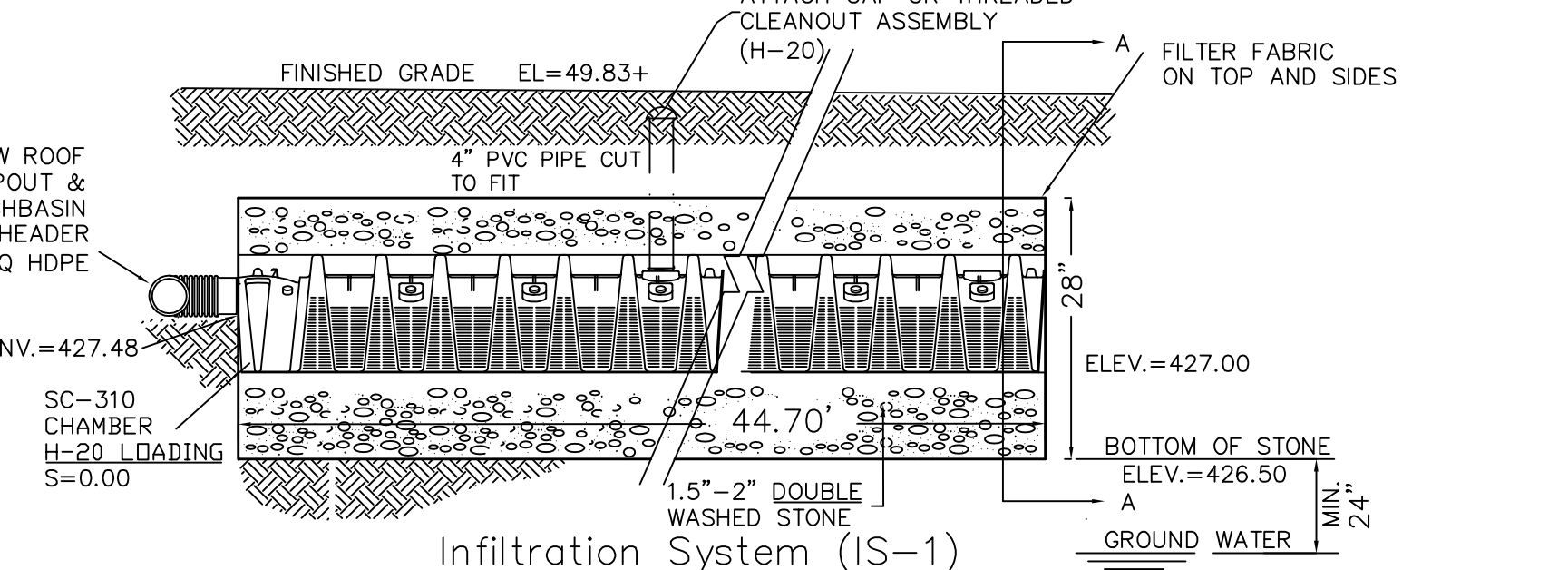
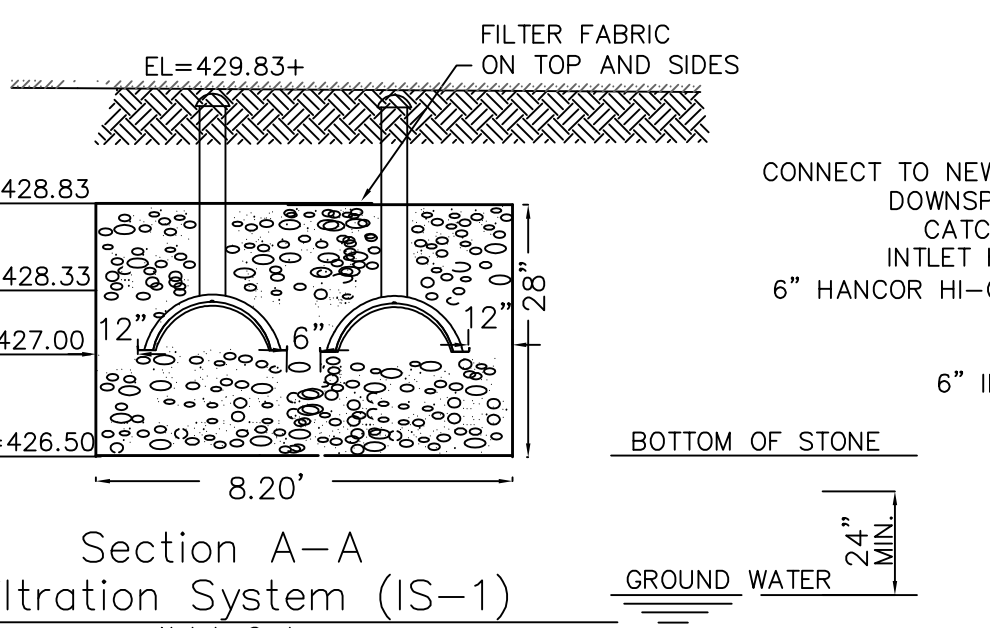
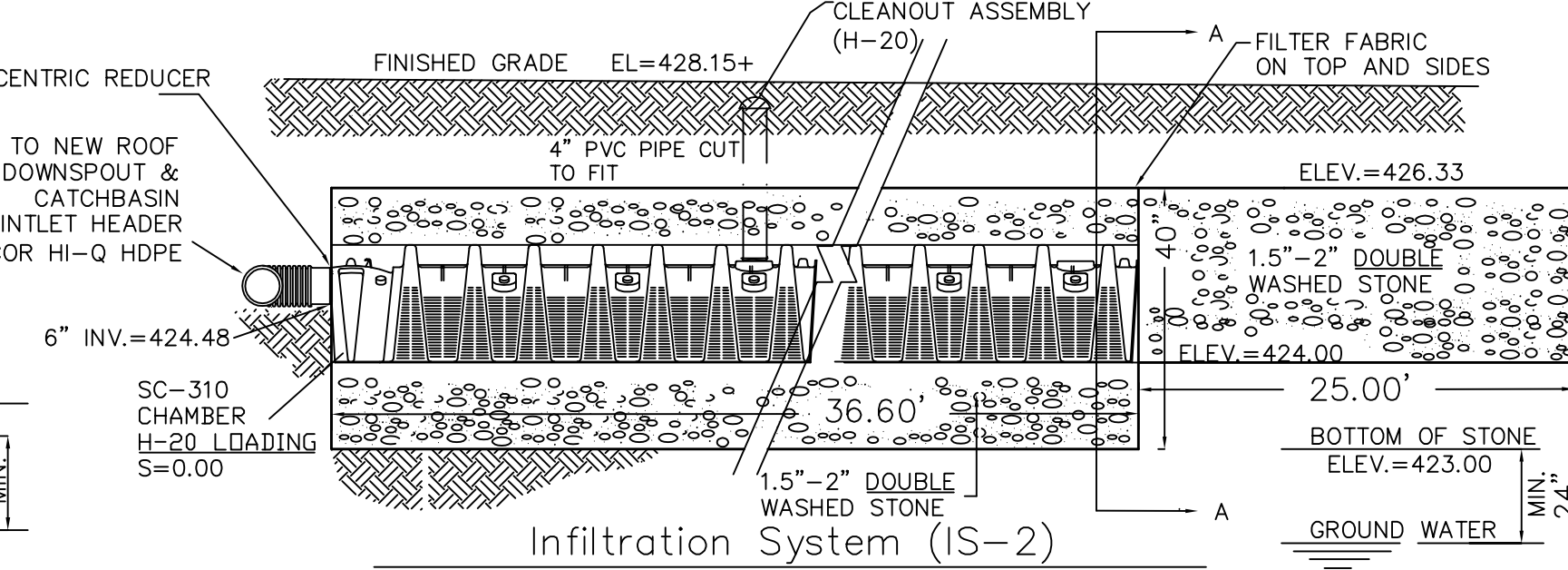
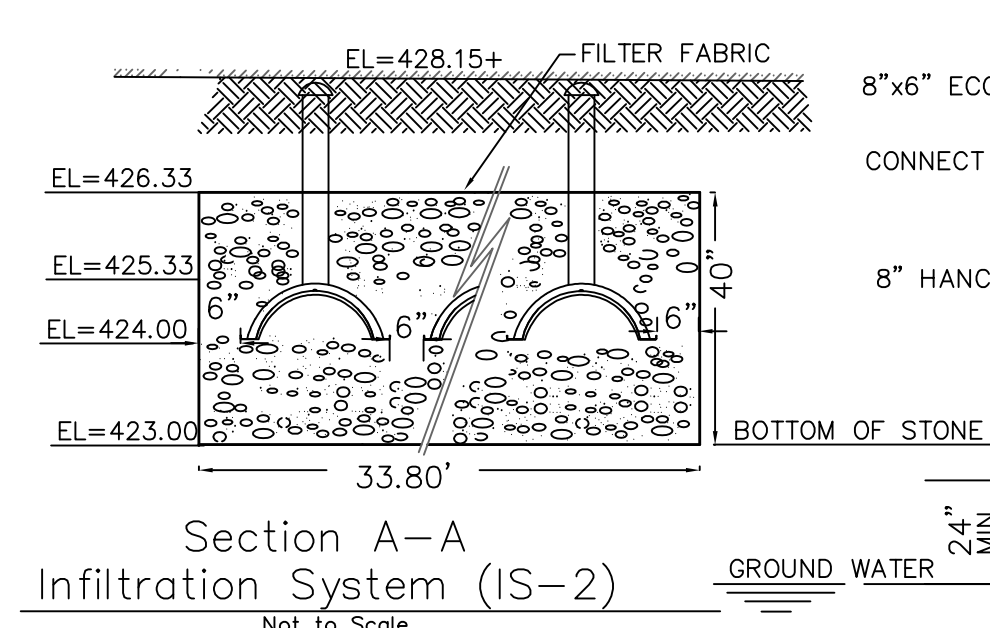


SOIL TEST DATA

| O.H. # | Depth from Surface (Inches) | Soil Horizon | Soil Texture (USDA) | Soil Color (Munsell) | Soil Mottling | Other (Structures, Stones, Boulders, Consistency % Gravel) |
|--------|-----------------------------|--------------|---------------------|----------------------|---------------|--|
| 1&2 | 00-12" | AP | SL | 10 YR3/2 | | GRANULAR, FRIABLE SINGLE GRAIN, FRIABLE |
| | 12-48" | B | SL | 10 YR5/6 | ◎60 | |
| | 48-96" | C | SL | 2.5Y7/2 | | |
| 3 | 00-06" | AP | SL | 10 YR3/2 | | GRANULAR, FRIABLE SINGLE GRAIN, FRIABLE |
| | 06-48" | B | SL | 10 YR5/6 | ◎72 | |
| | 48-108" | C | SL | 2.5Y7/2 | | |



NOTE: SOIL LAYERS A AND B AND ALL DELETERIOUS MATERIAL TO BE REMOVED FROM BENEATH PROPOSED INFILTRATION SYSTEM AND REPLACED WITH TITLE 5 SAND

NOTE: SOIL LAYERS A AND B AND ALL DELETERIOUS MATERIAL TO BE REMOVED FROM BENEATH PROPOSED INFILTRATION SYSTEM AND REPLACED WITH TITLE 5 SAND

SITE PLAN APPROVED WORCESTER PLANNING BOARD

DATE

ALPHA OMEGA ENGINEERING INC.
 CIVIL ENGINEERS, LAND SURVEYORS
 ENVIRONMENTAL CONSULTANTS
 25 HIGHLAND VIEW DR
 SUTTON, Massachusetts 01590
 Ph: (508) 865-9551
 Fax: (508) 499-6213
 info@alphaomegaeng.net
 www.alphaomegaeng.net

