COOK ROAD RETIREMENT COMMUNITY

GRAY ROAD, WINDHAM, MAINE

PREPARED BY:

CIVIL ENGINEER: TERRADYN CONSULTANTS, LLC 41 CAMPUS DR. SUITE 101 NEW GLOUCESTER, MAINE 04260 (207)926-5111

SURVEYOR: WAYNE T. WOOD & CO. 30 WOOD DRIVE GRAY, MAINE 04039 (207) 657-3330

SEPTIC EVALUATION: SUMMIT ENGINEERING SERVICES 145 LISBON STREET, SUITE 701 LEWISTON, MAINE 04240 (207)576-3313

APPLICANT / OWNER:

JAMES CUMMINGS P.O. BOX 957

PROJECT PARCEL SITE



SHEET INDEX

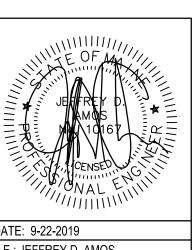
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LANDSCAPING PLAN

LEGEND

LEGEND	
	EXISTING PROPERTY LINE
	PROPOSED PROPERTY LINE
	PROPOSED SETBACK LINE
	EXISTING SETBACK LINE
	EXISTING EASEMENT
-·-·-	PROPOSED EASEMENT
	ROAD CENTERLINE
124	EXISTING MINOR CONTOUR
124	EXISTING MAJOR CONTOUR
124	PROPOSED CONTOUR EXISTING STORMDRAIN
SD	PROPOSED STORMDRAIN
s	EXISTING SANITARY SEWER
s	PROPOSED SANITARY SEWER
	EXISTING WATER LINE
W	PROPOSED WATER LINE
UD	EXISTING UNDERDRAIN
UD	PROPOSED UNDERDRAIN
OHE	EXISTING OVERHEAD ELECTRIC
—— OHE ——	& TELEPHONE PROPOSED OVERHEAD ELECTRIC
OHE -	& TELEPHONE
UGE	EXISTING UNDERGROUND
	ELECTRIC & TELEPHONE
UGE	PROPOSED UNDERGROUND
	ELECTRIC & TELEPHONE
	EXISTING EDGE OF PAVEMENT
	PROPOSED EDGE OF PAVEMENT
	EXISTING EDGE OF GRAVEL PROPOSED EDGE OF GRAVEL
	EXISTING CURB
	PROPOSED CURB
	EDGE OF WATER
uuuuuu	EXISTING TREE LINE
uuuuuu	PROPOSED TREE LINE
	CHAIN LINK FENCE
	PROPOSED FENCE
0 0 0	EXISTING GUARDRAIL PROPOSED GUARDRAIL
——SF ——	
\bowtie	EXISTING VALVE
×	PROPOSED VALVE
- Q -	EXISTING HYDRANT
•	PROPOSED HYDRANT
	EXISTING TRANSFORMER
	PROPOSED TRANSFORMER
\$	EXISTING LIGHT POLE
*	PROPOSED LIGHT POLE EXISTING UTILITY POLE
-O-	PROPOSED UTILITY POLE
	EXISTING CATCH BASIN
■	PROPOSED CATCH BASIN
S	EXISTING SEWER MANHOLE
S	PROPOSED SEWER MANHOLE
+ 30.20	EXISTING SPOT GRADE
_× 30.20	PROPOSED SPOT GRADE
	EXISTING SIGN
<u> </u>	PROPOSED SIGN
0	EXISTING MONUMENT
	EXISTING IRON PIPE
TP-A	TEST PIT
	EXISTING BUILDING
	PROPOSED BUILDING
<u> </u>	WETLAND AREA
	PROPOSED PAVEMENT
	RIPRAP
	PROPOSED WETLAND ALTERATION A

SNOW STORAGE AREA



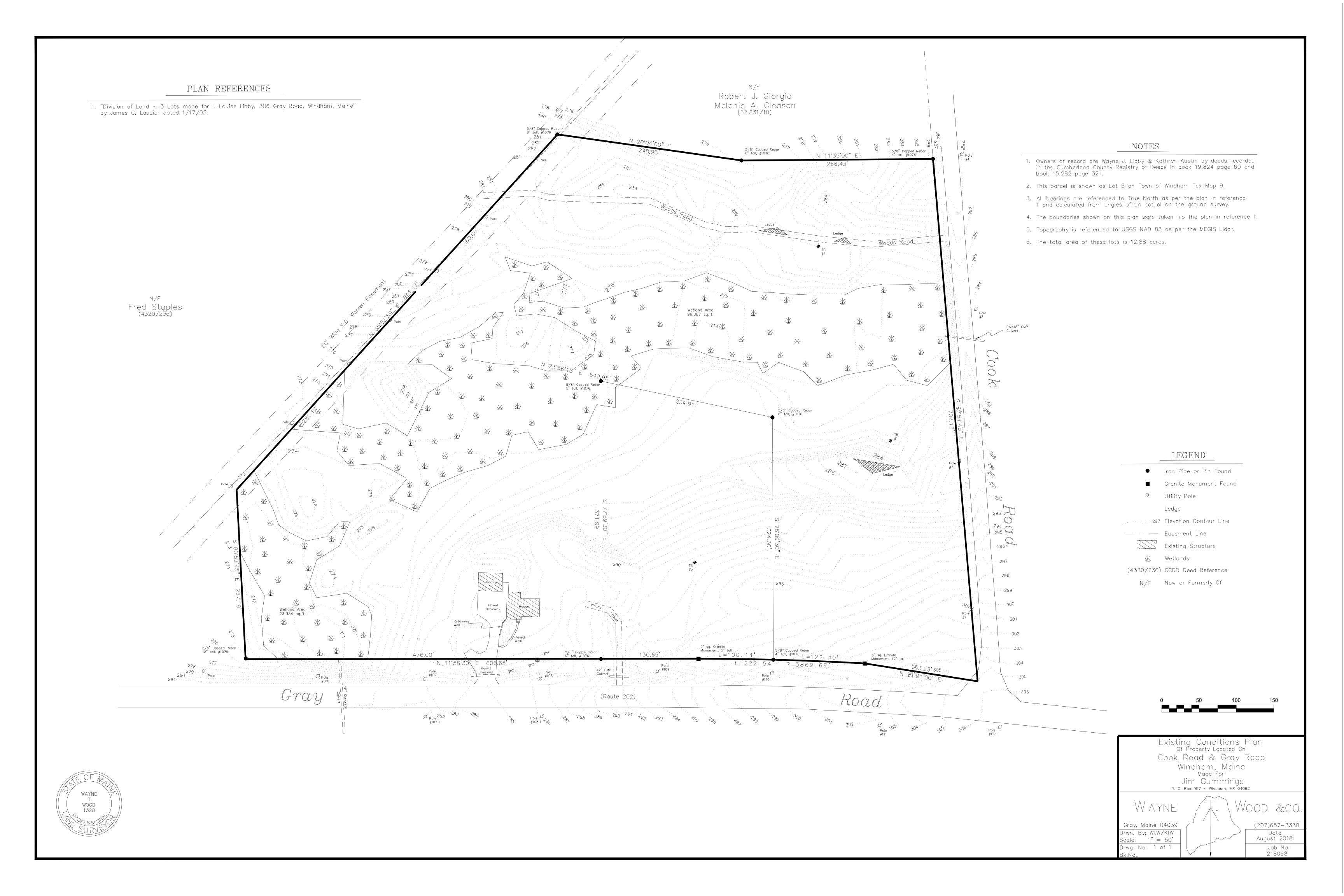
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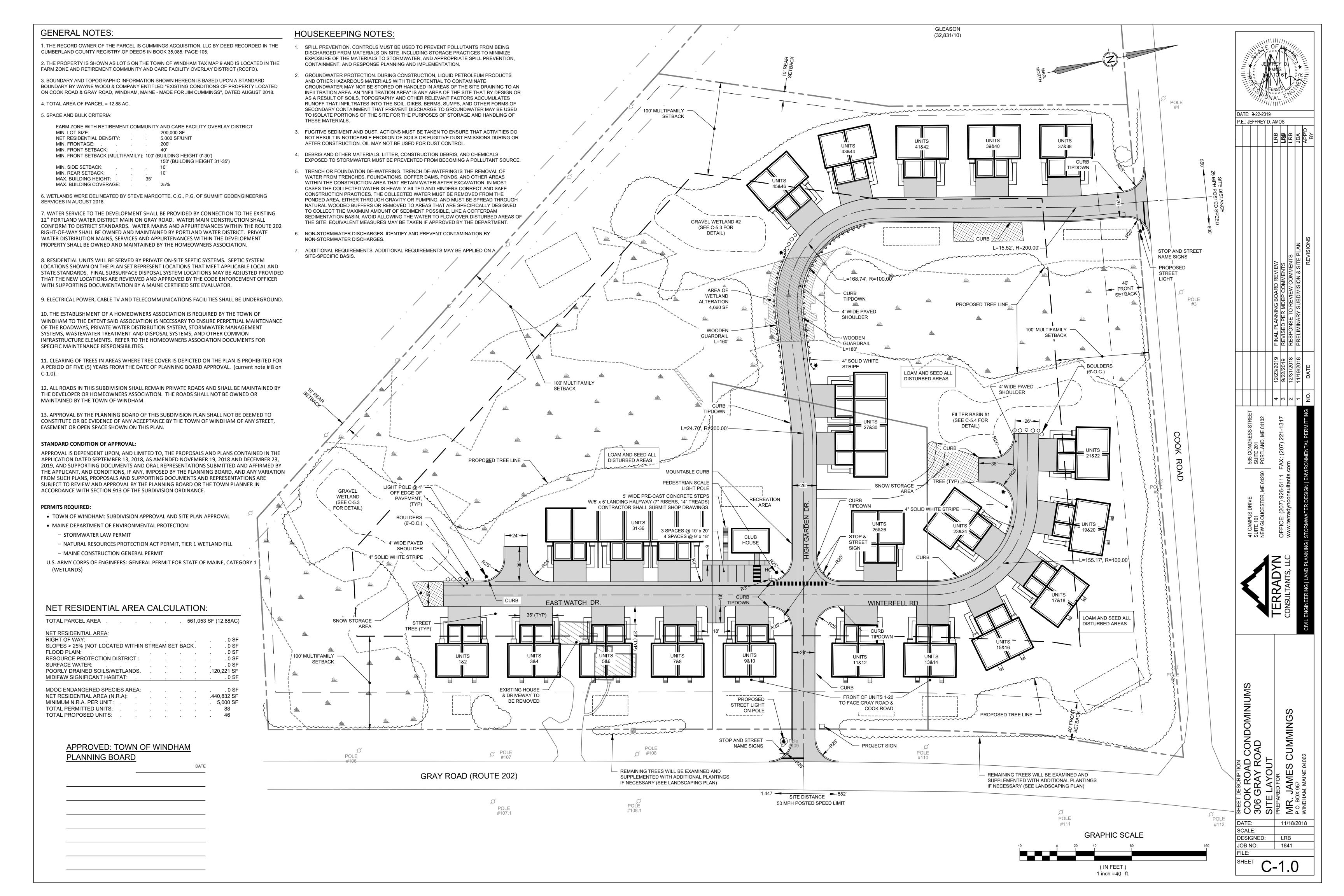
COOK ROAD RETIREMENT COMMUNITY 306 GRAY ROAD COVER SHEET AND LOCATION MAP

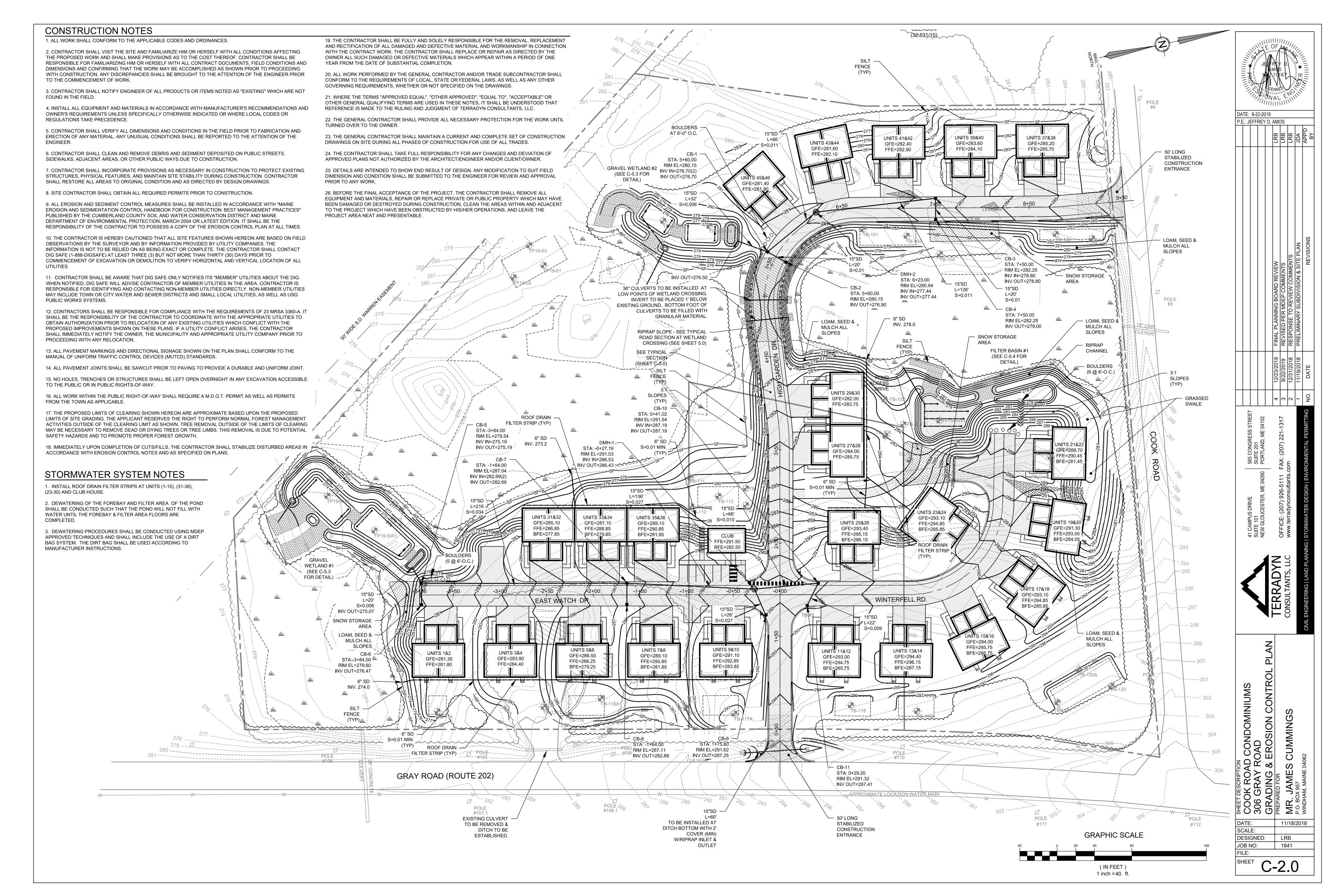
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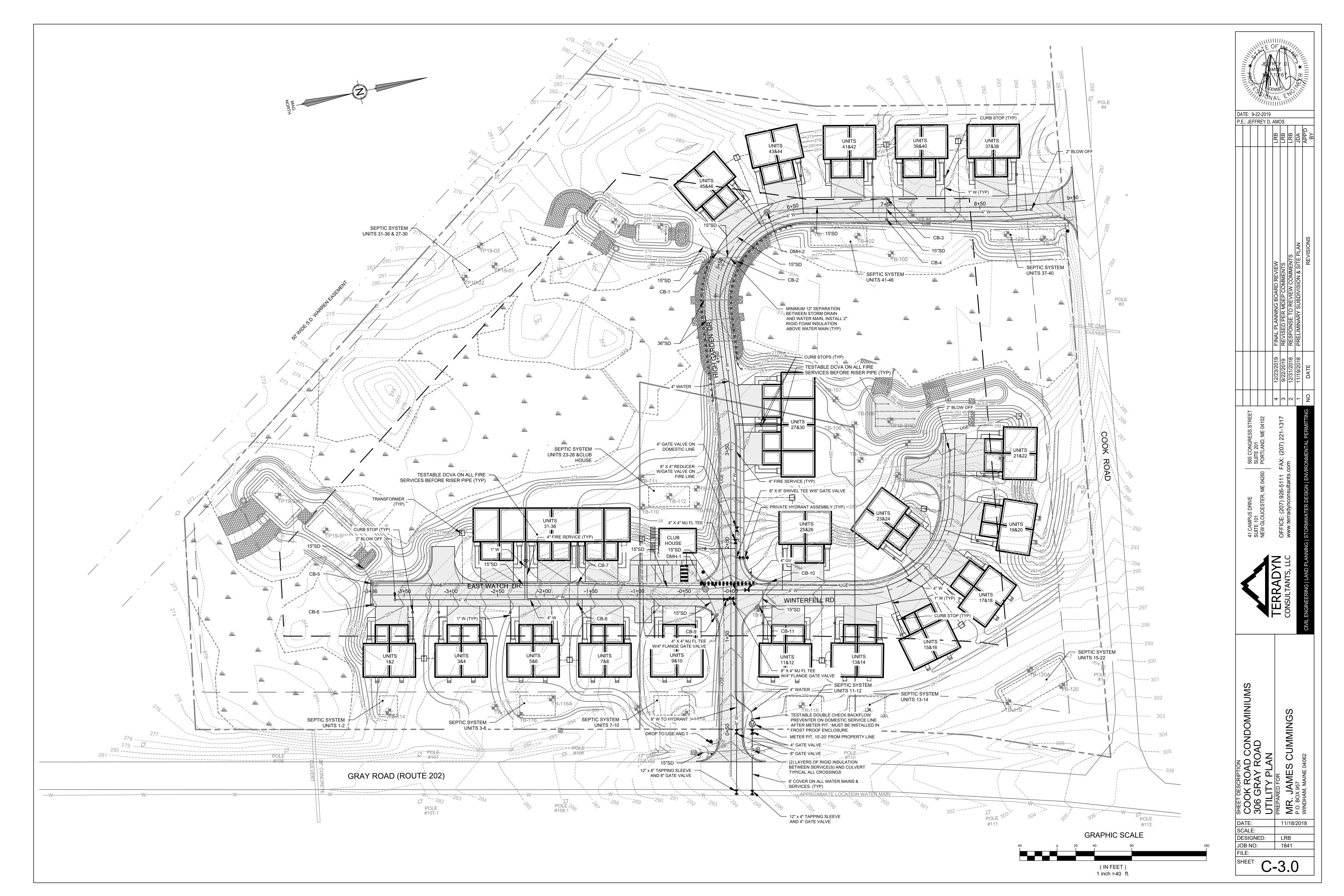
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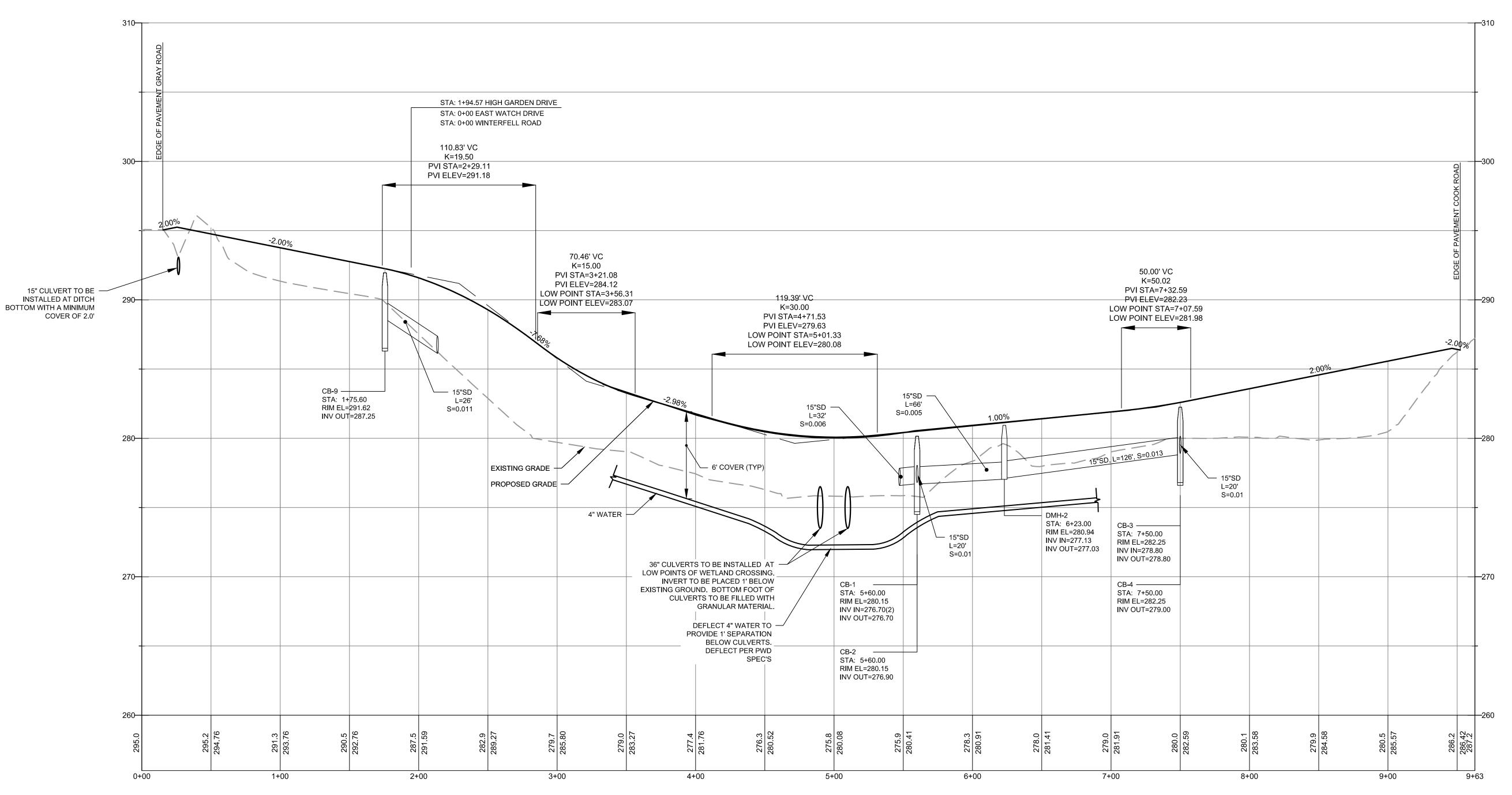
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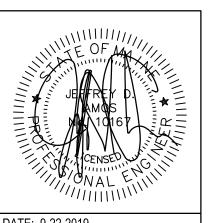






