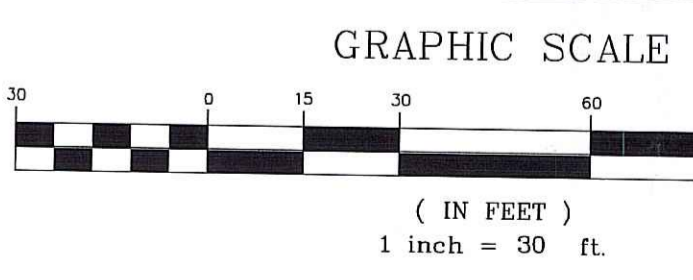


- GENERAL NOTES**
1. THE PROJECT WILL BE SERVICED BY PUBLIC SEWER & WATER UTILITIES.
 2. THIS SITE IS NOT LOCATED WITHIN A CRITICAL RESOURCE AREA AS DEFINED BY CRMC OR RIDEM.
 3. THE PARCEL IS LOCATED IN THE TOWN COASTAL & FRESHWATER WETLANDS ZONING OVERLAY DISTRICT.
 4. ACCORDING TO FEMA FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 445009 C0213H REVISED 10/19/10, THIS ENTIRE SITE LIES WITHIN FLOOD ZONE C - AREAS OF MINIMAL FLOODING.
 5. PROPERTY LINES ARE SHOWN AS BASED UPON A CLASS III SURVEY PREPARED BY ROBERT E. WINWARD P.L.S. ENTITLED "SITE PLAN, ASSESSORS PLAT K, LOT 69B, NARRAGANSETT RHODE ISLAND, PREPARED FOR WILLIAM DOLAN."
 6. THIS PARCEL LIES IN A DEVELOPED NEIGHBORHOOD, WITH TYPICALLY HOMESITES RANGING FROM 1/4 TO 1/2 ACRES.

- LEGEND**
- 101 — EXISTING CONTOURS
 - 102 — PROPOSED CONTOUR
 - — EXISTING SITE CONDITIONS
 - — PROPOSED CONDITIONS
 - — PROPERTY LINE
 - — BUILDING SETBACKS
 - S — EXISTING SEWER GRAVITY LINE
 - W — EXISTING WATER LINE
 - S — EXISTING SEWER (FORCE MAIN)
 - U/P — EXISTING UTILITY POLE
 - — EXISTING DRAINAGE
 - W — PROPOSED WATER LINE
 - S — PROPOSED SEWER LINE
 - TH # — TEST HOLES
 - A-12 — DELINEATED WETLANDS
 - — WETLAND SETBACK
 - — TREELINE
 - — STONEWALL
 - — FENCE (STOCKADE)
 - / — HYDRANT (EX. / PROP.)
 - / — WATER VALVE BOX (EX. / PROP.)
 - / — IRON PIN (EXIST / PROPOSED)
 - — LIMIT OF DISTURBANCE (LOD)
 - — EROSION CONTROLS (HAYBALES/SILT FENCE)

ZONING DISTRICT DIMENSIONAL REGULATIONS
ZONING DISTRICT USE: R-10
PROPOSED 2-FAMILY DUPLEX

	MIN.	SITE
MINIMUM LOT AREA (SF.)	20,000 S.F.	22,065 S.F.
MINIMUM LOT WIDTH:	150 FT.	225± FT.
MINIMUM YARD SETBACKS:		
FRONT	25 FT.	38 FT.
SIDE	10 FT.	20 FT.
REAR	20 FT.	20 FT.
MAXIMUM IMPERVIOUS COVERAGE: 25 %		17.5%



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APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Jeffrey J. Campopiano

ROADWAY EXTENSION & SITE DEVELOPMENT PLAN
GREENBRIAR ROAD
PLAT K/LOT 69B
NARRAGANSETT, RHODE ISLAND

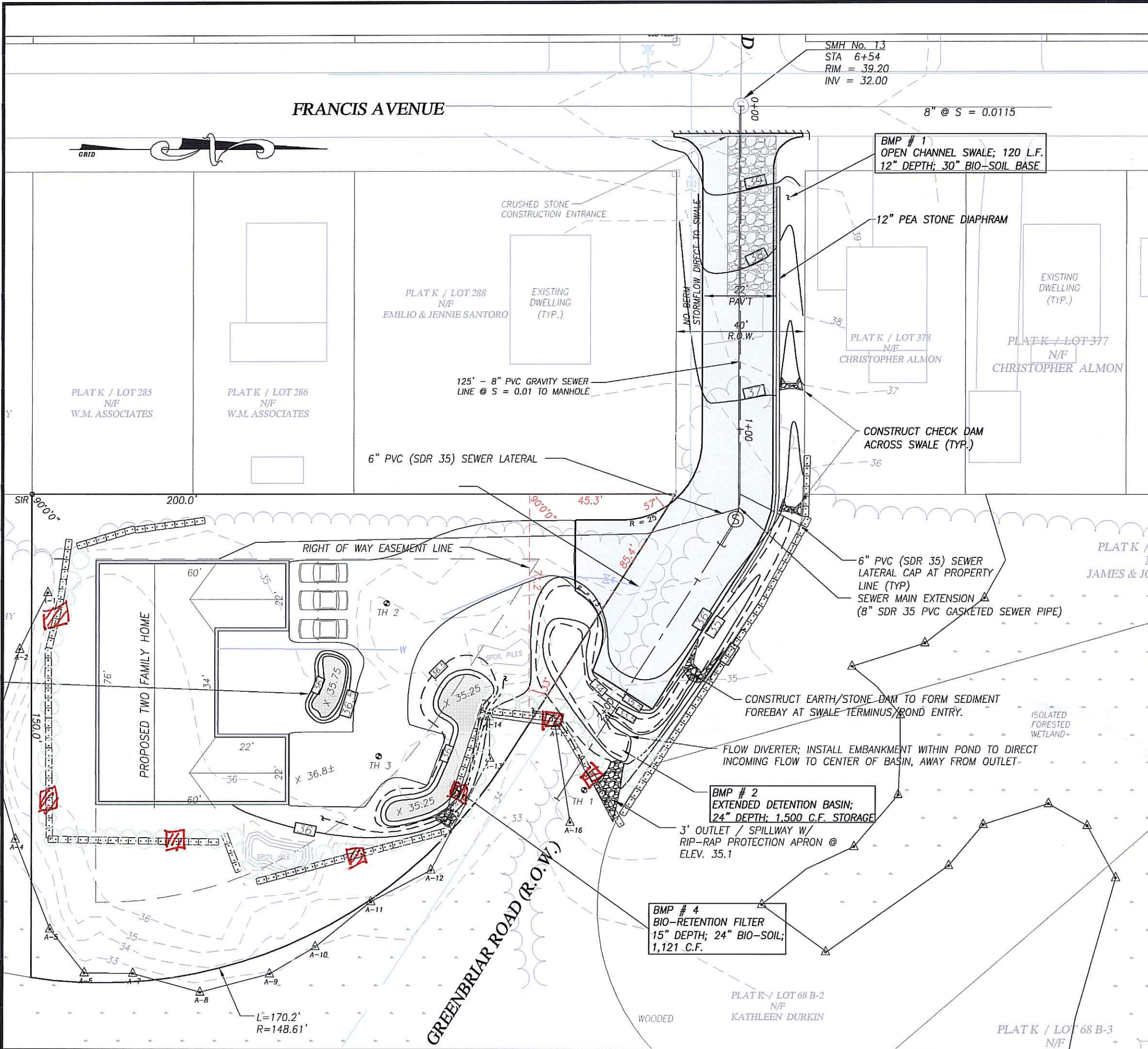
PREPARED BY: **JEFFREY J. CAMPOPIANO P.E.**
16 WEST MAIN STREET
WICKFORD, RHODE ISLAND 02852
PHONE: (401) 295-3037 / FAX: (401) 295-1118

