



WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. General Information

Important:

When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Applicant:

Martin Construction Resource

Name

E-Mail Address

70150 Highway 50

Mailing Address

Tipton

City/Town

MO

State

65081

Zip Code

843-708-0065

Phone Number

Fax Number (if applicable)

2. Representative (if any):

B & C Associates Inc.

Firm

David Crossman

Contact Name

bcwetlands@hotmail.com

E-Mail Address

2 Rice Street

Mailing Address

Hudson

City/Town

MA

State

01749

Zip Code

978-568-0135

Phone Number

978-568-0135

Fax Number (if applicable)

B. Determinations

1. I request the Marlborough Conservation Commission make the following determination(s). Check any that apply:

- a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.
- b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.
- c. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.
- d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any **municipal wetlands ordinance** or **bylaw** of:

Name of Municipality

- e. whether the following **scope of alternatives** is adequate for work in the Riverfront Area as depicted on referenced plan(s).



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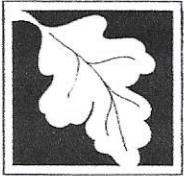
C. Project Description (cont.)

b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.

- Single family house on a lot recorded on or before 8/1/96
- Single family house on a lot recorded after 8/1/96
- Expansion of an existing structure on a lot recorded after 8/1/96
- Project, other than a single family house or public project, where the applicant owned the lot before 8/7/96
- New agriculture or aquaculture project
- Public project where funds were appropriated prior to 8/7/96
- Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
- Residential subdivision; institutional, industrial, or commercial project
- Municipal project
- District, county, state, or federal government project
- Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.

b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)



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D. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Name and address of the property owner:

Ken's Foods

Name

1 D'Angelo Drive

Mailing Address

Marlborough

City/Town

MA

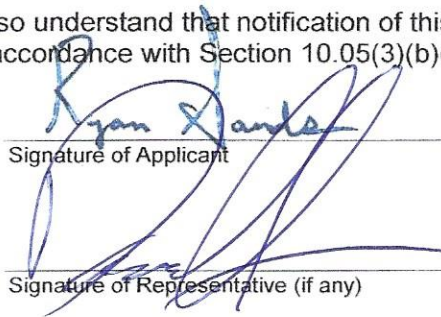
State

01752

Zip Code

Signatures:

I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.


Signature of Applicant

May 5, 2020

Date

Signature of Representative (if any)


Date

April 10, 2020

City of Marlborough
Site Plan Review Committee
140 Main Street
Marlborough, MA 01752

Subject: Ken's Foods – Cogen Upgrades
Site Plan Review Project Narrative
Parcel No. 115-5

Committee Members:

Martin Construction Resources is working with Ken's Foods on several improvements throughout their facility located at 1 D'Angelo Drive in the City of Marlborough. These improvements are primarily located within or on the roof of the main facility, except for the gas conditioning upgrades proposed in their wastewater treatment area located on the adjacent parcel (Parcel No. 115-5 per the City of Marlborough GIS application). The scope of the gas conditioning installation includes the following:

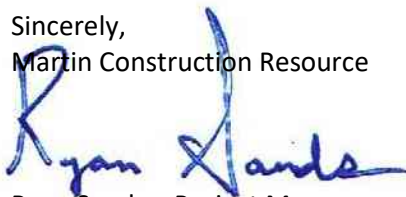
1. Remove equipment located on an existing 29'x9' concrete pad.
2. Install a new gas skid and chiller on this existing pad.
3. Pour a new 26'x12' concrete pad within the boundaries of the existing paved driveway.
4. Install two biological scrubbers on this pad to provide H₂S removal. Effluent would discharge to a small underground tank located just behind the scrubbers before being pumped to the adjacent SBR tank or other final point of connection.
5. Install a pipe bridge and interconnected piping to span the two pads.

While we intend to submit a Commercial Building Permit application to include full design drawings for all proposed improvements (including those summarized above), it is our understanding that Site Plan Review would only be required for improvements located beyond the footprint of existing structures.

Please find enclosed the "Site Plan Exhibit" and "CHA Design Drawings" to accompany our Preliminary Site Plan Review application. The proposed improvements will not generate any new impervious surfaces.

Please let us know if there are any questions, or if any additional information is required to allow for you to complete your review of this submittal.

Sincerely,
Martin Construction Resource



Ryan Sands – Project Manager
rsands@martinconstructionresource.com
843-708-0065

National Flood Hazard Layer FIRMette



42°19'19.48"N


























0 250 500 1,000 1,500 2,000 Feet 1:6,000

USGS The National Map: Orthoimagery. Data refreshed April, 2019.


42°18'52.87"N

Legend

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

- | | |
|------------------------------------|---|
| SPECIAL FLOOD HAZARD AREAS |  Without Base Flood Elevation (BFE)
<i>Zone A, V, A99</i>
 With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>
 Regulatory Floodway |
| OTHER AREAS OF FLOOD HAZARD |  0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i>
 Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>
 Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>
 Area with Flood Risk due to Levee <i>Zone D</i> |
| OTHER AREAS |  NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>
 Effective LOMRs
 Area of Undetermined Flood Hazard <i>Zone D</i> |
| GENERAL STRUCTURES |  Channel, Culvert, or Storm Sewer
 Levee, Dike, or Floodwall |
| OTHER FEATURES |  20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
 17.5 Coastal Transect
 Base Flood Elevation Line (BFE)
 Limit of Study
 Jurisdiction Boundary
 Coastal Transect Baseline
 Profile Baseline
 Hydrographic Feature |
| MAP PANELS |  Digital Data Available
 No Digital Data Available
 Unmapped |



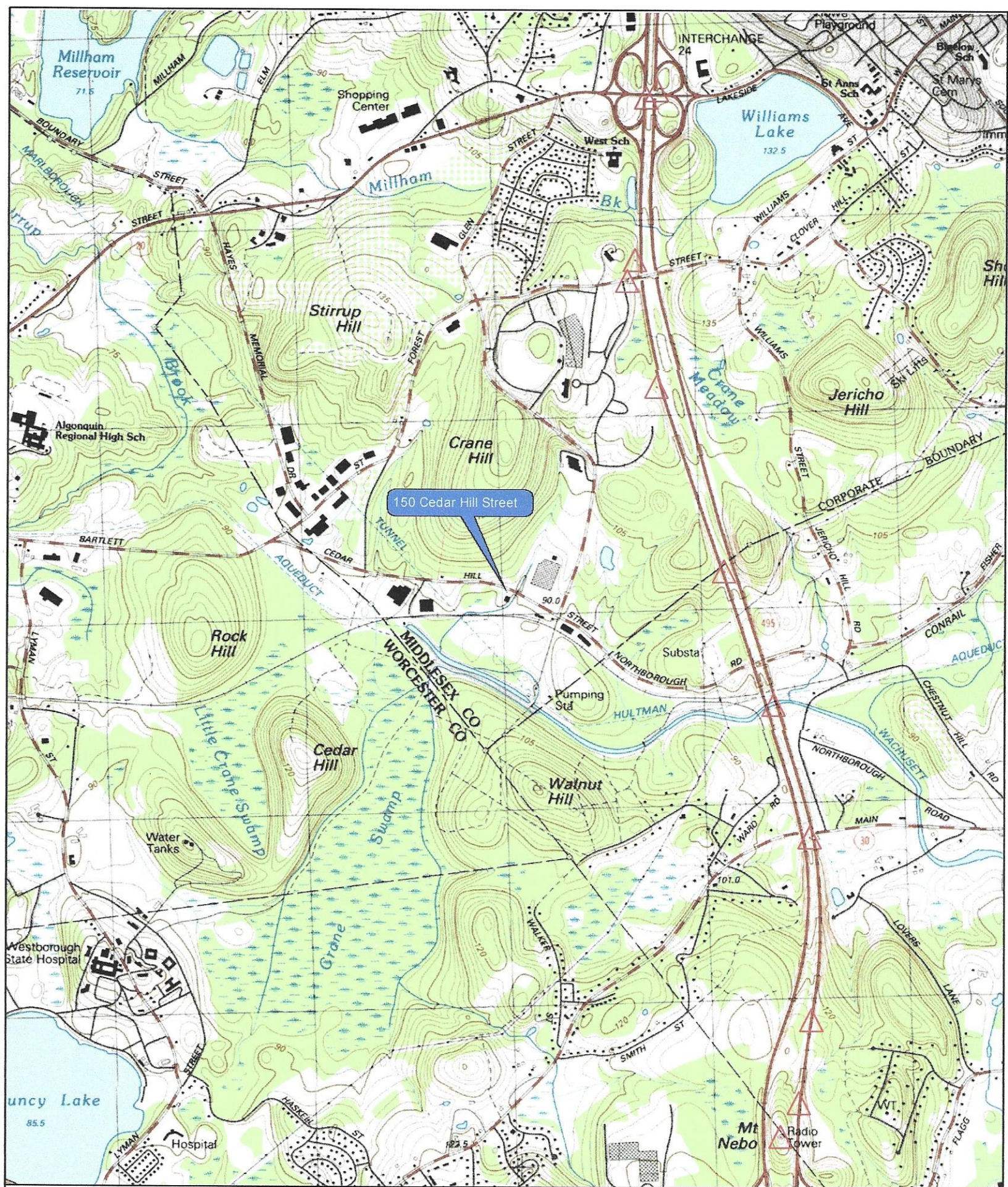
 The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **5/4/2020 at 2:53:14 AM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

71°34'43.32"W



150 Cedar Hill Street

Name: MARLBOROUGH
 Date: 5/4/2020
 Scale: 1 inch equals 2000 feet

Location: 042° 19' 04.15" N 071° 35' 03.64" W
 Caption: Site Locus
 150 Cedar Hill Street
 Marlborough, Massachusetts

Rec 5-4-2020



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

Marlborough
City/Town

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A. General Information

Important:

When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Applicant:

Ed Wiles ctown101@email.com

Name E-Mail Address

668 stow Road

Mailing Address

Marlborough MA 01752

City/Town State Zip Code

617-617-1754

Phone Number Fax Number (if applicable)

2. Representative (if any):

Firm

Contact Name E-Mail Address

Mailing Address

City/Town State Zip Code

Phone Number Fax Number (if applicable)

B. Determinations

1. I request the City of Marlborough make the following determination(s). Check any that apply:
Conservation Commission

- a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.
- b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.
- c. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.
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City of Marlborough
Name of Municipality

e. whether the following **scope of alternatives** is adequate for work in the Riverfront Area as depicted on referenced plan(s).



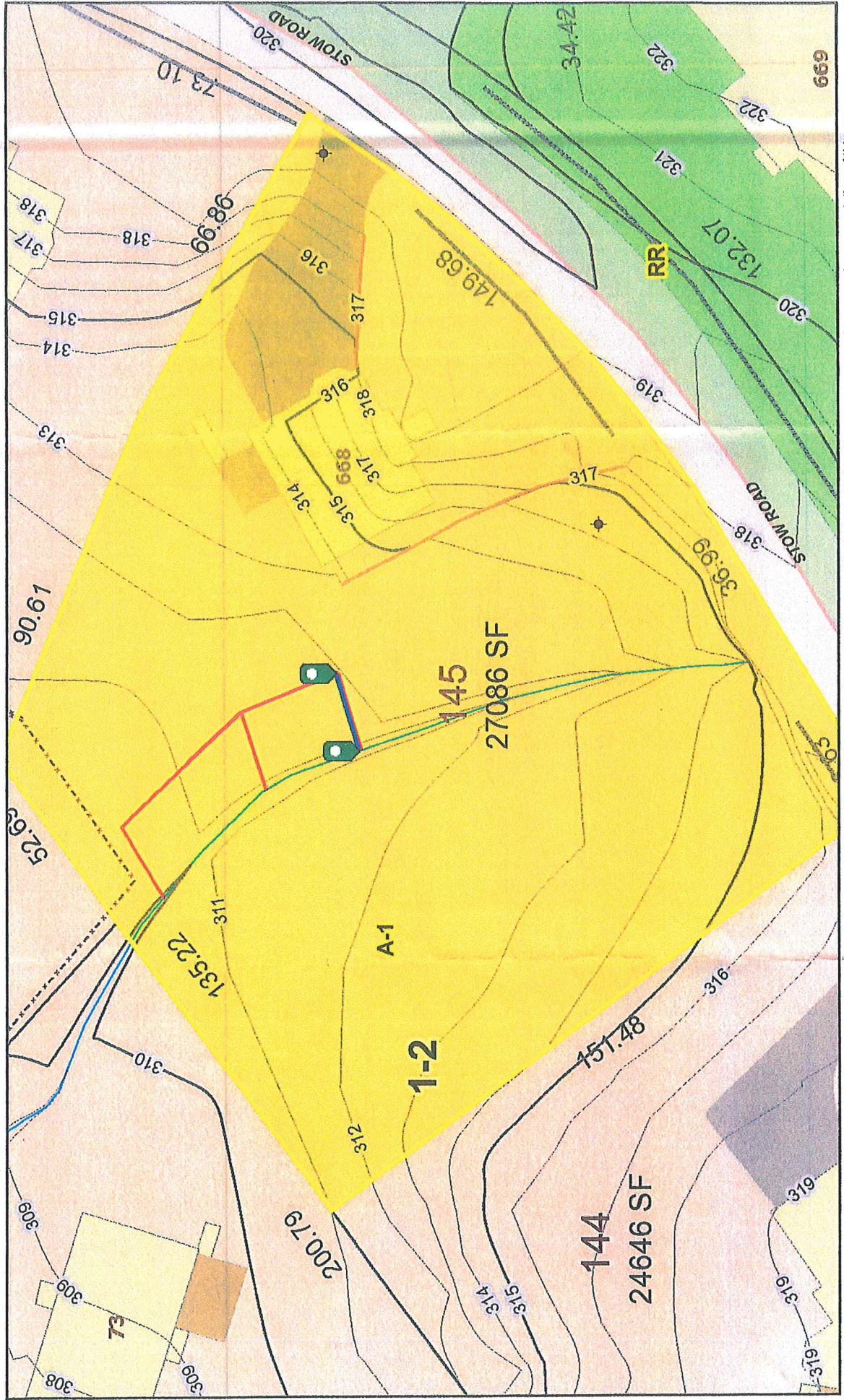
Marlborough, MA

1 inch = 34 Feet



May 1, 2020

668 Staw Rd



Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.



TO: Marlborough Conservation Commission DATE: April 30, 2020
Revised May 13, 2020

CC: Muazzez G. Reardon, P.E., MassDOT Project Manager
Susan McArthur, MassDOT, Wetlands Permitting Supervisor

FROM: Steven J. Tyler, P.E., Associate HSH PROJECT NO.: 2013061.32

SUBJECT: 608647, Marlborough – Resurfacing and Related Work on Route 20
Response to Marlborough Conservation Commission Questions

Summary

The purpose of this memorandum is to provide a summary response to the questions raised by the Marlborough Conservation Commission at the April 9, 2020 public hearing for the Notice of Intent filed for the Marlborough Route 20 project. The following questions raised by the Marlborough Conservation Commission will be addressed by this memorandum:

1. Station 42+50 Right. Please describe if any changes in drainage conditions will occur on the south side of Route 20 at Broad Meadow Brook because of the proposed improvements?
2. Station 62+00 to 64+00 Left. Verify the proposed design prevents water from ponding along the gutter line in front of Burger King.
3. Station 122+50 Right. Will the project consider dredging out existing sediment at the existing intermittent stream outlet located in the northwest corner of Hager Pond?
4. Station 136+00 Right. Is there a MassDOT approved / permitted new driveway access curb cut opening for the property owner east of Hager Street / Wayside Inn Road on the south side of Route 20? The property owner has recently created a new driveway/access to Route 20 and is dragging dirt and debris into the road. The ConComm would like to know if this is a MassDOT authorized access or not to help them address their concerns there?

Additional Questions from Continued May 7, 2020 Public Hearing

5. Station 42+50 Left. Provide further information regarding invasive species control.
6. Station 62+00 to 64+00 Left. Address follow up question from abutting Jolen Mobile Home Village regarding concern that the increase in flow rates at this location will increase the flood elevation.



Question 1: Station 42+50 Right - Drainage Conditions at Broad Meadow Brook (Downstream Side)

Marlborough Conservation Commission Comment / Question 1: Please describe if any changes in drainage conditions will occur on the south side of Route 20 at Broad Meadow Brook because of the proposed improvements?

Revised Response (May 13, 2020): As indicated in the Stormwater Report included with the NOI filing for the project (refer to NOI Attachment H) the proposed design will result in a modest increase in peak stormwater flow at this location, referred to as Design Point Number 3 (DP#3), compared to existing conditions. The following additional information has been copied from the Stormwater Report (NOI Attachment H).

Under existing conditions, Subcatchment EX3 collects stormwater runoff in Boston Post Road from the Cider Hill Condominiums (STA 28+75±) to approximately 60 feet east of Village Drive STA 51+50±). Stormwater flows overland and is collected by catch basins and conveyed through a closed drainage system to Broad Meadow Brook (DP#3). Stormwater is conveyed through a 12-inch PVC pipe outlet on the east side and an 18-inch RCP on the west side of Broad Meadow Brook to the south of Route 20.

In the proposed conditions, stormwater runoff generated along Boston Post Road from the Cider Hill Condominiums to Village Drive (westerly portion of PR-3) will be collected in new deep sump catch basins and conveyed through a new closed pipe system that outlets into Broad Meadow Brook through the existing 18-inch RCP outfall located on the westerly side of the brook. Stormwater runoff from Route 20 from approximately 160 feet east of Village Drive (STA 52+75±) to Broad Meadow Brook (easterly portion of PR-3) will be collected in new deep sump catch basins and conveyed through a new closed pipe system that includes replacing the existing 12-inch PVC outfall pipe with a 24-inch RCP. The existing 12-inch PVC outlet is undersized for the 10-year 24-hour storm and will be updated to a 24-inch RCP by the project.

For the project overall, the post-development peak discharge rate is higher than the existing peak discharge rate at DP#1 –DP#5 and DP#7-DP#11 in part due to the addition of pavement for sidewalks on both sides of Boston Post Road and widening within the shoulders and travel lanes. The proposed project increases the impervious area by 72,266 square feet overall. However, the proposed project will improve upon the existing condition by introducing elements to improve the water quality of runoff and by providing recharge opportunities. Structural Best Management Practices (BMPs) proposed include 92 deep sump catch basins, 5 leaching basins, a grassed swale, a sediment forebay and an infiltration basin. In the proposed condition the offsite stormwater runoff



has been reduced at DP#6 & DP#12. Peak discharge rates are provided in Table 1 of the Stormwater Report. Hydrology calculations are provided in Appendices B and C of the Stormwater Report.

Per Table 1 of the Stormwater Report the Pre- vs Post-Development impervious area is 109,144 sf vs. 144,194 sf, and the Pre- vs Post-Development peak discharge flow rate for the 2-year storm event is 7.29 cfs vs. 11.03 cfs, respectively, at DP #3 (Broad Meadow Brook). Further, the Pre- vs Post-Development peak discharge flow rate for the 10-year storm event is 12.83 cfs vs. 17.02 cfs, and for the 100-year storm event is 21.49 cfs vs. 26.46 cfs, respectively.

Based on StreamStats data, the peak flows for this portion of the Brook Meadow Brook watershed are 29.3 cfs (2-yr storm), 66.0 cfs (10-yr storm), and 132.0 cfs (100-yr storm). Please see the attached StreamStats Analysis of Broad Meadow Brook. The increase in peak flows in proposed conditions are 3.74 cfs (2-yr storm), 4.19 cfs (10-yr storm), and 4.97 cfs (100-yr storm). This translates to increases of 12.7%, 6.3% and 3.7% respectively.

Question 2: Station 62+00 to 64+00 Left – Route 20 Drainage Conditions at Burger King

Marlborough Conservation Commission Comment / Question 2: Verify the proposed design prevents water from ponding along the gutter line in front of Burger King.

Upon review of the grading plans in this area it has been confirmed that the project is designed to prevent water from ponding along the gutter line in front of Burger King. Along this section of the road the gutter line is continuously sloped / graded to drain from east to west along the gutter line in front of Burger King. Within this section of the road there are catch basins proposed; a.) approximately 100 feet east of the Burger King property and its eastern most driveway; b.) another approximately half-way between the 2 Burger King driveways; and c.) two more at the western most Burger King driveway, where the road grade transitions upgradient in the opposite direction.

Question 3: Station 122+50 Right – Sediment Dredging at Hager Pond

Marlborough Conservation Commission Comment / Question 3: Will the project consider dredging out existing sediment at the existing intermittent stream outlet located in the northwest corner of Hager Pond?

Revised Response (May 13, 2020): MassDOT has not used sand their roads for several years and does not think the sedimentation is MassDOT's responsibility. Also, looking at old satellite photos, there



are clear indications of numerous construction activities occurring or that have occurred on abutting properties. Given this is a cross culvert, a large majority of the deposits, would come from upstream activities. Given that the project will have the necessary equipment present at that location to facilitate the bank refortification work, MassDOT has agreed to include dredging 90 Cubic Yards of sediment out of the pond as part of the proposed project improvements.

Question 4: Station 136+00 Right – New Curb Cut Construction Impacts East of Hager St / Wayside Inn Rd

Marlborough Conservation Commission Comment / Question 4: Is there a MassDOT approved / permitted new driveway access curb cut opening for the property owner east of Hager Street / Wayside Inn Road on the south side of Route 20? The property owner has recently created a new driveway/access to Route 20 and is dragging dirt and debris into the road. The Conservation Commission would like to know if this is a MassDOT authorized/permitted access or not to help them address their concerns there?

The private property located east of Hager Street / Wayside Inn Road on the south side of Route 20 does not have a permit to access the curb cut opening. MassDOT's Permit section will be contacting them regarding the curb cut opening.

Question 5: Station 42+50 Left – Invasive Plant Species

Marlborough Conservation Commission Comment / Question 5: Provide further information regarding invasive species control.

New Question / Response (Added May 13, 2020): As discussed at the May 7, 2020 virtual public hearing the project includes additional requirements for invasive species control for the entire project limits that also apply to this location. As requested by the Conservation Commission we have attached the Technical Specifications for Invasive Species Control to this memorandum for reference.



Question 6: Station 62+00 to 64+00 Right - Drainage Conditions at Broad Meadow Brook (Downstream Side) – Follow-up to Question 1 Regarding Flood Elevation

Marlborough Conservation Commission Comment / Question 6: Address follow up question from abutting Jolen Mobile Home Village regarding concern that the increase in flow rates at this location will increase the flood elevation.

New Question / Response (Added May 13, 2020): As described in our response to Question 1, the project does increase peak flow at the location, which correlates to the peak volume of water getting to this location sooner. With regard to the total volume of water and the base flood elevation, the change is considered de minimis in the context of the overall watershed and should have a negligible effect on the flood elevation.

Attachments (Added May 13, 2020)

StreamStats Analysis of Broad Meadow Brook

Route 20 Grading Plan Sheet 12 of 27 (Sheet 146 or 428); In front of Burger King; Pertains to Question #2

Technical Specifications for Invasive Species Control; Pertains to Question #5

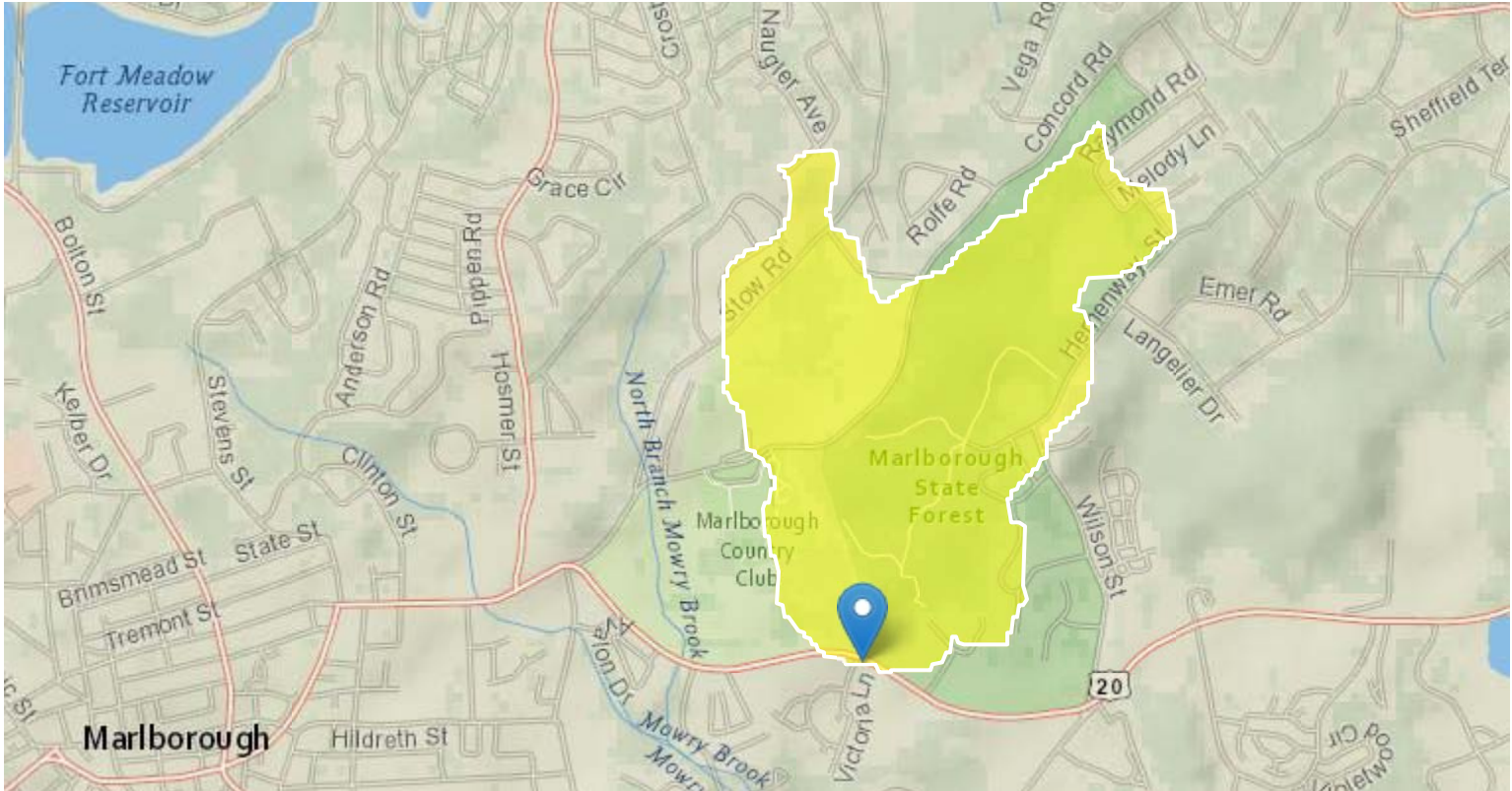
Broad Meadow Brook StreamStats Report

Region ID: MA

Workspace ID: MA20200513133615703000

Clicked Point (Latitude, Longitude): 42.34922, -71.51808

Time: 2020-05-13 09:36:34 -0400



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.68	square miles
ELEV	Mean Basin Elevation	358	feet
LC06STOR	Percentage of water bodies and wetlands determined from the NLCD 2006	8.26	percent

Peak-Flow Statistics Parameters^[Peak Statewide 2016 5156]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
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Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.68	square miles	0.16	512
ELEV	Mean Basin Elevation	358	feet	80.6	1948
LC06STOR	Percent Storage from NLCD2006	8.26	percent	0	32.3

Peak-Flow Statistics Flow Report^[Peak Statewide 2016 5156]

PII: Prediction Interval-Lower, Plu: Prediction Interval-Upper, SEp: Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	PII	Plu	SEp
2 Year Peak Flood	29.3	ft ³ /s	14.9	57.8	42.3
5 Year Peak Flood	49.6	ft ³ /s	24.8	99.2	43.4
10 Year Peak Flood	66	ft ³ /s	32.2	135	44.7
25 Year Peak Flood	90.1	ft ³ /s	42.4	191	47.1
50 Year Peak Flood	110	ft ³ /s	50.2	242	49.4
100 Year Peak Flood	132	ft ³ /s	58.2	299	51.8
200 Year Peak Flood	155	ft ³ /s	66.5	363	54.1
500 Year Peak Flood	190	ft ³ /s	77.4	464	57.6

Peak-Flow Statistics Citations

Zarriello, P.J.,2017, Magnitude of flood flows at selected annual exceedance probabilities for streams in Massachusetts: U.S. Geological Survey Scientific Investigations Report 2016–5156, 99 p. (<https://dx.doi.org/10.3133/sir20165156>)

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

USGS Software Disclaimer: This software has been approved for release by the U.S. Geological Survey (USGS). Although the software has been subjected to rigorous review, the USGS reserves the right to update the software as needed pursuant to further analysis and review. No warranty, expressed or implied, is made by the USGS or the U.S. Government as to the functionality of the software and related material nor shall the fact of release constitute any such warranty. Furthermore, the software is released on condition that neither the USGS nor the U.S. Government shall be held liable for any damages resulting from its authorized or unauthorized use.

USGS Product Names Disclaimer: Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Application Version: 4.3.11

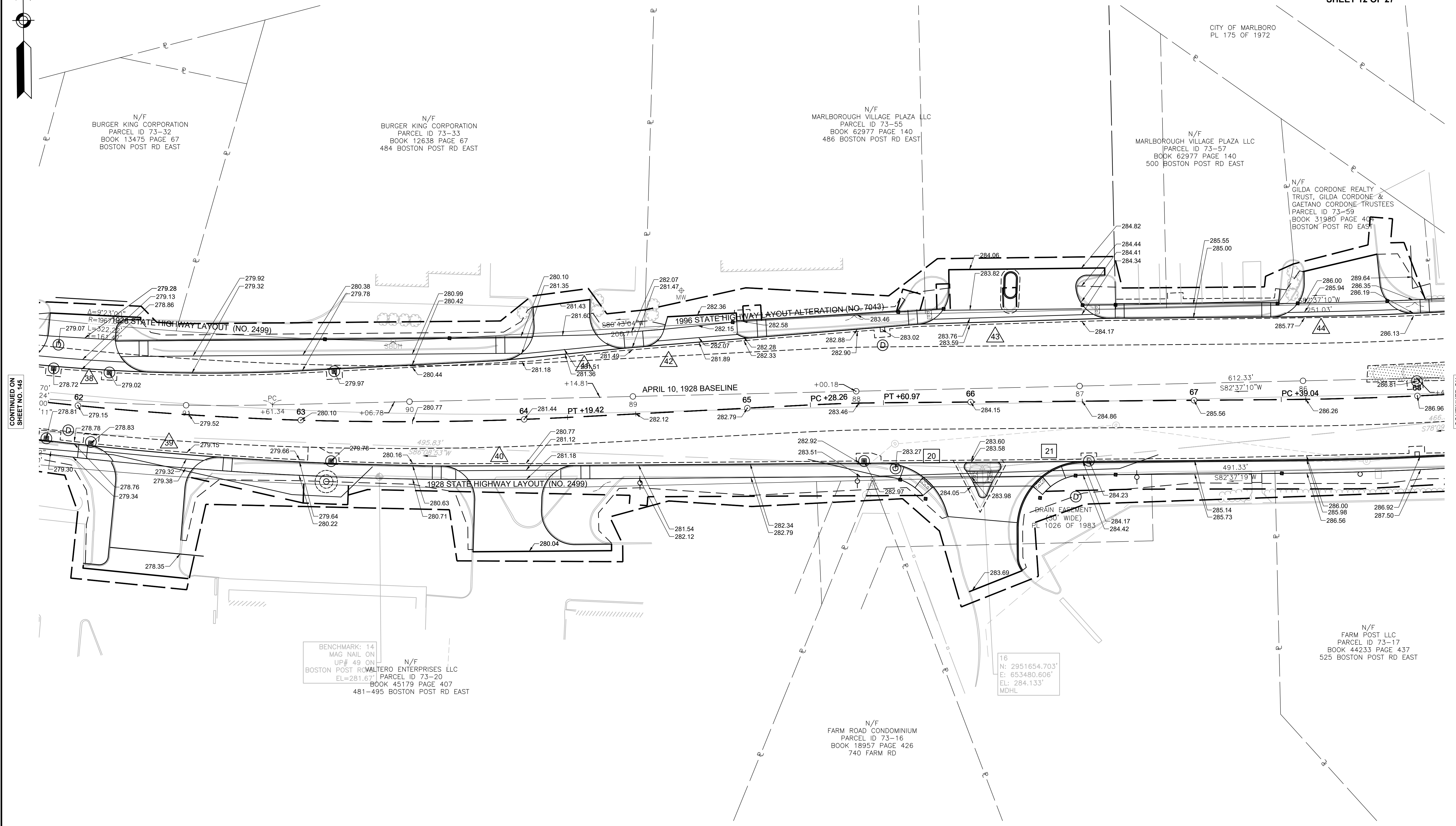


**MARLBOROUGH
BOSTON POST ROAD (ROUTE 20)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	146	428

**GRADING PLANS
SHEET 12 OF 27**

PROJECT FILE NO. 608467

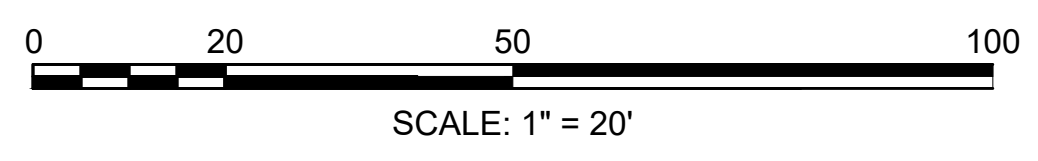


CONTINUED ON
SHEET NO. 145

CONTINUED ON
SHEET NO. 147

BENCHMARK: 14
MAG NAIL ON
UP# 49 ON
BOSTON POST RD
WALTERO ENTERPRISES LLC
PARCEL ID 73-20
EL=281.67'
BOOK 45179 PAGE 407
481-495 BOSTON POST RD EAST

16
N: 2951654.703'
E: 653480.806'
EL: 284.133'
MDHL



Existing shaped inverts shall be reconstructed as necessary to provide a smooth and uniform flow channel from the new pipe through the existing structure.

No separate payment will be made for the cost of connecting new pipes into existing structures, or necessary alterations of existing structure, but all costs in connection therewith shall be included in the unit prices bid for the various pipe items.

CONNECTING TO EXISTING DRAINAGE PIPES

Where new structures shown on the plans are to connect to existing pipes to remain, the remaining pipe shall be cleaned from the new structure to the next structure downstream. Test pits to locate and survey the existing pipe shall be performed prior to ordering the structure. The existing pipe or pipes shall be carefully cut or removed to allow the installation of the new drainage system. The existing pipe end shall be cut off flush with the inside face of the proposed structure wall and the remaining space around the pipe completely filled with red brick set in cement grout for the full thickness of the structure wall.

No separate payment will be made for the cost of connecting existing pipes to new structures, but all costs in connection therewith shall be included in the unit price bid for the various structure items. If new pipe or pipe section are required to extend the existing line to and through the new structure wall, the new pipe will be paid for under the unit price per foot established under that item.

NEW INTRODUCTIONS OF INVASIVE PLANTS INTO OR AROUND THE SITE

(Supplementing Subsections 7.01(D) Plant Pest Control and 7.13 Protection and Restoration of Property)

The Contractor shall ensure that no invasive plant species, as defined and listed by the Massachusetts Invasive Plant Advisory Group, are introduced or moved around the site by construction activities either by improperly cleaned construction equipment or importation of infected materials such as borrow, compost, nursery stock, seed, or hay bales. Corrective measures, if necessary, shall be made by The Contractor as directed by the Engineer. The Contractor shall be solely responsible for all costs associated with ensuring that invasive species are not introduced or moved around the site by construction activities and for all corrective measures required for as long as necessary to eliminate the introduced invasive plant species and prevent re-establishment of same. Item 102.3 includes compensation for site assessment to determine pre-construction presence of invasive plants as well as methods of control.

<u>ITEM 102.3</u>	<u>CONTROL OF INVASIVE PLANTS EXISTING ON SITE</u>	<u>HOUR</u>
<u>ITEM 102.33</u>	<u>STRATEGY FOR INVASIVE PLANTS EXISTING ON SITE</u>	<u>HOUR</u>

GENERAL

This item consists of controlling invasive plants within the project limits and documenting the extent of existing invasive plants within the project limits for the purposes of preventing spread during construction. An Invasive Plant Management Strategy (IPMS) for their control shall be submitted to the Engineer for review and approval and the IPMS shall be implemented on site.

Payment is per hour on site and shall be compensation for a minimum crew of 2 licensed applicators, 2 back-pack sprayers and mist-blowers, a properly equipped spray truck with spray hoses, and a tank with sufficient capacity for a full day of work.

The overall intent is to improve the habitat value of the site, protect proposed landscape restoration, improve future maintenance operations, and attempt to prevent future spread both on-site and to adjacent sites.

Measures to prevent the introduction of invasive plant species to the site and to correct their introduction as a result of construction-related activities shall be covered under the Standard Specifications, Division I - Sections 7.01(D) Plant Pest Control and 7.13 Protection and Restoration of Property as amended in these Special Provisions. Plant species targeted for management under this item include, but are not limited to, primarily bittersweet, Japanese knotweed, Tree of Heaven, and multi-flora rose.

The definition of invasive plant species shall be as described by Massachusetts Invasive Plant Advisory Group (MIPAG): “non-native species that have spread into native or minimally managed plant systems in Massachusetts, causing economic or environmental harm by developing self-sustaining populations and becoming dominant and/or disruptive to those systems.”

Control of invasive plants shall begin immediately with the initiation of construction and continue for a minimum of two (2) growing seasons. Work shall be done during the growing season from May – October.

The general expectation of treatment results is that there is no re-growth of targeted plant species at end of the first season unless otherwise addressed in the Invasive Plant Management Strategy.

Areas identified for vegetation control measures shall be as shown on the plans and as determined in the field by the Engineer and a MassDOT Landscape Architect. Contact at MassDOT Landscape Design Section is Tara Mitchell at (857) 368 -9177.

ITEM 102.3 & ITEM 102.33 (Continued)**SUBMITTALS**

1. No work shall begin without approval of the submittals.
2. Within 15 business days prior to the site walk, The Contractor shall submit all qualifications to the Engineer.
3. Contractor shall submit company qualifications to MassDOT Landscape Design for review and approval.

Submittals include the following items.

Qualifications**Invasive Plant Control Contractor Qualification:**

1. Company must provide proof of qualifications by providing the following:
 - a. Narrative describing company, its expertise and experience with invasive plant control.
 - b. Demonstrate experience with herbicide treatment as part of restorations and in sensitive areas
 - c. Describe company's technical qualifications and past performance.
2. Company must meet licensing requirements:
 - a. All crew applicators must have a Massachusetts Commercial Applicator License (CORE).
 - b. At least one or more applicator must have ROW certification if required for specific project.
 - c. Company must provide name(s) of applicator(s) and Applicator License/Certification number for all contractor crew leaders working on the project.
 - d. Company must provide documentation of any warnings, penalties or fines received in the last three (3) years.
3. Company must provide proof of experience with invasive plant control and include following:
 - a. At least five (5) references from prior invasive plant control work completed in last five (5) years. Provide contact information including address, phone number and email.
 - b. Provide a summary of each of these projects including nature of the problem, specific invasive vegetation treated, dates and period of treatment, methodologies used, and summary of success or not in terms of meeting performance objectives. Include summary of equipment used.
 - c. Photo documentation of these projects.
 - d. GPS coordinates of project locations, if available.
4. Crew leader must have expertise with invasive plant control and provide written documentation demonstrating the following: Have held Core Pesticide Applicator License for at least five (5) years. Resume listing five (5) or more years of experience applying pesticides with the company or with another company specializing in vegetation management.

ITEM 102.3 & ITEM 102.33 (Continued)

The following companies are pre-approved by MassDOT Landscape Design Section.

Groundscapes Express, Inc.

P.O. Box 737

Wrentham, MA 02093

Contact: John Engwer

Phone: 508-384-7140, FAX: 508-384-0571

Native Habitat Restoration

P.O. Box 334

Stockbridge, MA 01262

Contact: Jess M. Toro : 413-358-7400

Sari Hoy: 413-394-0277

New England Environmental, Inc.

15 Research Drive

Amherst, MA 01002

Contact: Scott Fisher

Phone: 413-256-0202, FAX: 413-256-1092

Vegetation Control Service, Inc.

2342 Main St.

Athol, MA 01331

Contact: Andrew Powers

Phone: 800-323-7706

Chris Polatin

Polatin Ecological Services, LLC

Old Blake Farm

334 Mountain Road

Gill, MA 01351

Phone: 413-367-5292, Fax 732-474-9757

Ted Elliman, Vegetation Management
Coordinator

New England Wild Flower Society

180 Hemenway Road

Framingham, MA 01701

508-877-7630 x 3203

Invasive Plant Management Strategy (IPMS)

Prior to the start of any invasive plant control treatment, submit in writing an IPMS proposal and Schedule of Control for approval by the Engineer and MassDOT Landscape Architect at least thirty (30) days prior to proposed treatment. All chemicals and methods proposed shall be consistent with applicable Massachusetts Wetlands Protection Act - Orders of Conditions. The IPMS shall include, but not be limited to, the following:

1. Description of treatment areas including identification of targeted invasive plant species, locations, approximate size of areas and digital photos with time/date stamp. Delineate treatment areas with polygons outlining their perimeter or locations of individual plants. A free-hand sketch drawn on construction plans or an aerial photo can be used to show locations.
2. Proposed methods of treatment for each species or area; such as manual removal, cutting, or herbicide treatment.
3. If herbicides are proposed, submit product label including application methods and rates for each (entire MSDS information need not be submitted if available online).
4. Proposed application rate.
5. Proposed time of treatment based on target plant species and construction schedule.
6. Method for disposing of invasive plant material including stems, trunks, branches, roots, associated soils, etc.
7. General monitoring schedule.

ITEM 102.3 & ITEM 102.33 (Continued)

8. Preliminary re-treatment schedule. Re-treatment shall be based on assessment of initial results and time of year.
9. Proposed performance metrics, or measure of treatment success, which shall be agreed upon by MassDOT.

Note: The IPMS is critical for identifying pre-construction conditions as well as strategies for minimizing import or spread of invasive plants. Failure to provide approved IPMS may jeopardize this item, in which case, The Contractor will be responsible for control of invasive plants found on site at no cost to the contract.

Follow-up Treatment Schedule

Depending on treatment results after the first year, the IPMS may be re-assessed for the second year to address additional concerns or adjust to conditions. A follow-up treatment schedule shall follow the same format as outlined above and submitted to the Engineer and MassDOT Landscape Architect for approval at least thirty (30) days prior to proposed treatment.

Reporting

Within two (2) weeks after each application, The Contractor shall provide to the Engineer a completed and signed MassDOT Herbicide Use Report. . Where applicable, The Contractor shall provide the name/s of the associated water body/bodies affected by potential discharge, per the requirements of Sections 7.1 and 7.2 of the USEPA Pesticide General Permit for the Discharges from the Application of Pesticides.

Photo Documentation

Digital photos with date and time stamp shall be provided with IPMS and follow-up reporting.

MATERIALS

All proposed herbicides shall be as approved prior to use in the IPMS. Herbicides shall be labeled for the method of treatment and shall meet all federal, state and local regulation requirements. All herbicide used shall be MDAR approved materials for Sensitive Areas. Application rates will depend on herbicide proposed and shall be per the manufacturer's label for specific application.

CONSTRUCTION METHODS

All methods used shall be as approved in the IPMS.

Prior to the start of any work, Contractor shall walk the site with the Engineer and the MassDOT Landscape Architect. The purpose of the site inspection is to identify limits of work, mark locations of areas designated for treatment and mark individual plants targeted for treatment or removal according to the IPMS. Contractor shall be responsible for marking plants and delineating areas to be preserved, removed, and otherwise treated. Fencing or other materials needed for marking and for delineating protected areas shall be incidental to this item.

ITEM 102.3 & ITEM 102.33 (Continued)**Herbicide Applications**

All herbicide application shall conform to Massachusetts Pesticide Laws and Regulations per the Massachusetts Department of Agricultural Resources (MDAR) Pesticide Bureau. Mixing, applying and/or disposing of herbicides shall always be in accordance with instructions on their labels and all applicable federal, state, and local regulations. Mixing shall not occur within sensitive areas, wetlands, or buffer zones. Contractor shall not spray 2 hours prior to precipitation and during rain. The Contractor shall be responsible for monitoring weather conditions and adjusting the work schedule as appropriate for the herbicide and application method to be used. Targeted vegetation shall be identified and marked prior to treatment. Plants treated by foliar spray, injection or glove application or other methods that leave standing vegetation, as opposed to cut-stump application, shall remain clearly marked for identification through the contract period. Desirable vegetation shall be protected from both spray and other physical damage. Contractor is responsible for any damage to vegetation not designated for removal or treatment. Vegetation damaged shall be restored. Cost of replacement plants and/or restoration shall be borne by The Contractor. Contractor shall ensure that the public does not enter a work area while herbicide application or spraying is underway.

Disposal of Invasive Plant Material

All material to be cleared shall become the property of The Contractor. The satisfactory disposal of all cleared plant material (seeds, roots, woody vegetation, associated soils, etc.) shall be The Contractor's responsibility.

The Contractor shall take measures to prevent viable plant material from leading to further infestations (seeds, roots, woody material, etc.) while stockpiled, in transit, or at final disposal locations. All precautions shall be taken to avoid contamination of natural landscapes with invasive plants or invasive plant material.

Chipping, shredding, or on-site burning of plant material shall not be permitted unless written approval is given as part of the Invasive Plant Management Strategy.

Contractor shall be responsible for treating areas of re-growth due to improper disposal.

In some instances, it may be preferable to dispose of plants on site with on-going monitoring for re-sprouting. This may be used only if method and disposal locations have been approved in the IPMS. Site work such as grading and seeding to stabilize disposal area shall be incidental to this item.

MONITORING

After initial herbicide treatment, all treated plants and areas shall be monitored through visual observation and re-treated as necessary and appropriate throughout the season and for the duration of the contract per the management proposal and schedule for control submitted by Contract. Monitoring shall be incidental to all items.

A brief Monitoring Report on treatment results that includes digital photographs shall be submitted to the Engineer and MassDOT Landscape Architect at the end of each season.

ITEM 102.3 & ITEM 102.33 (Continued)

METHOD OF MEASUREMENT

Item 102.3 will be measured for payment by the hour of crew time spent on the project doing actual work. A crew shall be defined as a minimum of two licensed applicators each equipped with (at minimum) back-pack sprayer and mist blower. The crew shall also have a properly equipped spray truck with hoses and a tank with sufficient capacity for a full day of work.

Item 102.33 will be measured for payment by the hour spent on the development of a plan for submission for the strategy for the implementation of Item 102.3.

BASIS OF PAYMENT

Payment will be based upon time spent on the project doing actual work and shall not include travel time to and from The Contractor's place of business and it shall also not include time for investigative field trips.

Item 102.3 and Item 102.33 will be paid at the Contract Unit Price per hour, which price shall include all labor, materials, equipment, tools and any incidentals required to complete the work as specified.

PROPOSED SITE PLAN OF MAP 73, LOTS 14 & 15A FARM ROAD MARLBOROUGH, MA

APPROVED
SITE PLAN REVIEW COMMITTEE

DATE: _____

GENERAL NOTES:

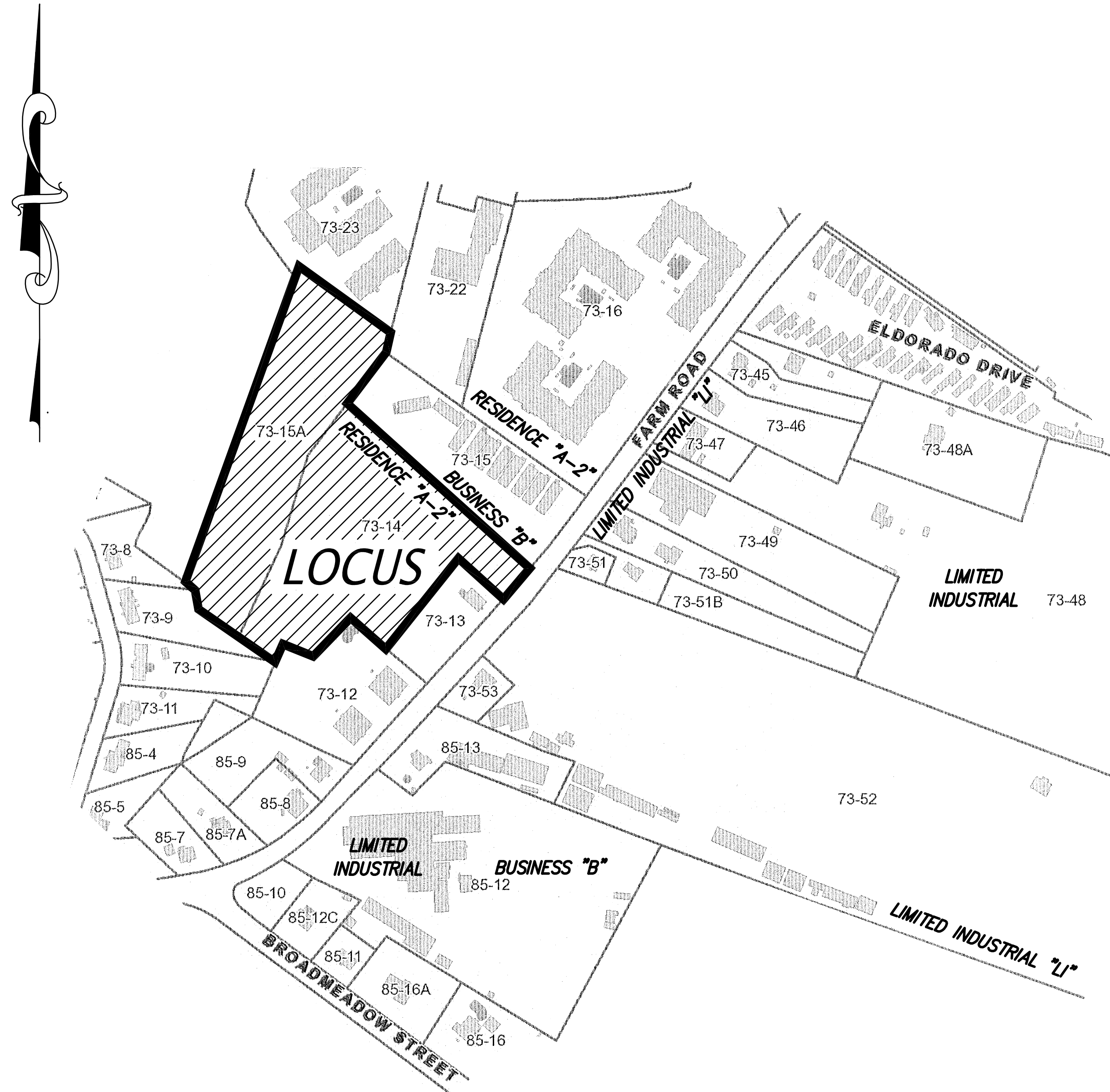
1. EXISTING BOUNDARY LINES AND TOPOGRAPHY IS BASED SURVEY AND TOPOGRAPHICAL SURVEY BY CONNORSTONE, INC. NOVEMBER 2019. ELEVATIONS ARE BASED UPON NGVD 1988 DATUM.
2. THE PARCEL IS SHOWN ON ASSESSORS MAP 73, PARCEL 14 & 15A.
3. EXISTING UTILITY LINES SHOWN ON THIS DRAWING ARE FROM AVAILABLE INFORMATION AND ARE APPROXIMATE LOCATIONS. THE ENGINEER DOES NOT GUARANTEE THEIR ACCURACY OR THAT ALL UTILITIES AND SUBSURFACE STRUCTURES ARE SHOWN. THE CONTRACTOR SHALL VERIFY SIZE, LOCATION AND INVERT ELEVATIONS OF THE UTILITIES AND STRUCTURES, AS REQUIRED PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES WITH RECORD DATA SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY. THE CONTRACTOR SHALL CONTACT DIG SAFE: 1-800-344-7233 (72 HOURS BEFORE DIGGING), AND TOWN DPW FOR UTILITY LOCATIONS PRIOR TO EXCAVATION. TEST PITS SHALL BE UTILIZED FOR UTILITY CONNECTIONS.

CONSTRUCTION NOTES:

1. ANY MINOR MODIFICATIONS (AS DETERMINED BY THE CITY ENGINEER) TO THE INFORMATION SHOWN ON THE APPROVED SITE PLANS SHALL BE SUBMITTED TO THE CITY ENGINEER AS A MINOR PLAN REVISION FOR APPROVAL PRIOR TO THE WORK BEING PERFORMED.
2. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
3. ALL MATERIALS AND CONSTRUCTION PRACTICES SHALL BE IN CONFORMANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE MARLBOROUGH DEPARTMENT OF PUBLIC WORKS, OR THE LATEST EDITION OF THE MASSACHUSETTS HIGHWAY DEPARTMENT (MHD) CONSTRUCTION STANDARDS AND THE MHD STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, WHICHEVER IS MORE STRINGENT.
4. THE WATER SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH THE TOWN OF MARLBOROUGH DPW WATER DIVISION RULES AND REGULATIONS. CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH APPLICABLE PERMITS (TO BE OBTAINED BY THE CONTRACTOR) WITH REQUIRED INSPECTIONS. FINAL LOCATION AND SIZE OF WATER SERVICES, FIRE DEPARTMENT SPRINKLER CONNECTIONS, AND SPRINKLER CONTROL ROOMS SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION.
5. THE SEWER SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH THE TOWN OF MARLBOROUGH DPW SEWER DIVISION RULES AND REGULATIONS. CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH APPLICABLE PERMITS (TO BE OBTAINED BY THE CONTRACTOR), WITH REQUIRED INSPECTIONS. INVERTS AT THE PROPOSED BUILDING SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION.
6. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, TO KEEP ACCURATE AS-BUILT MEASUREMENTS / RECORDS OF ALL UNDERGROUND OR CONCEALED WORK.
7. THE LAYOUT AND INSTALLATION OF ELECTRIC, GAS, TELEPHONE AND CATV UTILITY CONNECTIONS AND SERVICES SHALL IN ACCORDANCE WITH THE REQUIREMENTS OF THE RESPECTIVE UTILITY.
8. THE CONTRACTOR SHALL UTILIZE ALL MEASURES AND MATERIALS NECESSARY TO ENSURE THE SAFETY OF ALL PERSONS AND PROPERTIES AT THE SITE DURING CONSTRUCTION. ALL EXCAVATIONS SHALL CONFORM TO CURRENT OSHA STANDARDS.
9. A STREET OPENING PERMIT SHALL BE OBTAINED FROM THE CITY OF MARLBOROUGH DEPARTMENT OF PUBLIC WORKS PRIOR TO THE COMMENCEMENT OF ANY WORK IN THE PUBLIC WAY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE HIS WORK WITH THE APPROPRIATE HIGHWAY & UTILITY DEPARTMENTS.
10. UTILITY CONSTRUCTION IN CITY WAYS REQUIRES BACKFILL WITH CONTROLLED DENSITY FILL.
11. ALL CONSTRUCTION MATERIALS, STOCKPILES, STUMPS, ETC. ON SITE SHALL BE STORED IN A MANNER TO THE SATISFACTION OF THE CITY ENGINEER OR HIS DESIGNEE.
12. ALL SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC DEVICES" (MUTCD) AND THE OFFICE OF TRAFFIC OPERATIONS, FEDERAL HIGHWAY ADMINISTRATION, U.S. DEPARTMENT OF TRANSPORTATION.
13. ALL RAMPS, CURB CUTS, SIDEWALKS, AND ACCESSIBLE SPACES SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT REGULATIONS AND WITH ARCHITECTURAL ACCESS BOARD REGULATIONS (521 CMR 1-47).
14. JOINTS BETWEEN PROPOSED BITUMINOUS CONCRETE PAVEMENT AND EXISTING PAVEMENT TO REMAIN SHALL BE SAWCUT AND SEALED WITH HOT Poured RUBBERIZED ASPHALT SEALER.

COORDINATION WITH PLANS BY OTHERS:

15. SEE SEPARATE PLANS PREPARED BY OTHERS FOR LANDSCAPING AND SIGNAGE.
16. COORDINATE PROPOSED UTILITY LOCATIONS, SIZES, ELEVATIONS, AND MATERIALS WITH ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.
17. ANY CONFLICT BETWEEN THESE PLANS AND PLANS BY OTHERS SHALL BE REPORTED TO THE ENGINEER AND OWNER IMMEDIATELY.



LOCUS MAP: MAP 73, LOTS 14 & 15A FARM ROAD

SCALE: 1"=300'

ZONING : RESIDENCE A-2

LOT REQUIREMENTS	REQUIRED	PROPOSED
AREA	18,000 s.f.	332,742 s.f.
FRONTAGE	120 FEET	101.15 FEET
FRONT YARD	15 FEET	228.6 FEET
SIDE YARD	30 FEET	69.7 FEET
REAR YARD	40 FEET	310 FEET
BUILDING HEIGHT	2 1/2 STORIES	2 STORIES
MAXIMUM LOT COVERAGE	= 30%	14.9%

LOT COVERAGE TABULATION:

LOT AREA = 332,742± S.F.
EXISTING IMPERVIOUS AREA = 0 (0%)
PROPOSED IMPERVIOUS AREA = 49,650 S.F.
(BUILDING, DRIVEWAY, SIDEWALK)
PROPOSED LOT COVERAGE = 14.9%
ALLOWED LOT COVERAGE = 30%

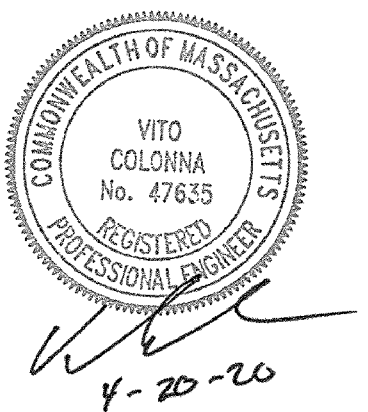
PARKING TABULATION:

DESIGN: 1 SPACE/2 STUDENTS
PLUS 1 SPACE PER 4 EMPLOYEES ON LARGEST SHIFT
PROPOSED STUDENTS = 27
EMPLOYEES ON LARGEST SHIFT = 27
TOTAL SPACES REQUIRED = 21
TOTAL SPACES PROVIDED = 75

SHEET INDEX:

SHEET / DESCRIPTION

- 1 / 6 COVER SHEET
- 2 / 6 EXISTING CONDITIONS
- 3 / 6 SITE PLAN
- 4 / 6 EROSION CONTROL PLAN
- 5-6 / 6 CONSTRUCTION DETAILS



PREPARED FOR:
NEW ENGLAND CENTER FOR CHILDREN
33 TURNPIKE ROAD
SOUTHBOROUGH, MA

OWNER:
MARLBOROUGH INDUSTRIAL, LLC
259 TURNPIKE ROAD, SUITE 100
SOUTHBOROUGH, MA

MAP 73, PARCELS 14 & 15A

**CONNORSTONE
ENGINEERING INC.**
CIVIL ENGINEERS AND LAND SURVEYORS
10 SOUTHWEST CUTOFF, SUITE 7
NORTHBOROUGH, MASSACHUSETTS 01532
PHONE: 508-393-9727 FAX: 508-393-5242

**PROPOSED SITE PLAN
COVER SHEET
MAP 73, LOTS 14 & 15A
FARM ROAD
MARLBOROUGH, MA**

4/20/2020	UTILITY COORD. & C. COMM ITEMS
REVISED:	DESCRIPTION:
DRAWN BY: REM	CHECK BY: VC
DATE: FEBRUARY 28, 2020	
SCALE: 1"= 10'	SHEET 1 OF 6.