PROFILE OF HIGH GARDEN DRIVE

SCALE: 1"=40' HORIZONTAL
1"=4" VERTICAL



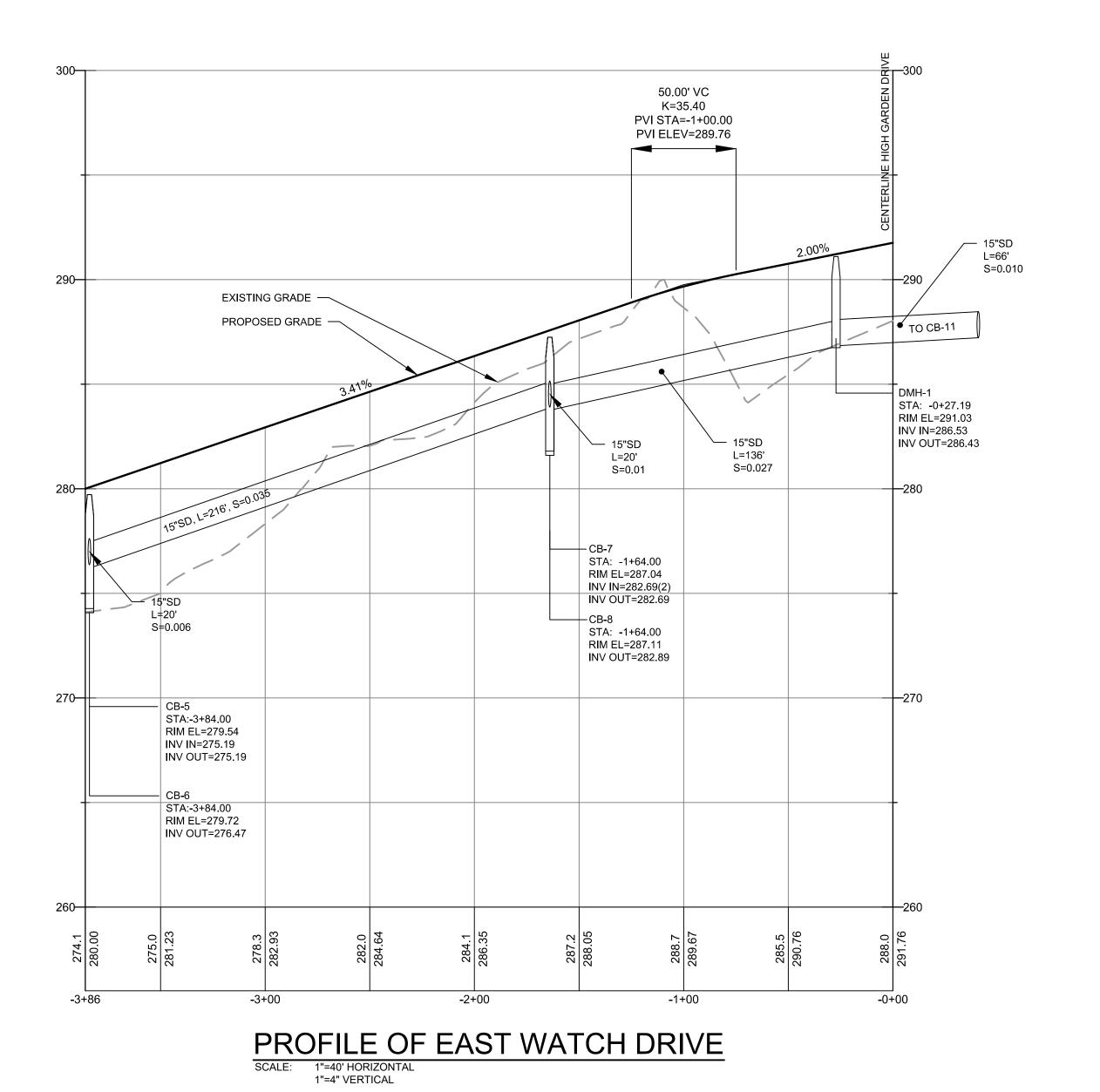
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					FINAL PLANNING BOARD REVIEW	REVISED PER MDEP COMMENTS	RESPONSE TO REVIEW COMMENTS	PRELIMINARY SUBDIVISION & SITE PLAN	REVISIONS	
					12/23/2019	9/22/2019	12/31/2018	11/19/2018	DATE	
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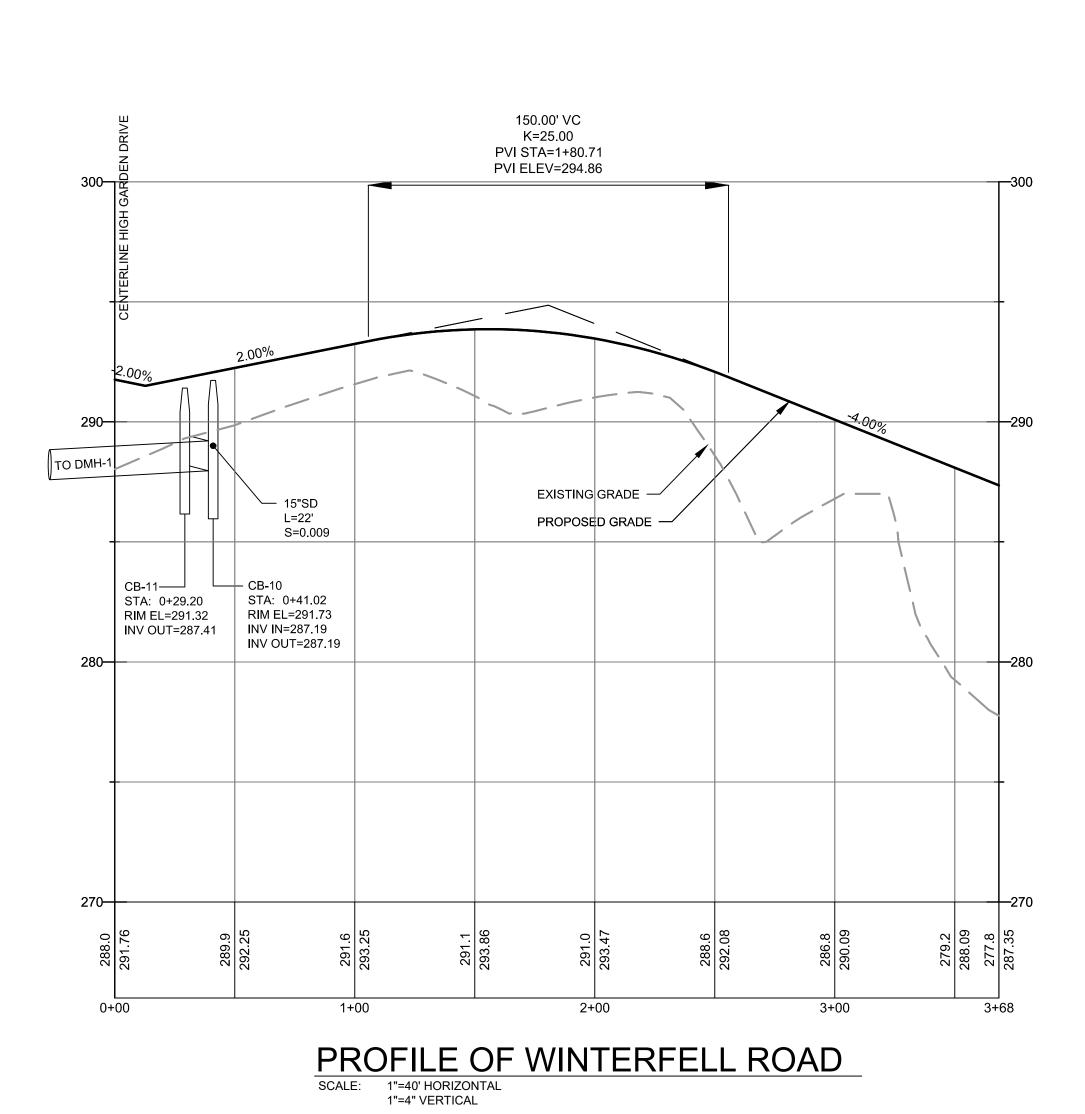
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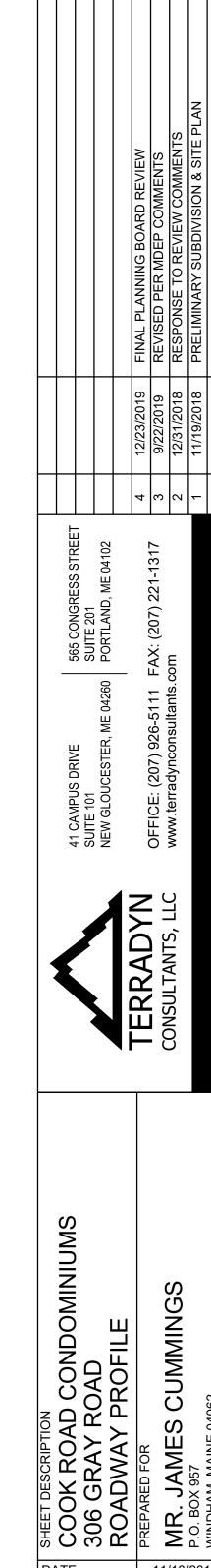
SHEET DESCRIPTION
COOK ROAD CONDOMINIUMS
306 GRAY ROAD
ROADWAY PROFILE
PREPARED FOR
MR. JAMES CUMMINGS
P.O. BOX 957
WINDHAM, MAINE 04062

DATE: SCALE: 11/18/2018 DESIGNED: LRB JOB NO: 1841

SHEET C-4.0







DATE: SCALE:

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SHEET C-4.1

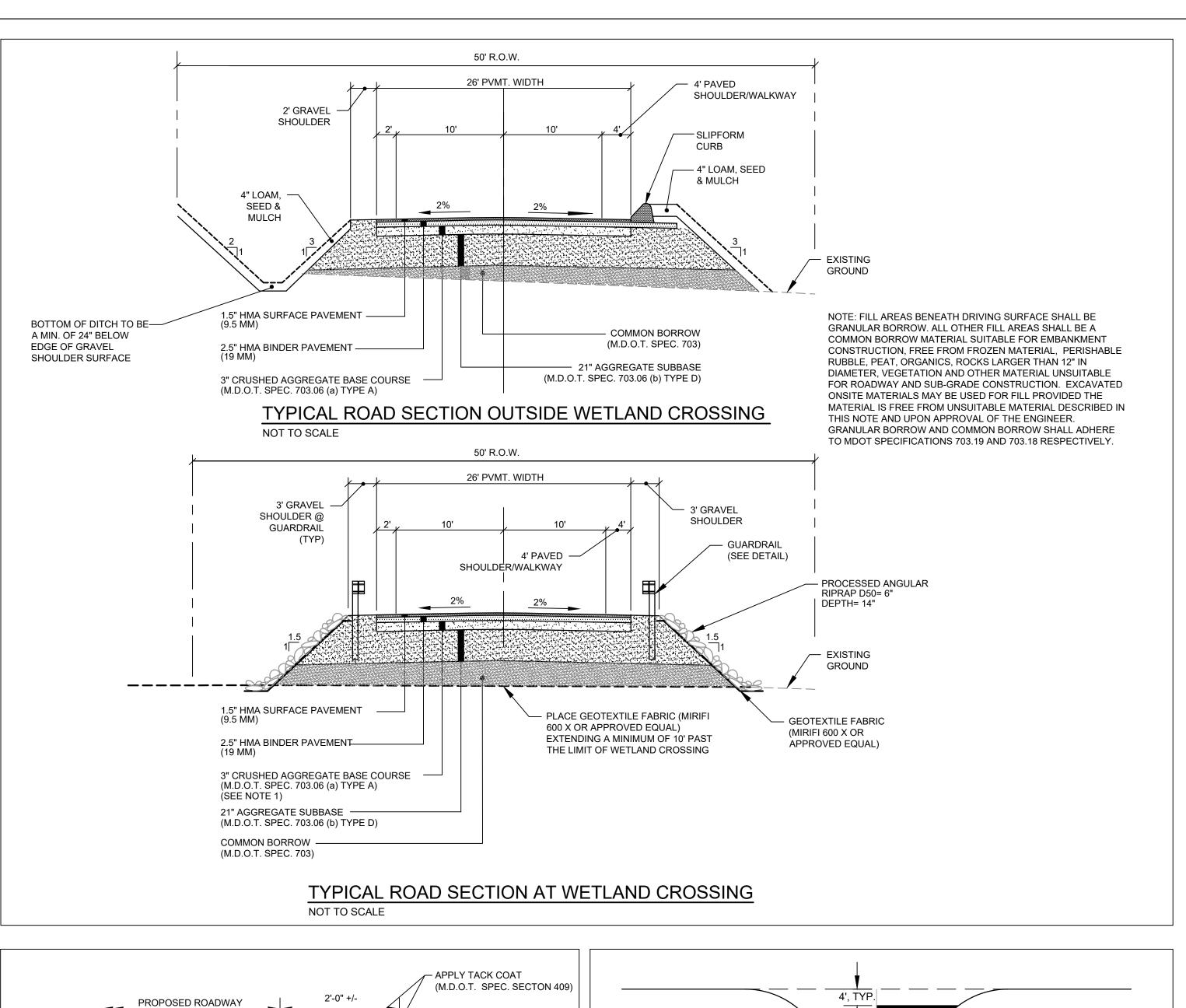
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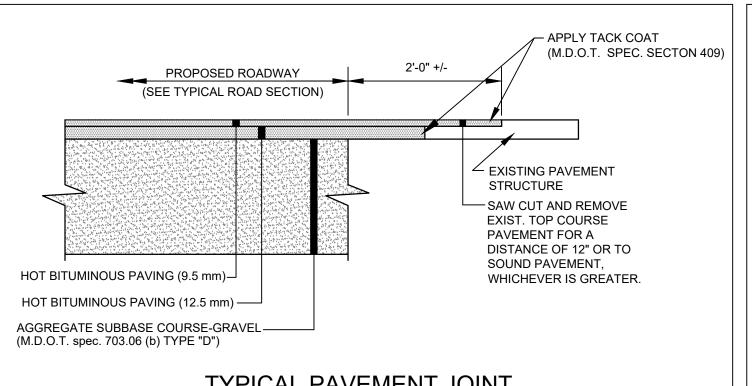
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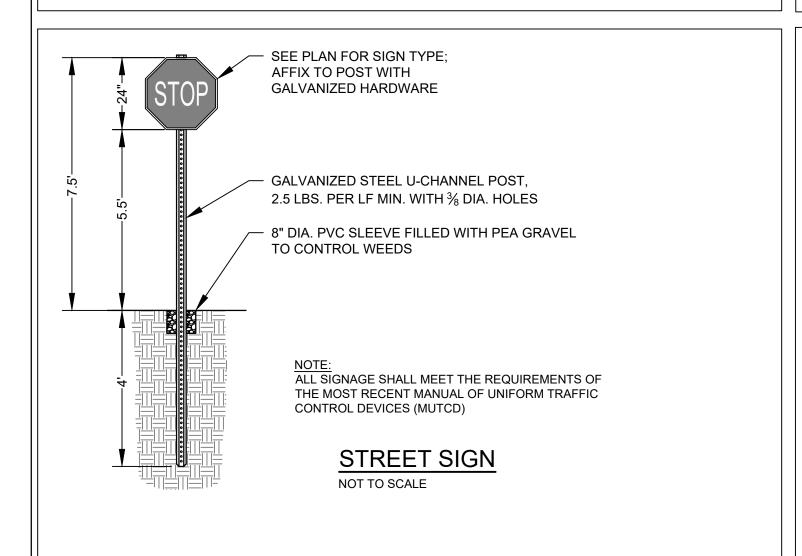
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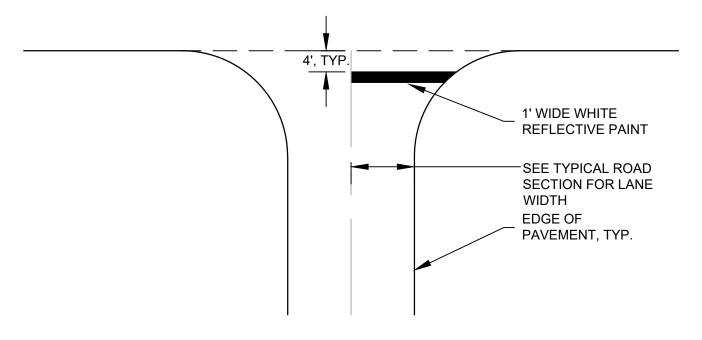
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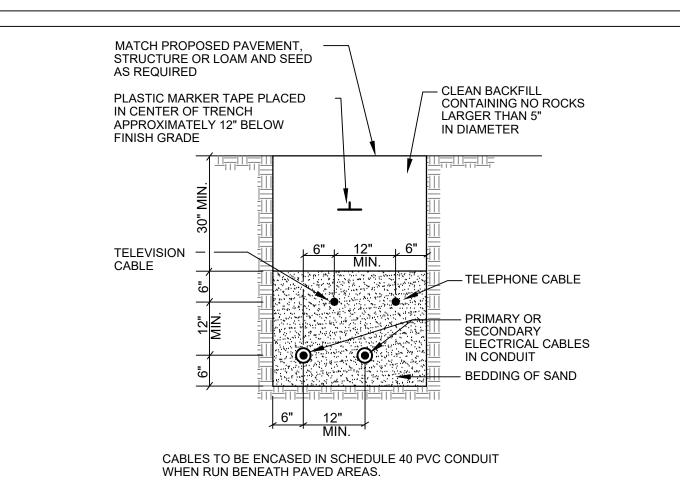


