

TOWN OF MILFORD, NH
OFFICE OF COMMUNITY DEVELOPMENT

1 UNION SQUARE, MILFORD, NH 03055

TEL: (603)249-0620

WEB: WWW.MILFORD.NH.GOV

Date: June 16, 2022
To: Planning Board
From: Lincoln Daley, Community Development Director
Subject: SP2022-05 30 Wilton Road LLC for the property located at Tax Map 6, Lot 14, 30 Wilton Road. Public Hearing for a Conditional Use Permit/Major Site Plan Application to construct 3 story, 40 foot tall, 13,950 square foot (41,850 square foot gross floor area) self-storage facility and associated, parking, site and drainage improvements in the Integrated Commercial Industrial zoning District and West Elm Overlay.

BACKGROUND/PROPOSAL:

The applicant is before the Planning Board for a conditional use permit and major site plan application to construct a 3 story, 40 foot tall, 13,950 square foot (41,850 square foot gross floor area) self-storage facility and associated, parking, site and drainage improvements in the Integrated Commercial Industrial zoning District and West Elm Overlay. Attached please find is the site plan, traffic analysis, parking memorandum, and proposed elevations.

EXISTING USE/CONDITIONS:

The proposed parcel, Tax Map 6, Lot 14 consists of approximately 6.354 acres (276,773 sq.ft.) with more than 950 linear feet of frontage on Wilton Road. The property is located adjacent to the Pine Valley Mill property to the north, the Pan Am Railway and Souhegan River to the south and east, the General Dollar store to the west, and residential homes to the north and northwest. The property is primarily comprised of the existing multi-building self-storage operation with an open undeveloped field to west and minimal tree coverage around the perimeter.

A small wetland resource area has been delineated along the southern property line, but will not be impacted by the project. The topography for the proposed subdivided lot is primarily flat with a slight upward slope from west to east. The subject area is primarily comprised of open field space.

LOT AREA:

Proposed Tax Map 6, Lot 14 = ±6.354 acres (276,773 sq.ft.)

APPLICATION STATUS:

The application is complete and ready to be accepted.

NOTICES:

Notices were sent to all property abutters on June 2, 2019.

WAIVERS:

No waivers have been requested.

ZONING DISTRICTS:

The proposed parcel lies within the Integrated Commercial – Industrial “ICI” zoning district. The intent of the Integrated Commercial-Industrial District is to provide an area for sales and service activities, both wholesale and retail, as well as industrial activities. This District is intended to be the area in which vehicular oriented business can occur. Pursuant to Section 7.13, Self-Service Storage Facilities are permitted in the Integrated Commercial-Industrial District by the granting of a conditional use permit by the Planning Board.

The property also falls within the West Elm Street Gateway Overlay District. The intent of this District is to encourage economic development in the West Elm Street Gateway District by enhancing, preserving and protecting the natural, historic and cultural resources of the Town. The purpose of this Ordinance is to implement the Town of Milford's vision for the future as set forth in the Community Character Chapter of the Master Plan 2007 Update: Goal No. 2: Foster the traditional character of Milford's neighborhoods by encouraging a human scale of development that is similar in setbacks, size and height, and that is comfortable and safe for pedestrians and non-motorized vehicles while allowing for an efficient and safe roadway network.

The property falls within the groundwater protection 2 district and the flood plain management district (proximity to the Souhegan River).

TRAFFIC AND ACCESS MANAGEMENT:

Access and egress from the retail facility will be from a new 24' wide driveway curb cut on Wilton Road. The driveway egress design allow for both east and west movement and a single lane access into the property. The project contains two internal drives connecting to the existing storage facility building on the property and one located on the western property line connecting to the General Dollar store.

The applicant submitted a traffic analysis memorandum dated 5/23/22 (see attached report). The report concluded that the proposed indoor storage facility use is expected to generate a total of 9 trips in the AM peak hour and 14 trips in the PM peak hour (61 trips in + 61 trip out = 122 total daily trips). This will result in a net increase for the entire site (existing storage buildings and proposed indoor facility) of 5 total trips in the AM peak hour and 5 total trips in the PM peak hour. ITE recommends that traffic impact studies be performed whenever an increase in trips in any peak hour is greater than 100 trips per hour since this is the point where a change in roadway capacity may be found and mitigation may or not be needed.

PARKING:

The project proposes to provide 4 parking spaces (included 1 handicap space) for the indoor storage facility.

DRAINAGE/STORMWATER MANAGEMENT:

The stormwater and drainage design is currently being reviewed by the Town's engineering consultant.

UTILITIES:

The proposed retail establishment will access the Milford waste water system while water will be provided by the Town of Wilton. Power to the site will be underground.

INTERDEPARTMENTAL REVIEWS:

Ambulance: No comments

Assessing: No comments.

Building Department: No comments.

Code Enforcement/ Health: No comments.

Conservation Commission: No Comments.

Environmental Programs/Stormwater: The stormwater and drainage design is currently under review by the Town Engineering Consultant, KV Partners.

Fire Department: The building will be required to have a sprinkler system installed. Plans must be provided for review an approval.

Heritage Commission: No comments.

Police Department: No comments.

Public Works:

1. Project will require a Town Street Opening Permit and Driveway Permit.
2. Ensure that all plantings do not impact sight distance for access/egress along Wilton Road.
3. The plan should incorporate pedestrian activity along Wilton Road.

Water/Sewer Utilities:

1. No comments.

Community Development / Planning:

1. Sheet 1 and 4. Please confirm if the proposed internal roadway connecting the existing storage facility with the proposed building conflicts with ability to construct said road over the underground penstock. Will additional access/maintenance easement(s) be required? If yes, please revise the plans accordingly and submit draft easement.
2. Sheet 1 and 4. Please explain the reason for not aligning the proposed driveway entrance with North River Road within the existing access easement area?
3. General Comment - Per the 8/27/16 Planning Board approval for the initial self-storage facility site plan for Map 6, Lot 14, Condition 1.c. states that the
“applicant shall work with the Community Development to finalize the design and location of the future bus stop shelter. Should an easement to accommodate future bus turnouts and shelters may be required, the applicant shall submit an access and maintenance easement to Community Development for review and approval.”
This has yet to be completed and would appear to be an opportunity to incorporate said bus shelter and potential bus turn out into the proposed site to provide multi-modal transportation for residents to access goods / services (e.g storage facilities, Dollar General, and Mill Building) and residences (Mill Building Apartments).
4. General Comment - Pedestrian Connectivity. Pursuant to Section 7.03 Sidewalks of the Development Regulations, the Planning Board may require sidewalks for pedestrian traffic to provide a connection between the main entrances of business, housing or industrial establishments, parking areas and along public roadways. Further, the Planning Board may also require sidewalks from the road to the main building entrance or along the road frontage if there is a reasonable expectation pedestrian patrons, residents, neighbors, employees would be traveling to or from the site. Sidewalks and pedestrian connectivity is further emphasized in the West Elm Street Overlay District.
5. Sheets 1, 4-7. Please revise the plans accordingly to include the location of the underground penstock.
6. Sheet 4. Please explain the reason for locating the proposed propane pad and tank as shown on the plan in close proximity to the building. In addition, it is recommended that protective bollards be installed around concrete pad.
7. Sheet 8. Please revise the plan set to include the engineering and construction details for the lights. Include the manufacturing photographs of each proposed light.
8. General Comment - Please explain if LID practices were considered as part of the drainage/stormwater and landscape design. More specifically it would appear that opportunities exist to utilize portions of the landscaped areas for treatment and infiltration of stormwater. In addition, were there considerations to design a functional raingarden in lieu of or in addition to the proposed detention basin?
9. General Comment - Proposed Signage. Please include the proposed design, construction, and engineering details associate with the monument sign, directional signage, and wall signage.
10. Sheet LA 101 -Snow Storage. The plan shows a snow storage location east of the main access drive. Please clarify and describe the anticipated process for snow removal. A note should be added to the plan detailing said removal process. It is recommended that the snow removal company be a certified Green Snow Professional.
11. Sheet LA 101. The proposed landscape design does not currently include any plantings along the building. Pursuant to Section 6.08.6 of the Development Regulations, landscaping shall be provided along all building frontage. A minimum of one (1) shrub for every five (5') feet of building frontage shall be provided. In instances where it is not possible to locate all required shrubs along the building frontage due to doorways, walkways or other impervious surfaces, the required shrubs shall be utilized within the parking lot or landscape buffers. Please

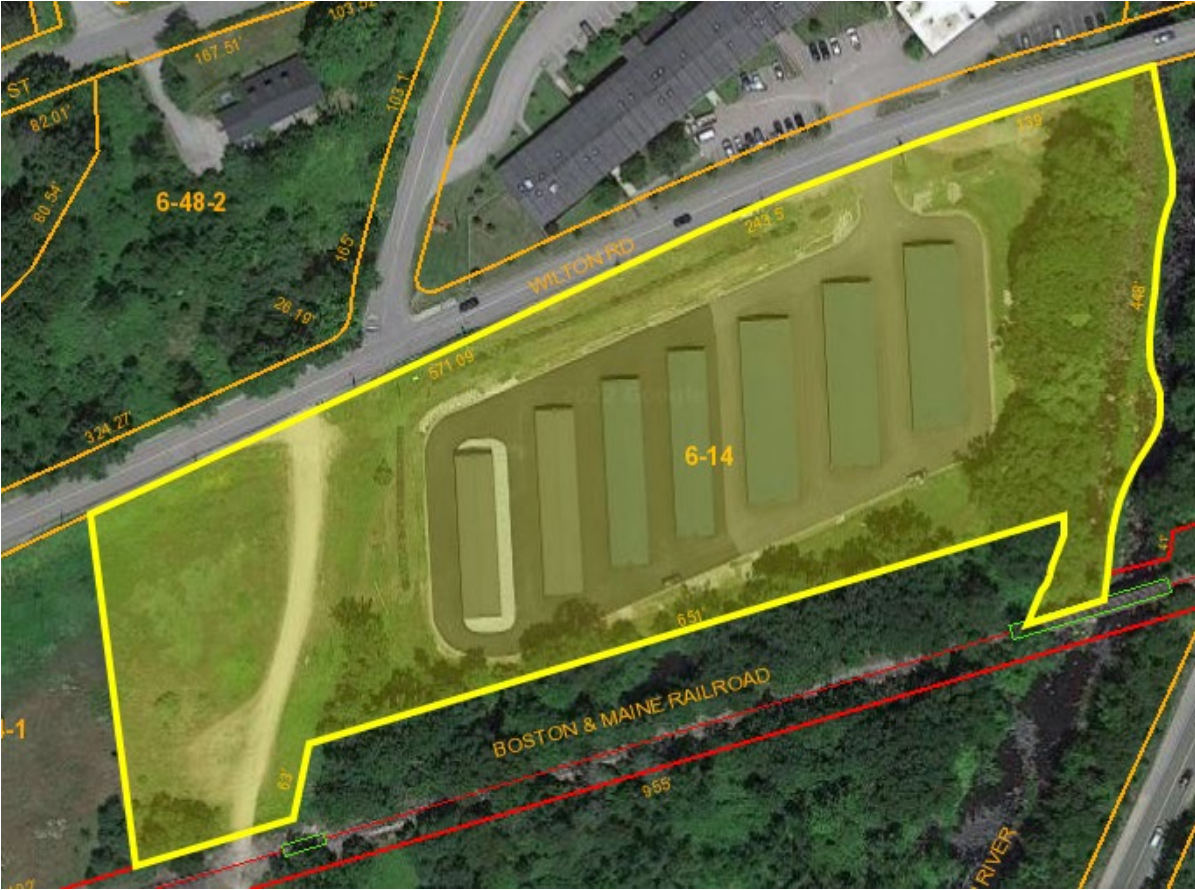
revise the plan accordingly or submit a waiver request.

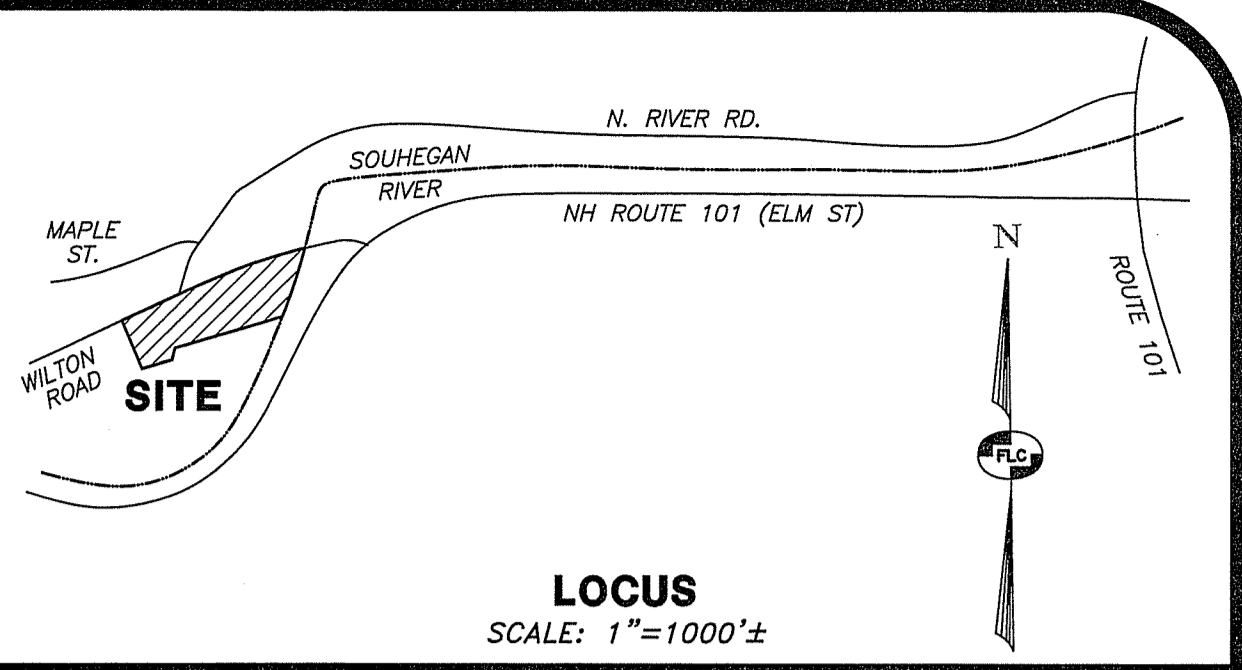
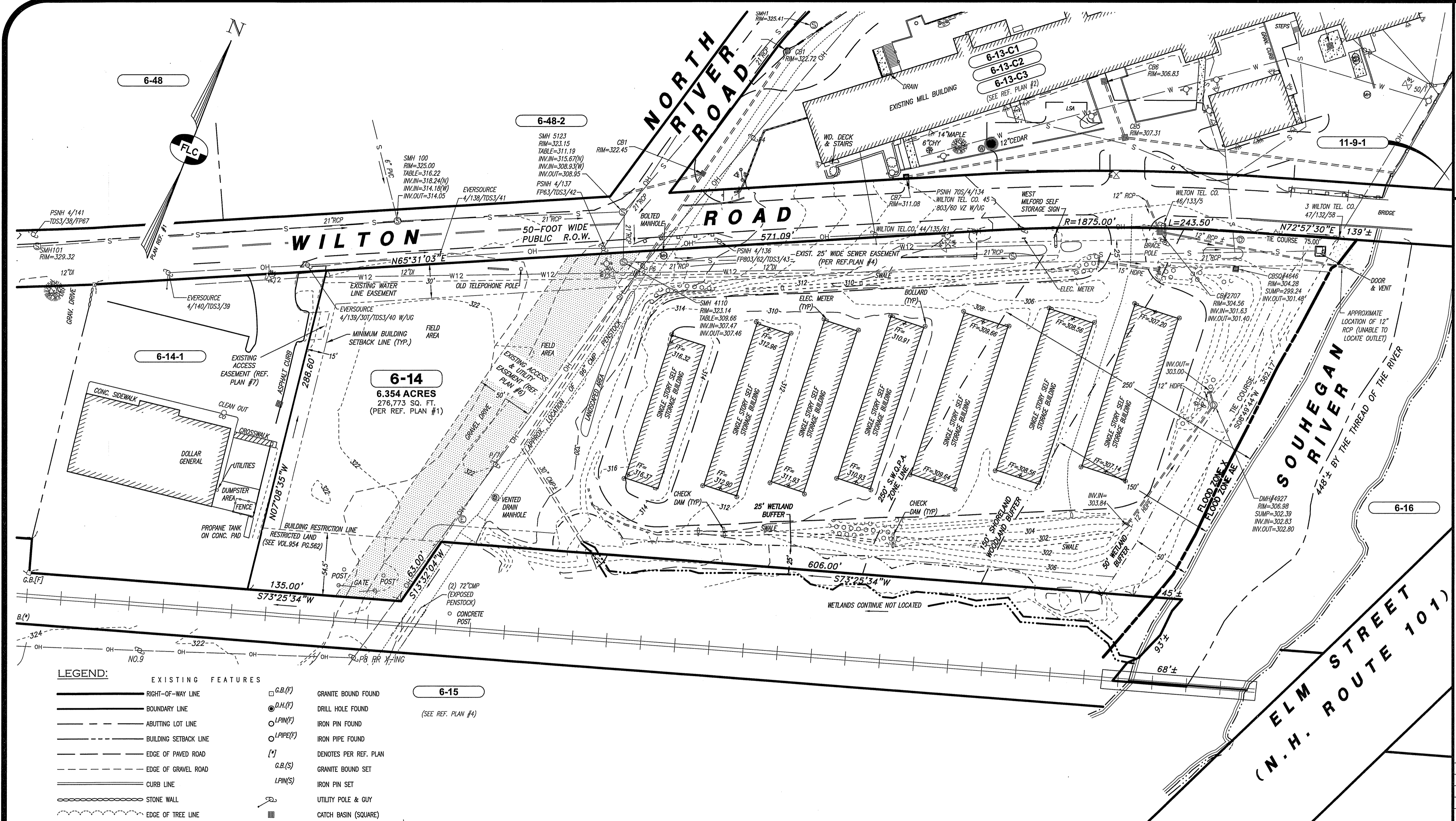
12. Sheet LA 101. Pursuant to Development Regulations, Section 6.08.8.A of the Development Regulations, please confirm that all plant stock meets the ANSI Z60.1 standard.
13. Sheet LA 101. Please add a note to the plan stating the following, “Any landscape element that dies, or is otherwise removed, shall be promptly replaced with the same, if not similar to, height or texture element as originally intended. In addition, landscaped areas shall be kept free of all debris, rubbish, weeds and overgrown turf grass.”
14. Sheet LA 101. Pursuant to the Development Regulations, Section 6.08.5.B.1 A landscaped buffer shall be at least ten (10’) feet in width and six (6’) feet in height to effectively screen from adjacent properties and may consist of evergreens, berms, mounds, fencing or combinations thereof in conjunction with complimenting shrubs and perennials. The buffer along the westerly property line is less than the required 10’ (9’ wide green buffer plus 1’ cape cod berm) and contains no screening. The plan should be revised with to comply with said section or request a waiver.
15. General Comment – Zoning Ordinance, Section 6.07.6.E.2 Building Massing, Form, Height. Pursuant to Section 6.07.06.E.2, to enhance the character of new development and the corridor, the building scale should be reduced introducing small- scaled architectural features, creating an irregular footprint and variations in roof forms and height of roof elements.
Please explain how the side elevations of the building meet these design standards and what alternatives were considered.
16. General Comment – Zoning Ordinance, Section 6.07.6.E.3 Architectural Features and Materials. Pursuant to Section 6.07.06.E.3, long expanses of repetitive architectural elements and flat unarticulated wall surfaces shall be avoided. Please explain how the side elevations of the building meet this requirement and what alternatives were considered. Please modify the plan in compliance with this section or request a waiver from said section.
17. General Comment – Zoning Ordinance, Section 6.07.6.E.8 Windows. Consideration should be given to adding windows or other architectural features to the side elevations to break up the walls.
18. General Comment – Section 6.07.6.E.11 Screening. Pursuant to Section 6.07.06.E.11, states that all rooftop air conditioning, heating and large mechanical equipment, building accessories, and refuse shall have noise reduction screening and be screened from public view and have noise reduction screening. Please identify on the plans where the anticipated roof mounted units will be located. Further, please provide building design and construction details for sound and visual screening mitigation for all roof mounted mechanical units.
19. General Comments – Building Design and Elevations
 - a. Roof Form and Materials – Section 6.07.E.7 of the Zoning Ordinance and the Development Regulations, Section 6.04.3 state that rooflines shall be characteristically sloped and articulated with architectural features such as dormers, chimneys, gables, cupolas, etc. Further, flat roofs are strongly discouraged unless the Planning Board finds that a proposal can provide appropriate visual appeal. In addition, rooflines shall not run in continuous planes and shall be broken into appropriately scaled masses. Please explain how the front and side roof lines of building meet these requirements. Further, please discuss what alternative building designs were considered for the location, corridor, and in context with Milford’s architectural heritage.
20. General Comment – Zoning Ordinance, Section 6.07.06.F.1 Access Management. Please provide an internal turning radius template analysis showing the turning movements for WB 50 design vehicle.

STAFF RECOMMENDATIONS:

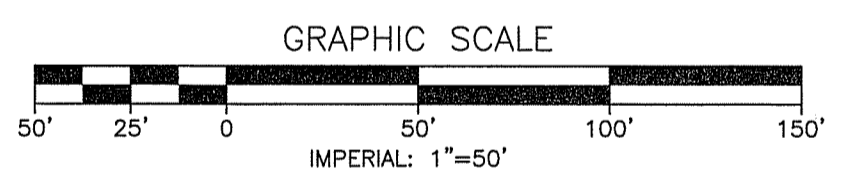
The applicant should be prepared to address the comments raised by the Planning Board, Conservation Commission, Heritage Commission, Town Consultants, Staff, and public pertaining to the Site Plan. The Planning Board will need to determine if the proposed site development meets the purpose and intent of the overlay. Staff recommends continuing the application and then scheduling a site walk of the property and area along Wilton Road.

Aerial Photographs of Map 6, Lot 14-1.





- NOTES:**
- THE OWNER OF RECORD FOR TAX MAP PARCEL 6-14 IS 30 WILTON ROAD LLC - 55 HIGH STREET - PITTSFIELD, NH 03263. DEED REFERENCE TO PARCEL IS BOOK 9471 PAGE 2225 DATED MAY 18, 2021 IN THE H.C.R.D.
 - THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING CONDITIONS FOR TAX MAP PARCEL 6-14 AS SHOWN.
 - THE TOTAL AREA OF TAX MAP PARCEL 6-14 IS 6.354 ACRES OR 276,773 SQ.FT. PER REFERENCE PLAN #1.
 - LOT NUMBERS REFER TO THE TOWN OF MILFORD ASSESSORS MAPS 6.
 - ZONING FOR THE PARCEL IS INTEGRATED COMMERCIAL-INDUSTRIAL "ICI".
- | INTEGRATED COMMERCIAL-INDUSTRIAL | REQUIRED | EXISTING |
|----------------------------------|-----------|------------|
| MIN LOT AREA | 20,000 SF | 276,773 SF |
| MIN LOT FRONTAGE | 150 FT | 953.59 FT |
| MIN FRONT SETBACK | 30 FT | 30 FT |
| MIN SIDE SETBACK | 15 FT | 15 FT |
| MIN REAR SETBACK | 15 FT | 15 FT |
| MAX. BUILDING HEIGHT | 40 FT | <40 FT |
- PERIMETER INFORMATION SHOWN WAS COMPILED ENTIRELY FROM THE REFERENCE PLANS CITED HEREON.
 - HORIZONTAL ORIENTATION IS BASED ON REFERENCE PLAN #1. VERTICAL DATUM IS PER REFERENCE PLAN #4.
 - THE SURFACE FEATURES AND SITE TOPOGRAPHY SHOWN ARE THE RESULT OF A FIELD SURVEY BY THIS OFFICE TOGETHER WITH THE REFERENCE PLANS CITED HEREON.
 - THE UNDERGROUND UTILITIES SHOWN HAVE BEEN COMPILED IN PART FROM PLANS OF RECORD AND FIELD LOCATION. THE LOCATION OF UNDERGROUND UTILITIES SHOULD BE CONSIDERED APPROXIMATE AND SHALL BE FIELD VERIFIED PRIOR TO ANY EXCAVATION OR CONSTRUCTION ACTIVITIES.
 - JURISDICTIONAL WETLANDS WERE MAPPED AND LOCATED BY THIS OFFICE DURING THE MONTH OF JUNE 2016 & VERIFIED IN NOVEMBER, 2021.
 - "OPEN SPACE" AREA IS 4.07 ACRES OR 64.0% OF THE TOTAL PARCEL AREA. MINIMUM REQUIREMENT IS 30%.
 - THE EASTERLY MOST PORTION OF THE PARCEL LIES WITHIN THE 100-YEAR FLOOD HAZARD AREA PER FEMA F.I.R.M. PANEL 330110C453D DATED SEPTEMBER 25, 2009.
 - THE SUBJECT PARCEL IS IN THE GROUNDWATER LEVEL II PROTECTION OVERLAY ZONE.
 - THE PARCEL IS SUBJECT TO AN EASEMENT AGREEMENT BETWEEN 282 ROUTE 101, TOWN OF WILTON WATER COMMISSION AND PVM COMMERCIAL CENTER, LLC. THE PARCEL IS SUBJECT TO RECIPROCAL EASEMENT AND AGREEMENT WITH LAND AND LAND USE RESTRICTIONS. SEE H.C.R.D. BK.9198 PG.2134. OTHER THAN THOSE SHOWN AND NOTED HEREON, THERE ARE NO OTHER KNOWN EASEMENT, DEED RESTRICTIONS OR COVENANTS ON THE PROPERTY.
 - THE PARCEL IS SERVICED BY WILTON DISTRICT MUNICIPAL WATER AND MILFORD SEWER.
 - THE ENTIRE PARCEL CONSISTS OF HINCKLEY LOAMY SAND, 2 TO 8% SLOPES PER NRCS WEB SOIL DATA.



- LEGEND:**
- | | | | |
|---|--------------------------|----------|------------------------|
| — | EXISTING FEATURES | — | GRANITE BOUND FOUND |
| — | RIGHT-OF-WAY LINE | ○ | DRILL HOLE FOUND |
| — | BOUNDARY LINE | ○ | IRON PIN FOUND |
| — | ABUTTING LOT LINE | ○ | IRON PIPE FOUND |
| — | BUILDING SETBACK LINE | [*] | DENOTES PER REF. PLAN |
| — | EDGE OF PAVED ROAD | G.B.(S) | GRANITE BOUND SET |
| — | EDGE OF GRAVEL ROAD | I.PIN(S) | IRON PIN SET |
| — | CURB LINE | — | UTILITY POLE & GUY |
| — | STONE WALL | — | CATCH BASIN (SQUARE) |
| — | EDGE OF TREE LINE | — | CATCH BASIN (ROUND) |
| — | EDGE OF WETLANDS | — | DRAIN MAN-HOLE |
| — | WETLANDS BUFFER LINE | — | SEWER MAN-HOLE |
| — | EXISTING EASEMENT LINE | — | SEWER CLEAN-OUT |
| — | PROPOSED EASEMENT LINE | — | WATER HYDRANT |
| — | 10' CONTOUR INTERVAL | — | WATER VALVE |
| — | 2' CONTOUR INTERVAL | — | WATER SHUT-OFF |
| — | CHAIN-LINK FENCE | — | GAS VALVE |
| — | STOCKADE FENCE | — | CABLE PEDESTAL |
| — | WIRE FENCE | — | ELECTRIC PEDESTAL |
| — | GUARDRAIL | — | TELEPHONE PEDESTAL |
| — | TIE COURSE LINE | — | TELEPHONE MAN-HOLE |
| — | EDGE OF WATER | — | IRRIGATION CONTROL BOX |
| — | CULVERT | — | SINGLE SIGN POST |
| — | OVERHEAD UTILITY LINE | — | HANDICAPPED PARKING |
| — | UNDERGROUND UTILITY LINE | — | EXISTING BUILDING |
| — | GAS LINE | — | |
| — | WATER LINE | — | |
| — | SEWER LINE | — | |
| — | TAX MAP & LOT NUMBER | | |

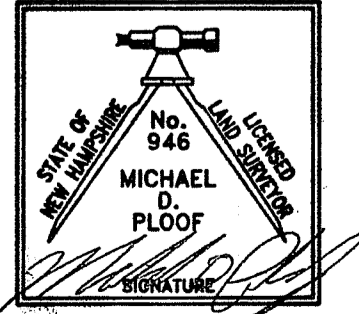
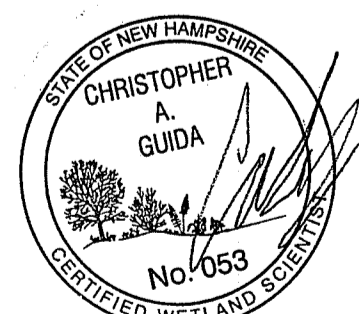
- 6-15**
(SEE REF. PLAN #4)
- ABUTTERS:**
- | | |
|--|---|
| TAX MAP 6 LOTS 14 & 15
37 WILTON ROAD MILFORD, LLC
& 282 ROUTE 101, LLC
100 ELM STREET
NASHUA, NH 03060
BK.8076 PG.2233 4/15/09 | TAX MAP 6 LOT 48-2
STEPHAN C. MURRAH
& 282 ROUTE 101, LLC
MILFORD, NH 03055-5003
BK.7310 PG.1943 9/1/04 |
| TAX MAP 6 LOT 13-C1
PINE VALLEY RESIDENTIAL, LLC
1400 PROVIDENCE HIGHWAY
SUITE 1000
NORWOOD, MA 02062
BK.8561 PG.389 5/16/13 | TAX MAP 11 LOT 9-1
P & P REALTY TRUST
P.O. BOX 95
WILTON, NH
BK. 5119 PG. 854 7/10/89 |
| TAX MAP 6 LOT 16
MILFORD COOPERATIVE BANK
C/O TD BANK
380 WELLINGTON STREET, 12TH
FLOOR
LONDON, ON N6A 454
BK.5131 PG.1932 8/31/89 | TAX MAP 6 LOTS 13-C2 &
13-C3
PVM COMMERCIAL CENTER, LLC
184 MAIN STREET
WALTHAM, MA 02451
BK.8561 PG.377 5/17/13 |
| TAX MAP 6 LOT 48
KAREN E. LeGAULT
24 MAPLE STREET
MILFORD, NH 03055
BK.8990 PG.1988 7/14/03 | PAN-AM RAILWAYS, INC.
1700 IRON HORSE PARK
NORTH BILLERICA, MA 01862 |
| | CO-APPLICANT:
MAC MILFORD REALTY, LLC
5 CHARDRELL CROSSING
MILFORD, NH 03055 |

CERTIFICATION:
WETLANDS WERE DELINEATED IN ACCORDANCE WITH THE US ARMY CORPS OF ENGINEERS 1987 WETLANDS DELINEATION MANUAL Y-87-1 AND REGIONAL SUPPLEMENT FOR NORTHEAST AND NORTHCENTRAL REGION AND FIELD INDICATORS FOR HYDRIC SOILS IN NEW ENGLAND, BY CHRISTOPHER A. GUIDA, C.W.S. IN JUNE 2016 & VERIFIED IN NOVEMBER, 2021.

DATE: 5/20/22

CERTIFICATION:
"I HEREBY CERTIFY THAT THE EXISTING IMPROVEMENTS SHOWN ARE THE RESULT OF A FIELD SURVEY PERFORMED BY FIELDSTONE LAND CONSULTANTS, PLLC DURING THE MONTH OF OCTOBER, 2021 TOGETHER WITH COMPILED DATA FROM THE REFERENCE PLANS CITED HEREON."

DATE: 5/20/22



- REFERENCE PLANS:**
- "SUBDIVISION PLAN - LISCIOTTI DEVELOPMENT CORP. - 30 WILTON ROAD - MAP 6, LOT 14 - TOWN OF MILFORD, HILLSBOROUGH COUNTY - STATE OF NEW HAMPSHIRE", SCALE: 1"=50', DATED: APRIL 23, 2019, PREPARED BY: CONTROL POINT ASSOCIATES, INC. & RECORDED AS PLAN #40218 IN THE H.C.R.D.
 - "SITE PLAN - PREPARED FOR - MILFORD - ELM STREET - TRUST - MILFORD, N.H.", SCALE: 1"=40', DATED: APRIL 23, 1987, LAST REVISED 9/29/87 BY THOMAS F. MORAN, INC.
 - "ALTA/ACSM LAND TITLE SURVEY - BOUNDARY AND EASEMENT PLAN - PINE VALLEY MILL - COMMERCIAL CENTER / RESIDENCES AT THE MILL - TAX MAP PARCEL 6-13 - 37 WILTON ROAD - MILFORD, NEW HAMPSHIRE - PREPARED FOR - DAKOTA PARTNERS, INC. - LAND OF - PINE VALLEY RESIDENTIAL, LLC", SCALE: 1"=40', DATED: JANUARY 30, 2013 AND LAST REVISED 5/30/13 BY THIS OFFICE.
 - "EXISTING CONDITIONS PLAN - LAND OF - 282 ROUTE 101, LLC & - 37 WILTON ROAD MILFORD, LLC - TAX MAP-LOT 6-14 - 30 WILTON ROAD - MILFORD, NEW HAMPSHIRE", SCALE: 1"=40', DATED: FEBRUARY 6, 2011, LAST REVISED 5/27/11, SHEET 4 OF 15 BY MERIDIAN LAND SERVICES, INC.
 - "PLAN OF TAX PARCELS 7-27, 7-33 & 7-34 - HILLSBOROUGH MILLS - MILFORD, N.H.", SCALE: 1"=80', DATED: JULY 17, 1979 BY THOMAS F. MORAN, INC.
 - "ACCESS & UTILITY EASEMENT PLAN - TAX MAP LOT 6-14 - 30 WILTON ROAD - MILFORD, NEW HAMPSHIRE", SCALE: 1"=50', DATED: JANUARY 18, 2017 & REVISED THROUGH: JUNE 26, 2018, PREPARED BY: FIELDSTONE LAND CONSULTANTS, PLLC & RECORDED AS PLAN #39994 IN THE H.C.R.D.
 - "ACCESS EASEMENT PLAN - LISCIOTTI DEVELOPMENT CORP. - 30 WILTON ROAD - MAP 6, LOT 14 - TOWN OF MILFORD, HILLSBOROUGH COUNTY - STATE OF NEW HAMPSHIRE", SCALE: 1"=20', DATED: AUGUST 13, 2019, PREPARED BY: CONTROL POINT ASSOCIATES, INC. & RECORDED AS PLAN #40252 IN THE H.C.R.D.

REV.	DATE	DESCRIPTION	UPDATE OWNER	TDA	MDP	MDP
A	05/20/22					
REV.	DATE	DESCRIPTION	C/O	DR	CK	

EXISTING CONDITIONS PLAN
TAX MAP LOT 6-14 - 30 WILTON ROAD
MILFORD, NEW HAMPSHIRE
PREPARED FOR:
GRANITE ENGINEERING, LLC
150 DOW STREET, TOWER 2, SUITE 421 MANCHESTER, NH 03101
LAND OF:
30 WILTON ROAD MILFORD, LLC
55 HIGH STREET - PITTSFIELD, NH 03263

SCALE: 1" = 50' NOVEMBER 23, 2021

Surveying + Engineering + Land Planning + Permitting + Septic Designs

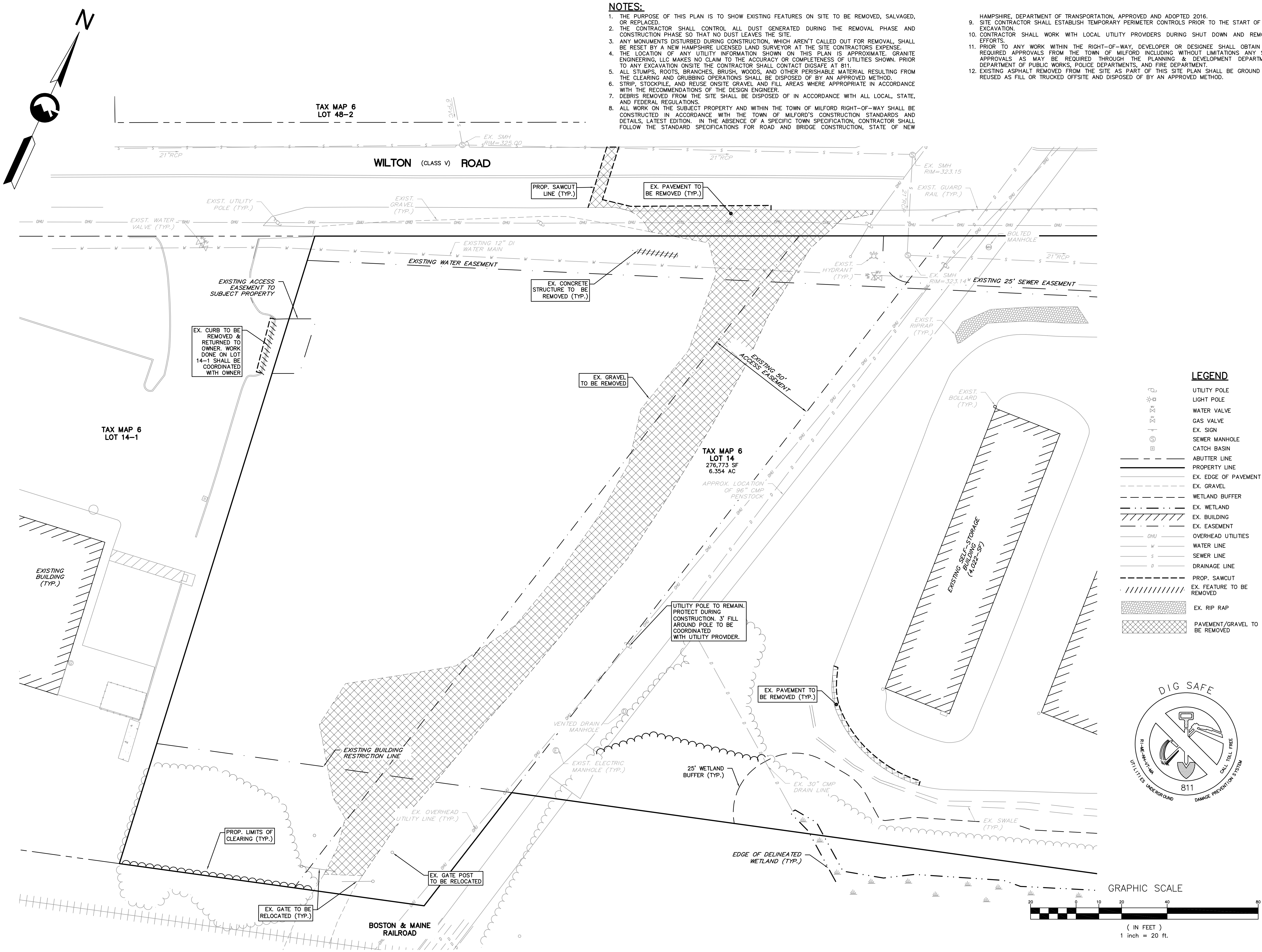


206 Elm Street, Milford NH 03055
Phone: (603) 672-5456 Fax: (603) 413-5456
www.FieldstoneLandConsultants.com

NOTES:

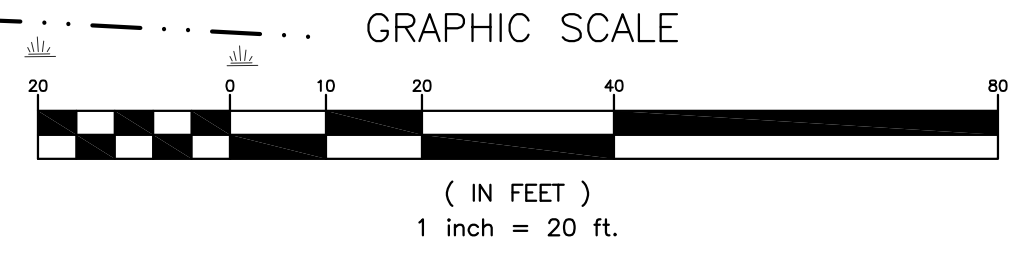
1. THE PURPOSE OF THIS PLAN IS TO SHOW EXISTING FEATURES ON SITE TO BE REMOVED, SALVAGED, OR REPLACED.
2. THE CONTRACTOR SHALL CONTROL ALL DUST GENERATED DURING THE REMOVAL PHASE AND CONSTRUCTION PHASE SO THAT NO DUST LEAVES THE SITE.
3. ANY MONUMENTS DISTURBED DURING CONSTRUCTION, WHICH AREN'T CALLED OUT FOR REMOVAL, SHALL BE RESET BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR AT THE SITE CONTRACTOR'S EXPENSE.
4. THE LOCATION OF ANY UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. GRANITE ENGINEERING, LLC MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ONSITE THE CONTRACTOR SHALL CONTACT DIGSAFE AT 811.
5. ALL STUMPS, ROOTS, BRANCHES, BRUSH, WOODS, AND OTHER PERISHABLE MATERIAL RESULTING FROM THE CLEARING AND GRUBBING OPERATIONS SHALL BE DISPOSED OF BY AN APPROVED METHOD.
6. STRIP, STOCKPILE, AND REUSE ONSITE GRAVEL AND FILL AREAS WHERE APPROPRIATE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE DESIGN ENGINEER.
7. DEBRIS REMOVED FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
8. ALL WORK ON THE SUBJECT PROPERTY AND WITHIN THE TOWN OF MILFORD RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TOWN OF MILFORD'S CONSTRUCTION STANDARDS AND DETAILS, LATEST EDITION. IN THE ABSENCE OF A SPECIFIC TOWN SPECIFICATION, CONTRACTOR SHALL FOLLOW THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION, APPROVED AND ADOPTED 2016.
9. SITE CONTRACTOR SHALL ESTABLISH TEMPORARY PERIMETER CONTROLS PRIOR TO THE START OF SITE EXCAVATION.
10. CONTRACTOR SHALL WORK WITH LOCAL UTILITY PROVIDERS DURING SHUT DOWN AND REMOVAL EFFORTS.
11. PRIOR TO ANY WORK WITHIN THE RIGHT-OF-WAY, DEVELOPER OR DESIGNEE SHALL OBTAIN ALL REQUIRED APPROVALS FROM THE TOWN OF MILFORD INCLUDING WITHOUT LIMITATIONS ANY SUCH APPROVALS AS MAY BE REQUIRED THROUGH THE PLANNING & DEVELOPMENT DEPARTMENT, DEPARTMENT OF PUBLIC WORKS, POLICE DEPARTMENTS, AND FIRE DEPARTMENT.
12. EXISTING ASPHALT REMOVED FROM THE SITE AS PART OF THIS SITE PLAN SHALL BE GROUND AND REUSED AS FILL OR TRUCKED OFFSITE AND DISPOSED OF BY AN APPROVED METHOD.

HAMPSHIRE, DEPARTMENT OF TRANSPORTATION, APPROVED AND ADOPTED 2016.
 9. SITE CONTRACTOR SHALL ESTABLISH TEMPORARY PERIMETER CONTROLS PRIOR TO THE START OF SITE EXCAVATION.
 10. CONTRACTOR SHALL WORK WITH LOCAL UTILITY PROVIDERS DURING SHUT DOWN AND REMOVAL EFFORTS.
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 12. EXISTING ASPHALT REMOVED FROM THE SITE AS PART OF THIS SITE PLAN SHALL BE GROUND AND REUSED AS FILL OR TRUCKED OFFSITE AND DISPOSED OF BY AN APPROVED METHOD.



LEGEND

	UTILITY POLE
	LIGHT POLE
	WATER VALVE
	GAS VALVE
	EX. SIGN
	SEWER MANHOLE
	CATCH BASIN
	ABUTTER LINE
	PROPERTY LINE
	EX. EDGE OF PAVEMENT
	EX. GRAVEL
	WETLAND BUFFER
	EX. WETLAND
	EX. BUILDING
	EX. EASEMENT
	OVERHEAD UTILITIES
	WATER LINE
	SEWER LINE
	DRAINAGE LINE
	PROP. SAWCUT
	EX. FEATURE TO BE REMOVED
	EX. RIP RAP
	PAVEMENT/GRAVEL TO BE REMOVED



REVISIONS

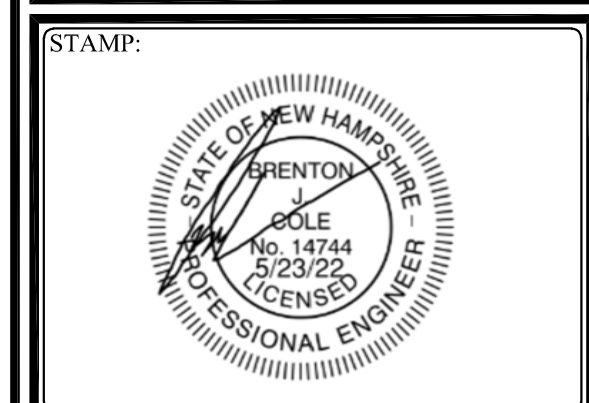
No.	DATE	COMMENTS
0	05/23/2022	PROJECT SUBMITTAL

OWNER & APPLICANT:
 30 WILTON ROAD LLC
 55 HIGH STREET
 PITTSFIELD, NH 05263
 BOOK 9471 PAGE 2225

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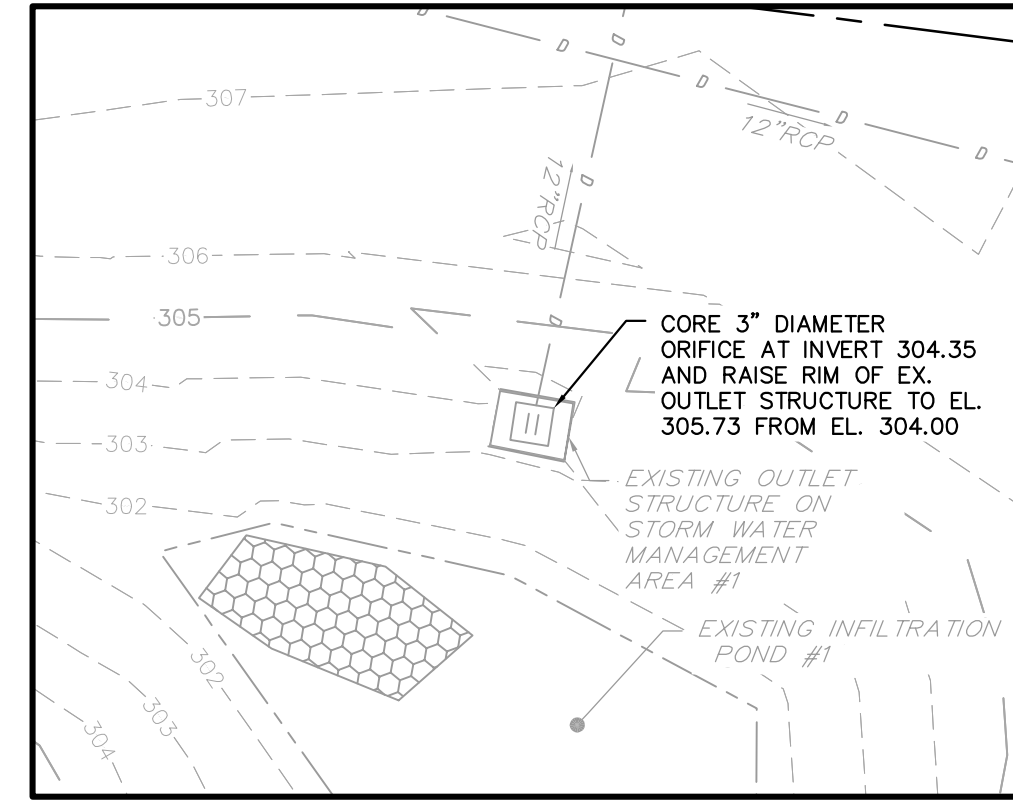
LOCATION:
 TAX MAP 6 LOT 14
 30 WILTON ROAD
 MILFORD, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

PROJECT:
STORAGE SENSE - MILFORD WEST

TITLE:
REMOVALS PLAN



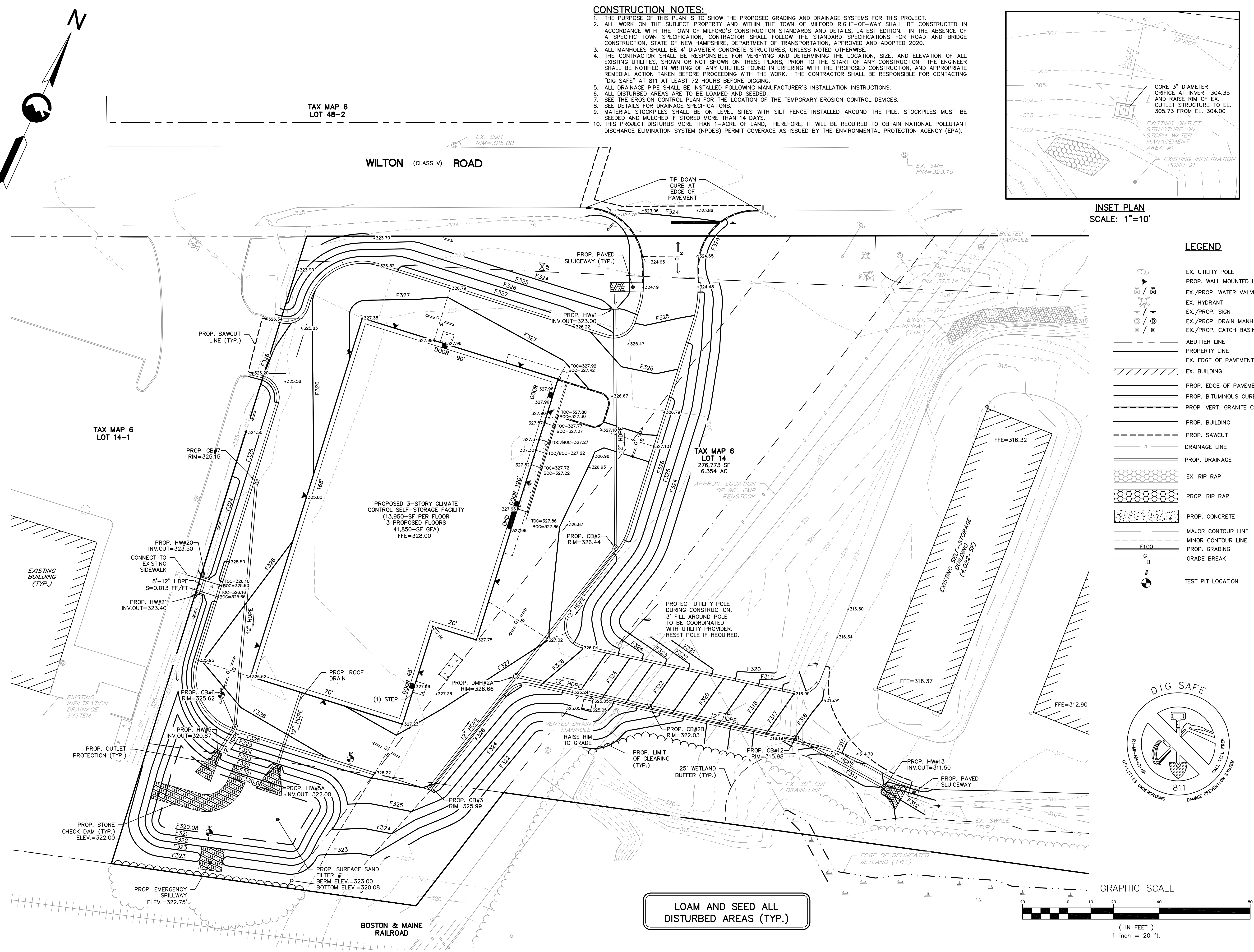
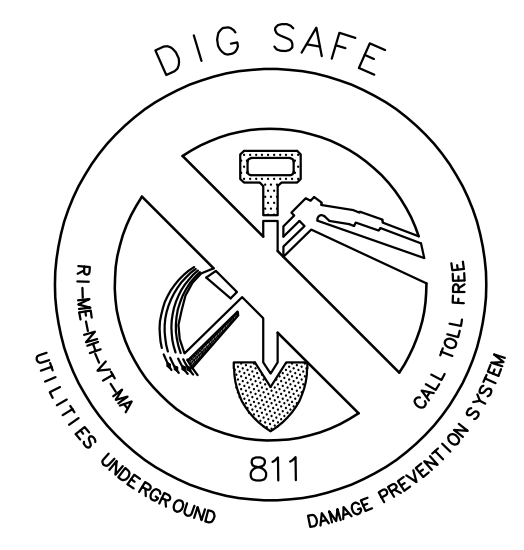
- CONSTRUCTION NOTES:**
1. THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED GRADING AND DRAINAGE SYSTEMS FOR THIS PROJECT.
 2. ALL WORK ON THE SUBJECT PROPERTY AND WITHIN THE TOWN OF MILFORD RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TOWN OF MILFORD'S CONSTRUCTION STANDARDS AND DETAILS, LATEST EDITION. IN THE ABSENCE OF A SPECIFIC TOWN SPECIFICATION, CONTRACTOR SHALL FOLLOW THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION, APPROVED AND ADOPTED 2020.
 3. ALL MANHOLES SHALL BE 4' DIAMETER CONCRETE STRUCTURES, UNLESS NOTED OTHERWISE.
 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION, AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 811 AT LEAST 72 HOURS BEFORE DIGGING.
 5. ALL DRAINAGE PIPE SHALL BE INSTALLED FOLLOWING MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 6. ALL DISTURBED AREAS ARE TO BE LOAMED AND SEEDED.
 7. SEE THE EROSION CONTROL PLAN FOR THE LOCATION OF THE TEMPORARY EROSION CONTROL DEVICES.
 8. SEE DETAILS FOR DRAINAGE SPECIFICATIONS.
 9. MATERIAL STOCKPILES SHALL BE ON LEVEL SITES WITH SILT FENCE INSTALLED AROUND THE PILE. STOCKPILES MUST BE SEEDED AND MULCHED IF STORED MORE THAN 14 DAYS.
 10. THIS PROJECT DISTURBS MORE THAN 1-ACRE OF LAND, THEREFORE, IT WILL BE REQUIRED TO OBTAIN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT COVERAGE AS ISSUED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA).



