# MUNICIPAL PARKING LOT

MECHANIC STREET · SPENCER · MASSACHUSETTS 100% CONSTRUCTION DRAWINGS

MARCH 06, 2020

PREPARED FOR

# TOWN OF SPENCER

3 OLD MEADOW ROAD SPENCER, MA 01562



PROJECT TEAM

# SHEET INDEX

L1.00

C3.00

E1.10

E1.11

E3.00

C3.01-C3.08

SHEET No. SHEET TITLE

GI-001 COVER SHEET

CN1.00 CONSTRUCTION NOTES

C1.00 EXISTING CONDITIONS PLAN

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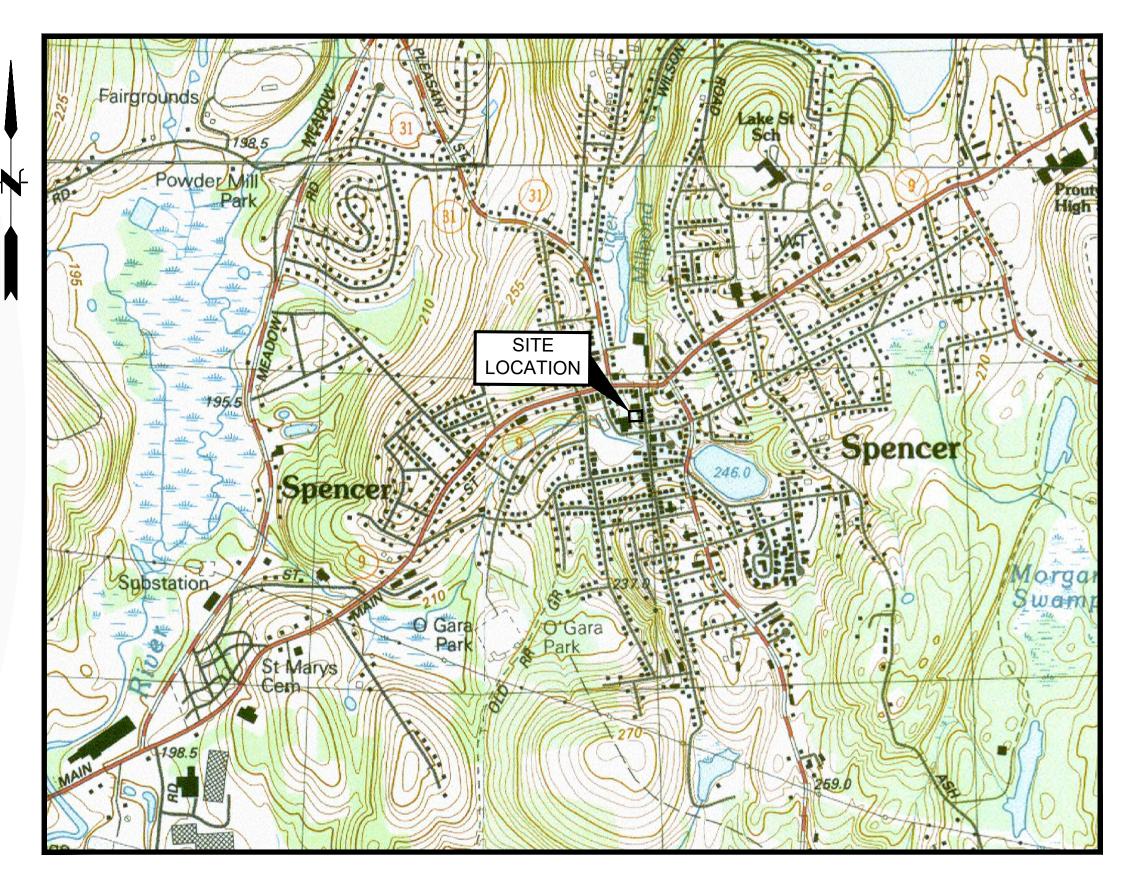
LANDSCAPE PLAN

SHERMAN AND FRYDRYK, LLC.

3 CONVERSE STREET, SUITE 203

PALMER, MA 01069

(413) 283-6210



LOCATION MAP

SCALE: 1" = 1000'



DATE: 03/06/2020

- 1. EXISTING CONDITIONS DEPICTED ON THIS PLAN ARE BASED ON A PLAN ENTITLED: EXISTING CONDITIONS - MECHANIC STREET. OCTOBER 17, 2019 PREPARED BY SHERMAN & FRYDRYK. LLC, REGISTERED PROFESSIONAL LAND SURVEYORS, 3 CONVERSE STREET, SUITE 203, PALMER MASSACHUSETTS.
- 2. GEOTECHNICAL DATA INCLUDING TEST PIT AND BORING LOCATIONS AND ELEVATIONS WERE OBTAINED BY FUSS & O'NEILL INC.

- 3. THIS PLAN IS BASED ON A FIELD SURVEY BY SHERMAN & FRYDRYK. LL REGISTERED PROFESSIONAL LAND SURVEYORS, 3 CONVERSE STREET, SUITE 203, PALMER MASSACHUSETTS.
- 4. HORIZONTAL DATUM IS NAD83. VERTICAL DATUM IS NAVD88. BOTH DATUMS WERE ESTABLISHED AT THIS SITE BY GPS METHODS FROMBY SHERMAN & FRYDRYK. LLC, REGISTERED PROFESSIONAL LAND SURVEYORS, 3 CONVERSE STREET, SUITE 203, PALMER MASSACHUSETTS.
- 5. PROPERTY LINES ARE BASED BY SHERMAN & FRYDRYK. LLC, REGISTERED PROFESSIONAL LAND SURVEYORS, 3 CONVERSE STREET, SUITE 203, PALMER MASSACHUSETTS PREVIOUS SURVEY BY THIS OFFICE.
- 6. LOCATIONS OF UTILITIES SHOWN HEREON ARE THE RESULT OF SURFACE EVIDENCE AS LOCATED BY FIELD SURVEY, PLANS OF RECORD, AND OTHER AVAILABLE SOURCES. THIS PLAN DOES NOT NECESSARILY DEPICT THE EXACT LOCATIONS OF ALL UTILITIES WHICH MAY EXIST AT THIS TIME WITHIN THE PREMISES SURVEYED.
- 7. THE CONTRACTOR SHOULD VERIFY THE EXISTING CONDITIONS TO THEIR SATISFACTION PRIOR TO BEGINNING ANY EXCAVATION. "DIG SAFE" SHALL BE NOTIFIED AT LEAST 72 HOURS PRIOR TO BEGINNING ANY WORK.

### GENERAL NOTES

- 8. DO NOT RELY SOLELY ON ELECTRONIC VERSIONS OF DRAWINGS, SPECIFICATIONS, AND DATA FILES THAT ARE PROVIDED BY THE ENGINEER. FIELD VERIFY LOCATION OF PROJECT FEATURES.
- 9. PERFORM NECESSARY CONSTRUCTION NOTIFICATIONS, APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK AS REQUIRED BY THE CONTRACT DOCUMENTS.
- 10. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS OF BUILDINGS AND ADJACENT SITE ELEMENTS INCLUDING SIDEWALKS, RAMPS, BUILDING ENTRANCES, STAIRWAYS, UTILITY PENETRATIONS, CONCRETE DOOR PADS, COMPACTOR PAD, LOADING DOCKS, BOLLARDS, ETC.
- 11. LOCATION OF UTILITIES SHOWN HERON ARE THE RESULT OF SURFACE EVIDENCE AS LOCATED BY FIELD SURVEY, PLANS OF RECORD, INFORMATION FURNISHED BY THE RESPECTIVE UTILITY COMPANIES AND OTHER AVAILABLE SOURCES. THIS PLAN DOES NOT NECESSARILY DEPICT THE EXACT LOCATION OF ALL UTILITIES WHICH MAY EXIST AT THIS TIME WITHIN THE PREMISES SURVEYED. LOCATIONS SHOULD BE VERIFIED BY THE RESPECTIVE UTILITY COMPANY BEFORE BEING RELIED UPON. ALL FIELD CHANGES MUST BE APPROVED BY THE ENGINEER.
- 12. LOCATION AND INVERTS OF EXISTING UTILITIES SHALL BE VERIFIED WITH THE ENGINEER PRIOR TO CONSTRUCTION. ALL FIELD CHANGES MUST BE APPROVED BY THE ENGINEER.
- 13. FUSS & O'NEILL MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA. FUSS & O'NEILL FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. FUSS & O'NEILL HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. BEFORE CONSTRUCTION THE CONTRACTOR SHALL CALL DIG SAFE FOR CLEARANCE.

## REGULATORY REQUIREMENTS

- 1. THE OWNER AND ENGINEER SHALL BE NOTIFIED 48 HOURS PRIOR TO
- 2. APPROVED PLANS SHALL BE ON SITE AT ALL TIMES.
- 3. WITHIN LOCAL RIGHTS-OF-WAY, PERFORM THE WORK IN ACCORDANCE WITH LOCAL MUNICIPAL STANDARDS.
- 4. WITHIN STATE RIGHTS-OF-WAY, PERFORM THE WORK IN ACCORDANCE WITH THE LATEST EDITION OF THE DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS AND ISSUED REVISIONS/SUPPLEMENTS.
- 5. PROVIDE TRAFFIC SIGNAGE AND PAVEMENT MARKINGS IN CONFORMANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 6. BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. PERFORM CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL
- 7. DISPOSE OF DEMOLITION DEBRIS IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND STATUTES.
- 8. CALL DIG-SAFE AT 811 OR 1-888-DIG-SAFE A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION.

- CALL DIG-SAFE 811 OR 1-888-DIG-SAFE A MINIMUM OF 72 HOURS PRIOR TO
- 2. STOP WORK IN THE VICINITY OF SUSPECTED CONTAMINATED SOIL, GROUNDWATER OR OTHER MEDIA. IMMEDIATELY NOTIFY THE OWNER SO THAT APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN. RESUME WORK IN THE IMMEDIATE VICINITY ONLY UPON DIRECTION BY THE OWNER.
- WITHIN THE LIMITS OF THE BUILDING FOOTPRINT, PERFORM EARTHWORK OPERATIONS TO SUBGRADE ELEVATIONS. SEE DRAWINGS BY OTHERS FOR WORK ABOVE SUBGRADE.
- CONTRACTOR SHALL PROTECT ALL SLOPES, VEGETATION, PAVING, WALKS, AND IMPROVEMENTS OUTSIDE THE AREAS TO BE AFFECTED BY THE CONSTRUCTION OF THIS PROJECT.
- REFER TO EROSION AND SEDIMENTATION CONTROL DETAILS FOR EROSION AND SEDIMENTATION CONTROL NOTES.
- 6. CATCH BASINS WITHIN THE WORK AREA OR DOWN STREAM OF DRAINAGE FLOW SHALL BE PROTECTED WITH CATCH BASIN SILT SACKS.
- 7. WATER AND CALCIUM CHLORIDE MUST BE AVAILABLE AT ALL TIMES FOR DUST CONTROL.

## <u>DEMOLITION</u>

- . REMOVE AND DISPOSE OF EXISTING UTILITIES, FOUNDATIONS AND UNSUITABLE MATERIAL BENEATH AND FOR A DISTANCE OF 10 FEET BEYOND THE PROPOSED BUILDING FOOTPRINT INCLUDING EXTERIOR COLUMNS, UNLESS OTHERWISE NOTED.
- 2. THE DEMOLITION PLAN IS PROVIDED FOR INFORMATION ONLY AND MAY NOT INDICATE ALL ITEMS REQUIRED TO BE DEMOLISHED. PERFORM A PRE-BID SITE INSPECTION. COORDINATE DEMOLITION OF UNIDENTIFIED UTILITIES OR STRUCTURES WITH OWNER. DEMOLISH STRUCTURES, SITE IMPROVEMENTS, UTILITIES, ETC. AS REQUIRED TO CONSTRUCT PROPOSED FACILITY AND UTILITY SERVICES.
- 3. TREES, BRUSH AND STUMPS REMOVED BY CLEARING & GRUBBING OPERATIONS SHALL BE TRANSPORTED OFF THE PROJECT SITE TO AN APPROVED DISPOSAL
- 4. ITEMS TO BE STOCKPILED ON-SITE FOR REUSE OR TO BE RELOCATED SHALL BE PROTECTED FROM CONSTRUCTION OPERATIONS. IF DAMAGED DURING CONSTRUCTION THEY SHALL BE REPLACED IN-KIND AT NO ADDITIONAL COST TO THE OWNER.

## SITE LAYOUT NOTES:

- PROVIDE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED SITE IMPROVEMENTS. FIELD VERIFY EXISTING PAVEMENT AND GROUND ELEVATIONS AT THE INTERFACE WITH PROPOSED PAVEMENTS AND DRAINAGE STRUCTURES BEFORE START OF CONSTRUCTION.
- PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, FIELD VERIFY PROPOSED UTILITY ROUTES AND IDENTIFY ANY INTERFERENCES OR OBSTRUCTIONS WITH EXISTING UTILITIES OR PUBLIC RIGHTS-OF-WAY.
- 3. IMMEDIATELY INFORM THE ENGINEER IN WRITING IF EXISTING UTILITY CONDITIONS CONFLICT OR DIFFER FROM THAT INDICATED AND IF THE WORK CANNOT BE COMPLETED AS INDICATED.
- DIMENSIONS ARE FROM FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS NOTED OTHERWISE.
- BOUNDS OR MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR
- RESET BY A PROFESSIONAL LICENSED SURVEYOR. 6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND SAFETY OF TRAFFIC ON THE PUBLIC AND PRIVATE WAYS AFFECTED BY THE CONSTRUCTION OF

## <u>PAVEMENT</u>

. CONSTRUCT ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS AND WALKWAYS IN CONFORMANCE WITH THE FEDERAL AMERICANS WITH DISABILITIES ACT AND WITH MASSACHUSETTS ARCHITECTURAL ACCESS BOARD AND LOCAL LAWS AND REGULATIONS (WHICHEVER ARE MORE STRINGENT).

## SITE RESTORATION

THIS PROJECT.

