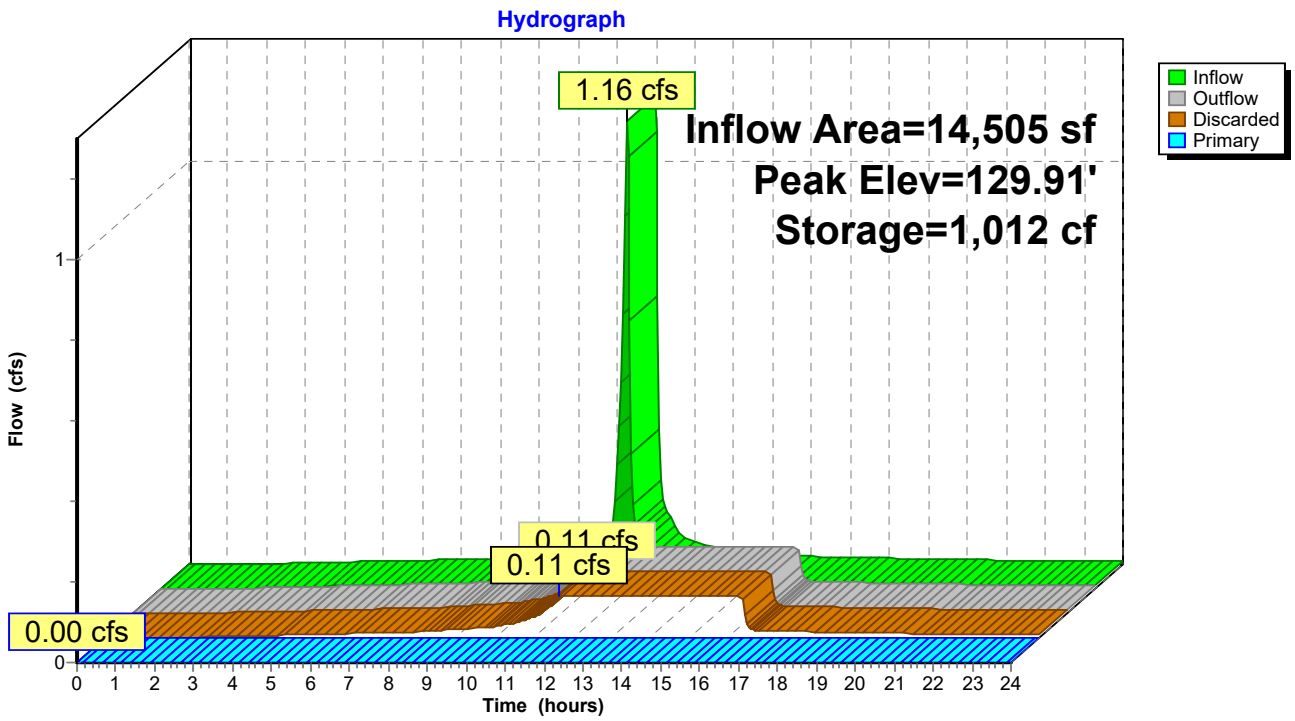
6,611.9 cf Field - 2,297.0 cf Chambers = 4,314.9 cf Stone x 40.0% Voids = 1,726.0 cf Stone Storage

Chamber Storage + Stone Storage = 4,023.0 cf = 0.092 af
Overall Storage Efficiency = 60.8%
Overall System Size = 74.82' x 25.25' x 3.50'

50 Chambers
244.9 cy Field
159.8 cy Stone



Pond IB1: Infiltration Basin 1



Stage-Area-Storage for Pond IB1: Infiltration Basin 1

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
129.00	**1,889**	0
129.05	1,889	38
129.10	1,889	76
129.15	1,889	113
129.20	1,889	151
129.25	1,889	189
129.30	1,889	227
129.35	1,889	264
129.40	1,889	302
129.45	1,889	340
129.50	1,889	378
129.55	1,889	455
129.60	1,889	533
129.65	1,889	610
129.70	1,889	687
129.75	1,889	764
129.80	1,889	841
129.85	1,889	917
129.90	1,889	993
129.95	1,889	1,069
130.00	1,889	1,145
130.05	1,889	1,220
130.10	1,889	1,295
130.15	1,889	1,369
130.20	1,889	1,444
130.25	1,889	1,517
130.30	1,889	1,591
130.35	1,889	1,664
130.40	1,889	1,736
130.45	1,889	1,809
130.50	1,889	1,880
130.55	1,889	1,952
130.60	1,889	2,022
130.65	1,889	2,093
130.70	1,889	2,162
130.75	1,889	2,232
130.80	1,889	2,300
130.85	1,889	2,368
130.90	1,889	2,435
130.95	1,889	2,502
131.00	1,889	2,568
131.05	1,889	2,634
131.10	1,889	2,698
131.15	1,889	2,762
131.20	1,889	2,825
131.25	1,889	2,887
131.30	1,889	2,948
131.35	1,889	3,008
131.40	1,889	3,067
131.45	1,889	3,124
131.50	1,889	3,181
131.55	1,889	3,236
131.60	1,889	3,290
131.65	1,889	3,342
131.70	1,889	3,392
131.75	1,889	3,439
131.80	1,889	3,484
131.85	1,889	3,526
131.90	1,889	3,567
131.95	1,889	3,607
132.00	1,889	3,645
132.05	1,889	3,683
132.10	1,889	3,721
132.15	1,889	3,758
132.20	1,889	3,796
132.25	1,889	3,834
132.30	1,889	3,872
132.35	1,889	3,910
132.40	1,889	3,947
132.45	1,889	3,985
132.50	1,889	**4,023**

Summary for Pond IB2a: Infiltration Basin 2a

Inflow Area =	26,310 sf, 88.91% Impervious, Inflow Depth > 1.92" for 1-YR event				
Inflow =	1.89 cfs @	11.96 hrs, Volume=	4,199 cf		
Outflow =	0.08 cfs @	13.27 hrs, Volume=	3,210 cf, Atten= 96%, Lag= 78.4 min		
Discarded =	0.06 cfs @	10.95 hrs, Volume=	3,098 cf		
Primary =	0.02 cfs @	13.27 hrs, Volume=	112 cf		

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 128.84' @ 13.27 hrs Surf.Area= 2,458 sf Storage= 2,161 cf

Plug-Flow detention time= 279.5 min calculated for 3,204 cf (76% of inflow)
Center-of-Mass det. time= 193.4 min (984.5 - 791.0)

Volume	Invert	Avail.Storage	Storage Description
#1A	127.50'	2,392 cf	**30.00'W x 81.94'L x 3.67'H Field A** 9,013 cf Overall - 3,032 cf Embedded = 5,981 cf x 40.0% Voids
#2A	128.00'	3,032 cf	**ADS_StormTech SC-740 +Cap** x 66 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 6 Rows of 11 Chambers
		5,424 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	128.60'	**15.0" Round Culvert** L= 55.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 128.60' / 128.00' S= 0.0109 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 1.23 sf
#2	Discarded	127.50'	**1.020 in/hr Exfiltration over Surface area**
#3	Device 1	128.80'	**10.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600
#4	Device 1	130.10'	**10.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600
#5	Device 1	130.99'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.06 cfs @ 10.95 hrs HW=127.54' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=0.02 cfs @ 13.27 hrs HW=128.84' (Free Discharge)
└─**1=Culvert** (Passes 0.02 cfs of 0.31 cfs potential flow)
  ├─**3=Orifice/Grate** (Orifice Controls 0.02 cfs @ 0.65 fps)
  ├─**4=Orifice/Grate** (Controls 0.00 cfs)
  └─**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond IB2a: Infiltration Basin 2a - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

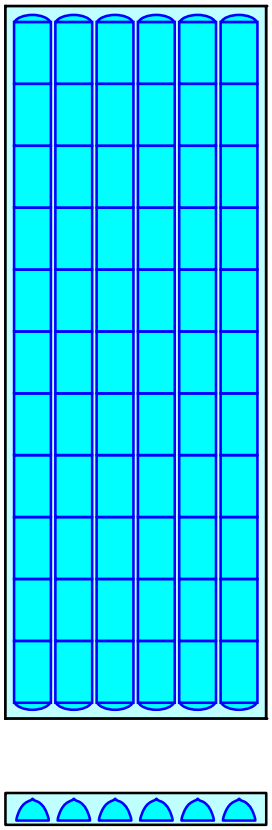
11 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 79.94' Row Length +12.0" End Stone x 2 = 81.94' Base Length
6 Rows x 51.0" Wide + 6.0" Spacing x 5 + 12.0" Side Stone x 2 = 30.00' Base Width
6.0" Base + 30.0" Chamber Height + 8.0" Cover = 3.67' Field Height

66 Chambers x 45.9 cf = 3,032.0 cf Chamber Storage

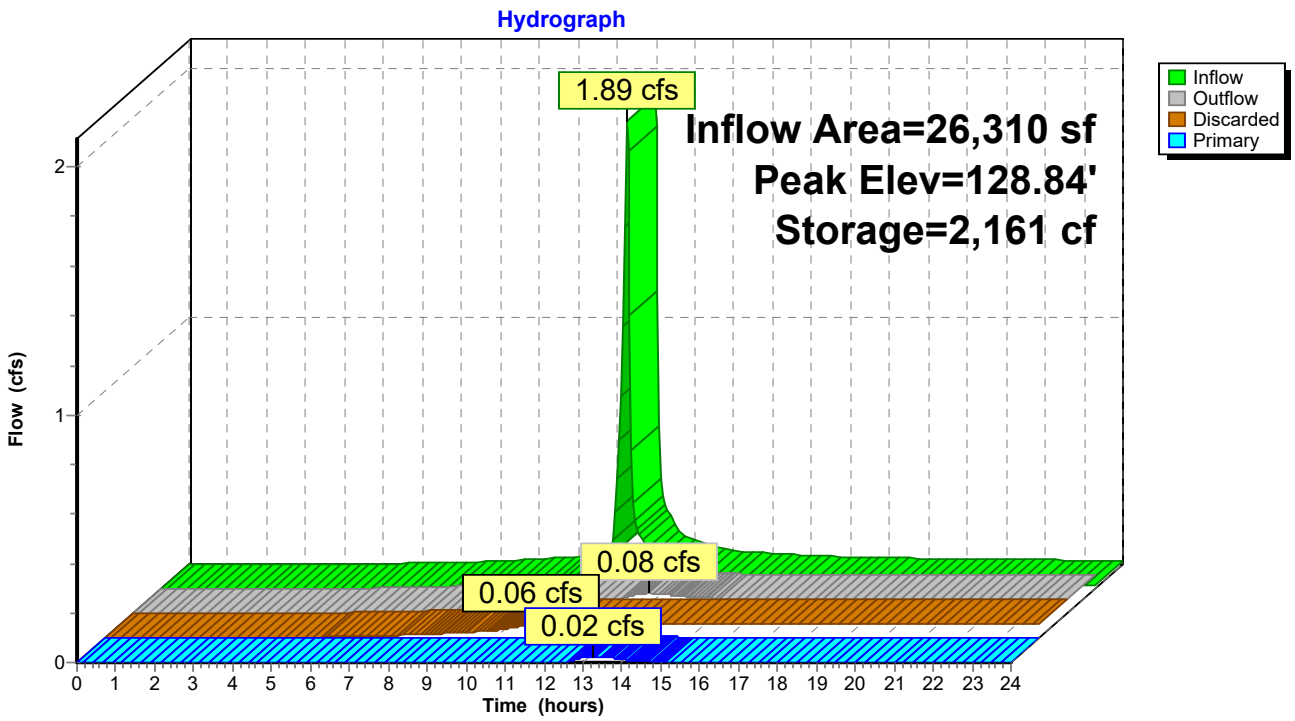
9,013.0 cf Field - 3,032.0 cf Chambers = 5,981.0 cf Stone x 40.0% Voids = 2,392.4 cf Stone Storage

Chamber Storage + Stone Storage = 5,424.4 cf = 0.125 af
Overall Storage Efficiency = 60.2%
Overall System Size = 81.94' x 30.00' x 3.67'

66 Chambers
333.8 cy Field
221.5 cy Stone



Pond IB2a: Infiltration Basin 2a



Stage-Area-Storage for Pond IB2a: Infiltration Basin 2a

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
127.50	**2,458**	0
127.55	2,458	49
127.60	2,458	98
127.65	2,458	147
127.70	2,458	197
127.75	2,458	246
127.80	2,458	295
127.85	2,458	344
127.90	2,458	393
127.95	2,458	442
128.00	2,458	492
128.05	2,458	593
128.10	2,458	695
128.15	2,458	796
128.20	2,458	897
128.25	2,458	998
128.30	2,458	1,099
128.35	2,458	1,199
128.40	2,458	1,298
128.45	2,458	1,398
128.50	2,458	1,497
128.55	2,458	1,595
128.60	2,458	1,694
128.65	2,458	1,791
128.70	2,458	1,888
128.75	2,458	1,985
128.80	2,458	2,081
128.85	2,458	2,177
128.90	2,458	2,272
128.95	2,458	2,367
129.00	2,458	2,461
129.05	2,458	2,554
129.10	2,458	2,647
129.15	2,458	2,739
129.20	2,458	2,830
129.25	2,458	2,921
129.30	2,458	3,011
129.35	2,458	3,100
129.40	2,458	3,188
129.45	2,458	3,275
129.50	2,458	3,362
129.55	2,458	3,447
129.60	2,458	3,532
129.65	2,458	3,615
129.70	2,458	3,698
129.75	2,458	3,779
129.80	2,458	3,858
129.85	2,458	3,937
129.90	2,458	4,014
129.95	2,458	4,089
130.00	2,458	4,164
130.05	2,458	4,236
130.10	2,458	4,306
130.15	2,458	4,374
130.20	2,458	4,439
130.25	2,458	4,501
130.30	2,458	4,559
130.35	2,458	4,614
130.40	2,458	4,667
130.45	2,458	4,719
130.50	2,458	4,769
130.55	2,458	4,818
130.60	2,458	4,867
130.65	2,458	4,916
130.70	2,458	4,966
130.75	2,458	5,015
130.80	2,458	5,064
130.85	2,458	5,113
130.90	2,458	5,162
130.95	2,458	5,211
131.00	2,458	5,261
131.05	2,458	5,310
131.10	2,458	5,359
131.15	2,458	**5,408**

Summary for Pond IB2c: Infiltration Basin Area 2c

Inflow Area =	15,551 sf, 65.27% Impervious, Inflow Depth > 1.28" for 1-YR event				
Inflow =	0.79 cfs @	11.97 hrs, Volume=	1,662 cf		
Outflow =	0.06 cfs @	11.70 hrs, Volume=	1,660 cf,	Atten= 93%,	Lag= 0.0 min
Discarded =	0.06 cfs @	11.70 hrs, Volume=	1,660 cf		
Primary =	0.00 cfs @	0.00 hrs, Volume=	0 cf		

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 130.62' @ 12.69 hrs Surf.Area= 2,373 sf Storage= 690 cf

Plug-Flow detention time= 102.2 min calculated for 1,660 cf (100% of inflow)
Center-of-Mass det. time= 101.1 min (930.0 - 828.9)

Volume	Invert	Avail.Storage	Storage Description
#1A	130.00'	1,505 cf	**27.00'W x 87.91'L x 2.00'H Field A** 4,747 cf Overall - 985 cf Embedded = 3,762 cf x 40.0% Voids
#2A	130.50'	985 cf	**ADS_StormTech SC-160LP +Cap** x 144 Inside #1 Effective Size= 18.0"W x 12.0"H => 0.96 sf x 7.12'L = 6.8 cf Overall Size= 25.0"W x 12.0"H x 7.56'L with 0.44' Overlap 12 Rows of 12 Chambers
		2,489 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	130.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	129.20'	**8.0" Round Culvert** L= 14.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 129.20' / 129.00' S= 0.0143 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.35 sf
#3	Device 2	130.70'	**11.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600
#4	Device 2	131.40'	**2.0" Vert. Orifice/Grate** C= 0.600
#5	Device 2	131.88'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.06 cfs @ 11.70 hrs HW=130.03' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=130.00' (Free Discharge)
└─**2=Culvert** (Passes 0.00 cfs of 1.32 cfs potential flow)
  ├─**3=Orifice/Grate** (Controls 0.00 cfs)
  ├─**4=Orifice/Grate** (Controls 0.00 cfs)
  └─**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond IB2c: Infiltration Basin Area 2c - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-160LP +Cap (ADS StormTech® SC-160LP with cap length)
Effective Size= 18.0"W x 12.0"H => 0.96 sf x 7.12'L = 6.8 cf
Overall Size= 25.0"W x 12.0"H x 7.56'L with 0.44' Overlap

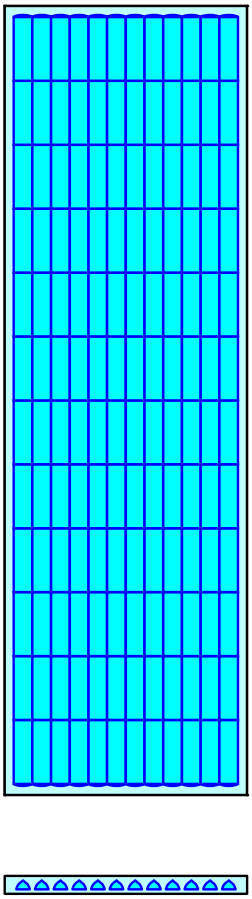
12 Chambers/Row x 7.12' Long +0.23' Cap Length x 2 = 85.91' Row Length +12.0" End Stone x 2 = 87.91' Base Length
12 Rows x 25.0" Wide + 12.0" Side Stone x 2 = 27.00' Base Width
6.0" Base + 12.0" Chamber Height + 6.0" Cover = 2.00' Field Height

144 Chambers x 6.8 cf = 984.5 cf Chamber Storage

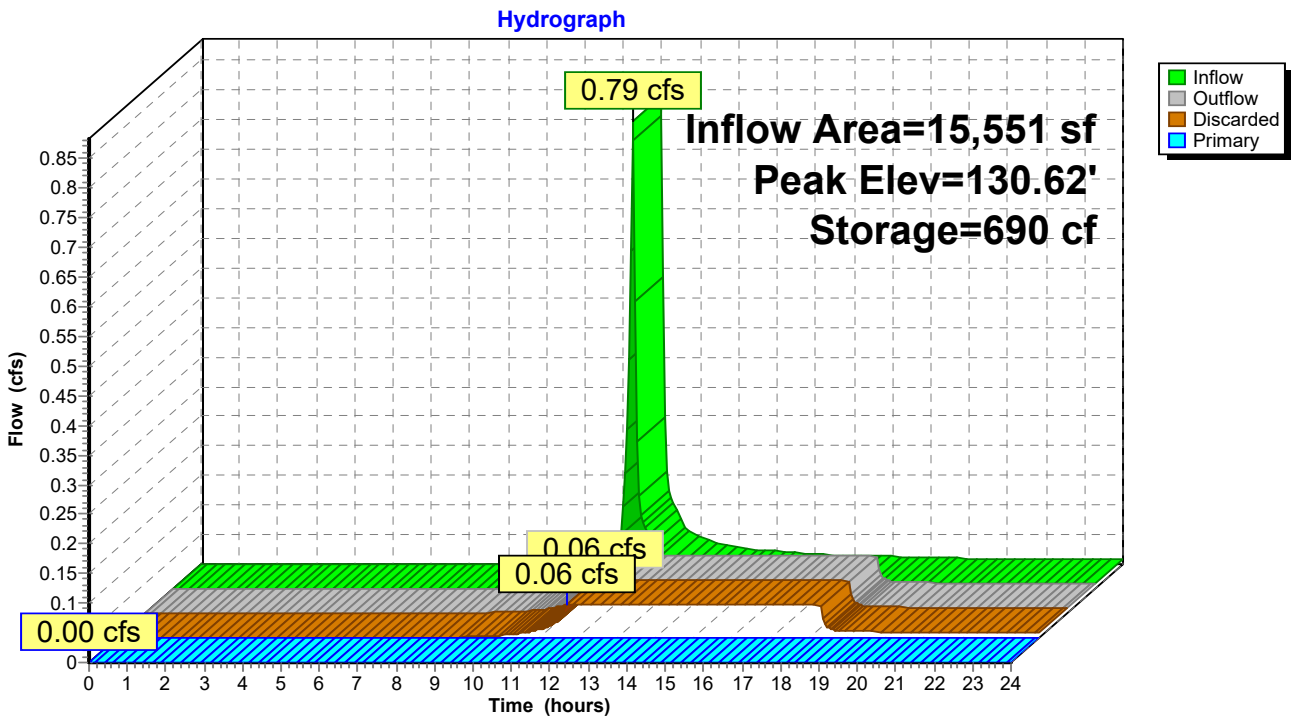
4,747.0 cf Field - 984.5 cf Chambers = 3,762.4 cf Stone x 40.0% Voids = 1,505.0 cf Stone Storage

Chamber Storage + Stone Storage = 2,489.5 cf = 0.057 af
Overall Storage Efficiency = 52.4%
Overall System Size = 87.91' x 27.00' x 2.00'

144 Chambers
175.8 cy Field
139.3 cy Stone



Pond IB2c: Infiltration Basin Area 2c



Stage-Area-Storage for Pond IB2c: Infiltration Basin Area 2c

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
130.00	**2,373**	0
130.02	2,373	19
130.04	2,373	38
130.06	2,373	57
130.08	2,373	76
130.10	2,373	95
130.12	2,373	114
130.14	2,373	133
130.16	2,373	152
130.18	2,373	171
130.20	2,373	190
130.22	2,373	209
130.24	2,373	228
130.26	2,373	247
130.28	2,373	266
130.30	2,373	285
130.32	2,373	304
130.34	2,373	323
130.36	2,373	342
130.38	2,373	361
130.40	2,373	380
130.42	2,373	399
130.44	2,373	418
130.46	2,373	437
130.48	2,373	456
130.50	2,373	475
130.52	2,373	512
130.54	2,373	549
130.56	2,373	587
130.58	2,373	624
130.60	2,373	661
130.62	2,373	698
130.64	2,373	735
130.66	2,373	772
130.68	2,373	808
130.70	2,373	844
130.72	2,373	880
130.74	2,373	916
130.76	2,373	952
130.78	2,373	987
130.80	2,373	1,022
130.82	2,373	1,057
130.84	2,373	1,092
130.86	2,373	1,127
130.88	2,373	1,161
130.90	2,373	1,195
130.92	2,373	1,229
130.94	2,373	1,263
130.96	2,373	1,296
130.98	2,373	1,329
131.00	2,373	1,361
131.02	2,373	1,394
131.04	2,373	1,426
131.06	2,373	1,457
131.08	2,373	1,489
131.10	2,373	1,519
131.12	2,373	1,550
131.14	2,373	1,580
131.16	2,373	1,609
131.18	2,373	1,638
131.20	2,373	1,667
131.22	2,373	1,695
131.24	2,373	1,722
131.26	2,373	1,749
131.28	2,373	1,774
131.30	2,373	1,799
131.32	2,373	1,824
131.34	2,373	1,847
131.36	2,373	1,870
131.38	2,373	1,892
131.40	2,373	1,914
131.42	2,373	1,935
131.44	2,373	1,955
131.46	2,373	1,976
131.48	2,373	1,995
131.50	2,373	2,015
131.52	2,373	2,034
131.54	2,373	2,053
131.56	2,373	2,072
131.58	2,373	2,091
131.60	2,373	2,110
131.62	2,373	2,129
131.64	2,373	2,148
131.66	2,373	2,167
131.68	2,373	2,186
131.70	2,373	2,205
131.72	2,373	2,224
131.74	2,373	2,243
131.76	2,373	2,262
131.78	2,373	2,281
131.80	2,373	2,300
131.82	2,373	2,319
131.84	2,373	2,338
131.86	2,373	2,357
131.88	2,373	2,376
131.90	2,373	2,395
131.92	2,373	2,414
131.94	2,373	2,433
131.96	2,373	2,452
131.98	2,373	2,471
132.00	2,373	**2,489**

Summary for Pond IB2e: Infiltration Basin 2b

Inflow Area =	15,464 sf, 93.24% Impervious, Inflow Depth > 2.01" for 1-YR event				
Inflow =	1.15 cfs @	11.96 hrs,	Volume=	2,590 cf	
Outflow =	0.14 cfs @	11.70 hrs,	Volume=	2,588 cf,	Atten= 87%, Lag= 0.0 min
Discarded =	0.14 cfs @	11.70 hrs,	Volume=	2,588 cf	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 131.17' @ 12.26 hrs Surf.Area= 2,592 sf Storage= 871 cf

Plug-Flow detention time= 37.8 min calculated for 2,583 cf (100% of inflow)
Center-of-Mass det. time= 37.3 min (821.6 - 784.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	130.50'	2,002 cf	**34.83'W x 74.40'L x 2.50'H Field A** 6,479 cf Overall - 1,474 cf Embedded = 5,005 cf x 40.0% Voids
#2A	131.00'	1,474 cf	**ADS_StormTech SC-310 +Cap** x 100 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 10 Rows of 10 Chambers
		3,476 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	130.85'	**15.0" Round Culvert Barrel** L= 69.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 130.85' / 130.50' S= 0.0051 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 1.23 sf
#2	Discarded	130.50'	**2.410 in/hr Exfiltration over Surface area**
#3	Device 1	131.40'	**3.0" W x 3.0" H Vert. Orifice/Grate** C= 0.600
#4	Device 1	132.63'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.14 cfs @ 11.70 hrs HW=130.54' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.14 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=130.50' (Free Discharge)
└─**1=Culvert Barrel** (Controls 0.00 cfs)
  ├─**3=Orifice/Grate** (Controls 0.00 cfs)
  └─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond IB2e: Infiltration Basin 2b - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-310 +Cap (ADS StormTech® SC-310 with cap length)
Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf
Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap

34.0" Wide + 6.0" Spacing = 40.0" C-C Row Spacing

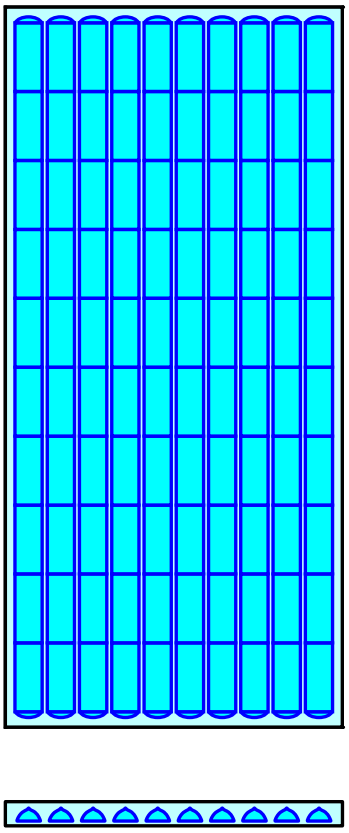
10 Chambers/Row x 7.12' Long +0.60' Cap Length x 2 = 72.40' Row Length +12.0" End Stone x 2 = 74.40' Base Length
10 Rows x 34.0" Wide + 6.0" Spacing x 9 + 12.0" Side Stone x 2 = 34.83' Base Width
6.0" Base + 16.0" Chamber Height + 8.0" Cover = 2.50' Field Height

100 Chambers x 14.7 cf = 1,474.2 cf Chamber Storage

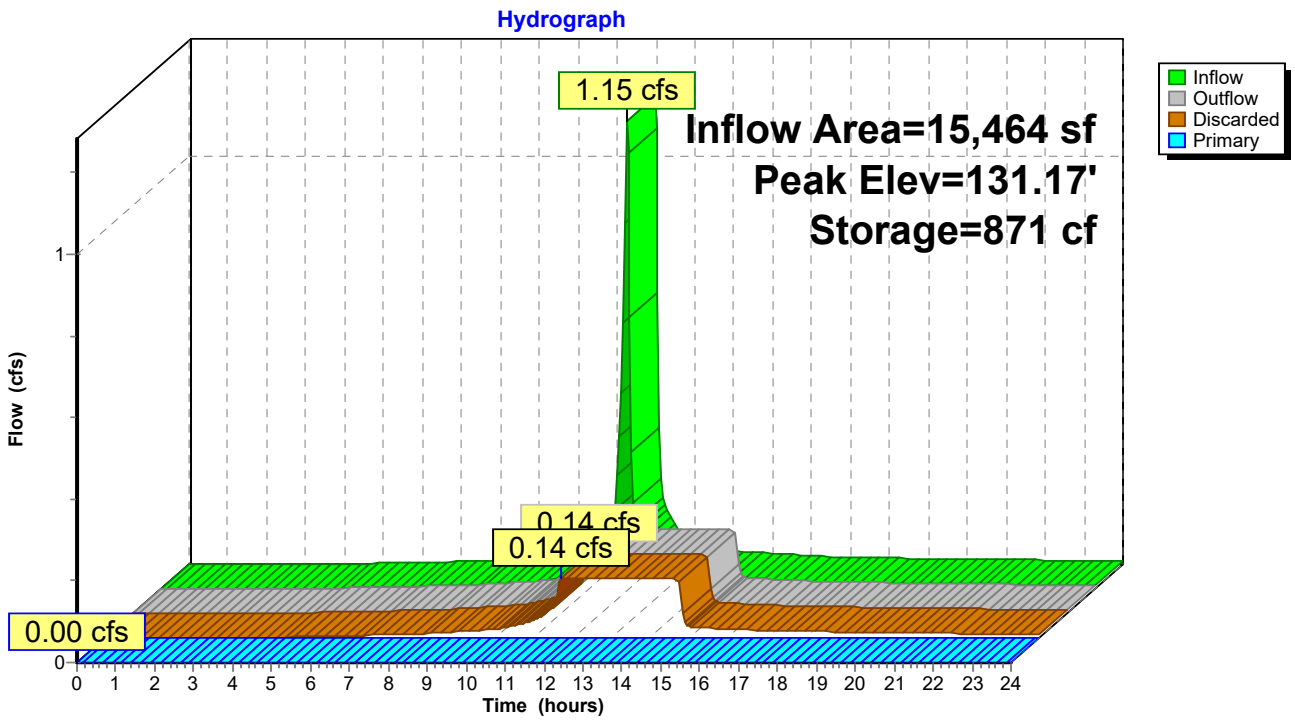
6,479.0 cf Field - 1,474.2 cf Chambers = 5,004.8 cf Stone x 40.0% Voids = 2,001.9 cf Stone Storage

Chamber Storage + Stone Storage = 3,476.1 cf = 0.080 af
Overall Storage Efficiency = 53.7%
Overall System Size = 74.40' x 34.83' x 2.50'

100 Chambers
240.0 cy Field
185.4 cy Stone



Pond IB2e: Infiltration Basin 2b



Stage-Area-Storage for Pond IB2e: Infiltration Basin 2b

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
130.50	**2,592**	0
130.55	2,592	52
130.60	2,592	104
130.65	2,592	155
130.70	2,592	207
130.75	2,592	259
130.80	2,592	311
130.85	2,592	363
130.90	2,592	415
130.95	2,592	466
131.00	2,592	518
131.05	2,592	622
131.10	2,592	724
131.15	2,592	827
131.20	2,592	928
131.25	2,592	1,029
131.30	2,592	1,129
131.35	2,592	1,227
131.40	2,592	1,325
131.45	2,592	1,422
131.50	2,592	1,517
131.55	2,592	1,611
131.60	2,592	1,703
131.65	2,592	1,794
131.70	2,592	1,884
131.75	2,592	1,972
131.80	2,592	2,057
131.85	2,592	2,141
131.90	2,592	2,222
131.95	2,592	2,301
132.00	2,592	2,377
132.05	2,592	2,449
132.10	2,592	2,516
132.15	2,592	2,579
132.20	2,592	2,638
132.25	2,592	2,695
132.30	2,592	2,750
132.35	2,592	2,802
132.40	2,592	2,854
132.45	2,592	2,906
132.50	2,592	2,958
132.55	2,592	3,010
132.60	2,592	3,061
132.65	2,592	3,113
132.70	2,592	3,165
132.75	2,592	3,217
132.80	2,592	3,269
132.85	2,592	3,321
132.90	2,592	3,372
132.95	2,592	3,424
133.00	2,592	**3,476**

Summary for Subcatchment PD-1: Prop. Drainage Area 1

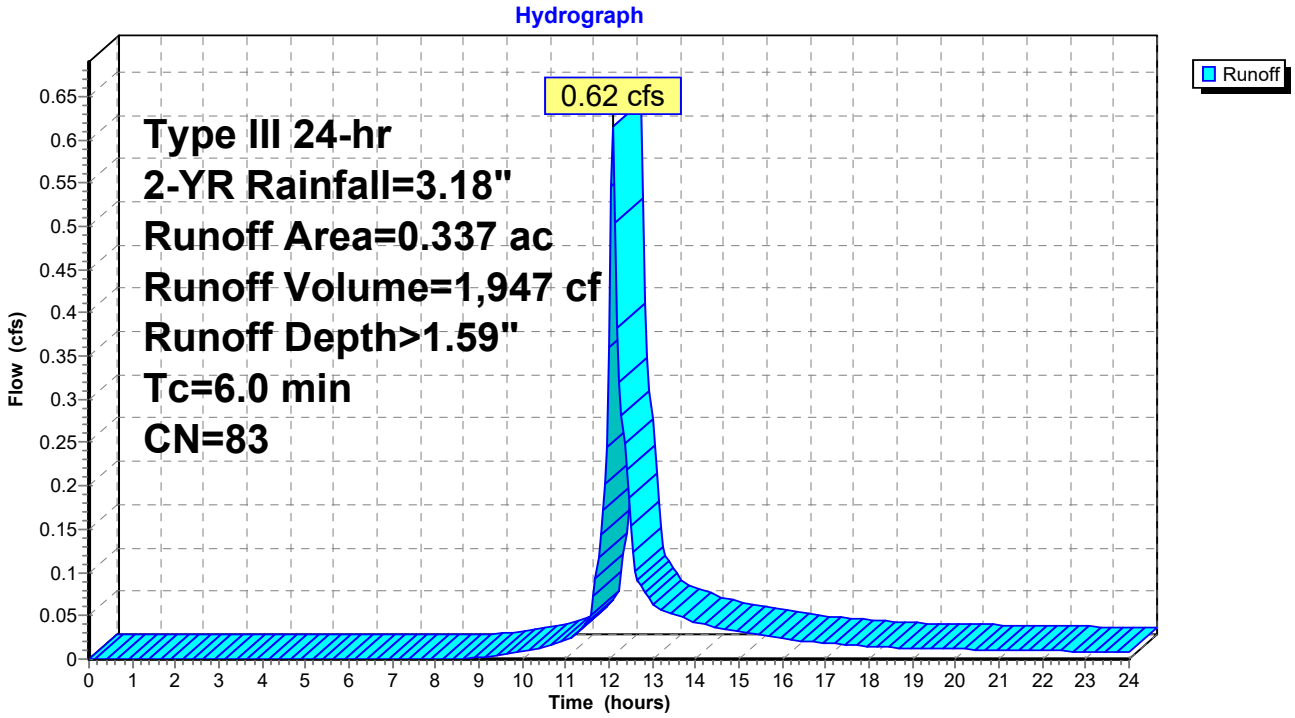
Runoff = 0.62 cfs @ 12.09 hrs, Volume= 1,947 cf, Depth> 1.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.18"

	Area (ac)	CN	Description
*	0.074	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.070	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.193	98	Paved parking
	0.337	83	Weighted Average
	0.144		42.73% Pervious Area
	0.193		57.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-1: Prop. Drainage Area 1



Summary for Subcatchment PD-2a: Prop. Drainage Area 2a

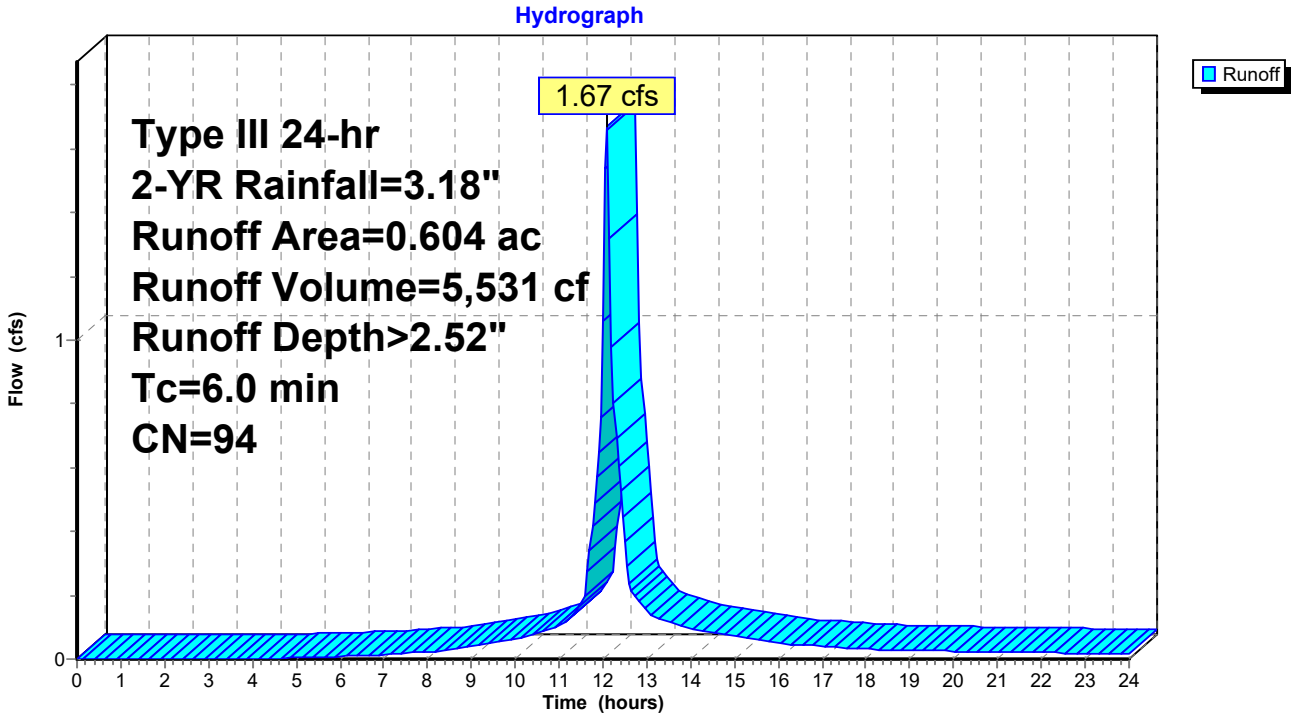
Runoff = 1.67 cfs @ 12.09 hrs, Volume= 5,531 cf, Depth> 2.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.18"

	Area (ac)	CN	Description
*	0.038	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.029	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.537	98	Paved parking
	0.604	94	Weighted Average
	0.067		11.09% Pervious Area
	0.537		88.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct**

Subcatchment PD-2a: Prop. Drainage Area 2a



Summary for Subcatchment PD-2b: Prop. Drainage Area 2b

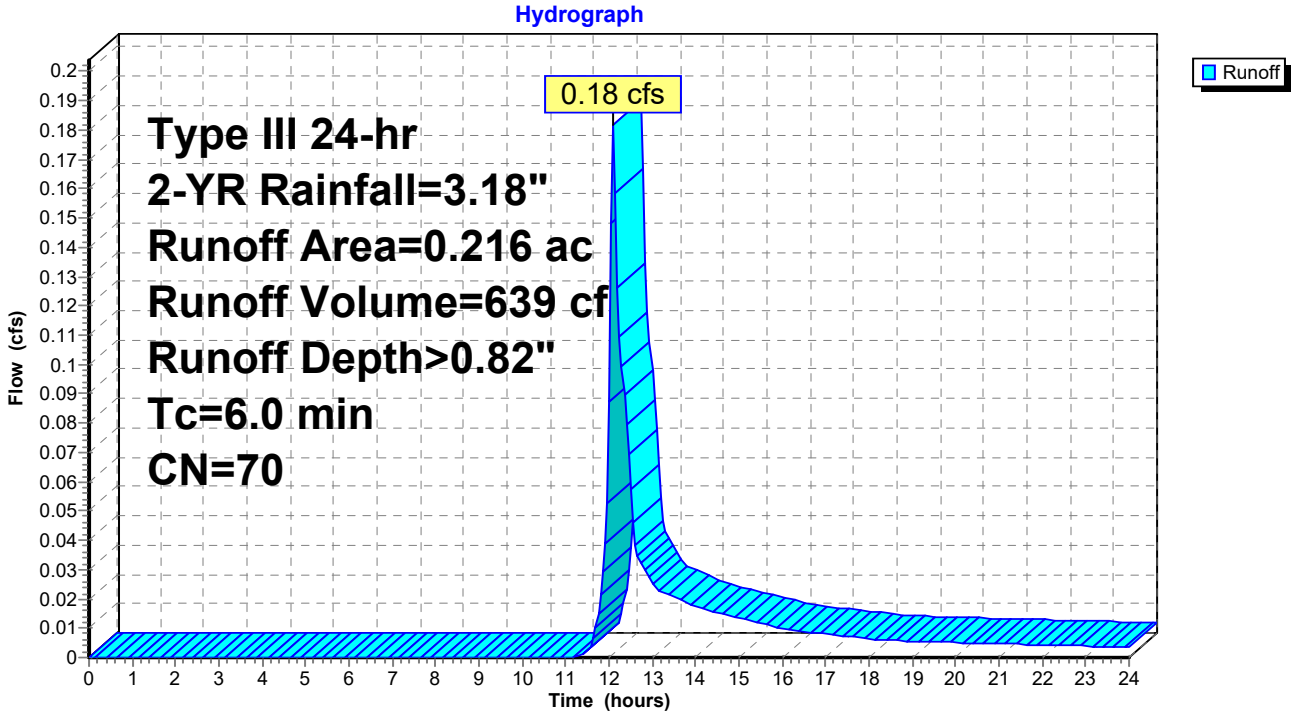
Runoff = 0.18 cfs @ 12.10 hrs, Volume= 639 cf, Depth> 0.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.18"

	Area (ac)	CN	Description
*	0.174	74	Woods/grass comb., Fair, HSG B/D, 13
*	0.018	43	Woods/grass comb., Fair, HSG A. 36A
	0.024	65	Woods/grass comb., Fair, HSG B
	0.216	70	Weighted Average
	0.216		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-2b: Prop. Drainage Area 2b



Summary for Subcatchment PD-2c: Prop. Drainage Area 2c

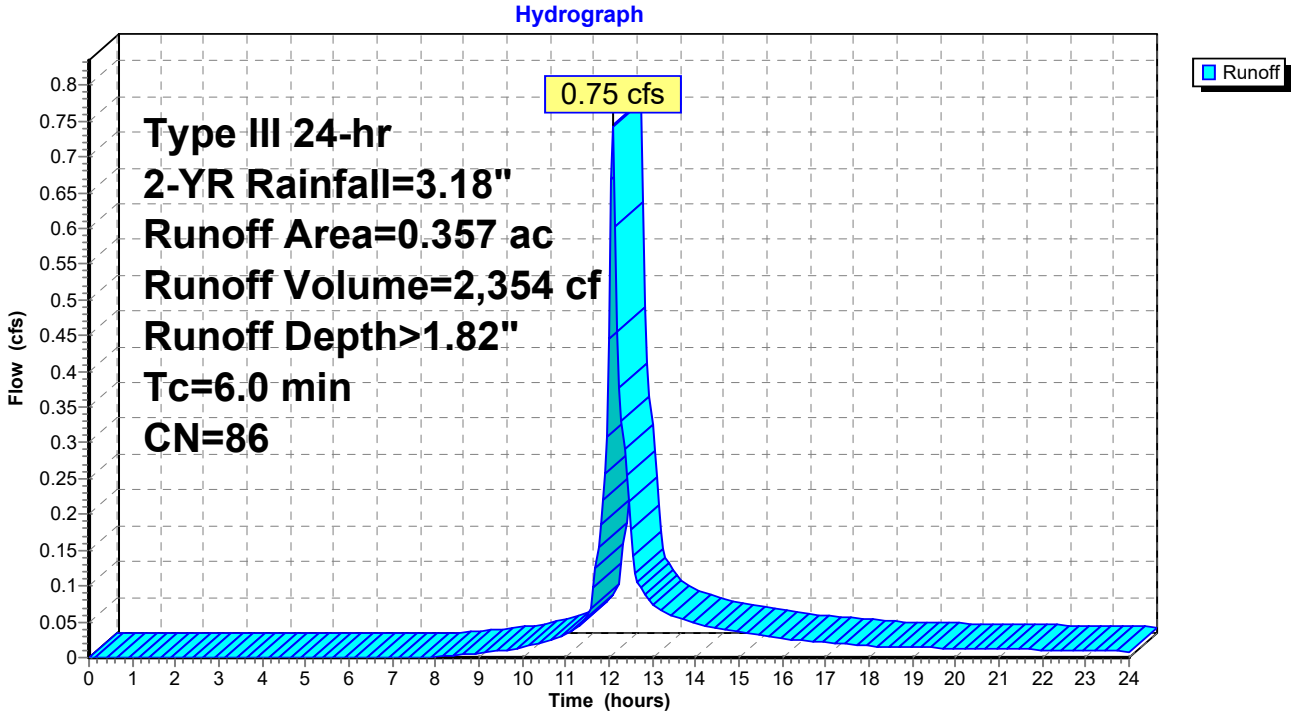
Runoff = 0.75 cfs @ 12.09 hrs, Volume= 2,354 cf, Depth> 1.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.18"

	Area (ac)	CN	Description
*	0.061	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.042	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.021	49	50-75% Grass cover, Fair, HSG A, 36A
	0.233	98	Paved parking, HSG D
	0.357	86	Weighted Average
	0.124		34.73% Pervious Area
	0.233		65.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-2c: Prop. Drainage Area 2c



Summary for Subcatchment PD-2d: Prop. Drainage Area 2d

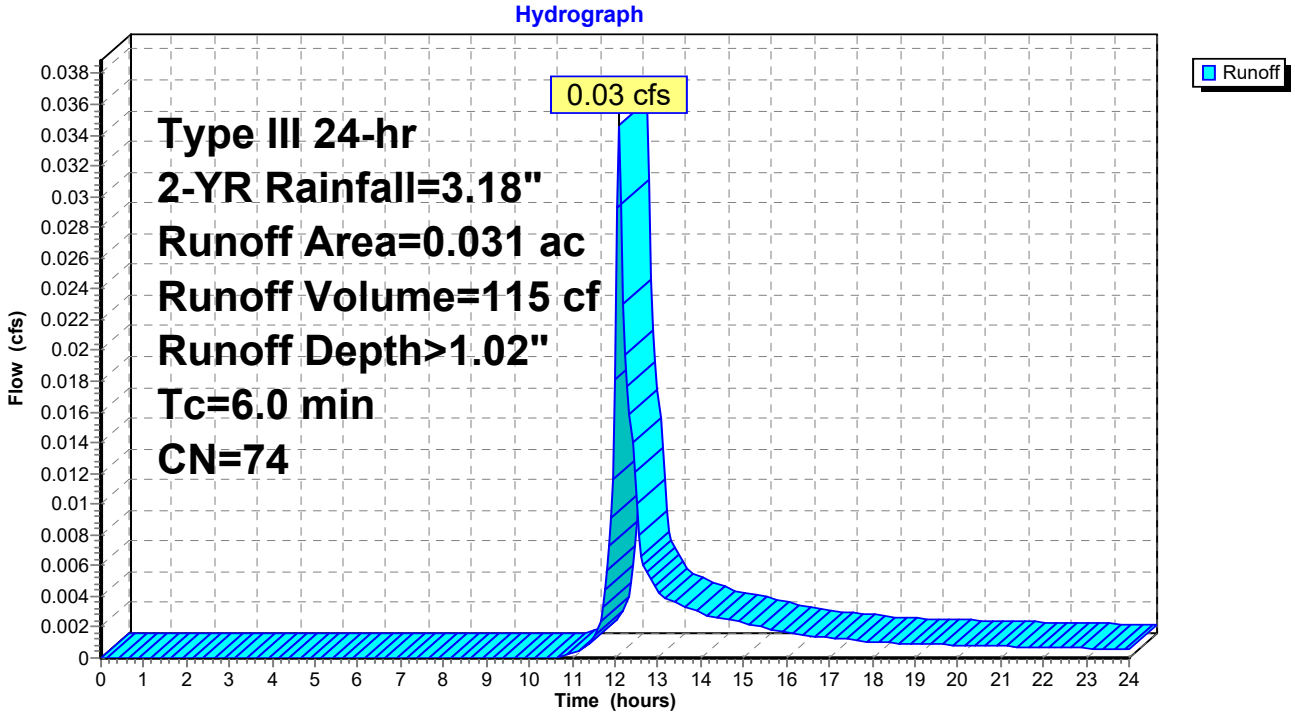
Runoff = 0.03 cfs @ 12.10 hrs, Volume= 115 cf, Depth> 1.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.18"

	Area (ac)	CN	Description
*	0.031	74	Woods/grass comb., Fair, HSG B/D, 13
	0.031		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-2d: Prop. Drainage Area 2d



Summary for Subcatchment PD-2e: Prop. Drainage Area 2e

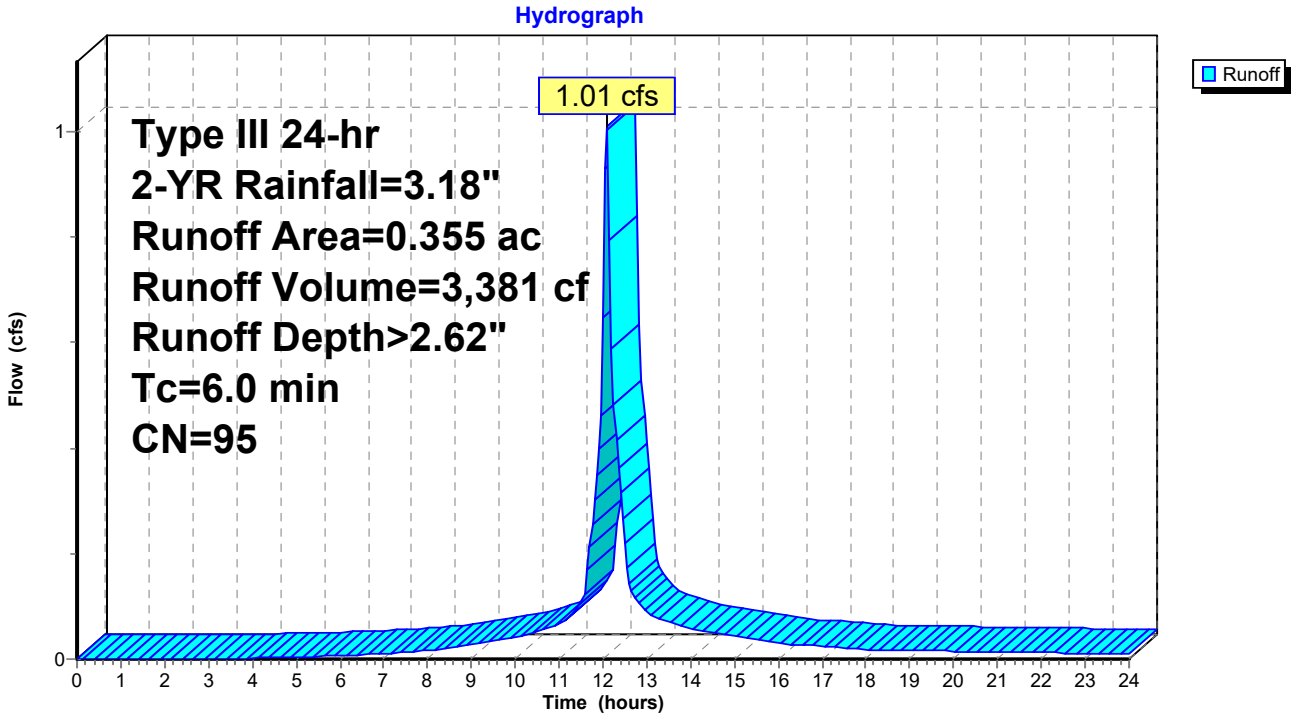
Runoff = 1.01 cfs @ 12.09 hrs, Volume= 3,381 cf, Depth> 2.62"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.18"

	Area (ac)	CN	Description
*	0.004	43	Woods/grass comb., Fair, HSG A, 36A
*	0.020	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.331	98	Paved parking
	0.355	95	Weighted Average
	0.024		6.76% Pervious Area
	0.331		93.24% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-2e: Prop. Drainage Area 2e



Summary for Subcatchment PD-2f: Prop. Drainage Area 2d

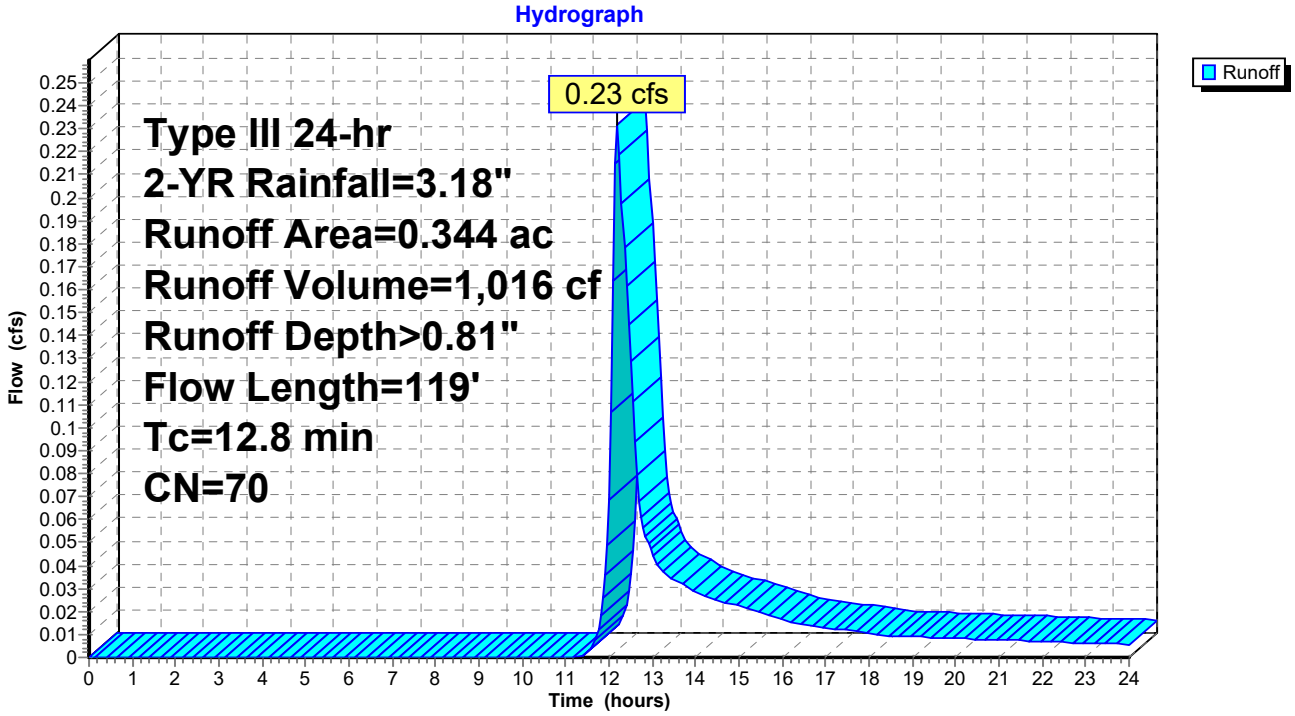
Runoff = 0.23 cfs @ 12.20 hrs, Volume= 1,016 cf, Depth> 0.81"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.18"

	Area (ac)	CN	Description
*	0.296	74	Woods/grass comb., Fair, HSG B/D, 13
	0.048	43	Woods/grass comb., Fair, HSG A
	0.344	70	Weighted Average
	0.344		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.9	23	0.1600	0.13		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.18"
8.4	36	0.0270	0.07		**Sheet Flow, B-C** Woods: Light underbrush n= 0.400 P2= 3.18"
1.5	60	0.0167	0.65		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
12.8	119	Total			

Subcatchment PD-2f: Prop. Drainage Area 2d



Summary for Subcatchment PD-3a: Prop. Drainage Area 3a

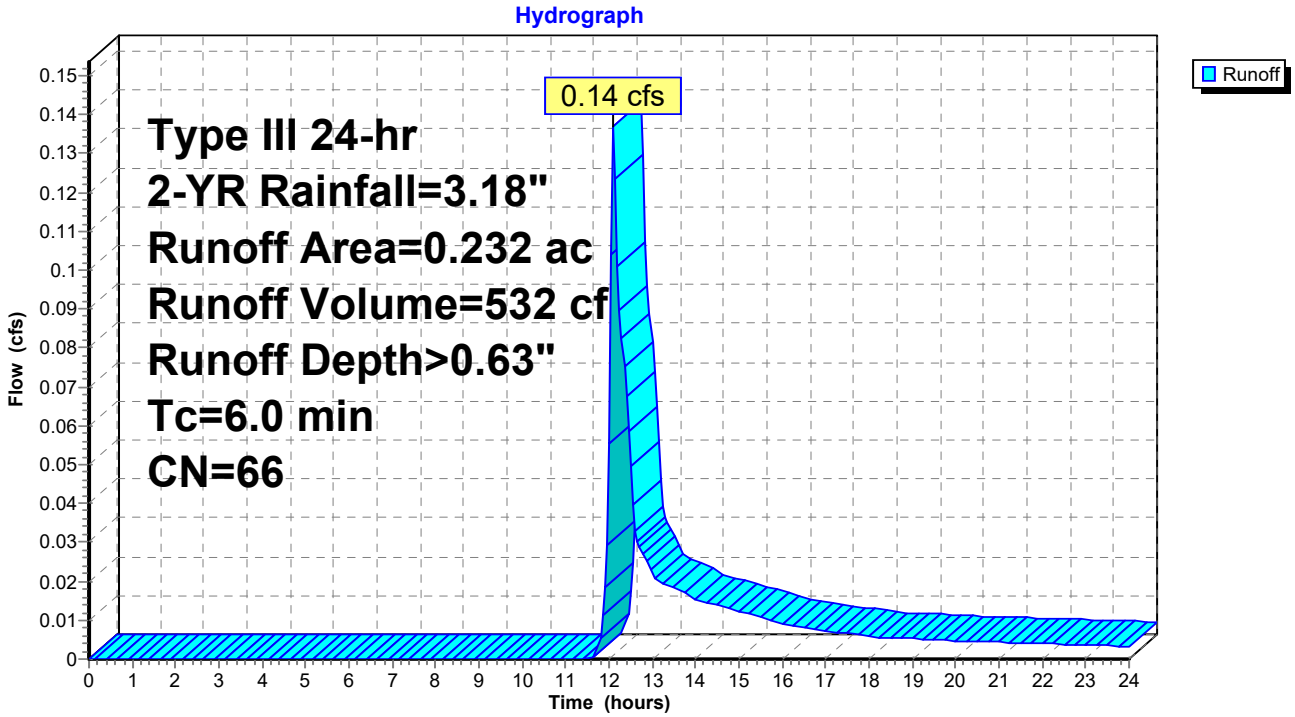
Runoff = 0.14 cfs @ 12.11 hrs, Volume= 532 cf, Depth> 0.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.18"

	Area (ac)	CN	Description
*	0.120	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.071	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.041	98	Paved parking
	0.232	66	Weighted Average
	0.191		82.33% Pervious Area
	0.041		17.67% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct**

Subcatchment PD-3a: Prop. Drainage Area 3a



Summary for Subcatchment PD-3b: Prop. Drainage Area 3b

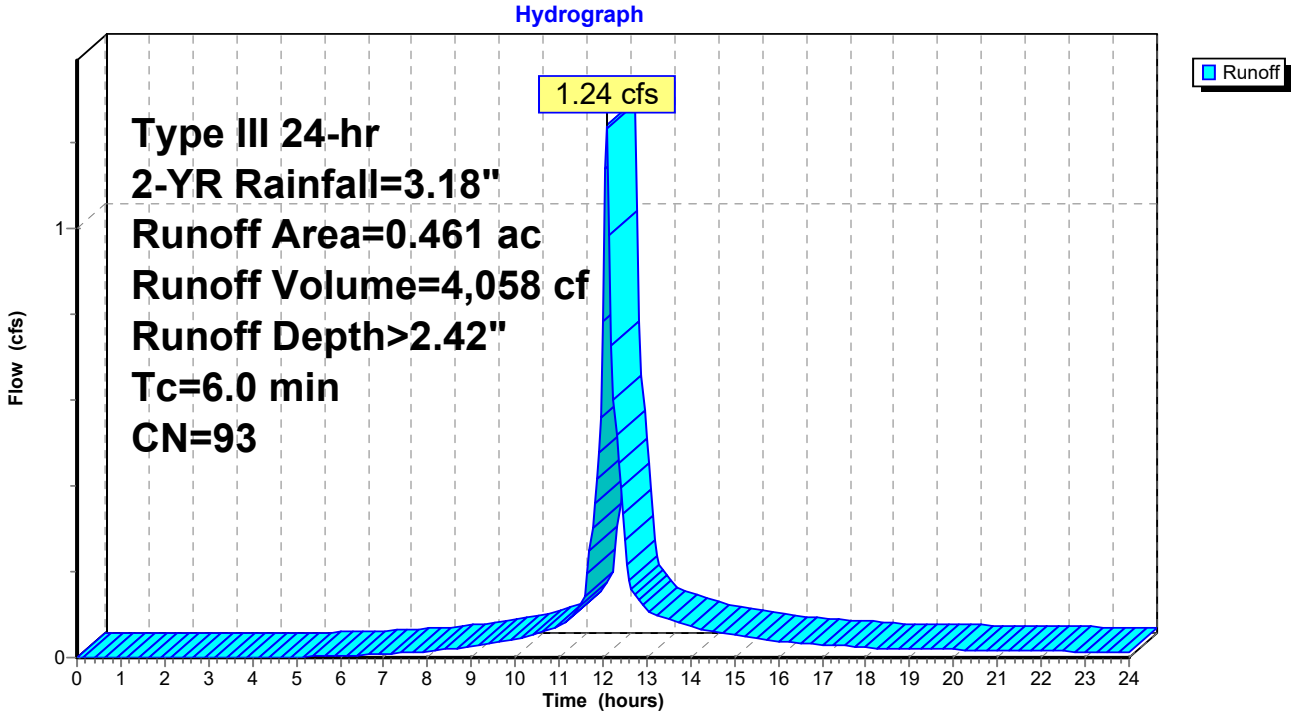
Runoff = 1.24 cfs @ 12.09 hrs, Volume= 4,058 cf, Depth> 2.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.18"

	Area (ac)	CN	Description
*	0.093	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.019	79	50-75% Grass cover, Fair, HSG C, 701A
*	0.016	98	Paved parking
*	0.333	98	Roofing
	0.461	93	Weighted Average
	0.112		24.30% Pervious Area
	0.349		75.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-3b: Prop. Drainage Area 3b



Summary for Subcatchment PD-3c: Prop. Drainage Area 3c

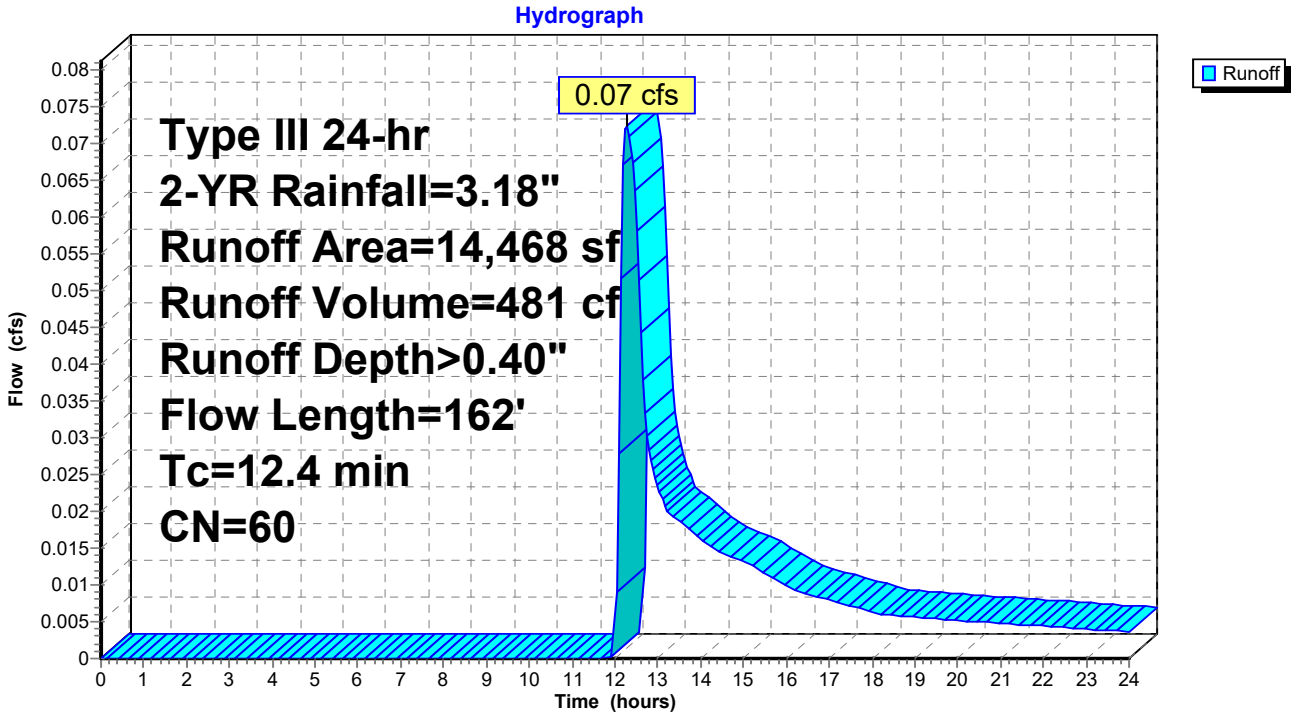
Runoff = 0.07 cfs @ 12.27 hrs, Volume= 481 cf, Depth> 0.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.18"

	Area (sf)	CN	Description
*	6,684	43	Woods/grass comb., Fair, HSG A, 36A
*	5,545	74	Woods/grass comb., Fair, HSG C
	1,501	76	Woods/grass comb., Fair, HSG C
*	738	77	50-75% Grass cover, Fair, HSG C
	14,468	60	Weighted Average
	14,468		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.8	8	0.0625	0.07		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.18"
3.4	17	0.0580	0.08		**Sheet Flow, B-C** Woods: Light underbrush n= 0.400 P2= 3.18"
3.2	16	0.0625	0.08		**Sheet Flow, C-D** Woods: Light underbrush n= 0.400 P2= 3.18"
1.5	9	0.1250	0.10		**Sheet Flow, D-E** Woods: Light underbrush n= 0.400 P2= 3.18"
2.5	112	0.0220	0.74		**Shallow Concentrated Flow, E-F** Woodland Kv= 5.0 fps
12.4	162	Total			

Subcatchment PD-3c: Prop. Drainage Area 3c



Summary for Subcatchment RD-1: Roof 1

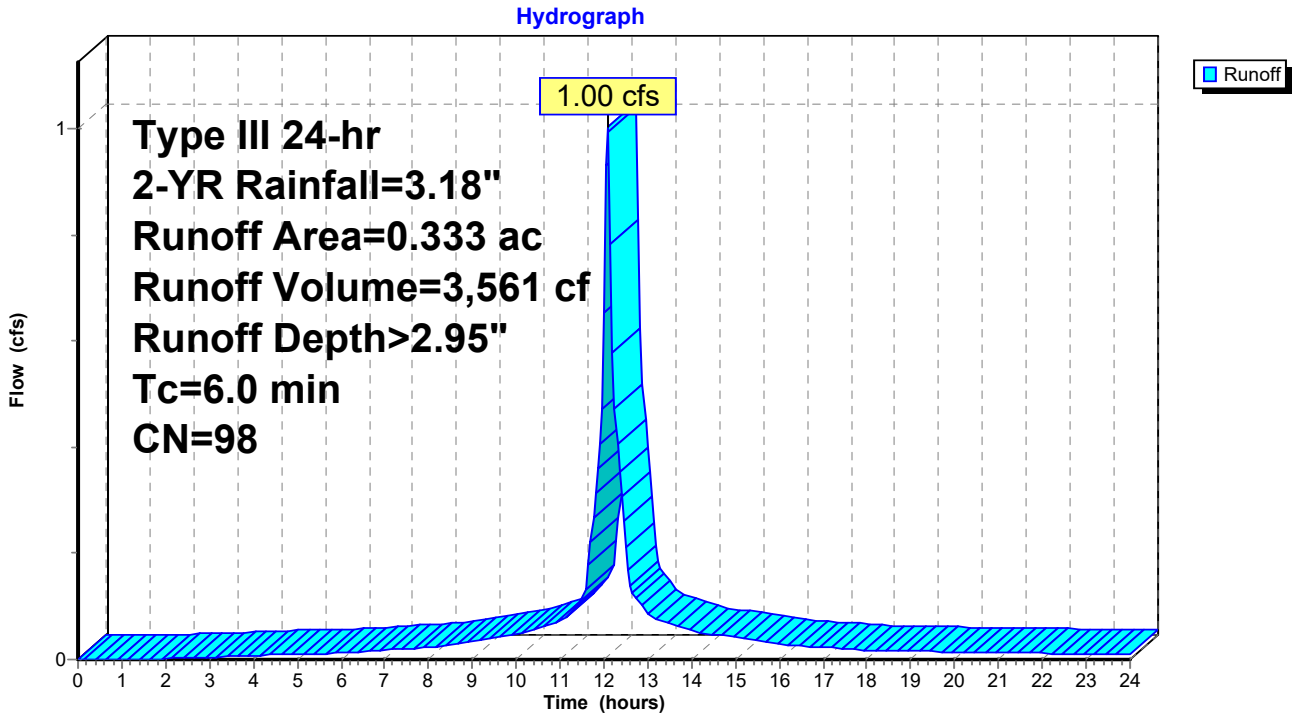
Runoff = 1.00 cfs @ 12.09 hrs, Volume= 3,561 cf, Depth> 2.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.18"

	Area (ac)	CN	Description
*	0.333	98	Unconnected roofs
	0.333		100.00% Impervious Area
	0.333		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment RD-1: Roof 1

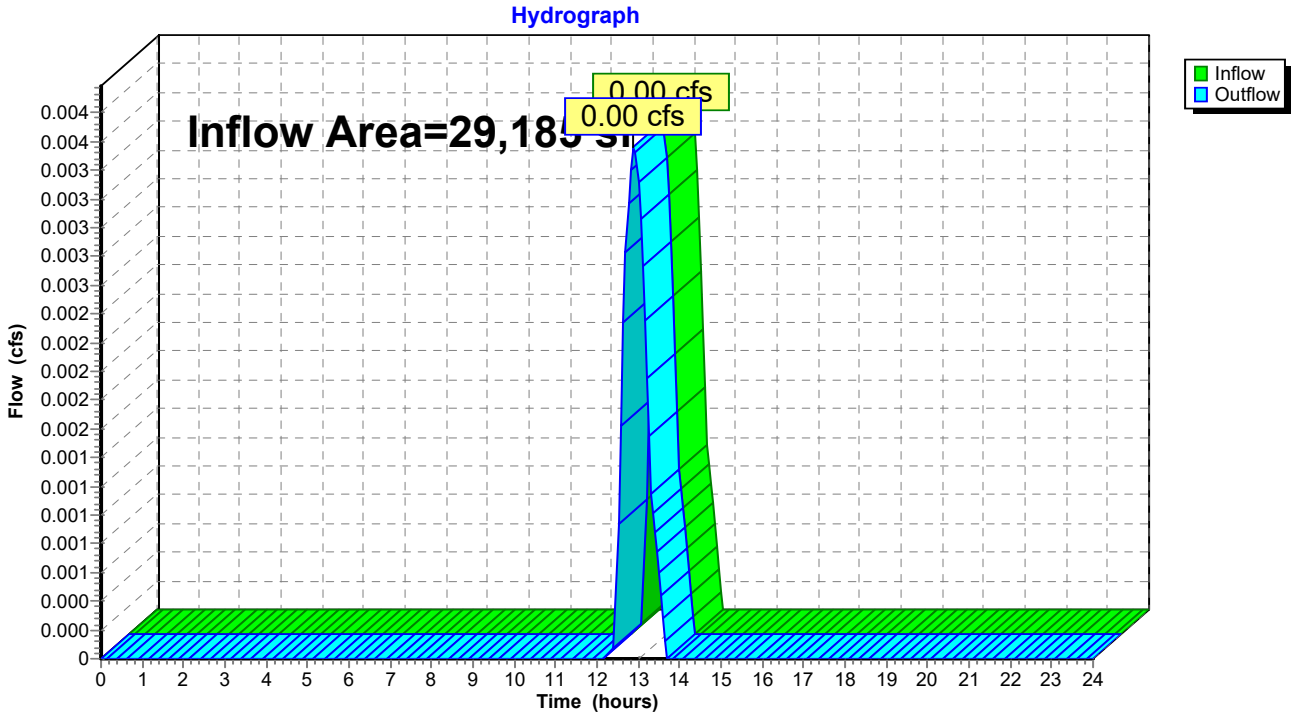


Summary for Reach DP-1a: Design Point 1

Inflow Area = 29,185 sf, 78.51% Impervious, Inflow Depth = 0.00" for 2-YR event
Inflow = 0.00 cfs @ 12.89 hrs, Volume= 8 cf
Outflow = 0.00 cfs @ 12.89 hrs, Volume= 8 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-1a: Design Point 1

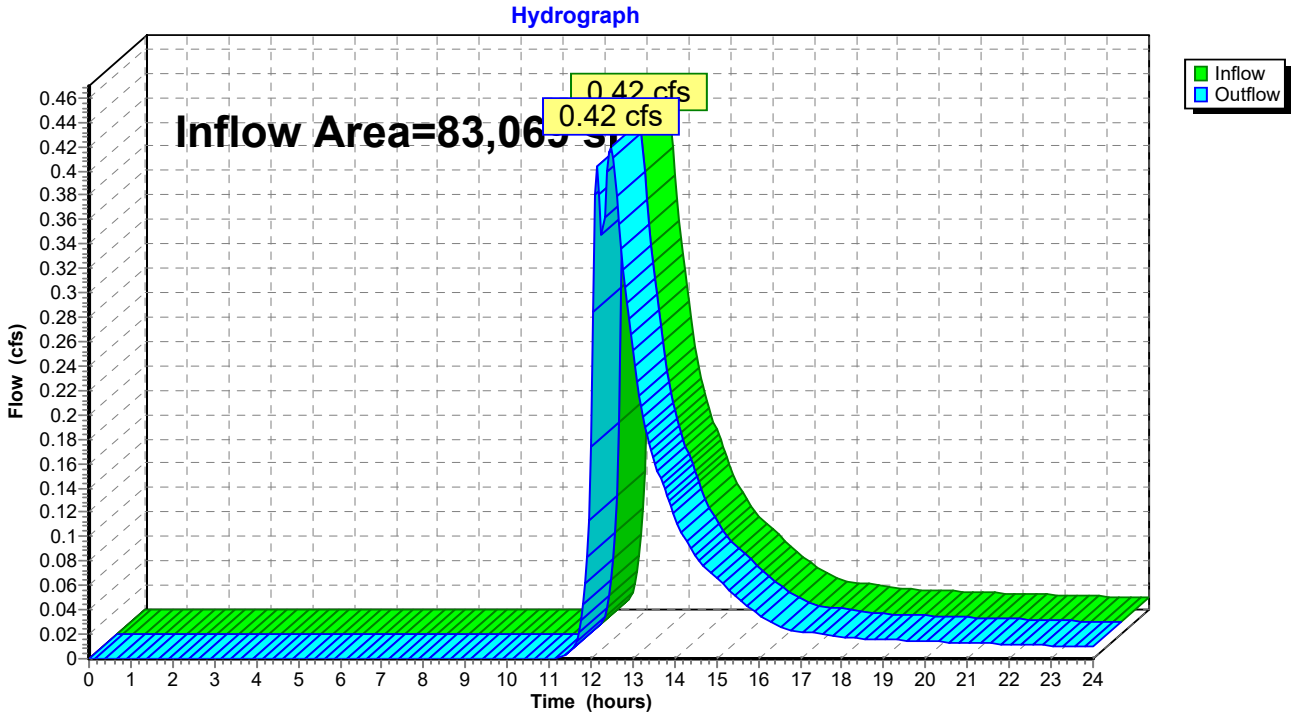


Summary for Reach DP-2a: Design Point 2

Inflow Area = 83,069 sf, 57.73% Impervious, Inflow Depth > 0.42" for 2-YR event
Inflow = 0.42 cfs @ 12.48 hrs, Volume= 2,893 cf
Outflow = 0.42 cfs @ 12.48 hrs, Volume= 2,893 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-2a: Design Point 2

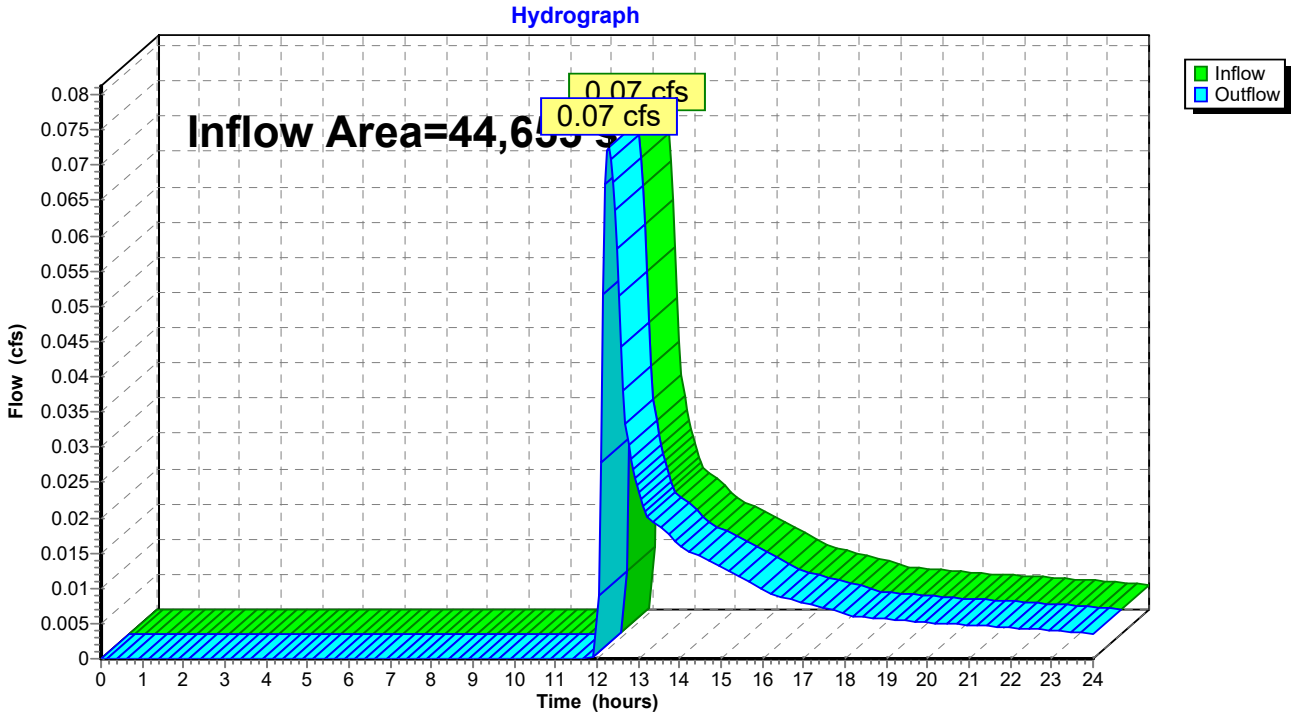


Summary for Reach DP-3a: Design Point 3

Inflow Area = 44,655 sf, 38.04% Impervious, Inflow Depth > 0.13" for 2-YR event
Inflow = 0.07 cfs @ 12.27 hrs, Volume= 481 cf
Outflow = 0.07 cfs @ 12.27 hrs, Volume= 481 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-3a: Design Point 3



Summary for Pond AB1: Above Ground Infiltration Basin 1

Inflow Area =	29,185 sf, 78.51% Impervious, Inflow Depth > 0.80" for 2-YR event				
Inflow =	0.62 cfs @	12.09 hrs,	Volume=	1,947 cf	
Outflow =	0.07 cfs @	12.89 hrs,	Volume=	1,945 cf,	Atten= 88%, Lag= 47.6 min
Discarded =	0.07 cfs @	12.89 hrs,	Volume=	1,937 cf	
Primary =	0.00 cfs @	12.89 hrs,	Volume=	8 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 128.03' @ 12.89 hrs Surf.Area= 1,242 sf Storage= 751 cf

Plug-Flow detention time= 105.7 min calculated for 1,941 cf (100% of inflow)
Center-of-Mass det. time= 104.9 min (937.6 - 832.7)

Volume	Invert	Avail.Storage	Storage Description
#1	127.00'	4,542 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc) 4,798 cf Overall - 256 cf Embedded = 4,542 cf
#2	127.00'	102 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc) Inside #1 256 cf Overall x 40.0% Voids
		4,644 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
127.00	512	0	0
128.00	1,218	865	865
129.00	1,949	1,584	2,449
130.00	2,749	2,349	4,798

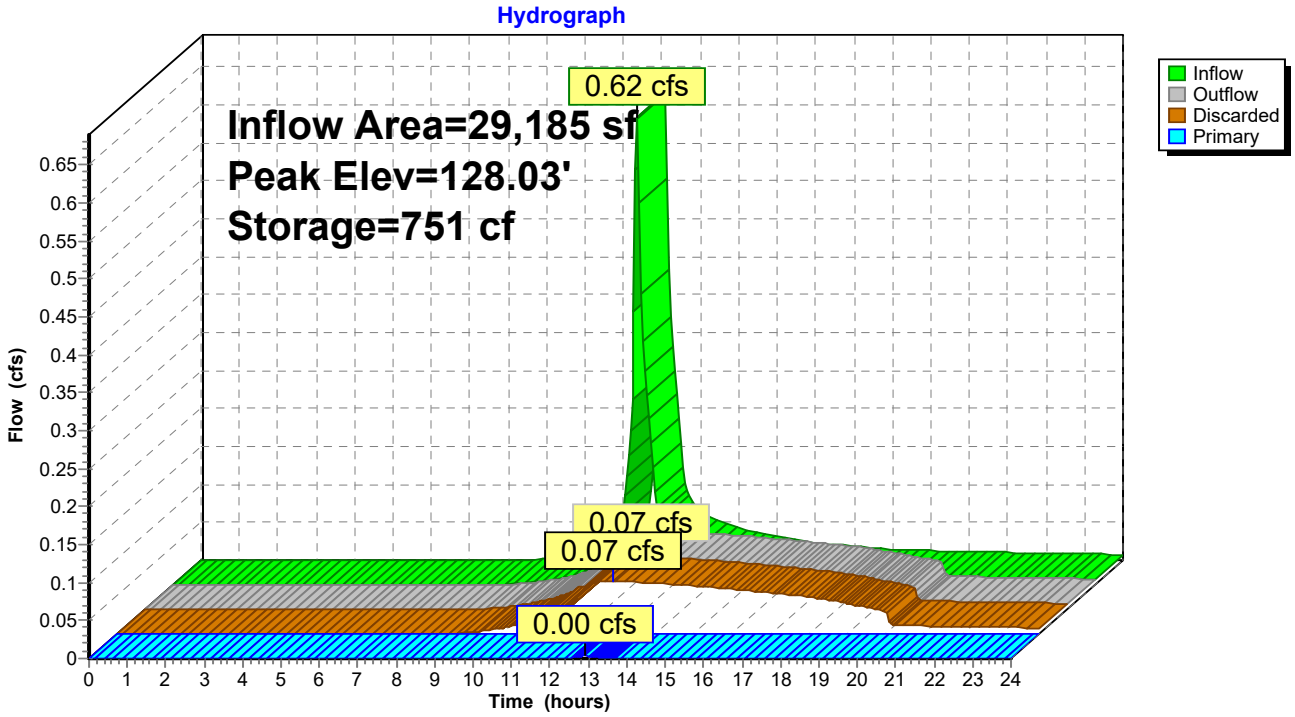
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
127.00	512	0	0
127.50	512	256	256

Device	Routing	Invert	Outlet Devices
#1	Primary	127.57'	**8.0" Round Culvert Barrel** L= 13.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 127.57' / 127.50' S= 0.0054 '/' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 0.35 sf
#2	Device 1	129.00'	**12.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Discarded	127.00'	**2.410 in/hr Exfiltration over Surface area**
#4	Device 1	128.00'	**5.0" Vert. Orifice/Grate** C= 0.600

Discarded OutFlow Max=0.07 cfs @ 12.89 hrs HW=128.03' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.07 cfs)

Primary OutFlow Max=0.00 cfs @ 12.89 hrs HW=128.03' (Free Discharge)
└─**1=Culvert Barrel** (Passes 0.00 cfs of 0.33 cfs potential flow)
  ├─**2=Orifice/Grate** (Controls 0.00 cfs)
  └─**4=Orifice/Grate** (Orifice Controls 0.00 cfs @ 0.61 fps)

Pond AB1: Above Ground Infiltration Basin 1



Stage-Area-Storage for Pond AB1: Above Ground Infiltration Basin 1

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
127.00	512	0
127.05	547	11
127.10	583	24
127.15	618	39
127.20	653	55
127.25	689	73
127.30	724	93
127.35	759	115
127.40	794	138
127.45	830	164
127.50	865	191
127.55	900	235
127.60	936	281
127.65	971	328
127.70	1,006	378
127.75	1,042	429
127.80	1,077	482
127.85	1,112	537
127.90	1,147	593
127.95	1,183	651
128.00	1,218	711
128.05	1,255	773
128.10	1,291	837
128.15	1,328	902
128.20	1,364	970
128.25	1,401	1,039
128.30	1,437	1,110
128.35	1,474	1,182
128.40	1,510	1,257
128.45	1,547	1,334
128.50	1,584	1,412
128.55	1,620	1,492
128.60	1,657	1,574
128.65	1,693	1,658
128.70	1,730	1,743
128.75	1,766	1,830
128.80	1,803	1,920
128.85	1,839	2,011
128.90	1,876	2,104
128.95	1,912	2,198
129.00	1,949	2,295
129.05	1,989	2,393
129.10	2,029	2,494
129.15	2,069	2,596
129.20	2,109	2,701
129.25	2,149	2,807
129.30	2,189	2,916
129.35	2,229	3,026
129.40	2,269	3,139
129.45	2,309	3,253
129.50	2,349	3,369
129.55	2,389	3,488
129.60	2,429	3,608
129.65	2,469	3,731
129.70	2,509	3,855
129.75	2,549	3,982
129.80	2,589	4,110
129.85	2,629	4,241
129.90	2,669	4,373
129.95	2,709	4,507
130.00	**2,749**	**4,644**

Summary for Pond AB3a: Above Ground Infiltration 3a

Inflow Area =	10,106 sf, 17.67% Impervious, Inflow Depth > 0.63" for 2-YR event				
Inflow =	0.14 cfs @	12.11 hrs,	Volume=	532 cf	
Outflow =	0.05 cfs @	12.48 hrs,	Volume=	531 cf,	Atten= 61%, Lag= 22.0 min
Discarded =	0.05 cfs @	12.48 hrs,	Volume=	531 cf	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 132.08' @ 12.48 hrs Surf.Area= 963 sf Storage= 77 cf

Plug-Flow detention time= 10.4 min calculated for 530 cf (100% of inflow)
Center-of-Mass det. time= 9.2 min (900.1 - 890.9)

Volume	Invert	Avail.Storage	Storage Description
#1	132.00'	3,206 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

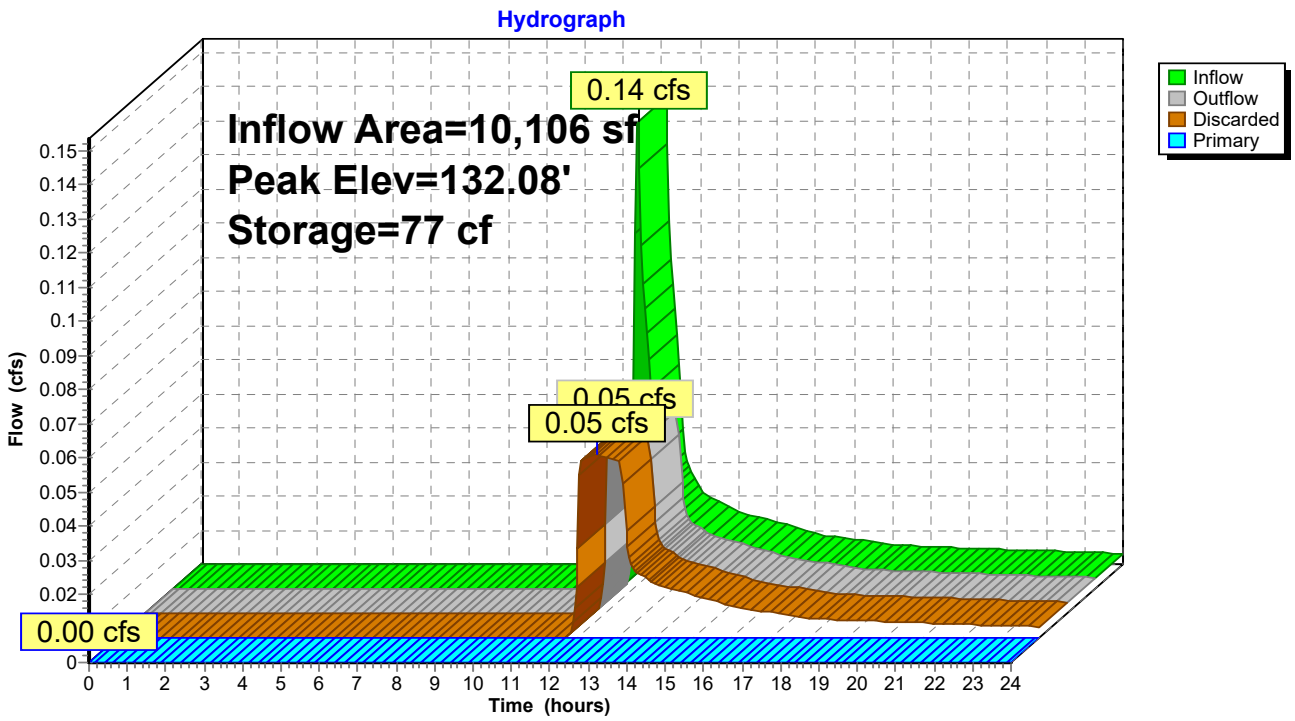
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
132.00	906	0	0
133.00	1,593	1,250	1,250
134.00	2,319	1,956	3,206

Device	Routing	Invert	Outlet Devices
#1	Discarded	132.00'	**2.410 in/hr Exfiltration over Surface area**
#2	Primary	133.00'	**10.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.05 cfs @ 12.48 hrs HW=132.08' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=132.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond AB3a: Above Ground Infiltration 3a



Stage-Area-Storage for Pond AB3a: Above Ground Infiltration 3a

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
132.00	906	0
132.02	920	18
132.04	933	37
132.06	947	56
132.08	961	75
132.10	975	94
132.12	988	114
132.14	1,002	134
132.16	1,016	154
132.18	1,030	174
132.20	1,043	195
132.22	1,057	216
132.24	1,071	237
132.26	1,085	259
132.28	1,098	281
132.30	1,112	303
132.32	1,126	325
132.34	1,140	348
132.36	1,153	371
132.38	1,167	394
132.40	1,181	417
132.42	1,195	441
132.44	1,208	465
132.46	1,222	489
132.48	1,236	514
132.50	1,250	539
132.52	1,263	564
132.54	1,277	589
132.56	1,291	615
132.58	1,304	641
132.60	1,318	667
132.62	1,332	694
132.64	1,346	721
132.66	1,359	748
132.68	1,373	775
132.70	1,387	803
132.72	1,401	830
132.74	1,414	859
132.76	1,428	887
132.78	1,442	916
132.80	1,456	945
132.82	1,469	974
132.84	1,483	1,003
132.86	1,497	1,033
132.88	1,511	1,063
132.90	1,524	1,094
132.92	1,538	1,124
132.94	1,552	1,155
132.96	1,566	1,186
132.98	1,579	1,218
133.00	1,593	1,250
133.02	1,608	1,282
133.04	1,622	1,314
133.06	1,637	1,346
133.08	1,651	1,379
133.10	1,666	1,412
133.12	1,680	1,446
133.14	1,695	1,480
133.16	1,709	1,514
133.18	1,724	1,548
133.20	1,738	1,583
133.22	1,753	1,618
133.24	1,767	1,653
133.26	1,782	1,688
133.28	1,796	1,724
133.30	1,811	1,760
133.32	1,825	1,796
133.34	1,840	1,833
133.36	1,854	1,870
133.38	1,869	1,907
133.40	1,883	1,945
133.42	1,898	1,983
133.44	1,912	2,021
133.46	1,927	2,059
133.48	1,941	2,098
133.50	1,956	2,137
133.52	1,971	2,176
133.54	1,985	2,216
133.56	2,000	2,255
133.58	2,014	2,296
133.60	2,029	2,336
133.62	2,043	2,377
133.64	2,058	2,418
133.66	2,072	2,459
133.68	2,087	2,501
133.70	2,101	2,542
133.72	2,116	2,585
133.74	2,130	2,627
133.76	2,145	2,670
133.78	2,159	2,713
133.80	2,174	2,756
133.82	2,188	2,800
133.84	2,203	2,844
133.86	2,217	2,888
133.88	2,232	2,932
133.90	2,246	2,977
133.92	2,261	3,022
133.94	2,275	3,068
133.96	2,290	3,113
133.98	2,304	3,159
134.00	**2,319**	**3,206**

Summary for Pond AB3b: Above Ground Infiltration 3b

Inflow Area =	20,081 sf, 75.70% Impervious, Inflow Depth > 2.42" for 2-YR event				
Inflow =	1.24 cfs @	12.09 hrs,	Volume=	4,058 cf	
Outflow =	0.04 cfs @	15.82 hrs,	Volume=	1,898 cf,	Atten= 97%, Lag= 224.2 min
Discarded =	0.04 cfs @	15.82 hrs,	Volume=	1,898 cf	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 132.88' @ 15.82 hrs Surf.Area= 1,731 sf Storage= 2,694 cf

Plug-Flow detention time= 344.9 min calculated for 1,898 cf (47% of inflow)
Center-of-Mass det. time= 228.6 min (1,021.0 - 792.4)

Volume	Invert	Avail.Storage	Storage Description
#1	130.00'	5,050 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

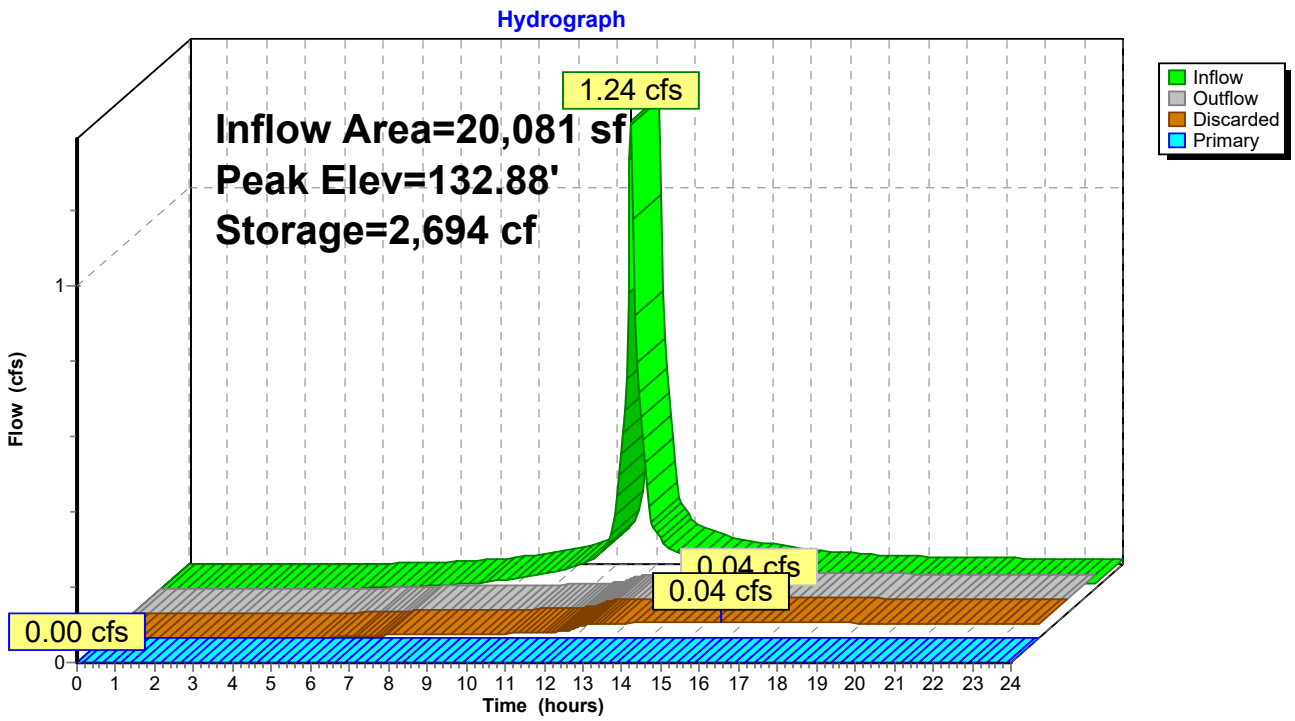
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
130.00	307	0	0
131.00	671	489	489
132.00	1,175	923	1,412
133.00	1,806	1,491	2,903
134.00	2,488	2,147	5,050

Device	Routing	Invert	Outlet Devices
#1	Primary	133.15'	**5.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32
#2	Discarded	130.00'	**1.020 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.04 cfs @ 15.82 hrs HW=132.88' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=130.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond AB3b: Above Ground Infiltration 3b



Stage-Area-Storage for Pond AB3b: Above Ground Infiltration 3b

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
130.00	307	0
130.05	325	16
130.10	343	33
130.15	362	50
130.20	380	69
130.25	398	88
130.30	416	108
130.35	434	130
130.40	453	152
130.45	471	175
130.50	489	199
130.55	507	224
130.60	525	250
130.65	544	276
130.70	562	304
130.75	580	333
130.80	598	362
130.85	616	392
130.90	635	424
130.95	653	456
131.00	671	489
131.05	696	523
131.10	721	559
131.15	747	595
131.20	772	633
131.25	797	673
131.30	822	713
131.35	847	755
131.40	873	798
131.45	898	842
131.50	923	888
131.55	948	934
131.60	973	982
131.65	999	1,032
131.70	1,024	1,082
131.75	1,049	1,134
131.80	1,074	1,187
131.85	1,099	1,241
131.90	1,125	1,297
131.95	1,150	1,354
132.00	1,175	1,412
132.05	1,207	1,472
132.10	1,238	1,533
132.15	1,270	1,595
132.20	1,301	1,660
132.25	1,333	1,725
132.30	1,364	1,793
132.35	1,396	1,862
132.40	1,427	1,932
132.45	1,459	2,005
132.50	1,491	2,078
132.55	1,522	2,154
132.60	1,554	2,231
132.65	1,585	2,309
132.70	1,617	2,389
132.75	1,648	2,471
132.80	1,680	2,554
132.85	1,711	2,639
132.90	1,743	2,725
132.95	1,774	2,813
133.00	1,806	2,903
133.05	1,840	2,994
133.10	1,874	3,087
133.15	1,908	3,181
133.20	1,942	3,277
133.25	1,977	3,375
133.30	2,011	3,475
133.35	2,045	3,576
133.40	2,079	3,679
133.45	2,113	3,784
133.50	2,147	3,891
133.55	2,181	3,999
133.60	2,215	4,109
133.65	2,249	4,220
133.70	2,283	4,334
133.75	2,318	4,449
133.80	2,352	4,566
133.85	2,386	4,684
133.90	2,420	4,804
133.95	2,454	4,926
134.00	**2,488**	**5,050**

Summary for Pond IB1: Infiltration Basin 1

Inflow Area = 14,505 sf,100.00% Impervious, Inflow Depth > 2.95" for 2-YR event
Inflow = 1.00 cfs @ 12.09 hrs, Volume= 3,561 cf
Outflow = 0.11 cfs @ 11.50 hrs, Volume= 3,558 cf, Atten= 89%, Lag= 0.0 min
Discarded = 0.11 cfs @ 11.50 hrs, Volume= 3,558 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 130.03' @ 12.81 hrs Surf.Area= 1,889 sf Storage= 1,188 cf

Plug-Flow detention time= 76.3 min calculated for 3,558 cf (100% of inflow)
Center-of-Mass det. time= 75.8 min (831.9 - 756.1)

Volume	Invert	Avail.Storage	Storage Description
#1A	129.00'	1,726 cf	**25.25'W x 74.82'L x 3.50'H Field A** 6,612 cf Overall - 2,297 cf Embedded = 4,315 cf x 40.0% Voids
#2A	129.50'	2,297 cf	**ADS_StormTech SC-740 +Cap** x 50 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 5 Rows of 10 Chambers
		4,023 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	130.24'	**12.0" Round Culvert** L= 10.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 130.24' / 130.00' S= 0.0240 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.79 sf
#2	Discarded	129.00'	**2.410 in/hr Exfiltration over Surface area**
#3	Device 1	130.40'	**3.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600
#4	Device 1	132.05'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.11 cfs @ 11.50 hrs HW=129.04' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.11 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=129.00' (Free Discharge)
└─**1=Culvert** (Controls 0.00 cfs)
  ├─**3=Orifice/Grate** (Controls 0.00 cfs)
  └─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond IB1: Infiltration Basin 1 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

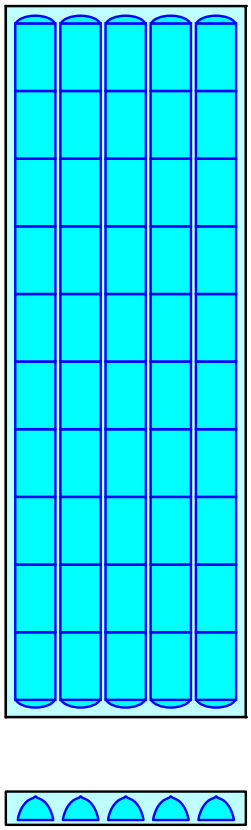
10 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 72.82' Row Length +12.0" End Stone x 2 = 74.82' Base Length
5 Rows x 51.0" Wide + 6.0" Spacing x 4 + 12.0" Side Stone x 2 = 25.25' Base Width
6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

50 Chambers x 45.9 cf = 2,297.0 cf Chamber Storage

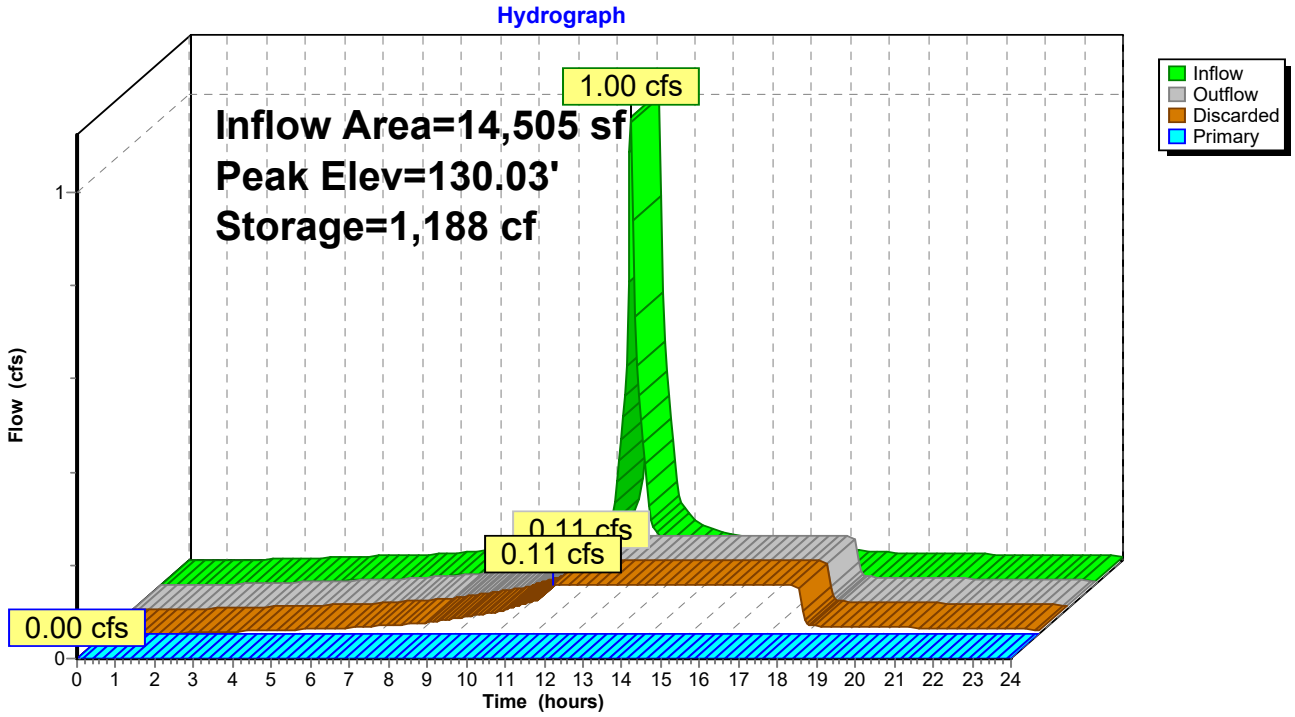
6,611.9 cf Field - 2,297.0 cf Chambers = 4,314.9 cf Stone x 40.0% Voids = 1,726.0 cf Stone Storage

Chamber Storage + Stone Storage = 4,023.0 cf = 0.092 af
Overall Storage Efficiency = 60.8%
Overall System Size = 74.82' x 25.25' x 3.50'

50 Chambers
244.9 cy Field
159.8 cy Stone



Pond IB1: Infiltration Basin 1



Stage-Area-Storage for Pond IB1: Infiltration Basin 1

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
129.00	**1,889**	0
129.05	1,889	38
129.10	1,889	76
129.15	1,889	113
129.20	1,889	151
129.25	1,889	189
129.30	1,889	227
129.35	1,889	264
129.40	1,889	302
129.45	1,889	340
129.50	1,889	378
129.55	1,889	455
129.60	1,889	533
129.65	1,889	610
129.70	1,889	687
129.75	1,889	764
129.80	1,889	841
129.85	1,889	917
129.90	1,889	993
129.95	1,889	1,069
130.00	1,889	1,145
130.05	1,889	1,220
130.10	1,889	1,295
130.15	1,889	1,369
130.20	1,889	1,444
130.25	1,889	1,517
130.30	1,889	1,591
130.35	1,889	1,664
130.40	1,889	1,736
130.45	1,889	1,809
130.50	1,889	1,880
130.55	1,889	1,952
130.60	1,889	2,022
130.65	1,889	2,093
130.70	1,889	2,162
130.75	1,889	2,232
130.80	1,889	2,300
130.85	1,889	2,368
130.90	1,889	2,435
130.95	1,889	2,502
131.00	1,889	2,568
131.05	1,889	2,634
131.10	1,889	2,698
131.15	1,889	2,762
131.20	1,889	2,825
131.25	1,889	2,887
131.30	1,889	2,948
131.35	1,889	3,008
131.40	1,889	3,067
131.45	1,889	3,124
131.50	1,889	3,181
131.55	1,889	3,236
131.60	1,889	3,290
131.65	1,889	3,342
131.70	1,889	3,392
131.75	1,889	3,439
131.80	1,889	3,484
131.85	1,889	3,526
131.90	1,889	3,567
131.95	1,889	3,607
132.00	1,889	3,645
132.05	1,889	3,683
132.10	1,889	3,721
132.15	1,889	3,758
132.20	1,889	3,796
132.25	1,889	3,834
132.30	1,889	3,872
132.35	1,889	3,910
132.40	1,889	3,947
132.45	1,889	3,985
132.50	1,889	**4,023**

Summary for Pond IB2a: Infiltration Basin 2a

Inflow Area =	26,310 sf, 88.91% Impervious, Inflow Depth > 2.52" for 2-YR event				
Inflow =	1.67 cfs @	12.09 hrs,	Volume=	5,531 cf	
Outflow =	0.28 cfs @	12.57 hrs,	Volume=	4,316 cf,	Atten= 83%, Lag= 28.7 min
Discarded =	0.06 cfs @	10.05 hrs,	Volume=	3,316 cf	
Primary =	0.22 cfs @	12.57 hrs,	Volume=	1,000 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 128.99' @ 12.57 hrs Surf.Area= 2,458 sf Storage= 2,438 cf

Plug-Flow detention time= 216.5 min calculated for 4,316 cf (78% of inflow)
Center-of-Mass det. time= 137.6 min (924.5 - 786.9)

Volume	Invert	Avail.Storage	Storage Description
#1A	127.50'	2,392 cf	**30.00'W x 81.94'L x 3.67'H Field A** 9,013 cf Overall - 3,032 cf Embedded = 5,981 cf x 40.0% Voids
#2A	128.00'	3,032 cf	**ADS_StormTech SC-740 +Cap** x 66 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 6 Rows of 11 Chambers
		5,424 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	128.60'	**15.0" Round Culvert** L= 55.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 128.60' / 128.00' S= 0.0109 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 1.23 sf
#2	Discarded	127.50'	**1.020 in/hr Exfiltration over Surface area**
#3	Device 1	128.80'	**10.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600
#4	Device 1	130.10'	**10.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600
#5	Device 1	130.99'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.06 cfs @ 10.05 hrs HW=127.54' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=0.22 cfs @ 12.57 hrs HW=128.99' (Free Discharge)
└─**1=Culvert** (Passes 0.22 cfs of 0.77 cfs potential flow)
  ├─**3=Orifice/Grate** (Orifice Controls 0.22 cfs @ 1.39 fps)
  ├─**4=Orifice/Grate** (Controls 0.00 cfs)
  └─**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond IB2a: Infiltration Basin 2a - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

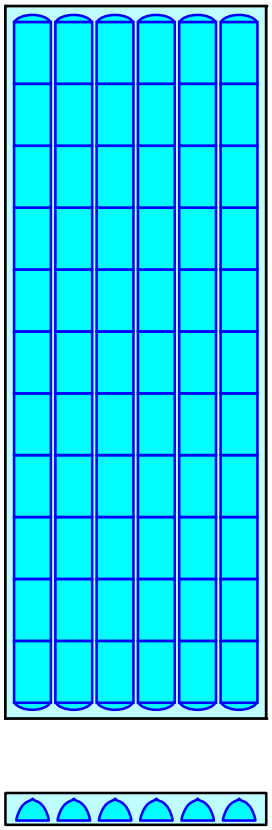
11 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 79.94' Row Length +12.0" End Stone x 2 = 81.94' Base Length
6 Rows x 51.0" Wide + 6.0" Spacing x 5 + 12.0" Side Stone x 2 = 30.00' Base Width
6.0" Base + 30.0" Chamber Height + 8.0" Cover = 3.67' Field Height

66 Chambers x 45.9 cf = 3,032.0 cf Chamber Storage

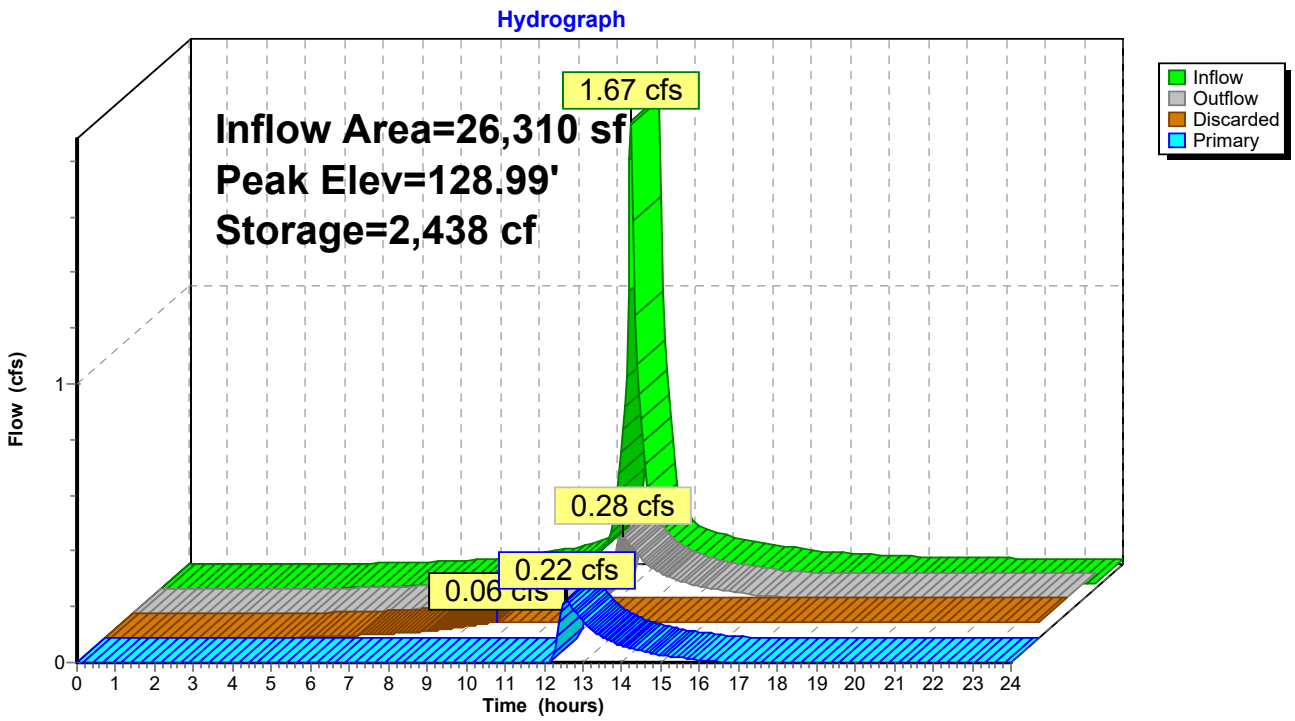
9,013.0 cf Field - 3,032.0 cf Chambers = 5,981.0 cf Stone x 40.0% Voids = 2,392.4 cf Stone Storage

Chamber Storage + Stone Storage = 5,424.4 cf = 0.125 af
Overall Storage Efficiency = 60.2%
Overall System Size = 81.94' x 30.00' x 3.67'

66 Chambers
333.8 cy Field
221.5 cy Stone



Pond IB2a: Infiltration Basin 2a



Stage-Area-Storage for Pond IB2a: Infiltration Basin 2a

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
127.50	**2,458**	0
127.55	2,458	49
127.60	2,458	98
127.65	2,458	147
127.70	2,458	197
127.75	2,458	246
127.80	2,458	295
127.85	2,458	344
127.90	2,458	393
127.95	2,458	442
128.00	2,458	492
128.05	2,458	593
128.10	2,458	695
128.15	2,458	796
128.20	2,458	897
128.25	2,458	998
128.30	2,458	1,099
128.35	2,458	1,199
128.40	2,458	1,298
128.45	2,458	1,398
128.50	2,458	1,497
128.55	2,458	1,595
128.60	2,458	1,694
128.65	2,458	1,791
128.70	2,458	1,888
128.75	2,458	1,985
128.80	2,458	2,081
128.85	2,458	2,177
128.90	2,458	2,272
128.95	2,458	2,367
129.00	2,458	2,461
129.05	2,458	2,554
129.10	2,458	2,647
129.15	2,458	2,739
129.20	2,458	2,830
129.25	2,458	2,921
129.30	2,458	3,011
129.35	2,458	3,100
129.40	2,458	3,188
129.45	2,458	3,275
129.50	2,458	3,362
129.55	2,458	3,447
129.60	2,458	3,532
129.65	2,458	3,615
129.70	2,458	3,698
129.75	2,458	3,779
129.80	2,458	3,858
129.85	2,458	3,937
129.90	2,458	4,014
129.95	2,458	4,089
130.00	2,458	4,164
130.05	2,458	4,236
130.10	2,458	4,306
130.15	2,458	4,374
130.20	2,458	4,439
130.25	2,458	4,501
130.30	2,458	4,559
130.35	2,458	4,614
130.40	2,458	4,667
130.45	2,458	4,719
130.50	2,458	4,769
130.55	2,458	4,818
130.60	2,458	4,867
130.65	2,458	4,916
130.70	2,458	4,966
130.75	2,458	5,015
130.80	2,458	5,064
130.85	2,458	5,113
130.90	2,458	5,162
130.95	2,458	5,211
131.00	2,458	5,261
131.05	2,458	5,310
131.10	2,458	5,359
131.15	2,458	**5,408**

Summary for Pond IB2c: Infiltration Basin Area 2c

Inflow Area =	15,551 sf, 65.27% Impervious, Inflow Depth > 1.82" for 2-YR event				
Inflow =	0.75 cfs @	12.09 hrs,	Volume=	2,354 cf	
Outflow =	0.09 cfs @	12.85 hrs,	Volume=	2,351 cf,	Atten= 88%, Lag= 45.6 min
Discarded =	0.06 cfs @	11.60 hrs,	Volume=	2,228 cf	
Primary =	0.03 cfs @	12.85 hrs,	Volume=	122 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 130.75' @ 12.85 hrs Surf.Area= 2,373 sf Storage= 930 cf

Plug-Flow detention time= 136.6 min calculated for 2,351 cf (100% of inflow)
Center-of-Mass det. time= 135.8 min (958.1 - 822.3)

Volume	Invert	Avail.Storage	Storage Description
#1A	130.00'	1,505 cf	**27.00'W x 87.91'L x 2.00'H Field A** 4,747 cf Overall - 985 cf Embedded = 3,762 cf x 40.0% Voids
#2A	130.50'	985 cf	**ADS_StormTech SC-160LP +Cap** x 144 Inside #1 Effective Size= 18.0"W x 12.0"H => 0.96 sf x 7.12'L = 6.8 cf Overall Size= 25.0"W x 12.0"H x 7.56'L with 0.44' Overlap 12 Rows of 12 Chambers
		2,489 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	130.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	129.20'	**8.0" Round Culvert** L= 14.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 129.20' / 129.00' S= 0.0143 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.35 sf
#3	Device 2	130.70'	**11.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600
#4	Device 2	131.40'	**2.0" Vert. Orifice/Grate** C= 0.600
#5	Device 2	131.88'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.06 cfs @ 11.60 hrs HW=130.02' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=0.03 cfs @ 12.85 hrs HW=130.75' (Free Discharge)
└─**2=Culvert** (Passes 0.03 cfs of 2.21 cfs potential flow)
  ├─**3=Orifice/Grate** (Orifice Controls 0.03 cfs @ 0.70 fps)
  ├─**4=Orifice/Grate** (Controls 0.00 cfs)
  └─**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond IB2c: Infiltration Basin Area 2c - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-160LP +Cap (ADS StormTech® SC-160LP with cap length)
Effective Size= 18.0"W x 12.0"H => 0.96 sf x 7.12'L = 6.8 cf
Overall Size= 25.0"W x 12.0"H x 7.56'L with 0.44' Overlap

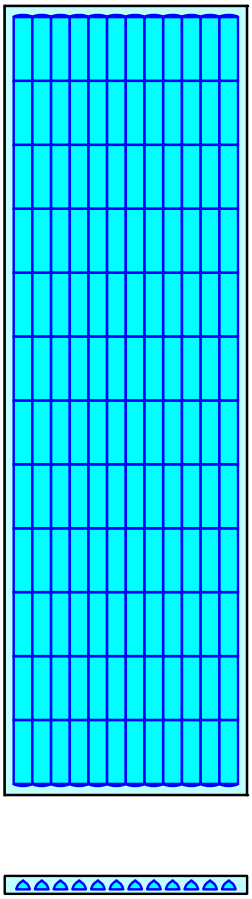
12 Chambers/Row x 7.12' Long +0.23' Cap Length x 2 = 85.91' Row Length +12.0" End Stone x 2 = 87.91' Base Length
12 Rows x 25.0" Wide + 12.0" Side Stone x 2 = 27.00' Base Width
6.0" Base + 12.0" Chamber Height + 6.0" Cover = 2.00' Field Height

144 Chambers x 6.8 cf = 984.5 cf Chamber Storage

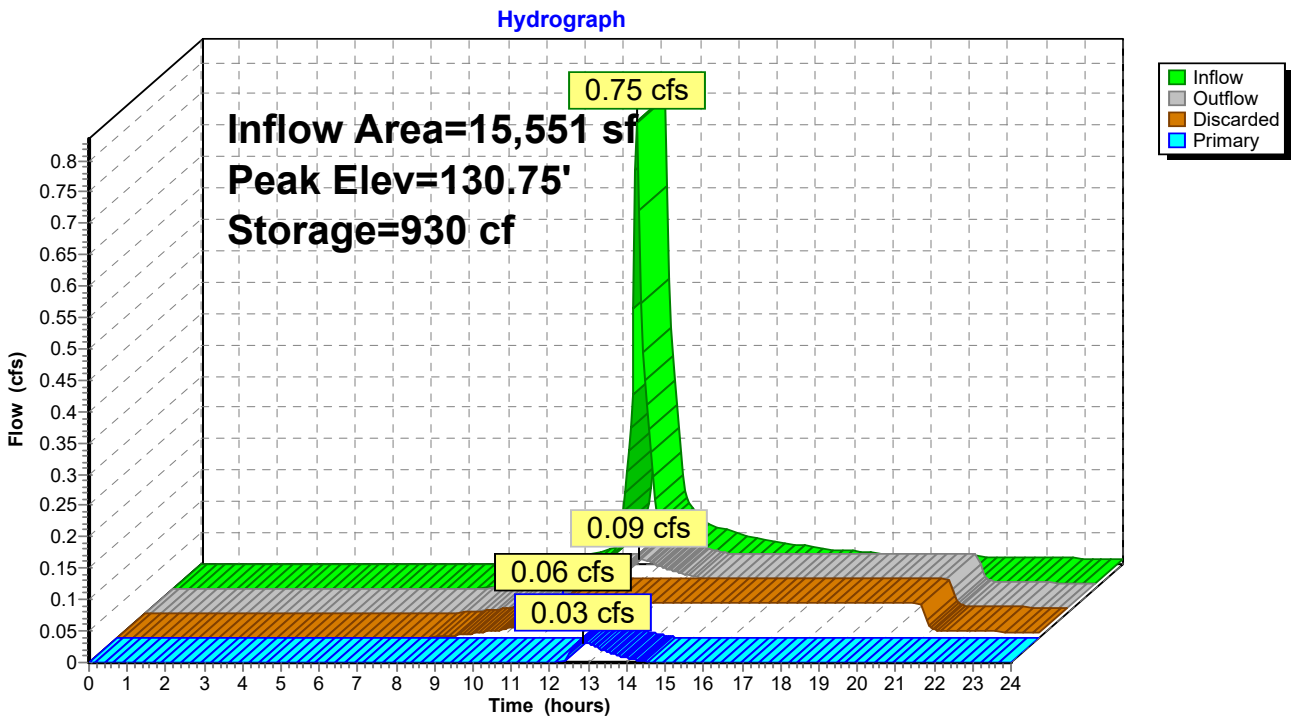
4,747.0 cf Field - 984.5 cf Chambers = 3,762.4 cf Stone x 40.0% Voids = 1,505.0 cf Stone Storage

Chamber Storage + Stone Storage = 2,489.5 cf = 0.057 af
Overall Storage Efficiency = 52.4%
Overall System Size = 87.91' x 27.00' x 2.00'

144 Chambers
175.8 cy Field
139.3 cy Stone



Pond IB2c: Infiltration Basin Area 2c



Stage-Area-Storage for Pond IB2c: Infiltration Basin Area 2c

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
130.00	**2,373**	0	131.06	2,373	1,457
130.02	2,373	19	131.08	2,373	1,489
130.04	2,373	38	131.10	2,373	1,519
130.06	2,373	57	131.12	2,373	1,550
130.08	2,373	76	131.14	2,373	1,580
130.10	2,373	95	131.16	2,373	1,609
130.12	2,373	114	131.18	2,373	1,638
130.14	2,373	133	131.20	2,373	1,667
130.16	2,373	152	131.22	2,373	1,695
130.18	2,373	171	131.24	2,373	1,722
130.20	2,373	190	131.26	2,373	1,749
130.22	2,373	209	131.28	2,373	1,774
130.24	2,373	228	131.30	2,373	1,799
130.26	2,373	247	131.32	2,373	1,824
130.28	2,373	266	131.34	2,373	1,847
130.30	2,373	285	131.36	2,373	1,870
130.32	2,373	304	131.38	2,373	1,892
130.34	2,373	323	131.40	2,373	1,914
130.36	2,373	342	131.42	2,373	1,935
130.38	2,373	361	131.44	2,373	1,955
130.40	2,373	380	131.46	2,373	1,976
130.42	2,373	399	131.48	2,373	1,995
130.44	2,373	418	131.50	2,373	2,015
130.46	2,373	437	131.52	2,373	2,034
130.48	2,373	456	131.54	2,373	2,053
130.50	2,373	475	131.56	2,373	2,072
130.52	2,373	512	131.58	2,373	2,091
130.54	2,373	549	131.60	2,373	2,110
130.56	2,373	587	131.62	2,373	2,129
130.58	2,373	624	131.64	2,373	2,148
130.60	2,373	661	131.66	2,373	2,167
130.62	2,373	698	131.68	2,373	2,186
130.64	2,373	735	131.70	2,373	2,205
130.66	2,373	772	131.72	2,373	2,224
130.68	2,373	808	131.74	2,373	2,243
130.70	2,373	844	131.76	2,373	2,262
130.72	2,373	880	131.78	2,373	2,281
130.74	2,373	916	131.80	2,373	2,300
130.76	2,373	952	131.82	2,373	2,319
130.78	2,373	987	131.84	2,373	2,338
130.80	2,373	1,022	131.86	2,373	2,357
130.82	2,373	1,057	131.88	2,373	2,376
130.84	2,373	1,092	131.90	2,373	2,395
130.86	2,373	1,127	131.92	2,373	2,414
130.88	2,373	1,161	131.94	2,373	2,433
130.90	2,373	1,195	131.96	2,373	2,452
130.92	2,373	1,229	131.98	2,373	2,471
130.94	2,373	1,263	132.00	2,373	**2,489**
130.96	2,373	1,296			
130.98	2,373	1,329			
131.00	2,373	1,361			
131.02	2,373	1,394			
131.04	2,373	1,426			

Summary for Pond IB2e: Infiltration Basin 2b

Inflow Area =	15,464 sf, 93.24% Impervious, Inflow Depth > 2.62" for 2-YR event				
Inflow =	1.01 cfs @	12.09 hrs,	Volume=	3,381 cf	
Outflow =	0.14 cfs @	11.70 hrs,	Volume=	3,379 cf,	Atten= 86%, Lag= 0.0 min
Discarded =	0.14 cfs @	11.70 hrs,	Volume=	3,379 cf	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 131.25' @ 12.60 hrs Surf.Area= 2,592 sf Storage= 1,029 cf

Plug-Flow detention time= 45.5 min calculated for 3,379 cf (100% of inflow)
Center-of-Mass det. time= 45.1 min (825.8 - 780.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	130.50'	2,002 cf	**34.83'W x 74.40'L x 2.50'H Field A** 6,479 cf Overall - 1,474 cf Embedded = 5,005 cf x 40.0% Voids
#2A	131.00'	1,474 cf	**ADS_StormTech SC-310 +Cap** x 100 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 10 Rows of 10 Chambers
		3,476 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	130.85'	**15.0" Round Culvert Barrel** L= 69.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 130.85' / 130.50' S= 0.0051 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 1.23 sf
#2	Discarded	130.50'	**2.410 in/hr Exfiltration over Surface area**
#3	Device 1	131.40'	**3.0" W x 3.0" H Vert. Orifice/Grate** C= 0.600
#4	Device 1	132.63'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.14 cfs @ 11.70 hrs HW=130.53' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.14 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=130.50' (Free Discharge)
└─**1=Culvert Barrel** (Controls 0.00 cfs)
  ├─**3=Orifice/Grate** (Controls 0.00 cfs)
  └─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond IB2e: Infiltration Basin 2b - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-310 +Cap (ADS StormTech® SC-310 with cap length)
Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf
Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap

34.0" Wide + 6.0" Spacing = 40.0" C-C Row Spacing

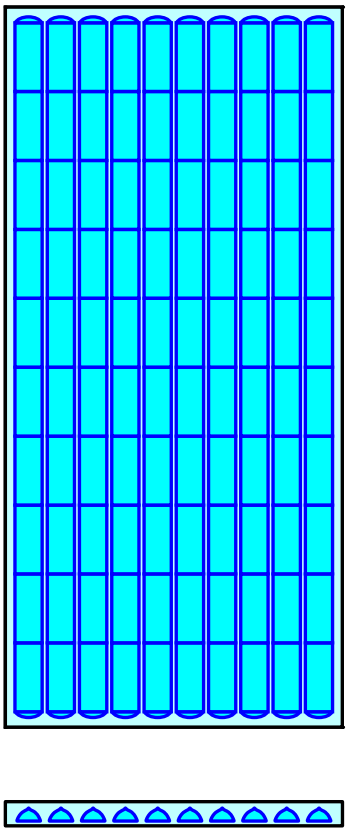
10 Chambers/Row x 7.12' Long +0.60' Cap Length x 2 = 72.40' Row Length +12.0" End Stone x 2 = 74.40' Base Length
10 Rows x 34.0" Wide + 6.0" Spacing x 9 + 12.0" Side Stone x 2 = 34.83' Base Width
6.0" Base + 16.0" Chamber Height + 8.0" Cover = 2.50' Field Height

100 Chambers x 14.7 cf = 1,474.2 cf Chamber Storage

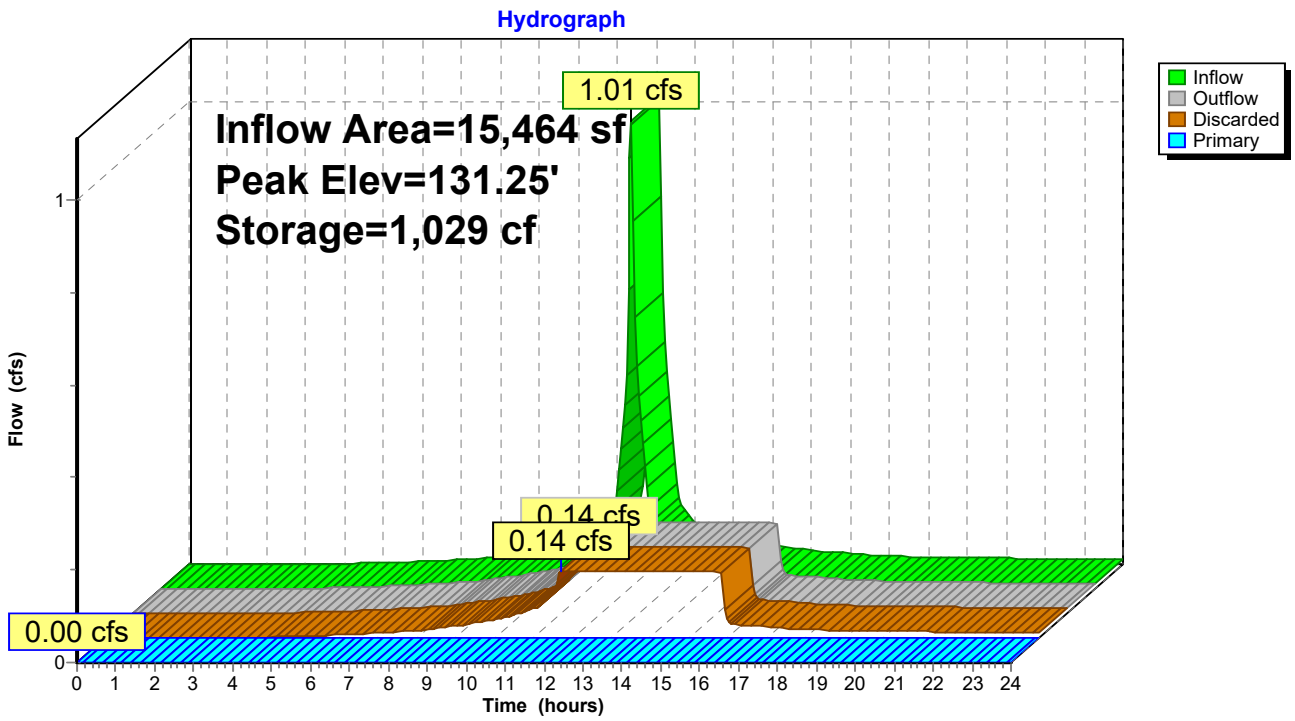
6,479.0 cf Field - 1,474.2 cf Chambers = 5,004.8 cf Stone x 40.0% Voids = 2,001.9 cf Stone Storage

Chamber Storage + Stone Storage = 3,476.1 cf = 0.080 af
Overall Storage Efficiency = 53.7%
Overall System Size = 74.40' x 34.83' x 2.50'

100 Chambers
240.0 cy Field
185.4 cy Stone



Pond IB2e: Infiltration Basin 2b



Stage-Area-Storage for Pond IB2e: Infiltration Basin 2b

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
130.50	**2,592**	0
130.55	2,592	52
130.60	2,592	104
130.65	2,592	155
130.70	2,592	207
130.75	2,592	259
130.80	2,592	311
130.85	2,592	363
130.90	2,592	415
130.95	2,592	466
131.00	2,592	518
131.05	2,592	622
131.10	2,592	724
131.15	2,592	827
131.20	2,592	928
131.25	2,592	1,029
131.30	2,592	1,129
131.35	2,592	1,227
131.40	2,592	1,325
131.45	2,592	1,422
131.50	2,592	1,517
131.55	2,592	1,611
131.60	2,592	1,703
131.65	2,592	1,794
131.70	2,592	1,884
131.75	2,592	1,972
131.80	2,592	2,057
131.85	2,592	2,141
131.90	2,592	2,222
131.95	2,592	2,301
132.00	2,592	2,377
132.05	2,592	2,449
132.10	2,592	2,516
132.15	2,592	2,579
132.20	2,592	2,638
132.25	2,592	2,695
132.30	2,592	2,750
132.35	2,592	2,802
132.40	2,592	2,854
132.45	2,592	2,906
132.50	2,592	2,958
132.55	2,592	3,010
132.60	2,592	3,061
132.65	2,592	3,113
132.70	2,592	3,165
132.75	2,592	3,217
132.80	2,592	3,269
132.85	2,592	3,321
132.90	2,592	3,372
132.95	2,592	3,424
133.00	2,592	**3,476**

Summary for Subcatchment PD-1: Prop. Drainage Area 1

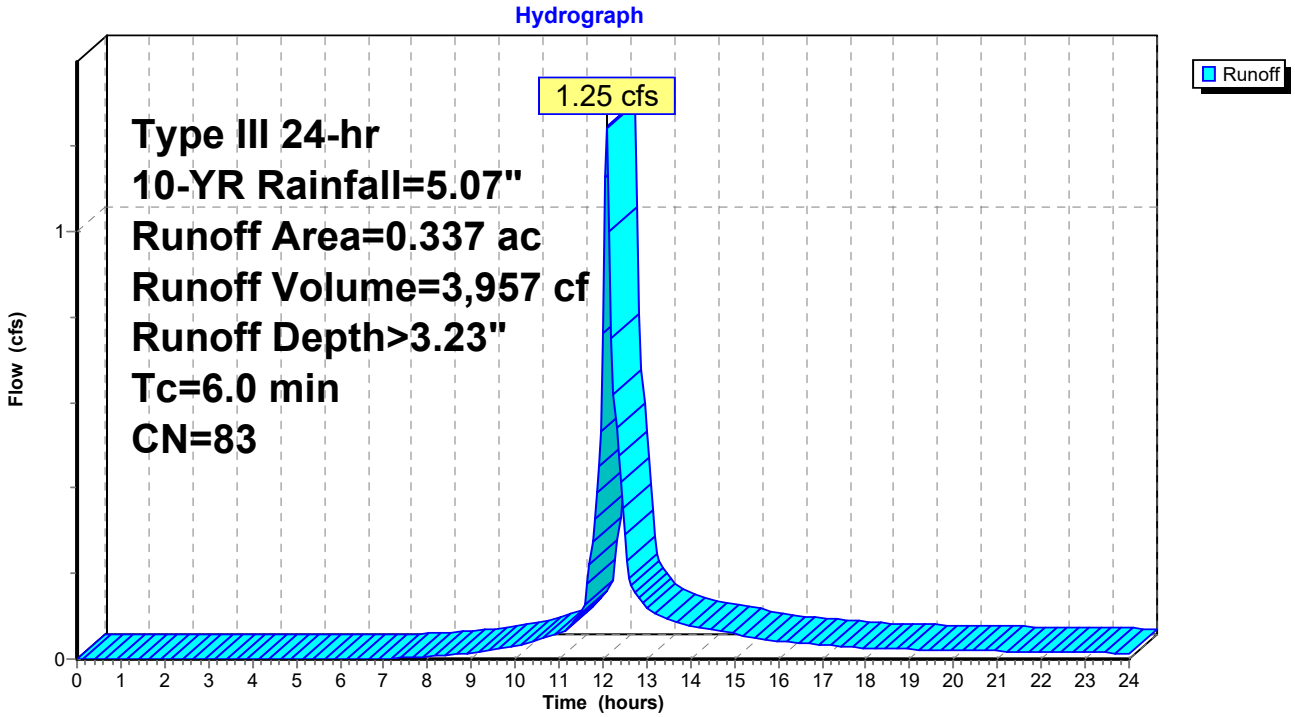
Runoff = 1.25 cfs @ 12.09 hrs, Volume= 3,957 cf, Depth> 3.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=5.07"

	Area (ac)	CN	Description
*	0.074	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.070	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.193	98	Paved parking
	0.337	83	Weighted Average
	0.144		42.73% Pervious Area
	0.193		57.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-1: Prop. Drainage Area 1



Summary for Subcatchment PD-2a: Prop. Drainage Area 2a

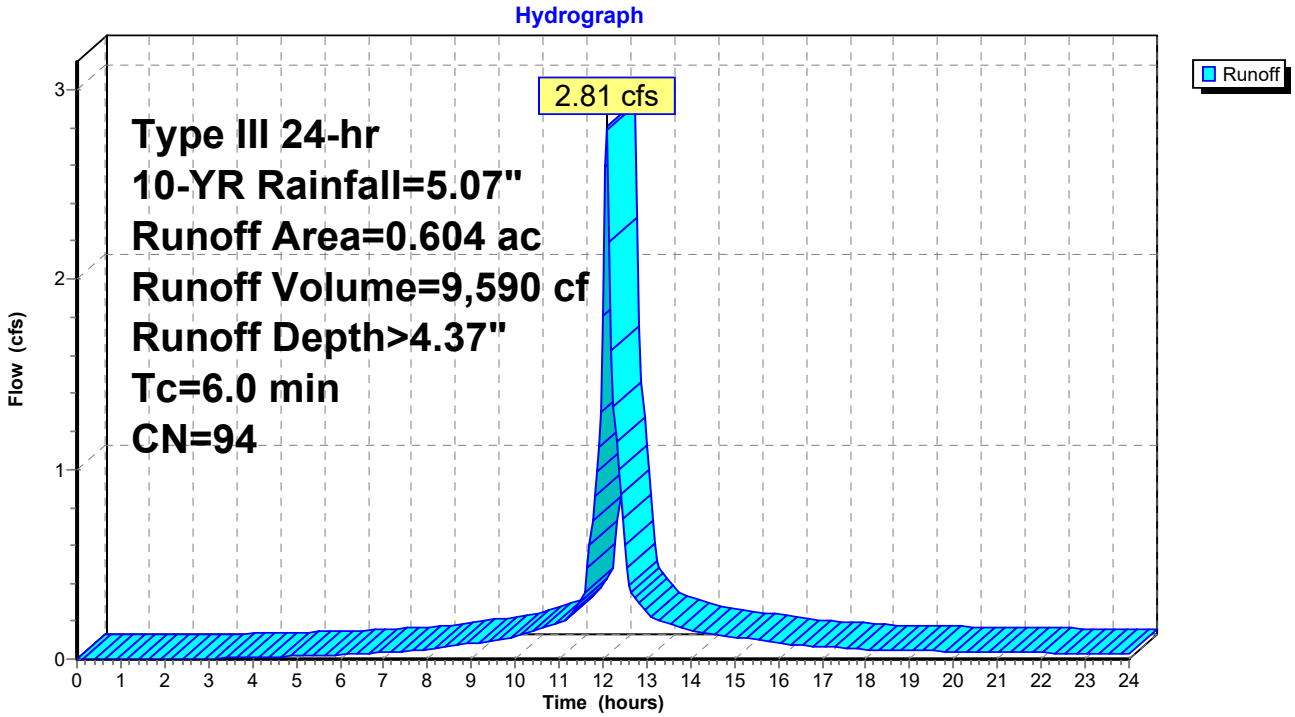
Runoff = 2.81 cfs @ 12.09 hrs, Volume= 9,590 cf, Depth> 4.37"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=5.07"

	Area (ac)	CN	Description
*	0.038	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.029	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.537	98	Paved parking
	0.604	94	Weighted Average
	0.067		11.09% Pervious Area
	0.537		88.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct**

