

**TOWN OF MANCHESTER
PLANNING AND ZONING COMMISSION**

February 21, 2024
7:00 P.M.

Lincoln Center Hearing Room, 494 Main Street
Or virtually, via Zoom

AGENDA

This meeting will be held both in person and virtually, via Zoom. The meeting will be shown live on Cox Channel 16 and streamed live at <http://www.channel16.org/CablecastPublicSite/watch/1?channel=1>. Individuals who wish to speak at or attend the virtual meeting must complete a Request to Attend Virtually form, available at <https://manct.us/meeting> by 4:00 p.m. on the day of the meeting. These individuals will need to join the Zoom meeting and will be allowed to speak when directed by the Chairman. Zoom meeting information will be sent to individuals who complete a Request to Attend Virtually form. Only individuals who complete a Request to Attend Virtually form will be allowed to join the Zoom meeting. A physical location and electronic equipment will be provided for the public to use if a written request is received at least 24 hours in advance, via email to pzccomments@manchesterct.gov, or by mail to the Planning Department, 494 Main Street, P.O. Box 191, Manchester, CT 06045-0191.

PUBLIC HEARING:

1. **CT SITING COUNCIL PETITION** – To collect public comments for submission to the Siting Council for a proposed solar facility at 250 Carter Street.
2. **3 SQUARED, LLC** – For a special exception under Art. II, Sec. 24.02.01(j) for a mixed-use multi-family development at 14 North Main Street.
 - Special Exception (PSE-0058-2023)

BUSINESS:

1. **3 SQUARED, LLC** – For a special exception under Art. II, Sec. 24.02.01(j) for a mixed-use multi-family development at 14 North Main Street.
 - Special Exception (PSE-0058-2023)
 - Erosion & Sedimentation Control Plan (ESC-0001-2024)
2. **TRA CONSULTING** – Pre-application discussion for possible distribution warehouse development at 71 & 81 Commerce Road.
 - Pre-application Review (PAR-0001-2024)
3. **HARTFORD HEALTHCARE CORPORATION** – Pre-application discussion for possible zoning regulation amendment proposal regarding signage permitted on medical office buildings.
 - Pre-application Review (PAR-0002-2024)

4. **DISCUSSION: MUNICIPAL FINES FOR INLAND WETLANDS VIOLATIONS**
5. **ADMINISTRATIVE REPORTS**
 - Upcoming Training Opportunities
 - In-house training session – March 18, 2024 beginning at 5:45 p.m. (before regularly scheduled meeting)
6. **APPROVAL OF MINUTES**
 - [February 5, 2024](#) – Public Hearing/Business Meeting
7. **RECEIPT OF NEW APPLICATIONS**

**TOWN OF MANCHESTER
LEGAL NOTICE**

The Planning and Zoning Commission will hold a public hearing on February 21, 2024 at 7:00 P.M., both virtually and in person in the Lincoln Center Hearing Room, 494 Main Street, Manchester, Connecticut, to hear and consider the following petitions:

3 SQUARED, LLC – Special Exception (PSE-0058-2023) – For a special exception under Art. II, Sec. 24.02.01(j) for a mixed-use multi-family development at 14 North Main Street, General Business zone.

CT SITING COUNCIL PETITION – 250 Carter Street – To collect public comments for submission to the Siting Council for a proposed solar facility at 250 Carter Street, Rural Residence zone.

At this hearing interested persons may be heard, either in person or virtually via Zoom, and written communications received. This meeting will be shown live on Cox Channel 16 and streamed live at <http://www.channel16.org/CablecastPublicSite/watch/1?channel=1>. Individuals who wish to speak at or attend the virtual meeting must complete a Request to Attend Virtually form, available at <https://manct.us/meeting>, by 4:00 p.m. on the day of the meeting. These individuals will need to join the Zoom meeting and will be allowed to speak when directed by the Chairman. Zoom meeting information will be sent to individuals who complete a Request to Attend Virtually form. Only individuals who complete a Request to Attend Virtually form will be allowed to join the Zoom meeting. A physical location and electronic equipment will be provided for the public to use if a written request is received at least 24 hours in advance, via email to pzcomments@manchesterct.gov, or by mail to the Planning Department, 494 Main Street, P.O. Box 191, Manchester, CT 06045-0191.

Individuals may also submit comments in writing to the Planning and Economic Development Department via email to pzcomments@manchesterct.gov, or by mail to the Planning Department, 494 Main Street, P.O. Box 191, Manchester, CT 06045-0191. All written comments received by 4:00 p.m. on the day of the meeting will be presented and recorded as part of the hearing.

A copy of this petition is in the Planning and Economic Development Department, Lincoln Center Building, 494 Main Street, and may be inspected during regular business hours (8:30 a.m. – 4:30 p.m., Monday through Friday). Information about this application will be available online at <https://Manchesterct.gov/pzc> by the Friday before the hearing.

Planning and Zoning Commission
Eric Prause, Chair

**TOWN OF MANCHESTER
PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT**

TO: Planning & Zoning Commission
FROM: Megan Pilla, Principal Development Planner *MP*
DATE: February 16, 2024
RE: CT Siting Council Petition – 250 Carter Street

Introduction

A Petition for Declaratory Ruling has been filed with the CT Siting Council for the construction, maintenance, and operation of a 0.999-megawatt AC solar photovoltaic electric generating facility at 250 Carter Street.

The proposed plan set and project narrative are included in this packet for reference. All other documents associated with the petition, including assessments and reports, can be accessed here: https://portal.ct.gov/CSC/3_Petitions/Petition-Nos-1601-1700/PE1609

The Siting Council has full jurisdiction over this petition. The purpose of this public hearing is to collect and submit public comments for consideration by the Siting Council.

Project Description

The approximately 41-acre parcel is bounded by Carter Street to the northeast, and surrounded by private residences on all other sides. It is almost entirely forested, with the exception of a portion of the Shenipsit hiking trail which aligns with a 50-ft. wide Algonquin Gas Transmission utility easement, and includes several pockets of wetlands.

The proposed solar array would include approximately 2,590 non-reflective solar panels surrounded by a chain-link security fence and vegetation buffer. The array would connect to the Eversource electric distribution grid via the existing Eversource pole on Carter Street.

The proposal includes the clearing of approximately 7 acres of forest, as well as a wetland crossing to create the 12-ft. wide gravel access drive.

mp

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Attach.

Town of Manchester, CT



Geographic Information Systems

250 CARTER ST

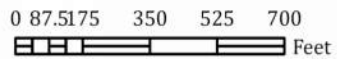
Legend

Zoning

- RR - Rural Residence
- Rural Residence (Cluster)

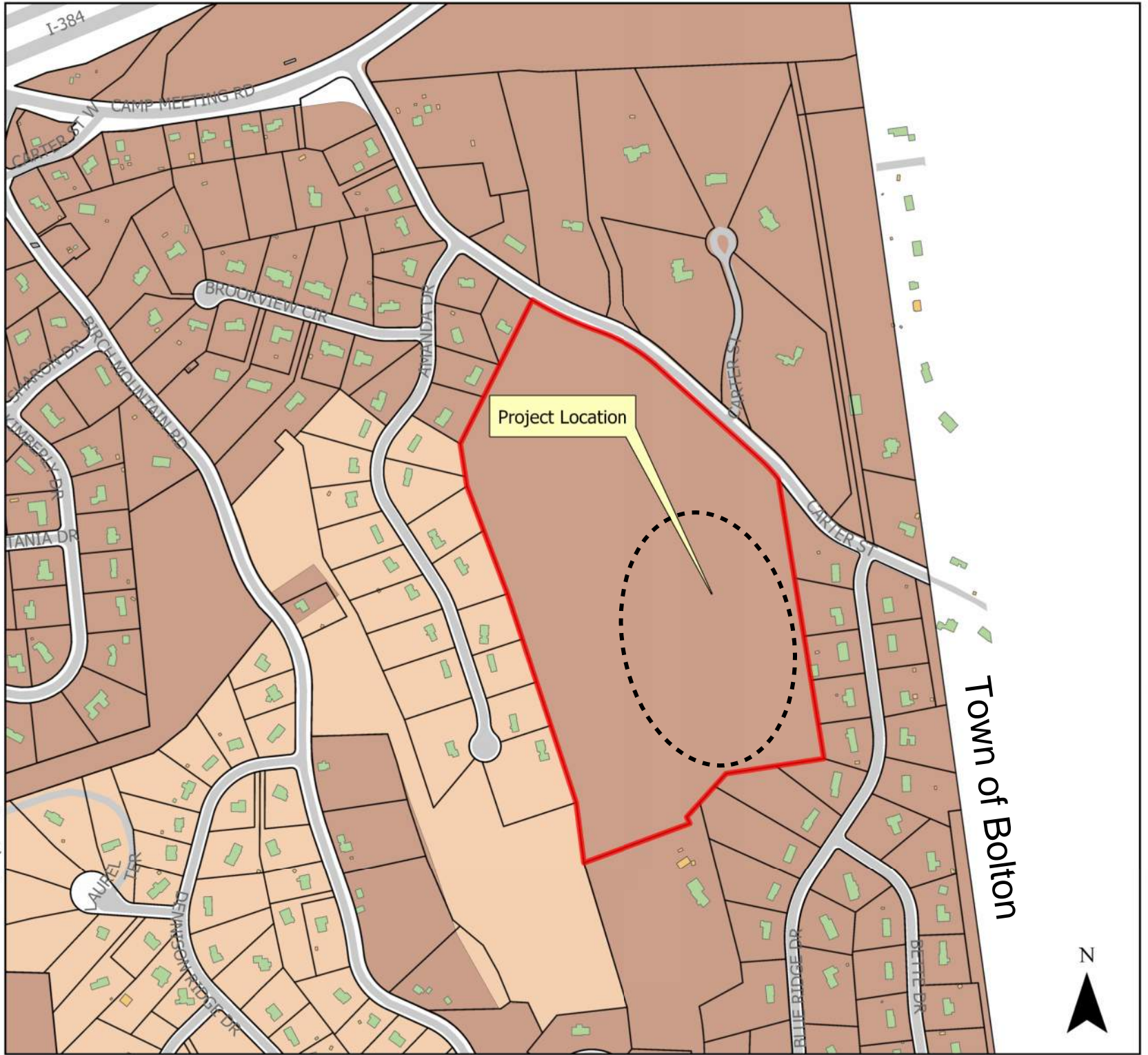
DISCLAIMER:
The Town of Manchester, CT assumes no legal responsibility for the information contained in this map. This map is provided 'AS IS' without warranty of any kind.

NOTES:
Planimetric and topographic information were compiled by stereo photogrammetric methods from photography dated April 24, 1999 in accordance with ASPR accuracy standards for 1"=40' large scale Class 1 maps. Real property compiled from recorded deeds, subdivision plans and other public records. Utility networks compiled from record plans, as-builts and/or field survey data. Aerial photography dated April 24, 1999.



1 inch = 500 ft

Date: 2/16/2024



Town of Bolton





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Email: pmichaud@michaud.law
Web: www.michaud.law

January 24, 2024

VIA ELECTRONIC MAIL AND U.S. MAIL

Melanie Bachman
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: Petition of TRITEC Americas, LLC for a Declaratory Ruling that No Certificate of Environmental Compatibility and Public Need is Required for the Construction Operation, Maintenance, and Decommissioning of a 0.999 MW AC Solar Photovoltaic Project in Manchester, Connecticut

Dear Attorney Bachman:

Through its undersigned counsel, TRITEC Americas, LLC respectfully submits the enclosed Petition regarding the above-referenced solar photovoltaic project, including the original, fifteen copies, and the \$625 filing fee.

Additionally, Michaud Law Group, LLC will submit an electronic copy of the Petition via electronic mail.

Please feel free to contact me if you have any questions.

Very truly yours,

A handwritten signature in blue ink that reads 'Paul R. Michaud'. The signature is written in a cursive style with a large initial 'P'.

Paul R. Michaud

STATE OF CONNECTICUT

SITING COUNCIL

**PETITION OF TRITEC AMERICAS, LLC
FOR A DECLARATORY RULING THAT
NO CERTIFICATE OF ENVIRONMENTAL
COMPATIBILITY AND PUBLIC NEED IS
REQUIRED FOR THE CONSTRUCTION
OPERATION, MAINTENANCE, AND
DECOMMISSIONING OF A 0.999 MW AC
SOLAR PHOTOVOLTAIC PROJECT IN
MANCHESTER, CONNECTICUT**

PETITION NO. _____

January 24, 2024

Under Connecticut General Statutes (C.G.S.) §§ 4-176, 16-50k(a), and 16-50k(e) and Regulations of Connecticut State Agencies § 16-50j-38 *et seq.*, TRITEC Americas, LLC (“Petitioner”), requests that the Connecticut Siting Council (“Council”) approve by a declaratory ruling the location, construction, operation, maintenance, and decommissioning of a solar photovoltaic facility with a capacity of 0.999 MW AC and associated equipment inclusive of all solar panels, transformers, electrical switchgear, monitoring equipment, and access roadways (“Project”). The Project will be constructed on approximately 7.8 acres of land (“Project Site”) located at 250 Carter Street, Manchester, Connecticut (“Host Parcel”). C.G.S. § 16-50k(a) provides in part:

...Notwithstanding the provisions of this chapter or title 16a, the council shall, in the exercise of its jurisdiction over the siting of generating facilities, approve by declaratory ruling (A) the construction of a facility solely for the purpose of generating electricity, other than an electric generating facility that uses nuclear materials or coal as fuel, at a Project Site where an electric generating facility operated prior to July 1, 2004, and (B) the construction or location of any fuel cell, unless the council finds a substantial adverse environmental effect, or of any customer-side distributed resources project or facility or grid-side distributed resources project or facility with a capacity of not more than sixty-five megawatts, as long as: (i) Such project meets air and water quality standards of the Department of Energy and Environmental

Protection, (ii) the council does not find a substantial adverse environmental effect, and (iii) for a solar photovoltaic facility with a capacity of two or more megawatts, to be located on prime farmland or forestland, excluding any such facility that was selected by the Department of Energy and Environmental Protection in any solicitation issued prior to July 1, 2017, pursuant to section 16a-3f, 16a-3g or 16a-3j, the Department of Agriculture represents, in writing, to the council that such project will not materially affect the status of such land as prime farmland or the Department of Energy and Environmental Protection represents, in writing, to the council that such project will not materially affect the status of such land as core forest. In conducting an evaluation of a project for purposes of subparagraph (B)(iii) of this subsection, the Departments of Agriculture and Energy and Environmental Protection may consult with the United States Department of Agriculture and soil and water conservation districts. (Emphasis added).

The proposed Project would produce 100% carbon-free energy thereby promoting Connecticut's legal requirement for 100% zero-carbon emissions from electricity generation by January 1, 2040. Public Act ("P.A.") No. 22-5, §1 (3). The technical evidence, evaluations, and analysis presented herein by Petitioner demonstrate that the Project will be a renewable distributed generation resource with a nameplate capacity of not more than sixty-five megawatts, will meet air and water quality standards of the Connecticut Department of Energy and Environmental Protection ("DEEP"), and will have no adverse environmental effects. The construction, operation, maintenance, and decommissioning of the proposed Project fully comply with the requirements set out in C.G.S. § 16-50k(a). Therefore, Petitioner respectfully requests that the Siting Council approve the Project by a declaratory ruling.

I. PETITIONER INFORMATION

TRITEC Americas, LLC is based in La Jolla, California. It is the Americas affiliate of TRITEC Group AG, a multi-national solar services company founded in 1987. TRITEC Americas

is a leading provider of solar PV project development, financing, and asset management services for the commercial and industrial solar market throughout the Americas.

Please address all correspondence and communications regarding this Petition to Petitioner’s attorney:

Paul R. Michaud
Bernadette Antaki
Dylan J. Gillis
Michaud Law Group LLC
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pmichaud@michaud.law
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II. NOTICE, ABUTTER INPUT, SITE PLANS

Under the Regulations of Connecticut State Agencies § 16-50j-40, Petitioner provided written notice of this Petition to all Project abutters and appropriate government officials and agencies on November 5, 2023. See **Exhibit A – Certification of Service and the Model Notice Letters.**

Petitioner provided an overview of the proposed Project and sought public comment from abutters and local government officials. Petitioner conducted two video conferences – the first with the Town of Manchester on November 14, 2023, and the second with abutters on November 16, 2023. Their main questions regarded noise, tree clearing, visibility, and wetland impacts. Noise levels at the nearest residential building will be about 29 decibels. According to the Centers for Disease Control and Prevention (“CDC”), this is roughly equivalent to a soft whisper. See CDC, *What Noises Cause Hearing Loss?*

https://www.cdc.gov/nceh/hearing_loss/what_noises_cause_hearing_loss.html, (Last Visited Jan. 24, 2024). A majority of the Project Site will require tree-clearing. The pre-existing trees on the

Host Parcel keep Project visibility levels low, but Petitioner proposes incorporating a vegetative buffer along the Project Site's eastern border to further reduce Project visibility. See Proposed Conditions Viewshed Map in Appendix A. As discussed below, the Project will have a minimal direct impact to 0.03 acres of wetlands and will adhere to all pertinent CT DEEP and US Army Corps of Engineers requirements.

The proposed Project would greatly benefit the abutters, the Town of Manchester, and the State. First, the Project would produce clean, carbon-free energy for the electric grid, thus reducing the Town's reliance on fossil fuels and helping to decrease greenhouse gas emissions and combat climate change, contributing to a more sustainable future. Second, it would produce long-term (at least 20 years) stable electricity for the electric grid, which can help lower electricity costs for the Town and its residents over the long term. Third, the Project would generate additional revenue for the Town through property taxes and other fees – on the land and equipment. Fourth, the Project would reduce air and water pollution associated with fossil fuel power plants, improving local air quality and protecting natural resources. It would also conserve water, as solar panels do not require water for cooling like traditional power plants. Fifth, the Project could serve as an educational tool for local schools to teach the students about renewable energy, sustainability, and environmental conservation. Sixth, the Project would result in substantial grid improvements in the vicinity of the Project Site, thus resulting in electric grid resiliency for local residents. Lastly, the project would allow the Town to help meet Connecticut's law to achieve 100% carbon-free generation by 2040.

III. PROJECT

The proposed Project is a Class I renewable energy source as defined under C.G.S. § 16-1(a)(20) and, as such, will help the State achieve its stated energy policy goals and meet legal

requirements for 100% carbon-free electric generation by January 1, 2040. See C.G.S. § 16a-35k; P.A. No. 22-5 §1 (3).

A. Project Site:

Petitioner utilized its internal experience and the knowledge and expertise of third-party electrical engineering, civil engineering, consultants, and legal counsel to carefully review, analyze, and select the proposed Project Site. The proposed Project Site selection was based on the site’s suitability regarding size, topography, the absence of biological and hydrological conflicts, site availability, and the proximity of the site to existing electrical infrastructure. The proposed Project was designed to minimize land disturbance and preserve the site. Petitioner conducted an extensive site assessment and analysis to prepare this Petition. The Project and Site Assessment involved the expert consultants and legal counsel shown in **Table 1** below:

TABLE 1:

Consultant	Site of Project Site Assessment and Analysis
Harry E. Cole & Son	Land Surveying
Solli Engineering, LLC	Civil Engineering
William Kenny Associates LLC	Wetlands Delineation and Impact Analysis
Solli Engineering, LLC	Habitat Review and Assessment
Archaeological Consulting Services	Phase IA Environmental Project Site Assessment
Pure Power Engineering, Inc.	Electrical and Mechanical Engineering
Horton Electrical Services, LLC	Project Construction and Installation
Pure Power Engineering, Inc.	Interconnection Design and Medium Voltage Analysis
Michaud Law Group LLC	Legal Counsel

B. Project Site Description:

The Project Site is located in the Rural Residential (RR) zoning district. The Project Site contains vacant land, woodlands, and wetlands. The Project Site does not contain prime farmland. The Project is an “agrivoltaic” project with existing and proposed agricultural activities on the Project Site. See Section III (H) below. The solar array setback is fifty feet from the Host Parcel’s property line, and there is one hundred feet between solar panels and any wetland or watercourse.

See **Appendix A** – Figures and **Exhibit B** – Civil Plan Set depicting the Project, Project Site, Host Parcel, and their environmental attributes.

Neither the Project Site nor Host Parcel are part of the Public Act 490 Program, and the State of Connecticut Department of Agriculture has not purchased any development rights for the Project Site as part of the State Program for the Preservation of Agricultural Land.

C. Project Description:

The proposed Project will be a ground-mounted solar photovoltaic system using a single-axis sun-tracking system and related improvements. The proposed Project has approximately 2,590 non-reflective solar panels measuring from about 3' to 6' above final grade, depending on location, grades, and panel tilt. It will be surrounded by a chain-link security fence and a vegetation buffer of evergreen trees along the eastern border to reduce visibility of the Project. The solar modules are designed to absorb incoming solar radiation and minimize reflectivity, so only a tiny percentage of incidental light will be reflected off the panels. This incidental light is significantly less reflective than standard building materials such as steel or a smooth water surface such as a pond or lake. The panels will rotate east to west tracking the sun and reducing overall reflectivity in any given direction. If one section of the array experiences electrical problems, then the remaining sections of the proposed Project can still operate and transmit power to the grid because the system is isolated by circuit strings that are further protected by fuses.

Petitioner will construct the proposed Project. The proposed Project construction period is estimated to take three to four months after receiving all required state and local government permits and approvals. If approved, the proposed Project will require a General Stormwater Permit from DEEP, building and electrical permits from the Town of Manchester, and a utility

interconnection agreement and easement with Eversource Energy. The Table below shows the Estimated Project Construction Schedule.

Estimated Project Construction Schedule	
Task	Duration
Mobilization and Project Site Preparation	Two weeks
Civil Work: Road Construction, Grading	Two weeks
Racking, Panel & Electrical Installation	Three weeks
Interconnection and Medium Voltage	Two weeks
System Testing	One week
Approvals & Commissioning	Two weeks

The proposed Project has not been designed to accommodate a potential future battery storage system, however, such a system would not impact the Project.

D. Electric Distribution Grid Interconnection:

Petitioner plans to interconnect the Project to the Eversource electric distribution grid where the access drive meets Carter Street as depicted in **Exhibit B**. Eversource is conducting a System Impact Study to review the Project’s electrical design and output and Petitioner expects interconnection review results in approximately thirty business days. Petitioner will notify Council of Eversource’s System Impact Study results.

E. Stormwater Management:

Petitioner’s civil engineers and legal team met with DEEP’s Water Permitting & Enforcement Division on December 12, 2023, to discuss the proposed Project and Petitioner’s

stormwater management plan. Petitioner designed the stormwater management so that post-development peak discharges are *less* than pre-development peak discharges, and the Project won't result in any adverse conditions to the surrounding areas and properties. Additionally, the stormwater management plan adheres to the 2024 CT Stormwater Quality Manual and 2024 CT Guidelines for Soil Erosion and Sediment Control. See Stormwater Management Report in **Exhibit C**.

E. Equipment, Construction, Operation, Maintenance, and Decommissioning:

1. Equipment. The Project equipment is comprised of premium modules, such as a single-axis sun tracker system that has a designed life and warranty extending for twenty years, but the proposed Project may remain operational for up to 30 years. The Project's capacity factor is 24.56%, which is relatively high for a solar system and is due to the use of single-axis trackers. The solar capacity factor is the system's actual output ratio to its maximum potential output. Annual losses due to system degradation are estimated at 0.5% per year. A solar inverter is a critical component in a solar system. It converts direct current (DC) electricity into alternating current (AC), the standard form of electricity used in homes and businesses. The inverters for the proposed Project have an operational life and warranty of approximately ten years. Therefore, Petitioner expects at least one inverter replacement during the entire operating life of the Project.

Steel foundations will be driven into the ground for the solar array. Steel racking components will be mounted on these foundations, followed by the installation of photovoltaic modules. The electrical contractor will then install conductors from the photovoltaic modules to the inverters and a transformer on a pad at the end of the array. A switchgear will also be mounted to this pad. The electrical contractor will install a medium voltage (MV) circuit from the Project Site to the Eversource point of standard coupling. AC wiring from the inverters to the panels and

MV Transformer occurs on the equipment pad next to the array. Underground conduits will protect feeders. The DC string wiring from the panels to the inverters is routed securely along the racking structure, preventing animal access. These wires enter a conduit weather head under the array, then route to the inverters. Any wiring along the system exposed to the sun is protected by split loom tubing to prevent UV damage. No wiring will be subject to damage during vegetation maintenance, as all wiring below the panels will be in a conduit. No spare parts or replacement modules will be kept on site. No chemicals will be used on-site. The transformers contain mineral oil, but this oil is industry standard and not a danger to the environment. See Product Information Sheets in **Appendix E**, including Toxicity Characteristic Leaching Procedure test results indicating that the proposed solar panels are not hazardous waste.

2. Construction, Operation, and Maintenance. The proposed Project construction will have an anticipated duration of three to four months and will take place Monday through Friday between 7:00 a.m. ET and 3:30 p.m. ET. Construction will involve the services of electrical, civil, and structural contractors. The construction staging area will be located entirely within the proposed limit of disturbance associated with the project. One access road will be on the Project Site. Petitioner will carry out construction consistent with the *2024 Connecticut Guidelines for Soil Erosion and Sedimentation Control* put out by DEEP.

Once built and operational, the Project will be monitored remotely twenty-four (24) hours a day, seven days a week, through a data acquisition system (“DAS”). The DAS system can detect local weather conditions, production from all equipment for the Project, and safety concerns related to grid outages or faults. In the event of a fault or power outage within the solar facility and the Eversource distribution circuit, the proposed Project must be isolated from the distribution circuit within two seconds of fault detection. The proposed Project’s Operations and Maintenance

("O&M") company will perform detailed scheduled annual inspections of all equipment at the Site. In addition, the O&M company will always be on-call in case unscheduled equipment maintenance or safety-related concerns are needed. Cleaning of the solar panels would be conducted as needed with non-toxic substances. However, it should be noted that regular cleaning is unnecessary due to average rainfall and environmental conditions. The tracker system has a snow sensor, and snow accumulation is shed automatically. The snow sensor can be programmed to have the trackers shed snow once it reaches a certain depth. The vegetation within the Project Site will be mowed four times a year. The Project's Operations and Maintenance (O&M) Plan is shown in **Exhibit D**. The proposed Project's estimated costs, including equipment and construction costs, are approximately \$3.22/Watt AC x 0.999 MW, or about \$3.22 million.

3. Decommissioning Plan. At the end of the proposed Project's operational life, Petitioner will remove all equipment, including the tracking system, panels, inverters, and electrical collection system, and restore the site to its condition before construction. The Decommissioning Plan for the Project is shown in **Exhibit E**.

F. Public Health and Safety:

Petitioner's focus on safety will meet or exceed all health and safety requirements applicable to electric power generation. The proposed Project is designed to meet all industry, state, and local codes and standards and will not pose a safety concern or create an undue hazard to the public. The proposed Project includes a seven-foot-high safety fence and gate as mandated by National Electric Code and will limit access to authorized or emergency personnel only. Each employee working at the Project Site will (1) receive required general and Project Site health and safety training, (2) comply with all health and safety controls as directed by local, state, and federal requirements, (3) understand and employ the Project Site health and safety plan, (4) know the

location of local emergency care facilities, travel times, ingress and egress routes, and (5) immediately report all unsafe conditions to the construction manager. The local contractor, Horton Electrical Services, LLC, will conduct outreach to local emergency responders in case of a fire or other emergency at the Project Site. The Fire Marshal will sign off on the Project Site when the building permit is issued. Petitioner will be prepared to provide access to emergency responders and the utility to cut power to the site for safety-related concerns. The proposed Project will adhere and comply with Best Management Practices for Electric and Magnetic Fields, the National Electric Code, and the current Connecticut State Building Code.

The nearest federally-obligated airport is about 9 miles west of the Project Site. Based on the distance of the Project Site, the FAA determined that there is no hazard to air navigation and no glare analysis would be necessary. See [Appendix F – FAA Determinations](#).

G. Non-Residential Renewable Energy Solutions Program:

Petitioner is submitting the Project into the State’s Non-Residential Renewable Energy Solutions (“NRES”) Program. The NRES Program is an incentive program that promotes clean-energy facility development with the energy generated by non-residential solar or other Class I renewable technologies. Under NRES, State, Agricultural, and Municipal (“SAM”) customers can share compensation from renewable energy generation. This is done by matching the SAM’s beneficial accounts with a renewable energy project. For this Project, Petitioner has an agreement with numerous distressed municipalities matching their beneficial electric accounts with the Project. The NRES program rules prioritize such projects in the NRES program to ensure participation by and economic benefits to distressed municipalities in the form of electric bill savings. The proposed project would result in one or more distressed municipalities receiving up to \$60,000 per year throughout the 20-year term of the NRES tariff agreement for a total of over

\$1,000,000. The proposed Project is part of solar project portfolio that Petitioner has put together to help distressed municipalities obtain 100% of their electrical needs through renewable energy.

H. Agrivoltaics:

The proposed Project will be an “Agrivoltaic” project. The U.S. Department of Energy’s Solar Energy Technologies Office defines agrivoltaics as “agricultural production, such as crop or livestock production or pollinator habitats, underneath solar panels or adjacent to solar panels.” See U.S. D.O.E, *What is Solar and Agriculture Co-Location*, Solar Energy Technologies Office, <https://www.energy.gov/eere/solar/solar-and-agriculture-co-location>. The Project Site and Host Parcel are currently an operating maple syrup farm with multiple maple syrup taps. Petitioner will continue agricultural activities throughout the lifespan of the Project – maple syrup taps will be relocated within the Host Parcel, and Petitioner is working closely with local farmers to find other agricultural opportunities for the proposed Project Site, including using CTFarmlink and New Connecticut Farmer Alliance.

I. Reduction in Greenhouse Gas Emissions Compared to Natural Gas:

Using resources from the National Renewable Energy Laboratory (NREL) and the U.S. Environmental Protection Agency (EPA), Petitioner estimates that there would be over a 91% reduction in greenhouse gas (“GHG”) emissions by pursuing solar instead of natural gas. Petitioner estimates that over 20 years, the proposed Project will generate about 40,997 MWh of electricity while emitting approximately 1,763 metric tons of CO₂e. To achieve the equivalent MWh production over 20 years as the Project, a natural gas generator would emit almost 19,925 metric tons of CO₂e – over eleven times the number of emissions from the proposed Project. See Carbon Debt Analysis in **Exhibit F**.

J. Environmental Assessment:

Solli Engineering, LLC prepared a comprehensive Environmental Assessment (“EA”) of the proposed Project. The EA is attached in **Exhibit G**. Per the EA, the maximum ground slope within the solar array area will be 9%. The Phase IA Cultural Resources Assessment Survey findings determined that no further archaeological conservation efforts are necessary for the Project Site. See Cultural Resources in **Appendix D**. The Natural Diversity Data Base review found one State-listed species within the proposed Project Site – the eastern box turtle – and Petitioner will adhere to the measures recommended by DEEP. See CT DEEP Correspondence in **Appendix C**. The Project Site and the entire State of Connecticut are within the threatened Northern Long-Eared Bat range, but the bats have no known hibernacula in the Town of Manchester. The U.S. Department of the Interior’s Fish and Wildlife Service confirmed compliance with protection for the bat in a letter provided in **Appendix B**. Photographic site documentation is also provided in **Exhibit G**.

IV. CONCLUSION

As discussed above and in the EA, Petitioner proposes to construct a state-of-the-art, clean, carbon-free, environmentally friendly solar electric generation system that will produce the maximum amount of carbon-free clean energy, implement agrivoltaic practices, provide economic benefits to distressed municipalities and avoid and minimize any adverse environmental effects.

Based on the evaluations and analysis presented in this Petition by Petitioner, the substantial evidence shows that the proposed Project will be a distributed resources project with a capacity of not more than sixty-five megawatts, will meet or exceed the air and water quality standards of DEEP, and will not have any substantial adverse environmental effects.

Accordingly, Petitioner respectfully requests that the Council grant this Petition for a Declaratory Ruling and approve the location, construction, operation, maintenance, and decommissioning of the proposed Project with a capacity of 0.999 MW AC, and associated equipment inclusive of solar panels, electrical transformers, electrical switchgear, monitoring equipment, and access roadways.

RESPECTFULLY SUBMITTED,

TRITEC Americas, LLC



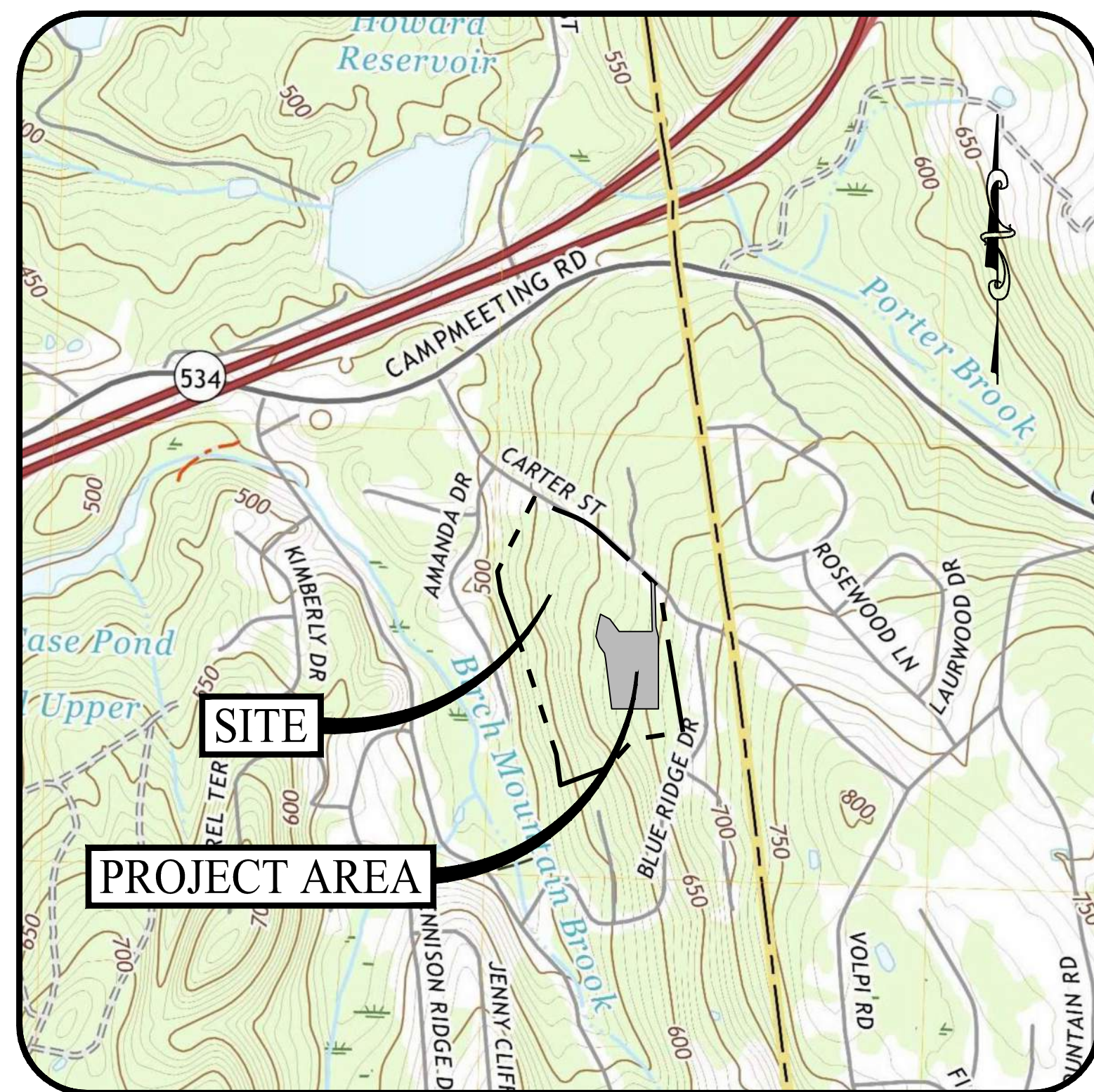
By: _____

Paul R. Michaud
Bernadette Antaki
Dylan J. Gillis
Michaud Law Group LLC
515 Centerpoint Drive, Suite 503
Middletown, Connecticut 06457
Direct Phone: 860-338-3728

Its Attorney

EXHIBIT B

Civil Plan Set

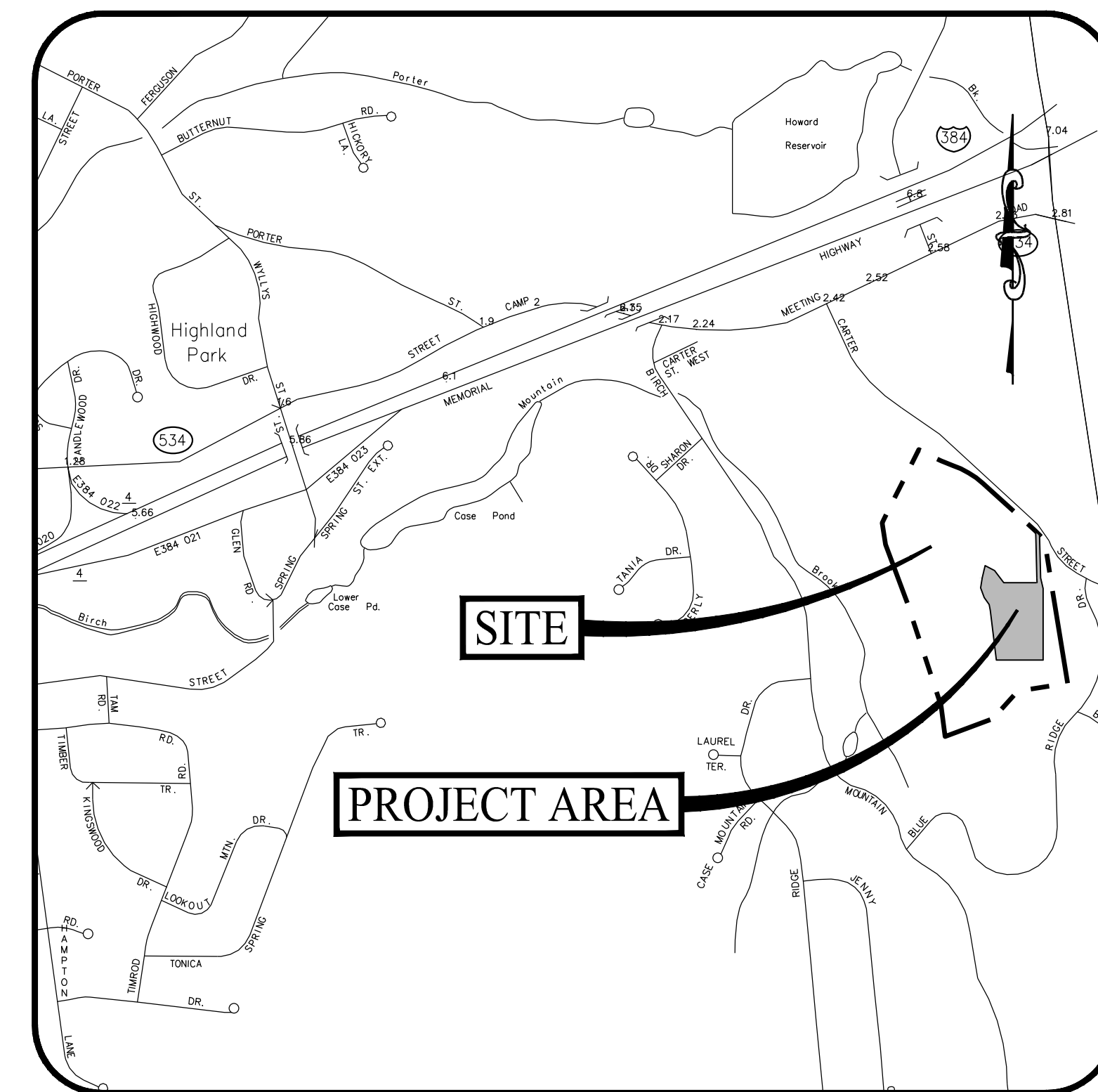


USGS MAP

SCALE: 1" = 1,000'

PROPOSED 0.99 MW SOLAR PHOTOVOLTAIC ARRAY

250 CARTER STREET
MANCHESTER, CONNECTICUT



LOCATION MAP

SCALE: 1" = 1,000'

PREPARED FOR:

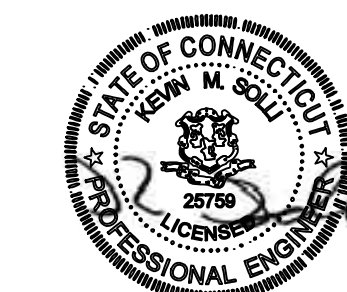


888 PROSPECT STREET, SUITE 200
LA JOLLA, CALIFORNIA

PREPARED BY:



501 MAIN STREET, MONROE, CONNECTICUT 06468
11 VANDERBILT AVENUE, NORWOOD, MASSACHUSETTS 02062



OWNER

WELLS JACOBSON TRUST
MARGARET JACOBSON TRUST
143 BOULDER ROAD
MANCHESTER, CONNECTICUT 06040

APPLICANT

TRITEC AMERICAS, LLC
888 PROSPECT STREET, SUITE 200
LA JOLLA, CALIFORNIA 92307

PROPERTY INFORMATION

ADDRESS: 250 CARTER STREET, MANCHESTER, CONNECTICUT
MAP-BLOCK-LOT: 154-970-250
ZONE: RR
AREA: +41.08 AC
BOOK/PAGE: 3397/0065

SOIL SCIENTIST

WILLIAM KENNY, CPWS, PLA, ASLA
WILLIAM KENNY ASSOCIATES
195 TUNXIS HILL, CUTOFF SOUTH
FAIRFIELD, CT 06825
(203) 366-0588

ENGINEER OF RECORD

KEVIN SOLLI, P.E., CPESC, LEED AP BD+C
LICENSE NO. 25759
SOLLI ENGINEERING, LLC
501 MAIN STREET
MONROE, CONNECTICUT 06468
(203) 880-5455

ELECTRICAL ENGINEER

PURE POWER ENGINEERING, INC.
111 RIVER STREET, SUITE 1110
HOBOKEN, NJ 07030
(201) 687-9975

LANDSCAPE ARCHITECT

MARY BLACKBURN, P.L.A.,
LICENSE CT NO. 1499
SOLLI ENGINEERING, LLC
501 MAIN STREET
MONROE, CONNECTICUT 06468
(203) 880-5455

SURVEYOR OF RECORD

STEPHAN M. GIUDICE, L.S. LICENSE NO. 70145
HARRY E. COLE & SON
876 SOUTH MAIN STREET
P.O. BOX 44
PLANTSVILLE, CT 06479
(203) 630-1406

DRAWING LIST

SHEET #	SHEET NAME	PLAN DATE	LATEST REVISION
0.00	COVER SHEET	01/15/24	N/A
-	PROPERTY & TOPOGRAPHIC SURVEY MAP	10/20/23	N/A
2.10	OVERALL SITE LAYOUT PLAN	01/15/24	N/A
2.11	SITE LAYOUT PLAN	01/15/24	N/A
2.21	GRADING AND DRAINAGE PLAN	01/15/24	N/A
2.31	SOIL EROSION & SEDIMENT CONTROL PLAN - PHASE 1	01/15/24	N/A
2.32	SOIL EROSION & SEDIMENT CONTROL PLAN - PHASE 2	01/15/24	N/A
2.41	SOIL EROSION & SEDIMENT CONTROL NOTES & DETAILS	01/15/24	N/A
3.01	CONSTRUCTION DETAILS	01/15/24	N/A
3.02	ENVIRONMENTAL NOTES & DETAILS	01/15/24	N/A








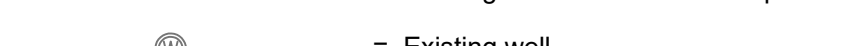





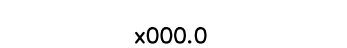




Rev. #: Date Description

Project:
PROPOSED SOLAR PHOTOVOLTAIC ARRAY
250 CARTER STREET
MANCHESTER, CONNECTICUT

Sheet Title: **COVER SHEET** Sheet #: **0.00**

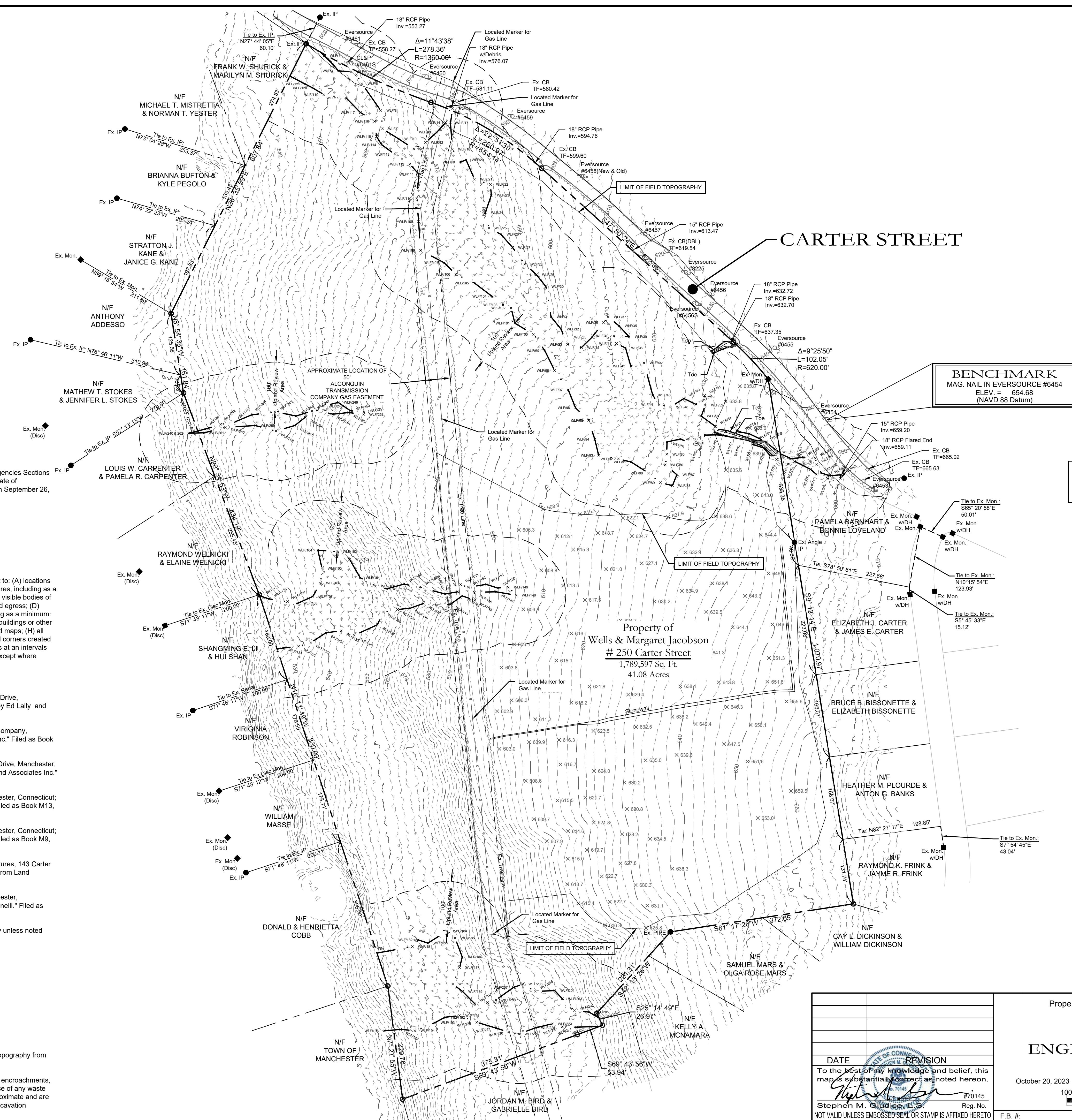
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LEGEND

-  = Existing utility pole
-  = Existing light pole
-  = Existing fire hydrant
-  = Existing water valve
-  = Existing gas valve
-  = Existing underground pipe
-  = Existing edge of pavement
-  = Existing bituminous concrete lip curb
-  = Existing well
-  = Existing catch basin
-  = Existing drainage manhole
-  = Existing sanitary manhole
-  = Existing utility box
-  = Existing contour
-  = Existing spot elevation
-  = Existing iron pin
-  = Existing drill hole
-  = Existing monument

SURVEY NOTES:

1. This map has been prepared pursuant to the Regulation of Connecticut State Agencies Sections 20-300b-1 through 20-300b-20 and the "Standards for Surveys and Maps in the State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996.
2. Type of survey performed: Property & Topographic Survey
3. Boundary determination category: Resurvey
4. Class of accuracy:
Horizontal: A-2
Vertical: T-2
5. The intent of this map is to depict or note the position of boundaries with respect to: (A) locations of all boundary monumentation found or set; (B) Apparent improvements and features, including as a minimum: dwellings, barns, garages, sheds, driveways, roadways, surface utilities, visible bodies of water and swimming pools; (C) record easements and visible means of ingress and egress; (D) record and apparent means of ingress and egress; (E) lines of occupation, including as a minimum: fences, walls, hedges and yards; (F) deed restrictions pertaining to the location of buildings or other apparent improvements; (G) unresolved conflicts with record deed descriptions and maps; (H) all apparent boundary encroachments; and (I) monumentation required to be set at all corners created by a deflection angle of not less than 70 degrees between two consecutive courses at an intervals not to exceed 600 feet (180 meters) along the boundaries between said corners, except where natural or man-made monumentation defines or occupies the line.
6. Map References:
 - a.) "Resubdivision Amanda Drive Prepared for Derekseth Homes, Amanda Drive, Manchester, Connecticut; Scale: 1"=100'; Dated: October 26, 1999; Sheet 2 of 19 by Ed Lally and Associates Inc." Filed as Map 1257 at the M.L.R.
 - b.) "Plot Plan Birch Mountain II Prepared for Mary Catherine Development Company, Manchester, Connecticut; Scale: 1"=40'; Dated: 1/30/89 by Design Professionals, Inc." Filed as Book M27, Page 60 at the M.L.R."
 - c.) "Resubdivision Amanda Drive Prepared for Derekseth Homes, Amanda Drive, Manchester, Connecticut; Scale: 1"=100'; Dated: October 26, 1999; Sheet 4 of 19 by Ed Lally and Associates Inc." Filed as Map 1259 at the M.L.R.
 - d.) "Map of Highland Estates, Birch Mountain Road & Carter Street, Manchester, Connecticut; Scale: 1"=50'; Dated: March 23, 1967; Sheet 2 of 3 by Hayden L. Griswold, C.E." Filed as Book M13, Page 48 at the M.L.R."
 - e.) "Map of Highland Estates, Birch Mountain Road & Carter Street, Manchester, Connecticut; Scale: 1"=50'; Dated: March 23, 1967; Sheet 3 of 3 by Hayden L. Griswold, C.E." Filed as Book M9, Page 36 at the M.L.R."
 - f.) "Boundary Survey Prepared for John Vontell, Existing Boundary and Features, 143 Carter Street, Manchester, Connecticut; Scale: 1"=30'; Dated: May 22, 2014 by Rob Hellstrom Land Surveying LLC." Filed as Map 2311 in Drawer 16 at the M.L.R."
 - g.) "Subdivision Plan Prepared for Robert C. Dennison, Carter Street, Manchester, Connecticut; Scale: 1"=100'; Dated: 6/20/83; Last Revised: 6-21-1983 by Fuss & O'Neill." Filed as Book M22, Page 49 at the M.L.R."
7. Per agreement with property owner no boundary corners were set by this survey unless noted hereon. All monumentation found is depicted or noted hereon.
8. Zone: RR
9. Total area: 1,789,597 Sq. Ft. - 41.08 Acres
10. Owner: Wells Jacobson & Margaret Jacobson
11. Town of Manchester Assessors Map #97 Lot #250
12. Filed in Volume 3397, Page 65 of the Town Clerk's office.
13. Contour interval is two(2) feet.
14. Existing contours generated from field topography. (Implemented with Aerial Topography from UCONN Base)
15. This survey does not include the location of any underground improvements or encroachments, subsurface utility lines or buried debris. Nor does it necessarily reflect the existence of any waste dumps or hazardous materials. The underground items depicted or noted are approximate and are not guaranteed. Notify "CALL BEFORE YOU DIG" 1-800-922-4455 prior to any excavation operations.



BENCHMARK
MAG. NAIL IN EVERSOURCE #6454
ELEV. = 654.68
(NAVD 88 Datum)

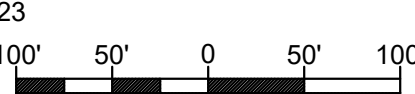
Wetlands Depicted are Field Located as Flagged
by Ian T. Cole, Professional Registered Soil
Scientist/Wetland Scientist on October 15, 2023

DATE	REVISION

To the best of my knowledge and belief, this map is substantially correct as noted hereon.

Stephen M. Gulligan, L.S.
Stephen M. Gulligan, L.S. #70145 Reg. No.
NOT VALID UNLESS EMBOSSED SEAL OR STAMP IS AFFIXED HERETO

Property & Topographic Survey Map
Prepared For
SOLLI ENGINEERING, LLC
250 Carter Street
Manchester, Connecticut
October 20, 2023 Scale: 1" = 100'

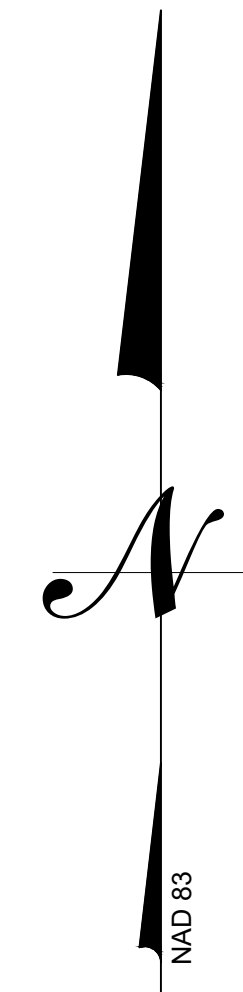


F.B. # PROJECT #: 2379a

cole
HARRY E. COLE & SON
engineering. surveying. planning.



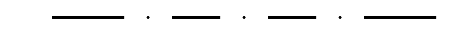
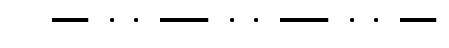
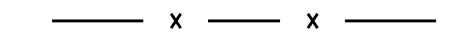
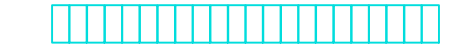


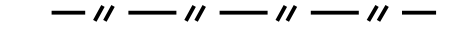
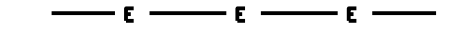




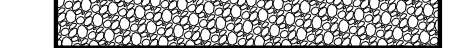
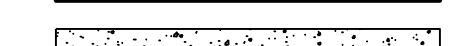
876 South Main Street
P.O. Box 44
Plainville, CT 06479 - 0044

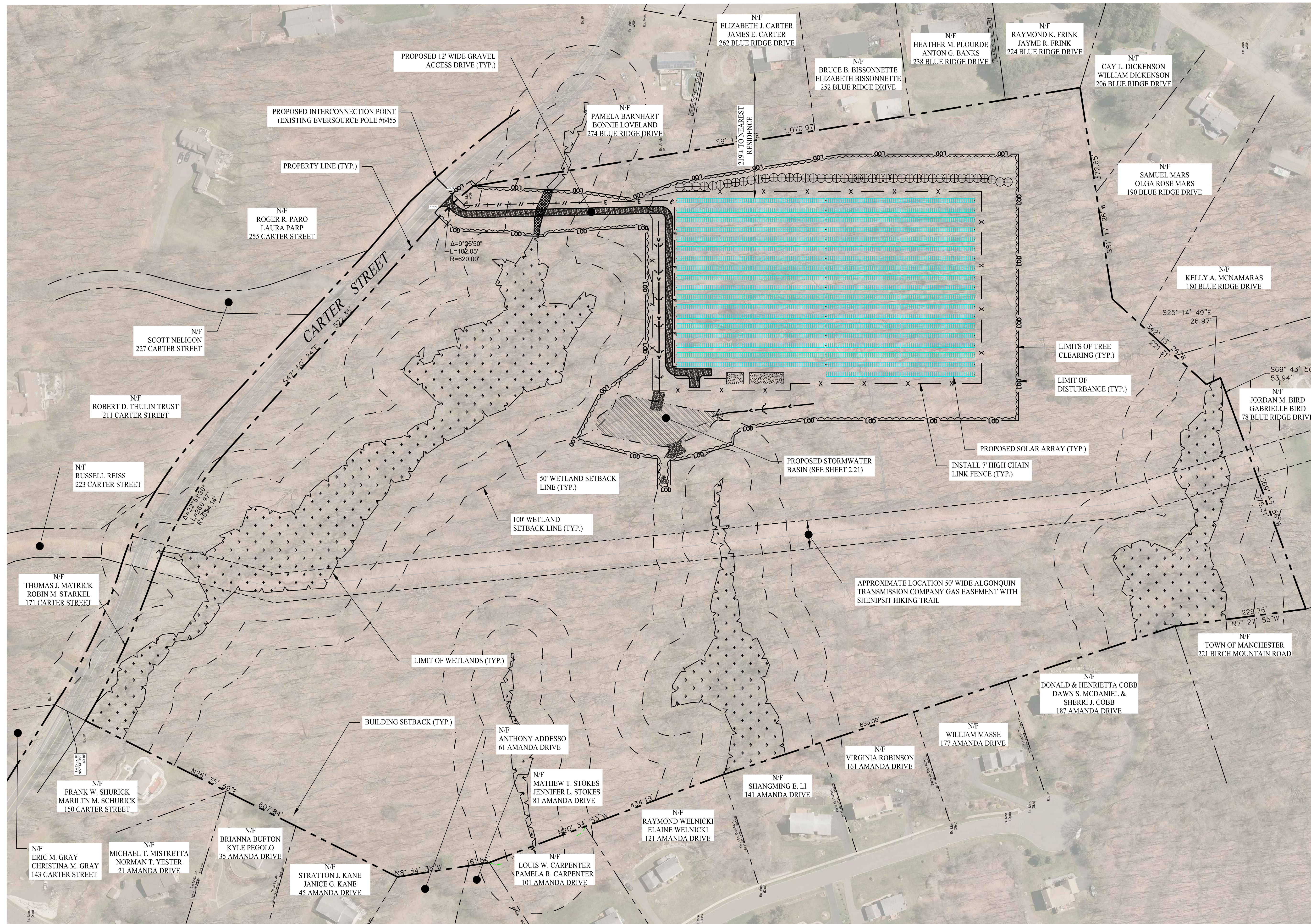
Tel: (860) 628-4484
Fax: (860) 620-0196
www.hecole.com



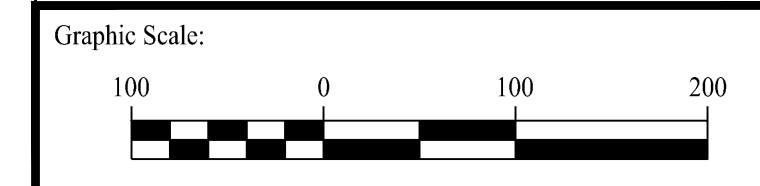


LEGEND

-  PROPERTY LINE
-  LIMIT OF WETLANDS
-  UPLAND REVIEW AREA
-  STORMWATER BASIN AREA
-  7 TALL CHAIN LINK FENCE
-  TRINA 540W SOLAR MODULES
-  UTILITY POLE
-  OVERHEAD ELECTRIC LINE
-  ELECTRIC CONDUIT
-  LIMIT OF TREE CLEARING
-  LIMIT OF DISTURBANCE
-  GRASS LINED SWALE
-  GRAVEL ACCESS DRIVE
-  CONCRETE EQUIPMENT PAD
-  WETLAND DISTURBANCE AREA
-  STORMWATER BASIN

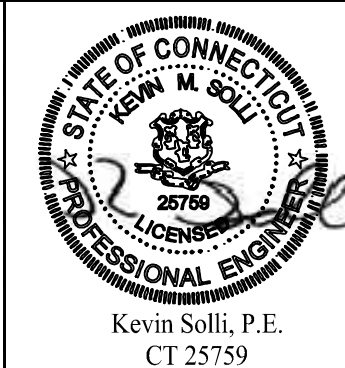


Rev. #:	Date	Description



SOLLI ENGINEERING
 501 Main Street, Monroe, CT 06468 T: (203) 880-5455 F: (203) 880-9695
 11 Vanderbilt Ave., Norwood, MA 02062 T: (781) 352-8491 F: (203) 880-9695

Drawn By:	CSH
Checked By:	EEL
Approved By:	KMS
Project #:	23100101
Plan Date:	01/15/24
Scale:	1" = 100'



PROPOSED SOLAR PHOTOVOLTAIC ARRAY
 250 CARTER STREET
 MANCHESTER, CONNECTICUT

Sheet Title:	Sheet #:
OVERALL SITE LAYOUT PLAN	2.10

Jun 19, 2024 - 9:37am chmody
 X:\SE Files\Project Data\2023\23100101 - 250 Carter Street - Manchester, CT\Cadd Data\23100101-2.10.dwg

PLANTING SCHEDULE

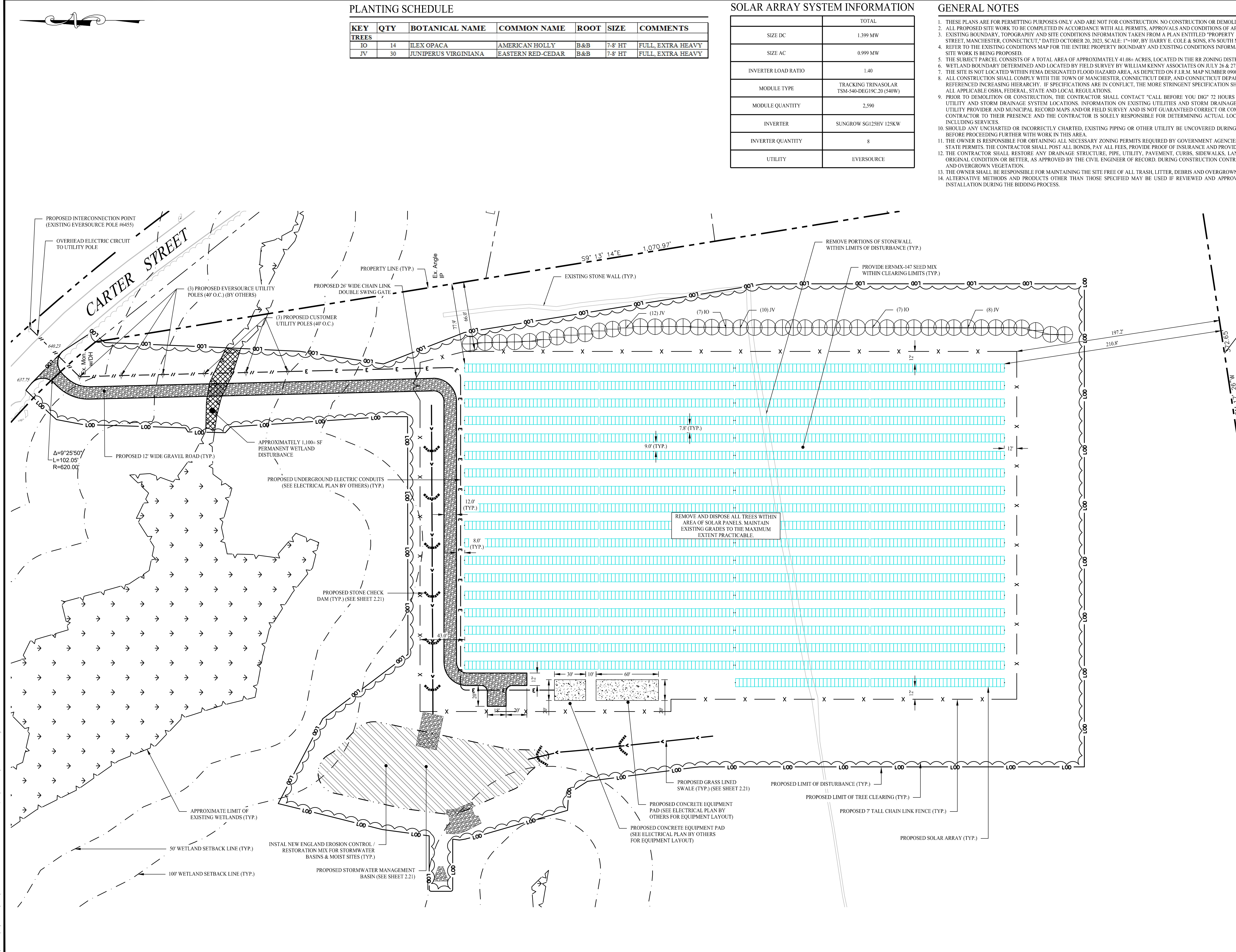
KEY TREES	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE	COMMENTS
IO	14	ILEX OPACA	AMERICAN HOLLY	B&B	7-8' HT	FULL, EXTRA HEAVY
JV	30	JUNIPERUS VIRGINIANA	EASTERN RED-CEDAR	B&B	7-8' HT	FULL, EXTRA HEAVY

SOLAR ARRAY SYSTEM INFORMATION

	TOTAL
SIZE DC	1,399 MW
SIZE AC	0,999 MW
INVERTER LOAD RATIO	1.40
MODULE TYPE	TRACKING TRINASOLAR TSM-540-DEG19C.20 (540W)
MODULE QUANTITY	2,590
INVERTER	SUNGROW SG125HV 125KW
INVERTER QUANTITY	8
UTILITY	EVERSOURCE

GENERAL NOTES

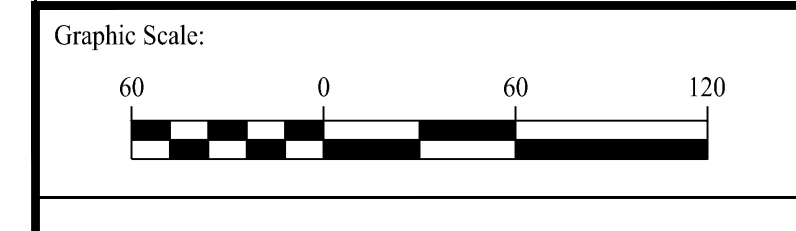
- THESE PLANS ARE FOR PERMITTING PURPOSES ONLY AND ARE NOT FOR CONSTRUCTION. NO CONSTRUCTION OR DEMOLITION SHALL BEGIN UNTIL FINAL APPROVAL OF THIS PLAN IS GRANTED.
- ALL PROPOSED SITE WORK TO BE COMPLETED IN ACCORDANCE WITH ALL PERMITS, APPROVALS AND CONDITIONS OF APPROVALS ISSUED BY LOCAL, STATE AND/OR FEDERAL REVIEWING AGENCIES.
- EXISTING BOUNDARY, TOPOGRAPHY AND SITE CONDITIONS INFORMATION TAKEN FROM A PLAN ENTITLED "PROPERTY & TOPOGRAPHIC SURVEY MAP PREPARED FOR SOLLI ENGINEERING, 250 CARTER STREET, MANCHESTER, CONNECTICUT," DATED OCTOBER 20, 2023, SCALE: 1"=100', BY HARRY E. COLE & SONS, 876 SOUTH MAIN STREET, PLANTVILLE, CT 06479.
- REFER TO THE EXISTING CONDITIONS MAP FOR THE ENTIRE PROPERTY BOUNDARY AND EXISTING CONDITIONS INFORMATION. THE PLAN HEREON DEPICTS A PORTION OF THE PROPERTY IN WHICH THE SITE WORK IS BEING PROPOSED.
- THE SUBJECT PARCEL CONSISTS OF A TOTAL AREA OF APPROXIMATELY 41.08+ ACRES, LOCATED IN THE RR ZONING DISTRICT IN THE TOWN OF MANCHESTER, CONNECTICUT.
- WETLAND BOUNDARY DETERMINED AND LOCATED BY FIELD SURVEY BY WILLIAM KENNY ASSOCIATES ON JULY 26 & 27, 2023.
- THE SITE IS NOT LOCATED WITHIN FEMA DESIGNATED FLOOD HAZARD AREA, AS DEPICTED ON F.I.R.M. MAP NUMBER 090330413F, WITH EFFECTIVE DATE SEPTEMBER 26, 2008.
- ALL CONSTRUCTION SHALL COMPLY WITH THE TOWN OF MANCHESTER, CONNECTICUT DEEP, AND CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS IN THE ABOVE REFERENCED INCREASING HIERARCHY. IF SPECIFICATIONS ARE IN CONFLICT, THE MORE STRINGENT SPECIFICATION SHALL APPLY. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE OSHA, FEDERAL, STATE AND LOCAL REGULATIONS.
- PRIOR TO DEMOLITION OR CONSTRUCTION, THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" 72 HOURS BEFORE THE COMMENCEMENT OF WORK AT (800) 922-4455 AND VERIFY ALL UTILITY AND STORM DRAINAGE SYSTEM LOCATIONS. INFORMATION ON EXISTING UTILITIES AND STORM DRAINAGE SYSTEMS HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY PROVIDER AND MUNICIPAL RECORD MAPS AND/OR FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES AND STORM DRAINAGE SYSTEMS ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE AND THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES AND STORM DRAINAGE SYSTEMS INCLUDING SERVICES.
- SHOULD ANY UNCHARTED OR INCORRECTLY CHARTED, EXISTING PIPING OR OTHER UTILITY BE UNCOVERED DURING EXCAVATION, CONSULT THE CIVIL ENGINEER IMMEDIATELY FOR DIRECTIONS BEFORE PROCEEDING FURTHER WITH WORK IN THIS AREA.
- THE OWNER IS RESPONSIBLE FOR OBTAINING ALL NECESSARY ZONING PERMITS REQUIRED BY GOVERNMENT AGENCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN ALL LOCAL AND STATE PERMITS. THE CONTRACTOR SHALL POST ALL BONDS, PAY ALL FEES, PROVIDE PROOF OF INSURANCE AND PROVIDE TRAFFIC CONTROLS NECESSARY FOR THIS PROJECT.
- THE CONTRACTOR SHALL RESTORE ANY DRAINAGE STRUCTURE, PIPE, UTILITY, PAVEMENT, CURBS, SIDEWALKS, LANDSCAPED AREAS OR SIGNAGE DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL CONDITION OR BETTER, AS APPROVED BY THE CIVIL ENGINEER OF RECORD. DURING CONSTRUCTION CONTRACTOR IS TO HAVE THE SITE MAINTAINED FREE OF ALL TRASH, LITTER, DEBRIS AND OVERGROWN VEGETATION.
- THE OWNER SHALL BE RESPONSIBLE FOR MAINTAINING THE SITE FREE OF ALL TRASH, LITTER, DEBRIS AND OVERGROWN VEGETATION THROUGHOUT CONSTRUCTION.
- ALTERNATIVE METHODS AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED IF REVIEWED AND APPROVED BY THE OWNER, CIVIL ENGINEER, AND REGULATORY AGENCY PRIOR TO INSTALLATION DURING THE BIDDING PROCESS.