APPLICANT / OWNER: **GREGORY & MARY ANN MANNI**
85 WEST VIEW AVENUE
CRANSTON, RHODE ISLAND 02920



SITE PLAN

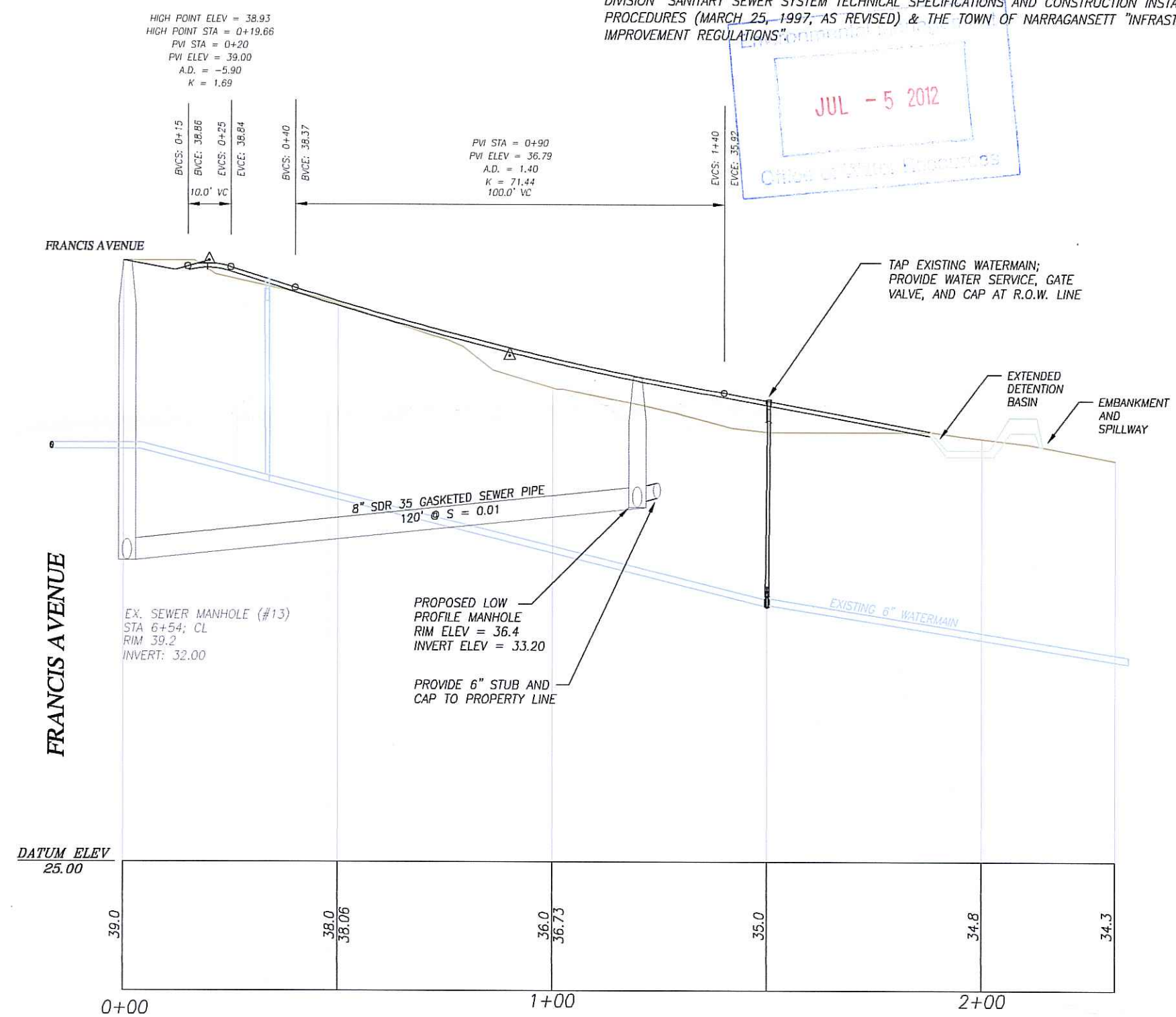
REV.	DATE	DESCRIPTION	DATE: 12/09/11
1	6/12	RIDEm Engineering Comments	SCALE: 1" = 30'



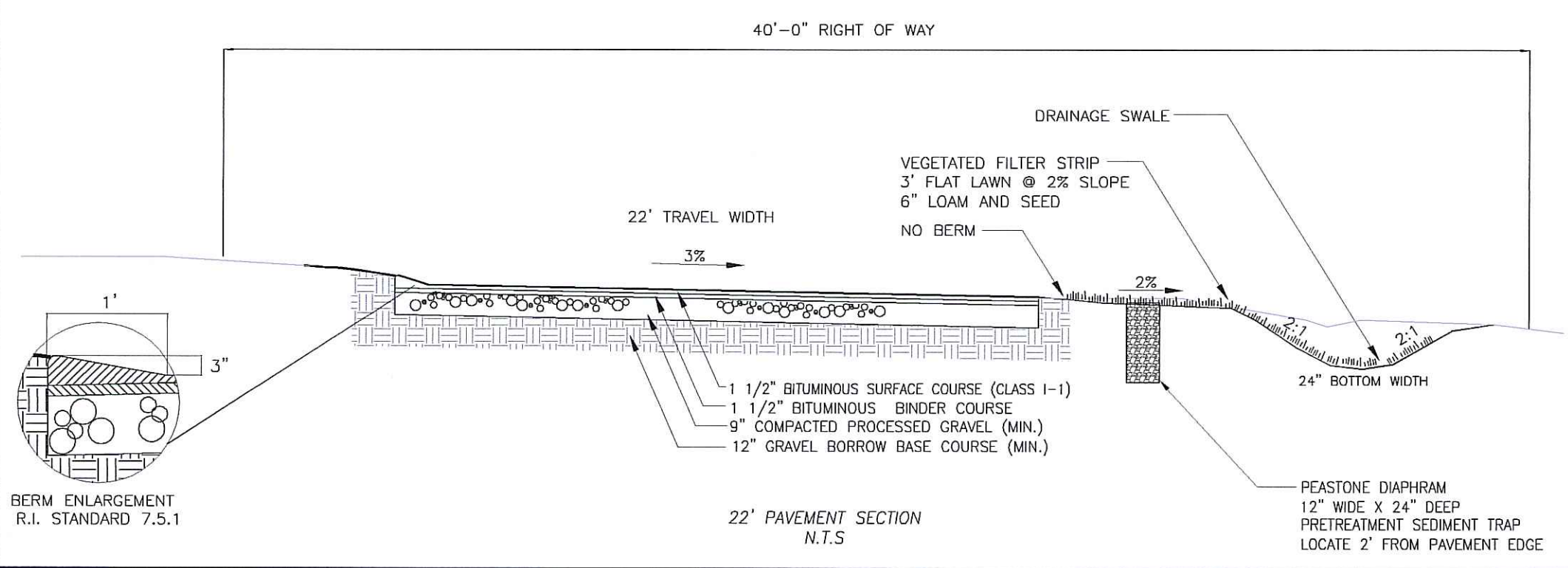
GENERAL NOTES: WORK WITHIN RIGHT-OF-WAY

1. ALL WORK PERFORMED IN THE TOWN R.O.W. SHALL CONFORM TO THE MOST RECENT REVISION OF THE TOWN OF NARRAGANSETT CODE OF ORDINANCES CHAPTER 17: "ROAD CONSTRUCTION" & CHAPTER 20 "UTILITIES".
2. MATCH EXISTING ROADWAY STRUCTURE IN KIND ACCORDING TO TOWN OF NARRAGANSETT REQUIREMENTS. ALL DISTURBED AREAS SHALL BE RE-ESTABLISHED TO PRE-CONSTRUCTION CONDITIONS.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS REQUIRED BY STATE AND LOCAL LAW. SUCH PERMITS INCLUDE A "RIGHT OF WAY CONSTRUCTION PERMIT" ISSUED THROUGH THE NARRAGANSETT PUBLIC WORKS DEPARTMENT & TOWN OF NARRAGANSETT APPLICATION FOR SEWER / WATER.
4. CONTRACTOR SHALL MAINTAIN THE APPLICABLE STATE & LOCAL LICENSES INCLUDING A "RIGHT OF WAY CONSTRUCTION LICENSE" ISSUED BY THE PUBLIC WORKS DEPARTMENT & THE APPLICABLE DRAINLAYERS LICENSE (ISSUED BY EITHER THE TOWN OF NARRAGANSETT ENGINEERING DIVISION OR A MASTER PLUMBER LICENSE ISSUED BY THE STATE OF RHODE ISLAND).
5. ALL WORK SHALL BE IN ACCORDANCE WITH THE CONDITIONS OF APPROVAL LISTED BY THE TOWN. CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE TOWN OF NARRAGANSETT 48 HOURS BUSINESS HOUR PRIOR TO COMMENCING WORK IN ANY PUBLIC R.O.W.
6. ALL ELEMENTS OF CONSTRUCTION WILL BE FIELD SUPERVISED BY THE OWNER, OR OWNER'S REPRESENTATIVE. A FINAL INSPECTION OF ALL SITE IMPROVEMENTS WILL BE MADE BY THE TOWN ENGINEER TO DETERMINE WHETHER THE WORK IS SATISFACTORY AND IN SUBSTANTIAL AGREEMENT WITH THE APPROVED FINAL CONSTRUCTION DRAWINGS AND SPECIFICATIONS. FOLLOWING THE FINAL INSPECTION CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING THE "DRAIN LAYER'S RETURN" BACK TO THE WASTEWATER/WATER DIVISION OFFICE WITH THE TOWN ENGINEER'S SIGNATURE.

7. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL SURVEY LAYOUT SURFACES FOR THE WORK AND SHALL SUBMIT "AS-BUILT" DRAWINGS OF THE WORK.
8. LOCATIONS AND DEPTHS OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS WITH "DIG SAFE." ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE CONTRACTOR'S RESPONSIBILITY. COSTS OF SUCH DAMAGE SHALL BE BORNE BY THE CONTRACTOR. NO EXCAVATION SHALL BE INITIATED UNTIL ALL INVOLVED UTILITY COMPANIES AND/OR TOWN DEPARTMENTS WHOSE FACILITIES MIGHT BE AFFECTED BY THE WORK TO BE PERFORMED ARE CONTACTED AT LEAST 72 HOURS IN ADVANCE BY THE CONTRACTOR. THE CONTRACTOR SHALL REQUEST THAT A REPRESENTATIVE FROM THE AFFECTED UTILITY BE PRESENT ON SITE WHEN WORK RELATING TO, ADJACENT TO, OR PROXIMATE TO SUCH UTILITY OR PROPERTY IS BEING PERFORMED.
9. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN THE DRY. THE CONTRACTOR SHALL PROVIDE, OPERATE AND MAINTAIN ANY EQUIPMENT NECESSARY TO CONTROL ALL SURFACE AND SUBSURFACE WATER ENCOUNTERED IN THE PERFORMANCE OF THE PROJECT.
10. THE CONTRACTOR SHALL PROVIDE BARRIERS TO PREVENT UNAUTHORIZED ENTRY TO CONSTRUCTION AREAS, AND TO PREVENT EXISTING FACILITIES AND ADJACENT PROPERTIES FROM DAMAGE FROM CONSTRUCTION OPERATIONS AND DEMOLITION.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MAINTENANCE PROTECTION OF PEDESTRIAN AND VEHICULAR TRAFFIC INCLUDING POLICE PROTECTION. ALL TEMPORARY CONSTRUCTION SIGNS, BARRICADES, AND LANE CLOSURES SHALL BE IN CONFORMANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.).
12. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION OPERATIONS INCLUDING ALL ACTIONS OR OMISSIONS OF ANY SUBCONTRACTORS, AGENTS, OR EMPLOYEES. THE CONTRACTOR MUST ENSURE THAT THE CONDITIONS OF ALL PERMITS, SPECIFICATIONS, AND FEDERAL, STATE, AND LOCAL REGULATIONS ARE STRICTLY ENFORCED. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL ASPECTS OF ON-SITE SAFETY INCLUDING WORK ZONE PROTECTION AND ANY DAMAGE TO EXISTING STRUCTURES.
13. ALL SEWER INSTALLATION, JOINTS, CONSTRUCTION, METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, THE TOWN OF NARRAGANSETT WASTEWATER DIVISION "SANITARY SEWER SYSTEM TECHNICAL SPECIFICATIONS, AND CONSTRUCTION INSTALLATION PROCEDURES (MARCH 25, 1997, AS REVISED) & THE TOWN OF NARRAGANSETT "INFRASTRUCTURE IMPROVEMENT REGULATIONS".



Permanent Buffer Markers per RIDEM Conditions 18+19.



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Jonathan D. Wencel

**ROADWAY EXTENSION & SITE DEVELOPMENT PLAN
GREENBRIAR ROAD
PLAT K / LOT 69B
NARRAGANSETT, RHODE ISLAND**

PREPARED BY:
JEFFREY J. CAMPOPIANO P.E.
16 WEST MAIN STREET
WICKFORD, RHODE ISLAND 02852
PHONE: (401) 295-3037 / FAX: (401) 295-1118