- 2. PROVIDE 6 INCHES OF TOPSOIL AND SEED TO AREAS DISTURBED DURING CONSTRUCTION AND NOT DESIGNATED TO BE RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.).
- 3. REPAIR DAMAGES RESULTING FROM CONSTRUCTION LOADS, AT NO ADDITIONAL COST TO OWNER.
- . RESTORE AREAS DISTURBED BY CONSTRUCTION OPERATIONS OUTSIDE OF THE WORK AREA TO THEIR ORIGINAL CONDITION OR BETTER, AT NO ADDITIONAL COST TO

# TY/GRADING NOTES:

- 1. TERMINATE EXISTING UTILITIES IN CONFORMANCE WITH LOCAL, STATE AND INDIVIDUAL UTILITY COMPANY STANDARD SPECIFICATIONS AND DETAILS. COORDINATE UTILITY SERVICE DISCONNECTS WITH UTILITY REPRESENTATIVES.
- 2. THE TYPE, SIZE AND LOCATION OF DEPICTED UNDERGROUND UTILITIES ARE APPROXIMATE REPRESENTATIONS OF INFORMATION OBTAINED FROM FIELD LOCATIONS OF VISIBLE FEATURES, EXISTING MAPS AND PLANS OF RECORD, UTILITY MAPPING, AND OTHER SOURCES OF INFORMATION OBTAINED BY THE ENGINEER. ASSUME NO GUARANTEE AS TO THE COMPLETENESS, SERVICEABILITY, EXISTENCE, OR ACCURACY OF UNDERGROUND FACILITIES. FIELD VERIFY THE EXACT LOCATIONS. SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES.
- 3. PAY ALL FEES AND COSTS ASSOCIATED WITH UTILITY MODIFICATIONS AND CONNECTIONS, REGARDLESS OF THE ENTITY THAT PERFORMS THE WORK.
- 4. COORDINATE THE WORK AND WORK SCHEDULE WITH UTILITY COMPANIES. PROVIDE ADEQUATE NOTICE TO UTILITIES TO PREVENT DELAYS IN CONSTRUCTION.
- 5. INSTALL PROPOSED PRIVATE UTILITY SERVICES ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY THE AUTHORITY HAVING JURISDICTION (WATER, SEWER. GAS. TELEPHONE. ELECTRIC, FIRE ALARM, ETC.). COORDINATE FINAL DESIGN LOADS AND LOCATIONS WITH OWNER AND ARCHITECT.
- 6. REMOVAL OF OVERHEAD WIRE AND POLES SHALL BE COORDINATED BY THE

7. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF DRAINAGE AND

- UTILITIES WITHIN 10 FEET OF BUILDING FOOTPRINT.
- 8. NOTIFY ABUTTING PROPERTY OWNERS AND THE TOWN OF SPENCER 24 HOURS PRIOR TO DISRUPTION OF UTILITY SERVICE.
- 9. ALL WATER SERVICE AND SEWER SERVICE CONNECTIONS SHALL BE COORDINATED WITH THE TOWN OF SPENCER DPW AND WATER DEPARTMENT.

# PLANTING NOTES:

- 1. ALL PLANTING MATERIAL TO BE NURSERY GROWN STOCK SUBJECT TO A.A.N.
- 2. THE CONTRACTOR SHALL SUPPLY ALL PLANTS IN QUANTITIES SUFFICIENT TO COMPLETE THE WORK SHOWN ON THE DRAWINGS AND LISTED IN THE PLANT LIST. IN THE EVENT OF A DISCREPANCY BETWEEN QUANTITIES SHOWN IN THE PLANT LIST AND THOSE REQUIRED BY THE DRAWINGS, THE LARGER NUMBER SHALL
- 3. ALL PLANTS SHALL BE APPROVED PRIOR TO INSTALLATION AND SHALL BE LOCATED ON SITE BY THE CONTRACTOR FOR THE APPROVAL OF THE LANDSCAPE ARCHITECT. ANY INSTALLATIONS WHICH WERE NOT APPROVED BY THE LANDSCAPE ARCHITECT AND WHICH ARE SUBSEQUENTLY REQUESTED TO BE MOVED WILL BE DONE AT THE CONTRACTORS EXPENSE.
- 4. PRECISE LOCATION OF ITEMS NOT DIMENSIONED ON THE PLAN ARE TO BE FIELD STAKED BY THE CONTRACTOR AND SHALL BE SUBJECT TO THE REQUIREMENTS SPECIFIED IN THE PREVIOUS NOTE.
- 5. ALL SHRUB MASSINGS AND TREE PITS SHALL BE MULCHED TO A DEPTH OF 3" WITH SHREDDED CEDAR BARK MULCH.
- 6. TREES SHALL NOT BE STAKED UNLESS OTHERWISE NOTED.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGED VEGETATION AND SHALL REPLACE OR REPAIR ANY DAMAGED MATERIAL, AT HIS OWN EXPENSE. THE CONTRACTOR SHALL CONTACT DIG-SAFE 811 OR 1-888-DIG-SAFE A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION.
- 8. ALL SHRUB AND GROUNDCOVER PLANTING AREAS SHALL HAVE CONTINUOUS BEDS OF TOPSOIL 12" DEEP. ALL SOD AND HYDROSEED AREAS SHALL HAVE A MINIMUM TOPSOIL BED OF 6".
- 9. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES IN THE FIELD. WHERE PLANT MATERIAL MAY INTERFERE WITH UTILITIES. THE CONTRACTOR SHALL
- NOTIFY THE LANDSCAPE ARCHITECT TO COORDINATE THEIR INSTALLATION. 10. FOR PLANTING SOIL MIX, SEE SPECIFICATIONS OR PLANTING DETAILS.
- 11. ALL EXISTING RILL, GULLY OR CHANNEL EROSION SHALL BE FILLED WITH APPROPRIATE BACKFILL MATERIAL, FINE RAKED, SCARIFIED AND STABILIZED WITH APPROPRIATE VEGETATIVE MATERIAL AND / OR APPROPRIATE SEDIMENTATION AND EROSION CONTROL MEASURES.
- 12. ADJUSTMENTS IN THE LOCATION OF THE PROPOSED PLANT MATERIAL AS A RESULT OF EXISTING VEGETATION TO REMAIN SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- 13. THE CONTRACTOR IS RESPONSIBLE FOR ALL MAINTENANCE REPAIR AND REPLACEMENT OF PLANT MATERIAL, AS REQUIRED, FOR THE DURATION OF THE PROJECT AND SUBSEQUENT WARRANTY PERIOD.
- 14. PLANTINGS INSTALLED IN THE DRY SUMMER MONTHS AND / OR LAWN SEEDED OUT OF SPRING OR FALL PERIODS, IF ALLOWED BY OWNER, WILL REQUIRE AGGRESSIVE IRRIGATION PROGRAMS AT THE CONTRACTOR'S EXPENSE, UNLESS OTHERWISE DIRECTED BY THE OWNER.
- 15. UPON COMPLETION OF PLANTING, REMOVE FROM SITE ALL EXCESS SOIL, MULCH, AND MATERIALS AND DEBRIS RESULTING FROM WORK OPERATIONS. CLEAN UP SHOULD BE COMPLETED AT THE END OF EACH WORKING DAY. RESTORE TO ORIGINAL CONDITIONS ALL DAMAGED PAVEMENTS, PLANTING AREAS, STRUCTURES AND LAWN AREAS RESULTING FROM LANDSCAPING OPERATIONS.
- 16. CONTRACTOR SHALL SURVEY, LOCATE, AND PROTECT ALL TREES WITHIN AREAS SHOWN AS "EXISTING VEGETATION TO REMAIN" WITHIN THE DEVELOPMENT ENVELOPE FOR REVIEW BY L.A. PRIOR TO CLEARING OPERATIONS.
- 17. 17. CONTRACTOR TO RESEED ALL DISTURBED AREAS.

### **EROSION & SEDIMENT CONTROL NOTES**

- 1. EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED PRIOR TO STUMP REMOVAL AND CONSTRUCTION. STABILIZATION OF ALL REGRADED AND SOIL STOCKPILE AREAS WILL BE INITIATED AND MAINTAINED DURING ALL PHASES OF
- 2. SEDIMENT REMOVED FROM EROSION CONTROL STRUCTURES WILL BE DISPOSED OF IN A MANNER WHICH IS CONSISTENT WITH THE INTENT OF THIS PLAN. ALL STRAW BALES OR SILT FENCE RETAINING SEDIMENT OVER 6" HIGH SHALL HAVE THE SEDIMENT REMOVED AND ALL DAMAGED EROSION CONTROLS REMOVED AND
- 3. THE CONTRACTOR WILL BE ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS EROSION AND SEDIMENT CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN, AND NOTIFYING THE PROPER CITY AGENCY OF ANY TRANSFER OF THIS RESPONSIBILITY. THE OWNER SHALL BE RESPONSIBLE FOR CONVEYING A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN IF THE TITLE TO THE LAND IS
- THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST AND WIND EROSION THROUGHOUT THE LIFE OF HIS CONTRACT. DUST CONTROL SHALL INCLUDE, BUT IS $_{
  m 6.}$ NOT LIMITED TO, SPRINKLING OF WATER ON EXPOSED SOILS AND HAUL ROADS. CONTRACTOR SHALL CONTROL DUST TO PREVENT A HAZARD TO TRAFFIC ON ADJACENT ROADWAYS.
- 5. IF FINAL GRADING IS TO BE DELAYED FOR MORE THAN THIRTY (30) DAYS AFTER LAND DISTURBANCES CEASE, TEMPORARY VEGETATION OR MULCH SHALL BE USED TO STABILIZE SOILS. OUTSIDE OF THE GROWING SEASON, ONLY WOOD MULCH SHALL BE USED.
- 6. STRAW BALES SHALL BE USED ONLY AS A TEMPORARY MEASURE. WHERE CONTROL MEASURES WILL BE REQUIRED FOR LONGER THAN SIXTY (60) DAYS, FILTER FABRIC SHALL BE USED.
- . WHERE DEWATERING IS NECESSARY. THERE SHALL NOT BE A DISCHARGE DIRECTLY INTO WETLANDS OR WATERCOURSES. PROPER METHODS AND DEVICES SHALL BE 2. UTILIZED TO THE EXTENT PERMITTED BY LAW, SUCH AS PUMPING WATER INTO A TEMPORARY SEDIMENTATION BASIN. PROVIDING SURGE PROTECTION AT THE INLET AND THE OUTLET OF PUMPS, FLOATING THE INTAKE OF THE PUMP, OR OTHER METHODS TO MINIMIZE AND RETAIN THE SUSPENDED SOLIDS. IF A PUMPING OPERATION IS CAUSING TURBIDITY PROBLEMS, SAID OPERATION SHALL CEASE UNTIL SUCH TIME AS FEASIBLE MEANS OF CONTROLLING TURBIDITY ARE DETERMINED AND 4. IMPLEMENTED. THE CONTRACTOR MUST SUBMIT HIS DESIGN ALONG WITH THE LOCATIONS OF THE BASIN TO THE TOWN PRIOR TO CONSTRUCTION.
- 8. INSPECTION A CERTIFIED PROFESSIONAL EROSION AND SEDIMENT CONTROL PERSONAL OR ENGINEER SHALL INSPECT ALL DISTURBED AREAS OF THE CONSTRUCTION ACTIVITY THAT HAVE NOT BEEN FINALLY STABILIZED, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AT LEAST ONCE EVERY WEEK AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCH OR GREATER. INSPECTION REPORTS SHALL BE SUBMITTED TO THE OWNER WEEKLY. WHERE SITES HAVE BEEN FINALLY STABILIZED, SUCH INSPECTION SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH FOR THREE MONTHS. CONTROLS SHALL BE CLEANED, REPAIRED, AND OR REPLACED AS REQUIRED. ANY DAMAGED CONTROLS SHALL BE REPAIRED IMMEDIATELY.
- 9. PERFORM CONSTRUCTION SEQUENCING IN SUCH A MANNER TO CONTROL EROSION AND TO MINIMIZE THE TIME THAT EARTH MATERIALS ARE EXPOSED BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED.

### OPERATION & MAINTENANCE PLAN DURING CONSTRUCTION

- 10. AN OPERATION AND MAINTENANCE (O&M) PLAN DURING CONSTRUCTION FOR
- STORMWATER CONTROLS IS DESCRIBED AS FOLLOWS: 11. OWNER SHALL BE RESPONSIBLE FOR ALL OPERATION AND MAINTENANCE OF
- 12. NO EARTHWORK ACTIVITIES SHALL COMMENCE UNTIL SILT FENCE HAS BEEN INSTALLED. SILT FENCE SHALL BE INSTALLED AS SHOWN ON THE DRAWINGS
- 13. AREAS LEFT EXPOSED TO FROSION FOR MORE THAN SEVEN DAYS SHALL BE
- FOR MORE THAN THIRTY DAYS SHALL BE TEMPORARILY SEEDED. 14. EROSION AND SEDIMENTATION CONTROLS SHALL BE MAINTAINED UNTIL SUCCESSFUL THE FLOOR SLAB UNLESS TOP AND BOTTOM REINFORCEMENT IS SPECIFIED. ESTABLISHMENT OF GROUND COVER.
- 15. NO STAGING OF MATERIALS OR LAY DOWN AREAS SHALL BE LOCATED WITHIN THE ANY RESOURCE AREA.
- 16. PAVED AREAS SHALL BE KEPT FREE OF SEDIMENT, AND SHALL BE CLEANED PERIODICALLY AS REQUIRED BY CONSTRUCTION ACTIVITIES. 17. CATCH BASINS SHALL BE PERIODICALLY INSPECTED FOR THE ACCUMULATION OF SEDIMENT. ALL CATCH BASINS WITHIN THE PROJECT SHALL BE CLEANED AT THE
- END OF THE PROJECT. 18. TEMPORARY SOIL STOCKPILES SHALL BE LOCATED WITHIN AREAS CONSISTING OF TO ACCOMMODATE ONGOING WORK.
- 19. SEDIMENT STOCKPILES SHALL HAVE A SIDE SLOPE OF NO GREATER THAN 2:1. ALL 16. ENGINEER TO APPROVE SUBGRADES PRIOR TO SLAB INSTALLATION. STOCKPILES SHALL BE ROUGH GRADED OR MAINTAIN A ROUGHENED SURFACE TO PREVENT EROSION. STOCKPILES THAT ARE NOT TO BE USED WITHIN 7 DAYS SHALL 17. CONTROL JOINTS AROUND ALL SLAB PENETRATIONS SHOULD BE SAWCUT BE SEEDED AFTER FORMATION OF STOCKPILE AS TO PREVENT EROSION, straw BALE BARRIER AND SILT FENCE SHALL BE INSTALLED AROUND STOCKPILE AREA APPROXIMATELY 10 FEET FROM TOE OF SLOPE.
- 20. THE CONTRACTOR IS RESPONSIBLE TO INSPECT AND REPAIR EROSION AND SEDIMENTATION CONTROL MEASURES AS REQUIRED TO PREVENT DAMAGE OR
- 21. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, REMOVE AND DISPOSE OF TEMPORARY EROSION CONTROL MEASURES. CLEAN SEDIMENT AND DEBRIS FROM TEMPORARY MEASURES AND FROM PERMANENT STORM DRAIN AND SANITARY SEWER SYSTEMS.

