

RIDEM PERMIT SUBMISSION SITE PLANS

FOR:

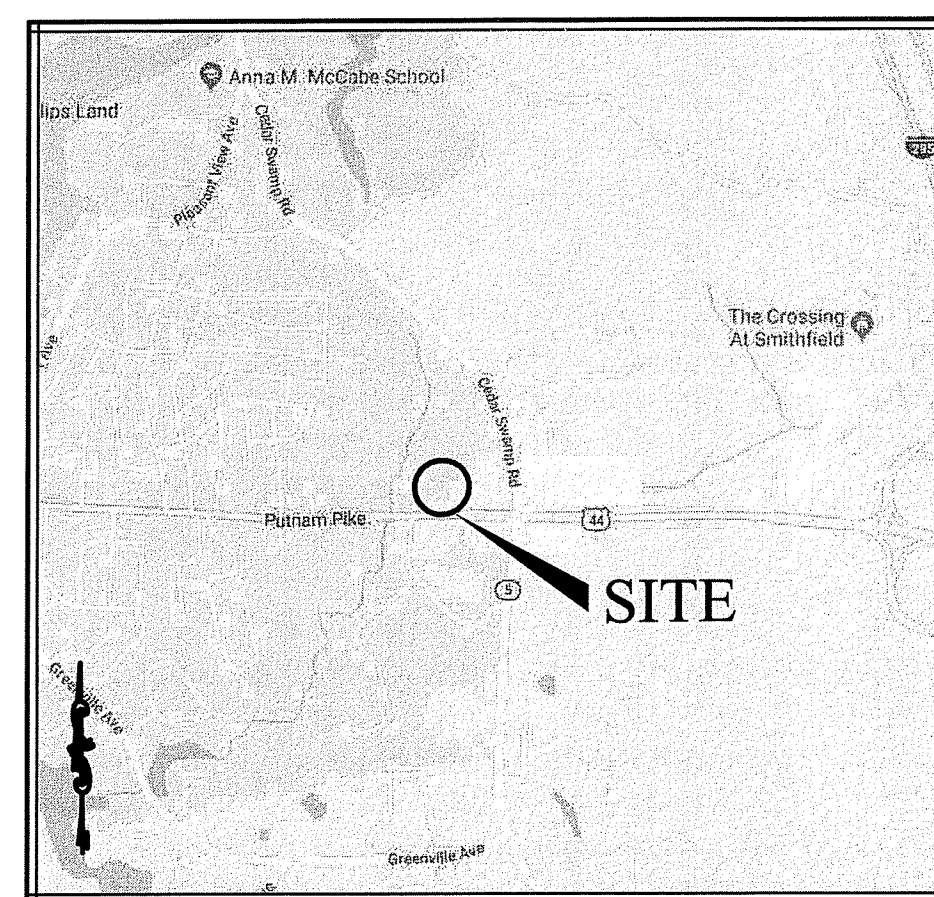
RETAIL CENTER REDEVELOPMENT

A.P. 43, LOT 85
473 PUTNAM PIKE
SMITHFIELD, R.I. 02828

PREPARED FOR:

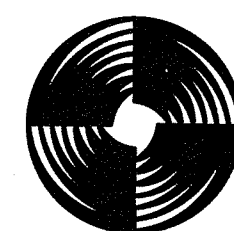
CGRI GREENVILLE LLC
1414 ATWOOD AVE
JOHNSTON, R.I. 02919

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED SEP 10 2019 FILE # 19-0194
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Nancy L. Freeman



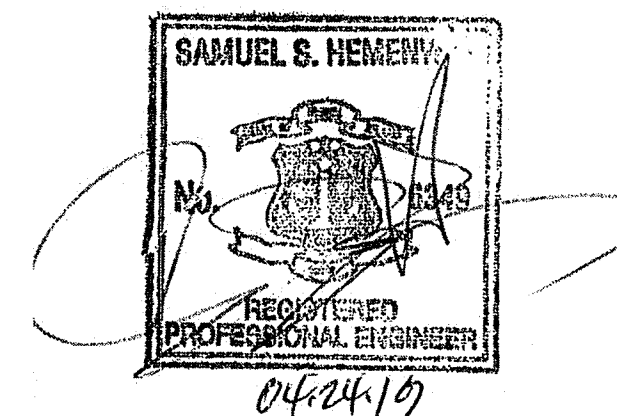
LOCUS MAP
NOT TO SCALE

PREPARED BY:



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GAROFALO & ASSOCIATES, INC.
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LAND PLANNERS, ENVIRONMENTAL SCIENTISTS
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JOB NO. 7156-00



DATED:

JANUARY 25, 2019

(REVISED DATE: JUNE 10, 2019)

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Environmental Management
JUN 21 2019
Office of Water Resources

GENERAL CONSTRUCTION NOTES:

- AN APPROVED SET OF PLANS AND ALL APPLICABLE PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE TRAILER AT ALL TIMES. DEVIATIONS OR CHANGES WILL NOT BE ALLOWED UNLESS BY WRITTEN APPROVAL FROM THE ENGINEER.
- SITING CONSTRUCTION SHALL NOT COMMENCE UNTIL ALL APPROVALS HAVE BEEN SECURED. REQUIRED PERMITS/APPROVALS FOR THE PROJECT INCLUDE BUT NOT LIMITED TO THE FOLLOWING: DEMOLITION PERMITS, SITE PLAN APPROVAL BY THE CITY OF SMITHFIELD, RIDOT PHYSICAL ALTERATION PERMIT, RIDEM UNDERGROUND INJECTION CONTROL, SMITHFIELD SEWER AND VEOLIA WATER NORTH AREA CONNECTION PERMIT, SMITHFIELD WATER SUPPLY BOARD CONNECTION PERMIT, SMITHFIELD MAJOR LAND DEVELOPMENT PERMIT, AND SMITHFIELD ZONING VARIANCE.
- THE CONTRACTOR MUST RETAIN THE SERVICES OF A REGISTERED LAND SURVEYOR IN THE STATE OF RHODE ISLAND TO LAYOUT ON THE GROUND ALL NEW ELEMENTS OF WORK. IF ANY WORK IS INSTALLED PRIOR TO THE ABOVE REQUIREMENT AND IF ANY WORK IS NOT SATISFACTORY TO THE ENGINEER, THE CONTRACTOR MUST REPLACE THE WORK AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL VERIFY THE PROPOSED LAYOUT WITH ITS RELATIONSHIP TO THE EXISTING SITE SURVEY. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, SITE CONDITIONS AND MATERIAL SPECIFICATIONS AND SHALL NOTIFY THE OWNER AND ENGINEER OF ANY ERRORS, OMISSIONS OR DISCREPANCIES BEFORE COMMENCING, INSTALLING OR PROCEEDING WITH WORK.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND TO TAKE WHATEVER NECESSARY MEASURES NEEDED TO PROVIDE FOR THEIR PROTECTION. THE ENGINEER HAS DILIGENTLY ATTEMPTED TO LOCATE AND INDICATE ALL EXISTING UNDERGROUND UTILITIES AND FACILITIES ON THE DRAWINGS; HOWEVER, THE INFORMATION SHOWN IS FOR THE CONTRACTORS CONVENIENCE ONLY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS OF UTILITIES SHOWN OR NOT SHOWN. THE CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AND LOCATE ANY EXISTING UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION, VERIFY ALL DIMENSIONS, SITE CONDITIONS AND MATERIALS. THE CONTRACTOR MUST CONTACT THE LOCAL UTILITY COMPANIES FOR EXACT LOCATION OF UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BEFORE START OF ANY WORK. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AND REPLACE ANY AND ALL DAMAGE MADE TO UTILITIES BY THE CONTRACTOR.
- THE CONTRACTOR MUST NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITIES IN THE AREA OF PROPOSED CONSTRUCTION, EXCAVATION OR BLASTING AT LEAST THREE WORKING DAYS, BUT NOT MORE THAN TEN WORKING DAYS PRIOR TO THE START OF ANY CONSTRUCTION, EXCAVATION OR BLASTING. ALL WATER, SEWER, GAS AND ALL OTHER UTILITIES MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
- METHODS AND MATERIALS USED IN THE CONSTRUCTION OF IMPROVEMENTS MUST CONFORM TO THE TOWN OF SMITHFIELD CURRENT CONSTRUCTION STANDARDS AND SPECIFICATIONS AND THE STATE OF RHODE ISLAND DEPARTMENT OF TRANSPORTATION.
- THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY PAVEMENT, DRIVEWAYS, SIDEWALKS, WALL, CURBS, ETC. DAMAGED DURING CONSTRUCTION WITH MATCHING MATERIALS.
- THE CONTRACTOR AGREES THAT HE WILL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE PROJECT SITE CONDITIONS THROUGHOUT CONSTRUCTION, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT.
- ALL MATERIALS USED FOR CONSTRUCTION MUST BE NEW AND FREE OF DEFECTS. USED OR SALVAGED MATERIAL WILL NOT BE ALLOWED UNLESS WRITTEN APPROVAL FROM THE OWNER IS OBTAINED BY THE CONTRACTOR.
- AT ALL TIME THE CONTRACTOR MUST MAINTAIN ACCESS FOR EMERGENCY VEHICLES AROUND AND TO ALL BUILDINGS. (I.E. IN TIMES OF RAIN OR SNOW, ROADS MUST BE ABLE TO CARRY A FIRE TRUCK BY BEING PAVED OR HAVING A CRUSHED STONE BASE, ETC.). WIDTH OF EMERGENCY VEHICLE ACCESS MUST BE A MINIMUM OF 20 FEET WIDE. ACCESS TO BUILDINGS THAT HAVE A FIRE SPRINKLER SYSTEM OR STANDPIPE MUST BE WITHIN 40 FEET OF THE FIRE DEPARTMENT CONNECTION (FDC), NFPA 1141 3-1.
- NECESSARY BARRICADES, LIGHTS, SIGNS AND OTHER TRAFFIC CONTROL METHODS AS MAYBE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC MUST BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION BY THE CONTRACTOR.
- HIGH INTENSITY LIGHTING FACILITIES MUST BE SO ARRANGED THAT THE SOURCE OF ANY LIGHT IS CONCEALED FROM PUBLIC VIEW AND FROM ADJACENT RESIDENTIAL PROPERTY AND DOES NOT INTERFERE WITH TRAFFIC. (REFER TO ELECTRICAL SITE PLANS PREPARED BY OTHERS FOR DETAILS.)
- ALL RI HIGHWAY BOUNDS AND PERMANENT SURVEY MARKERS SHALL BE PROTECTED THROUGHOUT CONSTRUCTION.
- ALL WORK WITHIN THE STATE HIGHWAY RIGHT OF WAY SHALL CONFORM TO RIDOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED 2013, WITH ALL REVISIONS AND R.I. STANDARD DETAILS, 1998 EDITION, WITH ALL REVISION
- ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES 2009 INCLUDING ALL REVISIONS.
- TEST HOLE EVALUATIONS WERE OBTAINED FROM A PERMIT PLAN TITLED "BENNY'S ADDITION," DATED 5-14-09.
- REFER TO ARCHITECTURAL, STRUCTURAL, AND MECHANICAL PLANS FOR ALL BUILDING INFORMATION.
- THERE ARE KNOWN WETLAND AREAS ON OR ADJACENT TO THE PROJECT SITE. THE WETLANDS INDICATED HAVE BEEN FLAGGED IN THE FIELD.
- ALL CURB RADII ARE 3' UNLESS OTHERWISE NOTED ON THE SITE PLAN.
- PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR IS REQUIRED TO DEVELOP AND IMPLEMENT A PLAN FOR THE TEMPORARY CONTROL OF VEHICULAR AND PEDESTRIAN TRAFFIC FOR WORK WITHIN PUBLIC STREET RIGHT-OF-WAY AT THE SITE EGRESS. CONTRACTOR SHALL OBTAIN APPROVAL OF SAID PLAN FROM APPROPRIATE STATE AND COMMUNITY PUBLIC SAFETY OFFICIALS.
- WHEN IT IS NECESSARY TO CLOSE OFF A STREET, THE FIRE DEPARTMENT AND POLICE DEPARTMENT SHALL BE NOTIFIED BY THE CONTRACTOR.
- PRECAST STRUCTURES MAY BE USED AT CONTRACTOR'S OPTION. SHOP DRAWINGS OF PRECAST STRUCTURES SHALL BE REVIEWED BY THE ENGINEER AND APPROVED BEFORE USE.
- IF ANY EXISTING STRUCTURES AND/OR UTILITIES TO REMAIN ARE DAMAGED DURING CONSTRUCTION, EITHER ON THE PROJECT SITE, ADJACENT PROPERTIES, OR WITHIN STATE RIGHT-OF-WAY, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.

GENERAL DRAINAGE & GRADING NOTES:

- ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
- ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER".
- CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
- ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER. CONTRACTOR SHALL GRASS DISTURBED AREAS IN ACCORDANCE WITH THE TOWN OF SMITHFIELD SPECIFICATIONS UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
- ALL WATERLINES SHALL BE LAID 10-FT (MINIMUM) DISTANCE FROM SANITARY LINES. A CARRIER PIPE SHALL BE PROVIDED WHEN WATERLINE CROSSES WITHIN 1.5-FT VERTICAL DISTANCE FROM SEWER LINES. CARRIER PIPES SHALL EXTEND 10-FEET PERPENDICULAR FROM THE CROSSING. ALL SEWER/WATER LAYOUT AND INSTALLATION SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF THE SMITHFIELD WATER SUPPLY BOARD AND RIDEM SEWER/WATER LINE SEPARATION POLICY.
- INSTALL SILT SACKS AT ALL INLETS AFTER INSTALLATION.

GENERAL UTILITY NOTES:

- THE CONTRACTOR SHALL NOTIFY DIG-SAFE (1-888-344-7233) AND ALL LOCAL AUTHORITIES & UTILITY COMPANIES TO VERIFY LOCATIONS OF UTILITIES WITHIN THE AREA 72 HOURS PRIOR TO BEGINNING ANY EXCAVATION OR DEMOLITION FOR THE PURPOSE OF COORDINATING THE MARKING OF UNDERGROUND UTILITIES. LOCATION AND DEPTHS OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY, LOCATE AND PROTECT EXISTING UTILITIES IN THE FIELD WHETHER OR NOT SHOWN ON THE DRAWINGS.
- ALL WORK SHALL BE IN COMPLETE ACCORDANCE WITH ALL APPLICABLE STATE, FEDERAL AND LOCAL CODES, AND ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS PREVIOUSLY OBTAINED BY THE OWNER/DEVELOPER. THE CONTRACTOR SHALL REFER TO THE SMITHFIELD WATER SUPPLY BOARD RULES & REGULATIONS FOR THE SERVICE INSTALLATION & EXTENSION REQUIREMENTS OF WATER LINES.
- THE CONTRACTOR SHALL COORDINATE LOCATION AND INSTALLATION OF ALL UNDERGROUND UTILITIES AND APPURTENANCES TO MINIMIZE DISTURBANCE OF CURBING, PAVING AND COMPACTED SUBGRADE, THE CONTRACTOR SHALL NOTIFY THE TOWN ENGINEER & ALL LOCAL UTILITY COMPANIES 48 HOURS BEFORE EACH PHASE OF CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER OF ANY DISCREPANCIES OR ERRORS DISCOVERED IN THE PLANS.
- BEDDING REQUIREMENTS SPECIFIED HEREIN ARE TO BE CONSIDERED AS MINIMUMS FOR RELATIVELY DRY, STABLE EARTH CONDITIONS. ADDITIONAL BEDDING SHALL BE REQUIRED FOR ROCK TRENCHES AND WET AREA. CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO PROVIDE SUCH ADDITIONAL BEDDING AS MAY BE REQUIRED TO PROPERLY CONSTRUCT THE WORK.
- THE CONTRACTOR SHALL REMOVE ANY ABANDONED FOUNDATIONS, UTILITY STRUCTURES, BURIED DEBRIS ETC. WHICH INTERFERE WITH THE INSTALLATION OF THE UTILITY WORK. ALL SUCH STRUCTURES SHALL BE COMPLETELY REMOVED AND THE EXCAVATED AREA SHALL BE BACKFILLED WITH COMPACTED GRAVEL IN 6" LIFTS TO 95% COMPACTION TO 6" BELOW THE BOTTOM OF THE UTILITY AND PIPE.
- COMPACTION OF THE BACKFILL OF ALL TRENCHES SHALL BE COMPACTION TO THE DENSITY OF 95% OF THE THEORETICAL MAXIMUM DRY DENSITY (ASTM D698). BACKFILL MATERIAL SHALL BE FREE FROM ROOTS, STUMPS OR OTHER FOREIGN DEBRIS AND SHALL BE PLACED IN LIFTS NOT TO EXCEED ONE FOOT IN COMPACTED FILL THICKNESS. CORRECTION OF ANY TRENCH SETTLEMENT WITHIN A YEAR FROM THE DATE OF PROJECT APPROVAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL PIPING LAYOUT INDICATED ON THESE PLANS IS DIAGRAMMATIC ONLY AND DOES NOT SHOW ALL THE REQUIRED FITTINGS FOR PROPER ALIGNMENT. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED FITTINGS TO OBTAIN PROPER ALIGNMENT AND FOR EXISTING UTILITY CONNECTIONS BASED UPON FIELD CONDITIONS.
- IF DURING EXCAVATION THE TRENCH WIDTH EXCEEDS THE SUM OF THE PIPE O.D. PLUS 2'-0", PLACE AND COMPACT THE FILL TO 12" ABOVE THE PIPE AND RE-EXCAVATE TO REQUIRED GRADE.
- DOMESTIC AND FIRE PROTECTION WATER SERVICE IS PROVIDED TO THE PROPERTY BY THE SMITHFIELD WATER SUPPLY BOARD (SWSB). THE ONSITE WATER SYSTEM ON THE PROPERTY IS PRIVATE. WATER PIPING SHALL BE CLASS 52 DOUBLE CEMENT LINED DUCTILE IRON PIPE WITH TYTON JOINTS. ALL BENDS, TEES ETC. SHALL BE JOINT RESTRAINED BY THE USE OF CONCRETE THRUST BLOCKS AND "MEG-A-LUG". ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE SWSB REGULATIONS, STANDARDS AND SPECIFICATIONS. NOTIFICATION SHALL BE PROVIDED TO SAID AUTHORITIES AT LEAST 72 HOURS PRIOR TO INITIATING CONSTRUCTION. WATER SERVICE PIPING SIZE SHOWN IS APPROXIMATE ONLY AND SHALL BE SIZED AND VERIFIED BY A LICENSED FIRE PROTECTION ENGINEER AND OR LICENSED PLUMBING ENGINEER.
- GATE VALVES SHALL BE CAST IRON BODY BRONZE MOUNTED, COMPLETE WITH ROAD BOX AND SHALL CONFORM TO THE SWSB REGULATIONS, STANDARDS AND SPECIFICATIONS.
- ALL FIRE AND PLUMBING FIXTURES MUST CONFORM TO LOCAL SPECIFICATIONS AND AS STIPULATED BY THE LOCAL FIRE MARSHALL AND/OR THE BUILDING OFFICIAL.
- ALL SANITARY SEWER MATERIALS AND WORKMANSHIP ASSOCIATED WITH THE INSTALLATION AND TESTING OF SANITARY SEWERS SHALL CONFORM TO THE SMITHFIELD SEWER DEPARTMENT REGULATIONS STANDARDS AND SPECIFICATIONS. ALL SEWER SYSTEM COMPONENTS MUST BE TESTED, CLEANED AND AS-BUILT INFORMATION MUST BE SUBMITTED TO THE TOWN OF SMITHFIELD AND APPROVED, PRIOR TO ISSUANCE OF A PERMIT TO CONNECT TO PUBLIC SEWER SYSTEM.
- SANITARY SEWER MAINS AND SERVICES SHALL BE SDR-35 (ASTM D-3034) PVC SEWER PIPE WITH PUSH ON RUBBER RING JOINTS UNLESS NOTED OTHERWISE. CLEANOUTS SHALL BE INSTALLED AT BUILDING FACE (REFER PLUMBING PLANS FOR ALL WORK WITHIN 5' OF THE BUILDING). NEOPRENE COUPLINGS WITH STAINLESS STEEL BAND AND SHEER RINGS SHALL BE REQUIRED FOR JOINING DIFFERENT TYPES OF SANITARY SEWER PIPES.
- SEWER LINES SHALL BE INSTALLED AT A MINIMUM 10 FOOT HORIZONTAL SEPARATION FROM ANY PROPOSED OR EXISTING WATER LINE. SEWER CONNECTION TO THE PROPERTY LINE SHALL BE PERFORMED BY THE EPSD AND PAID FOR BY THE OWNER. CONTRACTOR SHALL INSTALL CLEANOUT AT THE BUILDING FACE. CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH W.S.A. REQUIREMENTS.
- WHENEVER SEWER LINES MUST CROSS WATER LINES, THE SEWER SHALL BE INSTALLED SO THAT THE TOP OF THE SEWER IS AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. WHERE 18 INCH VERTICAL SEPARATION & 10 FOOT HORIZONTAL SEPARATION CAN NOT BE MET AT WATER AND SEWER CROSSINGS, THE SEWER PIPE SHALL BE ENCASED IN EITHER DUCTILE IRON OR #900 BLUE BRUTE PIPE FOR A DISTANCE OF 10 FEET ON EACH SIDE OF CROSSING.
- WHENEVER NEW SEWER LINES CONNECT TO EXISTING SEWER MANHOLES THE CONTRACTOR SHALL REBUILD THE EXISTING SEWER MANHOLE CHANNEL TO ACCOMMODATE THE NEW CONNECTION.
- STORM DRAINS 12" AND OVER SHALL BE SMOOTH INTERIOR WALL AND EXTERIOR CORRUGATED HIGH DENSITY POLYETHYLENE (HDPE) PIPE CAPABLE OF WITHSTANDING (H-20) LOAD UNLESS NOTED OTHERWISE. PIPE SHALL BE JOINED USING BELL & SPIGOT JOINTS MEETING OR EXCEED ASTM F2648. THE JOINT SHALL BE SOIL-TIGHT AND GASKETS SHALL MEET OR EXCEED ASTM F477. HDPE PIPE SHALL BE AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS INC. (ADS), HANCOR PIPE OR LANE PIPE. ALL STORM DRAINAGE PIPING SHALL BE LAID ON A SMOOTH CONTINUOUS GRADE WITH NO VISIBLE BENDS AT THE JOINTS. WHERE INDICATED ON DRAWINGS REINFORCED CONCRETE PIPE (RCP) PIPE SHALL BE CLASS III RCP WITH "O" RING GASKET JOINTS
- GAS SERVICE FACILITIES SHALL BE DESIGNED BY OTHERS. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE UTILITY INSTALLATIONS AS REQUIRED TO ENSURE ADEQUATE GAS SERVICE IS PROVIDED AND SHALL BE RESPONSIBLE FOR ALL INSTALLATION PROCEDURES (TRENCHING, LAYING PIPE, ETC.) AS ARE REQUIRED BY THE GAS COMPANY FOR COMPLETE AND IN PLACE CONSTRUCTION.

