

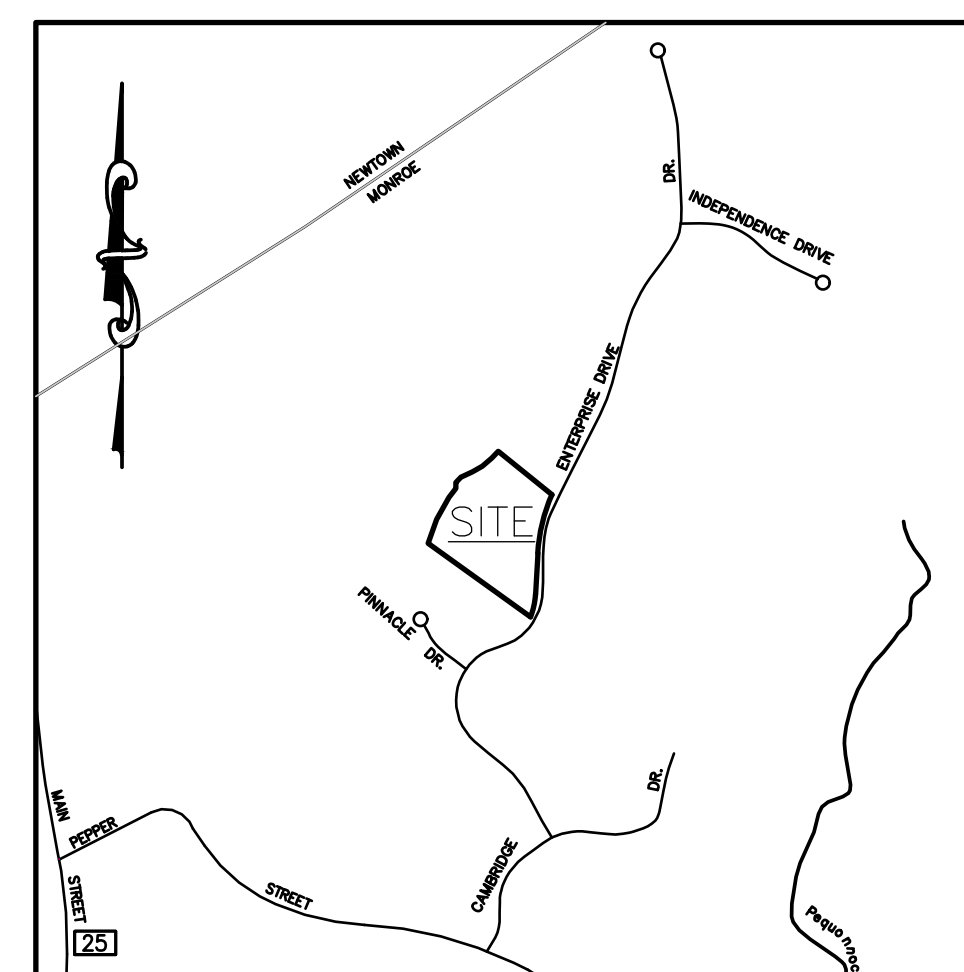
J. EDWARDS & ASSOCIATES LLC
 ENGINEERING • SURVEYING • SITE PLANNING

227 Stepney Road Easton, CT 06612
 Phone: 203.268.4205 Fax: 203.268.5604
 www.jedwardsassoc.com

SITE IMPROVEMENTS

MONROE, CONNECTICUT

67 ENTERPRISE DRIVE



LOCATION MAP
 SCALE: 1"=1000'

CONTENTS:

TITLE SHEET

- EX-1 EXISTING CONDITIONS PLAN
- S-1 SITE PLAN
- S-2 CONSTRUCTION DETAILS
- EC-1 EROSION CONTROL PLAN
- LP LIGHTING PLAN
- L-1 LANDSCAPE & WETLAND MITIGATION PLAN
- L-2 PLANTING AND SITE DETAILS
- L-2 PLANTING AND SITE DETAILS

REVISIONS

| # | DATE | DESCRIPTION |
|---|----------|---------------|
| 1 | 02.04.22 | ENG.&IWC COM. |
| 2 | 02.28.22 | ENG.COM. |
| 3 | 05.01.22 | PZC COM. |
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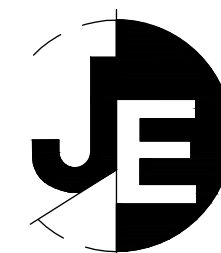
DATE: 12-13-21
 PROJECT #: 2873
 DRAWING FILE: SITE
 DRAWN BY: LE/JE/IE
 SCALE:

TITLE

SHEET NUMBER

BML TOOL, INC.
 67 ENTERPRISE DRIVE
 MONROE, CONNECTICUT

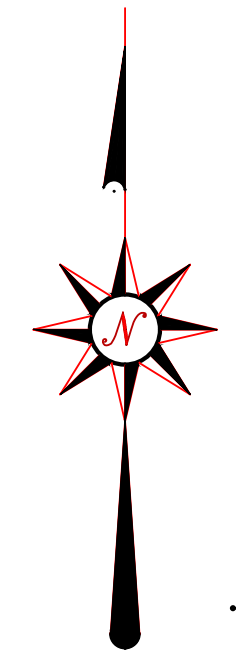
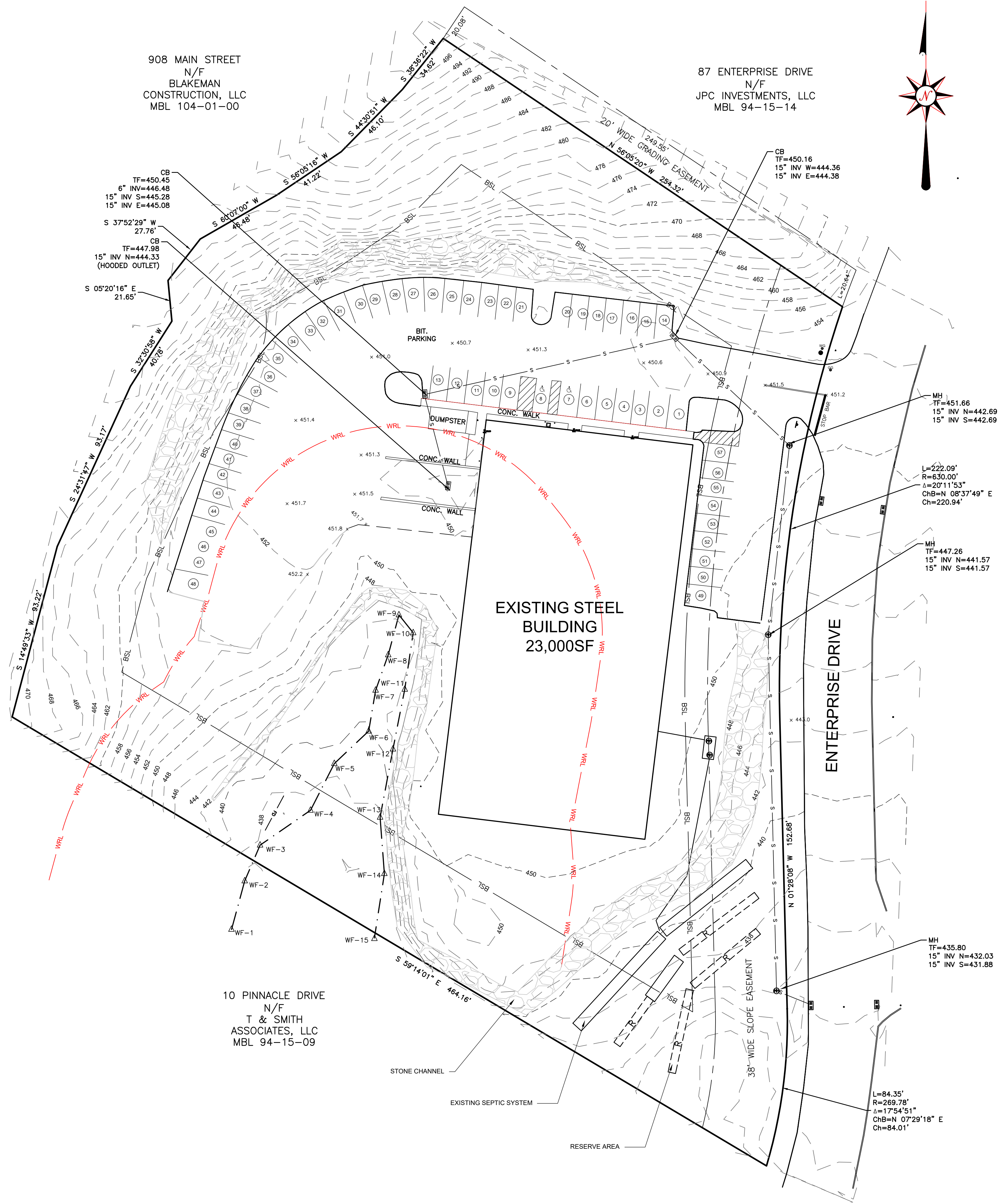
Prepared By:



J. EDWARDS & ASSOCIATES, LLC
 Engineering and Surveying
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 Easton, CT. 06612
 (203)-268-4205
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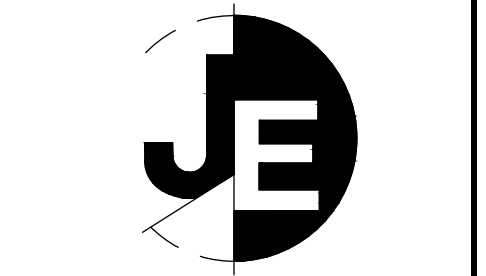
NOTES:

- THIS SURVEY (OR MAP) HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE 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. IT IS AN IMPROVEMENT LOCATION SURVEY BASED ON A DEPENDENT RESURVEY CONFORMING TO HORIZONTAL ACCURACY CLASS A-2 AND VERTICAL ACCURACY CLASS V-2 AND INTENDED TO BE USED FOR REGULATORY APPROVAL.
- REFERENCE MAP ENTITLED: "IMPROVEMENT LOCATION SURVEY - RECORD. PREPARED FOR BML TOOL, INC. 67 ENTERPRISE DRIVE, MONROE, CT." SCALE 1"=30', DATED JANUARY 12, 2010. PREPARED BY DAVID A. HUGHES, PROFESSIONAL ENGINEER & LAND SURVEYOR.
- PLAN PREPARED FOR OWNER.
- LOT CORNER MARKERS DEPICTED HEREON WERE FOUND AND/OR SET DURING COMPLETION OF THIS SURVEY. ALL CORNER MARKERS FOR THIS LOT ARE TO BE PLACED AS PART OF SUBDIVISION IMPROVEMENTS AND HAVE BEEN BONDED TO THE TOWN.
- BEARINGS BASED ON THE MAP REFERENCED IN NOTE 2 ABOVE.
- LOCATION OF UNDERGROUND UTILITIES DEPICTED HEREON ARE APPROXIMATE.
- CERTIFICATION OF THIS MAP APPLIES TO CONDITIONS AS OF THE ORIGINAL DATE OR REVISED DATE DEPICTED HEREON. EXISTING CONDITIONS ON THIS PROPERTY MAY HAVE CHANGED SINCE THAT DATE AND AN UPDATED SURVEY IS RECOMMENDED TO ACCURATELY DEPICT THE CURRENT CONDITIONS.
- ADDITIONAL IMPROVEMENTS AND TOPOGRAPHIC INFORMATION BASED ON A FIELD SURVEY PERFORMED BY J. EDWARDS & ASSOC., LLC.
- VERTICAL DATUM AND CONTOURS BASED ON NGVD 88.
- WETLANDS SHOWN ON THIS MAP WERE DELINEATED BY STEVEN DANZER, PhD, SOIL SCIENTIST AND FIELD LOCATED BY J. EDWARDS & ASSOCIATES, LLC.
- PROPERTY IS IDENTIFIED AS MAP-BLOCK-LOT 094-15-12 AND IS LOCATED IN ZONING DISTRICT I-2.



| OFF-STREET PARKING & LOADING COMPLIANCE | | | |
|---|----------|-------------------------------|-----------------|
| ZONE: INDUSTRIAL DISTRICT 2 I-2 | | | |
| USE | SIZE GFA | ZONING STANDARD | REQUIRED SPACES |
| OFF STREET PARKING | | | |
| BUILDING 1: MANUFACTURING | 28000 SF | 1/600SF | 47 |
| | | TOTAL REQUIRED PARKING SPACES | 47 |
| | | TOTAL PROPOSED PARKING SPACES | 57 |

| ZONING COMPLIANCE TABLE | | |
|---------------------------------|-----------------|---------------------|
| ZONE: INDUSTRIAL DISTRICT 2 I-2 | | |
| ZONING REQUIREMENT | ZONING STANDARD | EXISTING CONDITIONS |
| MINIMUM LOT AREA | 3 ACRES | 3.61 ACRES |
| MINIMUM LOT FRONTAGE | 200 FEET | 459.12' |
| MINIMUM SQUARE | 150 FEET | 150 FEET |
| MINIMUM YARD | | |
| BUILDING FRONT | 50 FEET | 56.5 |
| BUILDING SIDE | 25 FEET | 71.2 |
| BUILDING REAR | 25 FEET | 160.1 |
| OUTSIDE STORAGE AREA SIDE | 25 FEET | |
| BUILDING HEIGHT - STORIES/FEET | 3/40 | 1/25'± |
| BUILDING COVERAGE | 25% MAX. | 14.7% ± |



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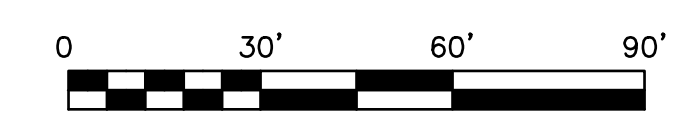
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| 2 | 02.28.22 | ENG.COM. |
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DATE: 12-13-21
PROJECT #: 2873
DRAWING FILE: SITE
DRAWN BY: LE/JE/JE
SCALE: 1"=30'

TITLE
EXISTING CONDITIONS SURVEY

SHEET NUMBER

EX-1



| OFF-STREET PARKING & LOADING COMPLIANCE | | | |
|---|----------|-----------------|-----------------|
| ZONE: INDUSTRIAL DISTRICT 2 I-2 | | | |
| USE | SIZE GFA | ZONING STANDARD | REQUIRED SPACES |
| OFF STREET PARKING | | | |
| BUILDING 1: MANUFACTURING | 28000 SF | 1/600SF | 47 |
| BUILDING 1: WAREHOUSE | 4000 SF | 1/1000SF | 4 |
| BUILDING 2: WAREHOUSE | 6000 SF | 1/1000SF | 6 |
| TOTAL REQUIRED PARKING SPACES | | | 57 |
| TOTAL PROPOSED PARKING SPACES | | | 57 |

| ZONING COMPLIANCE TABLE | | | |
|---------------------------------|-----------------|---------------------|---------------------|
| ZONE: INDUSTRIAL DISTRICT 2 I-2 | | | |
| ZONING REQUIREMENT | ZONING STANDARD | EXISTING CONDITIONS | PROPOSED CONDITIONS |
| MINIMUM LOT AREA | 3 ACRES | 3.61 ACRES | 3.61 ACRES |
| MINIMUM LOT FRONTAGE | 200 FEET | 459.12' | 459.12' |
| MINIMUM SQUARE | 150 FEET | 150 FEET | 150 FEET |
| MINIMUM YARD | | | |
| BUILDING FRONT | 50 FEET | 56.5 | 94.9' |
| BUILDING REAR | 25 FEET | 71.2 | 50.0' |
| BUILDING SIDE | 25 FEET | 160.1 | 50.1 |
| OUTSIDE STORAGE AREA | 25 FEET | | |
| BUILDING HEIGHT - STORIES/FEET | 3/40 | 1/25± | 1/13± |
| BUILDING COVERAGE | 25% MAX. | 14.7% ± | 18.6% |

CL TYPE CATCHBASIN
 TF=451.4
 5" TO DETENTION =447.5
 6" ROOF DRAIN =448.0
 12" OUTLET(HOODED) INV =448.5
 CONTROL OUTLET TO BE HOODED

STORM DETENTION SYSTEM
 TO COLLECT ALL RUNOFF
 FROM ROOF OF NEW BUILDING
 224LF OF 4'X4' CONCRETE GALLERIES
 WITH H-20 LOAD RATING
 SET IN 20'X60' STONE BED
 BOTTOM UNITS =445.0
 BOTTOM STONE =444.5
 6" CONTROL OUTLET RESTRICTED TO 5" INV =447.5
 (TEST PIT TO BE DUG PRIOR TO INSTALLATION
 TO VERIFY RECEIVING SOILS)

CUT AREA TO BE SLOPED AT 1 TO 1 WITH
 WITH RIP RAP UNLESS
 STABLE ROCK FACE CAN BE MAINTAINED

PROPOSED
 60'X100' STORAGE BUILDING
 FF=452.5
 NO INTERNAL PLUMBING
 HVAC TO BE WALL
 MOUNTED

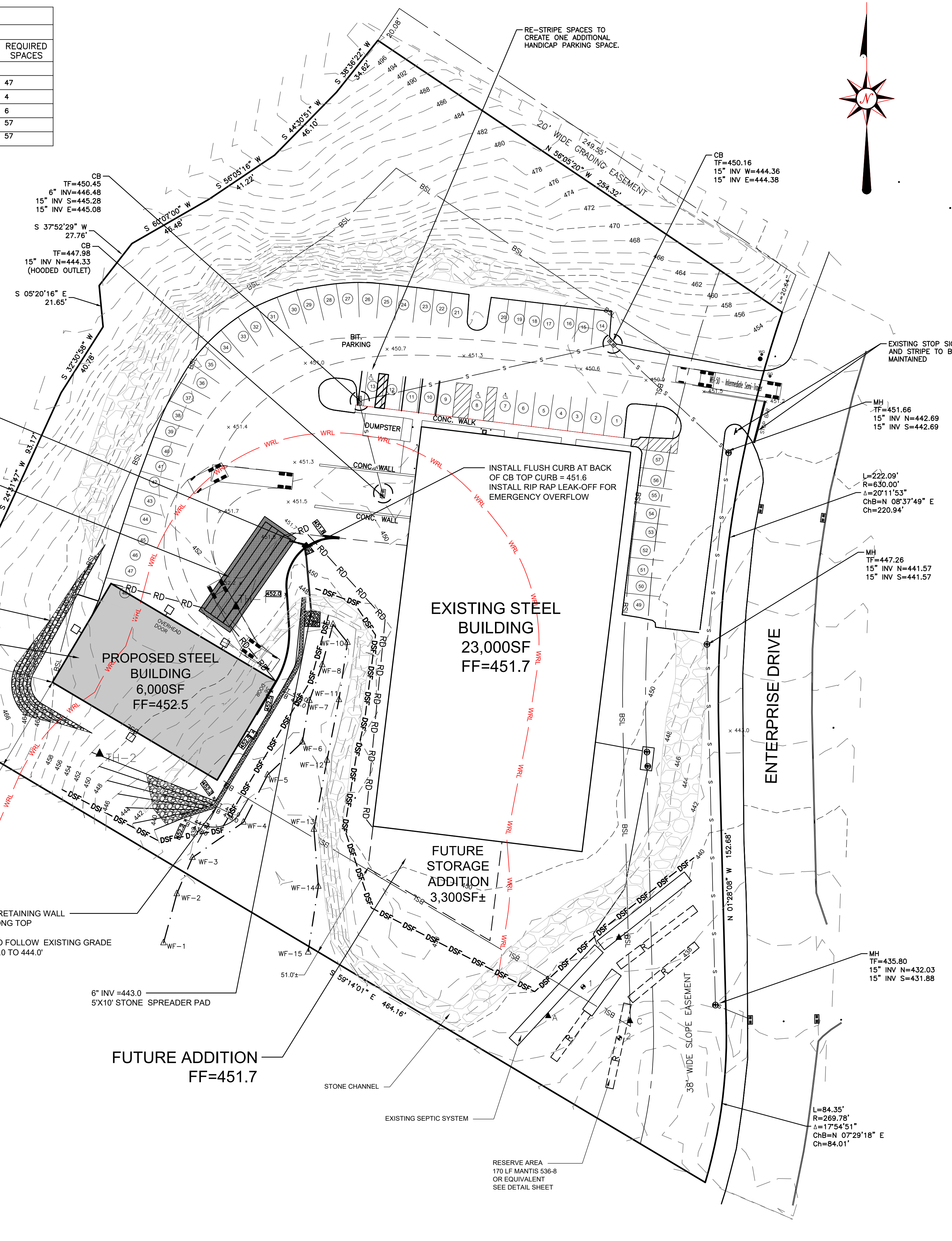
RE-CON BLOCK RETAINING WALL
 W/ 4" FENCE ALONG TOP
 TOP WALL =452.0
 BOTTOM WALL TO FOLLOW EXISTING GRADE
 RANGE FROM 438.0 TO 444.0'

6" INV =443.0
 5'X10' STONE SPREADER PAD

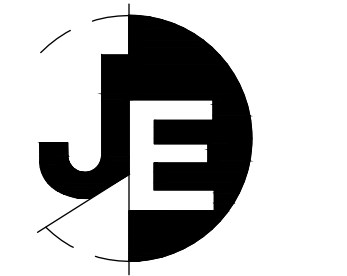
FUTURE ADDITION
 FF=451.7

EXISTING STEEL
 BUILDING
 23,000SF
 FF=451.7

FUTURE STORAGE
 ADDITION
 3,300SF±



- GENERAL NOTES
1. NORTH ARROW, BEARINGS AND COORDINATES ARE BASED UPON THE CONNECTICUT COORDINATE SYSTEM (NAD 1983). ELEVATIONS, CONTOURS AND BENCH MARK ARE BASED UPON NGVD 1929.
 2. INFORMATION REGARDING THE LOCATION OF EXISTING UTILITIES HAS BEEN BASED UPON AVAILABLE INFORMATION AND MAY BE INCOMPLETE. WHERE SHOWN SHOULD BE CONSIDERED APPROXIMATE. THE LOCATION OF ALL EXISTING UTILITIES SHOULD BE CONFIRMED PRIOR TO BEGINNING CONSTRUCTION. CALL "CALL BEFORE YOU DIG", 1-800-922-4455. ALL UTILITY LOCATIONS THAT DO NOT MATCH THE VERTICAL OR HORIZONTAL CONTROL SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.
 3. J. EDWARDS & ASSOCIATES LLC, ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF MAPS AND DATA WHICH HAVE BEEN SUPPLIED BY OTHERS.
 4. THIS PROJECT IS NOT WITHIN COASTAL ZONE MANAGEMENT AREAS AND/OR FLOOD ZONES.
 5. ALL UTILITY SERVICES ARE TO BE UNDERGROUND. THE EXACT LOCATION, MEANS OF CONSTRUCTION, AND SIZE OF ELECTRIC, TELEPHONE, AND CABLE TELEVISION ARE TO BE DETERMINED BY THE RESPECTIVE UTILITY COMPANIES.
 6. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. EXISTING UTILITY PIPE INVERTS ARE SHOWN AS APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO THE CONSTRUCTION.
 7. SEDIMENT AND EROSION CONTROL MEASURES AS DEPICTED ON THESE PLANS AND DESCRIBED WITHIN THE SEDIMENT AND EROSION CONTROL NARRATIVE SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT COVER AND STABILIZATION IS ESTABLISHED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL CONFORM TO THE "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL - CONNECTICUT - 2002", AND IN ALL CASES BEST MANAGEMENT PRACTICES SHALL PREVAIL.
 8. ALL DISTURBED AREAS SHALL RECEIVE A MINIMUM OF 6" TOPSOIL, AND BE SEEDED WITH GRASS, AS SHOWN ON THE PLANS.
 9. ALL PROPOSED CONTOURS AND SPOT ELEVATIONS INDICATE FINISHED GRADE.
 10. ALL CONSTRUCTION MATERIALS AND METHODS SHALL CONFORM TO THE TOWN OF MONROE REQUIREMENTS AND TO THE APPLICABLE SECTIONS OF THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCTION, FORM 616 AND ADDENDUMS.
 11. THE PLANS REQUIRE A CONTRACTOR'S WORKING KNOWLEDGE OF LOCAL, MUNICIPAL, WATER AUTHORITY, AND STATE CODES FOR UTILITY SYSTEMS. ANY CONFLICTS BETWEEN MATERIALS AND LOCATIONS SHOWN, AND LOCAL REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE EXECUTION OF WORK. THE ENGINEER WILL NOT BE HELD LIABLE FOR COSTS INCURRED TO IMPLEMENT OR CORRECT WORK WHICH DOES NOT CONFORM TO LOCAL CODE.
 12. ALL FUEL, OIL, PAINT, OR OTHER HAZARDOUS MATERIALS USED DURING CONSTRUCTION SHOULD BE STORED IN A SECONDARY CONTAINER AND REMOVED TO A LOCKED INDOOR AREA WITH AN IMPERVIOUS FLOOR DURING NON-WORK HOURS.
 13. COMPLIANCE WITH THE PERMIT CONDITIONS IS THE RESPONSIBILITY OF BOTH THE CONTRACTOR AND THE PERMITEE.



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| 3 | 05.01.22 | PZC.COM. |

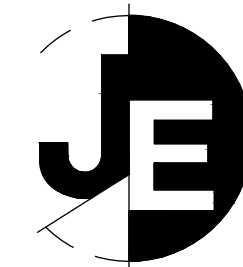
DATE: 12-13-21
 PROJECT #: 2873
 DRAWING FILE: SITE
 DRAWN BY: LE/JE/E
 SCALE: 1"=30'

TITLE
 SITE
 DEVELOPMENT
 PLAN

SHEET NUMBER

S-1





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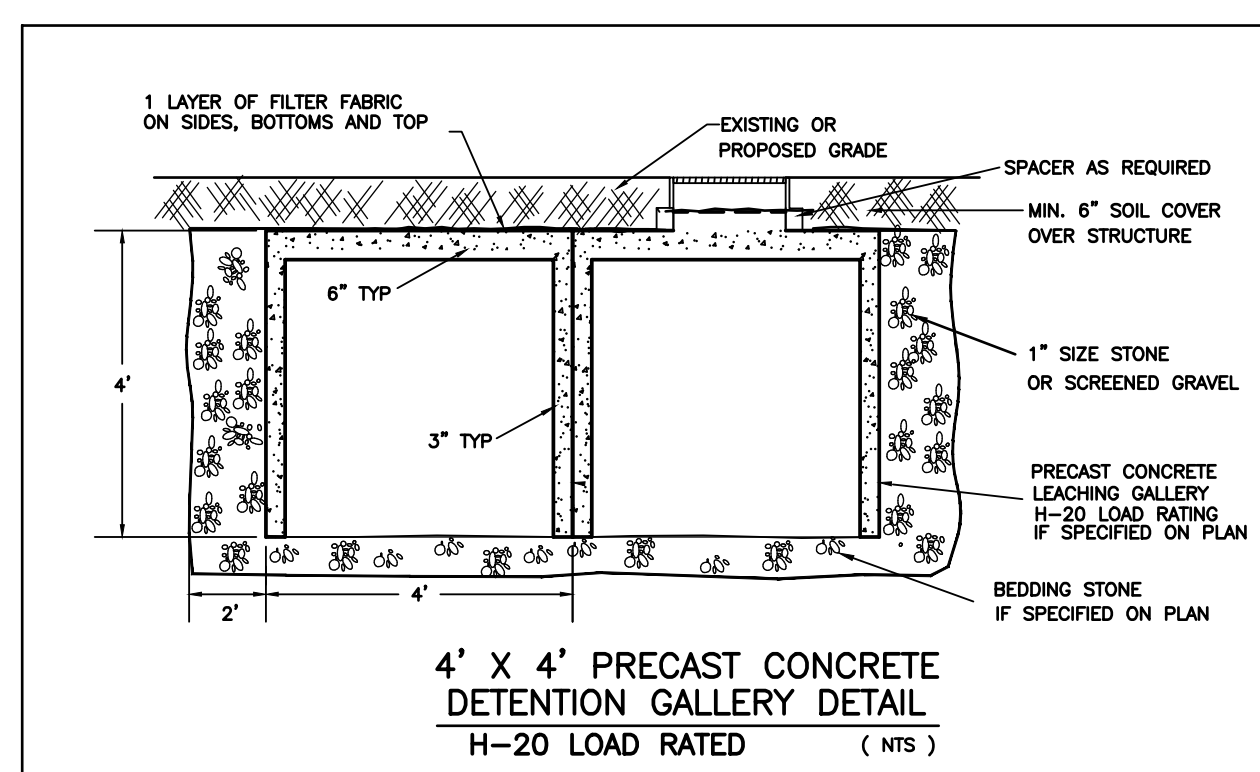
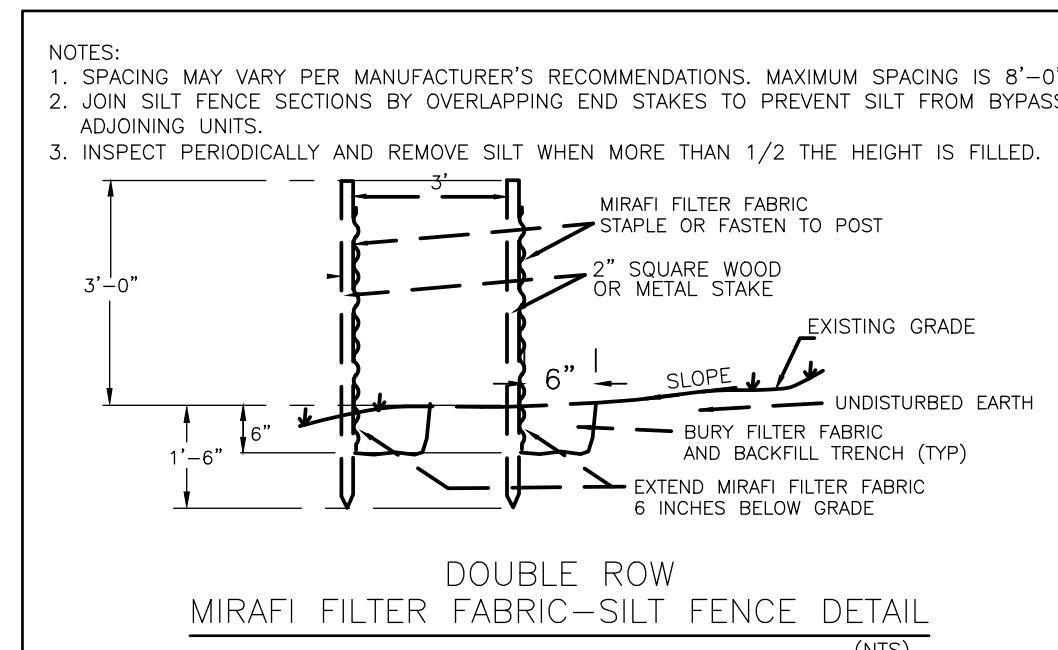
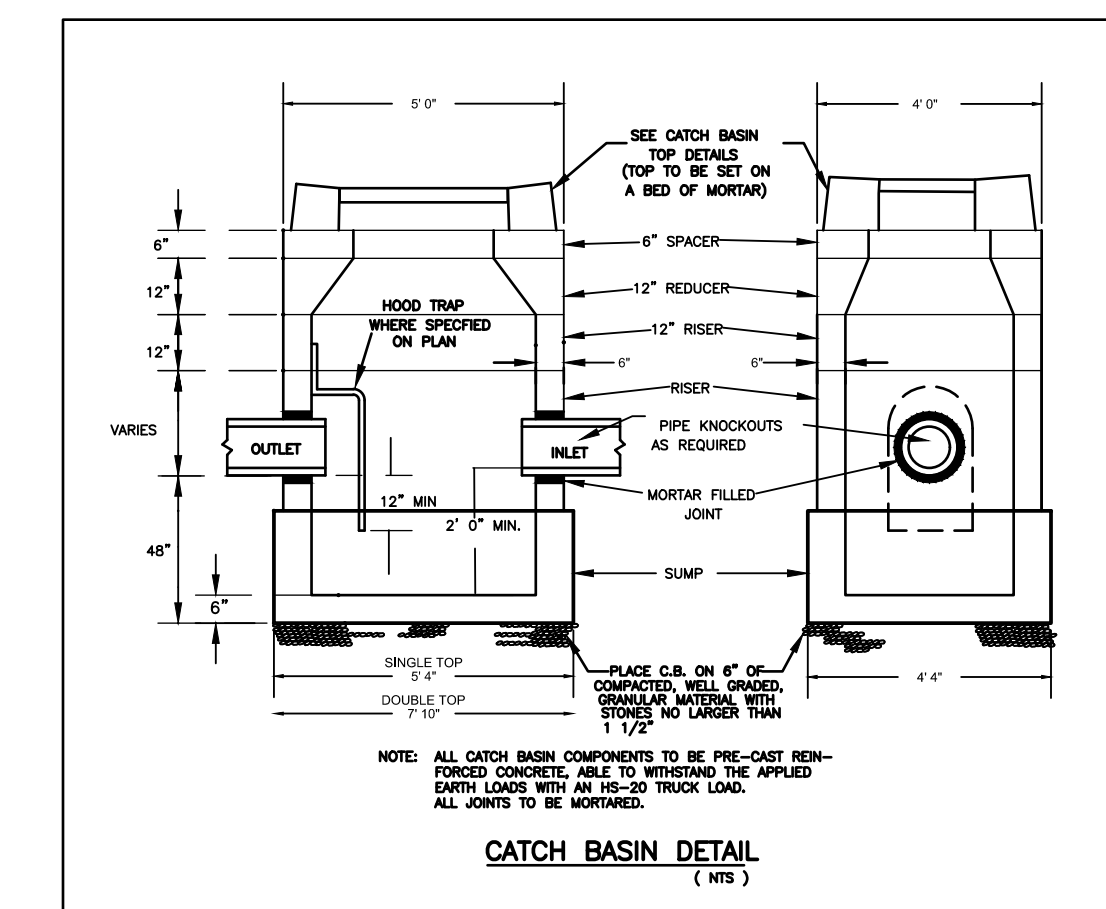
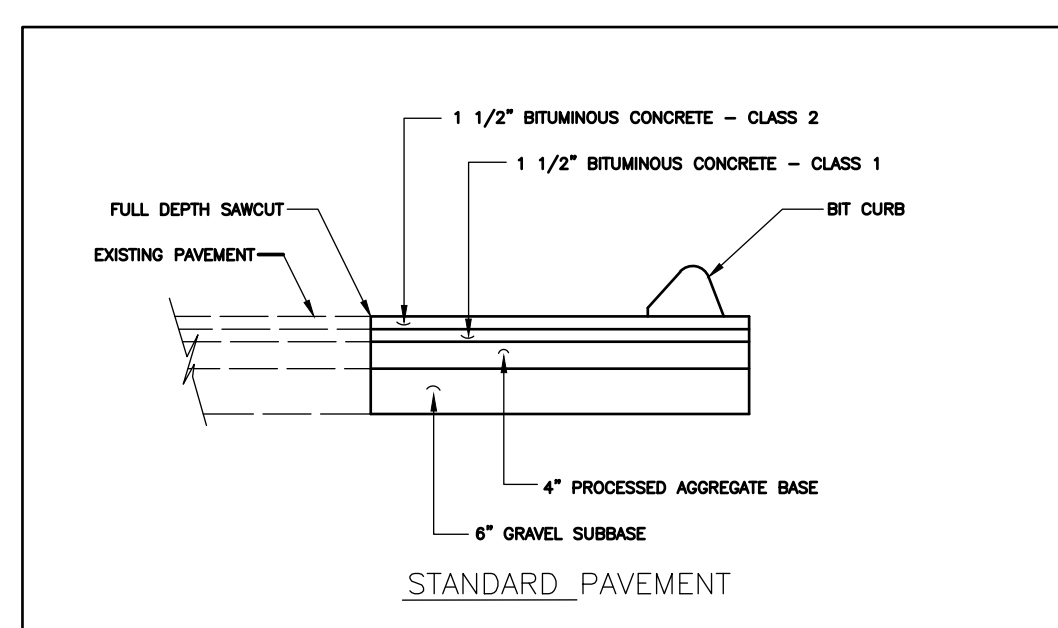
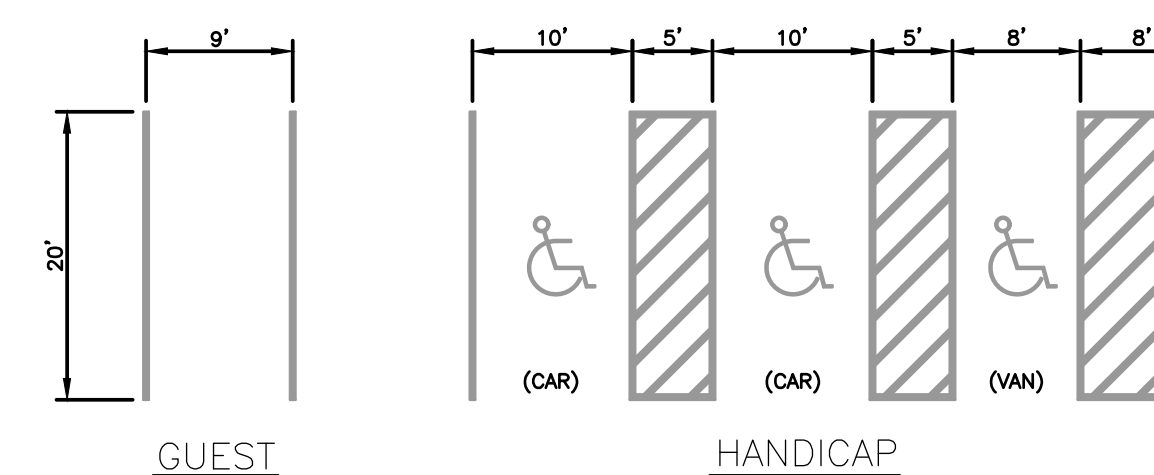
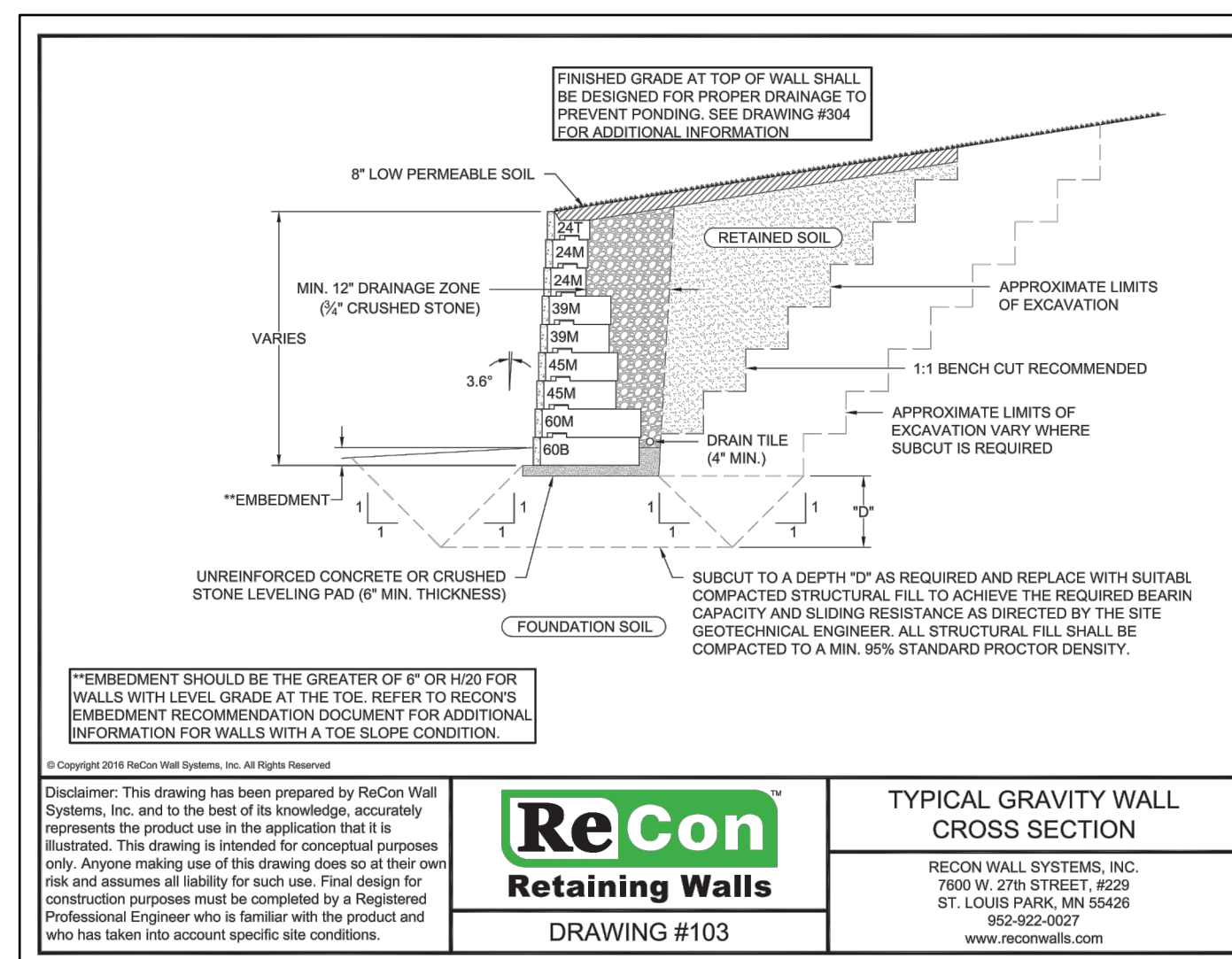
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DRAWING FILE: SITE
DRAWN BY: LE/JE/E
SCALE: 1"=30'

TITLE

CONSTRUCTION
DETAILS

SHEET NUMBER

S-2



TEST PIT DATA (June 1, 2006)

Conducted by B. Plourde (Pustola & Assoc.)
Witnessed by T. Monks (Sanitarian)

TP A
0' - 10" Topsoil
10' - 48" Red Brown Fine Sandy Loam

Ledge @ 46"
No Ground Water
No Mottling

TP B
0' - 6" Topsoil
6' - 28'/58" Red Brown Fine Sandy Loam

Ledge @ 28'/58"
No Ground Water
No Mottling

TP C
0' - 8" Topsoil
8' - 58" Red Brown Fine Sandy Loam
58' - 85" Grey Fine Sandy Loam

No Ledge
Ground Water @ 79"
No Mottling

PERCOLATION TEST RESULTS (June 8, 2006)

Conducted by B. Plourde (Pustola & Assoc.)

