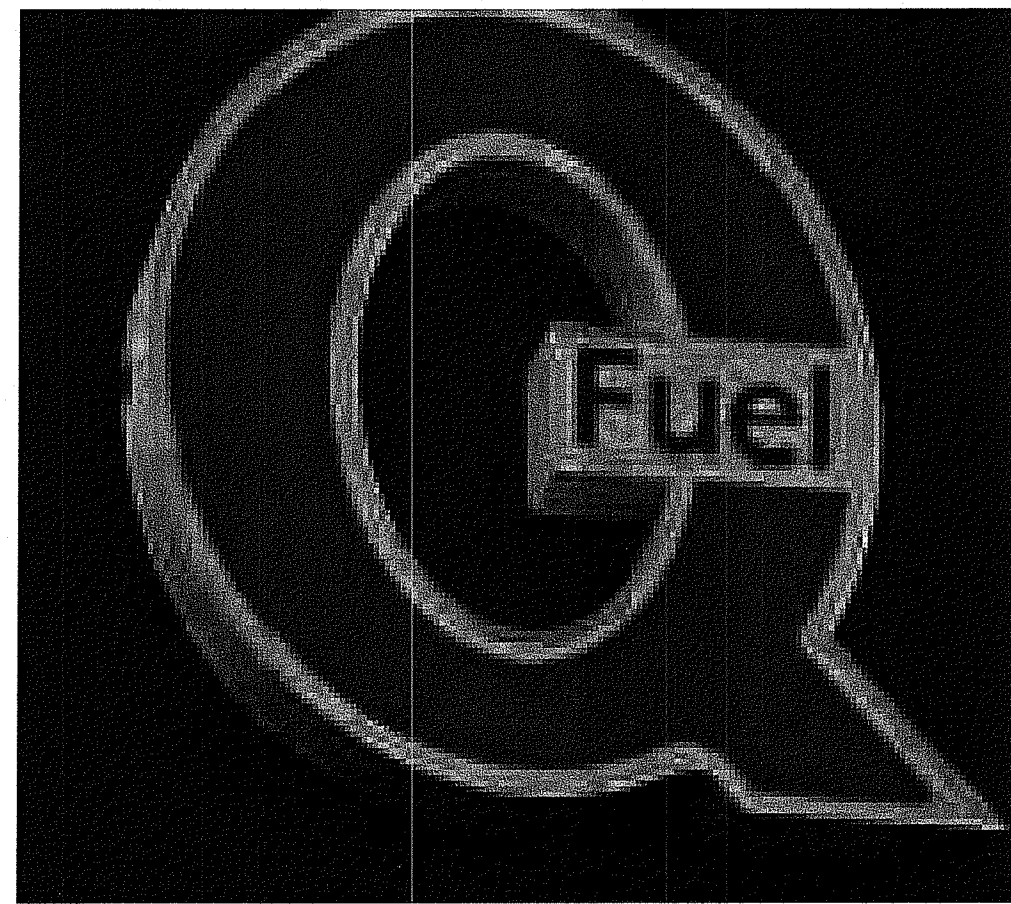


**SITE IMPROVEMENT PLANS for a Proposed
DRIVE-THRU
SERVICING**

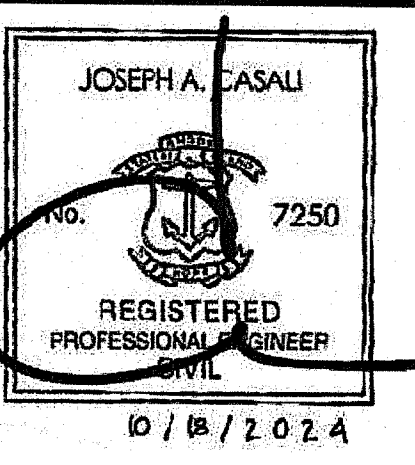
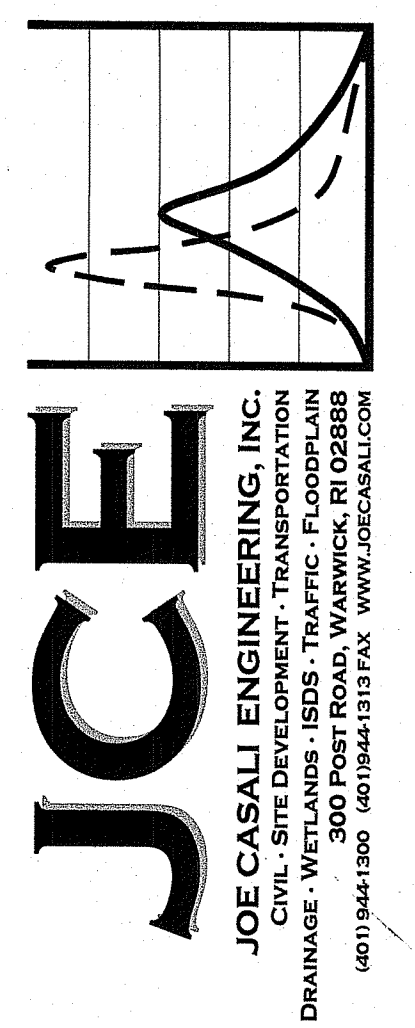


**1601 HARTFORD AVENUE
JOHNSTON, RHODE ISLAND
AP 53, LOT 22**

ZONING DISTRICT: GENERAL BUSINESS B-2 DISTRICT

FILINGS:

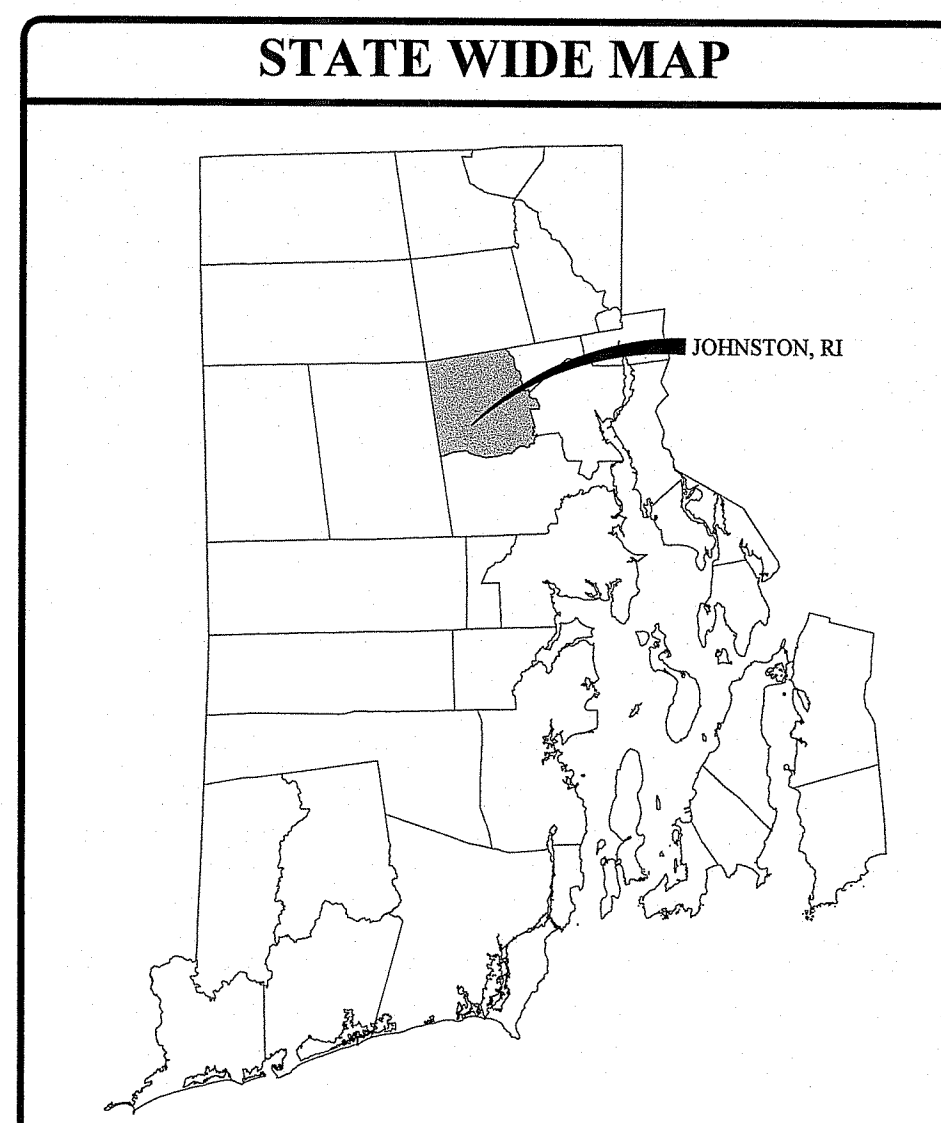
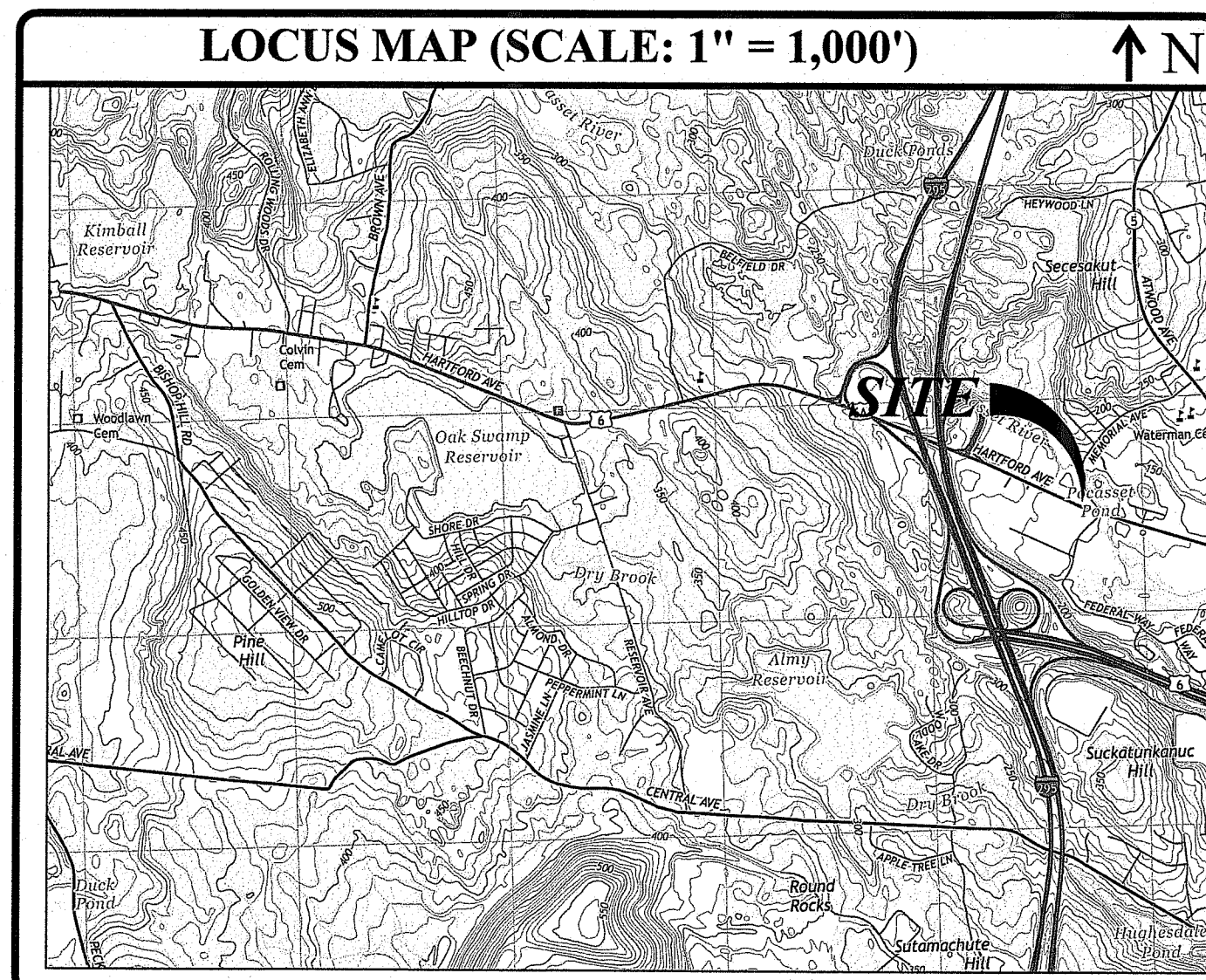
- RHODE ISLAND DEPARTMENT OF TRANSPORTATION - PHYSICAL ALTERATION PERMIT (PAP)
- RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT - FRESHWATER WETLANDS PERMIT
- TOWN OF JOHNSTON PLANNING DEPARTMENT - DEVELOPMENT PLAN REVIEW
- PROVIDENCE WATER SUPPLY BOARD
- NARRAGANSETT BAY COMMISSION - SEWER CONNECTION PERMIT
- TOWN OF JOHNSTON ENGINEERING REVIEW