TYPICAL PAVEMENT JOINT

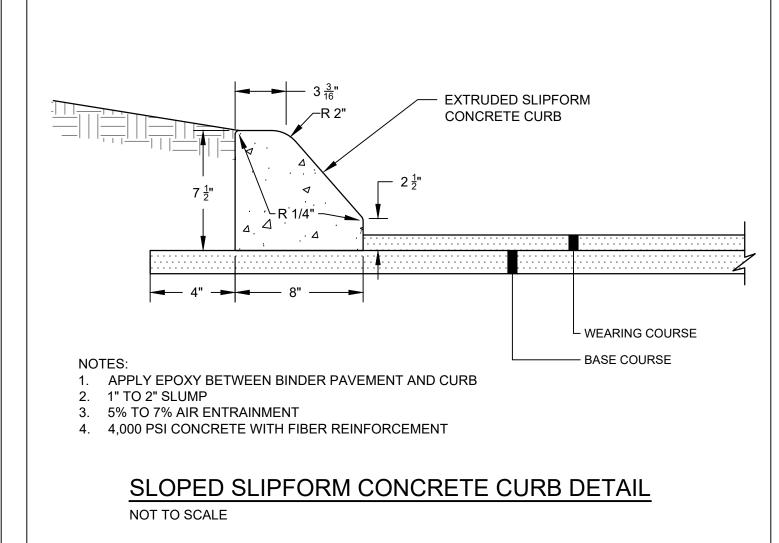


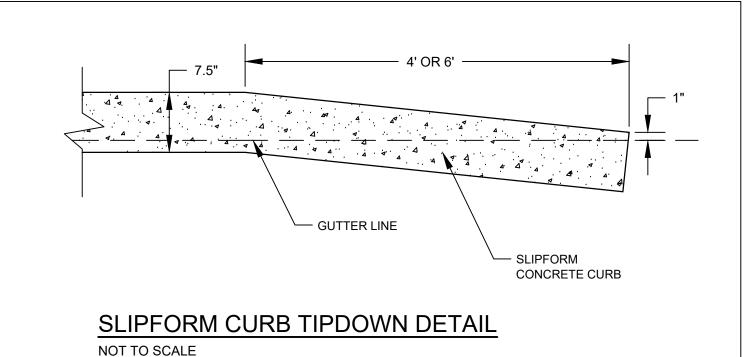


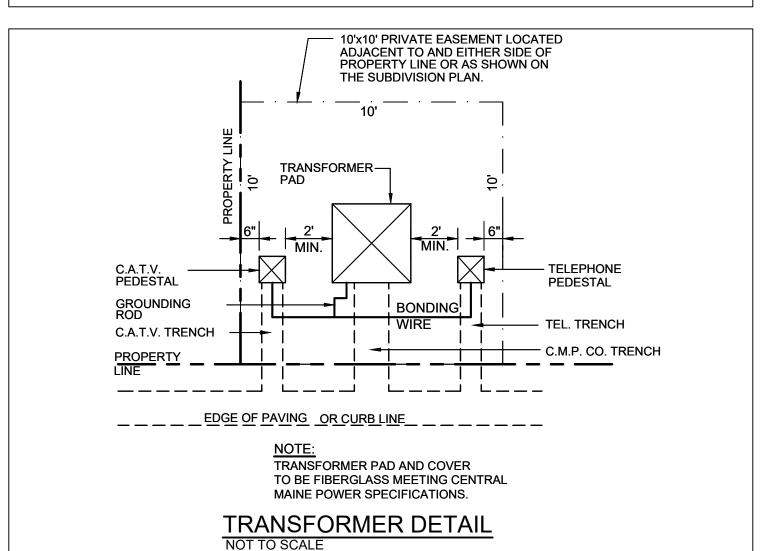
STOP BAR DETAIL NOT TO SCALE

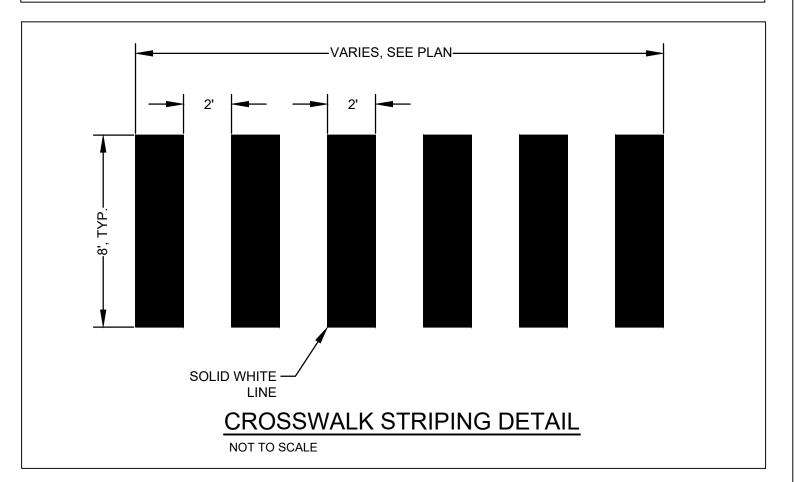


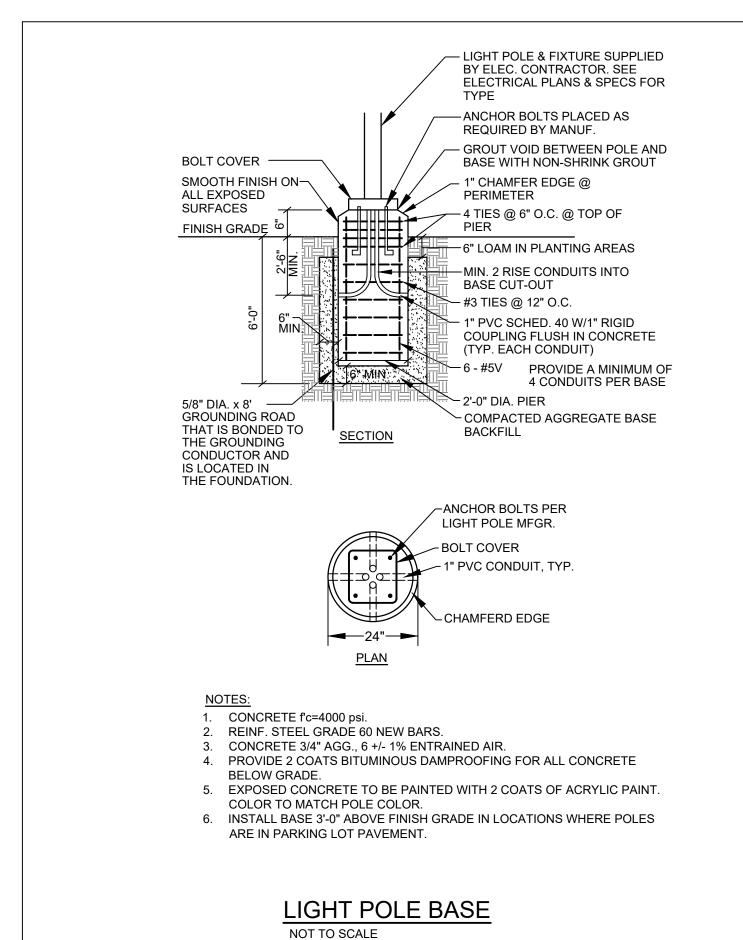
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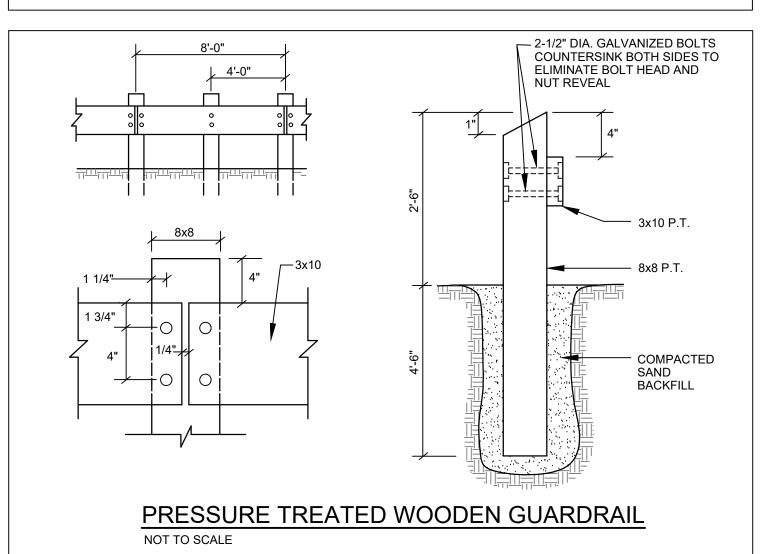


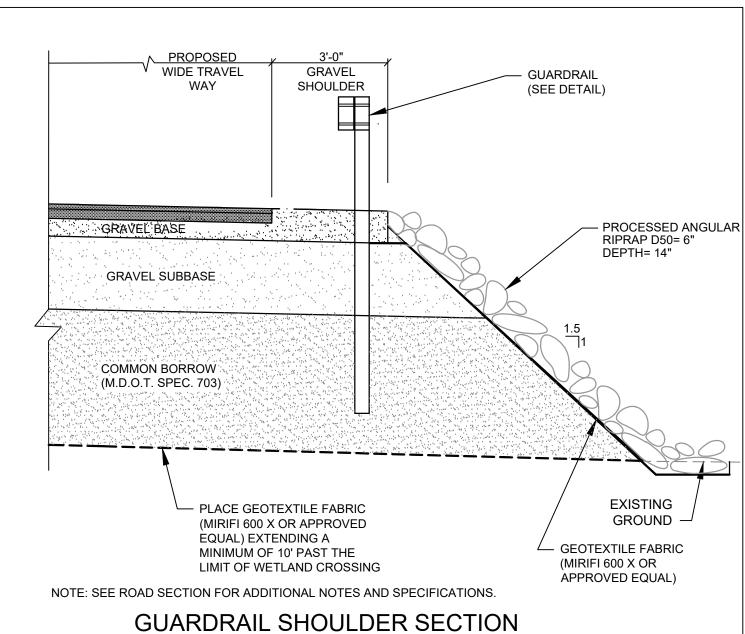




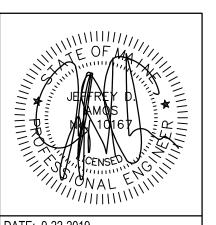








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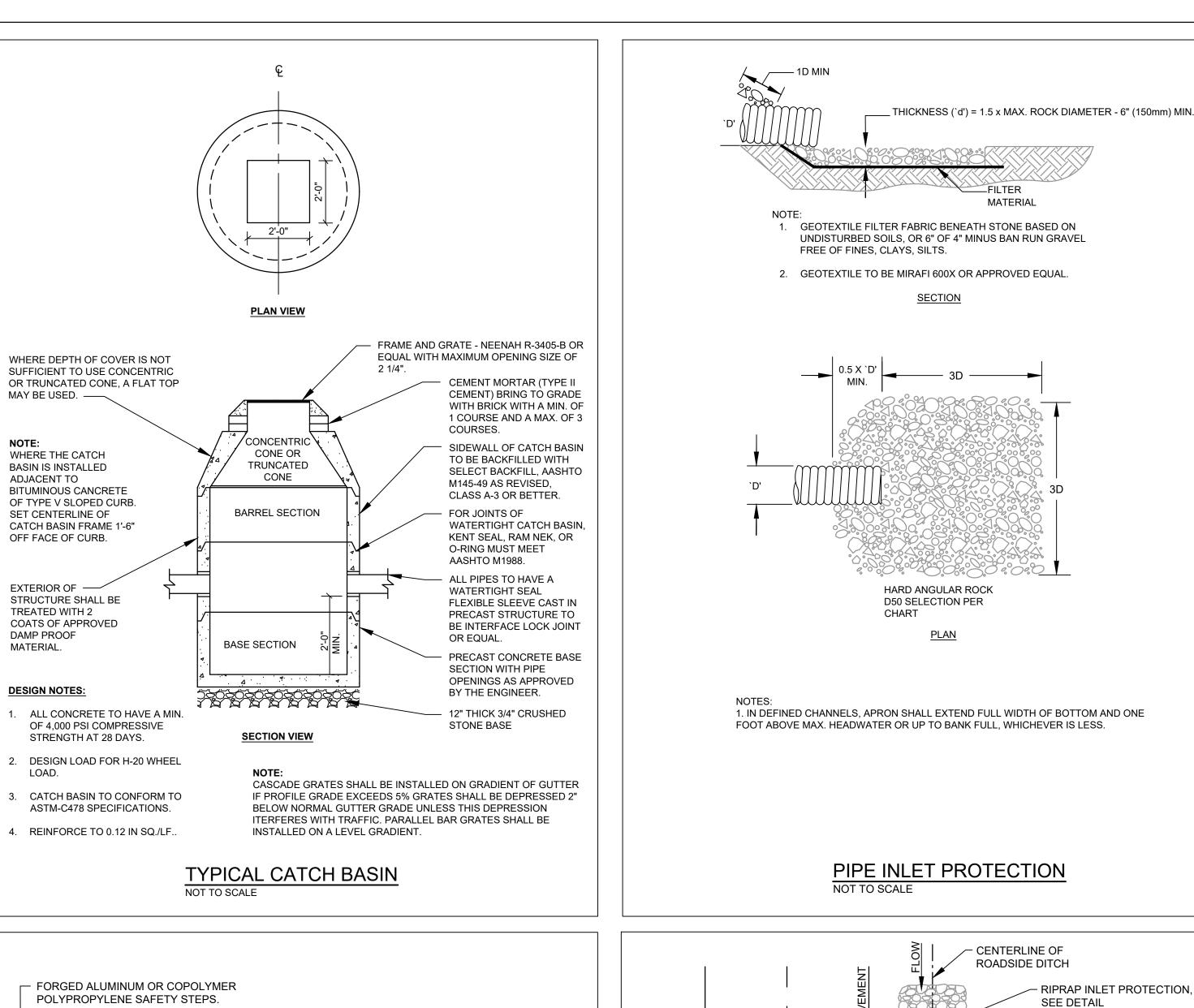