OWNER: APPLICANT:
GREGORY & MARY ANN MANNI
85 WEST VIEW AVENUE
CRANSTON, RHODE ISLAND 02920



ROADWAY EXTENSION PLAN

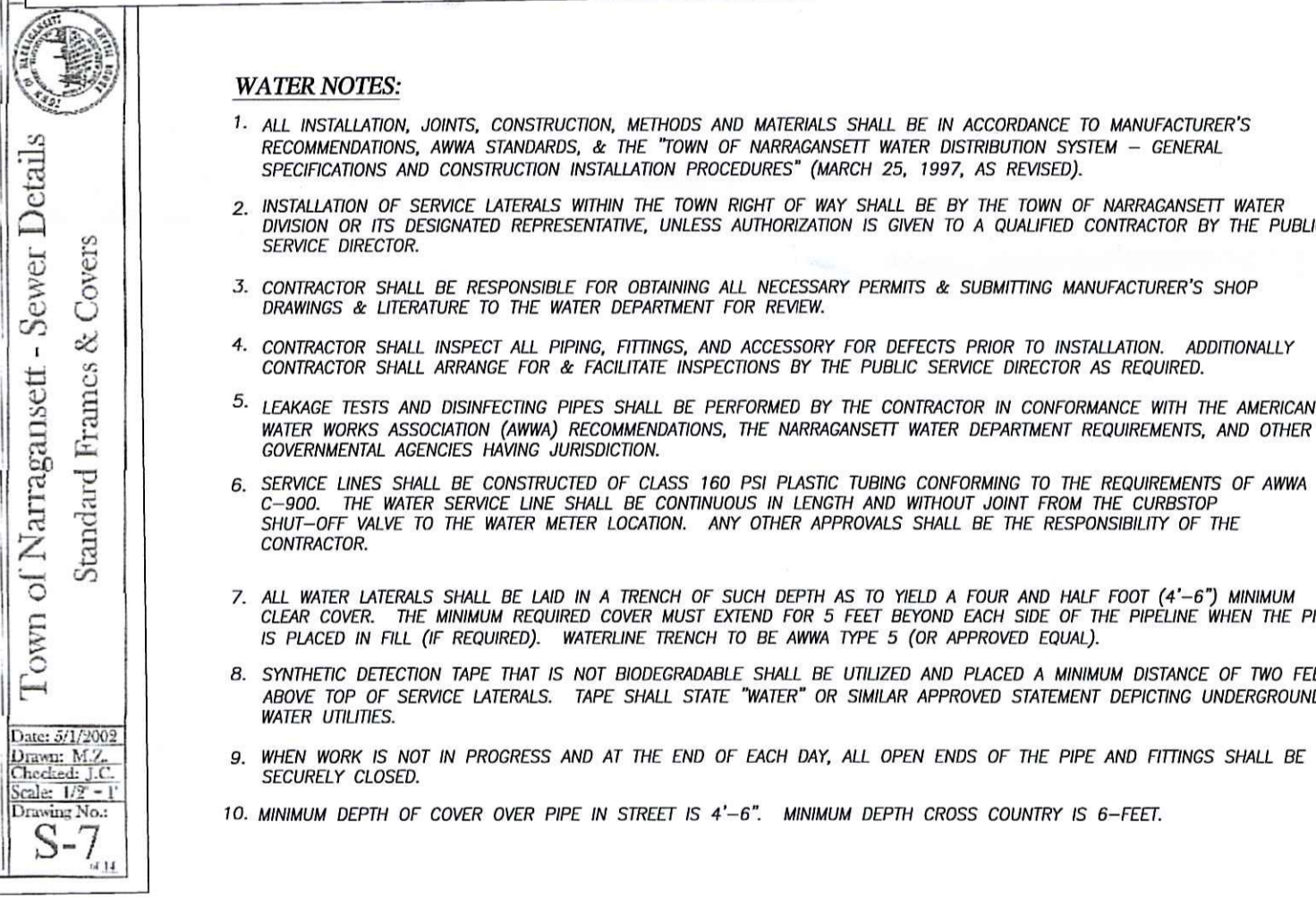
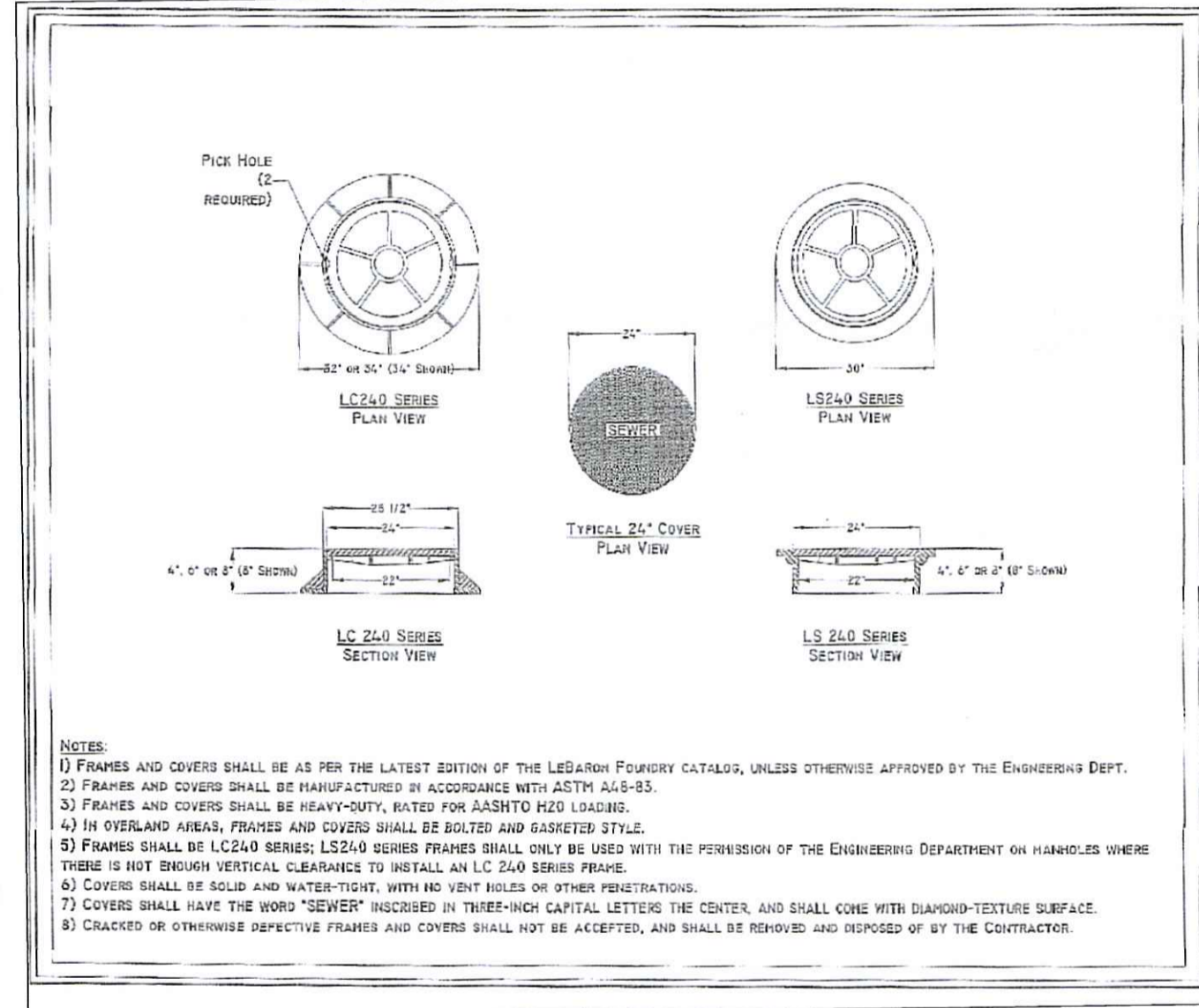
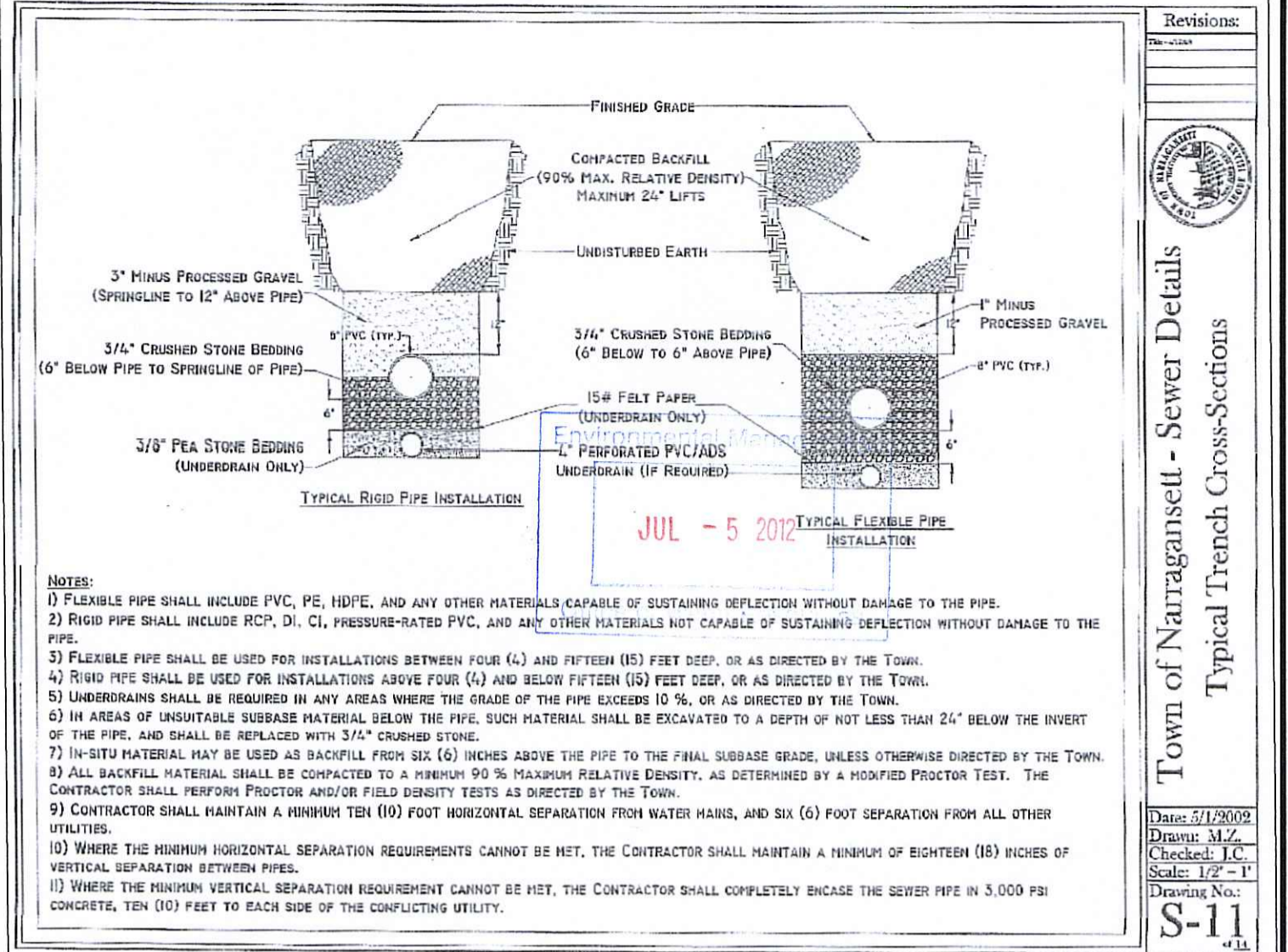
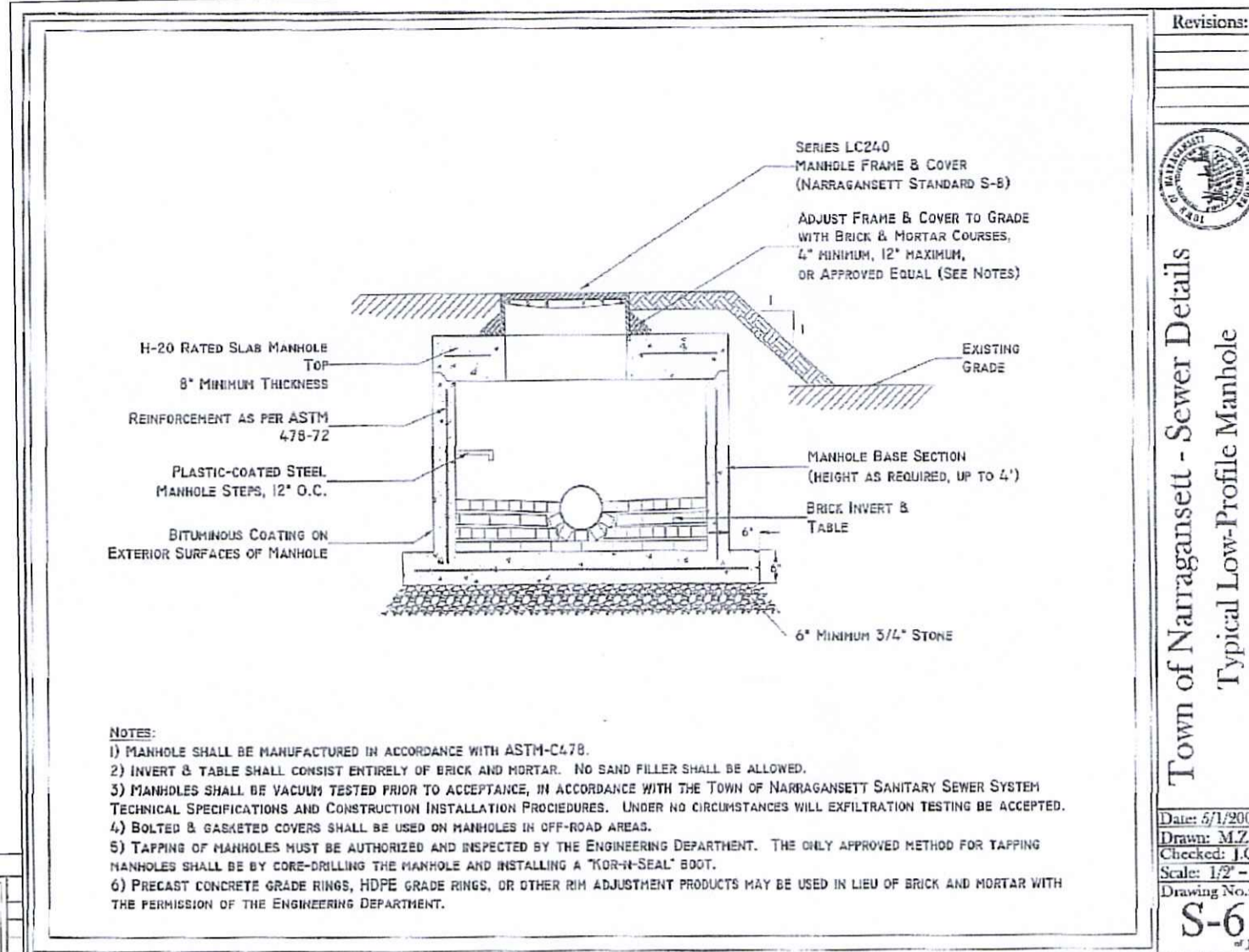
REV.	DATE	DESCRIPTION	DATE: 12/09/11