**QUICK FUEL MARKET
1601 HARTFORD AVENUE
JOHNSTON, RHODE ISLAND
AP 53, LOT 22**

Q:\123-09 Ravi Patel\CAD\1601 Hartford Avenue [SITE PLAN] - R3.dwg Oct. 22, 2024 10:58am

PROJECT TEAM			
OWNER/ APPLICANT:	SHANKAR VEER LLC C/O MR. RAVI PATEL 532 RUSSELLS MILLS DARTMOUTH, MA 02748	ARCHITECT:	HARRISON FRENCH & ASSOCIATES 31 HAYWARD STREET FRANKLIN, MA 02038 PHONE: 508-528-0770
CIVIL ENGINEER:	JOE CASALI ENGINEERING, INC. 300 POST ROAD WARWICK, RI 02888 PHONE: 401-944-1300 FAX: 401-944-1313 JOECASALI.COM	TRAFFIC ENGINEER:	BETA GROUP 6 BLACKSTONE VALLEY PLACE SUITE 101 LINCOLN, RI 02865 PHONE: 401-333-2382
LAND SURVEYOR:	WATERMAN ENGINEERING CO. 46 SUTTON AVENUE EAST PROVIDENCE, RI 02914 PHONE: (401) 438-5775		



INDEX OF DRAWINGS

SHEET NO.	PLAN
1	COVER SHEET
2	EXISTING CONDITIONS & SITE PREPARATION PLAN
3	SITE PLAN
4	GRADING & DRAINAGE PLAN
5	RI STANDARD DETAILS

Environmental Management
OCT 24 2024
Division of Water Resources

REVISIONS:

NO.	DATE	DESCRIPTION

DESIGNED BY: WMLJR
DRAWN BY: MCG/SEP/SD
CHECKED BY: JAC
DATE: OCTOBER 2024
PROJECT NO: 23-09

PRELIMINARY, NOT FOR CONSTRUCTION

COVER SHEET

SHEET 1 OF 5

GENERAL NOTES:

- PROPERTY LINE AND SITE SURVEY OF AP 53, LOT 22 COMPLETED BY WATERMAN ENGINEERING COMPANY, 46 SUTTON AVENUE, EAST PROVIDENCE RI IN MARCH 2021.
- THIS SITE LIES IN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN), AS SHOWN ON THE FEMA FIRM MAP FOR THE TOWN OF JOHNSTON, MAP NUMBER 44007C0284H, EFFECTIVE DATE OCTOBER 2, 2015.
- THE LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE LATEST AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATION OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND, AND "DIG-SAFE" MUST BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS. RESTORATION AND REPAIR OF DAMAGE TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL COST TO THE OWNER. NO EXCAVATION SHALL COMMENCE UNTIL ALL INVOLVED UTILITY COMPANIES AND/OR CITY WHOSE FACILITIES MIGHT BE AFFECTED BY ANY WORK TO BE PERFORMED BY THE CONTRACTOR ARE NOTIFIED AT LEAST 72 HOURS IN ADVANCE.
- SOILS ON THE SITE CONSIST OF UDORHTHENS-URBAN LAND COMPLEX (UD) AND MERRIMAC-URBAN LAND COMPLEX (MU) 0 TO 8 PERCENT SLOPES.
- TELEPHONE, ELECTRIC, SEWER, GAS, AND WATER SERVICES ARE ALL AVAILABLE FROM WITHIN HARTFORD AVENUE.
- THERE ARE NO EXTRAORDINARY/UNUSUAL NATURAL FEATURES, HISTORIC AREAS, CEMETERIES, ETC. PRESENT ON THE SITE. THERE ARE NO KNOWN EXISTING PUBLIC RECREATIONAL OR CULTURAL RESOURCES LOCATED WITHIN THE SUBJECT SITE.
- THERE IS AN EXISTING EASEMENTS GRANTED TO THE NARRAGANSETT ELECTRIC COMPANY AS DESCRIBED IN VOLUME 1027, PAGE 330 (EASEMENT BLANKET IN NATURE).