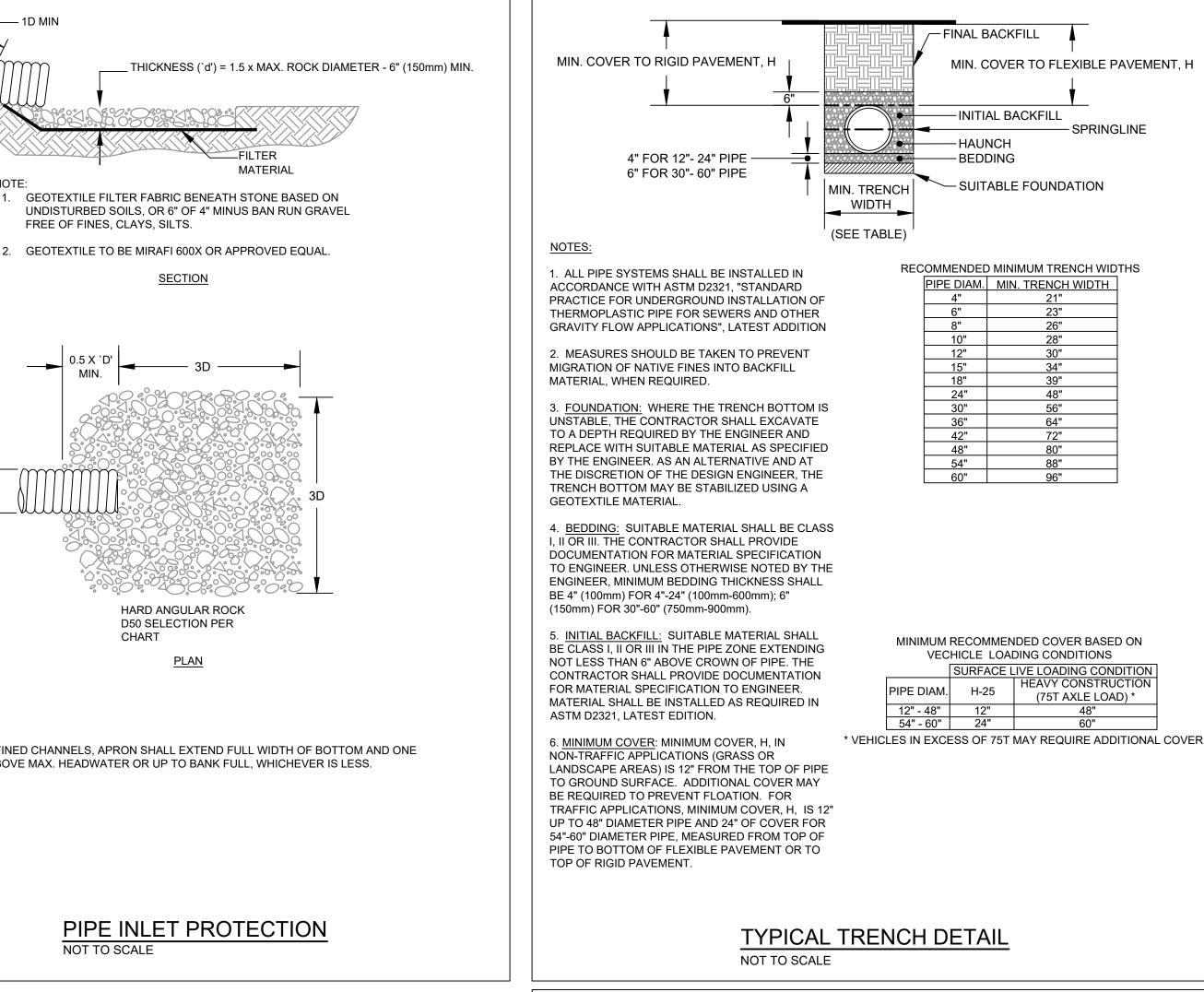
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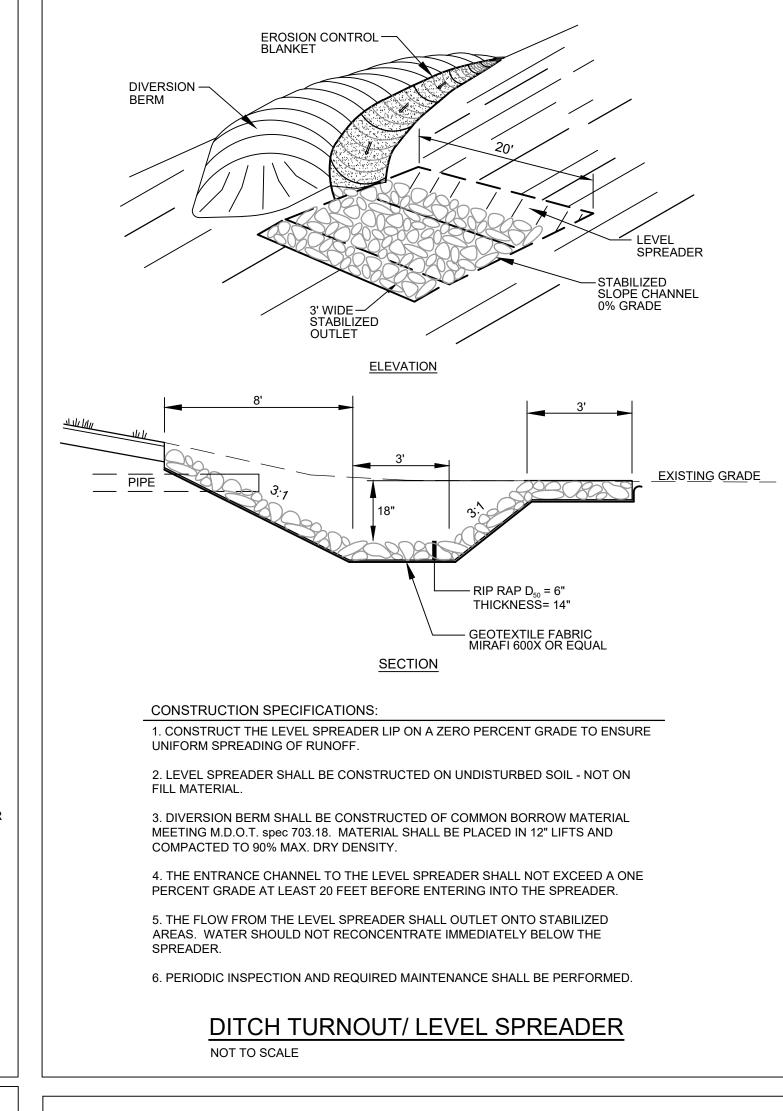
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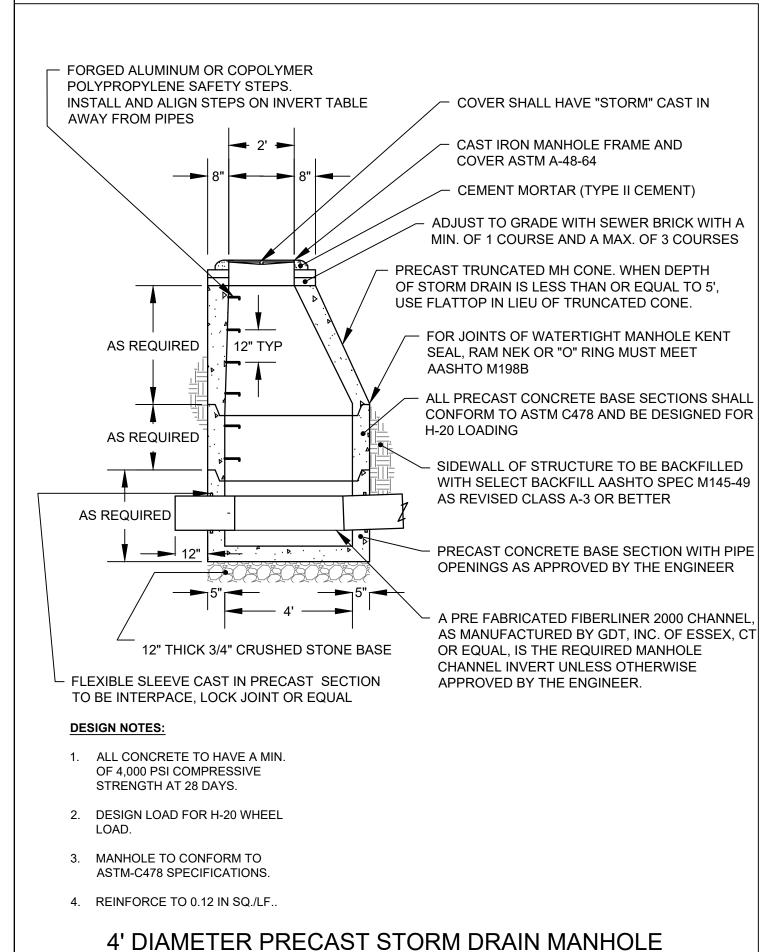
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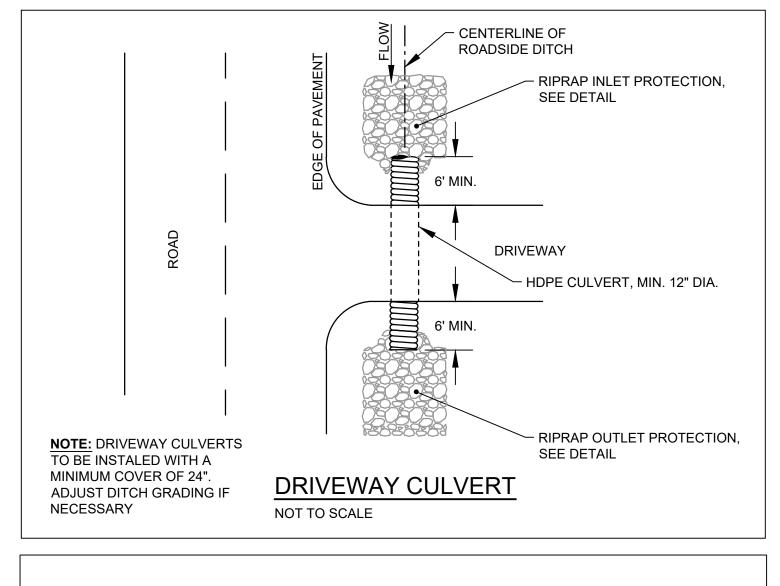


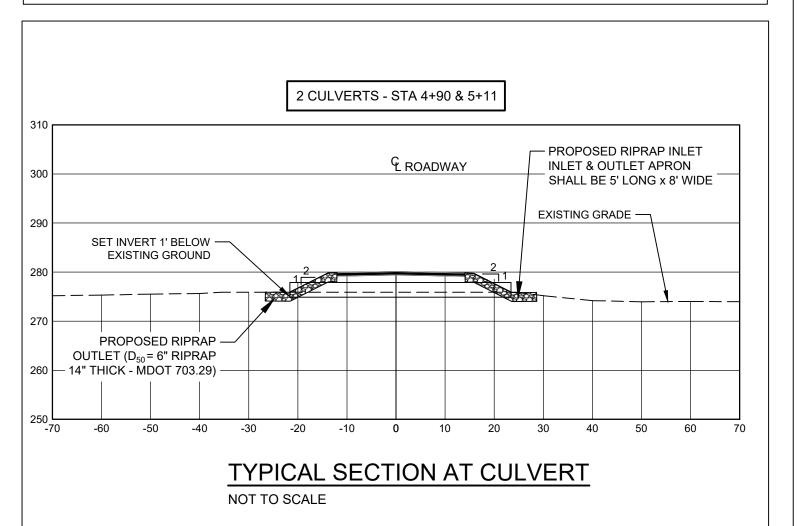


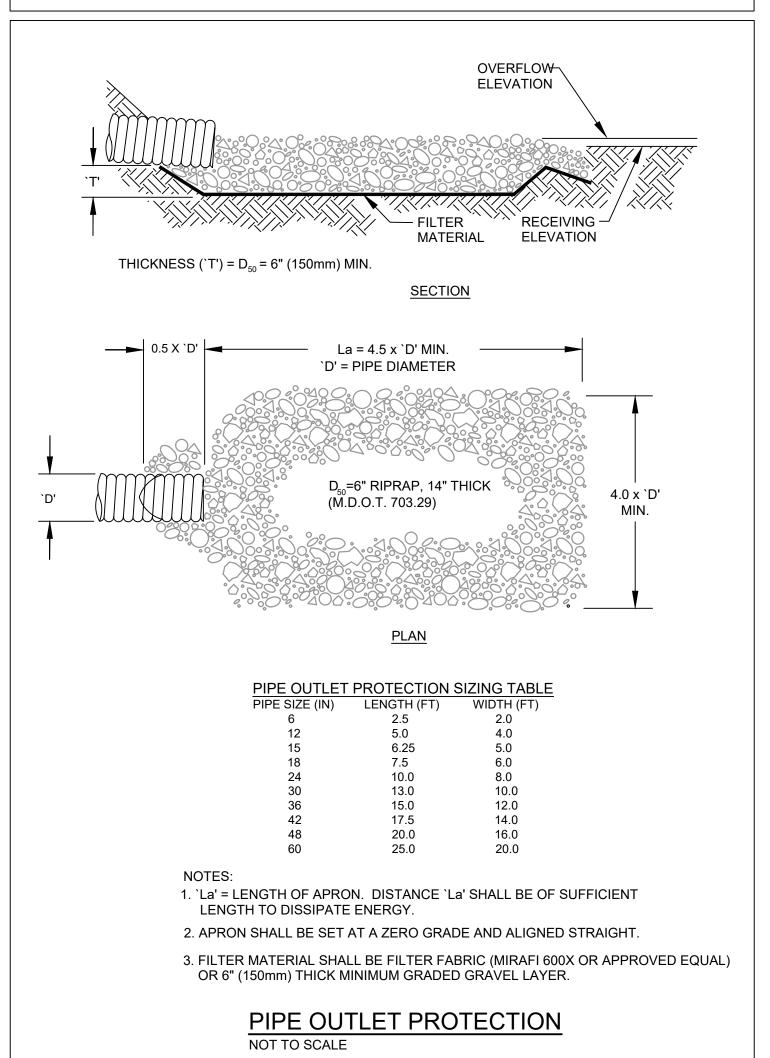


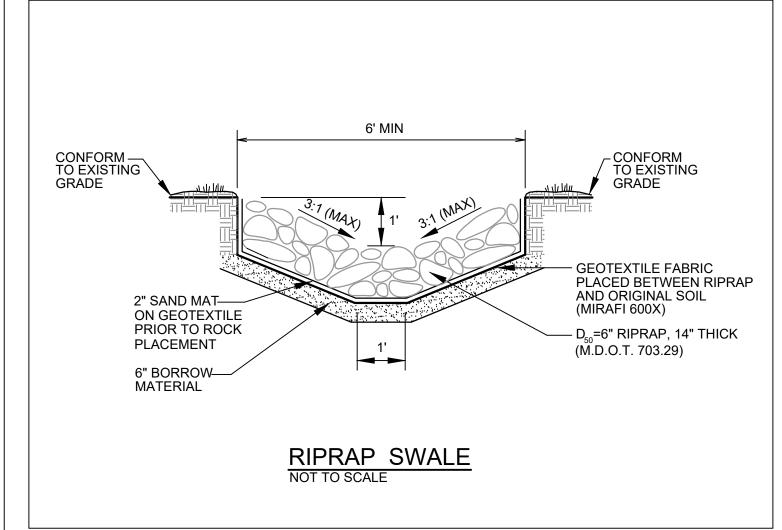


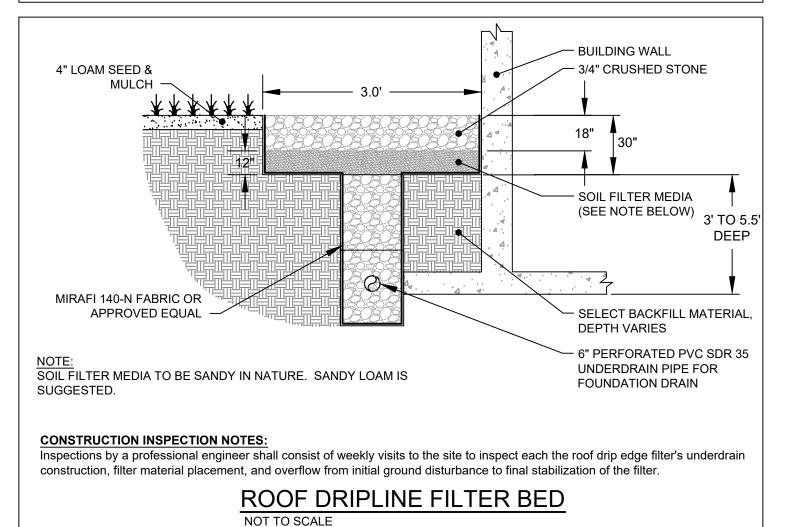
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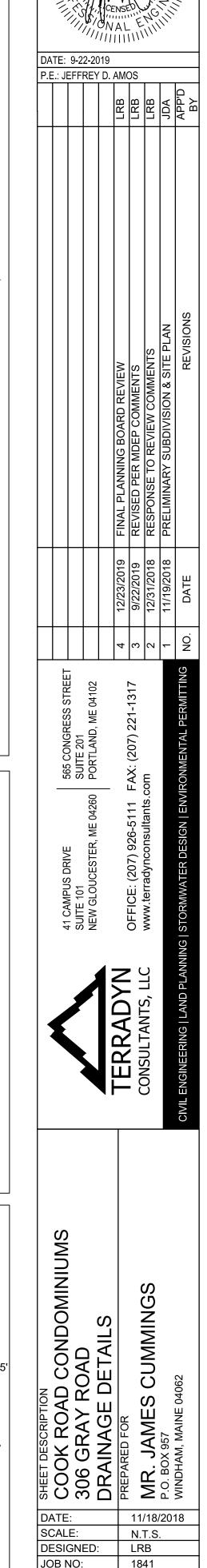












EROSION AND SEDIMENT CONTROL PLAN

A PERSON WHO CONDUCTS, OR CAUSES TO BE CONDUCTED, AN ACTIVITY THAT INVOLVES FILLING, DISPLACING OR EXPOSING SOIL OR OTHER EARTHEN MATERIALS SHALL TAKE MEASURES TO PREVENT UNREASONABLE EROSION OF SOIL OR SEDIMENT BEYOND THE PROJECT SITE OR INTO A PROTECTED NATURAL RESOURCE AS DEFINED IN 38 MRSA § 480-B, EROSION CONTROL MEASURES MUST BE IN PLACE BEFORE THE ACTIVITY BEGINS. MEASURES MUST REMAIN IN PLACE AND FUNCTIONAL LINTIL THE SITE IS PERMANENTLY STABILIZED. ADEQUATE AND TIMELY TEMPORARY AND PERMANENT STABILIZATION MEASURES MUST BE TAKEN. THE SITE MUST BE MAINTAINED TO PREVENT UNREASONABLE EROSION AND SEDIMENTATION. MINIMIZE DISTURBED AREAS AND PROTECT NATURAL DOWNGRADIENT BUFFER AREAS TO THE EXTENT PRACTICABLE.