LEGEND

- PROPERTY LINE
- LIMIT OF WETLANDS
- UPLAND REVIEW AREA
- STORMWATER BASIN AREA
- 7' TALL CHAIN LINK FENCE
- TRINA 540W SOLAR MODULES
- UTILITY POLE
- OVERHEAD ELECTRIC LINE
- ELECTRIC CONDUIT
- LIMIT OF TREE CLEARING
- GRASS LINED SWALE
- GRAVEL ACCESS DRIVE
- CONCRETE EQUIPMENT PAD
- WETLAND DISTURBANCE AREA
- STORMWATER BASIN
- EVERGREEN TREE

Rev. #:	Date	Description



SOLLI ENGINEERING
 501 Main Street, Meriden, CT 06468 T: (203) 880-5455 F: (203) 880-9695
 11 Vanderbilt Ave., Norwood, MA 02062 T: (781) 352-8491 F: (203) 880-9695

Drawn By:	AWC
Checked By:	CJB
Approved By:	KMS
Project #:	23100101
Plan Date:	01/15/24
Scale:	1" = 60'

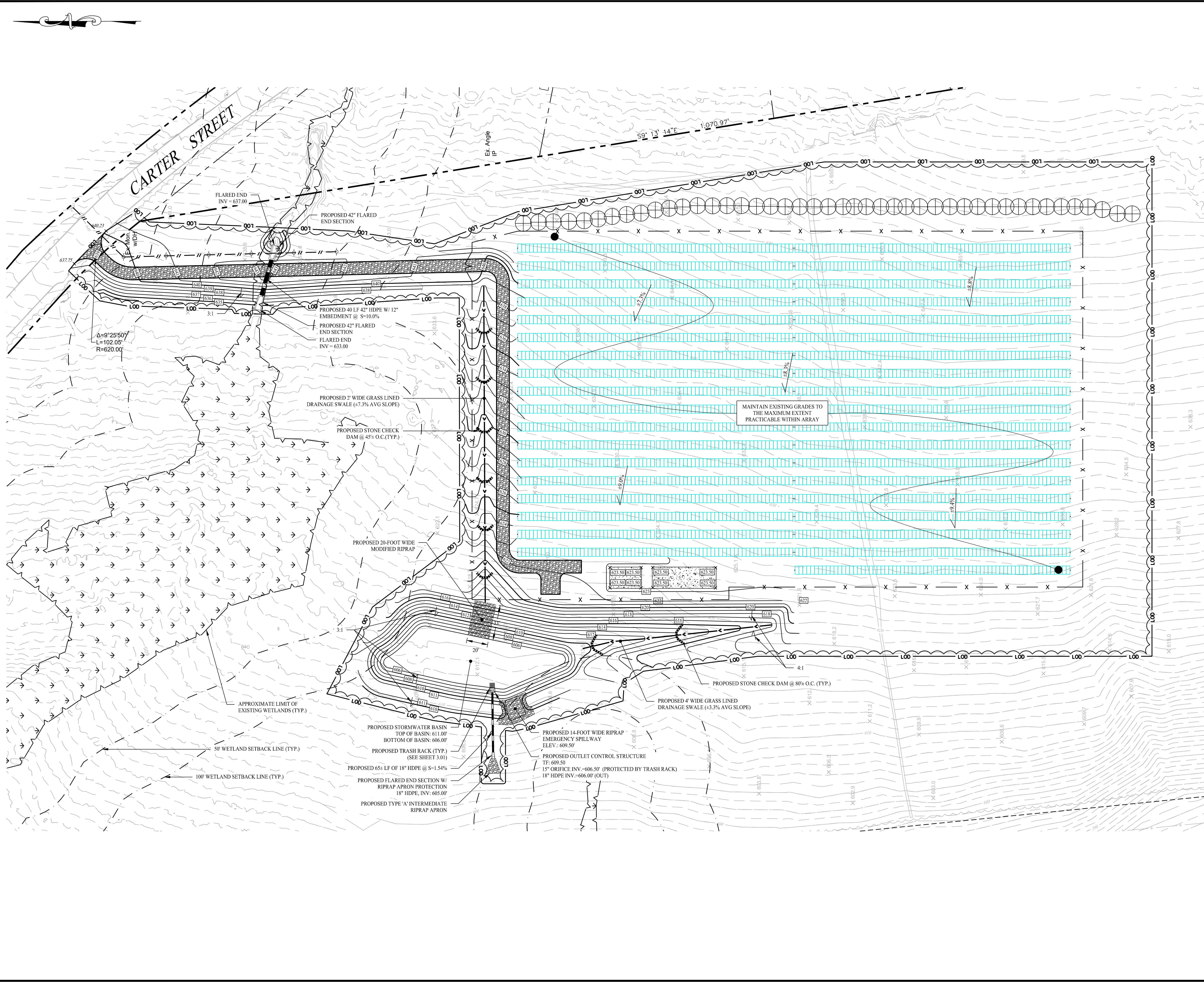


PROPOSED SOLAR PHOTOVOLTAIC ARRAY
 250 CARTER STREET
 MANCHESTER, CONNECTICUT

Sheet Title:	SITE LAYOUT PLAN
Sheet #:	2.11

Jan 19, 2024 - 9:38am chendy
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Jun 19, 2024 - 9:38am chesdy
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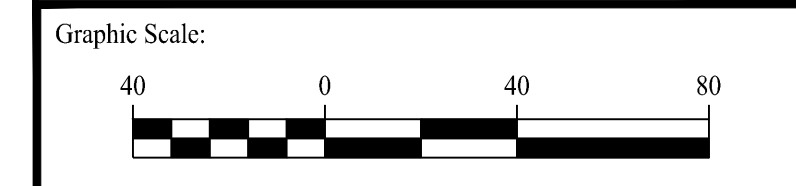
GENERAL NOTES

- REFER TO THE EXISTING CONDITIONS MAP FOR THE ENTIRE PROPERTY BOUNDARY AND EXISTING CONDITIONS INFORMATION. THE PLAN HEREON DEPICTS A PORTION OF THE PROPERTY IN WHICH THE SITE WORK IS BEING PROPOSED.
- THIS DRAWING IS INTENDED TO DESCRIBE GRADING AND DRAINAGE ONLY. REFER TO SITE PLAN FOR GENERAL INFORMATION, AND DETAIL SHEETS FOR DETAILS.
- THE CONTRACTOR SHALL PRESERVE EXISTING VEGETATION WHERE POSSIBLE AND/OR AS NOTED ON DRAWINGS. REFER TO EROSION CONTROL PLAN FOR LIMIT OF DISTURBANCE AND EROSION CONTROL NOTES.
- TOPSOIL SHALL BE STRIPPED AND STOCKPILED ON SITE FOR USE IN FINAL LANDSCAPING.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSTRUCTION PERMITS REQUIRED BY GOVERNMENT AND LOCAL AGENCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY CONSTRUCTION PERMITS FROM THE TOWN OF MANCHESTER REQUIRED TO PERFORM ALL WORK, INCLUDING FOR STREET CUTS AND CONNECTIONS TO EXISTING UTILITIES. THE CONTRACTOR SHALL POST ALL BONDS, PAY ALL FEES, PROVIDE PROOF OF INSURANCE AND PROVIDE TRAFFIC CONTROL NECESSARY FOR THIS WORK.
- ALL DISTURBANCE INCURRED TO TOWN OR STATE PROPERTY DUE TO CONSTRUCTION SHALL BE RESTORED TO ITS PREVIOUS CONDITION OR BETTER, TO THE SATISFACTION OF THE TOWN OF BETHANY AUTHORITY.
- IF IMPACTED OR CONTAMINATED SOIL IS ENCOUNTERED BY THE CONTRACTOR, THE CONTRACTOR SHALL SUSPEND EXCAVATION WORK OF IMPACTED SOIL AND NOTIFY THE OWNER AND/OR OWNER'S ENVIRONMENTAL CONSULTANT PRIOR TO PROCEEDING WITH FURTHER WORK IN THE IMPACTED SOIL LOCATION UNTIL FURTHER INSTRUCTED BY THE OWNER AND/OR OWNER'S ENVIRONMENTAL CONSULTANT.
- ALL PIPE LENGTHS ARE HORIZONTAL DISTANCES AND ARE APPROXIMATE.
- ALL DISTURBED AREAS TO BE RESEDED WITH ERMXX-147 WITHIN THE ARRAY AREA. ERMXX-610 WILL BE USED OUTSIDE FENCELINE AND IN NON-ARRAY AREAS.

LEGEND

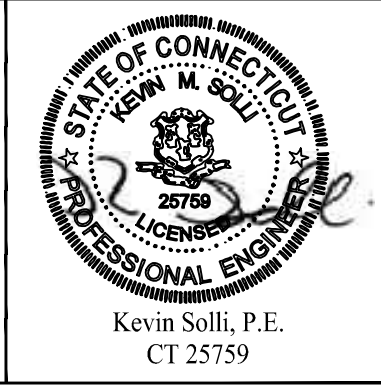
	PROPERTY LINE
	MAJOR CONTOURS
	MINOR CONTOURS
	EXISTING MAJOR CONTOURS
	EXISTING MINOR CONTOURS
	PROPOSED SPOT ELEVATION
	EXISTING SPOT ELEVATION
	STORM DRAIN PIPE
	RIP RAP SPILLWAY
	OUTLET CONTROL STRUCTURE
	FLARED END SECTION
	LEVEL SPREADER
	PERMANENT WETLAND DISTURBANCE AREA

Rev. #:	Date	Description



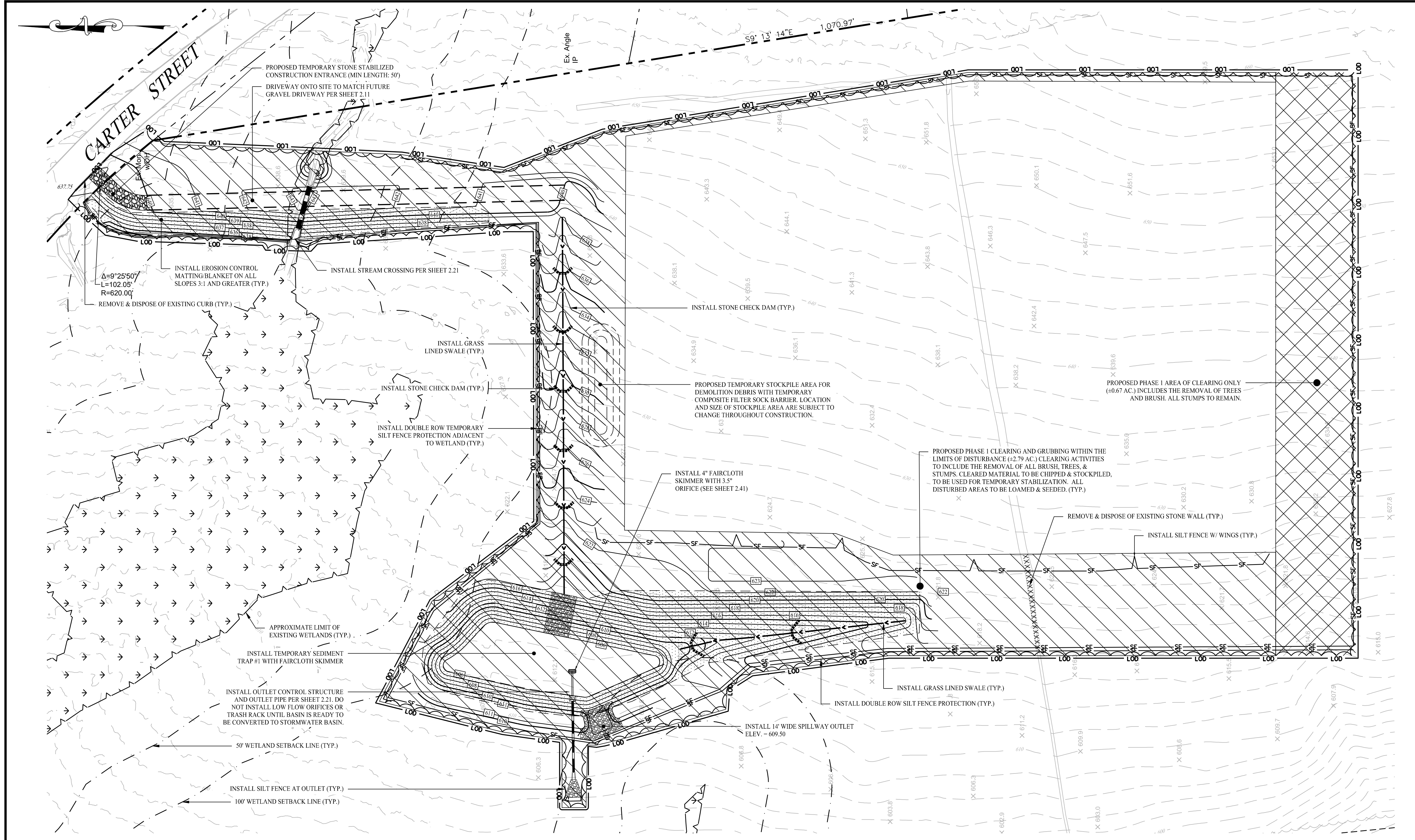
SOLLI ENGINEERING
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 11 Vanderbilt Ave., Norwood, MA 02062 T: (781) 352-8491 F: (203) 880-9695

Drawn By:	AWC
Checked By:	CJB
Approved By:	KMS
Project #:	23100101
Plan Date:	01/15/24
Scale:	1" = 40'



Project:
PROPOSED SOLAR PHOTOVOLTAIC ARRAY
 250 CARTER STREET
 MANCHESTER, CONNECTICUT

Sheet Title:	Sheet #:
GRADING & DRAINAGE PLAN	2.21



LEGEND

	PROPERTY LINE
	RIGHT-OF-WAY LINE
	ADJOINING LOT LINE
	SILT FENCE PROTECTION
	CURB REMOVAL
	FENCE / ROCK WALL REMOVAL
	TEMPORARY SEDIMENT TRAP / BASIN
	STONE CHECK DAM
	MATERIAL STOCKPILE AREA
	CONSTRUCTION ENTRANCE
	DIVERSION SWALE/BERM
	EROSION CONTROL MATTING
	PHASE 1 CLEARING AND GRUBBING
	PHASE 1 CLEARING ONLY (STUMPS TO REMAIN)

CONSTRUCTION SEQUENCE (PHASE I)

THE FOLLOWING SUGGESTED SEQUENCE OF CONSTRUCTION ACTIVITIES IS PROJECTED BASED UPON ENGINEERING JUDGEMENT AND BEST MANAGEMENT PRACTICES. THE CONTRACTOR MAY ELECT TO ALTER THE SEQUENCING TO BEST MEET THE CONSTRUCTION SCHEDULE, THE EXISTING SITE ACTIVITIES AND WEATHER CONDITIONS. SHOULD THE CONTRACTOR ALTER THE CONSTRUCTION SEQUENCE OR ANY EROSION AND SEDIMENTATION CONTROL MEASURES THEY SHALL MODIFY THE STORMWATER POLLUTION CONTROL PLAN ("SWPCP") AS REQUIRED BY THE GENERAL PERMIT. MAJOR CHANGES IN SEQUENCING AND/OR METHODS MAY REQUIRE REGULATORY APPROVAL PRIOR TO IMPLEMENTATION.

- PHASE I:**
1. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING. PHYSICALLY FLAG THE LIMITS OF DISTURBANCE IN THE FIELD AS NECESSARY TO FACILITATE THE PRE-CONSTRUCTION MEETING.
 2. CONDUCT A PRE-CONSTRUCTION MEETING TO DISCUSS THE PROPOSED WORK AND EROSION AND SEDIMENTATION CONTROL MEASURES. THE MEETING SHOULD BE ATTENDED BY THE OWNER, THE OWNER'S REPRESENTATIVE(S), THE GENERAL CONTRACTOR, DESIGNATED SUB-CONTRACTORS AND THE PERSON, OR PERSONS, RESPONSIBLE FOR THE IMPLEMENTATION, OPERATION, MONITORING AND MAINTENANCE OF THE EROSION AND SEDIMENTATION MEASURES. THE CONSTRUCTION PROCEDURES FOR THE ENTIRE PROJECT SHALL BE REVIEWED AT THIS MEETING.
 3. NOTIFY CALL BEFORE YOU DIG AT 811 AS REQUIRED, PRIOR TO THE START OF CONSTRUCTION.
 4. REMOVE EXISTING IMPEDIMENTS AS NECESSARY AND PROVIDE MINIMAL DISTURBANCE TO INSTALL THE REQUIRED CONSTRUCTION ENTRANCE.
 5. INSTALL STREAM CROSSING & ACCESS DRIVE.
 6. INSTALL SILT FENCE / PERIMETER SEC MEASURES AS PROPOSED (CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL SEC MEASURES).
 7. PREPARE TEMPORARY PARKING AND STORAGE AREAS. ESTABLISH MATERIAL STOCKPILE AREA AND INSTALL SEC BARRIER SURROUNDING PILE.
 8. COMPLETE PHASE 1 CLEARING & GRUBBING FOR INSTALLATION OF SEDIMENT TRAP AND GRASS LINED SWALES PER DESIGN PLANS. STABILIZE OPEN SOILS WITH SPECIFIED SEED MIXES.

SEDIMENT & EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL CONSTRUCT ALL SEDIMENT AND EROSION CONTROLS IN ACCORDANCE WITH THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION, IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, AND AS DIRECTED BY THE TOWN OF MONTVILLE. PERMITTEE, AND/OR SWPCP MONITOR. ALL PERIMETER SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CLEARING AND GRUBBING AND DEMOLITION OPERATIONS.
2. THESE DRAWINGS ARE ONLY INTENDED TO DESCRIBE THE SEDIMENT AND EROSION CONTROL MEASURES FOR THIS SITE. SEE CONSTRUCTION SEQUENCE FOR ADDITIONAL INFORMATION. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE EROSION & SEDIMENT CONTROL PLAN ARE SHOWN AS REQUIRED BY THE ENGINEER OF RECORD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL EROSION CONTROL MEASURES ARE CONFIGURED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION OF SOILS AND PREVENT THE TRANSPORT OF SEDIMENTS AND OTHER POLLUTANTS TO STORM DRAINAGE SYSTEMS AND/OR WATERCOURSES. ACTUAL SITE CONDITIONS OR SEASONAL AND CLIMATIC CONDITIONS MAY WARRANT ADDITIONAL CONTROLS OR CONFIGURATIONS, AS REQUIRED, AND AS DIRECTED BY THE PERMITTEE AND/OR SWPCP MONITOR. REFER TO SITE PLAN FOR GENERAL INFORMATION AND OTHER CONTRACT PLANS FOR APPROPRIATE INFORMATION.
3. A BOND OR LETTER OF CREDIT MAY BE REQUIRED TO BE POSTED WITH THE GOVERNING AUTHORITY FOR THE EROSION CONTROL INSTALLATION AND MAINTENANCE.
4. THE CONTRACTOR SHALL APPLY THE MINIMUM EROSION & SEDIMENT CONTROL MEASURES SHOWN ON THE PLAN IN CONJUNCTION WITH CONSTRUCTION SEQUENCING, SUCH THAT ALL ACTIVE WORK ZONES ARE PROTECTED. ADDITIONAL AND/OR ALTERNATIVE SEDIMENT AND EROSION CONTROL MEASURES MAY BE INSTALLED DURING THE CONSTRUCTION PERIOD IF FOUND NECESSARY BY THE CONTRACTOR, OWNER, ENGINEER OF RECORD, MUNICIPAL OFFICIALS, OR ANY GOVERNING AGENCY. THE CONTRACTOR SHALL CONTACT THE OWNER AND APPROPRIATE GOVERNING AGENCIES FOR APPROVAL IF ALTERNATIVE CONTROLS OTHER THAN THOSE SHOWN ON THE PLANS ARE PROPOSED BY THE CONTRACTOR.
5. THE CONTRACTOR SHALL TAKE EXTREME CARE DURING CONSTRUCTION SO AS NOT TO DISTURB UNPROTECTED WETLAND AREAS OR INSTALLED SEDIMENTATION AND EROSION CONTROL MEASURES. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROLS WEEKLY AND WITHIN 24 HOURS OF A STORM WITH A RAINFALL AMOUNT OF 0.25 INCHES OR GREATER TO VERIFY THAT THE CONTROLS ARE OPERATING PROPERLY AND MAKE REPAIRS AS NECESSARY IN A TIMELY MANNER.
6. THE CONTRACTOR SHALL KEEP A SUPPLY OF EROSION CONTROL MATERIAL (SILT FENCE, COMPOSITE FILTER SOCK, EROSION CONTROL BLANKET, ETC.) ON-SITE FOR PERIODIC MAINTENANCE AND EMERGENCY REPAIRS.
7. ALL FILL MATERIAL PLACED ADJACENT TO ANY WETLAND AREA SHALL BE GOOD QUALITY, WITH LESS THAN 5% FINES PASSING THROUGH A #200 SIEVE (BANK RUN), SHALL BE PLACED IN MAXIMUM ONE FOOT LIFTS, AND SHALL BE COMPACTED TO 95% MAX. DRY DENSITY MODIFIED PROCTOR OR AS SPECIFIED IN THE CONTRACT SPECIFICATIONS.
8. PROTECT EXISTING TREES THAT ARE TO BE SAVED BY FENCING, ORANGE SAFETY FENCE, CONSTRUCTION TAPE, OR EQUIVALENT FENCING TAPE. ANY LIMB TRIMMING SHOULD BE DONE AFTER CONSULTATION WITH AN ARBORIST AND BEFORE CONSTRUCTION BEGINS IN THAT AREA. FENCING SHALL BE MAINTAINED AND REPAIRED DURING CONSTRUCTION.
9. CONSTRUCTION ENTRANCES (ANTI-TRACKING PADS) SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR CONSTRUCTION ACTIVITY AND SHALL BE MAINTAINED THROUGHOUT THE DURATION OF ALL CONSTRUCTION IF REQUIRED. THE LOCATION OF THE TRACKING PADS MAY CHANGE AS VARIOUS PHASES OF CONSTRUCTION ARE COMPLETED. CONTRACTOR SHALL ENSURE THAT ALL VEHICLES EXITING THE SITE ARE PASSING OVER THE ANTI-TRACKING PADS PRIOR TO EXITING.
10. ALL CONSTRUCTION SHALL BE CONTAINED WITHIN THE LIMIT OF DISTURBANCE, WHICH SHALL BE MARKED WITH SILT FENCE, SAFETY FENCE, HAY BALES, RIBBONS, OR OTHER MEANS PRIOR TO CLEARING. CONSTRUCTION ACTIVITY SHALL REMAIN ON THE UPHILL SIDE OF THE SEDIMENT BARRIER UNLESS WORK IS SPECIFICALLY CALLED FOR ON THE DOWNHILL SIDE OF THE BARRIER.
11. NO CUT OR FILL SLOPES SHALL EXCEED 2:1 EXCEPT WHERE STABILIZED BY ROCK FACED EMBANKMENTS OR EROSION CONTROL BLANKETS. ALL SLOPES SHALL BE SEED AND BANKS WILL BE STABILIZED IMMEDIATELY UPON COMPLETION OF FINAL GRADING UNTIL TURF IS ESTABLISHED.
12. DIRECT ANY DEWATERING PUMP DISCHARGE TO A SEDIMENT CONTROL DEVICE CONFORMING TO THE GUIDELINES WITHIN THE APPROVED LIMIT OF DISTURBANCE IF REQUIRED. DISCHARGE TO STORM DRAINS OR SURFACE WATERS FROM SEDIMENT CONTROLS SHALL BE CLEAR AND APPROVED BY THE PERMITTEE OR MUNICIPALITY.
13. THE CONTRACTOR SHALL MAINTAIN A CLEAN CONSTRUCTION SITE AND SHALL NOT ALLOW THE ACCUMULATION OF RUBBISH OR CONSTRUCTION DEBRIS ON THE SITE. PROPER SANITARY DEVICES SHALL BE MAINTAINED ON-SITE AT ALL TIMES AND SECURED APPROPRIATELY. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID THE SPILLAGE OF FUEL OR OTHER POLLUTANTS ON THE CONSTRUCTION SITE AND SHALL ADHERE TO ALL APPLICABLE POLICIES AND REGULATIONS RELATED TO SPILL PREVENTION AND RESPONSE/CONTAINMENT.
14. MINIMIZE LAND DISTURBANCES. SEED AND MULCH DISTURBED AREAS WITH TEMPORARY MIX AS SOON AS PRACTICABLE (2 WEEK MAXIMUM UNSTABILIZED PERIOD) USING PERENNIAL RYEGRASS AT 40 LBS PER ACRE. MULCH ALL CUT AND FILL SLOPES AND SWALES WITH LOOSE HAY AT A RATE OF 2 TONS PER ACRE. IF NECESSARY, REPLACE LOOSE HAY ON SLOPES WITH EROSION CONTROL BLANKETS OR JUTE CLOTH. MODERATELY GRADED AREAS, ISLANDS, AND TEMPORARY CONSTRUCTION STAGING AREAS MAY BE HYDROSEEDED WITH TACKIFIER.
15. SWEEP AFFECTED PORTIONS OF OFF SITE ROADS ONE OR MORE TIMES A DAY (OR LESS FREQUENTLY IF TRACKING IS NOT A PROBLEM) DURING CONSTRUCTION. FOR DUST CONTROL, PERIODICALLY MOISTEN EXPOSED SOIL SURFACES WITH WATER ON UNPAVED TRAVELWAYS TO KEEP THE TRAVELWAYS DAMP. CALCIUM CHLORIDE MAY ALSO BE APPLIED TO ACCESS ROADS. DUMP TRUCK LOADS EXITING THE SITE SHALL BE COVERED.
16. VEGETATIVE ESTABLISHMENT SHALL OCCUR ON ALL DISTURBED SOIL, UNLESS THE AREA IS UNDER ACTIVE CONSTRUCTION. IT IS COVERED IN STONE OR SCHEDULED FOR PAVING WITHIN 30 DAYS. TEMPORARY SEEDING OR NON-LIVING SOIL PROTECTION OF ALL EXPOSED SOILS AND SLOPES SHALL BE INITIATED WITHIN THE FIRST 7 DAYS OF SUSPENDING WORK IN AREAS TO BE LEFT LONGER THAN 30 DAYS.
17. MAINTAIN ALL PERMANENT AND TEMPORARY SEDIMENT CONTROL DEVICES IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD. UPON COMPLETION OF WORK SWEEP CONCRETE PADS, CLEAN THE STORMWATER MANAGEMENT SYSTEMS AND REMOVE ALL TEMPORARY SEDIMENT CONTROLS ONCE THE SITE IS FULLY STABILIZED AND APPROVAL HAS BEEN RECEIVED FROM PERMITTEE OR THE MUNICIPALITY.
18. SEEDING MIXTURES SHALL BE FUZZ & BUZZ MIX - PREMIUM - ERNMX-147, OR APPROVED EQUAL. NEW ENGLAND EROSION CONTROL RESTORATION MIX FOR STORMWATER BASINS & MOIST SITES, OR APPROVED EQUAL, SHALL BE UTILIZED ON THE BOTTOM OF THE BASIN & FUZZ & BUZZ MIX - PREMIUM - ERNMX-147, OR APPROVED EQUAL, ON THE SIDE SLOPES OF THE BASIN. SEE SHEET DN-2 FOR ALL SEED MIXTURES.
19. REFER TO SHEET 2.41 FOR SEDIMENT & EROSION CONTROL NARRATIVE & DETAILS.

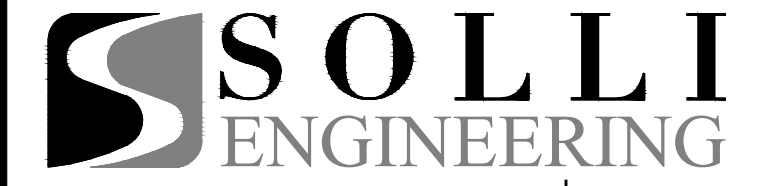
CONSTRUCTION OPERATION & MAINTENANCE PLAN

E&S MEASURE	INSPECTION SCHEDULE	MAINTENANCE REQUIRED
CONSTRUCTION ENTRANCE	DAILY	PLACE ADDITIONAL STONE, EXTEND THE LENGTH OR REMOVE AND REPLACE THE STONE. CLEAN PAVED SURFACES OF TRACKED SEDIMENT.
COMPOSITE FILTER SOCK	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR/REPLACE WHEN FAILURE OR DETERIORATION IS OBSERVED.
SILT FENCE	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR/REPLACE WHEN FAILURE OR DETERIORATION IS OBSERVED. REMOVE SILT WHEN IT REACHES 1/2 THE HEIGHT OF THE FENCE.
TOPSOIL/BORROW STOCKPILES	DAILY	REPAIR/REPLACE SEDIMENT BARRIERS AS NECESSARY.
TEMPORARY SOIL PROTECTION	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR ERODED OR BARE AREAS IMMEDIATELY. RESEED AND MULCH.

TEMPORARY SEDIMENT TRAP CALCULATIONS

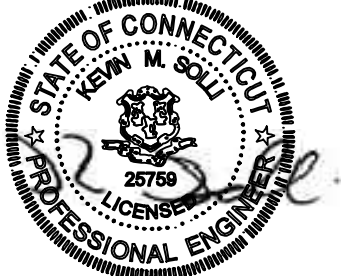
TRAP NUMBER	DRAINAGE AREA (AC)	REQ. STORAGE VOLUME (CF)	REQ. WET VOLUME (CF)	BOTTOM ELEVATION (FT)	WET ELEVATION (FT)	DRY ELEVATION (FT)	TOP ELEVATION (FT)	WET VOL PROVIDED (CF)	DRY VOLUME PROVIDED (CF)	TOTAL VOLUME PROVIDED (CF)
1	2.35	8,503	4,251	606.00	607.00	609.50	611.00	6,679	22,455	29,134

Rev. #:	Date	Description



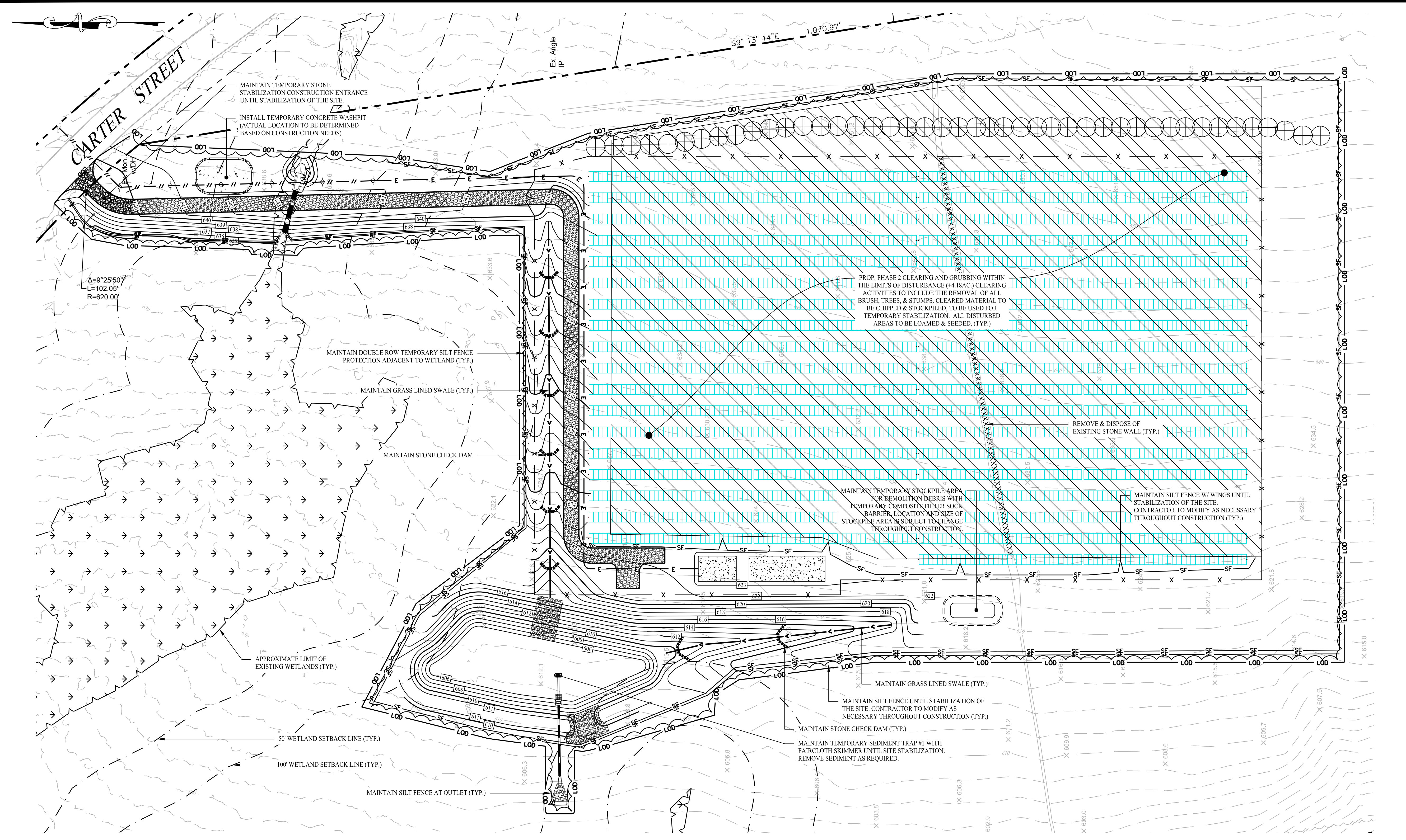
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Drawn By: SFU
Checked By: AWC
Approved By: KMS
Project #: 23100101
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Scale: 1" = 60'
Kevin Solli, P.E.
CT 25759



PROPOSED SOLAR PHOTOVOLTAIC ARRAY
250 CARTER STREET
MANCHESTER, CONNECTICUT

Sheet Title: SOIL EROSION & SEDIMENT CONTROL PLAN PHASE I
Sheet #: 2.31



LEGEND

	PROPERTY LINE
	RIGHT-OF-WAY LINE
	ADJOINING LOT LINE
	SILT FENCE PROTECTION
	CONSTRUCTION FENCE
	CURB REMOVAL
	FENCE / ROCK WALL REMOVAL
	TEMPORARY SEDIMENT TRAP / BASIN
	STONE CHECK DAM
	MATERIAL STOCKPILE AREA
	CONSTRUCTION ENTRANCE
	CONCRETE WASHPIT
	DIVERSION SWALE/BERM
	PHASE 2 CLEARING AND GRUBBING

- CONSTRUCTION SEQUENCE (PHASE II)**
- PHASE II:**
- TEMPORARILY SEED, THROUGHOUT CONSTRUCTION, DENUDED AREAS THAT WILL BE INACTIVE FOR 14 DAYS OR MORE.
 - ONCE SEDIMENT TRAP AND GRASS LINED SWALES ARE STABILIZED, COMPLETE PHASE 2 CLEARING AND GRUBBING. STABILIZE OPEN SOILS WITH SPECIFIED SEED MIXES.
 - INSTALL RACKING POSTS FOR SOLAR PANELS.
 - INSTALL SOLAR PANELS AND COMPLETE ELECTRIC INSTALLATION.
 - COMPLETE REMAINING SITE WORK, INCLUDING CHAIN LINK FENCE, EQUIPMENTS PADS, AND INTERCONNECTION ROUTE. STABILIZE ALL DISTURBED AREAS THROUGHOUT CONSTRUCTION.
 - PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE. PER APPENDIX (K) (C) (iii), FOR SLOPES GREATER THAN OR EQUAL TO 5%, EROSION CONTROL BLANKETS OR STUMP GRINDINGS OR EROSION CONTROL MIX MULCH OR HYDROSEED WITH TACKLIFER SHALL BE APPLIED WITHIN 72 HOURS OF FINAL GRADING, OR WHEN A RAINFALL OF 0.5 INCHES OR GREATER IS PREDICTED WITHIN 24 HOURS OF FINAL GRADING, WHICHEVER TIME PERIOD IS LESS.
 - CONVERT SEDIMENT TRAP TO PERMANENT STORMWATER BASIN. REMOVE ALL SEDIMENT AND REPAIR ALL BASIN BANKS AS REQUIRED. INSTALL LOW FLOW ORIFICES IN OUTLET CONTROL STRUCTURE.
 - REPAIR AND STABILIZE GRASS LINED SWALES AS REQUIRED.
 - PREPARE SITE FOR FINAL GRADING.
 - FINE GRADE, RAKE, SEED, AND MULCH ALL REMAINING DISTURBED AREAS.
 - CONTRACTOR / CONSTRUCTION MANAGER TO COORDINATE WITH ENGINEER OF RECORD AND SOIL CONSERVATION DISTRICT AGENT TO OBTAIN STABILIZED SITE STATUS.
 - CONTINUE DAILY INSPECTION REPORTS UNTIL THE FINAL DAILY INSPECTION REPORT IS SIGNED BY THE CONSTRUCTION MANAGER AND SUBMITTED.

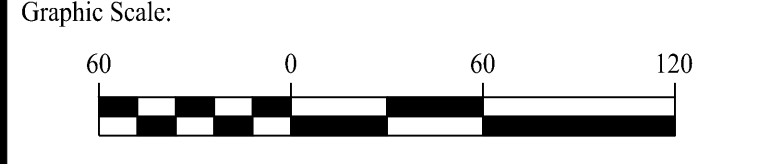
SEDIMENT & EROSION CONTROL NOTES

- THE CONTRACTOR SHALL CONSTRUCT ALL SEDIMENT AND EROSION CONTROLS IN ACCORDANCE WITH THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION, IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, AND AS DIRECTED BY THE TOWN OF MONTVILLE, PERMITTEE, AND/OR SWPCP MONITOR. ALL PERIMETER SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CLEARING AND GRUBBING AND DEMOLITION OPERATIONS.
- THESE DRAWINGS ARE ONLY INTENDED TO DESCRIBE THE SEDIMENT AND EROSION CONTROL MEASURES FOR THIS SITE. SEE CONSTRUCTION SEQUENCE FOR ADDITIONAL INFORMATION. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE EROSION & SEDIMENT CONTROL PLAN ARE SHOWN AS REQUIRED BY THE ENGINEER OF RECORD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL EROSION CONTROL MEASURES ARE CONFIGURED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION OF SOILS AND PREVENT THE TRANSPORT OF SEDIMENTS AND OTHER POLLUTANTS TO STORM DRAINAGE SYSTEMS AND/OR WATERCOURSES. ACTUAL SITE CONDITIONS OR SEASONAL AND CLIMATIC CONDITIONS MAY WARRANT ADDITIONAL CONTROLS OR CONFIGURATIONS, AS REQUIRED, AND AS DIRECTED BY THE PERMITTEE AND/OR SWPCP MONITOR. REFER TO SITE PLAN FOR GENERAL INFORMATION AND OTHER CONTRACT PLANS FOR APPROPRIATE INFORMATION.
- A BOND OR LETTER OF CREDIT MAY BE REQUIRED TO BE POSTED WITH THE GOVERNING AUTHORITY FOR THE EROSION CONTROL INSTALLATION AND MAINTENANCE.
- THE CONTRACTOR SHALL APPLY THE MINIMUM EROSION & SEDIMENT CONTROL MEASURES SHOWN ON THE PLAN IN CONJUNCTION WITH CONSTRUCTION SEQUENCING, SUCH THAT ALL ACTIVE WORK ZONES ARE PROTECTED. ADDITIONAL AND/OR ALTERNATIVE SEDIMENT AND EROSION CONTROL MEASURES MAY BE INSTALLED DURING THE CONSTRUCTION PERIOD IF FOUND NECESSARY BY THE CONTRACTOR, OWNER, ENGINEER OF RECORD, MUNICIPAL OFFICIALS, OR ANY GOVERNING AGENCY. THE CONTRACTOR SHALL CONTACT THE OWNER AND APPROPRIATE GOVERNING AGENCIES FOR APPROVAL IF ALTERNATIVE CONTROLS OTHER THAN THOSE SHOWN ON THE PLANS ARE PROPOSED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL TAKE EXTREME CARE DURING CONSTRUCTION SO AS NOT TO DISTURB UNPROTECTED WETLAND AREAS OR INSTALLED SEDIMENTATION AND EROSION CONTROL MEASURES. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROLS WEEKLY AND WITHIN 24 HOURS OF A STORM WITH A RAINFALL AMOUNT OF 0.25 INCHES OR GREATER TO VERIFY THAT THE CONTROLS ARE OPERATING PROPERLY AND MAKE REPAIRS AS NECESSARY IN A TIMELY MANNER.
- THE CONTRACTOR SHALL KEEP A SUPPLY OF EROSION CONTROL MATERIAL (SILT FENCE, COMPOSITE FILTER SOCK, EROSION CONTROL BLANKET, ETC.) ON-SITE FOR PERIODIC MAINTENANCE AND EMERGENCY REPAIRS.
- ALL FILL MATERIAL PLACED ADJACENT TO ANY WETLAND AREA SHALL BE GOOD QUALITY, WITH LESS THAN 5% FINES PASSING THROUGH A #200 SIEVE (BANK RUN), SHALL BE PLACED IN MAXIMUM ONE FOOT LIFTS, AND SHALL BE COMPACTED TO 95% MAX. DRY DENSITY MODIFIED PROCTOR OR AS SPECIFIED IN THE CONTRACT SPECIFICATIONS.
- PROTECT EXISTING TREES THAT ARE TO BE SAVED BY FENCING, ORANGE SAFETY FENCE, CONSTRUCTION TAPE, OR EQUIVALENT FENCING TAPE. ANY LIMB TRIMMING SHOULD BE DONE AFTER CONSULTATION WITH AN ARBORIST AND BEFORE CONSTRUCTION BEGINS IN THAT AREA. FENCING SHALL BE MAINTAINED AND REPAIRED DURING CONSTRUCTION.
- CONSTRUCTION ENTRANCES (ANTI-TRACKING PADS) SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR CONSTRUCTION ACTIVITY AND SHALL BE MAINTAINED THROUGHOUT THE DURATION OF ALL CONSTRUCTION IF REQUIRED. THE LOCATION OF THE TRACKING PADS MAY CHANGE AS VARIOUS PHASES OF CONSTRUCTION ARE COMPLETED. CONTRACTOR SHALL ENSURE THAT ALL VEHICLES EXITING THE SITE ARE PASSING OVER THE ANTI-TRACKING PADS PRIOR TO EXITING.
- ALL CONSTRUCTION SHALL BE CONTAINED WITHIN THE LIMIT OF DISTURBANCE, WHICH SHALL BE MARKED WITH SILT FENCE, SAFETY FENCE, HAY BALES, RIBBONS, OR OTHER MEANS PRIOR TO CLEARING. CONSTRUCTION ACTIVITY SHALL REMAIN ON THE UPHILL SIDE OF THE SEDIMENT BARRIER UNLESS WORK IS SPECIFICALLY CALLED FOR ON THE DOWNHILL SIDE OF THE BARRIER.
- NO CUT OR FILL SLOPES SHALL EXCEED 2:1 EXCEPT WHERE STABILIZED BY ROCK FACED EMBANKMENTS OR EROSION CONTROL BLANKETS. ALL SLOPES SHALL BE SEEDED AND BANKS WILL BE STABILIZED IMMEDIATELY UPON COMPLETION OF FINAL GRADING UNTIL TURF IS ESTABLISHED.
- DIRECT ANY DEWATERING PUMP DISCHARGE TO A SEDIMENT CONTROL DEVICE CONFORMING TO THE GUIDELINES WITHIN THE APPROVED LIMIT OF DISTURBANCE IF REQUIRED. DISCHARGE TO STORM DRAINS OR SURFACE WATERS FROM SEDIMENT CONTROLS SHALL BE CLEAR AND APPROVED BY THE PERMITTEE OR MUNICIPALITY.
- THE CONTRACTOR SHALL MAINTAIN A CLEAN CONSTRUCTION SITE AND SHALL NOT ALLOW THE ACCUMULATION OF RUBBISH OR CONSTRUCTION DEBRIS ON THE SITE. PROPER SANITARY DEVICES SHALL BE MAINTAINED ON-SITE AT ALL TIMES AND SECURED APPROPRIATELY. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID THE SPILLAGE OF FUEL OR OTHER POLLUTANTS ON THE CONSTRUCTION SITE AND SHALL ADHERE TO ALL APPLICABLE POLICIES AND REGULATIONS RELATED TO SPILL PREVENTION AND RESPONSE/CONTAINMENT.
- MINIMIZE LAND DISTURBANCES. SEED AND MULCH DISTURBED AREAS WITH TEMPORARY MIX AS SOON AS PRACTICABLE (2 WEEK MAXIMUM UNSTABILIZED PERIOD) USING PERENNIAL RYEGRASS AT 40 LBS PER ACRE. MULCH ALL CUT AND FILL SLOPES AND SWALES WITH LOOSE HAY AT A RATE OF 2 TONS PER ACRE. IF NECESSARY, REPLACE LOOSE HAY ON SLOPES WITH EROSION CONTROL BLANKETS OR JUTE CLOTH. MODERATELY GRADED AREAS, ISLANDS, AND TEMPORARY CONSTRUCTION STAGING AREAS MAY BE HYDROSEEDED WITH TACKLIFER.
- SWEEP AFFECTED PORTIONS OF OFF SITE ROADS ONE OR MORE TIMES A DAY (OR LESS FREQUENTLY IF TRACKING IS NOT A PROBLEM) DURING CONSTRUCTION. FOR DUST CONTROL, PERIODICALLY MOISTEN EXPOSED SOIL SURFACES WITH WATER ON UNPAVED TRAVELWAYS TO KEEP THE TRAVELWAYS DAMP. CALCIUM CHLORIDE MAY ALSO BE APPLIED TO ACCESS ROADS. DUMP TRUCK LOADS EXITING THE SITE SHALL BE COVERED.
- VEGETATIVE ESTABLISHMENT SHALL OCCUR ON ALL DISTURBED SOIL, UNLESS THE AREA IS UNDER ACTIVE CONSTRUCTION. IT IS COVERED IN STONE OR SCHEDULED FOR PAVING WITHIN 30 DAYS. TEMPORARY SEEDING OR NON-LIVING SOIL PROTECTION OF ALL EXPOSED SOILS AND SLOPES SHALL BE INITIATED WITHIN THE FIRST 7 DAYS OF SUSPENDING WORK IN AREAS TO BE LEFT LONGER THAN 30 DAYS.
- MAINTAIN ALL PERMANENT AND TEMPORARY SEDIMENT CONTROL DEVICES IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD. UPON COMPLETION OF WORK SWEEP CONCRETE PADS, CLEAN THE STORMWATER MANAGEMENT SYSTEMS AND REMOVE ALL TEMPORARY SEDIMENT CONTROLS ONCE THE SITE IS FULLY STABILIZED AND APPROVAL HAS BEEN RECEIVED FROM PERMITTEE OR THE MUNICIPALITY.
- SEEDING MIXTURES SHALL BE FUZZ & BUZZ MIX - PREMIUM - ERNMX-147, OR APPROVED EQUAL. NEW ENGLAND EROSION CONTROL RESTORATION MIX FOR STORMWATER BASINS & MOIST SITES, OR APPROVED EQUAL, SHALL BE UTILIZED ON THE BOTTOM OF THE BASIN & FUZZ & BUZZ MIX - PREMIUM - ERNMX-147, OR APPROVED EQUAL, ON THE SIDE SLOPES OF THE BASIN. SEE SHEET DN-2 FOR ALL SEED MIXTURES.
- REFER TO SHEET 2.41 FOR SEDIMENT & EROSION CONTROL NARRATIVE & DETAILS.

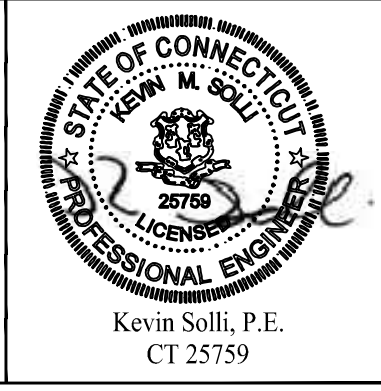
CONSTRUCTION OPERATION & MAINTENANCE PLAN

E&S MEASURE	INSPECTION SCHEDULE	MAINTENANCE REQUIRED
CONSTRUCTION ENTRANCE	DAILY	PLACE ADDITIONAL STONE, EXTEND THE LENGTH OR REMOVE AND REPLACE THE STONE. CLEAN PAVED SURFACES OF TRACKED SEDIMENT.
COMPOSITE FILTER SOCK	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR/REPLACE WHEN FAILURE OR DETERIORATION IS OBSERVED.
SILT FENCE	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR/REPLACE WHEN FAILURE OR DETERIORATION IS OBSERVED. REMOVE SILT WHEN IT REACHES 1/2 THE HEIGHT OF THE FENCE.
TOPSOIL/BORROW STOCKPILES	DAILY	REPAIR/REPLACE SEDIMENT BARRIERS AS NECESSARY.
TEMPORARY SOIL PROTECTION	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR ERODED OR BARE AREAS IMMEDIATELY. RESEED AND MULCH.

Rev. #:	Date	Description



Drawn By:	SFU
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Approved By:	KMS
Project #:	23100101
Plan Date:	01/15/24
Scale:	1" = 60'
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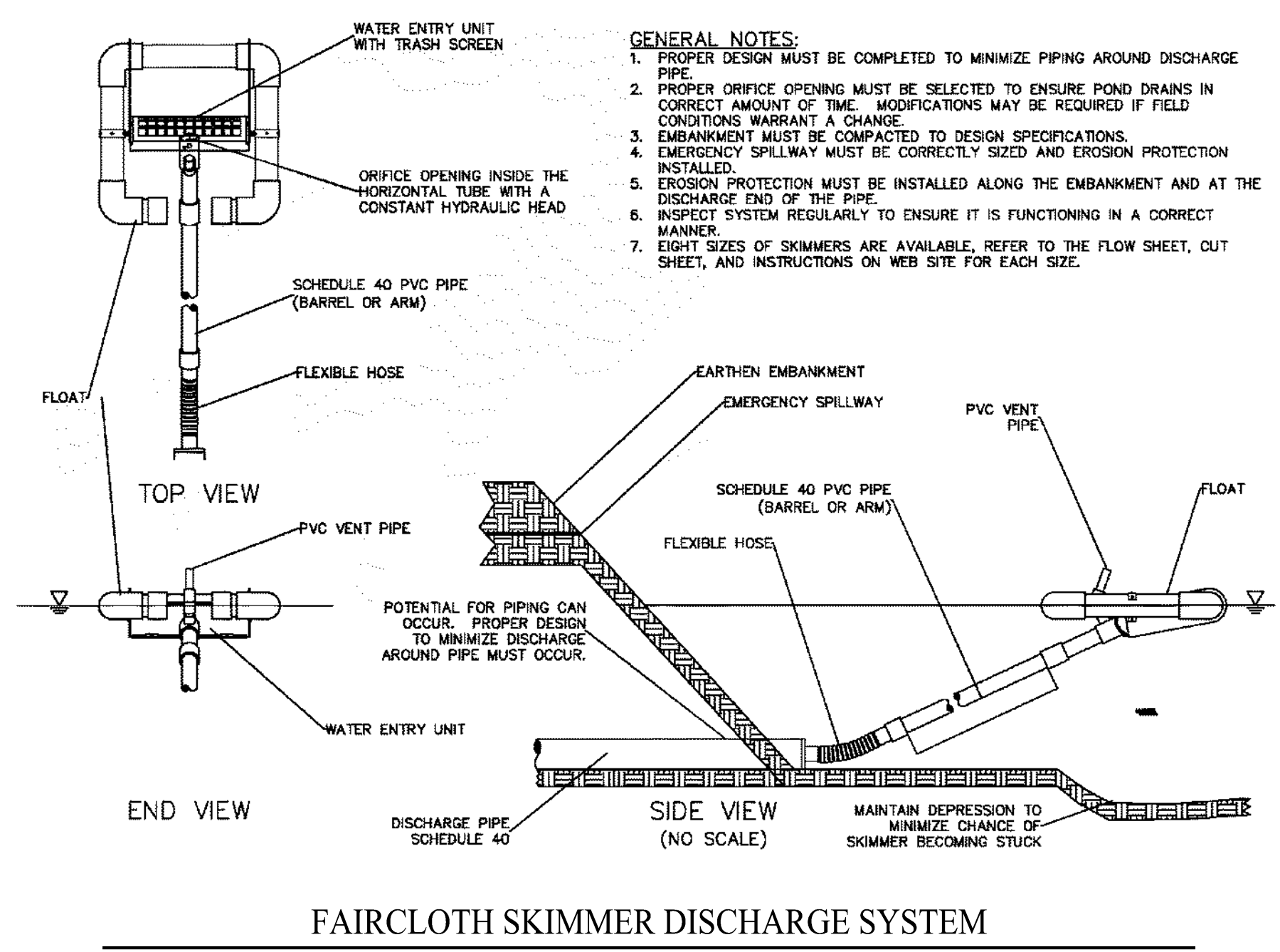
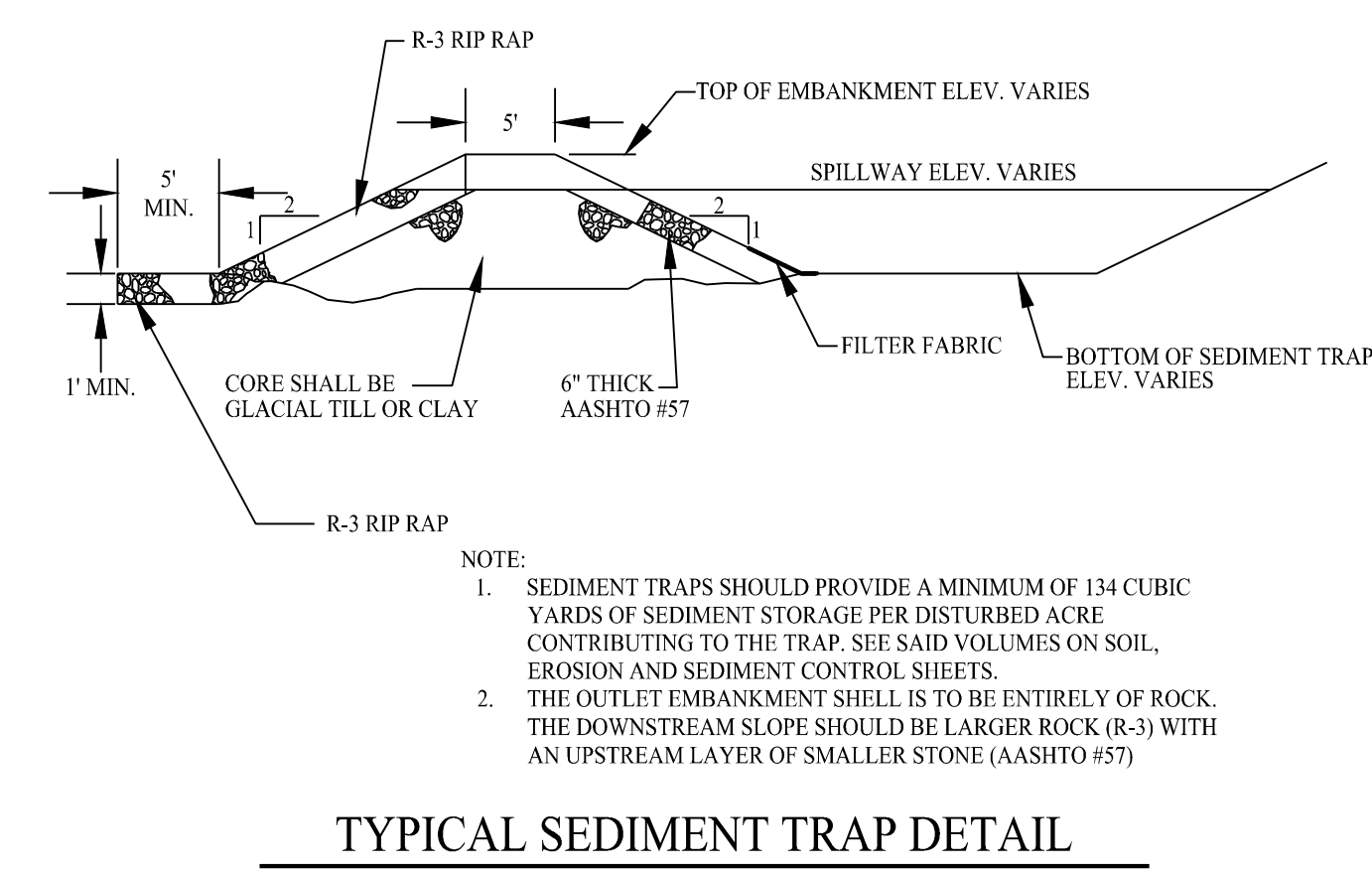
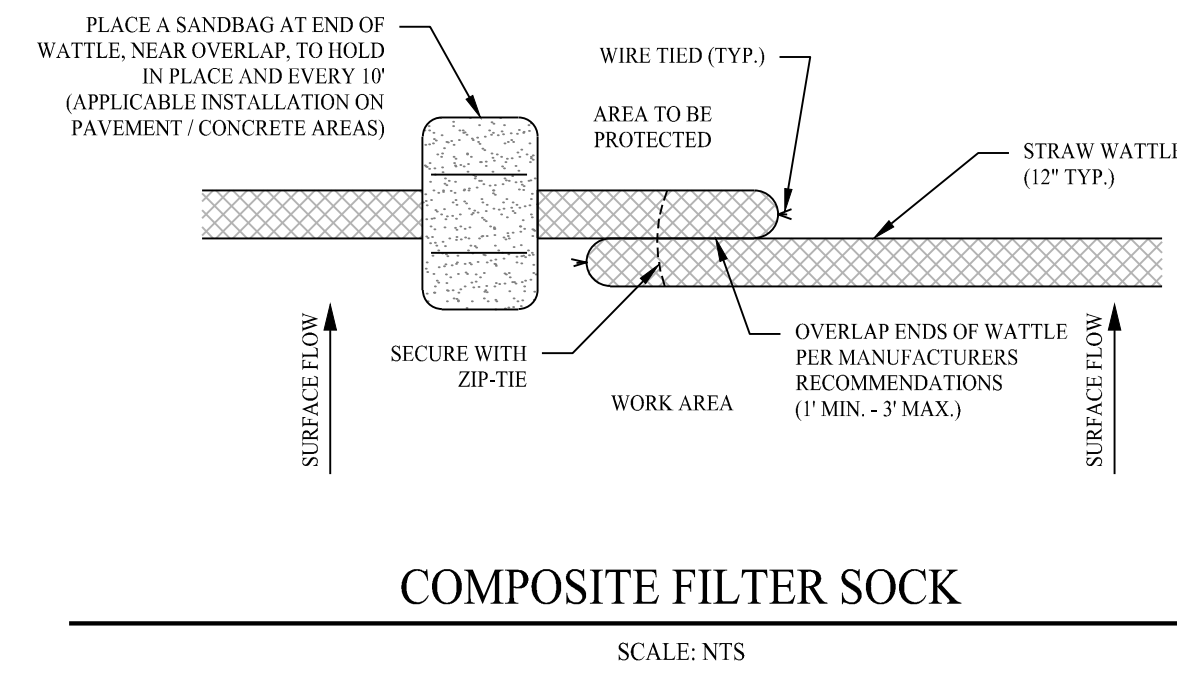
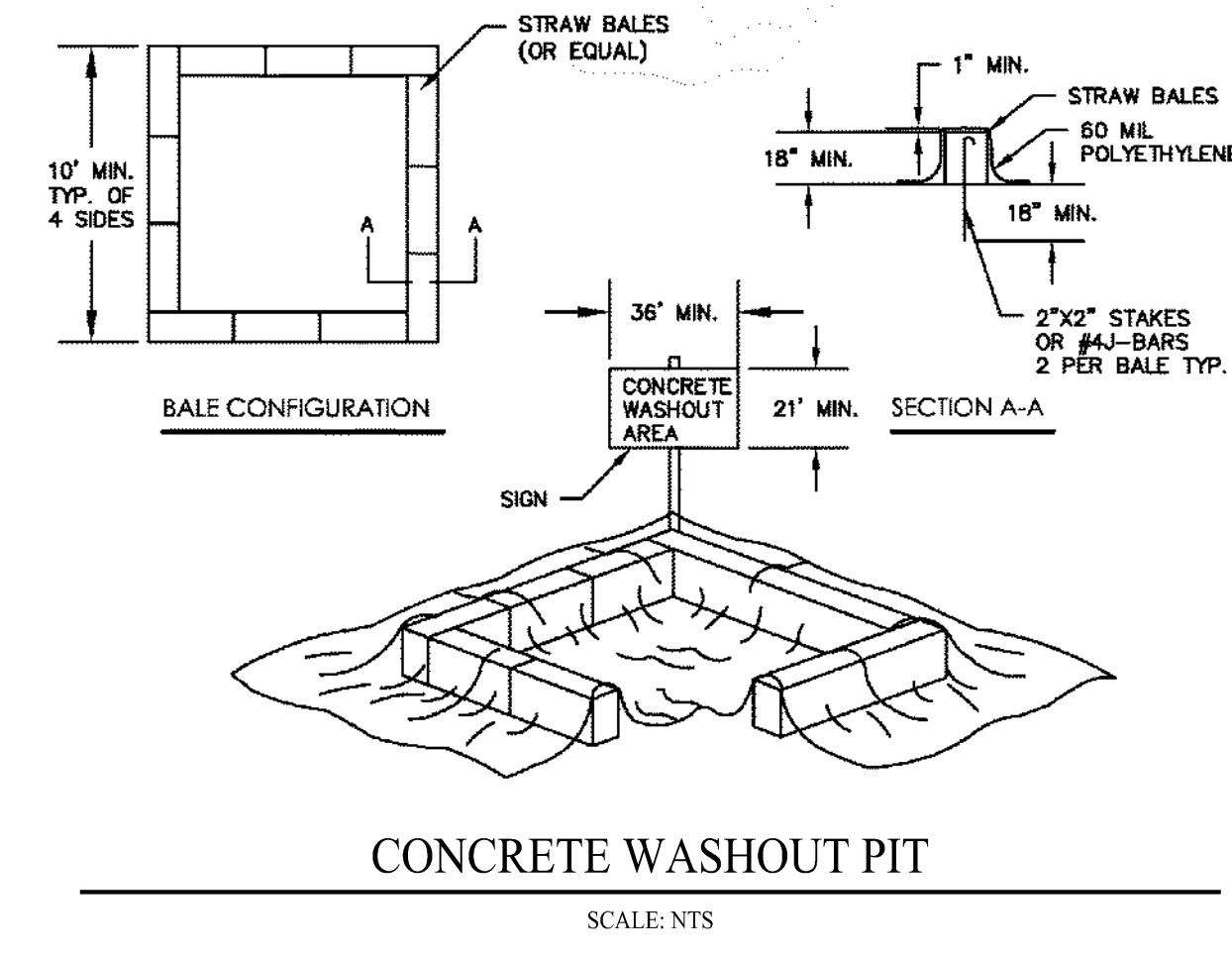
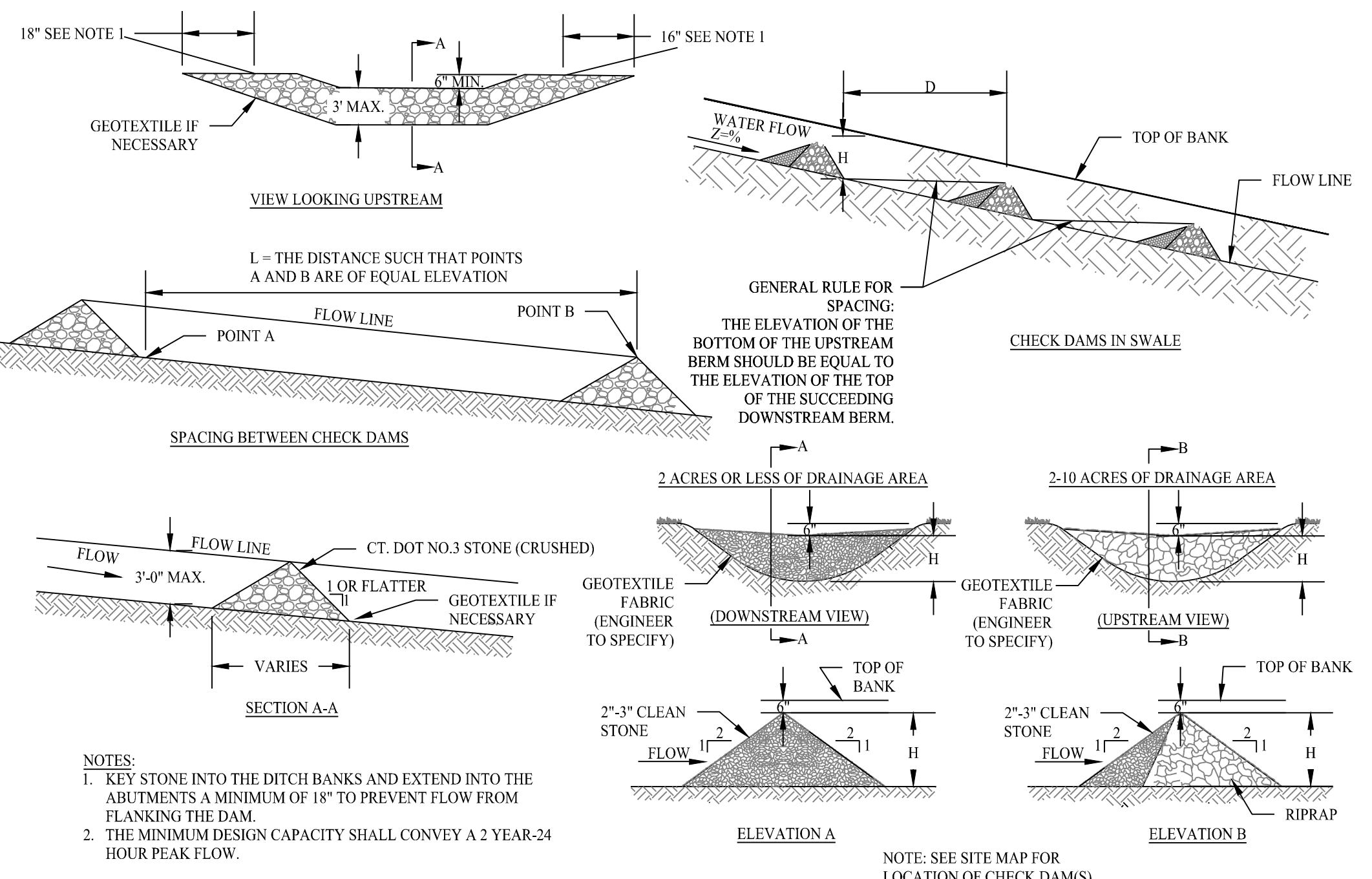
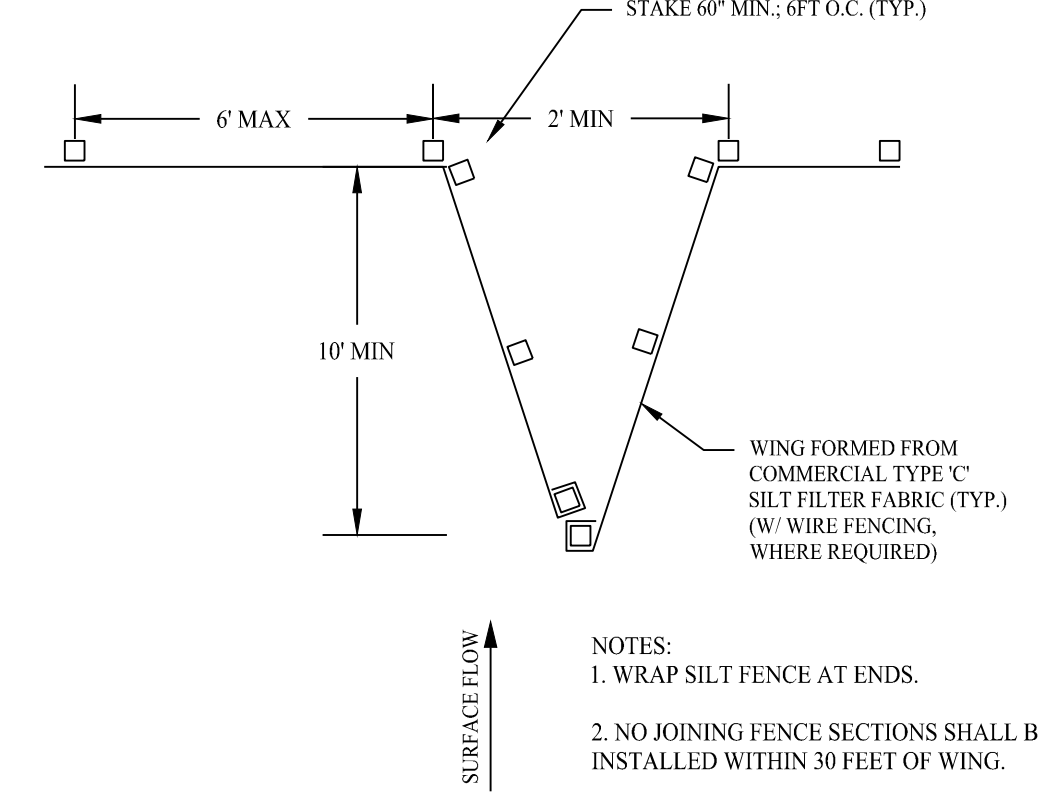
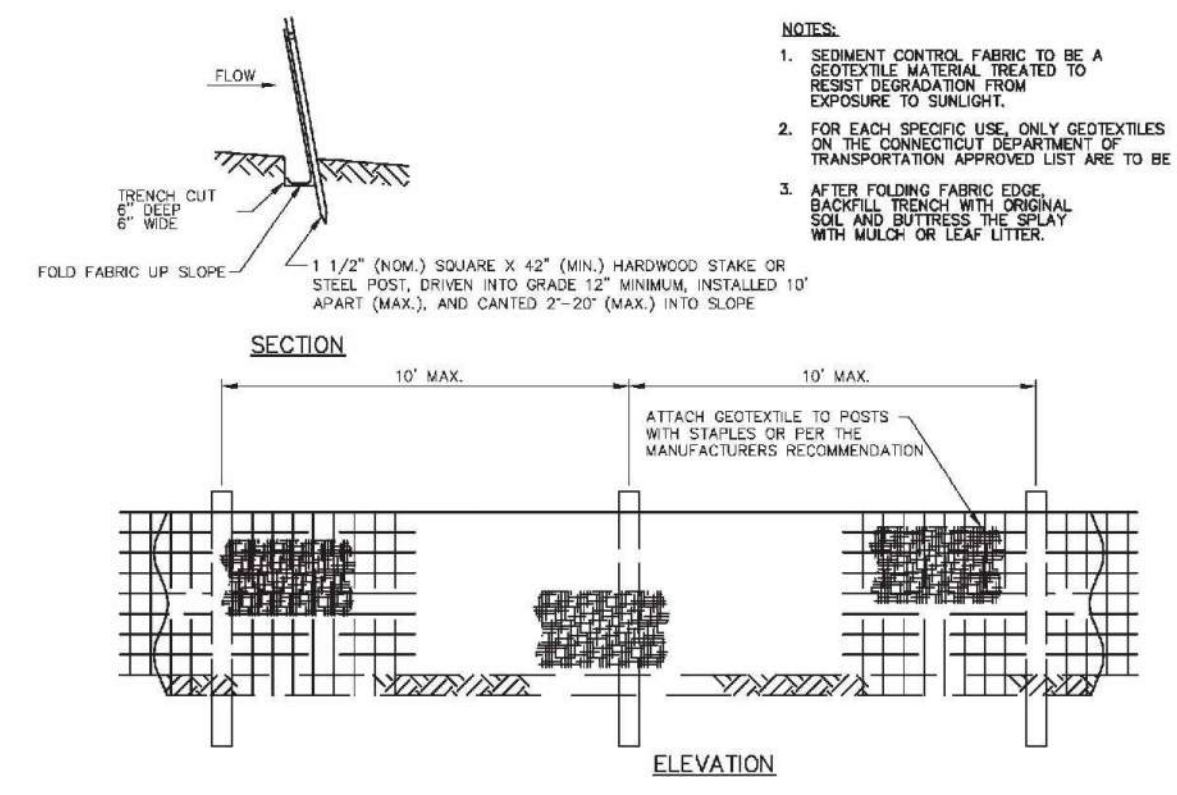
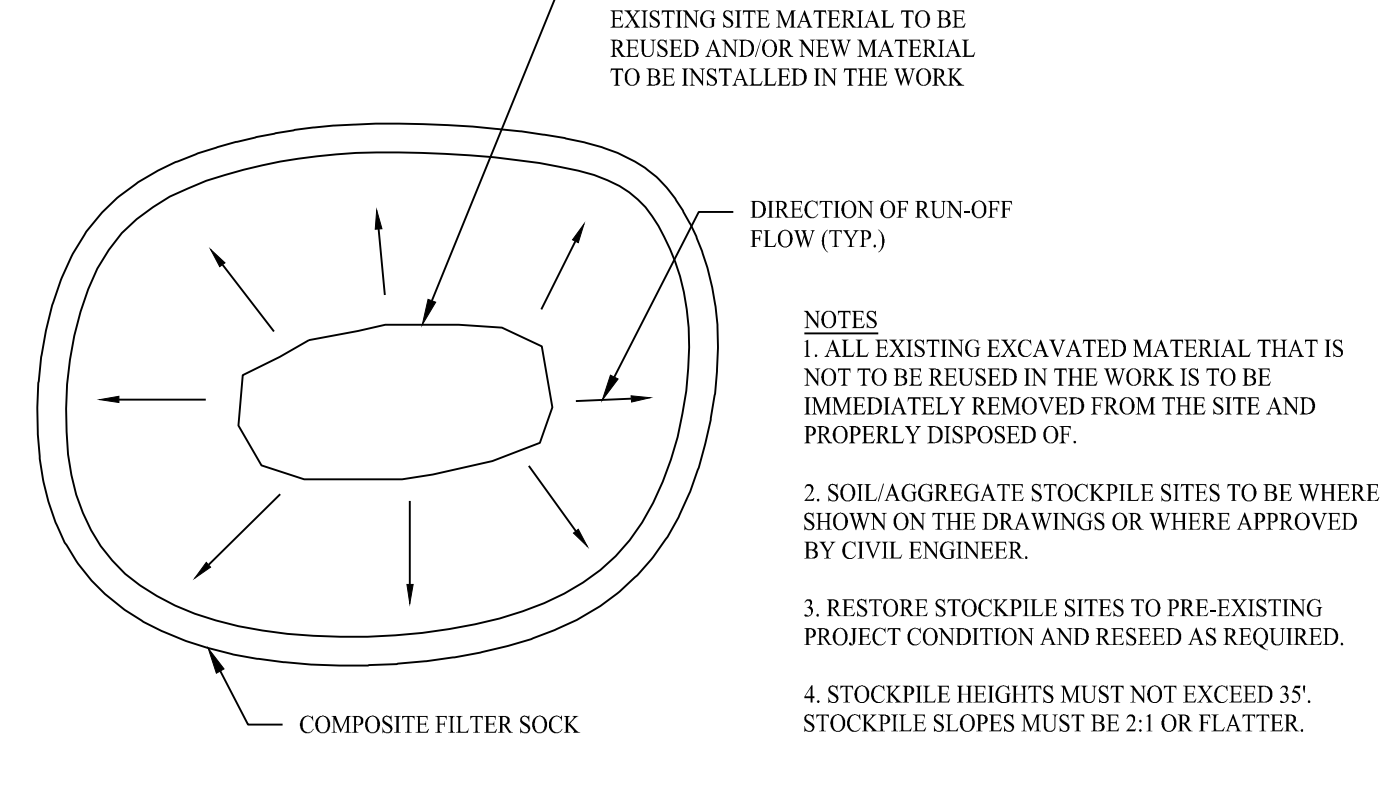
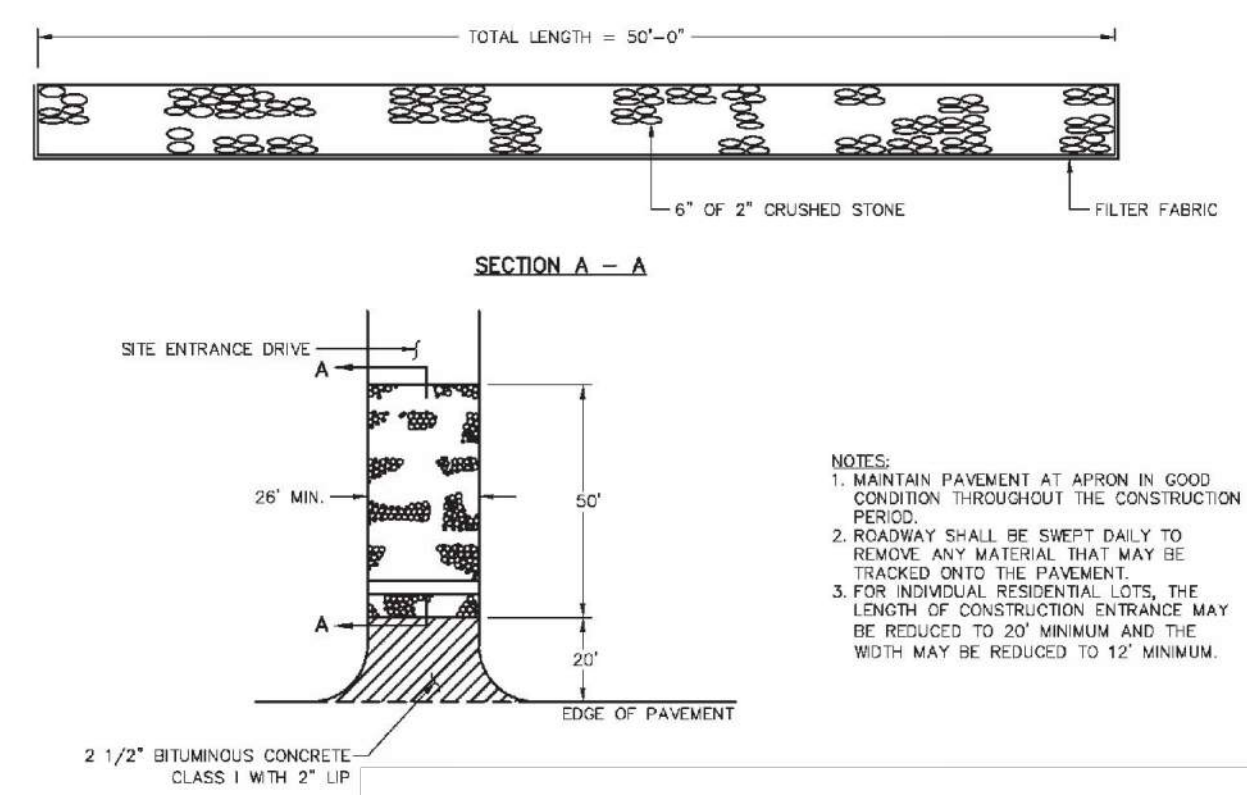