SITE NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND LEGALLY DISPOSING (R&D) OF ALL MATERIALS INDICATED ON THE PLANS.
- ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS, AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICAN WITH DISABILITIES ACT AND WITH ALL APPLICABLE STATE AND LOCAL LAWS AND REGULATIONS, WHICHEVER IS MORE STRINGENT.
- STOCKPILES OF EARTH MATERIALS SHALL NOT BE LOCATED ADJACENT TO DRAINAGE STRUCTURES.
- ALL DISTURBED AREAS OUTSIDE OF THE PAVED AREAS WILL RECEIVE A MINIMUM OF 6" OF LOAM AND SEED.
- THE LAYOUT SHOWN REPRESENTS A GRAPHICAL DESIGN, AND PRIOR TO THE CONSTRUCTION, THE CONTRACTOR SHALL ENGAGE A PROFESSIONAL LAND SURVEYOR (PLS) REGISTERED IN THE STATE OF RHODE ISLAND TO SET AND VERIFY ALL LINES AND GRADES. ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS ARE TO BE CONFIRMED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY ITEMS FOUND WHICH DO NOT MATCH THE PLANS MUST BE BROUGHT TO THE ENGINEERS ATTENTION PRIOR TO CONSTRUCTION FOR REVIEW. NO WORK SHALL PROCEED UNTIL AUTHORIZED BY THE ENGINEER.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SURVEY LAYOUT SERVICES FOR THE WORK AND SHALL SUBMIT "AS-BUILT" DRAWINGS OF ALL WORK, WHICH SHALL BE STAMPED AND CERTIFIED BY A MASSACHUSETTS REGISTERED PROFESSIONAL LAND SURVEYOR.
- ANY ITEM OF WORK NOT SPECIFICALLY INDICATED ON THE PLANS BUT IS REQUIRED FOR THE COMPLETE CONSTRUCTION OF THE PROJECT WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND INCLUDED IN THE CONTRACT BID PRICE. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING SITE CONDITIONS.
- WHERE NECESSARY TO REMOVE CURBS, CATCH BASINS OR DRAINS TO COMPLETE WORK, THE CONTRACTOR SHALL REPLACE SUCH ITEMS TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
- ANY EXISTING PIPE OR UTILITY DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR AT NO COST TO THE OWNER.
- THE CONTRACTOR SHALL RESTORE TO ITS ORIGINAL CONDITION OR REPLACE TREES, SHRUBS, FENCES, SIGNS, GUARDRAILS, DRIVEWAYS, SIDEWALKS AND ANY OTHER OBJECT AFFECTED BY THIS OPERATION, UNLESS OTHERWISE NOTED ON THE SITE PLANS.
- THE TOPS OF ALL VALVE BOXES AND CURB BOXES SHALL BE FLUSH WITH GROUND OR PAVEMENT SURFACE LEVEL AND PLUMB, UNLESS OTHERWISE DIRECTED.
- ROADWAYS SHALL BE LEFT PASSABLE AT ALL TIMES. CLOSURE OF ROADWAY IS NOT PERMITTED.
- UTILITY SERVICES SHALL BE MAINTAINED AT ALL TIMES.
- ALL LEDGE (IF ANY) TO BE REMOVED BY MECHANICAL MEANS.
- ALL CONSTRUCTION WORK SHALL BE PERFORMED IN THE DRY. THE CONTRACTOR SHALL PROVIDE, OPERATE AND MAINTAIN ALL PUMPS, SCREENS, OR OTHER FACILITIES NECESSARY TO CONTROL, COLLECT AND DISPOSE OF ALL SURFACE AND SUBSURFACE WATER ENCOUNTERED IN THE PERFORMANCE OF THE WORK.
- ALL SITE WORK, INCLUDING BUT NOT LIMITED TO, BITUMINOUS PAVEMENT, ROADWAY CONSTRUCTION, AGGREGATE MATERIALS, DRAINAGE STRUCTURES, CURBING, SIDEWALK, LANDSCAPING, SAW CUTTING, ETC. SHALL CONFORM TO THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, WITH LATEST AMENDMENTS AND REVISIONS.

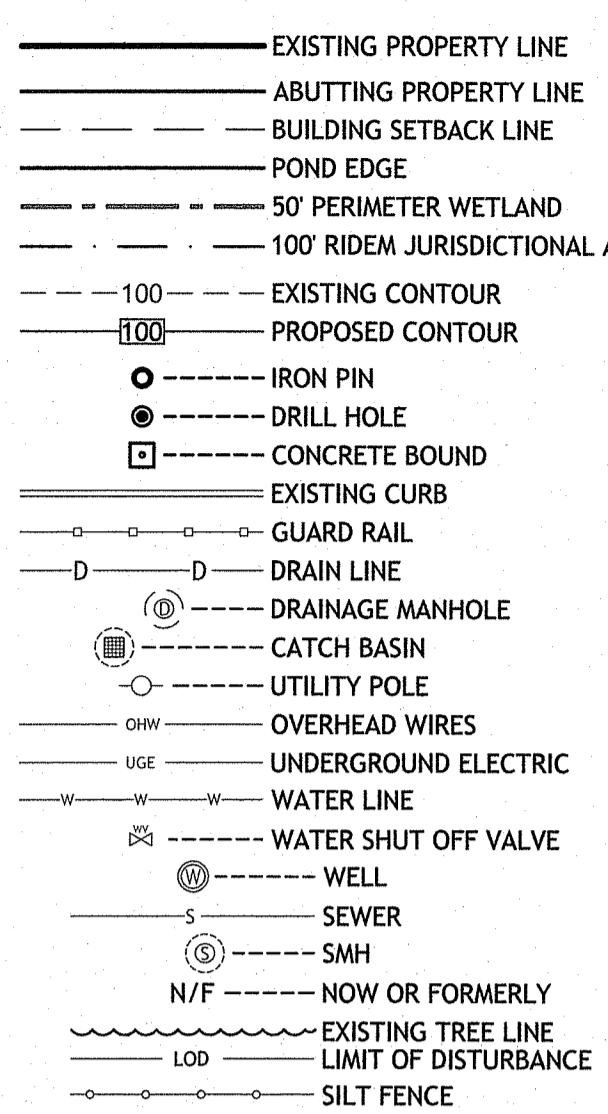
MAINTENANCE AND PROTECTION OF TRAFFIC NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MAINTENANCE AND PROTECTION OF PEDESTRIAN AND VEHICULAR TRAFFIC INCLUDING POLICE PROTECTION. ALL TEMPORARY AND VEHICULAR SIGNS, BARRICADES AND LANE CLOSURES SHALL BE IN CONFORMANCE WITH THE LATEST REVISIONS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009 EDITION.
- TEMPORARY CONSTRUCTION SIGNS AND ALL APPLICABLE TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF WORK IN ANY AREA OPEN TO TRAFFIC.
- THE PRIVATE VEHICLES OF CONSTRUCTION WORKERS SHALL NOT BE PARKED IN THE STATE OR TOWN RIGHT-OF-WAY.
- ALL MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL SETUPS, SIGNS CHANNELING DEVICES, ETC. SHALL BE IN ACCORDANCE WITH THE LATEST REVISIONS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION.
- SIGN MOUNTINGS SHALL BE IN ACCORDANCE WITH THE MASSDOT SPECIFICATIONS FOR TEMPORARY CONSTRUCTION SIGNS.

SOIL EROSION AND SEDIMENTATION CONTROL NOTES:

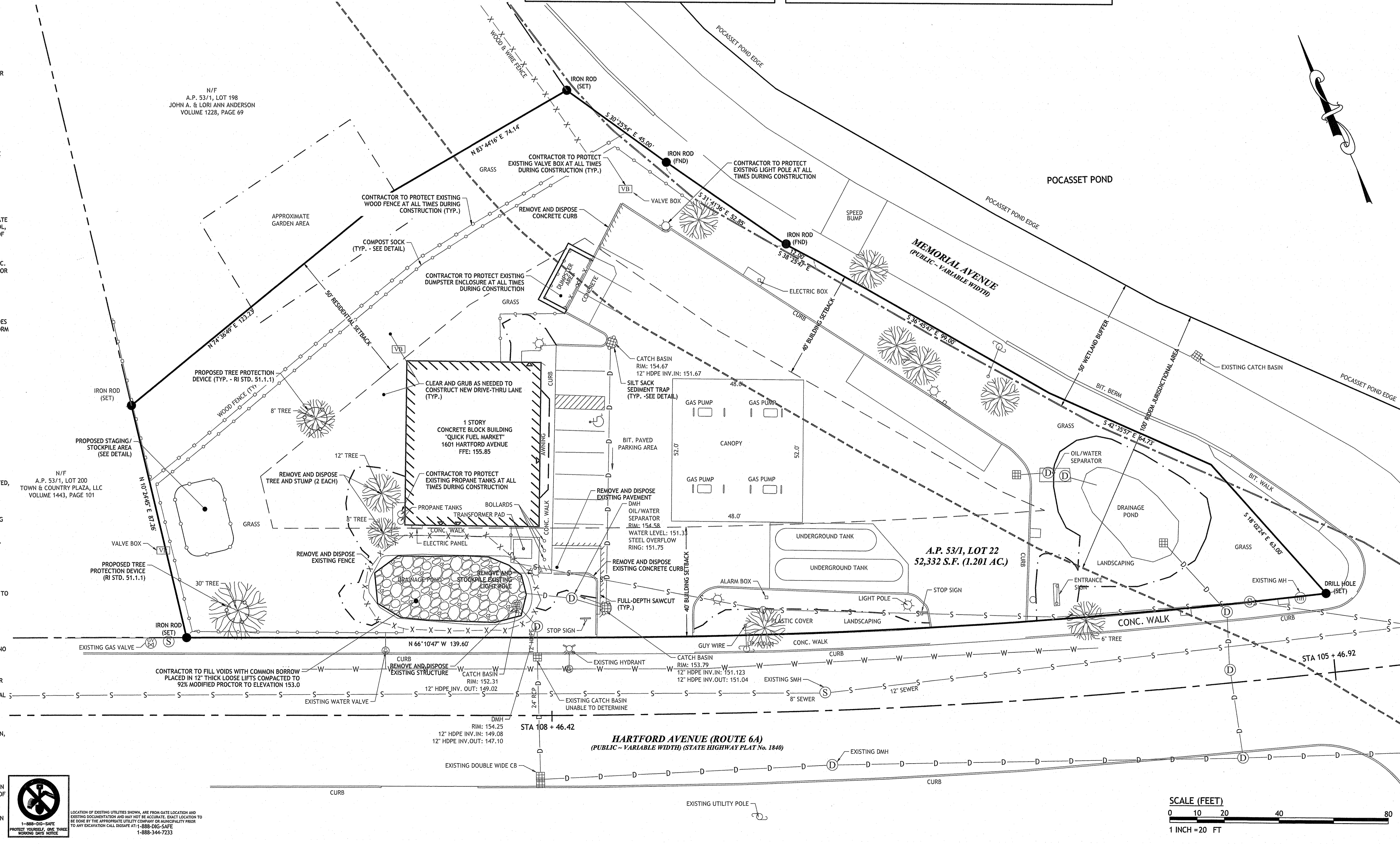
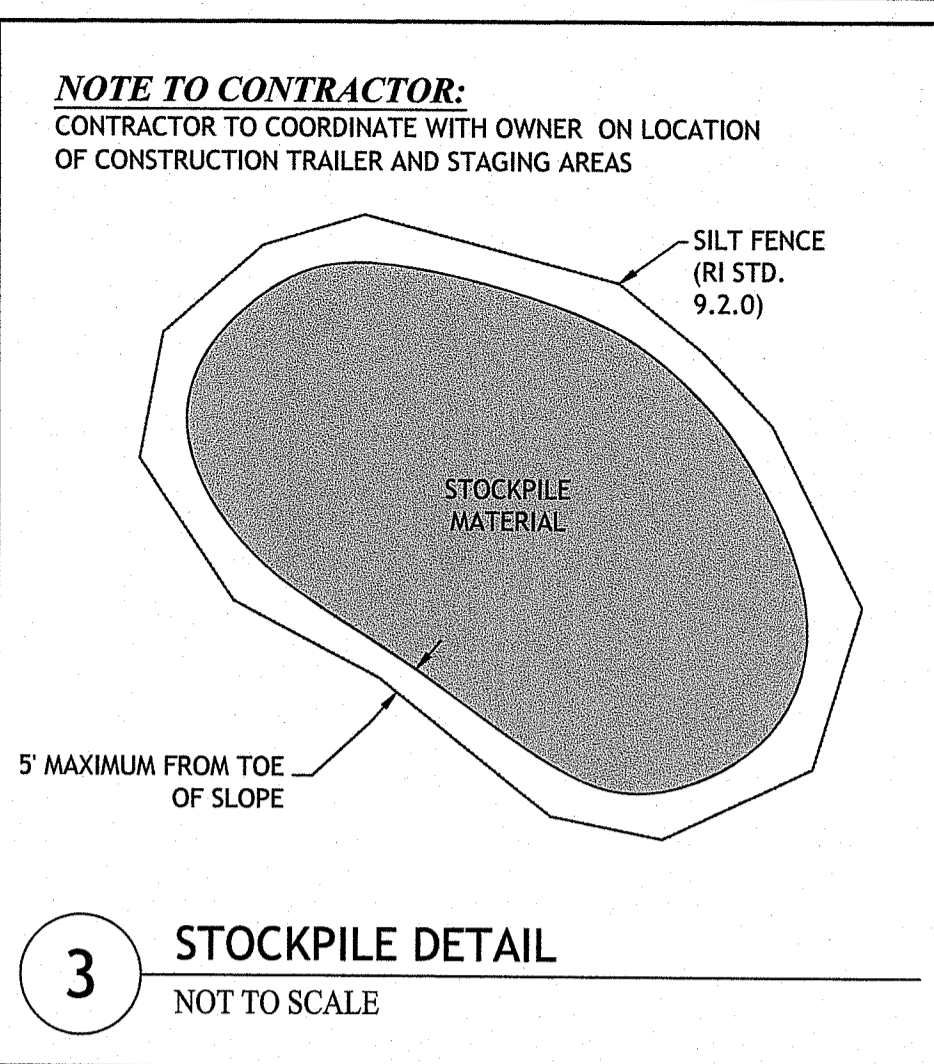
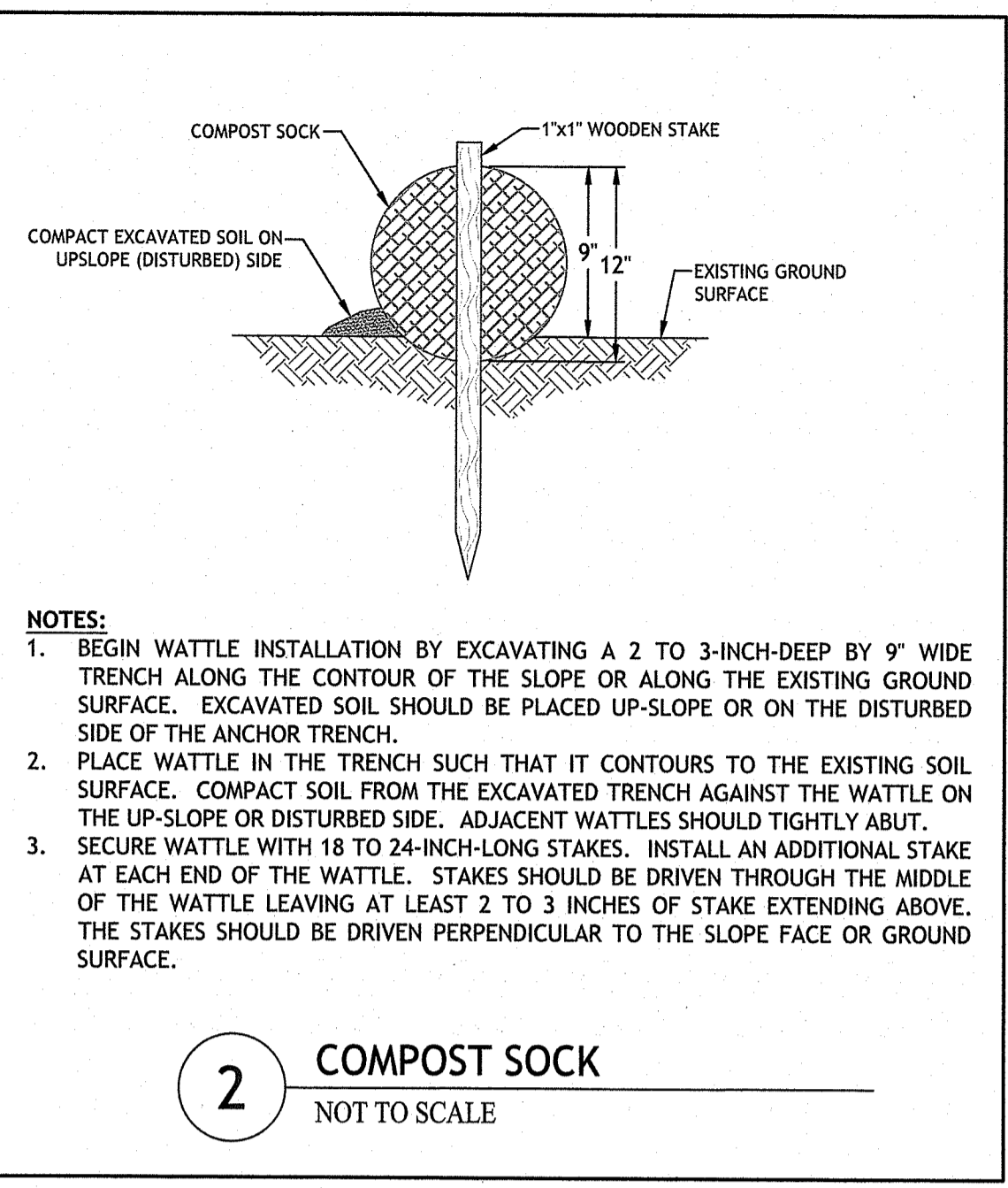
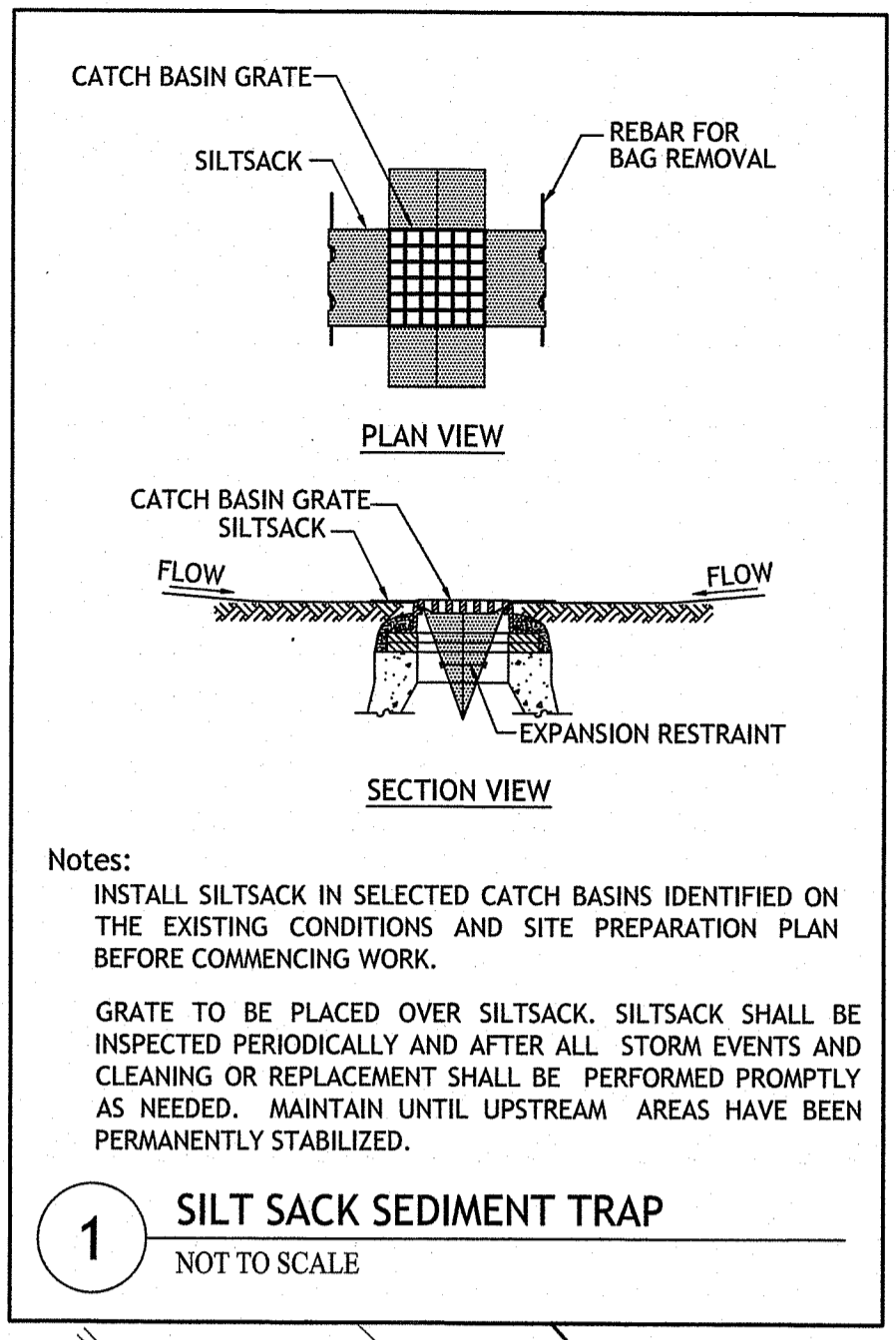
- EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING THE STORMWATER MANAGEMENT AREAS. THESE AREAS CANNOT BE USED AS SEDIMENT CONTROL DEVICES.
- ALL DISTURBED AREAS SUBJECT TO EROSION TENDENCIES WHETHER THEY ARE NEWLY FILLED OR EXCAVATED, SHALL RECEIVE SUITABLE SLOPE PROTECTION.
- ALL UNSLOPED AREAS ARE TO BE STABILIZED PRIOR TO CONNECTING TO THE STORMWATER FACILITIES.
- DURING CONSTRUCTION, THE CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF DURING STORMS AND PERIODS OF RAINFALL.
- SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED PERIODICALLY AND AFTER PERIODS OF RAINFALL. SUCH DEVICES SHALL BE REPAIRED OR REPLACED AS NEEDED.
- WATER DISCHARGE LOCATIONS WHERE DISTRIBUTING PIPES, CATCH BASINS, AND MANHOLES ARE TO BE CLEANED AND FLUSHED.
- ALL DISTURBED SLOPES EITHER NEWLY CREATED OR CURRENTLY EXPOSED SHALL BE SEED, PROTECTED AND MAINTAINED BY THE CONTRACTOR. THE CONTRACTOR SHALL REGULARLY CHECK ALL SEEDING AREAS TO ENSURE THAT A GOOD STAND IS MAINTAINED.
- ALL SILT FENCE, TEMPORARY TREATMENT (HAY, STRAW, ETC.) AND TEMPORARY EROSION PROTECTION SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED.
- STOCKPILES OF TOPSOIL SHALL NOT BE LOCATED NEAR WATERWAYS. THEY SHALL HAVE SIDE SLOPES OF NO GREATER THAN 2:1 AND SHALL BE TEMPORARILY SEED AND/OR STABILIZED PER CONTRACT SPECIFICATIONS.