Subcatchment PD-2a: Prop. Drainage Area 2a



Summary for Subcatchment PD-2b: Prop. Drainage Area 2b

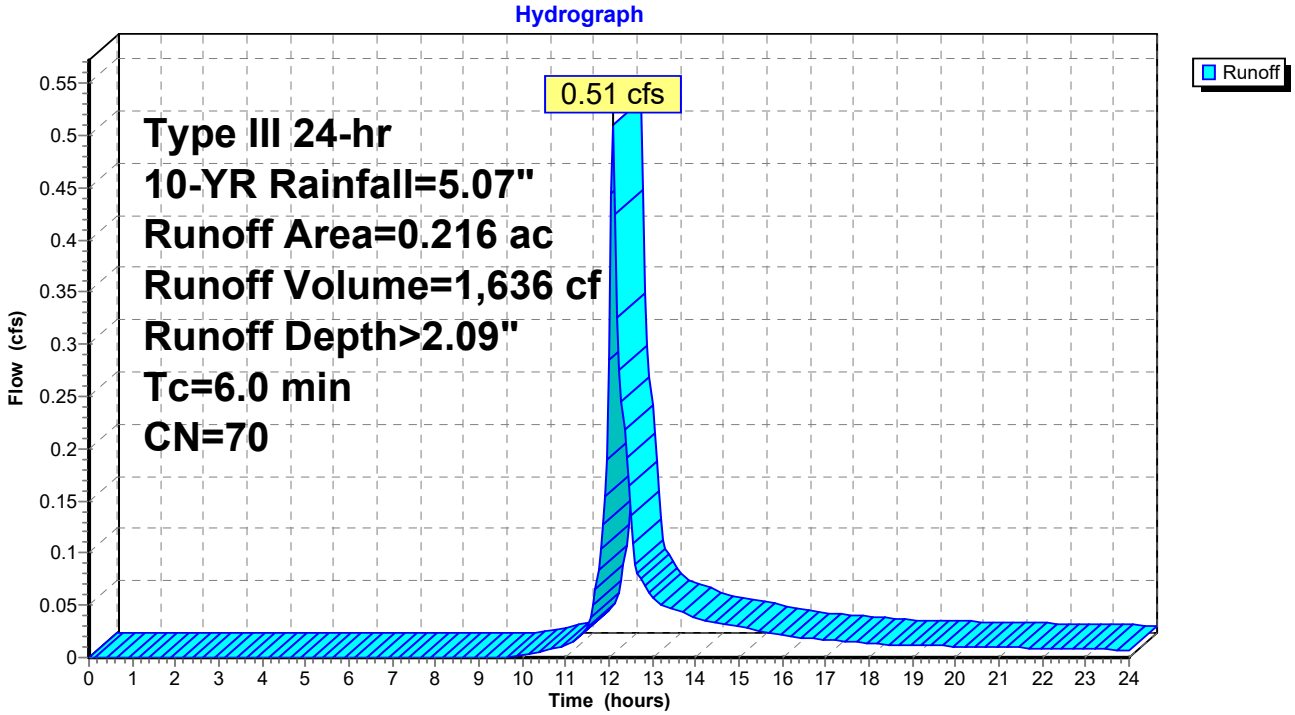
Runoff = 0.51 cfs @ 12.10 hrs, Volume= 1,636 cf, Depth> 2.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=5.07"

	Area (ac)	CN	Description
*	0.174	74	Woods/grass comb., Fair, HSG B/D, 13
*	0.018	43	Woods/grass comb., Fair, HSG A. 36A
	0.024	65	Woods/grass comb., Fair, HSG B
	0.216	70	Weighted Average
	0.216		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-2b: Prop. Drainage Area 2b



Summary for Subcatchment PD-2c: Prop. Drainage Area 2c

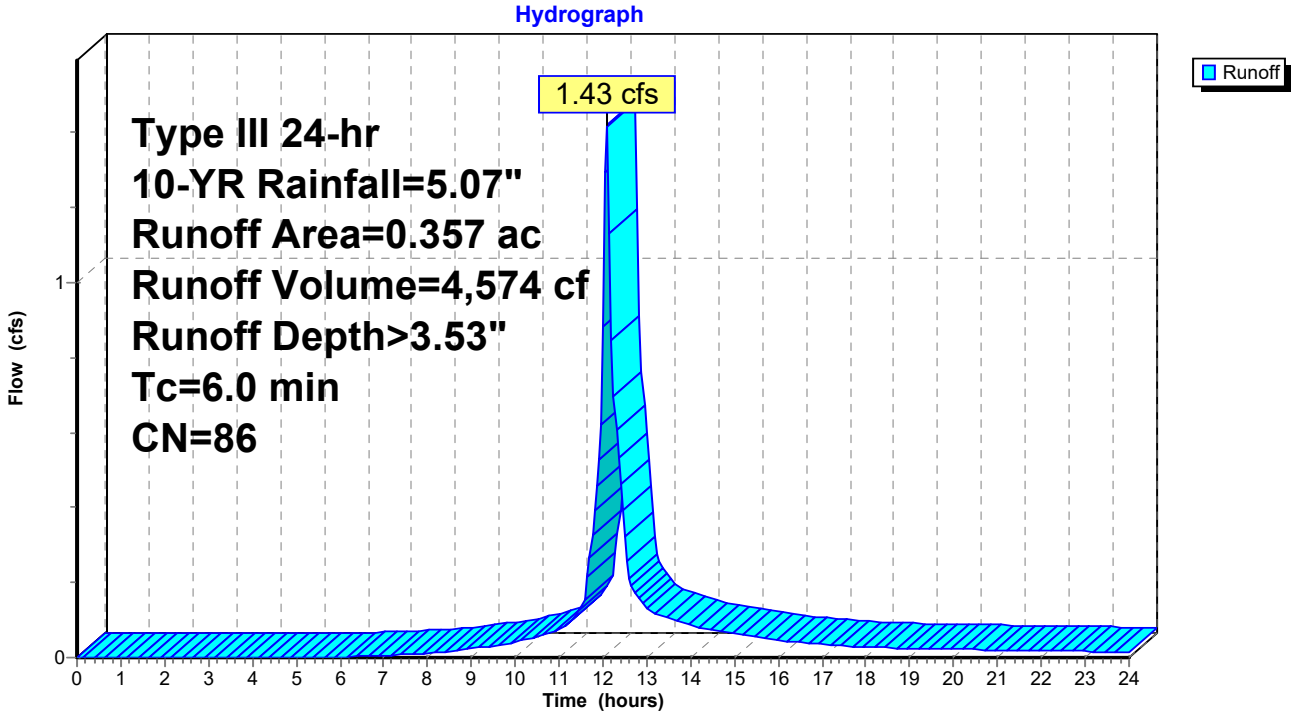
Runoff = 1.43 cfs @ 12.09 hrs, Volume= 4,574 cf, Depth> 3.53"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=5.07"

	Area (ac)	CN	Description
*	0.061	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.042	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.021	49	50-75% Grass cover, Fair, HSG A, 36A
	0.233	98	Paved parking, HSG D
	0.357	86	Weighted Average
	0.124		34.73% Pervious Area
	0.233		65.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-2c: Prop. Drainage Area 2c



Summary for Subcatchment PD-2d: Prop. Drainage Area 2d

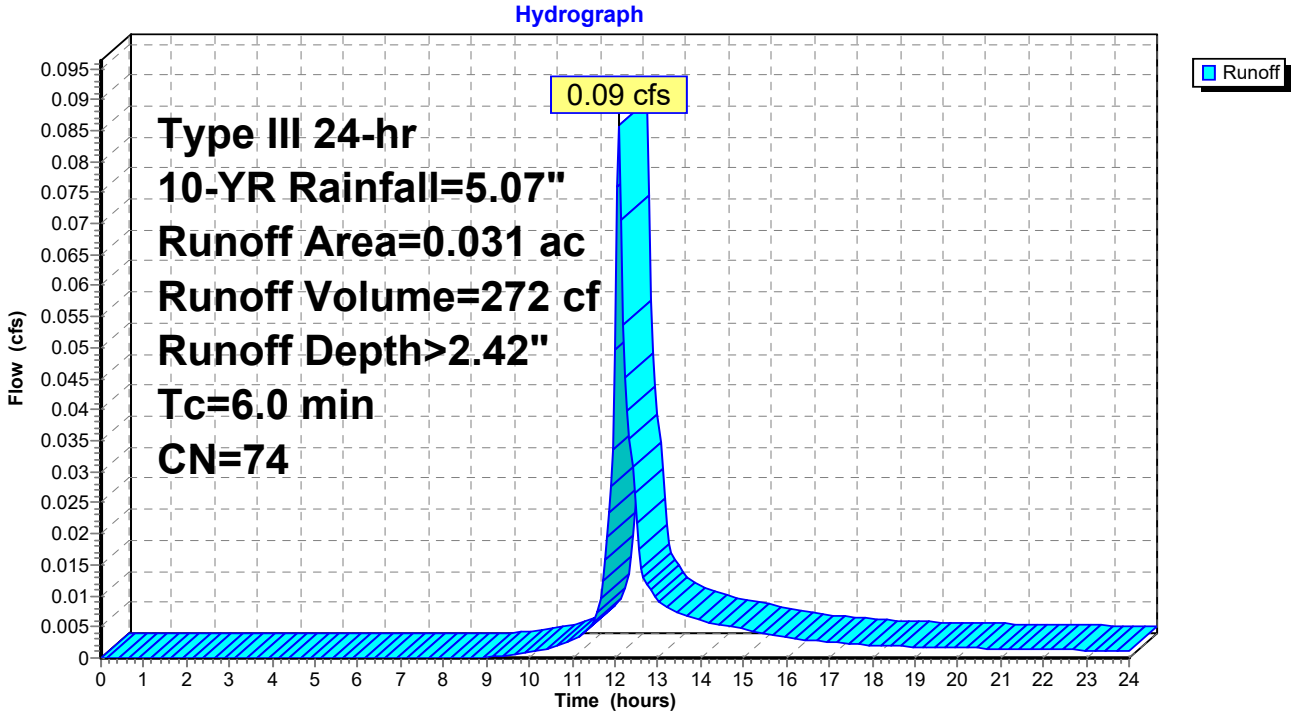
Runoff = 0.09 cfs @ 12.09 hrs, Volume= 272 cf, Depth> 2.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=5.07"

	Area (ac)	CN	Description
*	0.031	74	Woods/grass comb., Fair, HSG B/D, 13
	0.031		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-2d: Prop. Drainage Area 2d



Summary for Subcatchment PD-2e: Prop. Drainage Area 2e

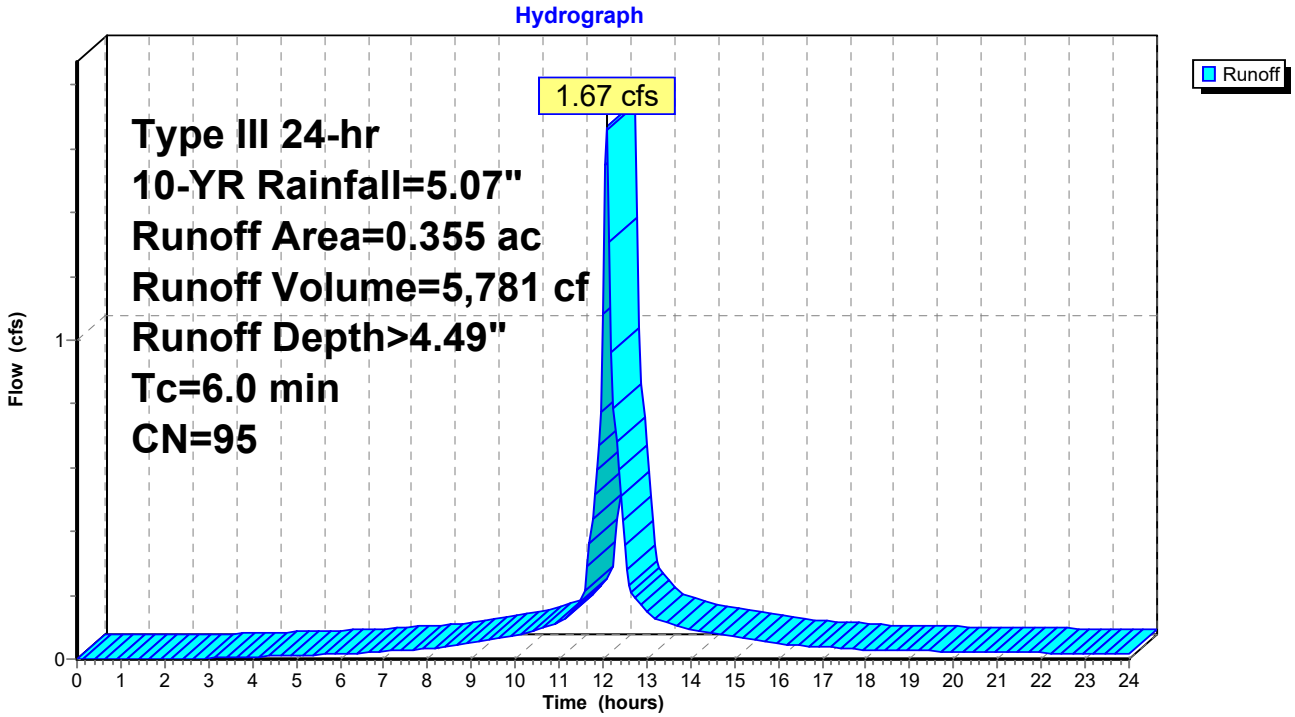
Runoff = 1.67 cfs @ 12.09 hrs, Volume= 5,781 cf, Depth> 4.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=5.07"

	Area (ac)	CN	Description
*	0.004	43	Woods/grass comb., Fair, HSG A, 36A
*	0.020	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.331	98	Paved parking
	0.355	95	Weighted Average
	0.024		6.76% Pervious Area
	0.331		93.24% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-2e: Prop. Drainage Area 2e



Summary for Subcatchment PD-2f: Prop. Drainage Area 2d

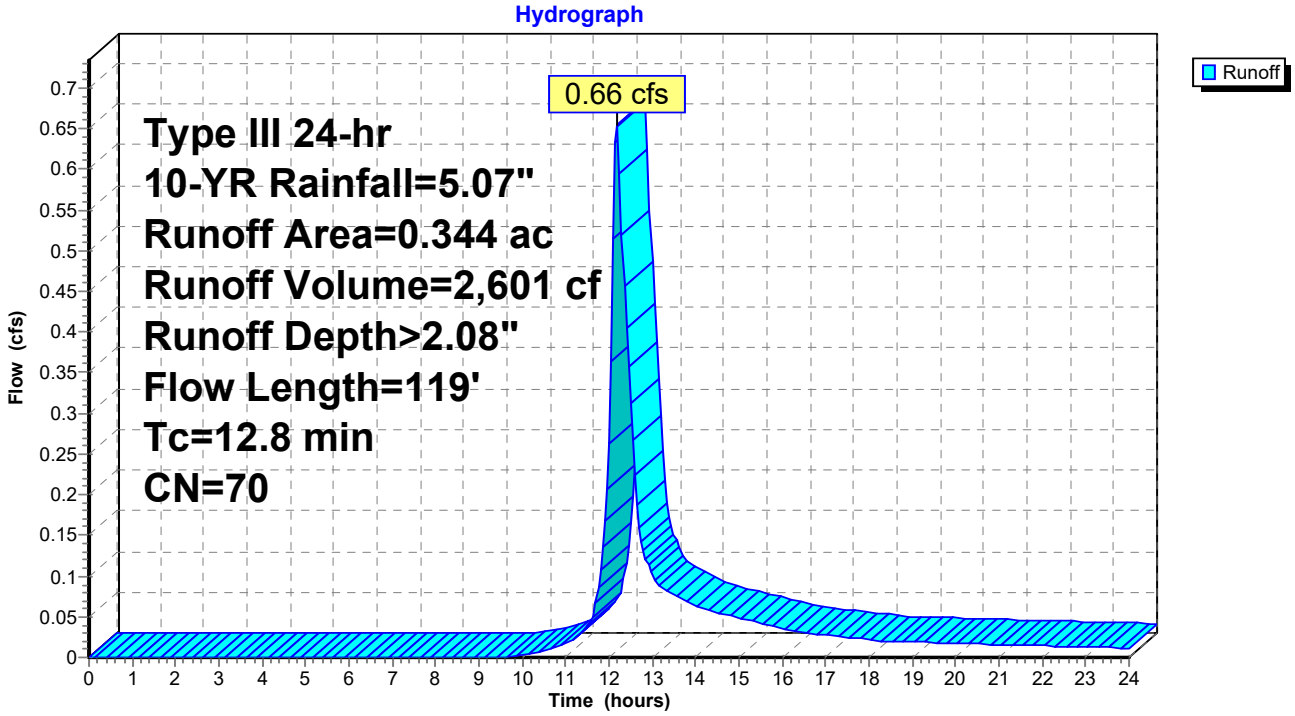
Runoff = 0.66 cfs @ 12.19 hrs, Volume= 2,601 cf, Depth> 2.08"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=5.07"

	Area (ac)	CN	Description
*	0.296	74	Woods/grass comb., Fair, HSG B/D, 13
	0.048	43	Woods/grass comb., Fair, HSG A
	0.344	70	Weighted Average
	0.344		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.9	23	0.1600	0.13		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.18"
8.4	36	0.0270	0.07		**Sheet Flow, B-C** Woods: Light underbrush n= 0.400 P2= 3.18"
1.5	60	0.0167	0.65		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
12.8	119	Total			

Subcatchment PD-2f: Prop. Drainage Area 2d



Summary for Subcatchment PD-3a: Prop. Drainage Area 3a

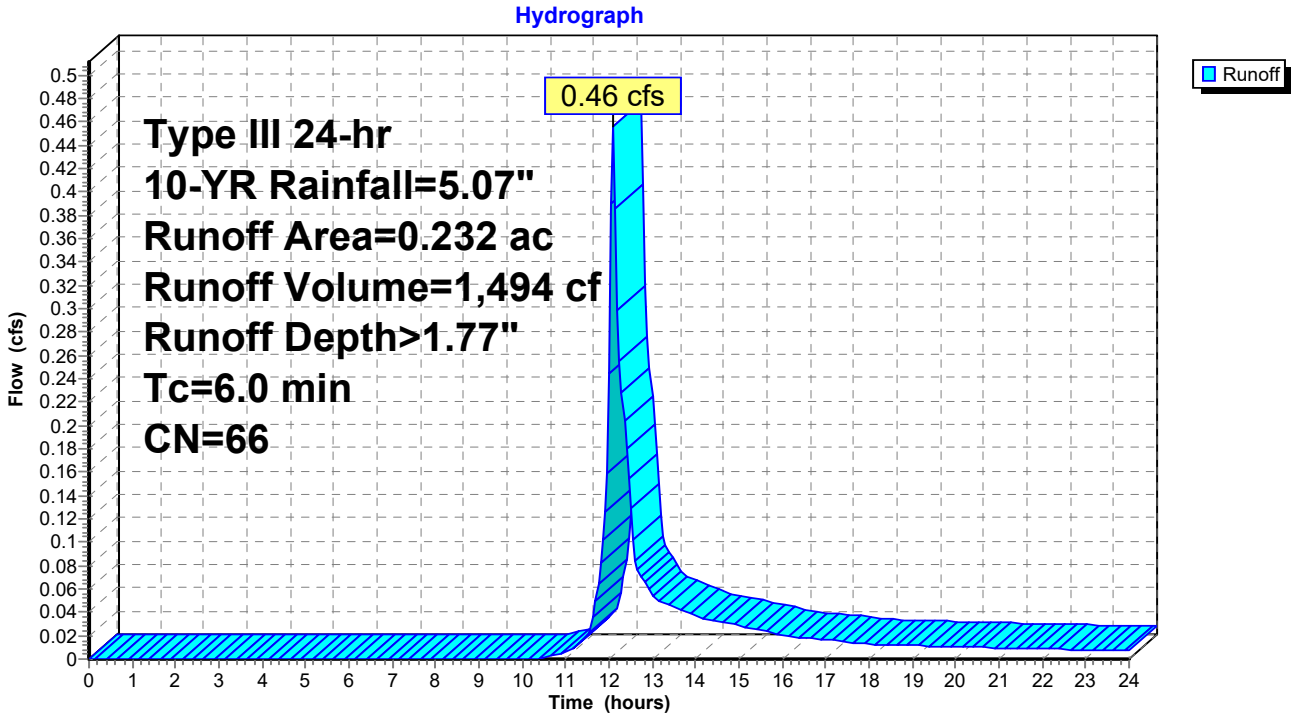
Runoff = 0.46 cfs @ 12.10 hrs, Volume= 1,494 cf, Depth> 1.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=5.07"

	Area (ac)	CN	Description
*	0.120	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.071	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.041	98	Paved parking
	0.232	66	Weighted Average
	0.191		82.33% Pervious Area
	0.041		17.67% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct**

Subcatchment PD-3a: Prop. Drainage Area 3a



Summary for Subcatchment PD-3b: Prop. Drainage Area 3b

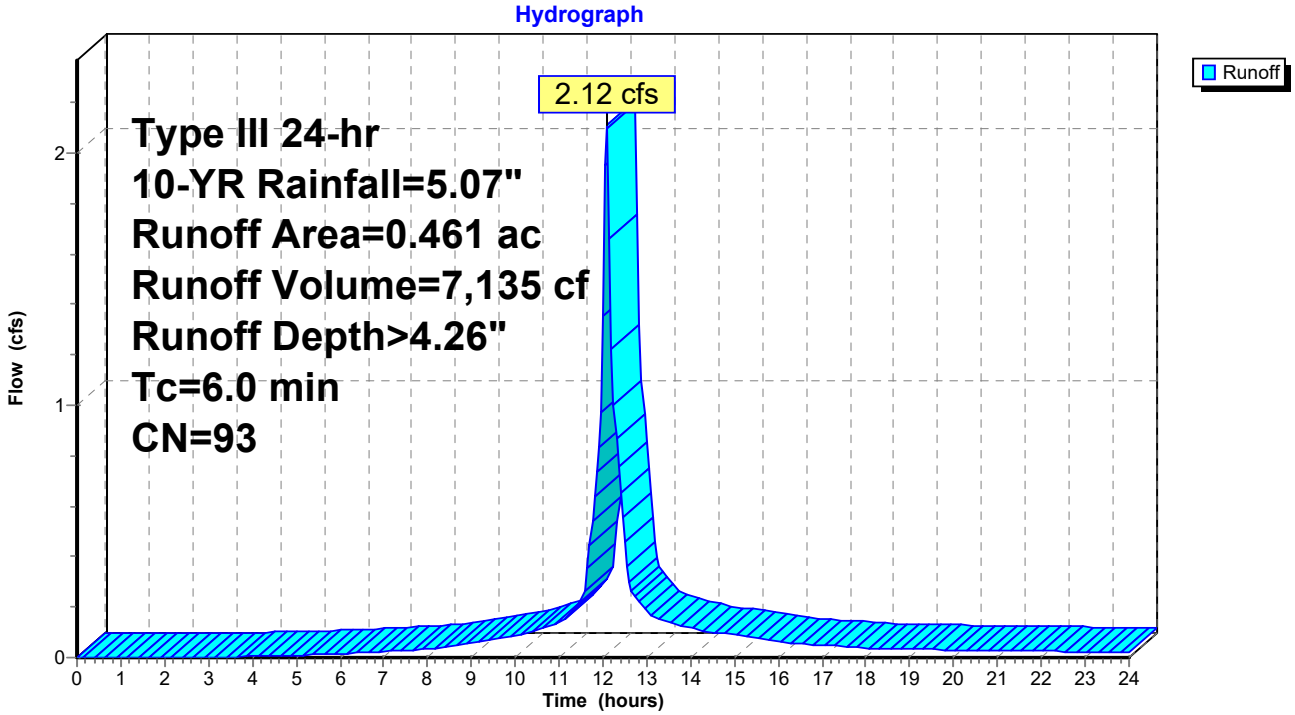
Runoff = 2.12 cfs @ 12.09 hrs, Volume= 7,135 cf, Depth> 4.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=5.07"

	Area (ac)	CN	Description
*	0.093	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.019	79	50-75% Grass cover, Fair, HSG C, 701A
*	0.016	98	Paved parking
*	0.333	98	Roofing
	0.461	93	Weighted Average
	0.112		24.30% Pervious Area
	0.349		75.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-3b: Prop. Drainage Area 3b



Summary for Subcatchment PD-3c: Prop. Drainage Area 3c

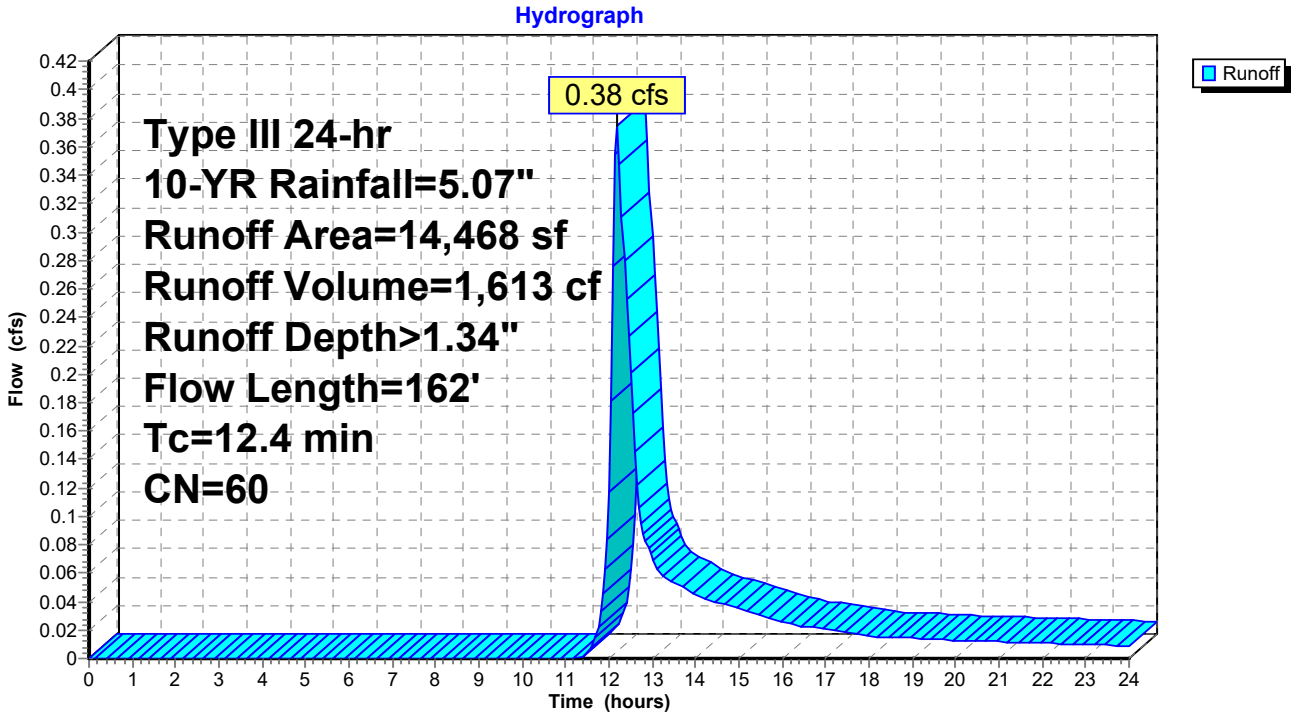
Runoff = 0.38 cfs @ 12.20 hrs, Volume= 1,613 cf, Depth> 1.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=5.07"

	Area (sf)	CN	Description
*	6,684	43	Woods/grass comb., Fair, HSG A, 36A
*	5,545	74	Woods/grass comb., Fair, HSG C
	1,501	76	Woods/grass comb., Fair, HSG C
*	738	77	50-75% Grass cover, Fair, HSG C
	14,468	60	Weighted Average
	14,468		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.8	8	0.0625	0.07		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.18"
3.4	17	0.0580	0.08		**Sheet Flow, B-C** Woods: Light underbrush n= 0.400 P2= 3.18"
3.2	16	0.0625	0.08		**Sheet Flow, C-D** Woods: Light underbrush n= 0.400 P2= 3.18"
1.5	9	0.1250	0.10		**Sheet Flow, D-E** Woods: Light underbrush n= 0.400 P2= 3.18"
2.5	112	0.0220	0.74		**Shallow Concentrated Flow, E-F** Woodland Kv= 5.0 fps
12.4	162	Total			

Subcatchment PD-3c: Prop. Drainage Area 3c



Summary for Subcatchment RD-1: Roof 1

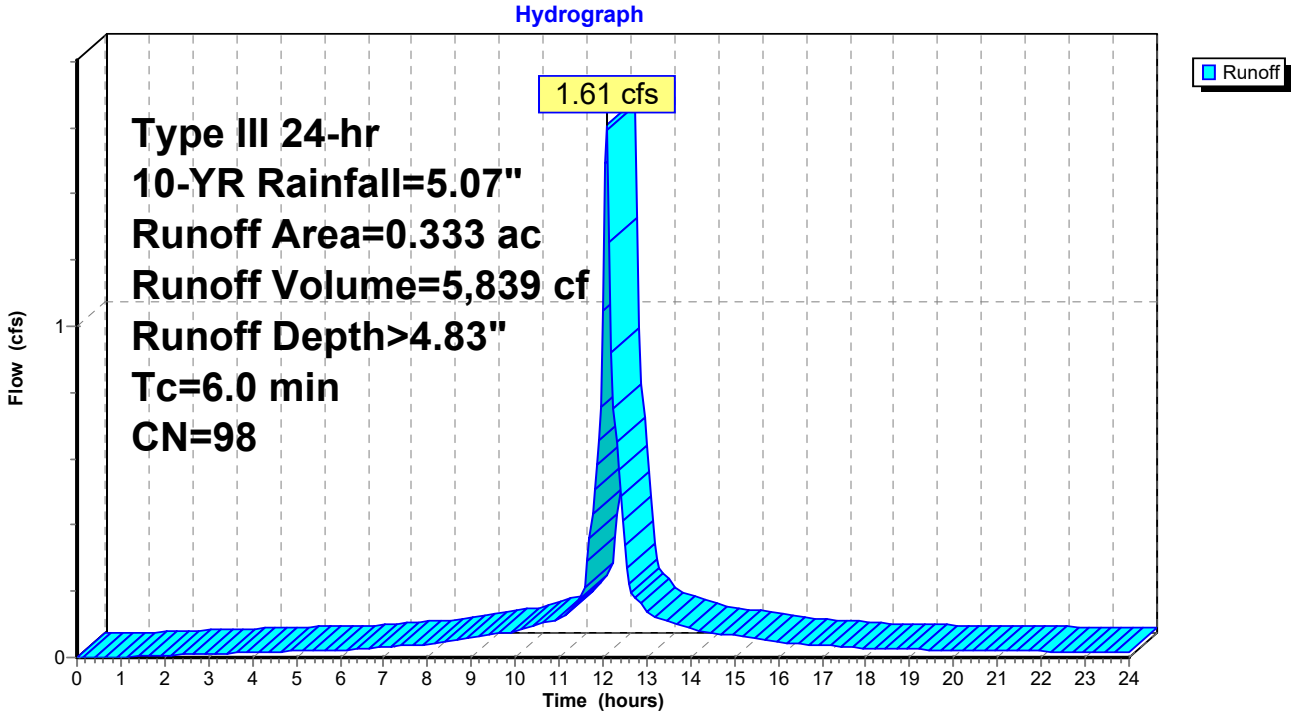
Runoff = 1.61 cfs @ 12.09 hrs, Volume= 5,839 cf, Depth> 4.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=5.07"

	Area (ac)	CN	Description
*	0.333	98	Unconnected roofs
	0.333		100.00% Impervious Area
	0.333		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment RD-1: Roof 1

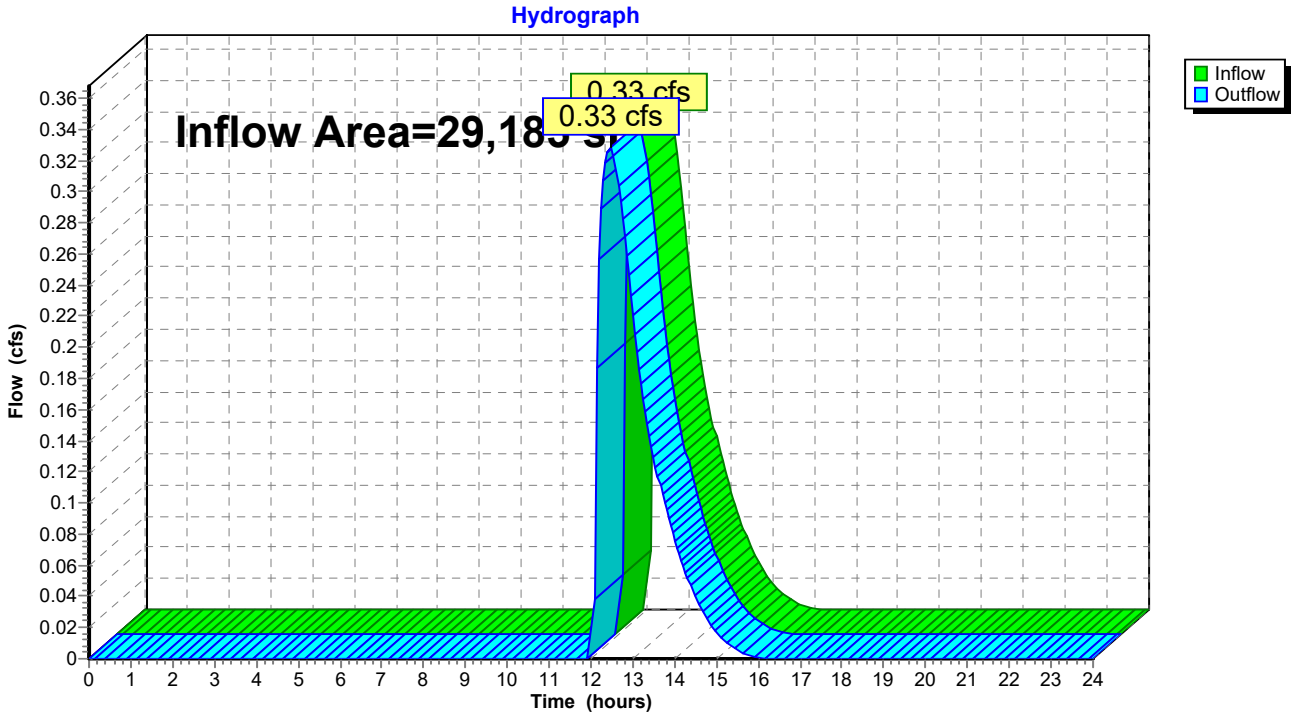


Summary for Reach DP-1a: Design Point 1

Inflow Area = 29,185 sf, 78.51% Impervious, Inflow Depth = 0.65" for 10-YR event
Inflow = 0.33 cfs @ 12.46 hrs, Volume= 1,570 cf
Outflow = 0.33 cfs @ 12.46 hrs, Volume= 1,570 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-1a: Design Point 1

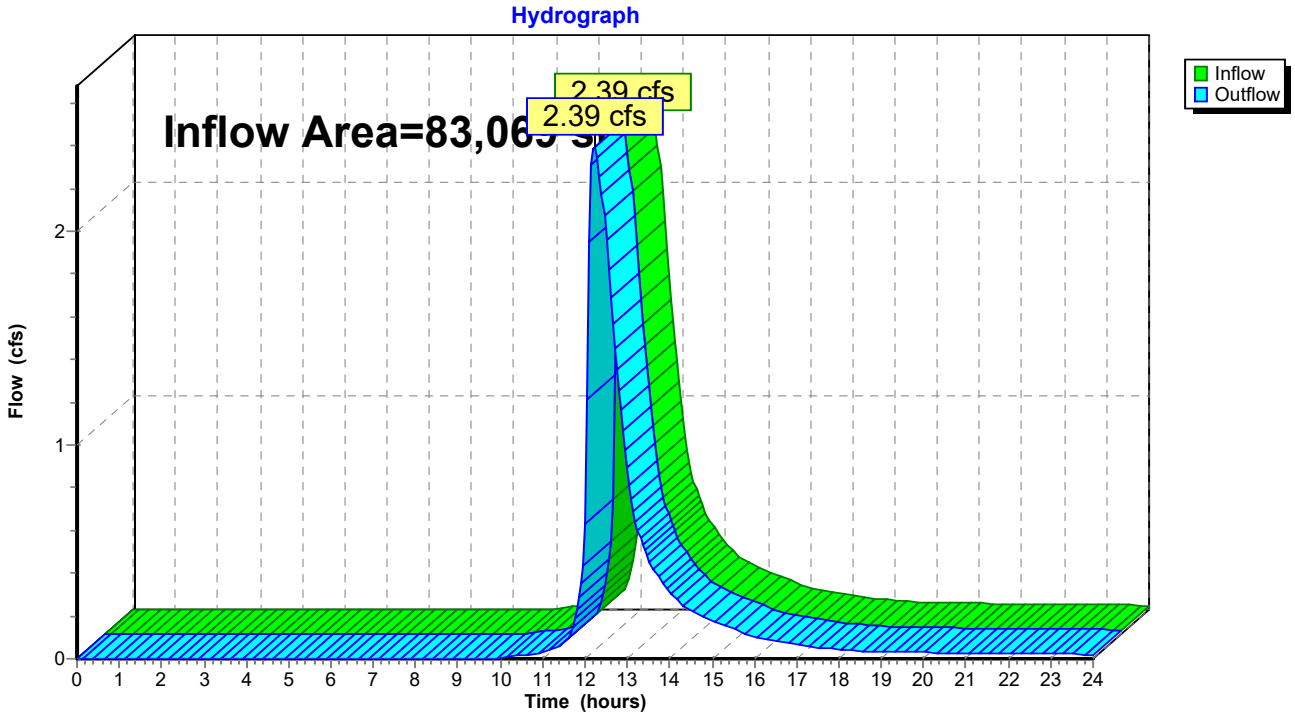


Summary for Reach DP-2a: Design Point 2

Inflow Area = 83,069 sf, 57.73% Impervious, Inflow Depth > 1.58" for 10-YR event
Inflow = 2.39 cfs @ 12.22 hrs, Volume= 10,915 cf
Outflow = 2.39 cfs @ 12.22 hrs, Volume= 10,915 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-2a: Design Point 2

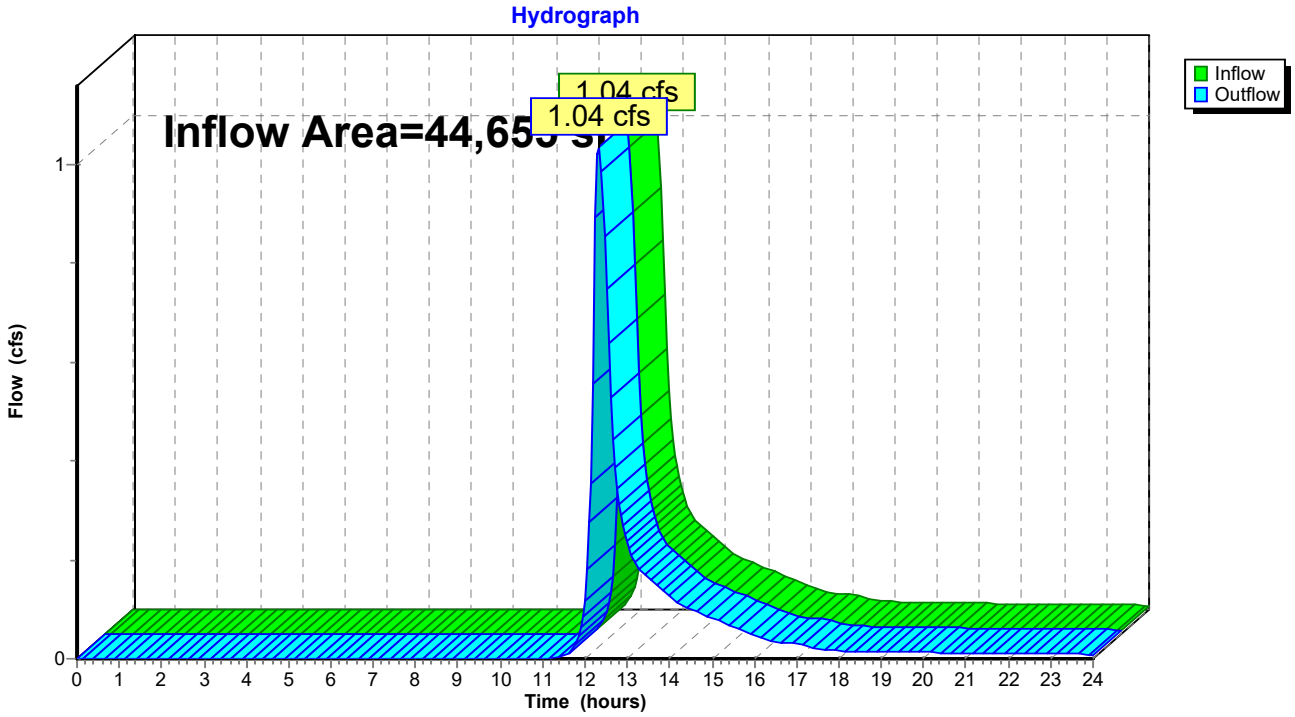


Summary for Reach DP-3a: Design Point 3

Inflow Area = 44,655 sf, 38.04% Impervious, Inflow Depth > 0.97" for 10-YR event
Inflow = 1.04 cfs @ 12.32 hrs, Volume= 3,625 cf
Outflow = 1.04 cfs @ 12.32 hrs, Volume= 3,625 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-3a: Design Point 3



Summary for Pond AB1: Above Ground Infiltration Basin 1

Inflow Area =	29,185 sf, 78.51% Impervious, Inflow Depth > 1.82" for 10-YR event				
Inflow =	1.25 cfs @	12.09 hrs,	Volume=	4,423 cf	
Outflow =	0.42 cfs @	12.46 hrs,	Volume=	4,420 cf,	Atten= 67%, Lag= 22.3 min
Discarded =	0.09 cfs @	12.46 hrs,	Volume=	2,850 cf	
Primary =	0.33 cfs @	12.46 hrs,	Volume=	1,570 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 128.46' @ 12.46 hrs Surf.Area= 1,553 sf Storage= 1,347 cf

Plug-Flow detention time= 86.2 min calculated for 4,410 cf (100% of inflow)
Center-of-Mass det. time= 85.6 min (895.7 - 810.1)

Volume	Invert	Avail.Storage	Storage Description
#1	127.00'	4,542 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc) 4,798 cf Overall - 256 cf Embedded = 4,542 cf
#2	127.00'	102 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc) Inside #1 256 cf Overall x 40.0% Voids
		4,644 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
127.00	512	0	0
128.00	1,218	865	865
129.00	1,949	1,584	2,449
130.00	2,749	2,349	4,798

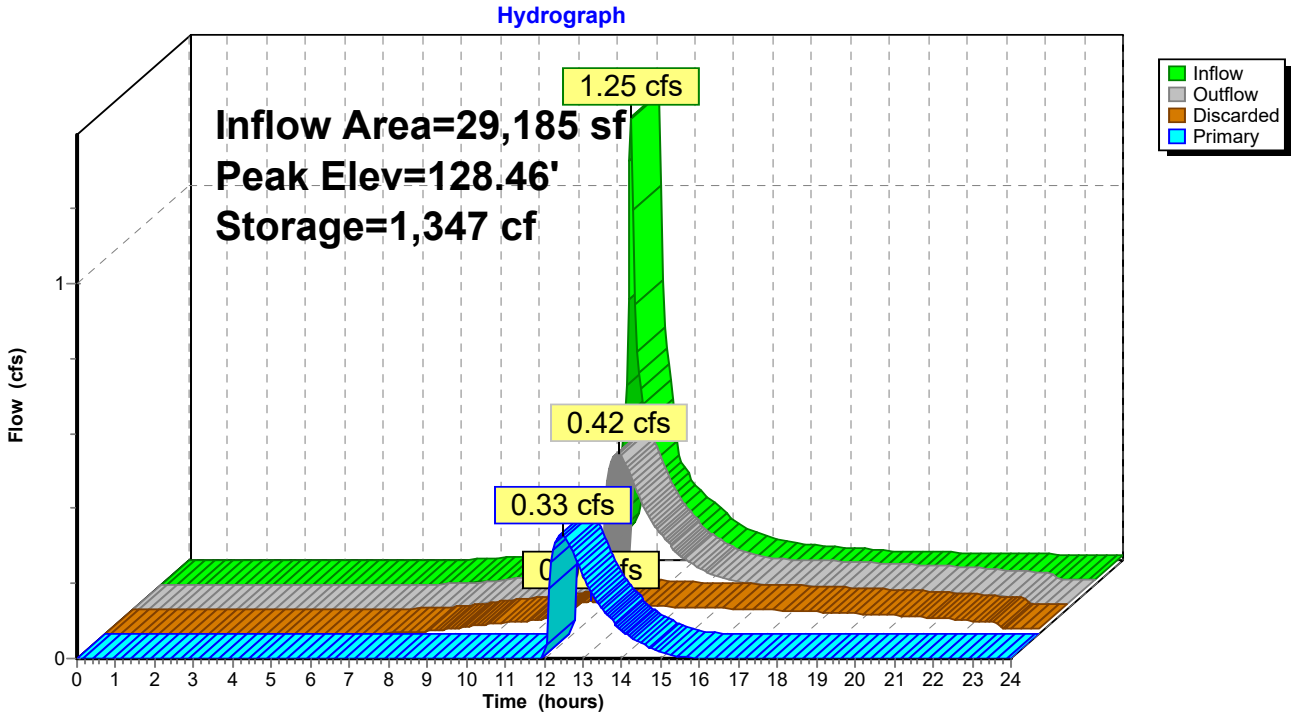
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
127.00	512	0	0
127.50	512	256	256

Device	Routing	Invert	Outlet Devices
#1	Primary	127.57'	**8.0" Round Culvert Barrel** L= 13.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 127.57' / 127.50' S= 0.0054 '/' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 0.35 sf
#2	Device 1	129.00'	**12.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Discarded	127.00'	**2.410 in/hr Exfiltration over Surface area**
#4	Device 1	128.00'	**5.0" Vert. Orifice/Grate** C= 0.600

Discarded OutFlow Max=0.09 cfs @ 12.46 hrs HW=128.46' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.09 cfs)

Primary OutFlow Max=0.33 cfs @ 12.46 hrs HW=128.46' (Free Discharge)
└─**1=Culvert Barrel** (Passes 0.33 cfs of 0.79 cfs potential flow)
  ├─**2=Orifice/Grate** (Controls 0.00 cfs)
  └─**4=Orifice/Grate** (Orifice Controls 0.33 cfs @ 2.41 fps)

Pond AB1: Above Ground Infiltration Basin 1



Stage-Area-Storage for Pond AB1: Above Ground Infiltration Basin 1

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
127.00	512	0
127.05	547	11
127.10	583	24
127.15	618	39
127.20	653	55
127.25	689	73
127.30	724	93
127.35	759	115
127.40	794	138
127.45	830	164
127.50	865	191
127.55	900	235
127.60	936	281
127.65	971	328
127.70	1,006	378
127.75	1,042	429
127.80	1,077	482
127.85	1,112	537
127.90	1,147	593
127.95	1,183	651
128.00	1,218	711
128.05	1,255	773
128.10	1,291	837
128.15	1,328	902
128.20	1,364	970
128.25	1,401	1,039
128.30	1,437	1,110
128.35	1,474	1,182
128.40	1,510	1,257
128.45	1,547	1,334
128.50	1,584	1,412
128.55	1,620	1,492
128.60	1,657	1,574
128.65	1,693	1,658
128.70	1,730	1,743
128.75	1,766	1,830
128.80	1,803	1,920
128.85	1,839	2,011
128.90	1,876	2,104
128.95	1,912	2,198
129.00	1,949	2,295
129.05	1,989	2,393
129.10	2,029	2,494
129.15	2,069	2,596
129.20	2,109	2,701
129.25	2,149	2,807
129.30	2,189	2,916
129.35	2,229	3,026
129.40	2,269	3,139
129.45	2,309	3,253
129.50	2,349	3,369
129.55	2,389	3,488
129.60	2,429	3,608
129.65	2,469	3,731
129.70	2,509	3,855
129.75	2,549	3,982
129.80	2,589	4,110
129.85	2,629	4,241
129.90	2,669	4,373
129.95	2,709	4,507
130.00	**2,749**	**4,644**

Summary for Pond AB3a: Above Ground Infiltration 3a

Inflow Area =	10,106 sf, 17.67% Impervious, Inflow Depth > 1.77" for 10-YR event				
Inflow =	0.46 cfs @	12.10 hrs,	Volume=	1,494 cf	
Outflow =	0.07 cfs @	12.78 hrs,	Volume=	1,491 cf,	Atten= 85%, Lag= 40.9 min
Discarded =	0.07 cfs @	12.78 hrs,	Volume=	1,491 cf	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 132.45' @ 12.78 hrs Surf.Area= 1,216 sf Storage= 479 cf

Plug-Flow detention time= 61.8 min calculated for 1,491 cf (100% of inflow)
Center-of-Mass det. time= 60.8 min (917.5 - 856.6)

Volume	Invert	Avail.Storage	Storage Description
#1	132.00'	3,206 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

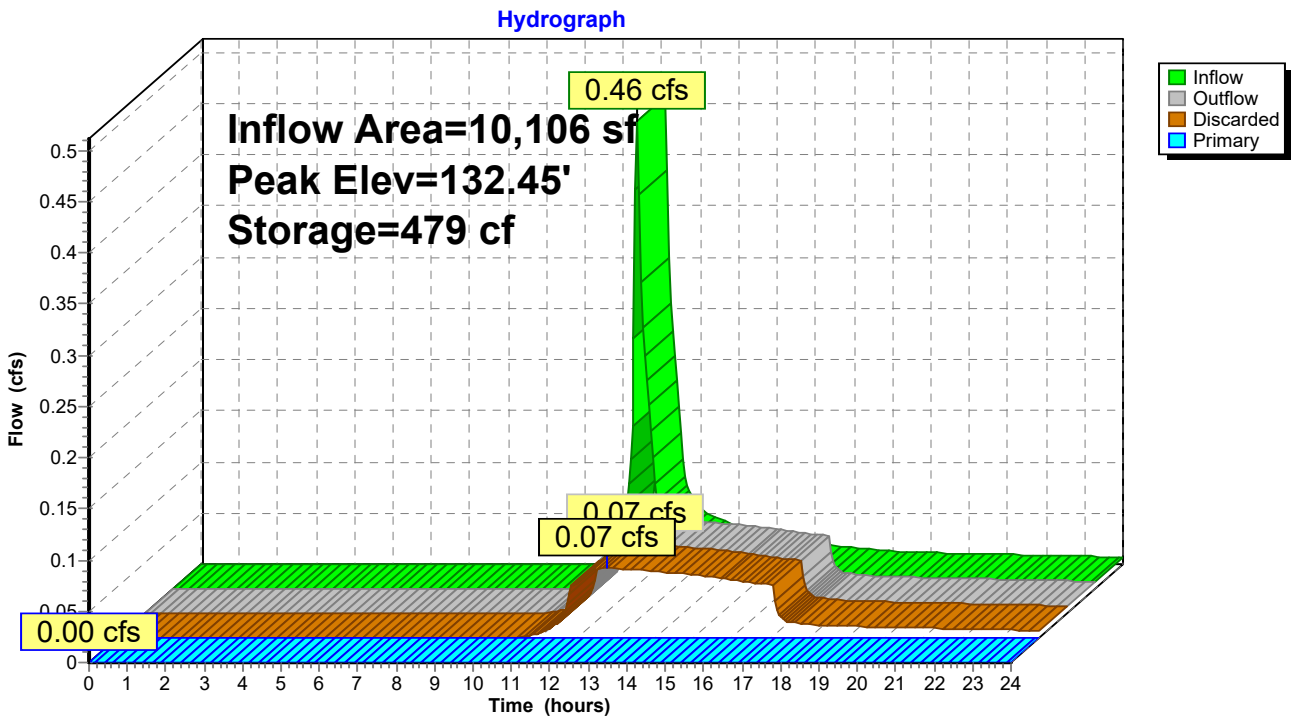
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
132.00	906	0	0
133.00	1,593	1,250	1,250
134.00	2,319	1,956	3,206

Device	Routing	Invert	Outlet Devices
#1	Discarded	132.00'	**2.410 in/hr Exfiltration over Surface area**
#2	Primary	133.00'	**10.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.07 cfs @ 12.78 hrs HW=132.45' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.07 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=132.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond AB3a: Above Ground Infiltration 3a



Stage-Area-Storage for Pond AB3a: Above Ground Infiltration 3a

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
132.00	906	0
132.02	920	18
132.04	933	37
132.06	947	56
132.08	961	75
132.10	975	94
132.12	988	114
132.14	1,002	134
132.16	1,016	154
132.18	1,030	174
132.20	1,043	195
132.22	1,057	216
132.24	1,071	237
132.26	1,085	259
132.28	1,098	281
132.30	1,112	303
132.32	1,126	325
132.34	1,140	348
132.36	1,153	371
132.38	1,167	394
132.40	1,181	417
132.42	1,195	441
132.44	1,208	465
132.46	1,222	489
132.48	1,236	514
132.50	1,250	539
132.52	1,263	564
132.54	1,277	589
132.56	1,291	615
132.58	1,304	641
132.60	1,318	667
132.62	1,332	694
132.64	1,346	721
132.66	1,359	748
132.68	1,373	775
132.70	1,387	803
132.72	1,401	830
132.74	1,414	859
132.76	1,428	887
132.78	1,442	916
132.80	1,456	945
132.82	1,469	974
132.84	1,483	1,003
132.86	1,497	1,033
132.88	1,511	1,063
132.90	1,524	1,094
132.92	1,538	1,124
132.94	1,552	1,155
132.96	1,566	1,186
132.98	1,579	1,218
133.00	1,593	1,250
133.02	1,608	1,282
133.04	1,622	1,314
133.06	1,637	1,346
133.08	1,651	1,379
133.10	1,666	1,412
133.12	1,680	1,446
133.14	1,695	1,480
133.16	1,709	1,514
133.18	1,724	1,548
133.20	1,738	1,583
133.22	1,753	1,618
133.24	1,767	1,653
133.26	1,782	1,688
133.28	1,796	1,724
133.30	1,811	1,760
133.32	1,825	1,796
133.34	1,840	1,833
133.36	1,854	1,870
133.38	1,869	1,907
133.40	1,883	1,945
133.42	1,898	1,983
133.44	1,912	2,021
133.46	1,927	2,059
133.48	1,941	2,098
133.50	1,956	2,137
133.52	1,971	2,176
133.54	1,985	2,216
133.56	2,000	2,255
133.58	2,014	2,296
133.60	2,029	2,336
133.62	2,043	2,377
133.64	2,058	2,418
133.66	2,072	2,459
133.68	2,087	2,501
133.70	2,101	2,542
133.72	2,116	2,585
133.74	2,130	2,627
133.76	2,145	2,670
133.78	2,159	2,713
133.80	2,174	2,756
133.82	2,188	2,800
133.84	2,203	2,844
133.86	2,217	2,888
133.88	2,232	2,932
133.90	2,246	2,977
133.92	2,261	3,022
133.94	2,275	3,068
133.96	2,290	3,113
133.98	2,304	3,159
134.00	**2,319**	**3,206**

Summary for Pond AB3b: Above Ground Infiltration 3b

Inflow Area =	20,081 sf, 75.70% Impervious, Inflow Depth > 4.26" for 10-YR event				
Inflow =	2.12 cfs @	12.09 hrs,	Volume=	7,135 cf	
Outflow =	0.79 cfs @	12.35 hrs,	Volume=	4,301 cf,	Atten= 63%, Lag= 15.5 min
Discarded =	0.05 cfs @	12.35 hrs,	Volume=	2,289 cf	
Primary =	0.74 cfs @	12.35 hrs,	Volume=	2,012 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 133.30' @ 12.35 hrs Surf.Area= 2,010 sf Storage= 3,474 cf

Plug-Flow detention time= 223.9 min calculated for 4,292 cf (60% of inflow)
Center-of-Mass det. time= 121.8 min (899.2 - 777.4)

Volume	Invert	Avail.Storage	Storage Description
#1	130.00'	5,050 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

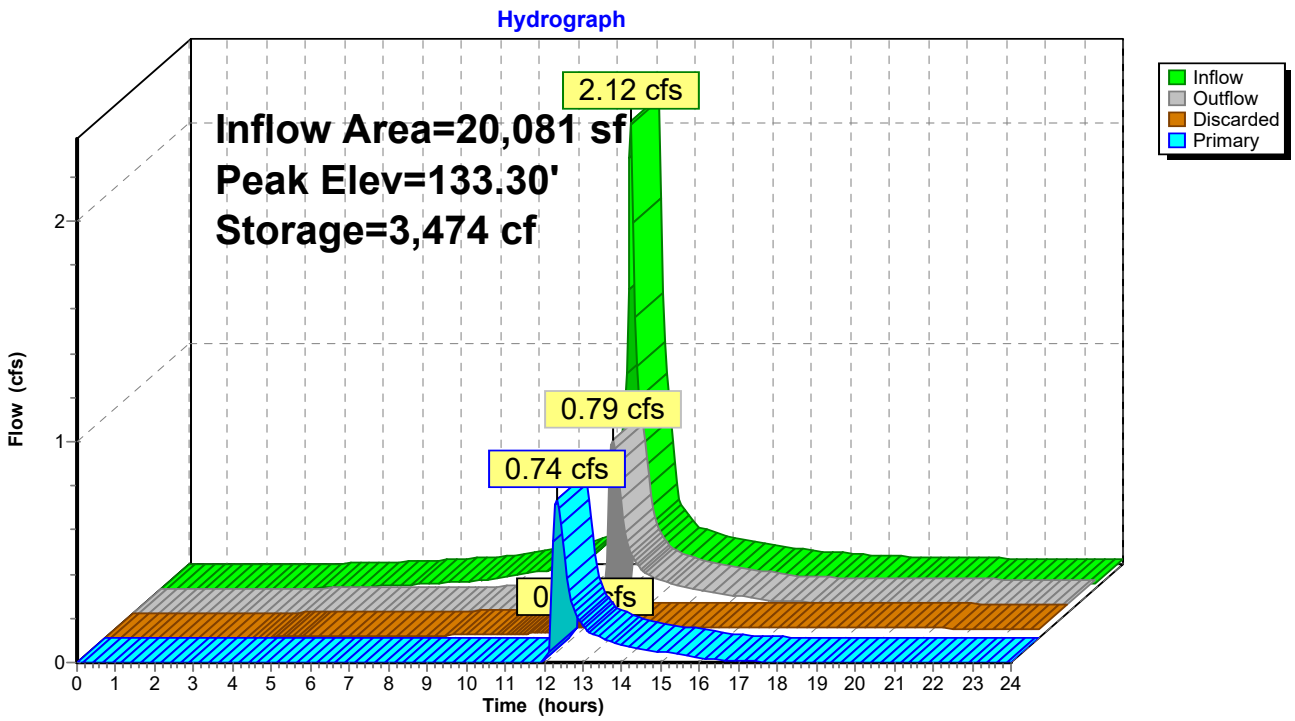
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
130.00	307	0	0
131.00	671	489	489
132.00	1,175	923	1,412
133.00	1,806	1,491	2,903
134.00	2,488	2,147	5,050

Device	Routing	Invert	Outlet Devices
#1	Primary	133.15'	**5.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32
#2	Discarded	130.00'	**1.020 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.05 cfs @ 12.35 hrs HW=133.30' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.73 cfs @ 12.35 hrs HW=133.30' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir** (Weir Controls 0.73 cfs @ 0.98 fps)

Pond AB3b: Above Ground Infiltration 3b



Stage-Area-Storage for Pond AB3b: Above Ground Infiltration 3b

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
130.00	307	0
130.05	325	16
130.10	343	33
130.15	362	50
130.20	380	69
130.25	398	88
130.30	416	108
130.35	434	130
130.40	453	152
130.45	471	175
130.50	489	199
130.55	507	224
130.60	525	250
130.65	544	276
130.70	562	304
130.75	580	333
130.80	598	362
130.85	616	392
130.90	635	424
130.95	653	456
131.00	671	489
131.05	696	523
131.10	721	559
131.15	747	595
131.20	772	633
131.25	797	673
131.30	822	713
131.35	847	755
131.40	873	798
131.45	898	842
131.50	923	888
131.55	948	934
131.60	973	982
131.65	999	1,032
131.70	1,024	1,082
131.75	1,049	1,134
131.80	1,074	1,187
131.85	1,099	1,241
131.90	1,125	1,297
131.95	1,150	1,354
132.00	1,175	1,412
132.05	1,207	1,472
132.10	1,238	1,533
132.15	1,270	1,595
132.20	1,301	1,660
132.25	1,333	1,725
132.30	1,364	1,793
132.35	1,396	1,862
132.40	1,427	1,932
132.45	1,459	2,005
132.50	1,491	2,078
132.55	1,522	2,154
132.60	1,554	2,231
132.65	1,585	2,309
132.70	1,617	2,389
132.75	1,648	2,471
132.80	1,680	2,554
132.85	1,711	2,639
132.90	1,743	2,725
132.95	1,774	2,813
133.00	1,806	2,903
133.05	1,840	2,994
133.10	1,874	3,087
133.15	1,908	3,181
133.20	1,942	3,277
133.25	1,977	3,375
133.30	2,011	3,475
133.35	2,045	3,576
133.40	2,079	3,679
133.45	2,113	3,784
133.50	2,147	3,891
133.55	2,181	3,999
133.60	2,215	4,109
133.65	2,249	4,220
133.70	2,283	4,334
133.75	2,318	4,449
133.80	2,352	4,566
133.85	2,386	4,684
133.90	2,420	4,804
133.95	2,454	4,926
134.00	**2,488**	**5,050**

Summary for Pond IB1: Infiltration Basin 1

Inflow Area =	14,505 sf,100.00% Impervious, Inflow Depth > 4.83" for 10-YR event				
Inflow =	1.61 cfs @	12.09 hrs,	Volume=	5,839 cf	
Outflow =	0.19 cfs @	12.67 hrs,	Volume=	5,835 cf,	Atten= 88%, Lag= 35.0 min
Discarded =	0.11 cfs @	10.80 hrs,	Volume=	5,370 cf	
Primary =	0.09 cfs @	12.67 hrs,	Volume=	465 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 130.68' @ 12.67 hrs Surf.Area= 1,889 sf Storage= 2,140 cf

Plug-Flow detention time= 126.4 min calculated for 5,835 cf (100% of inflow)
Center-of-Mass det. time= 126.0 min (873.3 - 747.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	129.00'	1,726 cf	**25.25'W x 74.82'L x 3.50'H Field A** 6,612 cf Overall - 2,297 cf Embedded = 4,315 cf x 40.0% Voids
#2A	129.50'	2,297 cf	**ADS_StormTech SC-740 +Cap** x 50 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 5 Rows of 10 Chambers
		4,023 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	130.24'	**12.0" Round Culvert** L= 10.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 130.24' / 130.00' S= 0.0240 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.79 sf
#2	Discarded	129.00'	**2.410 in/hr Exfiltration over Surface area**
#3	Device 1	130.40'	**3.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600
#4	Device 1	132.05'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.11 cfs @ 10.80 hrs HW=129.04' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.11 cfs)

Primary OutFlow Max=0.09 cfs @ 12.67 hrs HW=130.68' (Free Discharge)
└─**1=Culvert** (Passes 0.09 cfs of 0.89 cfs potential flow)
  ├─**3=Orifice/Grate** (Orifice Controls 0.09 cfs @ 2.14 fps)
  └─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond IB1: Infiltration Basin 1 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

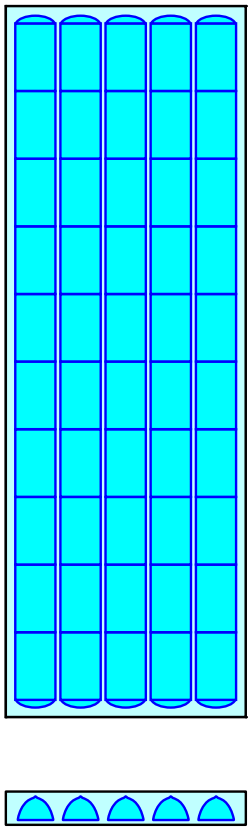
10 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 72.82' Row Length +12.0" End Stone x 2 = 74.82' Base Length
5 Rows x 51.0" Wide + 6.0" Spacing x 4 + 12.0" Side Stone x 2 = 25.25' Base Width
6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

50 Chambers x 45.9 cf = 2,297.0 cf Chamber Storage

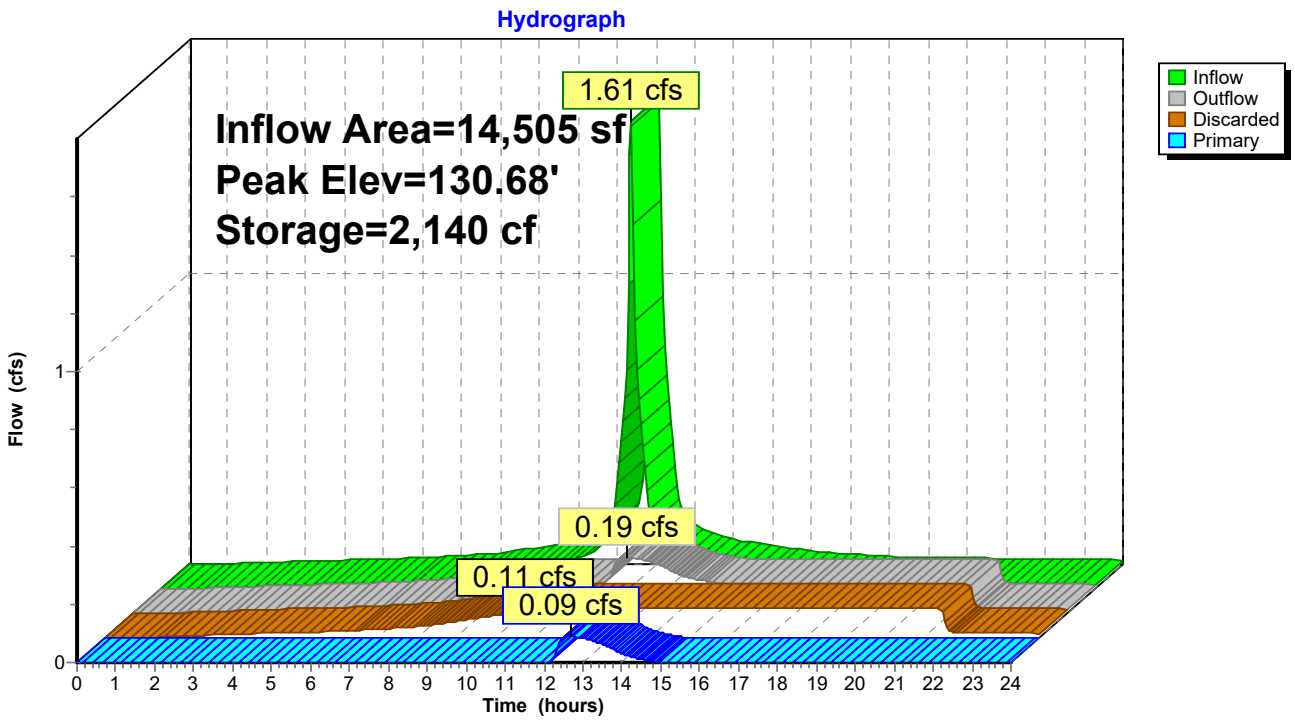
6,611.9 cf Field - 2,297.0 cf Chambers = 4,314.9 cf Stone x 40.0% Voids = 1,726.0 cf Stone Storage

Chamber Storage + Stone Storage = 4,023.0 cf = 0.092 af
Overall Storage Efficiency = 60.8%
Overall System Size = 74.82' x 25.25' x 3.50'

50 Chambers
244.9 cy Field
159.8 cy Stone



Pond IB1: Infiltration Basin 1



Stage-Area-Storage for Pond IB1: Infiltration Basin 1

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
129.00	**1,889**	0
129.05	1,889	38
129.10	1,889	76
129.15	1,889	113
129.20	1,889	151
129.25	1,889	189
129.30	1,889	227
129.35	1,889	264
129.40	1,889	302
129.45	1,889	340
129.50	1,889	378
129.55	1,889	455
129.60	1,889	533
129.65	1,889	610
129.70	1,889	687
129.75	1,889	764
129.80	1,889	841
129.85	1,889	917
129.90	1,889	993
129.95	1,889	1,069
130.00	1,889	1,145
130.05	1,889	1,220
130.10	1,889	1,295
130.15	1,889	1,369
130.20	1,889	1,444
130.25	1,889	1,517
130.30	1,889	1,591
130.35	1,889	1,664
130.40	1,889	1,736
130.45	1,889	1,809
130.50	1,889	1,880
130.55	1,889	1,952
130.60	1,889	2,022
130.65	1,889	2,093
130.70	1,889	2,162
130.75	1,889	2,232
130.80	1,889	2,300
130.85	1,889	2,368
130.90	1,889	2,435
130.95	1,889	2,502
131.00	1,889	2,568
131.05	1,889	2,634
131.10	1,889	2,698
131.15	1,889	2,762
131.20	1,889	2,825
131.25	1,889	2,887
131.30	1,889	2,948
131.35	1,889	3,008
131.40	1,889	3,067
131.45	1,889	3,124
131.50	1,889	3,181
131.55	1,889	3,236
131.60	1,889	3,290
131.65	1,889	3,342
131.70	1,889	3,392
131.75	1,889	3,439
131.80	1,889	3,484
131.85	1,889	3,526
131.90	1,889	3,567
131.95	1,889	3,607
132.00	1,889	3,645
132.05	1,889	3,683
132.10	1,889	3,721
132.15	1,889	3,758
132.20	1,889	3,796
132.25	1,889	3,834
132.30	1,889	3,872
132.35	1,889	3,910
132.40	1,889	3,947
132.45	1,889	3,985
132.50	1,889	**4,023**

Summary for Pond IB2a: Infiltration Basin 2a

Inflow Area =	26,310 sf, 88.91% Impervious, Inflow Depth > 4.37" for 10-YR event				
Inflow =	2.81 cfs @	12.09 hrs,	Volume=	9,590 cf	
Outflow =	1.10 cfs @	12.32 hrs,	Volume=	7,947 cf,	Atten= 61%, Lag= 13.9 min
Discarded =	0.06 cfs @	8.45 hrs,	Volume=	3,701 cf	
Primary =	1.04 cfs @	12.32 hrs,	Volume=	4,246 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 129.57' @ 12.32 hrs Surf.Area= 2,458 sf Storage= 3,488 cf

Plug-Flow detention time= 137.2 min calculated for 7,931 cf (83% of inflow)
Center-of-Mass det. time= 69.2 min (841.8 - 772.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	127.50'	2,392 cf	**30.00'W x 81.94'L x 3.67'H Field A** 9,013 cf Overall - 3,032 cf Embedded = 5,981 cf x 40.0% Voids
#2A	128.00'	3,032 cf	**ADS_StormTech SC-740 +Cap** x 66 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 6 Rows of 11 Chambers
		5,424 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	128.60'	**15.0" Round Culvert** L= 55.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 128.60' / 128.00' S= 0.0109 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 1.23 sf
#2	Discarded	127.50'	**1.020 in/hr Exfiltration over Surface area**
#3	Device 1	128.80'	**10.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600
#4	Device 1	130.10'	**10.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600
#5	Device 1	130.99'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.06 cfs @ 8.45 hrs HW=127.54' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=1.04 cfs @ 12.32 hrs HW=129.57' (Free Discharge)
└─**1=Culvert** (Passes 1.04 cfs of 3.81 cfs potential flow)
  ├─**3=Orifice/Grate** (Orifice Controls 1.04 cfs @ 3.73 fps)
  ├─**4=Orifice/Grate** (Controls 0.00 cfs)
  └─**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond IB2a: Infiltration Basin 2a - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

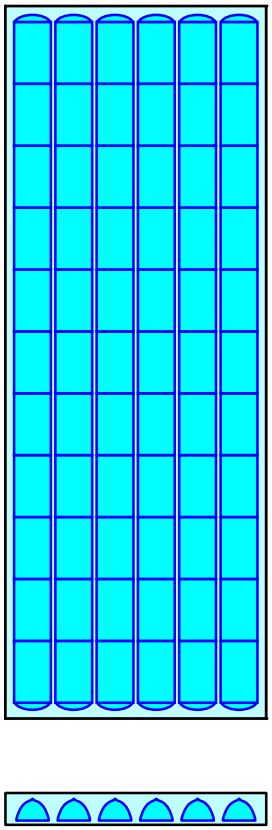
11 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 79.94' Row Length +12.0" End Stone x 2 = 81.94' Base Length
6 Rows x 51.0" Wide + 6.0" Spacing x 5 + 12.0" Side Stone x 2 = 30.00' Base Width
6.0" Base + 30.0" Chamber Height + 8.0" Cover = 3.67' Field Height

66 Chambers x 45.9 cf = 3,032.0 cf Chamber Storage

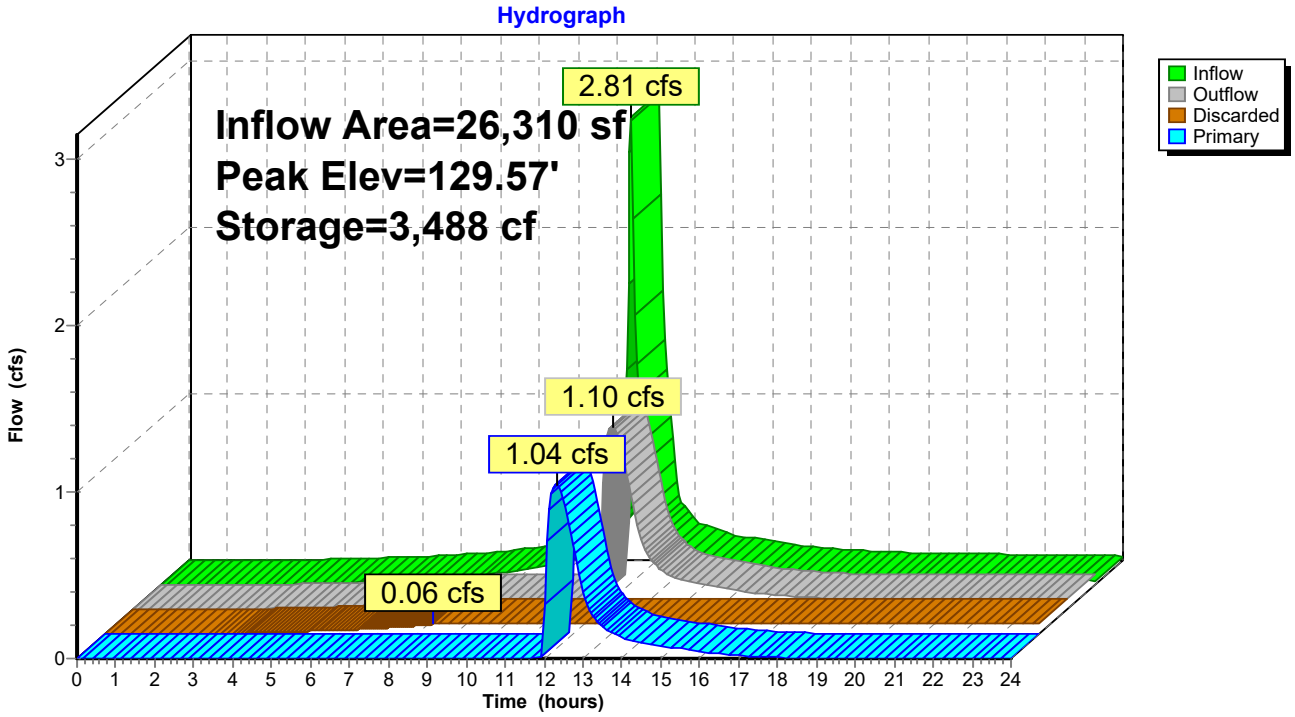
9,013.0 cf Field - 3,032.0 cf Chambers = 5,981.0 cf Stone x 40.0% Voids = 2,392.4 cf Stone Storage

Chamber Storage + Stone Storage = 5,424.4 cf = 0.125 af
Overall Storage Efficiency = 60.2%
Overall System Size = 81.94' x 30.00' x 3.67'

66 Chambers
333.8 cy Field
221.5 cy Stone



Pond IB2a: Infiltration Basin 2a



Stage-Area-Storage for Pond IB2a: Infiltration Basin 2a

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
127.50	**2,458**	0
127.55	2,458	49
127.60	2,458	98
127.65	2,458	147
127.70	2,458	197
127.75	2,458	246
127.80	2,458	295
127.85	2,458	344
127.90	2,458	393
127.95	2,458	442
128.00	2,458	492
128.05	2,458	593
128.10	2,458	695
128.15	2,458	796
128.20	2,458	897
128.25	2,458	998
128.30	2,458	1,099
128.35	2,458	1,199
128.40	2,458	1,298
128.45	2,458	1,398
128.50	2,458	1,497
128.55	2,458	1,595
128.60	2,458	1,694
128.65	2,458	1,791
128.70	2,458	1,888
128.75	2,458	1,985
128.80	2,458	2,081
128.85	2,458	2,177
128.90	2,458	2,272
128.95	2,458	2,367
129.00	2,458	2,461
129.05	2,458	2,554
129.10	2,458	2,647
129.15	2,458	2,739
129.20	2,458	2,830
129.25	2,458	2,921
129.30	2,458	3,011
129.35	2,458	3,100
129.40	2,458	3,188
129.45	2,458	3,275
129.50	2,458	3,362
129.55	2,458	3,447
129.60	2,458	3,532
129.65	2,458	3,615
129.70	2,458	3,698
129.75	2,458	3,779
129.80	2,458	3,858
129.85	2,458	3,937
129.90	2,458	4,014
129.95	2,458	4,089
130.00	2,458	4,164
130.05	2,458	4,236
130.10	2,458	4,306
130.15	2,458	4,374
130.20	2,458	4,439
130.25	2,458	4,501
130.30	2,458	4,559
130.35	2,458	4,614
130.40	2,458	4,667
130.45	2,458	4,719
130.50	2,458	4,769
130.55	2,458	4,818
130.60	2,458	4,867
130.65	2,458	4,916
130.70	2,458	4,966
130.75	2,458	5,015
130.80	2,458	5,064
130.85	2,458	5,113
130.90	2,458	5,162
130.95	2,458	5,211
131.00	2,458	5,261
131.05	2,458	5,310
131.10	2,458	5,359
131.15	2,458	**5,408**

Summary for Pond IB2c: Infiltration Basin Area 2c

Inflow Area =	15,551 sf, 65.27% Impervious, Inflow Depth > 3.53" for 10-YR event				
Inflow =	1.43 cfs @	12.09 hrs,	Volume=	4,574 cf	
Outflow =	0.46 cfs @	12.40 hrs,	Volume=	4,569 cf,	Atten= 68%, Lag= 18.8 min
Discarded =	0.06 cfs @	10.60 hrs,	Volume=	2,956 cf	
Primary =	0.40 cfs @	12.40 hrs,	Volume=	1,613 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 131.09' @ 12.40 hrs Surf.Area= 2,373 sf Storage= 1,500 cf

Plug-Flow detention time= 106.9 min calculated for 4,560 cf (100% of inflow)
Center-of-Mass det. time= 106.0 min (909.4 - 803.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	130.00'	1,505 cf	**27.00'W x 87.91'L x 2.00'H Field A** 4,747 cf Overall - 985 cf Embedded = 3,762 cf x 40.0% Voids
#2A	130.50'	985 cf	**ADS_StormTech SC-160LP +Cap** x 144 Inside #1 Effective Size= 18.0"W x 12.0"H => 0.96 sf x 7.12'L = 6.8 cf Overall Size= 25.0"W x 12.0"H x 7.56'L with 0.44' Overlap 12 Rows of 12 Chambers
		2,489 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	130.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	129.20'	**8.0" Round Culvert** L= 14.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 129.20' / 129.00' S= 0.0143 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.35 sf
#3	Device 2	130.70'	**11.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600
#4	Device 2	131.40'	**2.0" Vert. Orifice/Grate** C= 0.600
#5	Device 2	131.88'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.06 cfs @ 10.60 hrs HW=130.02' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=0.40 cfs @ 12.40 hrs HW=131.09' (Free Discharge)
└─**2=Culvert** (Passes 0.40 cfs of 2.53 cfs potential flow)
  ├─**3=Orifice/Grate** (Orifice Controls 0.40 cfs @ 2.65 fps)
  ├─**4=Orifice/Grate** (Controls 0.00 cfs)
  └─**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond IB2c: Infiltration Basin Area 2c - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-160LP +Cap (ADS StormTech® SC-160LP with cap length)
Effective Size= 18.0"W x 12.0"H => 0.96 sf x 7.12'L = 6.8 cf
Overall Size= 25.0"W x 12.0"H x 7.56'L with 0.44' Overlap

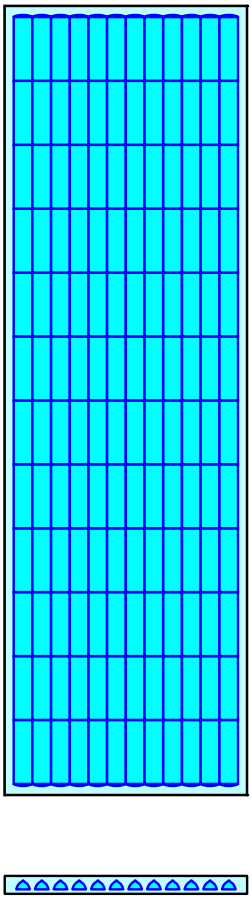
12 Chambers/Row x 7.12' Long +0.23' Cap Length x 2 = 85.91' Row Length +12.0" End Stone x 2 = 87.91' Base Length
12 Rows x 25.0" Wide + 12.0" Side Stone x 2 = 27.00' Base Width
6.0" Base + 12.0" Chamber Height + 6.0" Cover = 2.00' Field Height

144 Chambers x 6.8 cf = 984.5 cf Chamber Storage

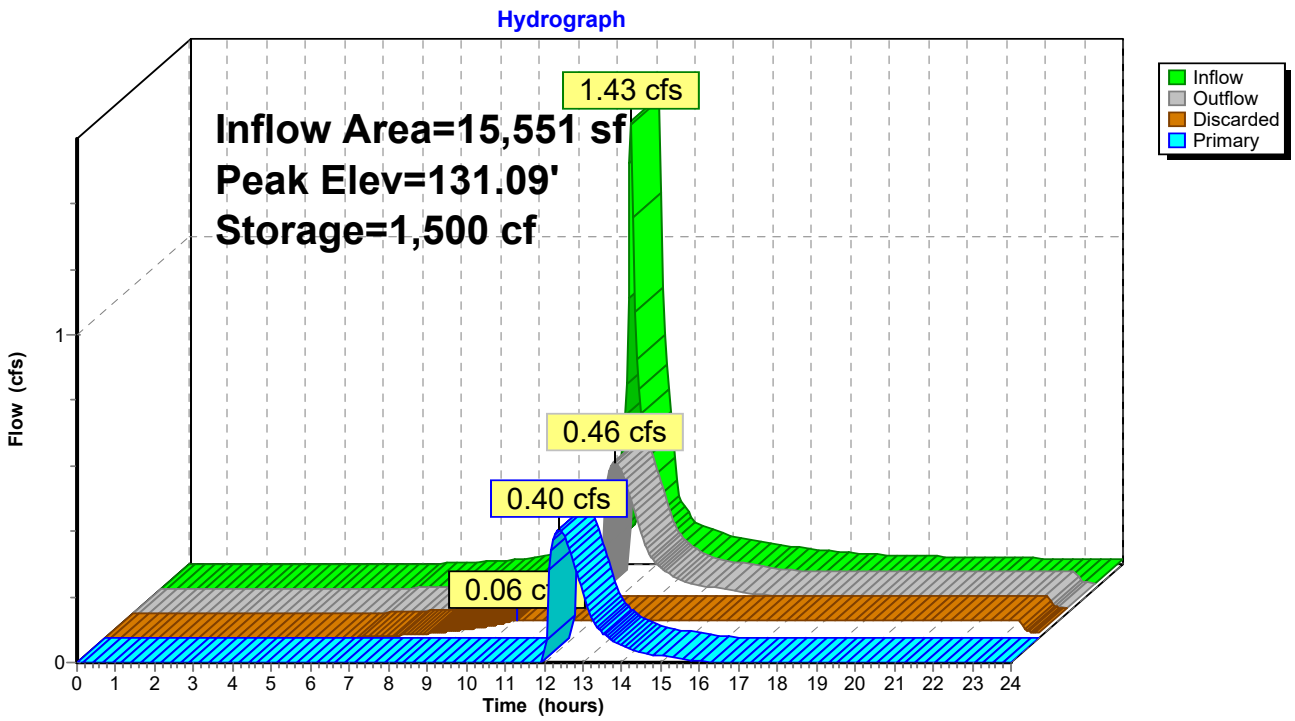
4,747.0 cf Field - 984.5 cf Chambers = 3,762.4 cf Stone x 40.0% Voids = 1,505.0 cf Stone Storage

Chamber Storage + Stone Storage = 2,489.5 cf = 0.057 af
Overall Storage Efficiency = 52.4%
Overall System Size = 87.91' x 27.00' x 2.00'

144 Chambers
175.8 cy Field
139.3 cy Stone



Pond IB2c: Infiltration Basin Area 2c



Stage-Area-Storage for Pond IB2c: Infiltration Basin Area 2c

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
130.00	**2,373**	0	131.06	2,373	1,457
130.02	2,373	19	131.08	2,373	1,489
130.04	2,373	38	131.10	2,373	1,519
130.06	2,373	57	131.12	2,373	1,550
130.08	2,373	76	131.14	2,373	1,580
130.10	2,373	95	131.16	2,373	1,609
130.12	2,373	114	131.18	2,373	1,638
130.14	2,373	133	131.20	2,373	1,667
130.16	2,373	152	131.22	2,373	1,695
130.18	2,373	171	131.24	2,373	1,722
130.20	2,373	190	131.26	2,373	1,749
130.22	2,373	209	131.28	2,373	1,774
130.24	2,373	228	131.30	2,373	1,799
130.26	2,373	247	131.32	2,373	1,824
130.28	2,373	266	131.34	2,373	1,847
130.30	2,373	285	131.36	2,373	1,870
130.32	2,373	304	131.38	2,373	1,892
130.34	2,373	323	131.40	2,373	1,914
130.36	2,373	342	131.42	2,373	1,935
130.38	2,373	361	131.44	2,373	1,955
130.40	2,373	380	131.46	2,373	1,976
130.42	2,373	399	131.48	2,373	1,995
130.44	2,373	418	131.50	2,373	2,015
130.46	2,373	437	131.52	2,373	2,034
130.48	2,373	456	131.54	2,373	2,053
130.50	2,373	475	131.56	2,373	2,072
130.52	2,373	512	131.58	2,373	2,091
130.54	2,373	549	131.60	2,373	2,110
130.56	2,373	587	131.62	2,373	2,129
130.58	2,373	624	131.64	2,373	2,148
130.60	2,373	661	131.66	2,373	2,167
130.62	2,373	698	131.68	2,373	2,186
130.64	2,373	735	131.70	2,373	2,205
130.66	2,373	772	131.72	2,373	2,224
130.68	2,373	808	131.74	2,373	2,243
130.70	2,373	844	131.76	2,373	2,262
130.72	2,373	880	131.78	2,373	2,281
130.74	2,373	916	131.80	2,373	2,300
130.76	2,373	952	131.82	2,373	2,319
130.78	2,373	987	131.84	2,373	2,338
130.80	2,373	1,022	131.86	2,373	2,357
130.82	2,373	1,057	131.88	2,373	2,376
130.84	2,373	1,092	131.90	2,373	2,395
130.86	2,373	1,127	131.92	2,373	2,414
130.88	2,373	1,161	131.94	2,373	2,433
130.90	2,373	1,195	131.96	2,373	2,452
130.92	2,373	1,229	131.98	2,373	2,471
130.94	2,373	1,263	132.00	2,373	**2,489**
130.96	2,373	1,296			
130.98	2,373	1,329			
131.00	2,373	1,361			
131.02	2,373	1,394			
131.04	2,373	1,426			

Summary for Pond IB2e: Infiltration Basin 2b

Inflow Area =	15,464 sf, 93.24% Impervious, Inflow Depth > 4.49" for 10-YR event				
Inflow =	1.67 cfs @	12.09 hrs,	Volume=	5,781 cf	
Outflow =	0.28 cfs @	12.56 hrs,	Volume=	5,778 cf,	Atten= 83%, Lag= 28.4 min
Discarded =	0.14 cfs @	11.30 hrs,	Volume=	5,231 cf	
Primary =	0.13 cfs @	12.56 hrs,	Volume=	547 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 131.73' @ 12.56 hrs Surf.Area= 2,592 sf Storage= 1,932 cf

Plug-Flow detention time= 74.1 min calculated for 5,778 cf (100% of inflow)
Center-of-Mass det. time= 73.8 min (841.3 - 767.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	130.50'	2,002 cf	**34.83'W x 74.40'L x 2.50'H Field A** 6,479 cf Overall - 1,474 cf Embedded = 5,005 cf x 40.0% Voids
#2A	131.00'	1,474 cf	**ADS_StormTech SC-310 +Cap** x 100 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 10 Rows of 10 Chambers
		3,476 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	130.85'	**15.0" Round Culvert Barrel** L= 69.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 130.85' / 130.50' S= 0.0051 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 1.23 sf
#2	Discarded	130.50'	**2.410 in/hr Exfiltration over Surface area**
#3	Device 1	131.40'	**3.0" W x 3.0" H Vert. Orifice/Grate** C= 0.600
#4	Device 1	132.63'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.14 cfs @ 11.30 hrs HW=130.53' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.14 cfs)

Primary OutFlow Max=0.13 cfs @ 12.56 hrs HW=131.73' (Free Discharge)
└─**1=Culvert Barrel** (Passes 0.13 cfs of 2.55 cfs potential flow)
  ├─**3=Orifice/Grate** (Orifice Controls 0.13 cfs @ 2.12 fps)
  └─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond IB2e: Infiltration Basin 2b - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-310 +Cap (ADS StormTech® SC-310 with cap length)
Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf
Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap

34.0" Wide + 6.0" Spacing = 40.0" C-C Row Spacing

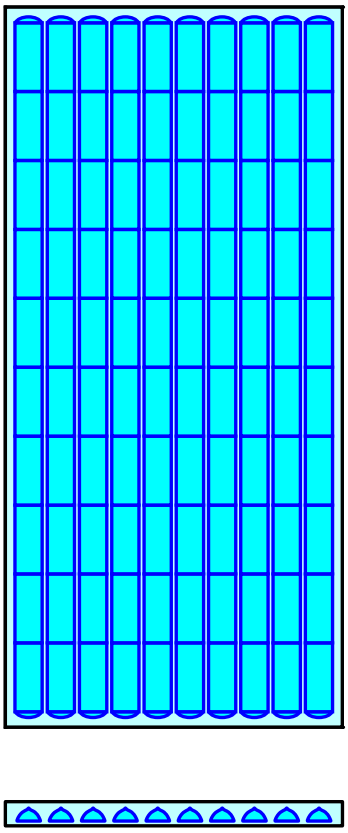
10 Chambers/Row x 7.12' Long +0.60' Cap Length x 2 = 72.40' Row Length +12.0" End Stone x 2 = 74.40' Base Length
10 Rows x 34.0" Wide + 6.0" Spacing x 9 + 12.0" Side Stone x 2 = 34.83' Base Width
6.0" Base + 16.0" Chamber Height + 8.0" Cover = 2.50' Field Height

100 Chambers x 14.7 cf = 1,474.2 cf Chamber Storage

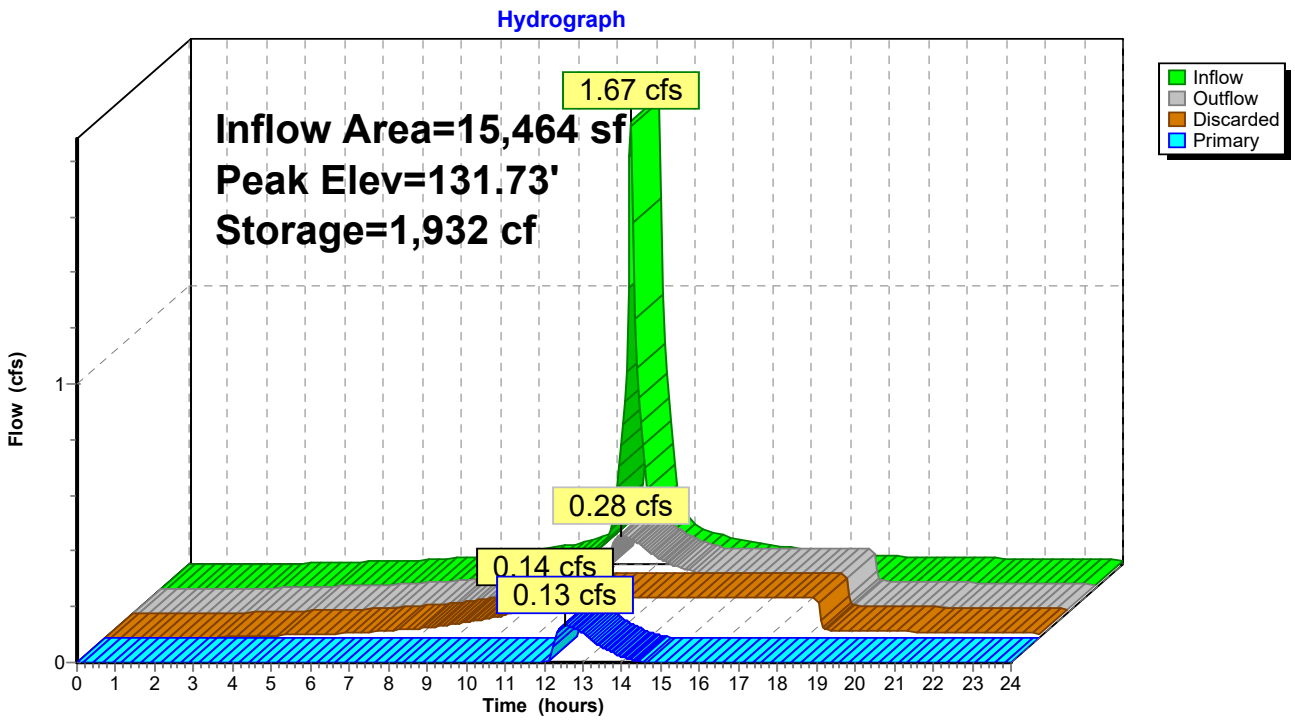
6,479.0 cf Field - 1,474.2 cf Chambers = 5,004.8 cf Stone x 40.0% Voids = 2,001.9 cf Stone Storage

Chamber Storage + Stone Storage = 3,476.1 cf = 0.080 af
Overall Storage Efficiency = 53.7%
Overall System Size = 74.40' x 34.83' x 2.50'

100 Chambers
240.0 cy Field
185.4 cy Stone



Pond IB2e: Infiltration Basin 2b



Stage-Area-Storage for Pond IB2e: Infiltration Basin 2b

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
130.50	**2,592**	0
130.55	2,592	52
130.60	2,592	104
130.65	2,592	155
130.70	2,592	207
130.75	2,592	259
130.80	2,592	311
130.85	2,592	363
130.90	2,592	415
130.95	2,592	466
131.00	2,592	518
131.05	2,592	622
131.10	2,592	724
131.15	2,592	827
131.20	2,592	928
131.25	2,592	1,029
131.30	2,592	1,129
131.35	2,592	1,227
131.40	2,592	1,325
131.45	2,592	1,422
131.50	2,592	1,517
131.55	2,592	1,611
131.60	2,592	1,703
131.65	2,592	1,794
131.70	2,592	1,884
131.75	2,592	1,972
131.80	2,592	2,057
131.85	2,592	2,141
131.90	2,592	2,222
131.95	2,592	2,301
132.00	2,592	2,377
132.05	2,592	2,449
132.10	2,592	2,516
132.15	2,592	2,579
132.20	2,592	2,638
132.25	2,592	2,695
132.30	2,592	2,750
132.35	2,592	2,802
132.40	2,592	2,854
132.45	2,592	2,906
132.50	2,592	2,958
132.55	2,592	3,010
132.60	2,592	3,061
132.65	2,592	3,113
132.70	2,592	3,165
132.75	2,592	3,217
132.80	2,592	3,269
132.85	2,592	3,321
132.90	2,592	3,372
132.95	2,592	3,424
133.00	2,592	**3,476**

Summary for Subcatchment PD-1: Prop. Drainage Area 1

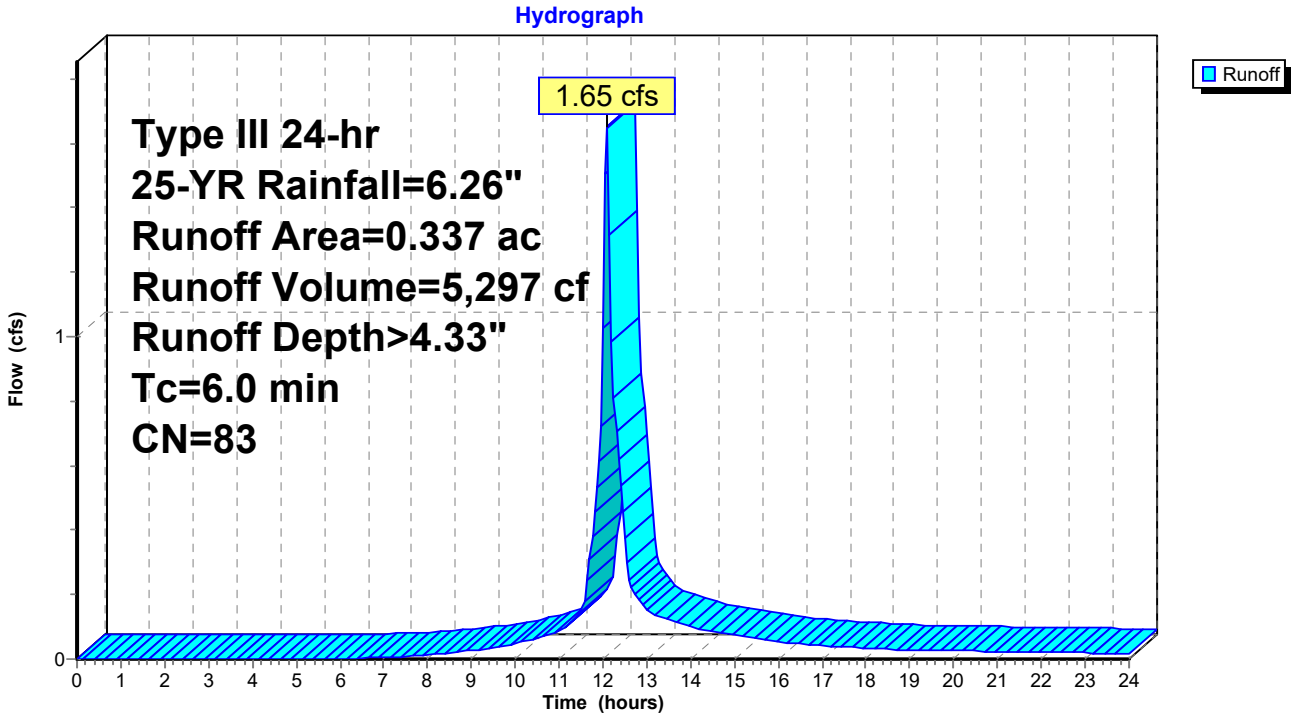
Runoff = 1.65 cfs @ 12.09 hrs, Volume= 5,297 cf, Depth> 4.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=6.26"

	Area (ac)	CN	Description
*	0.074	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.070	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.193	98	Paved parking
	0.337	83	Weighted Average
	0.144		42.73% Pervious Area
	0.193		57.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-1: Prop. Drainage Area 1



Summary for Subcatchment PD-2a: Prop. Drainage Area 2a

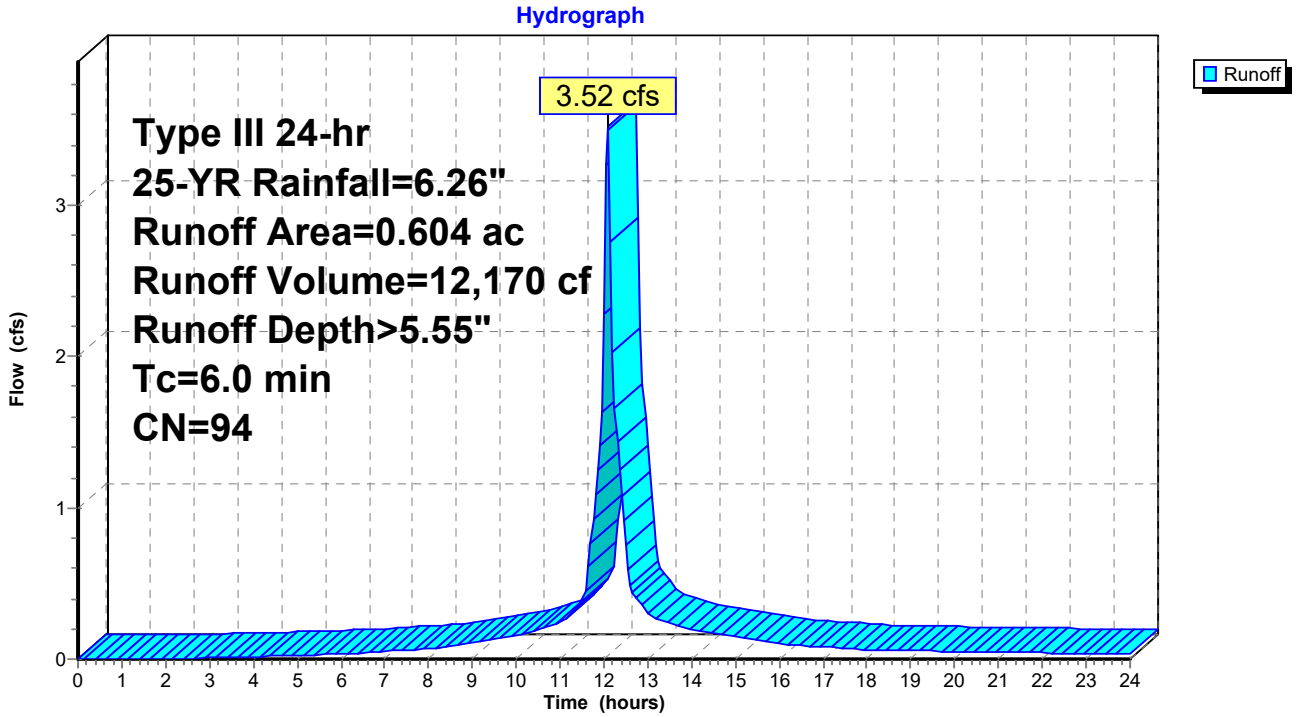
Runoff = 3.52 cfs @ 12.09 hrs, Volume= 12,170 cf, Depth> 5.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=6.26"

	Area (ac)	CN	Description
*	0.038	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.029	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.537	98	Paved parking
	0.604	94	Weighted Average
	0.067		11.09% Pervious Area
	0.537		88.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct**

Subcatchment PD-2a: Prop. Drainage Area 2a



Summary for Subcatchment PD-2b: Prop. Drainage Area 2b

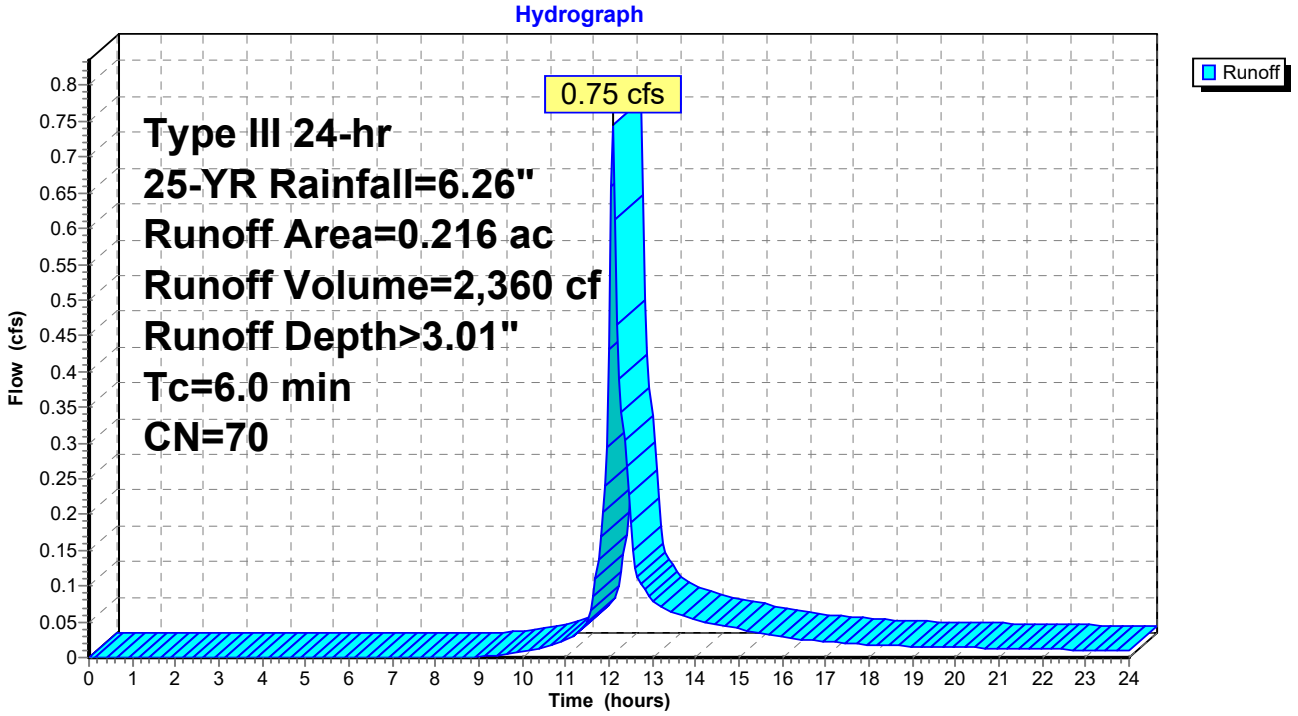
Runoff = 0.75 cfs @ 12.09 hrs, Volume= 2,360 cf, Depth> 3.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=6.26"

	Area (ac)	CN	Description
*	0.174	74	Woods/grass comb., Fair, HSG B/D, 13
*	0.018	43	Woods/grass comb., Fair, HSG A. 36A
	0.024	65	Woods/grass comb., Fair, HSG B
	0.216	70	Weighted Average
	0.216		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-2b: Prop. Drainage Area 2b



Summary for Subcatchment PD-2c: Prop. Drainage Area 2c

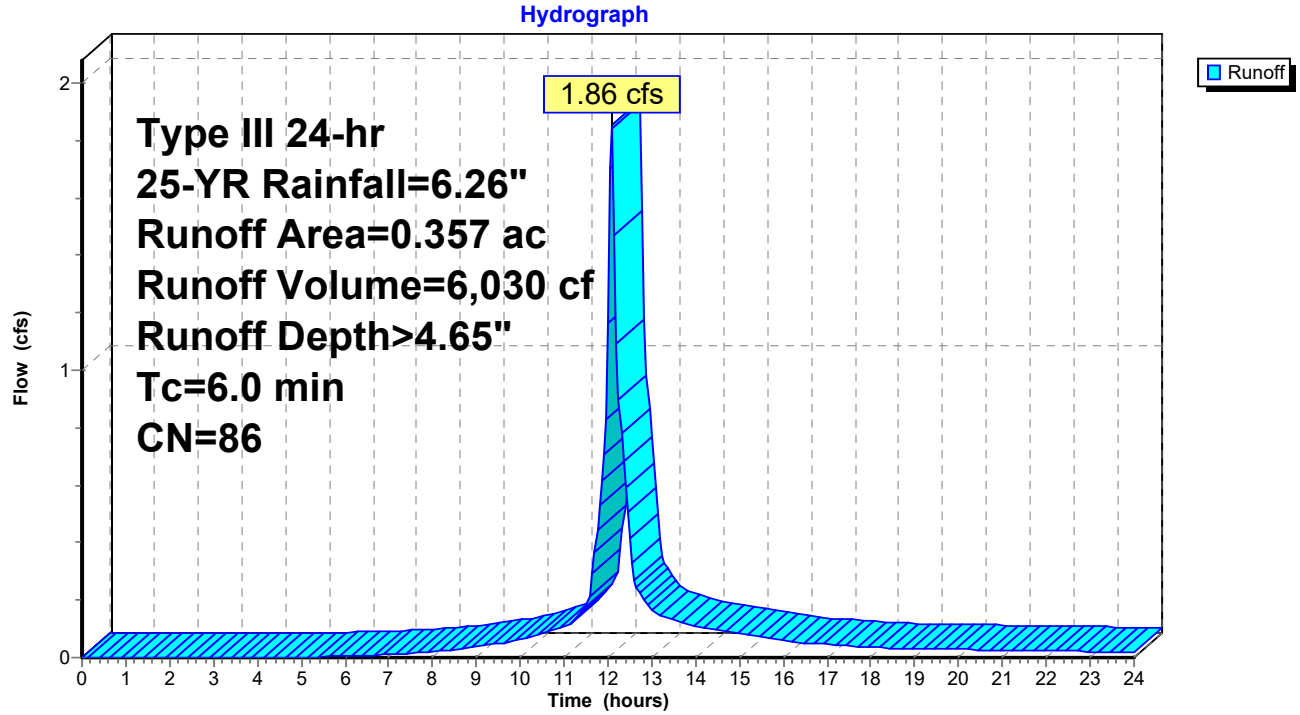
Runoff = 1.86 cfs @ 12.09 hrs, Volume= 6,030 cf, Depth> 4.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=6.26"

	Area (ac)	CN	Description
*	0.061	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.042	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.021	49	50-75% Grass cover, Fair, HSG A, 36A
	0.233	98	Paved parking, HSG D
	0.357	86	Weighted Average
	0.124		34.73% Pervious Area
	0.233		65.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-2c: Prop. Drainage Area 2c



Summary for Subcatchment PD-2d: Prop. Drainage Area 2d

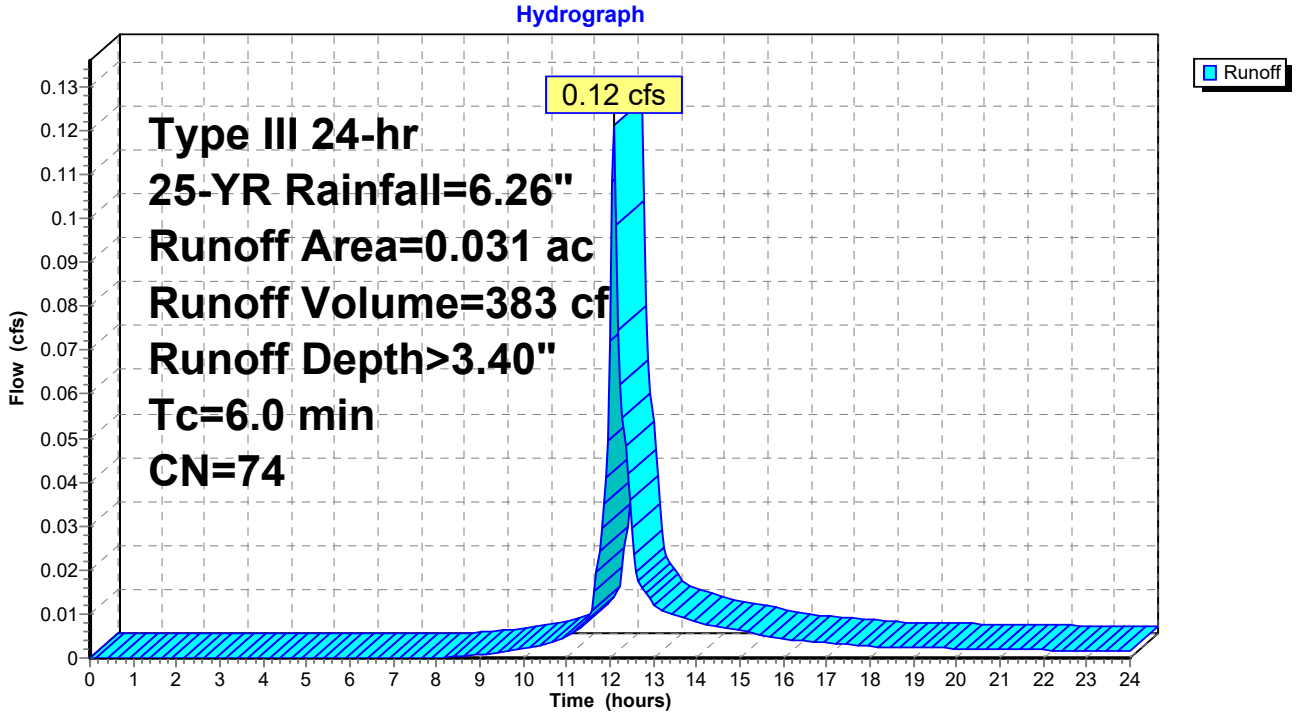
Runoff = 0.12 cfs @ 12.09 hrs, Volume= 383 cf, Depth> 3.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=6.26"

	Area (ac)	CN	Description
*	0.031	74	Woods/grass comb., Fair, HSG B/D, 13
	0.031		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-2d: Prop. Drainage Area 2d



Summary for Subcatchment PD-2e: Prop. Drainage Area 2e

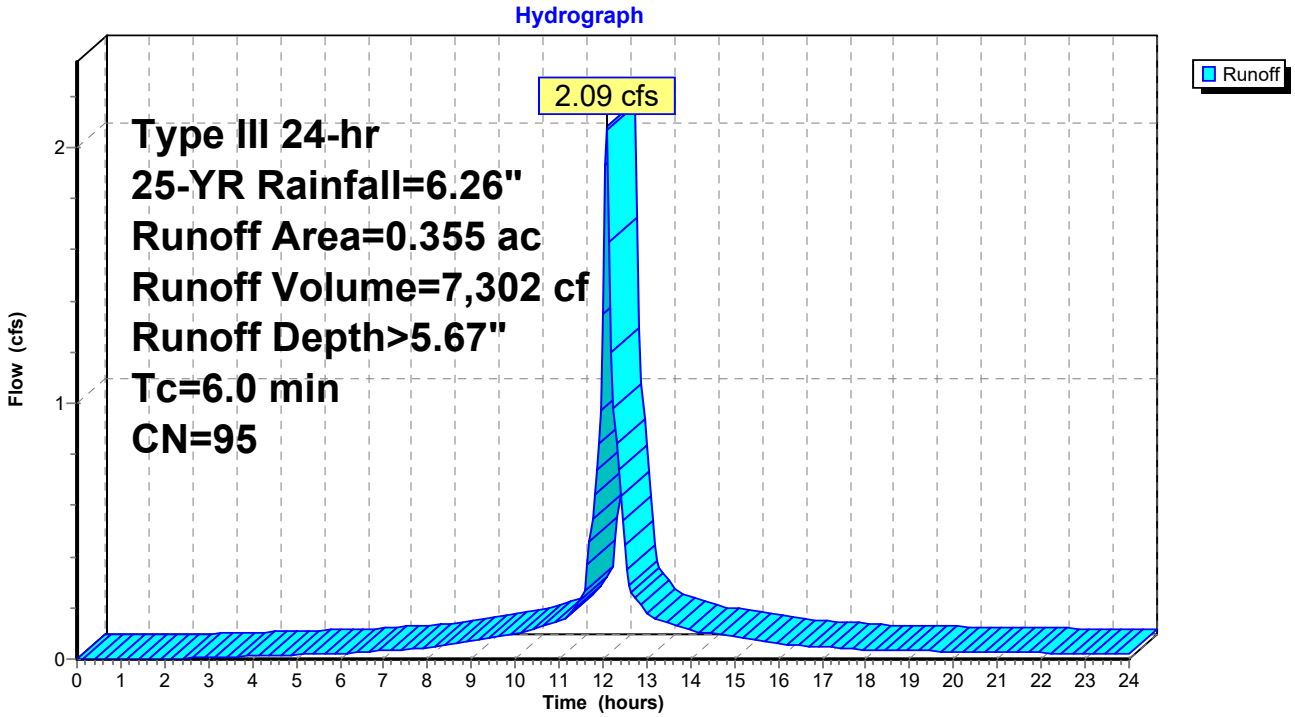
Runoff = 2.09 cfs @ 12.09 hrs, Volume= 7,302 cf, Depth> 5.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=6.26"

	Area (ac)	CN	Description
*	0.004	43	Woods/grass comb., Fair, HSG A, 36A
*	0.020	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.331	98	Paved parking
	0.355	95	Weighted Average
	0.024		6.76% Pervious Area
	0.331		93.24% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-2e: Prop. Drainage Area 2e



Summary for Subcatchment PD-2f: Prop. Drainage Area 2d

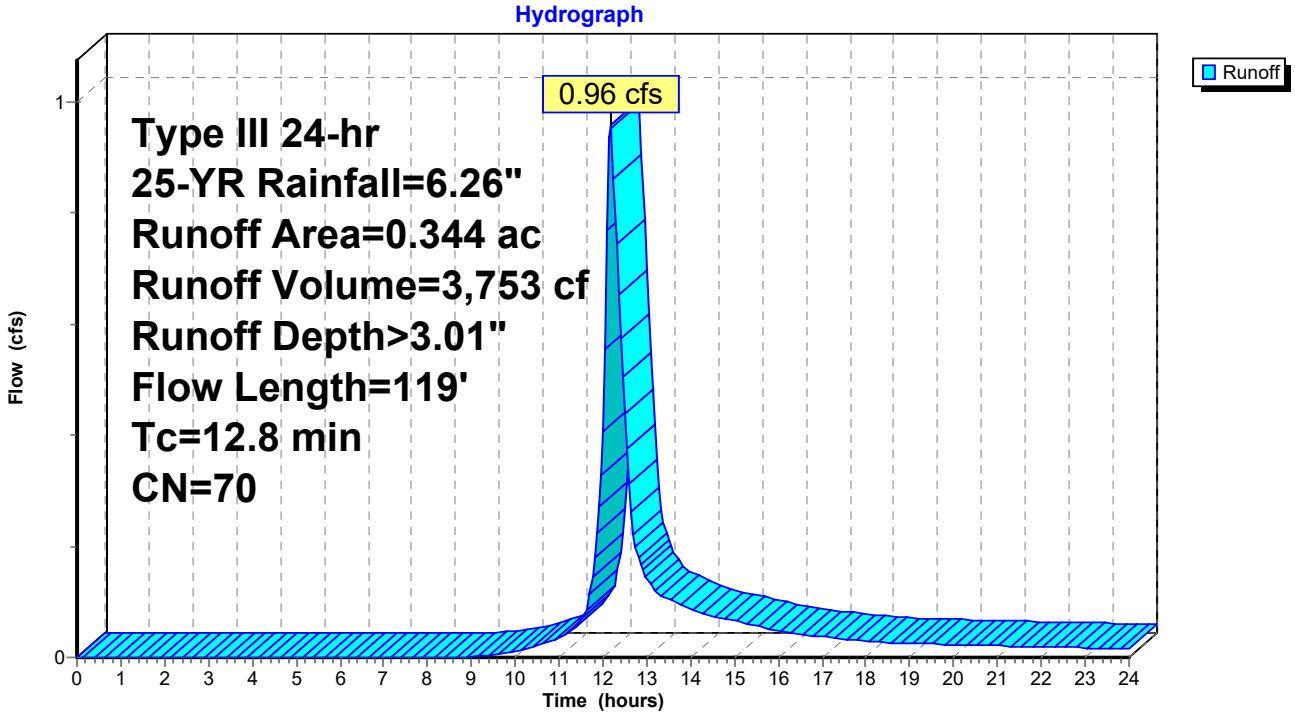
Runoff = 0.96 cfs @ 12.18 hrs, Volume= 3,753 cf, Depth> 3.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=6.26"

	Area (ac)	CN	Description
*	0.296	74	Woods/grass comb., Fair, HSG B/D, 13
	0.048	43	Woods/grass comb., Fair, HSG A
	0.344	70	Weighted Average
	0.344		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.9	23	0.1600	0.13		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.18"
8.4	36	0.0270	0.07		**Sheet Flow, B-C** Woods: Light underbrush n= 0.400 P2= 3.18"
1.5	60	0.0167	0.65		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
12.8	119	Total			

Subcatchment PD-2f: Prop. Drainage Area 2d



Summary for Subcatchment PD-3a: Prop. Drainage Area 3a

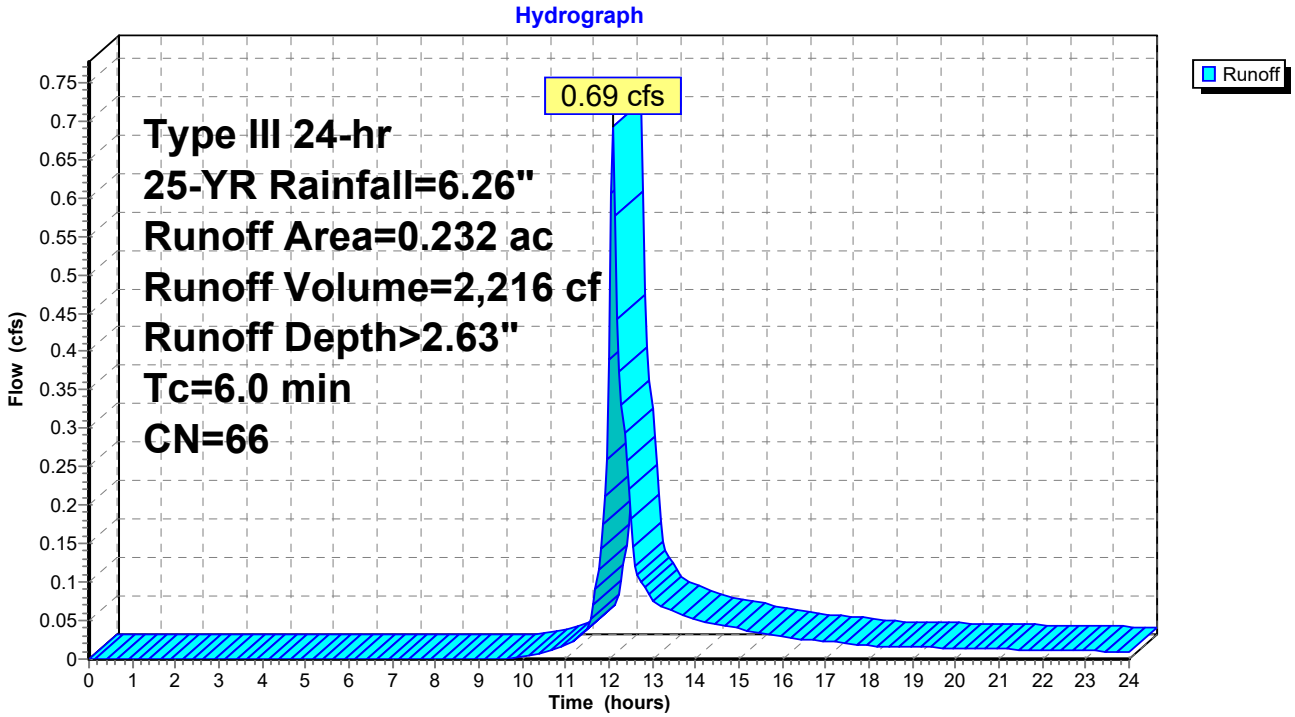
Runoff = 0.69 cfs @ 12.10 hrs, Volume= 2,216 cf, Depth> 2.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=6.26"

	Area (ac)	CN	Description
*	0.120	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.071	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.041	98	Paved parking
	0.232	66	Weighted Average
	0.191		82.33% Pervious Area
	0.041		17.67% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct**

Subcatchment PD-3a: Prop. Drainage Area 3a



Summary for Subcatchment PD-3b: Prop. Drainage Area 3b

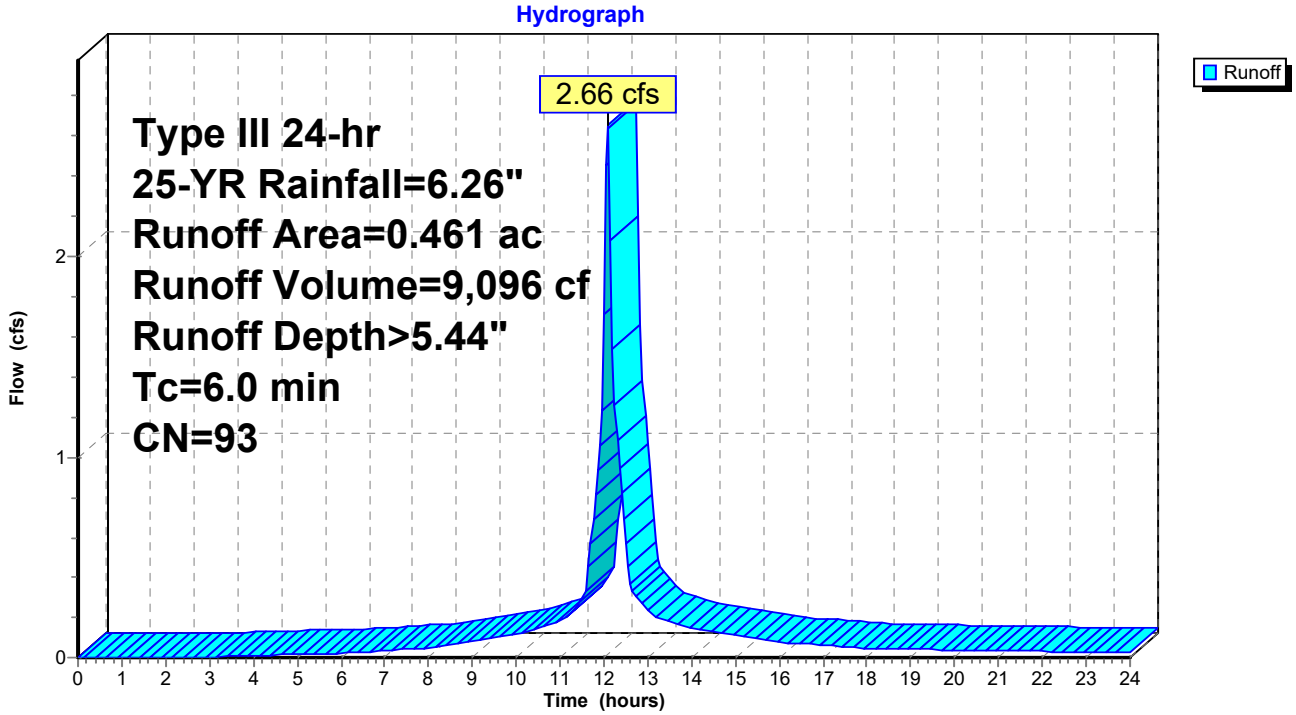
Runoff = 2.66 cfs @ 12.09 hrs, Volume= 9,096 cf, Depth> 5.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=6.26"

	Area (ac)	CN	Description
*	0.093	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.019	79	50-75% Grass cover, Fair, HSG C, 701A
*	0.016	98	Paved parking
*	0.333	98	Roofing
	0.461	93	Weighted Average
	0.112		24.30% Pervious Area
	0.349		75.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-3b: Prop. Drainage Area 3b



Summary for Subcatchment PD-3c: Prop. Drainage Area 3c

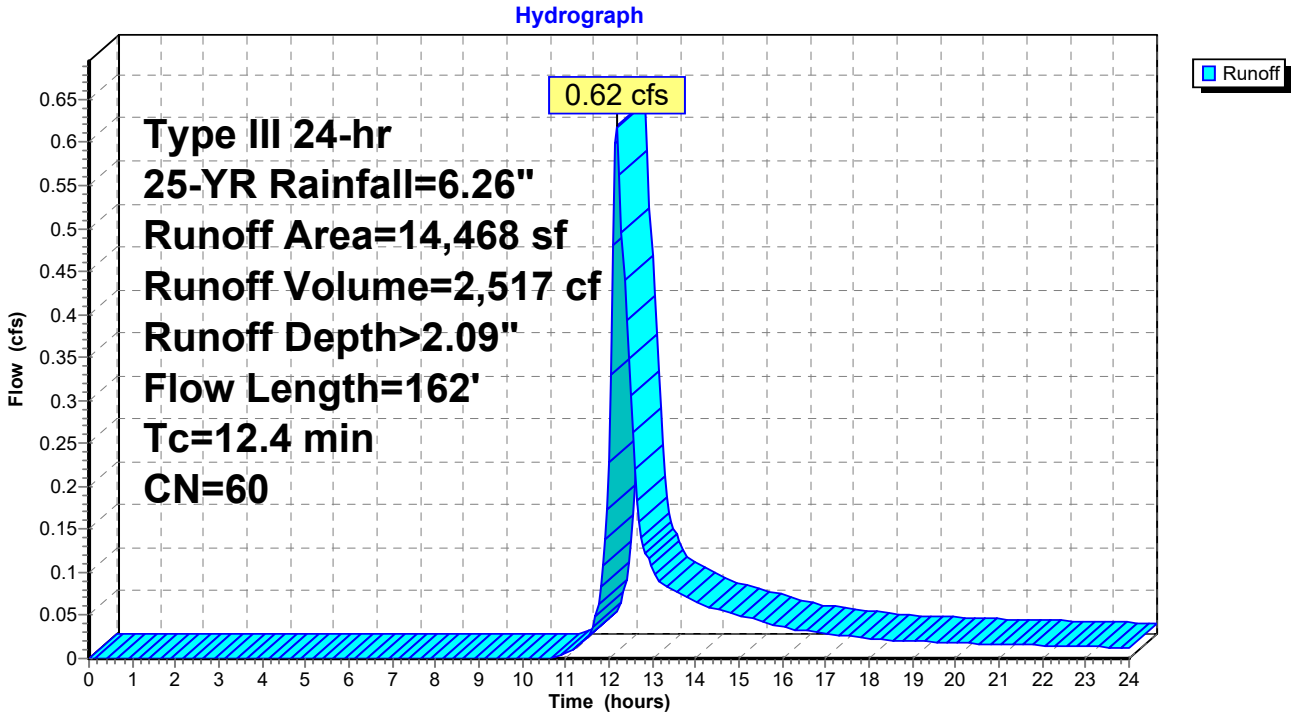
Runoff = 0.62 cfs @ 12.19 hrs, Volume= 2,517 cf, Depth> 2.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=6.26"

	Area (sf)	CN	Description
*	6,684	43	Woods/grass comb., Fair, HSG A, 36A
*	5,545	74	Woods/grass comb., Fair, HSG C
	1,501	76	Woods/grass comb., Fair, HSG C
*	738	77	50-75% Grass cover, Fair, HSG C
	14,468	60	Weighted Average
	14,468		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.8	8	0.0625	0.07		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.18"
3.4	17	0.0580	0.08		**Sheet Flow, B-C** Woods: Light underbrush n= 0.400 P2= 3.18"
3.2	16	0.0625	0.08		**Sheet Flow, C-D** Woods: Light underbrush n= 0.400 P2= 3.18"
1.5	9	0.1250	0.10		**Sheet Flow, D-E** Woods: Light underbrush n= 0.400 P2= 3.18"
2.5	112	0.0220	0.74		**Shallow Concentrated Flow, E-F** Woodland Kv= 5.0 fps
12.4	162	Total			

Subcatchment PD-3c: Prop. Drainage Area 3c



Summary for Subcatchment RD-1: Roof 1

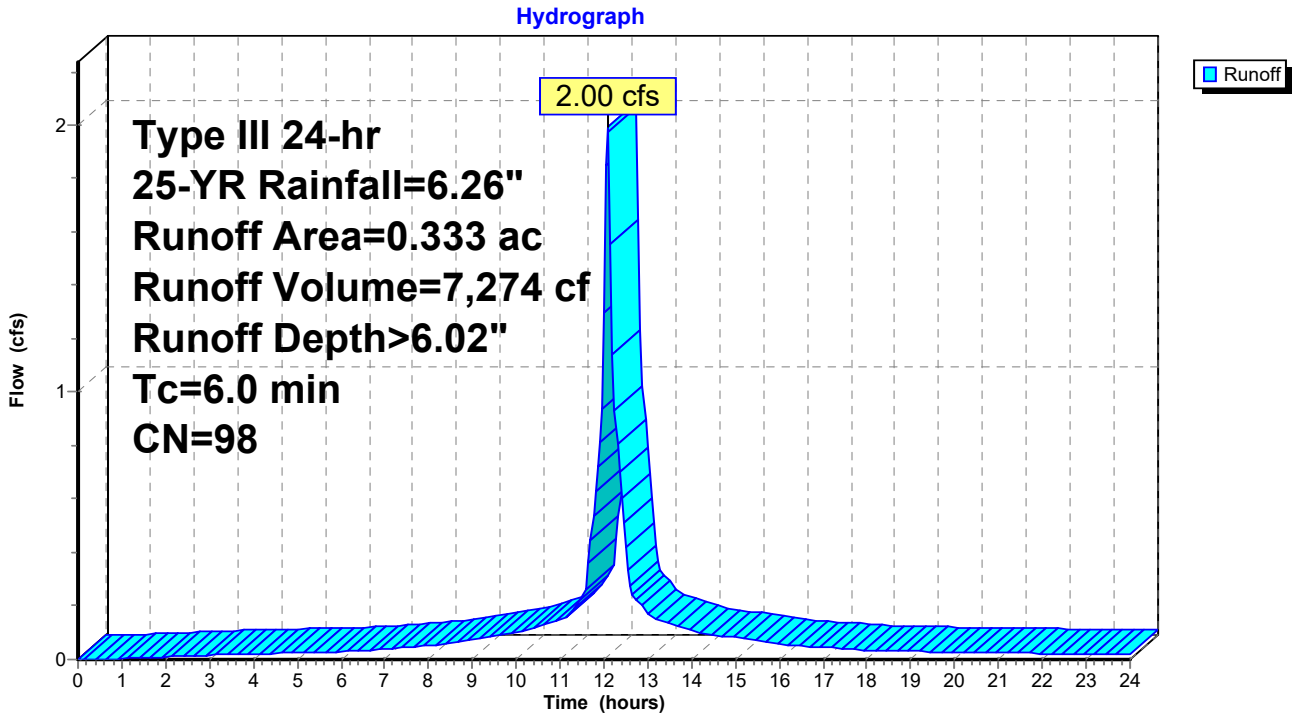
Runoff = 2.00 cfs @ 12.09 hrs, Volume= 7,274 cf, Depth> 6.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=6.26"

	Area (ac)	CN	Description
*	0.333	98	Unconnected roofs
	0.333		100.00% Impervious Area
	0.333		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment RD-1: Roof 1

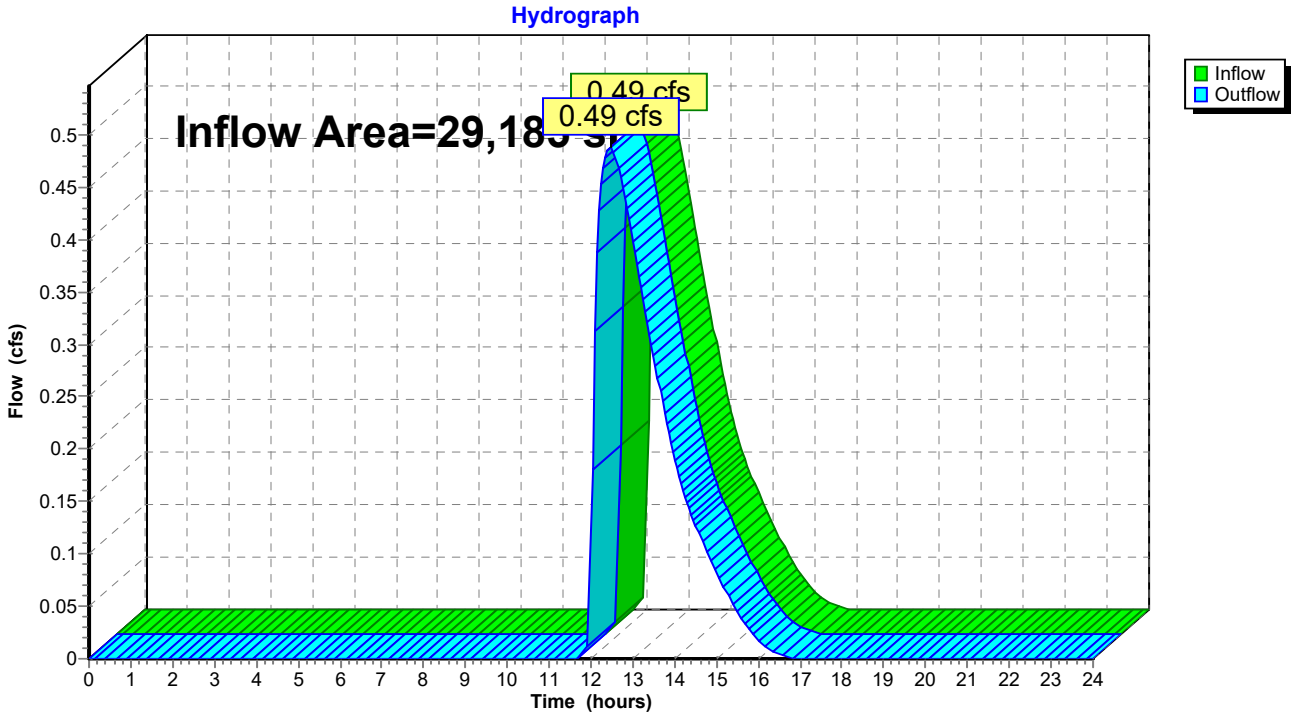


Summary for Reach DP-1a: Design Point 1

Inflow Area = 29,185 sf, 78.51% Impervious, Inflow Depth = 1.32" for 25-YR event
Inflow = 0.49 cfs @ 12.46 hrs, Volume= 3,221 cf
Outflow = 0.49 cfs @ 12.46 hrs, Volume= 3,221 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-1a: Design Point 1

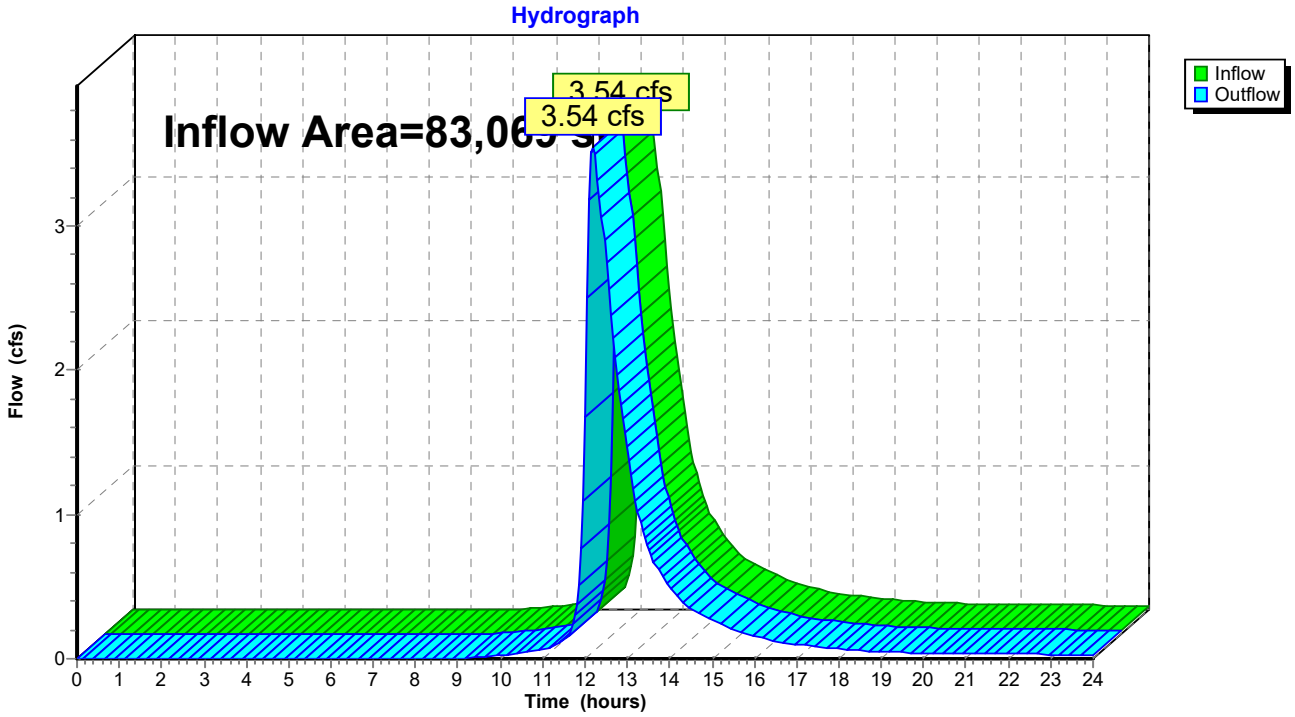


Summary for Reach DP-2a: Design Point 2

Inflow Area = 83,069 sf, 57.73% Impervious, Inflow Depth > 2.45" for 25-YR event
Inflow = 3.54 cfs @ 12.19 hrs, Volume= 16,951 cf
Outflow = 3.54 cfs @ 12.19 hrs, Volume= 16,951 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-2a: Design Point 2