- ELECTRIC SERVICE FACILITIES SHALL BE DESIGNED BY OTHERS. ELECTRIC SERVICE AND TRANSFORMER PAD SHALL CONFORM TO THE REQUIREMENTS OF THE ELECTRIC COMPANY. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ADEQUATE ELECTRIC SERVICE IS PROVIDED AND SHALL BE RESPONSIBLE FOR ALL INSTALLATION PROCEDURES (TRENCHING, LAYING PIPE, ETC.) AS ARE REQUIRED BY THE ELECTRIC COMPANY FOR COMPLETE AND IN PLACE CONSTRUCTION. REFER TO ELECTRICAL DRAWINGS FOR DETAILS ON ALL UNDERGROUND ELECTRIC.
- TEL/CABLE SERVICE FACILITIES SHALL BE DESIGNED BY OTHERS CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ADEQUATE UTILITY SERVICE IS PROVIDED AND SHALL BE RESPONSIBLE FOR ALL INSTALLATION PROCEDURES (TRENCHING, LAYING PIPE ETC.) AS IS REQUIRED BY THE LOCAL UTILITY CO. FOR COMPLETE AND IN PLACE CONSTRUCTION. REFER TO ELECTRICAL DRAWINGS FOR ALL UNDERGROUND ELECTRIC.
- SITE LIGHTING ELEMENTS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL PROVIDE A PHOTOMETRICS PLAN TO THE TOWN OF SMITHFIELD PRIOR TO CONSTRUCTION. THE PLAN SHALL MEET THE APPLICABLE REQUIREMENTS OF THE TOWN OF SMITHFIELD. SITE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE INSTALLATION OF LIGHT POLE BASES IN LOCATIONS INDICATED. REFER TO SITE LIGHTING PLANS FOR INSTALLATION REQUIREMENTS.
- WHENEVER UTILITIES ARE TO BE INSTALLED WITHIN THE TOWN OF SMITHFIELD PUBLIC OR PRIVATE RIGHT OF WAYS, THE TRENCH MUST BE BACKFILLED WITH FLOWABLE FILL. ALL AREAS OF ROADWAY PAVEMENT & WALKWAYS DISTURBED DURING CONSTRUCTION SHALL BE RE-PAVED PER THE TOWN OF SMITHFIELD AND STATE STANDARDS AND SPECIFICATIONS.

STORMWATER SYSTEM MAINTENANCE NOTES:

THE DRAINAGE SYSTEMS ARE TO BE MONITORED THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD BY THE CONTRACTOR. UPON COMPLETION OF THE PROJECT THE CONTRACTOR MUST DO A FINAL FULL MAINTENANCE & CLEAN UP OF THE STORMWATER MANAGEMENT SYSTEM AND THE SITE. UPON COMPLETION OF THE CONTRACTOR'S FINAL MAINTENANCE & CLEAN UP OF THE PROJECT, MONITORING OF THE STORMWATER MANAGEMENT SYSTEM SHALL BE THE RESPONSIBILITY OF THE OWNER.

CONSTRUCTION MONITORING/MAINTENANCE PROCEDURES SHALL BE AS FOLLOWS:
(RESPONSIBILITY OF CONTRACTOR)

- SILT BARRIER:**
MONITOR SILT BARRIER ON A WEEKLY BASIS AND AFTER EVERY RAIN STORM EVENT AND REPAIR OR REPLACE ANY DAMAGED AREAS IMMEDIATELY. IMMEDIATELY CLEAN THE SILT BARRIER IF SIX INCHES OR MORE OF SEDIMENT HAS ACCUMULATED ON THE HAYBALE & SILT BARRIER.
- PAVED AREAS:**
PARKING LOTS, PUBLIC & PRIVATE ROADWAYS AND GUTTERS SHALL BE SWEEPED CLEAN OF ALL SEDIMENT & DEBRIS. SWEEPING & REMOVAL OF DEBRIS SHALL BE PERFORMED ON A WEEKLY BASIS AT A MINIMUM.
- CATCH BASINS:**
ALL CATCH BASINS SHALL BE INSTALLED AS DETAILED AND INSPECTED AFTER EVERY RAIN STORM EVENT. IMMEDIATELY CLEAN THE CATCH BASIN SUMP IF TWO FEET OR MORE OF SEDIMENT HAS ACCUMULATED WITHIN THE CATCH BASIN.
- DRAIN MANHOLES:**
DRAIN MANHOLES SHALL BE INSTALLED AS DETAILED AND INSPECTED AFTER EVERY RAIN STORM EVENT. IMMEDIATELY CLEAN THE DRAIN MANHOLE IF ONE FOOT OR MORE OF SEDIMENT HAS ACCUMULATED WITHIN THE DRAIN MANHOLE.
- SUBSURFACE INFILTRATION BASIN (STORMTECH INFILTRATION SYSTEMS AND ISOLATOR ROWS):**
SUBSURFACE INFILTRATION BASIN SHALL BE INSPECTED AFTER EVERY RAIN STORM. CARE SHALL BE TAKEN TO PREVENT SILTATION OF THE BASIN AFTER INSTALLATION. PRETREATMENT BMP'S (DEEP SUMP CATCH BASINS & WATER QUALITY STRUCTURES) MUST BE MAINTAINED AND CLEANED PER THE PROCEDURES LISTED TO ENSURE PROPER FUNCTIONING. SUBSURFACE INFILTRATION BASIN SHALL BE MONITORED FOR ANY PONDING AND ACCUMULATION OF SEDIMENT/DEBRIS. ALL ACCUMULATED SEDIMENT AND DEBRIS MUST BE REMOVED BY A VAC-TRUCK. DISPOSAL OF ALL SEDIMENT AND DEBRIS MUST BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL GUIDELINES & REGULATIONS.

POST CONSTRUCTION MONITORING/MAINTENANCE PROCEDURES SHALL BE AS FOLLOWS:
(RESPONSIBILITY OF OWNER)

- PAVED AREAS:**
PARKING LOTS, ROADS AND ALL ACCESS WAYS AND GUTTERS MUST BE SWEEPED CLEAN OF ALL SEDIMENT AND DEBRIS ON BI-ANNUAL BASIS IN SPRING AND FALL OF EACH YEAR. OR AS NECESSARY.
- CATCH BASINS:**
ALL CATCH BASINS MUST BE INSPECTED AND MAINTAINED ON A BI-ANNUAL BASIS IN MARCH AND OCTOBER OF EACH YEAR. CATCH BASINS MUST BE INSPECTED TO ENSURE THEY HAVE ADEQUATE SUMP CAPACITY. FRAMES AND GRATES ARE NOT DAMAGED, OIL/WATER SEPARATING DEVICES ARE IN PLACE. CATCH BASIN SUMPS ARE TO BE CLEANED OUT DURING BI-ANNUAL INSPECTIONS IN MARCH AND OCTOBER OF EACH YEAR. IMMEDIATELY CLEAN THE CATCH BASIN SUMP IF TWO FEET OR MORE OF SEDIMENT HAS ACCUMULATED WITHIN THE CATCH BASIN.
- DRAIN MANHOLES:**
ALL DRAIN MANHOLES MUST BE INSPECTED AND MAINTAINED ON A BI-ANNUAL BASIS IN MARCH AND OCTOBER OF EACH YEAR. DRAIN MANHOLES MUST BE INSPECTED TO ENSURE FRAMES AND COVERS ARE NOT DAMAGED AND NO BLOCKAGES HAVE OCCURRED WITHIN THE MANHOLE. DRAIN MANHOLES ARE TO BE CLEANED OUT DURING BI-ANNUAL INSPECTIONS IN MARCH AND OCTOBER OF EACH YEAR IMMEDIATELY CLEAN THE DRAIN MANHOLE IF ONE FOOT OR MORE OF SEDIMENT HAS ACCUMULATED.
- SUBSURFACE INFILTRATION BASINS AND ISOLATOR ROWS:**
SUBSURFACE INFILTRATION BASIN SHALL BE INSPECTED ON A BIANNUAL BASIS, IN MARCH BASIN SHALL BE MONITORED FOR ANY PONDING AND ACCUMULATION OF SEDIMENT/DEBRIS. ALL ACCUMULATED SEDIMENT AND DEBRIS MUST BE REMOVED BY A VAC-TRUCK. DISPOSAL OF ALL SEDIMENT AND DEBRIS MUST BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL GUIDELINES & REGULATIONS.

INFILTRATION AREA CONSTRUCTION PROTECTION

FOR THE LONG-TERM FUNCTION OF THE INFILTRATING SYSTEMS, CARE MUST BE TAKEN IN THIS AREA DURING CONSTRUCTION. THE CONTRACTOR SHALL EMPLOY THE FOLLOWING MINIMUM BEST MANAGEMENT PRACTICES (BMP'S):

- THE INFILTRATION AREAS SHALL NOT BE USED AS A CONSTRUCTION SEDIMENTATION SYSTEM.
- CONSTRUCTION EQUIPMENT, VEHICULAR TRAFFIC, PARKING OF VEHICLES, AND STOCKPILING OF CONSTRUCTION AND EARTH MATERIALS SHALL BE OUTSIDE THE LIMITS OF THE INFILTRATION AREA UNTIL INSTALLATION IS COMPLETED. THE SUBGRADE BENEATH THE SYSTEM SHALL NOT BE COMPACTED.
- EXCAVATION FOR CONSTRUCTION OF THE INFILTRATION AREAS SHALL BE PERFORMED MANUALLY OR BY HYDRAULIC EXCAVATOR OR SOME OTHER SIMILAR MEANS TO ENSURE THAT THE EQUIPMENT IS NOT IN DIRECT CONTACT WITH THE NATURAL INFILTRATION EARTH MATERIAL AND DOES NOT CAUSE COMPACTION OF THE MATERIAL AND THE ENTIRE AREA IS TO BE SCARIFIED PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION FENCING AND EROSION CONTROLS AROUND THE PERMETER OF THE INFILTRATION AREA TO PREVENT THE USE OF THIS AREA FOR ALL ACTIVITIES THAT MIGHT DAMAGE THE INFILTRATION CAPABILITIES OF THE AREA. THIS FENCING MAY BE REMOVED FOR BACKFILLING AND FINAL CONSTRUCTION.

SITE PLAN LEGEND (RIDOT):

(BCP)	BITUMINOUS CONCRETE PAVEMENT 2" CLASS 12.5 HMA SURFACE 12" GRAVEL BORROW SUBBASE	(7.1.2)	6'-0" PRECAST CONCRETE TRANSITION CURB
(CM)	CUT AND MATCH PAVEMENT	(7.1.3)	PRECAST CONCRETE WHEELCHAIR RAMP TRANSITION CURB
(12" W)	12" PAVEMENT MARKINGS-CROSSWALKS & STOP BAR	(7.1.9)	PRECAST CONCRETE RAMP STONE
(LS)	4" LOAM AND SEEDING, TYPE 2	(7.6.0)	CURB SETTING DETAIL
(4.4.0)	PRECAST 4'-0", 6'-0" OR 6'-0" ROUND CATCH BASIN	(9.9.0)	CONSTRUCTION ACCESS
(6.1.0)	LIGHT - DUTY ROUND FRAME AND COVER	(20.1.0)	PAVEMENT MARKINGS- ARROWS AND ONLY
(6.2.1)	HEAVY - DUTY ROUND FRAME AND COVER	(43.1.0)	CEMENT CONCRETE SIDEWALK
(6.3.2)	HIGH CAPACITY FRAME AND GRATE (BICYCLE SAFE)	(43.3.0)	WHEELCHAIR RAMP
(6.4.0)	ROUND FRAME AND GRATE	(48.1.0)	DETECTIBLE WARNING PANEL PLACEMENT
(7.1.0)	PRECAST CONCRETE CURB		

SITE LEGEND

EXISTING	NEW	DESCRIPTION
— C —	— C —	CENTERLINE (LAYOUT)
— D —	— D —	STORM DRAIN
— E —	— E —	ELECTRIC (UNDERGROUND)
— F —	— F —	FIRE SERVICE
— FD —	— FD —	FOOTING DRAIN
— G —	— G —	GAS
— OHW —	— OHW —	OVERHEAD WIRE
— S —	— S —	PROPERTY LINE
— SL —	— SL —	SANITARY SEWER
— T —	— T —	SITE LIGHTING SERVICE
— W —	— W —	TELEPHONE
	— W —	WATER
— 64 —	— 64 —	CONTOUR
x64.0	x64.00	SPOT GRADE
x64.0(BC)	x64.00(BC)	SPOT GRADE (BOT. OF CURB)
x64.5(TC)	x64.50(TC)	SPOT GRADE (TOP OF CURB)
64.5(BW)	64.50(BW)	SPOT GRADE (BOT. OF WALL)
64.5(TW)	64.50(TW)	SPOT GRADE (TOP OF WALL)
=====	=====	BITUMINOUS CONC. CURB
=====	=====	CAPE COD BERM
=====	=====	PRECAST CONC. CURB
=====	=====	PRECAST SLOPED MOUNT. CURB
=====	=====	SLOPED GRANITE CURB
=====	=====	VERTICAL GRANITE CURB
— — — — —	— — — — —	CHAINLINK FENCE (CLF)
— — — — —	— — — — —	STOCKFACE FENCE (STKF)
+	+	BORING LOCATION
□ CB	⊙ CB#1	NEW CATCH BASIN
□ CB(DC)	⊙ CB	RIM ADJUSTMENT CATCH BASIN
CTB →	⊙ CTB →	CONCRETE THRUST BLOCK
DMH	⊙ DMH	DRAIN MANHOLE
FES	⊙ FES	FLARED END STRUCTURE
SMH	⊙ SMH	SEWER MANHOLE
W	⊙ W	WATER SERVICE
U	⊙ U	UTILITY POLE
H	⊙ H	FIRE HYDRANT
G	⊙ G	GATE VALVE AND CURB BOX
S	⊙ S	HANDICAP SYMBOL (PRKG. SPACE)
SEV	⊙ SEV	SIGN
TP	⊙ TP	WETLAND
FDC	⊙ FDC	SOIL EVALUATION LOCATION
PIV	⊙ PIV	TEST PIT LOCATION
EMH	⊙ EMH	FIRE DEPARTMENT CONNECTION
TMH	⊙ TMH	POST INDICATOR VALVE (PIV)
GEN	⊙ GEN	ELECTRIC MANHOLE (EMH)
GGO	⊙ GGO	TELEPHONE MANHOLE (TMH)
LP	⊙ LP	TRANSFORMER PAD
LP	⊙ LP	GENERATOR PAD
LP	⊙ LP	GROUND CLEANOUT
LP	⊙ LP	SIGHT LIGHT POLE
LP	⊙ LP	TRAFFIC FLOW DIRECTION
LP	⊙ LP	CONTINUOUS ROW OF HAYBALES
LP	⊙ LP	CONTINUOUS ROW OF SILT FENCE
LP	⊙ LP	PAVEMENT SAWCUT & MATCH TO EXISTING
LP	⊙ LP	RIDOT STD DETAIL REFERENCE

ABBREVIATIONS

CI	CAST IRON PIPE
CLDI	CEMENT LINED DUCTILE IRON PIPE
CLF	CHAINLINK FENCE
CTE	POINT OF CONNECTION TO EXISTING
D.I.	DUCTILE IRON PIPE
ESHWT	ESTIMATED SEASONAL HIGH WATER TABLE
ETR	EXISTING TO REMAIN
EX	EXISTING
F&I	FURNISH AND INSTALL
HDPE	HIGH DENSITY POLYETHYLENE PIPE
INV.	INVERT ELEVATION
MTE	MATCH TO EXISTING
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
VF	VERIFY IN FIELD
WQS	WATER QUALITY STRUCTURE

OWNER/APPLICANT:

A.P. 43, LOT 85
CGRI GREENVILLE LLC
1414 ATWOOD AVE
JOHNSTON, RI 02919

GENERAL NOTES & LEGEND PLAN FOR RETAIL CENTER REDEVELOPMENT
AP 43 LOT 85
SITUATED ON
PUTNAM PIKE, SMITHFIELD RHODE ISLAND
PREPARED FOR
CGRI GREENVILLE LLC

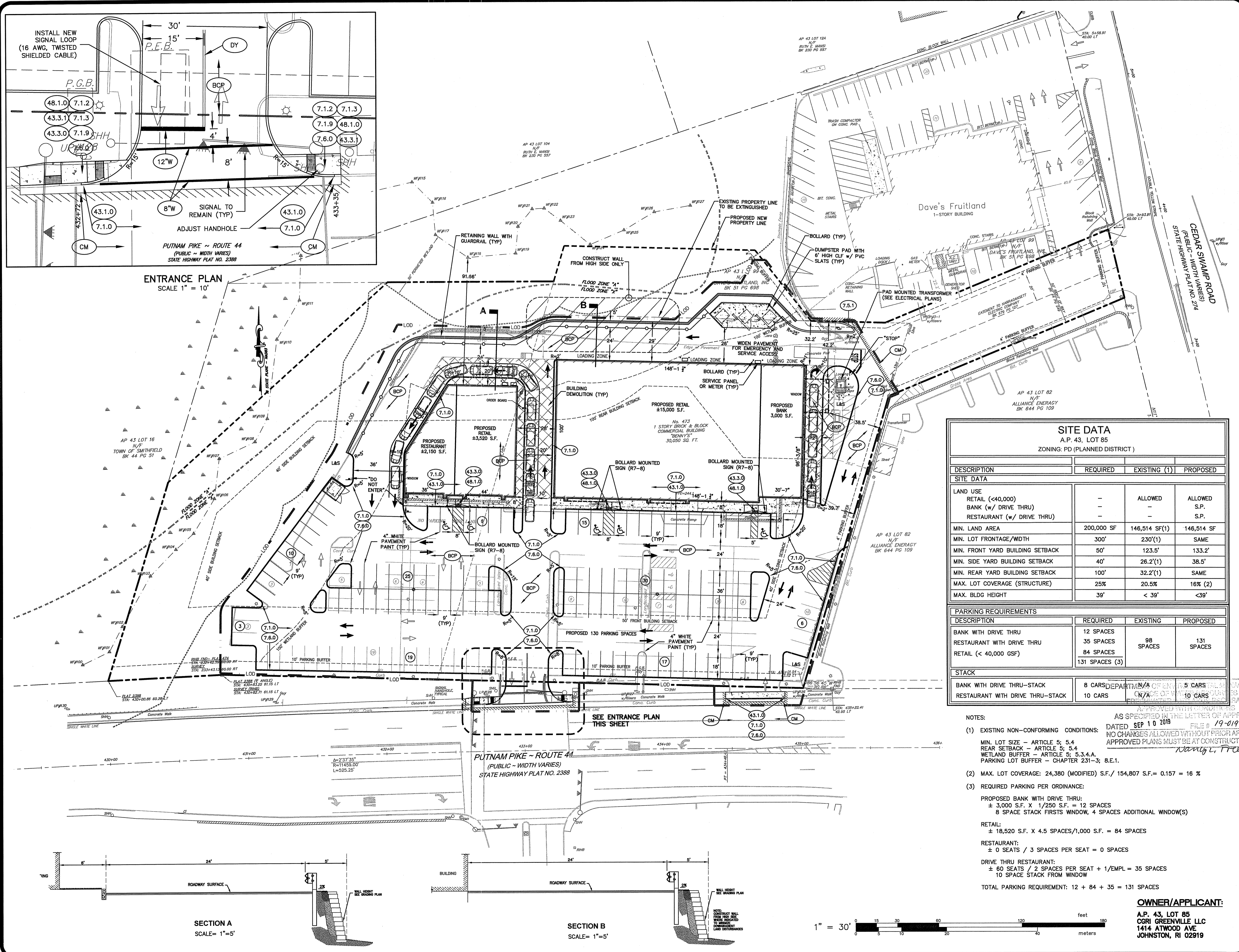
NO.	REVISION	BY	DATE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER RESOURCES DIVISION
APPROVED FOR THE TOWN OF SMITHFIELD
DATED: SEP 10 2019
FILE # 19-0194
NO CHANGES ARE TO BE MADE WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Mary L. Frasca, Environmental Management
JUN 21 2019
Office of Water Resources

GAROFALO
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CIVIL & STRUCTURAL ENGINEERS/SURVEYORS
LAND PLANNERS/ENVIRONMENTAL SCIENTISTS
85 CORLISS STREET
P.O. BOX 6145
PROVIDENCE, R.I. 02940
TEL. 401-273-6000

JOB NO. 7156.00	DRAWN BY K.Y.Y.
DWG. NO. 7156-00-Permit	CHECK BY S.H.H.
SCALE: AS SHOWN	APPROVED S.B.G.
	DATE: JANUARY 25, 2019

SHEET
C-1
2 OF 9 SHEETS



SITE LAYOUT PLAN
FOR
RETAIL CENTER REDEVELOPMENT
AP-43 LOT 85
SITUATED ON
PUTNAM PIKE, SMITHFIELD
RHODE ISLAND
PREPARED FOR
CGRI GREENVILLE LLC

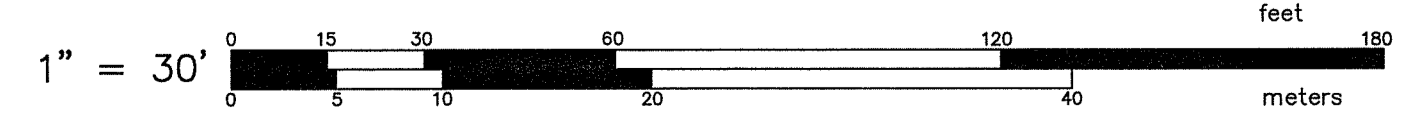
NO.	REVISION	BY	DATE
1.	PER DOT COMMENTS	KYY	04/24/19
2.	PER REVIEW COMMENTS	KYY	06/10/19

Environmental Management
JUN 21 2019
Office of Water Resources

SITE DATA			
AP. 43, LOT 85			
ZONING: PD (PLANNED DISTRICT)			
DESCRIPTION	REQUIRED	EXISTING (1)	PROPOSED
SITE DATA			
LAND USE			
RETAIL (<40,000)	-	ALLOWED	ALLOWED
BANK (w/ DRIVE THRU)	-	-	S.P.
RESTAURANT (w/ DRIVE THRU)	-	-	S.P.
MIN. LAND AREA	200,000 SF	146,514 SF(1)	146,514 SF
MIN. LOT FRONTAGE/WIDTH	300'	230'(1)	SAME
MIN. FRONT YARD BUILDING SETBACK	50'	123.5'	133.2'
MIN. SIDE YARD BUILDING SETBACK	40'	26.2'(1)	38.5'
MIN. REAR YARD BUILDING SETBACK	100'	32.2'(1)	SAME
MAX. LOT COVERAGE (STRUCTURE)	25%	20.5%	16% (2)
MAX. BLDG HEIGHT	39'	< 39'	<39'
PARKING REQUIREMENTS			
DESCRIPTION	REQUIRED	EXISTING	PROPOSED
BANK WITH DRIVE THRU	12 SPACES	-	-
RESTAURANT WITH DRIVE THRU	35 SPACES	98 SPACES	131 SPACES
RETAIL (< 40,000 GSF)	84 SPACES	-	-
	131 SPACES (3)		
STACK			
BANK WITH DRIVE THRU-STACK	8 CARS	5 CARS	5 CARS
RESTAURANT WITH DRIVE THRU-STACK	10 CARS	10 CARS	10 CARS

- NOTES:
- EXISTING NON-CONFORMING CONDITIONS: AS SPECIFIED IN THE LETTER OF APPROVAL DATED SEP 10 2019 FILE # 19-0194. NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL. APPROVED PLANS MUST BE AT CONSTRUCTION SITE.
 - MAX. LOT COVERAGE: 24,380 (MODIFIED) S.F. / 154,807 S.F. = 0.157 = 16 %
 - REQUIRED PARKING PER ORDINANCE:
 PROPOSED BANK WITH DRIVE THRU:
 ± 3,000 S.F. X 1/250 S.F. = 12 SPACES
 ± 8 SPACE STACK FIRSTS WINDOW, 4 SPACES ADDITIONAL WINDOW(S)
 RETAIL:
 ± 18,520 S.F. X 4.5 SPACES/1,000 S.F. = 84 SPACES
 RESTAURANT:
 ± 0 SEATS / 3 SPACES PER SEAT = 0 SPACES
 DRIVE THRU RESTAURANT:
 ± 60 SEATS / 2 SPACES PER SEAT + 1/EMPL = 35 SPACES
 10 SPACE STACK FROM WINDOW
 TOTAL PARKING REQUIREMENT: 12 + 84 + 35 = 131 SPACES

OWNER/APPLICANT:
A.P. 43, LOT 85
CGRI GREENVILLE LLC
1414 ATWOOD AVE
JOHNSTON, RI 02919



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JOB NO. 7156-00	DRAWN BY K.Y.Y.
DWG. NO. 7156-00-Permit	CHECK BY S.H.H.
SCALE: AS SHOWN	APPROVED S.B.G.
	DATE: JANUARY 25, 2019

SHEET
C-3
4 OF 9 SHEETS

L:\7156-00-Proposed Bank Facility (Complanets) - Putnam Pike - Smithfield, RI\dwg\01-Current\2019-Permit_Dwg\7156-00-Permit.dwg, 06/21/2019 KYY 10:35

SEQUENCE AND STAGING OF LAND DISTURBING ACTIVITIES:

1. SURVEY AND STAKE THE DRAINAGE STRUCTURES, LIMIT OF WORK AND SEDIMENTATION BARRIERS.
2. PLACE SEDIMENTATION BARRIERS (SILT SOCK OR SILT FENCE) AS SHOWN ON THE PLANS AND STAKED OUT IN THE FIELD. LIMIT OF WORK IS NEVER TO EXTEND BEYOND THE SEDIMENTATION BARRIERS.
3. BEGIN ROADWAY AND DRAINAGE WORK (CLEARING AND GRUBBING, EXCAVATING AND GRADING, ETC.). TOP SOIL TO BE STRIPPED AND STOCKPILED IN APPROVED AREAS. THE STOCKPILES ARE TO BE PROTECTED BY A ROW OF SEDIMENTATION BARRIER AND COVERED OR TEMPORARILY SEEDED. NO RUNOFF TO BE DISCHARGED TO THE DETENTION STRUCTURES UNTIL THE BINDER COURSE OF PAVEMENT IS INSTALLED AND DISTURBED AREAS ARE STABILIZED.
4. BEGIN CLEARING WITHIN AREAS OF THE PROPOSED STRUCTURES FOLLOWING CONSTRUCTION OF ROADWAY.
5. ALL PROPOSED CATCH BASINS MUST BE LINED WITH SILT SOCKS IMMEDIATELY AFTER INSTALLATION.
6. SWEEP THE ROADWAY AREAS TO REMOVE ALL SEDIMENTS.
7. FLUSH AND/OR REPAIR DRAINAGE AREAS AS NEEDED.
8. REMOVE ALL TEMPORARY SESC MEASURES FOLLOWING VEGETATIVE ESTABLISHMENT OF ALL DISTURBED AREAS.