Hole #1 - 1 - 10 min./in.
Hole #2 - 5.1 - 10 min./in.

PERCOLATION TEST READINGS (June 8, 2006)

| HOLE #1 - 1 - 10 min./in. | HOLE #2 - 5.1 - 10 min./in. |
|---------------------------|-----------------------------|
| 0 min. - 18 1/2 | 0 min. - 12 7/8 |
| 5 min. - 18 7/8 | 5 min. - 15 3/8 |
| 10 min. - 20 3/8 | 10 min. - 17 1/8 |
| 15 min. - 22 1/8 | 15 min. - 18 5/8 |
| 20 min. - 23 | 20 min. - 19 7/8 |
| 25 min. - Dry | 25 min. - 21 |
| | 30 min. - 21 7/8 |
| | 35 min. - 22 1/2 |
| | 40 min. - 23 1/4 |
| | 45 min. - 23 7/8 |

ADDITIONAL SOIL TESTING
PERFORMED ON 12-10-21
BY J. EDWARDS & ASSOC., LLC
PERCOLATION RATE: 17/20MIN

TH-1
0-36" MISC FILL
36-70" RED BROWN SANDY LOAM WITH COBBLES
ROOTS TO 36"
NO WATER, NO LEDGE, NO MOTTLING

TH-2
0-18" MISC FILL
18-24" ORIGINAL TOPSOIL
24-54" RED BROWN SANDY LOAM WITH COBBLES
54-70" GRAY BROWN SAND & GRAVEL
ROOTS TO 28"
NO WATER, NO LEDGE, NO MOTTLING

SEPTIC RESERVE CALCULATIONS

RESTRICTIVE LAYER @ 79"
NO MLSS REQUIRED

USE: INDUSTRIAL
0.1 GPD PER S.F. FLOOR AREA
0.1 GPD x 28000 SF = 2800 GPD

PER RATE 1" IN 10 MIN. = 1.5 APPLICATION RATE
2800 GPD / 1.5 APPLICATION RATE = 1866.7 ELA

RESERVE SYSTEM
170 LF MANTIS 536-B = 1870 ELA

A. GENERAL STATEMENT

- This project consists of the expansion of parking areas at an existing industrial development.
1. Work on this project is expected to commence upon approval by the Town of Monroe. Final stabilization shall be completed as soon as possible after completion of work. In all cases disturbed areas shall be stabilized by the end of the growing season so that grass cover can be established. Construction shall be completed in accordance with the attached schedule.
2. The Storm Pollution control program for this site shall include the following as shown on the approved map:
- Installation of a filter fence as shown on the plan.
 - Installation of anti-tracking apron on the driveways and at entrance to the roads.
 - Installation of detention/sediment basins and traps
3. Prior to any construction on the site, a pre-construction meeting shall be held with the owner, contractor, design engineer, and the authorized town official to review the site and the required erosion/sedimentation and storm pollution control program.
4. The approved site plans, erosion control plan, engineering report and land use applications are considered part of this plan.

- B. SCHEDULING OF GRADING AND CONSTRUCTION ACTIVITIES**
- Prior to starting construction on the site, all erosion and sediment control measures shall be installed as directed by the design engineer, permittee and/or authorized town agent. Detailed plans have been provided. Detailed construction sequencing has been included on the sheet for each phase.
- Construction sequence:
A detailed construction sequence has been included on the Erosion Control Plan.

C. MEASURES TO BE USED DURING CONSTRUCTION

1. **SILT FENCE**
Silt fence consists of wooden post and filter fabric. Fences will be secured in place by wood posts set a maximum of five feet on-center. The filter fabric will be three feet in height. Fabric at the base of the fence will be buried at least six inches into the ground. Tines will be used to secure the fence on the uphill side to prevent overturning. The purpose of silt fences is to intercept and detain sediment contained in overland runoff from disturbed areas of limited extent. (Envirochoice by Mirafi Inc. is an acceptable alternative to the system described above.)
- Installation and Maintenance shall conform to the following:
Sediment will be removed from behind silt fences when sediment has accumulated to 50% of original height of the fence.
2. **ANTI-TRACKING APRON**
A ramp of crushed stone extending a minimum distance of 50 feet will be installed at the point of ingress and egress to the site. The purpose of the device is to minimize the potential of tracking mud from the site onto public right-of-way.
- Installation and Maintenance shall conform to the following:
Minimum length will be 50 feet.
Stone size will meet CT DOT standards for two inch crushed gravel.
Stone will be placed upon the full width of the entrance roads.
Thickness of stone will be four inches or greater.
All sediment spilled, dropped, washed, or tracked onto public right-of-way will be removed immediately.
3. **TEMPORARY WATER BREAKS**
This temporary device consists of a swale constructed across proposed roadways. The purpose of this device is to direct runoff away from the road surface and minimize sediment from entering the drainage system. This shortens the length of disturbed slope by intercepting runoff and diverting it away from the roadway catch basins.
- Installation and Maintenance shall conform to the following:
Swales will be placed across roads, which are to be constructed in fill:
Every 200 feet on slopes of 5-10%
Every 300 feet on slopes less than 5%
Contributory drainage areas, which are less than five acres.
Swales drain to hay bale check dams.
4. **HAY BALE CHECK DAMS**
Hay bale check dams of tightly bound, steel pin anchored, hay bales embedded four inches below grade in drainage swales adjacent to roadways or at the toe of an exposed slope. The purpose of a hay bale check dam is to reduce runoff velocity, and promote deposition and sediment from runoff. Hay bale check dams will be used where the runoff velocities will be less than three feet per second.
- Installation and Maintenance shall conform to the following:
Compacted backfill will be placed against the up slope side of the Hay bales to a height of 4" above the ground.
Check dams will be placed on slopes of 5-10%
Every 100 feet on slopes greater than 10%
Every 200 feet on slopes 5-10%
Every 300 feet on slopes less than 5%
Sediment shall be removed from hay bale check dams when sediment has accumulated to 50% of the original height.
5. **TEMPORARY SEDIMENT TRAPS**
Runoff collected in roadway interceptor swales or other swales will be directed to a sediment trap. The trap consists of a small excavation and/or a berm. The purpose of the trap is to collect runoff, promote settling of sediment, and de-concentrate and distribute clean runoff overland through natural vegetation before it enters existing watercourses and wetlands.
- Installation and Maintenance shall conform to the following:
Contributory drainage areas that are less than or equal to five acres.
Utilized as part of swales prior to discharge to natural slopes.
Traps will be placed such that runoff discharging from the trap will flow at least 30 feet overland through natural vegetation before entering watercourses or wetlands.
Traps will be designed before construction.
Trap sides shall be compacted during construction.
The trap outlet shall have crushed stone rip-rap hand placed for energy dissipation.
Traps will be cleaned when sediment has accumulated to 50% of design volume.
Remove sediment deposited upland and treat to reduce potential erosion.

6. **CATCH BASIN FILTERS**
Temporary catch basin filters will be utilized to prevent the deposition of sediment into the storm sewer system prior to the stabilization of exposed areas with vegetation and/or pavement. These filters will consist of tightly bound, pin-anchored hay bales embedded four inches below grade, surrounding each catch basin inlet.
- Installation and Maintenance shall conform to the following:
Placed around each catch basin inlet prior to paving or stabilization with vegetation.
Sediment shall be removed from the filters when sediment has accumulated to 50% of the filter's original height.
7. **TEMPORARY GRADE TO DRAINS**
This is a temporary raised berm of compacted soil, placed across a disturbed slope that intercepts runoff from disturbed areas and directs it to an appropriate outlet. This device will be used mostly on steep slopes above deep excavations.
- Installation and Maintenance shall conform to the following:
Temporary grade to drains may be placed on cut and fill slopes exceeding 10 feet in height.
Contributory drainage area should not be greater than one acre.
Runoff will be diverted overland by the berms to sediment traps, sedimentation basins, swales, or check dams.
On slopes over 5%, additional stabilization is required in the form of stone rip-rap eight inches vertically up the upslope side of the berm and seven feet upslope from the upslope toe of the berm.
Top width of berm will be two feet. Side slopes will be 2:1 or flatter.
All berms shall be machine compacted.

8. **RIP-RAP OUTFALL PROTECTION**
As a permanent erosion control measure to protect the soil surface from the erosive forces and to slow the velocity of concentrated runoff while enhancing the potential for infiltration, velocity reducers in the form of crushed stone rip-rap will be used at the outlets of all drainage structures that discharge to wetlands or other sensitive areas. The minimum thickness of the rip-rap layer will be 1.5 times the maximum stone diameter but not less than six inches. Sizing the stone and determining the dimensions of the rip-rap pads will be completed upon further design of the project using the methods described in the Connecticut Guidelines for Soil Erosion and Sediment Control.
9. Names, addresses and phone numbers of all persons and organizations that will be responsible for the installation and maintenance of the erosion and sedimentation devices will be provided prior to any earth moving or any other construction activity.
10. Construction area to be kept clean from all litter, debris and other building materials collected and disposed of offsite in approved manner. All fuels, oils and other controlled chemicals to be stored in approved areas. Such areas to be bermed as necessary to prevent spills from entering open watercourses. Fueling of equipment shall not be allowed in other than approved areas. In the event of a fuel or chemical spill, immediate measures to be taken to control damage and local and state officials are to be notified immediately.
11. Where construction activities have permanently ceased or have temporarily been suspended for more than seven days, or when final grades are reached in any portion of the site, stabilization practices shall be implemented within three days. Areas that remain disturbed but inactive for at least thirty days shall receive temporary seeding in accordance with the guidelines.

D. MAINTENANCE PROGRAM DURING CONSTRUCTION

1. The designated site monitor will inspect disturbed areas of the construction activity that have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site at least once every seven calendar days and within 24 hours of the end of a storm that is 1/4 inch or greater. Where sites have been temporarily or finally stabilized, such inspection shall be conducted at least once every month for three months.
2. Additional control measures will be installed and the plan revised as appropriate as soon as practicable after such inspection. Such modifications shall provide for timely implementation of any changes to the site within 24 hours and implementation of any changes to the plan with 3 calendar days following the inspection. The plan shall be revised and the site controls updated in accordance with sound engineering practices, and applicable state and local regulations.
3. All control measures shall be maintained in effective working condition throughout the construction period.
4. Control measures found to be in disrepair shall be repaired or replaced immediately.
5. Sediment removed from control structures will be disposed of in a neat manner and disposed of in areas designated by the authorized town official or design engineer.
6. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the Stormwater Pollution Control Plan, and actions taken shall be made and retained as part of the Plan for at least three years after the date of inspection. The permittee, or his authorized representative shall sign the report.
7. The Owner, or his designated agent is assigned the responsibility for implementing this erosion and storm pollution control plan. This responsibility includes site inspections, preparation of reports, the installation and maintenance of control measures, informing all parties engaged on the construction site of the requirements and objectives of the plan, notifying the Planning and Zoning Commission of any transfer of this responsibility, and for conveying a copy of the Erosion and Sediment Control Plan and the Implementation Schedule for Erosion and Sedimentation Control if the title to the land is transferred.

E. POST-CONSTRUCTION STORM MANAGEMENT

1. After completion of site disturbance and satisfactory stabilization, all permanent control structures including detention basins, storm water ditches, and catch basins to be cleaned of all sediment and debris. At time of transfer of ownership and/or responsibility for controls, the new owner or designated agent shall be advised of the sedimentation control maintenance requirements for the project.

MAINTENANCE PROGRAM

- Seasonal Site Inspection/Maintenance
- In the spring sweep sand deposits from the driveway areas and deposit at approved site. Inspect the water quality areas for excessive sediment buildup and remove as required.
 - In the fall, remove leaf debris from the site to avoid excessive loading of the water quality areas and rain gardens. Mow area, as required eliminating unwanted plant species.
 - All catchbasins to be inspected and cleaned yearly.
 - The infiltration systems to be inspected yearly. If there is significant sediment accumulation in the systems, the cleaning schedule for the catchbasins shall be increased to 2 times per year.

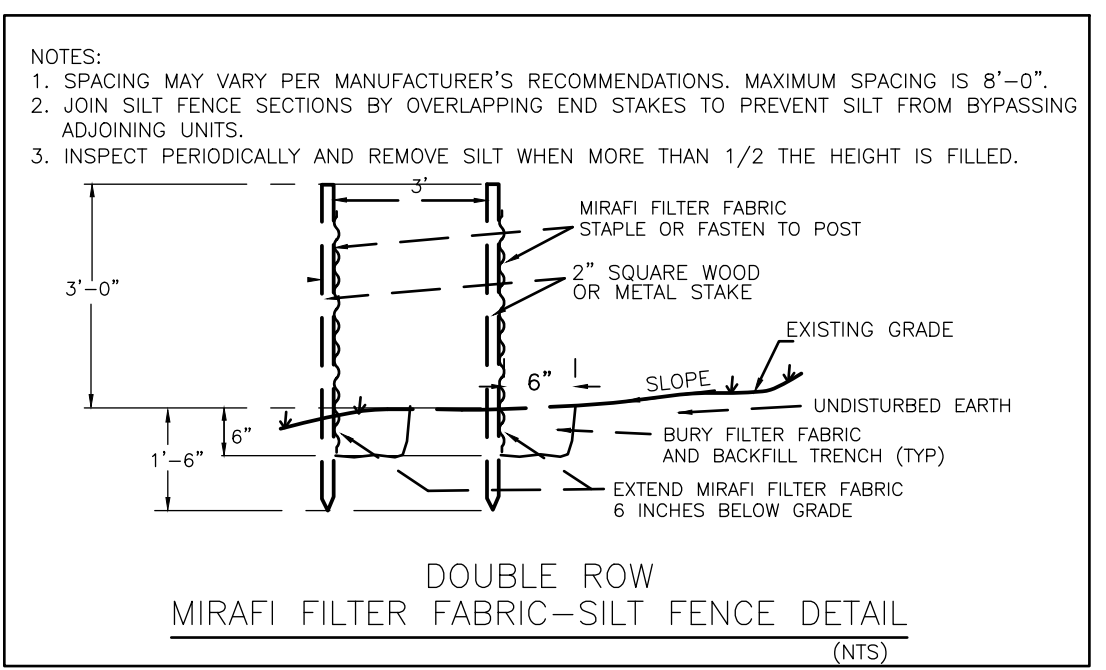
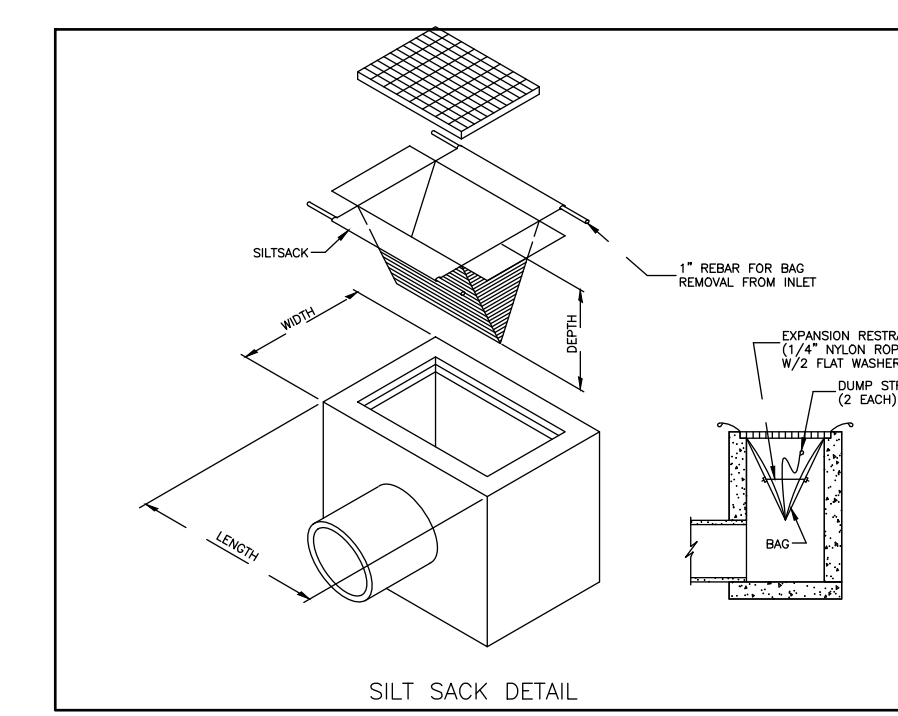
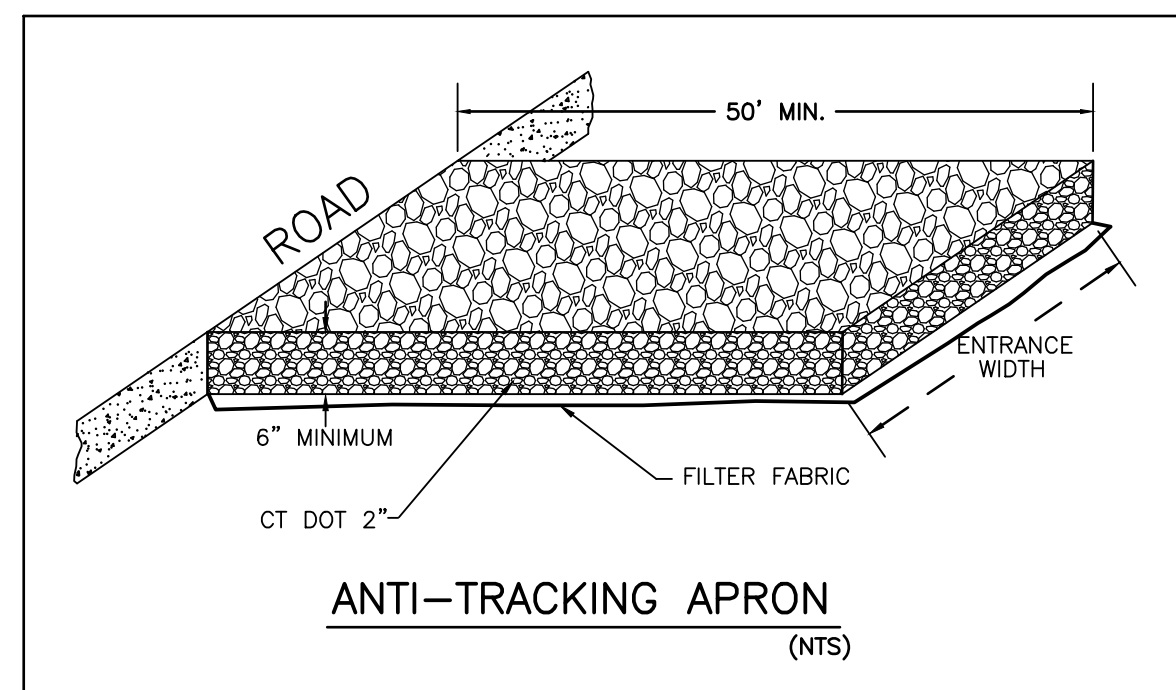
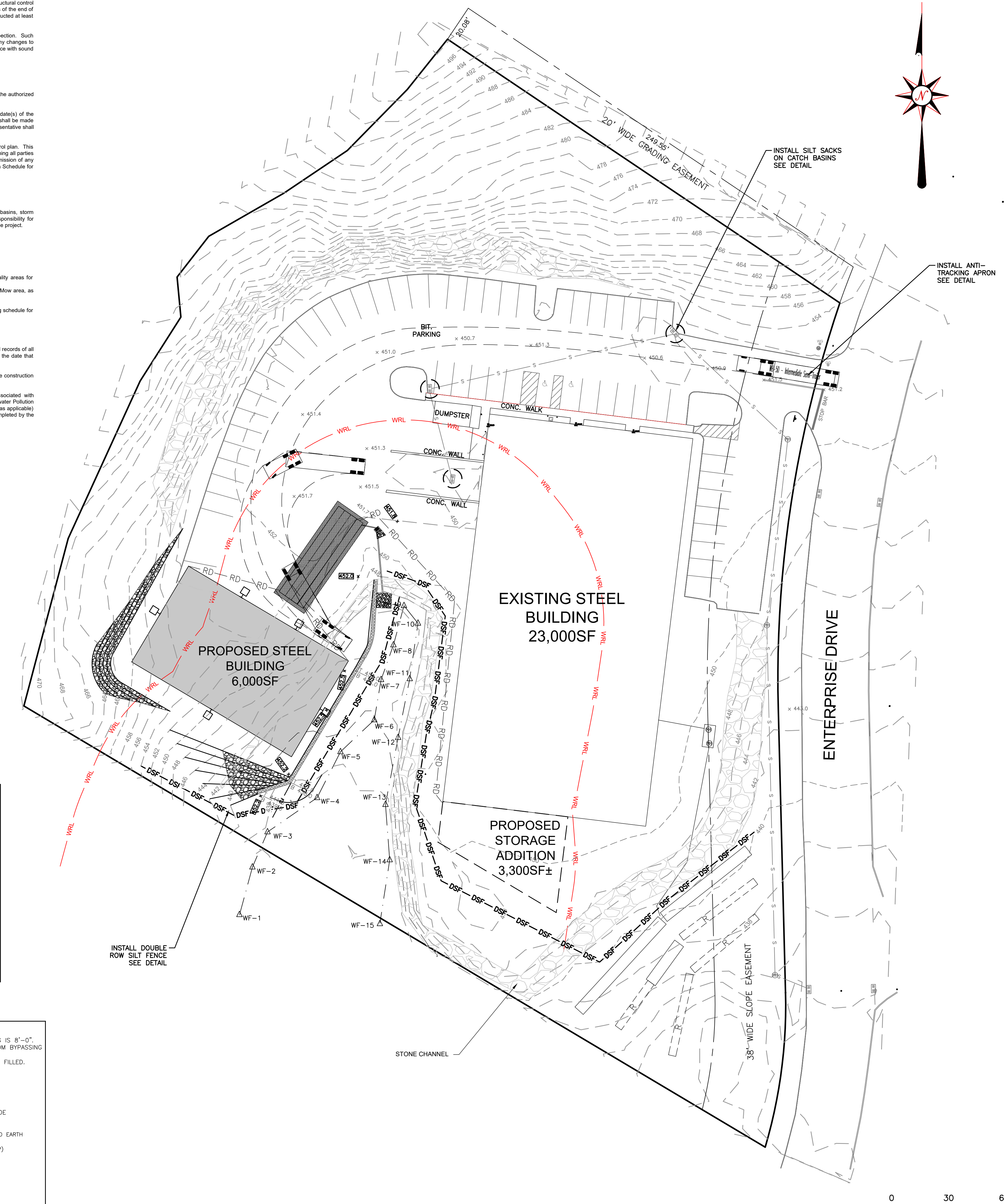
F. REPORTING AND RECORD KEEPING REQUIREMENTS

- The permittee shall retain copies of Stormwater Pollution Control Plans and all reports required by this general permit, and records of all data used to complete the registration to be authorized by this general permit, for a period of at least three years from the date that construction at the site is completed unless the commissioner specifies another time period in writing.
- The permittee shall retain an updated copy of the Stormwater Pollution Control Plan required by this general permit at the construction site from the date construction is initiated at the site until the date construction at the site is completed.
- Upon completion of construction, for sites authorized by the General Permit for the Discharge of Stormwater Associated with Commercial Activity or the General Permit for the Discharge of Stormwater Associated with Industrial Activity, the Stormwater Pollution Control Plan shall be kept as an appendix to the Stormwater Management Plan or Stormwater Pollution Prevention Plan (as applicable) for a period of at least three years from the date of completion of construction. A notice of termination form shall be completed by the permittee and forwarded to DEP upon completion of all site construction.

GENERAL EROSION CONTROL NOTES:

- A MINIMUM OF 4" OF TOPSOIL MUST BE PLACED ON ALL DISTURBED AREAS.
- ALL WASTE MATERIAL INCLUDING WASTEWATER, SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL LAW. LITTER SHALL BE PICKED UP AT THE END OF EACH WORKING DAY.
- EAS CONTROLS SHALL BE INSPECTED AT LEAST ONCE PER WEEK AND WITHIN 24 HOURS AFTER A RAINFALL EVENT OF GREATER THAN 1 INCH.
- ACCUMULATED SEDIMENT SHALL BE REMOVED AS REQUIRED TO KEEP SILT FENCES FUNCTIONAL. IN ALL CASES, DEPOSITS SHALL BE REMOVED WHEN ACCUMULATED SEDIMENT HAS REACHED ONE-HALF ABOVE THE GROUND HEIGHT OF THE FENCE.
- ALL SOIL STABILIZATION SHALL BE COMPLETED WITHIN FIVE (5) DAYS OF CLEARING OR INACTIVITY IN CONSTRUCTION.
- THE DEVELOPER SHALL PRACTICE EFFECTIVE DUST CONTROL PER SOIL CONSERVATION HANDBOOK DURING CONSTRUCTION AND UNTIL ALL AREAS ARE STABILIZED OR SURFACE TREATED. THE DEVELOPER SHALL BE RESPONSIBLE FOR CLEANING OF NEARBY STREETS, AS ORDERED BY THE TOWN, OF ANY DEBRIS FROM THESE CONSTRUCTION ACTIVITIES.
- IF SEEDING OR OTHER VEGETATIVE EROSION CONTROL METHOD IS USED, IT SHALL BECOME ESTABLISHED WITHIN TWO WEEKS OR THE TOWN MAY REQUIRE THE SITE TO BE RESEEDED OR A NONVEGETATIVE OPTION TO BE EMPLOYED.
- SOIL STOCKPILES MUST BE STABILIZED AS PER THE LATEST EDITION OF THE CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL.
- ALL DISTURBED AREAS TO BE SEEDDED WITH NEW ENGLAND CONSERVATION/WILDLIFE MIX (SEE CONSTRUCTION DETAIL SHEET) UNLESS OTHERWISE SPECIFIED ON PLANS.

EROSION CONTROL BLANKETS SHALL BE USED TO STABILIZE ALL SLOPE AREAS GREATER THAN 3 TO 1



J. EDWARDS & ASSOCIATES LLC
ENGINEERING • SURVEYING • SITE PLANNING

227 Stephy Road Easton, CT 06612
Phone: 203.268.4205 Fax: 203.268.5604
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BML TOOL, INC.
67 ENTERPRISE DRIVE
MONROE, CONNECTICUT

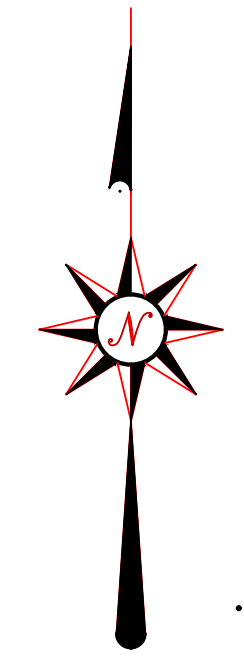
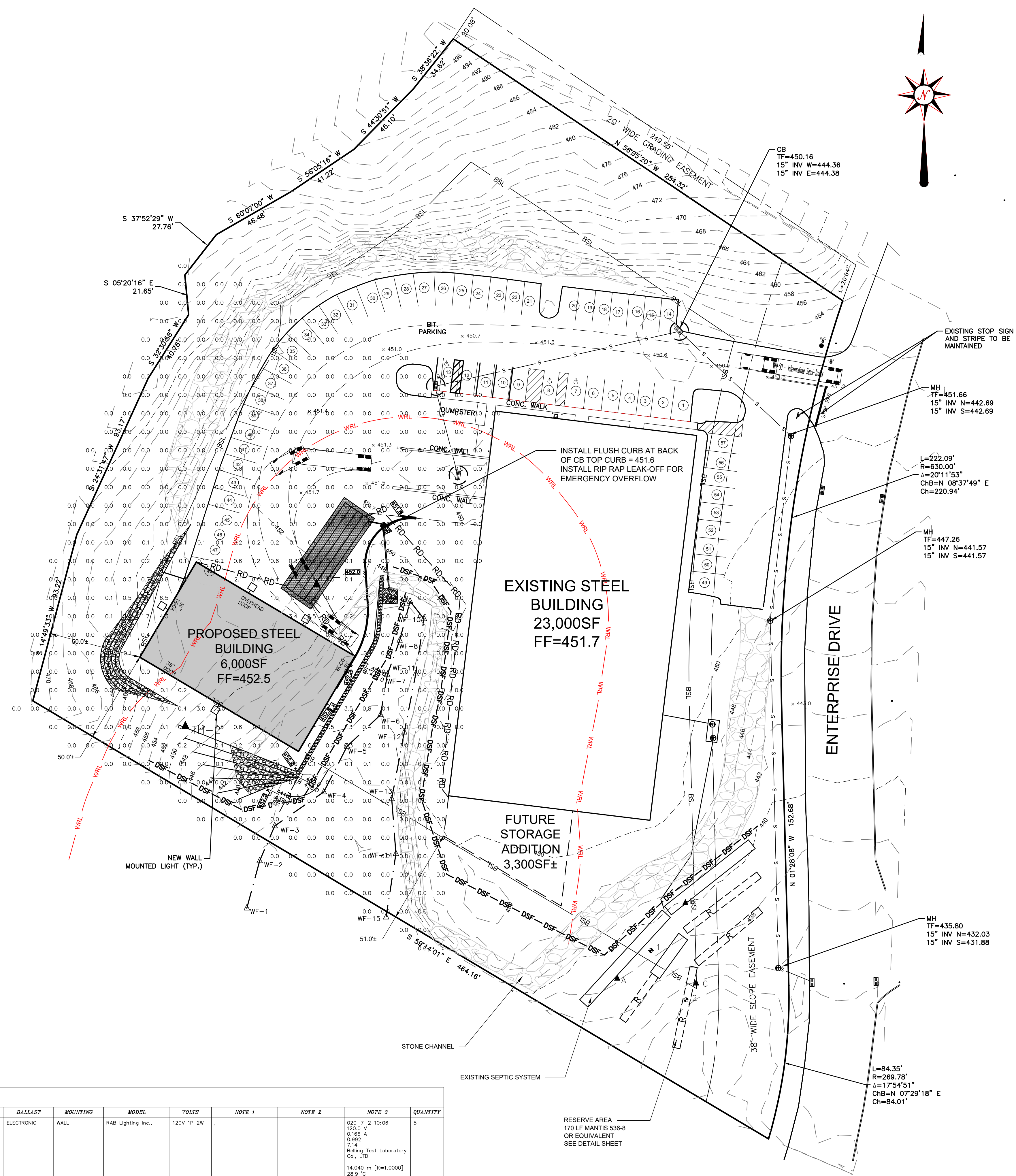
REVISIONS

| # | DATE | DESCRIPTION |
|---|----------|---------------|
| 1 | 02.04.22 | ENG.&IWC COM. |
| 2 | 02.28.22 | ENG.COM. |
| 3 | 05.01.22 | PZC COM. |

DATE: 12-13-21
PROJECT #: 2873
DRAWING FILE: SITE
DRAWN BY: LE/JE/E
SCALE: 1"=30'

EROSION CONTROL PLAN

SHEET NUMBER
EC-1



BRISK17FA20

RAB

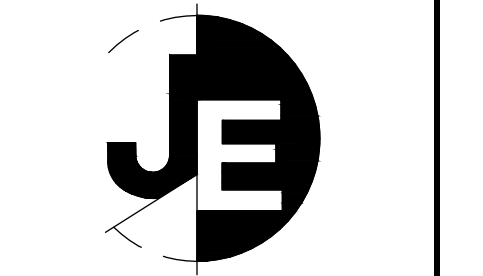


Color: Bronze Weight: 2.3 lbs

| | | | |
|--------------------|------------------|----------------|------------------------|
| Project: | Type: | | |
| Prepared By: | Date: | | |
| Driver Info | | | |
| Type | Constant Current | Watts | 20W |
| 120V | 0.08A | Color | 3000K/4000K/5000K |
| 208V | 0.10A | Temp | |
| 240V | 0.08A | Color Accuracy | 80 CRI |
| 277V | 0.07A | L2D | 100,000 Hours |
| Input Watts | 19.3/19.9/19.7W | Lumens | 2600/2921/2703 |
| | | Efficacy | 134.7/146.9/137.2 lm/W |

| | | |
|---|---|--|
| Technical Specifications | LED Characteristics | Construction |
| Field Adjustability | LEDs: | IP Rating: |
| Color temperature selectable by 3000K, 4000K and 5000K | Long-life, high-efficiency, surface-mount LEDs | Ingress protection rating of IP65 for dust and water |
| UL Listed: | Color Uniformity: | Cold Weather Starting: |
| Suitable for wet locations | RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017. | The minimum starting temperature is -40°C (-40°F) |
| IESNA LM-79 & LM-80 Testing: | Electrical | Ambient Temperature: |
| RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80. | Driver: | Suitable for use in up to 45°C (113°F) |
| DLC Listed: | Constant Current, Class 2, 120-277V, 50/60 Hz, 120W; 0.20A, 200V-0.10A, 240V-0.08A, 277V-0.07A | Housing: |
| This product is tested by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities. Designed to meet DLC S.1 requirements. | Dimming Driver: | Precision die-cast aluminum |
| DLC Product Code: PL111M5H9HX | Driver includes dimming control wiring for 0-10V DC dimming systems. Requires separate 0-10V DC dimming circuit. Dimm down to 10%. | |
| Performance: | Photocell: | |
| Lifespan: 100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations | 120-277V Dimmable, integrated button photocell included. Photocell is compatible with 120V-277V. | |

| LUMINAIRE SCHEDULE | | | | | | | | | | | |
|--------------------|--------|------|----------------|------------|----------|-------------------|------------|--------|--------|---|----------|
| CALLOUT | SYMBOL | LAMP | DESCRIPTION | BALLAST | MOUNTING | MODEL | VOLTS | NOTE 1 | NOTE 2 | NOTE 3 | QUANTITY |
| w1 | HD | (1) | BRISK17FA20_SK | ELECTRONIC | WALL | RAB Lighting Inc. | 120V 1P 2W | | | 020-7-2 10:06 120.0 V 0.166 A 0.992 7.14 Bellini Test Laboratory Co., L3D 14.040 m [K=1.0000] 28.9 °C | 5 |



J. EDWARDS & ASSOCIATES LLC
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227 Stepney Road Easton, CT 06612
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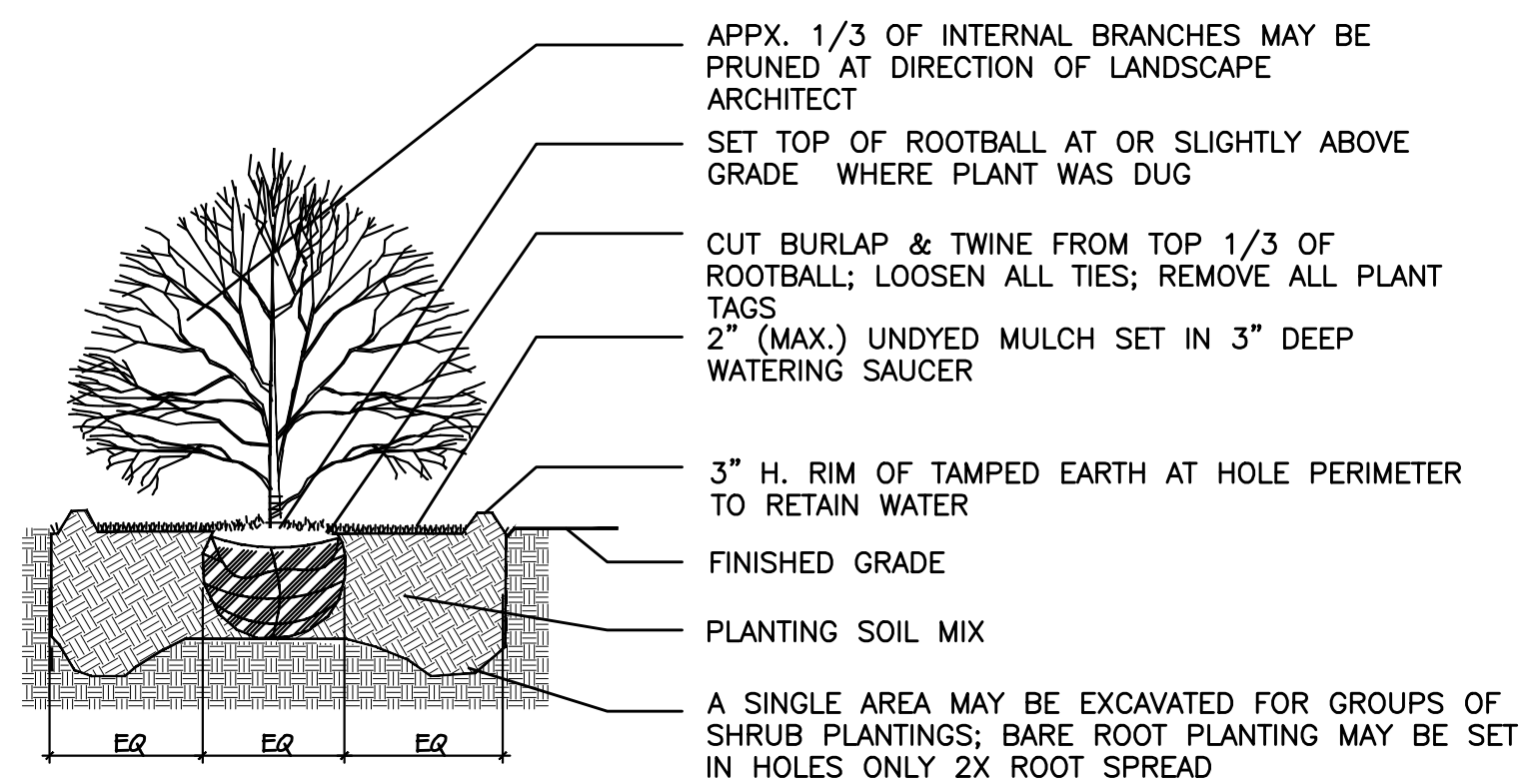
BML TOOL, INC.
67 ENTERPRISE DRIVE
MONROE, CONNECTICUT

| REVISIONS | | |
|-----------|----------|--------------|
| # | DATE | DESCRIPTION |
| 1 | 02.04.22 | ENG.&WC COM. |
| 2 | 02.28.22 | ENG.COM. |
| 3 | 05.01.22 | PZC.COM. |

DATE: 12-13-21
PROJECT #: 2873
DRAWING FILE: SITE
DRAWN BY: LE/JE/E
SCALE: 1"=30'

TITLE
LIGHTING PLAN

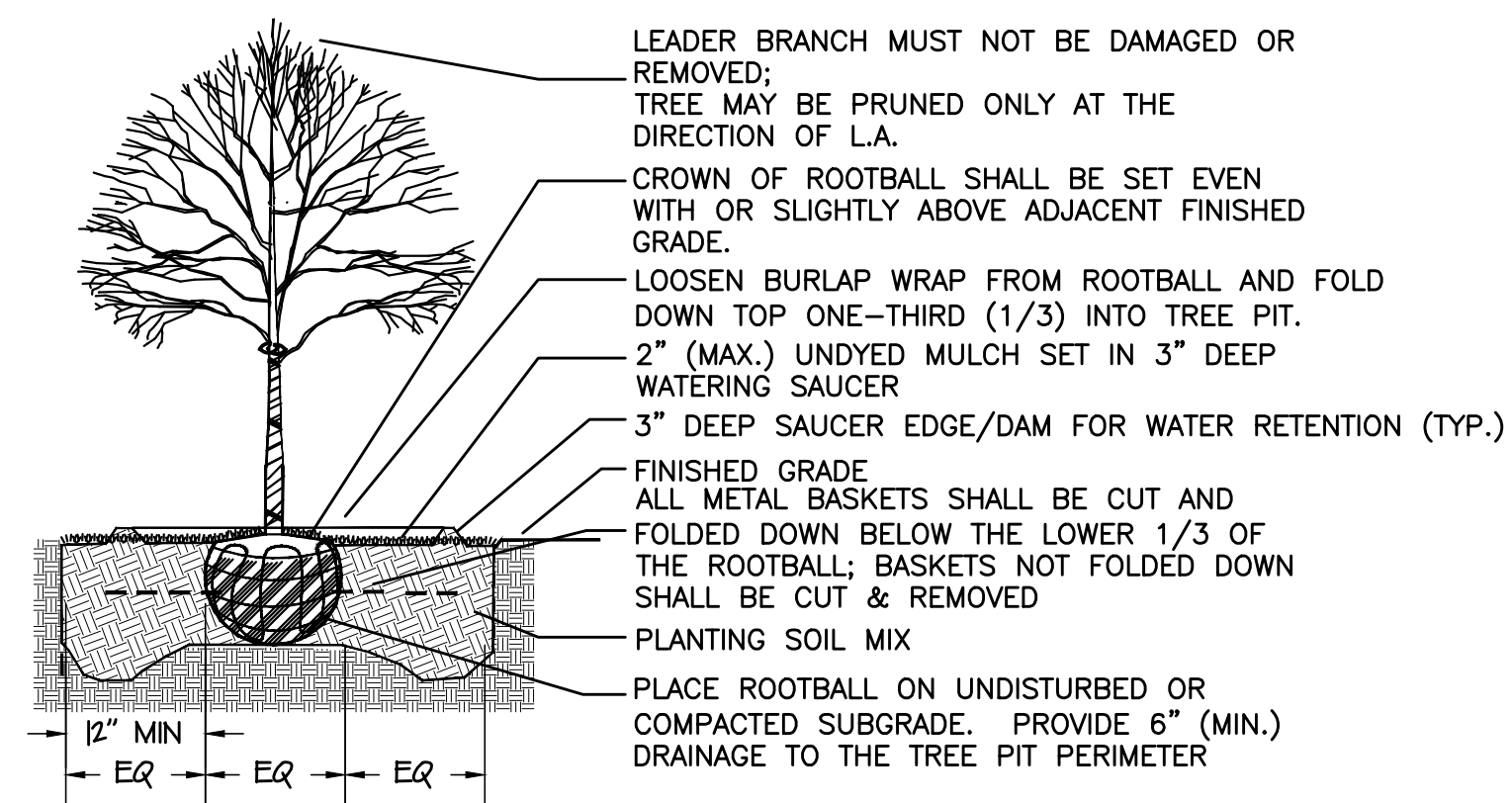
SHEET NUMBER
LP



NOTE: FOR ALL CONTAINER GROWN PLANTS, REMOVE FROM CONTAINER JUST PRIOR TO PLANTING AND MAKE VERTICAL INCISIONS ALONG THE SURFACE OF THE ROOTBALL WITH A SHARP INSTRUMENT. CUT THROUGH CIRCULAR ROOTS AND GENTLY COMB OUT ROOTS.