SCALE: 1" = 30'

2
SHEET 2 OF 5

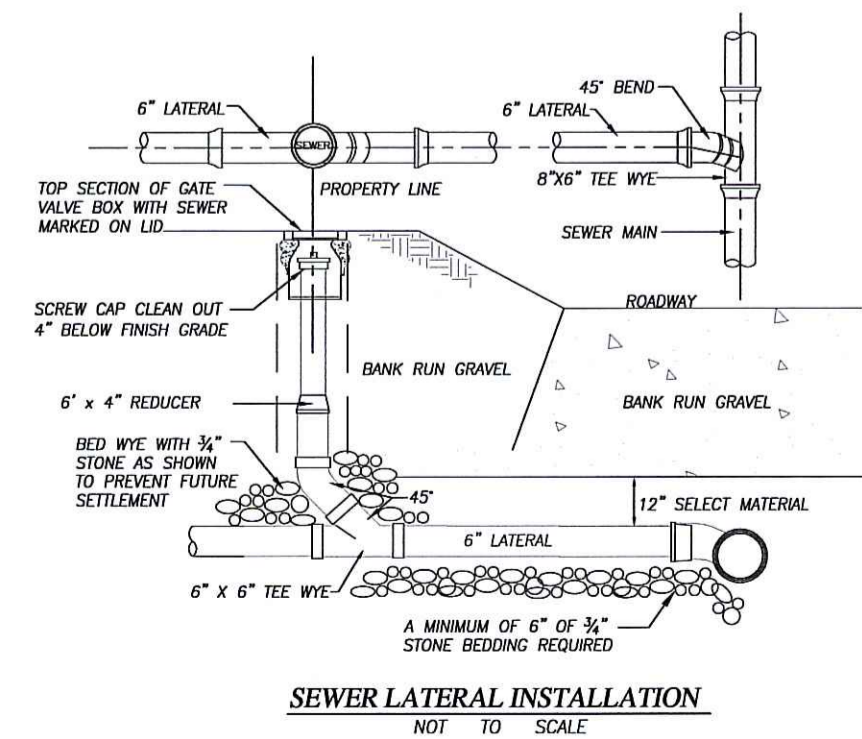
SEWER NOTES:

1. ALL INSTALLATION, JOINTS, CONSTRUCTION, METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, THE TOWN OF NARRAGANSETT WASTEWATER DIVISION "SANITARY SEWER SYSTEM TECHNICAL SPECIFICATIONS AND CONSTRUCTION INSTALLATION PROCEDURES" (MARCH 25, 1997, AS REVISED) & THE TOWN OF NARRAGANSETT "INFRASTRUCTURE IMPROVEMENT REGULATIONS".
2. INSTALLATION OF SERVICE LATERALS WITHIN THE TOWN RIGHT OF WAY SHALL BE COMPLETED BY A DRAINLAYER AUTHORIZED & LICENSED BY THE TOWN.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS & SUBMITTING MANUFACTURER'S SHOP DRAWINGS & LITERATURE TO THE SEWER DEPARTMENT FOR REVIEW.
4. CONTRACTOR SHALL INSPECT ALL PIPING, FITTINGS, AND ACCESSORY FOR DEFECTS PRIOR TO INSTALLATION. ADDITIONALLY CONTRACTOR SHALL ARRANGE FOR & FACILITATE INSPECTIONS BY THE NARRAGANSETT ENGINEERING DEPARTMENT AS REQUIRED.
5. PLASTIC PIPE AND FITTINGS SHALL BE EXTRA HEAVY SOLID POLYVINYL CHLORIDE (PVC) FROM VIRGIN TYPE I, GRADE I POLYVINYL CHLORIDE COMPOUNDS AS DEFINED AND DESCRIBED IN ASTM SPECIFICATIONS D-3034 SDR 35 FOR TYPE PSM POLY VINYL CHLORIDE (PVC) SEWER & PIPE FITTING.
6. PIPE SHALL BE LAID IN 10' LENGTHS; JOINTS SHALL BE DOUBLE-SOCKET TYPE SEALED WITH A RUBBER "O" RING GASKET APPROVED BY THE TOWN. THE JOINT WHEN ASSEMBLED MUST BE ABLE TO WITHSTAND A HYDRAULIC PRESSURE INTERNALLY OF AT LEAST 10 PSI.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND MAINTAINING TRENCH BOXES OR OTHER APPLICABLE MEANS OF TRENCH SUPPORT. THE TRENCH SUB-BASE SHALL BE THOROUGHLY DE-WATERED. CONTRACTOR SHALL OBSERVE ALL SAFETY REGULATIONS SET FORTH BY OSHA AND THE STATE LABOR DEPARTMENT.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING & SUPPORTING THE EXISTING PUBLIC UTILITIES BURIED ALONGUIN TRAIL. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF DISTURBED OR DAMAGED UTILITIES TO THE SATISFACTION OF THE TOWN ENGINEER.
9. SEWER PIPE SHALL BE LAID AT LEAST 10' HORIZONTAL FROM ANY EXISTING OR PROPOSED WATER LATERALS. THE DISTANCE SHALL BE MEASURED EDGE-TO-EDGE. IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10' SEPARATION, THE CROWN OF THE SEWER SHALL BE AT LEAST 18" BELOW THE INVERT OF THE WATERMAIN. THE TOWN ENGINEER RESERVES THE RIGHT TO REQUIRE ENCASEMENT OF THE WATER LINE IN SITUATIONS WHERE THE SEPARATION CAN NOT BE MET.
10. ALL SEWERAGE FACILITIES SHALL MEET TESTING AND CLEANING REQUIREMENTS AS OUTLINED IN SECTION 7 OF THE NARRAGANSETT SPECIFICATIONS PRIOR TO ACCEPTANCE. NO FLOW SHALL BE ACCEPTED UNTIL ALL THE ABOVE STEPS ARE COMPLETED AND APPROVAL HAS BEEN GRANTED BY THE TOWN ENGINEER.