A. POLLUTION PREVENTION: MINIMIZE DISTURBED AREAS AND PROTECT NATURAL DOWNGRADIENT BUFFER AREAS TO THE EXTENT PRACTICABLE. CONTROL STORMWATER VOLUME AND VELOCITY WITHIN THE SITE TO MINIMIZE SOIL EROSION. MINIMIZE THE DISTURBANCE OF STEEP SLOPES, CONTROL STORMWATER DISCHARGES, INCLUDING BOTH PEAK FLOW RATES AND VOLUME, TO MINIMIZE EROSION AT OUTLETS. THE DISCHARGE MAY NOT RESULT IN EROSION OF ANY OPEN DRAINAGE CHANNELS. SWALES. STREAM CHANNELS OR STREAM BANKS, UPLAND, OR COASTAL OR FRESHWATER WETLANDS OFF THE PROJECT SITE.

WHENEVER PRACTICABLE NO DISTURBANCE ACTIVITIES SHOULD TAKE PLACE WITHIN 50 FFFT OF ANY PROTECTED NATURAL RESOURCE. IF DISTURBANCE ACTIVITIES TAKE PLACE BETWEEN 30 FEET AND 50 FEET OF ANY PROTECTED NATURAL RESOURCE. AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED. IF DISTURBANCE ACTIVITIES TAKE PLACE LESS THAN 30 FEET FROM ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED AND DISTURBED AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 7 DAYS.

A. SEDIMENT BARRIERS. PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, PROPERLY INSTALL SEDIMENT BARRIERS AT THE EDGE OF ANY DOWNGRADIENT DISTURBED AREA AND ADJACENT TO ANY DRAINAGE CHANNELS WITHIN THE PROPOSED DISTURBED AREA. MAINTAIN THE SEDIMENT BARRIERS UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED. INSTALL SEDIMENT BARRIERS ALONG THE CONTOUR WITH THE ENDS TURNED UP SLOPE.

B. CONSTRUCTION ENTRANCE: PRIOR TO ANY CLEARING OR GRUBBING, A CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT THE INTERSECTION WITH THE PROPOSED ACCESS DRIVE AND THE EXISTING ROADWAY TO AVOID TRACKING OF MUD, DUST AND

C. INLET PROTECTION: PRIOR TO DISTURBANCE, INSTALL, SILT SACK SEDIMENT BARRIERS OR OTHER INLET PROTECTION AT CATCH BASIN INLETS RECEIVING RUNOFF FROM DISTURBED AREAS. INLET PROTECTION SHALL BE INSPECTED WEEKLY AND SEDIMENT. SHALL BE REMOVED AND LEGALLY DISPOSED OF WHEN IT REACHES 1/2 OF THE HEIGHT OR DEPTH OF THE BARRIER.

D. RIPRAP: SINCE RIPRAP IS USED WHERE EROSION POTENTIAL IS HIGH. CONSTRUCTION MUST BE SEQUENCED SO THAT THE RIPRAP IS PUT IN PLACE WITH THE MINIMUM DELAY. DISTURBANCE OF AREAS WHERE RIPRAP IS TO BE PLACED SHOULD BE UNDERTAKEN ONLY WHEN FINAL PREPARATION AND PLACEMENT OF THE RIPRAP CAN FOLLOW IMMEDIATELY BEHIND THE INITIAL DISTURBANCE. WHERE RIPRAP IS USED FOR OUTLET PROTECTION, THE RIPRAP SHOULD BE PLACED BEFORE OR IN CONJUNCTION WITH THE CONSTRUCTION OF THE PIPE OR CHANNEL SO THAT IT IS IN PLACE WHEN THE PIPE OR CHANNEL BEGINS TO OPERATE. MAINTAIN TEMPORARY RIPRAP, SUCH AS TEMPORARY CHECK DAMS UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.

E. TEMPORARY STABILIZATION. STABILIZE WITH TEMPORARY SEEDING, MULCH, OR OTHER NON-ERODABLE COVER ANY EXPOSED SOILS THAT WILL REMAIN UNWORKED FOR MORE THAN 7 DAYS EXCEPT, STABILIZE AREAS WITHIN 75 FEET OF A WETLAND OR WATERRODY WITHIN 48 HOURS OR PRIOR TO A PREDICTED STORM EVENT, WHICHEVER COMES FIRST, IF, HAY OR STRAW MULICH IS USED. THE APPLICATION RATE MUST BE 2 BALES (70-90 POUNDS) PER 1000 SF OR 1.5 TO 2 TONS (90-100 BALES) PER ACRE TO COVER 75 TO 90% OF THE GROUND SURFACE. HAY MULCH MUST BE KEPT MOIST OR ANCHORED TO PREVENT WIND BLOWING. AN EROSION CONTROL BLANKET OR MAT SHALL BE USED AT THE BASE OF GRASSED WATERWAYS, STEEP SLOPES (15% OR GREATER) AND ON ANY DISTURBED SOIL WITHIN 100 FEET OF LAKES, STREAMS AND WETLANDS. GRADING SHALL BE PLANNED SO AS TO MINIMIZE THE LENGTH OF TIME BETWEEN INITIAL SOIL EXPOSURE AND FINAL GRADING. ON LARGE PROJECTS THIS SHOULD BE ACCOMPLISHED BY PHASING THE OPERATION AND COMPLETING THE FIRST PHASE UP TO FINAL GRADING AND SEEDING BEFORE STARTING THE SECOND PHASE, AND SO ON.

F. TEMPORARY SEDIMENT SUMP: THE PROPOSED GRAVEL WETLAND SHALL BE EXCAVATED TO SUBGRADE DEPTH AND USED AS A SEDIMENT SUMP DURING CONSTRUCTION OF THE ROAD. THE RIPRAP SWALE, INTERNAL BERM AND SPILLWAY, EMBANKMENT, AND RIPRAP EMERGENCY SPILLWAY SHALL BE CONSTRUCTED PRIOR TO GRUBBING FOR THE ROADWAY CONSTRUCTION. WHEN THE ROADWAY AND ROADSIDE SWALES ARE STABILIZED, ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE BASIN, AND THE GRAVEL WETLAND SHALL BE COMPLETED IN ACCORDANCE WITH THE DETAILS LOCATED IN THE PLAN SET. IF THE BASIN MUST BE DEWATERED FOR CONSTRUCTION, SEDIMENT LADEN WATER SHALL BE PUMPED THROUGH A DIRTBAG SEDIMENT REMOVAL DEVICE.

IF AN AREA WILL NOT BE WORKED FOR MORE THAN ONE YEAR OR HAS BEEN BROUGHT TO FINAL GRADE, THEN PERMANENTLY

STABILIZE THE AREA WITHIN 7 DAYS BY PLANTING VEGETATION, SEEDING, SOD, OR THROUGH THE USE OF PERMANENT MULCH, OR RIPRAP, OR ROAD SUB-BASE. PROTECT SEEDED AREAS WITH MULCH OR, IF NECESSARY, EROSION CONTROL BLANKETS; AND SCHEDULE SODDING, PLANTING, AND SEEDING SO TO AVOID DIE-OFF FROM SUMMER DROUGHT AND FALL FROSTS. NEWLY SEEDED OR SODDED AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC, EXCESSIVE PEDESTRIAN TRAFFIC, AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL-ESTABLISHED WITH 90% COVER BY HEALTHY VEGETATION. IF NECESSARY, AREAS MUST BE REWORKED AND RESTABILIZED IF GERMINATION IS SPARSE, PLANT COVERAGE IS SPOTTY, OR TOPSOIL EROSION IS EVIDENT. ONE OR MORE OF THE FOLLOWING MAY APPLY TO A PARTICULAR SITE.

A SEEDED AREAS FOR SEEDED AREAS PERMANENT STABILIZATION MEANS AN 90% COVER OF THE DISTURBED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.

B. SODDED AREAS. FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.

C. PERMANENT MULCH. FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL. EROSION CONTROL MIX MAY BE USED AS MULCH FOR PERMANENT STABILIZATION ACCORDING TO THE APPROVED APPLICATION RATES AND LIMITATIONS.

D. RIPRAP, FOR AREAS STABILIZED WITH RIPRAP, PERMANENT STABILIZATION MEANS THAT SLOPES STABILIZED WITH RIPRAP HAVE APPROVED GEOTEXTILE TO PREVENT SOIL MOVEMENT FROM BEHIN THE RIPRAP. DETAILS ARE PROVIDED IN THE PLAN SET.

E. PAVED AREAS. FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUBBASE

F. DITCHES, CHANNELS, AND SWALES. FOR OPEN CHANNELS, PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH A 90% COVER OF HEALTHY VEGETATION, WITH A WELL-GRADED RIPRAP LINING, TURF REINFORCEMENT MAT, OR WITH ANOTHER NON-EROSIVE LINING SUCH AS CONCRETE OR ASPHALT PAVEMENT. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE CHANNEL LINING, UNDERCUTTING OF THE CHANNEL BANKS, OR DOWN-CUTTING OF THE CHANNEL

GENERAL CONSTRUCTION REQUIREMENTS
THE FOLLOWING EROSION CONTROL MEASURES SHALL BE FOLLOWED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION OF THIS PROJECT:

A. ALL TOPSOIL SHALL BE COLLECTED, STOCKPILED, SEEDED WITH RYE AT 3 POUNDS/1,000 SF AND MULCHED, AND REUSED AS REQUIRED. SILT FENCING SHALL BE PLACED DOWN GRADIENT FROM THE STOCKPILED LOAM. STOCKPILE TO BE LOCATED BY

DESIGNATION OF THE OWNER AND INSPECTING ENGINEER. B. THE INSPECTING ENGINEER AT HIS/HER DISCRETION, MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES AND/OR SUPPLEMENTAL VEGETATIVE PROVISIONS TO MAINTAIN STABILITY OF EARTHWORKS AND FINISH GRADED AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY SUPPLEMENTAL MEASURES AS DIRECTED BY THE INSPECTING ENGINEER. FAILURE TO COMPLY WITH THE ENGINEER'S DIRECTIONS WILL RESULT IN DISCONTINUATION OF CONSTRUCTION ACTIVITIES.

C. EROSION CONTROL MESH SHALL BE APPLIED IN ACCORDANCE WITH THE PLANS OVER ALL FINISH SEEDED AREAS AS SPECIFIED

D. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN UNTIL THEY ARE ADEQUATELY STABILIZED.

E. ALL EROSION, AND SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN

ACCORDANCE WITH THE DETAILS PROVIDED ON THE PLANS AND MANUFACTURER'S RECOMMENDATIONS.

G. REMOVE ANY TEMPORARY CONTROL MEASURES, SUCH AS SILT FENCE, WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED. REMOVE ANY ACCUMULATED SEDIMENTS AND STABILIZE.

PERMANENT VEGETATIVE COVER SHOULD BE ESTABLISHED ON DISTURBED AREAS WHERE PERMANENT, LONG LIVED VEGETATIVE COVER IS NEEDED TO STABILIZE THE SOIL, TO REDUCE DAMAGES FROM SEDIMENT AND RUNOFF, AND TO ENHANCE THE

PERMANENT LAWN SEED MIXTURE SHALL CONTAIN THE FOLLOWING PERCENTAGES OF SEED TYPES:

F. AREAS SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 INCHES PRIOR TO PLACEMENT OF TOPSOIL

50% BARON BLUEGRASS 35% PENNLAWN FESCUE

15% MANHATTAN II PERENNIAL RYE SEE THE PROJECT SPECIFICATIONS FOR ADDITIONAL SEED REQUIREMENTS.

A. GRADE AS FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE.

B. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS SUCH AS THOSE OFFERED BY THE UNIVERSITY OF MAINE SOIL TESTING LABORATORY. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL COOPERATIVE EXTENSION SERVICE OFFICE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 800 POUNDS PER ACRE OR 18.4 POUNDS PER 1,000 SQUARE FEET USING 10-20-20 (N-P2O5-K2O) OR EQUIVALENT. APPLY GROUND LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB. PER 1,000 SQ. FT).

C. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.D. REMOVE FROM THE SURFACE ALL STONES 2 INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, CONCRETE, CLODS, LUMPS OR

D. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED; THE AREA MUST BE TILLED AND FIRMED AS ABOVE.

E. PERMANENT SEEDING SHOULD BE MADE 45 DAYS PRIOR TO THE FIRST KILLING FROST OR AS A DORMANT SEEDING WITH MULCH AFTER THE FIRST KILLING FROST AND BEFORE SNOWFALL. WHEN CROWN VETCH IS SEEDED IN LATER SUMMER, AT LEAST 35% OF THE SEED SHOULD BE HARD SEED (UNSCARIFIED). IF SEEDING CANNOT BE DONE WITHIN THE SEEDING DATES, MULCH ACCORDING TO THE TEMPORARY MULCHING BMP AND OVERWINTER STABILIZATION AND CONSTRUCTION TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.

F. FOLLOWING SEED BED PREPARATION, SWALE AREAS, FILL AREAS AND BACK SLOPES SHALL BE SEEDED AT A RATE OF 3 LBS./1,000 S.F. WITH A MIXTURE OF 35% CREEPING RED H. FESCUE, 6% RED TOP, 24% KENTUCKY BLUEGRASS, 10% PERENNIAL RYEGRASS, 20% ANNUAL RYEGRASS AND 5% WHITE DUTCH CLOVER.

G. AREAS WHICH HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED SHALL BE MULCHED IMMEDIATELY FOLLOWING SEEDING.

H. AREAS WHICH CANNOT BE SEEDED WITHIN THE GROWING SEASON SHALL BE MULCHED FOR OVER-WINTER PROTECTION AND THE AREA SHOULD BE SEEDED AT THE BEGINNING OF THE GROWING SEASON.

WINTER CONSTRUCTION" IS CONSTRUCTION ACTIVITY PERFORMED DURING THE PERIOD FROM NOVEMBER 1 THROUGH APRIL 15. IF DISTURBED AREAS ARE NOT STABILIZED WITH PERMANENT MEASURES BY NOVEMBER 1 OR NEW SOIL DISTURBANCE OCCURS AFTER NOVEMBER 1, BUT BEFORE APRIL 15, THEN THESE AREAS MUST BE PROTECTED AND RUNOFF FROM THEM MUST BE CONTROLLED BY ADDITIONAL MEASURES AND RESTRICTIONS.

A. PERMANENT STABILIZATION CONSISTS OF AT LEAST 90% VEGETATION, PAVEMENT/GRAVEL BASE OR RIPRAP.

B. DO NOT EXPOSE SLOPES OR LEAVE SLOPES EXPOSED OVER THE WINTER OR FOR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY PROTECTED WITH MULCH.

C. APPLY HAY MULCH AT TWICE THE STANDARD RATE (150 LBS. PER 1.000 SF). THE MULCH MUST BE THICK ENOUGH SUCH THAT THE GROUND SURFACE WILL NOT BE VISIBLE AND MUST BE ANCHORED.

D. USE MULCH AND MULCH NETTING OR AN EROSION CONTROL MULCH BLANKET OR ALL SLOPES GREATER THAN 8 % OR OTHER AREAS EXPOSED TO DIRECT WIND.

E. INSTALL AN EROSION CONTROL BLANKET IN ALL DRAINAGEWAYS (BOTTOM AND SIDES) WITH A SLOPE GREATER THAN 3 %.

F. SEE THE VEGETATION MEASURES FOR MORE INFORMATION ON SEEDING DATES AND TYPES.

G. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SO THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.

H. AN AREA WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT

I. TEMPORARY MULCH MUST BE APPLIED WITHIN 7 DAYS OF SOIL EXPOSURE OR PRIOR TO ANY STORM EVENT. BUT AFTER EVERY WORKDAY IN AREAS WITHIN 100 FEET FROM A PROTECTED NATURAL RESOURCE.

J. AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE PERMANENTLY MULCHED THAT SAME DAY.

K. IF SNOWFALL IS GREATER THAN 1 INCH (FRESH OR CUMULATIVE), THE SNOW SHALL BE REMOVED FROM THE AREAS DUE TO BE SEEDED AND MULCHED.

L. LOAM SHALL BE FREE OF FROZEN CLUMPS BEFORE IT IS APPLIED.

M. ALL VEGETATED DITCH LINES THAT HAVE NOT BEEN STABILIZED BY NOVEMBER 1, OR WILL BE WORKED DURING THE WINTER CONSTRUCTION PERIOD, MUST BE STABILIZED WITH AN APPROPRIATE STONE LINING BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE UNLESS SPECIFICALLY RELEASED FROM THIS STANDARD BY THE DEPARTMENT.