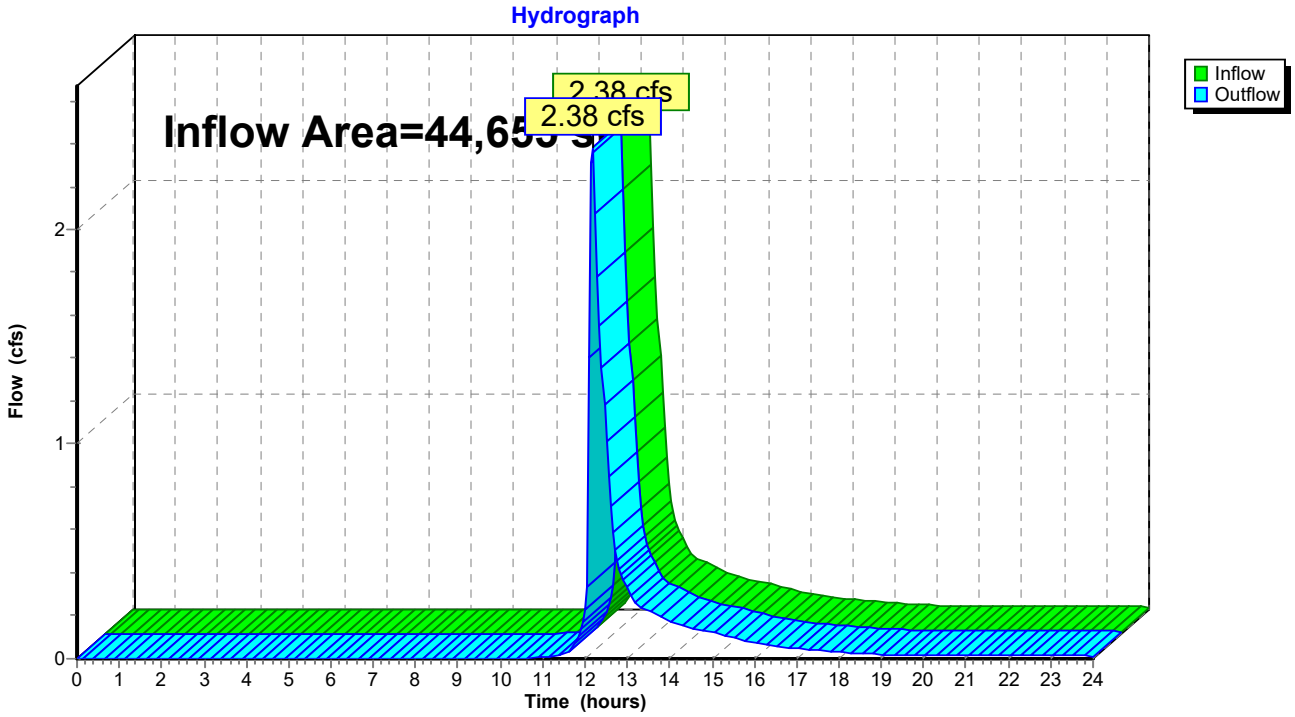


Summary for Reach DP-3a: Design Point 3

Inflow Area = 44,655 sf, 38.04% Impervious, Inflow Depth > 1.68" for 25-YR event
Inflow = 2.38 cfs @ 12.18 hrs, Volume= 6,245 cf
Outflow = 2.38 cfs @ 12.18 hrs, Volume= 6,245 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-3a: Design Point 3



Summary for Pond AB1: Above Ground Infiltration Basin 1

Inflow Area =	29,185 sf, 78.51% Impervious, Inflow Depth > 2.70" for 25-YR event				
Inflow =	1.65 cfs @	12.09 hrs,	Volume=	6,561 cf	
Outflow =	0.59 cfs @	12.46 hrs,	Volume=	6,537 cf,	Atten= 64%, Lag= 22.4 min
Discarded =	0.10 cfs @	12.46 hrs,	Volume=	3,316 cf	
Primary =	0.49 cfs @	12.46 hrs,	Volume=	3,221 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 128.76' @ 12.46 hrs Surf.Area= 1,774 sf Storage= 1,850 cf

Plug-Flow detention time= 76.7 min calculated for 6,537 cf (100% of inflow)
Center-of-Mass det. time= 74.4 min (879.3 - 804.9)

Volume	Invert	Avail.Storage	Storage Description
#1	127.00'	4,542 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc) 4,798 cf Overall - 256 cf Embedded = 4,542 cf
#2	127.00'	102 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc) Inside #1 256 cf Overall x 40.0% Voids
		4,644 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
127.00	512	0	0
128.00	1,218	865	865
129.00	1,949	1,584	2,449
130.00	2,749	2,349	4,798

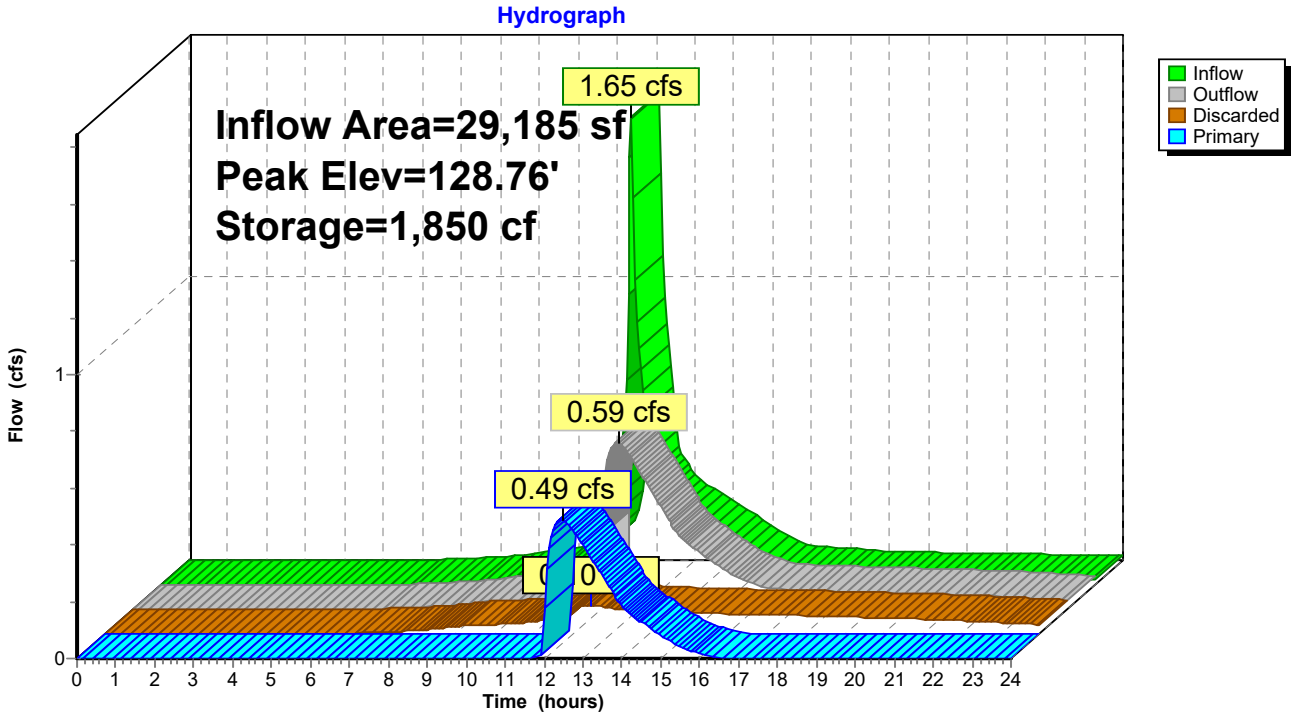
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
127.00	512	0	0
127.50	512	256	256

Device	Routing	Invert	Outlet Devices
#1	Primary	127.57'	**8.0" Round Culvert Barrel** L= 13.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 127.57' / 127.50' S= 0.0054 '/' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 0.35 sf
#2	Device 1	129.00'	**12.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Discarded	127.00'	**2.410 in/hr Exfiltration over Surface area**
#4	Device 1	128.00'	**5.0" Vert. Orifice/Grate** C= 0.600

Discarded OutFlow Max=0.10 cfs @ 12.46 hrs HW=128.76' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.10 cfs)

Primary OutFlow Max=0.49 cfs @ 12.46 hrs HW=128.76' (Free Discharge)
└─**1=Culvert Barrel** (Passes 0.49 cfs of 1.12 cfs potential flow)
  ├─**2=Orifice/Grate** (Controls 0.00 cfs)
  └─**4=Orifice/Grate** (Orifice Controls 0.49 cfs @ 3.58 fps)

Pond AB1: Above Ground Infiltration Basin 1



Stage-Area-Storage for Pond AB1: Above Ground Infiltration Basin 1

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
127.00	512	0
127.05	547	11
127.10	583	24
127.15	618	39
127.20	653	55
127.25	689	73
127.30	724	93
127.35	759	115
127.40	794	138
127.45	830	164
127.50	865	191
127.55	900	235
127.60	936	281
127.65	971	328
127.70	1,006	378
127.75	1,042	429
127.80	1,077	482
127.85	1,112	537
127.90	1,147	593
127.95	1,183	651
128.00	1,218	711
128.05	1,255	773
128.10	1,291	837
128.15	1,328	902
128.20	1,364	970
128.25	1,401	1,039
128.30	1,437	1,110
128.35	1,474	1,182
128.40	1,510	1,257
128.45	1,547	1,334
128.50	1,584	1,412
128.55	1,620	1,492
128.60	1,657	1,574
128.65	1,693	1,658
128.70	1,730	1,743
128.75	1,766	1,830
128.80	1,803	1,920
128.85	1,839	2,011
128.90	1,876	2,104
128.95	1,912	2,198
129.00	1,949	2,295
129.05	1,989	2,393
129.10	2,029	2,494
129.15	2,069	2,596
129.20	2,109	2,701
129.25	2,149	2,807
129.30	2,189	2,916
129.35	2,229	3,026
129.40	2,269	3,139
129.45	2,309	3,253
129.50	2,349	3,369
129.55	2,389	3,488
129.60	2,429	3,608
129.65	2,469	3,731
129.70	2,509	3,855
129.75	2,549	3,982
129.80	2,589	4,110
129.85	2,629	4,241
129.90	2,669	4,373
129.95	2,709	4,507
130.00	**2,749**	**4,644**

Summary for Pond AB3a: Above Ground Infiltration 3a

Inflow Area =	10,106 sf, 17.67% Impervious, Inflow Depth > 2.63" for 25-YR event				
Inflow =	0.69 cfs @	12.10 hrs,	Volume=	2,216 cf	
Outflow =	0.08 cfs @	13.00 hrs,	Volume=	2,213 cf,	Atten= 89%, Lag= 54.3 min
Discarded =	0.08 cfs @	13.00 hrs,	Volume=	2,213 cf	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 132.72' @ 13.00 hrs Surf.Area= 1,401 sf Storage= 831 cf

Plug-Flow detention time= 103.9 min calculated for 2,208 cf (100% of inflow)
Center-of-Mass det. time= 102.8 min (947.6 - 844.9)

Volume	Invert	Avail.Storage	Storage Description
#1	132.00'	3,206 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

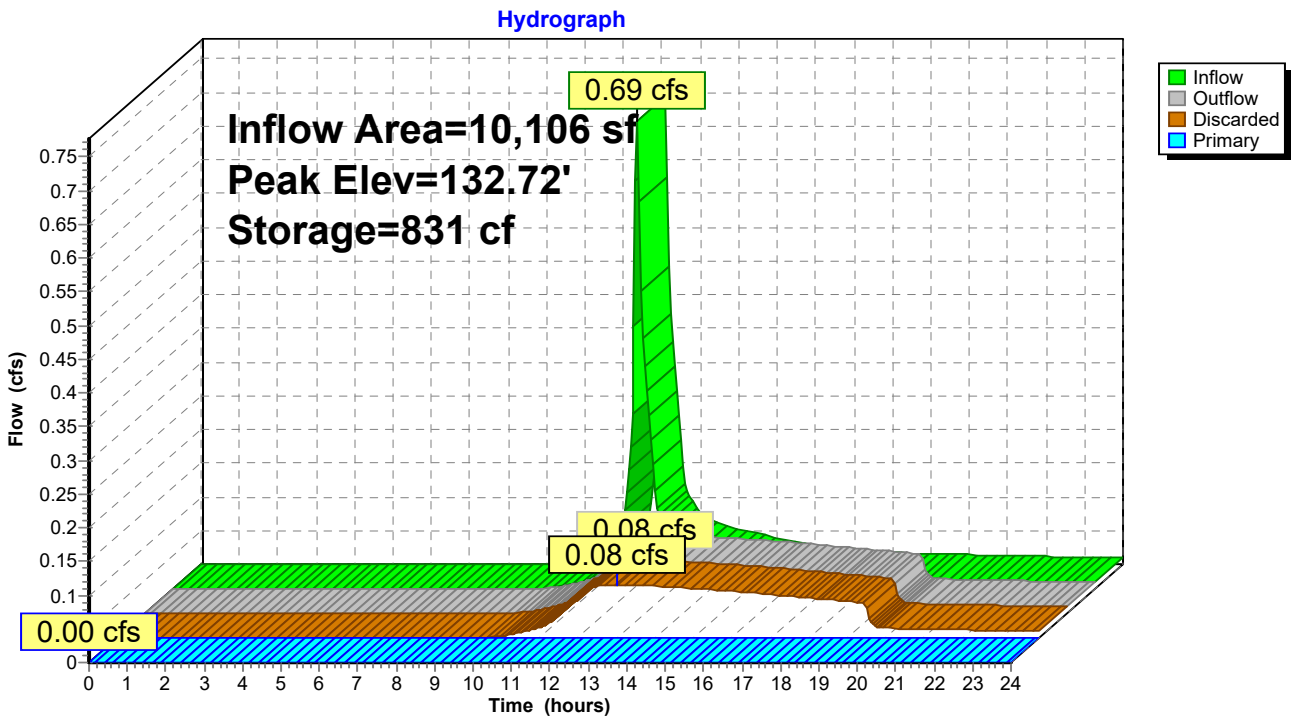
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
132.00	906	0	0
133.00	1,593	1,250	1,250
134.00	2,319	1,956	3,206

Device	Routing	Invert	Outlet Devices
#1	Discarded	132.00'	**2.410 in/hr Exfiltration over Surface area**
#2	Primary	133.00'	**10.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.08 cfs @ 13.00 hrs HW=132.72' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.08 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=132.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond AB3a: Above Ground Infiltration 3a



Stage-Area-Storage for Pond AB3a: Above Ground Infiltration 3a

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
132.00	906	0
132.02	920	18
132.04	933	37
132.06	947	56
132.08	961	75
132.10	975	94
132.12	988	114
132.14	1,002	134
132.16	1,016	154
132.18	1,030	174
132.20	1,043	195
132.22	1,057	216
132.24	1,071	237
132.26	1,085	259
132.28	1,098	281
132.30	1,112	303
132.32	1,126	325
132.34	1,140	348
132.36	1,153	371
132.38	1,167	394
132.40	1,181	417
132.42	1,195	441
132.44	1,208	465
132.46	1,222	489
132.48	1,236	514
132.50	1,250	539
132.52	1,263	564
132.54	1,277	589
132.56	1,291	615
132.58	1,304	641
132.60	1,318	667
132.62	1,332	694
132.64	1,346	721
132.66	1,359	748
132.68	1,373	775
132.70	1,387	803
132.72	1,401	830
132.74	1,414	859
132.76	1,428	887
132.78	1,442	916
132.80	1,456	945
132.82	1,469	974
132.84	1,483	1,003
132.86	1,497	1,033
132.88	1,511	1,063
132.90	1,524	1,094
132.92	1,538	1,124
132.94	1,552	1,155
132.96	1,566	1,186
132.98	1,579	1,218
133.00	1,593	1,250
133.02	1,608	1,282
133.04	1,622	1,314
133.06	1,637	1,346
133.08	1,651	1,379
133.10	1,666	1,412
133.12	1,680	1,446
133.14	1,695	1,480
133.16	1,709	1,514
133.18	1,724	1,548
133.20	1,738	1,583
133.22	1,753	1,618
133.24	1,767	1,653
133.26	1,782	1,688
133.28	1,796	1,724
133.30	1,811	1,760
133.32	1,825	1,796
133.34	1,840	1,833
133.36	1,854	1,870
133.38	1,869	1,907
133.40	1,883	1,945
133.42	1,898	1,983
133.44	1,912	2,021
133.46	1,927	2,059
133.48	1,941	2,098
133.50	1,956	2,137
133.52	1,971	2,176
133.54	1,985	2,216
133.56	2,000	2,255
133.58	2,014	2,296
133.60	2,029	2,336
133.62	2,043	2,377
133.64	2,058	2,418
133.66	2,072	2,459
133.68	2,087	2,501
133.70	2,101	2,542
133.72	2,116	2,585
133.74	2,130	2,627
133.76	2,145	2,670
133.78	2,159	2,713
133.80	2,174	2,756
133.82	2,188	2,800
133.84	2,203	2,844
133.86	2,217	2,888
133.88	2,232	2,932
133.90	2,246	2,977
133.92	2,261	3,022
133.94	2,275	3,068
133.96	2,290	3,113
133.98	2,304	3,159
134.00	**2,319**	**3,206**

Summary for Pond AB3b: Above Ground Infiltration 3b

Inflow Area =	20,081 sf, 75.70% Impervious, Inflow Depth > 5.44" for 25-YR event				
Inflow =	2.66 cfs @	12.09 hrs,	Volume=	9,096 cf	
Outflow =	1.81 cfs @	12.18 hrs,	Volume=	6,124 cf,	Atten= 32%, Lag= 5.6 min
Discarded =	0.05 cfs @	12.18 hrs,	Volume=	2,397 cf	
Primary =	1.76 cfs @	12.18 hrs,	Volume=	3,728 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 133.42' @ 12.18 hrs Surf.Area= 2,090 sf Storage= 3,712 cf

Plug-Flow detention time= 182.8 min calculated for 6,124 cf (67% of inflow)
Center-of-Mass det. time= 87.4 min (858.8 - 771.4)

Volume	Invert	Avail.Storage	Storage Description
#1	130.00'	5,050 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

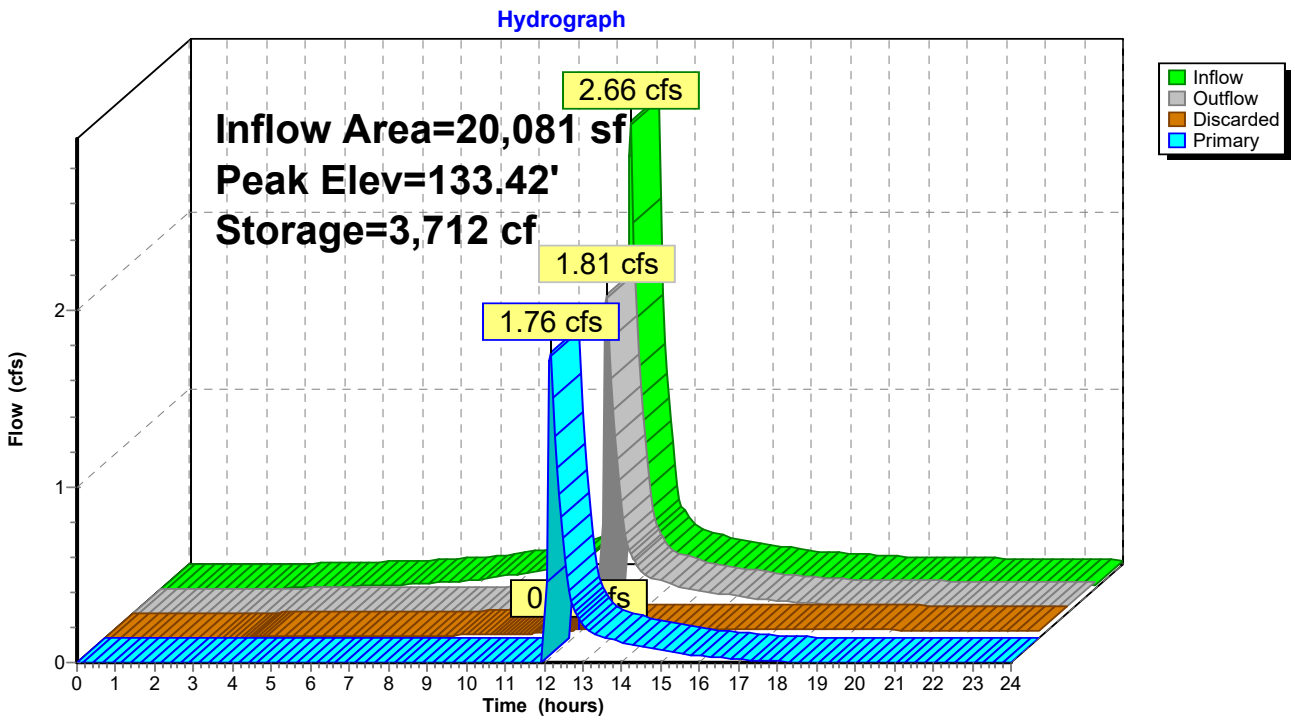
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
130.00	307	0	0
131.00	671	489	489
132.00	1,175	923	1,412
133.00	1,806	1,491	2,903
134.00	2,488	2,147	5,050

Device	Routing	Invert	Outlet Devices
#1	Primary	133.15'	**5.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32
#2	Discarded	130.00'	**1.020 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.05 cfs @ 12.18 hrs HW=133.41' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=1.72 cfs @ 12.18 hrs HW=133.41' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir** (Weir Controls 1.72 cfs @ 1.31 fps)

Pond AB3b: Above Ground Infiltration 3b



Stage-Area-Storage for Pond AB3b: Above Ground Infiltration 3b

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
130.00	307	0
130.05	325	16
130.10	343	33
130.15	362	50
130.20	380	69
130.25	398	88
130.30	416	108
130.35	434	130
130.40	453	152
130.45	471	175
130.50	489	199
130.55	507	224
130.60	525	250
130.65	544	276
130.70	562	304
130.75	580	333
130.80	598	362
130.85	616	392
130.90	635	424
130.95	653	456
131.00	671	489
131.05	696	523
131.10	721	559
131.15	747	595
131.20	772	633
131.25	797	673
131.30	822	713
131.35	847	755
131.40	873	798
131.45	898	842
131.50	923	888
131.55	948	934
131.60	973	982
131.65	999	1,032
131.70	1,024	1,082
131.75	1,049	1,134
131.80	1,074	1,187
131.85	1,099	1,241
131.90	1,125	1,297
131.95	1,150	1,354
132.00	1,175	1,412
132.05	1,207	1,472
132.10	1,238	1,533
132.15	1,270	1,595
132.20	1,301	1,660
132.25	1,333	1,725
132.30	1,364	1,793
132.35	1,396	1,862
132.40	1,427	1,932
132.45	1,459	2,005
132.50	1,491	2,078
132.55	1,522	2,154
132.60	1,554	2,231
132.65	1,585	2,309
132.70	1,617	2,389
132.75	1,648	2,471
132.80	1,680	2,554
132.85	1,711	2,639
132.90	1,743	2,725
132.95	1,774	2,813
133.00	1,806	2,903
133.05	1,840	2,994
133.10	1,874	3,087
133.15	1,908	3,181
133.20	1,942	3,277
133.25	1,977	3,375
133.30	2,011	3,475
133.35	2,045	3,576
133.40	2,079	3,679
133.45	2,113	3,784
133.50	2,147	3,891
133.55	2,181	3,999
133.60	2,215	4,109
133.65	2,249	4,220
133.70	2,283	4,334
133.75	2,318	4,449
133.80	2,352	4,566
133.85	2,386	4,684
133.90	2,420	4,804
133.95	2,454	4,926
134.00	**2,488**	**5,050**

Summary for Pond IB1: Infiltration Basin 1

Inflow Area =	14,505 sf,100.00% Impervious, Inflow Depth > 6.02" for 25-YR event				
Inflow =	2.00 cfs @	12.09 hrs,	Volume=	7,274 cf	
Outflow =	0.26 cfs @	12.62 hrs,	Volume=	7,270 cf,	Atten= 87%, Lag= 32.0 min
Discarded =	0.11 cfs @	10.30 hrs,	Volume=	6,006 cf	
Primary =	0.16 cfs @	12.62 hrs,	Volume=	1,264 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 131.11' @ 12.62 hrs Surf.Area= 1,889 sf Storage= 2,715 cf

Plug-Flow detention time= 127.9 min calculated for 7,270 cf (100% of inflow)
Center-of-Mass det. time= 127.5 min (871.6 - 744.1)

Volume	Invert	Avail.Storage	Storage Description
#1A	129.00'	1,726 cf	**25.25'W x 74.82'L x 3.50'H Field A** 6,612 cf Overall - 2,297 cf Embedded = 4,315 cf x 40.0% Voids
#2A	129.50'	2,297 cf	**ADS_StormTech SC-740 +Cap** x 50 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 5 Rows of 10 Chambers
		4,023 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	130.24'	**12.0" Round Culvert** L= 10.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 130.24' / 130.00' S= 0.0240 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.79 sf
#2	Discarded	129.00'	**2.410 in/hr Exfiltration over Surface area**
#3	Device 1	130.40'	**3.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600
#4	Device 1	132.05'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.11 cfs @ 10.30 hrs HW=129.04' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.11 cfs)

Primary OutFlow Max=0.16 cfs @ 12.62 hrs HW=131.11' (Free Discharge)
└─**1=Culvert** (Passes 0.16 cfs of 2.57 cfs potential flow)
  ├─**3=Orifice/Grate** (Orifice Controls 0.16 cfs @ 3.81 fps)
  └─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond IB1: Infiltration Basin 1 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

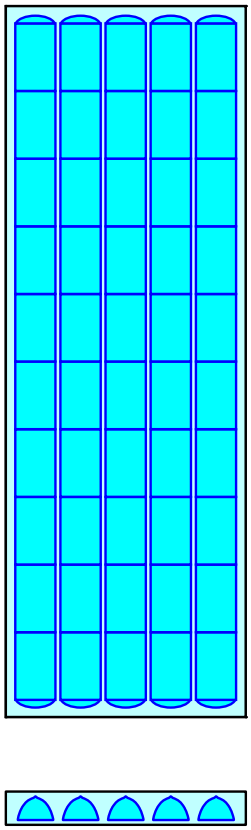
10 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 72.82' Row Length +12.0" End Stone x 2 = 74.82' Base Length
5 Rows x 51.0" Wide + 6.0" Spacing x 4 + 12.0" Side Stone x 2 = 25.25' Base Width
6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

50 Chambers x 45.9 cf = 2,297.0 cf Chamber Storage

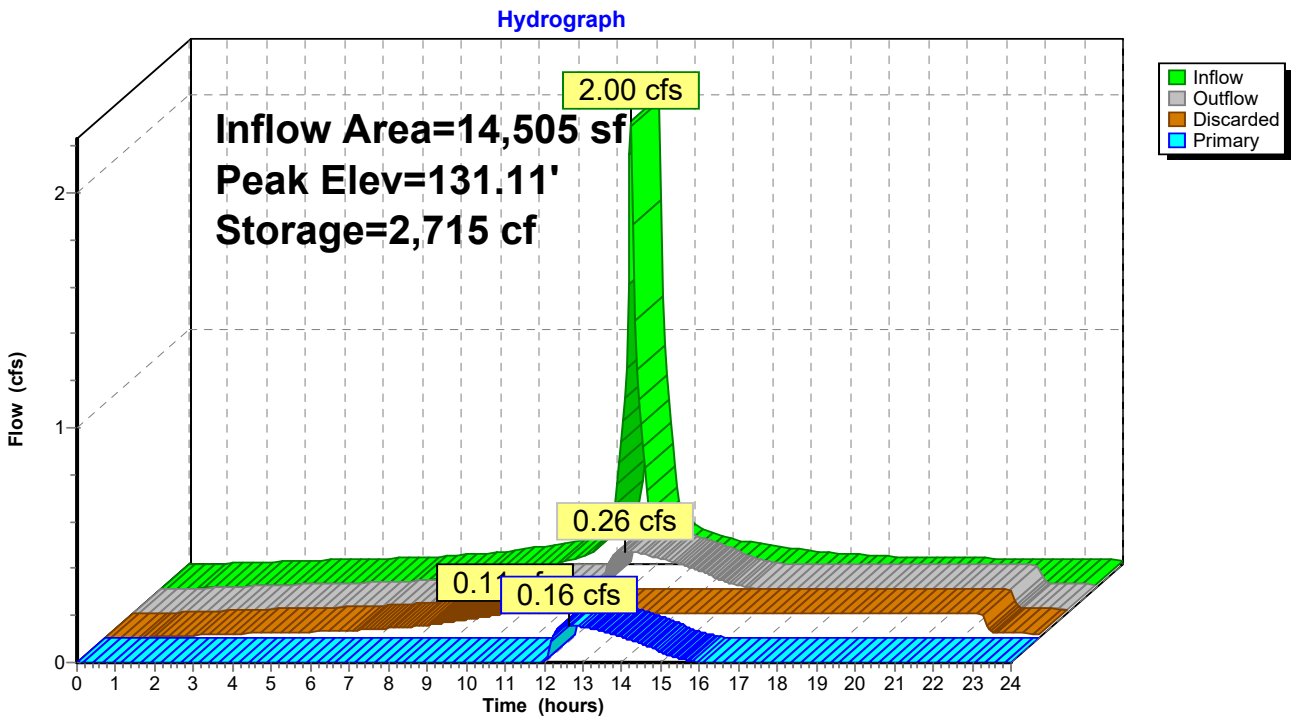
6,611.9 cf Field - 2,297.0 cf Chambers = 4,314.9 cf Stone x 40.0% Voids = 1,726.0 cf Stone Storage

Chamber Storage + Stone Storage = 4,023.0 cf = 0.092 af
Overall Storage Efficiency = 60.8%
Overall System Size = 74.82' x 25.25' x 3.50'

50 Chambers
244.9 cy Field
159.8 cy Stone



Pond IB1: Infiltration Basin 1



Stage-Area-Storage for Pond IB1: Infiltration Basin 1

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
129.00	**1,889**	0
129.05	1,889	38
129.10	1,889	76
129.15	1,889	113
129.20	1,889	151
129.25	1,889	189
129.30	1,889	227
129.35	1,889	264
129.40	1,889	302
129.45	1,889	340
129.50	1,889	378
129.55	1,889	455
129.60	1,889	533
129.65	1,889	610
129.70	1,889	687
129.75	1,889	764
129.80	1,889	841
129.85	1,889	917
129.90	1,889	993
129.95	1,889	1,069
130.00	1,889	1,145
130.05	1,889	1,220
130.10	1,889	1,295
130.15	1,889	1,369
130.20	1,889	1,444
130.25	1,889	1,517
130.30	1,889	1,591
130.35	1,889	1,664
130.40	1,889	1,736
130.45	1,889	1,809
130.50	1,889	1,880
130.55	1,889	1,952
130.60	1,889	2,022
130.65	1,889	2,093
130.70	1,889	2,162
130.75	1,889	2,232
130.80	1,889	2,300
130.85	1,889	2,368
130.90	1,889	2,435
130.95	1,889	2,502
131.00	1,889	2,568
131.05	1,889	2,634
131.10	1,889	2,698
131.15	1,889	2,762
131.20	1,889	2,825
131.25	1,889	2,887
131.30	1,889	2,948
131.35	1,889	3,008
131.40	1,889	3,067
131.45	1,889	3,124
131.50	1,889	3,181
131.55	1,889	3,236
131.60	1,889	3,290
131.65	1,889	3,342
131.70	1,889	3,392
131.75	1,889	3,439
131.80	1,889	3,484
131.85	1,889	3,526
131.90	1,889	3,567
131.95	1,889	3,607
132.00	1,889	3,645
132.05	1,889	3,683
132.10	1,889	3,721
132.15	1,889	3,758
132.20	1,889	3,796
132.25	1,889	3,834
132.30	1,889	3,872
132.35	1,889	3,910
132.40	1,889	3,947
132.45	1,889	3,985
132.50	1,889	**4,023**

Summary for Pond IB2a: Infiltration Basin 2a

Inflow Area =	26,310 sf, 88.91% Impervious, Inflow Depth > 5.55" for 25-YR event				
Inflow =	3.52 cfs @	12.09 hrs,	Volume=	12,170 cf	
Outflow =	1.45 cfs @	12.30 hrs,	Volume=	10,338 cf,	Atten= 59%, Lag= 12.7 min
Discarded =	0.06 cfs @	7.60 hrs,	Volume=	3,891 cf	
Primary =	1.40 cfs @	12.30 hrs,	Volume=	6,446 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 130.06' @ 12.30 hrs Surf.Area= 2,458 sf Storage= 4,248 cf

Plug-Flow detention time= 117.8 min calculated for 10,316 cf (85% of inflow)
Center-of-Mass det. time= 54.8 min (821.7 - 767.0)

Volume	Invert	Avail.Storage	Storage Description
#1A	127.50'	2,392 cf	**30.00'W x 81.94'L x 3.67'H Field A** 9,013 cf Overall - 3,032 cf Embedded = 5,981 cf x 40.0% Voids
#2A	128.00'	3,032 cf	**ADS_StormTech SC-740 +Cap** x 66 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 6 Rows of 11 Chambers
		5,424 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	128.60'	**15.0" Round Culvert** L= 55.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 128.60' / 128.00' S= 0.0109 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 1.23 sf
#2	Discarded	127.50'	**1.020 in/hr Exfiltration over Surface area**
#3	Device 1	128.80'	**10.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600
#4	Device 1	130.10'	**10.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600
#5	Device 1	130.99'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.06 cfs @ 7.60 hrs HW=127.54' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=1.40 cfs @ 12.30 hrs HW=130.06' (Free Discharge)
└─**1=Culvert** (Passes 1.40 cfs of 6.42 cfs potential flow)
  ├─**3=Orifice/Grate** (Orifice Controls 1.40 cfs @ 5.03 fps)
  ├─**4=Orifice/Grate** (Controls 0.00 cfs)
  └─**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond IB2a: Infiltration Basin 2a - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

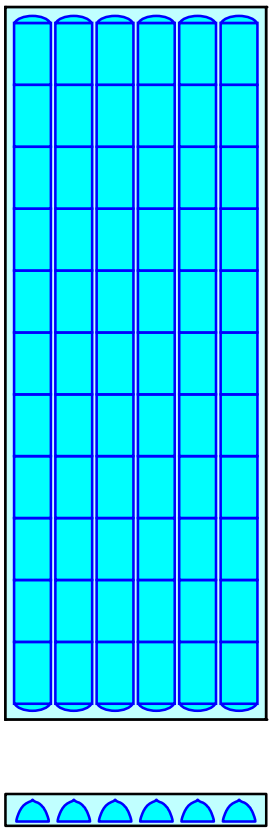
11 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 79.94' Row Length +12.0" End Stone x 2 = 81.94' Base Length
6 Rows x 51.0" Wide + 6.0" Spacing x 5 + 12.0" Side Stone x 2 = 30.00' Base Width
6.0" Base + 30.0" Chamber Height + 8.0" Cover = 3.67' Field Height

66 Chambers x 45.9 cf = 3,032.0 cf Chamber Storage

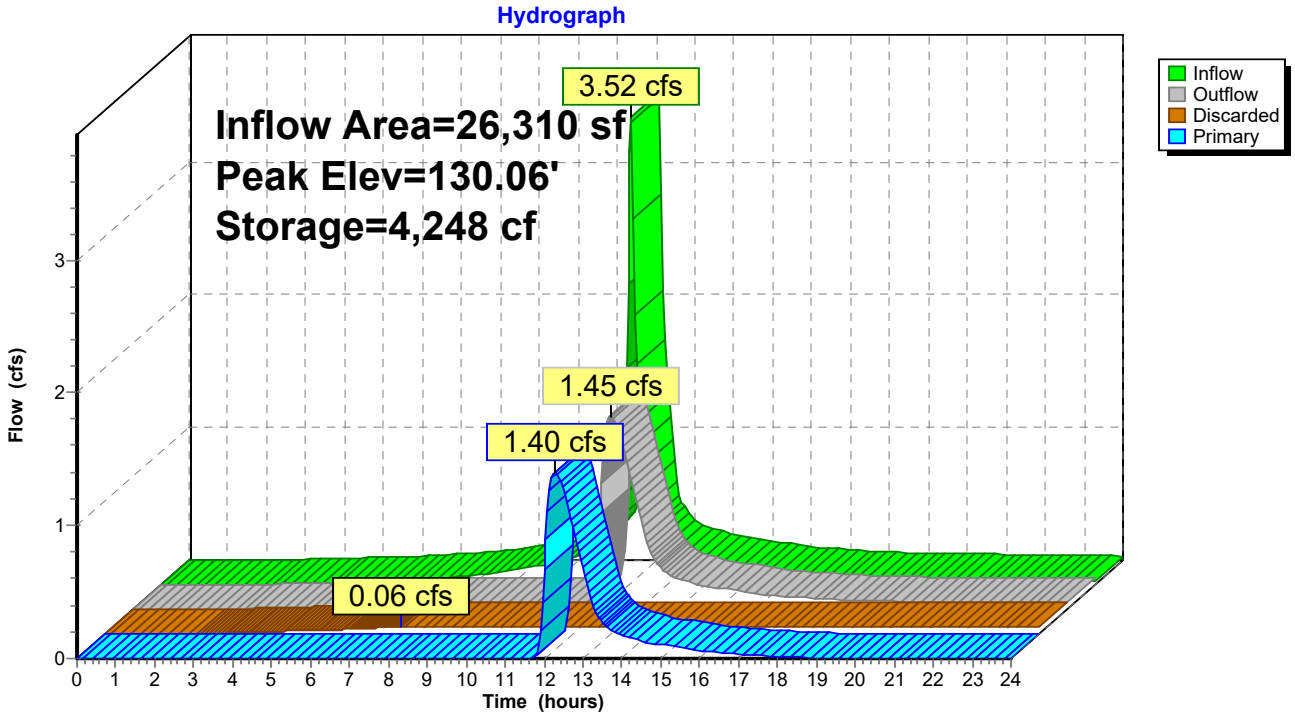
9,013.0 cf Field - 3,032.0 cf Chambers = 5,981.0 cf Stone x 40.0% Voids = 2,392.4 cf Stone Storage

Chamber Storage + Stone Storage = 5,424.4 cf = 0.125 af
Overall Storage Efficiency = 60.2%
Overall System Size = 81.94' x 30.00' x 3.67'

66 Chambers
333.8 cy Field
221.5 cy Stone



Pond IB2a: Infiltration Basin 2a



Stage-Area-Storage for Pond IB2a: Infiltration Basin 2a

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
127.50	**2,458**	0
127.55	2,458	49
127.60	2,458	98
127.65	2,458	147
127.70	2,458	197
127.75	2,458	246
127.80	2,458	295
127.85	2,458	344
127.90	2,458	393
127.95	2,458	442
128.00	2,458	492
128.05	2,458	593
128.10	2,458	695
128.15	2,458	796
128.20	2,458	897
128.25	2,458	998
128.30	2,458	1,099
128.35	2,458	1,199
128.40	2,458	1,298
128.45	2,458	1,398
128.50	2,458	1,497
128.55	2,458	1,595
128.60	2,458	1,694
128.65	2,458	1,791
128.70	2,458	1,888
128.75	2,458	1,985
128.80	2,458	2,081
128.85	2,458	2,177
128.90	2,458	2,272
128.95	2,458	2,367
129.00	2,458	2,461
129.05	2,458	2,554
129.10	2,458	2,647
129.15	2,458	2,739
129.20	2,458	2,830
129.25	2,458	2,921
129.30	2,458	3,011
129.35	2,458	3,100
129.40	2,458	3,188
129.45	2,458	3,275
129.50	2,458	3,362
129.55	2,458	3,447
129.60	2,458	3,532
129.65	2,458	3,615
129.70	2,458	3,698
129.75	2,458	3,779
129.80	2,458	3,858
129.85	2,458	3,937
129.90	2,458	4,014
129.95	2,458	4,089
130.00	2,458	4,164
130.05	2,458	4,236
130.10	2,458	4,306
130.15	2,458	4,374
130.20	2,458	4,439
130.25	2,458	4,501
130.30	2,458	4,559
130.35	2,458	4,614
130.40	2,458	4,667
130.45	2,458	4,719
130.50	2,458	4,769
130.55	2,458	4,818
130.60	2,458	4,867
130.65	2,458	4,916
130.70	2,458	4,966
130.75	2,458	5,015
130.80	2,458	5,064
130.85	2,458	5,113
130.90	2,458	5,162
130.95	2,458	5,211
131.00	2,458	5,261
131.05	2,458	5,310
131.10	2,458	5,359
131.15	2,458	**5,408**

Summary for Pond IB2c: Infiltration Basin Area 2c

Inflow Area =	15,551 sf, 65.27% Impervious, Inflow Depth > 4.65" for 25-YR event				
Inflow =	1.86 cfs @	12.09 hrs,	Volume=	6,030 cf	
Outflow =	0.65 cfs @	12.37 hrs,	Volume=	5,888 cf,	Atten= 65%, Lag= 16.8 min
Discarded =	0.06 cfs @	9.95 hrs,	Volume=	3,172 cf	
Primary =	0.60 cfs @	12.37 hrs,	Volume=	2,716 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 131.43' @ 12.37 hrs Surf.Area= 2,373 sf Storage= 1,949 cf

Plug-Flow detention time= 98.8 min calculated for 5,876 cf (97% of inflow)
Center-of-Mass det. time= 84.7 min (880.4 - 795.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	130.00'	1,505 cf	**27.00'W x 87.91'L x 2.00'H Field A** 4,747 cf Overall - 985 cf Embedded = 3,762 cf x 40.0% Voids
#2A	130.50'	985 cf	**ADS_StormTech SC-160LP +Cap** x 144 Inside #1 Effective Size= 18.0"W x 12.0"H => 0.96 sf x 7.12'L = 6.8 cf Overall Size= 25.0"W x 12.0"H x 7.56'L with 0.44' Overlap 12 Rows of 12 Chambers
		2,489 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	130.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	129.20'	**8.0" Round Culvert** L= 14.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 129.20' / 129.00' S= 0.0143 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.35 sf
#3	Device 2	130.70'	**11.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600
#4	Device 2	131.40'	**2.0" Vert. Orifice/Grate** C= 0.600
#5	Device 2	131.88'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.06 cfs @ 9.95 hrs HW=130.02' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=0.59 cfs @ 12.37 hrs HW=131.43' (Free Discharge)
└─**2=Culvert** (Passes 0.59 cfs of 2.82 cfs potential flow)
  ├─**3=Orifice/Grate** (Orifice Controls 0.59 cfs @ 3.88 fps)
  ├─**4=Orifice/Grate** (Orifice Controls 0.00 cfs @ 0.61 fps)
  └─**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond IB2c: Infiltration Basin Area 2c - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-160LP +Cap (ADS StormTech® SC-160LP with cap length)
Effective Size= 18.0"W x 12.0"H => 0.96 sf x 7.12'L = 6.8 cf
Overall Size= 25.0"W x 12.0"H x 7.56'L with 0.44' Overlap

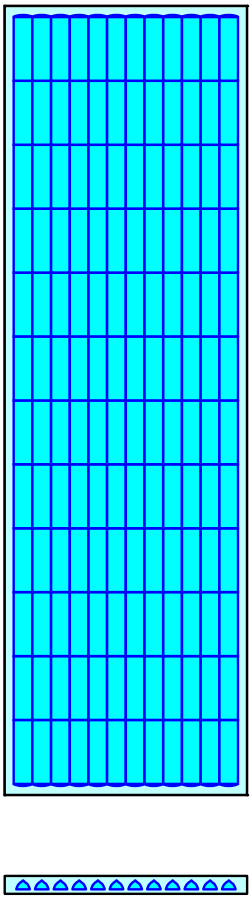
12 Chambers/Row x 7.12' Long +0.23' Cap Length x 2 = 85.91' Row Length +12.0" End Stone x 2 = 87.91' Base Length
12 Rows x 25.0" Wide + 12.0" Side Stone x 2 = 27.00' Base Width
6.0" Base + 12.0" Chamber Height + 6.0" Cover = 2.00' Field Height

144 Chambers x 6.8 cf = 984.5 cf Chamber Storage

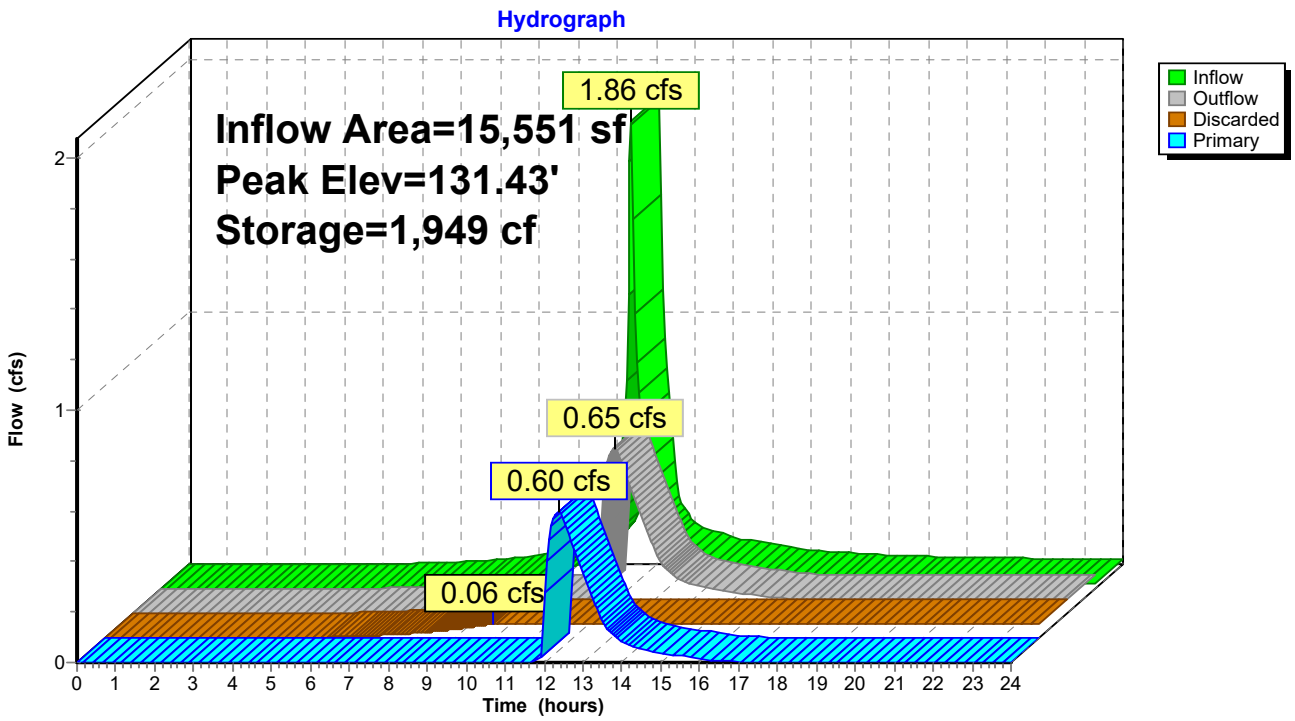
4,747.0 cf Field - 984.5 cf Chambers = 3,762.4 cf Stone x 40.0% Voids = 1,505.0 cf Stone Storage

Chamber Storage + Stone Storage = 2,489.5 cf = 0.057 af
Overall Storage Efficiency = 52.4%
Overall System Size = 87.91' x 27.00' x 2.00'

144 Chambers
175.8 cy Field
139.3 cy Stone



Pond IB2c: Infiltration Basin Area 2c



Stage-Area-Storage for Pond IB2c: Infiltration Basin Area 2c

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
130.00	**2,373**	0	131.06	2,373	1,457
130.02	2,373	19	131.08	2,373	1,489
130.04	2,373	38	131.10	2,373	1,519
130.06	2,373	57	131.12	2,373	1,550
130.08	2,373	76	131.14	2,373	1,580
130.10	2,373	95	131.16	2,373	1,609
130.12	2,373	114	131.18	2,373	1,638
130.14	2,373	133	131.20	2,373	1,667
130.16	2,373	152	131.22	2,373	1,695
130.18	2,373	171	131.24	2,373	1,722
130.20	2,373	190	131.26	2,373	1,749
130.22	2,373	209	131.28	2,373	1,774
130.24	2,373	228	131.30	2,373	1,799
130.26	2,373	247	131.32	2,373	1,824
130.28	2,373	266	131.34	2,373	1,847
130.30	2,373	285	131.36	2,373	1,870
130.32	2,373	304	131.38	2,373	1,892
130.34	2,373	323	131.40	2,373	1,914
130.36	2,373	342	131.42	2,373	1,935
130.38	2,373	361	131.44	2,373	1,955
130.40	2,373	380	131.46	2,373	1,976
130.42	2,373	399	131.48	2,373	1,995
130.44	2,373	418	131.50	2,373	2,015
130.46	2,373	437	131.52	2,373	2,034
130.48	2,373	456	131.54	2,373	2,053
130.50	2,373	475	131.56	2,373	2,072
130.52	2,373	512	131.58	2,373	2,091
130.54	2,373	549	131.60	2,373	2,110
130.56	2,373	587	131.62	2,373	2,129
130.58	2,373	624	131.64	2,373	2,148
130.60	2,373	661	131.66	2,373	2,167
130.62	2,373	698	131.68	2,373	2,186
130.64	2,373	735	131.70	2,373	2,205
130.66	2,373	772	131.72	2,373	2,224
130.68	2,373	808	131.74	2,373	2,243
130.70	2,373	844	131.76	2,373	2,262
130.72	2,373	880	131.78	2,373	2,281
130.74	2,373	916	131.80	2,373	2,300
130.76	2,373	952	131.82	2,373	2,319
130.78	2,373	987	131.84	2,373	2,338
130.80	2,373	1,022	131.86	2,373	2,357
130.82	2,373	1,057	131.88	2,373	2,376
130.84	2,373	1,092	131.90	2,373	2,395
130.86	2,373	1,127	131.92	2,373	2,414
130.88	2,373	1,161	131.94	2,373	2,433
130.90	2,373	1,195	131.96	2,373	2,452
130.92	2,373	1,229	131.98	2,373	2,471
130.94	2,373	1,263	132.00	2,373	**2,489**
130.96	2,373	1,296			
130.98	2,373	1,329			
131.00	2,373	1,361			
131.02	2,373	1,394			
131.04	2,373	1,426			

Summary for Pond IB2e: Infiltration Basin 2b

Inflow Area =	15,464 sf, 93.24% Impervious, Inflow Depth > 5.67" for 25-YR event				
Inflow =	2.09 cfs @	12.09 hrs,	Volume=	7,302 cf	
Outflow =	0.36 cfs @	12.55 hrs,	Volume=	7,298 cf,	Atten= 83%, Lag= 27.6 min
Discarded =	0.14 cfs @	11.05 hrs,	Volume=	6,005 cf	
Primary =	0.22 cfs @	12.55 hrs,	Volume=	1,293 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 132.06' @ 12.55 hrs Surf.Area= 2,592 sf Storage= 2,468 cf

Plug-Flow detention time= 76.6 min calculated for 7,298 cf (100% of inflow)
Center-of-Mass det. time= 76.3 min (838.4 - 762.2)

Volume	Invert	Avail.Storage	Storage Description
#1A	130.50'	2,002 cf	**34.83'W x 74.40'L x 2.50'H Field A** 6,479 cf Overall - 1,474 cf Embedded = 5,005 cf x 40.0% Voids
#2A	131.00'	1,474 cf	**ADS_StormTech SC-310 +Cap** x 100 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 10 Rows of 10 Chambers
		3,476 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	130.85'	**15.0" Round Culvert Barrel** L= 69.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 130.85' / 130.50' S= 0.0051 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 1.23 sf
#2	Discarded	130.50'	**2.410 in/hr Exfiltration over Surface area**
#3	Device 1	131.40'	**3.0" W x 3.0" H Vert. Orifice/Grate** C= 0.600
#4	Device 1	132.63'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.14 cfs @ 11.05 hrs HW=130.53' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.14 cfs)

Primary OutFlow Max=0.22 cfs @ 12.55 hrs HW=132.06' (Free Discharge)
└─**1=Culvert Barrel** (Passes 0.22 cfs of 4.21 cfs potential flow)
  ├─**3=Orifice/Grate** (Orifice Controls 0.22 cfs @ 3.52 fps)
  └─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond IB2e: Infiltration Basin 2b - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-310 +Cap (ADS StormTech® SC-310 with cap length)
Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf
Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap

34.0" Wide + 6.0" Spacing = 40.0" C-C Row Spacing

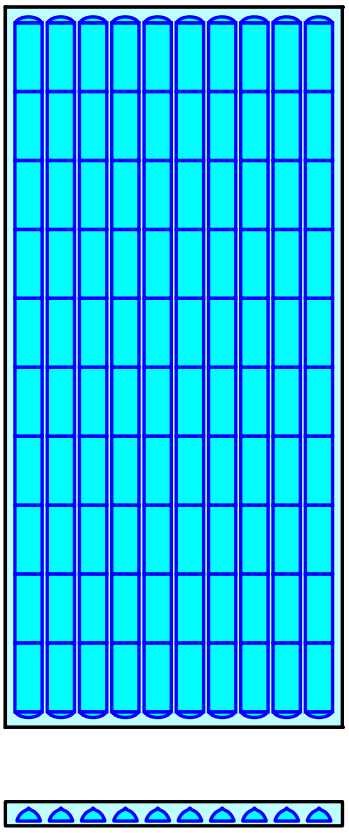
10 Chambers/Row x 7.12' Long +0.60' Cap Length x 2 = 72.40' Row Length +12.0" End Stone x 2 = 74.40' Base Length
10 Rows x 34.0" Wide + 6.0" Spacing x 9 + 12.0" Side Stone x 2 = 34.83' Base Width
6.0" Base + 16.0" Chamber Height + 8.0" Cover = 2.50' Field Height

100 Chambers x 14.7 cf = 1,474.2 cf Chamber Storage

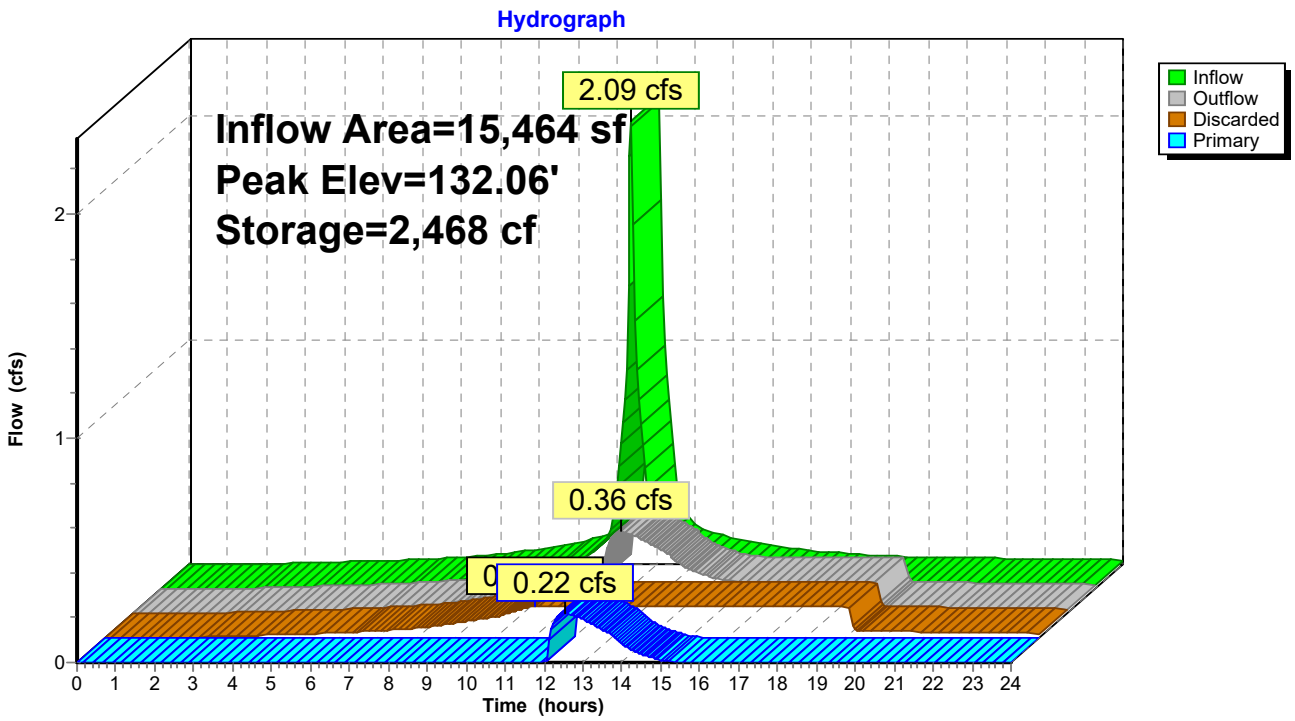
6,479.0 cf Field - 1,474.2 cf Chambers = 5,004.8 cf Stone x 40.0% Voids = 2,001.9 cf Stone Storage

Chamber Storage + Stone Storage = 3,476.1 cf = 0.080 af
Overall Storage Efficiency = 53.7%
Overall System Size = 74.40' x 34.83' x 2.50'

100 Chambers
240.0 cy Field
185.4 cy Stone



Pond IB2e: Infiltration Basin 2b



Stage-Area-Storage for Pond IB2e: Infiltration Basin 2b

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
130.50	**2,592**	0
130.55	2,592	52
130.60	2,592	104
130.65	2,592	155
130.70	2,592	207
130.75	2,592	259
130.80	2,592	311
130.85	2,592	363
130.90	2,592	415
130.95	2,592	466
131.00	2,592	518
131.05	2,592	622
131.10	2,592	724
131.15	2,592	827
131.20	2,592	928
131.25	2,592	1,029
131.30	2,592	1,129
131.35	2,592	1,227
131.40	2,592	1,325
131.45	2,592	1,422
131.50	2,592	1,517
131.55	2,592	1,611
131.60	2,592	1,703
131.65	2,592	1,794
131.70	2,592	1,884
131.75	2,592	1,972
131.80	2,592	2,057
131.85	2,592	2,141
131.90	2,592	2,222
131.95	2,592	2,301
132.00	2,592	2,377
132.05	2,592	2,449
132.10	2,592	2,516
132.15	2,592	2,579
132.20	2,592	2,638
132.25	2,592	2,695
132.30	2,592	2,750
132.35	2,592	2,802
132.40	2,592	2,854
132.45	2,592	2,906
132.50	2,592	2,958
132.55	2,592	3,010
132.60	2,592	3,061
132.65	2,592	3,113
132.70	2,592	3,165
132.75	2,592	3,217
132.80	2,592	3,269
132.85	2,592	3,321
132.90	2,592	3,372
132.95	2,592	3,424
133.00	2,592	**3,476**

Summary for Subcatchment PD-1: Prop. Drainage Area 1

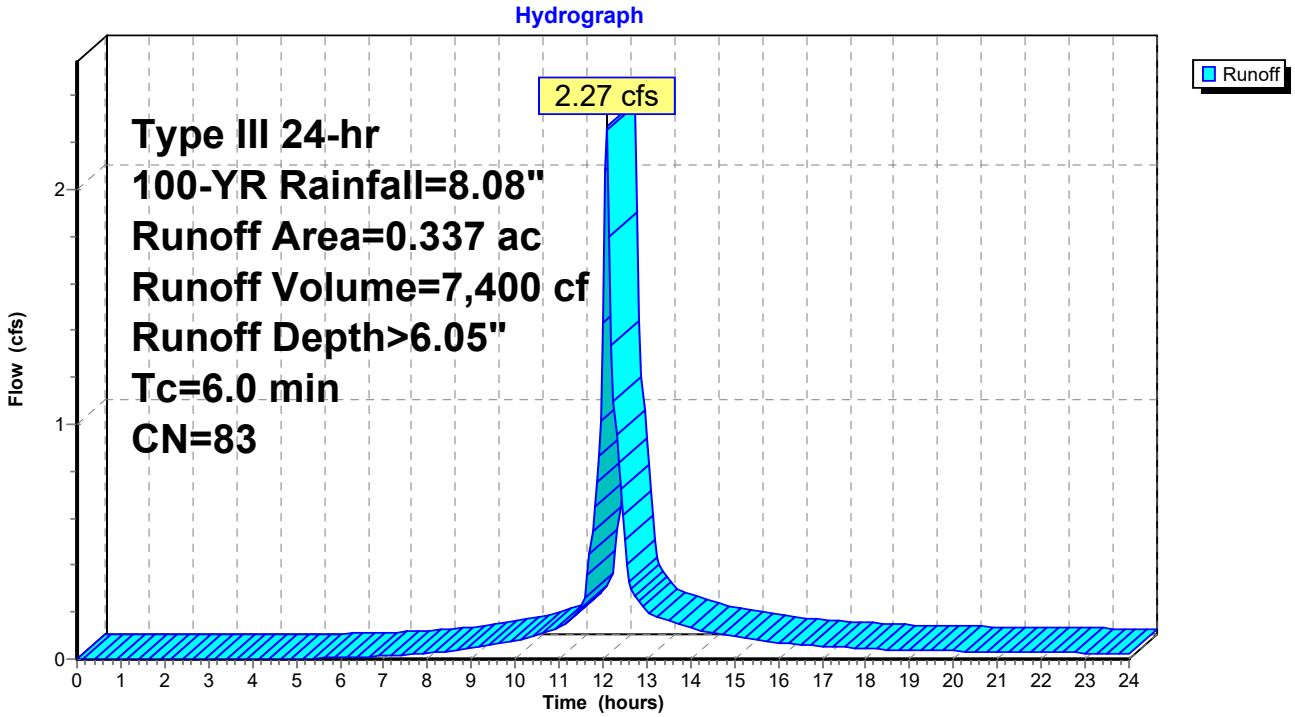
Runoff = 2.27 cfs @ 12.09 hrs, Volume= 7,400 cf, Depth> 6.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-YR Rainfall=8.08"

	Area (ac)	CN	Description
*	0.074	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.070	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.193	98	Paved parking
	0.337	83	Weighted Average
	0.144		42.73% Pervious Area
	0.193		57.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-1: Prop. Drainage Area 1



Summary for Subcatchment PD-2a: Prop. Drainage Area 2a

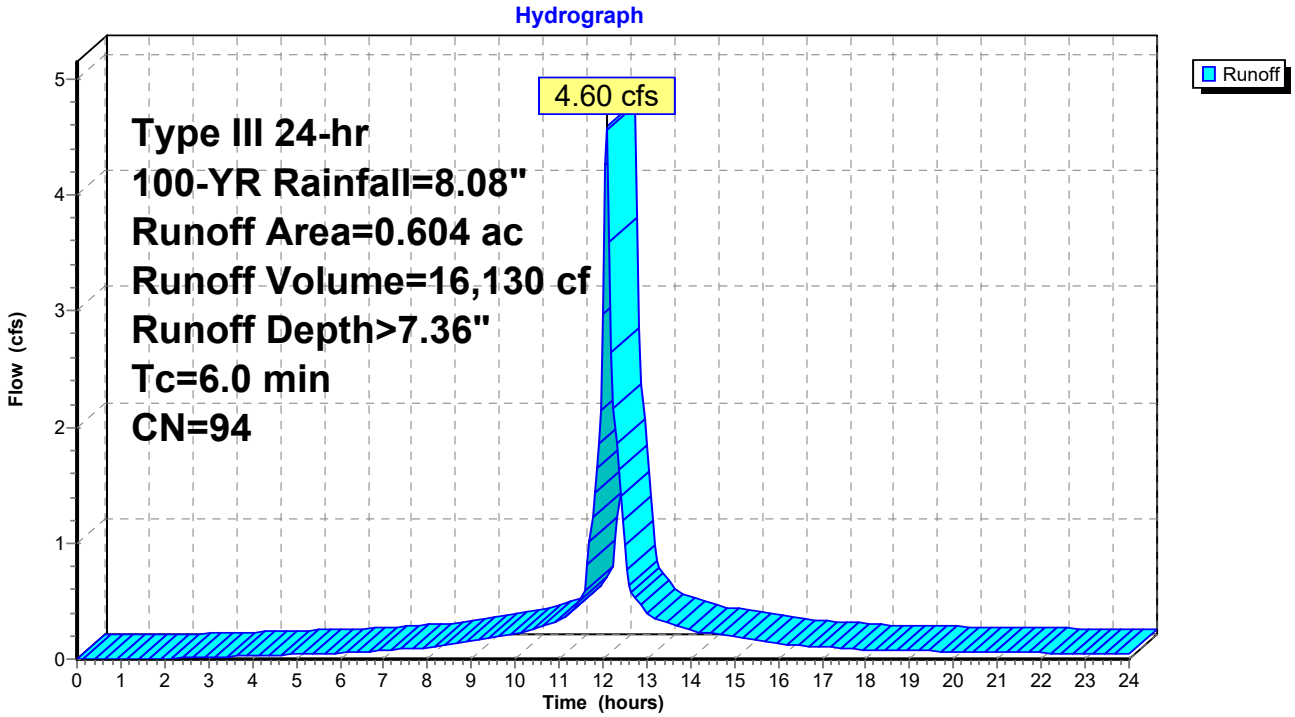
Runoff = 4.60 cfs @ 12.09 hrs, Volume= 16,130 cf, Depth> 7.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-YR Rainfall=8.08"

	Area (ac)	CN	Description
*	0.038	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.029	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.537	98	Paved parking
	0.604	94	Weighted Average
	0.067		11.09% Pervious Area
	0.537		88.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct**

Subcatchment PD-2a: Prop. Drainage Area 2a



Summary for Subcatchment PD-2b: Prop. Drainage Area 2b

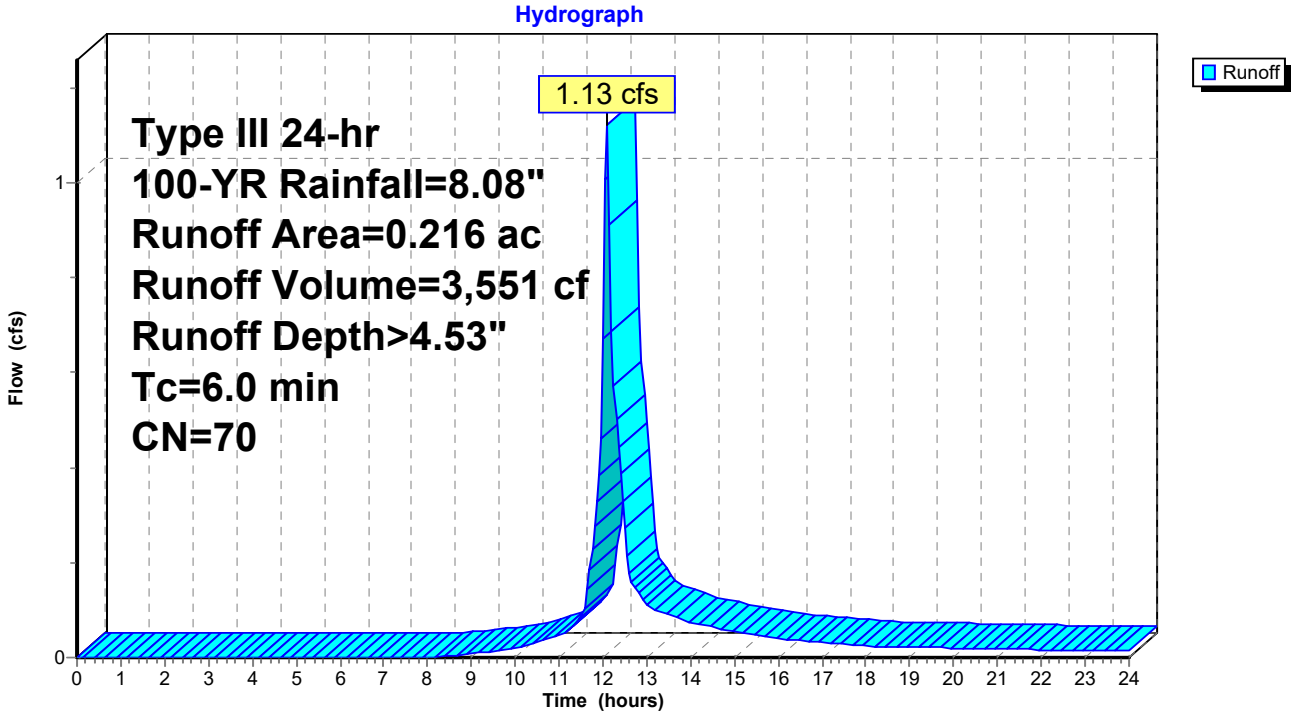
Runoff = 1.13 cfs @ 12.09 hrs, Volume= 3,551 cf, Depth> 4.53"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-YR Rainfall=8.08"

	Area (ac)	CN	Description
*	0.174	74	Woods/grass comb., Fair, HSG B/D, 13
*	0.018	43	Woods/grass comb., Fair, HSG A. 36A
	0.024	65	Woods/grass comb., Fair, HSG B
	0.216	70	Weighted Average
	0.216		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-2b: Prop. Drainage Area 2b



Summary for Subcatchment PD-2c: Prop. Drainage Area 2c

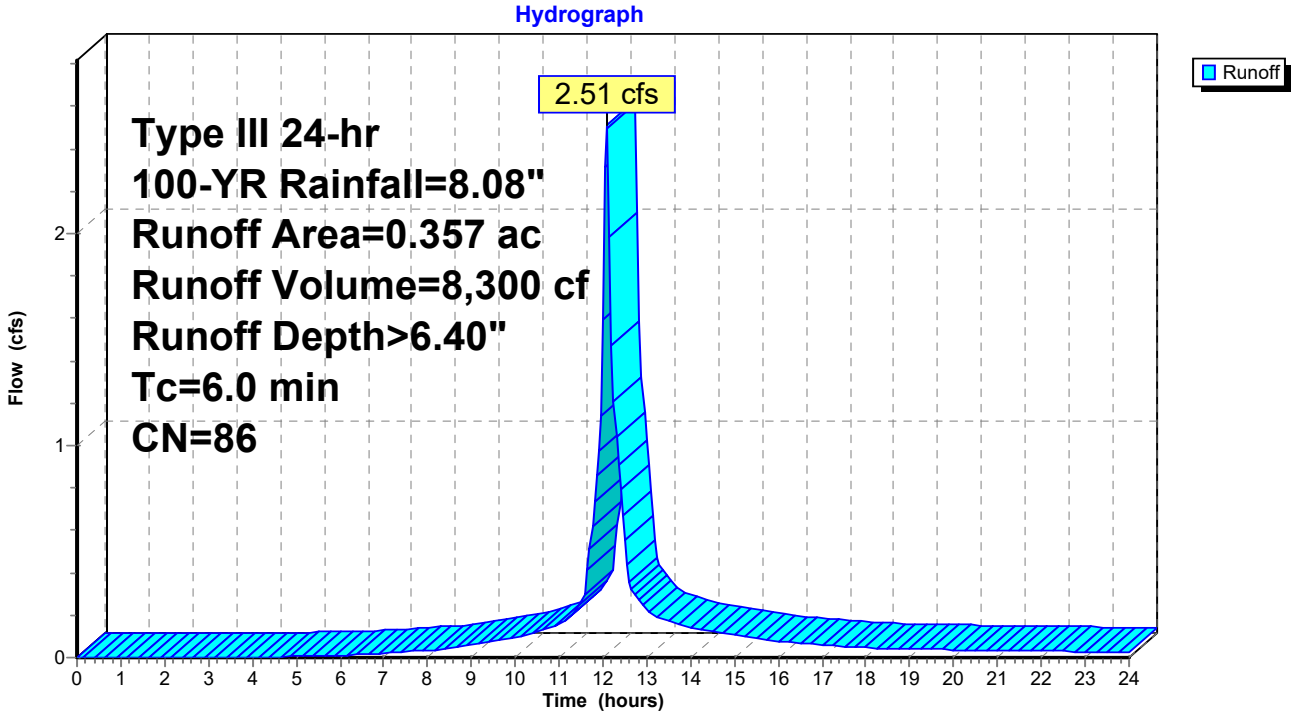
Runoff = 2.51 cfs @ 12.09 hrs, Volume= 8,300 cf, Depth> 6.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-YR Rainfall=8.08"

	Area (ac)	CN	Description
*	0.061	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.042	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.021	49	50-75% Grass cover, Fair, HSG A, 36A
	0.233	98	Paved parking, HSG D
	0.357	86	Weighted Average
	0.124		34.73% Pervious Area
	0.233		65.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-2c: Prop. Drainage Area 2c



Summary for Subcatchment PD-2d: Prop. Drainage Area 2d

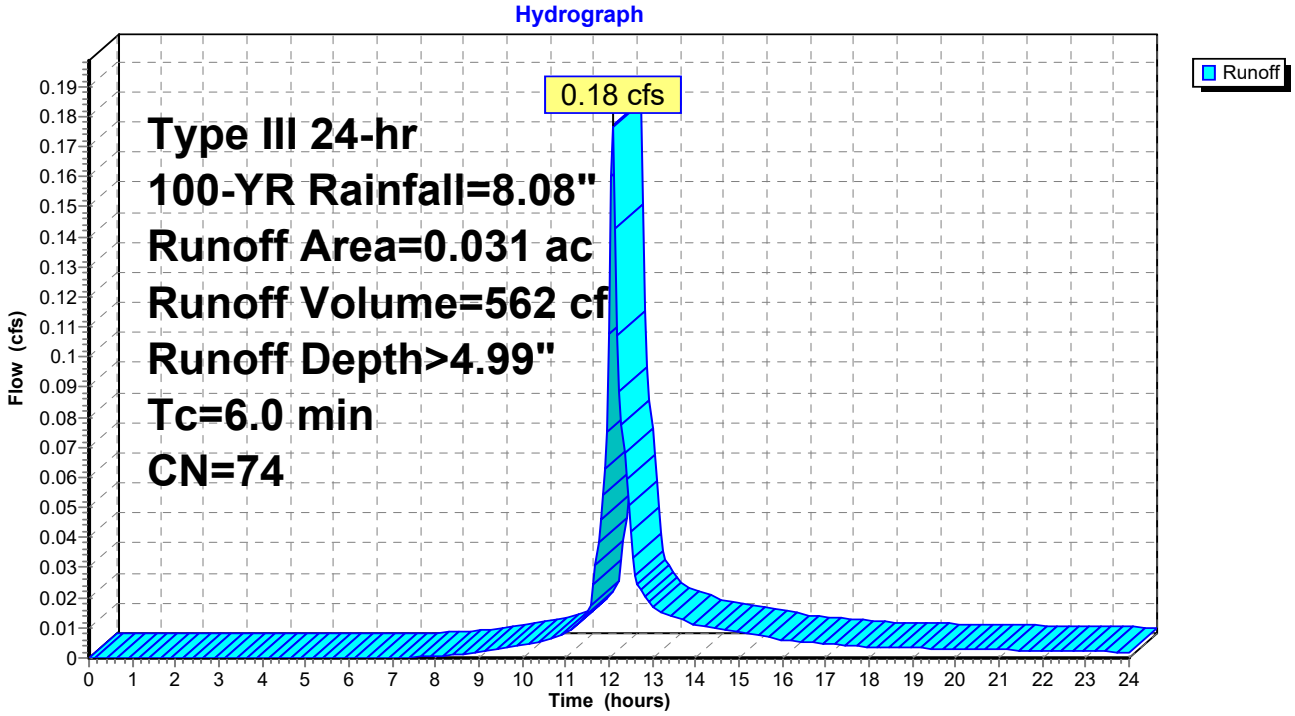
Runoff = 0.18 cfs @ 12.09 hrs, Volume= 562 cf, Depth> 4.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-YR Rainfall=8.08"

	Area (ac)	CN	Description
*	0.031	74	Woods/grass comb., Fair, HSG B/D, 13
	0.031		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-2d: Prop. Drainage Area 2d



Summary for Subcatchment PD-2e: Prop. Drainage Area 2e

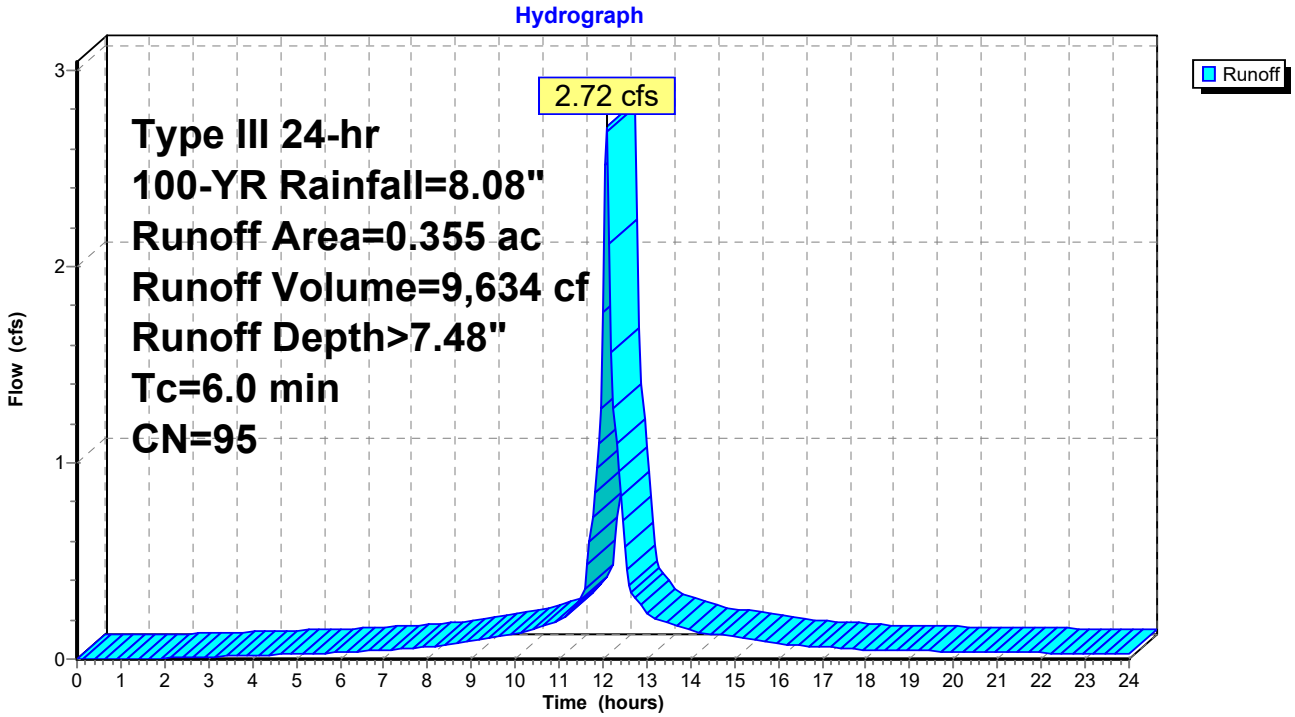
Runoff = 2.72 cfs @ 12.09 hrs, Volume= 9,634 cf, Depth> 7.48"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-YR Rainfall=8.08"

	Area (ac)	CN	Description
*	0.004	43	Woods/grass comb., Fair, HSG A, 36A
*	0.020	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.331	98	Paved parking
	0.355	95	Weighted Average
	0.024		6.76% Pervious Area
	0.331		93.24% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-2e: Prop. Drainage Area 2e



Summary for Subcatchment PD-2f: Prop. Drainage Area 2d

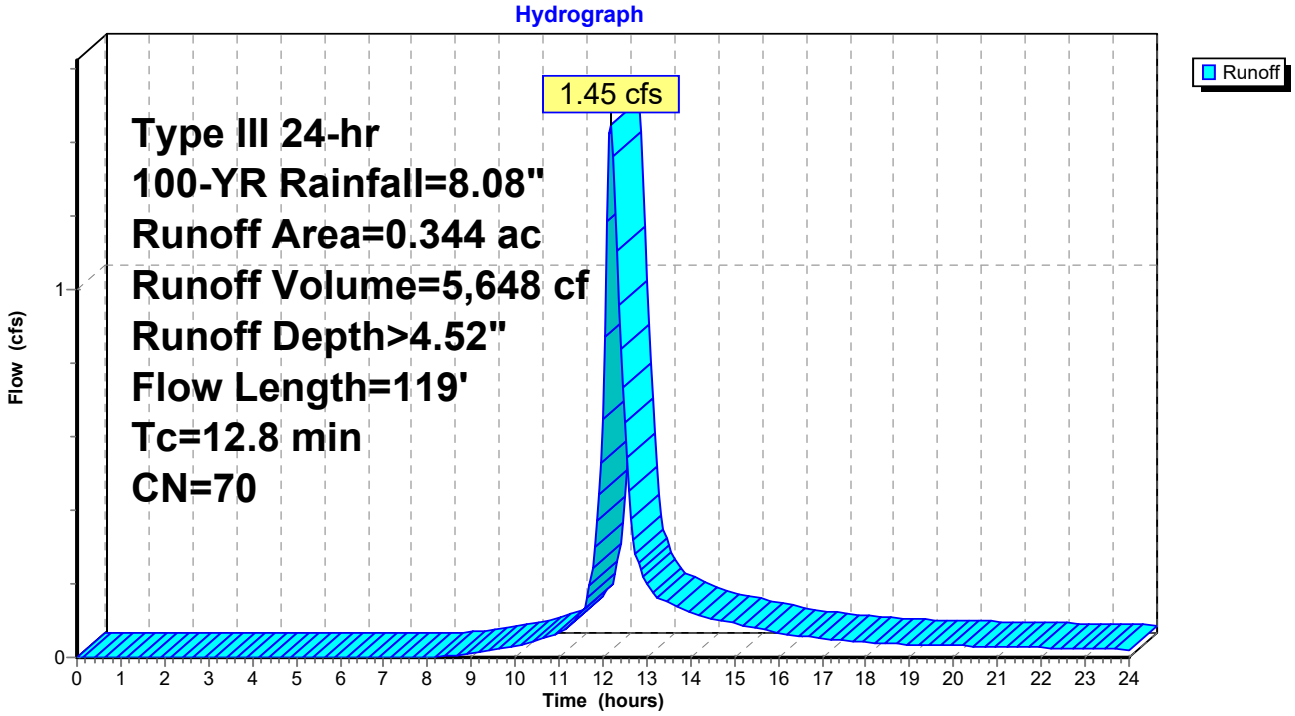
Runoff = 1.45 cfs @ 12.18 hrs, Volume= 5,648 cf, Depth> 4.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-YR Rainfall=8.08"

	Area (ac)	CN	Description
*	0.296	74	Woods/grass comb., Fair, HSG B/D, 13
	0.048	43	Woods/grass comb., Fair, HSG A
	0.344	70	Weighted Average
	0.344		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.9	23	0.1600	0.13		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.18"
8.4	36	0.0270	0.07		**Sheet Flow, B-C** Woods: Light underbrush n= 0.400 P2= 3.18"
1.5	60	0.0167	0.65		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
12.8	119	Total			

Subcatchment PD-2f: Prop. Drainage Area 2d



Summary for Subcatchment PD-3a: Prop. Drainage Area 3a

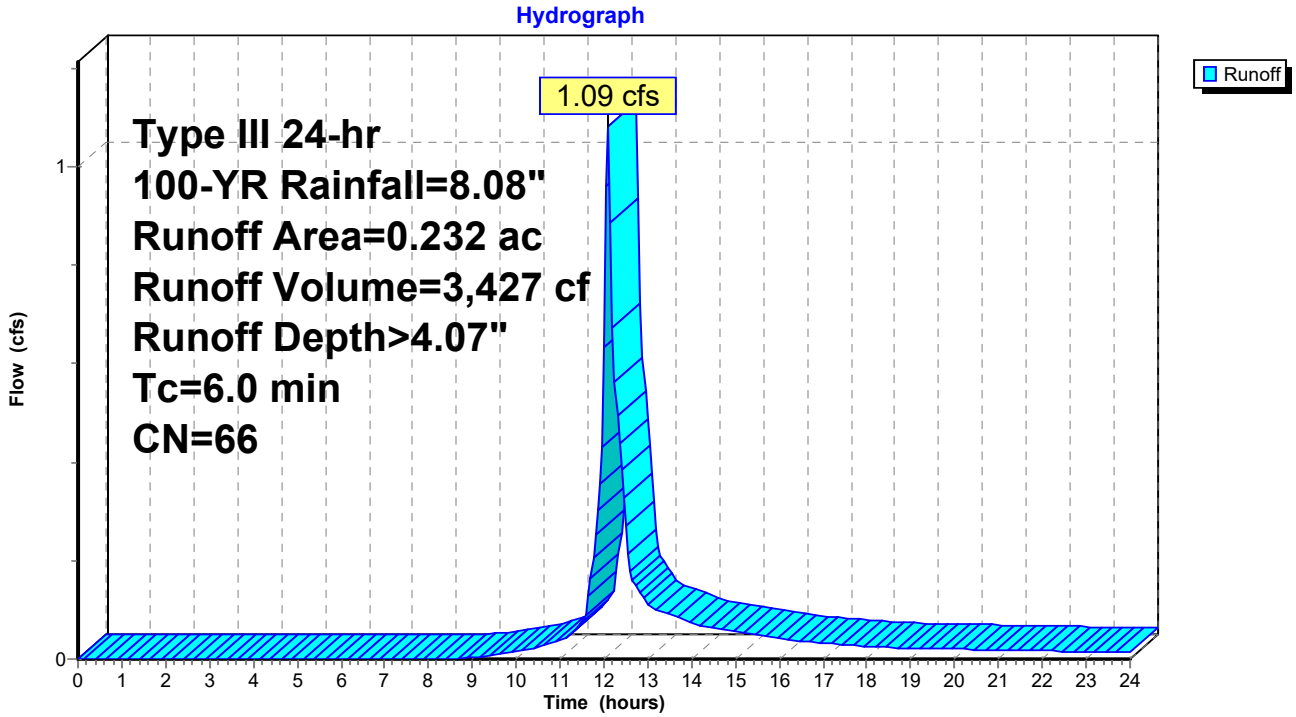
Runoff = 1.09 cfs @ 12.09 hrs, Volume= 3,427 cf, Depth> 4.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-YR Rainfall=8.08"

	Area (ac)	CN	Description
*	0.120	49	50-75% Grass cover, Fair, HSG A, 36A
*	0.071	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.041	98	Paved parking
	0.232	66	Weighted Average
	0.191		82.33% Pervious Area
	0.041		17.67% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct**

Subcatchment PD-3a: Prop. Drainage Area 3a



Summary for Subcatchment PD-3b: Prop. Drainage Area 3b

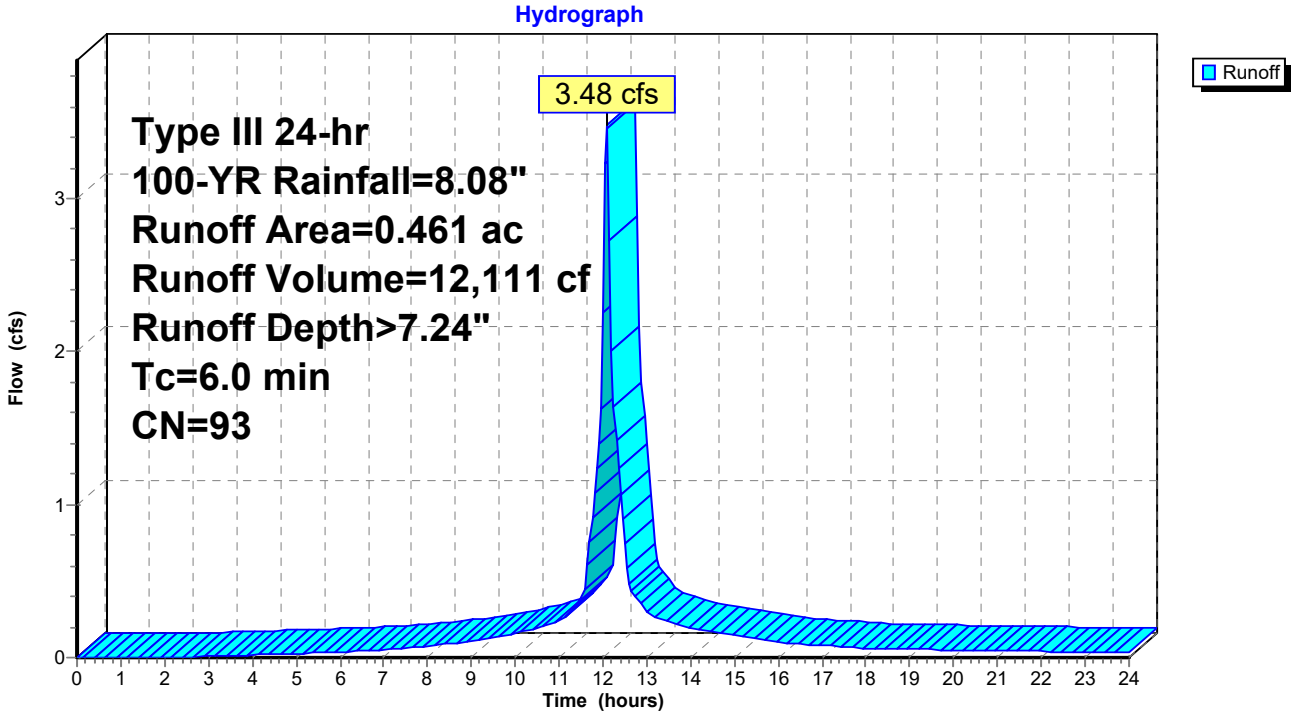
Runoff = 3.48 cfs @ 12.09 hrs, Volume= 12,111 cf, Depth> 7.24"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-YR Rainfall=8.08"

	Area (ac)	CN	Description
*	0.093	77	50-75% Grass cover, Fair, HSG B/D, 13
*	0.019	79	50-75% Grass cover, Fair, HSG C, 701A
*	0.016	98	Paved parking
*	0.333	98	Roofing
	0.461	93	Weighted Average
	0.112		24.30% Pervious Area
	0.349		75.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment PD-3b: Prop. Drainage Area 3b



Summary for Subcatchment PD-3c: Prop. Drainage Area 3c

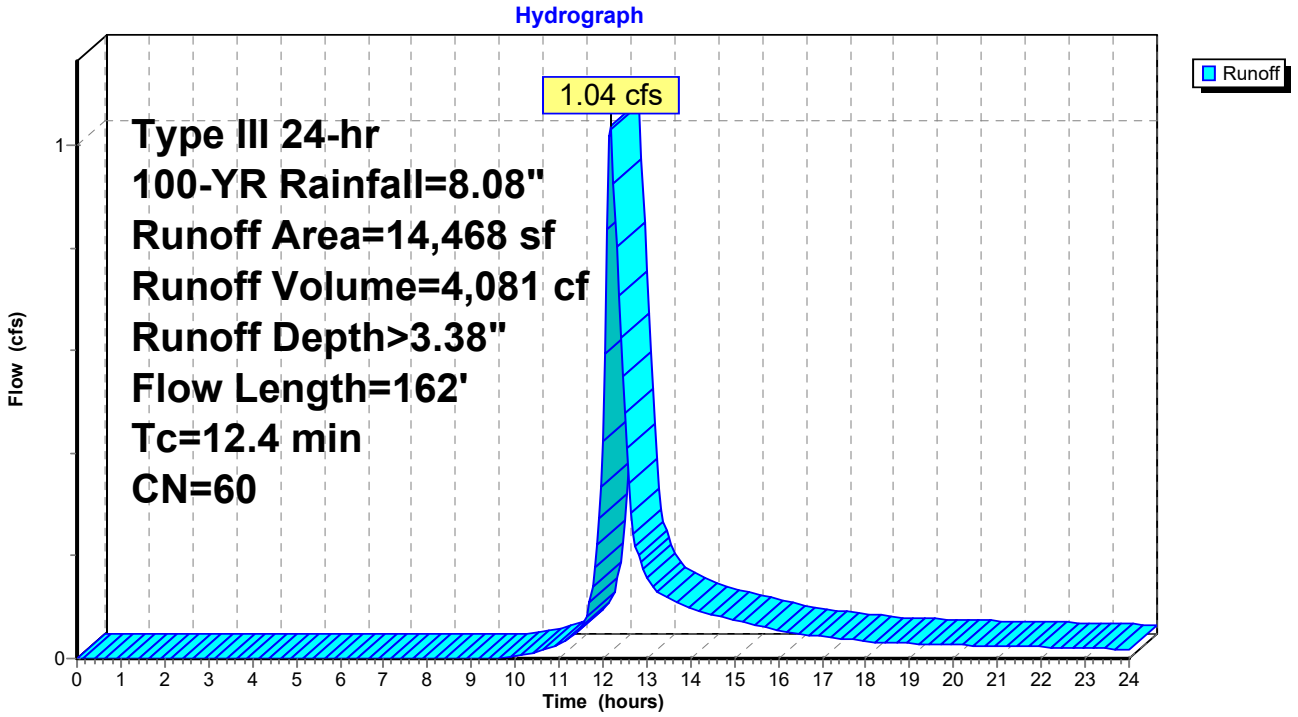
Runoff = 1.04 cfs @ 12.18 hrs, Volume= 4,081 cf, Depth> 3.38"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-YR Rainfall=8.08"

	Area (sf)	CN	Description
*	6,684	43	Woods/grass comb., Fair, HSG A, 36A
*	5,545	74	Woods/grass comb., Fair, HSG C
	1,501	76	Woods/grass comb., Fair, HSG C
*	738	77	50-75% Grass cover, Fair, HSG C
	14,468	60	Weighted Average
	14,468		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.8	8	0.0625	0.07		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.18"
3.4	17	0.0580	0.08		**Sheet Flow, B-C** Woods: Light underbrush n= 0.400 P2= 3.18"
3.2	16	0.0625	0.08		**Sheet Flow, C-D** Woods: Light underbrush n= 0.400 P2= 3.18"
1.5	9	0.1250	0.10		**Sheet Flow, D-E** Woods: Light underbrush n= 0.400 P2= 3.18"
2.5	112	0.0220	0.74		**Shallow Concentrated Flow, E-F** Woodland Kv= 5.0 fps
12.4	162	Total			

Subcatchment PD-3c: Prop. Drainage Area 3c



Summary for Subcatchment RD-1: Roof 1

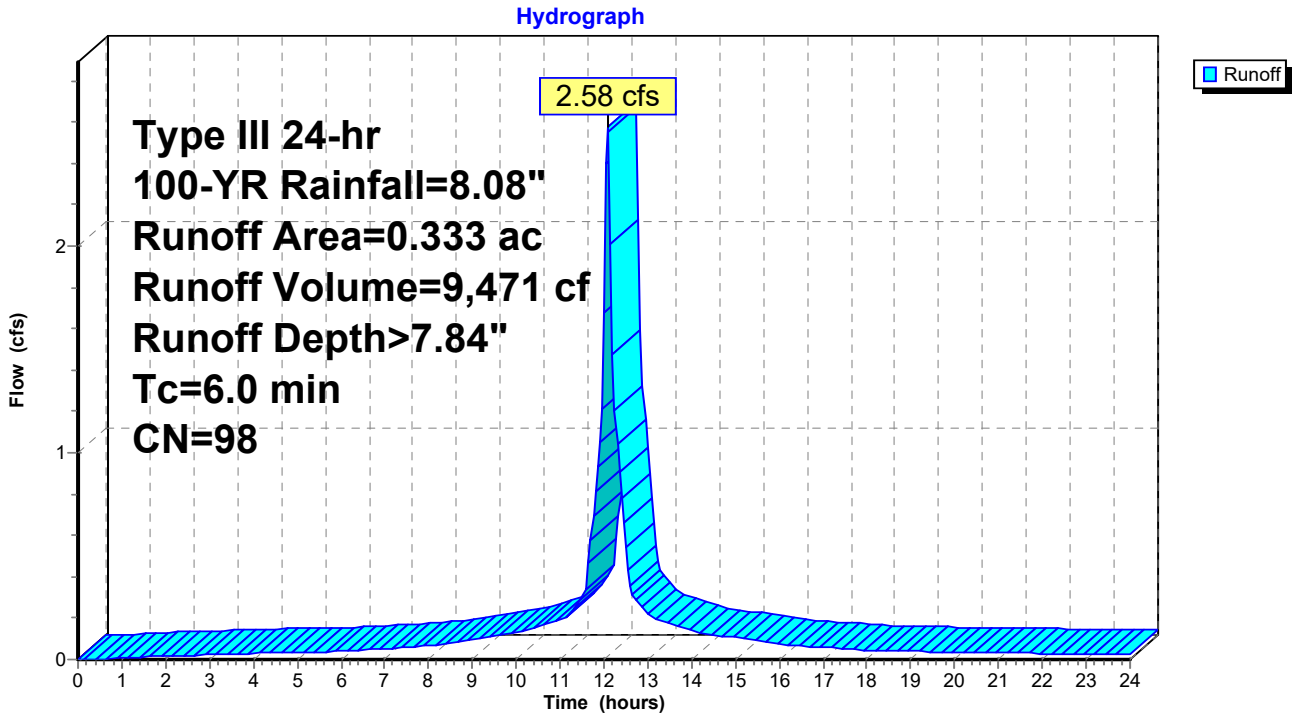
Runoff = 2.58 cfs @ 12.09 hrs, Volume= 9,471 cf, Depth> 7.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-YR Rainfall=8.08"

	Area (ac)	CN	Description
*	0.333	98	Unconnected roofs
	0.333		100.00% Impervious Area
	0.333		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct Entry**

Subcatchment RD-1: Roof 1

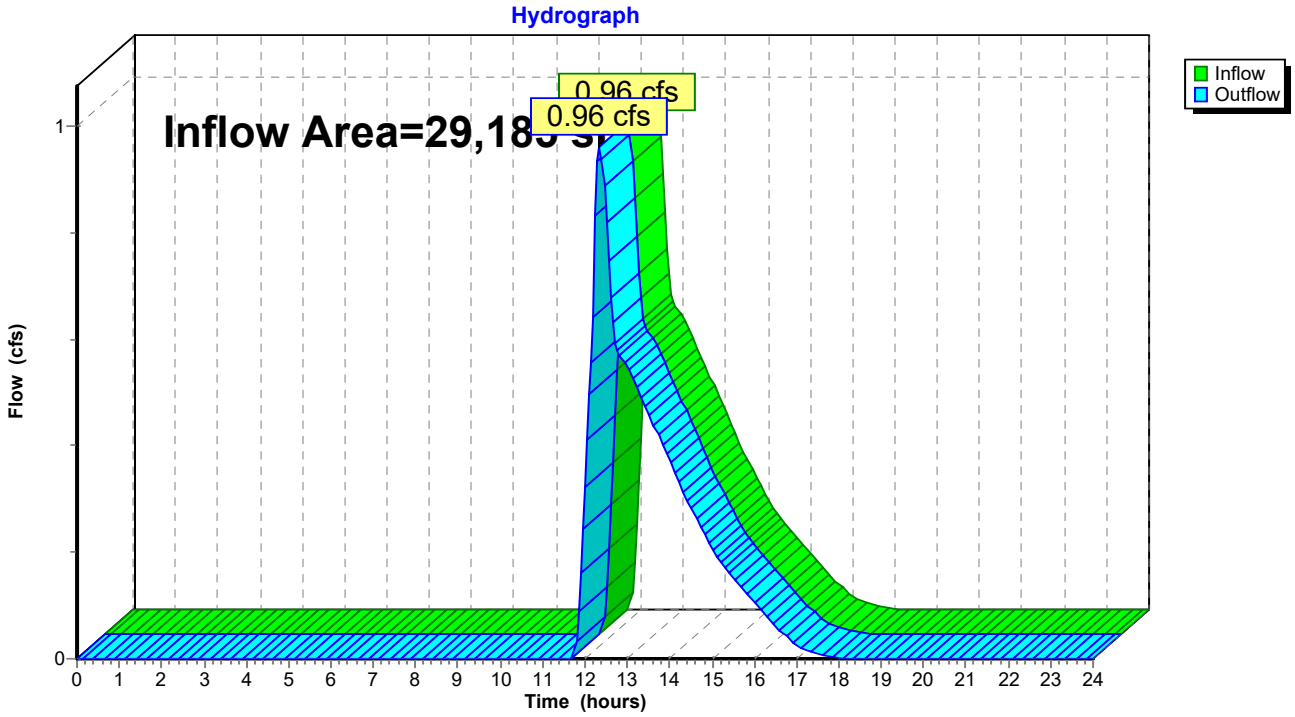


Summary for Reach DP-1a: Design Point 1

Inflow Area = 29,185 sf, 78.51% Impervious, Inflow Depth = 2.49" for 100-YR event
Inflow = 0.96 cfs @ 12.35 hrs, Volume= 6,044 cf
Outflow = 0.96 cfs @ 12.35 hrs, Volume= 6,044 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-1a: Design Point 1

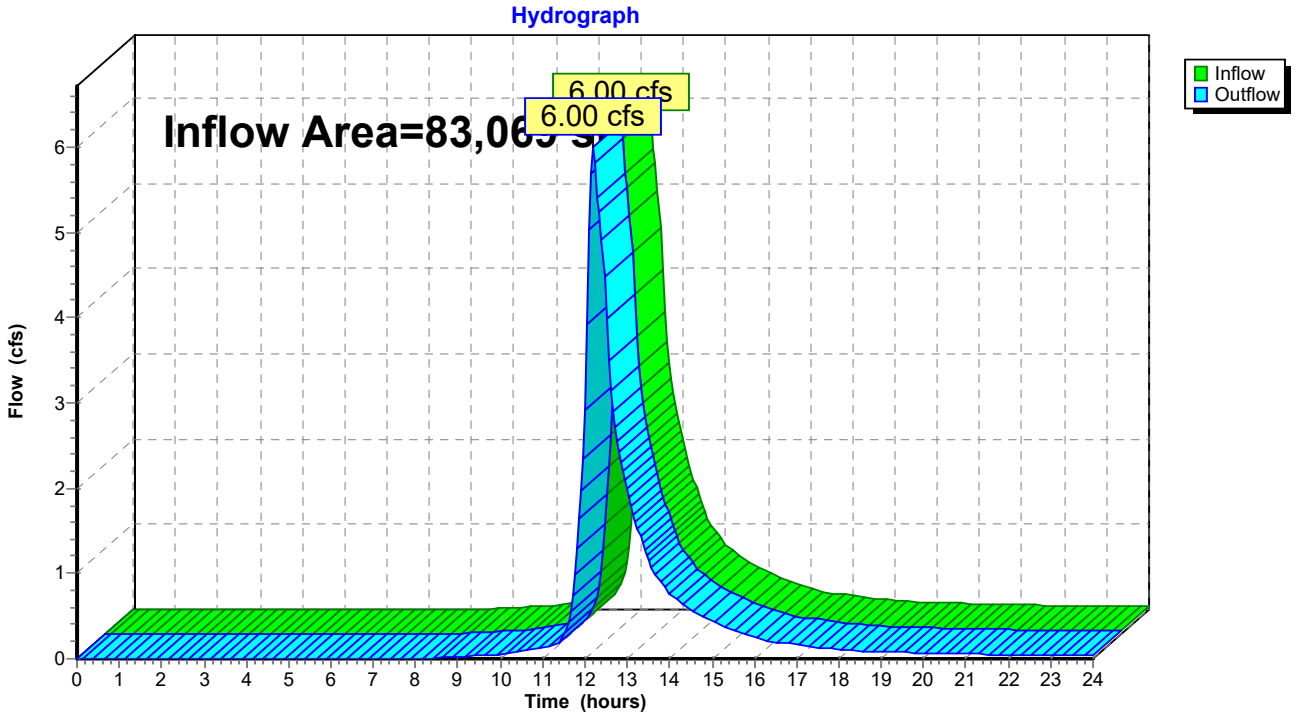


Summary for Reach DP-2a: Design Point 2

Inflow Area = 83,069 sf, 57.73% Impervious, Inflow Depth > 3.90" for 100-YR event
Inflow = 6.00 cfs @ 12.21 hrs, Volume= 26,964 cf
Outflow = 6.00 cfs @ 12.21 hrs, Volume= 26,964 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-2a: Design Point 2

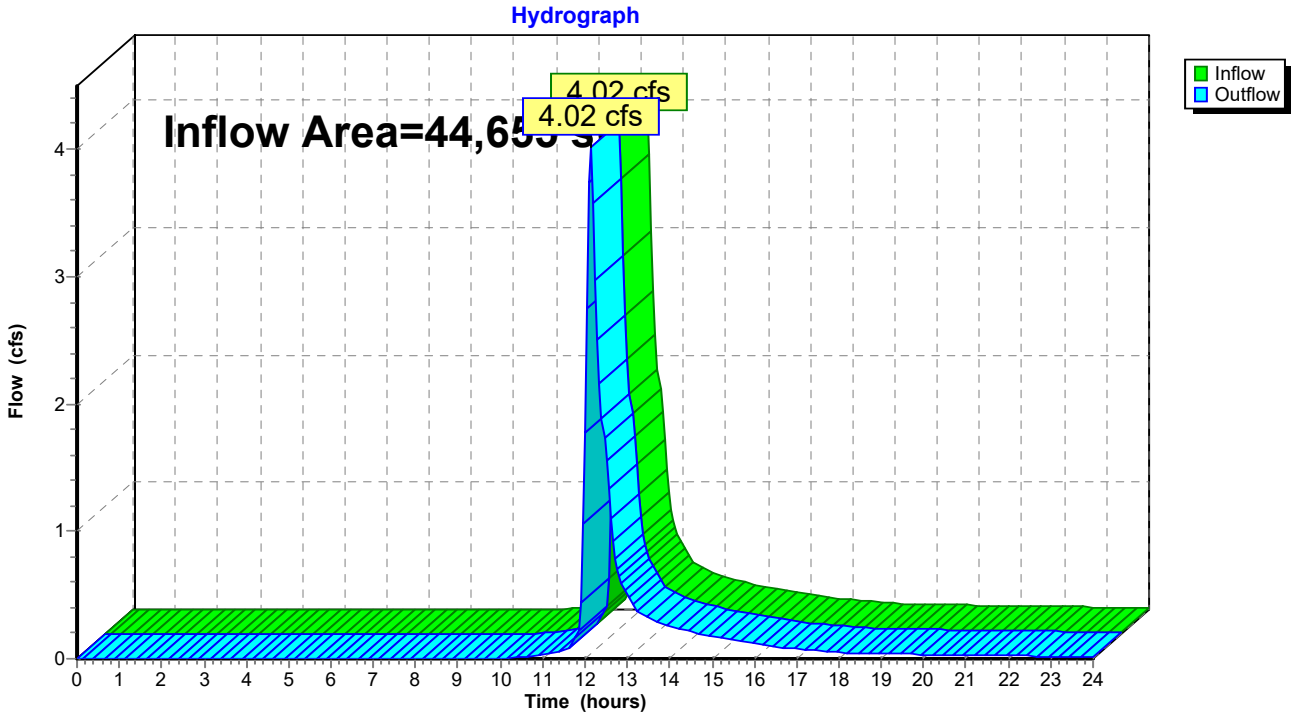


Summary for Reach DP-3a: Design Point 3

Inflow Area = 44,655 sf, 38.04% Impervious, Inflow Depth > 2.89" for 100-YR event
Inflow = 4.02 cfs @ 12.14 hrs, Volume= 10,769 cf
Outflow = 4.02 cfs @ 12.14 hrs, Volume= 10,769 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DP-3a: Design Point 3



Summary for Pond AB1: Above Ground Infiltration Basin 1

Inflow Area =	29,185 sf, 78.51% Impervious, Inflow Depth > 4.13" for 100-YR event				
Inflow =	2.39 cfs @	12.09 hrs, Volume=	10,050 cf		
Outflow =	1.07 cfs @	12.35 hrs, Volume=	9,894 cf, Atten= 55%, Lag= 15.5 min		
Discarded =	0.11 cfs @	12.35 hrs, Volume=	3,850 cf		
Primary =	0.96 cfs @	12.35 hrs, Volume=	6,044 cf		

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 129.10' @ 12.35 hrs Surf.Area= 2,031 sf Storage= 2,500 cf

Plug-Flow detention time= 68.9 min calculated for 9,874 cf (98% of inflow)
Center-of-Mass det. time= 59.8 min (864.3 - 804.5)

Volume	Invert	Avail.Storage	Storage Description
#1	127.00'	4,542 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc) 4,798 cf Overall - 256 cf Embedded = 4,542 cf
#2	127.00'	102 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc) Inside #1 256 cf Overall x 40.0% Voids
		4,644 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
127.00	512	0	0
128.00	1,218	865	865
129.00	1,949	1,584	2,449
130.00	2,749	2,349	4,798

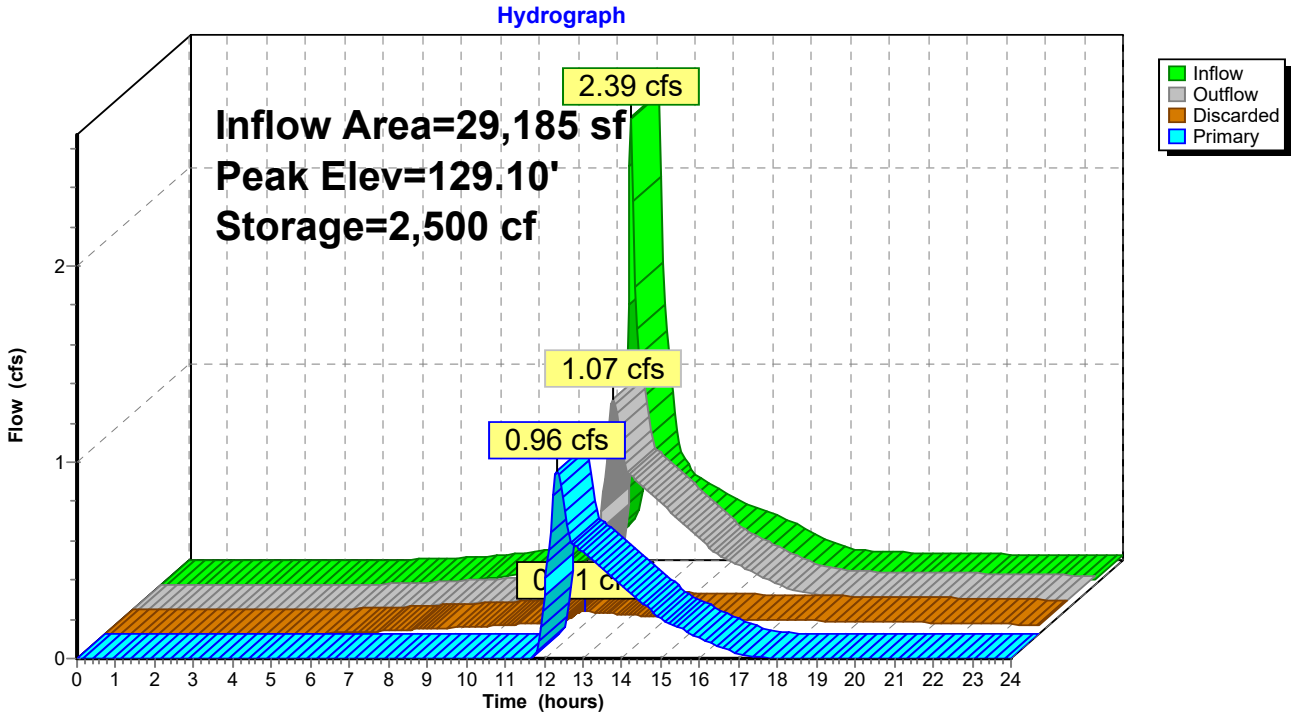
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
127.00	512	0	0
127.50	512	256	256

Device	Routing	Invert	Outlet Devices
#1	Primary	127.57'	**8.0" Round Culvert Barrel** L= 13.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 127.57' / 127.50' S= 0.0054 '/' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 0.35 sf
#2	Device 1	129.00'	**12.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Discarded	127.00'	**2.410 in/hr Exfiltration over Surface area**
#4	Device 1	128.00'	**5.0" Vert. Orifice/Grate** C= 0.600

Discarded OutFlow Max=0.11 cfs @ 12.35 hrs HW=129.10' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.11 cfs)

Primary OutFlow Max=0.96 cfs @ 12.35 hrs HW=129.10' (Free Discharge)
└─**1=Culvert Barrel** (Passes 0.96 cfs of 1.41 cfs potential flow)
  ├─**2=Orifice/Grate** (Weir Controls 0.34 cfs @ 1.05 fps)
  └─**4=Orifice/Grate** (Orifice Controls 0.62 cfs @ 4.55 fps)

Pond AB1: Above Ground Infiltration Basin 1



Stage-Area-Storage for Pond AB1: Above Ground Infiltration Basin 1

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
127.00	512	0
127.05	547	11
127.10	583	24
127.15	618	39
127.20	653	55
127.25	689	73
127.30	724	93
127.35	759	115
127.40	794	138
127.45	830	164
127.50	865	191
127.55	900	235
127.60	936	281
127.65	971	328
127.70	1,006	378
127.75	1,042	429
127.80	1,077	482
127.85	1,112	537
127.90	1,147	593
127.95	1,183	651
128.00	1,218	711
128.05	1,255	773
128.10	1,291	837
128.15	1,328	902
128.20	1,364	970
128.25	1,401	1,039
128.30	1,437	1,110
128.35	1,474	1,182
128.40	1,510	1,257
128.45	1,547	1,334
128.50	1,584	1,412
128.55	1,620	1,492
128.60	1,657	1,574
128.65	1,693	1,658
128.70	1,730	1,743
128.75	1,766	1,830
128.80	1,803	1,920
128.85	1,839	2,011
128.90	1,876	2,104
128.95	1,912	2,198
129.00	1,949	2,295
129.05	1,989	2,393
129.10	2,029	2,494
129.15	2,069	2,596
129.20	2,109	2,701
129.25	2,149	2,807
129.30	2,189	2,916
129.35	2,229	3,026
129.40	2,269	3,139
129.45	2,309	3,253
129.50	2,349	3,369
129.55	2,389	3,488
129.60	2,429	3,608
129.65	2,469	3,731
129.70	2,509	3,855
129.75	2,549	3,982
129.80	2,589	4,110
129.85	2,629	4,241
129.90	2,669	4,373
129.95	2,709	4,507
130.00	**2,749**	**4,644**

Summary for Pond AB3a: Above Ground Infiltration 3a

Inflow Area =	10,106 sf, 17.67% Impervious, Inflow Depth > 4.07" for 100-YR event				
Inflow =	1.09 cfs @	12.09 hrs, Volume=	3,427 cf		
Outflow =	0.26 cfs @	12.52 hrs, Volume=	3,422 cf, Atten= 76%, Lag= 25.6 min		
Discarded =	0.09 cfs @	12.52 hrs, Volume=	3,197 cf		
Primary =	0.17 cfs @	12.52 hrs, Volume=	225 cf		

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 133.03' @ 12.52 hrs Surf.Area= 1,618 sf Storage= 1,305 cf

Plug-Flow detention time= 139.7 min calculated for 3,415 cf (100% of inflow)
Center-of-Mass det. time= 138.5 min (970.7 - 832.2)

Volume	Invert	Avail.Storage	Storage Description
#1	132.00'	3,206 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

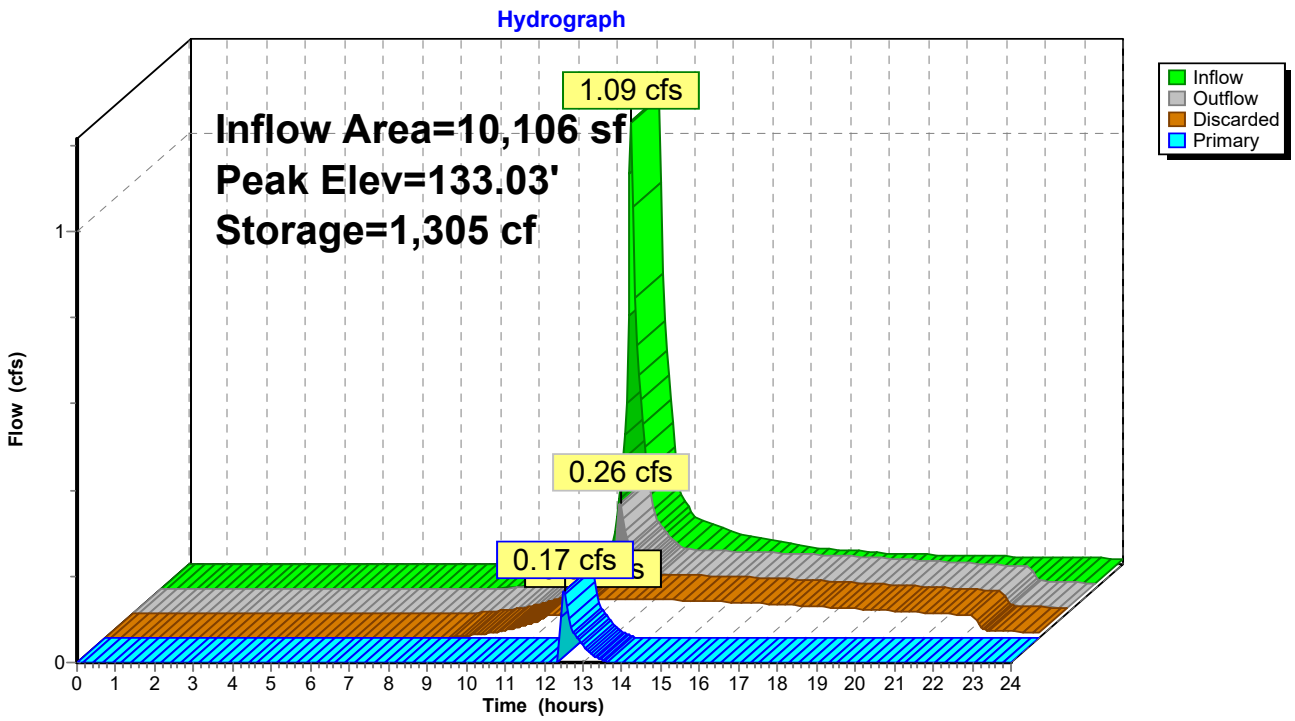
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
132.00	906	0	0
133.00	1,593	1,250	1,250
134.00	2,319	1,956	3,206

Device	Routing	Invert	Outlet Devices
#1	Discarded	132.00'	**2.410 in/hr Exfiltration over Surface area**
#2	Primary	133.00'	**10.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.09 cfs @ 12.52 hrs HW=133.03' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.09 cfs)

Primary OutFlow Max=0.15 cfs @ 12.52 hrs HW=133.03' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Weir Controls 0.15 cfs @ 0.46 fps)

Pond AB3a: Above Ground Infiltration 3a



Stage-Area-Storage for Pond AB3a: Above Ground Infiltration 3a

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
132.00	906	0
132.02	920	18
132.04	933	37
132.06	947	56
132.08	961	75
132.10	975	94
132.12	988	114
132.14	1,002	134
132.16	1,016	154
132.18	1,030	174
132.20	1,043	195
132.22	1,057	216
132.24	1,071	237
132.26	1,085	259
132.28	1,098	281
132.30	1,112	303
132.32	1,126	325
132.34	1,140	348
132.36	1,153	371
132.38	1,167	394
132.40	1,181	417
132.42	1,195	441
132.44	1,208	465
132.46	1,222	489
132.48	1,236	514
132.50	1,250	539
132.52	1,263	564
132.54	1,277	589
132.56	1,291	615
132.58	1,304	641
132.60	1,318	667
132.62	1,332	694
132.64	1,346	721
132.66	1,359	748
132.68	1,373	775
132.70	1,387	803
132.72	1,401	830
132.74	1,414	859
132.76	1,428	887
132.78	1,442	916
132.80	1,456	945
132.82	1,469	974
132.84	1,483	1,003
132.86	1,497	1,033
132.88	1,511	1,063
132.90	1,524	1,094
132.92	1,538	1,124
132.94	1,552	1,155
132.96	1,566	1,186
132.98	1,579	1,218
133.00	1,593	1,250
133.02	1,608	1,282
133.04	1,622	1,314
133.06	1,637	1,346
133.08	1,651	1,379
133.10	1,666	1,412
133.12	1,680	1,446
133.14	1,695	1,480
133.16	1,709	1,514
133.18	1,724	1,548
133.20	1,738	1,583
133.22	1,753	1,618
133.24	1,767	1,653
133.26	1,782	1,688
133.28	1,796	1,724
133.30	1,811	1,760
133.32	1,825	1,796
133.34	1,840	1,833
133.36	1,854	1,870
133.38	1,869	1,907
133.40	1,883	1,945
133.42	1,898	1,983
133.44	1,912	2,021
133.46	1,927	2,059
133.48	1,941	2,098
133.50	1,956	2,137
133.52	1,971	2,176
133.54	1,985	2,216
133.56	2,000	2,255
133.58	2,014	2,296
133.60	2,029	2,336
133.62	2,043	2,377
133.64	2,058	2,418
133.66	2,072	2,459
133.68	2,087	2,501
133.70	2,101	2,542
133.72	2,116	2,585
133.74	2,130	2,627
133.76	2,145	2,670
133.78	2,159	2,713
133.80	2,174	2,756
133.82	2,188	2,800
133.84	2,203	2,844
133.86	2,217	2,888
133.88	2,232	2,932
133.90	2,246	2,977
133.92	2,261	3,022
133.94	2,275	3,068
133.96	2,290	3,113
133.98	2,304	3,159
134.00	**2,319**	**3,206**

Summary for Pond AB3b: Above Ground Infiltration 3b

Inflow Area =	20,081 sf, 75.70% Impervious, Inflow Depth > 7.24" for 100-YR event				
Inflow =	3.48 cfs @	12.09 hrs,	Volume=	12,111 cf	
Outflow =	3.07 cfs @	12.13 hrs,	Volume=	9,000 cf,	Atten= 12%, Lag= 2.8 min
Discarded =	0.05 cfs @	12.13 hrs,	Volume=	2,537 cf	
Primary =	3.02 cfs @	12.13 hrs,	Volume=	6,463 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 133.53' @ 12.13 hrs Surf.Area= 2,166 sf Storage= 3,951 cf

Plug-Flow detention time= 151.2 min calculated for 9,000 cf (74% of inflow)
Center-of-Mass det. time= 65.2 min (829.9 - 764.7)

Volume	Invert	Avail.Storage	Storage Description
#1	130.00'	5,050 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

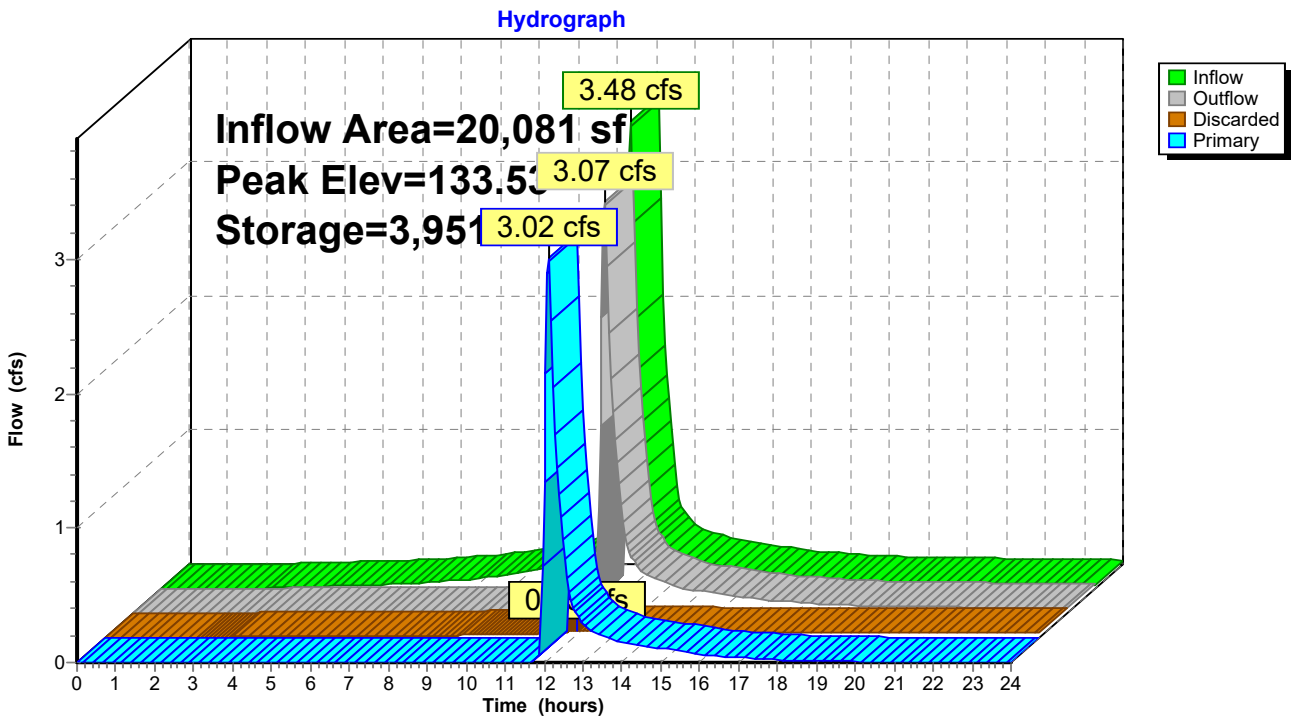
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
130.00	307	0	0
131.00	671	489	489
132.00	1,175	923	1,412
133.00	1,806	1,491	2,903
134.00	2,488	2,147	5,050

Device	Routing	Invert	Outlet Devices
#1	Primary	133.15'	**5.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32
#2	Discarded	130.00'	**1.020 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.05 cfs @ 12.13 hrs HW=133.52' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=2.96 cfs @ 12.13 hrs HW=133.52' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir** (Weir Controls 2.96 cfs @ 1.59 fps)

Pond AB3b: Above Ground Infiltration 3b



Stage-Area-Storage for Pond AB3b: Above Ground Infiltration 3b

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
130.00	307	0
130.05	325	16
130.10	343	33
130.15	362	50
130.20	380	69
130.25	398	88
130.30	416	108
130.35	434	130
130.40	453	152
130.45	471	175
130.50	489	199
130.55	507	224
130.60	525	250
130.65	544	276
130.70	562	304
130.75	580	333
130.80	598	362
130.85	616	392
130.90	635	424
130.95	653	456
131.00	671	489
131.05	696	523
131.10	721	559
131.15	747	595
131.20	772	633
131.25	797	673
131.30	822	713
131.35	847	755
131.40	873	798
131.45	898	842
131.50	923	888
131.55	948	934
131.60	973	982
131.65	999	1,032
131.70	1,024	1,082
131.75	1,049	1,134
131.80	1,074	1,187
131.85	1,099	1,241
131.90	1,125	1,297
131.95	1,150	1,354
132.00	1,175	1,412
132.05	1,207	1,472
132.10	1,238	1,533
132.15	1,270	1,595
132.20	1,301	1,660
132.25	1,333	1,725
132.30	1,364	1,793
132.35	1,396	1,862
132.40	1,427	1,932
132.45	1,459	2,005
132.50	1,491	2,078
132.55	1,522	2,154
132.60	1,554	2,231
132.65	1,585	2,309
132.70	1,617	2,389
132.75	1,648	2,471
132.80	1,680	2,554
132.85	1,711	2,639
132.90	1,743	2,725
132.95	1,774	2,813
133.00	1,806	2,903
133.05	1,840	2,994
133.10	1,874	3,087
133.15	1,908	3,181
133.20	1,942	3,277
133.25	1,977	3,375
133.30	2,011	3,475
133.35	2,045	3,576
133.40	2,079	3,679
133.45	2,113	3,784
133.50	2,147	3,891
133.55	2,181	3,999
133.60	2,215	4,109
133.65	2,249	4,220
133.70	2,283	4,334
133.75	2,318	4,449
133.80	2,352	4,566
133.85	2,386	4,684
133.90	2,420	4,804
133.95	2,454	4,926
134.00	**2,488**	**5,050**

Summary for Pond IB1: Infiltration Basin 1

Inflow Area =	14,505 sf,100.00% Impervious, Inflow Depth > 7.84" for 100-YR event				
Inflow =	2.58 cfs @	12.09 hrs,	Volume=	9,471 cf	
Outflow =	0.38 cfs @	12.59 hrs,	Volume=	9,452 cf,	Atten= 85%, Lag= 30.5 min
Discarded =	0.11 cfs @	9.40 hrs,	Volume=	6,802 cf	
Primary =	0.27 cfs @	12.59 hrs,	Volume=	2,650 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 132.06' @ 12.59 hrs Surf.Area= 1,889 sf Storage= 3,690 cf

Plug-Flow detention time= 134.6 min calculated for 9,452 cf (100% of inflow)
Center-of-Mass det. time= 133.2 min (873.9 - 740.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	129.00'	1,726 cf	**25.25'W x 74.82'L x 3.50'H Field A** 6,612 cf Overall - 2,297 cf Embedded = 4,315 cf x 40.0% Voids
#2A	129.50'	2,297 cf	**ADS_StormTech SC-740 +Cap** x 50 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 5 Rows of 10 Chambers
		4,023 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	130.24'	**12.0" Round Culvert** L= 10.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 130.24' / 130.00' S= 0.0240 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.79 sf
#2	Discarded	129.00'	**2.410 in/hr Exfiltration over Surface area**
#3	Device 1	130.40'	**3.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600
#4	Device 1	132.05'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.11 cfs @ 9.40 hrs HW=129.04' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.11 cfs)

Primary OutFlow Max=0.26 cfs @ 12.59 hrs HW=132.06' (Free Discharge)
└─**1=Culvert** (Passes 0.26 cfs of 5.55 cfs potential flow)
  ├─**3=Orifice/Grate** (Orifice Controls 0.25 cfs @ 6.04 fps)
  └─**4=Broad-Crested Rectangular Weir** (Weir Controls 0.01 cfs @ 0.26 fps)

Pond IB1: Infiltration Basin 1 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

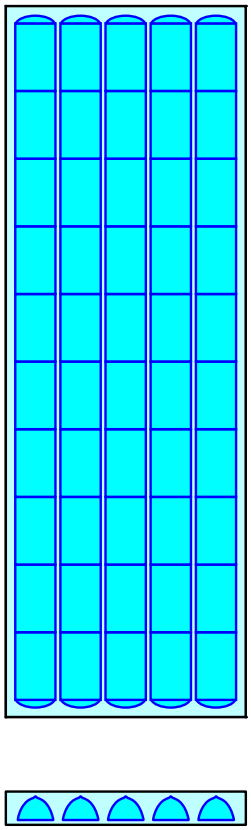
10 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 72.82' Row Length +12.0" End Stone x 2 = 74.82' Base Length
5 Rows x 51.0" Wide + 6.0" Spacing x 4 + 12.0" Side Stone x 2 = 25.25' Base Width
6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

50 Chambers x 45.9 cf = 2,297.0 cf Chamber Storage

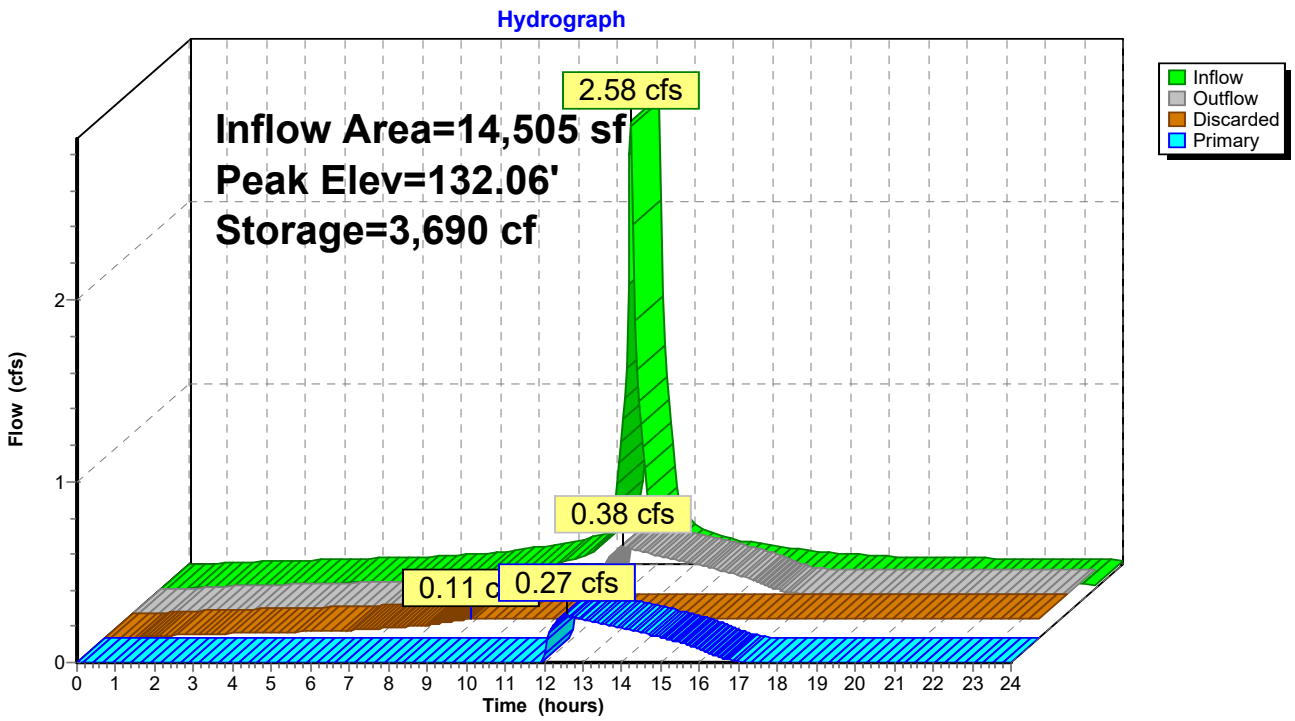
6,611.9 cf Field - 2,297.0 cf Chambers = 4,314.9 cf Stone x 40.0% Voids = 1,726.0 cf Stone Storage

Chamber Storage + Stone Storage = 4,023.0 cf = 0.092 af
Overall Storage Efficiency = 60.8%
Overall System Size = 74.82' x 25.25' x 3.50'

50 Chambers
244.9 cy Field
159.8 cy Stone



Pond IB1: Infiltration Basin 1



Stage-Area-Storage for Pond IB1: Infiltration Basin 1

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
129.00	**1,889**	0
129.05	1,889	38
129.10	1,889	76
129.15	1,889	113
129.20	1,889	151
129.25	1,889	189
129.30	1,889	227
129.35	1,889	264
129.40	1,889	302
129.45	1,889	340
129.50	1,889	378
129.55	1,889	455
129.60	1,889	533
129.65	1,889	610
129.70	1,889	687
129.75	1,889	764
129.80	1,889	841
129.85	1,889	917
129.90	1,889	993
129.95	1,889	1,069
130.00	1,889	1,145
130.05	1,889	1,220
130.10	1,889	1,295
130.15	1,889	1,369
130.20	1,889	1,444
130.25	1,889	1,517
130.30	1,889	1,591
130.35	1,889	1,664
130.40	1,889	1,736
130.45	1,889	1,809
130.50	1,889	1,880
130.55	1,889	1,952
130.60	1,889	2,022
130.65	1,889	2,093
130.70	1,889	2,162
130.75	1,889	2,232
130.80	1,889	2,300
130.85	1,889	2,368
130.90	1,889	2,435
130.95	1,889	2,502
131.00	1,889	2,568
131.05	1,889	2,634
131.10	1,889	2,698
131.15	1,889	2,762
131.20	1,889	2,825
131.25	1,889	2,887
131.30	1,889	2,948
131.35	1,889	3,008
131.40	1,889	3,067
131.45	1,889	3,124
131.50	1,889	3,181
131.55	1,889	3,236
131.60	1,889	3,290
131.65	1,889	3,342
131.70	1,889	3,392
131.75	1,889	3,439
131.80	1,889	3,484
131.85	1,889	3,526
131.90	1,889	3,567
131.95	1,889	3,607
132.00	1,889	3,645
132.05	1,889	3,683
132.10	1,889	3,721
132.15	1,889	3,758
132.20	1,889	3,796
132.25	1,889	3,834
132.30	1,889	3,872
132.35	1,889	3,910
132.40	1,889	3,947
132.45	1,889	3,985
132.50	1,889	**4,023**

Summary for Pond IB2a: Infiltration Basin 2a

Inflow Area =	26,310 sf, 88.91% Impervious, Inflow Depth > 7.36" for 100-YR event				
Inflow =	4.60 cfs @	12.09 hrs,	Volume=	16,130 cf	
Outflow =	2.38 cfs @	12.23 hrs,	Volume=	14,117 cf,	Atten= 48%, Lag= 8.5 min
Discarded =	0.06 cfs @	6.55 hrs,	Volume=	4,123 cf	
Primary =	2.32 cfs @	12.23 hrs,	Volume=	9,994 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 130.78' @ 12.23 hrs Surf.Area= 2,458 sf Storage= 5,048 cf

Plug-Flow detention time= 101.9 min calculated for 14,117 cf (88% of inflow)
Center-of-Mass det. time= 44.8 min (805.5 - 760.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	127.50'	2,392 cf	**30.00'W x 81.94'L x 3.67'H Field A** 9,013 cf Overall - 3,032 cf Embedded = 5,981 cf x 40.0% Voids
#2A	128.00'	3,032 cf	**ADS_StormTech SC-740 +Cap** x 66 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 6 Rows of 11 Chambers
		5,424 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	128.60'	**15.0" Round Culvert** L= 55.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 128.60' / 128.00' S= 0.0109 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 1.23 sf
#2	Discarded	127.50'	**1.020 in/hr Exfiltration over Surface area**
#3	Device 1	128.80'	**10.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600
#4	Device 1	130.10'	**10.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600
#5	Device 1	130.99'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.06 cfs @ 6.55 hrs HW=127.54' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=2.31 cfs @ 12.23 hrs HW=130.78' (Free Discharge)
└─**1=Culvert** (Passes 2.31 cfs of 8.21 cfs potential flow)
  ├─**3=Orifice/Grate** (Orifice Controls 1.80 cfs @ 6.47 fps)
  ├─**4=Orifice/Grate** (Orifice Controls 0.51 cfs @ 3.70 fps)
  └─**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond IB2a: Infiltration Basin 2a - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

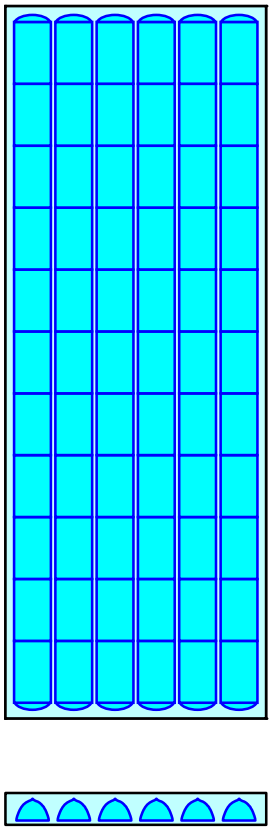
11 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 79.94' Row Length +12.0" End Stone x 2 = 81.94' Base Length
6 Rows x 51.0" Wide + 6.0" Spacing x 5 + 12.0" Side Stone x 2 = 30.00' Base Width
6.0" Base + 30.0" Chamber Height + 8.0" Cover = 3.67' Field Height

66 Chambers x 45.9 cf = 3,032.0 cf Chamber Storage

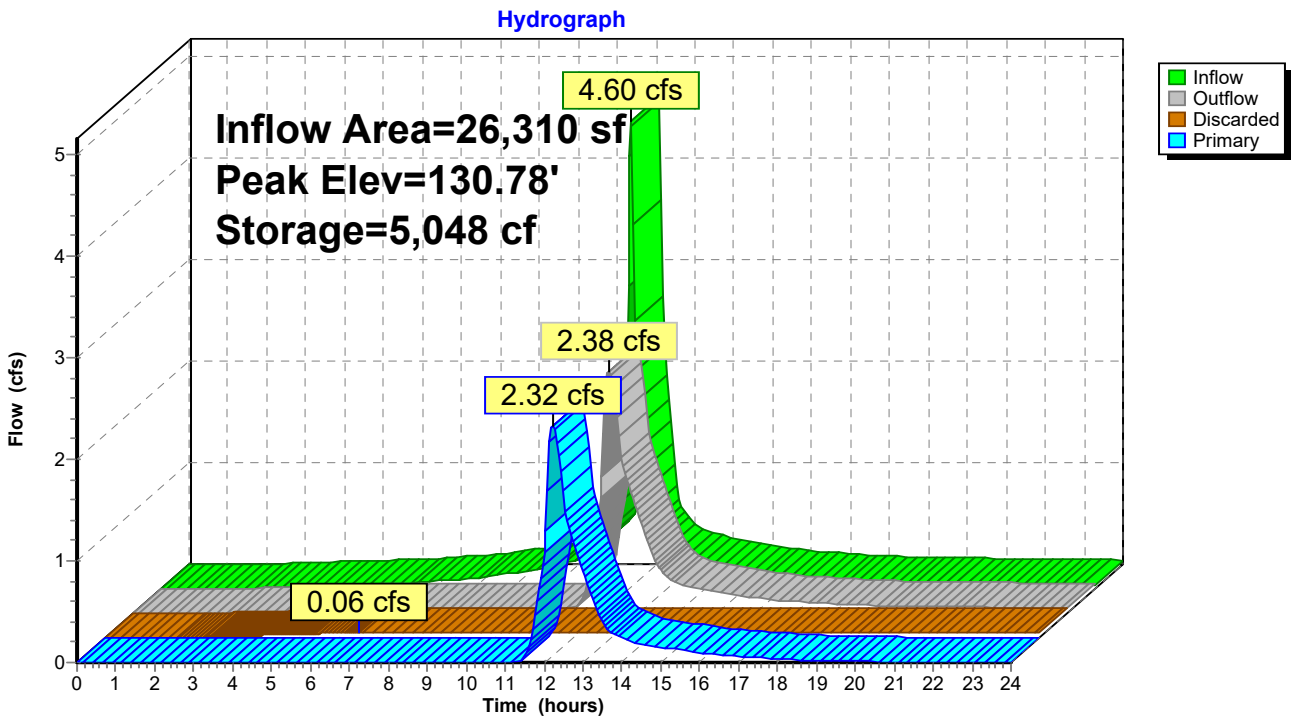
9,013.0 cf Field - 3,032.0 cf Chambers = 5,981.0 cf Stone x 40.0% Voids = 2,392.4 cf Stone Storage

Chamber Storage + Stone Storage = 5,424.4 cf = 0.125 af
Overall Storage Efficiency = 60.2%
Overall System Size = 81.94' x 30.00' x 3.67'