OPERATION & MAINTENANCE PLAN POST CONSTRUCTION

SUGGESTED OPERATION AND MAINTENANCE ACTIVITIES AND PROPOSED SCHEDULE AFTER CONSTRUCTION AS FOLLOWS:

- 1. SITE OWNER WILL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE SITE AFTER CONSTRUCTION IS COMPLETED.
- THE STORMWATER COLLECTION SYSTEMS WILL BE INSPECTED A MINIMUM OF FOUR (4) TIMES PER YEAR TO MAINTAIN PROPER OPERATION. SEDIMENT AND DEBRIS HALL BE REMOVED FROM STRUCTURES AND PIPES. ALL SEDIMENTATION WILL BE REMOVED FROM EACH DEEP SUMP CATCH BASIN A MINIMUM OF FOUR (4) TIMES A YEAR OR WHENEVER THE DEPTH OF DEPOSITS IS GREATER THAN OR EQUAL TO ONE HALF THE DEPTH FROM THE BOTTOM OF THE INVERT OF THE LOWEST PIPE. DEEP SUMP CATCH BASINS SHALL BE CLEANED AT THE END OF THE FOLIAGE AND SNOW REMOVAL SEASONS.
- 3. PAVED SURFACES WILL BE SWEPT TWICE ANNUALLY, APRIL AND OCTOBER, TO REMOVE SAND AND DEBRIS FOLLOWING WINTER MONTHS.
- INSTALLATION AND MAINTENANCE OF CONTROL MEASURES, INFORMING ALL PARTIES 4. AT LEAST TWICE PER YEAR, DURING THE SPRING (APRIL) AND FALL (NOVEMBER), OUTLET STRUCTURES WILL BE EXAMINED AND CLEANED, AND ALL FLOATABLES AND SOLIDS TRAPPED WILL BE REMOVED.
  - STORMWATER STRUCTURES AND PIPES WILL BE INSPECTED EACH SPRING (APRIL) AND FALL (NOVEMBER) FOR ACCUMULATION OF SEDIMENT AND DEBRIS. CLEAN AS
  - VORTECHNICS STORMWATER TREATMENT SYSTEM SHALL BE INSPECTED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
  - STORMCEPTOR WATER QUALITY UNITS SHALL BE INSPECTED EVERY SIX MONTHS FOR THE FIRST YEAR TO DETERMINE THE OIL AND SEDIMENT ACCUMULATION RATE AND AN INSPECTED BASED FOR SUBSEQUENT YEARS BASED ON THE FIRST-YEAR OBSERVATIONS OR LOCAL REQUIREMENTS. CLEANING IS REQUIRED ONCE SEDIMENT DEPTH REACHES 15% OF STORAGE CAPACITY OR AS REQUIRED BY LOCAL BYLAWS.

## **EXTERIOR CONCRETE NOTES:**

DAYS, UNLESS OTHERWISE NOTED.

ALL WORK TO BE PERFORMED IN ACCORDANCE WITH THE MASSACHUSETTS STATE BUILDING CODE 9TH EDITION AND ALL LOCAL REQUIREMENTS. DIMENSIONS AND CONDITIONS SHALL BE VERIFIED IN FIELD PRIOR TO THE

COMMENCEMENT OF WORK. ALL CONCRETE SHALL HAVE A DESIGN STRENGTH OF 4000 PSI AT 28

REINFORCING RODS SHALL BE ASTM A615, GRADE 60 EXCEPT WHERE FIELD BENDING IS REQUIRED, GRADE 40.

WELDED WIRE MESH SHALL BE ASTM A185. ALL WELDED WIRE MESH SHALL BE IN SHEET FORM.

PROVIDE SAW CUT EXPANSION/CONTROL JOINTS AT AREAS NOTED. ALL SAW CUT EXPANSION JOINTS SHALL BE A MINIMUM OF 1/4 OF THE SLAB THICKNESS AND A MAXIMUM OF 1/3 OF THE SLAB THICKNESS. JOINTS MUST BE CUT WITHIN 24 HOURS OF CONCRETE PLACEMENT.

JOINTS MUST BE SPACED IN ACCORDANCE WITH ACI-318 AND THE FOLLOWING RECOMMENDATIONS:

4" THICK SLAB-15'X15' < 250 SQ FT

5" THICK SLAB-18'X18' < 325 SQ FT 6" THICK SLAB-20'X20' < 400 SQ FT 8" THICK SLAB-25'X25' < 500 SQ FT

8. ALL CONCRETE SHALL BE MIXED AND PLACED IN ACCORDANCE WITH THE ACI "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI-318-89

CONCRETE CONTRACTOR SHALL INSTALL CHASES THROUGH THE FOUNDATION WALLS AS DIRECTED BY THE GENERAL CONTRACTOR.

10. EXTERIOR CONCRETE SLABS TO HAVE A LIGHT BROOM FINISH. CONCRETE SLABS TO RECEIVE (1) COAT OF CLEAR SEALER/HARDENER EXCEPT AS NOTED.

11. ALL REINFORCING BARS TO HAVE MINIMUM 2" COVERAGE.

ROUGH GRADED AND TEMPORARILY STABILIZED. AREAS DISTURBED BUT INACTIVE 12. ALL CONCRETE TO BE POURED WITH A MAXIMUM 4" SLUMP. 13. FLOOR SLAB REINFORCING MUST BE LOCATED AT OR ABOVE MID DEPTH OF

SHEETS ARE TO BE USED IN ALL WELDED WIRE MESH APPLICATIONS. WELDED

WIRE MESH TO BE PLACED WITH CHAIRS OR BOLSTERS ONLY. 14. POURING CONCRETE FLOORS IN A CHECKERBOARD PATTERN IS NOT

APPROVED OR RECOMMENDED BY ACI.

15. SEPARATE POURS MUST HAVE SMOOTH DOWELS (WRAPPED OR GREASED). DOWEL SIZES SHALL BE AS FOLLOWS:

4" THICK SLAB 1/2"X12" LONG 18" O.C. 5" THICK SLAB 1/2"x12" LONG 18" O.C.

6" THICK SLAB 3/4"x16" LONG 18" O.C.

8" THICK SLAB 3/4"x18" LONG 18" O.C. FORMERLY PAVED OR DEVELOPED SURFACES, AND WILL BE MOVED AS NECESSARY BOND BREAKER COMPOUND TO BE PAINTED ON PRIOR TO POURING ADJACENT

> THE FULL DEPTH OF THE SLAB OR BE DONE AS A CONSTRUCTION JOINT (POURED SEPARATELY).

18. ALL JOINTS SHALL BE FILLED AND SEALED.

AAAAAA DANIEL F. DELANY

STRUCTURE TABLE SMH 1 RIM=808.51 INV. IN=798.91 INV. OUT=798.91 CB 2 RIM=797.20 INV. OUT=794.80 CB 3 RIM=796.82 INV. IN=793.92 INV. OUT=792.02 SMH 4 RIM=796.46 INV. IN (NE)=789.16 INV. IN (SE)=789.26 INV. OUT=789.06

## LEGEND

	LLOLIAD	
S	SANITARY SEWER MANHOLE	CONTOUR (INDEX
<b>(</b>	STORM DRAIN MANHOLE	CONTOUR (INTER
	CATCH BASIN	SANITARY SEWE
①	TELECOMM MANHOLE	STORM DRAIN
$\mathcal{O} \longrightarrow$	UTILITY POLE W/GUY	GAS LINE
0	UTILITY POLE	CURB OR BERM
•G.G.	GAS GATE	EDGE OF PAVEN
•W.G.	WATER GATE	PROPERTY LINE
<del>-0-</del>	SIGN	ABUTTER LINE
0	FD FOUND IP IRON PIPE	
0	RB REINFORCING BAR	
	DH DRILL HOLE IB IRON BAR	
•	1 mm 1 1 1 mm 1 2 mm 1 3 1 3	

ONTOUR (INDEX) CONTOUR (INTERMEDIATE) the second section with the second section of the section of ANITARY SEWER TORM DRAIN AS LINE CURB OR BERM (AS NOTED) DGE OF PAVEMENT ROPERTY LINE

# NOTES:

- 1. THIS PLAN IS BASED ON A FIELD SURVEY BY THIS OFFICE DATED 09/19/2019.
- 2. HORIZONTAL DATUM IS NAD83. VERTICAL DATUM IS NAVD88. BOTH DATUMS WERE ESTABLISHED AT THIS SITE BY GPS METHODS FROM A PREVIOUS SURVEY DONE BY THIS OFFICE.
- 3. PROPERTY LINES ARE BASED OFF OF A PREVIOUS SURVEY BY THIS
- 4. LOCATIONS OF UTILITIES SHOWN HEREON ARE THE RESULT OF SURFACE EVIDENCE AS LOCATED BY FIELD SURVEY, PLANS OF RECORD, AND OTHER AVAILABLE SOURCES. THIS PLAN DOES NOT NECESSARILY DEPICT THE EXACT LOCATIONS OF ALL UTILITIES WHICH MAY EXIST AT THIS TIME WITHIN THE PREMISES SURVEYED.
- 5. THE CONTRACTOR SHOULD VERIFY THE EXISTING CONDITIONS TO HIS SATISFACTION PRIOR TO BEGINNING ANY EXCAVATION. "DIG SAFE" SHALL BE NOTIFIED AT LEAST 72 HOURS PRIOR TO BEGINNING ANY



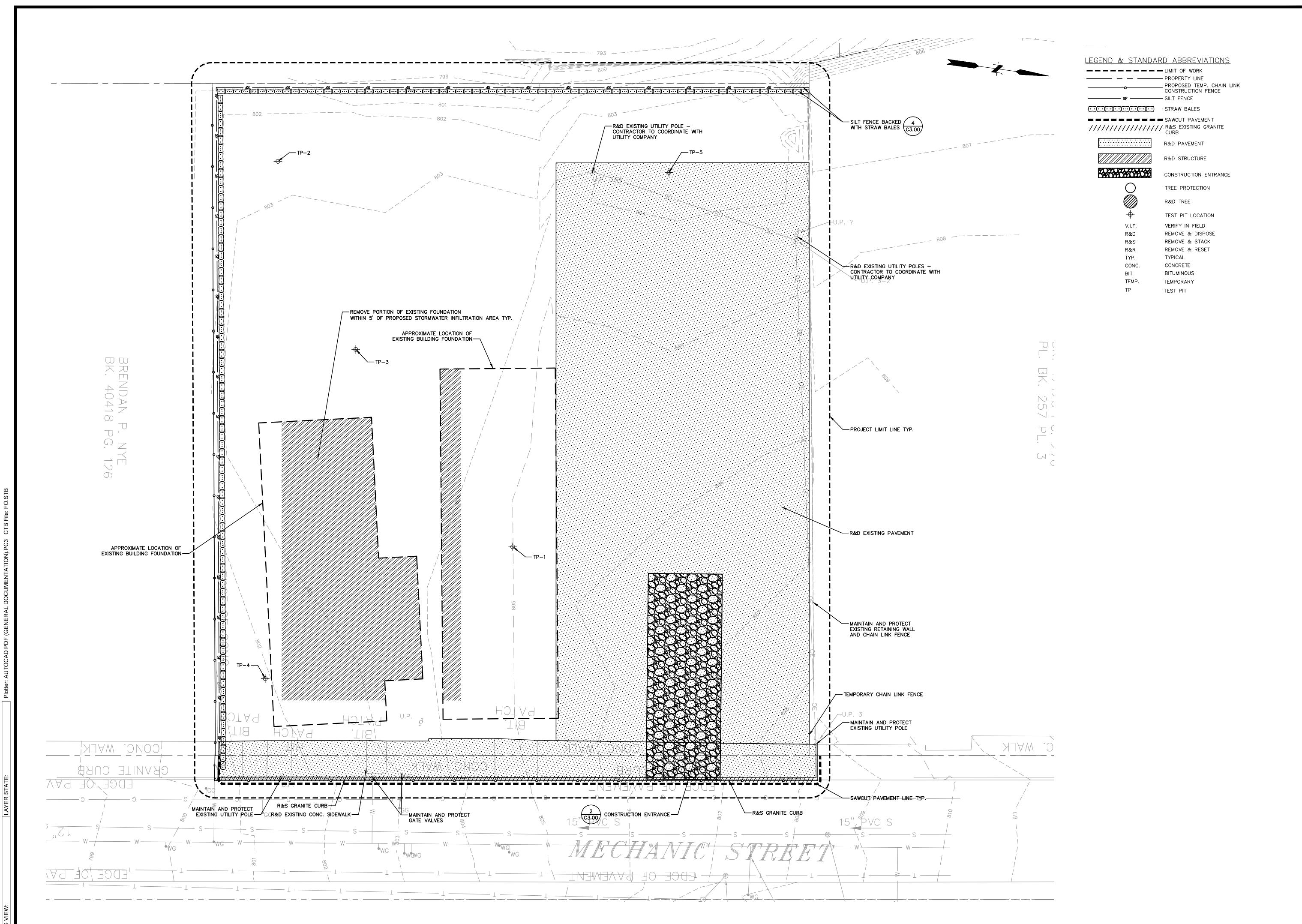
NO.	DATE	BY	REVISIONS	
1	2/18/20	DJF	ADD BEARINGS & DISTANCES	SHERMAN & FRYDRYK, LLC
				Land Surveying and Engineering
				3 Converse Street, Suite 203
		1.1		o converse server, serve 200 june
				Palmer, MA 01069

FIELD WORK: PWS/BJP	THOF MASO
COMPS: JMN	DONALD
DRAFTING: JMN	FRYDRYK # 41606
CHECKED: DJF	TO FESSION TO THE STATE OF THE
APPROVED: DJF	Danie Jake 1

