

TEST PIT NOTE:

THE CONTRACTOR MUST PERFORM TEST PITS IN ADVANCE OF PIPELINE CONSTRUCTION IN ORDER TO CONFIRM DEPTH AND LOCATION OF EXISTING UTILITIES. THE CONTRACTOR'S BID PRICE SHALL INCLUDE ALL COSTS ASSOCIATED WITH SIX (6) TEST PITS AND A UNIT FOR COST FOR ADDITIONAL TEST PITS.

SEQUENCE OF CONSTRUCTION

THE FOLLOWING IS A CONCEPTUAL SEQUENCE OF CONSTRUCTION ACTIVITIES AND IS INTENDED TO PROVIDE A GUIDE FOR THE CONTRACTOR.

1. INSTALL PERIMETER EROSION CONTROLS.
2. INSTALL NEW CULVERTS AND ROUGH GRADING. RIVER FLOW SHALL BE DIVERTED USING A TEMPORARY SAND BAG DAMS (OR APPROVED EQUAL) AND ANY EXCESS FLOW SHALL BE PUMPED AROUND THE WORK AREA OR DIVERTED INTO OTHER CULVERTS USING TEMPORARY DAMS AS SHOWN ON DRAWING C6.0. ALL CULVERT, SWALE AND CHANNEL WORK SHALL BE PERFORMED DURING THE LOW FLOW SEASON, JULY 1ST TO OCTOBER 31ST.
3. FINAL GRADING AND INSTALLATION OF NEW PAVEMENT, GUARDRAIL, NEW PAVEMENT MARKINGS, AND LANDSCAPING.
4. REMOVE & DISPOSE PERIMETER EROSION CONTROLS UPON SITE STABILIZATION.

CONSTRUCTION NOTES:

1. ALL CULVERT, SWALE AND CHANNEL WORK SHALL BE PERFORMED DURING THE LOW FLOW SEASON, JULY 1ST TO OCTOBER 31ST.
2. IN THE EVENT OF A POTENTIAL SIGNIFICANT STORM EVENT, SUCH AS A HURRICANE, THE CONTRACTOR MUST BE DIRECTED TO STOP WORK, TEMPORARILY STABILIZE THE SITE AND REMOVE THE PERIMETER EROSION CONTROLS PRIOR TO THE STORM. IMMEDIATELY AFTER THE STORM, THE CONTRACTOR SHALL RESET ALL PERIMETER EROSION CONTROLS.
3. DURING CONSTRUCTION, BLACK HUT ROAD AND PINCREST LANE CAN BE TEMPORARILY CLOSED UPON RECEIVING APPROVAL FROM THE BURRILLVILLE POLICE DEPARTMENT, FIRE DEPARTMENT, SCHOOL DEPARTMENT, AND PUBLIC WORKS DEPARTMENT.
4. THE CONTRACTOR IS REQUIRED TO PROTECT HIS/HER WORK FROM DAMAGE DURING ALL STORM EVENTS. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF REPAIRING ALL STORM DAMAGE, AT NO ADDITIONAL COST TO THE OWNER.
5. STORMWATER FLOW MUST BE MAINTAINED AT ALL TIMES BY THE CONTRACTOR THROUGH THE SYSTEM OF CULVERTS BY TEMPORARY PUMPING OR BY WATER DIVERSION USING TEMPORARY DAMS (OR APPROVED EQUAL). ALL COSTS FOR PERFORMING THIS WORK SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE.
6. ACCESS TO HOUSES #780 AND #782 MUST BE MAINTAINED AT ALL TIMES. VEHICULAR ACCESS TO THEIR DRIVEWAYS MUST BE RESTORED BEFORE THE END OF EACH WORKDAY.
7. THE CONTRACTOR IS REQUIRED TO MAINTAIN DETAILED AS-BUILT INFORMATION FOR ALL DRAINAGE AND UTILITY INSTALLATIONS. AS-BUILT INFORMATION MUST INCLUDE MATERIAL LIST, PIPE DEPTH AND SWING TIE LOCATIONS (2 MINIMUM) FROM NEW PIPE TO BUILDING CORNERS. ALL PIPE BEND/ELBOW/WYE LOCATIONS SHALL BE DIMENSIONED. FINAL PAYMENT WILL NOT BE MADE UNTIL SUITABLE AS-BUILT DATA IS PROVIDED.
8. THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER AT LEAST 48 HOURS PRIOR TO INSTALLATION OF ANY NEW DRAINAGE WORK. THE COORDINATION IS NECESSARY FOR THE ENGINEER TO SCHEDULE SITE INSPECTIONS. INSTALLATIONS PERFORMED WITHOUT INSPECTIONS BY THE ENGINEER MAY WARRANT COMPLETE REMOVAL AND REINSTALLATION AT THE CONTRACTOR'S SOLE EXPENSE.
9. THE CONTRACTOR SHALL NOTIFY ALL RESIDENTS OF BLACK HUT ROAD AFFECTED BY THE CONSTRUCTION WORK IN WRITING PRIOR TO THE START OF CONSTRUCTION. THE LETTER SHALL STATE THE STARTING DATE OF WORK AND A CONTACT TELEPHONE NUMBER WITH QUESTIONS OR CONCERNS.

DRAINAGE NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR THE MANAGEMENT OF STORMWATER FLOWS ON AND THROUGH THE SITE DURING CONSTRUCTION.
2. CONTRACTOR IS RESPONSIBLE TO PROVIDE SHOP DRAWINGS AND SPECIFICATIONS FOR ALL DRAINAGE RELATED ITEMS FOR REVIEW AND APPROVAL BY THE ENGINEER, PRIOR TO ORDERING.
3. CONTRACTOR TO VERIFY THAT ALL STRUCTURES ARE COMPATIBLE WITH FRAME AND GRATE OR COVER.
4. ALL STRUCTURES SHALL BE DESIGNED FOR H-20 LOADING.
5. ALL DRAINAGE PIPE SHALL BE DUCTILE IRON PIPE CLASS 52, ADS N-12 (OR APPROVED EQUAL) AS NOTED ON THE PLANS.
6. ALL JOINTS TO BE WATERTIGHT.
7. CONTRACTOR IS RESPONSIBLE TO PROVIDE SHOP DRAWINGS AND SPECIFICATIONS FOR ALL DRAINAGE RELATED ITEMS FOR REVIEW AND APPROVAL BY THE ENGINEER, PRIOR TO ORDERING.
8. PROJECT WIDE, CONTRACTOR IS RESPONSIBLE FOR FINE GRADING AND INSTALLING NEW PAVEMENT SURFACE ELEVATIONS IN A MANNER WHICH ALLOWS FOR SURFACE RUNOFF TO DRAIN FREELY AND PREVENTS PONDING OR PUDDLING ON THE NEW PAVEMENT SURFACES.
9. CATCH BASINS, MANHOLES AND DRAIN LINES WITHIN THE WORK LIMITS ARE TO BE CLEANED AND FLUSHED. THE ENGINEER AND OWNER SHALL BE NOTIFIED THREE (3) DAYS PRIOR TO WORK. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION OF THE WORK TO THE OWNER PRIOR TO ACCEPTANCE.
10. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE EXISTING FLOW FOR THE DURATION OF THE CONSTRUCTION OPERATIONS, INCLUDING PUMPS, DIKES, BY-PASS HOSES AND ANY OTHER INCIDENTAL EQUIPMENT NECESSARY. ALL COSTS FOR PERFORMING THIS WORK THROUGHOUT THE PROJECT SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE.
11. CONTRACTOR IS RESPONSIBLE FOR ALL DEWATERING AND FLOW DIVERSION OPERATIONS DURING CONSTRUCTION. ALL COSTS FOR DEWATERING AND FLOW DIVERSION OPERATIONS THROUGHOUT THE PROJECT SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE.
12. CONTRACTOR SHALL CLEAN AND SWEEP THE ENTIRE BITUMINOUS PROJECT LIMITS AT THE END OF THE PROJECT. CLEAN AND SWEEPING SHALL BE DONE BEFORE CLEAN AND FLUSHING PIPES IN ORDER TO PREVENT SEDIMENT FROM ENTERING THE CATCH BASINS OR PIPES.
13. ALL FRAME AND GRATES THAT ARE ADJUSTED TO GRADE WILL HAVE BITUMINOUS PAVEMENT INSTALLED AFTER FINAL ADJUSTMENT. THE FINISHED GRADE OF THE BITUMINOUS PAVEMENT SHALL DIRECT ALL SURFACE RUNOFF INTO THE CATCH BASINS AND PAVED WATERWAYS.