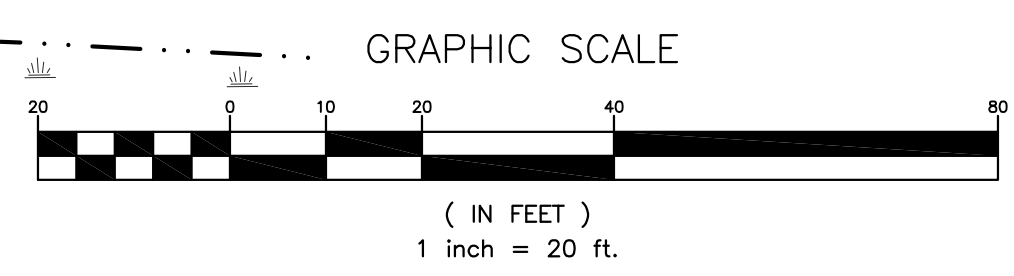
INSET PLAN
SCALE: 1"=10'

LEGEND

- EX. UTILITY POLE
- PROP. WALL MOUNTED LIGHT
- EX./PROP. WATER VALVE
- EX. HYDRANT
- EX./PROP. SIGN
- EX./PROP. DRAIN MANHOLE
- EX./PROP. CATCH BASIN
- ABUTTER LINE
- PROPERTY LINE
- EX. EDGE OF PAVEMENT
- EX. BUILDING
- PROP. EDGE OF PAVEMENT
- PROP. BITUMINOUS CURB
- PROP. VERT. GRANITE CURB
- PROP. BUILDING
- PROP. SAWCUT
- DRAINAGE LINE
- PROP. DRAINAGE
- EX. RIP RAP
- PROP. RIP RAP
- PROP. CONCRETE
- MAJOR CONTOUR LINE
- MINOR CONTOUR LINE
- PROP. GRADING
- GRADE BREAK
- TEST PIT LOCATION



LOAM AND SEED ALL DISTURBED AREAS (TYP.)

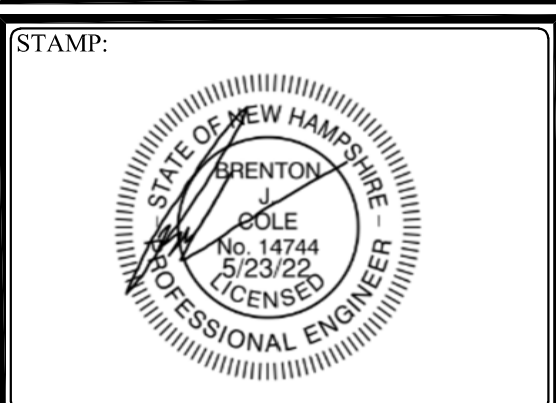


NO.	DATE	COMMENTS
0	05/23/2022	PROJECT SUBMITTAL

OWNER & APPLICANT:
 30 WILTON ROAD, LLC
 55 HIGH STREET
 PITTSFIELD, NH 05263
 BOOK 9471 PAGE 2225

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LOCATION:
 TAX MAP 6 LOT 14
 30 WILTON ROAD
 MILFORD, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

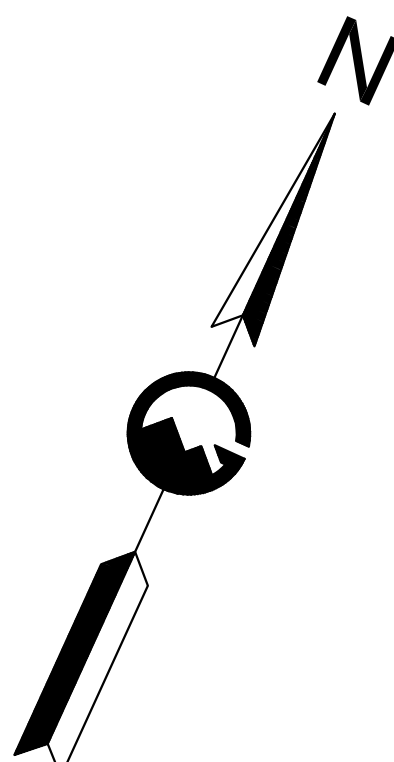
PROJECT:
STORAGE SENSE - MILFORD WEST

TITLE:
GRADING AND DRAINAGE PLAN

PROJECT No. / DATE:
 21-0630-1 / MAY 23, 2022

SHEET: 5 OF 17

SCALE:
 HORIZ. 1"=20'



WATER CONSTRUCTION NOTES:

1. ALL DISTRIBUTION MATERIALS, INCLUDING MAINS, FITTINGS AND VALVES, TO MEET APPLICABLE AMERICAN WATER WORKS ASSOCIATION (AWWA) AND NEW HAMPSHIRE DES-DRINKING WATER GROUNDWATER BUREAU STANDARDS, AS APPLICABLE.
2. ALL INSTALLATION AND TESTING OF MATERIALS TO CONFORM TO AWWA STANDARDS FOR POTABLE WATER SYSTEMS.
3. EXISTING WATER MAIN ALONG WILTON ROAD IS OWNED AND SUPPLIED BY THE TOWN OF WILTON WATER COMMISSION. ALL WORK INVOLVING THE PUBLIC WATER SUPPLY SHALL BE COMPLETED IN CONFORMANCE WITH THE STANDARDS OF THE WILTON WATER COMMISSION.
4. BUILDING SHOULD BE EQUIPPED WITH FIRE SPRINKLER AND FULL FIRE ALARM SYSTEM.

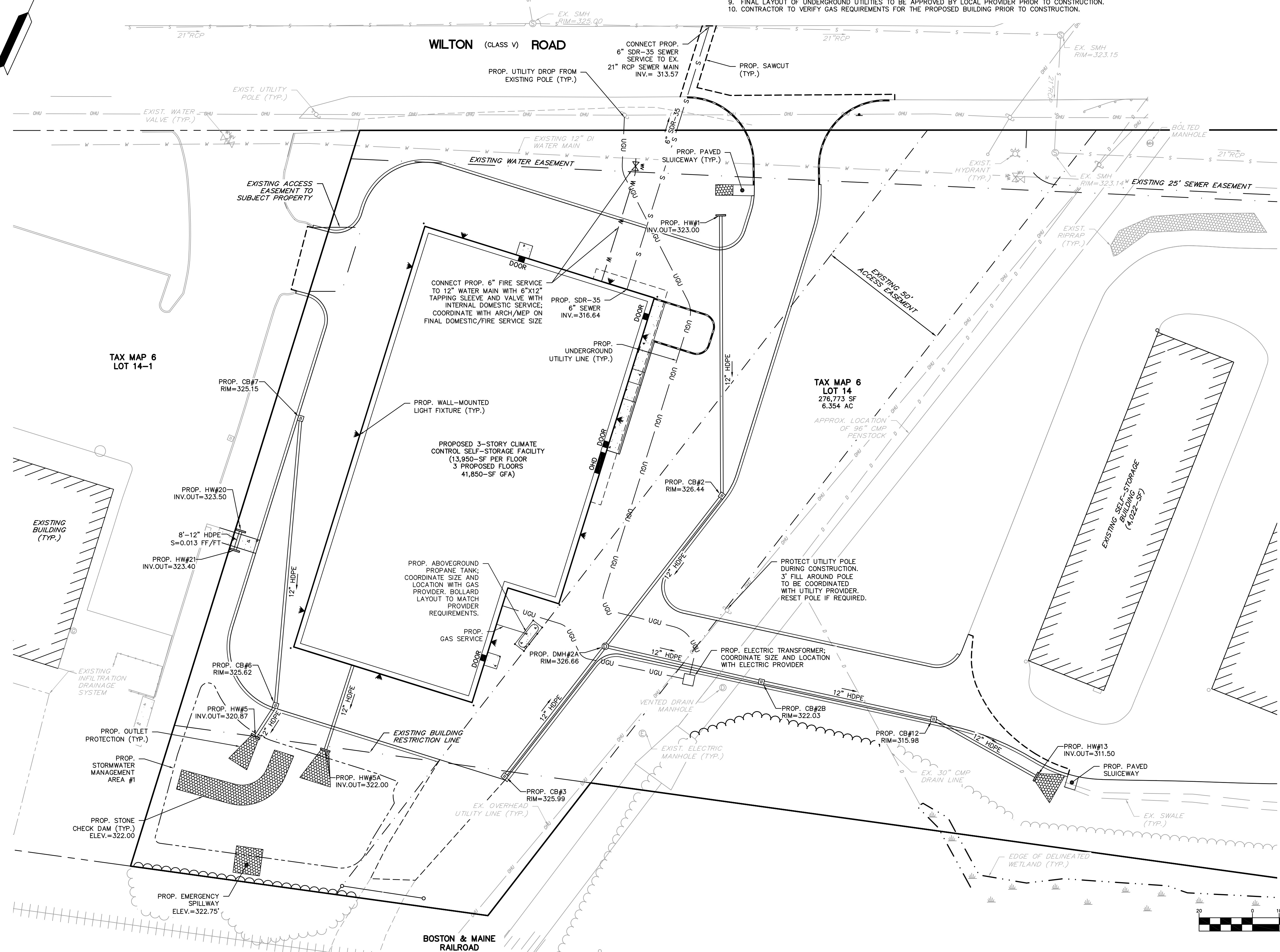
CONSTRUCTION NOTES:

1. THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED UTILITIES FOR THIS PROJECT.
2. ALL WORK SHALL CONFORM TO THE TOWN OF MILFORD STANDARD SPECIFICATIONS FOR ROAD, DRAIN & SEWER CONSTRUCTION. IN THE ABSENCE OF A SPECIFIC TOWN SPECIFICATION, CONTRACTOR SHALL FOLLOW THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION, APPROVED AND ADOPTED 2016.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION, AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 811 AT LEAST 72 HOURS BEFORE DIGGING.
4. ALL WORKMANSHIP AND MATERIALS INCORPORATED INTO THE CONSTRUCTION OF THE WATER LINES SHALL CONFORM TO ALL THE LOCAL PRECINCT'S STANDARDS, SPECIFICATIONS, RULES, AND REGULATIONS.
5. ALL WORKMANSHIP AND MATERIALS INCORPORATED INTO THE CONSTRUCTION OF THE ELECTRIC AND TELEPHONE LINES SHALL CONFORM WITH THE STANDARDS OF THE LOCAL PROVIDER.
6. CONTRACTOR SHALL COORDINATE WITH LOCAL PROVIDER RELATIVE TO FINAL LAYOUT OF UNDERGROUND UTILITIES.
7. ALL DRAINAGE PIPE SHALL BE INSTALLED FOLLOWING MANUFACTURER'S INSTALLATION INSTRUCTIONS.
8. CONTRACTOR TO VERIFY SIZE OF WATER SERVICE LINES WITH ARCHITECT PRIOR TO THE START OF CONSTRUCTION.
9. FINAL LAYOUT OF UNDERGROUND UTILITIES TO BE APPROVED BY LOCAL PROVIDER PRIOR TO CONSTRUCTION.
10. CONTRACTOR TO VERIFY GAS REQUIREMENTS FOR THE PROPOSED BUILDING PRIOR TO CONSTRUCTION.

TAX MAP 6
LOT 48-2

TAX MAP 6
LOT 14-1

TAX MAP 6
LOT 14
276,773 SF
6.354 AC

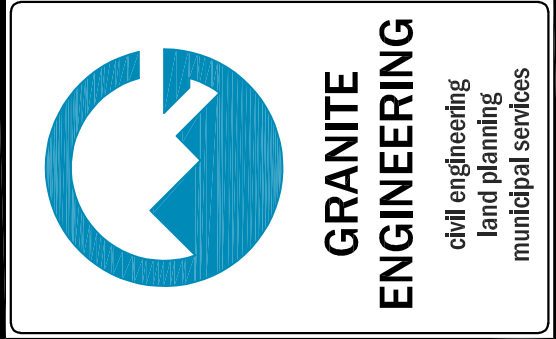
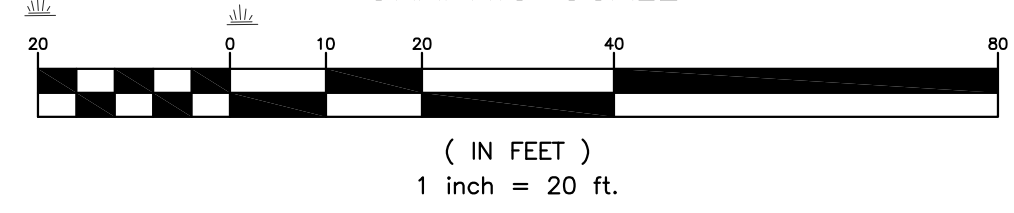


LEGEND

- EX. UTILITY POLE
- PROP. WALL MOUNTED LIGHT
- EX./PROP. WATER VALVE
- EX. HYDRANT
- EX./PROP. SIGN
- EX. SEWER MANHOLE
- EX./PROP. DRAIN MANHOLE
- EX./PROP. CATCH BASIN
- ABUTTER LINE
- PROPERTY LINE
- EX. EDGE OF PAVEMENT
- EX. BUILDING
- EX. EASEMENT
- PROP. EDGE OF PAVEMENT
- PROP. BITUMINOUS CURB
- PROP. VERT. GRANITE CURB
- PROP. BUILDING
- OVERHEAD UTILITIES
- GAS LINE
- WATER LINE
- SEWER LINE
- DRAINAGE LINE
- PROP. SEWER LINE
- PROP. UNDERGROUND UTILITIES
- PROP. WATER LINE
- PROP. DRAINAGE
- EX. RIP RAP
- PROP. RIP RAP
- PROP. CONCRETE



GRAPHIC SCALE

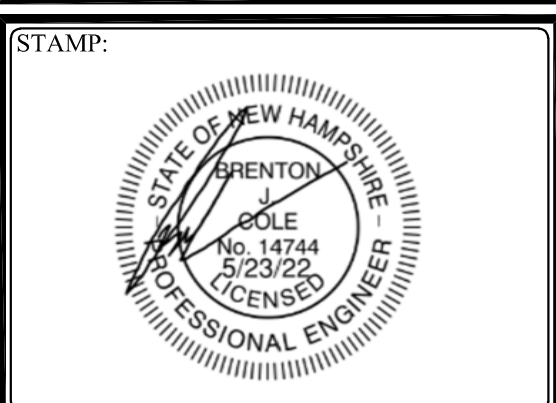


NO.	DATE	COMMENTS
0	05/23/2022	PROJECT SUBMITTAL

OWNER & APPLICANT:
30 WILTON ROAD LLC
55 HIGH STREET
PITTSFIELD, NH 03263
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LOCATION:
TAX MAP 6 LOT 14
30 WILTON ROAD
MILFORD, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

PROJECT:
STORAGE SENSE - MILFORD WEST

TITLE:
UTILITY PLAN

PROJECT No. / DATE:
21-0630-1 / MAY 23, 2022

SHEET:
6 OF 17

SCALE:
HORIZ. 1"=20'



TAX MAP 6
LOT 48-2

SITE SPECIFIC SOIL MAP UNIT KEY

SYMBOL	MAP UNIT	SLOPE CLASS	DRAINAGE CLASS
24B	AGAWAM	0-8%	WELL
313B	DEERFIELD	0-8%	MODERATELY WELL
313D	DEERFIELD	15-25%	MODERATELY WELL
313E	DEERFIELD	+25%	MODERATELY WELL
299ghdd	UDORTHENTS, SAND	0-8%	POORLY

THIS MAP PRODUCT IS WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOILS SURVEY. IT IS A SPECIAL PURPOSE PRODUCT, PRODUCED BY A CERTIFIED SOIL SCIENTIST, AND IS NOT A PRODUCT OF THE USDA NATURAL RESOURCE CONSERVATION SERVICE. THERE IS A NARRATIVE REPORT THAT ACCOMPANIES THIS MAP AND MAP KEY.

EROSION CONTROL NOTES:

1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE REQUIRED ONSITE TEMPORARY CONSTRUCTION EROSION CONTROL MEASURES.
2. ALL MEASURES IN THE PLAN SHALL MEET AS A MINIMUM THE BEST MANAGEMENT PRACTICES SET FORTH IN VOLUME 3 OF THE NEW HAMPSHIRE STORMWATER MANUAL "EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION" AS PUBLISHED AND AMENDED BY THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES.
3. WHENEVER PRACTICAL, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED OR SUPPLEMENTED. THE STRIPPING OF VEGETATION SHALL BE DONE IN A MANNER THAT MINIMIZES SOIL EROSION.
4. APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE.
5. THE AREA OF DISTURBANCE SHALL BE KEPT TO A MINIMUM. DISTURBED AREAS REMAINING IDLE FOR MORE THAN 30 DAYS SHALL BE STABILIZED.
6. MEASURES SHALL BE TAKEN TO CONTROL EROSION WITHIN THE PROJECT AREA. SEDIMENT IN RUNOFF WATER SHALL BE TRAPPED AND RETAINED WITHIN THE PROJECT AREA USING APPROVED MEASURES.
7. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN FUNCTIONING CONDITION UNTIL FINAL SITE STABILIZATION IS ACCOMPLISHED.
8. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS UNLESS CONDITIONS DICTATE OTHERWISE.
9. THE TOWN OF MILFORD SHALL RESERVE THE RIGHT TO REQUIRE FURTHER EROSION CONTROL PRACTICES DURING CONSTRUCTION SHOULD THEY FIND IT NECESSARY.
10. THE RESPONSIBLE PARTY SHALL INSTALL, INSPECT, REPORT, OPERATE, AND MAINTAIN ALL STORMWATER MANAGEMENT AND EROSION CONTROL MEASURES REQUIRED BY THESE PLANS.
11. TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH PROJECT PLANS. IN ADDITION, SIMILAR MEASURES SHALL BE INSTALLED WHERE AND WHEN THE FIELD CONDITION, OR FIELD OPERATION OF THE INDIVIDUAL SITE CONTRACTOR, MAY WARRANT.
12. ALL DISTURBED AREAS DESIGNATED TO BE TURF, SHALL RECEIVE A MINIMUM APPLICATION OF 4 INCHES OF LOAM (COMPACTED THICKNESS), PRIOR TO FINAL SEEDING AND MULCHING.
13. IN THE EVENT THAT, DURING CONSTRUCTION OF ANY PORTION OF THIS PROJECT, A WINTER SHUTDOWN IS NECESSARY, THE CONTRACTOR SHALL STABILIZE ALL INCOMPLETE WORK AND PROVIDE FOR SUITABLE METHODS OF DIVERTING RUNOFF IN ORDER TO ELIMINATE SHEET FLOW ACROSS FROZEN SURFACES. DUST SHALL BE CONTROLLED BY THE USE OF WATER AS NECESSARY THROUGHOUT THE CONSTRUCTION PERIOD, IN ACCORDANCE WITH ENV-A 1000.
15. IN NO WAY ARE THOSE TEMPORARY EROSION CONTROL MEASURES INDICATED ON THESE PLANS TO BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR SHALL USE JUDGEMENT IN INSTALLING SUPPLEMENTARY EROSION CONTROL MEASURES WHERE AND WHEN SPECIFIC SITE CONDITIONS AND/OR CONSTRUCTION METHODOLOGIES MAY WARRANT.
16. GRADED AREAS SHALL BE VEGETATED TO INSURE EROSION CONTROL BY SEEDING, MULCHING, AND FERTILIZING. DISTURBED AREAS SHALL BE PLANTED WITH SUITABLE PLANT MATERIAL.
17. GRADING SHALL NOT EXCEED A RATION OF 3 HORIZONTAL TO 1 VERTICAL WITHOUT SPECIAL EROSION CONTROL MEASURES. NETTING OR SIMILAR MATERIAL SHALL BE PROVIDED ON SLOPES WITH A RATION GREATER THAN 3:1 WHILE GROUND COVER IS BEING ESTABLISHED.

EROSION & SEDIMENT CONTROL LEGEND

	TEMPORARY BLOCK & GRAVEL SEDIMENT BARRIER
	TEMPORARY STONE CHECK DAM
	SILT FENCE
	STABILIZED CONSTRUCTION EXIT
	EROSION BLANKET
	STAGING AND STOCKPILE AREA
	NON-DISTURBANCE AREA
	OUTLET PROTECTION
	LIMITS OF CLEARING

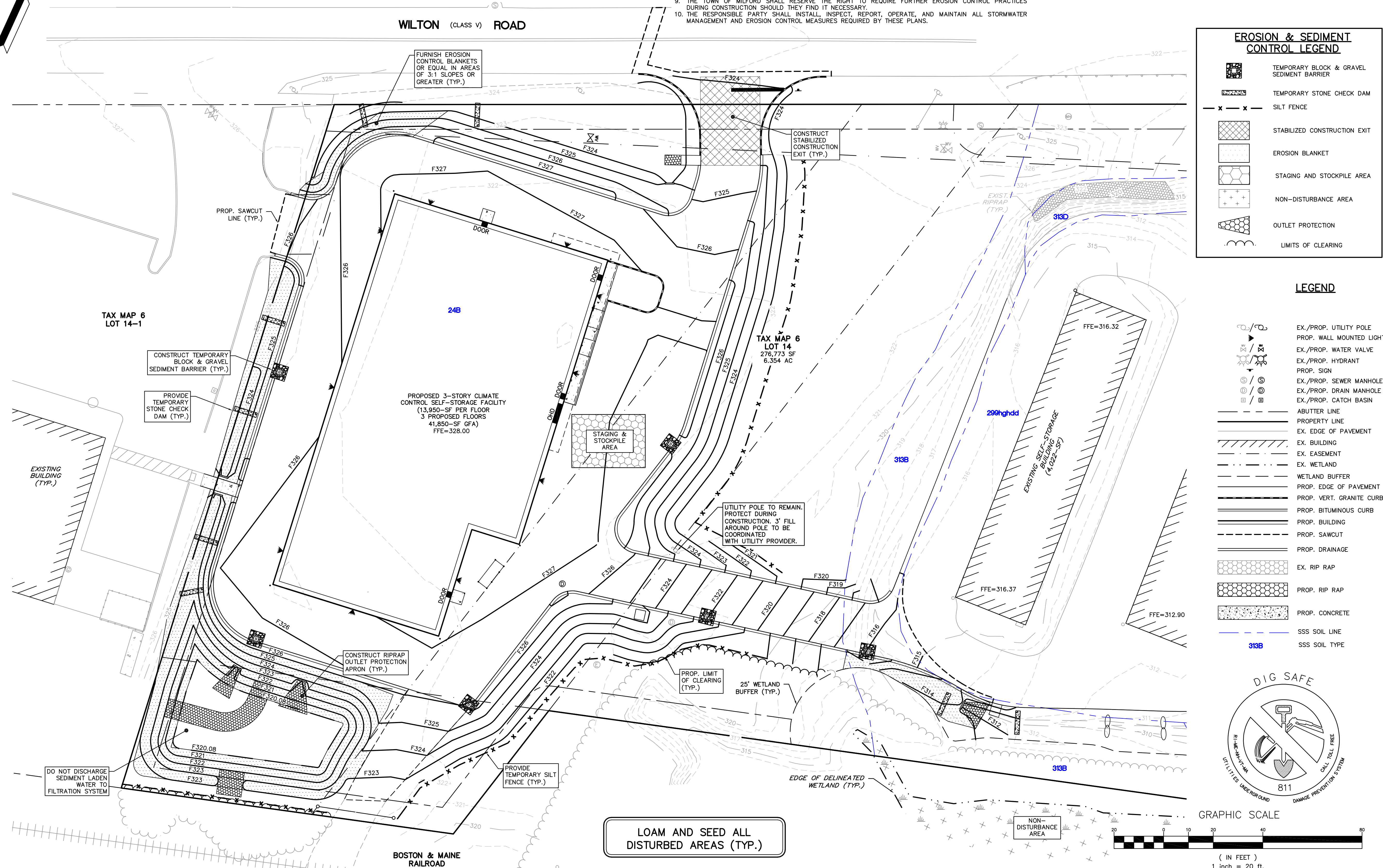
LEGEND

	EX./PROP. UTILITY POLE
	PROP. WALL MOUNTED LIGHT
	EX./PROP. WATER VALVE
	EX./PROP. HYDRANT
	PROP. SIGN
	EX./PROP. SEWER MANHOLE
	EX./PROP. DRAIN MANHOLE
	EX./PROP. CATCH BASIN
	ABUTTER LINE
	PROPERTY LINE
	EX. EDGE OF PAVEMENT
	EX. BUILDING
	EX. EASEMENT
	EX. WETLAND
	PROP. EDGE OF PAVEMENT
	PROP. VERT. GRANITE CURB
	PROP. BITUMINOUS CURB
	PROP. BUILDING
	PROP. SAWCUT
	PROP. DRAINAGE
	EX. RIP RAP
	PROP. RIP RAP
	PROP. CONCRETE
	SSS SOIL LINE
	SSS SOIL TYPE

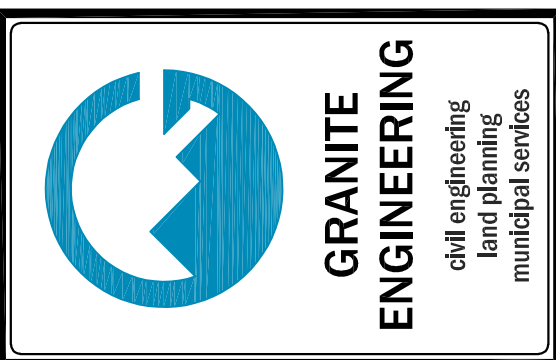


GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.



LOAM AND SEED ALL DISTURBED AREAS (TYP.)

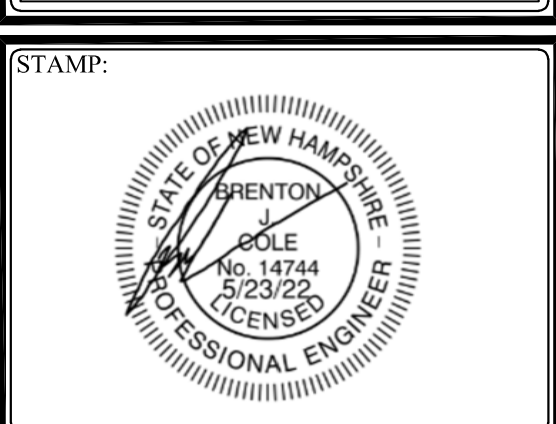


NO.	DATE	REVISIONS
0	05/23/2022	PROJECT SUBMITTAL

OWNER & APPLICANT:
30 WILTON ROAD LLC
55 HIGH STREET
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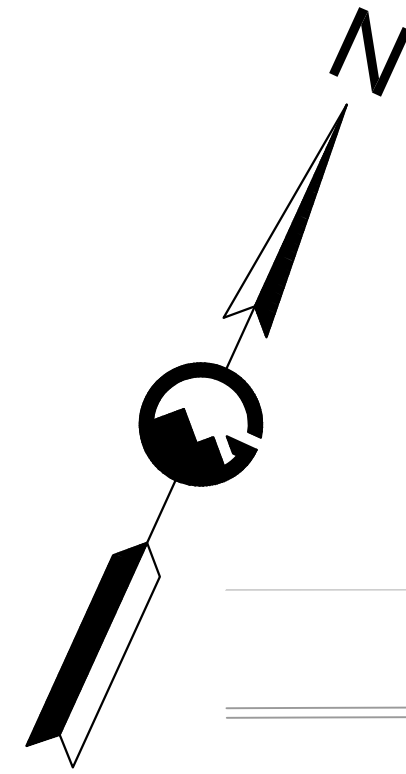


LOCATION:
TAX MAP 6 LOT 14
30 WILTON ROAD
MILFORD, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

PROJECT:
STORAGE SENSE - MILFORD WEST

TITLE:
EROSION CONTROL PLAN

PROJECT No. DATE: 21-0630-1 MAY 23, 2022
SHEET: 7 OF 17
SCALE: HORIZ. 1"=20'



GENERAL NOTES:

1. THE PURPOSE OF THIS PLAN IS TO ILLUSTRATE THE PROPOSED LIGHTING FOR THE PROJECT.
2. ALL FIXTURES SHALL BE AS SPECIFIED BY CHARRON, LLC.
3. ALL PROPOSED FIXTURES ARE FULL CUTOFF FIXTURES.
4. ALL LIGHTING INSTALLATIONS SHALL INCLUDE TIMERS, DIMMERS, SENSORS, AND/OR OTHER ENERGY-SAVING TECHNOLOGIES TO REDUCE THE OVERALL ENERGY CONSUMPTION. NON-ESSENTIAL LIGHTING SHALL BE TURNED OFF OR REDUCED AFTER NORMAL BUSINESS HOURS, LEAVING ONLY NECESSARY LIGHTING FOR SECURITY PURPOSES.

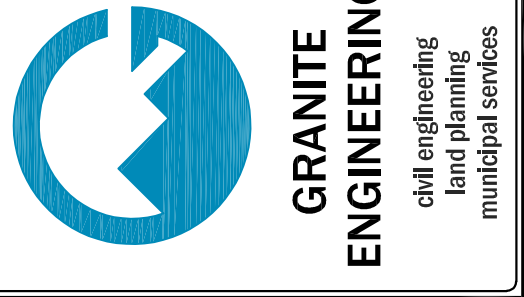
PARKING SPACES
 Illuminance (Fc)
 Average = 1.50
 Maximum = 2.6
 Minimum = 0.8
 Avg/Min Ratio = 1.88
 Max/Min Ratio = 3.25

ROADWAY AROUND BUILDING
 Illuminance (Fc)
 Average = 0.70
 Maximum = 3.1
 Minimum = 0.0
 Avg/Min Ratio = N.A.
 Max/Min Ratio = N.A.

Luminaire Schedule				
Symbol	Qty	Label	Arrangement	Description
←	TO	W1	Single	AXCSTIA-MSP-L30 / WALL MTD 15" AFG



THIS PLAN WAS PREPARED IN ASSOCIATION WITH:



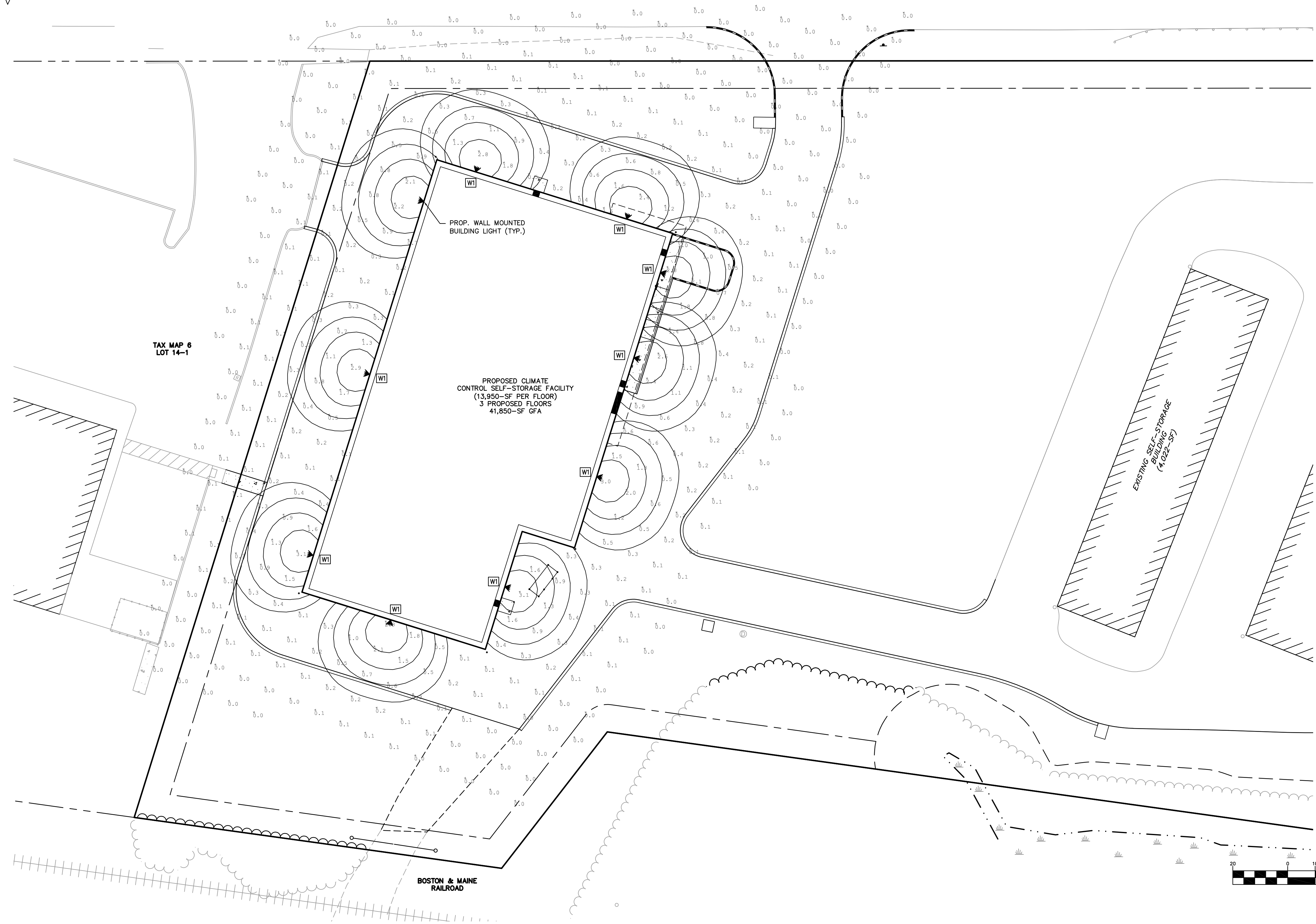
NO.	DATE	BY	TD	REVISIONS
				COMMENTS
0	05/23/2022			PROJECT SUBMITTAL

TAX MAP 6
LOT 48-2

TAX MAP 6
LOT 13-C

WILTON (CLASS V) ROAD

NORTH RIVER ROAD
(CLASS V)



TAX MAP 6
LOT 14-1

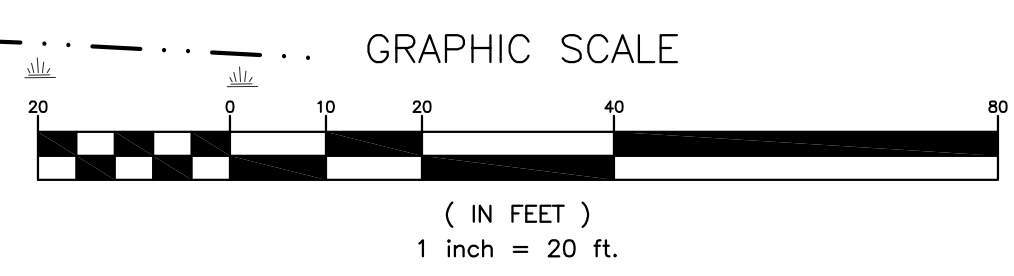
PROPOSED CLIMATE CONTROL SELF-STORAGE FACILITY
 (13,950-SF PER FLOOR)
 3 PROPOSED FLOORS
 41,850-SF GFA

EXISTING SELF-STORAGE BUILDING
 (4,022-SF)

BOSTON & MAINE RAILROAD

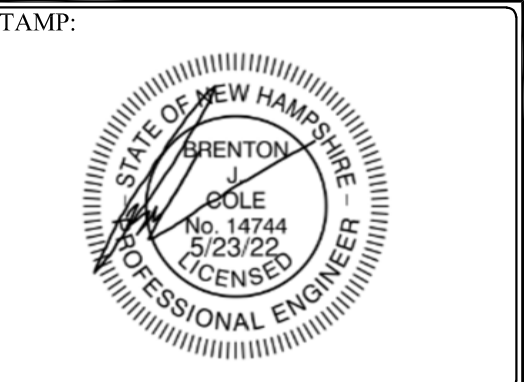
LEGEND

- PROP. BUILDING LIGHT
- EX. PROPERTY LINE
- EXIST. EDGE OF PAVEMENT
- PROP. EDGE OF PAVEMENT
- PROP. TREELINE
- EX. TREELINE
- PROP. BUILDING
- EX. BUILDING



OWNER & APPLICANT:
 30 WILTON ROAD LLC
 55 HIGH STREET
 PITTSFIELD, NH 05263
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LOCATION:
 TAX MAP 6 LOT 14
 30 WILTON ROAD
 MILFORD, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

PROJECT:
STORAGE SENSE - MILFORD WEST

TITLE:
LIGHTING PLAN

PROJECT No. DATE: 21-0630-1 MAY 23, 2022
 SHEET: 8 OF 17
 SCALE: HORIZ. 1" = 20'

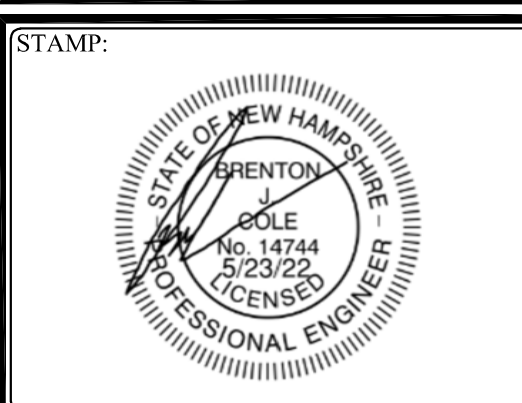
No.	DATE	COMMENTS	BY	
			TD	ID
0	05/23/2022	PROJECT SUBMITTAL		

OWNER & APPLICANT:
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55 HIGH STREET
PITTSFIELD, NH 03263
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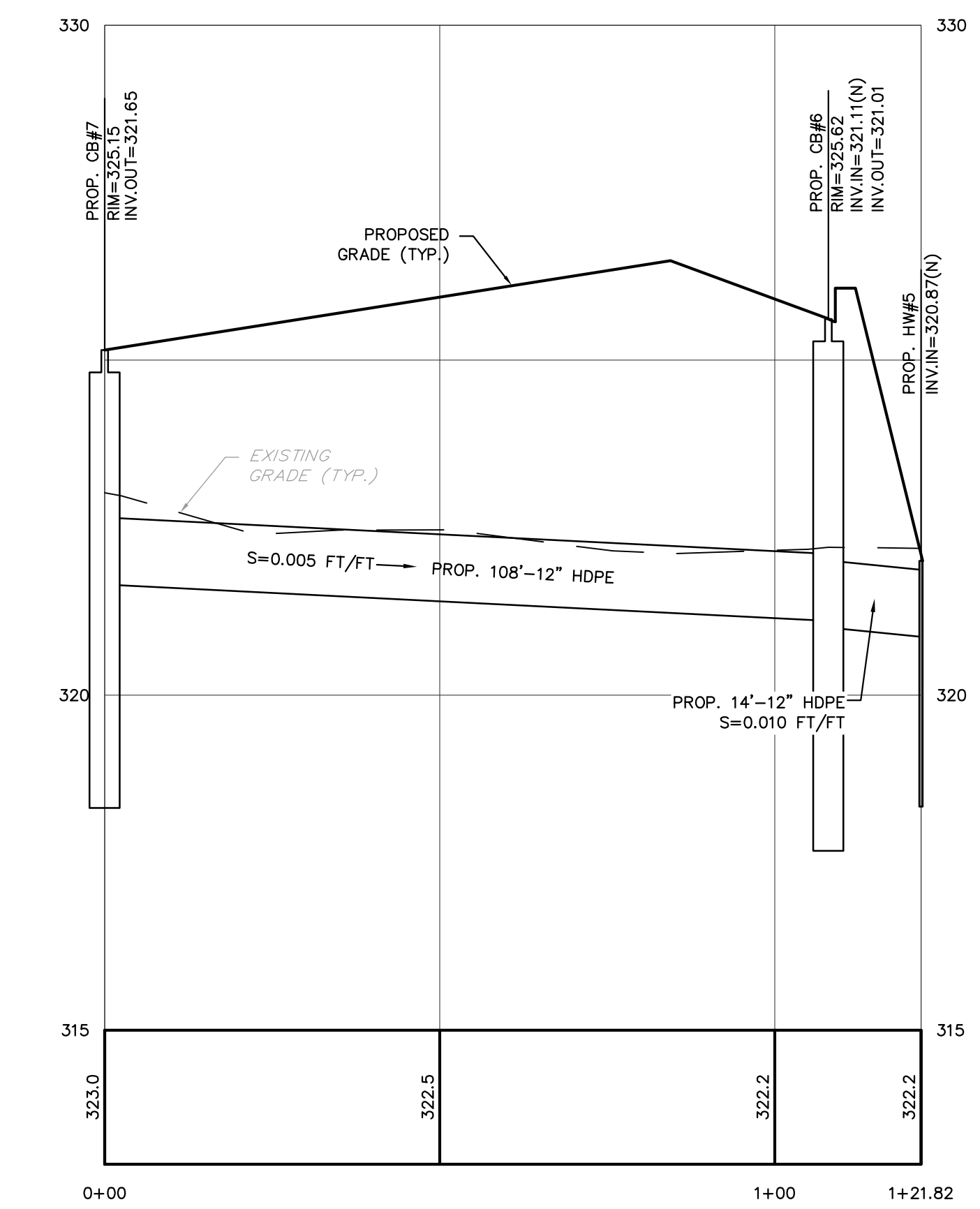


LOCATION:
TAX MAP 6 LOT 14
30 WILTON ROAD
MILFORD, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

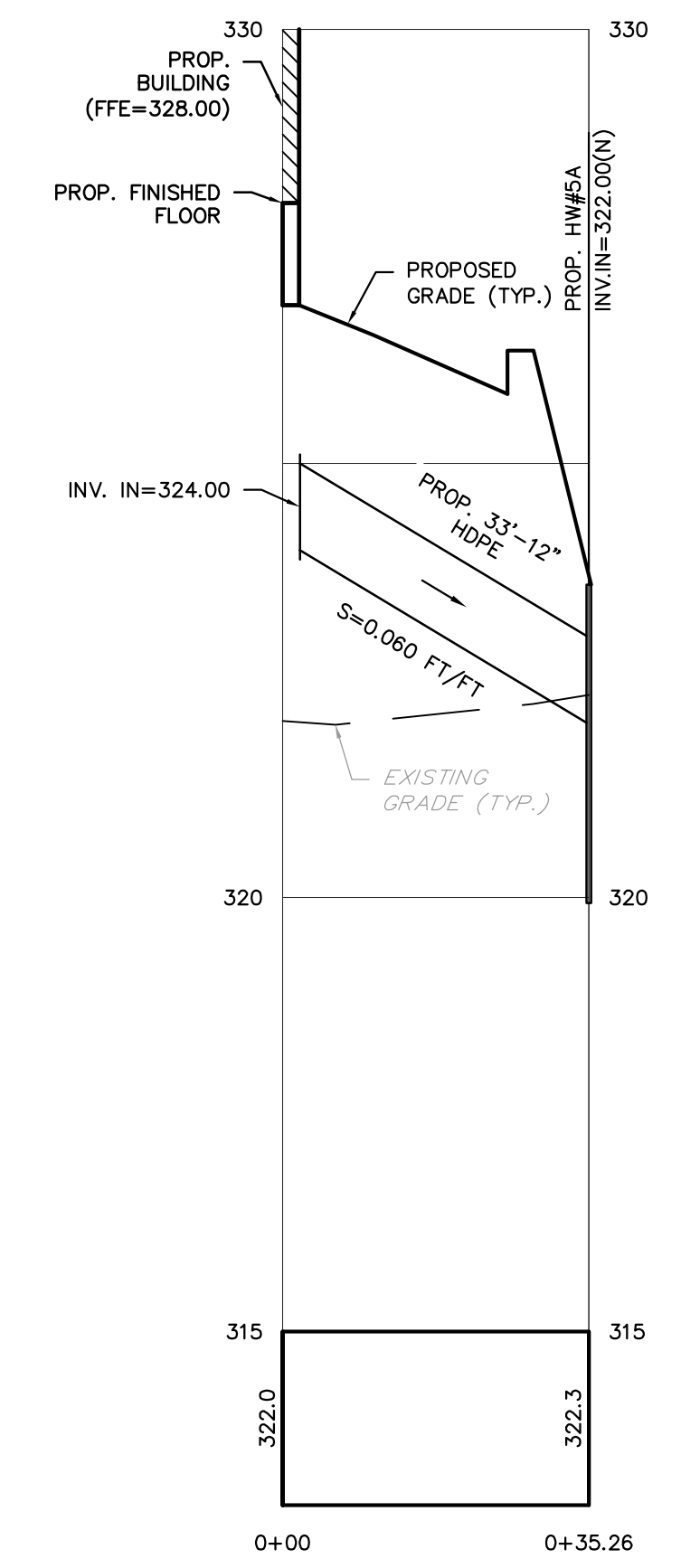
PROJECT:
STORAGE SENSE - MILFORD WEST

TITLE:
UTILITY PROFILES

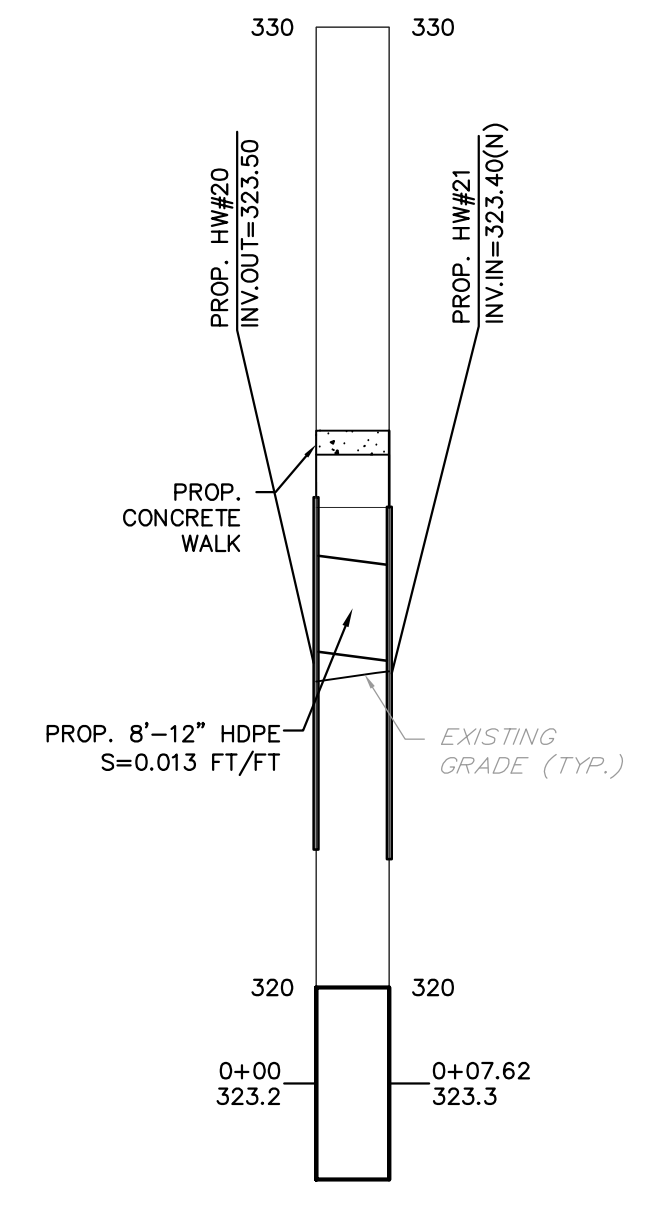
PROJECT No.:	DATE:	SCALE:
21-0630-1	MAY 23, 2022	AS SHOWN
SHEET:	9 OF 17	



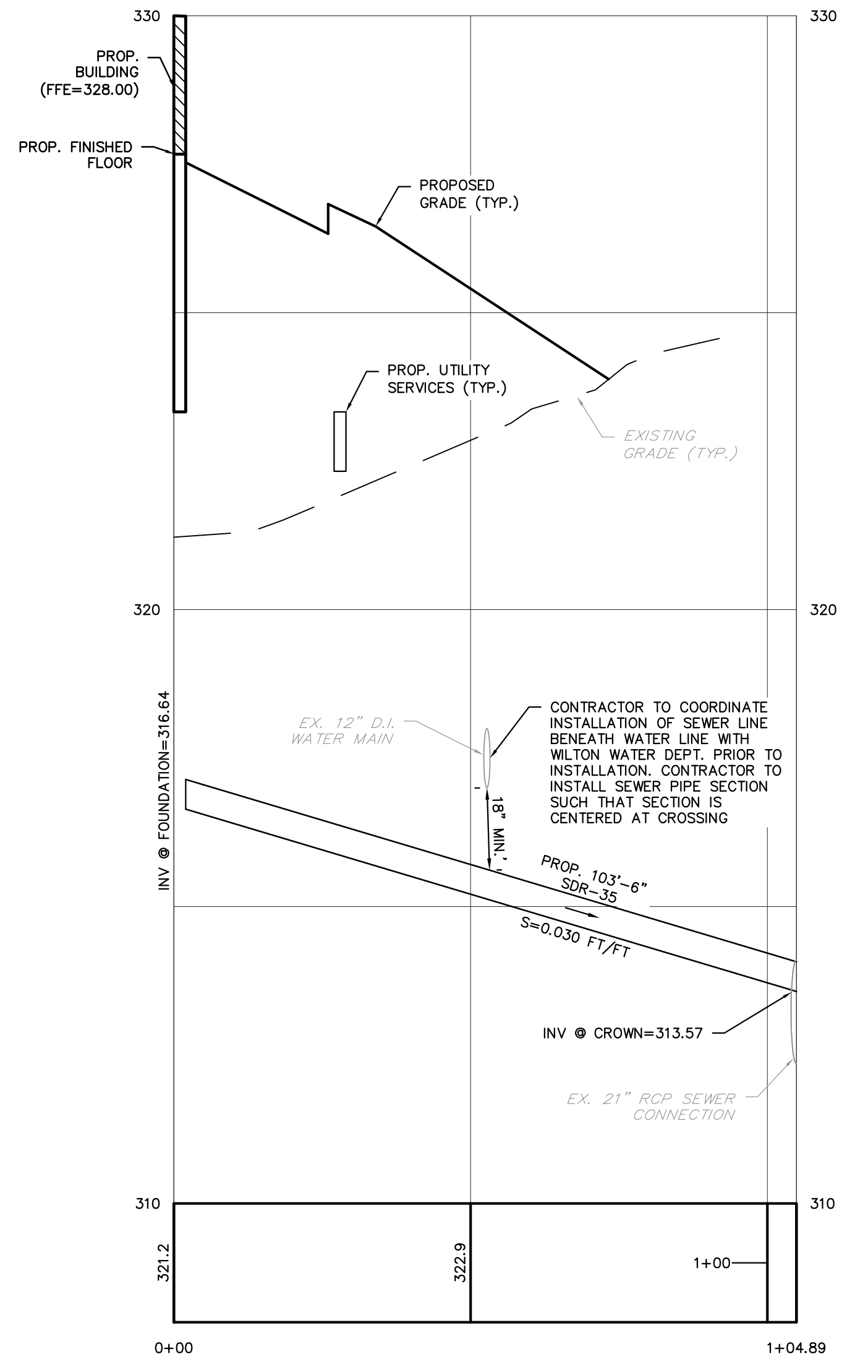
DRAINAGE PROFILE (PROP. CB #7 TO PROP. HW#5)
1"=20' HORIZ., 1"=2' VERT.



DRAINAGE PROFILE (PROP. ROOF DRAIN TO PROP. HW#5A)
1"=20' HORIZ., 1"=2' VERT.



DRAINAGE PROFILE (PROP. HW #20 TO PROP. HW #21)
1"=20' HORIZ., 1"=2' VERT.

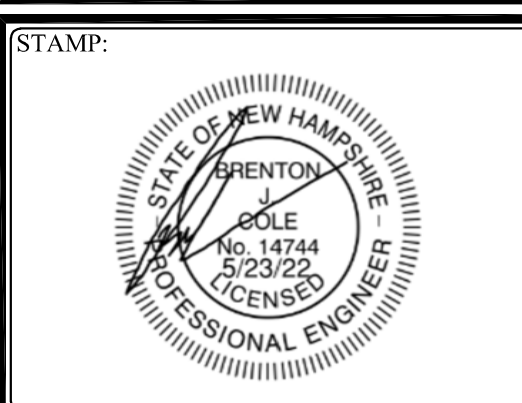


SEWER PROFILE
1"=20' HORIZ., 1"=2' VERT.