VERT: N/A DATE: <u>02/18/2020</u>

MECHANIC STREET

SPENCER, MA PREPARED FOR FUSS & O'NEILL, INC. SHEET NUMBER C1.00



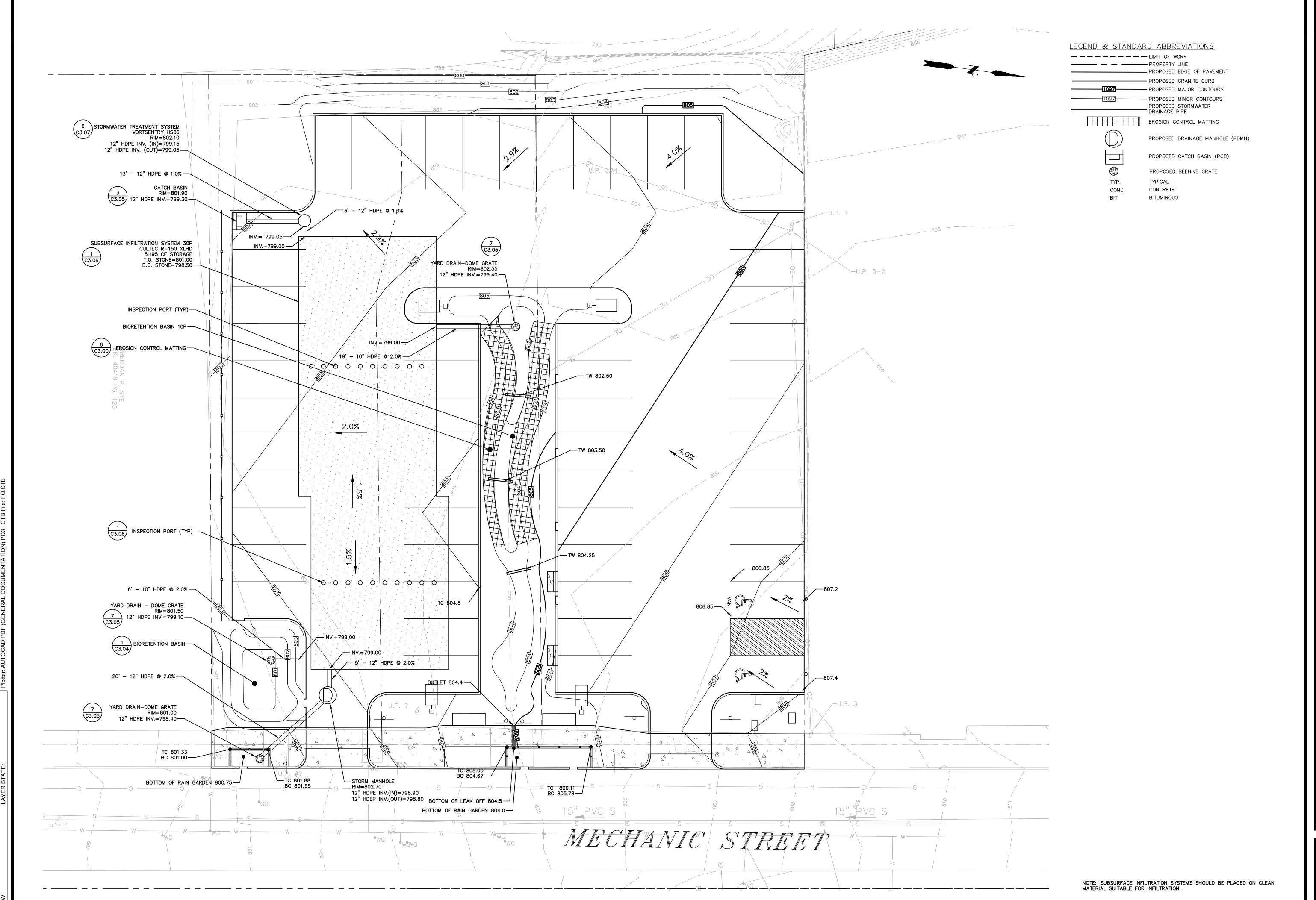
PROJ. No.: 20170390.D51 DATE: 03/06/2020

C1.10

NEILL &07 FUSS MUNICIPAL PARKING LOT & GREEN INFRASTRUCTURE PROJECT AYOUT PLAN

> PROJ. No.: 20170390.D51 DATE: 03/06/2020

> > C1.20

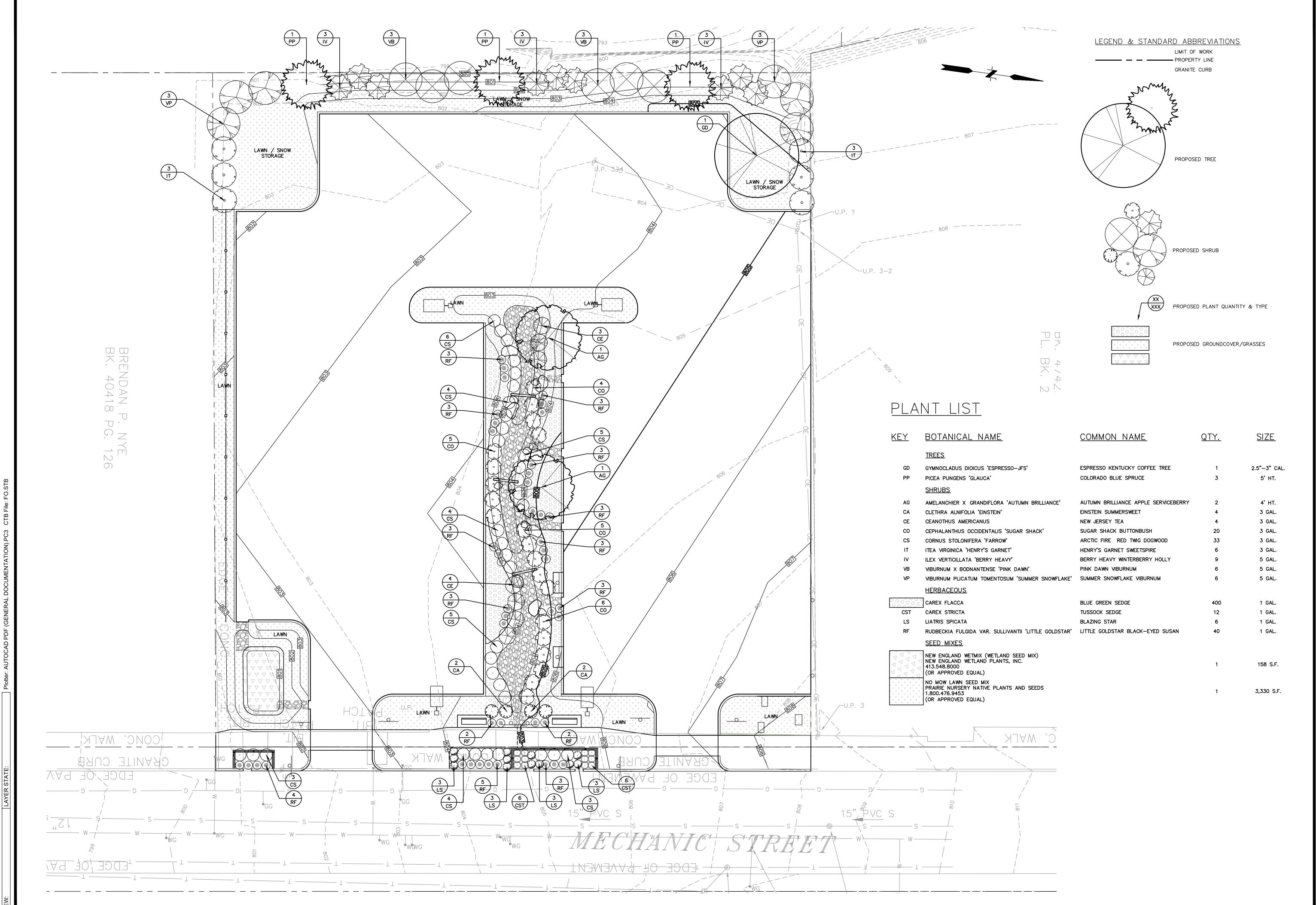


NEILL FUSS&O']

> TE GRADING AND DRAINAGE PLAI MUNICIPAL PARKING LOT & GREEN

PROJ. No.: 20170390.D51 DATE: 03/06/2020

C1.30



FUSS & O'NEILL

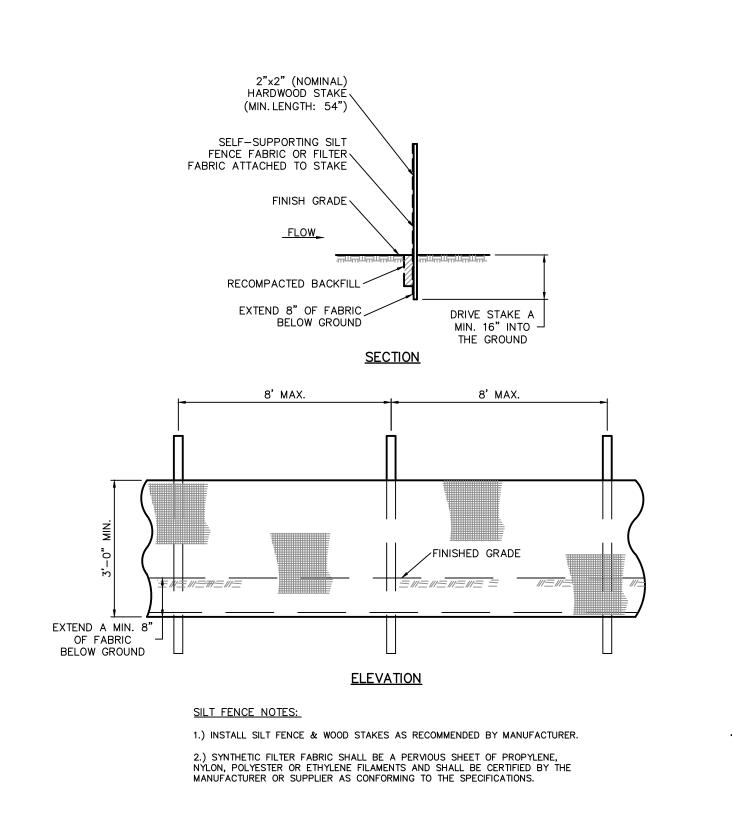
1550 MAIN STREET, SUITE 400
SPRINGFIELD, MA 01103
413.452.0445

FU 150 M Subsequence

SITE LANDSCAPE PLAN
MUNICIPAL PARKING LOT & GREEN
INFRASTRUCTURE PROJECT

PROJ. No.: 20170390.D51 DATE: 03/06/2020

L1.00



SILT FENCE

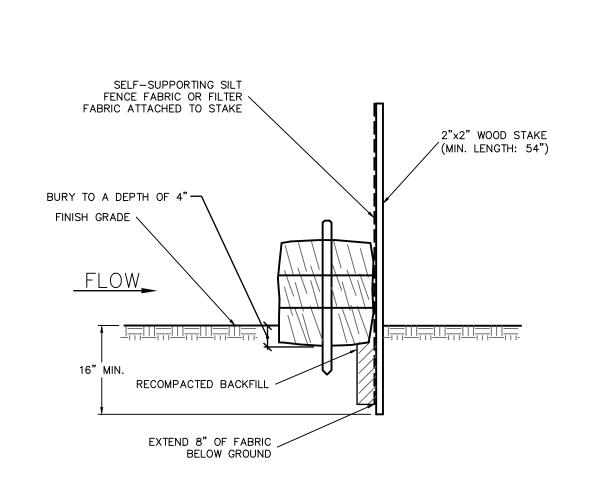
SCALE: N.T.S.

/GRADE 6" OF 2" WASHED STONE FILTER FABRIC <u>SECTION</u> CONSTRUCTION ENTRANCE \ NOTES: 1.) MAINTAIN ANTI-TRACKING APRON IN GOOD CONDITION THROUGHOUT CONSTRUCTION PERIOD. SEE NOTE ADJACENT ROADWAY SHALL BE SWEPT DAILY TO REMOVE ANY MATERIAL THAT MAY BE TRACKED ONTO PAVEMENT. 3.) WIDTH OF APRON SHALL NOT BE LESS THAN WIDTH OF INGRESS OR EGRESS. EXISTING EDGE OF PAVEMENT LOCATION PLAN

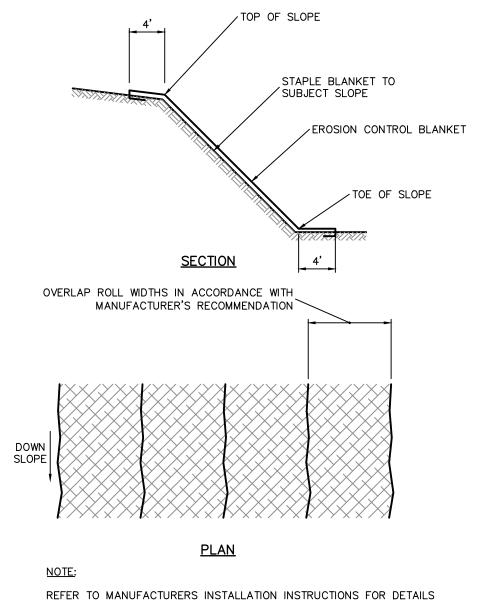
- 1. SIZED TO FIT ANY SIZE OR SHAPE CATCH BASIN.
- ALL SEAMS DOUBLE STITCHED.
- 3. PERMEABILITY REGULAR FLOW SILTSACK 40 gal./min./sq. ft. HI FLOW SILTSACK 200 gal./min./sq. ft.

CONSTRUCTION ENTRANCE

CATCH BASIN SILT SACK



CONTAIN AREA WITH STRAW BALES & SILT FENCE SF SF SF SF APPROXIMATE LIMIT OF TEMPORARY / STOCKPILE NOTE: STOCKPILES SHALL BE LOCATED WITHIN CONSTRUCTION FENCE LIMITS



REFER TO MANUFACTURERS INSTALLATION INSTRUCTIONS FOR DETAILS ON INSTALLATION INCLUDING STAPLING PATTERN, OVERLAPPING DETAILS, EDGE EMBEDMENT, AND ANCHOR DETAILS. TO BE INSTALLED ON SLOPES 3:1 OR GREATER.

SILT FENCE BACKED W/ STRAW BALES

TEMPORARY SOIL STOCKPILE SCALE: N.T.S.

EROSION CONTROL BLANKET SCALE: N.T.S.