NOTES:

1. CONTRACTOR SHALL INSTALL TEMPORARY MEASURES SUCH AS; FIBER MATTING, CRUSHED STONE, HAY OR STRAW IN AREAS WHERE SLOPES OR STABILIZATION HAS FAILED.
2. CONTRACTOR SHALL INSTALL SILT SACK INLET PROTECTION OR APPROVED EQUAL UNDER THE EXISTING CATCH BASIN GRATE ON THE SITE IN ADJACENT STREETS DOWN GRADIENT OF THE SITE. REMOVE AFTER CONSTRUCTION.
3. FILTER SOXX (SILT SOCK) SHALL BE INSTALLED AROUND THE PERIMETER OF THE AREA TO BE DISTURBED BY CONSTRUCTION AS NOTED ON THE PLANS. ADDITIONAL APPLICATIONS OF THESE CONTROLS MEASURES MAY BE REQUIRED DURING THE CONSTRUCTION PROCESS. THE CONTRACTOR SHALL INSPECT THE SITE AT A MINIMUM OF ONCE PER WEEK OR WITHIN 24 HOURS AFTER A STORM EVENT.
4. IF EROSION OR EROSION TENDENCIES ARE APPARENT ON THE SITE, THE CONTRACTOR IS RESPONSIBLE TO INSTALL ADDITIONAL CONSTRUCTION BMP'S SUCH AS SAND BAGS AS DIRECTED BY THE OWNER, LOCAL MUNICIPALITY, STATE AGENCIES OR ENGINEER DURING CONSTRUCTION.
5. IF SEDIMENT OR DEBRIS IS TRACKED ONTO EXISTING ROADWAYS ADJACENT TO THE CONSTRUCTION AREA, THE CONTRACTOR IS REQUIRED TO SWEEP THE PAVEMENT ON A DAILY BASIS. THE AREA SHALL BE INSPECTED DAILY.
6. THE CONTRACTOR IS RESPONSIBLE TO KEEP THE SITE CLEAN OF TRASH. RECOMMENDED DAILY PATROL OF THE CONSTRUCTION SHOULD BE CONDUCTED TO PICK-UP TRASH. THE OPERATOR SHALL ROUTINE THE CONTRACTOR TO HAVE PORTABLE SANITARY FACILITIES ON SITE. ROUTINE CLEANING AND WASTE DISPOSAL OF THESE PORTABLE SANITARY FACILITIES IS REQUIRED.
7. NO CONCRETE WASHOUT IS ALLOWED FOR THIS PROJECT.
8. ALL TRASH AND WASTE SHALL BE REMOVED FROM THE SITE AT THE END OF EACH WORK DAY.

DUST CONTROL NOTES:

ON AN AS-NEEDED BASIS OR AS DIRECTED BY THE ENGINEER OR OWNER, THE CONTRACTOR SHALL UTILIZE ONE OF THE FOLLOWING METHODS (AS RECOMMENDED BY THE "R.I. SOIL EROSION AND SEDIMENT CONTROL HANDBOOK") TO CONTROL DUST:

- A. THE EXPOSED SOIL SURFACE SHOULD BE MOISTENED PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST.

THE METHODS SHOULD BE REPEATED AS NEEDED, AND SPECIAL ATTENTION MUST BE GIVEN TO THE ACCESS DRIVES.

INSPECTION/MAINTENANCE NOTES:

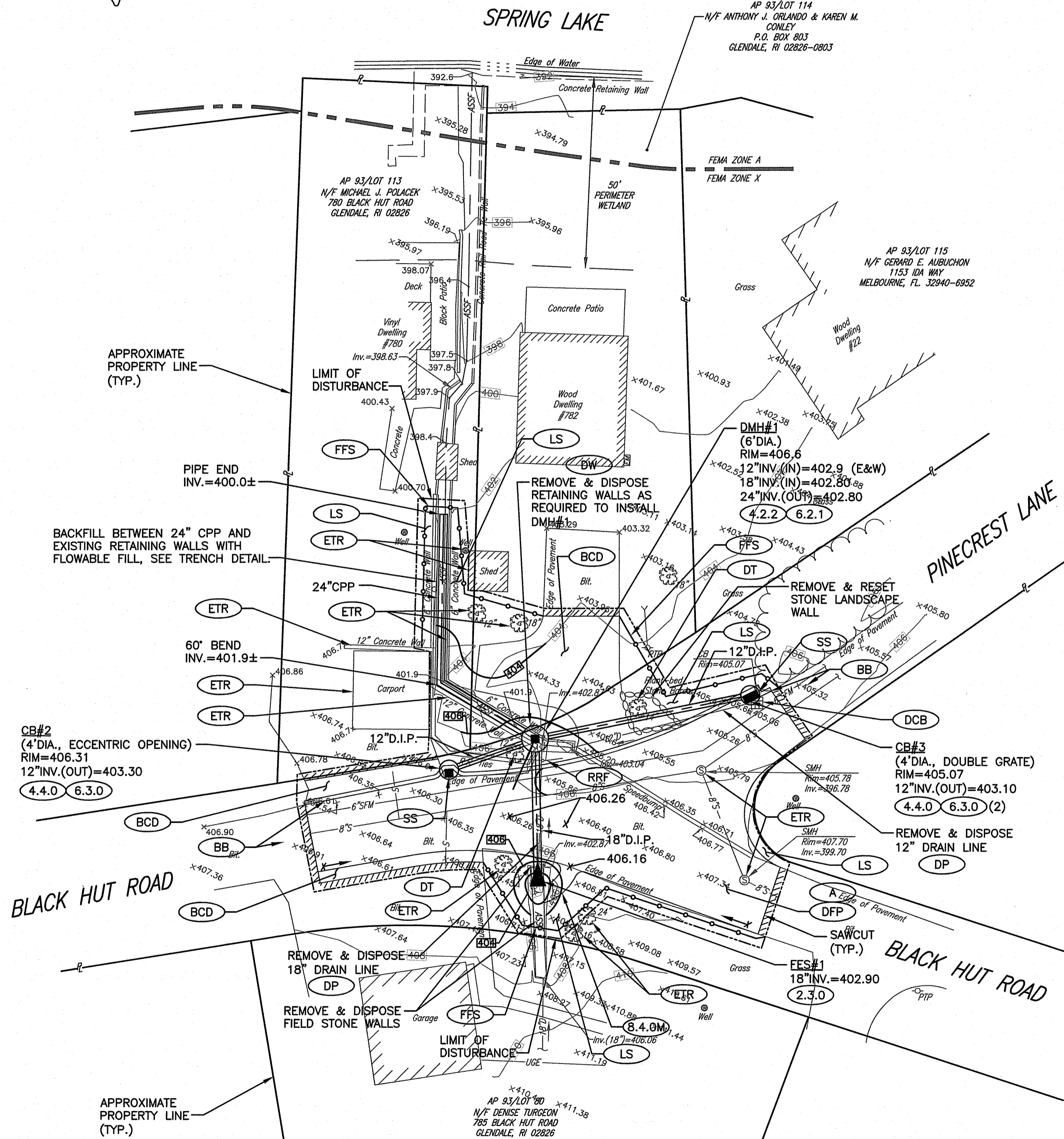
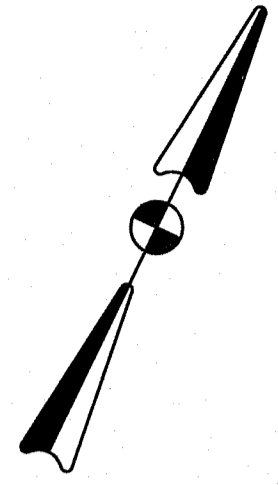
1. EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING DRAINAGE SYSTEMS, WETLANDS AND WATERWAYS.
2. ALL DISTURBED AREAS WHICH BECOME SUBJECT TO EROSION TENDENCIES WHETHER THEY BE NEWLY FILLED OR EXCAVATED SHALL RECEIVE SLOPE PROTECTION - SUCH AS RIP-RAP.
3. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING PERIODS OF RAINFALL.
4. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MAINTENANCE AND SHALL INSPECT / REPAIR / REPLACE DAILY DURING CONSTRUCTION, FOLLOWING RAINFALL AND WEEKLY DURING NON CONSTRUCTION PERIODS.
5. ADDITIONAL EROSION CONTROLS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE OWNER, MUNICIPAL REPRESENTATIVES, STATE AGENCIES OR ENGINEER.
6. THE "R.I. SOIL EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY THE U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, REVISED 2014 (LATEST REVISION), MUST BE UTILIZED BY THE CONTRACTOR AS A GUIDE.
7. THE CONTRACTOR IS RESPONSIBLE FOR ALL DUST CONTROL AND FOR THE ENTIRE PROJECT DURATION, INCLUDING TEMPORARY SHUT-DOWN PERIODS, MUST MONITOR AND REPAIR, AS NEEDED, ALL SLOPES TO ENSURE THE SITE IS STABLE.