PROPOSED SOLAR PHOTOVOLTAIC ARRAY
250 CARTER STREET
MANCHESTER, CONNECTICUT

Sheet Title:	SOIL EROSION & SEDIMENT CONTROL PLAN PHASE 2	Sheet #:	2.32
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SEDIMENT & EROSION CONTROL NARRATIVE

- THE PROJECT INVOLVES THE CONSTRUCTION OF A GROUND MOUNTED SOLAR PANEL FACILITY WITH ASSOCIATED EQUIPMENT, INCLUDING GRADING OF APPROXIMATELY 7.5+ ACRES OF EXISTING LOT.
 - THE PROPOSED PROJECT INVOLVES THE FOLLOWING CONSTRUCTION:
 - CLEARING, GRUBBING, AND GRADING OF EXISTING LOT.
 - CONSTRUCTION OF 2,590 GROUND MOUNTED SOLAR PANELS AND ASSOCIATED EQUIPMENT.
 - THE STABILIZATION OF DISTURBED AREAS WITH PERMANENT VEGETATIVE TREATMENTS.
- FOR THIS PROJECT, THERE ARE APPROXIMATELY 7.5+ ACRES OF THE SITE BEING DISTURBED WITH NEGLIGIBLE INCREASE IN THE IMPERVIOUS AREA OF THE SITE. IMPERVIOUS AREAS ARE LIMITED TO THE CONCRETE PADS FOR ELECTRICAL EQUIPMENT & GRAVEL ACCESS DRIVE.
- THE PROJECT AREA, AS MAPPED IN THE SOIL SURVEY OF STATE OF CONNECTICUT (NRCS, VERSION 1, SEPTEMBER 30, 2023), CONTAINS TYPE 86C (HYDROLOGIC SOIL GROUP C), 46B & 46C (HYDROLOGIC SOIL GROUP C/D) AND 2 (HYDROLOGIC SOIL GROUP D). A GEOTECHNICAL ENGINEERING REPORT IS SCHEDULED AND WILL BE PROVIDED UNDER SEPARATE COVER.
- IT IS ANTICIPATED THAT CONSTRUCTION WILL BE COMPLETED IN APPROXIMATELY 4-6 MONTHS.
- REFER TO THE CONSTRUCTION SEQUENCING AND EROSION AND SEDIMENTATION NOTES FOR INFORMATION REGARDING SEQUENCING OF MAJOR OPERATIONS IN THE ON-SITE CONSTRUCTION PHASES.
- STORMWATER MANAGEMENT DESIGN CRITERIA UTILIZES THE APPLICABLE SECTIONS OF THE 2004 CONNECTICUT STORMWATER QUALITY MANUAL AND THE TOWN OF MANCHESTER STANDARDS, TO THE EXTENT POSSIBLE AND PRACTICABLE FOR THIS PROJECT ON THIS SITE. EROSION AND SEDIMENTATION MEASURES ARE BASED UPON ENGINEERING PRACTICE, JUDGEMENT AND THE APPLICABLE SECTIONS OF THE CONNECTICUT EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS, LATEST EDITION.
- DETAILS FOR THE TYPICAL STORMWATER MANAGEMENT AND EROSION AND SEDIMENTATION MEASURES ARE SHOWN ON THE PLAN SHEETS OR PROVIDED AS SEPARATE SUPPORT DOCUMENTATION FOR REVIEW IN THIS PLAN.
- CONSERVATION PRACTICES TO BE USED DURING CONSTRUCTION:
 - STAGED CONSTRUCTION;
 - MINIMIZE THE DISTURBED AREAS TO THE EXTENT PRACTICABLE DURING CONSTRUCTION;
 - STABILIZE DISTURBED AREAS WITH TEMPORARY OR PERMANENT MEASURES AS SOON AS POSSIBLE, BUT NO LATER THAN 7-DAYS FOLLOWING DISTURBANCE;
 - MINIMIZE IMPERVIOUS AREAS;
 - UTILIZE APPROPRIATE CONSTRUCTION EROSION AND SEDIMENTATION MEASURES.
- THE FOLLOWING SEPARATE DOCUMENTS ARE TO BE CONSIDERED A PART OF THE EROSION AND SEDIMENTATION PLAN:
 - STORMWATER MANAGEMENT REPORT, TO BE ISSUED AT A LATER DATE.
 - SWPCP, TO BE ISSUED AT A LATER DATE.



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Approved By:	KMS
Project #:	23100101
Plan Date:	01/15/24
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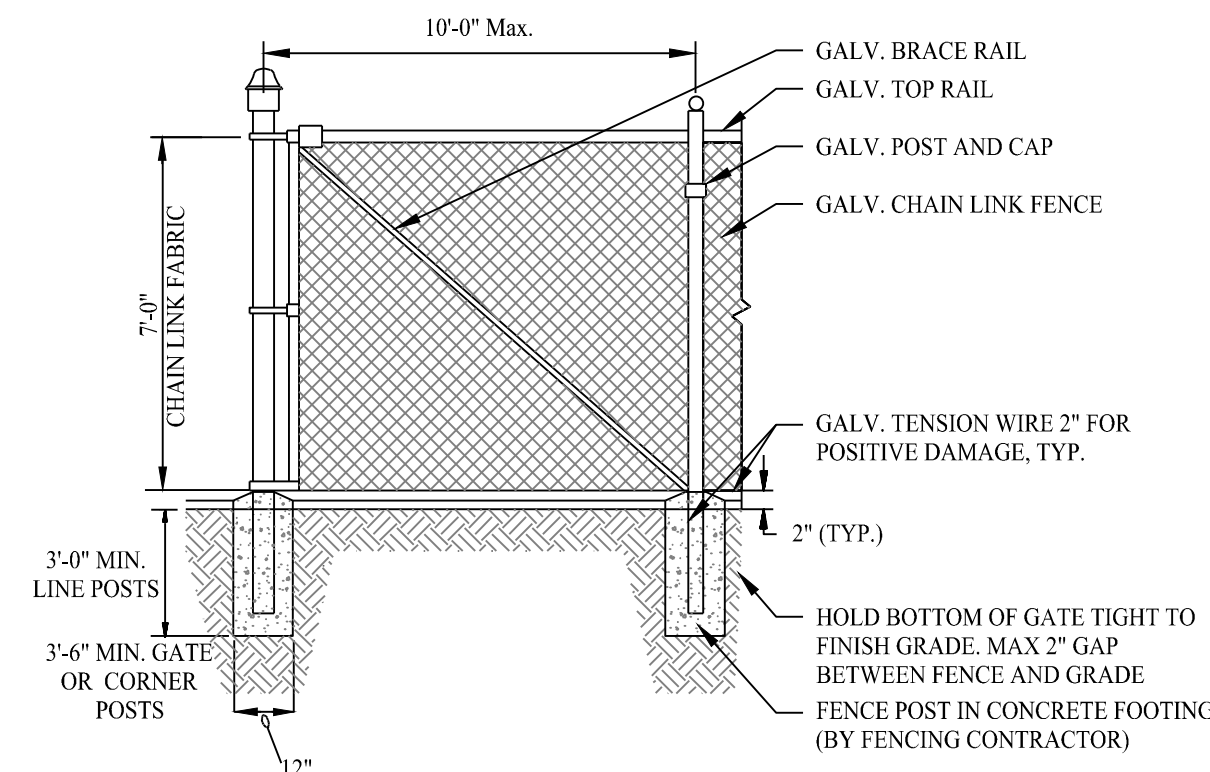
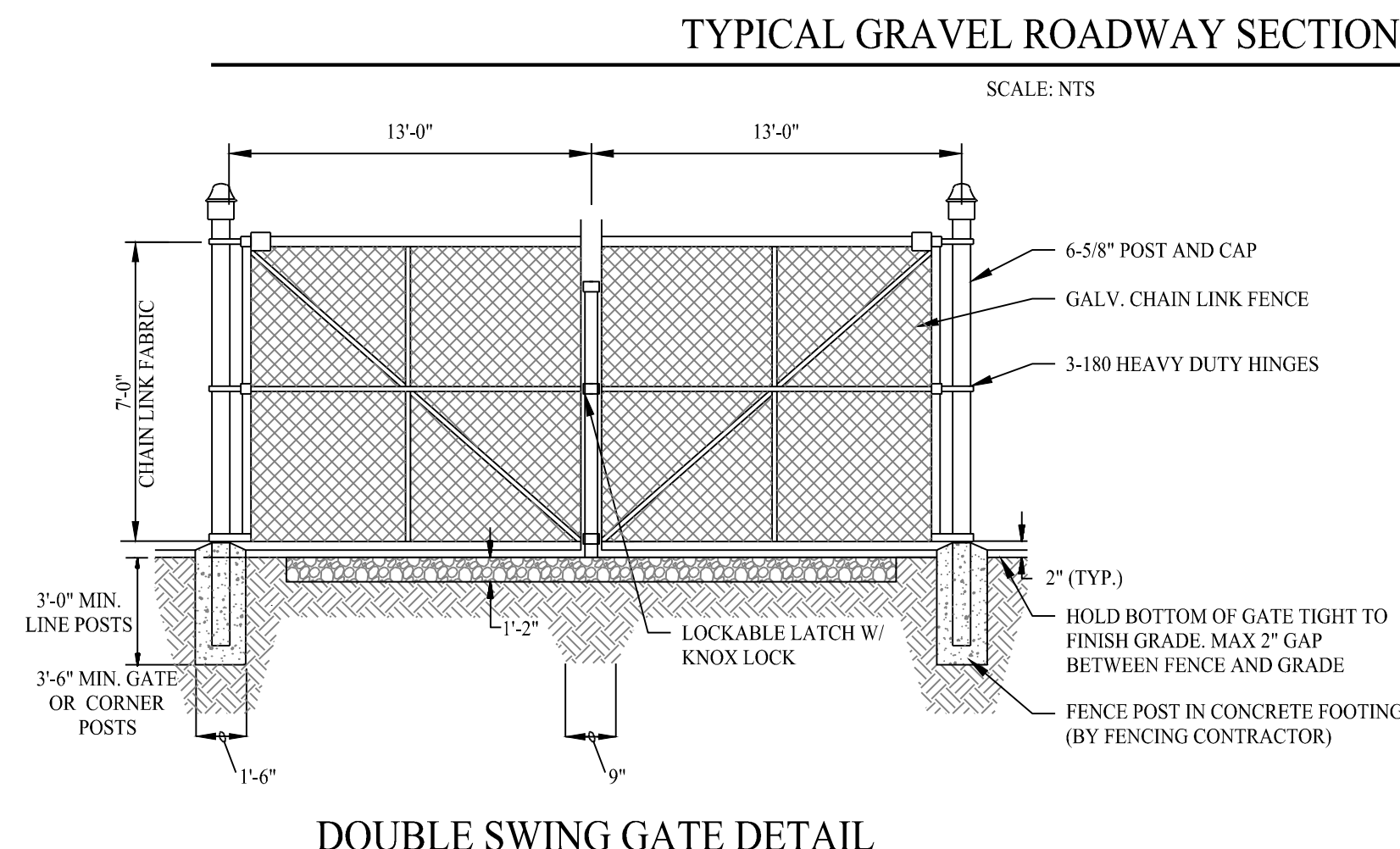
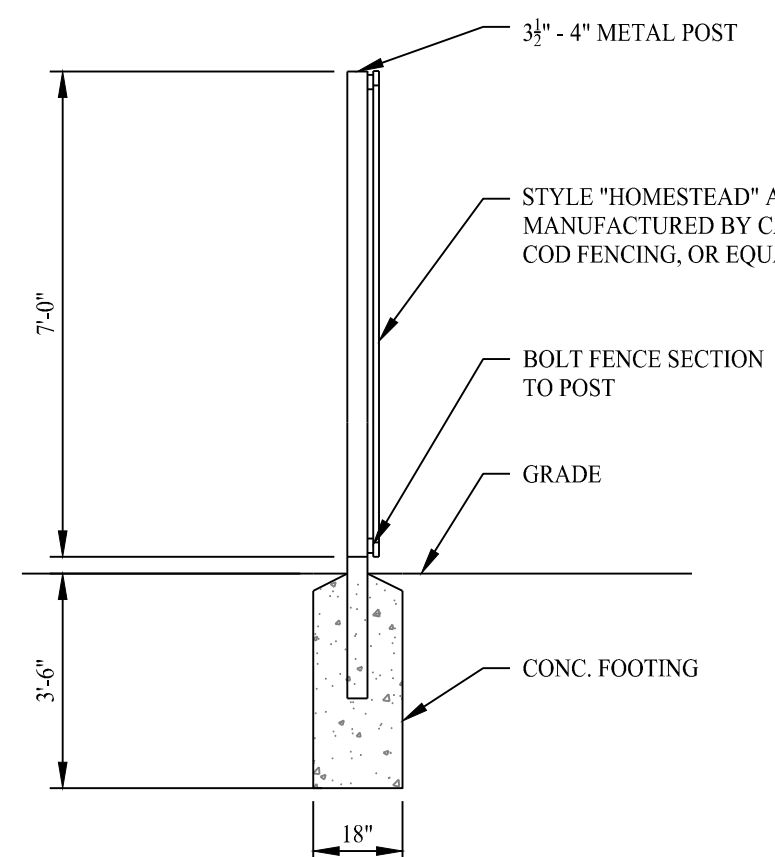
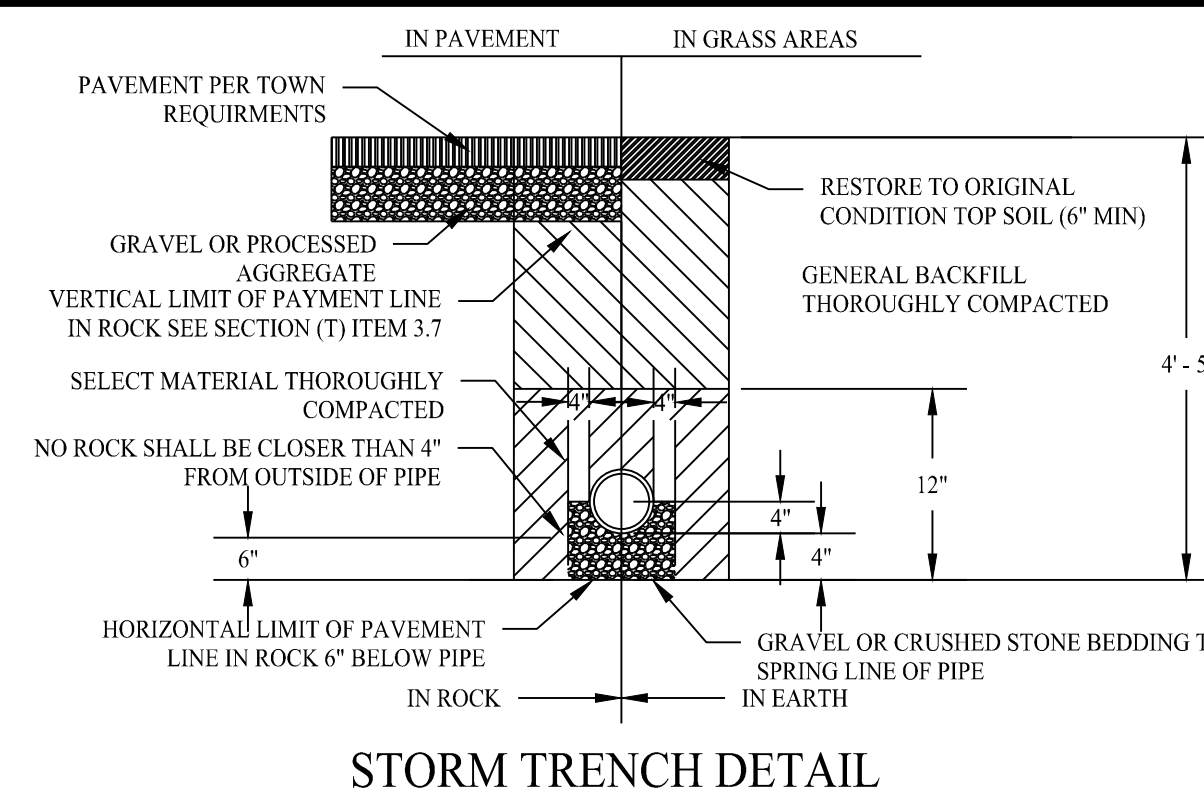
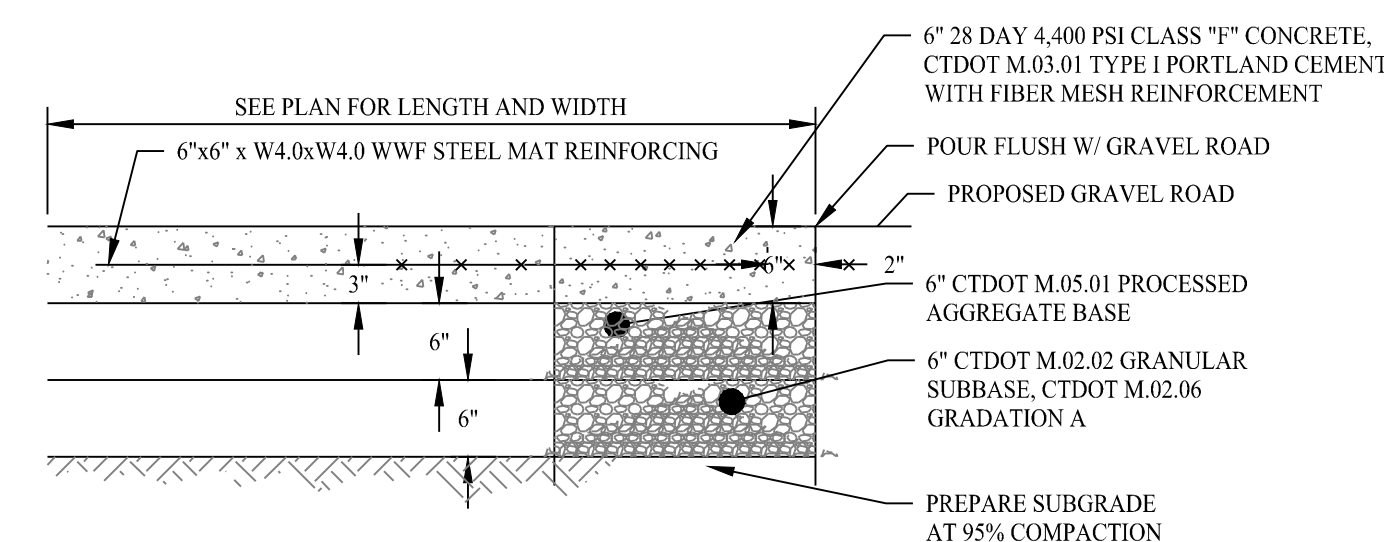
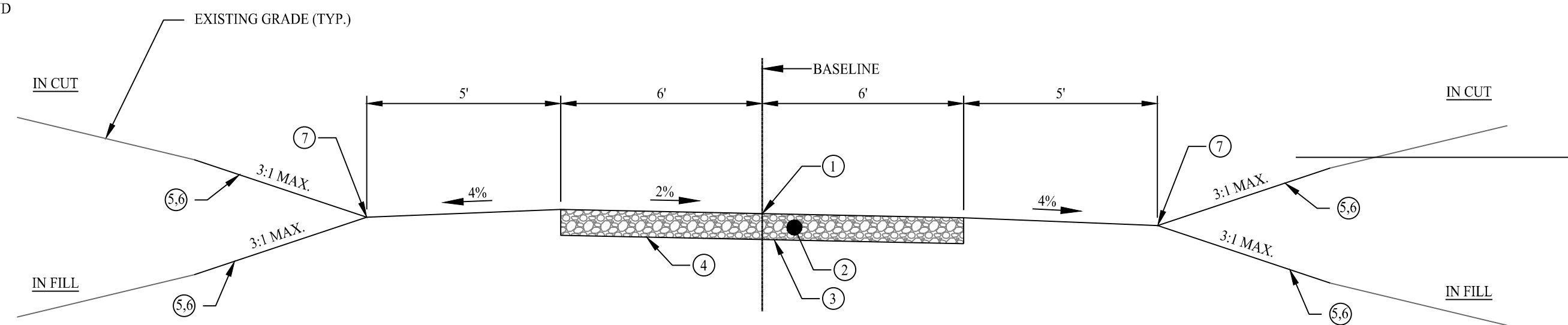


PROPOSED SOLAR PHOTOVOLTAIC ARRAY
250 CARTER STREET
MANCHESTER, CONNECTICUT

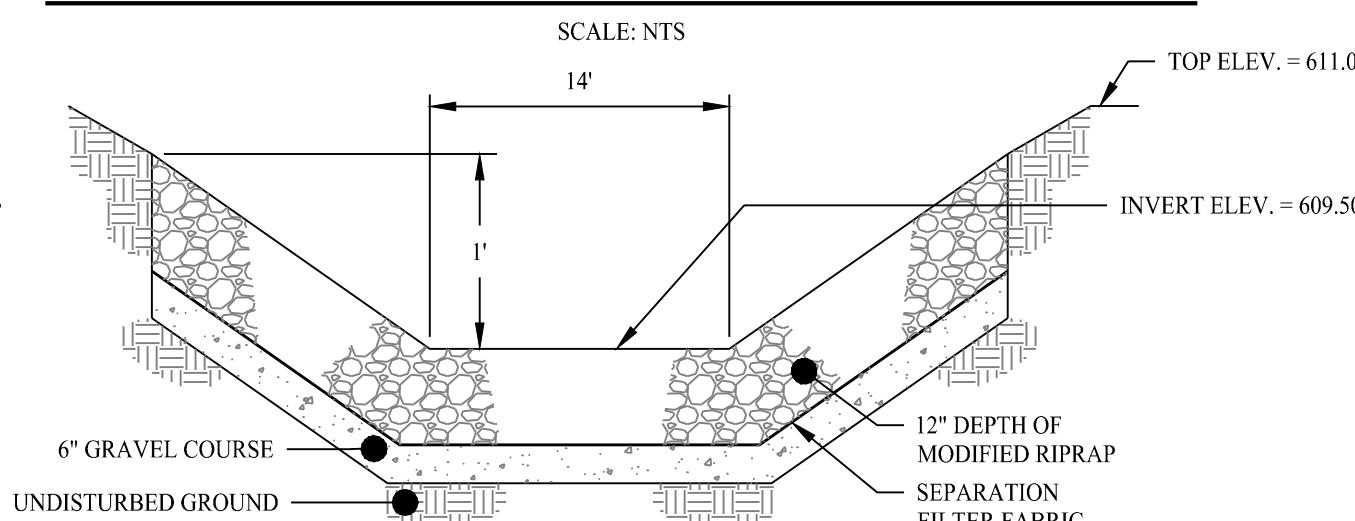
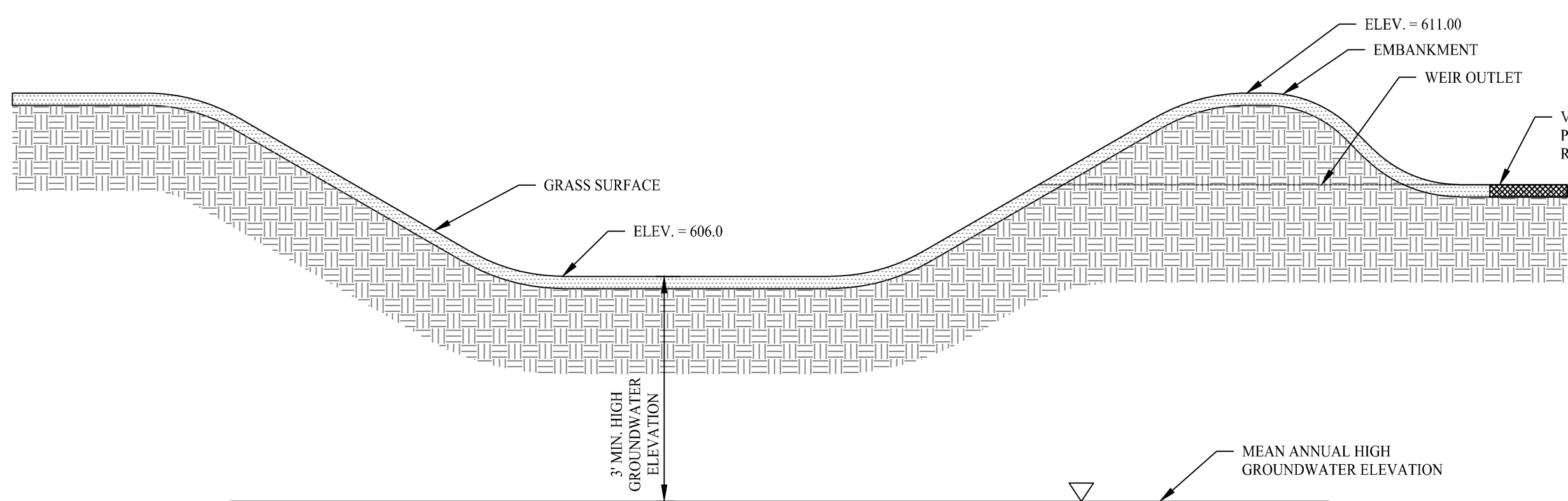
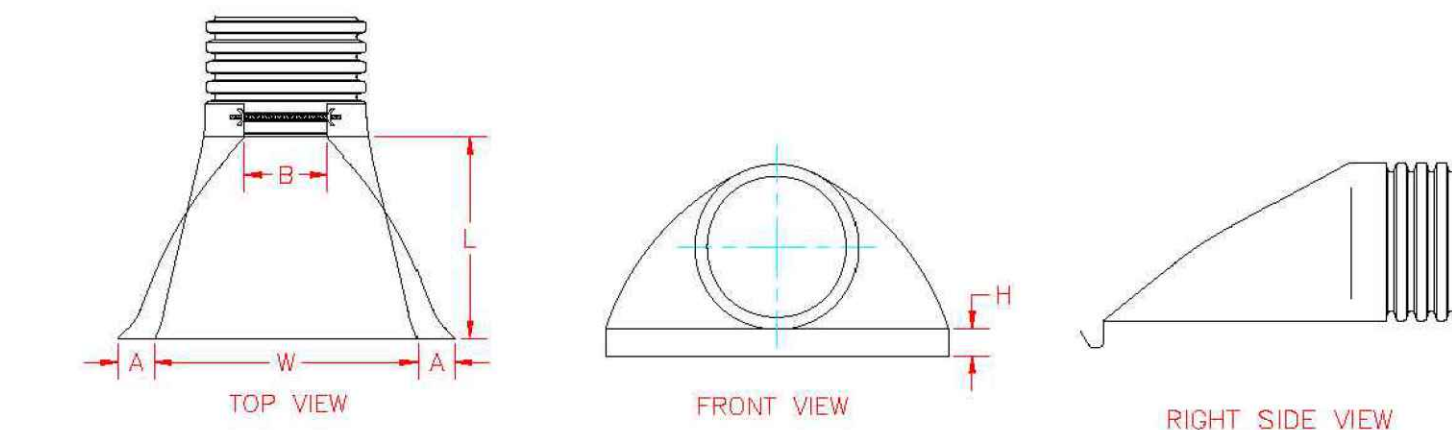
Sheet Title:	SOIL EROSION & SEDIMENT CONTROL NOTES & DETAILS	Sheet #:	2.41
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- 1 POINT OF APPLICATION OF GRADE OR MATCH EXISTING GROUND
- 2 8" LAYER CRUSHER RUN GRAVEL
- 3 NONWOVEN GEOTEXTILE (MIRAFI 140N OR EQUAL)
- 4 LIMIT OF EXCAVATION OR LIMIT OF COMPACTION
- 5 EROSION CONTROL BLANKET ON SLOPES 3:1 OR GREATER
- 6 TOPSOIL AND SEED
- 7 VEGETATED CHANNEL

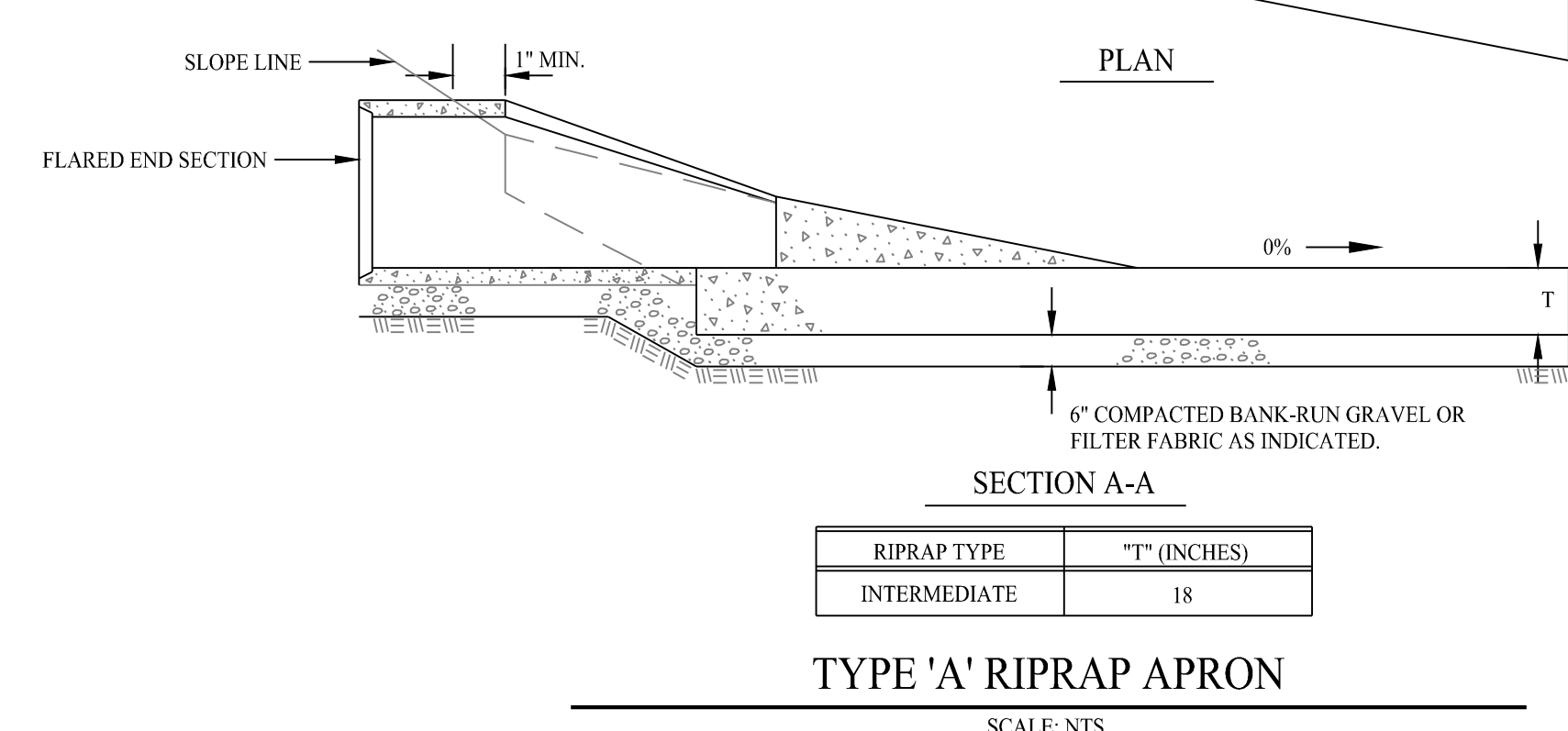
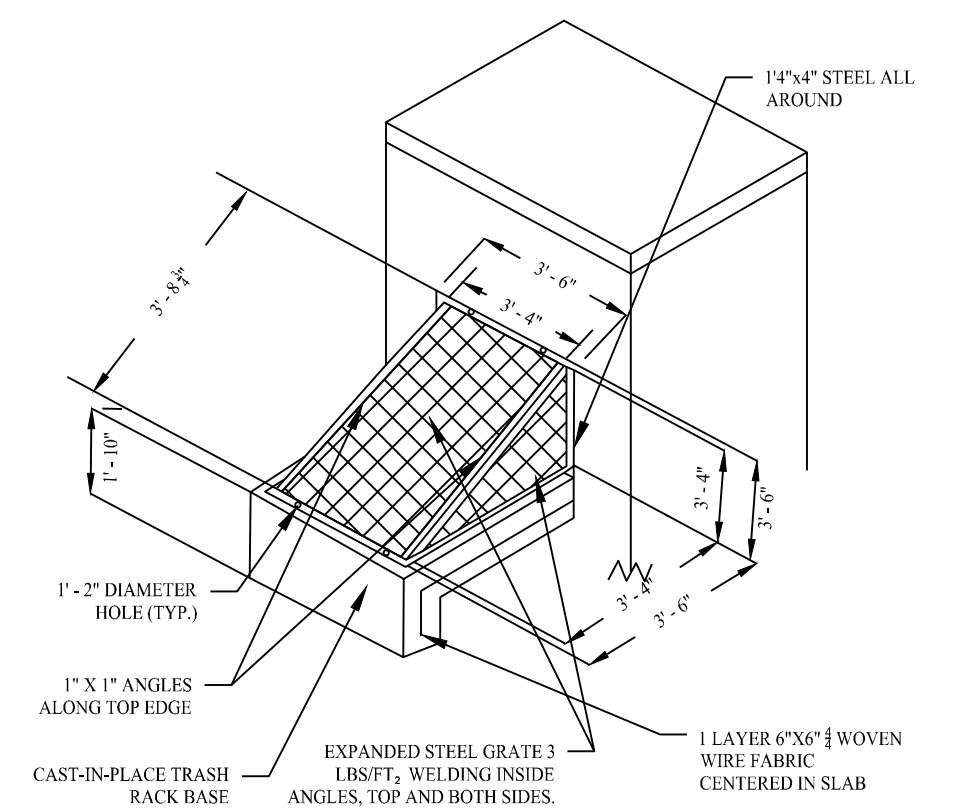
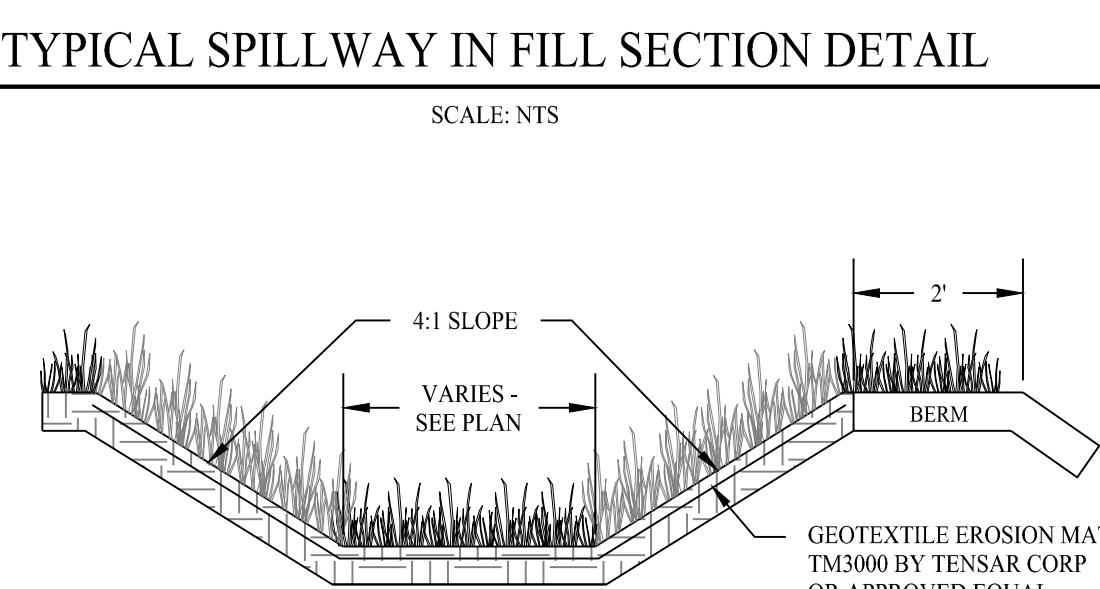
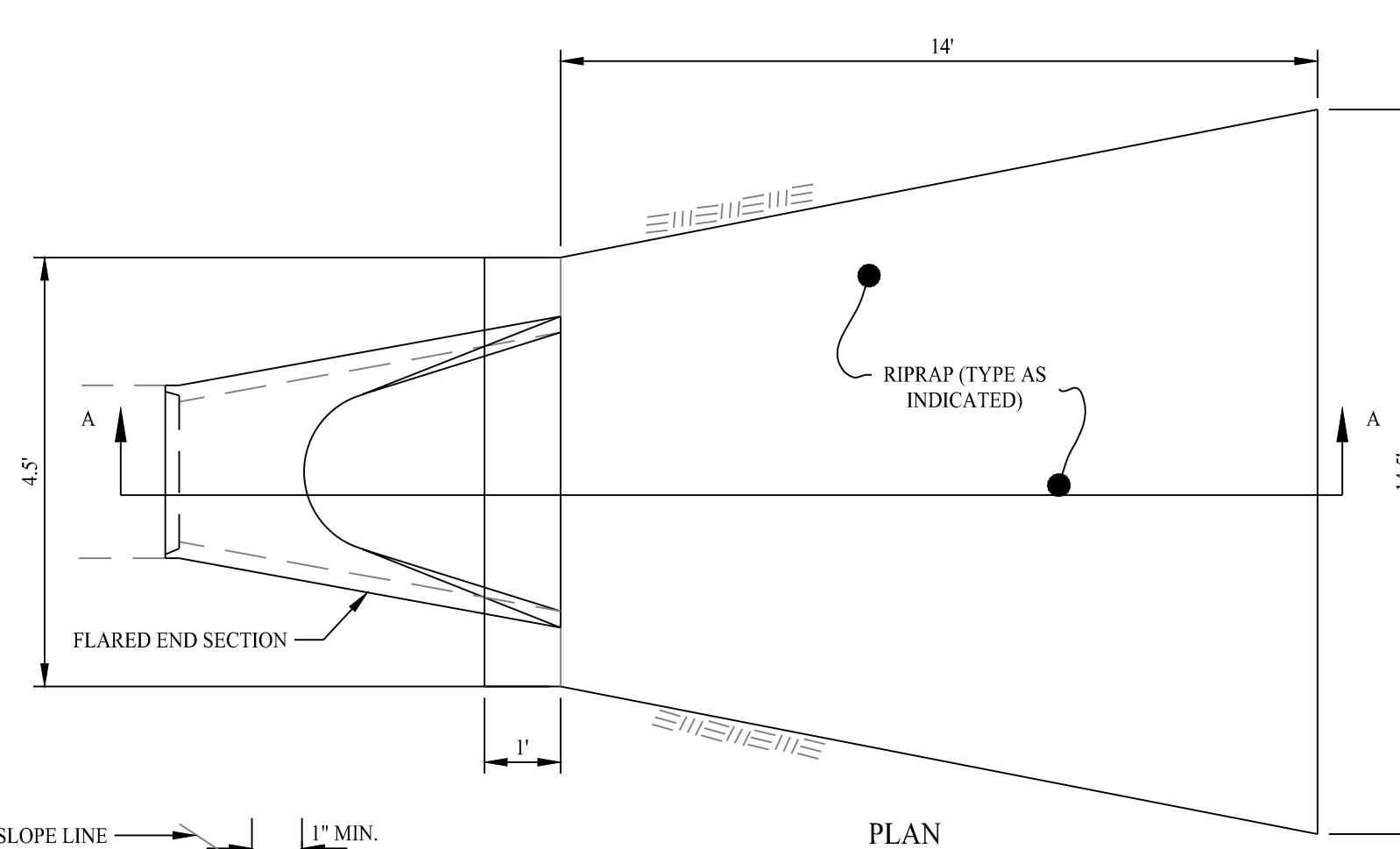
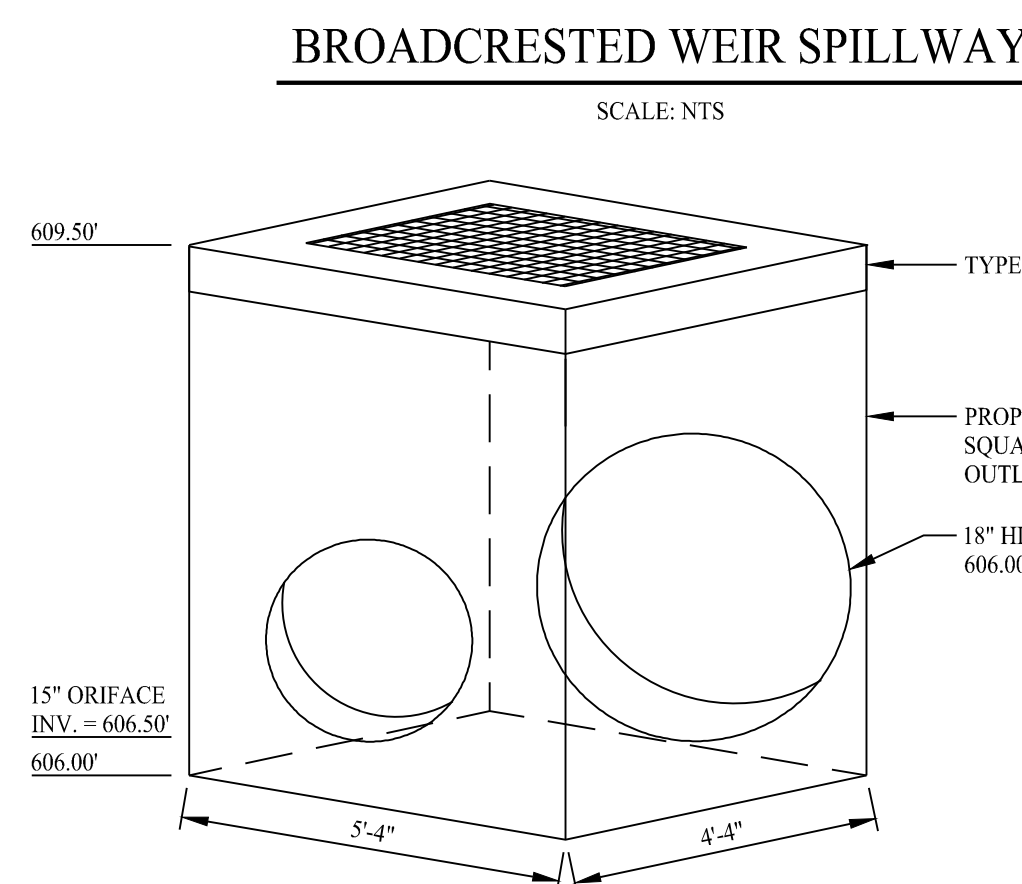
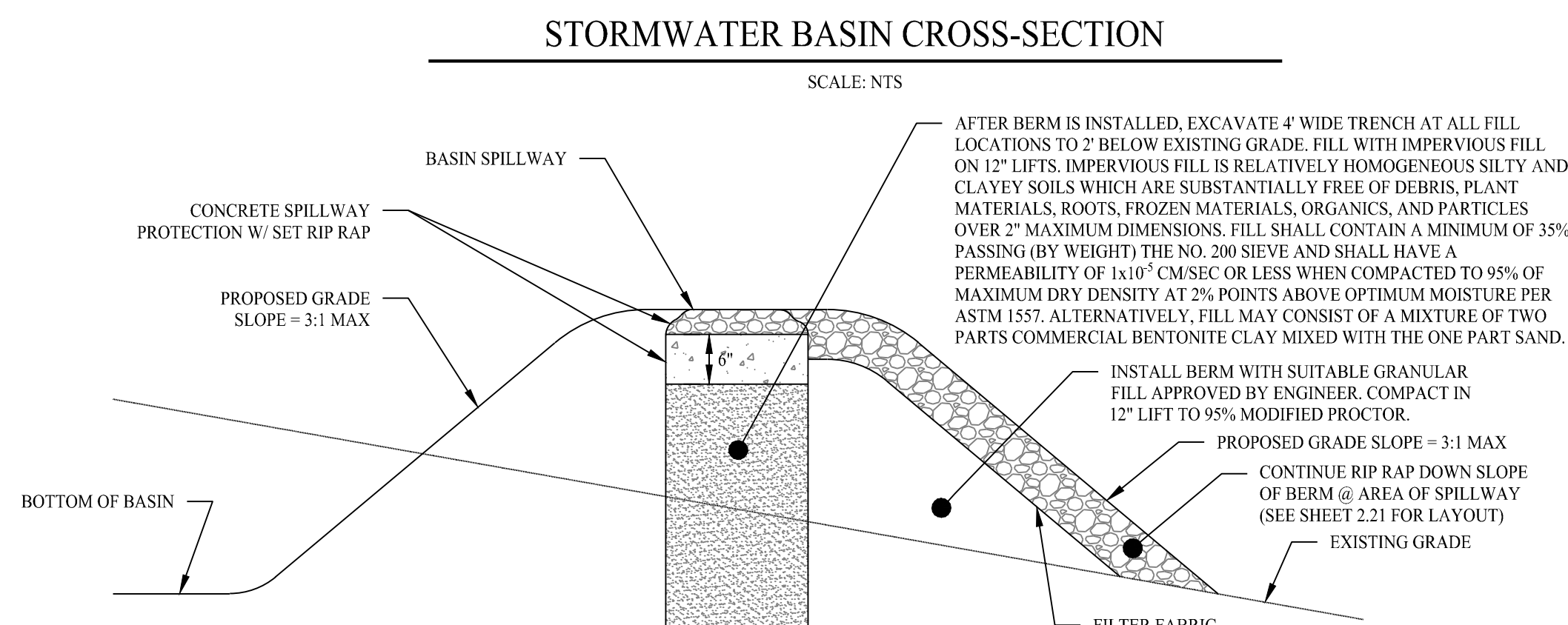
NOTES:
 1. THE CONTRACTOR SHALL CONTACT CT CALL BEFORE YOU DIG (CRYD) A MINIMUM OF 72 HOURS PRIOR TO BEGINNING CONSTRUCTION.
 2. TRANSITIONS BETWEEN TYPICAL ACCESS ROAD SECTIONS SHALL OCCUR OVER 50 FEET. (TYPICAL)



PIPE DIAMETER, in (mm)						
Diameter in (mm)	12 (300)	15 (375)	18 (450)	24 (600)	30 (750)	36 (900)
A	6.5 (165)	6.5 (165)	7.5 (191)	7.5 (191)	7.5 (191)	7.5 (191)
B (max)	10.0 (254)	10.0 (254)	15.0 (381)	18.0 (457)	22.0 (559)	25.0 (635)
H	6.5 (165)	6.5 (165)	6.5 (165)	6.5 (165)	8.6 (218)	8.6 (218)
L	25.0 (635)	25.0 (635)	32.0 (813)	36.0 (914)	58.0 (1473)	58.0 (1473)
W	29.0 (737)	29.0 (737)	35.0 (889)	45.0 (1143)	63.0 (1600)	63.0 (1600)



DETAIL PER ADVANCED DRAINAGE SYSTEMS, INC.

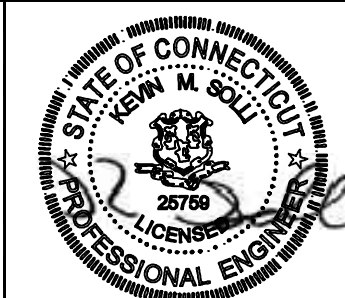


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 Approved By: KMS
 Project #: 23100101
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 Scale: NTS



PROPOSED SOLAR PHOTOVOLTAIC ARRAY
 250 CARTER STREET
 MANCHESTER, CONNECTICUT

Sheet Title: CONSTRUCTION DETAILS
 Sheet #: 3.01

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ENVIRONMENTAL NOTES - RESOURCE PROTECTION MEASURES

EASTERN BOX TURTLE PROTECTION PROGRAM

EASTERN BOX TURTLES ARE LISTED AS STATE "SPECIES OF SPECIAL CONCERN" BY THE CT DEEP. SPECIES CLASSIFIED AS "THREATENED" BY THE CT DEEP ARE NATIVE SPECIES THAT HAVE A NATURALLY RESTRICTED RANGE IN HABITAT IN THE STATE, ARE AT A LOW POPULATION LEVEL, ARE IN SUCH HIGH DEMAND BY HUMANS THAT ITS UNREGULATED TAKING WOULD BE DETRIMENTAL TO THE CONSERVATION OF ITS POPULATION, OR HAVE BEEN EXTIRPATED FROM THE STATE. EASTERN BOX TURTLES TYPICALLY INHABIT WELL-DRAINED FOREST BOTTOMLANDS AND OPEN DECIDUOUS FORESTS AND WILL UTILIZE A VARIETY OF OTHER EARLY SUCCESSIONAL HABITATS SUCH AS FIELD EDGES (AND OTHER EDGE HABITAT SUCH AS UTILITY CORRIDORS) AND THICKETS. THEY ALSO WILL UTILIZE WETLAND HABITATS SUCH AS MARSHES, BOGS, AND STREAMS AT VARIOUS TIMES DURING THEIR ACTIVE SEASON. EASTERN BOX TURTLES ARE ACTIVE BETWEEN APRIL 1 AND NOVEMBER 1; IN THE REMAINING MONTHS, THEY ARE DORMANT, IN A STATE OF BRUMATION A FEW INCHES UNDER THE GROUND SURFACE.

THE FOLLOWING IS A SUMMARY OF MEASURES REQUIRED BY THE CT DEEP AND TO BE USED BEFORE, DURING AND FOLLOWING CONSTRUCTION TO PROTECT EASTERN BOX TURTLES THAT MAY POTENTIALLY BE ENCOUNTERED AT THE SITE. ALL GROUND DISTURBANCE WORK ASSOCIATED WITH THE PROJECT MUST BE CONDUCTED BETWEEN APRIL 1 AND NOVEMBER 1, THE EASTERN BOX TURTLES' ACTIVE SEASON. IT IS RECOMMENDED MOWING NOT OCCUR DURING MAY 15 TO SEPTEMBER 15. IF MOWING IS TO OCCUR DURING THIS TIME FRAME, WHETHER PRE- OR POST-CONSTRUCTION, THE CT DEEP RECOMMENDS THE FOLLOWING:

PRE-CONSTRUCTION:

- IN PREPARING THE SITE FOR DEVELOPMENT, EXCLUSIONARY FENCING THAT IS AT LEAST 20 INCHES TALL AND THAT IS SECURED AND KEYED INTO THE GROUND, MUST BE INSTALLED AROUND THE PERIMETER OF THE WORK AREA TO PREVENT TURTLE ACCESS TO THE SITE. THE WORK AREA INCLUDES ALL AREAS USED FOR SITE ACCESS, EQUIPMENT PARKING, MATERIAL STAGING, MATERIAL STORAGE, AND CONSTRUCTION PURPOSES. THE ENTRANCE TO THE SITE ALSO MUST BE CORDONED OFF WITH AN EXCLUSIONARY METHOD WHEN THE SITE IS NOT IN USE. THIS CAN BE ACCOMPLISHED WITH A ROW OF HAY BALES THAT CAN BE MOVED WHEN ACCESS TO THE SITE IS NEEDED.
- IF MOWING NEEDS TO OCCUR BEFORE EXCLUSIONARY FENCE INSTALLATION WITHIN THE ACTIVE TURTLE TIMEFRAME, THE MOWING STYLE, MOWING HEIGHT, MOWING DIRECTIONALITY, MOWING SPEED, AND THE LOCATION OF NON-MOWING AREAS SHOULD BE AS FOLLOWS:
 - MOWING STYLE: AVOID FLAIL MOWER HEADS WITH GUIDE BARS THAT RIDE ALONG THE GROUND. SICKLE BAR MOWERS WILL HAVE THE LEAST IMPACT IF MOWING EVERY ONE TO FIVE YEARS. IN AREAS WITH MORE WOODY VEGETATION, A LESS THAN ONE TO TWO-INCH DIAMETER BRONTOSURUS-STYLE MOWER WILL HAVE THE LEAST IMPACT ON TURTLES.
 - MOWING HEIGHT: THE RETENTION OF MOWING STUBBLE SEVEN TO TWELVE INCHES IN HEIGHT WILL REDUCE MORTALITY, REDUCE BLADE WEAR, AND WILL LEAVE IMPORTANT COVER FOR ANIMALS.
 - MOWING DIRECTIONALITY: START MOWING FROM THE CENTER OF THE FIELD AND USE A BACK-AND-FORTH APPROACH OR LARGE CIRCLAR PATTERNS TO AVOID CONCENTRATING FLEEING ANIMALS WHERE THEY MAY BE KILLED OR STRANDED. IN ADDITION, LEAVE AN UNMOWED 30-FOOT STRIP AROUND THE PERIMETER OF THE FIELD AND MOW THIS AREA LAST. MOST TURTLES ARE FOUND WITHIN THESE AREAS, AND THIS PROVIDES TIME FOR THEM TO REACT TO THE MOWING ACTIVITY AND MOVE OUT OF THE AREA. IF THE FIELD IS NEAR A STREAM, START MOWING THE SIDE FURTHEST FROM THE STREAM AND WORK TOWARDS THE STREAM. IF THE FIELD IS BORDERED BY WOODLAND, START MOWING THE SIDE FURTHEST FROM WOODLAND AND WORK TOWARDS WOODLAND. IF THE FIELD IS BORDERED BY A ROAD, START MOWING NEXT TO THE ROAD AND WORK YOUR WAY ACROSS THE FIELD.
 - MOWING SPEED: MOWING IN LOW GEAR OR AT SLOW SPEEDS WILL ALLOW TURTLES TO REACT AND MOVE OUT OF THE FIELD.
 - NON-MOWING AREAS: LEAVE AN UNMOWED FIELD EDGE IN HIGH TURTLE-USE AREAS UNTIL AFTER SEPTEMBER 15.
- ONCE EXCLUSIONARY FENCING HAS BEEN INSTALLED SURROUNDING THE WORK AREA, A QUALIFIED INDIVIDUAL MUST SURVEY THE AREA TO DETERMINE IF THERE ARE ANY TURTLES WITHIN THE WORK AREA. IF TURTLES ARE IDENTIFIED, THEY ARE TO BE CAREFULLY MOVED TO AN AREA OUTSIDE OF THE WORK AREA IN A SAFE MANNER THAT WILL NOT HARM THEM. IF LISTED SPECIES OF TURTLES ARE IDENTIFIED, THE QUALIFIED INDIVIDUAL WILL DOCUMENT AND REPORT THESE FINDINGS TO THE CT DEEP IN THE MANNER IDENTIFIED WITHIN THE NDDB DETERMINATION LETTER. ONLY WHEN THE QUALIFIED INDIVIDUAL DETERMINES THAT NO TURTLES ARE WITHIN THE WORK AREA AND THAT THE SITE IS SECURE FROM TURTLES RE-ENTERING CAN CONSTRUCTION BEGIN.
- PRIOR TO COMMENCING ACTIVITY, A MEETING IS TO BE HELD WITH ALL CONSTRUCTION PERSONNEL WORKING WITHIN THE EXCLUSION AREA BY THE QUALIFIED INDIVIDUAL TO APPRAISE THEM OF THE SPECIES DESCRIPTION AND THEIR DUTIES IN REGARD TO MAINTAINING THE SECURITY OF THE SITE. SHOULD CONSTRUCTION PERSONNEL ENCOUNTER A TURTLE, THE QUALIFIED INDIVIDUAL WILL INSTRUCT PERSONNEL DURING THIS MEETING ON HOW TO CAREFULLY REMOVE THE TURTLE FROM THE SITE, HOW TO DOCUMENT THEIR FINDINGS AND TO REPORT IT TO THE QUALIFIED INDIVIDUAL FOR REPORTING TO THE CT DEEP.

MID-CONSTRUCTION:

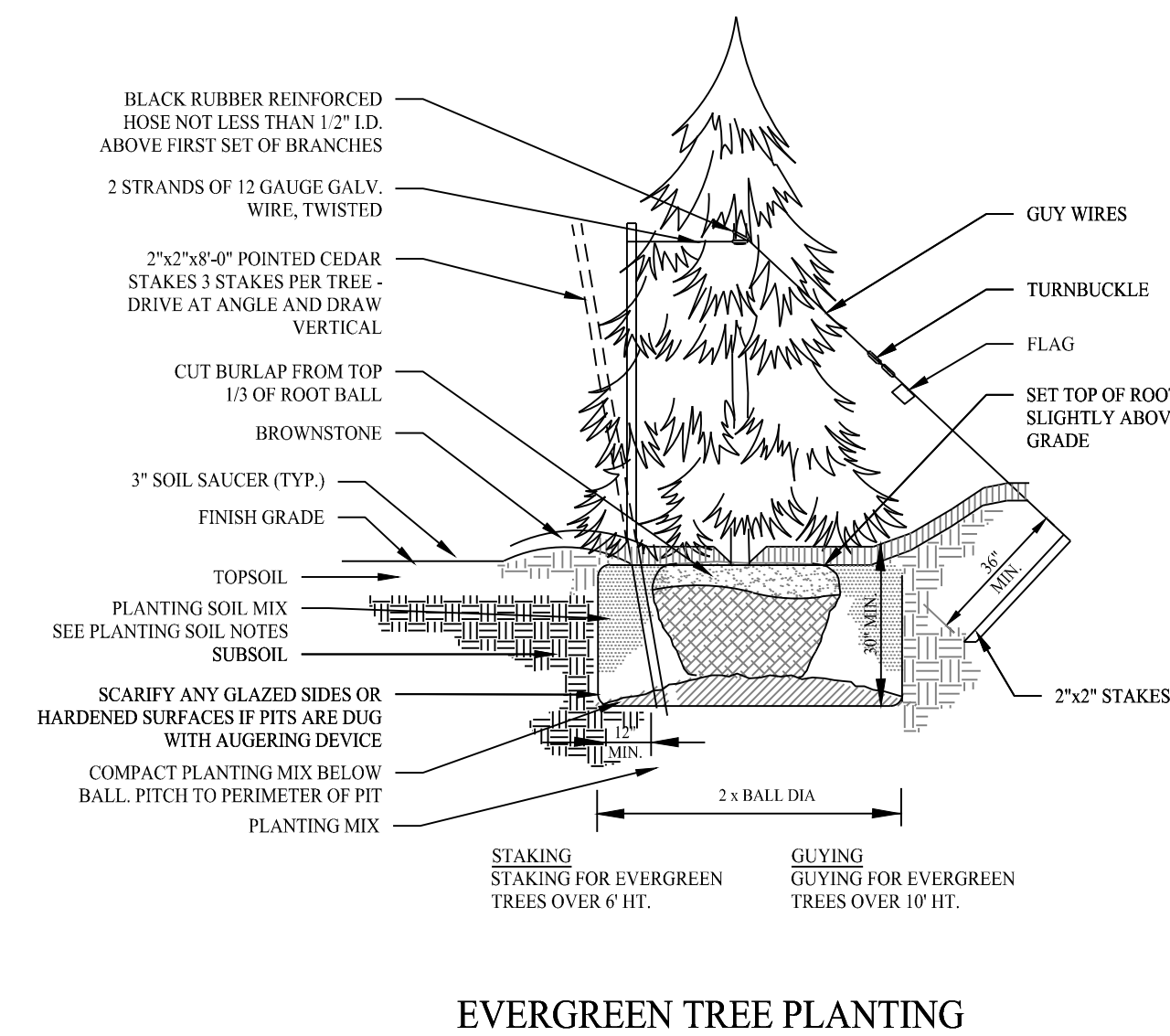
- PRIOR TO THE START OF WORK ACTIVITY EACH DAY, THE EXCLUSIONARY FENCING IS TO BE INSPECTED BY CONSTRUCTION PERSONNEL AND ALL GAPS OR OPENINGS AT THE GROUND LEVEL IDENTIFIED SHOULD BE FIXED OR REPAIRED IMMEDIATELY TO PREVENT TURTLES ACCESS TO THE SITE. IF A BREACH IS IDENTIFIED, WORK SHALL HALT UNTIL THE QUALIFIED INDIVIDUAL SURVEYS THE SITE AND DETERMINES NO TURTLES ARE WITHIN THE WORK AREA.
- ALL HEAVY MACHINERY (ACTIVE OR PARKED) MUST BE WITHIN THE LIMITS OF THE EXCLUSIONARY ZONE OR ON PAVED SURFACES. NO MACHINERY IS TO BE PARKED IN ANY TURTLE HABITAT (I.E., THE AREA OUTSIDE OF THE EXCLUSIONARY ZONE).
- AT THE END OF EACH WORK DAY, THE EXCLUSIONARY MEASURES AT THE ENTRANCE TO THE WORK SITE MUST BE REIMPLEMENTED TO PREVENT TURTLES FROM ACCESSING THE SITE. IF THIS IS NOT DONE, THE EXCLUSIONARY ZONE IS CONSIDERED VOID AND A QUALIFIED INDIVIDUAL MUST RE-SURVEY THE SITE AND CONCLUDE THAT NO TURTLES ARE PRESENT WITHIN THE WORK AREA BEFORE CONSTRUCTION ACTIVITY CAN BEGIN AGAIN.

POST-CONSTRUCTION:

- AFTER COMPLETION OF THE PROJECT, EXCLUSIONARY FENCING SHALL BE REMOVED ONCE THE AREA IS STABILIZED TO ALLOW FOR REPTILE AND AMPHIBIAN PASSAGE TO RESUME. IF CORDONING OFF SEGMENTS OF THE WORKSITE TO BE COMPLETED IN SEPARATE PHASES, ONCE THESE AREAS ARE STABLE, ONLY THEN MAY EXCLUSIONARY FENCING BE REMOVED. ALL ACTIVE AREAS MUST REMAIN EXCLUSIONARY TO TURTLES.