No.	DATE	COMMENTS	BY	ID
0	05/23/2022	PROJECT SUBMITTAL		

OWNER & APPLICANT:
30 WILTON ROAD LLC
55 HIGH STREET
PITTSFIELD, NH 05263
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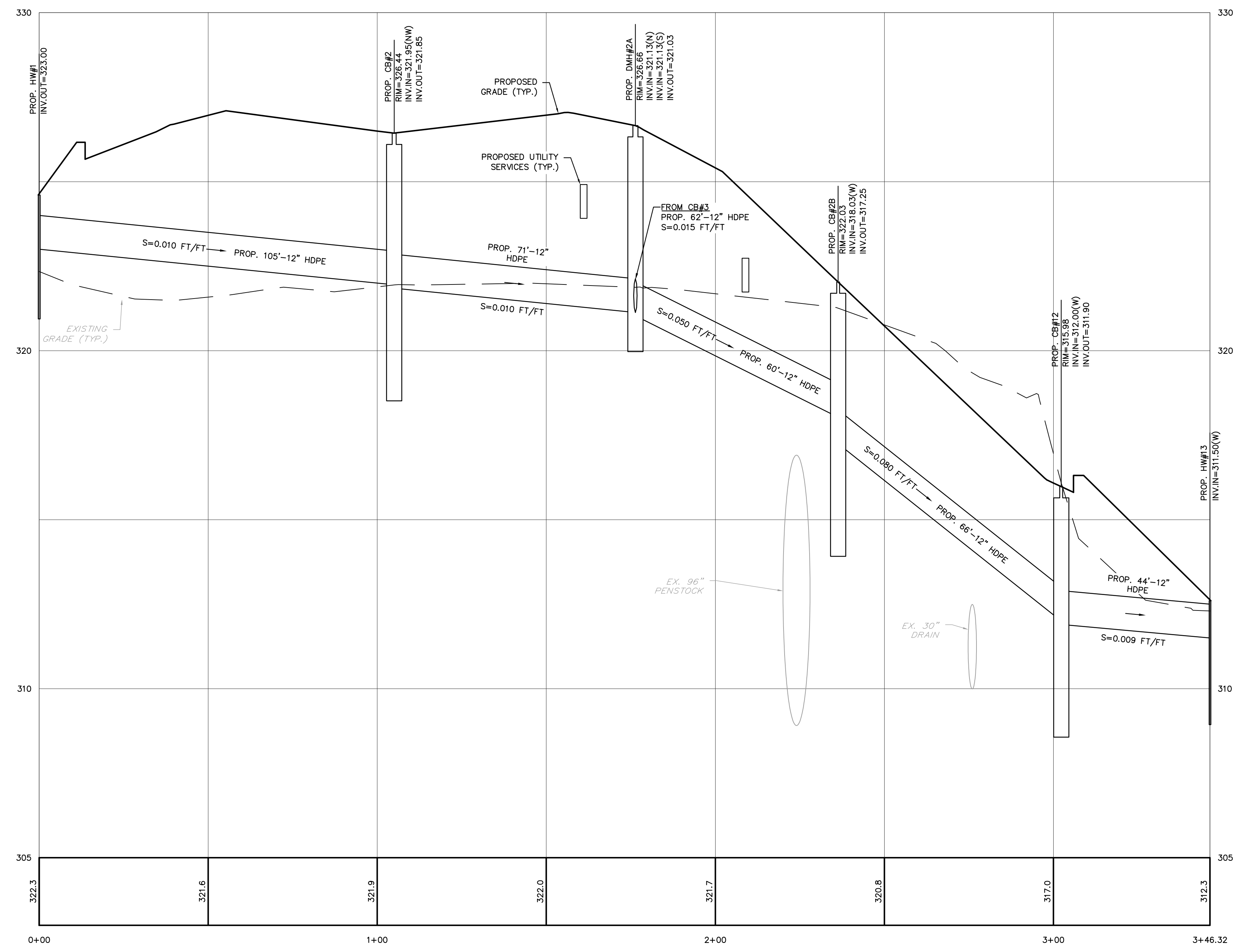


LOCATION:
TAX MAP 6 LOT 14
30 WILTON ROAD
MILFORD, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

PROJECT:
STORAGE SENSE - MILFORD WEST

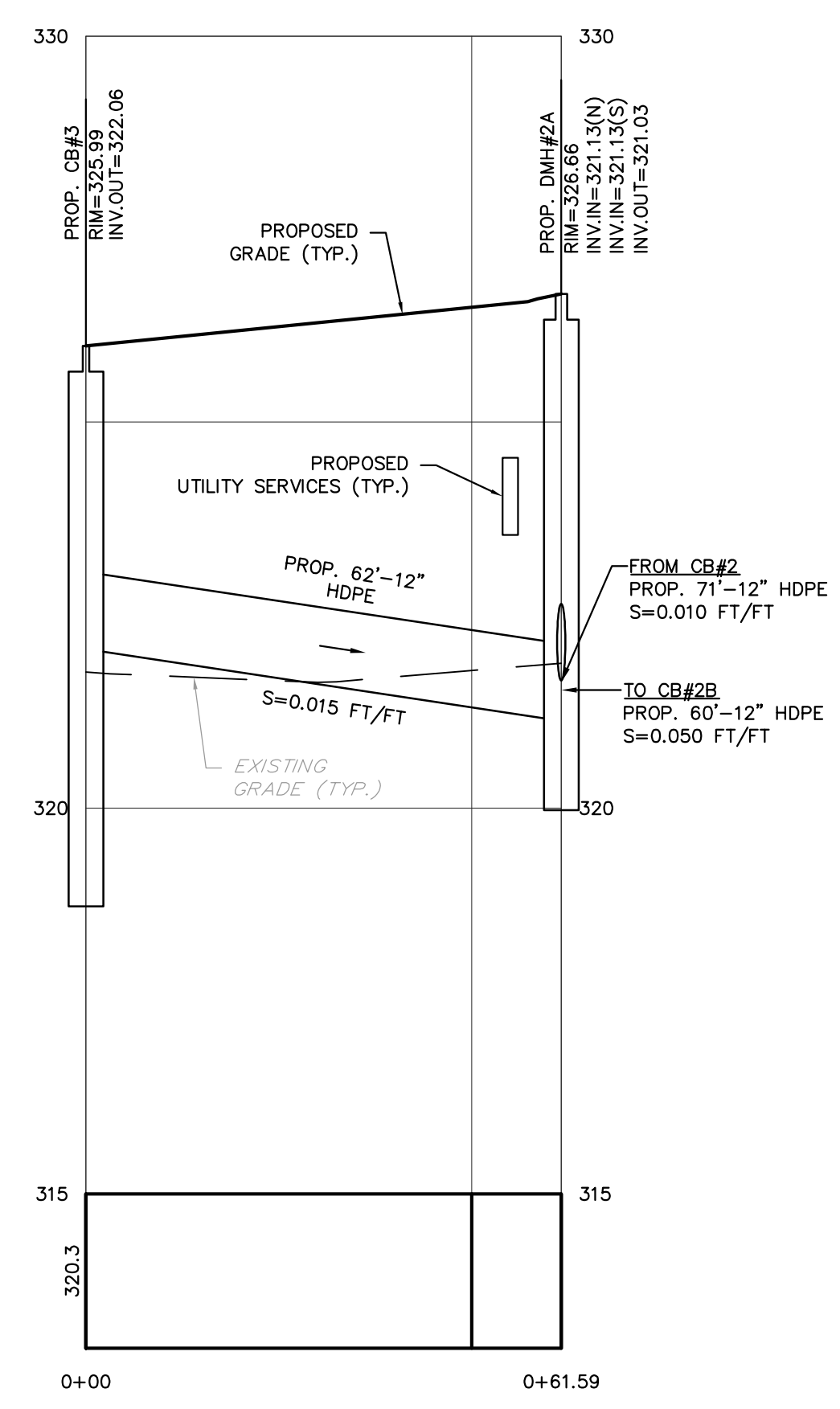
TITLE:
UTILITY PROFILES

PROJECT No. DATE: 21-0630-1 MAY 23, 2022 SCALE: AS SHOWN
SHEET: 10 OF 17



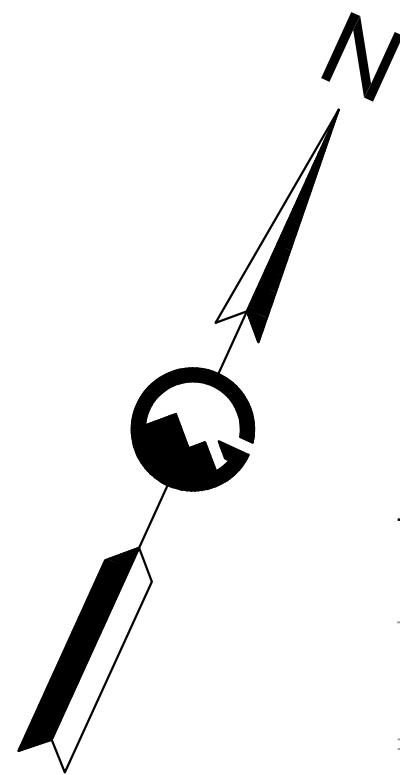
DRAINAGE PROFILE (PROP. HW#1 TO PROP. HW#13)

1"=20' HORIZ., 1"=2' VERT.



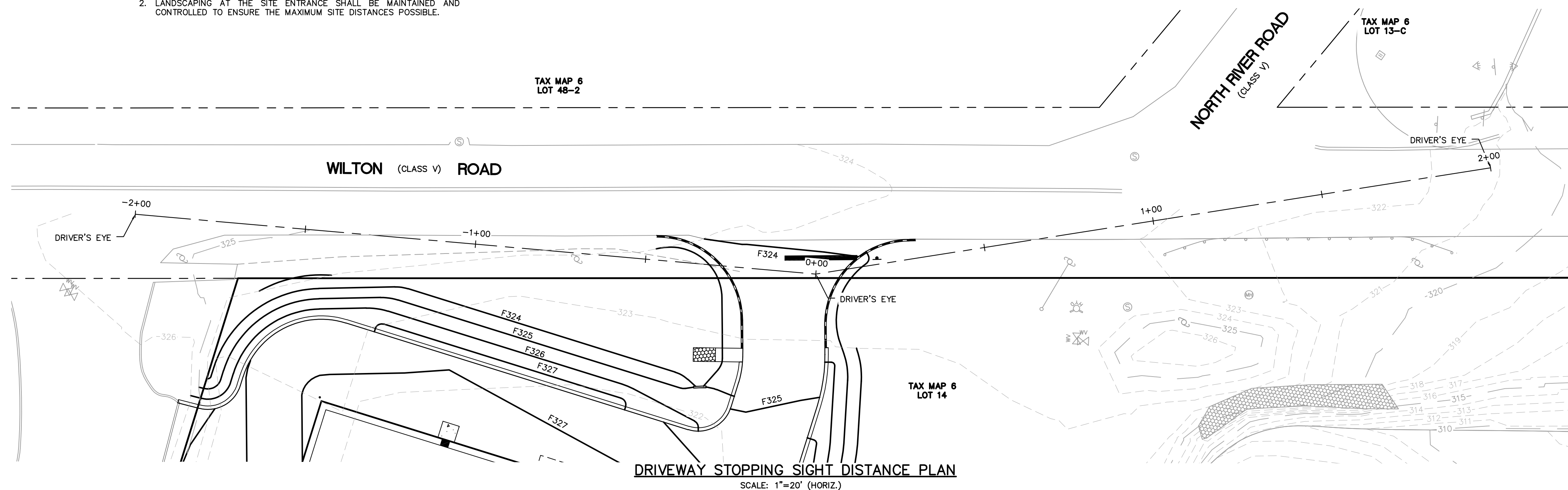
DRAINAGE PROFILE
(PROP. CB #3 TO PROP. DMH#2A)

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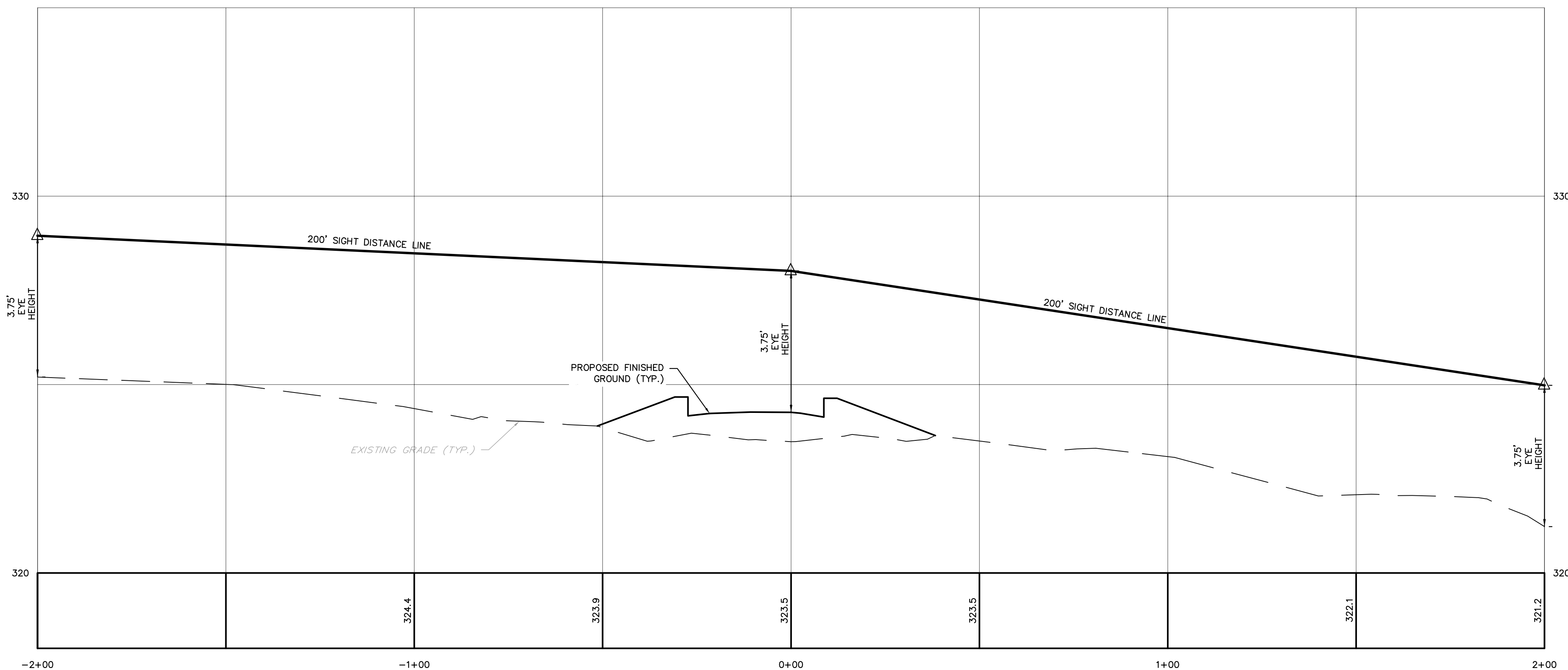


SIGHT DISTANCE NOTES:

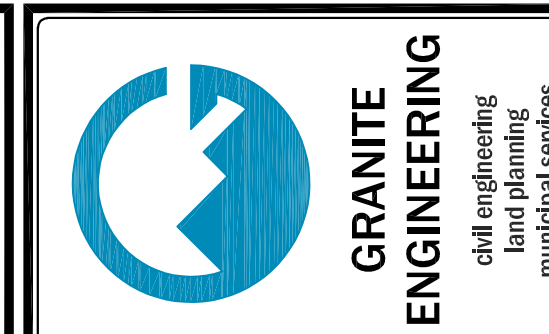
1. SIGHT DISTANCES WERE REFERENCED FROM THE TOWN OF MILFORD'S DRIVERS' REGULATIONS. MILFORD EXCEEDS AASHTO'S "POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS", 7TH EDITION, 2018.
2. LANDSCAPING AT THE SITE ENTRANCE SHALL BE MAINTAINED AND CONTROLLED TO ENSURE THE MAXIMUM SITE DISTANCES POSSIBLE.



DRIVEWAY STOPPING SIGHT DISTANCE PLAN
SCALE: 1"=20' (HORIZ.)



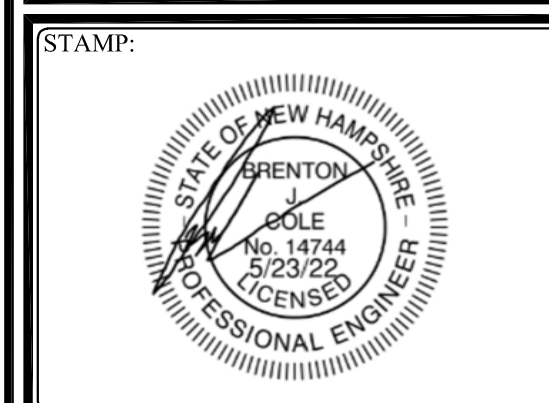
DRIVEWAY STOPPING SIGHT DISTANCE PROFILE
SCALE: 1"=20' (HORIZ.)
SCALE: 1"=2' (VERT.)



NO.	DATE	COMMENTS	BY	
			TD	TD
0	05/23/2022	PROJECT SUBMITTAL		

OWNER & APPLICANT:
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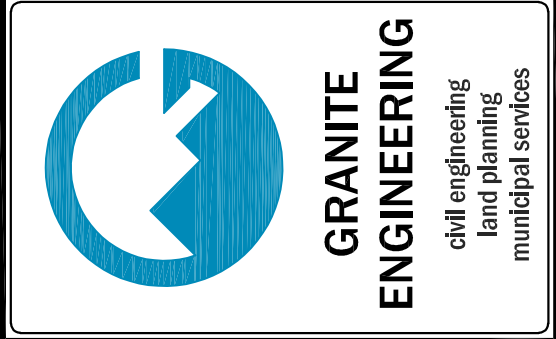
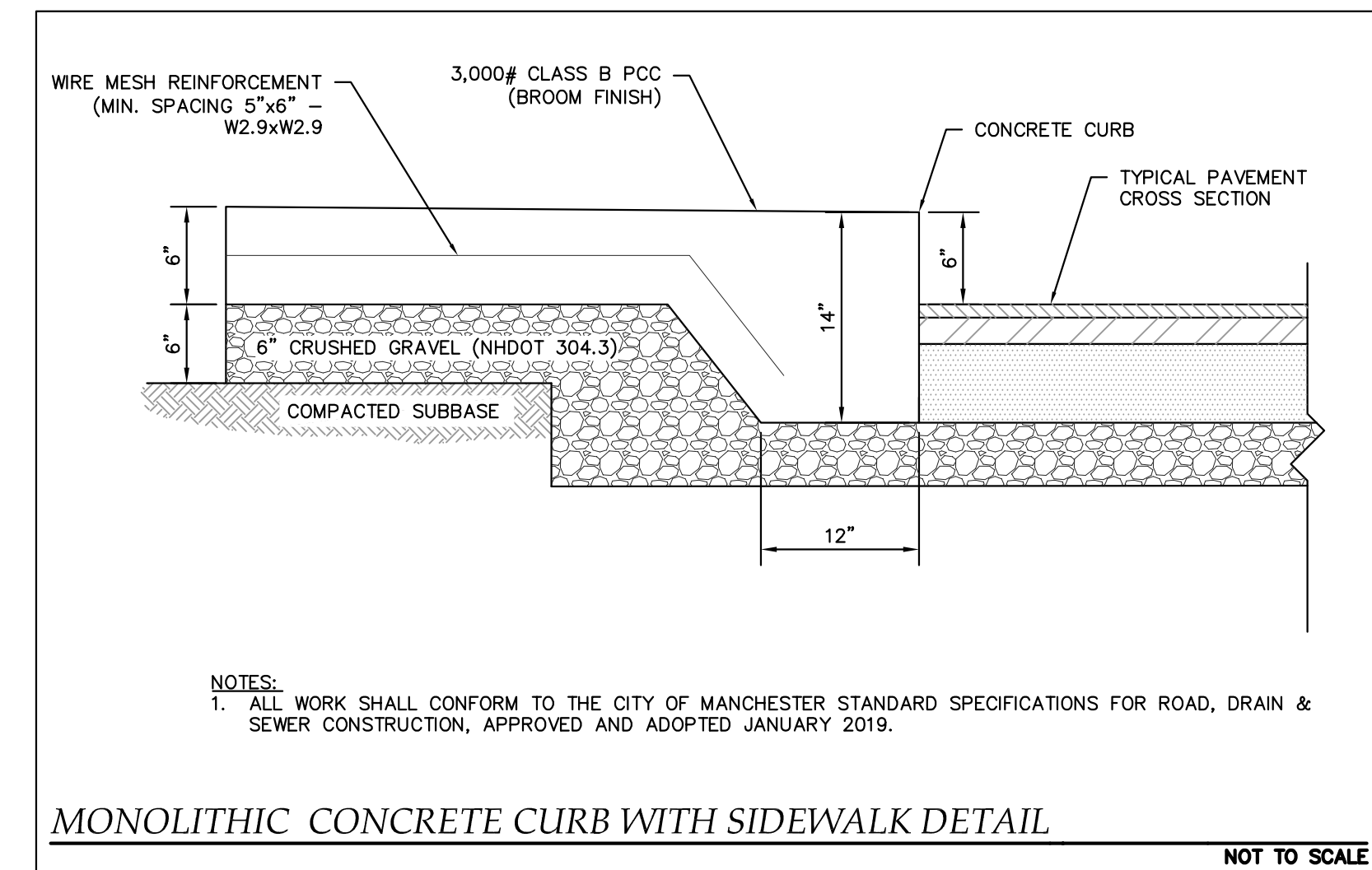
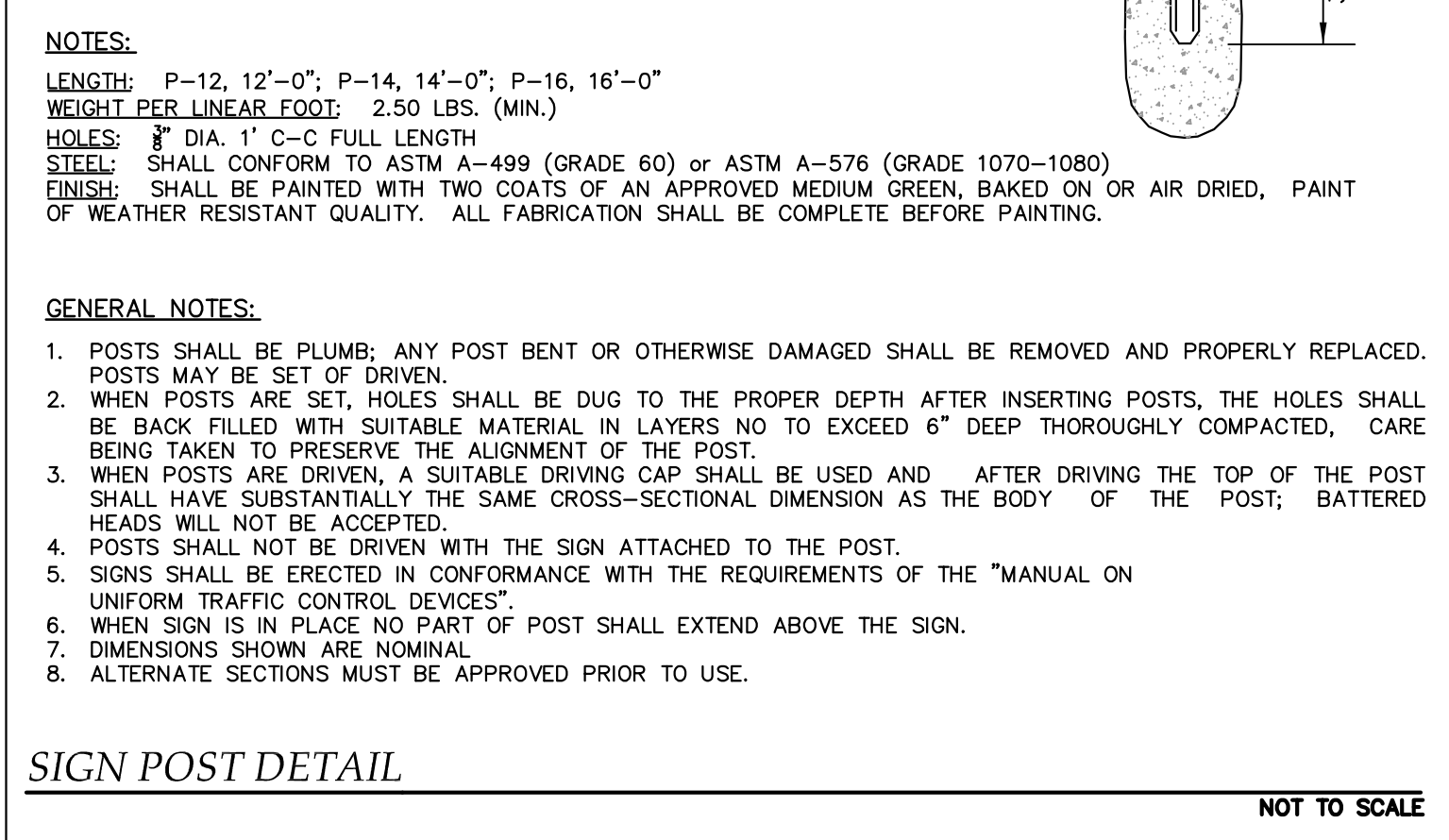
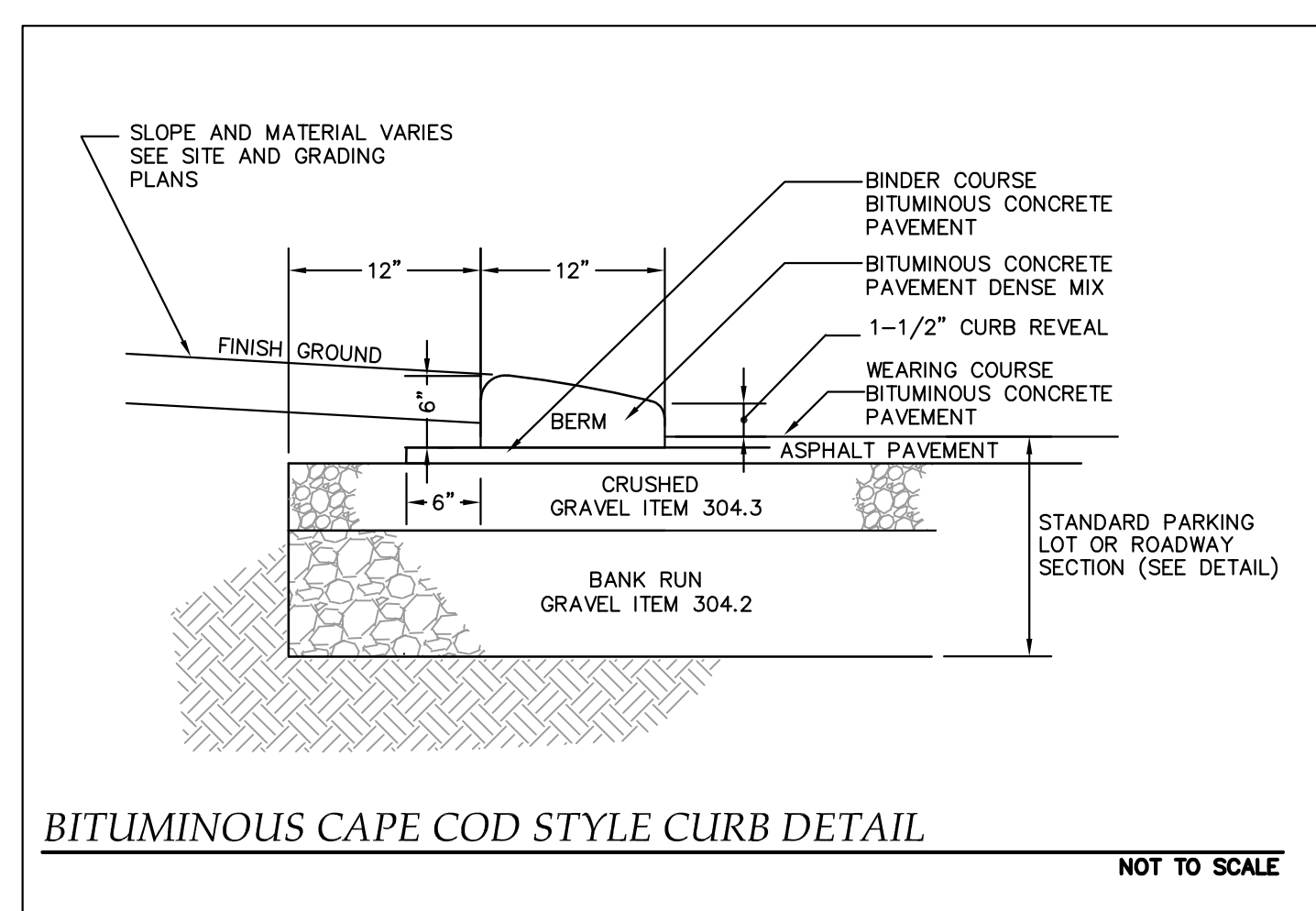
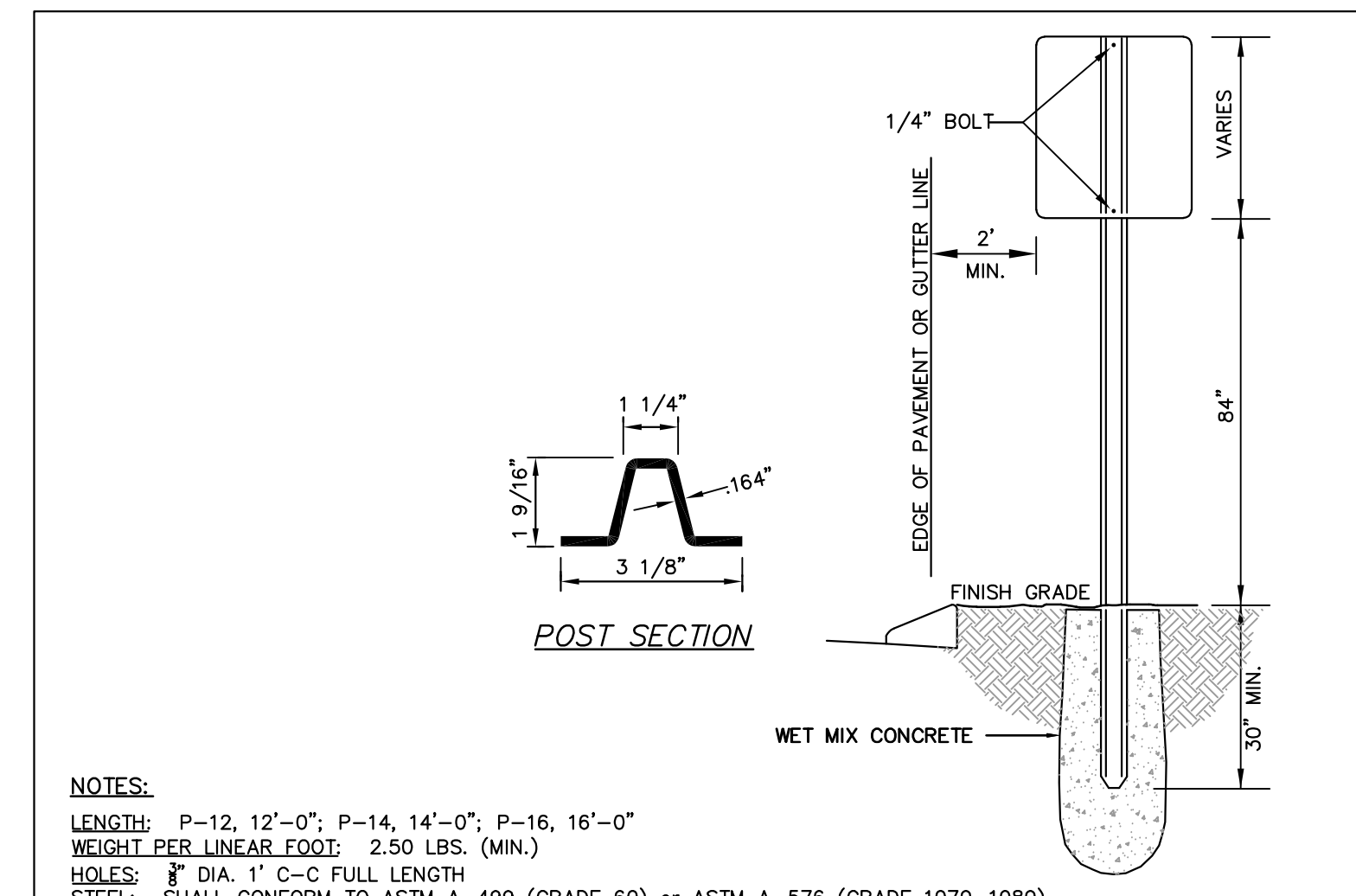
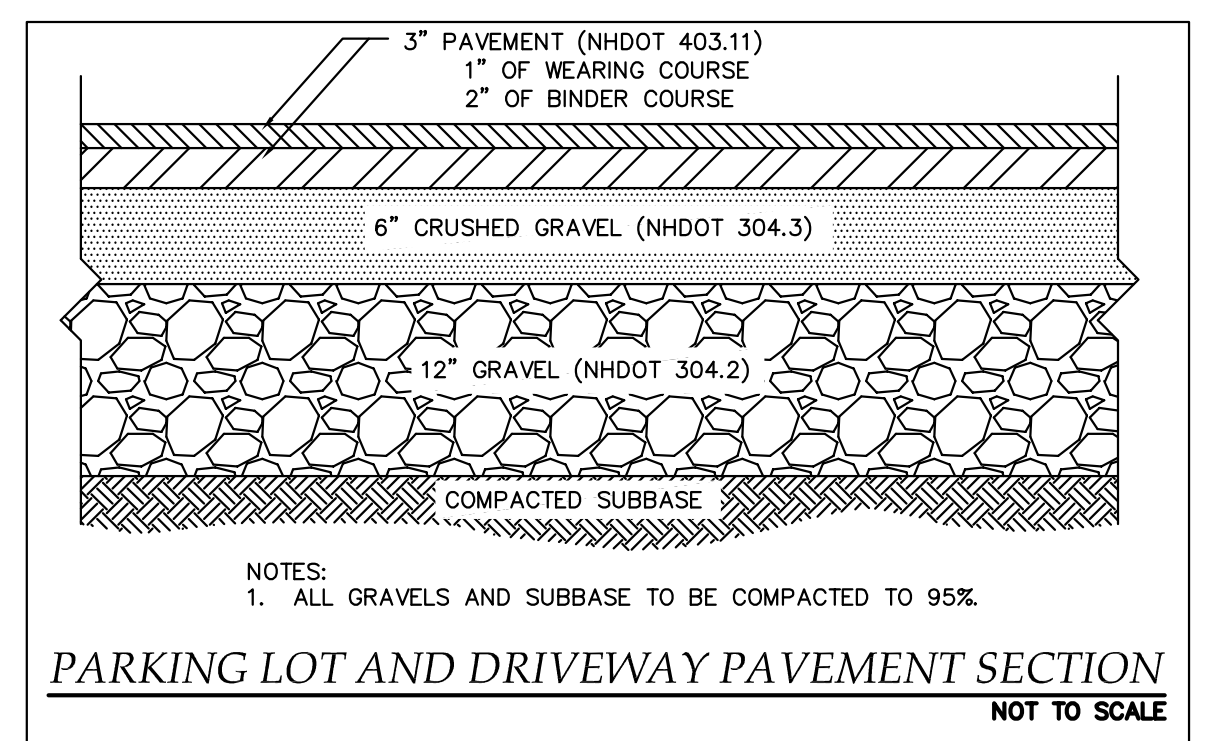
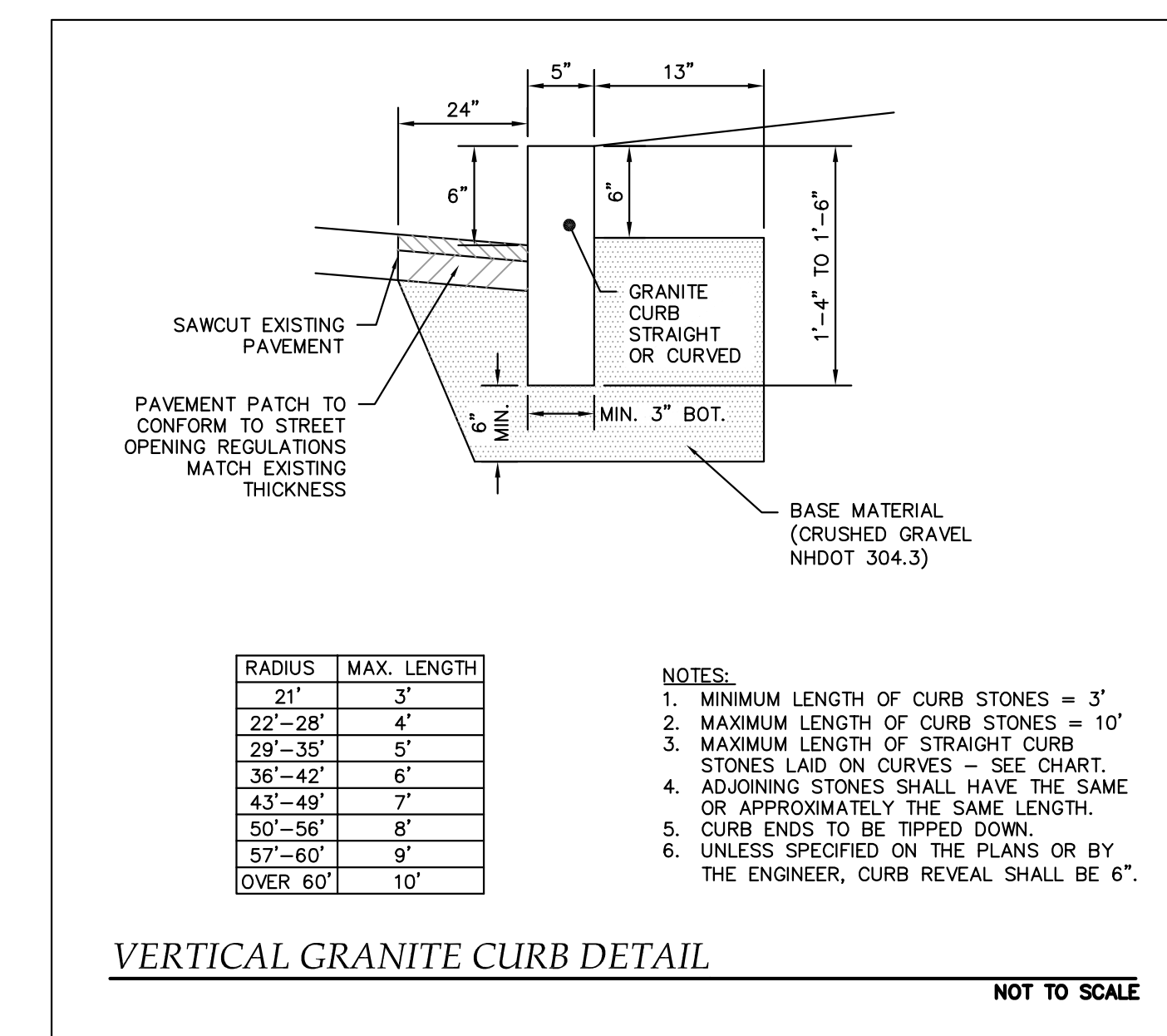
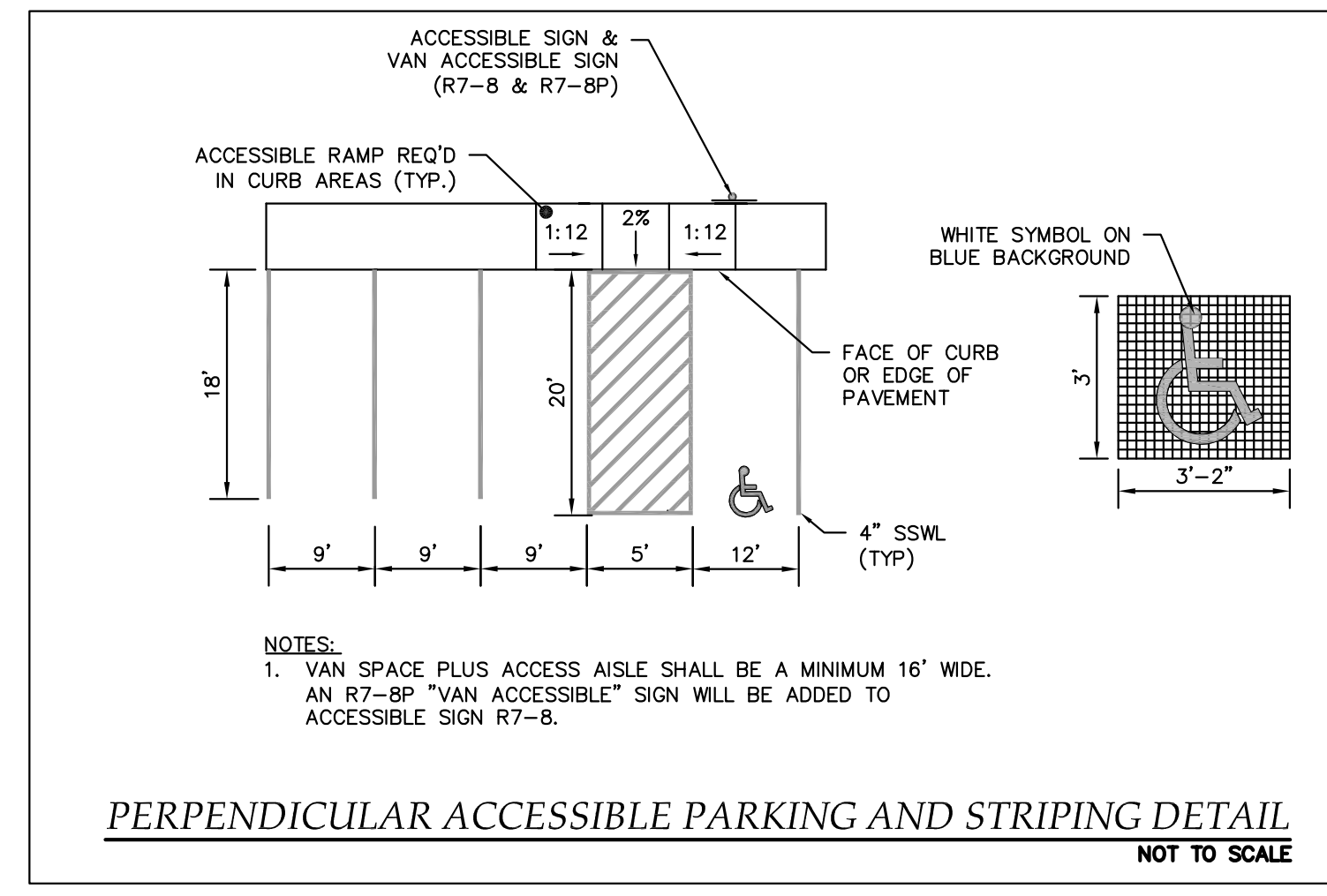
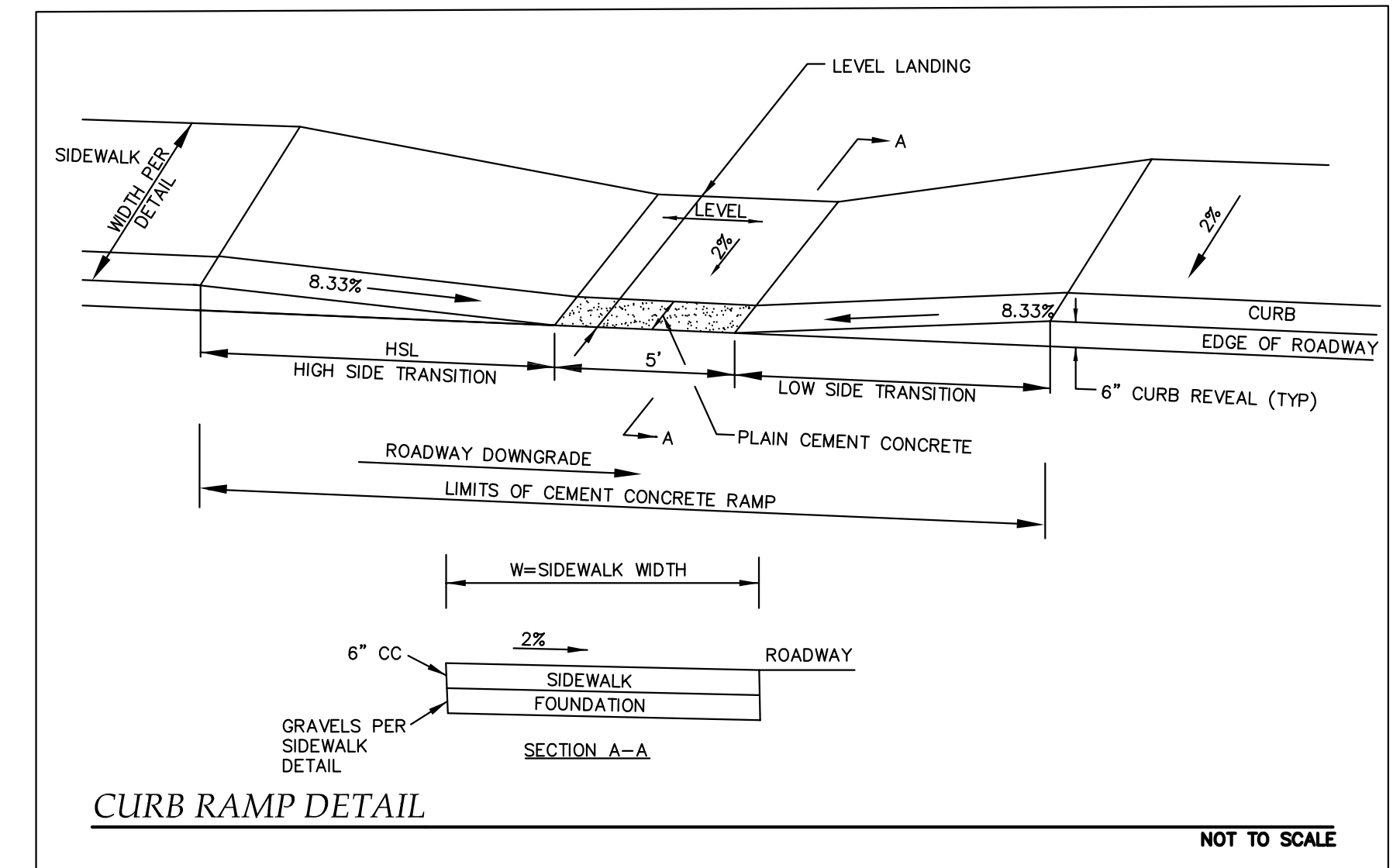
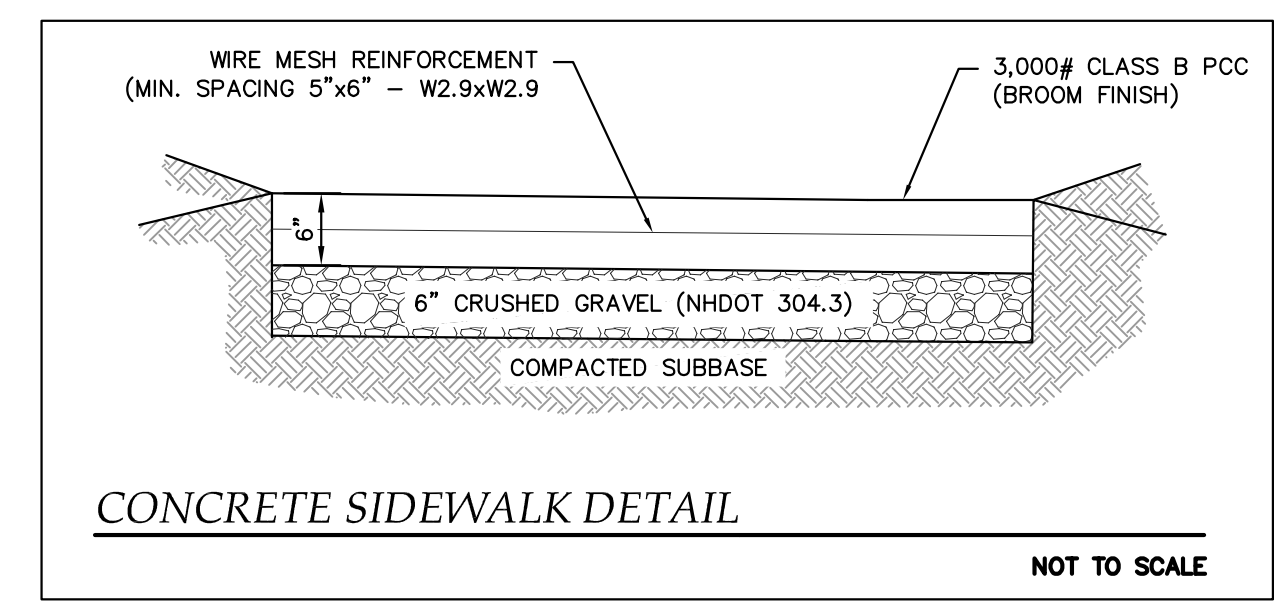
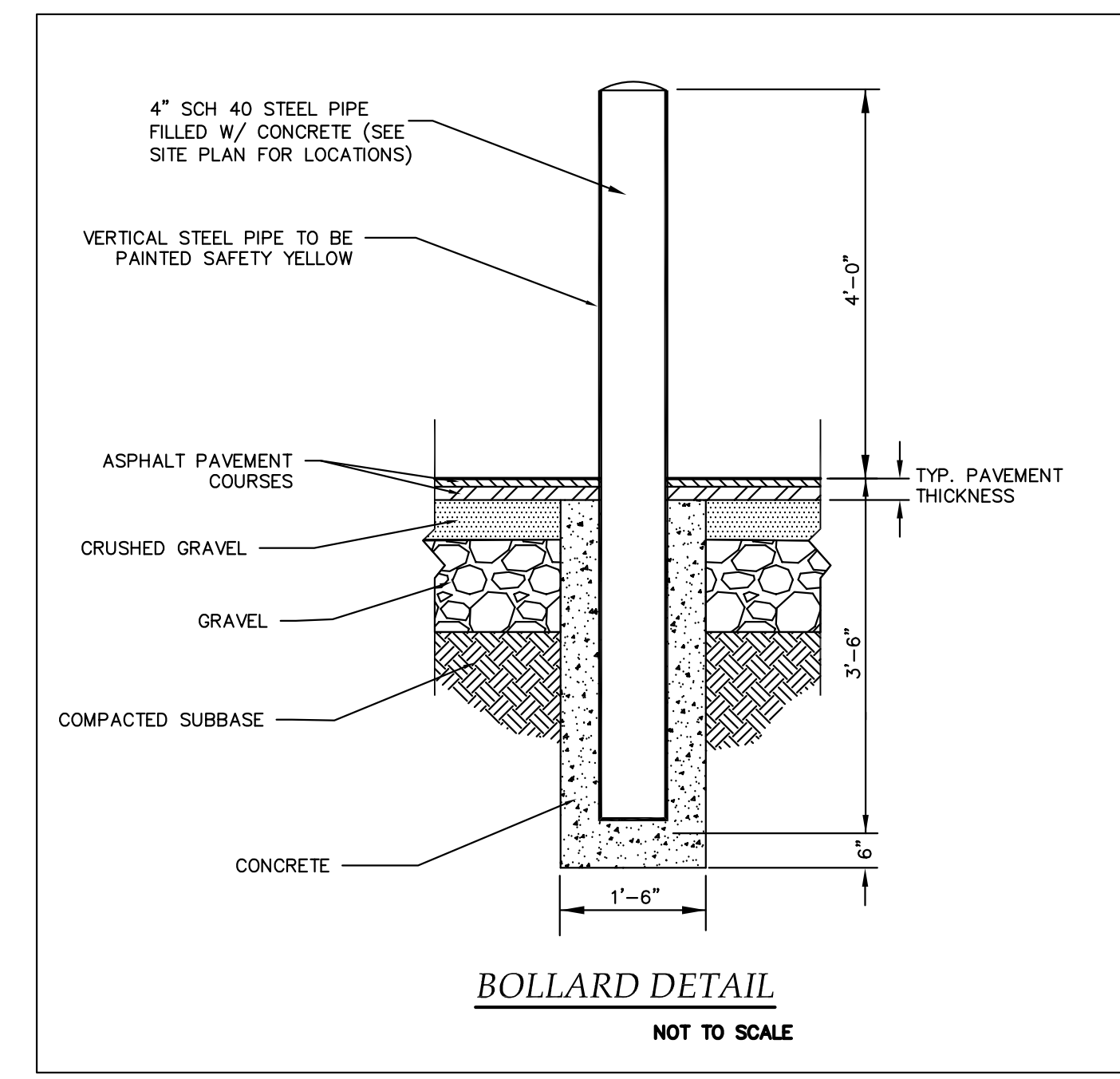
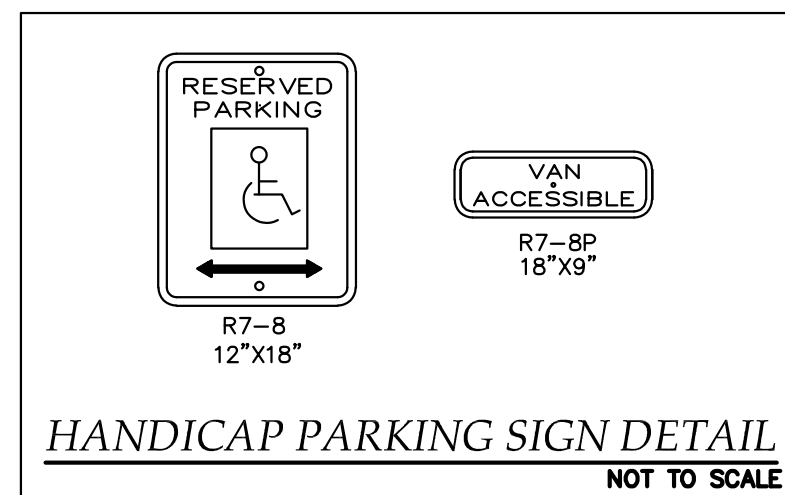


LOCATION:
TAX MAP 6 LOT 14
30 WILTON ROAD
MILFORD, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