SEDIMENTATION CONTROL PROGRAM:

1. EXTREME CARE SHALL BE EXERCISED TO PREVENT ANY SEDIMENTS FROM ENTERING THE ADJOINING PROPERTIES.
2. BANKS OR SLOPES OVER 5% SHALL BE SEEDED AS SOON AS POSSIBLE AND BE PROTECTED WITH STRAW OR FIBER MULCH.
3. DURING CONSTRUCTION, THE CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL.
4. SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED CLOSELY AND MAINTAINED PROMPTLY AFTER EACH RAINFALL.
5. CARE SHALL BE TAKEN SO AS NOT TO PLACE "REMOVED SEDIMENTS" WITHIN THE PATH OF EXISTING, NEWLY CREATED (BOTH TEMPORARY AND PERMANENT) OR PROPOSED WATERCOURSES OR THOSE AREAS SUBJECTED TO STORM WATER FLOW.
6. ADDITIONAL SILT SOCKS AND/OR SILT FENCE SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER.

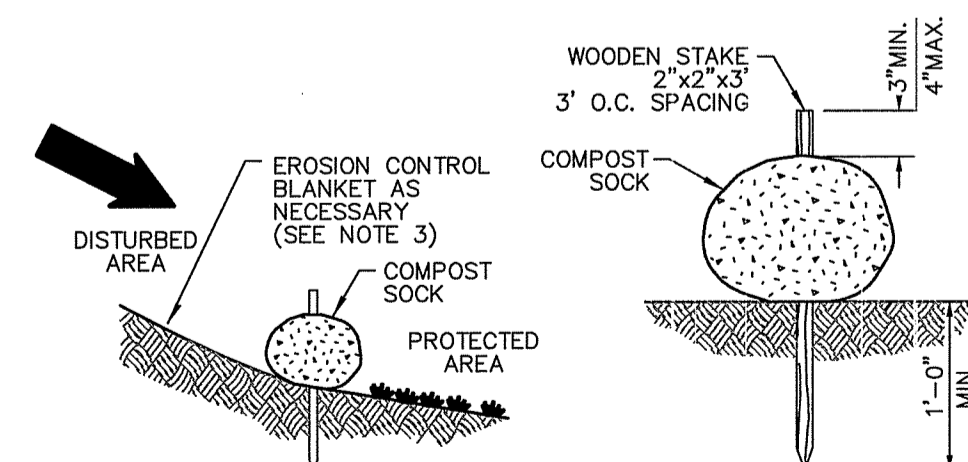
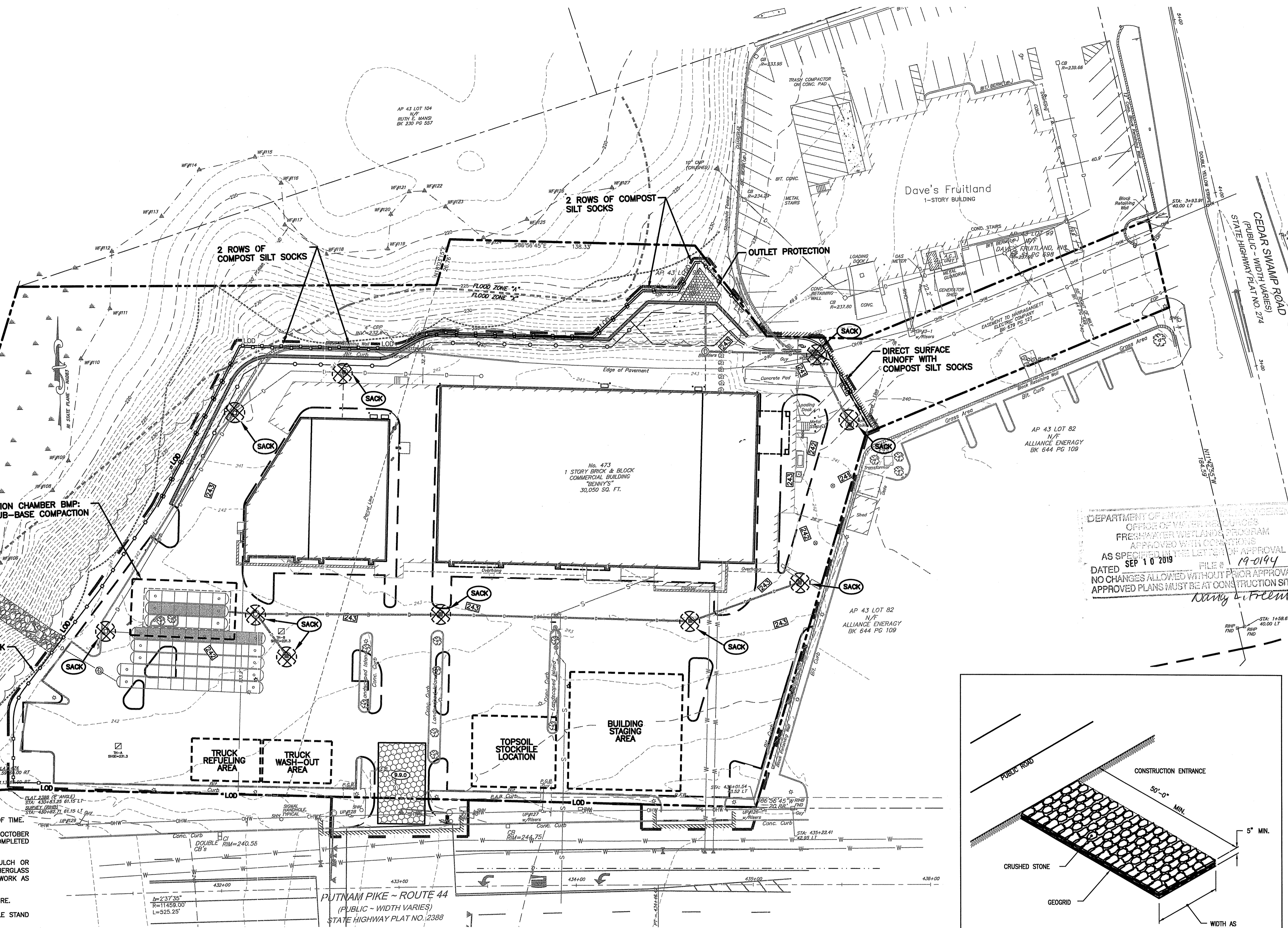
EROSION CONTROL and SOIL STABILIZATION PROGRAM:

1. DENuded SLOPES SHALL NOT BE LEFT EXPOSED FOR EXCESSIVE PERIODS OF TIME.
2. ALL DISTURBED SLOPES EITHER NEWLY CREATED OR EXPOSED PRIOR TO OCTOBER 15, SHALL BE SEEDED OR PROTECTED BY THAT DATE FOR ANY WORK COMPLETED DURING EACH CONSTRUCTION YEAR.
3. TEMPORARY TREATMENTS SHALL CONSIST OF A HAY, STRAW, OR FIBER MULCH OR PROTECTIVE COVERS SUCH AS A MAT OR FIBER LINING (BURLAP, JUTE, FIBERGLASS NETTING, EXCELSIOR BLANKETS). THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE ENGINEER.
4. HAY OR STRAW APPLICATIONS SHOULD BE IN THE AMOUNT OF 2000 LBS/ACRE.
5. ALL TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED.
6. THE TOPSOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS.
7. THE SEED MIX SHALL BE INOCULATED WITHIN TWENTY FOUR (24) HOURS, BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULUM FOR EACH VARIETY.
8. THE DESIGN MIX FOR TEMPORARY EROSION CONTROL AND SOIL STABILIZATION:

TYPE	% BY WEIGHT
CREeping RED FESCUE	70
ASTORIA BENTGRASS	5
BIRDFOOT TREFFOIL	15
PERENNIAL RYEGRASS	10

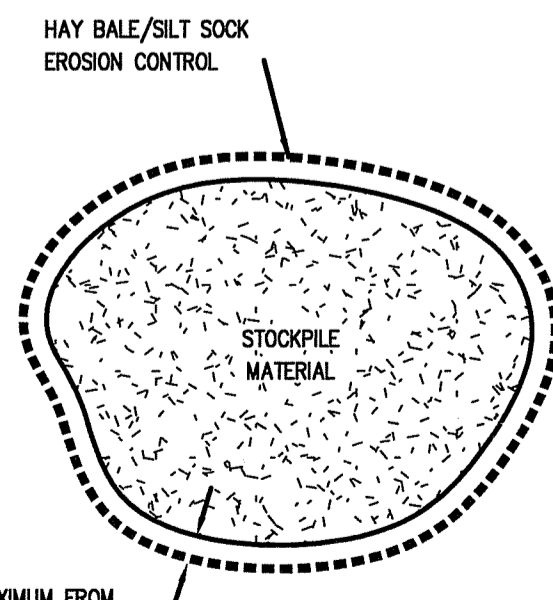
APPLICATION RATE 100 LBS/ACRE

- LIMING AND FERTILIZE AS REQUIRED TO COMPLIMENT OR UPGRADE EXISTING CONDITIONS.
9. THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE (1) YEAR, AND HE SHALL DO SO AT NO ADDITIONAL EXPENSE.
 10. ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1ST THROUGH OCTOBER 15TH.
 11. STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN FIFTEEN (15) DAYS OF FINAL GRADING.
 12. STOCKPILES OF TOPSOIL SHALL NOT BE LOCATED NEAR WATERWAYS OR FLOOD PLAINS. THEY SHALL HAVE SIDE SLOPES NO GREATER THAN THIRTY PERCENT (30%) AND STOCKPILES SHALL ALSO BE SEEDED AND/OR STABILIZED AND COMPLETELY ENCLOSED WITH A CONTINUOUS LINE OF STAKED HAYBALES AND COMPLY (SEE DETAIL).
 13. ON BOTH STEEP AND LONG SLOPES, CONSIDERATION SHOULD BE GIVEN TO "CRIMPING" OR "TRACKING" TO TACK DOWN MULCH APPLICATIONS.

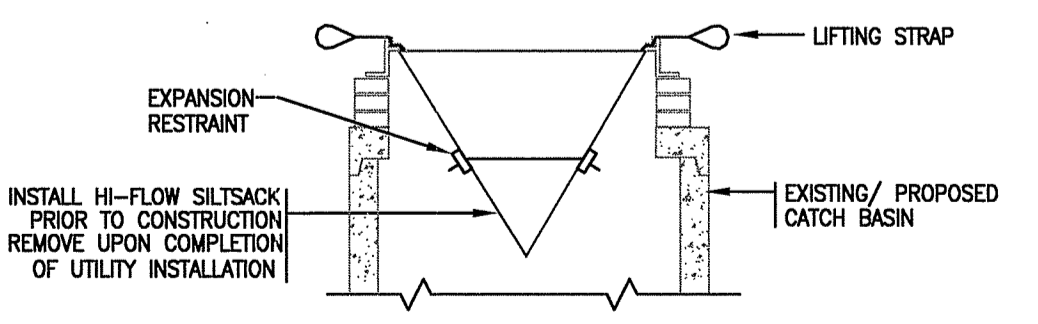


COMPOST SILT SOCK DETAIL

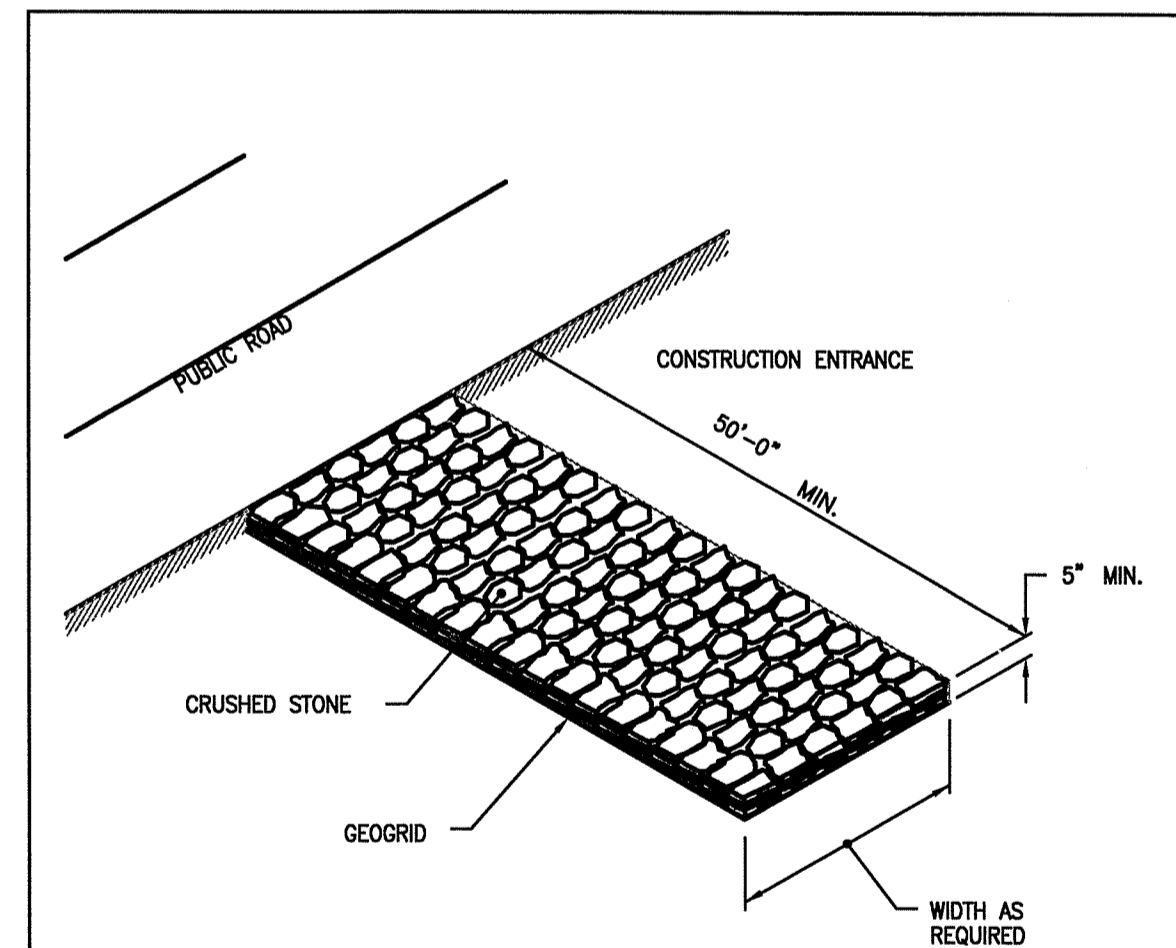
- NOT TO SCALE
- NOTES:
1. COMPOST SOCK SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS. COMPOST SOCK SHALL BE A MINIMUM OF 8" IN DIAMETER.
 2. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.
 3. WHEN PLACING COMPOST SOCK ON SLOPES, USE EROSION CONTROL BLANKET IF SPECIFIED ON PLANS.
 4. ALWAYS INSTALL COMPOST SOCK PERPENDICULAR TO SLOPE AND ALONG CONTOUR LINES.
 5. REMOVE SEDIMENT FROM THE UP SLOPE SIDE OF THE COMPOST SOCK WHEN ACCUMULATION HAS REACHED 1/2 OF THE EFFECTIVE HEIGHT OF THE COMPOST SOCK.



STOCKPILE DETAIL

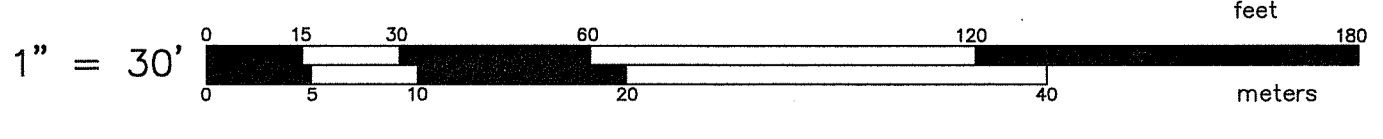


SILTSACK AT CATCH BASIN DETAIL



NOTE: SHALL BE IN ACCORDANCE WITH SECTION 211 OF THE R.I. STANDARD SPECIFICATIONS.

REVISIONS			R.I. STANDARD 9.9.0
NO.	BY	DATE	



DEPARTMENT OF TRANSPORTATION
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED SEP 10 2019 FILE # 19-0194
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Kathy L. Freeman

SOIL EROSION AND SEDIMENT CONTROL PLAN
FOR
RETAIL CENTER REDEVELOPMENT
AP 43 LOT 85
SITUATED ON
PUTNAM PIKE, SMITHFIELD RHODE ISLAND
PREPARED FOR
CGRI GREENVILLE LLC

NO.	REVISION	BY	DATE
2.	PER REVIEW COMMENTS	SHH	06/10/19

Environmental Management
JUN 21 2019
Office of Water Resources

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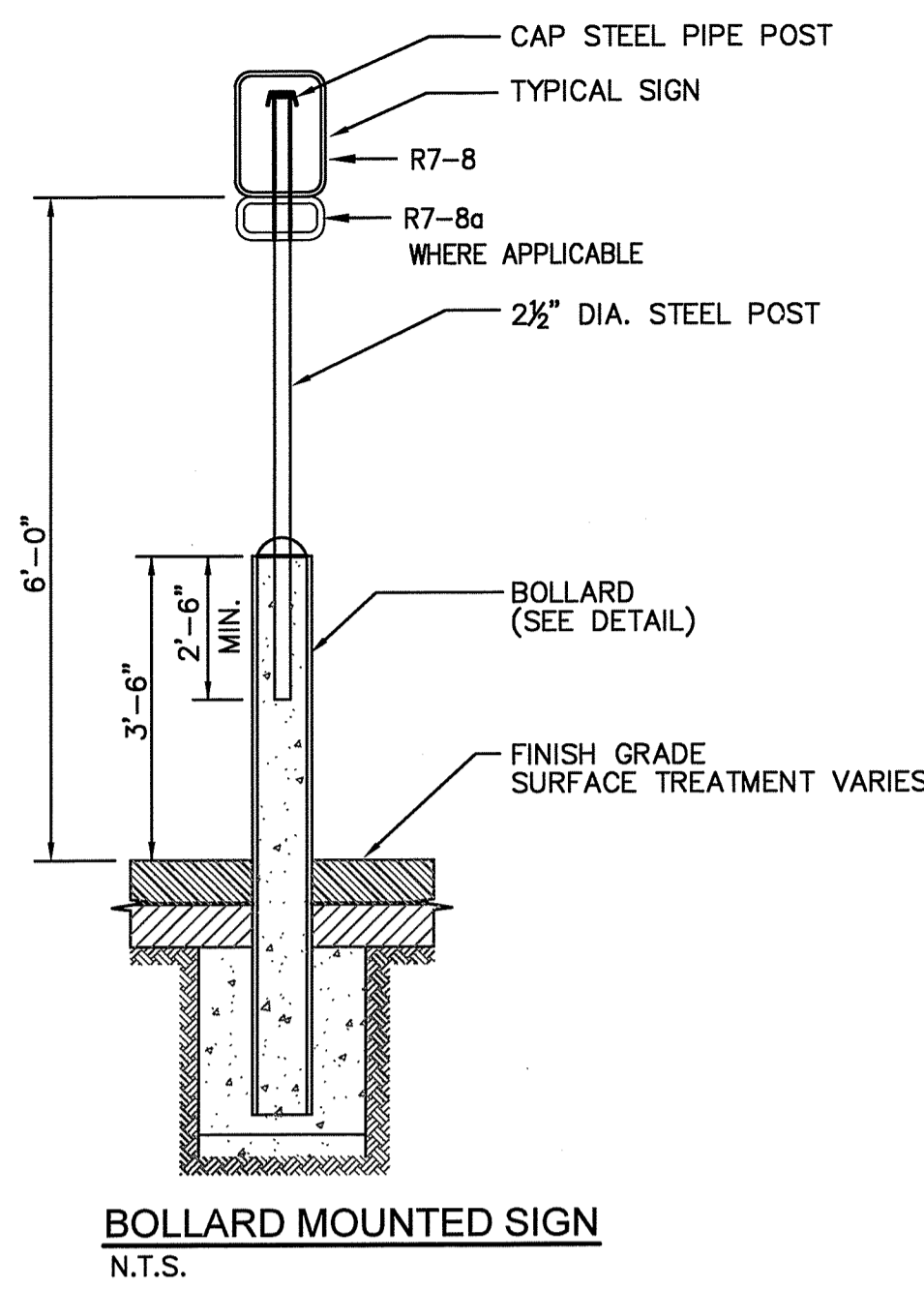
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85 CORLISS STREET
P.O. BOX 6145
PROVIDENCE, R.I. 02940
TEL. 401-273-6000

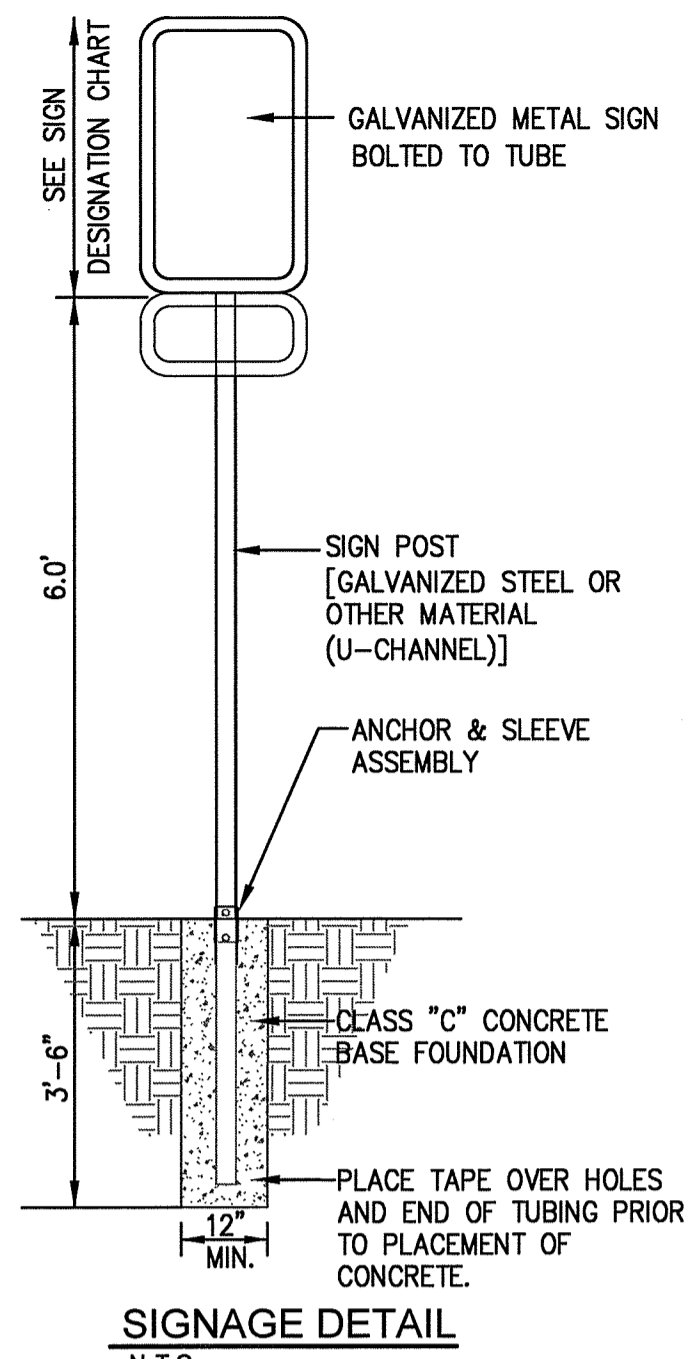
JOB NO. 7156-00	DRAWN BY N.J.M.
DWG. NO. 7156-00-SESC	CHECK BY S.H.H.
SCALE: AS SHOWN	APPROVED S.B.G.
	DATE: JANUARY 25, 2019