66 Chambers
333.8 cy Field
221.5 cy Stone



Pond IB2a: Infiltration Basin 2a



Stage-Area-Storage for Pond IB2a: Infiltration Basin 2a

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
127.50	**2,458**	0
127.55	2,458	49
127.60	2,458	98
127.65	2,458	147
127.70	2,458	197
127.75	2,458	246
127.80	2,458	295
127.85	2,458	344
127.90	2,458	393
127.95	2,458	442
128.00	2,458	492
128.05	2,458	593
128.10	2,458	695
128.15	2,458	796
128.20	2,458	897
128.25	2,458	998
128.30	2,458	1,099
128.35	2,458	1,199
128.40	2,458	1,298
128.45	2,458	1,398
128.50	2,458	1,497
128.55	2,458	1,595
128.60	2,458	1,694
128.65	2,458	1,791
128.70	2,458	1,888
128.75	2,458	1,985
128.80	2,458	2,081
128.85	2,458	2,177
128.90	2,458	2,272
128.95	2,458	2,367
129.00	2,458	2,461
129.05	2,458	2,554
129.10	2,458	2,647
129.15	2,458	2,739
129.20	2,458	2,830
129.25	2,458	2,921
129.30	2,458	3,011
129.35	2,458	3,100
129.40	2,458	3,188
129.45	2,458	3,275
129.50	2,458	3,362
129.55	2,458	3,447
129.60	2,458	3,532
129.65	2,458	3,615
129.70	2,458	3,698
129.75	2,458	3,779
129.80	2,458	3,858
129.85	2,458	3,937
129.90	2,458	4,014
129.95	2,458	4,089
130.00	2,458	4,164
130.05	2,458	4,236
130.10	2,458	4,306
130.15	2,458	4,374
130.20	2,458	4,439
130.25	2,458	4,501
130.30	2,458	4,559
130.35	2,458	4,614
130.40	2,458	4,667
130.45	2,458	4,719
130.50	2,458	4,769
130.55	2,458	4,818
130.60	2,458	4,867
130.65	2,458	4,916
130.70	2,458	4,966
130.75	2,458	5,015
130.80	2,458	5,064
130.85	2,458	5,113
130.90	2,458	5,162
130.95	2,458	5,211
131.00	2,458	5,261
131.05	2,458	5,310
131.10	2,458	5,359
131.15	2,458	**5,408**

Summary for Pond IB2c: Infiltration Basin Area 2c

Inflow Area =	15,551 sf, 65.27% Impervious, Inflow Depth > 6.40" for 100-YR event				
Inflow =	2.51 cfs @	12.09 hrs,	Volume=	8,300 cf	
Outflow =	1.31 cfs @	12.24 hrs,	Volume=	7,921 cf,	Atten= 48%, Lag= 9.2 min
Discarded =	0.06 cfs @	9.00 hrs,	Volume=	3,371 cf	
Primary =	1.25 cfs @	12.24 hrs,	Volume=	4,550 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 131.98' @ 12.24 hrs Surf.Area= 2,373 sf Storage= 2,473 cf

Plug-Flow detention time= 85.7 min calculated for 7,905 cf (95% of inflow)
Center-of-Mass det. time= 60.1 min (847.1 - 787.0)

Volume	Invert	Avail.Storage	Storage Description
#1A	130.00'	1,505 cf	**27.00'W x 87.91'L x 2.00'H Field A** 4,747 cf Overall - 985 cf Embedded = 3,762 cf x 40.0% Voids
#2A	130.50'	985 cf	**ADS_StormTech SC-160LP +Cap** x 144 Inside #1 Effective Size= 18.0"W x 12.0"H => 0.96 sf x 7.12'L = 6.8 cf Overall Size= 25.0"W x 12.0"H x 7.56'L with 0.44' Overlap 12 Rows of 12 Chambers
		2,489 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	130.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	129.20'	**8.0" Round Culvert** L= 14.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 129.20' / 129.00' S= 0.0143 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.35 sf
#3	Device 2	130.70'	**11.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600
#4	Device 2	131.40'	**2.0" Vert. Orifice/Grate** C= 0.600
#5	Device 2	131.88'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.06 cfs @ 9.00 hrs HW=130.02' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=1.24 cfs @ 12.24 hrs HW=131.98' (Free Discharge)
└─**2=Culvert** (Passes 1.24 cfs of 3.23 cfs potential flow)
  ├─**3=Orifice/Grate** (Orifice Controls 0.80 cfs @ 5.27 fps)
  ├─**4=Orifice/Grate** (Orifice Controls 0.07 cfs @ 3.40 fps)
  └─**5=Broad-Crested Rectangular Weir** (Weir Controls 0.36 cfs @ 0.89 fps)

Pond IB2c: Infiltration Basin Area 2c - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-160LP +Cap (ADS StormTech® SC-160LP with cap length)
Effective Size= 18.0"W x 12.0"H => 0.96 sf x 7.12'L = 6.8 cf
Overall Size= 25.0"W x 12.0"H x 7.56'L with 0.44' Overlap

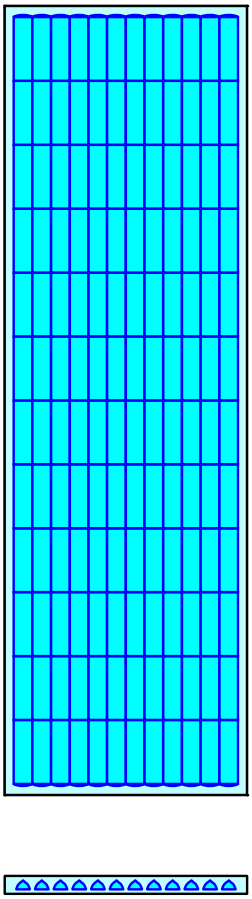
12 Chambers/Row x 7.12' Long +0.23' Cap Length x 2 = 85.91' Row Length +12.0" End Stone x 2 = 87.91' Base Length
12 Rows x 25.0" Wide + 12.0" Side Stone x 2 = 27.00' Base Width
6.0" Base + 12.0" Chamber Height + 6.0" Cover = 2.00' Field Height

144 Chambers x 6.8 cf = 984.5 cf Chamber Storage

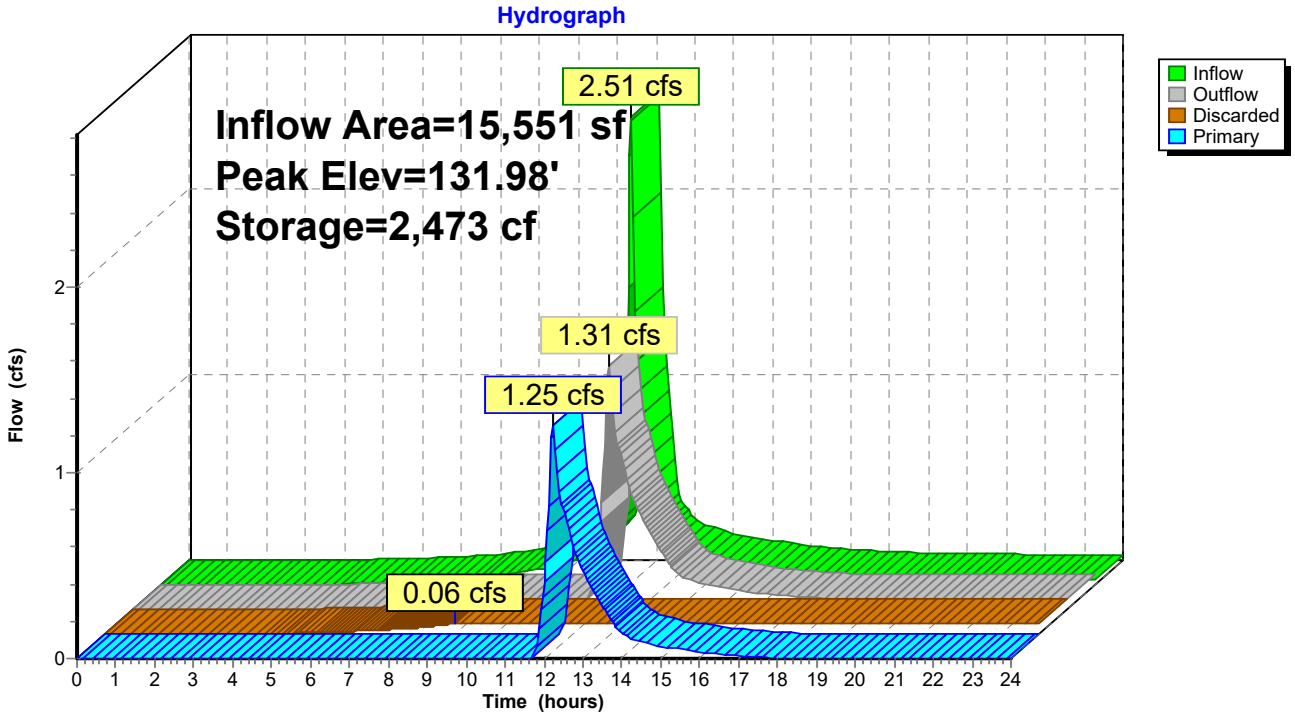
4,747.0 cf Field - 984.5 cf Chambers = 3,762.4 cf Stone x 40.0% Voids = 1,505.0 cf Stone Storage

Chamber Storage + Stone Storage = 2,489.5 cf = 0.057 af
Overall Storage Efficiency = 52.4%
Overall System Size = 87.91' x 27.00' x 2.00'

144 Chambers
175.8 cy Field
139.3 cy Stone



Pond IB2c: Infiltration Basin Area 2c



Stage-Area-Storage for Pond IB2c: Infiltration Basin Area 2c

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
130.00	**2,373**	0
130.02	2,373	19
130.04	2,373	38
130.06	2,373	57
130.08	2,373	76
130.10	2,373	95
130.12	2,373	114
130.14	2,373	133
130.16	2,373	152
130.18	2,373	171
130.20	2,373	190
130.22	2,373	209
130.24	2,373	228
130.26	2,373	247
130.28	2,373	266
130.30	2,373	285
130.32	2,373	304
130.34	2,373	323
130.36	2,373	342
130.38	2,373	361
130.40	2,373	380
130.42	2,373	399
130.44	2,373	418
130.46	2,373	437
130.48	2,373	456
130.50	2,373	475
130.52	2,373	512
130.54	2,373	549
130.56	2,373	587
130.58	2,373	624
130.60	2,373	661
130.62	2,373	698
130.64	2,373	735
130.66	2,373	772
130.68	2,373	808
130.70	2,373	844
130.72	2,373	880
130.74	2,373	916
130.76	2,373	952
130.78	2,373	987
130.80	2,373	1,022
130.82	2,373	1,057
130.84	2,373	1,092
130.86	2,373	1,127
130.88	2,373	1,161
130.90	2,373	1,195
130.92	2,373	1,229
130.94	2,373	1,263
130.96	2,373	1,296
130.98	2,373	1,329
131.00	2,373	1,361
131.02	2,373	1,394
131.04	2,373	1,426
131.06	2,373	1,457
131.08	2,373	1,489
131.10	2,373	1,519
131.12	2,373	1,550
131.14	2,373	1,580
131.16	2,373	1,609
131.18	2,373	1,638
131.20	2,373	1,667
131.22	2,373	1,695
131.24	2,373	1,722
131.26	2,373	1,749
131.28	2,373	1,774
131.30	2,373	1,799
131.32	2,373	1,824
131.34	2,373	1,847
131.36	2,373	1,870
131.38	2,373	1,892
131.40	2,373	1,914
131.42	2,373	1,935
131.44	2,373	1,955
131.46	2,373	1,976
131.48	2,373	1,995
131.50	2,373	2,015
131.52	2,373	2,034
131.54	2,373	2,053
131.56	2,373	2,072
131.58	2,373	2,091
131.60	2,373	2,110
131.62	2,373	2,129
131.64	2,373	2,148
131.66	2,373	2,167
131.68	2,373	2,186
131.70	2,373	2,205
131.72	2,373	2,224
131.74	2,373	2,243
131.76	2,373	2,262
131.78	2,373	2,281
131.80	2,373	2,300
131.82	2,373	2,319
131.84	2,373	2,338
131.86	2,373	2,357
131.88	2,373	2,376
131.90	2,373	2,395
131.92	2,373	2,414
131.94	2,373	2,433
131.96	2,373	2,452
131.98	2,373	2,471
132.00	2,373	**2,489**

Summary for Pond IB2e: Infiltration Basin 2b

Inflow Area =	15,464 sf, 93.24% Impervious, Inflow Depth > 7.48" for 100-YR event				
Inflow =	2.72 cfs @	12.09 hrs,	Volume=	9,634 cf	
Outflow =	0.84 cfs @	12.41 hrs,	Volume=	9,630 cf,	Atten= 69%, Lag= 19.2 min
Discarded =	0.14 cfs @	10.35 hrs,	Volume=	6,971 cf	
Primary =	0.70 cfs @	12.41 hrs,	Volume=	2,659 cf	

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 132.73' @ 12.41 hrs Surf.Area= 2,592 sf Storage= 3,199 cf

Plug-Flow detention time= 77.8 min calculated for 9,630 cf (100% of inflow)
Center-of-Mass det. time= 77.4 min (833.9 - 756.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	130.50'	2,002 cf	**34.83'W x 74.40'L x 2.50'H Field A** 6,479 cf Overall - 1,474 cf Embedded = 5,005 cf x 40.0% Voids
#2A	131.00'	1,474 cf	**ADS_StormTech SC-310 +Cap** x 100 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 10 Rows of 10 Chambers
		3,476 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	130.85'	**15.0" Round Culvert Barrel** L= 69.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 130.85' / 130.50' S= 0.0051 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 1.23 sf
#2	Discarded	130.50'	**2.410 in/hr Exfiltration over Surface area**
#3	Device 1	131.40'	**3.0" W x 3.0" H Vert. Orifice/Grate** C= 0.600
#4	Device 1	132.63'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.14 cfs @ 10.35 hrs HW=130.53' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.14 cfs)

Primary OutFlow Max=0.69 cfs @ 12.41 hrs HW=132.73' (Free Discharge)
└─**1=Culvert Barrel** (Passes 0.69 cfs of 6.21 cfs potential flow)
  ├─**3=Orifice/Grate** (Orifice Controls 0.33 cfs @ 5.29 fps)
  └─**4=Broad-Crested Rectangular Weir** (Weir Controls 0.36 cfs @ 0.89 fps)

Pond IB2e: Infiltration Basin 2b - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-310 +Cap (ADS StormTech® SC-310 with cap length)
Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf
Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap

34.0" Wide + 6.0" Spacing = 40.0" C-C Row Spacing

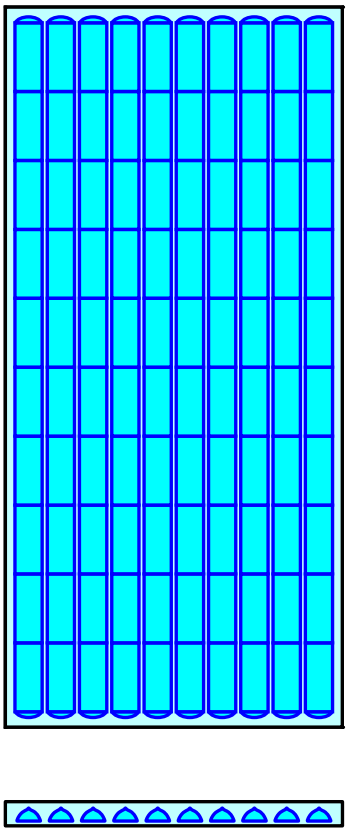
10 Chambers/Row x 7.12' Long +0.60' Cap Length x 2 = 72.40' Row Length +12.0" End Stone x 2 = 74.40' Base Length
10 Rows x 34.0" Wide + 6.0" Spacing x 9 + 12.0" Side Stone x 2 = 34.83' Base Width
6.0" Base + 16.0" Chamber Height + 8.0" Cover = 2.50' Field Height

100 Chambers x 14.7 cf = 1,474.2 cf Chamber Storage

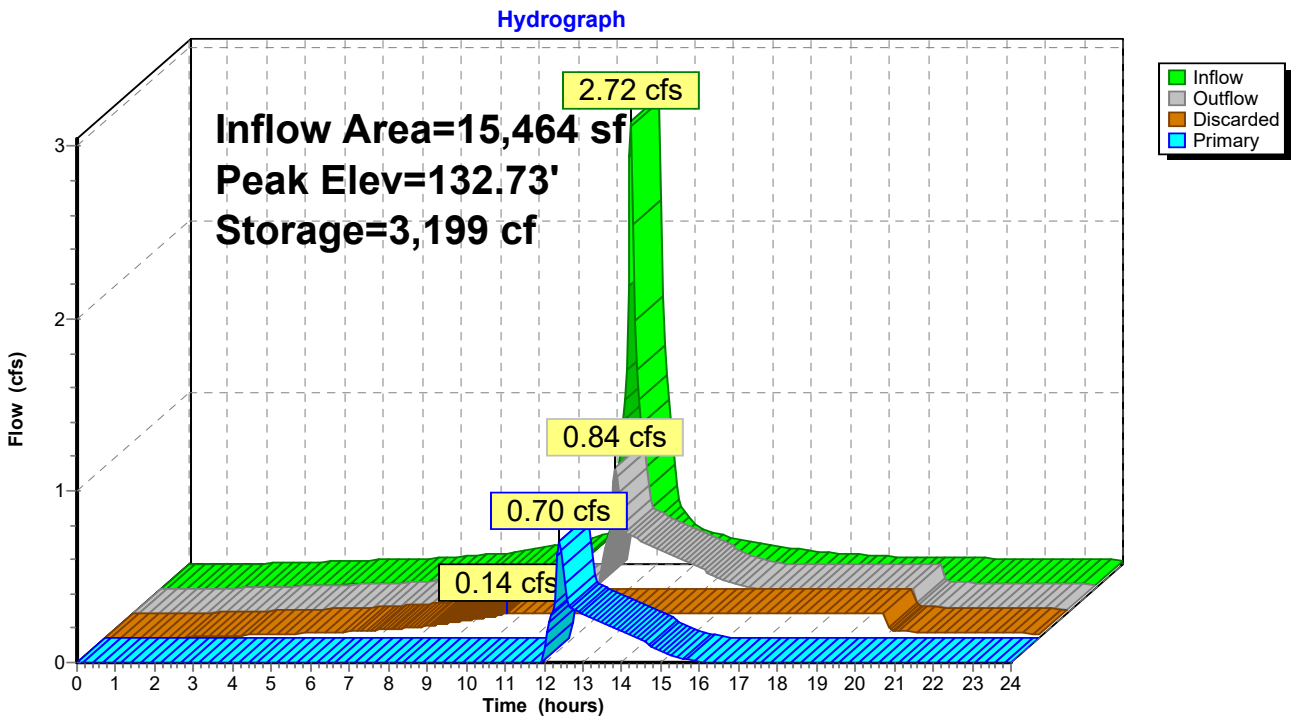
6,479.0 cf Field - 1,474.2 cf Chambers = 5,004.8 cf Stone x 40.0% Voids = 2,001.9 cf Stone Storage

Chamber Storage + Stone Storage = 3,476.1 cf = 0.080 af
Overall Storage Efficiency = 53.7%
Overall System Size = 74.40' x 34.83' x 2.50'

100 Chambers
240.0 cy Field
185.4 cy Stone



Pond IB2e: Infiltration Basin 2b



Stage-Area-Storage for Pond IB2e: Infiltration Basin 2b

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
130.50	**2,592**	0
130.55	2,592	52
130.60	2,592	104
130.65	2,592	155
130.70	2,592	207
130.75	2,592	259
130.80	2,592	311
130.85	2,592	363
130.90	2,592	415
130.95	2,592	466
131.00	2,592	518
131.05	2,592	622
131.10	2,592	724
131.15	2,592	827
131.20	2,592	928
131.25	2,592	1,029
131.30	2,592	1,129
131.35	2,592	1,227
131.40	2,592	1,325
131.45	2,592	1,422
131.50	2,592	1,517
131.55	2,592	1,611
131.60	2,592	1,703
131.65	2,592	1,794
131.70	2,592	1,884
131.75	2,592	1,972
131.80	2,592	2,057
131.85	2,592	2,141
131.90	2,592	2,222
131.95	2,592	2,301
132.00	2,592	2,377
132.05	2,592	2,449
132.10	2,592	2,516
132.15	2,592	2,579
132.20	2,592	2,638
132.25	2,592	2,695
132.30	2,592	2,750
132.35	2,592	2,802
132.40	2,592	2,854
132.45	2,592	2,906
132.50	2,592	2,958
132.55	2,592	3,010
132.60	2,592	3,061
132.65	2,592	3,113
132.70	2,592	3,165
132.75	2,592	3,217
132.80	2,592	3,269
132.85	2,592	3,321
132.90	2,592	3,372
132.95	2,592	3,424
133.00	2,592	**3,476**

APPENDIX E: STORMWATER CALCULATIONS

- *NOAA RAINFALL DATA*
- *PIPE SIZING*
- *WATER QUALITY VOLUME*
- *RIP RAP SIZING*

NOAA Atlas 14, Volume 10, Version 3
Location name: Enfield, Connecticut, USA*
Latitude: 41.9886°, Longitude: -72.5652°
Elevation: m/ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sandra Pavlovic, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Orlan Wilhite

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.339 (0.261-0.440)	0.409 (0.314-0.531)	0.523 (0.400-0.682)	0.617 (0.469-0.809)	0.746 (0.551-1.02)	0.844 (0.611-1.18)	0.946 (0.667-1.38)	1.06 (0.711-1.58)	1.22 (0.791-1.89)	1.36 (0.858-2.14)
10-min	0.481 (0.369-0.624)	0.579 (0.444-0.753)	0.740 (0.566-0.965)	0.873 (0.663-1.15)	1.06 (0.781-1.45)	1.20 (0.865-1.68)	1.34 (0.945-1.95)	1.50 (1.01-2.24)	1.73 (1.12-2.68)	1.92 (1.22-3.03)
15-min	0.566 (0.434-0.734)	0.681 (0.523-0.885)	0.870 (0.665-1.13)	1.03 (0.782-1.35)	1.24 (0.918-1.71)	1.41 (1.02-1.97)	1.58 (1.11-2.30)	1.77 (1.19-2.64)	2.04 (1.32-3.15)	2.26 (1.43-3.57)
30-min	0.762 (0.585-0.990)	0.921 (0.706-1.20)	1.18 (0.902-1.54)	1.40 (1.06-1.83)	1.69 (1.25-2.32)	1.91 (1.39-2.68)	2.15 (1.51-3.13)	2.41 (1.61-3.59)	2.78 (1.80-4.30)	3.08 (1.95-4.86)
60-min	0.959 (0.737-1.25)	1.16 (0.890-1.51)	1.49 (1.14-1.94)	1.76 (1.34-2.31)	2.14 (1.58-2.93)	2.42 (1.75-3.40)	2.72 (1.92-3.95)	3.05 (2.04-4.55)	3.51 (2.27-5.44)	3.89 (2.47-6.15)
2-hr	1.23 (0.950-1.59)	1.48 (1.14-1.91)	1.89 (1.45-2.45)	2.23 (1.70-2.90)	2.69 (2.00-3.68)	3.04 (2.22-4.26)	3.41 (2.43-4.98)	3.85 (2.59-5.71)	4.50 (2.92-6.92)	5.05 (3.20-7.93)
3-hr	1.41 (1.10-1.82)	1.70 (1.32-2.19)	2.17 (1.68-2.80)	2.56 (1.97-3.33)	3.10 (2.31-4.23)	3.49 (2.56-4.89)	3.92 (2.81-5.73)	4.44 (2.99-6.58)	5.24 (3.40-8.03)	5.91 (3.76-9.26)
6-hr	1.77 (1.38-2.27)	2.15 (1.67-2.75)	2.77 (2.15-3.55)	3.28 (2.53-4.23)	3.98 (2.99-5.42)	4.50 (3.33-6.28)	5.06 (3.67-7.40)	5.77 (3.90-8.50)	6.88 (4.49-10.5)	7.85 (5.01-12.2)
12-hr	2.18 (1.71-2.77)	2.68 (2.10-3.41)	3.50 (2.73-4.46)	4.18 (3.24-5.36)	5.11 (3.87-6.93)	5.80 (4.32-8.07)	6.55 (4.78-9.56)	7.52 (5.10-11.0)	9.04 (5.91-13.7)	10.4 (6.64-16.1)
24-hr	2.55 (2.01-3.22)	3.18 (2.51-4.02)	4.22 (3.31-5.35)	5.07 (3.96-6.47)	6.26 (4.76-8.45)	7.12 (5.33-9.87)	8.08 (5.94-11.8)	9.32 (6.35-13.6)	11.3 (7.42-17.1)	13.1 (8.40-20.1)
2-day	2.86 (2.27-3.59)	3.61 (2.86-4.54)	4.84 (3.82-6.10)	5.85 (4.60-7.42)	7.25 (5.56-9.76)	8.27 (6.24-11.4)	9.41 (6.98-13.7)	10.9 (7.46-15.8)	13.4 (8.81-20.1)	15.6 (10.0-23.9)
3-day	3.12 (2.49-3.91)	3.94 (3.14-4.93)	5.28 (4.19-6.63)	6.39 (5.04-8.07)	7.92 (6.09-10.6)	9.03 (6.84-12.5)	10.3 (7.65-14.9)	11.9 (8.17-17.2)	14.7 (9.67-22.0)	17.1 (11.0-26.1)
4-day	3.37 (2.69-4.20)	4.24 (3.38-5.29)	5.67 (4.50-7.10)	6.85 (5.41-8.63)	8.48 (6.54-11.3)	9.66 (7.34-13.3)	11.0 (8.20-15.9)	12.8 (8.75-18.4)	15.7 (10.3-23.4)	18.3 (11.8-27.8)
7-day	4.04 (3.24-5.01)	5.02 (4.03-6.24)	6.64 (5.30-8.28)	7.98 (6.34-10.0)	9.83 (7.61-13.1)	11.2 (8.50-15.3)	12.7 (9.46-18.2)	14.6 (10.1-21.0)	17.9 (11.8-26.5)	20.7 (13.4-31.4)
10-day	4.70 (3.78-5.81)	5.75 (4.62-7.12)	7.47 (5.98-9.28)	8.89 (7.09-11.1)	10.9 (8.41-14.3)	12.3 (9.36-16.7)	13.9 (10.3-19.8)	15.9 (11.0-22.8)	19.2 (12.7-28.5)	22.1 (14.3-33.4)
20-day	6.77 (5.48-8.32)	7.88 (6.38-9.70)	9.71 (7.83-12.0)	11.2 (9.00-13.9)	13.3 (10.3-17.4)	14.9 (11.3-19.9)	16.5 (12.2-23.0)	18.5 (12.9-26.3)	21.6 (14.4-31.7)	24.2 (15.7-36.3)
30-day	8.51 (6.92-10.4)	9.66 (7.84-11.8)	11.5 (9.33-14.2)	13.1 (10.5-16.2)	15.2 (11.8-19.7)	16.8 (12.8-22.2)	18.5 (13.6-25.4)	20.4 (14.2-28.8)	23.1 (15.5-33.8)	25.3 (16.5-37.9)
45-day	10.7 (8.72-13.0)	11.9 (9.68-14.5)	13.8 (11.2-16.9)	15.4 (12.4-19.0)	17.6 (13.7-22.6)	19.3 (14.7-25.3)	21.0 (15.4-28.5)	22.8 (15.9-32.0)	25.1 (16.9-36.6)	26.9 (17.6-40.1)
60-day	12.5 (10.2-15.2)	13.7 (11.2-16.7)	15.7 (12.8-19.2)	17.4 (14.1-21.4)	19.7 (15.3-25.1)	21.5 (16.3-27.9)	23.2 (17.0-31.1)	24.9 (17.4-34.8)	26.9 (18.1-39.1)	28.4 (18.6-42.2)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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Kaplan Development
118 Hazard Avenue
Enfield, CT
Bohler Job Number: CT191016
November 25, 2019

Rational Pipe Sizing Calculations

Design Period Storm:		10	Year	Design Period Intensity*			5.63	in/hr									
LOCATION		IMPERVIOUS			OTHER			SUM	Tc	I	Q	D	S	Material	n	Q Full	V Full
FROM	TO	A	C	CA	A	C	CA	CA	(min)	(in/hr)	(cfs)	(in)	(ft/ft)			(cfs)	(fps)
CB-1	CB-2	0.02	0.95	0.02	0.00	0.30	0.00	0.02	6	5.63	0.11	6	0.005	HDPE	0.012	0.43	2.19
CB-2	ICS-1	0.22	0.95	0.21	0.03	0.30	0.01	0.22	6	5.63	1.33	12	0.005	HDPE	0.012	2.73	3.47
CB-3	ICS-2	0.28	0.95	0.27	0.04	0.30	0.01	0.28	6	5.63	1.57	12	0.012	HDPE	0.012	4.23	5.38
CB-4	DMH-1	0.12	0.95	0.11	0.06	0.30	0.02	0.13	6	5.63	0.74	8	0.005	HDPE	0.012	0.93	2.65
DMH-1	ICS-3	0.00	0.95	0.00	0.00	0.30	0.00	0.00	6	5.63	0.00	8	0.005	HDPE	0.012	0.93	2.65
CB-5	ICS-3	0.12	0.95	0.11	0.07	0.30	0.02	0.14	6	5.63	0.76	8	0.005	HDPE	0.012	0.93	2.65
ICS-3	BMP-2	0.00	0.95	0.00	0.00	0.30	0.00	0.00	6	5.63	1.50	8	0.013	HDPE	0.012	1.51	4.33
CB-6	ICS-4	0.33	0.95	0.31	0.03	0.30	0.01	0.32	6	5.63	1.83	12	0.005	HDPE	0.012	2.73	3.47
RD-1	AB3b	0.33	0.95	0.31	0.00	0.30	0.00	0.31	6	5.63	1.77	12	0.005	HDPE	0.012	2.73	3.47
CB-7	FES-7	0.11	0.95	0.10	0.01	0.30	0.00	0.11	6	5.63	0.61	8	0.005	HDPE	0.012	0.93	2.65
CB-8	FES-8	0.08	0.95	0.08	0.02	0.30	0.01	0.08	6	5.63	0.46	8	0.020	HDPE	0.012	1.85	5.30
RD-2	ICS-5	0.33	0.95	0.31	0.11	0.30	0.03	0.35	6	5.63	1.95	12	0.020	HDPE	0.012	5.46	6.95

*Rainfall intensity provided by Cornell University's NRCC Atlas of Precipitation Extremes for the North Eastern United States and Canada on 11/25/19

Prepared By:
Bohler Engineering
352 Turnpike Road
Southborough, MA 01772
(508) 480-9900

Determine Water Quality Volume

From CT 2004 Stormwater Quality Manual:

$$WQV = \frac{(1'')(R)(A)}{12}$$

$$R = 0.05 + 0.009(I)$$

WQV = water quality volume (ac-ft)
R = volumetric runoff coefficient
I = percent impervious cover
A = site area in acres

Area		Total Area		Impervious Area		Impervious Cover	Volumetric Runoff Coefficient	Water Quality Volume (WQV)		Pretreatment Volume (10% of WQV)	Water Quality Volume Provided
ID		ac	ft^2	ac	ft^2	%	R	acre-feet	ft^3	ft^3	ft^3
PD-1		0.652	13,879	0.526	8,395	80.67	0.776	0.042	1,830	183	2,447
PD-2a		0.603	26,287	0.537	23,375	89.05	0.851	0.043	1,873	187	2,081
PD-2c		0.357	15,557	0.233	10,150	65.27	0.637	0.019	828	83	844
PD-2e		0.355	15,852	0.331	14,406	93.24	0.889	0.026	1,133	113	1,325
PD-3a		0.232	20,226	0.041	1,692	17.67	0.209	0.004	174	17	1,304
PD-3b		0.461	9,895	0.349	1,087	75.70	0.731	0.028	1,220	122	3,182
Total			101,696					0.162	7,058		11,183

Rip Rap and Apron Sizing Worksheet

Address: 118 Hazard Avenue
Enfield, CT

Project No.: CT191016
Date: 12/3/2019
Prepared By: MLT

Apron Sizing: FES-1

$$La = \frac{1.7Q}{Do^{3/2}} + 8Do$$

$$W\ end = 3Do + 0.4La\ for\ Tailwater\ \geq 0.5Do$$
$$W\ end = 3Do + La\ for\ Tailwater < 0.5Do$$

INPUT	Quantity	Units	Notes
Do	1.25	ft	Inside diameter of culvert
Q	0.94	cfs	Pipe discharge for conduit design storm or 25 year storm, whichever is greater

OUTPUT	Quantity	Units	Notes
La	11.14344	ft	Length of apron (minimum)
For tailwater elevation greater than or equal to the elevation of the center of the pipe:			
W start	3.75	ft	Width of apron at the culvert (minimum)
W end	8.207374	ft	Width of apron end (minimum)
For tailwater elevation less than the elevation of the center of the pipe:			
W start	3.75	ft	Width of apron at the culvert (minimum)
W end	14.89344	ft	Width of apron end (minimum)

Rip Rap Sizing:

$$d - 50 = \frac{0.02}{TW} * (\frac{Q}{Do})^{4/3}$$

NOTE: calculations based on 25 Year storm to FES-3

INPUT	Quantity	Units	Notes
TW	0.3	ft	Tailwater depth above the invert of the culvert
Do	1.25	ft	Inside diameter of culvert (defined in apron sizing)
Q	0.94	cfs	Pipe discharge for conduit design storm or 25 year storm, whichever is greater (defined in apron sizing)

OUTPUT	Quantity	Units	Notes
d-50	0.04559	ft	Median stone diameter in feet
	0.547075	in	Median stone diameter in inches

Rip Rap and Apron Sizing Worksheet

Address: 118 Hazard Avenue
Enfield, CT

Project No.: CT191016
Date: 12/3/2019
Prepared By: MLT

Apron Sizing: FES-2

$$La = \frac{1.7Q}{Do^{3/2}} + 8Do$$

$$W\ end = 3Do + 0.4La\ for\ Tailwater\ \geq 0.5Do$$
$$W\ end = 3Do + La\ for\ Tailwater < 0.5Do$$

INPUT	Quantity	Units	Notes
Do	1	ft	Inside diameter of culvert
Q	0.4	cfs	Pipe discharge for conduit design storm or 25 year storm, whichever is greater

OUTPUT	Quantity	Units	Notes
La	8.68	ft	Length of apron (minimum)
For tailwater elevation greater than or equal to the elevation of the center of the pipe:			
W start	3	ft	Width of apron at the culvert (minimum)
W end	6.472	ft	Width of apron end (minimum)
For tailwater elevation less than the elevation of the center of the pipe:			
W start	3	ft	Width of apron at the culvert (minimum)
W end	11.68	ft	Width of apron end (minimum)

Rip Rap Sizing:

$$d - 50 = \frac{0.02}{TW} * (\frac{Q}{Do})^{4/3}$$

NOTE: calculations based on 25 Year storm to FES-3

INPUT	Quantity	Units	Notes			
TW	0.3	ft	Tailwater depth above the invert of the culvert			
Do	1	ft	Inside diameter of culvert (defined in apron sizing)			
Q	0.4	cfs	Pipe discharge for conduit design storm or 25 year storm, whichever is greater (defined in apron sizing)			

OUTPUT	Quantity	Units	Notes
d-50	0.019648	ft	Median stone diameter in feet
	0.235778	in	Median stone diameter in inches

Rip Rap and Apron Sizing Worksheet

Address: 118 Hazard Avenue
Enfield, CT

Project No.: CT191016
Date: 12/3/2019
Prepared By: MLT

Apron Sizing: FES-3

$$La = \frac{1.7Q}{Do^{3/2}} + 8Do$$

$$W\ end = 3Do + 0.4La\ for\ Tailwater\ \geq 0.5Do$$
$$W\ end = 3Do + La\ for\ Tailwater < 0.5Do$$

INPUT	Quantity	Units	Notes
Do	1.25	ft	Inside diameter of culvert
Q	0.13	cfs	Pipe discharge for conduit design storm or 25 year storm, whichever is greater

OUTPUT	Quantity	Units	Notes
La	10.15813	ft	Length of apron (minimum)
For tailwater elevation greater than or equal to the elevation of the center of the pipe:			
W start	3.75	ft	Width of apron at the culvert (minimum)
W end	7.813254	ft	Width of apron end (minimum)
For tailwater elevation less than the elevation of the center of the pipe:			
W start	3.75	ft	Width of apron at the culvert (minimum)
W end	13.90813	ft	Width of apron end (minimum)

Rip Rap Sizing:

$$d - 50 = \frac{0.02}{TW} * (\frac{Q}{Do})^{4/3}$$

NOTE: calculations based on 25 Year storm to FES-3

INPUT	Quantity	Units	Notes
TW	0.3	ft	Tailwater depth above the invert of the culvert
Do	1.25	ft	Inside diameter of culvert (defined in apron sizing)
Q	0.13	cfs	Pipe discharge for conduit design storm or 25 year storm, whichever is greater (defined in apron sizing)

OUTPUT	Quantity	Units	Notes
d-50	0.003261	ft	Median stone diameter in feet
	0.039126	in	Median stone diameter in inches

Rip Rap and Apron Sizing Worksheet

Address: 118 Hazard Avenue
Enfield, CT

Project No.: CT191016
Date: 12/3/2019
Prepared By: MLT

Apron Sizing: FES-4

$$La = \frac{1.7Q}{Do^{3/2}} + 8Do$$

$$W\ end = 3Do + 0.4La\ for\ Tailwater\ \geq 0.5Do$$
$$W\ end = 3Do + La\ for\ Tailwater < 0.5Do$$

INPUT	Quantity	Units	Notes
Do	1	ft	Inside diameter of culvert
Q	1.77	cfs	Pipe discharge for conduit design storm or 25 year storm, whichever is greater

OUTPUT	Quantity	Units	Notes
La	11.009	ft	Length of apron (minimum)
For tailwater elevation greater than or equal to the elevation of the center of the pipe:			
W start	3	ft	Width of apron at the culvert (minimum)
W end	7.4036	ft	Width of apron end (minimum)
For tailwater elevation less than the elevation of the center of the pipe:			
W start	3	ft	Width of apron at the culvert (minimum)
W end	14.009	ft	Width of apron end (minimum)

Rip Rap Sizing:

$$d - 50 = \frac{0.02}{TW} * (\frac{Q}{Do})^{4/3}$$

NOTE: calculations based on 25 Year storm to FES-3

INPUT	Quantity	Units	Notes
TW	0.3	ft	Tailwater depth above the invert of the culvert
Do	1	ft	Inside diameter of culvert (defined in apron sizing)
Q	1.77	cfs	Pipe discharge for conduit design storm or 25 year storm, whichever is greater (defined in apron sizing)

OUTPUT	Quantity	Units	Notes
d-50	0.142738	ft	Median stone diameter in feet
	1.712857	in	Median stone diameter in inches

Rip Rap and Apron Sizing Worksheet

Address: 118 Hazard Avenue
Enfield, CT

Project No.: CT191016
Date: 12/3/2019
Prepared By: MLT

Apron Sizing: FES-5

$$La = \frac{1.7Q}{Do^{3/2}} + 8Do$$

$$W\ end = 3Do + 0.4La\ for\ Tailwater\ \geq 0.5Do$$
$$W\ end = 3Do + La\ for\ Tailwater < 0.5Do$$

INPUT	Quantity	Units	Notes
Do	0.667	ft	Inside diameter of culvert
Q	0.61	cfs	Pipe discharge for conduit design storm or 25 year storm, whichever is greater

OUTPUT	Quantity	Units	Notes
La	7.239663	ft	Length of apron (minimum)
For tailwater elevation greater than or equal to the elevation of the center of the pipe:			
W start	2.001	ft	Width of apron at the culvert (minimum)
W end	4.896865	ft	Width of apron end (minimum)
For tailwater elevation less than the elevation of the center of the pipe:			
W start	2.001	ft	Width of apron at the culvert (minimum)
W end	9.240663	ft	Width of apron end (minimum)

Rip Rap Sizing:

$$d - 50 = \frac{0.02}{TW} * (\frac{Q}{Do})^{4/3}$$

NOTE: calculations based on 25 Year storm to FES-3

INPUT	Quantity	Units	Notes
TW	0.3	ft	Tailwater depth above the invert of the culvert
Do	0.667	ft	Inside diameter of culvert (defined in apron sizing)
Q	0.61	cfs	Pipe discharge for conduit design storm or 25 year storm, whichever is greater (defined in apron sizing)

OUTPUT	Quantity	Units	Notes
d-50	0.059181	ft	Median stone diameter in feet
	0.710169	in	Median stone diameter in inches

Rip Rap and Apron Sizing Worksheet

Address: 118 Hazard Avenue
Enfield, CT

Project No.: CT191016
Date: 12/3/2019
Prepared By: MLT

Apron Sizing: FES-6

$$La = \frac{1.7Q}{Do^{3/2}} + 8Do$$

$$W\ end = 3Do + 0.4La\ for\ Tailwater\ \geq 0.5Do$$
$$W\ end = 3Do + La\ for\ Tailwater < 0.5Do$$

INPUT	Quantity	Units	Notes
Do	0.667	ft	Inside diameter of culvert
Q	0.46	cfs	Pipe discharge for conduit design storm or 25 year storm, whichever is greater

OUTPUT	Quantity	Units	Notes
La	6.771549	ft	Length of apron (minimum)
For tailwater elevation greater than or equal to the elevation of the center of the pipe:			
W start	2.001	ft	Width of apron at the culvert (minimum)
W end	4.70962	ft	Width of apron end (minimum)
For tailwater elevation less than the elevation of the center of the pipe:			
W start	2.001	ft	Width of apron at the culvert (minimum)
W end	8.772549	ft	Width of apron end (minimum)

Rip Rap Sizing:

$$d - 50 = \frac{0.02}{TW} * (\frac{Q}{Do})^{4/3}$$

NOTE: calculations based on 25 Year storm to FES-3

INPUT	Quantity	Units	Notes
TW	0.3	ft	Tailwater depth above the invert of the culvert
Do	0.667	ft	Inside diameter of culvert (defined in apron sizing)
Q	0.46	cfs	Pipe discharge for conduit design storm or 25 year storm, whichever is greater (defined in apron sizing)

OUTPUT	Quantity	Units	Notes
d-50	0.040621	ft	Median stone diameter in feet
	0.487453	in	Median stone diameter in inches

Rip Rap and Apron Sizing Worksheet

Address: 118 Hazard Avenue
Enfield, CT

Project No.: CT191016
Date: 12/3/2019
Prepared By: MLT

Apron Sizing: FES-7

$$La = \frac{1.7Q}{Do^{3/2}} + 8Do$$

$$W\ end = 3Do + 0.4La\ for\ Tailwater\ \geq 0.5Do$$
$$W\ end = 3Do + La\ for\ Tailwater < 0.5Do$$

INPUT	Quantity	Units	Notes
Do	1	ft	Inside diameter of culvert
Q	0.09	cfs	Pipe discharge for conduit design storm or 25 year storm, whichever is greater

OUTPUT	Quantity	Units	Notes
La	8.153	ft	Length of apron (minimum)
For tailwater elevation greater than or equal to the elevation of the center of the pipe:			
W start	3	ft	Width of apron at the culvert (minimum)
W end	6.2612	ft	Width of apron end (minimum)
For tailwater elevation less than the elevation of the center of the pipe:			
W start	3	ft	Width of apron at the culvert (minimum)
W end	11.153	ft	Width of apron end (minimum)

Rip Rap Sizing:

$$d - 50 = \frac{0.02}{TW} * (\frac{Q}{Do})^{4/3}$$

NOTE: calculations based on 25 Year storm to FES-3

INPUT	Quantity	Units	Notes
TW	0.3	ft	Tailwater depth above the invert of the culvert
Do	1	ft	Inside diameter of culvert (defined in apron sizing)
Q	0.09	cfs	Pipe discharge for conduit design storm or 25 year storm, whichever is greater (defined in apron sizing)

OUTPUT	Quantity	Units	Notes
d-50	0.002689	ft	Median stone diameter in feet
	0.032266	in	Median stone diameter in inches

Rip Rap and Apron Sizing Worksheet

Address: 118 Hazard Avenue
Enfield, CT

Project No.: CT191016
Date: 12/3/2019
Prepared By: MLT

Apron Sizing: FES-8

$$La = \frac{1.7Q}{Do^{3/2}} + 8Do$$

$$W\ end = 3Do + 0.4La\ for\ Tailwater\ \geq 0.5Do$$
$$W\ end = 3Do + La\ for\ Tailwater < 0.5Do$$

INPUT	Quantity	Units	Notes
Do	0.667	ft	Inside diameter of culvert
Q	0.21	cfs	Pipe discharge for conduit design storm or 25 year storm, whichever is greater

OUTPUT	Quantity	Units	Notes
La	5.991359	ft	Length of apron (minimum)
For tailwater elevation greater than or equal to the elevation of the center of the pipe:			
W start	2.001	ft	Width of apron at the culvert (minimum)
W end	4.397544	ft	Width of apron end (minimum)
For tailwater elevation less than the elevation of the center of the pipe:			
W start	2.001	ft	Width of apron at the culvert (minimum)
W end	7.992359	ft	Width of apron end (minimum)

Rip Rap Sizing:

$$d - 50 = \frac{0.02}{TW} * (\frac{Q}{Do})^{4/3}$$

NOTE: calculations based on 25 Year storm to FES-3

INPUT	Quantity	Units	Notes
TW	0.3	ft	Tailwater depth above the invert of the culvert
Do	0.667	ft	Inside diameter of culvert (defined in apron sizing)
Q	0.21	cfs	Pipe discharge for conduit design storm or 25 year storm, whichever is greater (defined in apron sizing)

OUTPUT	Quantity	Units	Notes
d-50	0.014279	ft	Median stone diameter in feet
	0.171349	in	Median stone diameter in inches

APPENDIX F: OPERATION AND MAINTENANCE

- *STORMWATER OPERATION AND MAINTENANCE PLAN*
- *INSPECTION REPORT*
- *INSPECTION AND MAINTENANCE LOG FORM*
- *LONG-TERM POLLUTION PREVENTION PLAN*
- *ILLICIT DISCHARGE STATEMENT*
- *MANUFACTURER'S INSPECTION AND MAINTENANCE MANUALS*

STORMWATER OPERATION AND MAINTENANCE PLAN

"All American Assisted Living" Facility.
118 Hazard Avenue
Enfield, CT

RESPONSIBLE PARTY DURING CONSTRUCTION:

TBD

RESPONSIBLE PARTY POST CONSTRUCTION:

TBD

Construction Phase

During the construction phase, all erosion control devices and measures shall be maintained in accordance with the final record plans, local/state approvals and conditions, the EPA Construction General Permit and the Stormwater Pollution Prevention Plan (SWPPP) if applicable. Additionally, the maintenance of all erosion / siltation control measures during construction shall be the responsibility of the general contractor. Upon proper notice to the property owner, the Town/City or its authorized designee shall be allowed to enter the property at a reasonable time and in a reasonable manner for the purposes of inspection.

Post Development Controls

Once construction is completed, the post development stormwater controls are to be operated and maintained in compliance with the following permanent procedures (note that the continued implementation of these procedures shall be the responsibility of the Owner or its assignee):

1. Parking lots and on-site driveways: Sweep at least four (4) times per year and on a more frequent basis depending on sanding operations. All resulting sweepings shall be collected and properly disposed of off site in accordance with CTDEEP and other applicable requirements.

   Approximate Maintenance Budget: $1,000/year

2. Catch basins, yard drains, trench drains, manholes and piping: Inspect four (4) times per year and at the end of foliage and snow-removal seasons. These features shall be cleaned four (4) times per year or whenever the depth of deposits is greater than or equal to one half the depth from the bottom of the invert of the lowest pipe in the catch basin or underground system. Accumulated sediment and hydrocarbons present must be removed and properly disposed of off site in accordance with CTDEEP and other applicable requirements.

   Approximate Maintenance Budget: $500/year per structure.

3. Infiltration Basin: Preventative maintenance after every major storm event during the first three (3) months of operation and at least twice per year thereafter. Inspect structure and pretreatment BMP to ensure proper operation after every major storm event

STORMWATER MANAGEMENT SYSTEM

POST-CONSTRUCTION INSPECTION REPORT

LOCATION:

118 Hazard Avenue
Enfield, CT

RESPONSIBLE PARTY:

TBD

NAME OF INSPECTOR:	INSPECTION DATE:
Note Condition of the Following (sediment depth, debris, standing water, damage, etc.):	
Catch Basins:	
Discharge Points/ Flared End Sections / Rip Rap:	
Infiltration Basin:	
Water Quality Units:	
Other:	
Note Recommended Actions to be taken on the Following (sediment and/or debris removal, repairs, etc.):	

Catch Basins:
Discharge Points / Flared End Sections / Rip Rap:
Infiltration Basin:
Water Quality Units:
Other:
Other:
Comments:

STORMWATER INSPECTION AND MAINTENANCE LOG FORM

All American Assisted Living
118 Hazard Avenue, Enfield CT

Stormwater Management Practice	Responsible Party	Date	Maintenance Activity Performed

LONG-TERM POLLUTION PREVENTION PLAN

"All American Assisted Living" Facility
118 Hazard Avenue
Enfield, CT

RESPONSIBLE PARTY DURING CONSTRUCTION:

TBD

RESPONSIBLE PARTY POST CONSTRUCTION:

TBD

For this site, the Long-Term Pollution Prevention Plan will consist of the following:

- No outdoor maintenance or washing of vehicles allowed.
- The property owner shall be responsible for "good housekeeping" including proper periodic maintenance of building and pavement areas, curbing, landscaping, etc.
- Proper storage and removal of solid waste (dumpsters).
- Sweeping of driveways a minimum of twice per year with a commercial cleaning unit. Any sediment removed shall be disposed of in accordance with applicable local and state requirements.
- Regular inspections and maintenance of Stormwater Management System as noted in the "O&M Plan".
- Snow removal shall be the responsibility of the property owner. Snow shall not be plowed, dumped and/or placed in forebays, infiltration basins or similar stormwater controls. Salting and/or sanding of pavement / walkway areas during winter conditions shall only be done in accordance with all state/local requirements and approvals.

OPERATON AND MAINTENANCE TRAINING PROGRAM

The Owner will coordinate an annual in-house training session to discuss the Operations and Maintenance Plan, the Long-Term Pollution Prevention Plan, and the Spill Prevention Plan and response procedures. Annual training will include the following:

Discuss the Operations and Maintenance Plan

- Explain the general operations of the stormwater management system and its BMPs
- Identify potential sources of stormwater pollution and measures / methods of reducing or eliminating that pollution
- Emphasize good housekeeping measures

Discuss the Spill Prevention and Response Procedures

- Explain the process in the event of a spill
- Identify potential sources of spills and procedures for cleanup and /or reporting and notification
- Complete a yearly inventory or Materials Safety Data sheets of all tenants and confirm that no potentially harmful chemicals are in use.
- Trash and other debris shall be removed from all areas of the site at least twice yearly.

ILLICIT DISCHARGE STATEMENT

Certain types of non-stormwater discharges are allowed under the U.S. Environmental Protection Agency Construction General Permit. These types of discharges will be allowed under the conditions that no pollutants will be allowed to come in contact with the water prior to or after its discharge. The control measures which have been outlined previously in this LTPPP will be strictly followed to ensure that no contamination of these non-storm water discharges takes place. Any existing illicit discharges, if discovered during the course of the work, will be reported to CTDEEP and the local DPW, as applicable, to be addressed in accordance with their respective policies. No illicit discharges will be allowed in conjunction with the proposed improvements.

Duly Acknowledged:

_____

Name & Title

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A division of ADS

Save Valuable Land and Protect Water Resources

Isolator® Row O&M Manual

StormTech® Chamber System for Stormwater Management

1.0 The Isolator® Row

1.1 INTRODUCTION

An important component of any Stormwater Pollution Prevention Plan is inspection and maintenance. The StormTech Isolator Row is a patented technique to inexpensively enhance Total Suspended Solids (TSS) removal and provide easy access for inspection and maintenance.

Looking down the Isolator Row from the manhole opening, woven geotextile is shown between the chamber and stone base.

1.2 THE ISOLATOR ROW

The Isolator Row is a row of StormTech chambers, either SC-310, SC-310-3, SC-740, DC-780, MC-3500 or MC-4500 models, that is surrounded with filter fabric and connected to a closely located manhole for easy access. The fabric-wrapped chambers provide for settling and filtration of sediment as storm water rises in the Isolator Row and ultimately passes through the filter fabric. The open bottom chambers and perforated sidewalls (SC-310, SC-310-3 and SC-740 models) allow storm water to flow both vertically and horizontally out of the chambers. Sediments are captured in the Isolator Row protecting the storage areas of the adjacent stone and chambers from sediment accumulation.

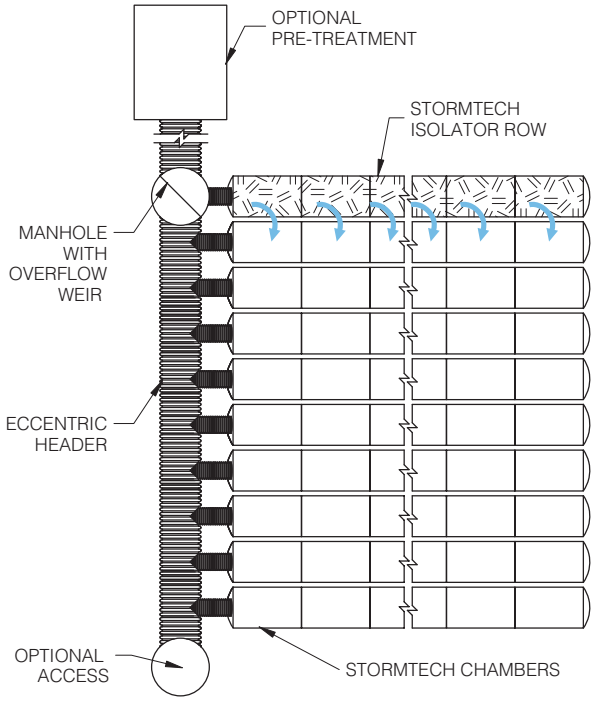
Two different fabrics are used for the Isolator Row. A woven geotextile fabric is placed between the stone and the Isolator Row chambers. The tough geotextile provides a media for storm water filtration and provides a durable surface for maintenance operations. It is also designed to prevent scour of the underlying stone and remain intact during high pressure jetting. A non-woven fabric is placed over the chambers to provide a filter media for flows passing through the perforations in the sidewall of the chamber. The non-woven fabric is not required over the DC-780, MC-3500 or MC-4500 models as these chambers do not have perforated side walls.

The Isolator Row is typically designed to capture the "first flush" and offers the versatility to be sized on a volume basis or flow rate basis. An upstream manhole not only provides access to the Isolator Row but typically includes a high flow weir such that storm water flowrates or volumes that exceed the capacity of the Isolator Row overtop the over flow weir and discharge through a manifold to the other chambers.

The Isolator Row may also be part of a treatment train. By treating storm water prior to entry into the chamber system, the service life can be extended and pollutants such as hydrocarbons can be captured. Pre-treatment best management practices can be as simple as deep sump catch basins, oil-water separators or can be innovative storm water treatment devices. The design of the treatment train and selection of pretreatment devices by the design engineer is often driven by regulatory requirements. Whether pretreatment is used or not, the Isolator Row is recommended by StormTech as an effective means to minimize maintenance requirements and maintenance costs.

Note: See the StormTech Design Manual for detailed information on designing inlets for a StormTech system, including the Isolator Row.

StormTech Isolator Row with Overflow Spillway
(not to scale)



2.0 Isolator Row Inspection/Maintenance

StormTech

2.1 INSPECTION

The frequency of Inspection and Maintenance varies by location. A routine inspection schedule needs to be established for each individual location based upon site specific variables. The type of land use (i.e. industrial, commercial, residential), anticipated pollutant load, percent imperviousness, climate, etc. all play a critical role in determining the actual frequency of inspection and maintenance practices.

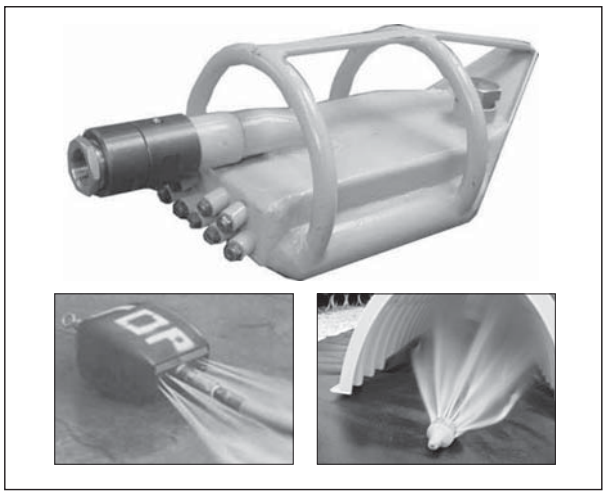
At a minimum, StormTech recommends annual inspections. Initially, the Isolator Row should be inspected every 6 months for the first year of operation. For subsequent years, the inspection should be adjusted based upon previous observation of sediment deposition.

The Isolator Row incorporates a combination of standard manhole(s) and strategically located inspection ports (as needed). The inspection ports allow for easy access to the system from the surface, eliminating the need to perform a confined space entry for inspection purposes.

If upon visual inspection it is found that sediment has accumulated, a stadia rod should be inserted to determine the depth of sediment. When the average depth of sediment exceeds 3 inches throughout the length of the Isolator Row, clean-out should be performed.

2.2 MAINTENANCE

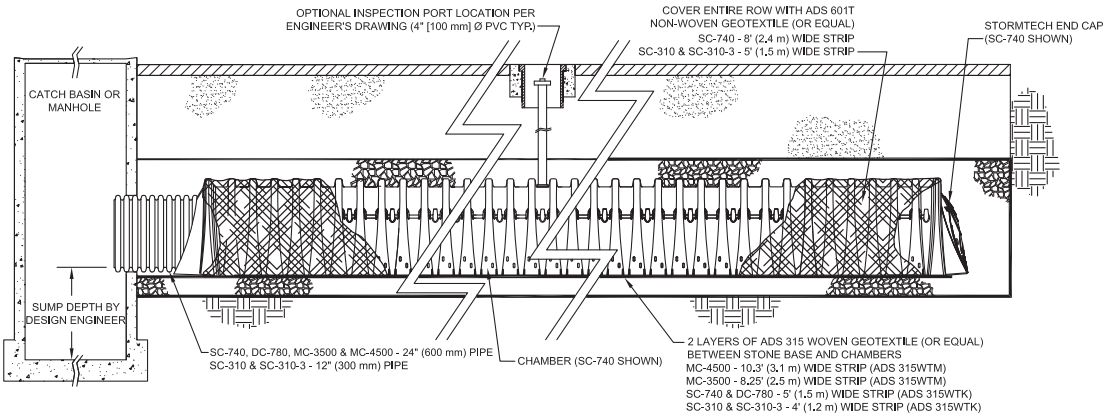
The Isolator Row was designed to reduce the cost of periodic maintenance. By "isolating" sediments to just one row, costs are dramatically reduced by eliminating the need to clean out each row of the entire storage bed. If inspection indicates the potential need for maintenance, access is provided via a manhole(s) located on the end(s) of the row for cleanout. If entry into the manhole is required, please follow local and OSHA rules for a confined space entries.



Examples of culvert cleaning nozzles appropriate for Isolator Row maintenance. (These are not StormTech products.)

Maintenance is accomplished with the JetVac process. The JetVac process utilizes a high pressure water nozzle to propel itself down the Isolator Row while scouring and suspending sediments. As the nozzle is retrieved, the captured pollutants are flushed back into the manhole for vacuuming. Most sewer and pipe maintenance companies have vacuum/JetVac combination vehicles. Selection of an appropriate JetVac nozzle will improve maintenance efficiency. Fixed nozzles designed for culverts or large diameter pipe cleaning are preferable. Rear facing jets with an effective spread of at least 45" are best. Most JetVac reels have 400 feet of hose allowing maintenance of an Isolator Row up to 50 chambers long. **The JetVac process shall only be performed on StormTech Isolator Rows that have AASHTO class 1 woven geotextile (as specified by StormTech) over their angular base stone.**

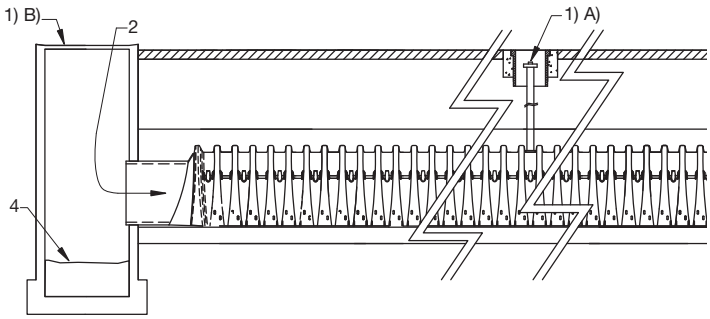
StormTech Isolator Row (not to scale)



NOTE: NON-WOVEN FABRIC IS ONLY REQUIRED OVER THE INLET PIPE CONNECTION INTO THE END CAP FOR DC-780, MC-3500 AND MC-4500 CHAMBER MODELS AND IS NOT REQUIRED OVER THE ENTIRE ISOLATOR ROW.

3.0 Isolator Row Step By Step Maintenance Procedures

StormTech Isolator Row (not to scale)



Step 1) Inspect Isolator Row for sediment

A) Inspection ports (if present)

i. Remove lid from floor box frame

ii. Remove cap from inspection riser

iii. Using a flashlight and stadia rod, measure depth of sediment and record results on maintenance log.

iv. If sediment is at, or above, 3 inch depth proceed to Step 2. If not proceed to step 3.

B) All Isolator Rows

i. Remove cover from manhole at upstream end of Isolator Row

ii. Using a flashlight, inspect down Isolator Row through outlet pipe

1. Mirrors on poles or cameras may be used to avoid a confined space entry
2. Follow OSHA regulations for confined space entry if entering manhole

iii. If sediment is at or above the lower row of sidewall holes (approximately 3 inches) proceed to Step 2. If not proceed to Step 3.

Step 2) Clean out Isolator Row using the JetVac process

A) A fixed culvert cleaning nozzle with rear facing nozzle spread of 45 inches or more is preferable

B) Apply multiple passes of JetVac until backflush water is clean

C) Vacuum manhole sump as required

Step 3) Replace all caps, lids and covers, record observations and actions

Step 4) Inspect & clean catch basins and manholes upstream of the StormTech system

Sample Maintenance Log

Date	Stadia Rod Readings		Sediment Depth (1) - (2)	Observations/Actions	Inspector
	Fixed point to chamber bottom (1)	Fixed point to top of sediment (2)			
3/15/01	6.3 ft.	none		New installation. Fixed point is CI frame at grade	djm
9/24/01		6.2	0.1 ft.	Some grit felt	sm
6/20/03		5.8	0.5 ft.	Mucky feel, debris visible in manhole and in Isolator row, maintenance due	rv
7/7/03	6.3 ft.		0	System jetted and vacuumed	djm

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Stormtech® and the Isolator® Row are registered trademarks of StormTech, Inc.

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(generally equal or greater to 3.0 inches in 24 hours) for the first three months. Mow the buffer area, side slopes and basin bottom if grassed floor, rake if stone or sand bottom, remove trash and debris, remove grass clippings and accumulated organic matter. Any sediment removed shall be disposed of in accordance with CTDEEP and other applicable requirements.

Approximate Maintenance Budget: $2,000/year per basin

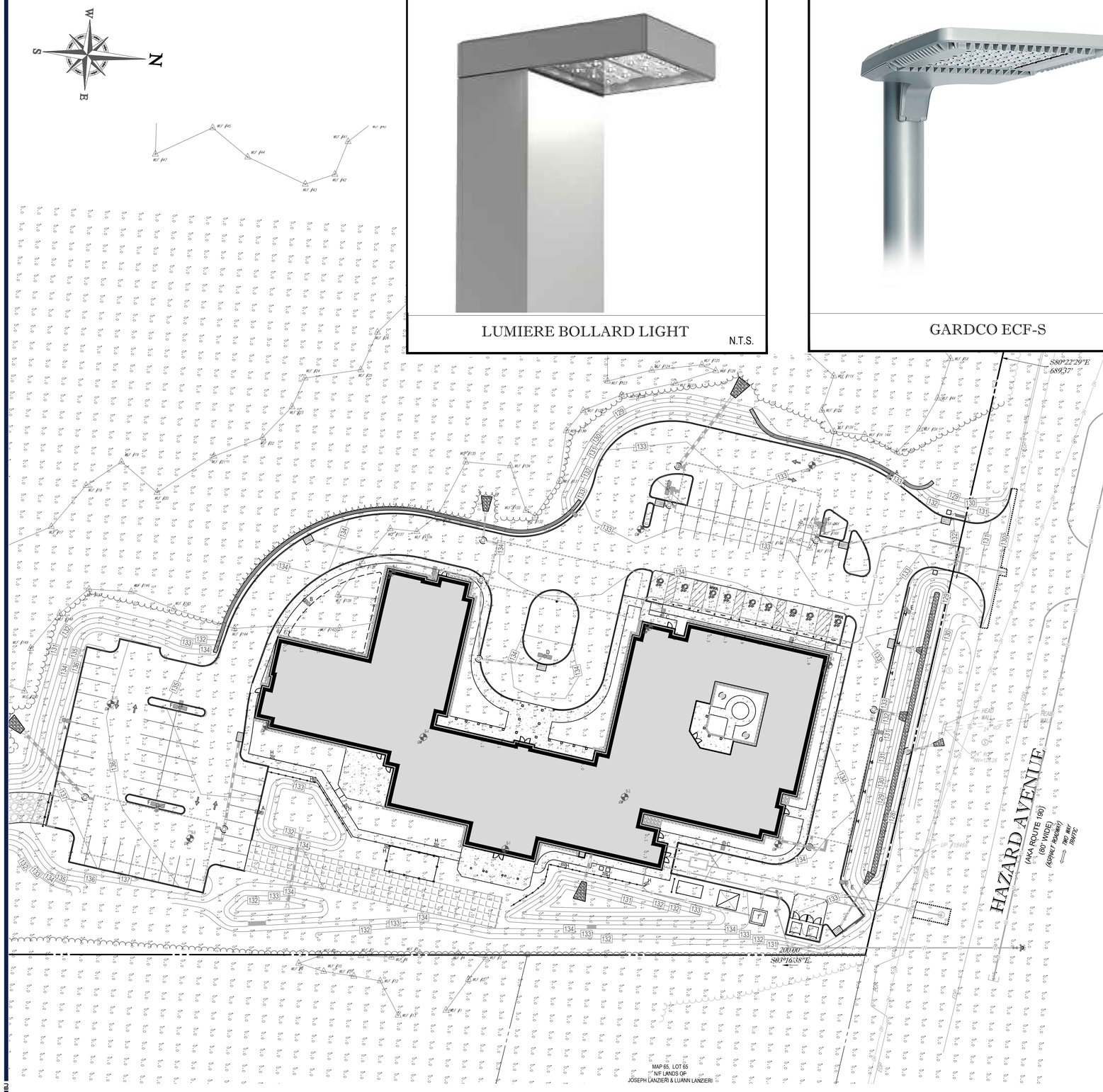
4. Underground Infiltration Basins: Preventative maintenance after every major storm event during the first three (3) months of operation and at least twice per year thereafter. Inspect structure and pretreatment BMP to ensure proper operation after every major storm event (generally equal or greater to 3.0 inches in 24 hours) for the first three months. The outlet of the basin, if any, shall be inspected for erosion and sedimentation, and rip-rap shall be promptly repaired in the case of erosion. Sediment collecting in the bottom of the basin shall be inspected twice annually, and removal shall commence any time the sediment reaches a depth of six inches anywhere in the basin. Any sediment removed shall be disposed of in accordance with CTDEEP and other applicable requirements.

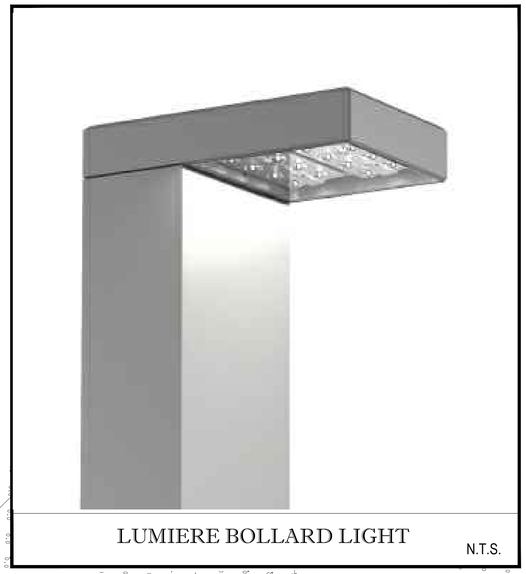
   Approximate Maintenance Budget: Cleaning - $1,000/year, Inspection - $200/year

5. Oil/Grit Separators: Cleaning includes removal of accumulated oil and grease and sediment using a vacuum truck or other ordinary catch basin cleaning device. In areas of high sediment loading, inspect and clean inlets after every major storm. At a minimum, inspect oil grit separators monthly, and clean them out at least twice per year. Polluted water or sediments removed from an oil grit separator should be disposed of in accordance with all applicable local, state, and federal laws and regulations.

   Approximate Maintenance Budget: Inspection/cleaning- $1,000/year per separator per year for inspections and semi-annual cleanings.

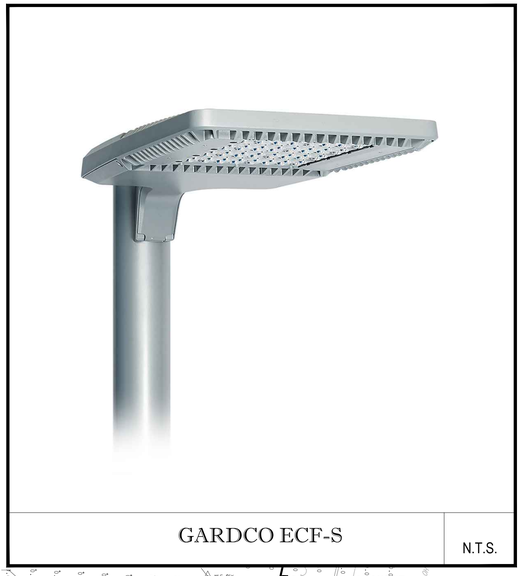
All components of the stormwater system will be accessible by the owner or their assignee.





LUMIERE BOLLARD LIGHT

N.T.S.



GARDCO ECF-S

N.T.S.

LIGHTING NOTES:

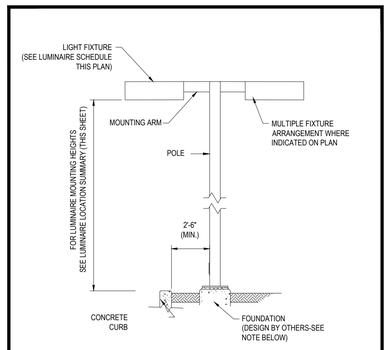
1. THIS LIGHTING PLAN DEPICTS PROPOSED SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER(S). ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES AND OTHER RELATED VARIABLE FIELD CONDITIONS.
2. THE LIGHT LOSS FACTORS USED IN THESE LIGHTING CALCULATIONS ARE 0.85 FOR ALL LED LUMINAIRES, 0.80 FOR ALL HIGH PRESSURE SODIUM LUMINAIRES OR 0.72 FOR ALL METAL HALIDE LUMINAIRES UNLESS OTHERWISE SPECIFIED. THESE FACTORS ARE INDICATIVE OF TYPICAL LIGHTING INDUSTRY MODELING STANDARDS.
3. THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ALL ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT ELEVATION ZERO (GROUND LEVEL) UNLESS OTHERWISE NOTED. THE VALUES DEPICTED ON THIS PLAN ARE IN FOOTCANDLES.
4. THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY. THIS WORK SHOULD INCLUDE, BUT NOT BE LIMITED TO, FREQUENT VISUAL INSPECTIONS, CLEANING OF LENSES, AND RELAMPING (IF NECESSARY) AT LEAST ONCE EVERY SIX (6) MONTHS. FAILURE TO FOLLOW THE ABOVE STEPS COULD CAUSE THE LUMINAIRES, LAMPS AND LENSES TO FAIL PROPERLY TO FUNCTION.
5. WHERE APPLICABLE, THE EXISTING CONDITION LIGHT LEVELS ILLUSTRATED ARE REPRESENTATIVE OF AN APPROXIMATION UTILIZING LABORATORY DATA FOR SIMILAR FIXTURES, UNLESS ACTUAL FIELD MEASUREMENTS ARE TAKEN WITH A LIGHT METER AND ARE, CONSEQUENTLY, APPROXIMATIONS ONLY. DUE TO FACTORS SUCH AS FIXTURE MAINTENANCE, EQUIPMENT TOLERANCES, WEATHER CONDITIONS, ETC, ACTUAL LIGHT LEVELS MAY DIFFER. EXISTING LIGHT LEVELS DEPICTED ON THIS PLAN SHOULD BE CONSIDERED APPROXIMATE.
6. THIS LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES, ONLY. POWER SYSTEM, CONDUITS, WIRING, VOLTAGES AND OTHER ELECTRICAL COMPONENTS ARE THE RESPONSIBILITY OF THE ARCHITECT, MEP AND/OR LIGHTING CONTRACTOR, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY STATE AND LOCAL REGULATIONS. LIGHT POLE BASES ARE THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR INSTALLING LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES AND ALL OTHER APPLICABLE RULES, REGULATIONS, LAWS AND STATUTES.
7. CONTRACTOR MUST BRING TO DESIGNER'S ATTENTION, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURES.
8. IT IS LIGHTING CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE PROJECT ARCHITECT OR OWNER REGARDING THE POWER SOURCE(S) FROM WITHIN THE BUILDING, AND TIMING DEVICES NECESSARY TO MEET THE DESIGN INTENT.
9. THE LIGHTING CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THE SITE PLAN, INCLUDING BUT NOT LIMITED TO, GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND ALL GOVERNMENTAL RULES, LAWS, ORDINANCES, REGULATIONS AND THE LIKE.
10. THE CONTRACTOR MUST VERIFY THAT INSTALLATION OF LIGHTING FIXTURES COMPLIES WITH THE REQUIREMENTS FOR SEPARATION FROM OVERHEAD ELECTRICAL WIRES PER STATE REGULATIONS.
11. WHEN A BANK ATM IS INCLUDED IN THE PLAN, THE LIGHTING DESIGN REPRESENTS BOHLER'S UNDERSTANDING AND INTERPRETATION OF THE REGULATORY LIGHTING LEVELS INTENDED BY PUBLISHED STANDARDS.
12. UPON OWNER'S ACCEPTANCE OF THE COMPLETED PROJECT, THE OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE, SERVICING, REPAIR AND INSPECTION OF THE LIGHTING SYSTEM AND ALL OF ITS COMPONENTS AND RELATED SYSTEMS, TO ENSURE ADEQUATE LIGHTING LEVELS ARE PRESENT AND FUNCTIONING AT ALL TIMES.

NUMERIC SUMMARY

LABEL	CALCTYPE	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN
AREA SUMMARY	ILLUMINANCE	FC	0.47	15.1	0.0	N.A	N.A

LUMINAIRE SCHEDULE

SYMBOL	QTY	ARRANGEMENT	LUMENS	LLF	BUG RATING	LUM. WATTS	DESCRIPTION
A	3	SINGLE	6864	0.85	B2-U0-G2	55.7	GARDCO ECF-S-32L-530-G2-2 @ 14' HIGH
B	3	SINGLE	6715	0.85	B1-U0-G2	55.7	GARDCO ECF-S-32L-530-NW-G2-3 @ 14' HIGH
C	4	SINGLE	7025	0.85	B1-U0-G2	55.7	GACRDCO-ECF-S-32L-530-NW-G2-4 @ 14' HIGH
D	1	DOUBLE	7025	0.85	B1-U0-G2	55.7	GARDCO-ECF-S-32L-530-NW-G2-4 BACK TO BACK @ 14' HIGH
E	1	SINGLE	5348	0.85	B1-U0-G2	55.7	GARDCO-ECF-S-32L-530-NW-G2-3-HIS @ 14' HIGH
F	4	TRIPLE @ 90	7025	0.85	B1-U0-G2	55.7	GARDCO-ECF-S-32L-530-NW-G2-4 @ 14' HIGH
G	1	SINGLE	5509	0.85	B1-U0-G2	55.7	GARDCO-ECF-S-32L-530-NW-G2-4-HIS @ 14' HIGH
H	8	SINGLE	1300	0.85	B1-U0-G1	15.5	LUMIERE EON LED 303-B1-LED82-3000-UNV-T2-DIM10-BK @ 3.5' HIGH



AREA LIGHT DETAIL

N.T.S.

NOTE: THIS DETAIL IS FOR BID AND BUDGETARY PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING A FOUNDATION DESIGN PREPARED BY A QUALIFIED STRUCTURAL ENGINEER CONSIDERING LIGHTING MANUFACTURER REQUIREMENTS, LOCAL WIND LOADS AND SITE SPECIFIC SOIL PARAMETERS.

- SOME SITE CONDITIONS AND/OR LOCATIONS MAY REQUIRE VIBRATION DAMPENING MEASURES AS DETERMINED BY A STRUCTURAL ENGINEER.
- THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF THE INTENT TO MOUNT ANYTHING TO THE POLE, ASIDE FROM THE LIGHT FIXTURES, INCLUDING BUT NOT LIMITED TO CAMERAS, BANNERS, FLAGS, SIGNAGE, ETC. AS IT WILL IMPACT THE POLE AND FOUNDATION DESIGN.

THIS PLAN TO BE UTILIZED FOR LIGHTING PURPOSES ONLY

30 15 7.5 0 30

1"= 30'

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SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

THE INFORMATION, DESIGN AND CONTENT OF THIS PLAN IS PROPRIETARY AND SHALL NOT BE COPIED OR USED FOR ANY PURPOSE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM BOHLER. ONLY APPROVED, SIGNED AND SEALED PLANS SHALL BE UTILIZED FOR CONSTRUCTION PURPOSES.
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	1/20/20	ART COMMENTS	MLT / JGB
2	3/10/20	EMERGENCY ACCESS	MLT / JGB
3	6/4/20	UPDATED WETLAND DELINEATION	BTJ / JGB
4	7/8/20	PLANNING & ZONING SUBMISSION	BTJ / JGB

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PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	CT191016
DRAWN BY:	MLT / DE
CHECKED BY:	JGB / PM
DATE:	12/06/19
CAD I.D.:	CT191016ss2

PROJECT:

PROPOSED SITE PLAN DOCUMENTS

FOR

KAPLAN DEVELOPMENT GROUP, LLC

PROPOSED DEVELOPMENT

118 HAZARD AVENUE
HARTFORD COUNTY
TOWN OF ENFIELD, CT
MAP & LOT: 65 - 59

BOHLER

16 OLD FORGE ROAD, SUITE A
ROCKY HILL, CT 06067
Phone: (860) 333-8900
Fax: (508) 480-9080
www.BohlerEngineering.com

J.G. BORD
STATE OF CONNECTICUT
JEFFREY G. BORD
No. 30414
LICENSED PROFESSIONAL ENGINEER

PROFESSIONAL ENGINEER
CONNECTICUT LICENSE NO. 30414

SHEET TITLE:

LIGHTING PLAN

SHEET NUMBER:

C-701

REVISION 4 - 7/8/20

P:\19\CT191016\DRAWINGS\PLAN SETS\REV3 - WETLAND FLAG REVISION\SCT191016SS3----\LAYOUT: C-701 LIGHT

TOWN OF ENFIELD

ENFIELD PLANNING & ZONING COMMISSION
STAFF REPORT & DRAFT RESOLUTION

Application #	PH# 2980	**Meeting Date:**	July 16, 2020
Address:	118 Hazard Avenue	**Prepared By:**	Laurie Whitten CZEO, AICP
Applicant:	Kaplan Development, LLC		Director of Development Services
Property Owner:	**Same as above**	**Wetlands**	Appd. 6/16/20
Zone:	BP/R-44	**Aquifer Protection Areas:**	no
Current Use:	**Woods/Farm**	**Flood Zones:**	no
Proposed Use:	**Assisted Living Facility**	**Variances:**	**no**
Map/Lot:	**65/59**	**Applicable Zoning Regulations:**	Section 4.40.1 : Assisted Living Facilities

Application for an Assisted Living Facility

PROPOSAL:

The subject parcel is a 19.44 +/- acre lot with road frontage on Hazard Avenue and Middle Road. It is divided into two portions based on use. The southern half mostly zoned R-44, accessed from Middle road is cleared and currently farmed. There is no proposed activity in this area. The northern half zoned Business Professional (BP) , had previously been row farmed but is currently heavily wooded with a Red Maple swamp.

The proposed development is for a 54,000 sq. ft. two story Assisted Living Facility with a 29,000 sq. ft. footprint, 58 units and associated development inclusive of drive aisles, walkways, stormwater management features, utilities and landscaping. Overall, only the northeastern 3.60 ac +/- of the 19.44 acres is proposed to be developed. Entry to the development will only be from Hazard Avenue.

The site is encumbered by wetlands. On June 16, 2020, a wetlands permit was approved for this development. This included a proposal to preserve the farmland as farm in perpetuity.

The site will be served with public sewer, gas, electric, and water

Section 4.40.1 - ZONING:

An Assisted Living Facility is permitted in the BP zone per 5.20. No part of this development will occur in the R-44 Portion of the property with the exception of an emergency access road. The proposal meets or exceeds all of the required bulk and area requirements as listed in Section 4.40.1.

Section 7.10.1 – Dust, Dirt, Fly Ash and Smoke

No dust, dirt, fly ash and smoke shall be emitted into the air so as to endanger the public health and safety, to impair the value and enjoyment of other property, to constitute a critical source of air pollution, or to create a nuisance. This is recommended as a condition of approval but it is also enforceable by the Zoning Enforcement Officer. All efforts shall be made to minimize dust and dirt during clearing and construction. Once constructed, it is anticipated that there should be minimal to no pollution from the site.

Section 7.10.6 Outdoor Lighting

The Applicant has provided a lighting specifications and a photometric plan showing all external illumination being directed or shielded in such a manner that the source (LED Luminaires on 14' poles) of light will not be visible from any street or from any adjoining property. Light encroachment beyond the development area shows at a level of 0.00. (i.e. no light encroachment)

Section 7.10.7 & 7.10.10 Drainage and Stormwater Runoff (sheet C-402)

Stormwater will be collected via overland flow into deep-sump hooded catchbasins. All stormwater will be directed into a) one of the 4 above ground infiltration basins which will help to treat roof runoff, b) one of 4 underground stormtech detention units which is designed to treat the first inch of runoff; or c) via underground pipes leading to rip rap aprons leading back to the wetlands area. The design is pursuant to meeting or exceeding the 2004 Stormwater Quality Manual requirements. The overall design attempted to mimic the pre development drainage patterns and

The proposed stormwater management system will decrease the peak rates of runoff from pre-development flows for the 1,2,10, 25, and 100 year storms.

Section 7.20 Erosion and Sedimentation Control Requirements (sheet c-401)

Erosion & Sedimentation Controls are shown on the Sheet C-04Grading & Erosion Control Plans. A series of silt fence, hay bales, inlet filters and sediment traps have been proposed throughout the site. A silt fenced soil stockpile has also been proposed Staff will review in the filed to determine if alternative or additional control measures will need to be installed.

Table 10.10.2 – Parking Standards
The parking standards require 1 per 2 DU + 1 per 2 Employees + 1Shuttle Vehicle. The Applicant has proposed 69 spaces, inclusive of 9 handicapped or van accessible stalls. The applicant should explain the staffing level assumed for this parking ratio.

Section 10.10.6 – Parking Design, Layout, and Location
The proposed layout, design and location have met the requirements.

Section 10.10.7 – Parking Area Setbacks and Landscaping Standards
Plan claims 15 trees are proposed. Staff only counts 14, but believes that only 14 trees are required.

Section 10.20 – Landscaping Standards
Buffers are required between the development and residential properties. The 3 acre +/- development area is a small portion of the property. The applicant has proposed landscape buffers around the development, including a 25 foot buffer along the road frontage. The only residentially zoned property is the rear of the subject parcel which is over 400 LF from the development area; and the property abutting to the west, which lies approximately 350 LF minimum from the development area. The woods will remain to the west and south of the development area, acting as an existing buffer. The application meets or exceeds the landscape buffer requirements.

Section 9.10.4 – Site Plan Approval Criteria.
The application appears to meet the requirements of this section. Regarding Traffic, the applicant nor staff believe that a traffic study is warranted as traffic in and out of an Assisted Living Facility tends to be minimal. The majority of residents do not drive, and traffic is generally from workers and visitors.

Section 10.30 – Signage
Following Sec 10.30.5 #12, the applicant is proposing one double sided , 50 sf., 20 ft. high freestanding sign; and one 38 sf. wall sign on the building. These meet the requirements, and can be considered as part of the overall zoning/building permit after an approval of the project.

Architectural Plans – Have been submitted for the Commissions review.

Staff Comments:
Engineering:
Fire:
Police:
WPCA:

SEPA INTERVENTION:
Under CGS 22a-19 , am entity

> *"may intervene as a party on the filing of a verified pleading asserting that the proceeding or action for judicial review involves conduct which has, or which is reasonably likely to have, the effect of unreasonably polluting, impairing or destroying the public trust in the air, water or other natural resources of the state.*

In essence , this means that someone may become part of the PZC review process, based on their concerns of environmental pollution. They have legal standing to ask questions directly of the applicant and Commission only on the environmental concerns, during the Public Hearing /Site Plan Review process. The PZC must read through the "verified pleading " and 1) first determine if the claim is within the jurisdiction of the PZC 2) Allow the intervenor to present their case with rebuttals 3)Consider the evidence and testimony presented by the intervenor when deliberating on taking action on the application.

The verified pleading is attached, along with an explanation (written in 2004) of environmental interventions. Staff will send out more directive/procedural information before meeting time.

MOTION TO APPROVE PH# 2980 to approve the application for an Assisted Living Facility with 58 units and associated improvements to be located at 118 Hazard Avenue in the BP zone; Map 65/lot 59 according to the below referenced plans and with the following conditions of approval:

Application PH# 2980 Referenced Plans:
Proposed Site Plan Documents for KAPLAN Development Group, LLC, proposed All American Assisted Living Facility 118 Hazard Ave, Enfield CT , Map 65 Lot 59, Town of Enfield, Hartford County, CT,; prepared by BOHLER 16 Old Forge Rd, Ste A Rocky Hill, CT 06067 860/333-8900 www.BohlerEngineering.com dated 1/20/20 revised 3/10/20

1/17 "Proposed All-American Assisted Living Facility, 118 Hazard Avenue, Enfield, Connecticut 06082"; Cover Sheet with Site Location Map, Aerial Area Plan and Drawing Sheet Index; Sheet: C-

101; Scale: As Noted; Prepared by Bohler Engineering, 16 Old Forge Road, Suite A, Rocky Hill, CT 06067. Prepared for Kaplan Development Group, LLC, 100 Jericho Quadrangle, Suite 142, Jericho, NY 11753. Dated December 6, 2019. Revised to March 10, 2020.
2/17 "General Notes Sheet" – Sheet C-102; Scale: None
3/17 "Demolition Plan" – Sheet C-201; Scale: 1" = 30'
4/17 "Site Layout Plan" – Sheet C-301; Scale: 1" = 30'
5/17 "Grading and Drainage Plan" – Sheet C-401; Scale: 1" = 30'
6/17 "Soil Erosion and Sediment Control Plan" – Sheet C-402; Scale: 1" = 30'
7/17 "Soil Erosion and Sediment Control Notes and Details" – Sheet C-403; Scale: None
8/17 "Utility Plan" – Sheet C-501; Scale: 1" = 30'
9/17 "Landscape Plan" – Sheet C-601; Scale: 1" = 30'
10/17 "Landscape Notes and Details" – Sheet C-602; Scale: None
11/17 "Lighting Plan" – Sheet C-701; Scale: 1" = 30'
12/17 "Detail Sheet" – Sheet C-901; Scale: None
13/17 "Detail Sheet" – Sheet C-902; Scale: None
14/17 "Detail Sheet" – Sheet C-903; Scale: None
15/17 "Detail Sheet" – Sheet C-904; Scale: None

16/17 "Detail Sheet" – Sheet C-905; Scale: None
17/17 "Detail Sheet" – Sheet C-906; Scale: None

Boundary and Topographic Survey

1/5 "Proposed All-American Assisted Living Facility, 118 Hazard Avenue, Enfield, Connecticut 06082"; Boundary and Topographic Survey with Location Map, Legend, Notes, Abutters Information and Map References; Scale: 1" = 60'; Prepared by Bohler Engineering, 16 Old Forge Road, Suite A, Rocky Hill, CT 06067. Prepared for Kaplan Development Group, LLC, 100 Jericho Quadrangle, Suite 142, Jericho, NY 11753. Dated September 5, 2019.

2/5 "Boundary and Topographic Survey" – Scale: 1" = 30'
3/5 "Boundary and Topographic Survey" – Scale: 1" = 30'
4/5 "Boundary and Topographic Survey" – Scale: 1" = 30'
5/5 "Boundary and Topographic Survey" – Scale: 1" = 30'

Architectural Plans prepared by EGA Architects, 1 Vernon St., Newberryport, MA 01950, Phone# 978-462-5515 ,dated 7/8/20
A1-1 Level 1 Floor Plan
A1-2 Level 2 Floor Plan
A1-3 Level 2 Floor Plan

A1-4 Front Entry Rendering

General Conditions:

1. This approval is for the specific use, site, and structure identified in the application. Any change in the nature of the use, site, or the structure will require new approvals from the Enfield Planning and Zoning Commission.
2. This approval does not include signage permits.
3. There is to be no exterior sheet metal venting pipes visible from the street.
4. Exterior mechanicals and electricals are to be boxed and screened.
5. This project shall be constructed and maintained in accordance with the referenced plans.
6. A building permit for the construction of facilities as approved must be obtained within 24 months of approval or this approval shall be rendered null and void, unless an extension is granted by the Commission.
7. All construction authorized by this approval shall be completed within five (5) years or this approval shall be considered null and void, unless an extension is granted by the Commission.
8. By acceptance of this permit and conditions, the applicant and owner acknowledge the right of Town staff to periodically enter upon the subject property for the purpose of determining compliance with the terms of this approval.

Site Specific Conditions:

9. No dust, dirt, fly ash and smoke shall be emitted into the air so as to endanger the public health and safety, to impair the value and enjoyment of other property, to constitute a critical source of air pollution, or to create a nuisance.

Conditions to be met prior to signing of plans:

10. All plans submitted for signature shall bear the seal and live signature of the appropriate professional(s) responsible for the preparation of the plans.
11. The application number shall be displayed on the plans in or near the Title Block area.
12. A copy of the approval letter and conditions shall be incorporated into the final plans submitted for signature, preferably located on the cover sheet or first sheet of the plan set.
13. A list outlining how the conditions of approval have been met shall be submitted along with final plans submitted for signature.
14. A list outlining all changes to the plans shall be submitted along with final plans submitted for signature. The list should cite the sheet number where each change has been made.
15. The conditions of this approval shall be binding on the applicant, land owners, and their successors and assigns.

Conditions to be met prior to the issuance of permits:

16. Four sets of paper plans with any required revisions incorporated shall be submitted to the Planning Department for signature of the Commission. The Director of Planning may require Mylars.
17. This approval will become effective upon the filing of a Special Use Zoning Certificate signed by the Commission Secretary on the Land Records by the applicant. Such certificate must be filed within 120 days of approval by Commission. Proof of such filing shall be in the file prior to the issuance of any permits.
18. The applicant shall also submit final plans as approved by the Commission in a digital format compatible with the Enfield Geographic Information Systems Electronic Submittals Ordinance.
19. The applicant shall post a separate bond for Erosion and Sediment Control submitted in the form of cash or certified check, pledged to the Town, in an amount to be determined by the Town Engineer and the Director of Planning.
20. The applicant shall post a Landscaping Bond to the Town, in an amount and format determined by the Director of Planning.
21. A pre-construction meeting between the applicant, site contractors, project engineer and Town Staff shall be held.
22. Any required certificates and/or approvals from State or Federal agencies (i.e. CT-DOT, DEEP, Army Corps of Engineers) shall be obtained by the applicant and reported to the Planning and Zoning Commission file. Any changes to the plans required by such entities may require a plan modification from the Enfield Planning and Zoning Commission.

Conditions which must be met prior to the Issuance of a Certificate of Compliance:

23. Complete as-built plans certified to Class A-2 accuracy shall be submitted prior to the issuance of any certificates of zoning compliance. The as-built plan shall also contain a certification by a Professional Engineer that they have inspected the site improvements and that they have been installed in accordance with the approved plans. Any deviations or omissions must be noted.
24. The design professional who prepared the approved PZC architectural drawings, shall provide as-built drawings with a certification that they have complied with approved plans. Any changes need to be noted on the plans and a list of changes submitted.
25. No Certificate of Occupancy or other final approval may be issued until the Zoning Enforcement Officer has signed off on the final work. When minor site work cannot be completed because of weather or other pertinent reason, a conditional approval may be issued for a period not to exceed 180 days, providing satisfactory surety shall be posted with the Town of Enfield in an amount sufficient to complete the site work and with surety acceptable to the Town of Enfield.
26. A request for final project review and certificate of zoning compliance must be made to the Planning Department not less than 10 days before a Certificate of Occupancy or other final approval is requested from the Building Official.

Note: The Conditions of Approvals do not take the place of other requirements found in the Town Codes, Regulations, and Application Instructions.

TOWN OF ENFIELD

Special Use Permit & Site Plan Review Application

Planning Division • 820 Enfield Street Enfield, CT 06082
Telephone: 860-253-6355 Website: www.enfield-ct.gov

Special Use Permit

Application For: ☑ New Special Use Permit ☐ Other _____
☐ Modification of Plan Previously Approved _____
☐ Modification of Conditions of Approval of a Special Permit: _____

Site Plan Review

Application For: ☐ New Site Plan Review ☐ Other _____
☐ Modification of Plan Previously Approved _____
☐ Modification of Conditions of Approval of a Site Plan: _____

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Staff Use Only					
PH #:		**SPR #:**	1829	**XSP #:**	
View Permit #:	TPL-20-86				
Zoning Regulation Section:					

PLEASE REVIEW LAND USE APPLICATION GUIDE FOR INSTRUCTIONS

Property Address: 50 Hazard Avenue **Map #:** 56 **Lot #:** 22

Zone(s): Business Regional **Size of Parcel:** ±1,494,000 SF **Account #:** 001000020005

Current Use: Regional Shopping Center

Project Name: Burlington Coat Factory Expansion at Brookside Plaza

Summary Description:

The proposed project includes the re-tenanting of the existing Walgreen's into a Burlington Coat Factory. This includes the construction of a single story ±6,303 square-foot building expansion with associated utility infrastructure, drainage, landscaping, loading dock and drive-way revisions necessary to incorporate the expansion into the existing loading area.

Applicant's Name: Regency Centers c/o Michael Lai

Applicant's Address: 28 Church Lane, Suite 200, Westport, CT 06880

Contact #: (203) 635-5570 **Email:** MichaelLai@regencycenters.com

TOWN OF ENFIELD

Applicant's Representative: David Gagnon- Langan

Representative Address: 555 Long Wharf Drive, 9th Floor, New Haven, CT 06511

Contact #: (860) 398-0196 **Email:** dtgagnon@langan.com

Does Applicant own the Property? ☑ Yes (Attach Copy of DEED)
☐ No (Provide Information Below & Attach Letter of Authorization)

Owner's Name: Equity One (Northeast Portfolio) LLC c/o Michael Lai

Owner's Contact #: 203-635-5563

Owner's Address: 28 Church Lane, Suite 200, Westport, CT

Owner's Email: MichaelLai@regencycenters.com

Project Information:

Septic: ☐ Yes ☑ No

Public Sewer: ☑ Yes ☐ No

Well Water: ☐ Yes ☑ No

Public Water: ☑ Yes ☐ No

Outdoor Storage: ☐ Yes ☑ No

Design District: ☐ Yes ☑ No

Do wetlands and watercourses affect this application? ☐ Yes ☑ No

Is the property within a Level A or Level B Aquifer Protection Area? ☐ Yes ☑ No

Does this application include any regulated activity in a floodplain ☐ Yes ☑ No

(If yes, you will need to also submit a Flood Hazard Development Permit application to the Planning & Zoning Commission)

What is the total lot acreage? ±34.3 AC (±1,494,000 SF)

What is the length of the property frontage? (List by Street) Hazard Avenue: ±1,700 LF, Freshwater Boulevard: ±775 LF, Rosario T Vella Avenue: ±1,635 LF, Phoenix Avenue: ±1,015 LF

Name the abutting street(s): Hazard Avenue, Freshwater Boulevard, Rosario T Vella Avenue, Phoenix Avenue

TOWN OF ENFIELD

What are the existing land uses and zoning districts for abutting properties or across the street(s)?

North Use: Retail/Restaurant, Zone: BR

East Use: Retail/Restaurant, Zone: BR

South Use: Vacant Land, Zone: IP

West Use: Hotel/Restaurant, Zone: BR

Environmental History:

Phase I: Land Records reviewed for environmental hazards? ☑ Yes ☐ No

Phase II: Environmental Hazards Identified? ☐ Yes ☑ No

If yes, please list the environmental conditions found: n/a

Phase 3: Is there a remediation plan? ☐ Yes ☑ No

If yes, please describe the remediation plan: n/a

Are there environmental restrictions on the property? ☐ Yes ☑ No

If yes, please list environmental restrictions: n/a

TOWN OF ENFIELD

The applicant understands that this application is to be considered complete only when all information and documents required by the Agency have been submitted. The undersigned warrants the truth of all statements contained herein and in all supporting documents according to the best of his/her knowledge and belief. Permission is granted to the Town of Enfield, Inland Wetlands & Watercourses Agency, and its agent(s) to walk the land, at reasonable times, and perform those tests necessary to properly review the application, both before and after a final decision has been issued.

☑ **I have reviewed and acknowledge the Land Use Application Guide for further instructions on how to complete my application.**

Applicant Signature: Lai **Date:** 05/19/2020

Print Name: Michael Lai

Owner's Signature: Lai **Date:** 05/19/2020

Print Name: Michael Lai

Subscribed and sworn to before me 19 **day of** May **, 20** 20 .

Notary Public **My Commission Expires:** December 11/2026

XHERSI RAKIPAJ
Notary Public, Commonwealth of Massachusetts
My Commission Expires December 11, 2026

For Office Use	
Application #:	**Date Submitted:**
DEP Form Submitted Date:	

TOWN OF ENFIELD

Applicant Responsibilities	
☑ **Application Form**	☑Provide a complete and notarized application form.
☑ **Owner Authorization**	☑ Provide a copy of the DEED, if you own the property OR Provide a letter from the owner authorizing you to apply on their behalf.
☐ **Abutter's Information**	☐ Notice to immediate abutters by certified mail not less that fifteen days **(15) days prior** to the start of the public hearing. (If applicable). ☐ A copy of the abutter's letter and proof of mailing notification is to be provided to the Planning Office **3 days prior** to the scheduled public hearing.
☑ **Project Narrative**	☑ Provide a detailed narrative explaining the proposal. ▪ How will you use the site? ☑ Include the hours of operation and number of employees for all commercial/industrial projects. ☐ Outdoor storage, if any ☐ Outdoor entertainment, if any ☐ Will there be food or alcohol? ☐ If proposing new curb cuts as part of the proposal, provide a narrative report demonstrating: ☐ The access ways are adequate but not excessive in number. ☐ The access ways are adequate in width, grade, alignment and visibility. ☐ That access ways are appropriately separated from street corners and other places of public assembly. ☑ If proposing new, changes to, off-street parking/loading areas, provide a narrative report demonstrating: ☑Section 10-Site Development Regulations ☑ Adequate off-street parking/loading areas are provided to prevent persons connected with or visiting the use from parking on public streets. ☑ That the proposed interior circulation system is adequate to provide safe accessibility to all off-street parking spaces.

TOWN OF ENFIELD

Applicant Responsibilities Continued	
☐ **Materials Samples Specification**	☐ Provide available manufacturer's literature for added site features: generators, fencing, pre-fabricated structures, etc.
	☐ Physical samples for any façade materials or any non-standard hardscaping should be submitted with the application.
☐ **Additional requirements for projects adjacent to State Right-of-Way**	☐ Provide a copy of preliminary applications for access to state highways and State-owned storm drainage facilities where such state permit is necessary.
PLANS-Full Submission Requirements	
☑ **Cover Sheet**	☑ Title of Project ☑ Name of Developer ☑ Name of Property Owner ☑ Name of Applicant ☑ North Arrow ☑ Scale ☑ Drawings are to be submitted in landscape orientation opposed to portrait orientation ☑ Drawing Index/List of all plan sets is to include: ▪ Original Date ▪ Revision Date(s) ▪ Sheet Number ▪ Sequential Page Number out of Pages in plan set. i.e. Page 1 of 10. ☑ Location Map ▪ Scale: 1" = 1000' ▪ Showing Adjacent streets, property owners, and Zones. ☑ Zoning Summary Table-Show a table comparing the standards required in these regulations and the standards provided by the proposed project: area and bulk requirements, parking requirements, etc. ☑ Seal & Signatures of appropriate design professional (Surveyor, Engineer, Architect, Landscape Architect, etc.) ☐ Land Use Commission Application Numbers, if applicable

TOWN OF ENFIELD

PLANS-Full Submission Requirements	
☑ **Aquifer Map**	☑ Proximity to Aquifer Protection Areas are to be delineated on plan sheet. ☐ Narrative ☐ Registration Form • Aquifer Protection Area Regulations- Section 8 Registration Requirements ☐ Permit Application • Aquifer Protection Area Regulations- Section 9 Permit Requirements
☑ **Floodplain Map**	☐ Town of Enfield Code of Ordinances- Chapter 42 Floods ☐ Development Permit for Special Flood Hazard Area Application ☐ Narrative ☑ Delineation of Floodplain Area- Official FIRM (Flood Insurance Rate Map) on which FEMA (Federal Emergency Management Agency) has delineated Areas of Special Flood Hazard, the Risk Premium Zones, and Base Flood Elevation.
☑ **Boundary Survey of Site**	☑ Area of Lot ☑ Show property boundaries including distances with angles or bearings. ☑ Include area of lot and property's zoning classification. ☑ Include names of adjacent property owners and zoning classification of their properties.
☑ **Existing Conditions Map** **Title Block Should Include** ☐ Name of Developer ☐ Name of Property Owner ☑ North Arrow ☑ 1": 20' Scale Preferred. May be between 20' and including 40' scale ▪ If another scale is desired, please contact staff for approval ☑ Seals and Signatures of appropriate design professional	☑ Delineate flagged Wetlands, if applicable. ☑ Existing contours or spot grades at no more than 2-foot intervals. ☑ Show location of existing buildings-indicate: ▪ Dimensions ▪ Area ▪ Height ▪ Number of stories ▪ Distances between buildings and to property lines. ☑ Show existing sanitary and storm water drainage facilities with elevation. ☑ Show existing sidewalks, curbs and curb cuts, and adjacent streets. ☑ Show location and description of all existing easements and right-of-way.

TOWN OF ENFIELD

PLANS-Full Submission Requirements	
☐ **Existing Conditions Map-Continued**	☑ Show existing trees-label all trees larger than 12" (feet). ☑ Show existing off-street parking/loading areas include details of: ▪ Aisles ▪ Driveways ▪ Each Parking Space ▪ All Loading and Unloading Areas ▪ Pavement Marking ▪ Location of Directional Signs ☑ Show existing lighting and signage. ☑ Show existing outdoor storage and screening-including dumpster areas.
☑ **Project Site Plan (s)** *Include as many sheets as required* **Title Block Should Include** ☐ Name of Developer ☐ Name of Property Owner ☑ North Arrow ☑ 1": 20' Scale Preferred. May be between 20' and including 40' scale ▪ If another scale is desired, please contact staff for approval ☑ Seals and Signatures of appropriate design professional	**Layout** ☑ Show proposed contours and spot grades at no more than (2) foot intervals. ☑ Show location of proposed buildings-indicate ▪ Use ▪ Dimensions/Size ▪ Area ▪ Height ▪ Number of Stories ▪ Distances between buildings and to property lines. ☑ Zoning Table with Area and Bulk Information ▪ Required ▪ Existing ▪ Proposed ☑ Traffic Access: ▪ Adequate in Number ▪ Width ▪ Grade ▪ Alignment ▪ Visibility ▪ Fire Lane(s) are to be marked ▪ Traffic Control Signs ▪ Location of Directional Signs ▪ Appropriately separated from Street Corners or Other Places of Assembly

TOWN OF ENFIELD

PLANS-Full Submission Requirements	
☑ **Project Site Plan (s)-Continued** *Include as many sheets as required* **Title Block Should Include** ☐ Name of Developer ☐ Name of Property Owner ☑ North Arrow ☑ 1": 20' Scale Preferred. May be between 20' and including 40' scale ▪ If another scale is desired, please contact staff for approval ☑ Seals and Signatures of appropriate design professional	☑ Traffic Access: ▪ Wheel stops or Bollards Post Protection Details • Gas • Electric • Drive Thurs • Outside Seating, etc. ☑ Circulation and Parking: Layout of Off-Street Parking Areas-include: ▪ Review Section 10-Site Development Regulations ▪ Aisles ▪ Driveways ▪ Number of Parking Space ▪ Safe Accessibility to All Required Off-Street Parking ▪ All Loading and Unloading Areas ▪ Pavement Markings ▪ Disabled Parking • To be consistent with State of CT Handicapped Parking Spaces and Signs Statutes and Regulations ☑ Show proposed outdoors storage and screening-including outside recycling and refuse storage areas. ☑ Show proposed sidewalks, curbs and curb cuts, and adjacent streets. ☑ Show all easements and rights-of-way/ ☐ Where development is proposed to be in phases, phase lines shall be shown. **<u>Landscaping, Lighting, and Signage</u>** ☑ Landscape: Planting Scheduled- ▪ Section 10.20 Landscaping Standards ▪ Section 10.10.7 Parking Area Setbacks & Landscaping Standards ▪ Location(s) ▪ Size(s) ▪ Quantity ▪ Common Names

TOWN OF ENFIELD

PLANS-Full Submission Requirements	
☑ **Project Site Plan (s)-Continued** *Include as many sheets as required*	☑ Lighting: Specifications for all lighting fixtures are to be included on the plans. ▪ Section 7.10.6 Outdoor Lighting Requirements ▪ Section 10.10.6 Parking Design, Layout, and Location-ii Lighting ▪ Height and size of all outdoor lighting is to be shown on plan ▪ Scalable: Number of Foot Candles ☐ Signage ▪ Review Section 10.30 Sign Regulations ▪ Location(s) ▪ Photo Rendering ▪ Dimension(s)/ Size(s) ▪ Length(s) X Width(s) X Height(s) ▪ Engineering footing details, if applicable
	<u>Engineering Details and Utilities</u> ☑ Soil Erosion and Sedimentation Control Measures. ▪ Section 7.20 Erosion and Sedimentation Control Requirements ▪ Grading and Construction Activities ▪ Construction Details ▪ Sequence of Installation, Application, and Stabilization ☑ Show connection(s) to sanitary and storm water drainage facilities (public or well), electric, and gas: ▪ Elevations ▪ Length of Pipes or Wires, etc. ☑ Delineate drainage design for roof area, parking lot, and driveways ▪ Section 7.10.10 Storm Water Runoff ☑ Indicate provisions for water supply ☑ Include appropriate details and cross section depicting the Town Standards for construction and site improvement found in the Technical Subdivision Regulations ☐ Maintenance schedules for all equipment are be provided within the plan set. ☑ Include Standard Town Notes. (See Attached)
Title Block Should Include ☐ Name of Developer ☐ Name of Property Owner ☑ North Arrow ☑ 1": 20' Scale Preferred. May be between 20' and including 40' scale ▪ If another scale is desired, please contact staff for approval ☑ Seals and Signatures of appropriate design professional	

TOWN OF ENFIELD

PLANS-Full Submission Requirements	
☑ **Architectural Plans and Elevations** *Include preliminary architectural drawings as part of the plan set* ☐ Scale 1-foot equals 16 feet	☑ Show floor plans for each floor or level of each proposed structure-indicate: ▪ Spatial Arrangements ▪ Use Occupancy ▪ Seating Arrangements ▪ Ingress and Egress, as appropriate ▪ Facilities-Restrooms and Storage Areas ▪ FOG (Fat, Oil, Grease) System Specification, if applicable • Dimension/Size • Indoor or Outdoor ▪ Grease Traps
	☑ Show exterior elevations of each side of each proposed structure-indicate: ▪ Material(s) ▪ Roof Scape, if any, ▪ Dimensions of building ▪ Air Scrubber- Restaurants, Bakery, Café, etc.
	☑ Show all exterior mechanical equipment and screening- ▪ ALL mechanical equipment is to be screened from the public view in a manner that is compatible with the architectural style of the building and designed in a manner that is integral to the architectural design of the building.
	☑ Where alteration and/or additions to an existing building are proposed, provide both plans and elevations adequate to explain the proposal.
☑ **Technical Report(s),** if applicable	☑ Erosion and Sedimentation Control Plan ☐ Traffic Impact Study ☐ Geotechnical Engineering Report ☐ Wetland and Soils Report ☐ Soil Scientist Report ☐ Wetland Impact Assessment Report ☑ Stormwater Analysis/Management Report ☑ Engineering Hydrology and Hydraulic Analysis Report ☐ Other

TOWN OF ENFIELD

Dates and Deadlines	
☐ **Deadline to turn materials into the Planning Division**	☐ _____ Deadlines are **25 days prior** to a Board or Commission meeting. ☐ 14 copies of 24 X 36 plans are to be submitted in complete sets- stapled, map folded and electronically.
☐ **Commission Meeting** *Application is Officially received*	☐ _____ The application is officially received by the Commission during the **next regular meeting after materials are submitted.** Applicants do not need to attend. ▪ CT General Statues- 8-7d
☐ **DEADLINE to post public hearing signs**	☐ _____ Deadline is **10 days prior** to the scheduled meeting at which the application will be discussed (for Public Hearings ONLY).
★ **Commission Meeting** *Application is discussed*	☐ _____ Typically, applications are discussed 1-2 meetings after they are officially received. The Commission sets the schedule based on the number of applications and anticipated length of discussion. The schedule also depends on the complexity of the proposal and if all appropriate Agencies and Departments have had sufficient time to submit written comments. Applicants are expected to attend the meeting (s) when their application is discussed and are expected to provide an introductory presentation of the proposed project.

TOWN OF ENFIELD

Post Commission Meeting	
☐ **Removal of Public Hearing Signage**	☐ Public hearing sign(s) must be **removed within five (5) days** of the closing of the hearing and returned to the Planning Division.
☐ **Plan Revisions**	☐ Revision of plans per Commission request. Final Plans include **four (4) copies** of approved plan measuring 24 X 36. Approval letter is to be incorporated into the Final Plans as its own plan sheet. ☐ An electronic submission of the final plans and any documents received are required. ☐ Digital list of all map sets is to be included.
☐ **Bonds** ☐ Landscaping Bond ☐ Site Restoration ☐ Soil Erosion Control	☐ Bonds may need to be posted. ☐ Review Section 9.10.5 Site Plan Bonding-Certificate of Compliance ▪ Erosion & Sediment Control Bond: **Cash Only Bond** ➢ Review Section 7.20 Erosion and Sedimentation Control Requirements ▪ Site Restoration Bond: **Surety Bond** ▪ Landscaping Bond: **Surety Bond** ➢ Review Section 10.20 Landscaping Standards
☐ **Land Records**	☐ Final Plans signed by the appointed Town Official may need to be filed with the Enfield Land Records. ☐ Documents requested to be filed with the Town Clerk on the Land Records **require a fee paid** to The Office of Town Clerk
☐ **Pre-Construction Meeting**	☐ Pre-Construction Meeting between the applicant, site contractors, project engineer and Town Staff.

TOWN OF ENFIELD

Post Construction	
☐ **Project Construction and Completion Requirements.**	☐ Please familiarize yourself with project completion requirements
☐ **Engineered Certified As-Built** ☐ **Architectural Designed As-Built**	☐ As-Built include **four (4) copies** of Certified As-Built measuring 24 X 36. ☐ Any deviations or omissions needs to be noted on the plans and a list of changes submitted.
☐ **Electronic Submittal Requirement**	☐ As-Built electronically submitted in addition to required paper copies. ☐ Digital list of map plan set is required.
☐ **Request of Certificate of Zoning Compliance**	☐ Review Section 9.10.5 Site Plan Bonding-Certificate of Compliance ☐ Request of Certificate of Zoning Compliance is to be completed **ten (10) days prior** to the inspection for the Certificate of Occupancy. ☐ Review Schedule of Fees
☐ **Request of Certificate of Occupancy**	☐ Request of Certificate of Occupancy is to be made after the Certificate of Zoning Compliance is completed.

TOWN OF ENFIELD

Post Commission-Bonds	
☐ **Release Request for Soil & Erosion Control Bond**	☐ Review Section 9.10.5 Site Plan Bonding-Certificate of Compliance ☐ Complete bond release form. ☐ Site will be inspected for completion. ☐ Review Section 9.10.9 Site Maintenance ☐ Review Schedule of Fees
☐ **Release Request for Site Restoration Bond**	☐ Review Section 9.10.5 Site Plan Bonding-Certificate of Compliance ☐ Complete bond release form. ☐ Site will be inspected for completion. ☐ Review Section 9.10.9 Site Maintenance ☐Review Schedule of Fees
☐ **Release Request for Landscaping Bond**	☐ Review Section 9.10.5 Site Plan Bonding-Certificate of Compliance ☐ Request are to be made **after one (1) growing season** typically one (1) year. Landscaping installed during the months of June, July, or August, the period shall be two (2) years. ☐ Complete bond release form. ☐ Site will be inspected for completion. ☐ Review Section 9.10.9 Site Maintenance ☐ Review Schedule of Fees.
☐ **Request for Bond Reduction**	☐ Complete bond reduction form ☐ Review Schedule of Fees

01/17/2006 $285,000.00 State Conveyance Tax Received
$71,250.00 Town Conveyance Tax Received

RECEIVED
ENFIELD PLANNING DEPT
2020 JUN 19 PM 2:51

AFTER RECORDING RETURN TO:

William S. Wilson, Esq.
Greenberg Traurig, LLP
One International Place
Boston, MA 02110

SPECIAL WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS:

THAT, GATEWAY CONNECTICUT PROPERTIES, INC., a California corporation ("Grantor"), for and in consideration of the sum of Ten and No/100 Dollars ($10.00) and other good and valuable consideration in hand paid to Grantor by EQUITY ONE (BROOKSIDE) LLC, a Massachusetts limited liability company ("Grantee"), whose mailing address is 1600 N.E. Miami Gardens Drive, North Miami Beach, FL 33179, the receipt and sufficiency of such consideration being hereby acknowledged, has GRANTED, SOLD AND CONVEYED, and by these presents does hereby GIVE, GRANT, SELL, BARGAIN AND CONVEY unto Grantee that certain real property being more particularly described in Exhibit A attached hereto and made a part hereof for all purposes, together with all improvements, structures and fixtures situated thereon (collectively, the "Property"); subject, however, to those matters more particularly described in Exhibit B attached hereto and made a part hereof for all purposes (collectively, the "Permitted Exceptions").

TO HAVE AND TO HOLD the Property, together with all and singular the rights, and appurtenances thereto in anywise belonging, unto Grantee, its successors and assigns forever, subject to the Permitted Exceptions; and Grantor does, for itself, its successors and assigns, covenant with Grantee and its successors and assigns, that the Property is free from all encumbrances made or suffered by Grantee, except for the Permitted Exceptions; and Grantor does hereby bind itself and its successors to WARRANT AND FOREVER DEFEND all and singular the Property, subject to the Permitted Exceptions, unto Grantee, its successors and assigns, against the claims and demands made or suffered by Grantor, except as aforesaid, but not otherwise.

[SIGNATURE PAGE TO FOLLOW]

12th IN WITNESS WHEREOF, this instrument has been executed under seal as of this day of January, 2006.

GRANTOR:

GATEWAY CONNECTICUT PROPERTIES, INC., a California corporation

By: _____
Name: EARL W. BUEHNER
Title: VICE PRESIDENT, ASST. SECRETARY & ASST. TREASURER

STATE OF CALIFORNIA)
) ss.
COUNTY OF LOS ANGELES)

On January 11, 2006, before me, the undersigned, Notary Public in and for said State and County, personally appeared Earl W. Buehner, personally known to me (~~or proved to me on the basis of satisfactory evidence~~) to be the person(~~s~~) whose name(~~s~~) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(~~ies~~), and that by his/~~her/their~~ signature(~~s~~) on the instrument the person(~~s~~), or the entity(~~ies~~) upon behalf of which the person(~~s~~) acted, executed the instrument.

WITNESS my hand and official seal.

Shirley T. Sarkisian
Notary Public

SHIRLEY T. SARKISIAN
Commission # 1583982
Notary Public - California
Los Angeles County
My Comm. Expires Jun 28, 2009

EXHIBIT A

LEGAL DESCRIPTION

All that certain piece or parcel of land, with the improvements thereon and appurtenances thereto, situated in the Town of Enfield, County of Hartford and State of Connecticut, shown on a certain map or plan entitled "Enfield Development Agency Plan of Development", Enfield Memorial Industrial Park, Enfield, Connecticut dated March, 1974, revised June 12, 1981, November 12, 1981, August 30, 1982, November 2, 1982, and October 28, 1983, Scale 1" = 100', Sheet 6 of 7, which map is on file in the Enfield Town Clerk's Office, said parcel being more particularly bounded and described as follows:

Beginning at a concrete monument marking the intersection of the east street line of Phoenix Avenue and the south street line of Hazard Avenue, said monument also marking the northwest corner of the property herein described; thence S 86° 47' 28" E, a distance of 628.97 feet and S 86° 20' 08" E, a distance of 1,070.20 feet along the south street line of Hazard Avenue to a concrete monument marking the intersection with the west street line of Freshwater Boulevard; thence along the west street line of Freshwater Boulevard S 3° 39' 52" W, a distance of 219.77 feet to a concrete monument marking a point of curvature to the left, a central angle of 29° 27' 32.8", a radius of 1,080.00 feet and a length of arc of 555.29 feet to a concrete monument marking a return curve to the right, a central angle of 98° 07' 31", a radius of 35.00 feet and a length of arc of 59.94 feet to a concrete monument marking a point of compound curve to the right along the north street line of Fairway Road, a central angle of 21° 00' 57.8", a radius of 713.92 feet and a length of arc of 261.86 feet to a concrete monument marking the point of tangency; thence continuing along the north street line N 86° 39' 03.4" W, a distance of 761.36 feet to a concrete monument marking a point of curve to the left, a central angle of 20° 50' 35.5", a radius of 830.00 feet and a length of arc of 301.94 feet to a concrete monument marking a point of tangency; thence S 72° 30' 21.1" W, a distance of 310.13 feet to a concrete monument marking a return curve to the right with Phoenix Avenue, a central angle of 91° 17' 20", a radius of 35.00 feet and a length of arc of 55.76 feet to a concrete monument marking a point of compound curve in the east street line of Phoenix Avenue; thence continuing in the east street line of Phoenix Avenue on a curve to the right, a central angle of 19° 54' 17", a radius of 2,925.00 feet and a length of arc of 1,016.16 feet to the point or place of beginning.

EXHIBIT B

PERMITTED EXCEPTIONS

1. Real estate taxes and all general and special assessments for 2006 and subsequent calendar years.

2. Rights of tenants under written leases.

3. Local, state and federal laws, ordinances or governmental regulations, including, but not limited to, building and zoning laws, ordinances and regulations, now or hereafter in effect relating to the Property.

4. Matters which would be disclosed by that certain Survey dated December 8, 2005 prepared by Daylor Consulting Group Inc. titled "#10, 28 and 38 Hazard Avenue, Brookside Plaza in Enfield, Connecticut."

5. Sanitary sewer, drainage easements, covenants, and agreements set forth in a Special Warranty Deed from the Town of Enfield and the Enfield Development Agency to Richard D. Bronson and Allan Hutensky dated July 10, 1984 and recorded in Volume 489 at Page 937 of the Enfield Land Records; as affected by a Partial Release of Sanitary Sewer Easement dated July 8, 1986 and recorded in Volume 523 at Page 435 of the said Land Records; as further affected by a Certificate of Occupancy issued by the Enfield Development Agency dated March 25, 1987 and recorded in Volume 542 at Page 507 of the said Land Records.

6. Terms and provisions of a Lease wherein Richard D. Bronson and Allan Hutensky are the Landlord and First National Supermarkets, Inc. is the Tenant, a Notice of which is dated November 28, 1984 and recorded in Volume 495 at Page 44 of the Enfield Land Records; amended by virtue of a First Amendment to Lease dated January 25, 1985 and recorded in Volume 496 at Page 467 of the said Land Records; as affected by a Commencement Date Agreement dated October 3, 1985 and recorded in Volume 507 at Page 779 of the said Land Records; as assigned to, and assumed by, Shaw's Supermarkets, Inc. by virtue of an Assignment of Lease and Assumption Agreement dated October 8, 1986 and recorded in Volume 1011 at Page 316 of said Land Records.

7. Terms and provisions of a Lease wherein Richard D. Bronson and Allan Hutensky are the Landlord and the Stop & Shop Companies, Inc. is the Tenant, a Notice of which is dated December 4, 1984 and recorded in Volume 496 at Page 1 of the Enfield Land Records; as affected by a Commencement Date Agreement dated February 14, 1986 and recorded in Volume 513 at Page 611 of the said Land Records.

8. Water Main Easement in favor of The Connecticut Water Company dated November 13, 1984 and recorded in Volume 496 at Page 250 of the Enfield Land Records.

9. Easement in favor of The Connecticut Light and Power Company dated May 24, 1985 and recorded in Volume 500 at Page 1159 of the Enfield Land Records.

10. Terms and provisions of a Lease wherein Richard D. Bronson and Allan Hutensky are the Lessors and McDonald's Corporation is the Lessee, a Memorandum of which is dated July 10, 1985 and recorded in Volume 503 at Page 65 of the Enfield Land Records; as affected by a Covenant Not to Compete dated July 18, 1985 and recorded in Volume 503 at Page 75 of the said Land Records.

11. Terms and provisions of a Lease wherein Richard D. Bronson and Allan Hutensky are the Lessors and Dunkin' Donuts of Connecticut, Inc. is the Lessee, a Notice of which is dated December 10, 1985 and recorded in Volume 514 at Page 650 of the Enfield Land Records.

12. Easement in favor of The Connecticut Light and Power Company dated March 27, 1986 and recorded in Volume 515 at Page 635 of the Enfield Land Records.

13. Terms and provisions of a Lease wherein Richard D. Bronson and Allan Hutensky, d/b/a Bronson & Hutensky, are the Landlord and Marshalls of Enfield, CT., Inc. is the Tenant, a Notice of which is dated April 21, 1986 and recorded in Volume 517 at Page 25 of the Enfield Land Records.

14. Water Main Easement in favor of The Connecticut Water Company dated August 22, 1986 and recorded in Volume 530 at Page 621 of the Enfield Land Records.

15. Terms and provisions of a Lease wherein Richard D. Bronson and Allan Hutensky are the Landlord and D'Angelo Inc. is the Tenant recorded on November 24, 1986 in Volume 532 at Page 867 of the Enfield Land Records. See also Notice of Lease dated December 30, 1986 and recorded in Volume 538 at Page 129 of the said Land Records. See also Assignment of Lease from D'Angelo Inc. to Delops, Inc. dated December 1, 1993 and recorded in Volume 833 at Page 2 of the said Land Records.

16. Easement in favor of The Connecticut Light and Power Company dated November 25, 1986 and recorded in Volume 533 at Page 357 of the Enfield Land Records.

17. Water Main Easement in favor of The Connecticut Water Company dated February 19, 1987 and recorded in Volume 542 at Page 1013 of the Enfield Land Records.

18. Terms and provisions of a Lease wherein Brookside Associates is the Landlord and Taco Bell Corp. is the Tenant, a Memorandum of which is dated September 2, 1987 and recorded in Volume 558 at Page 1114 of the Enfield Land Records; as affected by a Subordination, Non-Disturbance and Attornment Agreement by and between Maine State Retirement System and Taco Bell Corp. dated June 1, 1987 and recorded in Volume 558 at Page 1109 of the said Land Records.

19. Terms and provisions of a Lease wherein Brookside Associates is the Landlord and Springfield Food Systems, Inc. is the Tenant, a Notice of which is dated February 1, 1988 and recorded in Volume 568 at Page 851 of the Enfield Land Records. Said leasehold interest is affected by the following:

a) Contingent Assignment of Lease by and between Springfield Food System, Inc. and KFC Corporation dated July 15, 1987 and recorded in Volume 568 at Page 880 of the said Land Records;

b) Open-End Leasehold Mortgage Deed, Assignment of Rents, Security Agreement and Fixture Filing from Springfield Food System, Inc. to CBL Capital Corporation dated April 5, 1994 and recorded in Volume 858 at Page 1 of the said Land Records; assigned to Citicorp Leasing, Inc. by virtue of an Assignment of Open-End Leasehold Mortgage Deed, Assignment of Rents, Security Agreement and Fixture Filing dated July 21, 1998 and recorded in Volume 1138 at Page 241 of the said Land Records; modified by virtue of a Modification of Open-End Leasehold Mortgage Deed, Assignment of Rents, Security Agreement and Fixture Filing dated July 20, 1998 and recorded in Volume 1138 at Page 246 of the said Land Records; further modified by virtue of a Modification of Open-End Leasehold Mortgage Deed, Assignment of Rents, Security Agreement and Fixture Filing dated September 11, 2002 and recorded in Volume 1574 at Page 29 of the said Land Records; further modified by virtue of a Third Modification of Open-End Leasehold Mortgage Deed, Assignment of Rents, Security Agreement and Fixture Filing dated April 20, 2005 and recorded in Volume 2038 at Page 30 of the said Land Records;

c) UCC Financing Statement wherein Springfield Food System, Inc. is the Debtor and CBL Capital Corporation is the Secured Party recorded on April 11, 1994 in Volume 858 at Page 30 of the Enfield Land Records; continued by virtue of a UCC Continuation recorded on February 1, 1999 in Volume 1183 at Page 215 of the said Land Records; as further continued by virtue of a UCC Financing Statement Amendment recorded on April 5, 2004 in Volume 1844 at Page 312 of the said Land Records.

20. Letter of Understanding Between Pizza Hut of America, Inc. and Brookside Associates dated December 21, 1989 and recorded in Volume 607 at Page 579 of the Enfield Land Records. See also Assignment and Assumption of Lease Agreement by and between Pizza Hut of America, Inc. and Mita Enterprises, LLC dated March 3, 1999 and recorded in Volume 1198 at Page 342 of the said Land Records. See also Financing Statement wherein Mita Enterprises, LLC is the Debtor and Tricon Capital Corp. is the Secured Party (assigned within the document to Chase Bank of Texas, National Association, as Collateral Agent) recorded in Volume 1199 at Page 1 of the said Land Records; as continued by virtue of a UCC Financing Statement Amendment recorded on October 15, 2003 in Volume 1771 at Page 196 of the said Land Records; as amended by virtue of a UCC Financing Statement Amendment recorded on November 25, 2003 in Volume 1792 at Page 329 of the said Land Records.

21. Terms and provisions set forth in Standard Agreement for Construction and Installation of Public Improvements and Utilities and Related Improvements by and between the Town of Enfield and Brookside Plaza Associates recorded in Volume 614 at Page 334 of the Enfield Land Records.

22. Electric Distribution Easement in favor of The Connecticut Light and Power Company dated June 11, 1993 and recorded in Volume 788 at Page 127 of the Enfield Land Records.

23. Terms and provisions of a Lease wherein Maine State Retirement System is the Landlord and Staples, Inc. is the Tenant, a Memorandum of which is dated June 18, 1993 and recorded in Volume 793 at Page 347 of the Enfield Land Records.

24. Terms and provisions of a Lease wherein Maine State Retirement System is the Landlord and Pier I Imports (U.S.), Inc. is the Tenant, a Memorandum of which is dated August 1, 1994 and recorded in Volume 889 at Page 157 of the Enfield Land Records.

25. Terms and provisions of a Lease wherein Gateway Connecticut Properties, Inc. is the Landlord and The Big Party Corporation is the Tenant, a Notice of which was recorded on August 15, 1996 and recorded in Volume 1001 at Page 102 of the Enfield Land Records.

26. Easement in favor of the Town of Enfield dated March 13, 1991 and recorded in Volume 683 at Page 167 of the Enfield Land Records; as affected by a Consent of Lender by Allstate Life Insurance Company dated April 3, 1991 and recorded in Volume 683 at Page 166 of the said Land Records.

27. (a) All other matters of record affecting the Property insofar as the same are now in force and applicable; and (b) all matters which would be disclosed by an accurate survey and/or any interest in real property which would be disclosed by inspection of the Property.

bos-fs1\180370v03

RECORDED IN
ENFIELD LAND RECORDS
2006 JAN 17 PM 1:45
SUZANNE F. OLECHNICKI
TOWN CLERK

DOC#0606499

LANGAN

Memorandum

555 Long Wharf Drive New Haven, CT 06511 T: 203.562.5771 F: 203.789.6142

To: Planning & Zoning Commission – Town of Enfield, CT

From: David Gagnon – Langan
Nathan Kirschner - Langan

Cc'd: Michael Lai - Regency Centers

Date: 18 June 2020

Re: Project Narrative
Brookside Plaza Renovations (Burlington Coat Factory)
50 Hazard Avenue
Enfield, Connecticut 06082
Langan Project No.: 140161110

RECEIVED
ENFIELD PLANNING DEPT
2020 JUN 19 PM 2:48

General

This memorandum has been prepared in support of proposed renovations to Brookside Plaza, located at 50 Hazard Avenue in Enfield, Connecticut. The project proposes the re-tenanting of the Walgreens space to a Burlington Coat Factory with an expansion to the rear of the building and a relocated loading dock.

The subject property is bound by Hazard Avenue to the north, Freshwater Boulevard to the east, Rosario T Vella Avenue to the south, and Phoenix Avenue to the west. The subject property is ±34 acres and is in the Business Regional (BR) District. The proposed use will remain retail. Through correspondence with town staff, it is understood that the proposed renovations will require a site plan modification. In addition, a submission to the Inland Wetlands & Watercourses agency is required for a wetlands determination.

The current development area is primarily paved surfaces servicing the back of house and loading areas behind the main retail strip.

Project Description

The project proposes the addition of ±6,300 square-feet of back-of-house space and a loading dock at the rear of the existing Walgreens and adjacent spaces. The project proposes minor utility and drainage modifications to accommodate the building improvements. The existing landscape islands in the loading area will be re-formed to allow for truck access. There is no net increase in impervious surface and the drainage patterns will be maintained to the extent feasible in the proposed condition. Additionally, there is no change proposed to the existing parking count. The Burlington Coat Factory is anticipated to operate 9:00 AM to 6:00 pm on all days of the week.

Site alternates were reviewed prior to the submission of this application, including an 11,000 square-foot expansion with a new loading dock loading dock parallel to the building. It was determined the current application was the most efficient use of space and was the least impactful to the existing plaza. The store is anticipated to employ approximately 33 employees.

If you have any questions, or if you need additional information, please feel free to contact David Gagnon or Nate Kirschner at (203) 562-5771.

LANGAN

TRANSMITTAL

555 Long Wharf Drive New Haven, CT 06511 T: 203.562.5771 F: 203.789.6142

To:

Jennifer Pacacha, Assistant Town Planner
Town of Enfield
820 Enfield Street
Enfield, CT 06082

Phone No:

860.253.6356

Date:

06/18/2020

Project No.

140161101

Re:

P&Z Submission
50 Hazard Avenue
Enfield, CT 06082

Via:

☐ Fed Ex: ☐ Priority ☒ Standard ☐ 2-Day
☐ 1st Class Mail ☐ Hand Delivery

Items:

☒ Prints ☐ Letter ☒ Other
☐ Sepia ☒ Drawings ☐ Reports
☒ Other Flash Drive

Copies:	Dwg. No.:	Description:
5		P&Z Submission Set (Full Size)
2		P&Z Application & Checklist
2		Property DEED
2		P&Z Fee Calculation Memo
2		Stormwater Memo
2		Project Narrative
1		Flash drive (includes all materials listed above)
1		P&Z Fee (Check) – Under Separate Cover

RECEIVED ENFIELD PLANNING DEPT 2020 JUN 19 PM 2:48

☐ For Your Information ☒ For Your Use ☐ As Requested By:
☐ For Review and Comment ☐ For Approval ☐ Other:

Remarks:

Jennifer, please find the above-referenced materials for the Burlington Coat Factory Expansion at Brookside Plaza. If you have any comments, questions, or concerns, you can reach me at dtgagnon@langan.com or 413.265.9182.

Copies To:

Michael Lai – Regency Centers

From:

David T. Gagnon

\\langan.com\data\NHV\data1\140161101\Outbound Archive (Burlington Coat)\2020-06-16 P&Z Submission - Final\Parts\001T_JPachacha.docx

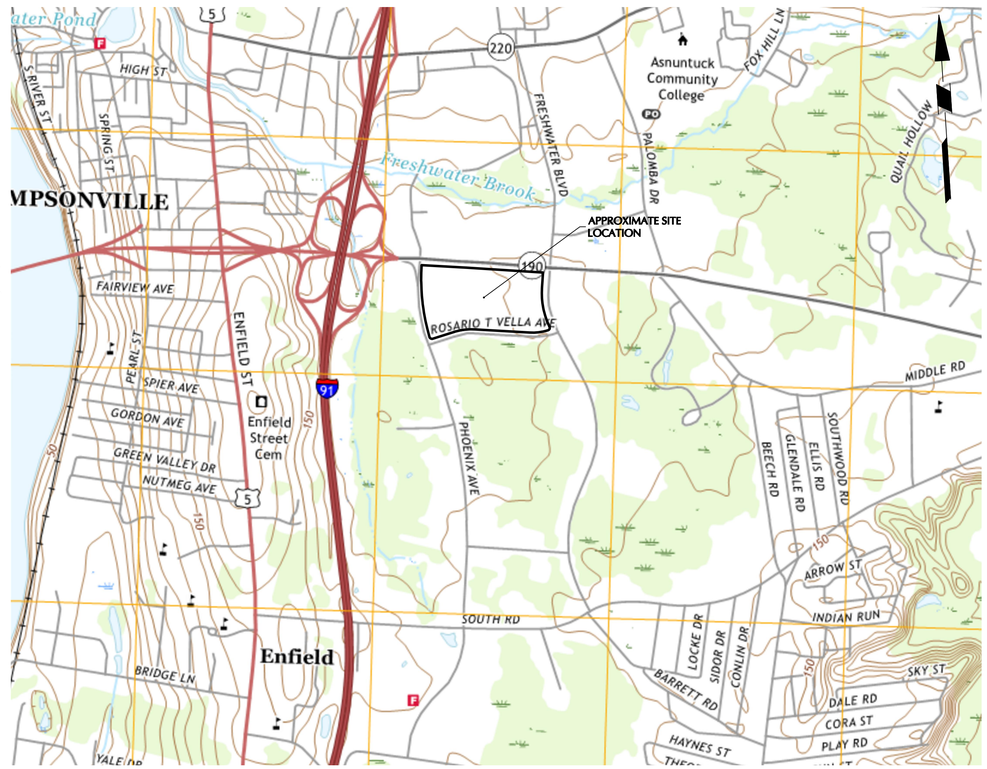
PLANNING & ZONING COMMISSION SUBMISSION
BURLINGTON COAT FACTORY EXPANSION AT BROOKSIDE PLAZA
50 HAZARD AVENUE aka 10 HAZARD AVENUE
MAP 56, LOT 22
TOWN OF ENFIELD, HARTFORD COUNTY, CONNECTICUT

CIVIL DRAWING INDEX

SHEET NUMBER	SHEET NAME	DRAWING TITLE	DATE	LAST REVISED
1	CS001	COVER SHEET	5/22/2020	6/18/2020
2	VT401	PARTIAL BOUNDARY & TOPOGRAPHIC SURVEY	5/11/2020	
3	CS002	GENERAL NOTES & MASTER LEGEND	5/22/2020	6/18/2020
4	CS100	OVERALL SITE PLAN	5/22/2020	6/18/2020
5	CS101	SITE PLAN	5/22/2020	6/18/2020
6	CS501	SITE DETAILS	5/22/2020	6/18/2020
7	CS502	SITE DETAILS II	6/18/2020	
8	CG101	GRADING, DRAINAGE, UTILITY, AND EROSION CONTROL PLAN	5/22/2020	6/18/2020
9	CG501	GRADING, DRAINAGE, UTILITY, AND EROSION CONTROL DETAILS I	5/22/2020	6/18/2020
10	CG502	GRADING, DRAINAGE, UTILITY, AND EROSION CONTROL DETAILS II	5/22/2020	6/18/2020
11	LL101	SITE LIGHTING PLAN	6/18/2020	
12	LL501	SITE LIGHTING DETAILS	6/18/2020	

ARCHITECTURAL DRAWING INDEX

SHEET #	NUMBER	DRAWING TITLE	DATE	LAST REVISED
10	LOD-1	PROPOSED LOD	04-30-2020	



MAP REFERENCE: USGS BROAD BROOK QUADRANGLE MAP 2018 (7.5-MINUTE SERIES)

LOCATION MAP

SCALE: 1" = 1000'

ABUTTING PROPERTY OWNERS WITHIN 200'

MAP	LOT	PROPERTY OWNER	PROPERTY LOCATION
45	1	JPMCC 2006-LDP7 CENTRO	9 HAZARD AVE
		1601 WASHINGTON AVE, SUITE 700	
		MIAMI BEACH, FL 33139	
45	8	PARAMOUNT COMMONS AT ENFIELD LLC	25 HAZARD AVE
		1195 RT 70, SUITE 2000	
		LAKEWOOD, NJ 08701	
45	10	G+R PROPERTIES LLC	7 HAZARD AVE
		1111 ELM ST	
		WEST SPRINGFIELD, MA 01089	
45	12	ENFIELD LODGING LLC	20 PHOENIX AVE
		PO BOX 480	
		BUFFALO, NY 14201	
45	13	TOWN OF ENFIELD	PHOENIX AVE
		820 ENFIELD ST	
		ENFIELD, CT 06082	
45	75	JPMCC 2006-LDP7 CENTRO	94 ELM ST
		1601 WASHINGTON AVE, SUITE 700	
		MIAMI BEACH, FL 33139	
46	35	TOWN OF ENFIELD	SOUTH RD
		820 ENFIELD ST	
		ENFIELD, CT 06082	
56	1	GMRI INC	41 HAZARD AVE
		PO BOX 695019	
		ORLANDO, FL 32869	
56	2	LEO BHW LTD LLC	39 HAZARD AVE
		2475 ALBANY AVE, SUITE 205	
		WEST HARTFORD, CT 06117	
56	4	FRESHWATER BOULEVARD RLTY LLC	95 FRESHWATER BLVD
		2694 BOSTON RD	
		WILBRAHAM, MA 01095	
56	21	TOWN OF ENFIELD	FRESHWATER BLVD
		820 ENFIELD ST	
		ENFIELD, CT 06082	
56	24	SKT FRESHWATER LLC	135 FRESHWATER BLVD
		342 NORTH MAIN ST, SUITE 200	
		WEST HARTFORD, CT 06107	
56	26	ENFIELD STATION LLC	54 HAZARD AVE
		11501 NORTH LAKE DR	
		CINCINNATI, OH 45249	

RELEASE DATES

DATE	ISSUED FOR
5/22/2020	IWWA DETERMINATION SUBMISSION
6/18/2020	P&Z SUBMISSION

OWNER/DEVELOPER
EQUITY ONE (NORTHEAST PORTFOLIO), LLC
C/O MICHAEL LAI
28 CHURCH LANE, SUITE 200
WESTPORT, CONNECTICUT 06880
(203) 635-5570

ARCHITECT
SARGENTI
8 PENN CENTER
1628 JFK BOULEVARD
PHILADELPHIA, PA 19103
(215) 482-1950

LAND SURVEYOR, CIVIL ENGINEER,
& LANDSCAPE ARCHITECT
LANGAN CT, INC.
C/O NATHAN KIRSCHNER
555 LONG WHARF DRIVE
NEW HAVEN, CT 06511
(203) 562-5771

LANGAN

LANGAN
PROJECT No. 140161101

NOTES

1. THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20–300b–1 THROUGH 20–300b–20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.
   a. THIS SURVEY IS A PROPERTY SURVEY CONFORMING TO A HORIZONTAL ACCURACY OF A–2 AND A TOPOGRAPHIC SURVEY CONFORMING TO A T–2 ACCURACY. THE BOUNDARY DETERMINATION IS A RESURVEY. THE PURPOSE OF THIS SURVEY IS TO PROVIDE A BOUNDARY OPINION AND DEPICT SITE FEATURES FOR FUTURE SITE DEVELOPMENT.

2. THIS SURVEY IS BASED UPON EXISTING PHYSICAL CONDITIONS FOUND AT THE SUBJECT SITE, DEED INFORMATION AND THE FOLLOWING REFERENCES:

   A. MAP TITLED "ALTA/ACSM LAND TITLE SURVEY, PROPERTY SURVEY, PREPARED FOR EQUITY ONE (NORTHEAST PORTFOLIO), INC, 10 HAZARD AVE. (CONN. ROUTE 190), ENFIELD, CONNECTICUT", SCALE: 1"=60', DATED: 06–22–15, LAST REVISED: 03–09–2016, BY: F.A. HESKETH & ASSOCIATES, INC

3. THE MERIDIAN OF THIS SURVEY IS REFERENCED TO CONNECTICUT STATE PLANE COORDINATE SYSTEM NAD 83 (EPOCH 2011). POSITION WAS DETERMINED BY GLOBAL NAVIGATION SATELLITE SYSTEMS (GNSS) AS PROVIDED BY HXGN SMARTNET CONTINUOUSLY OPERATED REFERENCE STATIONS (CORS).

4. ELEVATIONS SHOWN ARE REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 12B) AS DETERMINED BY GNSS

5. PLANIMETRIC AND TOPOGRAPHIC INFORMATION SHOWN HEREON HAS BEEN OBTAINED FROM GROUND SURVEYS BY LANGAN CT, INC. FIELD WORK COMPLETED DURING THE MONTH OF MAY 2020.