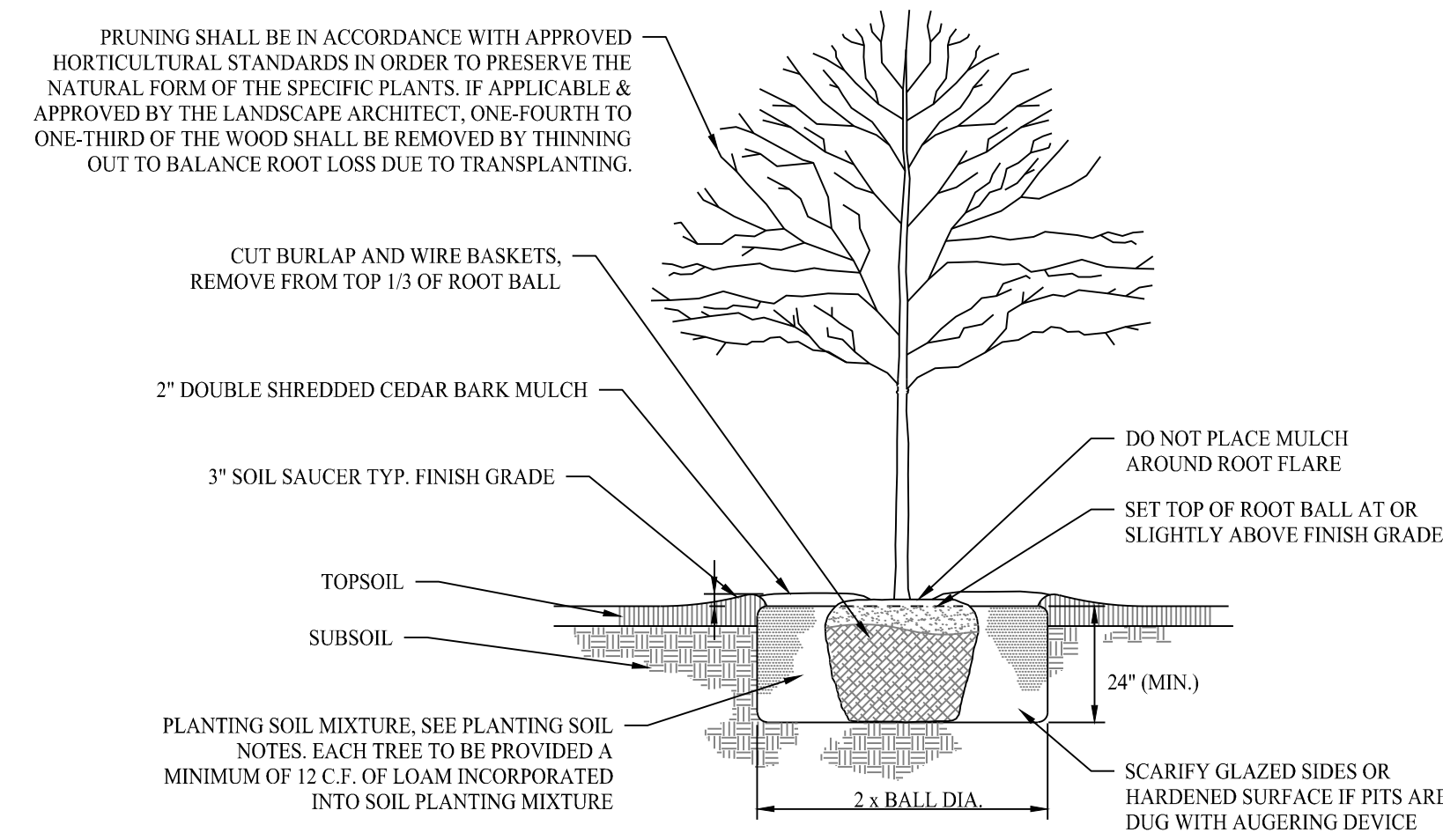
IN ADDITION TO THESE MEASURES, THE CT DEEP RECOMMENDS THE FOLLOWING BE IMPLEMENTED INTO THE GENERAL SITE DESIGN FOR THE DEVELOPMENT TO INCREASE THE VALUE OF HABITAT FOR WILDLIFE AND STATE-LISTED SPECIES.

- A SITE MANAGEMENT PLAN TO PROMOTE NATIVE VEGETATION GROWTH IN THE AREA UNDER THE SOLAR PANELS SHOULD BE CREATED.
- USE WILDLIFE-FRIENDLY FENCING TO ALLOW WILDLIFE MOVEMENT TO AND FROM THE DEVELOPMENT.
- DEVELOP A MANAGEMENT PLAN FOR AREAS OF THE PROPERTY WHERE DEVELOPMENT IS NOT OCCURRING AND/OR FOR WHEN SOLAR PANELS ARE DECOMMISSIONED THAT WILL SUPPORT STATE-LISTED SPECIES.



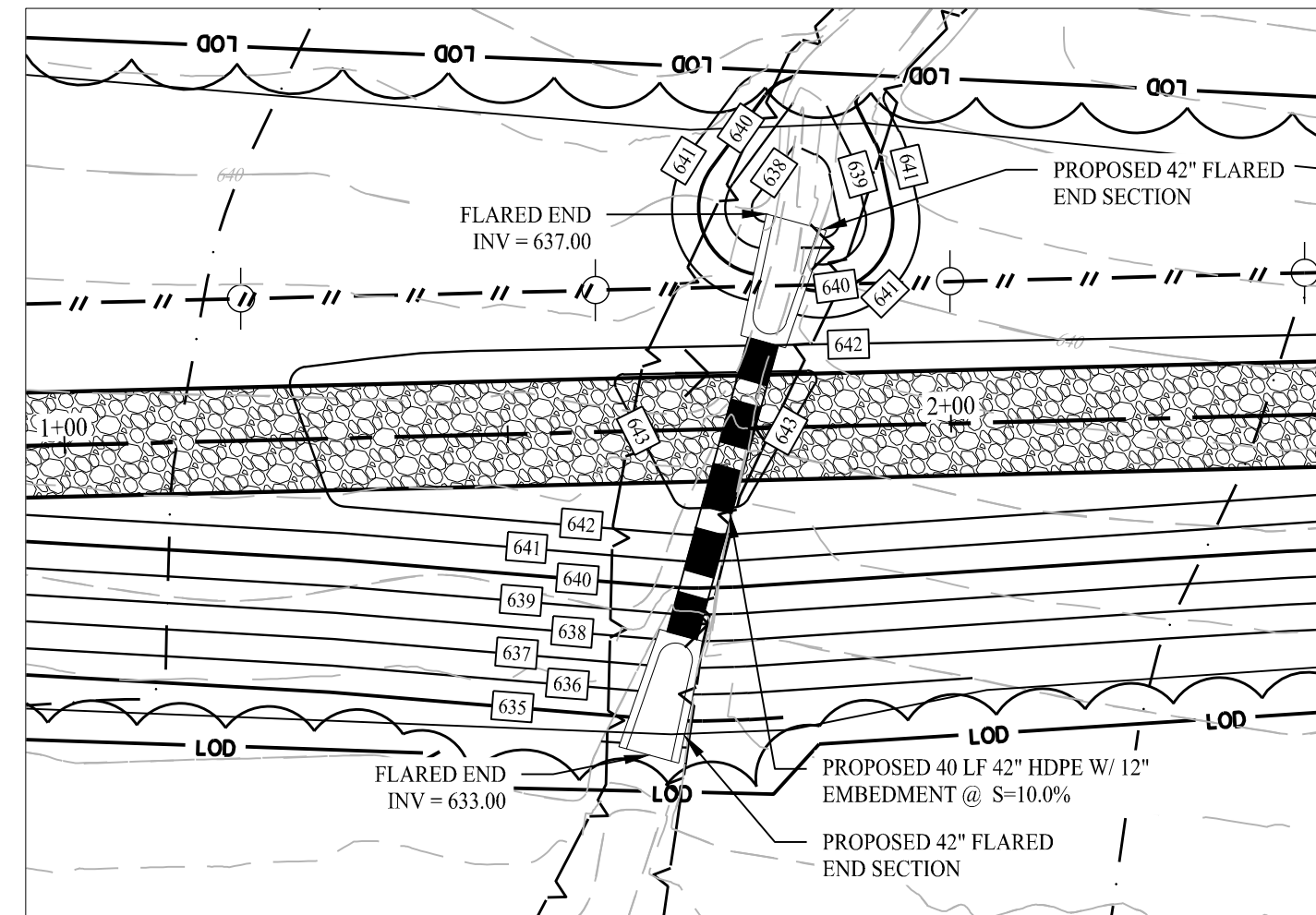
EVERGREEN TREE PLANTING

SCALE: NTS



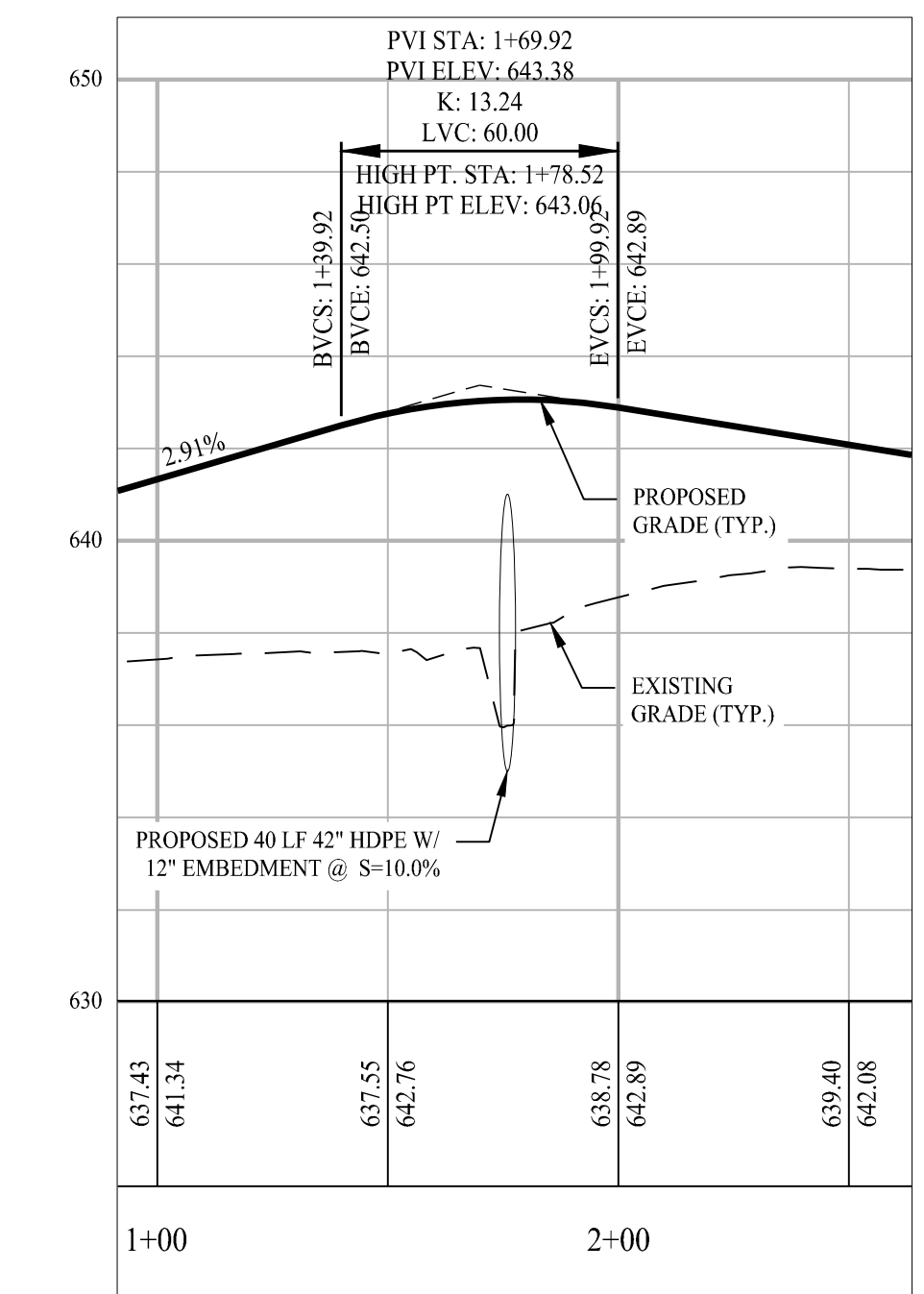
DECIDUOUS TREE PLANTING

SCALE: NTS



WETLAND CROSSING

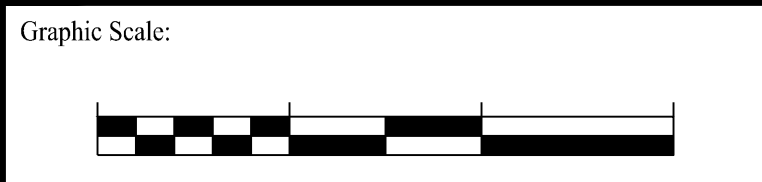
SCALE: 1" = 20'



PARTIAL PROFILE AT WETLAND CROSSING

HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 4'

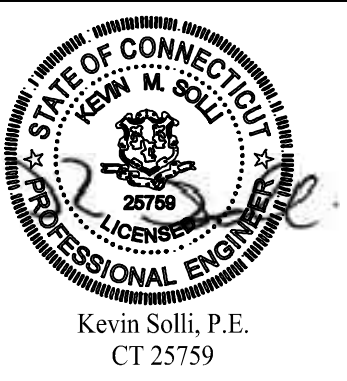
Rev. #:	Date	Description



SOLLI ENGINEERING

501 Main Street, Meriden, CT 06468 T: (203) 880-5455 F: (203) 880-9695
11 Vanderbilt Ave., Norwood, MA 02062 T: (781) 352-8491 F: (203) 880-9695

Drawn By:	CJS
Checked By:	CJB
Approved By:	KMS
Project #:	23100101
Plan Date:	01/15/24
Scale:	NTS




PROPOSED SOLAR PHOTOVOLTAIC ARRAY
250 CARTER STREET
MANCHESTER, CONNECTICUT

Sheet Title:	Sheet #:
ENVIRONMENTAL NOTES & DETAILS	3.02

**TOWN OF MANCHESTER
PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT**

TO: Planning & Zoning Commission

FROM: Megan Pilla, Principal Development Planner 

DATE: February 16, 2024

RE: 3 Squared, LLC – 14 North Main Street
Special Exception (PSE-0058-2023)
Erosion & Sedimentation Control Plan (ESC-0001-2024)

Introduction

The applicant is requesting a special exception under Article II, Section 24.02.01(j) for a mixed-use multi-family development at 14 North Main Street, and certification of the accompanying erosion and sedimentation control plan. The parcel is located in the General Business zone (GB).

Project Description

The approximately 1.27-acre parcel, which was formerly occupied by a Bank of America branch and is currently vacant, is bounded by North Main Street to the north, Oakland Street to the east, and Old North Main Street to the south. The Community Y Recreation Center is directly adjacent to the west. Other adjacent uses include Robertson Park and Manchester Mazda across the street to the north, several commercial businesses on Oakland Street and Apel Place, and the train tracks to the south of Old North Main Street. Beyond the train tracks to the south are several residences with frontage on Woodbridge Street.

The applicant is proposing mixed-use redevelopment of the parcel. The existing bank building would be demolished to make way for new construction of an 11,600 sq. ft., L-shaped, three-story building. The attached floor plans show retail spaces on the first floor on the side of the building facing Oakland Street, with apartments occupying the first floor on the side of the building facing Old North Main Street. The second and third floors are entirely residential. A total of five (5) retail spaces and 33 residential units are proposed.

The exterior design of the proposed structure, as shown on the attached architectural elevations, includes a variety of façade treatments, including brick, stone, vinyl, and stucco, as well as diverse window treatments and varying roof lines.

The proposed site plan includes a parking lot with a primary entrance off of North Main Street and a second entrance off of Old North Main Street, as well as brick pedestrian pathways that connect to the existing sidewalks, seating areas, and landscaping.

Traffic & Parking

Vehicular access to the site is currently available from all three (3) of the surrounding streets via four (4) curb cuts, but the proposed redevelopment would limit vehicular access to two (2) curb cuts, one off of North Main Street and the other off of Old North Main Street, both providing two-way access to a 50-space parking lot. Some parallel parking would also be available on Old North Main Street. Within the parking lot is a dedicated loading area with a direct sidewalk connection to the building entrance, as well as an enclosed dumpster.

The attached traffic study prepared by KWH Enterprise indicates that the anticipated trip generation of the proposed development can be adequately accommodated by the surrounding road network.

In response to a question from Town staff, the project traffic engineer also reviewed crash data from when the bank branch was operational in relation to the road improvements that have since been made to North Main Street and the intersection of Oakland Street and Old North Main Street, and concluded that the implemented road improvements are expected to alleviate the history of crashes that previously occurred in the area of the bank branch entrance.

Utilities

The site is served by Town water and sanitary sewer, and the capacity of those systems is sufficient for the anticipated utility demand of the proposed development.

Stormwater

The parcel is relatively flat, and in the existing condition stormwater generally sheet flows toward the northeast corner of the site where it enters the municipal storm system through a series of catch basins.

The proposed development includes a variety of detention strategies (highlighted on sheet C2 of the attached plan set). A roof leader will direct stormwater from the building roof into an underground detention system, which will allow some infiltration before overflowing into the municipal storm system. Runoff from the southwest section of the parking lot will be directed toward the westernmost row of parking stalls, which are indicated to be surfaced with porous pavement, allowing for direct infiltration. The remainder of the parking lot will drain toward the north, where a stone infiltration trench will filter and attenuate the flow before it enters a rain garden. In the event of heavy rain, the rain garden also overflows into the storm system via a perforated underdrain.

Usable Recreation Area

In accordance with the regulations, the proposed development must include usable outdoor recreation areas, including some area reserved for use by the residents of the building as well as

some area that is open to the public. To meet this requirement, the plans show a total of 5,200 sq. ft. of usable outdoor space on the ground floor that is usable by all visitors to the site, as well as a 4,200 sq. ft. rooftop patio and garden that will be available only to residents (highlighted on sheet A4 of the attached floor plans).

Erosion and Sedimentation Controls

Proposed erosion and sedimentation controls (highlighted on sheet ES1 of the attached plan set) include silt fence along the entire perimeter of the site, inlet protection at all drainage structures, a stabilized construction entrance off of North Main Street, and a temporary soil stockpile area to be surrounded by hay bales and/or silt fence.

Inland Wetlands Permit

Because a portion of Lydall Brook is within 100 feet of the project site to the northeast, an inland wetlands permit is required. This permit can be approved administratively by the Inland Wetlands Agent because the project is entirely within the upland review area and there are no proposed impacts to the watercourse.

For the Commission's Consideration

The Commission should consider whether the proposal meets the special exception criteria outlined in Art. IV, Sec. 20.

Staff Review

Town staff has reviewed the plans and documents submitted with the application and the status of any outstanding comments will be provided at the February 21, 2024 meeting.

Staff commends the inclusion of multiple low impact development techniques in the proposed plan, including:

- A section of porous pavement within the parking lot (10 parking stalls);
- An infiltration trench and rain garden in a highly visible location;
- An underground detention system to accommodate roof runoff;
- An effort to limit the total number of parking spaces to not exceed the minimum requirement; and
- A robust planting plan which includes not only native species, but also several fruit-bearing species which would support local wildlife.

mp

R:\Planning\PZC\2024\02 - February 21\Meeting Packet\PSE-0058-2023 (14 N Main) - Memo.docx

Attach.

Town of Manchester, CT



Geographic Information Systems

14 NORTH MAIN ST

Legend

Overlay Zone

Zoning

B2 - Business II

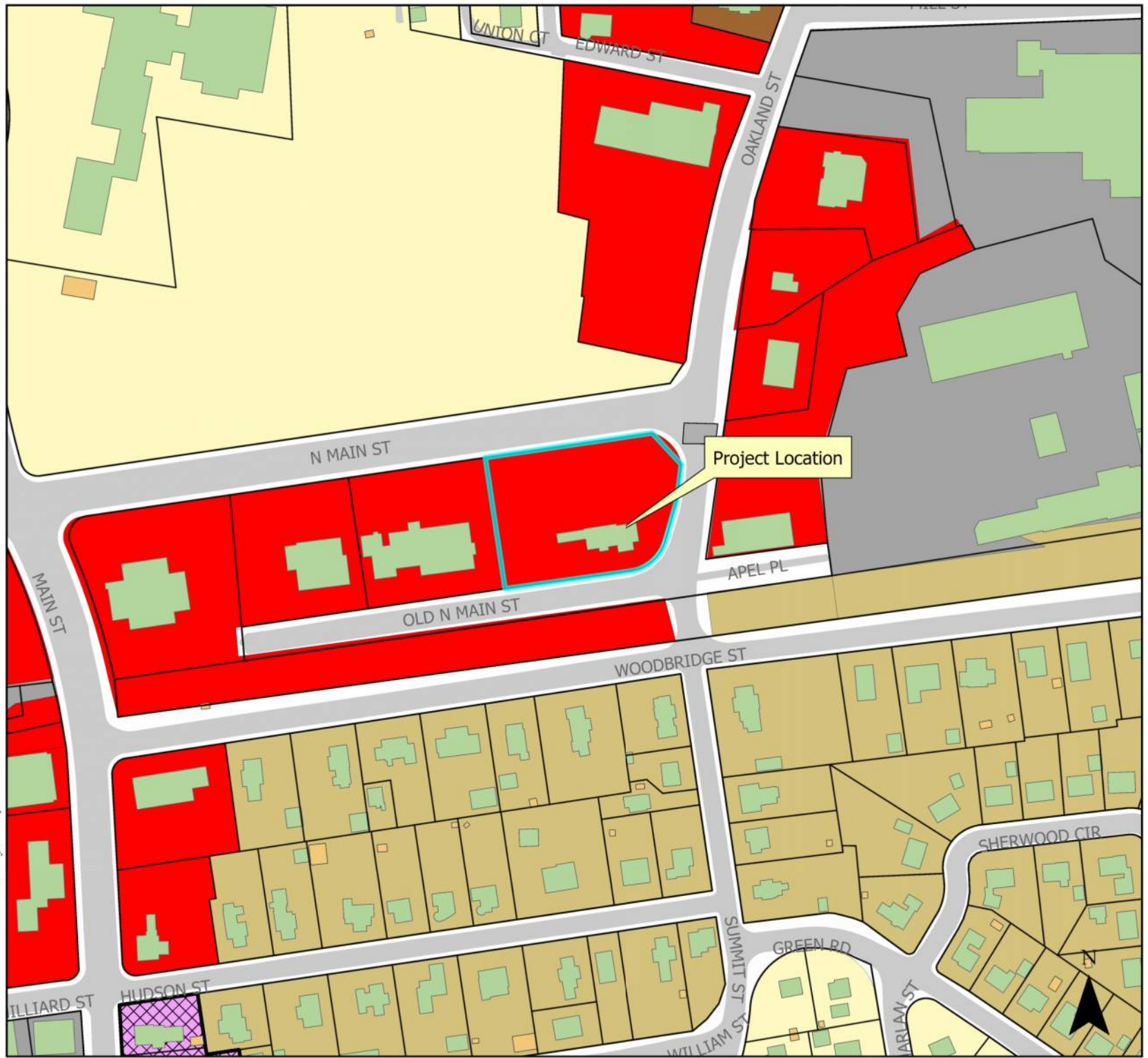
GB - General Business

IND - Industrial

PRD - Planned Residence

RA - Residence A

RB - Residence B



DISCLAIMER:
The Town of Manchester, CT assumes no legal responsibility for the information contained in this map. This map is provided 'AS IS' without warranty of any kind.

NOTES:
Planimetric and topographic information were compiled by stereo photogrammetric methods from photography dated April 24, 1999 in accordance with ASPR accuracy standards for 1"=40' large scale Class I maps. Real property compiled from recorded deeds, subdivision plans and other public records. Utility networks compiled from record plans, as-builts and/or field survey data. Aerial photography dated April 24, 1999.

0 35 70 140 210 280
 Feet

1 inch = 200 ft

Date: 2/16/2024

MANCHESTER PLANNING & ZONING COMMISSION

Applicant: 3 Squared, LLC

Application: Special Exception Mixed Use Development under Article II, Section 24.02.01(j) of the Zoning Regulations

Location: 14 North Main Street

Date: December 28, 2023

Item: Application Narrative

The applicant has filed a Special Exception Use application for permission to develop a mixed-use multi-family development with some of the proposed residential units on the ground floor, but the majority located above proposed ground floor commercial uses. Development of the project will require demolition and removal from this 1.24 acre parcel of the existing structure on the property, formerly a branch bank.

In its place will be developed an 11,600 square foot, L-shaped, three-story structure of a village "Main Street" design, with storefronts on a portion of the ground floor, and varying brick, stone, vinyl, and stucco exteriors, diverse window treatments, and differing rooflines above. A rooftop patio and garden will top the structure. The types of dwelling units are also varied, with 10 studio units, 18 one-bedroom units, and 5 2-bedroom units, 5 of the total number of units accessible. Five retail spaces of varying sizes are also included on the first floor.

The required number of parking spaces for the varied on-site uses, fifty, including 2 handicap spaces, are provided as set forth in the site plans. 9,400 square feet of open space recreational area is also incorporated into the plans. Public water and sewer will serve the site.

Access to and from both North Main Street and Old North Main Street is provided. A traffic study is included in the application package and states that, as to the proposed 33 residential units and 4,250 square feet of retail floor space, "based on trip generation and recent-year traffic counts collected by CTDOT for the adjacent North Main Street (Route 83) and Oakland Street, it can be concluded that both roadways have more than enough spare capacity to adequately accommodate the limited increases in vehicular trips from the development".



Utility Statement

Site: 14 Noth Main Street, Manchester

Usage: Residential & Commercial Units

The proposed site is to be developed with a combination of retail and residential units. There will be 4,250 square feet of retail space, 28 studio/one-bedroom units and 5 two-bedroom units.

Based on water usage outline in the Technical Standards of the Public Health Code, the following water usage is anticipated.

Retail 0.1 gallons per square foot / day

Residential 150 gallons per bedroom / day

For the proposed combined use, the following daily water usage has been calculated.

Retail 4,250 SF x 0.1 gal / SF / day = 425 gallons

Studio & One-Bedroom Residential Units 28 units x 150 gallons = 4,200 gallons

Two-Bedroom Residential Units 5 units x 2 bedrooms/unit x 150 gallons = 1,500 gallons

Daily Water Usage 425 gallons + 4,200 gallons + 1,500 gallons = 6,125 gallons

Peaking Factor = 3.0

Total Peak Design Flow 6,125 gallons x 3.0 = 18,385 gallons per day

Sewer use should be consistent with estimated water usage.



KWH Enterprise, LLC
 277 Reservoir Avenue, Suite 1101
 Meriden, CT 06451
 Phone: (203) 807-5482
 Cell: (203) 606-3525
 Fax: (203) 440-0788
 kermit.hua@kwhenterprise.com

December 26, 2023

Roy Evjen
 Evjen Agency
 100 Center Street
 Southington CT 06489

Reference: 14 North Main Street, Manchester, Connecticut

Dear Mr. Evjen:

Thank you for asking me to review the site trips, traffic impact, and roadway accident records for the proposed residential and retail development at 14 North Main Street in Manchester, Connecticut.

The development will include 33 residential units and a total retail floor space of 4,250 SF. Table 1 shows that the site is estimated to generate 23, 45, and 42 peak-hour trips during the respective weekday morning, weekday afternoon, and Saturday midday peak hours. The trip estimates were based on data from ITE (Institute of Transportation Engineers) *Trip Generation Manual, 11th Edition*.

Based on this trip generation and recent-year traffic counts collected by CTDOT for the adjacent North Main Street (Route 83) and Oakland Street, it can be concluded that both roadways have more than enough spare capacity to adequately accommodate the limited increases in vehicular trips from the development.

Table 1 Trip Generation

Multifamily Housing (Low-Rise) Not Close to Rail Transit (ITE LU 220) (33 Units)			
	Entry	Exit	Entry & Exit
Weekday AM Peak Hour of Adjacent Street	3	10	13
Weekday Afternoon Peak Hour of Adjacent Street	11	6	17
Saturday Midday Peak Hour of Adjacent Street	7	7	14

Strip Retail Plaza (<40k) (ITE LU 822) (4,250 SF)			
	Entry	Exit	Entry & Exit
Weekday AM Peak Hour of Adjacent Street	6	4	10
Weekday PM Peak Hour of Adjacent Street	14	14	28
Saturday Midday Peak Hour of Adjacent Street	14	14	28

Total			
	Entry	Exit	Entry & Exit
Weekday AM Peak Hour of Adjacent Street	9	14	23
Weekday PM Peak Hour of Adjacent Street	25	20	45
Saturday Midday Peak Hour of Adjacent Street	21	21	42



Reference: 14 North Main Street, Manchester, Connecticut

I also reviewed the traffic accident records for the segment of Route 83 and Oakland Street near the development site during 2020-2022. The records are summarized in Table 2. Four accidents were recorded for Oakland Street, and 31 accidents were recorded for the four-lane Route 83.

Based on the numbers and locations of the accidents over the three-year period and the accident categories in the table, no abnormal accident patterns were identified from these records. Because the development traffic will be adequately accommodated by the existing roadways and intersections, it is not expected to adversely affect the safety conditions of the adjacent roadways.

Table 2 Traffic Accident Summary

Location	Route 83 (North Main Street) between Main Street and Oakland Street (Mile 8.88 to 9.06)	Oakland Street between Old North Main Street and North Main Street
Year		
2020	15	1
2021	12	3
2022	4	
Total	31	4
Accident Severity		
Fatality	0	
Injury (No Fatality)	6	1
Property Damage Only	25	3
Total	31	4
Type of Collision		
Sideswipe-Same Direction	2	
Sideswipe-Opposite Direction	1	
Angle	10	
Front to Rear	15	3
Front to Front	1	
Backing		1
Pedestrian	1	
Other	1	
Total	31	4

Source: Connecticut Crash Data Repository

In summary, it is my professional opinion that the area roadways have more than enough spare capacity to safely and adequately accommodate the limited increases in the vehicular trips from this residential and retail development.



Reference: 14 North Main Street, Manchester, Connecticut

I appreciate the opportunity to prepare this letter. Should you have any questions or need additional information, please feel free to contact me.

Sincerely,

KWH Enterprise, LLC

Kermit Hua

Kermit Hua, PE, PTOE

Principal

kermit.hua@kwhenterprise.com

Cell: (203) 606-3525



Kermit Hua

Land Use: 220

Multifamily Housing (Low-Rise)

Description

Low-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have two or three floors (levels). Various configurations fit this description, including walkup apartment, mansion apartment, and stacked townhouse.

- A walkup apartment typically is two or three floors in height with dwelling units that are accessed by a single or multiple entrances with stairways and hallways.
- A mansion apartment is a single structure that contains several apartments within what appears to be a single-family dwelling unit.
- A fourplex is a single two-story structure with two matching dwelling units on the ground and second floors. Access to the individual units is typically internal to the structure and provided through a central entry and stairway.
- A stacked townhouse is designed to match the external appearance of a townhouse. But, unlike a townhouse dwelling unit that only shares walls with an adjoining unit, the stacked townhouse units share both floors and walls. Access to the individual units is typically internal to the structure and provided through a central entry and stairway.

Multifamily housing (mid-rise) (Land Use 221), multifamily housing (high-rise) (Land Use 222), affordable housing (Land Use 223), and off-campus student apartment (low-rise) (Land Use 225) are related land uses.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Additional Data

For the three sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.72 residents per occupied dwelling unit.

For the two sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96.2 percent of the total dwelling units were occupied.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip

generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

For the three sites for which data were provided for both occupied dwelling units and residents, there was an average of 2.72 residents per occupied dwelling unit.

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 1980s, the 1990s, the 2000s, the 2010s, and the 2020s in British Columbia (CAN), California, Delaware, Florida, Georgia, Illinois, Indiana, Maine, Maryland, Massachusetts, Minnesota, New Jersey, Ontario (CAN), Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, and Washington.

Source Numbers

188, 204, 237, 300, 305, 306, 320, 321, 357, 390, 412, 525, 530, 579, 583, 638, 864, 866, 896, 901, 903, 904, 936, 939, 944, 946, 947, 948, 963, 964, 966, 967, 1012, 1013, 1014, 1036, 1047, 1056, 1071, 1076

Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units

On a: **Weekday,**

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 49

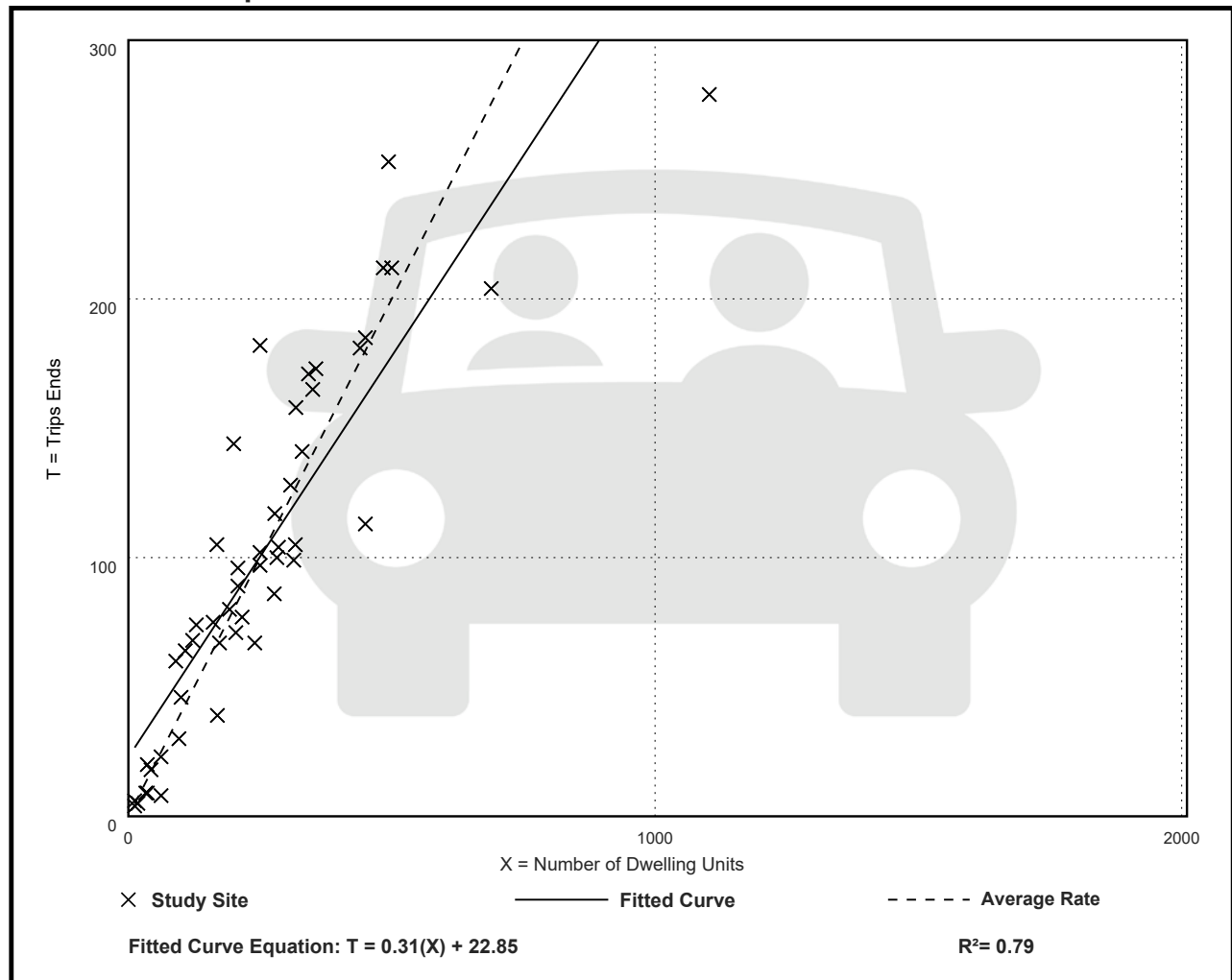
Avg. Num. of Dwelling Units: 249

Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

Data Plot and Equation



Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 59

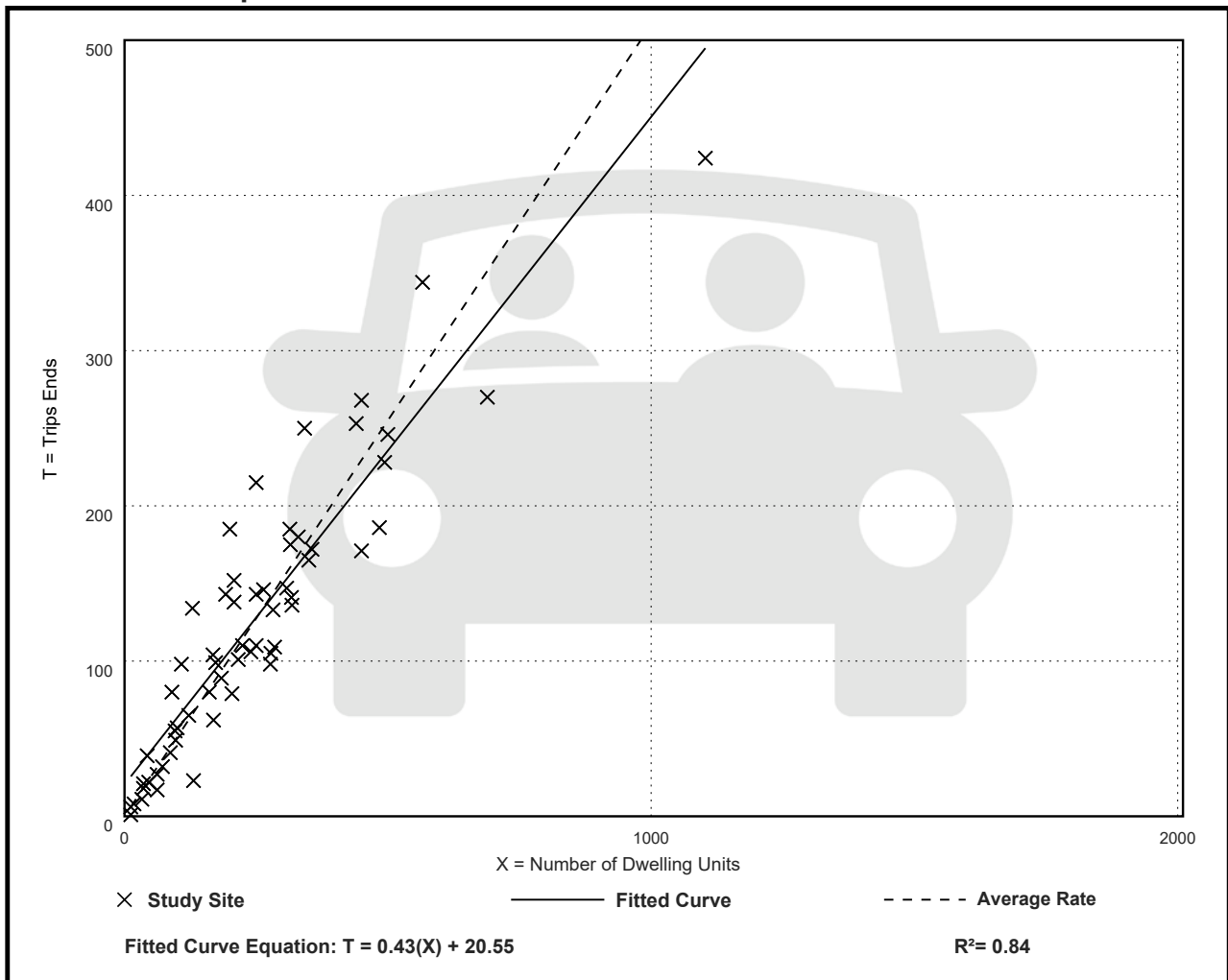
Avg. Num. of Dwelling Units: 241

Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.08 - 1.04	0.15

Data Plot and Equation



Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units

On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 1

Avg. Num. of Dwelling Units: 282

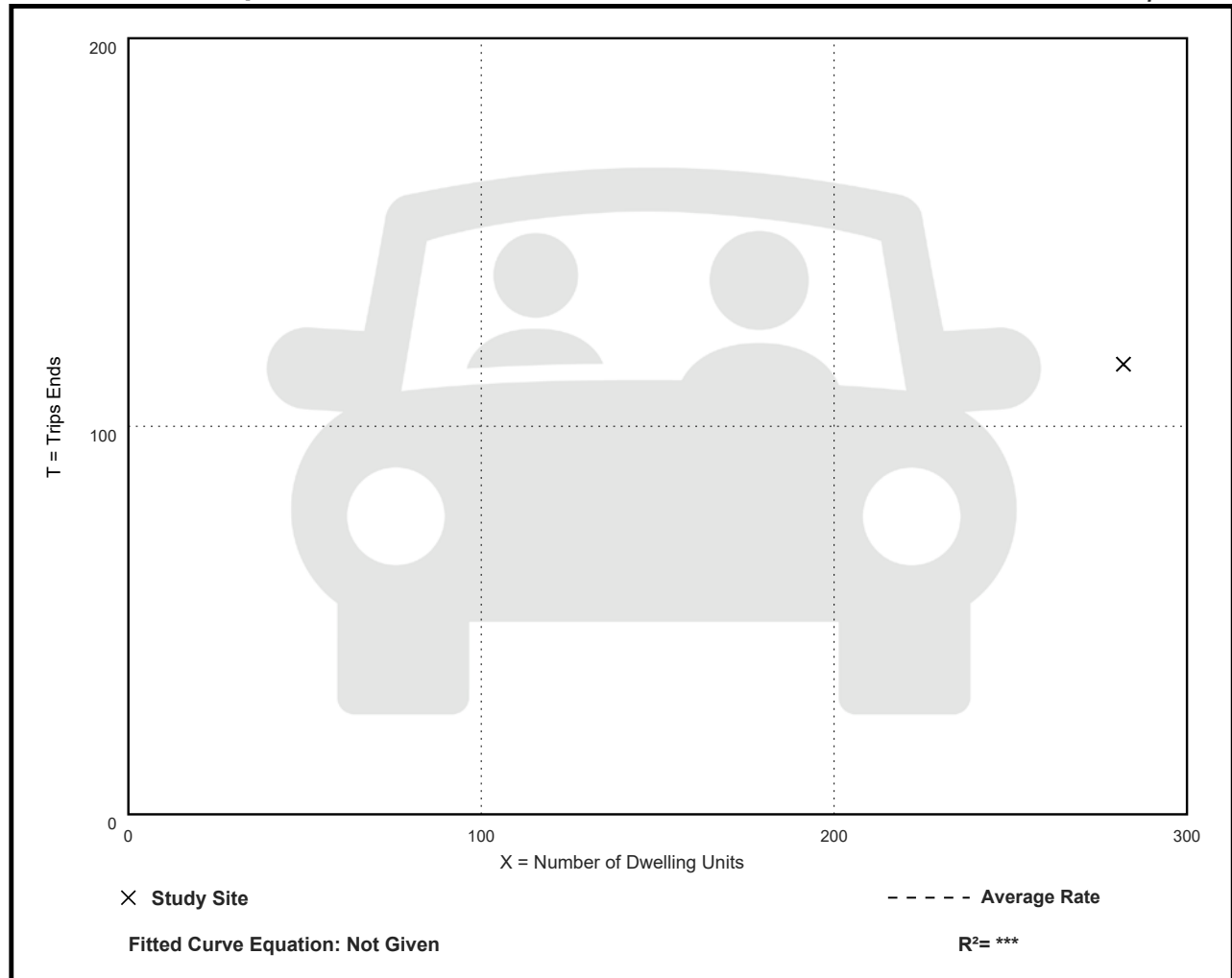
Directional Distribution: Not Available

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.41	0.41 - 0.41	***

Data Plot and Equation

Caution – Small Sample Size



Land Use: 822

Strip Retail Plaza (<40k)

Description

A strip retail plaza is an integrated group of commercial establishments that is planned, developed, owned, and managed as a unit. Each study site in this land use has less than 40,000 square feet of gross leasable area (GLA). Because a strip retail plaza is open-air, the GLA is the same as the gross floor area of the building.

The 40,000 square feet GFA threshold between strip retail plaza and shopping plaza (Land Use 821) was selected based on an examination of the overall shopping center/plaza database. No shopping plaza with a supermarket as its anchor is smaller than 40,000 square feet GLA.

Shopping center (>150k) (Land use 820), shopping plaza (40-150k) (Land Use 821), and factory outlet center (Land Use 823) are related uses.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Delaware, Florida, New Jersey, Ontario (CAN), South Dakota, Vermont, Washington, and Wisconsin.

Source Numbers

304, 358, 423, 428, 437, 507, 715, 728, 936, 960, 961, 974, 1009

Strip Retail Plaza (<40k) (822)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 5

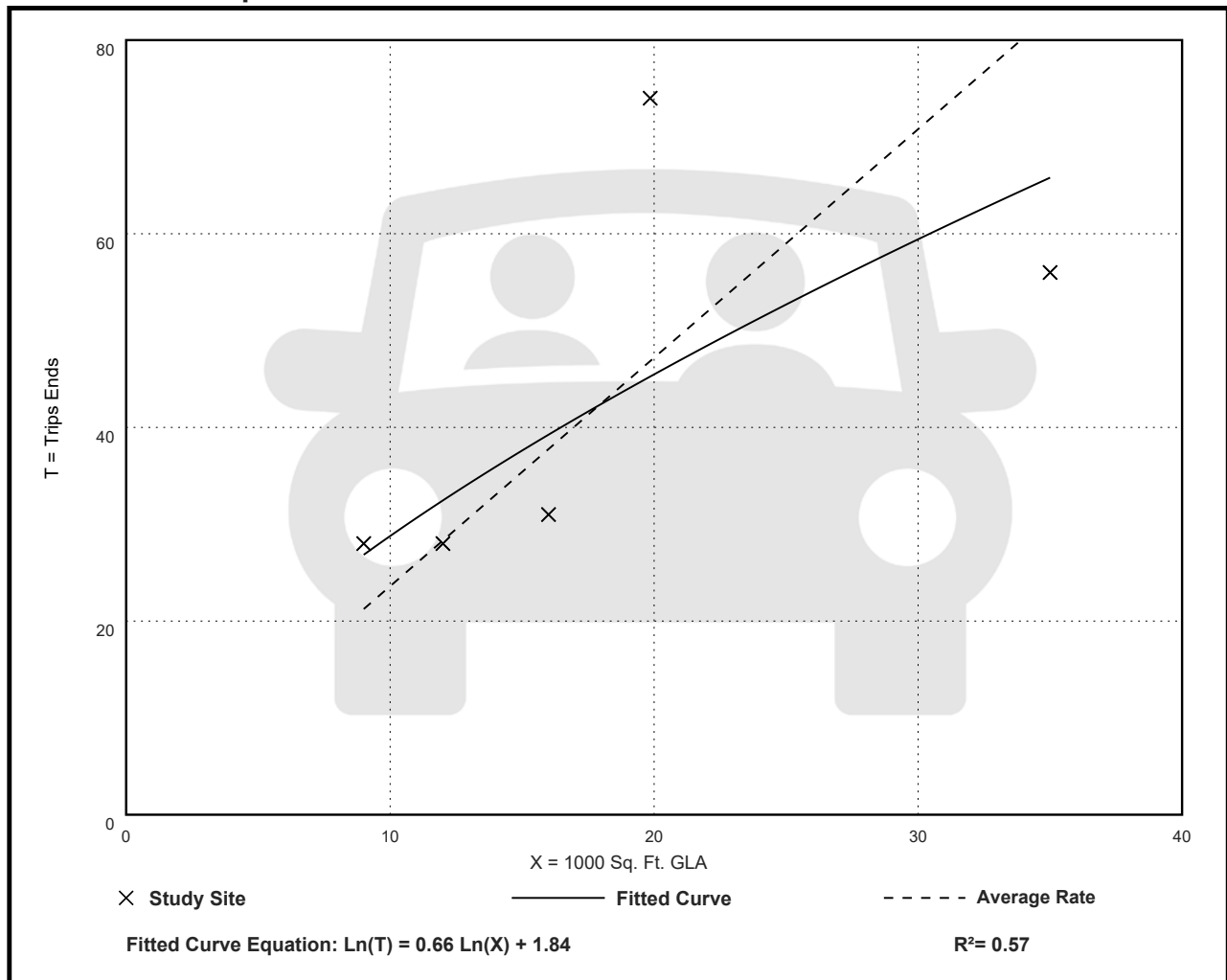
Avg. 1000 Sq. Ft. GLA: 18

Directional Distribution: 60% entering, 40% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
2.36	1.60 - 3.73	0.94

Data Plot and Equation



Strip Retail Plaza (<40k) (822)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 25

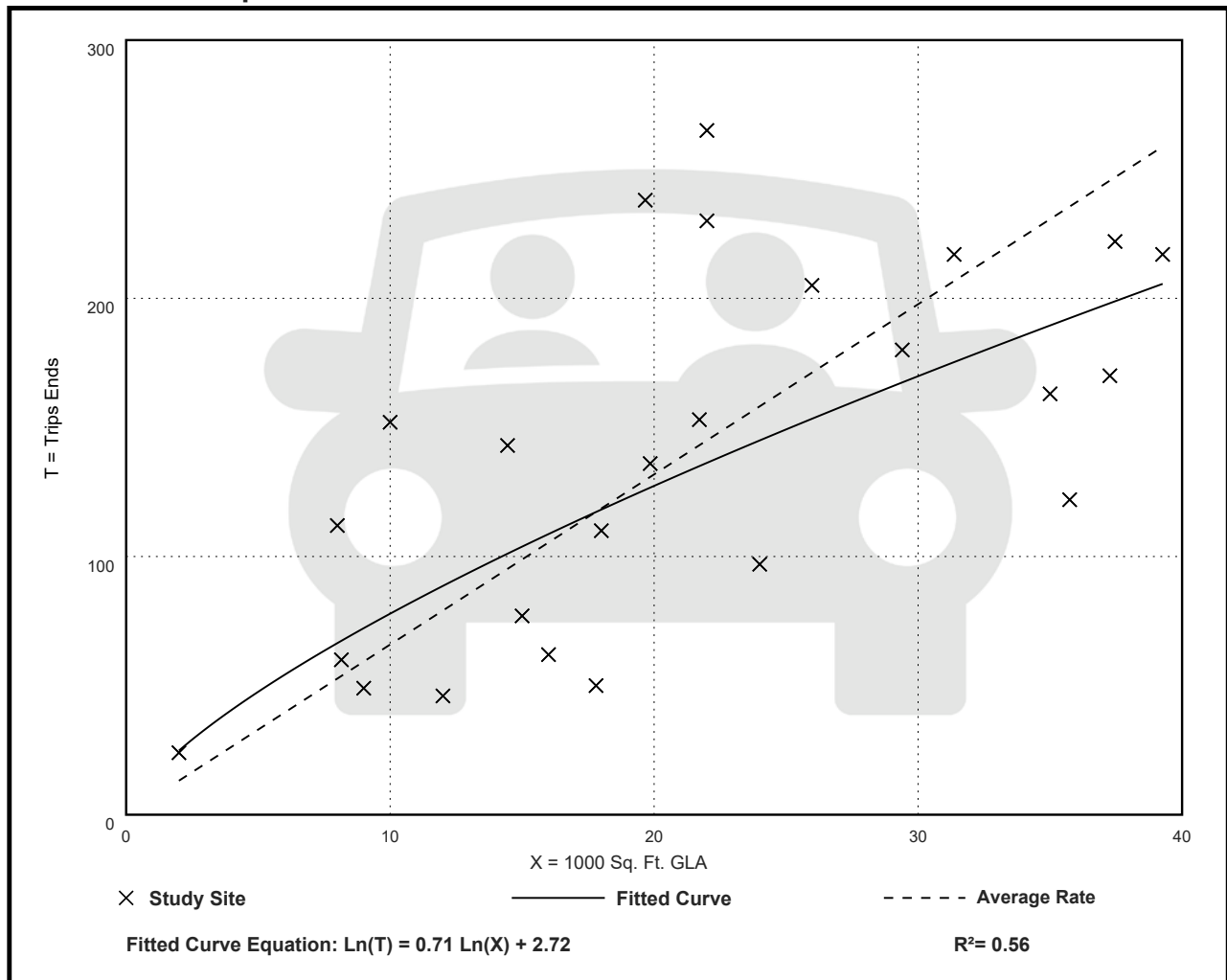
Avg. 1000 Sq. Ft. GLA: 21

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
6.59	2.81 - 15.20	2.94

Data Plot and Equation



Strip Retail Plaza (<40k) (822)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA

On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 12

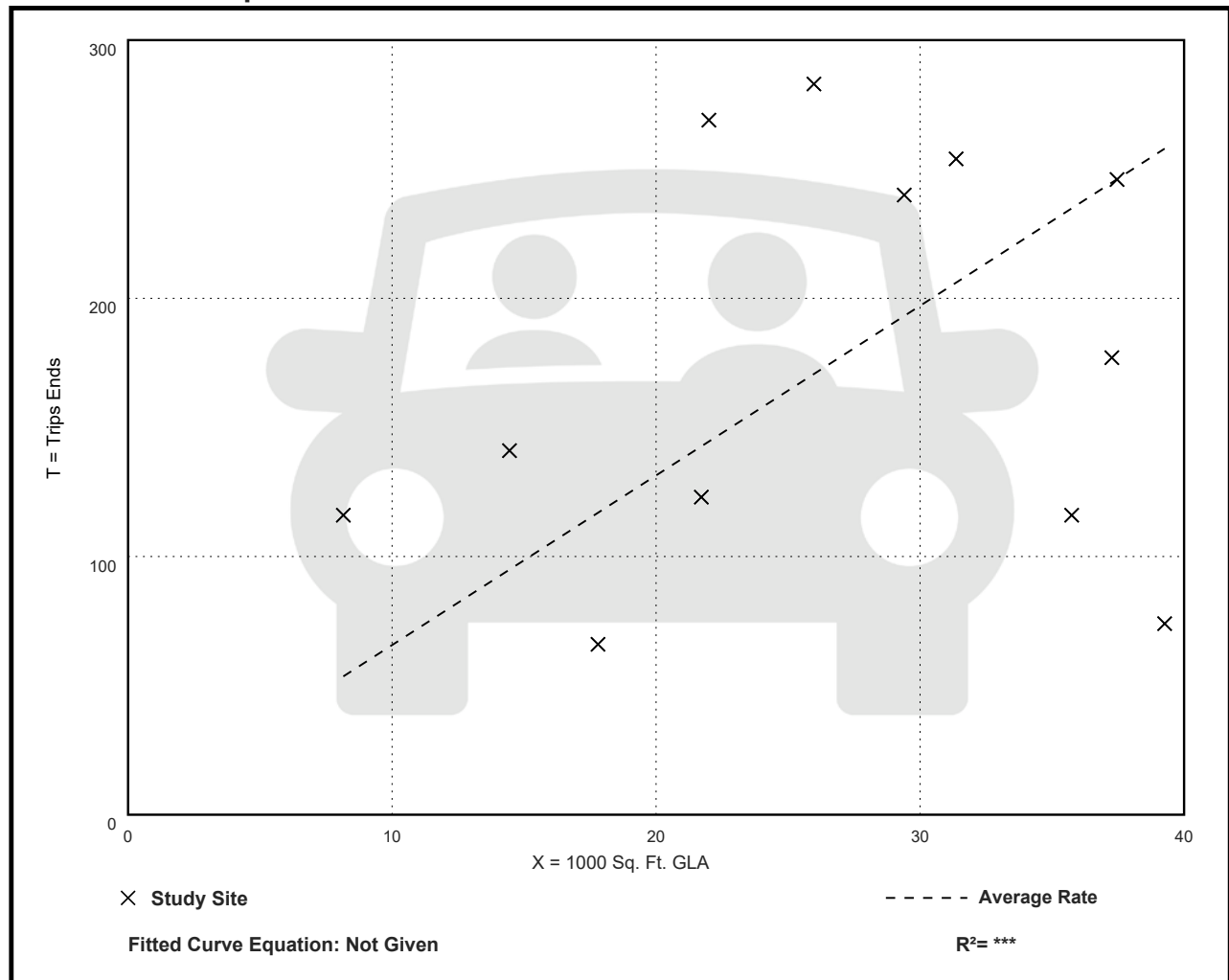
Avg. 1000 Sq. Ft. GLA: 27

Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
6.57	1.88 - 14.23	3.45

Data Plot and Equation

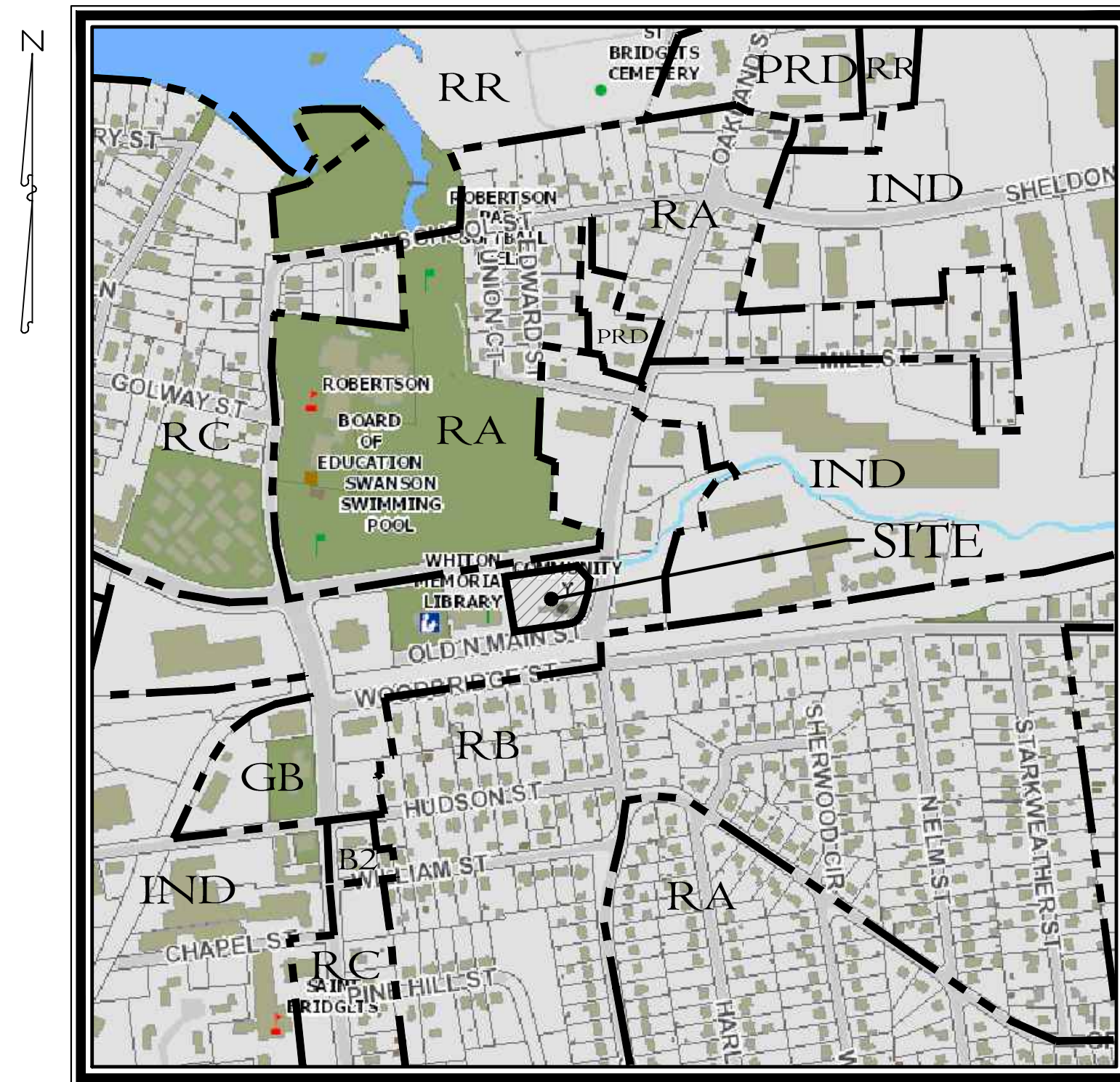


cole

engineering. surveying. planning.

Proposed Mixed-Use Development

14 North Main Street
Manchester, Connecticut



KEY MAP
SCALE: 1"=500'

Sheet Index:

- S1 Property & Topographic Survey Map
- R1 Removal and Demolition Plan
- C1 Site Layout & Landscaping Plan
- C2 Site Development Plan
- ES1 Soil Erosion & Sedimentation Control Plan
- ES2 Soil Erosion & Sediment Control Details
- D1 Details
- D2 Details
- D3 Details

Applicant:

3 Squared, LLC
100 Center Street
Southington, Connecticut 06489

Property Owner:

3 Squared, LLC
100 Center Street
Southington, Connecticut 06489

Consultants:

Engineering & Surveying
Harry E. Cole & Son
P.O. Box 44 - 876 South Main Street
Plantsville, Connecticut 06489
Tel. (860) 628-4484 Fax (860) 620-0196

PREPARED FOR

3 Squared, LLC

December 20, 2023

APPROVED
PLANNING AND ZONING
COMMISSION
MANCHESTER, CT

DATE: _____
SIGNED: _____

Revision Table

01	02/05/2024	Revised per Town Comments	
	December 20, 2023	First Submittal Set	#2387

DRAWING NAME: D:\Projects\2023\14 North Main - Manchester\1403.ctb DATE: 12/20/2023 10:00 AM LAYOUT: 1403.ctb OPERATOR: hew

DRAWING NAME: D:\B\C\and\Survey\2021 - North Main - Manchester\Map\2521 - North Main - Manchester\Map\2521 - North Main - Manchester.dwg; DATE: 10/16/2023; 11:05am; OPERATOR: msc

LEGEND

- = Existing utility pole
- = Existing light pole
- = Existing fire hydrant
- = Existing water valve
- = Existing gas valve
- = Existing underground pipe
- = Existing edge of pavement
- = Existing bituminous concrete lip curb
- = Existing well
- = Existing catch basin
- = Existing drainage manhole
- = Existing sanitary manhole
- = Existing utility box
- = Existing contour
- = Existing spot elevation
- = Existing iron pin
- = Existing drill hole
- = Existing monument

BENCHMARK
MAG NAIL IN CLP #6946
ELEV. = 178.59
(NAVD 88 DATUM)

Tie To Existing Monument
S81° 39' 25"W 611.81'

NORTH MAIN STREET
(STATE OF CONNECTICUT ROUTE 83)

Property of
Bank of America, National Association
#14 North Main Street
54,052 S.F.
1.24 AC

N/F
YOUNG MEN'S CHRISTIAN
ASSOCIATION OF MANCHESTER, INC.

Town of Manchester Control Point #62
N=850685.918 E=1062294.148 Elev.= 173.49'

Town of Manchester Control Point #5
N=849755.953 E=1061465.374 Elev.= 177.01'

Town of Manchester Control Point #61
N=851713.356 E=1062619.599 Elev.= 171.81'

SURVEY NOTES:

1. This map has been prepared pursuant to the Regulation of Connecticut State Agencies Sections 20-300b-1 through 20-300b-20 and the "Standards for Surveys and Maps in the State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996.
2. Type of survey performed: Property Survey
3. Boundary determination category: Resurvey
4. Class of accuracy:
Horizontal: A-2
Vertical: T-2
5. The intent of this map is to depict or note the position of boundaries with respect to: (A) locations of all boundary monumentation found or set; (B) Apparent improvements and features, including as a minimum: dwellings, barns, garages, sheds, driveways, roadways, surface utilities, visible bodies of water and swimming pools; (C) record easements and visible means of ingress and egress; (D) record and apparent means of ingress and egress; (E) lines of occupation, including as a minimum: fences, walls, hedges and yards; (F) deed restrictions pertaining to the location of buildings or other apparent improvements; (G) unresolved conflicts with record deed descriptions and maps; (H) all apparent boundary encroachments; and (I) monumentation required to be set at all corners created by a deflection angle of not less than 70 degrees between two consecutive courses at an intervals not to exceed 600 feet (180 meters) along the boundaries between said corners, except where natural or man-made monumentation defines or occupies the line.
6. Map References:
 - a) "Town Of Manchester; Map Showing Land Acquired From Fleet Bank, National Association By The State Of Connecticut; Intersection Improvements Oakland St. (Rte. 83) & North Main St. (Rte. 83); Scale 1"=40'; Dated: January 1995; Last Revised: 6/29/95 By Scott L. Neff" Filed In Map Book 32, Page 72C in M.L.R.
 - b) "ALTA/NPS Land Title Survey; Prepared For Bank Of America, National Association; 14 North Main Street, Manchester, CT; Scale 1"=20'; By Commercial Due Diligence Services"
7. Per agreement with property owner no boundary corners were set by this survey unless noted hereon. All monumentation found is depicted or noted hereon.
8. Zone: GB
9. Owner: Bank Of America, National Association
10. Town of Manchester Assessors Map #74 Lot #14
11. Filed in Volume 3145, Page 320 of the Town Clerk's office.
12. Contour interval is two (2) foot.
13. Existing contours generated from field topography.
14. This survey does not include the location of any underground improvements or encroachments, subsurface utility lines or buried debris. Nor does it necessarily reflect the existence of any waste dumps or hazardous materials. The underground items depicted or noted are approximate and are not guaranteed. Notify "CALL BEFORE YOU DIG" 1-800-922-4455 prior to any excavation operations.

BENCHMARK
MAG NAIL IN CLP #5335
ELEV. = 182.70
(NAVD 88 DATUM)



DATE	REVISION
2-2-24	Misc. Revisions Per Town Comments

To the best of my knowledge and belief, this map is substantially correct as noted hereon.

Stephen M. Giudice, L.S. #70145
Reg. No.

NOT VALID UNLESS EMBOSSED SEAL OR STAMP IS AFFIXED HERETO

Property & Topographic Survey Map

Prepared For
3 SQUARED, LLC
14 North Main Street
Manchester, Connecticut

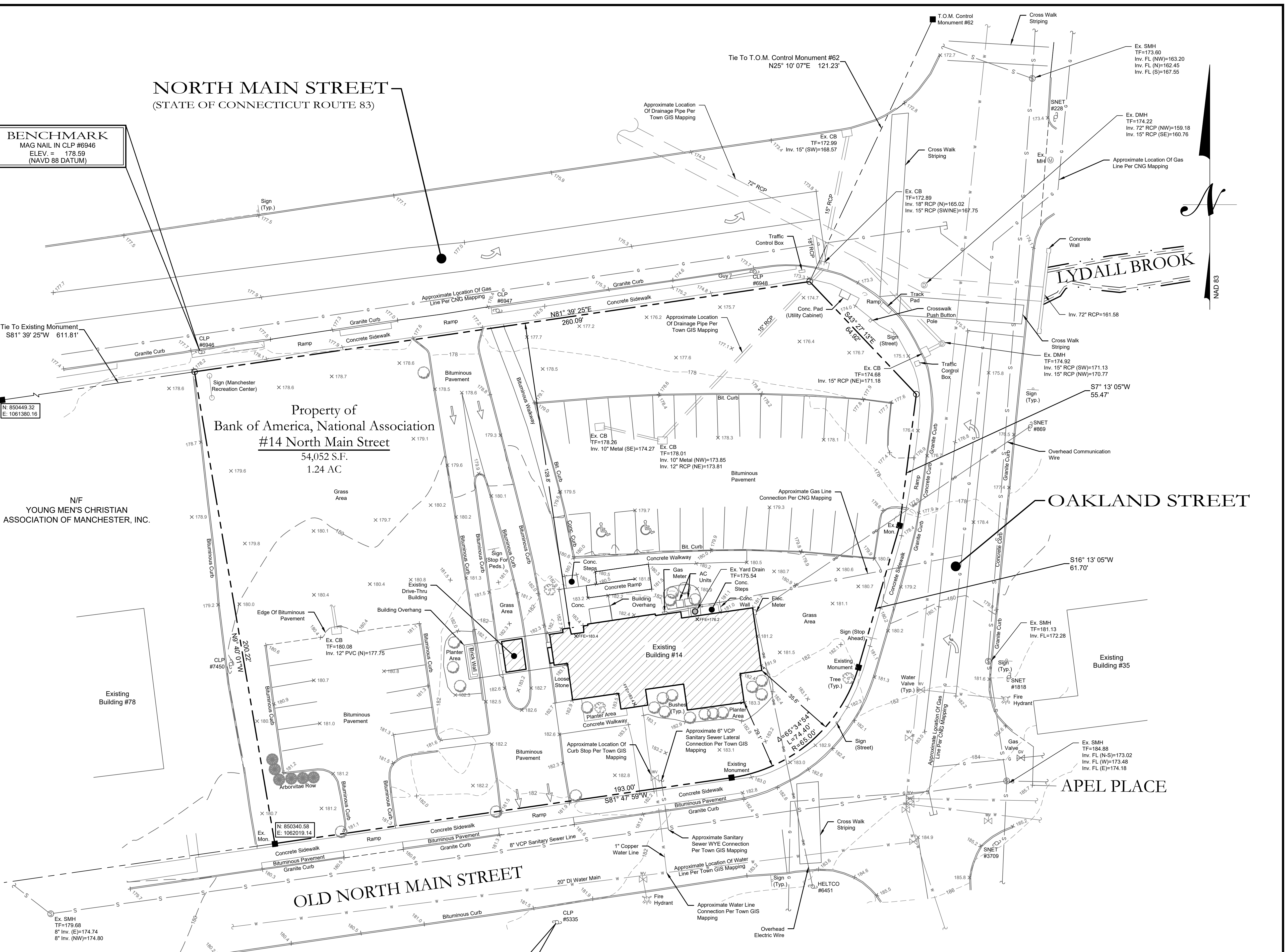
October 16, 2023 Scale: 1" = 20'

PROJECT #: 2521

cole
HARRY E. COLE & SON
engineering. surveying. planning.

876 South Main Street
P.O. Box 44
Plainville, CT 06479-0044

Tel: (860) 628-4484
Fax: (860) 620-0196
www.hecole.com



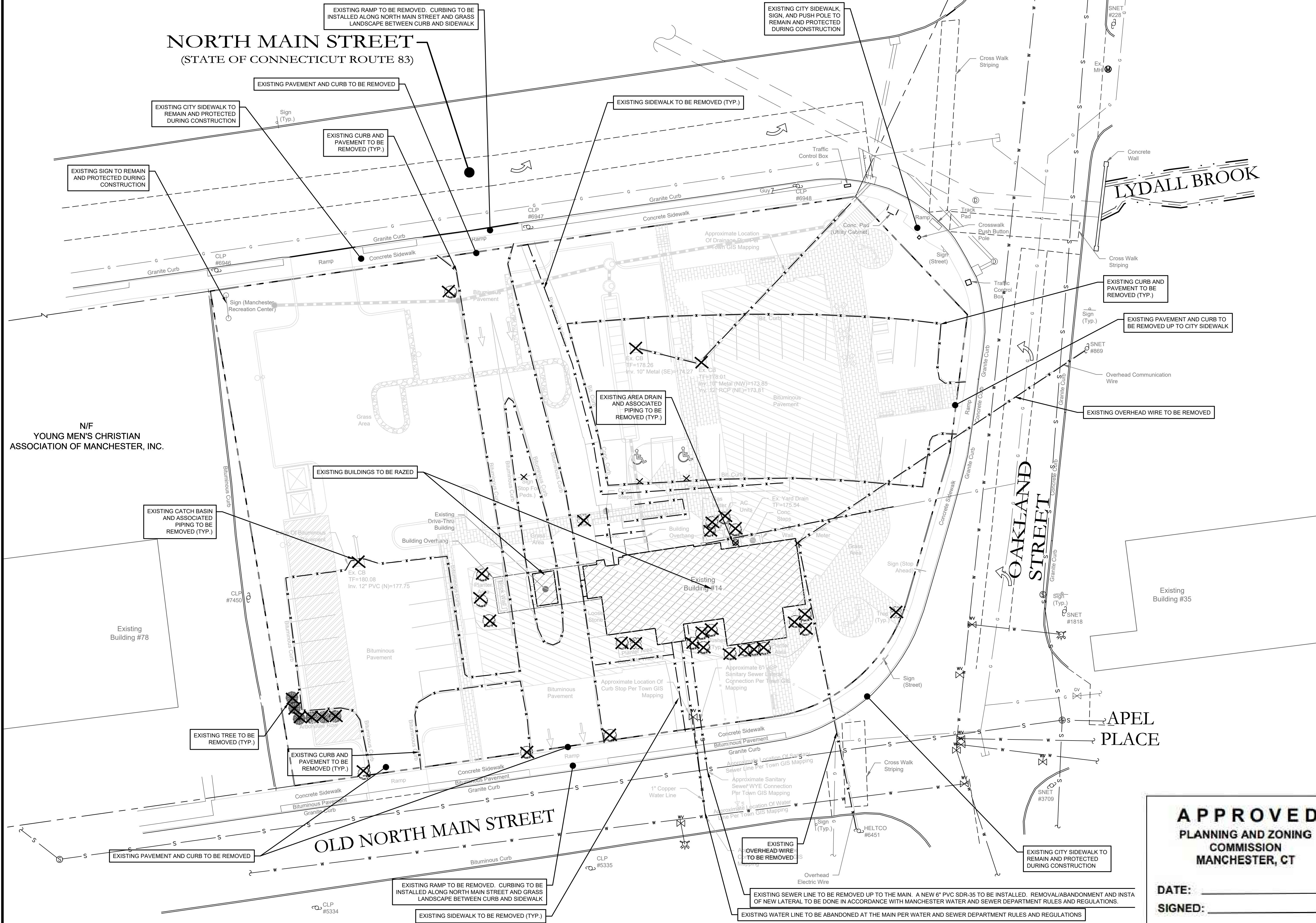
DRAWING NUMBER: DE-18-03-001-01 (REVISED) - North Main - Manchester, CT 06105 - 11/08/2024 - 11/08/2024

- REMOVALS / DEMOLITION PLAN NOTES:**
- Owner: 3 Squared, LLC
 - Applicant: 3 Squared, LLC
 - Street #: 14 North Main Street
 - All work in connection with this plan shall be completed within five years of the date of approval, or the approval is no longer valid.
 - Erosion and Sedimentation control shall conform to the "Connecticut Guidelines for Soil Erosion and Sediment Control" dated May 2002, and amended to date.
 - All site work shall conform to specifications as outlined in C.D.O.T. Form 818, dated 2021 and amended to date.
 - Any regulated activity in a designated Inland Wetland not a part of this plan shall require a separate Inland Wetland Permit.
 - Town of Manchester Planning and Engineering Departments to be notified at (860)-647-3044 and (860)-647-3152, 24 hours before site grading begins.
 - Prior to any excavation, contractor to notify "CALL BEFORE YOU DIG." 1-800-922-4455.
 - All existing utilities are from best available information, contractor to verify all locations, dimensions, and elevations prior to construction. Notify Engineer of any discrepancies.
 - Contractor to obtain a demolition permit prior to start of construction.
 - Contractor to coordinate with the Town of Manchester Water and Sewer Department to deliver the existing water meter prior to demolition of the building.
 - A CTDOT Encroachment Permit will be required for any work within the State Route 83 right of way.