SHEET
C-5
6 OF 9 SHEETS

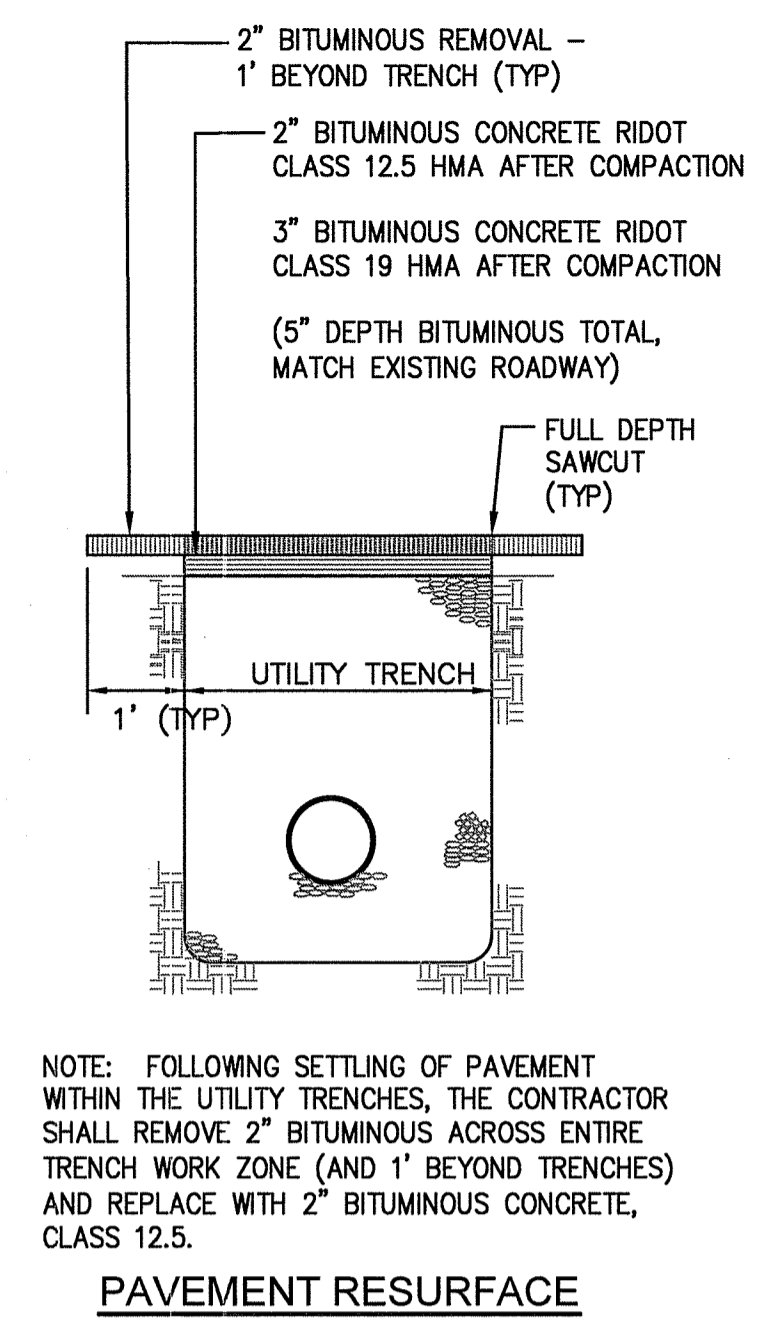
OWNER/APPLICANT:
A.P. 43, LOT 85
CGRI GREENVILLE LLC
1414 ATWOOD AVE
JOHNSTON, RI 02919



BOLLARD MOUNTED SIGN
N.T.S.

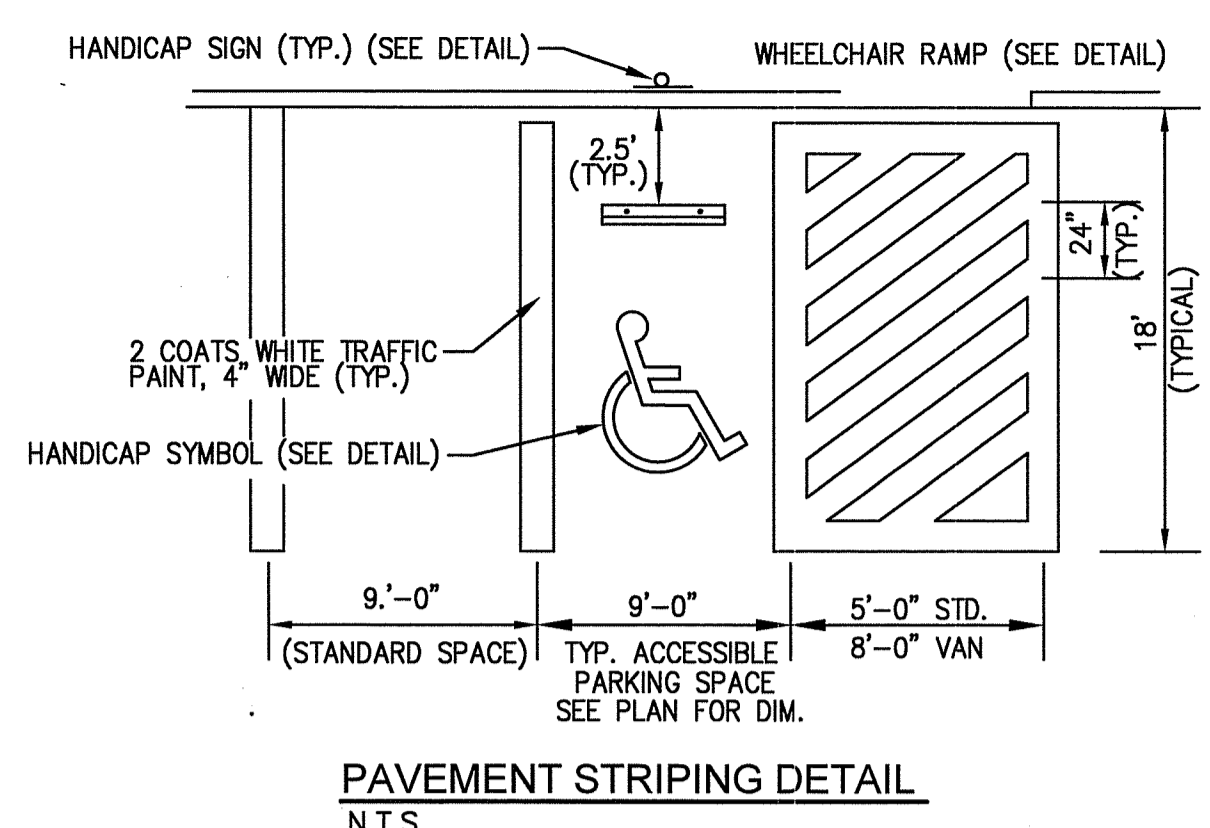


SIGNAGE DETAIL
N.T.S.

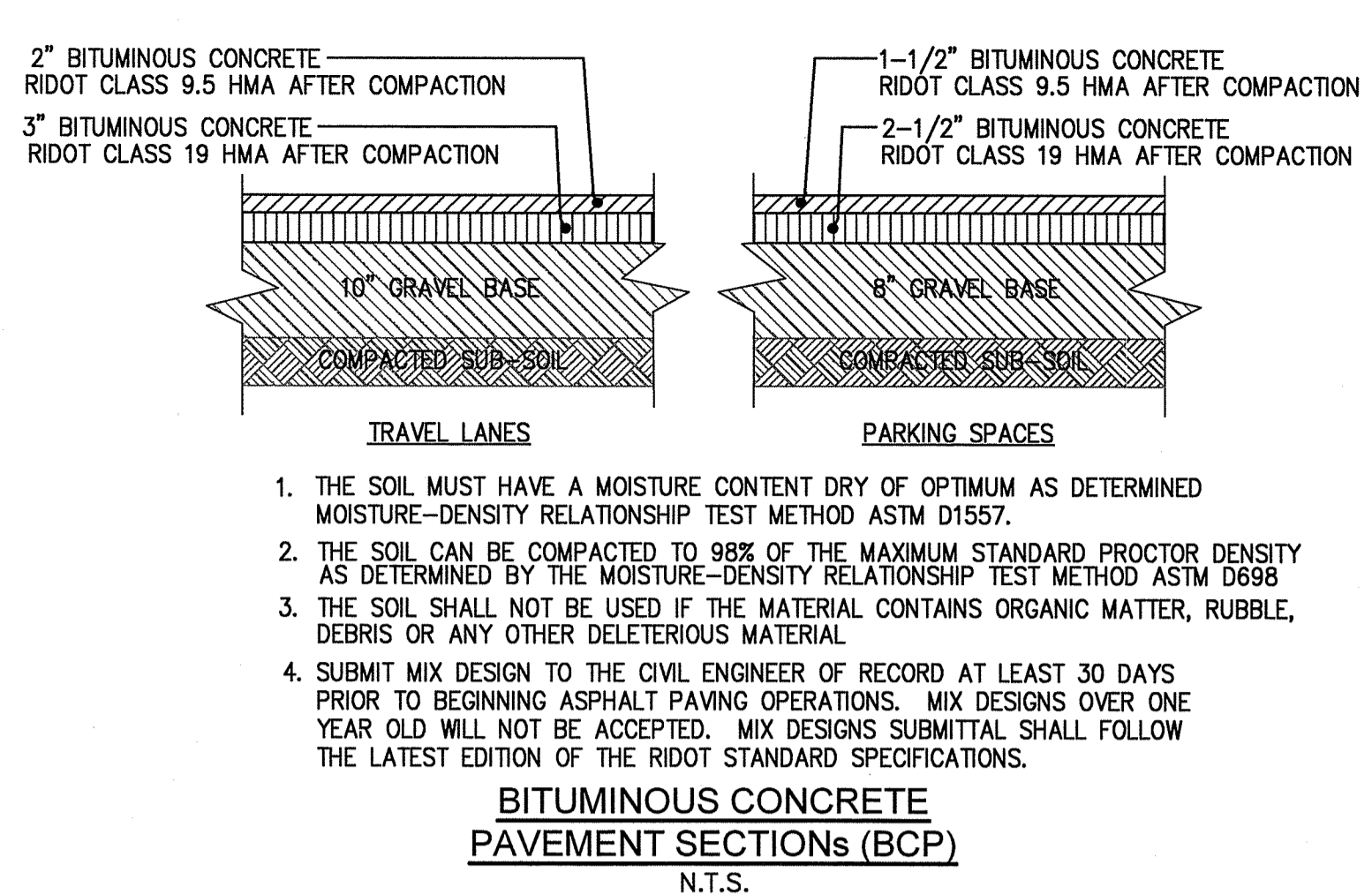


NOTE: FOLLOWING SETTLING OF PAVEMENT WITHIN THE UTILITY TRENCHES, THE CONTRACTOR SHALL REMOVE 2" BITUMINOUS ACROSS ENTIRE TRENCH WORK ZONE (AND 1' BEYOND TRENCHES) AND REPLACE WITH 2" BITUMINOUS CONCRETE, CLASS 12.5.

PAVEMENT RESURFACE
N.T.S.

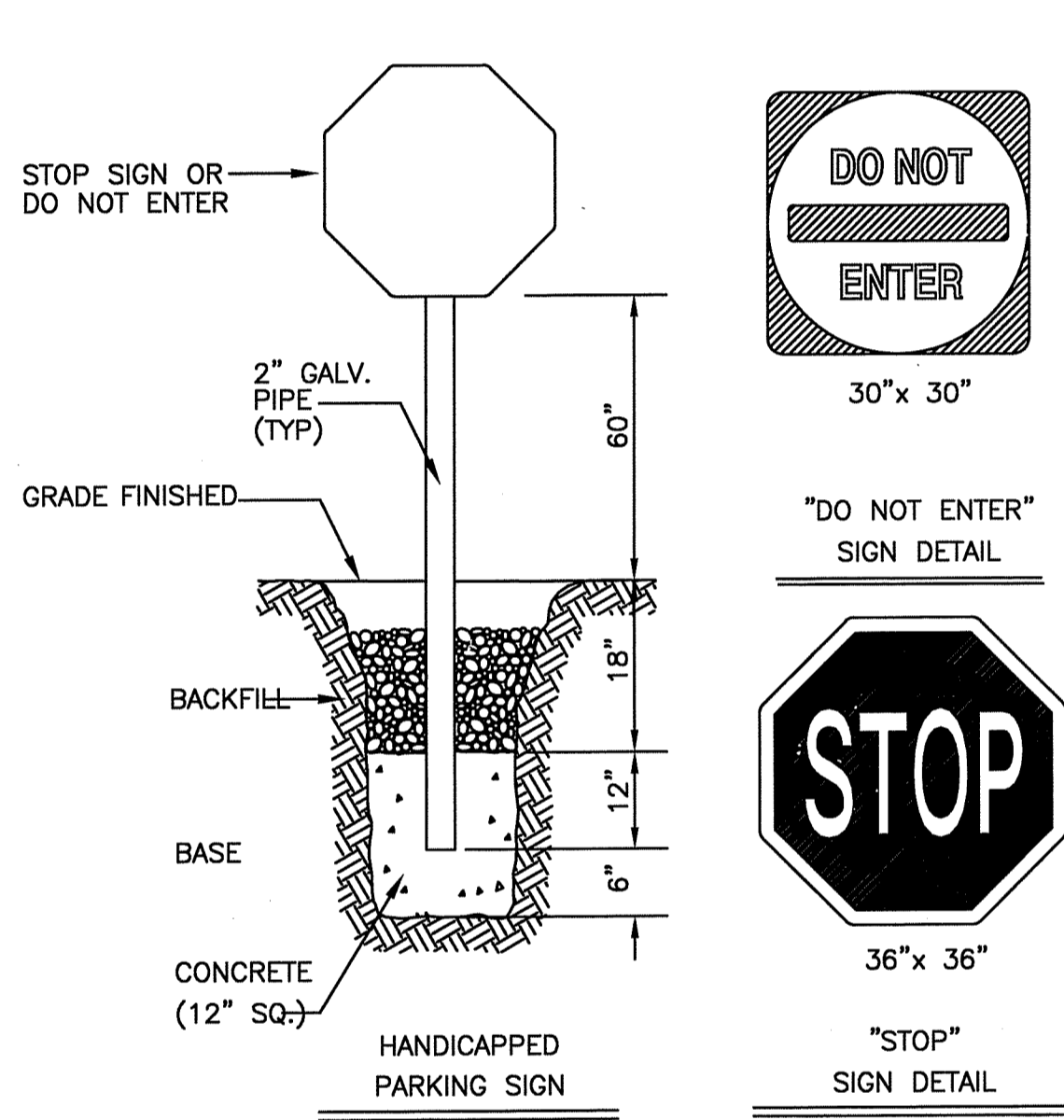


PAVEMENT STRIPING DETAIL
N.T.S.

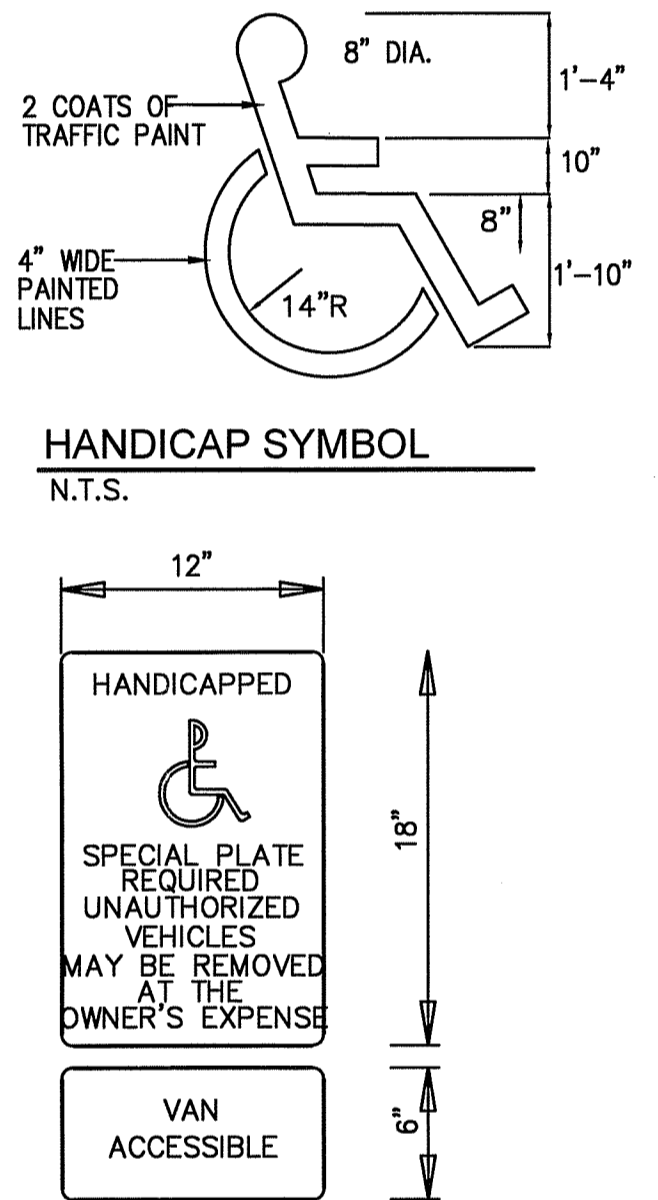


1. THE SOIL MUST HAVE A MOISTURE CONTENT DRY OF OPTIMUM AS DETERMINED MOISTURE-DENSITY RELATIONSHIP TEST METHOD ASTM D1557.
2. THE SOIL CAN BE COMPACTED TO 98% OF THE MAXIMUM STANDARD PROCTOR DENSITY AS DETERMINED BY THE MOISTURE-DENSITY RELATIONSHIP TEST METHOD ASTM D698
3. THE SOIL SHALL NOT BE USED IF THE MATERIAL CONTAINS ORGANIC MATTER, RUBBLE, DEBRIS OR ANY OTHER DELETERIOUS MATERIAL.
4. SUBMIT MIX DESIGN TO THE CIVIL ENGINEER OF RECORD AT LEAST 30 DAYS PRIOR TO BEGINNING ASPHALT PAVING OPERATIONS. MIX DESIGNS OVER ONE YEAR OLD WILL NOT BE ACCEPTED. MIX DESIGNS SUBMITTAL SHALL FOLLOW THE LATEST EDITION OF THE RIDOT STANDARD SPECIFICATIONS.

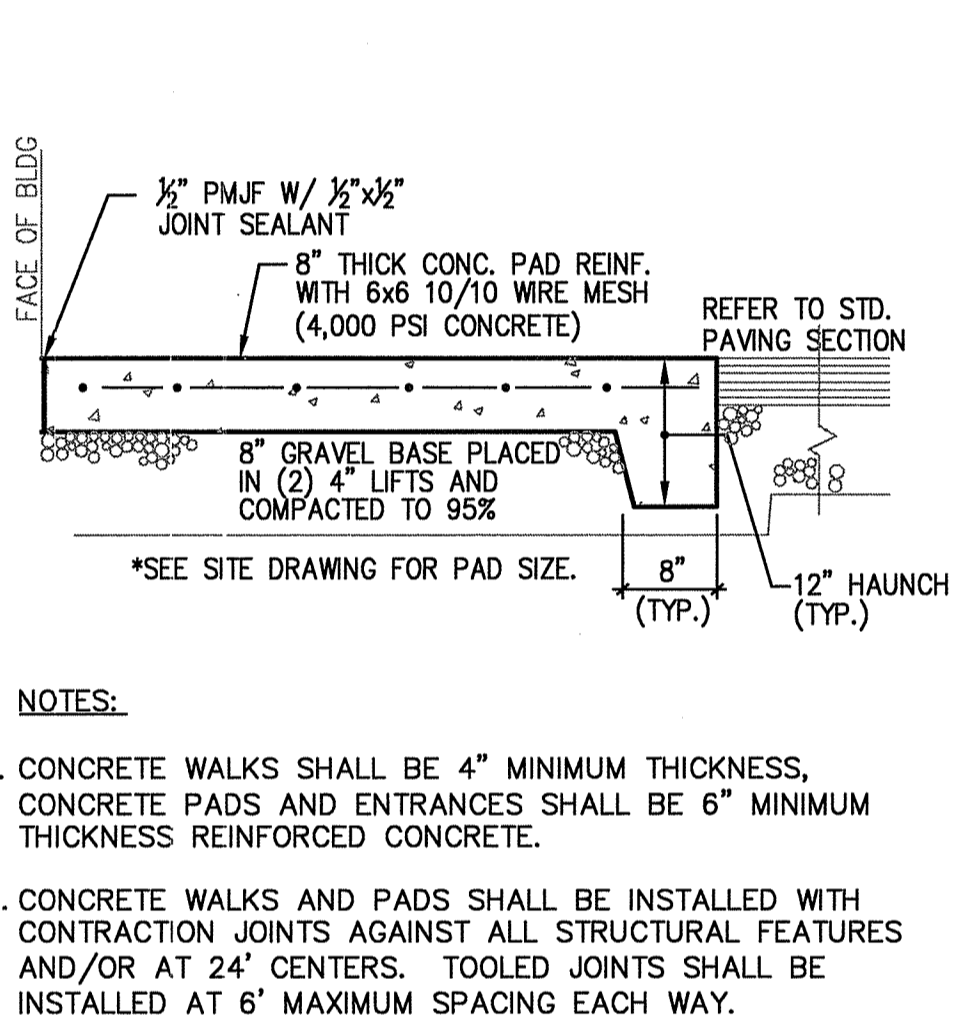
BITUMINOUS CONCRETE PAVEMENT SECTIONS (BCP)
N.T.S.