PROJECT:
STORAGE SENSE - MILFORD WEST

TITLE:
SIGHT DISTANCE PLAN AND PROFILE

PROJECT No. DATE: 21-0630-1 MAY 23, 2022 SCALE: AS SHOWN
SHEET: 11 OF 17



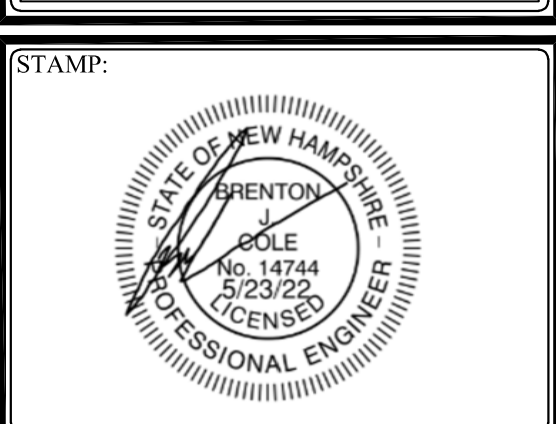
NO.	DATE	REVISIONS
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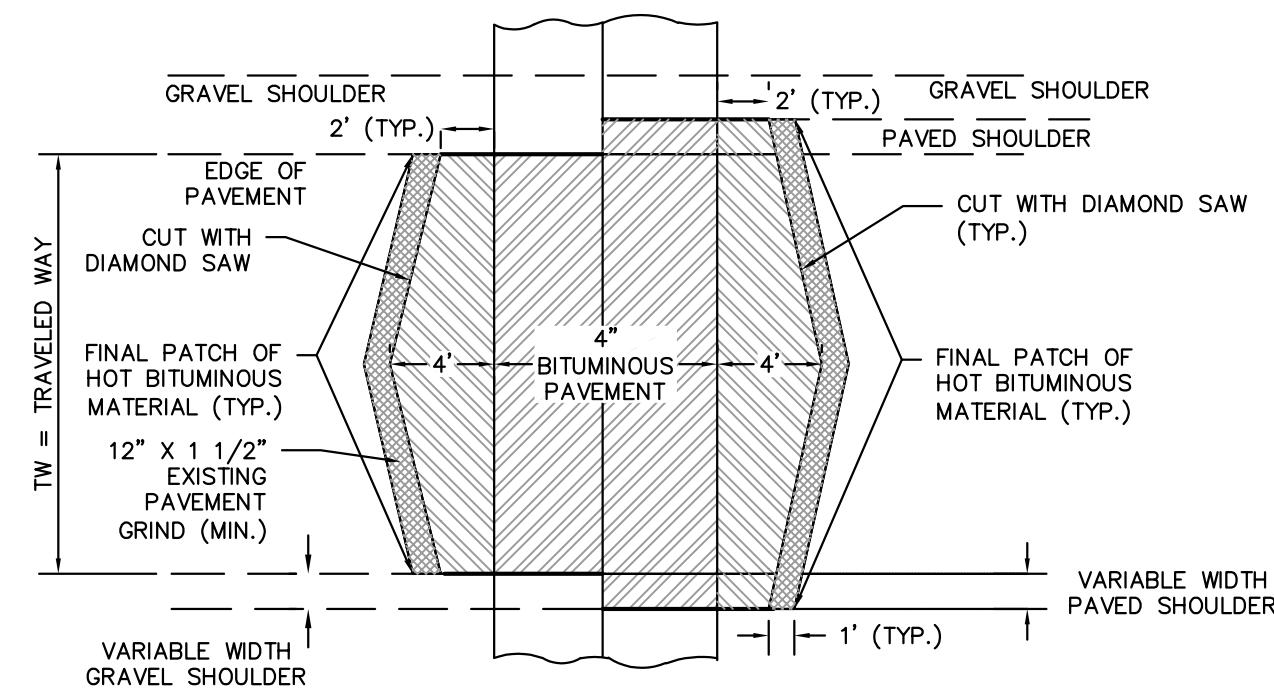
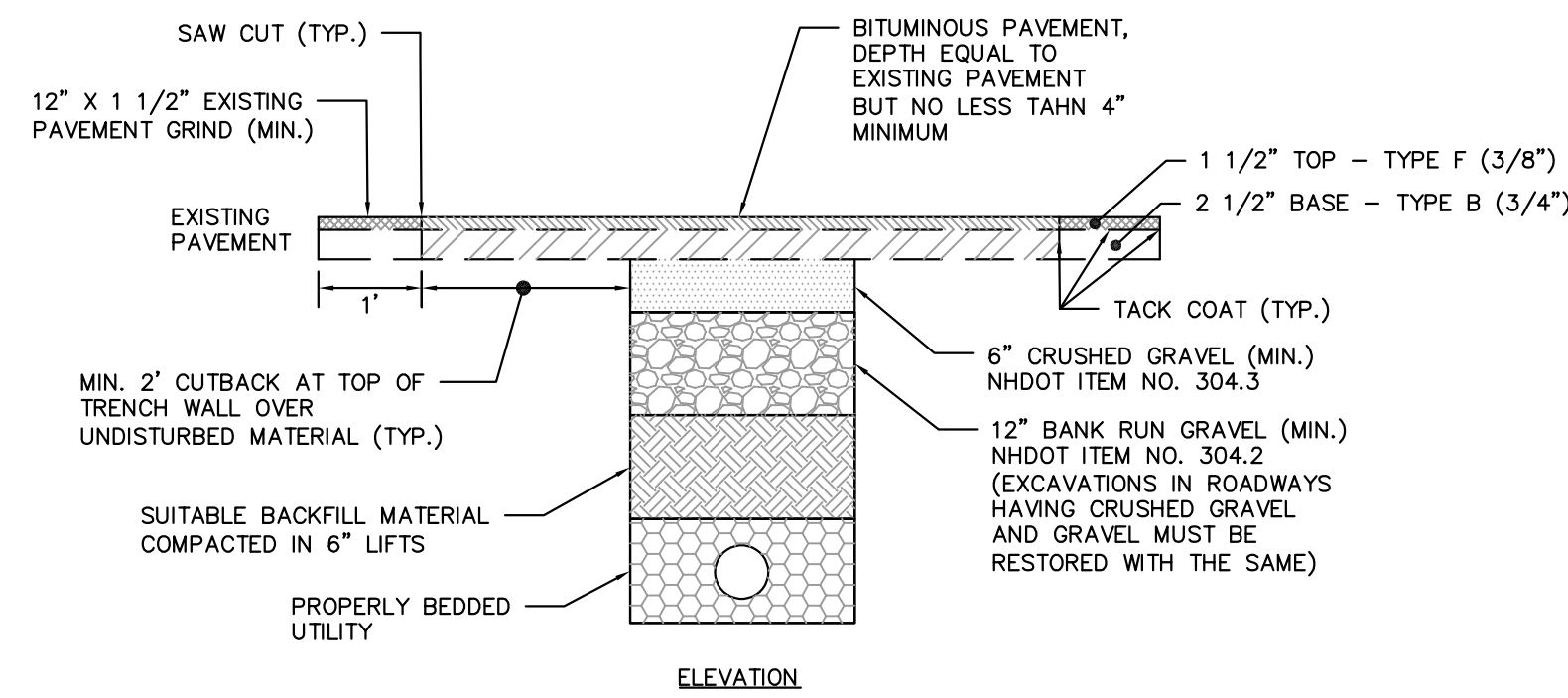


LOCATION:
TAX MAP 6 LOT 14
30 WILTON ROAD
MILFORD, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

PROJECT:
STORAGE SENSE - MILFORD WEST

TITLE:
DETAILS

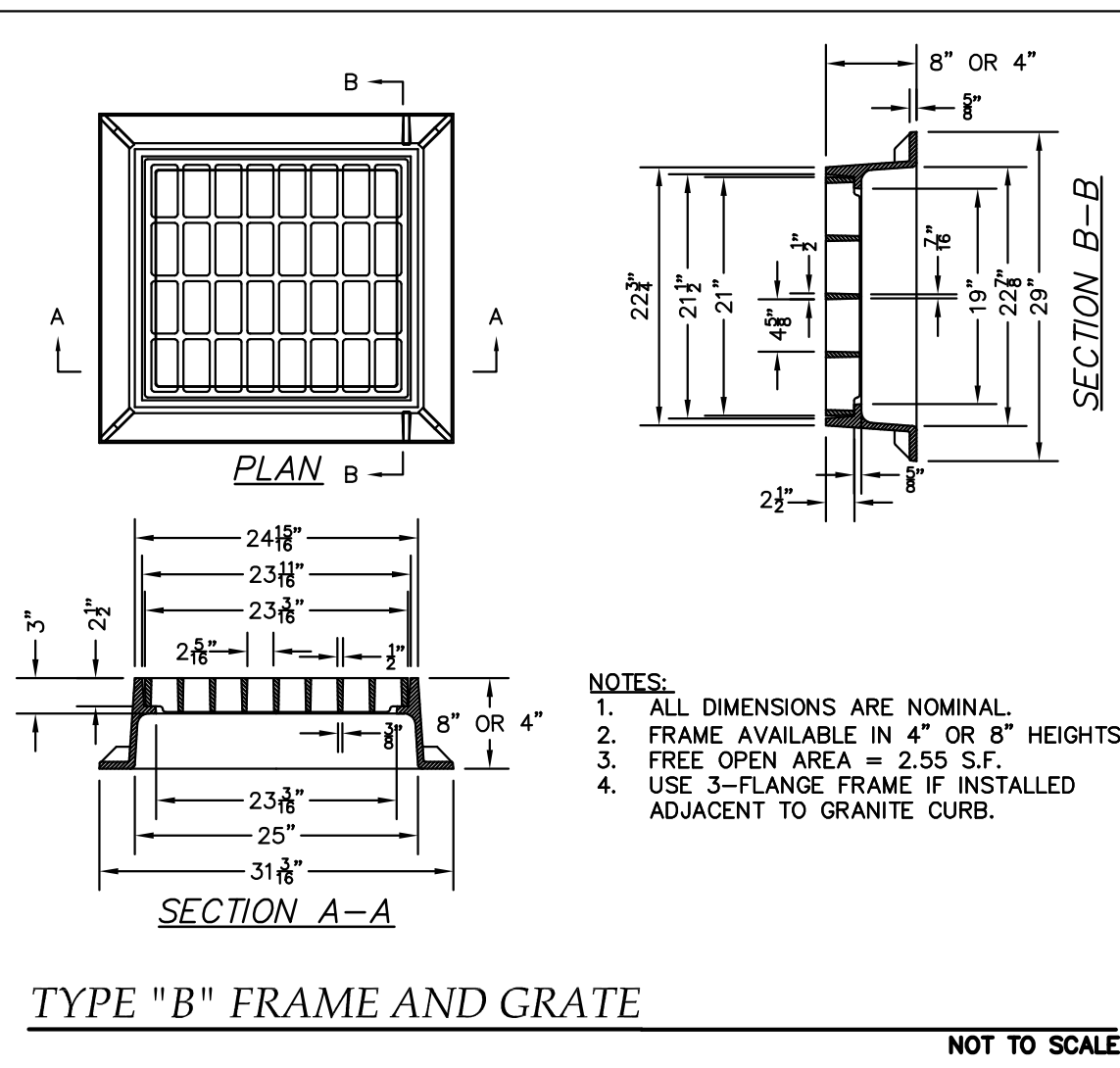
PROJECT No. DATE: 21-0630-1 MAY 23, 2022
SHEET: 12 OF 17
SCALE: AS SHOWN



TYPICAL PERMANENT PAVEMENT REPAIR

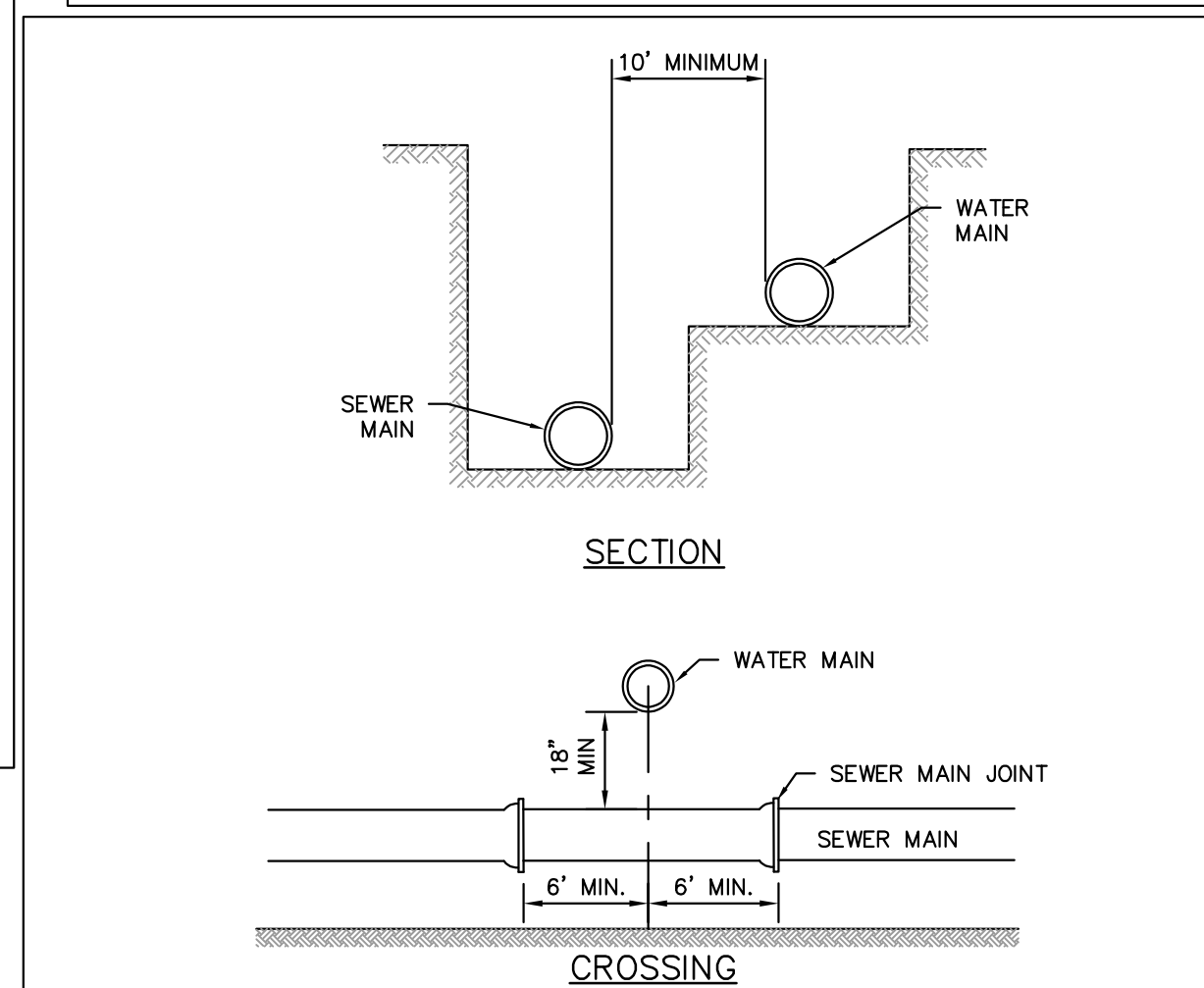
NOT TO SCALE

- NOTES:**
1. ALL BACKFILL MATERIAL PLACED IN TRENCHES SHALL BE COMPACTED IN LAYERS NOT EXCEEDING 6" (SIX INCHES) IN COMPACTED THICKNESS AT NEAR OPTIMUM MOISTURE CONTENT USING PNEUMATIC TAMPERS, VIBRATORY COMPACTORS OR OTHER APPROVED MEANS. THE MATERIAL SHALL BE COMPACTED TO NO LESS THAN 95% OF AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, METHOD OF TEST T99, METHOD C. WATER SHALL BE UNIFORMLY APPLIED DURING COMPACTION IN THE AMOUNT NECESSARY FOR PAPER CONSOLIDATION, BUT PUDDLING WILL NOT BE ALLOWED.
 2. WITHIN PAVED AREAS, CLASS A CRUSHED GRAVEL (AS DESCRIBED IN NH STANDARD SPECIFICATIONS) EQUAL TO THE EXISTING GRAVEL COURSE, SHALL BE PLACED IN LAYERS NOT EXCEEDING 9" (NINE INCHES) LOOSE DEPTH AND THOROUGHLY COMPACTED. AN APPROVED BITUMINOUS PLANT MIX MATERIAL SHALL BE PLACED AND CAREFULLY GRADED AND ROLLED TO THE ADJACENT PAVEMENT GRADE AS A TEMPORARY PATCH. JUST BEFORE COMPLETION OF THE PROJECT AND AFTER SUITABLE EXPOSURE OF THE TEMPORARY PATCHES TO TRAFFIC COMPACTION, THE PAVEMENT SHALL BE SAWN ON EITHER SIDE OF THE TRENCH TO PROVIDE A TWO FOOT MINIMUM OVERLAP OF THE FINAL PATCH ON UNDISTURBED MATERIAL. IN THE CASE OF TRANSVERSE OR DIAGONAL TRENCHING, THE PAVEMENT SHALL BE SAWN TO PROVIDE A FLAT DIAMOND SHAPED PATCH THAT WILL PERMIT ONLY ONE WHEEL OF A VEHICLE AT A TIME TO STRIKE THE PATCH AREA. WITHIN THE SAWN LIMITS OF THE FINAL PATCH, THE EXISTING PAVEMENT AND TEMPORARY PATCH MATERIAL SHALL BE REMOVED AND REPLACED WITH AN EQUAL DEPTH OF TYPE 1-1 HOT ASPHALTIC CONCRETE, LAYED AND COMPACTED TO MEET THE EXISTING PAVEMENT EDGE EXACTLY. SAW CUTS FOR FINAL PATCHING SHALL BE AS DIRECTED BY THE DISTRICT ENGINEER.
 3. SHOULDERS, OTHER THAN PAVED, DISTURBED DURING CONSTRUCTION, SHALL BE RESTORED BY EXCAVATING TO A DEPTH SUFFICIENT TO RECEIVE 3" CRUSHED BANK RUN GRAVEL WHICH SHALL BE GRADED AND COMPACTED ON A SLOPE OF 5/8" PER FOOT AWAY FROM THE PAVEMENT OR AS ORDERED BY THE DISTRICT ENGINEER.
 4. OTHER THAN HIGHWAY SLOPES AND SHOULDERS DISTURBED SHALL BE REPLACED PER THE RESPECTIVE SUBDIVISIONS OF THIS PERMIT OR INSTRUCTIONS ISSUED BY THE DISTRICT ENGINEER.
 5. IN OTHER AREAS, THE PRESENT SURFACE TYPE SHALL BE RESTORED BY PLACING SIMILAR MATERIAL INTO THE TRENCH TO A DEPTH EQUAL TO THAT EXISTING BEFORE EXCAVATION. ANY EXISTING GRASS ADDITIONALLY SHALL BE FERTILIZED AND RE-SEEDED. ANY ASPHALT OR CONCRETE SIDEWALKS SHALL HAVE SURFACES OF EQUAL DEPTH, KIND AND QUALITY PLACED.
 6. TRAFFIC SHALL BE MAINTAINED, CONTROLLED AND PROTECTED BY SUITABLE WARNING AND/OR CHANNELING DEVICES. ADVANCE AND STANDARD WARNING SIGNS AND FLAGS DURING THE PERFORMANCE OF THE WORK AS SHOWN ON THE ATTACHED "WARNING AND SIGN PACKAGE". THE CONTRACTOR SHALL MARK ALL HAZARDS WITHIN THE LIMITS OF THE PROJECT AND CONNECTING ROADS. THESE DEVICES SHALL BE MOVED, SUPPLEMENTED, CHANGED OR REMOVED DURING THE PROGRESS OF THE CONSTRUCTION. UNIFORMED TRAFFIC CONTROL OFFICERS SHALL BE PROVIDED FOR THE PROTECTION OF THE PUBLIC WHENEVER TWO WAY TRAFFIC CANNOT BE MAINTAINED AND/OR AT THE REQUEST OF THE DISTRICT ENGINEER.
 7. THIS TYPICAL DETAIL IS TO BE USED IN CONJUNCTION WITH THE STANDARD TRENCH PERMIT. ALL SAW CUTS FOR THE FINAL PATCH SHALL BE AS DIRECTED BY THE DISTRICT ENGINEER.
 8. IN ALL CASES, TRENCH IS TO BE FLUSH WITH EXISTING PAVEMENT AT THE END OF EACH WORK DAY.

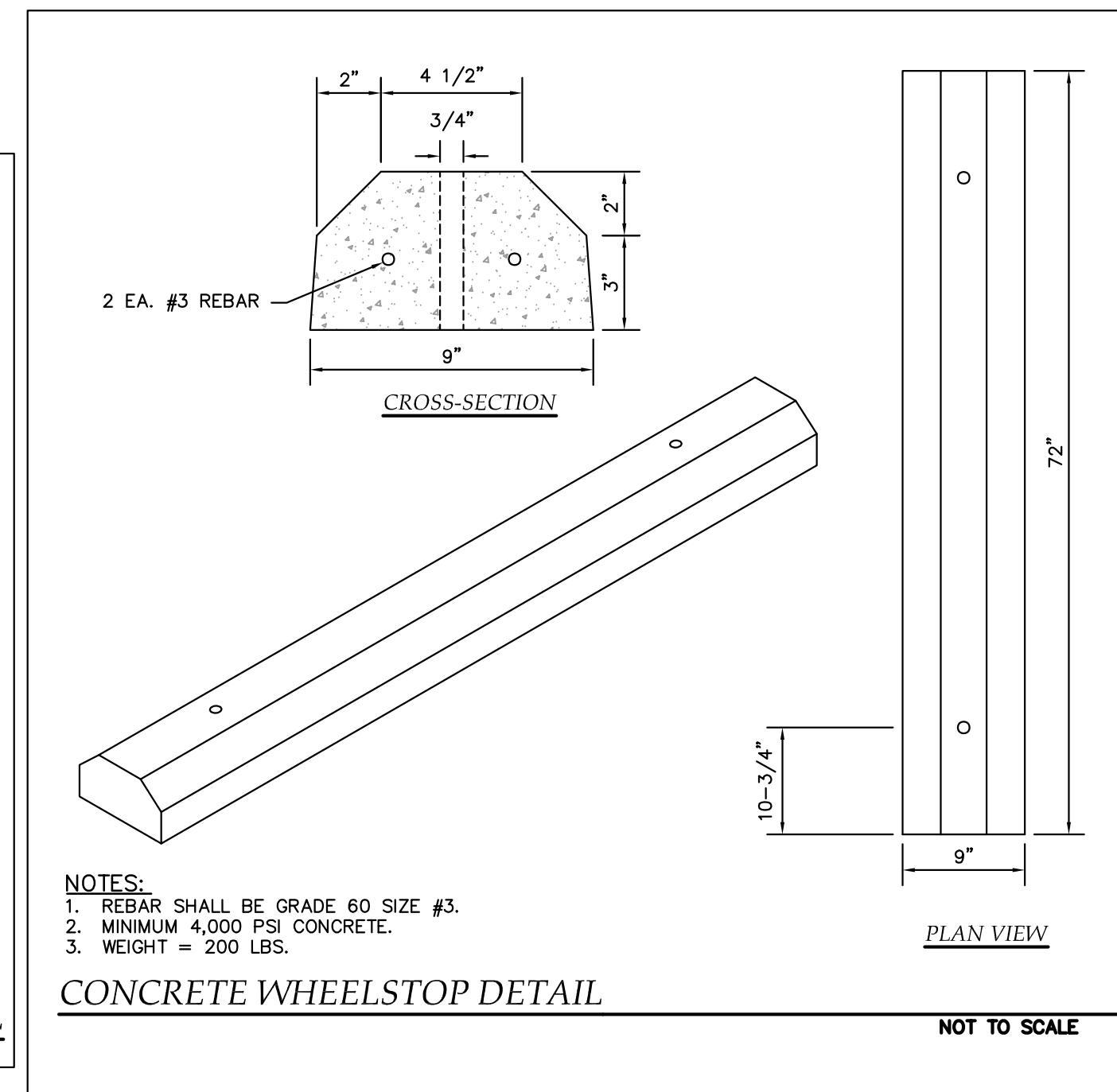


TYPE "B" FRAME AND GRATE

NOT TO SCALE

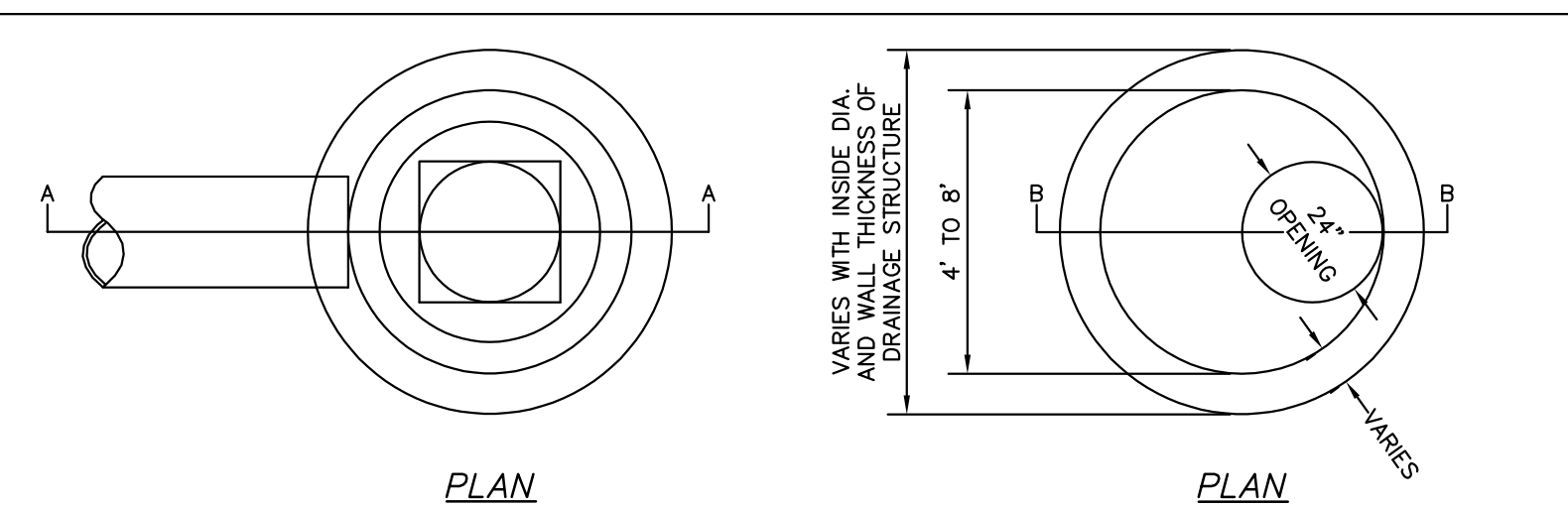


WATER AND SEWER SEPARATION AND CROSSING DETAIL



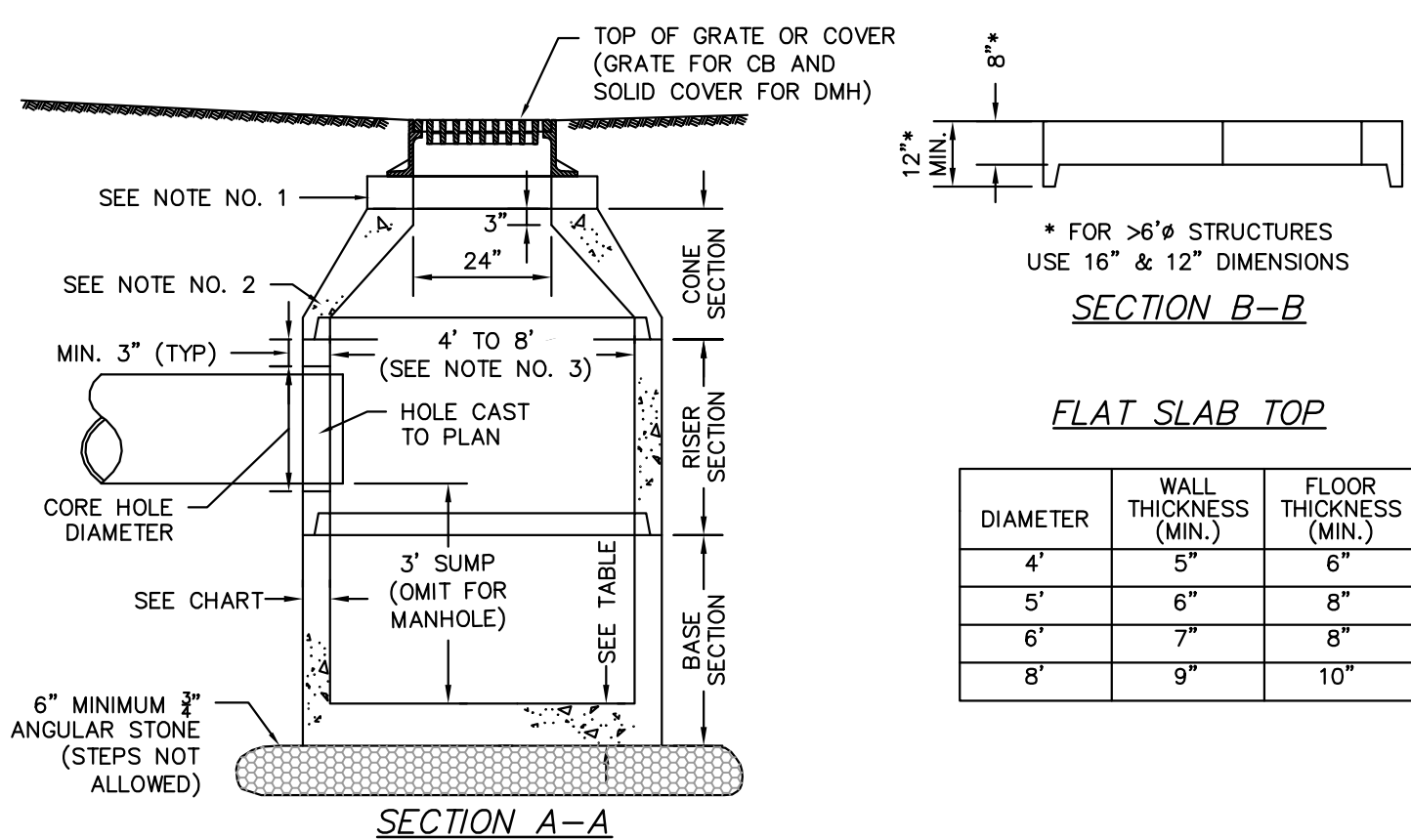
CONCRETE WHEELSTOP DETAIL

NOT TO SCALE



PLAN

PLAN



SECTION A-A

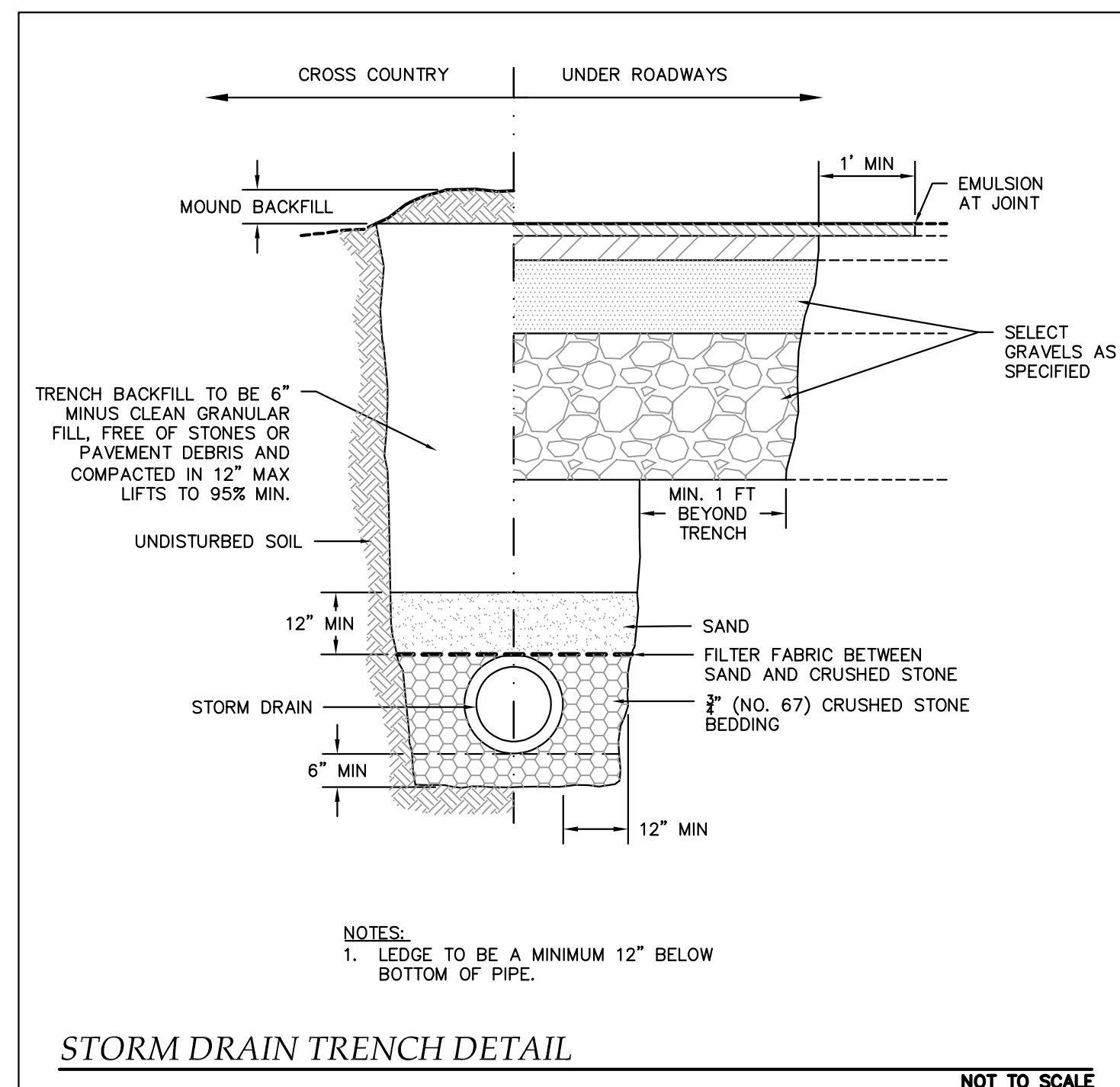
FLAT SLAB TOP

DIAMETER	WALL THICKNESS (MIN.)	FLOOR THICKNESS (MIN.)
4'	5"	6"
5'	6"	8"
6'	7"	8"
8'	9"	10"

- NOTES:**
1. FITTING FRAME TO GRADE MAY BE DONE WITH PREFABRICATED ADJUSTMENT RINGS OR CLAY BRICKS (2 COURSES MAX.).
 2. CONE SECTIONS MAY BE EITHER CONCENTRIC OR ECCENTRIC, OR FLAT SLAB TOPS MAY BE USED WHERE PIPE WOULD OTHERWISE ENTER INTO THE CONE SECTION OF THE STRUCTURE AND WHERE PERMITTED.
 3. FOR STRUCTURES WITH DIAMETERS GREATER THAN 4', THE DIAMETER MAY BE CONSTANT FROM TOP TO BOTTOM WITH A FLAT SLAB TOP, OR A RISER SECTION THAT TRANSITIONS FROM A STANDARD 4' CONE SECTION TO THE LARGER DIAMETER RISER OR BASE SECTION MAY BE USED.
 4. PIPE ELEVATIONS SHOWN ON PLANS SHALL BE FIELD VERIFIED PRIOR TO PRECASTING.
 5. OUTSIDE EDGES OF PIPES SHALL PROJECT NO MORE THAN 3" BEYOND INSIDE WALL OF STRUCTURE.
 6. PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT 4" HIGH AT AN 11' ANGLE CENTERED IN THE WIDTH OF THE WALL AND SHALL BE ASSEMBLED USING AN APPROVED FLEXIBLE SEALANT IN JOINTS.
 7. ALL STRUCTURES WITH MULTIPLE PIPES SHALL HAVE A MINIMUM OF 12" OF INSIDE SURFACE BETWEEN HOLES, NO MORE THAN 75% OF A HORIZONTAL CROSS-SECTION SHALL BE HOLES, AND THERE SHALL BE NO HOLES CLOSER THAN 3" TO JOINTS.
 8. ALL STRUCTURES SHALL MEET NHDOT SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH NHDOT SPECIFICATIONS.

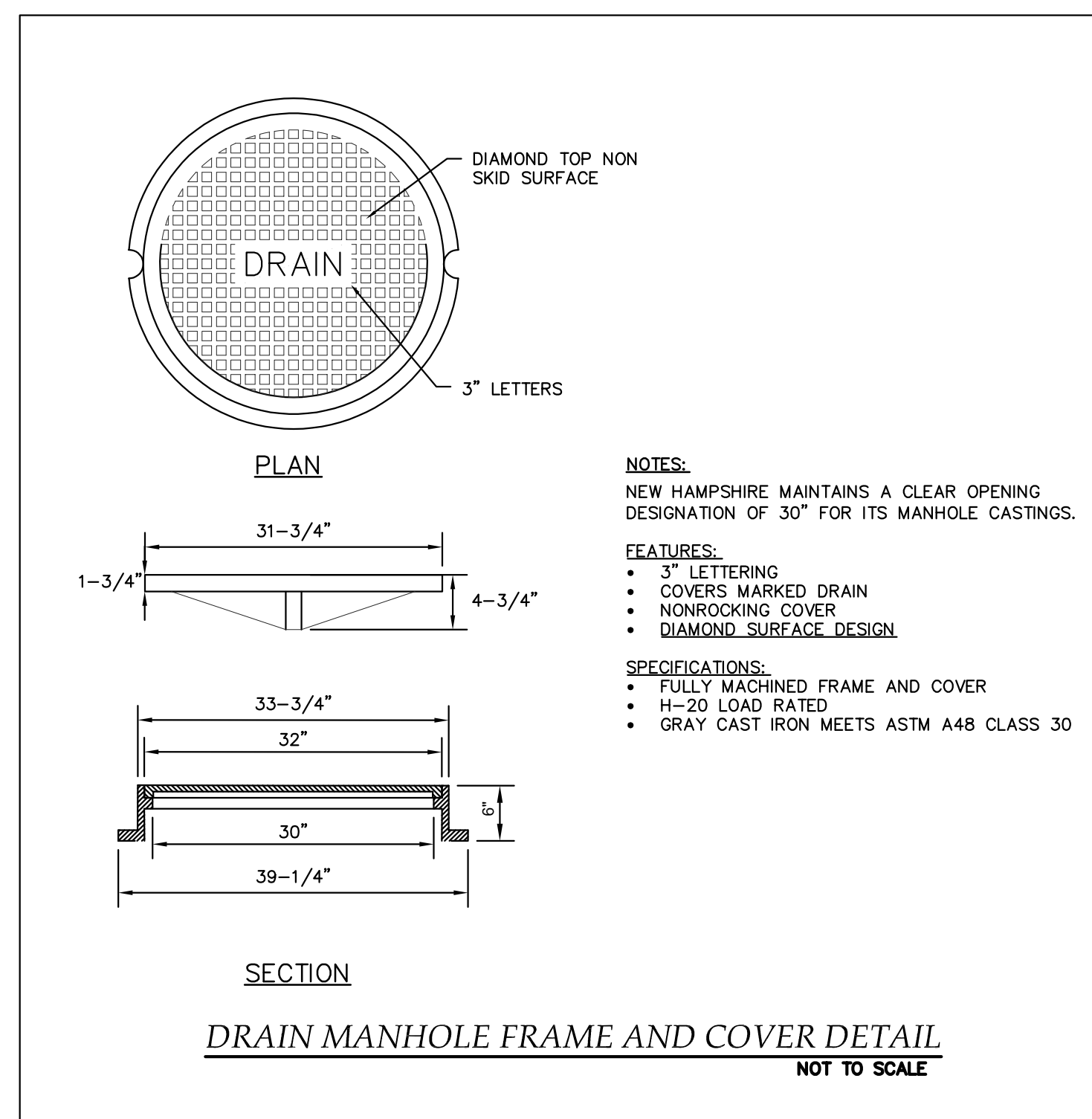
PRECAST REINFORCED CONCRETE CATCH BASIN AND DRAIN MANHOLE

NOT TO SCALE



STORM DRAIN TRENCH DETAIL

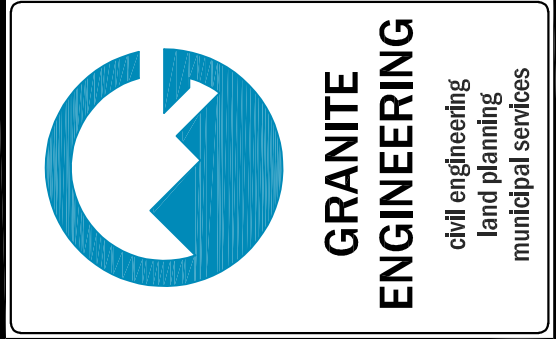
NOT TO SCALE



DRAIN MANHOLE FRAME AND COVER DETAIL

NOT TO SCALE

- NOTES:**
- NEW HAMPSHIRE MAINTAINS A CLEAR OPENING DESIGNATION OF 30" FOR ITS MANHOLE CASTINGS.
- FEATURES:**
- 3" LETTERING
 - COVERS MARKED DRAIN
 - NONROOKING COVER
 - DIAMOND SURFACE DESIGN
- SPECIFICATIONS:**
- FULLY MACHINED FRAME AND COVER
 - H-20 LOAD RATED
 - GRAY CAST IRON MEETS ASTM A48 CLASS 30



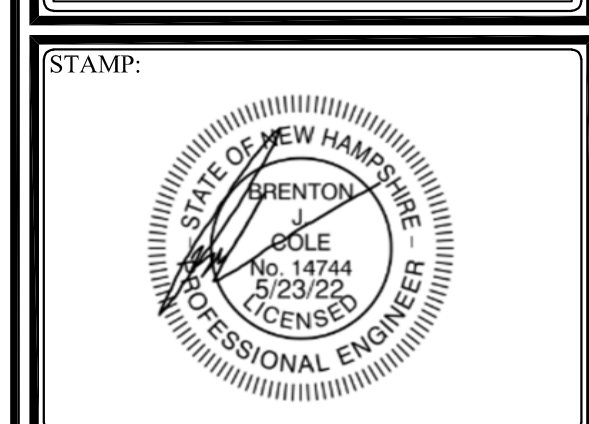
NO.	DATE	REVISIONS	BY	ID
0	05/23/2022	PROJECT SUBMITTAL		

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LOCATION:
 TAX MAP 6 LOT 14
 30 WILTON ROAD
 MILFORD, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

PROJECT:
STORAGE SENSE - MILFORD WEST

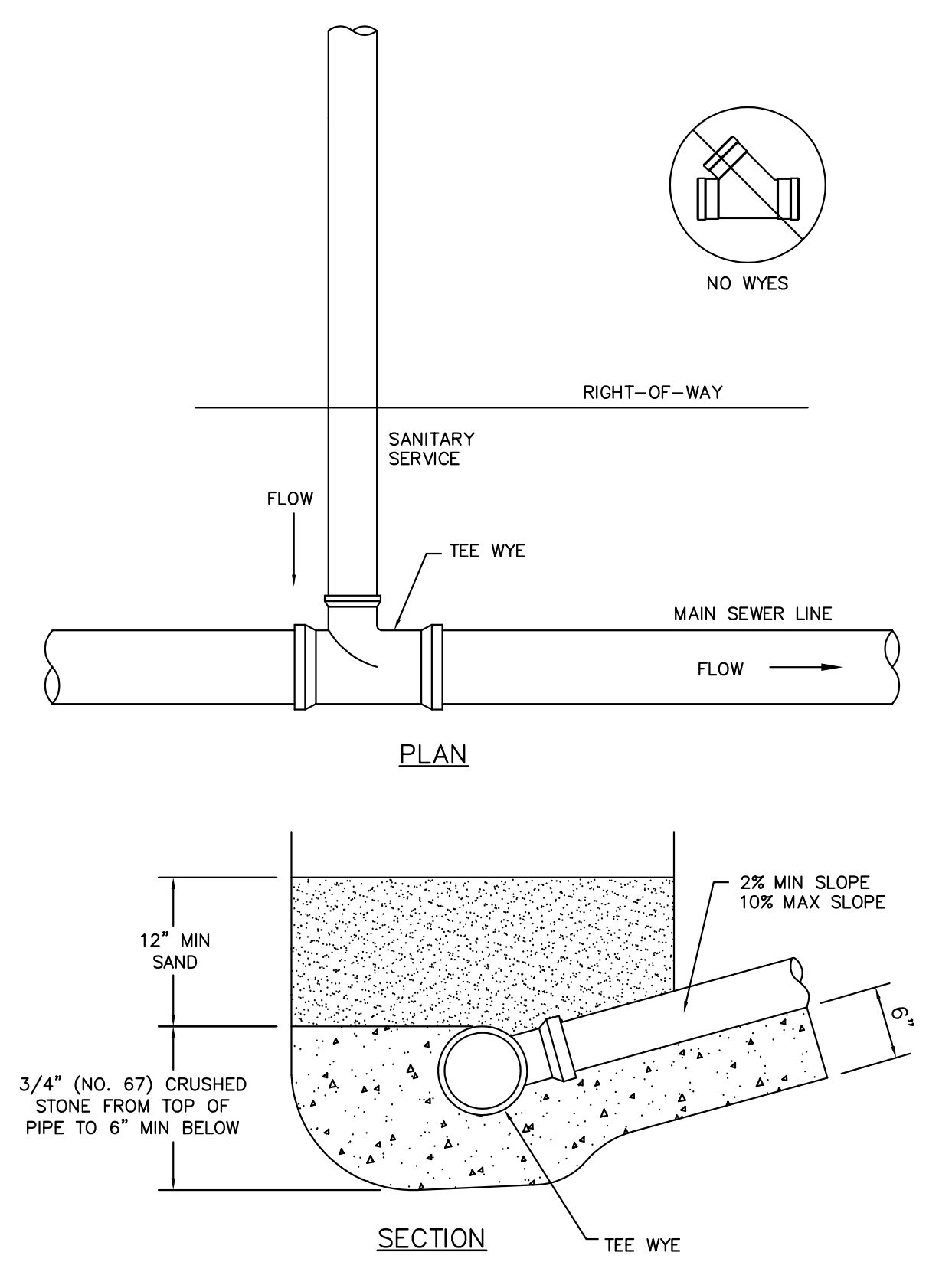
TITLE:
DETAILS

PROJECT No. DATE: 21-0630-1 MAY 23, 2022 SCALE: AS SHOWN
 SHEET: 13 OF 17

- SEWER SERVICE CONNECTION NOTES:**
- SERVICE CONNECTIONS SHALL USE SANITARY TEE OR WYE FITTINGS FOR ALL NEW SEWER CONSTRUCTION.
 - THE CENTERLINE OF ALL BUILDING CONNECTIONS SHALL ENTER THE TOP HALF OF THE SEWER.
 - ANY SERVICE CONNECTION WITH A VERTICAL RISE UP TO 4 FEET MAY HAVE THE SEWER FITTING SET VERTICALLY.
 - ANY SERVICE CONNECTION WITH A VERTICAL RISE UP TO 12 FEET SHALL EMPLOY NON-ENCASED RISERS THAT PROTECT AGAINST PIPE PENETRATION OR FAILURE AT THE FITTING BY THE USE OF BELL-ON-BELL CONNECTIONS.
 - FOR EXISTING SEWERS WHERE FITTINGS CANNOT BE INSTALLED, SADDLE CONNECTIONS SHALL BE USED.
 - PRESSURE SEWERAGE SHALL HAVE AN ISOLATION VALVE OR CURB STOP VALVE INSTALLED AT THE PROPERTY LINE. IF A CHECK VALVE IS USED AT THE PROPERTY LINE, THE VALVE SHALL BE INSTALLED WITHIN A VAULT TO FACILITATE MAINTENANCE.
 - ROOF DOWNSPOUTS, EXTERIOR OR INTERIOR FOUNDATION DRAINS, SUMP PUMPS, OR OTHER SOURCES OF SURFACE WATER RUN-OFF OR GROUNDWATER SHALL NOT BE DIRECTLY OR INDIRECTLY CONNECTED TO A PUBLIC SEWER.

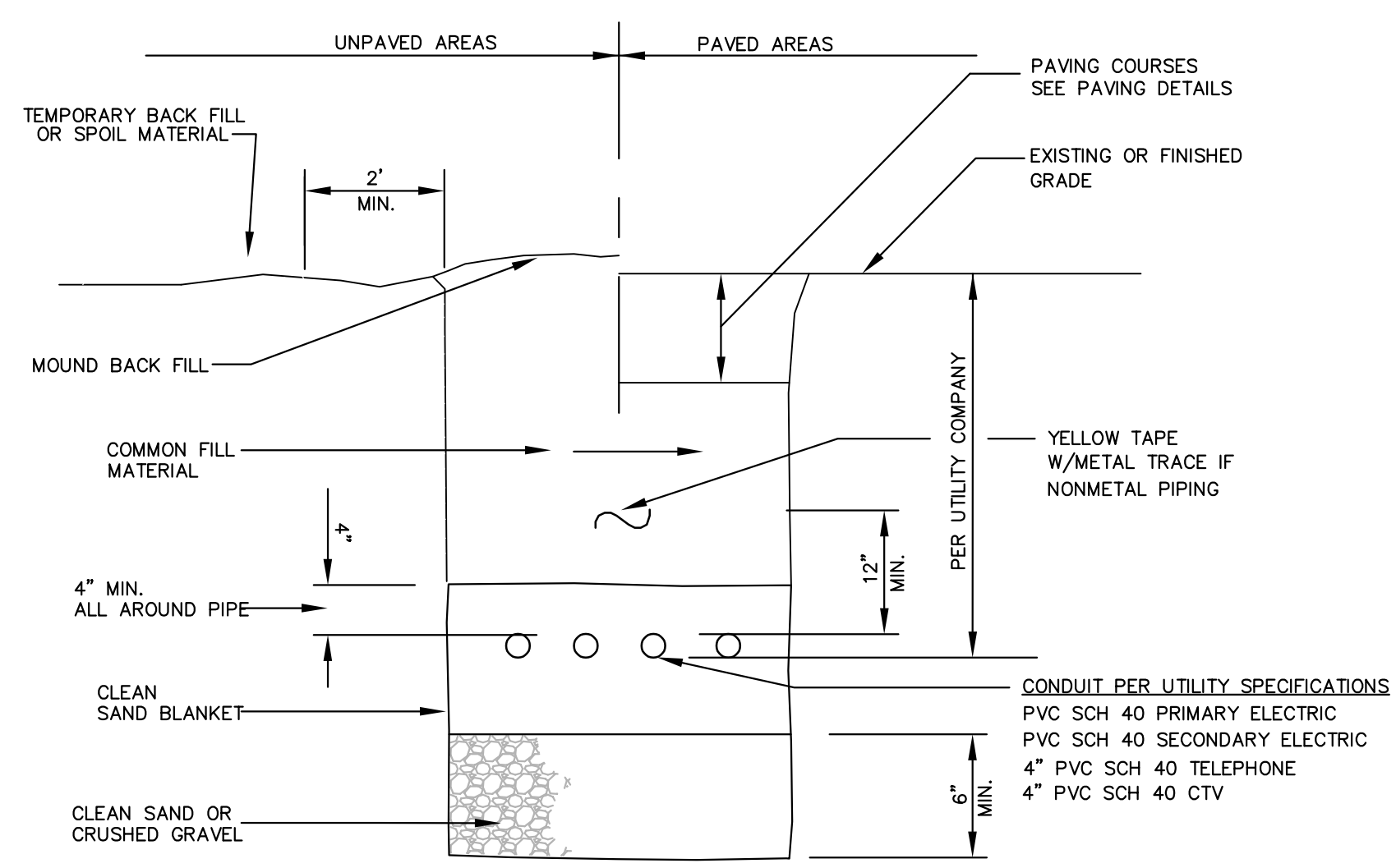
SEWER SERVICE CONNECTION NOTES

NOT TO SCALE



SEWER SERVICE DETAIL

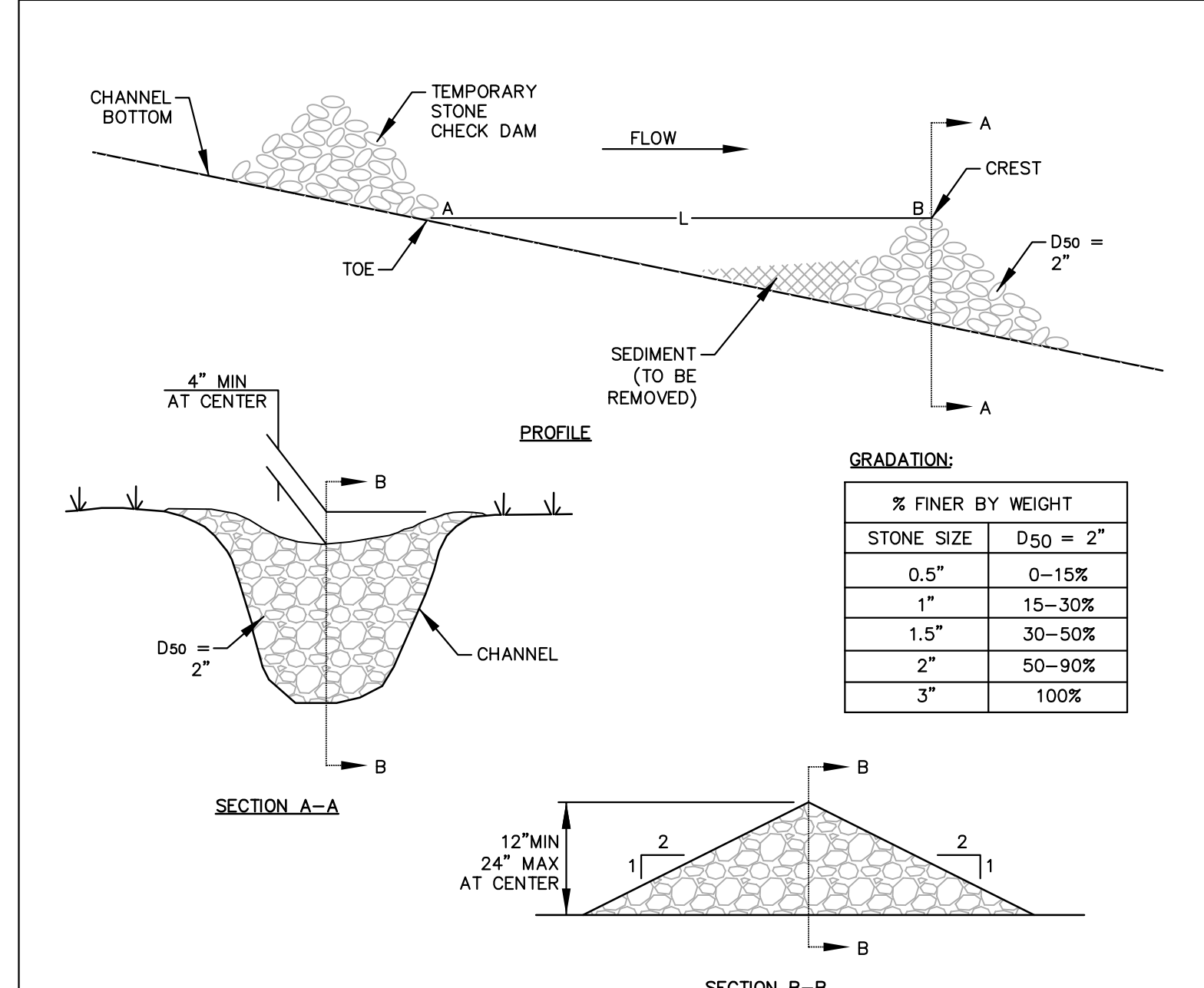
NOT TO SCALE



- NOTES:**
- ALL UTILITY SHAPE, GRADE, ALIGNMENT, AND LOCATION FINAL DESIGN TO BE DETERMINED BY UTILITY PROVIDER.
 - ALL ELECTRICAL, PHONE, AND DATA CONDUIT MATERIALS AND METHODS OF CONSTRUCTION TO COMPLY WITH APPLICABLE UTILITY CONSTRUCTION REGULATIONS.
 - THE ABOVE TYPICAL UTILITY TRENCH DETAIL SERVES AS A GUIDE ONLY.