N/F
HERITAGE FARM LLC
MAP 73, PARCEL 24
DEED BK. 41574, PG. 231

N/F
FARM COMMONS CONDOMINIUM
MAP 73, PARCEL 15
DEED BK. 57278, PG. 185

MAP 73, LOT 15A
AREA=142,096 S.F.
(3.26± ACRES)

MAP 73, LOT 14
AREA=190,646 S.F.
(4.38± ACRES)

WETLAND DELINEATION BY:
THREE OAKS ENVIRONMENTAL, LLC
NOVEMBER 15, 2019

BENCHMARK
NAIL-S, 16" OAK
ELEV.=276.71
(NAVD 1988)

N/F
JENNIFER BRODEUR
MAP 73, PARCEL 13
DEED BK. 32623, PG. 555

BENCHMARK
CHISEL SQUARE
ELEV.=279.70
(NAVD 1988)

N/F
SHILLINGTON COURT CONDOMINIUM
MAP 73, PARCEL 12
DEED BK. 12518, PG. 580

N/F
STEPHEN & EDITH JANIAK
MAP 73, PARCEL 10
DEED BK. 19492, PG. 52

DTH-1 (12-30-19)					
0-10"	Ap	SANDY LOAM	10YR3/2		
10-24"	Bw	SANDY LOAM	10YR5/6		
24-48"	C1	FINE SAND	2.5Y5/4		
48-120"	C2	CRS. S&G	2.5Y5/6		
NO MOTILES		NO WATER		NO REFUSAL	

DTH-2 (2-15-19)					
0-10"	Ap	SANDY LOAM	10YR3/2		
10-24"	Bw	SANDY LOAM	10YR5/6		
24-48"	C1	FINE SAND	2.5Y5/4		
48-120"	C2	CRS. S&G	2.5Y5/6		
NO MOTILES		NO WATER		NO REFUSAL	

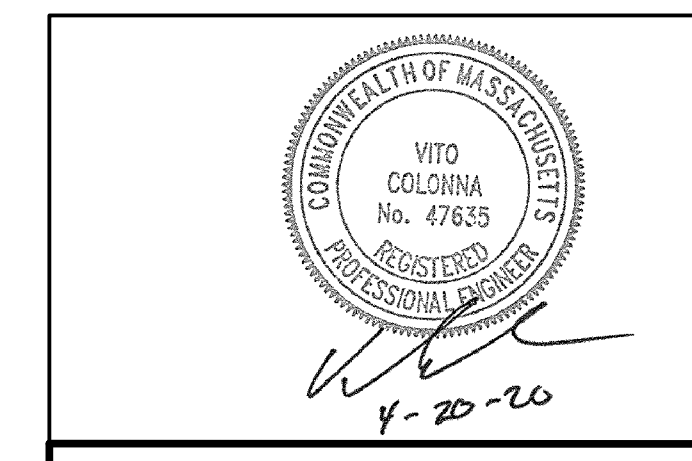
DTH-3 (2-15-19)					
0-10"	Ap	SANDY LOAM	10YR3/2		
10-24"	Bw	SANDY LOAM	10YR5/6		
24-48"	C1	FINE SAND	2.5Y5/4		
48-120"	C2	CRS. S&G	2.5Y5/6		
NO MOTILES		NO WATER		NO REFUSAL	

DTH-4 (2-15-19)					
0-12"		FILL			
12-40"	C1	FINE SAND	2.5Y5/4		
40-146"	C2	CRS. S&G	2.5Y5/6		
NO MOTILES		NO WATER		NO REFUSAL	

DTH-5 (2-15-19)					
0-4"	Ap	LOAMY SAND	10YR3/2		
4-42"	C1	FINE SAND	2.5Y5/4		
42-144"	C2	CRS. S&G	2.5Y5/6		
NO MOTILES		NO WATER		NO REFUSAL	

SYMBOLS & ABBREVIATIONS LEGEND

- PROP. DRAIN LINE/MANHOLE
- EXISTING SEWER LINE/MANHOLE
- EXISTING DRAIN LINE/MANHOLE
- CATCH BASIN
- FLARED END
- HEAD WALL
- HYDRANT
- GAS LINE/GATE
- WATER LINE/GATE
- TELEPHONE LINE/MANHOLE
- ELECTRIC LINE/MANHOLE
- ELECTRIC TRANSFORMER
- OVERHEAD WIRE
- FINISH GRADE CONTOUR
- MINOR CONTOUR
- MAJOR CONTOUR
- UTILITY POLE
- SIGN
- CHAIN LINK FENCE
- CONCRETE CURB
- VERTICAL GRANITE CURB
- SLOPED GRANITE CURB
- BITUMINOUS CONCRETE BERM
- MODIFIED CAPE COD BERM
- TREE LINE
- STONE WALL
- RETAINING WALL
- RIPRAP
- HDPE HIGH DENSITY POLYETHYLENE

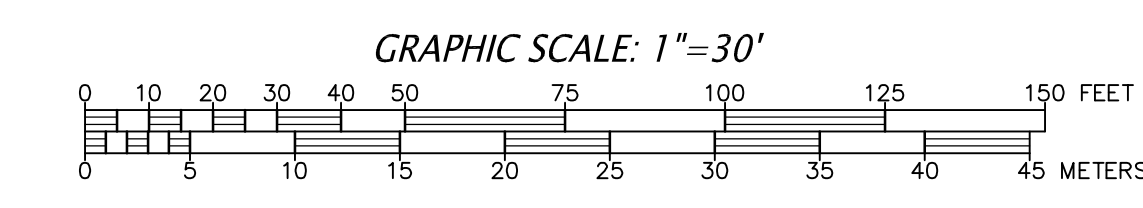


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SOUTHBOROUGH, MA

CONNORSTONE ENGINEERING INC.
CIVIL ENGINEERS AND LAND SURVEYORS
10 SOUTHWEST CUTOFF, SUITE 7
NORTHBOROUGH, MASSACHUSETTS 01532
PHONE: 508-393-9727 FAX: 508-393-5242

EXISTING CONDITIONS PLAN
OF
MAP 73, LOTS 14 & 15A
FARM ROAD
MARLBOROUGH, MA

4/20/2020	UTILITY COORD. & C. COMM ITEMS
REVISED:	DESCRIPTION:
DRAWN BY: REM	CHECK BY: VC
DATE: FEBRUARY 28, 2020	
SCALE: 1"=30'	SHEET 2 OF 6.



N/F
HERITAGE FARM LLC
MAP 73, PARCEL 24
DEED BK. 41574, PG. 231

N/F
FARM COMMONS CONDOMINIUM
MAP 73, PARCEL 15
DEED BK. 57278, PG. 185

N/F
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MAP 73, PARCEL 13
DEED BK. 32623, PG. 555

N/F
SHILLINGTON COURT CONDOMINIUM
MAP 73, PARCEL 12
DEED BK. 12518, PG. 580

N/F
STEPHEN & EDITH JANIAC
MAP 73, PARCEL 10
DEED BK. 19492, PG. 52

DRAINAGE TABULATION

FE-1
8" IN=276.0
CB-1
RIM=277.0
8" IN=274.3
12" OUT=274.2

CB-2
RIM=277.4
12" OUT=274.1

DMH-1
RIM=277.55
2-12" IN=273.8
12" OUT=273.7

CB-3-DOUBLE GRATE
RIM=276.0
12" OUT=272.8

STC-1
STORMCEPTOR 450I
RIM=277.55
12" IN=272.2-DMH
15" IN=272.2-CB
15" OUT=271.95

OCS-1
OUTLET CONTROL STRUCTURE
RIM=276.95
12" IN=271.8-STC-1
15" OUT=270.6
15" OVERFLOW=272.5

FE-2
12" OUT=268.0

SUBSURFACE DRYWELL-1
50 CULTEC CHAMBERS
(MODEL 330XLHD)
27'X74'X3.5' STONE BED
BOTTOM STONE=269.0
BOTTOM CHAMBERS=269.5
15" IN=270.50 (OCS-1)
8" IN=271.50 (ROOF DRAIN)
FOUR CLEANOUTS TO GRADE

CB-3-DOUBLE GRATE
RIM=276.0
12" OUT=272.8

STC-2
STORMCEPTOR 450I
W/ DOUBLE GRATE
RIM=275.00
12" OUT=271.8

OCS-2
OUTLET CONTROL STRUCTURE
RIM=275.3
12" IN=271.5-STC-2
12" OUT=269.7
12" OVERFLOW=271.5

FE-3
12" OUT=271.0

SUBSURFACE DRYWELL-2
12 CULTEC CHAMBERS
(MODEL 330XLHD)
27'X74'X3.5' STONE BED
BOTTOM STONE=268.0
BOTTOM CHAMBERS=268.5
12" IN=269.5 (OCS-2)
FOUR CLEANOUTS TO GRADE

ROOF DRYWELLS
6 CULTEC CHAMBERS EACH
(MODEL 330XLHD)
26'X13'X3.5' STONE BED
BOTTOM STONE=270.5
BOTTOM CHAMBERS=270.0
6" IN=272.50
TWO CLEANOUTS TO GRADE

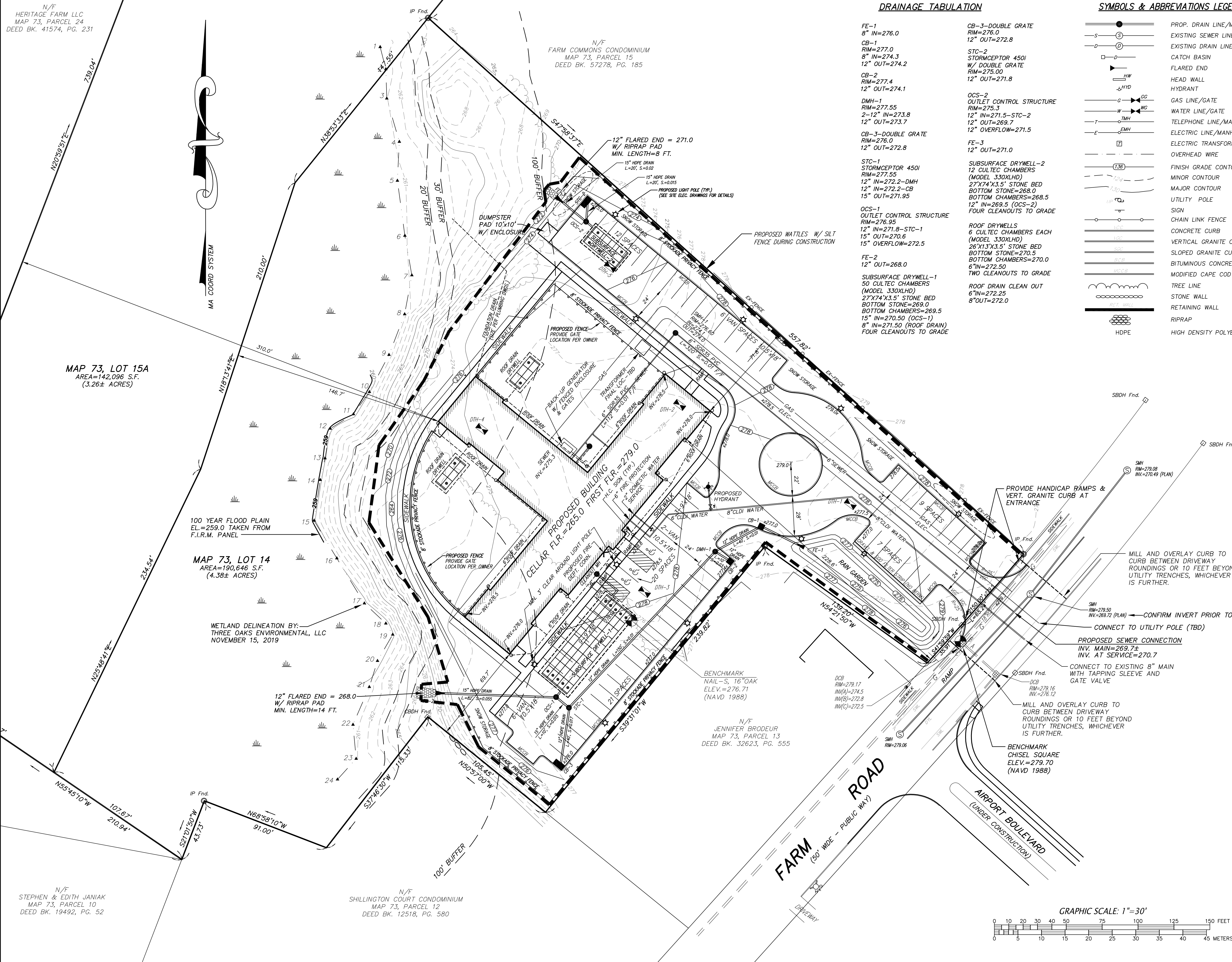
ROOF DRAIN CLEAN OUT
6" IN=272.25
8" OUT=272.0

SYMBOLS & ABBREVIATIONS LEGEND

	PROP. DRAIN LINE/MANHOLE
	EXISTING SEWER LINE/MANHOLE
	EXISTING DRAIN LINE/MANHOLE
	CATCH BASIN
	FLARED END
	HEAD WALL
	HYDRANT
	GAS LINE/GATE
	WATER LINE/GATE
	TELEPHONE LINE/MANHOLE
	ELECTRIC LINE/MANHOLE
	ELECTRIC TRANSFORMER
	OVERHEAD WIRE
	FINISH GRADE CONTOUR
	MINOR CONTOUR
	MAJOR CONTOUR
	UTILITY POLE
	SIGN
	CHAIN LINK FENCE
	CONCRETE CURB
	VERTICAL GRANITE CURB
	SLOPED GRANITE CURB
	BITUMINOUS CONCRETE BERM
	MODIFIED CAPE COD BERM
	TREE LINE
	STONE WALL
	RETAINING WALL
	RIPRAP
	HDPPE HIGH DENSITY POLYETHYLENE

CONSTRUCTION NOTES:

1. ANY MINOR MODIFICATIONS (AS DETERMINED BY THE CITY ENGINEER) TO THE INFORMATION SHOWN ON THE APPROVED SITE PLANS SHALL BE SUBMITTED TO THE CITY ENGINEER AS A MINOR PLAN REVISION FOR APPROVAL PRIOR TO THE WORK BEING PERFORMED.
2. ANY WORK AND MATERIAL WITHIN THE CITY RIGHT-OF-WAY SHALL CONFORM TO THE CITY OF MARLBOROUGH REQUIREMENTS.
3. ALL HANDICAP PARKING, RAMPS, AND ACCESS SHALL CONFORM TO AAB REQUIREMENTS.
4. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO CONSTRUCTION. EROSION CONTROL SHALL CONFORM TO THE CITY OF MARLBOROUGH CONSERVATION COMMISSION REQUIREMENTS.
5. ALL PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO "MUTCD" REQUIREMENTS.
6. A STREET OPENING PERMIT SHALL BE OBTAINED FROM THE CITY OF MARLBOROUGH DEPARTMENT OF PUBLIC WORKS PRIOR TO THE COMMENCEMENT OF ANY WORK IN THE PUBLIC WAY.
7. ALL CONSTRUCTION MATERIALS, STOCKPILES, STUMPS, ETC. ON SITE SHALL BE STORED IN A MANNER TO THE SATISFACTION OF THE CITY ENGINEER OR HIS DESIGNEE.
8. UTILITY CONSTRUCTION IN CITY WAYS REQUIRES BACKFILL WITH CONTROLLED DENSITY FILL.



MAP 73, LOT 15A
AREA=142,096 S.F.
(3.26± ACRES)

MAP 73, LOT 14
AREA=190,646 S.F.
(4.38± ACRES)

WETLAND DELINEATION BY:
THREE OAKS ENVIRONMENTAL, LLC
NOVEMBER 15, 2019

12" FLARED END = 268.0
W/ RIPRAP PAD
MIN. LENGTH=14 FT.

BENCHMARK
NAIL-S, 16" OAK
ELEV.=276.71
(NAVD 1988)

PROVIDE HANDICAP RAMPS &
VERT. GRANITE CURB AT
ENTRANCE

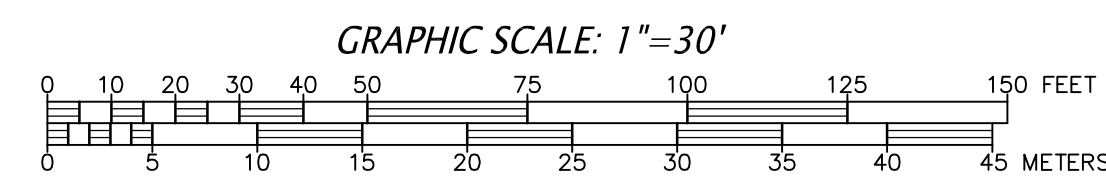
CONFIRM INVERT PRIOR TO CONSTRUCTION

PROPOSED SEWER CONNECTION
INV. MAIN=269.74
INV. AT SERVICE=270.7

CONNECT TO EXISTING 8" MAIN
WITH TAPPING SLEEVE AND
GATE VALVE

MILL AND OVERLAY CURB TO
CURB BETWEEN DRIVEWAY
ROUNDINGS OR 10 FEET BEYOND
UTILITY TRENCHES, WHICHEVER
IS FURTHER.

BENCHMARK
CHISEL SQUARE
ELEV.=279.70
(NAVD 1988)



PREPARED FOR:
NEW ENGLAND CENTER FOR CHILDREN
33 TURNPIKE ROAD
SOUTHBOROUGH, MA

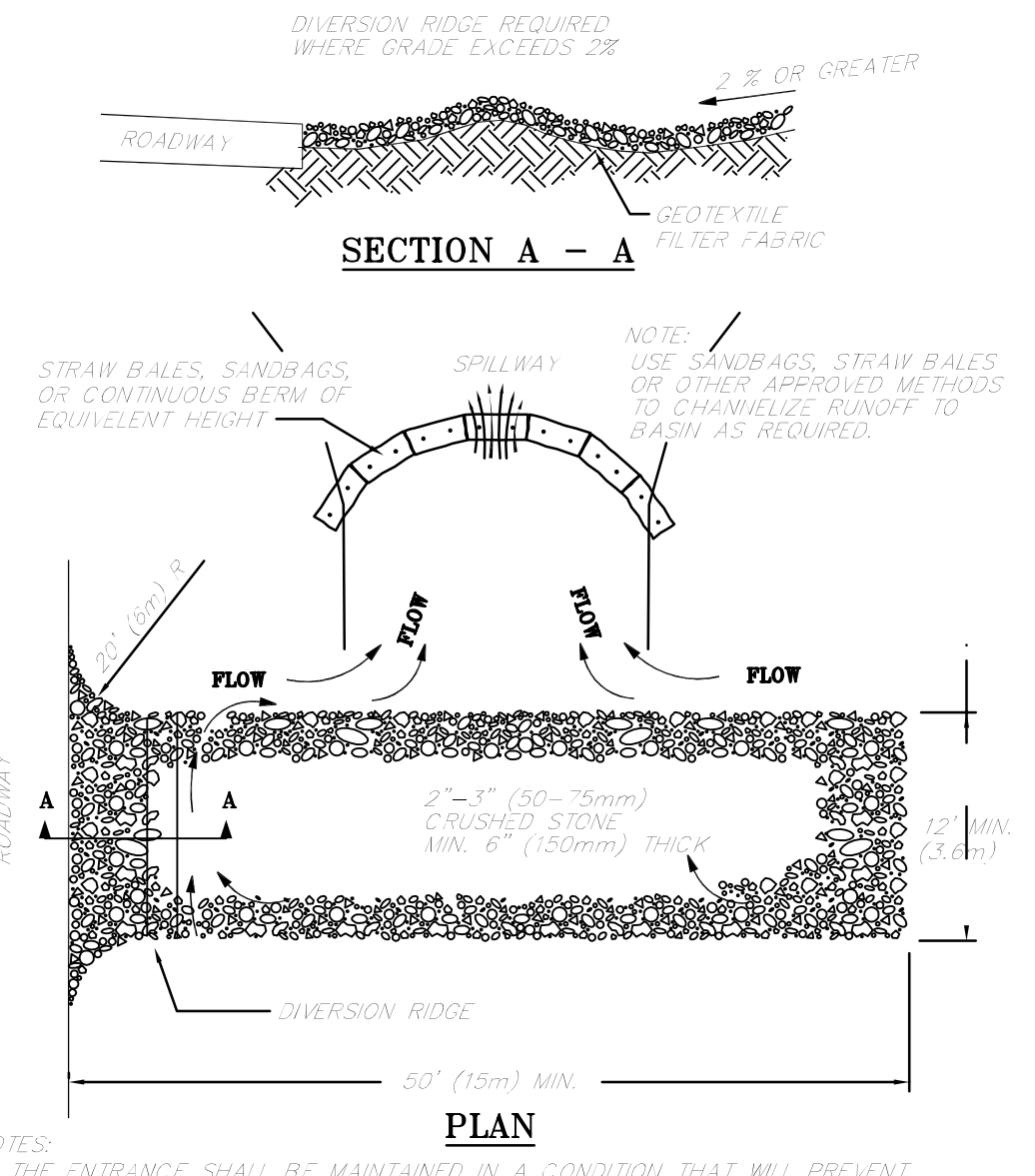
**CONNORSTONE
ENGINEERING INC.**
CIVIL ENGINEERS AND LAND SURVEYORS
10 SOUTHWEST CUTOFF, SUITE 7
NORTHBOROUGH, MASSACHUSETTS 01532
PHONE: 508-393-9727 FAX: 508-393-5242

**SITE PLAN
OF
MAP 73, LOTS 14 & 15A
FARM ROAD
MARLBOROUGH, MA**

4/20/2020	UTILITY COORD. & C. COMM ITEMS
REVISED:	DESCRIPTION:
DRAWN BY: REM	CHECK BY: VC
DATE: FEBRUARY 28, 2020	
SCALE: 1"=30'	SHEET 3 OF 6.

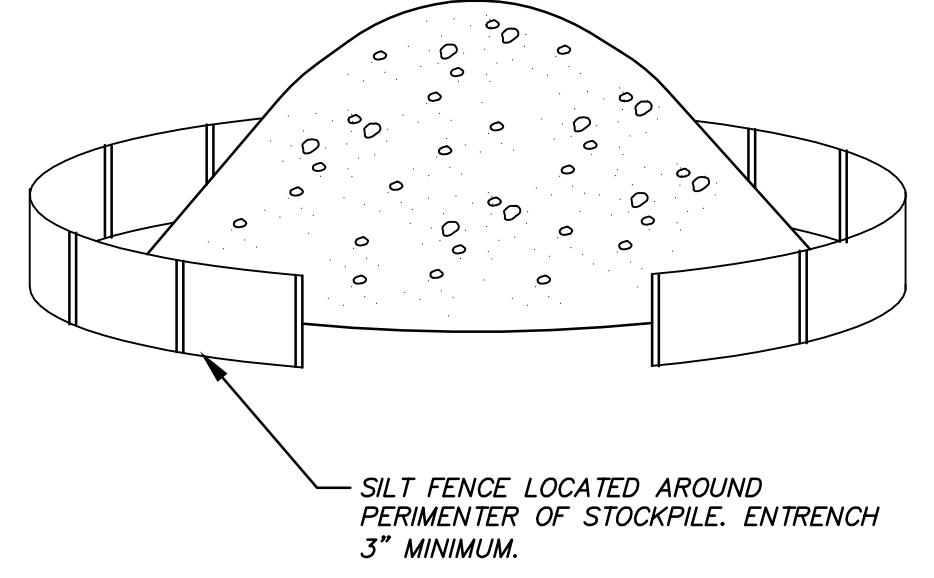
EROSION AND SEDIMENTATION CONTROL NOTES:

1. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO CONSTRUCTION.
2. EROSION CONTROL SHALL CONFORM TO THE CITY OF MARLBOROUGH REQUIREMENTS AS CONDITIONED IN THE SITE PLAN APPROVAL AND ORDER OF CONDITIONS.
3. PRIOR TO INITIATING CONSTRUCTION, ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND DETAIL DRAWINGS.
4. THIS PLAN DEPICTS THE MINIMUM REQUIRED SEDIMENTATION AND EROSION CONTROLS. THE CONTRACTOR SHALL EMPLOY ADDITIONAL SEDIMENTATION AND EROSION CONTROL MEASURES AS NECESSITATED BY SITE CONDITIONS, OR AS DIRECTED BY THE OWNER, THE OWNER'S REPRESENTATIVE, OR THE CONSERVATION COMMISSION TO ENSURE PROTECTION OF ALL WETLAND RESOURCES AND CONTROL SEDIMENT TRANSPORT. IF SEDIMENTATION PLUMES OCCUR, THE CONTRACTOR SHALL STOP WORK AND INSTALL ADDITIONAL SEDIMENTATION CONTROL DEVICES IMMEDIATELY TO PREVENT FURTHER SEDIMENTATION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY AND PERMANENT SEDIMENTATION AND EROSION CONTROLS UNTIL WORK IS COMPLETE AND ALL AREAS HAVE BEEN PERMANENTLY STABILIZED. AT SUCH TIME THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL SEDIMENTATION AND EROSION CONTROL MEASURES.
6. THE CONTRACTOR SHALL INSPECT SEDIMENTATION AND EROSION CONTROLS ON A DAILY BASIS AND IMMEDIATELY AFTER EACH RAINFALL; REPAIRS SHALL BE MADE BY THE END OF THE WORKING DAY. ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR WHEN THE VOLUME REACHES 1/4 TO 1/2 THE HEIGHT OF HAY BALE OR SEDIMENT TRAP, OR AS DIRECTED BY THE LOCAL AUTHORITY.
7. SOIL STOCKPILES SHALL BE STABILIZED TO PREVENT EROSION, AND A PERIMETER SEDIMENT CONTROL SYSTEM SHALL BE INSTALLED. FENCING SHALL BE INSTALLED AROUND STOCKPILES IN EXCESS OF 10 FEET IN HEIGHT.
8. DISTURBED AREAS SHALL BE STABILIZED BY LOAMING AND SEEDING, OR BY ANOTHER APPROVED METHOD, AS SOON AS POSSIBLE AFTER THE FINISHED GRADE HAS BEEN MET. DISTURBED AREAS WITH SLOPES 3:1 (H:V) OR GREATER SHALL BE COVERED WITH LOAM AND STABILIZED WITH HYDROSEED AND SOIL TACKIFIER. IF FINAL GRADING DOES NOT OCCUR DURING THE GROWING SEASON, THESE AREAS SHALL BE MULCHED WITH HAY SECURED.
9. DE-WATERING OPERATIONS, IF REQUIRED, SHALL DISCHARGE ONTO STABILIZED AREAS, AND ALL DISCHARGE WATER IS TO PASS THROUGH SEDIMENTATION CONTROL DEVICES TO PREVENT IMPACTS UPON WATER BODIES, BORDERING VEGETATED WETLANDS, DRAINAGE SYSTEMS AND ADJUTING PROPERTIES. AT A MINIMUM ALL DISCHARGES SHALL BE INTERCEPTED BY HAY BALE CORRAL AND HAY BALE CHECK DAMS SPACED 10' APART.
10. STAKED HAY BALES AND SILT FENCE SHALL BE INSTALLED ALONG THE EDGE OF PROPOSED DEVELOPMENT OR AS INDICATED ON THE PLANS. ADDITIONAL HAY BALES AND SILT FENCE SHALL BE LOCATED AS CONDITIONS WARRANT, AND IN SOME AREAS HAYBALE/SILT FENCING STRUCTURES MAY HAVE TO BE DUPLICATED AT REGULAR INTERVALS UP GRADIENT OF WETLANDS.
11. STREET SWEEPING IN THE VICINITY OF THE PROJECT AREA SHALL BE PERFORMED AS NEEDED UNTIL THE PROJECT LIMITS HAVE BEEN STABILIZED. ALL SEDIMENT TRACKED ONTO PUBLIC RIGHT-OF-WAYS SHALL BE SWEEPED AT THE END OF EACH WORKING DAY.
12. ALL EXISTING AND PROPOSED DRAINAGE SYSTEM INLETS, WHICH MAY RECEIVE STORM WATER FLOW FROM DISTURBED AREAS, SHALL BE PROVIDED WITH INLET PROTECTION (CATCH BASIN INSERTS, STREAMGUARD - MODEL 3003, OR APPROVED EQUAL). THE CONTRACTOR SHALL MAINTAIN THESE DEVICES PER THE MANUFACTURERS RECOMMENDATIONS UNTIL ALL WORK IS COMPLETED AND ALL AREAS HAVE BEEN ADEQUATELY STABILIZED.
13. DUST CONTROL MEASURES SHALL BE IMPLEMENTED AND MAINTAINED PROPERLY THROUGHOUT DRY WEATHER PERIODS UNTIL ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED. METHODS FOR DUST CONTROL SHALL INCLUDE WATER SPRINKLING AND/OR OTHER METHODS APPROVED BY THE ENGINEER.
14. ALL VEHICLES SHALL ENTER AND EXIT THE SITE VIA THE STABILIZED CONSTRUCTION ENTRANCE CONSISTING OF 3/4"-1 1/2" INCH CRUSHED STONE TO A DEPTH OF 12" FOR THE FIRST 50 FEET FROM EXISTING PAVED STREETS. IF THE SITE CONDITIONS ARE SUCH THAT THE GRAVEL PAD DOES NOT REMOVE THE MAJORITY OF THE MUD AND DEBRIS, THEN THE TIRES SHALL BE WASHED BEFORE ANY VEHICLES ENTER ADJACENT ROADWAYS. ALL WATER USED FOR TIRE WASHING SHALL BE COLLECTED AND TREATED PRIOR TO ENTERING THE DRAINAGE SYSTEM. THE CONTRACTOR SHALL INSPECT THE CONSTRUCTION ENTRANCE DAILY AND AFTER HEAVY USE.
15. EQUIPMENT SHALL NOT BE PARKED WITHIN WETLANDS.



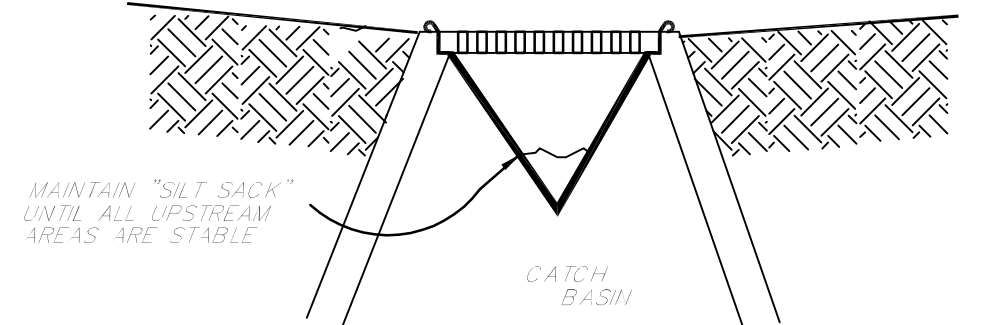
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT

- NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT INTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE INTO PUBLIC RIGHT-OF-WAY.
 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
 4. STONE APRON SHALL BE REPLACED AS DEPOSITED SOILS BUILD UP.



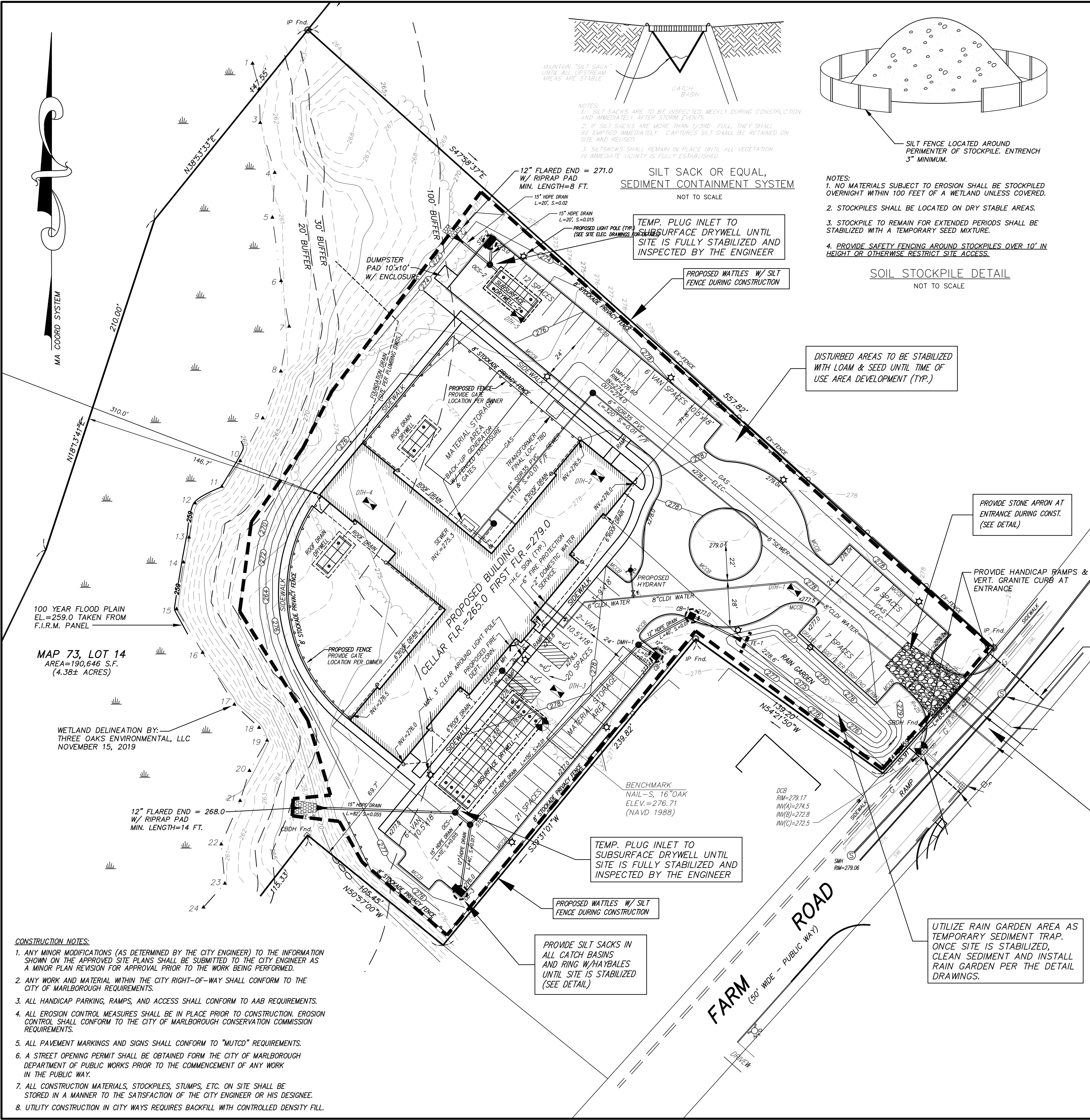
SOIL STOCKPILE DETAIL
NOT TO SCALE

- NOTES:
1. NO MATERIALS SUBJECT TO EROSION SHALL BE STOCKPILED OVERNIGHT WITHIN 100 FEET OF A WETLAND UNLESS COVERED.
 2. STOCKPILES SHALL BE LOCATED ON DRY STABLE AREAS.
 3. STOCKPILE TO REMAIN FOR EXTENDED PERIODS SHALL BE STABILIZED WITH A TEMPORARY SEED MIXTURE.
 4. PROVIDE SAFETY FENCING AROUND STOCKPILES OVER 10' IN HEIGHT OR OTHERWISE RESTRICT SITE ACCESS.



SILT SACK OR EQUAL, SEDIMENT CONTAINMENT SYSTEM
NOT TO SCALE

- NOTES:
1. SILT SACKS ARE TO BE INSPECTED WEEKLY DURING CONSTRUCTION AND IMMEDIATELY AFTER STORM EVENTS.
 2. IF SILT SACKS ARE MORE THAN 1/3RD FULL, THEY SHALL BE EMPTIED IMMEDIATELY. CAPTURED SILT SHALL BE RETAINED ON SITE AND REUSED.
 3. SILT SACKS SHALL REMAIN IN PLACE UNTIL ALL VEGETATION IN IMMEDIATE VICINITY IS FULLY ESTABLISHED.



CROSS SECTION

1. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3" DEEP. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.
2. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.

EROSION BARRIER
NOT TO SCALE

MAINTAIN STREET SWEEPING DURING CONSTRUCTION (SEE NOTE 11)

UTILIZE RAIN GARDEN AREA AS TEMPORARY SEDIMENT TRAP. ONCE SITE IS STABILIZED, CLEAN SEDIMENT AND INSTALL RAIN GARDEN PER THE DETAIL DRAWINGS.

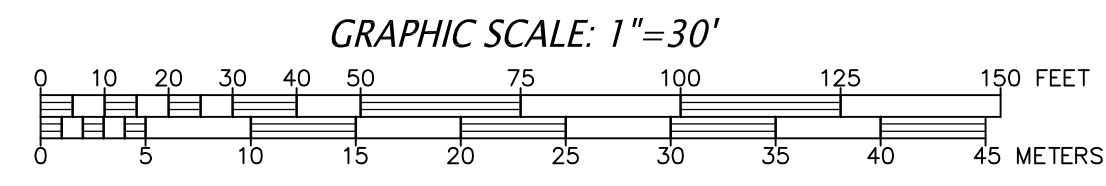
DISTURBED AREAS TO BE STABILIZED WITH LOAM & SEED UNTIL TIME OF USE AREA DEVELOPMENT (TYP.)

TEMP. PLUG INLET TO SUBSURFACE DRYWELL UNTIL SITE IS FULLY STABILIZED AND INSPECTED BY THE ENGINEER

PROVIDE SILT SACKS IN ALL CATCH BASINS AND RING W/HAYBALES UNTIL SITE IS STABILIZED (SEE DETAIL)

MAP 73, LOT 14
AREA=190,646 S.F.
(4.36± ACRES)

- CONSTRUCTION NOTES:**
1. ANY MINOR MODIFICATIONS (AS DETERMINED BY THE CITY ENGINEER) TO THE INFORMATION SHOWN ON THE APPROVED SITE PLANS SHALL BE SUBMITTED TO THE CITY ENGINEER AS A MINOR PLAN REVISION FOR APPROVAL PRIOR TO THE WORK BEING PERFORMED.
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 5. ALL PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO "MUTCD" REQUIREMENTS.
 6. A STREET OPENING PERMIT SHALL BE OBTAINED FROM THE CITY OF MARLBOROUGH DEPARTMENT OF PUBLIC WORKS PRIOR TO THE COMMENCEMENT OF ANY WORK IN THE PUBLIC WAY.
 7. ALL CONSTRUCTION MATERIALS, STOCKPILES, STUMPS, ETC. ON SITE SHALL BE STORED IN A MANNER TO THE SATISFACTION OF THE CITY ENGINEER OR HIS DESIGNEE.
 8. UTILITY CONSTRUCTION IN CITY WAYS REQUIRES BACKFILL WITH CONTROLLED DENSITY FILL.



PREPARED FOR:

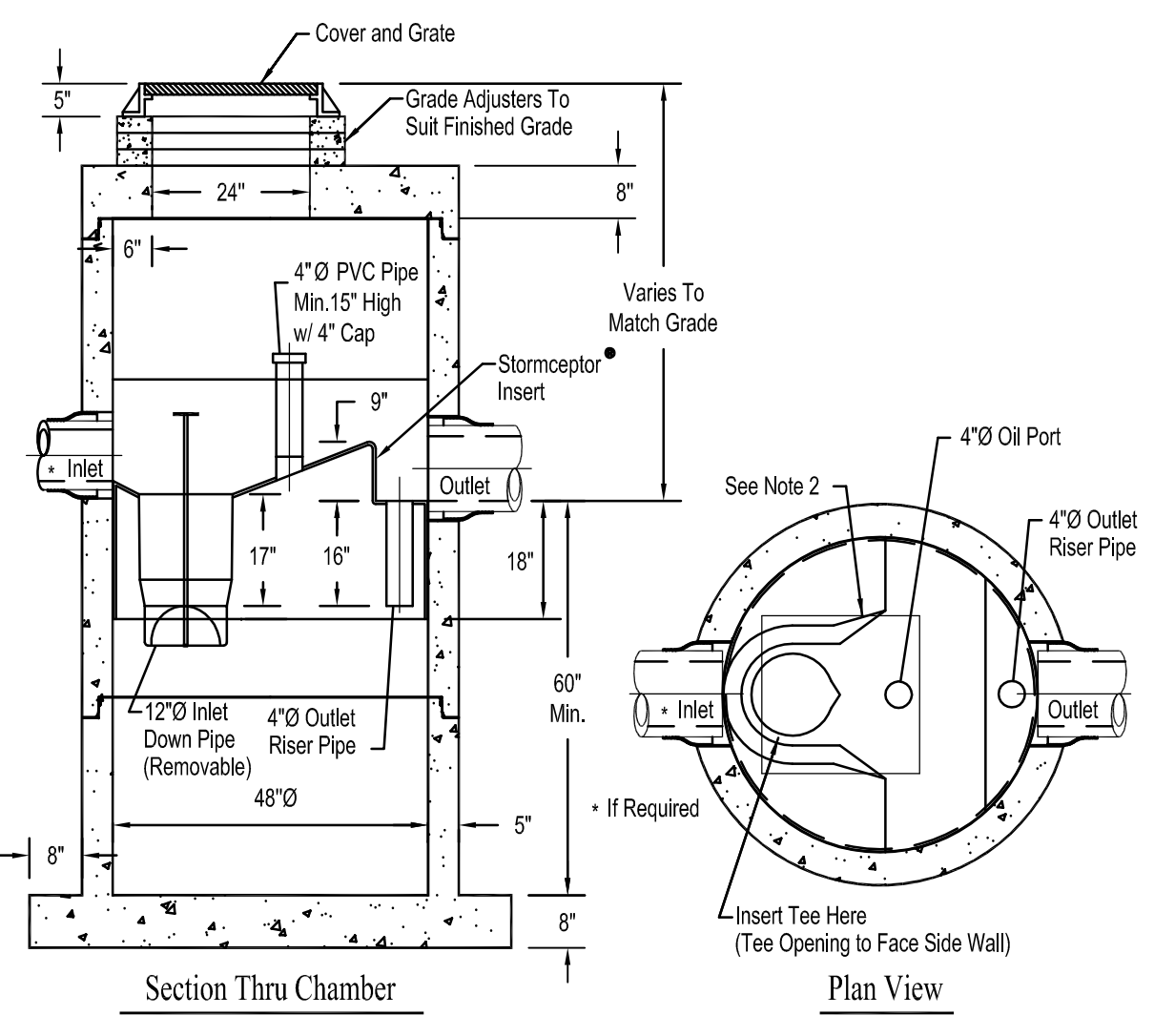
NEW ENGLAND CENTER FOR CHILDREN
33 TURNPIKE ROAD
SOUTHBOROUGH, MA

CONNORSTONE ENGINEERING INC.
CIVIL ENGINEERS AND LAND SURVEYORS
10 SOUTHWEST CUTOFF, SUITE 7
NORTHBOROUGH, MASSACHUSETTS 01532
PHONE: 508-393-9727 FAX: 508-393-5242

EROSION CONTROL PLAN
OF
MAP 73, LOTS 14 & 15A
FARM ROAD
MARLBOROUGH, MA

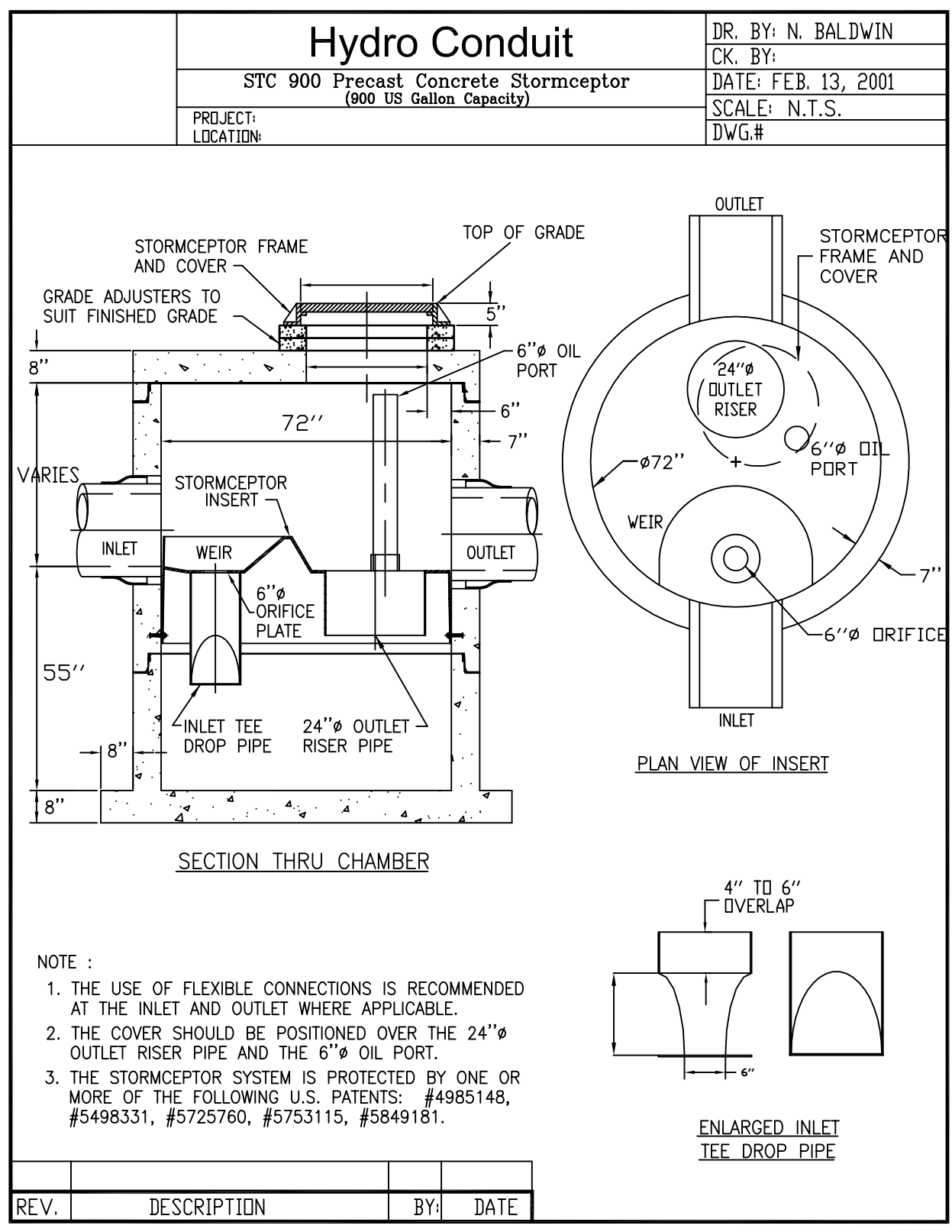
4/20/2020	UTILITY COORD. & C. COMM ITEMS
REVISED:	DESCRIPTION:
DRAWN BY: REM	CHECK BY: VC
DATE: FEBRUARY 28, 2020	
SCALE: 1"=30'	SHEET SWPPP 1

STC 450I Precast Concrete Stormceptor®
(450 U.S. Gallon Capacity)



- Notes:
1. The Use Of Flexible Connection is Recommended at The Inlet and Outlet Where Applicable.
 2. The Cover Should be Positioned Over The Inlet Drop Pipe and The Oil Port.
 3. The Stormceptor System is protected by one or more of the following U.S. Patents: #4985148, #5498331, #5725760, #5753115, #5849181, #6068765, #6371690.
 4. Contact a Concrete Pipe Division representative for further details not listed on this drawing.

Rinker 027

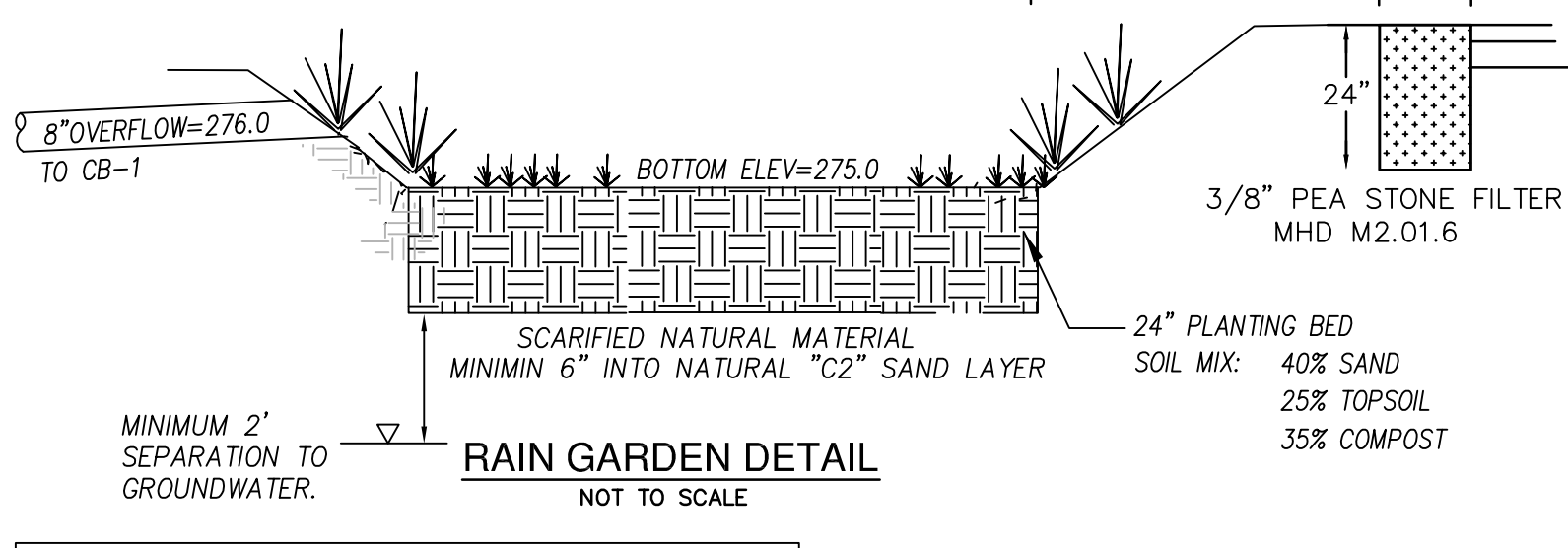


- NOTE:
1. THE USE OF FLEXIBLE CONNECTIONS IS RECOMMENDED AT THE INLET AND OUTLET WHERE APPLICABLE.
 2. THE COVER SHOULD BE POSITIONED OVER THE 24" Ø OUTLET RISER PIPE AND THE 6" Ø OIL PORT.
 3. THE STORMCEPTOR SYSTEM IS PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: #4985148, #5498331, #5725760, #5753115, #5849181.

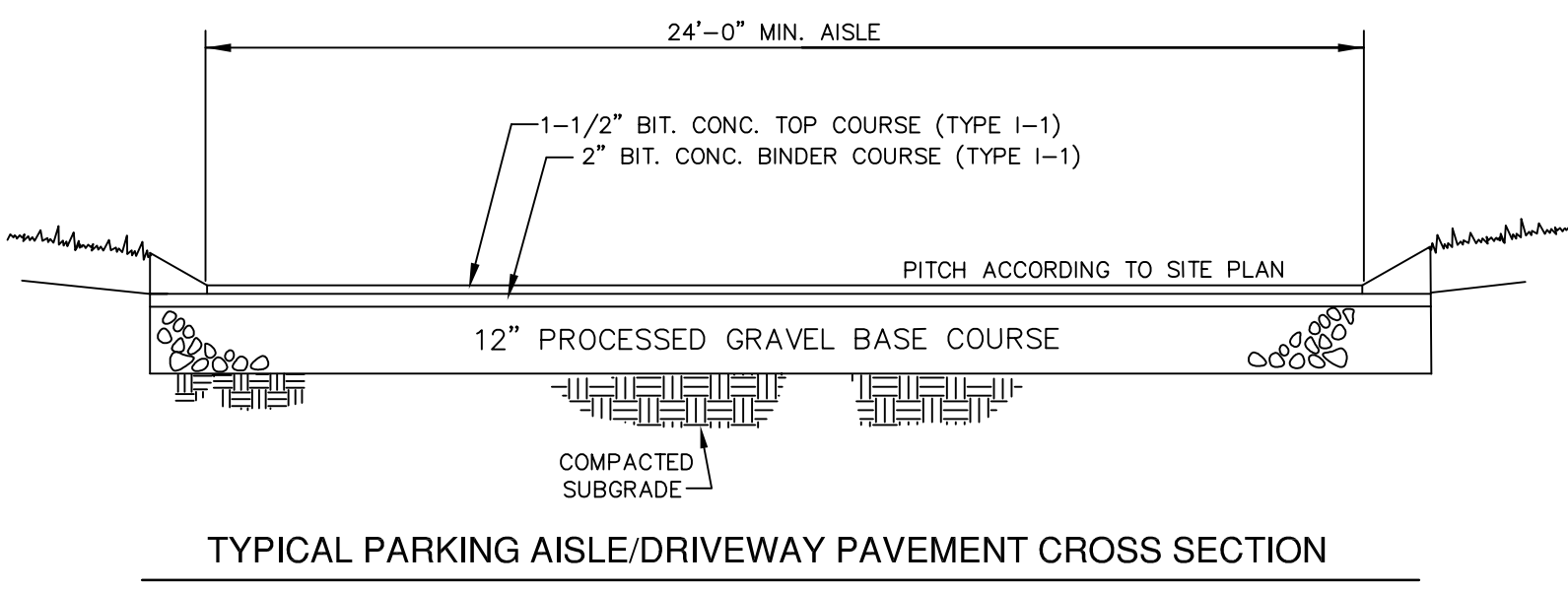
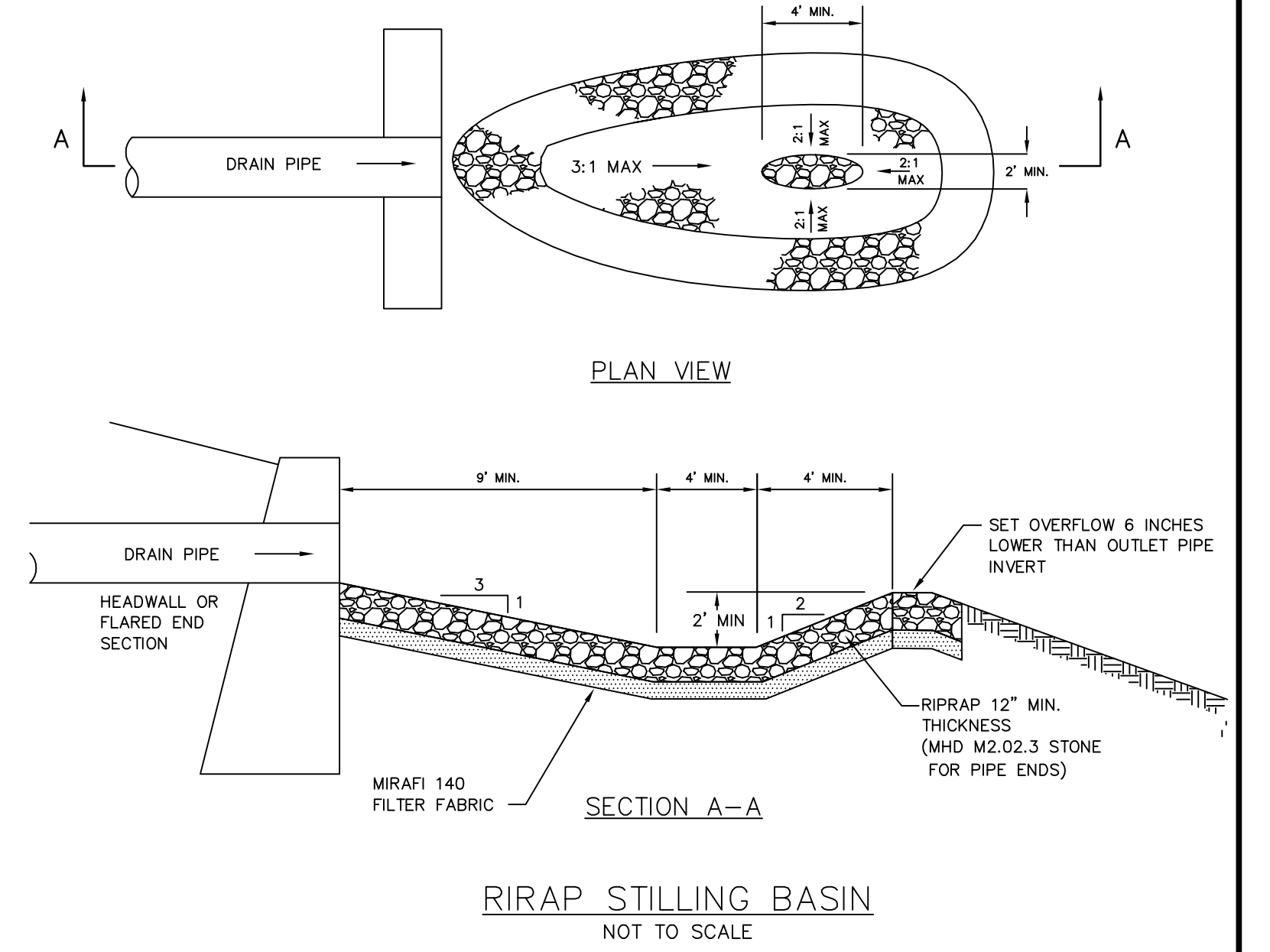
REV.	DESCRIPTION	BY	DATE

PLANT BASIN PERIMETER WITH
16 - INKBERRY (ILEX GLABRA)
16 - WINTERBERRY (ILEX VERTICILLATA)
PLANTED AT 6 FEET O.C.
(OR AS SHOWN ON FINAL LANDSCAPE PLANS)

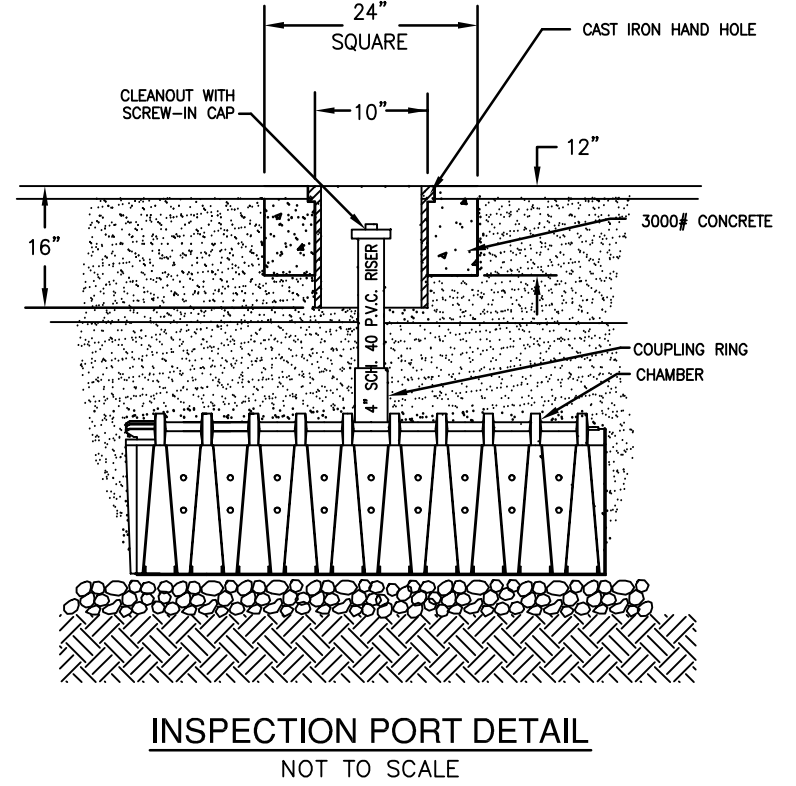
BOTTOM OF BASIN TO BE SEEDED WITH "NEW ENGLAND EROSION CONTROL/RESTORATION MIX (FOR DETENTION BASIN AND MOIST SITES), OR EQUAL.