MISCELLANEOUS TRAFFIC CONTROL DETAILS

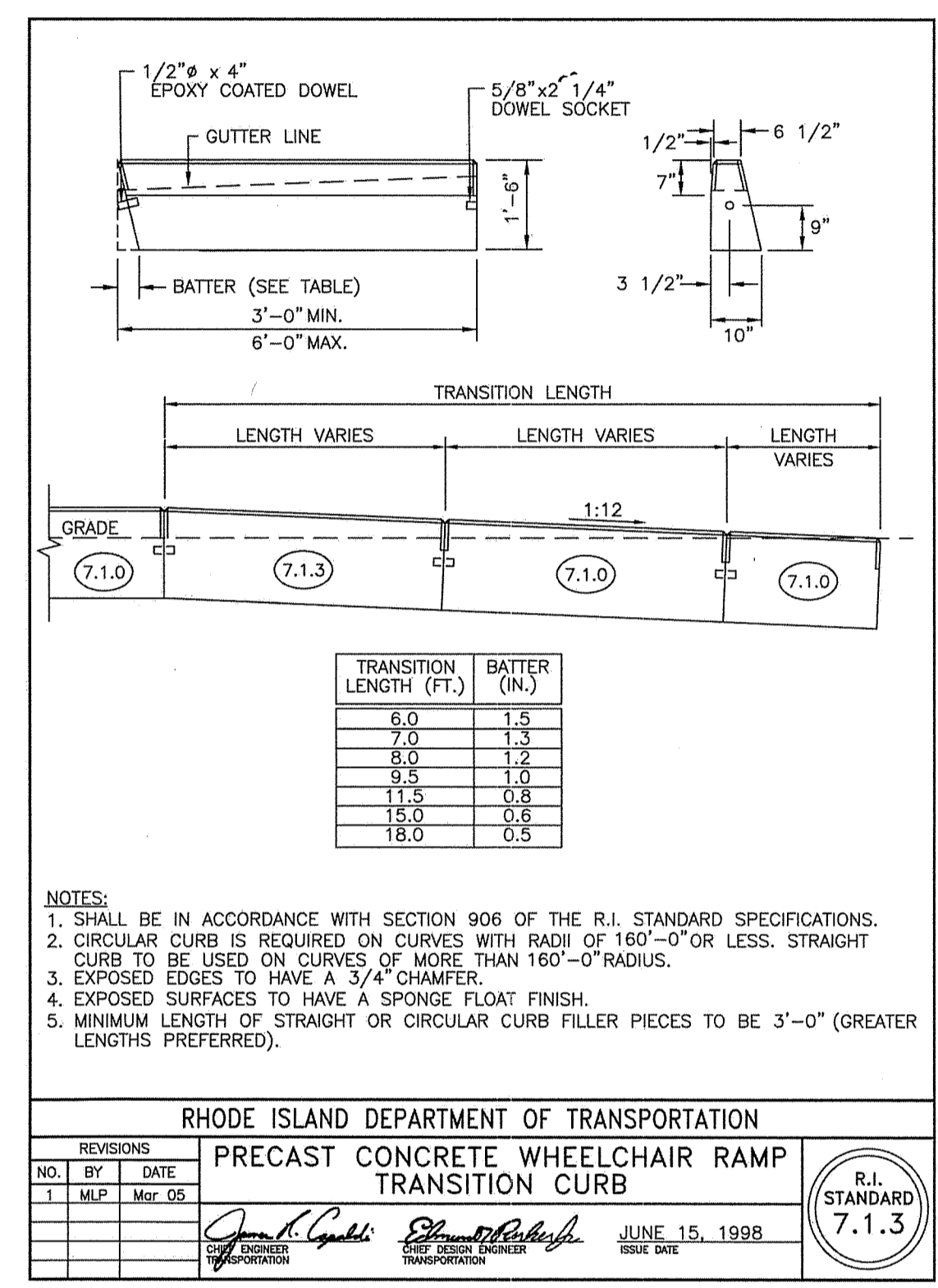


HANDICAP SYMBOL
N.T.S.



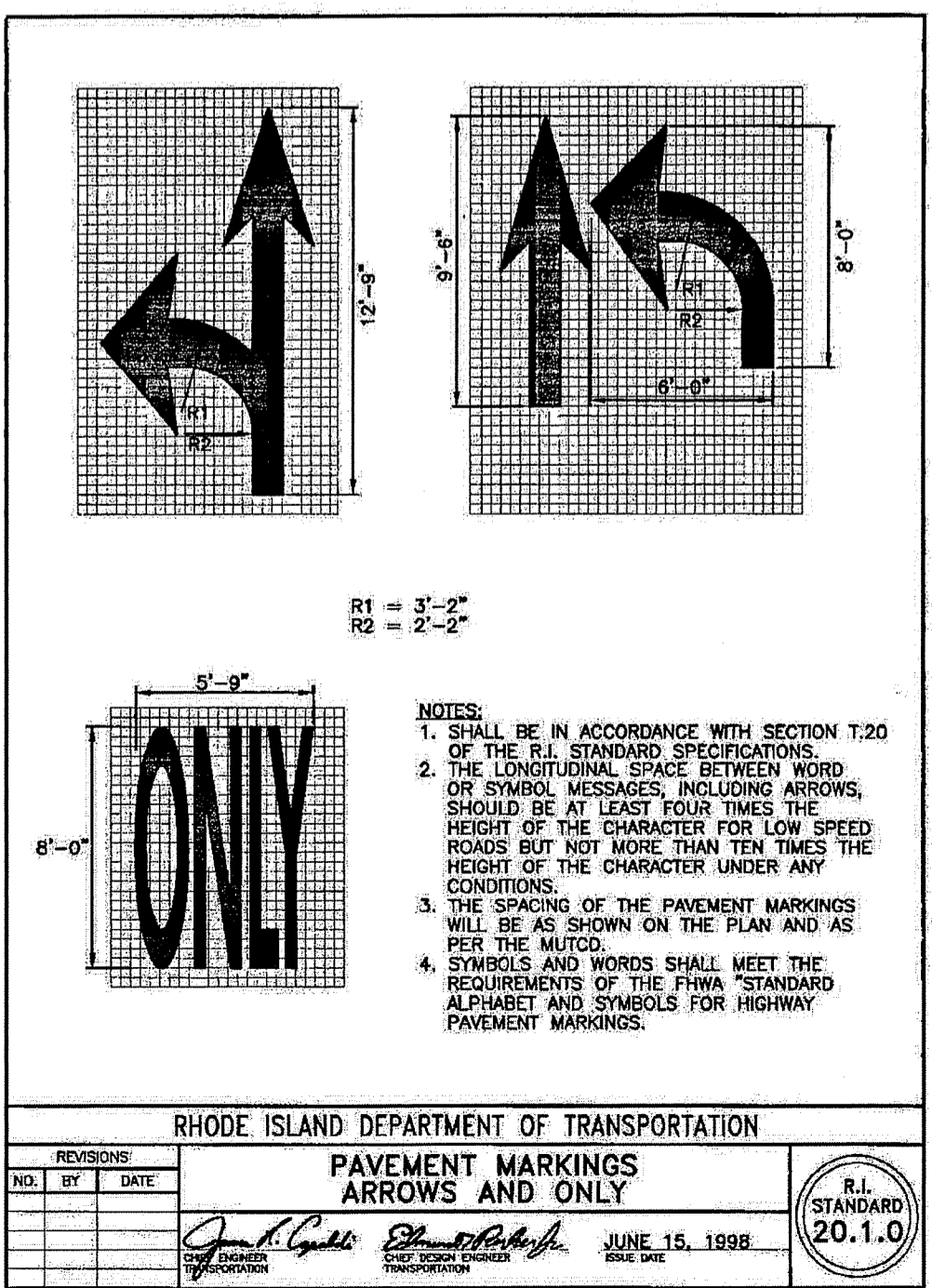
- NOTES:
1. CONCRETE WALKS SHALL BE 4" MINIMUM THICKNESS, CONCRETE PADS AND ENTRANCES SHALL BE 6" MINIMUM THICKNESS REINFORCED CONCRETE.
 2. CONCRETE WALKS AND PADS SHALL BE INSTALLED WITH CONTRACTION JOINTS AGAINST ALL STRUCTURAL FEATURES AND/OR AT 24' CENTERS. TOOLED JOINTS SHALL BE INSTALLED AT 6' MAXIMUM SPACING EACH WAY.

DUMPSTER PADS
N.T.S.

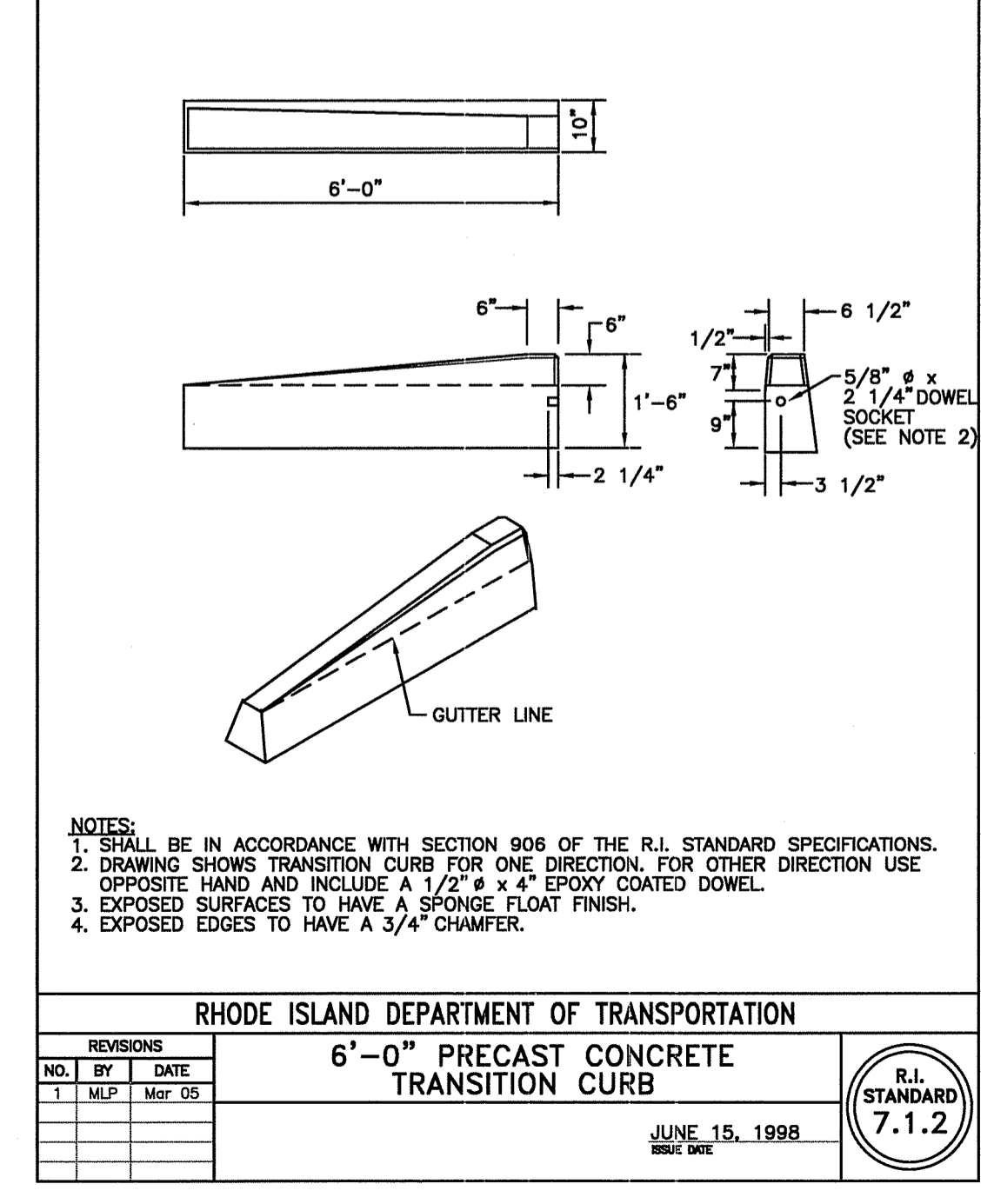


- NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
 2. CIRCULAR CURB IS REQUIRED ON CURVES WITH RADII OF 160'-0" OR LESS. STRAIGHT CURB TO BE USED ON CURVES OF MORE THAN 160'-0" RADII.
 3. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.
 4. EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
 5. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR CURB FILLER PIECES TO BE 3'-0" (GREATER LENGTHS PREFERRED).

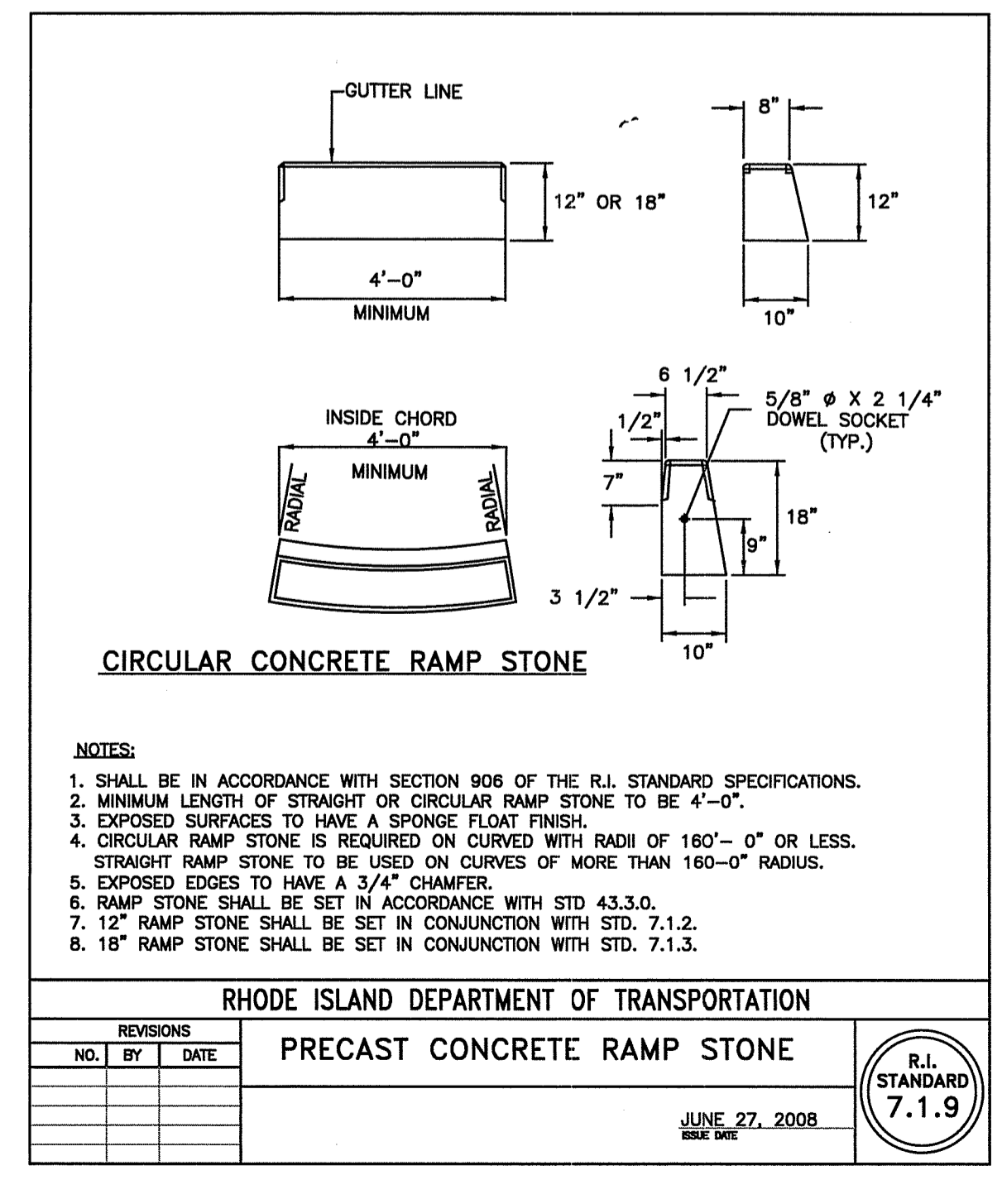
RHODE ISLAND DEPARTMENT OF TRANSPORTATION		
PRECAST CONCRETE WHEELCHAIR RAMP TRANSITION CURB		
NO.	BY	DATE
1	M.P.	Mar 05



RHODE ISLAND DEPARTMENT OF TRANSPORTATION		
PAVEMENT MARKINGS ARROWS AND ONLY		
NO.	BY	DATE
1	M.P.	Mar 05

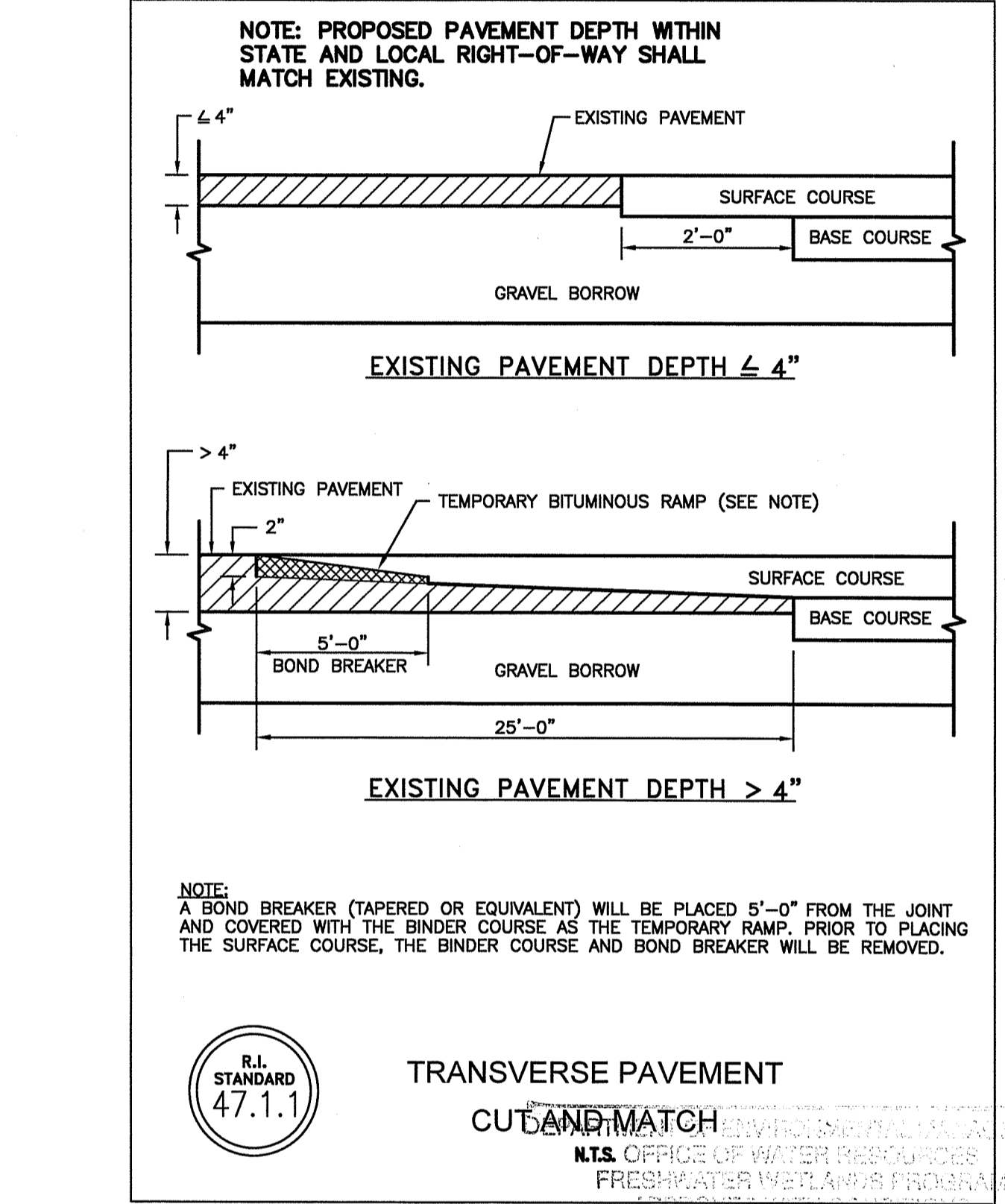


RHODE ISLAND DEPARTMENT OF TRANSPORTATION		
6'-0" PRECAST CONCRETE TRANSITION CURB		
NO.	BY	DATE
1	M.P.	Mar 05



- NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
 2. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR RAMP STONE TO BE 4'-0".
 3. EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
 4. CIRCULAR RAMP STONE IS REQUIRED ON CURVED WITH RADII OF 160'-0" OR LESS. STRAIGHT RAMP STONE TO BE USED ON CURVES OF MORE THAN 160'-0" RADII.
 5. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.
 6. RAMP STONE SHALL BE SET IN ACCORDANCE WITH STD 43.3.0.
 7. 12" RAMP STONE SHALL BE SET IN CONJUNCTION WITH STD. 7.1.2.
 8. 18" RAMP STONE SHALL BE SET IN CONJUNCTION WITH STD. 7.1.3.

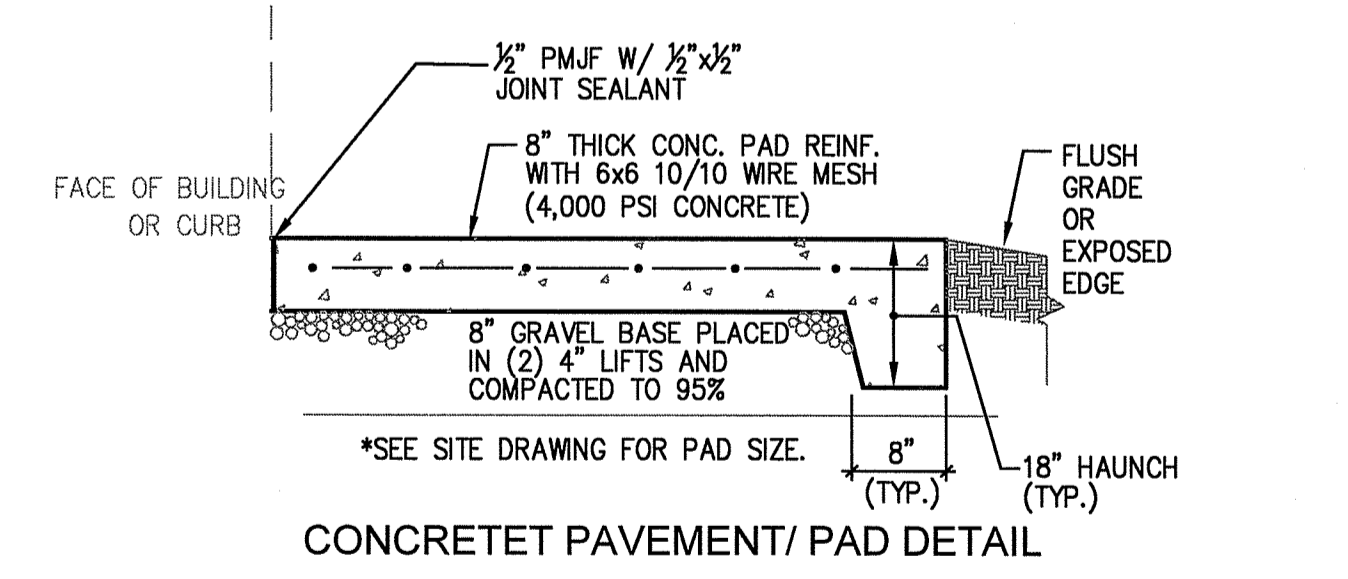
RHODE ISLAND DEPARTMENT OF TRANSPORTATION		
PRECAST CONCRETE RAMP STONE		
NO.	BY	DATE
1	M.P.	Mar 05



R.I. STANDARD 47.1.1

TRANSVERSE PAVEMENT CUT AND MATCH

AS SPECIFIED IN THE LETTER OF APPROVAL DATED SEP 10 2018 FILE # 19-0194 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL APPROVED PLANS MUST BE AT CONSTRUCTION SITE



- NOTES:
1. CONCRETE WALKS SHALL BE 4" MINIMUM THICKNESS, CONCRETE PADS AND ENTRANCES SHALL BE 6" MINIMUM THICKNESS REINFORCED CONCRETE.
 2. CONCRETE WALKS AND PADS SHALL BE INSTALLED WITH CONTRACTION JOINTS AGAINST ALL STRUCTURAL FEATURES AND/OR AT 24' CENTERS. TOOLED JOINTS SHALL BE INSTALLED AT 6' MAXIMUM SPACING EACH WAY.

CONCRETE PAVEMENT/ PAD
N.T.S.