ROUMANIA A. WASEF P.E. #56257
 DESIGNED BY: R. Monkarjous DRAWN BY: R. Monkarjous
 SURVEY BY: R. Monkarjous

DATE: 03/14/2024
 PROJECT NO.: 23-0696
 PLOT REFERENCE NO.: NONE
 DRAWING SCALE: 1"=20'

| MARK | DATE | DESCRIPTION |
|------|------|-------------|
| | | |
| | | |
| | | |
| | | |

LOCUS REFERENCES:
 ID: 17/020/38+40
 DEED BK. 64501, PG. 247
 PLAN BK. 909, PL. 655
OTHER REFERENCES:
 PLAN BK. 322, PL. 37
 PLAN BK. 20, PL. 67
 PLAN BK. 23, PL. 7
 RECORDED @ WORCESTER
 REGISTRY OF DEEDS

LEGEND
 --- EXISTING TOPO
 ○ UTILITY POLE
 --- OHW---OVERHANG WIRE
 --- STONE WALL
 ■ CATCH BASIN
 --- SETBACK LINE
 --- GAS LINE
 --- SEWER LINE
 --- WATER LINE
 --- FENCE
 --- SEWER MANHOLE
 --- DRAIN MANHOLE
 --- TWIN (S&D) MANHOLE
 --- PROP. TREE

SITE PLAN
 LOCATED AT
103 ALVARADO AVE.
WORCESTER, MA
 OWNED BY AND PREPARED FOR
RODRIGO M. SALGADO
 103 ALVARADO AVE.
 WORCESTER, MA

SITE PLAN
 SHEET NUMBER
 1 OF 2

LOCUS PLAN
 N.T.S.

CONSTRUCTION SEQUENCE & EROSION CONTROLS

1. Staked straw bales and silt fences are to be installed where shown on the site plans. The contractor and the owner are responsible for the proper maintenance of the hay bale dike and to identify and correct all sources of erosion. Extra straw bales are to be stored on site in order to quickly repair erosion prone areas.
2. Rough grading and stump removal are to be confined to areas as shown on the site design plan. Construction materials are to be stockpiled behind the hay bale dike.
3. Temporary stabilization of disturbed areas is to limit erosion toward the street and abutting properties. All trenches are to be filled on a daily basis. The contractor is to use proper judgment relative to construction practices during adverse weather conditions or periods of high groundwater.
4. Periodic maintenance of the erosion control structures is required. The hay bale dike is to serve as the limit of work.
5. All graded areas are to be loamed and seeded as soon as possible in order to insure the rapid stabilization of the erosion prone areas. A Conservation Seed Mixture of 20% Annual Ryegrass, 30% Creeping Red Fescue & 50% Merriam Kentucky Bluegrass is recommended.
6. The Erosion control structures are to remain in place for at least one full growing season. Periodic inspections of these erosion control structures is to continue during this phase of vegetation stabilization. In areas where silt fences have been installed, they are to be removed once the slopes have been stabilized.
7. The contractor is to stabilize all slopes immediately upon completion of work within each phase to prevent erosion of soils. During the grow-in period, temporary erosion controls (i.e. bark mulch or straw) is to be used to prevent erosion during periods of rainfall or snowmelt.
8. Periodic inspections of the entire construction site are to be performed by a competent representative who will insure the adherence to the regulations.

THE STRUCTURE IS NOT LOCATED WITHIN FEDERAL FLOOD ZONE PER HUD MAP # 25027C COMMUNITY # 0620E DATED 07/04/2011

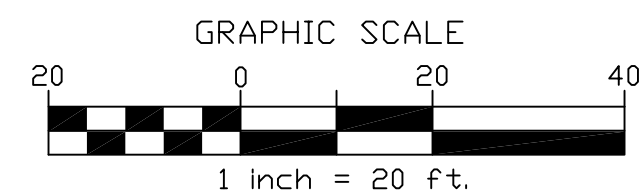
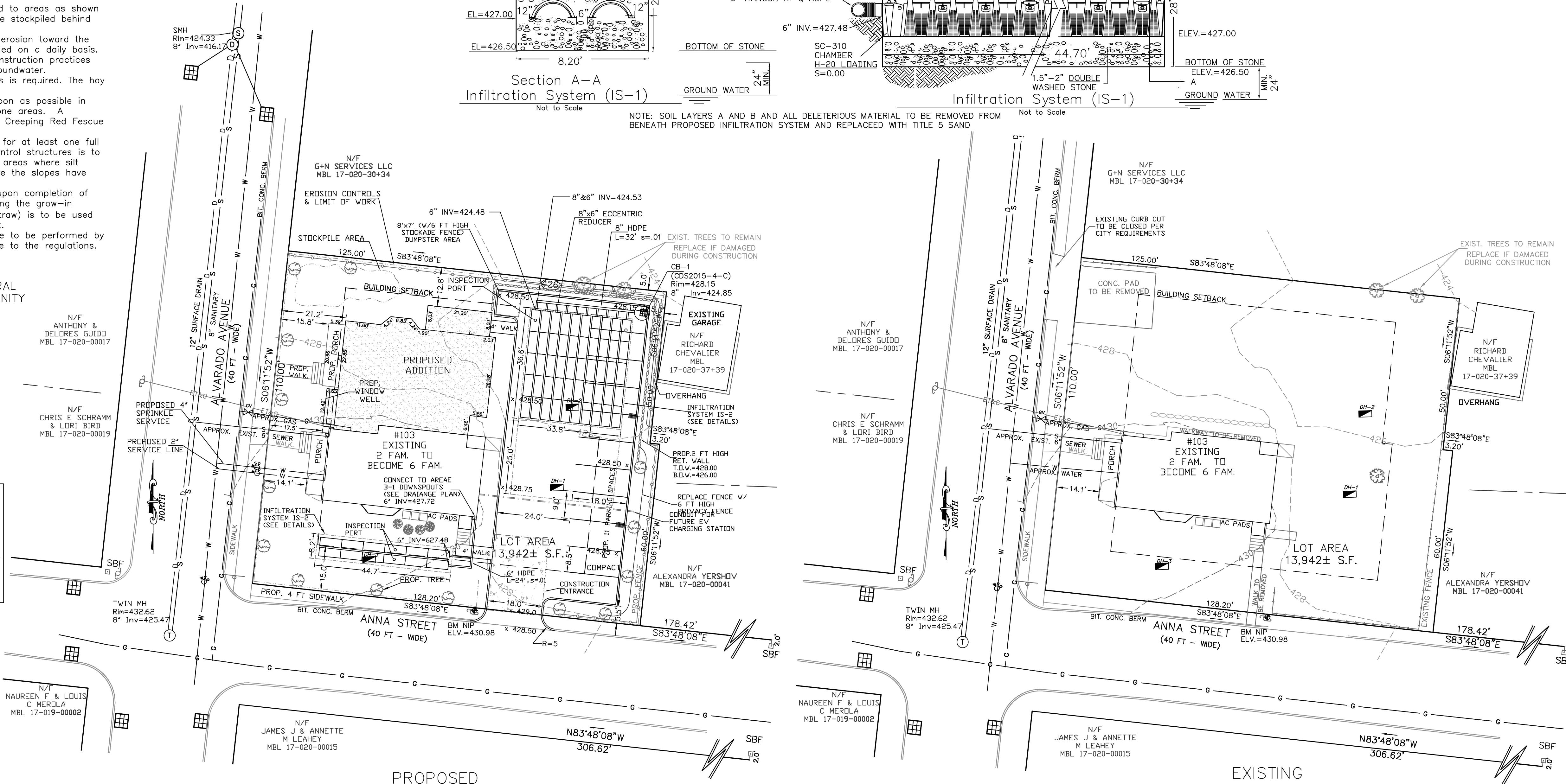
A SPECIAL PERMIT TO MODIFY PARKING AND LOADING DIMENSIONAL REQUIREMENTS, LAYOUT AND/OR THE NUMBER OF REQUIRED SPACES AND/OR LANDSCAPING REQUIREMENTS (ARTICLE IV, SECTION 7.A.2) WAS GRANTED BY THE CITY OF WORCESTER ZONING BOARD OF APPEALS.

CONTRACTOR TO NOTIFY DIG SAFE
 72 HOURS PRIOR TO ANY EXCAVATION
 TELEPHONE NUMBER 1-888-344-7233
 WWW.DIGSAFE.COM

ALL UNDERGROUND UTILITIES INFORMATION SHOWN HEREON WERE TAKEN FROM FIELD OBSERVATIONS AND UTILITY RECORDS.
 ALL LOCATIONS MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO START OF ANY CONSTRUCTION.