- THE SILT SOCK SHALL BE CHECKED BY THE CONTRACTOR ON A WEEKLY BASIS AND AFTER EACH STORM FOR UNDERMINING OR DETERIORATION. THE CONTRACTOR SHALL REPAIR OR REPLACE PORTIONS OF THE SILT SOCK AS NEEDED. THE CONTRACTOR SHALL CLEAN THE ACCUMULATED SEDIMENT IF HALF OF THE ORIGINAL HEIGHT OF THE SILT SOCK BECOMES FILLED WITH SEDIMENTS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL SOIL EROSION AND SEDIMENT CONTROLS ON THE PROJECT SITE FOR THE ENTIRE DURATION OF THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL FOLLOW THE DIRECTION OF THE RESIDENT ENGINEER WITH REGARD TO INSTALLATION, MAINTENANCE, AND REPAIR OF ALL SOIL EROSION AND SEDIMENTATION CONTROLS ON THE PROJECT SITE. TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROLS (SILT SOCK, SILT FENCE, ETC.) SHALL BE MAINTAINED UNTIL ALL EXPOSED SOILS ARE SATISFACTORILY STABILIZED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AND/OR RESEEDING ALL AREAS THAT DO NOT DEVELOP WITHIN ONE YEAR FROM THE COMPLETION OF CONSTRUCTION.
- ALL REFERENCED SOIL EROSION AND SEDIMENTATION CONTROLS INCLUDING MATERIALS USED, APPLICATION RATES AND THE INSTALLATION PROCEDURES SHALL BE PERFORMED PER THE RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT SOIL EROSION AND SEDIMENT CONTROL RULES.
- THE OPERATOR SHOULD INITIATE APPROPRIATE VEGETATIVE PRACTICES ON ALL DISTURBED AREAS AS SOON AS POSSIBLE, BUT NOT MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED, UNLESS THE ACTIVITY IS TO RESUME WITHIN TWENTY-ONE (21) DAYS.