OWNER/APPLICANT:
A.P. 43, LOT 85
CGRI GREENVILLE LLC
1414 ATWOOD AVE
JOHNSTON, RI 02919

CONSTRUCTION DETAILS
FOR
RETAIL CENTER REDEVELOPMENT
AP 43 LOT 85
SITUATED ON
PUTNAM PIKE, SMITHFIELD RHODE ISLAND
PREPARED FOR
CGRI GREENVILLE LLC

NO.	REVISION	BY	DATE

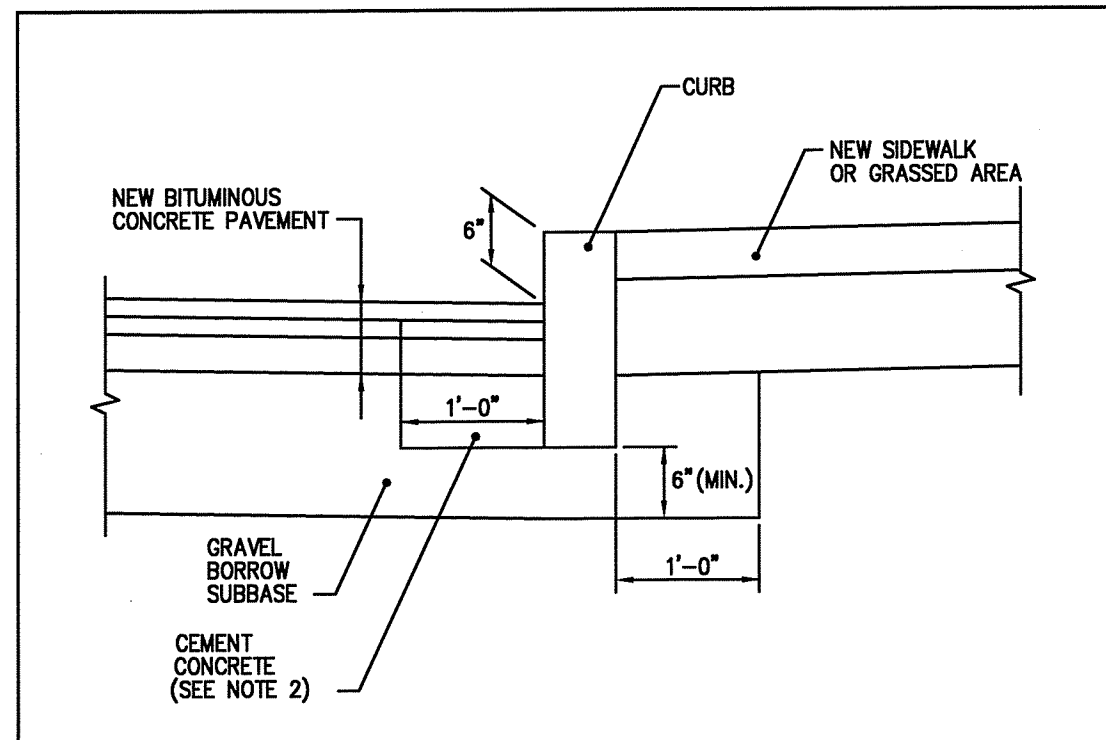
Environmental Management
JUN 21 2019
Office of Water Resources

GAROFALO
GAROFALO & ASSOCIATES, INC.
CIVIL & STRUCTURAL ENGINEERS/SURVEYORS
LAND PLANNERS/ENVIRONMENTAL SCIENTISTS

85 CORLISS STREET
P.O. BOX 6145
PROVIDENCE, R.I. 02940
TEL. 401-273-6000

JOB NO. 7156.00	DRAWN BY K.Y.Y.
DWG. NO. 7156.00-DET	CHECK BY S.H.H.
SCALE: AS SHOWN	APPROVED S.B.G.
DATE: JANUARY 25, 2018	

SHEET
C-6
7 OF 9 SHEETS



NOTES:
 1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
 2. CEMENT CONCRETE SHALL BE USED ONLY WHEN THE CURB IS SET AFTER THE BASE AND/OR BINDER COURSES ARE IN PLACE, OTHERWISE THE CEMENT CONCRETE WILL BE ELIMINATED AND THE GRAVEL BROUGHT UP TO BOTTOM OF THE BASE COURSE.

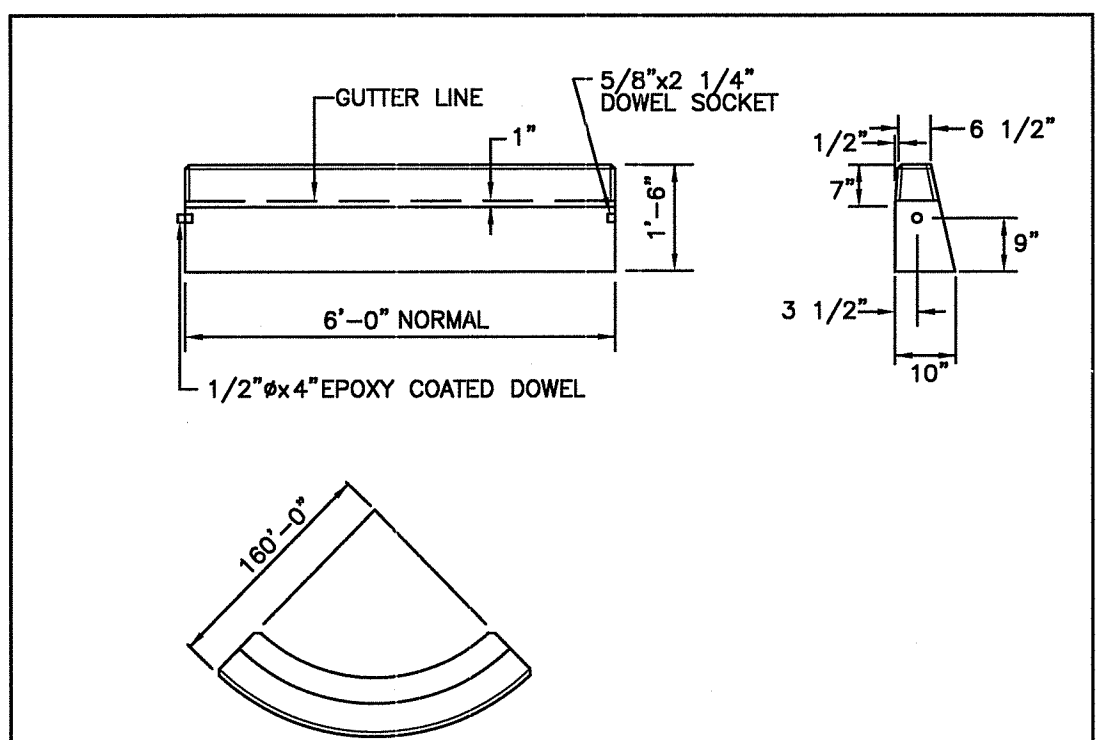
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS

NO.	BY	DATE
1	M.P.	Mar 05
2	M.P.	06/21/10

JUNE 15, 1998
 DATE DATE

STANDARD 7.6.0
 R.I.



NOTES:
 1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
 2. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FILLER PIECES TO BE 3'-0".
 3. EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
 4. CIRCULAR CURB IS REQUIRED ON CURVES WITH RADIUS OF 160'-0" OR LESS. STRAIGHT CURB TO BE USED ON CURVES OF MORE THAN 160'-0" RADIUS.
 5. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.

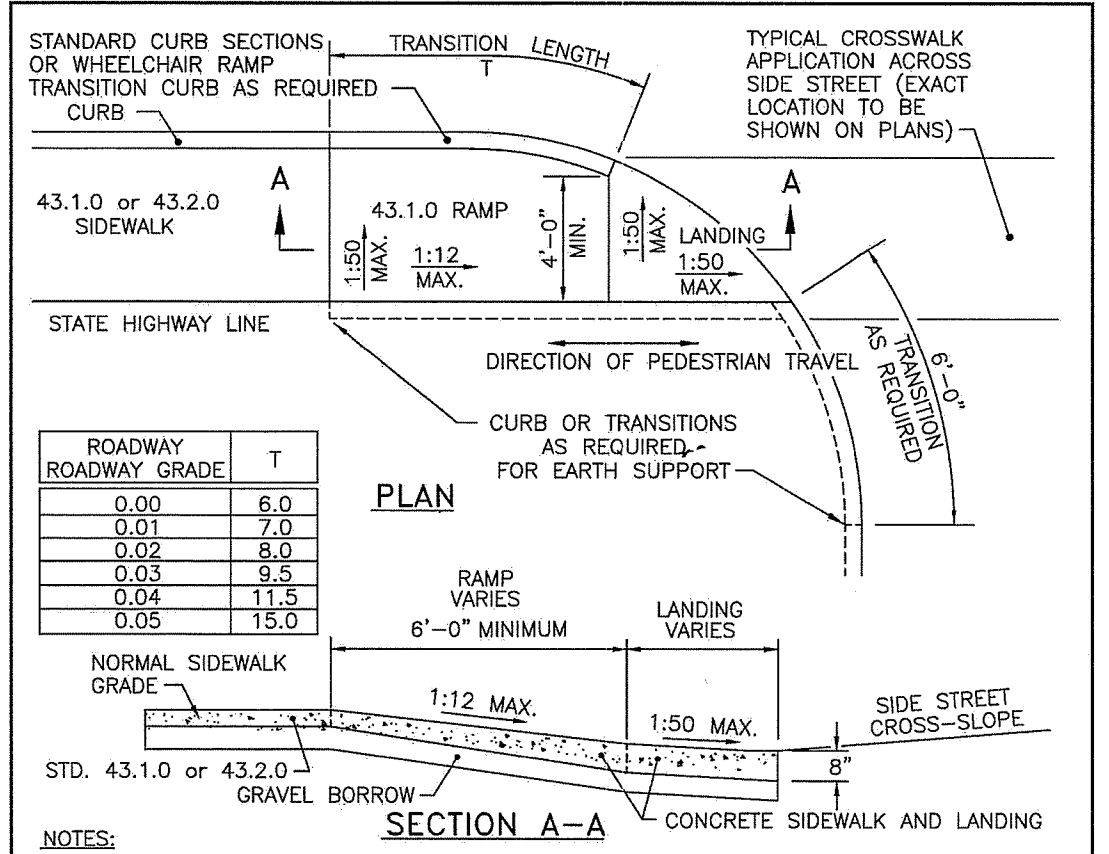
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS

NO.	BY	DATE
1	M.P.	Mar 05
2	M.P.	Sep 2012

JUNE 15, 1998
 DATE DATE

STANDARD 7.1.0
 R.I.



NOTES:
 1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS.
 2. THIS DETAIL IS TO BE USED ONLY WHEN STATE RIGHT-OF-WAY IS LIMITED TO BACK OF SIDEWALK AND SIDEWALK IS NARROW WITH NO PEDESTRIAN TRAFFIC FROM SIDE STREET.
 3. WHEN ANY OBSTRUCTION LOCATED IN THE SIDEWALK FALLS WITHIN A CROSSWALK AREA, IF POSSIBLE, THE OBSTRUCTION SHALL BE PLACED SUCH THAT IT FALLS OUTSIDE OF THE RAMP.
 4. AT NO TIME IS ANY PART OF THE WHEELCHAIR RAMP TO BE LOCATED OUTSIDE OF THE CROSSWALK, AND IT IS TO BE CENTERED WHENEVER POSSIBLE.
 5. DRAINAGE FACILITIES ARE TO BE LOCATED UP-GRADE OF ALL WHEELCHAIR RAMPS.
 6. LOCATION OF WHEELCHAIR RAMPS IS AS SHOWN ON CONTRACT DRAWINGS.
 7. ALL REQUIRED CUTTING OF CURB PIECES TO BE PAID FOR UNDER COST OF CURB.
 8. WHERE THE ROAD PROFILE EXCEEDS 5% THE TRANSITION LENGTH (T) SHALL BE EIGHTEEN FEET (18'-0").
 9. THE ENTRANCE OF THE WHEELCHAIR RAMP SHALL BE FLUSH WITH THE ROADWAY.
 10. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FILLER PIECES TO BE 3'-0" (GREATER LENGTHS PREFERRED).
 11. AN UNOBSTRUCTED PATH OF TRAVEL WITH A MINIMUM WIDTH OF 4'-0" SHALL BE MAINTAINED.

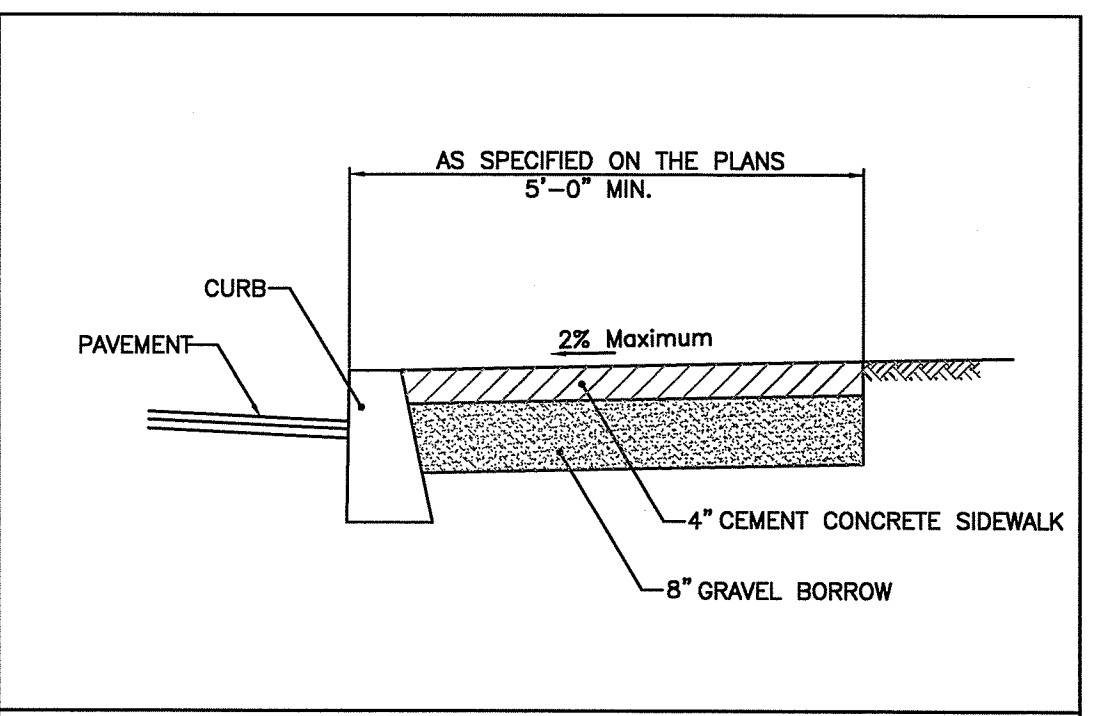
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS

NO.	BY	DATE
1	M.P.	Dec 2005
2	M.P.	Sep 2012

JUNE 15, 1998
 DATE DATE

STANDARD 43.3.1
 R.I.



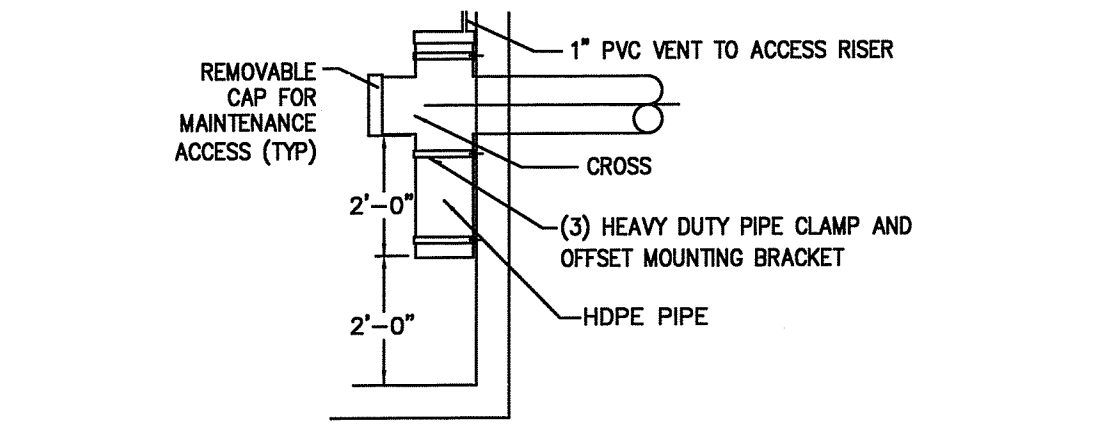
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS

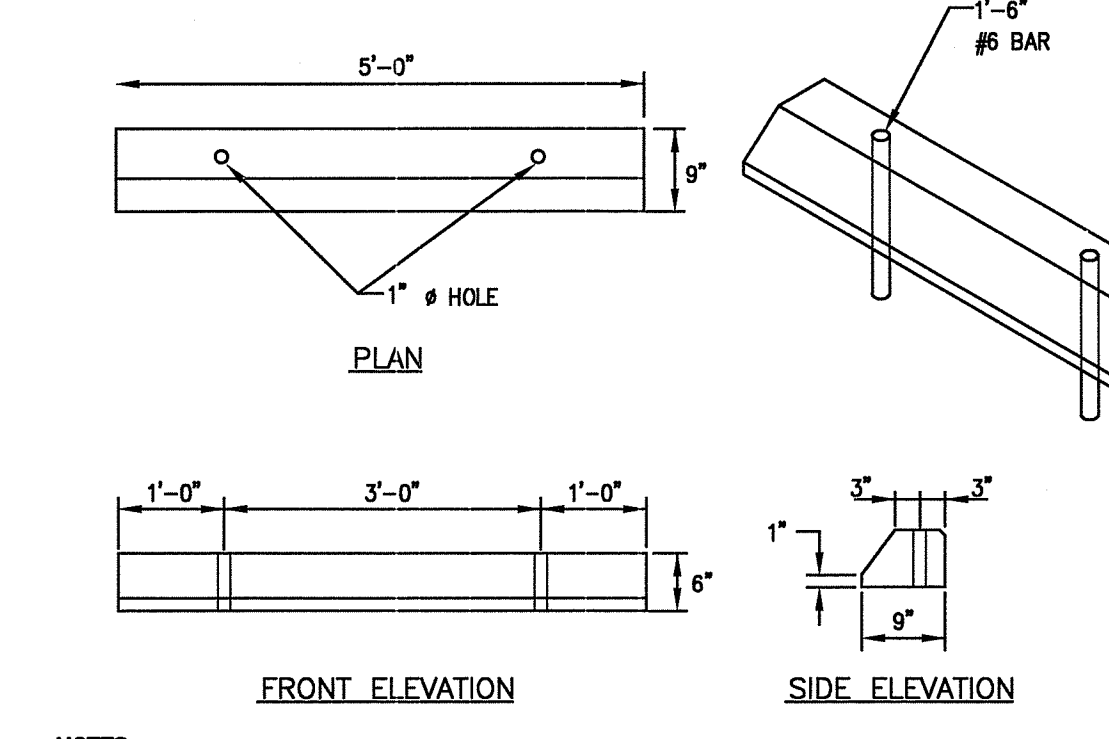
NO.	BY	DATE
1	M.P.	Mar 05
2	M.P.	06/21/10

JUNE 15, 1998
 DATE DATE

STANDARD 43.1.0
 R.I.



OUTLET ELBOW
 N.T.S.



NOTES:
 1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
 2. ALL EXPOSED EDGES TO HAVE A 3/4" CHAMFER.
 3. ALL SURFACES TO HAVE A SPONGE FLOAT FINISH.

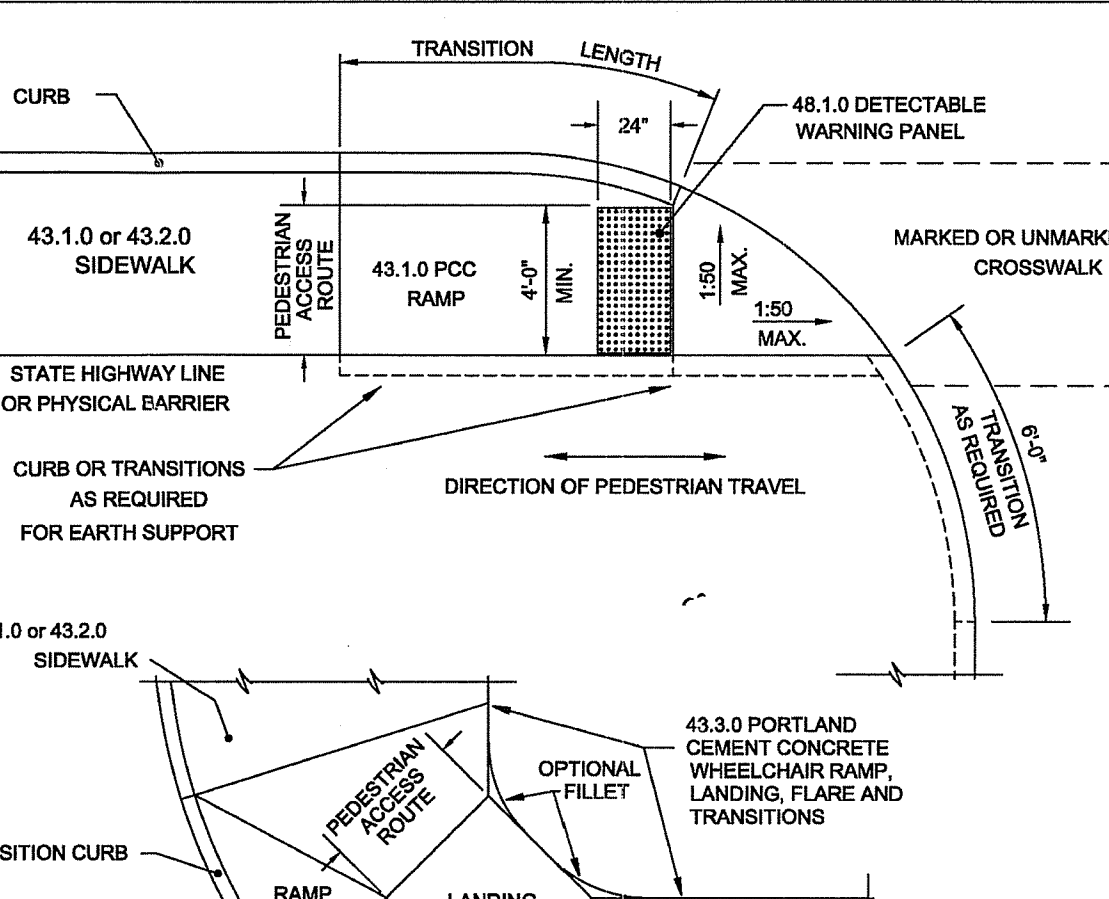
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS

NO.	BY	DATE
1	M.P.	Mar 05
2	M.P.	Sep 2012

JUNE 15, 1998
 DATE DATE

STANDARD 7.1.0
 R.I.



NOTES:
 1. DETECTABLE WARNING PANEL SHALL BE IN ACCORDANCE WITH SECTION 942 OF THE RHODE ISLAND STANDARD SPECIFICATIONS; PANEL TO MATCH RAMP WIDTH.