6. AS PER THE NATIONAL FLOOD INSURANCE PROGRAM FIRM MAP ENTITLED "HARTFORD COUNTY, CONNECTICUT PANEL 227 OF 675, MAP NUMBER 09003C0227F, EFFECTIVE DATE SEPTEMBER 26, 2008" THE PROJECT AREA IS IN ZONE X (UNSHADED).

7. UNLESS SPECIFICALLY NOTED HEREON, STORM AND SANITARY SEWER INFORMATION (INCLUDING PIPE INVERT, PIPE MATERIAL, AND PIPE SIZE) WAS OBSERVED AND MEASURED AT FIELD LOCATED STRUCTURES (MANHOLES/CATCH BASINS, ETC). CONDITIONS CAN VARY FROM THOSE ENCOUNTERED AT THE TIMES WHEN AND LOCATIONS WHERE DATA IS OBTAINED. DESPITE MEETING THE REQUIRED STANDARD OF CARE, THE SURVEYOR CANNOT, AND DOES NOT WARRANT THAT PIPE MATERIAL AND/OR PIPE SIZE THROUGHOUT THE PIPE RUN ARE THE SAME AS THOSE OBSERVED AT EACH STRUCTURE, OR THAT THE PIPE RUN IS STRAIGHT BETWEEN THE LOCATED STRUCTURES.

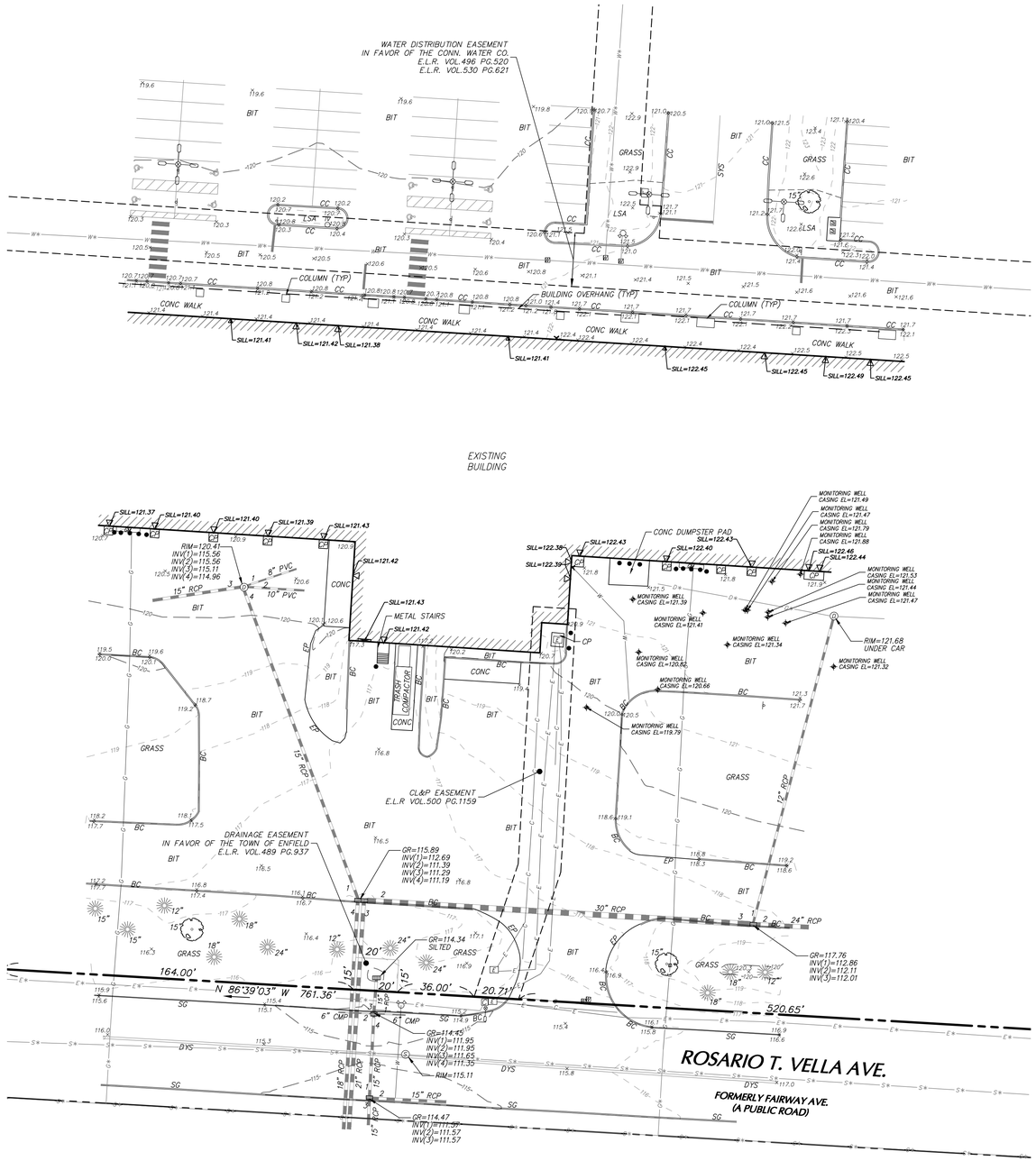
8. ADDITIONAL UTILITY (WATER, GAS, ELECTRIC ETC.) DATA MAY BE SHOWN FROM FIELD LOCATED SURFACE MARKINGS (BY OTHERS), EXISTING STRUCTURES, AND/OR FROM EXISTING DRAWINGS.

9. UNLESS SPECIFICALLY NOTED HEREON, THE SURVEYOR HAS NOT EXCAVATED TO PHYSICALLY LOCATE THE UNDERGROUND UTILITIES. THE SURVEYOR MAKES NO GUARANTEES THAT THE SHOWN UNDERGROUND UTILITIES ARE EITHER IN SERVICE, ABANDONED OR SUITABLE FOR USE, NOR ARE IN THE EXACT LOCATION OR CONFIGURATION INDICATED HEREON.

10. ALL BUILDINGS AND STRUCTURES WERE LOCATED AND MEASURED AT GROUND LEVEL. THE SURVEYOR MAKES NO DETERMINATIONS OR GUARANTEES AS TO THE ABSENCE, EXISTENCE OR LOCATION OF UNDERGROUND STRUCTURES, FOUNDATIONS, FOOTINGS, PROJECTIONS, WALLS, TANKS, SEPTIC SYSTEMS, ETC. NO TEST PITS, EXCAVATIONS OR GROUND PENETRATING RADAR WERE PERFORMED AS PART OF THIS SURVEY.

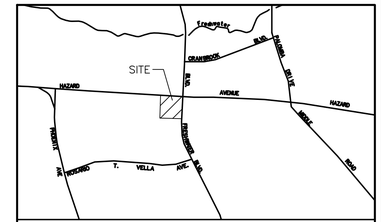
11. PRIOR TO ANY DESIGN OR CONSTRUCTION, THE PROPER UTILITY AGENCIES MUST BE CONTACTED FOR VERIFICATION OF UTILITY TYPE AND FOR FIELD LOCATIONS.

12. THIS SURVEY IS NOT VALID WITHOUT THE EMBOSSED OR INKED SEAL OF THE PROFESSIONAL.



LEGEND (NOT SHOWN TO SCALE)

- BOLLARD
- DOOR
- DOUBLE DOOR
- HANDICAP SYMBOL
- MAILBOX
- MONITORING WELL
- SIGN
- TREE
- CATCH BASIN
- CLEANOUT
- ELECTRIC BOX
- ELECTRIC METER
- FIRE HYDRANT
- GAS METER
- GAS VALVE
- LIGHT POLE
- MANHOLE (TYPE AS LABELED)
- IRRIGATION VALVE
- POWER POLE
- STANDPIPE
- WATER VALVE
- X 262.3 — SPOT ELEVATION
- BIT — BITUMINOUS
- CONC — CONCRETE
- CP — CONCRETE PAD
- LSA — LANDSCAPED AREA
- BOH — BUILDING OVERHANG
- BW — BOTTOM OF WALL
- EP — EDGE OF PAVEMENT
- BC — BITUMINOUS CURB
- CC — CONCRETE CURB
- GC — GRANITE CURB
- SG — SLOPED GRANITE CURB
- SYS — SINGLE YELLOW STRIPE
- DYS — DOUBLE YELLOW STRIPE
- EASEMENT LINE
- PROPERTY LINE
- RIGHT–OF–WAY LINE
- 322 — CONTOUR LINE
- FM — SANITARY FORCE MAIN
- CATV — CABLE TV MARK OUT LINE
- D — DRAINAGE MARK OUT LINE
- E — ELECTRIC MARK OUT LINE
- T — COMMUNICATION MARK OUT LINE
- G — GAS MARK OUT LINE
- S — SANITARY SEWER MARK OUT LINE
- W — WATER MARK OUT LINE
- ST — STEAM MARK OUT LINE
- UNK — UNKNOWN MARK OUT LINE
- R* — REFERENCE UTILITY LINE (TYPE AS NOTED) – PLOTTED FROM EXISTING MAPPING



PROJECT LOCATION MAP

SCALE: 1" = 1000'

SOURCE:
CONNECTICUT DEPARTMENT OF TRANSPORTATION

CT NAD 83

STATE OF CONNECTICUT — ANDREW G. IVES — No. 70286 — LICENSED — LAND SURVEYOR

30 0 15 30

SCALE: 1 INCH = 30 FEET

Date	Description	No.

REVISIONS

"TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON."

5/11/2020

ANDREW G. IVES — DATE SIGNED
PROFESSIONAL LAND SURVEYOR
CT STATE LIC. NO. 70286

LANGAN

Langan CT, Inc.
555 Long Wharf Drive
New Haven, CT 06511

T: 203.562.5771 F: 203.789.6142 www.langan.com

Project

BROOKSIDE PLAZA 10-38 HAZARD AVE.

ENFIELD — CONNECTICUT

Drawing Title

PARTIAL BOUNDARY & TOPOGRAPHIC SURVEY

Project No.	Drawing No.
140161101	VT401
Date: MAY 11, 2020	
Drawn By: JRL	
Checked By: AGI	Sheet 1 of 1

LANGAN

PROJECT NO. 140161101

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8

A B C D E F

GENERAL NOTES

1. ALL TOPOGRAPHIC, PROPERTY LINE, AND UTILITY INFORMATION TAKEN FROM PLANS ENTITLED "PARTIAL BOUNDARY & TOPOGRAPHIC SURVEY," PREPARED BY LANGAN, DATED 05/11/2020, AND "ALTA/ACSM LAND TITLE SURVEY," PREPARED BY F. A. HESKETH & ASSOCIATES, INC., DATED 06/22/2015 AND LAST REVISED 03/09/2016.
2. ALL PROPOSED DISTURBANCE IS NOT LOCATED WITHIN THE AQUIFER PROTECTION AREA.
3. ALL PROPOSED DISTURBANCE IS WITHIN ZONE X (UNSHADED) – AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD.
4. PROPOSED SITE WORK IMPROVEMENTS SHALL CONFORM TO THE STANDARD DETAILS AND/OR SPECIFICATIONS OF THE TOWN OF ENFIELD. IN THE ABSENCE OF LOCAL STANDARDS, SITE WORK SHALL CONFORM TO THE REQUIREMENTS OF CONNECTICUT DEPARTMENT OF TRANSPORTATION.
5. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING TOWN OF ENFIELD WATER POLLUTION CONTROL PLANT (860–253–5246, LEAVE MESSAGE IF NO ANSWER) 24 HOURS IN ADVANCE OF ANY INSPECTIONS.
6. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING CALL BEFORE YOU DIG (800–922–4455, 811, WWW.CBYD.COM), EXCAVATION TEST HOLES, PERFORMING TEST BORINGS, AND PERFORMING WHATEVER ADDITIONAL INVESTIGATION NECESSARY TO PROTECT AND MAINTAIN ALL EXISTING UTILITIES TO REMAIN THROUGHOUT THE CONSTRUCTION PERIOD. ANY CONFLICTS BETWEEN EXISTING UTILITIES AND PROPOSED UTILITIES DISCOVERED DURING CONSTRUCTION SHALL BE PROMPTLY REPORTED TO THE PROJECT ENGINEER.
7. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS, DIMENSIONS AND DETAILS OF ALL DOORS AND WALLS ASSOCIATED WITH THE BUILDING.
8. ALL IMPROVEMENTS CONSTRUCTED IN THE STATE RIGHT–OF–WAY SHALL COMPLY WITH THE CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARDS.
9. ALL IMPROVEMENTS CONSTRUCTED IN THE TOWN PUBLIC RIGHT–OF–WAY SHALL COMPLY WITH THE TOWN OF ENFIELD STANDARDS.
10. FOR AREAS OUTSIDE THE PROPERTY LINES, REPAIR AND/OR REPLACE ALL DAMAGE DONE TO EXISTING ELEMENTS (SIDEWALKS, PAVING, LANDSCAPING, ETC) AS REQUIRED BY OWNER AND/OR GOVERNING AUTHORITY.
11. CONTRACTOR TO REPAIR/REPLACE ANY EXISTING SIDEWALK THAT IS DAMAGED PRIOR TO OR DURING CONSTRUCTION.
12. ALL SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE MUTCD AND CONNECTICUT DEPARTMENT OF TRANSPORTATION REGULATIONS.
13. ALL RADII ARE 5.0' EXCEPT WHERE NOTED.
14. CONTRACTOR SHALL PREVENT DUST, SEDIMENT AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS. ADJOINING STREETS AND PROPERTIES TO BE KEPT FREE OF DEBRIS RESULTING FROM DEMOLITION AND SHALL BE CLEANED ON A DAILY BASIS OR AS NEEDED.
15. DUST CONTROL TREATMENTS SHALL BE APPLIED AS NECESSARY TO CONTROL AND REDUCE THE AMOUNT OF DUST WHICH MAY CAUSE OFF–SITE DAMAGE, BE A HEALTH HAZARD TO HUMANS, WILDLIFE AND PLANT LIFE, OR POSE A HAZARD TO TRAFFIC SAFETY.
16. ABBREVIATIONS:

ARCH. = ARCHITECTURAL	TF = TOP OF FRAME
CONC. = CONCRETE	INV = INVERT
EX. = EXISTING	PVC = POLYVINYL CHLORIDE PIPE
RCP = REINFORCED CONCRETE PIPE	LA = LANDSCAPED AREA
LF = LINEAR FEET	TYP = TYPICAL
CB = CATCH BASIN	HP = HIGHPOINT
CCB = CURB CATCH BASIN	CLCB = CURBLESS CATCH BASIN
TC = TOP OF CURB	MH = MANHOLE
BC = BOTTOM OF CURB	RL = ROOF LEADER
CO = CLEAN OUT	

17. DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRICAL, TELECOM AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND TO ENSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE UTILITY COMPANIES AS TO LOCATION OF AND SCHEDULING OF CONNECTIONS TO THEIR FACILITIES.
18. ALL SIDEWALKS SHALL SLOPE AWAY FROM BUILDING.
19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PAVEMENT REPAIRS REQUIRED AS A RESULT OF ANY UTILITY WORK.

GENERAL SITE NOTES

1. ALL TOPOGRAPHIC, PROPERTY LINE, AND UTILITY INFORMATION TAKEN FROM PLANS ENTITLED "PARTIAL BOUNDARY & TOPOGRAPHIC SURVEY," PREPARED BY LANGAN, DATED 05/11/2020, AND "ALTA/ACSM LAND TITLE SURVEY," PREPARED BY F. A. HESKETH & ASSOCIATES, INC., DATED 06/22/2015 AND LAST REVISED 03/09/2016.
2. THESE PLANS REPRESENT THE OVERALL SITEWORK IMPROVEMENTS REQUIRED FOR PROJECT CONSTRUCTION. THE CONTRACTOR SHALL FURNISH, INSTALL, TEST AND COMPLETE ALL WORK TO THE SATISFACTION OF THE ENGINEER AND OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION; AS SUCH, THESE PLANS DO NOT COMPLETELY REPRESENT, NOR ARE THEY INTENDED TO REPRESENT, ALL SPECIFIC INSTRUCTIONS REQUIRED FOR SITEWORK CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONSTRUCT ALL IMPROVEMENTS DEPICTED ON THESE PLANS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.
3. THE CONTRACTOR SHALL ACCEPT THE SITE AS IS. THE CONTRACTOR SHALL ASSESS CONDITIONS, AND THE KIND, QUALITY AND QUANTITY OF WORK REQUIRED. THE OWNER MAKES NO GUARANTEE IN REGARD TO THE ACCURACY OF ANY AVAILABLE INFORMATION WHICH WAS OBTAINED DURING INVESTIGATIONS. THE CONTRACTOR SHALL MAKE A THOROUGH SITE INSPECTION IN ORDER TO FIELD CHECK EXISTING SITE CONDITIONS, CORRELATE CONDITIONS WITH THE DRAWINGS AND RESOLVE ANY POSSIBLE CONSTRUCTION CONFLICTS WITH THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL MAKE ADDITIONAL TOPOGRAPHIC SURVEYS HE DEEMS NECESSARY, PROVIDED THEY ARE COORDINATED WITH THE OWNER. ANY CONDITIONS DETERMINED BY THE CONTRACTOR THAT DIFFER FROM THE INFORMATION SHOWN ON THE DRAWINGS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER PRIOR TO THE START OF WORK SHALL NOT BE CONSIDERED GROUNDS FOR ADDITIONAL PAYMENT OR CHANGES TO THE CONTRACT DURATION, OR ANY OTHER CLAIMS AGAINST THE OWNER OR OWNER'S ENGINEER.
4. THE CONTRACTOR SHALL, WHEN THEY DEEM NECESSARY, PROVIDE WRITTEN REQUESTS FOR INFORMATION (RFIS) TO THE OWNER AND ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEWORK ITEM. THE (RFI) SHALL BE IN A FORM ACCEPTABLE TO OWNER AND ENGINEER AND SHALL ALLOW FOR A MINIMUM OF TWO WORK DAYS OR ADDITIONAL REASONABLE TIME FOR A WRITTEN REPLY. RFIS SHALL BE NUMBERED CONSECUTIVELY BY DATE SUBMITTED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITEWORK ITEMS CONSTRUCTED DIFFERENTLY THAN INTENDED OR AS DEPICTED ON THE PLANS.
5. INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RIM ELEVATIONS, GRATE ELEVATIONS, BUILDING FINISHED FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL SUFFICIENTLY REVIEW ALL PLANS, PROFILES AND ANY OTHER INFORMATION IN THE CONTRACT DOCUMENTS FOR CONSISTENCY PRIOR TO CONSTRUCTION. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND BY THE CONTRACTOR OR HIS ASSIGNS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO CONSTRUCTION.
6. THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED THROUGHOUT THE PLAN SET AS WELL AS REFERENCES TO SPECIFICATIONS FROM APPLICABLE GOVERNING AUTHORITIES AND INDUSTRY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, REVIEW AND ADHERE TO ALL THESE DOCUMENTS.
7. THE PROPERTY OWNER AND/OR HIS/HER AGENTS MUST MAINTAIN (REPAIR/REPLACE), WHEN NECESSARY, THE SILTATION CONTROL UNTIL ALL DEVELOPMENT ACTIVITY IS COMPLETED AND ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED.
8. HANDICAP PARKING SHALL COMPLY WITH THE CT STATE BUILDING CODE REQUIREMENTS AS OF OCTOBER 2018 OR LAST REVISED.
9. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS, DIMENSIONS, AND DETAILS OF ALL DOORS, STAIRS, RAMPS, SIDEWALKS, CONCRETE PADS, WALLS, CANOPIES, EXTERIOR COLUMNS AND BOLLARDS ASSOCIATED WITH THE BUILDING.

STANDARD TOWN NOTES

1. THE DEVELOPER OF A SUBDIVISION SHALL NOTIFY THE TOWN ENGINEER'S OFFICE 24 HOURS IN ADVANCE TO SCHEDULE INSPECTION OF SUB–BASE, GRAVEL, PAVEMENT, SIDEWALKS, DRAINAGE STRUCTURES AND PIPES, SANITARY SEWERS, AND MANHOLES. TELEPHONE 8 AM – 4 PM AT 253–6366. PRIVATE SITES WILL BE INSPECTED FOR SANITARY SEWERS AND ANY IMPROVEMENT TO BE TURNED OVER TO THE TOWN.
2. ALL SITE WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TOWN OF ENFIELD SPECIFICATIONS AS OUTLINED IN SUBDIVISION REGULATIONS.
3. EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED IN ACCORDANCE WITH THE "EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY THE SOIL CONSERVATION SERVICE 2002.
4. ALL EXCAVATIONS WITHIN TOWN RIGHT–OF–WAY REQUIRE A STREET EXCAVATION PERMIT ISSUED BY THE ENGINEERING DEPARTMENT.
5. NO SITE IMPROVEMENTS SUCH AS DRAINAGE, SANITARY SEWERS, SIDEWALKS, EXCAVATIONS, FILLING, PAVEMENT OPTIONS, ETC., SHALL COMMENCE UNTIL THE SITE ENGINEERING BOND, AS REQUIRED BY THE ENFIELD PLANNING AND ZONING COMMISSION IS POSTED WITH THE TOWN OF ENFIELD.
6. NO STUMPS TO BE BURIED ON SITE.
7. PRE–CONSTRUCTION CONFERENCE FOR CONSTRUCTION OF A SUBDIVISION ONLY, SHALL INCLUDE THE TOWN ENGINEER OR HIS AGENT. NOTIFICATION OF CONFERENCE SHALL BE 48 HOURS IN ADVANCE.
8. THE DEVELOPER SHALL HIRE A REGISTERED PROFESSIONAL ENGINEER TO INSPECT THE SITE DURING CONSTRUCTION. TO ENSURE THE WORK IS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS, THE ENGINEER WILL BE REQUIRED TO CERTIFY ON AN AS–BUILT PLAN THAT THE PROJECT WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS AND ALL MATERIALS WERE PLACED IN ACCORDANCE WITH THE SITE PLANS AND SPECIFICATIONS, PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

CONTRACTOR NOTES

1. THE WORK TO BE PERFORMED IS AS SHOWN ON THE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION; AS SUCH, THESE PLANS MAY NOT COMPLETELY REPRESENT ALL SPECIFIC DETAILS OF INSTALLATION REQUIRED FOR CONSTRUCTION. CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL IMPROVEMENTS REQUIRED TO ACHIEVE CONSTRUCTION DEPICTED ON THESE PLANS.
2. THE CONTRACTOR SHALL PROVIDE WRITTEN REQUESTS FOR INFORMATION TO THE OWNER AND OWNER'S ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEWORK ITEM IF ANY SITEWORK ITEM DEPICTED ON THE PLANS WARRANTS ADDITIONAL ENGINEERING INFORMATION REQUIRED FOR CONSTRUCTION AND IS NOT RELATED TO MEANS AND METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITEWORK ITEMS INSTALLED DIFFERENTLY THAN INTENDED AS DEPICTED ON THE PLANS IN THE ABSENCE OF SUBMITTING AND RECEIVING REVIEWS AND/OR DIRECTION ON WRITTEN REQUESTS FOR INFORMATION.
3. THE CONTRACTOR SHALL ACCEPT THE SITE AS IS. THE CONTRACTOR SHALL MAKE AND SHALL BE DEEMED TO HAVE MADE A THOROUGH SITE INSPECTION IN ORDER TO FIELD CHECK EXISTING SITE CONDITIONS, CORRELATE CONDITIONS WITH THE DRAWINGS AND RESOLVE ANY POSSIBLE CONSTRUCTION CONFLICTS WITH THE OWNER AND OWNER'S ENGINEER PRIOR TO COMMENCEMENT OF WORK. THIS INCLUDES A TOPOGRAPHIC SURVEY OF ANY AREAS THE CONTRACTOR REQUIRES ADDITIONAL TOPOGRAPHIC INFORMATION. ANY CONDITIONS THAT DIFFER FROM THE EXISTING CONDITIONS SHOWN ON THE DRAWINGS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE OWNER AND OWNER'S ENGINEER PRIOR TO THE START OF WORK SHALL NOT BE CONSIDERED GROUNDS FOR A CHANGE ORDER.
4. IT IS SPECIFICALLY NOTED THAT INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RIM ELEVATIONS, GRATE ELEVATIONS, BUILDING FINISHED FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION ON THE DRAWINGS. CONTRACTOR SHALL REVIEW ALL PLANS, PROFILES AND ANY INFORMATION/DATA TABLES FOR CONSISTENCY PRIOR TO CONSTRUCTION. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE OWNER'S ENGINEER IN WRITING REQUESTING CLARIFICATION PRIOR TO CONSTRUCTION.
5. CONTRACTOR SHALL NOTE THAT THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED ON SHEETS THROUGHOUT THE PLAN SET AND AVAILABLE REFERENCES TO SPECIFICATIONS FROM APPLICABLE GOVERNING AUTHORITIES AND INDUSTRY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, REVIEW AND ADHERE TO ALL APPLICABLE REQUIREMENTS.
6. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CONTACT "CALL BEFORE YOU DIG" @ 1–800–922–4455 FOR THE LOCATION AND MARKING OF ALL EXISTING UTILITIES PRIOR TO ANY EXCAVATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
7. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, UTILITY LOCATIONS, AND INVERTS PRIOR TO CONSTRUCTION. ANY CONDITIONS FOUND TO DIFFER FROM THOSE SHOWN BY THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
8. CONTRACTOR SHALL REFER TO MEP AND ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRICAL, GAS, FIBER OPTIC, AND TELEPHONE SERVICE, ROOF DRAINS, AND ALL OTHER UTILITIES. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND TO ENSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE REGULATORY AGENCY AS TO LOCATION OF AND SCHEDULING OF CONNECTIONS TO THEIR FACILITIES.
9. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS, DIMENSIONS, AND DETAILS OF ALL DOORS, STAIRS, RAMPS, SIDEWALKS, CONCRETE PADS, WALLS, CANOPIES, EXTERIOR COLUMNS AND BOLLARDS ASSOCIATED WITH THE BUILDING.
10. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY THE ELEVATION AND LOCATION OF ALL UTILITIES BY VARIOUS MEANS PRIOR TO BEGINNING ANY EXCAVATION. TEST PITS SHALL BE DUG AT ALL LOCATIONS WHERE THE PROPOSED SANITARY AND STORM PIPING WILL CROSS EXISTING UTILITIES AND THE HORIZONTAL AND VERTICAL LOCATIONS OF THE UTILITIES SHALL BE DETERMINED. THE CONTRACTOR SHALL CONTACT THE CIVIL ENGINEER IN THE EVENT OF ANY DISCOVERED OR UNFORESEEN CONFLICTS SO THAT AN APPROPRIATE MODIFICATION CAN BE MADE.
11. CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE TOWN OF ENFIELD TO SECURE CONSTRUCTION PERMITS AND FOR PAYMENT OF FEES FOR STREET CUTS AND CONNECTIONS TO EXISTING UTILITIES.
12. THESE PLANS DETAIL SITE INSTALLED PIPES UP TO 5' FROM THE BUILDING FACE. REFER TO ARCHITECTURAL, STRUCTURAL AND MEP DRAWINGS FOR BUILDING CONNECTIONS. SITE CONTRACTOR SHALL SUPPLY AND INSTALL PIPE ADAPTERS AS NECESSARY AT BUILDING CONNECTION POINT OR AT EXISTING UTILITY OR PIPE CONNECTION POINT.
13. THE CONTRACTOR SHALL ENSURE THAT ALL UTILITY PROVIDERS AND GOVERNING AUTHORITY STANDARDS FOR MATERIALS AND CONSTRUCTION METHODS ARE MET. THE CONTRACTOR SHALL PERFORM PROPER COORDINATION WITH THE RESPECTIVE UTILITY PROVIDER.
14. THE CONTRACTOR SHALL RESTORE ANY UTILITY STRUCTURE, PIPE, UTILITY, PAVEMENT, CURBS, SIDEWALKS, DRAINAGE STRUCTURE, SWALE OR LANDSCAPED AREAS DISTURBED DURING CONSTRUCTION, TO THEIR ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE OWNER, TOWN OF ENFIELD AND STATE OF CONNECTICUT.

ACCESSIBILITY NOTES

1. WALKWAYS ALONG ACCESSIBLE ROUTES NOT TO EXCEED 5% RUNNING SLOPE OR 2% CROSS SLOPE.
2. ALL ADA PARKING SPACES AND PASSENGER LOADING ZONES SHALL NOT EXCEED 2% IN ANY DIRECTION.
3. ALL ADA EGRESSES SHALL BE FLUSH WITH ADJOINING MATERIAL UNLESS NOTED OTHERWISE.
4. ALL RAMPS SHALL NOT EXCEED 1:12 RUNNING SLOPE AND 2% CROSS SLOPE.

LEGEND

	EXISTING	PROPOSED
PROPERTY LINE		
ZONE BOUNDARY LINE		
SAWCUT LINE		
WETLAND LIMITS LINE		
100' WETLAND BUFFER LINE		
LANDSCAPE BUFFER LINE		
FRONT YARD SETBACK LINE		
SOIL BOUNDARY LINE		
BUILDING LINE		
CANOPY		
CURB LINE		
DOOR LOCATION		
TRAFFIC SIGN		
SIGN DESIGNATION		A
PARKING SPACE COUNT		9
LIGHT POLE		
CONCRETE SIDEWALK/PAD		
SANITARY SEWER LINE		
WATER LINE	W* W*	UW
GAS LINE	G* G*	UG
UNDERGROUND TELECOM		UT
UNDERGROUND ELECTRIC	E* E*	UE
TRANSFORMER		T
GATE VALVE	WG	
GAS METER		
UTILITY POLE		
SANITARY/STORM MANHOLE		
SANITARY CLEANOUT		
STORM PIPE		
CURBLESS CATCH BASIN		
CATCH BASIN		
CONTOUR	137	139
SPOT ELEVATION	X 139.67	X 138.79
LIMIT OF DISTURBANCE		LOD
SILT FENCE		
CONSTRUCTION FENCE		
TEMPORARY STOCKPILE		
HAYBALES		
INLET PROTECTION		
ANTI–TRACK PAD		

GRADING & DRAINAGE NOTES

1. ALL PROPOSED STORM DRAINAGE PIPING TO UTILIZE WATER–TIGHT JOINTS.
2. LOCATIONS AND ELEVATIONS OF ROOF LEADERS SHOULD BE COORDINATED WITH ARCHITECTURAL & MEP DRAWINGS PRIOR TO CONSTRUCTION.
3. CLEANOUTS SHALL BE PROVIDED FLUSH TO GRADE AT ALL LOCATIONS OF ROOF DRAIN INTERSECTIONS, BENDS AND UPSTREAM ENDS.
4. ALL REQUIRED STORM LATERALS SERVICING THE BUILDINGS SHALL BE COORDINATED AND CONSTRUCTED TO WITHIN FIVE FEET OF EACH BUILDING LATERAL ENTRANCE LOCATION AT THE INVERTS NOTED. ANY NECESSARY EXTENSIONS, RELOCATIONS, OR CORRECTIONS WITHIN FIVE FEET OF THE BUILDING NECESSARY TO COMPLETE CONNECTION OF LATERALS TO THE BUILDINGS SHALL BE MADE BY THE BUILDING CONTRACTOR.
5. CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE APPROPRIATE SIZES OF THE DRAINAGE STRUCTURES (CATCH BASINS, MANHOLES, YARD DRAINS, ETC.) TO ACCOMMODATE THE PIPING SHOWN.
6. STORM DRAINAGE PIPING INSTALLATION SHALL COMMENCE AT THE FURTHEST DOWNSTREAM POINT AND PROCEED UPSTREAM "IN THE DRY".
7. CONTRACTOR SHALL CONNECT ALL NEW ROOF DRAINS TO THE DRAINAGE SYSTEM. LOCATIONS AND ELEVATIONS OF ROOF LEADERS SHOULD BE COORDINATED WITH MEP AND ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION.
8. THE CONTRACTOR WILL BE REQUIRED TO CLEAN THE ENTIRE DRAINAGE SYSTEM OF ALL DEBRIS AND OBSTRUCTIONS BOTH DURING CONSTRUCTION AND AT THE END OF CONSTRUCTION PRIOR TO ACCEPTANCE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, REMOVAL OF ALL FORMWORK FROM STRUCTURES, CONCRETE AND MORTAR DROPPINGS, CONSTRUCTION DEBRIS, AND DIRT. THE SYSTEM SHALL BE THOROUGHLY FLUSHED CLEAN AND THE CONTRACTOR SHALL FURNISH ALL NECESSARY HOSE, PUMPS, PIPE, AND OTHER EQUIPMENT THAT MAY BE REQUIRED FOR THIS PURPOSE. NO DEBRIS SHALL BE FLUSHED INTO EXISTING STORM DRAINS, WETLANDS, OR WATERCOURSES; ALL DEBRIS SHALL BE REMOVED FROM THE SYSTEM AND DISPOSED OF IN ACCORDANCE WITH ALL GOVERNING AGENCIES.
9. ALL MANHOLE COVERS, GRATES, INLETS, AND RIMS TO REMAIN SHALL BE ADJUSTED TO PROPOSED GRADE.
10. CONTRACTOR TO PROVIDE ALL FITTINGS AND BENDS NECESSARY TO ACCOMPLISH WORK.
11. WALL DRAINS SHALL CONNECT TO STORM DRAINAGE SYSTEM AS SHOWN ON WALL DESIGN DRAWINGS.

UTILITY NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CONTACT "CALL–BEFORE–YOU–DIG" @ 1–800–922–4455 FOR THE LOCATION AND MARKING OF ALL EXISTING UTILITIES PRIOR TO ANY EXCAVATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
2. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, UTILITY LOCATIONS, AND INVERTS PRIOR TO CONSTRUCTION. ANY CONDITIONS FOUND TO DIFFER FROM THOSE SHOWN BY THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
3. CONTRACTOR SHALL REFER TO ARCHITECTURAL AND MEP PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRICAL, TELEPHONE AND GAS SERVICE, AND ALL OTHER UTILITIES. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND TO ENSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE REGULATORY AGENCY AS TO LOCATION OF AND SCHEDULING OF CONNECTIONS TO THEIR FACILITIES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTILITY COMPANIES 72 HOURS PRIOR TO BEGINNING OF EXCAVATION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PAVEMENT REPAIRS REQUIRED AS A RESULT OF ANY UTILITY WORK.
6. LOCATION OF SITE UTILITIES SHALL BE VERIFIED BY GENERAL CONTRACTOR THE PROPER UTILITY COMPANY PROVIDING SERVICE.
7. GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR ALL TAP AND TIE–IN FEES REQUIRED, AS WELL AS COST OF UNDERGROUND SERVICE CONNECTIONS TO THE BUILDING.
8. DIMENSIONS SHOWN ARE TO THE CENTERLINE OF PIPE OR FITTING.
9. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
10. GENERAL CONTRACTOR SHALL HAVE APPROVAL OF ALL GOVERNING AGENCIES HAVING JURISDICTION OVER THE SYSTEM PRIOR TO INSTALLATION.

ELECTRIC, TELEPHONE, & GAS:

11. CONTRACTOR TO COORDINATE GAS MAIN, ELECTRIC, AND TELEPHONE INSTALLATION WITH THE APPROPRIATE UTILITY COMPANIES.
12. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 30 INCHES OF COVER FOR ALL UNDERGROUND ELECTRIC, TELEPHONE AND GAS UTILITIES.

WATER & SANITARY:

13. ALL SANITARY SEWER PIPE TO BE PUSH–JOINT POLYVINYL CHLORIDE (PVC) PIPE SDR–35. ALL JOINTS BETWEEN PVC PIPE SECTIONS AND BETWEEN PIPE AND PRECAST MANHOLES SHALL HAVE WATER–TIGHT RUBBER GASKET CONNECTIONS. ALL PVC PIPES AND FITTINGS SHALL COMPLY WITH ASTM D3034–93. ALL MAINS SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH THE LOW PRESSURE AIR TEST METHOD.
14. WHERE THE SANITARY SEWER LINE PASSES LESS THAN 18" BELOW THE WATER LINE, PROVIDE CONCRETE ENCASEMENT. THE LENGTH OF THE ENCASEMENT TO BE INCREASED TO THE NEAREST JOINT.
15. WHERE THE SANITARY SEWER LINE PASSES ABOVE THE WATER LINES, ENCASE SEWER IN 6" THICK CONCRETE FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE CROSSING, OR SUBSTITUTE RUBBER GASKETED PRESSURE PIPE FOR THE PIPE BEING USED FOR THE SAME DISTANCE.
16. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 4.5 FEET OF COVER FOR ALL WATER DISTRIBUTION PIPING.
17. ALL NEW WATER LINES SHALL BE PRESSURE TESTED AND LEAKAGE TESTED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA STANDARD C600.
18. ALL NEW WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA STANDARD C651.
19. GRAVITY PIPING SHALL BE INSTALLED FROM DOWNSTREAM TO UPSTREAM, "IN THE DRY". THE CONTRACTOR IS ENCOURAGED TO BEGIN WORK AT THE MOST DOWNSTREAM POINT IN THE SYSTEM, ESPECIALLY WHEN THE NEW WORK WILL CONNECT TO AN EXISTING UTILITY DOWNSTREAM. IF THE CONTRACTOR CHOOSES NOT TO START AT THE FURTHEST DOWNSTREAM LOCATION, THEN HE IS RESPONSIBLE FOR VERIFYING THE EXACT LOCATION, ELEVATION, AND INVERT OF THE EXISTING UTILITY PRIOR TO STARTING ANY WORK AND VERIFYING THAT THE EXISTING LOCATION AND INVERT ALLOWS FOR THE CONSTRUCTION OF THE PROPOSED SYSTEM AS DESIGNED.

DEMOLITION NOTES

GENERAL:

1. THE CONTRACTOR SHALL INSPECT THE SITE THOROUGHLY AND FIELD–VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES. SOME UNDERGROUND UTILITIES MAY BE LOCATED DIFFERENTLY THAN SHOWN ON THIS PLAN. IN ADDITION, THERE MAY BE EXISTING UNDERGROUND UTILITIES PRESENT THAT ARE NOT SHOWN ON THIS PLAN. ALL CONTRACTORS USING THESE PLANS FOR DEMOLITION OR CONSTRUCTION SHALL CONFIRM ALL UTILITIES IN THE FIELD TO ESTABLISH LOCATIONS, SIZES, MATERIALS, AND ELEVATIONS. ANY DISCREPANCIES SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND THE CONSTRUCTION MANAGER.
2. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "CALL BEFORE YOU DIG," EXCAVATING THE HOLES, AND PREPARING ANY ADDITIONAL RESEARCH OR INVESTIGATIONS REQUIRED IN ORDER TO ENSURE THAT PROPOSED UTILITIES TO REMAIN ARE PROTECTED FROM DAMAGE DURING DEMOLITION. ANY DAMAGE TO EXISTING UTILITIES TO REMAIN IS REQUIRED TO BE REPAIRED BY THE CONTRACTOR.
3. THE CONTRACTOR SHALL NOTIFY AND OBTAIN ALL SHUTOFFS FOR ALL APPLICABLE UTILITIES PRIOR TO THE COMMENCEMENT OF DEMOLITION.
4. THE CONTRACTOR SHALL LOCATE/CONFIRM ALL DRAINAGE INFRASTRUCTURE AND MAINTAIN ADEQUATE STORM DRAINAGE THROUGHOUT CONSTRUCTION.
5. THE CONTRACTOR SHALL FIELD LOCATE AND PROPERLY DISCONNECT APPROPRIATE LATERALS TO LIVE MAINS PRIOR TO DEMOLITION AND IN ACCORDANCE WITH UTILITY COMPANY STANDARDS.
6. THE CONTRACTOR SHALL MAINTAIN THE SAFETY AND PROTECTION OF BOTH PEDESTRIANS AND MOTORISTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO TAKE ALL NECESSARY PRECAUTIONARY AND PROTECTIVE MEASURES, INCLUDING SIGNS, LIGHTS, BARRIERS, FENCING AND TRAFFIC FLAGMEN.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY DEMOLITION ASSOCIATED PERMITS.
8. CONTRACTOR TO PROTECT AND MAINTAIN ALL UTILITIES TO REMAIN UNTIL TEMPORARY OR PERMANENT NEW LINES ARE INSTALLED.

DEMOLITION:

9. THE CONTRACTOR SHALL REMOVE AND LEGALLY DISPOSE OF ALL STRUCTURES WITHIN THE PROJECT LIMITS INDICATED TO BE REMOVED.
10. THE CONTRACTOR SHALL INCLUDE IN HIS BID ALL TEMPORARY FACILITIES AND SERVICES NECESSARY TO SATISFY FEDERAL, STATE, & LOCAL REQUIREMENTS INCLUDING BUT NOT LIMITED TO BRACING, SHORING, PAVEMENT REPAIR, FENCING, PEDESTRIAN AND VEHICLE ACCESS, CONCRETE PADS, ETC.

CURB TRANSITION NOTES

1. CURB RADII ARE 5' UNLESS OTHERWISE NOTED.
2. PROVIDE 4' MINIMUM TRANSITION PIECE WHERE CURBING HEIGHT VARIES.

Date	Description	No.
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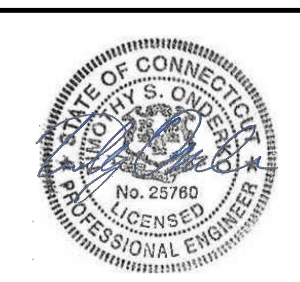
REVISIONS



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Project
BURLINGTON COAT FACTORY EXPANSION AT BROOKSIDE PLAZA
50 HAZARD AVENUE
ENFIELD CONNECTICUT

Drawing Title
GENERAL NOTES & MASTER LEGEND

Project No. 140161101
Date 5/22/2020
Drawn By IJAB
Checked By TSO

Drawing No. CS002

Sheet 3 of 9

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PROJECT NO. 140161101

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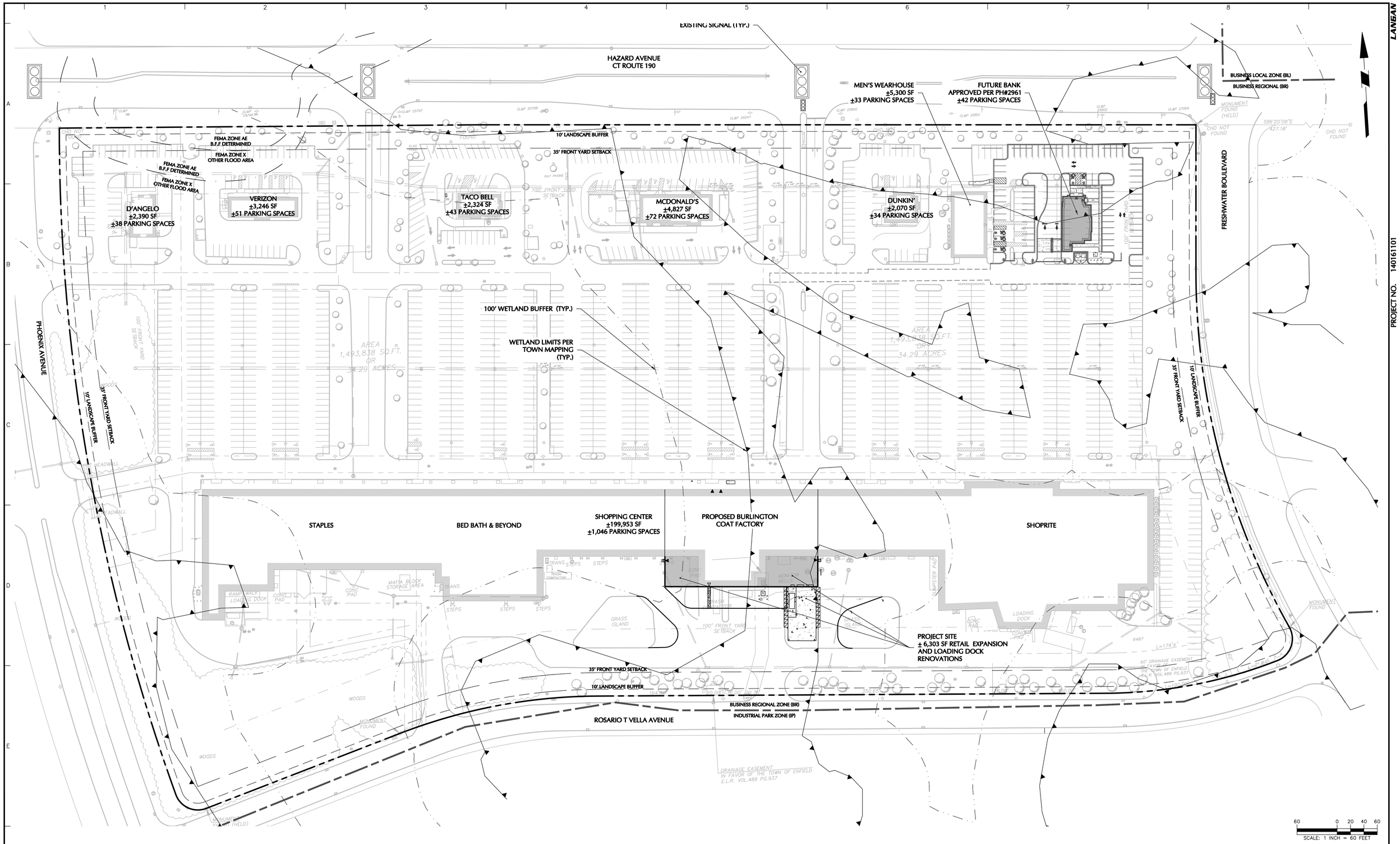

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REVISIONS

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JOSEPH S. ODDO
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Project
BURLINGTON COAT FACTORY EXPANSION AT BROOKSIDE PLAZA
50 HAZARD AVENUE
ENFIELD CONNECTICUT

Drawing Title
OVERALL SITE PLAN

Project No. 140161101
Date 5/22/2020
Drawn By IJAB
Checked By TSO

Drawing No. CS100
Sheet 4 of 9

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ZONING CHART

REFERENCE: TOWN OF ENFIELD CT ZONING REGULATIONS (REVISED THROUGH APRIL 2019)

ZONE: BUSINESS REGIONAL DISTRICT (BR)
PROPOSED USE: RETAIL (SPECIAL PERMIT)

ITEM	REQUIRED	EXISTING	PREVIOUSLY APPROVED[2]	PROPOSED	SECTION
MINIMUM LOT AREA	5 ACRES	±1,494,000 SF (±34.3 AC)	±1,494,000 SF (±34.3 AC)	±1,494,000 SF (±34.3 AC)	TABLE 5.10
MINIMUM FRONTAGE	250 FT	±5,240 FT	±5,240 FT	±5,240 FT	TABLE 5.10
MINIMUM FRONT YARD	35 FT	±100 FT	±105 FT	±105 FT	TABLE 5.10
MINIMUM SIDE YARD	30 FT	N/A	N/A	N/A	TABLE 5.10
MINIMUM REAR YARD	30 FT	N/A	N/A	N/A	TABLE 5.10
MINIMUM FLOOR AREA	80,000 SF	±220,110 SF[1]	±223,340 SF	±229,643 SF[3]	TABLE 5.10
MAXIMUM IMPERVIOUS COVERAGE	66%	±70.5%	±70.1%	±70.1%[4]	TABLE 5.10
MAXIMUM BUILDING COVERAGE	45%	±14.7%	±14.9%	±15.4%	TABLE 5.10
MAXIMUM BUILDING HEIGHT	72 FT	±35 FT	±35 FT	±35 FT	TABLE 5.10

ZONING NOTES:

1. ±220,110 SF IS THE TOTAL AREA OF EXISTING BUILDINGS FROM PLAN TITLED ALTA/ACSM LAND TITLE SURVEY, DATED 06/22/15, WHICH DOES NOT REFLECT GROSS USABLE FLOOR AREA.
2. PREVIOUSLY APPROVED CONDITIONS REFER TO PH#2961, SPECIAL PERMIT APPLICATION FOR CHASE BANK AT 50 HAZARD AVENUE. SEE OVERALL SITE PLAN FOR LOCATION.
3. PROPOSED FLOOR AREA = 223,340 SF (EXISTING) + 6,303 SF (EXPANSION) = 229,643 SF.
4. SEE SITE PLAN FOR LOCATIONS OF NEW PERVIOUS AND IMPERVIOUS AREA.
5. PROPOSED BUILDING COVERAGE = (229,643 SF/1,494,000 SF) X 100 = 15.4%.

PARKING CHART

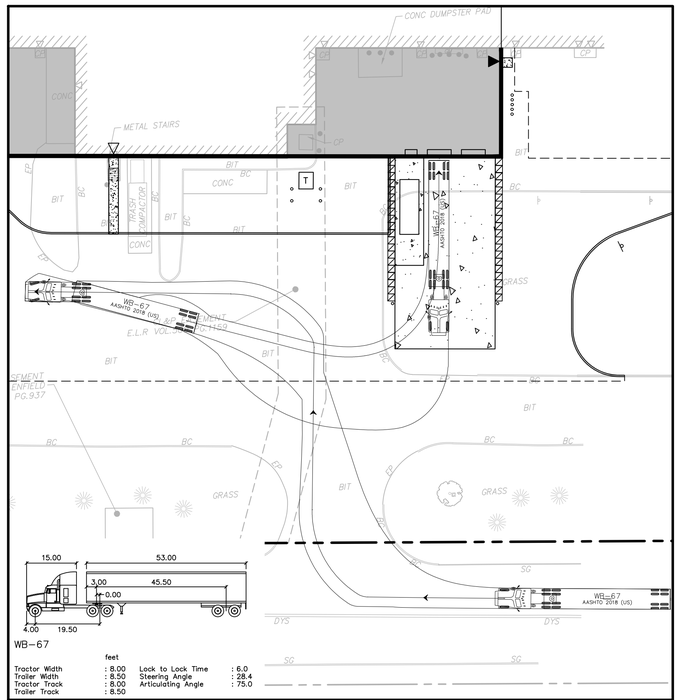
REFERENCE: TOWN OF ENFIELD CT ZONING REGULATIONS (REVISED THROUGH APRIL 2019)

ZONE: BUSINESS REGIONAL DISTRICT (BR)
PROPOSED USE: RETAIL (SPECIAL PERMIT)

ITEM	REQUIRED	EXISTING	PREVIOUSLY APPROVED[2]	PROPOSED	SECTION
MINIMUM NUMBER OF SPACES	FOUR (4) SPACES PER 1,000 SF OF GROSS LEASABLE AREA (GLA) (4 SPACES)(229,643 SF/ 1,000 SF) = 919 SPACES[1]	±1,390 SPACES	±1,358 SPACES	±1,358 SPACES	SECTION 10.10.4.A.

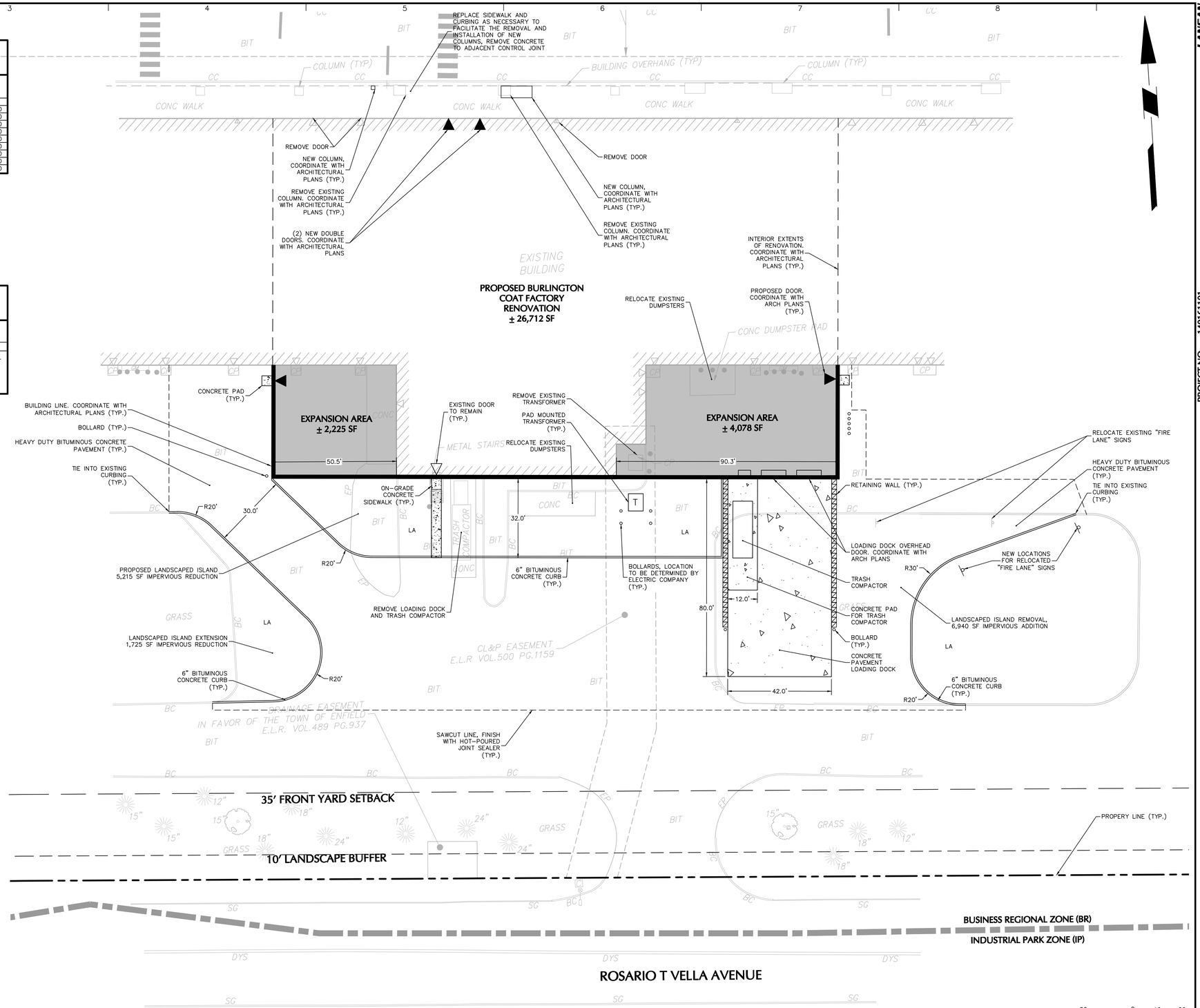
PARKING NOTES:

1. TOTAL AREA OF BUILDINGS WAS USED FOR THE PARKING CALCULATION AND DOES NOT REFLECT THE EXCEPTIONS TO THE GROSS USABLE FLOOR AREA DEFINITION. THE CALCULATION OF THE GROSS USABLE FLOOR AREA MAY RESULT IN A LOWER PARKING REQUIREMENT.
2. PREVIOUSLY APPROVED CONDITIONS REFER TO PH#2961, SPECIAL PERMIT APPLICATION FOR CHASE BANK AT 50 HAZARD AVENUE. SEE OVERALL SITE PLAN FOR LOCATION.



WB-67 TRUCK TURNING MANEUVER

1"=30'



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STATE OF CONNECTICUT — THIS IS TO CERTIFY THAT I AM A LICENSED PROFESSIONAL ENGINEER — No. 25760

LANGAN

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Project: BURLINGTON COAT FACTORY EXPANSION AT BROOKSIDE PLAZA
50 HAZARD AVENUE
ENFIELD CONNECTICUT

Drawing Title: SITE PLAN

Project No. 140161101
Date 5/22/2020
Drawn By BP
Checked By TSO

Drawing No. CS101

Sheet 5 of 9

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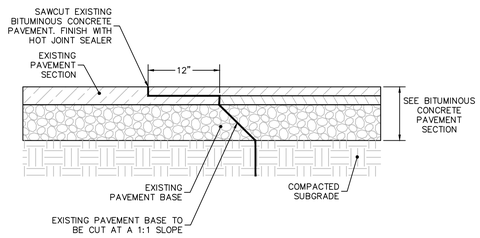
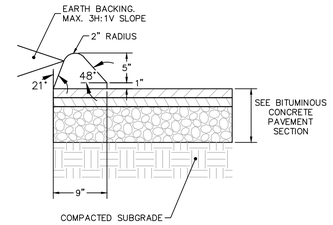


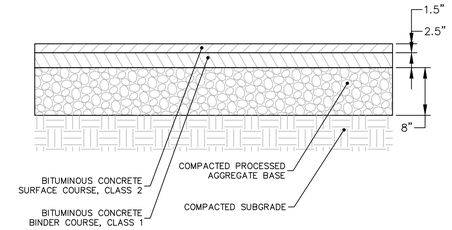
NOTES:
1. CONTRACTOR TO INSTALL TACK COAT ON ALL BUTT EDGES OF EXISTING PAVEMENT

1 SAWCUT PAVEMENT SECTION
N.T.S



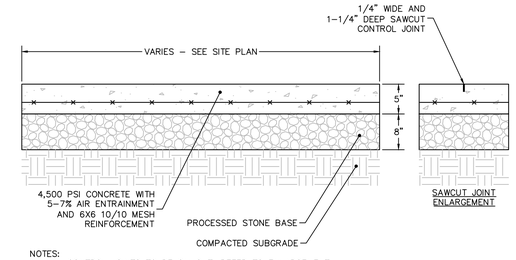
NOTES:
1. PROVIDE NOTCHED SEAT IN CURB AT LOCATIONS OF INTEGRAL BITUMINOUS CONCRETE SIDEWALK AND CURB

2 6" BITUMINOUS CONCRETE CURB
N.T.S



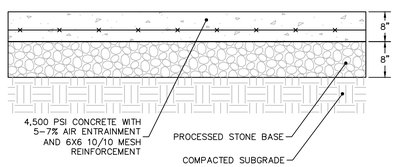
NOTES:
1. PROVIDE BITUMINOUS CONCRETE PAVEMENT AS INDICATED ON THE SITE PLAN.
2. BITUMINOUS CONCRETE SHALL CONFORM TO CT D.O.T. SPECIFICATIONS, FORM 817 SECTION 4.06, LATEST REVISION
3. PROCESSED AGGREGATE SHALL CONFORM TO CT D.O.T. SPECIFICATIONS, FORM 817 SECTION 3.04, LATEST REVISION

3 BITUMINOUS CONCRETE PAVEMENT SECTION - HEAVY DUTY
N.T.S



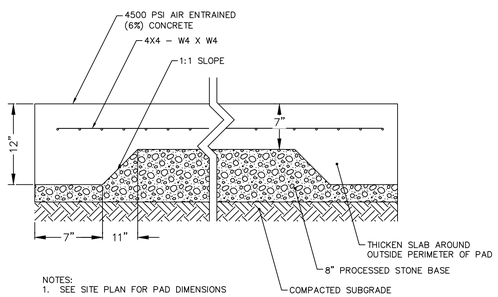
NOTES:
1. ALL CONTROL JOINTS TO BE SAWCUT, REFER TO ENLARGEMENT
2. SIDEWALKS TO COMPLY WITH CITY STANDARDS WHERE APPLICABLE.
3. EXPANSION AND CONTROL JOINTS SHALL BE INSTALLED PER LAYOUT AND DIMENSIONING PLANS. IF NOT SPECIFICALLY DETAILED MAXIMUM SPACING OF JOINTS SHALL BE AS FOLLOWS:
   EXPANSION – 20 FT.
   CONTROL – 5 FT.
4. CONTROL JOINTS SHALL BE SPACED EQUAL TO THE WIDTH BUT SHALL NOT EXCEED 6 FT. CARE SHALL BE TAKEN TO ASSURE UNIFORM GRADE, FREE OF SAGS AND SHORT GRADE CHANGES.
5. SURFACE TEXTURE SHALL BE A LIGHT BROOMING, TRANSVERSE TO THE LENGTH OF THE WALK.
6. CONTRACTOR TO PROVIDE 10'x10' MOCKUP SHOWING EXPANSION JOINTS, SAWCUT JOINTS, AND BROOM FINISH PRIOR TO INSTALLATION

4 ON-GRADE CONCRETE SIDEWALK
N.T.S



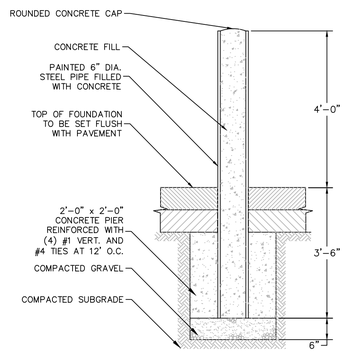
NOTES:
1. PRIOR TO ANY PAVING ACTIVITIES, THE SUBGRADE OR SUBBASE SHALL BE PROOF ROLLED.
2. PRIOR TO INSTALLATION OF PAVEMENT, THE SUBGRADE SHOULD BE SURFACE COMPACTED WITH A MINIMUM OF 4 PASSES WITH A VIBRATORY ROLLER HAVING A MINIMUM STATIC WEIGHT OF 10–TONS.
3. ANY SOFT AREAS SHALL BE REMOVED AND REPLACED WITH CLEAN, GRANULAR, FREE–DRAINING SOIL.
4. FILL SHALL BE PLACED IN LOOSE LIFTS NOT TO EXCEED 12–INCHES AND SHALL BE COMPACTED TO AT LEAST 95% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D–1557.
5. TRANSVERSE AND LONGITUDINAL CONTROL JOINTS SHALL BE SAW CUT AT 15 FT MAXIMUM SPACING.
6. DOWEL BARS SHALL BE PLACED AT ALL JOINTS.
7. SURFACE TEXTURE SHALL BE A MEDIUM BROOM FINISH.

5 CONCRETE PAVEMENT
N.T.S



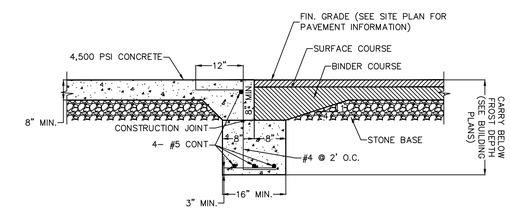
NOTES:
1. SEE SITE PLAN FOR PAD DIMENSIONS

6 CONCRETE PAD
N.T.S



NOTES:
1. PAINT PRIME AND FINISH COATS TO BE COMPATIBLE WITH EXTERIOR METAL SURFACES. COLOR SHALL BE PROVIDED OWNER/ARCHITECT

7 BOLLARD
N.T.S



8 CONCRETE/ASPHALT JOINT DETAIL
N.T.S

Date	Description	No.
06/18/20	P&Z SUBMISSION	1

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Project: BURLINGTON COAT FACTORY EXPANSION AT BROOKSIDE PLAZA
50 HAZARD AVENUE
ENFIELD CONNECTICUT

Drawing Title: SITE DETAILS

Project No. 140161101
Date 5/22/2020
Drawn By BP
Checked By TSO

Drawing No. CS501
Sheet 6 of 9

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LANGAN
PROJECT NO. 140161101

LAWN SEED MIX:

1. LAWN SEED MIX: LESCO GRASS SEED – ALL PRO TRANSITION MIX (3 TURF-TYPE TALL-FESCUE GRASSES)

   NOTES:
   A) SEED RATE:
      1) NEW ESTABLISHMENT: SEED AT A RATE OF 6–8 LBS/1000 SQ FT
      2) RENOVATION: 20–50% EXISTING COVER: 5–7 LBS/1000 SQ FT
         50–75% EXISTING COVER: 4–6 LBS/1000 SQ FT

2. GENERAL SEED NOTES:

   A) FINAL SEED MIXTURES, RATES, AND SPECIES TO BE DETERMINED BASED ON PROJECT LANDSCAPE ARCHITECT REVIEW.
   B) SEEDING SHALL TAKE PLACE IN THE SPRING (APRIL 1 TO JUNE 15) OR THE FALL (SEPTEMBER 1 TO OCTOBER 15).
   C) ELIMINATE UNWANTED VEGETATION PRIOR TO SEEDING USING A GLYPHOSATE-BASED HERBICIDE PER MANUFACTURER'S SPECIFICATIONS.
   D) IT IS RECOMMENDED THAT CONTRACTOR INSTALL SEED MIXTURE USING A NO-TILL TRUAX-TYPE DRILL SEEDER WHERE APPLICABLE.
   E) THERE MUST BE CONTINUOUS SOIL MOISTURE FOR 4–6 WEEKS TO ALLOW FOR PROPER GERMINATION.

LANDSCAPE MAINTENANCE NOTES

1. MAINTENANCE OPERATIONS BEFORE APPROVAL:

   A. PLANT CARE SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS SATISFACTORILY INSTALLED AND SHALL CONTINUE THROUGHOUT THE LIFE OF THE CONTRACT UNTIL FINAL ACCEPTANCE OF THE PROJECT.

   B. CARE SHALL INCLUDE, BUT NOT BE LIMITED TO, REPLACING MULCH THAT HAS BEEN DISPLACED BY EROSION OR OTHER MEANS, REPAIRING AND RESHAPING WATER RINGS OR SAUCERS, MAINTAINING STAKES AND GUYS AS ORIGINALLY INSTALLED, WATERING WHEN NEEDED OR DIRECTED, AND PERFORMING ANY OTHER WORK REQUIRED TO KEEP THE PLANTS IN A HEALTHY CONDITION.

   C. CONTRACTOR SHALL REMOVE AND REPLACE ALL DEAD, DEFECTIVE AND/OR REJECTED PLANTS AS REQUIRED BEFORE FINAL ACCEPTANCE.

2. MAINTENANCE DURING CONSTRUCTION:

   A. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING. PLANTS SHALL BE WATERED, MULCHED, WEEDED, PRUNED, SPRAYED, FERTILIZED, CULTIVATED, AND OTHERWISE MAINTAINED AND PROTECTED UNTIL PROVISIONAL ACCEPTANCE. SETTLED PLANTS SHALL BE RESET TO PROPER GRADE AND POSITION, PLANTING SAUCER RESTORED AND DEAD MATERIAL REMOVED. STAKES AND WIRES SHALL BE TIGHTENED AND REPAIRED. DEFECTIVE WORK SHALL BE CORRECTED AS SOON AS POSSIBLE AFTER IT BECOMES APPARENT AND WEATHER AND SEASON PERMIT.

   B. IF A SUBSTANTIAL NUMBER OF PLANTS ARE SICKLY OR DEAD AT THE TIME OF INSPECTION, ACCEPTANCE SHALL NOT BE GRANTED AND THE CONTRACTOR'S RESPONSIBILITY FOR MAINTENANCE OF ALL PLANTS SHALL BE EXTENDED FROM THE TIME REPLACEMENTS ARE MADE OR EXISTING PLANTS ARE DEEMED ACCEPTABLE BY THE LANDSCAPE ARCHITECT.

   C. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE SPECIFIED ON THE PLANT LIST OR THAT WHICH WAS TO REMAIN OR BE RELOCATED. THEY SHALL BE FURNISHED AND PLANTED AS SPECIFIED. THE COST SHALL BE BORNE BY THE CONTRACTOR. REPLACEMENTS RESULTING FROM REMOVAL, LOSS, OR DAMAGE DUE TO OCCUPANCY OF THE PROJECT IN ANY PART, VANDALISM, PHYSICAL DAMAGE BY ANIMALS, VEHICLES, ETC., AND LOSSES DUE TO CURTAILMENT OF WATER BY LOCAL AUTHORITIES SHALL BE APPROVED AND PAID FOR BY THE OWNER.

   D. PLANTS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER INSPECTION AND PROVISIONAL ACCEPTANCE.

   E. AT THE END OF THE ESTABLISHMENT PERIOD, INSPECTION SHALL BE MADE AGAIN. ANY PLANT REQUIRED UNDER THIS CONTRACT THAT IS DEAD OR UNSATISFACTORY TO THE LANDSCAPE ARCHITECT OR OWNER SHALL BE REMOVED FROM THE SITE AND REPLACED DURING THE NORMAL PLANTING SEASON.

3. LAWN MAINTENANCE:

   A. BEGIN MAINTENANCE IMMEDIATELY AFTER EACH PORTION OF LAWN IS PLANTED AND CONTINUE FOR 8 WEEKS AFTER ALL LAWN PLANTING IS COMPLETED.

   B. WATER TO KEEP SURFACE SOIL MOIST, REPAIR WASHED OUT AREAS BY FILLING WITH TOPSOIL, LIMING, FERTILIZING AND RE-SEEDING; MOW TO 2 1/2 – 3 INCHES AFTER GRASS REACHES 3 1/2 INCHES IN HEIGHT, AND MOW FREQUENTLY ENOUGH TO KEEP GRASS FROM EXCEEDING 3 1/2 INCHES. WEED BY LOCAL SPOT APPLICATION OF SELECTIVE HERBICIDE ONLY AFTER GRASS IS WELL-ESTABLISHED.

LAWN WATERING SCHEDULE

THE FOLLOWING WATERING SCHEDULE COVERS ROUGHLY 8 WEEKS TO ESTABLISH A HEALTHY STAND OF GRASS FROM SEED. THE CONTRACTOR SHALL BE OBLIGATED TO ENSURE A HEALTHY STAND OF GRASS AT THE END OF THE MAINTENANCE/BOND PERIOD. ANY BARE OR DEAD AREAS IN THE LAWN SHALL BE PREPARED, RESEEDED AND REESTABLISHED PRIOR TO THE END OF THE MAINTENANCE/BOND PERIOD AND TO THE SATISFACTION OF THE PROJECT LANDSCAPE ARCHITECT AND THE OWNER.

IMPORTANT ASPECTS TO ATTAINING AND SUSTAINING A HEALTHY STAND OF GRASS ARE THE INSTALLATION OF TOPSOIL, SEED BED PREPARATION, ATTAINING OPTIMAL pH FOR THE INTENDED PLANT SPECIES, FERTILIZING, MULCH COVERING, AND SUFFICIENT WATERING PER THESE NOTES AND/OR PROJECT SPECIFICATIONS.

1. SEEDING SHALL BE DONE DURING THE SEASONS SPECIFIED IN THE LAWN SEED MIX NOTES AND/OR PROJECT SPECIFICATIONS.
2. AFTER THE SEEDBED IS PREPARED, SEED IS INSTALLED, AND MULCH IS APPLIED, WATER LIGHTLY TO KEEP THE TOP 2 INCHES OF SOIL CONSISTENTLY MOIST, NOT SATURATED, AT NO TIME SHOULD WATER BE APPLIED TO THE POINT OF RUNOFF OR THE DISPLACEMENT OF SEED.
3. DEPENDING ON SOIL TEMPERATURES, IT MAY TAKE SEVERAL WEEKS FOR GERMINATION TO OCCUR. DIFFERENT SPECIES WITHIN THE MIX GERMINATE AT DIFFERENT TIMES AND THEREFORE CONTRACTOR SHOULD CONTINUE THE LIGHT WATERING, AS DESCRIBED ABOVE, UNTIL THERE IS AT LEAST 2 INCHES OF GROWTH THROUGHOUT.
4. AT THIS POINT, WATERING FREQUENCY MAY BE REDUCED TO EVERY 3 TO 5 DAYS. WATER SHALL BE APPLIED TO WET A 6 INCH MINIMUM SOIL DEPTH TO PROMOTE HEALTHY DEEP ROOTS.
5. BEGIN MOWING ONCE PER WEEK AFTER THE GRASS HAS REACHED 3 INCHES HEIGHT. MOW TO A HEIGHT OF NO LESS THAN 2–½ INCHES. AFTER 2 TO 3 WEEKS OF MOWING, CONTINUE TO WATER TO A 6 INCH MINIMUM SOIL DEPTH AS NECESSARY PER WEATHER CONDITIONS, AND SOIL MOISTURE SENSORS IF APPLICABLE.

PLANTING SOIL SPECIFICATIONS

1. PLANTING SOIL, ALTERNATELY MAY BE REFERRED TO AS TOPSOIL, SHOULD BE FRIABLE, FERTILE, WELL DRAINED, FREE OF DEBRIS, TOXINS, TRASH AND STONES OVER 1/2" DIA., IT SHOULD HAVE A HIGH ORGANIC CONTENT SUITABLE TO SUSTAIN HEALTHY PLANT GROWTH AND SHOULD LOOK AESTHETICALLY PLEASING HAVING NO NOXIOUS ODORS.

2. PLANTING SOIL:

   REUSE SURFACE SOILS STOCKPILED ON SITE, VERIFYING COMPLIANCE WITH PLANTING SOIL AND TOPSOIL CRITERIA IN THIS SPECIFICATION THROUGH TESTING. CLEAN SURFACE SOIL OF ALL ROOTS, PLANTS, SOD, AND GRAVEL OVER 1" IN DIAMETER AND DELETERIOUS MATERIALS. IF ON-SITE SOILS ARE TO BE USED FOR PROPOSED PLANTING, THE CONTRACTOR SHALL DEMONSTRATE, THROUGH SOIL TESTING, THAT ON-SITE SOILS MEET THE SAME CRITERIA AS INDICATED IN NOTES PLANS AND SPECIFICATIONS.

   SUPPLEMENT WITH IMPORTED OR MANUFACTURED TOPSOIL FROM OFF SITE SOURCES WHEN TOPSOIL AND PLANTING SOIL QUANTITIES ARE INSUFFICIENT. OBTAIN SOIL DISPLACED FROM NATURALLY WELL-DRAINED SITES WHERE TOPSOIL OCCURS AT LEAST 4" DEEP. DO NOT OBTAIN FROM AGRICULTURAL LAND, BOGS, MARSHES OR CONTAMINATED SITES.

   CONTRACTOR SHALL TEST SOILS AND FURNISH SAMPLES UPON REQUEST. PACKAGED MATERIALS SHALL BE UNOPENED BAGS OR CONTAINERS, EACH BEARING A NAME, GUARANTEE, AND TRADEMARK OF THE PRODUCER, MATERIAL COMPOSITION, MANUFACTURER'S CERTIFIED ANALYSIS, AND THE WEIGHT OF THE MATERIALS. SOIL OR AMENDMENT MATERIALS SHALL BE STORED ON SITE TEMPORARILY IN STOCKPILES PRIOR TO PLACEMENT AND SHALL BE PROTECTED FROM INTRUSION OF CONTAMINANTS AND EROSION. AFTER MIXING, SOIL MATERIALS SHALL BE COVERED WITH A TARPAULIN UNTIL TIME OF ACTUAL USE.

   ALL PLANTING SOILS SHALL BE SUBMITTED FOR TESTING TO THE STATE COOPERATIVE EXTENSION SERVICE, OR APPROVED EQUAL, PRIOR TO DELIVERY TO THE SITE. CONTRACTOR SHALL FURNISH SOIL SAMPLES AND SOIL TEST RESULTS TO LANDSCAPE ARCHITECT OR OWNER AT A RATE OF ONE SAMPLE PER 500 CUBIC YARDS TO ENSURE CONSISTENCY ACROSS THE TOTAL VOLUME OF PLANTING SOIL REQUIRED. TEST RESULTS SHALL EVALUATE FOR ALL CRITERIA LISTED IN THIS SPECIFICATION. IF TESTING AGENCY DETERMINES THAT THE SOILS ARE DEFICIENT IN ANY MANNER AND MAY BE CORRECTED BY ADDING AMENDMENTS, THE CONTRACTOR SHALL FOLLOW STATED RECOMMENDATIONS FOR SOIL IMPROVEMENT AND FURNISH SUBMITTALS FOR ALL AMENDMENTS PRIOR TO DELIVERY OF SOIL TO THE PROJECT SITE.

   A. THE FOLLOWING TESTING SHOULD BE PERFORMED AND RESULTS GIVEN TO THE LANDSCAPE ARCHITECT FOR APPROVAL BEFORE INSTALLATION:
      a. PARTICLE SIZE ANALYSIS – LOAMY SAND: 60–75% SAND, 25–40% SILT, AND 5–15% CLAY.
      b. FERTILITY ANALYSIS: pH (5.5–6.5), SOLUBLE SALTS (LESS THAN 2 MMHO/CM), NITRATE, PHOSPHATE, POTASSIUM, CALCIUM AND MAGNESIUM
      c. ORGANIC MATTER CONTENT: 2.5–5% IN NATIVE SOILS; UP TO 10% IN AMENDED SOILS
      d. TOXIC SUBSTANCE ANALYSIS
      e. MATERIAL DRAINAGE RATE: 60% PASSING IN 2 MINUTES, 40% RETAINED
      f. NOT MORE THAN 1% OF MATERIAL SHALL BE RETAINED BY A #4 SIEVE

3. SOIL AMENDMENT FOR PLANT MATERIAL:
   IF SOIL ORGANIC CONTENT IS INADEQUATE, SOIL SHALL BE AMENDED WITH COMPOST OR ACCEPTABLE, WEED FREE, ORGANIC MATTER. ORGANIC AMENDMENT SHALL BE WELL COMPOSTED, PH RANGE OF 6–8; MOISTURE CONTENT 35–55% BY WEIGHT 100% PASSING THROUGH 1" SIEVE; SOLUBLE SALT CONTENT LESS THAN 0.5 MM HOS/CM; MEETING ALL APPLICABLE ENVIRONMENTAL CRITERIA FOR CLEAN FILL.

   A. ORGANIC MATTER AS A SOIL AMENDMENT: LEAF MOLD WITH 60–90% ORGANIC CONTENT BY WEIGHT. SHREDDED LEAF LITTER, COMPOSTED FOR A MINIMUM OF 1 YR. SHOULD BE FREE OF DEBRIS, STONES OVER 1/2", WOOD CHIPS OVER 1".

   B. SOIL IN BEDS AND PLANTING ISLANDS OTHER THAN BACKFILL MATERIAL AND TOPSOIL, SHOULD BE FRIABLE, WELL DRAINED, AND FREE OF DEBRIS, INCLUDING STONES AND TRASH.

   C. AMENDMENTS FOR BACK FILL IN TREE AND SHRUB PITS:
      a. GROUND LIMESTONE (WITH A MIN. OF 88% OF CALCIUM AND MAGNESIUM CARBONATES) USED PENDING RESULTS OF SOIL ANALYSIS.
         – BRING pH LEVELS TO 5.5 MIN. TO 6.5 FOR NON-ERICACEOUS PLANTS
         – BRING pH LEVELS TO 4.5 MIN. TO 5.5 FOR ERICACEOUS PLANTS
      b. TERRA-SORB BY "PLANT HEALTH CARE" 800-421-9051 (SEE MANUFACTURER RECOMMENDATIONS) USED IN PLANTER BACKFILL MIXTURE WITH TREES AND SHRUBS.
      c. MYCOR-ROOT SAVER BY "PLANT HEALTH CARE" 800-421-9051 (SEE MANUFACTURER RECOMMENDATIONS) USED IN BACKFILL MIXTURE WITH TREES.

4. WHERE PLANTING AREAS ARE PROPOSED FOR FORMER PAVED OR GRAVEL AREAS, BEDS SHALL BE EXCAVATED TO A MINIMUM 30" DEPTH AND, AT A MINIMUM, BE BACKFILLED WITH BOTTOM LAYER OF SANDY LOAM (ORGANIC CONTENT LESS THAN 2%) OVER WHICH TOPSOIL AND PLANTING SOILS WILL BE PLACED AT DEPTHS INDICATED IN PLANS, DETAILS AND NOTES.

5. CLEAN SOIL FILL IN LANDSCAPE AREAS:
   LANDSCAPE FILL MATERIAL, BELOW PLANTING SOILS, SHALL HAVE THE PHYSICAL PROPERTIES OF A SANDY LOAM WITH AN ORGANIC CONTENT OF LESS THAN 2% AND A PH BETWEEN 5 – 7.

6. SOIL PLACEMENT:
   A. CONTRACTOR TO PROVIDE SIX INCHES (6") MINIMUM DEPTH PLANTING SOIL LAYER IN LAWN AREAS, TWELVE INCHES (12") MINIMUM DEPTH PLANTING SOIL LAYER IN GROUNDCOVER AND PERENNIAL AREAS, EIGHTEEN INCHES (18") MINIMUM DEPTH PLANTING SOIL LAYER IN SHRUB AREAS, AND THIRTY-SIX INCHES (36") MINIMUM DEPTH PLANTING SOIL LAYER IN TREE PLANTING AREAS.

   B. SCARIFY AND/OR TILL COMPACTED SUBSOILS TO A MINIMUM DEPTH OF 6 INCHES. THOROUGHLY MIX A 6 INCH DEPTH LAYER OF PLANTING SOIL INTO THE SUBSOIL PRIOR TO PLACING PLANTING SOIL AT THE DEPTHS INDICATED ABOVE. PLANTING SOIL SHALL BE PLACED IN 12–18" LIFTS AND WATER THOROUGHLY BEFORE INSTALLING NEXT LIFT. REPEAT UNTIL DEPTHS AND FINISH GRADES HAVE BEEN ACHIEVED. NO SOILS SHALL BE PLACED IN A FROZEN OR MUDDY CONDITION.

   C. PLANTING SOIL PRESENT AT THE SITE, IF ANY, MAY BE USED TO SUPPLEMENT TOTAL AMOUNT REQUIRED. CONTRACTOR TO FURNISH AN ANALYSIS OF ON-SITE PLANTING SOIL UTILIZED IN ALL PLANTING AREAS.

7. SOIL CONDITIONING:
   A. ADJUST pH AND NUTRIENT LEVELS AS REQUIRED TO ENSURE AN ACCEPTABLE GROWING MEDIUM. LOWER pH USING ELEMENTAL SULFUR ONLY. PEAT MOSS OR COPPER SULFATE MAY NOT BE USED. GROUND LIMESTONE AS A SOIL AMENDMENT MATERIAL WILL ONLY BE USED PENDING RESULTS OF SOIL ANALYSIS. PROVIDE WITH MINIMUM 88% CALCIUM AND MAGNESIUM CARBONATES AND SHALL HAVE TOTAL 100% PASSING THE 10 MESH SIEVE, MINIMUM 90% PASSING 20 MESH SIEVE, AND MINIMUM 60% PASSING 100 MESH SIEVE.

   B. ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF AT THE CONTRACTOR'S EXPENSE.

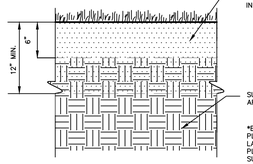
   C. SOIL MODIFICATIONS (PENDING RESULTS OF SOIL ANALYSIS):
      a. THOROUGHLY TILL ORGANIC MATTER (LEAF COMPOST) INTO THE TOP 6 TO 12 IN. OF MOST PLANTING SOILS TO IMPROVE THE SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A pH HIGHER THAN 7.0. PEAT MOSS MAY NOT BE USED AS ORGANIC MATTER AMENDMENT.

      b. MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. IMPROVE DRAINAGE IN HEAVY SOILS BY PLANTING ON RAISED MOUNDS OR BEDS AND INCLUDING SUBSURFACE DRAINAGE LINES.

      c. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

GENERAL NOTE:

DUE TO GENERAL CONSTRUCTION ACTIVITIES AND ADJACENT SITE COMPACTION REQUIREMENTS, SUBGRADE SOILS WITHIN PROPOSED PLANTING AREAS TEND TO BECOME HIGHLY COMPACTED. IN ORDER TO CREATE A HEALTHY GROWTH MEDIUM TO ALLOW PROPOSED PLANTINGS TO ESTABLISH A VIGOROUS ROOT MASS, THIS SUBGRADE SOIL MUST UNDERGO A RESTORATION PROCESS. IN ADDITION, IMPORTED OR AMENDED EXISTING SOILS SHALL BE MIXED WITH SUBGRADE SOILS WHERE THEY MEET IN ORDER TO CREATE A TRANSITIONAL GRADIENT TO ALLOW FOR PROPER DRAINAGE.

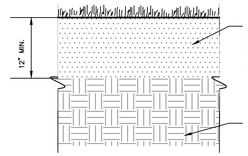


6" IMPORTED PLANTING SOIL (OR AMENDED EXISTING PLANTING SOIL) SHALL BE ROTO-TILLED INTO SUBGRADE TO A DEPTH OF 12".

SUBGRADE WITHIN 2'-6" OF FINISH GRADE IN PLANTING AREAS SHALL CONSIST OF FREE DRAINING SANDY SOIL FILL

*EXISTING SOIL STRIPPED FROM SITE CAN BE USED FOR PLANTING SOIL UPON APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT. CONTRACTOR SHALL REFER TO PLANTING SOIL SPECIFICATIONS FOR REQUIRED SUBMITTALS.

PLANTING SOIL WITHIN AREAS OF CUT OR RAISED GRADE



EXISTING SOIL IN ALL PROPOSED PLANTING AREAS SHALL BE ROTO-TILLED TO A DEPTH OF 12" (EXCLUDING TREE PROTECTION AREAS) AND AMENDED IN ACCORDANCE WITH PLANTING SOIL SPECIFICATIONS. EXISTING SOIL WITHIN TREE PROTECTION AREAS SHALL BE LOOSENED AND AMENDED BY NON-MECHANICAL METHODS, PROTECTING ROOT MASS AGAINST DAMAGE.

SUBGRADE

PLANTING SOIL WITHIN AREAS OF UNCHANGED GRADE

NOTES:

1. CONTRACTOR IS RESPONSIBLE TO SEND SAMPLES OF EXISTING SOILS INTENDED FOR USE IN PLANTING AREAS (1 PER 500 CY.) TO TESTING LABORATORY OR UNIVERSITY COOPERATIVE EXTENSION FOR TESTING. ALL TESTING COSTS ARE AT THE CONTRACTOR'S EXPENSE.
2. RECYCLED CRUSHED CONCRETE AND ASPHALT MILLINGS SHALL NOT BE PLACED WITHIN 2'-6" OF FINISH GRADE IN PROPOSED LANDSCAPE AREAS.
3. IMPORTED FILL SHALL CONTAIN NO CONTAMINATION IN EXCEEDENCE OF THE APPLICABLE STATE ENVIRONMENTAL STANDARDS AND MEET THE ENVIRONMENTAL REQUIREMENTS FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION OF COMPLIANCE PRIOR TO DELIVERY OF ANY FILL TO THE SITE.
4. CONTRACTOR TO LIGHTLY COMPACT ALL PLACED PLANTING SOILS AND RAISE GRADES ACCORDINGLY TO ALLOW FOR FUTURE SETTLEMENT OF PLANTING SOILS (TYP.)
5. NO STONES, WOOD CHIPS, OR DEBRIS LARGER THAN 1/2" SHALL BE ACCEPTABLE WITHIN PLANTING AREAS.

1 PLANTING SOIL

NTS

Date	Description	No.
06/18/20	P&Z SUBMISSION	1

REVISIONS

STATE OF CONNECTICUT · TIMOTHY S. ONDERKO · No. 25760 · LICENSED PROFESSIONAL ENGINEER

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50 HAZARD AVENUE
ENFIELD CONNECTICUT

Drawing Title: SITE DETAILS II

Project No. 140161101
Date 06/18/2020
Drawn By XW
Checked By JA/MH

Drawing No. CS502

Sheet 6 of 12

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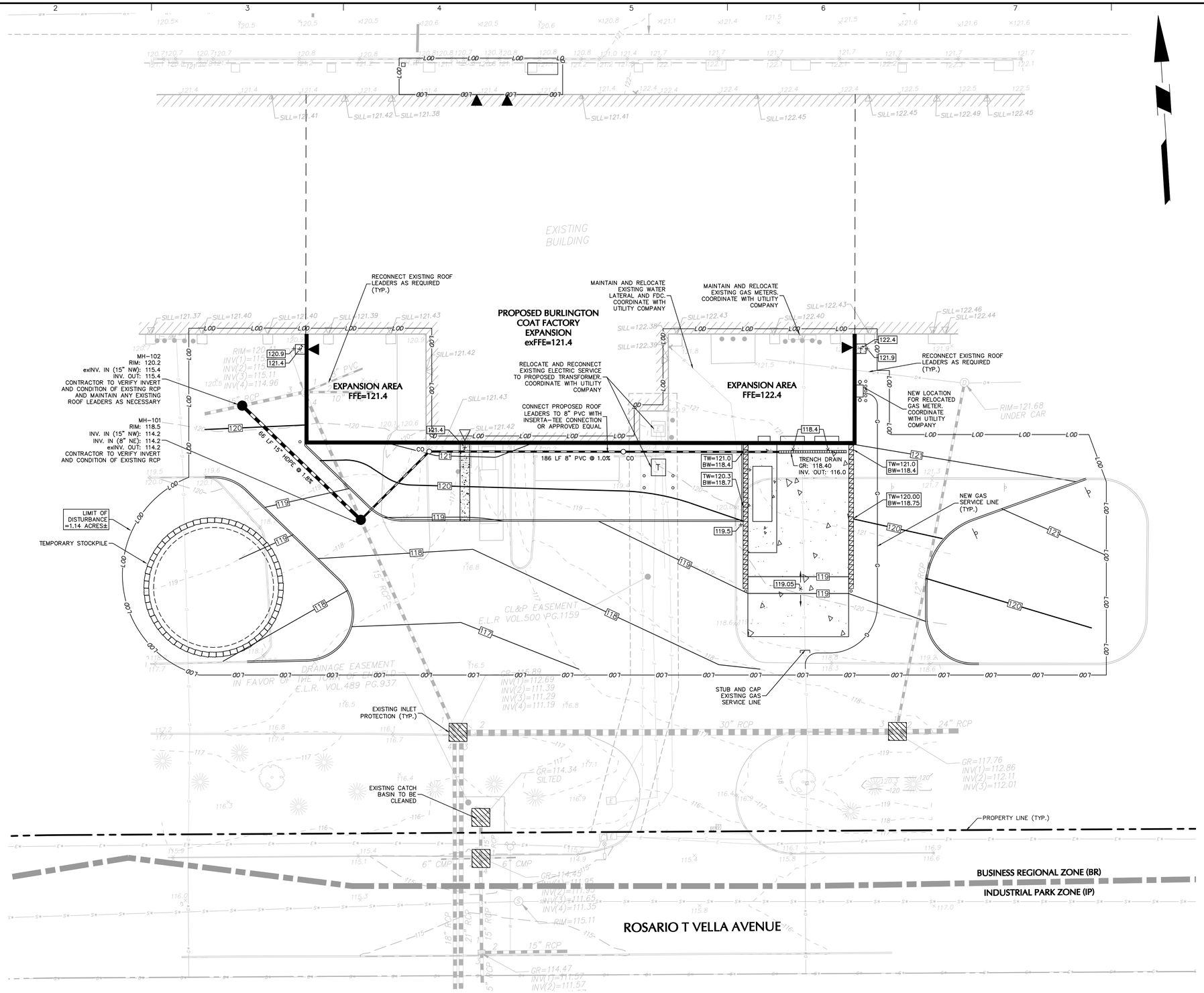

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REVISIONS

STATE OF CONNECTICUT — TIMOTHY S. ONDERDONK — No. 25760 — LICENSED PROFESSIONAL ENGINEER

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Project
BURLINGTON COAT FACTORY EXPANSION AT BROOKSIDE PLAZA
50 HAZARD AVENUE
ENFIELD CONNECTICUT

Drawing Title
GRADING, DRAINAGE, UTILITY, AND EROSION CONTROL PLAN

Project No. 140161101
Date 5/22/2020
Drawn By BP
Checked By TSO

Drawing No.
CG101
Sheet 7 of 9

PROJECT NO. 140161101

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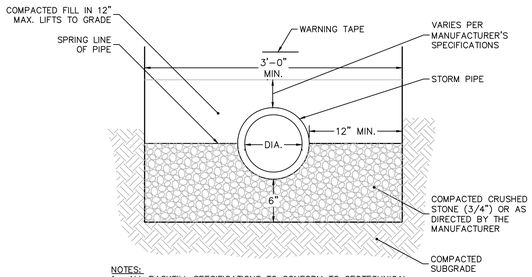
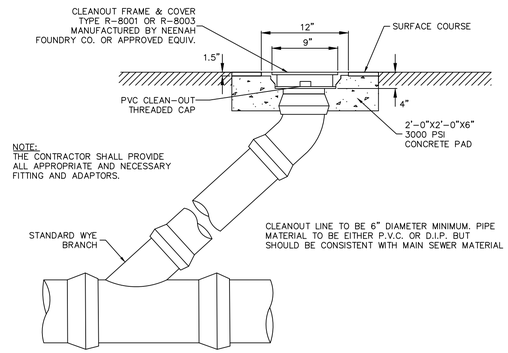
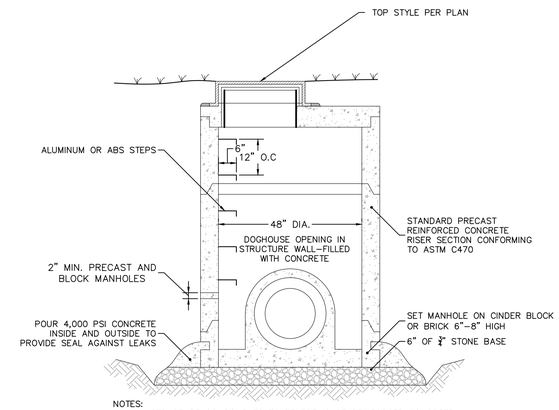


NOTES:
1. ALL BACKFILL SPECIFICATIONS TO CONFORM TO GEOTECHNICAL ENGINEER REQUIREMENTS AND MANUFACTURER'S RECOMMENDATIONS.

1 STORM PIPE BEDDING
N.T.S

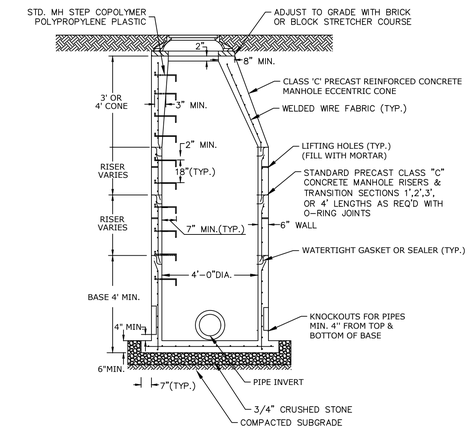


2 STORM CLEANOUT
N.T.S



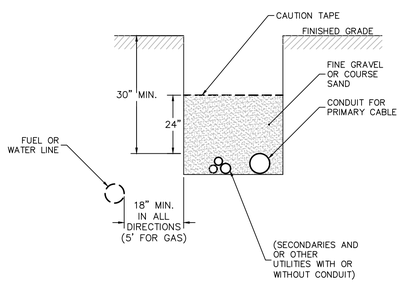
NOTES:
1. ALL STRUCTURE COMPONENTS TO BE PRE-CAST REINFORCED CONCRETE, ABLE TO WITHSTAND THE APPLIED EARTH LOADS WITH AN HS-20 TRUCK LOAD.
2. ALL JOINTS TO BE MORTARED.
3. STRUCTURE SHALL CONFORM TO ASTM C478.

3 DOGHOUSE STRUCTURE
N.T.S



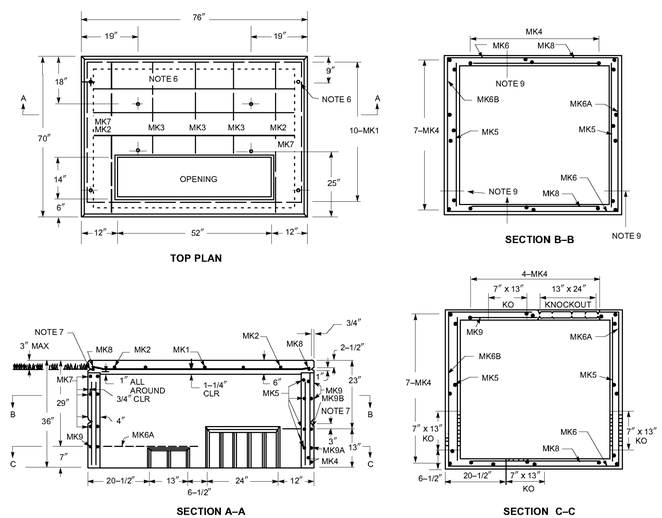
NOTES:
1. DIAMETER OF MANHOLE SHALL BE REVIEWED BY THE CONTRACTOR TO DETERMINE A LEGEND OF STANDARD MANHOLE DIMENSIONS WITH RESPECT TO PROPOSED PIPE SIZES, NUMBER AND GEOMETRY. OVER SIZE MANHOLES SHALL BE INSTALLED IF MINIMUM 6" WALL DIMENSION BETWEEN PIPES IS NOT PROVIDED.
2. MANHOLES SHALL BE STANDARD PRECAST CONCRETE UNITS AND SHALL BE DESIGNED AND CONSTRUCTED BY THE MANUFACTURER TO SUPPORT TRUCK H-20 LOADING.

4 STORM MANHOLE
N.T.S



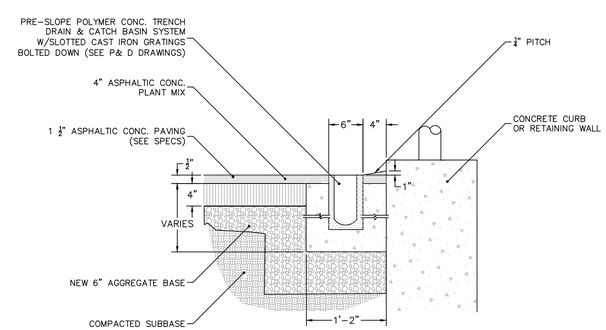
NOTES:
1. ALL DIRECT-BURIED CABLES SHALL BE INSTALLED AT A DEPTH OF AT LEAST 30 INCHES IN THE FOLLOWING ORDER:
   A. ENSURE THAT THE BOTTOM OF THE TRENCH IS WELL-TAMPED AND FREE OF ROCKS.
   B. INSTALL THE CONDUIT, GLUING ALL COUPLINGS.
   C. INSTALL SECONDARIES AND OTHER UTILITY CABLES OR CONDUITS LARGER THAN 2 INCHES IN MAXIMUM DIAMETER.
   D. BACKFILL WITH 12 INCHES CLEAN FILL NOT TO CONTAIN STONES LARGER THAN 2 INCHES IN MAXIMUM DIAMETER.
   E. INSTALL CABLE WARNING TAPE 12 INCHES OVER THE CONDUIT.
   F. FILL IN THE REMAINDER OF THE TRENCH WITH NATIVE BACKFILL.
2. THE TRENCH SHALL BE BACKFILLED IMMEDIATELY FOLLOWING PLACEMENT OF THE CONDUIT.
3. 1/4-INCH NYLON ROPE AND PLASTIC CONDUIT PLUG TO BE SUPPLIED AND INSTALLED BY CONTRACTOR.

5 ELECTRICAL UTILITY TRENCH
N.T.S

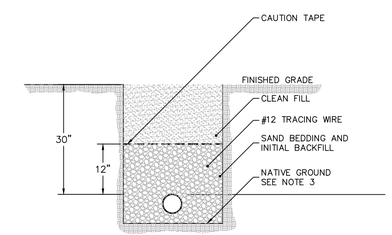


NOTES:
1. CONTRACTOR TO COORDINATE PAD SPECIFICATIONS WITH UTILITY PROVIDER.

6 TRANSFORMER PAD
N.T.S



7 TRENCH DRAIN DETAIL
N.T.S



NOTES:
1. TRENCHES IN STABLE SOIL OVER 5 FT DEEP SHALL BE REINFORCED BY APPROVED OSHA METHODS
2. TRENCHES SHALL BE COMPACTED
3. IF NATIVE GROUND IS NOT SUITABLE, THE CONTRACTOR SHALL EXCAVATE TO AN ACCEPTABLE DEPTH AND INSTALL MATERIALS AS APPROVED BY ENGINEERS AND UTILITY COMPANY. CONTRACTOR TO PROVIDE EXCAVATION, BEDDING, SAND BACKFILL AND FIND BACKFILL. GAS COMPANY TO PROVIDE INSTALLATION OF ALL GAS PIPING AND SERVICES.

8 GAS MAIN TRENCH
N.T.S

Date	Description	No.
06/18/20	P&Z SUBMISSION	1

REVISIONS

STATE OF CONNECTICUT ANTHONY S. ONOFRIO No. 25760 LICENSED PROFESSIONAL ENGINEER

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Project: BURLINGTON COAT FACTORY EXPANSION AT BROOKSIDE PLAZA
50 HAZARD AVENUE
ENFIELD CONNECTICUT

Drawing Title: GRADING, DRAINAGE, UTILITY, AND EROSION CONTROL DETAILS I

Project No. 140161101
Date 5/22/2020
Drawn By BP
Checked By TSO

Drawing No. CG501

Sheet 8 of 9

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LANGAN
PROJECT NO. 140161101

SOIL EROSION-SEDIMENT CONTROL NOTES

PROPOSED DEVELOPMENT

1. CONSTRUCTION WILL INCLUDE EARTHWORK, CURBING, PAVING, UTILITY INSTALLATION, LANDSCAPING AND BUILDING CONSTRUCTION. ALL DEMOLITION DEBRIS AND SOIL REMOVAL RELATED TO CONSTRUCTION SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL LAWS GOVERNING SUCH ACTIVITIES.
2. THE DETAILED EROSION AND SEDIMENT CONTROL MEASURES ARE SHOWN ON DRAWING CE101. THE PROPOSED MEASURES HAVE BEEN DESIGNED TO PREVENT THE MIGRATION OF SOIL SEDIMENT FROM THE SITE.

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR PHASING OF SOIL AND SEDIMENT CONTROL PRACTICES TO ENSURE SOIL AND SEDIMENT ARE PREVENTED FROM LEAVING THE DEVELOPMENT AREA THROUGHOUT DEMOLITION & CONSTRUCTION.
2. THE SOIL AND SEDIMENT CONTROL PRACTICES MUST BE INSTALLED IN ACCORDANCE WITH THE LOCAL GOVERNING AUTHORITY AND THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION AND THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL.
3. EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED PRIOR TO START OF DEMOLITION AND CONSTRUCTION AND DISTURBANCE OF SITE CONTRIBUTORY DRAINAGE AREAS. THE OWNER OR ITS CONTRACTOR SHALL INSPECT, REPAIR AND REMOVE ALL SEDIMENT AND EROSION CONTROL DEVICES, AS INDICATED HEREIN. ALL EARTH CHANGES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED IN SUCH A MANNER SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST POSSIBLE PERIOD OF TIME.
4. DISPOSAL OF COLLECTED SEDIMENT SHALL BE MADE TO AREA DESIGNATED BY THE OWNER'S SOIL ENGINEER.
5. FILTER FABRIC/SILT FENCE WILL BE INSTALLED ALONG THE TOE OF ALL CRITICAL CUT AND FILL SLOPES.
6. ALL TOPSOIL NOT TO BE USED FOR FINAL GRADING/LANDSCAPED AREAS SHALL BE REMOVED FROM THE SITE IMMEDIATELY, IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL LAW. ALL TOPSOIL TO BE USED IN LANDSCAPED AREAS SHALL BE STORED/STOCKPILED IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL LAW STANDARDS.
7. ALL AREAS WITHIN 500 FEET OF AN INHABITED DWELLING SHALL BE WETTED AS NECESSARY TO PROVIDE DUST CONTROL.
8. PAVEMENT BASE COURSE MUST BE PLACED IN ALL NEW ROADWAY AREAS UPON COMPLETION OF FINE GRADING.
9. THE CONTRACTOR IS RESPONSIBLE FOR ALL PAVED ROADWAYS, ON AND OFF-SITE, WHICH MUST BE KEPT FREE OF SITE GENERATED SEDIMENT AT ALL TIMES. DUST SHALL BE CONTROLLED BY SPRINKLING OR OTHER APPROVED METHOD.
10. ALL STORM DRAINAGE OUTLETS MUST BE STABILIZED, AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
11. SILT FENCES AND BARRIERS MUST BE CLEANED OR REPLACED PERIODICALLY TO REMOVE BUILT-UP SILT.
12. SEDIMENT TRAPS MUST BE CLEANED WHEN CAPACITY HAS BEEN REDUCED BY AN AVERAGE OF 2'-0" OVER ITS TOTAL AREA OR TO 70% OF ITS DESIGN VOLUMES, WHICHEVER OCCURS FIRST.
13. ALL EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSPECTED ON A DAILY BASIS AND CLEANED IMMEDIATELY AFTER EACH STORM.
14. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED FOR THE CONVEYANCE OF WATER AROUND, THROUGH, OR FROM THE EARTH CHANGE AREA SHALL BE DESIGNED TO LIMIT THE WATER FLOW TO A NON-EROSIVE VELOCITY.
15. THE CONTRACTOR SHALL CORRECT ANY OMISSIONS, ERRORS, OR FIELD OPERATIONS IMMEDIATELY AND IN ACCORDANCE WITH THE GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL.
16. ANY CONVEYANCE OF THIS PROJECT PRIOR TO ITS COMPLETION WILL TRANSFER FULL RESPONSIBILITY FOR COMPLIANCE WITH THE CERTIFIED PLAN TO ANY SUBSEQUENT OWNERS.
17. SOIL EROSION AND SEDIMENT CONTROLS MUST BE INSPECTED BY THE ZONING ENFORCEMENT OFFICER BEFORE WORK MAY COMMENCE.
18. THE PROPERTY OWNER AND/OR HIS/HER AGENTS MUST MAINTAIN (REPAIR/REPLACE), WHEN NECESSARY, THE SILTATION CONTROL UNTIL ALL DEVELOPMENT ACTIVITY IS COMPLETED AND ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED.

TEMPORARY STABILIZATION

SEDIMENT DISPOSAL AREAS AND TOPSOIL STOCKPILES NOT SCHEDULED FOR CONSTRUCTION ACTIVITIES WITHIN THIRTY (30) DAYS OF DISTURBANCE SHALL BE STABILIZED AS FOLLOWS:

A. SOIL AMENDMENTS AS NECESSARY.
B. ANNUAL RYE GRASS SEEDING APPLIED AT A RATE OF NOT LESS THAN 1 LB. PER 1,000 SF.
C. MULCH ALL NEWLY SEEDED AREAS WITHIN 80 LBS. OF SALT HAY OR SMALL GRAIN STRAW PER 1,000 SF.
D. WHEN DISTURBED AREAS ARE SCHEDULED FOR IMMEDIATE LANDSCAPING THEY MAY BE MULCHED AND SEEDED PER ITEM C ABOVE.

PERMANENT STABILIZATION

REFER TO PLANS FOR PERMANENT STABILIZATION METHODS + PROPOSED SEED MIXES.

A. PERMANENT VEGETATION IS TO BE SEEDED OR SODDED ON ALL DISTURBED LAND AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADING. MULCH AS NECESSARY FOR SEED PROTECTION AND ESTABLISHMENT. AMEND SOIL AS NEEDED PRIOR TO PERMANENT SEEDING. WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER COMPLETION OF AN EARTH CHANGE OR WHEN SIGNIFICANT EARTH CHANGE ACTIVITY CEASES, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED. ALL DISTURBED AREAS, STOCKPILES OF FILL OR EXCAVATED MATERIAL SHALL BE STABILIZED IN SUCH A MANNER AS NOT TO CAUSE UNREASONABLE HAZARD TO PERSONS OR PROPERTY.

B. MATERIALS SPECIFICATION: LAWN + MEADOW AREAS

(I) ANY SOIL HAVING A pH OF FOUR OR LESS CONTAINING IRON SULFIDES SHALL BE COVERED WITH A MINIMUM OF TWELVE INCHES OF SOIL HAVING A pH OF FIVE OR MORE PRIOR TO SEED BED PREPARATION.

C. MULCHING SHALL BE DONE AT THE RATE OF SEVENTY TO NINETY POUNDS (70–90 LBS) PER 1,000 SQUARE FEET WITH UNROTTED SALT HAY.

D. LIQUID MULCH BINDERS MUST BE USED TO ANCHOR SALT HAY, HAY OR STRAY MULCHES.

(I) APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH IN VALLEYS AND AT CREATED BANKS. REMAINDER OF AREA SHOULD BE UNIFORM IN APPEARANCE.

(II) USE ONE OF THE FOLLOWING: SYNTHETIC OR ORGANIC BINDERS, BINDERS SUCH AS CURASOL DCA-70, PETRO SET, TERRA TACH, HYDRO MULCH AND AEROSPRAY MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER OF ANCHOR MULCH MATERIALS. BINDERS CONTAINING PETROLEUM PRODUCTS SHALL NOT BE USED.

NOTE: ALL NAMES GIVEN ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A RECOMMENDATION OF THESE TO THE EXCLUSION OF OTHER PRODUCTS.

D. FILL MATERIAL SHALL BE FREE FROM DEBRIS, PERISHABLE OR COMBUSTIBLE MATERIAL AND FROZEN OR WET EARTH OR STONES LARGER THAN THREE INCHES IN MAXIMUM DIMENSION.

E. CONSTRUCTION AREAS SHALL BE PERIODICALLY SPRAYED WITH WATER UNTIL THE SURFACE IS WET TO CONTROL THE GENERATION OF DUST.

F. ALL REVISIONS AFTER APPROVAL HAS BEEN GRANTED SHALL BE FORWARDED TO THE APPROPRIATE DISTRICT FOR REVIEW.

G. THE LOCAL GOVERNING AUTHORITY SHALL RECEIVE WRITTEN NOTIFICATION SEVENTY TWO HOURS BEFORE THE START OF ANY CONSTRUCTION.

H. SEEDBED PREPARATION:

(I) TOPSOIL SHOULD BE A MINIMUM OF SIX INCHES DEEP (LIGHTLY COMPACTED) BEFORE SEEDING.

(II) TOPSOIL SHALL BE TESTED PRIOR TO SEEDING.

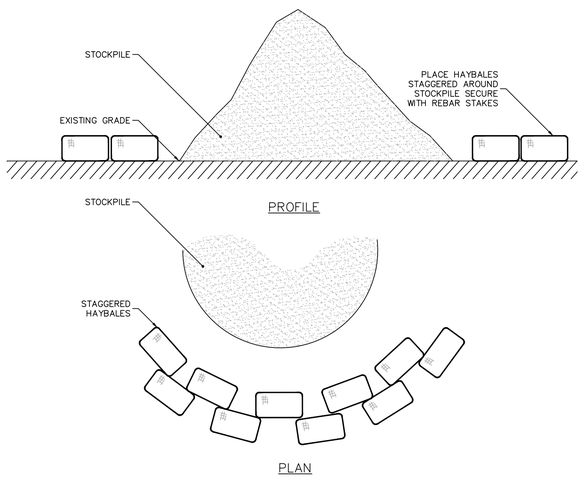
(III) WORK SOIL AMENDMENTS INTO SOIL AS NECESSARY AS NEARLY AS PRACTICAL TO A DEPTH OF FOUR INCHES WITH A DISC, SPRINGTOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE ALL CLAY OR SILTY SOIL AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEED BED WHEREVER FEASIBLE.

(IV) REMOVE FROM THE SURFACE ALL STONES ONE INCH OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS, OR OTHER UNSUITABLE MATERIAL.

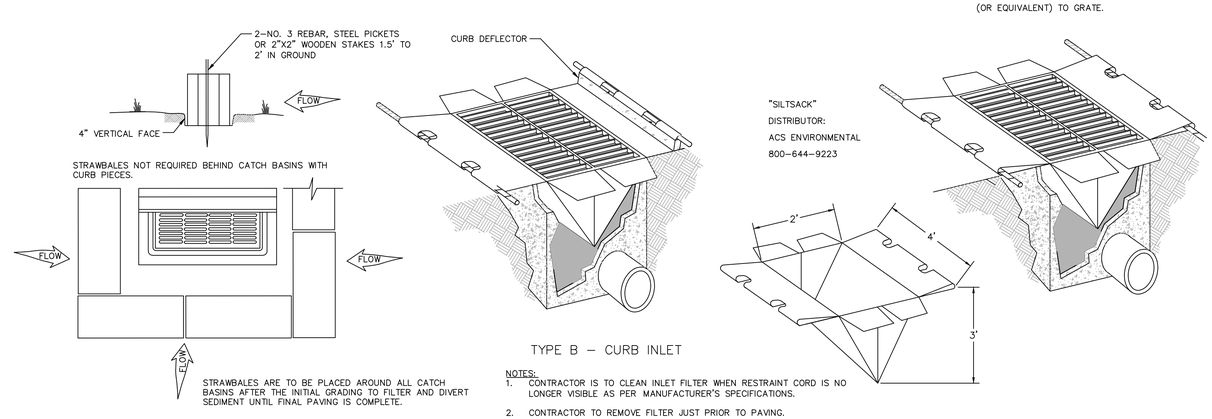
(V) INSPECT SEED BED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT SOIL COMPACT, THE AREA MUST BE RETILLED AND FIRMED AS ABOVE.

CONTINGENCY SOIL EROSION AND SEDIMENT CONTROL NARRATIVE

19. THE GENERAL CONTRACTOR WILL DESIGNATE PERSONNEL FOR 24 HOUR EMERGENCY RESPONSE IN THE EVENT OF SEVERE WEATHER AND INCREASED POTENTIAL FOR SEVERE EROSION.
20. THE GENERAL CONTRACTOR IS REQUIRED TO MAINTAIN ON SITE OR HAVE THE ABILITY TO RETRIEVE WITHIN 12 HOURS THE FOLLOWING MATERIALS IN THE EVENT THAT THERE ARE DEFICIENCIES IN THE SESC MEASURES:
    A. 25% OF THE INSTALLED LENGTH OF SILT FENCE
    B. EQUIVALENT TONNAGE OF STONE FOR STABILIZATION OF 2 STABILIZATION ENTRANCES. STONE COULD BE USED FOR SLOPE REPAIRS, ENERGY DISSIPATER ENHANCEMENTS, ETC.
    C. HEAVY EQUIPMENT CAPABLE OF TRENCHING/EXCAVATING LARGE AREAS TO DIVERT AND CONTROL RUNOFF IN A CONTROLLED MANNER.
    D. HAVE DESIGNATED A HYDRO-SEED CONTRACTOR CAPABLE OF RESPONDING TO THE SITE WITHIN 12 HOURS
21. ANY STUMP GRINDINGS OR WOOD CHIPS GENERATED ON-SITE SHOULD BE RETAINED FOR USE TO BACK UP SILT FENCES.



1 TEMPORARY STOCKPILE
N.T.S



NOTES:
1. CONTRACTOR IS TO CLEAN INLET FILTER WHEN RESTRAINT CORD IS NO LONGER VISIBLE AS PER MANUFACTURER'S SPECIFICATIONS.
2. CONTRACTOR TO REMOVE FILTER JUST PRIOR TO PAVING.

2 INLET PROTECTION
N.T.S

Date	Description	No.
06/18/20	P&Z SUBMISSION	1

REVISIONS

STATE OF CONNECTICUT · TIMOTHY S. ONSENO · No. 25760 · LICENSED PROFESSIONAL ENGINEER

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Project: BURLINGTON COAT FACTORY EXPANSION AT BROOKSIDE PLAZA
50 HAZARD AVENUE
ENFIELD CONNECTICUT

Drawing Title: GRADING, DRAINAGE, UTILITY, AND EROSION CONTROL DETAILS II

Project No. 140161101
Date 5/22/2020
Drawn By BP
Checked By TSO

Drawing No. CG502
Sheet 9 of 9

PROJECT NO. 140161101

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SITE LIGHTING SCHEDULE

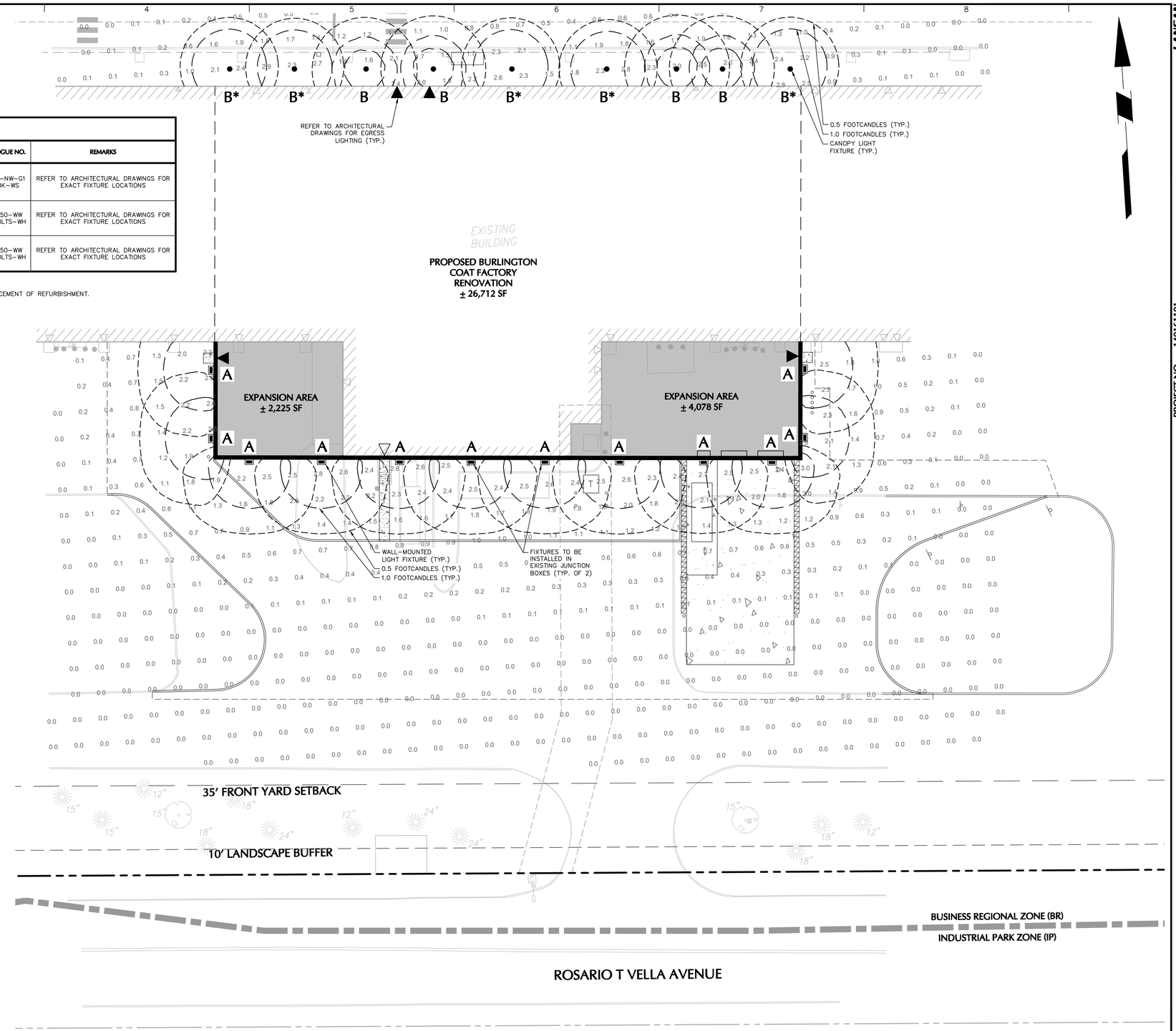
SYMBOL	KEY	QTY.	FIXTURE MANUFACTURER	FIXTURE MODEL	FIXTURE DESCRIPTION	FIXTURE MOUNTING HEIGHT	LAMP	OPTICS	LUMENS	LLF	FIXTURE CATALOGUE NO.	REMARKS
▭	A	12	SIGNIFY–GARDCO	101 LED SCONCE	WALL–MOUNTED FIXTURE; COLOR: BLACK	15'–0" (ABOVE FFE)	28W LED	TYPE 4	2,747	.90	101L–16L–530–NW–G1 –4–VOLTS–BK–WS	REFER TO ARCHITECTURAL DRAWINGS FOR EXACT FIXTURE LOCATIONS
●	B	4	SIGNIFY–GARDCO	SOFTVIEW LED PARKING GARAGE LUMINAIRE (SVPG)	CANOPY FIXTURE; COLOR: WHITE	12'–3" (ABOVE FFE)	22W LED	TYPE 5	2,395	.90	SVPG–140L–450–WW –G2–SM–5–VOLTS–WH	REFER TO ARCHITECTURAL DRAWINGS FOR EXACT FIXTURE LOCATIONS
●	B*	5	SIGNIFY–GARDCO	SOFTVIEW LED PARKING GARAGE LUMINAIRE (SVPG)	CANOPY FIXTURE; COLOR: WHITE	9'–3" (ABOVE FFE)	22W LED	TYPE 5	2,395	.90	SVPG–140L–450–WW –G2–SM–5–VOLTS–WH	REFER TO ARCHITECTURAL DRAWINGS FOR EXACT FIXTURE LOCATIONS

NOTES:
1. LIGHT FIXTURE QUANTITIES SHOWN ON THIS DRAWING ARE REPRESENTATIVE OF THE AREA SHOWN ONLY AND DO NOT REPRESENT TOTAL QUANTITIES FOR THE SITE.
2. EXISTING LIGHT FIXTURES TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO THESE FIXTURES INCLUDING REPLACEMENT OF REFURBISHMENT.
3. REFER TO ELECTRICAL DRAWINGS FOR SITE LIGHTING VOLTAGES.
4. CONTRACTOR TO CONFIRM CONTROLS SYSTEM REQUIRED BY THE OWNER AND PER CODE.

STATISTICS

DESCRIPTION	AVG.	MAX.	MIN.	MAX./MIN.	AVG./MIN.
PEDESTRIAN AREAS	2.2fc	2.9fc	1.5fc	1.9:1	1.5:1

NOTES:
LIGHTING PHOTOMETRY AND CALCULATIONS FOR EXISTING AND ADJACENT LIGHTING TO REMAIN ARE NOT INCLUDED IN THE ABOVE STATISTICS.



NOTE:
REFER TO LL501 FOR LIGHTING NOTES AND DETAILS.

Date	Description	No.
06/18/20	P&Z SUBMISSION	1

REVISIONS

STATE OF CONNECTICUT MICHAEL SZURA 0000339 LICENSED LANDSCAPE ARCHITECT

SIGNATURE MICHAEL SZURA DATE SIGNED
LICENSED LANDSCAPE ARCHITECT
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Project
BURLINGTON COAT FACTORY EXPANSION AT BROOKSIDE PLAZA
50 HAZARD AVENUE
ENFIELD CONNECTICUT

Drawing Title
SITE LIGHTING PLAN

Project No. 140161101
Date 6/18/2020
Drawn By XW
Checked By JA/MH

Drawing No. LL101

Sheet 11 of 12

LANGAN
PROJECT NO. 140161101

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LIGHTING NOTES:

GENERAL

1. POINT–BY–POINT CALCULATIONS PROVIDED WITHIN HAVE BEEN PREPARED IN ACCORDANCE TO IESNA STANDARDS AND IN CONSIDERATION OF THE VARIABLES WITHIN THESE NOTES AND SITE LIGHTING SCHEDULE. THE VALUES SHOWN ON THE PLANS ARE NOT AN INDICATION OF THE INITIAL LIGHT INTENSITIES OF THE LAMPS. THESE VALUES ARE AN APPROXIMATION OF THE MAINTAINED INTENSITIES DELIVERED TO THE GROUND PLANE USING INDUSTRY STANDARD LIGHT LOSS FACTORS (LLF) WHICH COVER LAMP DEGRADATION AND NATURAL BUILDUP/ DIRT DEGRADATION ON THE FIXTURE LENS. THE LIGHTING PLAN IS DESIGNED WITH AN INDUSTRY STANDARD LLF IN ACCORDANCE WITH GUIDANCE AS PROVIDED BY IESNA. MINOR VARIATIONS IN TOPOGRAPHY, PHYSICAL OBSTRUCTIONS, AMBIENT OR ADJACENT LIGHT SOURCES AND/OR OTHER POTENTIAL IMPACTS HAVE NOT BEEN INCLUDED IN THESE CALCULATIONS. THEREFORE, AS–BUILT LIGHT INTENSITIES MAY VARY, IN EITHER DIRECTION, FROM WHAT IS EXPLICITLY PORTRAYED WITHIN THESE DRAWINGS.NO GUARANTEE OF LIGHT LEVELS IS EXPRESSED OR IMPLIED BY THE POINT BY POINT CALCULATIONS SHOWN ON THESE PLANS.

2. LIGHT LEVEL POINT SPACING IS 10 FT. LEFT TO RIGHT AND 10 FT. TOP TO BOTTOM. POINT BY POINT CALCULATIONS ARE BASED ON THE LIGHT LOSS FACTOR AS STATED IN THE LIGHTING SCHEDULE.

COMPLIANCE

3. ALL SITE LIGHTING RELATED WORK AND MATERIALS SHALL COMPLY WITH CITY, COUNTY, AND OTHER APPLICABLE GOVERNING AUTHORITY REQUIREMENTS.

4. LIGHTING LAYOUT COMPLIES WITH THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA) SAFETY STANDARDS FOR LIGHT LEVELS.

COORDINATION

5. CONTRACTOR TO COORDINATE POWER SOURCE WITH LIGHT FIXTURES TO ENSURE ALL SITE LIGHTING IS OPERATING EFFECTIVELY, EFFICIENTLY AND SAFELY.

6. REFER TO ELECTRIFICATION PLAN FOR PROVIDING ADEQUATE POWER FOR SITE LIGHTING.

7. CONTRACTOR TO COORDINATE LOCATION OF EASEMENTS, UNDERGROUND UTILITIES AND DRAINAGE BEFORE DRILLING POLE BASES.

8. INSTALLATION OF ALL LIGHTING FIXTURES, POLES, FOOTINGS, AND FEEDER CABLE TO BE COORDINATED WITH ALL SITE WORK TRADES TO AVOID CONFLICT WITH FINISHED AND PROPOSED WORK.

9. CONTRACTOR TO COORDINATE INSTALLATION OF UNDERGROUND FEEDER CABLE FOR EXTERIOR LIGHTING WITH EXISTING AND PROPOSED UTILITIES, SITE DRAINAGE SYSTEMS, AND PAVING. CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNER'S REPRESENTATIVE SHOULD ANY UTILITIES, NOT SHOWN ON THE PLANS, BE FOUND DURING EXCAVATIONS.

WALL MOUNTED FIXTURES

10. CONTRACTOR TO COORDINATE INSTALLATION OF ALL THE WALL MOUNTED FIXTURES AND ELECTRICAL CONNECTIONS TO SITE STRUCTURE(S) WITH BUILDING MEP, ARCHITECT, AND/OR OWNER.

11. INSTALLATION AND ELECTRICAL CONNECTIONS FOR WALL MOUNTED FIXTURES TO BE COORDINATED WITH ARCHITECTURAL, STRUCTURAL, UTILITY AND SITE PLANS AND TO BE IN ACCORDANCE WITH ALL APPLICABLE CODES.

ADJUSTMENT AND INSPECTION

12. CONTRACTOR TO OPERATE EACH LUMINAIRE AFTER INSTALLATION AND CONNECTION. INSPECT FOR IMPROPER CONNECTIONS AND OPERATION.

13. CONTRACTOR TO AIM AND ADJUST ALL LUMINAIRES TO PROVIDE ILLUMINATION LEVELS AND DISTRIBUTION AS INDICATED ON THE CONSTRUCTION DRAWINGS OR AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR OWNER.

14. CONTRACTOR TO CONFIRM THAT LIGHT FIXTURES, TILT ANGLE AND AIMING MATCH SPECIFICATIONS ON THE PLANS.

REQUIREMENTS FOR ALTERNATES

15. ALL LIGHTING SUBSTITUTIONS MUST BE MADE WITHIN 14 DAYS PRIOR TO THE BID DATE TO PROVIDE AMPLE TIME FOR REVIEW AND TO ISSUE AN ADDENDUM INCORPORATING THE SUBSTITUTION WITH THE FOLLOWING REQUIREMENTS:
    - A. ANY SUBSTITUTION TO LIGHTING FIXTURES, POLES, ETC. MUST BE APPROVED BY THE OWNER, ENGINEER AND TENANTS. ANY COST ASSOCIATED WITH REVIEW AND/OR APPROVAL OF THE SUBSTITUTIONS SHALL BE ENTIRELY BORNE BY THE CONTRACTOR
    - B. COMPUTER PREPARED PHOTOMETRIC LAYOUT OF THE PROPOSED LIGHTED AREA WHICH INDICATES, BY ISOFOOTCANDLE, THE SYSTEM'S PERFORMANCE.
    - C. A PHOTOMETRIC REPORT FROM A NATIONAL INDEPENDENT TESTING LABORATORY WITH REPORT NUMBER, DATE, FIXTURE CATALOG NUMBER, LUMINAIRE AND LAMP SPECIFICATIONS; IES CALCULATIONS, POINT BY POINT FOOT CANDLE PLAN, STATISTIC ZONES SHOWING AVERAGE, MAXIMUM, MINIMUM AND UNIFORMITY RATIOS, SUMMARY, ISOLUX PLOT, AND CATALOGUE CUTS. CATALOGUE CUTS MUST IDENTIFY OPTICS, LAMP TYPE, DISTRIBUTION TYPE, REFLECTOR, LENS, BALLASTS, WATTAGE, VOLTAGE, FINISH HOUSING DESCRIPTION AND ALL OTHER PERTINENT INFORMATION.
    - D. POLE MANUFACTURER AASHTO CALCULATIONS INDICATING THE POLE AND ANCHOR BOLTS BEING SUBMITTED ARE CAPABLE OF SUPPORTING THE POLE AND FIXTURE SYSTEMS BEING UTILIZED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
    - E. THE UNDERWRITERS LABORATORY LISTING AND FILE NUMBER FOR THE SPECIFIC FIXTURE(S) TO BE UTILIZED.
    - F. A COLOR PHOTOGRAPH THAT CLEARLY SHOWS THE REPLACEMENT FIXTURE POLE MOUNTED, THE FIXTURE'S COLOR, FINISH, AND PHYSICAL CHARACTERISTICS.

GARDCO by Signify

Wall Mount

LED Wall Sconce

101L

Project:
Location:
Cat.No:
Type:
Lamps: Qty:
Notes:

Gardco 101 LED wall sconces feature a low-profile design that provides wide flexibility in high performance exterior wall illumination. Full cutoff performance, usable illumination patterns, and powerful wattages combine into a compact and architecturally pleasing design. 101L sconces are available in Type 2, 3, and 4 distributions, and provide output of up to 9500 lumens. Energy saving control options increase energy savings and offer California Title 24 compliance. Emergency Battery Backup option available for path of egress.

Ordering guide

example: 101L-32L-700-NW-G1-3-120-IMRI2-BZ

Prefix	Number of LEDs	Drive Current	LED Color – Generation	Distribution	Emergency	Voltage	Options: Controls	Options: Electrical	Options: Finish
101L									
101L 101L LED Wall Sconce	**16L** 16 LEDs (1 module) **32L** 32 LEDs (2 module)	**530** 530mA **650** 650mA **700** 700mA **1000** 1000mA **1200** 1200mA **530** 530mA **650** 650mA **700** 700mA **1000** 1000mA	**CW-G1** Cool White 5700K, 70CRI Generation 1 **NW-G1** Neutral White 4000K, 70CRI Generation 1 **WW-G1** Warm White 3000K, 70CRI Generation 1	**2** Type 2 **3** Type 3 **4** Type 4	**EBPC** Emergency Battery Pack Cold Weather[1,2,3] Leave blank to omit an emergency option	**UNV** 120-277V **HVU** 347-480V **120** 120V **208** 208V **240** 240V **277** 277V **347** 347V **480** 480V	**DD** 0-10V Dimming Driver[3,4] **DCC** Dual Circuit Control[4,7,8] **DynaDimmer:** Automatic Profile Dimming **CS50** Safety 50% Dimming (7 hours)[3,9,10] **CM50** Median 50% Dimming (8 hours)[3,9,10] **CE50** Economy 50% Dimming (9 hours)[3,9,10] **DA50** All Night 50% Dimming[3,9,10] **Photoelectric/Receptacle systems (Twist Lock Receptacle)** **PCR** Photocontrol Button[3,11,12,13] **TLR05** Twist Lock Receptacle 5-Pin[13] **TLR07** Twist Lock Receptacle 7-Pin[13] **TLRPC** Twist Lock Receptacle w/ Photocell[13,14] **Infrared Motion Response systems** **IMRI2** Integral with #2 lens[3,13,14] **IMRI3** Integral with #4 lens[3,13,14] **Network system (SiteWise)** **SW** SW Integral module[4,5] **Wireless system** **LLC2** Integral module with #2 lens[7,13,15,16] **LLC3** Integral module with #3 lens[7,13,15,16]	**Fusing** **F1** Single (120, 277, 347VAC)[3] **F2** Double (208, 240, 480VAC)[3] **F3** Canadian Double Pull (208, 240, 480VAC)[3] **Customer specified** **CC** Custom color (Must supply color chip for required factory quote)	**Textured** **BK** Black **WH** White **BZ** Bronze **DGY** Dark Gray **MGY** Medium Gray **Customer specified** **RAL** Specify optional color or RAL (ex: OC-LGP or OC-RAL7024) **CC** Custom color (Must supply color chip for required factory quote)
	32L 32 LEDs (2 module)	**530** 530mA **650** 650mA **700** 700mA **1000** 1000mA							

1. 650mA only available with Emergency Battery Pack Cold Rated (EBPC) option
2. 32L rated for 30°C at 1000mA
3. Available for use with 16L and 32L in 530mA or 650mA only. Rated for -20°C to 35°C.
4. Available in 120 or 277V only.
5. Not available with Dual Circuit Control (DCC) option.
6. EBPC is not available with DCC.
7. Not available with Dimming Driver (DD) option.
8. Available in 32L with 530mA. Consult technical support center for use with photocell and CS/CM/CE/DA.
9. Available in 120-277V (UNV) only.
10. Not available with LLC, TLR and DCC.
11. Not available with 480V.
12. Must specify input voltage.
13. TLR05/7 option not available with LLC, PCB, DCC. Works with 3 or 5 pin NEMA photocell dimming. Dimming will not be connected to TLR if ordering with DD, CS/CM/CE/DA and IMRI.
14. Not available with DD, DCC or LLC.
15. LLC2/3 Not available with TLR, PCB, IMRI, CS/CM/CE/DA. Ships with WS accessory attached to wireless module. Not for use with LLCR accessory
16. Not available with PCB, TLR05/7, DCC, LLC.
17. SW option is not available with any other control options with the exception of IMRI2, IMRI3 motion response options.

101L 10/18 page 1 of 7

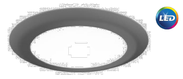
1 LIGHT FIXTURE TYPE A
NTS

GARDCO by Signify

Garage & Canopy

SoftView

SVPG with comfort optics



Project:
Location:
Cat.No:
Type:
Lumens: Qty:
Notes:

Gardco SoftView LED parking garage luminaires feature edge lit technology, providing visual comfort with minimal glare to enhance the user experience. An added uplight feature reduces the cave effect for an increased sense of security. SoftView features multiple optical distributions, lumen packages and mounting options providing you with the ideal solution for your garage lighting and low bay needs. Optional emergency battery backup available for path of egress lighting and is integral to the luminaire.

Ordering guide

example: SVPG-140L-210D-NW-G2-SM-5 -120-BL-IMRI2-MGY

Luminaire	Number of LEDs	Drive Current	Color Temperature	Mounting	Distribution	Emergency	Voltage	Options: Dimming controls	Options: Motion sensor	Options: Electrical	Options: Finish
SVPG											
SVPG SoftView Parking Garage	**140L** 140 LEDs (comfort engine) **286L**[1] 286 LEDs (comfort engine)	**450** 450mA **800** 800mA **1200** 1200mA **1675**[1,2,3] 1675mA **2100**[1,2,3] 2100mA **1200**[3] 1200mA **1675**[1,3] 1675mA **2100**[1,2,3] 2100mA **2400**[1,2,3,4,5] 2400mA **3000**[1,2,3,4,5,6] 3000mA **3400**[1,2,3,4,5,6,7] 3400mA	**NW-G2** Warm White 3000K (70 CRI) Generation 2 **NW-G3** Neutral White 4000K (70 CRI) Generation 2 **CW-G2**[1] Cool White 5000K (70 CRI) Generation 2 **WW-G2**[1] Warm Yellow 2700K (80 CRI) Generation 2 **BW-G2**[1] Balanced White 3500K (80 CRI) Generation 2 **BG-G2**[1] 3000K (80CRI) Generation 2 **BG-G3**[1] 4000K (80CRI) Generation 2 **BG-G2**[1] 5000K (80CRI) Generation 2	**SM** Surface / indirect pendant Mount, Normal vibration rated (pendant and junction box by others) **SBO** Surface Mount, Bridge / Overpass vibration rated **PM** Direct Pendant Mount, Bridge / Overpass vibration rated (pendant and junction box by others) **T**[1] Trunnion Mount (must also order separate line item TM mounting kit, see Accessories) **WM** Wall Mount (must also order separate line item WM mounting kit, see Accessories)	**1R** Type IR Rectangular **3**[1] Type III Asymmetric **5** Type V **CD** Concentrated Downlight	**none** leave blank **EBP**[1,2,3,4,5,6,7] Emergency Battery pack **EBPC**[1,2,3,4,5,6,7,8] Emergency Battery pack cold rated	**120** 120V **208** 208V **240** 240V **277** 277V **UNV** Universal 120-277V **347** 347V **480**[1] 480V **HVU**[1] Universal 347-480V	**none** leave blank **DD**[1,2,3,4,5,6,7,8,9] 0-10V Dimming external leads (controls by others) **BL**[1,2,3,4,5,6,7,8,9] Bi-level with motion sensor **LLC**[1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19] Wireless Controls	**none** leave blank **IMRI2**[1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19] Integral Motion Response, #2 lens **IMRI3**[1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19] Integral Motion Response, #3 lens **IMRI7**[1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19] Integral Motion Response, #7 lens (Factory customizable, contact factory*)	**Fusing** **none** leave blank **F1**[1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19] Single Fuse (120, 277, 347V) **F2**[1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19] Double Fuse (208, 240, 480V) **F3**[1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19] Double Fuse Canadian double pull (208, 240, 480V) **Surge Protection** **blank** SPI 10KV 10KA (standard) **SP2** 20KV 10KA (option)	**BZ** Bronze **MGY** Medium Gray **WH** White **OC**[1] Optional Color Specify optional color or RAL, ex: OC-LGP or OC-RAL7024. **SC**[1] Special Color Must supply color chip. Requires factory quote.
	286L[1] 286 LEDs (comfort engine)										

1. Choose either **EBP** suitable for 0°C (32°F) to +40°C (+104°F) or **EBPC** suitable for -20°C (-4°F) to +40°C (+104°F).
2. **EBP** or **EBPC** not available with **347V**, **480V** or **HVU**
3. **EBP** not available with 1675mA, 2100mA, 2400mA, 3000mA or 3400mA due to thermal restrictions.
4. **EBPC** not available with 2100mA, 2400mA, 3000mA or 3400mA due to thermal restrictions.
5. Must contact factory prior to ordering - these items are ETO Specials.
6. **LLC** not available with Emergency options (**EBP**, **EBPC**) due to thermal and fit restrictions.
7. Available with **120V**, **208V**, **240V**, **277V** or **UNV** only.
8. Provide specific input voltage.
9. Luminaire includes 0-10V dimming wires for dimming control by others.
10. 0-10V dimming driver standard.
11. Must be combined with Motion Sensing option (**IMRI2** or **IMRI3** or **IMRI7**), choose only 1 Motion Sensing option.
12. Must be combined with Dimming Controls option (**BL** or **LLC**).
13. Not available with Motion Sensing.
14. Choose only 1 Dimming Controls option: either **DD** or **BL** or **LLC**.
15. Trunnion Mount (**T**) not available with both **DD** and **EBP** or **EBPC**; is available with each individually (**DD** or **EBP** or **EPBC**).
16. **IMRI2**, **IMRI3**, or **IMRI7** not available with 3000mA or 3400mA due to thermal restrictions.
17. Extended lead times apply. Contact factory for details.
18. **5** Type III Asymmetric not available with any 286L configurations due to thermal and fit restrictions.
19. **LLC** Wireless Controls not available with 2400mA, 3000mA, or 3400mA due to fit restrictions (2x drivers).

SoftView_Gen2-Parking_Garage_luminaire 10/19 page 1 of 5

2 LIGHT FIXTURE TYPE B
NTS

06/18/20	P&Z SUBMISSION	1
Date	Description	No.