UTILITY TRENCH DETAIL

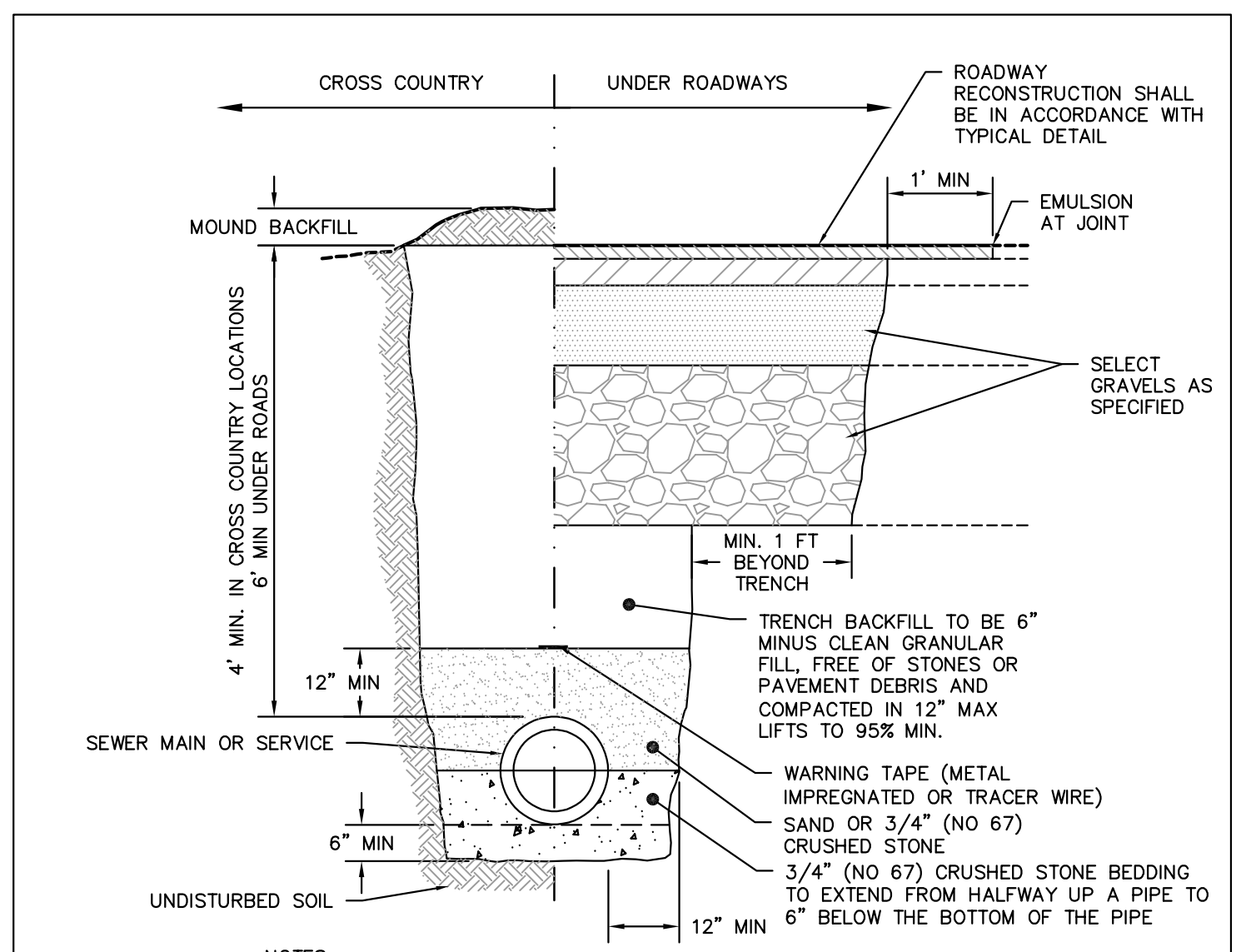
NOT TO SCALE



- NOTES:**
- PLACE TEMPORARY STONE CHECK DAM ($D_{50} = 2"$ MIN) TO THE LINES, GRADES AND LOCATIONS AS SHOWN ON THE APPROVED PLAN OR AS FIELD DIRECTED BY THE ENGINEER.
 - STONE SIZE TO BE INCREASED TO $D_{50} = 4"$ WHEN GRADES EXCEED 8% OR VELOCITIES EXCEED 6.0 FPS.
 - SET SPACING OF STONE CHECK DAMS SO THAT THE ELEVATION OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION AS THE TOE OF THE UPSTREAM DAM.
 - PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH EROSION STONE ($D_{50} = 4"$ MIN) OR LINER (NAG DS-150) AS NEEDED OR DIRECTED BY THE ENGINEER.
 - REMOVE STONE CHECK DAM WHEN NO LONGER NEEDED. AFTER BARRIER IS REMOVED, STABILIZE WITH VEGETATION.
 - REMOVE ALL SEDIMENT, REGRADE/VEGETATE AS NECESSARY OR AS FIELD DIRECTED BY THE ENGINEER.

STONE CHECK DAM DETAIL

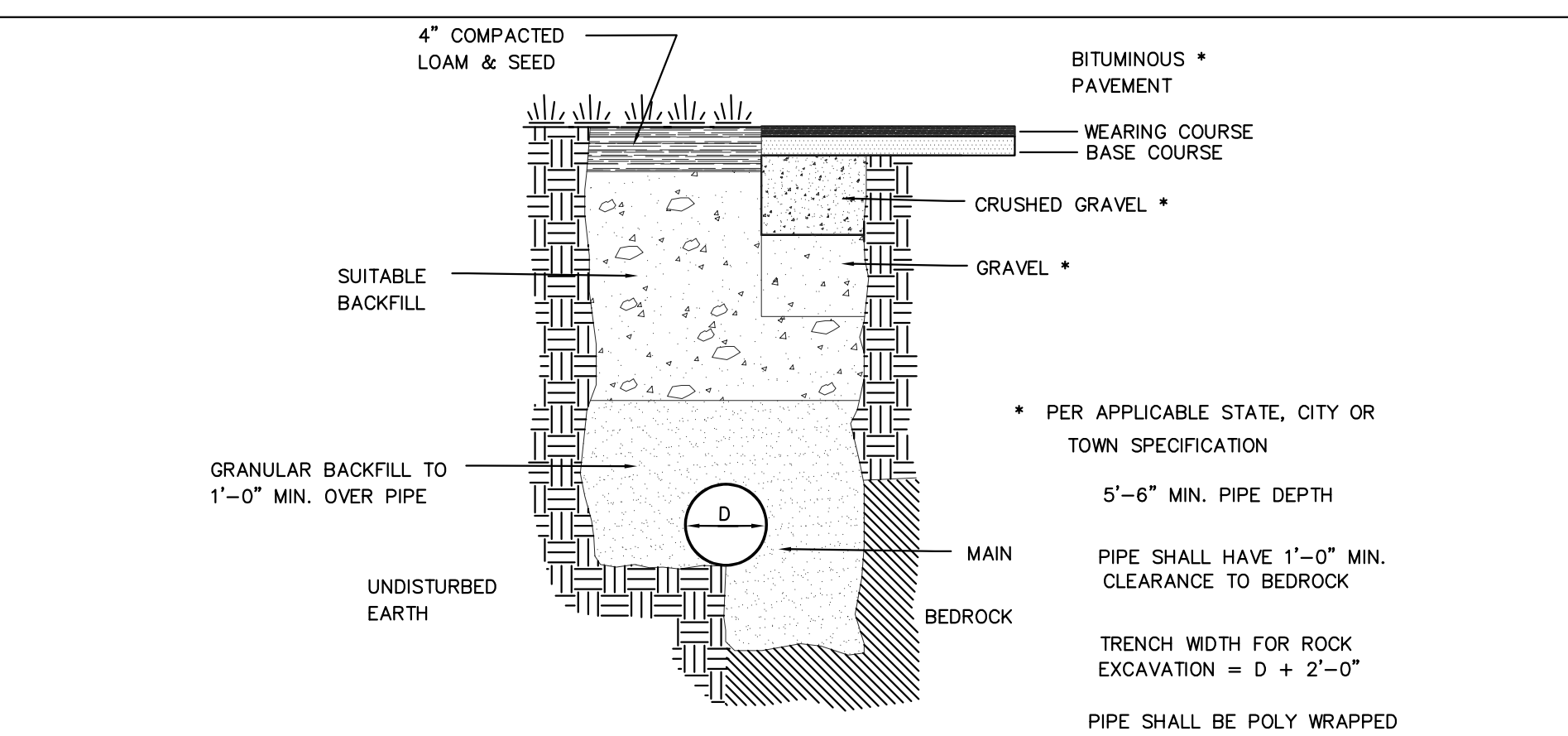
NOT TO SCALE



- NOTES:**
- PROVIDE MINIMUM 12" CLEARANCE ON ALL SIDE FROM LEDGE.
 - MAIN TO BE INSTALLED IN ACCORDANCE WITH LOCAL AND STATE SEWER RULES AND REGULATIONS.

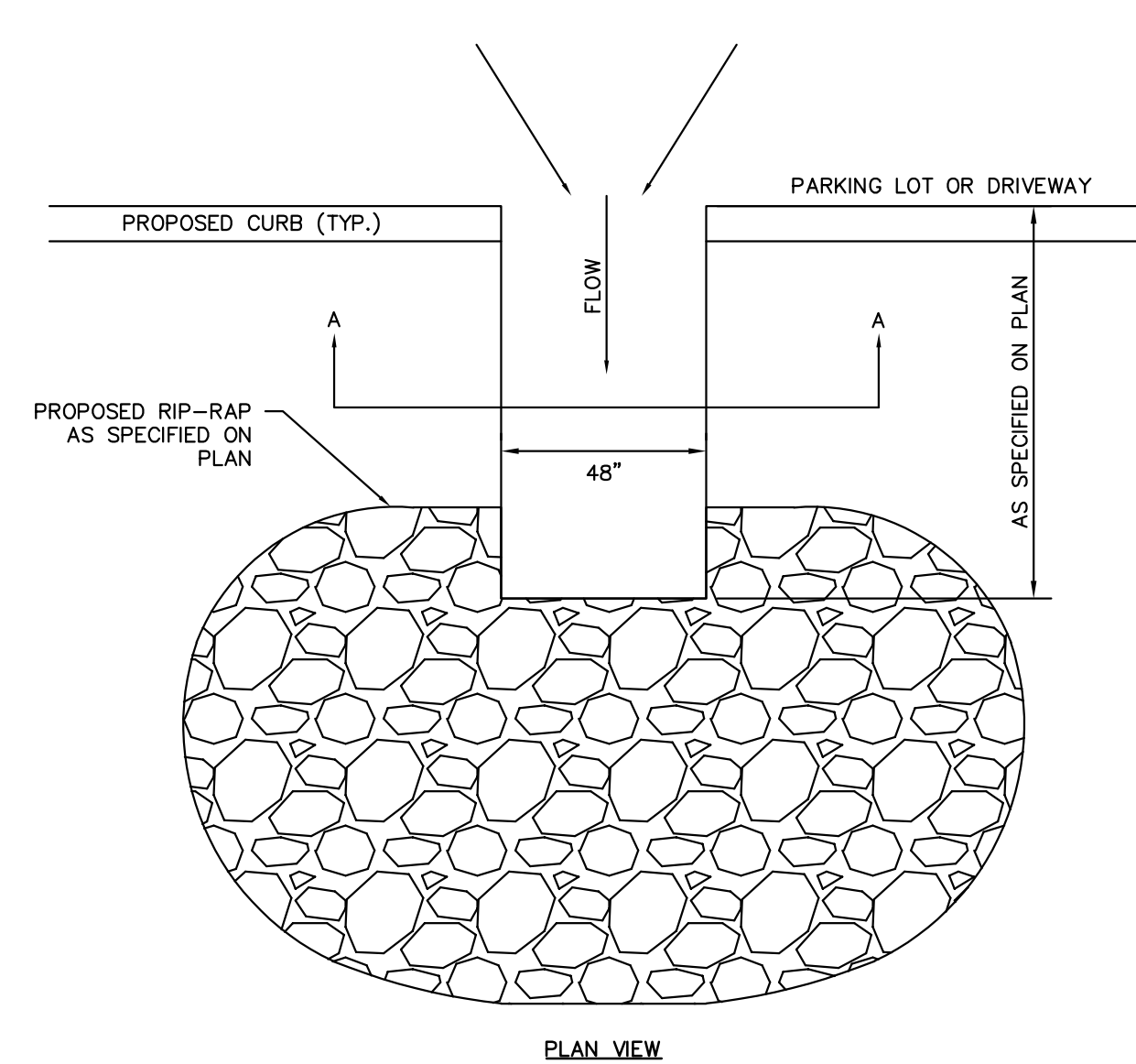
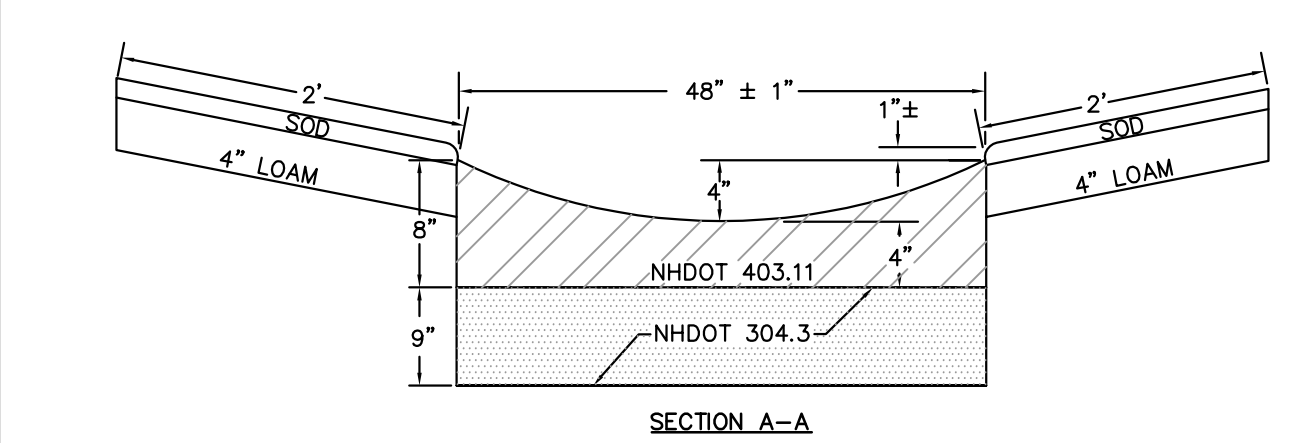
SEWER MAIN TRENCH/SERVICE DETAIL

NOT TO SCALE



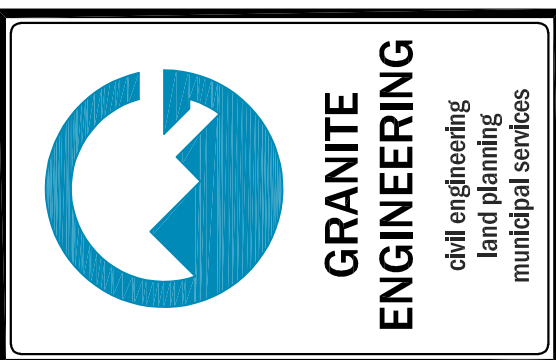
TYPICAL WATER MAIN/WATER SERVICE TRENCH DETAIL

NOT TO SCALE



PAVED SLUICE SWALE

NOT TO SCALE



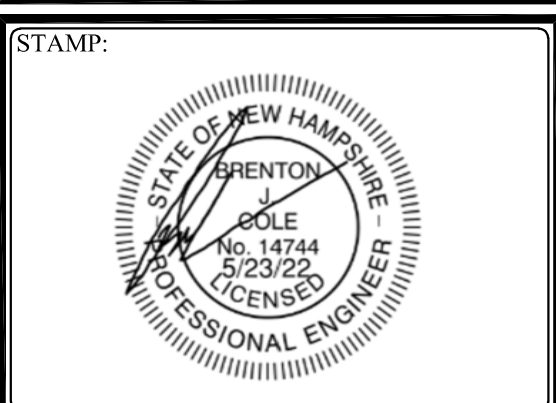
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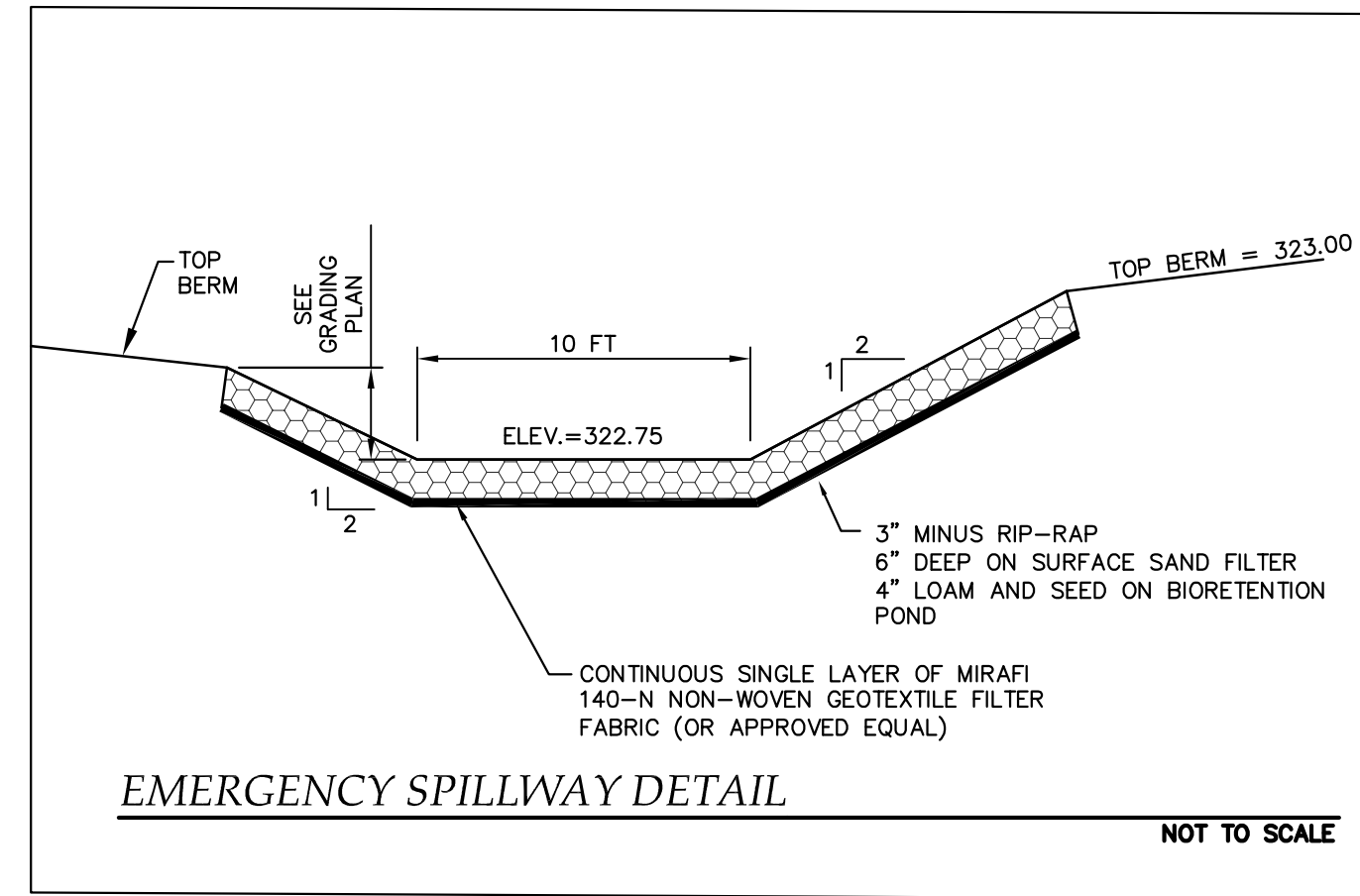


LOCATION:
 TAX MAP 6 LOT 14
 30 WILTON ROAD
 MILFORD, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

PROJECT:
STORAGE SENSE - MILFORD WEST

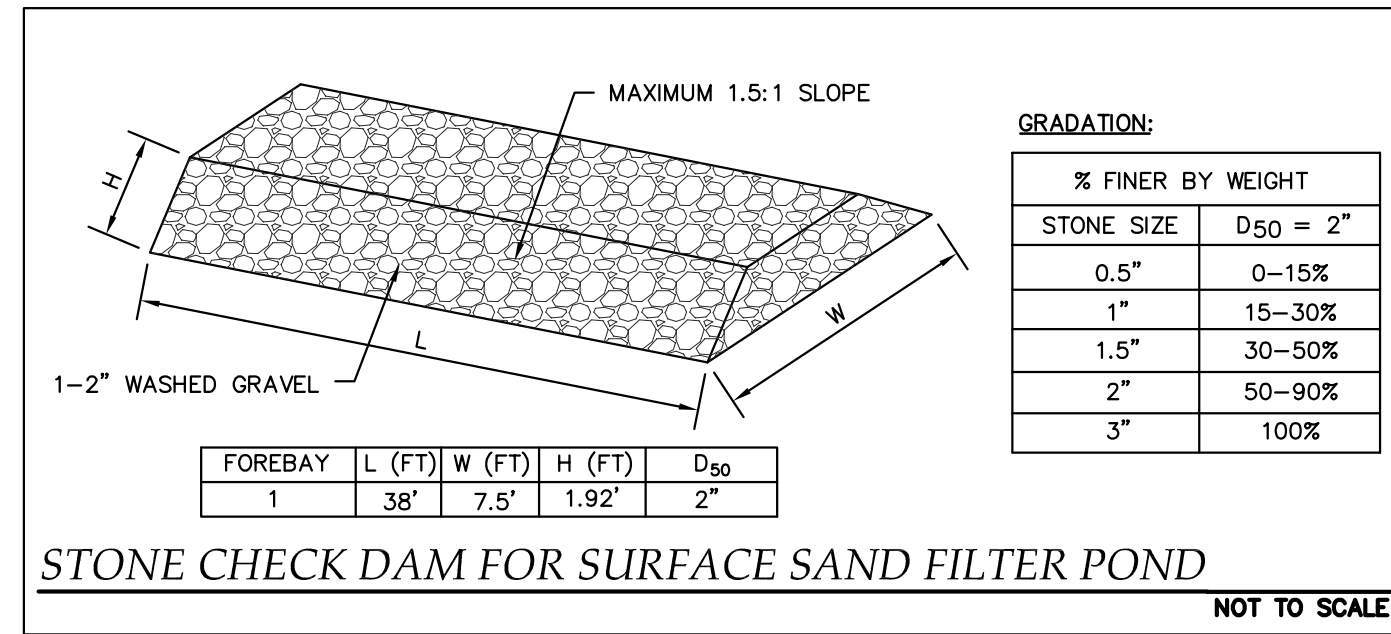
TITLE:
DETAILS

PROJECT No. DATE: 21-0630-1 MAY 23, 2022 SCALE: AS SHOWN
 SHEET: 14 OF 17



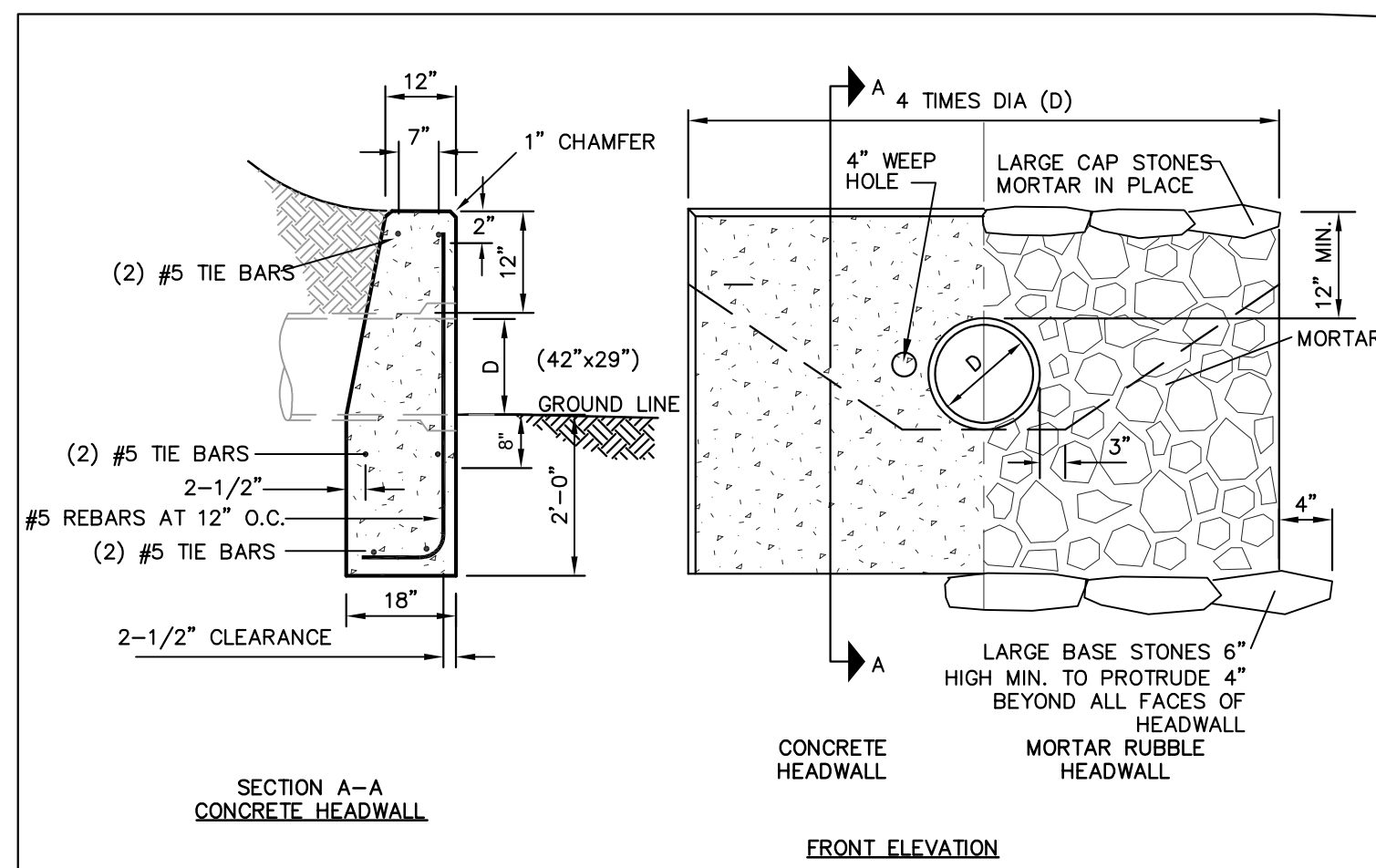
EMERGENCY SPILLWAY DETAIL

NOT TO SCALE



STONE CHECK DAM FOR SURFACE SAND FILTER POND

NOT TO SCALE



SECTION A-A CONCRETE HEADWALL

FRONT ELEVATION

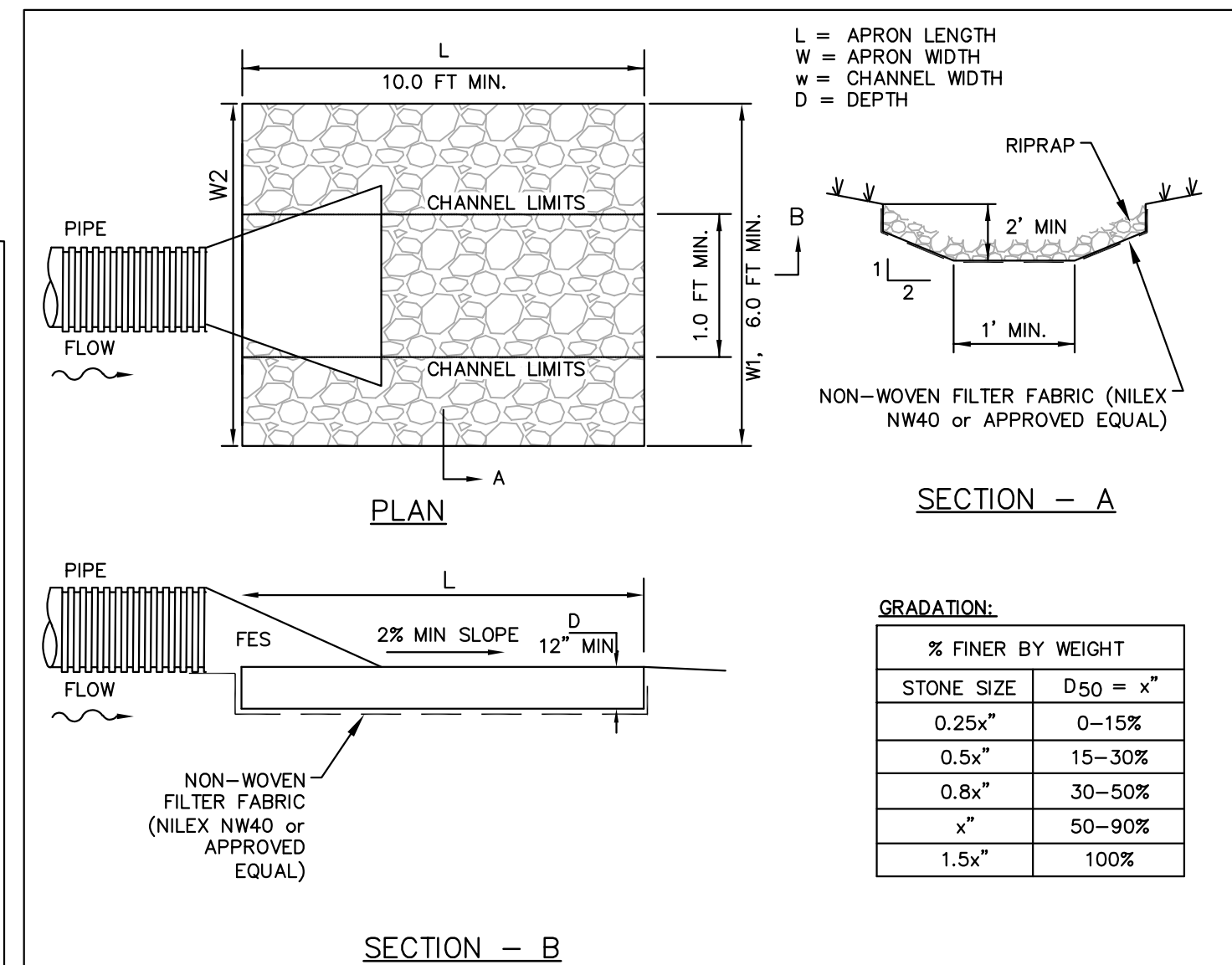
CLASS B CONCRETE - SCHEDULE FOR REINFORCED CONCRETE										
PIPE DIAMETER	12"	15"	18"	24"	30"	36"	42"	48"	54"	60"
NUMBER	4	4	4	4	4	4	4	4	4	4
LENGTH OF BARS	3'-0"	3'-0"	3'-0"	3'-0"	4'-0"	4'-0"	5'-0"	5'-0"	6'-0"	6'-0"

CLASS B CONCRETE - SCHEDULE FOR REINFORCED CONCRETE										
PIPE DIAMETER	12"	15"	18"	24"	30"	36"	42"	48"	54"	60"
CONCRETE QUANTITY (YDS)	1.0	1.3	1.8	2.7	3.5	4.9	6.4	8.0	10.0	12.3

- NOTES:
- FOR DESCRIPTIONS, MATERIALS AND CONSTRUCTION METHODS, SEE LATEST NHDOT SPECIFICATIONS.
 - ALL CONCRETE DIMENSIONS SHOWN ARE MINIMUM.
 - THE PLANNING BOARD RESERVES THE RIGHT TO REQUIRE THAT THE DEVELOPER PROVIDE CAST-IN-PLACE CONCRETE HEADWALLS WITH STONE FACING IF THE CAST-IN-PLACE TYPE IS TO BE USED.

TYPICAL CONCRETE HEADWALL DETAIL

NOT TO SCALE



SECTION - B

GRADATION:	
STONE SIZE	D ₅₀ = x"
0.25x"	0-15%
0.5x"	15-30%
0.8x"	30-50%
x"	50-90%
1.5x"	100%

NOTES:

- THE APRON SUBGRADE TO BE PREPARED TO THE GRADES SHOWN ON THE APPROVED PLANS.
- THE FRACTURED ROCK (RIP-RAP) SHALL CONFORM TO THE SPECIFIED GRADATION (D₅₀=4" MIN.).
- GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE RIP-RAP PLACEMENT. DAMAGED FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS SHALL BE A MINIMUM OF 12.0 INCHES.
- RIP-RAP PLACEMENT SHALL BE IN ONE CONTINUOUS LIFT TO THE DEPTH SPECIFIED, AVOIDING MATERIAL SEGREGATION.

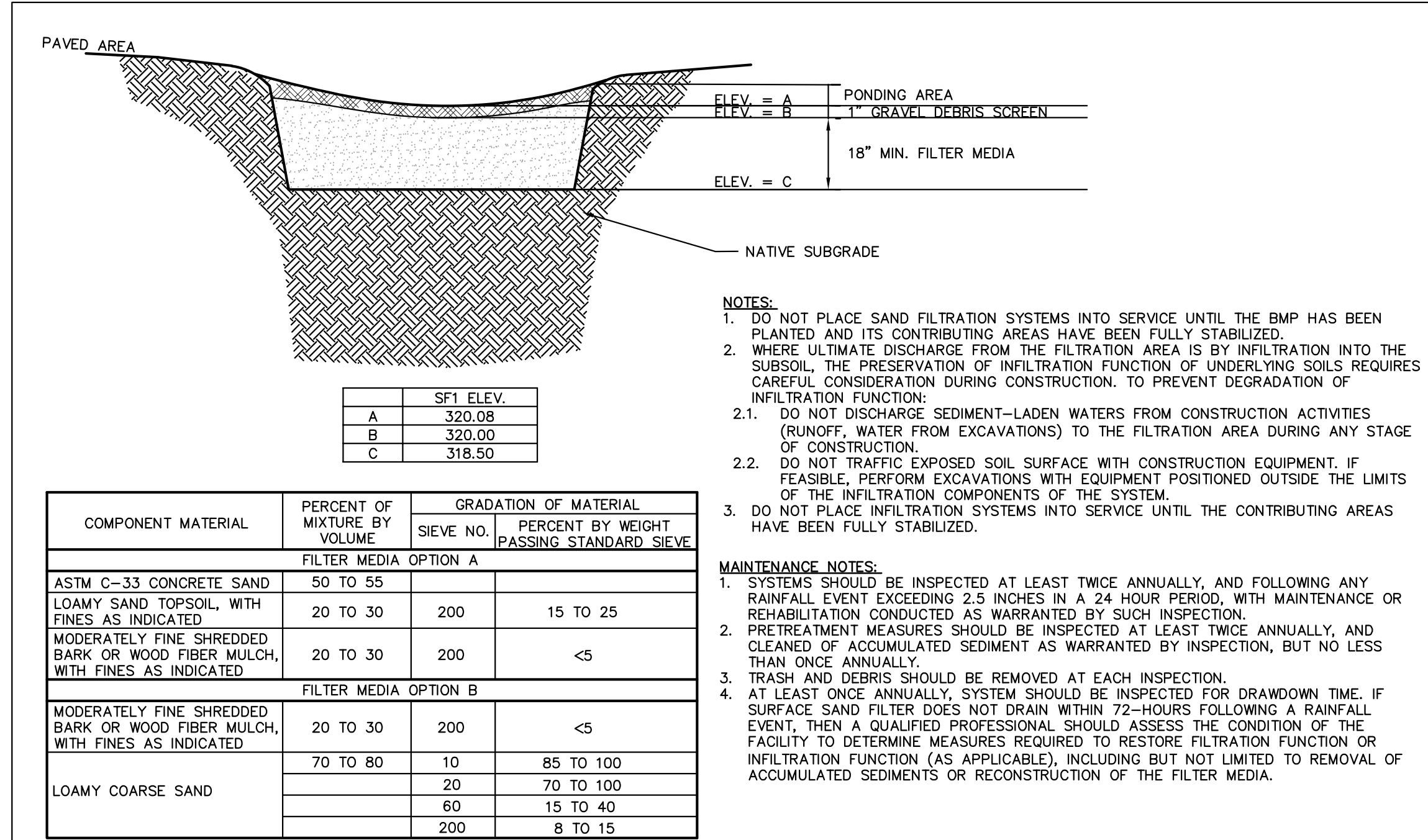
MAINTENANCE

THE APRON SHOULD BE INSPECTED AFTER EVERY MAJOR RAIN EVENT (≥ 3"). IF THE RIPRAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY. THE VEGETATED CHANNEL IMMEDIATELY BELOW THE OUTLET SHOULD BE PERIODICALLY INSPECTED FOR DEGRADATION. IF DEGRADATION HAS OCCURRED, REPAIR IMMEDIATELY. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS AND SEDIMENT THAT COULD IMPAIR UPSTREAM CHANNEL CHARACTERISTICS. ALL DEBRIS OR SEDIMENT SHOULD BE REMOVED OFF SITE AND DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE LAWS.

STRUCTURE	LENGTH	W1	W2	D50	DEPTH
HW#5	8'	11'	3'	4"	10"
HW#5A	9'	12'	3'	4"	10"
HW#13	12'	8'	3'	4"	10"

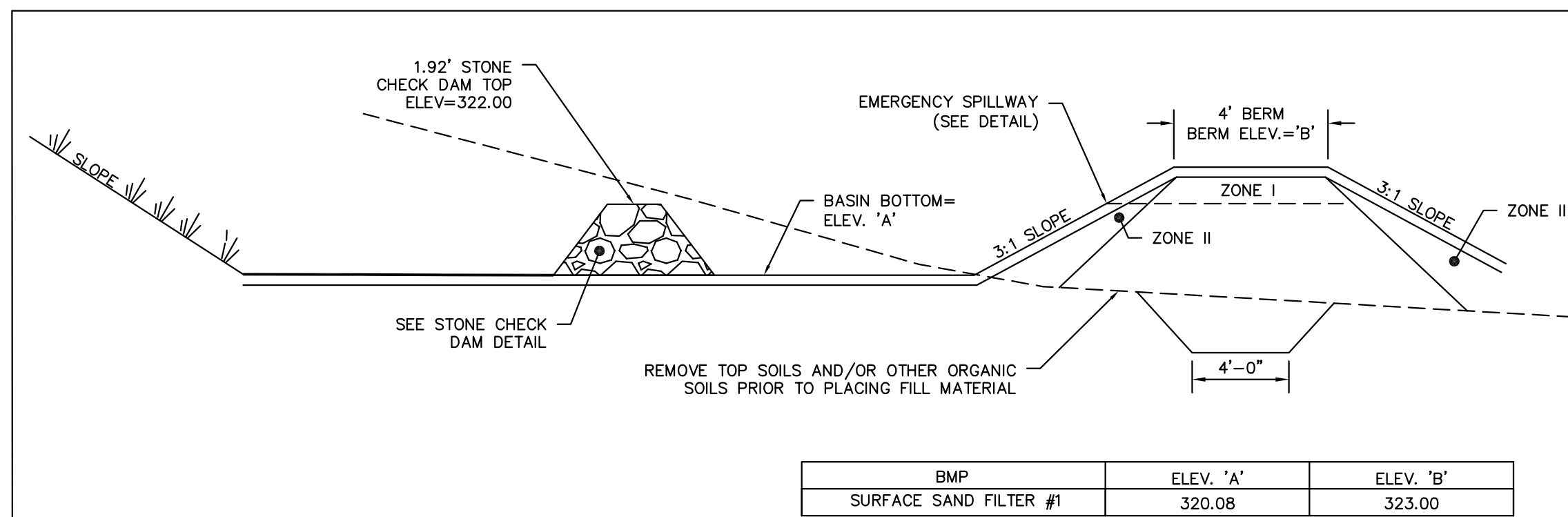
OUTLET PROTECTION DETAIL

NOT TO SCALE



SURFACE SAND FILTER DETAIL

NOT TO SCALE



BMP	ELEV. 'A'	ELEV. 'B'
SURFACE SAND FILTER #1	320.08	323.00

SURFACE SAND FILTER NOTES:

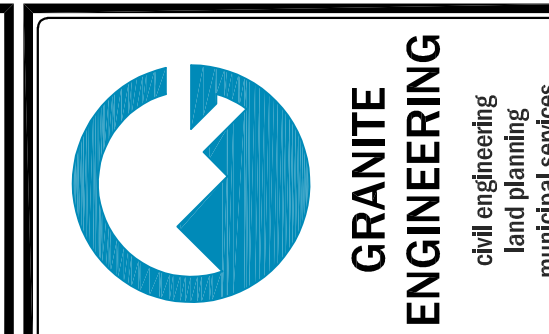
- DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO PERMANENT BIOTENTATION BMPs.
- AFTER THE BASIN IS EXCAVATED TO THE FINAL DESIGN ELEVATION, THE FLOOR SHOULD BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW TO RESTORE INFILTRATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG.
- IMMEDIATELY AFTER CONSTRUCTING THE BASIN, STABILIZE ITS BOTTOM AND SIDE SLOPES WITH A DENSE TURF OF WATER-TOLERANT GRASS. USE LOW-MAINTENANCE, RAPIDLY GERMINATING GRASSES, SUCH AS FESCUES.
- DO NOT PLACE BIOTENTATION SYSTEMS INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

NOTES:

- CONTRACTOR TO NOTIFY DIG-SAFE 72 HOURS PRIOR TO START OF CONSTRUCTION
- CLEAR AND CUT THE AREA TO THE NECESSARY EXTENT. CONTRACTOR TO PROPERLY DISPOSE OF ALL DEBRIS.
- ALL SILTATION AND TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED AS CALLED FOR ON PROJECT PLANS PRIOR TO GRUBBING OF CLEARED AREAS.
- CONTRACTOR TO COMPLETE GRUBBING AND PROPERLY DISPOSE OF ALL DEBRIS. STOCKPILE ORGANIC MATERIAL SUITABLE FOR USE AS TOPSOIL IN UPLAND AREAS. ALL STOCKPILES TO BE SEEDED AND, IF NECESSARY, SURROUNDED WITH HAY BALES TO PREVENT LOSSES DUE TO EROSION.
- CONSTRUCT TEMPORARY CULVERTS AS NECESSARY FOR CONSTRUCTION ACTIVITIES. ALL CROSSINGS TO BE PROTECTED BY HAY BALE BARRIERS TO PREVENT EROSION.
- CONSTRUCT CUT-OFF TRENCH (PART OF ZONE I).
- CONSTRUCT OUTLET AND OVERFLOW STRUCTURE, CULVERT, ANTI SEEP COLLARS, HEADWALL, AND RIP RAP OUTLET PROTECTION AS SHOWN ON PLANS AND DETAILS.
- CONSTRUCT ZONE I PORTION OF EARTH EMBANKMENT.
- CONSTRUCT ZONE II PORTION OF EARTH EMBANKMENT.
- APPLY TOPSOIL TO SLOPES AND OTHER AREAS OF DISTURBANCE BY CONSTRUCTION. TOPSOIL MAY BE NATIVE ORGANIC MATERIAL SCREENED SO AS TO BE FREE OF ALL DELETERIOUS MATERIAL. TOPSOIL SHALL BE A MINIMUM OF 4-INCHES OF COMPACTED THICKNESS. UPON PLACEMENT ON TOPSOIL, FINISHED AREAS ARE TO BE LIMED, SEEDED AND MULCHED. CONSTRUCTION PERSONNEL SHALL INSPECT COMPLETED SECTIONS OF WORK ON A REGULAR BASIS AND REMEDY ALL PROBLEM AREAS UNTIL GRASS HAS BECOME ESTABLISHED.
- MAINTAIN, REPAIR AND REPLACE TEMPORARY EROSION CONTROL MEASURES AS NECESSARY UNTIL THE WHOLE CONSTRUCTION AREA HAS BEEN STABILIZED (MINIMUM ONE WINTER).
- REMOVE AND SUITABLY DISPOSE OF TEMPORARY EROSION CONTROL MEASURES AFTER STABILIZATION.
- MONITOR CONSTRUCTION ACTIVITIES TO INSURE THEY ARE PERFORMED IN SUCH WAYS AS TO NOT ENDANGER THE INTEGRITY OF EARTH EMBANKMENTS, STORMWATER CONTROL, STRUCTURE, CULVERT AND RIP RAP OUTLET PROTECTION.

SURFACE SAND FILTER #1 DETAIL

NOT TO SCALE



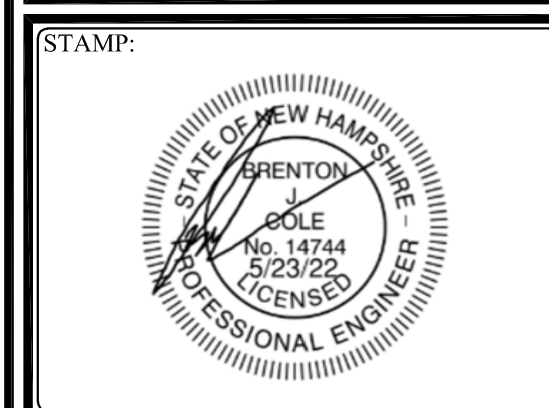
NO.	DATE	REVISIONS	COMMENTS	
			BY	TD
0	05/23/2022		PROJECT SUBMITTAL	

OWNER & APPLICANT:
 30 WILTON ROAD LLC
 55 HIGH STREET
 PITTSFIELD, NH 05263
 BOOK 9471 PAGE 2225

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 Manchester, New Hampshire 03101
 603.518.8030

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LOCATION:
 TAX MAP 6 LOT 14
 30 WILTON ROAD
 MILFORD, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

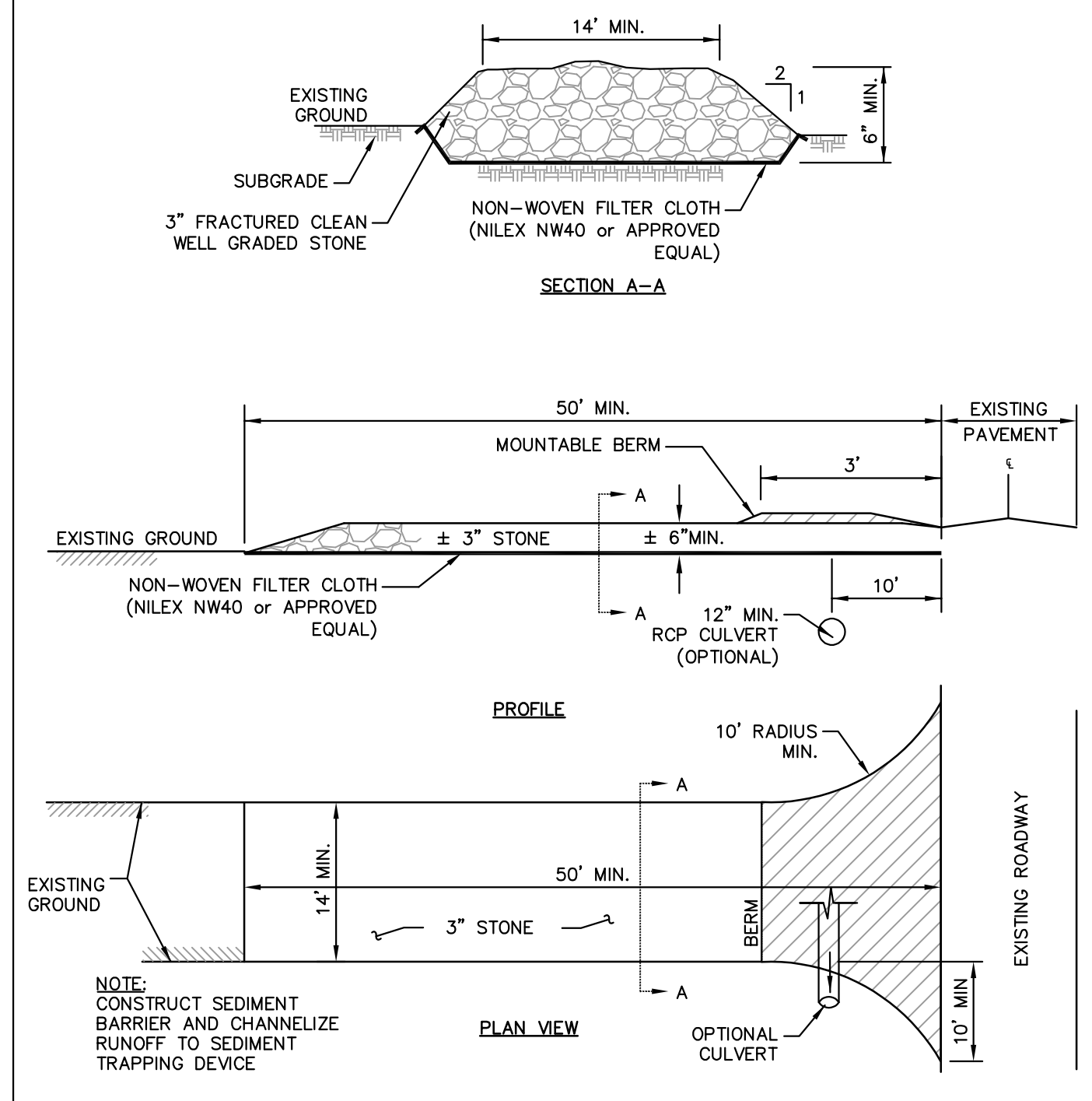
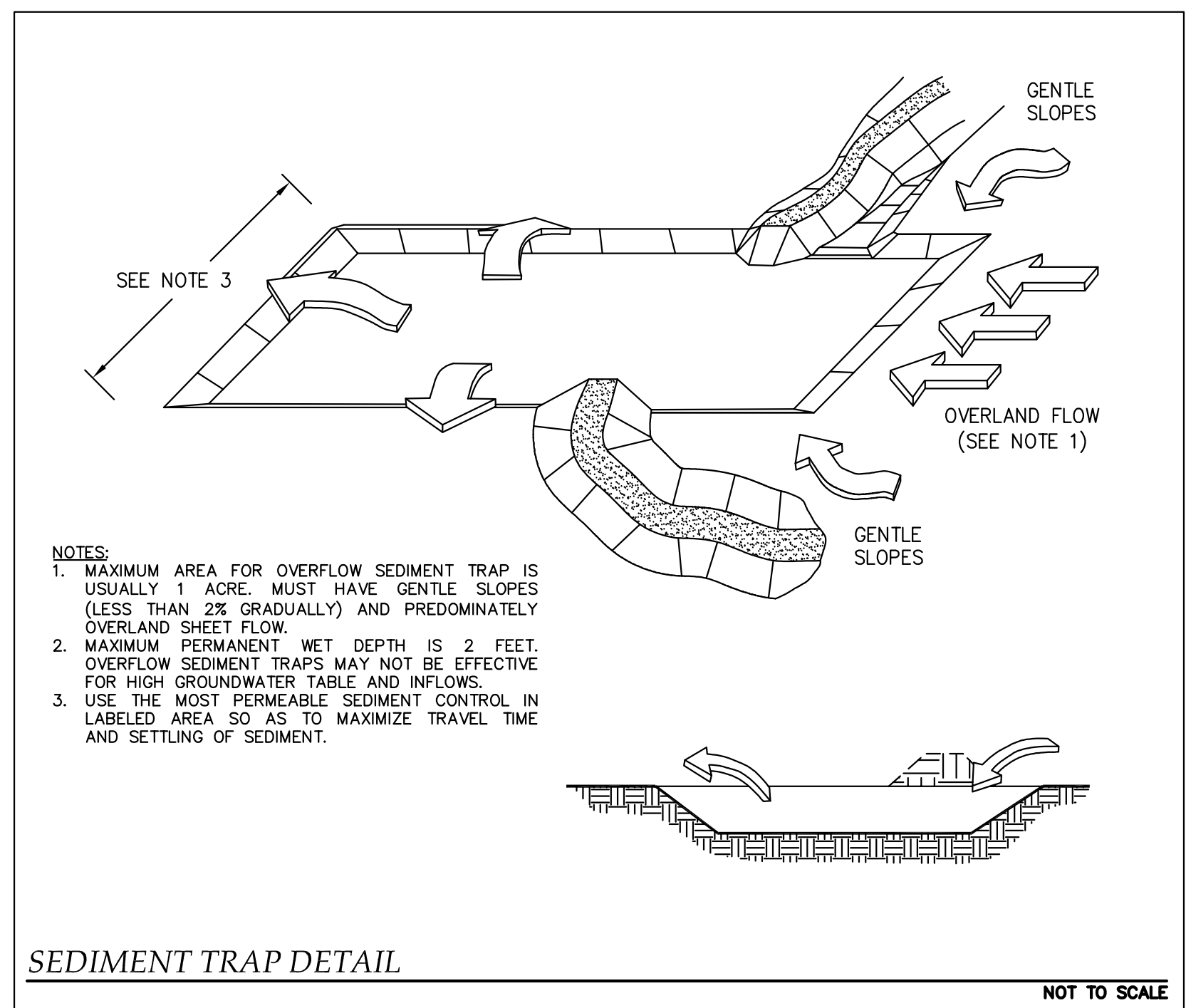
PROJECT:
STORAGE SENSE - MILFORD WEST