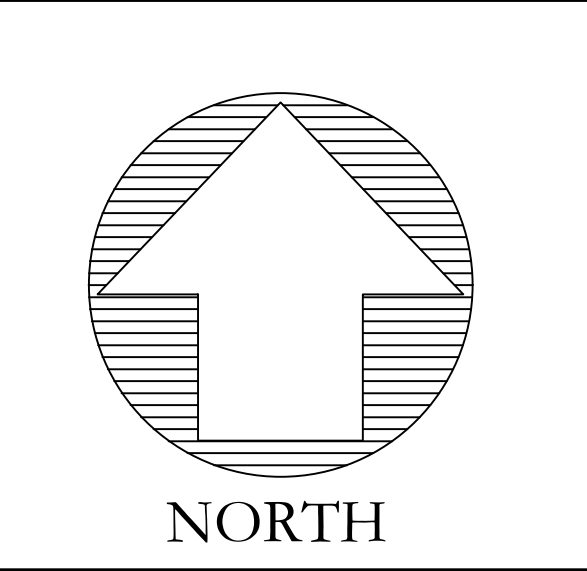
LEGEND

	= Existing utility pole		= Existing edge of pavement
	= Existing light pole		= Proposed curbing
	= Proposed Light		= Existing/Proposed well
	= Existing fire hydrant		= Existing catch basin
	= Proposed fire hydrant		= Existing drainage manhole
	= Existing water valve		= Existing sanitary manhole
	= Existing gas valve		= Proposed catch basin
	= Existing underground pipe		= Proposed manhole
	= Existing treeline		= Existing utility box
			= Proposed sidewalk ramp

	= Existing contour
	= Existing spot elevation
	= Proposed contour
	= Proposed spot elevation
	= Deep test location
	= Percolation test location
	= Grade to drain
	= Proposed Riprap
	= Proposed Drainage Pipe



Know what's below.
Call before you dig.



cole
HARRY E. COLE & SON
engineering. surveying. planning.

876 South Main Street Tel: (860) 628-4484
P.O. Box 44 Fax: (860) 620-0196
Plainville, CT 06479-0044 www.hecole.com

PROJECT NAME:
PROPOSED MIXED-USE DEVELOPMENT
14 North Main Street
Manchester, Connecticut

PREPARED FOR:
3 SQUARED, LLC

Sheet Description:
REMOVAL AND DEMOLITION PLAN

Scale:
20' 10' 0' 10' 20'
1"=20'

Date: December 20, 2023
Project #: 2521 F.B. #:
Drawn By: BTP Approved By: BNB

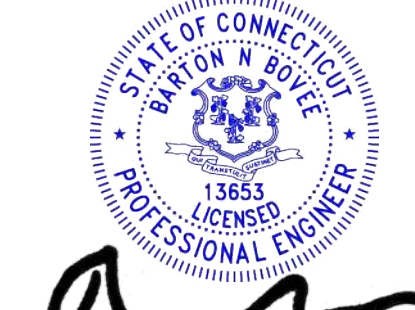
Revisions:

Date:	Descriptions:
02/05/2024	Revised per Town Comments

Sheet #:
R1

APPROVED
PLANNING AND ZONING
COMMISSION
MANCHESTER, CT

DATE: _____
SIGNED: _____



Barton N. Bovee P.E. #13653
Reg. No. NOT VALID UNLESS EMBOSSED SEAL OR STAMP IS AFFIXED HERETO

ZONING INFORMATION		
ITEM	REQUIRED	PROVIDED
ZONE	GB	GB
PROPOSED USE		MIXED USE (RESIDENTIAL AND COMMERCIAL)
LOT AREA	N/A	398,939 SF
LOT FRONTAGE	N/A	±919 FT
FRONT YARD SETBACK	25 FT	26 FT
SIDE YARD SETBACK	15 FT	N/A
REAR YARD SETBACK	30 FT	81.5 FT
MIN. BUILDING HEIGHT	2 STORIES (30 FT)	3 STORIES (≤ 50 FT)
MAX. BUILDING HEIGHT	3 STORIES (50 FT)	
MAX. BUILDING COVERAGE	60%	44.0%
OPEN SPACE RECREATIONAL AREA	250 SF PER RES. UNIT 8,250 SQ. FT. (MIN. 25% TENANT USE ONLY AND 25% USE TO ALL USERS)	4,200 SF ROOFTOP (RESIDENTS ONLY) & 200 SF SHARED USE AREAS 9,400 SF TOTAL

NOTES:
1. PER TOWN OF MANCHESTER ZONING REGULATIONS, SECTION 24.02.01.J.3.III.3. OPEN SPACE MAY INCLUDE BALCONIES OR ROOFTOP PATIOS/GARDENS

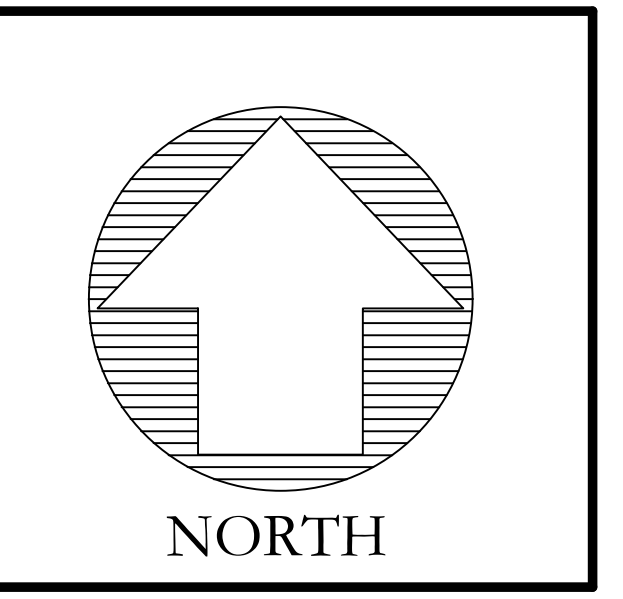
PARKING INFORMATION		
ITEM	REQUIRED	PROVIDED
PROPOSED BUILDING: RETAIL 4,250 SF (NET) 1 SPACE PER 250 S.F. NET	17	50
PROPOSED BUILDING: RESIDENTIAL 1-BEDROOM & STUDIO 1 SPACE PER UNIT	28	
PROPOSED BUILDING: RESIDENTIAL 2-BEDROOM 1 SPACE PER UNIT (MORE THAN 80% UNITS ARE STUDIO & 1-BED & WITHIN 1/2 MILE OF PUBLIC TRANSIT)	5	
HANDICAP PARKING	2	2
TOTAL # OF SPACES	50 (INCLUDING H.C.)	50 (INCLUDING H.C.)

NOTES:
1. PER TOWN OF MANCHESTER ZONING REGULATIONS, ARTICLE II, SECTION 24.02.01.J.4. RESIDENTIAL UNITS WITHIN 1/4 MILE RADIUS OF MASS TRANSIT AND UNIT MIX CONSIST OF 50% OR MORE 1 BEDROOM UNITS. THE MINIMUM PARKING RATIO IS 1 SPACE PER DWELLING UNIT.
1.1. THE PROPOSED PROJECT CONSIST OF 28 ONE-BEDROOM AND STUDIO APARTMENTS AND 5 TWO-BEDROOM. THE ONE-BEDROOM/STUDIO CONSIST OF 85% OF THE APARTMENTS.
2. PER CT PUBLIC ACT 22-25, AT LEAST 10% OF PROPOSED PARKING SPACES ARE TO BE EQUIPPED WITH EV CHARGING STATIONS.
2.1. IN ACCORDANCE WITH PA 22-25 (CONNECTICUT CLEAN AIR ACT) THIS DEVELOPMENT SHALL INCLUDE ELECTRIC VEHICLE CHARGING INFRASTRUCTURE THAT IS CAPABLE OF SUPPORTING LEVEL TWO ELECTRIC VEHICLE CHARGING STATIONS OR DIRECT CURRENT FAST CHARGING STATIONS IN AT LEAST TEN PERCENT OF THE PARKING SPACES



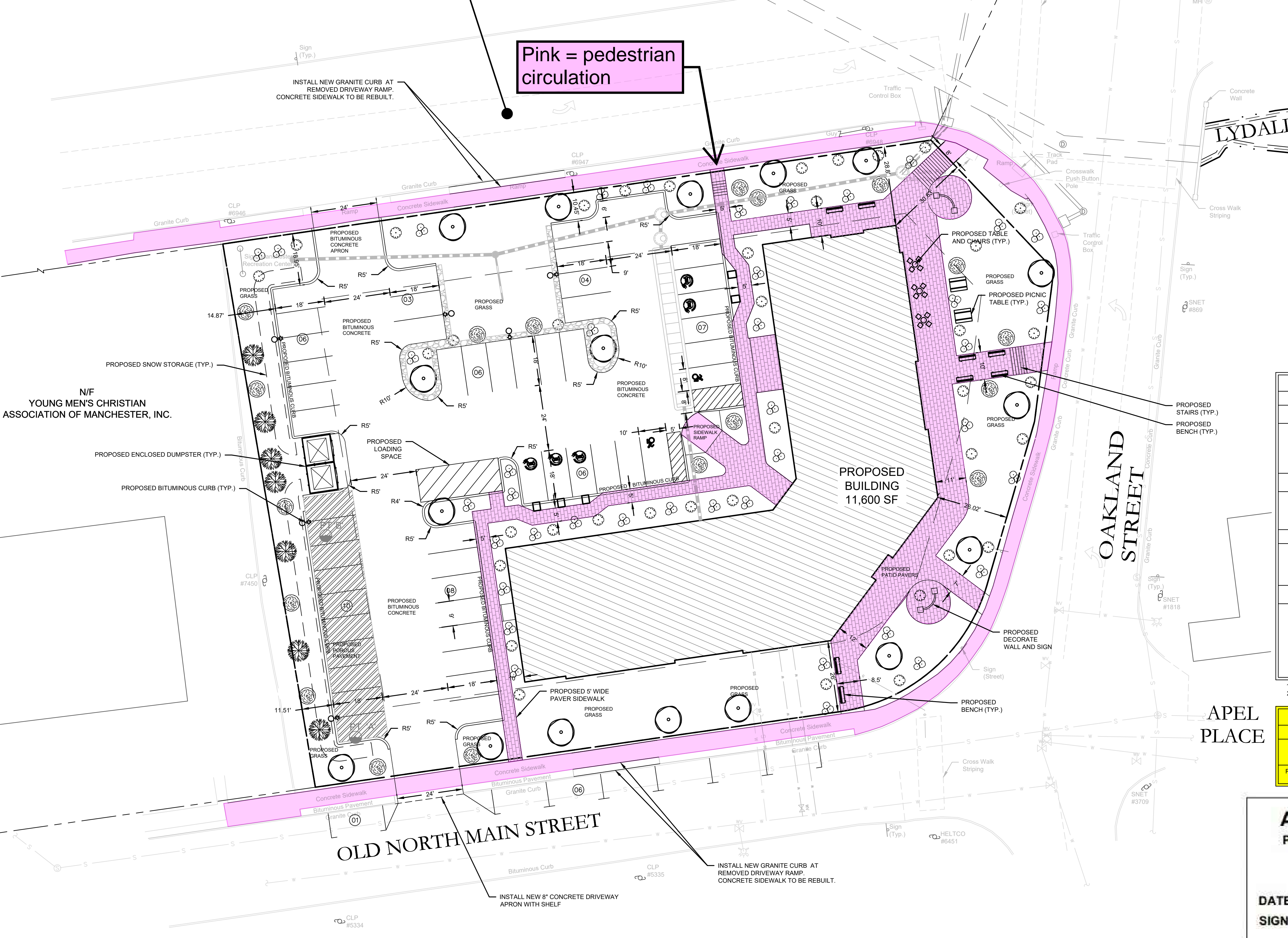
LEGEND

- Existing utility pole
- Existing light pole
- Proposed Light
- Existing fire hydrant
- Proposed fire hydrant
- Existing water valve
- Existing gas valve
- Existing underground pipe
- Existing treeline
- Existing edge of pavement
- Proposed curbing
- Existing/Proposed well
- Existing catch basin
- Existing drainage manhole
- Existing sanitary manhole
- Proposed catch basin
- Proposed manhole
- Existing utility box
- Proposed sidewalk ramp
- Existing contour
- Existing spot elevation
- Proposed contour
- Proposed spot elevation
- Deep test location
- Percolation test location
- Grade to drain
- Proposed Riprap
- Proposed Drainage Pipe



NORTH MAIN STREET
(STATE OF CONNECTICUT ROUTE 83)

Pink = pedestrian circulation



- SITE PLAN NOTES:**
- Owner: 3 Squared, LLC
 - Applicant: 3 Squared, LLC
 - Street #: 14 North Main Street
 - Area of Parcel: 398,939 SF - 9.16 Acres
 - Parcel is zoned: GB - General Business
 - Present use: Bank/Financial
 - Proposed use: Mixed Use (Residential and Commercial)
 - No Wetlands are present by an intermittent watercourse.
 - All work in connection with this plan shall be completed within five years of the date of approval, or the approval is no longer valid.
 - Erosion and Sedimentation control shall conform to the "Connecticut Guidelines for Soil Erosion and Sediment Control" dated May 2002, and amended to date.
 - All site work shall conform to specifications as outlined in C.D.O.T. Form 818, dated 2021 and amended to date.
 - Any regulated activity in a designated Inland Wetland not a part of this plan shall require a separate Inland Wetland Permit.
 - All areas disturbed by construction to be restored with 4" of loam and seeded.
 - All exterior light fixtures shall be LED and full cutoff fixtures with recessed lenses.
 - Underground fuel tanks are prohibited.
 - Town of Manchester Planning and Engineering Departments to be notified at (860)-647-3044 and (860)-647-3152, 24 hours before site grading begins.
 - Prior to any excavation, contractor to notify "CALL BEFORE YOU DIG," 1-800-922-4455.
 - All existing utilities are from best available information, contractor to verify all locations, dimensions, and elevations prior to construction. Notify Engineer of any discrepancies.
 - No floor drains are proposed. Floor drains are not allowed without obtaining Connecticut DEEP permits.
 - Building permit required for construction of retaining walls over 3-ft tall. Design of retaining walls shall be provided by structural/geotechnical engineer prior to construction of walls.
 - Location of snow storage is shown on this plan. Should the volume of accumulated snow exceed the capacity of the onsite storage as shown on this plan, the excess snow shall be disposed of off-site in accordance with all local, state and federal laws.
 - All materials and methods of construction within the Town right-of-way and for proposed utilities shall conform to the Manchester Public Improvement Standards, effective October 31, 2020, as amended.
 - A CTDOT Encroachment Permit will be required for any work within the State Route 83 right of way.
 - Record drawings shall be submitted to the Town of Manchester Engineering Division in accordance with Section 5.01 of the Manchester Public Improvement Standards upon completion of the work. The drawings shall be in a form acceptable to the Engineering Division and shall be approved prior to final acceptance of the project. The Contractor shall be responsible for procuring all information necessary to generate drawings and for providing the actual drawings to the Town.
 - In accordance with Town of Manchester Ordinance 14-57, the Contractor shall replace all broken or damaged sidewalk and curbs along the frontage of the property as directed by the Town.
 - An approved erosion control bond is required prior to the start of any construction activity.
 - Individual residential and commercial unit street addresses will be designated by the Town once the Planning & Zoning permit application is complete and approved

PLANT LIST

SYM.	QTY.	SCIENTIFIC NAME	COMMON NAME	CONDITION
SHADE TREES				
17		QUERCUS RUBRA	RED OAK	B & B, 3" CAL.
		ACER RUBRUM	RED MAPLE	B & B, 3" CAL.
		TILIA TOMENTOSA	SILVER LINDEN	B & B, 3" CAL.
		PRUNUS PENSYLVANICA	WILD RED CHERRY	B & B, 3" CAL.
DECIDUOUS TREES				
18		MORUS RUBRA	RED MULBERRY	B & B, 3" CAL.
		CERCIS CANADENSIS	REDBUD	B & B, 3" CAL.
		DIOSPYROS VIRGINIANA	COMMON PERSIMMON	B & B, 3" CAL.
EVERGREEN TREES				
7		PINUS RIGIDA	RED PINE	B & B, 3" CAL.
		PICEA MARIANA	BLACK SPRUCE	B & B, 3" CAL.
		TSUGA CANADENSIS	EASTERN HEMLOCK	B & B, 3" CAL.
SHRUBS				
79		ILEX VERTICILLATA	COMMON WINTERBERRY	B&B, 18-24" HT.
		ARONIA ARBUTIFOLIA	RED CHOKEBERRY	3 GAL. HEAVY, FULL
		RHODODENDRON CANADENSE	RHODODENDRON	3 GAL. HEAVY, FULL
		VIBURNUM CASSINOIDES	WITHEROD VIBURNUM	3 GAL. HEAVY, FULL
		VACCINIUM CORYMBOSUM	HIGHBUSH BLUEBERRY	2-3 FT
		JUNIPERUS COMMUNIS	COMMON JUNIPER	2-3 FT

LANDSCAPING INFORMATION

ITEM	REQUIRED	PROVIDED
STREET TREES	1 SHADE / 50 LINEAR FEET FRONTAGE (709.58 FT. - 48 FT DRIVEWAY OPENING = 661.58 LF) = 14 TREES	14 SHADE TREES
REQUIRED 20 SQ. FT. OF LANDSCAPE PER PARKING SPACE	1,000 SQFT (50 SPACES)	> 7,000 SQFT

APPROVED
PLANNING AND ZONING
COMMISSION
MANCHESTER, CT

DATE: _____
SIGNED: _____

Barton N. Bovee P.E.
Reg. No. #13653
NOT VALID UNLESS EMBOSSED SEAL OR STAMP IS AFFIXED HERETO

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HARRY E. COLE & SON
engineering, surveying, planning.

876 South Main Street
P.O. Box 44
Plainville, CT 06479-0044

Tel: (860) 628-4484
Fax: (860) 620-0196
www.hecole.com

PROJECT NAME:
PROPOSED MIXED-USE DEVELOPMENT

14 North Main Street
Manchester, Connecticut

PREPARED FOR:
3 SQUARED, LLC

Sheet Description:
SITE LAYOUT AND LANDSCAPING PLAN

Scale: 1"=20'
Date: December 20, 2023
Project #: 2521 F.B. #:
Drawn By: BTP Approved By: BNB

Sheet #:
C1

- SITE PLAN NOTES:**
- See Sheet C1 for additional information.
 - Site to be serviced by town water and sewer.
 - Contractor to coordinate with all local utility companies prior to the start of construction.
 - Proposed roof drains of the additional are to be collected and routed to the retention basin. Basin to be Culltec Recharger 360HD or approved equal. Chambers/System to be H2O loaded.
 - All Catch Basins/Inlets shall be cleaned prior to occupancy.
 - Maximum earth slopes shall be two feet horizontal to one foot vertical.
 - Sanitary service connection for domestic/office waste only. No industrial waste shall be discharged.
 - All existing utilities are from best available information, contractor to verify all locations, dimensions, and elevations prior to construction. Notify Engineer of any discrepancies.
 - All existing utilities are to remain and protected during construction. Existing meters and other apparatus may need to be relocated to locations along the proposed addition.
 - Proposed Yard Drain #5 to be constructed with 4ft sumps and hooded outlets.
 - All Proposed Doghouse Manhole #1, the downstream pipe is to remain, CCTV inspected, and cleaned out as necessary. Remaining upstream pipe to be removed.
 - Proposed sanitary lateral to be owned and maintained by the building owner.
 - All materials and methods of construction within the Town right-of-way and for proposed utilities shall conform to the Manchester Public Improvement Standards, effective October 31, 2020, as amended.
 - A CTDOT Encroachment Permit will be required for any work within the State Route 83 right of way.
 - Record drawings shall be submitted to the Town of Manchester Engineering Division in accordance with Section 5.01 of the Manchester Public Improvement Standards upon completion of the work. The drawings shall be in a form acceptable to the Engineering Division and shall be approved prior to final acceptance of the project. The Contractor shall be responsible for procuring all information necessary to generate drawings and for providing the actual drawings to the Town.
 - In accordance with Town of Manchester Ordinance 14-57, the Contractor shall replace all broken or damaged sidewalk and curbs along the frontage of the property as directed by the Town.
 - An approved erosion control bond is required prior to the start of any construction activity.
 - The proposed stormwater collection system, underground detention system and Low Impact Development treatment system(s) are to be privately owned and that maintenance will be the responsibility of the property owner.

SOIL TEST DATA

Percolation Test Data:
Date: 02/02/2024
By: Cole Civil & Survey

Percolation Test Data:

Time	Water Level
1:00pm	27.5"
1:10pm	31.5"
1:20pm	34.25"
1:30pm	36.25"
1:40pm	37.75"
1:50pm	39.25"
2:00pm	40.75"

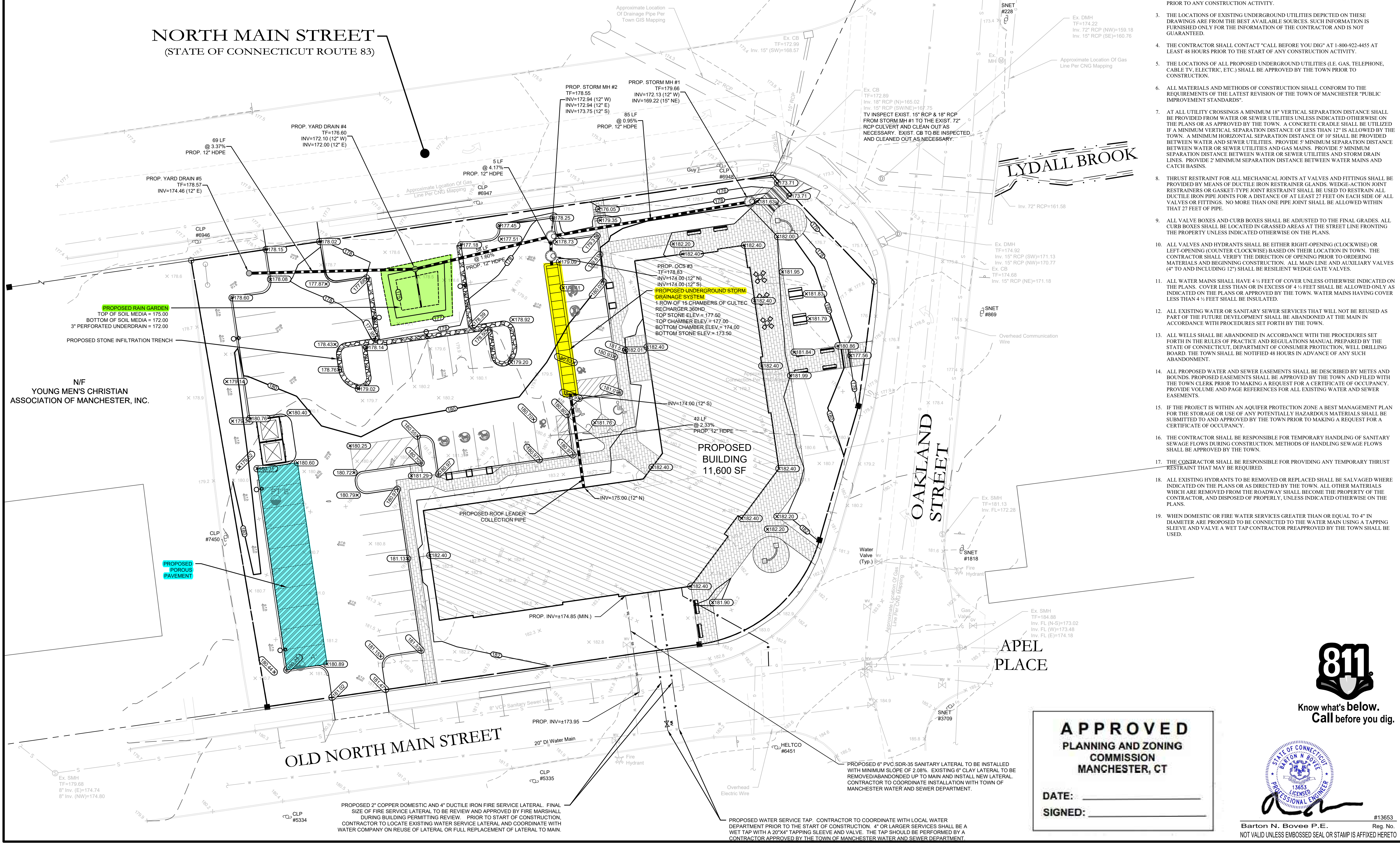
Percolation Test Data:

Time	Water Level
1:05pm	30.5"
1:15pm	34.25"
1:25pm	36.25"
1:35pm	38.25"
1:45pm	39.75"
1:55pm	40.75"
2:05pm	41.75"

LEGEND

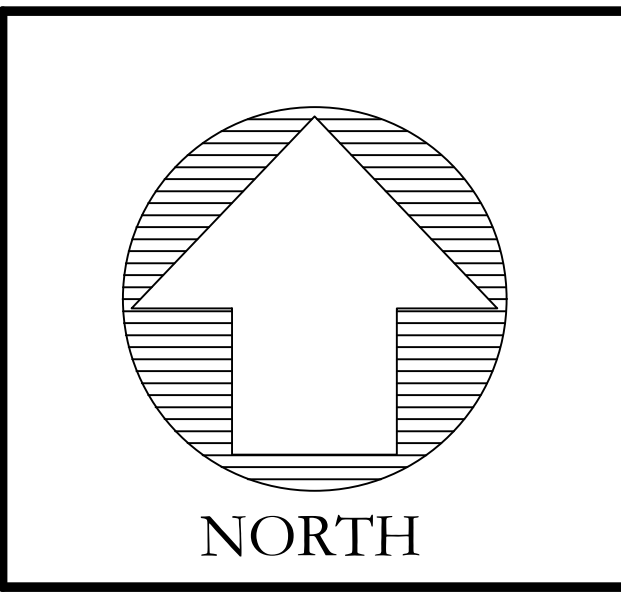
	= Existing utility pole		= Existing contour
	= Existing light pole		= Existing spot elevation
	= Proposed Light		= Existing contour
	= Existing fire hydrant		= Proposed spot elevation
	= Proposed fire hydrant		= Deep test location
	= Existing water valve		= Percolation test location
	= Existing gas valve		= Grade to drain
	= Existing underground pipe		= Proposed Riprap
	= Existing treeline		= Proposed Drainage Pipe

NORTH MAIN STREET
(STATE OF CONNECTICUT ROUTE 83)



TOWN OF MANCHESTER WATER AND SANITARY SEWER CONSTRUCTION NOTES FOR PERCOLATION

- A PRECONSTRUCTION MEETING WITH TOWN STAFF IS REQUIRED PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS PRIOR TO ANY CONSTRUCTION ACTIVITY.
- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES DEPICTED ON THESE DRAWINGS ARE FROM THE BEST AVAILABLE SOURCES. SUCH INFORMATION IS FURNISHED ONLY FOR THE INFORMATION OF THE CONTRACTOR AND IS NOT GUARANTEED.
- THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT 1-800-922-4455 AT LEAST 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY.
- THE LOCATIONS OF ALL PROPOSED UNDERGROUND UTILITIES (I.E. GAS, TELEPHONE, CABLE TV, ELECTRIC, ETC.) SHALL BE APPROVED BY THE TOWN PRIOR TO CONSTRUCTION.
- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST REVISION OF THE TOWN OF MANCHESTER "PUBLIC IMPROVEMENT STANDARDS".
- AT ALL UTILITY CROSSINGS A MINIMUM 18" VERTICAL SEPARATION DISTANCE SHALL BE PROVIDED FROM WATER OR SEWER UTILITIES UNLESS INDICATED OTHERWISE ON THE PLANS OR AS APPROVED BY THE TOWN. A CONCRETE CRADLE SHALL BE UTILIZED IF A MINIMUM VERTICAL SEPARATION DISTANCE OF LESS THAN 12" IS ALLOWED BY THE TOWN. A MINIMUM HORIZONTAL SEPARATION DISTANCE OF 10" SHALL BE PROVIDED BETWEEN WATER AND SEWER UTILITIES. PROVIDE 5" MINIMUM SEPARATION DISTANCE BETWEEN WATER AND SEWER UTILITIES AND GAS MAINS. PROVIDE 5" MINIMUM SEPARATION DISTANCE BETWEEN WATER AND STORM DRAIN LINES. PROVIDE 2" MINIMUM SEPARATION DISTANCE BETWEEN WATER MAINS AND CATCH BASINS.
- THRUST RESTRAINT FOR ALL MECHANICAL JOINTS AT VALVES AND FITTINGS SHALL BE PROVIDED BY MEANS OF DUCTILE IRON RESTRAINER GLANDS. WEDGE-ACTION JOINT RESTRAINERS OR GASKET-TYPE JOINT RESTRAINT SHALL BE USED TO RESTRAIN ALL DUCTILE IRON PIPE JOINTS FOR A DISTANCE OF AT LEAST 27 FEET ON EACH SIDE OF ALL VALVES OR FITTINGS. NO MORE THAN ONE PIPE JOINT SHALL BE ALLOWED WITHIN THAT 27 FEET OF PIPE.
- ALL VALVE BOXES AND CURB BOXES SHALL BE ADJUSTED TO THE FINAL GRADES. ALL CURB BOXES SHALL BE LOCATED IN GRASSED AREAS AT THE STREET LINE FRONTING THE PROPERTY UNLESS INDICATED OTHERWISE ON THE PLANS.
- ALL VALVES AND HYDRANTS SHALL BE EITHER RIGHT-CLOCKWISE (CLOCKWISE) OR LEFT-OPENING (COUNTER CLOCKWISE) BASED ON THEIR LOCATION IN TOWN. THE CONTRACTOR SHALL VERIFY THE DIRECTION OF OPENING PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. ALL MAIN LINE AND AUXILIARY VALVES (4" TO AND INCLUDING 12") SHALL BE RESILIENT WEDGE GATE VALVES.
- ALL WATER MAINS SHALL HAVE A 4 1/2 FEET OF COVER UNLESS OTHERWISE INDICATED ON THE PLANS. COVER LESS THAN OR IN EXCESS OF 4 1/2 FEET SHALL BE ALLOWED ONLY AS INDICATED ON THE PLANS OR APPROVED BY THE TOWN. WATER MAINS HAVING COVER LESS THAN 4 1/2 FEET SHALL BE INSULATED.
- ALL EXISTING WATER OR SANITARY SEWER SERVICES THAT WILL NOT BE REUSED AS PART OF THE FUTURE DEVELOPMENT SHALL BE ABANDONED AT THE MAIN IN ACCORDANCE WITH PROCEDURES SET FORTH BY THE TOWN.
- ALL WELLS SHALL BE ABANDONED IN ACCORDANCE WITH THE PROCEDURES SET FORTH IN THE RULES OF PRACTICE AND REGULATIONS MANUAL PREPARED BY THE STATE OF CONNECTICUT, DEPARTMENT OF CONSUMER PROTECTION, WELL DRILLING BOARD. THE TOWN SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF ANY SUCH ABANDONMENT.
- ALL PROPOSED WATER AND SEWER EASEMENTS SHALL BE DESCRIBED BY METES AND BOUNDS. PROPOSED EASEMENTS SHALL BE APPROVED BY THE TOWN AND FILED WITH THE TOWN CLERK PRIOR TO MAKING A REQUEST FOR A CERTIFICATE OF OCCUPANCY. PROVIDE VOLUME AND PAGE REFERENCES FOR ALL EXISTING WATER AND SEWER EASEMENTS.
- IF THE PROJECT IS WITHIN AN AQUIFER PROTECTION ZONE A BEST MANAGEMENT PLAN FOR THE STORAGE OR USE OF ANY POTENTIALLY HAZARDOUS MATERIALS SHALL BE SUBMITTED TO AND APPROVED BY THE TOWN PRIOR TO MAKING A REQUEST FOR A CERTIFICATE OF OCCUPANCY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY HANDLING OF SANITARY SEWAGE FLOWS DURING CONSTRUCTION. METHODS OF HANDLING SEWAGE FLOWS SHALL BE APPROVED BY THE TOWN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY TEMPORARY THRUST RESTRAINT THAT MAY BE REQUIRED.
- ALL EXISTING HYDRANTS TO BE REMOVED OR REPLACED SHALL BE SALVAGED WHERE INDICATED ON THE PLANS OR AS DIRECTED BY THE TOWN. ALL OTHER MATERIALS WHICH ARE REMOVED FROM THE ROADWAY SHALL BECOME THE PROPERTY OF THE CONTRACTOR, AND DISPOSED OF PROPERLY, UNLESS INDICATED OTHERWISE ON THE PLANS.
- WHEN DOMESTIC OR FIRE WATER SERVICES GREATER THAN OR EQUAL TO 4" IN DIAMETER ARE PROPOSED TO BE CONNECTED TO THE WATER MAIN USING A TAPPING SLEEVE AND VALVE A WET TAP CONTRACTOR PREAPPROVED BY THE TOWN SHALL BE USED.



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engineering. surveying. planning.

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Plainville, CT 06479-0044

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Fax: (860) 620-0196
www.hecole.com

PROJECT NAME:
PROPOSED MIXED-USE DEVELOPMENT

14 North Main Street
Manchester, Connecticut

PREPARED FOR:
3 SQUARED, LLC

Sheet Description:
SITE DEVELOPMENT PLAN

Scale: 1"=20'

Date: December 20, 2023

Project #: 2521 F.B. #:
Drawn By: BTP Approved By: BNB

Revisions:
Date: 02/05/2024 Descriptions: Revised per Town Comments

Sheet #:
C2

APPROVED
PLANNING AND ZONING COMMISSION
MANCHESTER, CT

DATE: _____
SIGNED: _____

811
Know what's below.
Call before you dig.

STATE OF CONNECTICUT
BARTON N. BOVEE
1863
LICENSED PROFESSIONAL ENGINEER

Barton N. Bovee P.E.
Reg. No. #13653
NOT VALID UNLESS EMBOSSED SEAL OR STAMP IS AFFIXED HERETO

DRAWING NAME: D:\B\C\c\and\soil\14-57-241 - North Main - Manchester\14-57-241 - North Main - Manchester.dwg DATE: 02/02/2024 11:49am OPERATOR: csm

SOIL EROSION AND SEDIMENT CONTROL NARRATIVE:

A. PROJECT INFORMATION

1. Project Description - The project site consists of one 1.24 acre parcel on 14 North Main Street in Manchester, CT.
2. Area Proposed Disturbance Due to Construction Activities - 1.3x Acres Total.
3. Estimated Start of Construction - Spring 2024.
4. Estimated Construction Completion Date - Summer 2026.

B. SEQUENCE OF CONSTRUCTION

The tentative sequence of construction events are as follows and activities noted by a "Capital Letter" may occur concurrently.

1. Conduct a pre-construction meeting with the OWNER, Contractor, Consultant Team, and Local, County and State agencies having jurisdiction over the project.
2. Field stakeout the limits of all activities and at a minimum identify the construction limit lines along environmentally sensitive and tree protection areas. Silt fencing may be used where it coincides with this line, but only as approved by the OWNER. (A)
3. Install silt fence along sides of contiguous to wetlands, watercourses and property owned by others affected by the work. Refer to the Soil Erosion and Sedimentation Control Plan for locations. (A)
4. Construct detention basins and stabilize immediately following construction. All slopes greater than 3:1 to be matted or hydro seeded with tackifier.
5. Prior to and after each rain storm monitor the sedimentation and erosion control structures, which may include riprap channels, sediment basins, plunge pools, etc. Routinely remove sediment during construction when controls exceed one half (1/2) their capacity. Sediment shall be disposed of in an environmentally acceptable manner at an approved location. (A)
6. Clear vegetation within project limits, except trees designated to remain or in question, as shown on the plans. The decision of how questionable trees are to be treated shall rest with the OWNER and coordinated through the local agency having jurisdiction as construction progresses. All trees and shrubs less than 6" in diameter, and not to remain, shall be chipped and stored on site for mulch. (A)
7. Remove stumps and dispose of at a bulky waste site approved by the ENGINEER and local official having jurisdiction. Disposal of stumps within burial pits on-site shall be prohibited. (B)
8. Construct all temporary sedimentation and erosion control structures, including but not limited to: silt fence, stone check dams and water breaks. All structures and their locations shall be approved by the ENGINEER or the Inland Wetlands Enforcement Officer. Prior to the next phase of construction. (B)
9. Install drainage outfall pipe and temporary sediment basin along with temporary drainage diversions to sediment basin.
10. Strip topsoil and subsoil materials as required and stockpile them at locations that will not adversely impact any down gradient wetlands. Stockpiles may be relocated to meet job conditions but are subject to the ENGINEER'S approval. Provide temporary erosion controls on the downslope of all stockpiles. (B)
11. Bring proposed site entrance surface areas to rough subgrade.
12. Conduct all rough cuts and fills for proposed houses, roads and utility installations. Making sure that all fill material is free of brush, rubbish, large boulders, logs, stumps and other objectionable materials. (C)
13. If blasting is required for any cuts, all proposed work is to be coordinated with all local officials having jurisdiction. The contractor is required to secure all permits for blasting operations in accordance with local and state regulations and conduct a pre-blast survey of surrounding properties. Rock spoil is to be disposed of in an appropriate manner as the site development plan may show or is locally permitted. (C)
14. Provide temporary seeding measures on all exposed soil which were damaged due to construction activities, are outside of construction traffic zones, and are not to be permanently restored or for a period in excess of thirty (30) days. Seeding and seedbed preparation are as specified herein or as indicated on the landscape plan. (C)
15. Excavate for and install storm drainage systems. Install haybale ring sediment barriers at all catch basin locations. (C)
16. Excavate for and install utilities. (C)
17. Bring proposed proposed roadway areas to pavement subgrade with processed stone and install binder course and curbing. Refer to details. (D)
18. Construct all driveway entrance improvements as indicated on plans. (E)
19. Exercise final long-term stabilization. (E)
20. Complete final paving with top course. (E)
21. Clean and remove all silt from within drainage structures and dispose of materials in an environmentally acceptable manner. (F)
22. Remove temporary measures once permanent measures have matured as approved by the Municipality's enforcement officer. (F)
23. Conduct final inspection with Municipality to identify deficiencies and establish punch list based on approved plans; complete to the satisfaction of the Municipality.
24. Construction Staging:
 - a. Stage #1 - Rough grade site, stabilize steep slopes. Construct temporary sedimentation control measures, detention and retention basins.
 - b. Stage #2 - Install subsurface storm water systems, install underground utilities and first coat pavement.
 - c. Stage #3 - Finish grade site and loam and seed all disturbed areas.
25. All dewatering to be directed into filter bags.

C. RESPONSIBILITY

1. The responsibility for implementing and maintaining the Soil Erosion and Sedimentation Control Plan rests with the OWNER OF RECORD where any development of the parcel gives cause to erosion and sedimentation. It is also to be said that the OWNER OF RECORD shall be held responsible for informing all concerned regarding responsibility of the SE&S plan and seeing that the plan becomes a part of the deed in the event the title of the property is transferred. The costs of all drainage erosion and sedimentation control measures will therefore rest with the OWNER OF RECORD.
2. Contact Person: 3 Squared, LLC Contact Phone: (860) 919-7078

GENERAL NOTES:

1. Additional notes and details are located on Sheet ES2.
2. At all times during construction, the Developer/Contractor shall be responsible for preventing and controlling on-site erosion including keeping the property sufficiently watered so as to minimize wind blown sediment. The Developer/Contractor shall also be responsible for installing and maintaining all erosion control facilities shown herein.
3. All soils exposed during land disturbing activity (stripping, grading, utility installations, stockpiling, filling, etc.) shall be kept in a roughened condition by ripping or disking along land contours until mulch, vegetation, or other permanent erosion control BMPs are installed. No soils in areas outside project street rights-of-way and future pavement shall remain exposed by land disturbing activity for more than thirty (30) days before required temporary or permanent erosion control (e.g. watering, seed/mulch, landscaping, etc.) is installed, unless otherwise approved by the Town Engineer.
4. All inlets shall be cleaned prior to occupancy.
5. All slopes greater than 3:1 shall be protected with Erosion Control Blankets (S150 by North American Green or approved equal) or Hydroseeded with Tackifier.
6. All erosion control measures shall remain intact and operational until the site has been stabilized and vegetation is thoroughly established. This may occur after completion of construction, therefore it is critical for the Developer, Contractor and/or Owner to understand the erosion control responsibilities and maintain the erosion control measures.
7. To minimize erosion of the sandy soils, vegetation shall be established immediately following completion of grading within each area. Vegetation may consist of temporary seeding or final loam and seed.
8. If areas of work are not addressed by this plan or sediment or erosion issues arise in areas not covered by this plan, then the plan shall be augmented in the field. Contractor shall be responsible to insure no sediment or erosion problems encroach upon abutting property. This may require additional barriers, swales and bales.
9. All erosion and sediment control measures shall conform to the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control manual.

**STORMWATER MANAGEMENT MAINTENANCE SCHEDULE
MANCHESTER, CONNECTICUT**

The following are the required maintenance and monitoring procedures.

- Riprap and Discharge Aprons** - Shall be cleared of all sediment deposits and invasive plant species and are to be inspected for rip-rap damage and deterioration. These procedures to be conducted yearly between May 1 and before September 15.
- Catch Basins** - All basin rim areas and sumps shall be cleaned of all sediment, trash and debris. These procedures to be conducted yearly anytime after May 1 and before September 15.
- Swales** - all swales be cleared of all sediment deposits, invasive plant species and debris. Any erosion shall be repaired. These procedures to be conducted annually. Swales shall be inspected two times a year and after significant rainfall events. Additional maintenance, beyond schedule maintenance, may be required based upon inspections.
- Underground Storage Chambers** - The underground storage chambers shall be inspected quarterly and cleaned of all sediment, trash and debris. These procedures to be conducted at minimum yearly anytime after May 1 and before September 15, or as necessary depending on condition following inspections.
- Rain Garden / Detention Basin** - Basin shall be cleared of all sediment deposits, invasive plant species and debris. These procedures to be conducted yearly between May 1 and September 15. Basin shall be inspected two times a year and after significant rainfall events. Additional maintenance, beyond scheduled maintenance, may be required based upon inspections.
- Slopes** - Slope erosion control blankets and vegetation shall be inspected twice a year and after significant rainfall events. Additional maintenance, beyond schedule maintenance, may be required based upon inspections. Any rills or channeling shall be repaired immediately.
- Parking Lot/Drive Sweeping** - Use mechanical sweeping on paved areas where dust and fine materials accumulate. These procedures to be conducted yearly anytime after May 1 and before September 15. All sediment deposits, trash and debris shall be removed to a location off-site and disposed of in an environmentally acceptable manner.
- Porous Pavement** - System shall be inspected for dewatering between storms and cleared of all sediment deposits and debris on a monthly basis. The upland and adjacent grassy and landscaped areas shall be maintained and any sediment or mulch that spills onto the porous pavement will be blown, swept or vacuumed as required. The pavement should be vacuumed at least twice a year, once prior and once after the winter season. Additional maintenance, beyond scheduled maintenance, may be required based upon inspections.
- The following requirements will help assure that the previous pavement system is maintained to preserve its effectiveness:
- i. Inspection of site shall occur monthly for the first few months after construction. Then inspections can occur on an annual basis, preferably after rain events when clogging can occur and be obvious. Permeable pavement requires minimal maintenance; however maintenance is absolutely necessary to ensure a proper working system.
 - ii. Asphalt seal coating is absolutely forbidden. Surface seal coating is not reversible.
 - iii. Street sweepers with vacuums, water, and brushes can be used to restore permeability. Follow sweeping with high-pressure hosing of the surface pores. Surface should be vacuumed 4 times per year, and at any additional times sediment is spilled, eroded, or tracked onto the surface.
 - iv. Planted areas adjacent to porous pavement should be well maintained to prevent soil washout onto the pavement. If any bare spots or eroded areas are observed within the planted areas, they should be replanted and/or stabilized at once.
 - v. Immediately clean any soil deposited on pavement. Superficial dirt does not necessarily clog the voids. However, dirt that is ground in repeatedly by tires can lead to clogging. Therefore, trucks or other heavy vehicles should be prevented from tracking or spilling dirt onto the pavement.
 - vi. Do not allow construction staging, soil/mulch storage, etc. on unprotected pavement surface.
 - vii. No winter sanding. Mechanical snow and ice removal preferred.
 - viii. Deicing is permitted on porous pavement in the winter. Minimize application of salt by reducing the application by 50% over traditional pavement.
 - ix. Written and verbal communication to the porous pavement's future owner should make clear the special purpose and special maintenance requirements such as those listed here.
- All sediment deposits, trash and debris shall be removed to a location off-site and disposed of in an environmentally acceptable manner.

TEMPORARY STORMWATER MANAGEMENT MAINTENANCE SCHEDULE (DURING CONSTRUCTION)

The following are the required maintenance and monitoring procedures

Swales - All swales shall be mowed and be cleared of all sediment deposits, invasive plant species and debris. These procedures shall be conducted monthly. Swales shall be inspected weekly and after significant rainfall events. Additional maintenance, beyond scheduled maintenance, may be required based upon inspections.

Catch Basins - All basin rim areas and sumps shall be cleaned of all sediment, trash and debris. These procedures shall be conducted monthly. Basins shall be inspected weekly and after significant rainfall events. Additional maintenance, beyond scheduled maintenance, may be required based upon inspections.

Slopes - Stabilized slopes are essential to preventing sediment movement. Any channels of concentrated flow, such as hills, shall be fixed immediately. Additional control measures, such as bales, riprap, sediment fence and erosion fabric or hydrosed with tackifier may be required. Slopes shall be inspected weekly and after significant rainfall events.

Sediment Barriers & Hay Bales - Shall be inspected weekly and after significant rainfall events. Repairs shall be made immediately. Additional barriers and bales may be required depending upon the area of work. If conditions exist which can not be addressed with this plan, then additional barriers shall be implemented to prevent sediment from leaving the site.

Street Sweeping - Sediment from the construction site, which has accumulated on the existing streets shall be cleaned up immediately. Contractor to inspect daily.

Wind Blown Sediment - Shall be minimized. Unpaved travel ways shall be sufficiently watered to minimize wind blown sediment. Other unpaved surfaces shall be watered, temporary vegetated, roughing with disc or other measures in the Connecticut Guidelines for Soil Erosion and Sediment Control manual.

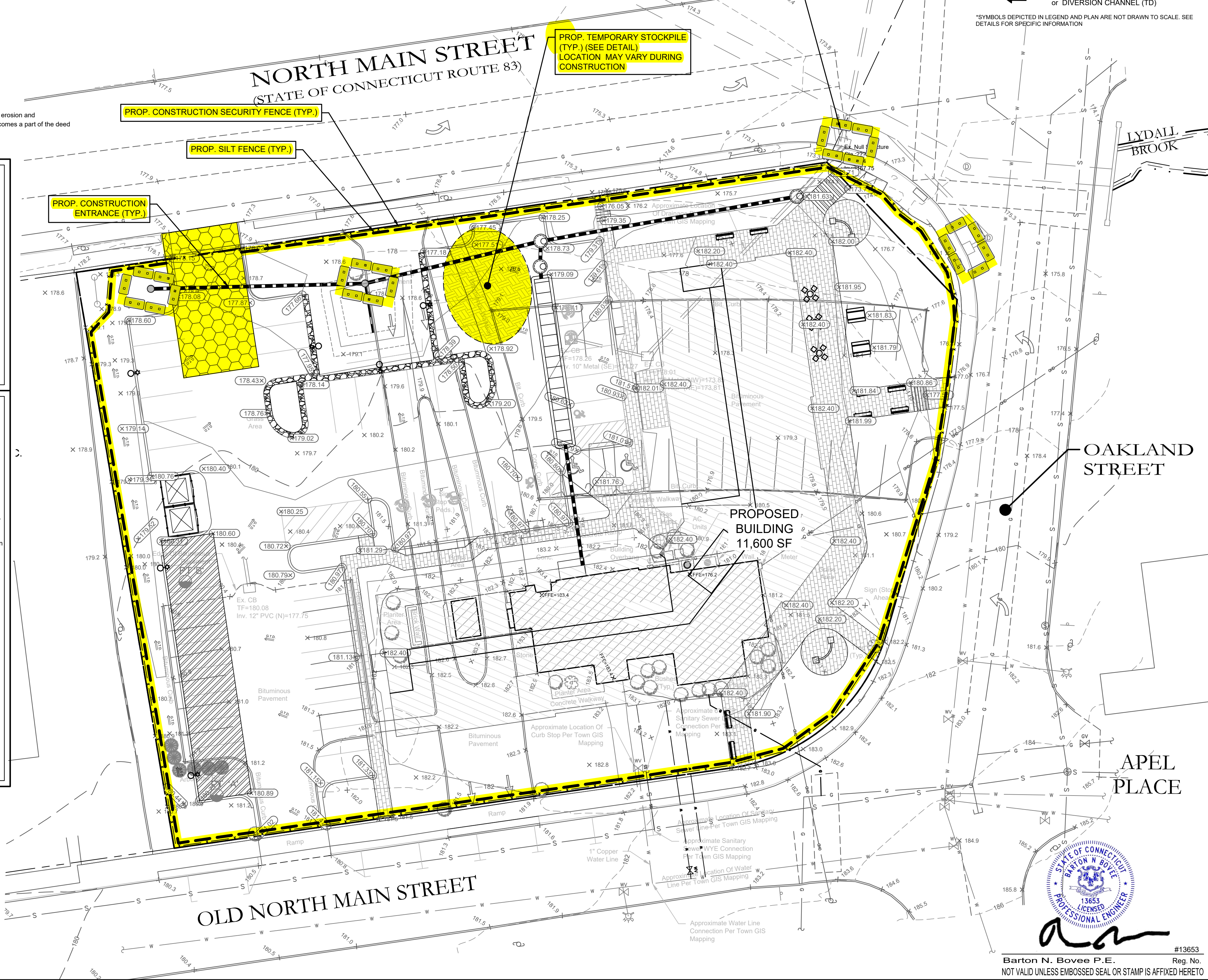
LEGEND	
	= Existing utility pole
	= Existing light pole
	= Proposed Light
	= Existing fire hydrant
	= Proposed fire hydrant
	= Existing water valve
	= Existing gas valve
	= Existing underground pipe
	= Existing tree line
	= Existing edge of pavement
	= Proposed curbing
	= Existing/Proposed well
	= Existing catch basin
	= Existing drainage manhole
	= Existing sanitary manhole
	= Proposed catch basin
	= Proposed manhole
	= Existing utility box
	= Proposed sidewalk ramp
	= Existing contour
	= Existing spot elevation
	= Proposed contour
	= Proposed spot elevation
	= Deep test location
	= Percolation test location
	= Grade to drain
	= Proposed Riprap
	= Proposed Drainage Pipe



EROSION CONTROL SYMBOL LEGEND

	= SILT FENCE
	= INLET PROTECTION
	= STAKED BALES
	= CHECK DAM WATTLE/sock or STONE
	= EROSION CONTROL BLANKET
	= TEMPORARY WATER BAR (WB) or DIVERSION CHANNEL (TD)

*SYMBOLS DEPICTED IN LEGEND AND PLAN ARE NOT DRAWN TO SCALE. SEE DETAILS FOR SPECIFIC INFORMATION



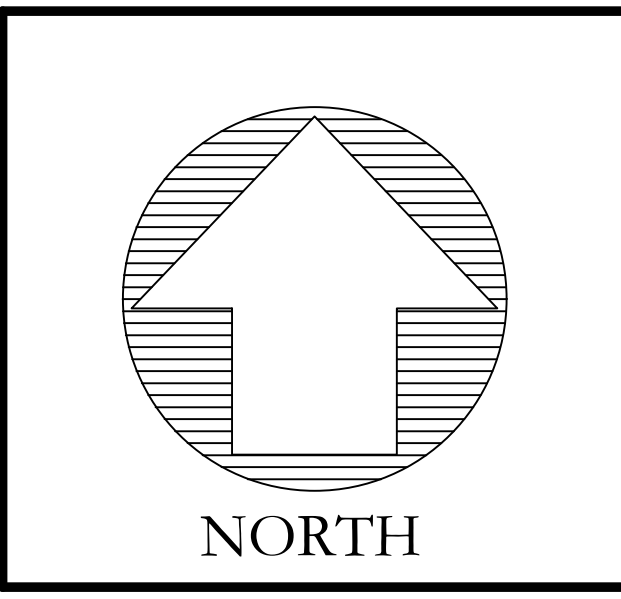
"The Planning and Zoning Commission certifies that the Soil and Erosion and Sedimentation Control Plan complies with the requirements of the Town of Manchester Regulations and the Connecticut Guidelines for Soil Erosion and Sedimentation Control dated 2002, as amended".

Signature _____
Date of Approval _____

**APPROVED
PLANNING AND ZONING
COMMISSION
MANCHESTER, CT**

DATE: _____
SIGNED: _____

Barton N. Bovee P.E.
Reg. No. #13653
NOT VALID UNLESS EMBOSSED SEAL OR STAMP IS AFFIXED HERETO



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PROJECT NAME:
PROPOSED MIXED-USE DEVELOPMENT

14 North Main Street
Manchester, Connecticut

PREPARED FOR:
3 SQUARED, LLC

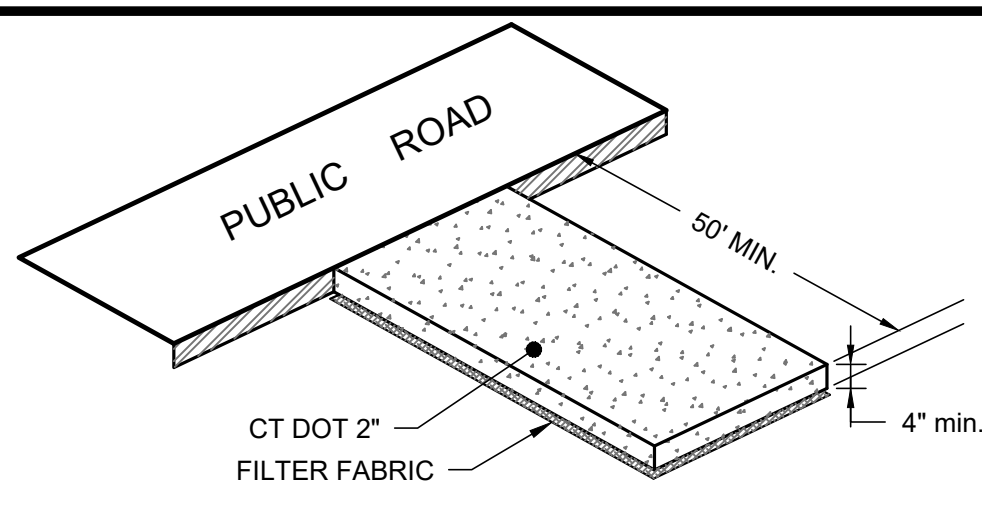
Sheet Description:
SOIL EROSION & SEDIMENTATION CONTROL PLAN

Scale: 1"=20'
20' 10' 0' 10' 20'

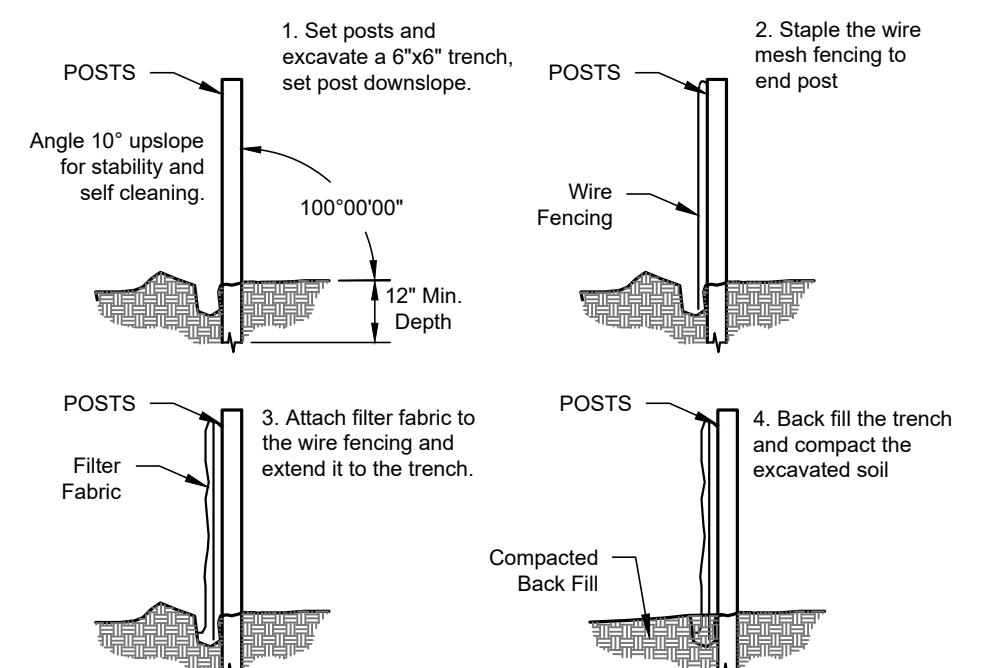
Date: December 20, 2023	F.B. #:
Project #: 2521	Approved By: BNB
Drawn By: BTP	Revisions:
Date: 02/05/2024	Descriptions:
	Revised per Town Comments

Sheet #:
ES1

DRAWING NAME: D:\Projects\2024\18-0001\18-0001-001.dwg; DATE: 10/20/2023; TIME: 10:00 AM; USER: BTP; PLOT DATE: 10/20/2023; PLOT TIME: 10:00 AM; PLOT USER: BTP

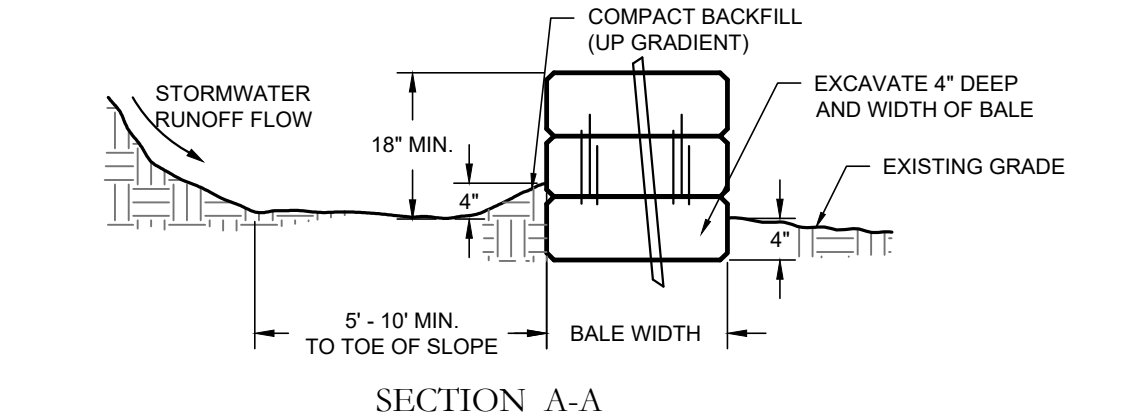


CONSTRUCTION ENTRANCE DETAIL
N.T.S.

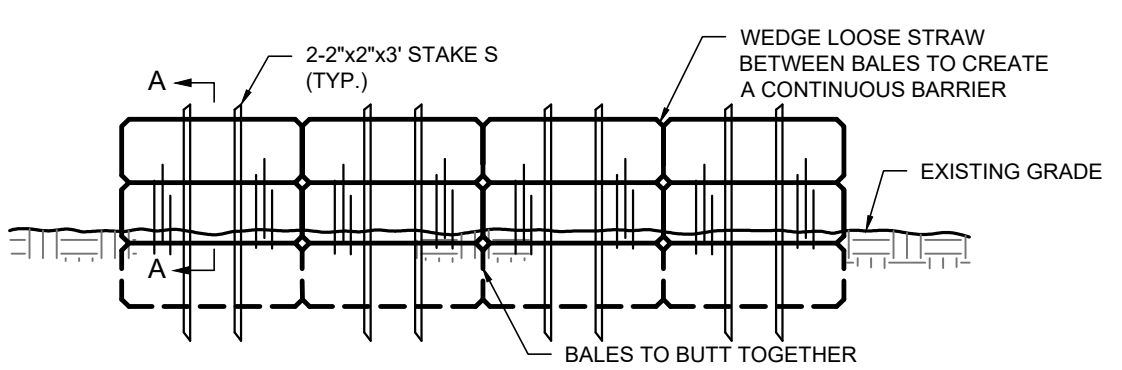


SEDIMENTATION BARRIER DETAIL
N.T.S.

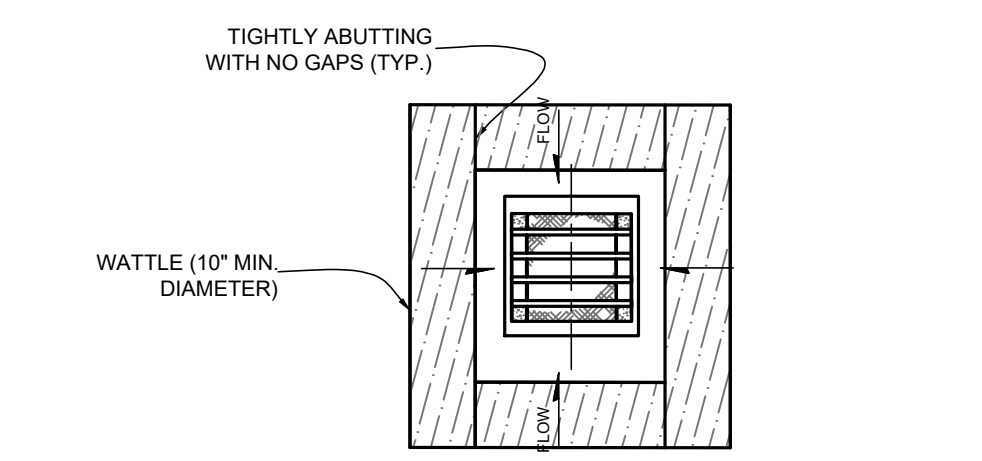
NOTES:
1. BALE BARRIER INSTALLATION SHALL FOLLOW THE CONTOUR OF THE LAND. THE LAST BALES SHALL WING UPSLOPE TO ENSURE PROTECTION.
2. BALE BARRIERS SHALL BE UTILIZED TO INTERCEPT SMALL AMOUNTS OF SEDIMENT FROM DRAINAGE AREAS ONE ACRE IN SIZE OR LESS. MAX. SLOPE BEHIND A BARRIER MUST BE LIMITED TO 2H:1V.
3. BALE BARRIERS SHALL BE INSPECTED PERIODICALLY AFTER STORM EVENTS GREATER THAN 1" OF RAINFALL AND SHALL BE REMOVED AND REPLACED AFTER 3 MONTHS EXCEPT AS OTHERWISE DIRECTED BY THE ENGINEER OR ENFORCEMENT OFFICIAL. BALES SHALL NOT BE REMOVED UNTIL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.



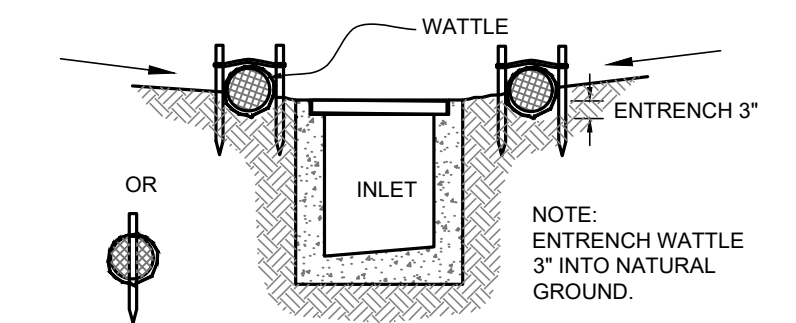
SECTION A-A



STRAW BALE BARRIER DETAIL
N.T.S.

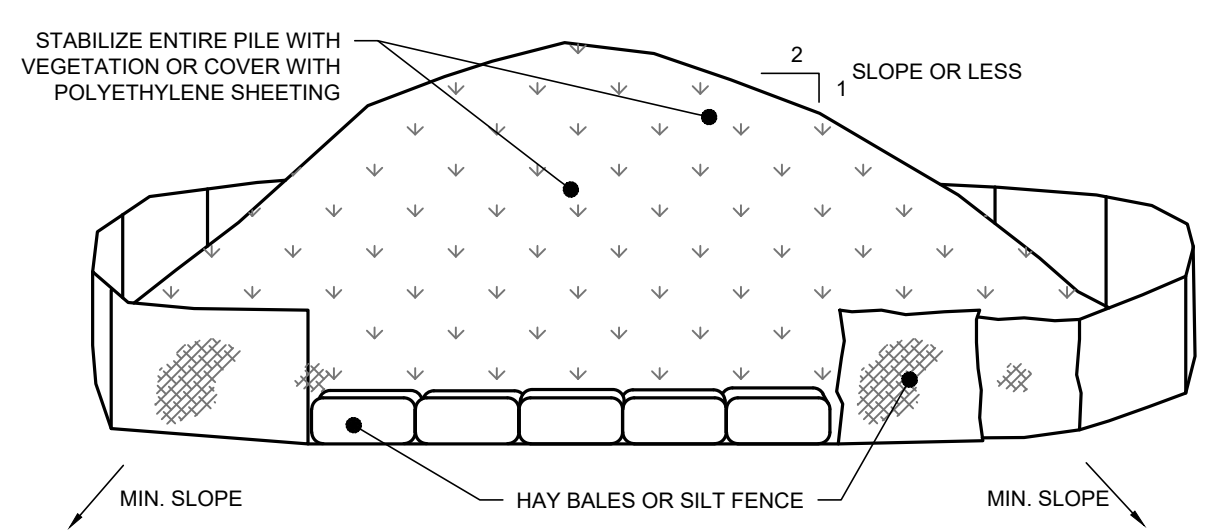


PLAN VIEW

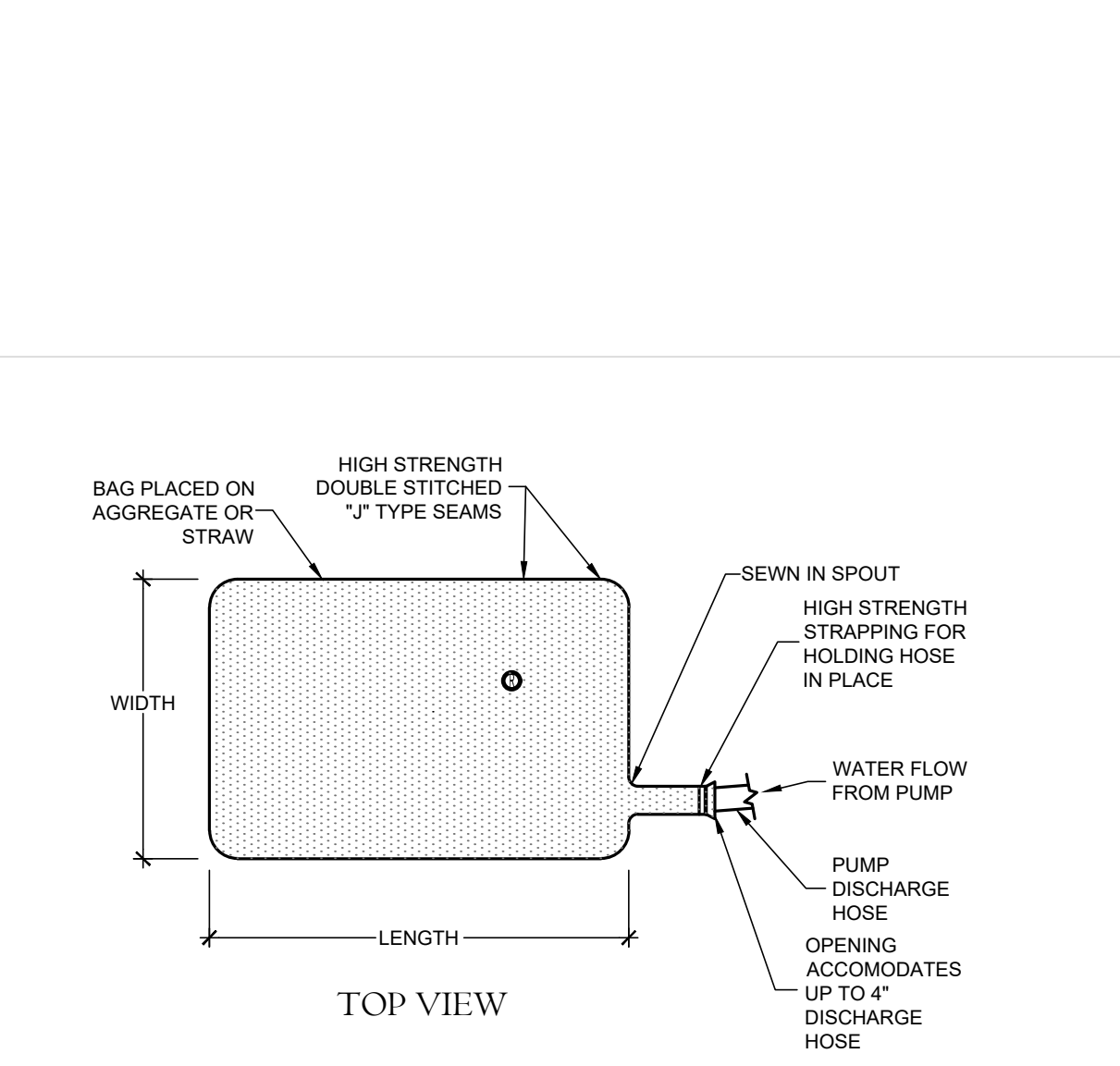


CATCH BASIN WATTLE PROTECTION
N.T.S.