GENERAL PROJECT WIDE NOTES:

1. COMPOST FILLED SILT SOCK AND SILT SACK IN CATCH BASINS SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, MAINTAINED ON A REGULAR BASIS, AND SHALL BE PLACED TO PREVENT SEDIMENTATION ONTO ADJACENT PROPERTY, ROADWAYS, WETLANDS AND WATERWAYS.
2. THE CONTRACTOR MUST REPLACE AND/OR RESEED ANY VEGETATION THAT DOES NOT DEVELOP/SURVIVE WITHIN THE PERIOD OF ONE YEAR AND THE CONTRACTOR SHALL DO SO AT NO ADDITIONAL EXPENSE TO THE OWNER.
3. ALL COMPOST FILLED SILT SOCK OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED AND POTENTIAL SEDIMENTATION SOURCES ARE REMOVED.
4. TREES AND OTHER EXISTING VEGETATION SHALL BE RETAINED WHENEVER FEASIBLE; THE AREA BEYOND THE DRIPLINE SHALL BE FENCED OR ROPED OFF TO PROTECT TREES FROM CONSTRUCTION EQUIPMENT.
5. AREAS DAMAGED DURING CONSTRUCTION SHALL BE RESODDED, RESEEDDED, OR OTHERWISE RESTORED AT THE CONTRACTOR'S EXPENSE.
6. NO STOCKPILES ARE ALLOWED.
7. SILT FENCE (RIDOT STD. DETAIL 9.2.0) MAY BE USED IN LIEU OF THE COMPOST FILLED SILT SOCK WHERE APPROVED BY THE ENGINEER.

EROSION CONTROL AND SOIL STABILIZATION PROGRAM:

1. EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING THE DRAINAGE SYSTEM, WETLANDS, ADJACENT PROPERTY, AND ROADWAYS.
2. TEMPORARY TREATMENTS SHALL CONSIST OF A HAY, STRAW, RIPRAP OR FIBER MULCH 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 OWNER.
3. HAY OR STRAW APPLICATIONS SHALL BE IN THE AMOUNT OF 3,000-4,000 LBS/ACRE.
4. NO STOCKPILES ARE ALLOWED.
5. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MAINTENANCE AND SHALL INSPECT/REPLACE AS NEEDED.
6. ADDITIONAL EROSION CONTROLS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER, OWNER, MUNICIPAL REPRESENTATIVES OR STATE AGENCIES.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING DUST CONTROL AT NO ADDITIONAL COST TO THE OWNER.
8. THE CATCH BASINS ADJACENT TO THE CONSTRUCTION AREA SHALL BE PROTECTED USING SILT SOCKS OR SILT SOCK INLET PROTECTION, AS NOTED.
9. ALL PROPOSED CATCH BASINS SHALL BE PROTECTED BY SILT SOCKS OR SILT SOCKS.
10. COMPOST FILLED SILT SOCK MAY BE INSTALLED ON THE EXISTING PAVEMENT/IMPERVIOUS AREAS WITH OUT STAKES. CONTRACTOR SHALL INSPECT DAILY, IF SOIL EROSION OR SEDIMENT IS OBSERVED IN THESE AREAS, THE CONTRACTOR SHALL RELOCATE OR INSTALL ADDITIONAL COMPOST FILLED SILT SOCK IN LOCATIONS THAT CAN BE STAKED. THIS WORK IS INCLUDED IN THE PROJECT SCOPE.
11. POLYMERS, FLOCCULANTS, OR OTHER TREATMENT CHEMICALS MUST NOT BE USED ON THIS PROJECT FOR DUST, SEDIMENTATION AND EROSION CONTROL. WATER WILL BE USED FOR DUST CONTROL AND EROSION WILL BE CONTROLLED USING THE PROPOSED EROSION CONTROLS, AND TEMPORARY STABILIZATION TECHNIQUES.



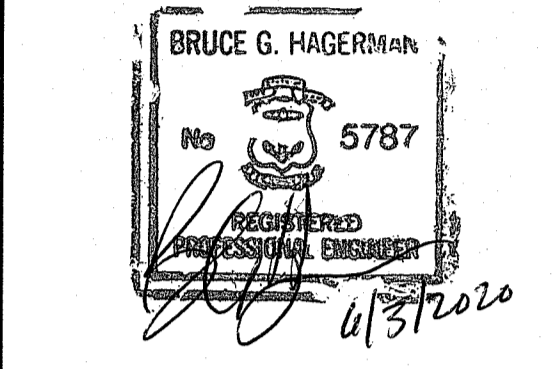
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN LETTER OF APPROVAL
DATED SEP 24 2020 FILE # 20-0139
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Martin D. Wenczek

Crossman Engineering
Rhode Island
151 Centerville Road
Warwick, RI 02886
Phone: (401) 738-5660
Email: cel@crossmaneng.com

Massachusetts
103 Commonwealth Avenue
North Attleboro, MA 02763
Phone: (508) 695-1700

THESE DRAWINGS ARE THE PROPERTY OF CROSSMAN ENGINEERING AND HAVE BEEN PREPARED FOR THEIR CLIENT FOR A SPECIFIC SITE AND PROJECT. THESE DRAWINGS ARE NOT TO BE COPIED OR USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF CROSSMAN ENGINEERING.