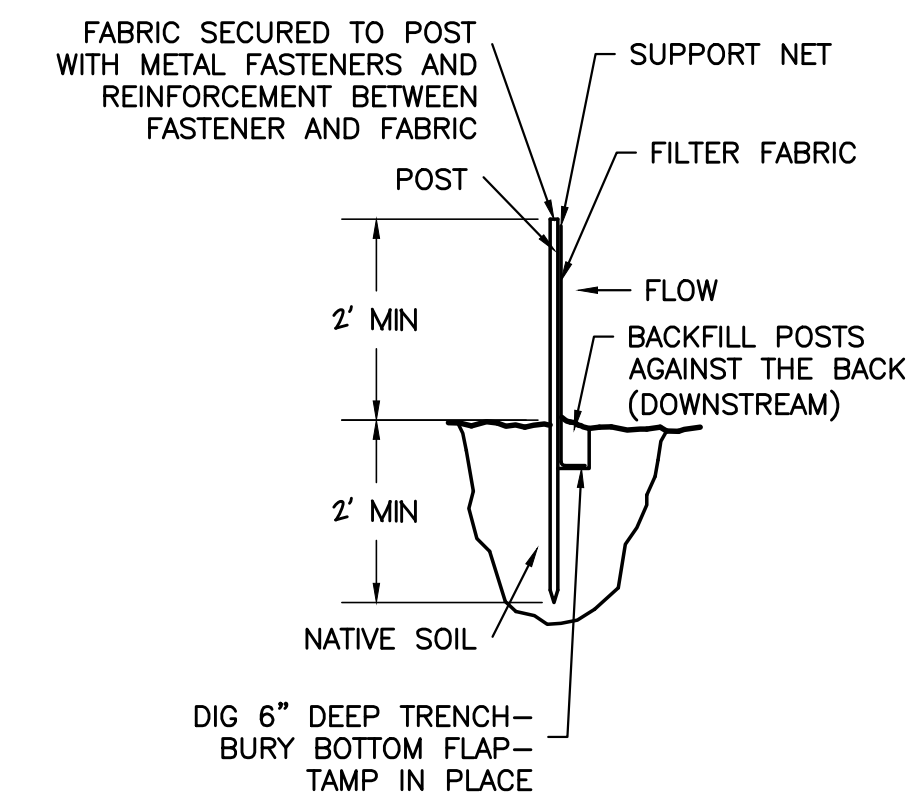
1 SHRUB PLANTING DETAIL

NOT TO SCALE



2 DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE



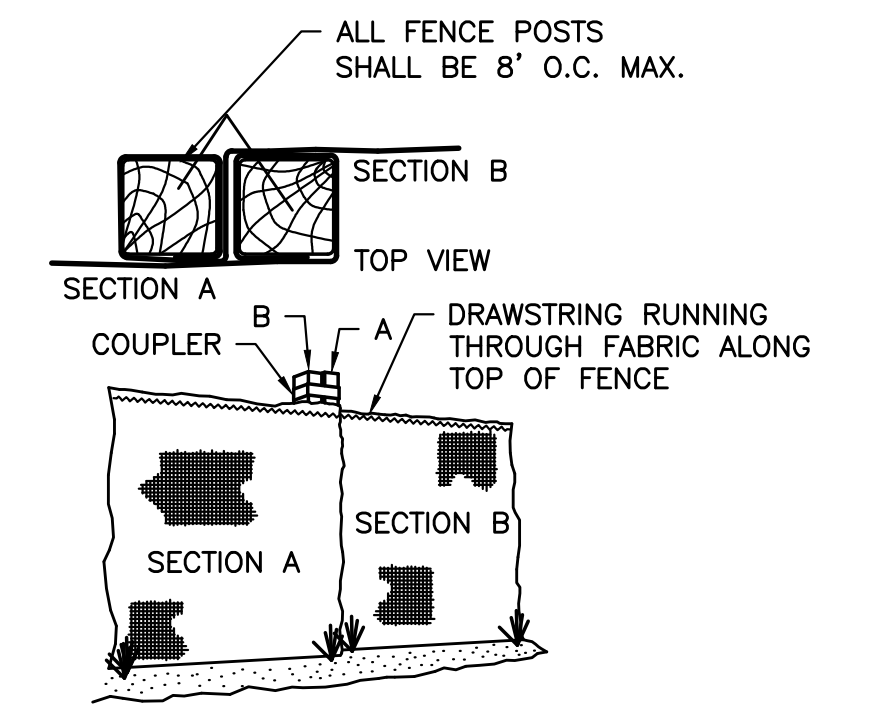
TOE-IN METHOD

INSTALLATION NOTES:

1. ALL INSTALLATION AS PER ASTM STANDARDS
2. EXCAVATE A 6 INCH TRENCH ALONG THE LOWER PERIMETER OF THE SITE
3. UNROLL A SECTION AT A TIME AND POSITION WALL OF THE TRENCH (NET SIDE AWAY FROM DIRECTION OF FLOW)
4. DRIVE THE POST INTO THE GROUND UNTIL THE NETTING IS APPROXIMATELY 2 INCHES FROM THE TRENCH BOTTOM
5. LAY THE TOE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH, BACKFILL THE TRENCH AND TAMP THE SOIL. STEEPER SLOPES REQUIRE AN INTERCEPT TRENCH
6. JOIN SECTIONS AS SHOWN ABOVE

3 FABRIC SILTATION FENCE DETAIL

NOT TO SCALE




JOINING SECTIONS OF FENCING

| | |
|-----------|------|
| Revisions | Date |
| | |

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Tracy Chalifoux LLC
 Landscape Architect
 7 King Street, Danbury, CT 06811
 Office: 845-364-1360
 E-mail: tchalifoux@gmail.com



LANDSCAPE PLAN
 BML TOOL

Location: 67 ENTERPRISE DRIVE
MONROE, CONNECTICUT

Graphic Scale and North Arrow

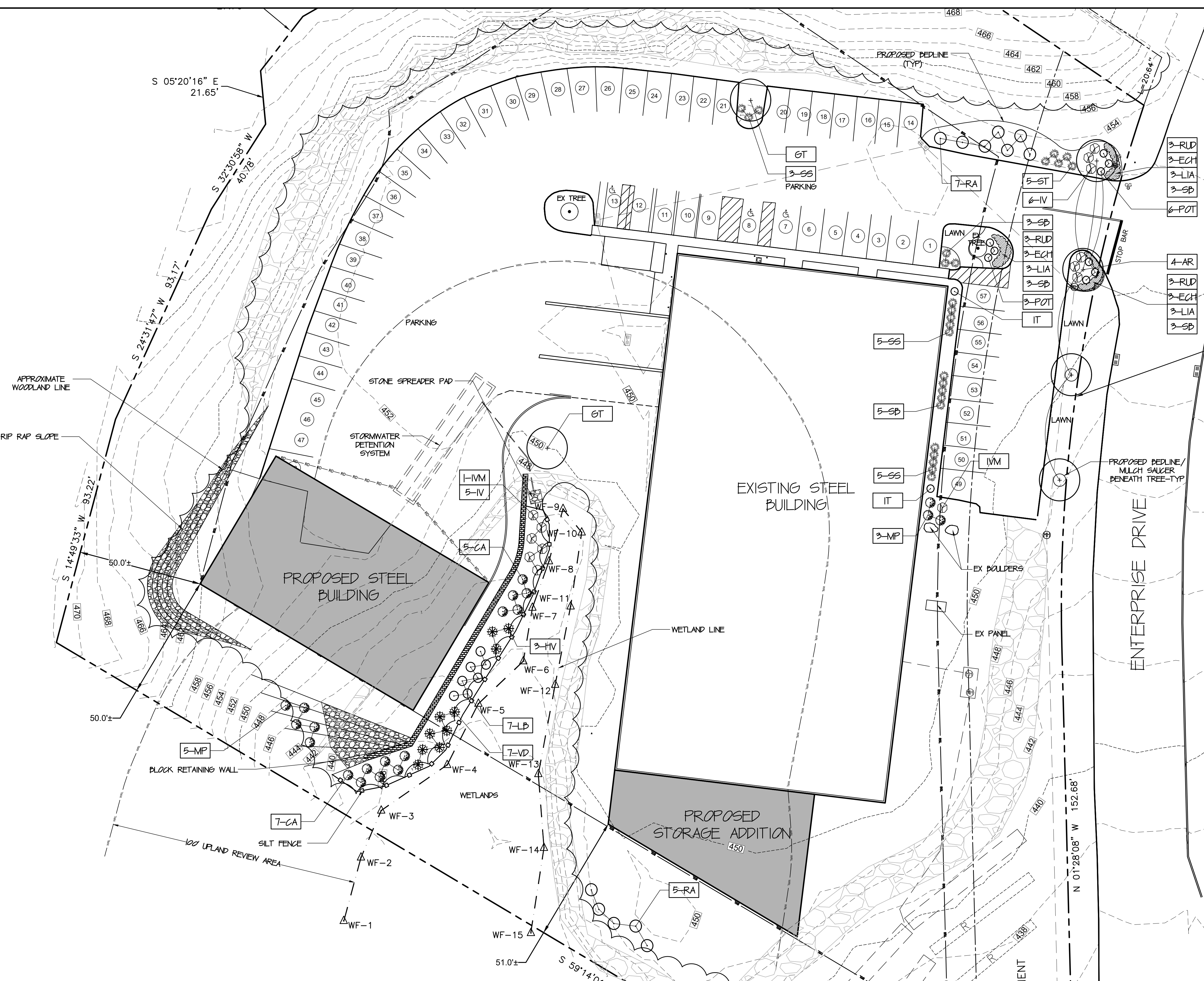
Date: December 20, 2021

Scale: AS SHOWN Checked: SD Drawn: TLC

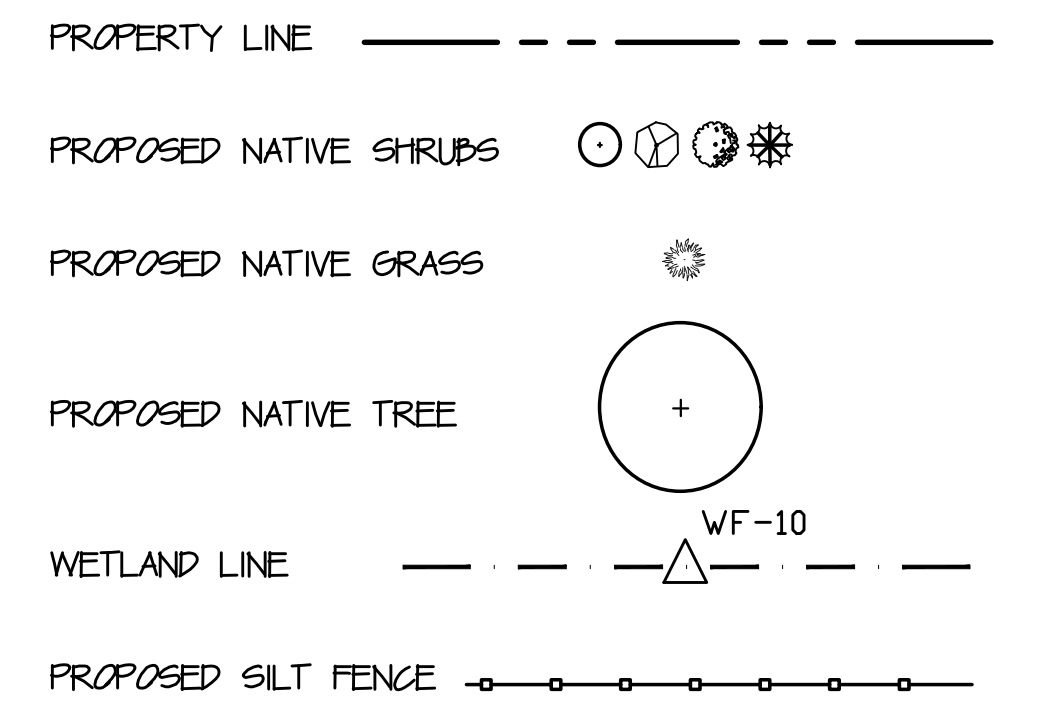
Drawing Title: **PLANTING & SITE DETAILS**

Drawing No. **L-2**

SHEET 2 OF 2



WETLAND PLANTING LEGEND



PLANTING NOTES:

- CONTACT CALL BEFORE YOU DIG AT 800-922-4455 TO HAVE UNDERGROUND UTILITY LINES MARKED PRIOR TO START OF ANY EXCAVATION WORK.
- ANY INVASIVE VEGETATION WITHIN THE WORK AREA TO BE REMOVED IS TO BE FLAGGED BY LANDSCAPE ARCHITECT, REMOVED BY HAND AND DISPOSED OF IN AN OFF-SITE LOCATION.
- EXACT LOCATION OF PLANTINGS, SPECIES TYPES AND QUANTITIES MAY VARY FROM THIS PLAN BASED ON SITE PLAN REVISIONS AND/OR ACTUAL FIELD CONDITIONS.
- PLANT SPECIES SUBSTITUTIONS MAY BE MADE WITH THE APPROVAL OF THE PROJECT LANDSCAPE ARCHITECT PRIOR TO PLANTING. SUBSTITUTED PLANTS SHALL BE AT AN EQUAL OR GREATER SIZE AS NOTED USING A SIMILAR TYPE PLANT.
- ALL PLANTING METHODS SHALL BE IN ACCORDANCE WITH THE 'AMERICAN STANDARDS FOR NURSERY STOCK' LATEST EDITION, AS PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
- IN THE EVENT OF A DISCREPANCY BETWEEN THE QUANTITIES OF PLANTS IN THE 'PLANT LIST' AND THE ACTUAL QUANTITIES SHOWN ON THE PLAN THE PLAN SHALL GOVERN.
- ALL PLANTING WORK SHALL BE PERFORMED EITHER BY HAND OR BY RUBBER TRACKED EQUIPMENT.
- ANY PLANTINGS SUSCEPTIBLE TO DEER BROWSING SHALL BE SPRAYED WITH ORGANIC DEER REPELLENT.
- PLANTINGS SHALL BE HAND WATERED OR WATERED WITH A TEMPORARY IRRIGATION SYSTEM UNTIL ESTABLISHMENT.
- BASE MAP INFORMATION WAS TAKEN FROM 'SITE DEVELOPMENT PLAN' PREPARED BY J. EDWARDS & ASSOCIATES, LLC ENGINEERING AND SURVEYING, DATED DECEMBER 1, 2021.

WORK SEQUENCE:

- INSTALL SILT FENCE AS SHOWN ON PLAN
- INSTALL NATIVE TREES AND SHRUBS
- PROVIDE 2" OF MULCH IMMEDIATELY BENEATH ALL NEW TREES AND SHRUBS
- FINE RAKE, SEED AND MOW MULCH TO RESTORE ALL DISTURBED LAWN AREAS
- REMOVE EROSION CONTROLS AFTER SITE IS STABLE

UPLAND PLANT LIST-BML Tool

| * QUANTITY | SYMBOL | BOTANICAL NAME | COMMON NAME | SIZE | SPREAD | SPACING | NOTES |
|-------------------|--------|--|--------------------------------|---------------|--------|----------|-------------------------|
| TREES | | | | | | | |
| 4 | AR | Acer rubrum 'Red Sunset' | Red Sunset Maple | 3"-3 1/2" DBH | | 40' O.C. | B&B, Specimen, Matching |
| 1 | GT | Gleditsia triacanthos var. inermis 'Shademaster' | Shademaster Honeylocust | 3"-3 1/2" DBH | | as shown | B&B, Specimen, Matching |
| SHRUBS | | | | | | | |
| 1 | IVM | Ilex verticillata 'Southern Gentleman' | Southern Gentleman Winterberry | 2'-3' ht. | 6' | 3' O.C. | Full, Heavy, Container |
| 6 | IV | Ilex verticillata 'Winter Red' | Winter Red Winterberry | 2'-3' ht. | 6' | 3' O.C. | Full, Heavy, Container |
| 2 | IT | Itea virginica 'Henry's Garnet' | Virginia Sweetpire | 2'-3' ht. | 3' | 3' O.C. | Full, Heavy, Container |
| 3 | MP | Myrica pensylvanica | Northern Bayberry | 2'-3' ht. | 6' | 3' O.C. | Full, Heavy, Container |
| 9 | POT | Potentilla fruticosa 'Goldfinger' | Bush Cinquefoil | 2'-3' ht. | 3' | 3' O.C. | Full, Heavy, Container |
| 7 | RA | Rhus aromatica 'Gro-Low' | Gro-Low Fragrant Sumac | 2'-3' ht. | 6' | 3' O.C. | Full, Heavy, Container |
| PERENNIALS | | | | | | | |
| 9 | ECH | Echinacea 'PowWow Wildberry' | PowWow Wildberry Coneflower | 1 Gallon | | 18" O.C. | Full, Heavy, Container |
| 9 | LS | Liatris spicata | Blazing Star | 1 Gallon | | 18" O.C. | Full, Heavy, Container |
| 9 | RUD | Rudbeckia fulgida 'Goldsturm' | Black-eyed Susan | 1 Gallon | | 18" O.C. | Full, Heavy, Container |
| 5 | ST | Sporobolus heterolepis 'Tara' | Prairie Dropseed | 1 Gallon | | 18" O.C. | Full, Heavy, Container |
| 17 | SB | Schizachyrium scoparium 'The Blues' | Little Bluestem | 1 Gallon | | 18" O.C. | Full, Heavy, Container |
| 13 | SS | Schizachyrium scoparium 'Smoke Signal' | Little Bluestem | 1 Gallon | | 18" O.C. | Full, Heavy, Container |

Note: Provide beneath trees and shrubs 2" of shredded bark mulch.

WETLAND BUFFER PLANT LIST-BML Tool

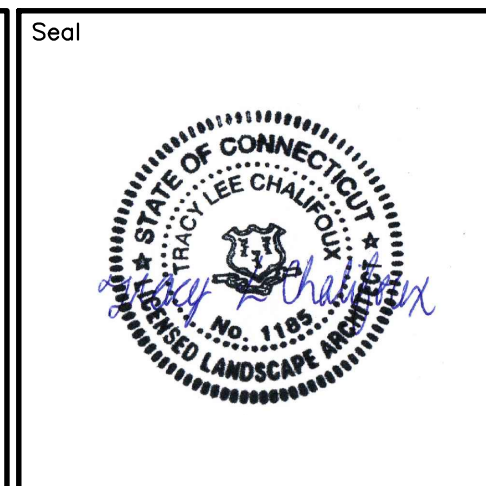
| QUANTITY | SYMBOL | BOTANICAL NAME | COMMON NAME | SIZE | SPREAD | SPACING | NOTES |
|---------------|--------|--|--------------------------------|---------------|--------|----------|-------------------------|
| 1 | GT | Gleditsia triacanthos var. inermis 'Shademaster' | Shademaster Honeylocust | 3"-3 1/2" DBH | | as shown | B&B, Specimen, Matching |
| SHRUBS | | | | | | | |
| 12 | CA | Clethra alnifolia | Sweet Pepperbush | 3"-3 1/2" ht. | 6' | 6' O.C. | Full, Heavy, Container |
| 3 | HV | Hamamelis virginiana | Witchhazel | 3"-3 1/2" ht. | 6' | 6' O.C. | Full, Heavy, Container |
| 1 | IVM | Ilex verticillata 'Southern Gentleman' | Southern Gentleman Winterberry | 3"-3 1/2" ht. | 6' | 6' O.C. | Full, Heavy, Container |
| 5 | IV | Ilex verticillata 'Winter Red' | Winter Red Winterberry Holly | 3"-3 1/2" ht. | 6' | 6' O.C. | Full, Heavy, Container |
| 7 | LB | Lindera benzoin | Spicebush | 3"-3 1/2" ht. | 6' | 6' O.C. | Full, Heavy, Container |
| 5 | MP | Myrica pensylvanica | Northern Bayberry | 3"-3 1/2" ht. | 6' | 6' O.C. | Full, Heavy, Container |
| 5 | RA | Rhus aromatica 'Gro-Low' | Gro-Low Fragrant Sumac | 2'-3' ht. | 3' | 3' O.C. | Full, Heavy, Container |
| 7 | VD | Viburnum dentatum | Arrowwood Viburnum | 3"-3 1/2" ht. | 6' | 8' O.C. | Full, Heavy, Container |

Note: Provide beneath trees and shrubs 2" of non-dyed bark mulch.

| Revisions | Date |
|-----------|------|
| | |

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Tracy Chalifoux LLC
Landscape Architect
7 King Street, Danbury, CT 06811
Office: 845-364-1360
E-mail: tchalifoux@gmail.com



Project Title
LANDSCAPE PLAN
BML TOOL

Location
67 ENTERPRISE DRIVE
MONROE, CONNECTICUT

Graphic Scale and North Arrow

Date
December 20, 2021

Scale
1"=20'-0"

Checked
SD

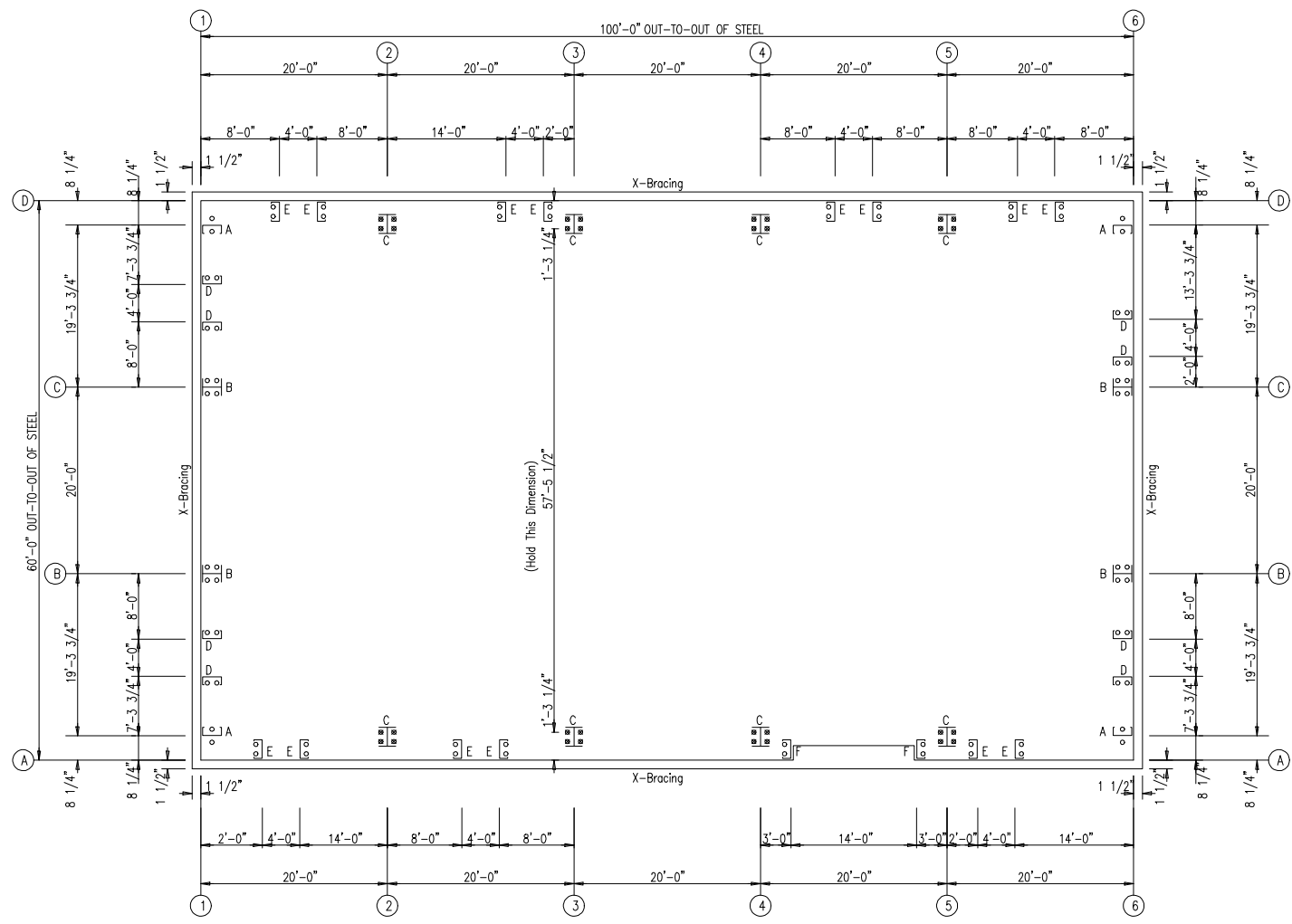
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TLC

Drawing Title
LANDSCAPE & WETLAND MITIGATION PLAN

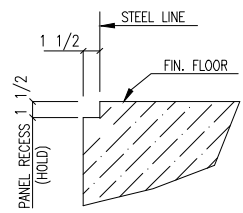
Drawing No.
L-1

SHEET 1 OF 2

○ Dia= 5/8"
 ⊗ Dia= 3/4"



ANCHOR BOLT PLAN



CONCRETE NOTCH DETAIL

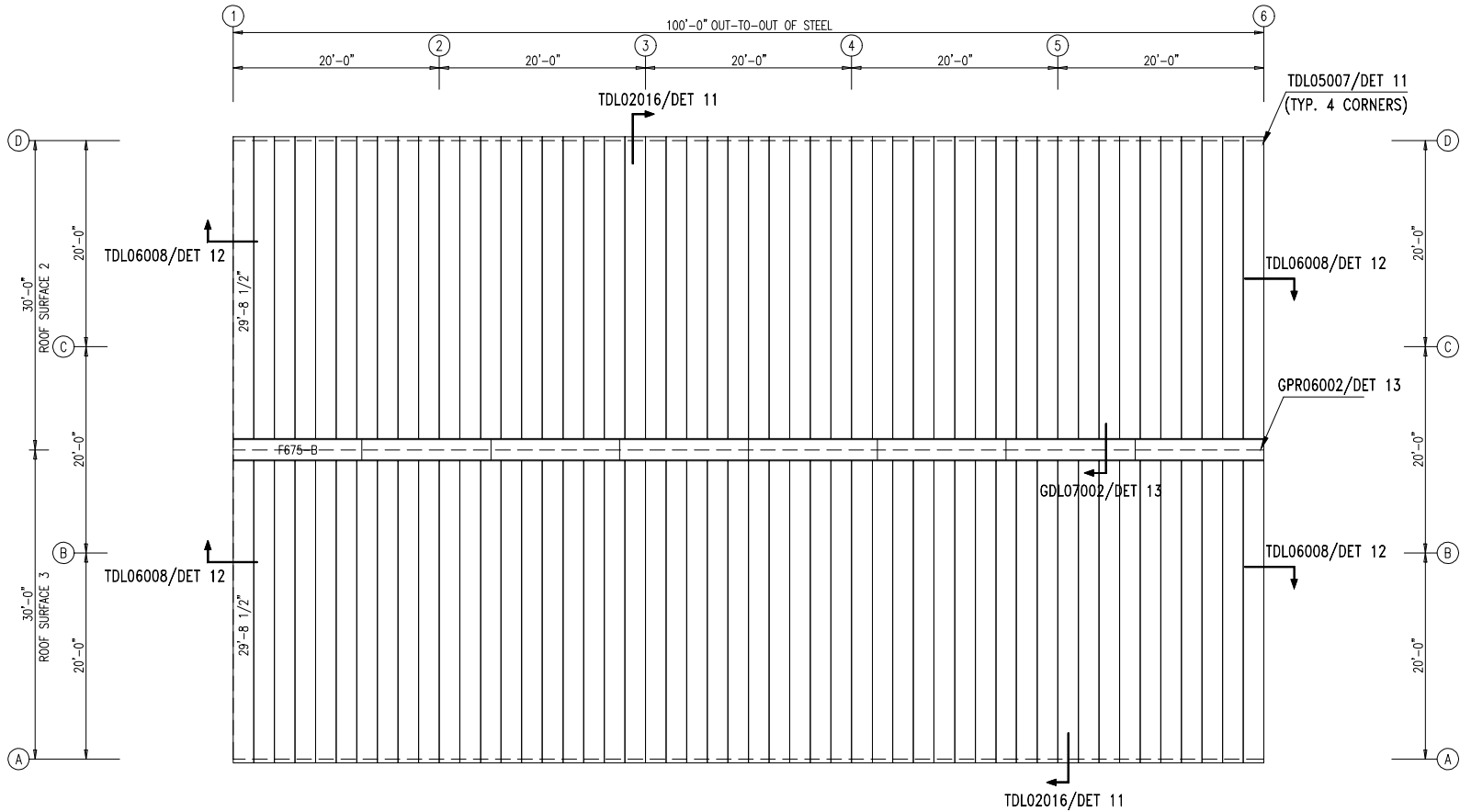
| ISSUE | DATE | DESCRIPTION | BY | CK'D | DSN |
|-------|---------|--------------------------|----|------|-----|
| 0 | 2/28/22 | FOR ERECTOR INSTALLATION | KD | HPD | EV |
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TORO STEEL BUILDINGS
 1405 DENISON ST
 MARKHAM, ON L3R-5V2

PROJECT: VINCENT BATTAGLIA
 CUSTOMER: VINCENT BATTAGLIA OWNER: VINCENT BATTAGLIA
 LOCATION: MONROE, CT 06468

| CAD | DATE | SCALE | PHASE | BUILDING ID | JOB NUMBER | SHEET NUMBER | ISSUE |
|-----|---------|--------|-------|-------------|------------|--------------|-------|
| | 2/28/22 | N.T.S. | 1 | A | 18-B-46371 | F1 | 0 |





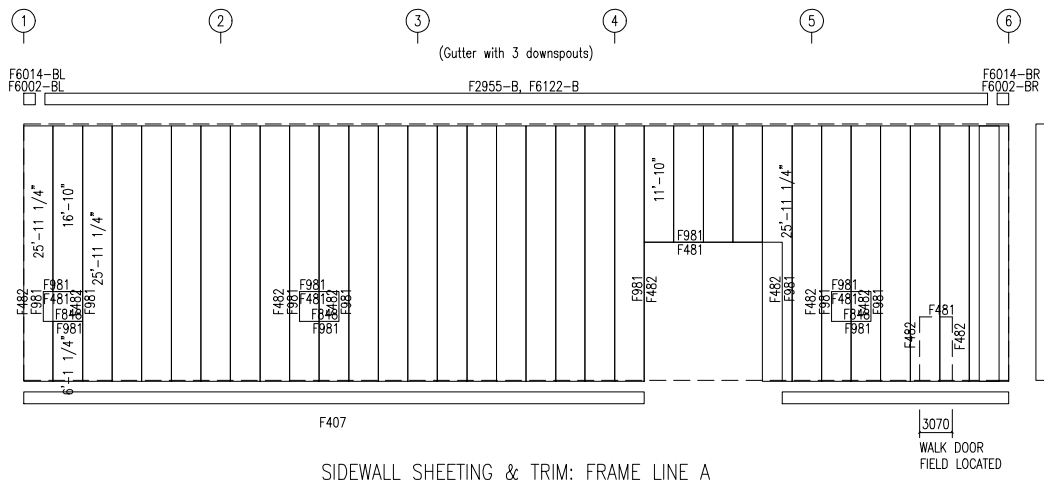
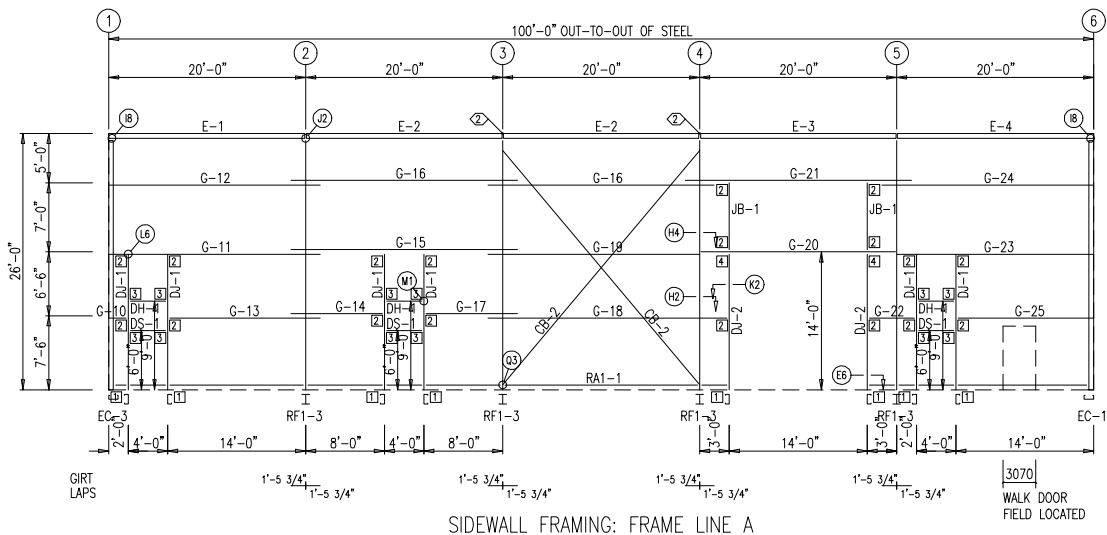
ROOF SHEETING PLAN
 PANELS: 24 Gauge DOUBLE-LOK - Galvalume

- GENERAL NOTES:
1. INSTALL ALL PURLIN AND FLANGE BRACES (FB) AS SHOWN.
 2. ROOF PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
 3. STRUT PURLINS, IF PROVIDED, MUST BE INSTALLED AND FASTENED TO ROOF SHEETING PER "PBR" PANEL ROOF DETAIL.
 4. DO NOT ADD ANY ADDITIONAL ROOF OPENINGS WITHOUT BUILDING MANUFACTURER APPROVAL OR PROFESSIONAL ENGINEER APPROVAL.
 5. DO NOT STACK SHEET BUNDLES ON ROOF. ONLY RAISE INDIVIDUAL SHEETS AS NEEDED.
 6. AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

| ISSUE | DATE | DESCRIPTION | BY | CK'D | DSN |
|-------|---------|-------------------------|----|------|-----|
| A | 2/28/22 | FOR CONSTRUCTION PERMIT | KD | HPD | EV |
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|---|---------|--------|-------|--------------------------|------------|--------------|-------|
| TORO STEEL BUILDINGS 1405 DENISON ST MARKHAM, ON L3R-5V2 | | | | | | | |
| PROJECT: VINCENT BATTAGLIA | | | | OWNER: VINCENT BATTAGLIA | | | |
| CUSTOMER: VINCENT BATTAGLIA | | | | | | | |
| LOCATION: MONROE, CT 06468 | | | | | | | |
| CAD | DATE | SCALE | PHASE | BUILDING ID | JOB NUMBER | SHEET NUMBER | ISSUE |
| | 2/28/22 | N.T.S. | 1 | A | 18-B-46371 | E2 | A |





| SPECIAL BOLTS | | | | | |
|---------------|------|------|------|--------|------|
| Q ID | QUAN | TYPE | DIA | LENGTH | WASH |
| 2 | 2 | A325 | 1/2" | 1 1/4" | 2 |

| MEMBER TABLE | | |
|--------------|---------------|-------------|
| FRAME LINE A | | |
| MARK | PART | LENGTH |
| DJ-1 | 8X35C14 | 13'-7 3/4" |
| DJ-2 | 8X35C14 | 13'-11 3/4" |
| DH-1 | 8X35C14 | 3'-11 3/4" |
| DS-1 | 8X35C14 | 3'-11 3/4" |
| E-1 | 10ES1L14 | 19'-11 1/2" |
| E-2 | 10ES1L14 | 19'-11 1/2" |
| E-3 | 10ES1L14 | 19'-11 1/2" |
| E-4 | 10ES1L14 | 19'-11 1/2" |
| G-10 | 8X25Z16 | 1'-7 3/4" |
| G-11 | 8X35Z14 | 21'-5 1/2" |
| G-12 | 8X25Z16 | 21'-5 1/2" |
| G-13 | 8X25Z16 | 15'-1 3/4" |
| G-14 | 8X25Z16 | 9'-1 3/4" |
| G-15 | 8X35Z14 | 22'-11 1/2" |
| G-16 | 8X25Z16 | 22'-11 1/2" |
| G-17 | 8X25Z16 | 9'-1 3/4" |
| G-18 | 8X25Z14 | 24'-1 3/4" |
| G-19 | 8X35Z14 | 21'-5 1/2" |
| G-20 | 8X35C14 | 19'-11 1/2" |
| G-21 | 8X25Z16 | 22'-11 1/2" |
| G-22 | 8X25Z16 | 4'-4" |
| G-23 | 8X35Z12 | 19'-11 1/2" |
| G-24 | 8X25Z16 | 21'-5 1/2" |
| G-25 | 8X25Z16 | 13'-7 3/4" |
| CB-2 | 3/4" DIA. ROD | 32'-0" |
| JB-1 | 8X35C14 | 6'-4" |

| CONNECTION PLATES | |
|-------------------|-----------|
| FRAME LINE A | |
| ID | MARK/PART |
| 1 | CL753 |
| 2 | CL751 |
| 3 | SC425 |
| 4 | CL750 |

DOWNSPOUT SPACING LOCATIONS
 DOWNSPOUTS ARE TO BE PLACED AT A SPACING NOT TO EXCEED 25 FT. WITH A DOWNSPOUT WITHIN 50 FT. OF EACH END OF THE GUTTER RUN. GUTTER STRAPS TO BE 2'-0" ON CENTER.