LEGEND:



DIMENSIONAL REQUIREMENTS	B-2 ZONE
MIN. DISTANCE FROM RESIDENTIAL ZONE BOUNDARY	= 50 FT.
MIN. S/B FRONT YARD	= 40 FT.
MIN. S/B REAR YARD	= 40 FT.
MIN. S/B SIDE YARD	= 40 FT.
MAX. BUILDING HEIGHT	= 35 FT.
MAX. BUILDING COVERAGE	= 40%

NOTE - ZONING INFORMATION IS FROM CURRENT ZONING AND MAY NOT REFLECT THE CONDITIONS AT THE TIME OF CONSTRUCTION OR ANY VARIANCES GRANTED.



JCE
 JOE CASALI ENGINEERING, INC.
 CIVIL - SITE DEVELOPMENT - TRANSPORTATION
 DRAINAGE - WETLANDS - TRAFFIC - FLOODPLAIN
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JOSEPH A. CASALI
 No. 7250
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL
 10/18/2024

QUICK FUEL MARKET
 1601 HARTFORD AVENUE
 JOHNSTON, RHODE ISLAND
 AP 53, LOT 22

REVISIONS:

NO.	DATE	DESCRIPTION

DESIGNED BY: WMLJR
 DRAWN BY: MCG/SEP/SD
 CHECKED BY: JAC
 DATE: OCTOBER 2024
 PROJECT NO: 23-09

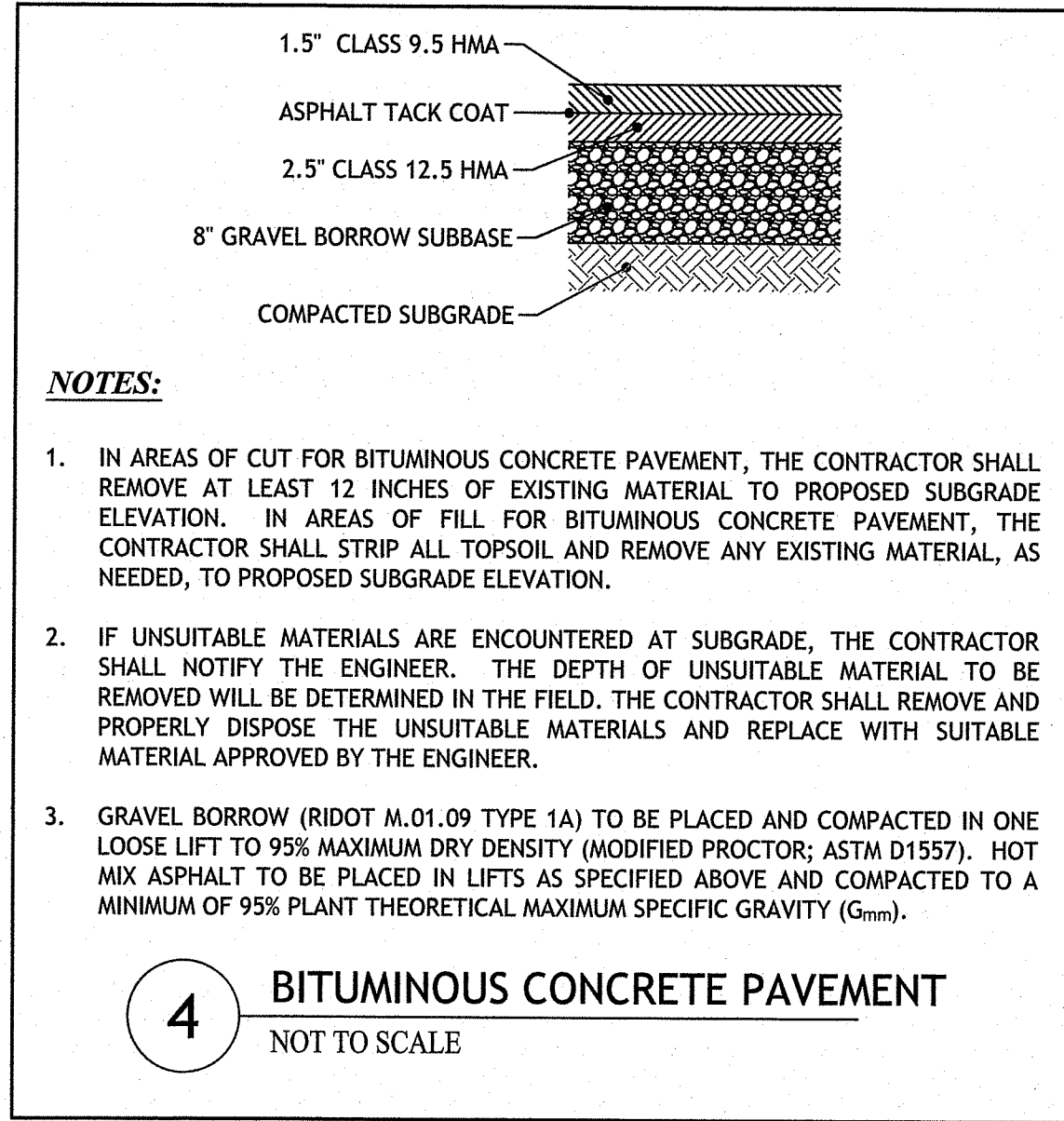
PRELIMINARY, NOT FOR CONSTRUCTION

EXISTING CONDITIONS & SITE PREP PLAN

SHEET 2 OF 5

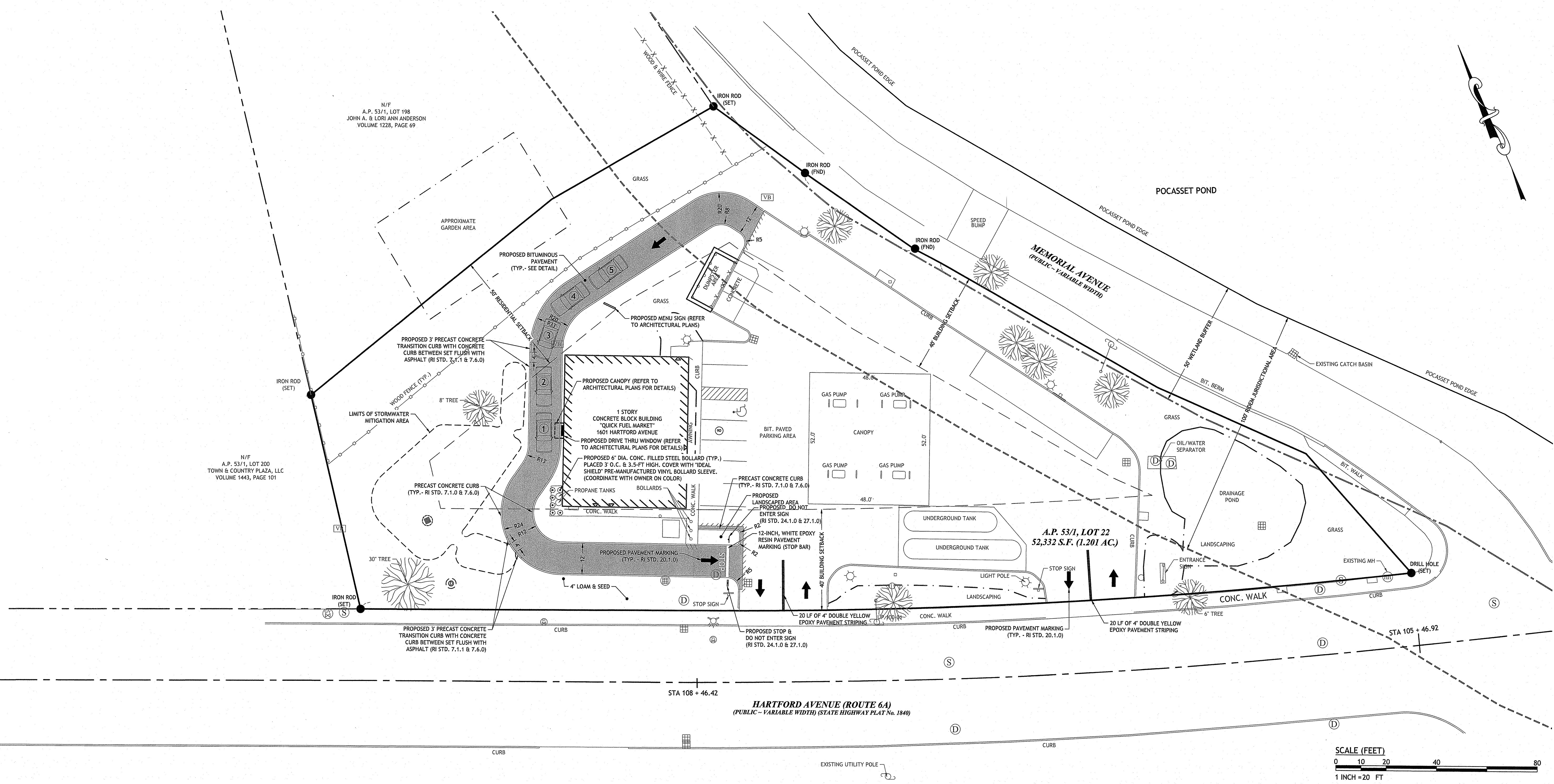
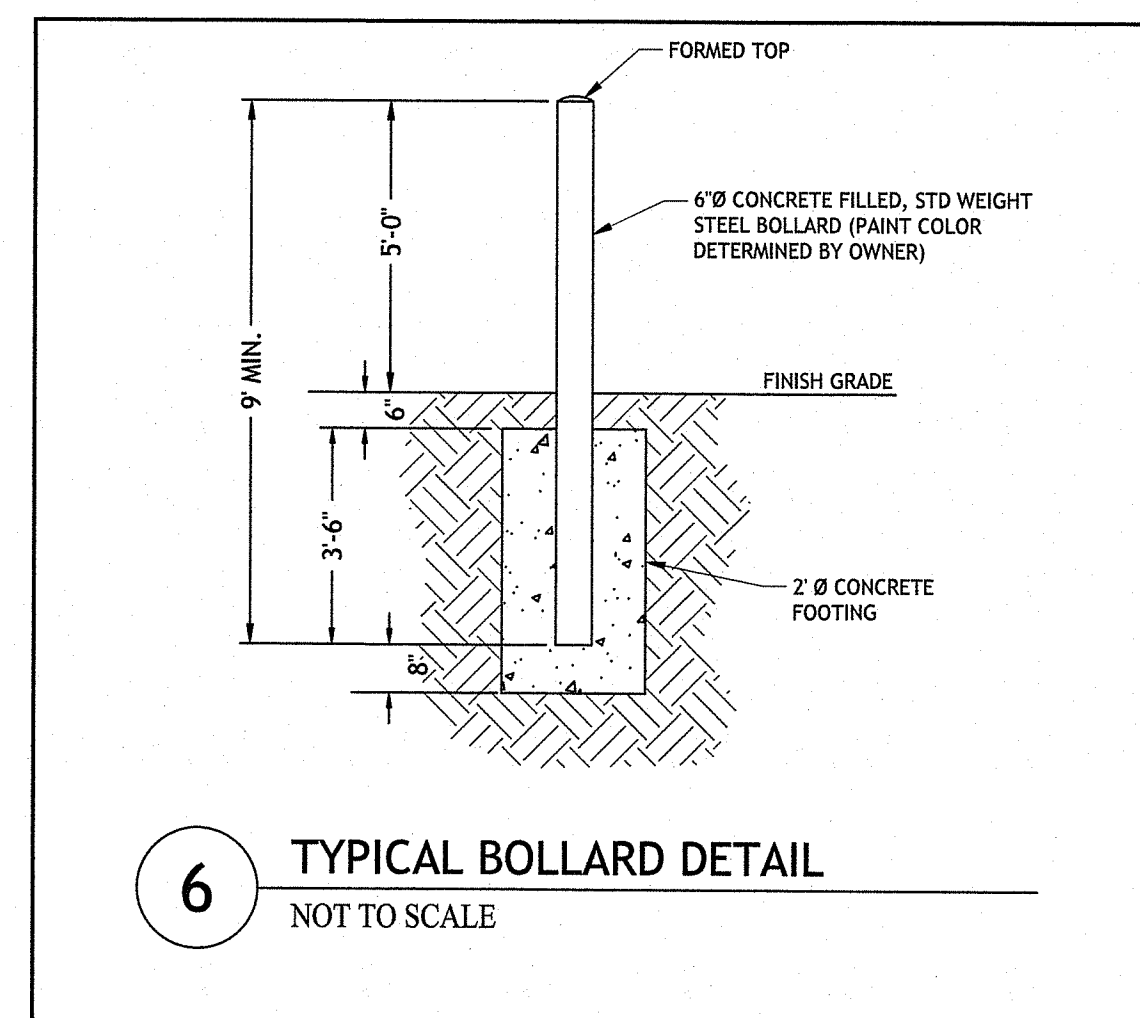
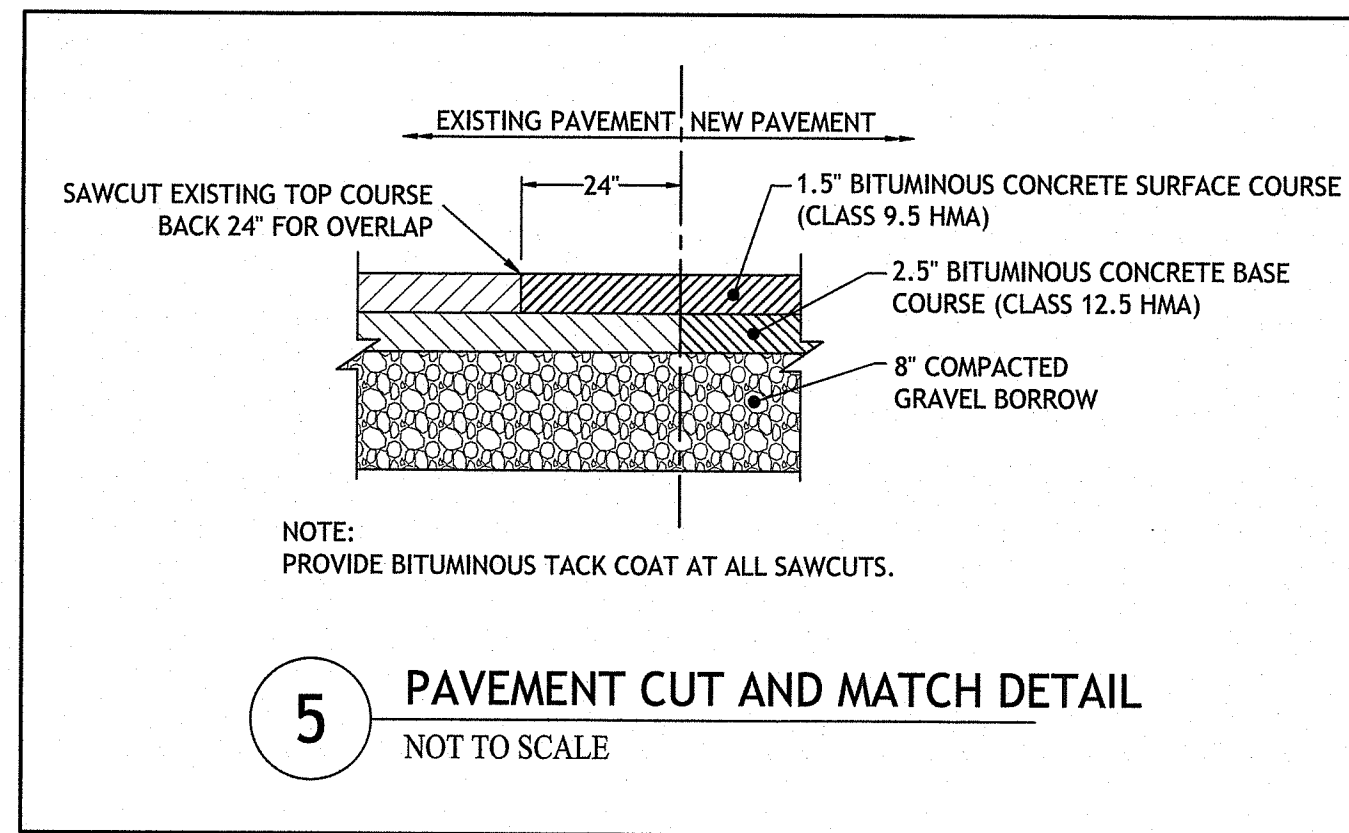
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IMPERVIOUS AREA CALCULATION:
 TOTAL LOT AREA = 52,332 SQ. FT.
 TOTAL EXISTING IMPERVIOUS AREA = 21,829 SF (41.7% IMPERVIOUS)
 NEW IMPERVIOUS AREA = 3,304 SF
 TOTAL PROPOSED IMPERVIOUS AREA = 25,133 SQ. FT. (48.1%)