TITLE:
DETAILS

PROJECT No. / DATE:
 21-0630-1 / MAY 23, 2022

SHEET:
 15 OF 17

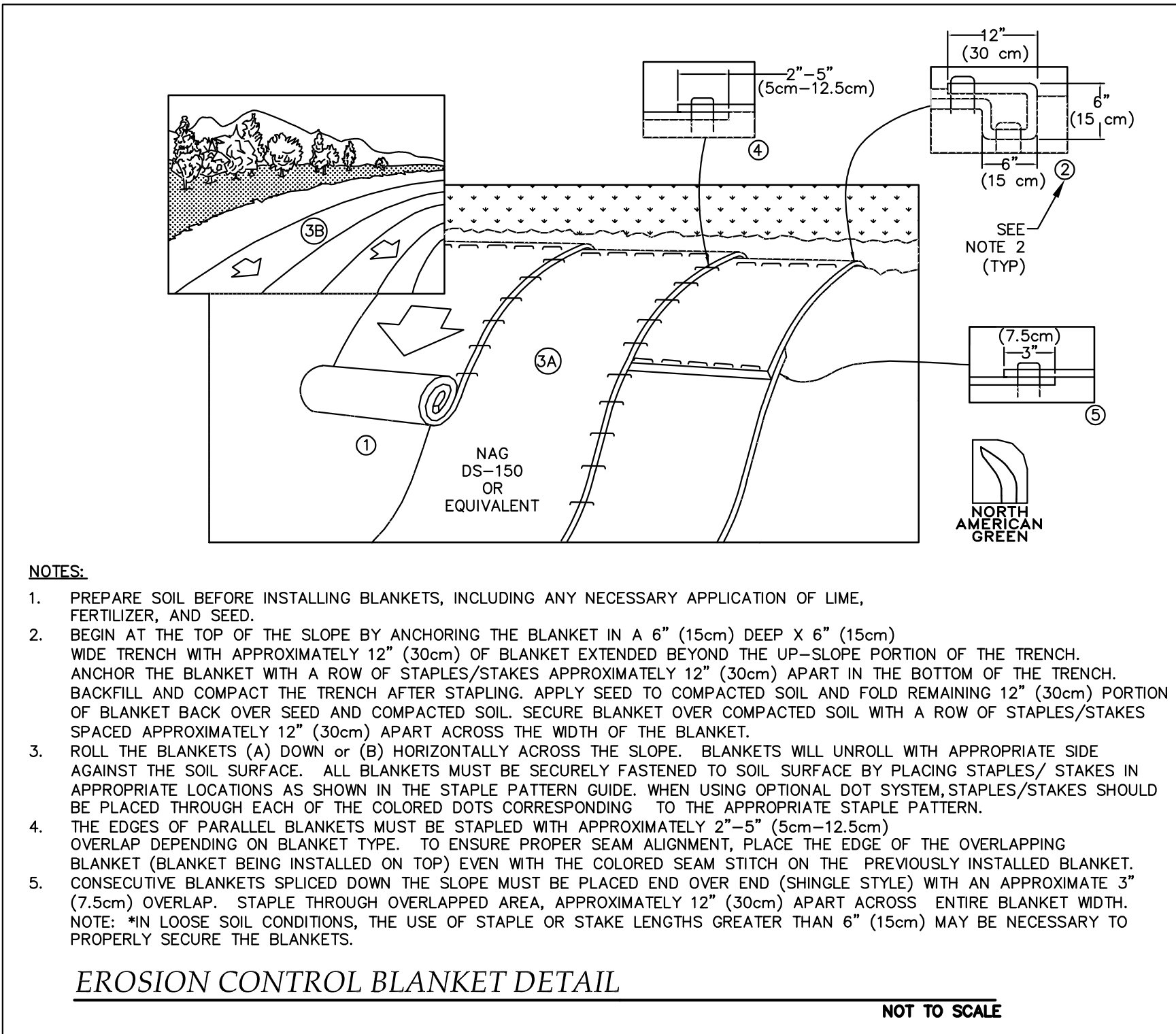
SCALE:
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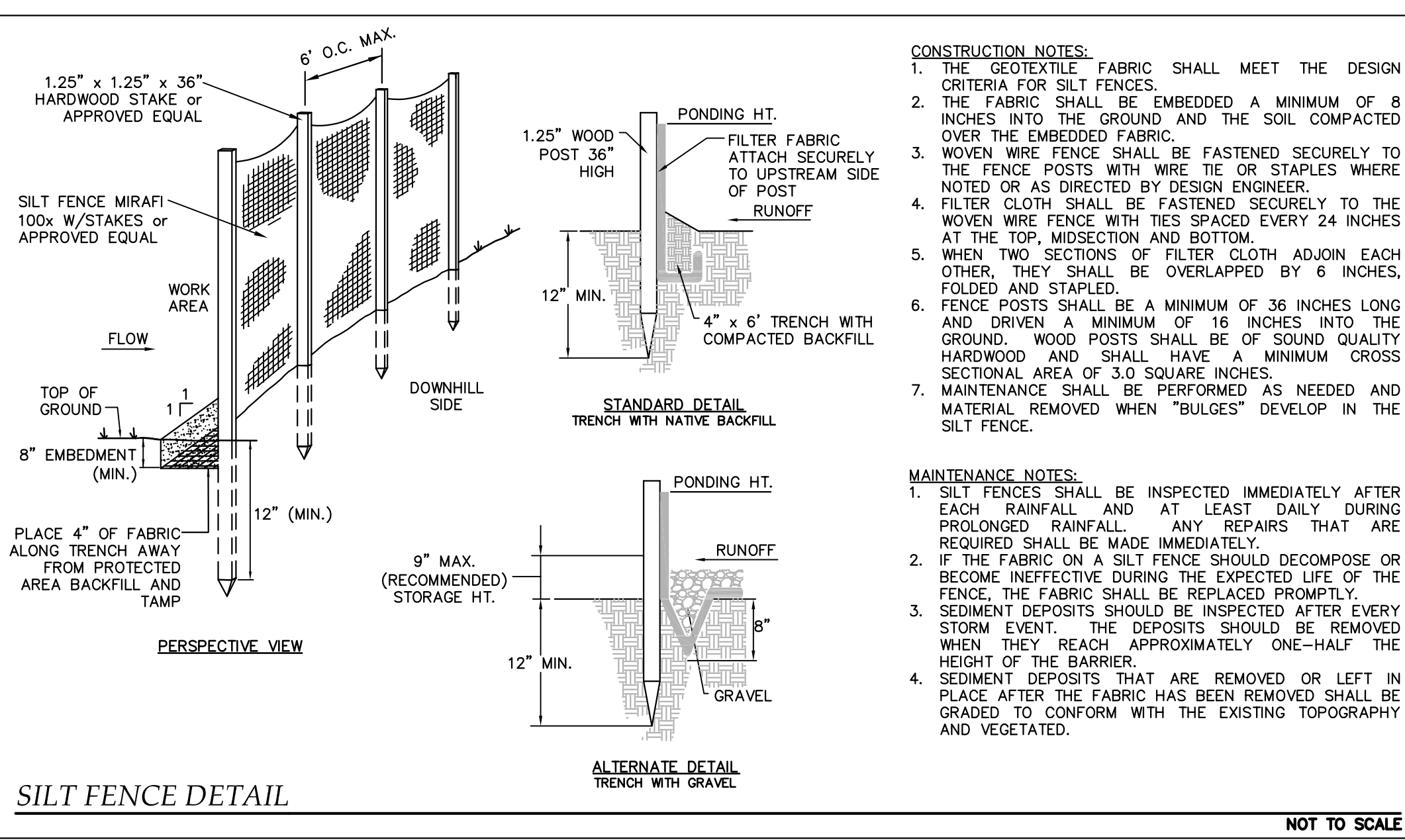
- NOTES:
1. STONE FOR A STABILIZED CONSTRUCTION EXIT SHALL BE 3 INCH STONE, RECLAIMED STONE OR RECYCLED CONCRETE EQUIVALENT.
 2. THE LENGTH OF THE STABILIZED EXIT SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
 3. THE THICKNESS OF THE STONE FOR THE STABILIZED EXIT SHALL NOT BE LESS THAN 6 INCHES.
 4. THE WIDTH OF THE EXIT SHALL NOT BE LESS THAN THE FULL WIDTH OF THE AREA WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICHEVER IS GREATER.
 5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.
 6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION EXIT SHALL BE PIPED BENEATH THE EXIT. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
 7. THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.
 8. WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

- WINTER CONSTRUCTION NOTES**
1. ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE SECURED WITH ANCHORED NETTING ELSEWHERE. THE PLACEMENT OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT BE DONE OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
 2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
 3. AFTER OCTOBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL (NHDOT 304.3).

- CONSTRUCTION SEQUENCE**
1. CONTACT DIG SAFE AT LEAST 72 HOURS BEFORE ANY EXCAVATION WORK.
 2. CUT AND CLEAR TREES AND BRUSH WITHIN LIMITS OF CLEARING SHOWN ON PLAN.
 3. INSTALL ALL APPLICABLE TEMPORARY EROSION CONTROL MEASURES PRIOR TO COMMENCEMENT OF ANY EARTHMOVING OPERATIONS. THE STABILIZED CONSTRUCTION EXIT SHALL BE IN PLACE AS SHOWN ON THE PROJECT PLANS.
 4. REMOVE STUMPS FROM THE SITE FOR SITE GRADING TO COMMENCE. ALL STUMPS AND SIMILAR ORGANIC DEBRIS SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR UNLESS A STUMP DUMP IS NOTED ON THE PLAN. NATIVE ORGANIC SOIL MATERIALS SUITABLE FOR USE AS TOPSOIL SHALL BE STOCKPILED WITHIN AREAS OUT OF THE WAY OF OTHER CONSTRUCTION ACTIVITIES AND DRAINAGE FLOW. STOCKPILES SHALL BE TEMPORARILY SEEDDED WITH WINTER RYE AND BE SURROUNDED BY PERIMETER CONTROLS TO PREVENT EROSION.
 5. COMMENCE EARTHWORK OPERATIONS. ALL PERMANENT EROSION CONTROL MEASURES AND DETENTION FACILITIES SHOULD BE INSTALLED PRIOR TO GRADING FOR PROJECT.
 6. ALL DRAINAGE SYSTEMS AND OTHER UTILITIES SHOULD BE CONSTRUCTED FROM LOW GRADE TO HIGH GRADE. INCOMPLETE WORK SHALL BE PROTECTED FROM SILTATION BY THE USE OF PERIMETER CONTROLS UNTIL THE SITE HAS BEEN FULLY STABILIZED.
 7. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - A. BASE COURSE GRAVELS ARE INSTALLED IN AREAS TO BE PAVED;
 - B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED; OR EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED;
 8. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION AND SEDIMENT CONTROL DEVICES ARE REQUIRED, THE OWNER SHALL BE REQUIRED TO INSTALL THE NECESSARY DEVICES OR CONSULT WITH THE ENGINEER.
 9. ALL STORMWATER FLOWS SHALL NOT BE DIRECTED TO THE STORMWATER MEASURES UNTIL ALL CONTRIBUTING AREA HAVE BEEN DEEMED STABLE.
 10. BEGIN THE CONSTRUCTION OF GRAVEL AND CRUSHED GRAVEL COURSES OVER PROPOSED DRIVEWAY, WALKS, AND PARKING AREAS AND COMPACT IN SPECIFIED LIFT THICKNESS AND COMPACTION RATES.
 11. COMPLETE GRADING ACTIVITIES AND WHEN COMPLETE, BEGIN TOPSOILING PROPOSED TURF AREAS USING STOCKPILED LOAM SUPPLEMENTED WITH BORROW LOAM, IF NECESSARY, TO LEAVE THE SPECIFIED THICKNESS.
 12. FINE GRADE ALL TURF AREAS AND COMPLETE PERMANENT SEEDING AND LANDSCAPING BY HYDROSEEDING WITH THE SPECIFIED SEED MIXTURE IMMEDIATELY AFTER FINE GRADING IS COMPLETED. ALL AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
 13. INSTALL THE FINAL BINDER COURSE OF PAVEMENT.
 14. INSTALL THE FINAL WEARING COURSE OF PAVEMENT OVER THE BINDER COURSE.
 15. COMPLETE INSTALLATION OF LANDSCAPING, SIGNAGE, AND OTHER SITE AMENITIES.
 16. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDED AREAS HAVE ESTABLISHED THEMSELVES.



- EROSION CONTROL NOTES**
1. THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES CONTROL.
 2. EARTHWORK SHALL BE LIMITED TO THE AREAS WITHIN THE LIMITS OF CLEARING AS SHOWN ON THE PLAN. AT NO TIME SHALL MORE THAN FIVE (5) ACRES OF SITE AREA BE IN AN UNSTABLE CONDITION. NO GIVEN AREA OF THE SITE SHALL BE LEFT IN AN UNSTABILIZED CONDITION FOR A PERIOD OF TIME EXCEEDING THIRTY (30) CALENDAR DAYS.
 3. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.
 4. PERIMETER CONTROLS MUST BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS.
 5. EROSION CONTROL MEASURES USED SHALL BE INSPECTED AT LEAST WEEKLY AND WITHIN 24 HOURS AFTER 0.25" OF RAINFALL OR MORE. ALL DEFICIENCIES SHALL BE FIXED IN ORDER TO KEEP OPERATION EFFECTIVE. THEY SHALL BE CLEANED AND MAINTAINED AND OTHERWISE KEPT IN AN EFFECTIVE OPERATING MANNER THROUGHOUT THE CONSTRUCTION PERIOD.
 6. TEMPORARY WATER DIVERSIONS (SWALES, BASINS, ETC.) MUST BE USED AS NECESSARY UNTIL AREAS ARE STABILIZED.
 7. PONDS AND SWALES SHALL BE INSTALLED EARLY ON IN THE CONSTRUCTION SEQUENCE (BEFORE ROUGH GRADING THE SITE).
 8. ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTION RUNOFF TO THEM.
 9. PERIODIC INSPECTION AND MAINTENANCE TO MAINTAIN DESIGN INTENT IS REQUIRED.
 10. ALL DISTURBED AREAS DESIGNATED TO BE TURF, SHALL RECEIVE THE REQUIRED AMOUNT OF LOAM (COMPACTED THICKNESS), PRIOR TO FINAL SEEDING AND MULCHING.
 11. IF DURING CONSTRUCTION A WINTER SHUTDOWN IS NECESSARY, THE CONTRACTOR SHALL STABILIZE ALL INCOMPLETE WORK AND PROVIDE FOR SUITABLE METHODS OF DIVERTING RUNOFF IN ORDER TO ELIMINATE SHEET FLOW ACROSS FROZEN SURFACES.
 12. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - A. BASE COURSE GRAVELS ARE INSTALLED IN AREAS TO BE PAVED;
 - B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED; OR
 - D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
 13. ALL DUST SHALL BE CONTROLLED BY THE USE OF WATER IN ACCORDANCE WITH ENV-A 1000.
 14. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION AND SEDIMENT CONTROL DEVICES ARE REQUIRED, THE OWNER SHALL BE REQUIRED TO INSTALL THE NECESSARY DEVICES OR CONSULT WITH THE ENGINEER.
 15. JUTE MATTING INSTALLED TO CONFORM WITH THE RECOMMENDED BEST MANAGEMENT PRACTICE OUTLINED IN VOLUME 3 OF THE NEW HAMPSHIRE STORMWATER MANUAL. EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION" ON ALL 3:1 SLOPES OR GREATER.
 16. ALL ROADWAYS AND PARKING AREAS SHALL BE STABILIZED WITHIN 72 HOURS.
 17. ALL CUT AND FILL SLOPES SHALL BE SEEDDED AND MULCHED WITHIN 72 HOURS.



NO.	DATE	REVISIONS
0	05/23/2022	PROJECT SUBMITTAL
		COMMENTS
		BY
		ID

OWNER & APPLICANT:

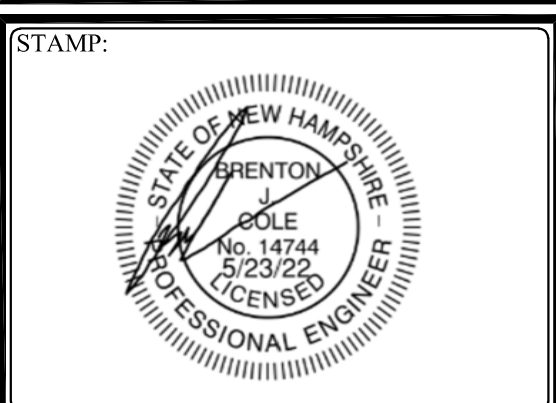
30 WILTON ROAD LLC
55 HIGH STREET
PITTSFIELD, NH 05263
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Manchester,
New Hampshire 03101

603.518.8030

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LOCATION: TAX MAP 6 LOT 14
30 WILTON ROAD
MILFORD, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

PROJECT: STORAGE SENSE -
MILFORD WEST

TITLE: DETAILS

PROJECT No. DATE: 21-0630-1 MAY 23, 2022 SCALE: AS SHOWN

SHEET: 16 OF 17

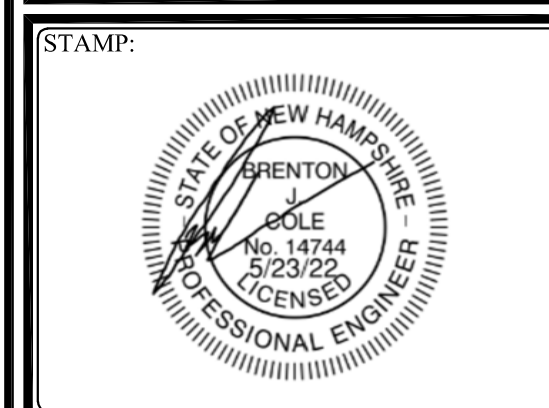
No.	DATE	COMMENTS	BY	
			PROJECT SUBMITTAL	ID
0	05/23/2022			

OWNER & APPLICANT:
30 WILTON ROAD LLC
55 HIGH STREET
PITTSFIELD, NH 03263
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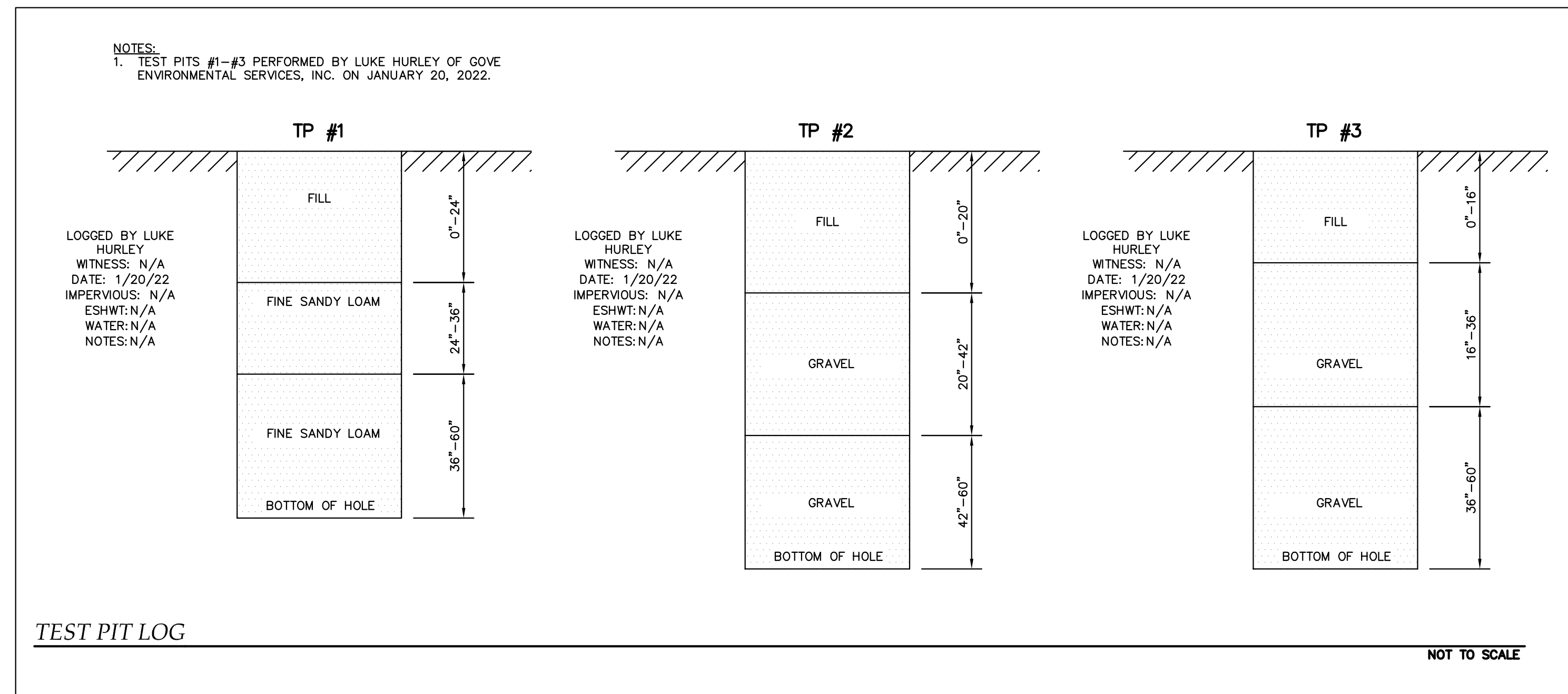


LOCATION:
TAX MAP 6 LOT 14
30 WILTON ROAD
MILFORD, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

PROJECT:
STORAGE SENSE - MILFORD WEST

TITLE:
DETAILS

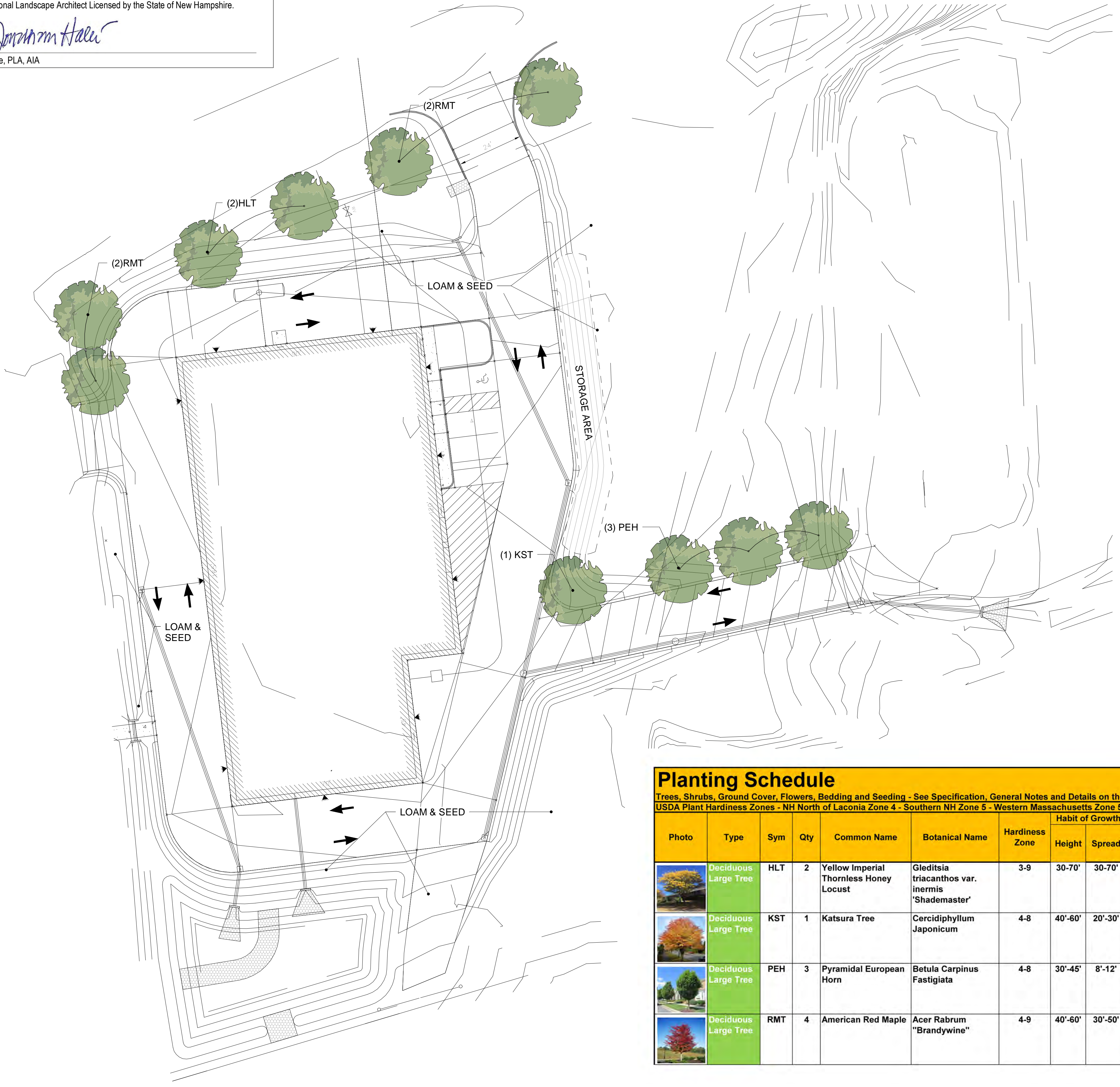
PROJECT No. DATE: 21-0630-1 MAY 23, 2022 SCALE: AS SHOWN
SHEET: 17 OF 17



I, Jonathan Halle, hereby Certify that I am the designer of this Landscape Plan and that I am a Professional Landscape Architect Licensed by the State of New Hampshire.

Jonathan Halle
Jonathan Halle, PLA, AIA

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarter inch = one foot
one quarter inch = one foot
one eighth inch = one foot



Planting Schedule															
Trees, Shrubs, Ground Cover, Flowers, Bedding and Seeding - See Specification, General Notes and Details on the Accompanying Drawings.															
USDA Plant Hardiness Zones - NH North of Laconia Zone 4 - Southern NH Zone 5 - Western Massachusetts Zone 5, - Eastern Massachusetts Zone 6															
Photo	Type	Sym	Qty	Common Name	Botanical Name	Hardiness Zone	Habit of Growth		Sun Exposure	Drought Tolerant	Native New England	Toxicity	Installed Size	Type	Use
							Height	Spread							
	Deciduous Large Tree	HLT	2	Yellow Imperial Thornless Honey Locust	Gleditsia triacanthos var. inermis "Shademaster"	3-9	30'-70'	30'-70'	Full Sun	YES	YES	1 to horses only	3"-3 1/2" cal 10-12ft	B&B	Street Tree
	Deciduous Large Tree	KST	1	Katsura Tree	Cercidiphyllum Japonicum	4-8	40'-60'	20'-30'	Full Sun	NO	NO	NO	3"-3 1/2" cal 10-12ft	B&B	Street Tree
	Deciduous Large Tree	PEH	3	Pyramidal European Horn	Betula Carpinus Fastigiata	4-8	30'-45'	8'-12'	Full Sun	YES	NO	NO	3"-3 1/2" cal 10-12ft	B&B	Street Tree
	Deciduous Large Tree	RMT	4	American Red Maple	Acer Rabrum "Brandywine"	4-9	40'-60'	30'-50'	Full Sun	YES	YES	2	3"-3 1/2" cal 10-12ft	B&B	Street Tree

PLAN KEY:

PROJECT TITLE / ADDRESS:
STORAGE SENSE - MILFORD WEST
30 WILTON ROAD
MILFORD, NH 03055



SCALE: AS NOTED DWN BY: CB
JOB #: 3782 CHK BY: JH
PRINT DATE: 5/19/2022 3:06:16 PM
ISSUE DATE:

NOT FOR CONSTRUCTION
SCHEMATIC DESIGN
LANDSCAPE SITE PLAN

LA101
SHEET NUMBER: 1 OF 4 ARCHITECTURAL

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LANDSCAPE GENERAL SPECIFICATIONS

SECTION 02955 - TREES, SHRUBS AND GROUND COVERS

PART 1: GENERAL

1.1 GENERAL REQUIREMENTS

- A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT, INCLUDING GENERAL CONDITIONS AND DIVISION I SPECIFICATION SECTIONS APPLY TO THIS SECTION.
B. EXAMINE ALL OTHER SECTIONS OF THE SPECIFICATIONS FOR REQUIREMENTS WHICH AFFECT WORK OF THIS SECTION WHETHER OR NOT SUCH WORK IS SPECIFICALLY MENTIONED IN THIS SECTION.
C. COORDINATE WORK WITH THAT OF ALL OTHER TRADES AFFECTING, OR AFFECTED BY WORK OF THIS SECTION. COOPERATE WITH SUCH TRADES TO ASSURE THE STEADY PROGRESS OF ALL WORK UNDER THE CONTRACT.

1.2 SUMMARY

- A. THIS SECTION INCLUDES THE FOLLOWING:
1. FURNISHING ALL PLANTS, MATERIALS, SUPPLIES, LABOR, EQUIPMENT, AND PERFORMING ALL OPERATIONS IN CONNECTION WITH FURNISHING AND PLACEMENT OF TOPSOIL AND PLANTING MIXTURE, PLANTING OF ALL TREES, SHRUBS AND PERENNIAL GROUND COVERS, PRUNING/MULCHING/WATERING OF PLANTS, MAINTENANCE, GUARANTEE AND FINAL CLEAN-UP.
B. RELATED SECTIONS: THE FOLLOWING SECTIONS CONTAIN REQUIREMENTS THAT RELATE TO THIS SECTION: SECTION 02300 "EARTHWORK" SECTION 02950 "SEEDING AND SODDING" LOCAL GOVERNING AUTHORITY AND CODE REQUIREMENTS. ALL NECESSARY CONSTRUCTION PERMITS.

1.3 SUBMITTALS

- A. SAMPLES: BEFORE ANY BARK MULCH IS DELIVERED TO THE JOB SITE, SUBMIT A SAMPLE TO THE LANDSCAPE ARCHITECT FOR THEIR APPROVAL.
B. MATERIALS LIST:
1. BEFORE ANY PLANTING MATERIALS ARE DELIVERED TO THE JOB SITE, SUBMIT TO THE LANDSCAPE ARCHITECT A COMPLETE LIST OF ALL PLANTS AND OTHER ITEMS PROPOSED TO BE INSTALLED.
2. INCLUDE COMPLETE DATA ON SOURCE, SIZE, AND QUALITY.
3. DEMONSTRATE COMPLETE CONFORMANCE WITH THE REQUIREMENTS OF THIS SECTION. THIS SHALL IN NO WAY BE CONSTRUED AS PERMITTING SUBSTITUTION FOR SPECIFIC ITEMS DESCRIBED IN THE PLANS OR THESE SPECIFICATIONS UNLESS THE SUBSTITUTION HAS BEEN APPROVED IN ADVANCE BY THE LANDSCAPE ARCHITECT.
C. AS-BUILT DRAWINGS: DURING THE COURSE OF THE INSTALLATION, CAREFULLY RECORD IN RED LINE ON A PRINT OF THE PLANTING PLANS ALL CHANGES MADE TO THE PLANTING LAYOUT DURING INSTALLATION.
D. CERTIFICATES: ALL CERTIFICATES REQUIRED BY LAW SHALL ACCOMPANY SHIPMENTS. UPON COMPLETION OF THE INSTALLATION, DELIVER ALL CERTIFICATES TO THE LANDSCAPE ARCHITECT.

1.4 QUALITY ASSURANCE

- A. INSTALLER QUALIFICATIONS: PROVIDE AT LEAST ONE PERSON WHO SHALL BE PRESENT AT ALL TIMES DURING EXECUTION OF THIS PORTION OF THE WORK AND WHO SHALL BE THOROUGHLY FAMILIAR WITH THE TYPE OF MATERIALS BEING INSTALLED AND THE BEST METHODS FOR THEIR INSTALLATION AND WHO SHALL DIRECT ALL WORK PERFORMED UNDER THIS SECTION.
B. MATERIAL STANDARDS:
1. ALL PLANTS AND PLANTING MATERIAL SHALL MEET OR EXCEED THE SPECIFICATIONS OF FEDERAL, STATE, AND COUNTY LAWS REQUIRING INSPECTION FOR PLANT DISEASE AND INSECT CONTROL.
2. QUALITY AND SIZE SHALL COMPLY WITH RECOMMENDATIONS AND REQUIREMENTS OF CURRENT EDITION OF ANSI Z60.1 AMERICAN STANDARD FOR NURSERY STOCK. FOR NUMBER ONE GRADE NURSERY STOCK AS ADOPTED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
3. ALL PLANTS SHALL BE TRUE TO NAME AND ONE OF EACH BUNDLE OR LOT SHALL BE TAGGED WITH THE NAME AND SIZE OF THE PLANTS IN ACCORDANCE WITH THE STANDARDS OF PRACTICE OF THE AMERICAN ASSOCIATION OF NURSERYMEN. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES.

1.5 DELIVERY, STORAGE, HANDLING

- A. DELIVERY AND STORAGE:
1. DELIVER ALL ITEMS TO THE SITE IN THEIR ORIGINAL CONTAINERS WITH ALL LABELS INTACT AND LEGIBLE AT TIME OF LANDSCAPE ARCHITECT INSPECTION.
2. IMMEDIATELY REMOVE FROM THE SITE ALL PLANTS WHICH ARE NOT TRUE TO NAME AND ALL MATERIALS WHICH DO NOT COMPLY WITH THE PROVISIONS OF THIS SECTION OF THESE SPECIFICATIONS.
3. ROOT PROTECTION:
a. HANDLE PLANTS AT ALL TIMES IN ACCORDANCE WITH THE BEST HORTICULTURAL PRACTICES SO THAT THE ROOTS OR BALLS ARE ADEQUATELY PROTECTED FROM THE SUN AND DRYING WINDS. NO PLANT SHALL BE BOUND WITH ROPE OR WIRE IN A MANNER THAT WOULD DAMAGE THE BARK, BREAK THE BRANCHES, OR DESTROY ITS NATURAL SHAPE.
4. HANDLING:
a. LIFT AND HANDLE PLANTS FROM THE BOTTOM OF THE BALL OR CONTAINER ONLY. PLANTS HANDLED OTHERWISE WILL BE SUBJECT TO REJECTION. PLANT NO BALLED AND BURLAPPED PLANT WHICH HAS THE BALL CRACKED OR BROKEN WILL BE ACCEPTED. NO BALLED AND BURLAPPED PLANTS USING PLASTIC/POLYESTER BURLAP WILL BE ACCEPTED. PLANT NO CONTAINERIZED OR TUBE-PAK PLANT WHOSE ROOT SYSTEM HAS SEPARATED FROM THE SOIL IN ITS CONTAINER.
5. PROTECTION DURING DELIVERY:
a. TRANSPORT PLANT MATERIAL IN CLOSED VEHICLES OR IN OPEN VEHICLES WITH THE ENTIRE LOAD PROPERLY COVERED FOR PROTECTION FROM DRYING WINDS.
b. PROTECT AFTER DELIVERY:
1. PLANT TREES AND SHRUBS AS SOON AS POSSIBLE AFTER DELIVERY. PLANTS THAT CANNOT BE PLANTED IMMEDIATELY SHALL HAVE THEIR ROOTS KEPT MOIST AND ADEQUATELY PROTECTED UNTIL PLANTED.
2. COVER THE BALLS OF BALLED AND BURLAPPED, CONTAINERIZED, AND TUBE-PAK PLANTS WITH TOPSOIL, OR AN APPROVED MULCH, AND KEEP CONSTANTLY MOIST UNTIL PLANTED.
3. STORE ALL PLANTS IN THE SHADE, OUT OF DIRECT SUNLIGHT AND DRYING WIND.
4. OWNER'S REPRESENTATIVE WILL SELECT STORAGE OR HOLDING AREA AND UPON DELIVERY OF PLANTS, DESIGNATE WHERE CONTRACTOR CAN PROTECT AND MAINTAIN THESE PLANT MATERIALS UNTIL THEY ARE PLANTED.

1.6 SCHEDULES

- A. PLANTING SEASON:
1. PLANTING OPERATIONS FOR DECIDUOUS MATERIALS SHALL TAKE PLACE DURING MARCH 15 TO JUNE 30 FOR SPRING PLANTING AND AUGUST 15TH TO OCTOBER 1 OR UNTIL GROUND FREEZES FOR FALL PLANTING. BARE ROOT DECIDUOUS PLANTING SHALL BE LIMITED TO PLANTING BETWEEN MARCH 10 TO MAY 1.
2. PLANTING OPERATIONS FOR EVERGREEN MATERIAL SHALL BE DURING MARCH 1 THROUGH JUNE 30 FOR SPRING PLANTING AND AUGUST 1 THROUGH SEPTEMBER 15 FOR FALL PLANTING.

1.7 INSPECTION

- A. INSPECTION OF PLANTS:
1. PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH AND UPON DELIVERY FOR CONFORMITY TO SPECIFIED QUALITY, SIZE, AND VARIETY. SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION UPON DELIVERY AT THE SITE OR WHILE WORK IS IN PROGRESS.
2. THE CONTRACTOR WILL INFORM THE LANDSCAPE ARCHITECT THREE BUSINESS DAYS (3) PRIOR TO THE PROPOSED ARRIVAL OF PLANT MATERIAL ON THE JOB SITE.
3. DURING THE TIME PLANT MATERIAL IS BEING INSPECTED, THE CONTRACTOR SHALL PROVIDE A COMPLETE STAKED LAYOUT AND HAVE MANPOWER AND EQUIPMENT AVAILABLE TO UNLOAD, OPEN AND HANDLE PLANT MATERIAL DURING INSPECTION.

PART 2: MATERIALS

2.1 PLANT MATERIALS

- A. GENERAL:
1. PLANT MATERIALS SHALL MEAN TREES AND PLANTS OF ALL DESCRIPTIONS REQUIRED TO BE FURNISHED FOR THE PROJECT, IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. ALL PLANT MATERIALS WILL BE TRUE TO NAME, WHICH SHALL CONFORM TO STANDARDIZED PLANT NAMES OF THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE, AND SHALL BE LEGIBLY TAGGED WITH THE NAME AND SIZE OF THE MATERIAL ACCORDING TO THE GENERAL NURSERY PRACTICE AS RECOMMENDED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
2. ALL PLANTS SHALL BE FIRST-CLASS REPRESENTATIVES OF THEIR NORMAL SPECIES OR VARIETIES. PLANTS SHALL BE SOUND, HEALTHY, AND VIGOROUS, WELL-BRANCHED AND DENSELY FOLIATED WHEN IN LEAF. UNLESS OTHERWISE SPECIFIED, PLANTS SHALL HAVE AVERAGE OR NORMALLY DEVELOPED BRANCH SYSTEMS AND VIGOROUS ROOT SYSTEMS. PLANTS SHALL BE FREE FROM SCALE, SPREADING KNOTS, SUN SCALD INJURIES, ABRASIONS OF THE BARK, OR OTHER OBJECTIONABLE BLEMISHES. WEAK PLANTS WILL NOT BE ACCEPTED. PLANTS MUST SHOW APPEARANCE OF NORMAL HEALTH AND VIGOR IN STRICT ACCORDANCE WITH THESE SPECIFICATIONS. ALL STOCK SHALL BE NURSERY GROWN.
3. PLANTS FURNISHED IN CONTAINERS SHALL HAVE THE ROOTS WELL ESTABLISHED IN THE SOIL MASS AND SHALL HAVE GROWN IN THE CONTAINER FOR AT LEAST ONE (1) GROWING SEASON. CONTAINERS SHALL BE OF A SIZE LARGE ENOUGH TO PROVIDE AN EARTH-ROOT MASS OF ADEQUATE DIAMETER AND DEPTH OF THE STEM DIAMETER AND PLANT HEIGHTS OR SPREAD, AS ESTABLISHED BY ACCEPTED NURSERY PRACTICE. PLANTS, OVER ESTABLISHED IN THE CONTAINER, AS EVIDENCED BY POT BOUND ROOT ENDS, WILL NOT BE ACCEPTED. BARE ROOT MATERIAL WILL BE ACCEPTED ONLY FOR SPRING PLANTING. BARE ROOT STOCK SHALL BE HANDLED ACCORDING TO STANDARD HORTICULTURAL PRACTICE WITH SPECIAL ATTENTION BEING PAID TO PREVENTING PLANT ROOTS FROM DRYING AND PLANTS BEING APPROPRIATELY STORED.
4. PLANTS LARGER THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE LANDSCAPE ARCHITECT.
5. THE HEIGHT OF TREES, MEASURED FROM THE CROWN OF THE ROOTS TO THE TOP OF THE TOP BRANCH AND CALIPER OF THE TRUNK SHALL BE TAKEN 6 INCHES ABOVE THE GROUND UP TO AND INCLUDING 4 INCH CALIPER SIZE, AND 12 INCHES ABOVE THE GROUND FOR LARGER SIZES, AND SHALL NOT BE LESS THAN THE MINIMUM SPECIFIED ON THE PLANT LIST. EXCEPT WHEN A CLUMP IS DESIGNATED, THE TRUNK OF EACH TREE SHALL BE A SINGLE TRUNK GROWING FROM A SINGLE UTILITABLE CROWN OF ROOTS. NO PART OF THE TRUNK SHALL BE CONSPICUOUSLY CROCKED AS COMPARED TO NORMAL TREES OF THE SAME VARIETY. THE TRUNK SHALL BE FREE FROM SUN SCALD, FROST CRACKS OR WOUNDS RESULTING FROM ABRASIONS, FIRE, OR OTHER CAUSES. NO PRUNING WOUNDS SHALL BE PRESENT HAVING A DIAMETER OF MORE THAN TWO (2) INCHES AND SUCH WOUNDS MUST SHOW VIGOROUS BARK ON ALL EDGES. EVERGREEN TREES SHALL BE BRANCHED TO WITHIN ONE FOOT OF THE GROUND.
6. SHRUBS AND PERENNIALS SHALL COMPLY WITH THE SPECIFIED SPREAD, HEIGHT OR CONTAINER SIZE AS SPECIFIED ON THE PLANT LIST. THE MEASUREMENTS FOR HEIGHT ARE TO BE TAKEN FROM THE GROUND LEVEL TO THE AVERAGE HEIGHT OF THE TOP OF THE SHRUB AND NOT THE LONGEST BRANCH. THE THICKNESS OF EACH SHRUB SHALL CORRESPOND TO THE TRADE CLASSIFICATION "NO. 1". SINGLE STEMMED OR THIN PLANTS WILL NOT BE ACCEPTED. THE SIDE BRANCHES MUST BE GENEROUS, WELL-TWIGGED, AND THE PLANT AS A WHOLE WELL-BRANCHED TO THE GROUND. THE PLANTS MUST BE IN A MOST VIGOROUS CONDITION, FREE FROM DEAD WOOD, BRUISES OR OTHER ROOT OR BRANCH INJURIES.
7. ALL PLANT MATERIAL SHALL COMPLY WITH STATE AND FEDERAL LAWS WITH RESPECT TO INSPECTION FOR PLANT DISEASE AND INFECTION. ANY INSPECTION CERTIFICATES REQUIRED BY LAW SHALL ACCOMPANY EACH SHIPMENT.
8. ALL PLANT MATERIAL IS SUBJECT TO LANDSCAPE ARCHITECT'S APPROVAL AND INSPECTION AT ANY PLACE, BEFORE DURING AND/OR AFTER PLANTING. ANY PLANT MATERIAL NOT APPROVED BY THE LANDSCAPE ARCHITECT SHALL BE IMMEDIATELY REMOVED FOR THE SITE.
9. NO PLANT MATERIAL SHALL BE ACCEPTED WITH LOOSE OR BROKEN BALLS, BROKEN CONTAINERS OR TUBE-PAKS

2.3 MULCH

- A. BARK MULCH: ALL BARK MULCH SHALL BE SHREDDED PINE BARK AS LOCALLY OR REGIONALLY MANUFACTURED, OR AN EQUAL APPROVED IN ADVANCE BY THE LANDSCAPE ARCHITECT.

2.4 PLANTING MIXTURE

- A. TOPSOIL: MOST TOPSOIL REQUIRED SHALL BE OBTAINED FROM ON-SITE STOCKPILED MATERIAL. SHOULD ADDITIONAL TOPSOIL BE NEEDED, IT SHALL BE IMPORTED MATERIAL FROM A LOCALLY AVAILABLE SOURCE, CONTAINING NO LOOSE, FRAGILE, AND/OR LARGE LUMPS OF LIMESTONE, STIFF CLAYS, OR HARD LUMPS SHALL BE BROKEN UP TO A DEPTH OF 4 INCHES. FINISH GRADING, GRADE THE AREAS TO FINISH GRADES FILLING AS NEEDED OR REMOVING SURPLUS DIRT AND FLOATING AREAS TO A SMOOTH UNIFORM GRADE. ALL LAWN AREAS SHALL SLOPE TO DRAIN. WHERE NO GRADES ARE SHOWN, AREAS SHALL HAVE A SMOOTH AND CONTINUAL GRADE BETWEEN EXISTING OR FIXED CONTROLS (SUCH AS WALKS, CURBS, OR WALLS). RAKE AND LEVEL AS NECESSARY TO OBTAIN TRUE EVEN LAWN SURFACES. ALL FINISH GRADES SHALL MEET THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE SEED IS SOWN OR SOD IS PLACED.
C. COMPOSTED BARK MULCH: COMPOSTED BARK MULCH SHALL BE 1/4" MINUS, FINE TEXTURED AND WELL COMPOSTED MULCH SUITABLE FOR USE AS A PLANTING MIX AMENDMENT. IT SHALL BE LOCALLY OR REGIONALLY MANUFACTURED, OR AN EQUAL APPROVED IN ADVANCE BY THE LANDSCAPE ARCHITECT.
D. TREES/SHRUB PLANTING MIX: TOPSOIL USED AS FILL AROUND PLANTS SHALL BE MIXED WITH PEAT MOSS AT THE RATE OF THREE PARTS TOPSOIL TO ONE PART PEAT.
E. PERENNIAL/GROUND COVER PLANTING MIX: TOPSOIL USED AS FILL AROUND THESE PLANTS SHALL BE MIXED WITH PEAT MOSS AND COMPOSTED BARK MULCH AT THE RATE OF TWO PARTS TOPSOIL TO ONE PART PEAT TO ONE PART COMPOSTED BARK MULCH. THE ABOVE MIXTURE IS MIXED WITH MAG AMP (W. R. GRACE AND COMPANY, P.O. BOX 338, WEST CHICAGO, ILLINOIS) AT THE RATE OF 10 OUNCES PER CUBIC YARD OF PLANTING MIX.
F. "ROOTS" - ROOT GROWTH ENHANCER: THIS PRODUCT SHALL BE A NATURAL ORGANIC BIOSTIMULANT THAT PROMOTES ROOT GROWTH AND STRESS TOLERANCE IN PLANTS. APPLY TO ALL TREES, SHRUBS, AND PERENNIALS PER MANUFACTURER'S RECOMMENDATIONS.
G. SUPERSORB C: WATER ABSORBENT GRANULES: THIS PRODUCT SHALL BE A COPOLYMER WATER ABSORBENT IN GRANULAR FORM TO BE INCORPORATED IN THE SPECIFIED PLANTING MIXES FOR BOTH TREES/SHRUBS AND PERENNIALS. ITS PURPOSE IS TO IMPROVE THE TOPSOIL'S WATER HOLDING CAPACITY.
H. AGRIFORM FERTILIZER TABLETS: TREES AND SHRUBS SHALL BE FERTILIZED WITH TWO (2) FERTILIZER TABLETS PER PLANTING HOLE. TABLETS SHALL BE 21 GRAM SIZE, OF 20-10-5 ANALYSIS AS MANUFACTURED BY AGRIFORM.

2.5 MISCELLANEOUS MATERIALS

- A. WOOD STAKE: STAKE FOR TREE SUPPORT SHALL BE 2" X 2" X 8'; WOOD STAKES.
B. GUYING WIRE: WIRE SHALL BE NUMBER 12 GAUGE GALVANIZED SOFT STEEL WIRE.
C. HOSE: HOSE FOR COVERING WIRE SHALL BE NEW OR USED TWO PLY RUBBER HOSE NOT LESS THAN 1/2 INCH INSIDE DIAMETER. (PLASTIC "CINCH-TIES" OR EQUIVALENT FASTENING DEVICE MAY BE AN ACCEPTABLE GUY WIRE AND HOSE PROTECTOR SUBSTITUTE)
D. TREE PAINT: TREE PAINT SHALL BE WATERPROOF, ASPHALT BASE PAINT WITH ANTISEPTIC PROPERTIES, MANUFACTURED FOR USE ON TREE WOUNDS; R.I.W. TREE SURGERY PAINT IS TOOCH RESISTANT AND WILL PROTECT TREE WOUNDS FROM FUNGUS GROWTH AND APPROVED EQUAL.
E. ANTI-DESSICCAT: ANTI-DESSICCAT SHALL BE AN EMULSION PERMEABLE ENOUGH TO PERMIT TRANSPIRATION, AND WILL BE USED TO RETARD EXCESS WATER LOSS. MIX IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
F. TREE WRAP: TREE WRAPPING PAPER SHALL BE WATERPROOF CREPE TREE WRAPPING PAPER, AT LEAST 2-1/2 INCHES IN WIDTH, MADE UP OF TWO LAYERS OF CREPE KRAFT PAPER, WEIGHING NOT LESS THAN 30 POUNDS PER ROLL, CEMENTED TOGETHER WITH ASPHALT.
G. TWINE: WRAPPING TWINE USED IN TREE WRAPPING SHALL BE COMPOSED OF A MINIMUM OF TWO PLY JUTE MATERIAL. SYNTHETIC MATERIALS SUCH AS NYLON OR PLASTIC WILL NOT BE PERMITTED.

PART 3: EXECUTION

3.1 SURFACE CONDITIONS

- A. INSPECTION: PRIOR TO ALL WORK OF THIS SECTION, CAREFULLY INSPECT THE INSTALLED WORK OF ALL OTHER TRADES AND VERIFY THAT ALL SUCH WORK IS COMPLETE TO THE POINT WHERE THIS INSTALLATION MAY PROPERLY COMMENCE. DETERMINE LOCATION OF UNDERGROUND UTILITIES AND PERFORM WORK IN A MANNER WHICH WILL AVOID POSSIBLE DAMAGE TO ANY UNINSTALLED UTILITIES.
B. LOCATION:
1. VERIFY THAT PLANTING MAY BE COMPLETED IN ACCORDANCE WITH THE ORIGINAL DESIGN AND THE REFERENCED STANDARDS. STAKE OUT LOCATIONS OF ALL PLANTS AND SECURE THE LANDSCAPE ARCHITECT APPROVAL BEFORE EXCAVATING PLANT PITS.
2. WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, LEDGE, ADVERSE DRAINAGE CONDITIONS, OR OBSTRUCTIONS, NOTIFY THE LANDSCAPE ARCHITECT BEFORE PLANTING.
C. DISCREPANCIES:
1. IN THE EVENT OF DISCREPANCY, IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT.
2. DO NOT PROCEED WITH INSTALLATION IN AREAS OF DISCREPANCY UNTIL ALL SUCH DISCREPANCIES HAVE BEEN FULLY RESOLVED.

3.2 TREE PROTECTION AND REMOVAL

- A. REMOVAL OF TREES:
1. TREE REMOVAL UNDER THIS CONTRACT SHALL BE ACCOMPLISHED AS REQUIRED TO ACCOMMODATE THE SCOPE OF WORK AS INDICATED ON THE SITE PLANS AS PREPARED BY SHERMAN, GREINER, HALL, LTD. AND PROVAN & LORBER, INC. SITE GRADING AND GRUBBING WILL BE ACCOMPLISHED AS DIRECTED IN SECTION 0212 "SITE GRADING". ALL TREES AND STUMPS SHALL BE REMOVED FROM THE AREA TO BE OCCUPIED BY THE NEW PLAYFIELDS, ROADS, SURFACED AREAS AND PLANTED AREAS. REMOVAL OF TREES OUTSIDE THESE AREAS SHALL ONLY BE THOSE AS NOTED, MARKED AND APPROVED BY THE LANDSCAPE ARCHITECT.
2. NO OTHER TREES MAY BE CUT EXCEPT BY PERMISSION OF THE LANDSCAPE ARCHITECT. ALL STUMPS SHALL BE REMOVED.
B. PROTECTION OF TREES:
1. GENERAL PROTECTION: THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF TOPS, TRUNKS, AND ROOTS OF EXISTING TREES ON THE SITE THAT ARE TO REMAIN. EXISTING TREES SUBJECT TO CONSTRUCTION DAMAGE SHALL BE BOXED, FENCED OR OTHERWISE PROTECTED BEFORE ANY WORK IS STARTED. REMOVE BOXING WHEN DIRECTED. DO NOT PERMIT HEAVY EQUIPMENT OR STOCKPILES WITHIN BRANCH SPREAD. REMOVE INTERFERING BRANCHES WITHOUT INJURY TO TRUNKS AND COVER WITH TREE PAINT.
2. GRADING AROUND TREES: WHERE EXCAVATION, FILL OR GRADING IS REQUIRED WITHIN THE BRANCH SPREAD OF TREES THAT ARE TO REMAIN, THE WORK SHALL BE PERFORMED AS FOLLOWS:
C. TRENCING: WHEN TRENCING OCCURS AROUND TREES TO REMAIN, THE TREE ROOTS SHALL NOT BE CUT BUT THE TRENCH SHALL BE TUNNELED UNDER AND AROUND THE ROOTS BY CAREFUL HAND DIGGING AND WITHOUT INJURY TO THE ROOTS.
D. RAISING GRADES: WHERE AT TREES IS BELOW THE NEW FINISHED GRADE, AND FILL NOT EXCEEDING 12 INCHES IS REQUIRED, CLEAN WASHED GRAVEL GRADED FROM 1 INCH TO 2 INCH SIZE SHALL BE PLACED DIRECTLY AROUND THE TREE TRUNK. THE GRAVEL SHALL EXTEND OUT FROM THE TRUNK ON ALL SIDES A MINIMUM OF 18 INCHES AND FINISH APPROXIMATELY 2 INCHES ABOVE THE FINISHED GRADE AT TREE. INSTALL GRAVEL BEFORE ANY EARTH FILL IS PLACED. NEW EARTH FILL SHALL NOT BE LEFT IN CONTACT WITH THE TRUNKS OF ANY TREES REQUIRING FILL.
E. TREE MARKERS: PRIOR TO ANY WORK BEING DONE IN THE IMPACTED ZONE, TREE MARKERS SHALL HAVE AN OPEN DRY WELL OF DURABLE MATERIAL WITHOUT MORTAR SITUATED AT LEAST 24" FROM THE TREE TRUNK. ALL MARKERS TO BE PROPERLY DRAINED. BEFORE FILLS OF OVER 12" ARE MADE UPON THE TREE ROOT AREAS, IT IS ADVISABLE TO SPREAD AT LEAST A 6" LAYER OF BROKEN STONE OR COARSE GRAVEL COVERED BY INVERTED SODS TO FACILITATE PROPER DRAINAGE AND AERATION.
F. LOWERING GRADES: EXISTING TREES IN AREAS WHERE THE NEW FINISHED GRADE IS TO BE LOWERED, SHALL HAVE REGRADING WORK DONE BY HAND TO ELEVATION AS INDICATED. ROOTS AS REQUIRED SHALL BE CUT CLEANLY 3 INCHES BELOW FINISHED GRADE AND SCARS ARE COVERED WITH TREE PAINT. TREES MARKED FOR INJURY TO THAT ARE LOCATED MORE THAN 6" ABOVE PROPOSED GRADES SHALL STAND ON BROAD ROUNDED MOUNDS AND BE GRADED SMOOTHLY INTO THE LOWER LEVEL. EXPOSED OR BROKEN ROOTS SHALL BE CUT CLEAN AND COVERED WITH TOPSOIL.