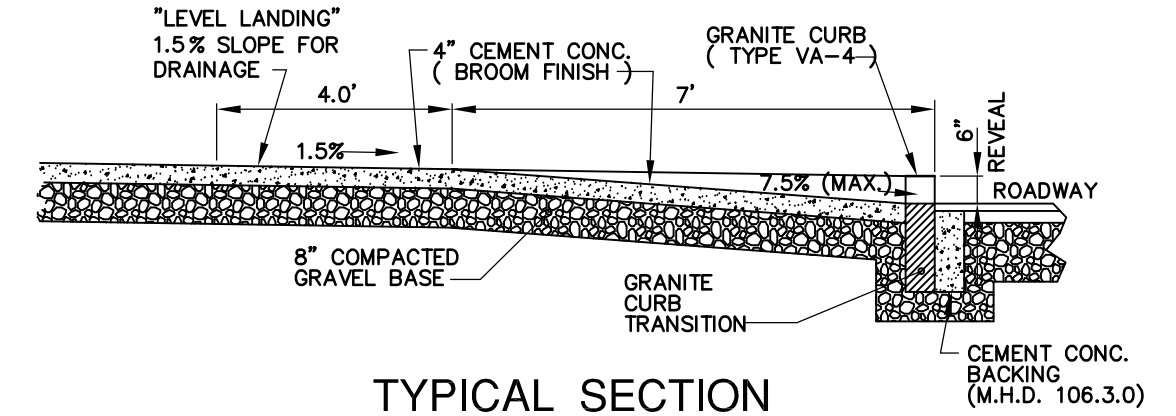
EXCAVATE A MINIMUM 6 INCHES IN TO NATURAL "C2" LAYER, AND REMOVE ANY UNSUITABLE MATERIALS BELOW OR AROUND THE SYSTEM. ANY REPLACEMENT FILL REQUIRED SHALL BE CLEAN FREE DRAINING FILL WITH LESS THAN 5% PASSING THE #200 SIEVE (TITLE 5 FILL MEETS THIS REQUIREMENT)



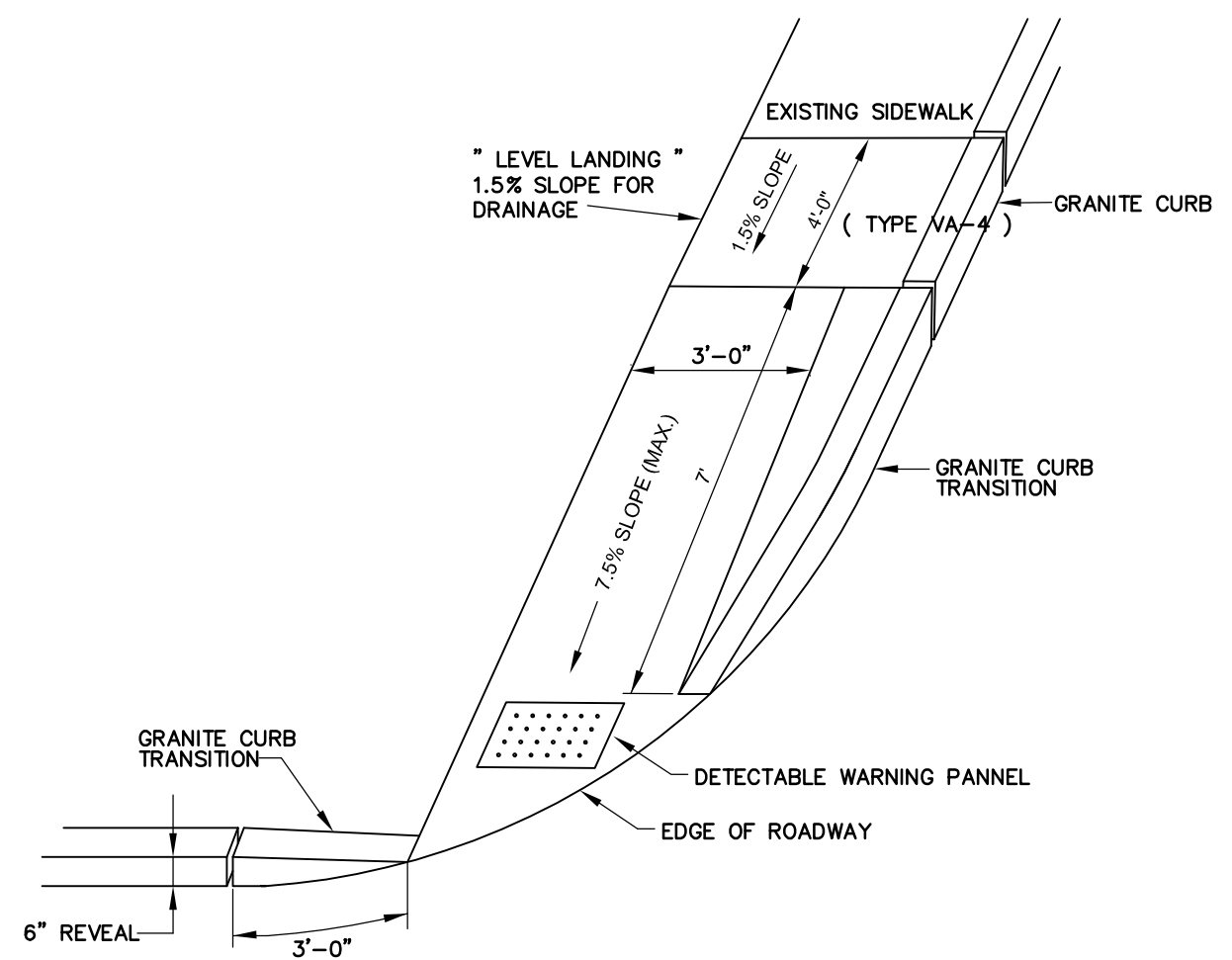
TYPICAL PARKING AISLE/DRIVEWAY PAVEMENT CROSS SECTION



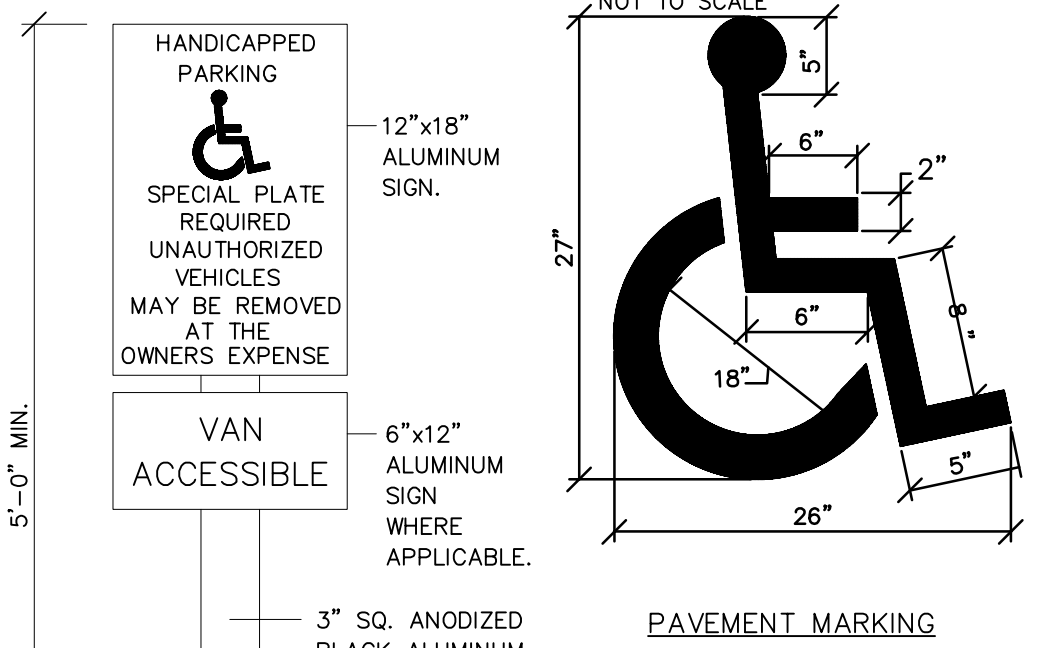
INSPECTION PORT DETAIL
NOT TO SCALE



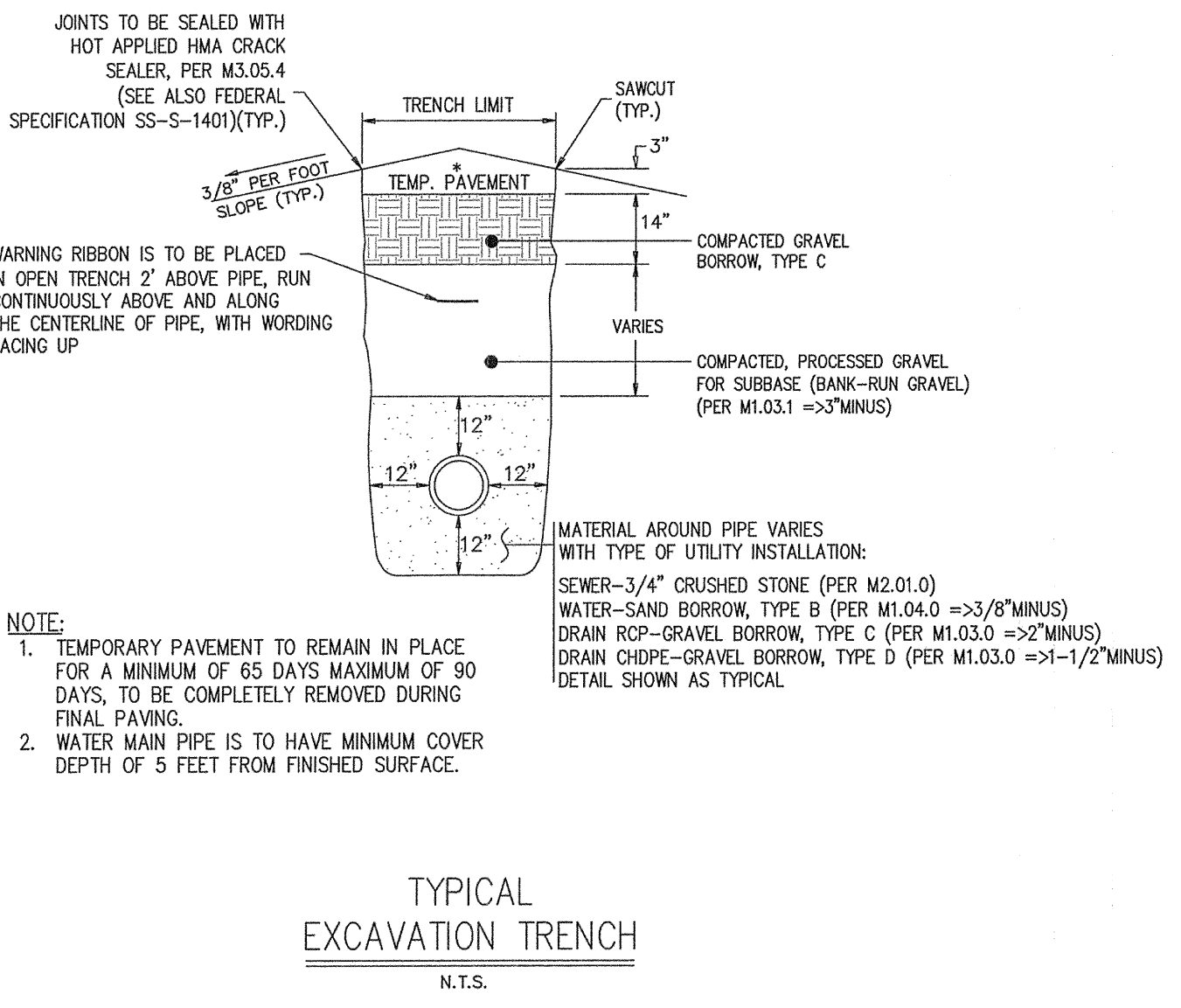
TYPICAL SECTION



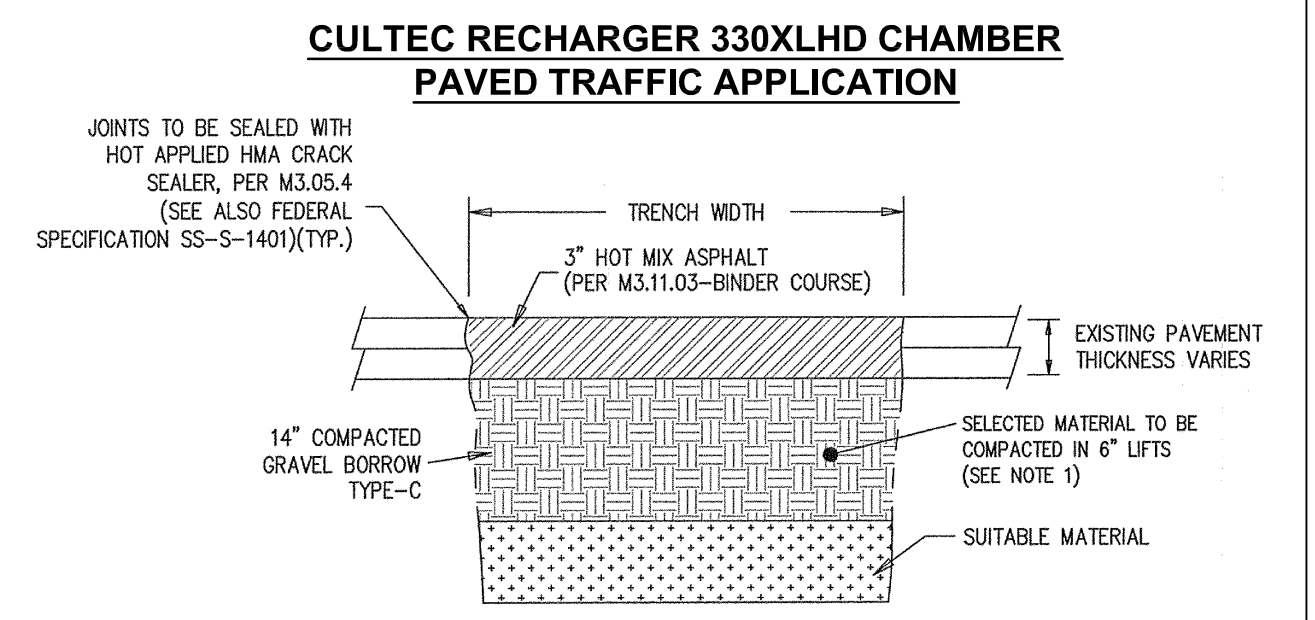
CONCRETE WHEELCHAIR CURB-CUT RAMP - 1
NOT TO SCALE



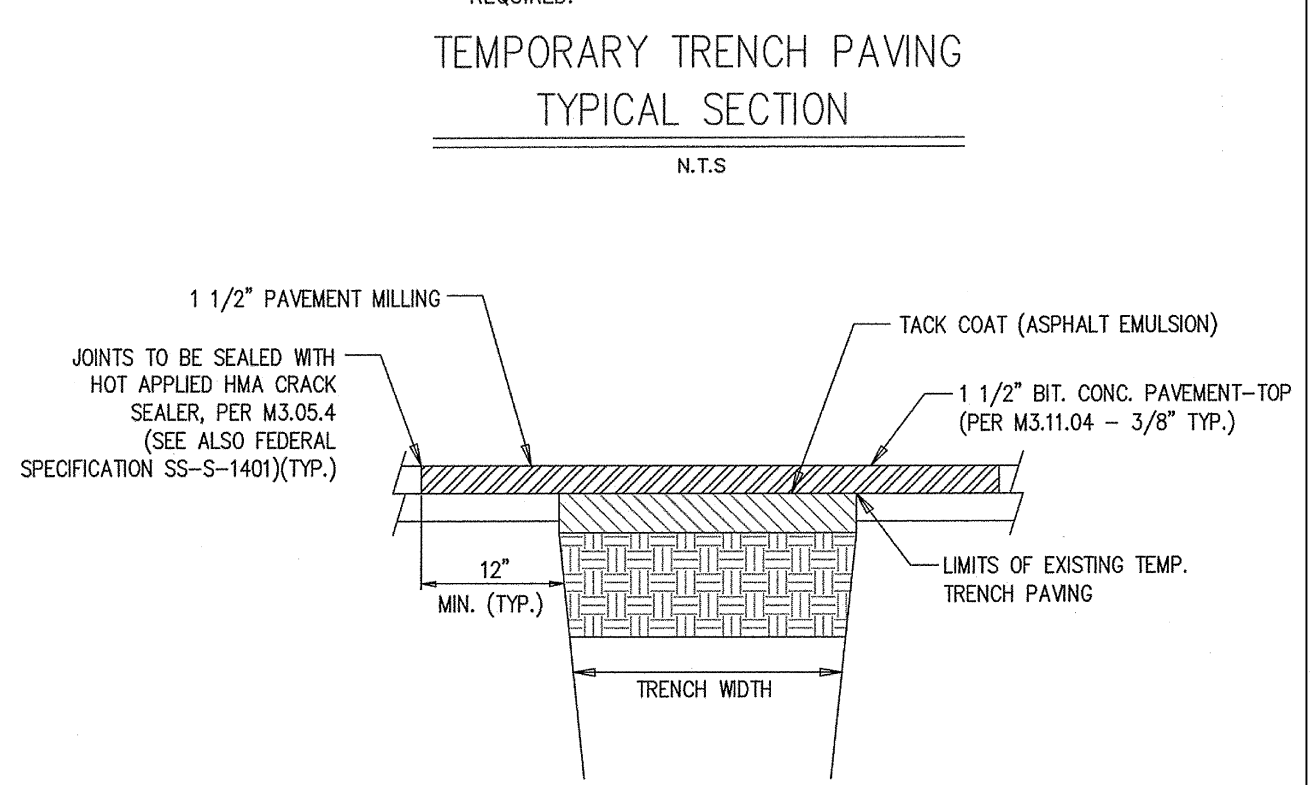
HANDICAP SIGN & PAVEMENT MARKING DETAIL
NOT TO SCALE



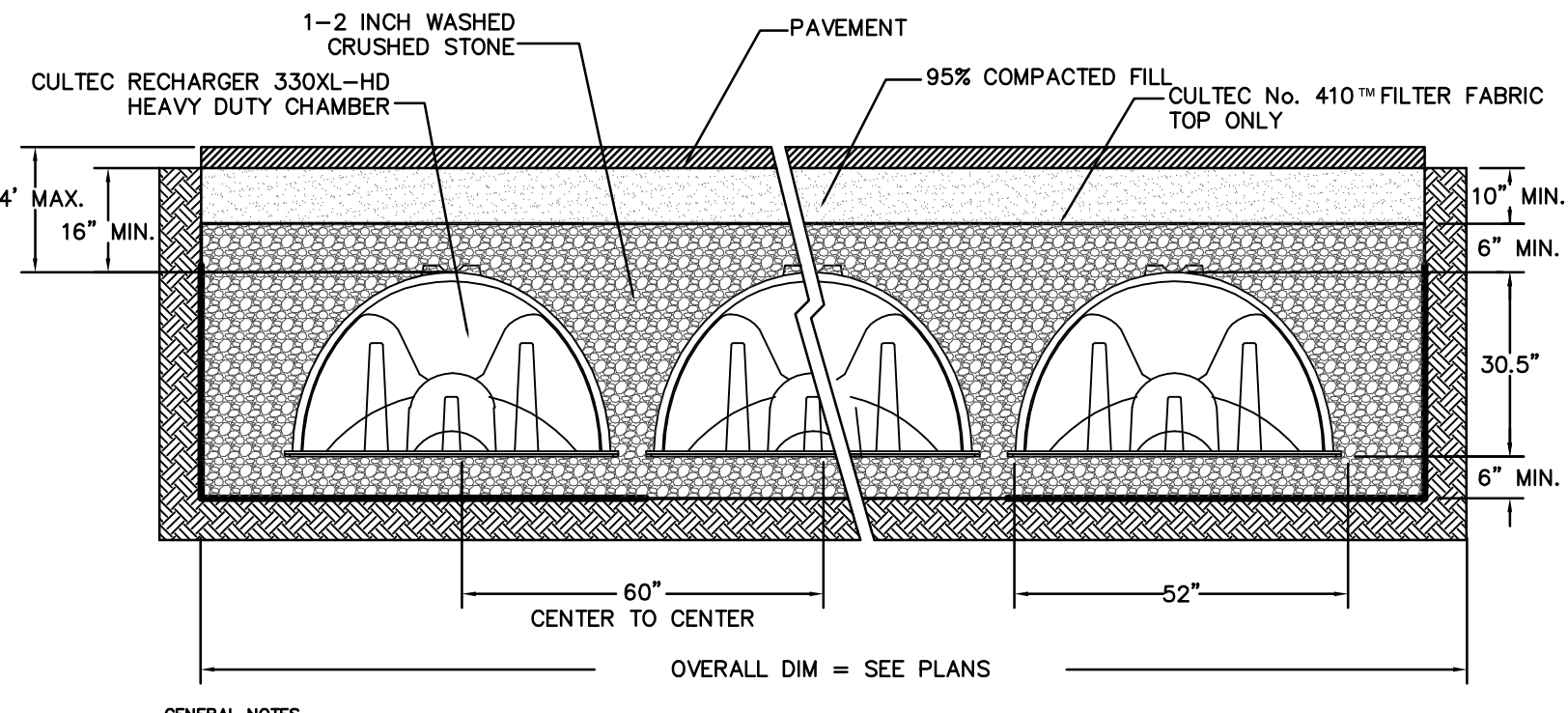
TYPICAL EXCAVATION TRENCH
N.T.S.



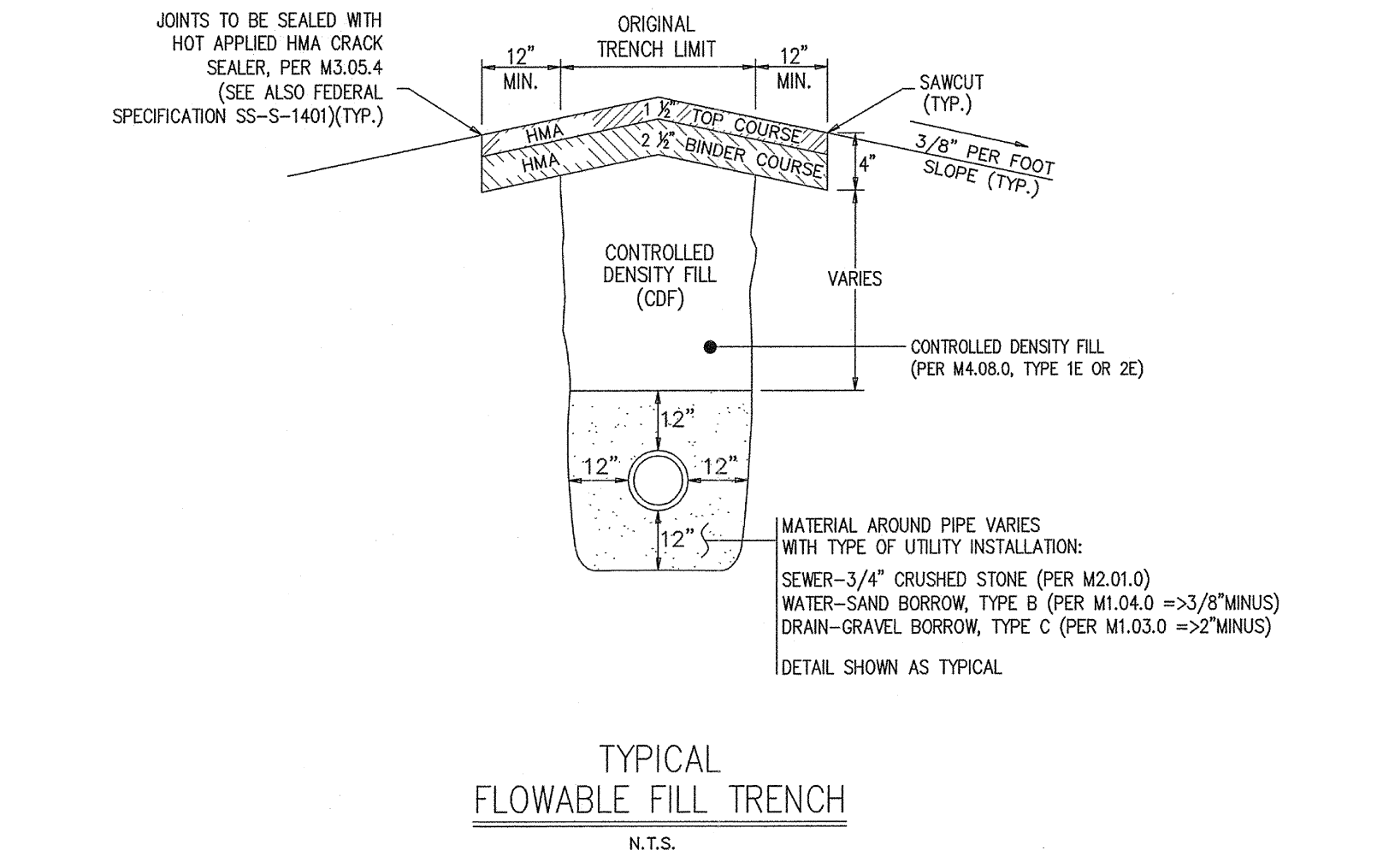
NOTE:
1. COMPACTION EQUIPMENT AND LIFT THICKNESS SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS TO OBTAIN THE COMPACTION STANDARDS DESCRIBED IN THE CONSTRUCTION NOTES, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. IN PROXIMITY TO STRUCTURES, A JUMPING JACK COMPACTOR SHALL BE REQUIRED.



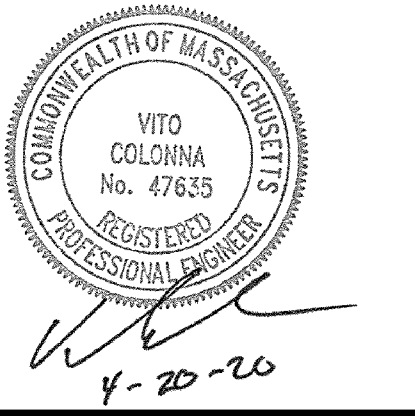
NOTE:
1. COMPACTION EQUIPMENT AND LIFT THICKNESS SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS TO OBTAIN THE COMPACTION STANDARDS DESCRIBED IN THE CONSTRUCTION NOTES UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. IN PROXIMITY TO STRUCTURES, A JUMPING JACK COMPACTOR SHALL BE REQUIRED.



CULTEC RECHARGER 330 XLHD CHAMBER SYSTEM
PAVED TRAFFIC APPLICATION
TYPICAL CROSS SECTION DETAIL



TYPICAL FLOWABLE FILL TRENCH
N.T.S.



PREPARED FOR:
NEW ENGLAND CENTER FOR CHILDREN
33 TURNPIKE ROAD
SOUTHBOROUGH, MA

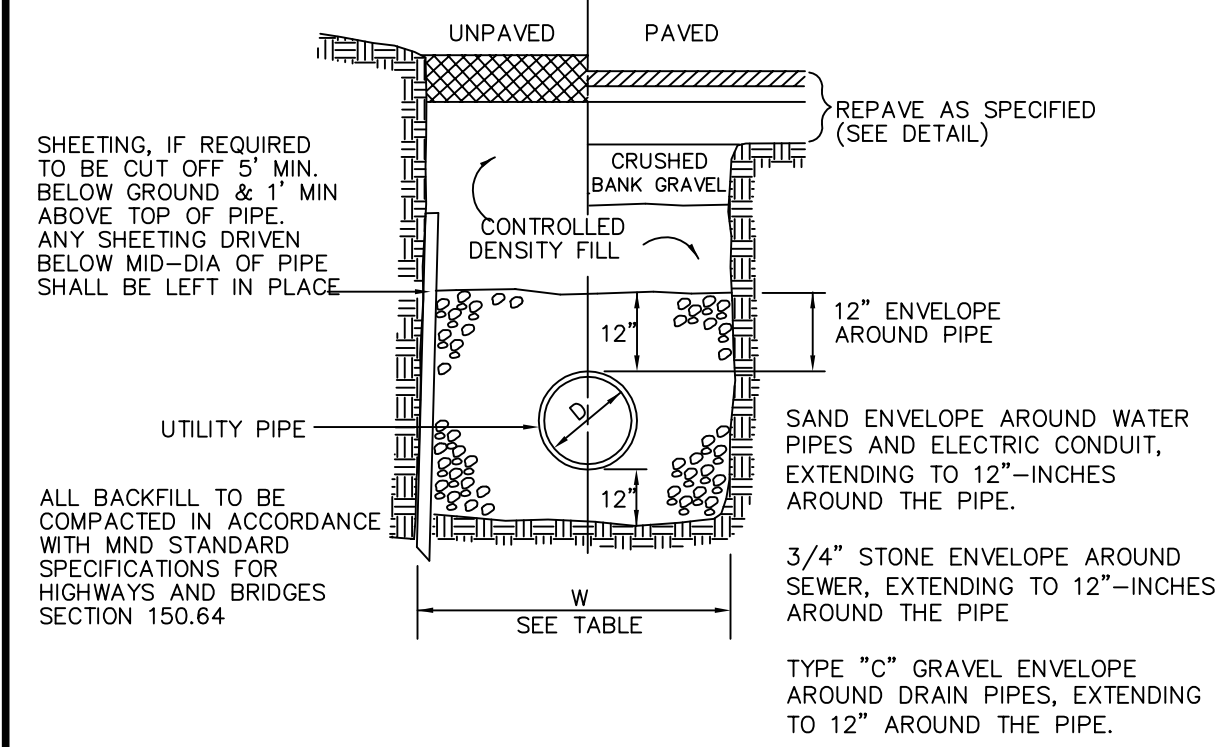
OWNER:
MARLBOROUGH INDUSTRIAL, LLC
259 TURNPIKE ROAD, SUITE 100
SOUTHBOROUGH, MA

CONNORSTONE ENGINEERING INC.
CIVIL ENGINEERS AND LAND SURVEYORS
10 SOUTHWEST CUTOFF, SUITE 7
NORTHBOROUGH, MASSACHUSETTS 01532
PHONE: 508-393-9727 FAX: 508-393-5242

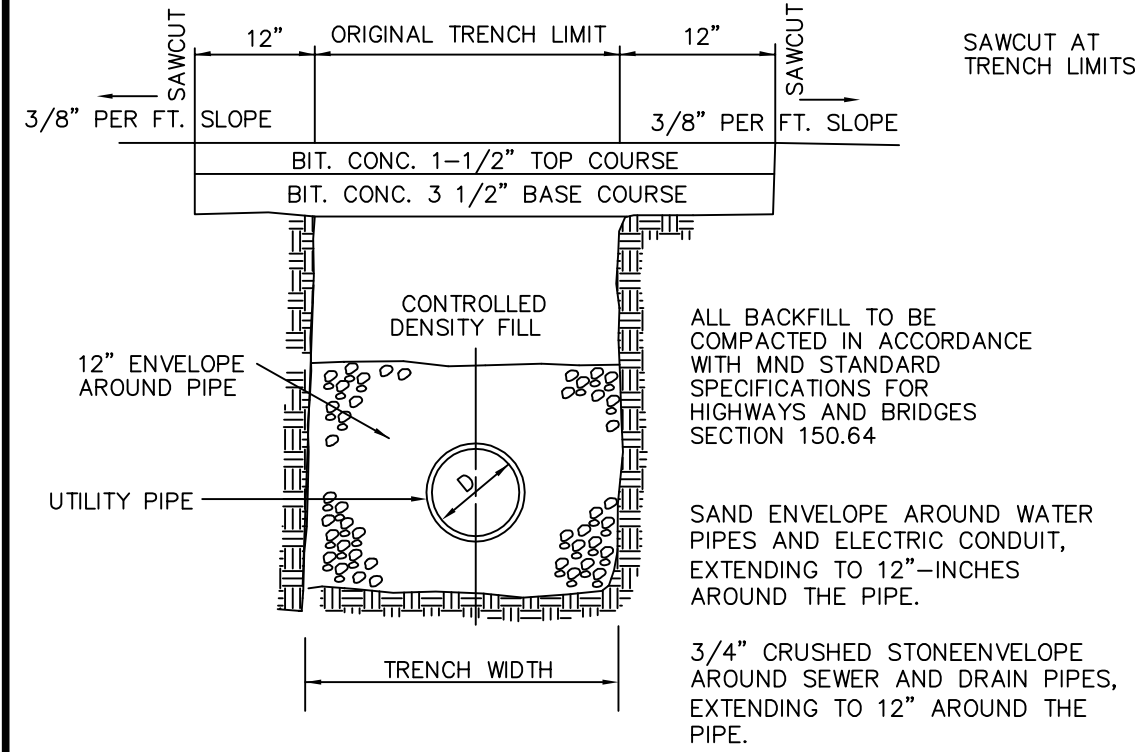
CONSTRUCTION DETAILS
MAP 73, LOTS 14 & 15A
FARM ROAD
IN
MARLBOROUGH, MA

4/20/2020	UTILITY COORD. & C. COMM ITEMS
REVISED:	DESCRIPTION:
DRAWN BY: REM	CHECK BY: VC
DATE: FEBRUARY 28, 2020	
SCALE: NONE	SHEET 5 OF 6.

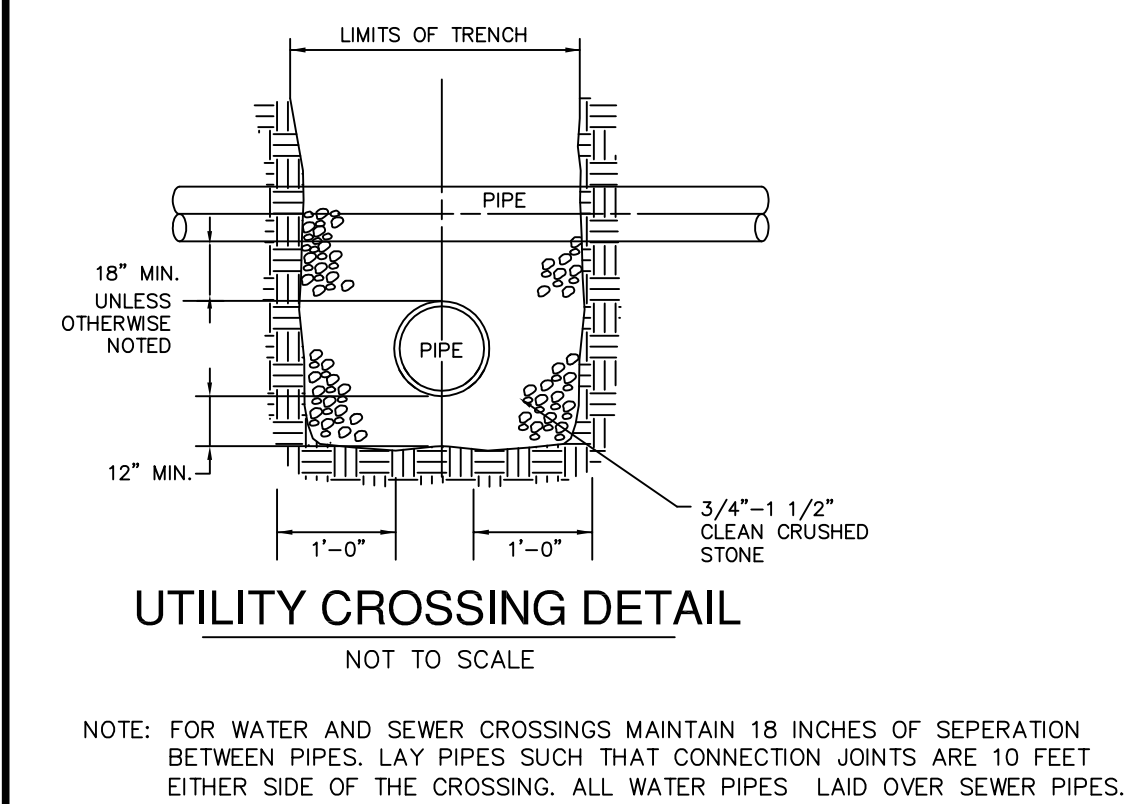
TRENCH WIDTH (W)		
D	W	W
DIAMETER OF PIPE	UNSHEEDED	SHEEDED
TO 12"	3'	4'
14" TO 24"	4'	5'
30" TO 36"	5'	6'



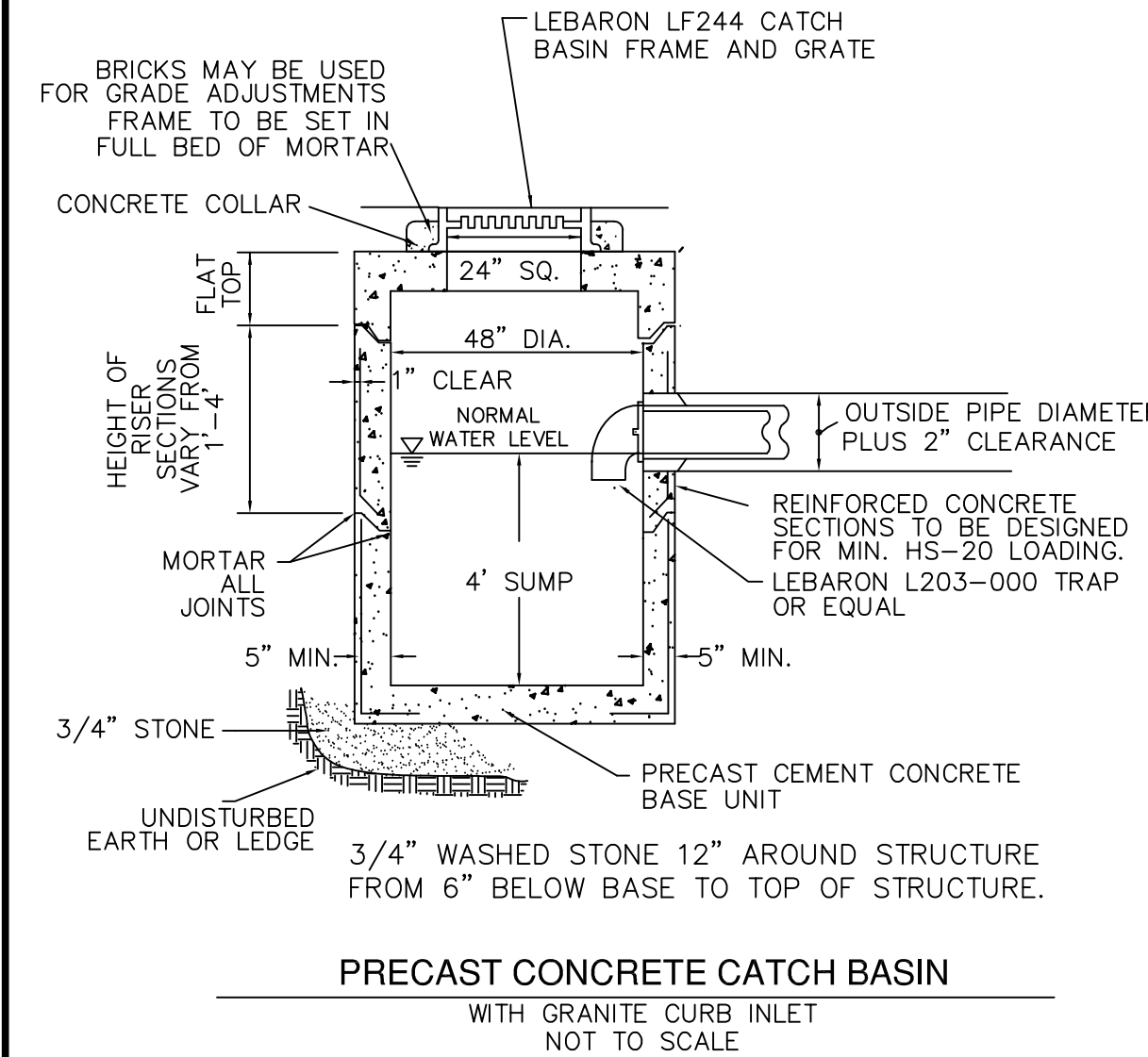
TYPICAL TRENCH SECTION
NOT TO SCALE



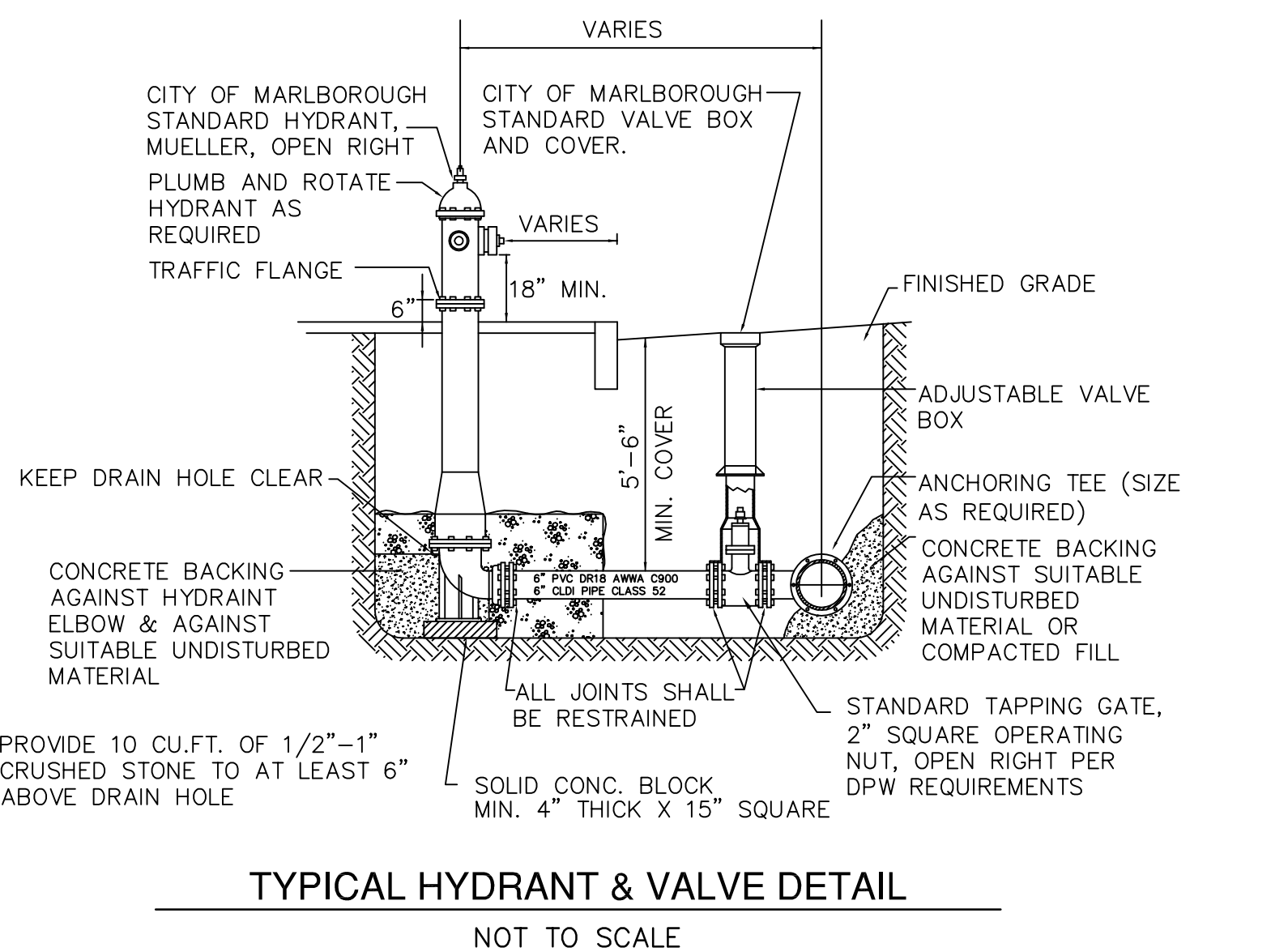
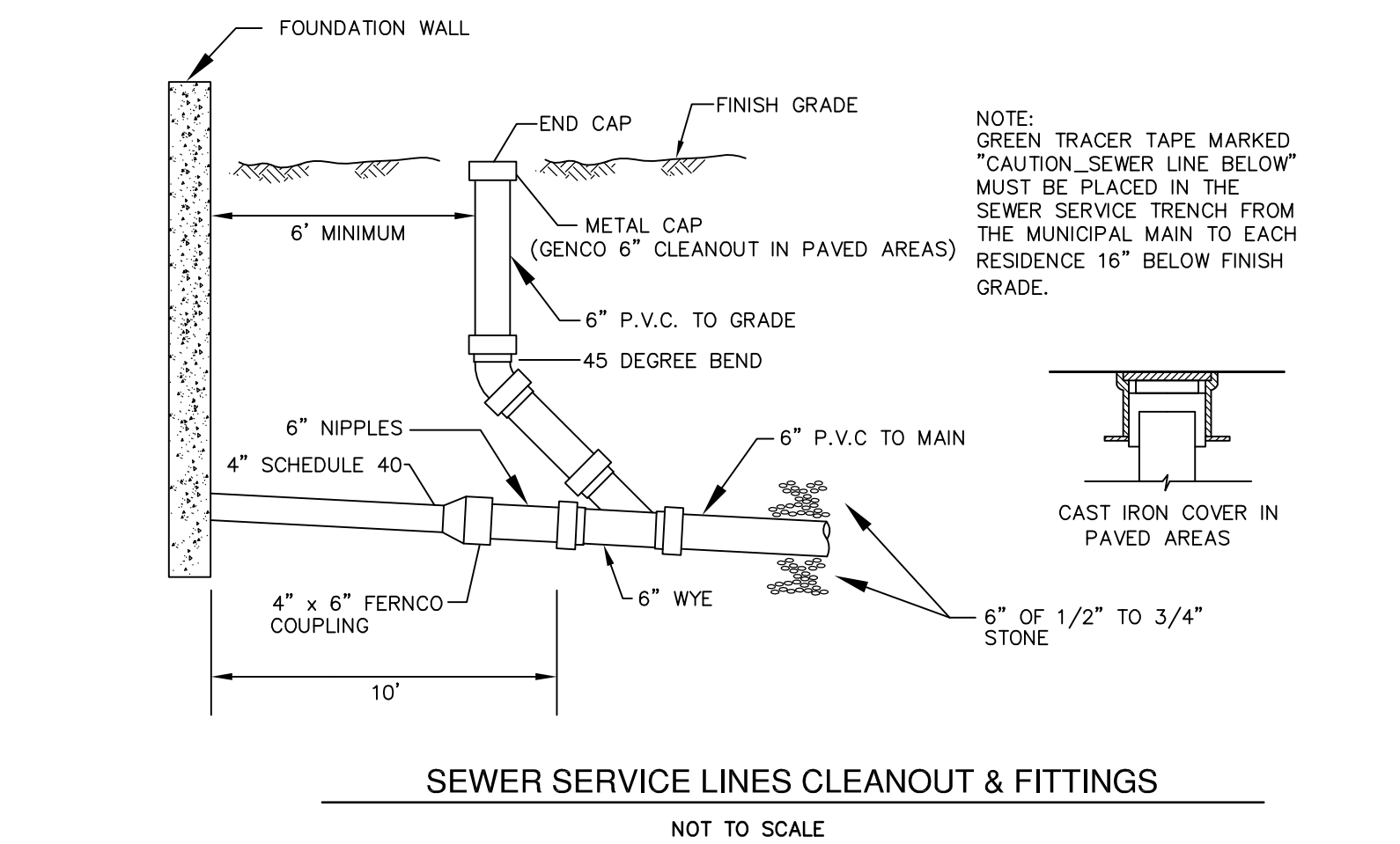
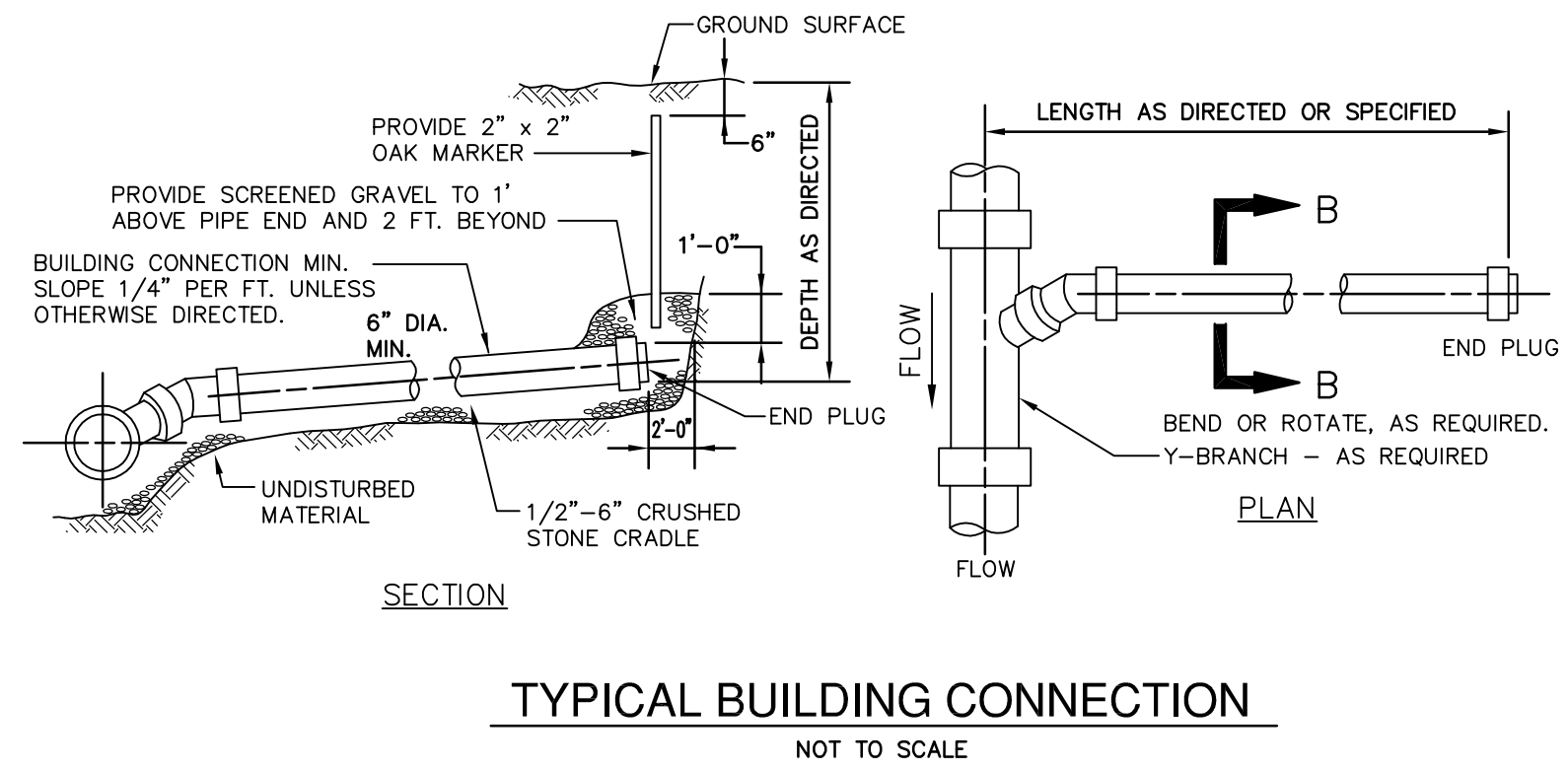
PERMANENT TRENCH PAVING
NOT TO SCALE



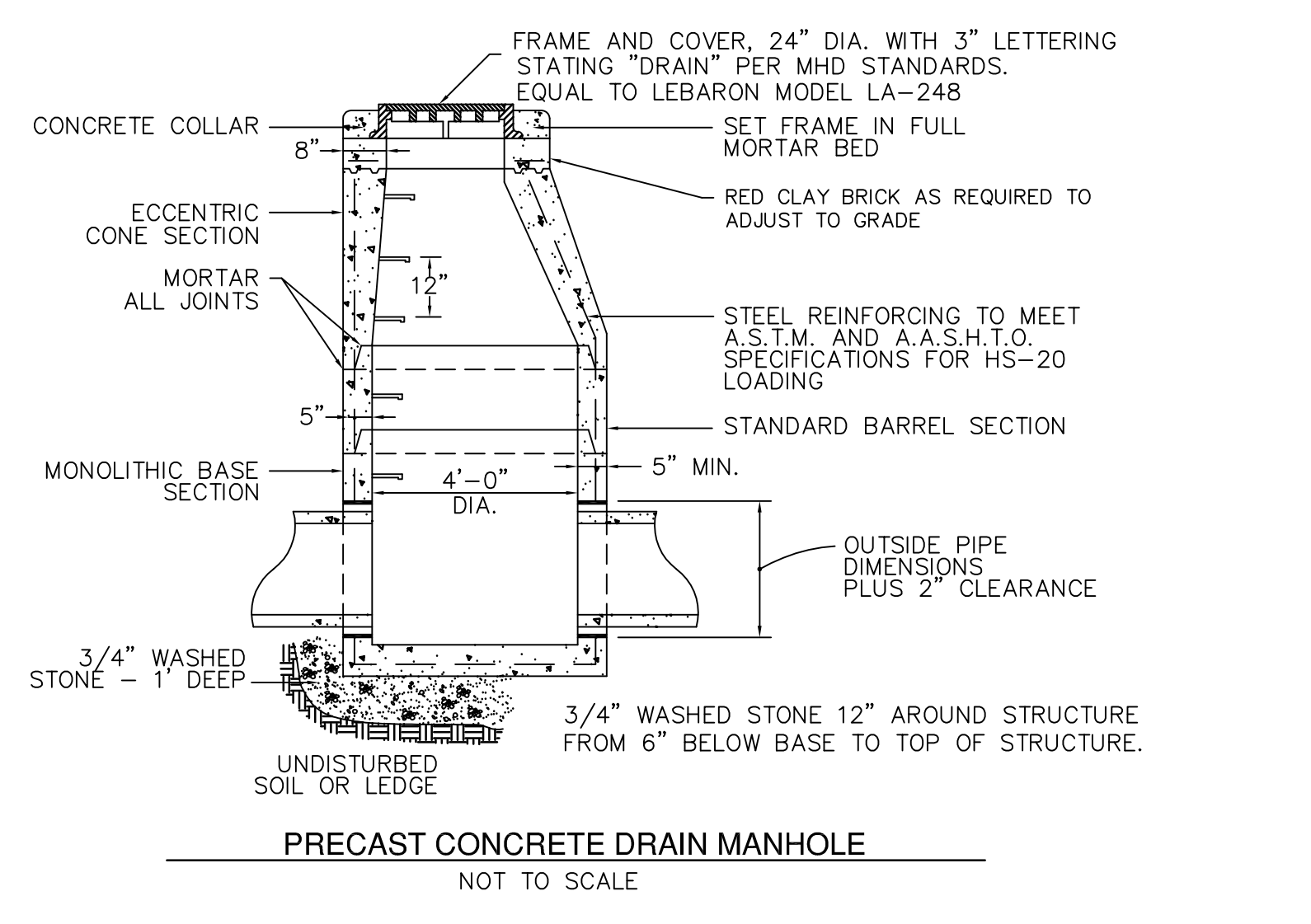
UTILITY CROSSING DETAIL
NOT TO SCALE



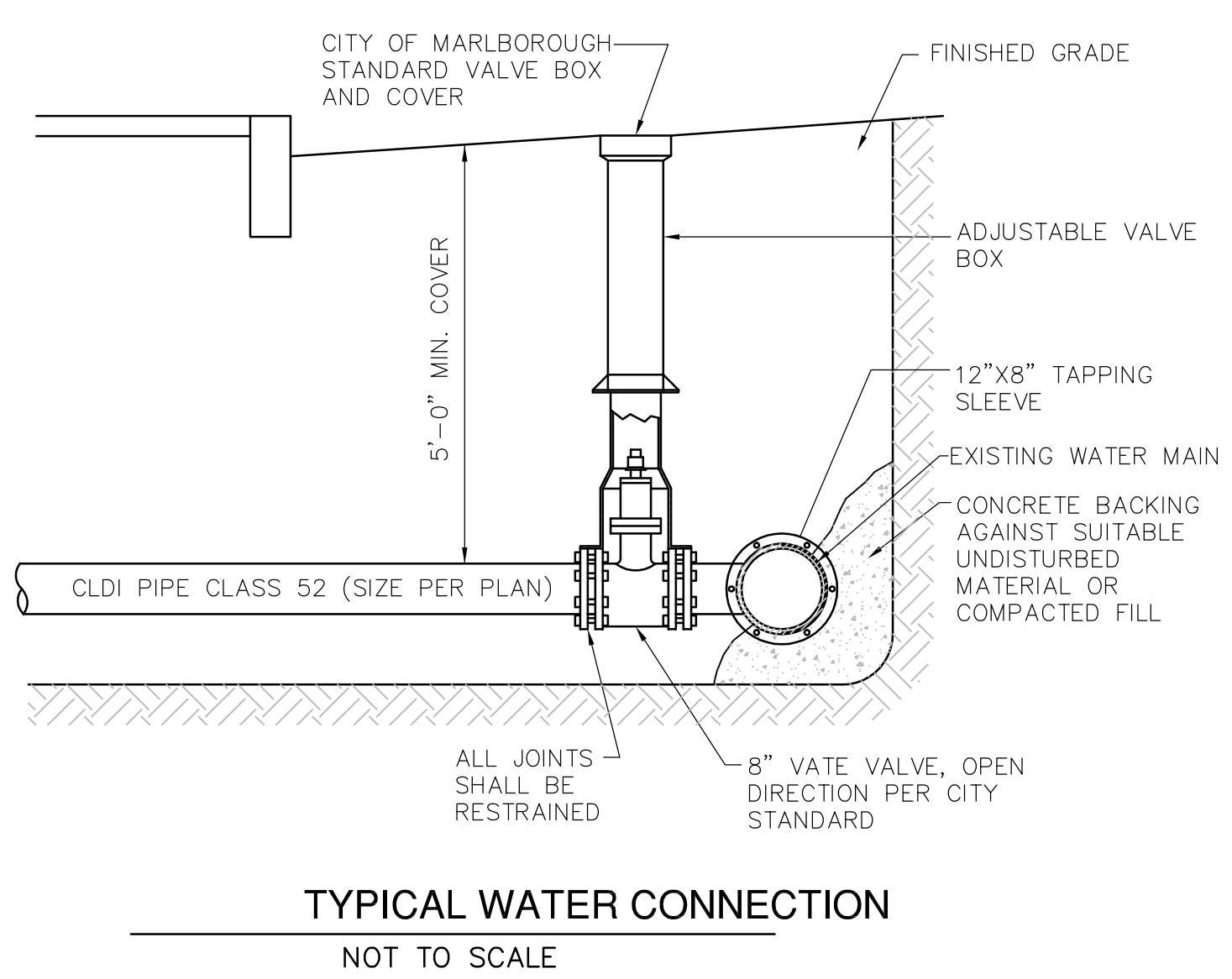
PRECAST CONCRETE CATCH BASIN
WITH GRANITE CURB INLET
NOT TO SCALE



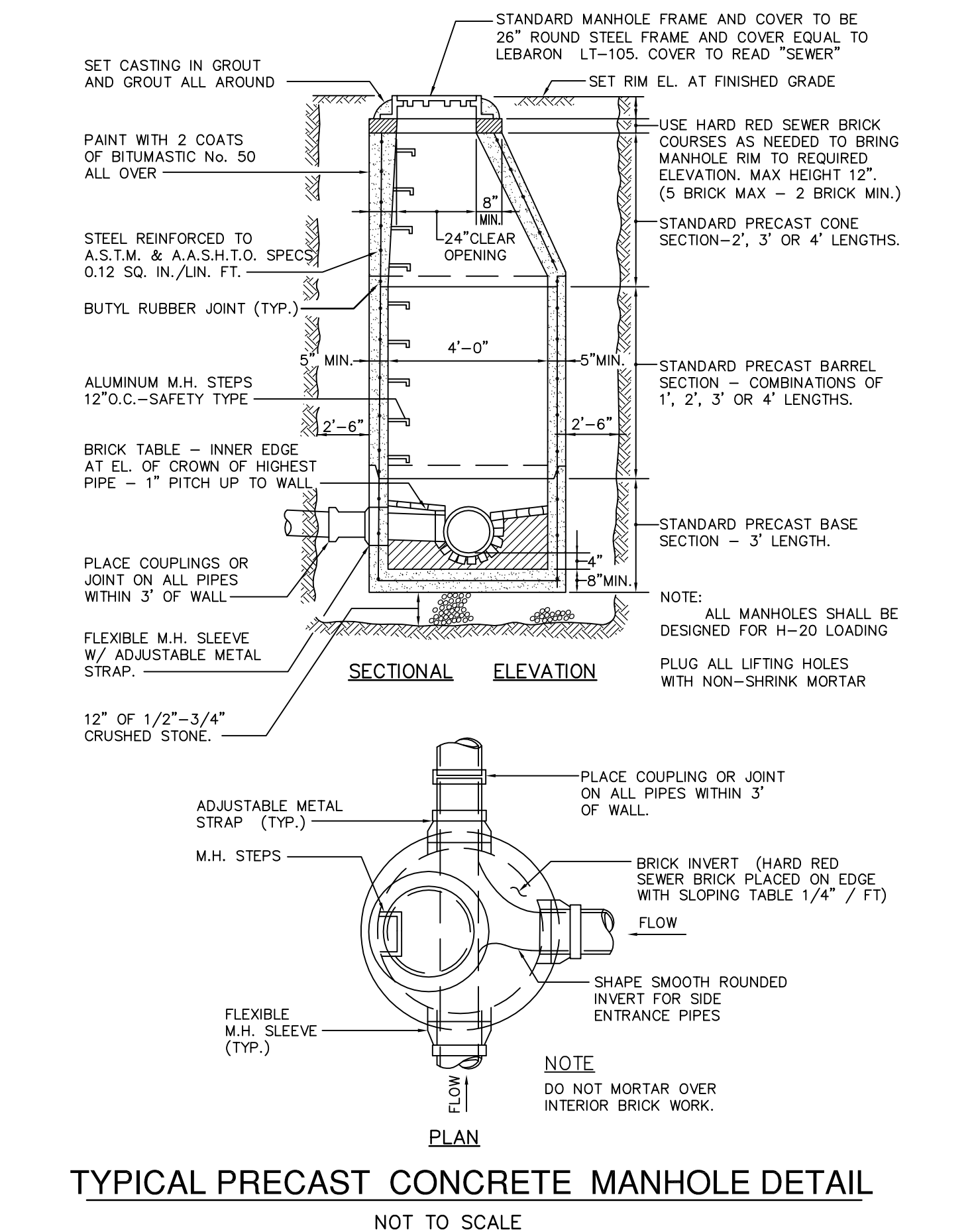
TYPICAL HYDRANT & VALVE DETAIL
NOT TO SCALE