PROJECT TITLE:
CULVERT REPLACEMENT PROJECT
BLACK HUT ROAD
BURRILLVILLE, RHODE ISLAND

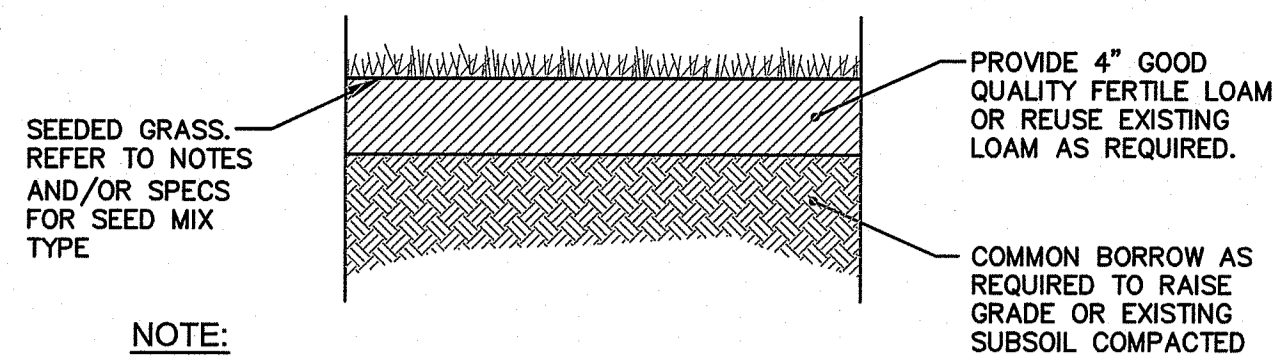
PREPARED FOR:
TOWN OF BURRILLVILLE
DEPARTMENT OF PUBLIC WORKS
AND ENGINEERING SERVICES
65 UNION AVENUE
HARRISVILLE, RI 02830

DRAWING TITLE:
SITE PLAN

DATE: APRIL 2020 SCALE: 1"=20'
DWG. NAME: 2320.20-C3.0-SITE PLAN.dwg

REVISIONS	NUMBER	REMARKS	DATE
△			

DRAWING NUMBER
C3.0
SHEET: 4 OF: 6

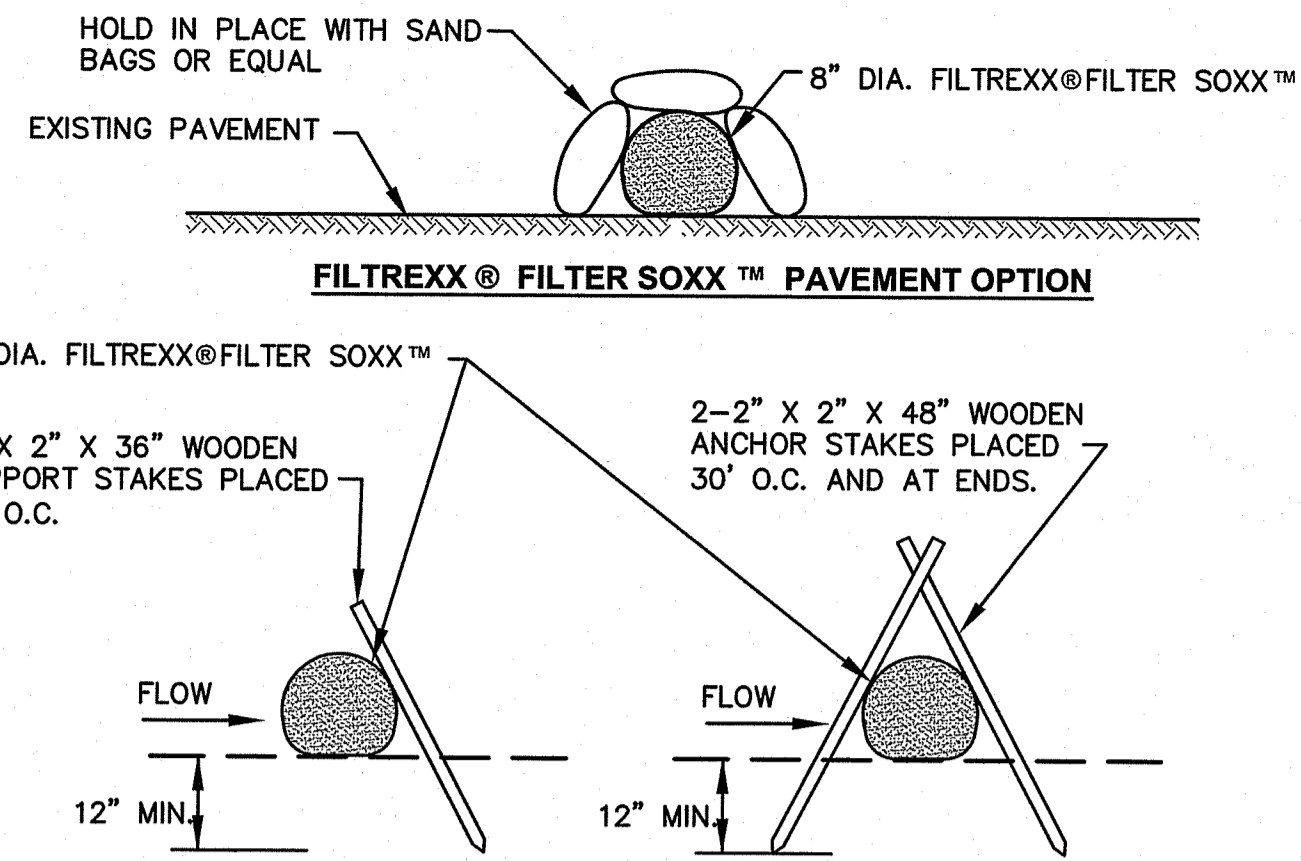


NOTE:
THE CONTRACTOR WILL BE RESPONSIBLE FOR WATERING LAWN DURING THE COURSE OF THE GROWING SEASON FOR A PERIOD OF ONE (1) YEAR.