WATER NOTES:

1. ALL INSTALLATION, JOINTS, CONSTRUCTION, METHODS AND MATERIALS SHALL BE IN ACCORDANCE TO MANUFACTURER'S RECOMMENDATIONS, AWWA STANDARDS, & THE "TOWN OF NARRAGANSETT WATER DISTRIBUTION SYSTEM - GENERAL SPECIFICATIONS AND CONSTRUCTION INSTALLATION PROCEDURES" (MARCH 25, 1997, AS REVISED).
2. INSTALLATION OF SERVICE LATERALS WITHIN THE TOWN RIGHT OF WAY SHALL BE BY THE TOWN OF NARRAGANSETT WATER DIVISION OR ITS DESIGNATED REPRESENTATIVE, UNLESS AUTHORIZATION IS GIVEN TO A QUALIFIED CONTRACTOR BY THE PUBLIC SERVICE DIRECTOR.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS & SUBMITTING MANUFACTURER'S SHOP DRAWINGS & LITERATURE TO THE WATER DEPARTMENT FOR REVIEW.
4. CONTRACTOR SHALL INSPECT ALL PIPING, FITTINGS, AND ACCESSORY FOR DEFECTS PRIOR TO INSTALLATION. ADDITIONALLY CONTRACTOR SHALL ARRANGE FOR & FACILITATE INSPECTIONS BY THE PUBLIC SERVICE DIRECTOR AS REQUIRED.
5. LEAKAGE TESTS AND DISINFECTING PIPES SHALL BE PERFORMED BY THE CONTRACTOR IN CONFORMANCE WITH THE AMERICAN WATER WORKS ASSOCIATION (AWWA) RECOMMENDATIONS, THE NARRAGANSETT WATER DEPARTMENT REQUIREMENTS, AND OTHER GOVERNMENTAL AGENCIES HAVING JURISDICTION.
6. SERVICE LINES SHALL BE CONSTRUCTED OF CLASS 160 PSI PLASTIC TUBING CONFORMING TO THE REQUIREMENTS OF AWWA C-900. THE WATER SERVICE LINE SHALL BE CONTINUOUS IN LENGTH AND WITHOUT JOINT FROM THE CURBSTOP SHUT-OFF VALVE TO THE WATER METER LOCATION. ANY OTHER APPROVALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
7. ALL WATER LATERALS SHALL BE LAID IN A TRENCH OF SUCH DEPTH AS TO YIELD A FOUR AND HALF FOOT (4'-6") MINIMUM CLEAR COVER. THE MINIMUM REQUIRED COVER MUST EXTEND FOR 5 FEET BEYOND EACH SIDE OF THE PIPELINE WHEN THE PIPE IS PLACED IN FILL (IF REQUIRED). WATERLINE TRENCH TO BE AWWA TYPE 5 (OR APPROVED EQUAL).
8. SYNTHETIC DETECTION TAPE THAT IS NOT BIODEGRADABLE SHALL BE UTILIZED AND PLACED A MINIMUM DISTANCE OF TWO FEET ABOVE TOP OF SERVICE LATERALS. TAPE SHALL STATE "WATER" OR SIMILAR APPROVED STATEMENT DEPICTING UNDERGROUND WATER UTILITIES.
9. WHEN WORK IS NOT IN PROGRESS AND AT THE END OF EACH DAY, ALL OPEN ENDS OF THE PIPE AND FITTINGS SHALL BE SECURELY CLOSED.
10. MINIMUM DEPTH OF COVER OVER PIPE IN STREET IS 4'-6". MINIMUM DEPTH CROSS COUNTRY IS 6'-FEET.



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Emmanuel D. Wencel

ROADWAY EXTENSION & SITE DEVELOPMENT PLAN
GREENBRIAR ROAD
PLAT K / LOT 69B
NARRAGANSETT, RHODE ISLAND

PREPARED BY: **JEFFREY J. CAMPOPIANO P.E.**
16 WEST MAIN STREET
WICKFORD, RHODE ISLAND 02852

APPLICANT: **WILLIAM DOLAN**
54 AUTUMN LANE
SOUTH KINGSTOWN, RHODE ISLAND 02892
OWNER: **GREGORY & MARY ANN MANNI**
85 WEST VIEW AVENUE
CRANSTON, RHODE ISLAND 02920

SEWER & WATER DETAILS

REV.	DATE	DESCRIPTION	DATE: 12/09/11
1	6/20/2012	SEWAGE PUMP NOT REQUIRED	SCALE: 1" = 30'

3
SHEET 3 OF 5

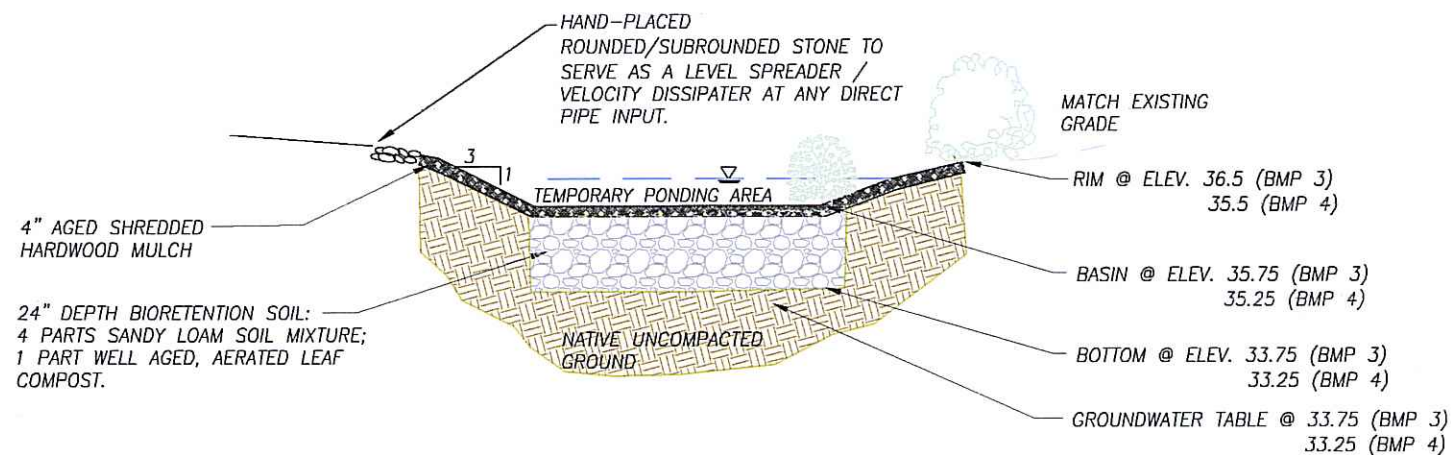
BIO-RETENTION FILTER CONSTRUCTION NOTES:

- THE BIORETENTION AREA SHALL BE CONSTRUCTED FOLLOWING THE COMPLETION AND STABILIZATION OF OTHER SITE WORK. COMPACTION OF THE AREA PRIOR TO AND DURING CONSTRUCTION MUST BE AVOIDED. EXCAVATION SHALL BE COMPLETED USING LIGHT EQUIPMENT WITH WIDE TRACKS. IF THE AREA DOES BECOMES COMPACTED, SOIL MUST BE TILLED TO A MINIMUM DEPTH OF 30".
- UNDERDRAINS NOT REQUIRED.
- FOLLOW SOIL SPECIFICATIONS TO PROVIDE A BIORETENTION SOIL MIXTURE WITH ADEQUATE NUTRIENTS. PLANTING MEDIA SHALL BE PLACED IN 12" LIFTS.

PLANTING MEDIA - THE MATERIAL TO BE FURNISHED SHALL BE A UNIFORM MIX FREE OF SUBSOIL, REFUSE, STUMPS, ROOTS, ROCKS, BRUSH, WEEDS OR OTHER MATERIAL WHICH WOULD PREVENT THE FORMATION OF A SUITABLE SEED BED. THE MEDIA SHALL CONSIST OF THE 4 PARTS PLANTING SOIL & 1 PART WELL AGED, AERATED, LEAF COMPOST.

TYPICAL BIO-MIX (MINIMUM 23% ORGANIC CONTENT):
 SAND: 65 - 75%
 SOIL FINES: 8 - 12% (NO MORE THAN 2% CLAY)
 ORGANIC MATTER: 23 - 25%