3.3 PLANTING TREES, SHRUBS AND GROUND COVERS

- A. GENERAL:
1. PLANT NURSERY STOCK IMMEDIATELY UPON DELIVERY TO THE SITE AND APPROVAL BY THE LANDSCAPE ARCHITECT EXCEPT THAT, IF THIS IS NOT FEASIBLE, HEAL-IN ALL BALLED AND BURLAPPED PLANTS AND PROTECT FROM SUN AND WIND.
2. REGULARLY WATER ALL NURSERY STOCK IN CONTAINERS AND TUBE-PAKS AND PLACE THEM IN A COOL AREA PROTECTED FROM SUN AND DRYING WINDS.
B. EXCAVATION OF PLANT HOLES:
1. TREE PITS SHALL HAVE SUBSTANTIALLY VERTICAL SIDES AND HORIZONTAL BOTTOMS. DEPTH OF PIT BELOW FINISH GRADE SHALL BE AT LEAST 9 INCHES (FOR TREES) AND 6 INCHES (FOR SHRUBS) GREATER THAN THE DEPTH OF THE BALL. IN NO CASE SHALL DEPTH OF TREE PITS BE LESS THAN 24 INCHES BELOW FINISHED GRADE. DIAMETER OF PITS FOR ALL TREES SHALL BE AT LEAST 9 INCHES GREATER THAN THE MAXIMUM DIAMETER OF THE TREE BALL OR ROOT SYSTEM AND FOR SHRUBS 6 INCHES.
2. PLANTING POCKETS FOR TUBE-PAK, ONE GALLON CONTAINER SHRUBS, CONTAINERIZED PERENNIAL PLANTS & 1" CALIPER TREES INTENDED FOR "NATURALIZING" FILL AND DISTURBED SLOPES, SHALL BE EXCAVATED SIMILAR AS DESCRIBED ABOVE, BUT TO A DEPTH OF 6" BELOW THE BOTTOM OF THE TUBE-PAK OR CONTAINER AND A MINIMUM OF 12" IN DIAMETER.
C. PLANTING OPERATION:
1. TREES AND SHRUBS SHALL BE SUPPLIED IN SIZES SHOWN ON THE PLANTING PLANS WITH ALL PLANTS BALLED AND BURLAPPED, CONTAINERIZED, OR IN TUBE-PAKS. DURING PLANTING OPERATIONS, THE NURSERY STOCK SHALL NOT BE EXPOSED TO THE SUN, DRYING WINDS, OR WINTER FREEZING.
2. THE SOIL IN THE BOTTOM OF THE HOLE, WHICH HAS BEEN EXCAVATED TO THE PRESCRIBED REQUIREMENTS, SHALL BE LOOSENEED TO A DEPTH OF 3 INCHES AND SOD AND/OR LAWN GRASS SHALL BE PLANTED IN THE CENTER OF THE HOLE TO FORM A COMPACTED MOUND OF SOIL. THE MOUND OF SOIL SHALL BE 2 INCHES ABOVE THE FINISHED GRADE. THE PLANT SHALL BE PLACED ON THIS MOUND OF SOIL AND HELD IN A VERTICAL POSITION. THE PLANT SHALL BE SO SET, BY ADJUSTING THE ELEVATION OF THE MOUND, THAT AFTER SETTLEMENT THE PLANT WILL STAND AT APPROXIMATELY THE SAME DEPTH IT STOOD IN THE NURSERY OR FIELD.
3. THE PLANT HOLE SHALL BE BACKFILLED WITH TOPSOIL, PEAT AND MAG AMP MIXTURE PLACED IN LAYERS AROUND THE ROOTS. EACH LAYER SHALL BE CAREFULLY TAMPED TO FILL ALL VOIDS AND PLACED IN MANNER TO AVOID INJURY TO THE TREE OR DISTURBING THE POSITION OF THE PLANT.
4. BURDAP ROPES OR WIRES SHALL BE REMOVED FROM THE UPPER THIRD OF BALLS. TREES WITH WIRE BASKETS SHALL HAVE THE TOP 12" OF THE WIRE BASKET COMPLETELY REMOVED IF PRACTICAL. REMOVAL OF BASKET WIRE SHALL BE DONE WITH BOLT CUTTER OR SIMILAR DEVICE AND NOT BEFORE THE BOTTOM HALF OF PLANT HOLE HAS BEEN BACKFILLED AND TAMPED SO AS TO PREVENT THE BALL FROM BREAKING APART OR LOOSENING DURING THIS OPERATION. UNITE AND REMOVE ALL ROPES AROUND TRUNK.
5. WHEN APPROXIMATELY TWO-THIRDS OF THE PLANT HOLE HAS BEEN BACKFILLED, THE HOLE SHALL BE FILLED WITH WATER AND THE SOIL ALLOWED TO SETTLE AROUND THE ROOTS. AFTER THE WATER HAS BEEN ABSORBED, THE PLANT HOLE SHALL BE FILLED WITH TOPSOIL AND TAMPED LIGHTLY TO GRADE. ANY SETTLEMENT SHALL BE BROUGHT TO GRADE WITH TOPSOIL.
6. ALL PLANTS SHALL BE SET PLUMB AND STRAIGHT, AND AT SUCH A LEVEL THAT, AFTER SETTLEMENT, A NORMAL OR NATURAL RELATIONSHIP OF THE TRUNK CROWN OF THE PLANT WITH THE GROUND SURFACE WILL BE ESTABLISHED. PLANTS SHALL BE LOCATED IN THE CENTER OF THE PIT. THE SURFACE ABOUT THE PLANT SHALL BE SMOOTH AND FORMED TO A CUP-SHAPED DEPRESSION ABOUT THE STEM OR TRUNK SO AS TO HOLD WATER. ONCE THIS CUP-SHAPED DEPRESSION HAS BEEN FORMED, THEN APPLY THE TOPSOIL GROWTH ENHANCER/BIOSTIMULANT, PER MANUFACTURER'S RECOMMENDATIONS, TO ALL TREES, SHRUBS AND PERENNIALS PRIOR TO MULCHING. UPON COMPLETION OF THE PLANTING, ALL SURPLUS SUBSOIL AND WASTE MATERIALS SHALL BE REMOVED.
7. FOR PLANTS ON LEVEL GROUND OR SLIGHT SLOPES, THE CONTRACTOR SHALL FORM AND LEAVE A SHALLOW BASIN 1/4" LARGER THAN THE DIAMETER OF THE PLANT AROUND EACH PLANT. AFTER PLANTING, CULTIVATE THE SOIL IN THE SHRUB BED BETWEEN TREE/SHRUB PITS, RAKE SMOOTH AND OUTLINE AS PER PLANS.
8. IN CASE OF PLANTING IN THE OPEN ON HOT DAYS, SHORTEN THE TIME BETWEEN PLANTING AND WATERING.

3.4 SEED BED PREPARATION

- A. SUB GRADE PREPARATION: SEED BED PREPARATION SHALL PERTAIN TO THE PREPARATION OF THE SURFACE OF THE GROUND TO RECEIVE THE SEED. THE GROUND SHALL BE HAND OR MACHINE RAKED SO AS TO REMOVE ALL DEBRIS, CLODS, STONES, OR OTHER FOREIGN MATTER LARGER THAN 1 INCH, TO A DEPTH OF 4 INCHES. PRIOR TO DUMPING AND SPREADING THE SEED, THE GROUND SHALL BE SCARED TO A MINIMUM DEPTH OF 2 INCHES TO FACILITATE BONDING OF THE SEED TO THE GROUND SURFACE. WHERE SUB GRADES HAVE BEEN COMPACTED ARTIFICIALLY SCARIFY TO A DEPTH OF 4 INCHES. PRIOR TO SPREADING TOPSOIL, ALL SUB GRADES SHALL BE GRADED EVENLY ACCORDING TO THE CONTRACT DOCUMENTS, SUCH DEBRIS, CLODS, ROCKS, AND OTHER MATERIAL SO REMOVED SHALL BE DISPOSED OF AS APPROVED BY THE LANDSCAPE ARCHITECT/OWNER'S REPRESENTATIVE. SEED BED PREPARATION SHALL NOT COMMENCE UNTIL THE MOISTURE CONDITIONS MAKE THE GROUND AREA AND SOIL FRAGILE.
B. PREPARING UNDISTURBED AREAS: AREAS TO BE SEEDED, WHICH HAVE NOT BEEN DISTURBED BY SITE GRADING OR TOPSOIL STRIPPING OPERATIONS, SHALL BE MOWED AND RAKED PRIOR TO TILLING AND TOP-SOLLING OPERATIONS. TILLAGE OF THE EXISTING VEGETATION INTO THE GROUND WILL NOT BE ACCEPTED.

3.5 TOPSOIL PLACEMENT

- A. SPREADING: TOPSOIL SHALL BE SPREAD EVENLY ON THE PREPARED AREAS TO A MINIMUM DEPTH OF 6 INCHES AFTER MACHINE COMPACTION. SPREADING SHALL NOT BE DONE WHEN THE GROUND OR TOPSOIL IS FROZEN OR EXCESSIVELY WET. AFTER SPREADING, ANY LARGE, STIFF CLODS OR HARD LUMPS SHALL BE BROKEN UP AND THE GROUND SHALL BE RAKED TO REMOVE ALL DEBRIS, STONES, AND FOREIGN MATTER LARGER THAN 1 INCH TO A DEPTH OF 4 INCHES.
B. FINISH GRADING: GRADE THE AREAS TO FINISH GRADES FILLING AS NEEDED OR REMOVING SURPLUS DIRT AND FLOATING AREAS TO A SMOOTH UNIFORM GRADE. ALL LAWN AREAS SHALL SLOPE TO DRAIN. WHERE NO GRADES ARE SHOWN, AREAS SHALL HAVE A SMOOTH AND CONTINUAL GRADE BETWEEN EXISTING OR FIXED CONTROLS (SUCH AS WALKS, CURBS, OR WALLS). RAKE AND LEVEL AS NECESSARY TO OBTAIN TRUE EVEN LAWN SURFACES. ALL FINISH GRADES SHALL MEET THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE SEED IS SOWN OR SOD IS PLACED.
C. SEED BED PREPARATION: AFTER FINISH GRADING AND JUST BEFORE SEEDING, THE AREAS TO BE SEEDED SHALL BE LOOSENEED TO PROVIDE A ROUGH, FIRM BUT FINELY PERMULVERIZED SEED BED. THE INTENT IS A TEXTURE CAPABLE OF RETAINING WATER, SEED, AND FERTILIZER WHILE REMAINING STABLE AND ALLOWING SEED TIME TO GERMINATE. SEED SHALL BE APPLIED TO THE CONDITIONED SEED BED NOT MORE THAN 48 HOURS AFTER THE SEED BED HAS BEEN PREPARED.
D. WATER: IF THERE HAS BEEN A TIME LAPSE BETWEEN THE PLACEMENT OF TOPSOIL AND SEEDING OPERATIONS TO ALLOW IT TO BECOME SETTLED AND COMPACTED ON THE SURFACE, THE AREA TO BE PLANTED WITH SEED SHALL BE THOROUGHLY HARROWED, WORKED TO A DEPTH OF 4 INCHES SO AS TO PROVIDE A SURFACE OF SUCH CONDITION THAT IT WILL ALLOW HAND RAKING AND APPLICATION OF THE SEED IN COMPLIANCE WITH THESE SPECIFICATIONS.
E. FERTILIZER/SOIL AMENDMENTS: APPLICATION OF FERTILIZER WILL BE IN 2 STAGES. TWO WEEKS PRIOR TO APPLICATION OF SEED, FERTILIZER SHALL BE APPLIED AT THE RATE OF 1 LBS/1000 S.F. FOR TURF AREAS. FERTILIZER SHALL BE APPLIED BY BROADCASTING OR DRILL METHODS; IT SHALL BE APPLIED SEPARATELY FROM THE SEED AND MIXED INTO THE SOIL TO A MINIMUM DEPTH OF 2 INCHES AND MAY BE INCORPORATED AS PART OF THE TOPSOIL PLACEMENT AND SEED BED PREPARATION OPERATIONS. SPRINKLE IMMEDIATELY AFTER INITIAL APPLICATION OF THE FERTILIZER WITH A FINE SPRAY UNTIL GROUND IS THOROUGHLY SATURATED, WITH PARTICULAR CARE TO AVOID RUNOFF ON SLOPING AREAS.
1. THE 2ND APPLICATION WILL FOLLOW THE FOLLOWING SEASON WITHIN THE SPECIFIED WARRANTY PERIOD AT A RATE DETERMINED BY SOIL TEST RESULTS FOR BOTH TURF AND NATIVE GRASS W/LD/LOWER AREAS.
2. APPLICATION OF SUPERPHOSPHATE AND GROUND LIME/STONE SHALL BE APPLIED AT RATES DETERMINED BY SOILS TEST RESULTS.
3. SEEDING: IMMEDIATELY PRIOR TO THE APPLICATION OF THE SEED, THE SOIL SHALL BE LOOSE TO A DEPTH OF AT LEAST 1 INCH AND FREE FROM ALL MATERIAL AS SPECIFIED. IF SOIL IS TOO LOOSE OR DRY FOR GOOD HANDLING, IT SHOULD BE MOISTENED AND ROLLED LIGHTLY.
4. SEEDING SHALL BE DONE WITHIN THE SPECIFIED TIME PERIODS AND AT THE FOLLOWING RATES:
a. FINE LAWN SEED SHALL BE SOWN AT A RATE OF 3.0 POUNDS PER 1000 SQUARE FEET AND SHALL BE PLANTED IN THE SPRING FROM APRIL 1ST TO MAY 30TH OR IN THE FALL FROM AUGUST 16TH TO OCTOBER 1ST.
b. NATIVE SEED MIX SHALL BE SOWN AT A RATE OF 5.0 POUNDS PER 1000 SQUARE FEET AND SHALL BE PLANTED IN THE SPRING FROM APRIL 1ST TO MAY 30TH OR IN THE FALL FROM AUGUST 16TH TO OCTOBER 1ST.
5. METHODS: SEEDING BY DRILL IS PREFERABLE, HOWEVER, HYDRAULIC SEEDING OR BROADCASTING WILL BE PERMITTED. BROADCAST SEEDING AND HYDRAULIC SEEDING SHALL NOT BE USED DURING ADVERSE WEATHER. AREAS SOWN BY HYDRAULIC OR BROADCAST METHODS WILL BE VISUALLY INSPECTED FOR UNIFORMITY OF APPLICATION. AREAS WHICH FAIL TO REVEAL AN AVERAGE OF TWO SEEDS PER SQUARE INCH WILL BE RE-SOWN AT NO ADDITIONAL EXPENSE TO THE OWNER. THE APPLIED SEED, REGARDLESS OF APPLICATION, SHALL NOT BE COVERED BY A SOIL THICKNESS NO GREATER THAN 1/2 INCH.
a. SEEDING BY DRILL: SEEDING EQUIPMENT USED FOR APPLYING GRASS SEED MUST BE DESIGNED, MODIFIED, OR EQUIPPED TO REGULATE THE APPLICATION RATE AND PLANTING DEPTH OF GRASS SEED. SEED MUST BE UNIFORMLY DISTRIBUTED IN THE DRILL HOPPER DURING THE DRILLING OPERATION. ALL GRASS ESTABLISHMENT EQUIPMENT SHALL BE OPERATED PERPENDICULAR TO THE SLOPE DRAINAGE. A DRILL SHALL BE NO WIDER THAN THE WIDTH OF THE AREA TO BE SO OPERATED. THE ROWS OF PLANTED SEEDS SHALL BE A MAXIMUM OF 8 INCHES APART AND SHALL BE AT RIGHT ANGLES TO THE FINISHED SLOPES.
b. BROADCAST SEEDING: WHEN SEED IS SOWN BY BROADCASTING, EXERCISE GREAT CARE THAT A UNIFORM DISTRIBUTION OF SEED IS OBTAINED. SEEDING SHALL BE DONE ON A STILL DAY USING A HOPPER TYPE SEEDER WITH ONE HALF OF THE SEED FOR EACH AREA BEING SOWN AT RIGHT ANGLES TO THE OTHER HALF. SEED DISTRIBUTION BY BROADCASTING SHALL BE COVERED WITH 1/4 TO 1/2 INCH OF SOIL. THE SEED MAY BE COVERED BY RAKING, DRAGGING, OR BY APPROPRIATE MECHANICAL MEANS.
c. HYDRAULIC SEEDING: WHEN HYDRAULIC SEED IS USED, SEED AND MULCH SHALL BE APPLIED IN SEPARATE AND DISTINCT OPERATIONS EXCEPT FOR THE FOLLOWING SEED PREPARATION:
6. THE CONTRACTOR MUST PROVIDE ONE POUND OF MULCH PER EACH THREE GALLONS OF WATER IN THE HYDROSEEDER AS A CUSHION AGAINST SEED DAMAGE. THE MULCH USED AS A CUSHION MAY BE PART OF THE TOTAL REQUIRED MULCH WITH THE REMAINDER APPLIED AFTER THE SEED IS METERING DURING APPLICATION.

3.6 MULCHING

- A. MULCHING:
1. ALL TREES AND SHRUB BEDS WILL BE CULTIVATED FOLLOWING THE GENERAL SHAPE OF THE BEDS AS INDICATED ON THE PLANS. FORM A SAUCER AROUND THE TOP OF THE PLANTING PIT TO HELP HOLD WATER DURING WATERING AND FORM THE OUTLINE FOR MULCHING.
2. APPLY THE SHREDDED BARK MULCH TO A DEPTH OF 4", EVENLY SPREAD OVER THE ENTIRE AREA OF EACH PLANTING PIT.
3. THOROUGHLY SOAK ALL MULCH AREAS. AFTER WATERING, RAKE MULCHED AREAS AND LEAVE IN A COMPLETED AND FINISHED CONDITION. THOROUGHLY SOAK ALL MULCH AREAS. AFTER WATERING, RAKE MULCHED AREAS AND LEAVE IN A COMPLETED AND FINISHED CONDITION.
B. MULCHING:
1. EACH TREE AND SHRUB BEDS WILL BE CULTIVATED FOLLOWING THE GENERAL SHAPE OF THE BEDS AS INDICATED ON THE PLANS. FORM A SAUCER AROUND THE TOP OF THE PLANTING PIT TO HELP HOLD WATER DURING WATERING AND FORM THE OUTLINE FOR MULCHING.
2. APPLY THE SHREDDED BARK MULCH TO A DEPTH OF 4", EVENLY SPREAD OVER THE ENTIRE AREA OF EACH PLANTING PIT.
3. THOROUGHLY SOAK ALL MULCH AREAS. AFTER WATERING, RAKE MULCHED AREAS AND LEAVE IN A COMPLETED AND FINISHED CONDITION. THOROUGHLY SOAK ALL MULCH AREAS. AFTER WATERING, RAKE MULCHED AREAS AND LEAVE IN A COMPLETED AND FINISHED CONDITION.
C. STAKING, GUYING, AND WRAPPING
A. STAKING AND GUYING:
1. TREES, GREATER THAN 1-1/2" IN CALIPER, SHALL BE STAKED IMMEDIATELY AFTER PLANTING. GUY WIRES SHALL BE ENCASED IN HOSE TO PREVENT DIRECT CONTACT WITH BARK OF THE TREE OR IT SHALL BE PLACED AROUND THE TRUNK IN A SINGLE LOOP. WIRES SHALL BE TIGHTENED AND KEPT TAUNT BY TWISTING THE STRANDS TOGETHER OR WITH TURNBUCKLES.
2. WRAP TREES IMMEDIATELY AFTER PLANTING, BUT NOT BEFORE THE CONDITION OF THE TRUNKS HAS BEEN INSPECTED AND APPROVED. CAREFULLY WRAP THE TRUNKS OF DECIDUOUS TREES WITH TREE WRAPPING PAPER. BEGIN THE WRAPPER AT THE BASE OF THE TRUNK JUST ABOVE THE ROOTS AND BELOW THE NORMAL GROUND LINE, AND EXTEND WRAPPING UPWARD IN SPIRAL MANNER WITH AN OVERLAP OF ONE-HALF (1/2) THE WIDTH OF THE PAPER STRIP. COVER WITH SOIL THE PORTION OF THE WRAPPING BELOW THE FINISHED GRADE. THE PAPER SHALL BE HELD IN PLACE WITH APPROVED TWINE OR TAPE. TIE THE TWINE AROUND THE TREE IN AT LEAST THREE PLACES, IN ADDITION TO THE TOP AND BOTTOM.
3. TREE GUYING AND STAKING SHALL BE AS DETAILED AS PER PROJECT PLANS AND COMPLETED IMMEDIATELY AFTER PLANTING.

3.7 STAKING, GUYING, AND WRAPPING

- A. STAKING AND GUYING:
1. TREES, GREATER THAN 1-1/2" IN CALIPER, SHALL BE STAKED IMMEDIATELY AFTER PLANTING. GUY WIRES SHALL BE ENCASED IN HOSE TO PREVENT DIRECT CONTACT WITH BARK OF THE TREE OR IT SHALL BE PLACED AROUND THE TRUNK IN A SINGLE LOOP. WIRES SHALL BE TIGHTENED AND KEPT TAUNT BY TWISTING THE STRANDS TOGETHER OR WITH TURNBUCKLES.
2. WRAP TREES IMMEDIATELY AFTER PLANTING, BUT NOT BEFORE THE CONDITION OF THE TRUNKS HAS BEEN INSPECTED AND APPROVED. CAREFULLY WRAP THE TRUNKS OF DECIDUOUS TREES WITH TREE WRAPPING PAPER. BEGIN THE WRAPPER AT THE BASE OF THE TRUNK JUST ABOVE THE ROOTS AND BELOW THE NORMAL GROUND LINE, AND EXTEND WRAPPING UPWARD IN SPIRAL MANNER WITH AN OVERLAP OF ONE-HALF (1/2) THE WIDTH OF THE PAPER STRIP. COVER WITH SOIL THE PORTION OF THE WRAPPING BELOW THE FINISHED GRADE. THE PAPER SHALL BE HELD IN PLACE WITH APPROVED TWINE OR TAPE. TIE THE TWINE AROUND THE TREE IN AT LEAST THREE PLACES, IN ADDITION TO THE TOP AND BOTTOM.
3. TREE GUYING AND STAKING SHALL BE AS DETAILED AS PER PROJECT PLANS AND COMPLETED IMMEDIATELY AFTER PLANTING.

3.8 PRUNING

- A. GENERAL:
1. EACH TREE SHALL BE PRUNED IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICE TO PRESERVE NATURAL CHARACTER OF PLANT. THE OBJECTIVE IS TO PRESERVE A SHAPE AND FORM REPRESENTATIVE OF THE SPECIES. PRUNING SHALL BE DONE WITH CLEAN, SHARP TOOLS.
B. PRUNING:
1. ALL DEAD WOOD, SUCKERS, BADLY BRUISED OR BROKEN BRANCHES SHALL BE REMOVED. THE TOPS OF DECIDUOUS PLANTS SHALL BE PRUNED EITHER BEFORE OR AFTER PLANTING TO AVOID ROOT LOSS DUE TO TRANSPIRATION. THIS SHALL CONSIST OF REMOVING ONE OR TWO INCHES OF THE TOP OF THE TREE. HEADING BACK THE STEMS AND TOP BRANCHES, AND SHALL BE DONE SO THAT THE PLANT RETAINS ITS NATURAL FORM. EXCEPT WHEN HEADING BACK, ALL CUTS SHALL BE MADE FLUSH WITH THE TRUNK OR BRANCH, NEVER CUT A LEADER.
2. CUTS OVER 1/2 INCH IN DIAMETER SHALL BE PAINTED WITH AN APPROVED TREE PAINT. PAINT SHALL COVER ALL EXPOSED CAMBIAL AS WELL AS OTHER EXPOSED LIVING TISSUE. PAINT SHALL BE WATERPROOF, ADHESIVE AND ELASTIC, ANTISEPTIC, FREE FROM KEROSENE, COAL TAR CREOSOTE OR ANY OTHER MATERIAL INJURIOUS TO THE PLANT. PAINT SHALL BE APPLIED IMMEDIATELY AFTER SEEDING OR MULCHING. USE WORKYARD OR APPROVED EQUAL.
3. TREES THAT HAVE BEEN SO BADLY PRUNED AS TO SPOIL THEIR REPRESENTATIVE FORM AND USEFULNESS SHALL BE REMOVED AND REPLACED.

3.9 WATERING

- A. ALL PLANTS SHALL BE WATERED TWICE WITHIN THE FIRST 24 HOURS OF THE TIME OF PLANTING, AND ALL PLANTS DURING THE MAINTENANCE PERIOD SHALL BE WATERED AT LEAST TWICE EACH WEEK. AT EACH WATERING THE SOIL AROUND EACH TREE OR SHRUB SHALL BE THOROUGHLY SATURATED. IF SUFFICIENT MOISTURE IS RETAINED IN THE SOIL AS DETERMINED BY THE LANDSCAPE ARCHITECT, THE REQUIRED WATERING MAY BE REDUCED.

3.10 INSPECTION FOR ACCEPTANCE AND CLEAN-UP

- A. INSPECTION:
1. IN ADDITION TO THE NORMAL PROGRESS INSPECTIONS, SCHEDULE AND CONDUCT THE FOLLOWING FORMAL INSPECTIONS, GIVING THE LANDSCAPE ARCHITECT AT LEAST 24 HOURS PRIOR NOTICE OF READINESS FOR INSPECTION.
2. INSPECTION OF PLANTS IN CONTAINERS PRIOR TO PLANTING.
3. INSPECTION OF PLANT LOCATIONS, TO VERIFY COMPLIANCE WITH THE PLANS.
4. FINAL INSPECTION AFTER COMPLETION OF PLANTING. SCHEDULE THIS INSPECTION SUFFICIENTLY IN ADVANCE, AND IN COOPERATION WITH THE LANDSCAPE ARCHITECT SO THAT FINAL INSPECTION MAY BE CONDUCTED WITHIN 24 HOURS AFTER COMPLETION OF PLANTING.
5. FINAL INSPECTION AT THE END OF THE MAINTENANCE PERIOD, PROVIDED THAT ALL PREVIOUS DEFICIENCIES HAVE BEEN CORRECTED.
6. THE LANDSCAPE ARCHITECT WILL INSPECT ALL WORK FOR ACCEPTANCE UPON WRITTEN REQUEST OF THIS SUBCONTRACTOR.
7. ACCEPTANCE OF LAWN SHALL BE GRANTED FOR THE WORK IN ITS ENTIRETY. NO PARTIAL ACCEPTANCE SHALL BE GIVEN.
8. ACCEPTANCE OF LAWN SHALL BE GRANTED FOR THE WORK IN ITS ENTIRETY. NO PARTIAL ACCEPTANCE SHALL BE GIVEN.
9. ACCEPTANCE OF LAWN SHALL BE GRANTED FOR THE WORK IN ITS ENTIRETY. NO PARTIAL ACCEPTANCE SHALL BE GIVEN.
10. NO LAWN AREAS SHALL EXHIBIT SIGNS OF DAMAGE FROM EROSION, WASHOUTS, GULLIES OR OTHER CAUSES.
11. BUILDING AND PAVEMENT SURFACES ADJACENT TO LAWN AREAS SHALL BE CLEAN AND FREE OF SPILLS OR OVERSPRAY FROM PLACING OR HANDLING OF TOPSOIL AND SEEDING OPERATIONS.
B. ACCEPTANCE:
1. UPON WRITTEN REQUEST OF THE CONTRACTOR, THE LANDSCAPE ARCHITECT SHALL INSPECT ALL LAWN AREAS TO DETERMINE COMPLETION OF THE CONTRACT WORK. THIS

LANDSCAPE GENERAL SPECIFICATIONS, CONT.

- B. SOD:** UPON DELIVERY OF SOD TO THE WORK SITE, USE ALL MEANS NECESSARY TO PROTECT AND MAINTAIN THE SOD BEFORE, DURING AND AFTER INSTALLATION. DELIVERY OF SOD SHALL BE CAREFULLY COORDINATED SO ITS PLACEMENT CAN PROCEED DIRECTLY AFTER ITS ARRIVAL. SOD SHALL BE INSTALLED ON SITE NO MORE THAN 24 HOURS AFTER CUTTING.
- C. FERTILIZER/LIME:** FERTILIZER AND LIME SHALL BE DELIVERED TO THE SITE IN THE ORIGINAL, UNOPENED CONTAINERS BEARING THE MANUFACTURER'S GUARANTEED CHEMICAL ANALYSIS NAME, TRADE MARK, AND CONFORMANCE WITH STATE AND FEDERAL LAWS. IN LIEU OF CONTAINERS, BOTH MATERIALS MAY BE FURNISHED IN BULK AND A CERTIFICATE INDICATING THE ABOVE INFORMATION SHALL ACCOMPANY EACH DELIVERY.
- D. STORAGE:** SEED, HYDROMULCH, HYDROMULCH BINDER, FERTILIZER AND LIME SHALL BE KEPT IN DRY, UNFROZEN AND FREE FLOWING. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY MATERIAL WHICH HAS BECOME CAKED FOR OTHERWISE DAMAGED OR DOES NOT MEET SPECIFIED REQUIREMENTS.
- E. REPLACEMENTS:** IN THE EVENT OF REJECTION OF THE SEED, IMMEDIATELY MAKE ALL REPLACEMENTS NECESSARY TO THE APPROVAL OF THE LANDSCAPE ARCHITECT AND AT NO ADDITIONAL COST TO THE OWNER.
- F. SCHEDULES:**
- SEASONAL LIMITATIONS CONDUCT SEEDING OPERATIONS DURING THE SPECIFIED TIME PERIODS. IF SPECIAL CONDITIONS EXIST THAT MAY WARRANT A VARIANCE IN THE SPECIFIED PLANT DATES OR CONDITIONS, A WRITTEN REQUEST SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT STATING THE SPECIAL CONDITIONS AND PROPOSED VARIANCE.
- G. NOTICE TO PROCEED:**
- THE CONTRACTOR SHALL NOT PROCEED WITH SEEDING AND SOD PLACEMENT OPERATIONS UNTIL THE IRRIGATION SYSTEM HAS BEEN TESTED AND APPROVED.

PART 2: MATERIALS

- 2.1 TOPSOIL**
- A. TOPSOIL REQUIRED SHALL BE OBTAINED FROM ON-SITE STOCKPILED MATERIAL WHICH WILL BE PLACED BY THE SITE CONTRACTOR. SHOULD ADDITIONAL TOPSOIL BE NEEDED TO BRING LANDSCAPE AREAS UP TO GRADE, THEN IT SHALL BE FURNISHED AND PLACED BY THE SITE CONTRACTOR, WITH IMPORTED MATERIAL FROM A LOCALLY APPROVED SOURCE.
- B. TOPSOIL SHALL BE A FINE SANDY LOAM OR A SANDY LOAM AS DETERMINED BY MECHANICAL ANALYSIS AND BASED ON THE "USDA" CLASSIFICATION SYSTEM. IT SHALL BE OF UNIFORM COMPOSITION, WITHOUT ADMIXTURE OF SUBSOIL, LOOSE, FRIABLE, AND SHALL CONTAIN ORDINARY AMOUNT OF HUMUS. IT SHALL CONTAIN NO LUMPS OF SOIL, ROCKS LARGER THAN 1 INCH, OR STICKS, OR ROOTS, AND OTHER DEBRIS. IT SHALL BE SUFFICIENTLY FERTILE TO SUSTAIN NORMAL HEALTHY LAWN GROWTH AND SHALL NOT HAVE A PH VALUE HIGHER THAN 7.0 OR LOWER THAN 6.5. THE TOPSOIL SHALL BE DELIVERED IN AN UNFROZEN AND NON-MUDDY CONDITION AND MUST MEET THE APPROVAL OF THE LANDSCAPE ARCHITECT.
- C. THE LOAM PLACED IN LANDSCAPE AREAS ON THE SITE MUST BE TESTED AND AMENDED AS RECOMMENDED BY SOIL TESTING FOR LAWNS AND PLANTING. THE COST OF ANY AMENDMENT TO THE LOAM AND TOPSOIL SHALL BE THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY. THE SITE CONTRACTOR SHALL FURNISH ADDITIONAL TOPSOIL AS REQUIRED.

- 2.2 SEED**
- A. GENERAL:
- CONTRACTOR SHALL SUBMIT CERTIFICATION TAGS FOR APPROVAL. ALL GRASS SEED SHALL BE:
 - FREE FROM NOXIOUS WEED SEEDS AND RECLEANED GRADE A RECENT CROP SEED
 - TREATED WITH APPROPRIATE FUNGICIDE
 - DELIVERED TO THE SITE IN SEALED CONTAINERS WITH DEALER GUARANTEED ANALYSIS.
- B. FINE LAWN SEED MIXTURE:
- ALL SEEDED, FINE LAWN AREAS AND INTENDED FOR THE PLAYFIELD AREAS AS DESIGNATED ON THE PLANS, SHALL BE SEEDDED WITH THE MIXTURE HEREIN SPECIFIED:

NAME OF GRASS	PROPORTION BY WEIGHT
CLASSIC KENTUCKY BLUEGRASS	20%
KENTUCKY BLUEGRASS	20%
PERENNIAL RYEGRASS	20%
SR4200 PERENNIAL RYEGRASS	15%
SHADOW 5 CHEWINGS FESCUE	10%
SHADEMASTER RED FESCUE	10%
SR5000 CHEWINGS FESCUE	5%

- C. NATIVE SEED MIXTURE:
- FOR ALL TURF AREAS NOT DESIGNATED ON THE PLANS FOR USE AS FINE LAWN ON THE PLAYFIELD AREAS, SHALL BE SEEDDED WITH THE MIXTURE HEREIN SPECIFIED:
- | NAME OF GRASS | PROPORTION BY WEIGHT |
|---------------------|----------------------|
| TALL FESCUE | 53% |
| CREeping RED FESCUE | 41% |
| REDFOP | 6% |
- ALL SEED USED SHALL MEET THE FOLLOWING MINIMUM STANDARDS:
 - PURITY 95%
 - GERMINATION 85%

- 2.3 SOD**
- A. ALL SOD SHALL BE WELL ESTABLISHED MOWN LAWN GRASS. IT SHALL BE VIGOROUS, WELL ROOTED, HEALTHY TURF FREE FROM DISEASE, INSECT PESTS, WEEDS AND OTHER GRASSES, STONES AND ANY OTHER HARMFUL OR DELETERIOUS MATTER.
- B. IT SHALL HAVE BEEN GROWN FROM A SEED MIXTURE IDENTICAL TO THAT SPECIFIED FOR THE FINE LAWN SEED MIXTURE SPECIFIED ABOVE. THIS SOD IS AVAILABLE FOR GOLD STAR SOD FARMS, CANTERBURY, NH. NOT MORE THAN 5% WEED AND UNDESIRABLE GRASSES SHALL BE ALLOWED.
- C. SOD SHALL BE ENCASED IN A MINERAL BACKED SOD GROWN IN THE NEW ENGLAND REGION. IT SHALL BE CUT IN UNIFORM, 1/4" WIDE STRIPS, 3/4" IN THICKNESS WITH CLEAN, CUT EDGES. SOD SHALL BE ROLLED OR FOLDED PRIOR TO LIFTING AND HANDLING TO PREVENT TEARING, BREAKING, DRYING AND ANY OTHER DAMAGE.

- 2.4 SOIL AMENDMENTS**
- A. FERTILIZER:
- FERTILIZER TO BE SPREAD ON AREAS TO BE SEEDDED SHALL BE COMMERCIALY PREPARED AND SHALL CONTAIN THE FOLLOWING PERCENTAGES BY WEIGHT:
 - LAWN SEED AND SOD AREAS:
 - 16% NITROGEN
 - 16% PHOSPHORIC ACID
 - 16% POTASH
 - 5% ZINC
 - USE FERTILIZER PERCENTAGE FOR ESTIMATING PURPOSES ONLY. AFTER ON-SITE, STOCKPILED TOPSOIL HAS BEEN PLACED, THE CONTRACTOR SHALL SUBMIT A

LABORATORY CHEMICAL ANALYSIS TO THE LANDSCAPE ARCHITECT FOR REVIEW AND DETERMINATION OF A FERTILIZER ANALYSIS AND APPLICATION RATE. THIS ANALYSIS SHALL BE OBTAINED FROM A MINIMUM OF FOUR (4) RANDOM SOIL SAMPLES SELECTED AND TAKEN IN THE FIELD PER REPRESENTATIVE APPROVAL.

- THE TOPSOIL ANALYSIS SHALL INCLUDE THE FOLLOWING CHEMICAL PARAMETERS:
 - PH
 - NITRATE NPPM
 - ORGANIC MATTER %
 - PHOSPHOROUS (OLSON) PPM
 - POTASSIUM PPM
 - SODIUM MEQ/100G
 - SULFATE PPM
 - CONDUCTIVITY MH/CM
 - COMMERCIAL FERTILIZER SHALL BE COMPLETE, UNIFORM IN COMPOSITION, DRY AND FREE FLOWING. THE FERTILIZER SHALL BE DELIVERED TO THE SITE IN THE ORIGINAL WATERPROOF CONTAINERS, EACH BEARING THE MANUFACTURER'S STATEMENT OF ANALYSIS.
- D. SUPERPHOSPHATE:
- INCORPORATE SUPERPHOSPHATE INTO THE TOPSOIL WITH THE FIRST APPLICATION OF COMMERCIAL FERTILIZER AT THE RATE OF TWENTY POUNDS PER SQUARE FEET OR AT THE RATE DETERMINED FROM THE TEST RESULTS.
- C. GROUND LIMESTONE:
- INCORPORATE GROUND LIMESTONE INTO THE TOPSOIL AFTER IT HAS BEEN SPREAD AT THE RATE OF FIFTY POUNDS PER THOUSAND SQUARE FEET OR AT THE RATE DETERMINED FROM THE TEST RESULTS TO ACHIEVE A PH OF 6.0 TO 6.5.

- D. MULCH:
- WHERE A SPECIFIC TYPE OF MULCH IS REQUIRED, THE TYPE WILL BE DESCRIBED IN THE EXECUTION SECTION. WHERE MULCHING REQUIREMENTS CAN BE MET EQUALLY WELL BY ONE OF SEVERAL TYPES, THE CONTRACTOR SHALL HAVE THE OPTION OF SELECTING ONE OF THE ACCEPTABLE TYPES.
 - ORGANIC MULCH: JACKLIN ORGANIC MULCH AS MANUFACTURED BY THE VAUGHAN-JACKLIN CORPORATION, EAST 8803 SPRAGUE, SPOKANE, WASHINGTON 99213 - (TELEPHONE (509) 926-6241), OR APPROVED EQUAL.
 - VEGETATIVE MULCH: VEGETATIVE MULCH MATERIAL SHALL BE COMPOSED OF WHEAT STRAW, RYE STRAW OR BARLEY STRAW, IN THAT ORDER OF PREFERENCE AND SHALL BE FREE OF NOXIOUS WEED SEEDS, STONES, DIRT, ROOTS, TWIGS, OR OTHER FOREIGN MATERIAL.
 - CELLULOSE FIBER MULCH: WOOD CELLULOSE FIBER MULCH SHALL CONSIST OF VIRGIN WOOD FIBERS MANUFACTURED FROM WHOLE WOOD CHIPS AND SHALL BE PROCESSED IN SUCH A MANNER THAT IT WILL NOT CONTAIN ANY GROWTH OR GERMINATION INHIBITING FACTORS. THE MULCH SHALL BE DYED AN APPROPRIATED COLOR TO FACILITATE VISUAL METERING DURING APPLICATION. UPON APPLICATION, THE MATERIAL SHALL PRODUCE A MAT ABSORPTION AND PERCOLATION AND SHALL COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL. THE WOOD CELLULOSE FIBERS MUST MAINTAIN UNIFORM SUSPENSION IN WATER UNDER AGITATION.

- E. MULCH TACKIFIERS:
- TACKIFIERS MIXED WITH OR APPLIED OVER STRAW SHALL BE TERRA-TACK AR, OR APPROVED EQUAL OF NON-ASPHALTIC FORMULATION. TACKIFIERS USED TO ANCHOR VEGETATIVE OR CELLULOSE FIBER MULCH SHALL BE TERRA TACK III, OR APPROVED EQUAL OF NON-ASPHALTIC FORMULATION.
- F. WATER:
- WATER SHALL BE AVAILABLE FROM MUNICIPAL SYSTEM THROUGH CONTRACTOR.
- G. EROSION CONTROL BLANKET:
- EROSION CONTROL FABRIC MAY BE REQUIRED AS AN ADDITIONAL MEASURE TO PREVENT EROSION ON SLOPES GREATER THAN 2:1 AND IN DRAINAGE SWALES. MATERIAL IS NECESSARY AND AUTHORIZED WHILE WORK IS IN PROGRESS, THEN THE MATERIAL SHALL BE CURLEX EROSION CONTROL BLANKET CONSISTING OF A DENSE MAT OF CURLED AND SEASONED ASPEN WOOD EXCELSIOR BOUND WITH A TOUGH, PHOTO-DEGRADABLE, EXTRUDED PLASTIC MESH AS MANUFACTURED BY AMERICAN EXCELSIOR CO., ARLINGTON, TEXAS OR APPROVED EQUAL.

PART 3: EXECUTION

- 3.1 SURFACE CONDITIONS**
- A. INSPECTION:
- PRIOR TO ALL WORK OF THIS SECTION, CAREFULLY INSPECT THE INSTALLED WORK OF ALL OTHER TRADES AND VERIFY THAT ALL SUCH WORK IS COMPLETE TO THE POINT WHERE THIS INSTALLATION MAY PROPERLY COMMENCE. VERIFY THAT SEEDING MAY BE COMPLETED IN ACCORDANCE WITH THE ORIGINAL DESIGN AND THE REFERENCED STANDARDS.
- B. DISCREPANCIES:
- IN THE EVENT OF DISCREPANCY, IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT.
 - DO NOT PROCEED WITH INSTALLATION IN AREAS OF DISCREPANCY UNTIL ALL SUCH DISCREPANCIES HAVE BEEN FULLY RESOLVED.

- 3.2 SEED BED PREPARATION**
- A. SUBGRADE PREPARATION:
- SEED BED PREPARATION SHALL PERTAIN TO THE PREPARATION OF THE SURFACE OF THE GROUND TO RECEIVE THE SEED. THE GROUND SHALL BE HAND OR MACHINE RAKED SO AS TO REMOVE ALL DEBRIS, CLODS, STONES, OR OTHER FOREIGN MATTER LARGER THAN 1 INCH, TO A DEPTH OF 4 INCHES. PRIOR TO DUMPING AND SPREADING OF TOPSOIL, THE SURFACE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 2 INCHES TO FACILITATE BONDING OF TOPSOIL TO SUBGRADE SOIL. WHERE SUBGRADES HAVE BEEN COMPACTED ARTIFICIALLY SCARIFY TO A DEPTH OF 6 INCHES. PRIOR TO SPREADING TOPSOIL, ALL SUBGRADES SHALL BE GRADED EVENLY ACCORDING TO THE CONTRACT DOCUMENTS.
 - SUCH DEBRIS, CLODS, ROCKS, AND OTHER MATERIAL SO REMOVED SHALL BE DISPOSED OF AS APPROVED BY THE LANDSCAPE ARCHITECT/OWNER'S REPRESENTATIVE. SEED BED PREPARATION SHALL NOT COMMENCE UNTIL THE MOISTURE CONDITIONS MAKE THE GROUND AREA AND SOIL FRIABLE.
- B. PREPARING UNDISTURBED AREAS:
- AREAS TO BE SEEDDED WHICH HAVE NOT BEEN DISTURBED BY SITE GRADING OR TOPSOIL STRIPPING OPERATIONS, SHALL BE MOWED AND RAKED PRIOR TO TILLING AND TOPSOILING OPERATIONS. TILLAGE OF THE EXISTING VEGETATION INTO THE GROUND WILL NOT BE ACCEPTED.

3.3 TOPSOIL PLACEMENT

- A. SPREADING:
- TOPSOIL SHALL BE SPREAD EVENLY ON THE PREPARED AREAS TO A MINIMUM DEPTH OF 6 INCHES AFTER MACHINE COMPACTION. SPREADING SHALL NOT BE DONE WHEN THE GROUND OR TOPSOIL IS FROZEN OR EXCESSIVELY WET. AFTER SPREADING, ANY LARGE, STIFF CLODS OR HARD LUMPS SHALL BE BROKEN UP AND THE GROUND SHALL BE HAND OR MACHINE RAKED TO REMOVE ALL DEBRIS, STONES, AND FOREIGN MATTER LARGER THAN 1 INCH TO A DEPTH OF 4 INCHES.
- B. FINISH GRADING:
- GRADE THE AREAS TO FINISH GRADES FILLING AS NEEDED OR REMOVING SURPLUS DIRT AND FLOATING AREAS TO A SMOOTH UNIFORM GRADE. FINISHED AREAS SHALL SLOPE TO DRAIN. WHERE NO GRADES ARE SHOWN, AREAS SHALL HAVE A SMOOTH AND CONTINUAL GRADE BETWEEN EXISTING OR ALL CONTROL LINES AS WALLS, CURBS, OR WALLS. RAKE AND LEVEL AS NECESSARY TO OBTAIN TRUE EVEN LAWN SURFACES. ALL FINISH GRADES SHALL MEET THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE SEED IS SOWN OR SOD IS PLACED.
- C. SEED BED PREPARATION:
- AFTER FINISH GRADING AND JUST BEFORE SEEDING, THE AREAS TO BE SEEDDED SHALL BE LOOSENEED TO PROVIDE A ROUGH, FIRM BUT FINELY PULVERIZED SEED BED. THE INTENT IS A TEXTURE CAPABLE OF RETAINING WATER, SEED, AND FERTILIZER WHILE REMAINING STABLE AND ALLOWING SEED TIME TO GERMINATE. SEED SHALL BE APPLIED TO THE CONDITIONED SEED BED NOT MORE THAN 48 HOURS AFTER THE SEED BED HAS BEEN PREPARED.
 - IF THERE HAS BEEN A TIME LAPSE BETWEEN THE PLACEMENT OF TOPSOIL AND SEEDING OPERATIONS TO ALLOW IT TO BECOME SETTLED AND COMPACTED ON THE SURFACE, THE AREA TO BE PLANTED WITH SEED SHALL BE THOROUGHLY HARROWED, WORKED TO A DEPTH OF 4 INCHES SO AS TO PROVIDE A SURFACE OF SUCH CONDITION THAT IT WILL ALLOW HAND RAKING AND APPLICATION OF THE SEED IN COMPLIANCE WITH THESE SPECIFICATIONS.

- D. FERTILIZER/SOIL AMENDMENTS:
- APPLICATION OF FERTILIZER WILL BE IN 2 STAGES. TWO WEEKS PRIOR TO APPLICATION OF SEED, FERTILIZER SHALL BE APPLIED AT THE RATE OF 3 LBS/1000 S.F. FOR TURF AREAS. FERTILIZER SHALL BE APPLIED BY BROADCASTING OR DRILL METHODS. IT SHALL BE APPLIED SEPARATELY FROM THE SEED AND MIXED INTO THE SOIL TO A MINIMUM DEPTH OF 2 INCHES AND MAY BE INCORPORATED AS PART OF THE TOPSOIL PLACEMENT AND SEED BED PREPARATION OPERATIONS. SPRINKLE IMMEDIATELY AFTER INITIAL APPLICATION OF THE FERTILIZER WITH A FINE SPRAY UNTIL GROUND IS THOROUGHLY SATURATED, WITH PARTICULAR CARE TO AVOID RUNOFF ON SLOPING AREAS.
 - THE 2ND APPLICATION WILL FOLLOW THE FOLLOWING SEASON WITHIN THE SPECIFIED WARRANTY PERIOD AT A RATE DETERMINED BY SOIL TEST RESULTS FOR BOTH TURF AND NATIVE GRASS WILDLAND AREAS.
 - APPLICATION OF SUPERPHOSPHATE AND GROUND LIMESTONE SHALL BE APPLIED AT RATES DETERMINED BY SOILS TEST RESULTS.

- E. SEEDING:
- IMMEDIATELY PRIOR TO THE APPLICATION OF THE SEED, THE SOIL SHALL BE LOOSE TO A DEPTH OF AT LEAST 1 INCH AND FREE FROM ALL MATERIAL AS SPECIFIED. IF SOIL IS TOO LOOSE OR DRY FOR GOOD HANDLING, IT SHOULD BE MOISTENED AND ROLLED LIGHTLY.
 - SEEDING SHALL BE DONE WITHIN THE SPECIFIED TIME PERIODS AND AT THE FOLLOWING RATES:
 - FINE LAWN SEED SHALL BE SOWN AT A RATE OF 3.0 POUNDS PER 1000 SQUARE FEET AND SHALL BE PLANTED IN THE SPRING FROM APRIL 1ST TO MAY 30TH OR IN THE FALL FROM AUGUST 16TH TO OCTOBER 1ST.
 - NATIVE SEED MIX SHALL BE SOWN AT A RATE OF 5.0 POUNDS PER 1000 SQUARE FEET AND SHALL BE PLANTED IN THE SPRING FROM APRIL 1ST TO MAY 30TH OR IN THE FALL FROM AUGUST 16TH TO OCTOBER 1ST.

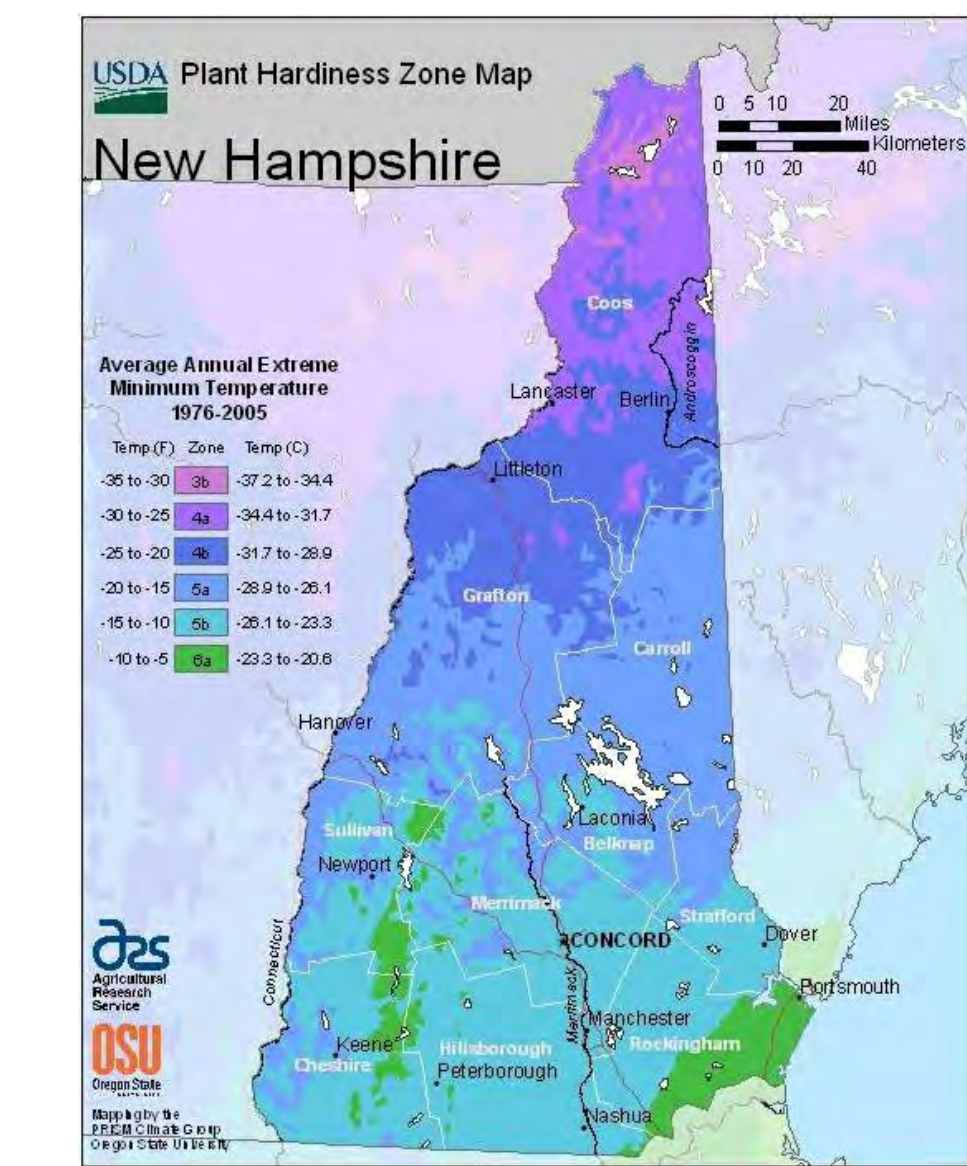
- F. METHODS:
- SEEDING BY DRILL IS PREFERABLE, HOWEVER, HYDRAULIC SEEDING OR BROADCASTING WILL BE PERMITTED. BROADCAST SEEDING AND HYDRAULIC SEEDING SHALL NOT BE USED DURING ADVERSE WEATHER.
 - AREAS SOWN BY HYDRAULIC OR BROADCAST METHODS WILL BE VISUALLY INSPECTED FOR UNIFORMITY OF APPLICATION. AREAS WHICH FAIL TO REVEAL AN AVERAGE OF TWO SEEDS PER SQUARE INCH WILL BE RESOWN AT NO ADDITIONAL EXPENSE TO THE OWNER.
 - THE APPLIED SEED, REGARDLESS OF APPLICATION, SHALL NOT BE COVERED BY A SOIL THICKNESS NO GREATER THAN 1/2 INCH.
 - SEEDING BY DRILL:
 - SEEDING EQUIPMENT USED FOR APPLYING GRASS SEED MUST BE DESIGNED, MODIFIED, OR EQUIPPED TO REGULATE THE APPLICATION RATE AND PLANTING DEPTH OF THE SEED MUST BE UNIFORMLY DISTRIBUTED IN THE DRILL HOPPER DURING THE DRILLING OPERATION. ALL GRASS ESTABLISHMENT EQUIPMENT SHALL BE OPERATED PERPENDICULAR TO THE SLOPE DRAINAGE. A DRILL SHALL BE NO WIDER THAN THE WIDTH OF THE AREA WHICH IT IS TO EQUIPATE. THE ROWS OF PLANTED SEEDS SHALL BE A MAXIMUM OF 8 INCHES APART AND SHALL BE AT RIGHT ANGLES TO THE FINISHED SLOPES.