SEEDING NOTES

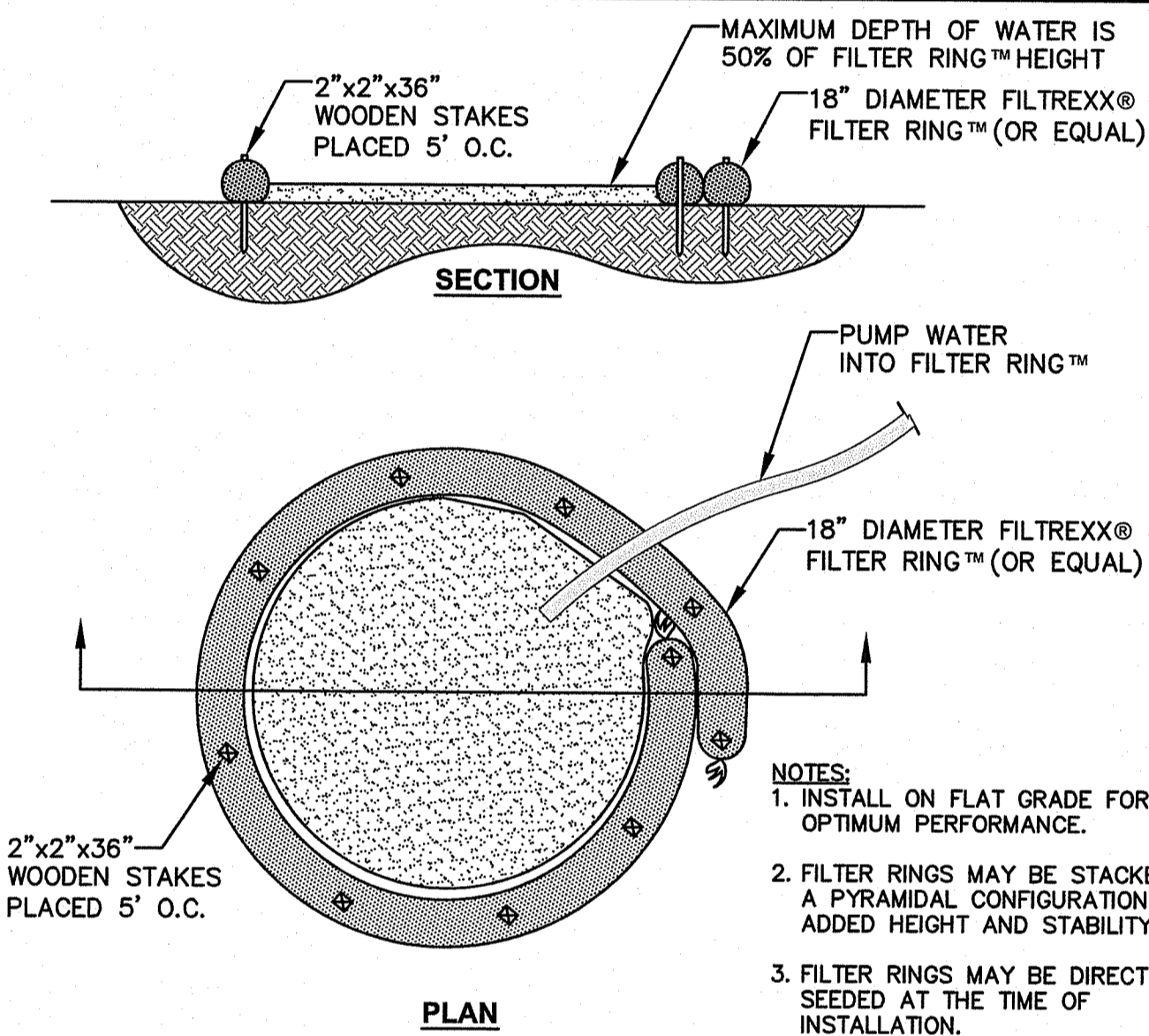
- LOAM SHALL BE SPREAD TO A MINIMUM DEPTH OF 4" OVER ALL AREAS DESIGNATED ON PLANS.
- SHAPE AND SMOOTH THE SURFACE TO THE LINES AND GRADES AS SHOWN ON PLANS.
- FERTILIZE WITH 10-10-10 OR EQUIVALENT ANALYSIS FOR ONLY ESTABLISHMENT OF THE GRASS. AT LEAST 40% OF THE FERTILIZER NITROGEN SHALL BE IN A SLOW RELEASE FORM. INCORPORATE THE FERTILIZER INTO THE TOP 3 TO 4 INCHES OF THE PLANTING SOIL. APPLY AT THE RATE OF 8 POUNDS PER 1,000 SQUARE FEET AT SEEDING.
- LIME: SPREAD EVENLY AND WORK INTO THE SOIL DURING PREPARATION OF SEED BED AT THE RATE OF ONE TON PER ACRE. INCORPORATE INTO THE SOIL BY DICING OR OTHER APPROVED METHOD. DISTRIBUTE LIME UNIFORMLY AND WORK INTO TOP 4 INCHES OF TOP SOIL (MINIMUM) AND UNIFORMLY BLEND BY DICING OR ROTOTILLING.
- THE CONTRACTOR SHALL RESEED ANY BARE OR BARREN AREAS AND REPAIR GULLIES AS NECESSARY UNTIL THE ENTIRE SITE HAS A STABLE COVER OF VEGETATION.
- APPLICATION OF SEED:
 - RATE OF APPLICATION OF SEED SHALL BE 8 POUNDS PER 1,000 SQUARE FEET OR AS INDICATED ON PLANS.
 - SEEDING SHALL BE DONE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND INSTRUCTIONS, AND ONLY DURING THE FOLLOWING DATES:
 SPRING SEEDING: MARCH 15 TO MAY 31
 FALL SEEDING: AUGUST 15 TO OCTOBER 15
 - THE CONTRACTOR SHALL KEEP ALL SEEDING AREAS WATERED AND IN GOOD CONDITION, RESEEDING IF AND WHEN NECESSARY FOR AN 8 WEEK PERIOD OR UNTIL A GOOD, HEALTHY, UNIFORM GROWTH IS ESTABLISHED OVER THE ENTIRE AREA. THE CONTRACTOR SHALL ALSO MAINTAIN THESE AREAS IN AN APPROVED CONDITION UNTIL PROVISIONAL ACCEPTANCE.
 - DURING THIS PERIOD, WATER TURF AS NECESSARY TO MAINTAIN AN ADEQUATE SUPPLY OF MOISTURE WITHIN THE ROOT ZONE. AN ADEQUATE SUPPLY OF MOISTURE IS EQUIVALENT OF ONE INCH OF ABSORBED WATER PER WEEK THAT IS DELIVERED AT WEEKLY INTERVALS IN THE FORM OF NATURAL RAIN OR IS AUGMENTED AS REQUIRED BY PERIODIC WATERING.
 - OVERSEED WHEN NECESSARY TO PROMOTE GRASS GROWTH.
 - REPLANT AREAS VOID OF TURF ONE SQUARE FOOT OR LARGER.
 - SEED: SEED ALL AREAS DESIGNATED ON PLAN AS WELL AS ALL DISTURBED EXISTING AREAS WITH THE FOLLOWING SEED MIX: UNIVERSITY OF RHODE ISLAND IMPROVED SEED MIX NO. 2 AS AVAILABLE FROM ALLEN'S SEED STORE OR EQUAL. APPLICATION RATE = 200 lbs. / ACRE