GENERAL NOTES

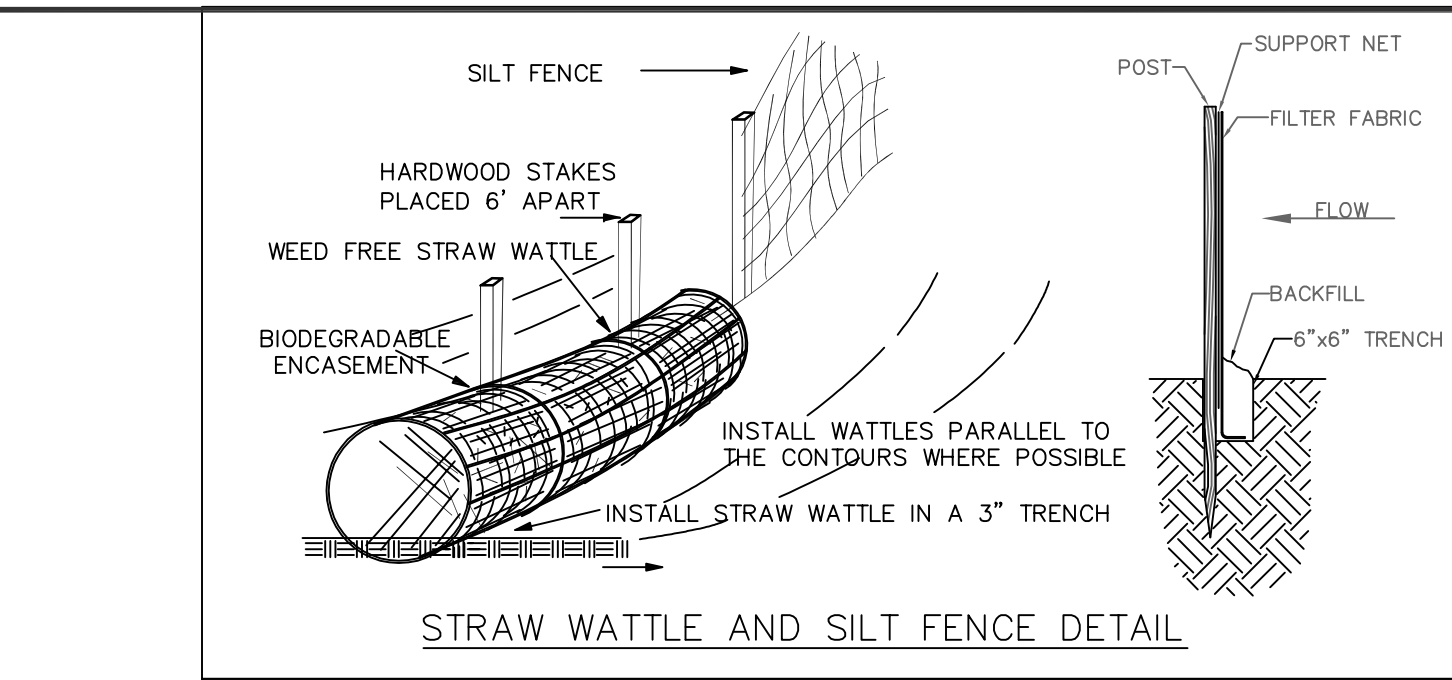
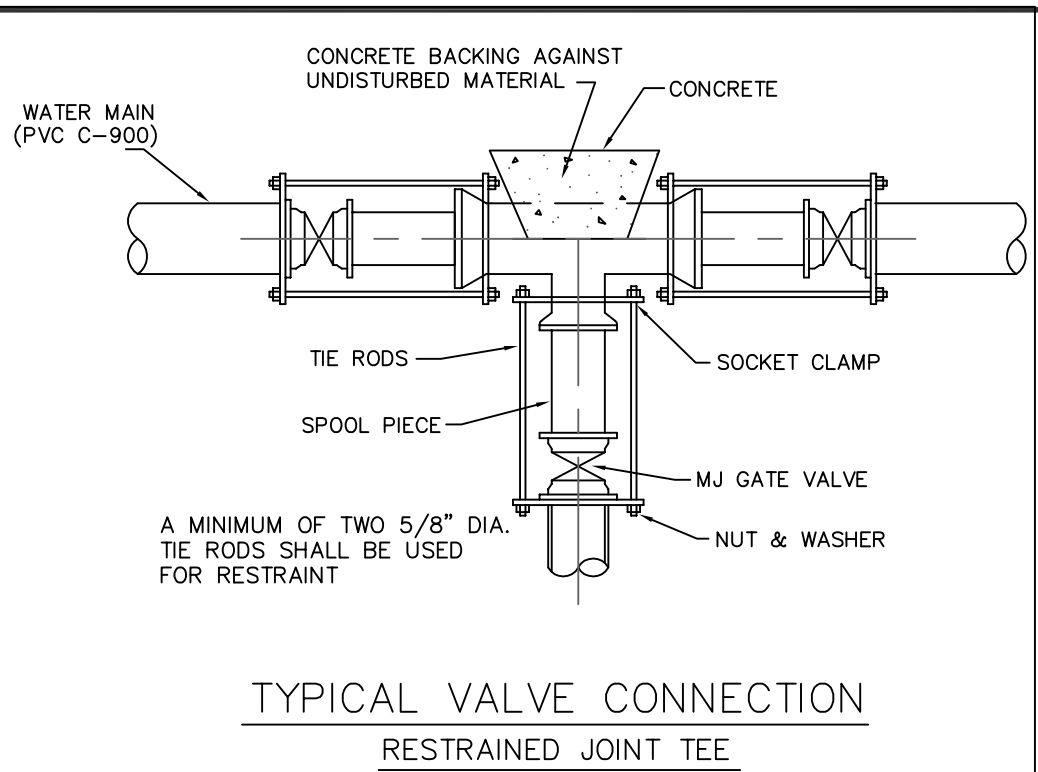
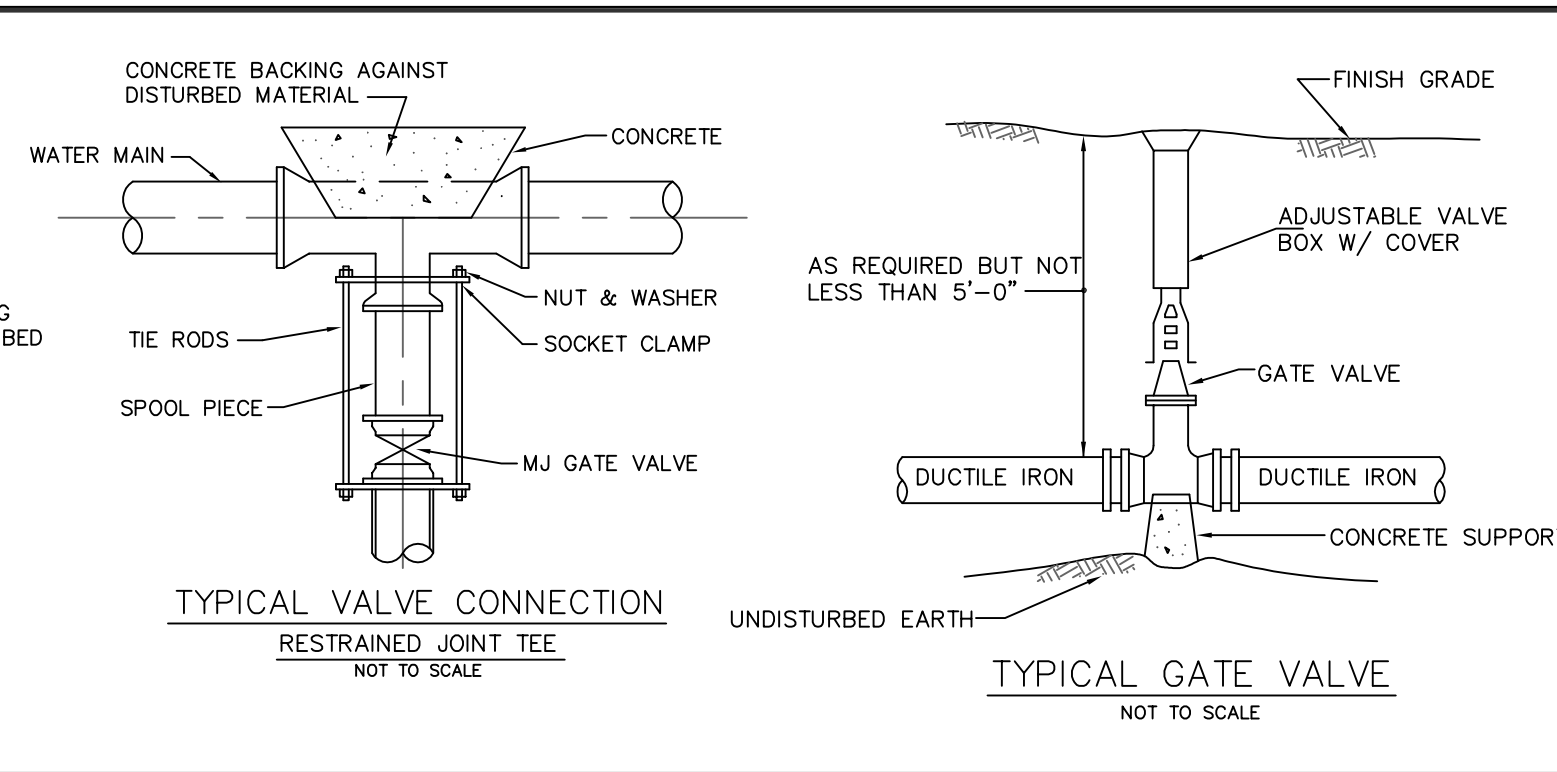
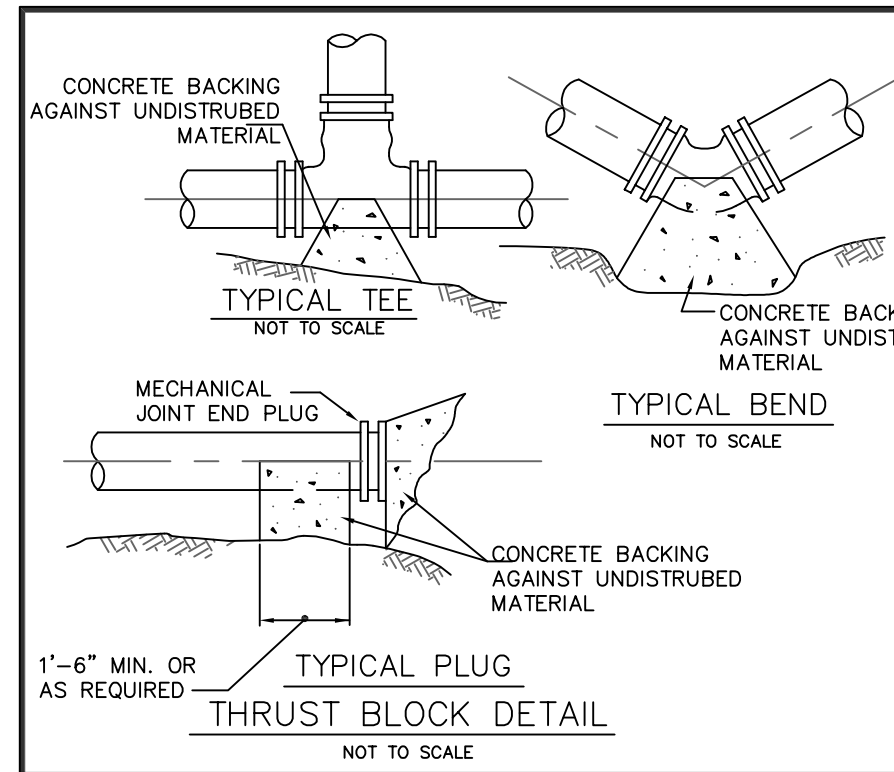
- 1.0 UTILITIES
- 1.1 Place 6" Loom and seed in all disturbed areas of the project not otherwise improved.
- 1.2 Install nylon string in all conduit for pull through of cables
- 1.3 All trenches for utilities to be backfilled and compacted with granular materials free of rocks larger than 2".
- 1.4 All underground utility locations shown are based on field evidence and records provided to ALPHA OMEGA ENGINEERING INC. These locations should be considered approximate. Other utilities may exist which are not evident or for which record information was not found. The contractor must contact all utility companies and "Dig Safe" before excavation begins. We assume no responsibility for damages incurred as a result of utilities omitted or inaccurately shown.
- 1.5 It is the responsibility of the contractor to review all of the drawings and specifications associated with this project work and project scope prior to the initiation of construction. Should the contractor find a conflict with the documents, relative to the specifications or applicable codes, it is the contractor's responsibility to notify the project engineer of record in writing prior to the start of construction. Failure by the contractor to notify the project engineer shall constitute acceptance of full responsibility by the contractor to complete the scope of work as defined by the drawings and in full conformance with local regulations and codes.
- 1.6 All work shall conform to the City of Worcester and the Massachusetts Highway Department construction standards as applicable.
- 1.7 All work is to be performed in accordance with O.S.H.A. requirements.
- 1.8 Contractor is responsible for all excavation to be performed in accordance with current O.S.H.A. standards, as well as additional provisions to assure stability of contiguous structures, as field conditions dictate.
- 1.9 Refer to the Stormwater Pollution Prevention Plan for erosion control details and specifications. Erosion controls are to be installed and inspected prior to commencement of land clearing.



| ZONING: | REQ. | EXIST. | PROP. |
|----------------|---|--------|--------|
| RL-7 | 17,000 S.F.* | 13,942 | 13,942 |
| LOT AREA: | 90'** | 110' | 110' |
| FRONTAGE: | 20' | 14.1' | 14.1' |
| FRONT SETBACK: | 10' | 53.8' | 12.8' |
| SIDE SETBACK: | 20' | 54.14' | 54.14' |
| REAR SETBACK: | 50' /3+ STORIES | | |
| BLDG. HEIGHT: | * 7,000 S.F FOR 1ST UNIT PLUS 2,000 PER ADDITIONAL UNIT | | |
| | ** 65 FT PLUS 5 FT PER UNIT TO TOTAL OF 140 FT | | |

TOTAL AREA WITHIN THE FRONT AND EXTERIOR SIDE YARD=3,823 S.F.
 PROPOSED IMPERVIOUS COVERAGE =790 S.F. =21% OF THE TOTAL AREA