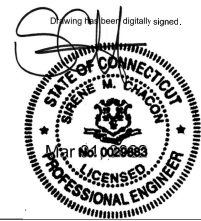
- GENERAL NOTES:**
- INSTALL ALL GIRTS AND FLANGE BRACES (FB) AS SHOWN.
 - WALL PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
 - OTHER THAN FOR WALK DOORS AND WINDOWS SHOWN ON THE CONTRACT, DO NOT ADD ADDITIONAL WALL OPENINGS WITHOUT APPROVAL OF BUILDING MANUFACTURER OR PROFESSIONAL ENGINEER.
 - AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

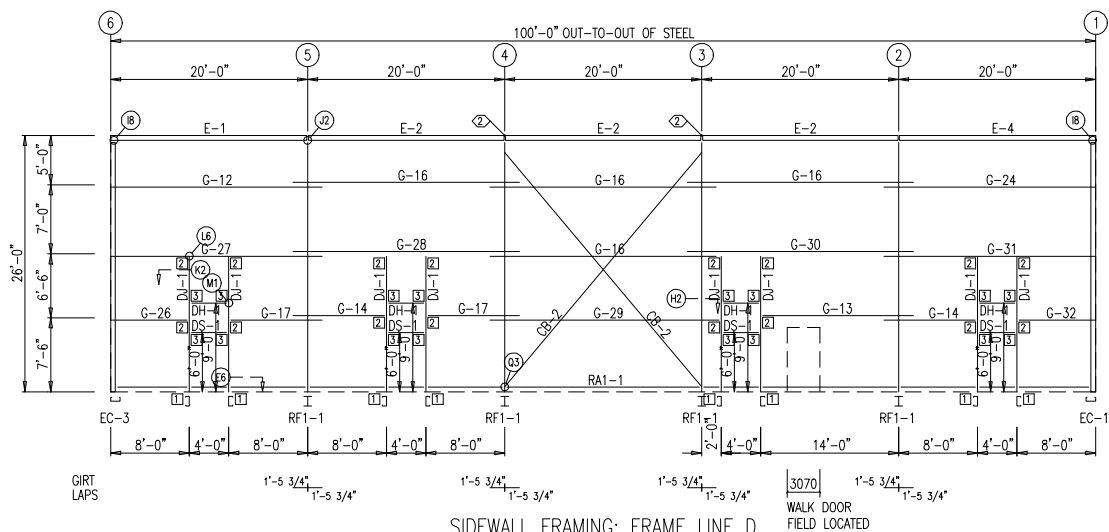
| ISSUE | DATE | DESCRIPTION | BY | CK'D | DSN |
|-------|---------|-------------------------|----|------|-----|
| A | 2/28/22 | FOR CONSTRUCTION PERMIT | KD | HPD | EV |

TORO STEEL BUILDINGS
 1405 DENISON ST
 MARKHAM, ON L3R-5V2

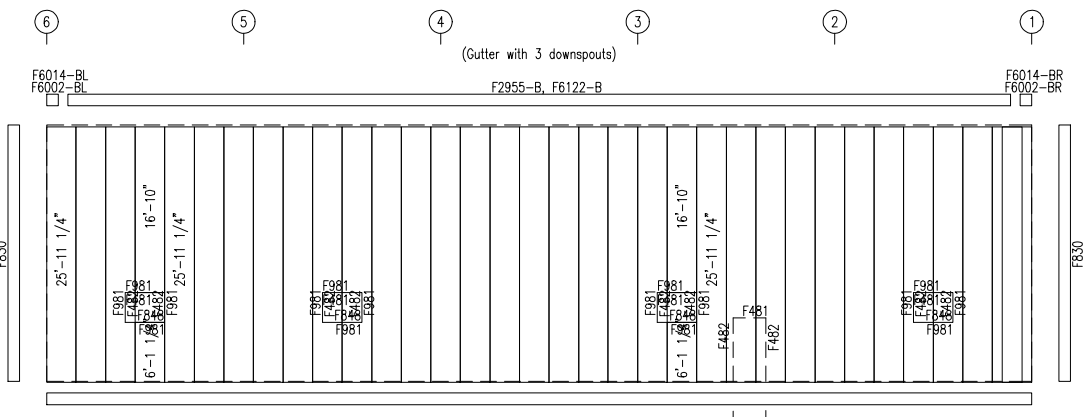
PROJECT: VINCENT BATTAGLIA
 CUSTOMER: VINCENT BATTAGLIA
 OWNER: VINCENT BATTAGLIA
 LOCATION: MONROE, CT 06468

| CAD | DATE | SCALE | PHASE | BUILDING ID | JOB NUMBER | SHEET NUMBER | ISSUE |
|-----|---------|--------|-------|-------------|------------|--------------|-------|
| | 2/28/22 | N.T.S. | 1 | A | 18-B-46371 | E3 | A |





SIDEWALL FRAMING: FRAME LINE D



SIDEWALL SHEETING & TRIM: FRAME LINE D

PANELS: 26 Gauge PBR - Desert Sand

| ISSUE | DATE | DESCRIPTION | BY | CK'D | DSN |
|-------|---------|-------------------------|----|------|-----|
| A | 2/28/22 | FOR CONSTRUCTION PERMIT | KD | HPD | EV |
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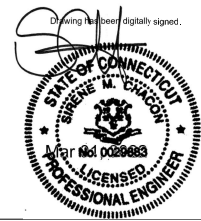
| | | | | | | | |
|--|---------|--------|-------|----------------------------|------------|--------------|-------|
| TORO STEEL BUILDINGS | | | | | | | |
| 1405 DENISON ST MARKHAM, ON L3R-5V2 | | | | | | | |
| PROJECT: VINCENT BATTAGLIA | | | | OWNER: VINCENT BATTAGLIA | | | |
| CUSTOMER: VINCENT BATTAGLIA | | | | LOCATION: MONROE, CT 06468 | | | |
| CAD | DATE | SCALE | PHASE | BUILDING ID | JOB NUMBER | SHEET NUMBER | ISSUE |
| | 2/28/22 | N.T.S. | 1 | A | 18-B-46371 | E4 | A |

- GENERAL NOTES:**
1. INSTALL ALL GIRTS AND FLANGE BRACES (FB) AS SHOWN.
 2. WALL PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
 3. OTHER THAN FOR WALK DOORS AND WINDOWS SHOWN ON THE CONTRACT, DO NOT ADD ADDITIONAL WALL OPENINGS WITHOUT APPROVAL OF BUILDING MANUFACTURER OR PROFESSIONAL ENGINEER.
 4. AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

| SPECIAL BOLTS | | | | | | |
|---------------|------|------|------|--------|------|--|
| Q ID | QUAN | TYPE | DIA | LENGTH | WASH | |
| 2 | 2 | A325 | 1/2" | 1 1/4" | | |

| MEMBER TABLE | | |
|--------------|---------------|-------------|
| FRAME LINE D | | |
| MARK | PART | LENGTH |
| DJ-1 | 8X35C14 | 13'-7 3/4" |
| DH-1 | 8X35C14 | 3'-11 3/4" |
| DS-1 | 8X35C14 | 3'-11 3/4" |
| E-1 | 10E51L14 | 19'-11 1/2" |
| E-2 | 10E51L14 | 19'-11 1/2" |
| E-4 | 10E51L14 | 19'-11 1/2" |
| G-12 | 8X25Z16 | 21'-5 1/2" |
| G-13 | 8X25Z16 | 15'-1 3/4" |
| G-14 | 8X25Z16 | 9'-1 3/4" |
| G-16 | 8X25Z16 | 22'-11 1/2" |
| G-17 | 8X25Z16 | 9'-1 3/4" |
| G-24 | 8X25Z16 | 21'-5 1/2" |
| G-26 | 8X25Z16 | 7'-7 3/4" |
| G-27 | 8X25Z16 | 21'-5 1/2" |
| G-28 | 8X25Z14 | 22'-11 1/2" |
| G-29 | 8X25Z14 | 23'-1 3/4" |
| G-30 | 8X25Z14 | 22'-11 1/2" |
| G-31 | 8X25Z13 | 21'-5 1/2" |
| G-32 | 8X25Z16 | 7'-7 3/4" |
| CB-2 | 3/4" DIA. ROD | 32'-0" |

| CONNECTION PLATES | |
|-------------------|-----------|
| FRAME LINE D | |
| ID | MARK/PART |
| 1 | CL753 |
| 2 | CL751 |
| 3 | SC425 |



BEARING FRAME ONLY!
 WASHER TO BE USED AT ENDWALL COLUMN TO ENDWALL RAFTER CONNECTION. USE ONE WASHER ON COLUMN SIDE. WASHER NOT NEEDED ON CLIP SIDE.

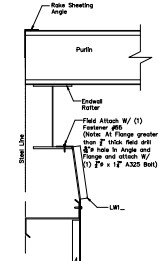
| BOLT TABLE | | | | |
|--------------|------|------|------|--------|
| FRAME LINE 1 | | | | |
| LOCATION | QUAN | TYPE | DIA | LENGTH |
| ER-1/ER-2 | 8 | A325 | 5/8" | 1 3/4" |
| Columns/Raf | 4 | A325 | 1/2" | 1 1/4" |

| MEMBER TABLE | | | |
|--------------|---------------|--------------|--|
| FRAME LINE 1 | | | |
| MARK | PART | LENGTH | |
| EC-1 | 12F35C12 | 24'-5 1/2" | |
| EC-2 | W12X14 | 26'-0 13/16" | |
| EC-3 | 12F35C12 | 24'-5 1/2" | |
| ER-1 | WBX10 | 30'-1" | |
| ER-2 | WBX10 | 30'-1" | |
| DJ-1 | 8X35C14 | 13'-7 3/4" | |
| DH-1 | 8X35C14 | 3'-11 3/4" | |
| DS-1 | 8X35C14 | 3'-11 3/4" | |
| G-1 | 8X25Z16 | 6'-7 3/4" | |
| G-2 | 8X52Z12 | 18'-7 3/4" | |
| G-3 | 8X35Z13 | 18'-7 3/4" | |
| G-4 | 8X25Z16 | 7'-4" | |
| G-5 | 8X35Z13 | 19'-4" | |
| G-6 | 8X35Z12 | 18'-7 3/4" | |
| CB-1 | 1/2" DIA. ROD | 32'-5" | |
| JB-3 | LW1 | 7'-0" | |
| JB-5 | LW1 | 4'-3 13/16" | |
| JB-4 | LW1 | 6'-6" | |
| JB-6 | LW1 | 5'-11 13/16" | |

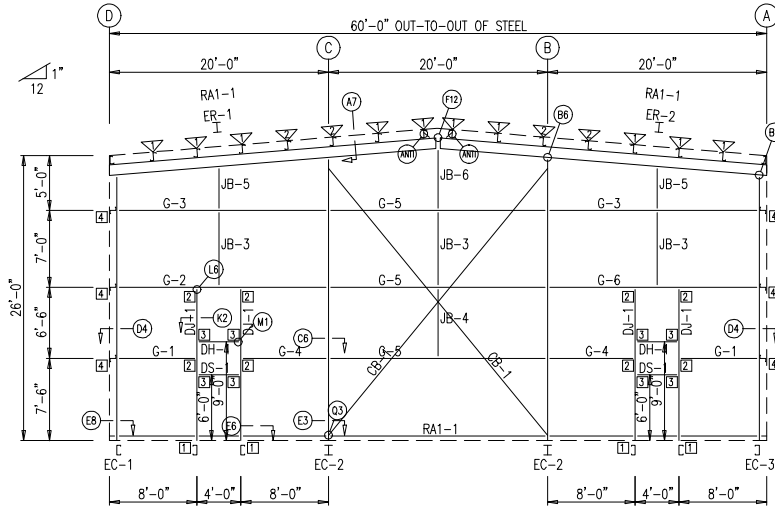
| FLANGE BRACE TABLE | | |
|--------------------|--------|---------------|
| FRAME LINE 1 | | |
| ∇ ID | PART | LENGTH |
| 1 | FB29.5 | L2X2X1/4G |
| 2 | FB7-1 | L2.5X2.5X3/16 |

| CONNECTION PLATES | | |
|-------------------|-------|------|
| FRAME LINE 1 | | |
| ID | MARK | PART |
| 1 | CL753 | |
| 2 | CL751 | |
| 3 | SC425 | |
| 4 | SC5 | |

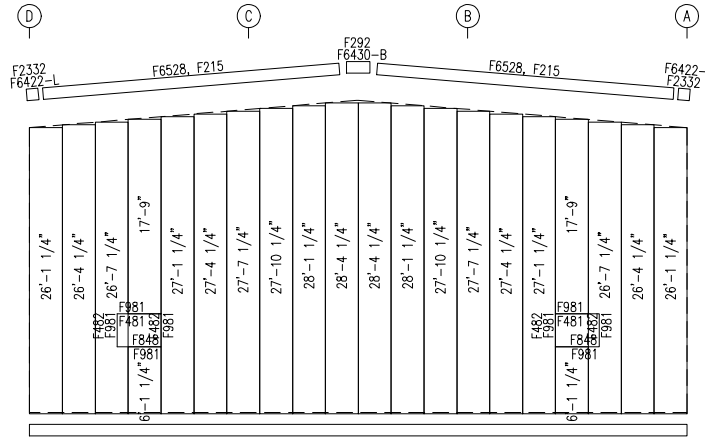
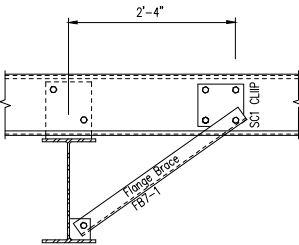
Sag Angle Attachment at Endwall Rake



Rafter Inside of Girt Space



ENDWALL FRAMING: FRAME LINE 1



ENDWALL SHEETING & TRIM: FRAME LINE 1

PANELS: 26 Gauge PBR - Desert Sand

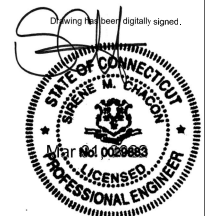
- GENERAL NOTES:**
1. INSTALL ALL GIRTS AND FLANGE BRACES (FB) AS SHOWN.
 2. WALL PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
 3. OTHER THAN FOR WALK DOORS AND WINDOWS SHOWN ON THE CONTRACT, DO NOT ADD ADDITIONAL WALL OPENINGS WITHOUT APPROVAL OF BUILDING MANUFACTURER OR PROFESSIONAL ENGINEER.
 4. AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

| ISSUE | DATE | DESCRIPTION | BY | CK'D | DSN |
|-------|---------|-------------------------|----|------|-----|
| A | 2/28/22 | FOR CONSTRUCTION PERMIT | KD | HPD | EV |

TORO STEEL BUILDINGS
 1405 DENISON ST
 MARKHAM, ON L3R-5V2

PROJECT: VINCENT BATTAGLIA
 CUSTOMER: VINCENT BATTAGLIA OWNER: VINCENT BATTAGLIA
 LOCATION: MONROE, CT 06468

| CAD | DATE | SCALE | PHASE | BUILDING ID | JOB NUMBER | SHEET NUMBER | ISSUE |
|-----|---------|--------|-------|-------------|------------|--------------|-------|
| | 2/28/22 | N.T.S. | 1 | A | 18-B-46371 | E5 | A |



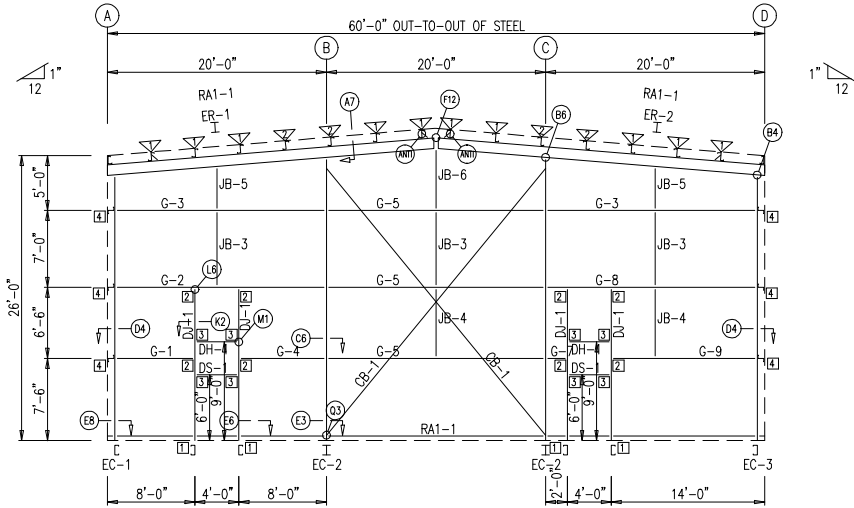
BEARING FRAME ONLY!
 WASHER TO BE USED AT ENDWALL COLUMN TO ENDWALL RAFTER CONNECTION. USE ONE WASHER ON COLUMN SIDE. WASHER NOT NEEDED ON CLIP SIDE.

| BOLT TABLE FRAME LINE 6 | | | | |
|----------------------------|------|------|------|--------|
| LOCATION | QUAN | TYPE | DIA | LENGTH |
| ER-1/ER-2 Columns/Raf | 8 | A325 | 5/8" | 1 3/4" |
| | 4 | A325 | 1/2" | 1 1/4" |

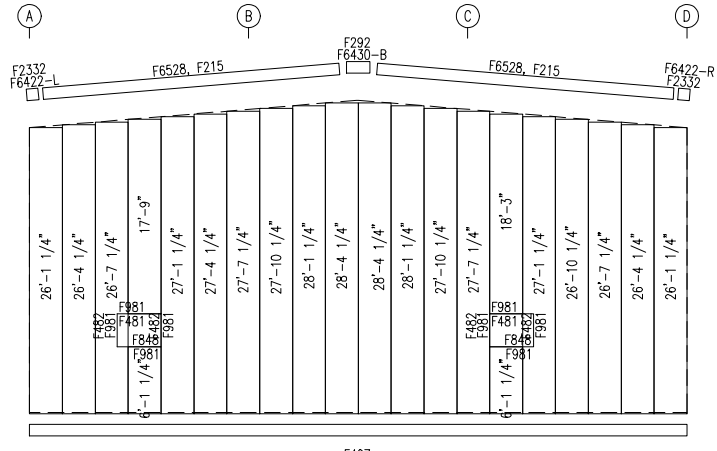
| MEMBER TABLE FRAME LINE 6 | | |
|------------------------------|---------------|--------------|
| MARK | PART | LENGTH |
| EC-1 | 12F35C12 | 24'-5 1/2" |
| EC-2 | W12X14 | 26'-0 13/16" |
| EC-3 | 12F35C12 | 24'-5 1/2" |
| ER-1 | WBX10 | 30'-1" |
| ER-2 | WBX10 | 30'-1" |
| DJ-1 | 8X35C14 | 13'-7 3/4" |
| DH-1 | 8X35C14 | 3'-11 3/4" |
| DS-1 | 8X35C14 | 3'-11 3/4" |
| G-1 | 8X25Z16 | 6'-7 3/4" |
| G-2 | 8X25Z12 | 18'-7 3/4" |
| G-3 | 8X35Z13 | 18'-7 3/4" |
| G-4 | 8X25Z16 | 7'-4" |
| G-5 | 8X35Z13 | 19'-4" |
| G-6 | 8X25Z16 | 1'-4" |
| G-7 | 8X25Z12 | 18'-7 3/4" |
| G-8 | 8X25Z16 | 12'-7 3/4" |
| G-9 | 8X25Z16 | 12'-7 3/4" |
| CB-1 | 1/2" DIA. ROD | 32'-5" |
| JB-3 | LW1 | 7'-0" |
| JB-5 | LW1 | 4'-3 13/16" |
| JB-4 | LW1 | 6'-6" |
| JB-6 | LW1 | 5'-11 13/16" |

| FLANGE BRACE TABLE FRAME LINE 6 | | | |
|------------------------------------|--------|---------------|-----------|
| ▽ ID | PART | LENGTH | |
| 1 | FB29.5 | L2X2X14G | 2'-5 1/2" |
| 2 | FB7-1 | L2.5X2.5X3/16 | 2'-5 1/2" |

| CONNECTION PLATES FRAME LINE 6 | | |
|-----------------------------------|-----------|--|
| CLID | MARK/PART | |
| 1 | CL753 | |
| 2 | CL751 | |
| 3 | SC25 | |
| 4 | SC5 | |

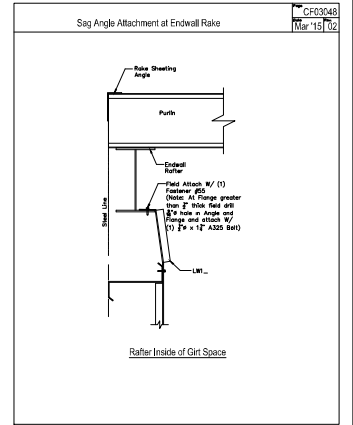
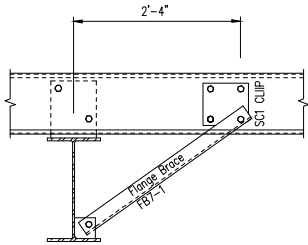


ENDWALL FRAMING: FRAME LINE 6



ENDWALL SHEETING & TRIM: FRAME LINE 6

PANELS: 26 Gauge PBR - Desert Sand



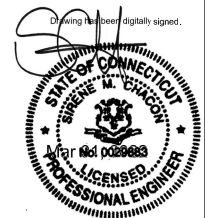
GENERAL NOTES:
 1. INSTALL ALL GIRTS AND FLANGE BRACES (FB) AS SHOWN.
 2. WALL PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
 3. OTHER THAN FOR WALK DOORS AND WINDOWS SHOWN ON THE CONTRACT, DO NOT ADD ADDITIONAL WALL OPENINGS WITHOUT APPROVAL OF BUILDING MANUFACTURER OR PROFESSIONAL ENGINEER.
 4. AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

| ISSUE | DATE | DESCRIPTION | BY | CK'D | DSN |
|-------|---------|-------------------------|----|------|-----|
| A | 2/28/22 | FOR CONSTRUCTION PERMIT | KD | HPD | EV |

TORO STEEL BUILDINGS
 1405 DENISON ST
 MARKHAM, ON L3R-5V2

PROJECT: VINCENT BATTAGLIA
 CUSTOMER: VINCENT BATTAGLIA
 OWNER: VINCENT BATTAGLIA
 LOCATION: MONROE, CT 06468

| CAD | DATE | SCALE | PHASE | BUILDING ID | JOB NUMBER | SHEET NUMBER | ISSUE |
|-----|---------|--------|-------|-------------|------------|--------------|-------|
| | 2/28/22 | N.T.S. | 1 | A | 18-B-46371 | E6 | A |



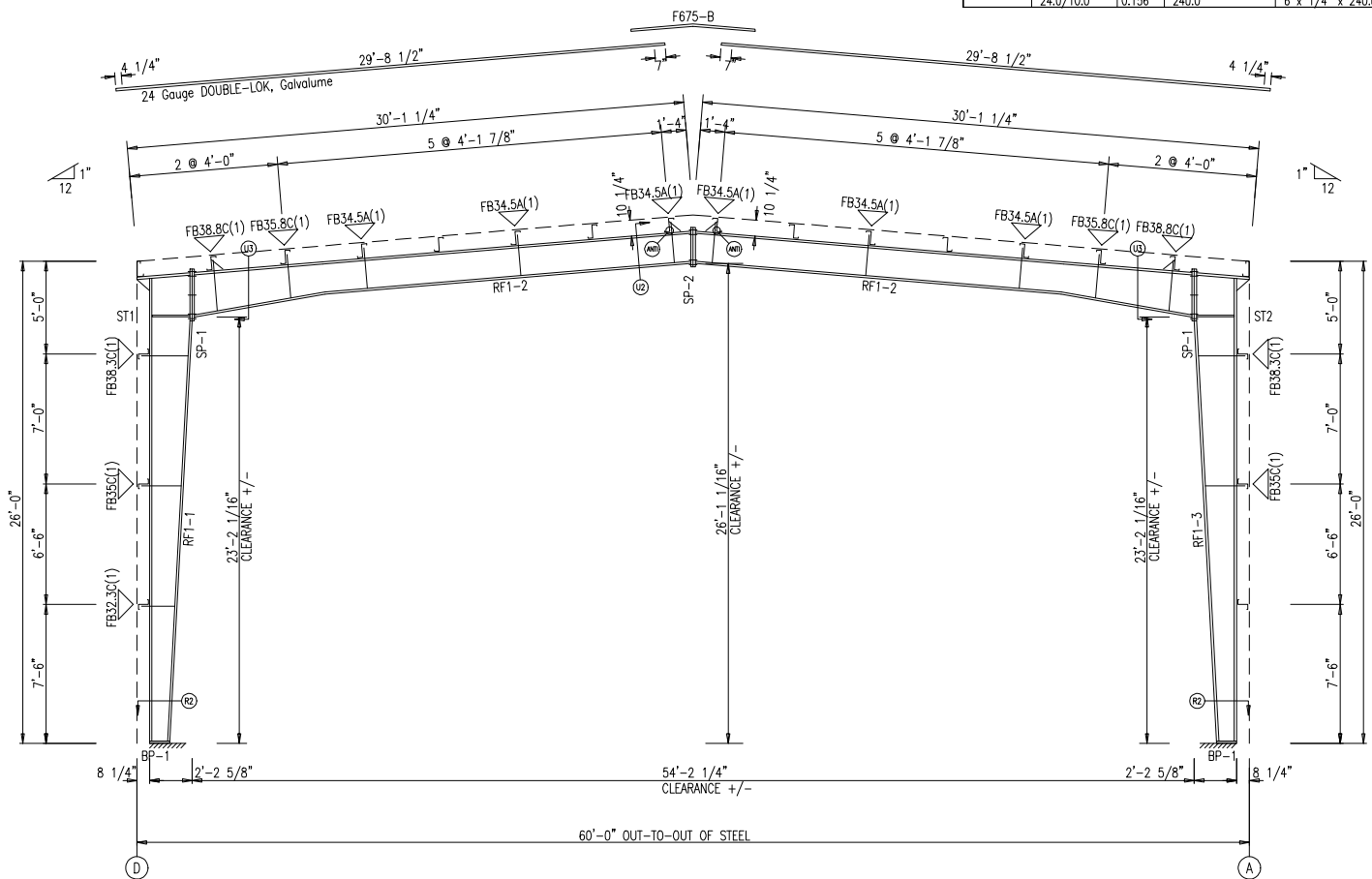
| SPICE PLATE & BOLT TABLE | | | | | | | | | | |
|--------------------------|-----|-----|-----|------|------|--------|--------|-------|-------|--------|
| Mark | Qty | Top | Bot | Int | Type | Dia | Length | Width | Thick | Length |
| SP-1 | 4 | 4 | 2 | A325 | 3/4" | 2 1/2" | 6" | 3/4" | 2'-9" | 7/8" |
| SP-2 | 4 | 4 | 0 | A325 | 3/4" | 2 1/2" | 6" | 3/4" | 2'-0" | 7/8" |

| STIFFENER TABLE | | | | |
|-----------------|------------|--------|------------|--------|
| Mark | Stiff Mark | Width | Plate Size | Length |
| RF1-1 | ST1 | 2 1/2" | 1/4" | 26" |
| RF1-3 | ST2 | 2 1/2" | 1/4" | 26" |

| BASE PLATE TABLE | | | |
|------------------|-------|-------|--------|
| Col Mark | Width | Thick | Length |
| BP-1 | 6" | 5/8" | 11" |

FLANGE BRACES: FBxx (1 or 2)
 xx=length(in)
 (1) One Side; (2) Two Sides
 C - L2X2X1/8
 A - L2X2X1/4

| MEMBER TABLE | | | | | |
|--------------|-----------|-------|-----------|--------|------------------------------------|
| Mark | Web Depth | | Web Plate | | Outside Flange W x Thk x Length |
| | Start/End | Thick | Length | Length | |
| RF1-1 | 10.0/24.0 | 0.156 | 240.0 | 240.0 | 6 x 1/4" x 240.0 |
| | 24.0/26.0 | 0.156 | 34.2 | 34.2 | 6 x 1/4" x 61.5 |
| RF1-2 | 26.0/26.0 | 0.185 | 29.5 | 29.5 | 6 x 1/4" x 34.6 |
| | 26.0/18.0 | 0.185 | 86.5 | 86.5 | 6 x 1/4" x 84.4 |
| RF1-3 | 18.0/18.0 | 0.156 | 240.0 | 240.0 | 6 x 5/16" x 120.0 |
| | 26.0/26.0 | 0.185 | 29.5 | 29.5 | 6 x 1/4" x 34.6 |
| RF1-3 | 26.0/24.0 | 0.156 | 34.2 | 34.2 | 6 x 1/4" x 61.5 |
| | 24.0/10.0 | 0.156 | 240.0 | 240.0 | 6 x 3/8" x 120.2 |



GENERAL NOTES:
 1. BOLTED JOINTS WITH A325 TYPE 1 BOLTS GREATER THAN 1/2" DIAMETER ARE SPECIFIED AS PRE-TENSIONED JOINTS IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE RSCC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS. PRE-TENSIONING CAN BE ACCOMPLISHED BY USING THE TURN-OF-NUT METHOD OF TIGHTENING, CALIBRATED WRENCH, TWIST-OFF TYPE TENSION-CONTROL BOLTS OR DIRECT-TENSION-INDICATOR AS ACCEPTABLE TO THE INSPECTING AGENCY AND BUILDING OFFICIAL. INSTALLATION INSPECTION REQUIREMENTS FOR PRE-TENSIONED JOINTS (SPECIFICATION FOR STRUCTURAL JOINTS SECTION 9.2) USING TURN-OF-NUT/CALIBRATED WRENCH/TWIST OFF TYPE TENSION CONTROL BOLTS/DIRECT TENSION INDICATOR] METHOD IS SUGGESTED. THE CONNECTIONS ON THIS PROJECT ARE NOT SLIP CRITICAL.
 2. ALL FIELD CONNECTIONS OF SECONDARY FRAMING SHALL BE BOLTED WITH A325 BOLTS.
 3. INSTALL ALL FLANGE BRACES ON COLUMN AND RAFTER AS SHOWN.

| ISSUE | DATE | DESCRIPTION | BY | CK'D | DSN |
|-------|---------|-------------------------|----|------|-----|
| A | 2/28/22 | FOR CONSTRUCTION PERMIT | KD | HPD | EV |

TORO STEEL BUILDINGS
 1405 DENISON ST
 MARKHAM, ON L3R-5V2

PROJECT: VINCENT BATTAGLIA
 CUSTOMER: VINCENT BATTAGLIA
 OWNER: VINCENT BATTAGLIA
 LOCATION: MONROE, CT 06468

| CAD | DATE | SCALE | PHASE | BUILDING ID | JOB NUMBER | SHEET NUMBER | ISSUE |
|-----|---------|--------|-------|-------------|------------|--------------|-------|
| | 2/28/22 | N.T.S. | 1 | A | 18-B-46371 | E7 | A |



STORMWATER MANAGEMENT PLAN

FOR

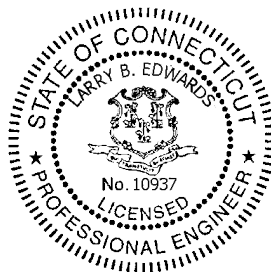
67 ENTERPRISE DRIVE

MONROE, CONNECTICUT

December 13, 2021
REV. 02-28-2022



Prepared by
J. Edwards & Associates, LLC
227 Stepney Road, Easton, CT 06612



Larry Edwards P.E. #10937

PROJECT NARRATIVE

This project consists of a 3.6 acre lot located in the Enterprise Industrial park. The site contains an existing building and associated site improvements. It is proposed to construct a 3300sf addition to the existing building and a new 6000sf building, both of which will be used for storage. A portion of building footprint is paved with the remainder consisting of grass and woods. The SCS soil maps indicate a soil group B.

All of the new impervious area will be collected by roof drains and discharged to a new stormwater detention system. The overflow from the system will be directed to the wetland at the rear of the existing building.

The study area for the attached analysis includes the roof area of the new buildings and paved areas only. The remainder of the site is controlled by an existing drainage system which will not be negatively impacted by the new building.

The drainage analysis for the project was performed using the SCS TR55 computer model using NOAA IDF data. Storm frequencies of 2, 10, 25 and 100 years have been evaluated. The basin outlet has been sized to handle a 100 year storm.

STORM WATER QUALITY CALCULATIONS

Water Quality Volume

This site is a retrofit of an existing developed site. The stormwater quality analysis was calculated for the new buildings and pavement areas only.

$$WQV = (1")(R)(A)/12$$

$$\text{Total impervious area} = 11,369\text{sf} (0.26\text{ac})$$

$$R = (0.05) + (0.009)(\% \text{ impervious}) = 0.95$$

$$WQV = 1 \times 0.95 \times 0.26/12 = 897\text{cf required} \quad 1547\text{cf provided}$$

STORMWATER OUTFLOW

| | 2 YR EXIST | 2 YR PROP | 10 YR EXIST | 10 YR PROP | 25 YR EXIST | 25 YR PROP | 100 YR EXIST | 100 YR PROP |
|--|---------------|--------------|----------------|---------------|----------------|---------------|--------------------|-------------------|
| | | | | | | | | |
| | 0.23 | 0.23 | 0.63 | 0.58 | 0.91 | 0.71 | 1.37 | 0.86 |

Outlet Protection

The water quality basin outlet will be protected with a rip rap pad sized in accordance with the Connecticut Erosion Control guidelines

$$\text{LENGTH} = L_a = 1.7(Q) / (D_o)^{3/2} + 8(D_o)$$

$$\text{WIDTH} = 3(D_o) + L_a$$

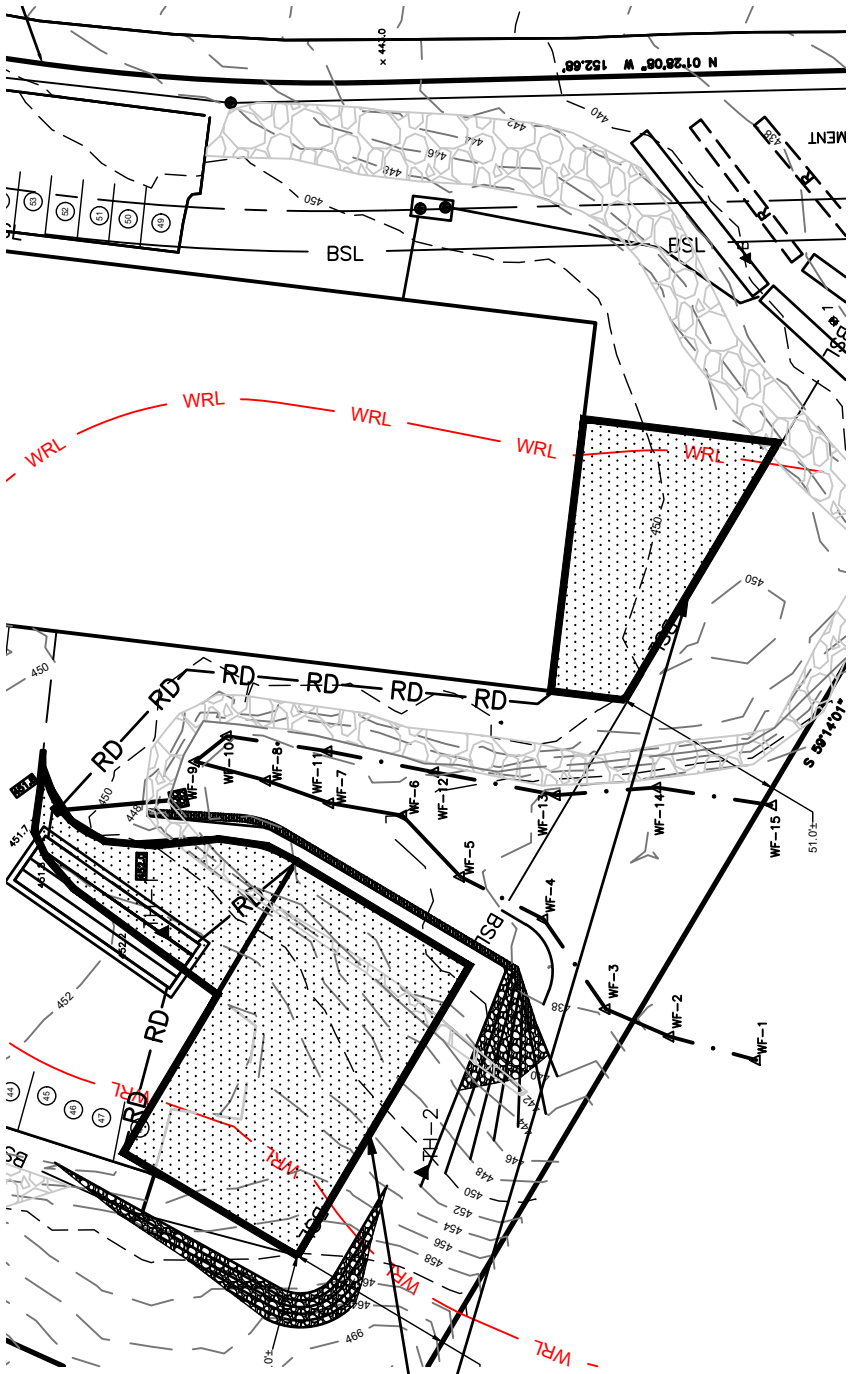
WQ BASIN A

Q_{25yr} = .71 cfs outlet pipe 5"

$$L_a = (1.7)(0.71)/(0.41) + .8(0.26) = 5' \text{ (8' provided)}$$

$$W = 3(0.41) + 5 = 6.2 \text{ (8' provided)}$$

$$V = 2.25/13 = 0.2 \text{ fps}$$



DRAINAGE STUDY AREA = 11,370sf

DRAINAGE MAP
 67 ENTERPRISE DRIVE
 MONROE CT
 SCALE: 1" = 50' 12/22/21



NOAA Atlas 14, Volume 10, Version 3
Location name: Monroe, Connecticut, USA*
Latitude: 41.3527°, Longitude: -73.2523°
Elevation: 451.75 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 & aeriels](#)