5. BROADCAST SEEDING:
- WHEN SEED IS SOWN BY BROADCASTING, EXERCISE GREAT CARE THAT A UNIFORM DISTRIBUTION OF SEED IS OBTAINED. SEEDING SHALL BE DONE ON A STILL DAY USING A HAND OR DRILL TYPE SEEDER WITH ONE HALF OF THE SEED FOR EACH AREA BEING SOWN AT RIGHT ANGLES TO THE OTHER HALF. SEED DISTRIBUTION BY BROADCASTING SHALL BE COVERED WITH 1/4 TO 1/2 INCH OF SOIL. THE SEED MAY BE COVERED BY RAKING, DRAGGING, OR BY APPROPRIATE MECHANICAL MEANS.
6. HYDRAULIC SEEDING:
- WHEN HYDRAULIC SEED IS USED, SEED AND MULCH SHALL BE APPLIED IN SEPARATE AND DISTINCT OPERATIONS EXCEPT FOR THE FOLLOWING:
 - THE CONTRACTOR MUST PREPARE ONE POUND OF MULCH PER EACH THREE GALLONS OF WATER IN THE HYDROSEEDER AS A CUSHION AGAINST SEED DAMAGE. THE MULCH USED AS A CUSHION MAY BE PART OF THE TOTAL REQUIRED MULCH WITH THE REMAINDER APPLIED AFTER THE SEED IS METERING DURING APPLICATION.
 - THE CONTRACTOR MAY APPLY MULCH AND LAWN SEED MIX HYDRAULICALLY IN A SINGLE APPLICATION, PROVIDING ONE HALF OF THE SEED HAS BEEN SOWN BY BROADCAST OR DRILL METHODS AS AN INITIAL APPLICATION AND THE RATE OF APPLICATION OF LAWN SEED MIX INCREASED BY 4 POUNDS PER 1000 SQUARE FEET.
 - THE APPLICATION OF THE SEED SLURRY SHALL BE MADE WITH EQUIPMENT HAVING A BUILT-IN AGITATION SYSTEM AND OPERATING CAPACITY SUFFICIENT TO AGITATE, SUSPEND AND HOMOGENEOUSLY MIX A SLURRY CONTAINING WATER, SEED, AND MULCH OF SEED. THE SLURRY SHALL BE SPRAYED OVER THE SOIL IN A UNIFORM COAT. ALL HYDRAULICALLY SEED AREAS SHALL BE HYDROMULCHED UPON COMPLETION.

- G. WATERING:
- WATERING IMMEDIATELY AFTER SEEDING OR MULCHING WITH A FINE SPRAY TO A DEPTH OF 6 INCHES. AVOID RUNOFF ON SLOPING AREAS.
 - THE SURFACE LAYER OF THE SOIL MUST BE KEPT DAMP BY FREQUENT LIGHT WATERING DURING THE GERMINATION PERIOD AND UNTIL PLANTS ARE FIRMLY ROOTED.
- H. PROTECTION:
- PROTECT ALL SEEDED AREAS BY ERECTING TEMPORARY FENCES, BARRIERS, SIGNS, ETC. AS NECESSARY TO PREVENT TRAMPLING. THEY SHALL REMAIN IN PLACE FOR AT LEAST SIX WEEKS UNLESS OTHER ARRANGEMENTS ARE MADE WITH THE LANDSCAPE ARCHITECT.

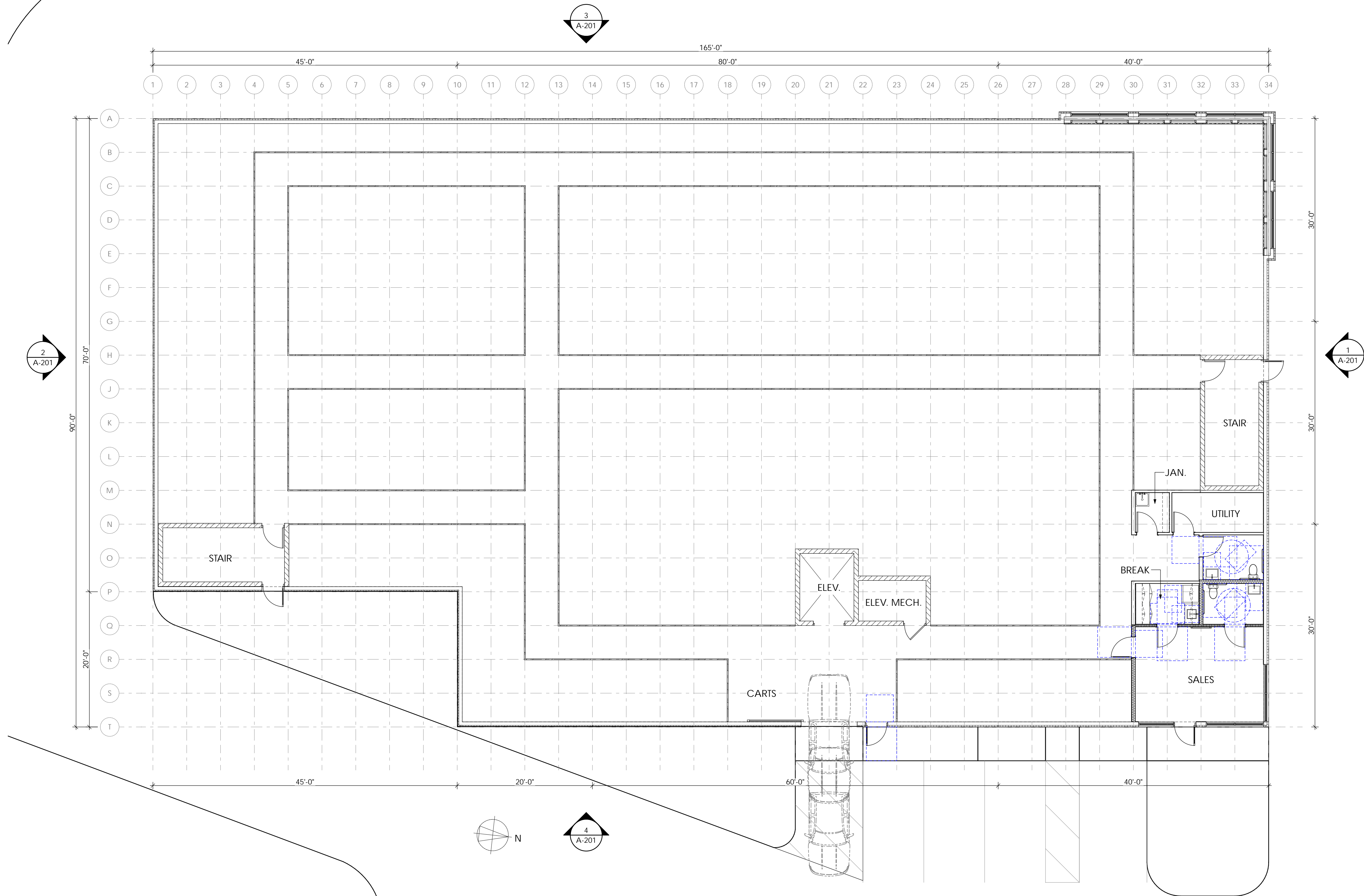
- I. MULCHING:
- GENERAL:
 - MULCH ALL HYDROSEEDED AREAS, DRAINAGE SWALES, SLOPES 4:1 OR STEEPER, AND ANY AREAS WHERE LIKELY HAZARD OF EROSION EXISTS. TOPSOIL OR SEED WHICH WASHES OUT FOR REASONS ATTRIBUTABLE TO THE CONTRACTOR'S ACTIVITIES OR FAILURE TO TAKE PROPER PRECAUTIONS, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
 - ALL STRUCTURES SHALL BE PROTECTED FROM HYDRAULIC APPLICATION OF MULCH MATERIAL AND MATERIAL DEPOSITED ON FACILITIES SHALL BE REMOVED.
 - MULCH SHALL NOT BE APPLIED IN THE PRESENCE OF FREE SURFACE WATER, BUT MAY BE APPLIED ON DAMP GROUND.
 - APPLICATION OF ORGANIC MULCH:
 - WET APPLICATION: ORGANIC MULCH SHALL BE MIXED WITH WATER AT A RATE OF ONE POUND MULCH (DRY WEIGHT) TO ONE GALLON OF WATER HYDRAULICALLY APPLIED AS PER MANUFACTURERS RECOMMENDATIONS AT A MINIMUM RATE OF 2000 POUNDS PER ACRE.
 - DRY APPLICATION: ORGANIC MULCH SHALL BE BROADCAST AT A MINIMUM RATE OF 2000 POUNDS PER ACRE, AND SHALL BE ROLLED LIGHTLY TO SET FIRMLY INTO THE SOIL.
 - APPLICATION OF WOOD CELLULOSE FIBER MULCH:
 - WOOD CELLULOSE FIBER MULCH SHALL BE APPLIED HYDRAULICALLY. IT SHALL BE MIXED WITH WATER AT THE RATE SPECIFIED BY THE MANUFACTURER AND SHALL BE MIXED IN STANDARD HYDRAULIC MULCHING EQUIPMENT TO FORM A HOMOGENEOUS SLURRY. THE SLURRY SHALL BE SPRAYED UNIFORMLY OVER THE SURFACE AT A MINIMUM RATE OF 1800 POUNDS PER ACRE.
 - APPLICATION OF VEGETABLE MULCH:
 - MULCH SHALL BE APPLIED IN A UNIFORM MANNER WITH A MULCH SPREADER AT A MINIMUM RATE OF 1-1/2 TONS PER ACRE WHERE REQUIRED MULCH SHALL BE ANCHORED INTO THE SEED BED BY TUCKING OR APPLICATION OF A TACKIFYING AGENT.
 - ANCHORING MULCH:
 - GENERAL: ANCHOR MULCH IN ALL AREAS SEEDDED WHICH ARE IN THE CONTRACTOR'S OPINION HIGHLY SUSCEPTIBLE TO EROSION.
 - APPLICATION: MULCH TACKIFIERS SHALL BE MIXED WITH WATER AT A RATE SPECIFIED BY THE MANUFACTURER AND SHALL BE APPLIED AT A MINIMUM RATE OF 40 POUNDS PER ACRE.
 - CURLEX EROSION CONTROL BLANKETS:
 - GENERAL: FURNISH AND INSTALL "CURLEX" BLANKETS TO SLOPES WHICH ARE IN THE CONTRACTOR'S OPINION HIGHLY SUSCEPTIBLE TO EROSION AND ITS OCCURRENCE CANNOT BE PREVENTED BY ANY OTHER MEANS.
 - APPLICATION: BLANKETS WILL BE APPLIED VERTICALLY TO THE SLOPE AND ATTACHED TO THE SLOPE WITH U-SHAPED METAL STAPLES, WITH LEGS 6" IN LENGTH AND 1" CROWN. SIZE, GAUGE AND NUMBER OF STAPLES WILL VARY WITH GROUND CONDITIONS, SLOPE, ETC.

USDA PLANT HARDINESS ZONE MAP



NH INVASIVE SPECIES WATCH LIST

SCIENTIFIC NAME	SYNONYMS	COMMON NAME
ABUTILON THEOPHRASTI MEDIK.		VELVETLEAF INDIAN-MALLOW
ACER GINNALA MAXIM.		AMUR MAPLE
AGROSTEMMA GITHAGO L. VAR. GITHAGO	LYCHNIS GITHAGO (L.) SCOP.	COMMON CORNCOCKLE
AIRA CARYOPHYLLEA L.	ASPRIS CARYOPHYLLEA (L.) NASH	COMMON SILVER-HAIRGRASS
ALLIUM VITUELOSA L.		CROW GARLIC
AMORPHA FRUTICOSA L.	AMORPHA FRUTICOSA L. VAR. ANGUSTIFOLIA PURSH; A. FRUTICOSA L. VAR. OBLONGIFOLIA PALMER; A. FRUTICOSA L. VAR. TENNESSEENSIS (SHUTT. TW. EX KUNZE) PALMER	FALSE INDIGO-BUSH
ARALIA ELATA (MIQ.) SEEM.		JAPANESE ANGELICA-TREE
BARBAREA VULGARIS AIT. F.	BARBAREA ARCUATA (OPIZ EX J. & K. PRESL.) REICHENB.; B. STRICTA. OF AUTHORS NOT ANDRZ.; B. VULGARIS VAR. ARCUATA (OPIZ EX J. & K. PRESL.) FRIES; CAMPE BARBAREA (L.) W. WIGHT EX PIPER, C. STRICTA. OF AUTHORS NOT (ANDRZ.) W. WIGHT EX PIPER, ERYSIMIUM BARBAREA L.	GARDEN YELLOW-ROCKET
BRASSICA JUNCEA (L.) CZERN.	BRASSICA JUNCEA (L.) CZERN. VAR. CRISPIFOLIA BAILEY; SINAPIS JUNCEA L.	CHINESE MUSTARD
BRASSICA NIGRA (L.) W.D.J. KOCH	SINAPIS NIGRA L.	BLACK MUSTARD
BROMUS TECTORUM L.	ANISANTHA TECTORUM (L.) NEVSKI	CHEAT BROME
CARDAMINE IMPATIENS L.		NARROW-LEAVED BITTER-CRESS
CENTAUREA JACCA L.	CENTAUREA DEBEAUXII GREIN. & GODR. SPP. THUILLIERI DOSTAL; C. JACEA L. SPP. DECIPIENS (THUILL.) CELAK.; C. JACEA L. SPP. PRATENSIS CELAK.; C. PRATENSIS THUILL.; C. THUILLIERI (DOSTAL) J. DUVOID; & LAMBINON; CYANUS JACEA (L.) P. GAERTN.; JACEA PRATENSIS LAM.	BROWN KNAPWEED
CENTAUREA NIGRA L.	JACEA NIGRA (L.) HILL	BLACK KNAPWEED
CHELIDONIUM MAJUS L.	CHELIDONIUM MAJUS L. VAR. LACINIATUM (P. MILL.) SYME; C. MAJUS L. VAR. PLENUM WEHRHANN	GREATER CELANDINE
CIRSIUM PALUSTRE (L.) SCOP.	CHELIDONIUM PALUSTRIS L.	MARSH THISTLE
CIRSIUM VULGARE (SAVI) TEN.	CARDIUS LANCEOLATUS L.; C. VULGARIS SAVI; CIRSIUM LANCEOLATUM (L.) SCOP.	COMMON THISTLE
CONVOLVULUS ARVENSIS L.	STROPHOCAULOS ARVENSIS (L.) SMALL	FIELD BINDWEED
CYTISUS SCOPARIUM (L.) LINK	SPARTIUM SCOPARIUM L.	SCOTCH BROOM
DIGITARIA SANGUINALIS (L.) SCOP.	PANICUM SANGUINALE L.	HAIRY CRABGRASS
EICHHORNIA CRASSIPES (MART.) SOLMS-LAUBACH	EICHHORNIA SPECIOSA KUNTH; PIAROPUS CRASSIPES (MART.) RAF.	COMMON WATER-HYACINTH
ELYMUS REPENS (L.) GOULD	AGROPYRON REPENS (L.) GOULD; ELYTRIGIA REPENS (L.) DESV. EX B.D. JACKSON; TRITICUM REPENS L.	CREeping WILD-RYE
EPILOBIUM HIRSUTUM L.		HAIRY WILLOW-HERB
EPIPACTIS HELLEBORINE (L.) CRANTZ	EPIPACTIS LATIFOLIA (L.) ALL.; SERAPIAS HELLEBORINE L.	BROAD-LEAVED HELLEBORINE
EUONYMUS EUROPAEUS L.		EUROPEAN SPINDLE-TREE
EUONYMUS FORTUNEI (TURCZ.) HAND-MAZZ	EUONYMUS FORTUNEI (TURCZ.) HAND-MAZZ VAR. RADICANS (SIEB. EX MIQ.) REHD.; E. FORTUNEI (TURCZ.) HAND-MAZZ VAR. VEGETUS (REHD.) REHD.; E. RADICANS SIEB. EX MIQ.; E. RADICANS SIEB. EX MIQ. VAR. VEGETUS REHD.	CLIMBING SPINDLE-TREE
FESTUCA FILIFORMIS POURRET	FESTUCA CAPILLATA LAM.; F. OVINA L. VAR. CAPILLATA (LAM.) ALEF.; F. TENUIFOLIA SIBTHORP	FINE-LEAVED SHEEP FESCUE
FIGARIA VERNA HUDS. SPP. FERTILIS	FIGARIA VERNA HUDS. SPP. BULBIFERA A. & D. LÖVE; RANUNCULUS FIGARIA L. SPP. BULBIFER LAMBINON; R. FIGARIA L. SPP. BULBIFERA (MARSDEN-JONES) LAVALREE, AN ILLEGITIMATE NAME; R. FIGARIA VAR. BULBIFERA MARSDEN-JONES	FIG-CROWFOOT
FROELICHA GRACILIS (HOOK.) MOQ.	OPLOTHECA GRACILIS MOQ.	SLENDER COTTON-WEED
GALIUM MOLLUGO L.		WHORLED BEDSTRAW
GLECHOMA HEDERACEA L.	GLECHOMA HEDERACEA L. VAR. MICRANTHA MORIC.; G. HEDERACEA L. VAR. PARVIFLORA (BENTH.) HOUSE; NEPETA HEDERACEA (L.) TRIVISAN	GILL-OVER-THE-GROUND
HYLOTELEPHIUM TELEPHIUM (L.) H. OHRB	SEDUM PURPUREUM (L.) J.A. SCHULTES; S. PURPURASCENS W.D.J. KOCH; S. TELEPHIUM L.	PURPLE ORPINE
KOCHIA SCOPARIA (L.) SCHRAD.	BASSIA SCOPARIA (L.) A.J. SCOTT; CHENOPodium SCOPARIUM L.; KOCHIA SCOPARIA (L.) SCHRAD. VAR. PUBESCENS FENZL; K. SCOPARIA (L.) SCHRAD. VAR. SUBVILLOSA MOQ.	SUMMER-CYPRRESS
LAMIUM AMPLEXICAULE L. VAR. AMPLEXICAULE		COMMON HENBIT
LAMIUM PURPUREUM L.	LAMIUM DISSECTUM WITH.; L. HYBRIDUM, OF AUTHORS NOT VILL.	RED HENBIT
LONICERA XYLISTEUM L.		FLY HONEYSUCKLE
LUPINUS POLYPHYLLUS LINDL. VAR. POLYPHYLLUS	LUPINUS PALLIDIPES HELLER; L. POLYPHYLLUS LINDL. VAR. ALBIFLORUS L.H. BAILEY; L. POLYPHYLLUS LINDL. VAR. PALLIDIPES (HELLER) C.P. SM.	BLUE LUPINE
LYSIMACHIA ARVENSIS (L.) U. MANNS & A. ANDERB.	CORONARIA FLOS-CUCULI (L.) A. BRAUN; SILENE FLOS-CUCULI (L.) CLAIRVILLE	RAGGED ROBIN LYCHNIS
LYSIMACHIA VULGARIS L.	ANAGALLIS ARVENSIS L.; A. ARVENSIS L. VAR. CAERULEA (SCHREB.) GREIN. & GODR.; A. CAERULEA SCHREB.	SCARLET PIMPERNEL
MISCANTHUS SINENSIS ANDERS.	MISCANTHUS SINENSIS ANDERS. VAR. GRACILLIMUS A.S. HITCHC.	GARDEN YELLOW-LOOSESTRIPE
MYCELIS MURALIS (L.) DUMORT.	LACTUCA MURALIS (L.) FRESEN.	CHINESE SILVERGRASS
MYOSOTIS SCORPIOIDES L.	LACTUCA MURALIS (L.) FRESEN.	WALL-LETTUCE
NASTURTIIUM MICROPHYLLUM BOENN. EX REICHENB.	MYOSOTIS PALUSTRIS (L.) HILL	WATER FORGET-ME-NOT
NASTURTIIUM OFFICINALE AIT. F.	NASTURTIIUM OFFICINALE AIT. F. VAR. MICROPHYLLUM (BOENN. EX REICHENB.) THELLUNG; RORIPPA MICROPHYLLA (BOENN. EX REICHENB.) HYL. EX A. & D. LÖVE	ONE-ROWED WATER-CRESS
NASTURTIIUM OFFICINALE AIT. F.	BAELUERTA NASTURTIIUM-AQUATICUM (L.) HAYEK; RORIPPA NASTURTIIUM-AQUATICUM (L.) HAYEK; SISYMBRIUM NASTURTIIUM-AQUATICUM L.	TWO-ROWED WATER-CRESS
ONENANTHE JAVANICA (BLUME) DC		JAVA WATER DROPWORT
PERSICARIA LONGISETA (BRUIJN) KITAGAWA	PERSICARIA CAESPITOSA (BLUME) NAKAI VAR. LONGISETA (BRUIJN) REED; POLYGONUM CAESPITOSUM BLUME VAR. LONGISETUM (BRUIJN) STEWARD; P. LONGISETUM BRUIJN	ORIENTAL LADY'S-THUMB SMARTWEED
PHELLODENDRON AMURENSE RUPR.	PHELLODENDRON AMURENSE RUPR. VAR. SACHALINENSE F. SCHMIDT; P. JAPONICUM MAXIM.; P. SACHALINENSE (F. SCHMIDT) SARG.	AMUR CORKTREE
POA COMPRESSA L.		FLAT-STEMMED BLUE GRASS
POA NEMORALIS L.		WOOD BLUE GRASS
POPULUS ALBA L.	POPULUS ALBA L. VAR. BOLLEANA LAUCHE	WHITE POPLAR
RANUNCULUS REPENS L.	RANUNCULUS REPENS L. VAR. DEGENERATES SCHUR; R. REPENS L. VAR. ERECTUS DC.; R. REPENS L. VAR. GLABRATUS DC.; R. REPENS L. VAR. PLENIFLORUS FERN.; R. REPENS L. VAR. VILLOsus LAMOTTE	SPOT-LEAVED CROWFOOT
RAPHANUS RAPHANISTRUM L. SPP. RAPHANISTRUM		WILD RADISH
RHINANTHUS MINOR L. SPP. MINOR	RHINANTHUS CRISTA-GALLI L. IN PART; R. CRISTA-GALLI L. VAR. FALLAX (WIMMER & GRAB.) DRUCE; R. STENOPHYLLUS (SCHUR) SCHINZ & THELLUNG	LITTLE YELLOW-RATTLE
RUMEX ACETOSELLA L. SPP. PYRENAICUS (POURRET EX LAPEYR.) AKEROYD	ACETOSELLA VULGARIS (KÖCH) FOURR. SPP. PYRENAICUS (POURRET EX LAPEYR.) A. LÖVE; RUMEX ACETOSELLA L. VAR. PYRENAICUS (POURRET EX LAPEYR.) TIMBAL-LAGRAVE; R. PYRENAICUS (POURRET EX LAPEYR.) AKEROYD	SHEEP DOCK
SECURIGERA VARIA (L.) LASSEN	CORONILLA VARIA L.	PURPLE CROWN-VEITCH
SILPHIUM PERFOLIATUM L.		CUP-PLANT ROSINWEED
SINAPIS ARVENSIS L.	BRASSICA ARVENSIS RABENH.; B. KABER (DC.) L.C. WHEELER; B. KABER (DC.) L.C. WHEELER VAR. PINNATIFIDA (STOKES) L.C. WHEELER	CORN CHARLOCK
SOLANUM CAROLINENSE L. VAR. CAROLINENSE		CAROLINA



1 FLOOR PLAN - MAIN LEVEL
SCALE: 1/8" = 1'-0"

603 STORAGE
30 WILTON ROAD • MILFORD • NH



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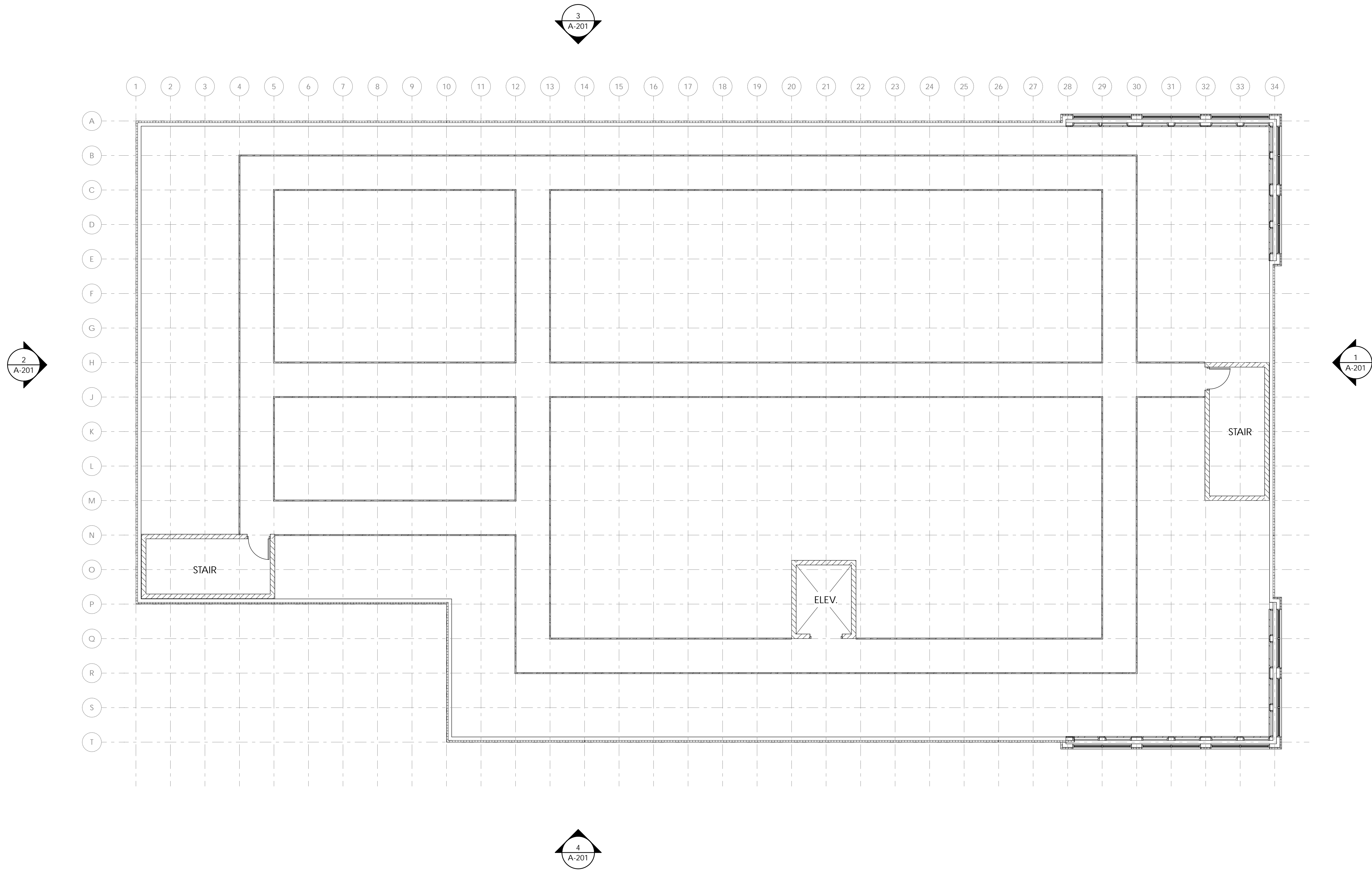
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FLOOR PLAN - MAIN LEVEL

ISSUED: 5/20/22
PROJECT #: 2022.007

A-101



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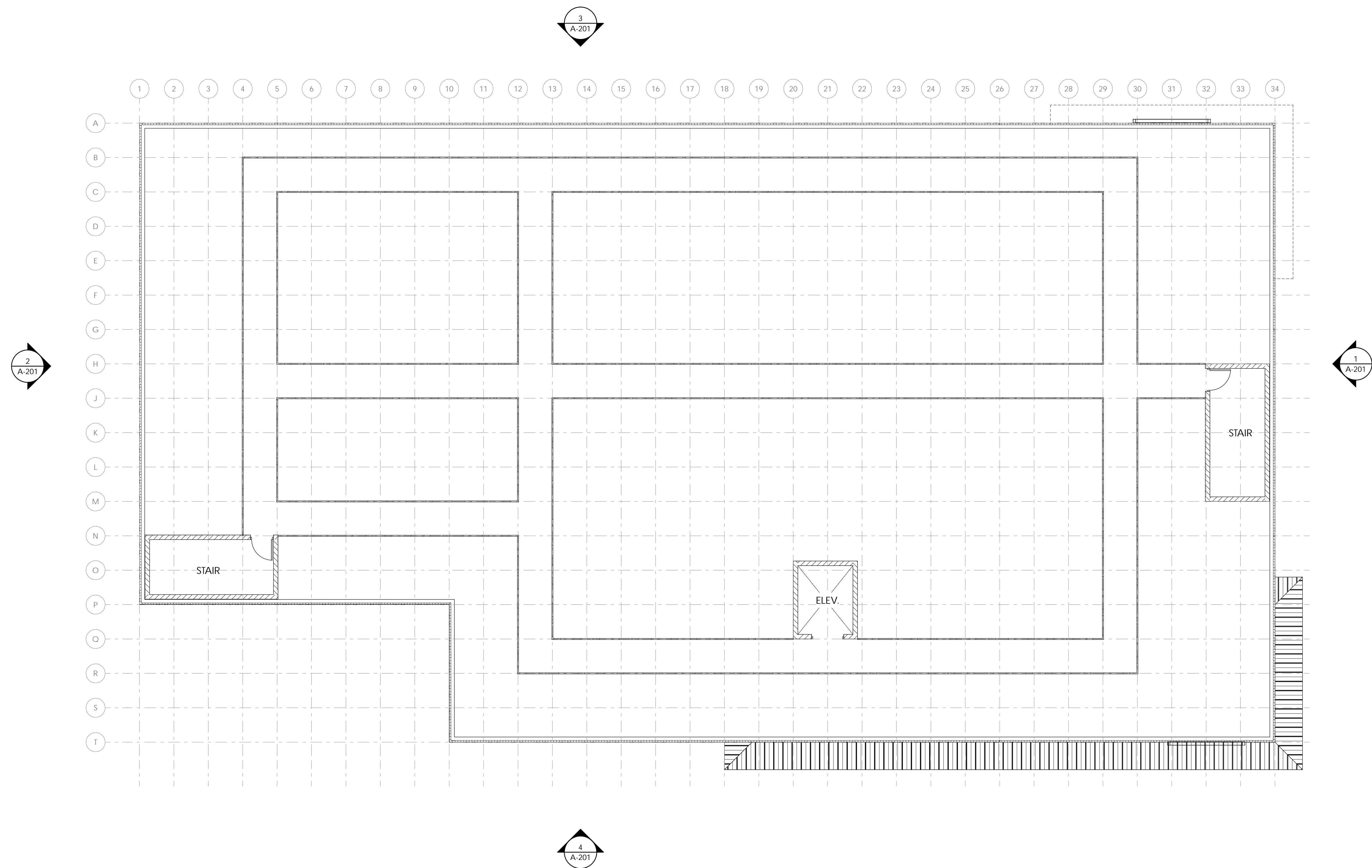
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FLOOR PLAN - SECOND LEVEL
ISSUED: 5/20/22
PROJECT #: 2022.007

A-102



1 FLOOR PLAN - THIRD LEVEL
SCALE: 1/8" = 1'-0"

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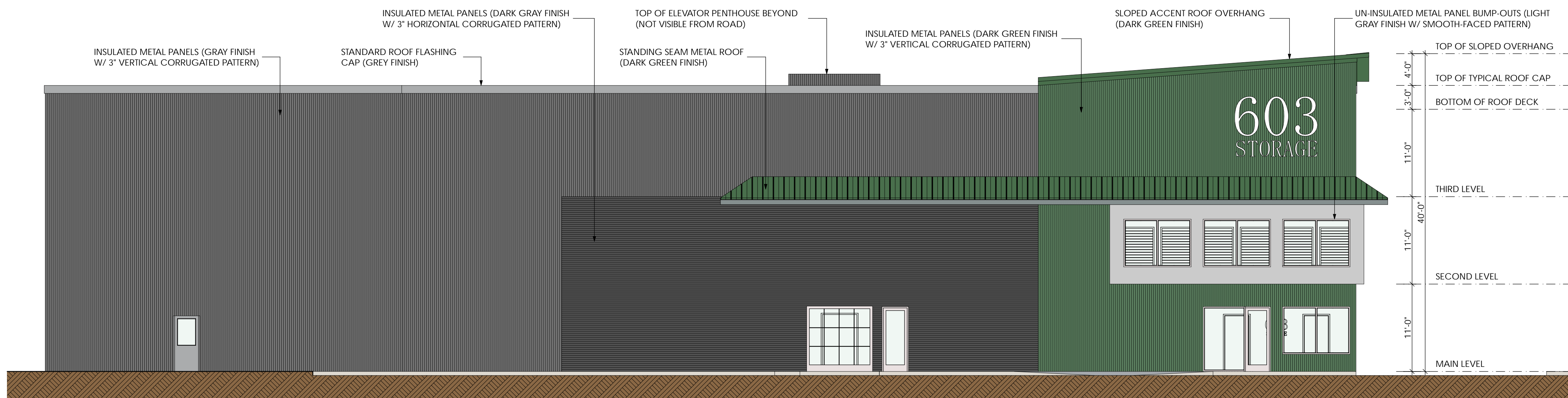
SCHEMATIC

REV. #	DESCRIPTION	DATE

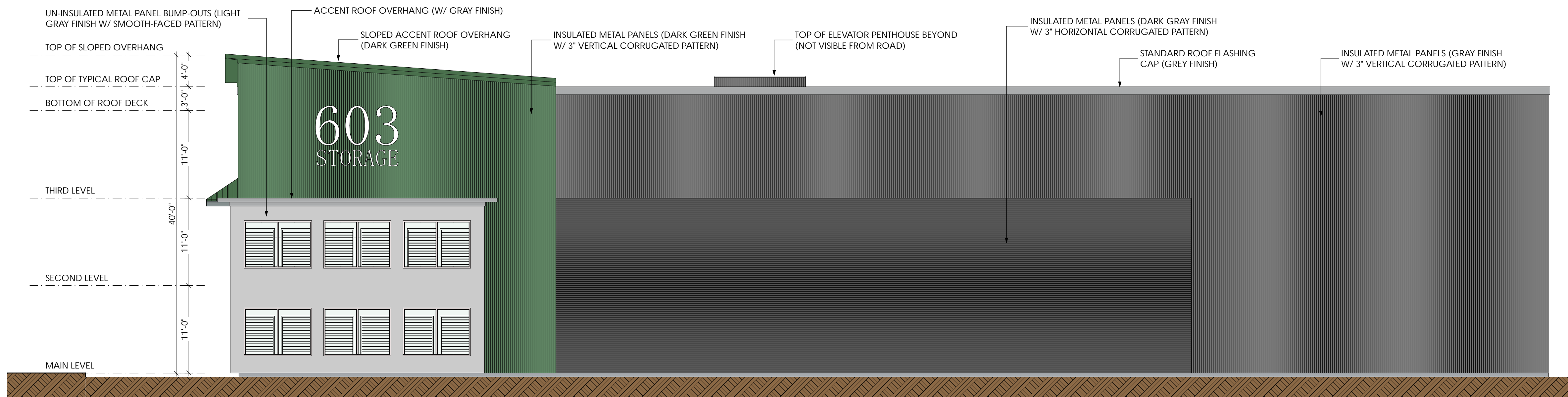
FLOOR PLAN - THIRD LEVEL

ISSUED: 5/20/22
PROJECT #: 2022.007

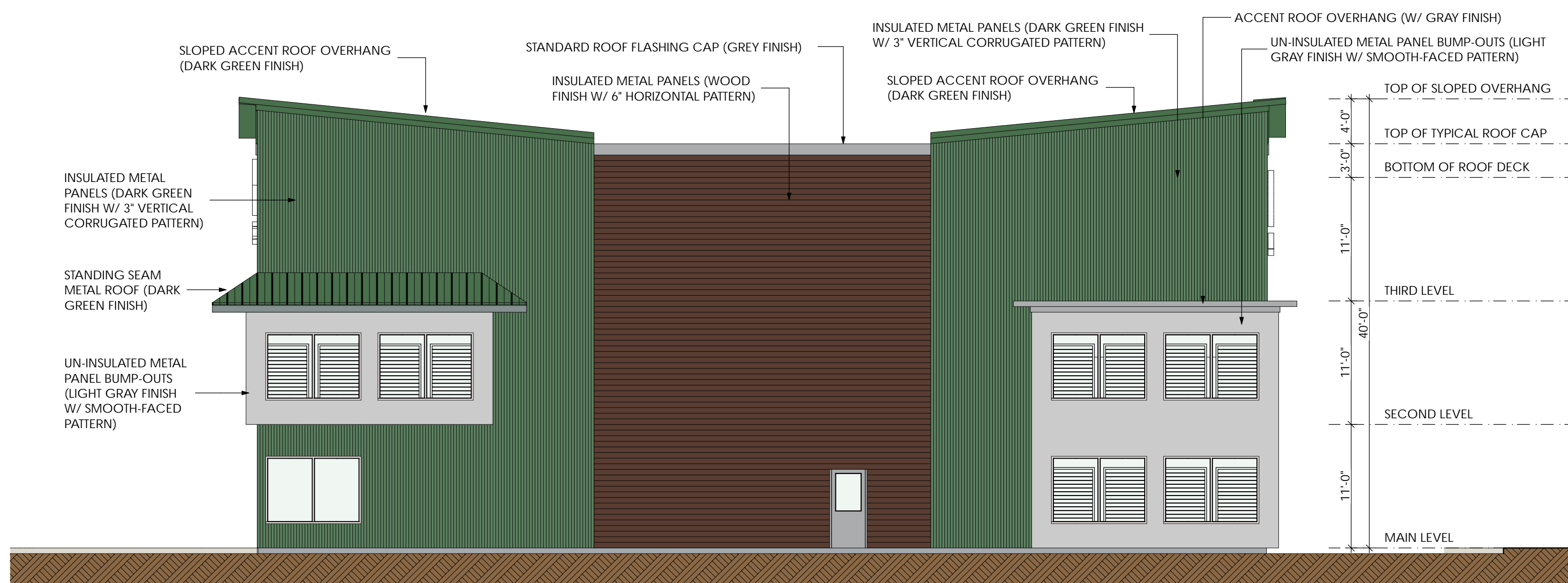
A-103



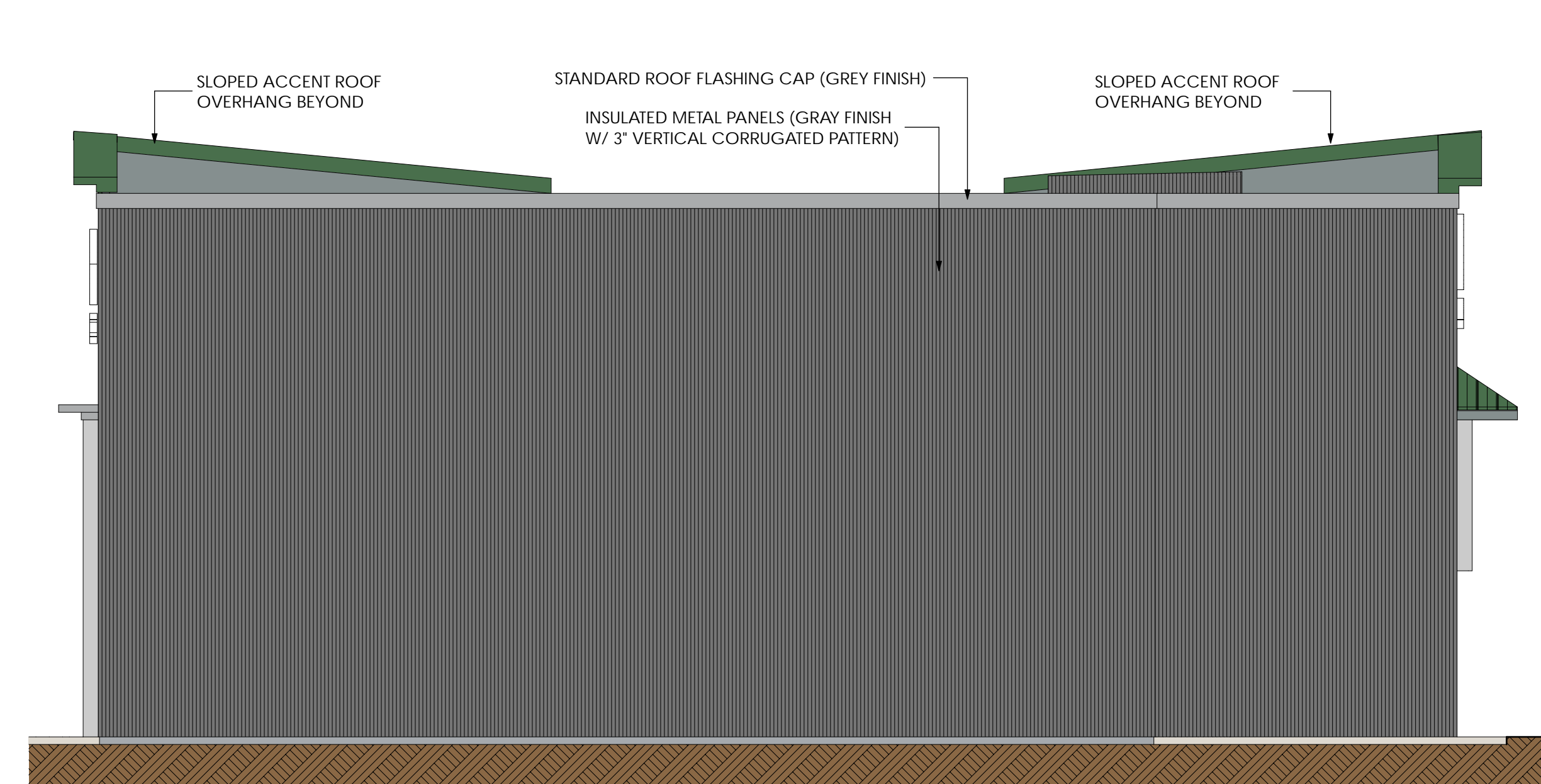
4 EAST ELEVATION
SCALE: 1/8" = 1'-0"



3 WEST ELEVATION
SCALE: 1/8" = 1'-0"



1 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



2 NORTH ELEVATION
SCALE: 1/8" = 1'-0"

603 STORAGE
30 WILTON ROAD • MILFORD • NH



NOT FOR CONSTRUCTION

DENNIS MIREX, P.A.
THE ARCHITECTS
697 UNION STREET, MANCHESTER, NH
(603) 625-4548 www.THEARCHITECTS.NET

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SCHEMATIC

REV #	DESCRIPTION	DATE

ELEVATIONS

ISSUED: 5/20/22
PROJECT #: 2022.007



3 PERSPECTIVE



4 PERSPECTIVE



1 PERSPECTIVE



2 PERSPECTIVE

603 STORAGE
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SCHEMATIC

REV. #	DESCRIPTION	DATE

PERSPECTIVES

ISSUED: 5/20/22
PROJECT #: 2022.007

X-001



Storage Sense – Milford West | 30 Wilton Road
Narrative in Support of Conditional Use Permit for Self-Storage Use in ICI District

West Milford Self-Storage is an existing self-storage facility in Milford, located at 30 Wilton Road. The subject property, Milford Tax Assessor's Map 6 Lot 14, is approximately 6.35 acres in area and is situated in the Integrated Commercial-Industrial District (ICI). The existing site includes several buildings of self-storage units, and the proposal includes the construction of a climate-controlled self-storage facility on the remainder of the parcel. 30 Wilton Road, LLC, the applicant and owner of the parcel, proposes this addition that will maintain the use that currently exists on site. The Milford Zoning Ordinance, Section 7.13, states that self-storage facilities are permitted in the ICI District through the Conditional Use Permit process. The Applicant is submitting this application with the Major Site Plan Application and Stormwater Management Permit Application, in accordance with the Milford Zoning Ordinance. The following requirements in Section 7.13.4 have been listed below and the proponent offers the following statements of compliance with each item:

- 1. The use of the premises shall be limited to storage only, and shall not be used to manufacture, fabricate, or process goods; service or repair vehicles or boats, trailers, small engines or electrical equipment, or to conduct similar repair activities;***

The property will not be used for any other purpose than storage.

- 2. No auctions, garage sales or retail sales of any kind, with the exception of the property owner liquidating abandoned contents of a storage unit, shall be allowed on site;***

The property will not be used for any other purpose than storage.

- 3. No commercial or industrial activity other than that which pertains to the operation and maintenance of the facility shall be allowed on the site;***

The property will not be used for any other purpose than storage.

- 4. An individual self-service storage unit or private postal boxes within a self-service storage facility shall not be considered premises for the purpose of assigning a legal or business address;***

The self-storage units will not have associated private postal boxes or operate as a legal or business address.

- 5. Electrical service to storage units shall be for lighting and climate control only. No electrical outlets are permitted inside individual storage units.***

Lighting fixtures and switches shall be of a secure design that will not allow tapping the fixtures for other purposes;

Electrical outlets will not be designed in the storage units and fixtures will be secured to prevent tapping.

- 6. Exterior light fixtures shall comply with Section 6.06 of the Milford Development Regulations;***

Exterior lighting complies with the Milford regulations.

- 7. If the facility abuts residentially zoned property, the facility loading bays, docks or doors shall have appropriate permanent visual mitigation to as to not be visible from the residential property or from public rights-of-way;***

The facility has been situated such that the loading doors are oriented away from residentially zoned properties.

- 8. In order to promote visual compatibility with commercial development allowed in commercial and industrial zones, Self-Storage Facility buildings shall incorporate appropriate landscaping/screening and architectural design features, such as: massing, proportion; façade modulation; exterior building materials and detailing; varied roofline; pedestrian scale; etc.;***

Enclosed in our plan set are architectural plans and landscaping designs that we feel are compatible with surrounding properties.

- 9. All outdoor storage of merchandise or commodities (including motor vehicles) shall be screened from any lot which is in a residence district by a strip at least four (4) feet wide, densely planted with shrubs or trees which are of a type that may be expected to form a year-round dense screen at least six (6) feet high within three (3) years, or by an opaque wall, barrier or uniform fence at least six (6) feet high above finished grade. Such screening shall be maintained in good condition at all times. Such screening or barrier may be interrupted by normal entrances or exits, and shall have no signs hung or attached thereto other than those permitted in the district. As a part of the Site Plan approval, the Planning Board may require additional screening beyond that set forth in Section 6.08 of the Milford Development Regulations if it determines that additional Screening is necessary or appropriate;***

The proposal does not include any outdoor storage.

- 10. Self-storage facilities shall utilize building materials and architectural features which fit into the context of the surrounding properties;***

Enclosed in our plan set are architectural plans that we feel are compatible with surrounding properties.

11. Except as provided herein, all property storage on the premises shall be entirely within an enclosed building. Open storage of recreation vehicles, boats and storage pods is permitted, subject to the following:

- a. Storage shall occur only in a designated area which is clearly delineated for open storage;**
- b. Such areas shall not exceed 10 percent of the lot or parcel area;**
- c. Such areas shall be screened from view from property zoned for detached single family residential use and public property, including the public right-of-way;**
- d. Storage shall not occur in required parking spaces, drives, parking lanes nor within required building setback areas;**
- e. No vehicle maintenance, washing or repair shall be permitted;**

The proposal does not include any outdoor or open storage. Proposed storage units are all within the proposed climate-controlled facility.

12. Vehicle and trailer rental may be permitted on the premises as an accessory use by the Self-Storage Facility owner, subject to review and approval as part of Site Plan Approval. Rental vehicles shall not be parked in required parking spaces, drives or parking lanes.

The development is not proposing vehicle or trailer rental on the premises as part of this application.

Enclosed in our plan set are architectural plans that we feel are compatible with surrounding properties.

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The development is not proposing vehicle or trailer rental on the premises as part of this application.



TRAFFIC IMPACT MEMORANDUM

To: Town of Milford, Department of Planning & Community Development
From: Thomas D'Aguiar, P.E.
Date: May 23, 2022
Re: 30 Wilton Road (Storage Sense – Milford West)

This memorandum summarizes the trip generation and distribution analysis performed for the new building at 30 Wilton Road development. This analysis is provided in accordance with the regulations outlined for the West Elm Street Gateway zoning district in the Town's Zoning Ordinance. This memorandum serves to compare the expected traffic flows in and out of the site in the existing condition versus the proposed condition.

Project Description

The project proposes the construction of a climate-controlled storage facility to supplement the existing storage facility on the same property. The subject property is located at 30 Wilton Road, Tax Map 6 Lot 14.

The subject property is currently occupied by the existing self-storage facility, which was constructed in 2017. The proposed development will provide a new driveway connection to Wilton Road, and will also connect internal roadways to the existing self-storage and the adjacent Dollar General to the west of the subject parcel.

Existing Street Network

The property includes frontage on Wilton Road to the north, and the parcel is abutting some residential properties north of Wilton Road. On all other sides of the property, it is abutted by commercial properties in the Integrated Commercial-Industrial zone. The property is also enclosed to the east by the Souhegan River.

Wilton Road

Wilton Road near the subject property is an east-west running two-lane roadway, with one lane in each direction. The posted speed limit is 25 mph in the vicinity of the site, and the nearest intersection is approximately 600 feet to the east (Wilton Road, Elm Street & NH 101). Driveway access is directly from Wilton Road.

Sight Distance

The project proposes a new 24' wide driveway on Wilton Road, located to the west side of the site. There is an existing 30'-wide driveway on the eastern side of the site. Sight distance at the proposed driveway meets or exceeds AASHTO stopping sight distance for a 25-mph roadway and Milford Driveway Regulations of 200'.

Trip Generation

Site generated trip projections were developed for the site based upon the methodologies of the Institute of Transportation Engineers (ITE), Trip Generation Manual (10th Edition, 2017). The ITE Manual is a nationally recognized and locally accepted method for forecasting trip generation for a range of commercial, retail, and residential land uses. The methodological assumptions are developed based upon the observed traffic conditions of other similar developments located throughout the United States. The layout of the proposed site is shown in the attached exhibit. Trip generation was determined for the typical weekday, AM peak hour, and PM peak hour based upon ITE Land Use 151 for Mini-Warehouse. Trip generation was calculated using rates that correlate trip generation to the square footage of storage units within the development. A summary of trip generation is provided within Table 1 for the existing self-storage facility and Table 2 for the additional storage area provided by the new facility, and Table 3 for the net new trips during the typical weekday, and weekday AM and PM peak hours of the adjacent street traffic.

Table 1 – Existing Conditions Trip Generation Summary

Time Period	Net Trips (LUC 151 for 38,460 SF)			
	Rate/Unit ¹	In	Out	Total
Weekday Daily ² (24 hour period)	1.51	29	30	59
Weekday AM Peak Hour ³ (one hour between 7 and 9 a.m.)	0.10	3	1	4
Weekday PM Peak Hour ⁴ (one hour between 4 and 6 p.m.)	0.17	3	4	7

¹ 1 Unit is 1000 SF of use area

² Average rate of 1.51 with direction distribution of 50% entering and 50% exiting

³ Average rate of 0.10 with direction distribution of 60% entering and 40% exiting

⁴ Average rate of 0.17 with direction distribution of 47% entering and 53% exiting

Table 2 – Proposed Condition Trip Generation Summary

Time Period	Net Trips (LUC 151 for 80,310 SF)			
	Rate/Unit ¹	In	Out	Total
Weekday Daily ² (24 hour period)	1.51	61	61	122
Weekday AM Peak Hour ³ (one hour between 7 and 9 a.m.)	0.10	6	3	9
Weekday PM Peak Hour ⁴ (one hour between 4 and 6 p.m.)	0.17	6	8	14

¹ Unit is 1000 SF of use area

² Average rate of 1.51 with direction distribution of 50% entering and 50% exiting

³ Average rate of 0.10 with direction distribution of 60% entering and 40% exiting

⁴ Average rate of 0.17 with direction distribution of 47% entering and 53% exiting

Table 3 – Net New Trip Generation Summary

Time Period	Net New Trips		
	In	Out	Total
Weekday Daily (24 hour period)	32	31	63
Weekday AM Peak Hour (one hour between 7 and 9 a.m.)	3	2	5
Weekday PM Peak Hour (one hour between 4 and 6 p.m.)	3	2	5

Summary and Conclusion

The project proposes the construction of a new, climate-controlled storage facility on the existing self-storage lot at 30 Wilton Road, Milford, NH. The new building will produce an estimated 32 trips in and 31 trips out of the site, when compared to the existing use. The use is not heavily influenced by the weekday peak hours, since there are not many commuters driving to the property when they would normally be driving to and from work.