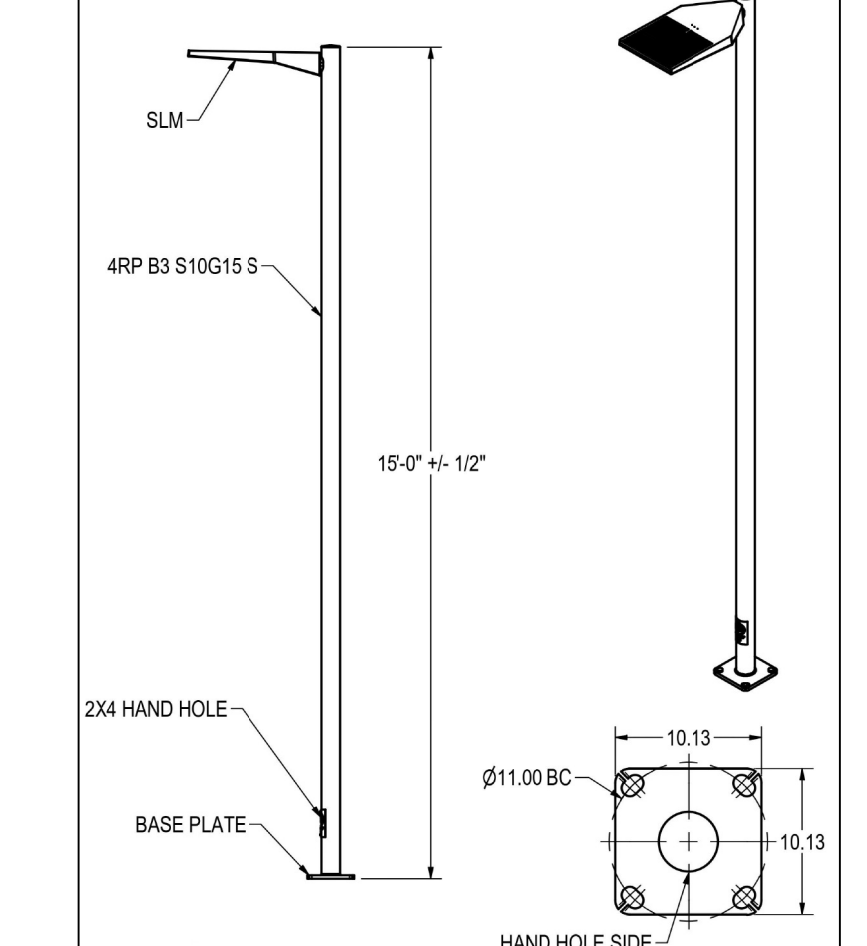
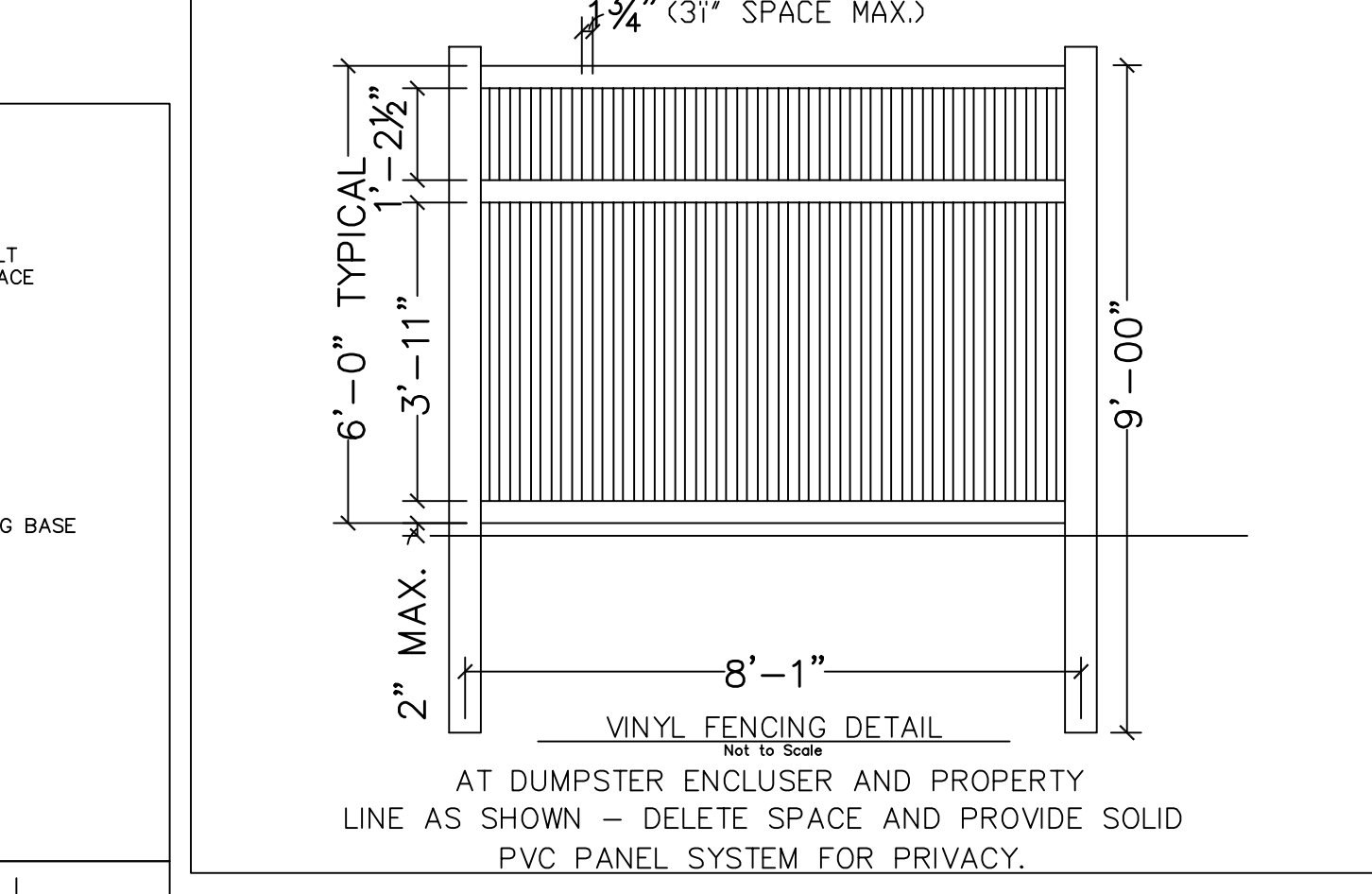
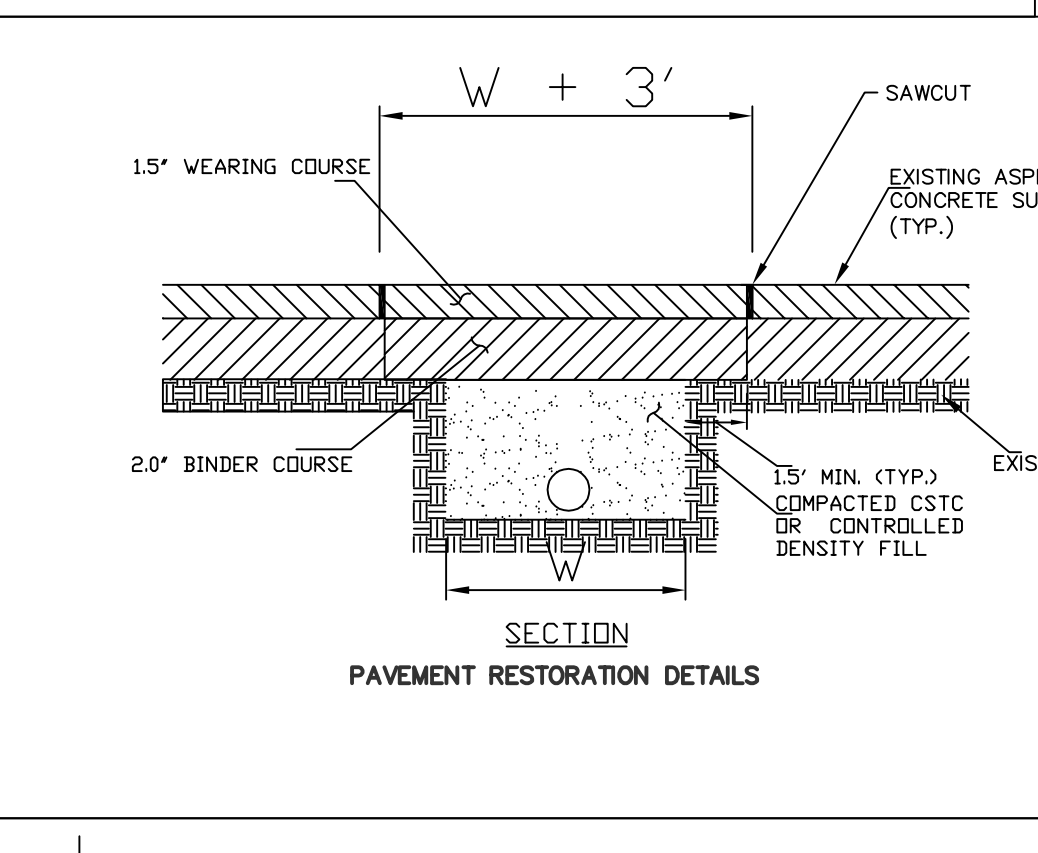
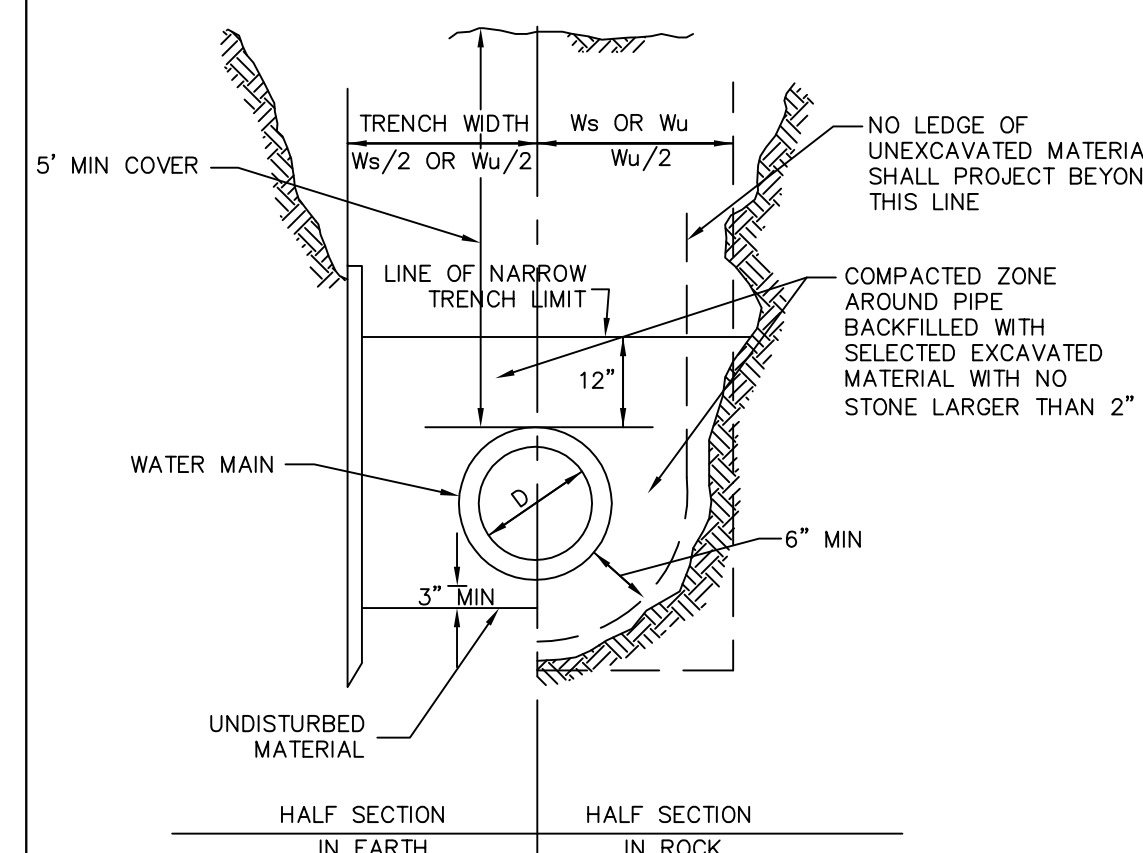
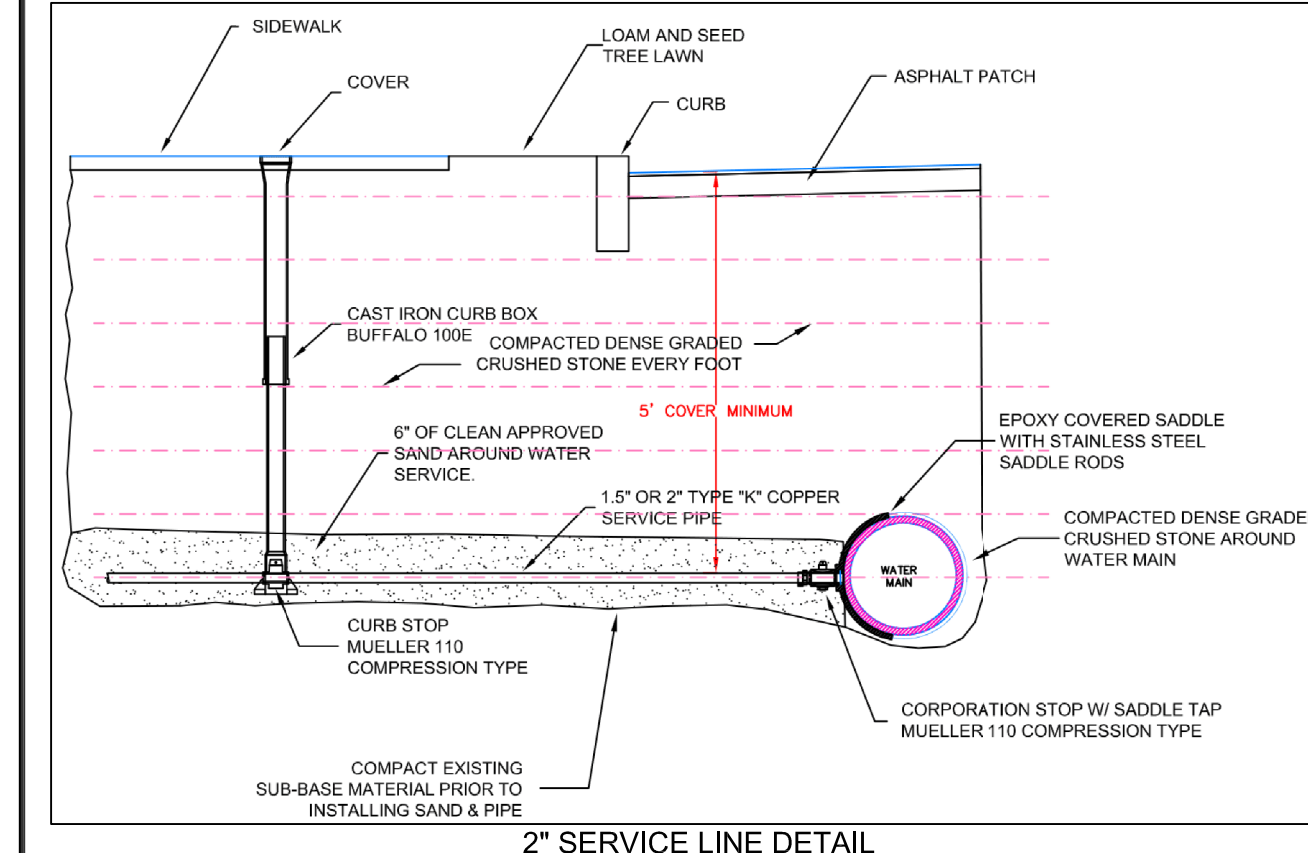
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SITE PLAN APPROVED WORCESTER PLANNING BOARD