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 | 0.365 (0.278-0.469) | 0.427 (0.324-0.549) | 0.528 (0.400-0.681) | 0.612 (0.461-0.792) | 0.727 (0.533-0.973) | 0.814 (0.586-1.11) | 0.905 (0.635-1.27) | 1.01 (0.673-1.43) | 1.15 (0.743-1.68) | 1.26 (0.800-1.88) |
| 10-min | 0.517 (0.393-0.664) | 0.604 (0.459-0.778) | 0.747 (0.567-0.964) | 0.866 (0.653-1.12) | 1.03 (0.755-1.38) | 1.15 (0.830-1.57) | 1.28 (0.899-1.79) | 1.43 (0.954-2.03) | 1.63 (1.05-2.38) | 1.79 (1.13-2.66) |
| 15-min | 0.608 (0.463-0.781) | 0.711 (0.540-0.915) | 0.880 (0.667-1.14) | 1.02 (0.769-1.32) | 1.21 (0.888-1.62) | 1.36 (0.977-1.85) | 1.51 (1.06-2.11) | 1.68 (1.12-2.38) | 1.91 (1.24-2.80) | 2.11 (1.33-3.13) |
| 30-min | 0.844 (0.642-1.09) | 0.986 (0.750-1.27) | 1.22 (0.923-1.57) | 1.41 (1.06-1.83) | 1.68 (1.23-2.24) | 1.88 (1.35-2.55) | 2.08 (1.46-2.90) | 2.30 (1.54-3.28) | 2.61 (1.69-3.81) | 2.84 (1.80-4.22) |
| 60-min | 1.08 (0.822-1.39) | 1.26 (0.959-1.62) | 1.56 (1.18-2.01) | 1.80 (1.36-2.34) | 2.14 (1.57-2.86) | 2.40 (1.72-3.25) | 2.66 (1.85-3.69) | 2.93 (1.96-4.17) | 3.30 (2.13-4.82) | 3.58 (2.27-5.32) |
| 2-hr | 1.40 (1.07-1.79) | 1.64 (1.26-2.10) | 2.04 (1.55-2.61) | 2.36 (1.79-3.04) | 2.81 (2.07-3.74) | 3.15 (2.28-4.26) | 3.51 (2.47-4.87) | 3.90 (2.62-5.51) | 4.46 (2.89-6.47) | 4.91 (3.12-7.25) |
| 3-hr | 1.62 (1.24-2.06) | 1.90 (1.46-2.42) | 2.37 (1.81-3.02) | 2.76 (2.10-3.54) | 3.29 (2.44-4.37) | 3.69 (2.69-4.98) | 4.12 (2.92-5.73) | 4.60 (3.10-6.48) | 5.31 (3.45-7.68) | 5.89 (3.75-8.66) |
| 6-hr | 2.03 (1.57-2.56) | 2.42 (1.87-3.05) | 3.05 (2.35-3.86) | 3.57 (2.74-4.55) | 4.29 (3.20-5.67) | 4.83 (3.54-6.49) | 5.40 (3.86-7.50) | 6.08 (4.11-8.51) | 7.08 (4.62-10.2) | 7.93 (5.06-11.6) |
| 12-hr | 2.49 (1.94-3.12) | 3.01 (2.34-3.78) | 3.85 (2.98-4.85) | 4.55 (3.51-5.75) | 5.51 (4.13-7.24) | 6.23 (4.59-8.33) | 7.00 (5.03-9.67) | 7.91 (5.36-11.0) | 9.28 (6.07-13.2) | 10.4 (6.68-15.1) |
| 24-hr | 2.93 (2.29-3.65) | 3.59 (2.81-4.48) | 4.68 (3.65-5.85) | 5.58 (4.33-7.01) | 6.82 (5.15-8.91) | 7.73 (5.74-10.3) | 8.73 (6.33-12.0) | 9.93 (6.76-13.7) | 11.8 (7.72-16.7) | 13.4 (8.57-19.2) |
| 2-day | 3.32 (2.61-4.11) | 4.13 (3.25-5.12) | 5.45 (4.28-6.78) | 6.56 (5.12-8.18) | 8.07 (6.14-10.5) | 9.18 (6.87-12.2) | 10.4 (7.63-14.4) | 11.9 (8.15-16.4) | 14.4 (9.45-20.3) | 16.5 (10.6-23.6) |
| 3-day | 3.62 (2.86-4.46) | 4.50 (3.56-5.56) | 5.96 (4.69-7.37) | 7.16 (5.61-8.90) | 8.82 (6.73-11.4) | 10.0 (7.53-13.3) | 11.4 (8.37-15.6) | 13.1 (8.94-17.9) | 15.8 (10.4-22.1) | 18.1 (11.7-25.8) |
| 4-day | 3.89 (3.09-4.78) | 4.83 (3.83-5.94) | 6.36 (5.03-7.85) | 7.64 (6.00-9.46) | 9.39 (7.18-12.1) | 10.7 (8.03-14.1) | 12.1 (8.91-16.6) | 13.9 (9.51-18.9) | 16.7 (11.0-23.4) | 19.2 (12.4-27.3) |
| 7-day | 4.66 (3.72-5.71) | 5.70 (4.54-6.97) | 7.38 (5.86-9.06) | 8.78 (6.93-10.8) | 10.7 (8.22-13.7) | 12.1 (9.14-15.9) | 13.7 (10.1-18.5) | 15.6 (10.7-21.1) | 18.5 (12.3-25.8) | 21.1 (13.6-29.8) |
| 10-day | 5.43 (4.34-6.61) | 6.51 (5.21-7.94) | 8.29 (6.60-10.1) | 9.76 (7.73-12.0) | 11.8 (9.07-15.0) | 13.3 (10.0-17.3) | 14.9 (11.0-20.0) | 16.9 (11.6-22.8) | 19.8 (13.1-27.4) | 22.2 (14.4-31.3) |
| 20-day | 7.74 (6.24-9.37) | 8.93 (7.19-10.8) | 10.9 (8.72-13.2) | 12.5 (9.96-15.2) | 14.7 (11.3-18.5) | 16.4 (12.4-21.0) | 18.1 (13.3-23.9) | 20.1 (13.9-26.9) | 22.8 (15.2-31.3) | 24.9 (16.2-34.9) |
| 30-day | 9.65 (7.80-11.6) | 10.9 (8.81-13.2) | 13.0 (10.4-15.7) | 14.7 (11.7-17.8) | 17.0 (13.1-21.3) | 18.8 (14.2-23.8) | 20.6 (15.0-26.8) | 22.5 (15.7-30.0) | 25.0 (16.8-34.3) | 27.0 (17.6-37.6) |
| 45-day | 12.0 (9.73-14.4) | 13.3 (10.8-16.0) | 15.5 (12.5-18.7) | 17.3 (13.9-20.9) | 19.8 (15.3-24.6) | 21.7 (16.4-27.3) | 23.6 (17.2-30.4) | 25.5 (17.8-33.8) | 27.9 (18.7-38.0) | 29.6 (19.3-41.1) |
| 60-day | 13.9 (11.3-16.7) | 15.3 (12.5-18.3) | 17.6 (14.2-21.1) | 19.5 (15.7-23.5) | 22.1 (17.1-27.3) | 24.1 (18.2-30.2) | 26.1 (19.0-33.4) | 27.9 (19.6-36.9) | 30.3 (20.4-41.1) | 31.9 (20.9-44.2) |

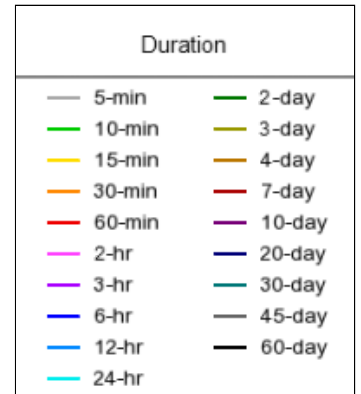
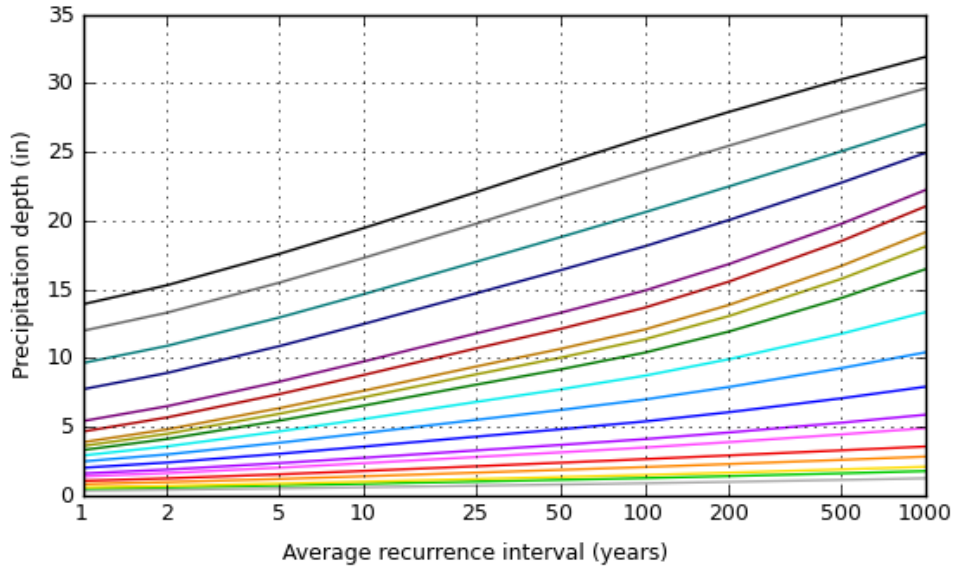
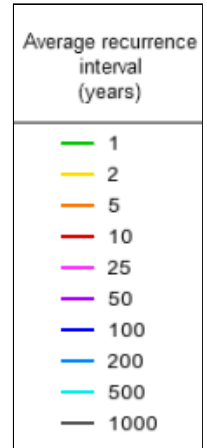
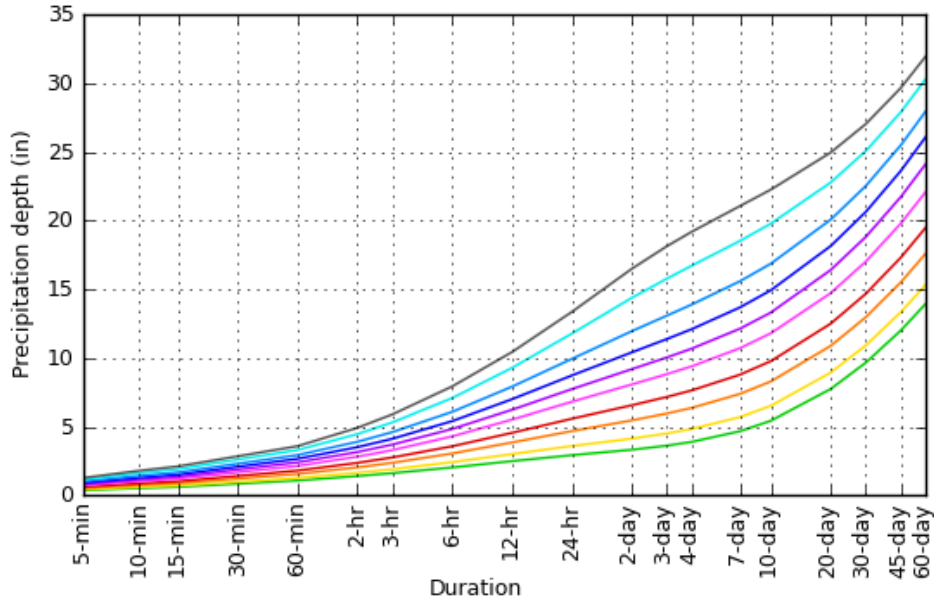
¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average 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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PF graphical

PDS-based depth-duration-frequency (DDF) curves

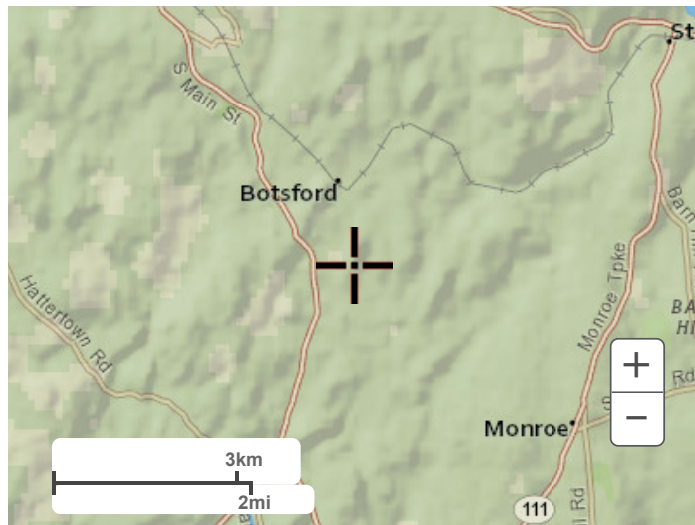
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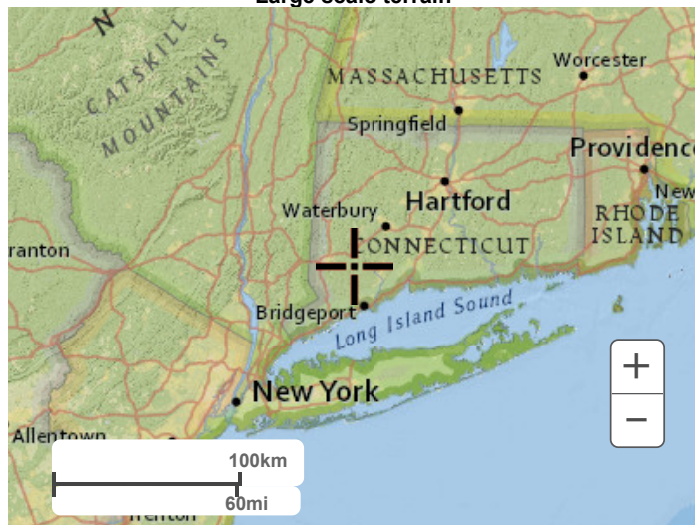
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Maps & aerials

Small scale terrain



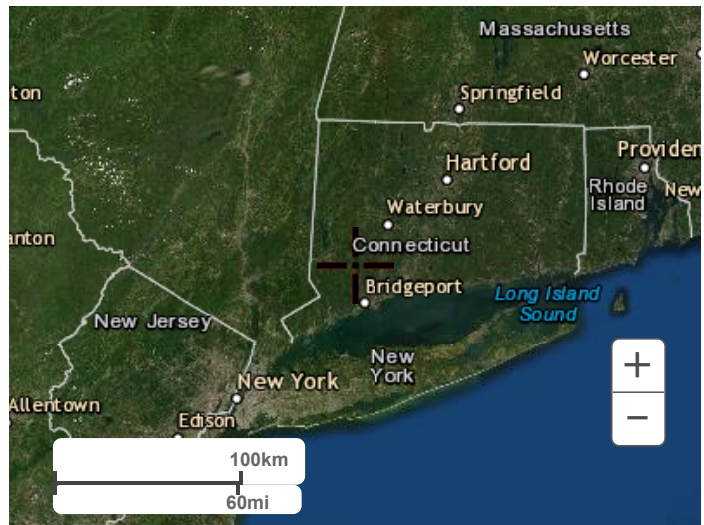
Large scale terrain



Large scale map



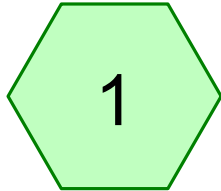
Large scale aerial



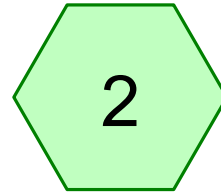
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[National Weather Service](#)
[National Water Center](#)
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

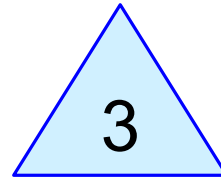
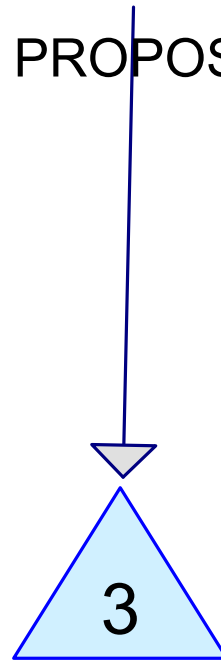
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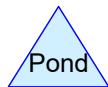
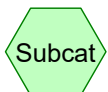
EXISTING Q NEW
BUILDING



Q PROPOSED



PROPOSED
DETENTION SYSTEM



Area Listing (all nodes)

| Area (acres) | CN | Description (subcatchment-numbers) |
|-----------------|-----------|---------------------------------------|
| 0.243 | 65 | Woods/grass comb., Fair, HSG B (1) |
| 0.018 | 98 | Paved parking, HSG B (1) |
| 0.261 | 98 | Unconnected pavement, HSG B (2) |
| 0.522 | 83 | TOTAL AREA |

2893

Type III 24-hr 100 yr Rainfall=8.73"

Prepared by {enter your company name here}

Printed 12/17/2021

HydroCAD® 9.10 s/n 04982 © 2011 HydroCAD Software Solutions LLC

Page 3

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1: EXISTING Q NEW

Runoff Area=11,370 sf 7.04% Impervious Runoff Depth>4.41"

Flow Length=100' Slope=0.3000 '/' Tc=7.2 min CN=67 Runoff=1.37 cfs 0.096 af

Subcatchment 2: Q PROPOSED

Runoff Area=11,370 sf 100.00% Impervious Runoff Depth>7.81"

Tc=5.0 min CN=98 Runoff=2.25 cfs 0.170 af

Pond 3: PROPOSED DETENTION SYSTEM

Peak Elev=448.41' Storage=3,197 cf Inflow=2.25 cfs 0.170 af

Outflow=0.86 cfs 0.132 af

Total Runoff Area = 0.522 ac Runoff Volume = 0.266 af Average Runoff Depth = 6.11"
46.48% Pervious = 0.243 ac 53.52% Impervious = 0.279 ac

Summary for Subcatchment 1: EXISTING Q NEW BUILDING

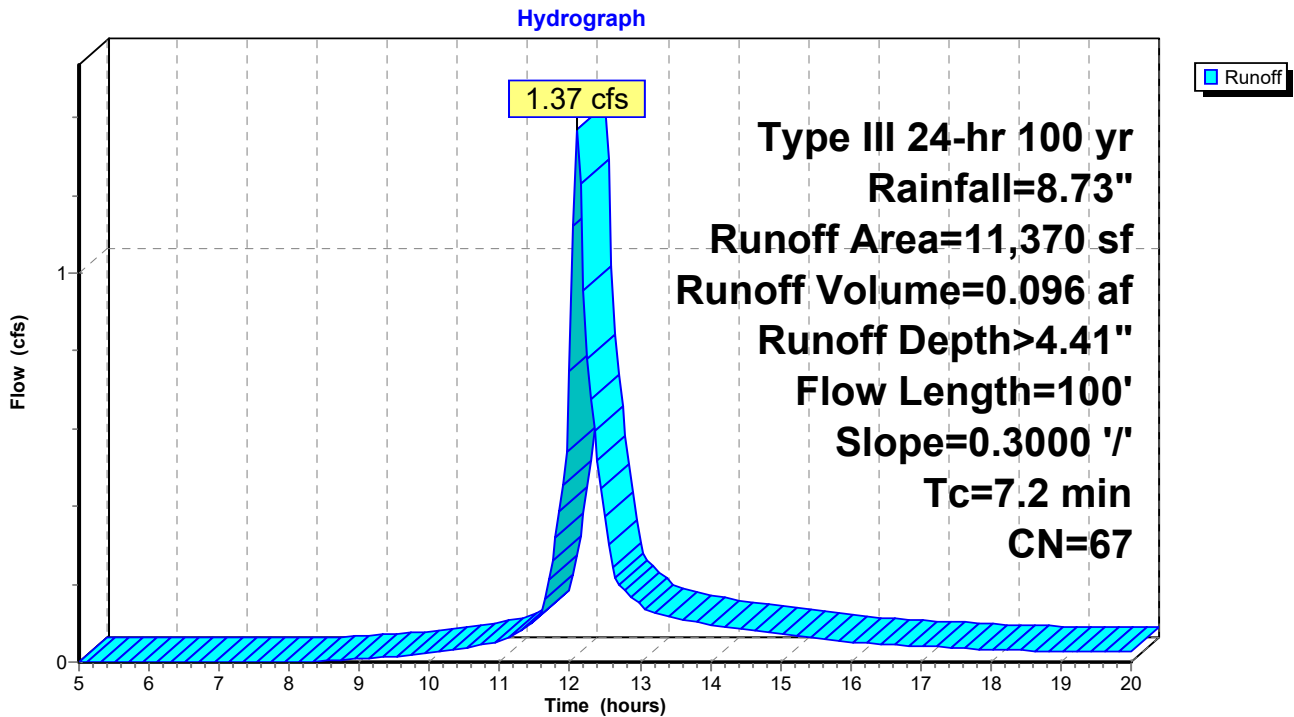
Runoff = 1.37 cfs @ 12.11 hrs, Volume= 0.096 af, Depth> 4.41"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100 yr Rainfall=8.73"

| Area (sf) | CN | Description |
|-----------|----|--------------------------------|
| 800 | 98 | Paved parking, HSG B |
| 10,570 | 65 | Woods/grass comb., Fair, HSG B |
| 11,370 | 67 | Weighted Average |
| 10,570 | | 92.96% Pervious Area |
| 800 | | 7.04% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|---|
| 7.2 | 100 | 0.3000 | 0.23 | | Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.30" |

Subcatchment 1: EXISTING Q NEW BUILDING



Summary for Subcatchment 2: Q PROPOSED

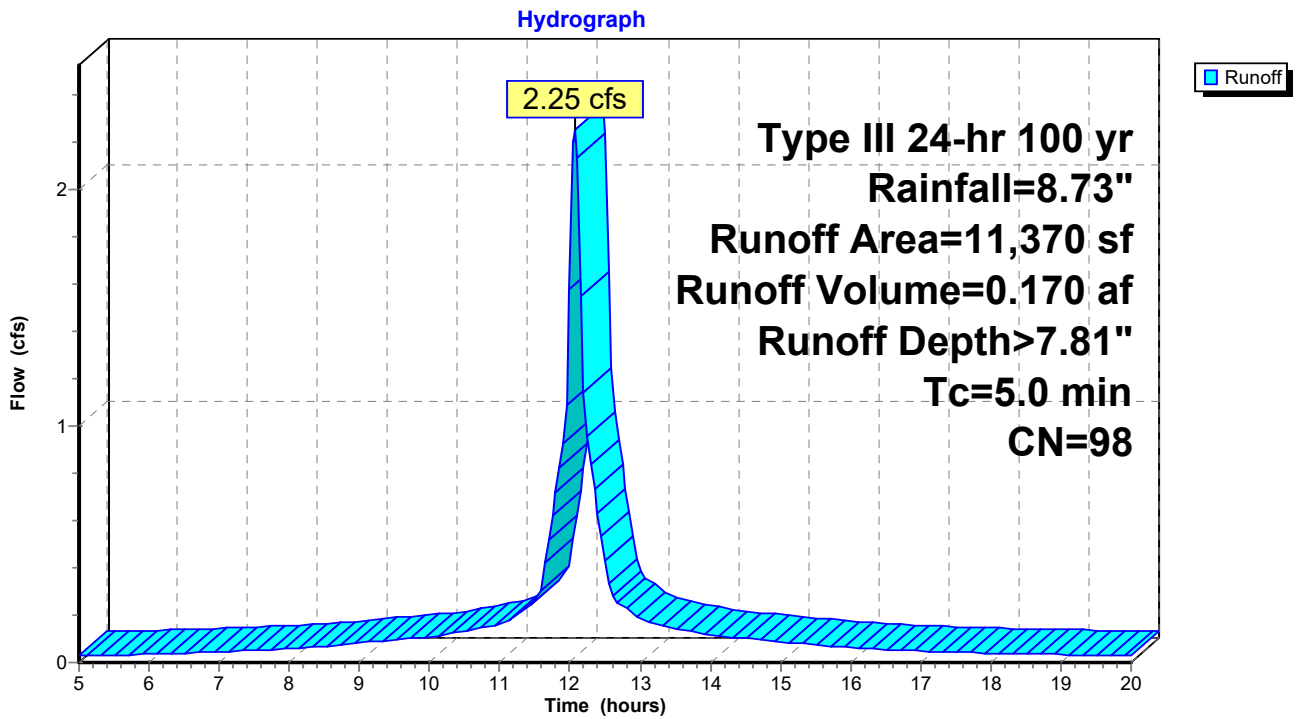
Runoff = 2.25 cfs @ 12.07 hrs, Volume= 0.170 af, Depth> 7.81"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 yr Rainfall=8.73"

| Area (sf) | CN | Description |
|-----------|----|-----------------------------|
| 11,370 | 98 | Unconnected pavement, HSG B |
| 11,370 | | 100.00% Impervious Area |
| 11,370 | | 100.00% Unconnected |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 5.0 | | | | | Direct Entry, |

Subcatchment 2: Q PROPOSED



Summary for Pond 3: PROPOSED DETENTION SYSTEM

Inflow Area = 0.261 ac, 100.00% Impervious, Inflow Depth > 7.81" for 100 yr event
 Inflow = 2.25 cfs @ 12.07 hrs, Volume= 0.170 af
 Outflow = 0.86 cfs @ 12.29 hrs, Volume= 0.132 af, Atten= 62%, Lag= 13.4 min
 Primary = 0.86 cfs @ 12.29 hrs, Volume= 0.132 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 448.41' @ 12.29 hrs Surf.Area= 1,195 sf Storage= 3,197 cf

Plug-Flow detention time= 132.8 min calculated for 0.132 af (78% of inflow)
 Center-of-Mass det. time= 74.4 min (806.4 - 732.1)

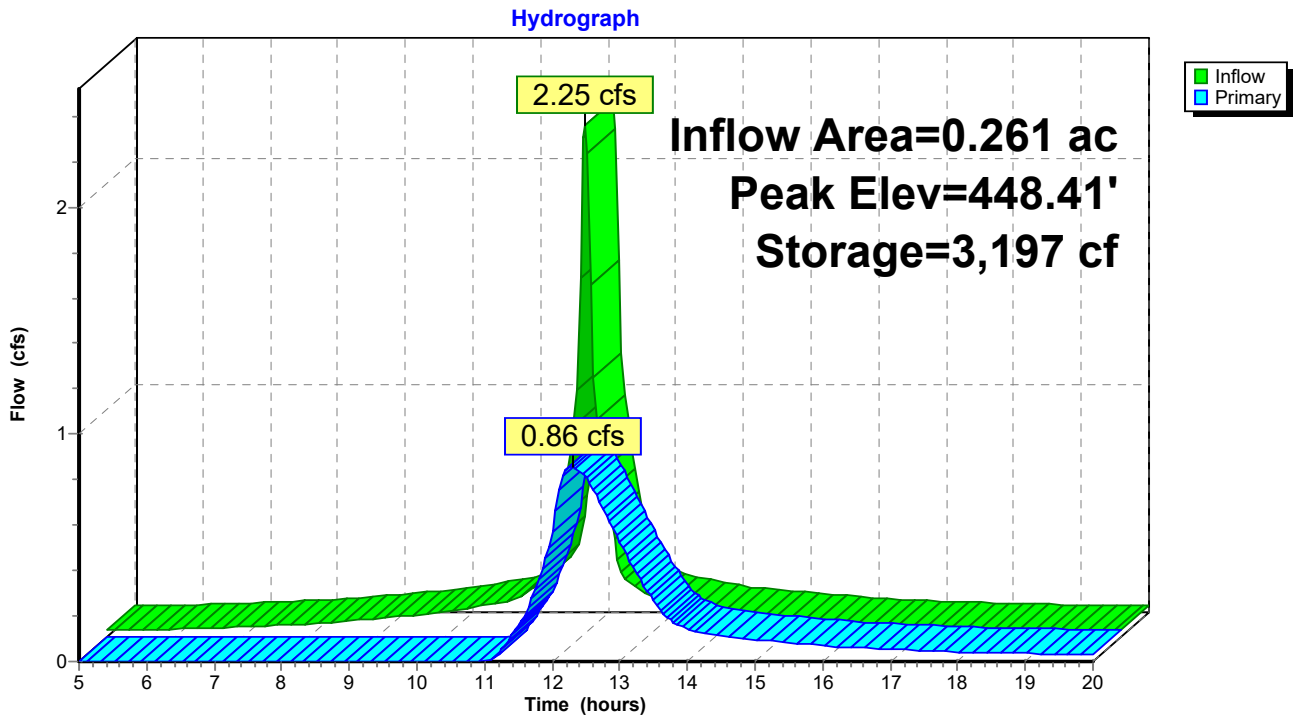
| Volume | Invert | Avail.Storage | Storage Description |
|--------|---------|---------------|--|
| #1 | 444.50' | 789 cf | Custom Stage Data (Prismatic) Listed below (Recalc) 5,378 cf Overall - 3,406 cf Embedded = 1,972 cf x 40.0% Voids |
| #2 | 445.00' | 2,620 cf | Galley 4x8x4 x 28 Inside #1 Inside= 42.0"W x 43.0"H => 12.47 sf x 7.50'L = 93.6 cf Outside= 52.8"W x 48.0"H => 15.20 sf x 8.00'L = 121.6 cf |
| | | 3,408 cf | Total Available Storage |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|------------------|-------------------|------------------------|------------------------|
| 444.50 | 1,195 | 0 | 0 |
| 449.00 | 1,195 | 5,378 | 5,378 |

| Device | Routing | Invert | Outlet Devices |
|--------|---------|---------|-------------------------------|
| #1 | Primary | 446.50' | 5.0" Vert. 5" C= 0.600 |

Primary OutFlow Max=0.86 cfs @ 12.29 hrs HW=448.40' (Free Discharge)
 ↑**1=5"** (Orifice Controls 0.86 cfs @ 6.27 fps)

Pond 3: PROPOSED DETENTION SYSTEM



Stage-Discharge for Pond 3: PROPOSED DETENTION SYSTEM

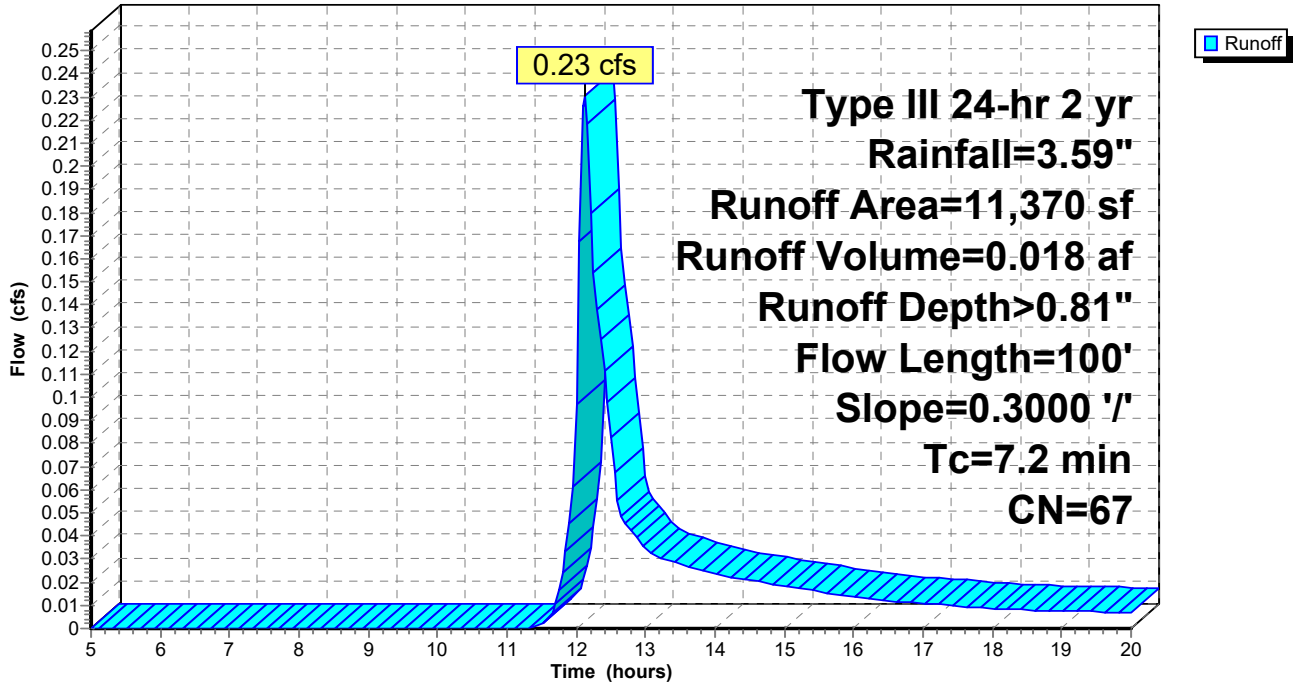
| Elevation (feet) | Primary (cfs) | Elevation (feet) | Primary (cfs) |
|---------------------|------------------|---------------------|------------------|
| 444.50 | 0.00 | 447.15 | 0.44 |
| 444.55 | 0.00 | 447.20 | 0.46 |
| 444.60 | 0.00 | 447.25 | 0.48 |
| 444.65 | 0.00 | 447.30 | 0.51 |
| 444.70 | 0.00 | 447.35 | 0.53 |
| 444.75 | 0.00 | 447.40 | 0.55 |
| 444.80 | 0.00 | 447.45 | 0.57 |
| 444.85 | 0.00 | 447.50 | 0.58 |
| 444.90 | 0.00 | 447.55 | 0.60 |
| 444.95 | 0.00 | 447.60 | 0.62 |
| 445.00 | 0.00 | 447.65 | 0.64 |
| 445.05 | 0.00 | 447.70 | 0.65 |
| 445.10 | 0.00 | 447.75 | 0.67 |
| 445.15 | 0.00 | 447.80 | 0.69 |
| 445.20 | 0.00 | 447.85 | 0.70 |
| 445.25 | 0.00 | 447.90 | 0.72 |
| 445.30 | 0.00 | 447.95 | 0.73 |
| 445.35 | 0.00 | 448.00 | 0.75 |
| 445.40 | 0.00 | 448.05 | 0.76 |
| 445.45 | 0.00 | 448.10 | 0.77 |
| 445.50 | 0.00 | 448.15 | 0.79 |
| 445.55 | 0.00 | 448.20 | 0.80 |
| 445.60 | 0.00 | 448.25 | 0.82 |
| 445.65 | 0.00 | 448.30 | 0.83 |
| 445.70 | 0.00 | 448.35 | 0.84 |
| 445.75 | 0.00 | 448.40 | 0.85 |
| 445.80 | 0.00 | 448.45 | 0.87 |
| 445.85 | 0.00 | 448.50 | 0.88 |
| 445.90 | 0.00 | 448.55 | 0.89 |
| 445.95 | 0.00 | 448.60 | 0.90 |
| 446.00 | 0.00 | 448.65 | 0.91 |
| 446.05 | 0.00 | 448.70 | 0.93 |
| 446.10 | 0.00 | 448.75 | 0.94 |
| 446.15 | 0.00 | 448.80 | 0.95 |
| 446.20 | 0.00 | 448.85 | 0.96 |
| 446.25 | 0.00 | 448.90 | 0.97 |
| 446.30 | 0.00 | 448.95 | 0.98 |
| 446.35 | 0.00 | 449.00 | 0.99 |
| 446.40 | 0.00 | | |
| 446.45 | 0.00 | | |
| 446.50 | 0.00 | | |
| 446.55 | 0.01 | | |
| 446.60 | 0.03 | | |
| 446.65 | 0.06 | | |
| 446.70 | 0.10 | | |
| 446.75 | 0.15 | | |
| 446.80 | 0.20 | | |
| 446.85 | 0.25 | | |
| 446.90 | 0.29 | | |
| 446.95 | 0.32 | | |
| 447.00 | 0.35 | | |
| 447.05 | 0.38 | | |
| 447.10 | 0.41 | | |

Stage-Area-Storage for Pond 3: PROPOSED DETENTION SYSTEM

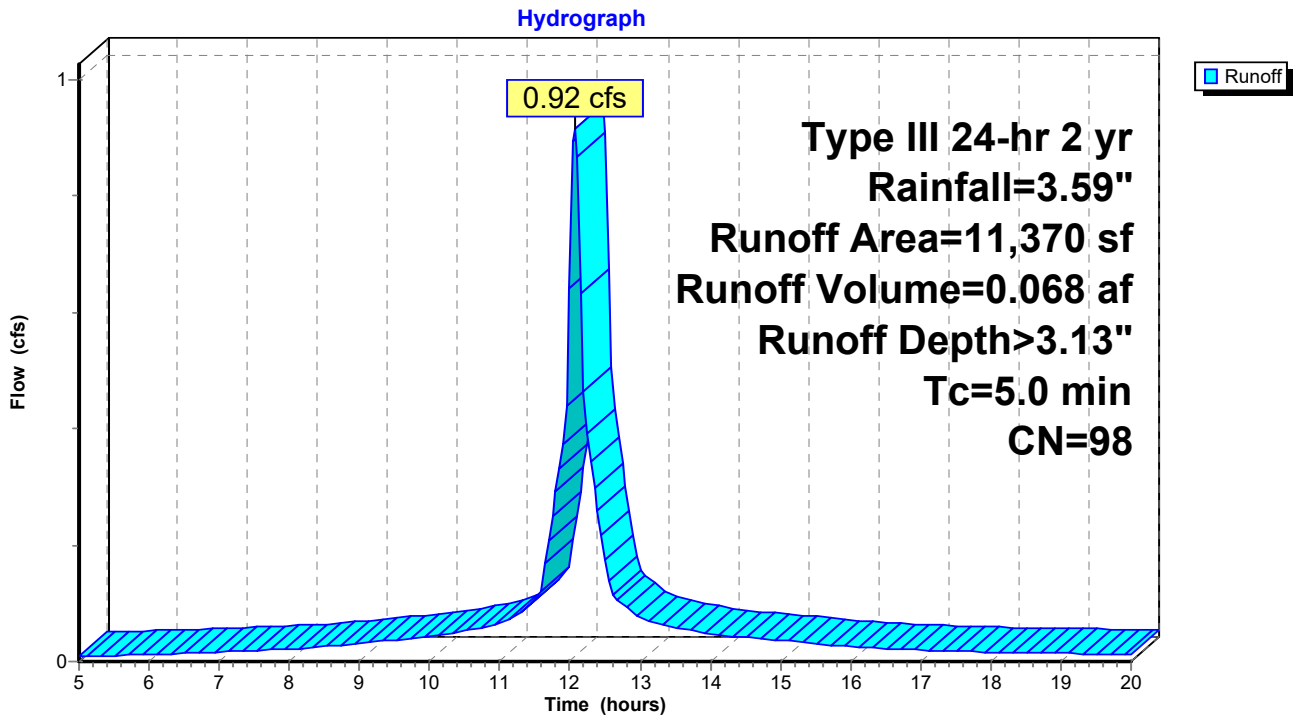
| Elevation (feet) | Storage (cubic-feet) | Elevation (feet) | Storage (cubic-feet) |
|---------------------|-------------------------|---------------------|-------------------------|
| 444.50 | 0 | 447.15 | 2,112 |
| 444.55 | 24 | 447.20 | 2,156 |
| 444.60 | 48 | 447.25 | 2,199 |
| 444.65 | 72 | 447.30 | 2,242 |
| 444.70 | 96 | 447.35 | 2,286 |
| 444.75 | 120 | 447.40 | 2,329 |
| 444.80 | 143 | 447.45 | 2,372 |
| 444.85 | 167 | 447.50 | 2,416 |
| 444.90 | 191 | 447.55 | 2,459 |
| 444.95 | 215 | 447.60 | 2,502 |
| 445.00 | 239 | 447.65 | 2,545 |
| 445.05 | 281 | 447.70 | 2,589 |
| 445.10 | 324 | 447.75 | 2,632 |
| 445.15 | 366 | 447.80 | 2,675 |
| 445.20 | 409 | 447.85 | 2,718 |
| 445.25 | 452 | 447.90 | 2,761 |
| 445.30 | 496 | 447.95 | 2,804 |
| 445.35 | 540 | 448.00 | 2,848 |
| 445.40 | 584 | 448.05 | 2,891 |
| 445.45 | 628 | 448.10 | 2,934 |
| 445.50 | 671 | 448.15 | 2,977 |
| 445.55 | 715 | 448.20 | 3,020 |
| 445.60 | 759 | 448.25 | 3,063 |
| 445.65 | 803 | 448.30 | 3,106 |
| 445.70 | 847 | 448.35 | 3,149 |
| 445.75 | 891 | 448.40 | 3,192 |
| 445.80 | 935 | 448.45 | 3,235 |
| 445.85 | 979 | 448.50 | 3,278 |
| 445.90 | 1,022 | 448.55 | 3,321 |
| 445.95 | 1,066 | 448.60 | 3,349 |
| 446.00 | 1,110 | 448.65 | 3,357 |
| 446.05 | 1,154 | 448.70 | 3,364 |
| 446.10 | 1,198 | 448.75 | 3,371 |
| 446.15 | 1,241 | 448.80 | 3,379 |
| 446.20 | 1,285 | 448.85 | 3,386 |
| 446.25 | 1,329 | 448.90 | 3,394 |
| 446.30 | 1,372 | 448.95 | 3,401 |
| 446.35 | 1,416 | 449.00 | 3,408 |
| 446.40 | 1,460 | | |
| 446.45 | 1,503 | | |
| 446.50 | 1,547 | | |
| 446.55 | 1,590 | | |
| 446.60 | 1,634 | | |
| 446.65 | 1,678 | | |
| 446.70 | 1,721 | | |
| 446.75 | 1,765 | | |
| 446.80 | 1,808 | | |
| 446.85 | 1,852 | | |
| 446.90 | 1,895 | | |
| 446.95 | 1,939 | | |
| 447.00 | 1,982 | | |
| 447.05 | 2,026 | | |
| 447.10 | 2,069 | | |