REVISIONS

STATE OF CONNECTICUT MICHAEL SZURA 1339 LICENSED LANDSCAPE ARCHITECT

SIGNATURE MICHAEL SZURA DATE SIGNED
LICENSED LANDSCAPE ARCHITECT
STATE LIC. No. 1339

LANGAN

Langan CT, Inc.
555 Long Wharf Drive
New Haven, CT 06511

T: 203.562.5771 F: 203.789.6142 www.langan.com

Project
BURLINGTON COAT FACTORY EXPANSION AT BROOKSIDE PLAZA
50 HAZARD AVENUE
ENFIELD CONNECTICUT

Drawing Title
SITE LIGHTING NOTES & DETAILS

Project No. 140161101
Date 06/18/2020
Drawn By XW
Checked By JA/MH

Drawing No. LL501

Sheet 12 of 12

LANGAN

PROJECT NO. 140161101

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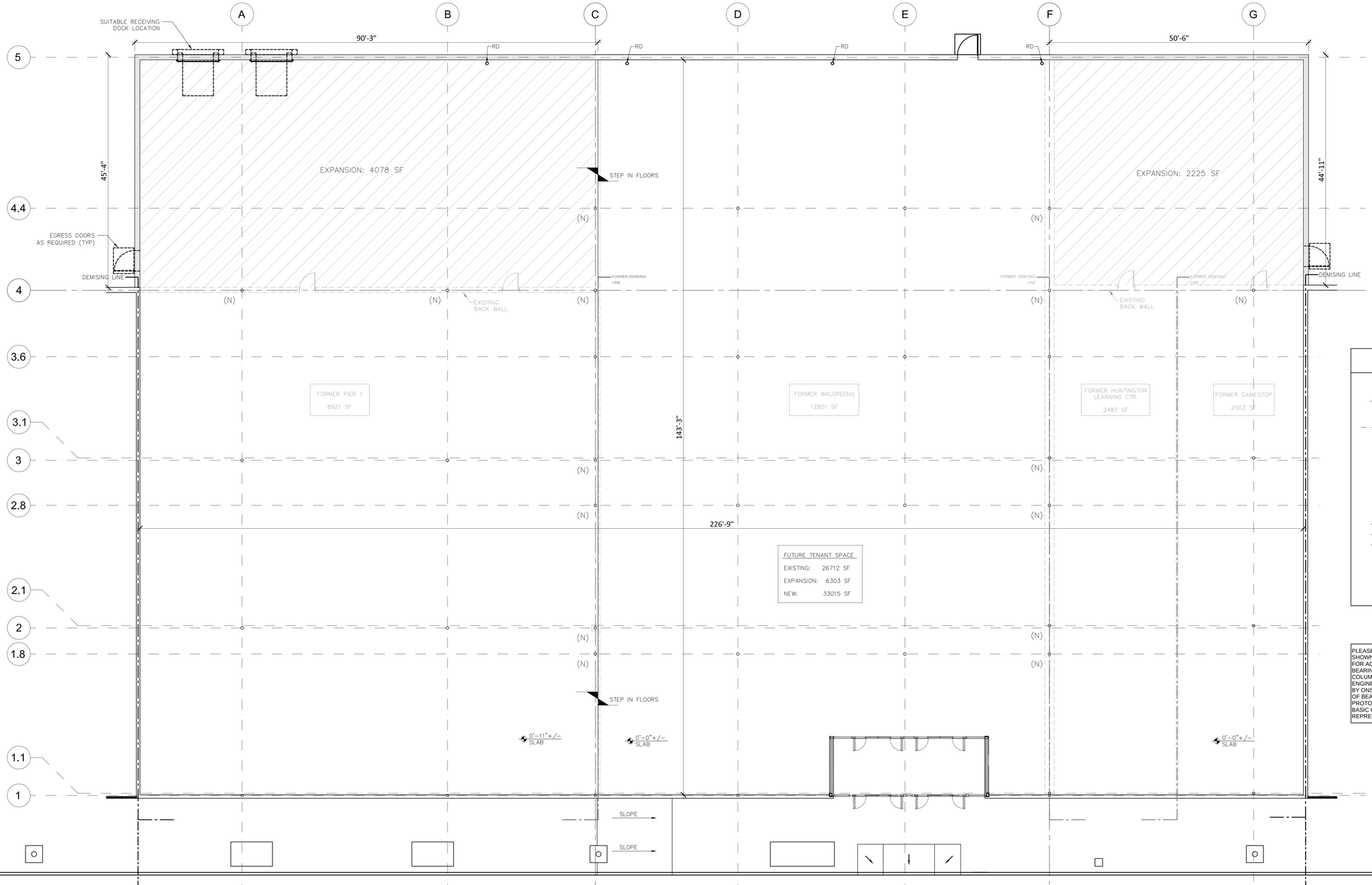
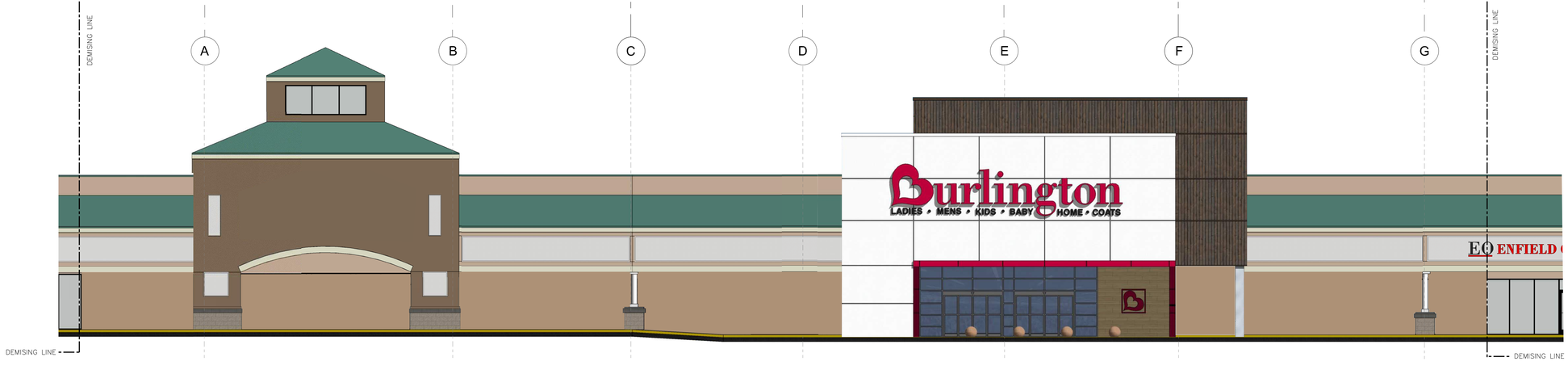


LEGEND

- EXISTING COL. LINE
- NEW COL. LINE
- (N) DENOTES POSSIBLE LOCATION OF NEW STRUCTURAL COL.
- NEW EXTERIOR MASONRY WALL
- AREA OF EXPANSION
- EXISTING DEMISING AND EXTERIOR WALLS

PLEASE NOTE THAT NEW COLUMNS AND COL. LINES SHOWN REPRESENT MOST PROBABLE LOCATIONS FOR ADDED STRUCTURE NEEDED TO REPLACE BEARING WALL(S) REMOVED AS PART OF THIS LOD. COLUMN GRID SHOWN DOES NOT REPRESENT AN ENGINEERED DESIGN AND HAS NOT BEEN VERIFIED BY ONSITE SURVEY TO DETERMINE CONSTRUCTION OF BEARING WALLS AND ASSEMBLIES. SIMILARLY, PROTOTYPICAL TENANT FACADE IS SHOWN FOR BASIC OF SCHEMATIC DESIGN ONLY AND DOES NOT REPRESENT EXACT FINAL POSITION OR DIMENSION.

NEW LOD PLAN
1/8" = 1'-0"



PROPOSED ELEVATION
1/8 = 1'-0"

SARGENTI
1628 JFK BOULEVARD, PHILADELPHIA, PA 19103
T|215.482.1950 • WWW.SARGARCH.COM

CONSULTANTS

CONSULTANTS

ARCHITECTURAL SEAL

DATE	ISSUE	
04/30/20	OWNER REVIEW	

PROJECT NAME / LOCATION

PROPOSED LOD

BROOKSIDE PLAZA
30 HAZARD AVENUE
ENFIELD, CT

PROJECT INFORMATION

DATE: 04/30/2020
PROJECT NO. 5327-20
DRAWN BY: PAS

FOR OWNER REVIEW

SHEET TITLE / NUMBER

LOD-1

LANGAN

Memorandum

Langan CT, Inc.
555 Long Wharf Drive New Haven, CT 06511 T: 203.562.5771 F: 203.789.6142

To: Town of Enfield Planning and Zoning Commission

From: Langan
Nathan Kirschner
Brian Phillips, P.E.

Date: 05 June 2020

Re: Stormwater Management Memo
Burlington Coat Factory Expansion at Brookside Plaza
50 Hazard Avenue
Enfield, Connecticut
Langan Project Number: 140161110

RECEIVED
ENFIELD PLANNING DEPT
2020 JUN 19 PM 2:49

This memorandum addresses stormwater management design for the proposed Burlington Coat Factory Expansion at Brookside Plaza located on 50 Hazard Avenue (Route 190) in Enfield, Connecticut. Brookside Plaza totals about ±34.3 acres, however, this analysis is restricted to the project limit of disturbance of development of about ±1.5 acres.

The proposed project includes the construction of a single story ±6,300 square-foot building expansion with associated utility infrastructure, drainage, landscaping, loading dock and drive-way revisions necessary to incorporate the expansion into the existing loading area. The development will occur within the existing Brookside Plaza loading area and will result in a net reduction in impervious surfaces.

The Brookside Plaza property is located in the Freshwater Brook Subregional Drainage Basin. Under existing conditions, site drainage within the project limits flows overland and is captured by a series of catch basins which ultimately discharge to a town-owned storm drainage network.

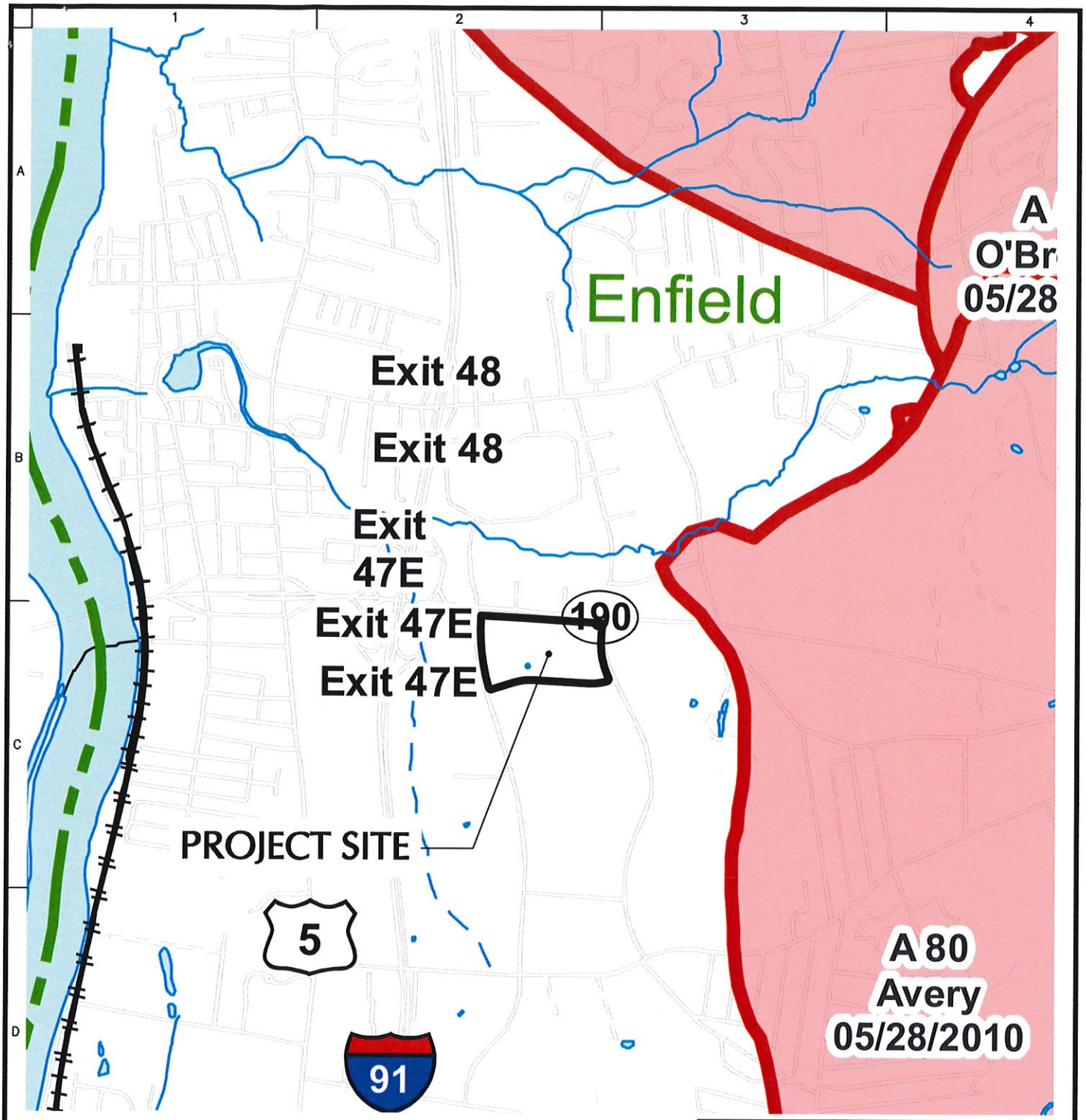
In the proposed condition, drainage patterns have been largely maintained and the existing drainage network has been utilized. The project has been designed to allow for a zero net increase of impervious surfaces by replacing paved areas with landscape islands, maintaining groundwater recharge, water quality, and runoff rates.

The proposed stormwater management system has been designed to maintain existing flow patterns and utilize the existing stormwater conveyance system on-site. The development will maintain peak flow rates, water quality, ground water recharge, and previous surfaces. We believe that the proposed stormwater system, as designed, will effectively manage stormwater runoff.

LIST OF FIGURES

Fig. 1: **Aquifer Protection Map**

Fig. 2: **FEMA Map**



NOTE:

AQUIFER PROTECTION AREA MAP INFORMATION TAKEN FROM CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION WEBSITE (https://portal.ct.gov/DEEP/Aquifer-Protection-and-Groundwater/Aquifer-Protection/Aquifer-Protection-Area-Maps) ON 06/05/2020.

LEGEND

- Level A APA (Final Adopted)
- Level A APA (Final)
- Level B APA (Preliminary)
- Town Boundary

LANGAN Langan CT, Inc. 555 Long Wharf Drive New Haven, CT 06511 T: 203.562.5771 F: 203.789.6142 www.langan.com	Project BURLINGTON COAT FACTORY EXPANSION AT BROOKSIDE PLAZA 50 HAZARD AVENUE ENFIELD CONNECTICUT	Drawing Title AQUIFER PROTECTION MAP	Project No. 140161101 Date 06/05/2020 Drawn By IJAB Checked By DTG	Drawing No. FIG. 1 Sheet 1 of 2

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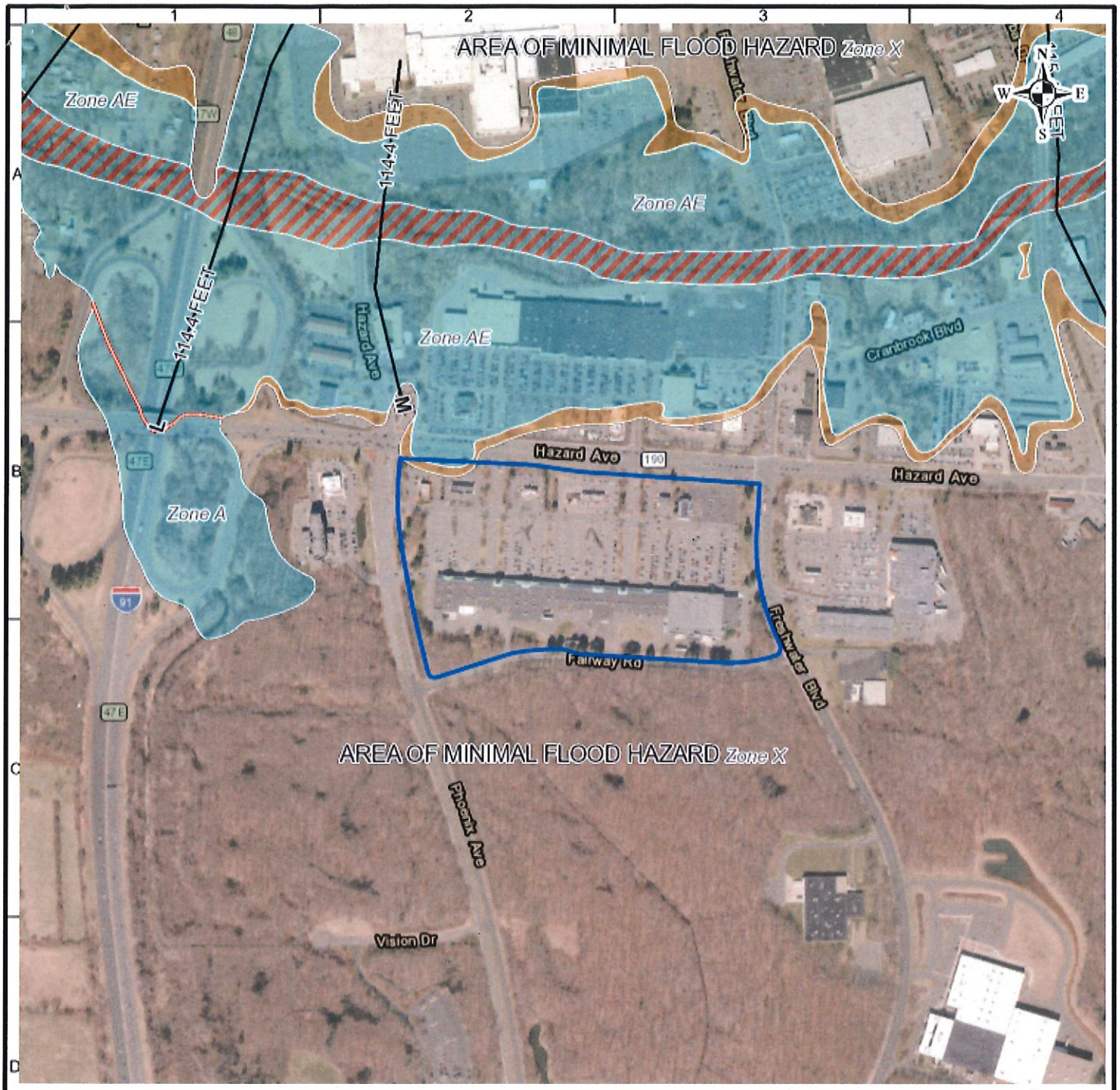
Filename: \\langan.com\data\NHV\data1\140161101\Cadd Data - 140161101\SheetFiles\Figures\FG01-140161101-CA701-0101.dwg Date: 6/5/2020 Time: 10:38 User: ibrown Style Table: Langan.stb Layout: ANSIA-BP



Approximate Site Boundary

1% Annual Chance Flood Hazard

Regulatory Floodway

Special Floodway

Area of Undetermined Flood Hazard

0.2% Annual Chance Flood Hazard

Future Conditions 1% Annual Chance Flood Hazard

Area with Reduced Risk Due to Levee

700 0 700

SCALE IN FEET

Notes:
Base map provided by FEMA, Panel 09003C022F, Effective September 26, 2008.

LANGAN

Long Wharf Maritime Center, 555 Long Wharf Drive
New Haven, CT 06511
T: 203.562.5771 F: 203.789.6142 www.langan.com

Langan Engineering & Environmental Services, Inc.
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.
Langan International
Collectively known as Langan

Project

10-38 HAZARD AVENUE

ENFIELD

HARTFORD COUNTY CONNECTICUT

FEMA FLOOD INSURANCE RATE MAP

Project No. 140161101	Figure 2
Date 11/21/2019	
Scale 1:700	
Drawn By MG	
Submission Date 11/21/2019	Sheet 2 of 3

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TOWN OF ENFIELD

ENFIELD PLANNING & ZONING COMMISSION
STAFF REPORT & DRAFT RESOLUTION

Application #	SPR# 1829	**Meeting Date:**	July 23, 2020
Address:	10 Hazard Avenue	**Prepared By:**	Jennifer Pacacha, MRP AICP
Applicant:	Regency Centers, c/o Michael Lai		Assistant Town Planner
Property Owner:	Equity One (Northeast Portfolio) LLC., c/o Michael Lai	**Wetlands/Watercourses:**	Yes
Zone:	BR	**Aquifer Protection Areas:**	No
Current Use:	Retail	**Flood Zones:**	No
Proposed Use:	Retail	**Variances:**	No
Map/Lot:	56/22	**Applicable Zoning Regulations:**	See Below

SITE PLAN REVIEW

PROPOSAL:
Within the Brookside Plaza shopping center, Walgreens is no longer a tenant. Burlington Coat Factory would like to take the space of the former Walgreens, and is proposing a 6,300 square foot building addition to the rear of the building.

The Inland Wetlands & Watercourses Agency has granted Agent Approval for this project.

Minor Site work is proposed in the rear of the building to accommodate the expansion.

ADJACENT USES:
North: Business Regional
South: Industrial-Professional
East: Business Regional
West: Business Regional

APPLICABLE ZONING REGULATIONS:
Table 5.10 – Lot and Bulk Requirements

> **Business Regional** (Footnote 9: The requirements of this section with respect to the Business R District shall apply only to the area of the entire site included in the approved Special Permit plan and, except for the maximum <u>building height</u>, shall not apply as a restriction to any subdivision of the original Special Permit plan area.

Min. Lot Area – 9 Acres
Min. Frontage – 250 feet (Footnote 3: Except for as provided in Section 5.30.2)
Min. Front Yard – 35 feet (Footnote 3: Except for as provided in Section 5.30.2)
Min. Side Yard – 30 feet
Min. Rear Yard – 30 feet
Min. Floor Area – 80,000 square feet
Max. Impervious Coverage – 66% (Footnote 4: May be increased to 70% for a regional shopping center when the Commission determines that offsite drainage will not be increased in a manner to be detrimental to downstream properties.) (A variance was issued allowing lot coverage to be up to 72%.)
Max. Building Coverage – 45%
Max. Building Height – 72 feet (Footnote 1: For each additional five (5) feet of front yard setback above the minimum requirement, an additional one (1) foot of building height is permitted, but in no case shall such additional height exceed 24-feet. If the building height listed in the table above is to be exceeded, then the minimum side and rear yards shall be increased by one (1) foot for each one (1) foot of additional building height permitted.

Proposed Lot and Bulk – The Lot & Bulk Requirements are shown on CS101 of the plan set in the Zoning Table. All but Impervious Coverage has been met. No increase in impervious coverage is proposed. The applicant will be adding landscaping in order to ensure no increase in impervious coverage takes place.

Table 5.20 Use Requirements –

Retail Stores – Allowed in BR Zones with a Special Permit – It is already an approved use for this site.

Section 7.10.7 Drainage - No structure shall be used, erected or expanded and no land shall be graded or paved unless provisions have been made for the proper disposal of drainage water, particularly from parking areas and driveways, from the areas contiguous to property lines and from low areas which tend to collect water. – **A stormwater/drainage memo was included with the application. No change in impervious coverage is proposed, therefore no change in drainage is proposed either.**

Section 7.20 Erosion and Sedimentation Control Requirements
7.20.1 Activities Requiring a Certified Soil Erosion and Sedimentation Control Plan - A soil erosion and sediment control plan shall be submitted with any application for development when the disturbed area of such development is cumulatively more than one-half (½) acre. – **An erosion control plan was included in the site plan set, but only shows stockpile area. Planning Staff recommends requiring silt fences along the exterior limits of disturbance and protection for any catch basins within the limits of disturbance.**

Section 10.10.2 – Number of Required Parking and Loading Spaces
Retail Sales – 1 space per 150 square feet of sales/customer area

The shopping center has ample parking to accommodate the added area.

MOTION TO APPROVE SPR# 1829 – 10 Hazard Avenue – to allow a 6,300 square foot building addition associated with Burlington Coat Factory; Equity One (Northeast Portfolio) LLC., c/o Michael Lai, owner; Regency Centers, c/o Michael Lai, applicant; Map 56/Lot 22; Business Regional Zone with according to the below referenced plans and with the following conditions of approval:

General Conditions:
1. This approval is for the specific use, site, and structure identified in the application. Any change in the nature of the use, site, or the structure will require new approvals from the Enfield Planning and Zoning Commission.
2. This approval does not include signage permits.
3. There is to be no exterior sheet metal venting pipes visible from the street.
4. Exterior mechanicals and electricals are to be boxed and screened.
5. This project shall be constructed and maintained in accordance with the referenced plans.
6. A building permit for the construction of facilities as approved must be obtained within 24 months of approval or this approval shall be rendered null and void, unless an extension is granted by the Commission.
7. All construction authorized by this approval shall be completed within five (5) years or this approval shall be considered null and void, unless an extension is granted by the Commission.
8. By acceptance of this permit and conditions, the applicant and owner acknowledge the right of Town staff to periodically enter upon the subject property for the purpose of determining compliance with the terms of this approval.

Site Specific Conditions:
9. Silt fencing must be installed along the limits of disturbance.
10. Any catch basins within the limit of disturbance must be protected with erosion and sedimentation controls.
11. All Erosion & Sedimentation Controls must be shown on final plans.

Conditions to be met prior to signing of plans:
12. All plans submitted for signature shall bear the seal and live signature of the appropriate professional(s) responsible for the preparation of the plans.
13. The application number shall be displayed on the plans in or near the Title Block area.
14. A copy of the approval letter and conditions shall be incorporated into the final plans submitted for signature, preferably located on the cover sheet or first sheet of the plan set.

15. A list outlining how the conditions of approval have been met shall be submitted along with final plans submitted for signature.
16. A list outlining all changes to the plans shall be submitted along with final plans submitted for signature. The list should cite the sheet number where each change has been made.
17. The conditions of this approval shall be binding on the applicant, land owners, and their successors and assigns.

Conditions to be met prior to the issuance of permits:

18. Two sets of paper plans with any required revisions incorporated shall be submitted to the Planning Department for signature of the Commission. The Director of Planning may require Mylars.
19. The applicant shall also submit final plans as approved by the Commission in a digital format compatible with the Enfield Geographic Information Systems Electronic Submittals Ordinance.
20. The applicant shall post a separate bond for Erosion and Sediment Control submitted in the form of cash or certified check, pledged to the Town, in an amount to be determined by the Town Engineer and the Director of Planning.
21. A pre-construction meeting between the applicant, site contractors, project engineer and Town Staff shall be held.

Conditions which must be met prior to the Issuance of a Certificate of Compliance:

22. Complete as-built plans certified to Class A-2 accuracy shall be submitted prior to the issuance of any certificates of zoning compliance. The as-built plan shall also contain a certification by a Professional Engineer that they have inspected the site improvements and that they have been installed in accordance with the approved plans. Any deviations or omissions must be noted.
23. The design professional who prepared the approved PZC architectural drawings, shall provide as-built drawings with a certification that they have complied with approved plans. Any changes need to be noted on the plans and a list of changes submitted.
24. No Certificate of Occupancy or other final approval may be issued until the Zoning Enforcement Officer has signed off on the final work. When minor site work cannot be completed because of weather or other pertinent reason, a conditional approval may be issued for a period not to exceed 180 days, providing satisfactory surety shall be posted with the Town of Enfield in an amount sufficient to complete the site work and with surety acceptable to the Town of Enfield.
25. A request for final project review and certificate of zoning compliance must be made to the Planning Department not less than 10 days before a Certificate of Occupancy or other final approval is requested from the Building Official.

Note: The Conditions of Approvals do not take the place of other requirements found in the Town Codes, Regulations, and Application Instructions.

REFERENCE PLANS

1/13 – Cover Sheet – "Planning & Zoning Commission Submission – Burlington Coat Factory Expansion at Brookside Plaza" 50 Hazard Avenue aka 10 Hazard Avenue; Map 56/Lot 22; Town of Enfield, Hartford County, Connecticut; Prepared for Equity One (Northeast Portfolio), LLC c/o Michael Mai, 28 Church Lane, Suite 200, Westport, Connecticut 06880, (203) 635-5570; Prepared by Langan CT, Inc. c/o Nathan Kirschner, 555 Long Wharf Drive, New Haven, CT 06511; Prepared May 22, 2020; Revised June 18, 2020.

2/13 – Partial Boundary and Topographic Survey – Sheet VT401

3/13 – General Notes and Master Legend – Sheet CS002

4/13 – Overall Site Plan – CS100

5/13 – Site Plan – CS101

6/13 – Site Details – CS501

7/13 – Site Details II – CS502

8/13 – Grading, Drainage, Utility, and Erosion Control Plan – CG101

9/13 – Grading, Drainage, Utility, and Erosion Control Plan Details I – CG501

10/13 – Grading, Drainage, Utility, and Erosion Control Details II – CG502

11/13 – Site Lighting Plan – LL01

12/13 – Site Lighting Details – LL501

13/13 – Proposed LOD – LOD-1

TOWN OF ENFIELD

Special Use Permit & Site Plan Review Application

Planning Division • 820 Enfield Street Enfield, CT 06082
Telephone: 860-253-6355 Website: www.enfield-ct.gov

Special Use Permit

Application For: ☐ New Special Use Permit ☐ Other _____
☐ Modification of Plan Previously Approved _____
☐ Modification of Conditions of Approval of a Special Permit: _____

Site Plan Review

Application For: ☒ New Site Plan Review ☐ Other _____
☐ Modification of Plan Previously Approved _____
☐ Modification of Conditions of Approval of a Site Plan: _____

Staff Use Only					
PH #:		**SPR #:**	1830	**XSP #:**	
View Permit #:	TPL-20-39				
Zoning Regulation Section:	5.20				

PLEASE REVIEW LAND USE APPLICATION GUIDE FOR INSTRUCTIONS

Property Address: 74 Palomba Drive **Map #:** 056 **Lot #:** 0025
Zone(s): BL **Size of Parcel:** 1.15 **Account #:** 06320002 0027
Current Use: Commercial
Project Name: Anthonys Restaurant + Pizzeria
Summary Description: I would Like To change units HIJ To be used as Restaurant area

Applicant's Name: Dimitris Patetsos
Applicant's Address: 8 Theodore Street Enfield CT 06082
Contact #: 860-916-7889 **Email:** dpatetsos@icloud.com

TOWN OF ENFIELD

Applicant's Representative: _____

Representative Address: _____

Contact #: _____ **Email:** _____

Does Applicant own the Property? ☐ Yes (Attach Copy of DEED)
☐ No (Provide Information Below & Attach Letter of Authorization)

Owner's Name: _____

Owner's Contact #: _____

Owner's Address: _____

Owner's Email: _____

Project Information:

Septic: ☒ Yes ☒ No

Public Sewer: ☐ Yes ☐ No

Well Water: ☐ Yes ☒ No

Public Water: ☒ Yes ☐ No

Outdoor Storage: ☐ Yes ☒ No

Design District: ☐ Yes ☐ No

Do wetlands and watercourses affect this application? ☐ Yes ☒ No

Is the property within a Level A or Level B Aquifer Protection Area? ☐ Yes ☒ No

Does this application include any regulated activity in a floodplain ☐ Yes ☒ No

(If yes, you will need to also submit a Flood Hazard Development Permit application to the Planning & Zoning Commission)

What is the total lot acreage? 1.15

What is the length of the property frontage? (List by Street) _____

_____

_____

Name the abutting street(s): _____

_____

_____

TOWN OF ENFIELD

What are the existing land uses and zoning districts for abutting properties or across the street(s)?

North _____

East _____

South _____

West _____

Environmental History:

Phase I: Land Records reviewed for environmental hazards? ☐ Yes ☒ No

Phase II: Environmental Hazards Identified? ☐ Yes ☒ No

If yes, please list the environmental conditions found: _____

Phase 3: Is there a remediation plan? ☐ Yes ☒ No

If yes, please describe the remediation plan: _____

Are there environmental restrictions on the property? ☐ Yes ☒ No

If yes, please list environmental restrictions: _____

TOWN OF ENFIELD

The undersigned hereby permits town staff and commission members to enter into and inspect this site during reasonable hours for the purpose of reviewing this application and accompanying plans. I hereby depose and say that all of the above statements as well as the statements contained in all papers filed herewith are true.

☐ **I have reviewed and acknowledge the Land Use Application Guide for further instructions on how to complete my application.**

Applicant Signature: D. Paterso **Date:** 7-2-20

Print Name: Dimitrios Paterson

Subscribed and sworn to before me _____ **day of** _____**, 20**_____.

_____ _____

Notary Public **My Commission Expires:**

INSTR # 2020001854
VOL 2729 PG 709 07/29/2019 02:31:06 PM
RECORDED IN ENFIELD CT
SUZANNE F. OLECHNICKI TOWN CLERK
TOWN CONVEYANCE TAX RECEIVED $1,887.50
STATE CONVEYANCE TAX RECEIVED $9,437.50

After recording, please return to:
Silver & Silver LLP
One Liberty Square
New Britain CT 06051

WARRANTY DEED

SMYTH SISTERS LLC, a Connecticut limited liability company with its principal office located in the Town of Enfield, County of Hartford and State of Connecticut ("Grantor") for consideration paid, grants to **PALOMBA DRIVE LLC**, a Connecticut limited liability company with its principal office located in the Town of Enfield, County of Hartford and State of Connecticut ("Grantee") with WARRANTY COVENANTS, all of its interest in and to a certain parcel of land with the improvements thereon known as 74 Palomba Drive, Enfield, Connecticut, and being more particularly bounded and described as follows:

A certain piece or parcel of land with the buildings and improvements thereon, situated in the Town of Enfield, County of Hartford and State of Connecticut and located in the southwest corner of Palomba Drive and Cranbrook Boulevard, known as "74 Palomba Drive" and shown as "Parcel 4" on a certain map or plan on file in the Enfield Town Clerk's Office and recorded in Map Volume 204, Page 2241 entitled "Property of Robert D. Smyth, Smyth Farm Dairy Bar, Dale v. Roberts and Glenn Toner Hazard Avenue, Palomba Drive & Cranbrook Blvd., Enfield, Conn. Scale: 1 in. = 40 ft. Date: June 15, 1983 with revisions dated 2/29/84, 7/13/84 & 1/21/84 Alford Associates, Inc. Civil Engineers Windsor, Connecticut", and more particularly bounded and described as follows:

NORTHERLY: by Cranbrook Boulevard, 236.05 feet;

EASTERLY: by Palomba Drive, 228.53 feet;

SOUTHERLY: by "Parcel 3" as shown on said map, 263.21 feet; and

WESTERLY: by land now or formerly of John G. Fenton, 180 feet.

Being a portion of the first piece described in a deed from Richard M. Smyth, Inc. to Robert D. Smyth and Richard V. Smyth dated March 23, 1967 and recorded in Volume 274, Page 222 of the Enfield Land Records. Said premises are also a portion of the first piece described in a deed from Richard W. Smyth to Robert D. Smyth dated February 13, 1979 and recorded in Volume 440, Page 78 of the Enfield Land Records.

Said premises are subject to municipal taxes due the Town of Enfield on the List of October 1, 2018, and thereafter which taxes the herein named Grantee assumes and agrees to pay as part consideration for this Deed.

Said premises are also subject to any liens, encumbrances, easements and restrictions appearing of record, to any and all provisions of any municipal ordinances and/or regulations and public or private law, and to building and building line restrictions, and to zoning and inland-wetland regulations.

Signed this 26th day of July, 2019.

Witnessed by:

Witness - Despina C. Tartsinis

Witness - George F. Varessis

GRANTOR:
SMYTH SISTERS LLC

Mary S. Leveille, Managing Member
Its Duly Authorized

STATE OF CONNECTICUT)
) ss. East Windsor
COUNTY OF HARTFORD)

The foregoing instrument was acknowledged before me on July 26, 2019 by Mary S. Leveille, Managing Member of Smyth Sisters LLC, as her free act and deed, and the free act and deed of the company.

Despina C. Tartsinis, Esq.
Commissioner of the Superior Court

Grantee's Address:
74 Palomba Drive
Enfield CT 06082

To Whom it may concern

I Dimitrios Patetsos give my permission for a change of use permit for 74 Palomba Dr

D. Patetsos Date 5/6/20

Business Inquiry

Business Details

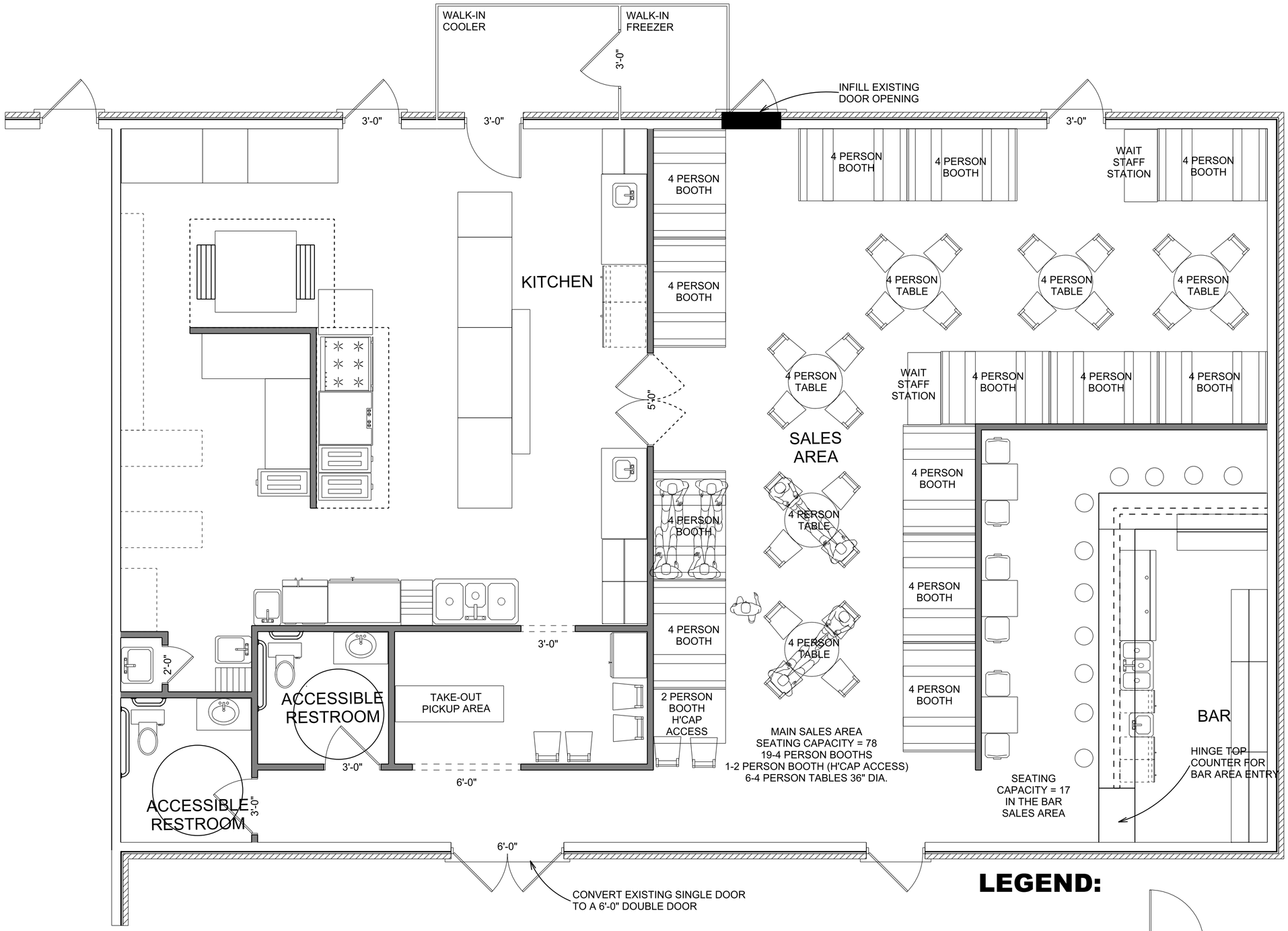
Business Name:	**PALOMBA DRIVE, LLC**	Citizenship/State Inc:	**Domestic/CT**
Business ID:	**1308405**	Last Report Filed Year:	**2020**
Business Address:	**74 PALOMBA DRIVE, ENFIELD, CT, 06082, USA**	Business Type:	**Domestic Limited Liability Company**
Mailing Address:	**8 THEODORE STREET, ENFIELD, CT, 06082, USA**	Business Status:	**Active**
Date Inc/Registration:	**May 03, 2019**		
Annual Report Due Date:	**03/31/2021**		
NAICS Code:	**Real Estate and Rental and Leasing (53)**	NAICS Sub Code:	**General Rental Centers (532310)**

Principals Details

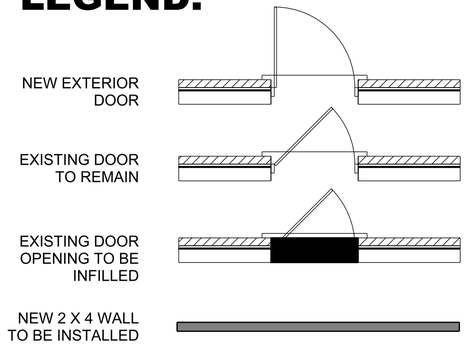
Name/Title	Business Address	Residence Address
DIMITRIOS PATETSOS MEMBER	74 PALOMBA DRIVE, ENFIELD, CT, 06082, USA	8 THEODORE STREET, ENFIELD, CT, 06082, USA

Agent Summary

Agent Name	**SILVER & SILVER LLP**
Agent Business Address	**ONE LIBERTY SQUARE, NEW BRITAIN, CT, 06051**
Agent Residence Address	**NONE**
Agent Mailing Address	**ONE LIBERTY SQUARE, NEW BRITAIN, CT, 06051**



LEGEND:



DESIGN WORKS of New England LLC
P.O. BOX 251
WINDSOR LOCKS, CT 06096
TEL: 860-670-0366
mjpdesignworks@gmail.com

NO.	DESCRIPTION	DATE
1	MISC.TO EXISTING DOORWAY	9/4/19

REVISIONS

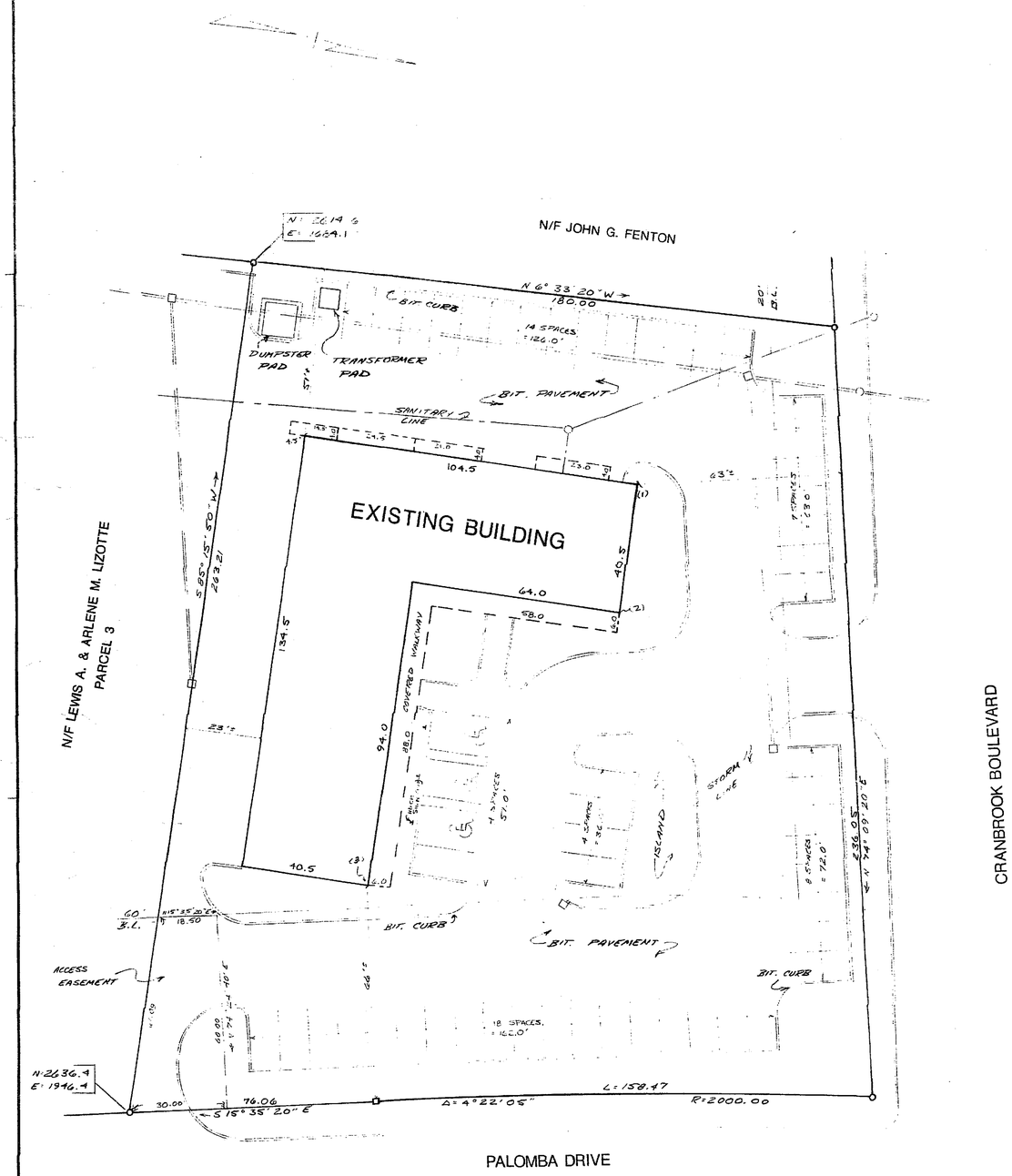
ALTERATIONS TO
74 PALOMBA DRIVE
ENFIELD, CT 06082

DRAWING TITLE:
KITCHEN EQUIPMENT AND FURNITURE PLAN

DO NOT SCALE

PROJECT #	SCALE:	DATE:
023-019	AS NOTED	9/29/19

DRAWING NUMBER:
Q-101



UNIT SCHEDULE:

UNIT	PERCENT OWNERSHIP	FLOOR AREA SQ. FT.
A	14.0548	1000
B	10.1195	720
C	10.4706	745
D	8.4329	600
E	6.7463	480
F	9.5573	680
G	6.8166	485
H	11.3141	805
I	11.0330	785
J	11.4547	815

BUILDING CORNER	COORDINATES	
	NORTH	EAST
(1)	2749.3	1724.7
(2)	2749.3	1764.7
(3)	2692.8	1863.4

NOTES:

1. AREA OF PARCEL: 50,260 S.F.
2. COORDINATES BASED ON ASSUMED DATUM.

LEGEND:

STORM DRAINAGE
CATCH BASIN
SANITARY SEWER
MAN HOLE
x(1) x(2) x(3) BUILDING CORNERS

8 4 0 8 16 24
6 2
SCALE IN FEET

REVISION	DATE

STATE OF CONNECTICUT WILSON M. ALFORD, SR. No. 2163 REGISTERED PROFESSIONAL ENGINEER

STATE OF CONNECTICUT WILSON M. ALFORD, SR. No. 2163 REGISTERED LAND SURVEYOR

I HEREBY CERTIFY THAT THIS MAP COMPLIES WITH A2 CLASSIFICATION AS DEFINED BY CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC.

Wilson M. Alford Jr.

Alford
ASSOCIATES, INC.

CIVIL ENGINEERS
WINDSOR, CONNECTICUT

WILSON M. ALFORD, SR., P.E. & L.S.
WILSON M. ALFORD, JR., P.E. & L.S.

DATE: DEC 19, 1986

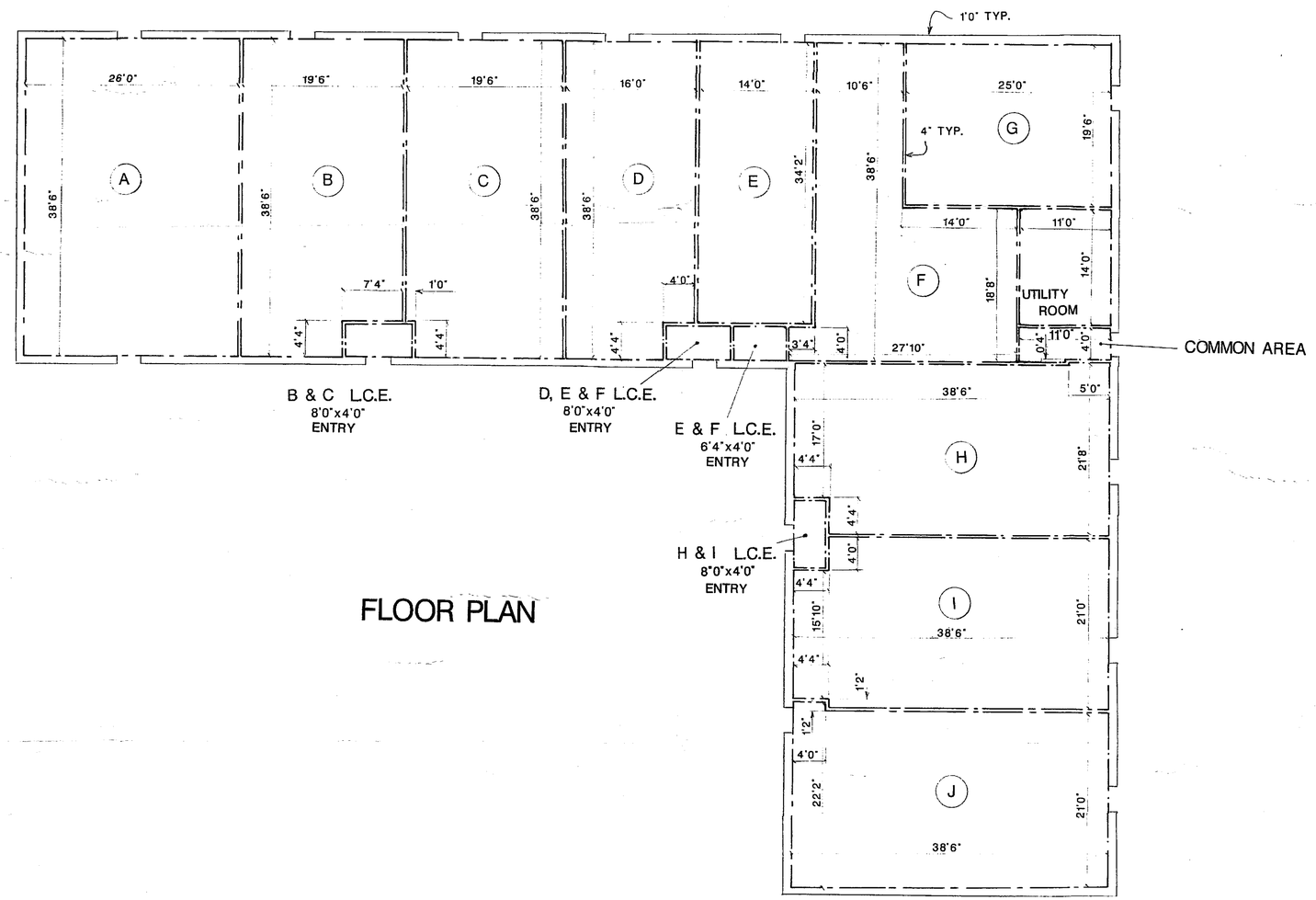
SCALE: 1 IN. = 20 FT.

SITE PLAN & UNIT SCHEDULE
PARCEL 4
PREPARED FOR
ROBERT D. SMYTH

POLUMBA DRIVE & CRANBROOK BOULEVARD
ENFIELD, CONN.

Sheet
1 of 2

JOSEPH MERRITT & CO.



FLOOR PLAN

LEGEND

— — — —	UNIT BOUNDARY
A	UNIT I.D.
A & B L.C.E.	LIMITED COMMON ELEMENT
	LIMITED COMMON ELEMENT BOUNDARY
	RESERVED FOR UNITS AS NOTED

20 10 0 20 40 60

15 5

SCALE IN FEET

REVISION	DATE

STATE OF CONNECTICUT WILSON M. ALFORD, SR. No. 2163 REGISTERED PROFESSIONAL ENGINEER

STATE OF CONNECTICUT WILSON M. ALFORD, SR. No. 2163 REGISTERED LAND SURVEYOR

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Wilson M. Alford Jr.

Alford ASSOCIATES, INC.

CIVIL ENGINEERS
WINDSOR, CONNECTICUT

WILSON M. ALFORD, SR., P.E. & L.S.
WILSON M. ALFORD, JR., P.E. & L.S.

DATE: DEC. 19, 1986

SCALE: 1 IN. = 8 FT.

UNIT PLANS
PARCEL 4
PREPARED FOR
ROBERT D. SMYTH

PALOMBA DRIVE & CRANBROOK BOULEVARD
ENFIELD, CONN.

Sheet
2 of 2

JOSEPH MERRITT & CO

FILE SMYTH

TOWN OF ENFIELD

ENFIELD PLANNING & ZONING COMMISSION
SPR# 1830 – 74 PALOMBA DRIVE
STAFF REPORT
JULY 23, 2020

Address:	**74 PALOMBA DR**	**Prepared By:**	**R. Rachele**
Applicant:	**(Owner)-Dimitrios Patetsos (Agent)-Mike DelConte**		
Property Owner:	**Palomba Drive, LLC**	**Wetlands/Watercourses:**	**Yes**
Zone:	**BL**	**Aquifer Protection Areas:**	**Yes**
Current Use:	**Retail**	**Flood Zones:**	**Zone A**
Proposed Use:	**Restaurant**	**Variances:**	
Map/Lot:	**056 // Lot 0025**	**Applicable Zoning Regulations:**	**5.20 – Use Table**

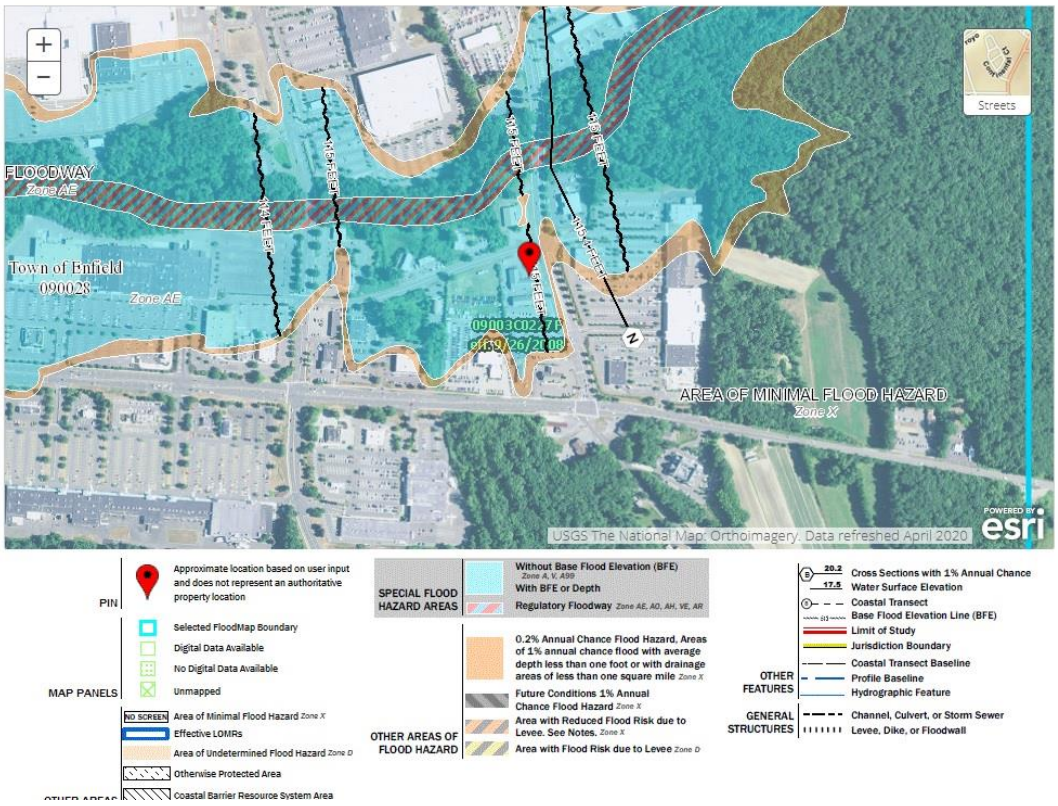
Background:
This is an application to combine three retail spaces into one larger space and to change the use from retail to a restaurant at 74 Palomba Drive. The existing three spaces are approx. 808 square feet in size each. The combining of the three units will create one space of approx. 2,426 square feet to be utilized as a restaurant area.

Wetlands – The property does have a small portion of wetlands located on it in the area of the southeast corner of the property, but is not in the vicinity of the proposed change. The change would not disturb the wetland area.

Aquifer Protection – The property is located over the Aquifer Protection area, however the use is a non-regulated activity.

Flood Zone – The property is located within a Flood Zone, but the proposed activity is not a regulated activity.

TOWN OF ENFIELD



ADJACENT USES:
North: BL – Commercial/Retail
South: BL – Commercial/Retail
East: BL – Commercial/Retail
West: BL - Commercial/Retail

APPLICABLE ZONING REGULATIONS: Section 5.20 - Use Table, of the Zoning Regulations allows for restaurants in a Business Local zone by means of a site plan.

LOT & BULK REQUIREMENTS: The proposed change does not affect the required lot & bulk requirements for this property.

PARKING: The change of use has no affect on the parking requirements under Section 10.10.2 of the regulations.

DEPARTMENT COMMENTS:

Engineering Department –

Health Department – Health has made recommendations and requirements to the applicant for the restaurant use and those requirements will have to be met as part of P&Z approval.

Building Department – The Building Dept. has made recommendations and requirements to the applicant for the change of use from retail to the restaurant use and those requirements will have to be met as part of P&Z approval.

Water Pollution Control Authority – Water Pollution Control has submitted requirements to the applicant regarding Fats, Oil, Grease (FOG) as discharged waste from restaurant facilities and those requirements will have to be met as part of P&Z approval.

Police Department –

Fire Department –

ENFIELD PLANNING & ZONING COMMISSION
SPR# 1830 – 74 PALOMBA DR. – ANTHONY'S RESTAURANT & PIZZERIA
DRAFT RESOLUTION FOR COMMISSIN CONSIDERATION
JULY 23, 2020

WHEREAS, the Enfield Planning & Zoning Commission has received an application for the conversion of three retail spaces into one space and the use change from retail to restaurant use located at 74 Palomba Drive; Map 056 // Lot 0025; Business Local Zone; and

WHEREAS, the Commission held a regular meeting on July 23, 2020; and

WHEREAS, the conversion from three spaces to one space and the change of use will have no adverse effect on the surrounding neighborhood and is consistent with the Plan of Conservation and Development; and

WHEREAS, the conversion and change of use conforms to the requirements of the Enfield Zoning Regulations;

TOWN OF ENFIELD

NOW THEREFORE BE IT RESOLVED;

RESOLVED, the Enfield Planning & Zoning Commission hereby approves SPR #1830 for the conversion of three retail spaces into one and the change of use from retail use to restaurant use at 74 Palomba Drive; Map 056 // Lot 0025: Business Local (BL) Zone.

General Conditions:

1. This approval is for the specific use, site, and structure identified in the application. Any change in the nature of the use, site, or the structure will require new approvals from the Enfield Planning and Zoning Commission.
2. This approval does not include signage permits.
3. There is to be no exterior sheet metal venting pipes visible from the street.
4. Exterior mechanicals and electricals are to be boxed and screened.
5. This project shall be constructed and maintained in accordance with the referenced plans.
6. A building permit for the construction of facilities as approved must be obtained within 24 months of approval or this approval shall be rendered null and void, unless an extension is granted by the Commission.
7. All construction authorized by this approval shall be completed within five (5) years or this approval shall be considered null and void, unless an extension is granted by the Commission.
8. By acceptance of this permit and conditions, the applicant and owner acknowledge the right of Town staff to periodically enter upon the subject property for the purpose of determining compliance with the terms of this approval.

Site Specific Conditions:

9. Will be added for each unique application.

Conditions to be met prior to signing of plans:

10. All plans submitted for signature shall bear the seal and live signature of the appropriate professional(s) responsible for the preparation of the plans.
11. The application number shall be displayed on the plans in or near the Title Block area.
12. A copy of the approval letter and conditions shall be incorporated into the final plans submitted for signature, preferably located on the cover sheet or first sheet of the plan set.
13. A list outlining how the conditions of approval have been met shall be submitted along with final plans submitted for signature.
14. A list outlining all changes to the plans shall be submitted along with final plans submitted for signature. The list should cite the sheet number where each change has been made.
15. The conditions of this approval shall be binding on the applicant, land owners, and their successors and assigns.

Conditions to be met prior to the issuance of permits:

16. Four sets of paper plans with any required revisions incorporated shall be submitted to the Planning Department for signature of the Commission. The Director of Planning may require Mylars.
17. The applicant shall also submit final plans as approved by the Commission in a digital format compatible with the Enfield Geographic Information Systems Electronic Submittals Ordinance.
18. A pre-construction meeting between the applicant, site contractors, project engineer and Town Staff shall be held.
19. Any required certificates and/or approvals from State or Federal agencies (i.e. CT-DOT, DEEP, Army Corps of Engineers) shall be obtained by the applicant and reported to the Planning and Zoning Commission file. Any changes to the plans required by such entities may require a plan modification from the Enfield Planning and Zoning Commission.

Conditions which must be met prior to the Issuance of a Certificate of Compliance:

20. Complete as-built plans certified to Class A-2 accuracy shall be submitted prior to the issuance of any certificates of zoning compliance. The as-built plan shall also contain a certification by a Professional Engineer that they have inspected the site improvements and that they have been installed in accordance with the approved plans. Any deviations or omissions must be noted.
21. The design professional who prepared the approved PZC architectural drawings, shall provide as-built drawings with a certification that they have complied with approved plans. Any changes need to be noted on the plans and a list of changes submitted.
22. No Certificate of Occupancy or other final approval may be issued until the Zoning Enforcement Officer has signed off on the final work. When minor site work cannot be completed because of weather or other pertinent reason, a conditional approval may be issued for a period not to exceed 180 days, providing satisfactory surety shall be posted with the Town of Enfield in an amount sufficient to complete the site work and with surety acceptable to the Town of Enfield.
23. A request for final project review and certificate of zoning compliance must be made to the Planning Department not less than 10 days before a Certificate of Occupancy or other final approval is requested from the Building Official.

Note: The Conditions of Approvals do not take the place of other requirements found in the Town Codes, Regulations, and Application Instructions.

REFERENCE PLANS

TOWN OF ENFIELD

Site Plan - "74 Palomba Drive, Enfield, CT" Dated 6/25/20

"Proposed Floor Plans" – Prepared by Alford Associates, Inc, Civil Engineers dated 12/19/86
Parcel 4 prepared for Robert D. Smyth

Department of Development Services
Building/Community & Economic Development/Planning & Zoning
820 Enfield Street
Enfield, Connecticut 06082

Telephone (860) 253-6355
Fax (860) 253-6310

www.enfield-ct.gov

RECEIVED
ENFIELD PLANNING DIV.
2020 JUL 15 AM 4:10

TOWN OF ENFIELD

Special Use Permit & Site Plan Review Application

Planning Division • 820 Enfield Street Enfield, CT 06082
Telephone: 860-253-6355 Website: www.enfield-ct.gov

Special Use Permit

Application For: ☑ New Special Use Permit ☐ Other _____
☐ Modification of Plan Previously Approved _____
☐ Modification of Conditions of Approval of a Special Permit: _____

Site Plan Review

Application For: ☑ New Site Plan Review ☐ Other _____
☐ Modification of Plan Previously Approved _____
☐ Modification of Conditions of Approval of a Site Plan: _____

Staff Use Only					
PH #:		**SPR #:**	1831	**XSP #:**	
View Permit #:	TPL-20-85				
Zoning Regulation Section:	5.20.2 Sub Sec F				

PLEASE REVIEW LAND USE APPLICATION GUIDE FOR INSTRUCTIONS

Property Address: 74 Palomba Drive **Map #:** 056 **Lot #:** 0025
Zone(s): BL **Size of Parcel:** 1.15 **Account #:** 06320002 0027
Current Use: Commercial
Project Name: Perm. Outside Dining Area
Summary Description: _____

Applicant's Name: Dimitris Patetsos
Applicant's Address: 8 Theodore Street, Enfield, CT 06082
Contact #: 860-416-7889 **Email:** dpatetsos@icloud.com

TOWN OF ENFIELD

Applicant's Representative: _____

Representative Address: _____

Contact #: _____ **Email:** _____

Does Applicant own the Property? ☐ Yes (Attach Copy of DEED)
☐ No (Provide Information Below & Attach Letter of Authorization)

Owner's Name: _____

Owner's Contact #: _____

Owner's Address: _____

Owner's Email: _____

Project Information:

Septic: ☐ Yes ☑ No

Public Sewer: ☑ Yes ☐ No

Well Water: ☐ Yes ☑ No

Public Water: ☑ Yes ☐ No

Outdoor Storage: ☐ Yes ☑ No

Design District: ☐ Yes ☐ No

Do wetlands and watercourses affect this application? ☐ Yes ☑ No

Is the property within a Level A or Level B Aquifer Protection Area? ☐ Yes ☐ No

Does this application include any regulated activity in a floodplain ☐ Yes ☐ No

(If yes, you will need to also submit a Flood Hazard Development Permit application to the Planning & Zoning Commission)

What is the total lot acreage? 1.15

What is the length of the property frontage? (List by Street) _____

_____

_____

Name the abutting street(s): _____

_____

_____

TOWN OF ENFIELD

What are the existing land uses and zoning districts for abutting properties or across the street(s)?

North _____

East _____

South _____

West _____

Environmental History:

Phase I: Land Records reviewed for environmental hazards? ☐ Yes ☑ No

Phase II: Environmental Hazards Identified? ☐ Yes ☑ No

If yes, please list the environmental conditions found: _____

Phase 3: Is there a remediation plan? ☐ Yes ☑ No

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Are there environmental restrictions on the property? ☐ Yes ☑ No

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TOWN OF ENFIELD

The undersigned hereby permits town staff and commission members to enter into and inspect this site during reasonable hours for the purpose of reviewing this application and accompanying plans. I hereby depose and say that all of the above statements as well as the statements contained in all papers filed herewith are true.

☐ **I have reviewed and acknowledge the Land Use Application Guide for further instructions on how to complete my application.**

Applicant Signature: D. Patetsos **Date:** _____

Print Name: Dimitrios Patetsos

Subscribed and sworn to before me 28 **day of** May, **20** 20.

Teresa Chwiedz — July 31, 2023

Notary Public TERESA CHWIEDZ **My Commission Expires:**

INSTR # 2020001854
VOL 2729 PG 709 07/29/2019 02:31:06 PM
RECORDED IN ENFIELD CT
SUZANNE F. OLECHNICKI TOWN CLERK
TOWN CONVEYANCE TAX RECEIVED $1,887.50
STATE CONVEYANCE TAX RECEIVED $9,437.50

After recording, please return to:
Silver & Silver LLP
One Liberty Square
New Britain CT 06051

WARRANTY DEED

SMYTH SISTERS LLC, a Connecticut limited liability company with its principal office located in the Town of Enfield, County of Hartford and State of Connecticut ("Grantor") for consideration paid, grants to **PALOMBA DRIVE LLC**, a Connecticut limited liability company with its principal office located in the Town of Enfield, County of Hartford and State of Connecticut ("Grantee") with WARRANTY COVENANTS, all of its interest in and to a certain parcel of land with the improvements thereon known as 74 Palomba Drive, Enfield, Connecticut, and being more particularly bounded and described as follows:

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SOUTHERLY: by "Parcel 3" as shown on said map, 263.21 feet; and

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Signed this 26th day of July, 2019.

Witnessed by:

Witness - Despina C. Tartsinis

Witness - George F. Varessis

GRANTOR:
SMYTH SISTERS LLC

Mary S. Leveille, Managing Member
Its Duly Authorized

STATE OF CONNECTICUT)
) ss. East Windsor
COUNTY OF HARTFORD)

The foregoing instrument was acknowledged before me on July 26, 2019 by Mary S. Leveille, Managing Member of Smyth Sisters LLC, as her free act and deed, and the free act and deed of the company.

Despina C. Tartsinis, Esq.
Commissioner of the Superior Court

Grantee's Address:
74 Palomba Drive
Enfield CT 06082

July 1, 2020

To Whom It May Concern:

I Dimitrios Patetsos am requesting permission for outside patio at 74 Palomba Drive. The patio will consist of 4 tables each having an umbrella, which will allow for 16 patrons. There will be one (1) designated server for the patio area which will be a seasonal patio only. All tables, chairs, and umbrellas will be removed and stored for the winter months.

D. Patetsos

Dimitrios Patetsos

7-2-20

Date

Business Inquiry

Business Details

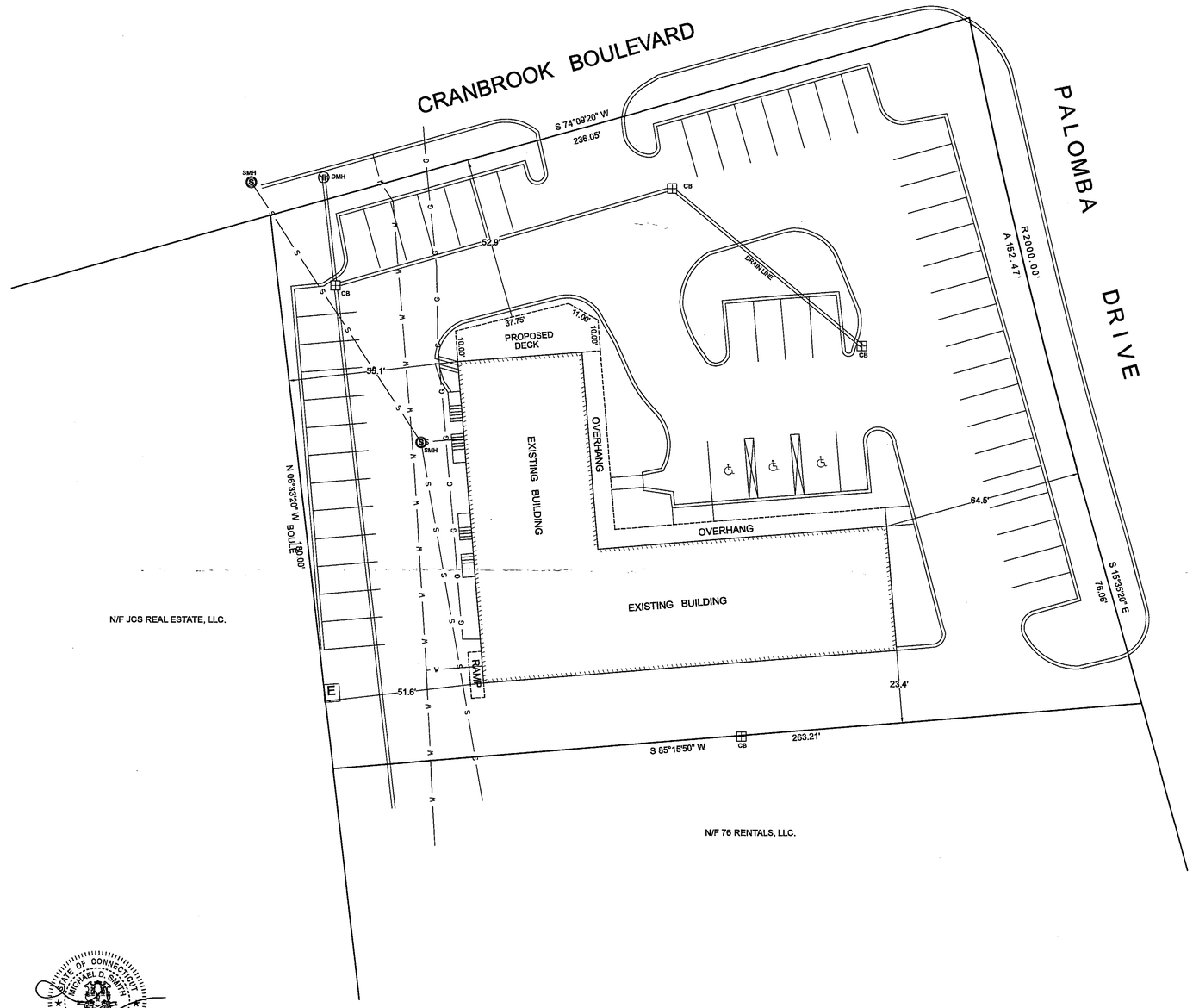
Business Name:	**PALOMBA DRIVE, LLC**	Citizenship/State Inc:	**Domestic/CT**
Business ID:	**1308405**	Last Report Filed Year:	**2020**
Business Address:	**74 PALOMBA DRIVE, ENFIELD, CT, 06082, USA**	Business Type:	**Domestic Limited Liability Company**
Mailing Address:	**8 THEODORE STREET, ENFIELD, CT, 06082, USA**	Business Status:	**Active**
Date Inc/Registration:	**May 03, 2019**		
Annual Report Due Date:	**03/31/2021**		
NAICS Code:	**Real Estate and Rental and Leasing (53)**	NAICS Sub Code:	**General Rental Centers (532310)**

Principals Details

Name/Title	Business Address	Residence Address
DIMITRIOS PATETSOS MEMBER	74 PALOMBA DRIVE, ENFIELD, CT, 06082, USA	8 THEODORE STREET, ENFIELD, CT, 06082, USA

Agent Summary

Agent Name	**SILVER & SILVER LLP**
Agent Business Address	**ONE LIBERTY SQUARE, NEW BRITAIN, CT, 06051**
Agent Residence Address	**NONE**
Agent Mailing Address	**ONE LIBERTY SQUARE, NEW BRITAIN, CT, 06051**



N
W E
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G G G = GAS LINE
S S S = SEWER LINE
W W W = WATER LINE

STATE OF CONNECTICUT
MICHAEL D. SMYTH
70441
LICENSED
LAND SURVEYOR

NOTES:

1) THIS SURVEY AND MAP HAVE BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THRU 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996. THE PROPERTY LINES DEPICTED HEREON ARE THE RESULT OF AN "ON THE GROUND" FIELD SURVEY AND IT CONFORMS TO CLASS A-2 ACCURACY STANDARDS.

2) THE PROPERTY IS NOT LOCATED IN AN ESTABLISHED FEMA FLOOD ZONE PER FEMA MAP 09003C0227F, DATED SEPTEMBER 26, 2008.

3) ADDITIONAL UNDERGROUND UTILITIES SERVICING THE BUILDING MAY EXIST AND NOT BE SHOWN HEREON. CONTACT DIGSAFE PRIOR TO ANY EXCAVATION.

4) PLAN REFERENCE = "SITE PLAN & UNIT SCHEDULE - PARCEL 4 PREPARED FOR ROBERT D. SMYTH" - PREPARED BY ALFORD ASSOC. DATED 12/18/86

5) LOCUS DEED REFERENCE = 2629/19

6) THE PURPOSE OF THIS PLAN IS FOR CONSTRUCTION OF A PROPOSED DECK AS SHOWN.

SITE PLAN

74 PALOMBA DRIVE
ENFIELD, CT
OWNED BY

SMYTH SISTERS, LLC.

DATE: 6/25/2020 SCALE: 1" = 20'

SMITH ASSOCIATES
SURVEYORS, INC.
46 B BALDWIN STREET - EAST LONGMEADOW, MA 01028 - P:(413) 525-8801 F: (413) 525-8841
SMITHASSOCIATESSURVEYORS@HOTMAIL.COM WWW.SMITHASSOCIATESSURVEYORS.COM

TOWN OF ENFIELD

ENFIELD PLANNING & ZONING COMMISSION
SPR# 1831 – 74 PALOMBA DRIVE
STAFF REPORT
JULY 23, 2020

Address:	**74 PALOMBA DR**	**Prepared By:**	**R. Rachele**
Applicant:	**(Owner)-Dimitrios Patetsos Agent-Mike DelConte**		
Property Owner:	**Palomba Drive, LLC**	**Wetlands/Watercourses:**	**Yes**
Zone:	**BL**	**Aquifer Protection Areas:**	**Yes**
Current Use:	**Retail**	**Flood Zones:**	**Zone A**
Proposed Use:	**Restaurant**	**Variances:**	
Map/Lot:	**056 // Lot 0025**	**Applicable Zoning Regulations:**	**5.20,2 Subsection F**

Background:
This is an application to install a raised deck for a permanent seasonal outdoor dining on the north side of a newly proposed restaurant at 74 Palomba Drive. The outdoor dining area is proposed to be installed over a raised landscaped area that is presently mulched. The interior patron dining area is approx. 1300 square feet and the proposed outdoor dining area is approx. 450 square feet. The proposed outdoor dining area is for a limit of 4 tables with 4 patrons each, for a total of 16 patrons.

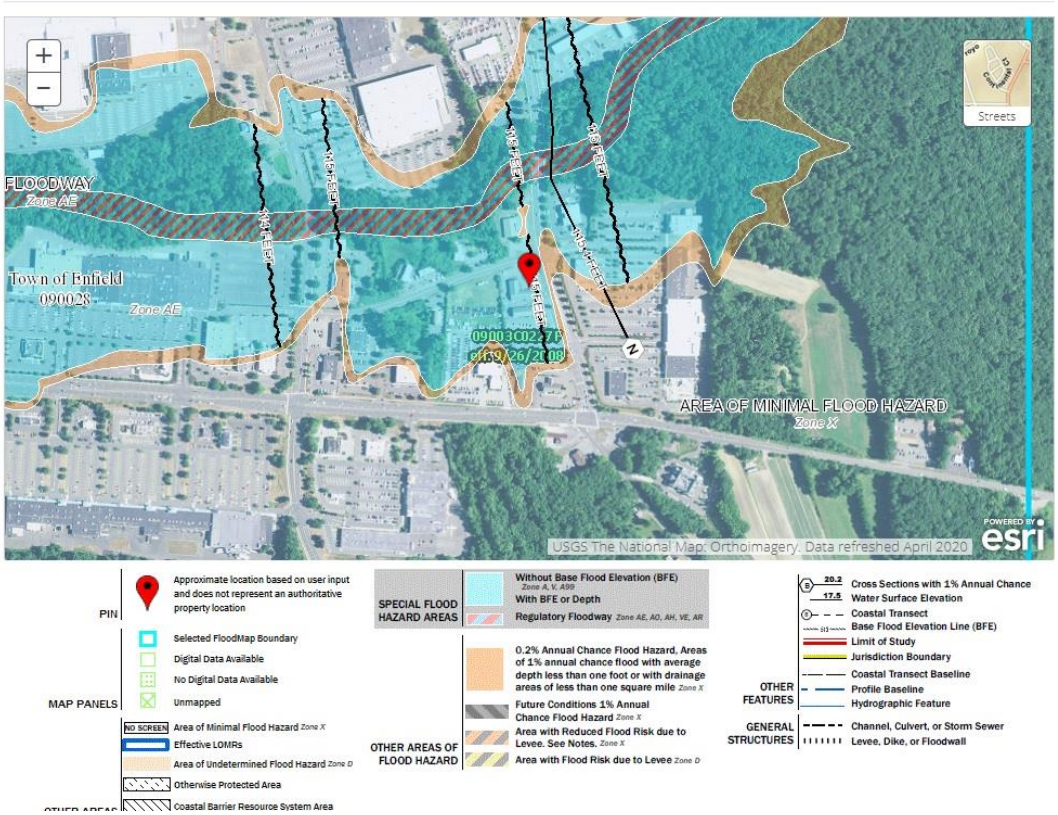
Subsection xi.- Outdoor dining area cannot exceed 4 tables/16 seats unless there are waitpersons to serve patrons. Where all food service is conducted by waitpersons, outdoor dining area cannot exceed 50% of the floor area of the indoor dining area; and cannot exceed 50% of the number of tables/seats within the indoor dining area.

Wetlands – The property does have a small portion of wetlands located on it in the area of the southeast corner of the property but is not in the vicinity of the proposed change. The change would not disturb the wetland area.

Aquifer Protection –The property is located over the Aquifer Protection area, however the use is a non-regulated activity

Flood Zone – The property is located within a Flood Zone, but the proposed activity and structure is above the existing flood zone requirement of 115 feet and is not a regulated activity.

TOWN OF ENFIELD



ADJACENT USES:
North: BL – Commercial/Retail
South: BL – Commercial/Retail
East: BL – Commercial/Retail
West: BL - Commercial/Retail

APPLICABLE ZONING REGULATIONS: Section 5.20.2 Subsection F – Outdoor Dining areas for Restaurants. This section of the regulations allows for a permanent seasonal outdoor dining area for up to 16 patrons to be administratively approved, however, in this case the exterior area is being modified with a structure to allow for this accessory use. The Use Table, of the Zoning Regulations, allows for permanent seasonal outdoor dining areas as an accessory use in a Business Local zone by means of a site plan.

LOT & BULK REQUIREMENTS: The proposed change does not affect the required lot & bulk requirements for this property.

PARKING: The addition of this exterior area has no effect on the parking requirements under Section 10.10.2 of the regulations.

DEPARTMENT COMMENTS:

Engineering Department –

Health Department – Health has made recommendations and requirements to the applicant for the restaurant use and outdoor area and those requirements will have to be met as part of P&Z approval.

Building Department – The Building Dept. has made recommendations and requirements to the applicant for the construction of this proposed structure and those requirements will have to be met as part of P&Z approval.

Water Pollution Control Authority – No Comment

Police Department –

Fire Department –

ENFIELD PLANNING & ZONING COMMISSION
SPR# 1830 – 74 PALOMBA DR. – ANTHONY'S RESTAURANT & PIZZERIA
DRAFT RESOLUTION FOR COMMISSIN CONSIDERATION
JULY 23, 2020

WHEREAS, the Enfield Planning & Zoning Commission has received an application for the addition of a permanent seasonal outdoor dining at 74 Palomba Drive; Map 056 // Lot 0025; Business Local Zone; and

WHEREAS, the Commission held a regular meeting on July 23, 2020; and

WHEREAS, the addition of a permanent seasonal outdoor dining area will have no adverse effect on the surrounding neighborhood and is consistent with the Plan of Conservation and Development; and

WHEREAS, the addition of a permanent seasonal outdoor dining area conforms to the requirements of the Enfield Zoning Regulations;

NOW THEREFORE BE IT RESOLVED;

TOWN OF ENFIELD

RESOLVED, the Enfield Planning & Zoning Commission hereby approves SPR #1830 for the conversion of three retail spaces into one and the change of use from retail use to restaurant use at 74 Palomba Drive; Map 056 // Lot 0025: Business Local (BL) Zone.

General Conditions:

1. This approval is for the specific use, site, and structure identified in the application. Any change in the nature of the use, site, or the structure will require new approvals from the Enfield Planning and Zoning Commission.
2. This approval does not include signage permits.
3. There is to be no exterior sheet metal venting pipes visible from the street.
4. Exterior mechanicals and electricals are to be boxed and screened.
5. This project shall be constructed and maintained in accordance with the referenced plans.
6. A building permit for the construction of facilities as approved must be obtained within 24 months of approval or this approval shall be rendered null and void, unless an extension is granted by the Commission.
7. All construction authorized by this approval shall be completed within five (5) years or this approval shall be considered null and void, unless an extension is granted by the Commission.
8. By acceptance of this permit and conditions, the applicant and owner acknowledge the right of Town staff to periodically enter upon the subject property for the purpose of determining compliance with the terms of this approval.

Site Specific Conditions:

9. Adequate self-closing trash receptacles must be provided, and the restaurant is responsible for cleanup of all trash generated from the outdoor dining (including the restaurant site and surrounding areas).
10. No outside audio systems are permitted
11. In addition to required parking for indoor seating, outdoor dining requires one parking space for every 4 seats.
12. All tables, chairs, trash receptacles, etc., shall be removed at the end of each outdoor dining season.

Conditions to be met prior to signing of plans:

13. All plans submitted for signature shall bear the seal and live signature of the appropriate professional(s) responsible for the preparation of the plans.
14. The application number shall be displayed on the plans in or near the Title Block area.
15. A copy of the approval letter and conditions shall be incorporated into the final plans submitted for signature, preferably located on the cover sheet or first sheet of the plan set.
16. A list outlining how the conditions of approval have been met shall be submitted along with final plans submitted for signature.

Department of Development Services
Building/Community & Economic Development/Planning & Zoning
820 Enfield Street
Enfield, Connecticut 06082

Telephone (860) 253-6355
Fax (860) 253-6310

www.enfield-ct.gov

17. A list outlining all changes to the plans shall be submitted along with final plans submitted for signature. The list should cite the sheet number where each change has been made.
18. The conditions of this approval shall be binding on the applicant, landowners, and their successors and assigns.

Conditions to be met prior to the issuance of permits:

19. The applicant shall post a separate bond for Erosion and Sediment Control submitted in the form of cash or certified check, pledged to the Town, in an amount to be determined by the Town Engineer and the Director of Planning.
20. Four sets of paper plans with any required revisions incorporated shall be submitted to the Planning Department for signature of the Commission. The Director of Planning may require Mylars.
21. The applicant shall also submit final plans as approved by the Commission in a digital format compatible with the Enfield Geographic Information Systems Electronic Submittals Ordinance. A pre-construction meeting between the applicant, site contractors, project engineer and Town Staff shall be held.
22. Any required certificates and/or approvals from State or Federal agencies (i.e. CT-DOT, DEEP, Army Corps of Engineers) shall be obtained by the applicant and reported to the Planning and Zoning Commission file. Any changes to the plans required by such entities may require a plan modification from the Enfield Planning and Zoning Commission.

Conditions which must be met prior to the Issuance of a Certificate of Compliance:

23. Complete as-built plans certified to Class A-2 accuracy shall be submitted prior to the issuance of any certificates of zoning compliance. The as-built plan shall also contain a certification by a Professional Engineer that they have inspected the site improvements and that they have been installed in accordance with the approved plans. Any deviations or omissions must be noted.
24. The design professional who prepared the approved PZC architectural drawings, shall provide as-built drawings with a certification that they have complied with approved plans. Any changes need to be noted on the plans and a list of changes submitted.
25. No Certificate of Occupancy or other final approval may be issued until the Zoning Enforcement Officer has signed off on the final work. When minor site work cannot be completed because of weather or other pertinent reason, a conditional approval may be issued for a period not to exceed 180 days, providing satisfactory surety shall be posted with the Town of Enfield in an amount sufficient to complete the site work and with surety acceptable to the Town of Enfield.
26. A request for final project review and certificate of zoning compliance must be made to the Planning Department not less than 10 days before a Certificate of Occupancy or other final approval is requested from the Building Official.

Note: The Conditions of Approvals do not take the place of other requirements found in the Town Codes, Regulations, and Application Instructions.

TOWN OF ENFIELD

REFERENCE PLANS

Site Plan - "74 Palomba Drive, Enfield, CT" Dated 6/25/20

"Proposed Floor Plans" – Prepared by Alford Associates, Inc, Civil Engineers dated 12/19/86
Parcel 4 prepared for Robert D. Smyth

Department of Development Services
Building/Community & Economic Development/Planning & Zoning
820 Enfield Street
Enfield, Connecticut 06082

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Building/Community & Economic Development/Planning & Zoning
820 Enfield Street
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TOWN OF ENFIELD

June 18, 2020

Honorable Member
Enfield Town Council
Enfield, Connecticut

Subject: **Resolution Referring to the Planning and Zoning Commission Proposed Conveyance of Town-Owned Land (26-32 Church Street & 28 South River Street)**

Resolution Setting a Public Hearing

Councilors:

Highlights:

- The Town of Enfield has completed the Demolition of Structures at 26 - 32 Church Street and at 28 South River Street Project
- These properties will be put on the market by Century 21 AllPoints Realty on behalf of the Town.
- In their current form, the two properties are non-revenue generating.
- Purchase will enable the redevelopment of these sites and increase revenues for the Town.

Budget Impact:

There is no budget impact.

Recommendation:

That the Town Council adopt the attached Resolutions.

Respectfully Submitted,

Nelson Tereso
Deputy Director of Economic & Community Development

Attachments:

1. Resolutions (2)

ENFIELD TOWN COUNCIL

RESOLUTION NO._____

RESOLUTION REFERRING THE PROPOSED CONVEYANCE OF LAND TO THE PLANNING AND ZONING COMMISSION

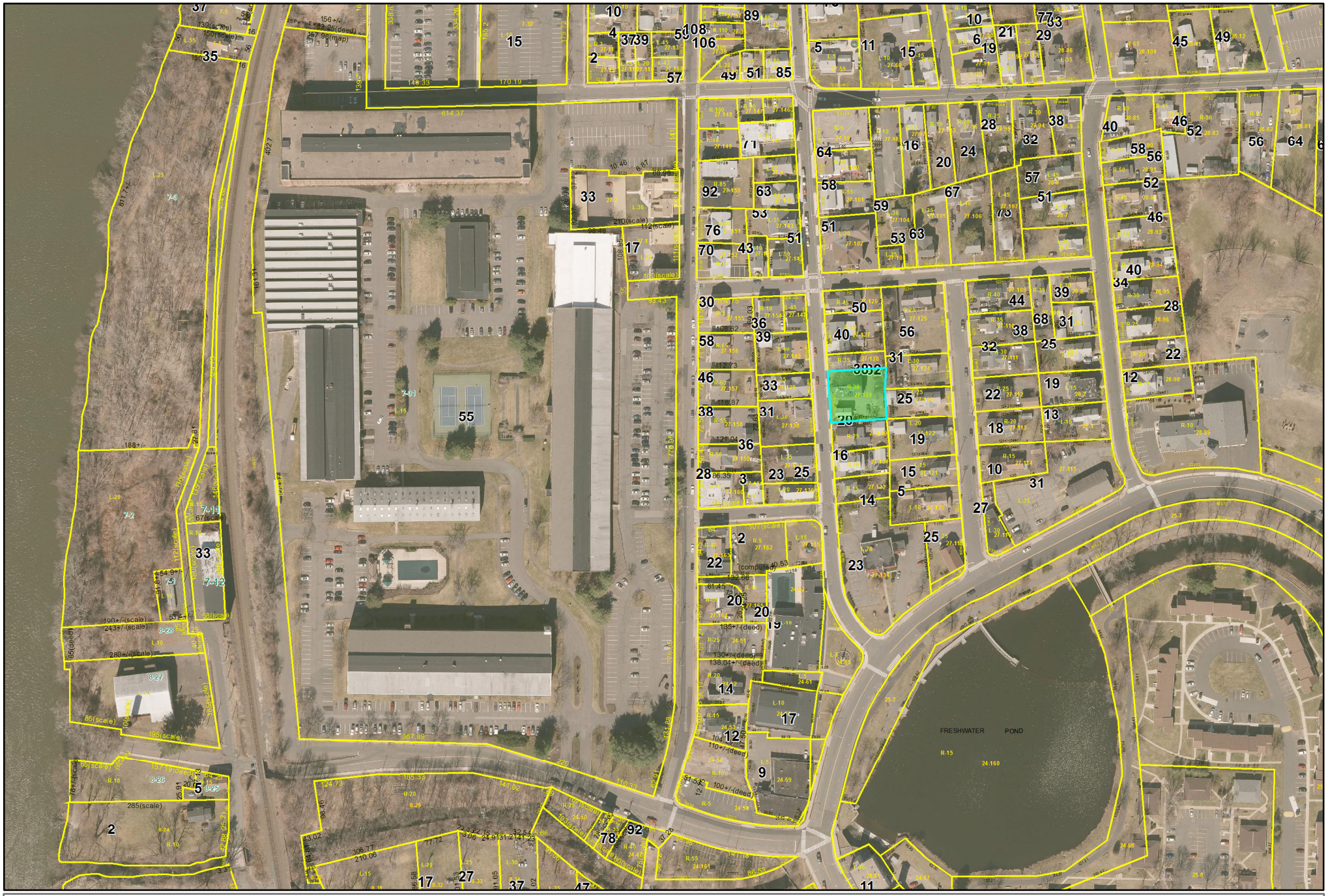
WHEREAS, the Town of Enfield owns the properties located at 26-32 Church Street and 28 South River Street; and

WHEREAS, the Town intends to market and sell these properties with the services provided by the Town's vendor for real estate agency services; and

WHEREAS, the Council must refer this proposed conveyance to the Planning and Zoning Commission for a report in conformance with the requirements of Connecticut General Statute §8-24.

NOW, THEREFORE, BE IT RESOLVED that the proposed conveyance of 26-32 Church Street and 28 South River Street is referred to the Planning and Zoning Commission in conformance with the requirements of Connecticut General Statute §8-24.

Prepared by: Nelson Tereso, Deputy Director Economic & Community Development
Date Prepared: Jun 18, 2020



32 Church Aerial GIS

N
W E
S

0 50 100 200 300 400 Feet

1 inch = 244 feet

The Town of Enfield, CT shall assume no liability for any errors,omissions, or inaccuracies in the information provided regardless of how caused or any decision made or action taken or not taken by reader in reliance upon any information or data furnished hereunder.

28 South River Street Aerial GIS

N
W E
S

Feet
0 50100 200 300 400
1 inch = 362 feet

The Town of Enfield, CT shall assume no liability for any errors,omissions, or inaccuracies in the information provided regardless of how caused or any decision made or action taken or not taken by reader in reliance upon any information or data furnished hereunder.

TOWN OF ENFIELD

ENFIELD PLANNING & ZONING COMMISSION
8-24 REFERRALS – CONVEYANCE OF 32 CHURCH STREET & 28 SOUTH RIVER STREET
JULY 23, 2020

MOTION to forward a favorable recommendation to the Town Council for the conveyance of 32 Church Street; Map 27/Lot 129; TD-2 Zone; Town of Enfield, owner.

MOTION to forward a favorable recommendation to the Town Council for the conveyance of 28 South River Street; Map 8/Lot 19; TD-1 Zone; Town of Enfield, owner.

Dated this 23rd day of July 2020

Ken Nelson, Jr., Chairman;
Richard Szewczak, Secretary

Department of Development Services
Building/Community & Economic Development/Planning & Zoning
820 Enfield Street
Enfield, Connecticut 06082

Telephone (860) 253-6507
Fax (860) 253-6310

www.enfield-ct.gov

TOWN OF ENFIELD

Development Permit For Special Flood Hazard Areas

Planning Division • 820 Enfield Street Enfield, CT 06082
Telephone: 860-253-6355 Website: www.enfield-ct.gov

Staff Use Only	
FLD #:	FLD# 40
View Permit #:	
Zoning Regulation Section:	

PLEASE REVIEW LAND USE APPLICATION GUIDE FOR INSTRUCTIONS

Property Address: 55 COTTAGE RD **Map #:** 80 **Lot #:** 178

Zone(s): R-33 **Size of Parcel:** 140' x 70' **Account #:**

Current Use: RESIDENTIAL

Flood Plain Zone Designation: AE
(From Flood Insurance Rate Map)

Project Name: ADDITION & RENOVATIONS

Summary Description: INTERIOR RENOVATIONS, NEW MASTER BATH AND BEDROOM AND NEW 2 CAR GARAGE.

Owner's Name: RANDY DAIGLE

Owner's Contact #: 860-559-0087

Owner's Address: 55 COTTAGE RD

Owner's Email: RDAIGLE6 @ COX.NET

Applicant's Name: SAME

Applicant's Address: SAME

Contact #: SAME **Email:** SAME

TOWN OF ENFIELD

Applicant's Representative: SELF

Representative Address: _____

Contact #: _____ **Email:** _____

Does Applicant own the Property? ☐ **Yes (Attach Copy of DEED)**
☐ **No (Provide Information Below & Attach Letter of Authorization)**

The undersigned hereby permits town staff and commission members to enter into and inspect this site during reasonable hours for the purpose of reviewing this application and accompanying plans. I hereby depose and say that all of the above statements as well as the statements contained in all papers filed herewith are true.

☒ **I have reviewed and acknowledge the Land Use Application Guide for further instructions on how to complete my application.**

Applicant Signature: [signature] **Date:** 5-26-20

Print Name: RANDY DAILEY

Subscribed and sworn to before me 26 **day of** May, **20** 20.

Diane L. Wadsworth 5/31/21

Notary Public **My Commission Expires:**

For Office Use	
Application #: _____	**Date Submitted:** _____

INSTR # 2018014874
VOL 2692 PG 834 04/30/2018 03:33:24 PM
RECORDED IN ENFIELD CT
SUZANNE F. OLECHNICKI TOWN CLERK
TOWN CONVEYANCE TAX RECEIVED $450.00
STATE CONVEYANCE TAX RECEIVED $1,350.00

After Recording Return to:
McCaffrey Law Firm, PC
PO Box 172
Enfield, CT 06083

STATUTORY WARRANTY DEED

KNOW YE THAT We, Bruce F. Belanger and Machelle D. Belanger, both now or formerly of the Town of Enfield, County of Hartford and State of Connecticut

for the consideration of **One Hundred Eighty Thousand and 00/100 ($180,000.00) Dollars**

received to our full satisfaction of **Randy Daigle,** now or formerly of the Town of Enfield, County of Hartford and State of Connecticut

do give, grant, bargain, sell and confirm unto the said **Randy Daigle,** his heirs and assigns forever with **WARRANTY COVENANTS**,

See Schedule A attached hereto and made a part hereof

Being the same premises conveyed to the Grantors herein by Warranty Deed of Martha Androulidakis dated June 29, 2000 and recorded on June 30, 2000 in Volume 1294 at Page 232 of the Enfield Land Records.

Said premises are conveyed subject to Restrictive Covenants as set forth in Deed dated March 19, 1926 and recorded September 18, 1926 in Volume 69 at Page 223 of the Enfield Land Records.

Said premises are further conveyed subject to restrictions appearing of record, taxes to the Town of Enfield on the List of October 1, 2017, and thereafter, which the Grantee herein assumes and agrees to pay and to any and all provisions of any ordinance, municipal regulation, and public or private law, and to building, building line, zoning and inland-wetland regulations as of record may appear.

Signed this 27 day of April, 2018
Signed and delivered in the presence of:

Maureen A Rochette
~~Bridgid Tyler Murray~~ Maureen A. Rochette

Bruce F. Belanger

Linda M. Picard

Machelle Belanger
Machelle D. Belanger

STATE OF CONNECTICUT)
: ss. Enfield April 27, 2018
COUNTY OF HARTFORD)

Personally Appeared, Bruce F. Belanger and Machelle D. Belanger, as aforesaid, Signers of the foregoing Instrument, and acknowledged the same to be their free act and deed, before me.

LINDA M. PICARD
NOTARY PUBLIC
STATE OF CONNECTICUT
MY COMMISSION EXPIRES MAR. 31, 2023

Grantee's Address:
55 Cottage Road
Enfield, CT 06082

SCHEDULE A

, a certain piece or parcel of land, with all buildings and improvements located thereon, situated in the Town of Enfield, County of Hartford and State of Connecticut, being known as 55 Cottage Road and being shown and designated as "Lot 4" and "Portion of Lot #3" on a map or plan entitled "Plan Prepared for Robert M. Baillargeon Enfield, Conn. William R. Palmberg Land Surveyor 19 East Road Broad Brook, Connecticut 06016 528-8501 623-7018 by WF Scale 1" = 20' Date 10-21-91 Sheet 1 Check WF No. 91045 Certified Class A2" which map or plan is on file in the Office of the Town Clerk of said Town of Enfield for a more particular description.

Said premises are more particularly bounded and described as follows:

NORTHWESTERLY: By Pine Point Lake, as shown on said map referenced by a closing line, a distance of seventy-five and sixty-six one-hundredths (75.66) feet;

NORTHEASTERLY: By land now or formerly of Lorraine A. Goulet & Betty Jane Zavatsky, Lot 5, as shown on said map, a distance of one hundred twenty-five (125) feet;

SOUTHEASTERLY: By Cottage Road, a distance of seventy-five (75) feet; and

SOUTHWESTERLY: By land now or formerly of Richard M. & Cheryle L. Dunne, a Remaining Portion of Lot 3, as shown on said map, a distance of one hundred thirty-five (135) feet.

Said premises consists of an area of .24 acres, more or less.

Said premises are also known as follows:

Two certain pieces or parcels of land, situated in the Town of Enfield, County of Hartford and State of Connecticut, located on the westerly side of Cottage Road in said Town of Enfield, more particularly described as follows:

FIRST PARCEL:

A certain piece or parcel of land, located in the Town Enfield, County of Hartford and State of Connecticut, with all buildings and improvements located thereon, being designated as Lot No. 4 according to a map or plan of lots known as "Plan of Shaker Pines" which map is on file in the office of the Town Clerk of said Town of Enfield, Book of Maps, Volume 2, Page 8 to which reference may be had for a more particular description, together with the usual riparian rights in Pine Point Lake.

SECOND PARCEL:

A certain piece or parcel of land, located in the Town of Enfield, County of Hartford and State of Connecticut, bounded and described as follows:

BEGINNING at a point at the intersection of the westerly line of Cottage Road, so-called, with the southerly line of Lot No. 4 according to a map or plan of Lots known as "Shaker Pines Lake" which said map is on file in the Office of the Town Clerk of the Town of Enfield, Book of Maps, Volume 2, Page 8 and running:

THENCE southerly along the westerly line of said Cottage Road, so-called, 25 feet to an iron pin;

THENCE westerly in a line parallel with the southerly line of Lot No. 4, 135 feet, more or less, to the shore of Pine Point Lake;

THENCE northerly along the shore of Pine Point Lake, 25 feet to the southerly line of said Lot 4;

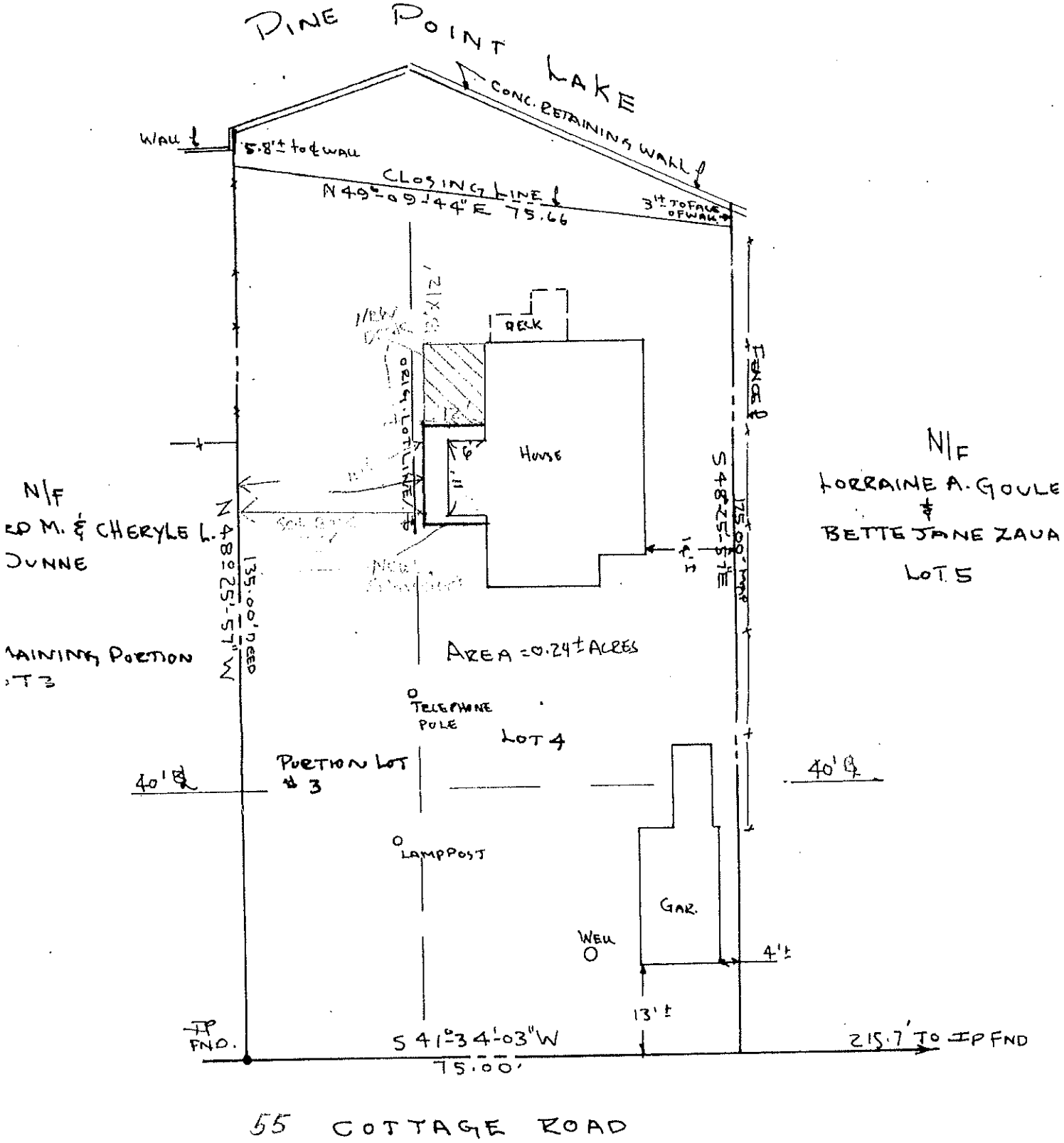
THENCE easterly along the southerly along the line of Lot 4, 148 feet to the place of beginning.

BOUNDED:

NORTH by Lot No. 4; EAST by the highway, Cottage Road, so-called; SOUTH by land now or formerly of Norman Slavin et al; and WEST by Pine Point Lake.

Randy Daigle
55 Cottage Road Enfield Ct. 06082
(860) 559-0087
Addition and Renovation Description

1. Removing existing 2nd bedroom interior wall at front of the house (lake side) and existing 2"x 4" floor joists and installing new 2"x 10" floor joist, new Batt insulation and ¾" T&G plywood subflooring glued and screwed.
2. Remove existing exterior storage area on back-right of the house (street side) and install new exterior wall out 4 feet from existing and install new 2"x 10" floor joists with new Batt insulation and ¾" T&G plywood subflooring glued and screwed for new master bathroom.
3. Bump out the back of the house 4 feet from existing (street side) install new 2"x 10" floor joists with new Batt insulation and ¾" T&G plywood subflooring glued and screwed for new foyer/entrance area.
4. Bump out the back-left rear of the house 10 feet from existing (street side) attached to the existing closet install new 2"x 10" floor joists with new Batt insulation and ¾" T&G plywood subflooring glued and screwed for new bedroom.
5. Extending existing roof as required with new pre-engineered roof joists per code.
6. Build new 2 car garage with 2nd floor in rear attached to the new bedroom. (street side)
7. All new exterior walls construction shall be 2"x 6" wood studs @ 16" O.C. w/ Batt insulation, exterior plywood, vapor barrow and vinyl siding on exterior side and ½" sheetrock painted on interior side.
8. All new floor areas shall be poured concrete slab with footing per code and 2X wood sleepers with Batt insulation and ¾" T&G plywood subflooring glued and screwed.
9. Remove existing kitchen cabinets and appliances and replace with new.
10. Entire roof shall be stripped to existing plywood, plywood repaired as required. New 25 year architectural shingles.
11. New 200 amp Electrical panel in existing house wired for Generator hookup.
12. New Electrical sub panel in garage.
13. New forced air mechanical system with heat and AC.
14. Entire house to be vinyl sided.
15. All new energy efficient Windows and Doors throughout.
16. Remove existing gravel driveway and install new paved driveway.



55 COTTAGE ROAD

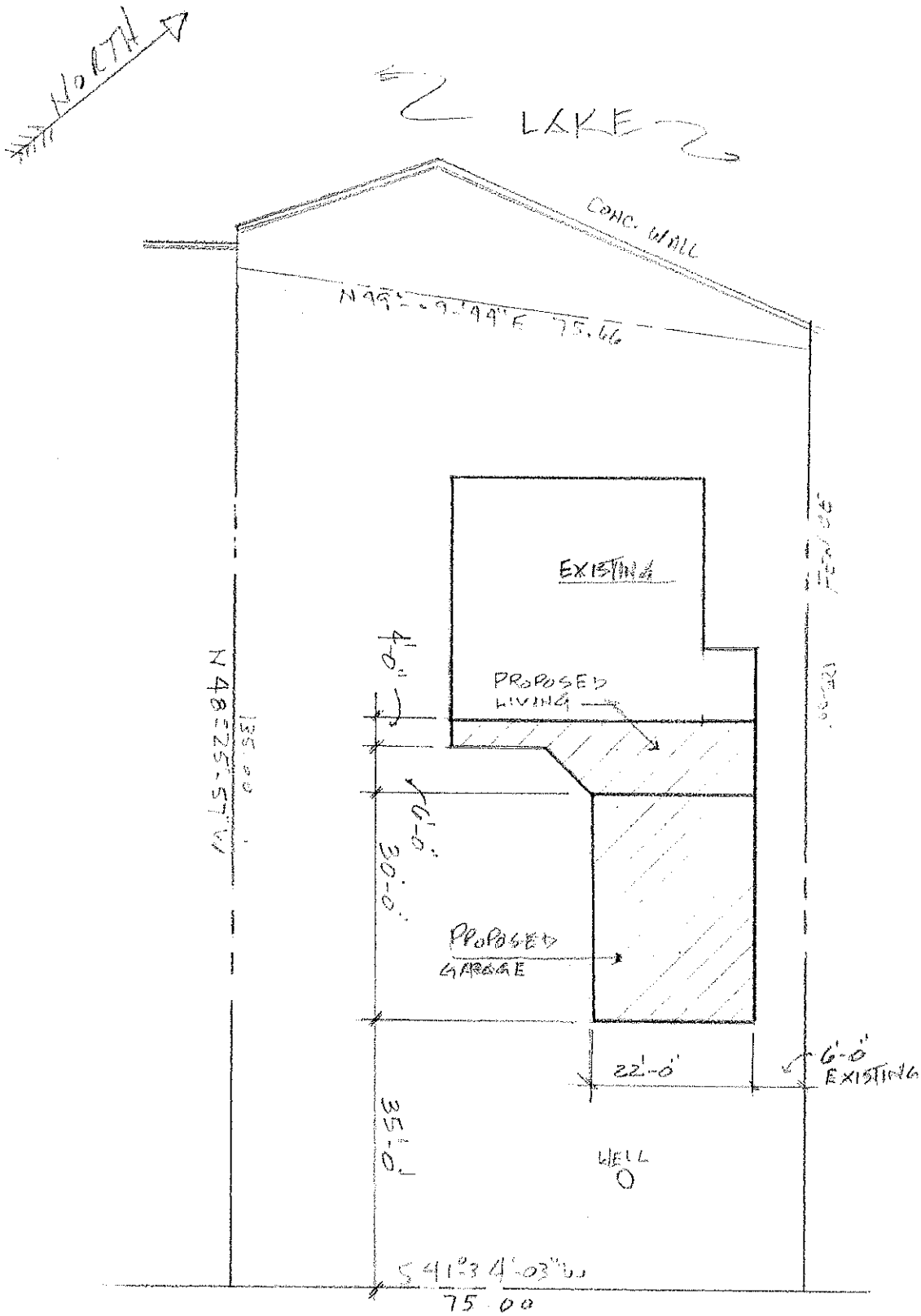
TES:

p - Plan of Shaker Pines 1" = 80' -
Merrill & Sears C.E.

monumentation for Cottage Road and
is established from existing iron
assumed.

forming to side line and rear line,
nforming to side and setback requirements.

R-33



55 COTTAGE ROAD

RECEIVED
ENFIELD PLANNING DEPT.
2020 JUL 10 PM 3:07

TOWN OF ENFIELD

Development Permit For Special Flood Hazard Areas

Planning Division • 820 Enfield Street Enfield, CT 06082
Telephone: 860-253-6355 Website: www.enfield-ct.gov

Staff Use Only	
FLD #:	41
View Permit #:	TPL-20-79
Zoning Regulation Section:	

PLEASE REVIEW LAND USE APPLICATION GUIDE FOR INSTRUCTIONS

Property Address: 25 & 39 HAZARD AVE **Map #:** 45 **Lot #:** 0002 0008

Zone(s): BR **Size of Parcel:** 32.97± 0.70 **Account #:** 0010000 10020 0010000 10015

Current Use: RETAIL & RESTAURANTS (ENFIELD COMMONS)

Flood Plain Zone Designation: AE
(From Flood Insurance Rate Map)

Project Name: 25 & 39 HAZARD AVE

Summary Description: EXCAVATION & LIMITED FILL IN LIMITS OF AE ZONE AS SHOWN ON GRADING PLAN

Owner's Name: 25 - PARAMOUNT / APPLICANT 39 - LEO BHW LTD LLC

Owner's Contact #: 732-961-8132 860-232-1729

Owner's Address: SEE ATTACHED AUTHORIZATION LETTER

Owner's Email:

Applicant's Name: PARAMOUNT NEWCO REALTY

Applicant's Address: 1195 ROUTE 70 SUITE 2000 LAKEWOOD, NJ 08701

Contact #: 732-961-8132 **Email:** lzc@paramountrealty.com

TOWN OF ENFIELD

Applicant's Representative: ERIC KELLY - PARAMOUNT

Representative Address: _____

Contact #: 732-961-8132 **Email:** ekelly@paramountrealty.com

Does Applicant own the Property? ☒ **Yes (Attach Copy of DEED)** 25 IS OWNED BY APPLICANT

☒ **No (Provide Information Below & Attach Letter of Authorization)** 39 IS OWNED BY LEO BHW

The undersigned hereby permits town staff and commission members to enter into and inspect this site during reasonable hours for the purpose of reviewing this application and accompanying plans. I hereby depose and say that all of the above statements as well as the statements contained in all papers filed herewith are true.

☒ **I have reviewed and acknowledge the Land Use Application Guide for further instructions on how to complete my application.**

Applicant Signature: DSZ AGENT FOR APPLICANT **Date:** 7/1/20

Print Name: DAVID S. ZIAKS P.E.
F.A. HESKETH & ASSOCIATES, INC.

Subscribed and sworn to before me 1 **day of** July, **20** 20.

Joanne Marie O'Neill

Notary Public

JOANNE MARIE O'NEILL
NOTARY PUBLIC
MY COMMISSION EXPIRES MAR. 31, 2023

My Commission Expires:

For Office Use	
Application #: _____	**Date Submitted:** _____

RECEIVED
ENFIELD PLANNING DEPT.
2020 JUL 10 PM 3:07

July 1, 2020

Special Flood Hazard Application 25 & 39 Hazard Avenue -- Supplemental Project Narrative

- The project site includes the parcel 39 Hazard Avenue and a small portion of adjoining 25 Hazard Avenue. The two lots are part of Enfield Commons Shopping Center and have been developed under a unified site plan process included in various Special Permit applications over the past 25-30 years.
- The project involves the demolition of the existing 8,484 s.f. restaurant building at 39 Hazard Avenue and the construction of a new 6,986 s.f. retail/restaurant building that fits in a slightly smaller footprint.
- The new building will have three tenant spaces with a single drive-thru for the west tenant and two outside dining areas in front (southside facade).
- The plan includes reworking existing parking and driveways to accommodate the new drive-thru.
- Work on adjacent 25 Hazard Avenue involves reconstructing parking and loading areas next to Aspen Dental and minor work north of the new building.
- With the site grading changes at 39 Hazard Ave., there is a small loss of net 100-year flood storage volume which is compensated for in the underground drainage design, so there will be no impact to the floodplain. The calculations show the need for 1,066.2 c.f. of compensatory storage to replace the flood stage capacity lost with the redevelopment of 39 Hazard Avenue. The design calls for approximately 1,165 c.f. of compensatory storage in underground 36" dia. piping as shown on Sheet GR-1.
- There is no additional impervious coverage proposed.
- There is a slight increase in landscape area.

T:proj/19001/floodhazardnarrative012920.doc

VL2470 PG296

#25

Special Warranty Deed

April 7, 2009 $240,000.00 State Conveyance Tax Received
$60,000.00 Town Conveyance Tax Received

CENTRO GA ENFIELD COMMONS, LLC, a Delaware limited liability company, with a mailing address c/o Centro Properties Group, 420 Lexington Avenue, 7th Floor, New York, New York 10170, (hereinafter referred to as "Grantor"), for $10.00 and other good and valuable consideration paid, does hereby give, grant, bargain, sell and confirm unto Paramount Commons at Enfield LLC, with a mailing address at 1195 Route 70, Suite 2000, Lakewood, New Jersey 08701 (hereinafter referred to as "Grantee") all that certain piece or parcel of land, with the buildings and improvements located thereon, situated in the Town of Enfield, County of Hartford and State of Connecticut, as more particularly described in Exhibit A attached hereto and made a part hereof ("Property").

Subject to restrictions, easements, covenants and other matters of record, the rights of tenants in possession and to the state of facts shown on that certain survey of the Property dated March 27, 2009, prepared by F.A. Hesketh & Associates, Inc.

Real Estate Taxes due the Town of Enfield on the Grand List of October 1, 2008, which taxes the Grantee herein assumes and agrees to pay as part consideration for this deed.

This conveyance has been authorized by the written consent of the Grantor.

TO HAVE AND TO HOLD, the above granted premises with the appurtenances thereof, unto the said Grantee, and unto its successors and assigns forever, to it and their proper use and behoof.

AND FURTHERMORE, the said Grantor does by these presents, bind itself and its successors and assigns forever to Warrant and Defend the above granted premises to the said Grantee, its successors and assigns, against all acts of the Grantor and against all claims and demands whatsoever of any person or persons claiming by, from and under said Grantor, except as hereinbefore mentioned.

Dated this 6th day of April, 2009

CENTRO GA ENFIELD COMMONS, LLC, a
Delaware limited liability company

By: _____
Name: Lee Reeves
Title: Senior Vice President

1591830 v1

STATE OF NEW YORK)
) ss:
COUNTY OF NEW YORK)

The foregoing instrument was acknowledged before me this 2nd day of April, 2009, by Lee Reves, the Senior V.P. of Centro GA Enfield Commons, LLC a Delaware limited liability company.

Joel F. Crystal
Notary Public

My Commission Expires:

JOEL FROME CRYSTAL
NOTARY PUBLIC, State of New York
No. 02 CR 5871065
Qualified in Westchester County
Commission Expires November 30, 2010

Exhibit A

ALL THAT CERTAIN PIECE OR PARCEL OF LAND SITUATED IN THE TOWN OF ENFIELD, COUNTY OF HARTFORD AND STATE OF CONNECTICUT SHOWN AND DESIGNATED AS "SUBJECT PARCEL AREA = 32.97± ACRES" ON A CERTAIN MAP OR PLAN ENTITLED "ALTA/ACSM LAND TITLE SURVEY PROPERTY SURVEY PREPARED FOR GALILEO ENFIELD COMMONS LLC ENFIELD COMMONS HAZARD AVENUE & FRESHWATER BOULEVARD, ENFIELD, CONNECTICUT, DATED 08-30-90 REVISED THROUGH 04-27-05, SCALE 1"= 60' SHEETS 1 AND 2 OF 2 BY F.A. HESKETH & ASSOCIATES, INC., BEING MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT A CHD MONUMENT IN THE NORTHERLY STREET LINE OF HAZARD AVENUE, CONNECTICUT ROUTE 190, SAID POINT BEING LOCATED N 86° 22' 57" W A DISTANCE OF 30.15 FEET FROM AN ANGLE POINT IN THE NORTHERLY STREET LINE OF HAZARD AVENUE. SAID POINT ALSO BEING LOCATED S 48° 47' 02" W A DISTANCE OF 28.28 FEET FROM AN ANGLE POINT IN THE WESTERLY STREET LINE OF FRESHWATER BOULEVARD.

THENCE, N 86° 22' 57" W A DISTANCE OF 319.37 FEET ALONG THE NORTHERLY STREET LINE OF HAZARD AVENUE TO THE POINT OF BEGINNING.

THENCE, N 86° 22' 57" W A DISTANCE OF 130.23 FEET TO A CHD MONUMENT.

THENCE, N 86° 23' 19" W A DISTANCE OF 605.49 FEET TO A POINT.

THENCE, N 86° 48' 55" W A DISTANCE OF 532.84 FEET TO A POINT AT THE SOUTHWEST CORNER OF THE PARCEL HEREIN DESCRIBED AND THE SOUTHEAST CORNER OF LAND NOW OR FORMERLY OF THE MAY STORES SHOPPING CENTERS, INC., THE LAST THREE COURSES BEING ALONG THE NORTHERLY STREET LINE OF HAZARD AVENUE ALSO KNOWN AS CONNECTICUT ROUTE 190.

THENCE, N 02° 00' 10" W A DISTANCE OF 945.00 FEET TO A POINT AT THE NORTHWEST CORNER OF THE PARCEL HEREIN DESCRIBED, SAID POINT LYING IN THE CENTER LINE OF FRESHWATER BROOK THE LAST COURSE BEING ALONG LAND NOW OR FORMERLY OF THE MAY STORES SHOPPING CENTERS, INC., AND LAND NOW OR FORMERLY OF SIXPENCE INN OF ENFIELD, PARTLY BY EACH.

THENCE, EASTERLY ALONG THE CENTER LINE OF FRESHWATER BROOK A DISTANCE OF 1,130.00 FEET MORE OR LESS, TO A POINT IN THE CENTERLINE OF FRESHWATER BROOK SAID POINT CAN BE FOUND 1,092.56 FEET AT BEARING S 80° 53' 48" E FROM THE LAST COURSE HEREON DESCRIBED.

THENCE, N 10° 22' 20" W A DISTANCE OF 306.88 FEET TO A POINT.

THENCE, N 75° 52' 10" E A DISTANCE OF 312.84 FEET TO A POINT, THE LAST TWO COURSES BEING ALONG LAND NOW OR FORMERLY OF THE MAY STORES SHOPPING CENTERS INC.

THENCE, S 05° 49' 10" E A DISTANCE OF 313.83 FEET TO A POINT.

Exhibit A

THENCE, N 84° 10' 50" E A DISTANCE OF 241.76 FEET TO A POINT AT THE NORTHWEST CORNER OF LAND NOW OR FORMERLY OF SIMON KONOVER, AND STANLEY M. BASKIND; MARSHALL J. MOTT, TRUSTEES, THE LAST TWO COURSES BEING ALONG LAND NOW OR FORMERLY OF AAM PROPERTIES, INC.

THENCE, S 01° 08' 30" E A DISTANCE OF 74.26 FEET TO A POINT.

THENCE, N 88° 12' 37" E A DISTANCE OF 93.51 FEET TO A POINT IN THE WESTERLY STREET LINE OF FRESHWATER BOULEVARD. THE LAST TWO COURSES BEING ALONG LAND NOW OR FORMERLY OF SIMON KONOVER, AND STANLEY M. BASKIND, MARSHALL J. MOTT, TRUSTEES.

THENCE, S 03° 37' 00" W A DISTANCE OF 730.45 FEET ALONG THE WESTERLY STREET LINE OF FRESHWATER BOULEVARD TO A POINT.

THENCE, N 86° 23' 00" W A DISTANCE OF 89.00 FEET TO A POINT.

THENCE, N 03° 37' 03" E A DISTANCE OF 93.52 FEET TO A POINT.

THENCE, N 86° 22' 57" W A DISTANCE OF 225.42 TO A POINT.

THENCE, S 03° 37' 01" W A DISTANCE OF 129.00 FEET TO A POINT.

THENCE, N 86° 22' 57" W A DISTANCE OF 25.00 FEET TO A POINT.

THENCE, S 03° 37' 03" W A DISTANCE OF 124.00 FEET TO THE POINT AND PLACE OF BEGINNING, THE LAST SIX COURSES BEING THROUGH LAND OF PARKSIDE ASSOCIATES LIMITED PARTNERSHIP.

EXCEPTING FROM THE PREVIOUSLY DESCRIBED PARCEL IS LAND NOW OR FORMERLY RR REALTY ENFIELD, LLC DESCRIBED AS FOLLOWS:

LESS AND EXCEPT LAND NOW OR FORMERLY DEPICTED AS "RR REALTY OF ENDFIELD, LLC" BEING DESCRIBED" AS FOLLOWS:

A CERTAIN PIECE OR PARCEL OF LAND SITUATED ON THE NORTHERLY SIDE OF HAZARD AVENUE (CONNECTICUT ROUTE 190) IN THE TOWN OF ENFIELD, COUNTY OF HARTFORD, STATE OF CONNECTICUT. BEING BOUNDED AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT OF REFERENCE MARKING THE SOUTHWESTERLY CORNER OF THE PROPERTY KNOWN AS "ENFIELD COMMONS" AND THE SOUTHEASTERLY CORNER OF LAND NOW OR FORMERLY THE MAY STORES SHOPPING CENTERS, INC.

THENCE, N 59° 59' 53" E A DISTANCE OF 165.22 FEET ALONG A TIE LINE TO THE POINT OF BEGINNING.

THENCE, N04°02'38"E A DISTANCE OF 49.03 FEET TO A POINT.

Exhibit A

THENCE, ALONG A CURVE TO THE RIGHT HAVING A CENTRAL ANGLE OF 90° 00' 00" A RADIUS OF 3.00 FEET AND AN ARC LENGTH OF 4.71 FEET TO A POINT. SAID POINT CAN BE LOCATED N 49° 02' 38" W A CHORD DISTANCE OF 4.24 FEET FROM THE LAST COURSE HEREIN DESCRIBED.

THENCE, S 85° 57' 22" E A DISTANCE OF 4.50 FEET TO A POINT.

THENCE, N 04° 02' 38" E A DISTANCE OF 21.00 FEET TO A POINT.

THENCE, N 85° 57' 22" W A DISTANCE OF 1.33 FEET TO A POINT.

THENCE, N 04° 02' 38" E A DISTANCE OF 26.17 FEET TO A POINT.

THENCE, ALONG A CURVE TO THE RIGHT HAVING A CENTRAL ANGLE OF 90° 00' 00" A RADIUS OF 20.00 FEET AND AN ARC LENGTH OF 31.42 FEET TO A POINT. SAID POINT CAN BE LOCATED N 49° 02' 38" E A CHORD DISTANCE OF 28.28 FEET FROM THE LAST COURSE HEREIN DESCRIBED.

THENCE, S 85° 57' 22" E A DISTANCE OF 97.67 FEET TO A POINT.

THENCE, S 04° 02' 38" W A DISTANCE OF 119.19' FEET TO A POINT.

THENCE, N 85° 57' 22" W A DISTANCE OF 123.83 FEET TO THE POINT AND PLACE OF BEGINNING.

SAID EXCEPTION PARCEL DESCRIBED HEREIN CONTAINS 14,230 SQUARE FEET OR 0.33 ACRES MORE OR LESS.

SAID SUBJECT PARCEL CONTAINS 32.97± ACRES.

TOGETHER WITH THE RIGHTS, PRIVILEGES AND EASEMENTS AS CONTAINED IN A RECIPROCAL EASEMENT AGREEMENT BY AND BETWEEN PARKSIDE ASSOCIATES LIMITED PARTNERSHIP AND GMRI, INC. DATED MAY 10, 1995 AND RECORDED IN VOLUME 921 AT PAGE 169 OF THE ENFIELD LAND RECORDS AND ALSO TOGETHER WITH THE RIGHTS, PRIVILEGES AND EASEMENTS AS CONTAINED IN A RECIPROCAL OPERATING AGREEMENT BY AND BETWEEN PARKSIDE ASSOCIATES LIMITED PARTNERSHIP AND GMRI, INC. DATED MAY 10, 1995 AND RECORDED IN VOLUME 921 AT PAGE 188 OF THE ENFIELD LAND RECORDS.

TOGETHER WITH THE RIGHTS, PRIVILEGES AND EASEMENTS AS CONTAINED IN a Reciprocal Easement Agreement by and between Sea Enfield Commons LLC and RR Realty of Enfield LLC dated April 6, 2005 and recorded April 7, 2005 in volume 1998 page 148 of the Enfield Land Records.

TOGETHER WITH THE RIGHTS, PRIVILEGES AND EASEMENTS AS CONTAINED IN a Reciprocal Operating Agreement by and between Sea Enfield Commons LLC and RR Realty of Enfield LLC dated April 6, 2005 and recorded April 7, 2005 in volume 1998 page 175 of the Enfield Land Records.

RECORDED IN
ENFIELD LAND RECORDS

2009 APR -7 PM 1:38 41

SUZANNE F. OLECHNICKI
TOWN CLERK

MAP 238
P. 3919

VL1343 PG243

#39

02/27/2001 $6,750.00 State Conveyance Tax Received
$742.50 Town Conveyance Tax Received

WARRANTY DEED

GMRI, Inc., a Florida corporation with an address of 1751 Directors Row, Orlando, Florida 32809 ("Grantor"), in consideration of $10.00 and other good and valuable consideration to Grantor paid, the receipt of which is acknowledged, does hereby grant, bargain, sell, convey and warrant to LEO BHW LTD., LLC, with an address of 8786 Marlamoore Lane, West Palm Beach, Florida 33412, ("Grantee"), all the following real estate:

See Exhibit "A" Attached Hereto

Subject to: Reciprocal Easement Agreement dated May 10, 1995, by and between Parkside Associates Limited Parntership and GMRI, Inc., recorded May 11, 1995 at Volume 0921, Page 169 of the Public Records of Hartford County, Connecticut and Reciprocal Operating Agreement dated May 10, 1995, by and between Parkside Associates Limited Partnership and GMRI, Inc., recorded May 11, 1995 at Volume 0921, Page 188 of the Public Records of Hartford County, Connecticut.

Subject to real estate taxes and assessments for the current year and subsequent years.

Subject to all valid easements, rights of way, covenants, conditions, reservations and restrictions of record, if any, and also to applicable zoning, land use and other laws and regulations.

To have and to hold the same, together with all the buildings, improvements and appurtenances belonging thereto, if any, to the Grantee and Grantee's heirs, successors and assigns forever.

Grantor, for Grantor and Grantor's heirs and successors, covenants with Grantee and Grantee's heirs, successors and assigns, that:

1. Grantor is lawfully seized in fee simple of the above property, and has good right to convey the same;

2. The above property is free from all encumbrances, except as set forth above;

3. Grantee shall quietly enjoy the above property; and

4. Grantor will forever warrant and defend the title to the above property against the lawful claims and demands of all persons, except as set forth above.

This property was acquired by the Grantor by: Special Warranty Deed dated May 10, 1995, recorded May 11, 1995 at Volume 0921, Page 166 of the Public Records of Hartford County, Connecticut.

IN WITNESS WHEREOF, this Warranty Deed is executed under seal on this 20th day of February, 2001.

Signed, Sealed and Delivered in the Presence of:

Witness: Susan VanderJagt

Witness: Sally Blackmun

GMRI, INC., a Florida corporation

By: _____
Laurie B. Burns
Vice President

STATE OF FLORIDA
COUNTY OF ORANGE

The foregoing instrument was acknowledged before me this 20th day of February, 2001 by Laurie B. Burns, Vice President of GMRI, Inc., a Florida corporation, on behalf of the corporation. (S)He is personally known to me and did not take an oath.

_____ (Signature)
_____ (Print or Type Name)
Notary Public (Title or Rank)
_____ (Serial/Commission Number)
My Commission Expires:

(NOTARY'S SEAL) Susan S. VanderJagt
Commission # CC 906350
Expires Feb. 1, 2004
Bonded Thru
Atlantic Bonding Co., Inc.

EXHIBIT "A"
LEGAL DESCRIPTION
39 HAZARD AVENUE, ENFIELD, CT

PARCEL 1A

A CERTAIN PIECE OR PARCEL OF LAND SITUATED ON THE NORTHERLY SIDE OF HAZARD AVENUE (CONNECTICUT ROUTE 190) IN THE TOWN OF ENFIELD, COUNTY OF HARTFORD, STATE OF CONNECTICUT. SAID PARCEL BEING DEPICTED AS "PARCEL 1A" ON A MAP ENTITLED "RE-SUBDIVISION PLAN PARCEL 1 ENFIELD COMMONS PREPARED FOR GMRI, INC. HAZARD AVENUE (ROUTE 190) FRESHWATER BOULEVARD ENFIELD, CONNECTICUT. DATED: 01-16-98 SCALE: 1" = 40' SHEET 1 OF 1 F. A. KESKETH & ASSOCIATES, INC." BEING BOUND AND MORE PARTICULARLY DESCRIBED AS FOLLOWS.

BEGINNING AT A POINT MARKING THE SOUTHWESTERLY CORNER OF PARCEL 1B DEPICTED ON SAID MAP AND THE SOUTHEASTERLY CORNER OF THE PARCEL HEREIN DESCRIBED. SAID POINT OF BEGINNING BEING LOCATED NORTH 86° 22' 57" WEST A DISTANCE 183.75 FEET FROM A CONNECTICUT HIGHWAY DEPARTMENT MONUMENT FOUND MARKING THE INTERSECTION OF THE NORTHERLY HIGHWAY LINE OF HAZARD AVENUE (CONNECTICUT ROUTE 190) AND THE EASTERLY STREET LINE OF FRESHWATER BOULEVARD.

THENCE, NORTH 86° 22' 57" WEST A DISTANCE OF 153.62 FEET ALONG THE NORTHERLY HIGHWAY LINE OF HAZARD AVENUE (CONNECTICUT ROUTE 190) TO A POINT MARKING THE SOUTHEASTERLY CORNER OF PARCEL 2 DEPICTED ON SAID MAP.

THENCE, NORTH 03° 37' 03" EAST A DISTANCE OF 124.00 FEET TO A POINT.

THENCE, SOUTH 86° 22' 57" EAST A DISTANCE OF 25.00 FEET TO A POINT.

THENCE, NORTH 03° 37' 00" EAST A DISTANCE OF 129.00 FEET TO A POINT.

THENCE, SOUTH 86° 22' 57" EAST A DISTANCE OF 108.62 FEET TO THE NORTHWESTERLY CORNER OF PARCEL B DEPICTED ON SAID MAP. THE LAST FOUR COURSES BEING ALONG LAND NOW OR FORMERLY PARKSIDE ASSOCIATES LIMITED PARTNERSHIP BEING PARCEL 2 DEPICTED ON SAID MAP.

THENCE, SOUTH 03° 37' 03" EAST A DISTANCE OF 253.00 FEET ALONG THE WESTERLY LINE OF PARCEL 1B DEPICTED ON SAID MAP TO THE POINT AND PLACE OF BEGINNING.

SAID PARCEL CONTAINING 30,581 SQ. FEET ON 0.702 ACRES MORE OR LESS.

Subject to: Reciprocal Easement Agreement dated May 10, 1995, by and between Parkside Associates Limited Parntership and GMRI, Inc., recorded May 11, 1995 at Volume 0921, Page 169 of the Public Records of Hartford County, Connecticut and Reciprocal Operating Agreement dated May 10, 1995, by and between Parkside Associates Limited Partnership and GMRI, Inc., recorded May 11, 1995 at Volume 0921, Page 188 of the Public Records of Hartford County, Connecticut.

RECORDED IN
ENFIELD LAND RECORDS
2001 FEB 27 PM 2:45
SUZANNE F. OLECHNICKI
TOWN CLERK

DOC#0105613

Hesketh

3 Creamery Brook • East Granby, CT 06026

F. A. Hesketh
& Associates, Inc.

LETTER OF TRANSMITTAL

TO: ENFIELD PLANNING DEPT

DATE: 7/1/2020

OFFICE JOB FILE NO: 19001

PROJECT NAME: ENF. COMMONS

ATTN:

PROJECT LOCATION: #25 & 39 HAZARD

WE ARE SENDING YOU HEREWITH:

NO OF COPIES	ITEM TITLE	MADE BY	ORIGINALS	PAPER PRINTS	MYLAR COPY	OTHER	REMARKS
14	PLAN SET			X			DATED 7/1/20
3	ENGINEERING REPORT			X			DATED 7/1/20
1	APPL & $70.00 FEE		X				SPECIAL FLOOD
1	APPL & $468.00 FEE		X				SPECIAL USE SITE PLAN

COMMENTS:

SENT BY:

MAIL
SPECIAL DELIVERY
FEDEX
MESSENGER
OTHER

C.C:

F. A. Hesketh & Associates, Inc.
By:

IF ENCLOSURES LISTED ABOVE ARE NOT RECEIVED KINDLY NOTIFY AT ONCE

Udolf Properties
8 Ellsworth Road Suite 401
West Hartford, CT 06107

RECEIVED
ENFIELD PLANNING DEPT.
2020 JUL 10 PM 3:07

12/20/2019

Planning & Zoning
Town of Enfield
820 Enfield Street
Enfield, CT 06082

RE: 39 Hazard Avenue, Enfield, Connecticut ("Property")

Dear Sir or Madam:

LEO BHW LTD, LLC, being the owner of the Property, does hereby by provide consent and permission to Paramount Newco Realty LLC to file applications and make submittals to the Planning & Zoning Department of the Town of Enfield regarding changes in the use and occupancy of the Property.

LEO BHW LTD, LLC, a Connecticut limited liability company

By:_____
Name: Robert Udolf
Title: Manager

Proposed

Retail / Restaurant Building at Enfield Commons

25 & 39 Hazard Avenue

Enfield, Connecticut

Inland Wetlands & Watercourses, Special Use and Site Plan Applications

January 24, 2020

Revised July 01, 2020

PH#

File IW #

DEVELOPMENT TEAM

Property Owner	LEO BHW LTD, LLC 8 Ellsworth Road Suite 401 West Hartford, CT 06107
Applicant/Developer	Paramount Newco Realty 1195 Route 70 Suite 2000 Lakewood, NJ 08701
Legal Counsel	Daniel J. Ivler, Esquire
Civil Engineer	F. A. Hesketh & Associates, Inc.
Landscape Architect	F. A. Hesketh & Associates, Inc.
Architect	Ni Design
Surveyor	F. A. Hesketh & Associates, Inc.

LIST OF DRAWINGS

	Title Sheet
MA-1	Master Layout Plan
LA-1	Layout Plan
LS-1 and LS-2	Landscape Plan
GR-1	Grading and Soil Erosion & Sediment Control Plan
UT-1	Utility and Drainage Plan
SD-1 thru SD-3	Site Details
NT-1	Notes
PS-1	Property Survey
A.2	Construction Plan
A.3 and A.3a	Exterior Elevations

David S. Ziaks P.E. #13336

F. A. Hesketh & Associates, Inc.
3 Creamery Brook, East Granby, CT 06026
Phone (860) 653-8000 · Fax (860) 844-8600
Civil & Traffic Engineers · Surveyors · Planners · Landscape Architects

G:\2019\19001 – Enfield Common\Submittals\2020-07-01\ESMtp104.dwg, TP-1, Jun 29, 2020 – 11:52:23 AM

ZONING INFORMATION (ENTIRE PARCEL)

LOCATION: ENFIELD, CONNECTICUT

ZONE: B–R (BUSINESS REGIONAL SHOPPING DISTRICT)

USE: RETAIL / MOTOR VEHICLE REPAIR GARAGE (SPECIAL PERMIT) / RESTAURANT WITH DRIVE-THRU (SPECIAL PERMIT)

ITEM #	ITEM	REQUIREMENTS	EXISTING	PROPOSED	VARIANCE
1	MINIMUM LOT AREA	217,800 S.F. (5.00 AC.)	1,438,430 S.F. (33.02 AC.)	1,438,430 S.F. (33.02 AC.)	NO
2	MINIMUM LOT WIDTH	NONE REQUIRED	287.26 FEET	287.26 FEET	NO
3	MINIMUM LOT FRONTAGE	250 FEET	1,268 FEET	1,268 FEET	NO
4	MINIMUM FRONT SETBACK	35 FEET	75 FEET	75 FEET	NO
5	MINIMUM SIDE SETBACK	30 FEET	115.42 FEET	115.42 FEET	NO
6	MINIMUM REAR SETBACK	30 FEET	95.56 FEET	95.56 FEET	NO
7	MAXIMUM BUILDING HEIGHT	72 FEET	<25'/ 1 STORY	<25'/ 1 STORY	NO
8	MAXIMUM BUILDING COVERAGE	45 PERCENT	21.6 PERCENT	22.3 PERCENT	NO
9	MAXIMUM IMPERVIOUS COVERAGE	66 PERCENT	71.9 PERCENT	71.5 PERCENT	YES
10	MINIMUM GROSS LANDSCAPE	15 PERCENT	******	******	EXISTING NON-CONFORMITY

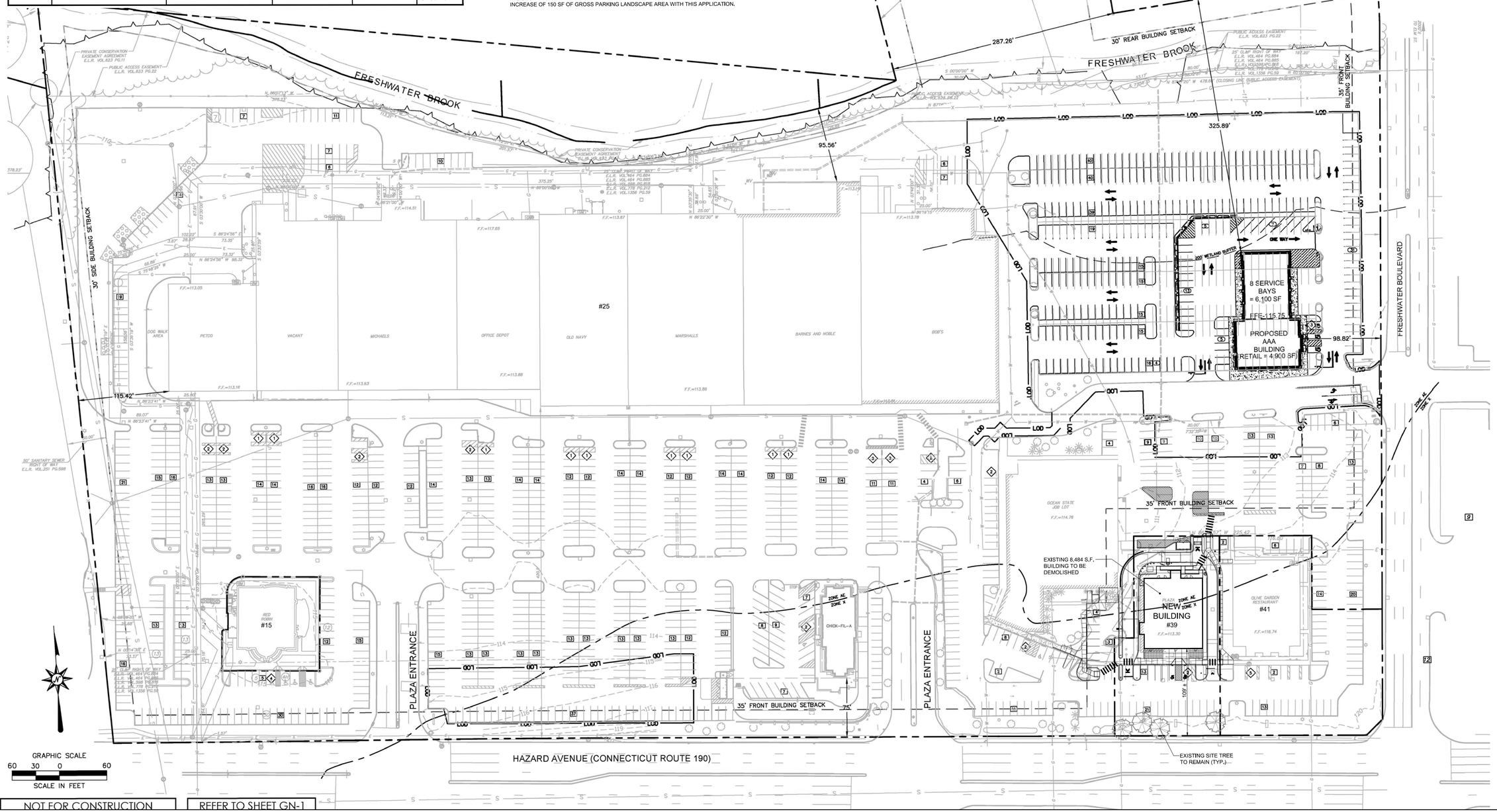
PARKING INFORMATION (DEVELOPMENT)

	USE	PARKING REQUIREMENT	BUILDING AREA	GROSS FLOOR AREA	PARKING REQUIRED
Enfield Commons*	SHOPPING CENTER	4/1000	236,313	218,191	873
Ocean State*	SHOPPING CENTER	4/1000	22,775	22,775	92
Moe's***	RESTAURANT-FF	1/75	2,769	2,769	37
NEW BUILDING	RESTAURANT	15/1000	6,986	4,541*****	46
Olive Garden**	RESTAURANT	15/1000	9,230	6,211	94
Red Robin*	RESTAURANT	15/1000	6,348	4,582	69
Aspen Dental*	SHOPPING CENTER	4/1000	3,200	3,046	13
Chick-Fil-A****	RESTAURANT-FF	1/3	4,891	131 SEATS	44
Storage	SHOPPING CENTER	4/1000	73	0	0
			EXISTING TOTALS		1,268
AAA OFFICE	BUSINESS SERVICES	1/250	4,900	4,900	20
AAA SERVICE	AUTOMOTIVE	6/SERVICE BAY	6,100	8 BAYS	48
				PROPOSED REQUIRED TOTALS	68
				TOTAL REQUIRED	1,336
				TOTAL PROPOSED	1,407

*G.F.A. or "GROSS USABLE FLOOR AREA" DETERMINED THROUGH MEASUREMENTS TAKEN DURING BUILDING WALK-THROUGH ON 1/17/2014. FIGRES INCLUDE ONLY AREAS ACCESSIBLE TO THE PUBLIC. TOTAL G.F.A. MAY BE LOWER THAN INDICATED IN CHART.
**G.F.A. or "GROSS USABLE FLOOR AREA" DETERMINED THROUGH MEASUREMENTS TAKEN DURING BUILDING WALK-THROUGH ON 4/21/2015 FIGURES INCLUDE ONLY AREAS ACCESSIBLE TO THE PUBLIC. TOTAL G.F.A. MAY BE LOWER THAN INDICATED IN CHART.
***PARKING REQUIRED FOR MOE'S, AS A FAST FOOD RESTAURANT, HAS BEEN CALUCLATED AT A RATE OF 1 SPACE FOR EVERY 75 S.F. OF GROSS LEASABLE FLOOR AREA PER THE TOWN OF ENFIELD ZONING REGULATIONS.
****PARKING REQUIRED FOR CHICK-FIL-A, AS A FAST FOOD RESTAURANT, HAS BEEN CALUCLATED AT A RATE OF 1 SPACE FOR EVERY 3 PATRON SEATS PER THE TOWN OF ENFIELD ZONING REGULATIONS.
***** ASSUME 65% GROSS USABLE FLOOR AREA FOR 'NEW BUILDING'
****** THE SHOPPING CENTER IS AN EXISTING NON-CONFORMING USE WITH REGARDS TO SECTION 10.10.7. THERE IS A SLIGHT INCREASE OF 150 SF OF GROSS PARKING LANDSCAPE AREA WITH THIS APPLICATION.