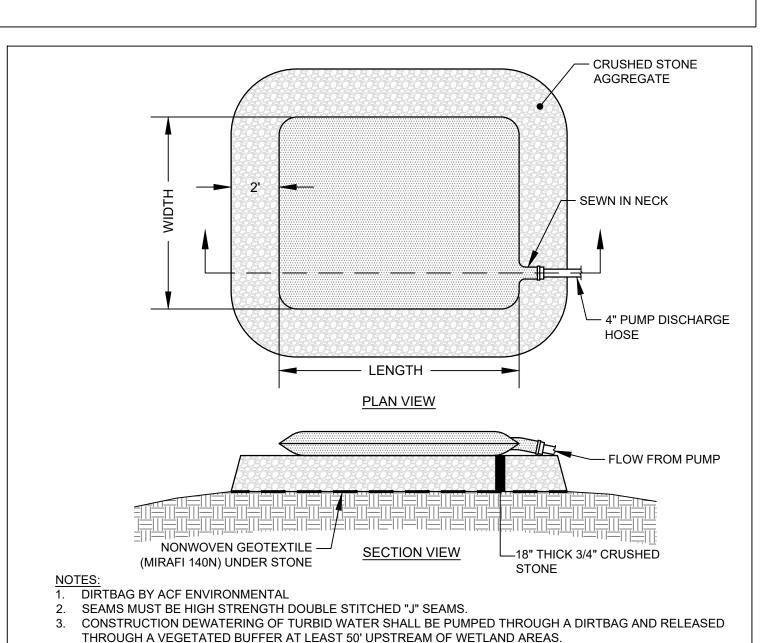
A. MINIMUM EROSION CONTROL MEASURES WILL NEED TO BE IMPLEMENTED AND THE APPLICANT WILL BE RESPONSIBLE TO MAINTAIN ALL COMPONENTS OF THE EROSION CONTROL PLAN UNTIL THE SITE IS FULLY STABILIZED. HOWEVER, BASED ON SITE AND WEATHER CONDITIONS DURING CONSTRUCTION, ADDITIONAL EROSION CONTROL MEASURES MAY NEED TO BE IMPLEMENTED. ALL AREAS OF INSTABILITY AND EROSION MUST BE REPAIRED IMMEDIATELY DURING CONSTRUCTION AND NEED TO BE MAINTAINED UNTIL THE SITE IS FULLY STABILIZED OR VEGETATION IS ESTABLISHED. A CONSTRUCTION LOG MUST BE MAINTAINED FOR THE EROSION AND SEDIMENTATION CONTROL INSPECTIONS AND MAINTENANCE

B. INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION CONTROL MEASURES, MATERIALS STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. INSPECT THESE AREAS AT LEAST ONCE A WEEK AS WELL AS BEFORE AND WITHIN 24 HOURS AFTER A STORM EVENT (RAINFALL), AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL. INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT THE INSPECTIONS.

C. A LOG (REPORT) MUST BE KEPT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF THE PERSONNEL MAKING THE INSPECTION. THE DATE(S) OF THE INSPECTION. AND MAJOR OBSERVATIONS RELATING TO OPERATION OF EROSION AND SEDIMENTATION CONTROLS AND POLLUTION PREVENTION MEASURES. MAJOR OBSERVATIONS MUST INCLUDE: BMPS THAT NEED TO BE MAINTAINED; LOCATION(S) OF BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION: AND LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED THAT DID NOT EXIST AT THE TIME OF INSPECTION. FOLLOW-UP TO CORRECT DEFICIENCIES OR ENHANCE CONTROLS MUST ALSO BE INDICATED IN THE LOG AND DATED, INCLUDING WHAT ACTION WAS TAKEN AND WHEN.

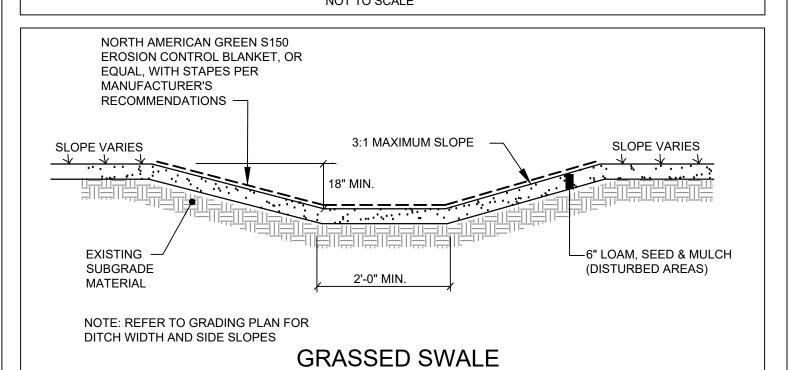
THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY MUST BE PROVIDED UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

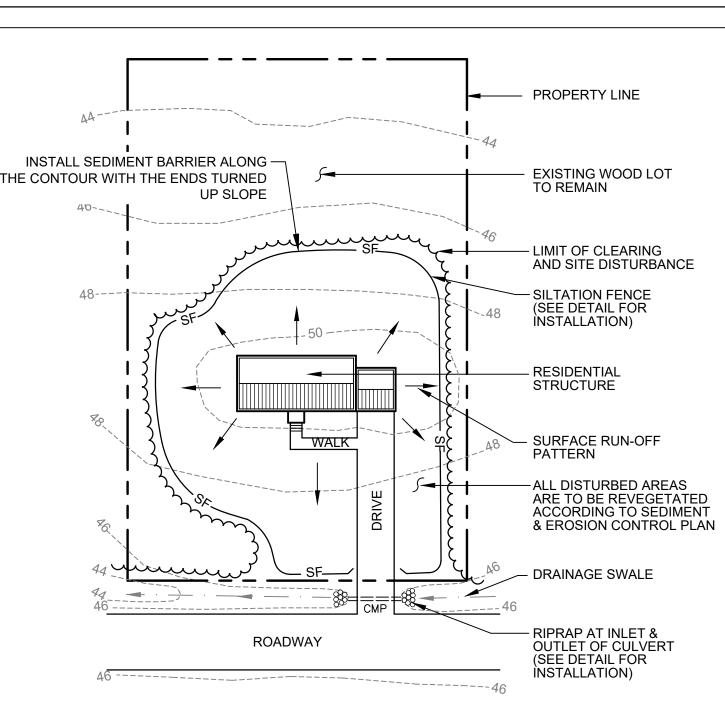
A DEWATERING PLAN IS NEEDED TO ADDRESS EXCAVATION DE-WATERING FOLLOWING HEAVY RAINFALL EVENTS OR WHERE THE EXCAVATION MAY INTERCEPT THE GROUNDWATER TABLE DURING CONSTRUCTION. THE COLLECTED WATER NEEDS TREATMENT AND A DISCHARGE POINT THAT WILL NOT CAUSE DOWNGRADIENT EROSION AND OFFSITE SEDIMENTATION OR WITHIN A RESOURCE.



4. THE LOCATION OF THE DIRTBAG SHALL BE DETERMINED BY THE CONTRACTOR, BUT SHALL IT SHALL NOT BE SITED IN CRITICAL AREAS, SUCH AS WETLANDS.

DIRTBAG DETAIL

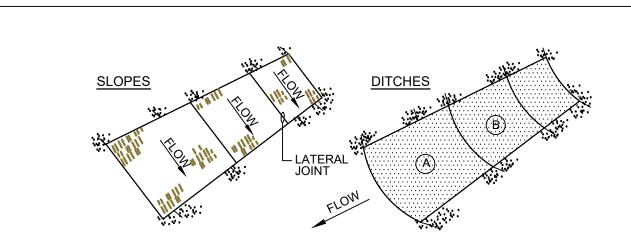




INSPECTION NOTES FOR LOT GRADING AND DRIVEWAY LOCATION

INSPECTIONS BY A PROFESSIONAL ENGINEER SHALL CONSIST OF A VISIT TO THE SITE PRIOR TO CONSTRUCTION TO CONSULT WITH THE EARTHWORK CONTRACTOR AND A POST CONSTRUCTION MEETING TO CONFIRM GRADING ON LOTS AND FOR ALL DRIVEWAYS TO ENSURE RUNOFF IS DIRECTED ACCORDING TO PLANS AND TO OVERSEE THE RE-STABILIZATION OF THE LOT INTO A VEGETATED

TYPICAL EROSION CONTROL MEASURES FOR DWELLING UNITS



I. BURY THE TOP END OF THE MESH MATERIAL IN A 6" TRENCH AND BACKFILL AND TAMP TRENCHING SECURE END WITH STAPLES AT 6" SPACING, 4" DOWN FROM EXPOSED END.

2. FLOW DIRECTION JOINTS TO HAVE UPPER END OF LOWER STRIP BURIED WITH UPPER LAYERS OVERLAPPED 4" AND STAPLED. OVERLAP B OVER A.

3. LATERAL JOINTS TO HAVE 4" OVERLAP OF STRIPS. STAPLE 18" ON CENTER.

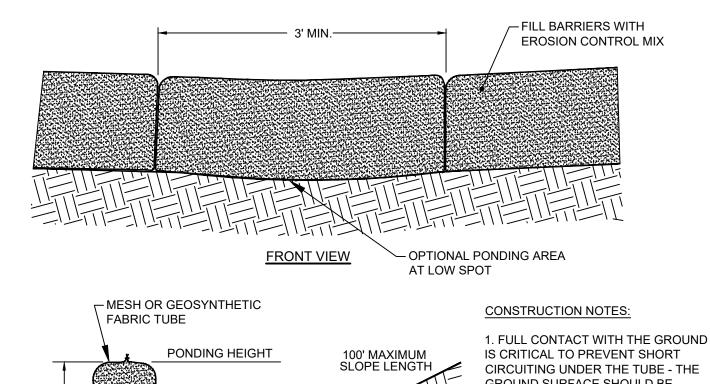
4. STAPLE OUTSIDE LATERAL EDGE 2' ON CENTER.

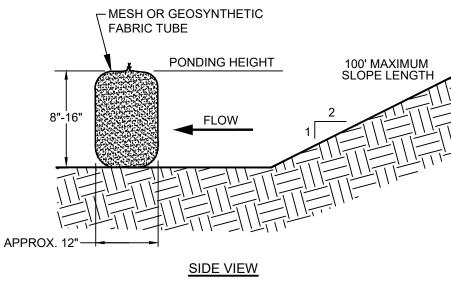
5. WIRE STAPLES TO BE MIN. OF #11 WIRE, 6" LONG & 1-1/2" WIDE.

6. USE NORTH AMERICAN GREEN DS 150 (OR APPROVED EQUAL) ON SLOPES BETWEEN 4:1-2:1. USE NORTH AMERICAN GREEN VMAX SC250 PERMANENT TURF REINFORCEMENT MAT (OR APPROVED EQUAL) ON SLOPES 2:1 AND STEEPER..

EROSION CONTROL BLANKET

NOT TO SCALE





FILTER SOCK

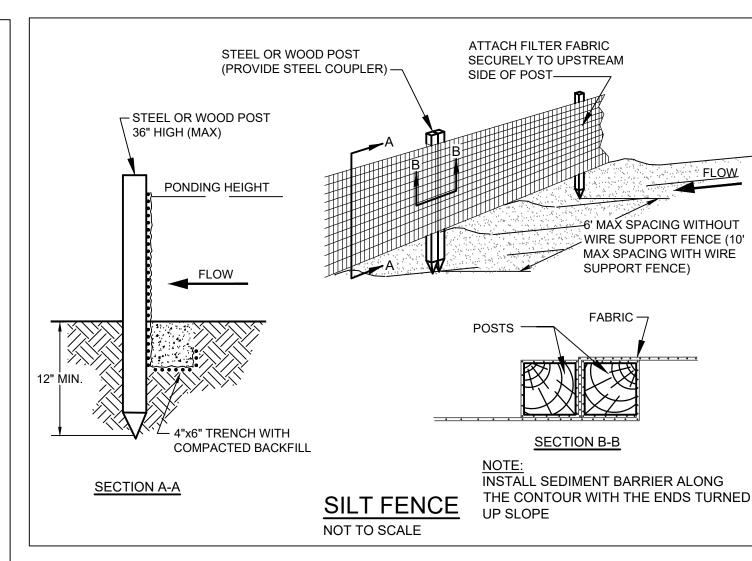
NOT TO SCALE

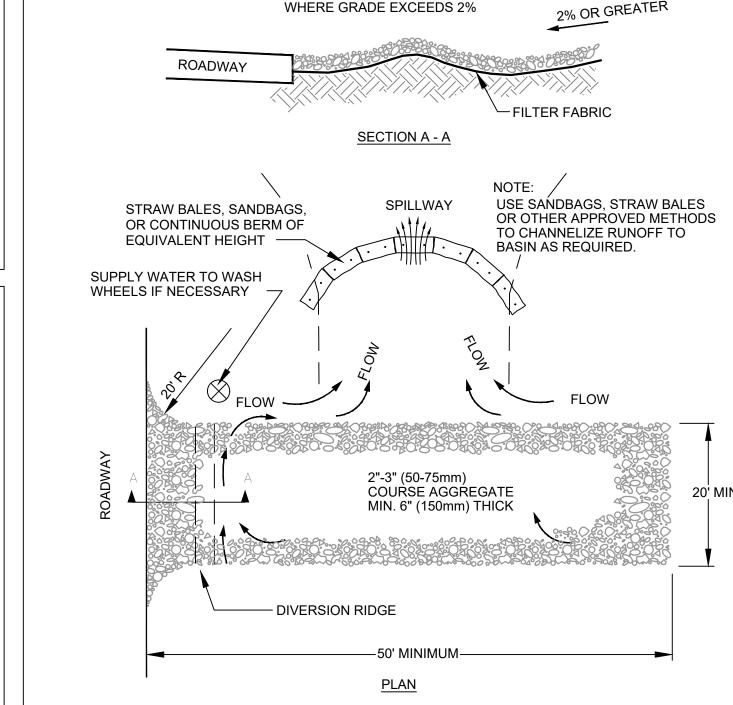
CIRCUITING UNDER THE TUBE - THE GROUND SURFACE SHOULD BE SMOOTH AND LEVEL. IN WOODED AREAS, PROTRUDING ROOTS AND DEBRIS MAY NEED TO BE REMOVED. IN GRASSED AREAS, THE GRASS NEEDS TO BE EITHER MOWED OR COMPRESSED DOWN.

2. STAKING MAY BE NECESSARY ON STEEP SLOPES.

3. INSTALL SEDIMENT BARRIER ALONG THE CONTOUR WITH THE ENDS TURNED UP SLOPE.

4. UPON FINAL STABILIZATION, THE TUBE CAN BE CUT OPEN AND THE MATERIAL SPREAD OUT ONTO THE GROUND. THE MESH MATERIAL SHOULD BE REMOVED





DIVERSION RIDGE REQUIRED

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.

2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.

3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

STABILIZED CONSTRUCTION ENTRANCE

. DURING PERIODS OF WINTER CONSTRUCTION (NOV. 15 THROUGH CONTROL APRIL 15), THE CONTRACTOR SHALL MIX BERM INSTALL EROSION CONTROL MIX BERMS IN LIEU OF SILT FENCE. ──── 1'-0" MIN. 🚤 2. INSTALL SEDIMENT BARRIER ALONG THE CONTOUR WITH THE ENDS TURNED UP SLOPE. GROUND

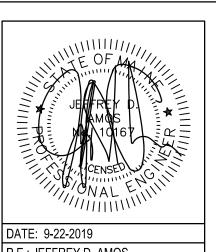
EROSION CONTROL MIX SHALL CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES & MAY CONTAIN ROCKS LESS THAN 4" IN DIAMETER. EROSION CONTROL MIX MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH. THE MIX COMPOSITION SHALL MEET THE FOLLOWING STANDARDS: - THE ORGANIC MATTER CONTENT SHALL BE BETWEEN 80% - 100% DRY WEIGHT BASIS

- PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 6" SCREEN AND A MINIMUM OF 70%, MAXIMUM OF 85% PASSING A 0.75" SCREEN - THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED - LARGE PORTIONS OF SILTS, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX. - SOLUBLE SALTS CONTENT SHALL BE < 4.0 mmhos/cm.

NOT TO SCALE

- ph SHALL FALL BETWEEN 5.0 - 8.0.