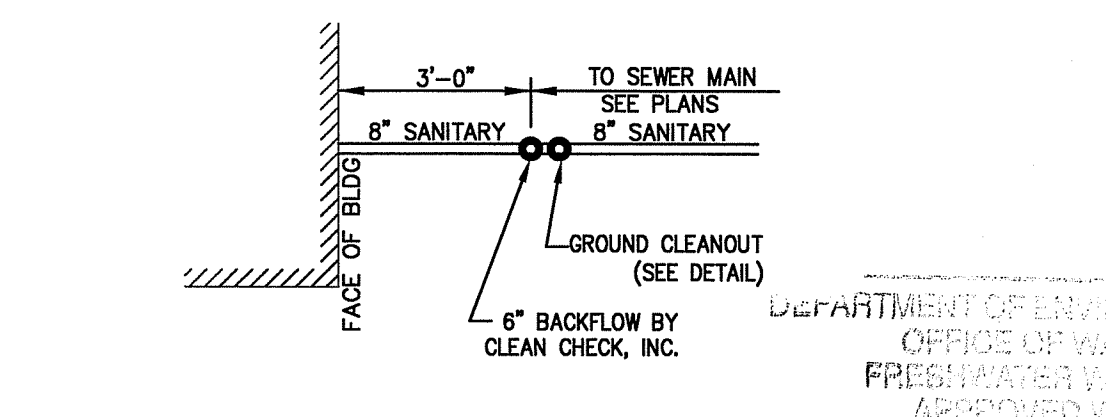
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS

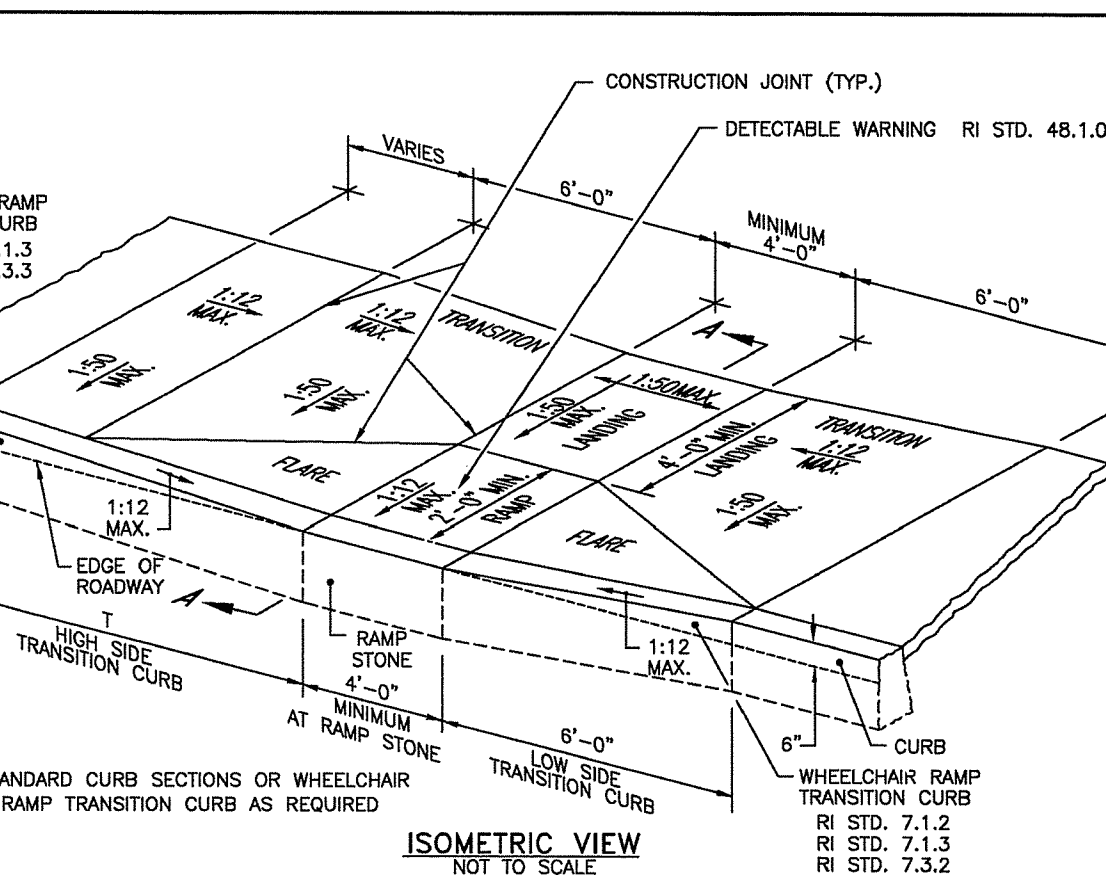
NO.	BY	DATE
1	M.P.	Dec 2005
2	M.P.	Sep 2012

JUNE 15, 1998
 DATE DATE

STANDARD 48.1.0
 R.I.



PLAN VIEW OF BACKFLOW/CLEANOUT
 AS SPECIFIED ON THE PLANS
 DATED SEP 10 2019
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE



NOTES:
 1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS.
 2. WHEN ANY OBSTRUCTION LOCATED IN THE SIDEWALK FALLS WITHIN A CROSSWALK AREA, THE WHEELCHAIR RAMP SHALL BE PLACED SUCH THAT THE OBSTRUCTION FALLS OUTSIDE OF THE CROSSWALK, AND IT IS TO BE CENTERED WHENEVER POSSIBLE.
 3. AT NO TIME IS ANY PART OF THE WHEELCHAIR RAMP TO BE LOCATED OUTSIDE OF THE CROSSWALK, AND IT IS TO BE CENTERED WHENEVER POSSIBLE.
 4. DRAINAGE FACILITIES ARE TO BE LOCATED UP-GRADE OF ALL WHEELCHAIR RAMPS.
 5. LOCATION OF WHEELCHAIR RAMPS IS AS SHOWN ON CONTRACT DRAWINGS.
 6. IN NO INSTANCE SHALL THE SIDEWALK CROSS SLOPE EXCEED 1:50 EXCEPT WITHIN THE RAMP AREA.
 7. AN UNOBSTRUCTED PATH OF TRAVEL WITH A MINIMUM WIDTH OF 4'-0" SHALL BE MAINTAINED.
 8. THE WHEELCHAIR RAMP SLOPE AND SIDE SLOPES (TRANSITIONS), MUST NOT BE STEEPER THAN 1:12. HOWEVER, THESE SLOPES MAY BE FLATTER THAN 1:12 WHEN WARRANTED BY SURROUNDING CONDITIONS.
 9. WHERE THE ROAD PROFILE EXCEEDS 5% THE HIGH SIDE TRANSITION LENGTH (T) SHALL BE EIGHTEEN FEET (18'-0").
 10. IN NO CASE, WHERE A STOP LINE IS WARRANTED, SHALL A RAMP BE PLACED BEHIND THE STOP LINE.
 11. THE ENTRANCE OF THE WHEELCHAIR RAMP SHALL BE FLUSH WITH THE ROADWAY.
 12. THE WHEELCHAIR RAMP SHALL BE CENTERED RADIALLY, OPPOSITE THE RADIUS POINT WHEN POSSIBLE.
 13. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FILLER PIECES TO BE 3'-0" (GREATER LENGTHS PREFERRED).
 14. ALL REQUIRED CUTTING OF CURB PIECES TO BE PAID FOR UNDER COST OF CURB.
 15. DETECTABLE WARNINGS TO BE PAID FOR UNDER SECTION 942 OF THE R.I. STANDARD SPECIFICATIONS.
 16. 4" CONCRETE DEPTH FOR RADIUS WHEELCHAIR RAMPS ONLY. USE 4" DEPTH FOR TANGENT (MID-BLOCK) LOCATIONS.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS

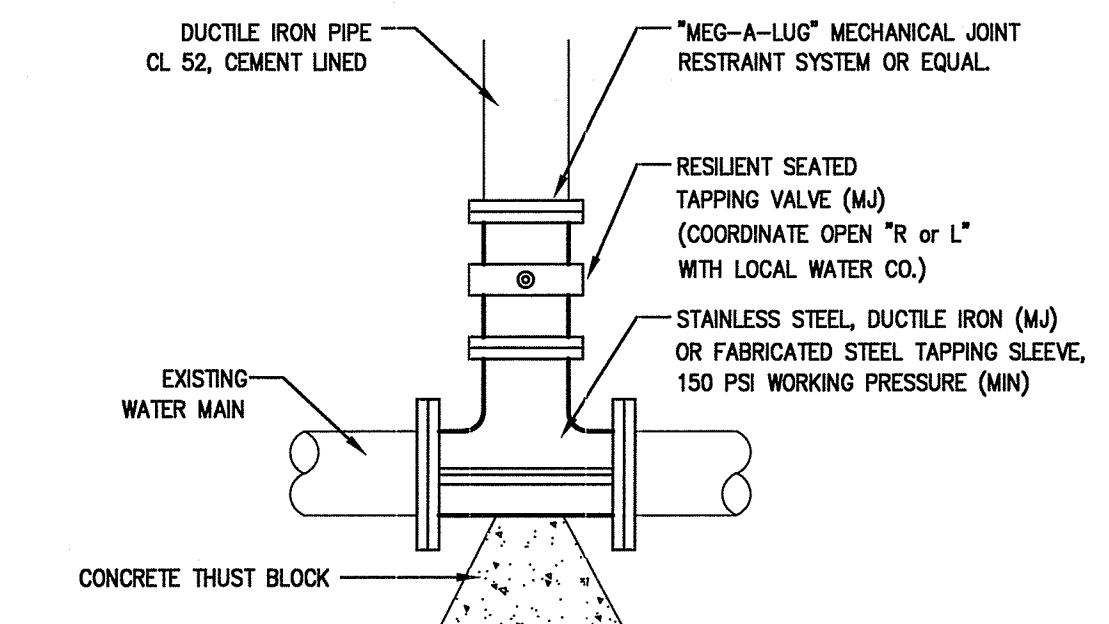
NO.	BY	DATE
1	M.P.	Dec 2005
2	M.P.	Jun 2008
3	M.P.	Sep 2012

JUNE 15, 1998
 DATE DATE

STANDARD 43.3.0
 R.I.



TYPICAL TAPPING SLEEVE & VALVE DETAIL
 N.T.S.



NOTES:
 1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
 2. ALL EXPOSED EDGES TO HAVE A 3/4" CHAMFER.
 3. ALL SURFACES TO HAVE A SPONGE FLOAT FINISH.

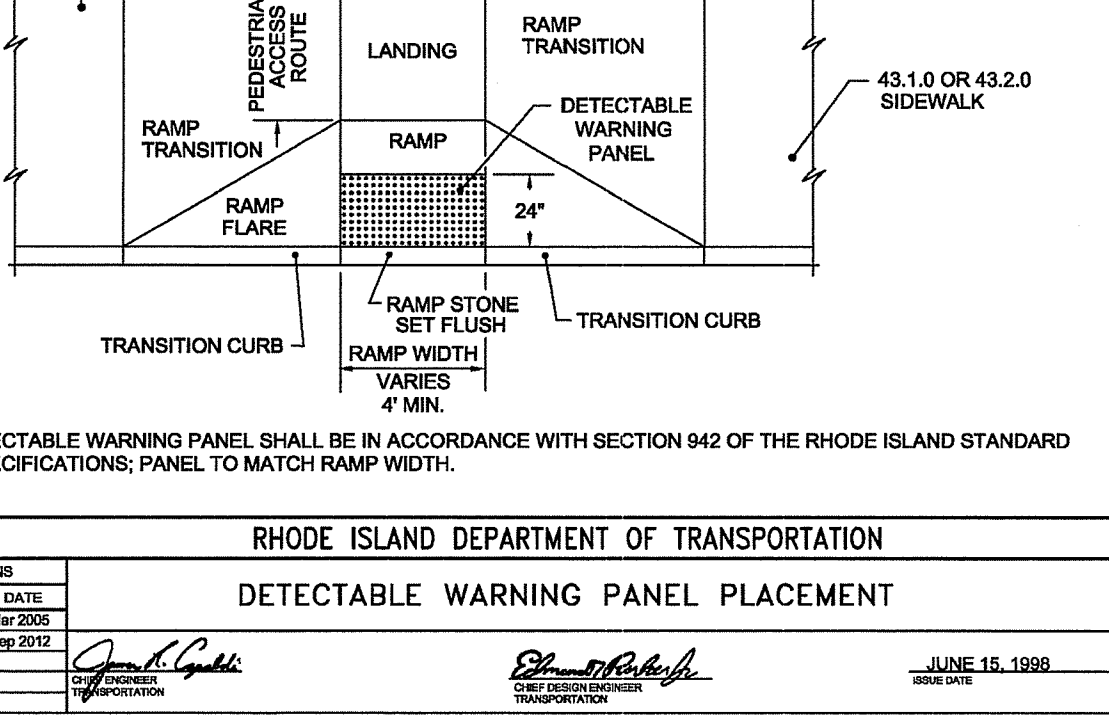
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS

NO.	BY	DATE
1	M.P.	Mar 05
2	M.P.	Sep 2012

JUNE 15, 1998
 DATE DATE

STANDARD 7.1.0
 R.I.



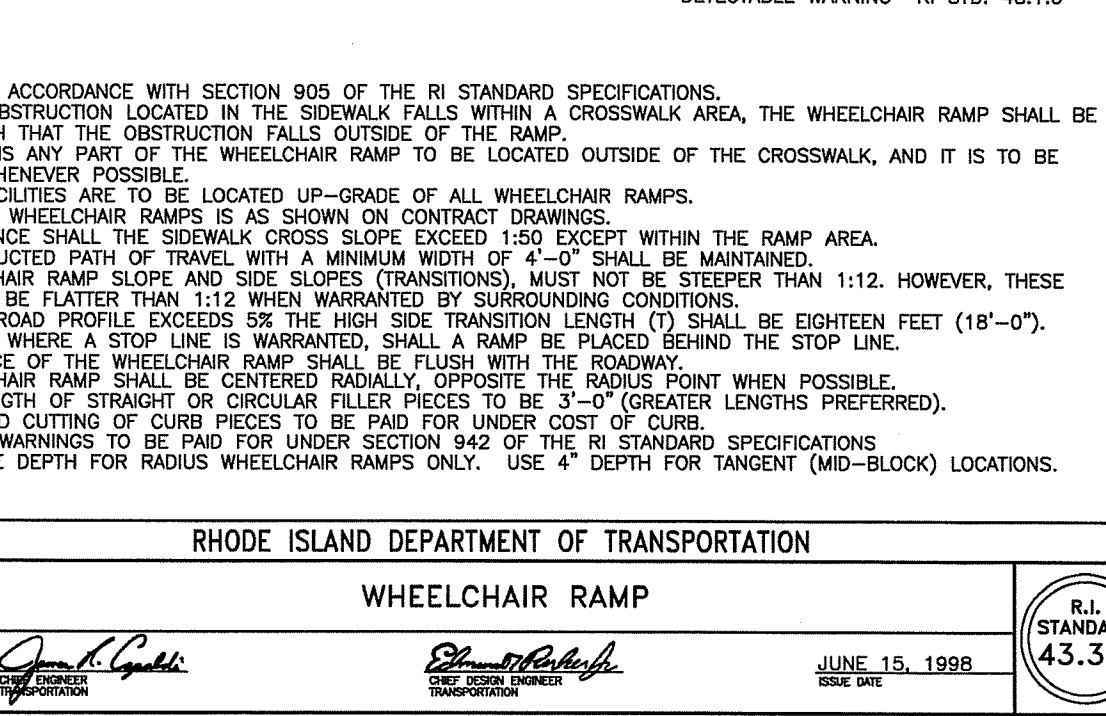
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS

NO.	BY	DATE
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2	M.P.	Sep 2012

JUNE 15, 1998
 DATE DATE

STANDARD 48.1.0
 R.I.



RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS

NO.	BY	DATE
1	M.P.	Dec 2005
2	M.P.	Jun 2008
3	M.P.	Sep 2012

JUNE 15, 1998
 DATE DATE

STANDARD 43.3.0
 R.I.

CONSTRUCTION DETAILS-2
 FOR
 RETAIL CENTER
 REDEVELOPMENT
 AP 43 LOT 85
 SITUATED ON
 PUTNAM PIKE, SMITHFIELD
 RHODE ISLAND
 PREPARED FOR
 CGRI GREENVILLE LLC

NO.	REVISION	BY	DATE

Environmental Management
 JUN 21 2019
 Office of Water Resources

GAROFALO
 GAROFALO & ASSOCIATES, INC.
 CIVIL & STRUCTURAL ENGINEERS/SURVEYORS
 LAND PLANNERS/ENVIRONMENTAL SCIENTISTS

85 CORLISS STREET
 P.O. BOX 6145
 PROVIDENCE, R.I. 02940
 TEL. 401-273-6000

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 the engineer/surveyor and have been
 prepared for the specific project
 project of this site and are not to
 be used for any other purpose,
 without the written consent of one of its
 directors.

JOB NO. 7156.00	DRAWN BY K.Y.Y.
DWG. NO. 7156.00-DET	CHECK BY S.H.H.
SCALE: AS SHOWN	APPROVED S.B.G.
	DATE: JANUARY 25, 2018

SHEET
 C-7
 8 OF 9 SHEETS

OWNER/APPLICANT:
 A.P. 43, LOT 85
 CGRI GREENVILLE LLC
 1414 ATWOOD AVE
 JOHNSTON, RI 02919

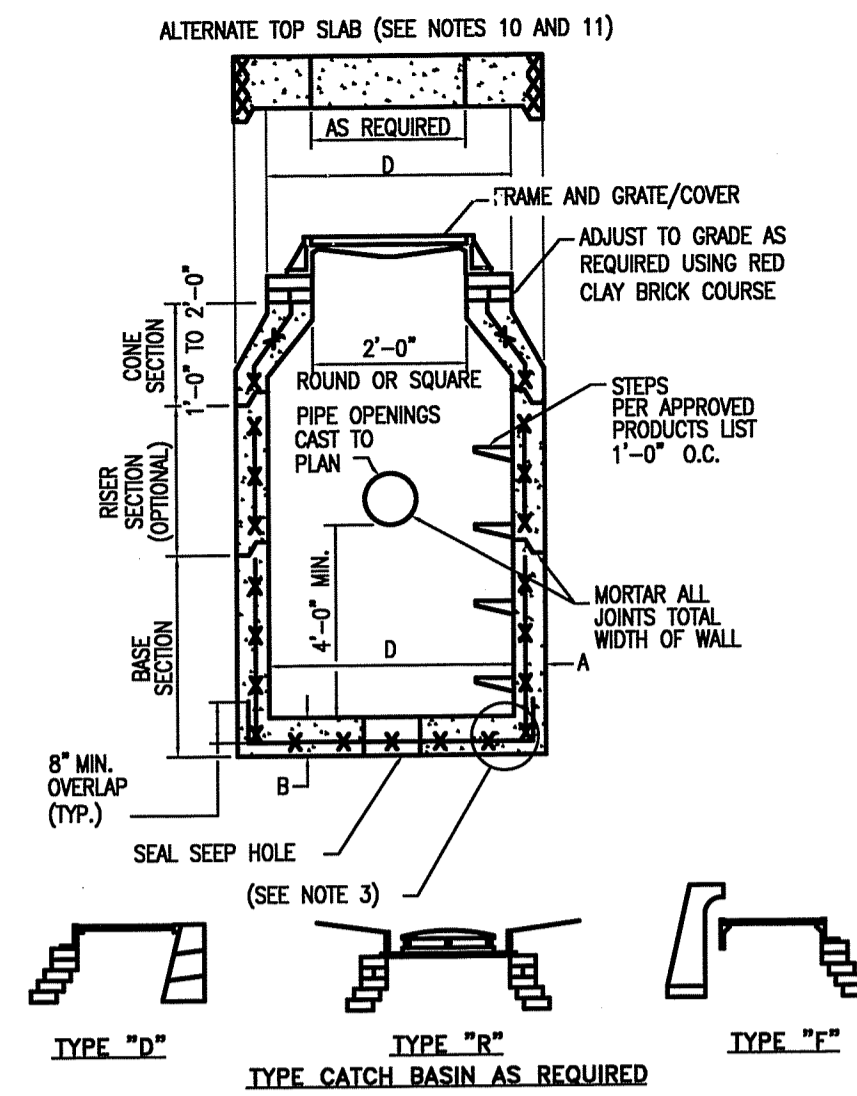


TABLE 1

CATCH BASIN DIAMETER (D)	CIRCUMFERENTIAL STEEL REINFORCEMENT REQUIRED	
	A	B
4'-0"	5"	6"
5'-0"	6"	7"
6'-0"	7"	8"

* FOR LONGITUDINAL (VERTICAL STANDING) REINFORCEMENT REFER TO ASTM C478, ITEM 8.1.2

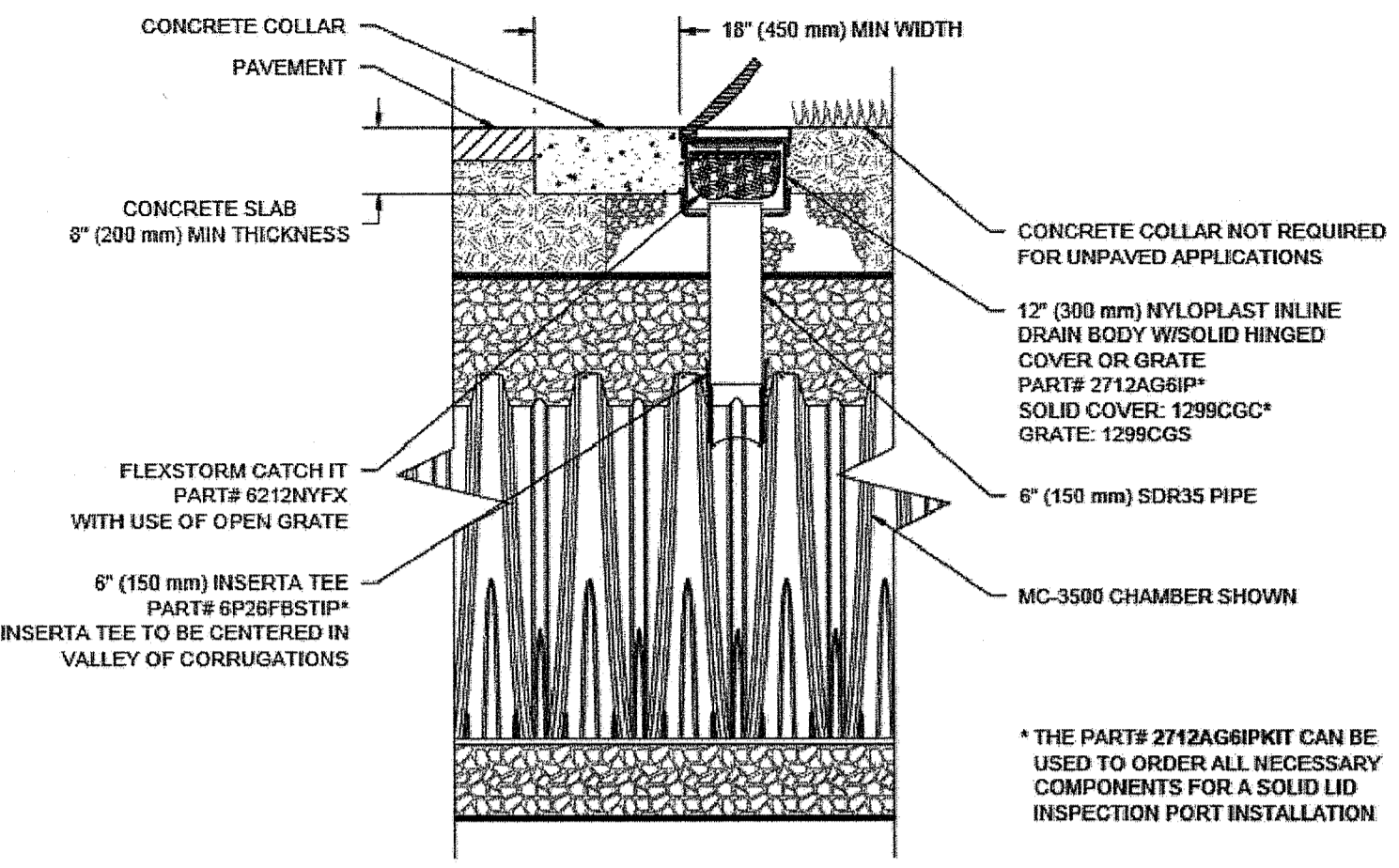
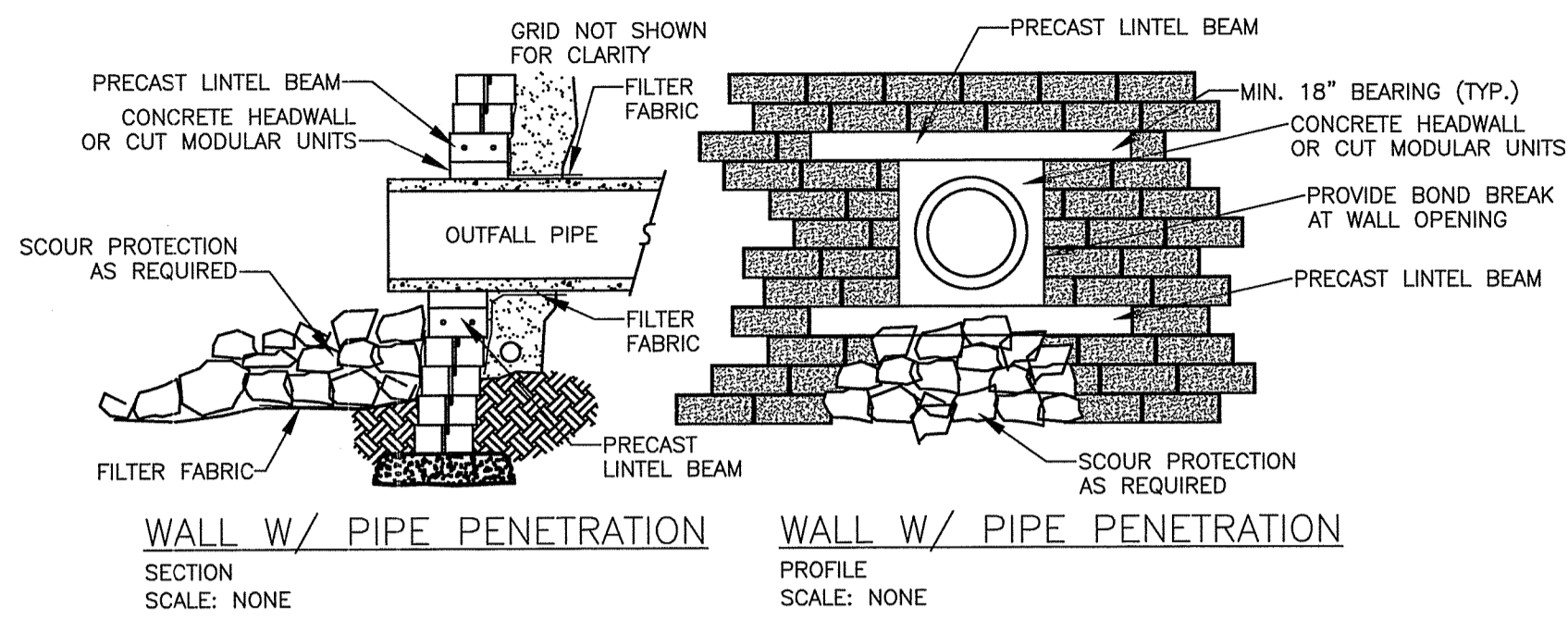
- NOTES:
- SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.
 - SEE TABLE 1 FOR STEEL REINFORCEMENT REQUIREMENTS.
 - STEEL REINFORCEMENT FOR BASE SECTION BOTTOM SHALL BE A MINIMUM OF 0.12 SQ. IN./LIN. FT. (BOTH WAYS).
 - STEPS SHALL CONFORM TO STD. 5.3.0 AND SHALL BE INSTALLED AT THE CASTING PLANT.
 - ONE FOUR MONOLITHIC BASE SECTION.
 - ANY NECESSARY ADJUSTMENTS DURING CONSTRUCTION WILL BE DONE BY SAW-CUTTING AND/OR CORING ONLY. NO JACKHAMMERS, HAMMERS AND CHISELS OR PNEUMATIC TOOLS WILL BE ALLOWED.
 - CORBEL MADE OF RED CLAY BRICK WILL BE PERMITTED FOR THE "CONE SECTION" OF THE 4'-0" CATCH BASIN ONLY.
 - FOR CATCH BASIN TYPES "D" AND "F" STEPS MUST BE INSTALLED ON THE CURB SIDE OF THE STRUCTURE.
 - THE CENTERLINE OF THE OPENING MUST BE WITHIN 2'-0" FROM THE STEPS.
 - ALTERNATE TOP SLAB IS STEEL REINFORCED TO MEET OR EXCEED H-25 LOADING (SEE STD. 4.7.2).
 - ALTERNATE TOP SLAB IS ONLY FOR USE WHEN REDUCING SECTION DOES NOT FIT BECAUSE OF STRUCTURE DEPTH.
 - REFER TO STD. 5.2.0 FOR MAXIMUM PIPE SIZES.