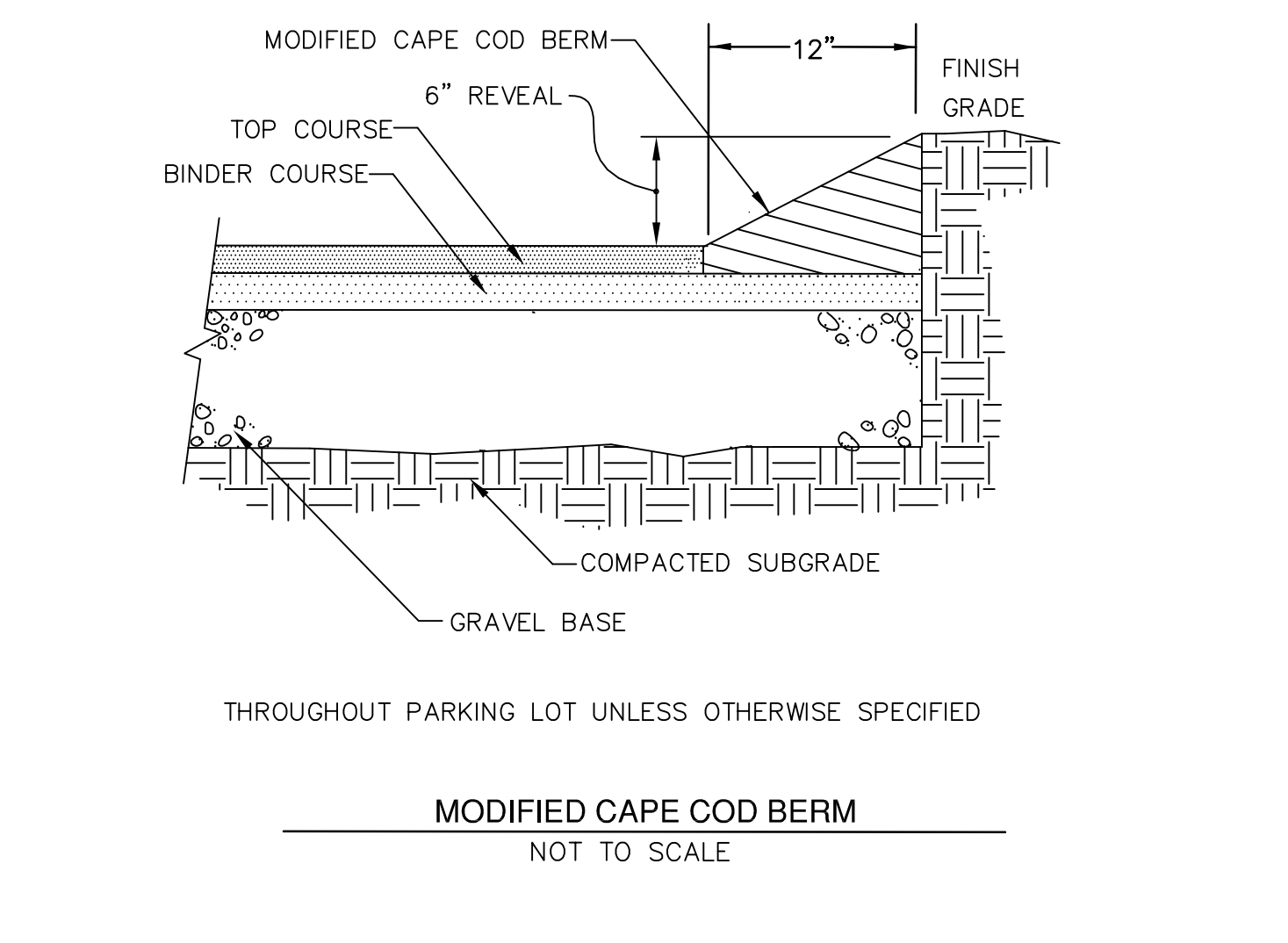
PRECAST CONCRETE DRAIN MANHOLE
NOT TO SCALE



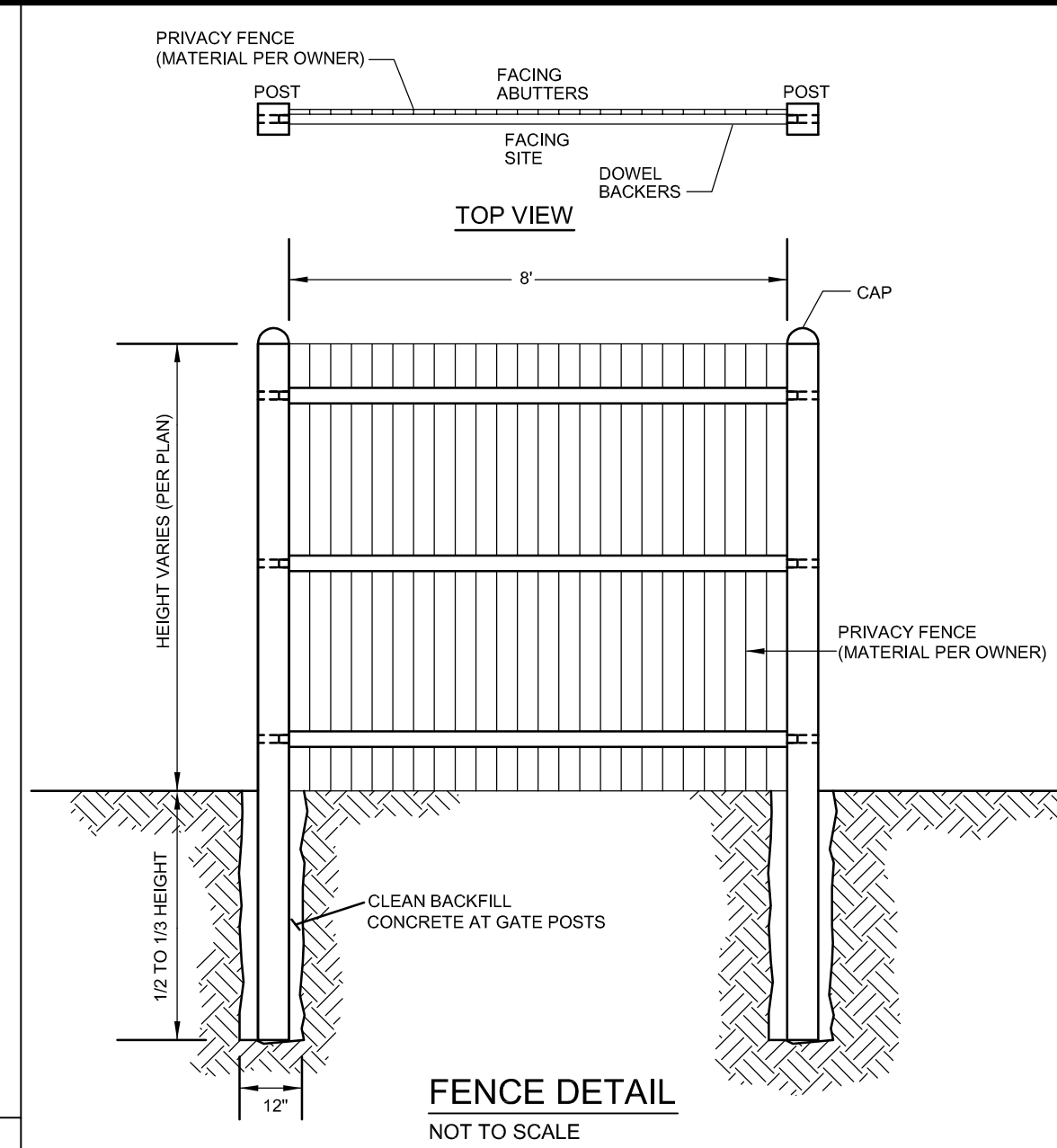
TYPICAL WATER CONNECTION
NOT TO SCALE



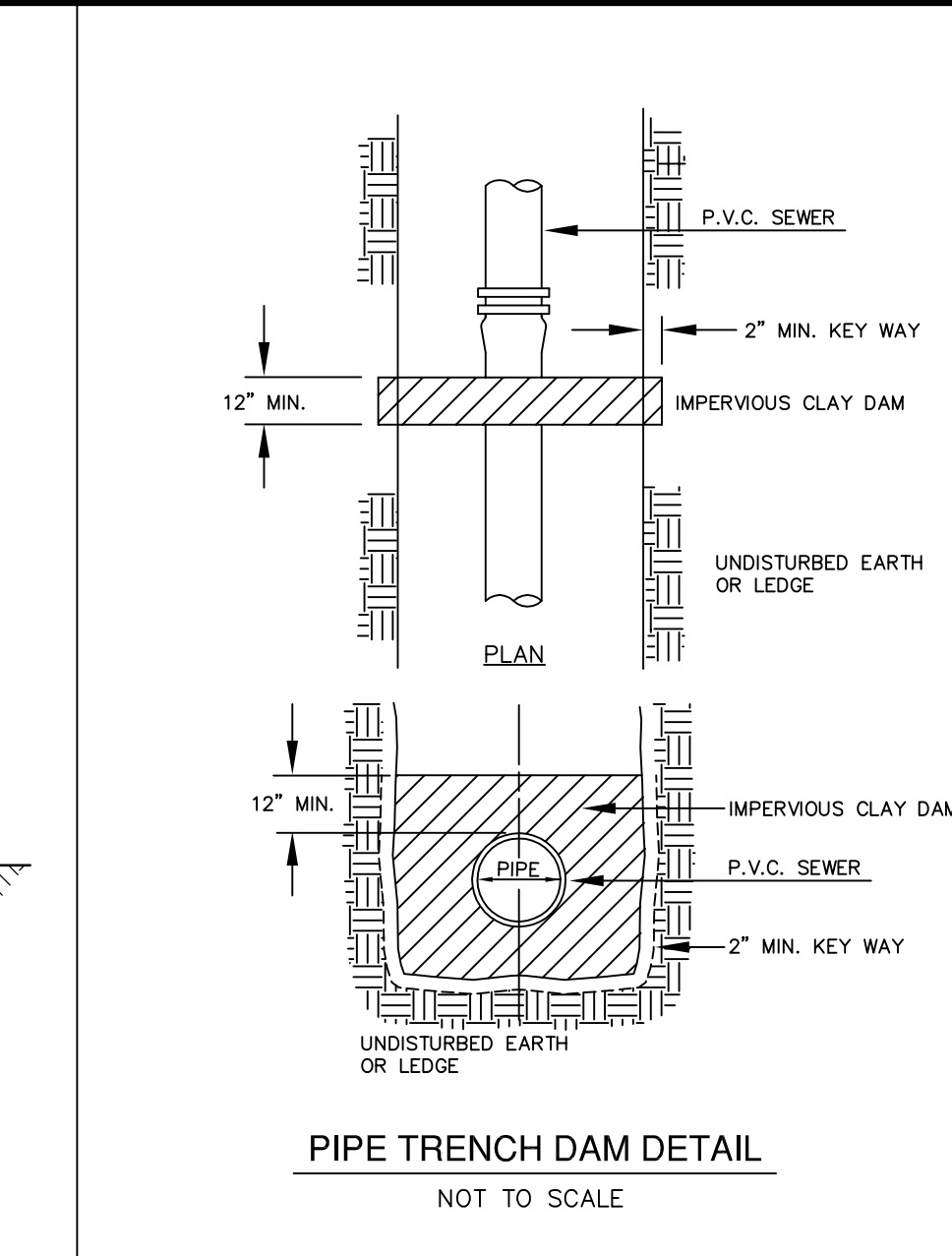
TYPICAL PRECAST CONCRETE MANHOLE DETAIL
NOT TO SCALE



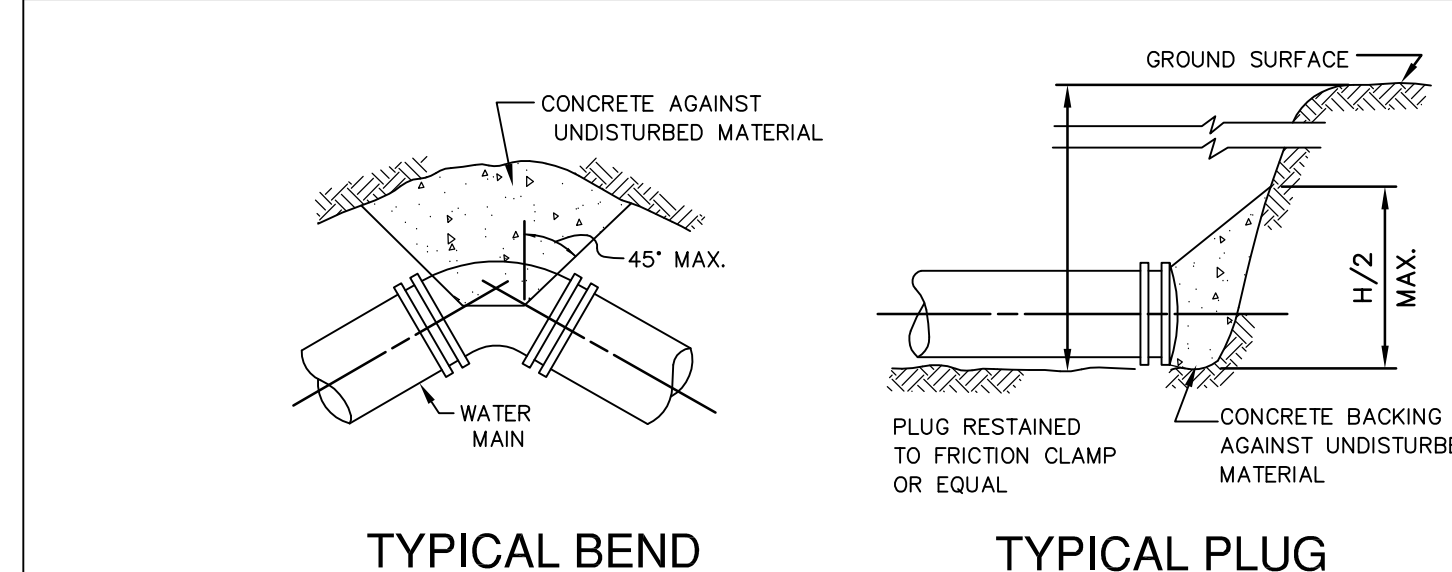
MODIFIED CAPE COD BERM
NOT TO SCALE



FENCE DETAIL
NOT TO SCALE

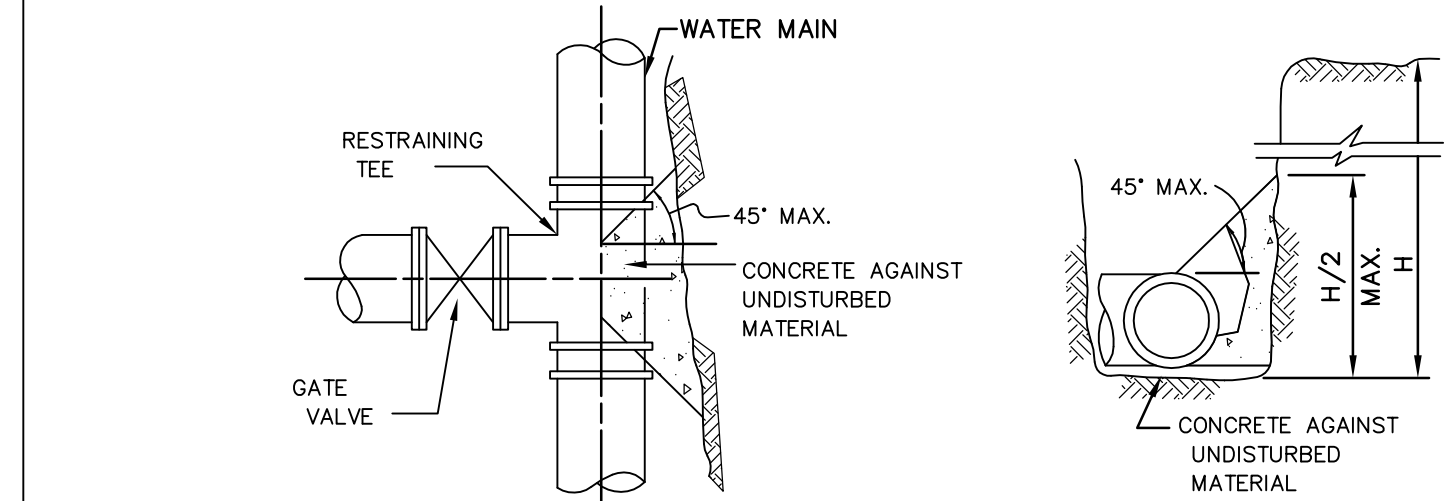


PIPE TRENCH DAM DETAIL
NOT TO SCALE



TYPICAL BEND

TYPICAL PLUG



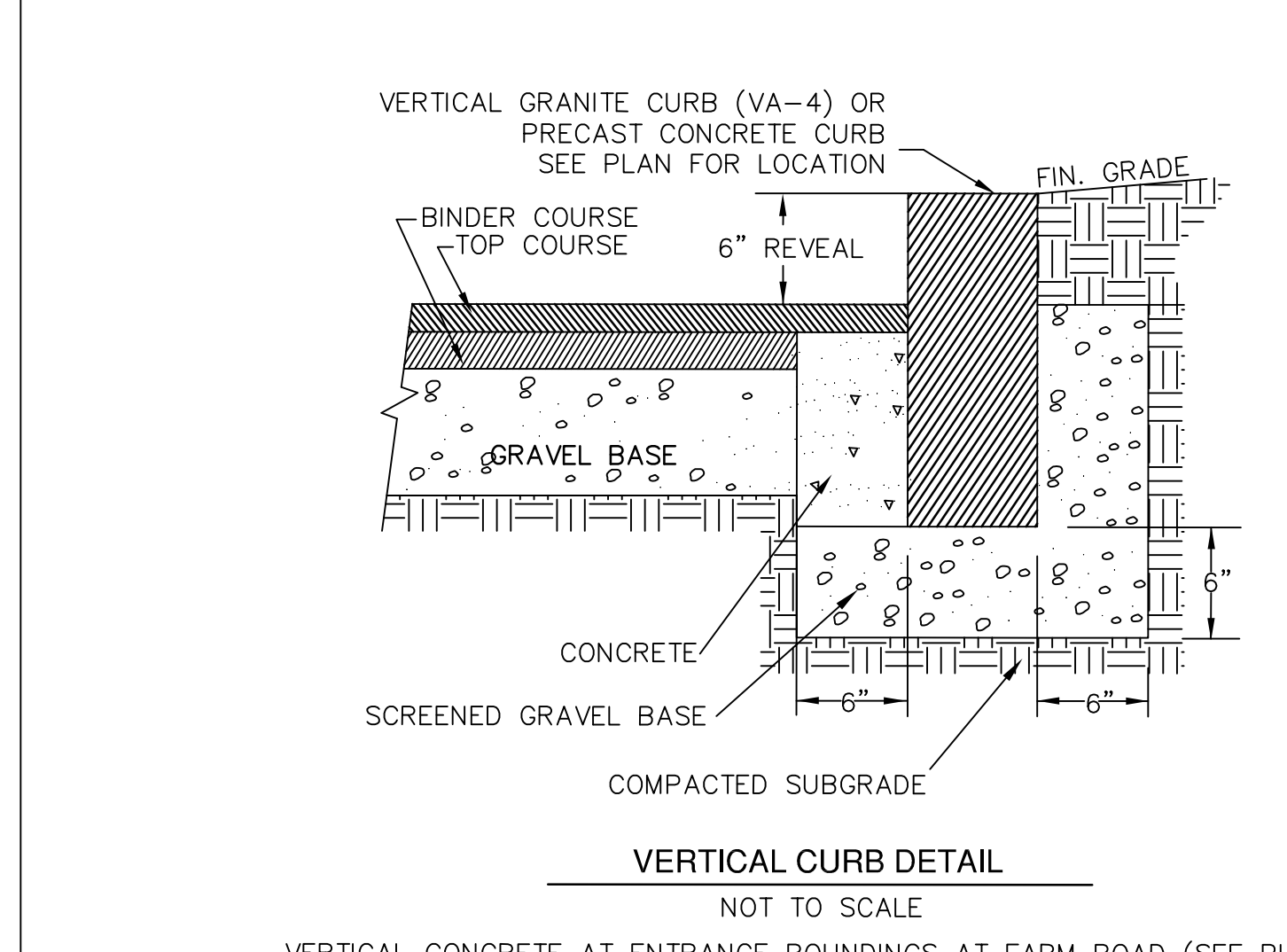
TYPICAL TEE & VALVE

TYPICAL SECTION

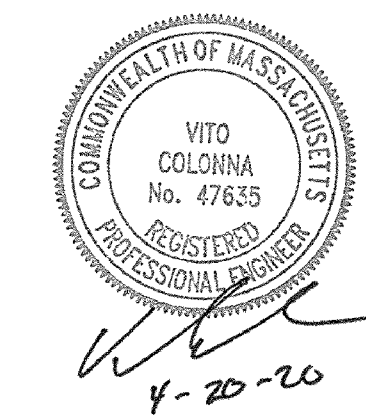
NOTE: CONCRETE FOR THRUST BLOCKS SHALL BE NO LONGER THAN THE RATIO OF 2 1/2 : 5 1/2 AND SHALL HAVE A MINIMUM COMPRESSION STRENGTH OF 2000 PSI (SO THAT FLANGES AND BOLTS ARE ACCESSIBLE.)

BEARING AREAS OF THRUST BLOCKS (BEARING AREA IN SQUARE FT.)				
PIPE SIZE	1/4 BEND	1/8 BEND	1/16 BEND OR LESS	PLUG TEES
6 AND 8	8	8	8	8
10 AND 12	22	13	8	16

TYPICAL THRUST BLOCK DETAIL
NOT TO SCALE



VERTICAL CURB DETAIL
NOT TO SCALE



PREPARED FOR:
NEW ENGLAND CENTER FOR CHILDREN
33 TURNPIKE ROAD
SOUTHBOROUGH, MA

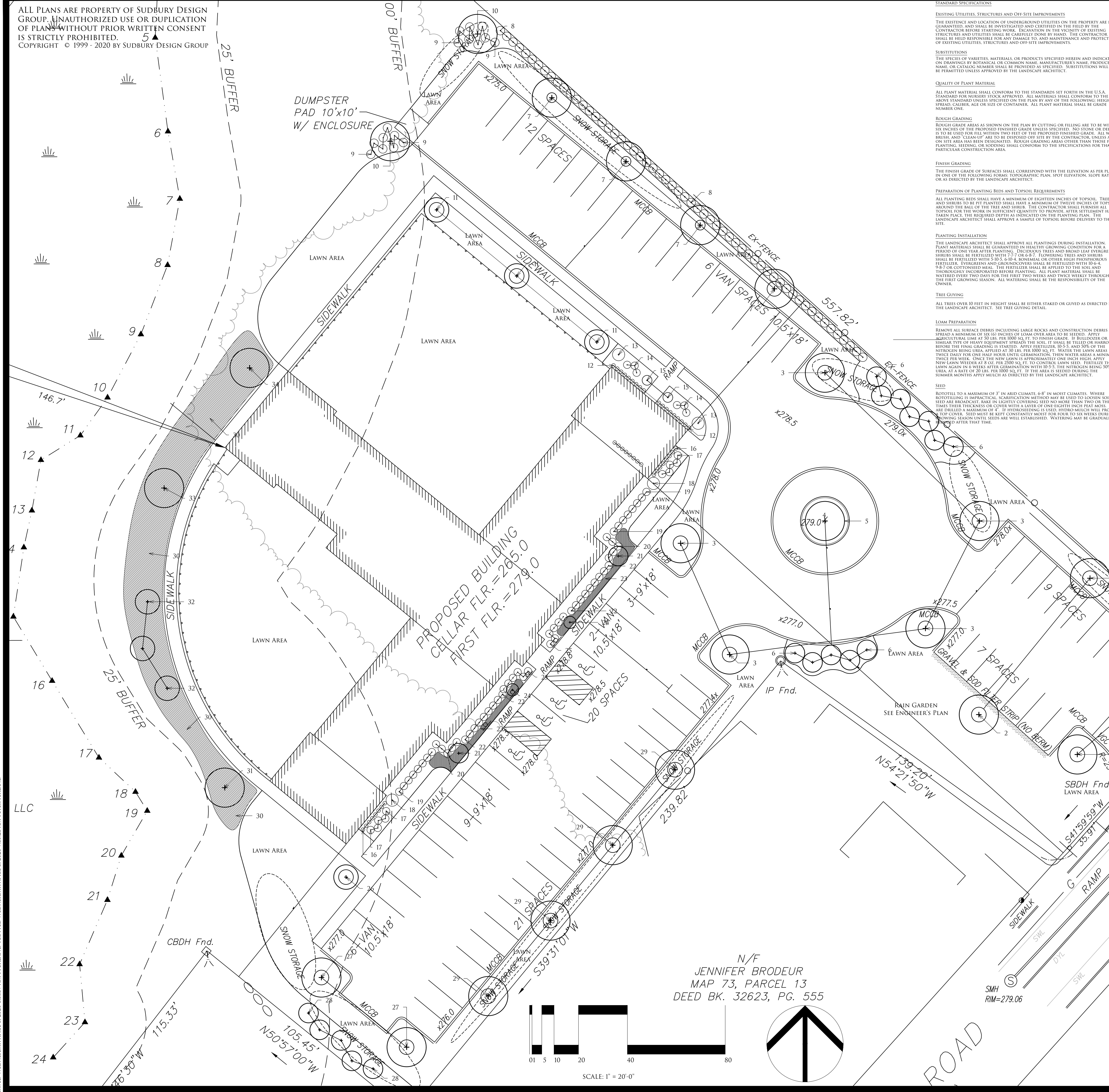
OWNER:
MARLBOROUGH INDUSTRIAL, LLC
259 TURNPIKE ROAD, SUITE 100
SOUTHBOROUGH, MA

CONNORSTONE ENGINEERING INC.
CIVIL ENGINEERS AND LAND SURVEYORS
10 SOUTHWEST CUTOFF, SUITE 7
NORTHBOROUGH, MASSACHUSETTS 01532
PHONE: 508-393-9727 FAX: 508-393-5242

CONSTRUCTION DETAILS
MAP 73, LOTS 14 & 15A
FARM ROAD
IN
MARLBOROUGH, MA

4/20/2020 UTILITY COORD. & C. COMM ITEMS
REVISED: DESCRIPTION:
DRAWN BY: REM CHECK BY: VC
DATE: FEBRUARY 28, 2020
SCALE: NONE SHEET 6 OF 6.

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STANDARD SPECIFICATIONS
 EXISTING UTILITIES, STRUCTURES AND OFF-SITE IMPROVEMENTS
 THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES ON THE PROPERTY ARE NOT GUARANTEED, AND SHALL BE INVESTIGATED AND CERTIFIED IN THE FIELD BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES, STRUCTURES AND OFF-SITE IMPROVEMENTS. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO, AND MAINTENANCE AND PROTECTION OF EXISTING UTILITIES, STRUCTURES AND OFF-SITE IMPROVEMENTS.

SUBSTITUTIONS
 THE SPECIES OR MATERIALS, MATERIALS, OR PRODUCTS SPECIFIED HEREIN AND INDICATED ON DRAWINGS BY BOTANICAL OR COMMON NAME, MANUFACTURER'S NAME, PRODUCT'S NAME OR CATALOG NUMBER SHALL BE PROVIDED IN SPECIES. SUBSTITUTIONS SHALL NOT BE PERMITTED UNLESS APPROVED BY THE LANDSCAPE ARCHITECT.

QUALITY OF PLANT MATERIAL
 ALL PLANT MATERIAL SHALL CONFORM TO THE STANDARDS SET FORTH IN THE U.S.A. STANDARD FOR NURSERY STOCK APPROVED. ALL MATERIALS SHALL CONFORM TO THE SPECIFICATIONS LISTED ON THE PLAN BY ANY OF THE FOLLOWING HEIGHT, CALIBER, AGE OR SIZE OF CONTAINER. ALL PLANT MATERIAL SHALL BE GRADE NUMBER ONE.

ROUGH GRADING
 ROUGH GRADE AREAS AS SHOWN ON THE PLAN BY CUTTING OR FILLING ARE TO BE WITHIN SIX INCHES OF THE PROPOSED FINISHED GRADE UNLESS SPECIFIED. NO STONE OR DEBRIS IS TO BE USED FOR FILL WITHIN TWO FEET OF THE PROPOSED FINISHED GRADE. ALL WOOD, BRUSH AND LIMBS ARE TO BE REMOVED FROM THE AREA. THE CONTRACTOR SHALL THOROUGHLY INCORPORATED BEFORE PLANTING. ALL PLANT MATERIAL SHALL BE WATERED EVERY TWO DAYS FOR THE FIRST TWO WEEKS AND TWICE WEEKLY THROUGHOUT THE FIRST GROWING SEASON. ALL WATERING SHALL BE THE RESPONSIBILITY OF THE OWNER.

FINISH GRADING
 THE FINISH GRADE OF SURFACES SHALL CORRESPOND WITH THE ELEVATION AS PER PLAN, IN ONE OF THE FOLLOWING FORMS: TOPOGRAPHIC PLAN, SPOT ELEVATION, SLOPE RATIO, OR AS DIRECTED BY THE LANDSCAPE ARCHITECT.

PREPARATION OF PLANTING BEDS AND TOPSOIL REQUIREMENTS
 ALL PLANTING BEDS SHALL HAVE A MINIMUM OF EIGHTEEN INCHES OF TOPSOIL. TREES AND SHRUBS TO BE PLANTED SHALL HAVE A MINIMUM OF TWENTY INCHES OF TOPSOIL AROUND THE BASE OF THE TREE AND SHRUB. THE CONTRACTOR SHALL FURNISH ALL TOPSOIL FOR THE WORK IN SUFFICIENT QUANTITY TO PROVIDE, AFTER SETTLEMENT HAS TAKEN PLACE, THE REQUIRED DEPTH AS INDICATED ON THE PLANTING PLAN. THE LANDSCAPE ARCHITECT SHALL APPROVE A SAMPLE OF TOPSOIL BEFORE BEING USED ON THE SITE.

PLANTING INSTALLATION
 THE LANDSCAPE ARCHITECT SHALL APPROVE ALL PLANTINGS DURING INSTALLATION. PLANT MATERIALS SHALL BE SEPARATED BY HEALTHY GROWING SEASON FOR TREES AND SHRUBS. TREES SHALL BE PLANTED IN THE FALL OR EARLY WINTER. TREES AND SHRUBS SHALL BE FERTILIZED WITH 7-7-7 OR 6-6-7. FLOWERING TREES AND SHRUBS SHALL BE FERTILIZED WITH 10-10-10. EVERGREENS AND OTHER HIGH PHOSPHORUS FERTILIZER. EVERGREENS AND GROUNDCOVERS SHALL BE FERTILIZED WITH 10-4-8-27 OR GOTTENSHAL. THE FERTILIZER SHALL BE APPLIED TO THE SOIL AND THOROUGHLY INCORPORATED BEFORE PLANTING. ALL PLANT MATERIAL SHALL BE WATERED EVERY TWO DAYS FOR THE FIRST TWO WEEKS AND TWICE WEEKLY THROUGHOUT THE FIRST GROWING SEASON. ALL WATERING SHALL BE THE RESPONSIBILITY OF THE OWNER.

TREE GOVING
 ALL TREES OVER 10 FEET IN HEIGHT SHALL BE EITHER STAKED OR GOVED AS DIRECTED BY THE LANDSCAPE ARCHITECT. SEE TREE GOVING DETAIL.

LODM PREPARATION
 REMOVE ALL SURFACE DEBRIS INCLUDING LARGE ROCKS AND CONSTRUCTION DEBRIS AND FURNISH A MINIMUM OF SIX INCHES OF LOAM OVER AREA TO BE SEEDS. AFTER AGRICULTURAL LIME AT 50 LB. PER 1000 SQ. FT. TO FINISH GRADE. IF BULLDOZER OR GRADER TYPE OF EQUIPMENT BREAKS THE SOIL 7" DEEP AT THE END OF THE DAY BEFORE THE FINAL GRADING IS STARTED. APPLY FERTILIZER 10-5-5 AND 50% OF THE NITROGEN BEING USED. APPLY AT 50 LB. PER 1000 SQ. FT. WATER THE SOIL TWICE DAILY FOR ONE HALF HOUR UNTIL GERMINATION. THEN WATER AREAS A MINIMUM OF TWICE PER WEEK. ONCE THE NEW LAWN IS APPARENTLY ONE INCH HIGH, APPLY NEW LAWN SEEDS AT 8 OZ. PER 2000 SQ. FT. TO CONTROL LAWN SEED. FERTILIZE THE LAWN AGAIN A WEEK AFTER GERMINATION WITH 1/3 THE NITROGEN BEING USED. USE A RATE OF 20 LB. PER 1000 SQ. FT. OF THE AREA IS BEING SOWN. DURING THE SUMMER MONTHS APPLY MULCH AS DIRECTED BY THE LANDSCAPE ARCHITECT.

SEED
 ROTOTILL TO A MAXIMUM OF 3" IN ARID CLIMATE, 6" IN MOST CLIMATE. WHERE ROTOTILLING IS INAPPLICABLE IN CLIMATE WHERE IT IS NOT KNOWN SOIL, IF SEED ARE INDICATED, MAKE IN LIGHTLY COVERING SEED NO MORE THAN TWO OR THREE TIMES THEIR TYPICAL COVER. APPLY A LAYER OF MULCH TO PROTECT PLANT SEEDS. SEEDS ARE DULLED A MAXIMUM OF 4". IF HYDRATION IS USED, HYDRATED MULCH WILL PROVIDE TOP COVER. SEEDS MUST BE KEPT CONSISTENT MOIST FOR 60 TO 90 DAYS DURING GROWING SEASON UNTIL SEEDS ARE WELL ESTABLISHED. WATERING MAY BE GRADUALLY STOPPED AFTER THAT TIME.

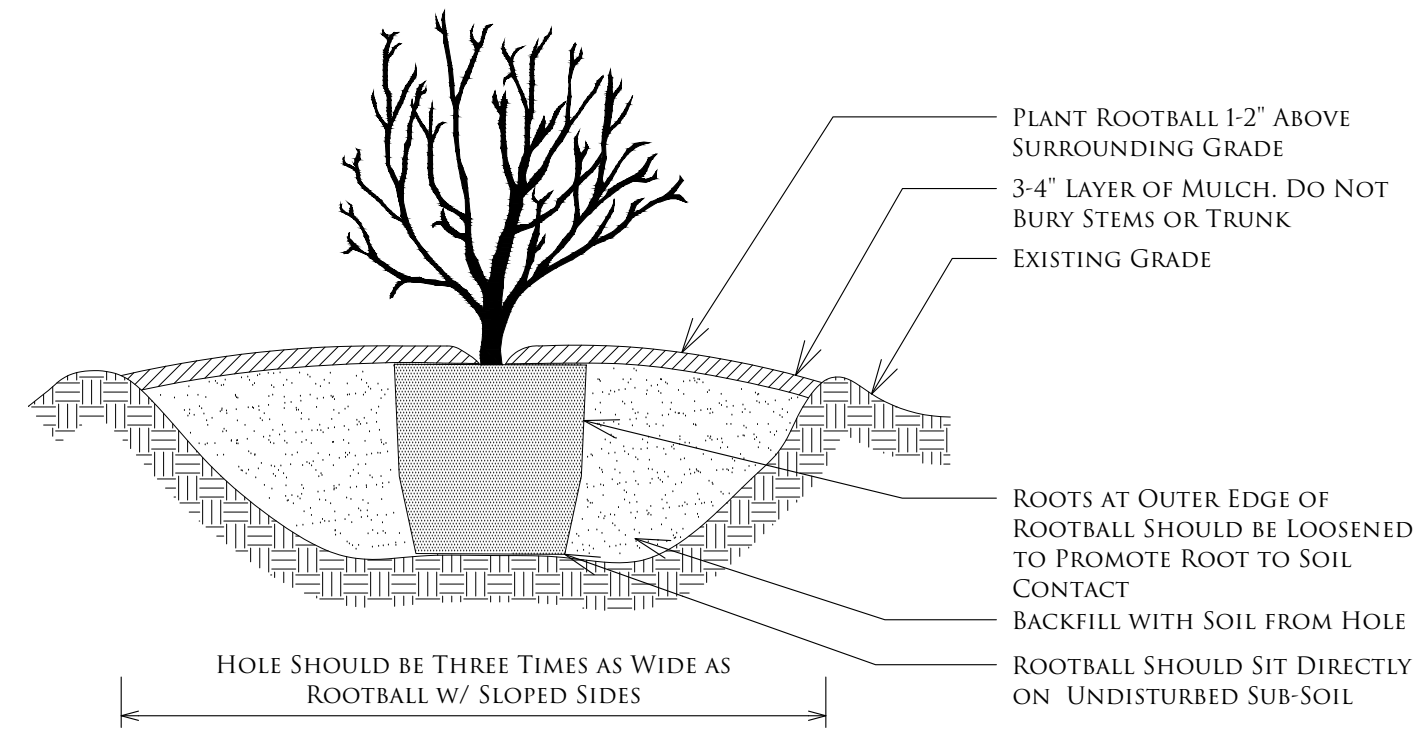
	Name	Common Name	Qty	Size
1	Syringa reticulata 'Ivory Silk'	Japanese Tree Lilac	2	3-3.5" cal
2	Cercis canadensis	Eastern Redbud	2	2.5-3" cal.
3	Acer rubrum 'Redpointe'	Redpoint Maple	5	2.5-3" cal.
4	Ulmus americana 'Princeton'	Princeton American Elm	1	3.5-4"
5	Annuals	Annuals	1	flats
6	Thuja x plicata 'Green Giant'	Green Giant Arborvitae	12	6-7 ft.
7	Tillia cordata 'Greenspire'	Greenspire Littleleaf Linden	4	2.5-3" cal.
8	Thuja occidentalis 'American Pillar'	Full Speed a Hedge Arborvitae	58	4-5 ft.
9	Dievella lonicera	e e	16	3 gal.
10	Nyssa sylvatica	e	2	2.5-3" cal.
11	Cornus Kousa	Kousa Dogwood	3	2-2.5" cal.
12	Calamagrostis acutiflora 'Karl Foerster'	Karl Foerster Feather Reed Grass	18	#2 pot
13	Ilex x meserveae 'Blue Prince' NO BERRIES	Male Blue Holly - Conical shape -No Berrie	2	4-5 ft.
14	Itea virginica 'Little Henry'	Little Henry Sweetspire	6	2-2.5 ft.
15	Chamaecyparis pisifera 'Filifera Nana'	Compact Threadleaf Cyparis	2	3-3.5 ft.
16	Calamagrostis acutiflora 'Karl Foerster'	Karl Foerster Feather Reed Grass	16	#2 pot
17	Buxus microphylla 'Green Gem'	Littleleaf Boxwood	10	2-2.5 ft.
18	Picea glauca 'Conica'	Dwarf Alberta Spruce	2	4-5 ft.
19	Cornus sanguinea 'Cato' Arctic Sun	Arctic Sun Dogwood	16	2.5-3 ft.
20	Thuja occidentalis 'Fire Ckief'	Fire Chief Arborvitae	10	3-3.5 ft.
21	Stewartia pseudocamellia	Japanese Stewartia	2	2-2.5" cal.
22	Ilex x meserveae 'China Boy'	China Boy Holly	18	2.5-3 ft.
23	Hemerocallis x 'Happy Returns'	Yellow Reblooming Daylilies	125	#1 pot
24	Carpinus betulus 'Columnaris Nana'	Dwarf Columnar European Hornbeam	2	6-7 ft.
25	Buxus sempervirens	Common Boxwood	12	3-3.5 ft.
26	Cornus Kousa	Kousa Dogwood	1	2-2.5" cal.
27	Nyssa sylvatica	Tupelo	2	2.5-3" cal.
28	Pinus cembra	Swiss Stone Pine	5	6-7 ft.
29	Plantanus x acerfolia 'Exclamation'	Exclamation London Planetree	4	2-2.5" cal.
30	Carex pensylvanica	Sedge (3225 sq. ft. @10" spacing)	5355	2" plugs
31	Acer rubrum	Swamp Red Maple	1	2-2.5" cal.
32	Betula nigra clump	River Birch Clump	3	10-12 ft.
33	Acer rubrum	Swamp Red Maple	1	2-2.5" cal.
34	Quercus cocinea	Scarlet Oak	1	2-2.5" cal.

SAVED WEDNESDAY, APRIL 8, 2020 6:31:59 AM FERLAND PLOTTED WEDNESDAY, APRIL 8, 2020 9:35:28 AM PETER FERLAND LLC

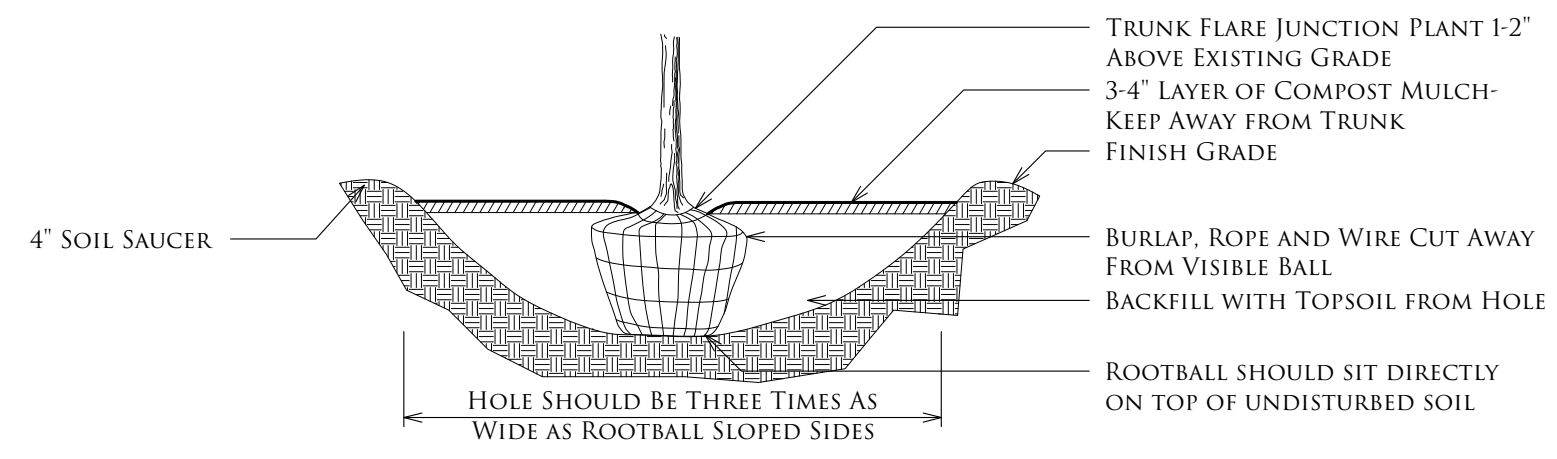
SUDBURY DESIGN GROUP
 740 Boston Post Rd. Sudbury, MA 01776
 978.443.3638 MA | sudburydesign.com | 401.789.5889 RI

PLANTING PLAN
 NEW ENGLAND CENTER FOR CHILDREN
 FARM ROAD
 MARLBOROUGH, MA 01752
 SCALE: 1" = 20'-0"
 APRIL 6, 2020 PF

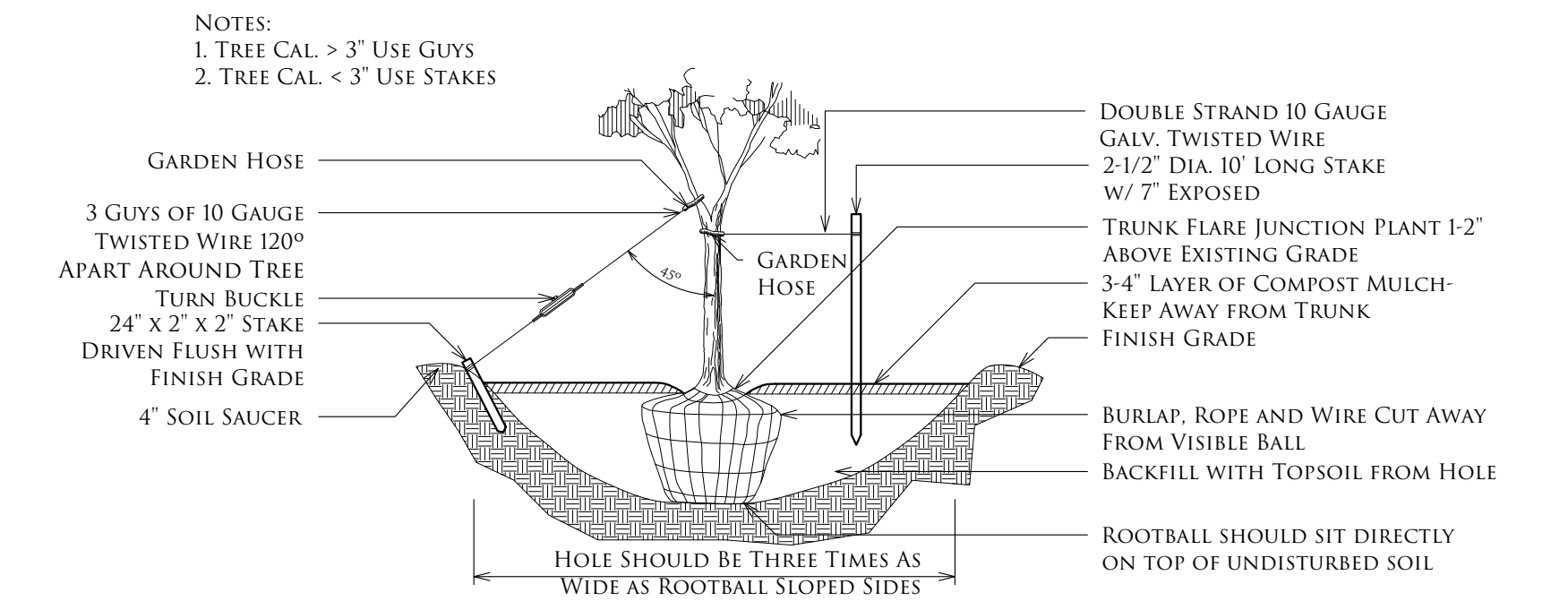
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1
2 SHRUB PLANTING DETAIL SCALE: 1/2" = 1'-0"



2
2 TREE PLANTING DETAIL SCALE: 1/2" = 1'-0"



1
101 TREE STAKING DETAIL SCALE: 1/2" = 1'-0"

SAVED WEDNESDAY, APRIL 8, 2020 11:24 PM PFERLAND PLOTTED WEDNESDAY, APRIL 8, 2020 12:43 PM PETER FERLAND

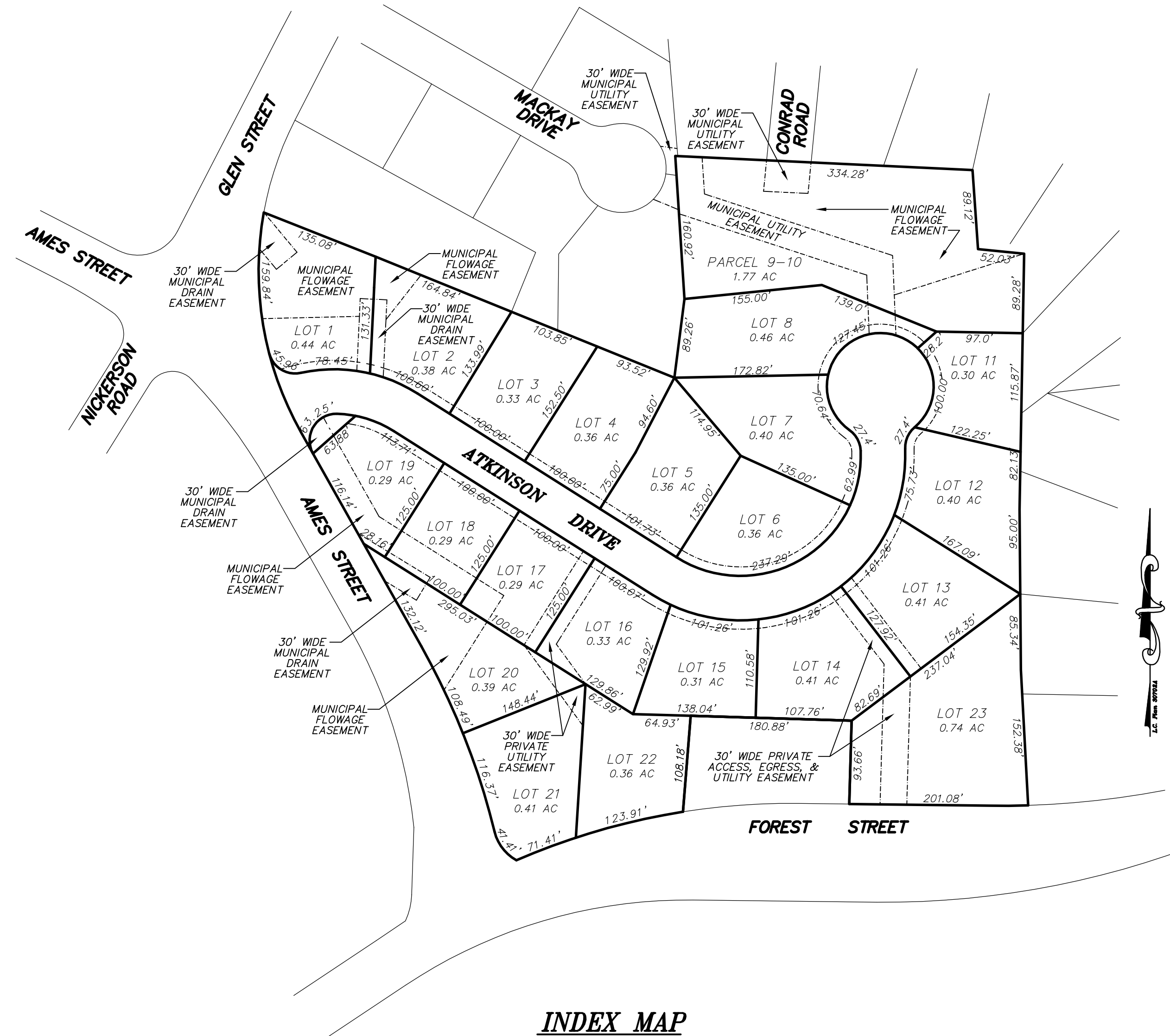
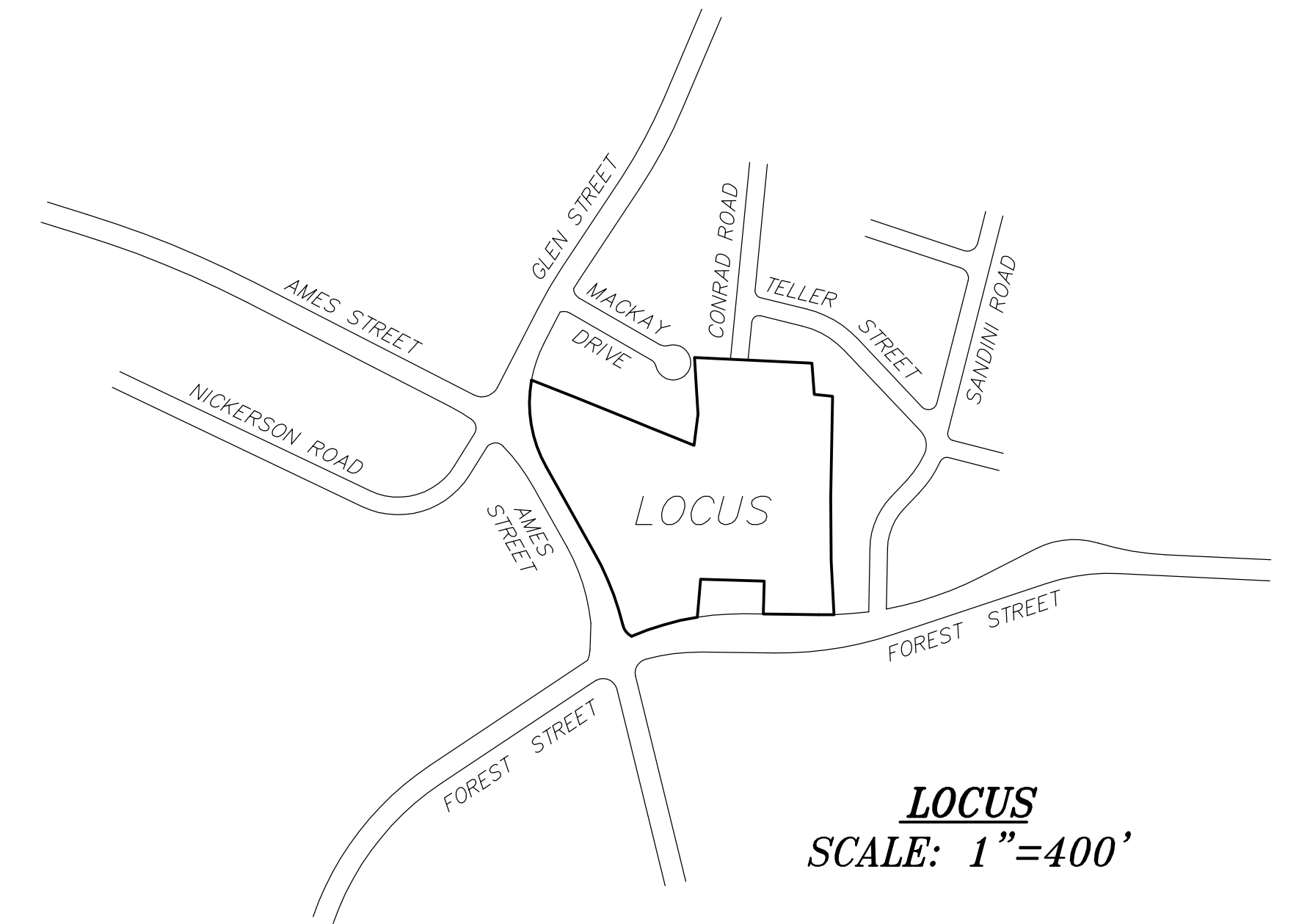


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978.443.3638 MA | sudburymdesign.com | 401.789.5889 RI

PLANTING DETAILS
NEW ENGLAND CENTER
FOR CHILDREN

FARM ROAD
MARLBOROUGH, MA 01752
SCALE: SEE DETAIL
APRIL 6, 2020 PF

**DEFINITIVE SUBDIVISION PLAN
OF
"COMMONWEALTH HEIGHTS"
IN
MARLBOROUGH, MASSACHUSETTS**



PLAN SUMMARY

DESCRIPTION	SHEET
LOCUS / INDEX PLAN	1
PLAN OF LAND	2
CONSTRUCTION DRAWINGS	1-9

SITE SUMMARY

TOTAL AREA = 10.60± Acres
 TOTAL LOT AREA = 9.23± Acres
 ROADWAY AREA = 1.37± Acres
 ROADWAY LENGTH = 1,071.16 Feet
 TOTAL LOTS = 23

OWNER
 MARLBOROUGH / NORTHBOROUGH
 LAND REALTY TRUST
 1 WALL STREET
 BURLINGTON, MA 01803
 PHONE: (781) 272 7000
 FAX: (781) 272 3130

SUBDIVIDER
 COMMONWEALTH HEIGHTS, LLC
 128 WEST MAIN STREET
 WILMINGTON, MA 01887
 PHONE: (978) 988 8060
 FAX: (978) 988 0181

DEFINITIVE PLAN

**PLAN OF LAND
OF
COMMONWEALTH HEIGHTS
IN
MARLBOROUGH, MA.**

- REFERENCES:**
 ASSESSORS MAP 100, LOTS 24-26
 MAP 89, LOTS 80-99
 DEED BOOK 1228, PAGE 149
 Plan No. 453 of 1961
 Plan No. 1549 of 1968
 Plan No. 527 of 1941
 Plan No. 1527 of 1986
 Plan No. 437 of 1976
 Plan No. 198 of 1997
 Plan No. 1544 of 1968
 Plan No. 511 of 1984
 Plan No. 455 of 1961
 Plan No. 1174 of 1995
 L.C. Plan 30702A
 Plan No. 549 of 2007
 Plan No. 550 of 2007

Middlesex South
 Registry of Deeds

SITE ADDRESS: OFF FOREST STREET

2019 PLAN NOTE:
 THE PURPOSE OF THIS PLAN IS FOR RE-PERMITTING/APPROVAL OF THE COMMONWEALTH HEIGHTS SUBDIVISION PREVIOUSLY APPROVED BY THE CITY OF MARLBOROUGH PLANNING BOARD IN MAY OF 2006.

THE PREVIOUS SUBDIVISION APPROVAL EXPIRED.

THIS PLAN SET WILL SUPERCEDE THE PREVIOUS SUBDIVISION PLANS RECORDED AS PLANS 549 & 550 OF 2007 IN THE MIDDLESEX SOUTH REGISTRY OF DEEDS.

APPROVAL UNDER THE
 SUBDIVISION CONTROL LAW,
 IS REQUIRED.