EROSION CONTROL MIX BERM

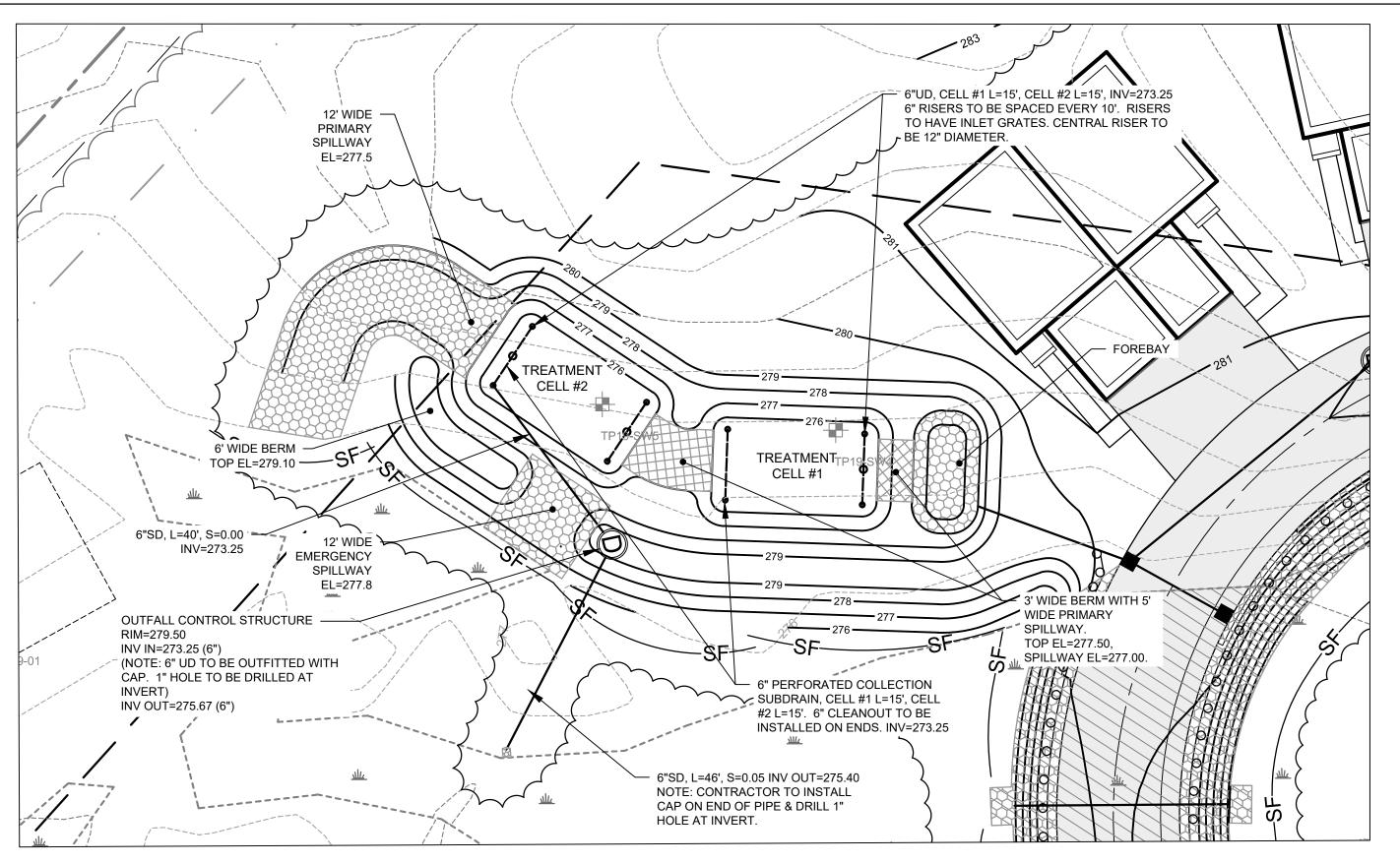


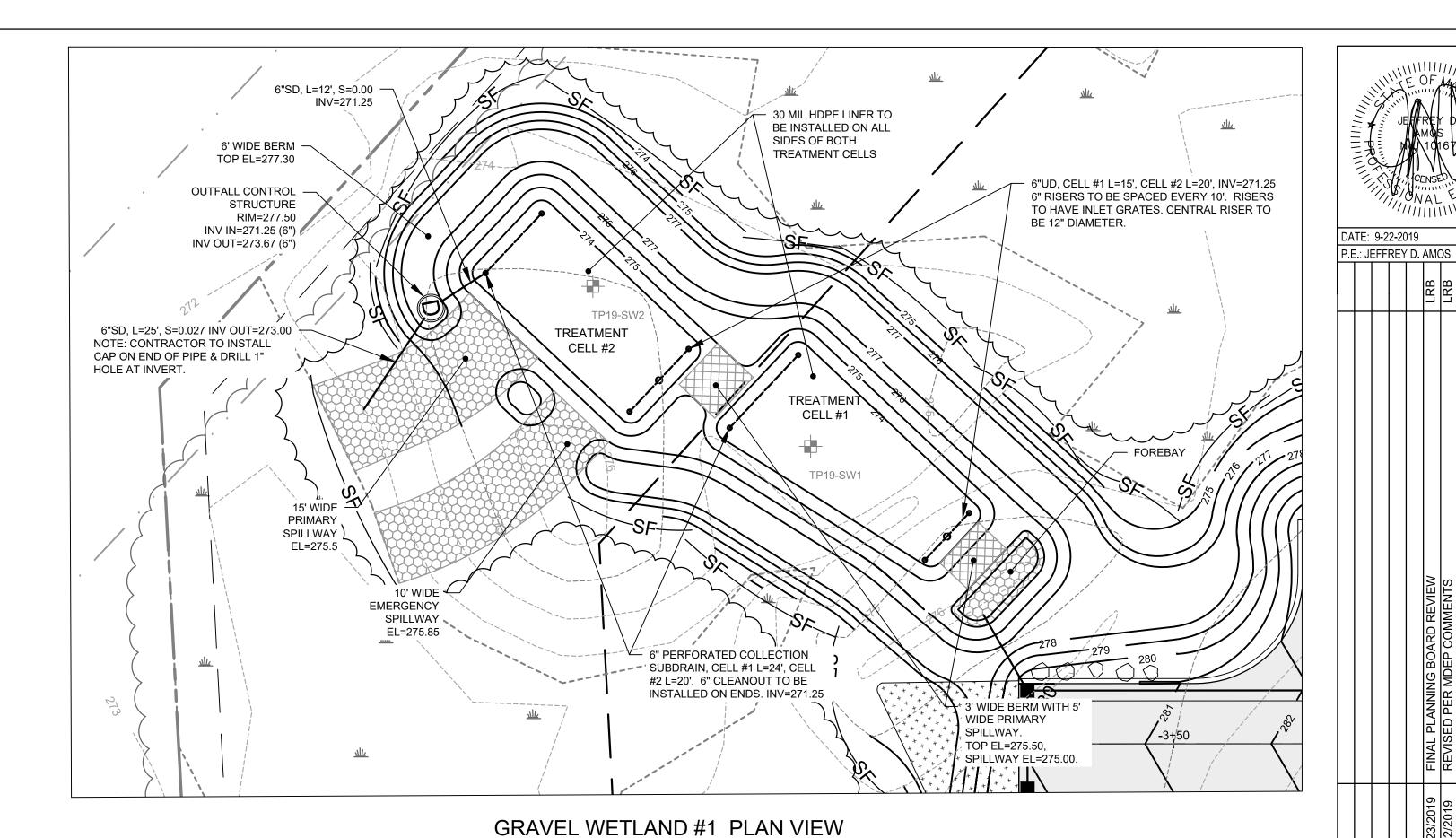
FINAL PLANNING BOARD REVIEW REVISED PER MDEP COMMENTS LRB	JDA	APP'D BY
G BOARD REVIEW IDEP COMMENTS		
		REVISIONS
12/23/2019	11/19/2018	DATE

ONDOMINIUMS

11/18/2018 DESIGNED: LRB

JOB NO: 1841





GRAVEL WETLAND #2 PLAN VIEW

OUTFALL CONTROL PERFORATED RISER PIPES WITH INLET STRUCTURE GRATE. TOP OF PIPE = TOP OF INTERIOR BERMS. NOTE: CENTRAL RISER TO BE 12" 4" THICK LAYER OF DIAMETER. ALL OTHERS TO BE 6" 6' WIDE OUTER BERM LOAM, SEED & MULCH DIAMETER. RISERS TO EXTEND 18" ABOVE WETLAND SOIL SURFACE. — 6" HDPE CLEANOUT WITH CAP TO BE ——— **EMERGENCY SPILLWAY** INSTALLED AT ENDS OF COLLECTION LINE. CLEANOUTS TO BE PERFORATED WITHIN 3' WIDE 3' WIDE GRAVEL LAYERS AND SOLID WITHIN INTERIOR **INTERIOR** WETLAND SOIL. BERM , BERM ----CLEAR & GRUB ORGANIC WETLAND SOIL MIXTURE: THE WETLAND SOIL SHOULD HAVE A LOW HYDRAULIC CONDUCTIVITY (0.1-0.01 FT/DAY). THIS SOIL CAN BE TREATMENT CELL #1 TREATMENT CELL #2 MANUFACTURED USING COMPOST, SAND AND FIND BOTTOM EL **BOTTOM EL** SOILS, INTO A BLEND WITH MORE THAN 15% ORGANIC 6" DIAMETER MATTER. IT SHOULD CONTAIN MORE THAN 15% SILT PERFORATED (PASSING THE #200 SIEVE); BUT WITH A CLAY SIZE DISTRIBUTION LINE PORTION THAT IS LESS THAN 2%. DO NOT USE GEOTEXTILES BETWEEN THE HORIZONTAL LAYERS OF 3/4" ANGULAR CRUSHED INVERT TO EQUAL 4" THIS SYSTEM AS THEY WILL CLOG DUE TO FINES AND STONE TO BE INSTALLED TO BELOW THE FLOOR OF MAY RESTRICT ROOT GROWTH. A DEPTH OF 6" BELOW THE TREATMENT CELLS. 6" SOLID UNDERDRAIN PIPES. 6" SOLID HDPE - 4' WIDE, 2' DEEP (MIN) CONSTRUCTION INSPECTION NOTES **6" DIAMETER** HDPE 8" ORGANIC WETLAND SOIL-INSPECTION BY A PROFESSIONAL ENGINEER WILL CONSIST OF CUT OFF TRENCH PERFORATED POND CONSTRUCTION NOTES 6" DIAMETER 6" DIAMETER WEEKLY VISITS TO THE SITE TO INSPECT THE INSTALLATION OF DISTRIBUTION 3" PEA GRAVEL-PERFORATED PERFORATED 1. CONTRACTOR SHALL REMOVE ALL TOPSOIL AND ORGANIC MATERIAL FROM - 2' DEEP SUMP EACH POND'S EMBANKMENT CONSTRUCTION, STORMWATER INLET. LINE COLLECTION LINE COLLECTION LINE EMBANKMENT AND POND CONSTRUCTION AREA. UNDERDRAINS, FILTER MATERIAL MAKEUP AND PLACEMENT. 24" - 3/4" ANGULAR CRUSHED STONE-2. SCARIFY SUBGRADE TO ESTABLISH INTERFACE FOR ALL FILLS. OUTLET CONTROL STRUCTURE, CLAY LINER (IF APPLICABLE), AND GRAVEL WETLAND 1- PLACE 30 MIL HDPE LINER BETWEEN GRAVEL 3. CONSTRUCTION MATERIAL SHALL MEET M.D.O.T. SPEC 703.18 EMERGENCY SPILLWAY CONSTRUCTION FROM INITIAL GROUND LAYER & ADJACENT SOIL. 6" HDPE CLEANOUT WITH CAP TO BE -4. COMPACT IN 12" LIFTS TO 92% OF MAXIMUM DRY DENSITY. DISTURBANCE TO FINAL STABILIZATION OF THE POND. AN INSTALLED AT ENDS OF COLLECTION LINE. 5. INSTALL RIPRAP AND EROSION CONTROL MESH WHERE SPECIFIED. INSPECTION OF THE UNDERDRAINED GRAVEL OUTLET SHALL ALSO GRAVEL WETLAND 2 - PLACE NON WOVEN GEOTEXTILE FABRIC (MIRIFI 6. LOAM, SEED & STABILIZE IN ACCORDANCE WITH SEDIMENTATION AND S600 OR APPROVED EQUAL) BETWEEN GRAVEL LAYER & ADJACENT BE PERFORMED ONE YEAR AFTER THE FINAL STABILIZATION OF **EROSION CONTROL PLAN & NOTES.**

NOT TO SCALE

GRAVEL WETLAND INSTALLATION NOTES:

1. THE MINIMUM SPACING BETWEEN THE SUBSURFACE PERFORATED DISTRIBUTION LINE AND THE SUBSURFACE PERFORATED COLLECTION DRAIN AT EITHER END OF THE GRAVEL IN EACH TREATMENT CELL IS 15 FT.

2. THERE SHOULD BE A MINIMUM HORIZONTAL TRAVEL DISTANCE OF 15 FT WITHIN THE GRAVEL LAYER IN EACH CELL.

3. VERTICAL PERFORATED OR SLOTTED RISER PIPES DELIVER WATER FROM THE SURFACE DOWN TO THE SUBSURFACE, PERFORATED OR SLOTTED DISTRIBUTION LINES. THESE RISERS SHALL HAVE A MAXIMUM SPACING OF 10 FEET.

4. SLOTTED VERTICAL RISERS SHALL HAVE A MINIMUM DIAMETER OF 12" FOR THE CENTRAL RISER AND 6" FOR END RISERS. THE VERTICAL RISERS SHALL NOT BE CAPPED, BUT RATHER COVERED WITH AN INLET GRATE.

5. VERTICAL CLEANOUTS CONNECTED TO THE DISTRIBUTION AND COLLECTION SUBDRAINS, AT EACH END, SHALL BE PERFORATED OR SLOTTED ONLY WITHIN THE GRAVEL LAYER, AND SOLID WITHIN THE WETLAND SOIL AND STORAGE AREA ABOVE.

6. TREATMENT CELL FLOOR TO BE GRADED FLAT.

7, BERMS AND WEIRS SEPARATING THE FOREBAY AND TREATMENT CELLS SHOULD BE CONSTRUCTED WITH CLAY, OR NON-CONDUCTIVE SOILS, AND/OR A FINE GEOTEXTILE, OR SOME COMBINATION THEREOF, TO AVOID WATER SEEPAGE AND SOIL PIPING THROUGH THESE EARTHEN DIVIDERS.

8. THE SYSTEM SHOULD BE PLANTED TO ACHIEVE A RIGOROUS ROOT MAT WITH GRASSES, FORBS, AND SHRUBS WITH OBLIGATE AND FACULTATIVE WETLAND SPECIES.

9. THE SUBAREA DRAINING TO A CREATED WETLAND MUST BE COMPLETELY STABLE BEFORE RUNOFF IS DIRECTED TO THE BASIN TO PREVENT SEDIMENTATION OF THE DRAINAGE LAYER; OR ALL RUNOFF SHOULD BE RE-DIRECTED UNTIL CONSTRUCTION IS FINALIZED. THE VEGETATION WITHIN THE STRUCTURE IS EQUALLY IMPORTANT AND MUST BE WELL ESTABLISHED BEFORE IT CAN ACCEPT ANY RUNOFF.

10. GRAVEL WETLAND STORMWATER AREA TO BE SEEDED WITH "NEW ENGLAND WETMIX" AS DISTRIBUTED BY NEW ENGLAND WETLAND PLANTS, INC., 820 WEST STREET, AMHERST, MA 01002, PHONE 413-548-8000, EMAIL INFO@NEWP.COM, OR APPROVED EQUIVALENT. APPLY AT A RATE OF 1 LB/2.500 SF.

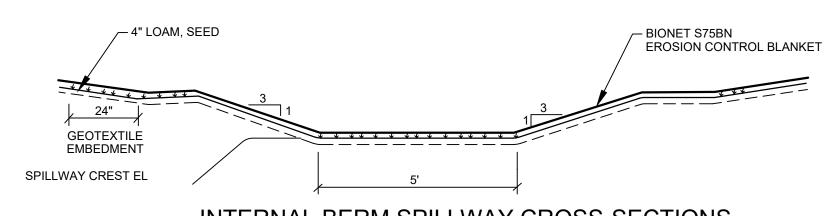
11. THE SEEDS WILL NOT GERMINATE UNDER INUNDATED CONDITIONS. IF PLANTED DURING THE FALL MONTHS THE SEED MIX WILL GERMINATE THE FOLLOWING SPRING. DURING THE FIRST SEASON OF GROWTH SEVERAL SPECIES WILL PRODUCE SEEDS WHILE OTHER SPECIES WILL PRODUCE SEEDS AFTER THE SECOND GROWING SEASON. NOT ALL SPECIES WILL GROW IN ALL WETLAND SITUATIONS. THIS MIX IS COMPRISED OF THE WETLAND SPECIES MOST LIKELY TO GROW IN CREATED/RESTORED WETLANDS AND SHOULD PRODUCE MORE THAN 75% GROUND COVER IN TWO FULL GROWING SEASONS.

12. THE WETLAND SEEDS IN THIS MIX CAN BE SOWN BY HAND, WITH A HAND-HELD SPREADER, OR HYDRO-SEEDED ON LARGE OR HARD TO REACH SITES. LIGHTLY RAKE TO ENSURE GOOD SEED-TO-SOIL CONTACT. SEEDING CAN TAKE PLACE ON FROZEN SOIL, AS THE FREEZING AND THAWING WEATHER OF LATE FALL AND LATE WINTER WILL WORK THE SEED INTO THE SOIL. IF SPRING CONDITIONS ARE DRIER THAN USUAL, WATERING MAY BE REQUIRED. IF SOWING DURING THE SUMMER MONTHS, SUPPLEMENTAL WATERING WILL LIKELY BE REQUIRED UNTIL GERMINATION. A LIGHT MULCH OF CLEAN, WEED FREE STRAW IS RECOMMENDED.

13. THE POND CONSTRUCTION SHOULD BE ONLY CONSTRUCTED UNDER THE SUPERVISION OF THE DESIGN ENGINEER.

CROSS SECTION VIEW - GRAVEL WETLAND

	GRAVEL WETLAND #1	GRAVEL WETLAND #2
BOTTOM EL	274.00	276.00
TOP OF OUTER BERM EL.	277.30	279.10
INTERNAL BERM TOP EL.	275.50	277.50
INTERNAL BERM SPILLWAY EL.	275.00	277.00
INTERNAL SPILLWAY WIDTH	5'	5'
PRIMARY SPILLWAY EL	275.50	277.50
PRIMARY SPILLWAY WIDTH	15'	12'
EMERGENCY SPILLWAY EL.	275.85	277.80
EMERGENCY SPILLWAY WIDTH	10'	12'
PERFORATED CELL SUBDRAINS	271.25	273.25
2 YR/24 HR DHW	275.65	277.60
10 YR/24 HR DHW	275.79	277.73
25 YR/24 HR DHW	275.85	277.78
100 YR/24 HR DHW	275.94	277.85



INTERNAL BERM SPILLWAY CROSS-SECTIONS

EMBANKMENT CONSTRUCTION

WHERE SPECIFIED ON PLANS

DRILL 1" HOLE IN INVERT OF CAP.

EXISTING

GROUND

MEETING M.D.O.T. SPECIFICATION 703.