Subcatchment 1: EXISTING Q NEW BUILDING

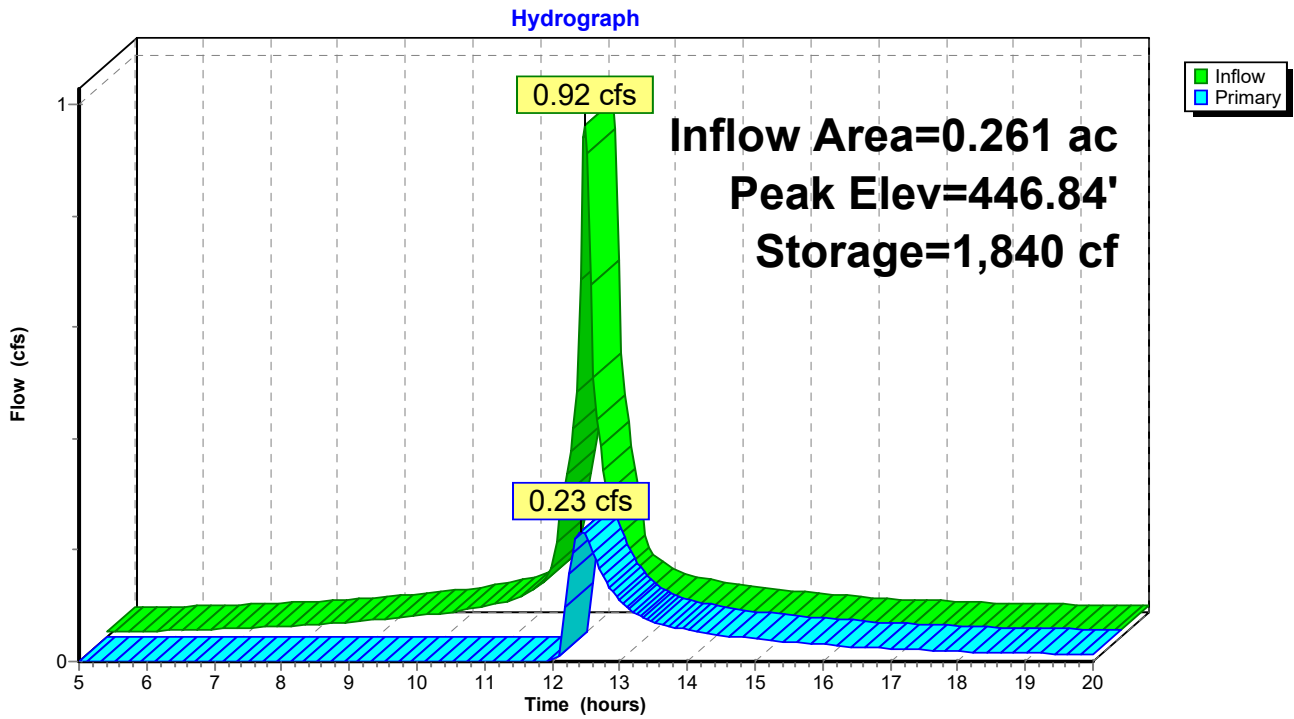
Hydrograph



Subcatchment 2: Q PROPOSED



Pond 3: PROPOSED DETENTION SYSTEM



Stage-Discharge for Pond 3: PROPOSED DETENTION SYSTEM

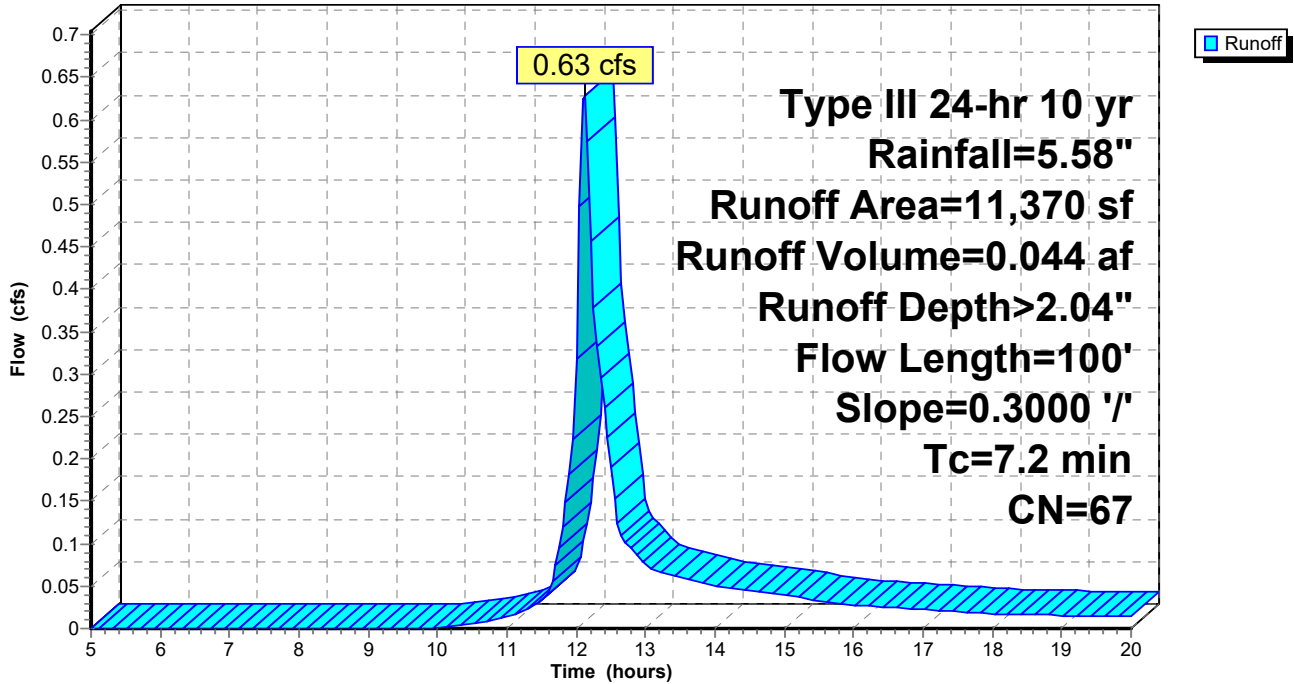
| Elevation (feet) | Primary (cfs) | Elevation (feet) | Primary (cfs) |
|---------------------|------------------|---------------------|------------------|
| 444.50 | 0.00 | 447.15 | 0.44 |
| 444.55 | 0.00 | 447.20 | 0.46 |
| 444.60 | 0.00 | 447.25 | 0.48 |
| 444.65 | 0.00 | 447.30 | 0.51 |
| 444.70 | 0.00 | 447.35 | 0.53 |
| 444.75 | 0.00 | 447.40 | 0.55 |
| 444.80 | 0.00 | 447.45 | 0.57 |
| 444.85 | 0.00 | 447.50 | 0.58 |
| 444.90 | 0.00 | 447.55 | 0.60 |
| 444.95 | 0.00 | 447.60 | 0.62 |
| 445.00 | 0.00 | 447.65 | 0.64 |
| 445.05 | 0.00 | 447.70 | 0.65 |
| 445.10 | 0.00 | 447.75 | 0.67 |
| 445.15 | 0.00 | 447.80 | 0.69 |
| 445.20 | 0.00 | 447.85 | 0.70 |
| 445.25 | 0.00 | 447.90 | 0.72 |
| 445.30 | 0.00 | 447.95 | 0.73 |
| 445.35 | 0.00 | 448.00 | 0.75 |
| 445.40 | 0.00 | 448.05 | 0.76 |
| 445.45 | 0.00 | 448.10 | 0.77 |
| 445.50 | 0.00 | 448.15 | 0.79 |
| 445.55 | 0.00 | 448.20 | 0.80 |
| 445.60 | 0.00 | 448.25 | 0.82 |
| 445.65 | 0.00 | 448.30 | 0.83 |
| 445.70 | 0.00 | 448.35 | 0.84 |
| 445.75 | 0.00 | 448.40 | 0.85 |
| 445.80 | 0.00 | 448.45 | 0.87 |
| 445.85 | 0.00 | 448.50 | 0.88 |
| 445.90 | 0.00 | 448.55 | 0.89 |
| 445.95 | 0.00 | 448.60 | 0.90 |
| 446.00 | 0.00 | 448.65 | 0.91 |
| 446.05 | 0.00 | 448.70 | 0.93 |
| 446.10 | 0.00 | 448.75 | 0.94 |
| 446.15 | 0.00 | 448.80 | 0.95 |
| 446.20 | 0.00 | 448.85 | 0.96 |
| 446.25 | 0.00 | 448.90 | 0.97 |
| 446.30 | 0.00 | 448.95 | 0.98 |
| 446.35 | 0.00 | 449.00 | 0.99 |
| 446.40 | 0.00 | | |
| 446.45 | 0.00 | | |
| 446.50 | 0.00 | | |
| 446.55 | 0.01 | | |
| 446.60 | 0.03 | | |
| 446.65 | 0.06 | | |
| 446.70 | 0.10 | | |
| 446.75 | 0.15 | | |
| 446.80 | 0.20 | | |
| 446.85 | 0.25 | | |
| 446.90 | 0.29 | | |
| 446.95 | 0.32 | | |
| 447.00 | 0.35 | | |
| 447.05 | 0.38 | | |
| 447.10 | 0.41 | | |

Stage-Area-Storage for Pond 3: PROPOSED DETENTION SYSTEM

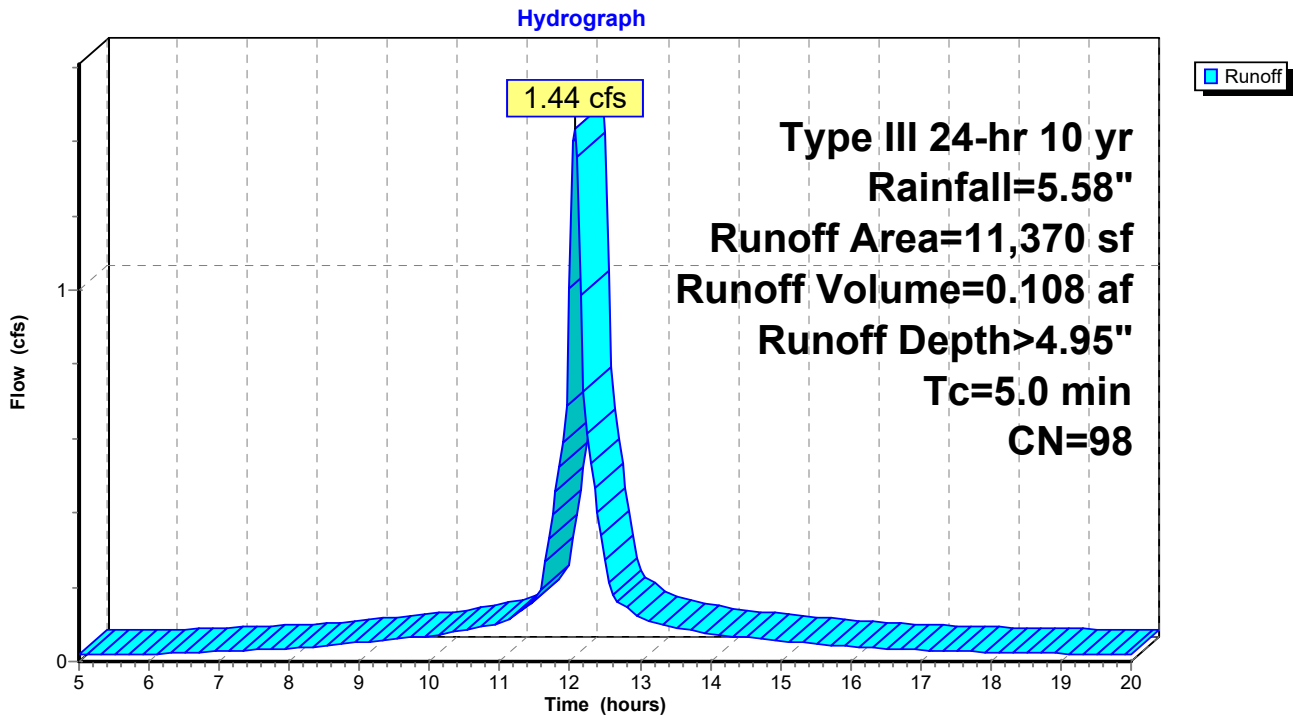
| Elevation (feet) | Storage (cubic-feet) | Elevation (feet) | Storage (cubic-feet) |
|---------------------|-------------------------|---------------------|-------------------------|
| 444.50 | 0 | 447.15 | 2,112 |
| 444.55 | 24 | 447.20 | 2,156 |
| 444.60 | 48 | 447.25 | 2,199 |
| 444.65 | 72 | 447.30 | 2,242 |
| 444.70 | 96 | 447.35 | 2,286 |
| 444.75 | 120 | 447.40 | 2,329 |
| 444.80 | 143 | 447.45 | 2,372 |
| 444.85 | 167 | 447.50 | 2,416 |
| 444.90 | 191 | 447.55 | 2,459 |
| 444.95 | 215 | 447.60 | 2,502 |
| 445.00 | 239 | 447.65 | 2,545 |
| 445.05 | 281 | 447.70 | 2,589 |
| 445.10 | 324 | 447.75 | 2,632 |
| 445.15 | 366 | 447.80 | 2,675 |
| 445.20 | 409 | 447.85 | 2,718 |
| 445.25 | 452 | 447.90 | 2,761 |
| 445.30 | 496 | 447.95 | 2,804 |
| 445.35 | 540 | 448.00 | 2,848 |
| 445.40 | 584 | 448.05 | 2,891 |
| 445.45 | 628 | 448.10 | 2,934 |
| 445.50 | 671 | 448.15 | 2,977 |
| 445.55 | 715 | 448.20 | 3,020 |
| 445.60 | 759 | 448.25 | 3,063 |
| 445.65 | 803 | 448.30 | 3,106 |
| 445.70 | 847 | 448.35 | 3,149 |
| 445.75 | 891 | 448.40 | 3,192 |
| 445.80 | 935 | 448.45 | 3,235 |
| 445.85 | 979 | 448.50 | 3,278 |
| 445.90 | 1,022 | 448.55 | 3,321 |
| 445.95 | 1,066 | 448.60 | 3,349 |
| 446.00 | 1,110 | 448.65 | 3,357 |
| 446.05 | 1,154 | 448.70 | 3,364 |
| 446.10 | 1,198 | 448.75 | 3,371 |
| 446.15 | 1,241 | 448.80 | 3,379 |
| 446.20 | 1,285 | 448.85 | 3,386 |
| 446.25 | 1,329 | 448.90 | 3,394 |
| 446.30 | 1,372 | 448.95 | 3,401 |
| 446.35 | 1,416 | 449.00 | 3,408 |
| 446.40 | 1,460 | | |
| 446.45 | 1,503 | | |
| 446.50 | 1,547 | | |
| 446.55 | 1,590 | | |
| 446.60 | 1,634 | | |
| 446.65 | 1,678 | | |
| 446.70 | 1,721 | | |
| 446.75 | 1,765 | | |
| 446.80 | 1,808 | | |
| 446.85 | 1,852 | | |
| 446.90 | 1,895 | | |
| 446.95 | 1,939 | | |
| 447.00 | 1,982 | | |
| 447.05 | 2,026 | | |
| 447.10 | 2,069 | | |

Subcatchment 1: EXISTING Q NEW BUILDING

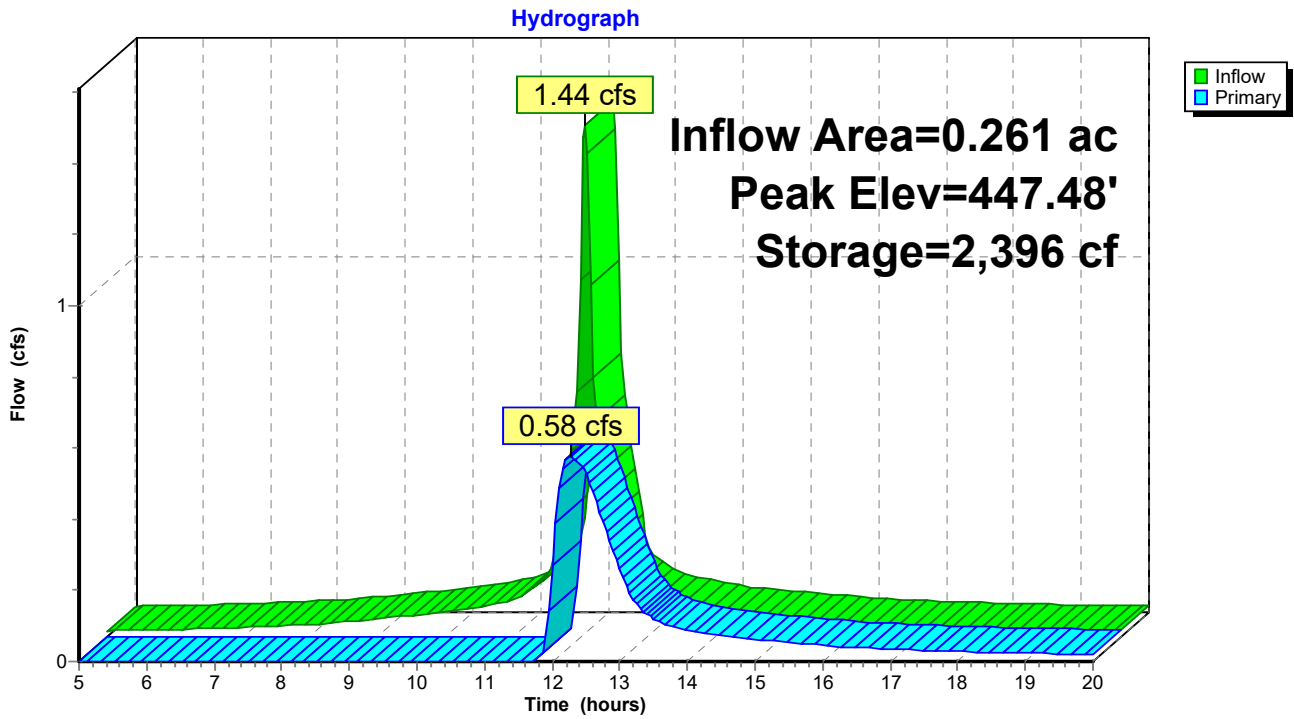
Hydrograph



Subcatchment 2: Q PROPOSED



Pond 3: PROPOSED DETENTION SYSTEM



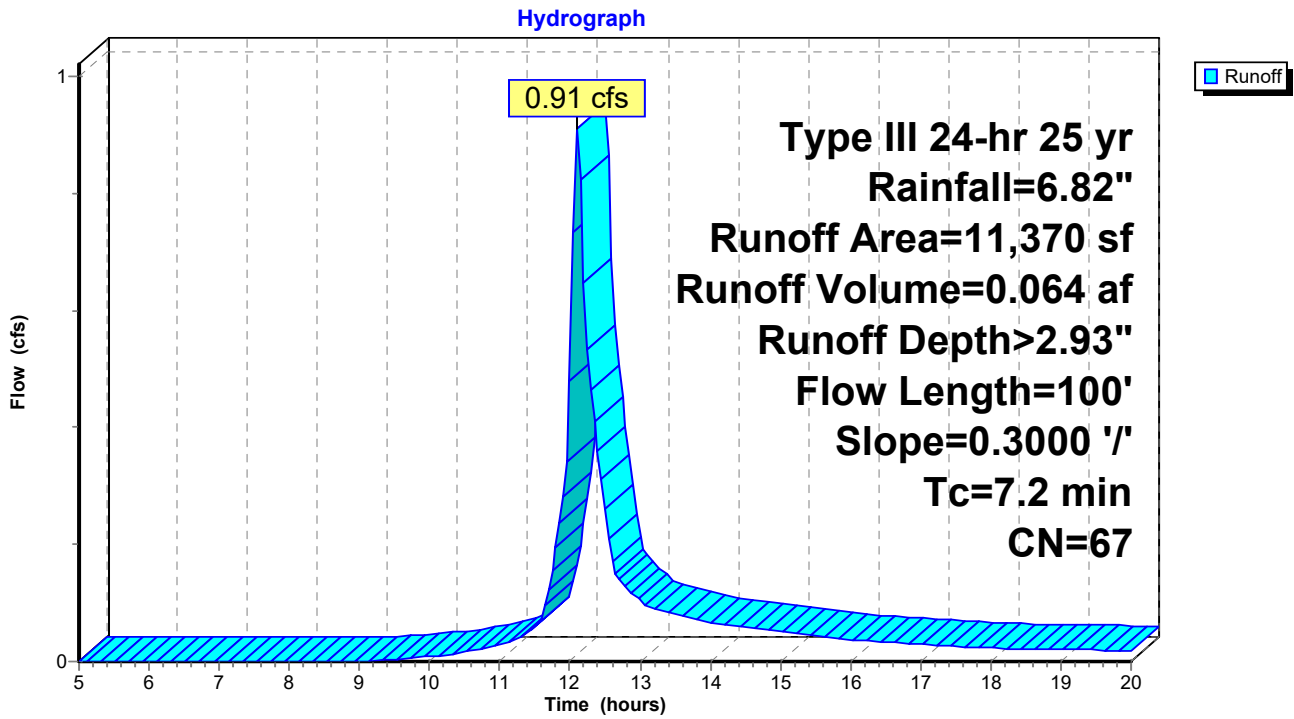
Stage-Discharge for Pond 3: PROPOSED DETENTION SYSTEM

| Elevation (feet) | Primary (cfs) | Elevation (feet) | Primary (cfs) |
|---------------------|------------------|---------------------|------------------|
| 444.50 | 0.00 | 447.15 | 0.44 |
| 444.55 | 0.00 | 447.20 | 0.46 |
| 444.60 | 0.00 | 447.25 | 0.48 |
| 444.65 | 0.00 | 447.30 | 0.51 |
| 444.70 | 0.00 | 447.35 | 0.53 |
| 444.75 | 0.00 | 447.40 | 0.55 |
| 444.80 | 0.00 | 447.45 | 0.57 |
| 444.85 | 0.00 | 447.50 | 0.58 |
| 444.90 | 0.00 | 447.55 | 0.60 |
| 444.95 | 0.00 | 447.60 | 0.62 |
| 445.00 | 0.00 | 447.65 | 0.64 |
| 445.05 | 0.00 | 447.70 | 0.65 |
| 445.10 | 0.00 | 447.75 | 0.67 |
| 445.15 | 0.00 | 447.80 | 0.69 |
| 445.20 | 0.00 | 447.85 | 0.70 |
| 445.25 | 0.00 | 447.90 | 0.72 |
| 445.30 | 0.00 | 447.95 | 0.73 |
| 445.35 | 0.00 | 448.00 | 0.75 |
| 445.40 | 0.00 | 448.05 | 0.76 |
| 445.45 | 0.00 | 448.10 | 0.77 |
| 445.50 | 0.00 | 448.15 | 0.79 |
| 445.55 | 0.00 | 448.20 | 0.80 |
| 445.60 | 0.00 | 448.25 | 0.82 |
| 445.65 | 0.00 | 448.30 | 0.83 |
| 445.70 | 0.00 | 448.35 | 0.84 |
| 445.75 | 0.00 | 448.40 | 0.85 |
| 445.80 | 0.00 | 448.45 | 0.87 |
| 445.85 | 0.00 | 448.50 | 0.88 |
| 445.90 | 0.00 | 448.55 | 0.89 |
| 445.95 | 0.00 | 448.60 | 0.90 |
| 446.00 | 0.00 | 448.65 | 0.91 |
| 446.05 | 0.00 | 448.70 | 0.93 |
| 446.10 | 0.00 | 448.75 | 0.94 |
| 446.15 | 0.00 | 448.80 | 0.95 |
| 446.20 | 0.00 | 448.85 | 0.96 |
| 446.25 | 0.00 | 448.90 | 0.97 |
| 446.30 | 0.00 | 448.95 | 0.98 |
| 446.35 | 0.00 | 449.00 | 0.99 |
| 446.40 | 0.00 | | |
| 446.45 | 0.00 | | |
| 446.50 | 0.00 | | |
| 446.55 | 0.01 | | |
| 446.60 | 0.03 | | |
| 446.65 | 0.06 | | |
| 446.70 | 0.10 | | |
| 446.75 | 0.15 | | |
| 446.80 | 0.20 | | |
| 446.85 | 0.25 | | |
| 446.90 | 0.29 | | |
| 446.95 | 0.32 | | |
| 447.00 | 0.35 | | |
| 447.05 | 0.38 | | |
| 447.10 | 0.41 | | |

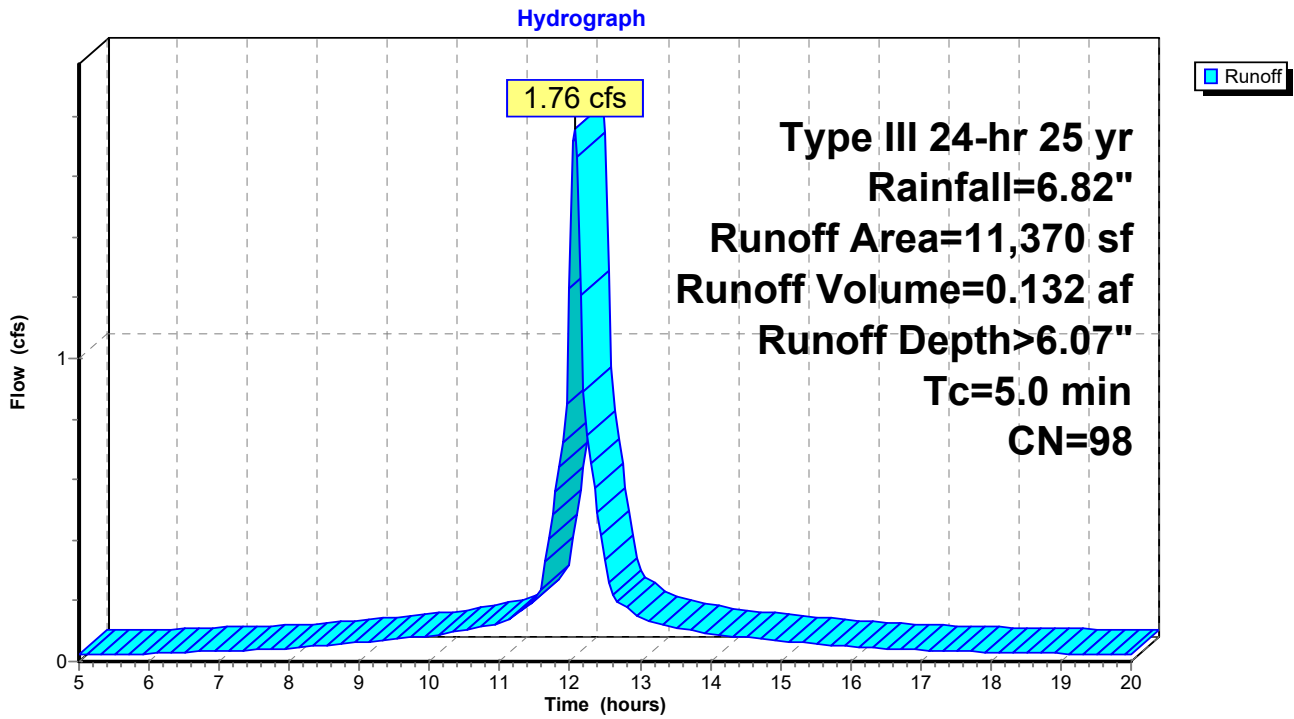
Stage-Area-Storage for Pond 3: PROPOSED DETENTION SYSTEM

| Elevation (feet) | Storage (cubic-feet) | Elevation (feet) | Storage (cubic-feet) |
|---------------------|-------------------------|---------------------|-------------------------|
| 444.50 | 0 | 447.15 | 2,112 |
| 444.55 | 24 | 447.20 | 2,156 |
| 444.60 | 48 | 447.25 | 2,199 |
| 444.65 | 72 | 447.30 | 2,242 |
| 444.70 | 96 | 447.35 | 2,286 |
| 444.75 | 120 | 447.40 | 2,329 |
| 444.80 | 143 | 447.45 | 2,372 |
| 444.85 | 167 | 447.50 | 2,416 |
| 444.90 | 191 | 447.55 | 2,459 |
| 444.95 | 215 | 447.60 | 2,502 |
| 445.00 | 239 | 447.65 | 2,545 |
| 445.05 | 281 | 447.70 | 2,589 |
| 445.10 | 324 | 447.75 | 2,632 |
| 445.15 | 366 | 447.80 | 2,675 |
| 445.20 | 409 | 447.85 | 2,718 |
| 445.25 | 452 | 447.90 | 2,761 |
| 445.30 | 496 | 447.95 | 2,804 |
| 445.35 | 540 | 448.00 | 2,848 |
| 445.40 | 584 | 448.05 | 2,891 |
| 445.45 | 628 | 448.10 | 2,934 |
| 445.50 | 671 | 448.15 | 2,977 |
| 445.55 | 715 | 448.20 | 3,020 |
| 445.60 | 759 | 448.25 | 3,063 |
| 445.65 | 803 | 448.30 | 3,106 |
| 445.70 | 847 | 448.35 | 3,149 |
| 445.75 | 891 | 448.40 | 3,192 |
| 445.80 | 935 | 448.45 | 3,235 |
| 445.85 | 979 | 448.50 | 3,278 |
| 445.90 | 1,022 | 448.55 | 3,321 |
| 445.95 | 1,066 | 448.60 | 3,349 |
| 446.00 | 1,110 | 448.65 | 3,357 |
| 446.05 | 1,154 | 448.70 | 3,364 |
| 446.10 | 1,198 | 448.75 | 3,371 |
| 446.15 | 1,241 | 448.80 | 3,379 |
| 446.20 | 1,285 | 448.85 | 3,386 |
| 446.25 | 1,329 | 448.90 | 3,394 |
| 446.30 | 1,372 | 448.95 | 3,401 |
| 446.35 | 1,416 | 449.00 | 3,408 |
| 446.40 | 1,460 | | |
| 446.45 | 1,503 | | |
| 446.50 | 1,547 | | |
| 446.55 | 1,590 | | |
| 446.60 | 1,634 | | |
| 446.65 | 1,678 | | |
| 446.70 | 1,721 | | |
| 446.75 | 1,765 | | |
| 446.80 | 1,808 | | |
| 446.85 | 1,852 | | |
| 446.90 | 1,895 | | |
| 446.95 | 1,939 | | |
| 447.00 | 1,982 | | |
| 447.05 | 2,026 | | |
| 447.10 | 2,069 | | |

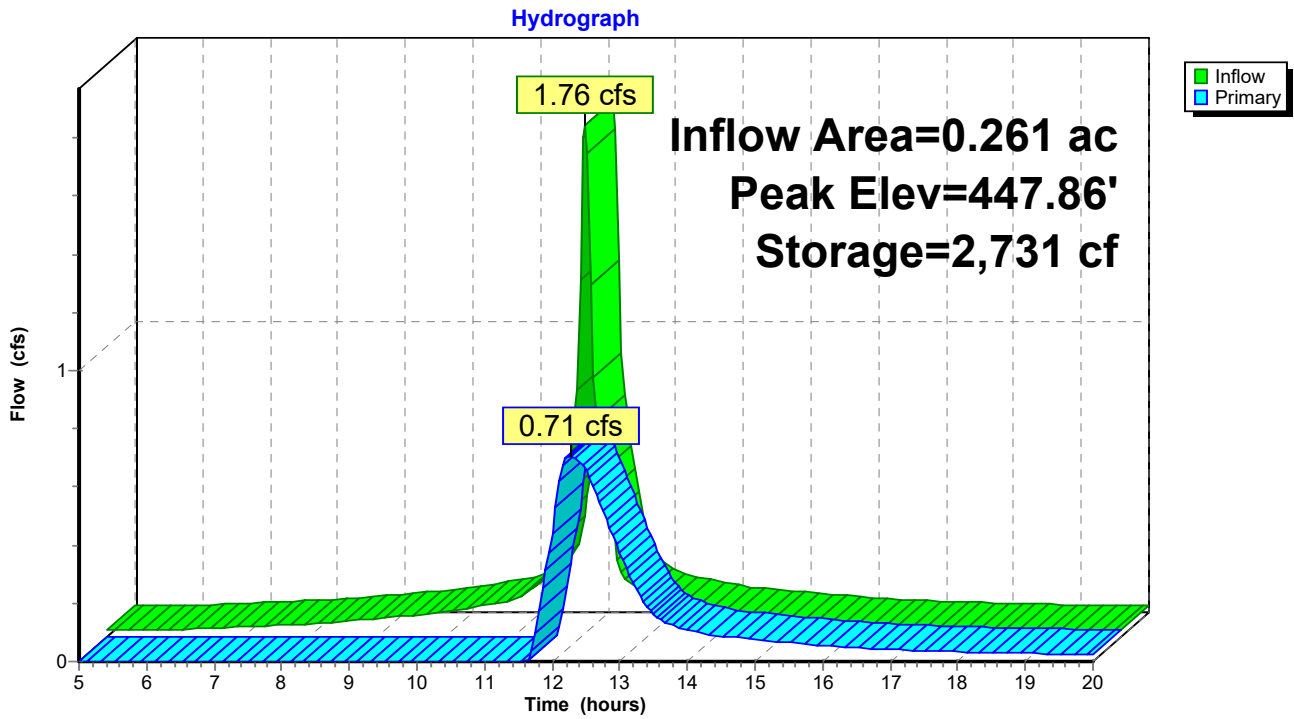
Subcatchment 1: EXISTING Q NEW BUILDING



Subcatchment 2: Q PROPOSED



Pond 3: PROPOSED DETENTION SYSTEM



Stage-Discharge for Pond 3: PROPOSED DETENTION SYSTEM

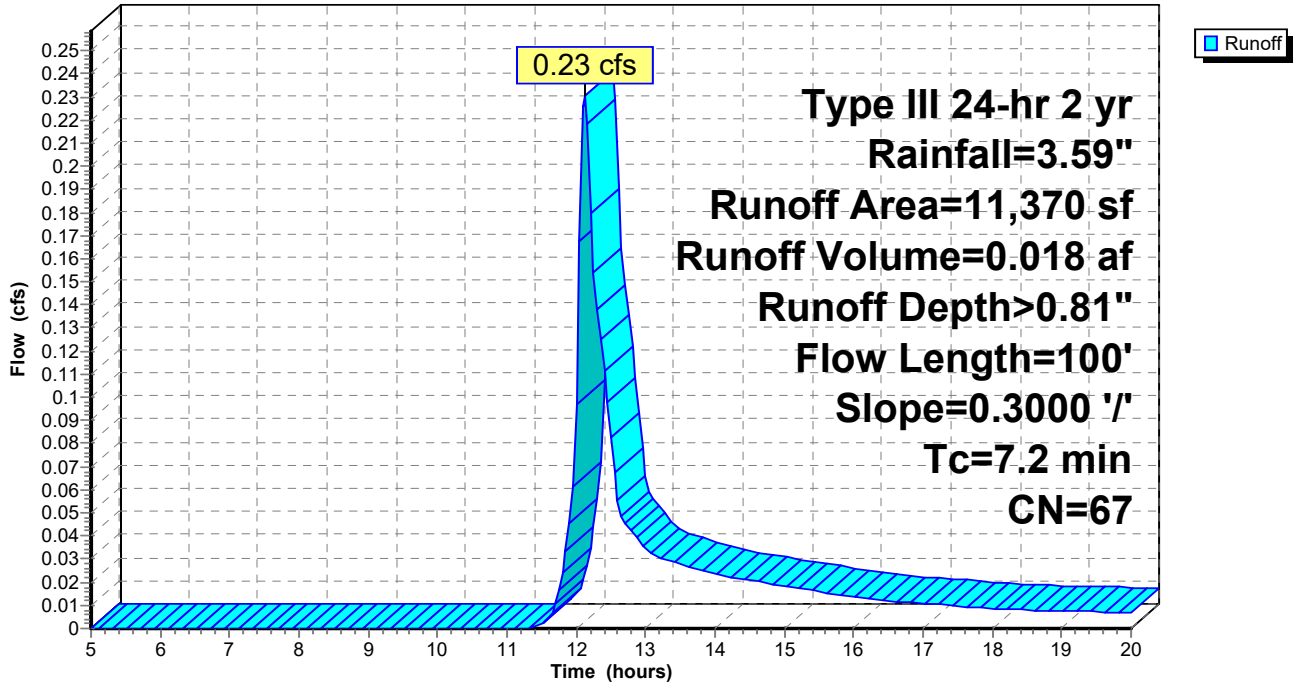
| Elevation (feet) | Primary (cfs) | Elevation (feet) | Primary (cfs) |
|---------------------|------------------|---------------------|------------------|
| 444.50 | 0.00 | 447.15 | 0.44 |
| 444.55 | 0.00 | 447.20 | 0.46 |
| 444.60 | 0.00 | 447.25 | 0.48 |
| 444.65 | 0.00 | 447.30 | 0.51 |
| 444.70 | 0.00 | 447.35 | 0.53 |
| 444.75 | 0.00 | 447.40 | 0.55 |
| 444.80 | 0.00 | 447.45 | 0.57 |
| 444.85 | 0.00 | 447.50 | 0.58 |
| 444.90 | 0.00 | 447.55 | 0.60 |
| 444.95 | 0.00 | 447.60 | 0.62 |
| 445.00 | 0.00 | 447.65 | 0.64 |
| 445.05 | 0.00 | 447.70 | 0.65 |
| 445.10 | 0.00 | 447.75 | 0.67 |
| 445.15 | 0.00 | 447.80 | 0.69 |
| 445.20 | 0.00 | 447.85 | 0.70 |
| 445.25 | 0.00 | 447.90 | 0.72 |
| 445.30 | 0.00 | 447.95 | 0.73 |
| 445.35 | 0.00 | 448.00 | 0.75 |
| 445.40 | 0.00 | 448.05 | 0.76 |
| 445.45 | 0.00 | 448.10 | 0.77 |
| 445.50 | 0.00 | 448.15 | 0.79 |
| 445.55 | 0.00 | 448.20 | 0.80 |
| 445.60 | 0.00 | 448.25 | 0.82 |
| 445.65 | 0.00 | 448.30 | 0.83 |
| 445.70 | 0.00 | 448.35 | 0.84 |
| 445.75 | 0.00 | 448.40 | 0.85 |
| 445.80 | 0.00 | 448.45 | 0.87 |
| 445.85 | 0.00 | 448.50 | 0.88 |
| 445.90 | 0.00 | 448.55 | 0.89 |
| 445.95 | 0.00 | 448.60 | 0.90 |
| 446.00 | 0.00 | 448.65 | 0.91 |
| 446.05 | 0.00 | 448.70 | 0.93 |
| 446.10 | 0.00 | 448.75 | 0.94 |
| 446.15 | 0.00 | 448.80 | 0.95 |
| 446.20 | 0.00 | 448.85 | 0.96 |
| 446.25 | 0.00 | 448.90 | 0.97 |
| 446.30 | 0.00 | 448.95 | 0.98 |
| 446.35 | 0.00 | 449.00 | 0.99 |
| 446.40 | 0.00 | | |
| 446.45 | 0.00 | | |
| 446.50 | 0.00 | | |
| 446.55 | 0.01 | | |
| 446.60 | 0.03 | | |
| 446.65 | 0.06 | | |
| 446.70 | 0.10 | | |
| 446.75 | 0.15 | | |
| 446.80 | 0.20 | | |
| 446.85 | 0.25 | | |
| 446.90 | 0.29 | | |
| 446.95 | 0.32 | | |
| 447.00 | 0.35 | | |
| 447.05 | 0.38 | | |
| 447.10 | 0.41 | | |