MARLBOROUGH PLANNING BOARD

DATE: _____

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

VAROUJAN H. HAGOPIAN, P.L.S. 49665

ZONED: RESIDENCE A-3
 AREA = 12,500 sf
 FRONTAGE = 100 feet
 SETBACKS: FRONT = 20 feet
 SIDE = 15 feet
 REAR = 30 feet



CONNORSTONE
 CONSULTING CIVIL ENGINEERS
 AND
 LAND SURVEYORS
 10 SOUTHWEST CUTOFF, SUITE 7
 NORTHBOROUGH, MASSACHUSETTS 01532
 PH. (508) 393 9727 FAX (508) 393 5242

DESIGNED BY: REM,TDP
 CHECKED BY: VHH
 COMPUTED BY: VHH
 FIELD SURVEY: BKK,VHH
 DRAWN BY: VHH
 SCALE: 1"=40'
 SHEET 1 OF 2

COMMONWEALTH HEIGHTS IN MARLBOROUGH, MA.	MARCH 2, 2020
	JANUARY 28, 2020
	REVISIONS
	OCTOBER 24, 2019

PROJECT SUMMARY

- TOTAL AREA OF ORIGINAL TRACT SHOWN ON THIS PLAN = 461,938 S.F.
 A. AREA IN LOTS 1-23 AND PARCEL "A" = 402,267 S.F.
 B. AREA IN STREET = 59,671 S.F.
 C. AREA IN EASEMENTS = 76,536 S.F.
 D. AREA RESERVED FOR PARKS, SCHOOLS, ETC. = 0 S.F.
 TOTAL AREA OF SUBDIVISION = 461,938 S.F.
- STREETS:
 A. ROAD STA. 0+00 TO STA. 10+71.16 = 1071.16 L.F.
- EASEMENTS:
 A. UTILITY EASEMENTS = 68,382 S.F.
 B. ACCESS, EGRESS, & UTILITY EASEMENTS = 8,154 S.F.

REFERENCES:
 ASSESSORS MAP 100, LOTS 24-26
 MAP 89, LOTS 80-99
 DEED BOOK 1228, PAGE 149

SITE ADDRESS: OFF FOREST STREET

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 Plan No. 455 of 1961
 Plan No. 1174 of 1995
 L.C. Plan 30702A
 Plan No. 549 of 2007
 Plan No. 550 of 2007

Middlesex South
 Registry of Deeds

APPROVAL UNDER THE
 SUBDIVISION CONTROL LAW,
 IS REQUIRED.

MARLBOROUGH PLANNING BOARD

DATE: _____

I HEREBY CERTIFY THAT THIS PLAN
 WAS PREPARED IN CONFORMANCE WITH
 THE RULES AND REGULATIONS OF THE
 REGISTERS OF DEEDS.

VAROUJAN H. HAGOPIAN, P.L.S. 49665

I, _____ CLERK OF THE CITY OF MARLBOROUGH
 RECEIVED AND RECORDED APPROVAL FROM THE PLANNING BOARD
 OF THIS PLAN ON _____ AND NO APPEAL WAS TAKEN
 FOR TWENTY (20) DAYS THEREAFTER.

DEFINITIVE PLAN

**PLAN OF LAND
 OF
 COMMONWEALTH HEIGHTS
 IN
 MARLBOROUGH, MA.**

CONNORSTONE
 CONSULTING CIVIL ENGINEERS
 AND
 LAND SURVEYORS
 10 SOUTHWEST CUTOFF, SUITE 7
 NORTHBOROUGH, MASSACHUSETTS 01532
 PH. (508) 393 9727 FAX (508) 393 5242

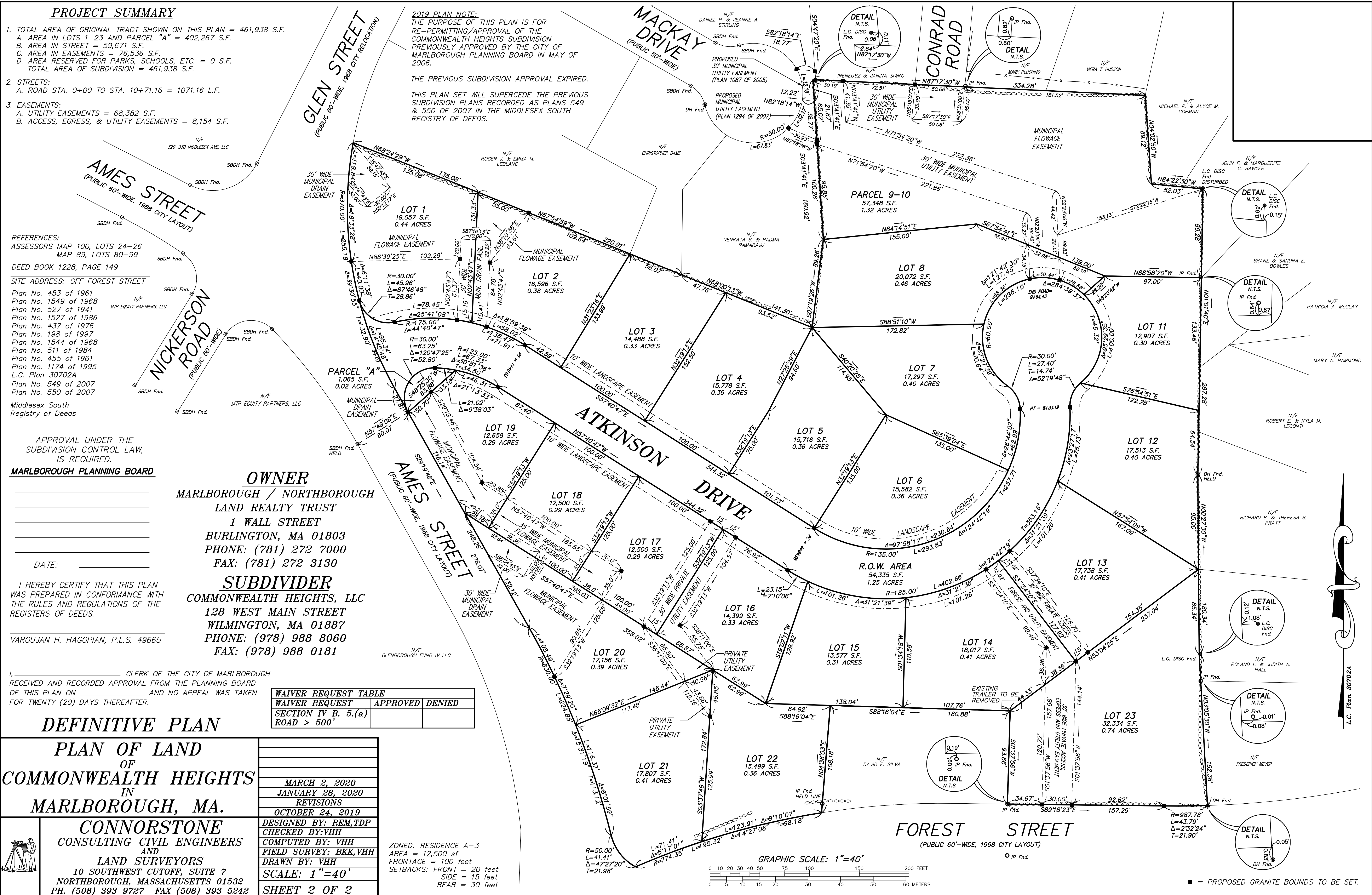
OWNER
 MARLBOROUGH / NORTHBOROUGH
 LAND REALTY TRUST
 1 WALL STREET
 BURLINGTON, MA 01803
 PHONE: (781) 272 7000
 FAX: (781) 272 3130

SUBDIVIDER
 COMMONWEALTH HEIGHTS, LLC
 128 WEST MAIN STREET
 WILMINGTON, MA 01887
 PHONE: (978) 988 8060
 FAX: (978) 988 0181

WAIVER REQUEST TABLE		
WAIVER REQUEST	APPROVED	DENIED
SECTION IV B. 5.(a) ROAD > 500'		

DESIGNED BY: REM,TDP
CHECKED BY: VHH
COMPUTED BY: VHH
FIELD SURVEY: BKK,VHH
DRAWN BY: VHH
SCALE: 1"=40'
SHEET 2 OF 2

ZONED: RESIDENCE A-3
 AREA = 12,500 sf
 FRONTAGE = 100 feet
 SETBACKS: FRONT = 20 feet
 SIDE = 15 feet
 REAR = 30 feet



■ = PROPOSED GRANITE BOUNDS TO BE SET.

ZONE: RESIDENCE A-3
 AREA = 12,500 sf
 FRONTAGE = 100 feet
 SETBACKS: FRONT = 20 feet
 SIDE = 15 feet
 REAR = 30 feet

UTILITIES LEGEND
 UNDERDRAIN
 CABLE/UTILITIES
 GAS LINE
 SEWER LINE
 WATER LINE
 DRAIN LINE

LEGEND
 FLARED END
 PROPOSED DCB
 UTILITY POLE
 WET FLAG #
 STONE WALL
 FINISH GRADE
 2' CONTOUR
 10' CONTOUR
 TREE LINE
 EXISTING DMH
 EXISTING DCB
 EXISTING SMH
 S/S SEWER SERVICE
 W/S WATER SERVICE
 C/U CABLE UTILITIES
 W/S WATER SERVICE
 G GAS MAIN

APPROVAL UNDER THE
 SUBDIVISION CONTROL LAW,
 IS REQUIRED.

MARLBOROUGH PLANNING BOARD

DATE: _____

OWNER
 MARLBOROUGH / NORTHBOROUGH
 LAND REALTY TRUST
 1 WALL STREET
 BURLINGTON, MA. 01803
 (781) 272-7000
 (781) 272-3130

SUBDIVIDER
 COMMONWEALTH HEIGHTS, LLC
 128 WEST MAIN STREET
 WILMINGTON, MA. 01887
 (978) 988-8060
 (978) 988-0181

**TOPOGRAPHICAL PLAN
 OF
 COMMONWEALTH HEIGHTS
 IN
 MARLBOROUGH, MA.**

**CONNORSTONE
 CONSULTING CIVIL ENGINEERS
 AND
 LAND SURVEYORS**
 10 SOUTHWEST CUTOFF, SUITE 7
 NORTHBOROUGH, MASSACHUSETTS 01532
 TEL: (508) 393-9727 FAX: (508) 393-5242

DESIGNED BY: REM,TDP	
CHECKED BY: VC	
COMPUTED BY: VHH	
FIELD SURVEY: BKK	
DRAWN BY: REM, VHH	MARCH 2, 2020
SCALE: 1" = 40'	JANUARY 28, 2020
	REVISIONS
SHEET 1 OF 10	OCTOBER 24, 2019

NOTE:
 GEOTECHNICAL ENGINEER SHALL INSPECT
 AND CERTIFY THE CONSTRUCTION OF
 THE DETENTION BASIN IN ACCORDANCE
 WITH THE REQUIREMENTS OF THE MARLBORO DPW.
 FOR REQUIRED MONUMENTATION, SEE PLAN OF LAND, SHEET
 2 OF 2, COMMONWEALTH HEIGHTS, DATED JUNE 6, 2005.

MILLING AND RESURFACING OF AMES STREET REQUIRED
 WITHIN 25 FEET OF ALL PAVEMENT CUTS. PAVEMENT
 MARKINGS SHALL BE REPLACED IN ACCORDANCE WITH THE
 MASSHIGHWAY STANDARD SPECIFICATIONS.

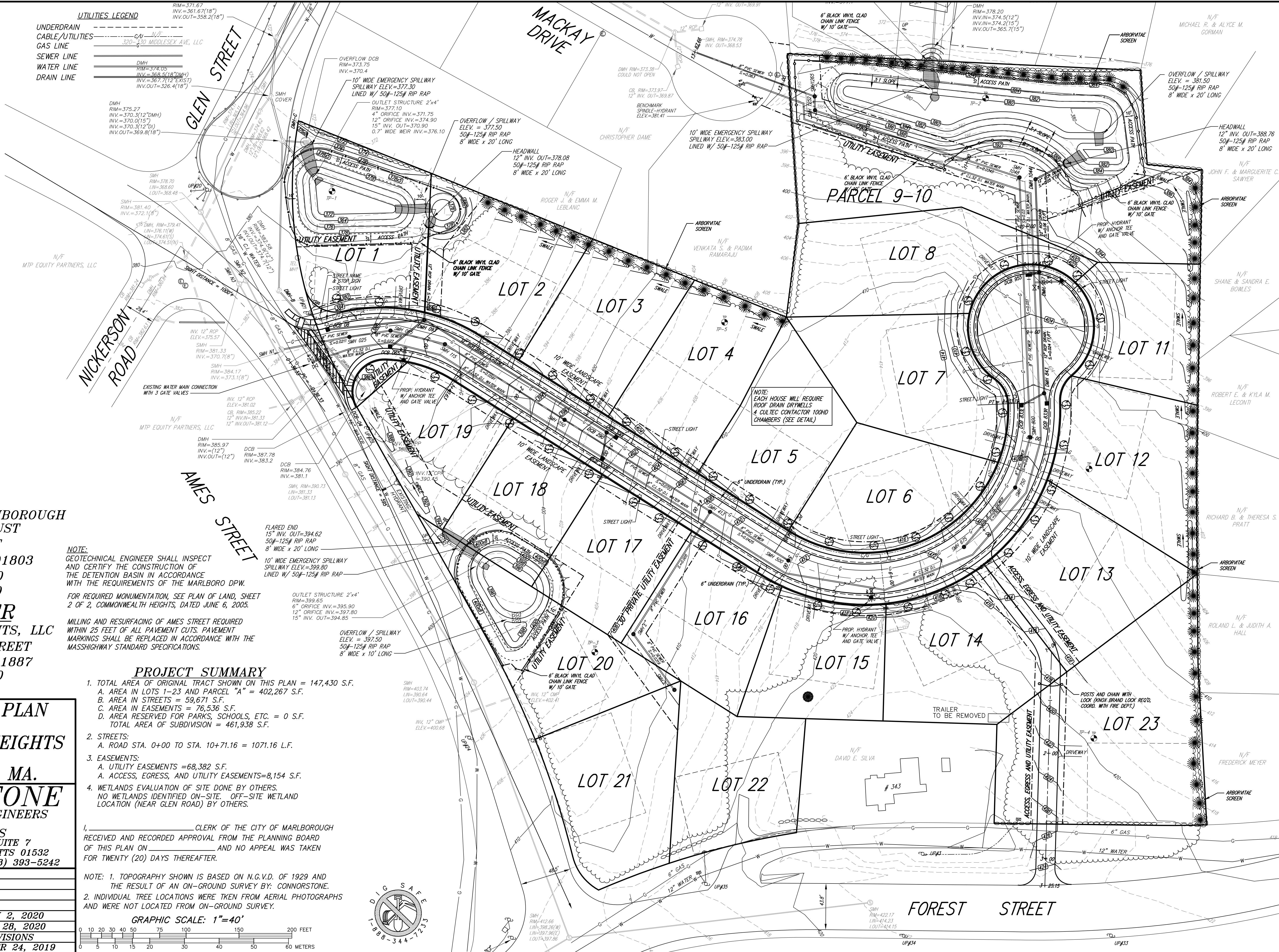
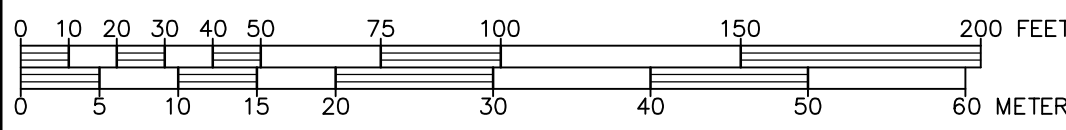
PROJECT SUMMARY

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 A. AREA IN LOTS 1-23 AND PARCEL "A" = 402,267 S.F.
 B. AREA IN STREETS = 59,671 S.F.
 C. AREA IN EASEMENTS = 76,536 S.F.
 D. AREA RESERVED FOR PARKS, SCHOOLS, ETC. = 0 S.F.
 TOTAL AREA OF SUBDIVISION = 461,938 S.F.
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 A. ROAD STA. 0+00 TO STA. 10+71.16 = 1071.16 L.F.
- EASEMENTS:
 A. UTILITY EASEMENTS = 68,382 S.F.
 A. ACCESS, EGRESS, AND UTILITY EASEMENTS = 8,154 S.F.
- WETLANDS EVALUATION OF SITE DONE BY OTHERS.
 NO WETLANDS IDENTIFIED ON-SITE. OFF-SITE WETLAND
 LOCATION (NEAR GLEN ROAD) BY OTHERS.

I, _____ CLERK OF THE CITY OF MARLBOROUGH
 RECEIVED AND RECORDED APPROVAL FROM THE PLANNING BOARD
 OF THIS PLAN ON _____ AND NO APPEAL WAS TAKEN
 FOR TWENTY (20) DAYS THEREAFTER.

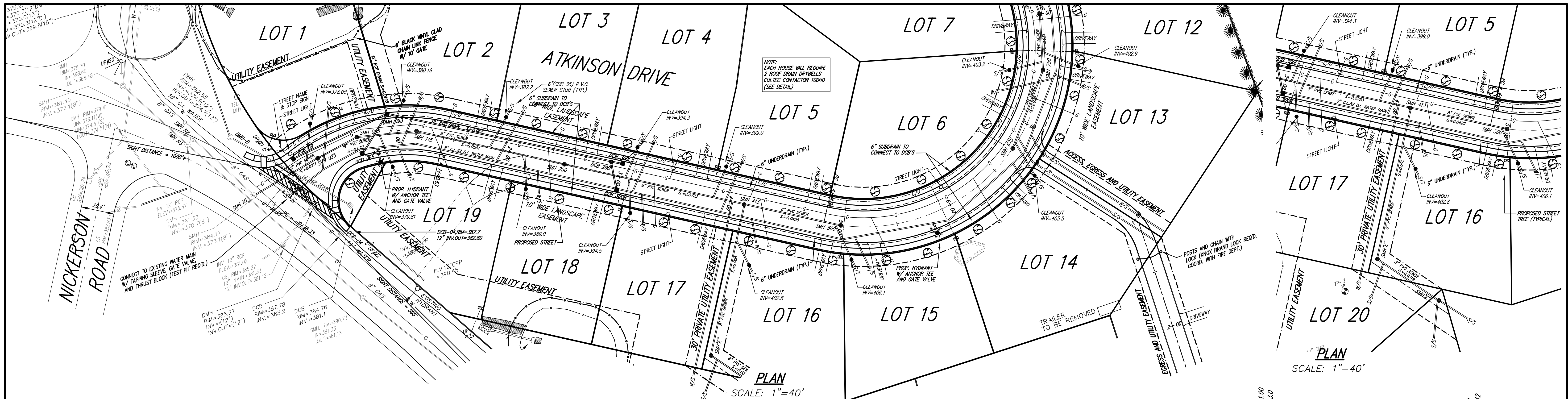
NOTE: 1. TOPOGRAPHY SHOWN IS BASED ON N.G.V.D. OF 1929 AND
 THE RESULT OF AN ON-GROUND SURVEY BY: CONNORSTONE.
 2. INDIVIDUAL TREE LOCATIONS WERE TAKEN FROM AERIAL PHOTOGRAPHS
 AND WERE NOT LOCATED FROM ON-GROUND SURVEY.

GRAPHIC SCALE: 1"=40'



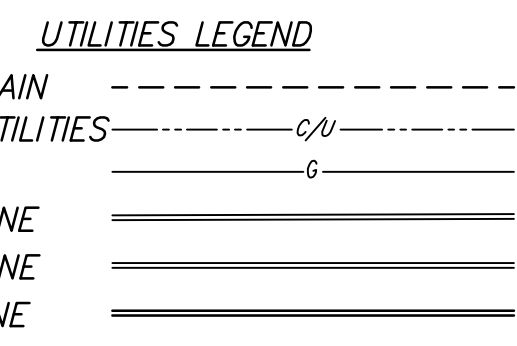
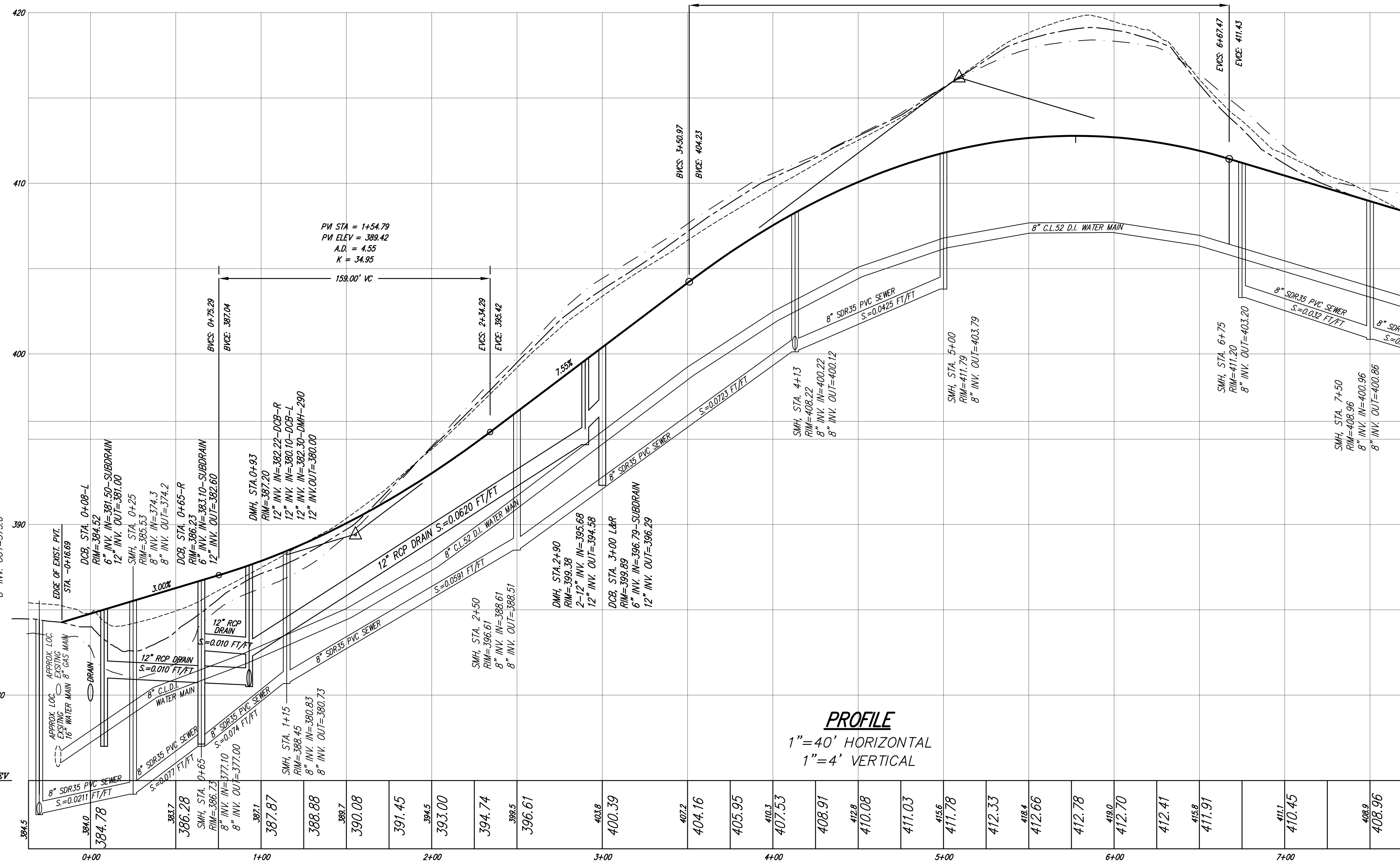
NOTE:
 EACH HOUSE WILL REQUIRE
 ROOF DRAIN DRYWELLS
 & CULTEC CONTRACTOR 100HD
 CHAMBERS (SEE DETAIL)

FOREST STREET



A.D. = -10.55
K = 30.00
316.5000" VC

NOTE:
CONTROLLED DENSITY FILL (CDF) SHALL
BE REQUIRED FOR ALL TRENCH WORK AND/OR
EXCAVATED AREAS LOCATED IN THE
RIGHT-OF-WAY LAYOUT OF AMES STREET.



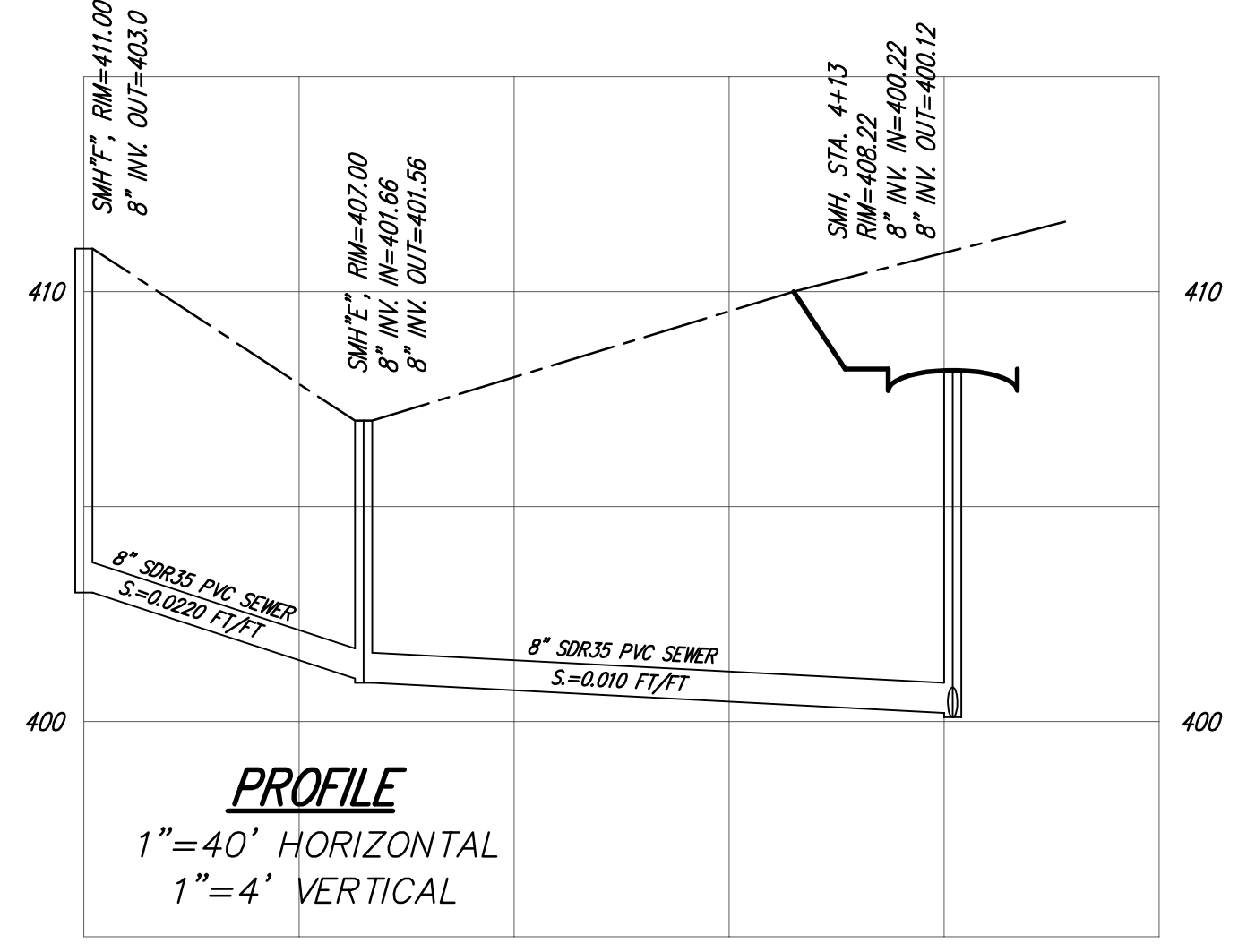
APPROVAL UNDER THE
SUBDIVISION CONTROL LAW,
IS REQUIRED.
MARLBOROUGH PLANNING BOARD

DATE: _____

OWNER
MARLBOROUGH / NORTHBOROUGH
LAND REALTY TRUST
1 WALL STREET
BURLINGTON, MA. 01803
(781) 272-7000
(781) 272-3130
SUBDIVIDER
COMMONWEALTH HEIGHTS, LLC
128 WEST MAIN STREET
WILMINGTON, MA. 01887
(978) 988-8060
(978) 988-0181

I, _____ CLERK OF THE CITY OF MARLBOROUGH
RECEIVED AND RECORDED APPROVAL FROM THE PLANNING BOARD
OF THIS PLAN ON _____ AND NO APPEAL WAS TAKEN
FOR TWENTY (20) DAYS THEREAFTER.

NOTE: TOPOGRAPHY SHOWN IS BASED ON N.G.V.D. OF 1929 AND
THE RESULT OF AN ON-GROUND SURVEY BY: CONNORSTONE.



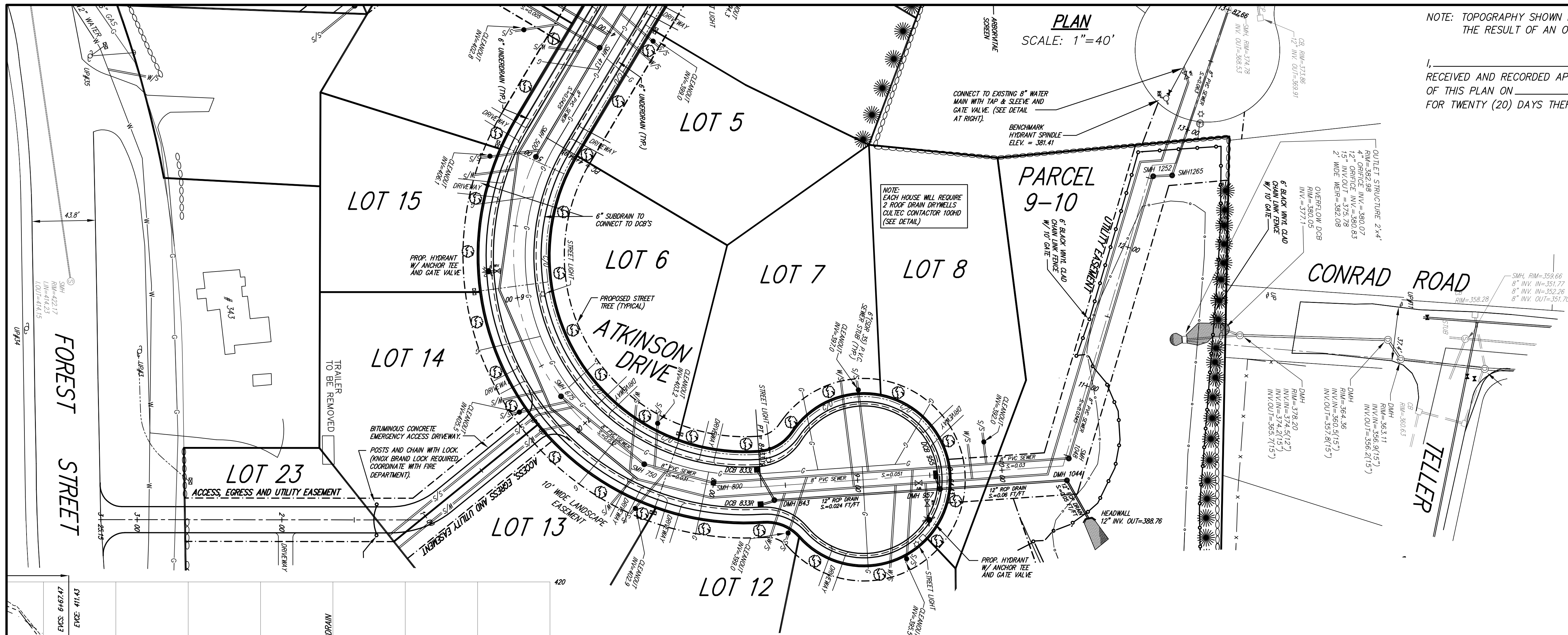
NOTE: CONNORSTONE DOES NOT WARRANT THE
LOCATION OR CHARACTERISTICS OF UNDERGROUND
UTILITIES OR OTHER SUBSURFACE CONDITIONS.

PLAN AND PROFILE
OF
ATKINSON DRIVE
IN
MARLBOROUGH, MA.

CONNORSTONE
CONSULTING CIVIL ENGINEERS
AND
LAND SURVEYORS
10 SOUTHWEST CUTOFF, SUITE 7
NORTHBOROUGH, MASSACHUSETTS 01532
TEL: (508) 393-9727 FAX: (508) 393-5242

DESIGNED BY: REM,TDP	
CHECKED BY: VC	
COMPUTED BY: VHH	
FIELD SURVEY: BKK	
DRAWN BY: REM, VHH	MARCH 2, 2020
SCALE: AS SHOWN	JANUARY 28, 2020
	REVISIONS
SHEET 2 OF 10	OCTOBER 24, 2019



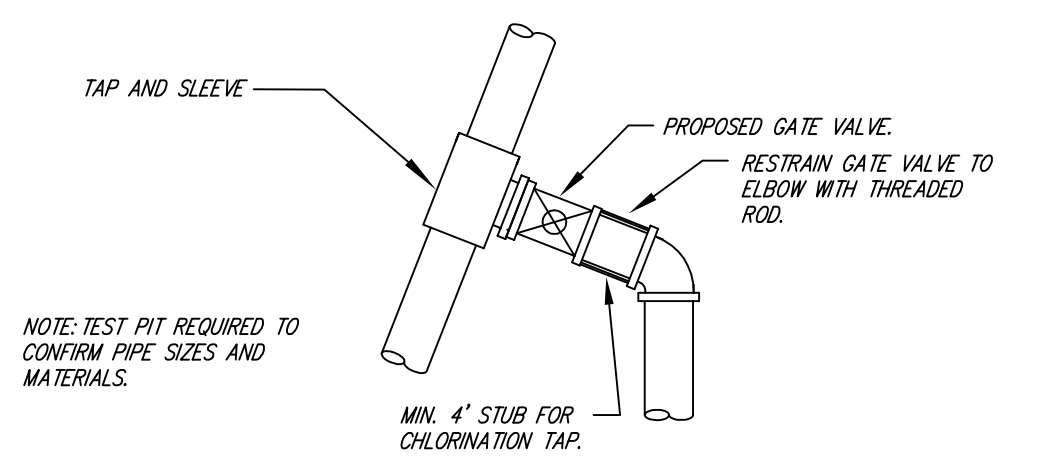


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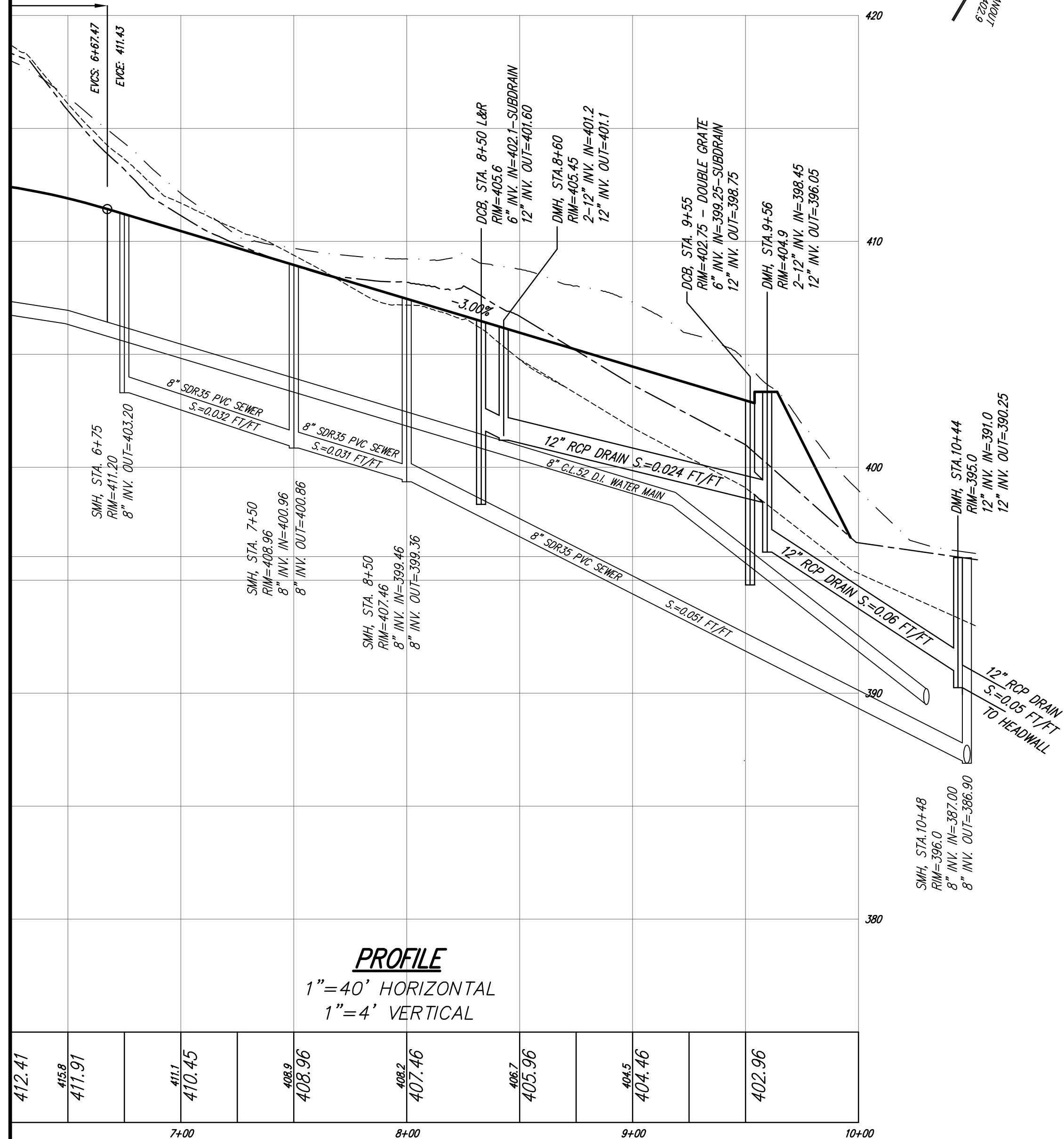
APPROVAL UNDER THE SUBDIVISION CONTROL LAW, IS REQUIRED.
MARLBOROUGH PLANNING BOARD

I, _____ CLERK OF THE CITY OF MARLBOROUGH RECEIVED AND RECORDED APPROVAL FROM THE PLANNING BOARD OF THIS PLAN ON _____ AND NO APPEAL WAS TAKEN FOR TWENTY (20) DAYS THEREAFTER.

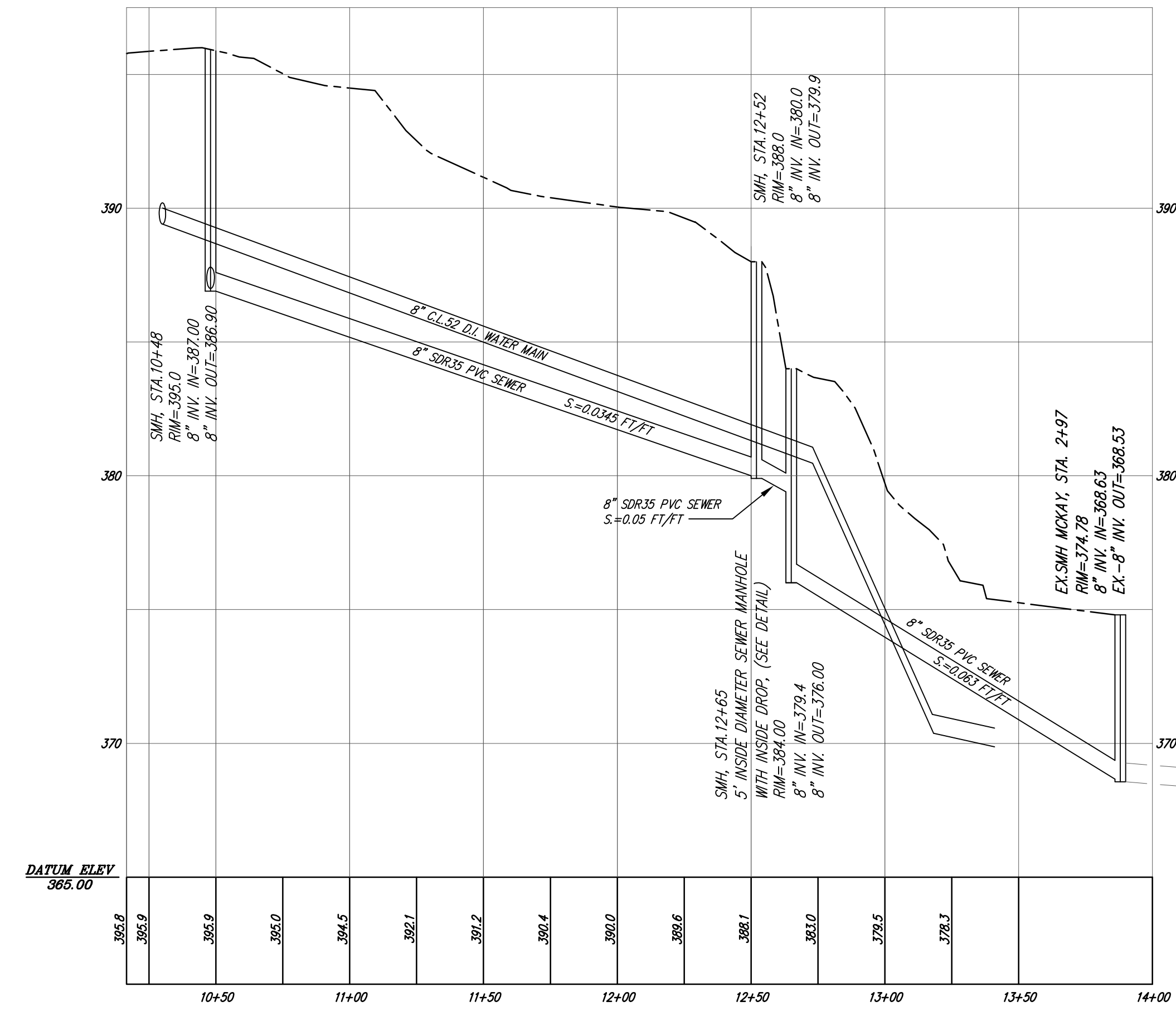
DATE: _____



WATER MAIN CONNECTION DETAIL NOT TO SCALE



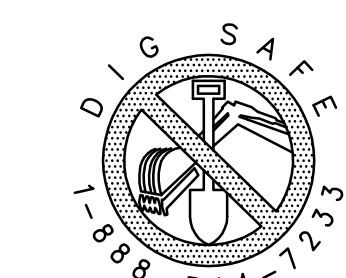
PROFILE
1"=40' HORIZONTAL
1"=4' VERTICAL



PROFILE
1"=40' HORIZONTAL
1"=4' VERTICAL

NOTE: SURVEY PERFORMED BY CONNORSTONE ENGINEERING IN FEBRUARY AND MARCH, 2005.

NOTE: CONNORSTONE DOES NOT WARRANT THE LOCATION OR CHARACTERISTICS OF UNDERGROUND UTILITIES OR OTHER SUBSURFACE CONDITIONS.



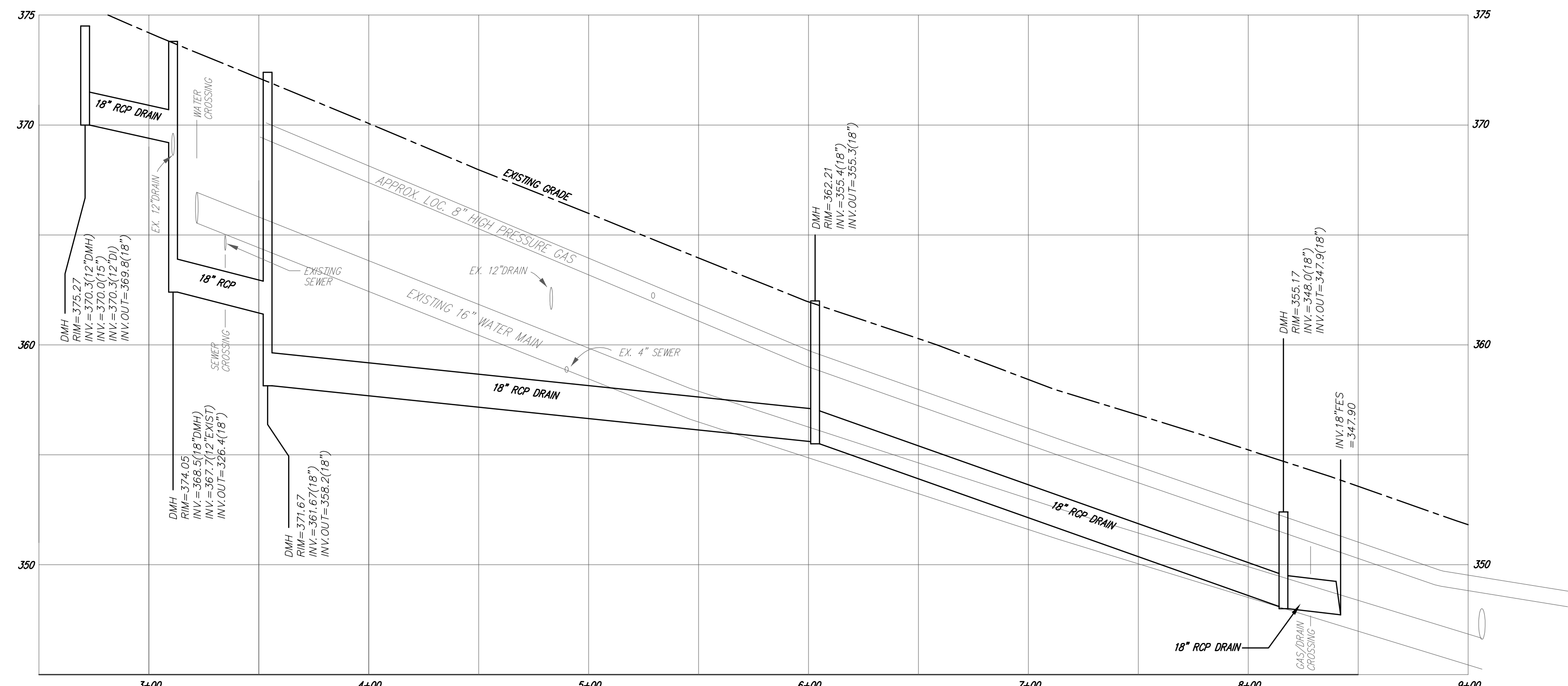
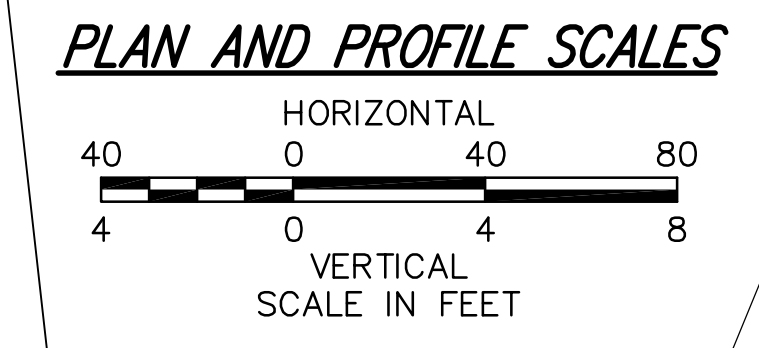
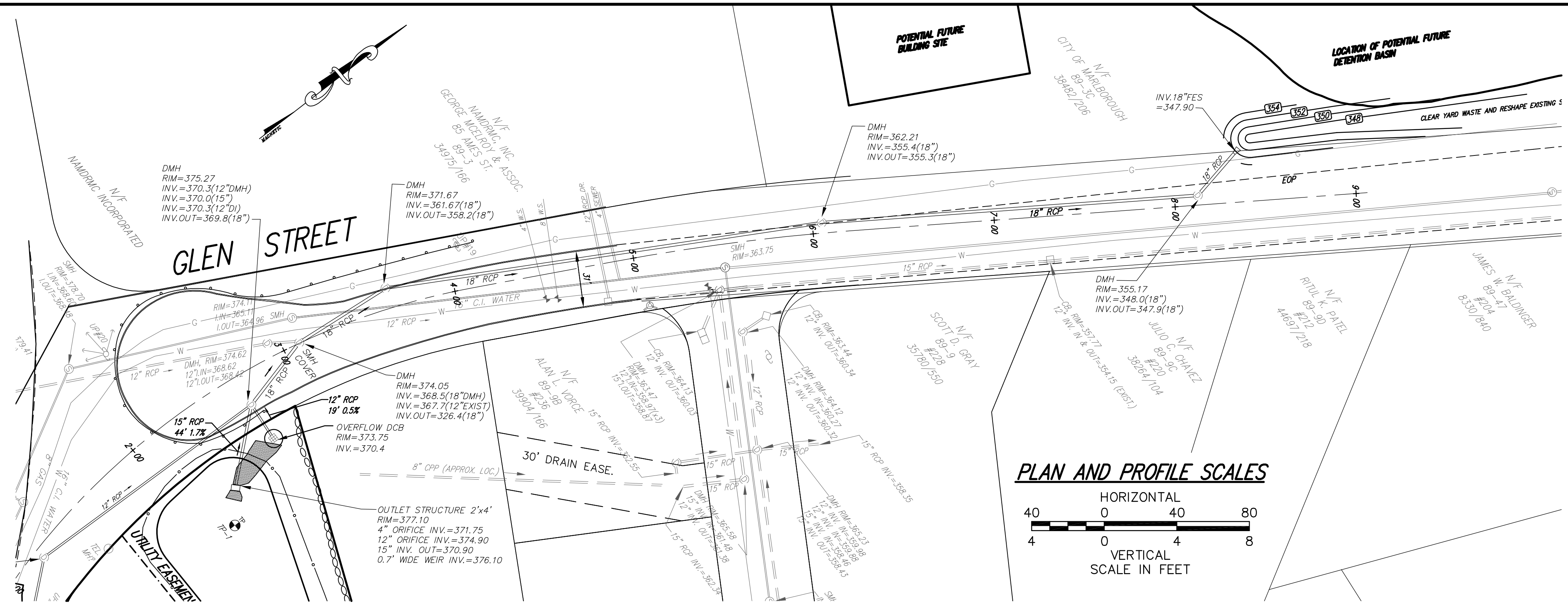
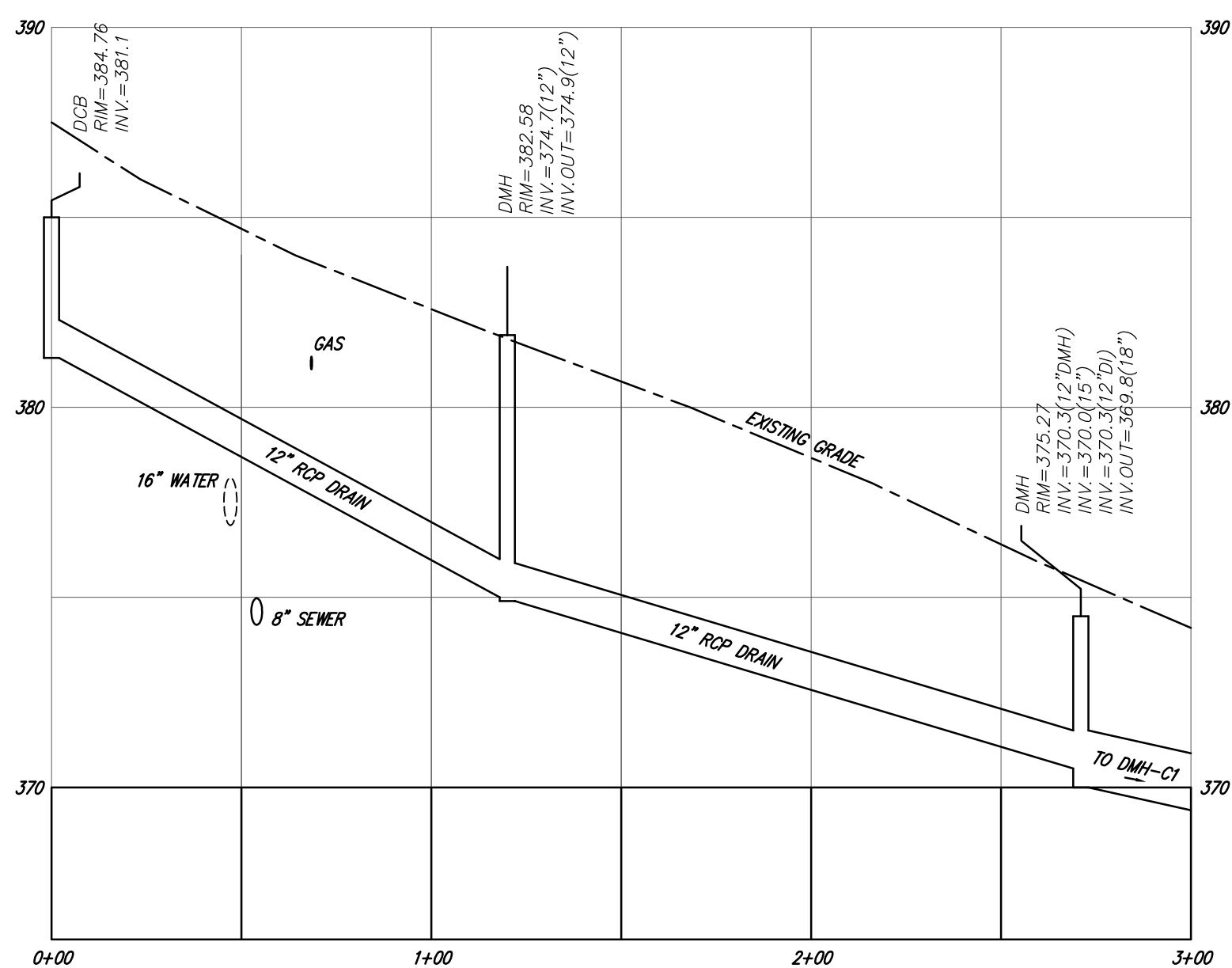
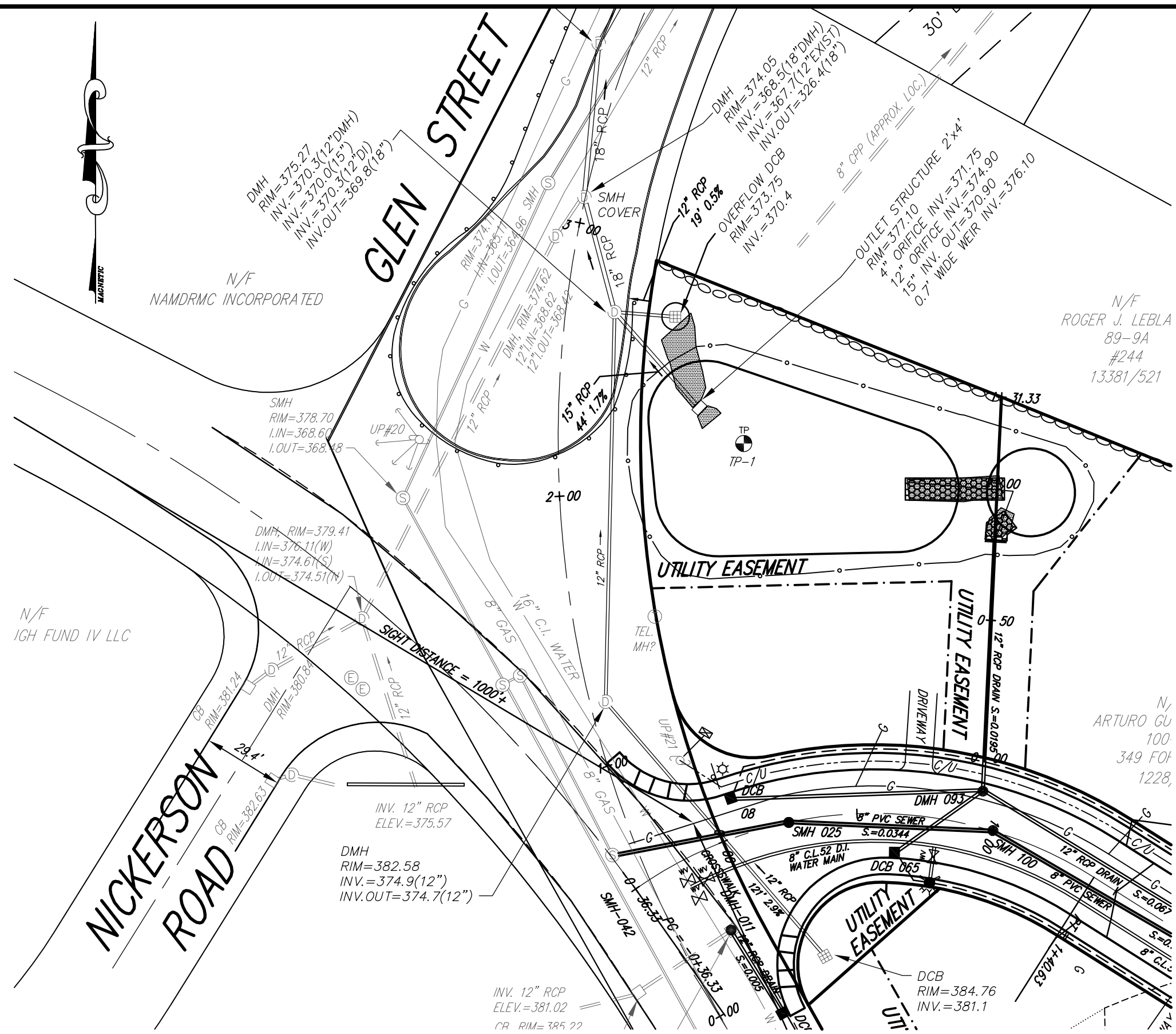
OWNER
MARLBOROUGH / NORTHBOROUGH LAND REALTY TRUST
1 WALL STREET
BURLINGTON, MA. 01803
(781) 272-7000
(781) 272-3130

SUBDIVIDER
COMMONWEALTH HEIGHTS, LLC
128 WEST MAIN STREET
WILMINGTON, MA. 01887
(978) 988-8060
(978) 988-0181

PLAN AND PROFILE OF ATKINSON DRIVE IN MARLBOROUGH, MA.

CONNORSTONE
CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS
10 SOUTHWEST CUTOFF, SUITE 7
NORTHBOROUGH, MASSACHUSETTS 01532
TEL: (508) 393-9727 FAX: (508) 393-5242

DESIGNED BY: REM,TDP	
CHECKED BY: VC	
COMPUTED BY: VHH	
FIELD SURVEY: BKK	
DRAWN BY: REM, VHH	MARCH 2, 2020
SCALE: AS SHOWN	JANUARY 28, 2020
	REVISIONS
SHEET 3 OF 10	OCTOBER 24, 2019



APPROVAL UNDER THE
SUBDIVISION CONTROL LAW,
IS REQUIRED.
MARLBOROUGH PLANNING BOARD

NOTE: TOPOGRAPHY SHOWN IS BASED ON N.G.V.D. OF 1929 AND
THE RESULT OF AN ON-GROUND SURVEY BY: CONNORSTONE.

I, _____ CLERK OF THE CITY OF MARLBOROUGH
RECEIVED AND RECORDED APPROVAL FROM THE PLANNING BOARD
OF THIS PLAN ON _____ AND NO APPEAL WAS TAKEN
FOR TWENTY (20) DAYS THEREAFTER.

DATE: _____

OWNER
MARLBOROUGH / NORTHBOROUGH
LAND REALTY TRUST
1 WALL STREET
BURLINGTON, MA. 01803
(781) 272-7000
FAX (781) 272-3130

SUBDIVIDER
COMMONWEALTH HEIGHTS, LLC
128 WEST MAIN STREET
WILMINGTON, MA. 01887
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NOTE: CONNORSTONE DOES NOT WARRANT THE LOCATION OR CHARACTERISTICS
OF UNDERGROUND UTILITIES OR OTHER SUBSURFACE CONDITIONS.