NOTES:

1. IN AREAS OF CUT FOR BITUMINOUS CONCRETE PAVEMENT, THE CONTRACTOR SHALL REMOVE AT LEAST 12 INCHES OF EXISTING MATERIAL TO PROPOSED SUBGRADE ELEVATION. IN AREAS OF FILL FOR BITUMINOUS CONCRETE PAVEMENT, THE CONTRACTOR SHALL STRIP ALL TOPSOIL AND REMOVE ANY EXISTING MATERIAL, AS NEEDED, TO PROPOSED SUBGRADE ELEVATION.
2. IF UNSUITABLE MATERIALS ARE ENCOUNTERED AT SUBGRADE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER. THE DEPTH OF UNSUITABLE MATERIAL TO BE REMOVED WILL BE DETERMINED IN THE FIELD. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE THE UNSUITABLE MATERIALS AND REPLACE WITH SUITABLE MATERIAL APPROVED BY THE ENGINEER.
3. GRAVEL BORROW (RIDOT M.01.09 TYPE 1A) TO BE PLACED AND COMPACTED IN ONE LOOSE LIFT TO 95% MAXIMUM DRY DENSITY (MODIFIED PROCTOR; ASTM D1557). HOT MIX ASPHALT TO BE PLACED IN LIFTS AS SPECIFIED ABOVE AND COMPACTED TO A MINIMUM OF 95% PLANT THEORETICAL MAXIMUM SPECIFIC GRAVITY (G_{mm}).



JCE
 JOE CASALI ENGINEERING, INC.
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 300 POST ROAD, WARWICK, RI 02888
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QUICK FUEL MARKET
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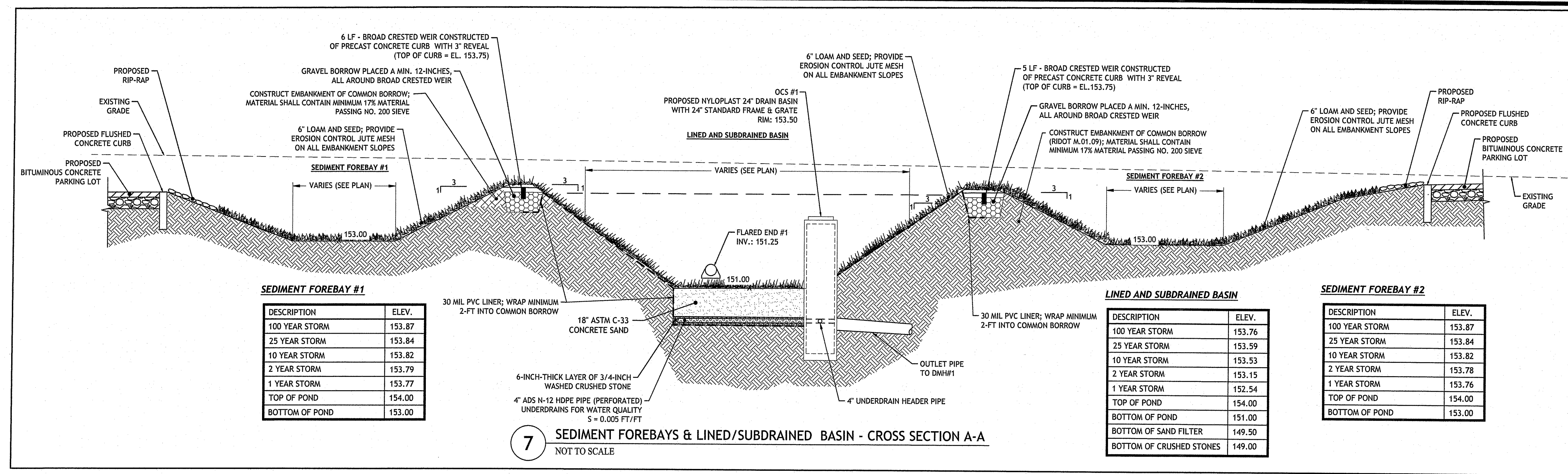
DESIGNED BY: WMLJR
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PRELIMINARY, NOT FOR CONSTRUCTION

SITE PLAN

SHEET 3 OF 5

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SEDIMENT FOREBAY #1

DESCRIPTION	ELEV.
100 YEAR STORM	153.87
25 YEAR STORM	153.84
10 YEAR STORM	153.82
2 YEAR STORM	153.79
1 YEAR STORM	153.77
TOP OF POND	154.00
BOTTOM OF POND	153.00

LINED AND SUBDRAINED BASIN

DESCRIPTION	ELEV.
100 YEAR STORM	153.76
25 YEAR STORM	153.59
10 YEAR STORM	153.53
2 YEAR STORM	153.15
1 YEAR STORM	152.54
TOP OF POND	154.00
BOTTOM OF POND	151.00
BOTTOM OF SAND FILTER	149.50
BOTTOM OF CRUSHED STONES	149.00

SEDIMENT FOREBAY #2

DESCRIPTION	ELEV.
100 YEAR STORM	153.87
25 YEAR STORM	153.84
10 YEAR STORM	153.82
2 YEAR STORM	153.78
1 YEAR STORM	153.76
TOP OF POND	154.00
BOTTOM OF POND	153.00

7 SEDIMENT FOREBAYS & LINED/SUBDRAINED BASIN - CROSS SECTION A-A
NOT TO SCALE

ADS, Inc. Drainage Handbook Specifications • 1-48

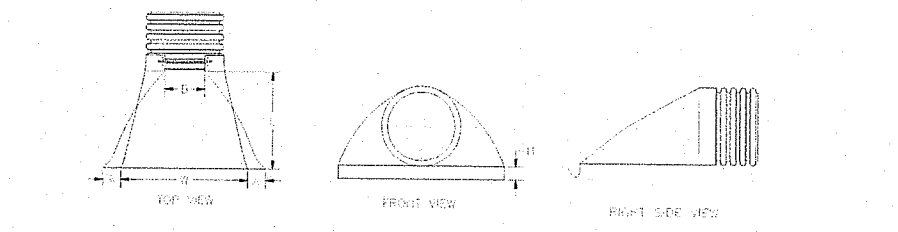
ADS FLARED END SECTION SPECIFICATION

Scope
This specification describes 12- through 36-inch (300 to 900mm) ADS Flared End Sections for use in culvert and drainage outlet applications.