PARKING LEGEND

- HANDICAP PARKING SPACES
- AAA BUILDING PARKING SPACES
- ENFIELD COMMONS PARKING SPACES



NOT FOR CONSTRUCTION

REFER TO SHEET GN-1

F. A. Hesketh & Associates, Inc.
6 Creamery Brook, East Granby, CT 06026
Civil & Traffic Engineers · Surveyors · Planners · Landscape Architects
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Fax (860) 844-8600
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Revisions:

No.	Date	Description
1	01–24–2020	Town comments
2	03–30–2020	Miscellaneous revisions
3	07–01–2020	TPZ Filing

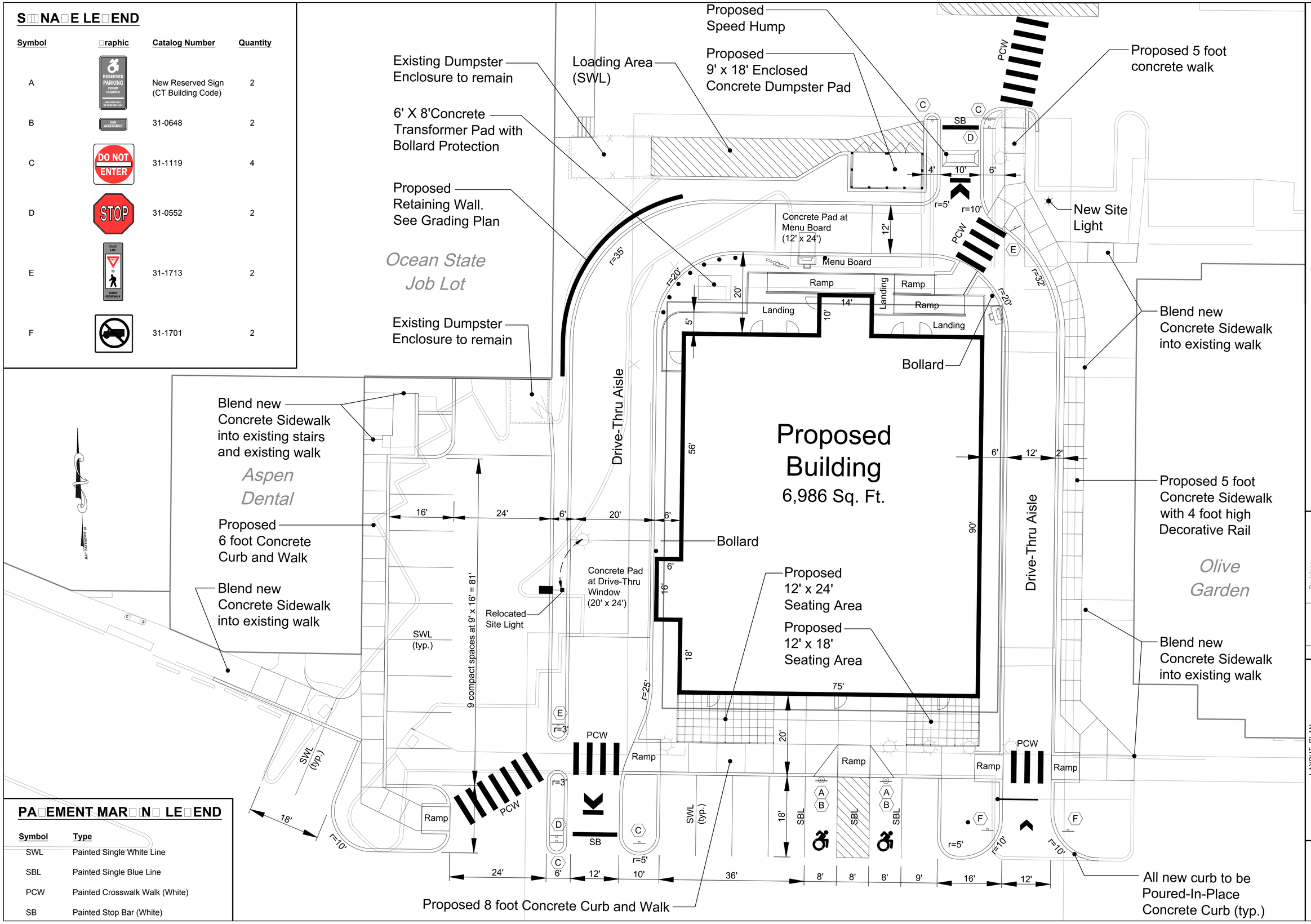
MASTER PLAN
PREPARED FOR
PARAMOUNT NEWCO REALTY
ENFIELD COMMONS
25 & 39 HAZARD AVENUE
ENFIELD, CONNECTICUT

date: 12–24–2019 | drawn by: KLL | job no: 19001
scale: 1" = 60' | checked by: DSZ | sheet no: 1 OF 1

MA–1

SIGNAGE LEGEND

Symbol	Graphic	Catalog Number	Quantity
A	RESERVED PARKING PERMIT REQUIRED	New Reserved Sign (CT Building Code)	2
B	VAN ACCESSIBLE	31-0648	2
C	DO NOT ENTER	31-1119	4
D	STOP	31-0552	2
E	STATE LAW YIELD TO PEDESTRIANS WITHIN CROSSWALK	31-1713	2
F		31-1701	2



PAVEMENT MARKING LEGEND

Symbol	Type
SWL	Painted Single White Line
SBL	Painted Single Blue Line
PCW	Painted Crosswalk Walk (White)
SB	Painted Stop Bar (White)

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Revisions:

No.	Date	Description
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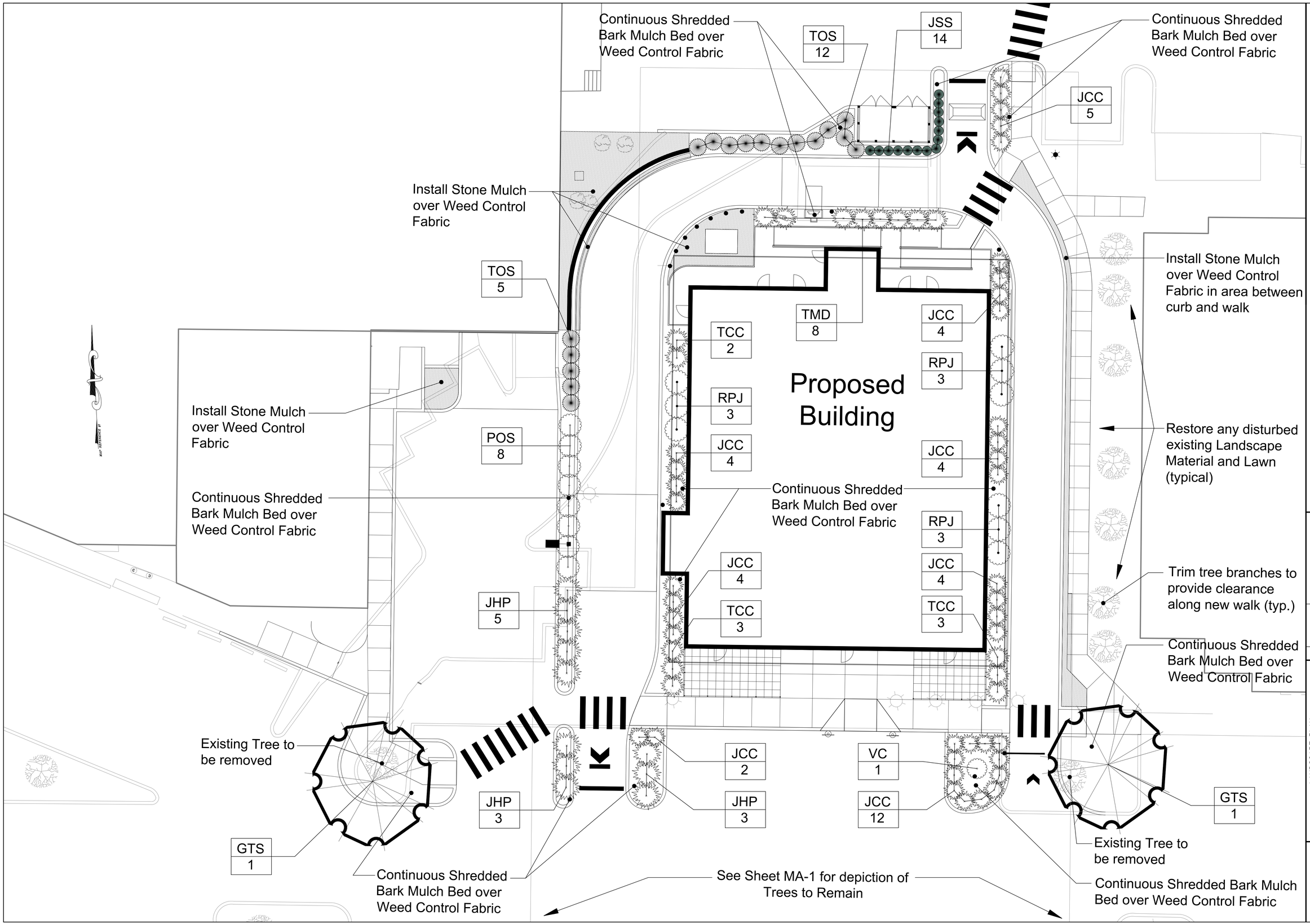
LAYOUT PLAN
PREPARED FOR
PARAMOUNT NEWCO REALTY
ENFIELD COMMONS
25 & 39 HAZARD AVENUE
ENFIELD, CONNECTICUT

date: 12-24-2019 | drawn by: KLL | job no: 19001
scale: 1" = 10' | checked by: DSZ | sheet no: 1 OF 1

LA-1



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Revisions:

No.	Date	Description
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LANDSCAPE PLAN
PREPARED FOR
PARAMOUNT NEWCO REALTY
ENFIELD COMMONS
25 & 39 HAZARD AVENUE
ENFIELD, CONNECTICUT

date: 12-24-2019 | drawn by: KLL | job no: 19001
scale: 1" = 10' | checked by: DSZ | sheet no: 1 OF 1

LS-1

LANDSCAPE SCHEDULE

Deciduous Canopy Trees

Symbol	Botanical Name	Common Name	Quantity	Size	Root	Mature Height
GTS	*Gleditsia triacanthos 'Shademaster'*	Shademaster Honeylocust	2	4 to 4 ½ inch caliper	Balled and Burlapped	40 Feet

Evergreen Trees

Symbol	Botanical Name	Common Name	Quantity	Size	Root	Mature Height
JSS	*Juniperus scopulorum 'Skyrocket'*	Skyrocket Upright Juniper	12	5 to 6 foot height	Balled and Burlapped	15 Feet
TOS	*Thuja occidentalis 'Smaragd'*	Emerald Green Arborvitae	17	6 to 8 foot height	Balled and Burlapped	15 Feet

Deciduous Shrubs

Symbol	Botanical Name	Common Name	Quantity	Size	Root	Mature Height
POS	*Physocarpus opulus 'Summerwine'*	Summerwine Ninebark	8	24 to 30 inch height	#3 Container	6 Feet
VC	*Viburnum carlesii*	Korean Spice Viburnum	1	3 to 4 foot height	Balled and Burlapped	6 Feet

Evergreen Shrubs

Symbol	Botanical Name	Common Name	Quantity	Size	Root	Mature Height
JCC	*Juniperus chin. 'Pfitzeriana Compacta'*	Compact Pfitzer Juniper	39	24 to 30 inch spread	#3 Container	4 Feet
JHP	*Juniperus horizontalis depressa plumosa*	Andorra Juniper	11	24 to 30 inch spread	#3 Container	2 Feet
TCC	*Taxus cuspidata 'Capitata'*	Upright Yew	8	36 to 42 inch height	Balled and Burlapped	Prune to height
TMD	*Taxus x media 'Densiformis'*	Spreading Yew	8	18 to 24 inch height	Balled and Burlapped	4 Feet

Broadleaf Evergreen Shrubs

Symbol	Botanical Name	Common Name	Quantity	Size	Root	Mature Height
RPJ	*Rhododendron 'P.J.M.'*	R.P.J. Rhododendron	9	24 to 30 inch height	#3 Container	5 Feet

LANDSCAPE NOTES

1. All plants shall meet or exceed the specifications of Federal, State and County laws requiring inspection for plant disease and insect control.

2. Plant material shall conform with the "American Standard for Nursery Stock" by the American Association of Nurserymen, Inc. (ANSI Z60.1-2004).

3. All plants shall be certified true to name by the nursery source. Plant names shall be in accordance with "Hortis Third" (1976) by the staff of the Liberty Hyde Bailey Hortorium, Cornell University. One plant from each species shall be tagged with name and size of the plant in accordance with the standards of practice of the American Association of Nurserymen. Botanical names shall take precedence over common names.

4. Plant material shall be typical of their species and/or variety, with a normal habit of growth, sound, healthy and vigorous. They shall be well branched and densely foliated when in leaf, free of disease, insect pest, eggs or larvae. They shall have healthy well-developed root systems. All trees shall have straight single trunks with their main leader intact unless otherwise noted or approved.

5. All landscaped areas to have 2" shredded bark mulch (color: black) over weed control fabric. No weed control fabric in areas of groundcover or perennial plantings.

6. Provide protective covering of plant material during delivery and storage. Root balls shall not be cracked or broken. Do not prune plants prior to delivery. Remove unacceptable plant material immediately from the job site.

7. Plant locations on the Drawings are approximate and are to be used only as a guide. Contractor shall provide all field engineering services to accurately stake out locations for all plants prior to installation. Do not begin excavation until Project Landscape Architect has approved specific layout.

8. If requested by Project Landscape Architect, stake and guy each tree as shown on the applicable Drawings immediately after planting. Keep trees plumb and taut.

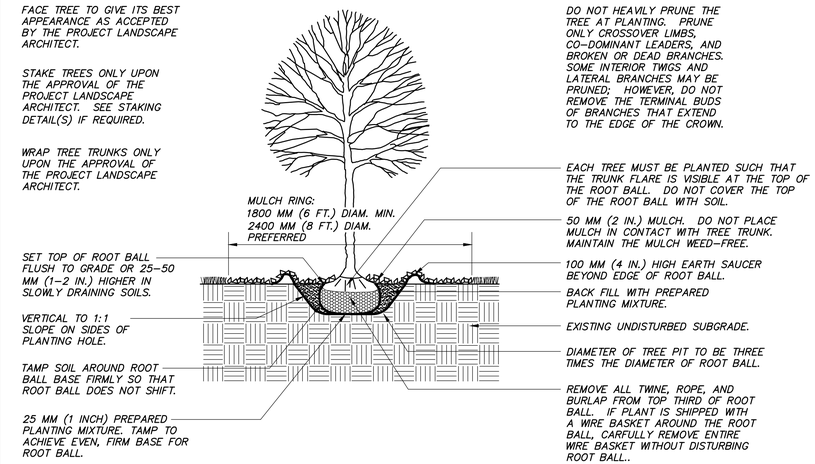
9. If requested by Project Landscape Architect, wrap the trunks of all trees spirally from the ground line to above the lowest main branch.

10. Perform all cultural care necessary to properly maintain plant viability and keep planted areas in a neat and orderly condition, including but not limited to:

a. Watering
b. Weed removal
c. Apply lime or sulphur to adjust soil pH to specific plant requirements
d. Restore or reshape earth saucers
e. Pruning
f. Adjust and tighten tree supports to maintain plants at their proper grades and vertical position
g. Replace mulch to maintain proper depth

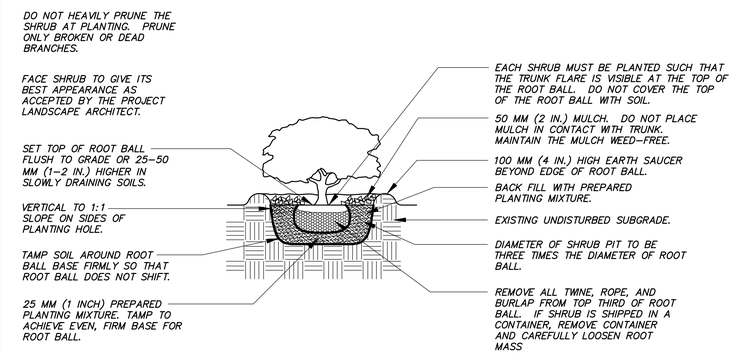
11. All planted and lawn areas within development area (building and parking areas) to receive an automatic, mechanical irrigation system.

12. A minimum of 4 inches of topsoil shall be placed on all areas of disturbance to be reseeded.



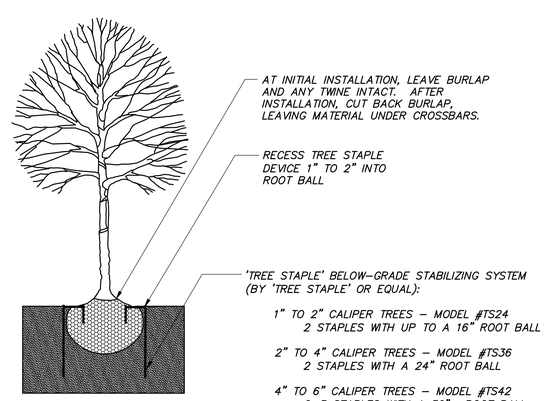
B&B TREE PLANTING DETAIL

N.T.S.



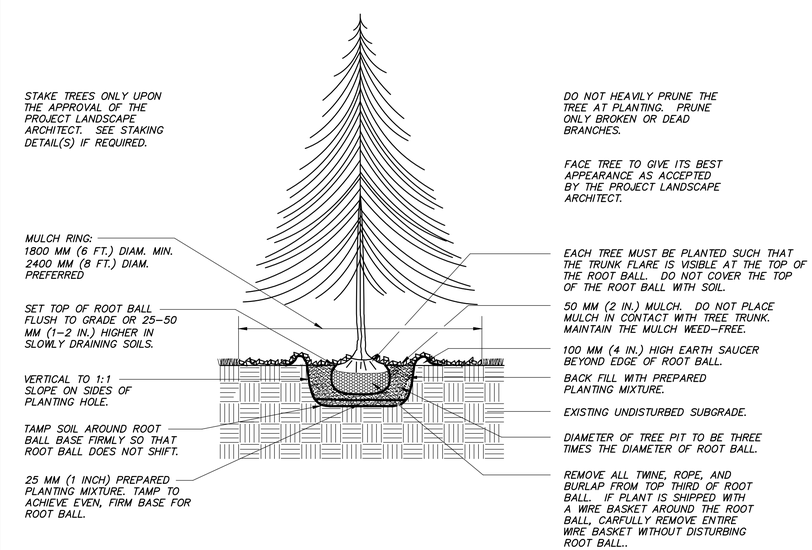
SHRUB PLANTING DETAIL

N.T.S.



TREE STAKING DETAIL

N.T.S.



EVERGREEN B&B TREE PLANTING DETAIL

N.T.S.

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Revisions:

No.	Date	Description
1	01–24–2020	Town comments
2	03–30–2020	Miscellaneous revisions
3	07–01–2020	TPZ Filing

LANDSCAPE SCHEDULE, DETAILS AND NOTES

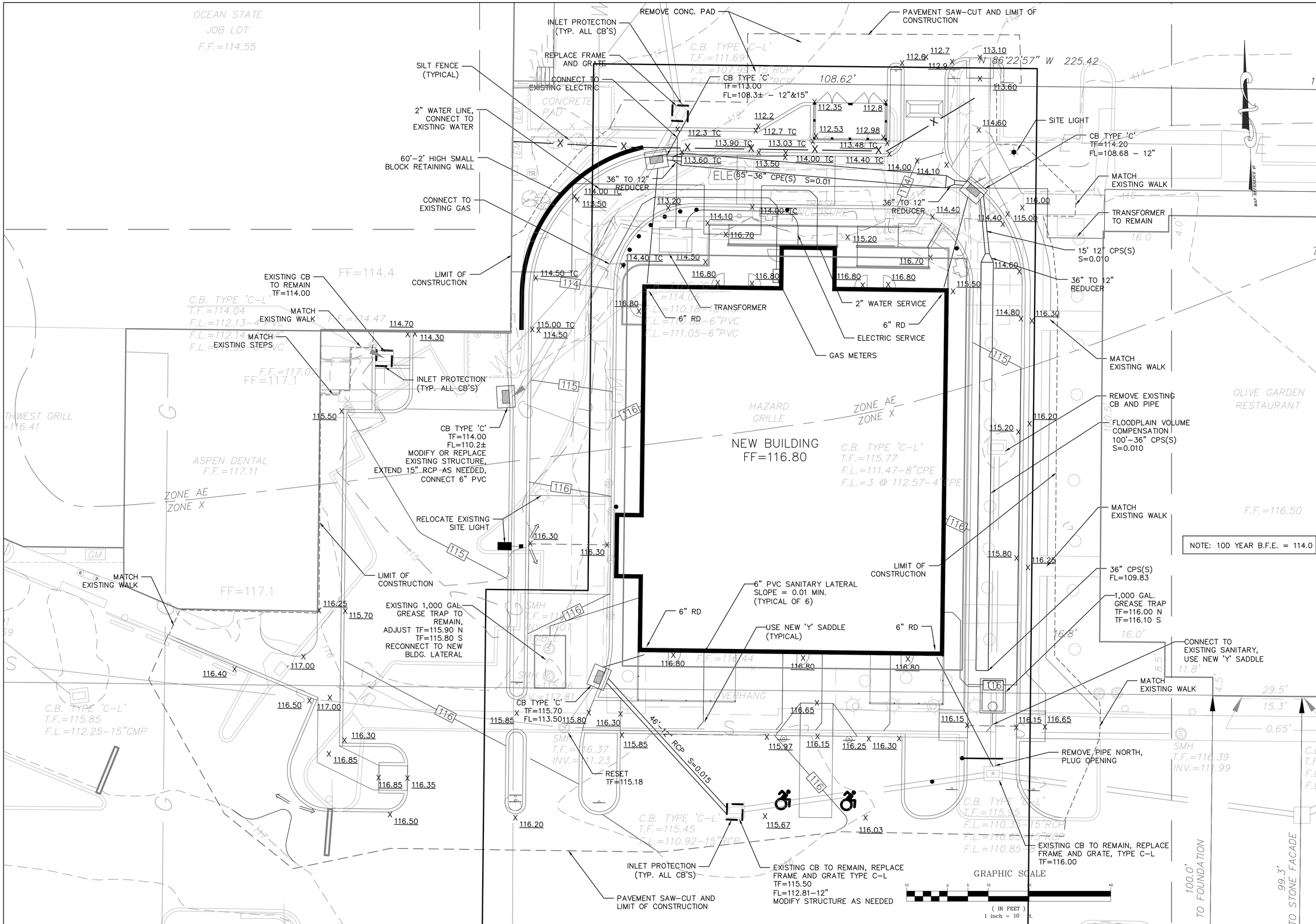
PREPARED FOR

PARAMOUNT NEWCO REALTY

ENFIELD COMMONS
25 & 39 HAZARD AVENUE
ENFIELD, CONNECTICUT

date: 12–24–2019 | drawn by: KLL | job no: 19001
scale: NO SCALE | checked by: DSZ | sheet no: 1 OF 1

LS–2



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revisions:

no.	date	description
1	10-24-20	Town comments
2	03-30-20	Miscellaneous Revisions
3	07-01-20	IWZ Filing

GRADING AND SOIL EROSION CONTROL PLAN

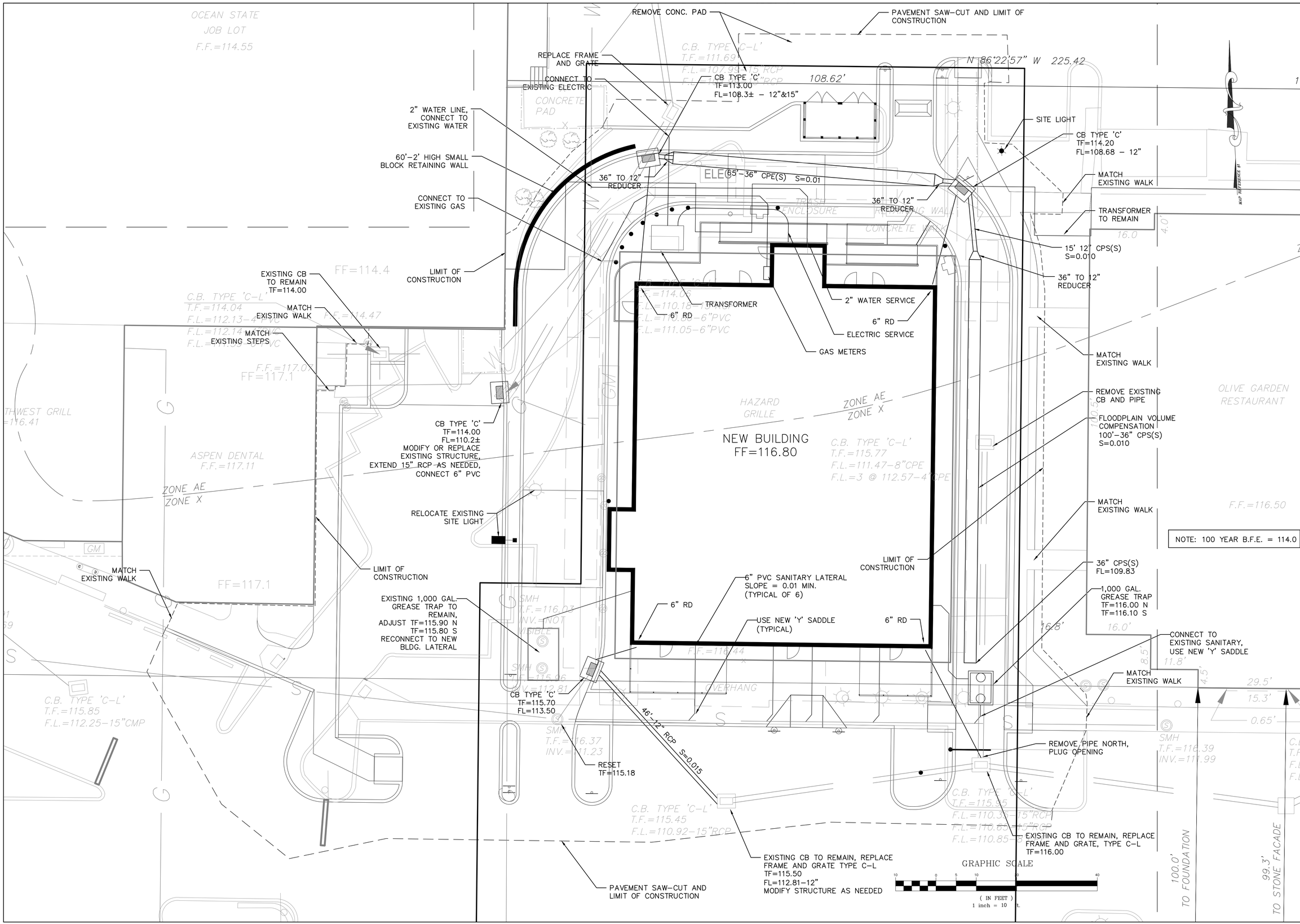
PREPARED FOR

PARAMOUNT NEWCO REALTY

25 & 39 HAZARD AVENUE
ENFIELD, CONNECTICUT

date: 12-24-2019 | drawn by: R.K | job no: 19001
scale: 1" = 10' | checked by: DSZ | sheet no: 1 OF 1

GR-1



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revisions:

no.	date	description
1	10-24-20	Town comments
2	03-30-20	Miscellaneous Revisions
3	07-01-20	TPZ Filing

UTILITY AND DRAINAGE PLAN

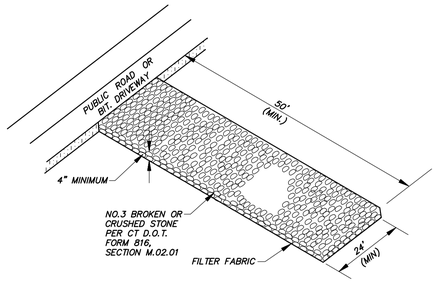
PREPARED FOR

PARAMOUNT NEWCO REALTY

25 & 39 HAZARD AVENUE
ENFIELD, CONNECTICUT

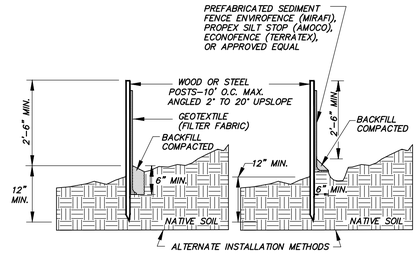
date: 12-24-2019 | drawn by: RJK | job no: 19001
scale: 1" = 10' | checked by: DSZ | sheet no: 1 OF 1

UT-1



CONSTRUCTION EXIT (CE)

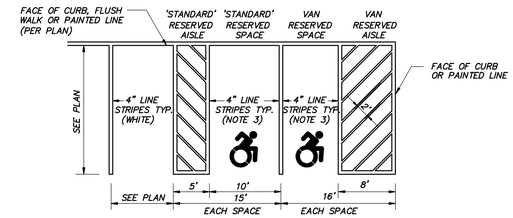
N.T.S.



NOTE:
1. WOOD POSTS SHALL BE HARDWOOD 1 1/2" x 1 1/2" x 48" MIN. STEEL POST SHALL BE A MINIMUM OF 0.5 POUNDS PER LINEAR FOOT X 48".
2. JOINTS, WHEN REQUIRED, SHALL BE SPLICED & SECURELY SEALED TOGETHER, AT POST LOCATIONS ONLY, WITH A MINIMUM 6" OVERLAP.

SEDIMENT FENCE EROSION CONTROL (SFEC)

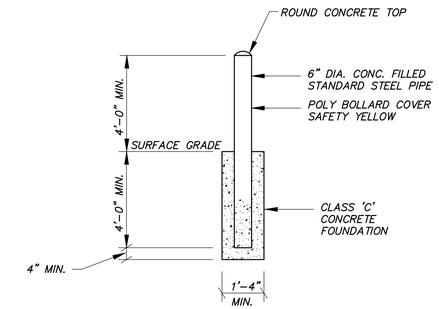
N.T.S.



NOTES:
1. AISLE CONFIGURATION PER PLAN.
2. SIGN/BOLLARD LOCATION PER PLAN.
3. LINE STRIPING COLOR AND ADA SYMBOL SPECIFICS NEED TO COORDINATED WITH ENFIELD BUILDING INSPECTOR BEFORE INSTALLATION
4. ADJACENT 'STANDARD' RESERVED PARKING SPACES MAY SHARE COMMON AISLE. ADJACENT 'VAN' RESERVED PARKING SPACES MAY SHARE A COMMON AISLE.

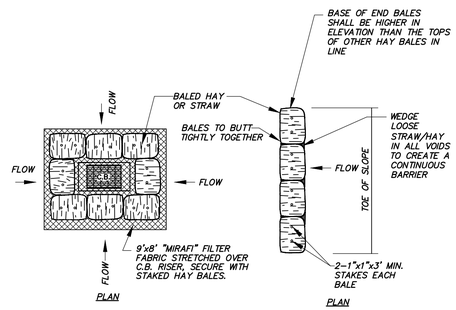
RESERVED PARKING SPACE LAYOUT

N.T.S.



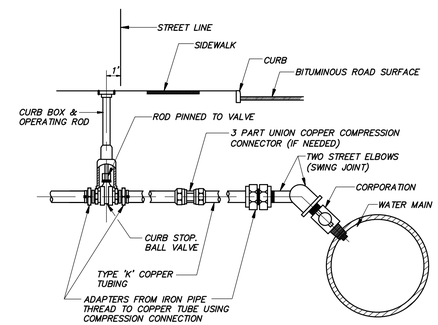
BOLLARD DETAIL

N.T.S.



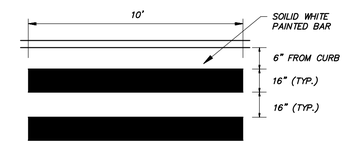
HAYBALE EROSION CONTROL (HBEC)

N.T.S.



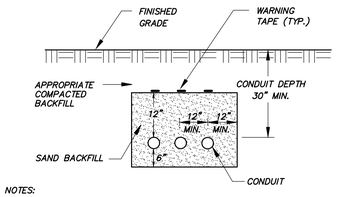
1" SERVICE TAP OFF HORIZ. CENTER LINE & ALL 1 1/2" AND 2" TAPS

N.T.S.



PAINTED PEDESTRIAN CROSSWALK

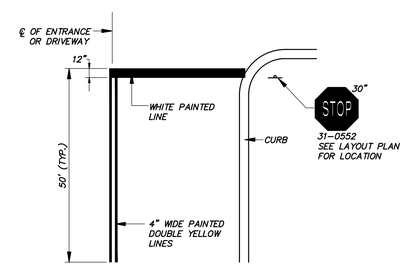
N.T.S.



NOTES:
1. CONDUIT – TYPE DB PVC SCH. 40
2. SAND FILL PER DOT OR UTILITY CO. SPECIFICATIONS
3. SHOWN FOR ILLUSTRATIVE PURPOSED ONLY, FOLLOW CUSTODIAL UTILITY COMPANY SPECIFICATIONS.

ELECTRIC/TELEPHONE/CATV TRENCH

N.T.S.



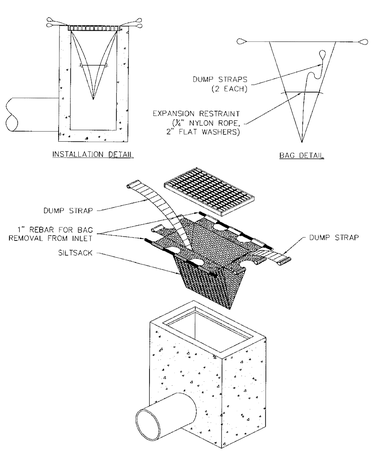
TYPICAL PAVEMENT MARKINGS AT STOP BAR

N.T.S.

NOTES:
1. PREMIUM SPEED HUMP BY BARCO PRODUCTS OR APPROVED EQUAL.
2. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

SPEED HUMP

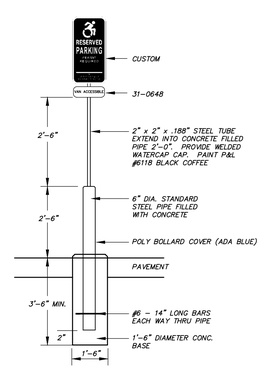
N.T.S.



1. INSTALL AND MAINTAIN IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS

INLET PROTECTION (IP) [SILT SACK INSERT]

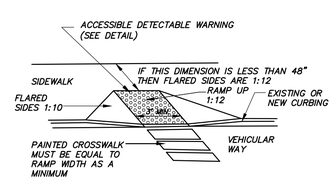
N.T.S.



ACCESSIBLE SPACE SIGN POST/BASE

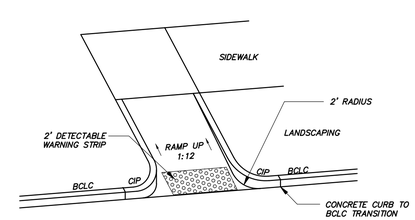
N.T.S.

NOTES:
1. CLASS 'C' CONCRETE.
2. ALL ACCESSIBLE RAMPS TO RECEIVE BROOM FINISH 90° TO THE SLOPE OF THE RAMP.
3. IF CURRENT BUILDING CODE REQUIRES ALTERNATE DESIGN, CONSTRUCT RAMP TO MEET CURRENT CODE REQUIREMENTS.
4. INTEGRATE TRUNCATED DOME TACTILE STRIPS IN ACCORDANCE WITH THE LATEST ADA STANDARDS.



ACCESSIBLE RAMP (TYPE A)

N.T.S.



ACCESSIBLE RAMP (TYPE C)

N.T.S.

PH#

File IW #

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No.	Date	Description
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DETAILS
PREPARED FOR
PARAMOUNT NEWCO REALTY
25 & 39 HAZARD AVENUE
ENFIELD, CONNECTICUT

Date: 12–24–2019	Drawn by: RJK	Job no: 19001	Sheet no: 1 OF 3
Scale: NTS	Checked by: DSZ		

SD–1

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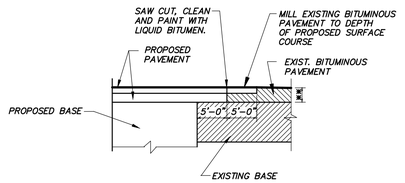
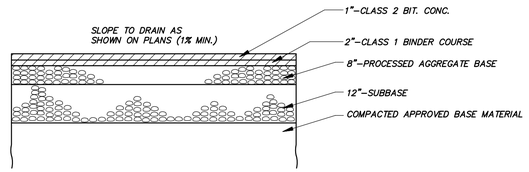


NOTES:
1. OVERLAP BOTH PROPOSED BITUMINOUS CONCRETE COURSES (CLASS I AND CLASS 2) OVER EXISTING SUBBASE.
2. ** MINIMUM THICKNESS TO BE SAME AS PROPOSED BITUMINOUS CONCRETE OR MATCH THICKNESS OF EXISTING PAVEMENT, WHICH EVER IS GREATER.

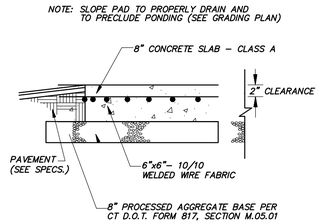
PAVEMENT MATCH TREATMENT

N.T.S.



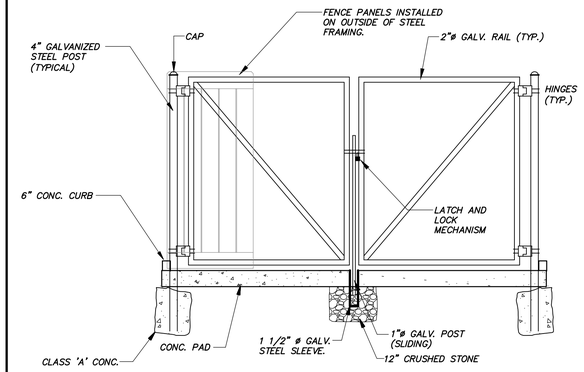
PAVEMENT SECTION

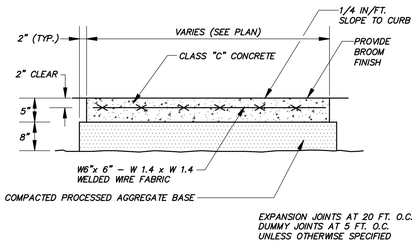
N.T.S.



CONCRETE PAD

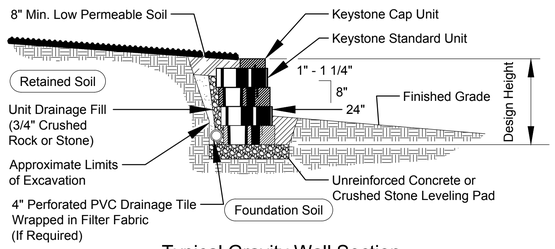
N.T.S.





CONCRETE SIDEWALK

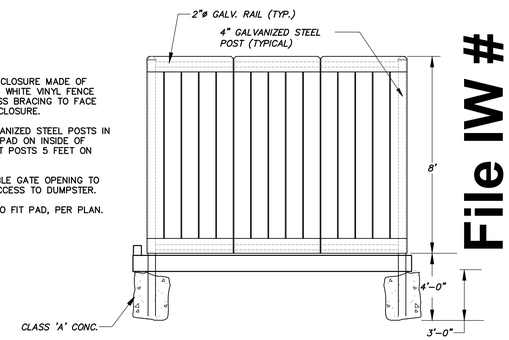
N.T.S.



Typical Gravity Wall Section

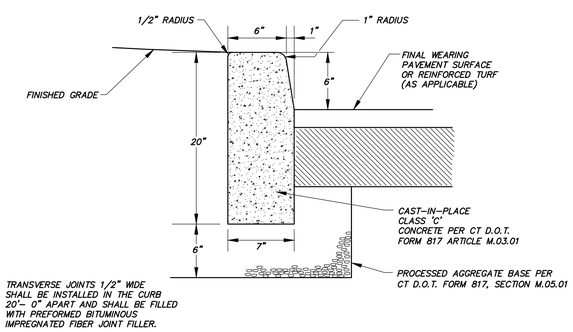
Standard Unit - 1" Setback

NOTES:
1. DUMPSTER ENCLOSURE MADE OF 8-FOOT-HIGH WHITE VINYL FENCE PANELS. CROSS BRACING TO FACE INSIDE OF ENCLOSURE.
2. INSTALL GALVANIZED STEEL POSTS IN CORNERS OF PAD ON INSIDE OF FENCING. SET POSTS 5 FEET ON CENTER.
3. INSTALL DOUBLE GATE OPENING TO FACILITATE ACCESS TO DUMPSTER.
4. DIMENSIONS TO FIT PAD, PER PLAN.



DUMPSTER ENCLOSURE

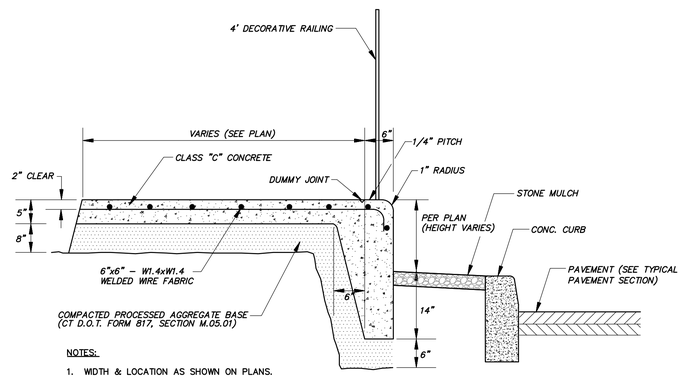
N.T.S.



NOTE: TRANSVERSE JOINTS 1/2" WIDE SHALL BE INSTALLED IN THE CURB 20'- 0" APART AND SHALL BE FILLED WITH PREFORMED BITUMINOUS IMPREGNATED FIBER JOINT FILLER.

CONCRETE CURBING

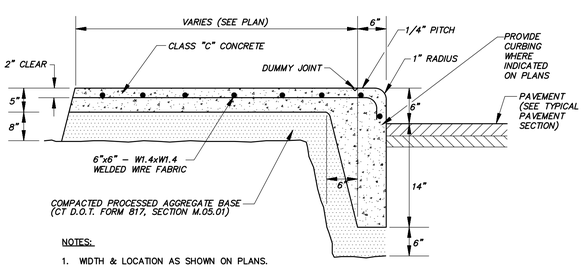
N.T.S.



NOTES:
1. WIDTH & LOCATION AS SHOWN ON PLANS.
2. PREMOLDED EXPANSION JOINTS AT 20 FT. O.C.
3. DUMMY JOINTS AT 5 FT. O.C.

CONCRETE SIDEWALK WITH DECORATIVE FENCE

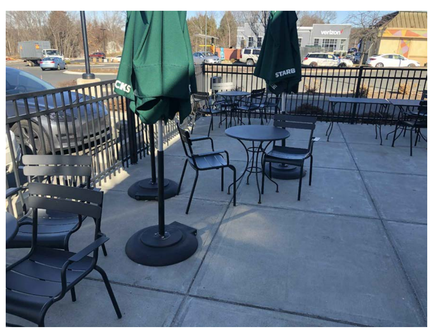
N.T.S.



NOTES:
1. WIDTH & LOCATION AS SHOWN ON PLANS.
2. PREMOLDED EXPANSION JOINTS AT 20 FT. O.C.
3. DUMMY JOINTS AT 5 FT. O.C.

CONCRETE CURB AND WALK

N.T.S.



TYPICAL PATIO SEATING AND FENCING

N.T.S.

File IW # PH#

F. A. Hesketh & Associates, Inc.
3 Creamery Brook, East Granby, CT 06026
Phone (860) 653-8000 Fax (860) 844-8600
Civil & Traffic Engineers · Surveyors · Planners · Landscape Architects
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Revisions:

No.	Date	Description
1	01-24-2020	Town comments
2	03-30-2020	Miscellaneous revisions
3	07-01-2020	TPX Filing

DETAILS
PREPARED FOR
PARAMOUNT NEWCO REALTY
25 & 39 HAZARD AVENUE
ENFIELD, CONNECTICUT

Date: 12-24-2019 | Drawn by: RJK | Job no: 19001
Scale: NTS | Checked by: DSZ | Sheet no: 2 OF 3

SD-2

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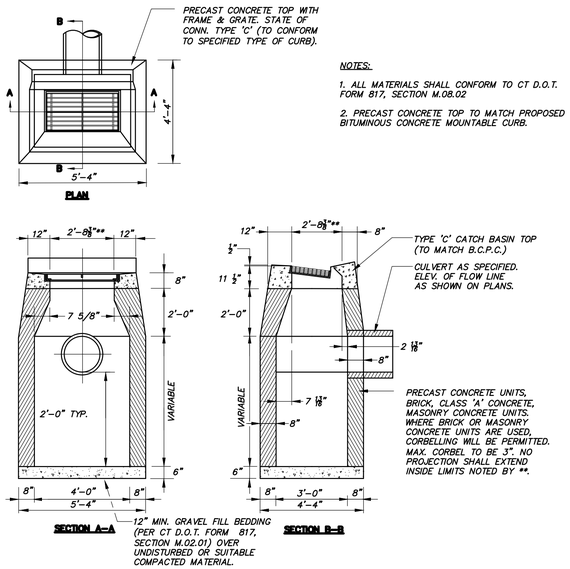
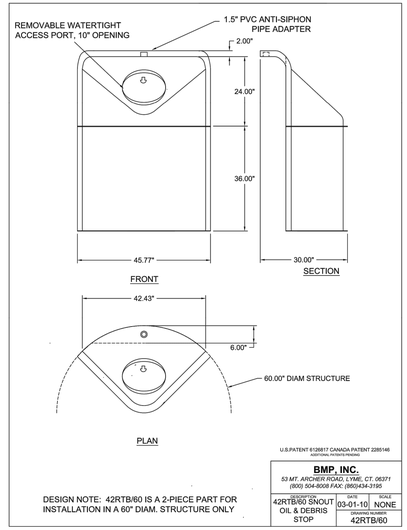


NOTES:

1. ALL MATERIALS SHALL CONFORM TO CT D.O.T. FORM 817, SECTION M.08.02
2. PRECAST CONCRETE TOP TO MATCH PROPOSED BITUMINOUS CONCRETE MOUNTABLE CURB.

TYPE 'C' CATCH BASIN

N.T.S.

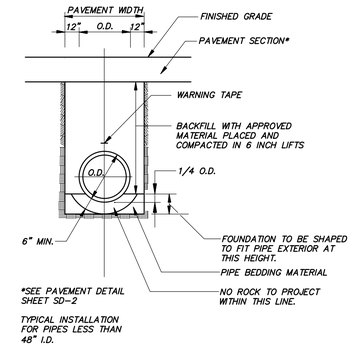


DESIGN NOTE: 42RTB/60 IS A 2-PIECE PART FOR INSTALLATION IN A 60" DIAM. STRUCTURE ONLY

ALL NEW C.B'S TO HAVE TRAP HOODS

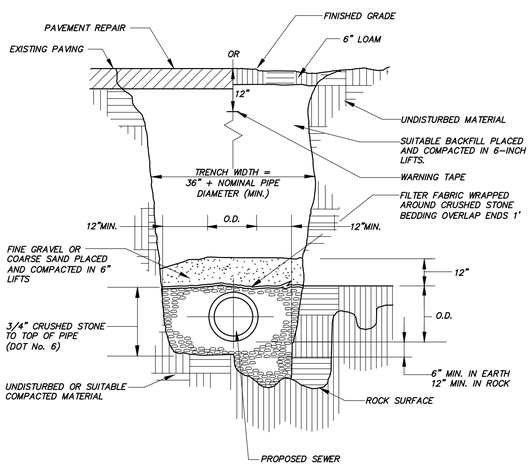
TRAP HOOD DETAIL

N.T.S.



STORM SEWER TRENCH

N.T.S.



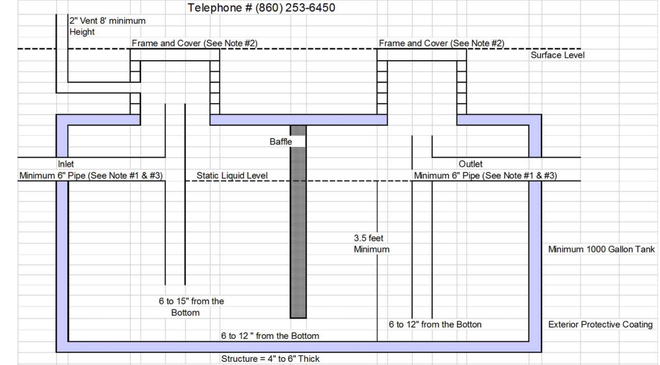
GRAVITY SEWER TRENCH

N.T.S.

New Construction Requirement

EXTERNAL FOG TREATMENT UNIT

Town of Enfield
Department of Public Works, Water Pollution Control Divisiion
820 Enfield Street, Enfield, Ct. 06082
Telephone # (860) 253-6450



NOTE:
1) All pipe joints water tight.
2) Frame and Cover shall be installed according to Town of Enfield Subdivision Regulations.revised to 02-12-02.
3) All internal pipe shall be schedule 80 and be glued.

(IV)

GREASE TRAP

N.T.S.

File IW # PH#

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Revisions:

No.	Date	Description
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DETAILS
PREPARED FOR
PARAMOUNT NEWCO REALTY
25 & 39 HAZARD AVENUE
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Date: 12-24-2019 | Drawn by: RJK | Job no: 19001
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SD-3

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I. PROJECT DESCRIPTION

THE PROJECT CONSISTS OF THE REMOVAL OF AN EXISTING OUTPARCEL BUILDING (AZTECA) AND ASSOCIATED APPURTENANCES RELATED TO THIS EXISTING BUILDING.

IN ITS PLACE A NEW 6,986 SQUARE FOOT MULTI–TENANT BUILDING WILL BE CONSTRUCTED. THE NEW BUILDING WILL HAVE A DRIVE–THRU WINDOW AND DEDICATED DRIVE –THRU LANE. A SLIGHT RECONFIGURATION OF THE EXISTING PARKING SPACES AND PEDESTRIAN WALKWAY SYSTEM WILL BE CONSTRUCTED TO ACCOMMODATE THE NEW BUILDING DESIGN.

ACCESS TO THE NEW BUILDING WILL BE VIA THE EXISTING DRIVEWAY SYSTEM FOR THE BALANCE OF THE ENFIELD COMMONS DEVELOPMENT.

THE SITE WILL BE SERVED WITH PUBLIC UTILITIES FROM HAZARD AVENUE AND FRESHWATER BOULEVARD. SANITARY SEWAGE WILL FLOW BY GRAVITY TO THE EXISTING ENFIELD COMMONS SEWER SYSTEM. A NEW GREASE TRAP WILL BE INSTALLED AND CONNECTED TO THIS SAME SEWER SYSTEM. STORM WATER WILL BE HANDLED WITH CONVENTIONAL STORM DRAIN SYSTEMS COMPRISED OF CATCH BASINS, MANHOLES AND WILL BE CONNECTED TO THE EXISTING ENFIELD COMMONS DRAINAGE SYSTEM.

THE PROJECT WILL BE LANDSCAPED WITH TREES AND SHRUBS IN THE PARKING LOT ISLANDS WITH ADDITIONAL FOUNDATIONS PLANTINGS AROUND THE NEW BUILDINGS AND WALKS.

II. CONSTRUCTION SEQUENCE:

IN GENERAL, THE OVERALL PROJECT WILL FOLLOW THE SEQUENCE BELOW:

1. CONTACT "CALL BEFORE YOU DIG" AT 1–800–922–4455 AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION TO HAVE EXISTING UTILITIES MARKED.
2. ATTEND PRECONSTRUCTION MEETING WITH THE TOWN OF ENFIELD OFFICIALS.
3. INSTALL EROSION CONTROL MEASURES PRIOR TO THE START OF CONSTRUCTION.
4. DEMOLISH EXISTING BUILDING
5. CUT TREES, REMOVE STUMPS, STRIP AND STOCKPILE TOPSOIL.
6. ROUGH GRADE SITE.
7. INSTALL BUILDING FOUNDATIONS.
8. INSTALL UNDERGROUND UTILITIES, LIGHT STANDARDS, AND MAKE UTILITY CONNECTIONS.
9. PREPARE SUBGRADE, INSTALL PAVEMENT BINDER COURSE AND CURBING.
10. INSTALL PAVEMENT WEARING SURFACE.
11. INSTALL SITE AMENITIES. APPLY PAVEMENT MARKINGS AND SIGNS.
12. PLACE TOPSOIL AND LANDSCAPE MATERIALS.
13. REMOVE EROSION CONTROLS AFTER DISTURBED AREAS ARE LANDSCAPED AND MULCHED OR NEW LAWN AREAS STABILIZE. COMPLETE FINAL CLEANING OF STORM SEWER SYSTEM.
14. THE APPROXIMATE DATE FOR START OF CONSTRUCTION IS FALL 2020. THE ESTIMATED COMPLETION DATE IS LATE SPRING 2021.

III. EROSION CONTROL DEVICES:

REFER TO THE "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL – 2002" (SEE GENERAL EROSION AND SEDIMENT CONTROL NOTE 3) WHEN CONSTRUCTING EROSION CONTROL DEVICES SHOWN ON THESE PLANS.

CE – CONSTRUCTION EXIT IS A CRUSHED STONE PAD ON GEOTEXTILE PROVIDING A CLEANING SURFACE AT POINTS WHERE VEHICLES LEAVE A DISTURBED AREA AND REDUCE TRACKING OF DIRT ONTO PAVED AREAS. THE STONE MUST BE REMOVED AND REPLACED WHEN IT BECOMES FILLED WITH SEDIMENT.

ECB – EROSION CONTROL BLANKET – A MANUFACTURED BLANKET COMPOSED OF BIODEGRADABLE PHOTODEGRADABLE NATURAL OR POLYMER FIBERS AND/OR FILAMENTS THAT HAVE BEEN MECHANICALLY, STRUCTURALLY OR CHEMICALLY BOUND TOGETHER TO FORM A CONTINUOUS MATRIX.

GRSW – GRASSED SWALE: A SHAPED SHALLOW EARTH DRAINAGE WAY USED TO CONVEY EXCESS SURFACE RUNOFF. GRASS VEGETATION SHOULD BE WELL ESTABLISHED BEFORE USE. STABILIZATION WITH NETTING OR MULCH MAY BE REQUIRED.

HBCD – HAYBALE CHECK DAMS SHALL BE STAKED IN A SINGLE ROW ORIENTED PERPENDICULAR TO THE FLOW ALONG THE BOTTOM AND SIDES OF DRAINAGE CHANNELS AND DITCHES. DAMS SHALL BE INSTALLED AT 100' INTERVALS UNLESS OTHERWISE SHOWN ON THE PLANS. THE HAYBALES MUST BE REPLACED WHENEVER THEY BECOME DETERIORATED.

HBEC – HAYBALE EROSION CHECKS SHALL BE STAKED A MINIMUM OF FIVE (5) FEET FROM THE BASE OF DISTURBED SLOPES EXCEEDING EIGHT (8) FEET IN HEIGHT, OR AT LOCATIONS SHOWN ON THE PLANS. LINE OF HAYBALES MUST BE INSTALLED FOLLOWING ELEVATION CONTOURS. PLACE HAYBALES BEFORE STARTING A FILL SLOPE AND AFTER DIGGING A CUT SLOPE. HEEL HAYBALES 4" INTO THE SOIL. STAKE HAYBALES AROUND THE PERIMETER OF ALL CATCH BASINS AND INSTALL FILTER FABRIC WRAP ON CATCH BASIN INLET GRATES. REMOVE ALL SEDIMENT WHEN DEPOSITS REACH ½ BALE HEIGHT. HAYBALES MUST BE REPLACED PERIODICALLY.

IP – INLET PROTECTION: A SEDIMENT CONTROL DEVICE USED DURING CONSTRUCTION THAT MOUNTS UNDER THE GRATE OF A CATCH BASIN, RESIDING INSIDE THE STRUCTURE. IT IS MADE OF PERMEABLE GEOTEXTILE THAT ALLOWS WATER TO PASS, BUT TRAPS SILT AND SEDIMENT. (SILT SACK OR APPROVED EQUAL.) THE SILT SACK MUST BE REMOVED WHEN SILT/SEDIMENT REACHES ONE HALF THE HEIGHT OF THE DEVICE. REMOVE SEDIMENTS AND DEPOSIT ON STABLE AREA OF SITE AND RINSE DEVISE FOR REUSE. REPLACE WHEN DAMAGED.

RRLS – RIP RAP LEVEL SPREADER: A RIPRAP LINED APRON INSTALLED AT A ZERO PERCENT GRADE TO ABSORB THE INITIAL IMPACT OF STORMWATER DISCHARGE FROM THE STORM DRAINAGE SYSTEM AND FURTHER REDUCE FLOW VELOCITIES TO PREVENT EROSION DOWNSTREAM.

RRPP – RIPRAP PLUNGE POOL: A RIPRAP DISSIPATION DEVICE INSTALLED AT THE ENDS OF DRAINAGE CULVERTS CREATING A POOL WITH BOTTOM BELOW THE CULVERT. WATER IN THE POOL REDUCES VELOCITY AND THE POOL COLLECTS HEAVY SEDIMENT. RIPRAP PLUNGE POOLS REQUIRE PERIODIC REMOVAL OF ACCUMULATED DEPOSITS. RRPP IS DESIGNED PER THE "CONNECTICUT DEPARTMENT OF TRANSPORTATION, DRAINAGE MANUAL – 2000"

SFEC – SEDIMENT FENCE EROSION CHECK IS A SYNTHETIC TEXTILE BARRIER DESIGNED TO FILTER SEDIMENT FROM SURFACE WATER. PLACEMENT SHALL BE SIMILAR TO HBEC AND INSTALLATION REQUIRES ANCHORING THE FENCE BOTTOM TO PREVENT BYPASS. ALL SEDIMENT SHALL BE REMOVED IF DEPOSITS REACH ONE (1) FOOT IN DEPTH. ADDITIONAL SUPPORT (SUCH AS SNOW FENCE OR WIRE FENCE) ON THE DOWNHILL FACE MAY BE REQUIRED TO STRENGTHEN SEDIMENT FENCE IN HIGH FLOW LOCATIONS.

SL – SEDIMENT LOGS: A SEDIMENT CONTROL DEVICE CONSISTING OF AN OUTSIDE, OPEN WEAVE CONTAINMENT FABRIC FILLED WITH FIBERS. IT IS DESIGNED TO PROVIDE A FLEXIBLE, LIGHTWEIGHT, POROUS, SEDIMENT CONTROL DEVICE WITH THE ABILITY TO CONFORM TO THE TERRAIN UPON WHICH IT IS INSTALLED. IT IS DESIGNED TO DISSIPATE VELOCITY OF FLOW AND FILTER AND TRAP SEDIMENTS UPGRADIENT AND WITHIN THE DEVICE.

IV. GENERAL NOTES:

1. EXISTING TOPOGRAPHY FROM A SURVEY ENTITLED "LIMITED TOPOGRAPHIC SURVEY, PREPARED FOR LEO BHW LTD, LLC, PARCEL 1A ENFIELD COMMONS, 39 HAZARD AVENUE, ENFIELD, CONNECTICUT" BY F. A. HESKETH AND ASSOCIATES, INC. AND DATED 12–24–2019.
2. N.G.V.D. (1983) VERTICAL DATUM USED. AN ASSUMED HORIZONTAL DATUM WAS USED. SEE TOPOGRAPHIC SURVEY FOR HORIZONTAL CONTROL POINTS AND BENCHMARKS.
3. ALL WORK AND MATERIALS TO CONFORM TO THE PROJECT SPECIFICATIONS, CT DOT FORM 817, TOWN OF ENFIELD STANDARD DETAILS AND CUSTODIAL UTILITY COMPANY DETAILS AND SPECIFICATIONS, AND THE DETAILS SHOWN ON THESE PLANS, AS APPLICABLE.
4. PRIOR TO ANY EXCAVATION THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES BY CALLING 1–800–922–4455 AT LEAST 48 HOURS IN ADVANCE.
5. THE LOCATION OF ALL UTILITIES SHOWN IS APPROXIMATE AND ARE BASED ON AVAILABLE AS–BUILT INFORMATION FROM UTILITY COMPANY RECORDS, THE PROPERTY OWNER, AND LIMITED SURVEY DATA BY F. A. HESKETH AND ASSOC., INC. ALL EXISTING UTILITIES MAY NOT BE SHOWN, AND THE LOCATIONS SHOWN MAY NOT BE ACCURATE. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES ON THE SITE PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY AND NOTIFYING THE DESIGN SITE ENGINEER OR ARCHITECT, AS APPLICABLE, OF ANY ADJUSTMENTS TO THE PLANS WHICH ARE NECESSARY. TEST PITS WILL BE REQUIRED AT ALL PROPOSED UTILITY CROSSINGS IN ORDER TO DETERMINE UNDERGROUND UTILITY LOCATIONS AND TO IDENTIFY POTENTIAL CONFLICTS WITH VERTICAL AND HORIZONTAL ALIGNMENTS SHOWN ON THE PLANS. TEST PITS SHALL BE COMPLETED BY THE CONTRACTOR AT HIS EXPENSE.
6. ALL UTILITIES TO BE INSTALLED, RELOCATED, AND/OR PROTECTED IN ACCORDANCE WITH THE CUSTODIAL UTILITY COMPANY STANDARDS AND WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS. FINAL LOCATION OF UTILITY CONNECTIONS OR METHODS OF PROTECTION ARE SUBJECT TO REVISION BY INDIVIDUAL UTILITY COMPANIES PRIOR TO THE INSTALLATION OR IMPLEMENTATION OF PROTECTION. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE WORK WITH THE APPLICABLE UTILITY COMPANIES, FOR COORDINATING UTILITY CONNECTIONS AND/OR RELOCATIONS WITH THE SITE WORK AND BUILDING CONSTRUCTION, AND COORDINATING THE PROTECTION OF ALL UTILITIES NECESSARY TO PERFORM THE WORK SHOWN ON THE PLANS. COORDINATION ACTIVITIES SHALL BE SCHEDULED AND TAKE PLACE PRIOR TO THE START OF CONSTRUCTION ACTIVITIES EFFECTING THE UTILITIES INSTALLATION, REPLACEMENT, AND/OR PROTECTION.
7. INSTALLATION OF UTILITIES SHALL BE COMPLETED IN STRICT ACCORDANCE WITH THE PLANS BOTH IN VERTICAL AND HORIZONTAL ALIGNMENTS, UNLESS SPECIFICALLY APPROVED BY THE SITE ENGINEER.
8. A PRE–CONSTRUCTION MEETING AND AUTHORIZATION TO PROCEED WILL BE REQUIRED PRIOR TO START OF ANY CONSTRUCTION INCLUDING REMOVAL OF TREES OR DEMOLITION ACTIVITIES. PROCEDURES FOR SUCH PRE–CONSTRUCTION MEETING AND AUTHORIZATION TO PROCEED SHALL BE IN ACCORDANCE WITH STATE, TOWN AND OWNER REQUIREMENTS. THE CONTRACTOR SHALL COORDINATE THIS MEETING.
9. ALL WORK ON THIS PROJECT SHALL BE COMPLETED IN CONFORMANCE WITH THE REQUIREMENTS OF ALL FEDERAL, STATE, AND LOCAL PERMITS ISSUED FOR THIS PROJECT.
10. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE PLAN, SPECIFICATIONS, AND THE EROSION AND SEDIMENTATION CONTROL NOTES.
11. TREES SHALL BE FLAGGED AND APPROVED BY THE SITE ENGINEER PRIOR TO REMOVAL.
12. NO STUMPS ARE TO BE BURIED ON SITE.
13. ALL DEBRIS SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.
14. DRAINAGE SHALL BE MAINTAINED THROUGHOUT THE PROJECT SO AS NOT TO CAUSE FLOODING OF ROADWAYS OR DAMAGE TO PRIVATE PROPERTY.
15. ALL SANITARY SEWER WORK SHALL BE COORDINATED WITH THE ENFIELD WATER POLLUTION CONTROL (WPC). WPC TEL. NUMBER: 860–253–6450.
16. ELECTRIC, WATER, GAS, TELEPHONE AND SANITARY SEWER CUSTODIAL UTILITY COMPANY IS THE CONNECTICUT LIGHT & POWER, THE CONNECTICUT WATER COMPANY, HAZARDVILLE WATER COMPANY, YANKEE GAS, SOUTHERN NEW ENGLAND TELEPHONE COMPANY AND ENFIELD WATER POLLUTION CONTROL, RESPECTIVELY.
17. NO VEHICLES OR FLUID FILLED MATERIALS (INCLUDING SANI–CANS, HYDRAULIC EQUIPMENT, ETC.) SHOULD BE STORED WITHIN 50 FEET OF WETLANDS OR WATERCOURSES.

V. STANDARD TOWN OF ENFIELD NOTES:

1. THE DEVELOPER OF A SUBDIVISION SHALL NOTIFY THE TOWN ENGINEER'S OFFICE 24 HOURS IN ADVANCE TO SCHEDULE INSPECTION OF SUBBASE GRAVEL, PAVEMENT, SIDEWALKS, DRAINAGE STRUCTURES AND PIPES, SANITARY SEWERS AND MANHOLES. TELEPHONE 8 A.M. – 4 P.M. AT 253–6363. PRIVATE SITES WILL BE INSPECTED FOR SANITARY SEWERS AND ANY IMPROVEMENT TO BE TURNED OVER TO THE TOWN.
2. ALL SITE WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TOWN OF ENFIELD SPECIFICATIONS AS OUTLINED IN THE SUBDIVISION REGULATIONS.
3. EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED IN ACCORDANCE WITH THE "EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY THE SOIL CONSERVATION SERVICE 2002.
4. ALL EXCAVATIONS WITHIN TOWN RIGHT–OF–WAY REQUIRES A STREET EXCAVATION PERMIT ISSUED BY THE ENGINEERING DEPARTMENT.
5. NO SITE IMPROVEMENTS SUCH AS DRAINAGE, SANITARY SEWERS, SIDEWALKS, EXCAVATIONS, FILLING, PAVEMENT OPERATIONS, ETC., SHALL COMMENCE UNTIL THE SITE ENGINEERING BOND, AS REQUIRED BY THE ENFIELD PLANNING AND ZONING COMMISSION, IS POSTED WITH THE TOWN OF ENFIELD.
6. NO STUMPS TO BE BURIED ON SITE.
7. PRE–CONSTRUCTION CONFERENCE FOR CONSTRUCTION OF A SUBDIVISION ONLY, SHALL INCLUDE THE TOWN ENGINEER OR HIS AGENT. NOTIFICATION OF CONFERENCE SHALL BE 48 HOURS IN ADVANCE.
8. THE DEVELOPER SHALL HIRE A REGISTERED PROFESSIONAL ENGINEER TO INSPECT THE SITE DURING CONSTRUCTION. TO INSURE THE WORK IS CONSTRUCTED IN ACCORDANCE WITH APPROVED PLANS, THE ENGINEER WILL BE REQUIRED TO CERTIFY ON AN AS–BUILT PLAN THAT THE PROJECT WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS AND ALL MATERIALS WERE PLACED IN ACCORDANCE WITH THE SITE PLANS AND SPECIFICATIONS, PRIOR TO RELEASE OF ANY BONDS.

VI. LONG TERM STORMWATER SYSTEM AND OVERALL SITE MAINTENANCE PLAN

IT IS IMPORTANT THAT A LONG TERM MAINTENANCE PLAN BE IMPLEMENTED AND EXECUTED THROUGHOUT THE LIFE OF THE FACILITY.

STORMWATER SYSTEM

1. MAINTENANCE OF THE ON–SITE STORM WATER SYSTEM IS THE RESPONSIBILITY OF THE PROPERTY OWNER. THIS INCLUDES ALL CATCH BASINS, YARD DRAINS, PIPING, MANHOLES, OUTLET STRUCTURE, ROOF LEADERS AND THE DRAINAGE PIPES.
2. THE FOLLOWING SCHEDULE OF MAINTENANCE SHALL BE FOLLOWED:

   A. IN GENERAL, GOOD HOUSEKEEPING PRACTICES SHALL BE INCORPORATED INTO THE ROUTINE SITE AND FACILITY MAINTENANCE PLAN TO MINIMIZE DEPOSITION OF SEDIMENT, LITER AND CONTAMINANTS INTO THE STORM DRAINAGE SYSTEM.

   B. PAVED PARKING AND LOADING AREAS AND WALKS SHALL BE SWEPT OF DEBRIS, SAND, AND LITTER AT LEAST TWICE ANNUALLY, IN PARTICULAR, LATE SPRING AFTER WINTER SANDING OPERATIONS, AND IN LATE FALL AFTER LEAF LITTER CLEANUP.

   C. CATCH BASINS AND THE OUTLET STRUCTURE SHALL BE INSPECTED SEMIANNUALLY, FOLLOWING SPRING AND FALL SITE CLEANUP. ACCUMULATED SEDIMENT AND DEBRIS SHALL BE REMOVED AND DISPOSED OF TO APPROVED OFF–SITE LOCATIONS.
3. MAINTENANCE RECORDS DOCUMENTING SYSTEM INSPECTIONS AND CLEANING OPERATIONS SHALL BE MAINTAINED BY THE PROPERTY OWNER AND SHALL BE MADE AVAILABLE FOR INSPECTION BY THE TOWN AS REQUESTED.

SITE MAINTENANCE

1. ONGOING GENERAL MAINTENANCE OF THE SITE IS THE RESPONSIBILITY OF THE PROPERTY OWNER. THIS INCLUDES LITTER CONTROL, FERTILIZER AND PESTICIDE MANAGEMENT, SNOWPLOWING, SANDING/SALTING AND SNOWPILE STOCKPILING. IN GENERAL, GOOD HOUSEKEEPING PRACTICES SHALL BE INCORPORATED INTO THE ROUTINE SITE AND FACILITY MAINTENANCE PLAN TO MINIMIZE DEPOSITION OF SEDIMENT, LITER AND OTHER POTENTIAL CONTAMINANTS.
2. WITH REGARD TO LAWN AND LANDSCAPE MANAGEMENT, IT IS IMPERATIVE THAT THE PROPOSED LANDSCAPING BE MAINTAINED FOLLOWING CURRENT HORTICULTURAL PRACTICES TO INSURE THE HEALTH OF THE LAWN AND PLANTINGS AND MINIMIZE THE NEED TO USE FERTILIZERS AND PESTICIDES. THE APPLICATION OF FERTILIZERS AND PESTICIDES SHALL BE COMPLETED FOLLOWING AN INTEGRATED PEST MANAGEMENT PLAN PREPARED AND APPLIED BY A LICENSED PROFESSIONAL IN STRICT CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND IN COMPLIANCE WITH ALL APPLICABLE GOVERNMENTAL LAWS AND REGULATIONS.
3. SNOW FROM THE PARKING AND SIDEWALK AREAS SHALL BE STOCKPILED AT LOCATIONS AS DEPICTED ON THE PLANS AROUND THE SITE TO AVOID THE CREATION OF LARGE SNOWPILE AREAS.
4. THE APPLICATION RATE OF SAND AND ICE MELT MATERIALS SHALL BE MINIMIZED TO THE SMALLEST AMOUNT NECESSARY TO MAINTAIN SAFE TRAVEL AND PEDESTRIAN CONDITIONS.

   APPLICATION OF ICE MELT MATERIALS SHALL BE LIMITED TO PEDESTRIAN ACCESS ROUTES AND BUILDING ENTRANCES, AND GENERALLY PROHIBITED FROM PAVED PARKING AND DRIVEWAY AREAS, UNLESS ABSOLUTELY NECESSARY DUE TO EXCESSIVE ICE BUILDUP.

   ALTERNATIVES TO STANDARD NACL ROAD SALT SHALL BE EVALUATED AND UTILIZED ON AN ANNUAL BASIS. AT THIS TIME, CALCIUM CHLORIDE AND/OR MAGNESIUM CHLORIDE ARE PREFERRED ALTERNATIVES.

File IW # PH#

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Civil & Traffic Engineers · Surveyors · Planners · Landscape Architects www.fahesketh.com · mail@fahesketh.com

Revisions:

No.	Date	Description
1	03–30–2020	Miscellaneous revisions
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NOTES
PREPARED FOR
PARAMOUNT NEWCO REALTY
39 HAZARD AVENUE
ENFIELD, CONNECTICUT

Date: 12–24–2019 | Drawn by: KLL | Job no: 05186
Scale: NTS | Checked by: DSZ | Sheet no: 1 OF 1

NT–1

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LEGEND

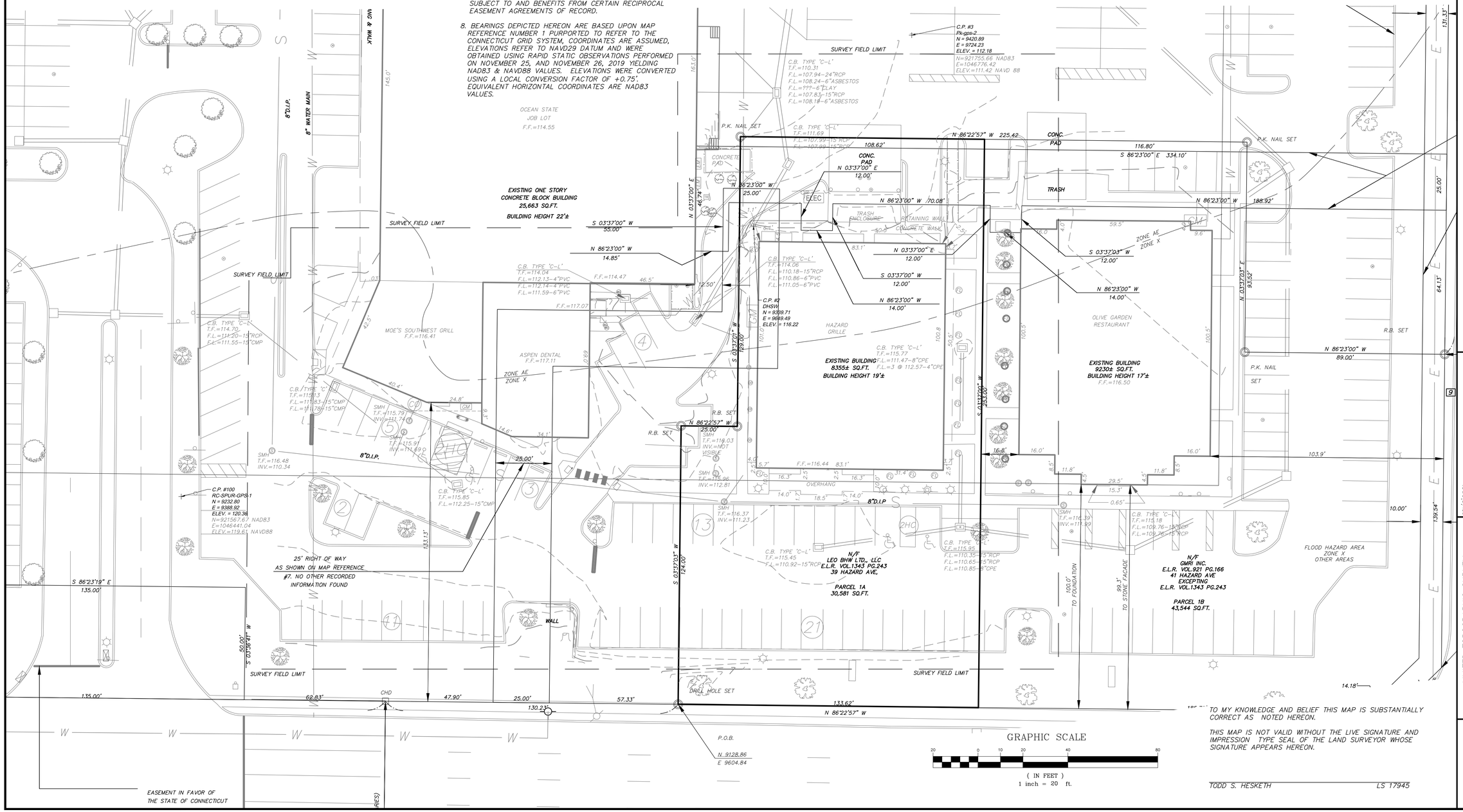
N/F	= NOW OR FORMERLY	F/F	= FINISHED FLOOR
E.L.R.	= ENFIELD LAND RECORD	—E—E—	= ELECTRIC LINE
VOL.	= VOLUME		= SANITARY LINE
PG.	= PAGE		= LOOP DETECTOR
CP	= CONTROL POINT	(#)	= # OF PARKING SPACES
ELEV.	= ELEVATION	→	= DIRECTION OF FLOW
SQ.FT.	= SQUARE FEET	2	= FIDELITY NATIONAL TITLE INSURANCE COMPANY ALTA COMMITMENT FOR TITLE INSURANCE (8/1/16), COMMITMENT DATE: 01/08/2019 AT 8:00 A.M. EXCEPTIONS
☼	= LIGHT STANDARD		
Ⓢ	= SANITARY MANHOLE		
□	= CATCH BASIN		
WG	= WATERGATE		
GG	= GAS GATE		
	= SIGN		
—G—G—	= GAS LINE		
—W—W—	= WATER LINE		
TR	= TRANSFORMER		
WG	= WATERGATE		
GM	= GAS METER		
P.O.B.	= POINT OF BEGINNING		
P.O.C.	= POINT OF COMMENCEMENT		

NOTES:

1. THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20–300B–1 THROUGH 20–300B–20.
2. IT IS A LIMITED TOPOGRAPHIC SURVEY INTENDED TO BE USED FOR DESIGN PURPOSES.
3. THE BOUNDARY DETERMINATION CATEGORY IS THAT OF A RESURVEY AND IS DEPENDENT IN NATURE AND IS BASED UPON MAP REFERENCE NUMBER 1.
4. THIS SURVEY CONFORMS TO CLASS A–2 / T–2 ACCURACY STANDARDS.
5. THE SUBJECT PARCEL IS CURRENTLY OWNED BY LEO BHW LTD, LLC ENFIELD LAND RECORDS VOLUME 1343 PAGE 243.
6. THE SUBJECT PARCEL IS LOCATED IN THE BUSINESS REGIONAL (BR) ZONE IN THE TOWN OF ENFIELD, CONNECTICUT.
7. 25 HAZARD AVENUE, 15 HAZARD AVENUE, 39 HAZARD AVENUE AND 41 HAZARD AVENUE ARE CONSIDERED ONE PARCEL FOR ZONING PURPOSES BY THE TOWN OF ENFIELD. THE PARCEL DEPICTED HEREON MAY BE SUBJECT TO AND BENEFITS FROM CERTAIN RECIPROCAL EASEMENT AGREEMENTS OF RECORD.
8. BEARINGS DEPICTED HEREON ARE BASED UPON MAP REFERENCE NUMBER 1 PURPORTED TO REFER TO THE CONNECTICUT GRID SYSTEM, COORDINATES ARE ASSUMED, ELEVATIONS REFER TO NAVD29 DATUM AND WERE OBTAINED USING RAPID STATIC OBSERVATIONS PERFORMED ON NOVEMBER 25, AND NOVEMBER 26, 2019 YIELDING NAD83 & NAVD88 VALUES. ELEVATIONS WERE CONVERTED USING A LOCAL CONVERSION FACTOR OF +0.75'. EQUIVALENT HORIZONTAL COORDINATES ARE NAD83 VALUES.
9. UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED HEREON HAVE BEEN COMPILED IN PART FROM RECORD MAPS, VISIBLE FEATURES AND OTHER SOURCES OF INFORMATION. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXSIST ON THE SITE. THE SIZE, LOCATIONS AND EXITENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BTY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION CALL–BEFORE –YOU– DIG 1–800–922–4455.
10. THE FLOOD ZONE LINES DEPICTED HEREON WERE OBTAINED AND DIGITIZED FROM AN ELECTRONIC FILE OBTAINED FROM THE FEMA WEBSITE OF A MAP ENTITLED "FIRM FLOOD INSURANCE RATE MAP HARTFORD COUNTY CONNECTICUT (ALL JURISDICTIONS) PANEL 227 OF 675 MAP NUMBER 09003C0227F EFFECTIVE DATE SEPTEMBER 26, 2008 FEDERAL EMERGENCY MANAGEMENT AGENCY"

MAP REFERENCES:

1. AS–BUILT PLAN OF ENFIELD COMMONS PREPARED FOR PARKSIDE ASSOCIATES LIMITED PARTNERSHIP 25,39,41,43,45 HAZARD AVENUE (ROUTE 190) ENFIELD, CONNECTICUT DATE: 08–30–90 REVISED TO 03–22–95 SCALE 1"=40' SHEETS 1–3 OF 3 BY F.A. HESKETH & ASSOCIATES, INC.



TO MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

THIS MAP IS NOT VALID WITHOUT THE LIVE SIGNATURE AND IMPRESSION TYPE SEAL OF THE LAND SURVEYOR WHOSE SIGNATURE APPEARS HEREON.

TODD S. HESKETH LS 17945

F. A. Hesketh & Associates, Inc.
3 Creamery Brook, East Granby, CT 06026
Civil & Traffic Engineers · Surveyors · Planners · Landscape Architects
Phone (860) 653-8000
Fax. (860) 844-8600
e-mail heskethmail.net

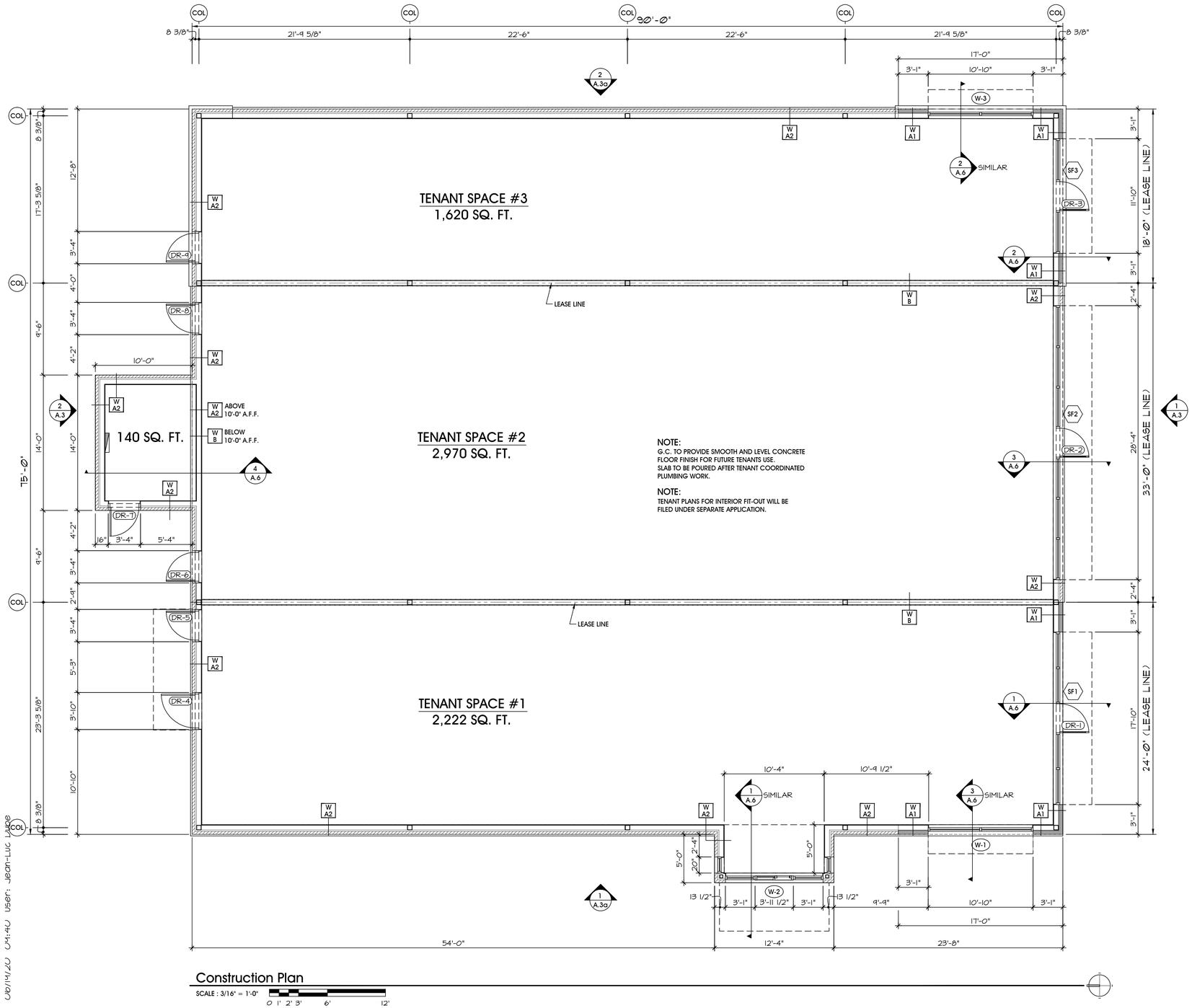
revisions:		
no.	date	description

LIMITED TOPOGRAPHIC SURVEY
PREPARED FOR
LEO BHW LTD, LLC
PARCEL 1A ENFIELD COMMONS
39 HAZARD AVENUE
ENFIELD, CONNECTICUT

date: 12–24–2019	drawn by: CAD	job no: 19001	Sheet no: 1 OF 1
Scale: 1" = 20'	checked by: TSH		

PS–1

Q:\2019\19001 – Enfield Commons\SURVEY\LIMITED TOPOGRAPHIC SURVEY-2.dwg, Layout1, Dec. 19, 2019 – 9:26:02 AM



Construction Plan

SCALE : 3/16" = 1'-0"

0 1' 2' 3' 6' 12'

Drawing Symbol Legend

- SOFFIT / CEILING LINE
- NEW WALL CONSTRUCTION (REFER TO WALL TYPES)
- EXG. DOOR
- NEW DOOR
- DR-# — DOOR TYPE SYMBOL, DOOR TYPE NUMBER (REFER TO SCHEDULE ON A.2a)
- W # — WALL TYPE SYMBOL, WALL TYPE NUMBER (REFER TO SCHEDULE)
- SF# — STOREFRONT TYPE SYMBOL, STOREFRONT TYPE NUMBER (REFER TO DETAILS ON A.2a)
- W# — WINDOW TYPE SYMBOL, WINDOW TYPE NUMBER (REFER TO DETAILS ON A.2a)
- DETAIL NUMBER, DETAIL SYMBOL, DRAWING NUMBER

Wall Type Schedule

W A1	NEW EXTERIOR WALL: 6" METAL STUDS AT 16" O.C. W/ R19 BATT INSULATION, 5/8" DENS-GLASS & 4" STONE VENEER ON EXTERIOR SIDE. PROVIDE (1) LAYER OF 5/8" TYPE 'X' GYP. BD. ON INTERIOR SIDE FROM FLOOR TO 12'-0" ABOVE SLAB. BRACE ABOVE CEILING(S) AS REQUIRED. USE MOISTURE RESISTANT GYP. BD. AT WET LOCATIONS.
W A2	NEW EXTERIOR WALL: 6" METAL STUDS AT 16" O.C. W/ R19 BATT INSULATION, 5/8" DENS-GLASS & E.F.I.S. FINISH ON EXTERIOR SIDE. PROVIDE (1) LAYER OF 5/8" TYPE 'X' GYP. BD. ON INTERIOR SIDE. FROM FLOOR TO 12'-0" ABOVE SLAB. BRACE ABOVE CEILINGS AS REQUIRED. USE MOISTURE RESISTANT GYP. BD. AT WET LOCATIONS.
W B	NEW INTERIOR 1 HR. UL RATED TENANT DEMISING PARTITION W/ 20 GA. 6" METAL STUDS AT 16" O.C. & (1) LAYER OF 5/8" TYPE 'X' GYP. BD. ON BOTH SIDES, FIRE-STOPPED TO UNDERSIDE OF ROOF DECK ABOVE.

Ni Design
11 Talcott Notch Road
Farmington, CT 06032
T. 860 · 678 · 1946
F. 860 · 678 · 7111
nidesign@nidesign.net

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Charles Georgie Associates
ARCHITECTS & ENGINEERS, L L C
365 New Haven Ave., Ste. 4
Milford, CT 06460
Tel: (203) 934-2855
Fax. (203) 504-7987
E-mail: cgeorgie@cgassoc.net

DRAWING CHRONOLOGY:

index:	date:	description:
03 . 23 . 20		NOT FOR CONSTRUCTION
04 . 20 . 20		REVISED PER TENANT COMMENTS
06 . 22 . 20		ISSUED FOR PRELIMINARY FIRE MARSHAL REVIEW

TITLE:

Construction Plan

date: 04 . 20 . 20 drawn by: WJK scale: AS NOTED

PROJECT:

Enfield Commons
39 Hazard Avenue
Enfield, Connecticut

space #: - sq. ft.: 6,812 job #: 19101 file: -

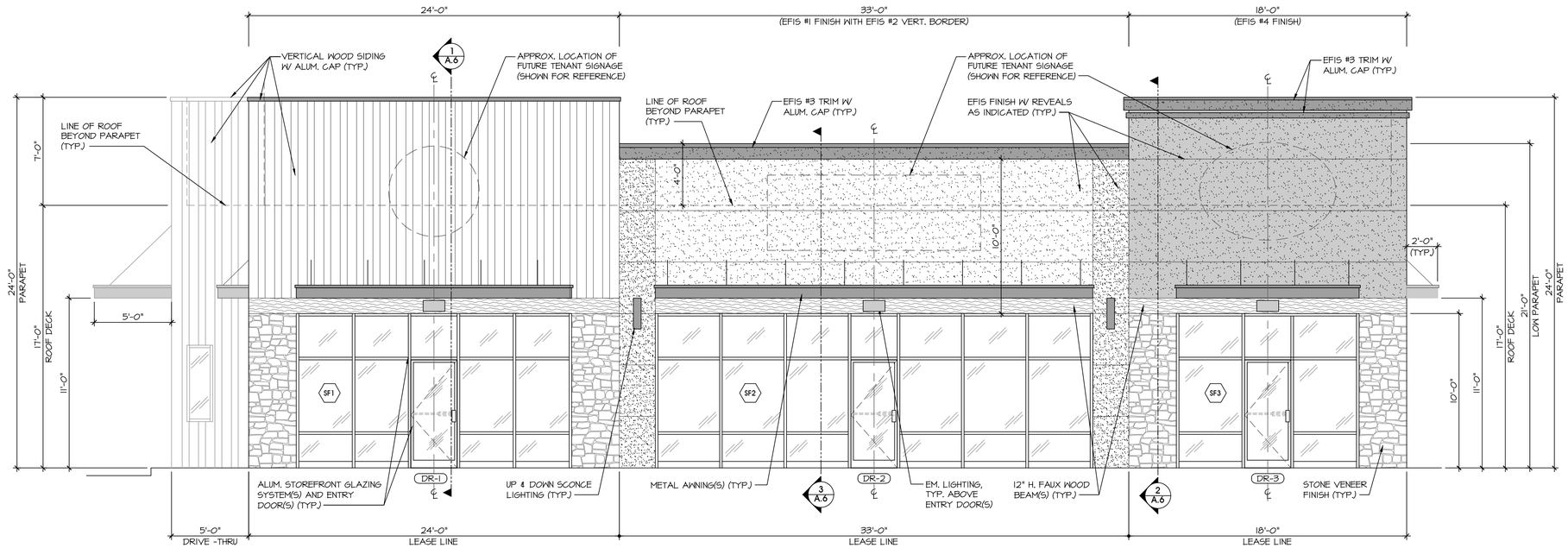
A.2

Building Signage Note

TENANT SIGNAGE SHOWN HERE FOR REFERENCE ONLY. FINAL SIGNAGE (SIZE, MATERIALS, ETC.) SHALL BE PREPARED & SUBMITTED BY TENANT UNDER SEPARATE APPLICATION(S).

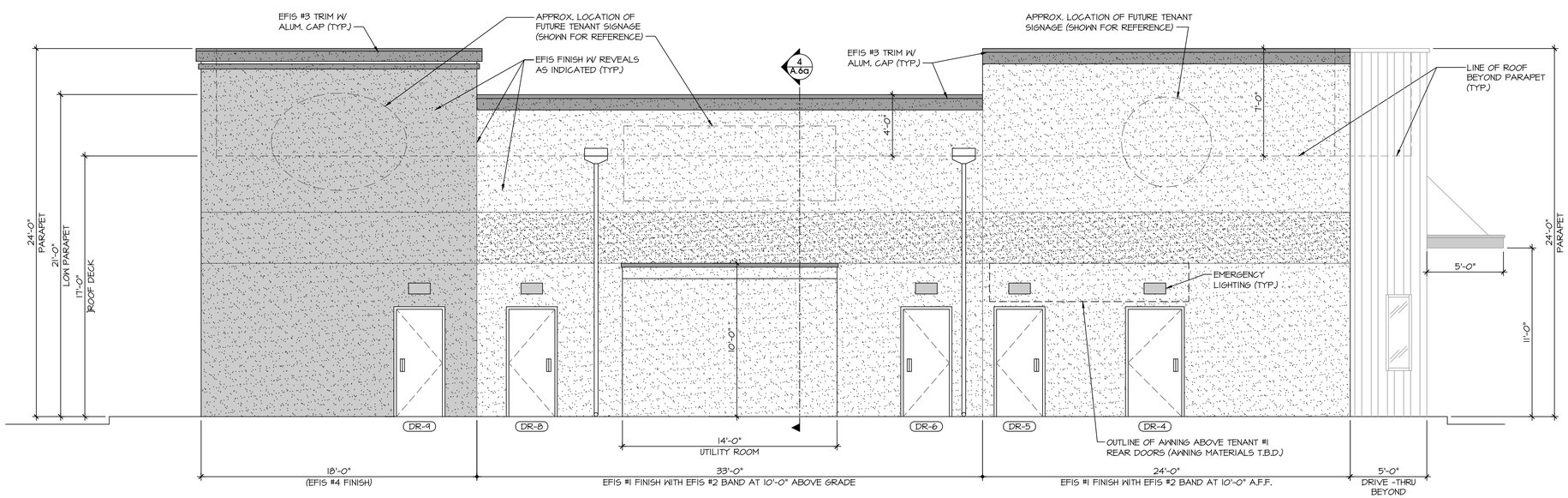
Exterior Building Finishes

MATERIAL TYPE	COLOR DESCRIPTION
ALUM. STOREFRONT GLAZING SYSTEM	SATIN ALUMINUM (CLEAR ANODIZED)
METAL CANOPY & PARAPET ALUM. CAP	TO MATCH RAL #4021 (MATTE FIN.) (FINAL SPEC. T.B.D.)
STONE VENEER	MULTI-COLORED (GRAY & TAN SHADES)
FAUX WOOD BEAM	LIGHT RUSTIC PINE (FINAL SPEC. T.B.D.)
VERTICAL WOOD SIDING	TO MATCH "NIGIRI" ACCOYA (FINAL SPEC. T.B.D.)
EFIS #1	SIM. TO SW 6147 "PANDA WHITE" (FINAL SPEC. T.B.D.)
EFIS #2 (BAND AT 10'-0")	SIM. TO SW 7024 "FUNCTIONAL GRAY" (FINAL SPEC. T.B.D.)
EFIS #3 (TRIM AT PARAPET)	SIM. TO SW 7069 "IRON ORE" (FINAL SPEC. T.B.D.)
EFIS #4 (TENANT #3)	GREY (FINAL SPEC. T.B.D.)



1 Exterior Front (South) Elevation

SCALE : 1/4" = 1'-0"



2 Exterior Rear (North) Elevation

SCALE : 1/4" = 1'-0"

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Tel: (203) 934-2855
Fax. (203) 504-7987
E-mail: cgeorgie@cgassoc.net

DRAWING CHRONOLOGY:

index:	date:	description:
03	23 . 20	NOT FOR CONSTRUCTION
04	20 . 20	REVISED EXTERIOR FACADE DESIGN
06	22 . 20	ISSUED FOR PRELIMINARY FIRE MARSHAL REVIEW

TITLE:

Exterior Elevations

date: 04 . 20 . 20 drawn by: WJK scale: AS NOTED

PROJECT:

Enfield Commons
39 Hazard Avenue
Enfield, Connecticut

space #: - sq. ft.: 6,812 job #: 19101 file: -

A.3

Building Signage Note

TENANT SIGNAGE SHOWN HERE FOR REFERENCE ONLY. FINAL SIGNAGE (SIZE, MATERIALS, ETC.) SHALL BE PREPARED & SUBMITTED BY TENANT UNDER SEPARATE APPLICATION(S).

Exterior Building Finishes

MATERIAL TYPE	COLOR DESCRIPTION
ALUM. STOREFRONT GLAZING SYSTEM	SATIN ALUMINUM (CLEAR ANODIZED)
METAL CANOPY & PARAPET ALUM. CAP	TO MATCH RAL #4021 (MATTE FIN.) (FINAL SPEC. T.B.D.)
STONE VENEER	MULTI-COLORED (GRAY & TAN SHADES)
FAUX WOOD BEAM	LIGHT RUSTIC PINE (FINAL SPEC. T.B.D.)
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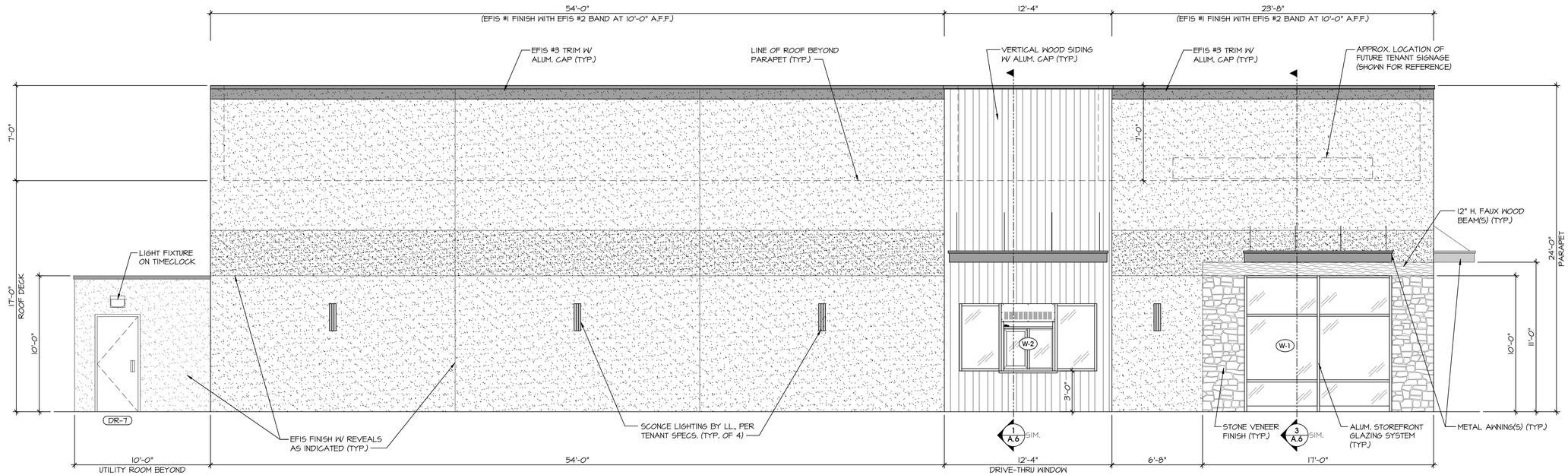
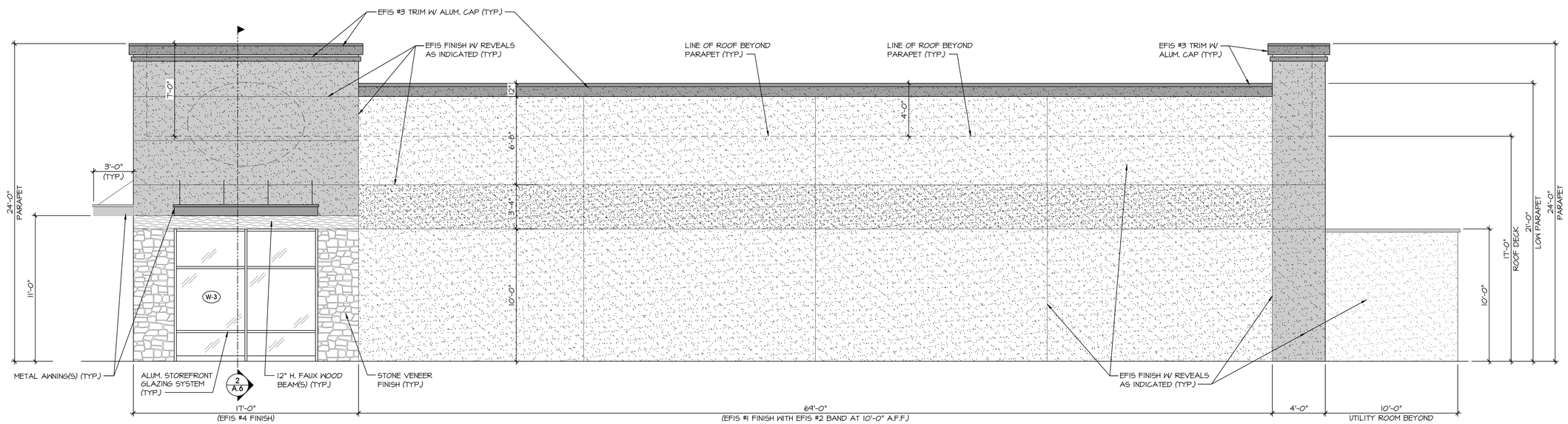
EFIS #4 (TENANT #3)	GREY (FINAL SPEC. T.B.D.)



1 Exterior Side (West) Elevation

SCALE : 1/4" = 1'-0"



2 Exterior Side (East) Elevation

SCALE : 1/4" = 1'-0"

PR19101_A3-A3A.DWG 06/19/20 09:36 User: Jean-Luc Dube

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Tel: (203) 934-2855
Fax. (203) 504-7987

DRAWING CHRONOLOGY:

index:	date:	description:
03	23 . 20	NOT FOR CONSTRUCTION
04	20 . 20	REVISED EXTERIOR FACADE DESIGN
06	22 . 20	ISSUED FOR PRELIMINARY FIRE MARSHAL REVIEW

TITLE:

Exterior Elevations

date: 04 . 20 . 20 drawn by: WJK scale: AS NOTED

PROJECT:

Enfield Commons
39 Hazard Avenue
Enfield, Connecticut

space #: - sq. ft.: 6,812 job #: 19101 file: -

A.3a

National Flood Hazard Layer FIRMette

FEMA

41°59'36.54"N

72°34'22.31"W

41°59'9.80"N

0 250 500 1,000 1,500 2,000 Feet 1:6,000

NOTE: PROJ. DATUM = 115 BFE

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- B 20.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represe an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

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SITE ENGINEERING
DRAINAGE REPORT
FLOOD HAZARD ANALYSIS

25 & 39 HAZARD AVENUE
ENFIELD COMMONS
ENFIELD, CT

Prepared for:

Paramount Newco Realty
Enfield, CT
Applicant

Prepared by:

F. A. Hesketh
& Associates, Inc.

3 Creamery Brook
East Granby, CT 06026

860-653-8000

STATE OF CONNECTICUT
DAVID S. ZIAKIS
No. 13336
LICENSED
PROFESSIONAL ENGINEER

January 29, 2020
Revised July 1, 2020

FAHA Project #19001

SITE ENGINEERING
DRAINAGE REPORT
FLOOD HAZARD ANALYSIS

Prepared For

25 & 39 HAZARD AVENUE
ENFIELD COMMONS
ENFIELD, CT
July 1, 2020

A. INTRODUCTION

The project is part of Enfield Commons Shopping Center and falls in the BR Zone. The applicant, Paramount Newco Realty, is proposing to demolish the existing 8,484 s.f. restaurant at 39 Hazard Avenue and replace it with a new 6,986 s.f building with the addition of a drive-thru. The revised site with be blended into the surrounding tenant layout and access. There will be no increase in impervious coverage.

B. WATER SUPPLY

The new building will be connected with minor modifications to the existing water supply to the current building.

C. SANITARY SEWAGE DISPOSAL

The new building addition will be connected with minor modifications to the existing sanitary sewer serving the current building. New 6" sanitary laterals will be installed for the new tenant spaces and one new grease trap will be installed on the east side. The existing grease trap on the west side will be reused for that tenant space.

D. GAS, ELECTRIC, TELEPHONE/COMMUNICATION SERVICES

The new building will be serviced through modifications and extensions from the systems serving the existing building.

E. LIGHTING

New building and site lighting will be provided by LED lights mounted on the side of the building and will be dark sky compliant.

F. DRAINAGE SYSTEM

Runoff from the project site will be collected by new catch basins installed over the existing drainage system. There are no new discharge points. The system has been analyzed for the 25-year storm and the results are attached. In general, the existing system has sufficient capacity to handle the design storm.

Maintenance of the On-Site Storm Water System:

1. Maintenance of the on-site storm water system is the responsibility of the property owner. This includes all catch basins, system piping, manholes and roof leaders and underground flood compensation piping.

2. The following schedule of maintenance shall be followed:

   In general, good housekeeping practices shall be incorporated into the routine site and facility maintenance plan to minimize deposition of sediment, litter and contaminants into the storm drainage system.

   Paved parking and loading areas and walks shall be swept of debris, sand, and litter at least twice annually, in particular, late spring after winter sanding operations, and in late fall after leaf litter cleanup.

   Catch basins and storm drains shall be inspected annually, following spring site cleanup. Accumulated sediment and debris shall be removed and disposed of to approved off-site locations.

3. Maintenance records documenting system inspection and cleaning operations shall be maintained by the property owner and shall be made available for inspection by the Town as requested.

4. The owner is responsible for managing the on-site storm water system to prevent mosquito breeding between April 1 and September 30.

G. SOIL EROSION CONTROL PLAN

A soil and erosion control plan has been prepared in accordance with town and CT DEEP requirements. Prior to the start of site construction, the project limits will be carefully staked out in the field and reviewed with town staff. Soil erosion and

sedimentation control measures will be installed prior to construction and maintained throughout the work.

H. OSTA PERMIT

The project is included with additional parcels under a prior OSTA approval. A revision to that approval is being submitted.

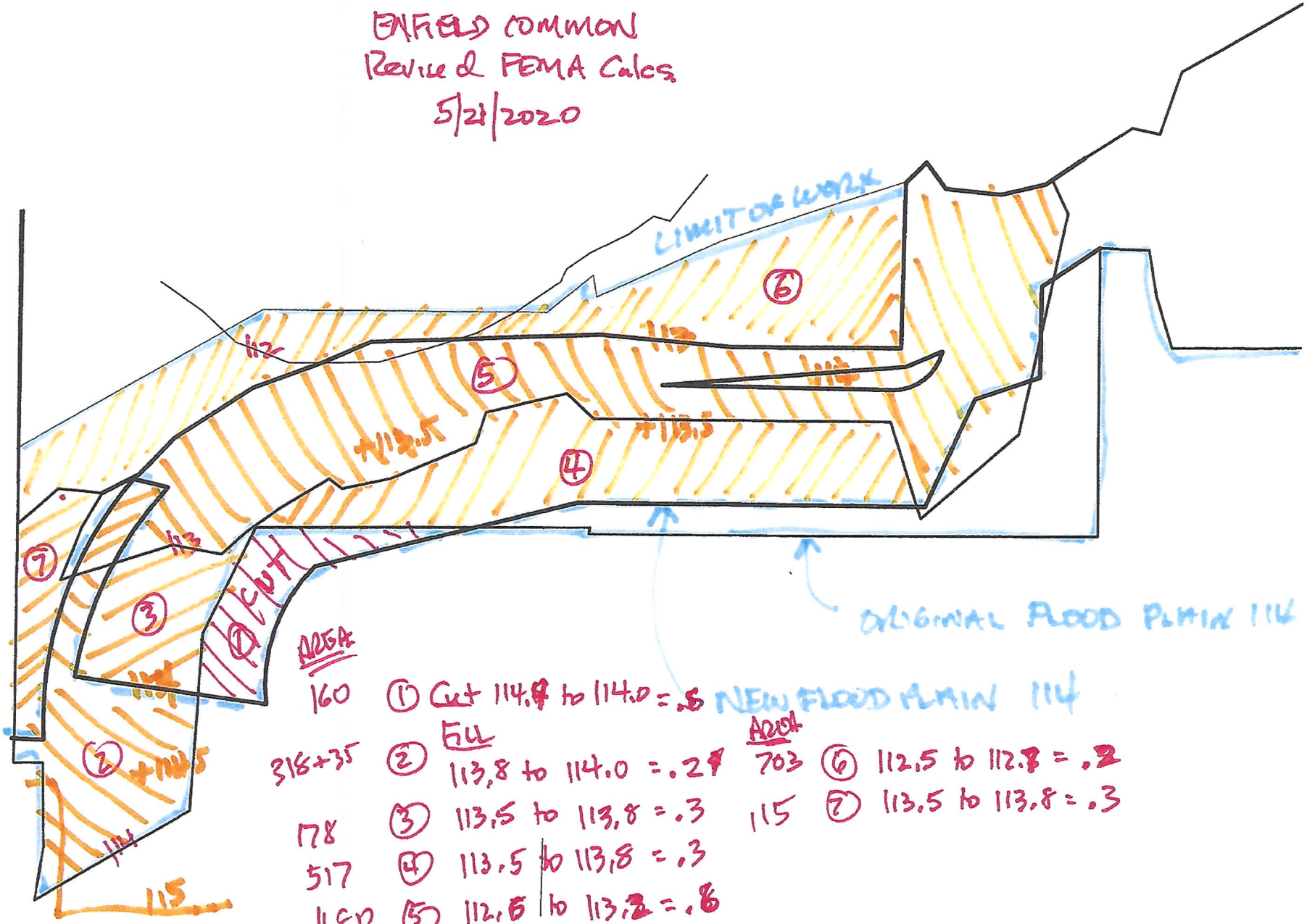
I. FLOOD HAZARD ANALYSIS

The 100-year BFE is 114.00 (NAVD 88) based on the current FEMA mapping. With the site grading changes, there is a small loss of net 100-year flood storage volume which is compensated for in the underground drainage design, so there will be no impact to the floodplain. The attached calculations show the need for 1,066.2 c.f. of compensatory storage to replace the flood stage capacity lost with the redevelopment of 39 Hazard Avenue. The design calls for approximately 1,165 c.f. of compensatory storage in underground 36" dia. piping as shown on Sheet GR-1.

The compensatory storage piping has been integrated into the site drainage system. As flood elevations rise, they will backwater into the storage piping and remain there until the flood elevation subsides. The piping will drain back through the overall site piping system.

FEMA CALCULATIONS			
NUMBER	AREA	GRADE CHANGE	
	SQ. FT.	ELEV	VOL
		feet	cu. Ft.
1	160	-0.6	-96.0
2	353	0.2	70.6
3	178	0.3	53.4
4	517	0.3	155.1
5	1180	0.6	708.0
6	703	0.2	140.6
7	115	0.3	34.5
		net change	1066.2
NOTE: The elevation change only includes up to elev. 114			
total change		**1066**	
cf/ft 36" pipe		7.068375	
required length		151	

ENFIELD COMMON
Revise d FEMA Calcs
5/21/2020

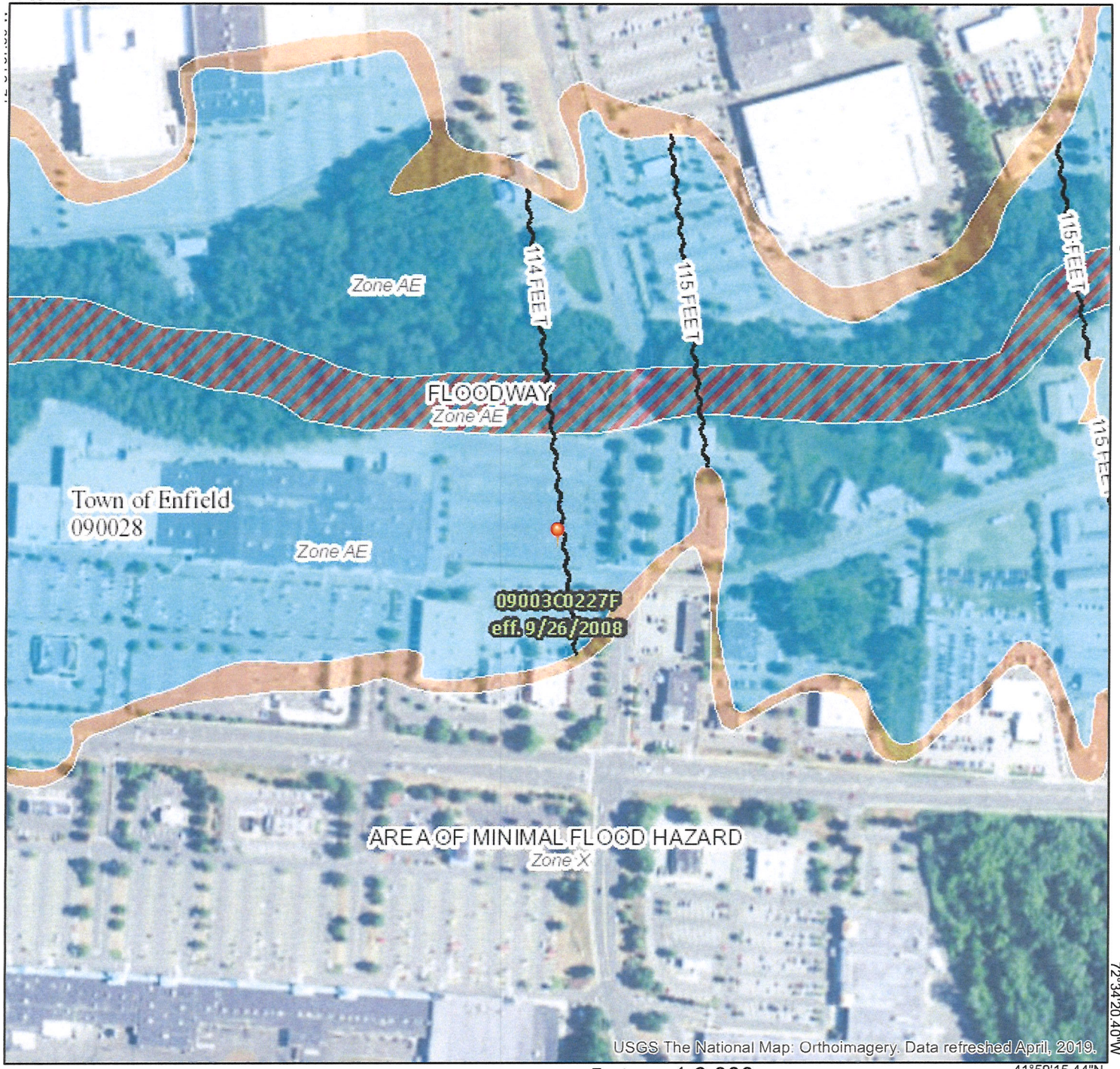


AREA			AREA		
160	①	Cut 114.[illegible] to 114.0 = .5			
		FILL			
316+35	②	113.8 to 114.0 = .2[illegible]	703	⑥	112.5 to 112.[illegible] = .2
178	③	113.5 to 113.8 = .3	115	⑦	113.5 to 113.8 = .3
517	④	113.5 to 113.8 = .3			
1180	⑤	112.5 to 113.2 = .8			

National Flood Hazard Layer FIRMette

FEMA

41°59'42.18"N



72°34'20.40"W

41°59'15.44"N

Feet 1:6,000

0 250 500 1,000 1,500 2,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainag areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
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- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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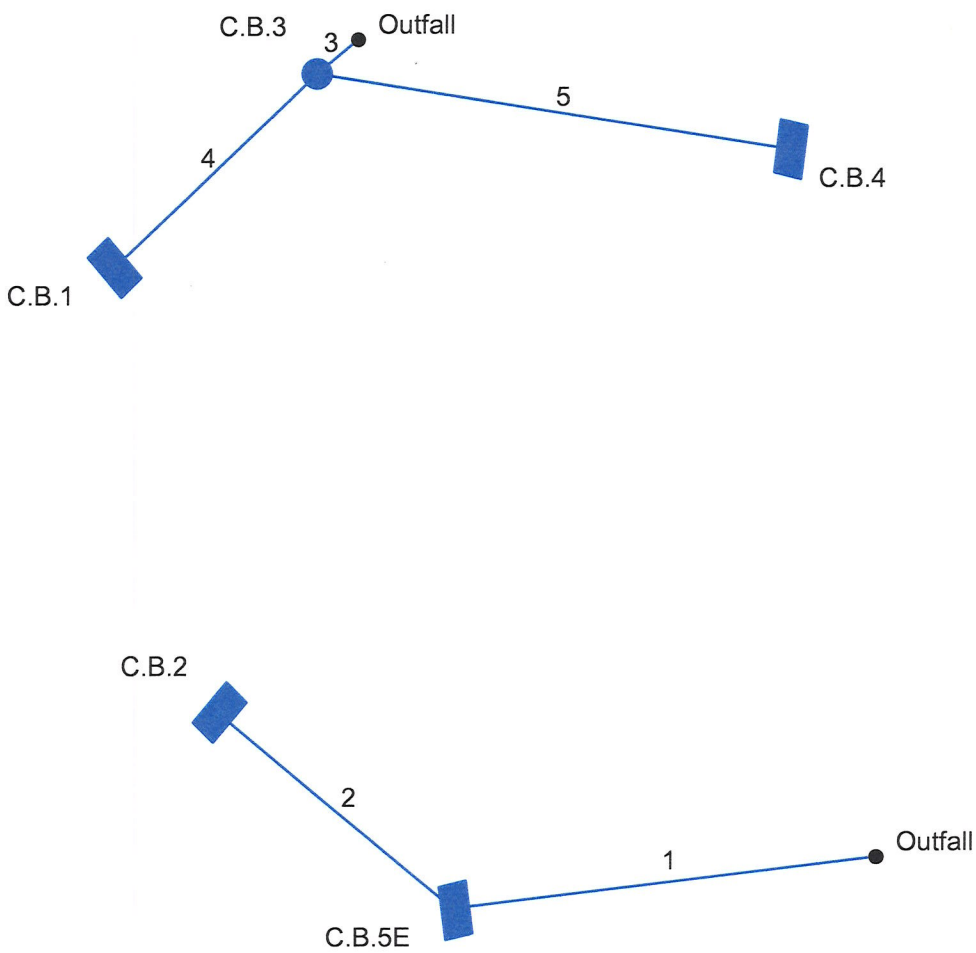
Hydraflow Storm Sewers Plan



Project File: 2020-01-31.stm	Number of lines: 5	Date: 06-29-2020

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	64	0.15	0.34	0.53	0.08	0.24	5.0	5.3	8.2	2.01	4.19	3.44	15	0.42	110.65	110.92	111.22	111.56	115.95	115.50	OUTFALL-C.B.5
2	1	46	0.19	0.19	0.87	0.17	0.17	5.0	5.0	8.4	1.39	4.36	4.23	12	1.50	112.81	113.50	113.20	114.00	115.50	115.70	C.B.2-C.B.5E
3	End	8	0.13	0.33	0.86	0.11	0.27	5.0	5.4	8.1	2.17	0.00	0.00	12	4.00	108.24	108.56	108.81	109.13	113.00	111.69	C.B.3-OUTFALL
4	3	42	0.15	0.15	0.80	0.12	0.12	5.0	5.0	8.4	1.01	0.00	0.00	15	4.50	108.31	110.20	109.55	110.63	111.69	114.00	C.B.1-C.B.3
5	3	72	0.05	0.05	0.70	0.04	0.04	5.0	5.0	8.4	0.29	0.00	0.00	12	0.51	108.31	108.68	109.36	109.36	111.69	114.20	C.B.4-C.B.3

Project File: 2020-01-31.stm | Number of lines: 5 | Run Date: 06-29-2020

NOTES: Intensity = 39.66 / (Inlet time + 3.70) ^ 0.72; Return period = 25 Yrs. ; c = cir e = ellip b = box

Inlet Report

Line No	Inlet ID	Q = CIA (cfs)	Q carry (cfs)	Q capt (cfs)	Q byp (cfs)	Junc type	Curb Inlet		Grate Inlet			Gutter							Inlet			Byp line No
							Ht (in)	L (ft)	area (sqft)	L (ft)	W (ft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	Depr (in)	
1	C.B.5E	0.67	0.00	0.67	0.00	Grate	3.0	5.83	2.00	5.83	2.08	Sag	5.00	0.030	0.030	0.013	-0.09	-2.92	0.08	1.25	2.0	Off
2	C.B.2	1.39	0.00	1.39	0.00	Comb	3.0	5.83	2.00	5.83	2.08	Sag	5.00	0.030	0.030	0.013	-0.04	-1.22	0.13	2.05	2.0	1
3	C.B.3	0.94	0.00	0.94	0.00	Comb	3.0	5.83	2.00	5.83	2.08	Sag	5.00	0.030	0.030	0.013	-0.07	-2.22	0.10	1.58	2.0	Off
4	C.B.1	1.01	0.00	1.01	0.00	Curb	3.0	5.83	2.00	5.83	2.08	Sag	5.00	0.030	0.030	0.013	0.09	3.15	0.26	4.12	2.0	3
5	C.B.4	0.29	0.00	0.29	0.00	Curb	3.0	5.83	2.00	5.83	2.08	Sag	5.00	0.030	0.030	0.013	0.04	1.38	0.21	3.28	2.0	4

Project File: 2020-01-31.stm | Number of lines: 5 | Run Date: 06-29-2020

NOTES: Inlet N-Values = 0.013 ; Intensity = 39.66 / (Inlet time + 3.70) ^ 0.72; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

Storm Sewer Inventory Report

Line No.	Alignment				Flow Data				Physical Data								Line ID
	Dnstr line No.	Line length (ft)	Defl angle (deg)	Junc type	Known Q (cfs)	Drng area (ac)	Runoff coeff (C)	Inlet time (min)	Invert El Dn (ft)	Line slope (%)	Invert El Up (ft)	Line size (in)	Line shape	N value (n)	J-loss coeff (K)	Inlet/ Rim El (ft)	
1	End	64	173	Grate	0.00	0.15	0.53	5.0	110.65	0.42	110.92	15	Cir	0.013	1.16	115.50	OUTFALL-C.B.5E
2	1	46	47	Comb	0.00	0.19	0.87	5.0	112.81	1.50	113.50	12	Cir	0.013	1.00	115.70	C.B.2-C.B.5E
3	End	8	140	Comb	0.00	0.13	0.86	5.0	108.24	4.00	108.56	12	Cir	0.013	1.50	111.69	C.B.3-OUTFALL
4	3	42	-4	Curb	0.00	0.15	0.80	5.0	108.31	4.50	110.20	15	Cir	0.013	1.00	114.00	C.B.1-C.B.3
5	3	72	-131	Curb	0.00	0.05	0.70	5.0	108.31	0.51	108.68	12	Cir	0.013	1.00	114.20	C.B.4-C.B.3

Project File: 2020-01-31.stm | Number of lines: 5 | Date: 06-29-2020

Storm Sewer Summary Report

Line No.	Line ID	Flow rate (cfs)	Line size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line slope (%)	HGL down (ft)	HGL up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns line No.	Junction Type
1	OUTFALL-C.B.5E	2.01	15	Cir	64	110.65	110.92	0.422	111.22	111.56	0.18	111.74	End	Grate
2	C.B.2-C.B.5E	1.39	12	Cir	46	112.81	113.50	1.500	113.20	114.00	0.19	114.00	1	Combination
3	C.B.3-OUTFALL	2.17	12	Cir	8	108.24	108.56	4.000	108.81	109.13	n/a	109.13	End	Combination
4	C.B.1-C.B.3	1.01	15	Cir	42	108.31	110.20	4.500	109.55	110.63	n/a	110.63	3	Curb-Horiz
5	C.B.4-C.B.3	0.29	12	Cir	72	108.31	108.68	0.514	109.36	109.36	n/a	109.37	3	Curb-Horiz

Project File: 2020-01-31.stm | Number of lines: 5 | Run Date: 06-29-2020

NOTES: Return period = 25 Yrs.

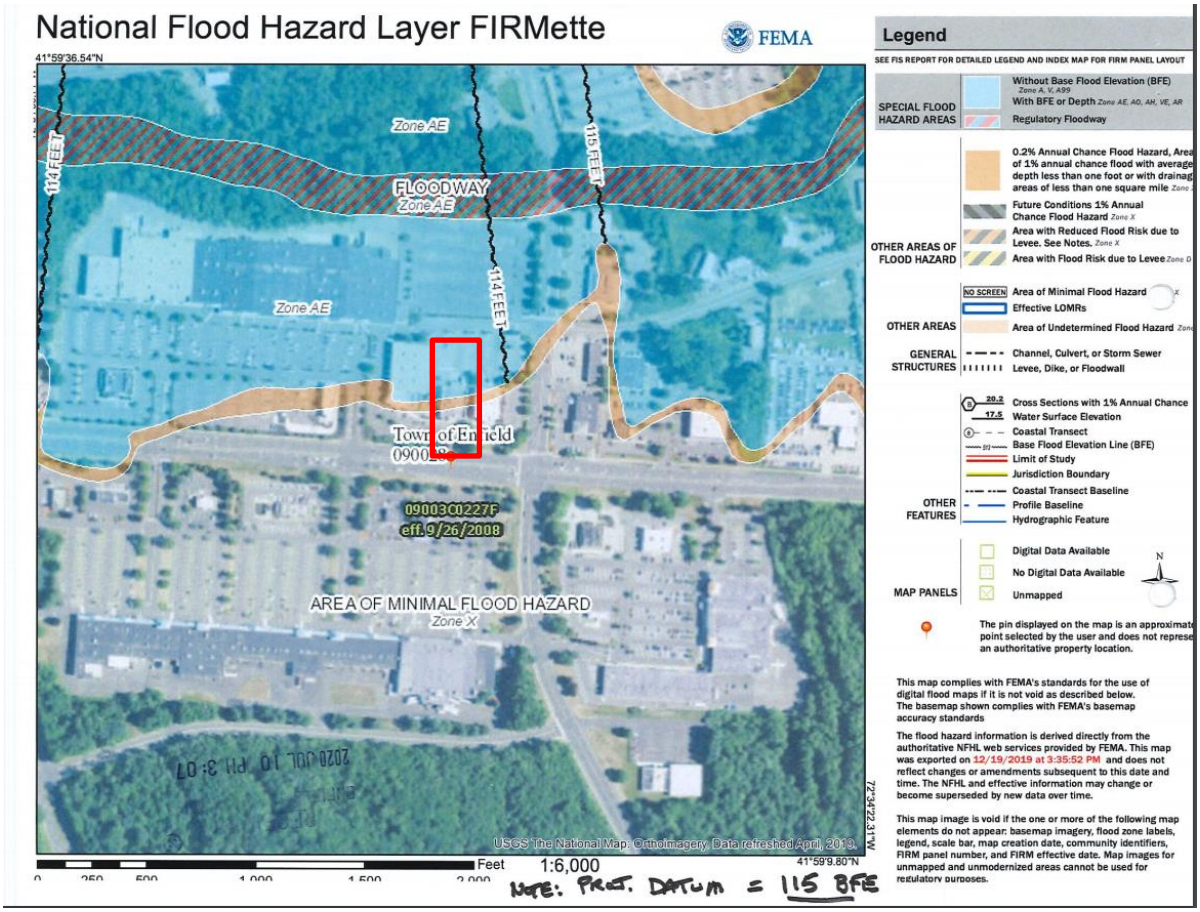
TOWN OF ENFIELD

ENFIELD PLANNING & ZONING COMMISSION
FLD # 041 – 25 & 39 HAZARD AVENUE- Map 045 / Lot 0002, 0008
JULY 17, 2020

BACKGROUND

This is an application for a Permit for Development within the Special Flood Hazard Area to allow excavation and limited fill in the AE Zone. The proposed project involves the demolition of the existing 8,484 sq. ft. restaurant building and the construction of a new 6,986 sq. ft. retail/restaurant building that fits a slightly smaller footprint at the property known as 39 Hazard Avenue.

The northern half of the site is located in the AE Zone and has a cross section that is indicated in orange as *0.2% Annual Chance Flood Hazard, Areas of 1% Annual chance flood with average depth less than one foot or with drainage areas of less than one square mile.*



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Per Section 42-41 – Establishment of Development Permit – a development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 42-36.

Section 42-81 -- General Standards outlines the required standards for all areas of special flood hazards. Applicable standards include but are not limited to: Section 42-81 (1), Section 42-81 (2), Section 42-81 (3), Section 42-81 (6), Section 42-81 (7), Section 42-81 (8), and Section 42-81 (9).

Section 42-82 – Specific Standards provides required provisions. Applicable standards include but are not limited to Section 42-82 (2), Section 42-82 (3), and Section 42-82 (4).

Link to the Code of Ordinances.

Please refer to the narrative, the FEMA map, the site plans, and the engineering, drainage, and flood hazard analysis report.

Staff Comments:

- The narrative states that the proposed construction will create a small loss of net 100-year flood storage volume that is compensated for by the underground drainage basin. The calculations showed the need for 1,066.2 c.f. of compensatory storage to replace the flood stage capacity lost by the proposed development. The proposed site plan creates approximately 1,165 c.f. of compensatory storage in underground 36'' diameter piping as shown on Sheet GR-1.
- John Cabibbo, Assistant Town Engineer, commented that the proposed flood compensation piping system shows pipes reducing from 36'' diameter to 12'' diameter pipes and the section along the east side of the proposed building shows a flat pipe end closure. Details for the reducers and the pipe end enclosure should be submitted. It should also be noted or shown that the inverts of the 36'' and 12'' pipes match at the reducer connections so the system will property drain out after storms subside. To be effective, this flood compensation system should be water tight to protect from groundwater infiltration. If the pipe system is not water tight, these pipes will be filled with groundwater before the flood water rises to flood elevation, which is about five feet above the pipe inverts. Making the system water tight should also be noted on the plans.

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TOWN OF ENFIELD

ENFIELD PLANNING & ZONING COMMISSION
FLD # 041 – 25 & 39 HAZARD AVENUE - Map 045 / Lot 0002, 0008
DRAFT RESOLUTION FOR COMMISSION CONSIDERATION
July 17, 2018

MOTION TO APPROVE THE DEVELOPMENT PERMIT FOR SPECIAL FLOOD HAZARD AREAS FOR FLD# 041 – 25 & 39 Hazard Avenue – Application for a permit for Development within the Special Flood Hazard Area to allow excavation and limited fill in the AE Zone. Paramount Newco Realty Owner/Applicant; Map 045/ Lot 0002, 0008; BR Zone.

Site Specific Conditions

1) Before the signing of plans or the issuance of a permit the applicant will address the concerns from the Assistant Town Engineer regarding the flood compensation piping system as outlined above in the section titled 'Staff Comments.'

General Conditions

1) This approval is for the specific use, site, and structure identified in the application. Any change in the nature of the use, site, or the structure will require new approvals from the Enfield Planning and Zoning Commission.
2) A building permit for the construction of facilities as approved must be obtained within 24 months of approval or this approval shall be rendered null and void, unless an extension is granted by the Commission.
3) All construction authorized by this approval shall be completed within five (5) years or this approval shall be considered null and void, unless an extension is granted by the Commission.
4) By acceptance of this permit and conditions, the applicant and owner acknowledge the right of Town staff to periodically enter upon the subject property for the purpose of determining compliance with the terms of this approval.

Conditions to be met prior to signing of plans:

5) All plans submitted for signature shall bear the seal and live signature of the appropriate professional(s) responsible for the preparation of the plans.
6) The application number shall be displayed on the plans in or near the Title Block area.
7) A copy of the approval letter and conditions shall be incorporated into the final plans submitted for signature, preferably located on the cover sheet or first sheet of the plan set.
8) A list outlining how the conditions of approval have been met shall be submitted along with final plans submitted for signature.
9) A list outlining all changes to the plans shall be submitted along with final plans submitted for signature. The list should cite the sheet number where each change has been made.

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10) The conditions of this approval shall be binding on the applicant, land owners, and their successors and assigns.

Conditions to be met prior to the issuance of permits:

11) Four sets of paper plans with any required revisions incorporated shall be submitted to the Planning Department for signature of the Commission. The Director of Planning may require Mylars.
12) The applicant shall also submit final plans as approved by the Commission in a digital format compatible with the Enfield Geographic Information Systems Electronic Submittals Ordinance.
13) A pre-construction meeting between the applicant, site contractors, project engineer and Town Staff shall be held.
14) Any required certificates and/or approvals from State or Federal agencies (i.e. CT-DOT, DEEP, Army Corps of Engineers) shall be obtained by the applicant and reported to the Planning and Zoning Commission file. Any changes to the plans required by such entities may require a plan modification from the Enfield Planning and Zoning Commission.

General Standards

15) *Anchoring.* All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.
16) *Construction materials and methods.*
    a. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
    b. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
    c. All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
17) *Utilities*.
    a. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;
    b. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters; and
    c. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

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18) *Recreational vehicles*. Recreational vehicles placed on sites within Zones A1-30, AH and AE shall either:
    a. Be on the site for fewer than 180 consecutive days;
    b. Be fully licensed and ready for highway use. (A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.); or
    c. Meet all the general standards of this section and the requirements of section 42-82.
19) *Aboveground storage tanks*. Above-ground storage tanks (oil, propane, etc.) which are located outside or inside of the structure must either be elevated above the base flood elevation (BFE) on a concrete pad, or be securely anchored with tie-down straps to prevent flotation or lateral movement, have the top of the fill pipe extended above the BFE, and have a screw fill cap that does not allow for the infiltration of floodwater.
20) *Portion of structure in flood zone*. If any portion of a structure lies within the Special Flood Hazard Area (SFHA), the entire structure is considered to be in the SFHA. The entire structure must meet the construction requirements of the flood zone. The structure includes any attached additions, garages, decks, sunrooms, or any other structure attached to the main structure.
21) *Portion of structure in flood zone*. If any portion of a structure lies within the Special Flood Hazard Area (SFHA), the entire structure is considered to be in the SFHA. The entire structure must meet the construction requirements of the flood zone. The structure includes any attached additions, garages, decks, sunrooms, or any other structure attached to the main structure. Decks or porches that extend into a more restrictive flood zone will require the entire structure to meet the standards of the more restrictive zone.

Specific Standards

22) *Nonresidential construction*. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to at least one foot above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:
    a. Be floodproofed so that below one foot above the base flood level, the structure is watertight with walls substantially impermeable to the passage of water;
    b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and

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c. Be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certifications shall be provided to the official as set forth in subsection 42-62(3)b.

23) *Water-holding capacity.* The water-holding capacity of the floodplain shall not be reduced. Any reduction caused by structures, improvements, filling, regarding, and any other form of development of land shall be compensated by depending and/or widening of the floodplain. Storage shall be provided on site unless easements have been gained from adjacent property owners; it shall be a volume not previously used for flood storage and shall be hydraulically comparable and incrementally equal to the theoretical volume of floodwater at each elevation, up to and including the 100-year flood elevation, which would be displaced by the proposed project. Such compensatory volume shall have an unrestricted hydraulic connection to the same waterway or water body.

24) *Encroachments.* Within the floodplain as designated on the maps, all encroachments, including fill, new construction, substantial improvements to existing structures, and any other development are prohibited unless certification by a registered professional engineer is provided by the applicant demonstrating that such encroachment shall not result in any (0.00) increase in flood levels (base flood elevation). Work within the bordering land subject to flooding, including work to provide the above specified compensatory storage shall not restrict flows so as to cause an increase in flood stage or velocity.

DATED this day of July 17, 2020.

REFERENCE PLANS

0/11 - Cover Sheet – "Proposed Retail/Restaurant Building at Enfield Commons, 25 & 39 Hazard Avenue, Enfield CT Inland Wetlands & Watercourses, Special Use and Site Plan Applications" Prepared for LEO BHW LTD, LLC, 8 Ellsworth Road, Suite 401, West Hartford, CT 06107, Owner; Paramount Newco Realty, 1195 Route 70, Suite 2000, Lakewood, NJ 08701, Applicant/Developer; Cover sheet with Location Map, Table of Contents, Page 1 of 15; Prepared by F. A. Hesketh & Associates, INC. 3 Creamery Brook, East Granby, CT 06026 (860) 653-800; Dated January 24, 2019; Revised July 01, 2020.

1/11 – Master Plan – "Proposed Retail/Restaurant Building at Enfield Commons, 25 & 39 Hazard Avenue, Enfield CT Inland Wetlands & Watercourses, Special Use and Site Plan Applications" Prepared for LEO BHW LTD, LLC, 8 Ellsworth Road, Suite 401, West Hartford, CT 06107, Owner; Paramount Newco Realty, 1195 Route 70, Suite 2000, Lakewood, NJ 08701,

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Applicant/Developer; Scale 1'' = 60'; Page 2 of 15; Sheet MA-1; Dated December 24, 2019; Revised July 01, 2020.

2/11 – Layout Plan – "Proposed Retail/Restaurant Building at Enfield Commons, 25 & 39 Hazard Avenue, Enfield CT Inland Wetlands & Watercourses, Special Use and Site Plan Applications" Prepared for LEO BHW LTD, LLC, 8 Ellsworth Road, Suite 401, West Hartford, CT 06107, Owner; Paramount Newco Realty, 1195 Route 70, Suite 2000, Lakewood, NJ 08701, Applicant/Developer; Page 3 of 15; Sheet LA-1; Dated December 24, 2019; Revised July 1, 2020.

3/11 – Landscape Plan -- "Proposed Retail/Restaurant Building at Enfield Commons, 25 & 39 Hazard Avenue, Enfield CT Inland Wetlands & Watercourses, Special Use and Site Plan Applications" Prepared for LEO BHW LTD, LLC, 8 Ellsworth Road, Suite 401, West Hartford, CT 06107, Owner; Paramount Newco Realty, 1195 Route 70, Suite 2000, Lakewood, NJ 08701, Applicant/Developer; Page 4 of 15; Sheet LS-1; Dated December 24, 2019; Revised July 1, 2020.

4/11 – Landscape Schedule, Details, and Notes -- "Proposed Retail/Restaurant Building at Enfield Commons, 25 & 39 Hazard Avenue, Enfield CT Inland Wetlands & Watercourses, Special Use and Site Plan Applications" Prepared for LEO BHW LTD, LLC, 8 Ellsworth Road, Suite 401, West Hartford, CT 06107, Owner; Paramount Newco Realty, 1195 Route 70, Suite 2000, Lakewood, NJ 08701, Applicant/Developer; Page 5 of 15; Sheet LS-2; Dated December 24, 2019; Revised July 1, 2020.

5/11 – Grading and Soil Erosion -- "Proposed Retail/Restaurant Building at Enfield Commons, 25 & 39 Hazard Avenue, Enfield CT Inland Wetlands & Watercourses, Special Use and Site Plan Applications" Prepared for LEO BHW LTD, LLC, 8 Ellsworth Road, Suite 401, West Hartford, CT 06107, Owner; Paramount Newco Realty, 1195 Route 70, Suite 2000, Lakewood, NJ 08701, Applicant/Developer; Scale 1'' = 10'; Page 6 of 15; Sheet GR-1; Dated December 24, 2019; Revised July 1, 2020.