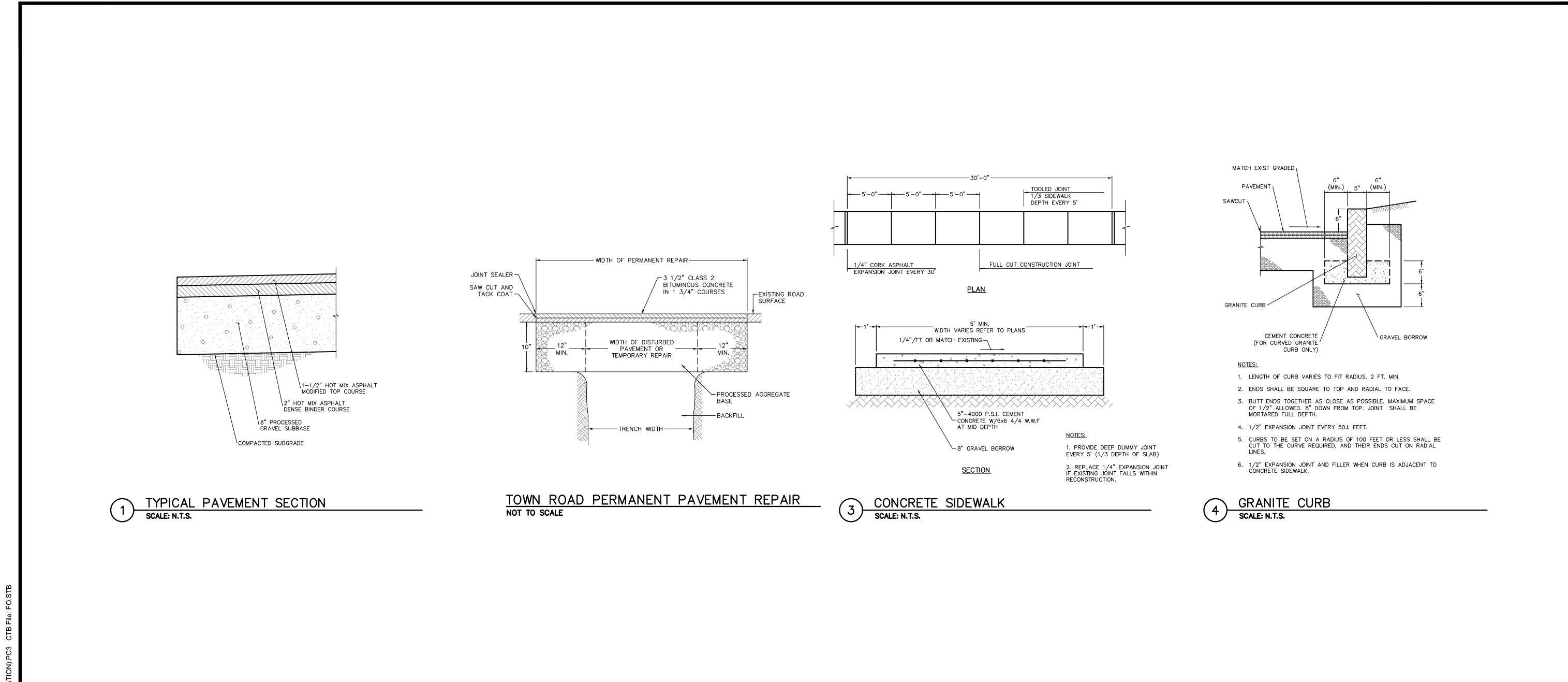
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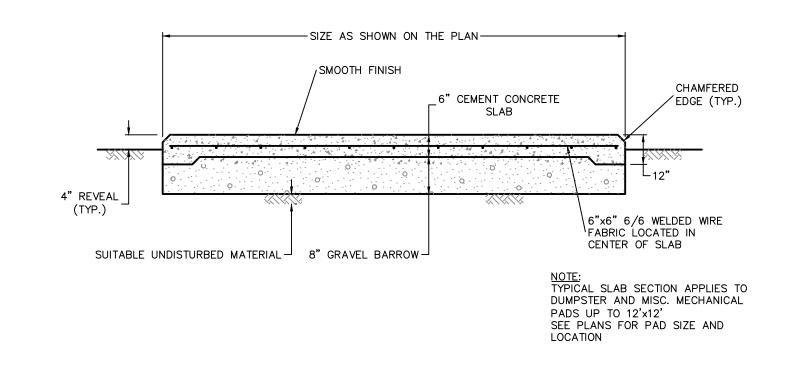
PROJ. No.: 20190110.A10

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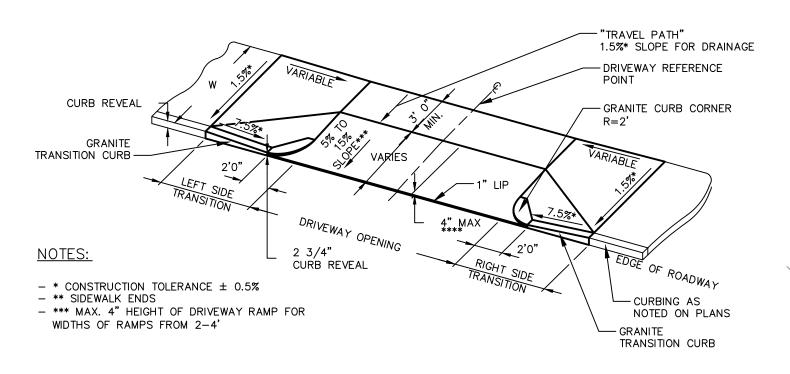
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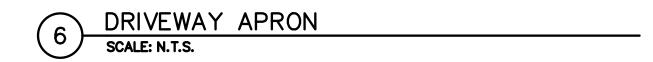
TOWN OF SPENCER
EROSION & SEDIMENT CONTROL
DETAILS

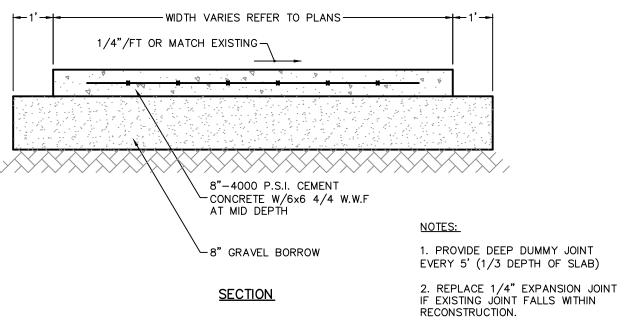




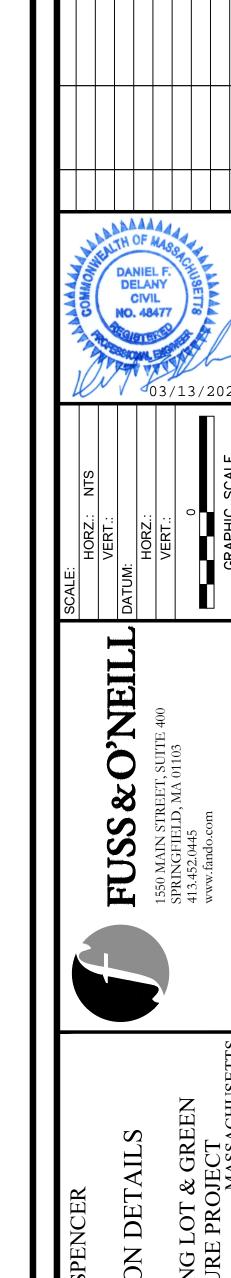










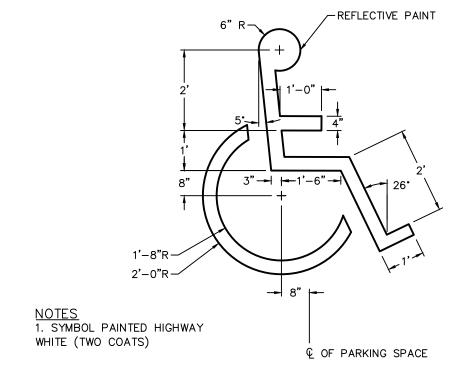


CONSTRUCTION DETAILS
MUNICIPAL PARKING LOT & GRE
INFRASTRUCTURE PROJECT

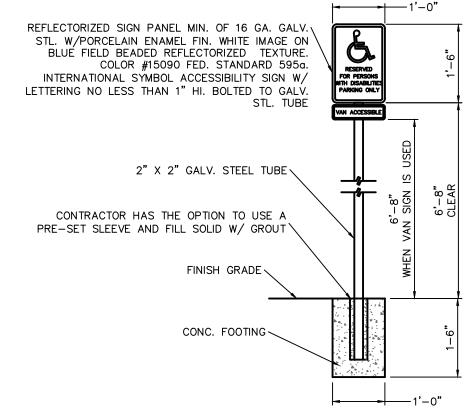
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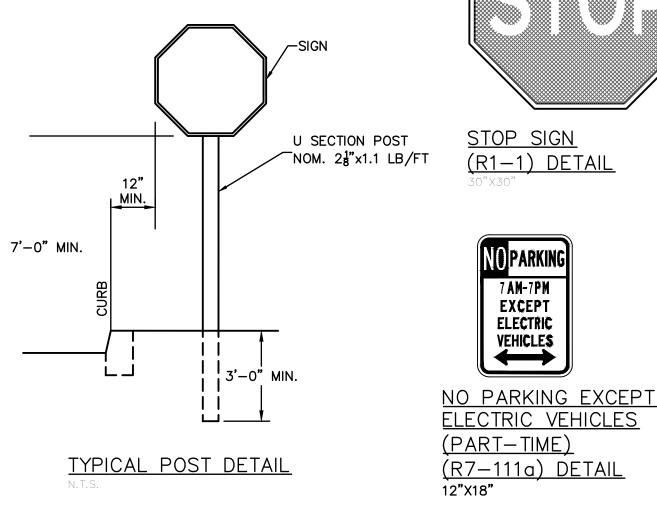
VAN ACCESSIBLE PARKING STALL



ACCESSIBLE PARKING SYMBOL SCALE: N.T.S.



ACCESSIBLE PARKING SIGN SCALE: N.T.S.



DO NOT ENTER SIGN (R1-1) DETAIL (R5-1) DETAIL 30"X30"

> ONE WAY SIGN (R6-1) DETAIL 36"X12"

**ENTER** 

NO PARKING SIGN

(R7-1) DETAIL 12"X18"

SIGNS AND POST DETAIL SCALE: N.T.S.



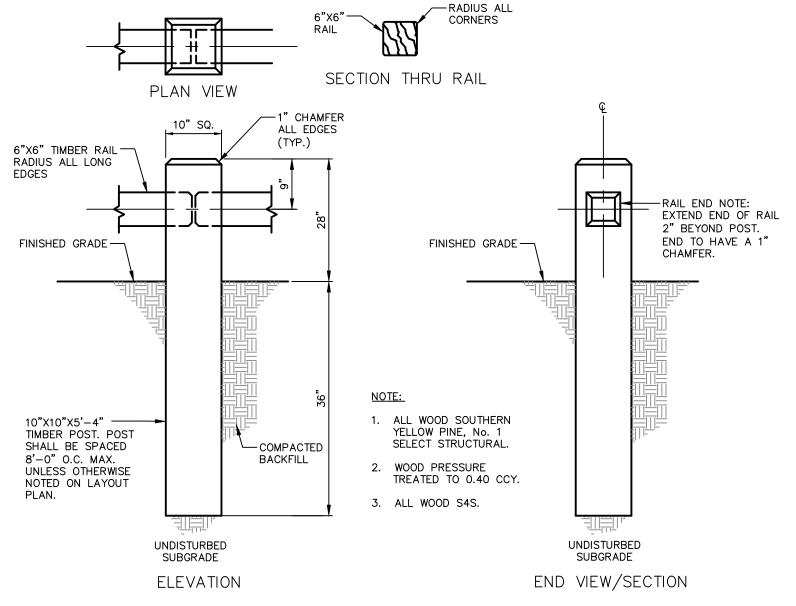
MANUFACTURER: PANNIER
PRODUCT: LOW PROFILE — TRADITIONAL T
INSTALLATION — DIRECT BURIAL
COLOR — NPS BROWN T: 724.265.4900 E: marketing@pannier.com

INFORMATIONAL SIGNAGE SCALE: N.T.S.



MANUFACTURER: DUMOR INC.
PRODUCT: BENCH 495
INSTALLATION — SURFACE MOUNT
COLOR — FOREST GREEN
T: 800.598.4018
E: sales@dumor.com

BACKLESS BENCH SCALE: N.T.S.



TIMBER GUARDRAIL SCALE: N.T.S.

C3.02

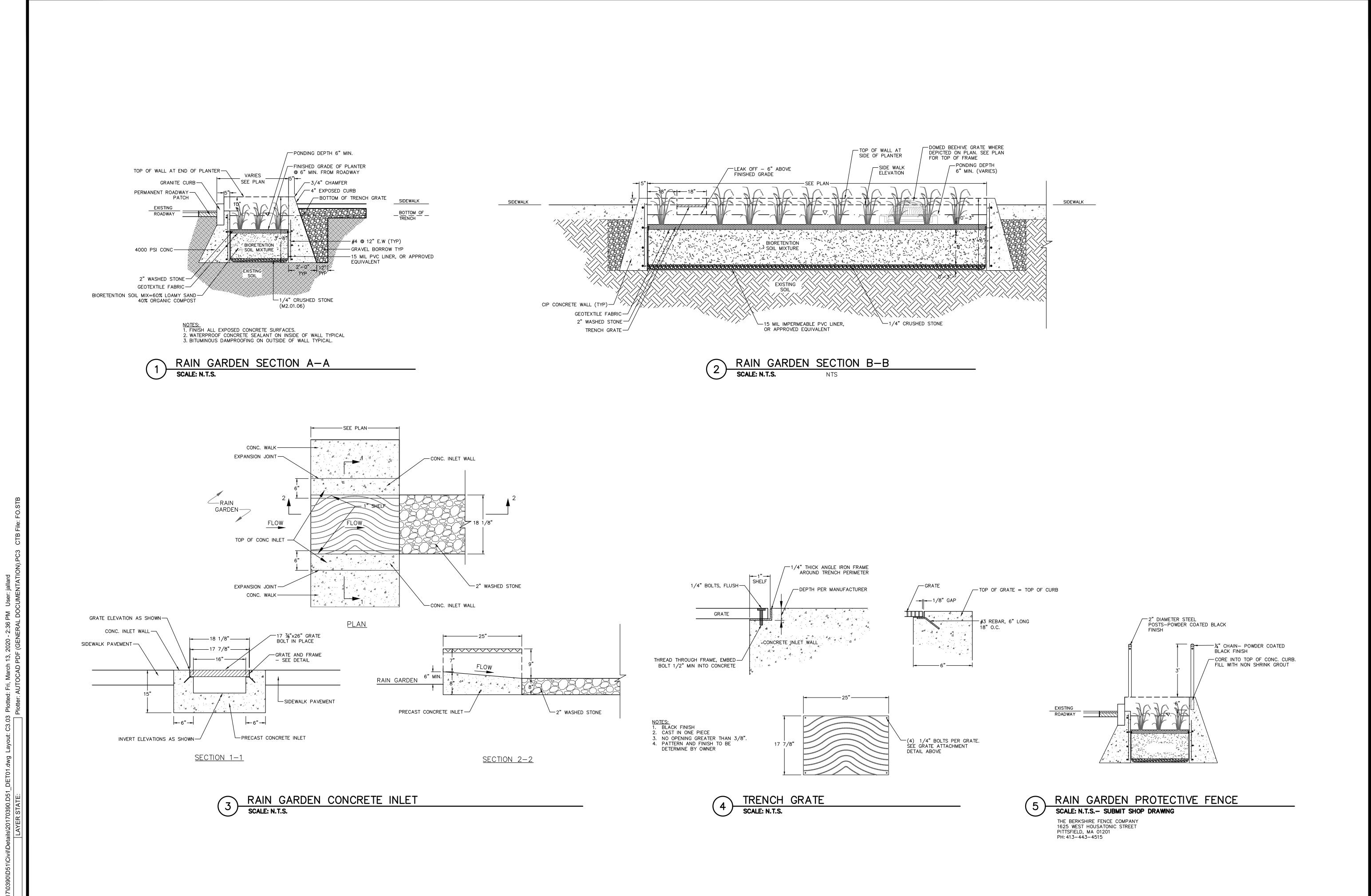
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DATE: 03/06/2020