Stage-Area-Storage for Pond 3: PROPOSED DETENTION SYSTEM

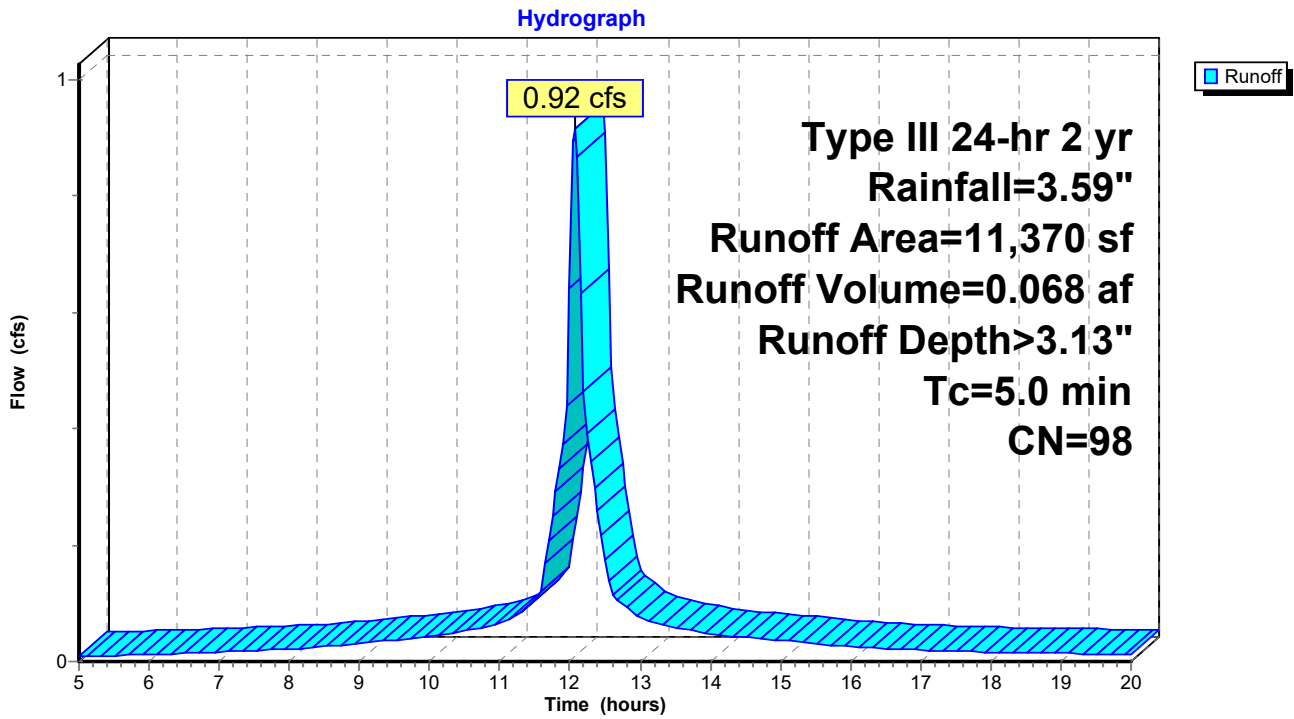
| Elevation (feet) | Storage (cubic-feet) | Elevation (feet) | Storage (cubic-feet) |
|---------------------|-------------------------|---------------------|-------------------------|
| 444.50 | 0 | 447.15 | 2,112 |
| 444.55 | 24 | 447.20 | 2,156 |
| 444.60 | 48 | 447.25 | 2,199 |
| 444.65 | 72 | 447.30 | 2,242 |
| 444.70 | 96 | 447.35 | 2,286 |
| 444.75 | 120 | 447.40 | 2,329 |
| 444.80 | 143 | 447.45 | 2,372 |
| 444.85 | 167 | 447.50 | 2,416 |
| 444.90 | 191 | 447.55 | 2,459 |
| 444.95 | 215 | 447.60 | 2,502 |
| 445.00 | 239 | 447.65 | 2,545 |
| 445.05 | 281 | 447.70 | 2,589 |
| 445.10 | 324 | 447.75 | 2,632 |
| 445.15 | 366 | 447.80 | 2,675 |
| 445.20 | 409 | 447.85 | 2,718 |
| 445.25 | 452 | 447.90 | 2,761 |
| 445.30 | 496 | 447.95 | 2,804 |
| 445.35 | 540 | 448.00 | 2,848 |
| 445.40 | 584 | 448.05 | 2,891 |
| 445.45 | 628 | 448.10 | 2,934 |
| 445.50 | 671 | 448.15 | 2,977 |
| 445.55 | 715 | 448.20 | 3,020 |
| 445.60 | 759 | 448.25 | 3,063 |
| 445.65 | 803 | 448.30 | 3,106 |
| 445.70 | 847 | 448.35 | 3,149 |
| 445.75 | 891 | 448.40 | 3,192 |
| 445.80 | 935 | 448.45 | 3,235 |
| 445.85 | 979 | 448.50 | 3,278 |
| 445.90 | 1,022 | 448.55 | 3,321 |
| 445.95 | 1,066 | 448.60 | 3,349 |
| 446.00 | 1,110 | 448.65 | 3,357 |
| 446.05 | 1,154 | 448.70 | 3,364 |
| 446.10 | 1,198 | 448.75 | 3,371 |
| 446.15 | 1,241 | 448.80 | 3,379 |
| 446.20 | 1,285 | 448.85 | 3,386 |
| 446.25 | 1,329 | 448.90 | 3,394 |
| 446.30 | 1,372 | 448.95 | 3,401 |
| 446.35 | 1,416 | 449.00 | 3,408 |
| 446.40 | 1,460 | | |
| 446.45 | 1,503 | | |
| 446.50 | 1,547 | | |
| 446.55 | 1,590 | | |
| 446.60 | 1,634 | | |
| 446.65 | 1,678 | | |
| 446.70 | 1,721 | | |
| 446.75 | 1,765 | | |
| 446.80 | 1,808 | | |
| 446.85 | 1,852 | | |
| 446.90 | 1,895 | | |
| 446.95 | 1,939 | | |
| 447.00 | 1,982 | | |
| 447.05 | 2,026 | | |
| 447.10 | 2,069 | | |

Subcatchment 1: EXISTING Q NEW BUILDING

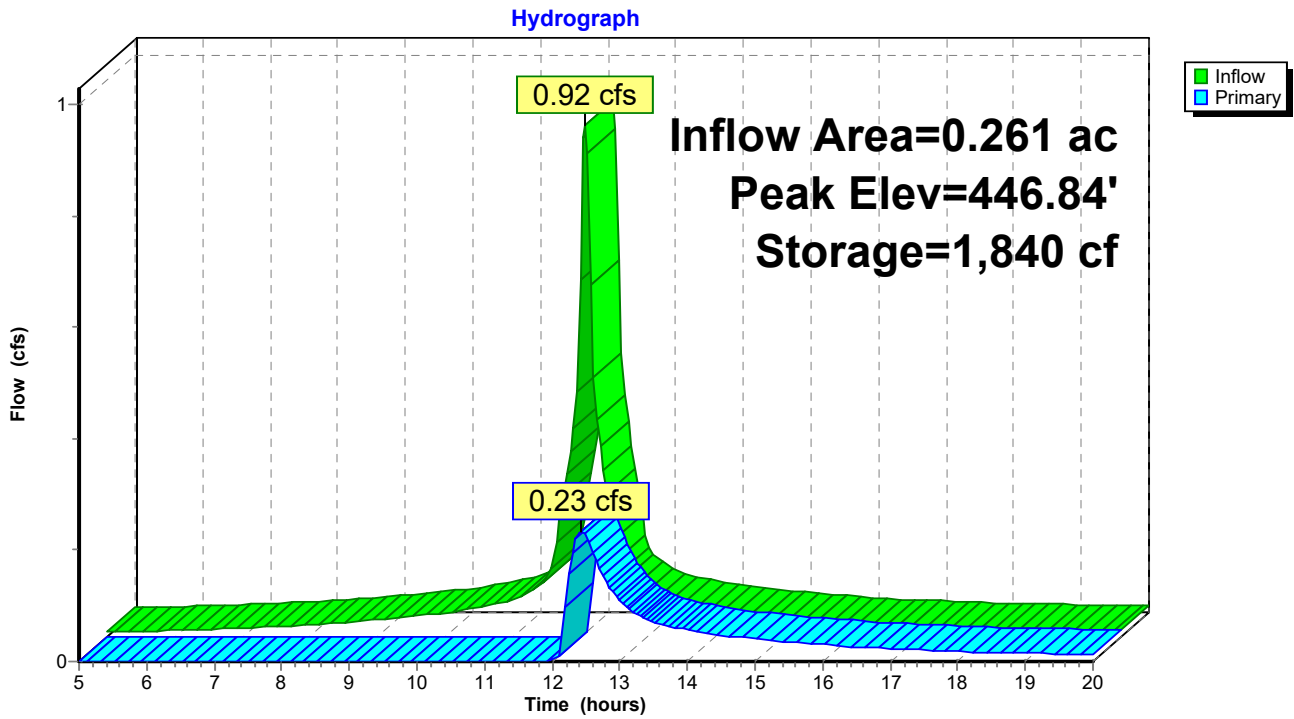
Hydrograph



Subcatchment 2: Q PROPOSED



Pond 3: PROPOSED DETENTION SYSTEM



Stage-Discharge for Pond 3: PROPOSED DETENTION SYSTEM

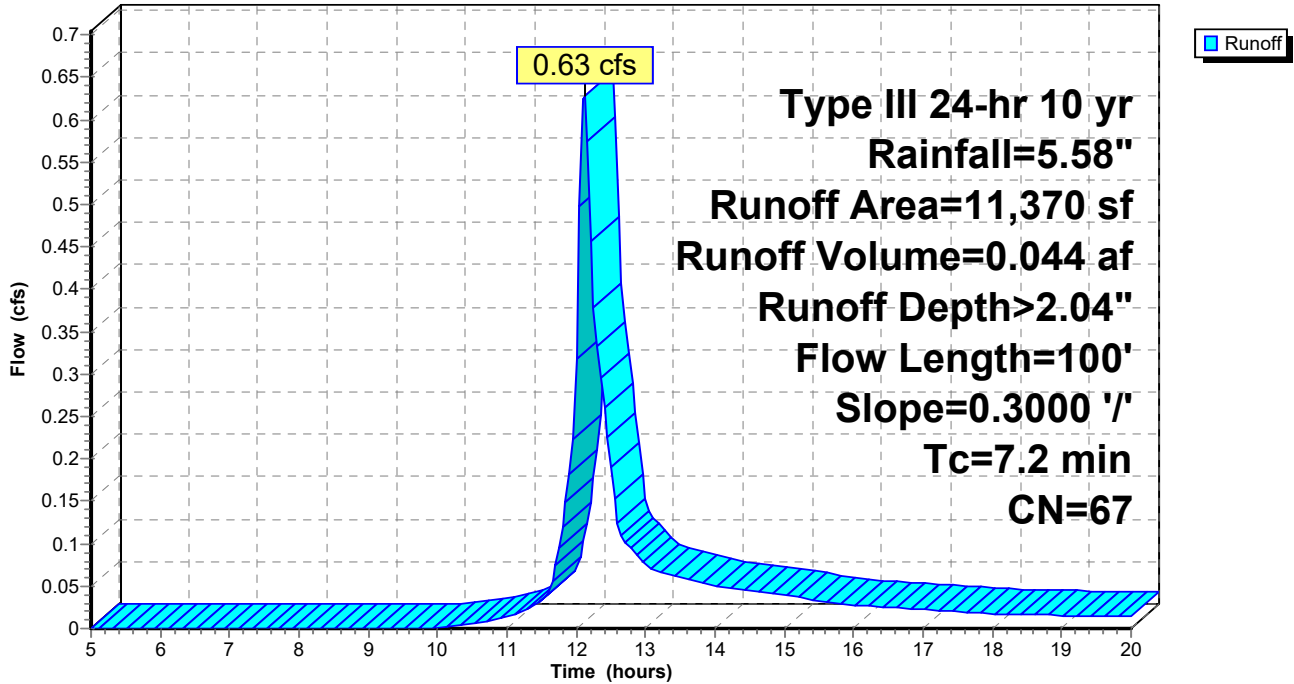
| Elevation (feet) | Primary (cfs) | Elevation (feet) | Primary (cfs) |
|---------------------|------------------|---------------------|------------------|
| 444.50 | 0.00 | 447.15 | 0.44 |
| 444.55 | 0.00 | 447.20 | 0.46 |
| 444.60 | 0.00 | 447.25 | 0.48 |
| 444.65 | 0.00 | 447.30 | 0.51 |
| 444.70 | 0.00 | 447.35 | 0.53 |
| 444.75 | 0.00 | 447.40 | 0.55 |
| 444.80 | 0.00 | 447.45 | 0.57 |
| 444.85 | 0.00 | 447.50 | 0.58 |
| 444.90 | 0.00 | 447.55 | 0.60 |
| 444.95 | 0.00 | 447.60 | 0.62 |
| 445.00 | 0.00 | 447.65 | 0.64 |
| 445.05 | 0.00 | 447.70 | 0.65 |
| 445.10 | 0.00 | 447.75 | 0.67 |
| 445.15 | 0.00 | 447.80 | 0.69 |
| 445.20 | 0.00 | 447.85 | 0.70 |
| 445.25 | 0.00 | 447.90 | 0.72 |
| 445.30 | 0.00 | 447.95 | 0.73 |
| 445.35 | 0.00 | 448.00 | 0.75 |
| 445.40 | 0.00 | 448.05 | 0.76 |
| 445.45 | 0.00 | 448.10 | 0.77 |
| 445.50 | 0.00 | 448.15 | 0.79 |
| 445.55 | 0.00 | 448.20 | 0.80 |
| 445.60 | 0.00 | 448.25 | 0.82 |
| 445.65 | 0.00 | 448.30 | 0.83 |
| 445.70 | 0.00 | 448.35 | 0.84 |
| 445.75 | 0.00 | 448.40 | 0.85 |
| 445.80 | 0.00 | 448.45 | 0.87 |
| 445.85 | 0.00 | 448.50 | 0.88 |
| 445.90 | 0.00 | 448.55 | 0.89 |
| 445.95 | 0.00 | 448.60 | 0.90 |
| 446.00 | 0.00 | 448.65 | 0.91 |
| 446.05 | 0.00 | 448.70 | 0.93 |
| 446.10 | 0.00 | 448.75 | 0.94 |
| 446.15 | 0.00 | 448.80 | 0.95 |
| 446.20 | 0.00 | 448.85 | 0.96 |
| 446.25 | 0.00 | 448.90 | 0.97 |
| 446.30 | 0.00 | 448.95 | 0.98 |
| 446.35 | 0.00 | 449.00 | 0.99 |
| 446.40 | 0.00 | | |
| 446.45 | 0.00 | | |
| 446.50 | 0.00 | | |
| 446.55 | 0.01 | | |
| 446.60 | 0.03 | | |
| 446.65 | 0.06 | | |
| 446.70 | 0.10 | | |
| 446.75 | 0.15 | | |
| 446.80 | 0.20 | | |
| 446.85 | 0.25 | | |
| 446.90 | 0.29 | | |
| 446.95 | 0.32 | | |
| 447.00 | 0.35 | | |
| 447.05 | 0.38 | | |
| 447.10 | 0.41 | | |

Stage-Area-Storage for Pond 3: PROPOSED DETENTION SYSTEM

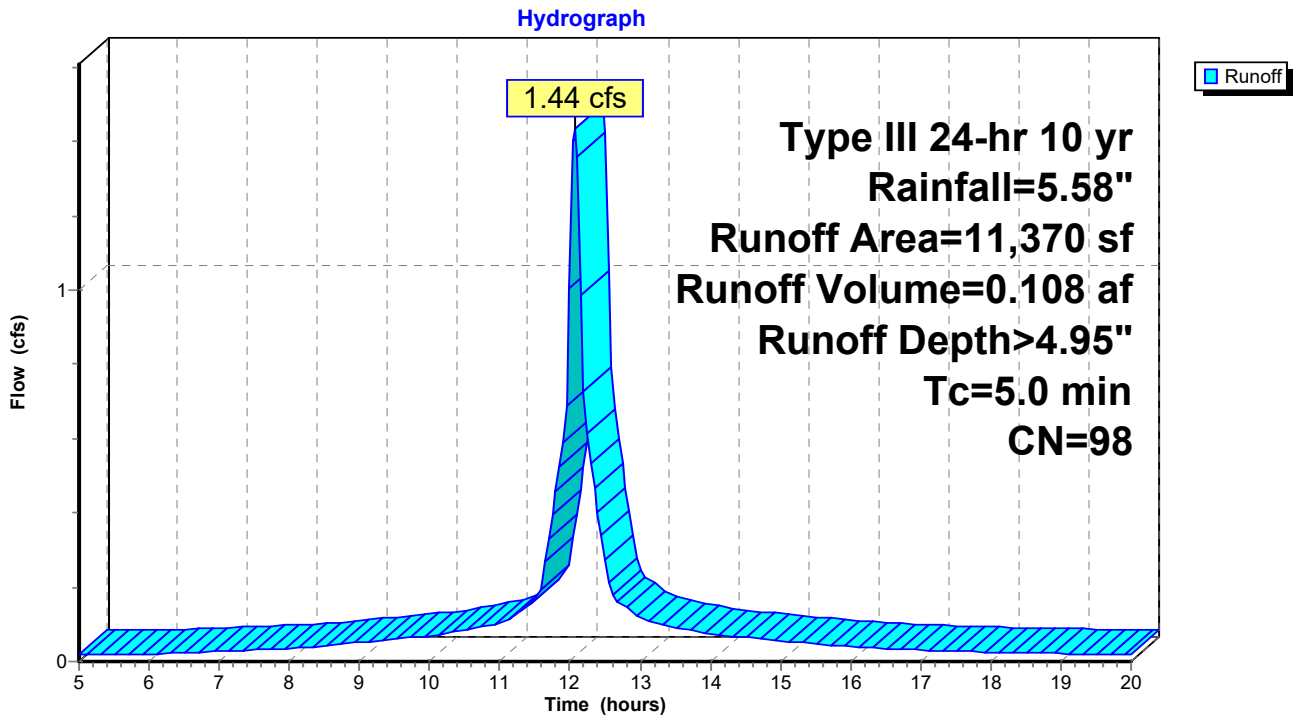
| Elevation (feet) | Storage (cubic-feet) | Elevation (feet) | Storage (cubic-feet) |
|---------------------|-------------------------|---------------------|-------------------------|
| 444.50 | 0 | 447.15 | 2,112 |
| 444.55 | 24 | 447.20 | 2,156 |
| 444.60 | 48 | 447.25 | 2,199 |
| 444.65 | 72 | 447.30 | 2,242 |
| 444.70 | 96 | 447.35 | 2,286 |
| 444.75 | 120 | 447.40 | 2,329 |
| 444.80 | 143 | 447.45 | 2,372 |
| 444.85 | 167 | 447.50 | 2,416 |
| 444.90 | 191 | 447.55 | 2,459 |
| 444.95 | 215 | 447.60 | 2,502 |
| 445.00 | 239 | 447.65 | 2,545 |
| 445.05 | 281 | 447.70 | 2,589 |
| 445.10 | 324 | 447.75 | 2,632 |
| 445.15 | 366 | 447.80 | 2,675 |
| 445.20 | 409 | 447.85 | 2,718 |
| 445.25 | 452 | 447.90 | 2,761 |
| 445.30 | 496 | 447.95 | 2,804 |
| 445.35 | 540 | 448.00 | 2,848 |
| 445.40 | 584 | 448.05 | 2,891 |
| 445.45 | 628 | 448.10 | 2,934 |
| 445.50 | 671 | 448.15 | 2,977 |
| 445.55 | 715 | 448.20 | 3,020 |
| 445.60 | 759 | 448.25 | 3,063 |
| 445.65 | 803 | 448.30 | 3,106 |
| 445.70 | 847 | 448.35 | 3,149 |
| 445.75 | 891 | 448.40 | 3,192 |
| 445.80 | 935 | 448.45 | 3,235 |
| 445.85 | 979 | 448.50 | 3,278 |
| 445.90 | 1,022 | 448.55 | 3,321 |
| 445.95 | 1,066 | 448.60 | 3,349 |
| 446.00 | 1,110 | 448.65 | 3,357 |
| 446.05 | 1,154 | 448.70 | 3,364 |
| 446.10 | 1,198 | 448.75 | 3,371 |
| 446.15 | 1,241 | 448.80 | 3,379 |
| 446.20 | 1,285 | 448.85 | 3,386 |
| 446.25 | 1,329 | 448.90 | 3,394 |
| 446.30 | 1,372 | 448.95 | 3,401 |
| 446.35 | 1,416 | 449.00 | 3,408 |
| 446.40 | 1,460 | | |
| 446.45 | 1,503 | | |
| 446.50 | 1,547 | | |
| 446.55 | 1,590 | | |
| 446.60 | 1,634 | | |
| 446.65 | 1,678 | | |
| 446.70 | 1,721 | | |
| 446.75 | 1,765 | | |
| 446.80 | 1,808 | | |
| 446.85 | 1,852 | | |
| 446.90 | 1,895 | | |
| 446.95 | 1,939 | | |
| 447.00 | 1,982 | | |
| 447.05 | 2,026 | | |
| 447.10 | 2,069 | | |

Subcatchment 1: EXISTING Q NEW BUILDING

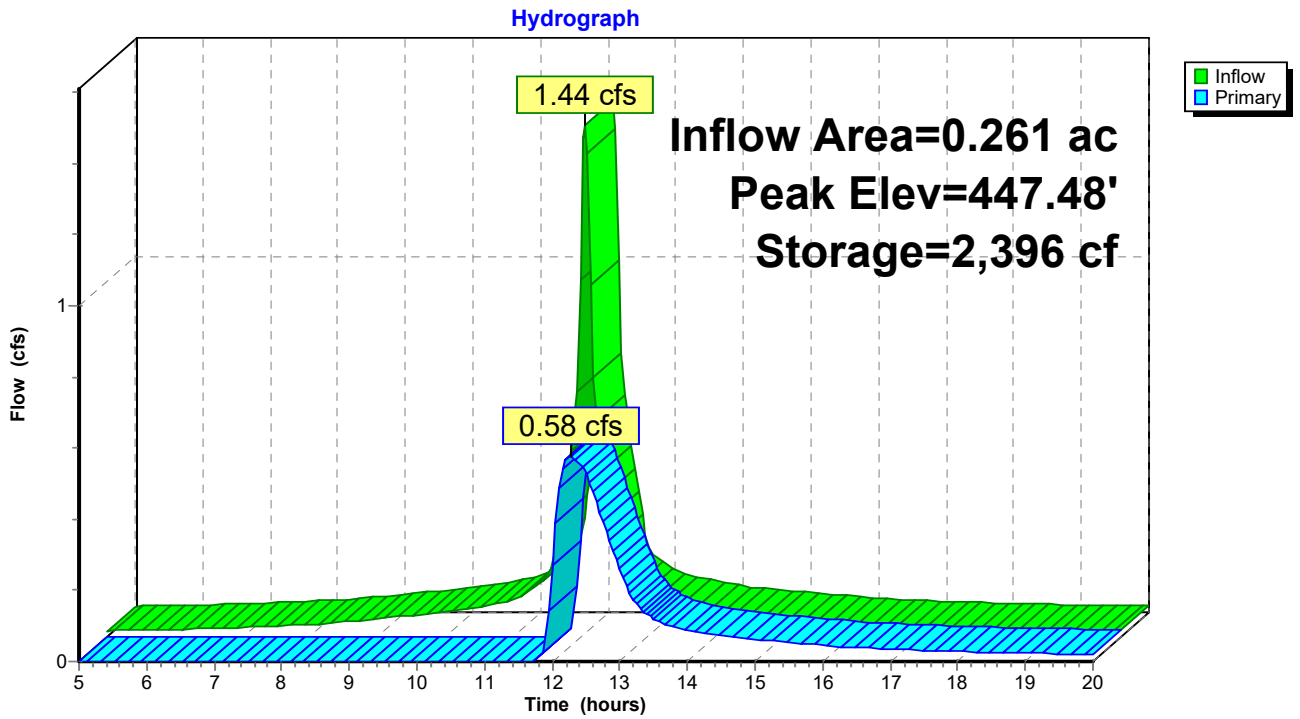
Hydrograph



Subcatchment 2: Q PROPOSED



Pond 3: PROPOSED DETENTION SYSTEM



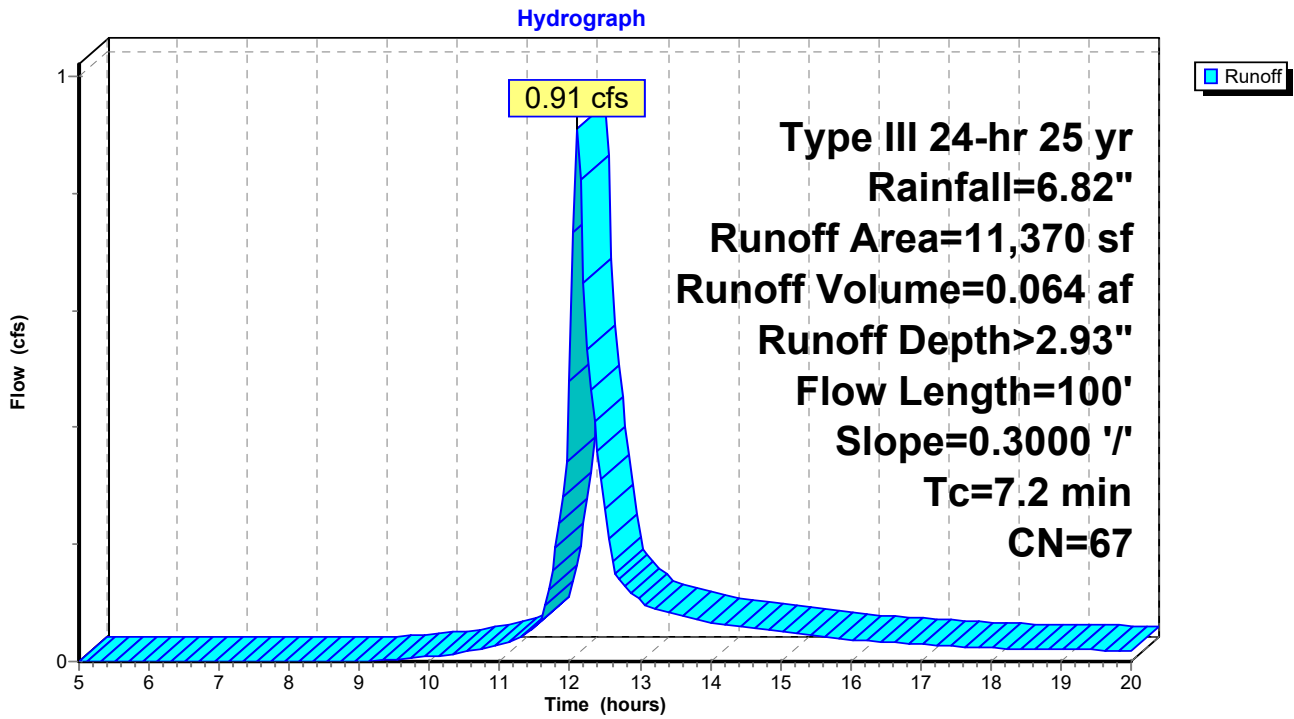
Stage-Discharge for Pond 3: PROPOSED DETENTION SYSTEM

| Elevation (feet) | Primary (cfs) | Elevation (feet) | Primary (cfs) |
|---------------------|------------------|---------------------|------------------|
| 444.50 | 0.00 | 447.15 | 0.44 |
| 444.55 | 0.00 | 447.20 | 0.46 |
| 444.60 | 0.00 | 447.25 | 0.48 |
| 444.65 | 0.00 | 447.30 | 0.51 |
| 444.70 | 0.00 | 447.35 | 0.53 |
| 444.75 | 0.00 | 447.40 | 0.55 |
| 444.80 | 0.00 | 447.45 | 0.57 |
| 444.85 | 0.00 | 447.50 | 0.58 |
| 444.90 | 0.00 | 447.55 | 0.60 |
| 444.95 | 0.00 | 447.60 | 0.62 |
| 445.00 | 0.00 | 447.65 | 0.64 |
| 445.05 | 0.00 | 447.70 | 0.65 |
| 445.10 | 0.00 | 447.75 | 0.67 |
| 445.15 | 0.00 | 447.80 | 0.69 |
| 445.20 | 0.00 | 447.85 | 0.70 |
| 445.25 | 0.00 | 447.90 | 0.72 |
| 445.30 | 0.00 | 447.95 | 0.73 |
| 445.35 | 0.00 | 448.00 | 0.75 |
| 445.40 | 0.00 | 448.05 | 0.76 |
| 445.45 | 0.00 | 448.10 | 0.77 |
| 445.50 | 0.00 | 448.15 | 0.79 |
| 445.55 | 0.00 | 448.20 | 0.80 |
| 445.60 | 0.00 | 448.25 | 0.82 |
| 445.65 | 0.00 | 448.30 | 0.83 |
| 445.70 | 0.00 | 448.35 | 0.84 |
| 445.75 | 0.00 | 448.40 | 0.85 |
| 445.80 | 0.00 | 448.45 | 0.87 |
| 445.85 | 0.00 | 448.50 | 0.88 |
| 445.90 | 0.00 | 448.55 | 0.89 |
| 445.95 | 0.00 | 448.60 | 0.90 |
| 446.00 | 0.00 | 448.65 | 0.91 |
| 446.05 | 0.00 | 448.70 | 0.93 |
| 446.10 | 0.00 | 448.75 | 0.94 |
| 446.15 | 0.00 | 448.80 | 0.95 |
| 446.20 | 0.00 | 448.85 | 0.96 |
| 446.25 | 0.00 | 448.90 | 0.97 |
| 446.30 | 0.00 | 448.95 | 0.98 |
| 446.35 | 0.00 | 449.00 | 0.99 |
| 446.40 | 0.00 | | |
| 446.45 | 0.00 | | |
| 446.50 | 0.00 | | |
| 446.55 | 0.01 | | |
| 446.60 | 0.03 | | |
| 446.65 | 0.06 | | |
| 446.70 | 0.10 | | |
| 446.75 | 0.15 | | |
| 446.80 | 0.20 | | |
| 446.85 | 0.25 | | |
| 446.90 | 0.29 | | |
| 446.95 | 0.32 | | |
| 447.00 | 0.35 | | |
| 447.05 | 0.38 | | |
| 447.10 | 0.41 | | |

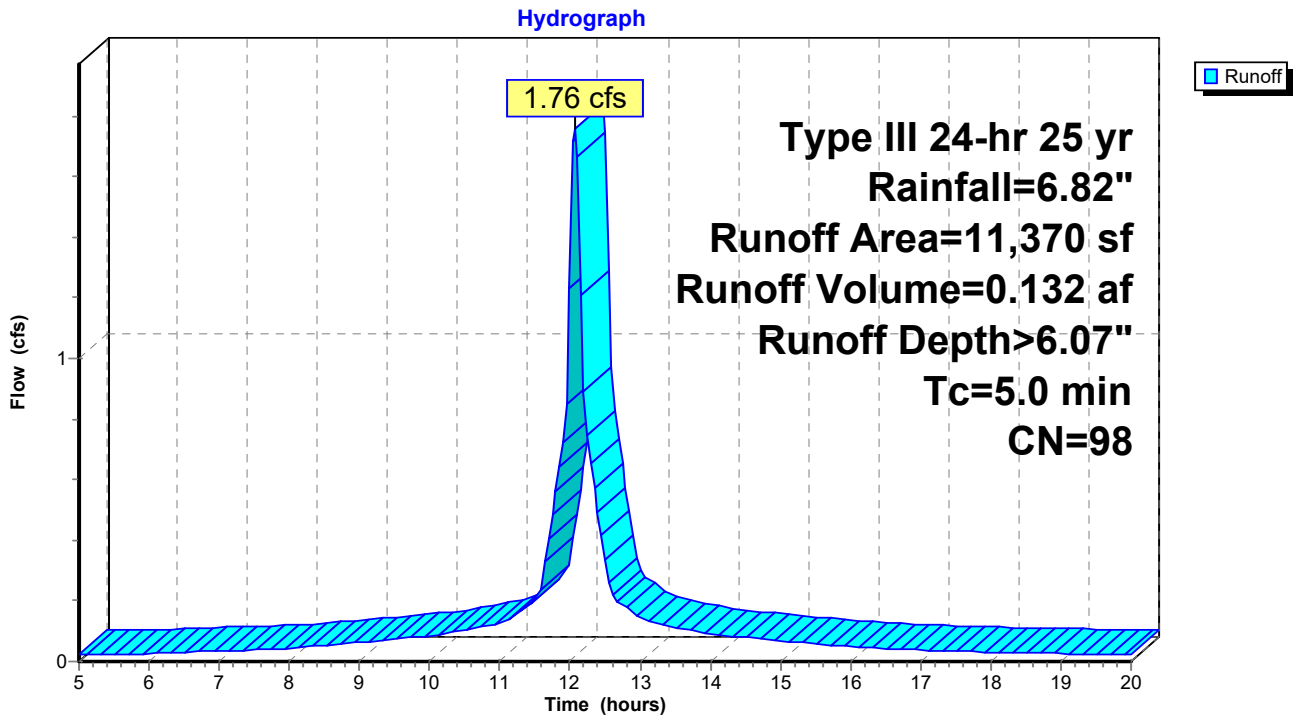
Stage-Area-Storage for Pond 3: PROPOSED DETENTION SYSTEM

| Elevation (feet) | Storage (cubic-feet) | Elevation (feet) | Storage (cubic-feet) |
|---------------------|-------------------------|---------------------|-------------------------|
| 444.50 | 0 | 447.15 | 2,112 |
| 444.55 | 24 | 447.20 | 2,156 |
| 444.60 | 48 | 447.25 | 2,199 |
| 444.65 | 72 | 447.30 | 2,242 |
| 444.70 | 96 | 447.35 | 2,286 |
| 444.75 | 120 | 447.40 | 2,329 |
| 444.80 | 143 | 447.45 | 2,372 |
| 444.85 | 167 | 447.50 | 2,416 |
| 444.90 | 191 | 447.55 | 2,459 |
| 444.95 | 215 | 447.60 | 2,502 |
| 445.00 | 239 | 447.65 | 2,545 |
| 445.05 | 281 | 447.70 | 2,589 |
| 445.10 | 324 | 447.75 | 2,632 |
| 445.15 | 366 | 447.80 | 2,675 |
| 445.20 | 409 | 447.85 | 2,718 |
| 445.25 | 452 | 447.90 | 2,761 |
| 445.30 | 496 | 447.95 | 2,804 |
| 445.35 | 540 | 448.00 | 2,848 |
| 445.40 | 584 | 448.05 | 2,891 |
| 445.45 | 628 | 448.10 | 2,934 |
| 445.50 | 671 | 448.15 | 2,977 |
| 445.55 | 715 | 448.20 | 3,020 |
| 445.60 | 759 | 448.25 | 3,063 |
| 445.65 | 803 | 448.30 | 3,106 |
| 445.70 | 847 | 448.35 | 3,149 |
| 445.75 | 891 | 448.40 | 3,192 |
| 445.80 | 935 | 448.45 | 3,235 |
| 445.85 | 979 | 448.50 | 3,278 |
| 445.90 | 1,022 | 448.55 | 3,321 |
| 445.95 | 1,066 | 448.60 | 3,349 |
| 446.00 | 1,110 | 448.65 | 3,357 |
| 446.05 | 1,154 | 448.70 | 3,364 |
| 446.10 | 1,198 | 448.75 | 3,371 |
| 446.15 | 1,241 | 448.80 | 3,379 |
| 446.20 | 1,285 | 448.85 | 3,386 |
| 446.25 | 1,329 | 448.90 | 3,394 |
| 446.30 | 1,372 | 448.95 | 3,401 |
| 446.35 | 1,416 | 449.00 | 3,408 |
| 446.40 | 1,460 | | |
| 446.45 | 1,503 | | |
| 446.50 | 1,547 | | |
| 446.55 | 1,590 | | |
| 446.60 | 1,634 | | |
| 446.65 | 1,678 | | |
| 446.70 | 1,721 | | |
| 446.75 | 1,765 | | |
| 446.80 | 1,808 | | |
| 446.85 | 1,852 | | |
| 446.90 | 1,895 | | |
| 446.95 | 1,939 | | |
| 447.00 | 1,982 | | |
| 447.05 | 2,026 | | |
| 447.10 | 2,069 | | |