NOTES:
1. AREA CHOSE FOR STOCKPILING SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STARWBALES, THEN STABILIZED WITH VEGETATION OR COVERED WITH POLYETHYLENE SHEETING.
4. TO BE USED WHERE TOPSOIL IS NECESSARY FOR REGRADING AND VEGETATING DISTURBED AREAS. TOPSOIL IS APPLIED TO SUBSOILS THAT ARE DRAUGHTY (HAVING LOW AVAILABLE MOISTURE FOR PLANTS), STONEY/SALTY, HAVE LOW PERMEABILITY, OR ARE EXTREMELY ACID. IT IS ALSO USED TO BACKFILL AROUND SHRUB AND TREE TRANSPLANTS. PRESERVATION OF EXISTING TOPSOIL IS BENEFICIAL FOR ALL TYPES OF LAWN OR ORNAMENTAL PLANTINGS.
5. TEMPORARY STOCKPILING STABILIZATION MEASURES INCLUDE VEGETATIVE COVER, MULCH NONVEGETATIVE COVER AND PERIPHERAL SEDIMENT TRAPPING BARRIERS. THE STABILIZATION MEASURE(S) SELECTED SHOULD BE APPROPRIATE FOR THE TIME OF YEAR, SITE CONDITIONS AND REQUIRED PERIOD OF USE.
6. SEE EROSION AND SEDIMENT CONTROL PLAN FOR LOCATIONS.

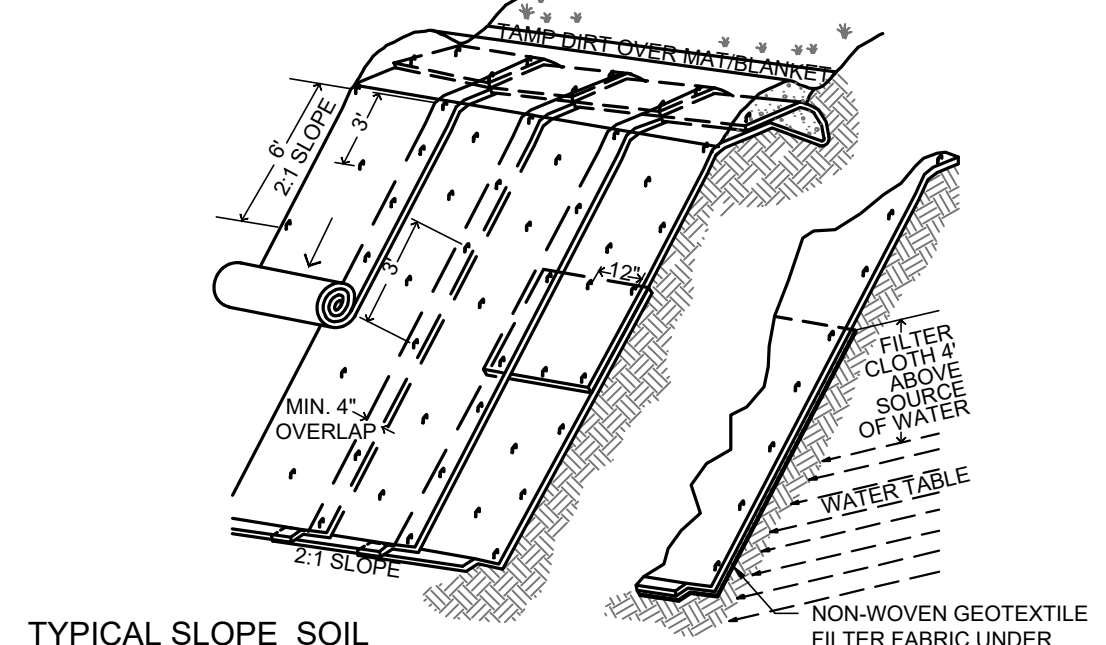


SOIL STOCKPILE DETAIL
N.T.S.



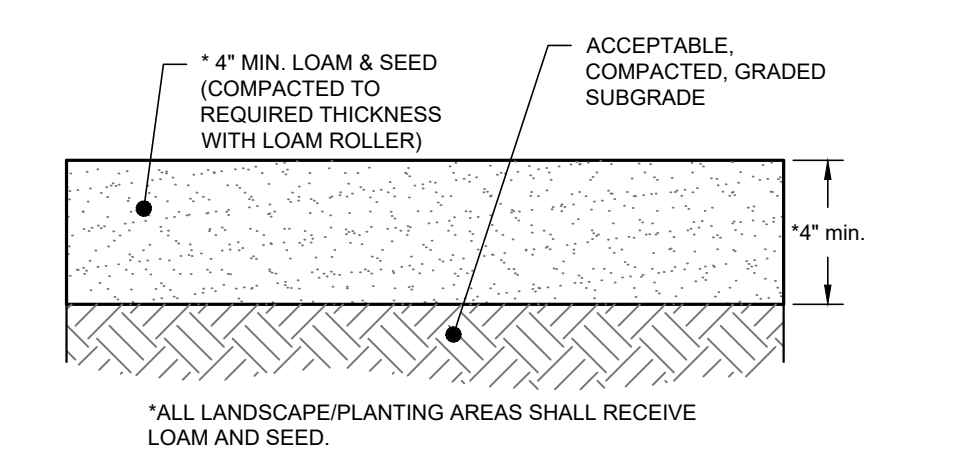
DIRTBAG SILT CONTROL SYSTEM
N.T.S.

NOTES:
1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
2. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
MATS/BLANKETS SHOULD BE INSTALLED VERTICALLY DOWN SLOPE.

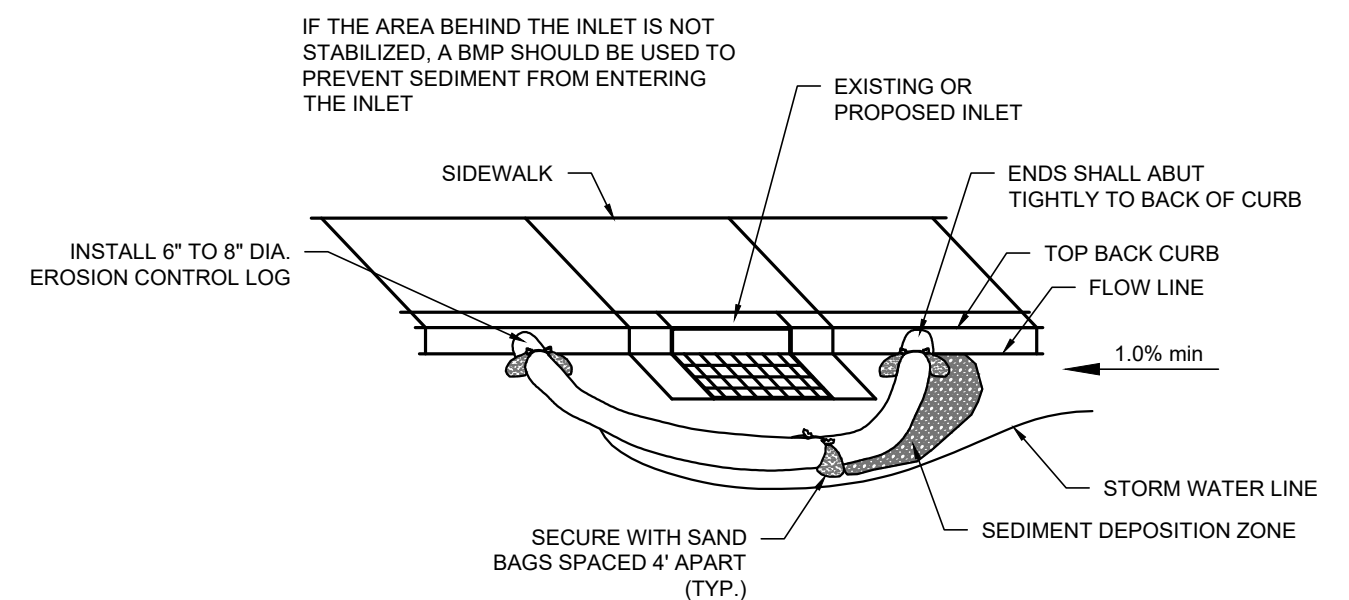


TYPICAL SLOPE SOIL STABILIZATION
EROSION BLANKET & REINFORCEMENT MAT SLOPE INSTALLATION
N.T.S.

GENERIC SEED MIXTURE or **SESC MANUAL SEED MIXTURE**
- 25-30% KENTUCKY BLUE GRASS
- 80% GERMINATION
- 30-35% RED FESCUE 90% GERMINATION
- 30-40% PERENNIAL RYE GRASS MIXTURES
- 85% GERMINATION
or
PERMANENT GRASS SEEDING
PER FIGURE PS-2 & PS-3 OF THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL MANUAL

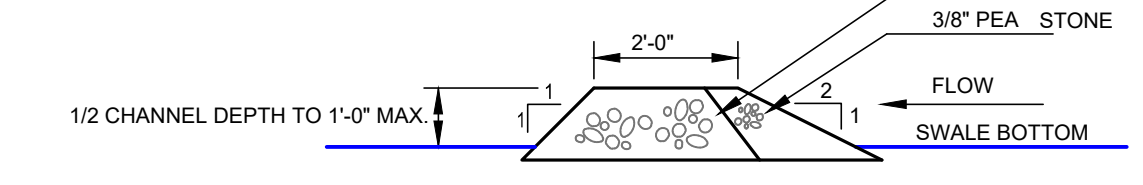


LOAM & SEED DETAIL
N.T.S.

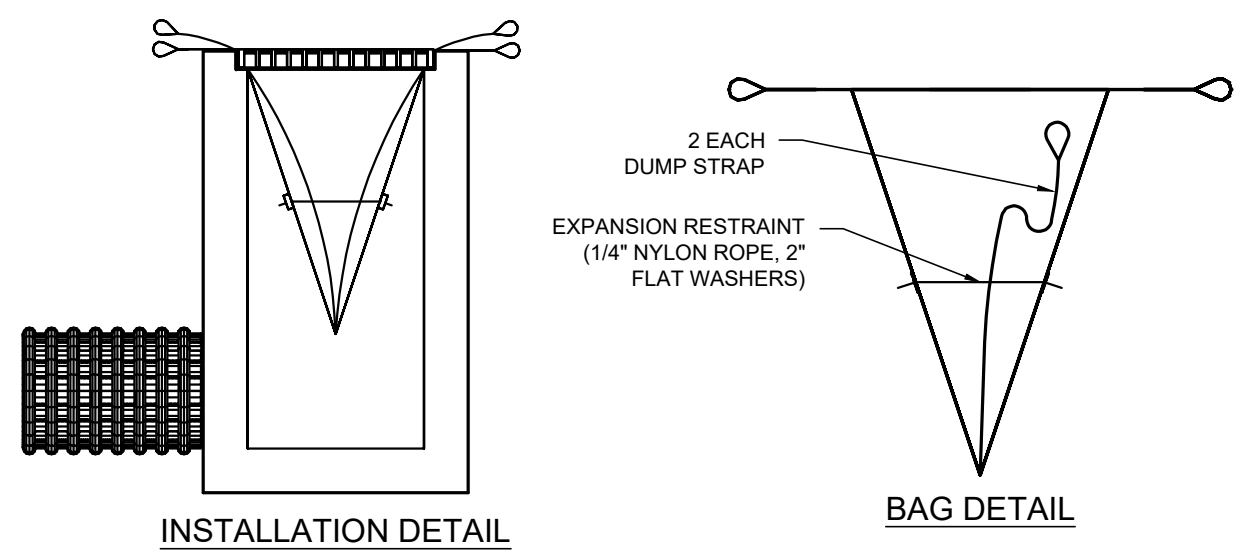


EROSION CONTROL LOG - CURB INLET PROTECTION
N.T.S.

NOTES:
1. INSTALL CRUSHED STONE CHECK DAMS ON SWALES WITH SLOPES GREATER THAN 5% AT 100' INTERVALS.
2. SWALE SLOPES AS NOTED ON PLANS ARE MINIMUM SLOPES.
3. SWALE DEPTH AS NOTED ON PLANS (1'-6" MIN.)

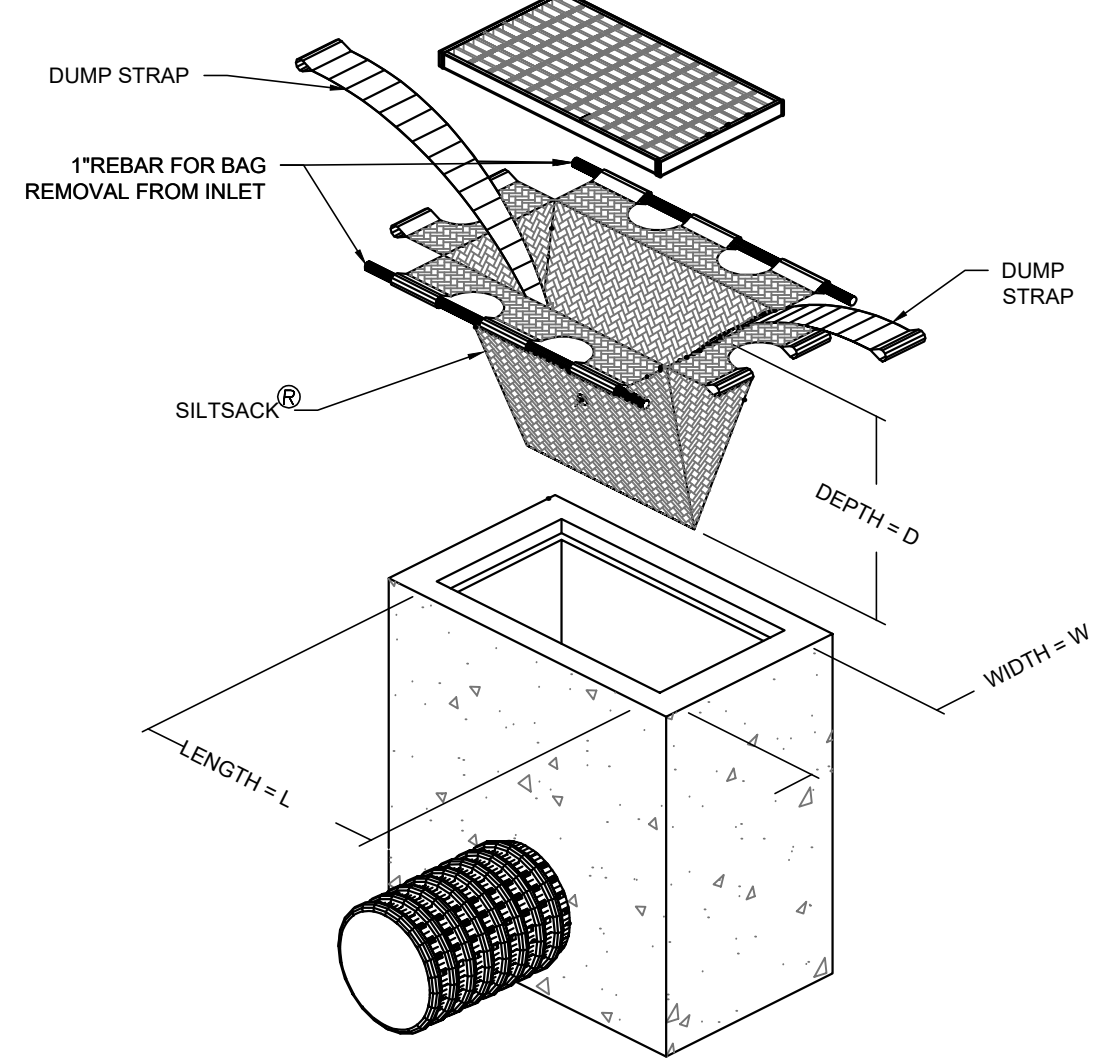


TYPICAL CRUSHED STONE CHECK DAM
N.T.S.



INSTALLATION DETAIL

BAG DETAIL



NOTES:
1. AVAILABLE FROM ACF ENVIRONMENTAL 48 OLD GRAYS BRIDGE ROAD BROOKFIELD, CT 06804. (203)313-9002

SILTSACK INLET CONTROL DEVICE
N.T.S.

APPROVED
PLANNING AND ZONING
COMMISSION
MANCHESTER, CT

DATE: _____
SIGNED: _____



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HARRY E. COLE & SON
engineering. surveying. planning.

876 South Main Street Tel: (860) 628-4484
P.O. Box 44 Fax: (860) 620-0196
Plainville, CT 06479 - 0044 www.hecole.com

PROJECT NAME:
PROPOSED MIXED-USE DEVELOPMENT

14 North Main Street
Manchester, Connecticut

PREPARED FOR:

3 SQUARED, LLC

Sheet Description:

SOIL EROSION & SEDIMENT CONTROL DETAILS

Scale: N.T.S.

Date: December 20, 2023

Project #: 2521 F.B. #:
Drawn By: BTP Approved By: BNB

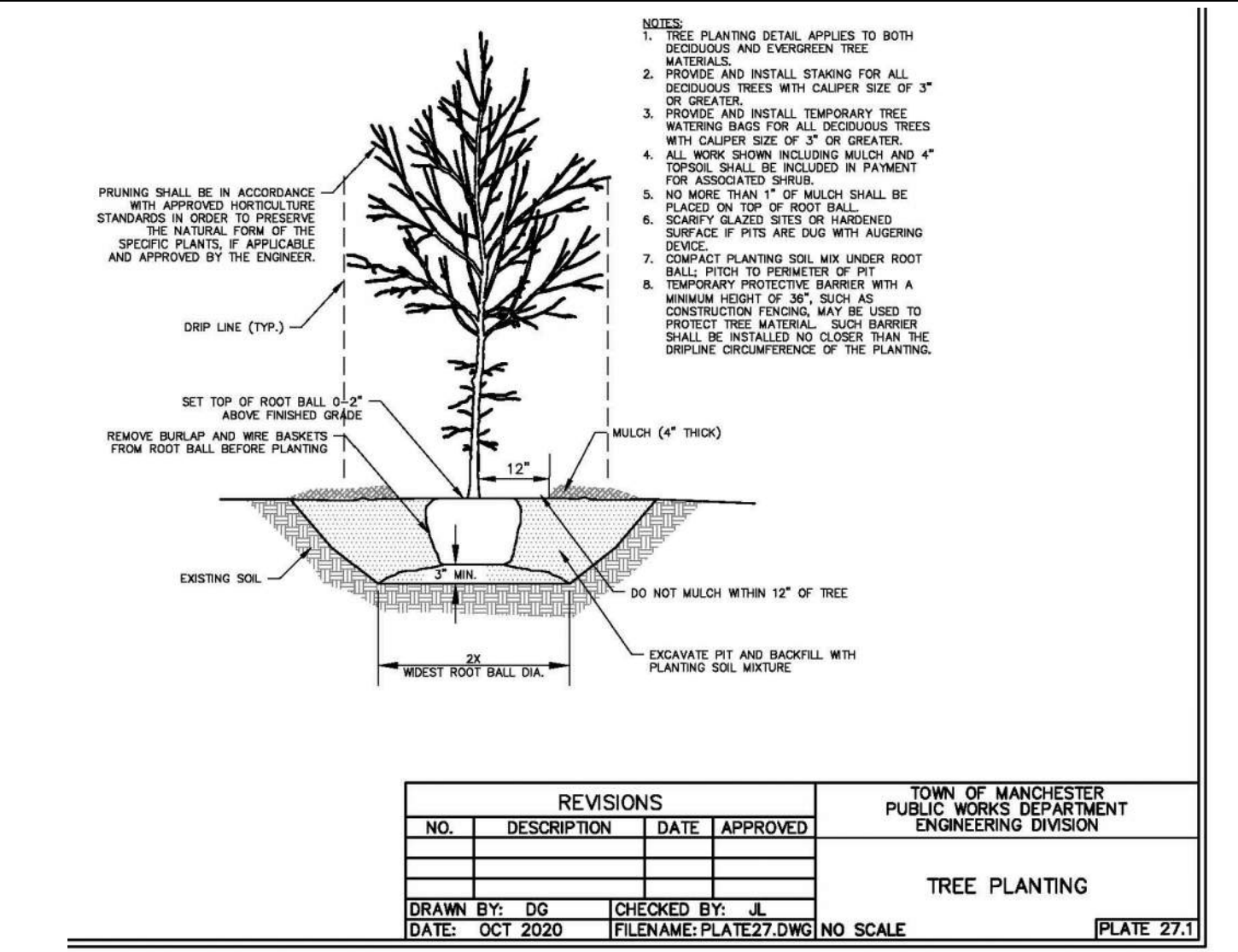
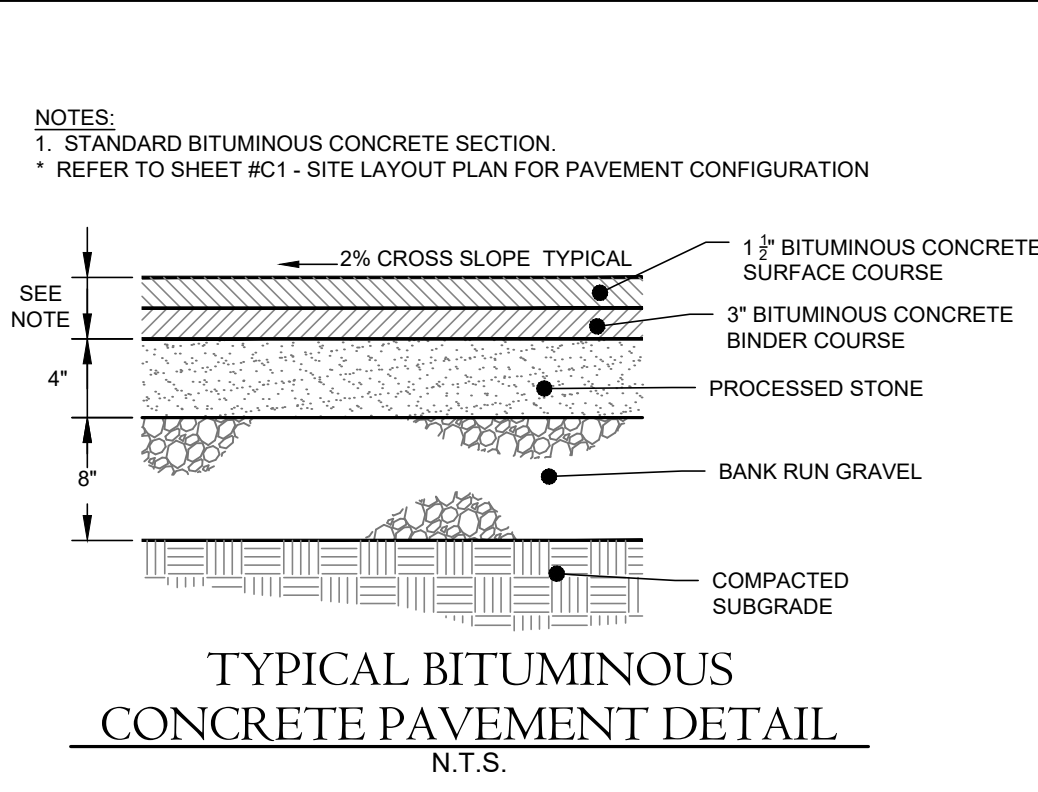
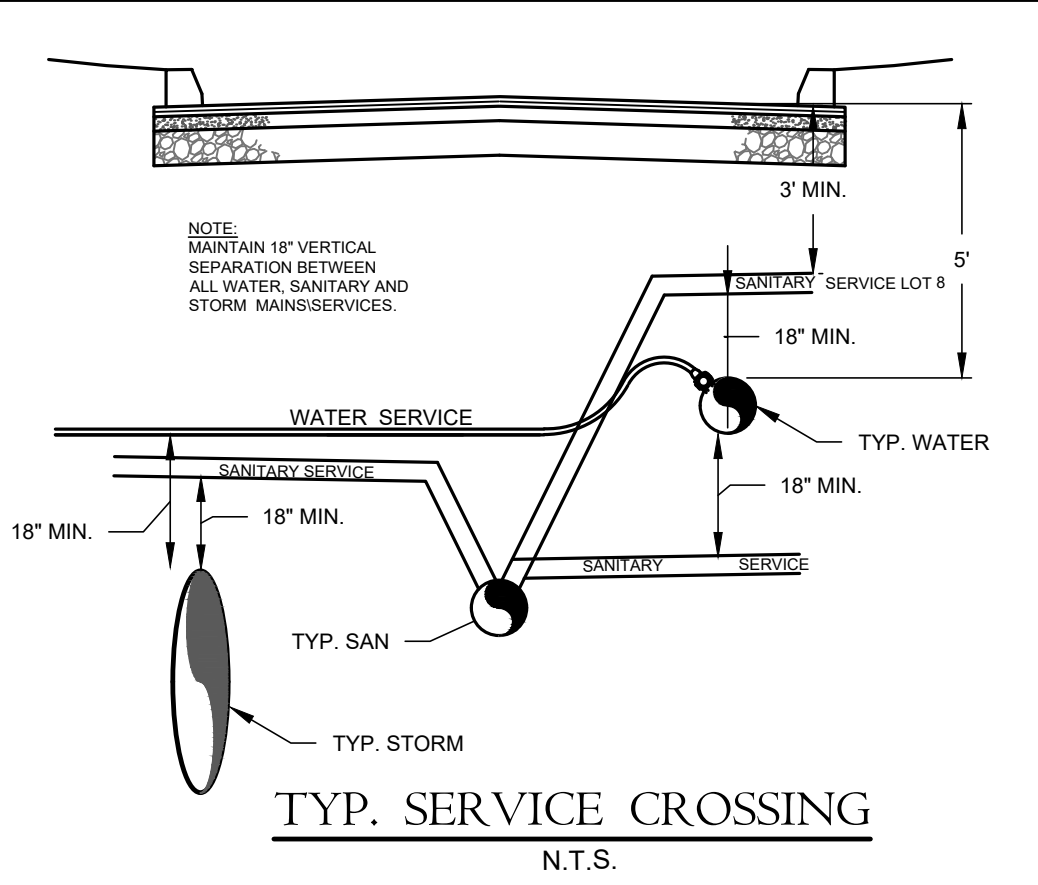
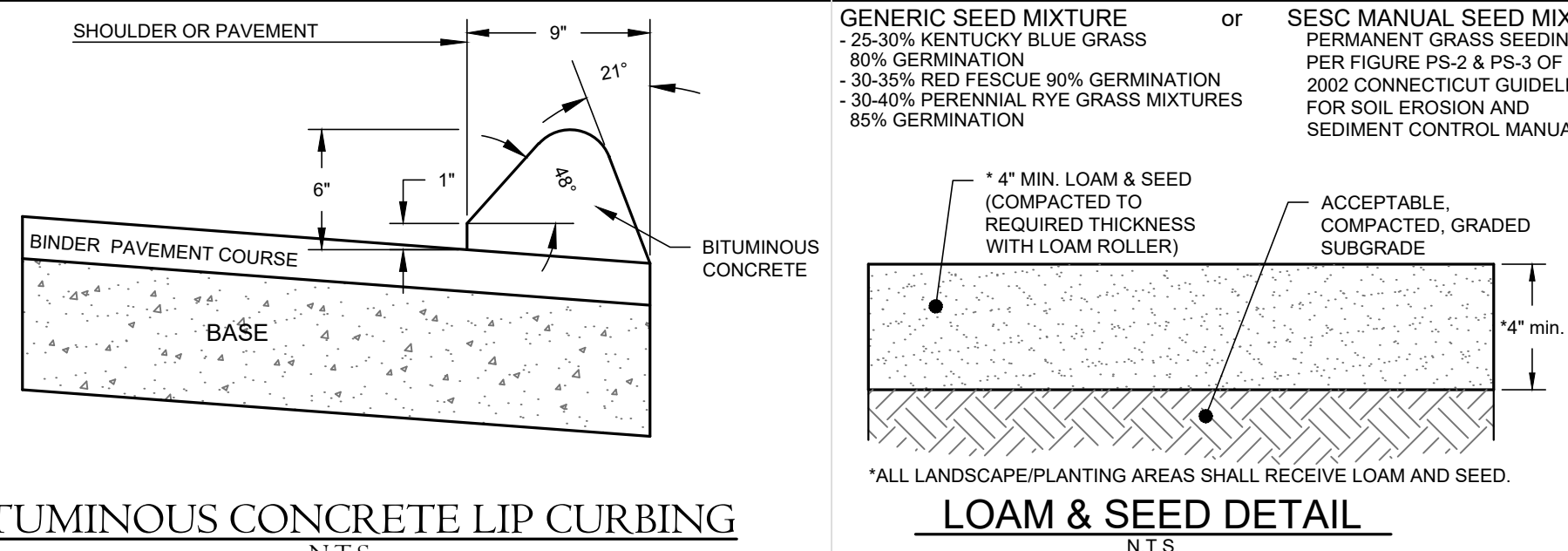
Revisions:

Date:	Descriptions:
02/05/2024	Revised per Town Comments

Sheet #:

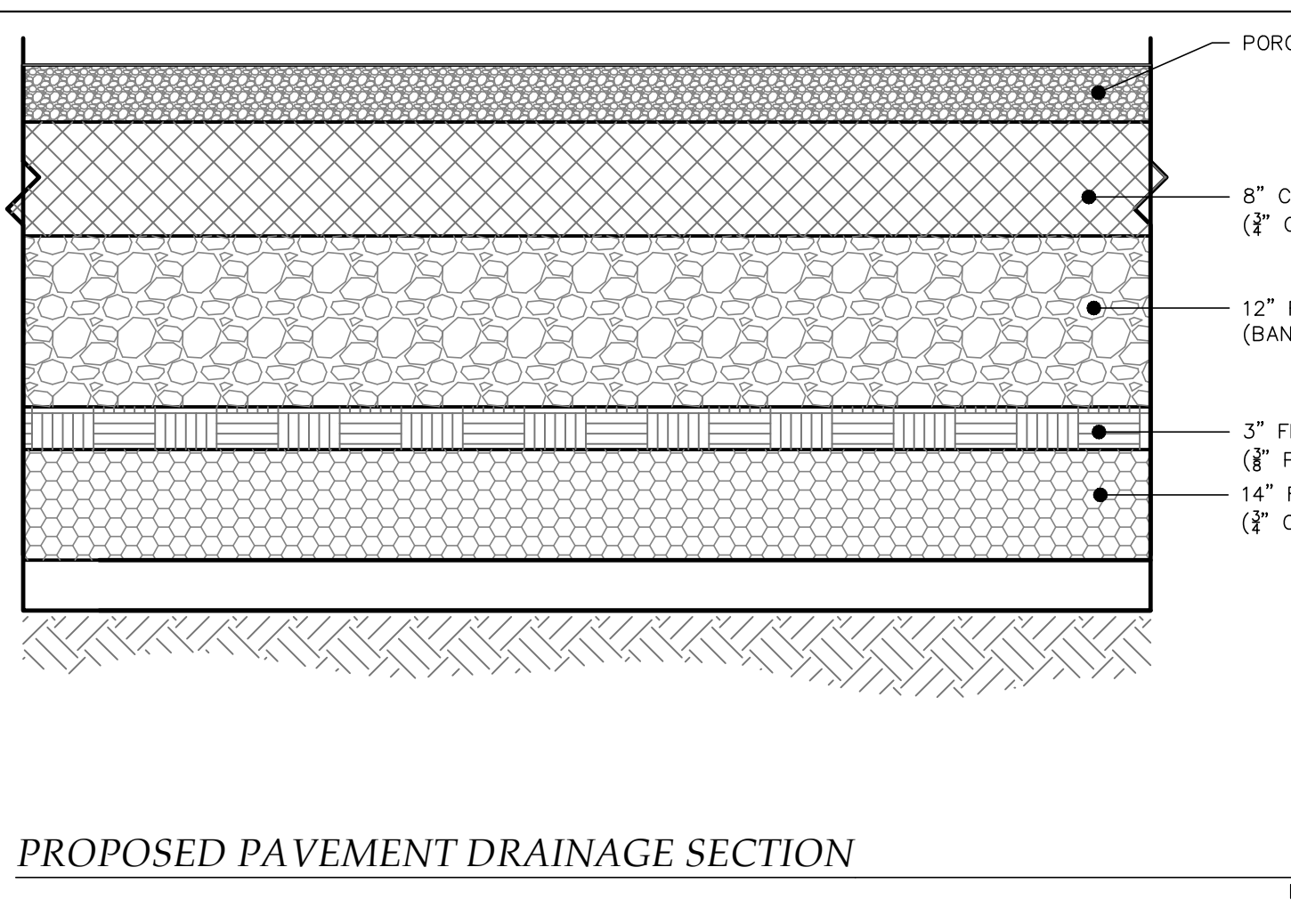
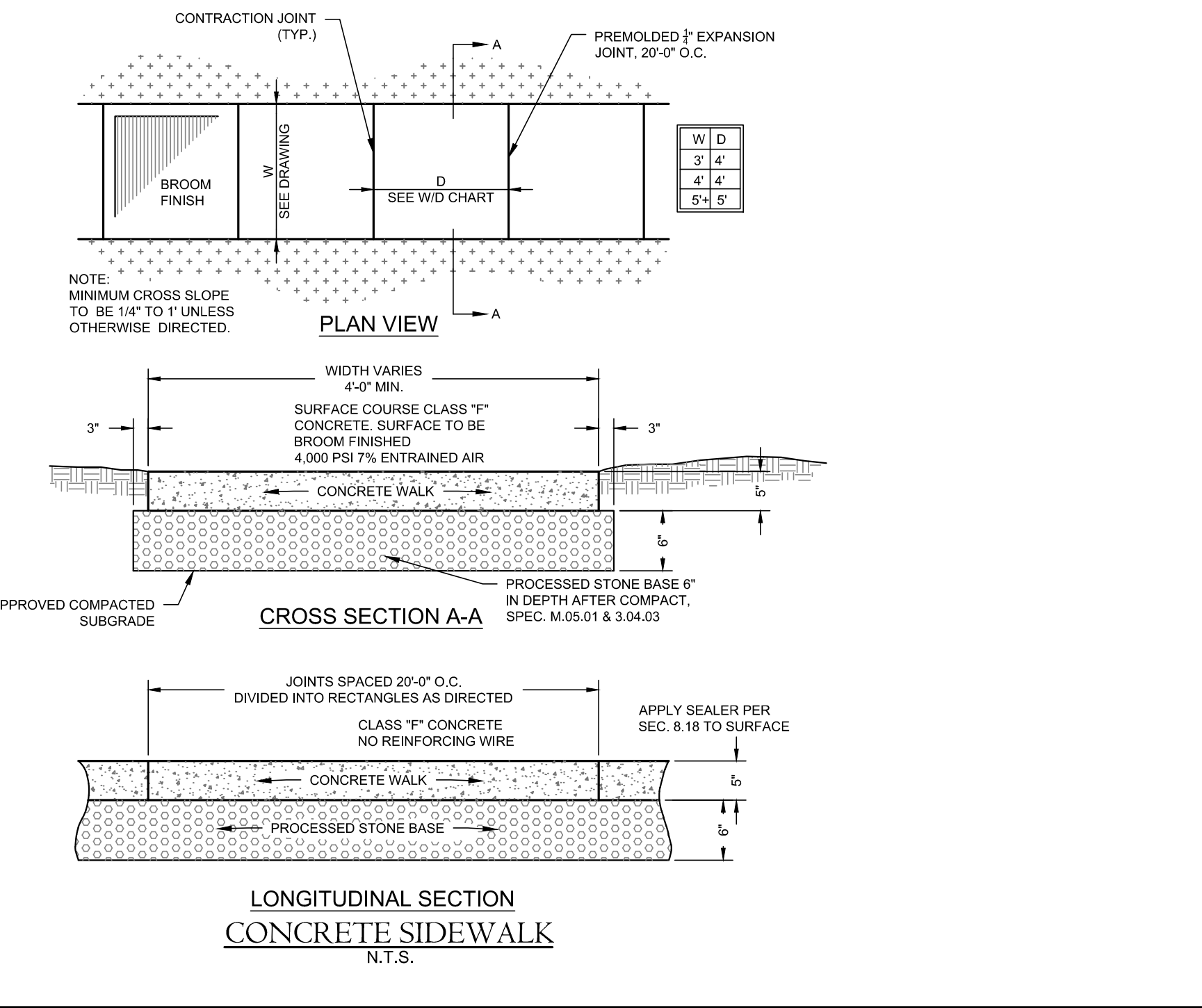
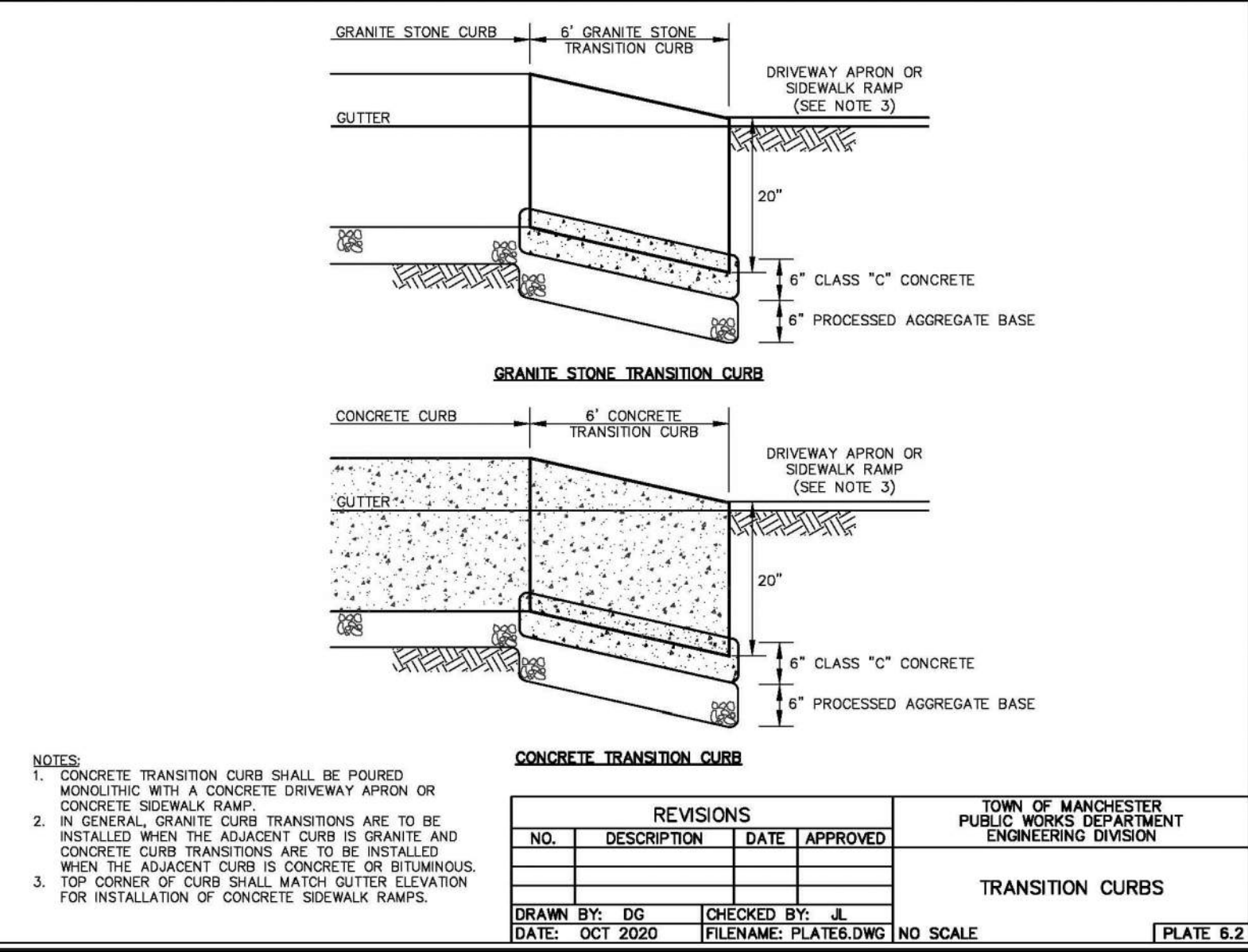
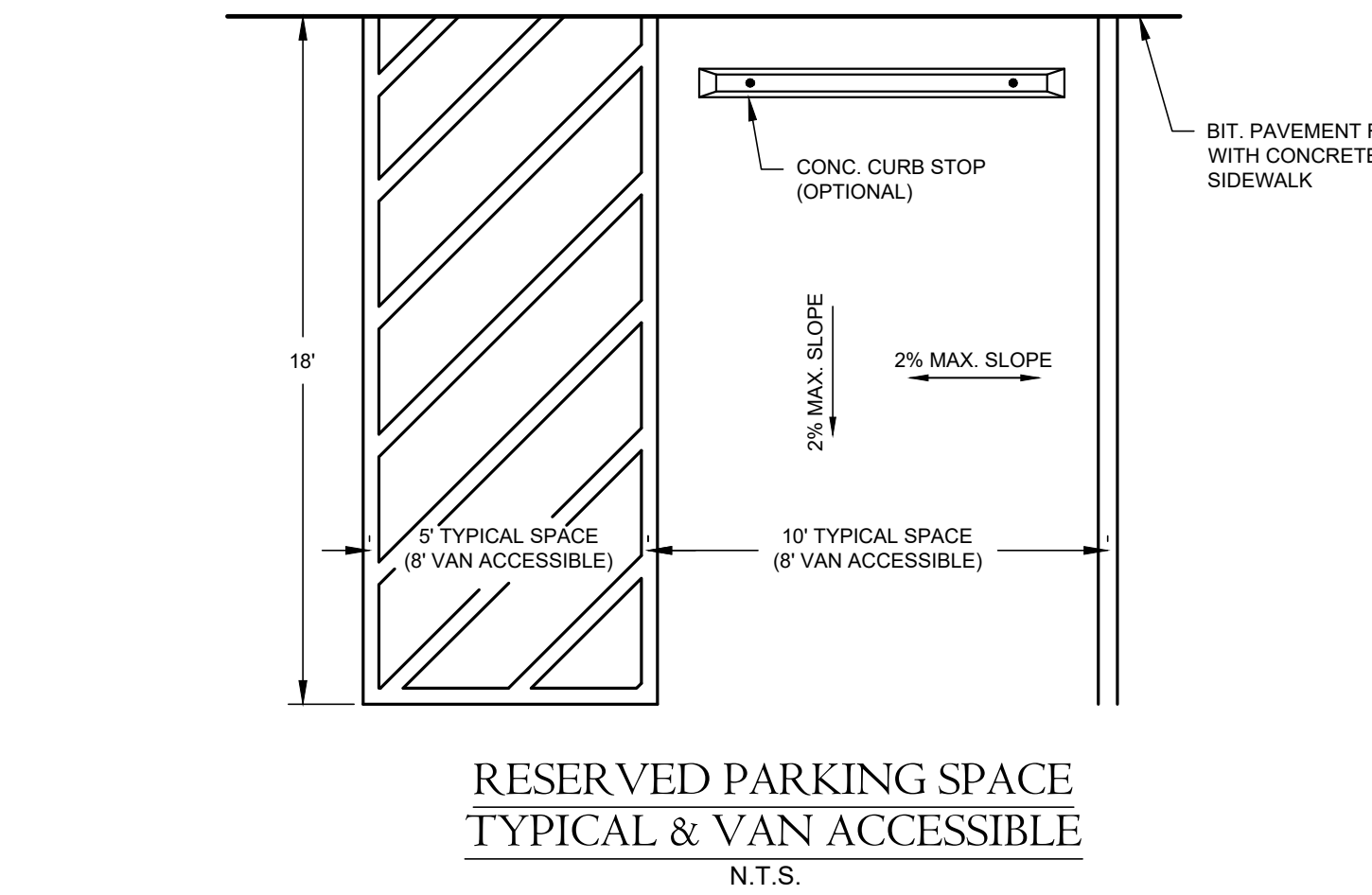
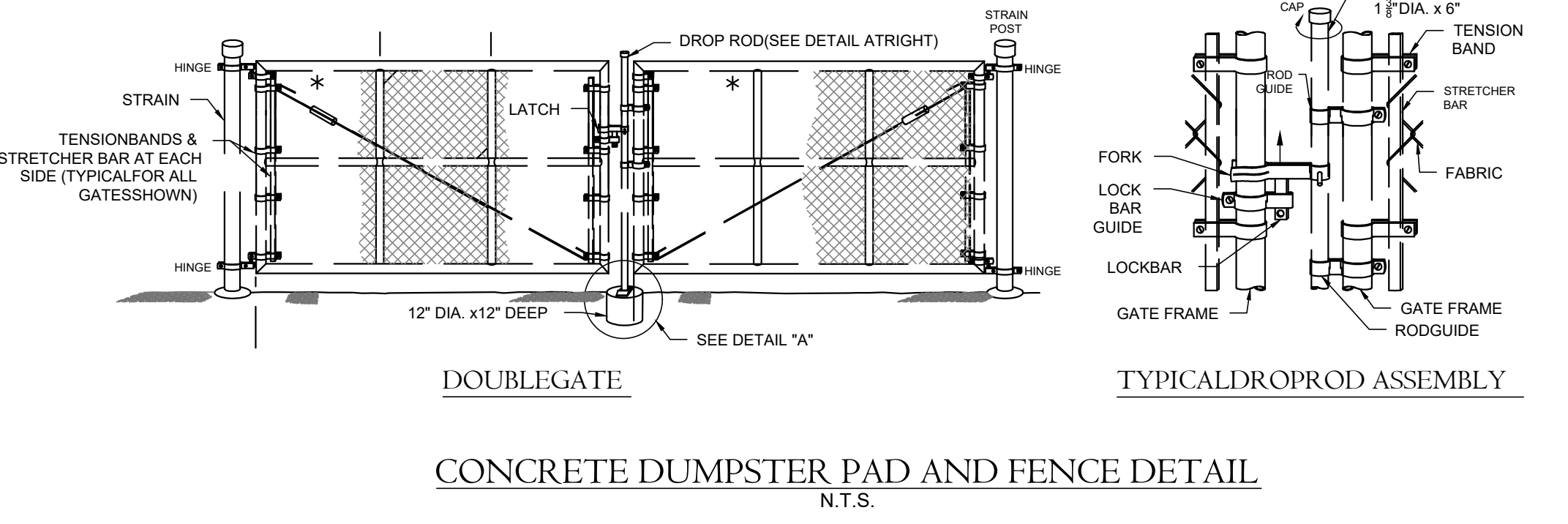
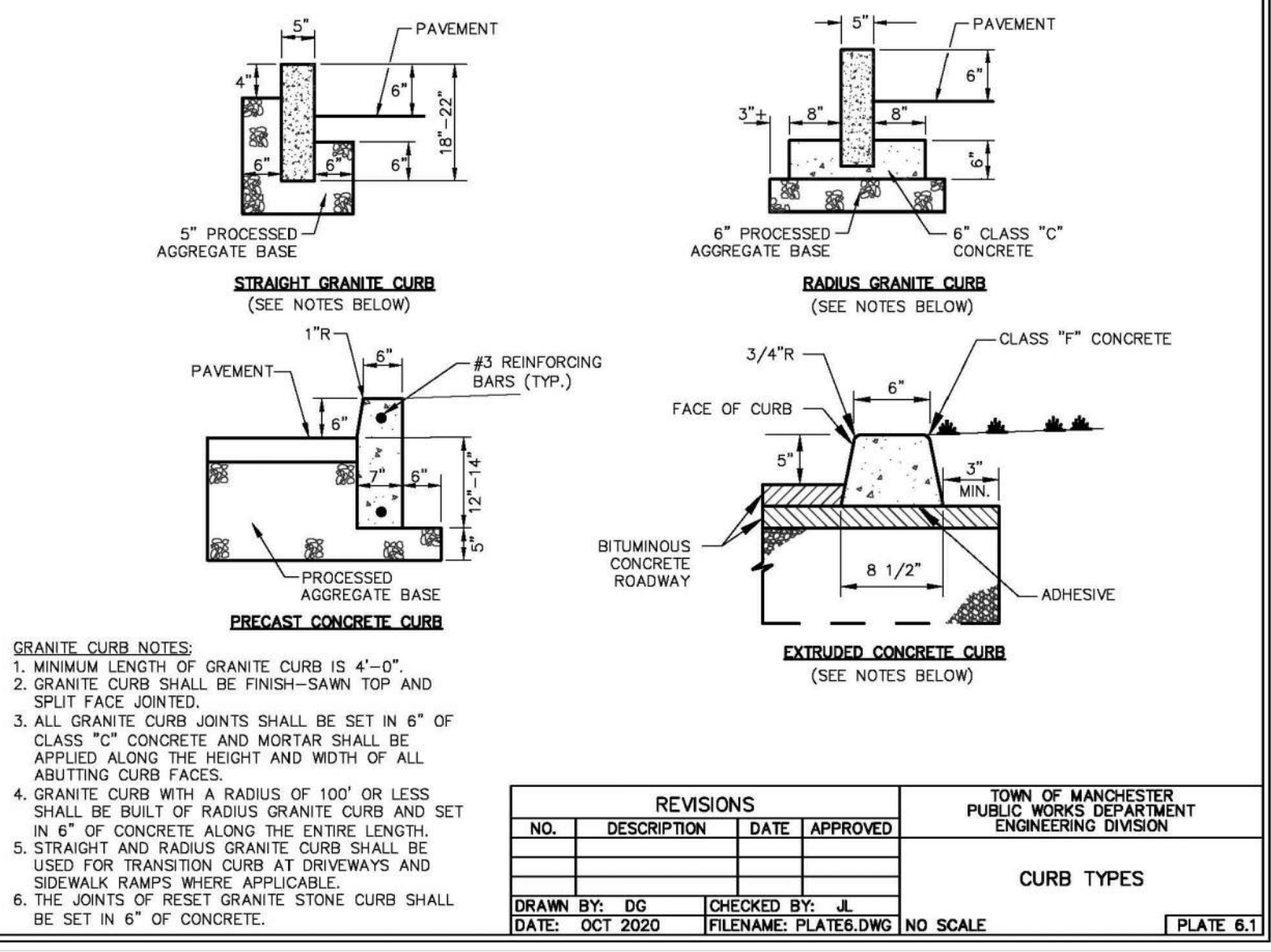
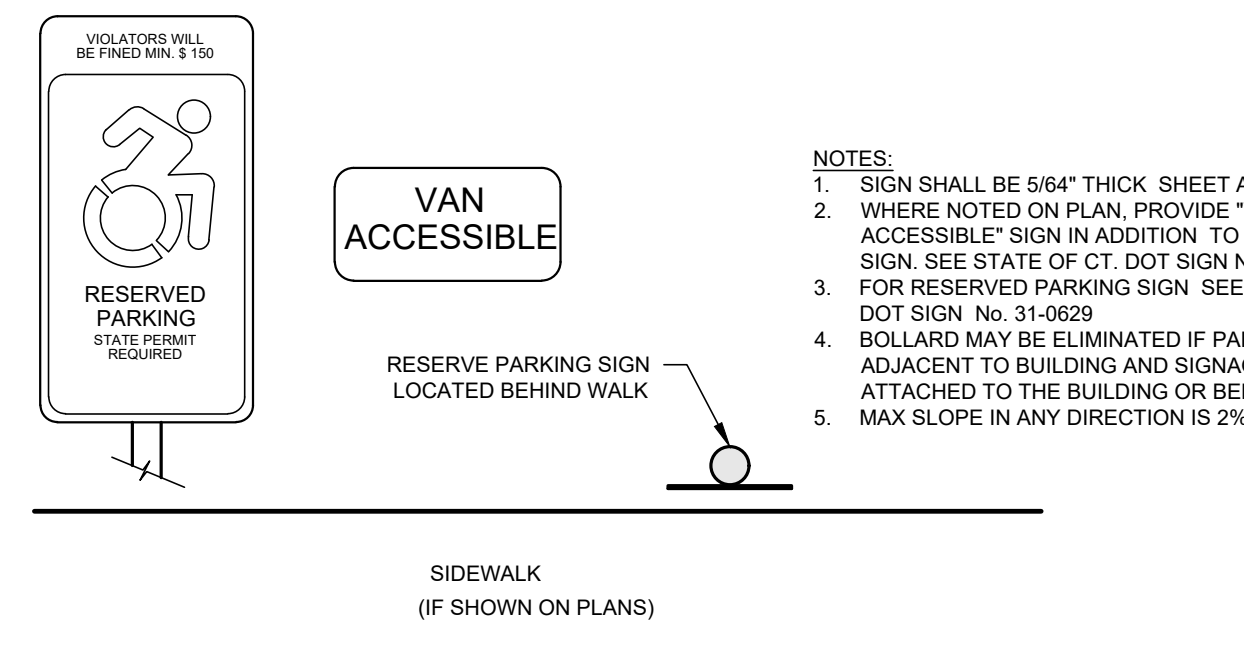
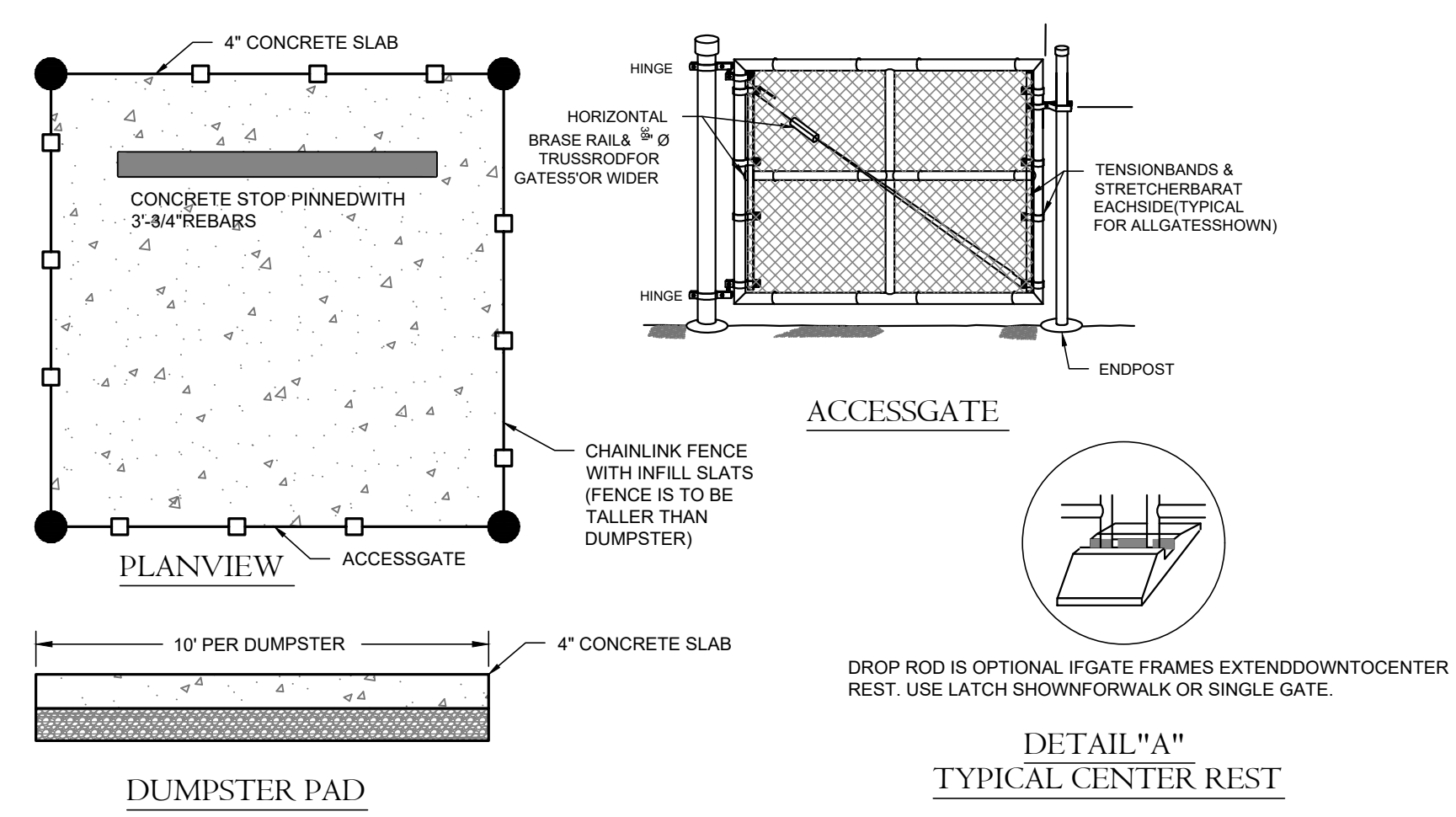
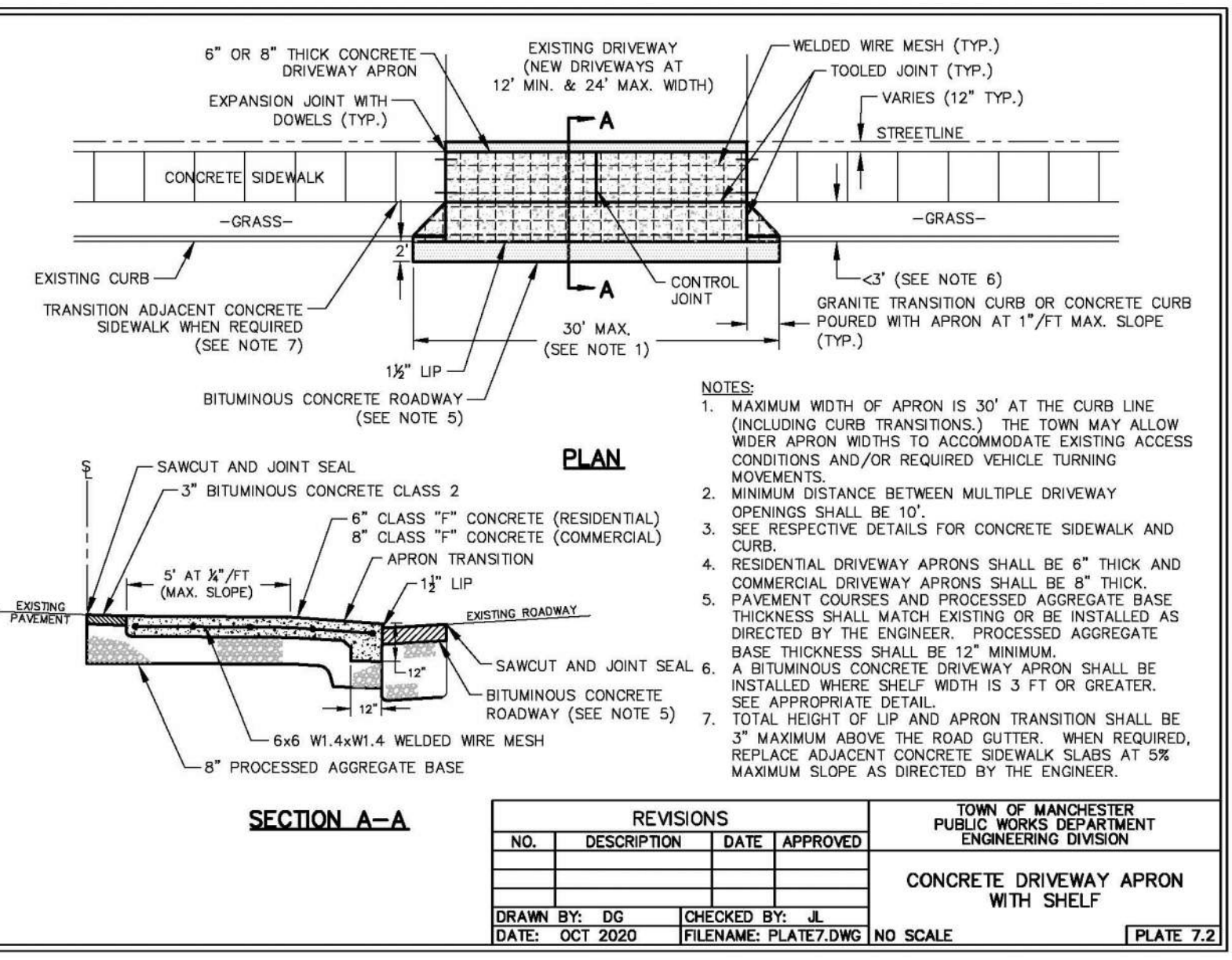
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REVISIONS				TOWN OF MANCHESTER PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION	
NO.	DESCRIPTION	DATE	APPROVED		

DRAWN BY: DG CHECKED BY: JL
DATE: OCT 2020 FILENAME: PLATE7.DWG NO SCALE TREE PLANTING PLATE 7.7



APPROVED
PLANNING AND ZONING
COMMISSION
MANCHESTER, CT

DATE: _____
SIGNED: _____



PROJECT NAME:

PROPOSED MIXED-USE DEVELOPMENT

14 North Main Street
Manchester, Connecticut

876 South Main Street Tel: (860) 628-4484
P.O. Box 44 Fax: (860) 620-0196
Plantville, CT 06479 - 0044 www.heccole.com

PREPARED FOR:

3 SQUARED, LLC

Sheet Description:

DETAILS

Scale: N.T.S.