LOAM-SEED DETAIL
NOT TO SCALE



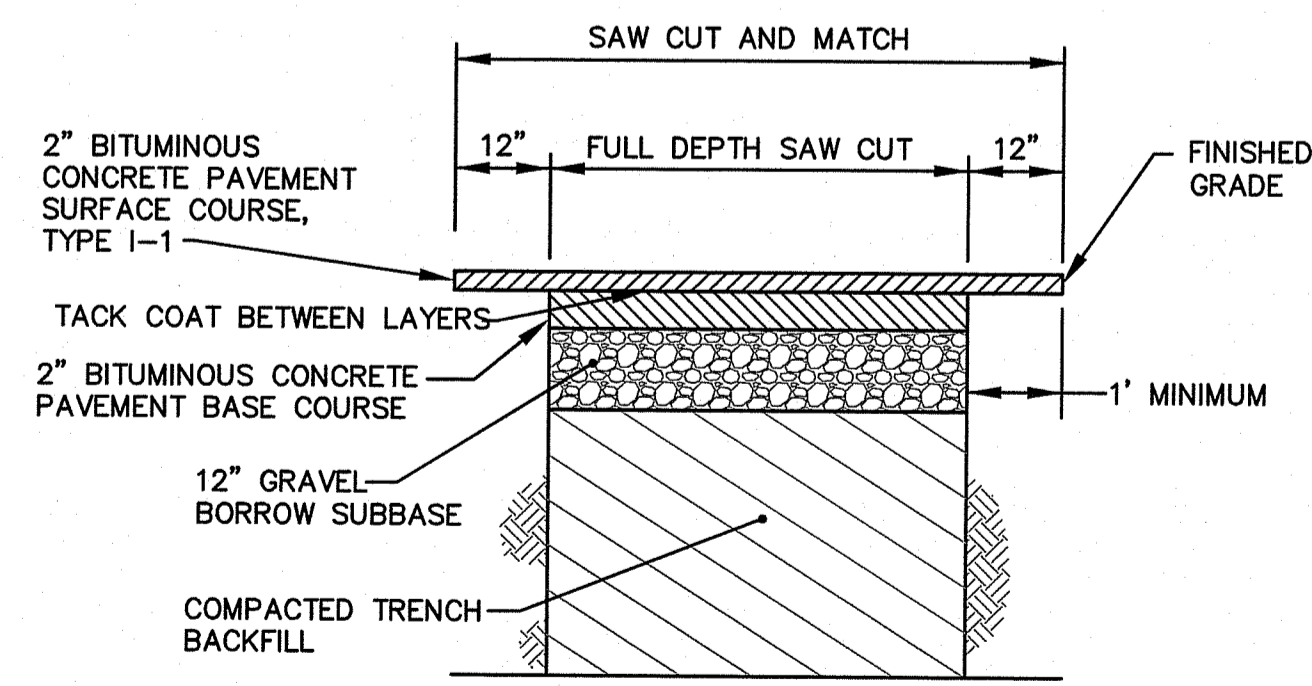
- NOTES:**
- CONTRACTOR IS RESPONSIBLE TO BECOME FAMILIAR WITH THE FILTREXX PRODUCTS AND COORDINATE INSTALLATION SCHEDULES AND METHODS WITH THE ENGINEER PRIOR TO PLACEMENT.
 - ALL MATERIAL SHALL MEET FILTREXX SPECIFICATIONS.
 - COMPOST MATERIAL TO BE DISPERSED ON SITE AS DETERMINED BY OWNER.
 - ALTERNATIVE COMPOST FILLED FILTER SOCK CAN BE USED IF APPROVED BY THE ENGINEER.

FILTREXX® FILTER SOXX™ DETAIL
NOT TO SCALE



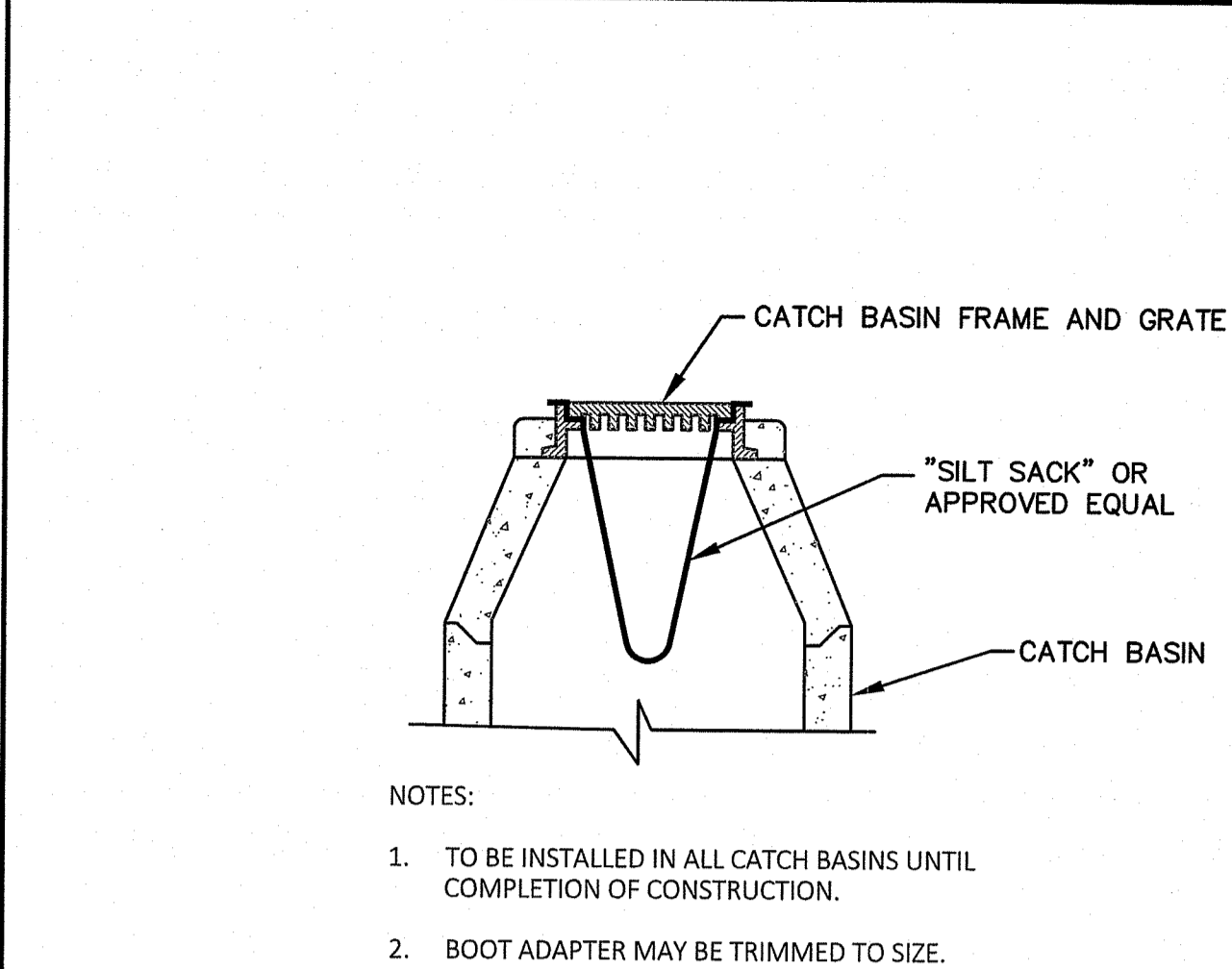
- NOTES:**
- INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.
 - FILTER RINGS MAY BE STACKED IN A PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT AND STABILITY.
 - FILTER RINGS MAY BE DIRECT SEEDED AT THE TIME OF INSTALLATION.
 - THIS TYPICAL INSTALLATION SHALL BE USED FOR DEWATERING OPERATIONS.
 - DEWATERING FILTER BAGS MAY BE USED IN LIEU OF THE FILTER RING.