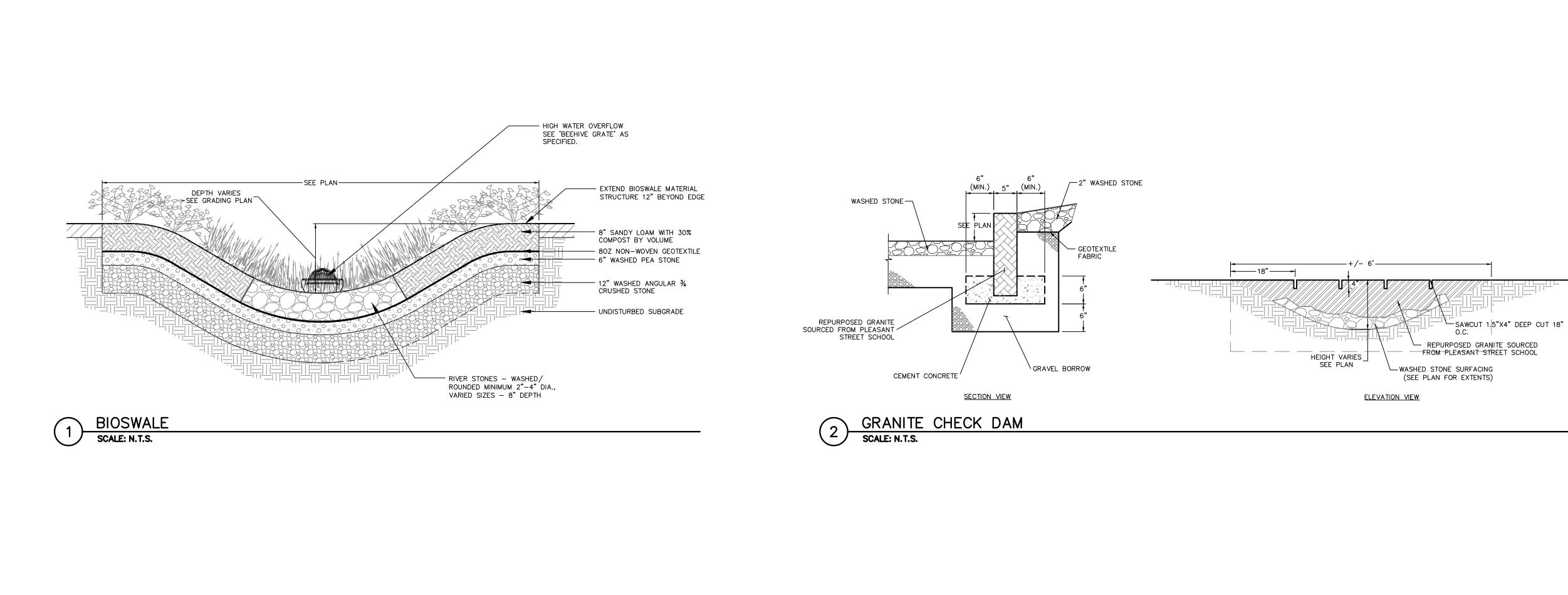
CONSTRUCTION DETAILS

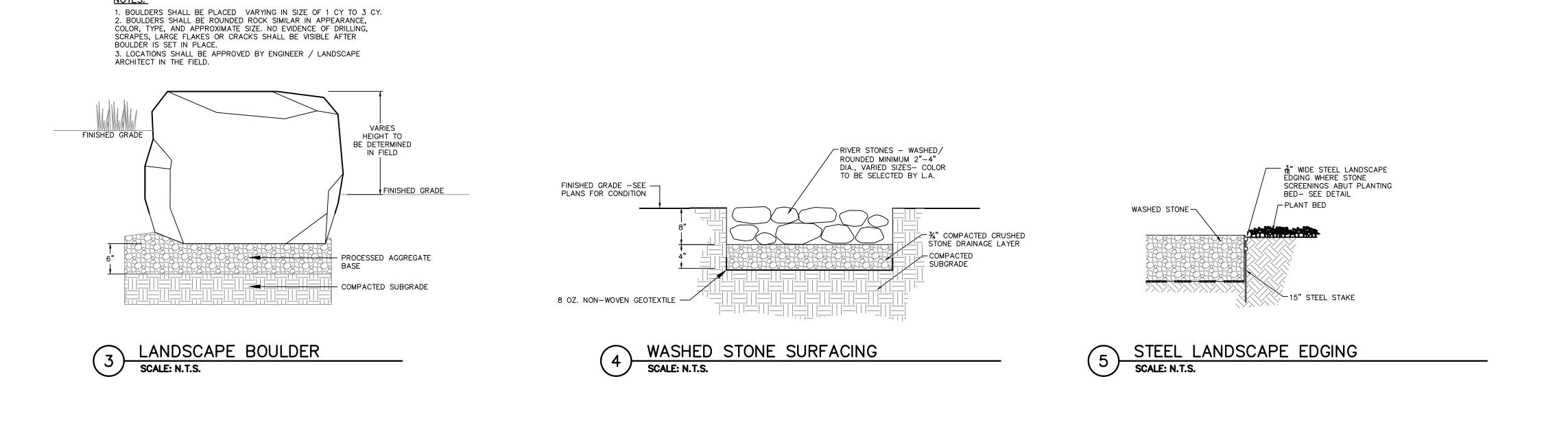
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**METTLE** &0'I FUSS MUNICIPAL PARKING LOT & GREEN
INFRASTRUCTURE PROJECT CONSTRUCTION DETAILS PROJ. No.: 20190110.A10 DATE: 03/06/2020





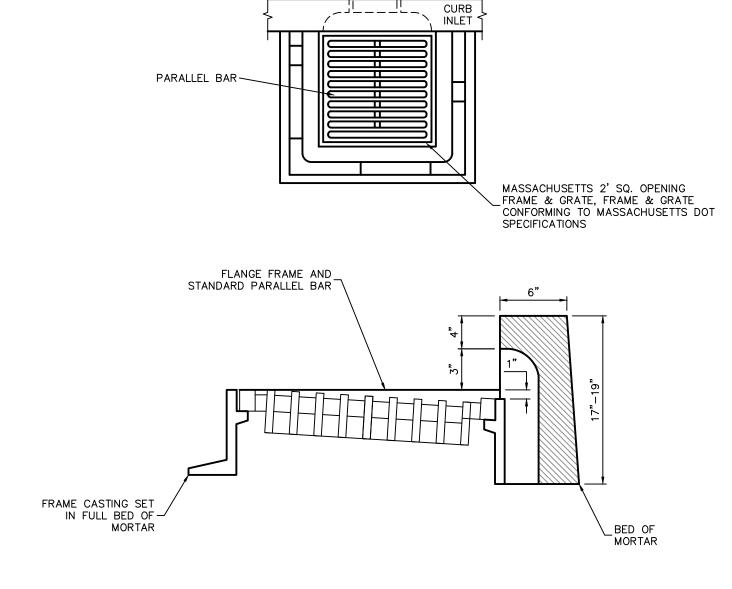


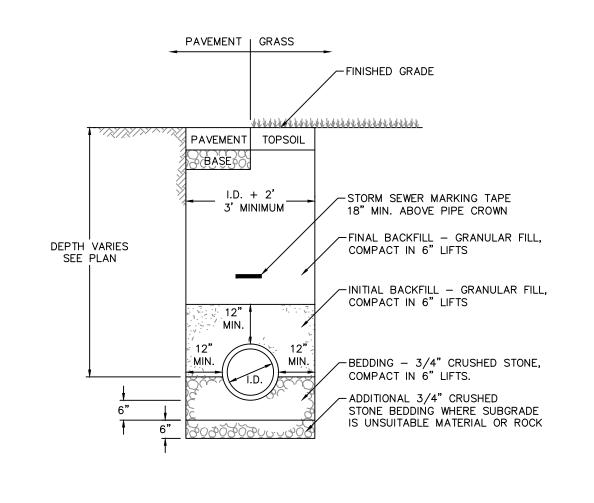
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STANDARD MANHOLE FRAME AND

SCALE: N.T.S.

MASSACHUSETTS 2' SQ. OPENING
FRAME & GRATE, FRAME & GRATE CONFORMING
TO MASSACHUSETTS DOT SPECIFICATIONS CATCH BASIN COMBINATION (CURB) INLET-(SEE DETAIL) -BED OF MORTAR DRAIN PIPE AS SHOWN AND SPECIFIED ON THE PLANS PROVIDE "V" OPENINGS FOR PIPES MIN. 0.12 SQ. IN. STEEL PER VERTICAL FOOT IN ACCORDANCE HOOD FOR CATCH BASIN (SEE DETAIL) TO AASHTO M199





PRECAST CONCRETE CATCH BASIN WITH COMBINATION (CURB) INLET

CATCH BASIN COMBINATION (CURB) INLET

STORMWATER DRAINAGE TRENCH

CONFIGURATION DETAIL 1" PVC ANTI-SIPHON PIPE ADAPTER REMOVABLE WATERTIGHT \_ACCESS PORT, 6"-10" -MOUNTING FLANGE └OUTLET PIPE (HIDDEN) SIDE VIEW FRONT VIEW

SOLIDS SETTLE ON BOTTOM \*NOTE - SUMP DEPTH OF 36" MIN. FOR < OR= 12" DIAM. FOR OUTLETS > OR= 15", DEPTH = 2.5-3X DIAM.

TYPICAL INSTALLATION

- ANTI-SIPHON DEVICE

OIL-DEBRIS HOOD

OIL AND DEBRIS

DETAIL B FOAM GASKET W/ PSA BACKING \_ (TRIM TO LENGTH) ANCHOR W/ BOLT (SEE DETAIL A) INSTALLATION NOTE: POSITION HOOD SUCH THAT BOTTOM FLANGE IS A DISTANCE OF 1/2 OUTLET PIPE DIAMETER (MIN.) BELOW THE PIPE INVERT. MINUMUM DISTANCE FOR PIPES < GASKET 12" I.D. IS 6". COMPRESSED BETWEEN HOOD AND STRUCTURE <u>DETAIL A</u> (SEE DETAIL B) ANCHOR \
SHIELD STAINLESS DRILLED HOLE EXPANSION CONE (NARROW END

INSTALLATION DETAIL

NOTES:

SNOUT OIL-WATER-DEBRIS SEPARATOR

1. ALL HOODS AND TRAPS FOR CATCH BASINS AND WATER QUALITY STRUCTURES SHALL BE AS MANUFACTURED BY: BEST MANAGEMENT PRODUCTS, INC. 53 MT. ARCHER RD. LYME, CT 06371

(860) 434-0277, (860) 434-3195 FAX TOLL FREE: (800) 504-8008 OR (888) 434-0277 WEB SITE: www.bmpinc.com OR PRE-APPROVED EQUAL

HOOD FOR CATCH BASIN

- 2. ALL HOODS SHALL BE CONSTRUCTED OF A GLASS REINFORCED RESIN COMPOSITE WITH ISO GEL COAT EXTERIOR FINISH WITH A MINIMUM 0.125" LAMINATE THICKNESS. 3. ALL HOODS SHALL BE EQUIPPED WITH A WATERTIGHT ACCESS PORT, A MOUNTING FLANGE,
- AND AN ANTI-SIPHON VENT PIPE AND ELBOW AS DRAWN. (SEE CONFIGURATION DETAIL)
- 4. THE SIZE AND POSITION OF THE HOOD SHALL BE DETERMINED BY OUTLET PIPE SIZE AS PER MANUFACTURER'S RECOMMENDATION (SNOUT SIZE ALWAYS LARGER THAN PIPE SIZE).
- 5. THE BOTTOM OF THE HOOD SHALL EXTEND DOWNWARD A MINIMUM DISTANCE EQUAL TO 1/2 THE OUTLET PIPE DIAMETER WITH A MINIMUM DISTANCE OF 6" FOR PIPES <12" I.D.
- 6. THE ANTI-SIPHON VENT SHALL EXTEND ABOVE HOOD BY MINIMUM OF 3" AND A MAXIMUM OF 12" ACCORDING TO STRUCTURE CONFIGURATION.
- 7. THE SURFACE OF THE STRUCTURE WHERE THE HOOD IS MOUNTED SHALL BE FINISHED SMOOTH AND FREE OF LOOSE MATERIAL AND PIPE SHALL BE FINISHED FLUSH TO WALL.
- 8. THE HOOD SHALL BE SECURELY ATTACHED TO STRUCTURE WALL WITH 3/8' STAINLESS STEEL BOLTS AND OIL-RESISTANT GASKET AS SUPPLIED BY MANUFACTURER. (SEE INSTALLATION DETAIL)
- INSTALLATION INSTRUCTIONS SHALL BE FURNISHED WITH MANUFACTURER SUPPLIED INSTALLATION KIT. INSTALLATION KIT SHALL INCLUDE:
  - A. INSTALLATION INSTRUCTIONS PVC ANTI-SIPHON VENT PIPE AND ADAPTER OIL-RESISTANT CRUSHED CELL FOAM GASKET WITH PSA BACKING
- 3/8" STAINLESS STEEL BOLTS E. ANCHOR SHIELDS

FINISH GRADE--FERNCO QWIK CAP -- DOMED BEEHIVE GRATE WHERE DEPICTED ON PLAN. SEE PLAN FOR TOP OF FRAME ACCESS BOX — CAMPBELL NO. 4164 OR NEENAH NO. R—1975 FINISHED GRADE ADS NYLOPLAST 24" H-10 PEDESTRIAN GRATE ∕6" P.V.C. PIPE PE x PE ∕-45° BELL × BELL ELBOW ∕-6" P.V.C. PIPE PE x PE \_8" x 6" 45° T-WYE BELL x BELL P.V.C PIPE REFER TO SITE PLANS FOR INVERT ELEVATION NOTE: ALL PIPE AND FITTINGS SHALL BE SDR 35. ADS NYLOPLAST , 24" DRAIN BASIN 12" HDPE -INSTALL YARD DRAIN PER MANUFACTURER'S SPECIFICATIONS