DATE _____

ALPHA OMEGA ENGINEERING INC.
CIVIL ENGINEERS, LAND SURVEYORS
ENVIRONMENTAL CONSULTANTS
25 HIGHLAND VIEW DR
SUTTON, Massachusetts 01590
Ph: (508) 865-9551
Fax: (508) 499-6213
info@alphaomegaeng.net
www.alphaomegaeng.net



ROUMANY A. WASEF P.E. #56257
DESIGNED BY: R. Monkarjous DRAWN BY: R. Monkarjous
SURVEY BY: R. Monkarjous

DATE: 03.14.2024
PROJECT NO.: 23-0996
PLOT REFERENCE NO.: NONE
DRAWING SCALE: 1"=20'

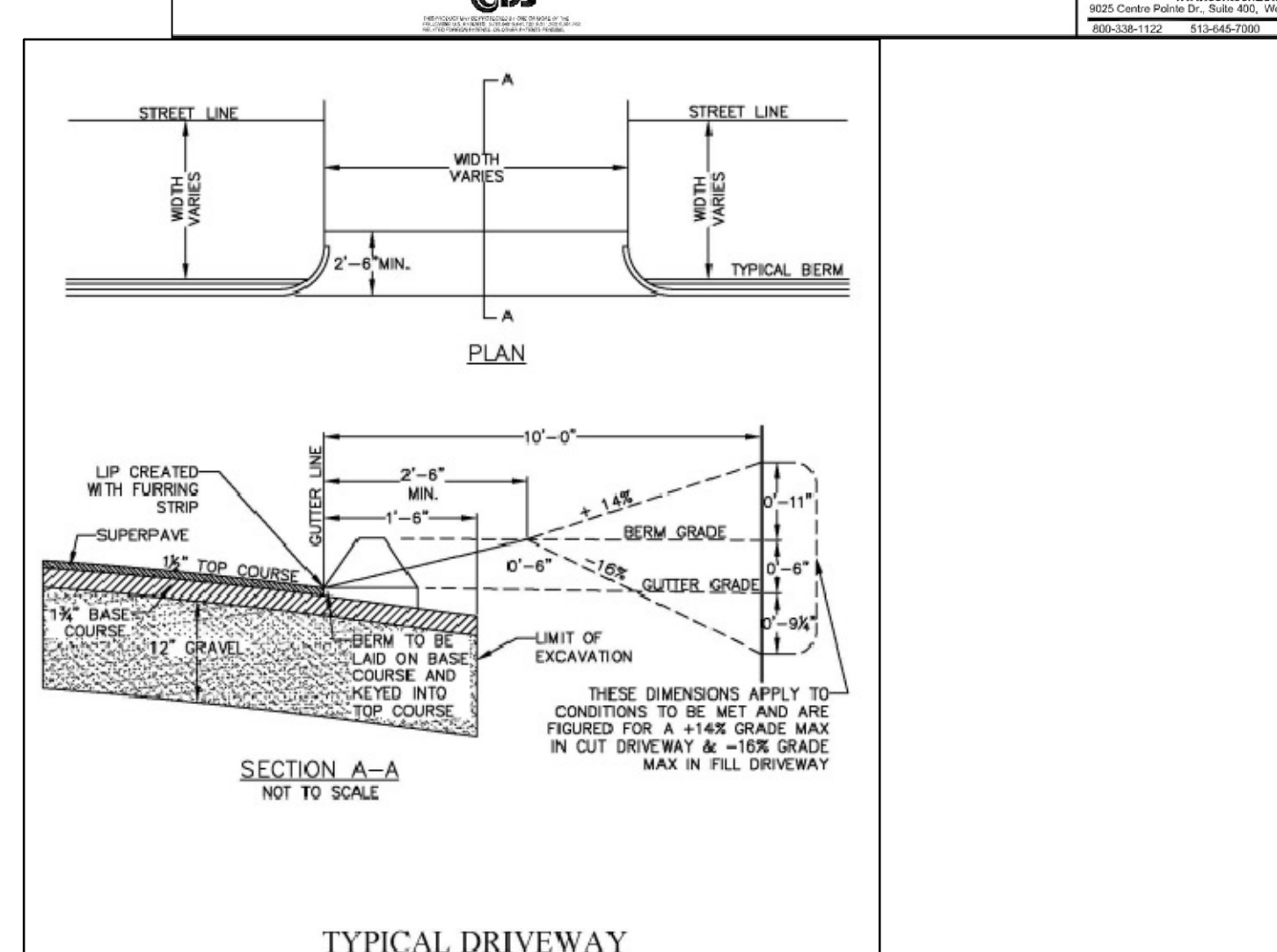
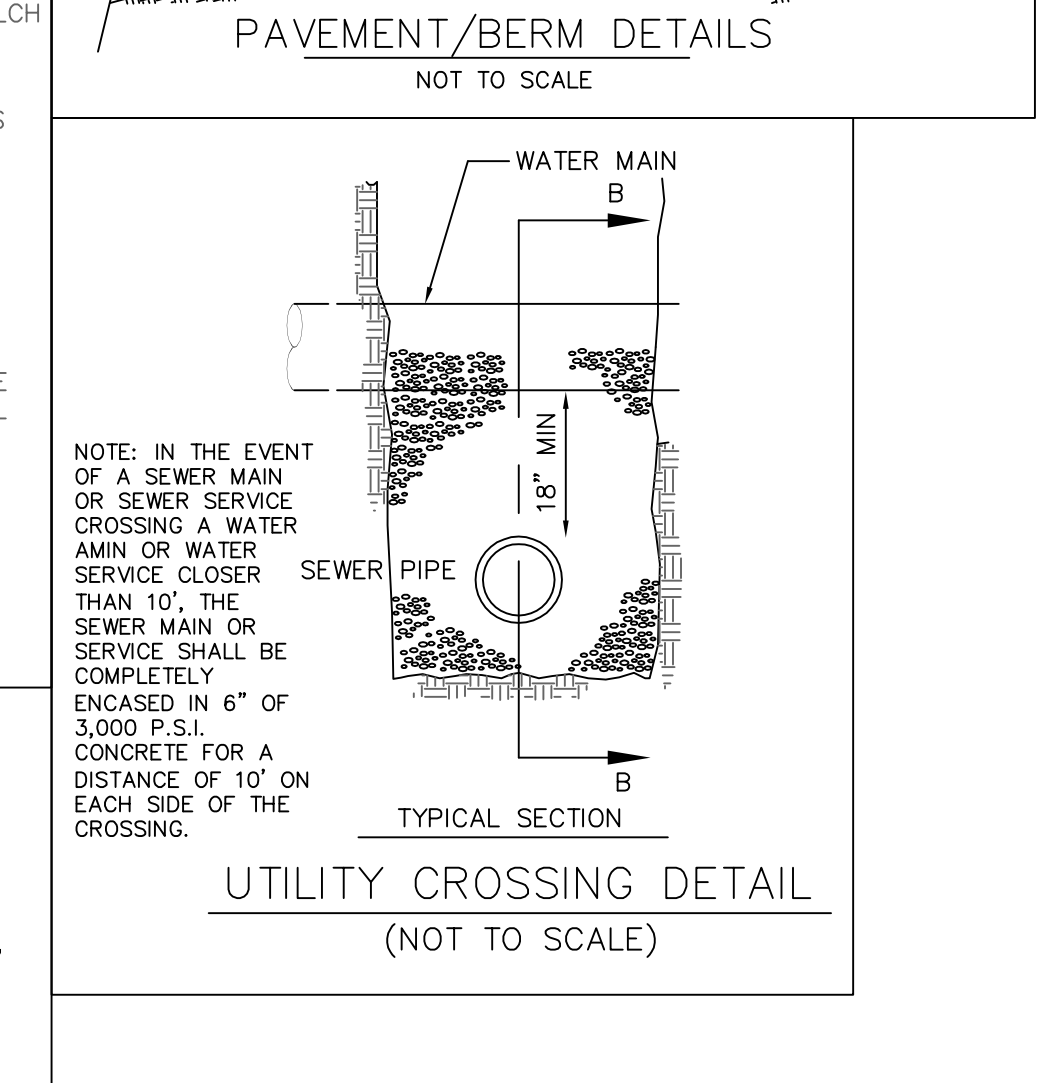
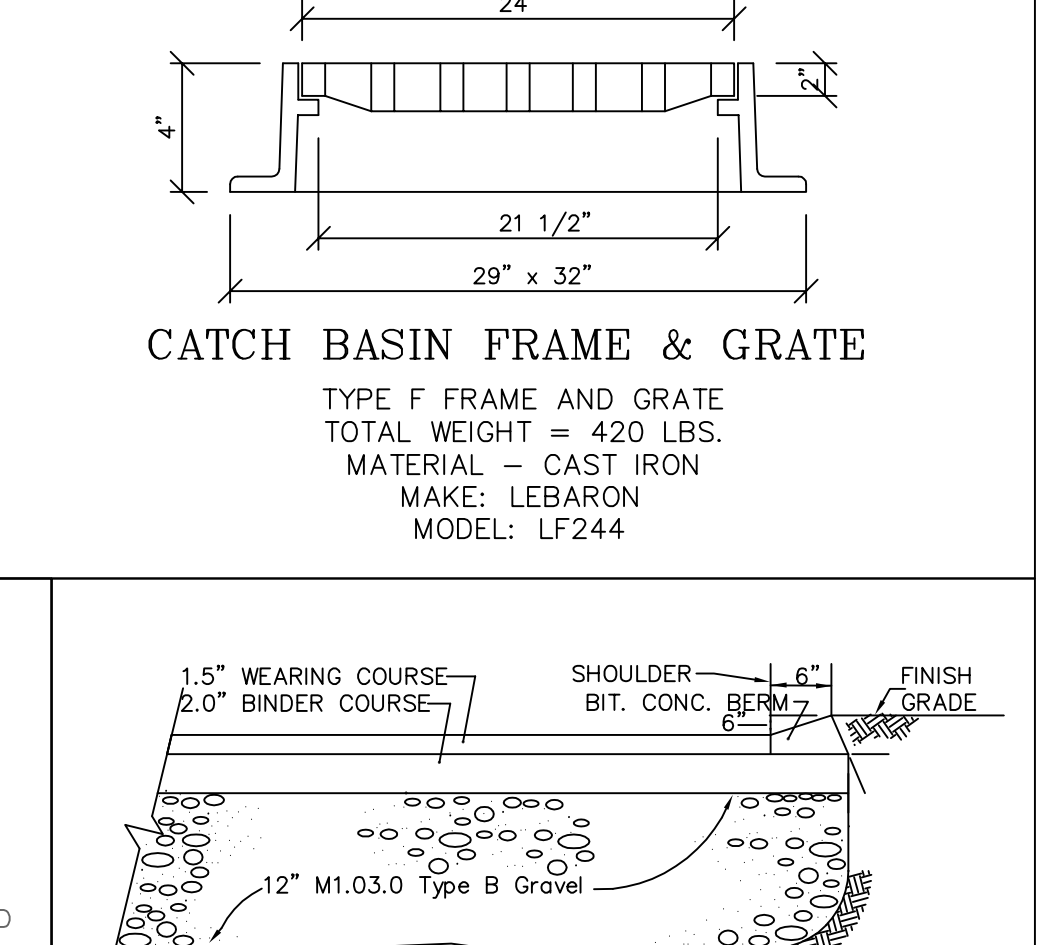