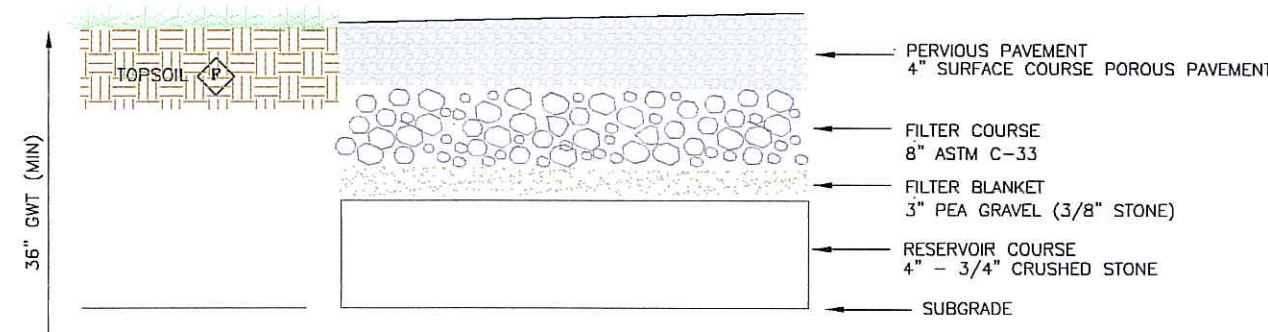
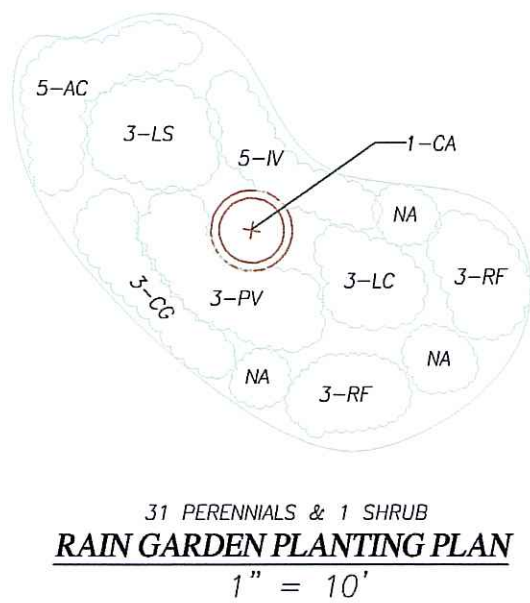
MULCH: MULCH ONLY AROUND THE INDIVIDUAL PLANTS USING WELL AGED SHREDDED HARDWOOD. BARK MULCH AND WOOD CHIPS ARE NOT TO BE USED AS THEY FLOAT TO THE SURFACE.
- PLANTS SHOULD BE PLANTED IN A PIT 6" LARGER THAN DIAMETER OF PLANTING BALL WITH BALL 1/8" OF INCH ABOVE THE FINAL GRADE SURFACE. PLANT ONLY NONINVASIVE SPECIES. FOLLOW THE RECOMMENDED PERENNIAL PLANT LIST, UTILIZING LOW-MAINTENANCE, WATER AND DROUGHT TOLERANT SPECIES.
- MAINTENANCE: REPLACE DEAD PLANTS, DEAD-HEAD AND PRUNE AS REQUIRED. MULCH ANNUALLY; FERTILIZER SHALL NOT BE UTILIZED, AMEND SOIL YEARLY WITH A COMPOST MIX.



BIO-RETENTION FILTER CROSS SECTION
NOT TO SCALE

SAMPLE PLANT LIST

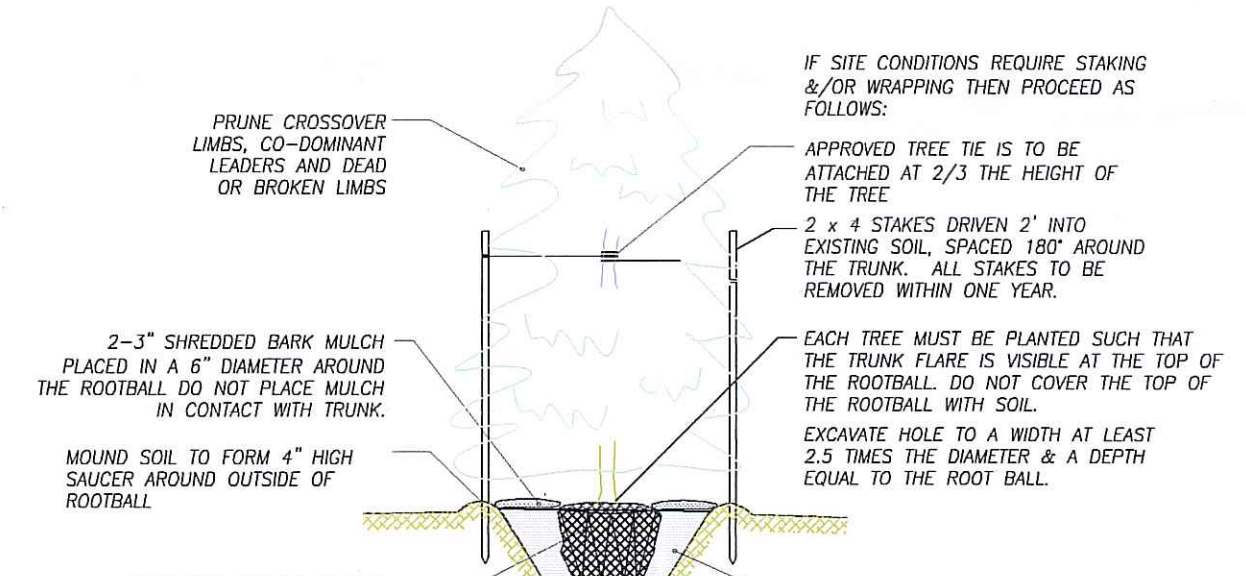
Abbreviation	Qty	Botanical Name	Common Name	Height	Spread	Spacing	Install Size
CA	1	CORNUS SERICEA "ARCTIC FIRE"	RED OSIER DOGWOOD	3-4'	3-4'	4-5'	2-3 GALLON
LC	3	LOBELIA CARDINALIS	CARDINAL FLOWER	24-30"	12-24"	22" O.C.	1 GALLON
LS	3	LOBELIA SIPHILITICA	BLUE LOBELIA	24-30"	12-24"	22" O.C.	1 GALLON
RF	6	RUDBECKIA FULGIDA	BLACK EYED SUSANS	24-36"	18"-24"	24" O.C.	1 GALLON
AC	5	AQUILEGIA CANADENSIS	COLUMBINE	24-30"	12-18"	18" O.C.	1 GALLON
IV	5	IRIS VERSICOLOR	BLUE FLAG IRIS	23-36"	12"-15"	15-18" O.C.	1 GALLON
PV	3	PANICUM VIRGATUM	SWITCH GRASS	40-50"	28-36"	3' O.C.	1 GALLON
CG	3	COREOPSIS GRANDIFLORA "FULL MOON"	FULL MOON COREOPSIS	12-20" 3-4'	12-18"	22 O.C.	1 GALLON
NA	3	ASTER NOVAE ANGLIAE	NEW ENGLAND ASTER	18" PRUNED	18-24"	24 O.C.	1 GALLON



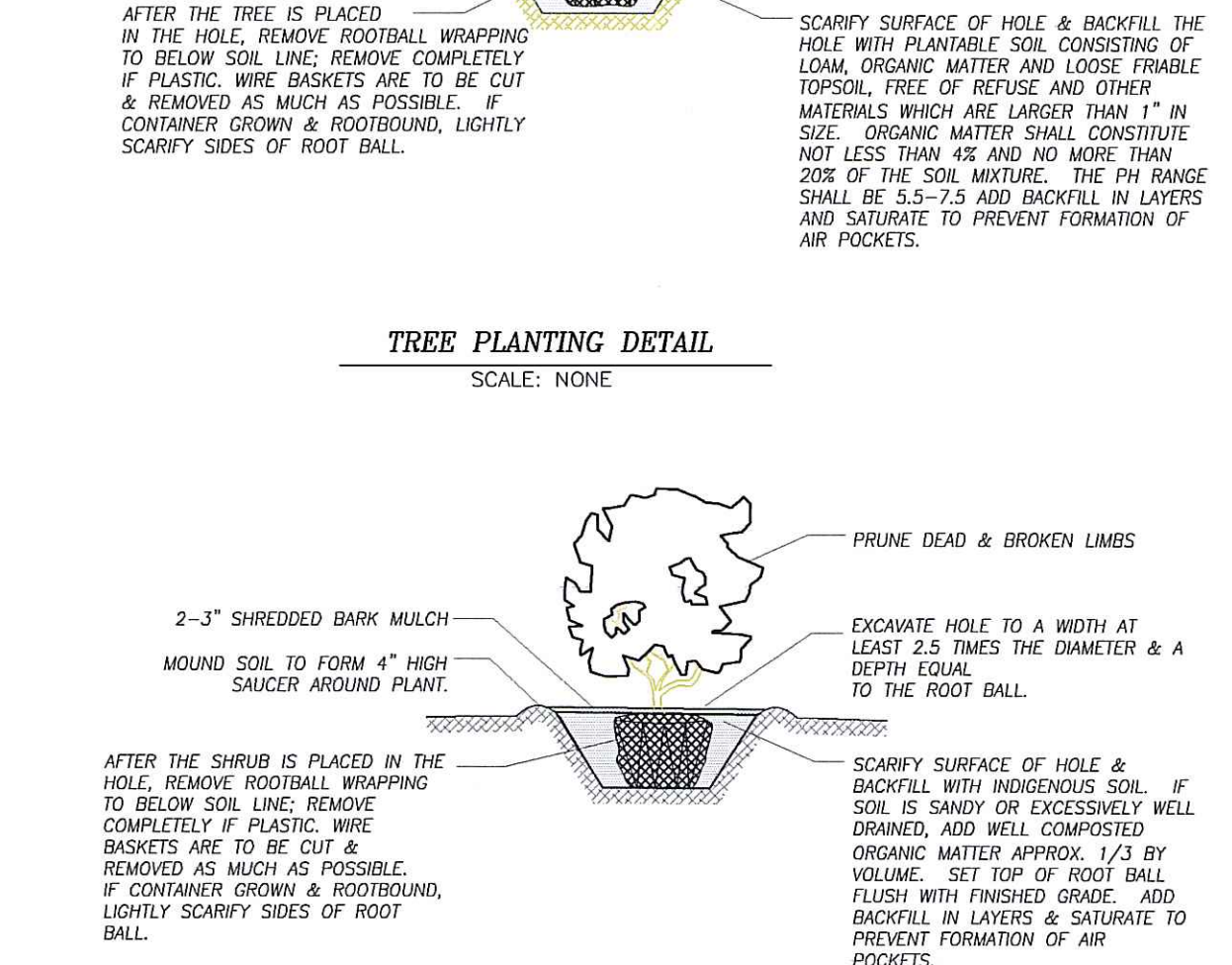
PERVIOUS PAVEMENT DRIVEWAY DETAIL
NOT TO SCALE