- NOTES:**
- 1) TOPOGRAPHY SHOWN IS BASED ON N.G.V.D. OF 1929 AND THE RESULT OF AN ON-GROUND SURVEY BY CONNORSTONE AND FROM PLANS OF RECORD.
 - 2) PIPES TO BE ABANDONED SHALL BE FILLED WITH CONTROLLED DENSITY FILL AND PLUGGED AT BOTH THE UPSTREAM AND DOWNSTREAM ENDS WITH CONCRETE OR BRICK MASONRY.
 - 3) ALL PROPOSED TRENCHES SHALL BE SAWCUT IN NEAT, STRAIGHT LINES PRIOR TO EXCAVATION. ALL TRENCHES SHALL BE BACKFILLED AND RESURFACED TO MEET AND MATCH EXISTING GRADES.
 - 4) EACH PORTION OF DRAIN PIPE INSTALLATION SHALL BE INSTALLED WORKING FROM THE DOWNSTREAM END AND WORKING BACK TOWARDS THE SITE.
 - 5) THE CONTRACTOR SHALL COORDINATE WITH THE CITY ENGINEER REGARDING WORK IN THE PUBLIC RIGHT-OF-WAY.
 - 6) END THE END OF WORK EACH DAY, TRENCHES SHALL BE BACKFILLED AND PROTECTED TO THE SATISFACTION OF THE CITY ENGINEER.

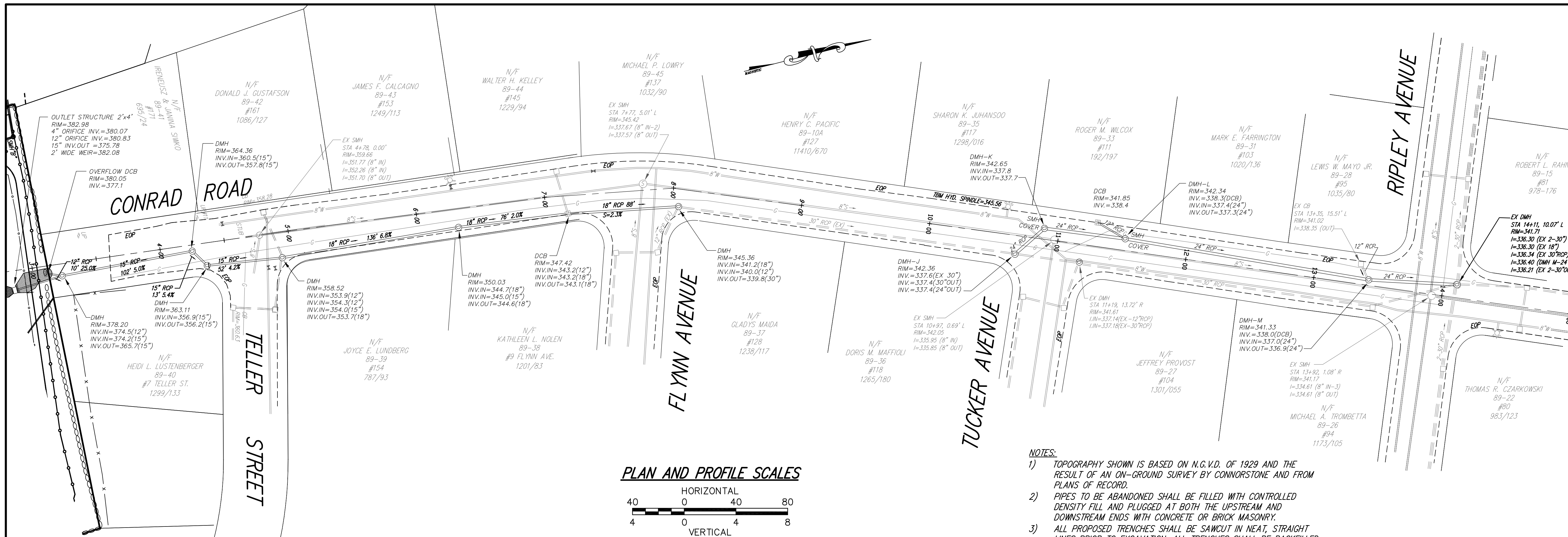


**OFF SITE PLAN AND PROFILES
OF
COMMONWEALTH HEIGHTS
IN
MARLBOROUGH, MA.**

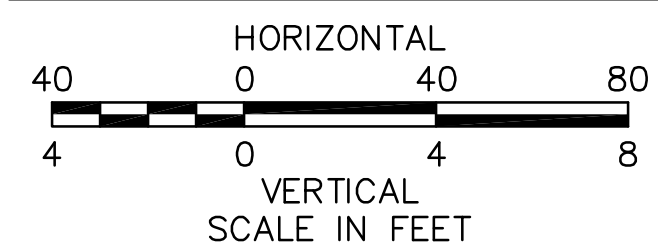
CONNORSTONE
CONSULTING CIVIL ENGINEERS
AND
LAND SURVEYORS
10 SOUTHWEST CUTOFF, SUITE 7
NORTHBOROUGH, MASSACHUSETTS 01532
TEL: (508) 393-9727 FAX: (508) 393-5242

DESIGNED BY: REM,TDP	
CHECKED BY: VC	
COMPUTED BY: TDP	
FIELD SURVEY: BKK	
DRAWN BY: REM, TDP	
SCALE: AS SHOWN	JANUARY 28, 2020
SHEET 4 OF 10	REVISIONS
	OCTOBER 24, 2019

NOTE: CONNORSTONE DOES NOT WARRANT THE LOCATION OR CHARACTERISTICS OF UNDERGROUND UTILITIES OR OTHER SUBSURFACE CONDITIONS.



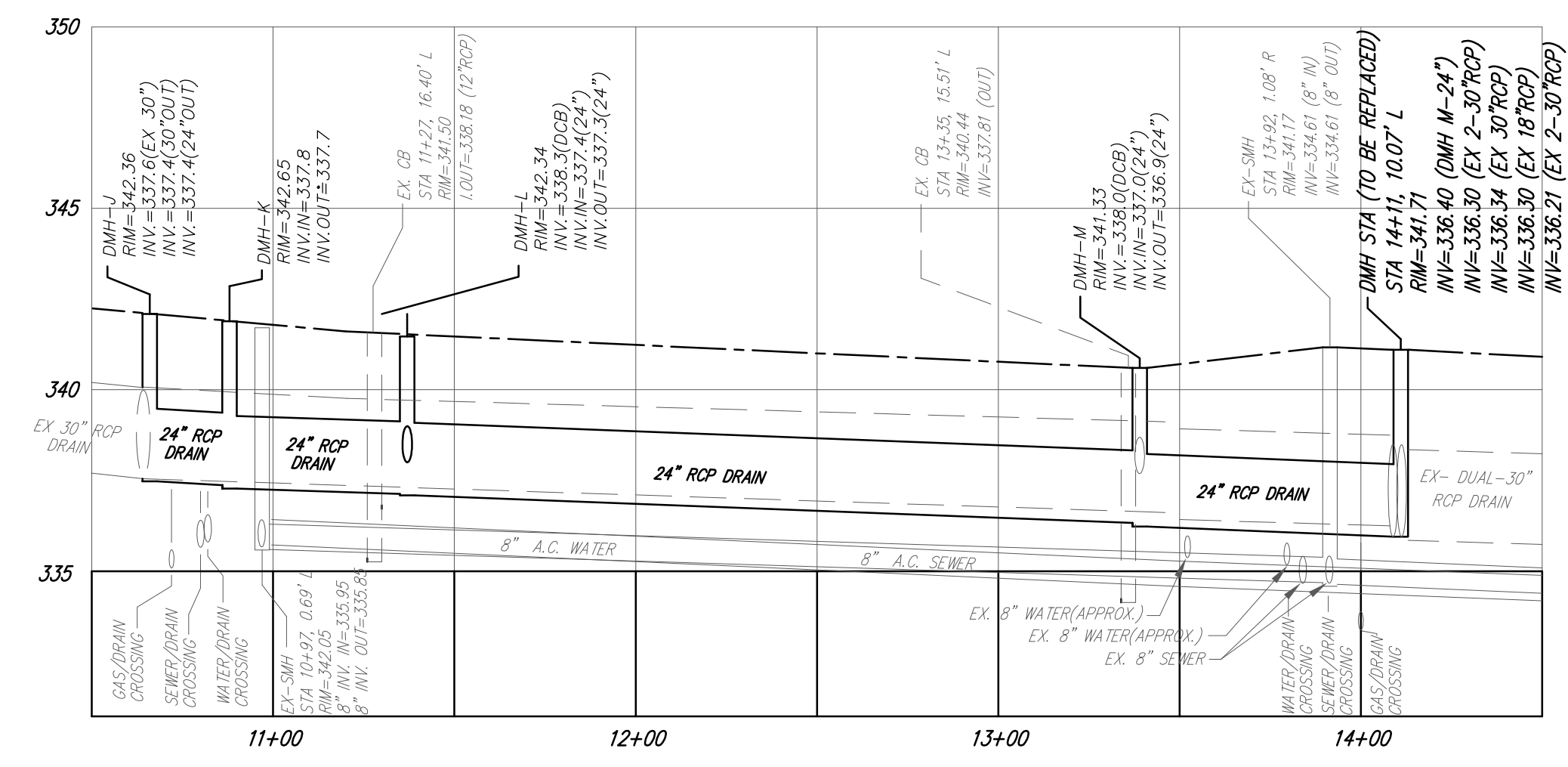
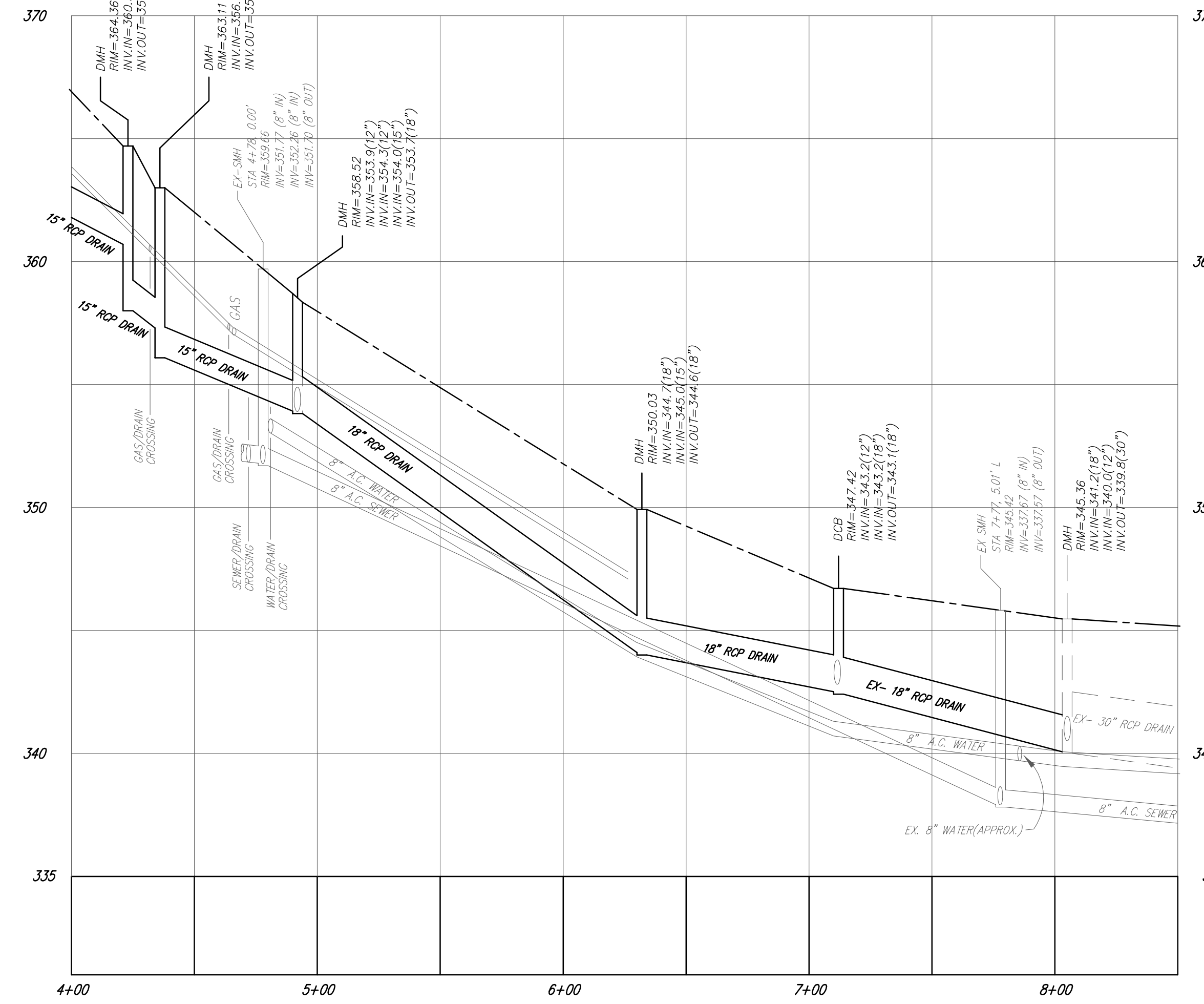
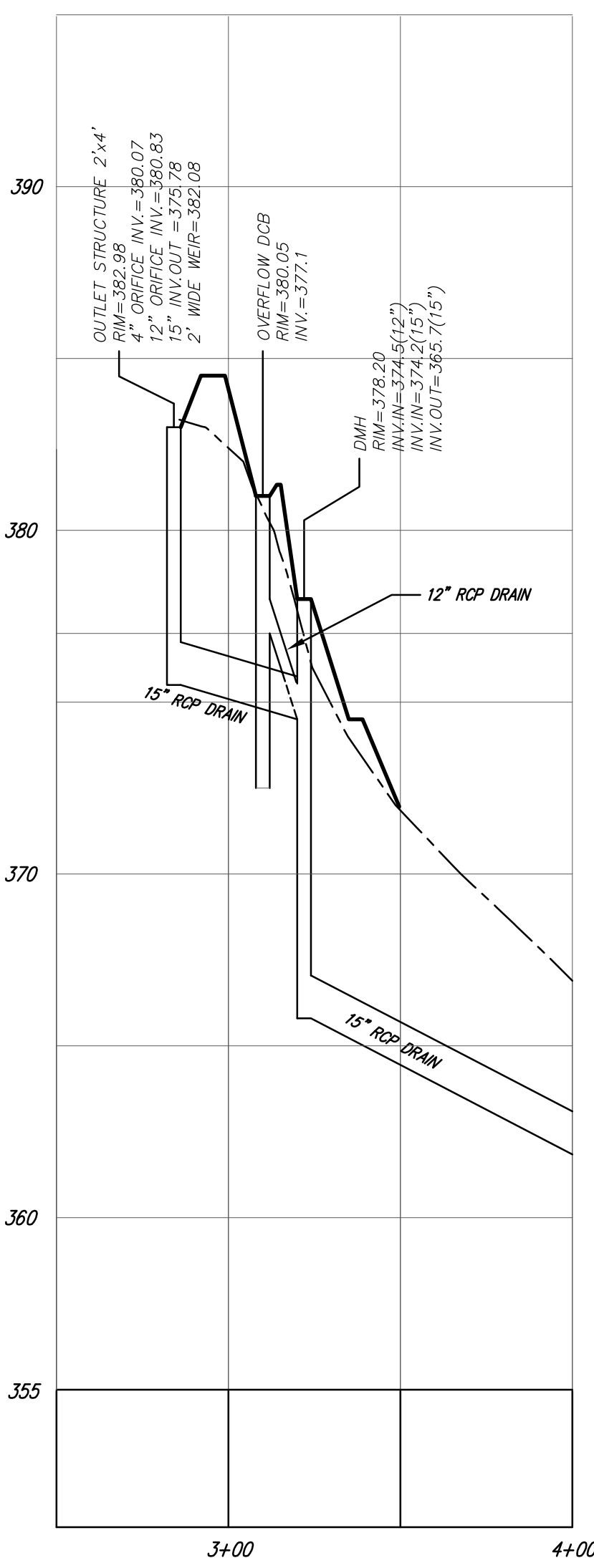
PLAN AND PROFILE SCALES



- NOTES:
- 1) TOPOGRAPHY SHOWN IS BASED ON N.G.V.D. OF 1929 AND THE RESULT OF AN ON-GROUND SURVEY BY CONNORSTONE AND FROM PLANS OF RECORD.
 - 2) PIPES TO BE ABANDONED SHALL BE FILLED WITH CONTROLLED DENSITY FILL AND PLUGGED AT BOTH THE UPSTREAM AND DOWNSTREAM ENDS WITH CONCRETE OR BRICK MASONRY.
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 - 5) THE CONTRACTOR SHALL COORDINATE WITH THE CITY ENGINEER REGARDING WORK IN THE PUBLIC RIGHT-OF-WAY.
 - 6) END THE END OF WORK EACH DAY, TRENCHES SHALL BE BACKFILLED AND PROTECTED TO THE SATISFACTION OF THE CITY ENGINEER.

OWNER
MARLBOROUGH / NORTHBOROUGH
LAND REALTY TRUST
 1 WALL STREET
 BURLINGTON, MA. 01803
 (781) 272-7000
 FAX (781) 272-3130

SUBDIVIDER
COMMONWEALTH HEIGHTS, LLC
 128 WEST STREET
 WILMINGTON, MA. 01887
 (978) 988-8060
 FAX (978) 988-0181



APPROVAL UNDER THE
 SUBDIVISION CONTROL LAW,
 IS REQUIRED.
MARLBOROUGH PLANNING BOARD

DATE: _____

NOTE: TOPOGRAPHY SHOWN IS BASED ON N.G.V.D. OF 1929 AND THE RESULT OF AN ON-GROUND SURVEY BY: CONNORSTONE.

I, _____ CLERK OF THE CITY OF MARLBOROUGH
 RECEIVED AND RECORDED APPROVAL FROM THE PLANNING BOARD
 OF THIS PLAN ON _____ AND NO APPEAL WAS TAKEN
 FOR TWENTY (20) DAYS THEREAFTER.



OFF SITE PLAN AND PROFILE
OF
CONRAD ROAD
IN
MARLBOROUGH, MA.

CONNORSTONE
 CONSULTING CIVIL ENGINEERS
 AND
 LAND SURVEYORS
 10 SOUTHWEST CUTOFF, SUITE 7
 NORTHBOROUGH, MASSACHUSETTS 01532

DESIGNED BY: REM,TDP	
CHECKED BY: VC	
COMPUTED BY: TDP	
FIELD SURVEY: BKK	
DRAWN BY: TDP	
SCALE: AS SHOWN	JANUARY 28, 2020
SHEET 5 OF 10	REVISIONS OCTOBER 24, 2019

ZONE: RESIDENCE A-3
 AREA = 12,500 sf
 FRONTAGE = 100 feet
 SETBACKS: FRONT = 20 feet
 SIDE = 15 feet
 REAR = 30 feet

SOIL MANAGEMENT NOTES:
 THE FOLLOWING NOTES APPLY TO THE REMOVAL OF EXISTING CONTAMINATED SOILS ON-SITE IN ACCORDANCE WITH THE APPROVED SOIL MANAGEMENT PLAN PRIOR TO COMMENCING CONSTRUCTION OF THE SUBDIVISION.

1. A PRE-CONSTRUCTION MEETING SHALL BE HELD AT THE SITE AT LEAST SEVEN DAYS PRIOR TO THE START OF CONSTRUCTION, INCLUDING REPRESENTATIVES OF THE OWNERS, THE CONTRACTOR AND APPROPRIATE CITY OFFICIALS.
2. A LIST OF RESPONSIBLE PARTIES, AS CITED IN THE SOIL MANAGEMENT PLAN, WILL BE PROVIDED AT THE PRE-CONSTRUCTION MEETING.
3. APPROPRIATE FENCING WILL BE PROVIDED IN ACCORDANCE WITH THE SOIL MANAGEMENT PLAN. THE LOCATION OF THE FENCING WILL BE SHOWN ON A CONSTRUCTION SEQUENCING PLAN TO BE PROVIDED AT OR BEFORE THE PRE-CONSTRUCTION MEETING.
4. PRIOR TO CONSTRUCTION, THE SOIL MANAGEMENT PLAN FOR THE DEVONSHIRE SITE WILL BE PROVIDED, SUBJECT TO THE APPROVAL OF THE MARLBOROUGH BOARD OF HEALTH.
5. AIR QUALITY MONITORING LOCATIONS AND PROCEDURES WILL BE PROVIDED ON THE CONSTRUCTION SEQUENCING PLAN AND PROVIDED AT THE PRE-CONSTRUCTION MEETING.
6. THE HEALTH AND SAFETY PLAN WILL BE PROVIDED BY THE CONTRACTOR AND THE OWNER'S LICENSED SITE PROFESSIONAL AT THE PRE-CONSTRUCTION MEETING.
7. SUBJECT TO THE IMPLEMENTATION OF THE FINAL SOIL MANAGEMENT PLAN PREPARED FOR THE GUTIERREZ COMPANY AND BIRCHWOOD DEVELOPMENT, PREPARED BY ENVIRONMENTAL RISK GROUP DATED FEBRUARY 2006.

- LEGEND**
- SP TEMPORARY STUMP PILE
 - SD TEMPORARY SEDIMENT BASIN
 - P PORTA POTTI
 - LS LOAM STOCKPILE
 - MS MATERIAL STORAGE
 - EM EXCESS MATERIAL
 - CT CONSTRUCTION TRAILER

- PHASING**
1. CUT TREES WHERE REQUIRED.
 2. INSTALL EROSION CONTROLS.
 3. CONSTRUCT TEMPORARY SEDIMENT BASINS.
 4. REMOVE CONTAMINATED SOILS IN ACCORDANCE WITH APPROVED SOIL MANAGEMENT PLAN.
 5. ROUGH GRADE ROADWAY.
 6. INSTALL DRAINAGE, SILT SACKS IN CATCH BASINS.
 7. INSTALL REMAINING UNDERGROUND UTILITIES.
 8. CONSTRUCT SIDEWALK AND ROAD TO BINDER.
 9. LOAM AND SEED.
 10. WHEN SITE IS STABILIZED, CONVERT TEMPORARY SEDIMENT BASIN TO TONAL CONSTRUCTED WETLAND.
 - A. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENT.
 - B. REMOVE SEDIMENT RISER.
 - C. CONSTRUCT FOREBAY.
 - D. INSTALL RIPRAP IN BASIN.
 - E. GRADE BOTTOM FOR HIGH AND LOW MARSH.
 - F. PLANT WETLAND PLANTS IN BASIN.
- DUST CONTROL:** THE CONTRACTOR SHALL MAINTAIN ON SITE AN ADEQUATE WATER SUPPLY TO PREVENT THE GENERATION OF DUST.

NOISE ABATEMENT: ALL EQUIPMENT USED ON THE SITE SHALL BE EQUIPPED WITH MUFFLERS AND/OR OTHER NOISE CONTROLLING DEVICES AS REQUIRED BY STATE AND LOCAL REGULATIONS.

BLASTING: IF REQUIRED, BLASTING SHALL BE CONDUCTED IN ACCORDANCE WITH ALL LOCAL, FEDERAL, AND STATE REGULATIONS, INCLUDING 527 CMR 13.

NOTES:

1. EROSION CONTROLS TO BE SET IN PLACE PRIOR TO CONSTRUCTION TAKING PLACE.
2. ONCE CATCH BASINS HAVE BEEN INSTALLED, SILTSACK SHALL BE PLACED IN ALL CATCH BASINS.

EROSION CONTROL PLAN
 OF
COMMONWEALTH HEIGHTS
 IN
MARLBOROUGH, MA.
CONNORSTONE
 CONSULTING CIVIL ENGINEERS
 AND
 LAND SURVEYORS
 10 SOUTHWEST CUTOFF, SUITE 7
 NORTHBOROUGH, MASSACHUSETTS 01532
 TEL: (508) 393-9727 FAX: (508) 393-5242

DESIGNED BY: REM,TDP	
CHECKED BY: VC	
COMPUTED BY: VHH	
FIELD SURVEY: BKK	
DRAWN BY: REM, VHH	MARCH 2, 2020
SCALE: 1" = 40'	JANUARY 28, 2020
	REVISIONS
SHEET 6 OF 10	OCTOBER 24, 2019

OWNER
 MARLBOROUGH / NORTHBOROUGH
 LAND REALTY TRUST
 1 WALL STREET
 BURLINGTON, MA. 01803
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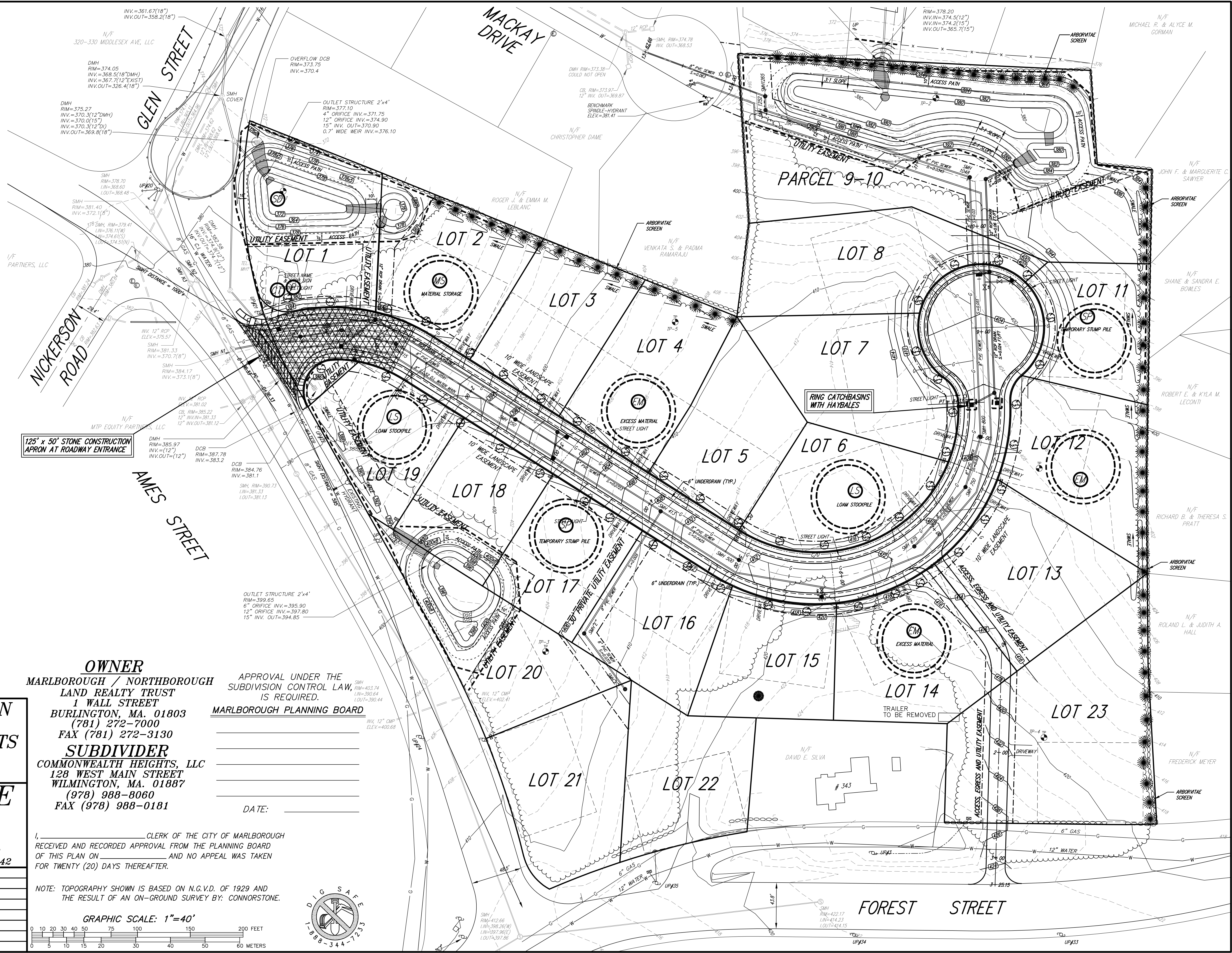
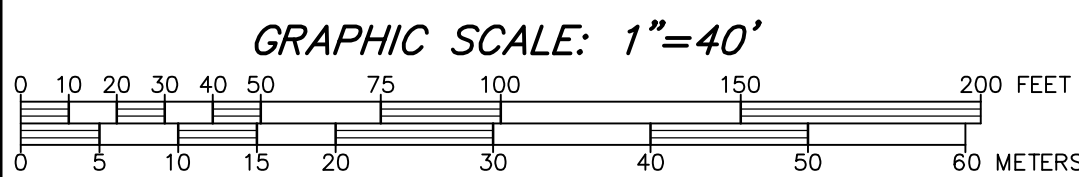
SUBDIVIDER
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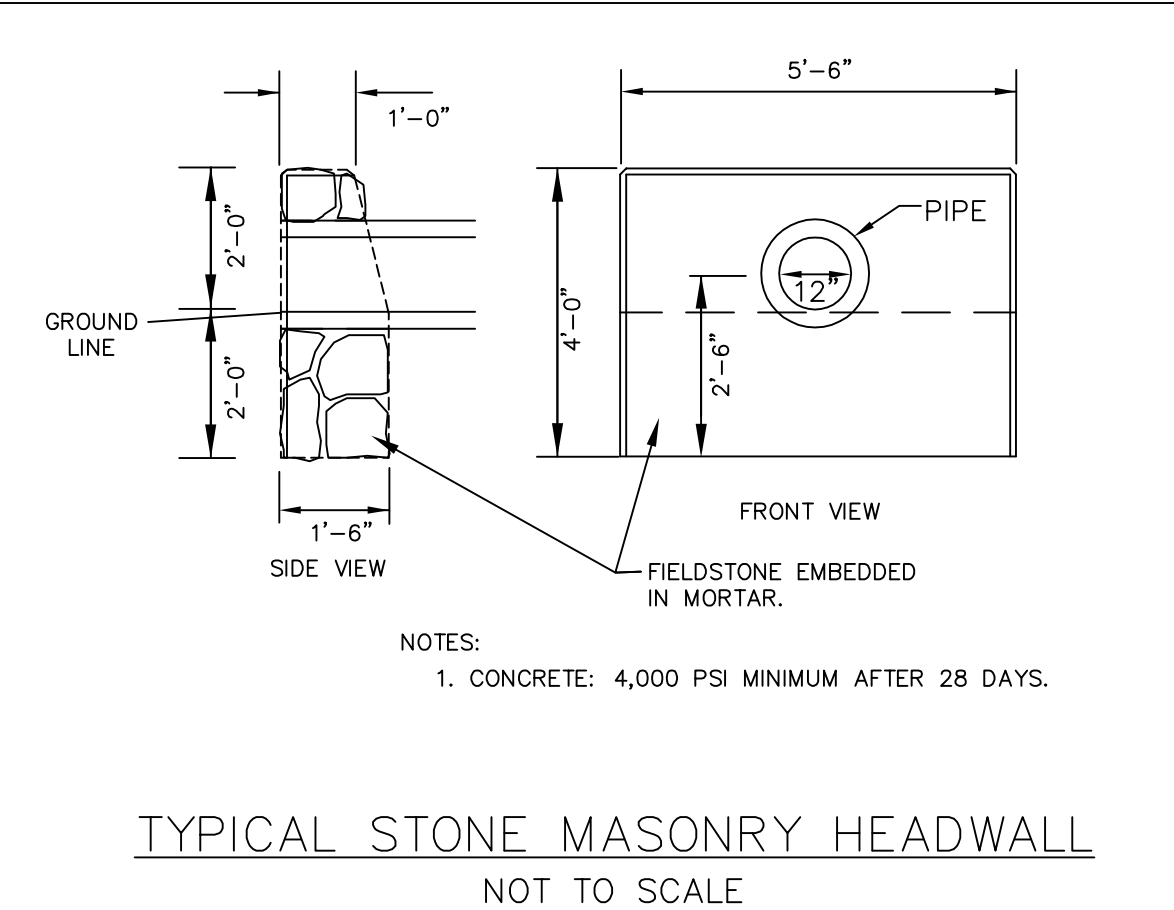
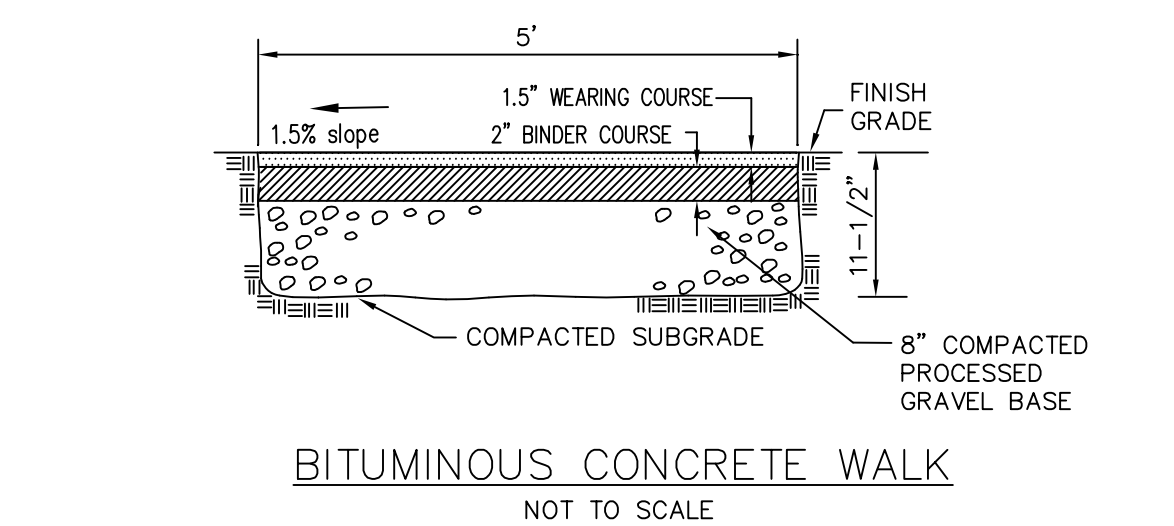
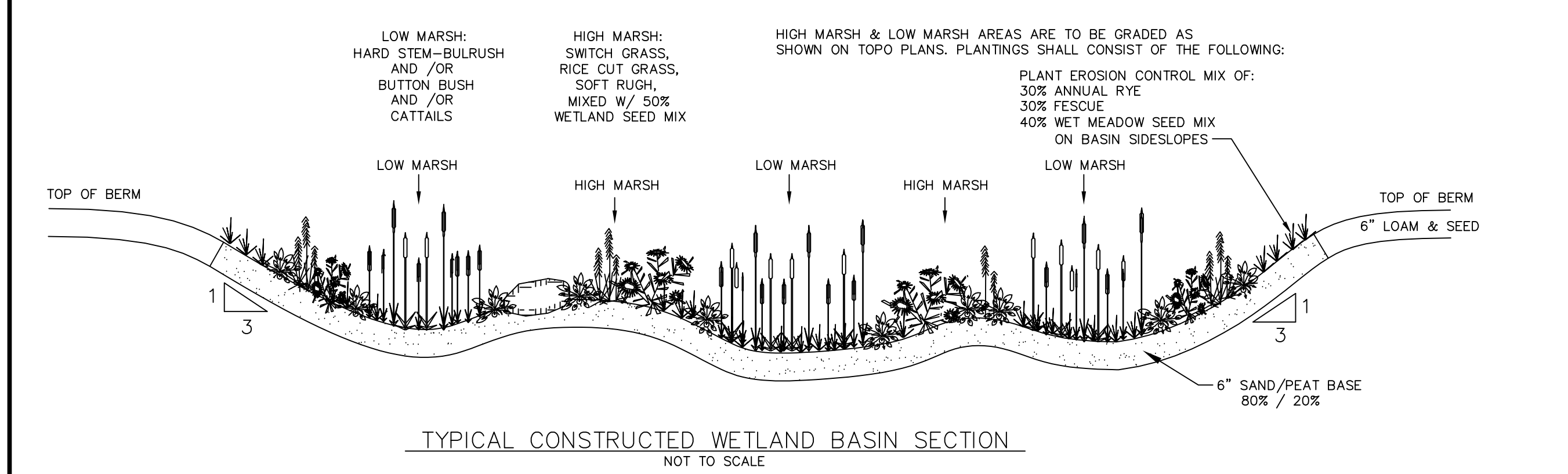
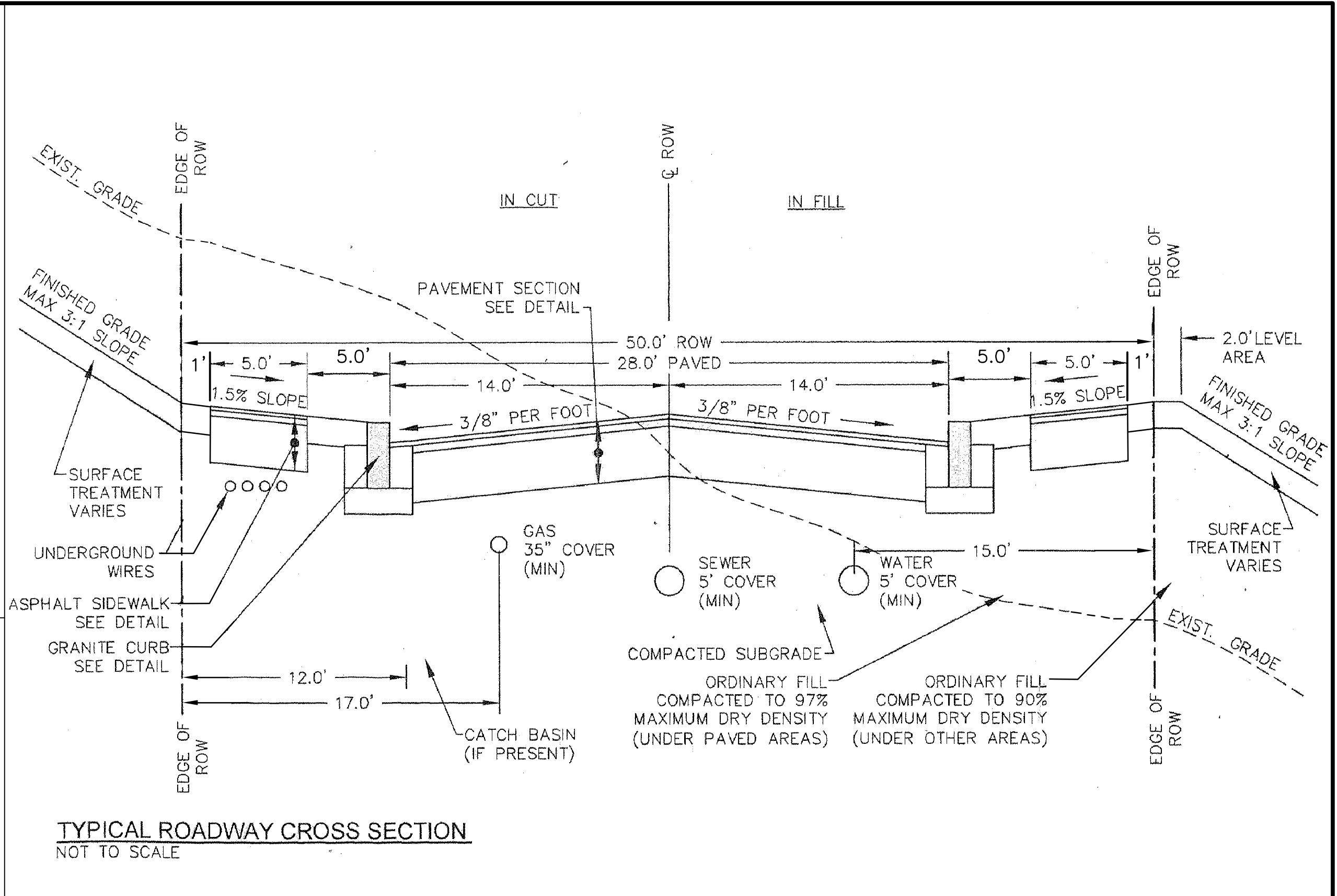
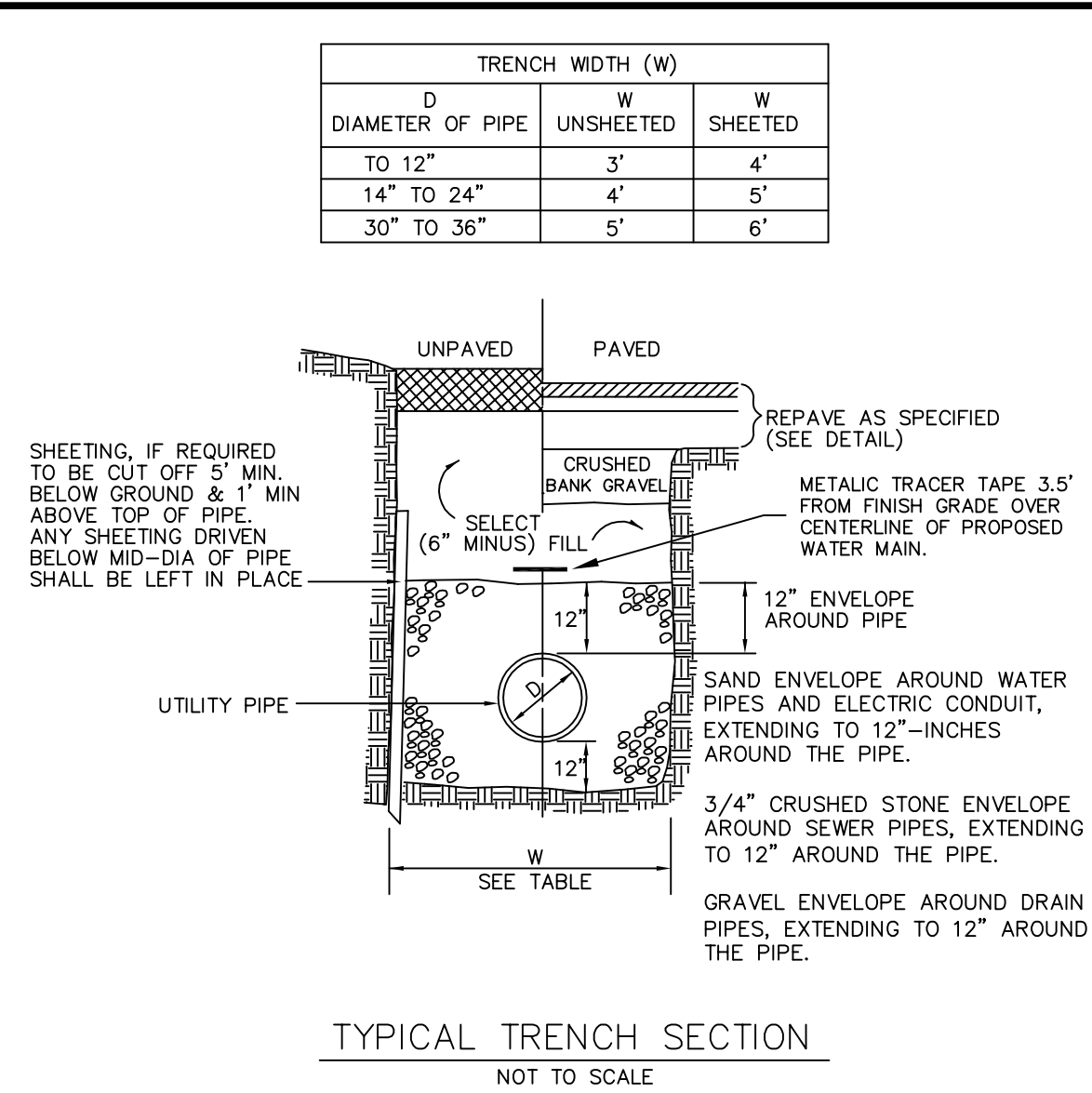
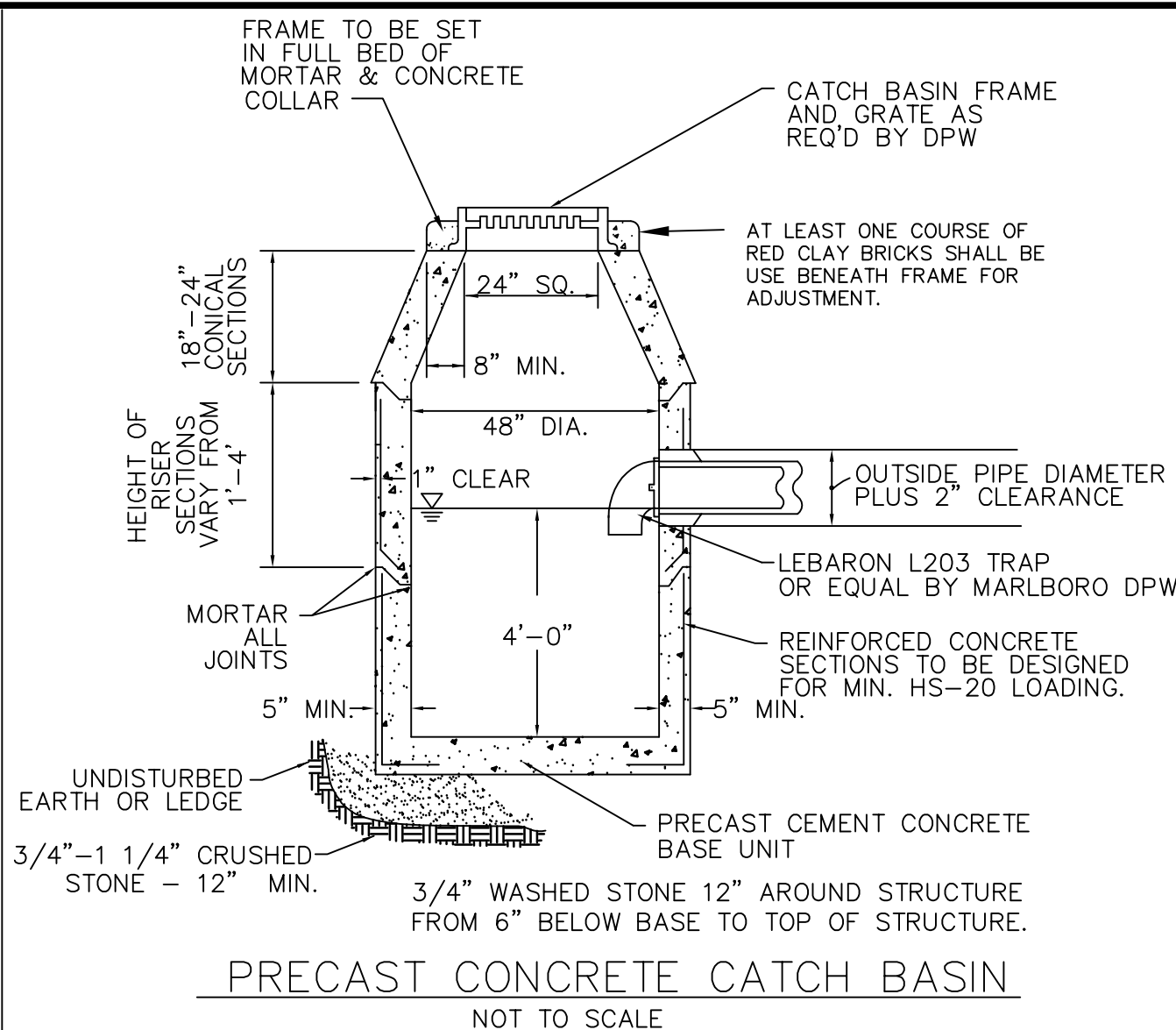
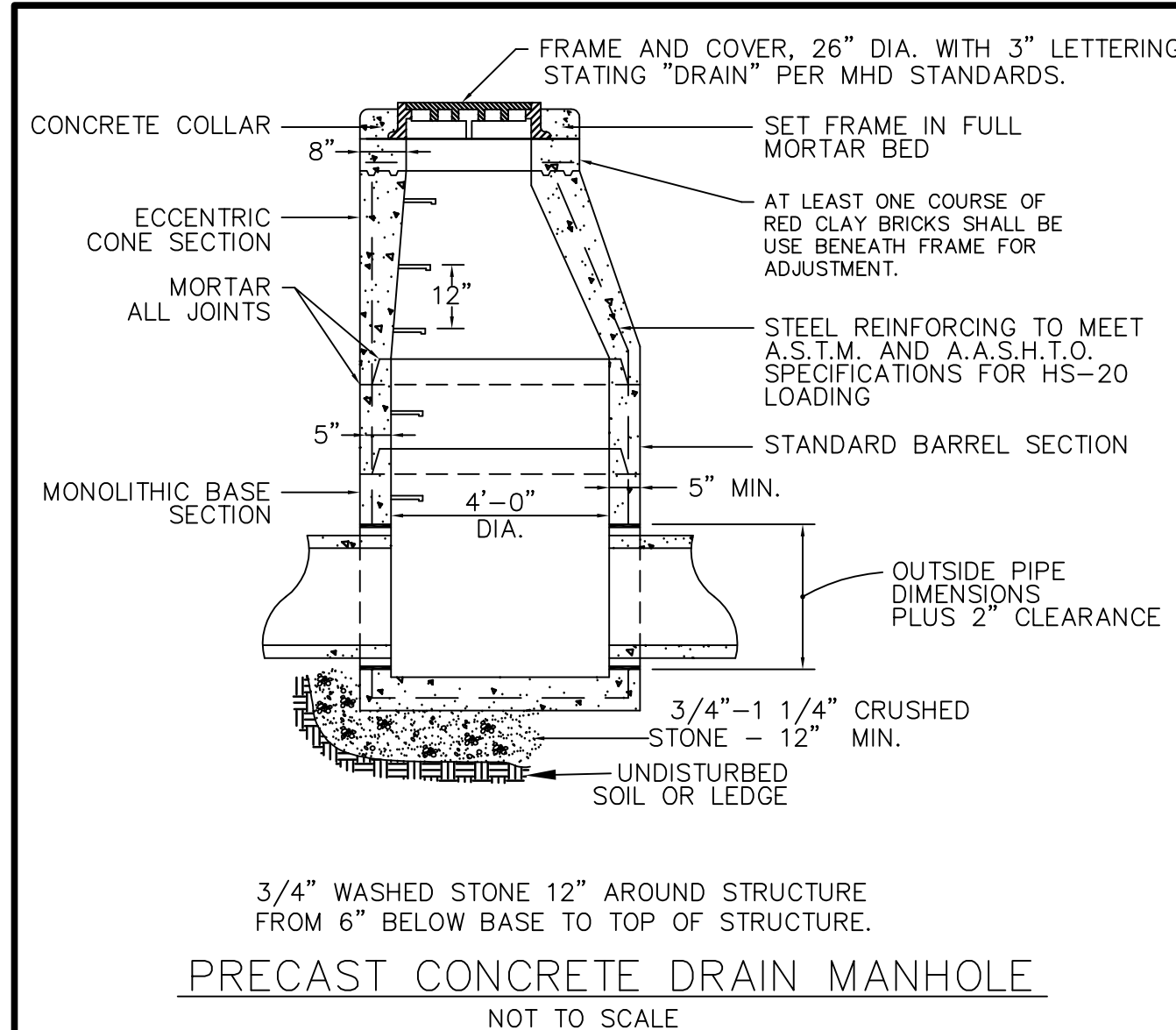
APPROVAL UNDER THE
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 IS REQUIRED.
MARLBOROUGH PLANNING BOARD

DATE: _____

I, _____ CLERK OF THE CITY OF MARLBOROUGH
 RECEIVED AND RECORDED APPROVAL FROM THE PLANNING BOARD
 OF THIS PLAN ON _____ AND NO APPEAL WAS TAKEN
 FOR TWENTY (20) DAYS THEREAFTER.