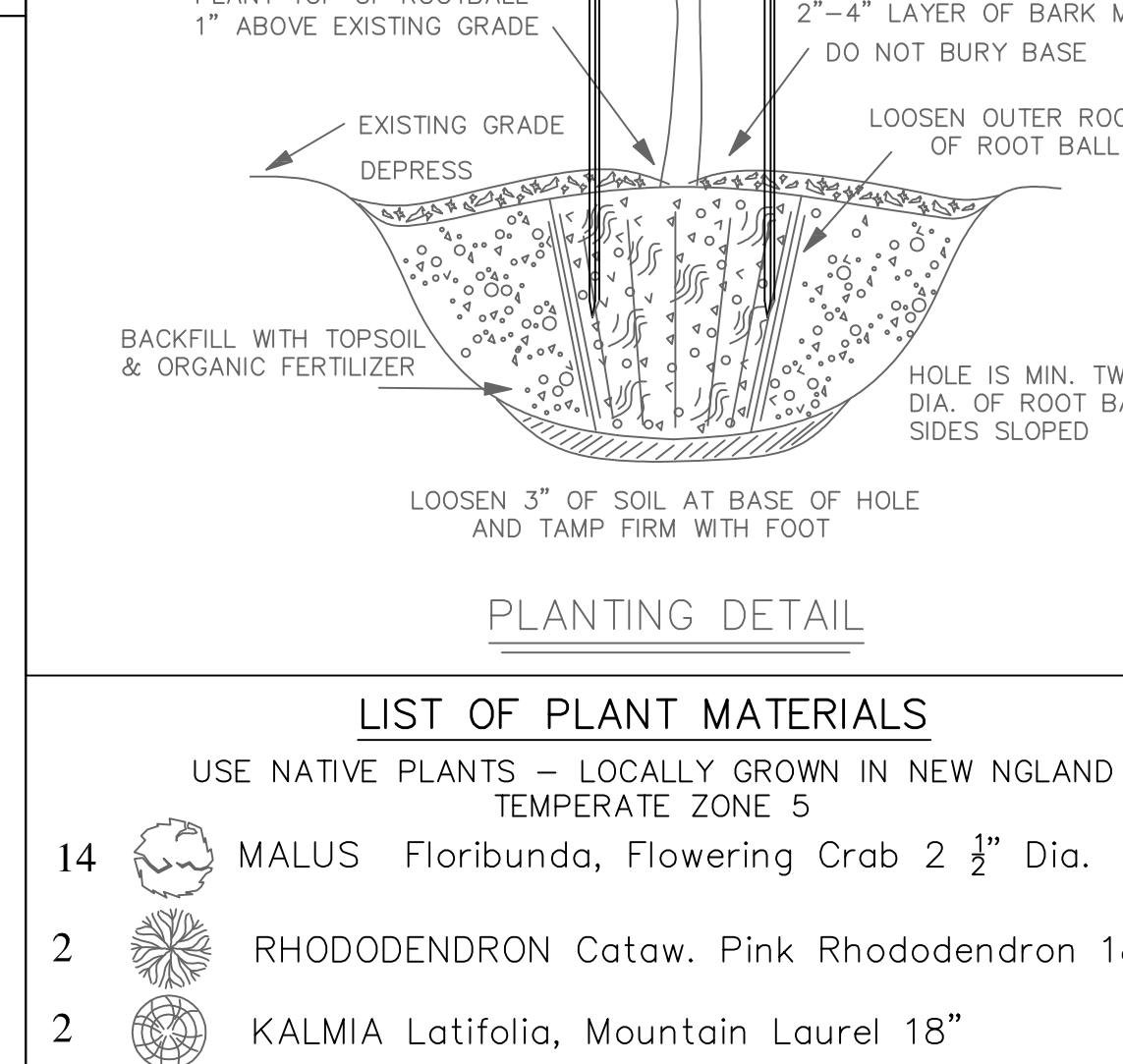
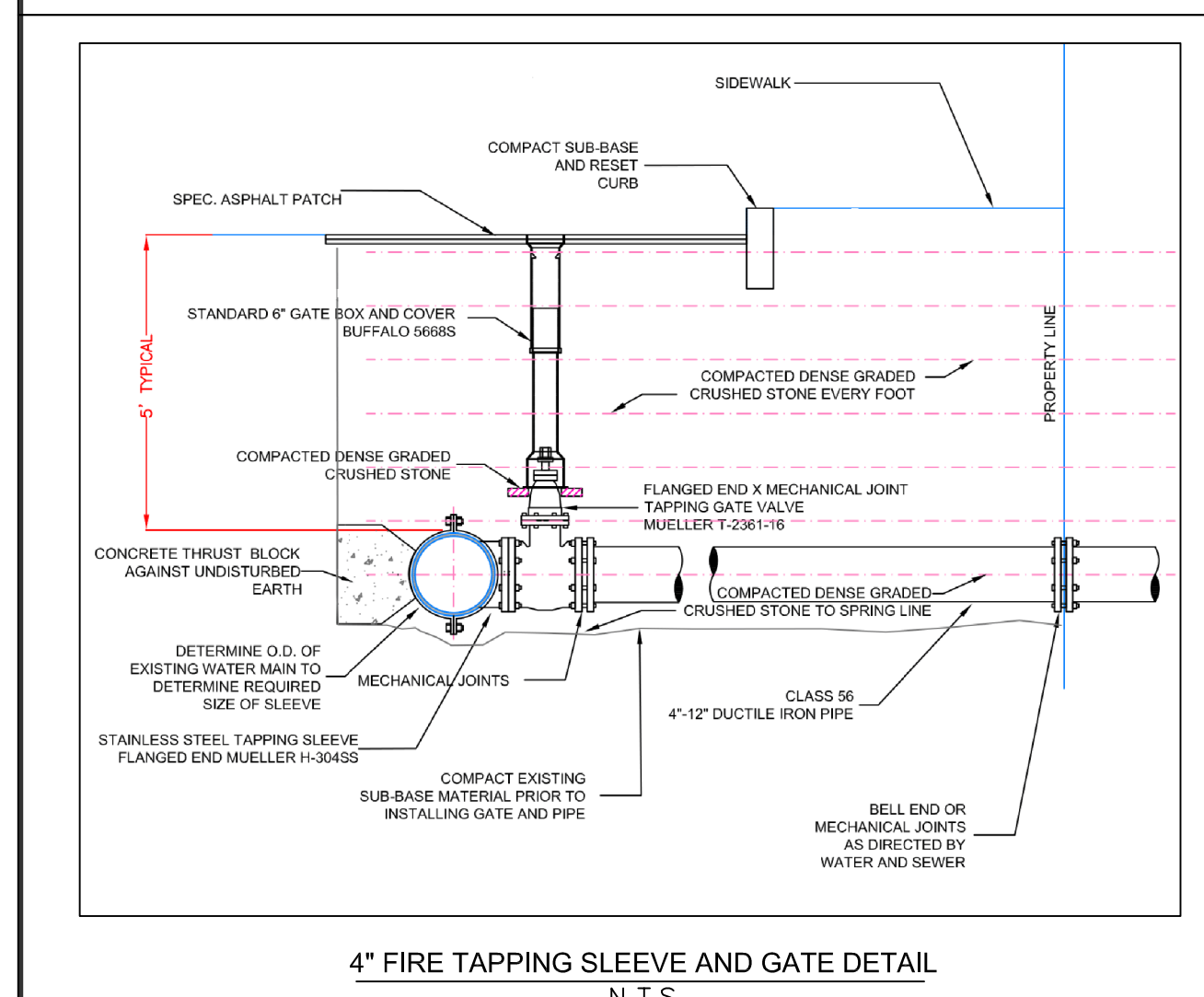
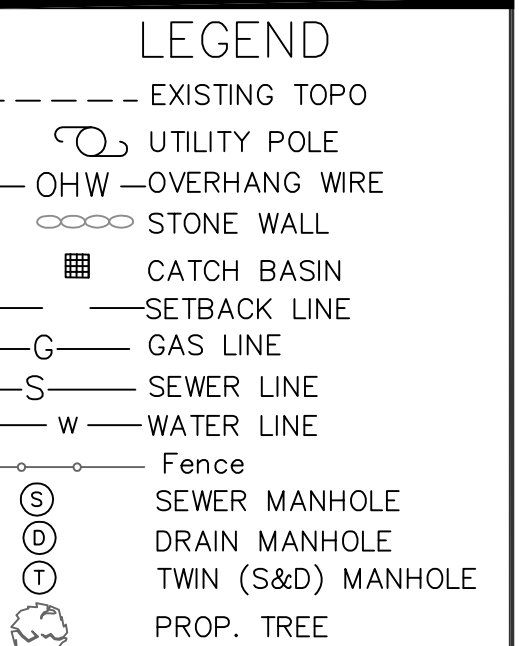
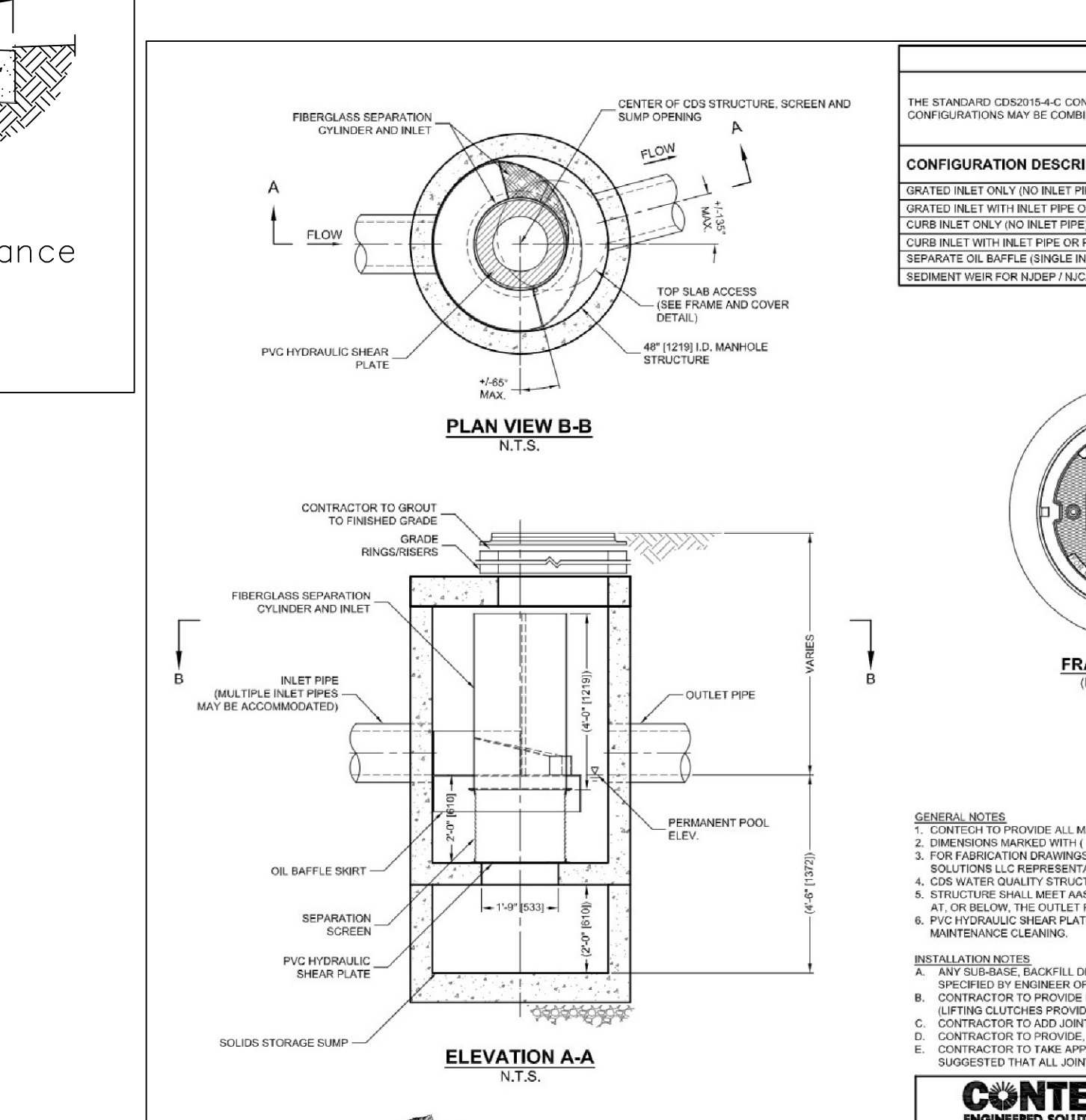
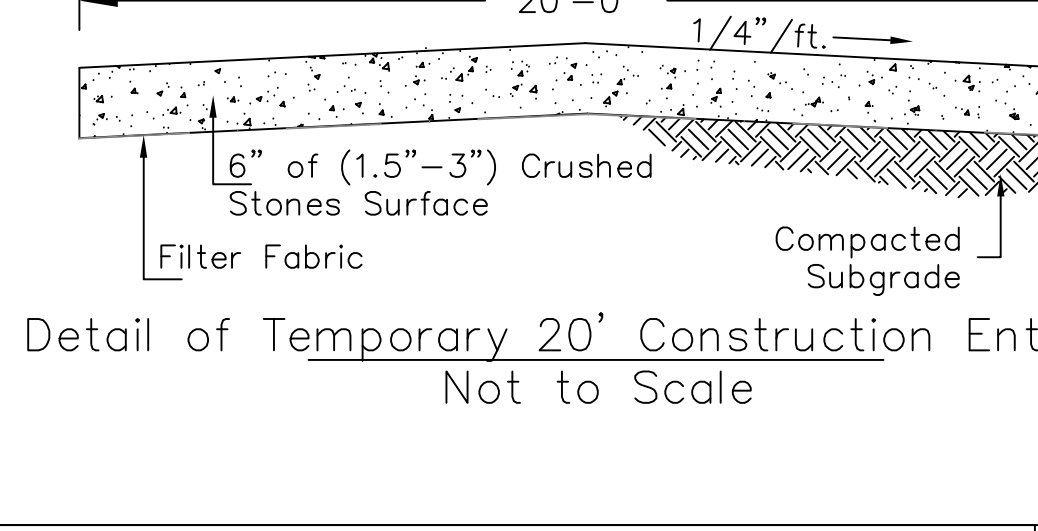
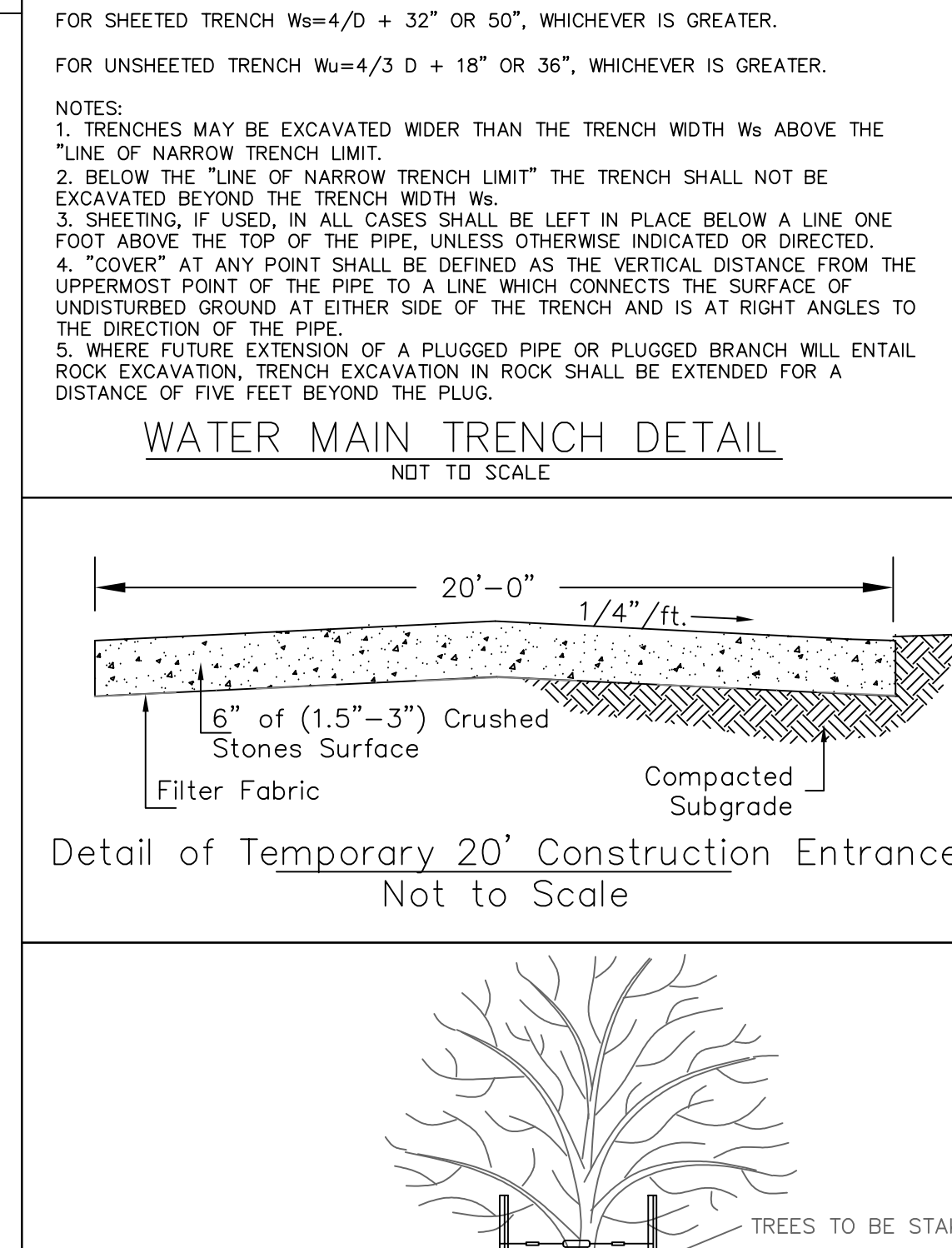
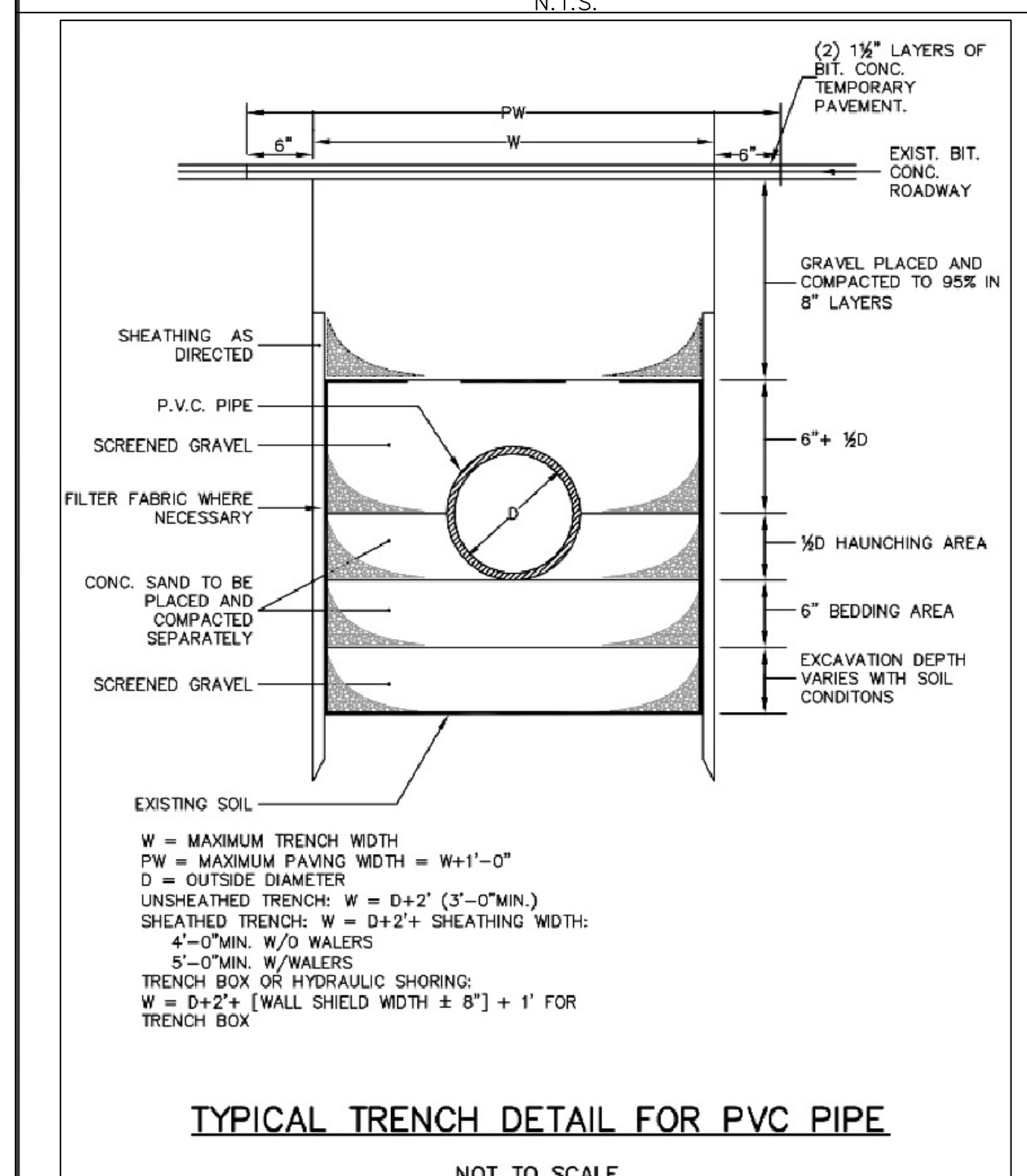
REVISIONS