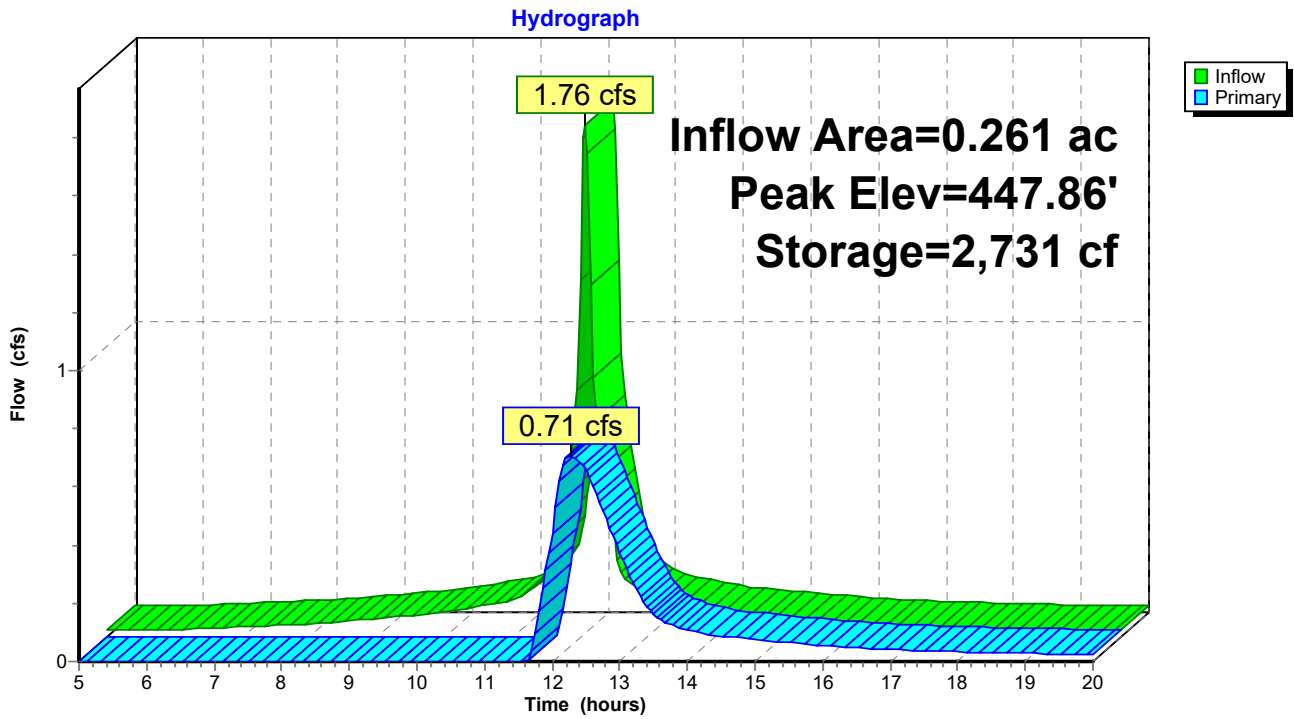
Subcatchment 1: EXISTING Q NEW BUILDING



Subcatchment 2: Q PROPOSED



Pond 3: PROPOSED DETENTION SYSTEM

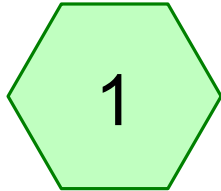


Stage-Discharge for Pond 3: PROPOSED DETENTION SYSTEM

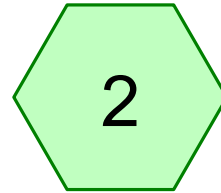
| Elevation (feet) | Primary (cfs) | Elevation (feet) | Primary (cfs) |
|---------------------|------------------|---------------------|------------------|
| 444.50 | 0.00 | 447.15 | 0.44 |
| 444.55 | 0.00 | 447.20 | 0.46 |
| 444.60 | 0.00 | 447.25 | 0.48 |
| 444.65 | 0.00 | 447.30 | 0.51 |
| 444.70 | 0.00 | 447.35 | 0.53 |
| 444.75 | 0.00 | 447.40 | 0.55 |
| 444.80 | 0.00 | 447.45 | 0.57 |
| 444.85 | 0.00 | 447.50 | 0.58 |
| 444.90 | 0.00 | 447.55 | 0.60 |
| 444.95 | 0.00 | 447.60 | 0.62 |
| 445.00 | 0.00 | 447.65 | 0.64 |
| 445.05 | 0.00 | 447.70 | 0.65 |
| 445.10 | 0.00 | 447.75 | 0.67 |
| 445.15 | 0.00 | 447.80 | 0.69 |
| 445.20 | 0.00 | 447.85 | 0.70 |
| 445.25 | 0.00 | 447.90 | 0.72 |
| 445.30 | 0.00 | 447.95 | 0.73 |
| 445.35 | 0.00 | 448.00 | 0.75 |
| 445.40 | 0.00 | 448.05 | 0.76 |
| 445.45 | 0.00 | 448.10 | 0.77 |
| 445.50 | 0.00 | 448.15 | 0.79 |
| 445.55 | 0.00 | 448.20 | 0.80 |
| 445.60 | 0.00 | 448.25 | 0.82 |
| 445.65 | 0.00 | 448.30 | 0.83 |
| 445.70 | 0.00 | 448.35 | 0.84 |
| 445.75 | 0.00 | 448.40 | 0.85 |
| 445.80 | 0.00 | 448.45 | 0.87 |
| 445.85 | 0.00 | 448.50 | 0.88 |
| 445.90 | 0.00 | 448.55 | 0.89 |
| 445.95 | 0.00 | 448.60 | 0.90 |
| 446.00 | 0.00 | 448.65 | 0.91 |
| 446.05 | 0.00 | 448.70 | 0.93 |
| 446.10 | 0.00 | 448.75 | 0.94 |
| 446.15 | 0.00 | 448.80 | 0.95 |
| 446.20 | 0.00 | 448.85 | 0.96 |
| 446.25 | 0.00 | 448.90 | 0.97 |
| 446.30 | 0.00 | 448.95 | 0.98 |
| 446.35 | 0.00 | 449.00 | 0.99 |
| 446.40 | 0.00 | | |
| 446.45 | 0.00 | | |
| 446.50 | 0.00 | | |
| 446.55 | 0.01 | | |
| 446.60 | 0.03 | | |
| 446.65 | 0.06 | | |
| 446.70 | 0.10 | | |
| 446.75 | 0.15 | | |
| 446.80 | 0.20 | | |
| 446.85 | 0.25 | | |
| 446.90 | 0.29 | | |
| 446.95 | 0.32 | | |
| 447.00 | 0.35 | | |
| 447.05 | 0.38 | | |
| 447.10 | 0.41 | | |

Stage-Area-Storage for Pond 3: PROPOSED DETENTION SYSTEM

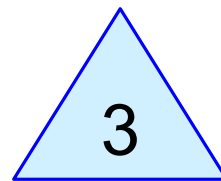
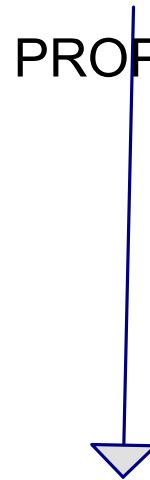
| Elevation (feet) | Storage (cubic-feet) | Elevation (feet) | Storage (cubic-feet) |
|---------------------|-------------------------|---------------------|-------------------------|
| 444.50 | 0 | 447.15 | 2,112 |
| 444.55 | 24 | 447.20 | 2,156 |
| 444.60 | 48 | 447.25 | 2,199 |
| 444.65 | 72 | 447.30 | 2,242 |
| 444.70 | 96 | 447.35 | 2,286 |
| 444.75 | 120 | 447.40 | 2,329 |
| 444.80 | 143 | 447.45 | 2,372 |
| 444.85 | 167 | 447.50 | 2,416 |
| 444.90 | 191 | 447.55 | 2,459 |
| 444.95 | 215 | 447.60 | 2,502 |
| 445.00 | 239 | 447.65 | 2,545 |
| 445.05 | 281 | 447.70 | 2,589 |
| 445.10 | 324 | 447.75 | 2,632 |
| 445.15 | 366 | 447.80 | 2,675 |
| 445.20 | 409 | 447.85 | 2,718 |
| 445.25 | 452 | 447.90 | 2,761 |
| 445.30 | 496 | 447.95 | 2,804 |
| 445.35 | 540 | 448.00 | 2,848 |
| 445.40 | 584 | 448.05 | 2,891 |
| 445.45 | 628 | 448.10 | 2,934 |
| 445.50 | 671 | 448.15 | 2,977 |
| 445.55 | 715 | 448.20 | 3,020 |
| 445.60 | 759 | 448.25 | 3,063 |
| 445.65 | 803 | 448.30 | 3,106 |
| 445.70 | 847 | 448.35 | 3,149 |
| 445.75 | 891 | 448.40 | 3,192 |
| 445.80 | 935 | 448.45 | 3,235 |
| 445.85 | 979 | 448.50 | 3,278 |
| 445.90 | 1,022 | 448.55 | 3,321 |
| 445.95 | 1,066 | 448.60 | 3,349 |
| 446.00 | 1,110 | 448.65 | 3,357 |
| 446.05 | 1,154 | 448.70 | 3,364 |
| 446.10 | 1,198 | 448.75 | 3,371 |
| 446.15 | 1,241 | 448.80 | 3,379 |
| 446.20 | 1,285 | 448.85 | 3,386 |
| 446.25 | 1,329 | 448.90 | 3,394 |
| 446.30 | 1,372 | 448.95 | 3,401 |
| 446.35 | 1,416 | 449.00 | 3,408 |
| 446.40 | 1,460 | | |
| 446.45 | 1,503 | | |
| 446.50 | 1,547 | | |
| 446.55 | 1,590 | | |
| 446.60 | 1,634 | | |
| 446.65 | 1,678 | | |
| 446.70 | 1,721 | | |
| 446.75 | 1,765 | | |
| 446.80 | 1,808 | | |
| 446.85 | 1,852 | | |
| 446.90 | 1,895 | | |
| 446.95 | 1,939 | | |
| 447.00 | 1,982 | | |
| 447.05 | 2,026 | | |
| 447.10 | 2,069 | | |



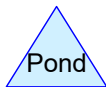
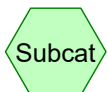
EXISTING Q NEW
BUILDING



Q PROPOSED



PROPOSED
DETENTION SYSTEM



Area Listing (all nodes)

| Area (acres) | CN | Description (subcatchment-numbers) |
|-----------------|-----------|---------------------------------------|
| 0.243 | 65 | Woods/grass comb., Fair, HSG B (1) |
| 0.018 | 98 | Paved parking, HSG B (1) |
| 0.261 | 98 | Unconnected pavement, HSG B (2) |
| 0.522 | 83 | TOTAL AREA |

2893

Type III 24-hr 100 yr Rainfall=8.73"

Prepared by {enter your company name here}

Printed 12/17/2021

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Page 3

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1: EXISTING Q NEW

Runoff Area=11,370 sf 7.04% Impervious Runoff Depth>4.41"

Flow Length=100' Slope=0.3000 '/' Tc=7.2 min CN=67 Runoff=1.37 cfs 0.096 af

Subcatchment 2: Q PROPOSED

Runoff Area=11,370 sf 100.00% Impervious Runoff Depth>7.81"

Tc=5.0 min CN=98 Runoff=2.25 cfs 0.170 af

Pond 3: PROPOSED DETENTION SYSTEM

Peak Elev=448.41' Storage=3,197 cf Inflow=2.25 cfs 0.170 af

Outflow=0.86 cfs 0.132 af

Total Runoff Area = 0.522 ac Runoff Volume = 0.266 af Average Runoff Depth = 6.11"
46.48% Pervious = 0.243 ac 53.52% Impervious = 0.279 ac

Summary for Subcatchment 1: EXISTING Q NEW BUILDING

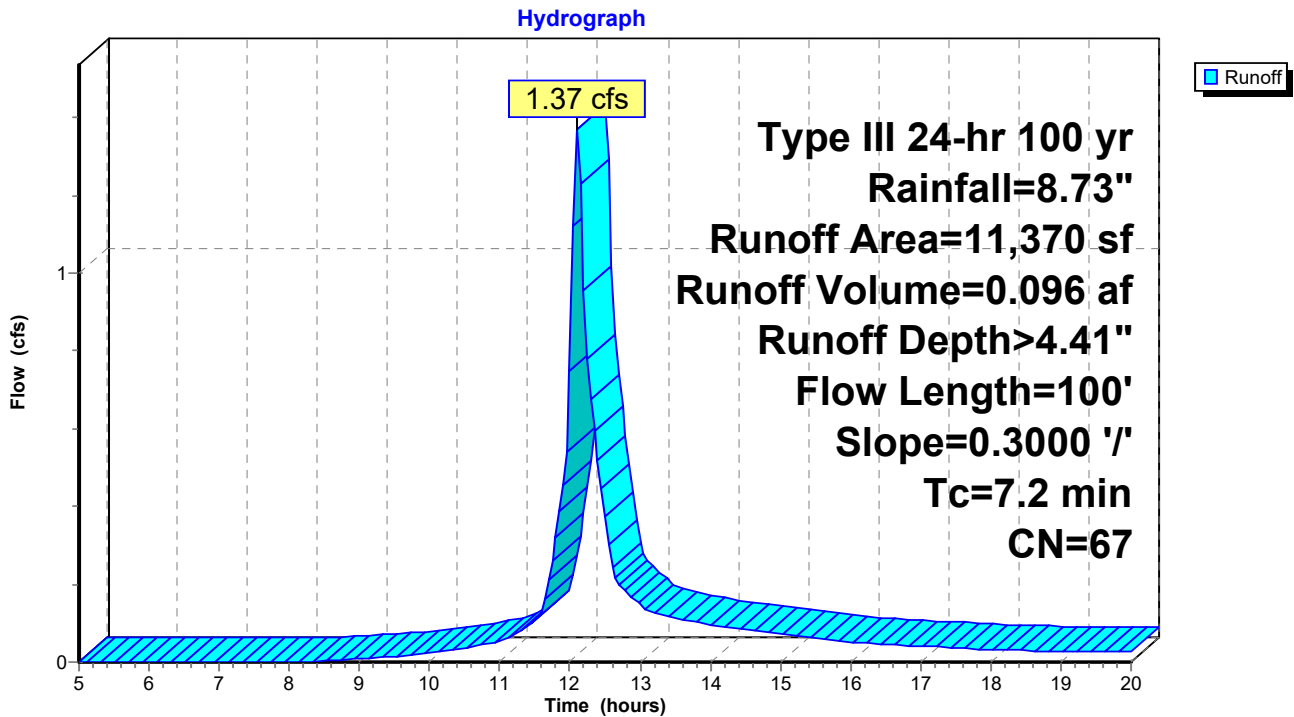
Runoff = 1.37 cfs @ 12.11 hrs, Volume= 0.096 af, Depth> 4.41"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100 yr Rainfall=8.73"

| Area (sf) | CN | Description |
|-----------|----|--------------------------------|
| 800 | 98 | Paved parking, HSG B |
| 10,570 | 65 | Woods/grass comb., Fair, HSG B |
| 11,370 | 67 | Weighted Average |
| 10,570 | | 92.96% Pervious Area |
| 800 | | 7.04% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|---|
| 7.2 | 100 | 0.3000 | 0.23 | | Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.30" |

Subcatchment 1: EXISTING Q NEW BUILDING



Summary for Subcatchment 2: Q PROPOSED

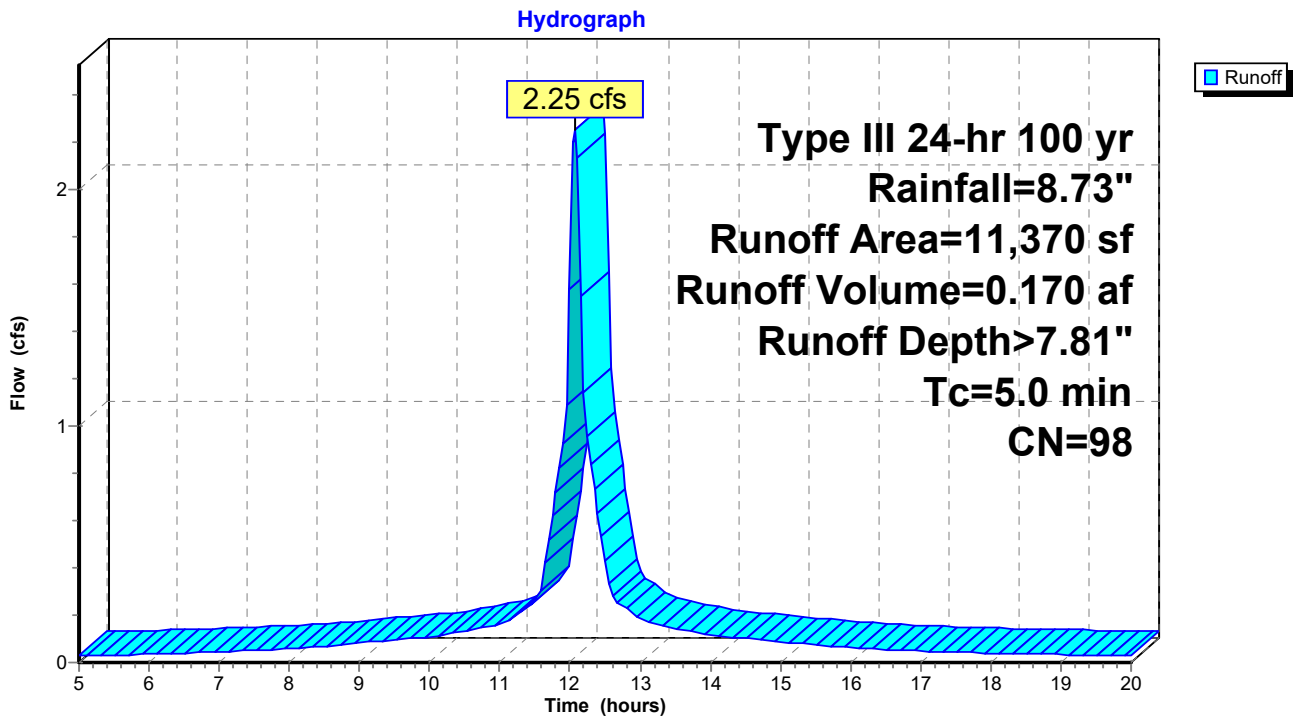
Runoff = 2.25 cfs @ 12.07 hrs, Volume= 0.170 af, Depth> 7.81"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 yr Rainfall=8.73"

| Area (sf) | CN | Description |
|-----------|----|-----------------------------|
| 11,370 | 98 | Unconnected pavement, HSG B |
| 11,370 | | 100.00% Impervious Area |
| 11,370 | | 100.00% Unconnected |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 5.0 | | | | | Direct Entry, |

Subcatchment 2: Q PROPOSED



Summary for Pond 3: PROPOSED DETENTION SYSTEM

Inflow Area = 0.261 ac, 100.00% Impervious, Inflow Depth > 7.81" for 100 yr event
 Inflow = 2.25 cfs @ 12.07 hrs, Volume= 0.170 af
 Outflow = 0.86 cfs @ 12.29 hrs, Volume= 0.132 af, Atten= 62%, Lag= 13.4 min
 Primary = 0.86 cfs @ 12.29 hrs, Volume= 0.132 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 448.41' @ 12.29 hrs Surf.Area= 1,195 sf Storage= 3,197 cf

Plug-Flow detention time= 132.8 min calculated for 0.132 af (78% of inflow)
 Center-of-Mass det. time= 74.4 min (806.4 - 732.1)

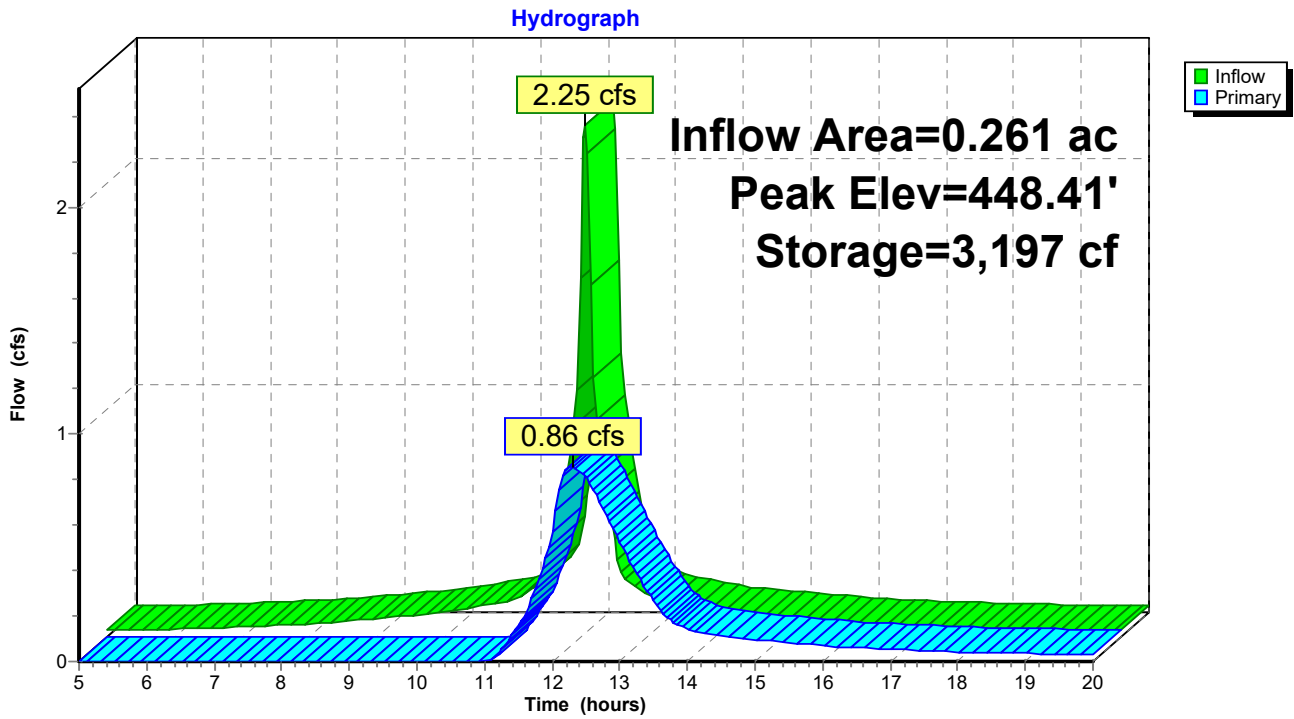
| Volume | Invert | Avail.Storage | Storage Description |
|--------|---------|---------------|--|
| #1 | 444.50' | 789 cf | Custom Stage Data (Prismatic) Listed below (Recalc) 5,378 cf Overall - 3,406 cf Embedded = 1,972 cf x 40.0% Voids |
| #2 | 445.00' | 2,620 cf | Galley 4x8x4 x 28 Inside #1 Inside= 42.0"W x 43.0"H => 12.47 sf x 7.50'L = 93.6 cf Outside= 52.8"W x 48.0"H => 15.20 sf x 8.00'L = 121.6 cf |
| | | 3,408 cf | Total Available Storage |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|------------------|-------------------|------------------------|------------------------|
| 444.50 | 1,195 | 0 | 0 |
| 449.00 | 1,195 | 5,378 | 5,378 |

| Device | Routing | Invert | Outlet Devices |
|--------|---------|---------|-------------------------------|
| #1 | Primary | 446.50' | 5.0" Vert. 5" C= 0.600 |

Primary OutFlow Max=0.86 cfs @ 12.29 hrs HW=448.40' (Free Discharge)
 ↑1=5" (Orifice Controls 0.86 cfs @ 6.27 fps)

Pond 3: PROPOSED DETENTION SYSTEM



Stage-Discharge for Pond 3: PROPOSED DETENTION SYSTEM

| Elevation (feet) | Primary (cfs) | Elevation (feet) | Primary (cfs) |
|---------------------|------------------|---------------------|------------------|
| 444.50 | 0.00 | 447.15 | 0.44 |
| 444.55 | 0.00 | 447.20 | 0.46 |
| 444.60 | 0.00 | 447.25 | 0.48 |
| 444.65 | 0.00 | 447.30 | 0.51 |
| 444.70 | 0.00 | 447.35 | 0.53 |
| 444.75 | 0.00 | 447.40 | 0.55 |
| 444.80 | 0.00 | 447.45 | 0.57 |
| 444.85 | 0.00 | 447.50 | 0.58 |
| 444.90 | 0.00 | 447.55 | 0.60 |
| 444.95 | 0.00 | 447.60 | 0.62 |
| 445.00 | 0.00 | 447.65 | 0.64 |
| 445.05 | 0.00 | 447.70 | 0.65 |
| 445.10 | 0.00 | 447.75 | 0.67 |
| 445.15 | 0.00 | 447.80 | 0.69 |
| 445.20 | 0.00 | 447.85 | 0.70 |
| 445.25 | 0.00 | 447.90 | 0.72 |
| 445.30 | 0.00 | 447.95 | 0.73 |
| 445.35 | 0.00 | 448.00 | 0.75 |
| 445.40 | 0.00 | 448.05 | 0.76 |
| 445.45 | 0.00 | 448.10 | 0.77 |
| 445.50 | 0.00 | 448.15 | 0.79 |
| 445.55 | 0.00 | 448.20 | 0.80 |
| 445.60 | 0.00 | 448.25 | 0.82 |
| 445.65 | 0.00 | 448.30 | 0.83 |
| 445.70 | 0.00 | 448.35 | 0.84 |
| 445.75 | 0.00 | 448.40 | 0.85 |
| 445.80 | 0.00 | 448.45 | 0.87 |
| 445.85 | 0.00 | 448.50 | 0.88 |
| 445.90 | 0.00 | 448.55 | 0.89 |
| 445.95 | 0.00 | 448.60 | 0.90 |
| 446.00 | 0.00 | 448.65 | 0.91 |
| 446.05 | 0.00 | 448.70 | 0.93 |
| 446.10 | 0.00 | 448.75 | 0.94 |
| 446.15 | 0.00 | 448.80 | 0.95 |
| 446.20 | 0.00 | 448.85 | 0.96 |
| 446.25 | 0.00 | 448.90 | 0.97 |
| 446.30 | 0.00 | 448.95 | 0.98 |
| 446.35 | 0.00 | 449.00 | 0.99 |
| 446.40 | 0.00 | | |
| 446.45 | 0.00 | | |
| 446.50 | 0.00 | | |
| 446.55 | 0.01 | | |
| 446.60 | 0.03 | | |
| 446.65 | 0.06 | | |
| 446.70 | 0.10 | | |
| 446.75 | 0.15 | | |
| 446.80 | 0.20 | | |
| 446.85 | 0.25 | | |
| 446.90 | 0.29 | | |
| 446.95 | 0.32 | | |
| 447.00 | 0.35 | | |
| 447.05 | 0.38 | | |
| 447.10 | 0.41 | | |

Stage-Area-Storage for Pond 3: PROPOSED DETENTION SYSTEM

| Elevation (feet) | Storage (cubic-feet) | Elevation (feet) | Storage (cubic-feet) |
|---------------------|-------------------------|---------------------|-------------------------|
| 444.50 | 0 | 447.15 | 2,112 |
| 444.55 | 24 | 447.20 | 2,156 |
| 444.60 | 48 | 447.25 | 2,199 |
| 444.65 | 72 | 447.30 | 2,242 |
| 444.70 | 96 | 447.35 | 2,286 |
| 444.75 | 120 | 447.40 | 2,329 |
| 444.80 | 143 | 447.45 | 2,372 |
| 444.85 | 167 | 447.50 | 2,416 |
| 444.90 | 191 | 447.55 | 2,459 |
| 444.95 | 215 | 447.60 | 2,502 |
| 445.00 | 239 | 447.65 | 2,545 |
| 445.05 | 281 | 447.70 | 2,589 |
| 445.10 | 324 | 447.75 | 2,632 |
| 445.15 | 366 | 447.80 | 2,675 |
| 445.20 | 409 | 447.85 | 2,718 |
| 445.25 | 452 | 447.90 | 2,761 |
| 445.30 | 496 | 447.95 | 2,804 |
| 445.35 | 540 | 448.00 | 2,848 |
| 445.40 | 584 | 448.05 | 2,891 |
| 445.45 | 628 | 448.10 | 2,934 |
| 445.50 | 671 | 448.15 | 2,977 |
| 445.55 | 715 | 448.20 | 3,020 |
| 445.60 | 759 | 448.25 | 3,063 |
| 445.65 | 803 | 448.30 | 3,106 |
| 445.70 | 847 | 448.35 | 3,149 |
| 445.75 | 891 | 448.40 | 3,192 |
| 445.80 | 935 | 448.45 | 3,235 |
| 445.85 | 979 | 448.50 | 3,278 |
| 445.90 | 1,022 | 448.55 | 3,321 |
| 445.95 | 1,066 | 448.60 | 3,349 |
| 446.00 | 1,110 | 448.65 | 3,357 |
| 446.05 | 1,154 | 448.70 | 3,364 |
| 446.10 | 1,198 | 448.75 | 3,371 |
| 446.15 | 1,241 | 448.80 | 3,379 |
| 446.20 | 1,285 | 448.85 | 3,386 |
| 446.25 | 1,329 | 448.90 | 3,394 |
| 446.30 | 1,372 | 448.95 | 3,401 |
| 446.35 | 1,416 | 449.00 | 3,408 |
| 446.40 | 1,460 | | |
| 446.45 | 1,503 | | |
| 446.50 | 1,547 | | |
| 446.55 | 1,590 | | |
| 446.60 | 1,634 | | |
| 446.65 | 1,678 | | |
| 446.70 | 1,721 | | |
| 446.75 | 1,765 | | |
| 446.80 | 1,808 | | |
| 446.85 | 1,852 | | |
| 446.90 | 1,895 | | |
| 446.95 | 1,939 | | |
| 447.00 | 1,982 | | |
| 447.05 | 2,026 | | |
| 447.10 | 2,069 | | |

ARCHITECTURAL REVIEW BOARD

APPLICATION



TOWN OF MONROE
PLANNING & ZONING DEPARTMENT
7 Fan Hill Road, Monroe, CT 06468
Tel. (203) 452-2812

FOR OFFICE USE:

ARB File # _____

Project Name: BML TOOL INC

PZC Project #: _____ PZC File #: _____

Street Address: 67 ENTERPRISE DRIVE

Assessor Map: 94 and Lot: 15/12 Zoning District: I-2 Lot Acreage: 3.61

REQUIRED APPLICATION SUBMISSION MATERIALS

- **Formal Application Submission** – Provide **four (4) paper application sets** (*plans folded and materials collated into individual sets*) and **one (1) pdf CD** including the following materials: (a) signed application form; (b) supporting application narrative; and (c) Submission Materials Required as listed below.
- **Sealed and Certified Plans** – All Surveys, Site Plans and Architectural Plans shall be current and include an original seal and live signature certification of the professional preparer.
- **Submission Materials Required**
 - Site Plans and Details – Layout, Grading and Landscape Plans and Details (24" x 36" Sheets)**
Site Plans shall indicate the existing and proposed treatment and detail of all site and building improvements; landscaping specifying location, number and type of vegetation; ingress and egress of vehicular and pedestrian traffic; parking and sidewalks; and the like.
 - Architectural Plans – Floor Plans and Exterior Elevations of ALL sides (24" x 36" Sheets)**
Floor Plans shall indicate entrances and exits with relation to exterior components, and interior use and layout, as well as interior connections between floors. Elevations shall clearly show and indicate proposed building materials and finishes; dimensions sufficient to establish overall building height and width and other pertinent dimensions to clearly describe design intent. Where an addition to an existing building or structure is proposed, the existing building or structure shall be shown grayed-out to contrast existing from proposed.
 - Signage and Lighting Plans and Details (24" x 36" Sheets)**
Design and details of signs and light fixtures, including catalog cuts, materials, colors and photometric plan.
 - Materials/Finishes**
Indicate materials and finishes on Elevations and Details. Provide samples of materials and finishes.
 - Relation to Adjacent Area**
Provide photographs of the project site and surrounding area.
 - Other Information**
Provide additional information as necessary to clearly describe the proposed project or as required by the ARB.

CONTACT INFORMATION

1. **Applicant's name:** PHILLIP & VINCENT BATTAGLIA
Address: _____
Phn/Cell: Type203.880.9485 Email: PHILB@BMLTOOL.COM
Property interest: Owner Contract Vendee Tenant Other _____

2. **Owner's Name:** _____
Address: _____
Phn/Cell: _____ Email: _____

3. **Primary Contact Name:** J. EDWARDS & ASSOCIATES LLC - JASON EDWARDS
Business Address: 227 STEPNEY ROAD, EASTON, CT 06612
Phn/Cell: 203.268.4205 Email: jason@jedwardsassoc.com

The applicant's Primary Project Contact will be sent all correspondence (primarily via email) during the course of the project review and is responsible for distributing to the other applicant representatives.

4. **Application Professionals**

| | <i>Name</i> | <i>Phone/Cell</i> | <i>Email</i> |
|----------------------|-----------------------------|-------------------|--------------|
| Attorney: | _____ | _____ | _____ |
| Surveyor: | J. EDWARDS & ASSOCIATES LLC | _____ | _____ |
| Engineer: | J. EDWARDS & ASSOCIATES LLC | _____ | _____ |
| Landscape Architect: | _____ | _____ | _____ |
| Architect: | _____ | _____ | _____ |
| Other: | _____ | _____ | _____ |

DESCRIPTION OF PROPOSED PROJECT

CONSTRUCTION OF NEW STORAGE BUILDING ADJACENT TO EXISTING FACILITY

DEVELOPED

New Building/Structure on ~~Undeveloped Lot~~ Addition to Existing Building/Structure on Developed Lot

Existing Footprint: 23000 sf New Footprint: 6000 sf Total Footprint: _____ sf

Existing GFA: _____ sf New GFA: _____ sf Total GFA: _____ sf

Existing Height / Stories: _____ ft 2 stories

Proposed Height / Stories: _____ ft 1 stories

Other Proposed Site Improvements:

ARB MISSION

The mission of the **Architectural Review Board (ARB)** is to assist applicants interested in constructing new buildings and structures, or altering and expanding existing buildings and structures, in the Town of Monroe ensure such proposals compliment the historical and residential nature of the Town and help preserve the quality of the Town's built and natural environments for generations to come.

ARB SERVES AN ADVISORY ROLE TO PLANNING AND ZONING COMMISSION

The ARB serves as an advisory Board to the Monroe Planning and Zoning Commission. The Planning and Zoning Commission is the approval entity of all projects before ARB.

ELEMENTS CONSIDERED BY ARB

The ARB evaluation will consider the following:

- **Landscape and Environment** – To ensure compatibility and complimentary changes to Monroe landscapes and environmental conditions; and to prevent the unnecessary destruction or blighting of the natural landscape or of the existing developed environment.
- **Design of Buildings and Structures** – To ensure Site Plans, architectural design and construction materials and finishes are of such nature and character they will compliment, be compatible and protect and preserve the integrity of existing patterns, styles, and vernacular image and character of the project site and surrounding area; while protecting property values of the Town.
- **Relationship of Buildings and Structure(s) to Open Space** – To ensure the treatment of disturbed areas in relation to open areas relates to existing topography and natural environmental conditions and patterns, as well as to existing buildings and structures of the site and surrounding area.
- **Consideration of Adjoining Properties and Uses** – To ensure reasonable provisions have been made for sight and sound buffers, preservation of views, and other design elements which may have impact adjoining properties and land uses.
- **Design of Accessory Elements** – To ensure the function and design of accessory project elements including but not limited to lighting, signage, landscaping are appropriately considered and incorporated, with emphasis on the scale and density of street landscaping elements, delivery route and refuse storage screening, and the like.

ARB MEETING SCHEDULE

- ARB meetings are second and third Tuesday of each month, except August and December, and holidays.
- ARB meetings begin at 7:30 pm and applicants and their professional representatives must attend and present their proposed project plans, and answer questions of the ARB.
- Most applications are evaluated in a single meeting, but additional meetings may be required based on the proposed project, its complexity or scale, and if sufficient information is not provided.

Application No. _____ File No. _____

I (we) hereby certify that I (we) make this application as or on behalf of and with the full authority of the owner(s) of the property or premises and am aware of and understand the Zoning, Subdivision and Inland Wetlands Regulations pertinent to the application and affirm that the statements and information provided are accurate and true. Further, all the undersigned hereby authorizes the Town of Monroe and its agents, to access the premises for the purpose of application investigation, site review, inspection of improvements or construction, and enforcement of the Town's Regulations and Ordinances, and the General Statutes of the State of Connecticut, as may be applicable.

All the undersigned warrant the truth of all statements contained herein and in all supporting documents according to the best of their knowledge and belief. Further, all the undersigned understand and agree that the Architecture Review Board (ARB) and/or its Staff/Consultants may request additional information and it is the applicant's/owner's responsibility to provide this information in a timely fashion and to the ARB's satisfaction. If the information provided is incomplete or inaccurate, the ARB may hold additional meetings with the applicant and/or render a negative report and recommendation to the Planning and Zoning Commission.

This agreement shall be binding on all heirs, executors, administrators, successors and assigns of all undersigned.

APPLICANT(S) – (Both Applicant and Owner Notarized Signatures are Required)

Applicant Name Printed Authorized Signature Date

Additional Applicant Authorized Signature Date
(Provide additional sheets as needed)

Subscribed and sworn to by _____ on this day of _____, 20____, before me:

Notary Public, Justice of the Peace, Commissioner of the Superior Court

Please note the following: This application must include the owner's signature and notarization or a written, notarized consent to submit this application, signed and dated by the owner.

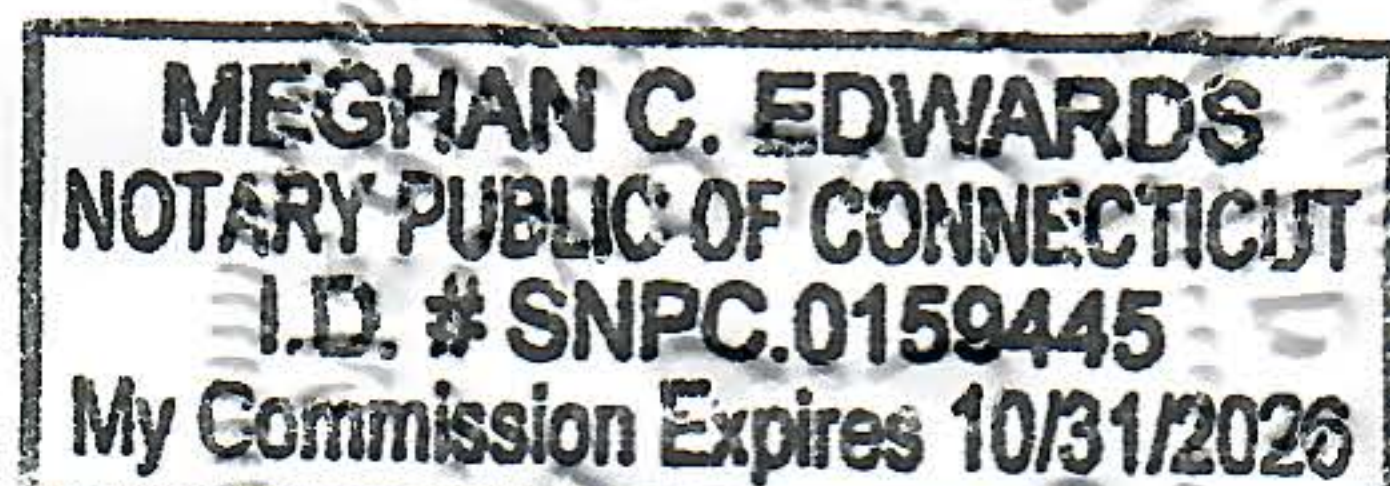
OWNER(S) – (Both Applicant and Owner Notarized Signatures are Required)

VINCENT BATTAGLIA - B.M.L. TOOL & MFG. CORP.
Owner Business Name

VINCENT BATTAGLIA [Signature] 3-3-2022
Authorized Member Name Printed Authorized Signature Date

Subscribed and sworn to by Vincent Battaglia on this day of March 3, 2022, before me:

[Signature]
Notary Public, Justice of the Peace, Commissioner of the Superior Court





February 28, 2022

This document has been prepared in response to the comments below received from the Monroe Engineering Department on 02/24/2022. Responses from JEA are in [blue](#)

A. Public Improvements:

1. N/A

B. Traffic and Safety:

1. The stop sign at the site exit should be indicated on the plans, and existing line striping should be repainted/maintained when possible.

[This has been noted on the plans](#)

2. Handicap parking and respective access to the proposed building should be shown (include dimensions and elevations).

[The new structure is to be used for storage only. There is no public access proposed. The existing spaces provide ADA compliant access to the building. This will be reviewed with the building and zoning departments as part of the building permit.](#)

3. The location of access points (doors) to the proposed buildings should be indicated.

[Door locations have been added to the new building. There are no door location proposed for the future addition at this time](#)

C. Drainage and Utilities:

1. 1. Test pit TH-1 should be extended to a minimum depth of 18” below the stone under the detention system (8.5’ depth in lieu of the provided 5.8’ depth; to at least elevation 443.0).

[An additional test pit will be dug prior to installing the system. This has been noted on the plans](#)

2. The roof drain for the future addition to the existing building should connect to the detention system in lieu of the downstream/outlet catch basin.

[This has been revised](#)

3. The plan indicates a hooded 12” inlet pipe in the catch basin, but the detail shows the hood on the catch basin/manhole outlet. Accordingly, the plan notations should be revised to match the detail.

[This has been revised](#)

4. In reviewing the plan in comparison to the stormwater management plan (calculations), it appears that the pipe size/data on the plans is the opposite of the intended layout. Accordingly, the plans should be revised to reflect a 5” outlet leaving the detention system,

[227 Stepney Road • Easton, CT • 06612 • Phone:203.268.4205 • Fax: 203.268.5604](#)

and a 12" outlet leaving the catch basin/manhole. Also a detail of the restriction of the 6" pipe to 5" size should be provided.

[This has been addressed](#)

5. The finish floor elevation of the proposed building, and addition should be indicated.

[This has been addressed](#)

6. Some means of overflow from the detention system should be provided in the event that the one small outlet becomes plugged, or a storm event greater than 100 years happens to come along.

[A flush curb and leakoff have been added at the back of the new CB. In emergency conditions the system will overflow the CB and discharge to the wetlands](#)

7. How will the runoff at the southeast corner of the proposed building be handled (show spot elevation at the southeast corner of the building, and grades off the easterly side of the building)? Will runoff flow over the wall?

[It is intended for the runoff to flow to the rear and over the riprap slope. Spot elevations have been added](#)

8. The location of the anticipated retaining wall footing drain and outlet should be indicated.

[This has been addressed](#)

9. The drainage system outlet protection (rip rap spreader pad) appears to be too small. Accordingly, sizing data should be included in the report.

10. [This has been addressed](#)

D. Sedimentation and Erosion Control (MS4 issues):

1. See above.
2. Anti-tracking measures should be indicated.

[The anti-tracking pad was removed at the request of the IWC. It was there opinion that the existing paved parking lot would act as an apron](#)

E. Other:

1. A site stabilization and restoration bond estimate should be provided.