IN-LINE CLEAN-OUT

YARD DRAIN WITH BEEHIVE GRATE

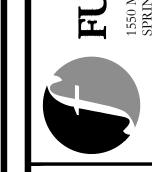
PROJ. No.: 20190110.A10 DATE: 03/06/2020

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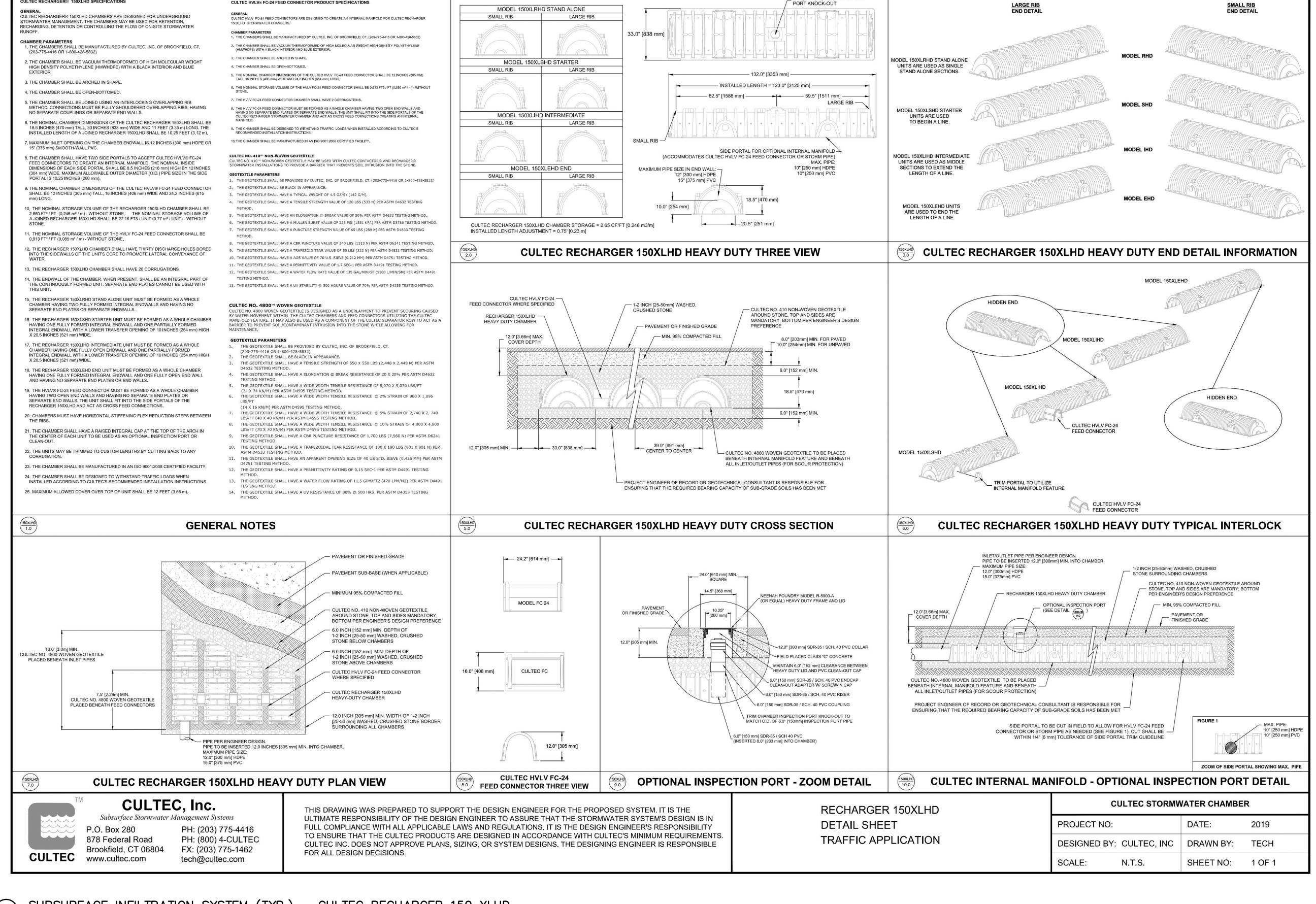
DELANY

CIVIL

**4**03/13/202



MUNICIPAL PARKING LOT & GREEN INFRASTRUCTURE PROJECT DETAILS CONSTRUCTION



6.0" [150 mm] DIA. INSPECTION

SUBSURFACE INFILTRATION SYSTEM (TYP.) - CULTEC RECHARGER 150 XLHD

**CULTEC HVLV® FC-24 FEED CONNECTOR PRODUCT SPECIFICATIONS** 

CULTEC RECHARGER® 150XLHD SPECIFICATIONS

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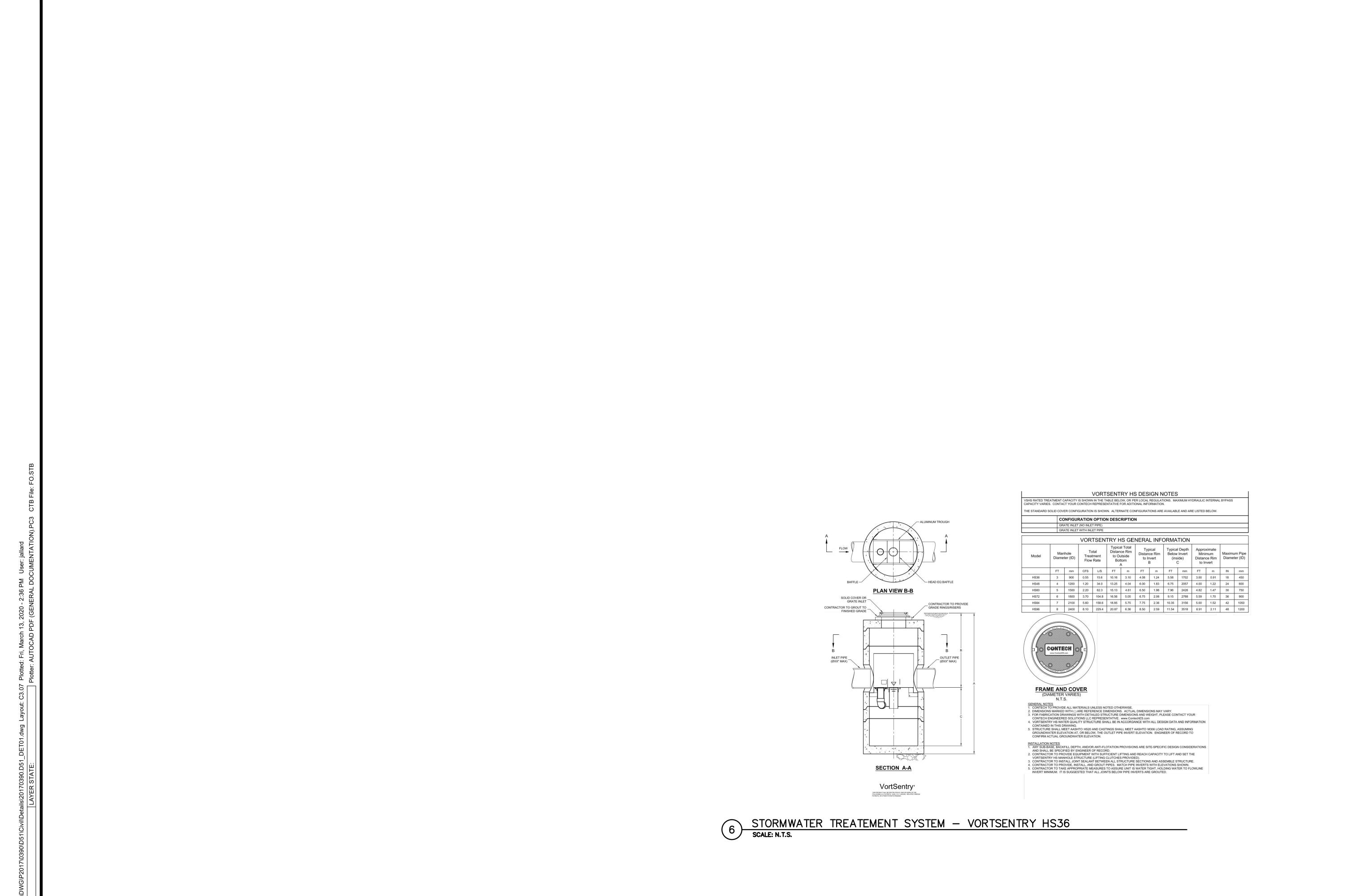
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NICIPAL PARKING LOT & GREEN INFRASTRUCTURE PROJECT DETAIL CONSTRUCTION

PROJ. No.: 20190110.A10

DATE: 03/06/2020



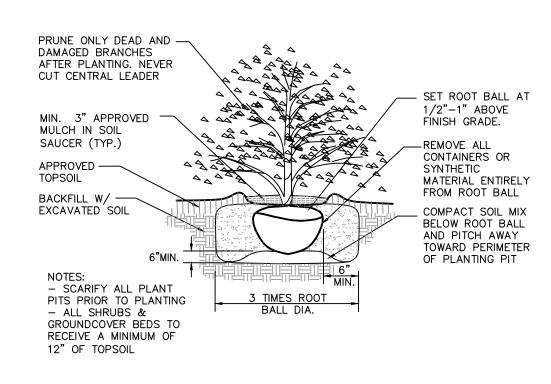
FUSS & O'NEILL

CONSTRUCTION DETAILS

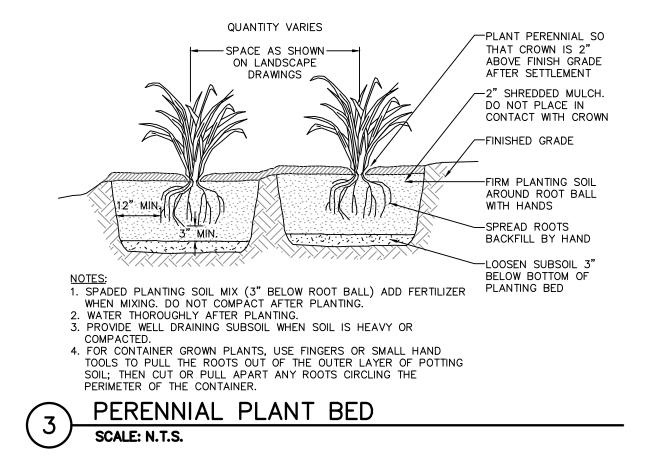
MUNICIPAL PARKING LOT & GREEN
INFRASTRUCTURE PROJECT