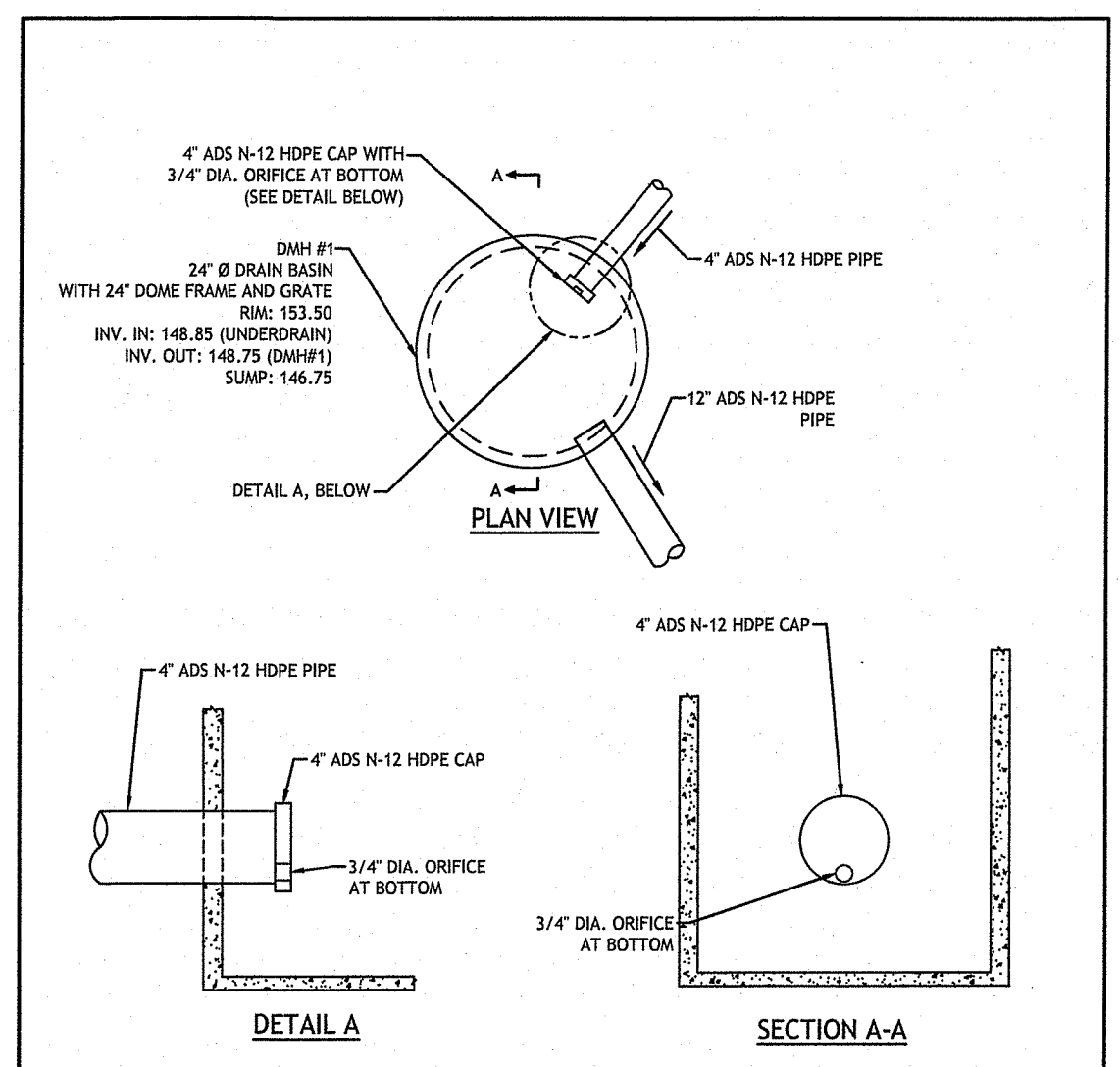
Requirements
The ADS Flared End Section shall be high density polyethylene meeting ASTM D3350 minimum cell classification 213220C; contact manufacturer for additional cell classification information. When provided, the metal threaded fastening rod shall be stainless steel.

Installation
Installation shall be in accordance with ADS installation instructions and with those issued by state or local authorities. Contact your local ADS representative or visit www.ads-pipe.com for the latest installation instructions.

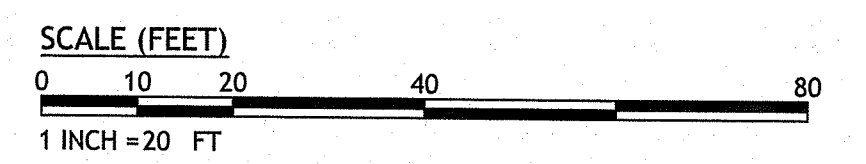
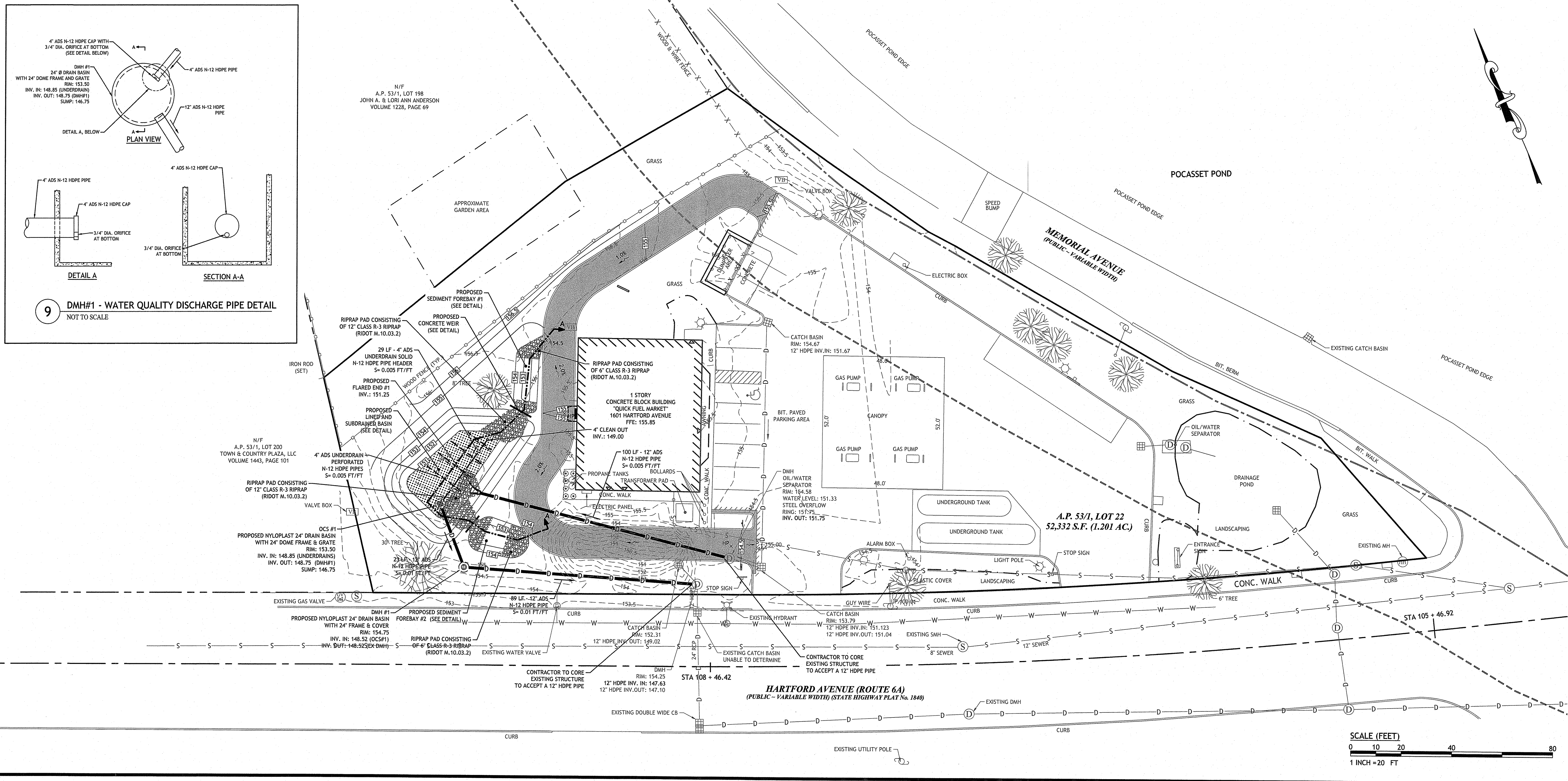
Description	PIPE DIAMETER, in (mm)				
	12 (305)	18 (457)	24 (609)	30 (762)	36 (914)
By (mm)	6.3	6.8	7.6	8.0	8.7
By (mm)	(165)	(165)	(191)	(191)	(191)
By (mm)	152	152	183	183	212
By (mm)	(384)	(384)	(464)	(464)	(533)
By (mm)	6.8	6.8	8.0	8.0	8.7
By (mm)	(165)	(165)	(165)	(165)	(165)
By (mm)	(330)	(330)	(330)	(330)	(330)
By (mm)	29.1	29.2	35.2	40.5	45.7
By (mm)	(727)	(727)	(889)	(1143)	(1160)



8 FLARED END SECTION DETAIL
NOT TO SCALE



9 DMH#1 - WATER QUALITY DISCHARGE PIPE DETAIL
NOT TO SCALE



JOCE
JOSEPH A. CASALI ENGINEERING, INC.
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DRAINAGE - WATER CONTROL - TRAFFIC - FLOODPLAIN
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GRADING & DRAINAGE PLAN

SHEET 4 OF 5