Date: December 20, 2023

Project #: 2521 F.B. #: ---

Drawn By: BTP Approved By: MSL

Revisions:

Date:	Descriptions:
02/05/2024	Revised per Town Comments

Sheet #:

D1

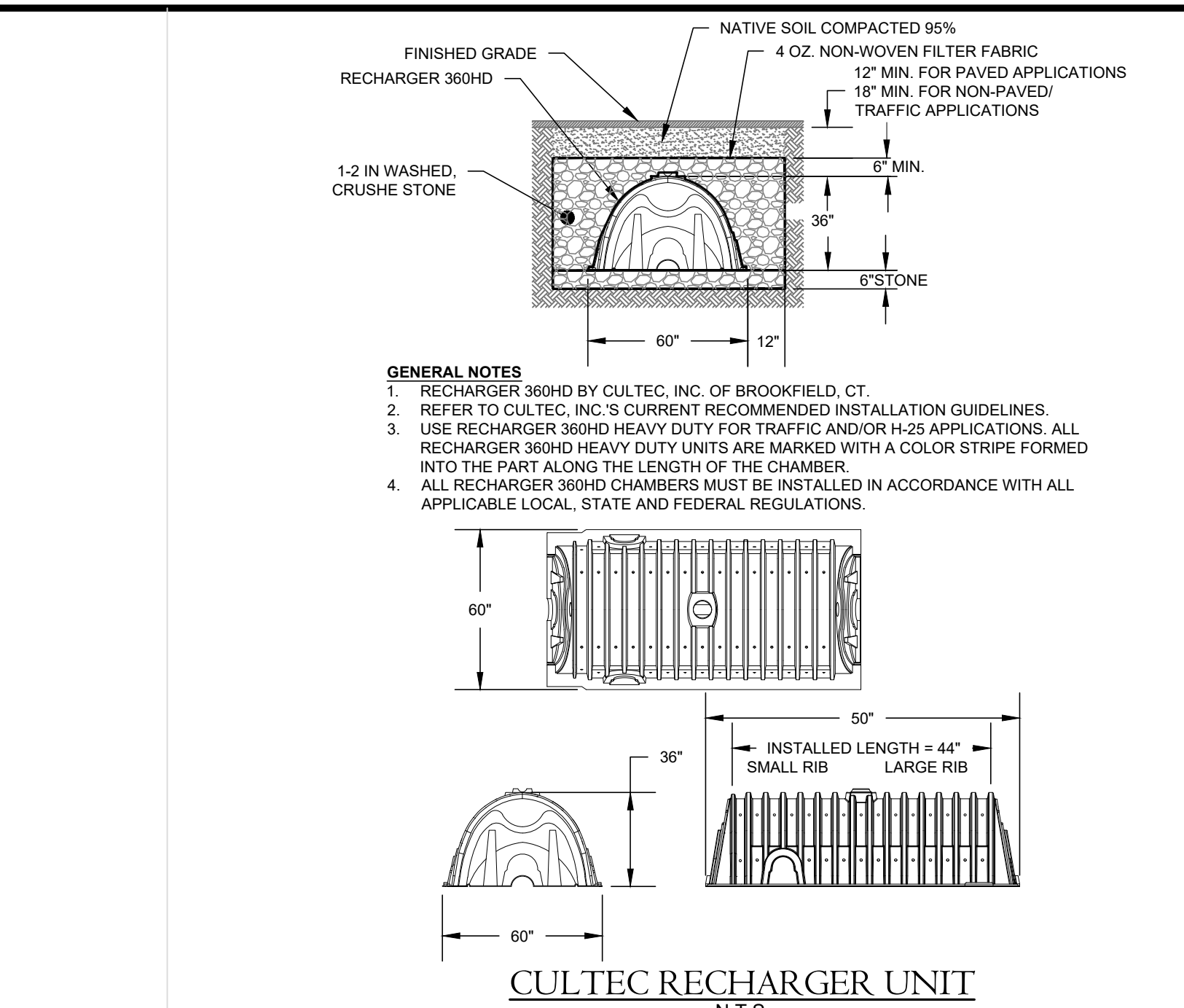
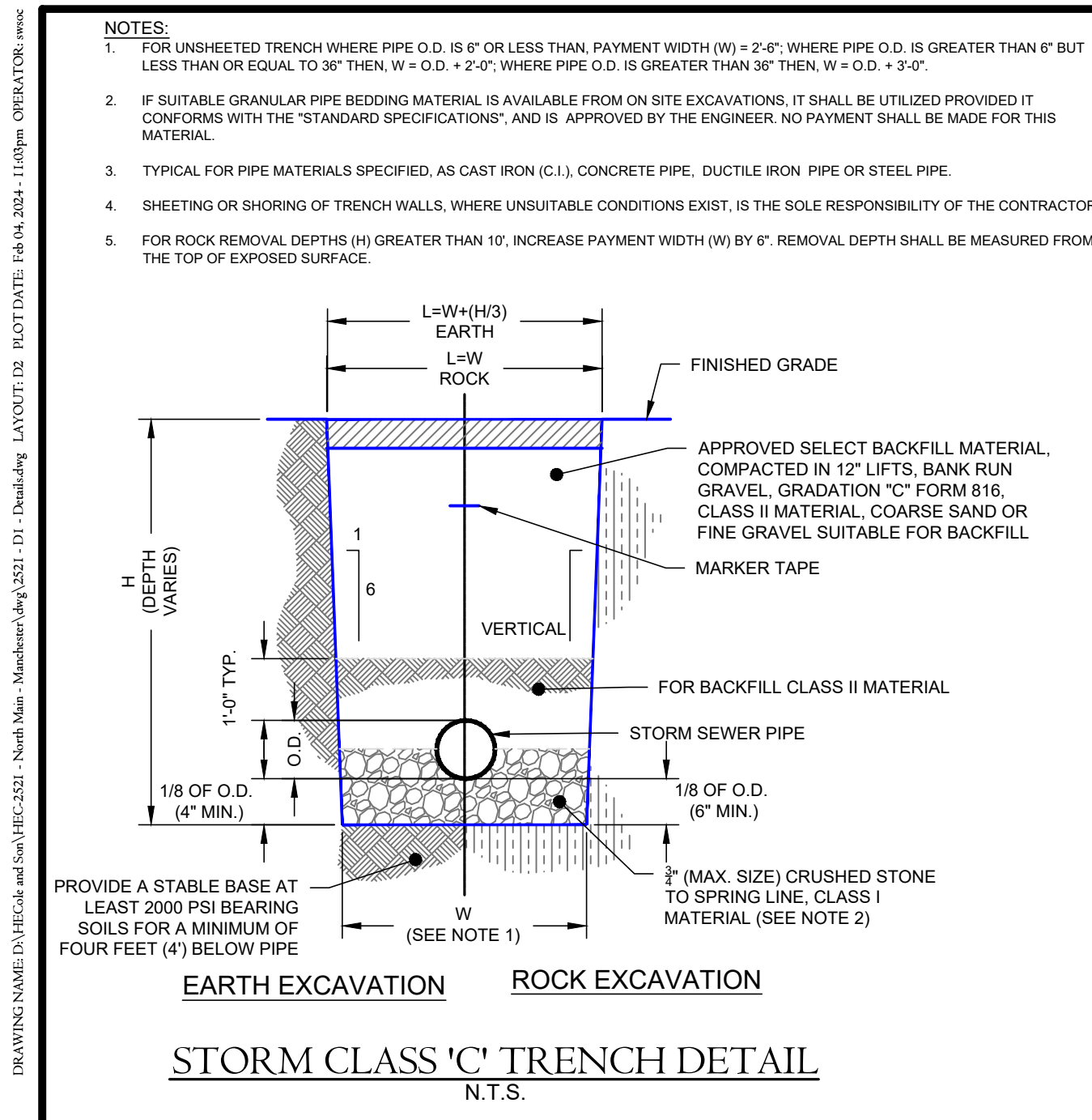


TABLE R1 THICKNESS REQUIREMENTS FOR GRANULAR BEDDING

RIPRAP DESIGNATION	MINIMUM BEDDING THICKNESS (INCHES)
MODIFIED	6"
INTERMEDIATE	6"
STANDARD	12"
SPECIAL DESIGN	12"

GRANULAR BEDDING SHALL CONFORM TO CONN. DOT SPECIFICATION M.02.01

TABLE R2 CLASSIFICATION OF RIPRAP

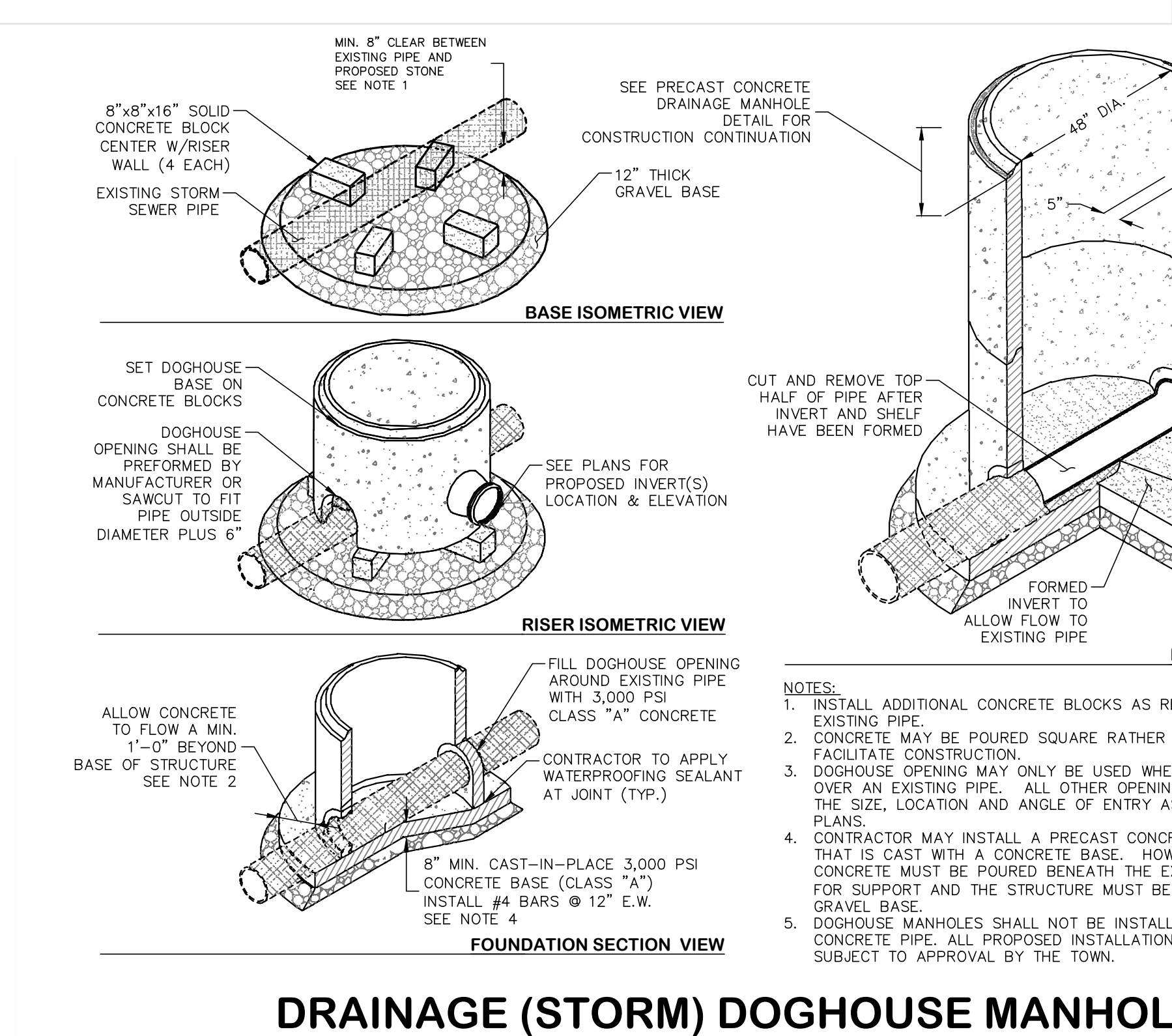
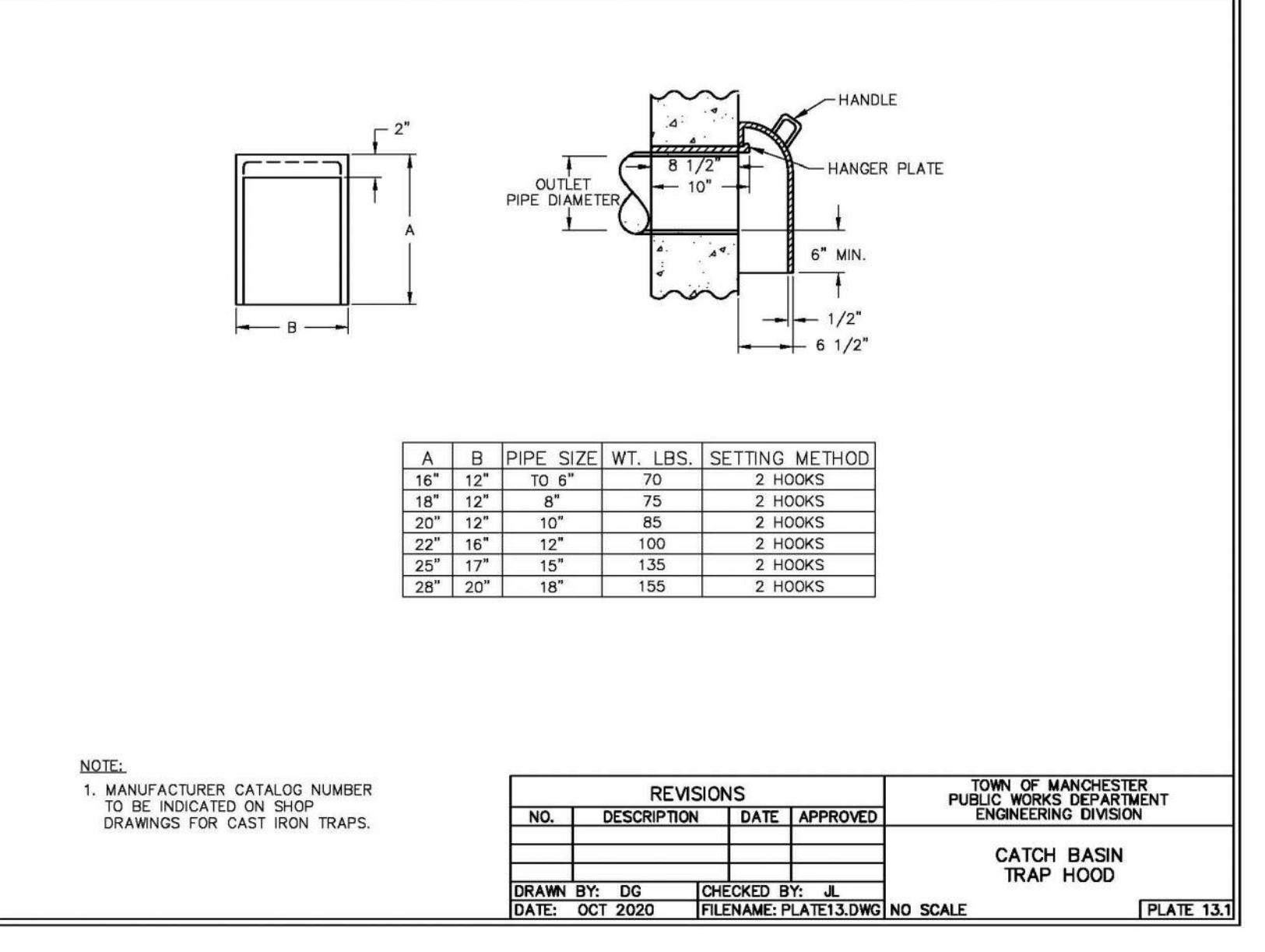
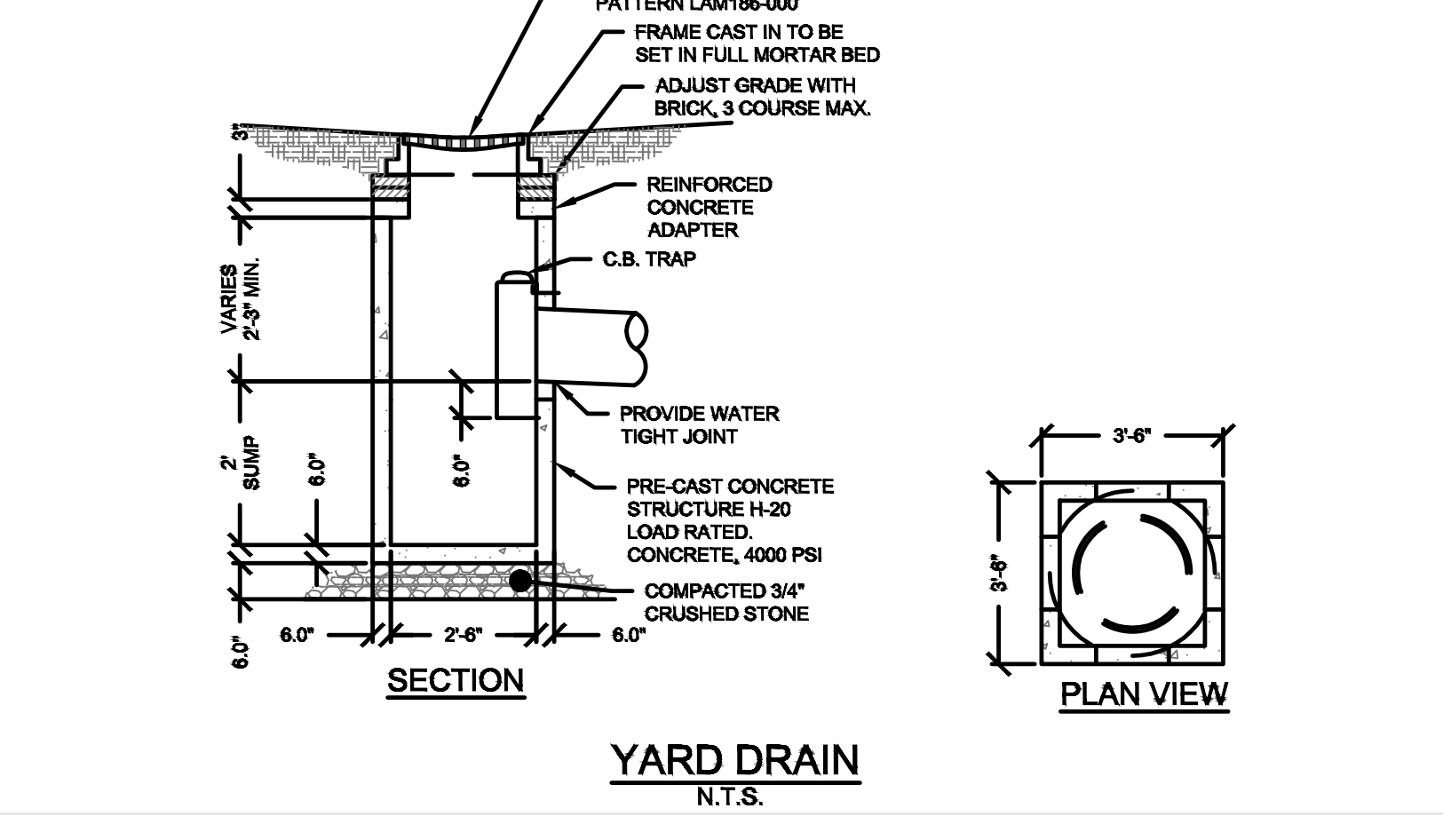
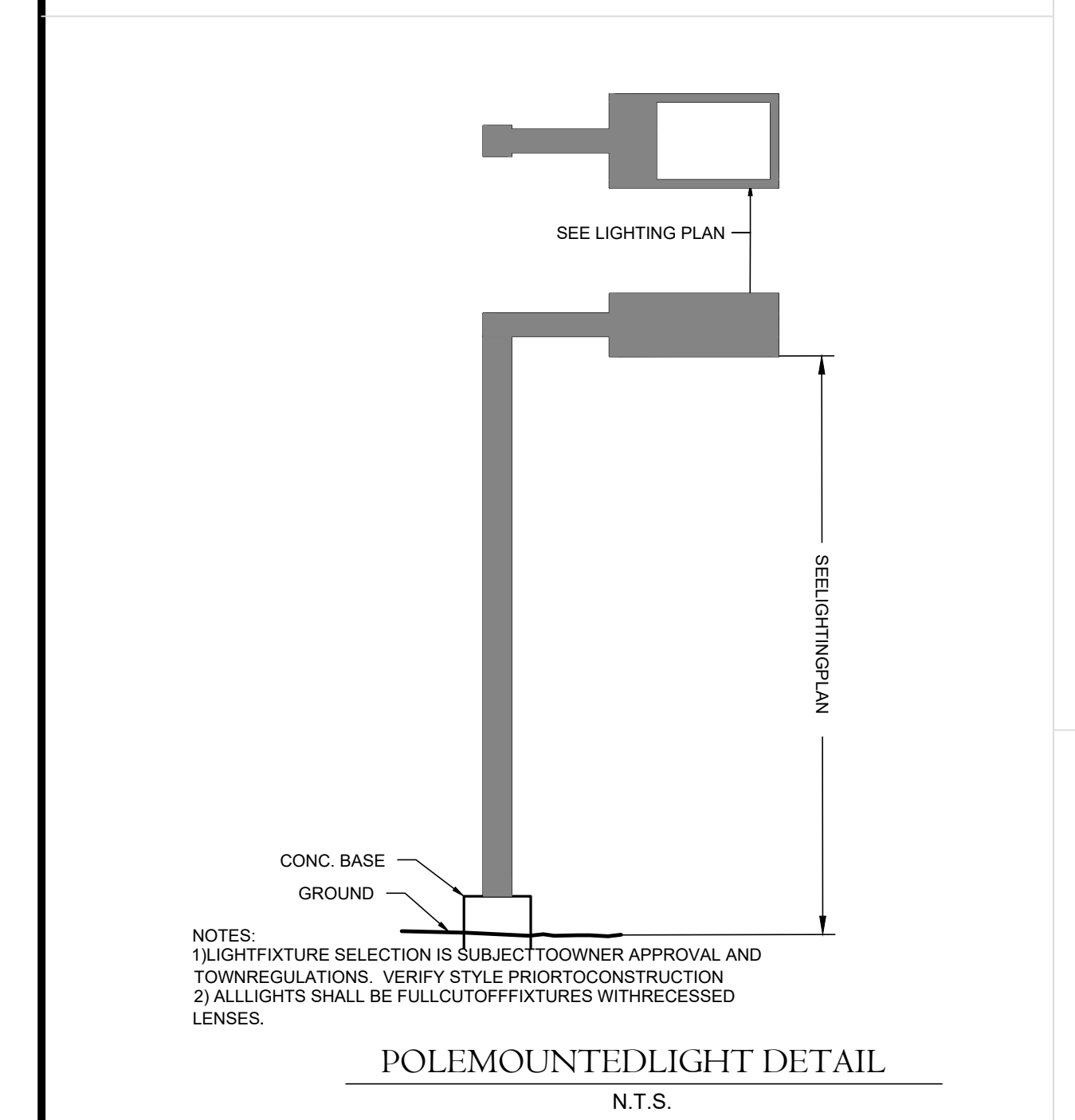
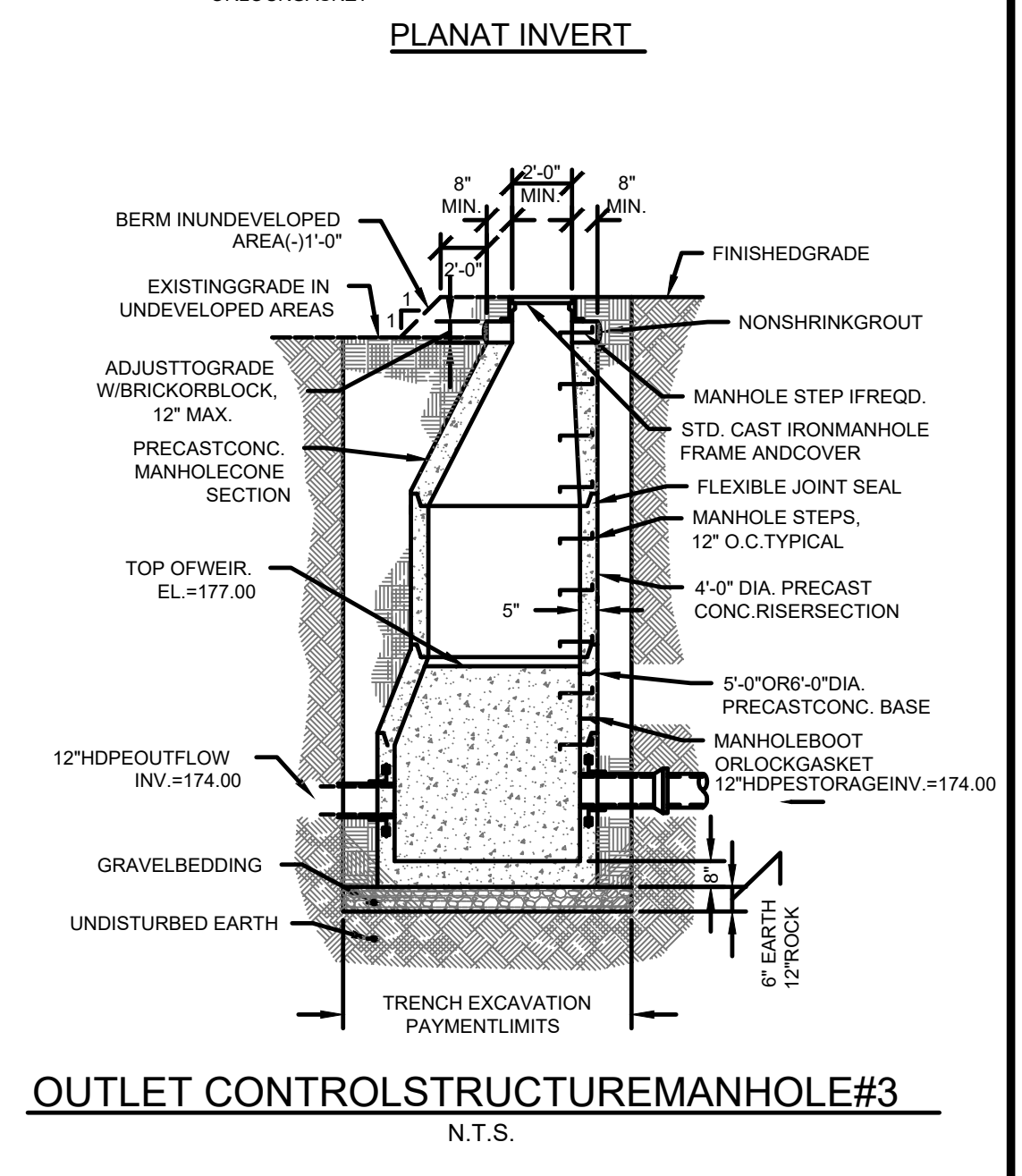
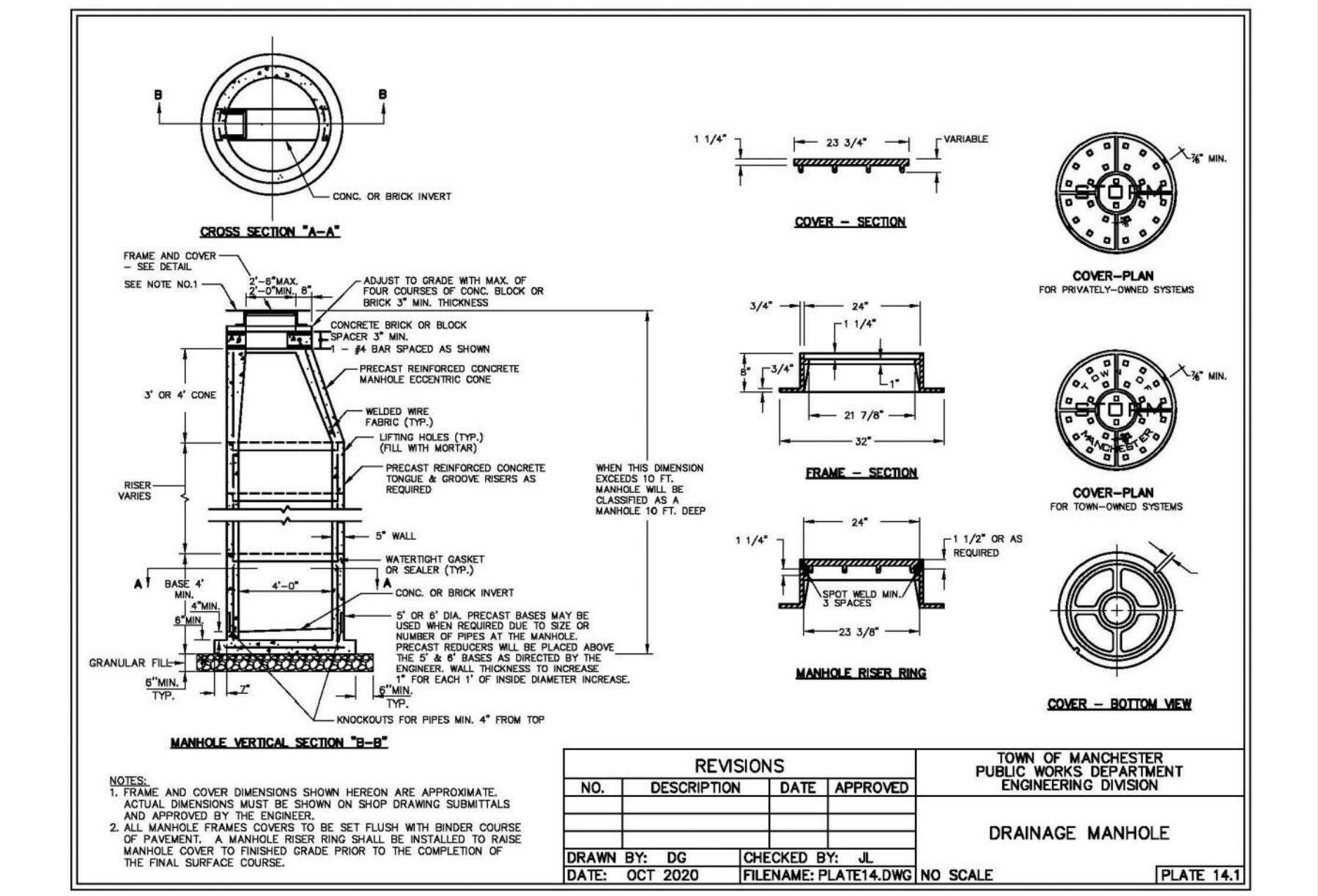
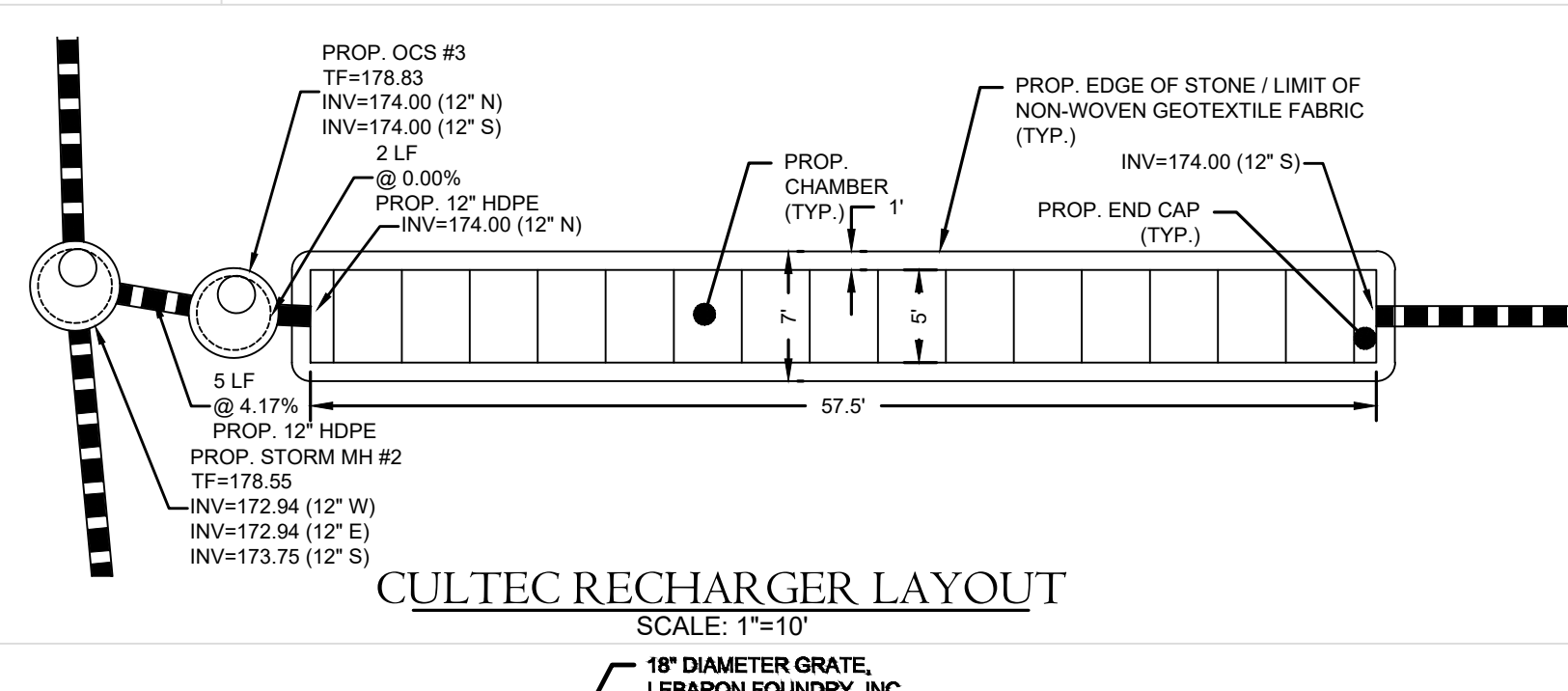
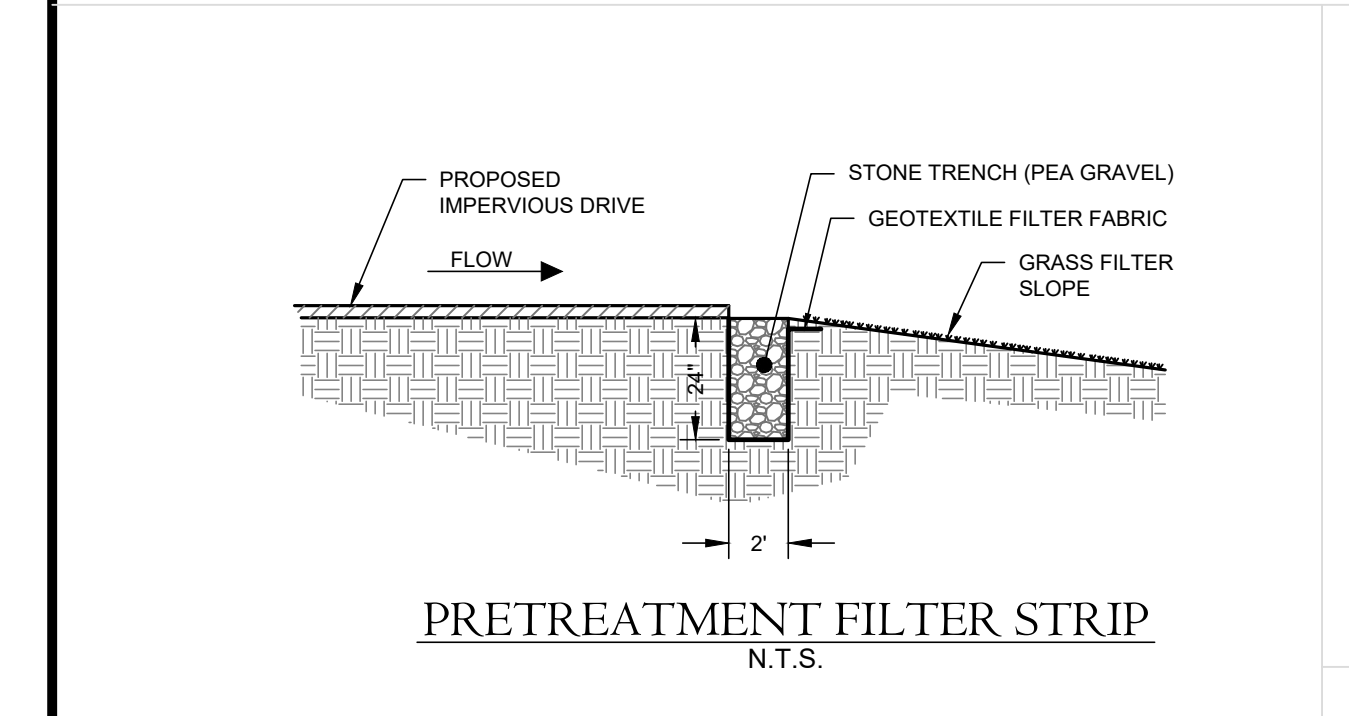
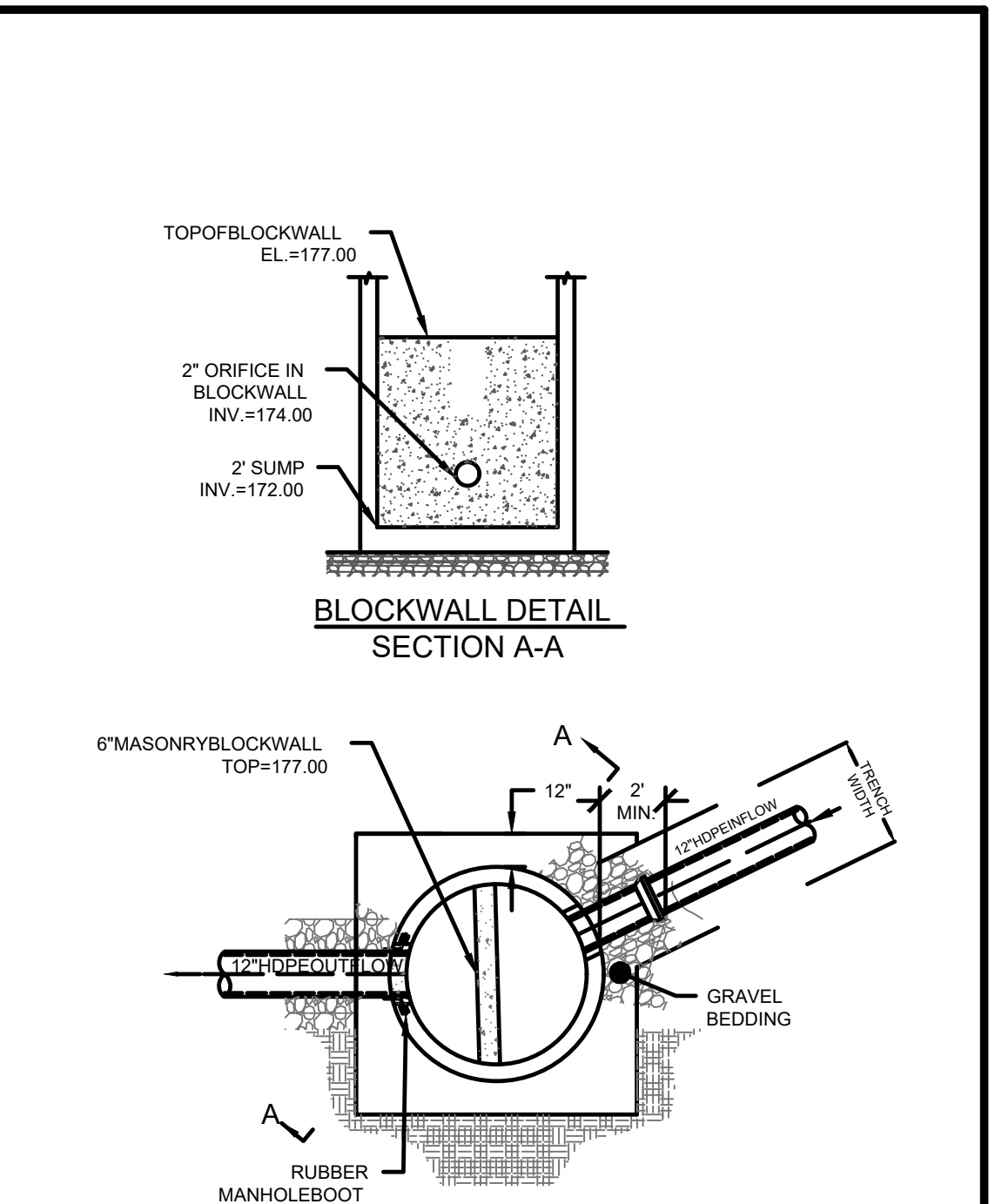
RIPRAP DESIGNATION	d ₅₀ (INCHES)	DEPTH (INCHES)
MODIFIED	5	12
INTERMEDIATE	8	18
STANDARD	15	36

d₅₀ = MEAN PARTICLE SIZE
RIPRAP SPECIFICATIONS & GRADATIONS SHALL CONFORM TO CONN. DOT. M.12.02

TABLE R3 GRADATION FOR GRANULAR BEDDING

U.S. STANDARD SIEVE SIZE	PERCENT WEIGHT BY PASSING CONN. DOT. GRADING A
5"	100
3 1/2"	100
1 1/2"	55-100
3/4"	-
1/4"	25-60
#10	15-45
#40	5-25
#100	0-10
#200	0-5

RIPRAP INSTALLATION DETAIL
N.T.S.



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PLANNING AND ZONING
COMMISSION
MANCHESTER, CT

DATE: _____
SIGNED: _____



PROJECT NAME:

PROPOSED MIXED-USE DEVELOPMENT

14 North Main Street
Manchester, Connecticut

PREPARED FOR:
3 SQUARED, LLC

876 South Main Street
P.O. Box 44
Plainville, CT 06479-0044

Tel: (860) 628-4484
Fax: (860) 620-0196
www.hecole.com

DETAILS

Scale: N.T.S.

Date: December 20, 2023

Project #: 2521 F.B. #: ---

Drawn By: BTP Approved By: MSL

Revisions:

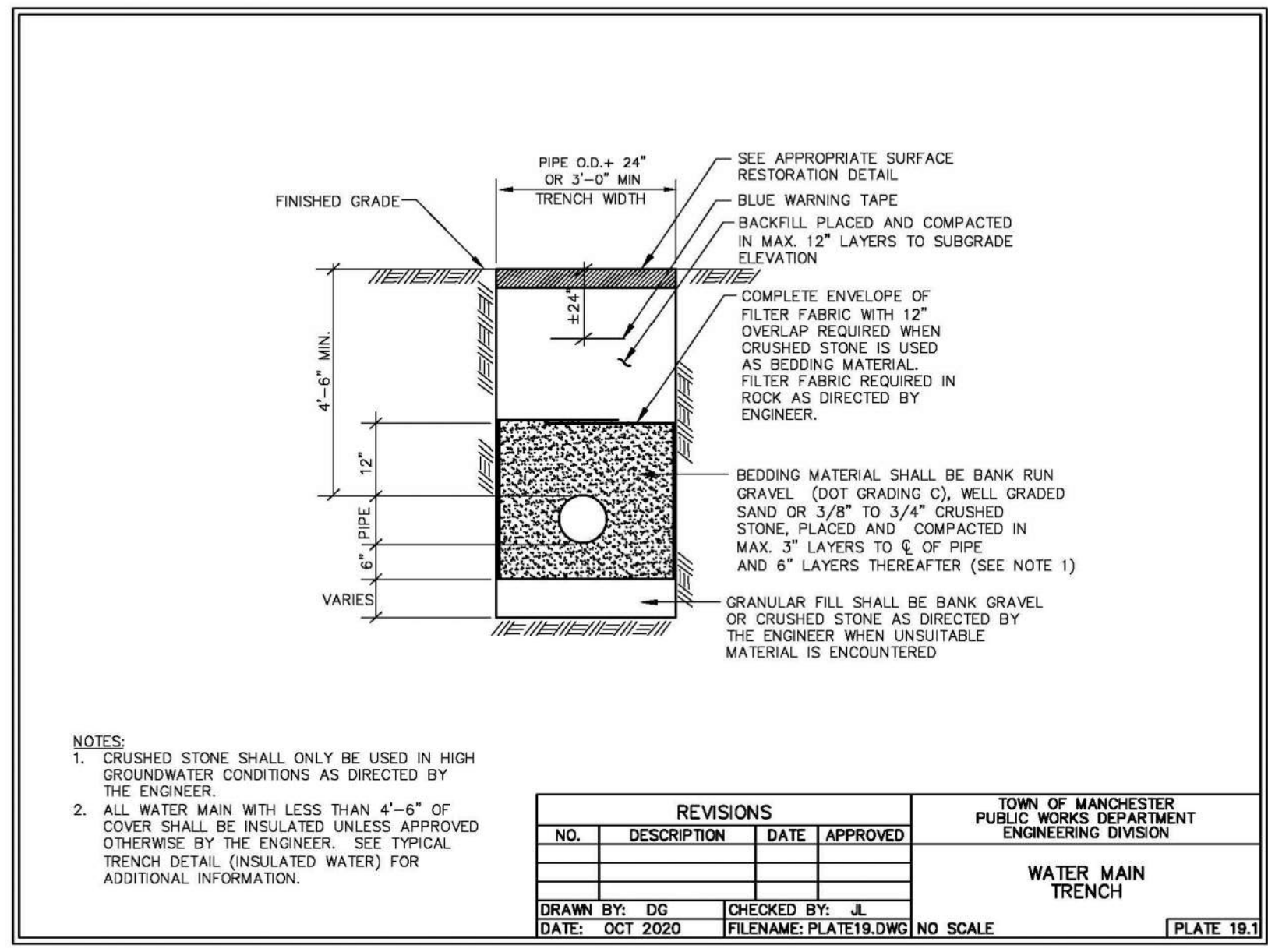
Date:	Descriptions:
02/05/2024	Revised per Town Comments

Sheet #: _____

Sheet #: _____

Sheet #: _____

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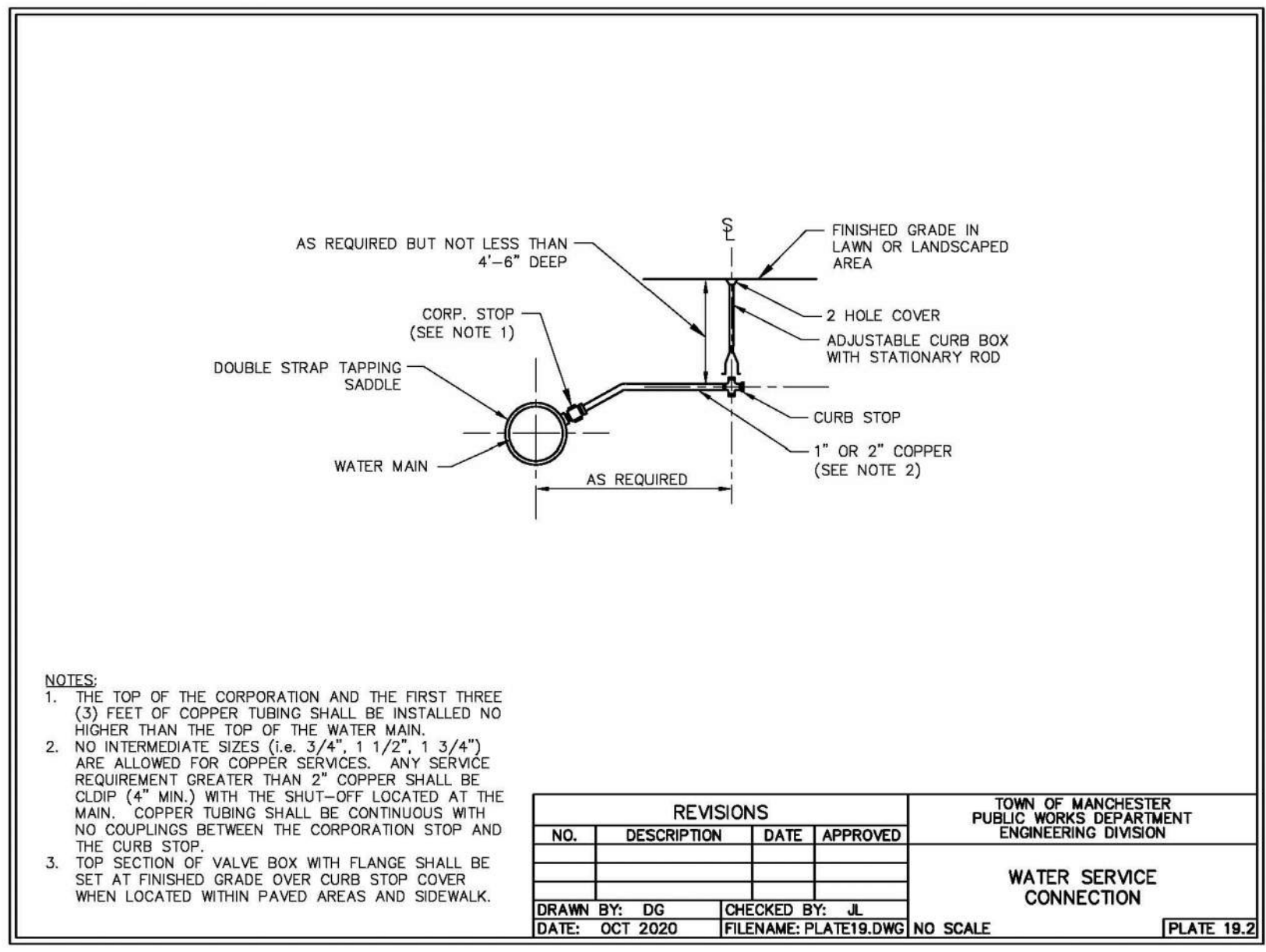


NOTES:
 1. CRUSHED STONE SHALL ONLY BE USED IN HIGH GROUNDWATER CONDITIONS AS DIRECTED BY THE ENGINEER.
 2. ALL WATER MAIN WITH LESS THAN 4'-6\"/>

REVISIONS			
NO.	DESCRIPTION	DATE	APPROVED

DRAWN BY: DG CHECKED BY: JL
 DATE: OCT 2020 FILENAME: PLATE19.DWG NO SCALE [PLATE 19.1]

TOWN OF MANCHESTER
 PUBLIC WORKS DEPARTMENT
 ENGINEERING DIVISION
WATER MAIN TRENCH

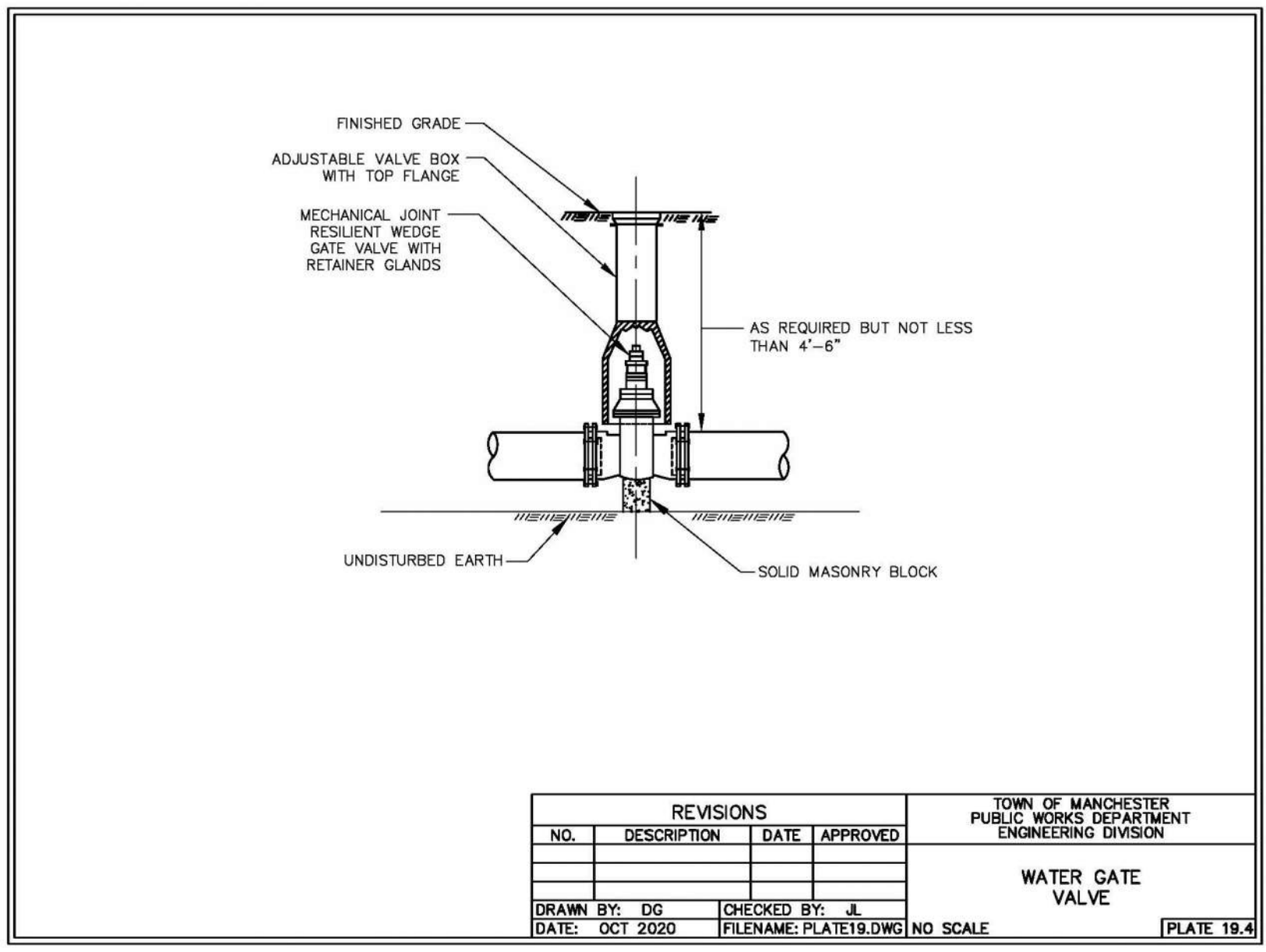


NOTES:
 1. THE TOP OF THE CORPORATION AND THE FIRST THREE (3) FEET OF COPPER TUBING SHALL BE INSTALLED NO HIGHER THAN THE TOP OF THE WATER MAIN.
 2. NO INTERMEDIATE SIZES (i.e. 3/4\", 1 1/2\", 1 3/4\") ARE ALLOWED FOR COPPER SERVICES. ANY SERVICE REQUIREMENT GREATER THAN 2\"/>

REVISIONS			
NO.	DESCRIPTION	DATE	APPROVED

DRAWN BY: DG CHECKED BY: JL
 DATE: OCT 2020 FILENAME: PLATE19.DWG NO SCALE [PLATE 19.2]

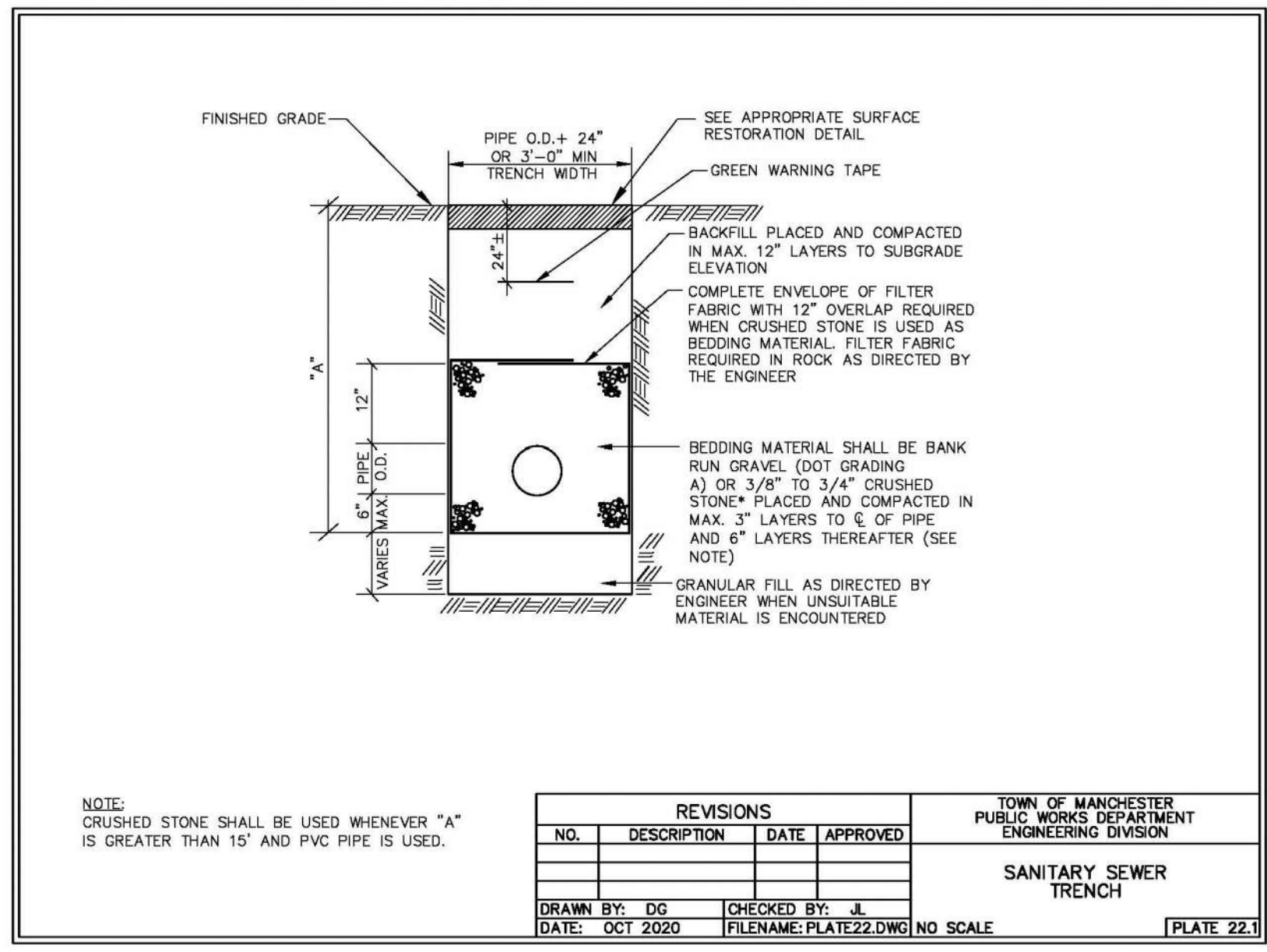
TOWN OF MANCHESTER
 PUBLIC WORKS DEPARTMENT
 ENGINEERING DIVISION
WATER SERVICE CONNECTION



REVISIONS			
NO.	DESCRIPTION	DATE	APPROVED

DRAWN BY: DG CHECKED BY: JL
 DATE: OCT 2020 FILENAME: PLATE19.DWG NO SCALE [PLATE 19.4]

TOWN OF MANCHESTER
 PUBLIC WORKS DEPARTMENT
 ENGINEERING DIVISION
WATER GATE VALVE

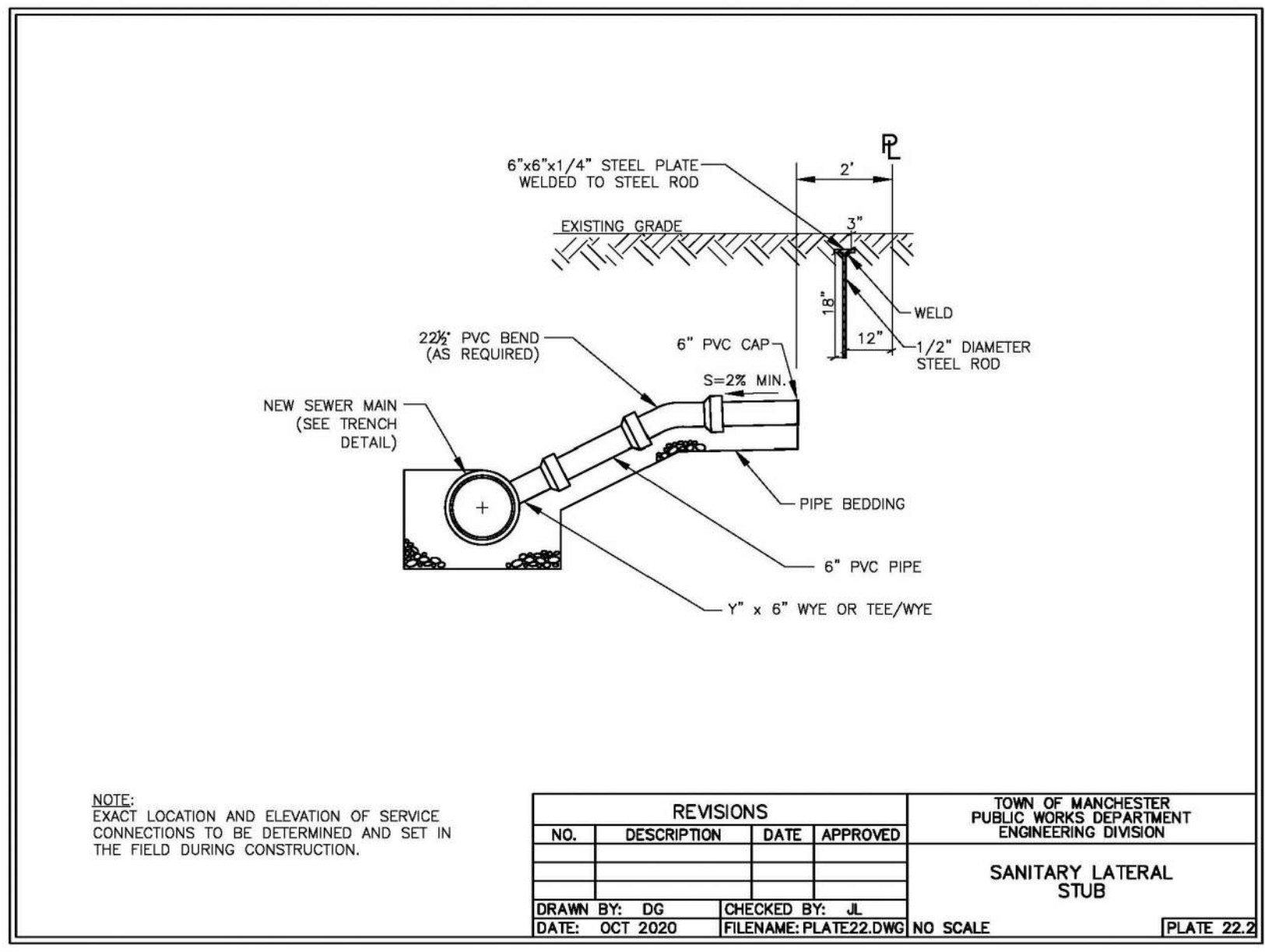


NOTE:
 CRUSHED STONE SHALL BE USED WHENEVER \"A\" IS GREATER THAN 15\"/>

REVISIONS			
NO.	DESCRIPTION	DATE	APPROVED

DRAWN BY: DG CHECKED BY: JL
 DATE: OCT 2020 FILENAME: PLATE22.DWG NO SCALE [PLATE 22.1]

TOWN OF MANCHESTER
 PUBLIC WORKS DEPARTMENT
 ENGINEERING DIVISION
SANITARY SEWER TRENCH

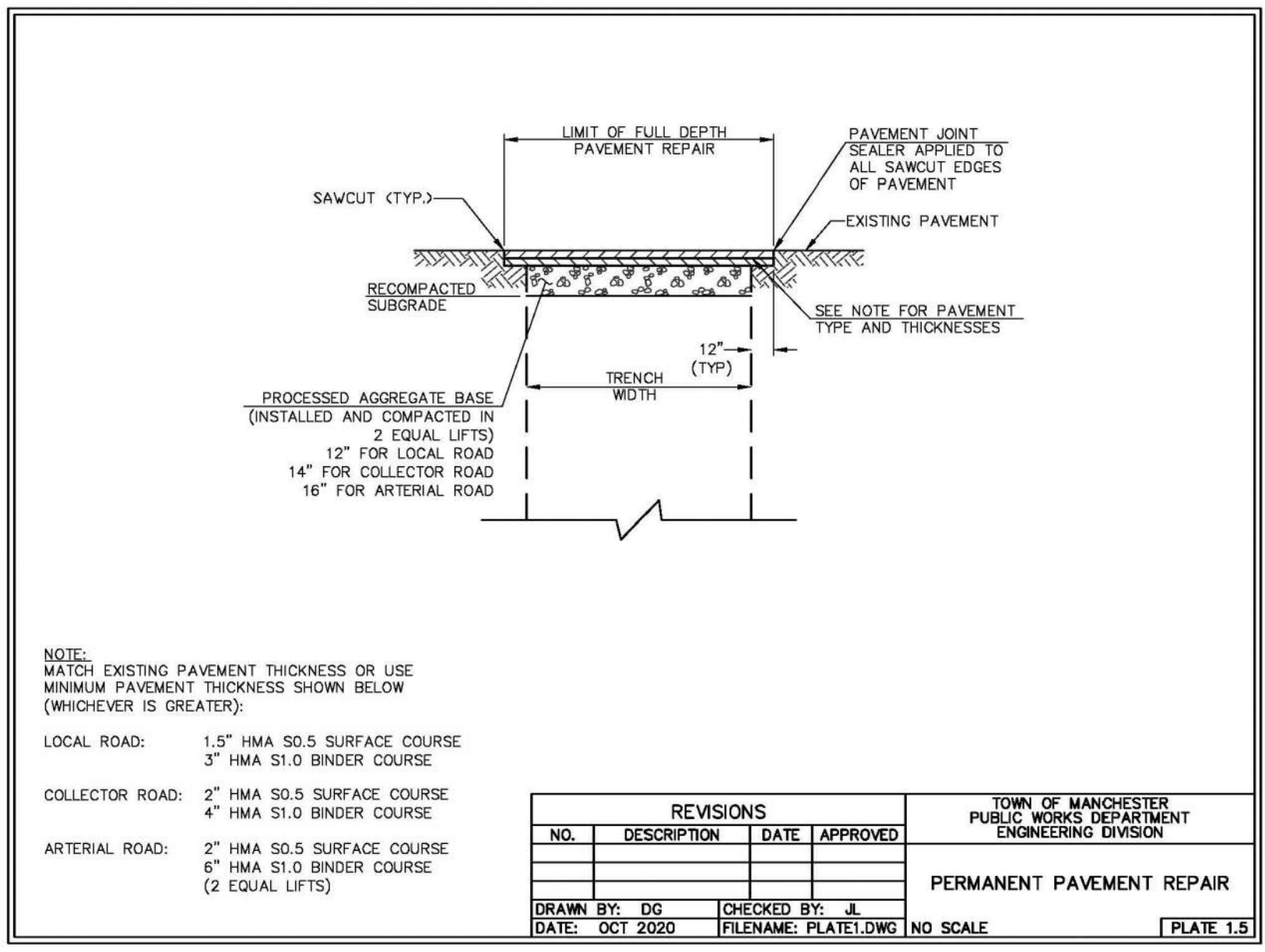


NOTE:
 EXACT LOCATION AND ELEVATION OF SERVICE CONNECTIONS TO BE DETERMINED AND SET IN THE FIELD DURING CONSTRUCTION.

REVISIONS			
NO.	DESCRIPTION	DATE	APPROVED

DRAWN BY: DG CHECKED BY: JL
 DATE: OCT 2020 FILENAME: PLATE22.DWG NO SCALE [PLATE 22.2]

TOWN OF MANCHESTER
 PUBLIC WORKS DEPARTMENT
 ENGINEERING DIVISION
SANITARY LATERAL STUB

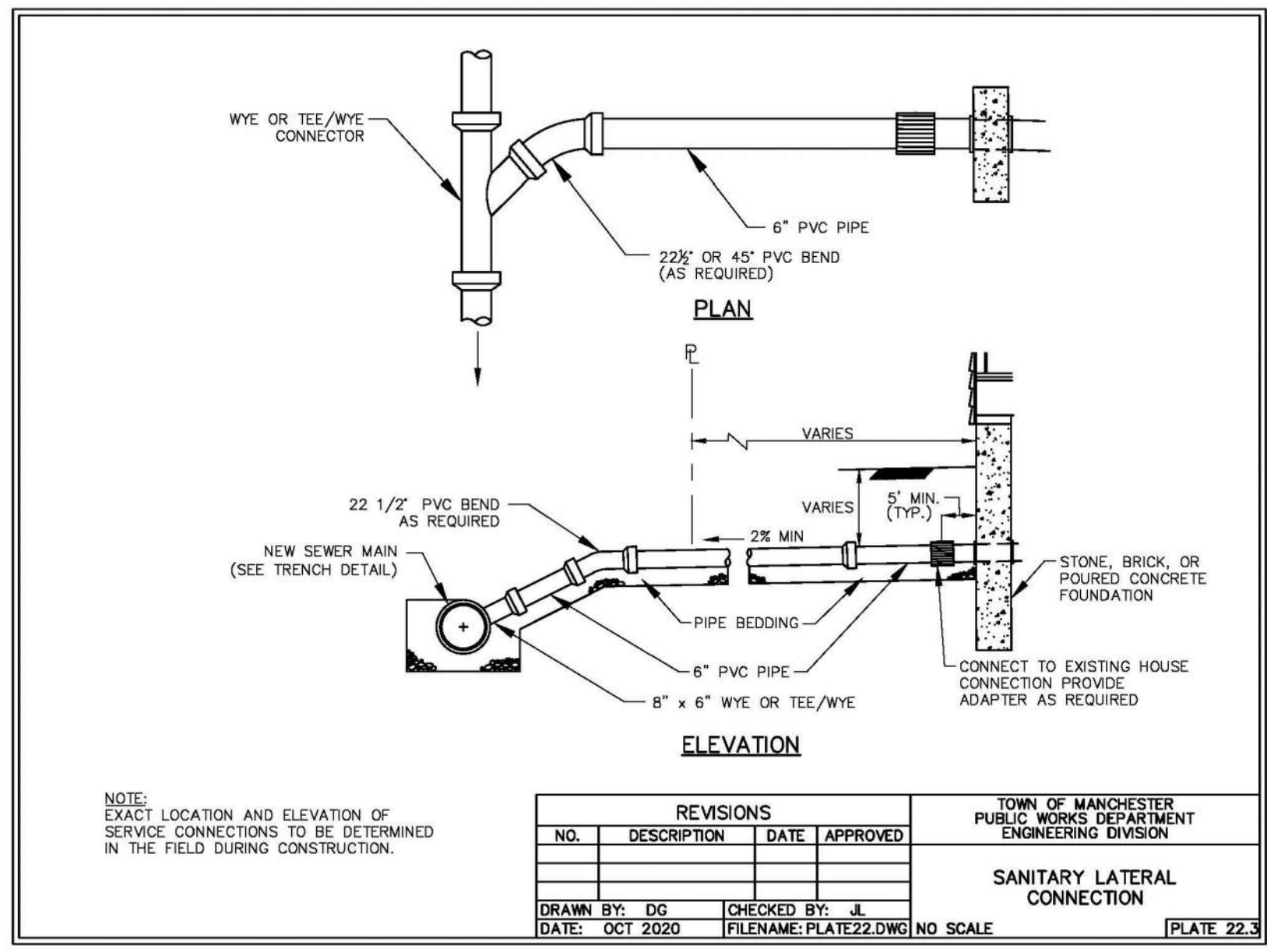


NOTE:
 MATCH EXISTING PAVEMENT THICKNESS OR USE MINIMUM PAVEMENT THICKNESS SHOWN BELOW (WHICHEVER IS GREATER):
 LOCAL ROAD: 1.5\"/>

REVISIONS			
NO.	DESCRIPTION	DATE	APPROVED

DRAWN BY: DG CHECKED BY: JL
 DATE: OCT 2020 FILENAME: PLATE1.DWG NO SCALE [PLATE 1.5]

TOWN OF MANCHESTER
 PUBLIC WORKS DEPARTMENT
 ENGINEERING DIVISION
PERMANENT PAVEMENT REPAIR

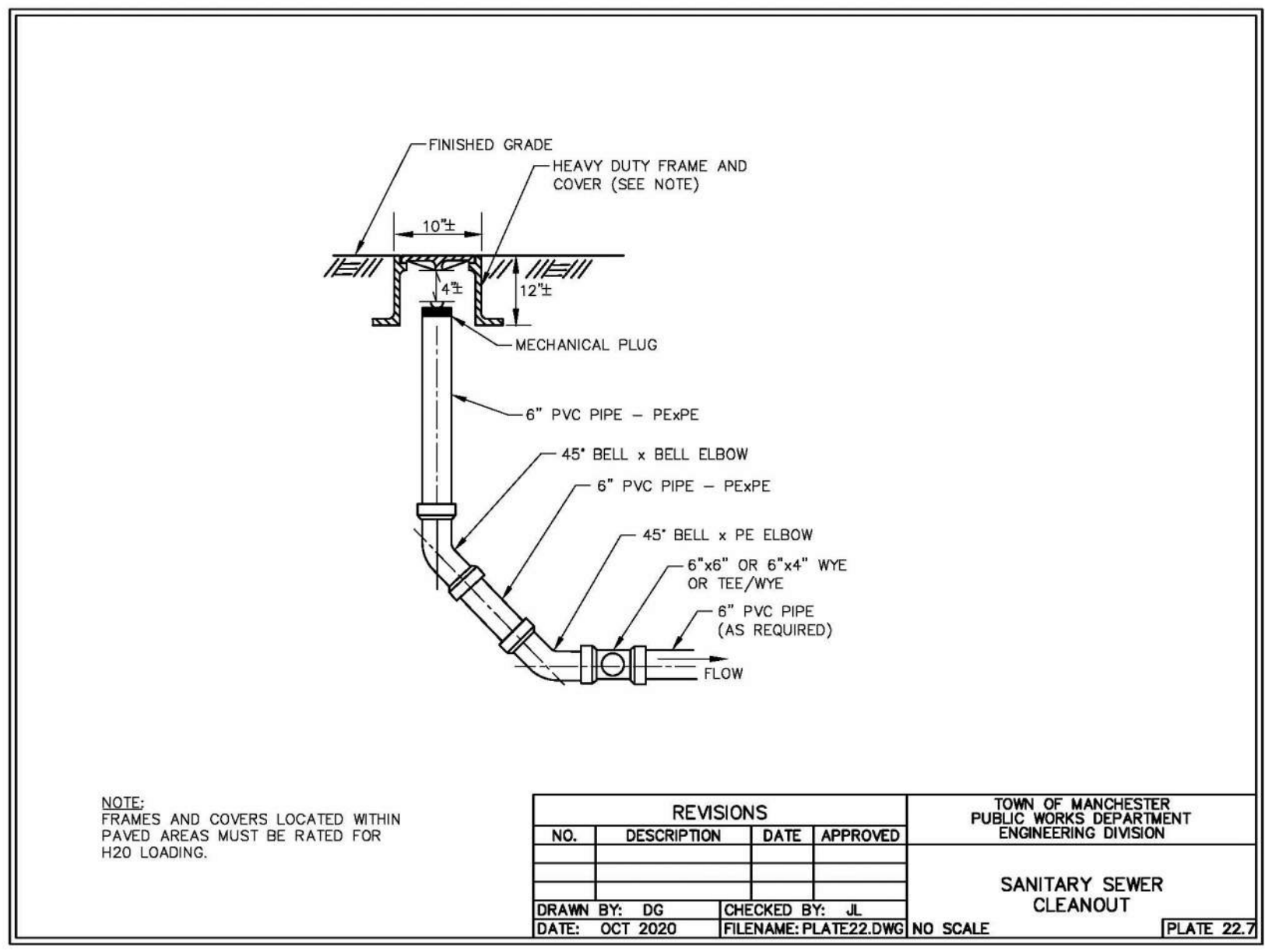


NOTE:
 EXACT LOCATION AND ELEVATION OF SERVICE CONNECTIONS TO BE DETERMINED IN THE FIELD DURING CONSTRUCTION.

REVISIONS			
NO.	DESCRIPTION	DATE	APPROVED

DRAWN BY: DG CHECKED BY: JL
 DATE: OCT 2020 FILENAME: PLATE22.DWG NO SCALE [PLATE 22.3]

TOWN OF MANCHESTER
 PUBLIC WORKS DEPARTMENT
 ENGINEERING DIVISION
SANITARY LATERAL CONNECTION



NOTE:
 FRAMES AND COVERS LOCATED WITHIN PAVED AREAS MUST BE RATED FOR H2O LOADING.

REVISIONS			
NO.	DESCRIPTION	DATE	APPROVED

DRAWN BY: DG CHECKED BY: JL
 DATE: OCT 2020 FILENAME: PLATE22.DWG NO SCALE [PLATE 22.7]

TOWN OF MANCHESTER
 PUBLIC WORKS DEPARTMENT
 ENGINEERING DIVISION
SANITARY SEWER CLEANOUT

APPROVED
 PLANNING AND ZONING
 COMMISSION
 MANCHESTER, CT

DATE: _____
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PROJECT NAME:
PROPOSED MIXED-USE DEVELOPMENT
 14 North Main Street
 Manchester, Connecticut

PREPARED FOR:
3 SQUARED, LLC

Sheet Description:
DETAILS

Scale: N.T.S.