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
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| | | |

LOCUS REFERENCES:
ID: 17/020/38+40
DEED BK. 64501, PG. 247
PLAN BK. 909, PL. 655

OTHER REFERENCES:
PLAN BK. 322, PL. 37
PLAN BK. 20, PL. 67
PLAN BK. 23, PL. 7

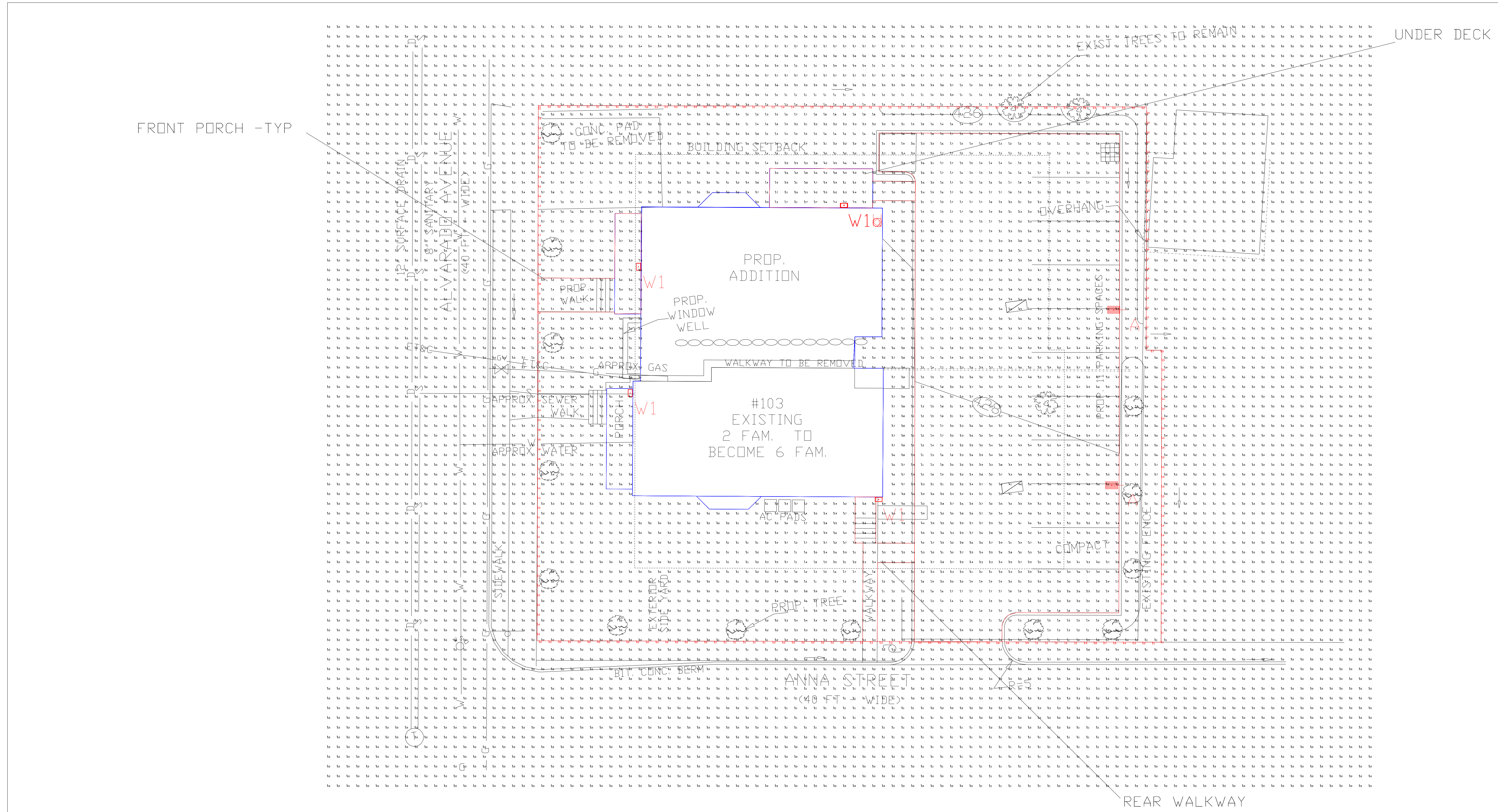
RECORDED @ WORCESTER REGISTRY OF DEEDS



REPRODUCTION OF THIS PLAN IN WHOLE OR PART IS PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE DESIGN ENGINEER AND/OR FIRM.

SITE PLAN
LOCATED AT
103 ALVARADO AVE., WORCESTER, MA
OWNED BY AND PREPARED FOR
RODRIGO M. SALGADO
103 ALVARADO AVE., WORCESTER, MA

PROJECT TITLE _____
SHEET TITLE **SITE PLAN**
SHEET NUMBER **1 OF 2**



Calculation Summary

| Label | CalcType | Units | Avg | Max | Min | Avg/Min | Max/Min |
|--------------------------|-------------|-------|------|-----|-----|---------|---------|
| ALL CALCS AT GRADE-2'X2' | Illuminance | Fc | 0.82 | 8.4 | 0.0 | N.A. | N.A. |
| PROPERTY LINE | Illuminance | Fc | 0.54 | 1.6 | 0.0 | N.A. | N.A. |
| FRONT PORCH -TYP | Illuminance | Fc | 3.93 | 8.2 | 0.9 | 4.37 | 9.11 |
| PARKING LOT | Illuminance | Fc | 3.20 | 6.9 | 0.5 | 6.40 | 13.80 |
| REAR WALKWAY | Illuminance | Fc | 2.92 | 8.1 | 0.3 | 9.73 | 27.00 |
| UNDER DECK | Illuminance | Fc | 4.35 | 7.7 | 1.3 | 3.35 | 5.92 |

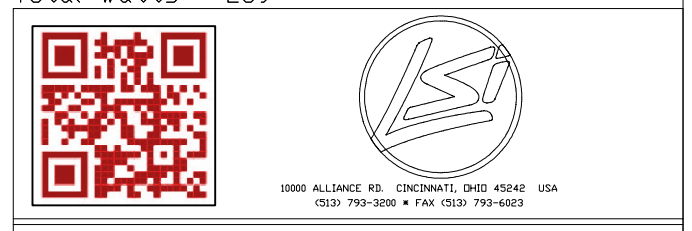
Luminaire Schedule

| Symbol | Qty | Label | Arrangement | Description | Mounting Height | LLD | LLF | Arr. Lum. Lumens | Arr. Watts |
|--------|-----|-------|-------------|--------------------------------------|-----------------|------|-------|------------------|------------|
| | 2 | A | Single | SLM-LED-09L-SIL-4-50-IH-70CRI-SINGLE | 15' | 1000 | 0.970 | 8146 | 63 |
| | 3 | W1 | Single | XWS-LED-03L-SIL-FT-50-70CRI | 7' | 1000 | 0.950 | 3012 | 19 |
| | 1 | W1a | Single | XWS-LED-03L-SIL-FT-50-70CRI | BELOW GRADE | 1000 | 0.950 | 3012 | 19 |
| | 1 | W1b | Single | XWS-LED-03L-SIL-FT-50-70CRI | FIRST FLOOR | 1000 | 0.950 | 3012 | 19 |
| | 1 | W1c | Single | XWS-LED-03L-SIL-FT-50-70CRI | SECOND FLOOR | 1000 | 0.950 | 3012 | 19 |
| | 1 | W1d | Single | XWS-LED-03L-SIL-FT-50-70CRI | THIRD FLOOR | 1000 | 0.950 | 3012 | 19 |

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine the applicability of the layout to existing or future field conditions.

This lighting plan represents illumination levels calculated from laboratory data taken under controlled conditions in accordance with The Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/LED's and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping, or any other architectural elements unless noted. Fixture nomenclature noted does not include mounting hardware or poles. This drawing is for photometric evaluation purposes only and should not be used as a construction document or as a final document for ordering product.

Total Project Watts
Total Watts = 259



LIGHTING PROPOSAL LD-159808

ALVARADO AVE - MULTI-FAMILY
103 ALVARADO AVE
WORCESTER, MA

BY:RJK DATE:03/18/24 REV: SHEET 1 OF 1

SCALE: 1"=10' 0 10