DEWATERING BASIN DETAIL
NOT TO SCALE

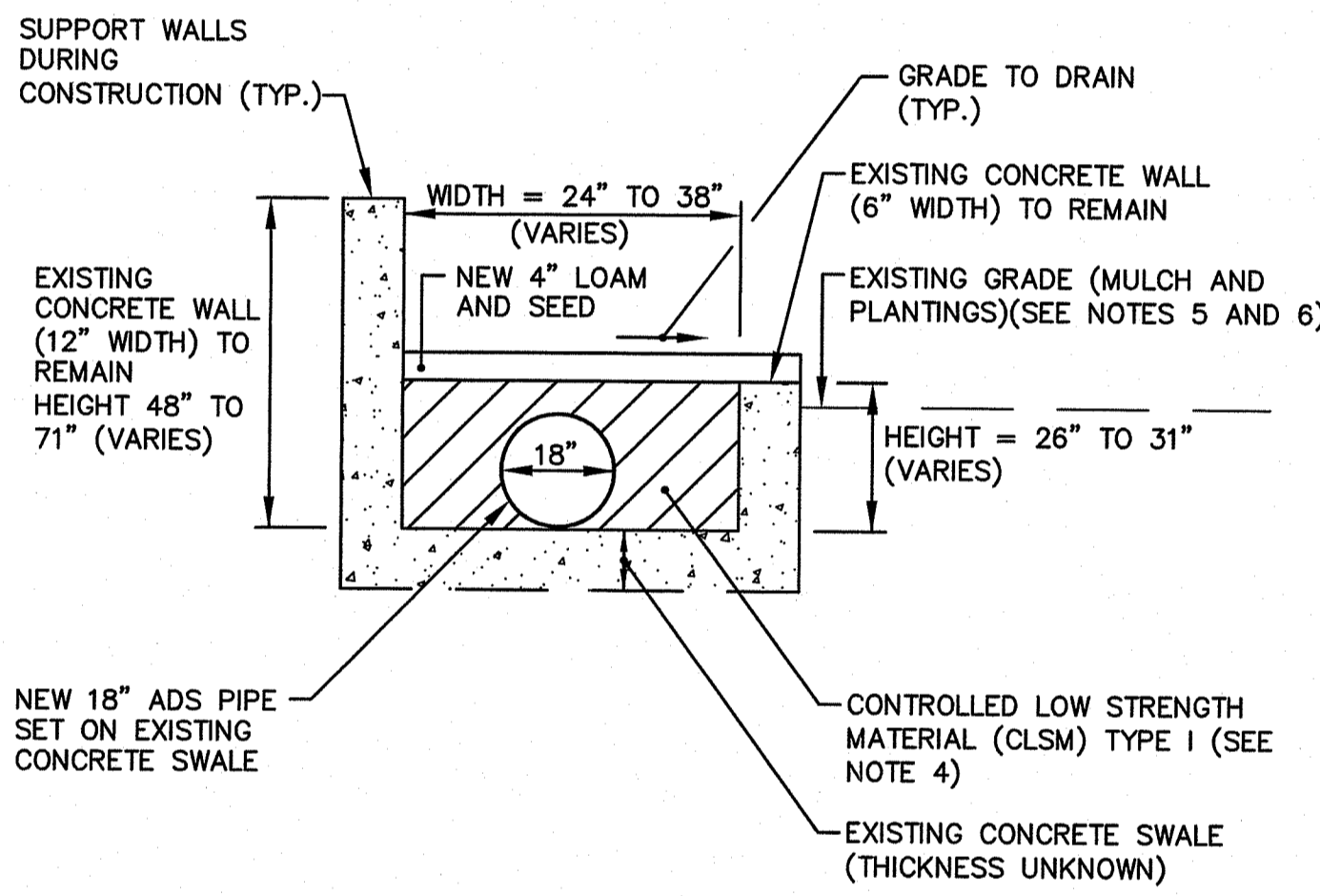


NOTE:
THE PAVEMENT DEPTH IN TRENCH AREAS FOR PROPOSED DRAINAGE INSTALLATION WITHIN THE ROADWAY SHALL BE REPLACED WITH THE ABOVE THICKNESSES. THE CONTRACTOR SHALL COORDINATE ALL PAVING OPERATIONS WITHIN THE ROADWAY WITH THE TOWN OF BURRILLVILLE DPW PRIOR TO PLACEMENT.