Date: December 20, 2023

Project #: 2521 F.B. #: ---
 Drawn By: BTP Approved By: MSL

Revisions:
 Date: Descriptions:
 02/05/2024 Revised per Town Comments

Sheet #:
D3

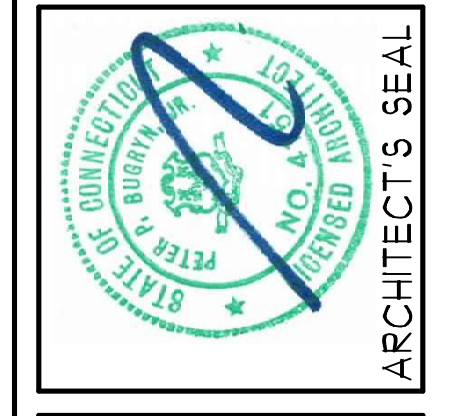
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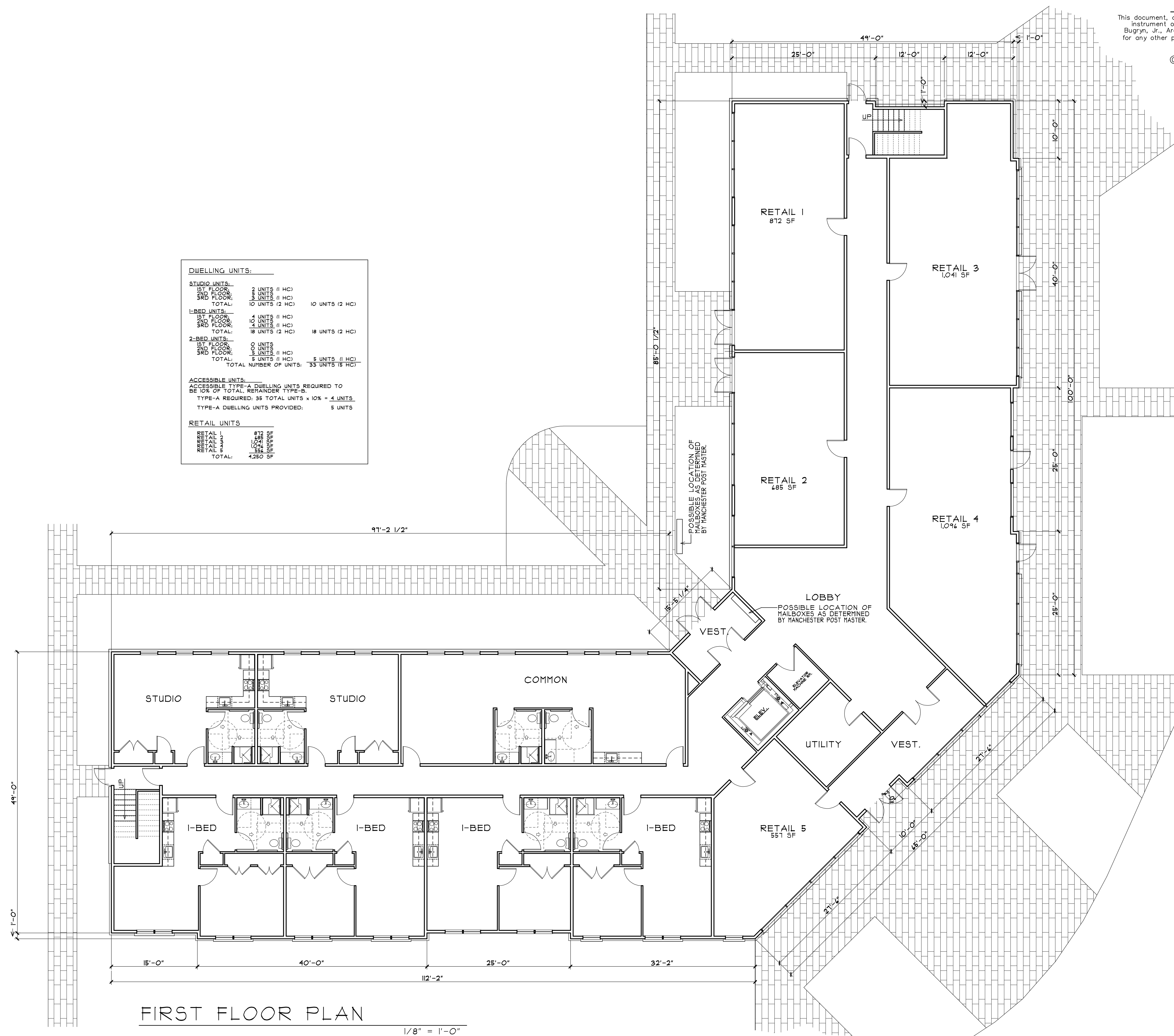


PRELIMINARY PLANS FOR
 COMMERCIAL - RESIDENTIAL BUILDING
 14 NORTH MAIN STREET
 MANCHESTER, CT
 FIRST FLOOR PLAN

REVISIONS:
 12/20/23 UNIT COUNT
 2/1/24 PIZ STAFF REVIEW

DATE: 11/4/23
 DRAWN BY: PPB
 PROJECT NO. A-23-0018

SHEET: **A1**
 X OF X



DWELLING UNITS:

STUDIO UNITS:		
1ST FLOOR:	2 UNITS (1 HC)	
2ND FLOOR:	3 UNITS (1 HC)	
3RD FLOOR:	5 UNITS (1 HC)	
TOTAL:	10 UNITS (2 HC)	10 UNITS (2 HC)
1-BED UNITS:		
1ST FLOOR:	14 UNITS (1 HC)	
2ND FLOOR:	14 UNITS (1 HC)	
3RD FLOOR:	14 UNITS (1 HC)	
TOTAL:	42 UNITS (2 HC)	18 UNITS (2 HC)
2-BED UNITS:		
1ST FLOOR:	0 UNITS	
2ND FLOOR:	0 UNITS	
3RD FLOOR:	5 UNITS (1 HC)	
TOTAL:	5 UNITS (1 HC)	5 UNITS (1 HC)
TOTAL NUMBER OF UNITS: 57 UNITS (15 HC)		

ACCESSIBLE UNITS:
 ACCESSIBLE TYPE-A DWELLING UNITS REQUIRED TO BE 10% OF TOTAL, REMAINDER TYPE-B.
 TYPE-A REQUIRED: 35 TOTAL UNITS x 10% = 4 UNITS
 TYPE-A DWELLING UNITS PROVIDED: 5 UNITS

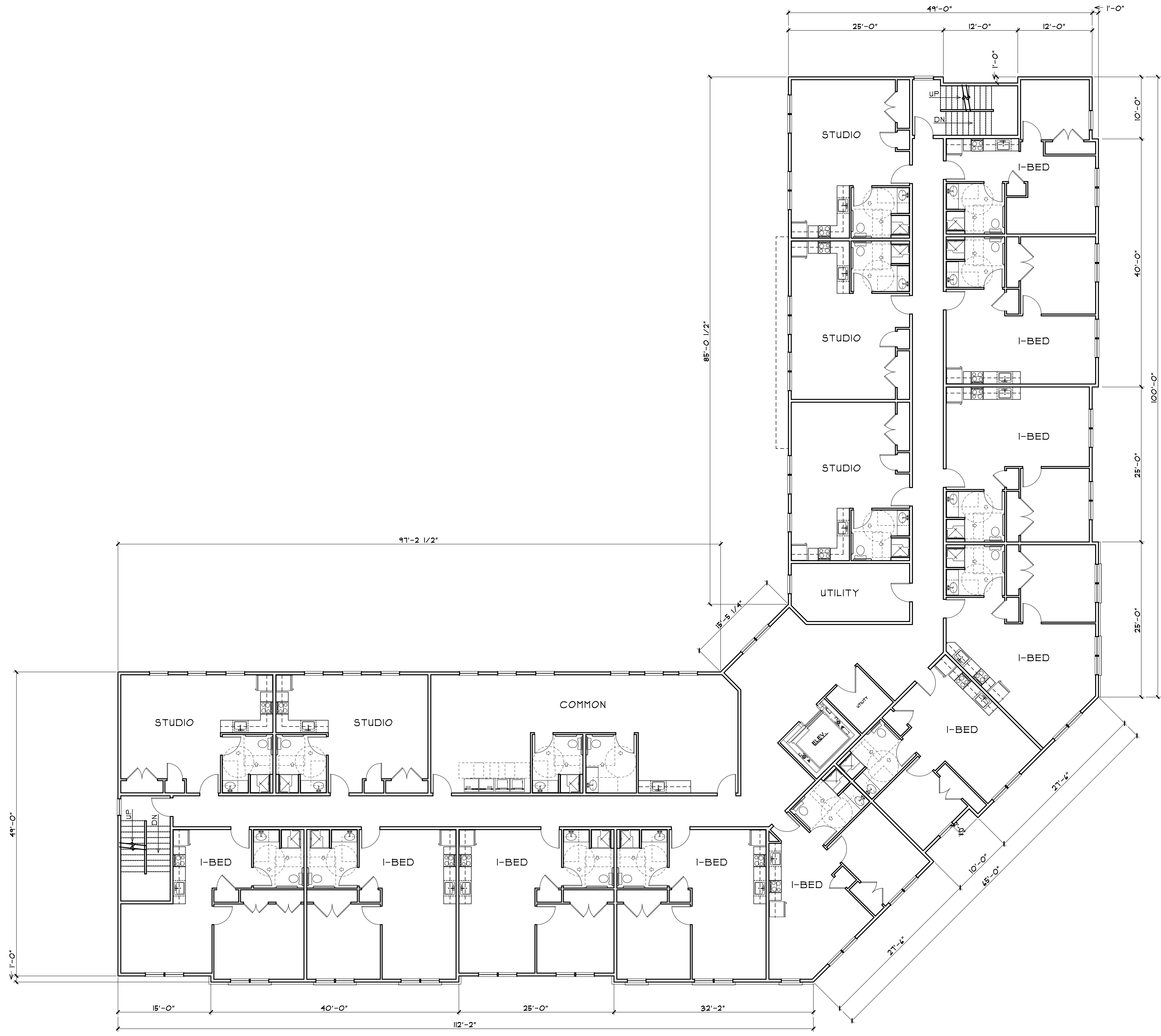
RETAIL UNITS

RETAIL 1	872 SF
RETAIL 2	485 SF
RETAIL 3	1,041 SF
RETAIL 4	1,094 SF
RETAIL 5	551 SF
TOTAL:	4,250 SF

FIRST FLOOR PLAN

1/8" = 1'-0"

\\Server-pc\aharedata\Peter Bugryn Drawings\Soq_Ev.gen\14 N. Main St., Manchester, CT\Preliminary Floor Plans - 2-1-24.dwg



SECOND FLOOR PLAN

1/8" = 1'-0"

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PRELIMINARY PLANS FOR —
COMMERCIAL — RESIDENTIAL BUILDING
14 NORTH MAIN STREET
MANCHESTER, CT
SECOND FLOOR PLAN

REVISIONS:

DATE	DESCRIPTION
12/20/23	UNIT COUNT
2/17/24	PIZ STAFF REVIEW

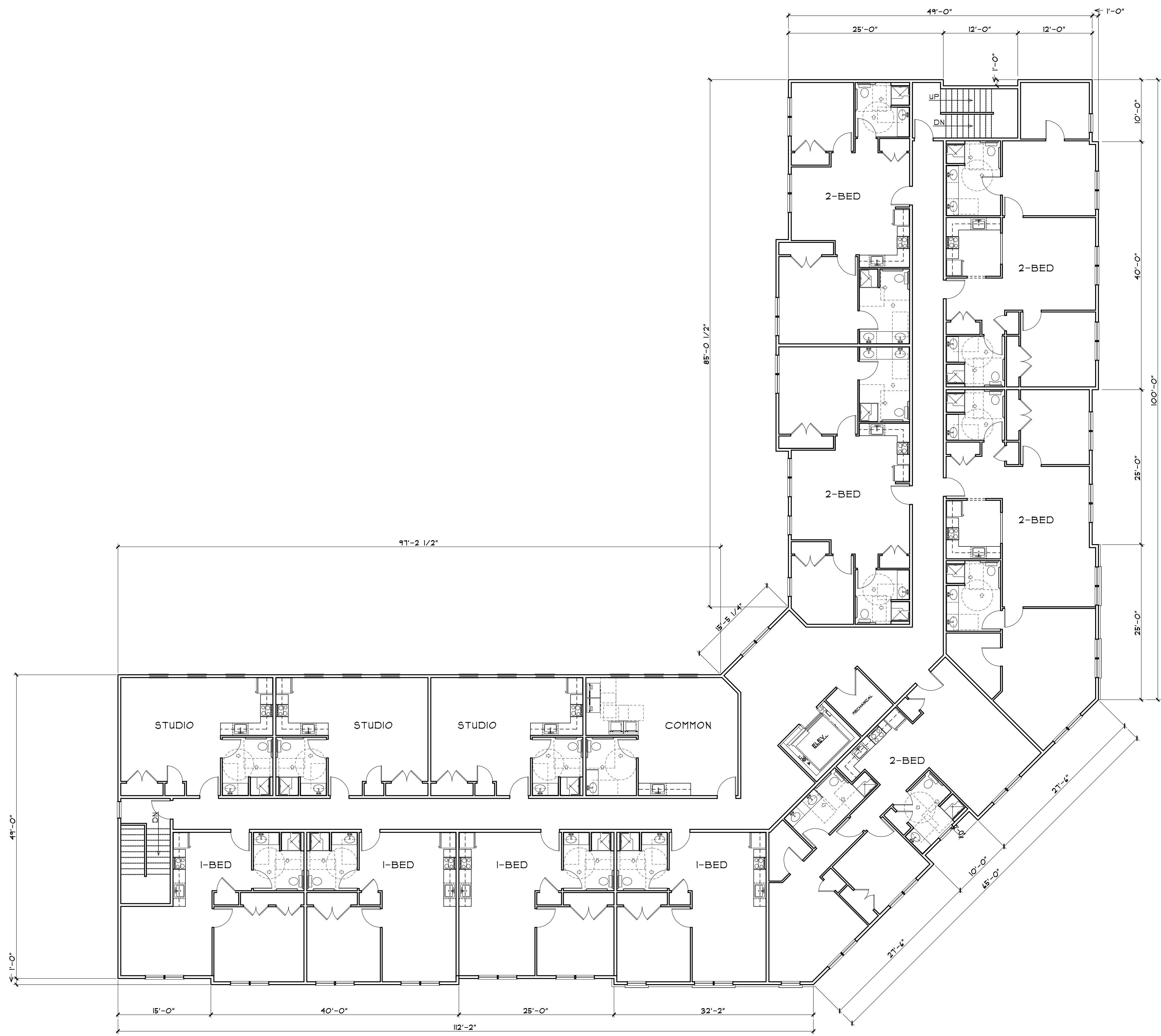
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PROJECT NO. A-23-0018

SHEET: **A2**
X OF X

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THIRD FLOOR PLAN

1/8" = 1'-0"

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PRELIMINARY PLANS FOR
COMMERCIAL - RESIDENTIAL BUILDING
14 NORTH MAIN STREET
MANCHESTER, CT

THIRD FLOOR PLAN

REVISIONS:	
2/1/24	PIZ STAFF REVIEW

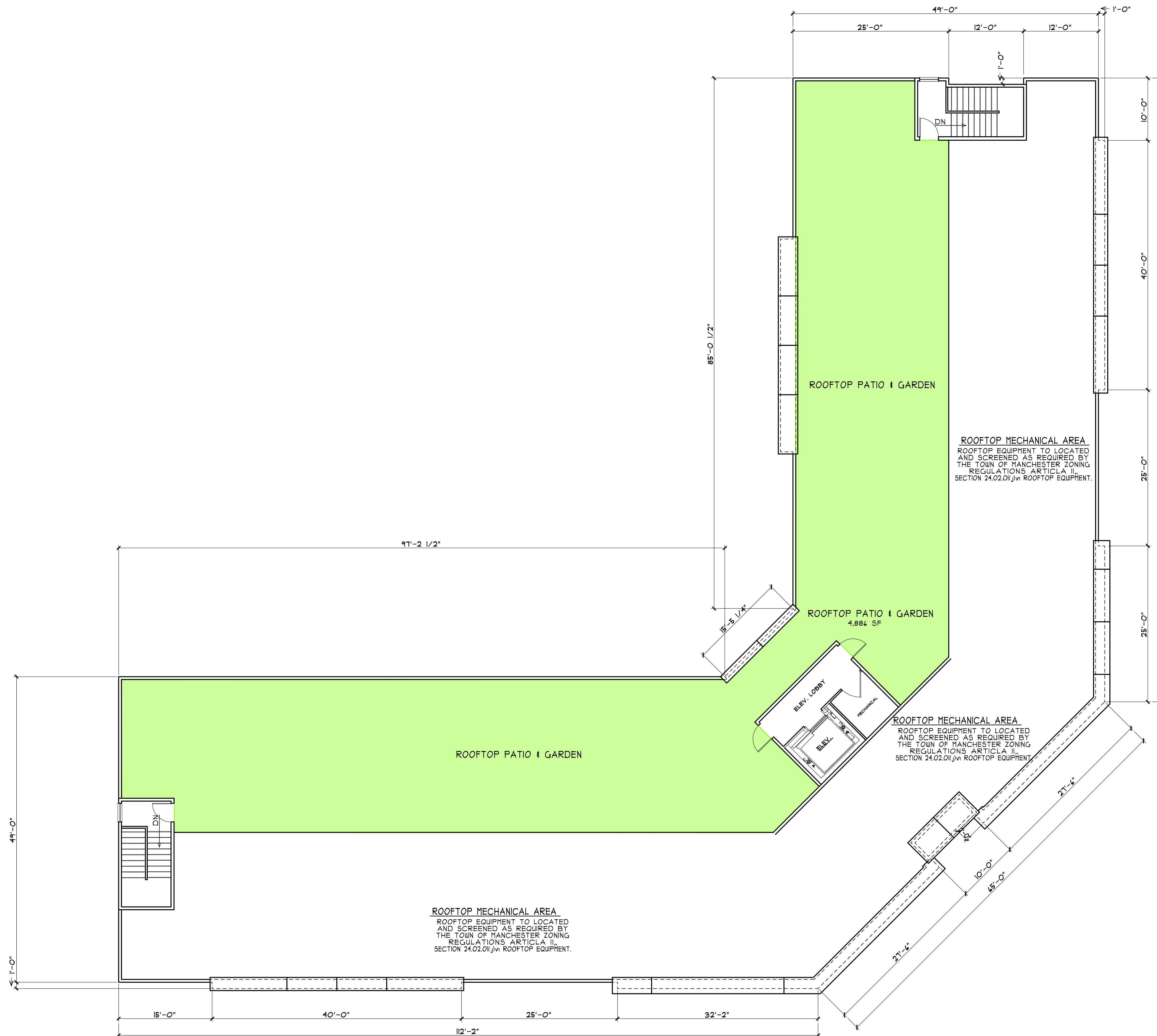
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DRAWN BY: PPB

PROJECT NO. A-23-0018

SHEET: **A3**
X OF X

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ROOF PLAN

1/8" = 1'-0"

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Peter P. Bugryn, Jr.
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 860.309.4200 / Email: pbugryn@yahoo.com



PRELIMINARY PLANS FOR
 COMMERCIAL - RESIDENTIAL BUILDING
 14 NORTH MAIN STREET
 MANCHESTER, CT
 ROOF PLAN

REVISIONS:

12/20/23	ROOFTOP
2/1/24	PIZ STAFF REVIEW

DATE: 11/4/23

DRAWN BY: PPB

PROJECT NO. A-23-0018

SHEET:

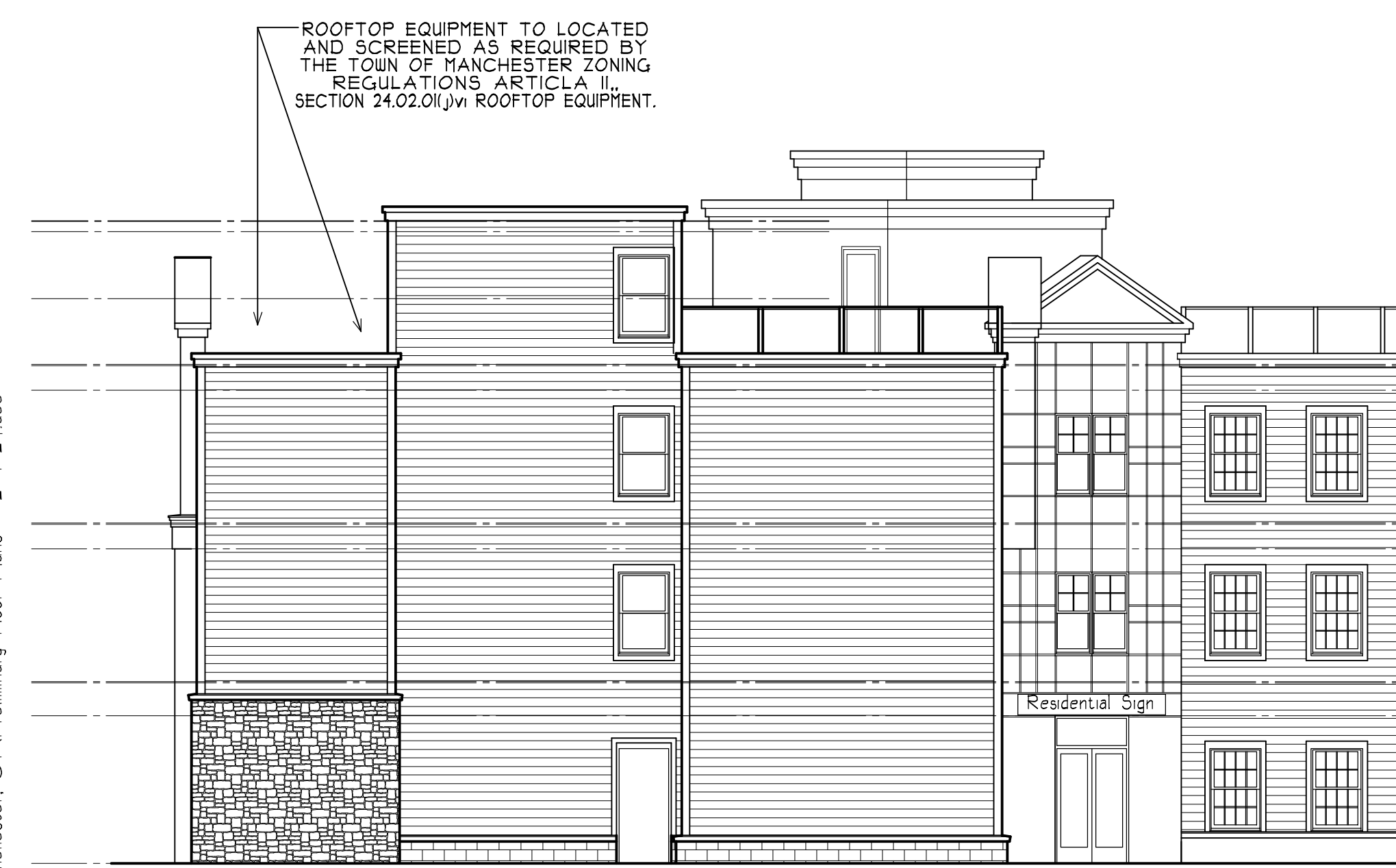
A4
 X OF X



OLD NORTH MAIN ELEVATION



OAKLAND STREET ELEVATION



NORTH MAIN STREET ELEVATION



REAR BELEVATION

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NOTE:
 1. THIS DRAWING IS INTENDED TO SHOW DESIGN INTENT. FIELD CONDITIONS AND INSTALLATION PROCEDURES MAY REQUIRE THAT CHANGES BE MADE IN THE FIELD. CONSTRUCTION DETAILS PROCESS MAY ALSO DETERMINE CERTAIN AREAS AND SPECIFIC INSTANCES WHICH WOULD BEST BE CONSTRUCTED OTHERWISE.
 2. ALL MATERIALS AND PRODUCTS (EG. RAFTERS, JOISTS, BEAMS, RIDGES, ETC.) SHALL BE VERIFIED AND LOCATED IN THE FIELD. DO NOT SCALE THESE OR ANY DRAWINGS CONTAINED IN THIS SET OF ARCHITECTURAL CONSTRUCTION DRAWINGS.

Peter P. Bugryn, Jr.
 Architect/Consultant
 205 Perkins Street / Bristol, CT 06010
 860.309.4260 / Email: p.bugryn@yahoo.com



PRELIMINARY PLANS FOR
 COMMERCIAL - RESIDENTIAL BUILDING
 14 NORTH MAIN STREET
 MANCHESTER, CT
 EXTERIOR ELEVATIONS

REVISIONS:
 12/20/23 ROOFTOP
 2/7/24 PHZ STAFF REVIEW

DATE:
 11/4/23

DRAWN BY:
 PPB


PROJECT NO.
 A-23-0018

SHEET:
 AS
 X OF X

\\Server-pc\aharedata\Peter_Bugryn_Drawing\160g_Ev\en\N Main St., Manchester, CT\Preliminary Floor Plans - 2-1-24.dwg

**TOWN OF MANCHESTER
PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT**

TO: Planning & Zoning Commission

FROM: Megan Pilla, Principal Development Planner 

DATE: February 16, 2024

RE: TRA Consulting – 71 & 81 Commerce Road
Pre-application Review (PAR-0001-2024)

Introduction

The applicant is seeking initial feedback on a possible proposal for development of a distribution warehouse at 71 & 81 Commerce Road. The parcel is located in the Industrial zone. Concept plans are attached.

As always, any discussion held during a pre-application review is non-binding for both the Commission and the applicant.

mp

R:\Planning\PZC\2024\02 - February 21\Meeting Packet\PAR-0001-2024 (71-81 Commerce) - Memo.docx

Attach.

Town of Manchester, CT



Geographic Information Systems 71 & 81 COMMERCE RD

Legend

Zoning

- IND - Industrial
- PRD - Planned Residence
- RR - Rural Residence

DISCLAIMER:
The Town of Manchester, CT assumes no legal responsibility for the information contained in this map. This map is provided 'AS IS' without warranty of any kind.

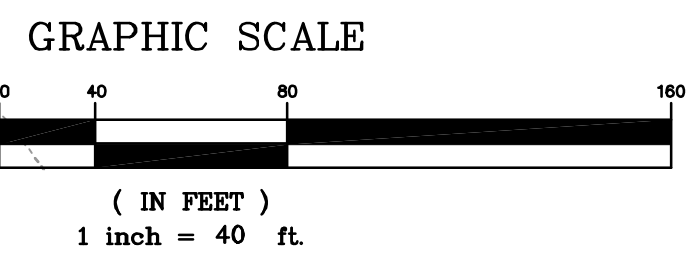
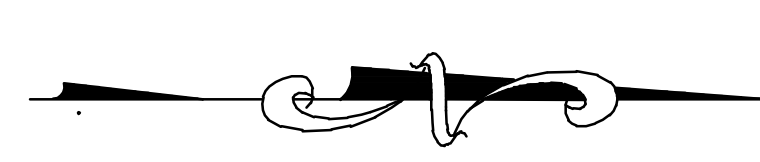
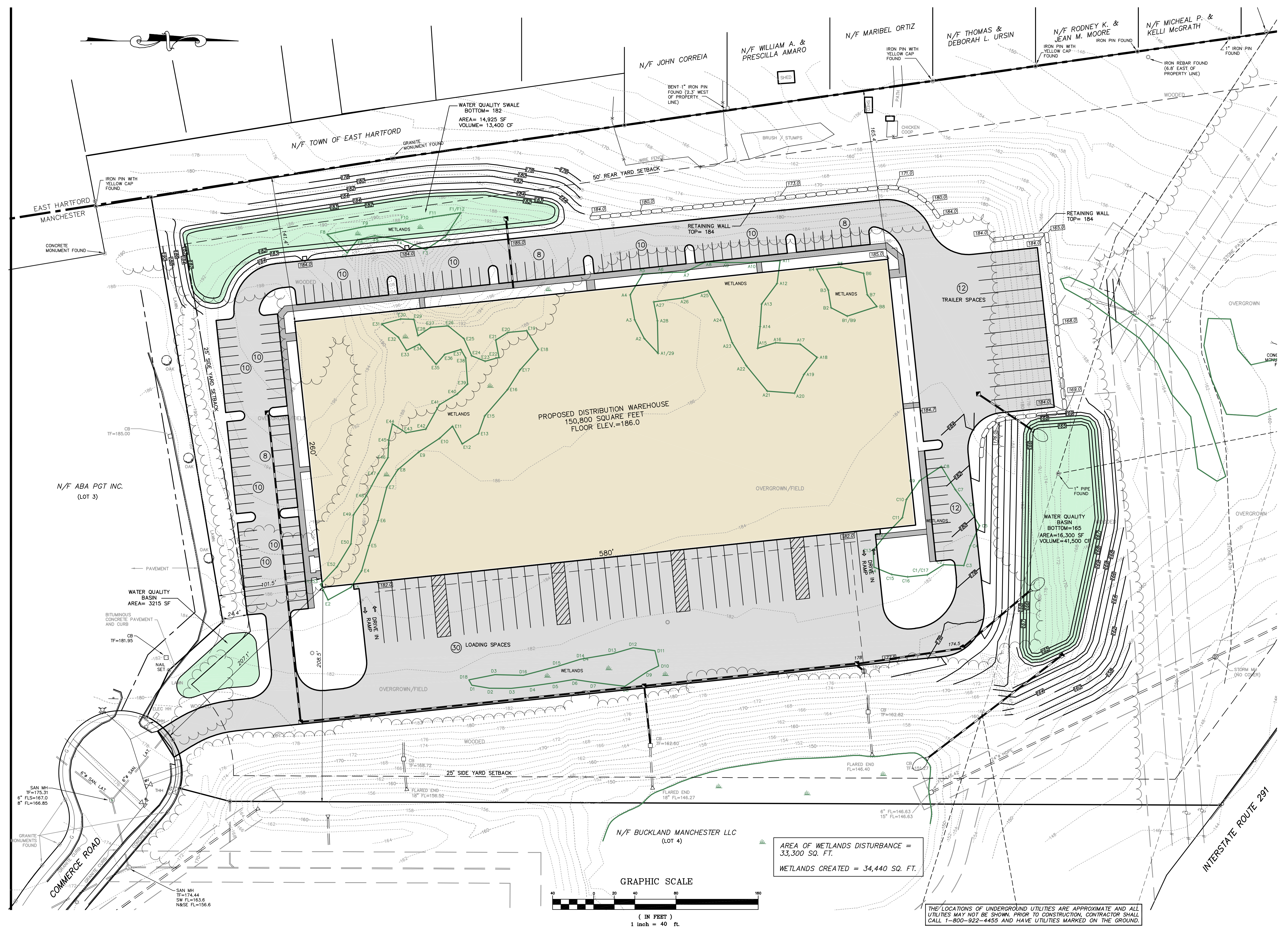
NOTES:
Planimetric and topographic information were compiled by stereo photogrammetric methods from photography dated April 24, 1999 in accordance with ASPR accuracy standards for 1"=40' large scale Class I maps. Real property compiled from recorded deeds, subdivision plans and other public records. Utility networks compiled from record plans, as-builts and/or field survey data. Aerial photography dated April 24, 1999.

0 70 140 280 420 560
Feet

1 inch = 400 ft

Date: 2/16/2024

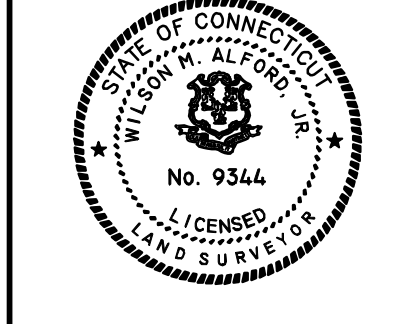
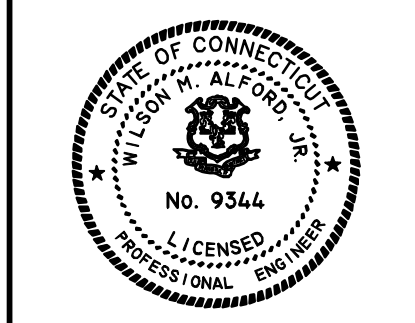




AREA OF WETLANDS DISTURBANCE = 33,300 SQ. FT.
 WETLANDS CREATED = 34,440 SQ. FT.

THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND ALL UTILITIES MAY NOT BE SHOWN. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL CALL 1-800-922-4455 AND HAVE UTILITIES MARKED ON THE GROUND.

REVISION	DATE
2-16-24	REVISED PROPOSED LAYOUT



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

L.S. No. 9344

NOT VALID WITHOUT A LIVE SIGNATURE AND EMBOSSED SEAL



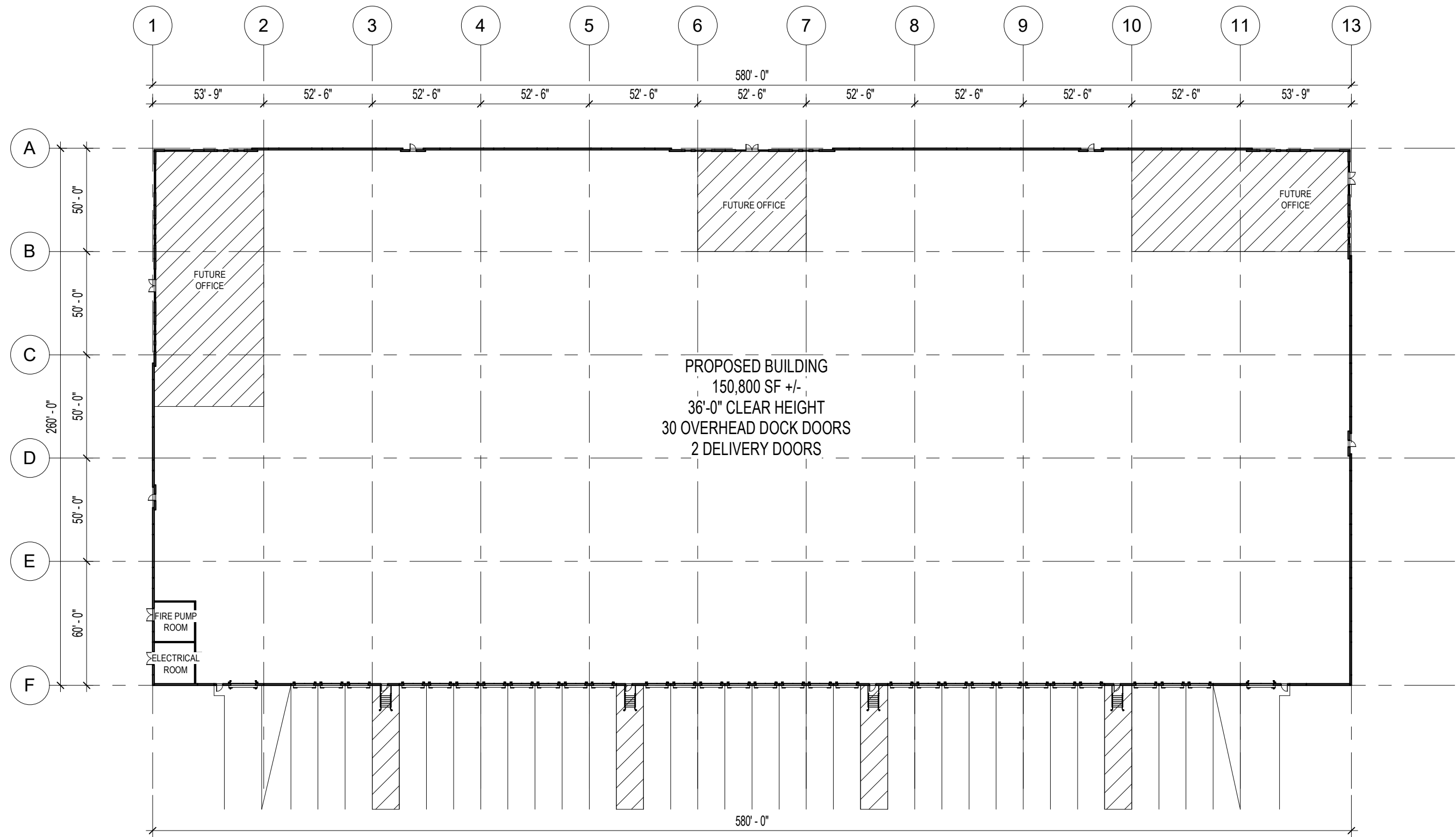
CIVIL ENGINEERS
 WINDSOR, CONNECTICUT
 WILSON M. ALFORD, JR., P.E. & L.S.

DATE: JANUARY 10, 2024

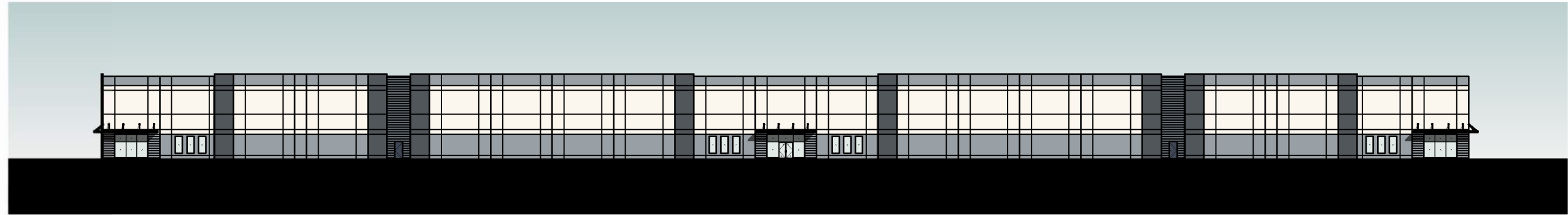
SCALE: 1 IN. = 40 FT.

PRELIMINARY LAYOUT
 PREPARED FOR
**LUZERN ASSOCIATES, LLC
 and FOXFIELD, LLC**
 MANCHESTER, CONNECTICUT
 71 COMMERCE ROAD
 AND 81 COMMERCE ROAD

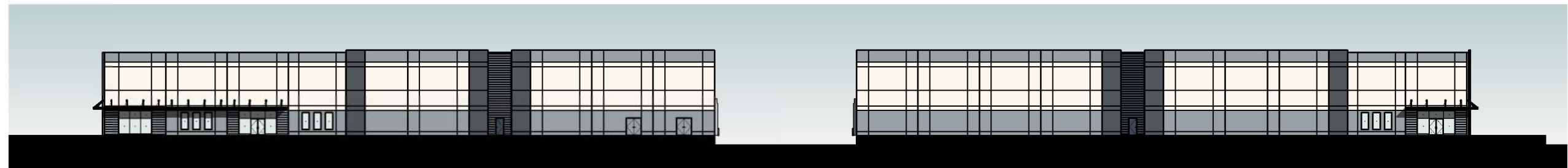
Sheet
 1 OF 1



A1.0 | PROPOSED FLOOR PLAN



1 WEST ELEVATION
A2.0 1" = 50'-0"



2 SOUTH ELEVATION
A2.0 1" = 50'-0"

3 NORTH ELEVATION
A2.0 1" = 50'-0"



4 EAST ELEVATION
A2.0 1" = 50'-0"

A2.0 | OVERALL ELEVATIONS




A3.0 | CORNER RENDER DRAFT



A4.0 | CORNER RENDER DRAFT

**TOWN OF MANCHESTER
PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT**

TO: Planning & Zoning Commission

FROM: Megan Pilla, Principal Development Planner 

DATE: February 16, 2024

RE: Hartford Healthcare Corporation
Pre-application Review (PAR-0002-2024)

Introduction

The applicant is seeking initial feedback on a possible proposal for a zoning regulation amendment pertaining to signage permitted on medical office buildings as described in the attached letter.

As always, any discussion held during a pre-application review is non-binding for both the Commission and the applicant.

mp

R:\Planning\PZC\2024\02 - February 21\Meeting Packet\PAR-0002-2024 - Memo.docx

Attach.



Matthew Ranelli
mranelli@goodwin.com
Phone: (860) 251-5748

Hartford
One Constitution Plaza
Hartford, CT 06103-1919

February 15, 2024

Mr. Eric Prause, Chair,
and Commission Members
Planning and Zoning Commission
Town of Manchester
494 Main Street
P. O. Box 191
Manchester, CT 06045-0191

Ms. Megan Pilla, PLA, ASLA
Principal Development Planner
Town of Manchester
494 Main Street
P. O. Box 191
Manchester, CT 06045-0191

Re: Pre-Application Review Pursuant to Section 7-159b of the General Statutes of a Proposed Amendment to Article VI, Section 13 of the Zoning Regulations; Hartford HealthCare Exterior Wall Signage, 376 Tolland Turnpike, Manchester

Dear Chair Prause, Commission Members, and Ms. Pilla:

On behalf of Hartford HealthCare Corporation ("HHC"), we are requesting the opportunity to meet with the Commission for a pre-application review, pursuant to General Statutes § 7-159b, of a proposed amendment to Article VI, Section 13 of the Zoning Regulations regarding signage for medical care facilities. The pre-application process is non-binding, but would be very helpful to us to preview a draft zoning text amendment that we would like to propose.

HHC enhances access to healthcare throughout Connecticut. Its care-delivery network offers a unified high standard of care in crucial specialties at hospital and ambulatory healthcare centers, such as in Manchester, located in towns and cities across Connecticut. HHC's Manchester location at 376 Tolland Turnpike provides a range of medical services to Manchester residents and patients. HHC's healthcare centers are an essential component of its health care delivery network and making sure healthcare center locations are clearly marked with signage easily visible and known to the public is, of course, an equally important requirement.

Under Manchester's existing signage requirements in the Zoning Regulations, HHC is limited to a maximum wall sign area of 32 square feet because its building is located in the General Business zone and within 50 feet of the street (Tolland Turnpike). *See* § 13.07.01. But for the setback limitation, HHC could otherwise have a sign area of up to 456 square feet based on the linear footage of the face of the building. As a result, HHC currently has a small wall sign with very low visibility (*see* street view photo attached as Exhibit A).

February 15, 2024

Page 2

We understand the intent of the setback limitation on sign size as applied to typical properties oriented across the street from each other for example; however, HHC's site is unusual because there are no other parcels between it and I-84 but it technically does not "adjoin" I-84 because the Tolland Turnpike intervenes (*see* Exhibit B aerial view). Manchester's existing sign regulations provide several exceptions to various signage requirements for certain uses that "adjoin" restricted access highways such as I-84. For example, motels and gasoline service stations are allowed to have larger free-standing signs that would otherwise be permitted if the parcel is "adjoining" the highway. These exceptions make sense because they provide useful information to the public for the location of these services and the signs are situated along the highway corridor. Medical services are similar, if not more important, services and there is a public in knowing and easily finding the location of such services.

HHC would like to replace a portion of its current sign with a similar wall sign (*see* Exhibit C, 120.5 square foot wall sign drawing) to aid patients and the general public. HHC previously applied for a variance for relief from the 32 foot maximum sign area limit. Even though the HHC property is essentially abutting I-84, except for the intervening Tolland Turnpike, the Zoning Board of Appeals denied the variance application for lack of hardship. As a result, we would like to discuss with the Commission a proposed text amendment which would provide a very limited but worthy exception to the maximum signage limitation for medical services and located in a manner that would not undo the intent of the existing setback requirement.

We have taken the liberty of drafting a narrowly tailored proposed text amendment of the exception for discussion purposes as follows:

(NEW) Article IV, Section 13.10.06.04: Medical clinic, medical office and medical services building adjoining or abutting across the street a restricted access highway and zoned General Business may erect a wall sign facing the restricted access highway and not exceeding 200 square feet.

We look forward to the opportunity to present our pre-application request to you at your February 21, 2024 meeting. Please let us know if you would like any additional information in advance of that meeting.

Sincerely,



Matthew Ranelli

GMR:ekf

Attachments

c: David Webber, Esq., Senior Counsel, Hartford HealthCare (w/ att.)
Jason Laabs, Hartford HealthCare (w/ att.)

EXHIBIT A

Street View



EXHIBIT B

Parcel View

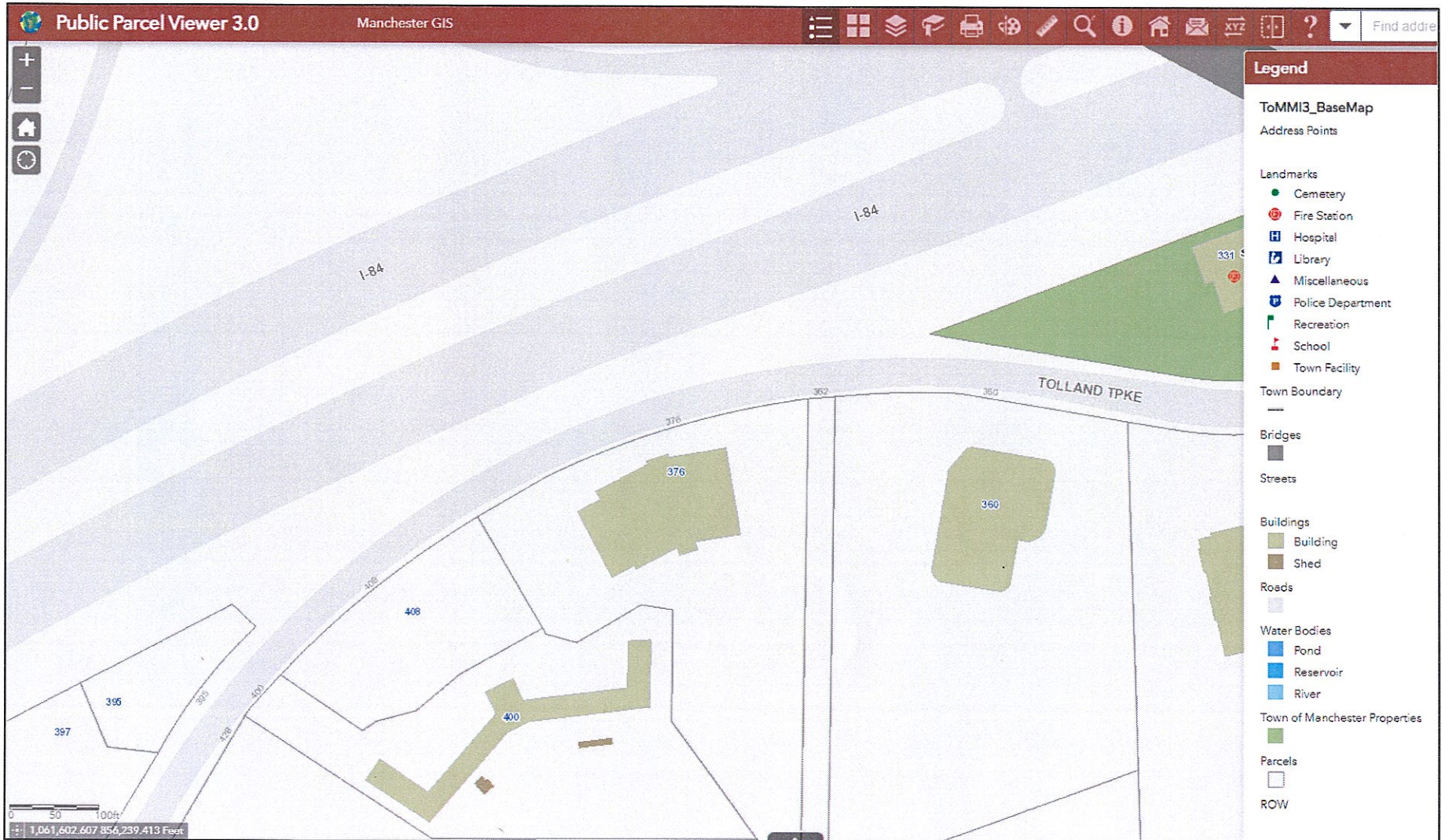


EXHIBIT C

Example of 120.5 Square Foot Draft Wall Sign

QTY-1

Sign Specifications

Code:

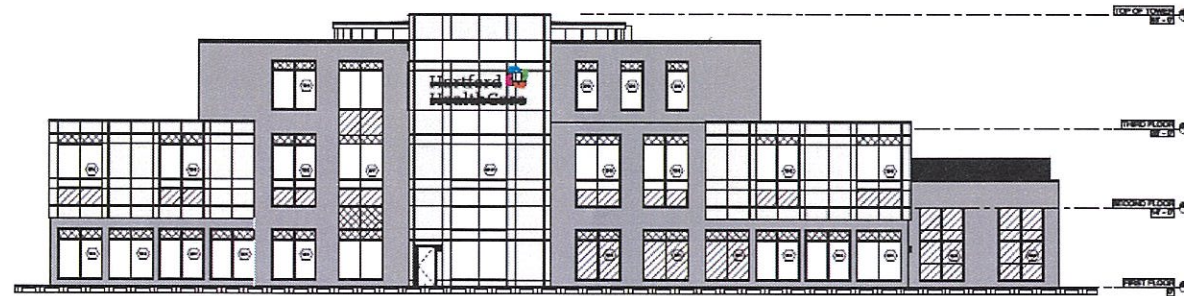
Based on allowances (please see previous page) and GIS notes: 152 if frontage equals to a total allowance of 456 sqft of signage.

Rear Elevation:

Existing Sign: 120.5 sqft (to Remain)
Balance = 335.5 sqft

Front Elevation:

Proposed Sign: 120.5 sqft (same as rear)
Remain SF or Surplus = 215 sqft



**TOWN OF MANCHESTER
PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT**

TO: Planning & Zoning Commission

FROM: Megan Pilla, Principal Development Planner *MP*

DATE: February 16, 2024

RE: Discussion – Municipal fines for inland wetlands violations

Introduction

The attached draft of a possible ordinance proposal has been provided by Commissioner Farina for the purpose of discussion.

mp

R:\Planning\PZC\2024\02 - February 21\Meeting Packet\Farina draft - Memo.docx

Attach.

Proposed Ordinance:
Inland Wetlands Agency and Aquifer Protection Citations and Fines

Article I - Authority and Purpose

This ordinance is enacted under the authority of the Connecticut General Statutes §§ 22a-36 to 22a-45, inclusive, and the Town of Manchester Charter. It aims to preserve, protect, and regulate the wetlands and watercourses within the town boundaries.

Article II – Definitions [Is this redundant to definitions in Charter?]

Article III - Citation Authority and Procedure

The Inland Wetlands Agent or any duly authorized person as designated by the Town Manager, Board of Directors, or Inland Wetlands Commission of the Town of Manchester is empowered to issue citations for any violations of this ordinance. Citations may be served either by hand delivery or by certified mail, return receipt requested, to the person or entity named in the citation.

Article IV - Violations and Penalties

Any activity violating the regulations set forth by this ordinance, the Aquifer Protection Area Regulations, the Inland Wetland and Watercourse Regulations, or any order issued pursuant thereto, shall be subject to citation and fine.

Article V. Penalties for offenses; fines

A. Violations of Wetlands Regulations.

(1) The following fines may be assessed by citation for a violation of the Aquifer Protection Area Regulations, the Inland Wetland and Watercourse Regulations, or any order issued pursuant thereto:

(a) For conducting or allowing the conduct of any regulated activity within any portion of an inland wetland or watercourse without a permit or in violation of any permit, including deposition of any material, removing of any material, discharging, polluting, excavating, filling, draining, grading, clear-cutting, removal of vegetation, planting invasive vegetation, or other activities resulting in direct impacts, to any portion of an inland wetland or watercourse: a fine of \$1,000 for each offense.

(b) For conducting, permitting the conduct of, undertaking, permitting the existence of, or allowing any regulated activity outside of an inland wetland or watercourse without a permit or in violation of any permit which causes, directly or indirectly, pollution, draining/drying, erosion, filling, damage to native vegetation, or other negative impacts to an inland wetland or watercourse or any portion thereof: a fine of \$1,000 for each offense.

(c) For noncompliance with permit conditions and/or limitations or with enforcement orders, where such noncompliance is not described in Article V(1)(a-b) of this section: a fine of \$1,000 for each offense.

(d) For conducting any other regulated activity without the issuance of a permit, where such activity is not described in Article V(1)(a-b) of this section: a fine of \$500 for each offense.

(2) Each day on which a violation of the Wetlands Regulations continues to exist shall be deemed a separate and distinct violation.

(3) For repeated violations on the same property, fines shall be doubled to the extent permissible by law.

Article VI - Period for Uncontested Payment of Fines

Those persons or entities cited have a period of thirty days from receipt of the citation to make an uncontested payment of the fine. Such fines shall be made payable to the Collector of Revenue of the Town of Manchester. If such fine is not paid within the thirty-day period, further actions may be taken pursuant to Section 7-152c of the Connecticut General Statutes.

Article VII - Appeals and Hearing Procedures

Any person or entity cited wishing to contest a citation may request a hearing before the Citation Hearing Officer within thirty days of receipt of the citation. Hearing procedures shall be established in accordance with the provisions of Section 7-152c of the Connecticut General Statutes.

Article VIII - Citation Hearing Officers

The Town Manager shall appoint an impartial Citation Hearing Officer to conduct hearings. No person with a personal conflict of interest shall serve as a Citation Hearing Officer. The Inland Wetlands Agent, Zoning Enforcement Officer, or any current member of the Planning and Zoning Commission or Inland Wetlands Agency may not be appointed as a Citation Hearing Officer.

Article IX - Remedies Not Exclusive

The remedies provided by this ordinance are not exclusive and shall be in addition to any other remedies available under state law or other municipal ordinances.

Article X - Severability

If any part of this ordinance is declared invalid by a court, the remainder shall not be affected and shall continue in full force and effect.

Article XI - Effective Date

This ordinance shall take effect upon passage by the Board of Directors.

Adoption

This ordinance is hereby adopted by the Board of Directors of the Town of Manchester, Connecticut, on [Adoption Date], and shall be published as required by law.

DRAFT

**TOWN OF MANCHESTER
MINUTES OF PUBLIC HEARING
HELD BY THE PLANNING AND ZONING COMMISSION/
INLAND WETLANDS AND WATERCOURSES AGENCY
FEBRUARY 5, 2024**

MEMBERS PRESENT:

In Person: Eric Prause, Chairman
Patrick Kennedy, Vice Chairman
Michael Stebe, Secretary
Teresa Ike
Chris Schoeneberger
Daniela Luna
Michael Farina

ALTERNATES PRESENT:

In Person: Zachary Schurin

ABSENT:

Maliha Ahsan
Bonnie Potocki

ALSO PRESENT:

In Person: Megan Pilla, Principal Development Planner
Gary Anderson, Director of Planning & Economic
Development
Electronically: David Laiuppa, Environmental Planner/Wetlands
Agent
Nancy Martel, Recording Secretary

The Chairman opened the Public Hearing at 7:00 P.M. The Secretary read the legal notice when the call was made.

AYR WELLNESS – Special exception under Art. II, Sec. 24.02.01(n) for a cannabis retail use at 185 Spencer Street. – Special Exception (PSE-0057-2023)

Attorney Stephen Penny introduced himself as representing the applicant. Attorney Penny detailed the property location, size, abutters, and public utilities.

The regulations of the General Business zone were reviewed by Attorney Penny. The regulations set forth regarding a cannabis retailer are met with the application. The proposed use also meets the goals of the Manchester Plan of Conservation and Development. The proposal will keep an empty building in productive use.

Attorney Penny stated that the project involves the readaptive use of the former Starbucks with no changes to the building or site work.

Mr. Andrew Bushnell, Professional Engineer/Licensed Land Surveyor, Bushnell Associates, introduced himself. Mr. Bushnell was not aware of any changes to the property aside from signage. The specifications of the property, surrounding area, public utilities, and shared driveway were detailed.

Current landscaping, lighting, parking, shared utilities, and catch basins were noted, all of which are in working order.

Mr. Bill Vliet, Vliet & O'Neill, introduced himself. Mr. Vliet addressed the Town Traffic Engineer's concerns, namely the queuing problem and morning peak hour traffic operations. There will no longer be a morning rush hour associated with this site. He noted that the drive-through, which can easily accommodate 10 stacked cars, will be utilized for appointment-based orders. The trip report's worst-case scenario estimates 35 vehicles entering and 35 vehicles exiting the property per hour, which is significantly less than Starbucks had. Mr. Vliet reported that there are no issues with access and roadway capacity with the signalized operations of the driveway intersection with Spencer Street or Hillstown Road.

After a question from Mr. Prause, Ms. Tenisha Victor, Vice-President of Market Expansion, reported that deliveries will take place through a door located by the drive-through window. During delivery time, the facility would be shut down. The security guard will assist in the deliveries. The delivery hours will vary. She explained that this will be the first location in Connecticut, though they operate across eight markets in the country, about 90 facilities currently.

Responding to a request from Mr. Prause, Mr. Vliet commented that, at this time, there are no plans for a specific employee parking location.

Attorney Amanda Ostrowitz stated that there is an employee public transportation incentive program, but noted that there is adequate parking. Due to state legislation, the signage will be well-lit and down facing.

Mr. Vliet reiterated that the morning peak hour congestion has been eliminated, and the signal is traffic responsive.

Ms. Pilla reported that the required parking spaces are based on the square footage of the building and the plan is well above the number required.

A general discussion was held regarding the parking and traffic flow regarding the southern parking area. Attorney Ostrowitz suggested signage indicating the southern parking lot is for employee and handicapped parking only, with signage directing customers to the rear of the building.

Mr. Stebe commented on the Popeye's traffic conflicts and suggested the traffic be a loop. A discussion commenced with Mr. Vliet.

After a question from Mr. Schoeneberger, Ms. Victor detailed the process and flow of the drive-through.

Ms. Luna requested clarification of the number of employees per shift and the incentive programs, which were explained. Ms. Victor noted that it all depends on the geographic location and the accessibility of mass transit.

Mr. Kennedy observed that the plan will reduce the traffic issues from the previous operation. Mr. Vliet reiterated that the traffic report utilized a much larger number of vehicles than will actually visit.

Attorney Tiana Hercules, Criminal Defense Attorney, Hartford reported that she is partnered with AYR on all the Connecticut projects. Attorney Hercules explained that criminal justice and re-entry are huge passions of hers. They are in the process of their third pardons clinic to help individuals clear their criminal records for free. She explained the success of that program as well as others, including cannabis education. She reported that she has been in talks with the Squire Village community to initiate programs based on needs.

Mr. Schoeneberger asked whether there have been security issues that will influence the security plans for the location. Ms. Victor said they have had no break-ins throughout their 90 locations, and Connecticut has very strict security regulations.

Ms. Luna asked how an individual would apply for the community outreach programs. Attorney Hercules explained that the word is spread via social media, colleges, and libraries. The steps to request services were detailed.

Attorney Penny cited letters from people associated with the programs Attorney Hercules explained. He concluded that the project conforms with the regulations by:

- Suitable location for use/neighborhood compatibility
- Adequate streets for use
- Adequate parking and access
- Adequate public utilities
- Suitable structures for use
- Environmental protection and conservation

Ms. Pilla reported only one outstanding comment, which is the addition of a utility label on the site plan. The Police Department requested the removal of a statement, which has already been done. There is one outstanding comment regarding a label.

Ms. Ike asked whether notifications were sent to abutters and Ms. Pilla reported that they were sent to property owners. There were also signs and the legal notice.

Attorney James Zimmer, Jacobs, Walker, Rice & Barry, introduced himself, stating that he represents the owners of the abutting apartment building, Apex 191. He explained that his client does not believe this is an appropriate location for a cannabis dispensary. They contend that the use is not compatible with other existing uses in the area, particularly the adjacent apartments. Since the property was converted to a multi-family residential property and has a shared driveway, many individuals may not want to live in proximity to this business. He noted that the

hours of operation are to be from 9:00 A.M. to 8:00 P.M. Monday through Sunday. Attorney Zimmer remarked about the traffic and parking on the property, speculating on the potential difficulty for emergency vehicles.

Ms. Pilla read letters of support from Ian Wilson, 84 Lyness Street and Keren Prescott, Founder of PowerUp Connecticut and PowerUp Manchester, and Executive Director of the EmpowerU program.

Ms. Luna inquired whether reinvestment in the community is a requirement of cannabis dispensaries. Attorney Hercules stated that part of her reason for involvement in the cannabis industry is the requirement for a social equity plan on all sites, retail and cultivation.

Mr. Anderson stated that those are state requirements which go through the state licensing process.

Attorney Penny reiterated that the amount of traffic associated with this business will be approximately one-third that of Starbucks. Regarding security concerns, the applicant's representatives have indicated that they have not had security issues, noting that the site is under camera monitoring 24 hours a day.

Attorney Ostrowitz clarified that the hours of operation are 10:00 A.M. to 8:00 P.M. The average site visit time is 7 minutes for a walk-in customer and 4 minutes for a pre-order. She commented that these facilities are built to be a fortress with no exterior advertisements visible to the public; no one can see into the facility and individuals cannot enter the building and sales floor if underage.

Ms. Luna stated her concerns over the number of parking spaces, and she does not believe employee incentivizing will be successful in reducing the parking needs.

Mr. Vliet reiterated that he and Jim Mayer, the Town Traffic Engineer, used the worst case for the number of vehicles, and explained how the numbers were reached.

Mr. Stebe referred to the two cannabis operations in Manchester and noted the concerns when they were approved. He asked whether there have been any issues reported since opening.

Mr. Anderson stated that the Chief of Police noted no issues whatsoever.

Ms. Luna asked why AYR chose Manchester and whether they sought to open in other towns.

Attorney Ostrowitz responded that she handles site selection strategy. She explained the analysis going into the decision for this town and this property. The factors involved were explained in detail by Attorney Ostrowitz. After questions from Ms. Luna, she explained why their location will be preferable over the Buckland area operations, and detailed the many other locations she has sited.

Mr. Prause asked how the traffic counts were captured. Mr. Vliet stated that they looked at other AYR facilities and contoured their counts to the size of this location.

MOTION: Mr. Kennedy moved to close the Public Hearing. Mr. Schoeneberger seconded the motion and all members voted in favor.

The public hearing was closed at 8:40 P.M.

I certify these minutes were adopted on the following date:

Date

Eric Prause, Chairman

**NOTICE: A DIGITAL RECORDING OF THIS PUBLIC HEARING CAN BE HEARD
IN THE PLANNING DEPARTMENT.**

DRAFT

**TOWN OF MANCHESTER
MINUTES OF BUSINESS MEETING
HELD BY THE PLANNING AND ZONING COMMISSION/
INLAND WETLANDS AND WATERCOURSES AGENCY
FEBRUARY 5, 2024**

MEMBERS PRESENT:

In Person: Eric Prause, Chairman
Patrick Kennedy, Vice Chairman
Michael Stebe, Secretary
Teresa Ike
Chris Schoeneberger
Daniela Luna
Michael Farina

ALTERNATES PRESENT:

In Person: Zachary Schurin

ABSENT:

Maliha Ahsan
Bonnie Potocki

ALSO PRESENT:

In Person: Megan Pilla, Principal Development Planner
Gary Anderson, Director of Planning & Economic
Development
Electronically: David Laiuppa, Environmental Planner/Wetlands
Agent
Nancy Martel, Recording Secretary

The Chairman opened the Business Meeting at 8:40 P.M.

AYR WELLNESS – Special exception under Art. II, Sec. 24.02.01(n) for a cannabis retail use at 185 Spencer Street. – Special Exception (PSE-0057-2023)

Special Exception (PSE-0057-2023)

MOTION: Mr. Kennedy moved to approve the special exception under Art. II, Sec. 24.02.01(n) to allow a cannabis retail use at 185 Spencer Street, with the modifications as specified in a staff memorandum from:

1. Megan Pilla, Principal Development Planner, dated January 29, 2024.

Mr. Stebe seconded the motion.

Mr. Farina suggested the Planning Department change those notified of public hearings from homeowners to residents.

Ms. Luna expressed her concern about parking and traffic and will not support the motion.

Mr. Kennedy noted that, in his opinion, this is the best option from a traffic standpoint and is an adaptive reuse. If this application is denied, this location lends itself to a fast-food type of operation, which would have a higher traffic count. The regulations do not state that this use cannot be near an apartment building. The Commission is tasked with ensuring it meets zoning regulations, which this does.

Ms. Pilla stated that, since the applicant agreed on the record to comply with the hours of operation, it is implied, and a condition would be redundant. The Zoning Enforcement Officer will sign off before a Certificate of Occupancy is issued.

Mr. Prause summarized that the location is on an arterial road, in a mixed-use development, and matches well with the intentions of the Plan of Conservative and Development. The use seems to be an overall traffic improvement. He suggested a modification to add signage to the southern parking lot for employee parking.

MOTION: Mr. Farina moved to amend the motion to add another modification: That signage be added to the southern 4 parking spaces to be marked as employee parking. Mr. Stebe seconded the motion. Mr. Prause, Mr. Kennedy, Mr. Stebe, Ms. Ike, and Mr. Farina voted in favor of the motion. Mr. Schoeneberger voted against the motion. Ms. Luna abstained. The motion to amend the motion passed five to one.

Mr. Prause, Mr. Kennedy, Mr. Stebe, Ms. Ike, Mr. Schoeneberger, and Mr. Farina voted in favor of the amended motion. Ms. Luna voted against the motion. The motion passed six to one.

The reason for the approval is that the proposed activity meets the special exception criteria in Article IV, Section 20, as well as the specific criteria for cannabis establishments outlined in Article II, Section 24.02.01(n).

HILLIARD MILLS LLC – Changes to previously approved PZC plans at 640 & 642 Hilliard Street and 370 Adams Street, for renovation of buildings 5 & 6 and various site improvements. – Special Exception Modification (PSE-0055-2023) – *Request for 65-day Extension*; Flood Plain Permit (FLDP-0005-2023) – *Request for 65-day Extension*

Special Exception Modification (PSE-0055-2023) – Request for 65-day Extension Flood Plain Permit (FLDP-0005-2023) – Request for 65-day Extension

MOTION: Mr. Kennedy moved to approve the requests for 65-day extensions, to April 12, 2024. Mr. Farina seconded the motion and all members voted in favor.

ADMINISTRATIVE REPORTS

Ms. Pilla reported that the next training session will be prior to the regular meeting of February 21, 2024. She inquired whether the members would prefer to hold it at another meeting because of the number of items on the agenda. The consensus was to move the training session to March 18th.

Mr. Anderson commented that the Commission should review the public hearing notification process.

Mr. Laiuppa noted an administrative approval of the modification to the wetland application for the Tesla charging station at 234 Tolland Turnpike. Regarding the 260 Tolland Turnpike Cease and Correct order, the actions have ceased, silt fences are up, and they are reaching out to the soil scientist to perform a wetland delineation and design for the mitigation plan.

Mr. Schoeneberger reported that he recently attended a Freedom of Information seminar. He suggested the Commission members utilize an email established rather than utilizing their personal emails.

APPROVAL OF MINUTES

January 17, 2024 – Public Hearing/Business Meeting

MOTION: Mr. Kennedy moved to approve the minutes as written. Mr. Farina seconded the motion and all members voted in favor.

RECEIPT OF NEW APPLICATIONS

1. AYR WELLNESS – Special Exception (PSE-0057-2023) – For a special exception under Art. II, Sec. 24.02.01(n) for a cannabis products retailer use at 185 Spencer Street.
2. 3 SQUARED, LLC – Special Exception (PSE-0058-2023); Erosion & Sedimentation Control Plan (ESC-0001-2024) – For a special exception under Art. II, Sec. 24.02.01(j) for a mixed-use multi-family development at 14 North Main Street.
3. TOWN OF MANCHESTER PLANNING & ZONING COMMISSION – Zoning Regulation Amendment (REG-0001-2024) – Proposed regulation amendment to allow the conversion of vacant school buildings to multi-family residential.

MOTION TO ADJOURN: Mr. Kennedy moved to adjourn the Business Meeting. Mr. Schoeneberger seconded the motion and all members voted in favor.

The Business Meeting was closed at 9:10 P.M.

I certify these minutes were adopted on the following date:

Date

Eric Prause, Chairman

NOTICE: A DIGITAL RECORDING OF THIS BUSINESS MEETING CAN BE HEARD IN THE PLANNING DEPARTMENT.

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ROAD WIDTH REGULATION CAN BE SATISFIED BY DEDICATION OF UNSUITABLE LAND

When can land that is totally unsuitable for use as a roadway be utilized to satisfy a road width requirement. It can where the requirement is not just to meet public highway needs but also to insure spacing of buildings. The zoning regulation in question stated that new streets must be fifty feet wide and that front yard and side yard requirements are measured from the edge of the fifty-foot street. The regulation stated further that for every one foot less that a street does not meet this requirement, one-half foot shall be added to each side yard requirement.

A decision by the Commission to approve a 2-lot subdivision was appealed to court because the dedicated road, while meeting the fifty-foot width requirement, would actually only be the same width as the existing twelve-foot-wide paved accessway. To comply with the road width requirement in the regulations, the dedicated road would incorporate wetlands areas. It was agreed by all parties that the existing paved road would not be widened and that the inclusion of the wetland areas was done solely to meet the fifty-foot road width requirement.

In dismissing the appeal, the court agreed with the Commission that the purpose of the regulation was not

SAVE THE DATE – 2024 ANNUAL CONFERENCE

The Federation will hold its Annual Conference on March 28, 2024 at the Aqua Turf Country Club in Plantsville CT. The event starts at 5:00 p.m. The program for the Conference will include a presentation on Air BnB Regulation as well as the 2024 Land Use Legislative Agenda. Flyers announcing the event will be sent to all members later this month. Attendees will be entitled to receive credit for One Hour of Training as well as enjoy a wonderful dinner.

focused only on establishing the travel width of a road but also to establish a point where front yard and side yards could be measured for the purpose of establishing a more uniform setback for buildings. This equally important purpose provided a basis for the Commission to find compliance with its road width requirement. *Kerlin v. Planning & Zoning Commission, 222 Conn. App. 216 (2023).*

RESIDENCY REQUIREMENT FOR AIR BnB UNCONSITUTUIONAL

Concerned about the growth of the short-term vacation rental business in its single-family neighborhoods, a city passed a land use ordinance that would limit who could engage in this business. The concern was based upon the belief that short-term vacation home rentals

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were negatively affecting the character and livability of the city's residential neighborhoods and limiting the availability of workforce housing. The ordinance sought to limit this business activity to those single-family homes that were the primary residence of the property's owner. Many of the short-term vacation rental properties were owned by out-of-state people who rented their property when they weren't using it themselves as a vacation home. These out-of-state owners formed the South Lake Tahoe Property Owners Group and challenged the ordinance on the basis it was unconstitutional.

The constitutional argument was that the ordinance violated the dormant commerce clause of the federal constitution in that it discriminated against out-of-state property owners in favor of resident property owners. By doing this, the ordinance placed an undue burden on interstate commerce, something which the federal constitution prohibits unless it can be demonstrated that the ordinance serves a legitimate government purpose and this could not be done in a nondiscriminatory way. The court viewed the residency requirement as discriminatory on its face as it mandated differential treatment of in-state and out-of-state interests that benefited the former and burdened the later. *See South Lake Tahoe Property Owners Group v. City of South Lake Tahoe, 92 Cal. App. 735 (2023).*

SOLID WASTE FACILITIES CANNOT BE PROHIBITED

Connecticut General Statutes Sec. 22a-208b provides in relevant part that no municipal zoning regulation shall have the effect of prohibiting the construction, alteration or operation of solid waste facilities within the limits of the municipality. When a city's planning and zoning agency denied a site plan application to construct and operate a solid waste transfer station, the applicant appealed to court on the basis that this denial violated this state statute.

The planning and zoning commission stated that its denial was based on the fact that the requested use was not permitted by the zoning regulations but that this was not a violation of the state statute as the Commission allowed two similar uses to continue as nonconforming uses and the zoning regulations allowed wood waste processing, which it claimed is a type of solid waste facility.

The court rejected both of these arguments. Allowing nonconforming uses to continue is not the same as not prohibiting the same uses in the zoning regulations. Nonconforming uses are allowed to continue due to Connecticut General Statutes Sec. 8-2 and not by operation of municipal zoning regulations. The zoning regulations as written clearly prohibited solid waste facilities within the city except for one particular type. The court found this to

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be a clear violation of Connecticut General Statutes Sec. 22a-208b which allows for the regulation, but not the prohibition of solid waste facilities by municipal zoning agencies. *See MSW Associates LLC v. Planning & Zoning Department, 202 Conn. App. 707 (2021).*

HARM TO SCENIC VIEWS AND NATURAL ENVIRONMENT OUTWEIGHED BY NEED FOR ADEQUATE CELL COVERAGE.

An application to erect a 140-foot-tall telecommunications tower was submitted to the Connecticut Siting Council. The proposed tower would be located in a scenic rural area with a residential neighborhood located nearby. In reviewing the application, the Siting Council was required to decide whether fulfilling the public need for adequate wireless service outweighed the adverse impact the tower would have on the scenic and natural environment around the site.

In this case, the evidence before the Council demonstrated that the need to provide adequate uniform cell coverage in this rural area outweighed the need to preserve the scenic area and natural environment as well as concerns over harm to a nearby residential neighborhood. Therefore, it was proper for the Council to approve the application. *See Woodbridge Newton Neighborhood Trust v. Siting Council, HHB-CV-22-6070603.*

ANNOUNCEMENTS

Lifetime Achievement Award and Length of Service Award

Nomination forms will be sent out later this month for these awards which will be presented to recipients at the Federation's annual conference. You should begin your process of finding eligible nominees now.

Workshops

Connecticut law now requires that every land use agency member receive 4 hours of training every two years. At the price of \$200.00 per session for each agency attending, our workshops are an affordable way for your board to 'stay legal'. Each workshop attendee will receive a booklet which sets forth the 'basics' as well as a booklet on good governance which covers conflict of interest as well as how to run a meeting and a public hearing.

ABOUT THE EDITOR

Steven Byrne is an attorney with an office in Farmington, Connecticut. A principal in the law firm of Byrne & Byrne LLC, he maintains a strong focus in the area of land use law and is available for consultation and representation in all land use matters both at the administrative and court levels.

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