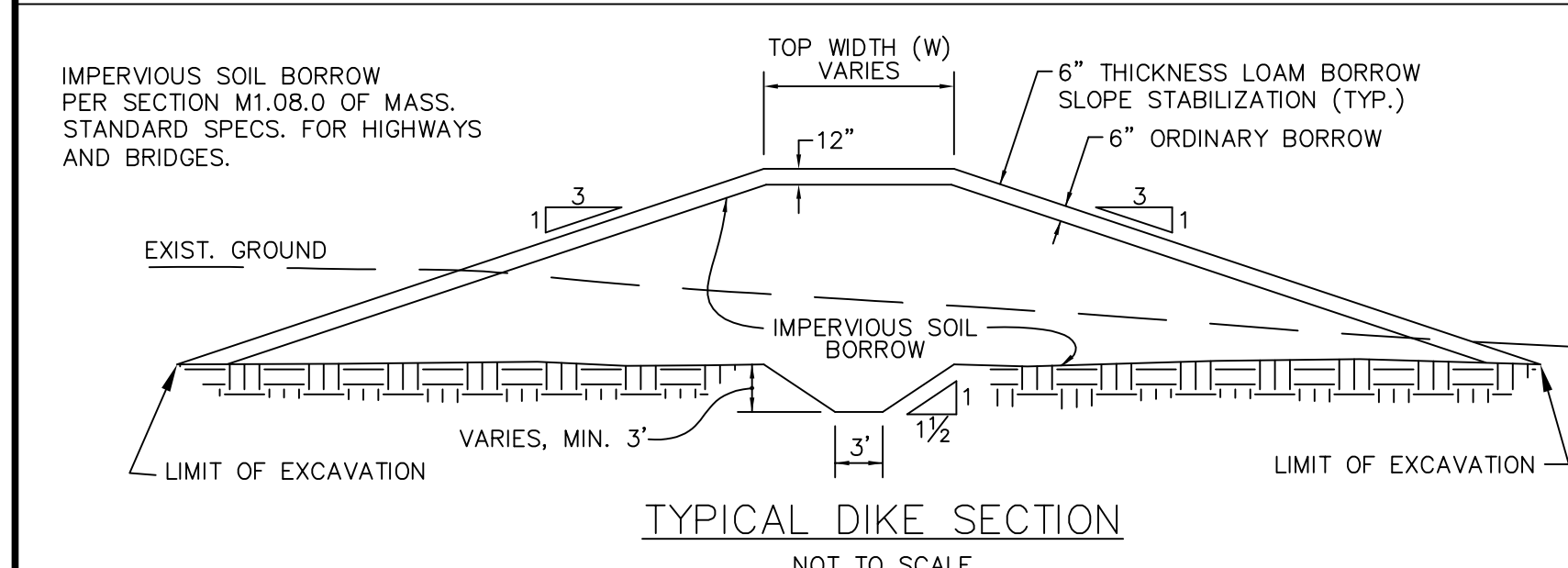
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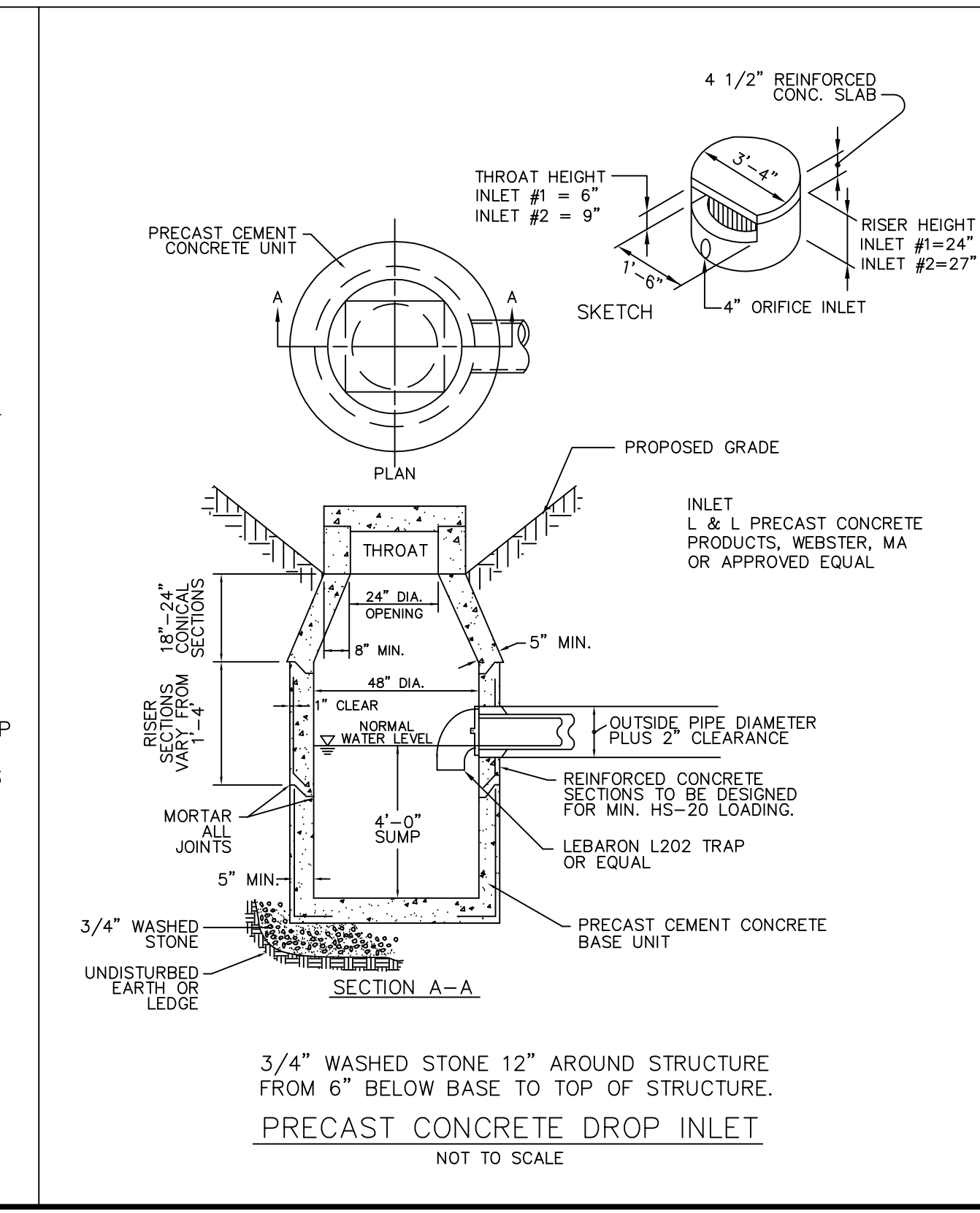
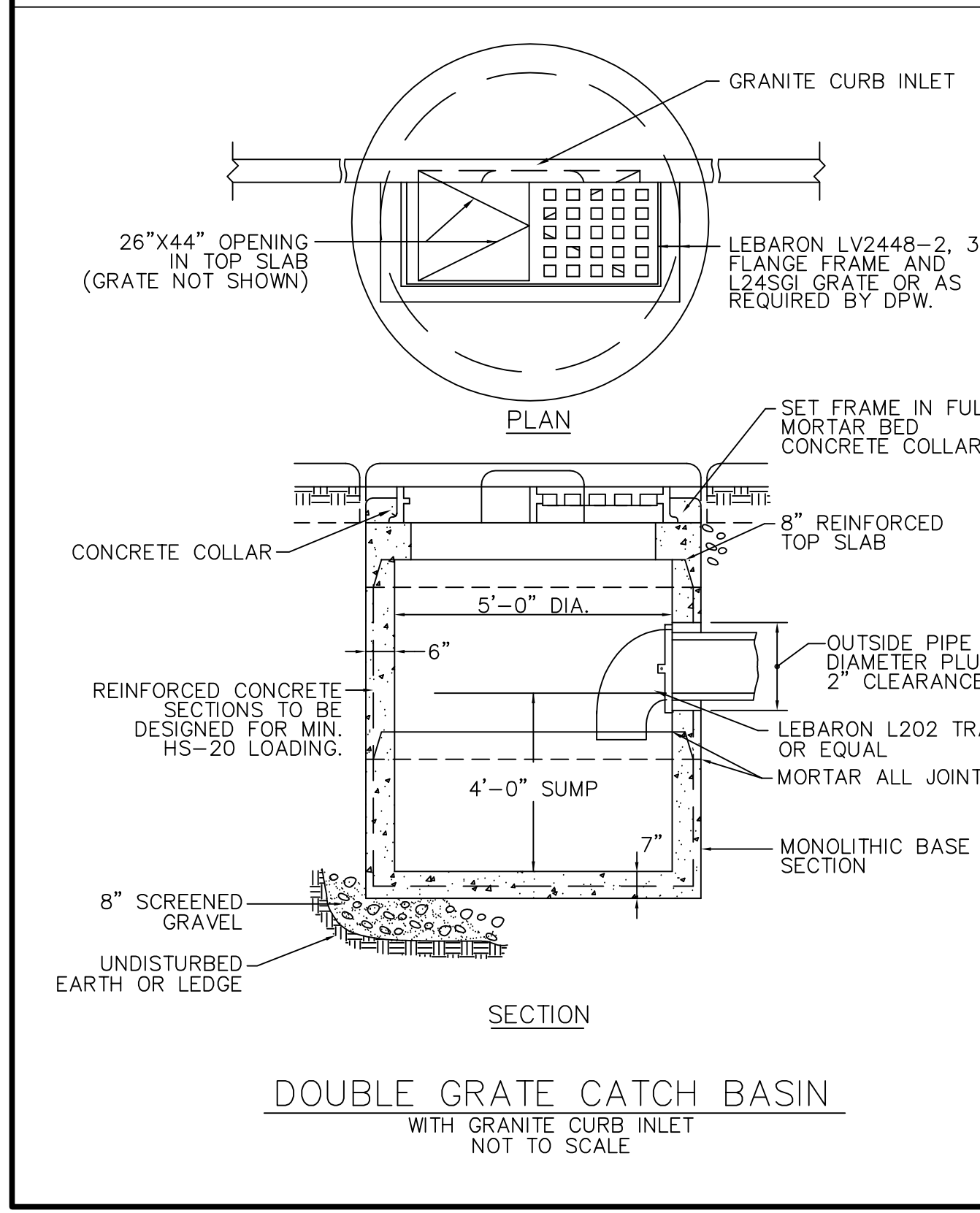
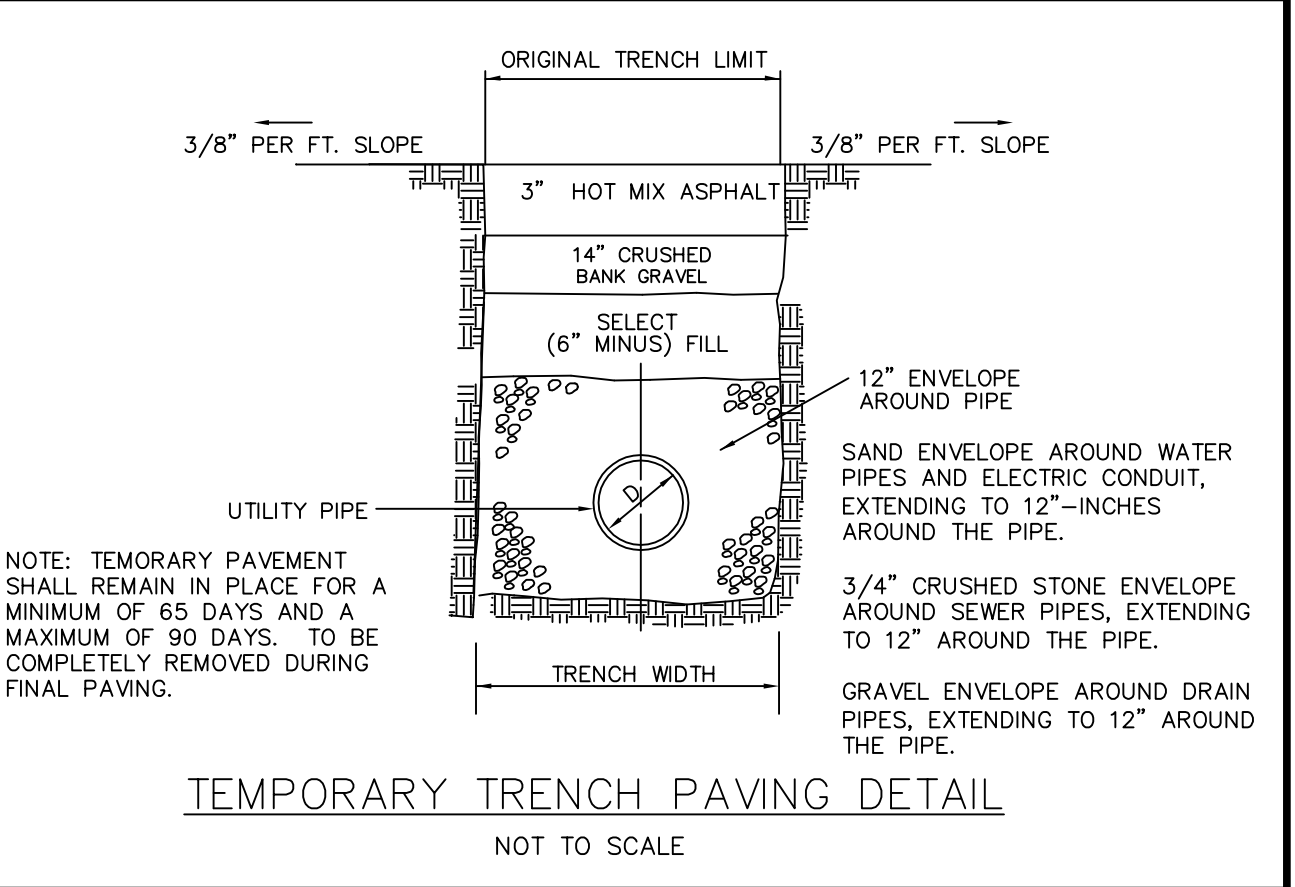
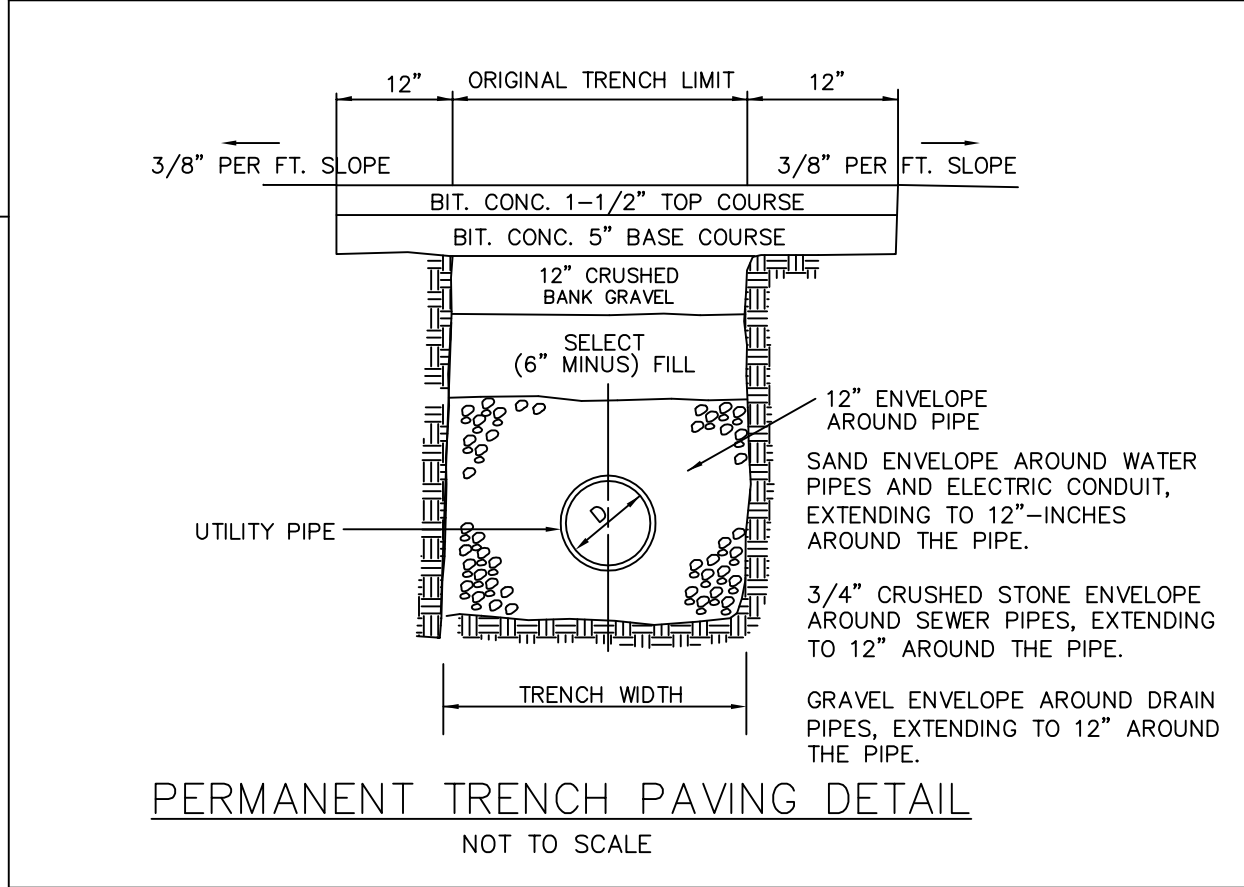
- SITE EROSION NOTES**
- PROPOSED ENTRANCE TIE-IN WITH AMES STREET SHALL BE TREATED WITH 3/4"-1 1/2" INCH CRUSHED STONE TO A DEPTH OF 12" FOR THE FIRST 75 FEET FROM EXISTING PAVED STREETS UNTIL READY FOR PAVEMENT.
 - SLOPE CUTS SHALL BE LOAMED AND SEEDED WITH EROSION CONTROL MIX AND COVERED WITH HAY MULCH OR GRASS CLIPPINGS, TO RETARD MOISTURE LOSS AS SOON AS POSSIBLE.
 - CATCH BASINS SHALL BE EQUIPPED WITH SILTSACKS UNTIL ALL VEGETATION IN IMMEDIATE AREA IS FULLY ESTABLISHED.
 - ANY AREAS EXPOSED SHALL BE LOAMED AND SEEDED NO LATER THAN FIRST WEEK OF OCTOBER.
 - CULVERT DISCHARGE PIPES SHALL HAVE 2 DOUBLE ROWS OF HAYBALES 5' APART AND 10' FROM THE OUTLETS.

- GENERAL NOTES**
- CONNORSTONE ENGINEERING INC. DOES NOT WARRANT THE LOCATION OF UNDERGROUND UTILITIES OR CHARACTER OF THE GROUND.
 - THE CONTRACTOR SHALL CONTACT DIG SAFE: 1-800-344-7233, AND CITY OF MARLBORO DPW FOR UTILITY LOCATIONS PRIOR TO EXCAVATION. TEST PITS SHALL BE UTILIZED FOR UTILITY CONNECTIONS.
 - PROPOSED LAYOUTS OF GAS AND CABLE UTILITIES SHALL BE THE RESPONSIBILITY OF THE LOCAL UTILITY COMPANY.
 - ALL ROADWAY AND UTILITY CONSTRUCTION PROCEDURES SHALL BE IN ACCORDANCE WITH MHD OR LOCAL MUNICIPALITY STANDARDS, WHICHEVER IS MORE STRINGENT.
 - A 2' LEVELING AREA SHALL BE PROVIDED BEHIND THE SIDEWALK IN THE VICINITY OF PROPOSED MAILBOXES.



DETENTION BASIN TO BE DESIGNED AND INSPECTED BY A LICENSED PROFESSIONAL GEOTECHNICAL ENGINEER AND STAMPED CERTIFICATION OF PROPER DESIGN AND INSPECTION SHALL BE PROVIDED TO THE CITY ENGINEER AFTER INSTALLATION AND PRIOR TO AS-BUILTS BEING APPROVED.

EMERGENCY OVERFLOW SPILLWAY TO BE MADE OF RIPRAP (SEE DETAIL, SHEET 8 OF 9).



APPROVAL UNDER THE SUBDIVISION CONTROL LAW, IS REQUIRED.

MARLBOROUGH PLANNING BOARD

DATE: _____

CONCORSTONE
CONSULTING CIVIL ENGINEERS
AND
LAND SURVEYORS
10 SOUTHWEST CUTOFF, SUITE 7
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TEL: (508) 393-9727 FAX: (508) 393-5242

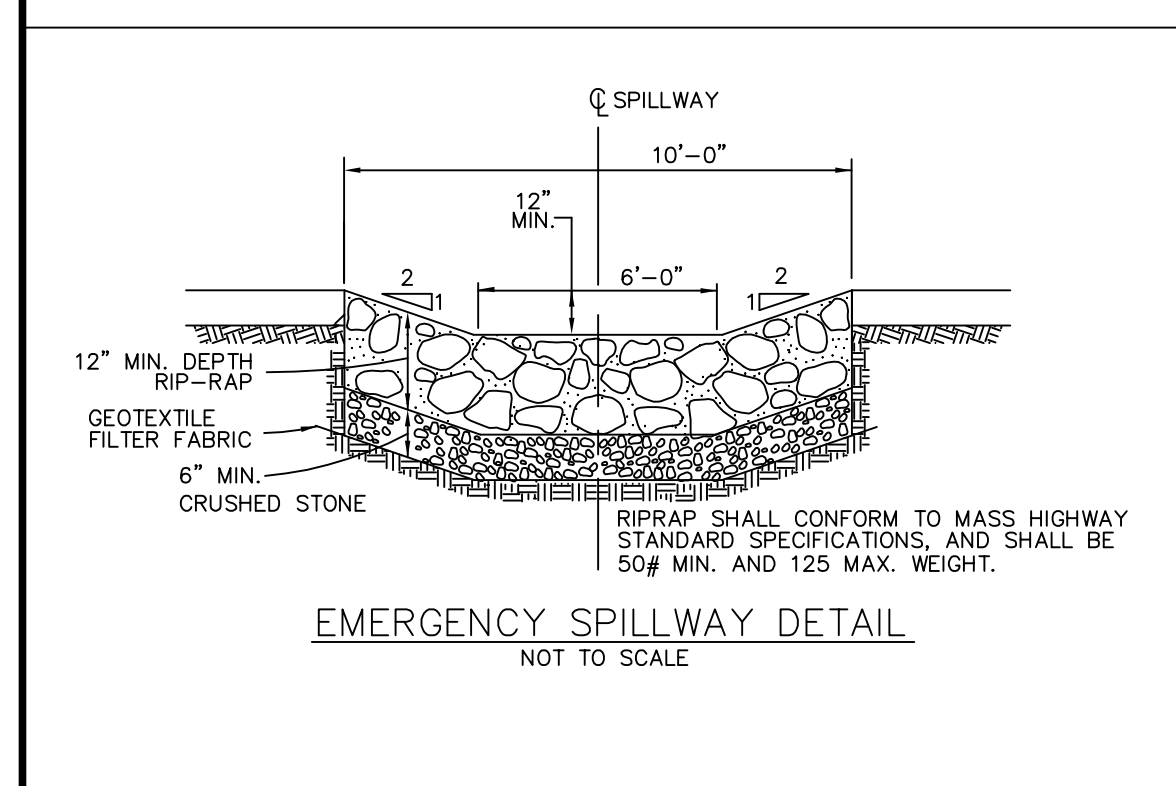
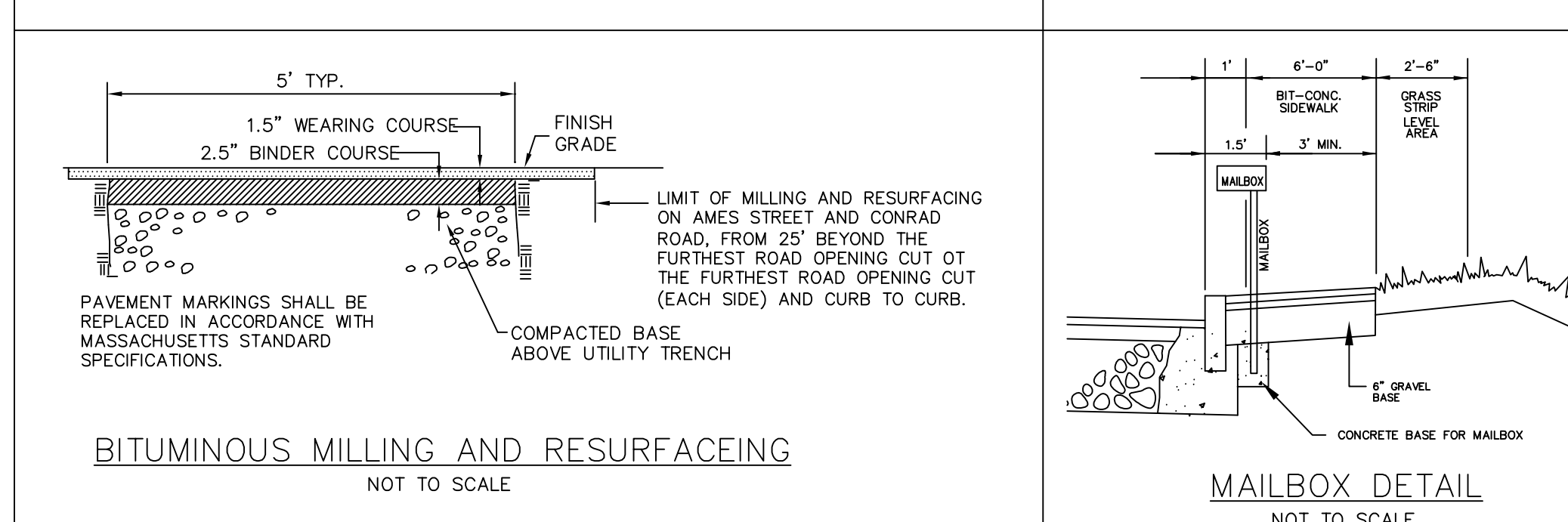
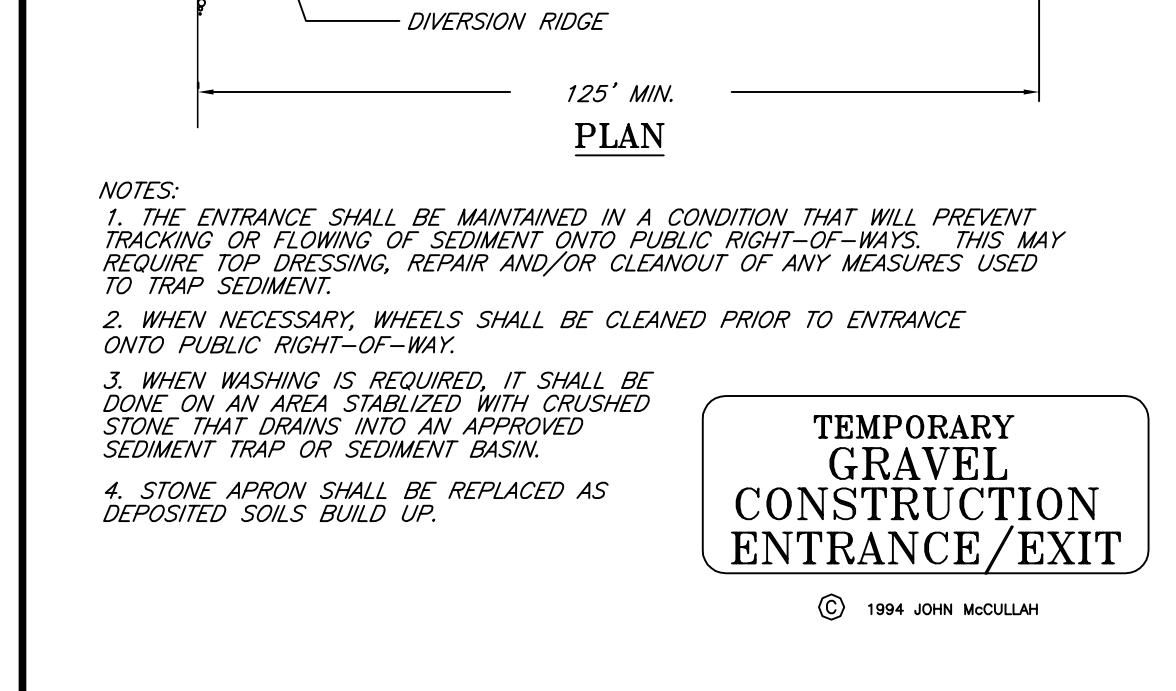
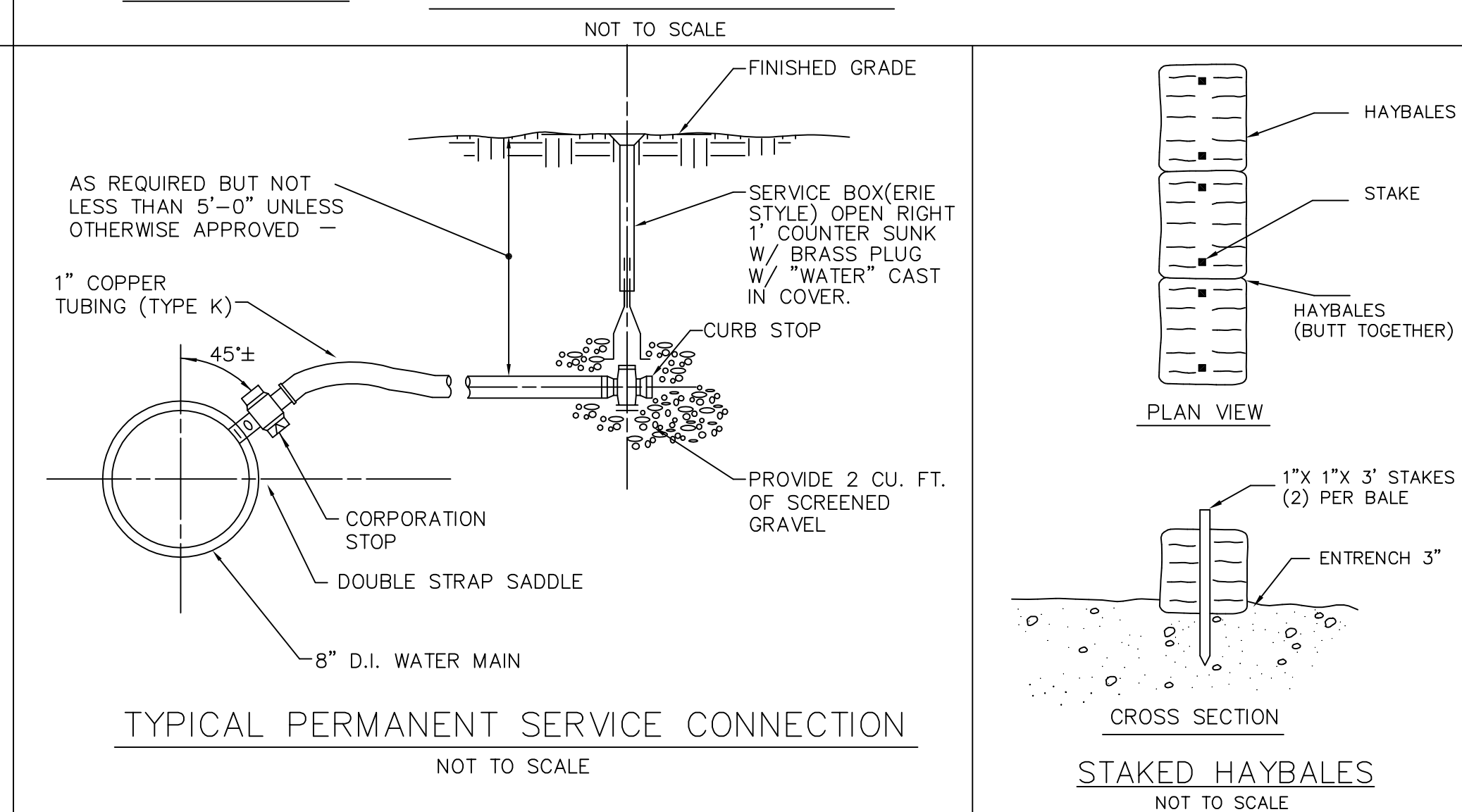
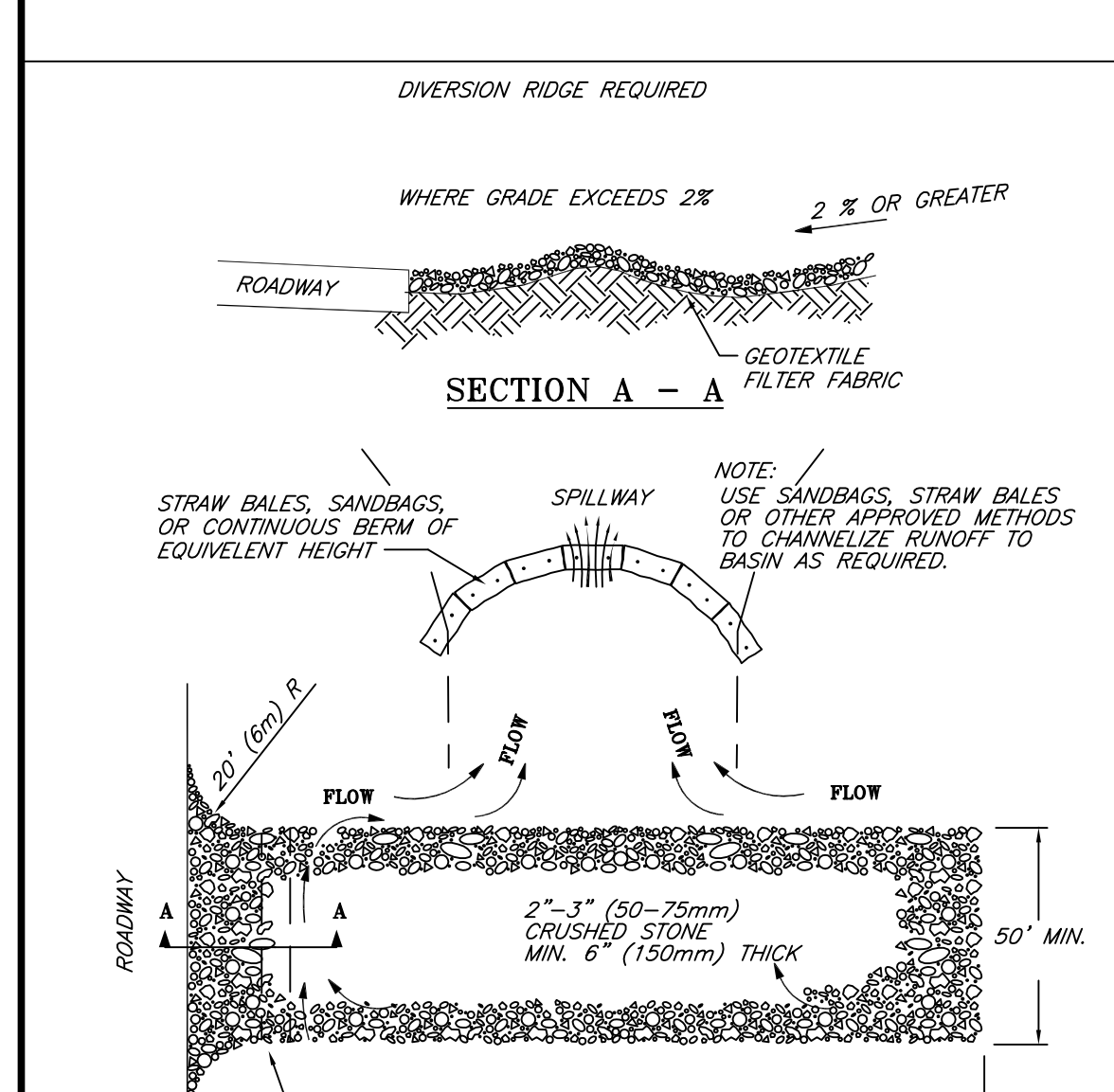
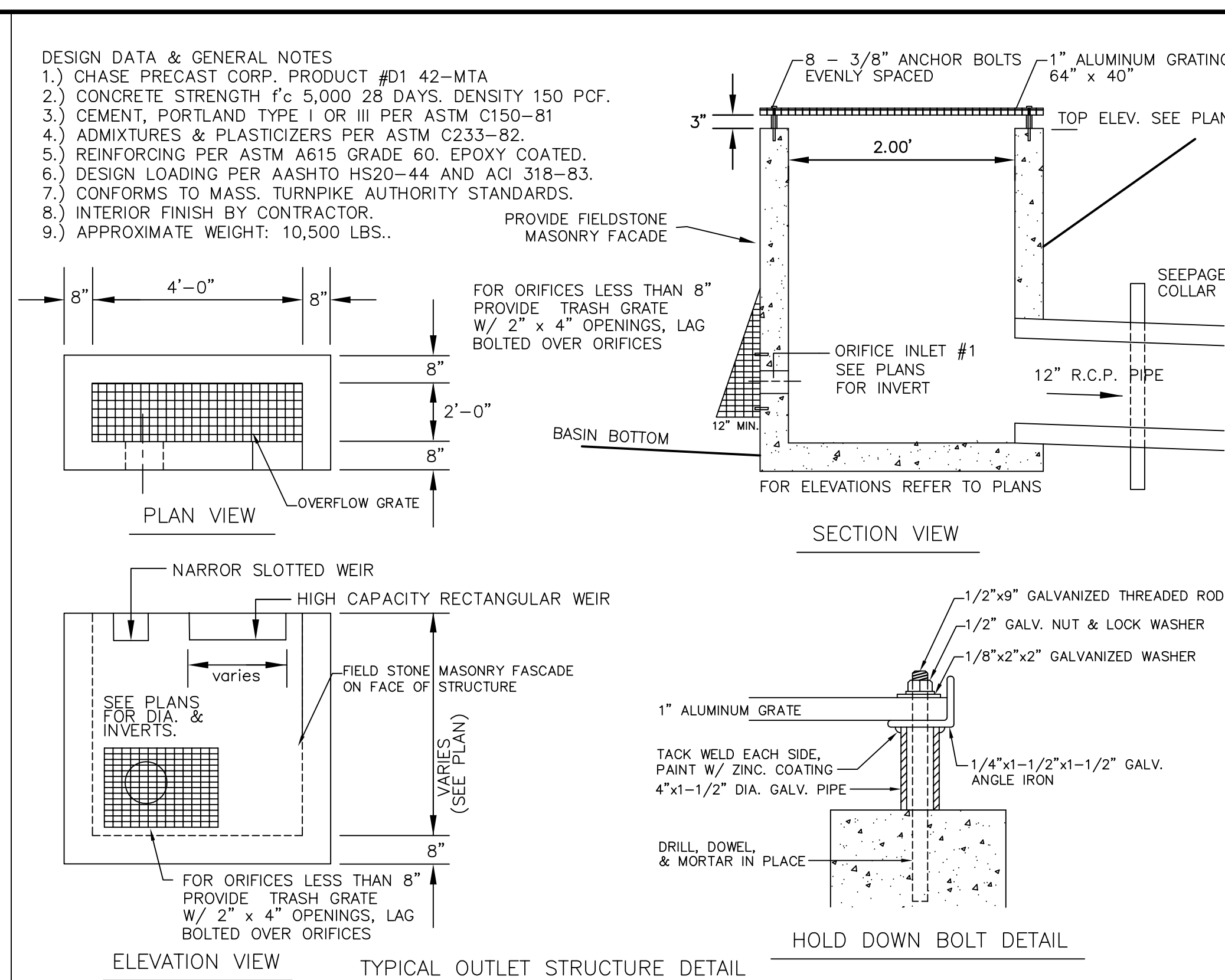
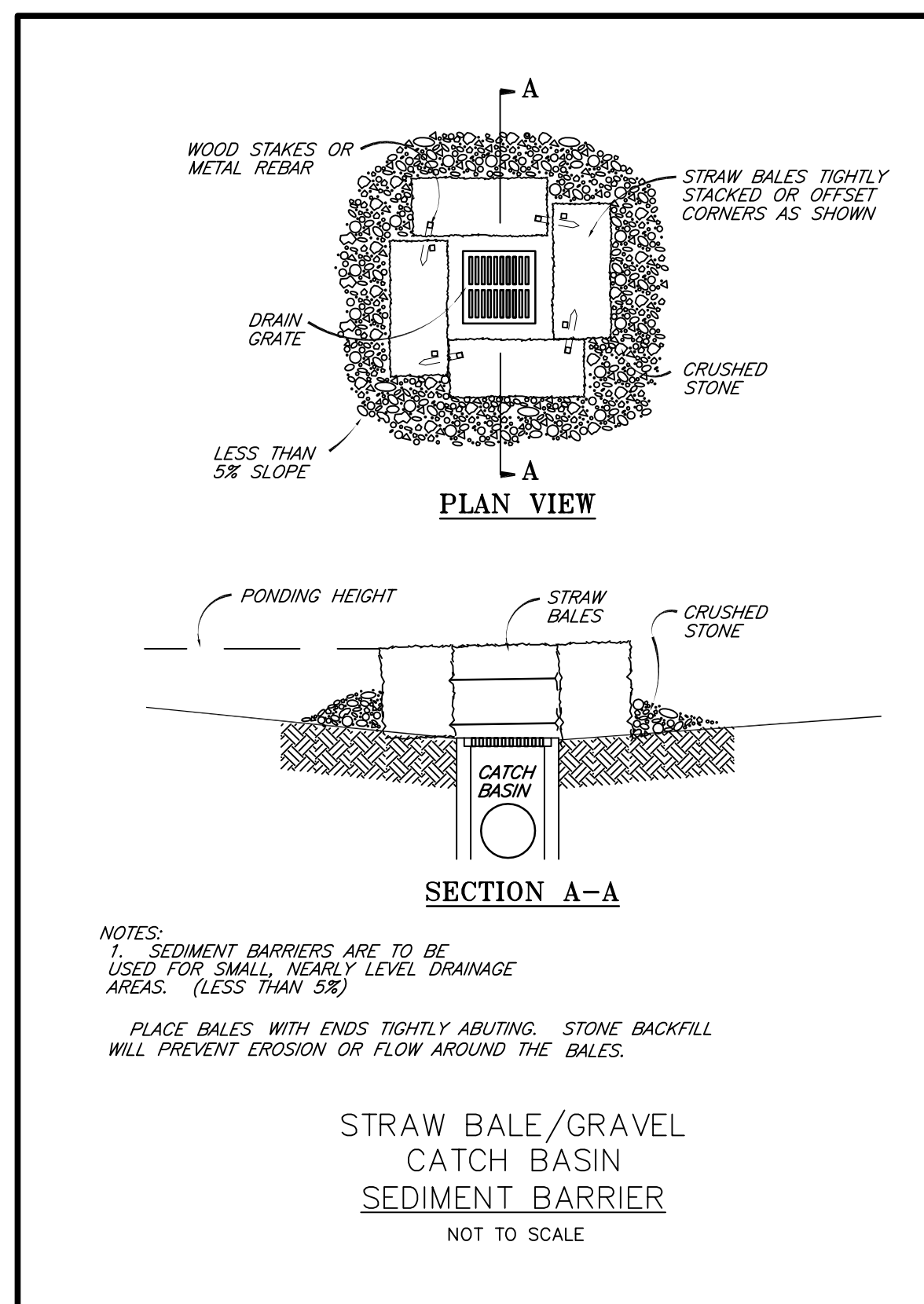
DESIGNED BY: REM, TDP
CHECKED BY: VC
COMPUTED BY: REM
FIELD SURVEY: BKK
DRAWN BY: REM
SCALE: NONE
SHEET 7 OF 10

SUBDIVIDER
COMMONWEALTH HEIGHTS, LLC
128 WEST MAIN STREET
WILMINGTON, MA. 01887
(978) 988-8060

OWNER
MARLBOROUGH / NORTHBOROUGH
LAND REALTY TRUST
1 WALL STREET
BURLINGTON, MA. 01803
(781) 272-7000

DEFINITIVE PLAN
CONSTRUCTION DETAILS
OF
COMMONWEALTH HEIGHTS
IN
MARLBOROUGH, MA.

MARCH 2, 2020
JANUARY 28, 2020
REVISIONS
OCTOBER 24, 2019



APPROVAL UNDER THE SUBDIVISION CONTROL LAW, IS REQUIRED.

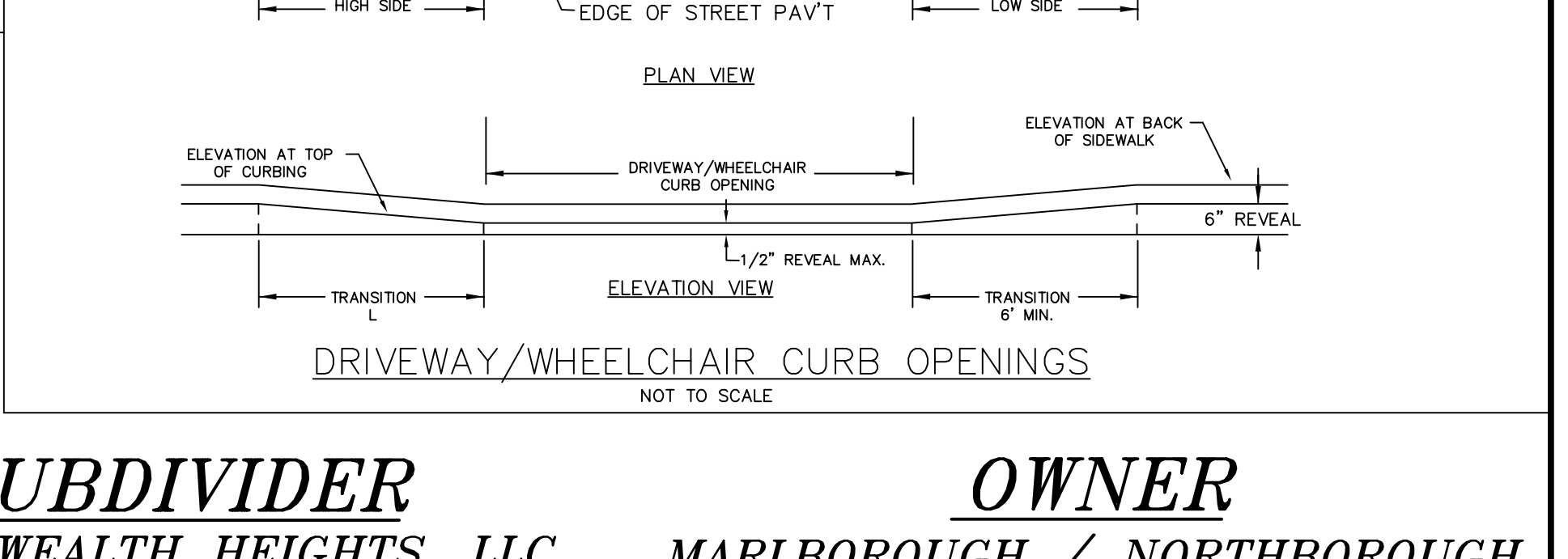
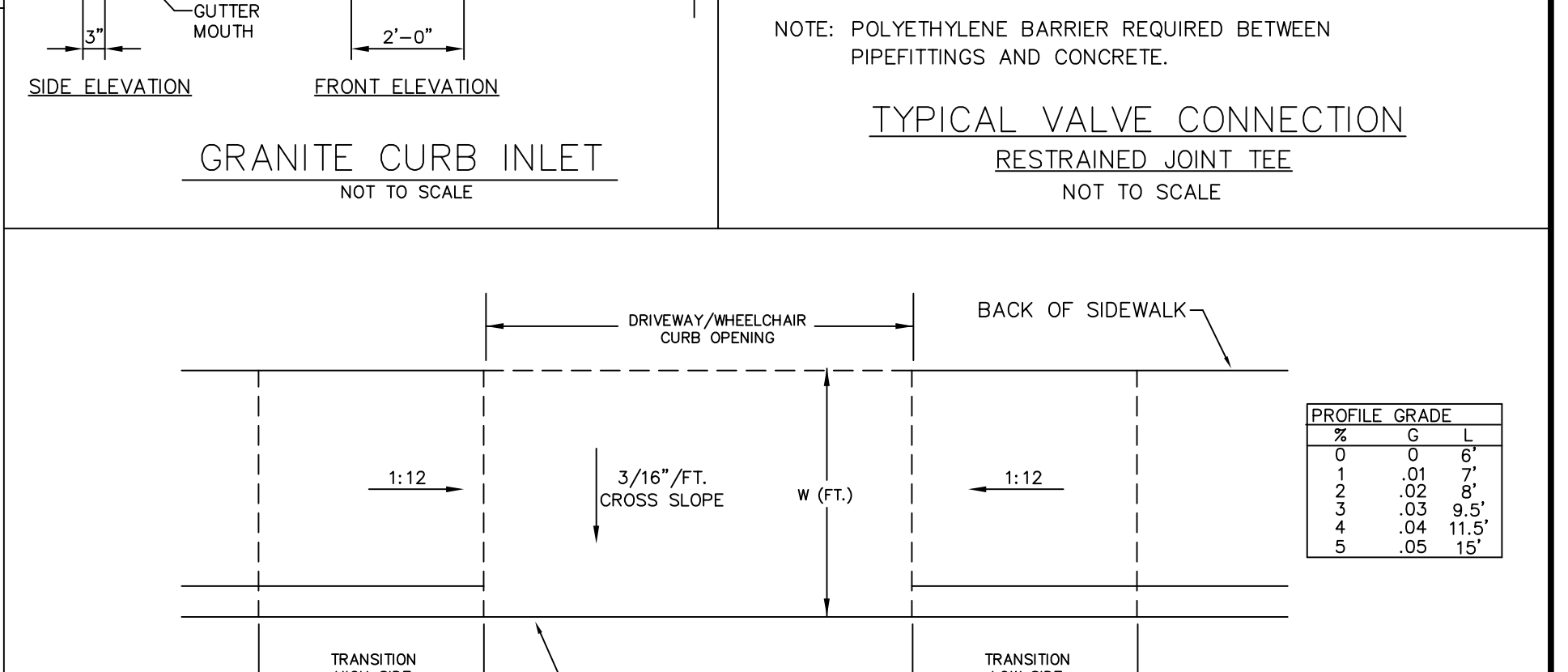
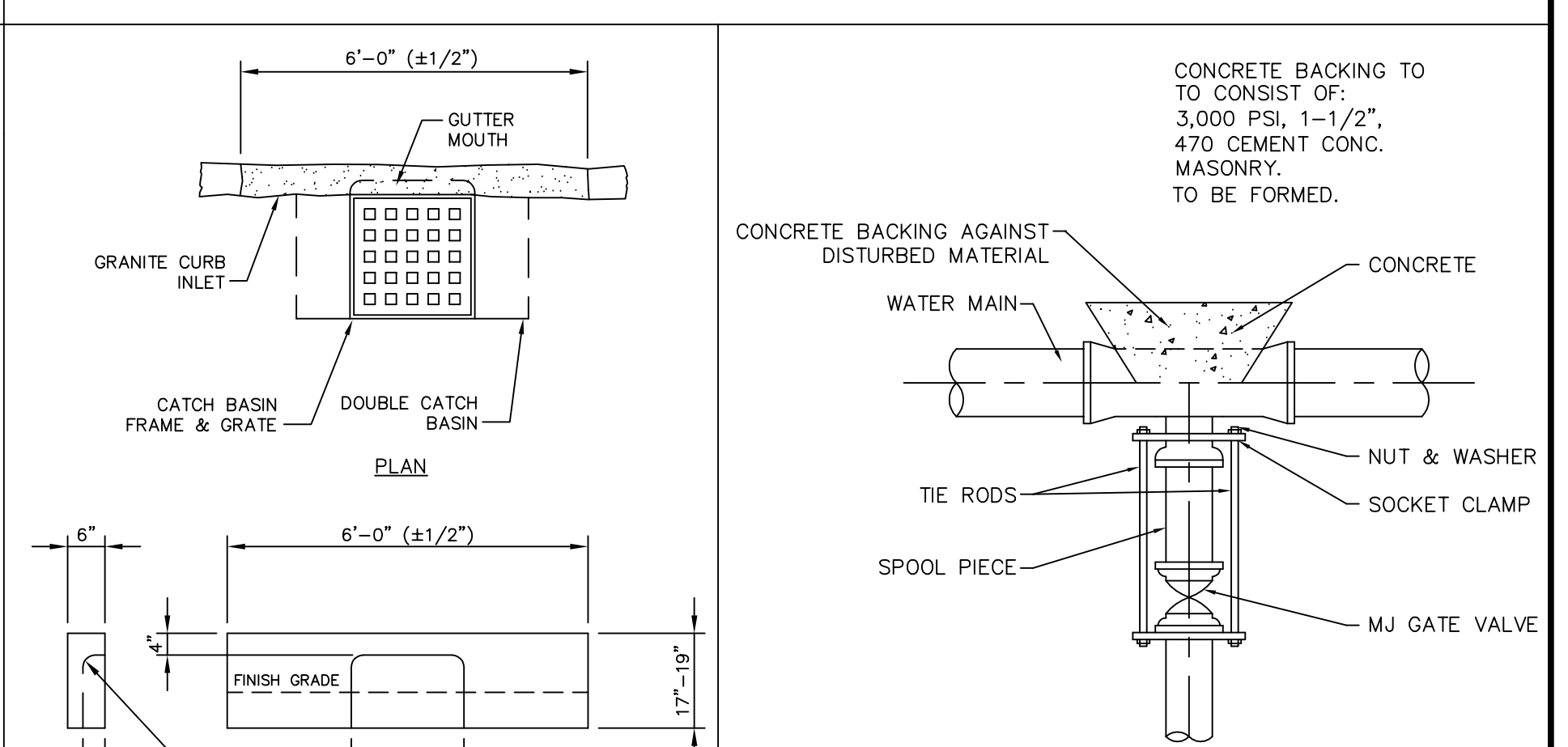
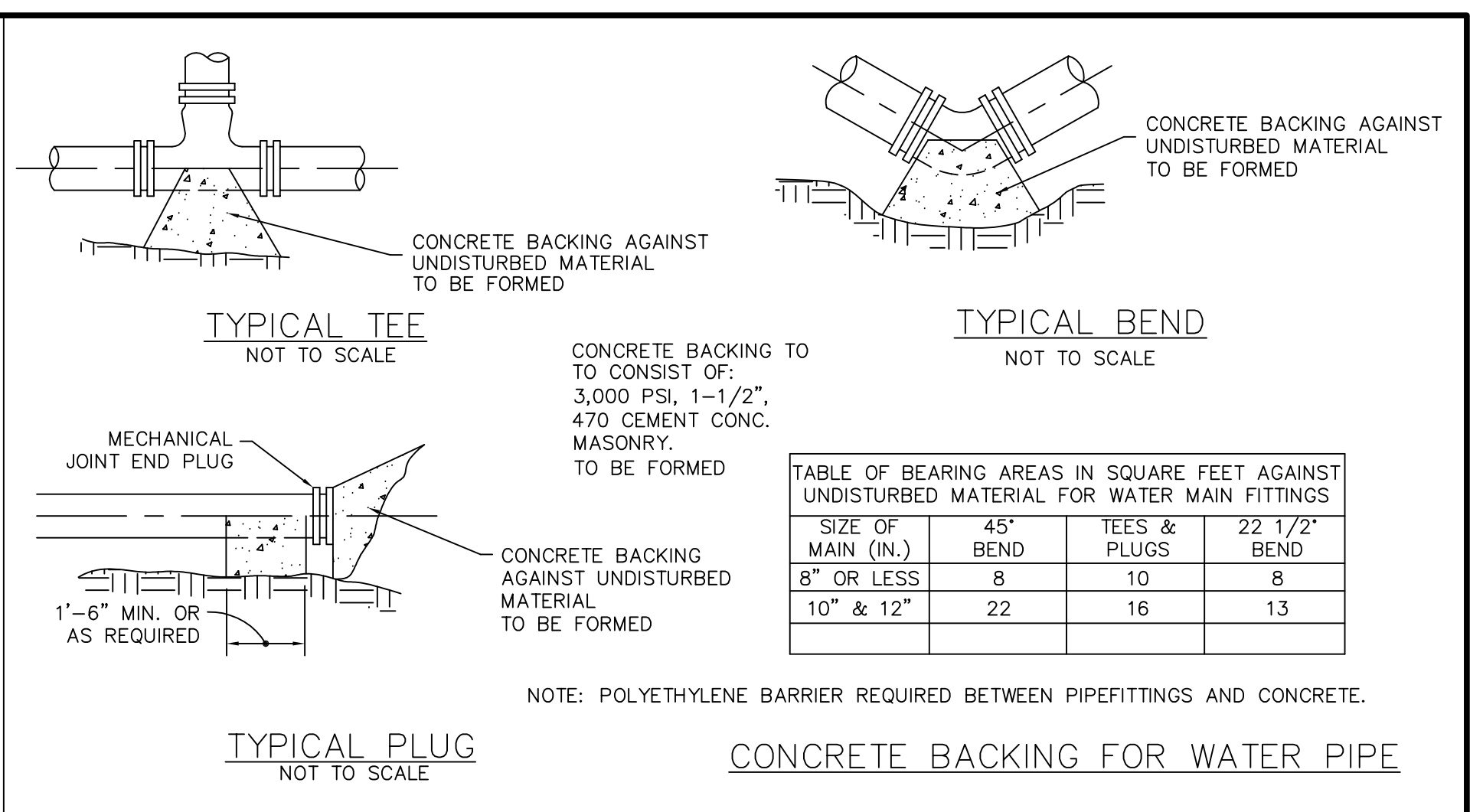
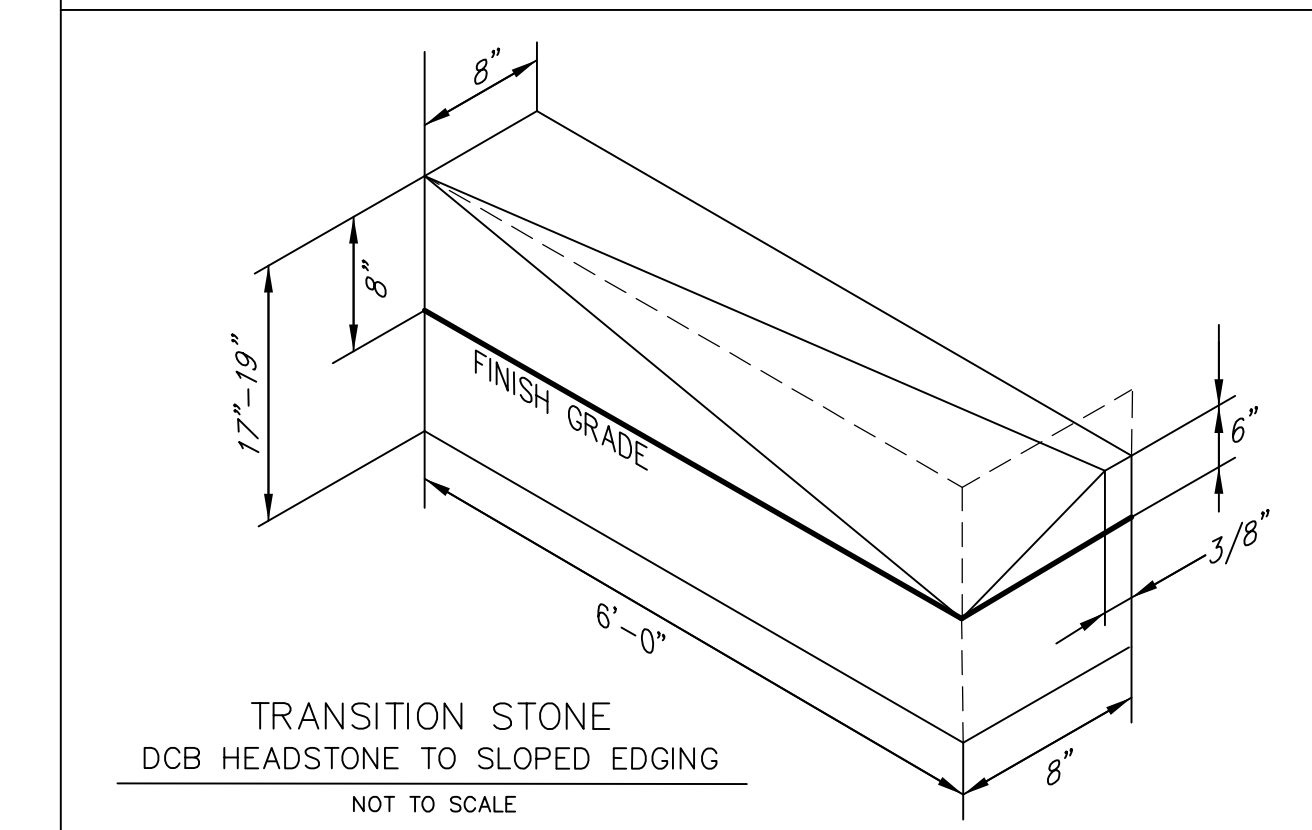
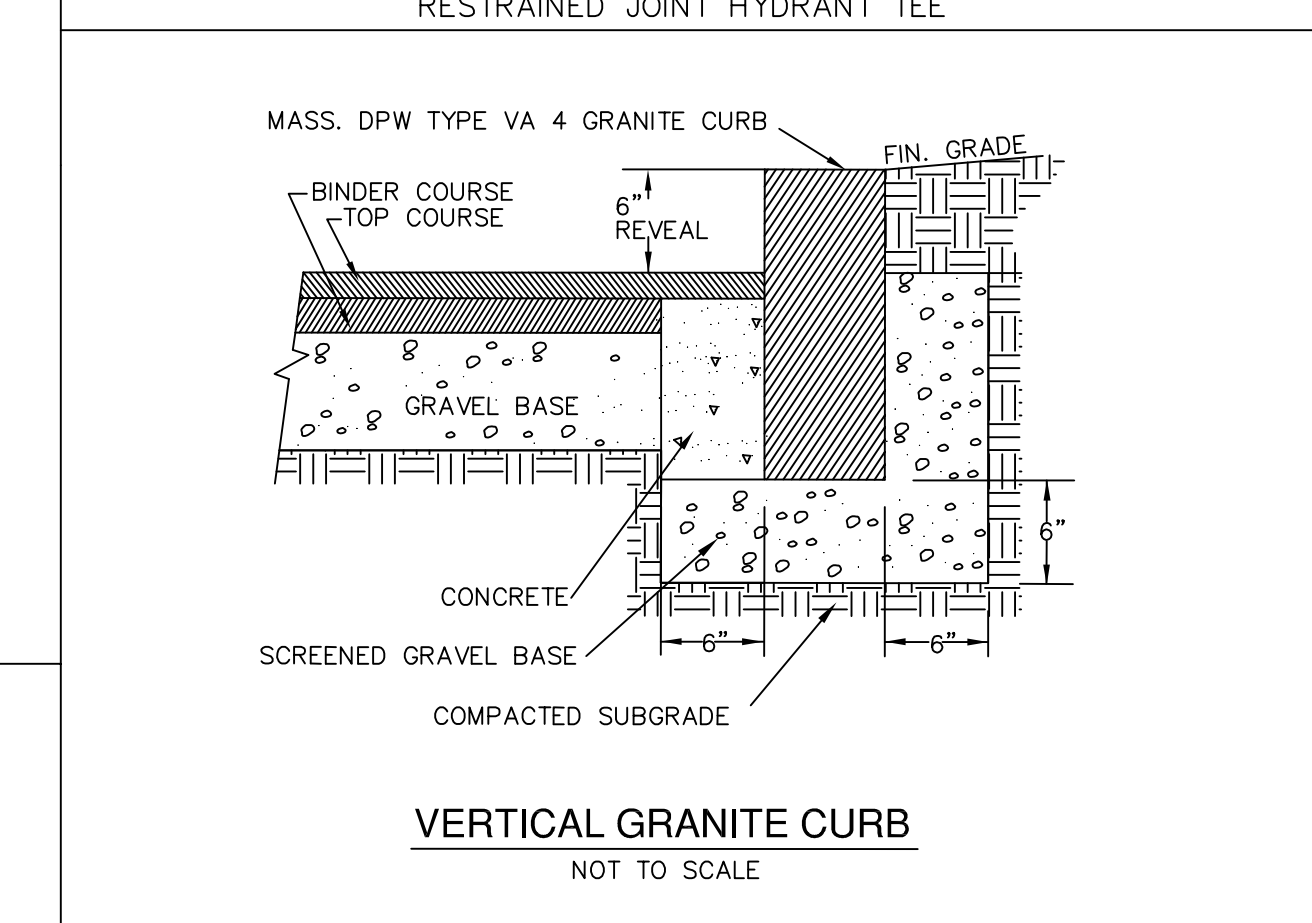
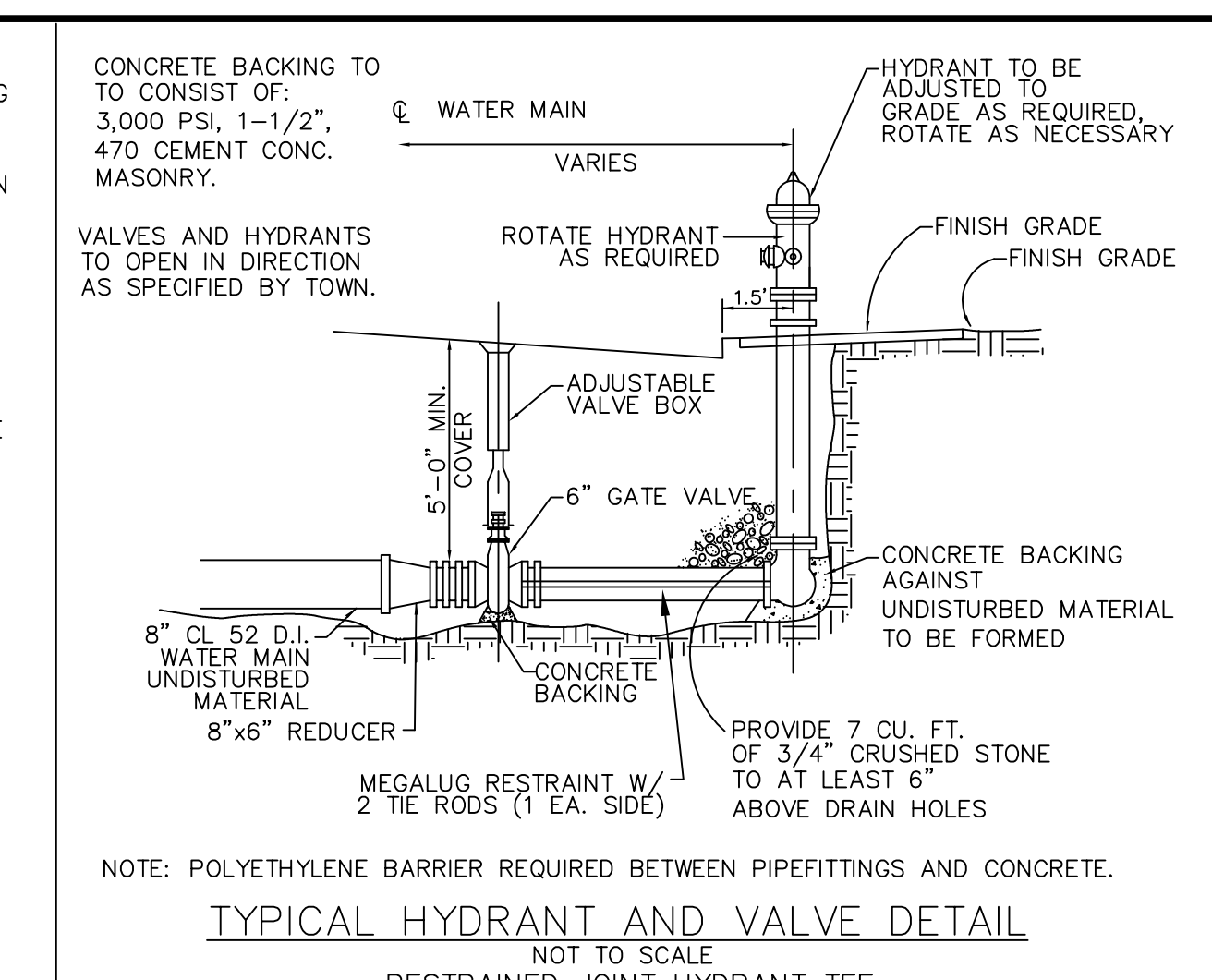
MARLBOROUGH PLANNING BOARD

DATE: _____

APPROVAL UNDER THE SUBDIVISION CONTROL LAW, IS REQUIRED.