6/11 – Utility and Drainage -- "Proposed Retail/Restaurant Building at Enfield Commons, 25 & 39 Hazard Avenue, Enfield CT Inland Wetlands & Watercourses, Special Use and Site Plan Applications" Prepared for LEO BHW LTD, LLC, 8 Ellsworth Road, Suite 401, West Hartford, CT 06107, Owner; Paramount Newco Realty, 1195 Route 70, Suite 2000, Lakewood, NJ 08701, Applicant/Developer; Scale 1'' = 10'; Page 7 of 15; Sheet UT-1; Dated December 24, 2019; Revised July 1, 2020.

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7/11 – Details -- "Proposed Retail/Restaurant Building at Enfield Commons, 25 & 39 Hazard Avenue, Enfield CT Inland Wetlands & Watercourses, Special Use and Site Plan Applications" Prepared for LEO BHW LTD, LLC, 8 Ellsworth Road, Suite 401, West Hartford, CT 06107, Owner; Paramount Newco Realty, 1195 Route 70, Suite 2000, Lakewood, NJ 08701, Applicant/Developer; Page 8 of 15; Sheet SD-1; Dated December 24, 2019; Revised July 1, 2020.

8/11 – Details -- "Proposed Retail/Restaurant Building at Enfield Commons, 25 & 39 Hazard Avenue, Enfield CT Inland Wetlands & Watercourses, Special Use and Site Plan Applications" Prepared for LEO BHW LTD, LLC, 8 Ellsworth Road, Suite 401, West Hartford, CT 06107, Owner; Paramount Newco Realty, 1195 Route 70, Suite 2000, Lakewood, NJ 08701, Applicant/Developer; Page 9 of 15; Sheet SD-2; Dated December 24, 2019; Revised July 1, 2020.

9/11 – Details -- "Proposed Retail/Restaurant Building at Enfield Commons, 25 & 39 Hazard Avenue, Enfield CT Inland Wetlands & Watercourses, Special Use and Site Plan Applications" Prepared for LEO BHW LTD, LLC, 8 Ellsworth Road, Suite 401, West Hartford, CT 06107, Owner; Paramount Newco Realty, 1195 Route 70, Suite 2000, Lakewood, NJ 08701, Applicant/Developer; Page 10 of 15; Sheet SD-3; Dated December 24, 2019; Revised July 1, 2020.

10/11 – Notes -- "Proposed Retail/Restaurant Building at Enfield Commons, 25 & 39 Hazard Avenue, Enfield CT Inland Wetlands & Watercourses, Special Use and Site Plan Applications" Prepared for LEO BHW LTD, LLC, 8 Ellsworth Road, Suite 401, West Hartford, CT 06107, Owner; Paramount Newco Realty, 1195 Route 70, Suite 2000, Lakewood, NJ 08701, Applicant/Developer; Page 11 of 15; Sheet NT-1; Dated December 24, 2019; Revised July 1, 2020.

11/11 – Limited Topographic Survey -- "Proposed Retail/Restaurant Building at Enfield Commons, 25 & 39 Hazard Avenue, Enfield CT Inland Wetlands & Watercourses, Special Use and Site Plan Applications" Prepared for LEO BHW LTD, LLC, 8 Ellsworth Road, Suite 401, West Hartford, CT 06107, Owner; Paramount Newco Realty, 1195 Route 70, Suite 2000, Lakewood, NJ 08701, Applicant/Developer; Scale 1''=20'; Page 12 of 15; Sheet PS-1; Dated December 24, 2019; Revised July 1, 2020.

12/14 – Construction Plan – "Enfield Commons – 39 Hazard Ave, Enfield, CT" Prepared by NI Designs; 11 Talcott Notch Road, Farmington, CT 06032 (860) 678-1946 and Charles Georgie Associates, 365 New Haven Ave, Ste. 4, Milford CT 06460 (203) 934-2855. Scale 3/16'' = 1'; Page 13 of 15; Sheet A.2; Dated April 20, 2020.

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13/14 – Exterior Elevations – "Enfield Commons – 39 Hazard Ave, Enfield, CT" Prepared by NI Designs; 11 Talcott Notch Road, Farmington, CT 06032 (860) 678-1946 and Charles Georgie Associates, 365 New Haven Ave, Ste. 4, Milford CT 06460 (203) 934-2855. Scale ¼'' = 1'. Page 14 of 15; Sheet A.3; Dated April 20, 2020.

14/14 – Exterior Elevations -- "Enfield Commons – 39 Hazard Ave, Enfield, CT" Prepared by NI Designs; 11 Talcott Notch Road, Farmington, CT 06032 (860) 678-1946 and Charles Georgie Associates, 365 New Haven Ave, Ste. 4, Milford CT 06460 (203) 934-2855. Scale ¼'' = 1'. Page 15 of 15; Sheet A.3a; Dated April 20, 2020.

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TOWN OF ENFIELD

Special Use Permit & Site Plan Review Application

Planning Division • 820 Enfield Street Enfield, CT 06082
Telephone: 860-253-6355 Website: www.enfield-ct.gov

Special Use Permit

Application For: ☐ New Special Use Permit ☑ Other Administrative Approval
☐ Modification of Plan Previously Approved _____
☐ Modification of Conditions of Approval of a Special Permit: _____

Site Plan Review

Application For: ☐ New Site Plan Review ☐ Other _____
☐ Modification of Plan Previously Approved _____
☐ Modification of Conditions of Approval of a Site Plan: _____

Staff Use Only					
PH #:		**SPR #:**		**XSP #:**	
View Permit #:					
Zoning Regulation Section:					

PLEASE REVIEW LAND USE APPLICATION GUIDE FOR INSTRUCTIONS

Property Address: 10 Lego Way **Map #:** 75 **Lot #:** 104

Zone(s): Industrial I-1 **Size of Parcel:** 19.12 Acres **Account #:** 065700020005

Current Use: Vacant warehouse with office space

Project Name: Driveway and Loading Expansion Plan

Summary Description: Addition of a demising wall to split the space for two separate tenants.

Applicant's Name: Rock Ridge Realty, LLC

Applicant's Address: P.O. Box 880, 33 Shaws Lane, Springfield, MA 01101

Contact #: 413-452-3121 **Email:** sgrodsky@grodsky.com

TOWN OF ENFIELD

Applicant's Representative: Scott Grodsky

Representative Address: P.O. Box 880, 33 Shaws Lane, Springfield, MA 01101

Contact #: 413-452-3121 **Email:** sgrodsky@grodsky.com

Does Applicant own the Property? ☑ Yes (Attach Copy of DEED)
☐ No (Provide Information Below & Attach Letter of Authorization)

Owner's Name: Rock Ridge Realty, LLC

Owner's Contact #: 413-452-3121

Owner's Address: 10 Lego Way, Enfield, CT

Owner's Email: sgrodsky@grodsky.com

Project Information:

Septic: ☐ Yes ☑ No

Public Sewer: ☑ Yes ☐ No

Well Water: ☐ Yes ☑ No

Public Water: ☑ Yes ☐ No

Outdoor Storage: ☑ Yes ☐ No

Design District: ☐ Yes ☑ No

Do wetlands and watercourses affect this application? ☑ Yes ☐ No

Is the property within a Level A or Level B Aquifer Protection Area? ☑ Yes ☐ No

Does this application include any regulated activity in a floodplain ☐ Yes ☑ No

(If yes, you will need to also submit a Flood Hazard Development Permit application to the Planning & Zoning Commission)

What is the total lot acreage? 19.12 acres

What is the length of the property frontage? (List by Street) 203.18 on Lego Way

Name the abutting street(s): Lego Way

What are the existing land uses and zoning districts for abutting properties or across the street(s)?

North Town of Enfield Public Works Garage - Industrial 1

East Vacant Agricultural Fields - Industrial 1

South Residential House - R33, Vacant - R44

West Enfield Senior Center & Enfield Police Department - Industrial 1

Environmental History:

Phase I: Land Records reviewed for environmental hazards? ☑ Yes ☐ No

Phase II: Environmental Hazards Identified? ☐ Yes ☑ No

If yes, please list the environmental conditions found: _____

Phase 3: Is there a remediation plan? ☐ Yes ☑ No

If yes, please describe the remediation plan: _____

Are there environmental restrictions on the property? ☐ Yes ☑ No

If yes, please list environmental restrictions: _____

TOWN OF ENFIELD

The undersigned hereby permits town staff and commission members to enter into and inspect this site during reasonable hours for the purpose of reviewing this application and accompanying plans. I hereby depose and say that all of the above statements as well as the statements contained in all papers filed herewith are true.

☑ **I have reviewed and acknowledge the Land Use Application Guide for further instructions on how to complete my application.**

Applicant Signature: _____ **Date:** 7/16/2020

Print Name: Scott Grodsky

Subscribed and sworn to before me _____day of _____, 20_____.

_____ _____

Notary Public **My Commission Expires:**

TOWN OF ENFIELD

Planning Checklist of Required Information

(To be included with your application)

Permit #: _____

View Permit #: _____

Applicant Name: Rock Ridge Realty, LLC

Address: P.O. Box 880, 33 Shaw Lane, Springfield, MA 01101

Contact #: 413-452-3121

Email: sgrodsky@grodsky.com

Project Name: Driveway & Loading Expansion Plan

Please Read Instructions

General: Site Plans shall be prepared by appropriate design professionals (Surveyor, Engineer, Architect, and Landscape Architect) licensed to practice in the State of Connecticut and shall bear appropriate registration stamps. All drawings 24 X 36 shall be at a scale of not less than one (1) inch equals 60 feet and where practical, the scale shall be one (1) inch equals 40 feet. All Site Plan drawings shall be in sufficient detail and accuracy, (generally A-2 survey), to enable the construction of all site improvements shown and approved on the drawings. All site improvements shall be designed and constructed to the standards of the Town's Technical Standards. The Planning Department requires an electronic submission of all documents received.

Applicant Responsibilities	
☐ **Application Form**	☐Provide a complete and notarized application form.
☐ **Owner Authorization**	☐ Provide a copy of the DEED, if you own the property OR Provide a letter from the owner authorizing you to apply on their behalf.
☐ **Abutter's Information**	☐ Notice to immediate abutters by certified mail not less that fifteen days **(15) days prior** to the start of the public hearing. (If applicable). ☐ A copy of the abutter's letter and proof of mailing notification is to be provided to the Planning Office **3 days prior** to the scheduled public hearing.

Applicant Responsibilities Continued	
☐ **Project Narrative**	☐ Provide a detailed narrative explaining the proposal. ▪ How will you use the site? ☐ Include the hours of operation and number of employees for all commercial/industrial projects. ☐ Outdoor storage, if any ☐ Outdoor entertainment, if any ☐ Will there be food or alcohol? ☐ If proposing new curb cuts as part of the proposal, provide a narrative report demonstrating: ☐ The access ways are adequate but not excessive in number. ☐ The access ways are adequate in width, grade, alignment and visibility. ☐ That access ways are appropriately separated from street corners and other places of public assembly. ☐ If proposing new, changes to, off-street parking/loading areas, provide a narrative report demonstrating: ☐Section 10-Site Development Regulations ☐ Adequate off-street parking/loading areas are provided to prevent persons connected with or visiting the use from parking on public streets. ☐ That the proposed interior circulation system is adequate to provide safe accessibility to all off-street parking spaces
☐ **Materials Samples Specification**	☐ Provide available manufacturer's literature for added site features: generators, fencing, pre-fabricated structures, etc.
	☐ Physical samples for any façade materials or any non-standard hardscaping should be submitted with the application.
☐ **Additional requirements for projects adjacent to State Right-of-Way**	☐ Provide a copy of preliminary applications for access to state highways and State-owned storm drainage facilities where such state permit is necessary.

TOWN OF ENFIELD

PLANS-Full Submission Requirements	
☐ **Cover Sheet**	☐ Title of Project ☐ Name of Developer ☐ Name of Property Owner ☐ Name of Applicant ☐ North Arrow ☐ Scale ☐ Drawings are to be submitted in landscape orientation opposed to portrait orientation ☐ Drawing Index/List of all map sets is to be include: ▪ Original Date ▪ Revision Date(s) ▪ Sheet Number ▪ Sequential Page Number out of Pages in plan set. i.e. Page 1 of 10. ☐ Location Map ▪ Scale: 1" = 1000' ▪ Showing Adjacent streets, property owners, and Zones. ☐ Zoning Summary Table-Show a table comparing the standards required in these regulations and the standards provided by the proposed project: area and bulk requirements, parking requirements, etc. ☐ Seal & Signatures of appropriate design professional (Surveyor, Engineer, Architect, Landscape Architect, etc.) ☐ Land Use Commission Application Numbers, if applicable

PLANS-Full Submission Requirements	
☐ **Aquifer Map**	☐ Proximity to Aquifer Protection Areas are to be delineated on plan sheet. ☐ Narrative ☐ Registration Form • Aquifer Protection Area Regulations- Section 8 Registration Requirements ☐ Permit Application • Aquifer Protection Area Regulations- Section 9 Permit Requirements

TOWN OF ENFIELD

PLANS-Full Submission Requirements	
☐ **Floodplain Map**	☐ Town of Enfield Code of Ordinances- Chapter 42 Floods ☐ Development Permit for Special Flood Hazard Area Application ☐ Narrative ☐ Delineation of Floodplain Area- Official FIRM (Flood Insurance Rate Map) on which FEMA (Federal Emergency Management Agency) has delineated Areas of Special Flood Hazard, the Risk Premium Zones, and Base Flood Elevation.
☐ **Boundary Survey of Site**	☐ Area of Lot ☐ Show property boundaries including distances with angles or bearings. ☐ Include area of lot and property's zoning classification. ☐ Include names of adjacent property owners and zoning classification of their properties.
☐ **Existing Conditions Map** **Title Block Should Include** ☐ Name of Developer ☐ Name of Property Owner ☐ North Arrow ☐ 1": 20' Scale Preferred. May be between 20' and including 40' scale ▪ If another scale is desired, please contact staff for approval ☐ Seals and Signatures of appropriate design professional	☐ Delineate flagged Wetlands, if applicable. ☐ Existing contours or spot grades at no more than 2-foot intervals. ☐ Show location of existing buildings-indicate: ▪ Dimensions ▪ Area ▪ Height ▪ Number of stories ▪ Distances between buildings and to property lines. ☐ Show existing sanitary and storm water drainage facilities with elevation. ☐ Show existing sidewalks, curbs and curb cuts, and adjacent streets. ☐ Show location and description of all existing easements and right-of-way.

TOWN OF ENFIELD

PLANS-Full Submission Requirements	
☐ **Existing Conditions Map-Continued**	☐ Show existing trees-label all trees larger than 12" (feet). ☐ Show existing off-street parking/loading areas include details of: ▪ Aisles ▪ Driveways ▪ Each Parking Space ▪ All Loading and Unloading Areas ▪ Pavement Marking ▪ Location of Directional Signs ☐ Show existing lighting and signage. ☐ Show existing outdoor storage and screening-including dumpster areas.
☐ **Project Site Plan (s)** *Include as many sheets as required* **Title Block Should Include** ☐ Name of Developer ☐ Name of Property Owner ☐ North Arrow ☐ 1": 20' Scale Preferred. May be between 20' and including 40' scale ▪ If another scale is desired, please contact staff for approval ☐ Seals and Signatures of appropriate design professional	**Layout** ☐ Show proposed contours and spot grades at no more than (2) foot intervals. ☐ Show location of proposed buildings-indicate ▪ Use ▪ Dimensions/Size ▪ Area ▪ Height ▪ Number of Stories ▪ Distances between buildings and to property lines. ☐ Zoning Table with Area and Bulk Information ▪ Required ▪ Existing ▪ Proposed ☐ Traffic Access: ▪ Adequate in Number ▪ Width ▪ Grade ▪ Alignment ▪ Visibility ▪ Fire Lane(s) are to be marked ▪ Traffic Control Signs ▪ Location of Directional Signs ▪ Appropriately separated from Street Corners or Other Places of Assembly

TOWN OF ENFIELD

PLANS-Full Submission Requirements	
☐ **Project Site Plan (s)-Continued** *Include as many sheets as required*	☐ Traffic Access: ▪ Wheel stops or Bollards Post Protection Details • Gas • Electric • Drive Thurs • Outside Seating, etc. ☐ Circulation and Parking: Layout of Off-Street Parking Areas-include: ▪ Review Section 10-Site Development Regulations ▪ Aisles ▪ Driveways ▪ Number of Parking Space ▪ Safe Accessibility to All Required Off-Street Parking ▪ All Loading and Unloading Areas ▪ Pavement Markings ▪ Disabled Parking • To be consistent with State of CT Handicapped Parking Spaces and Signs Statutes and Regulations ☐ Show proposed outdoors storage and screening-including outside recycling and refuse storage areas. ☐ Show proposed sidewalks, curbs and curb cuts, and adjacent streets. ☐ Show all easements and rights-of-way/ ☐ Where development is proposed to be in phases, phase lines shall be shown.
Title Block Should Include ☐ Name of Developer ☐ Name of Property Owner ☐ North Arrow ☐ 1”: 20’ Scale Preferred. May be between 20’ and including 40’ scale ▪ If another scale is desired, please contact staff for approval ☐ Seals and Signatures of appropriate design professional	**<u>Landscaping, Lighting, and Signage</u>** ☐ Landscape: Planting Scheduled- ▪ Section 10.20 Landscaping Standards ▪ Section 10.10.7 Parking Area Setbacks & Landscaping Standards ▪ Location(s) ▪ Size(s) ▪ Quantity ▪ Common Names

TOWN OF ENFIELD

PLANS-Full Submission Requirements	
☐ **Project Site Plan (s)-Continued** *Include as many sheets as required* **Title Block Should Include** ☐ Name of Developer ☐ Name of Property Owner ☐ North Arrow ☐ 1": 20' Scale Preferred. May be between 20' and including 40' scale ▪ If another scale is desired, please contact staff for approval ☐ Seals and Signatures of appropriate design professional	☐ Lighting: Specifications for all lighting fixtures are to be included on the plans. ▪ Section 7.10.6 Outdoor Lighting Requirements ▪ Section 10.10.6 Parking Design, Layout, and Location-ii Lighting ▪ Height and size of all outdoor lighting is to be shown on plan ▪ Scalable: Number of Foot Candles ☐ Signage ▪ Review Section 10.30 Sign Regulations ▪ Location(s) ▪ Photo Rendering ▪ Dimension(s)/ Size(s) ▪ Length(s) X Width(s) X Height(s) ▪ Engineering footing details, if applicable **<u>Engineering Details and Utilities</u>** ☐ Soil Erosion and Sedimentation Control Measures. ▪ Section 7.20 Erosion and Sedimentation Control Requirements ▪ Grading and Construction Activities ▪ Construction Details ▪ Sequence of Installation, Application, and Stabilization ☐ Show connection(s) to sanitary and storm water drainage facilities (public or well), electric, and gas: ▪ Elevations ▪ Length of Pipes or Wires, etc. ☐ Delineate drainage design for roof area, parking lot, and driveways ▪ Section 7.10.10 Storm Water Runoff ☐ Indicate provisions for water supply ☐ Include appropriate details and cross section depicting the Town Standards for construction and site improvement found in the Technical Subdivision Regulations ☐ Maintenance schedules for all equipment are be provided within the plan set. ☐ Include Standard Town Notes. (See Attached)

TOWN OF ENFIELD

PLANS-Full Submission Requirements	
☐ **Architectural Plans and Elevations** N/A *Include preliminary architectural drawings as part of the plan set* ☐ Scale 1-foot equals 16 feet	☐ Show floor plans for each floor or level of each proposed structure-indicate: ▪ Spatial Arrangements ▪ Use Occupancy ▪ Seating Arrangements ▪ Ingress and Egress, as appropriate ▪ Facilities-Restrooms and Storage Areas ▪ FOG (Fat, Oil, Grease) System Specification, if applicable • Dimension/Size • Indoor or Outdoor ▪ Grease Traps
	☐ Show exterior elevations of each side of each proposed structure-indicate: ▪ Material(s) ▪ Roof Scape, if any, ▪ Dimensions of building ▪ Air Scrubber- Restaurants, Bakery, Café, etc.
	☐ Show all exterior mechanical equipment and screening- ▪ ALL mechanical equipment is to be screened from the public view in a manner that is compatible with the architectural style of the building and designed in a manner that is integral to the architectural design of the building.
	☐ Where alteration and/or additions to an existing building are proposed, provide both plans and elevations adequate to explain the proposal.
☐ **Technical Report(s),** if applicable	☐ Erosion and Sedimentation Control Plan ☐ Traffic Impact Study ☐ Geotechnical Engineering Report ☐ Wetland and Soils Report ☐ Soil Scientist Report ☐ Wetland Impact Assessment Report ☐ Stormwater Analysis/Management Report ☐ Engineering Hydrology and Hydraulic Analysis Report ☐ Other

TOWN OF ENFIELD

Dates and Deadlines	
☐ **Deadline to turn materials into the Planning Division**	☐_____ Deadlines are **25 days prior** to a Board or Commission meeting. ☐ 14 copies of 24 X 36 plans are to be submitted in complete sets- stapled, map folded and electronically.
☐ **Commission Meeting** *Application is Officially received*	☐_____ The application is officially received by the Commission during the **next regular meeting after materials are submitted.** Applicants do not need to attend. ▪ CT General Statues- 8-7d
☐ **DEADLINE to post public hearing signs**	☐_____ Deadline is **10 days prior** to the scheduled meeting at which the application will be discussed (for Public Hearings ONLY).
★ **Commission Meeting** *Application is discussed*	☐_____ Typically, applications are discussed 1-2 meetings after they are officially received. The Commission sets the schedule based on the number of applications and anticipated length of discussion. The schedule also depends on the complexity of the proposal and if all appropriate Agencies and Departments have had sufficient time to submit written comments. Applicants are expected to attend the meeting (s) when their application is discussed and are expected to provide an introductory presentation of the proposed project.

Upon the recommendation of the Director of Planning, the Commission may consider a waiver of submission requirements if it finds that the information is not necessary in order to decide on the application's conformance with these Regulations and conformance to the Enfield's Plan of Conservation and Development.

TOWN OF ENFIELD

Post Commission Meeting	
☐ **Removal of Public Hearing Signage**	☐ Public hearing sign(s) must be **removed within five (5) days** of the closing of the hearing and returned to the Planning Division.
☐ **Plan Revisions**	☐ Revision of plans per Commission request. Final Plans include **four (4) copies** of approved plan measuring 24 X 36. Approval letter is to be incorporated into the Final Plans as its own plan sheet. ☐ An electronic submission of the final plans and any documents received are required. ☐ Digital list of all map sets is to be included.
☐ **Bonds** ☐ Landscaping Bond ☐ Site Restoration ☐ Soil Erosion Control	☐ Bonds may need to be posted. ☐ Review Section 9.10.5 Site Plan Bonding-Certificate of Compliance ▪ Erosion & Sediment Control Bond: **Cash Only Bond** ➢ Review Section 7.20 Erosion and Sedimentation Control Requirements ▪ Site Restoration Bond: **Surety Bond** ▪ Landscaping Bond: **Surety Bond** ➢ Review Section 10.20 Landscaping Standards
☐ **Land Records**	☐ Final Plans signed by the appointed Town Official may need to be filed with the Enfield Land Records. ☐ Documents requested to be filed with the Town Clerk on the Land Records **require a fee paid** to The Office of Town Clerk
☐ **Pre-Construction Meeting**	☐ Pre-Construction Meeting between the applicant, site contractors, project engineer and Town Staff.

TOWN OF ENFIELD

Post Construction	
☐ **Project Construction and Completion Requirements.**	☐ Please familiarize yourself with project completion requirements
☐ **Engineered Certified As-Built** ☐ **Architectural Designed As-Built**	☐ As-Built include **four (4) copies** of Certified As-Built measuring 24 X 36. ☐ Any deviations or omissions needs to be noted on the plans and a list of changes submitted.
☐ **Electronic Submittal Requirement**	☐ As-Built electronically submitted in addition to required paper copies. ☐ Digital list of map plan set is required.
☐ **Request of Certificate of Zoning Compliance**	☐ Review Section 9.10.5 Site Plan Bonding-Certificate of Compliance ☐ Request of Certificate of Zoning Compliance is to be completed **ten (10) days prior** to the inspection for the Certificate of Occupancy. ☐ Review Schedule of Fees
☐ **Request of Certificate of Occupancy**	☐ Request of Certificate of Occupancy is to be made after the Certificate of Zoning Compliance is completed.

TOWN OF ENFIELD

Post Commission-Bonds	
☐ **Release Request for Soil & Erosion Control Bond**	☐ Review Section 9.10.5 Site Plan Bonding-Certificate of Compliance ☐ Complete bond release form. ☐ Site will be inspected for completion. ☐ Review Section 9.10.9 Site Maintenance ☐ Review Schedule of Fees
☐ **Release Request for Site Restoration Bond**	☐ Review Section 9.10.5 Site Plan Bonding-Certificate of Compliance ☐ Complete bond release form. ☐ Site will be inspected for completion. ☐ Review Section 9.10.9 Site Maintenance ☐Review Schedule of Fees
☐ **Release Request for Landscaping Bond**	☐ Review Section 9.10.5 Site Plan Bonding-Certificate of Compliance ☐ Request are to be made **after one (1) growing season** typically one (1) year. Landscaping installed during the months of June, July, or August, the period shall be two (2) years. ☐ Complete bond release form. ☐ Site will be inspected for completion. ☐ Review Section 9.10.9 Site Maintenance ☐ Review Schedule of Fees.
☐ **Request for Bond Reduction**	☐ Complete bond reduction form ☐ Review Schedule of Fees

Standard Town Map Notes
1. The developer shall notify the Town Engineer's office in advance to schedule inspection of sub-base gravel, pavement, sidewalks, drainage structures and pipes, sanitary sewers and manholes. Private site will be inspected for sanitary sewers.
2. All site work shall be constructed in accordance with the Town of Enfield specifications, as outlined in the approval and the technical specifications
3. Erosion and sedimentation control shall be installed in accordance with the "Erosion and Sediment Control Handbook" prepared by the Soil Conservation Service 2002, as amended.
4. All excavation within Town right-of-way requires a Street Excavation Permit issued by the Engineering Department.
5. No site improvements such as drainage, sanitary sewers, sidewalks, excavation fillings, pavement operation, etc., shall commence until the site restoration bond, as required by the Enfield Planning and Zoning Commission, is posted with the Town of Enfield.
6. No stumps to be buried on site.
7. Pre-construction conference for construction, shall include the Town Engineer or his agent and the Town Planning office. Request for conference shall be in advance.
8. The developer shall hire a Registered Professional Engineer to inspect the site of construction to ensure the work is constructed in accordance with the approved plans, the engineer will be required to certify on an As-Built Plan that the project was constructed in accordance with the approved plans and all materials were placed in accordance with the site plans and specifications, prior to issuance of a Certificate of Occupancy.

TOWN OF ENFIELD

Public Hearing Sign(s) Receipt

For: ☐ Enfield Planning & Zoning Commission ☐ Inland & Wetlands Commission
☐ Historic District Commission ☐ Enfield Zoning Board of Appeals

Receipt is hereby acknowledged of a $10.00 payment for each public hearing sign purchased from the Enfield Planning Department. Posting is located at:

_____
(Address)

for application number PH #, IW #, HDC #, ZBA #_____.
(Select appropriate Land Use Commission)

Public hearing sign(s) must be removed within five (5) days of the closing of the hearing and returned to the Planning Office. Public hearing signage fee is non-refundable.

Date: _____

Receipt of $: _____

Number of Signs: _____

Signature of Applicant: _____

Printed Name: _____

Signature of Planning Department Official: _____

TOWN OF ENFIELD

Notice

The Enfield Zoning Ordinance and the Enfield Subdivision Regulations require the posting of public hearing sign(s) on all sites which are the subject of public hearing before the Planning and Zoning Commission or the Zoning Board of Appeals.

The Regulations are as follows:

- Whenever a public hearing is scheduled by the Town Planning and Zoning Commission, or by the Zoning Board of Appeals, the applicant shall place a sign on the affected property which can be seen from all abutting streets. The sign, to be placed at or near the street line or travel way or in such locations, shall be clearly visible to the general public and located actable to the Zoning Enforcement Officer. Such sign to be provided by the Planning Office shall be installed by the applicant no less than **ten (10) days before** the hearing, and shall be removed by the applicant within **five (5) days after** the close of such hearing. An affidavit will be executed by the applicant or his agent certifying that this sign will be installed and maintained in accordance with the provisions of this section.

TOWN OF ENFIELD

AFFIDAVIT
POSTING OF PUBLIC HEARING SIGN(S)

I, _____,

Applicant for **PH #, IW #, HDC #, ZBA #**_____,
(Select appropriate Land Use Commission)

an application requiring a public hearing before the Enfield Planning and Zoning Commission, Inland Wetlands Commission, Historic District Commission, or Zoning Board of Appeals, do hereby certify that in accordance with the Public Hearing Requirements and Procedures found within Section 9.30 of the Enfield Zoning Regulations or the Standard Requirements of Section 4 number 4f. of the Enfield Subdivision Regulation; I have posted public hearing sign(s) on the site in question as required **ten (10) days prior** to the scheduled public hearing meeting date.

This affidavit is signed and notarized and will be delivered to the Planning Division at least **three (3) days before** the public hearing.

_____
(Signature)

_____
(Printed Name)

_____
(Date)

_____
(Notary)

My Commission Expired on: _____

TOWN OF ENFIELD

REQUEST FOR HEARING EXTENSION(S)

I hereby request that the Enfield Planning and Zoning Commission, Inland Wetlands Commission, Historic District Commission, or Zoning Board of Appeals grant an extension of the statutory time to complete the Public Hearing on:

Application PH #, IW #, HDC #, ZBA #: _____
(Select appropriate Land Use Commission)

until _____
(Date: 2 extensions totaling up to 65 days)

By this signature I certify that I have the power to represent the interests of the applicant and/or owner involved in this hearing.

_____
(Signature)

_____
(Printed Name)

Staff Use Only					
Date Received:		**DoR:**		**MOPH:**	
MCPH:		**Extension 1:**		**Extension 2:**	

TOWN OF ENFIELD

REQUEST FOR WITHDRAWAL OF APPLICATION

I, _____

is hereby requesting a withdrawal of **PH #, SPR #, IW #, HDC #, ZBA #:**

_____
(Select appropriate Land Use Commission)

application from the Enfield Planning and Zoning Commission, Inland Wetlands Commission, Historic District Commission, or Zoning Board of Appeals.

By this signature I certify that I have the power to represent the interests of the applicant and/or owner involved in this hearing.

_____
(Signature)

_____
(Printed Name)

Staff Use Only					
Date Received:		**DoR:**		**MOPH:**	
MCPH:		**Withdrawal Date:**			

TENANT IMPROVEMENTS

10 LEGO WAY

ENFIELD CONNECTICUT

ARCHITECTS

LAZARUS AND SARGEANT, LTD., 50 NORTH MAIN STREET, WALLINGFORD, CT. 06492

STRUCTURAL ENGINEER

WILLIAM JACQUES, P.E., 15 JUDSON COURT, CHESHIRE, CT 06410

LEGEND & SYMBOLS

- EXITSING INTERIOR PARTITION
- NEW INTERIOR PARTITION
- EXISTING TO BE REMOVED
- 3 — WALL TYPE TAG
- D111 — DOOR TAG
- DETAIL # / SHEET # — DETAIL SYMBOL
- SECTION OR ELEVATION # / SHEET # — SECTION/ELEVATION SYMBOL
- ALIGN
- REVISIONS
- SPOT ELEVATION SYMBOL
- SIGNAGE
- UNIVERSAL SYMBOL OF HANDICAPPED ACCESSIBILITY
- SUSPENDED CEILING GRID
- 2 X 2 LIGHT FIXTURE
- 2 X 4 LIGHT FIXTURE
- SPRINKLER HEAD
- SUPPLY AIR DIFFUSER
- RETURN AIR DIFFUSER

ABBREVIATIONS

A/C	AIR CONDITIONER UNIT	INSUL	INSULATION
ADA	AMERICAN DIABILITIES ACT	INT	INTERIOR / INTERNAL
ADD'L	ADDITIONAL	JAN	JANITOR
ADJ	ADJUSTIBLE	JCT	JUNCTION
AFF	ABOVE FINISHED FLOOR	JT	JOINT
AL	ALUMINUM	KIT	KITCHEN
APPROX	APPROXIMATE	LAM	LAMINATE(D)
ARCH	ARCHITECT(URAL)	LAV	LAVATORY
ASST	ASSISTANT	LH	LEFT HAND
AV	AVERAGE	LVL	LEVEL
BD	BOARD	MAX	MAXIMUM
BK	BRICK	MECH	MECHANICAL
BLDG	BUILDING	MEZZ	MEZZANINE
BLK	BLOCK(ING)	MFG	MANUFACTURER
CAB	CABINET	MGR	MANAGER
CIRC	CIRCULATION	MIN	MINIMUM
CL	CENTER LINE	MISC	MISCELLANEOUS
CLG	CEILING	MO	MASONRY OPENING
CLOS	CLOSET	MTD	MOUNTED
CLR	CLEARANCE	MTL	METAL
CMU	CONCRETE MASONRY UNIT	NIC	NOT IN CONTRACT
CNTL	CONTROL	NOM	NOMINAL
COL	COLUMN	NTS	NOT TO SCALE
COMM	COMMUNICATION(S)	O.C.	ON CENTER
CONC	CONCRETE	OPNG	OPENING
CONF	CONFERENCE	OPP	OPPOSITE
CONST	CONSTRUCTION	PAF	POWDER ACTUATED FASTENER
CORR	CORRIDOR	PBD	PARTICLE BOARD
CPT	CARPET	PED	PEDESTAL
CPU	CENTRAL PROCESSING UNIT	PLAS	PLASTIC
CTR	CENTER	PLWD	PLYWOOD
DBL	DOUBLE	PR	PAIR
DF	DRINKING FOUNTAIN	PROJ	PROJECTION
DIA	DIAMETER	PD	POWER DISTRIBUTION UNIT
DIAG	DIAGONAL	PTD	PAINTED
DIM	DIMENSION	PVC	POLYVINYL CHLORIDE
DISP	DISPENSER	QTY	QUANTITY
DIV	DIVISION	R	RISER
DN	DOWN	RA	RADIUS
DWG	DRAWING	RECEP	RECEPTION
EA	EACH	REF	REFERENCE
EJ	EXPANSION JOINT	REQ'D	REQUIRED
ELEC	ELECTRIC(AL)	REV	REVISION
ELEV	ELEVATOR	RH	RIGHT HAND
ENG	ENGINEER	RM	ROOM
EQ	EQUAL	SC	SOLID CORE
EQUIP	EQUIPMENT	SIM	SIMILAR
EXIST	EXISTING	SPEC	SPECIFICATION
EXT	EXTERIOR / EXTERNAL	SQ	SQUARE
F.C.	FIRECODE	STD	STANDARD
FD	FLOOR DRAIN	STOR	STORAGE
FE	FIRE EXTINGUISHER	STRUC	STRUCTURAL
FIN	FINISH(ED)	SUSP	SUSPENDED
FL	FLOOR(ING)	T	TREAD
FT	FEET (FOOT)	T&G	TONGUE AND GROOVE
FXTR	FIXTURE	THK	THICK(NESS)
GA	GAUGE	THRESH	THRESHOLD
GB	GRAB BAR	TYP	TYPICAL
GL	GLASS	UON	UNLESS OTHERWISE NOTED
GND/GRD	GROUND	UPS	UNINTERRUPTIBLE POWER SUPPLY
GWB	GYPSUM WALL BOARD	VB	VINYL BASE
HC	HOLLOW CORE	VCT	VINYL COMPOSITION TILE
HDWR	HARDWARE	VEST	VESTIBULE
HR	HOUR	VIF	VERIFY IN FIELD
HT	HEIGHT	W/	WITH
HVAC	HEATING, VENTILATION & AIR CONDITIONING	W/O	WITHOUT
IN	INCH	W.C.	WATER CLOSET
INCL	INCLUDE(D) (ING)	WD	WOOD

DRAWING LIST

COVER SHEET

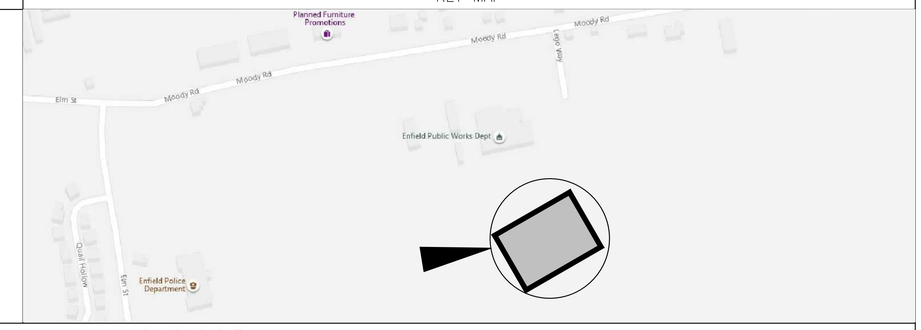
ARCHITECTURAL

A-1.1 MAIN LEVEL BUILDING FLOOR PLAN / NOTES
A-1.2 MEZZANINE LEVEL BUILDING FLOOR PLAN / NOTES
A-3.1 DEMISING WALLS DETAILS
A-3.2 NEW OVERHEAD DOOR AND MAN DOOR DETAILS
A-5.1 NEW BATHROOMS DETAILS

STRUCTURAL

S-1 STRUCTURAL MODIFICATIONS
S-2 STRUCTURAL MODIFICATIONS DETAILS

KEY MAP



BUILDING DATA

APPLICABLE CODES

ALL NEW WORK CONFORMS TO THE FOLLOWING CODES

2018 CT STATE BUILDING CODE – 2015 INTERNATIONAL BUILDING CODE (ICC) W/2018 CT AMENDMENTS
2018 CT STATE EXISTING BUILDING CODE – 2015 INTERNATIONAL EXISTING BUILDING CODE (IEBC) W/2018 CT AMENDMENTS
2018 CT FIRE SAFETY CODE – 2015 INTERNATIONAL FIRE CODE (ICC) W/2018 CT AMENDMENTS
2018 CT FIRE PREVENTION CODE – 2015 NATIONAL FIRE PROTECTION ASSOCIATION – UNIFORM FIRE CODE 2015 (NFPA 1) W/ 2016 CT FIRE SAFETY CODE AMENDMENTS
2018 CT STATE MECHANICAL CODE – 2015 INTERNATIONAL MECHANICAL CODE W/ 2018 CT AMENDMENTS
2018 CT STATE PLUMBING CODE – 2015 INTERNATIONAL PLUMBING CODE W/ 2018 CT AMENDMENTS
2018 CT STATE ELECTRICAL CODE – 2017 NATIONAL ELECTRICAL CODE (NFPA 70) W/ 2018 CT AMENDMENTS
2018 CT STATE ENERGY CODE – 2015 INTERNATIONAL ENERGY CONSERVATION CODE W/ 2018 CT AMENDMENTS
2018 CT ACCESSIBILITY CODE – 2009 ICC/ANSI A117.1 W/ 2018 CT AMENDMENTS

BUILDING DATA

PROPOSED BUILDING OCCUPANCY GROUP – UNSEPARATED MIXED USES – S1 MODERATE HAZARD STORAGE, B-BUSINESS AND F1 MODERATE HAZARD FACTORY INDUSTRIAL
CONSTRUCTION TYPE – IIB UNPROTECTED/NON-COMBUSTIBLE
GROSS BUILDING FOOTPRINT AREA – 100,619 SF (PER AVAILABLE DRAWINGS)
MEZZANINE GROSS AREA – 84,300 SF (PER AVAILABLE DRAWINGS)

THE BUILDING IS AN UNLIMITED AREA BUILDING AS DESCRIBED IN THE 2018 CTSBC SECTION 507 – UNLIMITED AREA BUILDINGS, PARAGRAPH 507.4 ONE-STORY BUILDINGS.

BUILDING ALTERATION DATA

THE CODE COMPLIANCE OPTION SELECTED TO ANALYZE THE PROPOSED CHANGES DESCRIBED IN THESE DOCUMENTS IS THE CTSBC/EXISTING BUILDING CODE CHAPTER 4 – PRESCRIPTIVE COMPLIANCE METHOD

TENANT AREA OCCUPANT LOAD CALCULATIONS – TENANT A

TENANT AREA: 82,832 SF GROSS
TENANT OCCUPANT LOAD BY OCCUPANCY

OFFICE SPACE (B-BUSINESS)	5,597 SF @ 1 OCC. PER 100 SF	=	56 OCC.
WAREHOUSE (S1-MODERATE HAZARD STORAGE)	44,235 SF @ 1 OCC. PER 500 SF GROSS	=	89 OCC.
	TOTAL OCCUPANT LOAD		145 OCC.

TENANT EXIT CAPACITY

3 – 3' DOORS @ 33" CLEAR EXITING x .2"/OCC. = 165 OCC./ DOOR x 3 DOORS = 495 OCC.
1 – 6' DOOR @ 67" CLEAR EXITING x .2"/OCC. = 335 OCC. (SHARED – x .5) = 167 OCC. (SHARED)
EXIT CAPACITY 662 OCC.

TENANT PLUMBING FIXTURE REQUIREMENTS (145 OCC.)

TOILETS:
OFFICE – 56 @ 1 PER (25 FOR FIRST 50 – 50 FOR REMAINDER) = 2.12
WAREHOUSE – 89 @ 1 PER 100 = .89
TOTAL TOILETS REQUIRED 3.01 (4)
TOTAL TOILETS PROVIDED 11 (OFFICE AREA ONLY)

LAVATORIES
OFFICE – 56 @ 1 PER 40 (FOR FIRST 80) = 1.40
WAREHOUSE – 89 @ 1 PER 100 = .89
TOTAL LAVATORIES REQUIRED 2.29 (3)
TOTAL LAVATORIES PROVIDED 5 (4 GANG SINKS)

DRINKING FOUNTAINS
OFFICE – 56 @ 1 PER 100 = .56
WAREHOUSE – 89 @ 1 PER 1000 = .089
TOTAL DRINKING FOUNTAINS REQUIRED .649 (1)
TOTAL DRINKING FOUNTAINS PROVIDED 2 (EXISTING BI-LEVEL UNIT)

SERVICE SINK
TOTAL SERVICE SINKS REQ'D 1
TOTAL SERVICE SINKS PROVIDED 1

TENANT AREA OCCUPANT LOAD CALCULATIONS – TENANT B

TENANT AREA: 82,897 SF GROSS (49,171 SF GROSS MAIN LEVEL / 33,726 SF GROSS MEZZANINE)
TENANT OCCUPANT LOAD BY OCCUPANCY

OFFICE SPACE (B-BUSINESS)(MAIN LEVEL)	1,275 SF @ 1 OCC. PER 100 SF NET	=	13 OCC.
INDUSTRIAL SPACE (F1-MODERATE HAZARD FACTORY/ INDUSTRIAL)(EST.)(MAIN LEVEL)	29,802 SF @ 1 OCC. PER 100 SF GROSS	=	299 OCC.
ACCESSORY STORAGE TO INDUSTRIAL SPACE (EST.)(MAIN LEVEL)	18,000 SF @ 1 OCC. PER 300 SF GROSS	=	60 OCC.
WAREHOUSE SPACE (S1-MODERATE HAZARD STORAGE) (MEZZANINE)	33,820 SF @ 1 OCC. PER 500 SF GROSS	=	68 OCC.
	TOTAL OCCUPANT LOAD		440 OCC.

TENANT EXIT CAPACITY

6 – 3' DOORS @ 33" CLEAR EXITING x .2"/OCC. = 165 OCC./ DOOR x 6 DOORS = 990 OCC.
1 – 6' DOOR @ 67" CLEAR EXITING x .2"/OCC. = 335 OCC. = 335 OCC.
1 – 6' DOOR @ 67" CLEAR EXITING x .2"/OCC. = 335 OCC. (SHARED – x.5) = 167 OCC. (SHARED)
EXIT CAPACITY 1,492 OCC.

TENANT PLUMBING FIXTURE REQUIREMENTS (440 OCC.)

TOILETS:

OFFICE –	13 @ 1 PER 25 FOR FIRST 50	=	0.52
INDUSTRIAL –	299 @ 1 PER 100	=	2.99
ACCESSORY STORAGE –	60 @ 1 PER 100	=	0.60
WAREHOUSE –	68 @ 1 PER 100	=	0.68
	TOTAL TOILETS REQUIRED		4.79 (5)
	TOTAL TOILETS PROVIDED		10

LAVATORIES

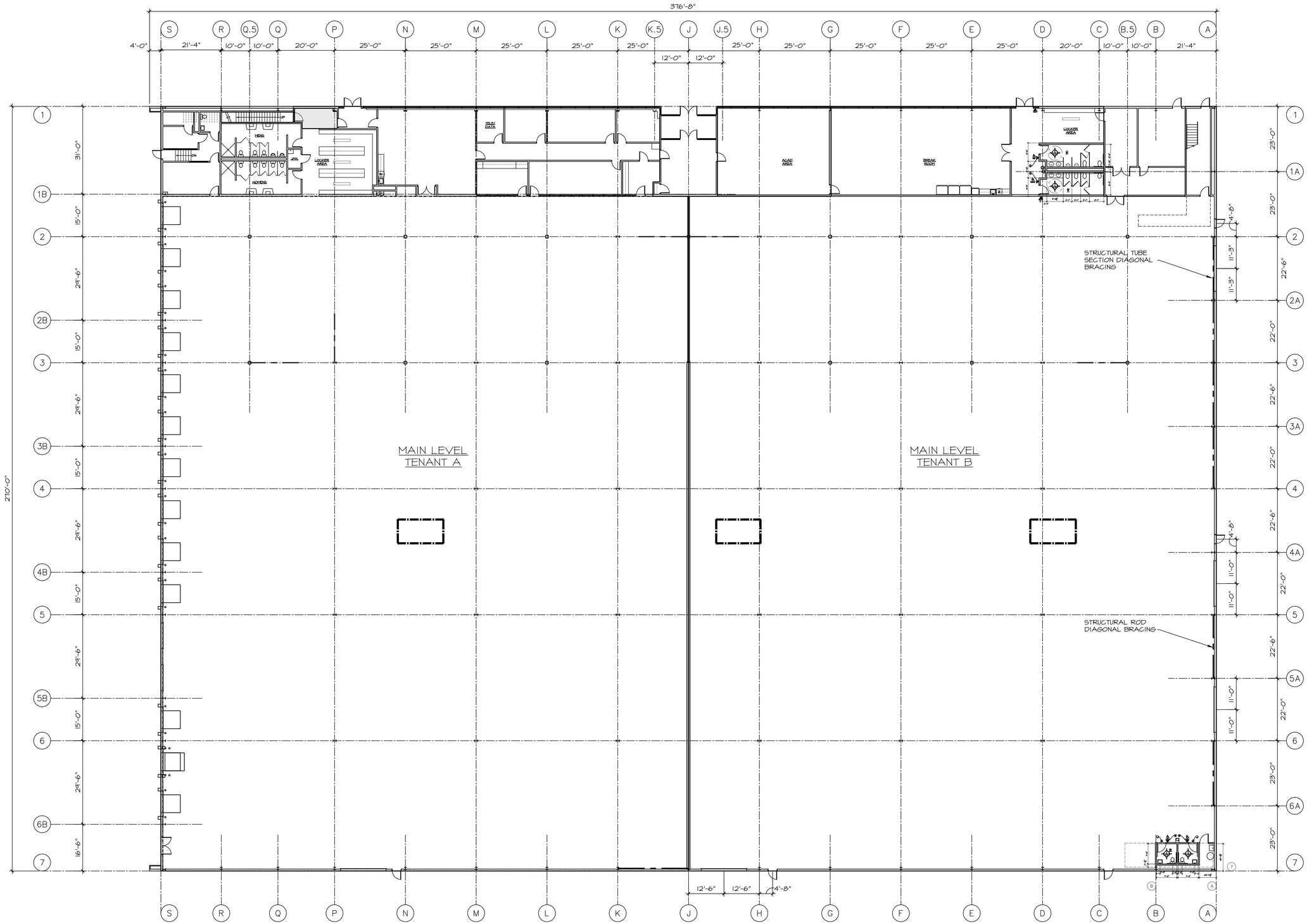
OFFICE –	13 @ 1 PER 40 FOR FIRST 80	=	0.325
INDUSTRIAL –	299 @ 1 PER 100	=	2.99
ACCESSORY STORAGE –	60 @ 1 PER 100	=	0.60
WAREHOUSE	68 @ 1 PER 100	=	0.68
	TOTAL LAVATORIES REQUIRED		4.595 (5)
	TOTAL LAVATORIES PROVIDED		6

DRINKING FOUNTAINS

OFFICE –	13 @ 1 PER 100	=	0.13
INDUSTRIAL –	299 @ 1 PER 400	=	0.748
ACCESSORY STORAGE –	60 @ 1 PER 1000	=	0.06
WAREHOUSE	68 @ 1 PER 1000	=	0.068
	TOTAL DRINKING FOUNTAINS REQUIRED		1.006 (2)
	TOTAL DRINKING FOUNTAINS PROVIDED		3 (1 NEW BI-LEVEL UNIT/ 1 SINGLE LEVEL)

SERVICE SINK
TOTAL SERVICE SINKS REQUIRED 1
TOTAL SERVICE SINKS PROVIDED 1

DATE: 05-22-20



GENERAL NOTES:

REV.	DESCRIPTION	DATE
1.	-	0-0-00

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ARCHITECTS - PLANNERS - INTERIOR DESIGNERS

50 NORTH MAIN STREET
WALLINGFORD, CONNECTICUT 06492
203-265-3194 203-294-1610 F

PROJECT TITLE:

INDUSTRIAL FACILITY

10 LEGO WAY

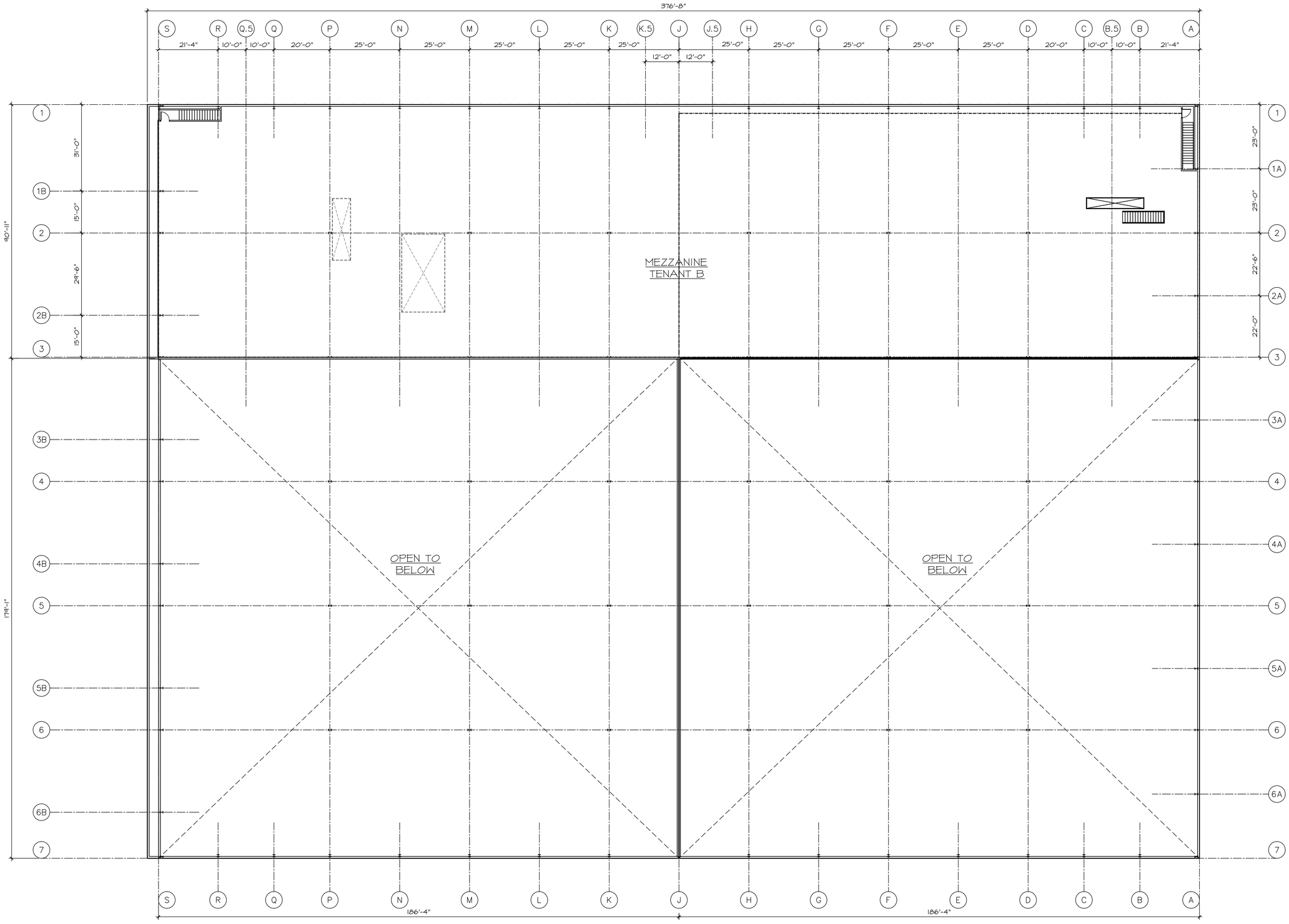
ENFIELD CT.

DRAWING TITLE:

EXISTING MAIN LEVEL FLOOR PLAN

SCALE : 1/16" = 1'-0"
DWN. BY: G.M.
CHECKED: S.S.
DATE : 05/20/20

DRAWING No.
A-1.1



GENERAL NOTES:

REV.	DESCRIPTION	DATE
1.	-	0-0-00

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WALLINGFORD, CONNECTICUT 06492
203-265-3194 203-294-1610 F

PROJECT TITLE:

INDUSTRIAL FACILITY

10 LEGO WAY

ENFIELD CT.

DRAWING TITLE:

EXISTING MEZZANINE FLOOR PLAN

SCALE : 1/16" = 1'-0"

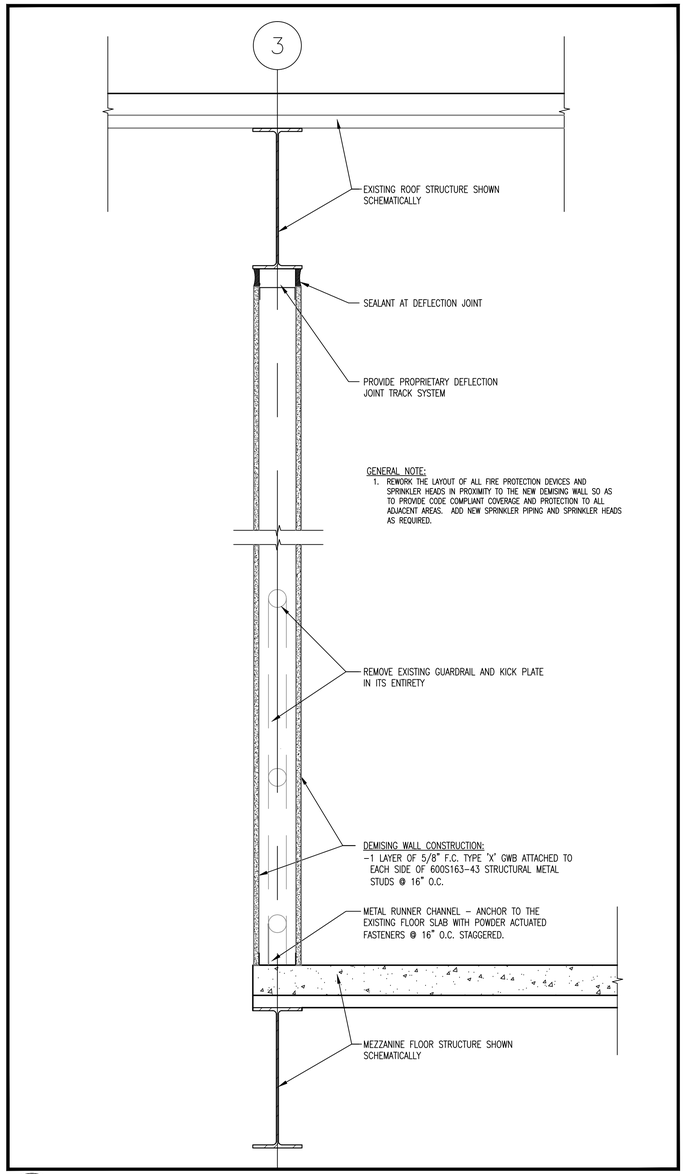
DWN. BY: G.M.

CHECKED: S.S.

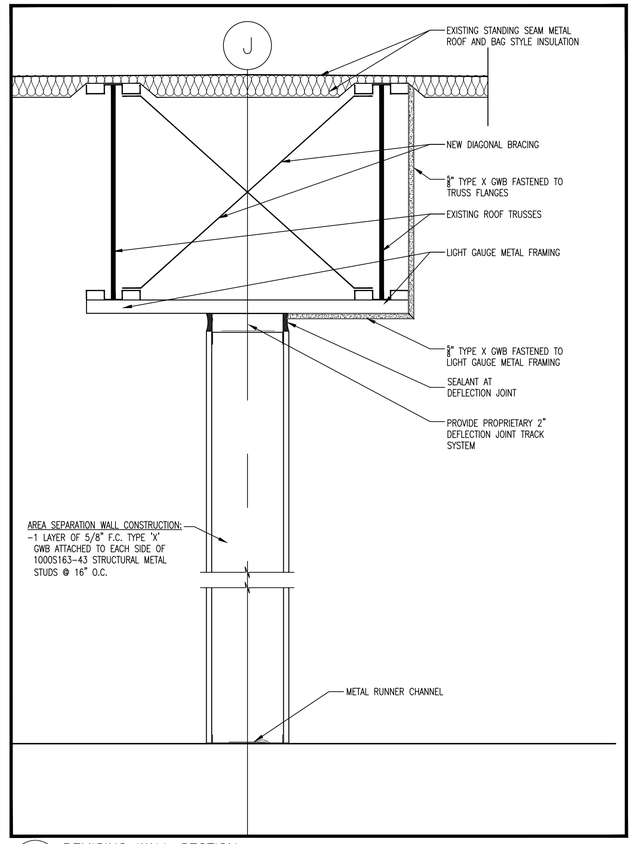
DATE : 05/20/20

DRAWING No.

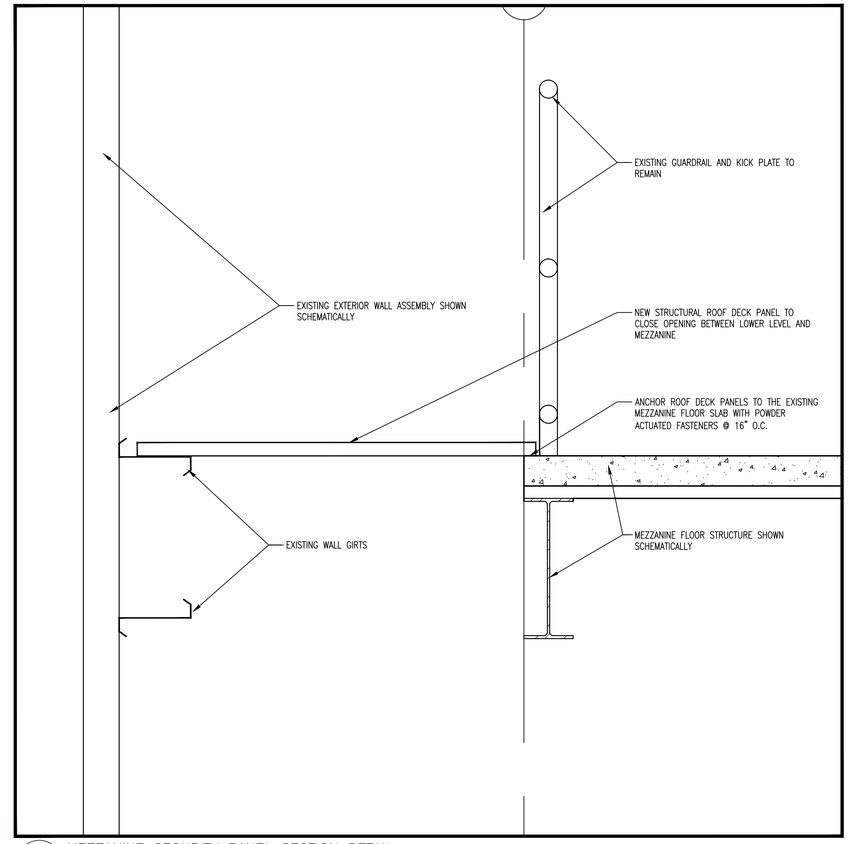
A-1.2



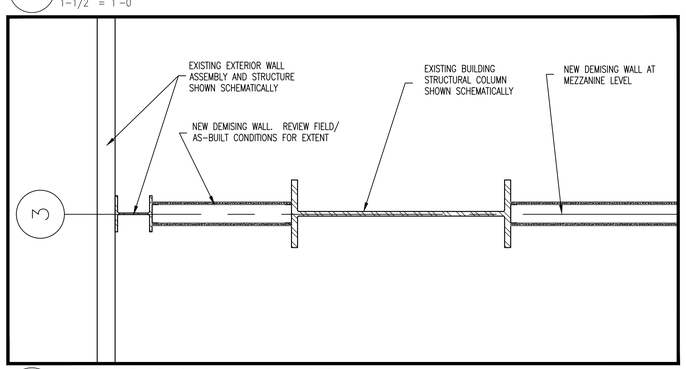
1 MEZZANINE DEMISING WALL SECTION
1-1/2" = 1'-0"



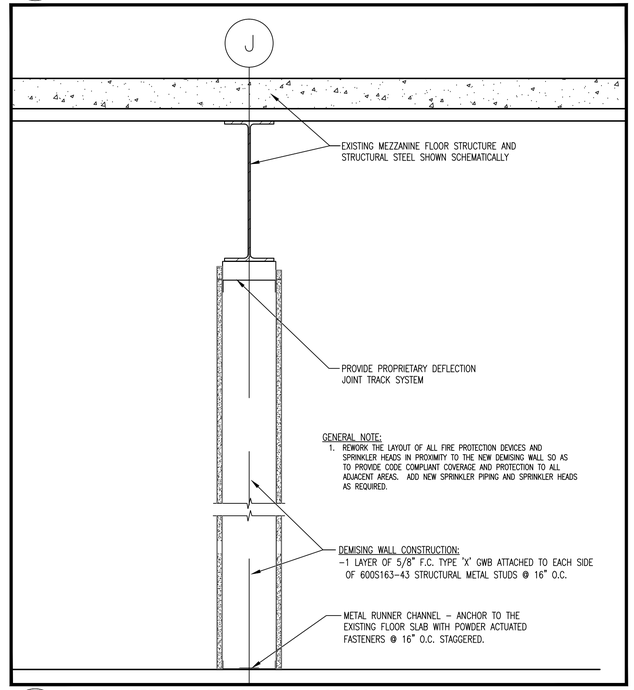
3 DEMISING WALL SECTION
1-1/2" = 1'-0"



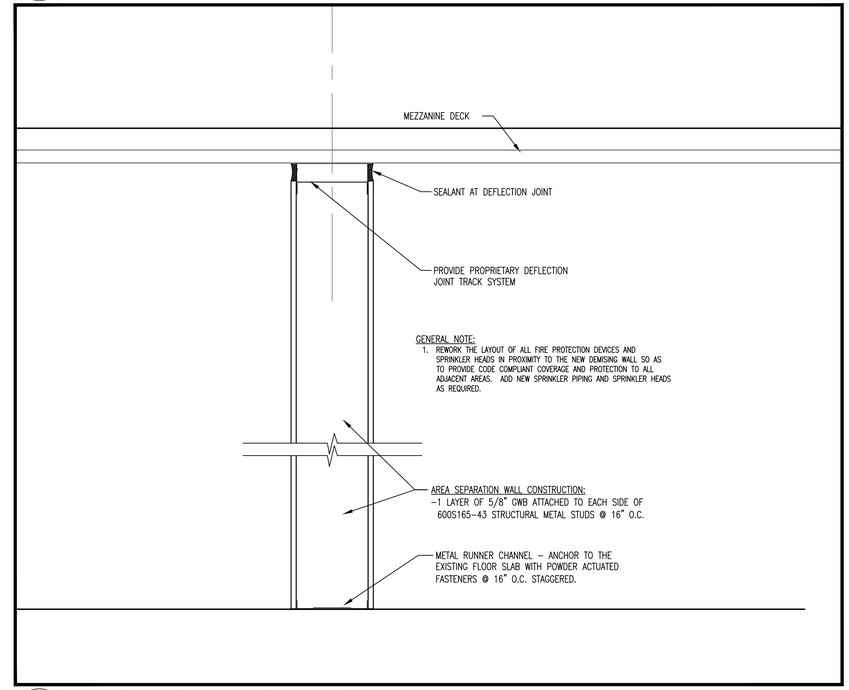
5 MEZZANINE SECURITY PANEL SECTION DETAIL
1-1/2" = 1'-0"



2 MEZZANINE DEMISING WALL PLAN DETAIL
3/4" = 1'-0"



4 UNDER MEZZANINE DEMISING WALL SECTION
1-1/2" = 1'-0"



6 TYPICAL UNDER MEZZANINE PARTITION
1-1/2" = 1'-0"

GENERAL NOTES:

REV.	DESCRIPTION	DATE
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WALLINGFORD, CONNECTICUT 06492
203-265-3194 203-294-1610 F

PROJECT TITLE:

INDUSTRIAL FACILITY

10 LEGO WAY

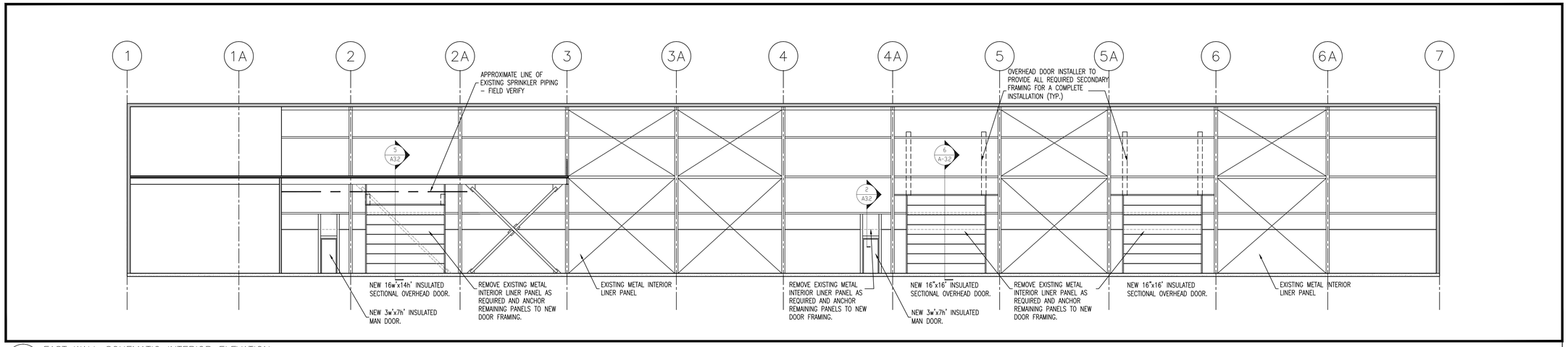
ENFIELD CT.

DRAWING TITLE:

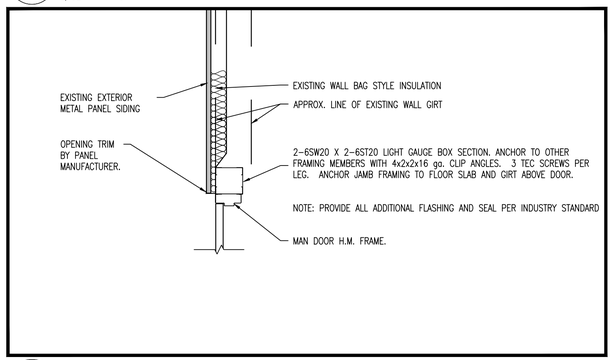
NEW DEMISING WALL DETAILS

SCALE : AS NOTED
DWN. BY: G.M.
CHECKED: S.S.
DATE : 05/20/20

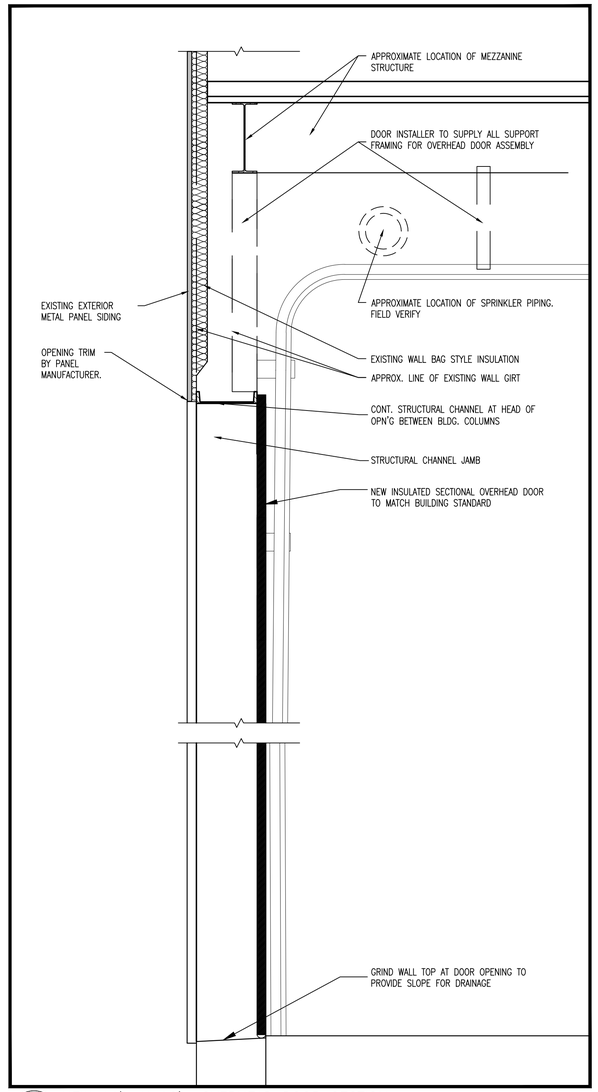
DRAWING No.
A-3.1



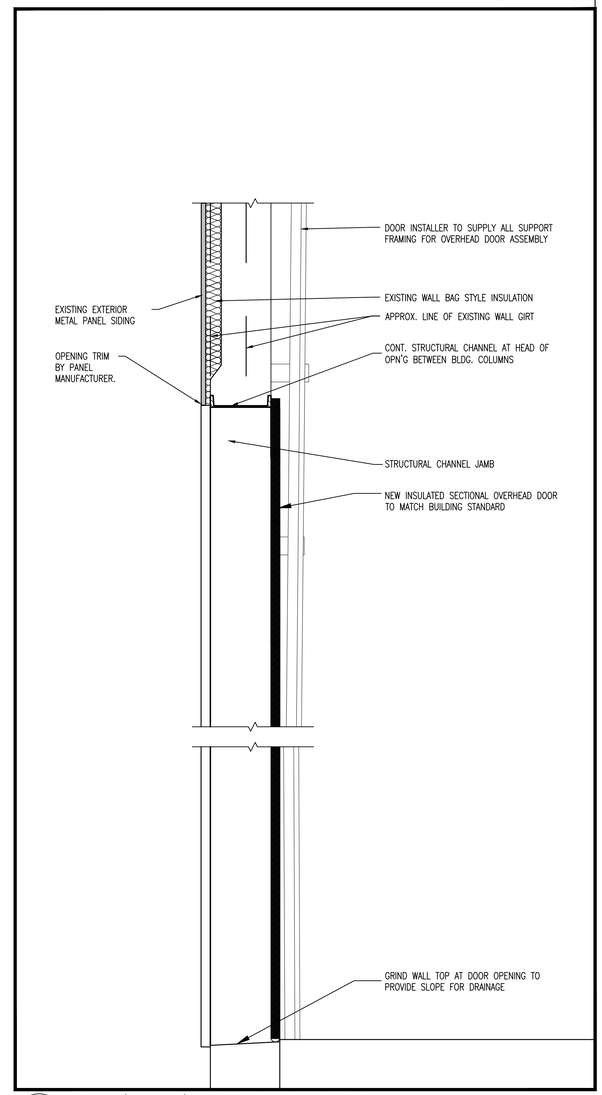
1 EAST WALL SCHEMATIC INTERIOR ELEVATION
3/32" = 1'-0"



2 MEZZANINE DEMISING WALL PLAN DETAIL
3/4" = 1'-0"



5 NEW 14'h X 16'w OVERHEAD DOOR SECTION
3/4" = 1'-0"



6 NEW 16'h X 16'w OVERHEAD DOOR SECTION
3/4" = 1'-0"

GENERAL NOTES:

REV.	DESCRIPTION	DATE
1.	-	0-0-00

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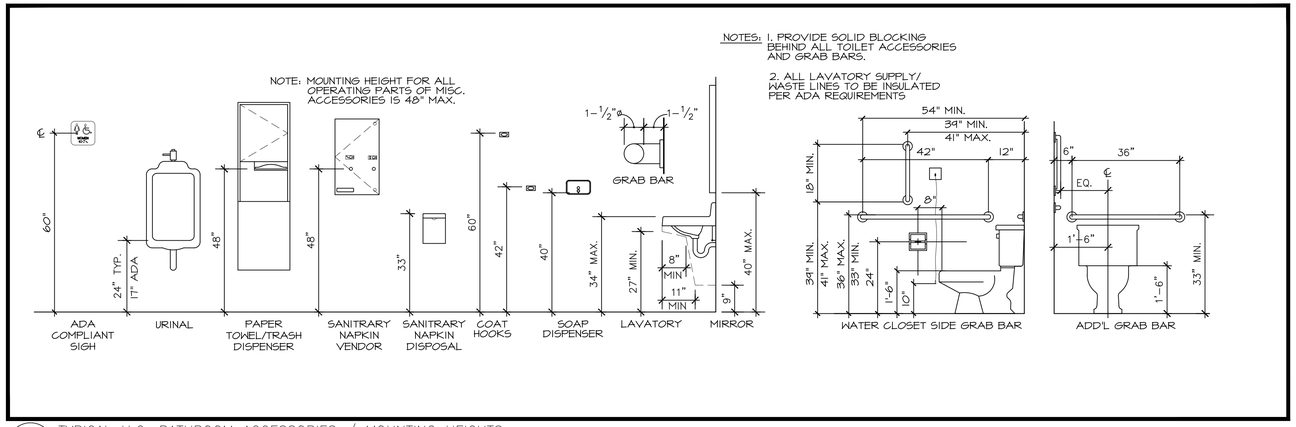
WALLINGFORD, CONNECTICUT 06492
203-265-3194 203-294-1610 F

PROJECT TITLE:
INDUSTRIAL FACILITY
10 LEGO WAY
ENFIELD CT.

DRAWING TITLE:
NEW OVER HEAD DOOR
NEW MAN DOOR
DETAILS

SCALE : AS NOTED
DWN. BY: G.M.
CHECKED: S.S.
DATE : 05/20/20

DRAWING No.
A-3.2



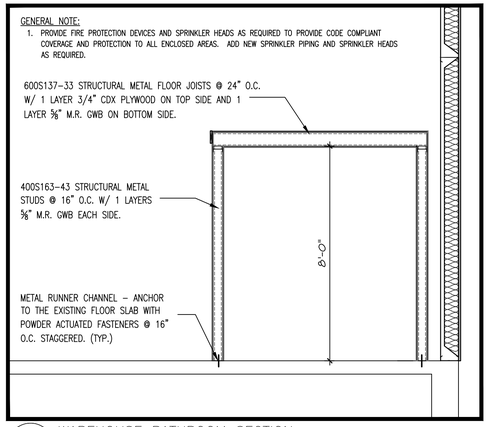
1 TYPICAL H.C. BATHROOM ACCESSORIES / MOUNTING HEIGHTS
1/2" = 1'-0"

- (A) SOAP DISPENSER, CTS – BOBRICK B-82216. –LAVATORY MOUNTED SOAP DISPENSER.
- (B) BOBRICK PLASTIC AUTOMATIC TOWEL DISPENSER MODEL B72974.
- (C) KOHLER KELSTON TOILET TISSUE HOLDER MODEL K-13504-CP.
- (D) 42" GRAB BAR
- (E) 36" GRAB BAR
- (F) 18" GRAB BAR
- (G) ADA COMPLIANT SIGNAGE
- (H) KOHLER DAMASK FRAMED MIRROR K-99665 SURFACE MOUNTED IN WHITE. 22X37.
- (I) SANITARY NAPKIN DISPOSAL N.I.C.
- (J) AUDIO VISUAL ALARM INDICATOR ON WALL ABOVE DOOR
- (K) AUDIO VISUAL ALARM SWITCH W/DROP STRING
- (L) KOHLER KELSTON HOOK MODEL K-13505-CP.

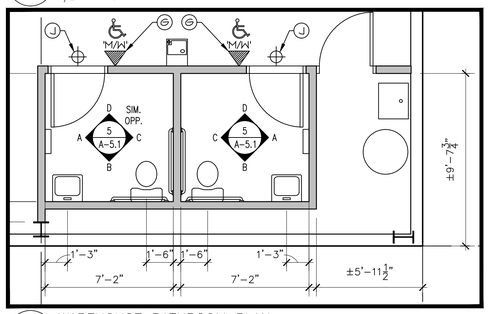
NOTE:
ALL ACCESSORIES TO BE STAINLESS STEEL AS MANUFACTURED BY BOBRICK.

2 BATHROOM ACCESSORIES LEGEND
N/A

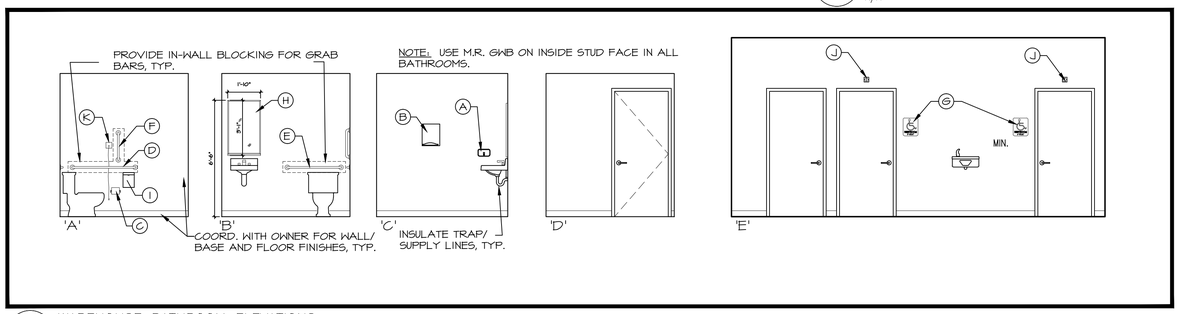
GENERAL NOTE:
1. PROVIDE FIRE PROTECTION DEVICES AND SPRINKLER HEADS AS REQUIRED TO PROVIDE CODE COMPLIANT COVERAGE AND PROTECTION TO ALL ENCLOSED AREAS. ADD NEW SPRINKLER PIPING AND SPRINKLER HEADS AS REQUIRED.



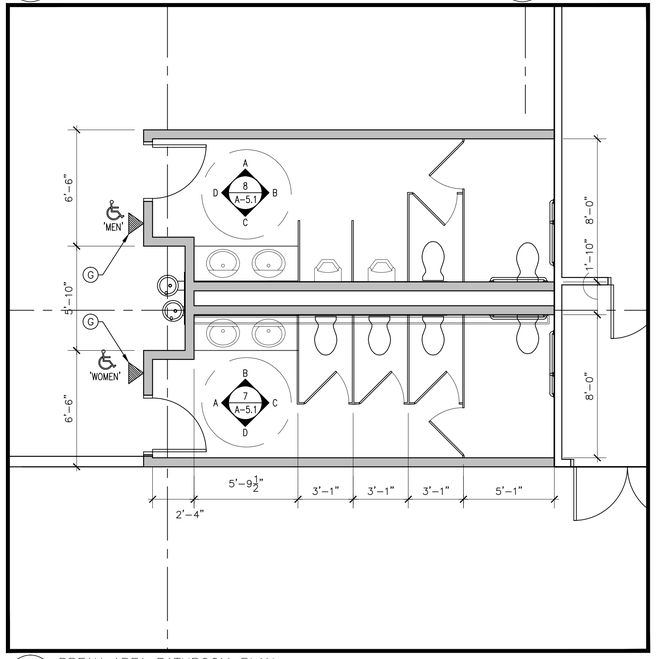
3 WAREHOUSE BATHROOM SECTION
3/8" = 1'-0"



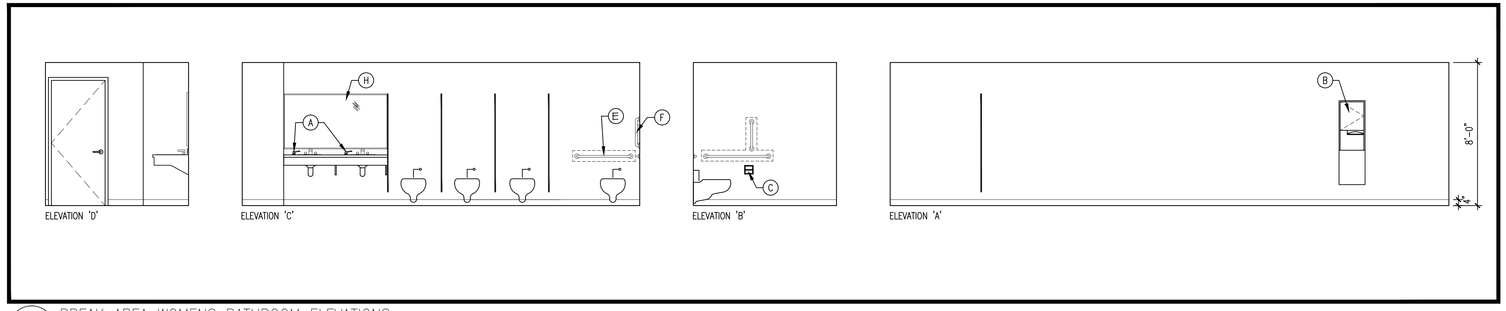
4 WAREHOUSE BATHROOM PLAN
1/4" = 1'-0"



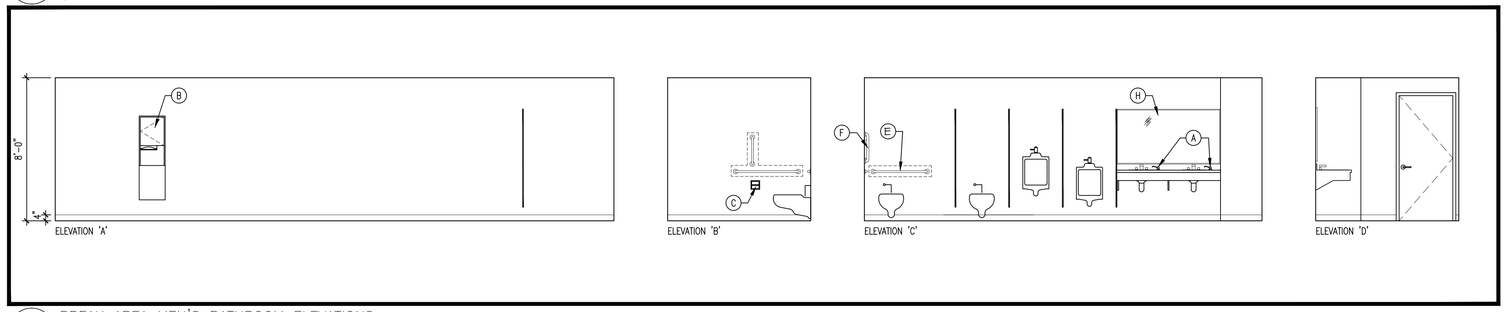
5 WAREHOUSE BATHROOM ELEVATIONS
1/4" = 1'-0"



6 BREAK AREA BATHROOM PLAN
1/4" = 1'-0"



7 BREAK AREA WOMENS BATHROOM ELEVATIONS
1/4" = 1'-0"



8 BREAK AREA MEN'S BATHROOM ELEVATIONS
1/4" = 1'-0"

GENERAL NOTES:

REV.	DESCRIPTION	DATE
1.	-	0-0-00

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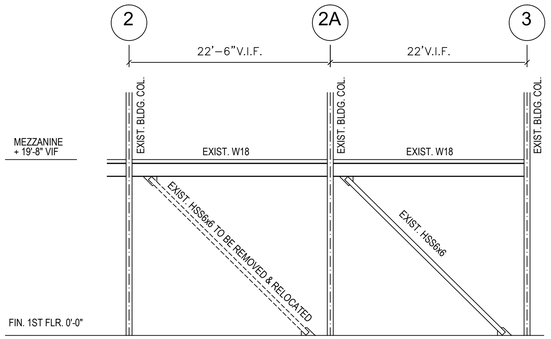
50 NORTH MAIN STREET
WALLINGFORD, CONNECTICUT 06492
203-265-3194 203-294-1610 F

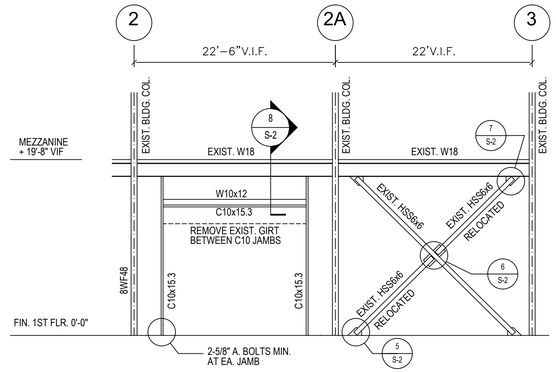
PROJECT TITLE:
INDUSTRIAL FACILITY
10 LEGO WAY
ENFIELD CT.

DRAWING TITLE:
BATHROOM PLANS ELEVATIONS AND DETAILS

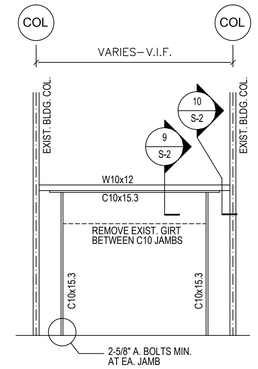
SCALE : 1/16" = 1'-0"
DWN. BY: G.M.
CHECKED: S.S.
DATE : 05/20/20
DRAWING No. A-5.1



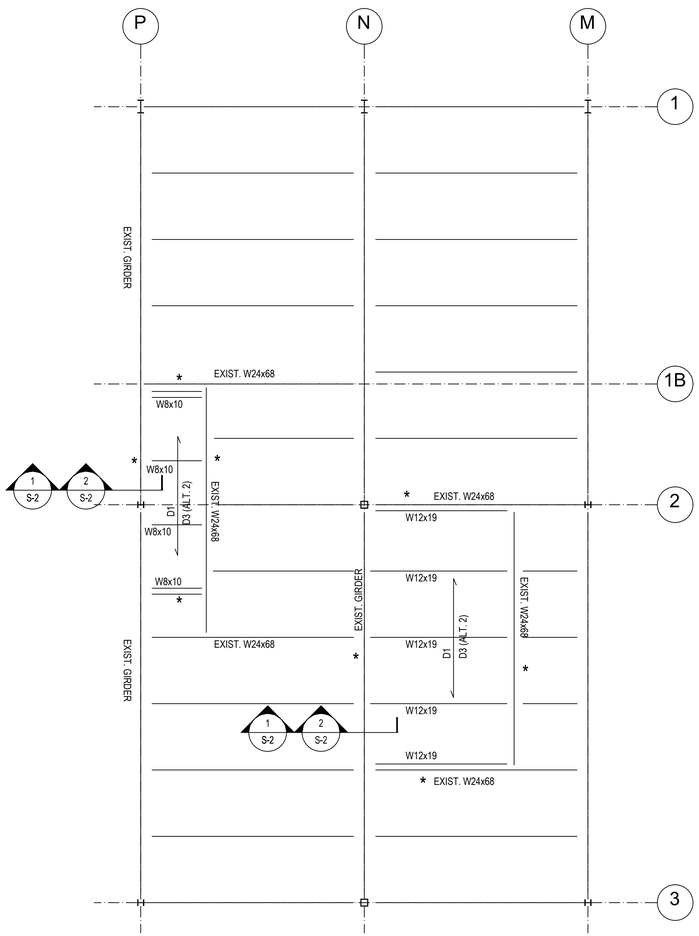
1 / S-1 BRACE ELEVATION - DEMO
1/8" = 1'-0"



2 / S-1 BRACE ELEVATION - PROPOSED
1/8" = 1'-0"



3 / S-1 FRAMING ELEVATION
TYP. 16'x16' OVERHEAD DOOR
1/8" = 1'-0"

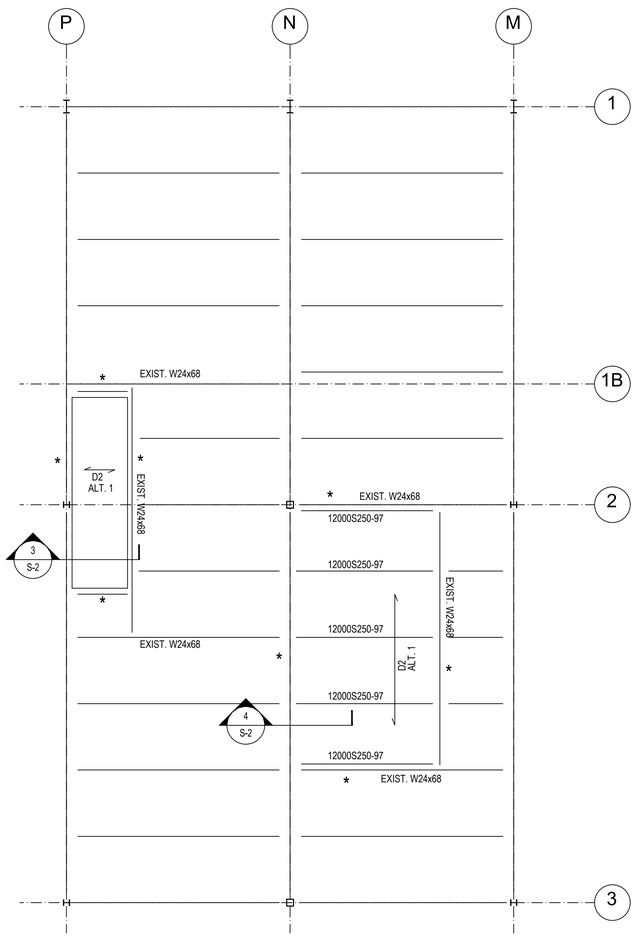


4 / S-1 PART. MEZZANINE FRAMING PLAN
STRUCTURAL IN-FILL
1/8" = 1'-0"

* ALL (4) SIDES OF EXISTING OPENINGS SHALL BE POSTED WITH WARNING SIGN STATING "NO FLOOR LOADING BEYOND HANDRAILS" FOR ALT. 2 ONLY

NOTE: ALT. 2 CAN BE UPGRADED TO FULL LOAD CAPACITY AT ANY FUTURE TIME BY INSTALLING CONCRETE & MESH AS DESCRIBED IN "D1"

DECK SCHEDULE:
D1 = 1.5 C 20 GA GALV. WITH 3.25"± N.W. CONC. OVER TOP OF STEEL DECK, REINF. WITH 6x6 W2.1xW2.1 WWF
D2 = 1.5 C 18 GA GALV., NO CONCRETE
D3 = 1.5 C 20 GA GALV., NO CONCRETE



5 / S-1 PART. MEZZANINE FRAMING PLAN
NON-STRUCTURAL IN-FILL (ALTERNATE 1)
1/8" = 1'-0"

* ALL (4) SIDES OF EXISTING OPENINGS SHALL BE POSTED WITH WARNING SIGN STATING "NO FLOOR LOADING BEYOND HANDRAILS"

STRUCTURAL GENERAL NOTES

GENERAL

GOVERNING DESIGN CODES

1. 2018 STATE OF CONNECTICUT BUILDING CODE

DESIGN LOADS

LIVE LOADS:
MEZZANINE IN-FILLS: 150 psf

WIND LOADS:
WIND VELOCITY: 125 mph (ULT.)
BUILDING RISK CATEGORY: II
EXPOSURE CLASSIFICATION: C
IMPORTANCE FACTOR: 1.0

SEISMIC LOADS
IMPORTANCE FACTOR: 1.0
MCE SPECTRAL ACCELERATIONS:
Ss = 0.176 S1 = 0.065

MINIMUM LATERAL LOADS:
WALLS: 5 PSF

STEEL

1. ALL STRUCTURAL STEEL IS DESIGNED ACCORDING TO THE AISC "LOAD AND RESISTANCE FACTOR DESIGN," 3RD EDITION.
2. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST PROVISIONS OF THE AISC MANUAL OF STEEL CONSTRUCTION.
3. ALL STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING:
   A. W-SHAPES SHALL CONFORM TO ASTM A-992.
   B. M-, S-, C-, AND MC-SHAPES SHALL CONFORM TO ASTM A-36 OR ASTM A-572, GR. 50 AS INDICATED.
   C. ANGLES SHALL CONFORM TO ASTM A-36.
   D. HSS SECTIONS SHALL CONFORM TO ASTM A500 GRADE B.
4. ALL STRUCTURAL STEEL BOLTED CONNECTIONS SHALL BE MADE WITH ASTM A325 HIGH STRENGTH BOLTS UNLESS NOTED OTHERWISE.
5. STEEL COLUMNS SHALL BE SET ON CONCRETE OR STEEL UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
6. PROVIDE ALL PLATES, CLIP ANGLES, ETC., REQUIRED TO COMPLETE THE STRUCTURE EVEN IF EVERY SUCH ITEM IS NOT INDICATED ON THE DRAWINGS.
7. ALL WELDS SHALL BE MADE ONLY BY WELDERS WHO HAVE BEEN QUALIFIED AS PRESCRIBED IN THE "STANDARD CODE OF WELDING IN BUILDING CONSTRUCTION" OF THE AMERICAN WELDING SOCIETY (AWS D1.1)
8. CONNECTIONS CAPACITY SHALL CONFORM TO AISC LRFD UNIFORM LOAD BEAM TABLES FOR MINIMUM CONNECTION CAPACITY, OR 10 kips ULTIMATE LOAD, WHICHEVER IS GREATER.

GENERAL NOTES:

REV.	DESCRIPTION	DATE
1.	–	0-0-00

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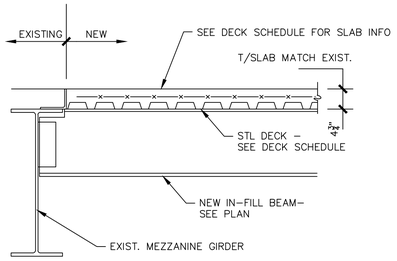
ARCHITECTS - PLANNERS - INTERIOR DESIGNERS
50 NORTH MAIN STREET
WALLINGFORD, CONNECTICUT 06492
203-265-3194 203-294-1610 F

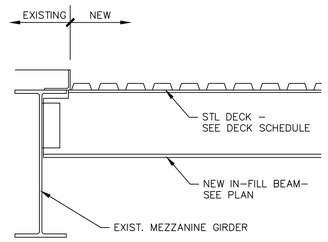
PROJECT TITLE:
INDUSTRIAL FACILITY
10 LEGO WAY
ENFIELD CT.

DRAWING TITLE:
STRUCTURAL MODIFICATIONS

SCALE : AS NOTED
DWN. BY: W.E.J.
CHECKED: S.S.
DATE : 05/20/20
DRAWING No. S-1



1 S-2 SECTION
N.T.S.



2 S-2 SECTION - ALTERNATE 2
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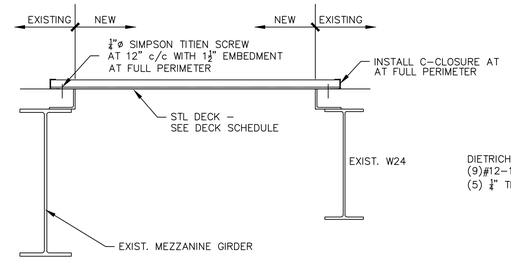

3 S-2 SECTION ALTERNATE 1
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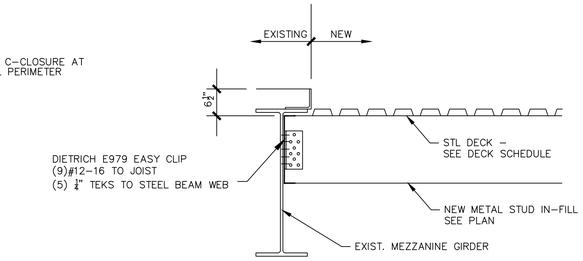

4 S-2 SECTION - ALTERNATE 1
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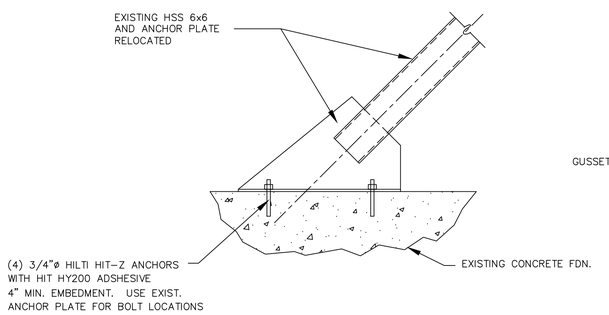
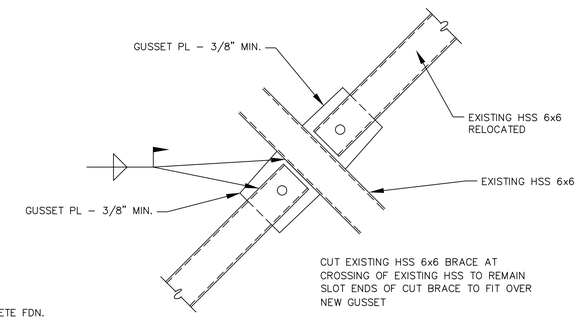


5 S-2 BRACE CONNECTION DETAIL
NOT TO SCALE



6 S-2 BRACE CONNECTION DETAIL
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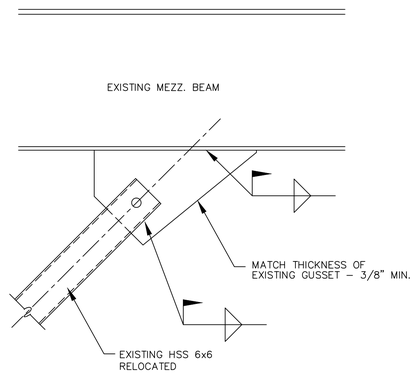
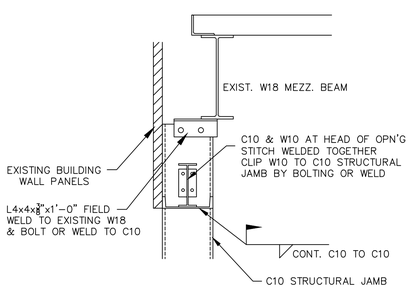


7 S-2 BRACE CONNECTION DETAIL
NOT TO SCALE



8 S-2 SECTION
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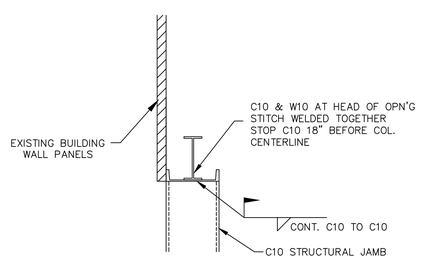

9 S-2 SECTION
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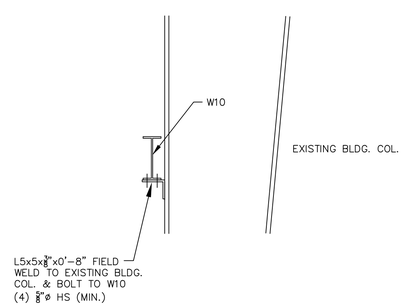

10 S-2 SECTION
N.T.S.

GENERAL NOTES:

REV.	DESCRIPTION	DATE
1.	–	0–0–00

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PROJECT TITLE:
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10 LEGO WAY
ENFIELD CT.

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STRUCTURAL MODIFICATIONS DETAILS

SCALE : AS NOTED
DWN. BY: W.E.J.
CHECKED: S.S.
DATE : 05/20/20
DRAWING No.
S-2

EXISTING FIRE HYDRANT
EXISTING STORM PIPE
EXISTING SANITARY LINE
WETLAND SOILS
EXISTING EDGE OF TREES/BRUSH
PROPOSED CATCH BASIN
PROPOSED LIMIT OF CLEARING
PROPOSED CONTOUR
EXISTING MANHOLE
EXIST. BIT. CURB
PROP. BIT. CURB

NOTES:

ZONE: I-1

NOTE: VERIFY ALL UTILITY LOCATIONS IN THE FIELD PRIOR TO START OF ANY WORK (SEE NOTE BELOW).

WARNING: THESE PLANS NOT TO BE USED FOR LOCATION OF UNDERGROUND UTILITIES - CALL BEFORE YOU DIG 1-800-922-4455 TWO WORKING DAYS BEFORE YOU DIG.

PROPOSED SPOT GRADES AT CURB LOCATIONS ARE BOTTOM OF CURB

THIS PROPERTY HAS 1.2 AC. OF WETLAND SOILS

I HAVE REVIEWED THE WETLAND BOUNDARIES AS SHOWN ON THIS PLAN AND AM OF THE OPINION THAT THEY REPRESENT THE SOIL BOUNDARIES MARKED BY ME IN THE FIELD.

MARK W. FRIEND
SOIL SCIENTIST

SOIL TYPES
(FROM NRCS SOIL SURVEY)

103 - RIPPOWAN FINE SANDY LOAM
12 - RAYPOL SILT LOAM
36 - WINDSOR LOAMY SAND
29A - AGAWAM FINE SANDY LOAM

I HEREBY DECLARE TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS PLAN IS SUBSTANTIALLY CORRECT.

MARK W. FRIEND P.E. #15818

MEGSON, HEAGLE & FRIEND
CIVIL ENGINEERS & LAND SURVEYORS, LLC
81 RANKIN ROAD
GLASTONBURY, CONN. 06033
PHONE (860)-659-0587

PH #2934

GRADING, DRAINAGE & SITE PLAN
DRIVEWAY & LOADING EXPANSION PLAN
10 LEGO WAY
PREPARED FOR
ROCK RIDGE REALTY, LLC
ENFIELD, CONN.

REV. 3-11-19 CONDITIONS OF APPROVAL

CK. BY:	MWF
DRW. BY:	ZTA
DATE:	12-19-18
SCALE:	1"=40'
SHEET	4 OF 8
MAP NO.	94-18-1SP

P:\2018\PROJ\J09418\dwg\BASE\J09418-p1.dwg 3/11/2019 12:57:13 PM EDT

TOWN OF ENFIELD

ENFIELD PLANNING & ZONING COMMISSION
SPR # 1834 (formerly PH# 2934) – 10 LEGO WAY
STAFF REPORT
FEBRUARY 14, 2019
REVISED JULY 17, 2020

(2/14/19) BACKGROUND
The property at 10 Lego Way is an Industrial-1 property with an existing warehouse building on it. There are several loading docks that exist on the southwest side of the building. The applicant is proposing a warehousing and fabrication use within the building, along with the extension of the driveway around the building, the installation of three more loading bay doors, as well as outdoor storage. The manufacturing use is allowed within an I-1 zone, and the additional drive way and loading bay doors are allowed with a Site Plan Review. The outdoor storage is allowed in an Industrial-1 zone with a Special Use Permit.

This application did not have to go to wetlands because the proposed site improvements are not located within wetlands or within the 100-foot upland review area. This property is not located within a flood zone. This property is located over an aquifer, and therefore requires registration. They have filed an Aquifer Registration Application which will be on the next Aquifer Protection Agency agenda.

7/17/20 - The owner/applicant has agreed to lease out half of the building to a new tenant - Advance Auto. This is also an approved use in the I-1 zone. Two external changes are proposed 1) the location of a trash compactor, and 2) development of the approved deferred parking lot

The new tenant strictly is warehousing, with no fabrication. The proposal is to take the existing building and build an internal wall to separate the two uses. The new demising wall is proposed to cut the building in half with the wall running from north to south. The placement of a trash compactor at the southwest corner of the building is proposed, as one was previously located in that position.

PARKING –
There are currently 85 spaces on the site. With the building to be divided by uses the calculations are as follows:

Warehouse, Distribution, Storage, 1 parking space per 1,250 square feet of gross leasable floor
50,895 SF /1250 = 40.7 = 41 spaces

Fabrication, 1 space per 1,000 square feet of gross leasable floor area.
50,895 SF/1000 = 50.8 = 51 spaces.

Thus 41 + 51= 92 spaces are required.

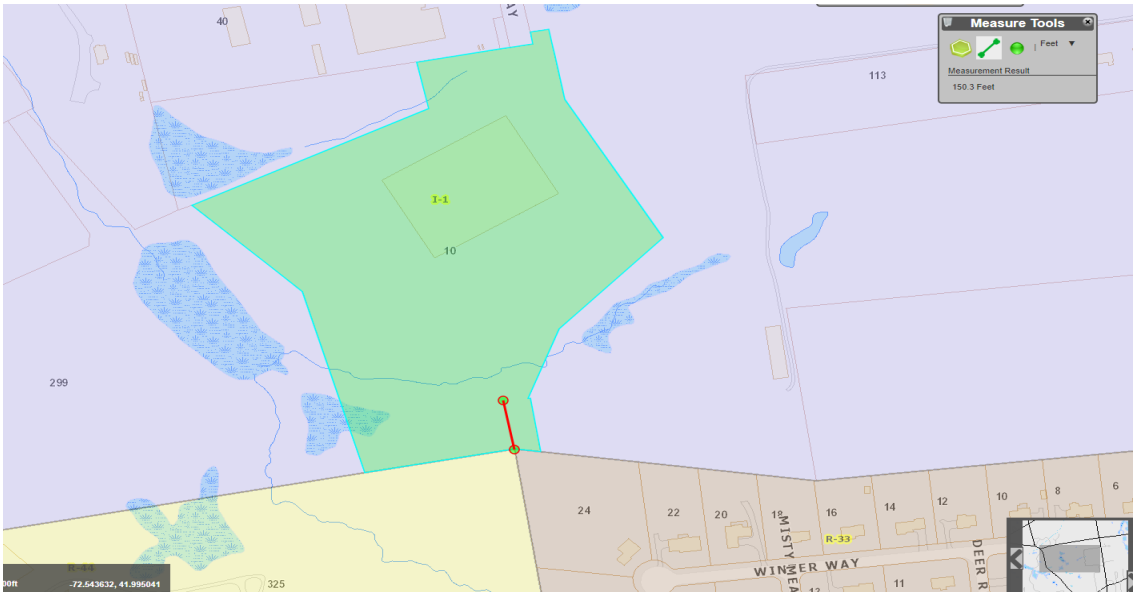
The applicant proposes to develop the deferred parking lot on the east side of the building which will more than accommodate the additional 7 spaces needed.

The facility was previously approved with 85 parking spaces and is an existing non-conformity. Given that the building is not expanding in any way, the provided parking is not required to increase to meet the regulations.

(2/14/19) APPLICABLE ZONING REGULATIONS
Section 6.10 – Lot and Bulk Requirements
The property meets the lot and bulk requirements for an Industrial-1 zone except for building height. The existing building is 48-feet tall where the maximum building height is 25-feet. Footnote 2 states that buildings on properties that exceed the front, side, and rear yard requirements can increase the height of the building by one foot for every extra foot of yard depth. The property far exceeds what is required for front, rear, and side yard depths, therefore the additional 23 feet of building height is acceptable. The building is also existing and the applicant is not proposing to expand it under this application.

Section 6.10.2 – Additional Setbacks and Buffer Requirements Applicable to All Industrial Districts

TOWN OF ENFIELD



The property abuts two residential zones to the south with a watercourse running through the wooded area. That area also has a conservation easement on it., along with a drainage easement and a sewer easement to the Town of Enfield. The building and the proposed driveway and loading bays are located well over 150-feet away from those residential zones and the woods

Department of Development Services
Building/Community & Economic Development/Planning & Zoning
820 Enfield Street
Enfield, Connecticut 06082

Telephone (860) 253-6507
Fax (860) 253-6310

www.enfield-ct.gov

create a buffer between the industrial use and the residential zones. The applicants will need to post a bond prior to obtaining a Building Permit. Therefore, the proposed site improvements meet the standards of section 6.10.2.

Table 6.2 Use Table for Industrial and Industrial Park Districts
Warehousing and manufacturing are both allowed in an Industrial-1 zone with a site plan approval.

6.30.2 Activities Limited to Enclosed Buildings and Limited Outdoor Storage Provision
Limited Outdoor Storage is allowed in any Industrial Zone with a Special Permit with the following standards:

1. Limited to no more than 20% of the rear outdoor space. – **Applicant meets the standard**
2. Limited to uses associated with on-site uses only – **Applicant meets the standard**
3. All outdoor storage must be screened from public view – **A 10' high fence is proposed not directly adjacent to the outdoor storage area, but farther north and closer to the Lego Way entrance.**
4. Outdoor storage must be in defined area(s) not scattered about or throughout the site. – **The outdoor storage will be limited to the area shown on the plans.**

The applicant has indicated that there will be additional outdoor storage on the paved areas on the south side of the building around the concrete pad. There will be racks for storage of pipes that are unloaded in that area. Planning Staff has recommended a condition of approval that these racks be shown on the final plans to be submitted. The additional racks will not cause any non-conformity with section 6.30.2.

6.10.7 Drainage & 7.20 Storm Water Runoff
Surface runoff from the proposed paved areas will be accomplished with curbing, catchbasins and underground piping that is connected to the existing drainage system. The system discharges to a large stormwater management basin which provides detention and mitigation of peak runoffs, as well as water quality treatment. The design of the pipes was calculated in anticipation of further development in the future including the expansion of pavement as proposed in this application, as was the stormwater management basin. They were designed to convey flows from up to a 25-year frequency storm.

The stormwater management basin is detention pond #1 of a larger master drainage plan that was constructed in association with the Misty Meadows/Rye Vale Residential and Heritage Park Industrial subdivisions. Heritage Park Industrial subdivision was never constructed. The Lego property was constructed and is much smaller than the proposed Heritage Park subdivision was going to be. The "Summary of Flows to the Stormwater Management Basin" shows that the proposed flows will be less than the overall anticipated flows from the Lego Project from 2000.

The drainage calculations from 2000 are in the complete Hydrology and Hydraulics Engineering Report dated December 12, 2018. The full report will be available at the February 14, 2019 meeting, or can be emailed to you for review.

7.20 – Erosion and Sedimentation Control Requirements
A soil erosion and sedimentation control plan shall be submitted with any application for development when the disturbed area of such development is cumulatively more than one-half acre.

The applicant supplied an Erosion & Sedimentation Control Plan and Details sheet. The plan itself does not indicate location of filter fabric fencing, only the location of hay bales along the limits of disturbance. The location o the filter fabric fencing should be shown on the plans and/or on the legend. The applicant is proposing two construction entrances both with trap rock and filter fabric.

Table 10.10.2
The applicant used the Warehouse, Distribution, Storage, Wholesale, and Mail Order Establishments to calculate parking. This would require 1 parking space per 1,250 square feet of gross leasable floor area for a 130,000 square foot building. Therefore, the parking requirement would be 104 spaces.

The applicant is also proposing fabrication at this location. Under the Industrial (Non-Warehouse) designation, the parking requirement would be 1 space per 1,000 square feet of gross leasable floor area. The parking requirement would be 390 parking spaces.

The facility was previously approved with 85 parking spaces and is an existing non-conformity. Given that the building is not expanding in any way, the provided parking is not required to increase to meet the regulations.

10.10.8 Loading Area Requirements
Loading areas must meet the following standards:

1. Loading areas associated with loading docks shall be screened from the street in the BR, BP and IP zones. – **The property is not located within the BR, BP, or IP zones, but loading areas are still screened from the street.**
2. All loading spaces that abut a residential district or an intervening alley separating an industrial district from a residential district shall be screened by walls or fences uniform in color, at least eight (8) feet high. – **The loading spaces are not abutting any residential districts.**
3. Loading spaces shall not be located within 40 feet of an intersection. – **The loading spaces are not located within 40 feet of an intersection.**
4. Loading spaces shall not be in the required front or side yard. – **The loading spaces are not located within the front or side yard setbacks.**

5. No motor vehicle repair work shall be permitted in conjunction with loading facilities. – **No motor vehicle repair work is proposed.**

DEPARTMENT COMMENTS
Engineering Department – No comments yet received.

Water Pollution Control Department – The WPC has no comments at this time. If the plans changes then we will review them again.

Fire Department – I do not have any issues or concerns regarding PH #2934.

Health Department – Our Dept. has no comments regarding this application.

Police Department – I have no comments or concerns with 10 Lego Way, other than pointing out that there are no marked and signed fire lanes designated in these plans. I am sure the FD will require them. All signage and markings should comply with town ordinances for proper enforcement.

ENFIELD PLANNING & ZONING COMMISSION
PH# 2934 – 10 LEGO WAY
RESOLUTION
FEBRUARY 14, 2019

MOTION TO APPROVE PH# 2934 for a Special Use Permit to allow a warehousing and fabrication company to extend an access road around the building, add additional pavement to accommodate outdoor storage, and to install three additional loading bay doors on the south and east sides of the building; Rick Ridge Realty, LLC., owner/applicant; Map 75/Lot 104; Industrial-1 Zone with the following conditions of approval and in accordance with the below referenced plans:

General Conditions:

1. This approval is for the specific use, site, and structure identified in the application. Any change in the nature of the use, site, or the structure will require new approvals from the Enfield Planning and Zoning Commission.
2. This approval does not include signage permits.
3. There is to be no exterior sheet metal venting pipes visible from the street.
4. Exterior mechanicals and electricals are to be boxed and screened.
5. This project shall be constructed and maintained in accordance with the referenced plans.
6. A building permit for the construction of facilities as approved must be obtained within 24 months of approval or this approval shall be rendered null and void, unless an extension is granted by the Commission.
7. All construction authorized by this approval shall be completed within five (5) years or this approval shall be considered null and void, unless an extension is granted by the Commission.

8. By acceptance of this permit and conditions, the applicant and owner acknowledge the right of Town staff to periodically enter upon the subject property for the purpose of determining compliance with the terms of this approval.

Site Specific Conditions:

9. The outdoor storage racks for pipes located on the proposed bituminous paved area on the south side of the building must be shown on the final plans.

Conditions to be met prior to signing of plans:

10. All plans submitted for signature shall bear the seal and live signature of the appropriate professional(s) responsible for the preparation of the plans.
11. The application number shall be displayed on the plans in or near the Title Block area.
12. A copy of the approval letter and conditions shall be incorporated into the final plans submitted for signature, preferably located on the cover sheet or first sheet of the plan set.
13. A list outlining how the conditions of approval have been met shall be submitted along with final plans submitted for signature.
14. A list outlining all changes to the plans shall be submitted along with final plans submitted for signature. The list should cite the sheet number where each change has been made.
15. The conditions of this approval shall be binding on the applicant, land owners, and their successors and assigns.

Conditions to be met prior to the issuance of permits:

16. Four sets of paper plans with any required revisions incorporated shall be submitted to the Planning Department for signature of the Commission. The Director of Planning may require Mylars.
17. This approval will become effective upon the filing of a Special Use Zoning Certificate signed by the Commission Secretary on the Land Records by the applicant. Such certificate must be filed within 120 days of approval by Commission. Proof of such filing shall be in the file prior to the issuance of any permits.
18. The applicant shall also submit final plans as approved by the Commission in a digital format compatible with the Enfield Geographic Information Systems Electronic Submittals Ordinance.
19. The applicant shall post a bond for Site Restoration in an amount to be determined by the Town Engineer and the Director of Planning.
20. The applicant shall post a separate bond for Erosion and Sediment Control submitted in the form of cash or certified check, pledged to the Town, in an amount to be determined by the Town Engineer and the Director of Planning.
21. A pre-construction meeting between the applicant, site contractors, project engineer and Town Staff shall be held.
22. Any required certificates and/or approvals from State or Federal agencies (i.e. CT-DOT, DEEP, Army Corps of Engineers) shall be obtained by the applicant and reported to the Planning and Zoning Commission file. Any changes to the plans required by such entities may require a plan modification from the Enfield Planning and Zoning Commission.

Conditions which must be met prior to the Issuance of a Certificate of Compliance:

23. Complete as-built plans certified to Class A-2 accuracy shall be submitted prior to the issuance of any certificates of zoning compliance. The as-built plan shall also contain a certification by a Professional Engineer that they have inspected the site improvements and that they have been installed in accordance with the approved plans. Any deviations or omissions must be noted.
24. The design professional who prepared the approved PZC architectural drawings, shall provide as-built drawings with a certification that they have complied with approved plans. Any changes need to be noted on the plans and a list of changes submitted.
25. No Certificate of Occupancy or other final approval may be issued until the Zoning Enforcement Officer has signed off on the final work. When minor site work cannot be completed because of weather or other pertinent reason, a conditional approval may be issued for a period not to exceed 180 days, providing satisfactory surety shall be posted with the Town of Enfield in an amount sufficient to complete the site work and with surety acceptable to the Town of Enfield.
26. A request for final project review and certificate of zoning compliance must be made to the Planning Department not less than 10 days before a Certificate of Occupancy or other final approval is requested from the Building Official.

Note: The Conditions of Approvals do not take the place of other requirements found in the Town Codes, Regulations, and Application Instructions.

PH# 2934 – REFERENCED PLANS:

1/7 "Proposed Expansion of Driveway and Loading Area", 10 Lego Way, Enfield, Connecticut 06082; Cover Sheet with Location Map, Parking Table, Sheet Index and Zoning Table; Scale for Location Map: 1" = 1,000'; Prepared by Megson, Heagle and Friend, 81 Rankin Road, Glastonbury, Connecticut 06033. Prepared for Rock Ridge Realty, LLC, Enfield, Connecticut 06082. Dated: December 19, 2018.

2/7 "Boundary Map" – Scale: 1" = 40'

3/7 "Boundary Plan" – Scale: 1" = 40'

4/7 "Grading, Drainage and Site Plan" – Scale: 1" = 40'

5/7 "Erosion and Sedimentation Control Plan" – Scale: 1" = 40'

6/7 "General Notes and Details" – Scale: None

7/7 "Erosion and Sedimentation Notes and Details" - Scale: None

RECEIVED
ENFIELD PLANNING DEPT.
2020 JUL 14 AM 12:47

TOWN OF ENFIELD

Special Use Permit & Site Plan Review Application

Planning Division • 820 Enfield Street Enfield, CT 06082
Telephone: 860-253-6355 Website: www.enfield-ct.gov

Special Use Permit

Application For: ☐ New Special Use Permit ☐ Other _____
☐ *Modification of Plan Previously Approved* _____
☐ Modification of Conditions of Approval of a Special Permit: _____

Site Plan Review

Application For: ☑ New Site Plan Review ☐ Other _____
☐ Modification of Plan Previously Approved _____
☐ Modification of Conditions of Approval of a Site Plan: _____

Staff Use Only					
PH #:		**SPR #:**	1832	**XSP #:**	
View Permit #:					
Zoning Regulation Section:	5.20.2 Sub Sec F.				

PLEASE REVIEW LAND USE APPLICATION GUIDE FOR INSTRUCTIONS

Property Address: 83 Freshwater Blvd. **Map #:** _____ **Lot #:** _____
Zone(s): _____ **Size of Parcel:** 1.7 Acres **Account #:** 090500020050
Current Use: HOT TABLE Restaurant
Project Name: HOT TABLE PATIO.
Summary Description: Install new exterior concrete patio with metal fence.

Applicant's Name: HOT TABLE LLC (John DeVoie)
Applicant's Address: 1500 Main St, Springfield, MA 01115
Contact #: 617-947-4150 **Email:** john@hottable.com

TOWN OF ENFIELD

Applicant's Representative: John DeVoie (Hot Table LLC)

Representative Address: 1500 Main St, Springfield, MA 01115

Contact #: 617-947-4152 **Email:** john@hottable.com

Does Applicant own the Property? ☐ Yes (Attach Copy of DEED)
☑ No (Provide Information Below & Attach Letter of Authorization)

Owner's Name: Mercury Realty Company

Owner's Contact #: 860-677-8111

Owner's Address: P.O. Box 945, Farmington, CT 06034

Owner's Email: mikeg@hrwresources.com

Project Information:

Septic: ☐ Yes ☑ No

Public Sewer: ☑ Yes ☐ No

Well Water: ☐ Yes ☑ No

Public Water: ☑ Yes ☐ No

Outdoor Storage: ☐ Yes ☑ No

Design District: ☐ Yes ☑ No

Do wetlands and watercourses affect this application? ☐ Yes ☑ No

Is the property within a Level A or Level B Aquifer Protection Area? ☐ Yes ☑ No

Does this application include any regulated activity in a floodplain ☐ Yes ☑ No

(If yes, you will need to also submit a Flood Hazard Development Permit application to the Planning & Zoning Commission)

What is the total lot acreage? 1.7 acres

What is the length of the property frontage? (List by Street)

422.4 - Freshwater

160 - Cranbrook

Name the abutting street(s): Cranbrook

TOWN OF ENFIELD

What are the existing land uses and zoning districts for abutting properties or across the street(s)?

North Commercial - Wharehouse Food Store (Costco)

East Commercial - Parking

South Commercial - Retail

West Commercial - Parking

Environmental History:

Phase I: Land Records reviewed for environmental hazards? ☐ Yes ☑ No

Phase II: Environmental Hazards Identified? ☐ Yes ☑ No

If yes, please list the environmental conditions found: _____

Phase 3: Is there a remediation plan? ☐ Yes ☑ No

If yes, please describe the remediation plan: _____

Are there environmental restrictions on the property? ☐ Yes ☑ No

If yes, please list environmental restrictions: _____

TOWN OF ENFIELD

The undersigned hereby permits town staff and commission members to enter into and inspect this site during reasonable hours for the purpose of reviewing this application and accompanying plans. I hereby depose and say that all of the above statements as well as the statements contained in all papers filed herewith are true.

☑ **I have reviewed and acknowledge the Land Use Application Guide for further instructions on how to complete my application.**

Applicant Signature: _____ **Date:** 7/10/2020

Print Name: John DeVoe

Subscribed and sworn to before me 10 **day of** July, 2020.

GILBERT NIEVES
NOTARY PUBLIC
COMMONWEALTH OF MASSACHUSETTS
My Comm. Expires March 6, 2026

Notary Public **My Commission Expires:**

LISER 391 298

QUIT-CLAIM DEED No. 136 Cleveland Legal Blank Service, Inc. Hartford, Connecticut

Know All Men by These Presents

THAT THOMAS R. SMYTH, of the Town of Enfield, County of Hartford and State of Connecticut

for divers good causes and considerations thereunto moving, especially for Ten Dollars ($10.00) and other valuable consideration

received to his full satisfaction of MERCURY REALTY COMPANY, a general partnership, with offices in the Town of Wethersfield, County of Hartford and State of Connecticut

has remised, released, and forever quit-claimed, and does by these presents, for himself and heirs, justly and absolutely remise, release, and forever QUIT-CLAIM unto the said MERCURY REALTY COMPANY, its successors and assigns forever, all such right and title as he the said THOMAS R. SMYTH has or ought to have in or to all that certain piece or parcel of land situated on the northerly side of Hazard Avenue - Connecticut Route 190 in the Town of Enfield, County of Hartford and State of Connecticut, being bounded and described as follows:

Commencing at a point set in the northerly line of Hazard Avenue - Conn. Rte. 190, which point marks the southwest corner of the premises described herein and the southeast corner of land owned now or formerly by Richard W. and Robert Smyth, said point being ten (10) feet west of a Connecticut Highway Department marker;
Thence running N 3° 37' 00" E along land now or formerly by said Richard W. and Robert Smyth and along land owned now or formerly by Bernard Pellegrino and Anthony Parillo, partly by each, in all a distance of eight hundred seventy-six (876) feet, more or less, to a point in the center line of the brook or stream known as Freshwater Brook;
Thence running in an easterly direction along the center line of said Freshwater Brook, a distance of two hundred fifty (250) feet, more or less to a point, which point marks the northeast corner of the premises described herein;
Thence running S 3° 37' 00" W along land now or formerly by Ford Leasing Dev. Co., a distance of eight hundred eighty (880) feet, more or less, to a point set in the northerly line of Hazard Avenue - Conn. Rte. 190, which point is one hundred eighty-seven and forty-seven one-hundredths (187.47) feet west of a Connecticut Highway Department marker;
Thence running N 86° 23' 00" W along said northerly line of Hazard Avenue - Conn. Rte. 190, a distance of two hundred fifty (250) feet to a point, which point marks the point and place of beginning.

Together with a sewer easement from the above-described premises northerly across Freshwater Brook and across land now or formerly of Edward Rapacki, et ux, to the trunk line sewer of the Town of Enfield.

Being the same premises conveyed to Thomas R. Smyth by Warranty Deed from Richard M. Smyth dated July 9, 1951 and recorded in the Enfield Land Records, Vol. Page and by deed from Richard W. Smyth and Robert D. Smyth dated April 10, 1967 and recorded in the Enfield Land Records, Vol. 274, Page 504.

Said premises are conveyed subject to any and all provisions of any ordinance, municipal regulation, or public or private law.

"No Conveyance Tax collected

Asst Town Clerk of Enfield

RECEIVED
ENFIELD PLANNING BOARD
2020 JUL 14 AM 12:47

Said premises are further shown on a map entitled "MAP PREPARED FOR MERCURY OIL CO. ENFIELD, CONN.", prepared by Luchs & Beckerman, Civil Engineers - Planners - Land Surveyors, Glastonbury, Conn. Scale 1" = 40' Date 8-16-74, which map is to be filed in the office of the Town Clerk of the Town of Enfield.

The purpose for recording this Quit Claim Deed is to correct the description set forth in the Warranty Deed from the Releasor herein to the Releasee herein dated August 21, 1974 and recorded August 21, 1974 in Volume 388 at Page 434 of the Town of Enfield Land Records. The error in the description in said Warranty Deed was in the distance stated from a Connecticut Highway Department marker to the southeasterly corner of the *premises described therein*.

The error is also contained on the map entitled "MAP PREPARED FOR MERCURY OIL CO. ENFIELD, CONN.", prepared by Luchs & Beckerman, Civil Engineers - Planners - Land Surveyors, Glastonbury, Conn. Scale 1" = 40' Dated 8-16-74 which map "is" filed.

The premises are correctly shown on a map entitled "MAP PREPARED FOR MERCURY OIL CO. ENFIELD, CONN.", prepared by Luchs & Beckerman, Civil Engineers - Planners - Land Surveyors, Glastonbury, Conn. Scale 1" = 40' Dated 8-16-74, Revised September 4, 1974, which map is to be filed in the office of the Town Clerk of the Town of Enfield.

To Have and to Hold, the *premises unto* him *the said* THOMAS R. SMYTH and to his heirs and assigns, to the only use and behoof of the said MERCURY REALTY COMPANY, its successors ~~heirs~~ and assigns forever, so that neither he the said THOMAS R. SMYTH nor any person or persons in his name and behalf, shall or will hereafter claim or demand any right or title to the premises or any part thereof, but they and everyone of them shall by these presents be excluded and forever barred.

IN WITNESS WHEREOF, THOMAS R. SMYTH

has hereunto set his hand and seal this 30th day of October 19 74

Signed, sealed and Delivered in the presence of

Francis J. Fahey ..... Thomas R. Smyth .....(L. S.)
Francis J. Fahey — THOMAS R. SMYTH

Edna A. Bartley ....(L. S.)
Edna A. Bartley

....(L. S.)

....(L. S.)

STATE OF CONNECTICUT }
COUNTY OF } ss.

On this 30th day of October 19 74, before me Francis J. Fahey, the undersigned officer, personally appeared THOMAS R. SMYTH known to me (or satisfactorily proven) to be the person whose name is/~~are~~ subscribed to the within instrument and acknowledged that he/~~she/they~~ executed the same for the purposes therein contained.

In Witness Whereof I hereunto set my hand.

Francis J. Fahey .....
Francis J. Fahey — *Notary Public—Commissioner of the Superior Court*

STATE OF CONNECTICUT }
COUNTY OF } ss.

On this day of 19, before me , *the undersigned officer, personally* appeared who acknowledged himself/herself to be the of , a corporation, and that he, as such being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing the name of the corporation by himself/herself as

In Witness Whereof I hereunto set my hand.

Grantee's Address .....

.....
Street and Number

Notary Public—Commissioner of the Superior Court

.....
City *State*

Received.....19.....At.....M.

Recorded in.....

Land Records — Vol.....Page.....

.....Town Clerk

HOT TABLE
PANINI

RECEIVED
ENFIELD PLANNING DIVISION
2020 JUL 14 AM 12:46

July 10, 2020

Town of Enfield
Planning Division
820 Enfield Street
Enfield, CT 06082

RECEIVED
ENFIELD PLANNING DIVISION
2020 JUL 14 AM 12:47

To Whom It May Concern:

Thank you for reviewing our application and plans for our proposed patio located at 83 Freshwater Boulevard. This will be a seasonal patio with four tables and 16 chairs for our customers to use as on a self-service basis. We will remove the tables and chairs from the patio during the winter. We believe this patio will be an attractive addition to the property and the town. Please let me know if you need any additional information.

Regards,

John DeVoie
President
Hot Table LLC

RECEIVED
ENFIELD PLANNING DEPT.
2020 JUL 14 AM 12:47

MERCURY REALTY COMPANY, L.L.C.

P.O. Box 945
Farmington, CT 06034-0945

Telephone: (860) 677-8111
Fax: (860) 677-5697

July 10, 2020

Town of Enfield
Planning Office
820 Enfield Street
Enfield, CT 06082

Dear Sir or Madam:

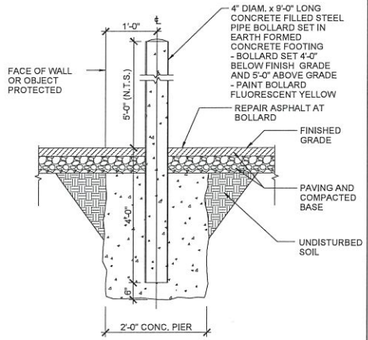
This letter is intended to confirm that we are the owner of the property that includes 83 Freshwater Boulevard, Enfield, CT, currently occupied by Hot Table Panini restaurant (the "Tenant"). By this letter, we confirm that we grant permission to Tenant to apply to your office for approval of an outside patio including exterior seating for up to 16 guests.

If you have any questions, please do not hesitate to contact me.

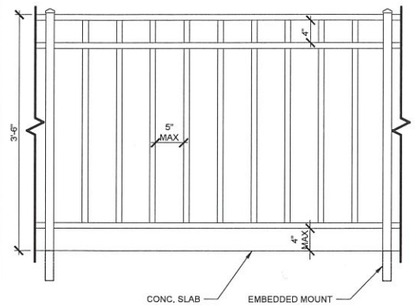
Very truly yours,

MERCURY REALTY COMPANY, L.L.C.

Michael Goldfarb

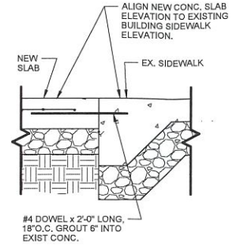


6 BOLLARD DETAIL
SCALE: N.T.S.

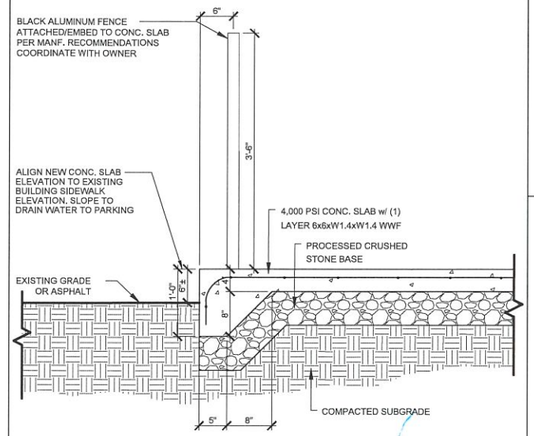


NOTE: COORDINATE BLACK ALUMINUM FENCE WITH OWNER

5 ALUMINUM FENCE DETAIL
SCALE: N.T.S.



4 TYP. JOINT BETWEEN EXISTING & NEW SLAB
SCALE: N.T.S.



3 MONOLITHIC CURB DETAIL
SCALE: N.T.S.

PARKING TABULATIONS

HOT TABLE (RESTAURANT): 29 SPACES
1 SPACE/3 SEATS=84 SEATS/3=21.3
1 SPACE/EMPLOYEE=1 x 8 EMPLOYEES=8

NEW: 1 SPACE/OUTDOOR 4 SEATS=16 SEATS/4=4

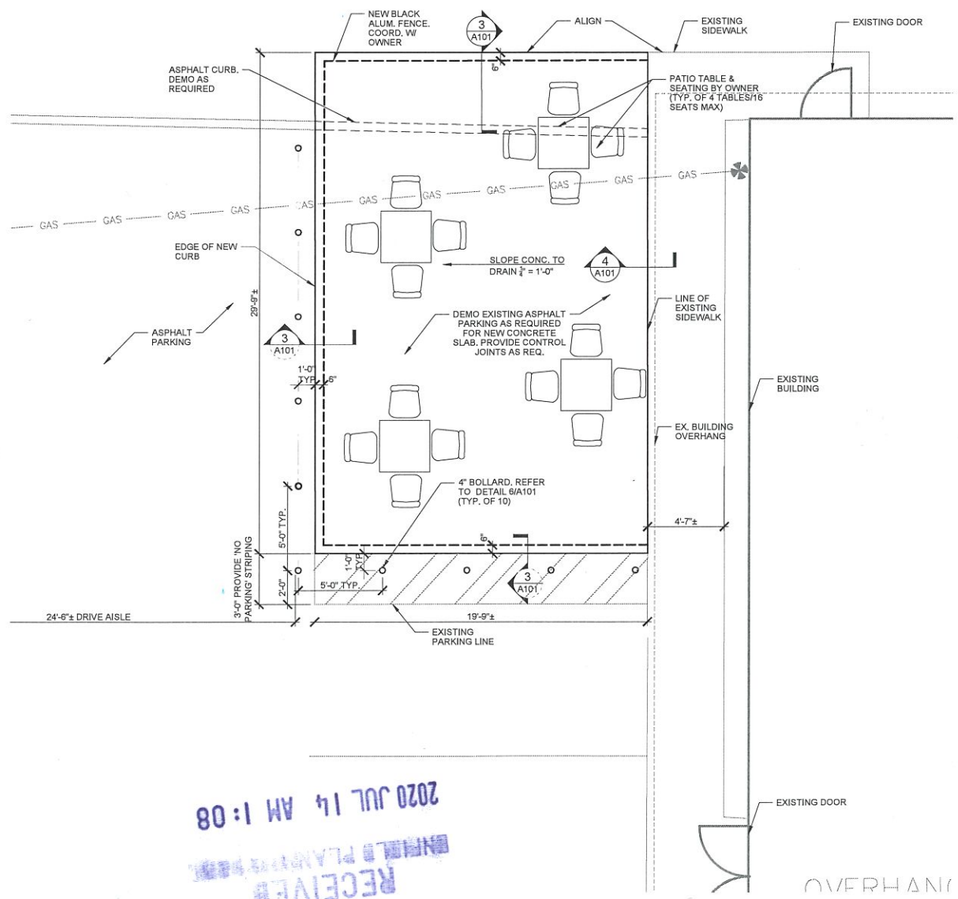
RETINA CONSULTANTS (MEDICAL OFFICES < 10,000 SF): 23 SPACES
6 SPACES/1,000 SF GROSS FLOOR AREA=3,800/1,000=3.8 x 6=22.8

SAVINGS INSTITUTE (BANK): 26 SPACES
3 SPACES/TELLER WINDOW=3 x 4 WINDOWS=12
1 SPACE/DESK=1 x 4 DESKS=4
1 SPACES/EMPLOYEE=1 x 10 EMPLOYEES=10

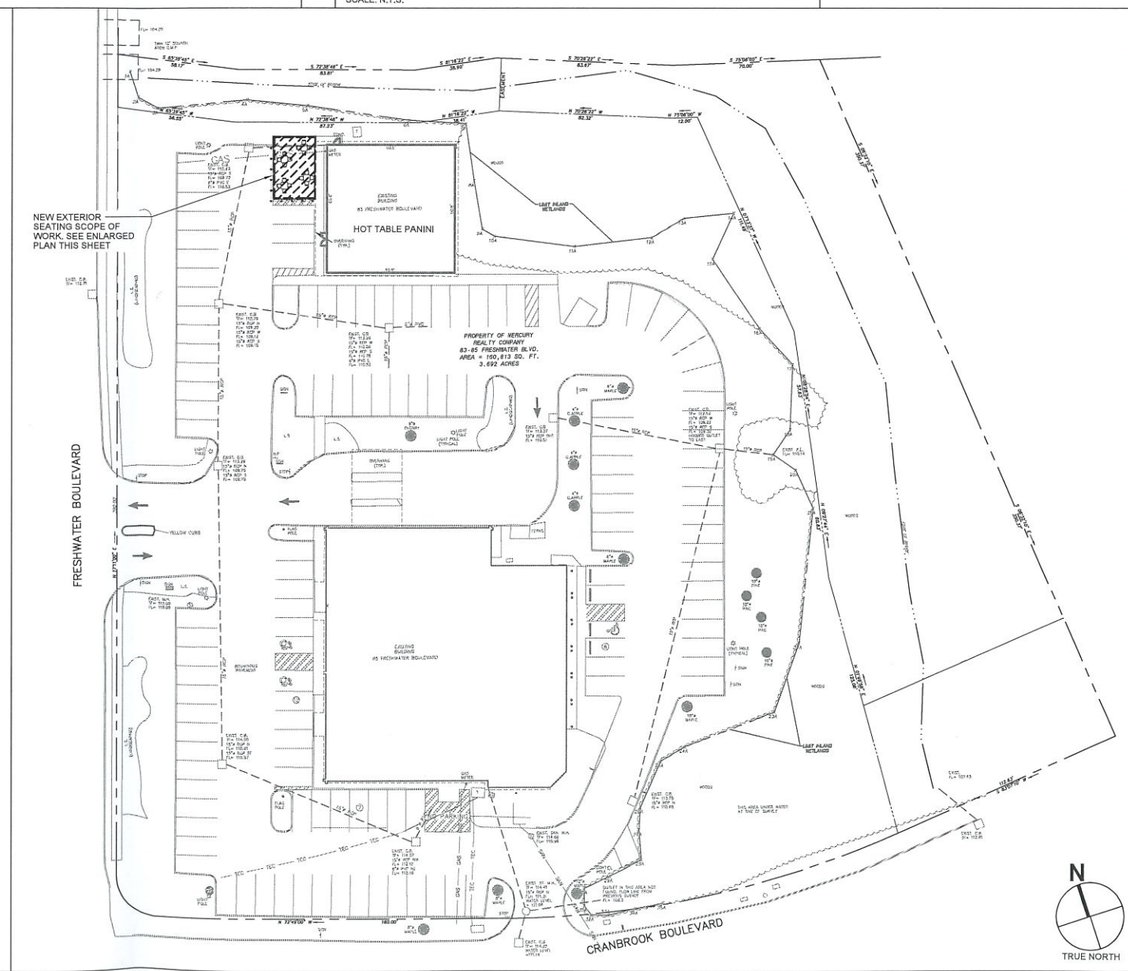
SHERWIN-WILLIAMS (PAINT SALES): 18
1 SPACE/150 SF OF SALES/CUSTOMER AREA=2,625/150=17.5

TOTAL REQUIRED SPACES: 100
TOTAL AVAILABLE SPACES: 128 CURRENTLY
-3 (TO BE REMOVED IN FRONT OF HOT TABLE PANINI)
125

NOTE: CURRENTLY 6 HC SPACES PROVIDED



2 ENLARGED SEATING AREA PLAN
SCALE: 1/4"=1'-0"



1 SITE PLAN
SCALE: 1/32"=1'-0"

RECEIVED
ENFIELD PLANNING DEPT.
2020 JUL 14 AM 1:08

ARCHITECT:
PHASE ZERO DESIGN
architects | interior designers
8 WILCOX STREET
SIMSBURY, CT 06070
PHONE: (860) 264-1624
FAX: (860) 264-1628
www.phasezerodesign.com

CLIENT:
HOT TABLE, LLC
83 FRESHWATER BLVD
ENFIELD, CT 06082
(413) 731-1400
HOTTABLE.COM

MEP CONSULTANT:

STRUCTURAL CONSULTANT:

HOT TABLE PANINI
EXTERIOR SEATING AREA
83 FRESHWATER BOULEVARD
ENFIELD, CT 06082

PROJECT

REVISIONS

REV	DATE	DESCRIPTION / COMMENTS

SEAL

STATE OF CONNECTICUT
MICHAEL G. WHITE
No. 8038
LICENSED ARCHITECT

ISSUED FOR: PERMIT
ISSUED DATE: 07/02/2020

DRAWN BY: HAP

CHECKED BY: MG

PROJECT NUMBER: 1120213

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DRAWING NAME
EXTERIOR SEATING PLANS & DETAILS

DRAWING NO.
A101

Plot Date: 7/2/2020 2:03:47 PM, Dwg Filename: J:\Hospitality\Hot Table\1120213 Enfield CT\Drawings\1120213_A101_Exterior Seating Area Plan.dwg