TYPICAL PAVEMENT REPAIR (WITHIN ROAD)
NOT TO SCALE

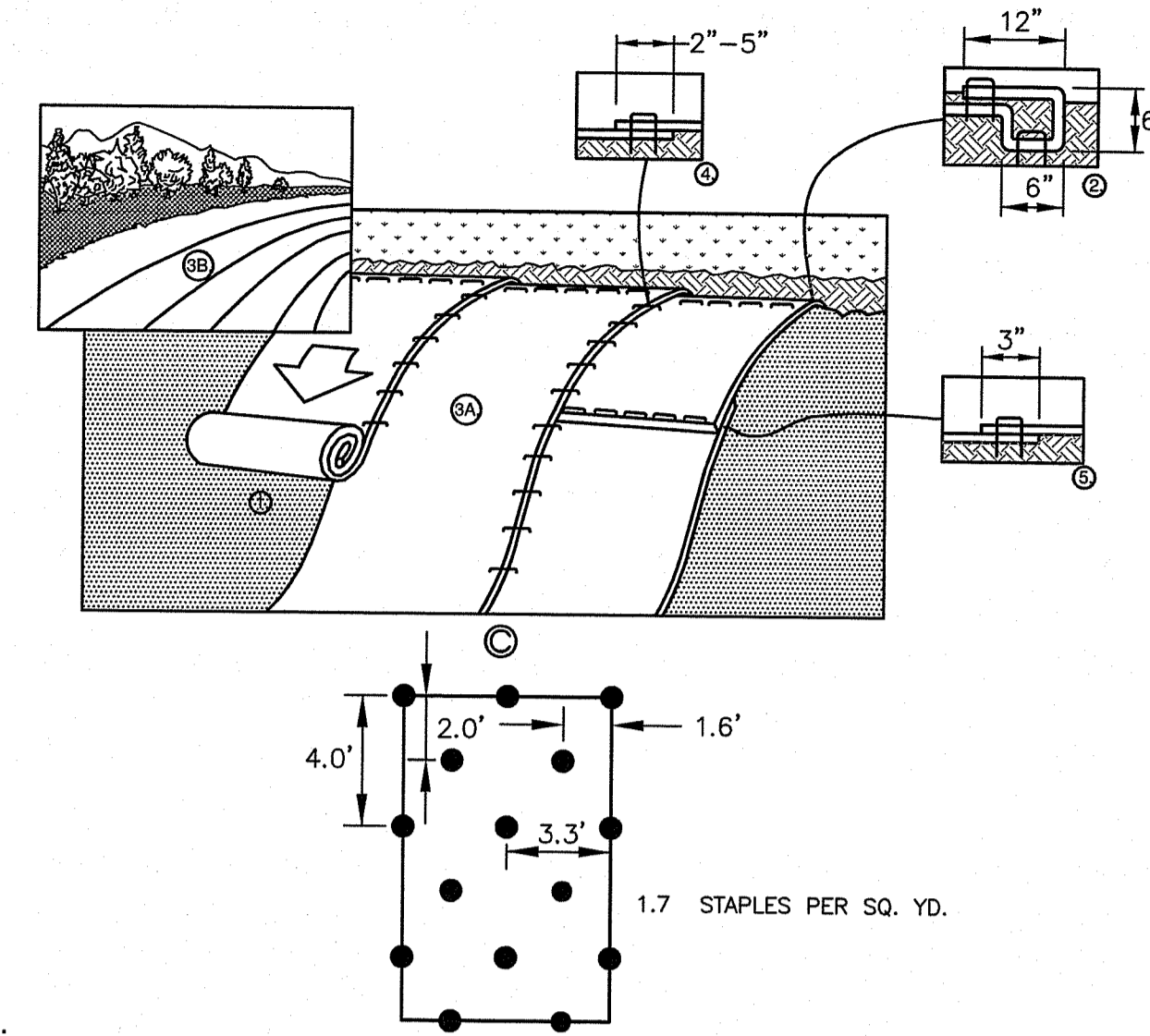


FILTER BAG INLET SEDIMENT CONTROL DEVICE (SILT SACK) DETAIL
NOT TO SCALE



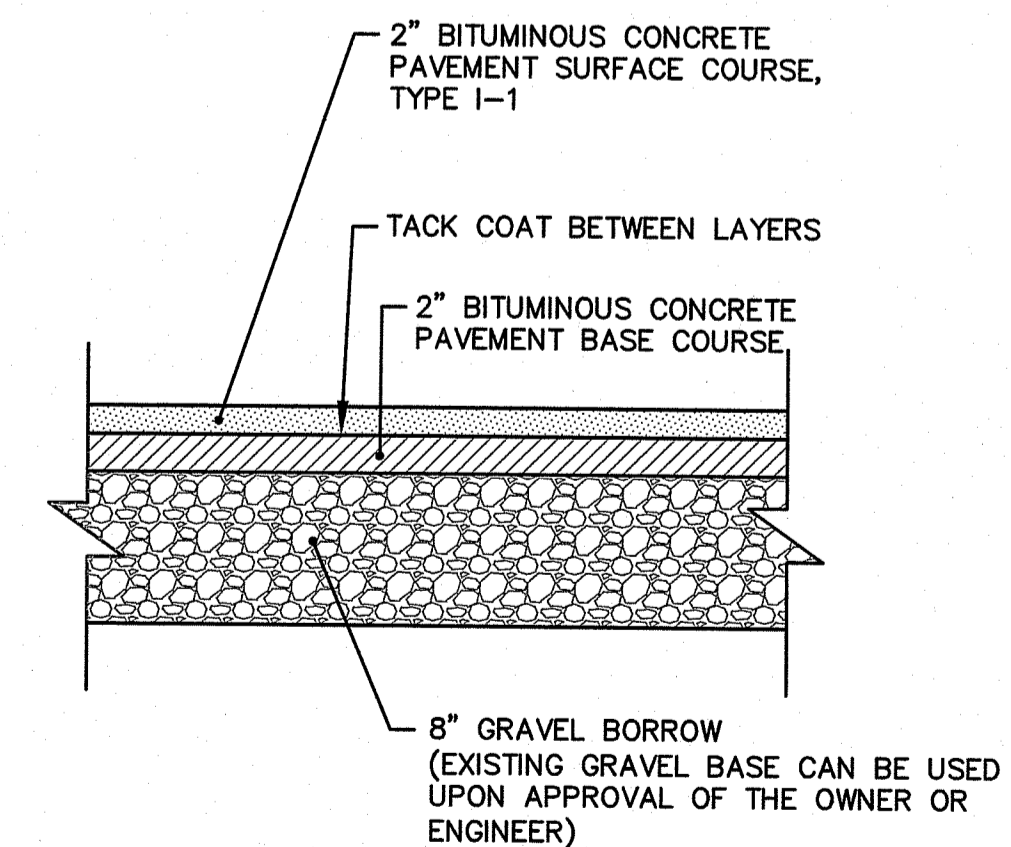
- NOTE:**
- NEW 18" DRAINAGE PIPE TO BE SET AT GRADE IN CENTER LINE OF EXISTING CONCRETE SWALE.
 - CONTRACTOR IS REQUIRED TO SUPPORT EXISTING CONCRETE WALLS DURING CONSTRUCTION. CARE SHALL BE UTILIZED WHEN WORKING ADJACENT TO EXISTING WALLS.
 - CONTRACTOR SHALL REMOVE ALL EXISTING WOOD SUPPORTS PRIOR TO INSTALLATION OF CLSM.
 - CONTROLLED LOW STRENGTH MATERIAL (CLSM) TYPE I (EXCAVATABLE FLOWABLE FILL) SHALL CONFORM TO ALL REQUIREMENTS OF SECTION 603 OF THE RIDOT SPECIFICATIONS.
 - CONTRACTOR SHALL COORDINATE THE REMOVAL OF ALL PLANTINGS WITH THE HOMEOWNER AND TOWN OF BURRILLVILLE DPW. PLANTINGS TO BE REPLANTED AFTER DRAINAGE INSTALLATION SHALL BE PROPERLY REMOVED AND STORED.
 - IF THE HOMEOWNER ELECTS, THE EXISTING MULCHED AREA CAN BE LOAMED AND SEED FOR A FINAL COVER.

TYPICAL 18 INCH PIPE INSTALLATION IN EXISTING CONCRETE SWALE DETAIL
NOT TO SCALE



- NOTE:**
- PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
 - BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30CM) OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP'S.
 - ROLL THE RECP'S (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
 - THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2" - 5" (5 CM - 12.5 CM) OVERLAP DEPENDING ON RECP'S TYPE.
 - CONSECUTIVE RECP'S SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP'S WIDTH.
 - ALL REQUIRED EROSION CONTROL BLANKET (MAT) OVERLAPS AND ANCHORS SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE.
- NOTE:** *IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.

EROSION CONTROL BLANKET (JUTE MESH) TEMPORARY INSTALLATION DETAIL
NOT TO SCALE



NOTE:
THE CONTRACTOR SHALL COORDINATE ALL PAVING OPERATIONS FOR THE DRIVEWAY REPAIR WITH THE HOMEOWNER AND THE TOWN OF BURRILLVILLE DPW PRIOR TO PLACEMENT.

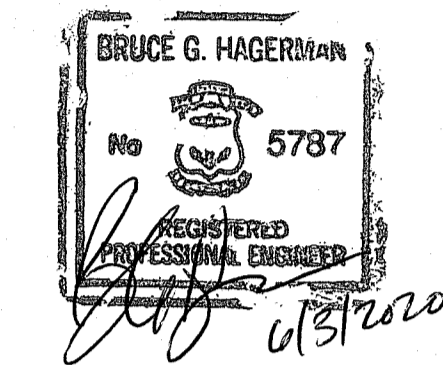
TYPICAL BITUMINOUS DRIVEWAY REPAIR PAVEMENT STRUCTURE DETAIL
NOT TO SCALE

Crossman Engineering
Rhode Island
151 Centerville Road
Warwick, RI 02886
Phone: (401) 738-5660

Massachusetts
103 Commonwealth Avenue
North Attleboro, MA 02763
Phone: (508) 695-1700

Email: cel@grossmaneng.com

THESE DRAWINGS ARE THE PROPERTY OF CROSSMAN ENGINEERING AND HAVE BEEN PREPARED FOR THEIR CLIENT FOR A SPECIFIC SITE AND PROJECT. THESE DRAWINGS ARE NOT TO BE COPIED OR USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF CROSSMAN ENGINEERING.



CULVERT REPLACEMENT PROJECT
BLACK HUT ROAD
BURRILLVILLE, RHODE ISLAND

PREPARED FOR:
TOWN OF BURRILLVILLE
DEPARTMENT OF PUBLIC WORKS
AND ENGINEERING SERVICES

65 UNION AVENUE
HARRISVILLE, RI 02830

DRAWING TITLE:
MISCELLANEOUS DETAILS
PLAN NO. 1

DATE: APRIL 2020
SCALE: NO SCALE

DWG. NAME: 2346.10-C4.1-DET01.dwg

REVISIONS	NUMBER	REMARKS	DATE
△			

DRAWING NUMBER:
C4.1
SHEET: 5 OF 6