MARLBOROUGH PLANNING BOARD

DATE: _____



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DEFINITIVE PLAN

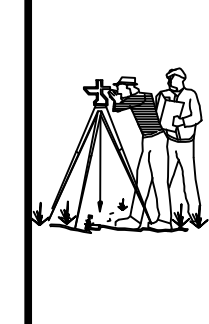
CONSTRUCTION DETAILS
OF
COMMONWEALTH HEIGHTS
IN
MARLBOROUGH, MA.

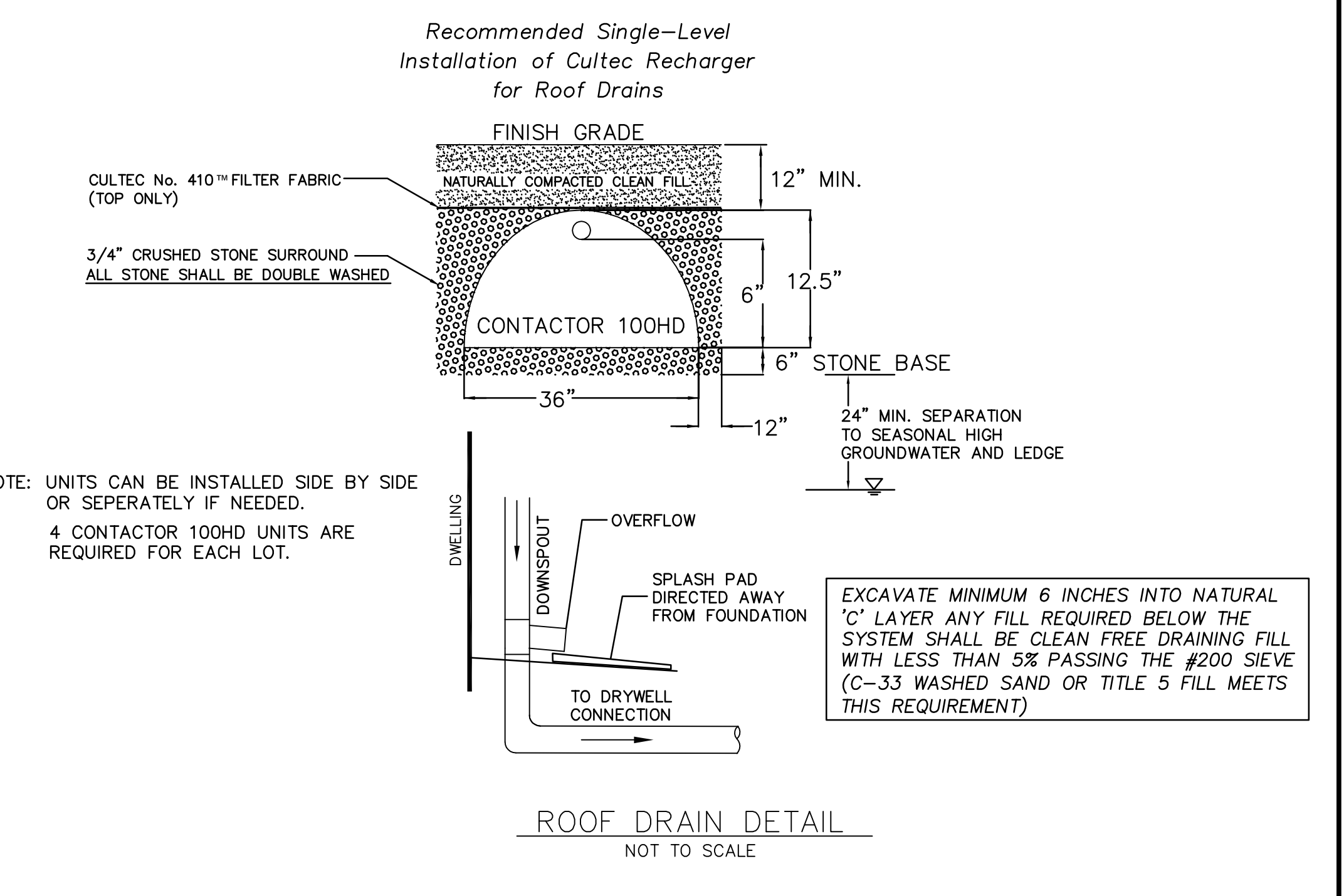
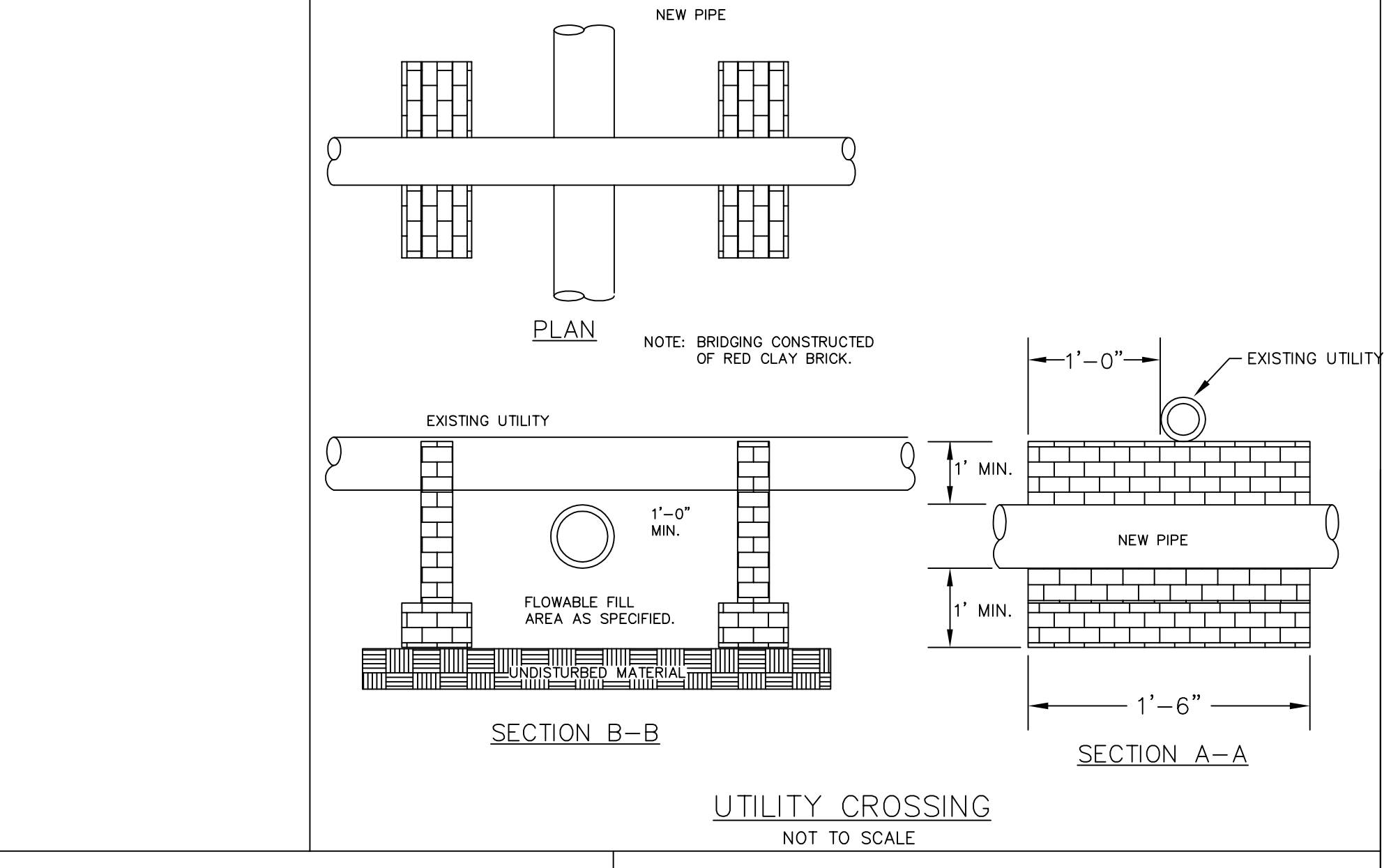
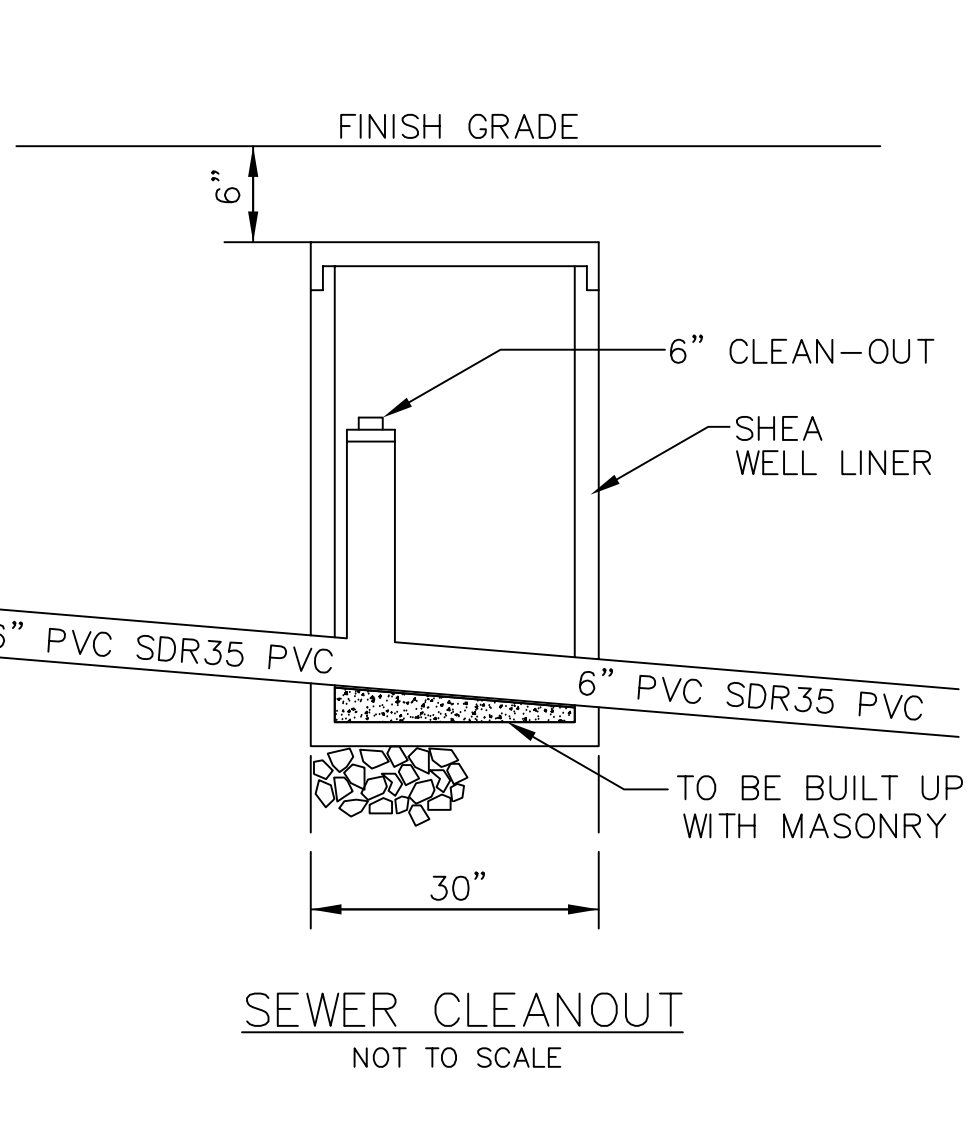
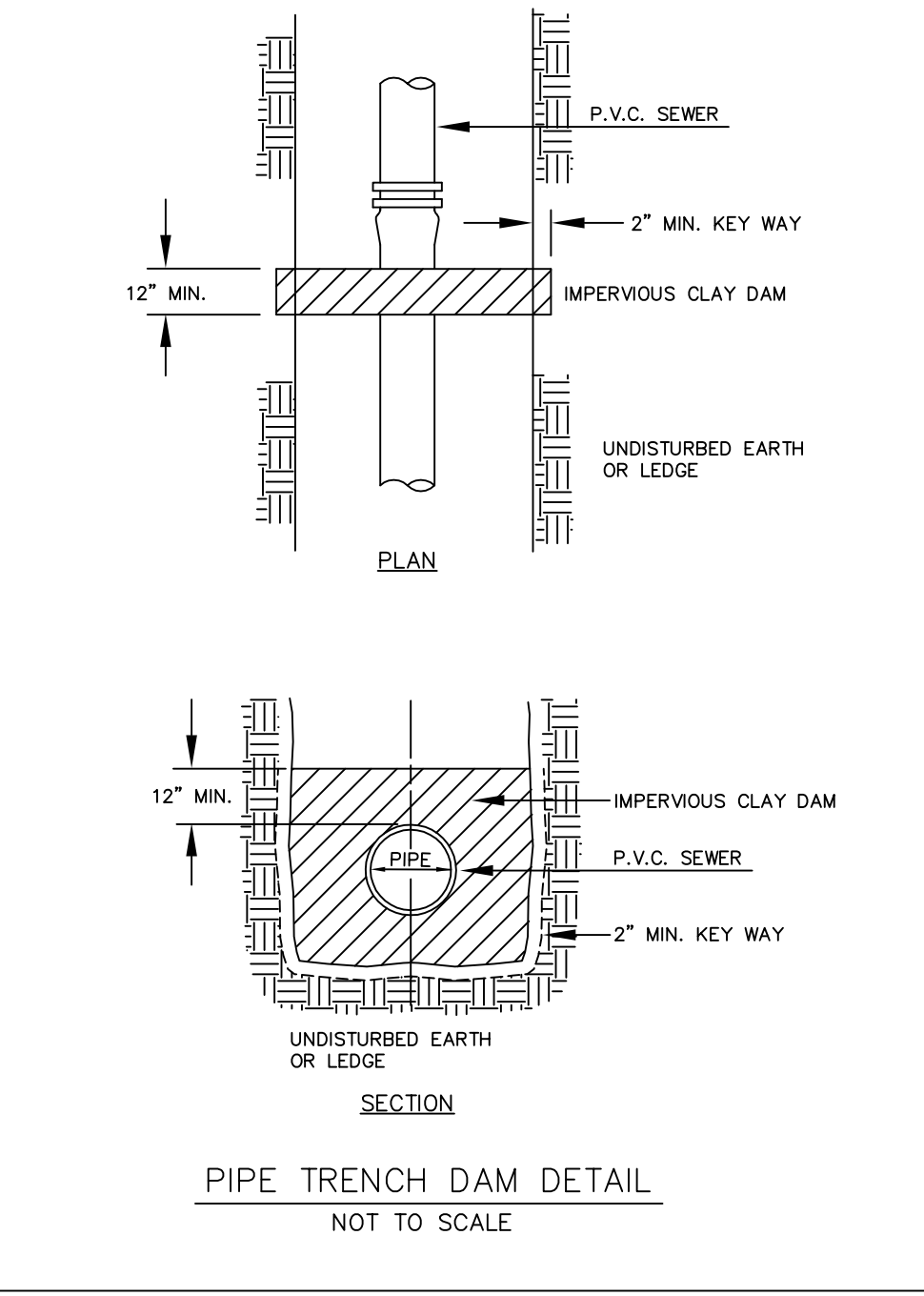
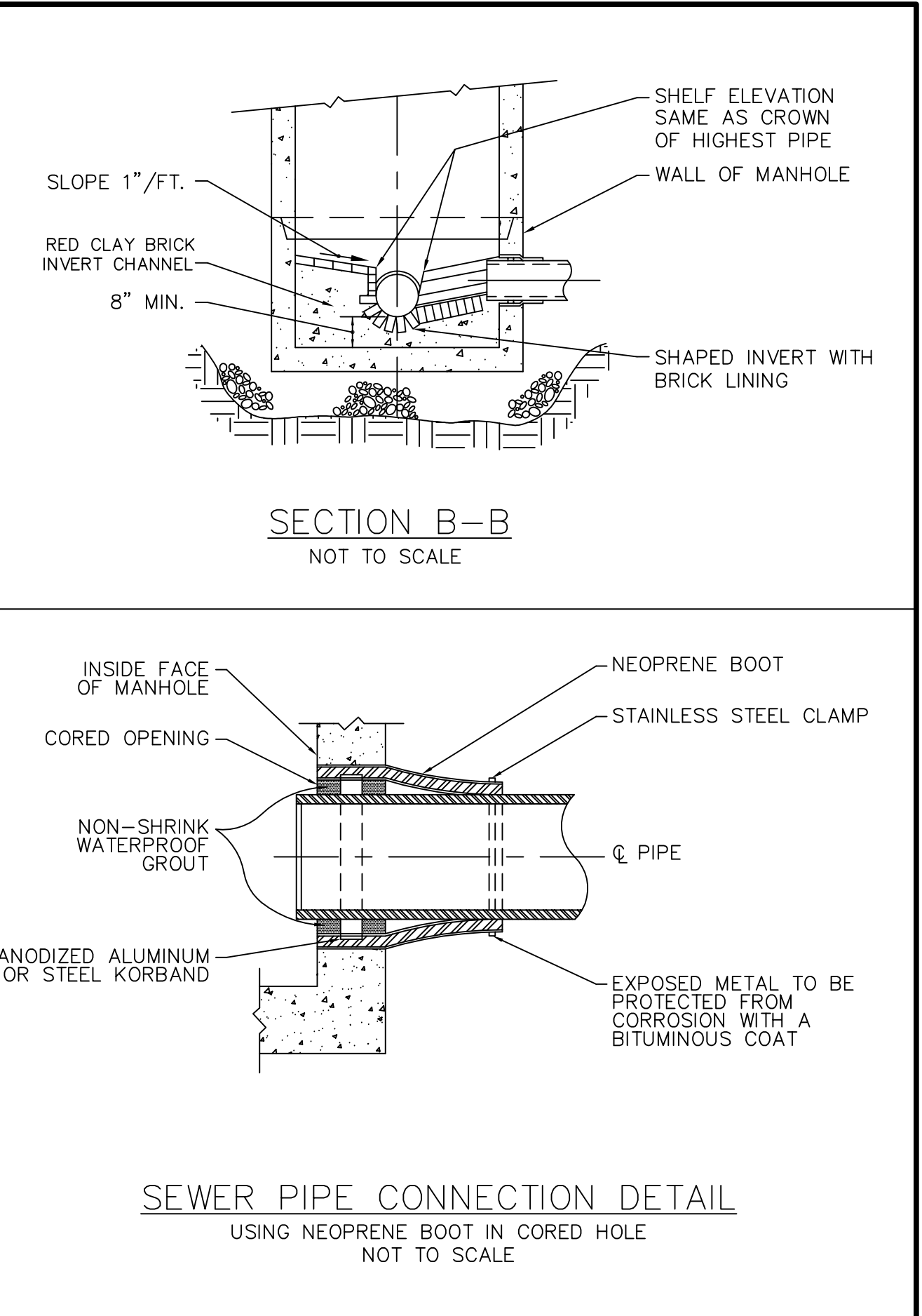
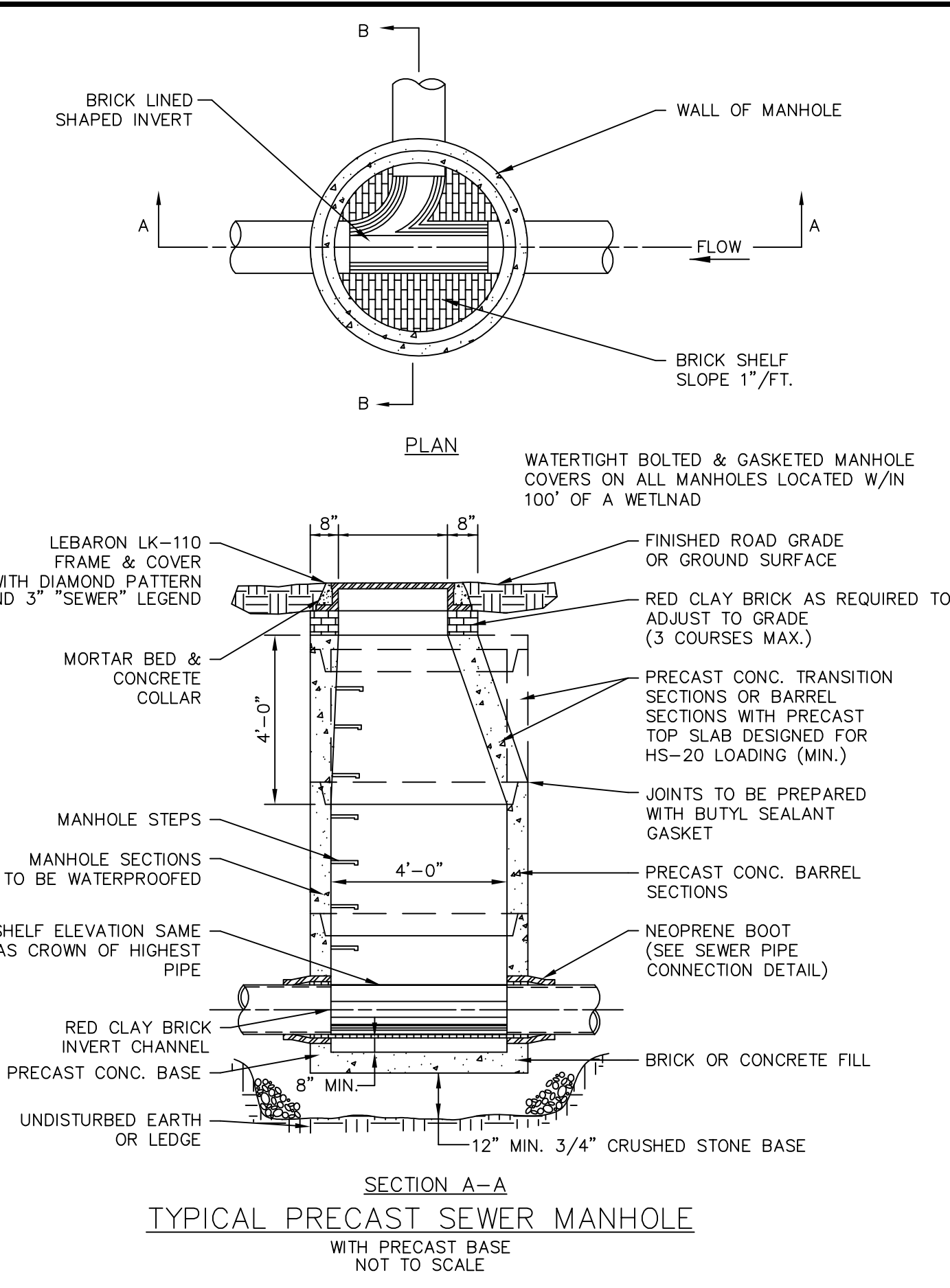
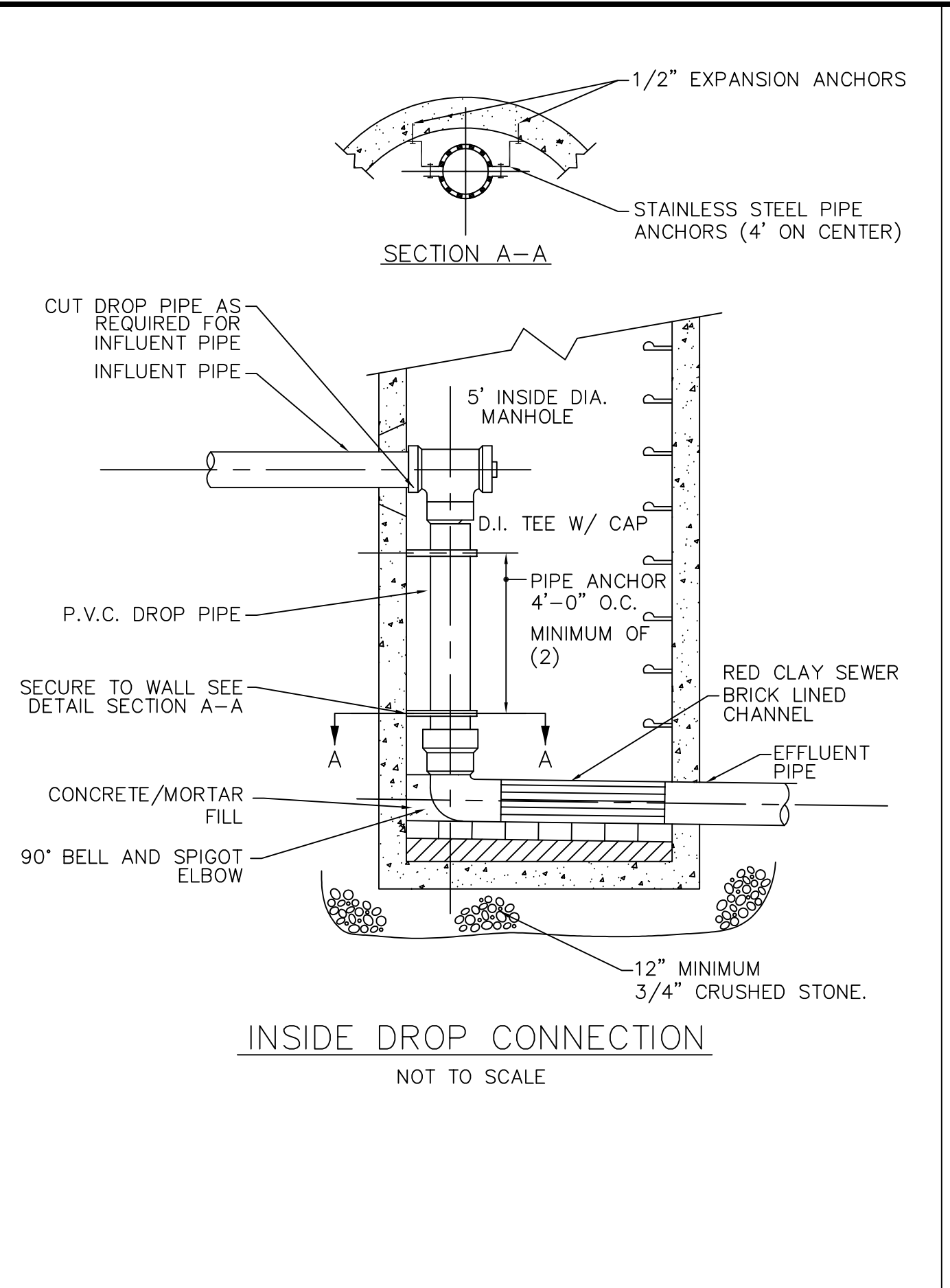
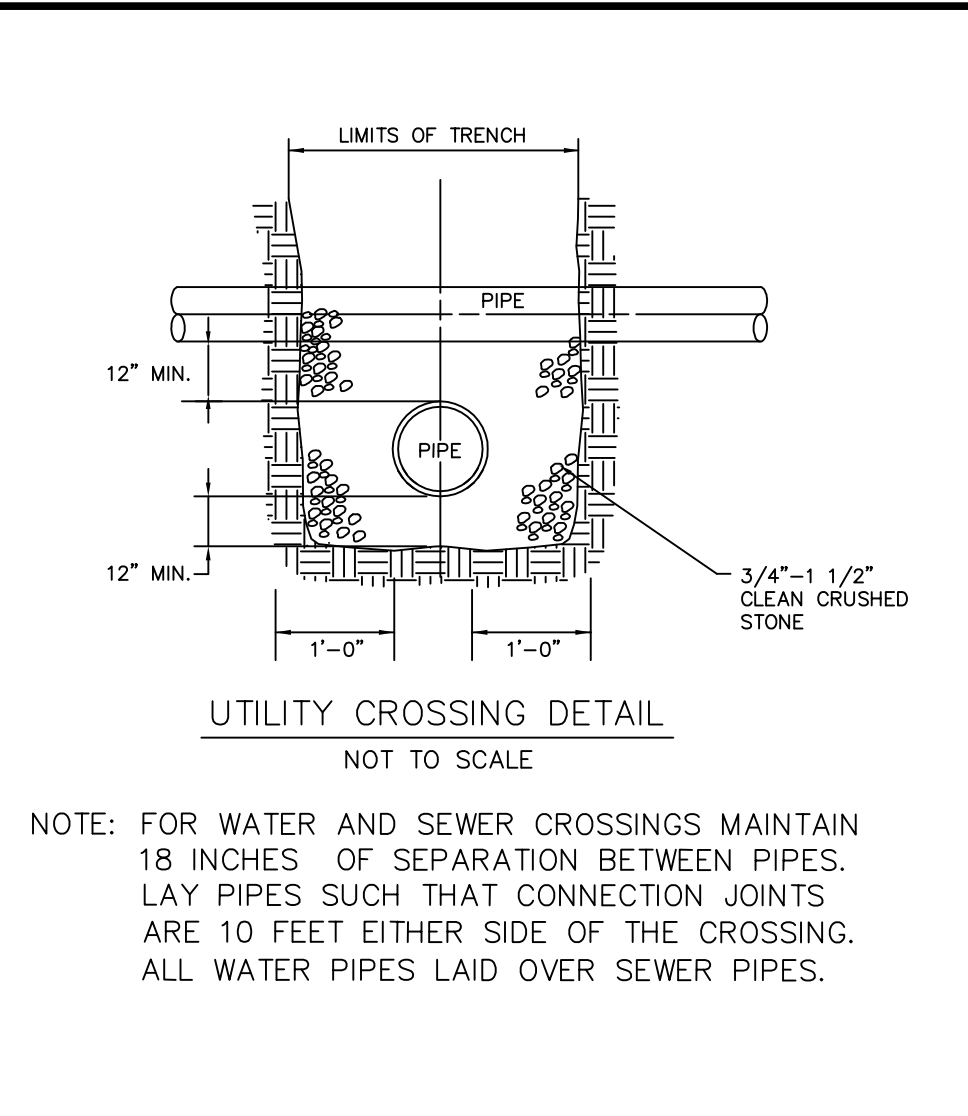
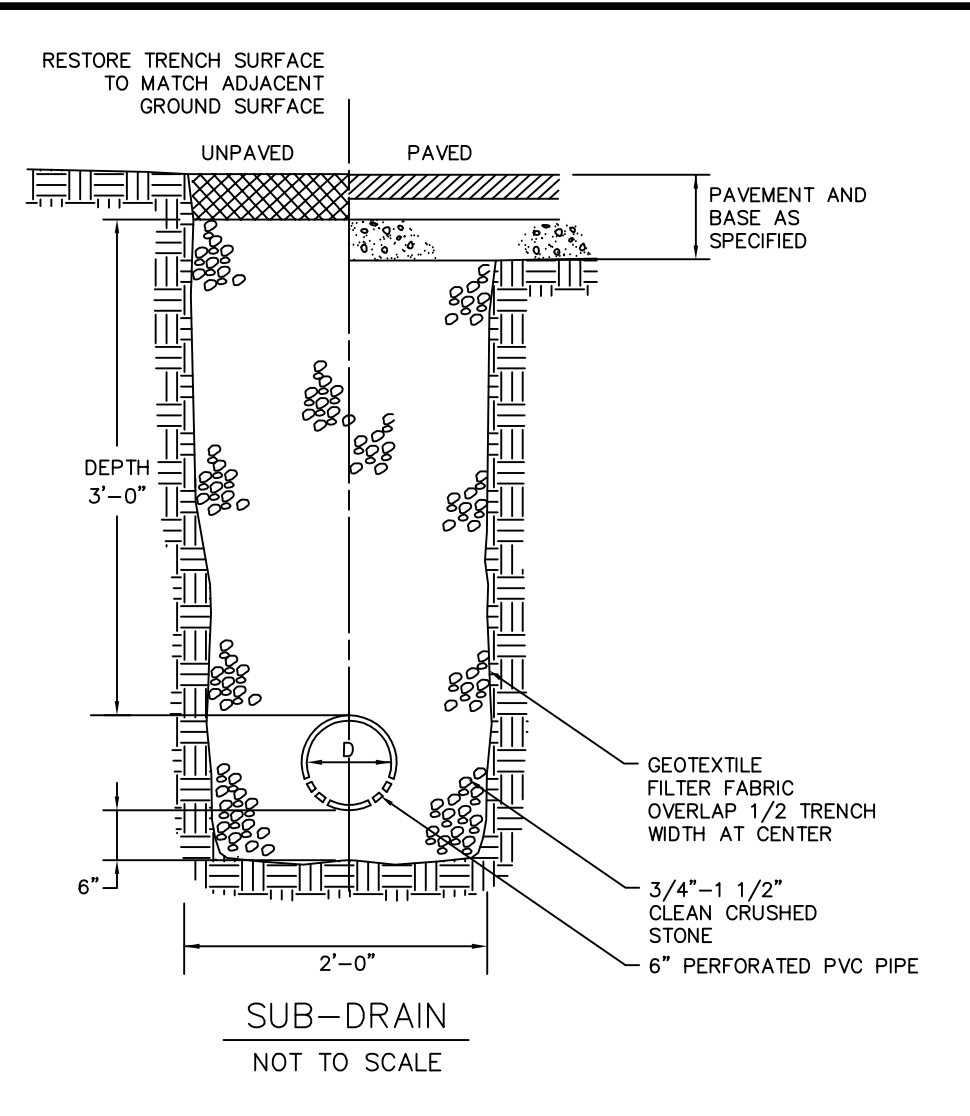
MARCH 2, 2020
JANUARY 28, 2020
REVISIONS
OCTOBER 24, 2019

I, _____ CLERK OF THE CITY OF MARLBOROUGH RECEIVED AND RECORDED APPROVAL FROM THE PLANNING BOARD OF THIS PLAN ON _____ AND NO APPEAL WAS TAKEN FOR TWENTY (20) DAYS THEREAFTER.

CONNORSTONE
CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS
10 SOUTHWEST CUTOFF, SUITE 7
NORTHBOROUGH, MASSACHUSETTS 01532
TEL: (508) 393-9727 FAX: (508) 393-5242

DESIGNED BY: REM, TDP
CHECKED BY: VC
COMPUTED BY: REM
FIELD SURVEY: BKK
DRAWN BY: REM
SCALE: NONE
SHEET 8 OF 10

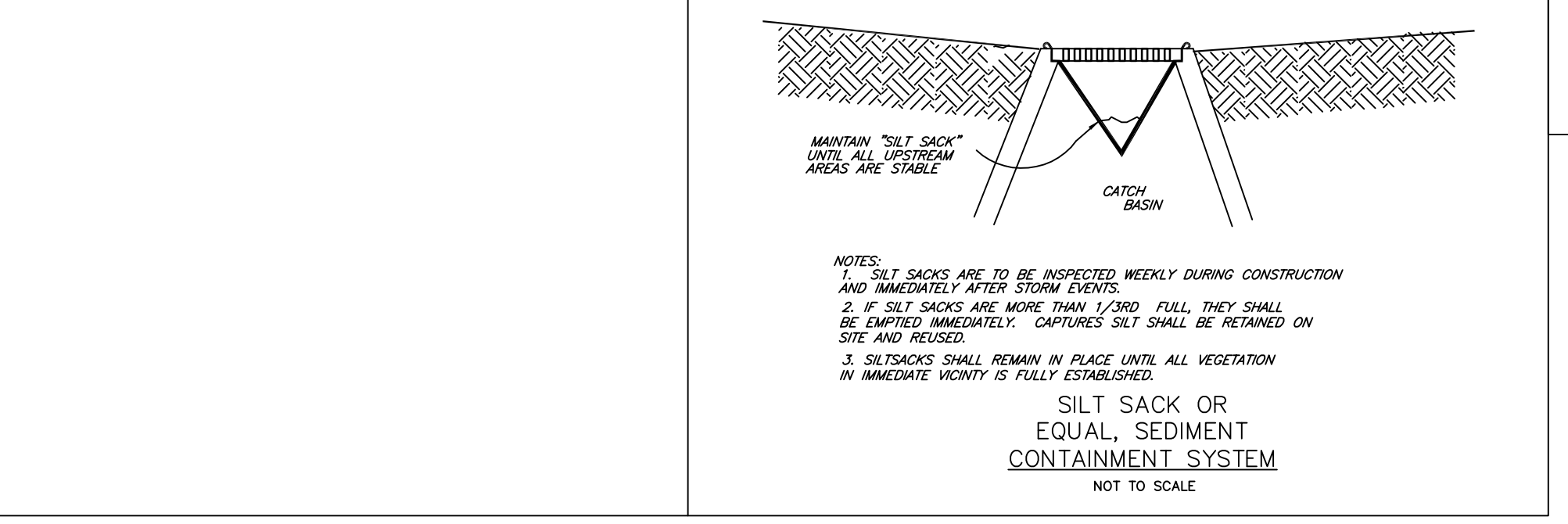
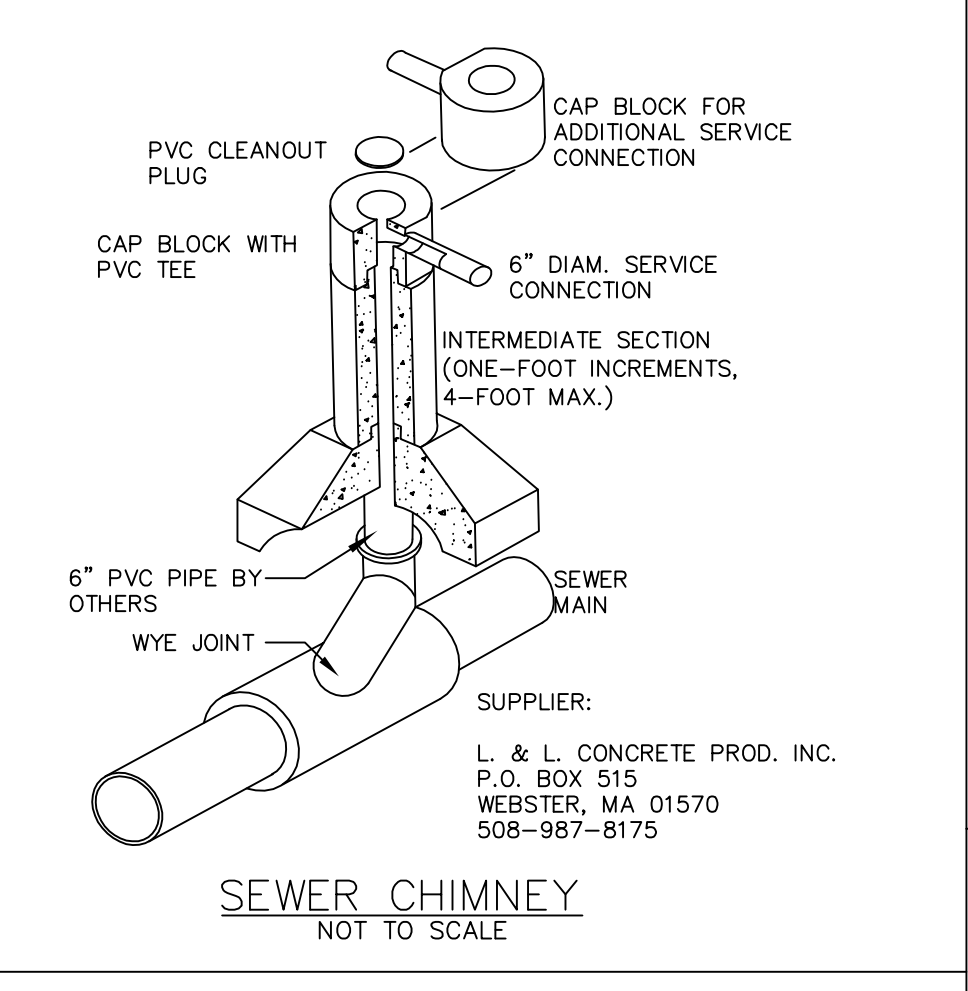




OWNER
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LAND REALTY TRUST
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BURLINGTON, MA. 01803

SUBDIVIDER
COMMONWEALTH HEIGHTS, LLC
128 WEST STREET
WILMINGTON, MA. 01887

APPROVAL UNDER THE
 SUBDIVISION CONTROL LAW,
 IS REQUIRED.
MARLBOROUGH PLANNING BOARD



SUBDIVIDER
COMMONWEALTH HEIGHTS, LLC
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(978) 988-8060

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LAND REALTY TRUST
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BURLINGTON, MA. 01803
(781) 272-7000

DATE: _____

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 OF THIS PLAN ON _____ AND NO APPEAL WAS TAKEN
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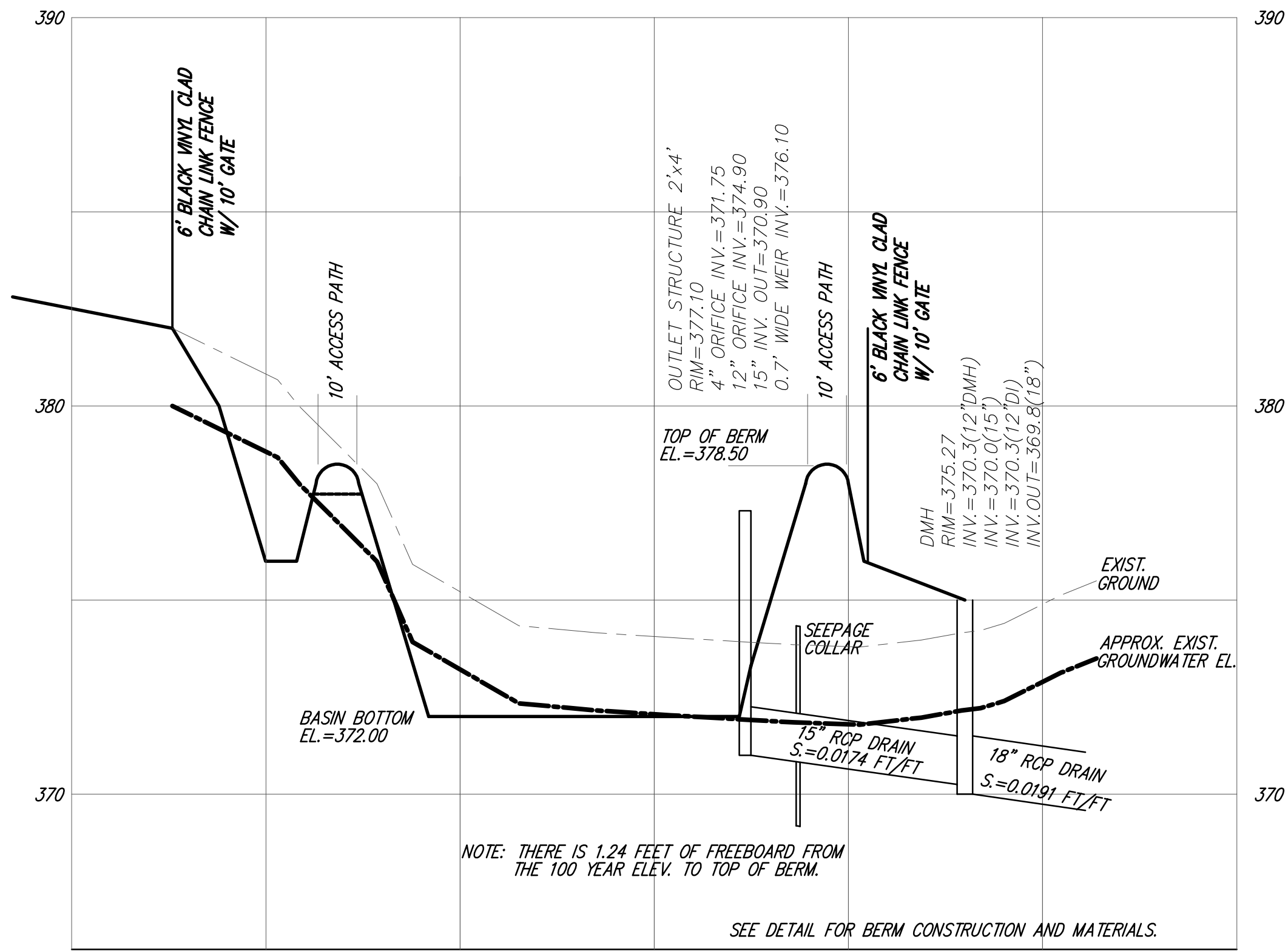


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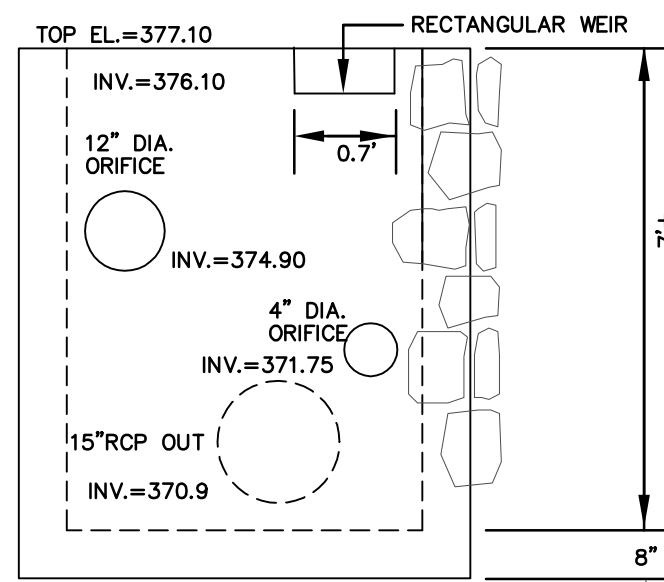
DESIGNED BY: REM, TDP
 CHECKED BY: VC
 COMPUTED BY: REM
 FIELD SURVEY: BKK
 DRAWN BY: REM
 SCALE: NONE
 SHEET 9 OF 10

DEFINITIVE PLAN
 CONSTRUCTION DETAILS
 OF
 COMMONWEALTH HEIGHTS
 IN
 MARLBOROUGH, MA.

MARCH 2, 2020
 JANUARY 28, 2020
 REVISIONS
 OCTOBER 24, 2019

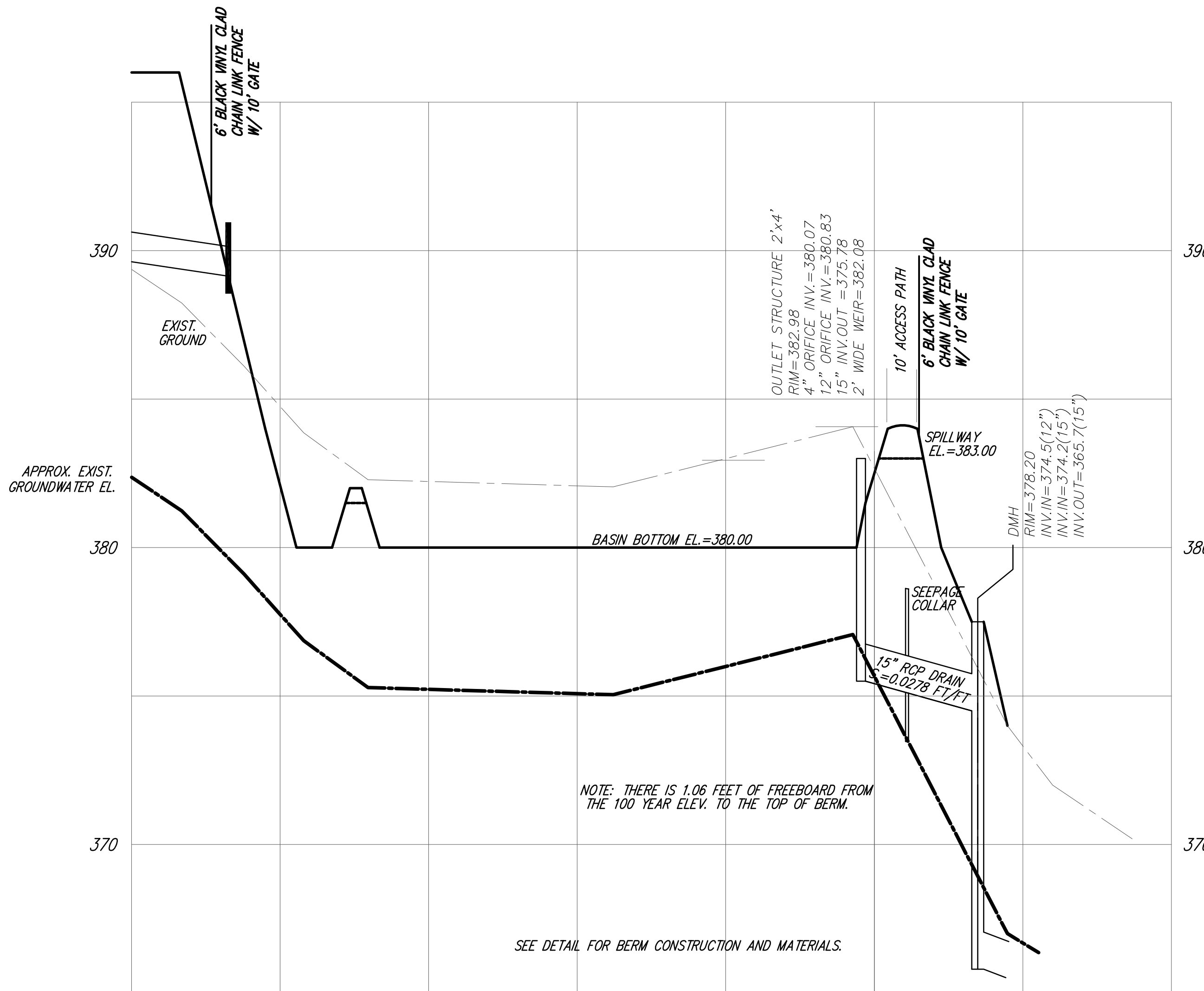


BASIN PA1 SECTION
 HORIZONTAL SCALE: 1"=30'
 VERTICAL SCALE: 1"=3'

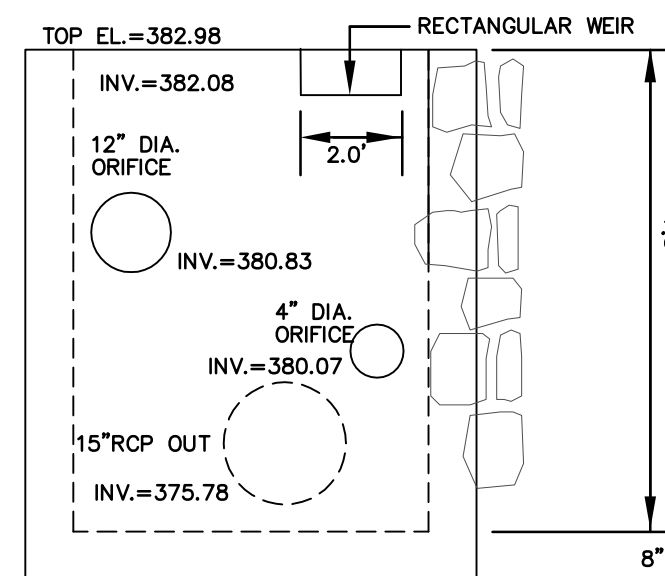


FRONT ELEVATION
 SEE TYPICAL DETAIL FOR OUTLET STRUCTURE CONSTRUCTION. THIS DETAIL SHOWS ORIFICE SIZE AND ELEVATIONS ONLY.
 OUTLET STRUCTURE DETAIL- BASIN PA1
 NOT TO SCALE

PROVIDE FIELDSTONE MASONRY FACADE ON VISIBLE SURFACES OF OUTLET STRUCTURE.

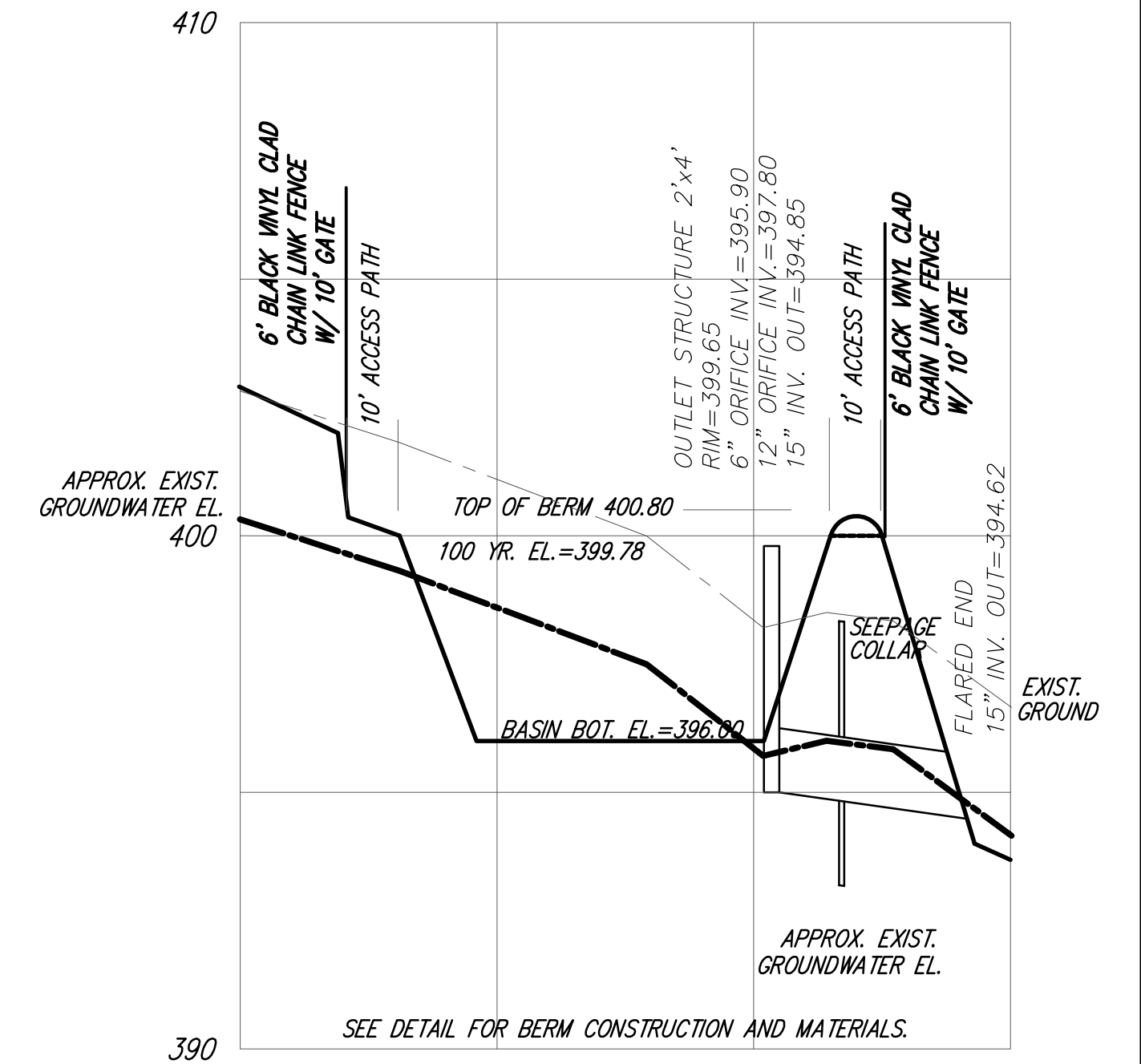


BASIN PB SECTION
 HORIZONTAL SCALE: 1"=30'
 VERTICAL SCALE: 1"=3'

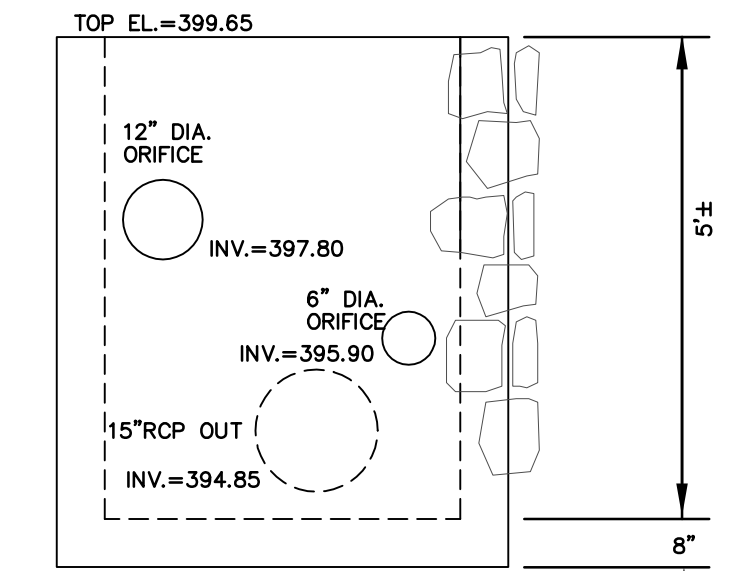


FRONT ELEVATION
 SEE TYPICAL DETAIL FOR OUTLET STRUCTURE CONSTRUCTION. THIS DETAIL SHOWS ORIFICE SIZE AND ELEVATIONS ONLY.
 OUTLET STRUCTURE DETAIL- BASIN PB
 NOT TO SCALE

PROVIDE FIELDSTONE MASONRY FACADE ON VISIBLE SURFACES OF OUTLET STRUCTURE.



BASIN PA2 SECTION
 HORIZONTAL SCALE: 1"=30'
 VERTICAL SCALE: 1"=3'



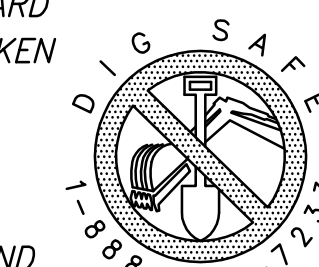
FRONT ELEVATION
 SEE TYPICAL DETAIL FOR OUTLET STRUCTURE CONSTRUCTION. THIS DETAIL SHOWS ORIFICE SIZE AND ELEVATIONS ONLY.
 OUTLET STRUCTURE DETAIL- BASIN PA2
 NOT TO SCALE

PROVIDE FIELDSTONE MASONRY FACADE ON VISIBLE SURFACES OF OUTLET STRUCTURE.

APPROVAL UNDER THE
 SUBDIVISION CONTROL LAW,
 IS REQUIRED.
 MARLBOROUGH PLANNING BOARD

 DATE: _____

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 OF THIS PLAN ON _____ AND NO APPEAL WAS TAKEN
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NOTE: TOPOGRAPHY SHOWN IS BASED ON N.G.V.D. OF 1929 AND THE RESULT OF AN ON-GROUND SURVEY BY: CONNORSTONE.

OWNER
 MARLBOROUGH / NORTHBOROUGH
 LAND REALTY TRUST
 1 WALL STREET
 BURLINGTON, MA. 01803
 (781) 272-7000
 FAX (781) 272-3130

SUBDIVIDER
 COMMONWEALTH HEIGHTS, LLC
 128 WEST MAIN STREET
 WILMINGTON, MA. 01887
 (978) 988-8060
 FAX (978) 988-0181

CONSTRUCTION DETAILS
 OF
COMMONWEALTH HEIGHTS
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CONNORSTONE
 CONSULTING CIVIL ENGINEERS
 AND
 LAND SURVEYORS

10 SOUTHWEST CUTOFF, SUITE 7
 NORTHBOROUGH, MASSACHUSETTS 01532
 TEL: (508) 393-9727 FAX: (508) 393-5242

DESIGNED BY: REM,TDP	
CHECKED BY: VC	
COMPUTED BY: VHH	
FIELD SURVEY: BKK	
DRAWN BY: REM, VHH	MARCH 2, 2020
SCALE: AS SHOWN	JANUARY 28, 2020
SHEET 10 OF 10	REVISIONS
	OCTOBER 24, 2019