PROJ. No.: 20190110.A10 DATE: 03/06/2020

1 TREE PLANTING
SCALE: N.T.S.



2 SHRUB PLANTING SCALE: N.T.S.



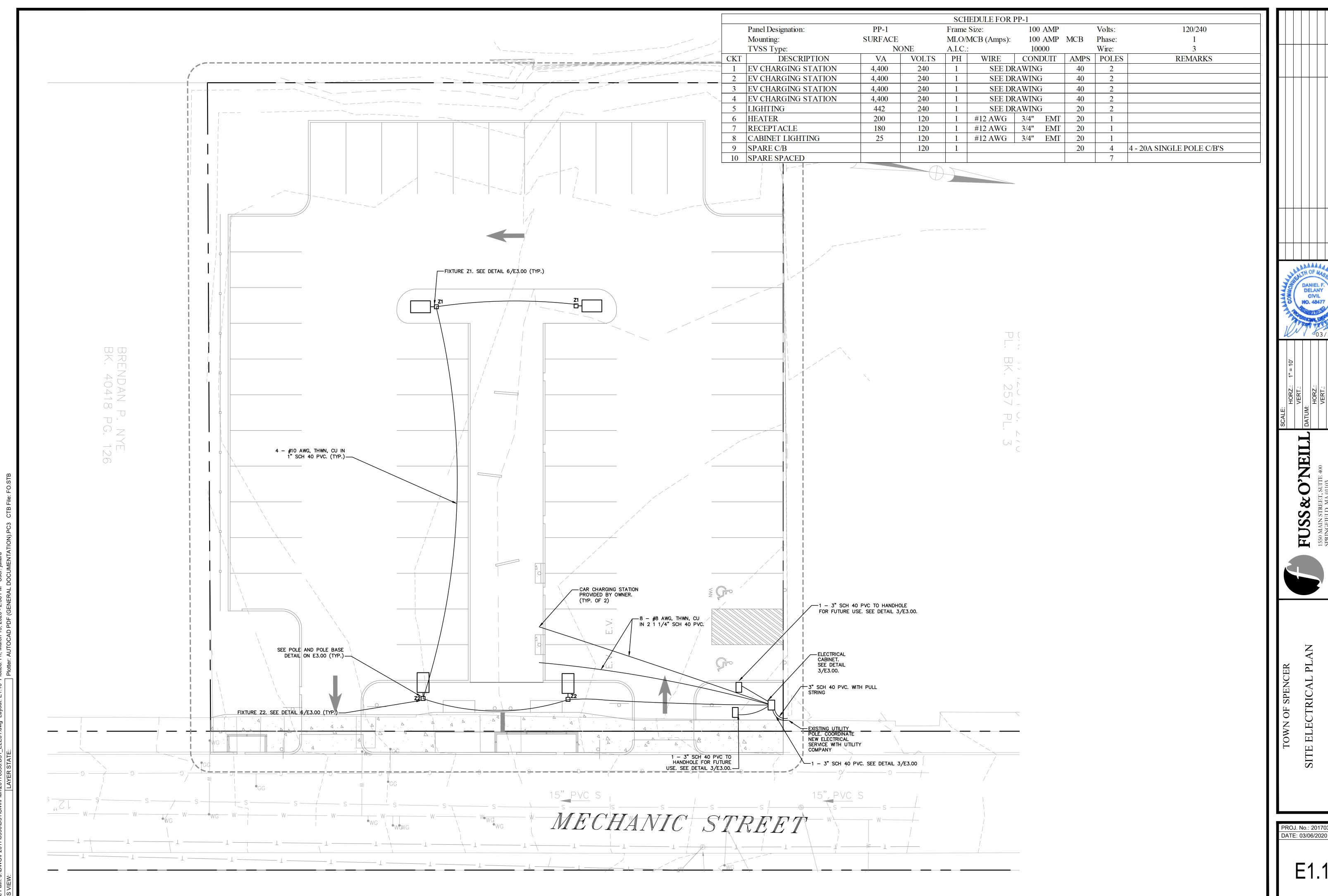


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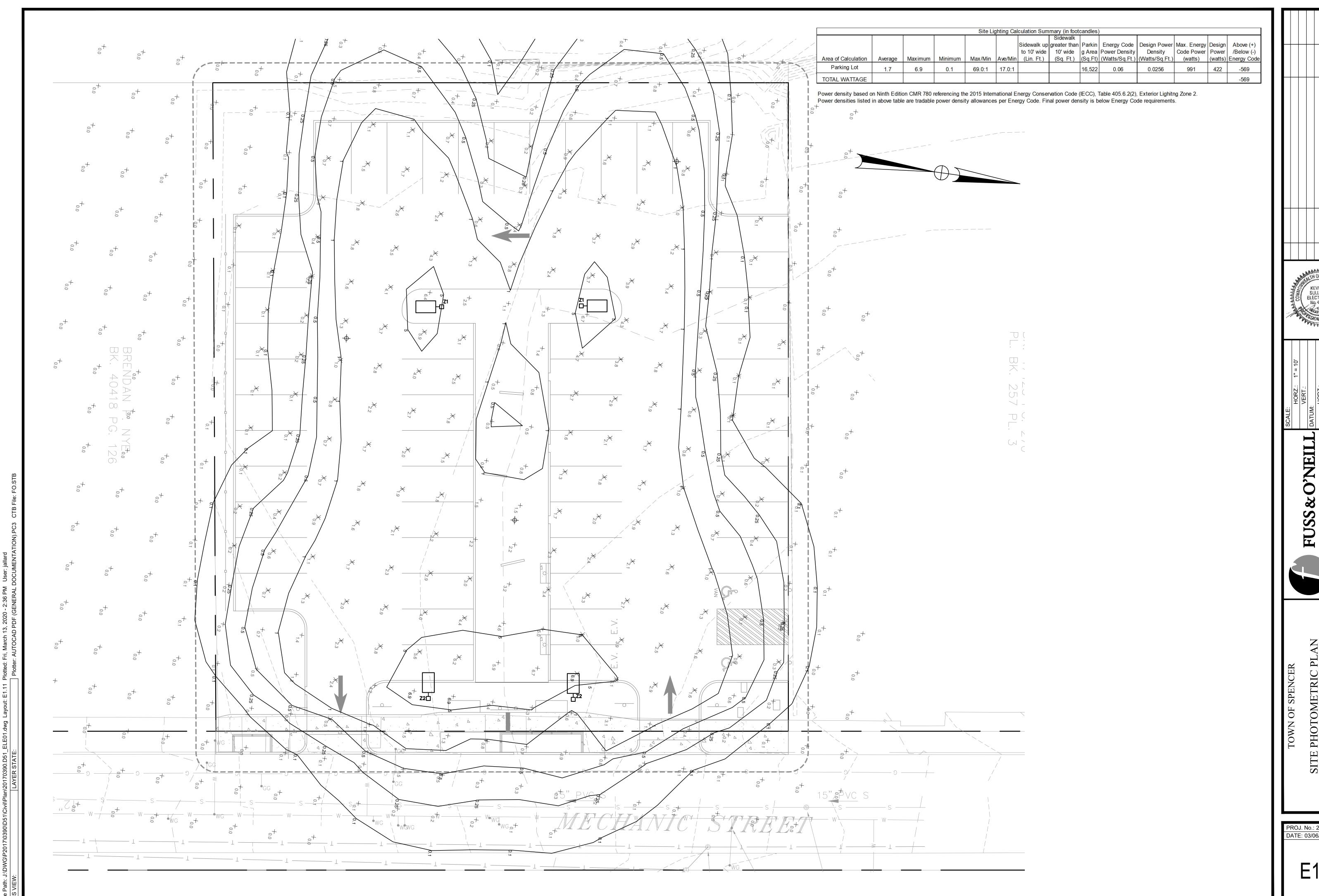
CONSTRUCTION DETAILS
MUNICIPAL PARKING LOT & GREEN
INFRASTRUCTURE PROJECT
MASSACHIE

TOWN OF SPENCER

PROJ. No.: 20190110.A10 DATE: 03/06/2020



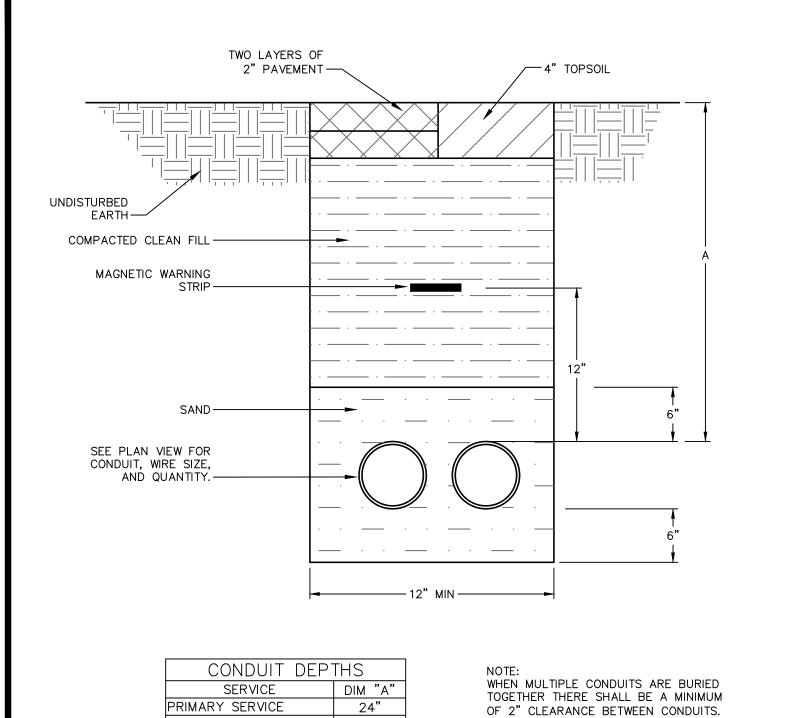
PROJ. No.: 20170390.D51 DATE: 03/06/2020



MUNICIPAL PARKING LOT & GREEN
INFRASTRUCTURE PROJECT SITE PHOTOMETRIC PLAN

PROJ. No.: 20170390.D51 DATE: 03/06/2020

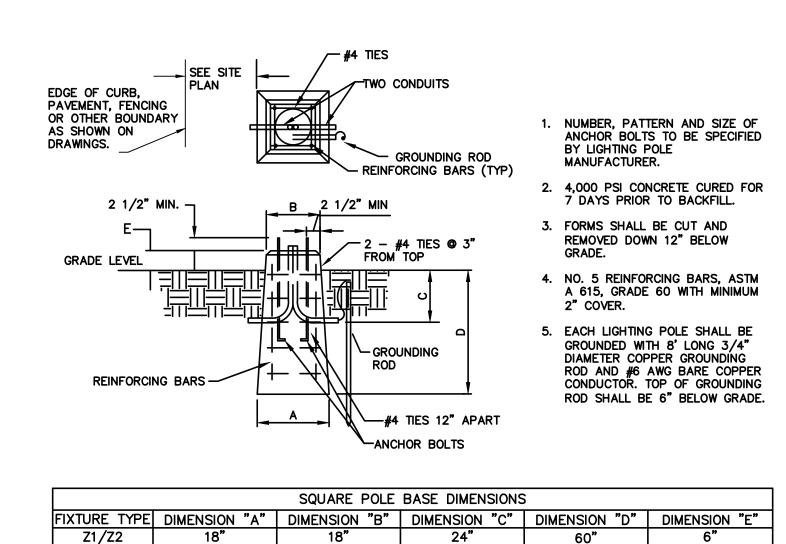
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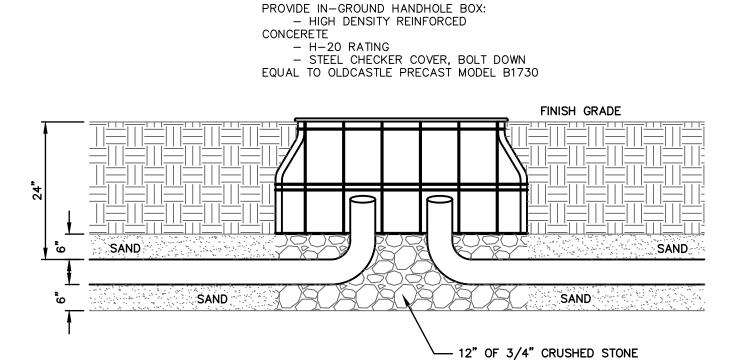
SITE LIGHTING

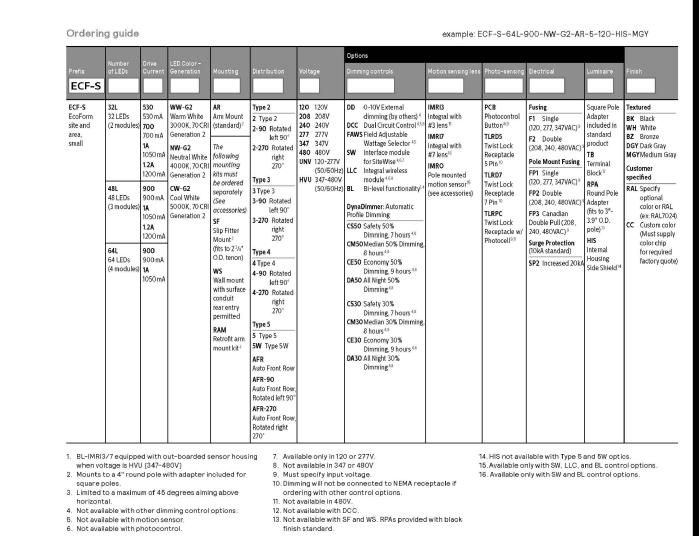
SCALE: N.T.S.

BURIED CONDUIT DETAIL



FIXTURE Z1/Z2 POLE BASE DETAIL





c Ulus

Site & Area

EcoForm

ECF-S small area ligh

Gardco EcoForm Gen-2 combines economy with performance in an LED area luminaire. Capable of delivering up to 26,400 lumens or more in a compact, low profile LED luminaire, EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by

eliminating the need to drill additional holes in most existing poles. Integral control systems available for further energy savings. Includes Service Tag, our innovative way to provide assistance throughout the life of the product.

ECF-S\_EcoForm\_area\_small 04/19 page 1 of 8

G GARDCO

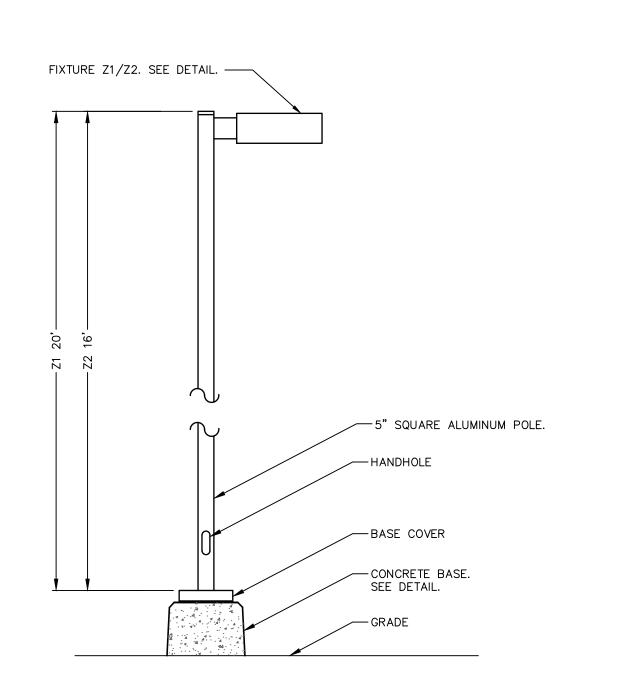
1. CONCRETE SHALL BE 4,000 PSI CONCRETE. PHOTOCELL CONTROL 2. CONCRETE SHALL BE CURED FOR 7 DAYS FOR STREET LIGHTING -NEW POLE MOUNTED TRANSFORMER PRIOR TO BACKFILL. EQUAL TO MODEL PROVIDE LED LIGHT FIXTURE AND BY UTILITY COMPANY ON POLE. #K4223C ---SWITCH INSIDE ELECTRICAL ENCLOSURE. 3. ALL REINFORCING BARS SHALL BE ASTM CIRCUIT TO POWER PANEL. A 615, GRADE 60 BARS WITH 2" COVER UNLESS NOTED OTHERWISE. ELECTRICAL ENCLOSURE EQUAL TO HOFFMAN A72R3618FSLP WITH NECESSARY 4. ALL EXPOSED EDGES SHALL BE BEVELED HARDWARE TO MOUNT POWER PANELS ¾" x ¾" UNLESS DIMENSIONED AND LIGHTING CONTROLS. -OTHERWISE. CONSTRUCTION JOINTS WILL NOT BE PERMITTED WITHOUT PRIOR APPROVAL OF METER SOCKET WITH THE ENGINEER. POWER CO. METER-6. COMPACTED STUCTRUAL FILL SHALL BE DEPOSITED AND COMPACTED IN 6" LIFTS. ──WEATHER MAST 7. LENGTH AND WIDTH OF PAD SHALL BE 12" PER SIDE GREATER THAN EQUIPMENT POWER PANEL. 100 AMP, TO BE MOUNTED ON PAD. 120/240V SINGLE 3W, 20 CIRCUIT, SERVICE RATED .-100 AMP, 120/240V WITH 100kAIC RATING DISCONNECT --PROVIDE GFI/WP RECEPTACLE INSIDE ELECTRICAL SINGLE POINT ENCLOSURE. CIRCUIT TO POWER PANEL. SCH. 40 PVC GROUND BUS EXPANSION FITTING. — GROUND ROD 10'x3/4"ø-3/4" CHAMFER (TYP)--PROVIDE 200 WATT ELECTRIC HEATER EQUAL TO HOFFMAN DAH2001A. CIRCUIT PROPOSED TO POWER PANEL. GRADE — UNDISTURBED SOIL — COVER -#5 @ 12" IN THE TRANSVERSE 12" (TYP) DIRECTION (TOP AND BOTTOM) -COMPACTED STRUCTURAL FILL. - 90° STEEL SWEEP TO SITE LIGHTING -BOND PAD (TYP). (2)-3" SCH 40 PVC TO HANDHOLE. SEE FOUNDATION SITE PLAN. INSTALL DETECTABLE REBAR TO

WARNING TAPE 12" ABOVE CONDUIT.

ELECTRICAL CABINET

SCALE: N.T.S.

SERVICE



HANDHOLE DETAIL

FIXTURE Z1/Z2 POLE DETAIL SCALE: N.T.S.

Z1: ECF-S-32L-1A-NW-G2-AR-2-240-F2 Z2: ECF-S-32L-1A-NW-G2-AR-4-240-F2

KEILI. Ó 8 FUSS DETAIL TRIC

MUNICIPAL PARKING LOT & GREEN INFRASTRUCTURE PROJECT

PROJ. No.: 20170390.D51 DATE: 03/06/2020

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