PERVIOUS DRIVEWAY CONSTRUCTION NOTES:

- GENERAL:** ADJACENT AREAS SHALL BE COMPLETED & STABILIZED PRIOR TO CONSTRUCTION OF THE DRIVEWAY. AVOID COMPACTION OF THE DRIVEWAY AREA.
- EXCAVATION:** EXCAVATE TO THE DEPTH OF THE PROPOSED SUB-BASE. IF "A" HORIZON SOILS ARE ENCOUNTERED BENEATH THIS DEPTH CONTINUE TO EXCAVATE UNTIL A SUITABLE BASE MATERIAL IS ENCOUNTERED.
- MATERIALS:** CRUSHED STONE SHALL HAVE 90% FRACTURED FACES, LA ABRASION < 40 PER ASTM C131. MINIMUM CBR OF 80% PER ASTM D 1883. DO NOT USE ROUNDED RIVER GRAVEL FOR VEHICULAR APPLICATIONS. ALL STONE MATERIALS SHALL BE WASHED WITH LESS THAN 1% PASSING THE NO. 200 SIEVE. BASE, SUBBASE AND FILLER MATERIALS SHALL BE FREE OF FINES, ORGANIC MATTER AND OTHER FOREIGN SUBSTANCES, & SHALL CONFORM TO ASTM D 448 GRADATION AS SHOWN BELOW.
- SUB-BASE:** ASTM NO. 2
- BASE:** OPEN GRADED GRAVEL (ASTM NO. 57)
- | SIEVE SIZE | % PASSING |
|------------|-----------|
| 3" | 100% |
| 2.5" | 90%-100% |
| 2" | 35%-70% |
| 1.5" | 0%-15% |
| 3/4" | 0%-5% |
- BACKFILL:** BACKFILL MATERIAL SHALL BE COMPOSED OF HARD, DURABLE STONE AND COARSE TO FINE SAND, LUMP FREE OF PEAT, VEGETABLE OR ORGANIC MATTER, CLAY LUMPS & OTHER DEBRIS. THE GRANULAR FILL SHALL BE READILY COMPATIBLE AND SHALL NOT CONTAIN ANY STONES THAT ARE IN EXCESS OF 6".
- PERVIOUS COURSE:** ASTM C-33
- | SIEVE SIZE | % PASSING |
|------------|-----------|
| 1/2" | 100% |
| 3/8" | 100% |
| No. 4 | 70%-100% |
| No. 8 | 0%-5% |
| No. 200 | 0%-5% |
- FILL SHALL MEET THE FOLLOWING:**
- | SIEVE SIZE | % PASSING |
|------------|-----------|
| 6" | 100% |
| #4 | 30-100% |
| #200 | 0-8% |
- LOAM:** THE CONTRACTOR SHALL PROVIDE A MINIMUM OF FOUR (4") INCHES OF LOAM ON AREAS UP TO 10% IN GRADE. ALL OTHER AREAS OVER 10% GRADE SHALL RECEIVE A MINIMUM OF SIX (6") INCHES. THE MATERIAL TO BE FURNISHED SHALL CONSIST OF LOOSE, FRIABLE, SANDY LOAM OR LOAM TOPSOIL, FREE OF SUBSOIL, REFUSE, STUMPS, ROOTS, ROCKS, BRUSH, WEEDS OR OTHER MATERIAL WHICH WOULD PREVENT THE FORMATION OF A SUITABLE SEED BED.
- SEED -** THE ACCEPTABLE PLANTING SEASON SHALL BE BETWEEN APRIL 1ST AND OCTOBER 15TH. IF THE DISTURBANCE DOES NOT FALL WITHIN THIS PERIOD THE CONTRACTOR SHALL PROVIDE TEMPORARY MULCHING UNTIL THE AREA CAN BE SEEDED.
- PREPARATION:**
- KEEP AREA WHERE PAVEMENT IS TO BE CONSTRUCTED FREE FROM SEDIMENTS DURING ENTIRE JOB. PREVENT OVER COMPACTION OF DRIVEWAY AREA.
 - PROVIDE BERM AT DRIVEWAY/STREET LINE TO PREVENT OFF-SITE & STREET RUNOFF FROM ENTERING DRIVEWAY. BACKFILL REQUIRED TO MEET GRADES SHALL MEET THE REQUIREMENTS ABOVE AND BE COMPACTED TO A DENSITY OF 90% USING A VIBRATORY COMPACTOR.
 - VERIFY GRADES AND SLOPES. DRIVEWAY SHALL PITCH AWAY FROM OWTS AND DWELLING AT A MINIMUM OF 1-2% TOWARDS BIORETENTION AREA.
 - INSTALL SUB-BASE: MOISTEN, SPREAD AND COMPACT THE NO. 2 SUBBASE IN 4 TO 6" LIFTS. COMPACT SUB-GRADE TO A MINIMUM OF 90% AND A MAXIMUM OF 95%. COMPACT SHALL BE IN ACCORDANCE WITH ASTM 01557. OVER-COMPACTION SHALL BE AVOIDED.
 - INSTALL OPEN GRADED BASE: INSTALL 4" THICK BASE & LIGHTLY COMPACT. THE BASE MATERIAL SHOULD SHOW NO SIGNS OF MOVEMENT WHEN COMPACTION IS COMPLETE.
- PAVER INSTALLATION:**
- PAVING STONES SHALL BE PERMEABLE OR OPEN CELL DESIGN MEETING THE REQUIREMENTS OF ASTM C 936-08 ("STANDARD SPECIFICATIONS FOR INTERLOCKING CONCRETE PAVING UNITS") & C140 (STANDARD TEST METHODS OF SAMPLING AND TESTING CONCRETE MASONRY UNITS).
 - SPREAD BEDDING SAND (MEETING ASTM NO. 8 GRADATION) IN A 1" THICK LAYER.
 - ENSURE PAVERS ARE FREE FROM FOREIGN MATERIALS, LAY PAVERS IN PATTERNS SPECIFIED WITH JOINT OPENINGS AS SPECIFIED BY MANUFACTURER (TYP. 1/8"). FILL GAPS AND CUT EDGE UNITS.
 - COMPACT AND SEAT PAVERS IN SAND USING LOW AMPLITUDE, 75-90 HZ COMPACTOR CAPABLE OF 5,000 LBS. DO NOT COMPACT WITHIN 3' OF THE UNRESTRAINED EDGES OF PAVING UNITS.
- MAINTENANCE:** KEEP ADJACENT AREAS WELL MAINTAINED AND STABILIZED. REMOVE LEAVES/DEBRIS REGULARLY. RAKE & HOSE DOWN DRIVEWAY SEASONALLY TO PREVENT THE SURFACE FROM CLOGGING.



TREE PLANTING DETAIL
SCALE: NONE



SHRUB PLANTING DETAIL
SCALE: NONE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED **AUG 24 2012** FILE # **12-0004**
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

ROADWAY EXTENSION & SITE DEVELOPMENT PLAN
GREENBRIAR ROAD
PLAT K / LOT 69B
NARRAGANSETT, RHODE ISLAND

PREPARED BY: **JEFFREY J. CAMPOPIANO P.E.**
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SITE DETAILS

REV.	DATE	DESCRIPTION	DATE: 12/09/11
			N.T.S.

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SHEET 5 OF 5