PRECAST 4'-0", 5'-0", OR 6'-0" ROUND CATCH BASIN

NOT TO SCALE

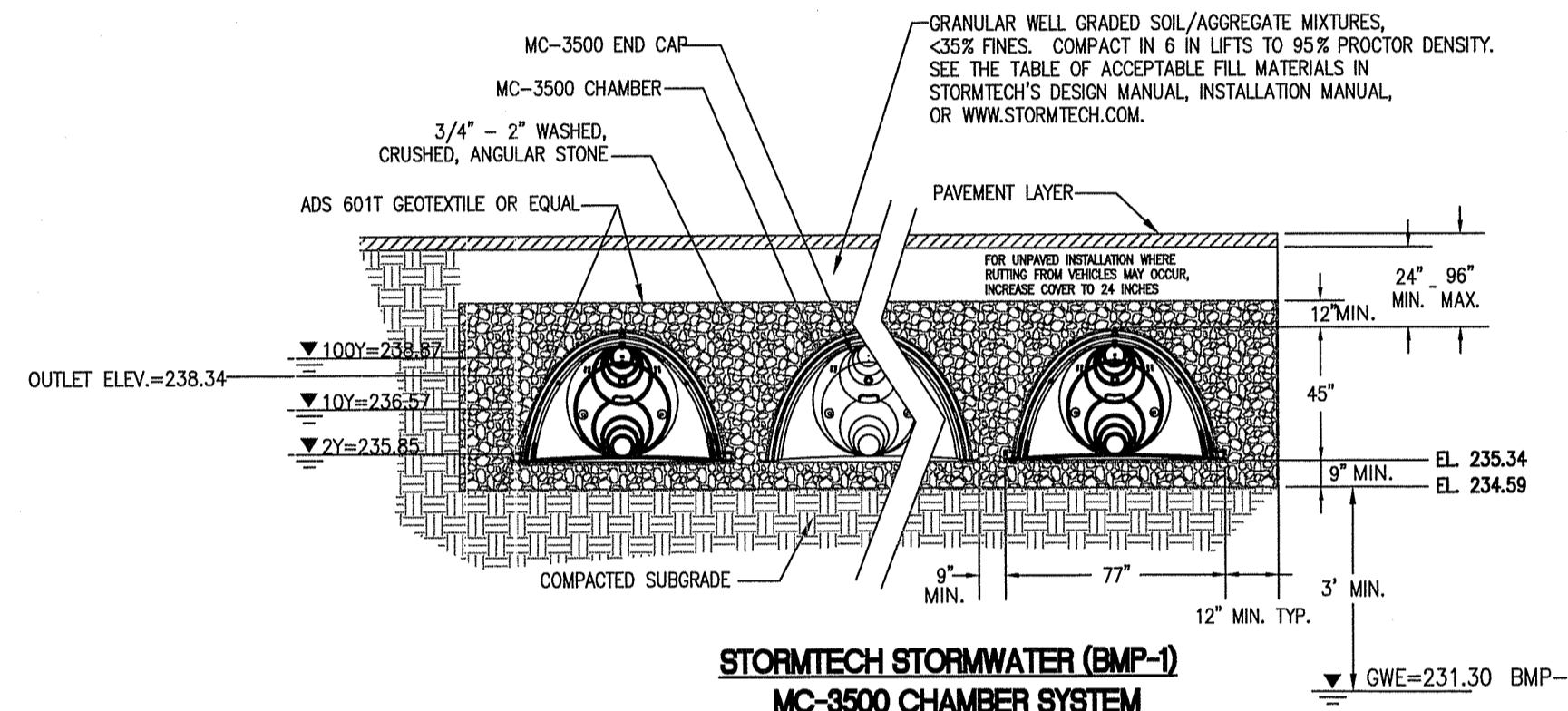


- INLET NOTES:
- FINAL BEAM SIZE, REINFORCEMENT, AND CONFIGURATION TO BE DESIGNED BY WALL DESIGN ENGINEER
 - INLET BEAMS SHALL BE PRECAST WITH MINIMUM 7 DAYS CURE
 - HEIGHT OF BEAM SHALL CORRESPOND TO HEIGHT OF MODULAR UNITS
 - PLACEMENT OF INLET BEAMS SHALL BE CONSISTENT WITH THE PLACEMENT OF OUTFALL PIPE
 - INSTALL OUTFALL PIPE PRIOR TO CONSTRUCTION OF WALL ABOVE
 - OUTFALL PIPE SHALL EXTEND BEYOND BASE COURSE OF WALL NO LESS THAN 6"
 - GEOTEXTILE FABRIC SHALL BE INSTALLED AROUND PIPE OPENING
 - INLET TO EXTEND MINIMUM 18" EITHER SIDE OF PIPE



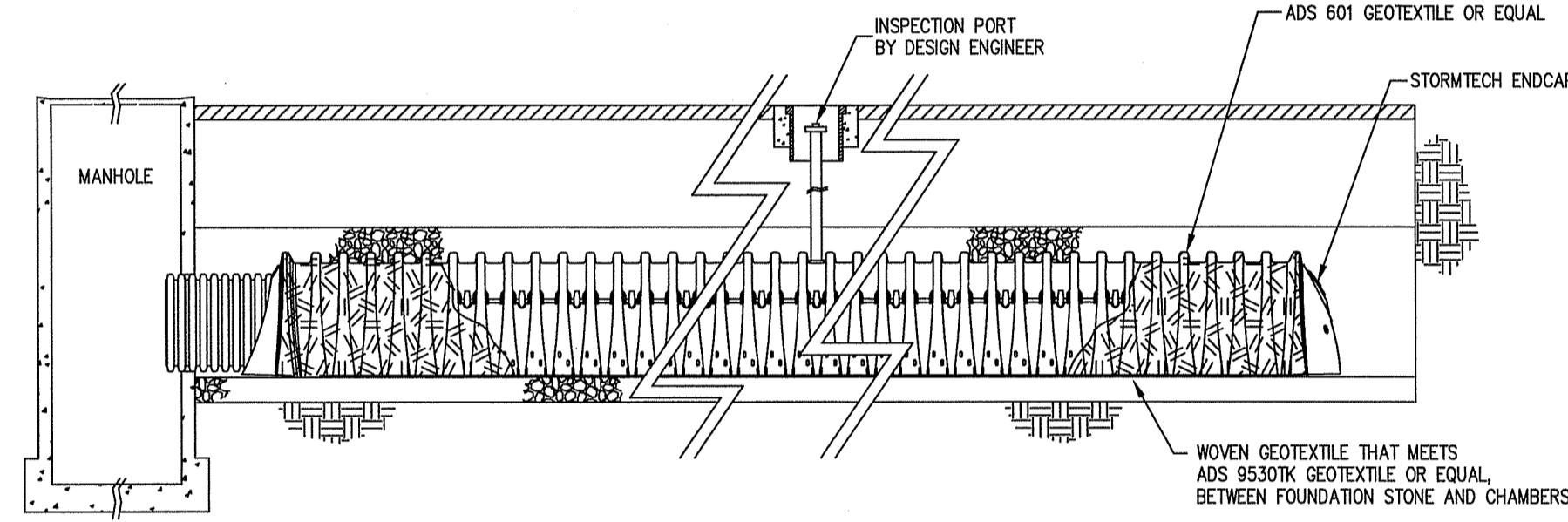
STORMTECH MC-3500 CHAMBER SYSTEM INSPECTION PORT DETAIL

NOT TO SCALE



STORMTECH STORMWATER (BMP-1) MC-3500 CHAMBER SYSTEM

NOT TO SCALE

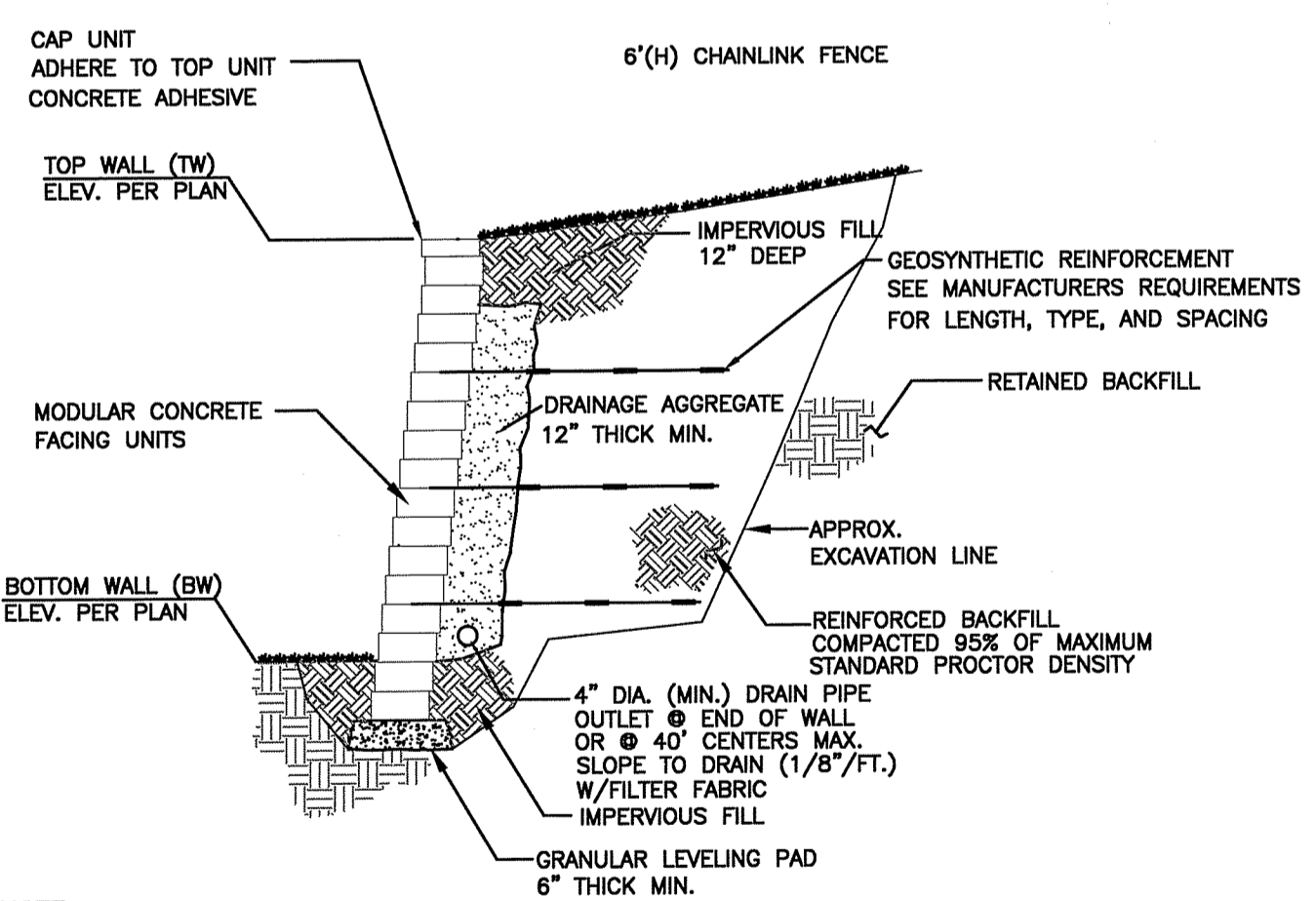


ISOLATOR CHAMBER ROW DETAIL

NOT TO SCALE

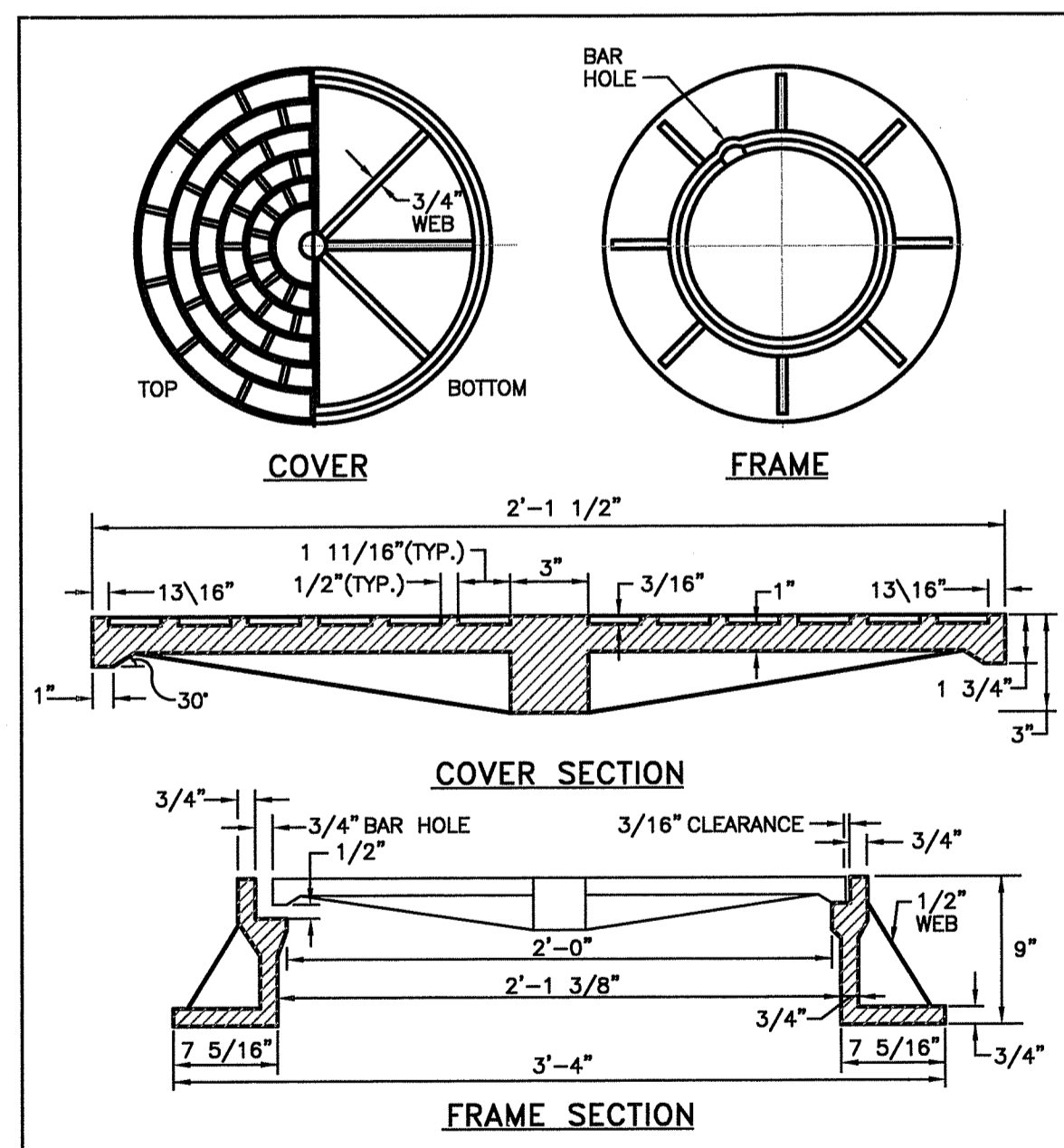
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED SEP 10 2019 FILE # 19-0194
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Nancy L. Freeman



RETAINING WALL DETAIL

N.T.S.

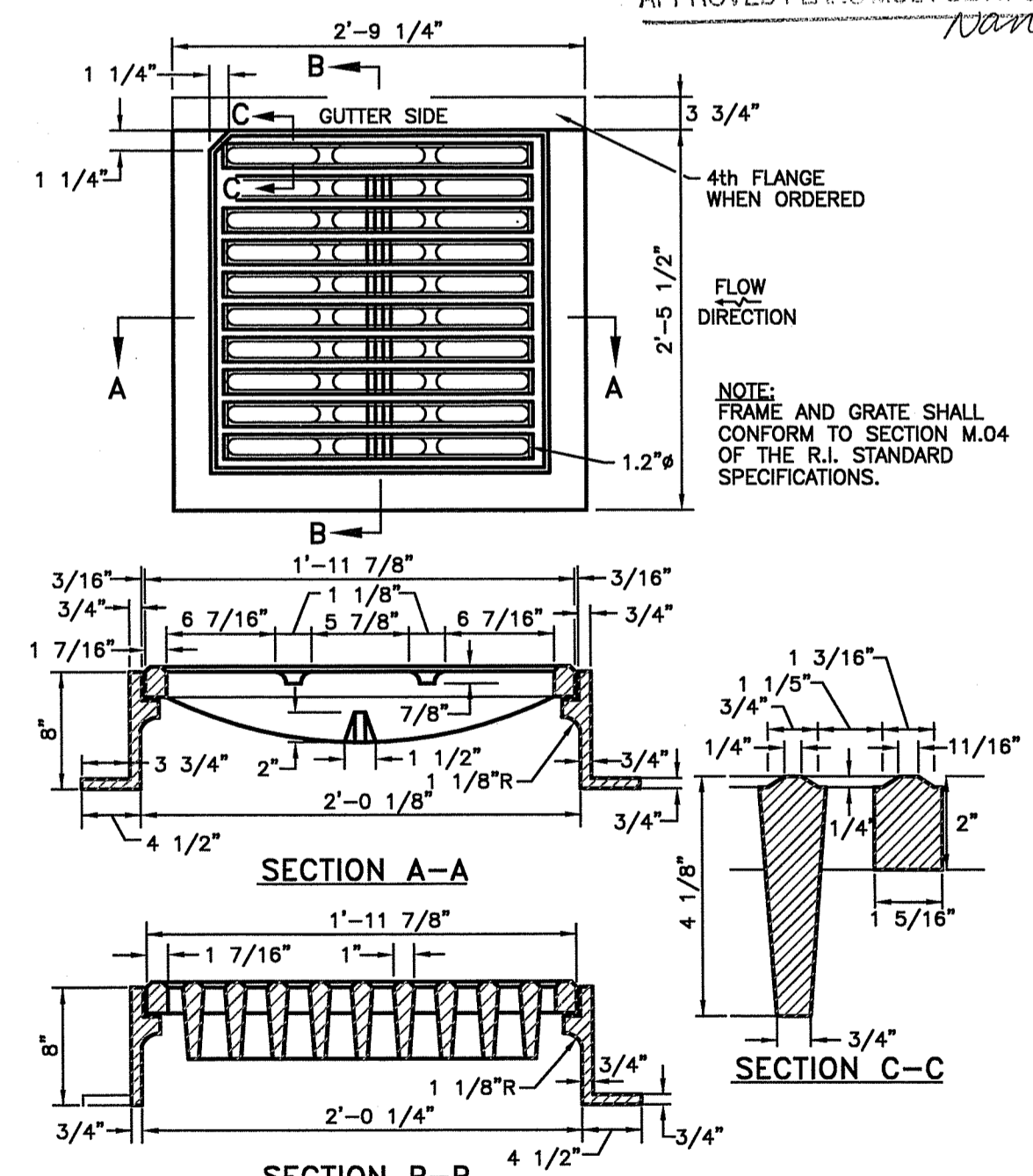


RHODE ISLAND DEPARTMENT OF TRANSPORTATION HEAVY-DUTY ROUND FRAME AND COVER

REVISIONS		
NO.	BY	DATE

JUNE 15, 1998
DATE

R.I. STANDARD 6.2.1



RHODE ISLAND DEPARTMENT OF TRANSPORTATION SQUARE FRAME AND GRATE (BICYCLE SAFE)

N.T.S.

GAROFALO GAROFALO & ASSOCIATES, INC. CIVIL & STRUCTURAL ENGINEERS/SURVEYORS LAND PLANNERS/ENVIRONMENTAL SCIENTISTS

85 CORLISS STREET
P.O. BOX 8145
PROVIDENCE, R.I. 02940
TEL. 401-273-6000

Environmental Management
JUN 21 2019
Office of Water Resources

JOB NO. 7156.00	DRAWN BY K.Y.Y.
DWG. NO. 7156.00-DET	CHECK BY S.H.H.
SCALE: AS SHOWN	APPROVED S.B.G.
	DATE: JANUARY 25, 2018

SHEET

C-8

9 OF 9 SHEETS

OWNER/APPLICANT:
A.P. 43, LOT 85
CGRI GREENVILLE LLC
1414 ATWOOD AVE
JOHNSTON, RI 02919

CONSTRUCTION DETAILS - 3
FOR
RETAIL CENTER REDEVELOPMENT
AP 43 LOT 85
SITUATED ON
PUTNAM PIKE, SMITHFIELD
RHODE ISLAND
PREPARED FOR
CGRI GREENVILLE LLC