2. PI ACE BORROW MATERIAL IN 12" LIFTS

1. CONSTRUCTION OF COMMON BORROW MATERIAL

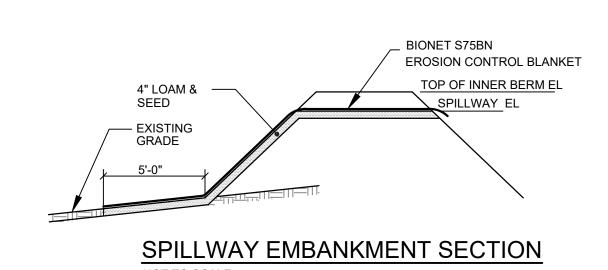
COMPACTED TO 95% OF MAXIMUM DRY DENSITY

3. INSTALL RIPRAP AND EROSION CONTROL MESH

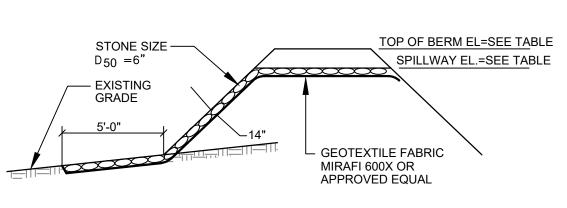
4. LOAM, SEED, AND STABILIZE IN ACCORDANCE

- 6" OUTFALL PIPE WITH CAP. CONTRACTOR TO

WITH SEDIMENTATION AND EROSION CONTROL



COOK ROAD CONDOMINIUMS 306 GRAY ROAD POND DETAILS & NOTES	PREPARED FOR MR. JAMES CUMMINGS P.O. BOX 957 WINDHAM, MAINE 04062
ATE: CALE: ESIGNED: DB NO: ILE:	11/18/2018
ESIGNED:	LRB
OR NO:	1841
JB NO.	1041
HEFT	
<u> </u>	- 5.3

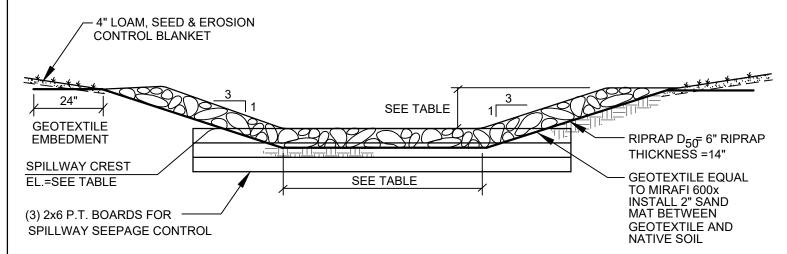


EMBANKMENT CONSTRUCTION 1. CONSTRUCTION OF COMMON BORROW MATERIAL MEETING M.D.O.T. SPECIFICATION. 2. PLACE BORROW MATERIAL IN 12" LIFTS COMPACTED TO 95% OF MAXIMUM DRY DENSITY. 3. INSTALL RIPRAP AND EROSION CONTROL MESH

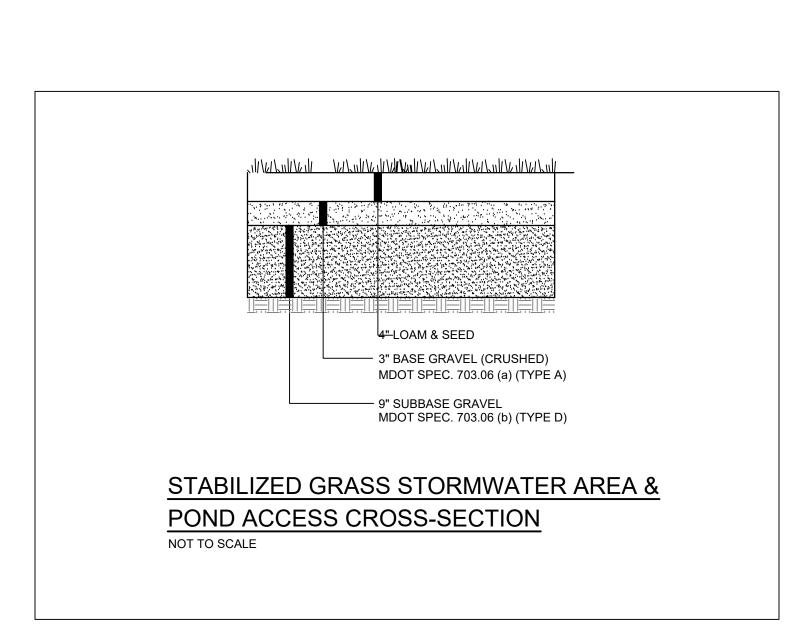
WHERE SPECIFIED ON PLANS 4. LOAM, SEED, AND STABILIZE IN ACCORDANCE WITH SEDIMENTATION AND EROSION CONTROL

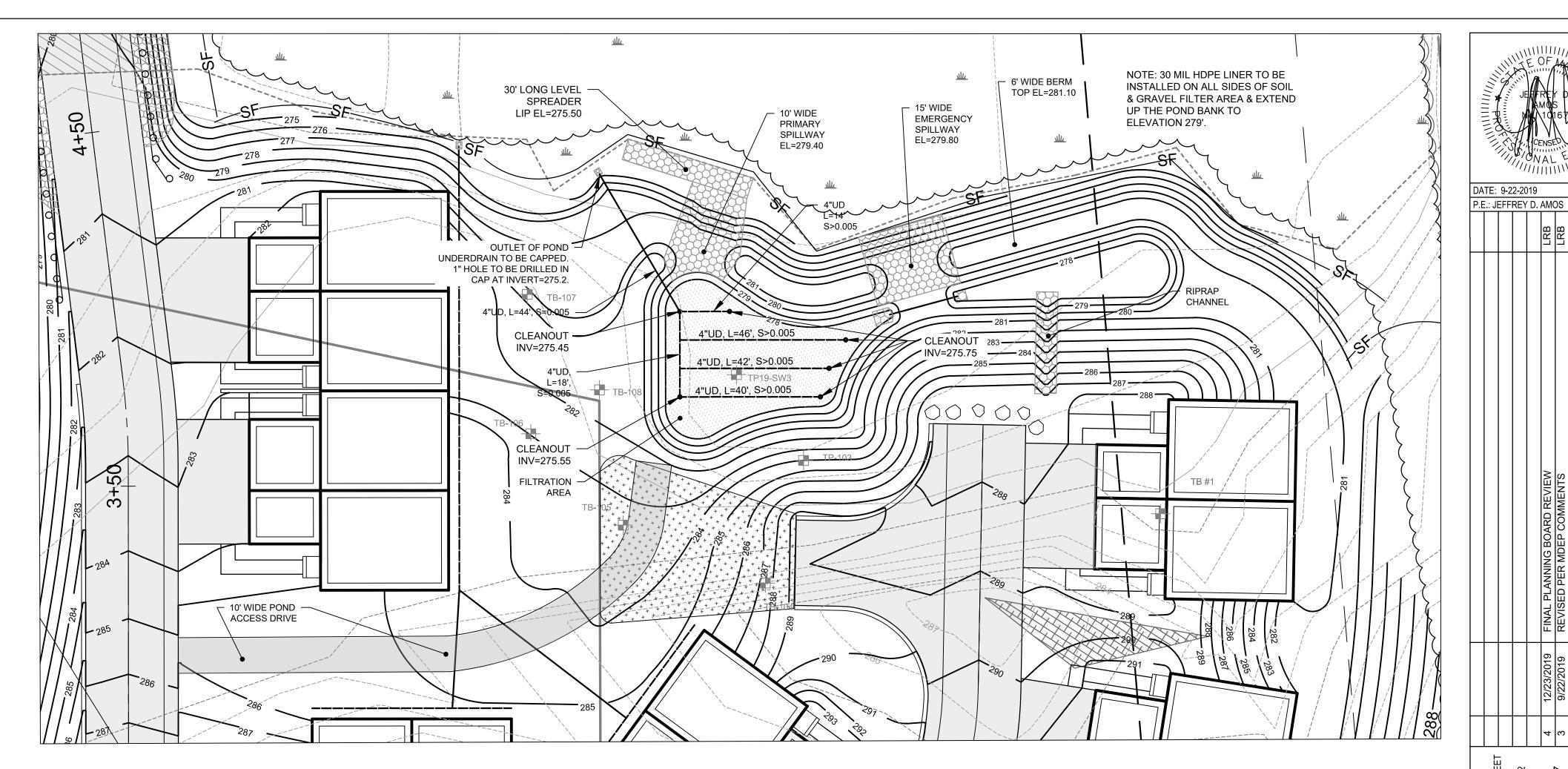
EMERGENCY & PRIMARY SPILLWAY SECTION

NOT TO SCALE



EMERGENCY & PRIMARY SPILLWAY CROSS-SECTION NOT TO SCALE





FILTER BASIN #1 PLAN VIEW

11/18/2018

LRB

1841

SCALE:

JOB NO:

SHEET

FILE:

DESIGNED:

LOAMY SAND TOPSOIL WITH MINIMAL CLAY CONTENT AND

BETWEEN 15-25% FINES PASSING THE #200 SIEVE.

MODERATELY FINE, SHREDDED BARK OR WOOD FIBER

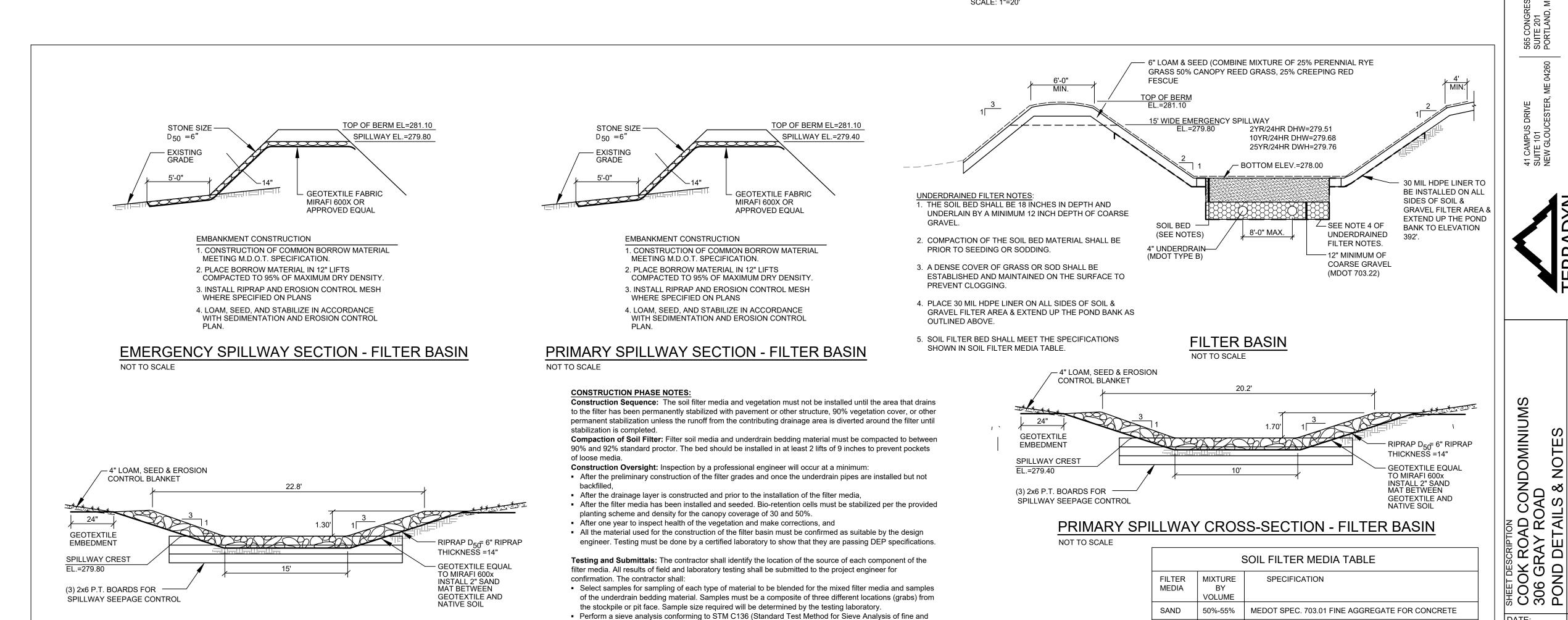
MULCH WITH LESS THAN 5% PASSING THE #200 SIEVE

TOPSOIL | 20%-30%

MULCH 20%-30%

FILTER BASIN #1 DETAILS

NOT TO SCALE



Course Aggregates 1996A) on each type of the sample material. The resulting soil filter media mixture

must have 8% to 12% by weight passing the #200 sieve, a clay content of less than 2% (determined

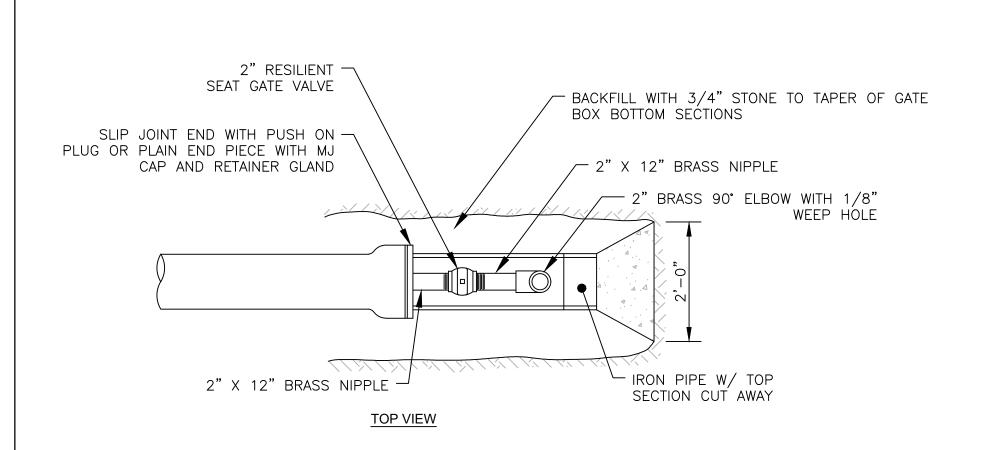
Perform a permeability test on the soil filter media mixture conforming to ASTM D2434 with the mixture

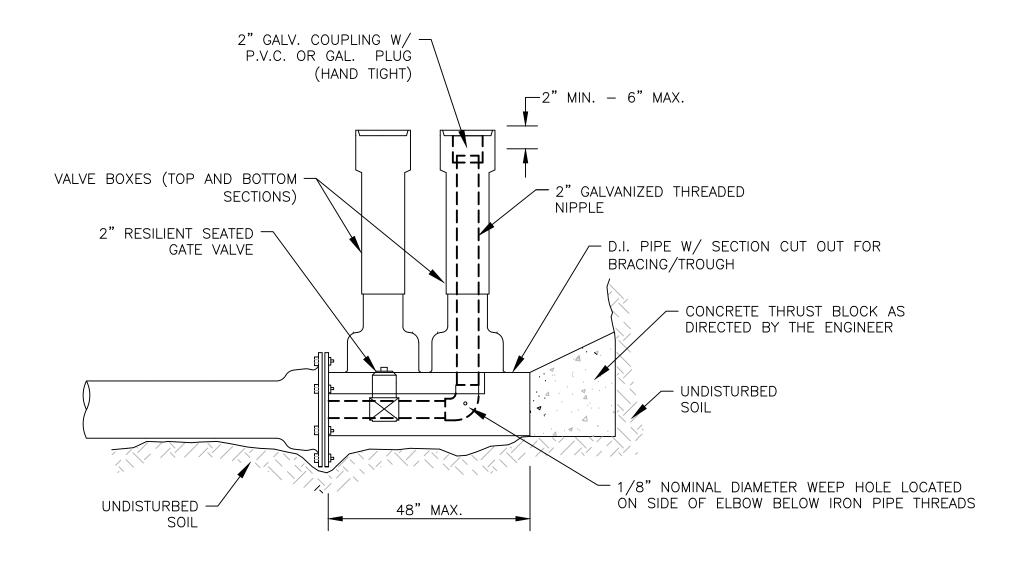
hydrometer grain size analysis) and have 10% dry weight of organic matter.

compacted to 90-92% of maximum dry density based on ASTM D698.

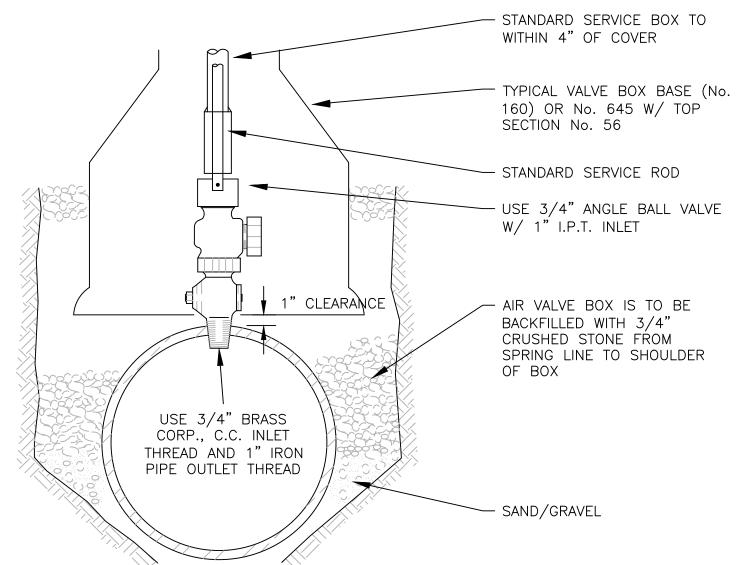
EMERGENCY SPILLWAY CROSS-SECTION - FILTER BASIN

NOT TO SCALE

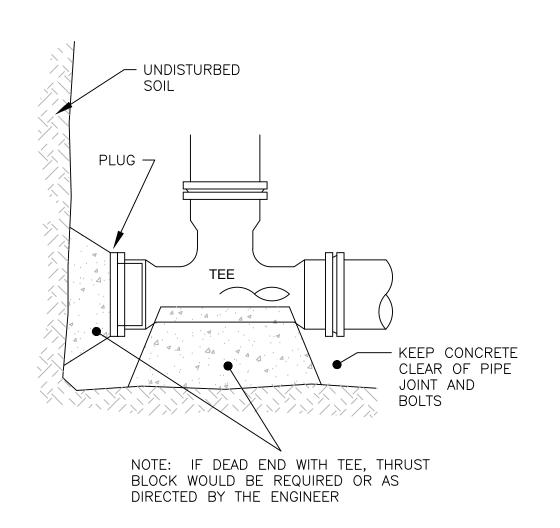


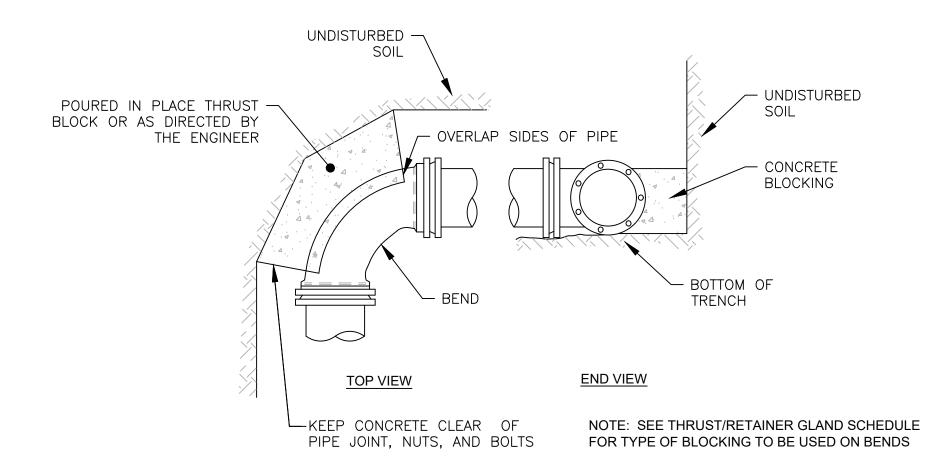


STANDARD 2" BLOW OFF

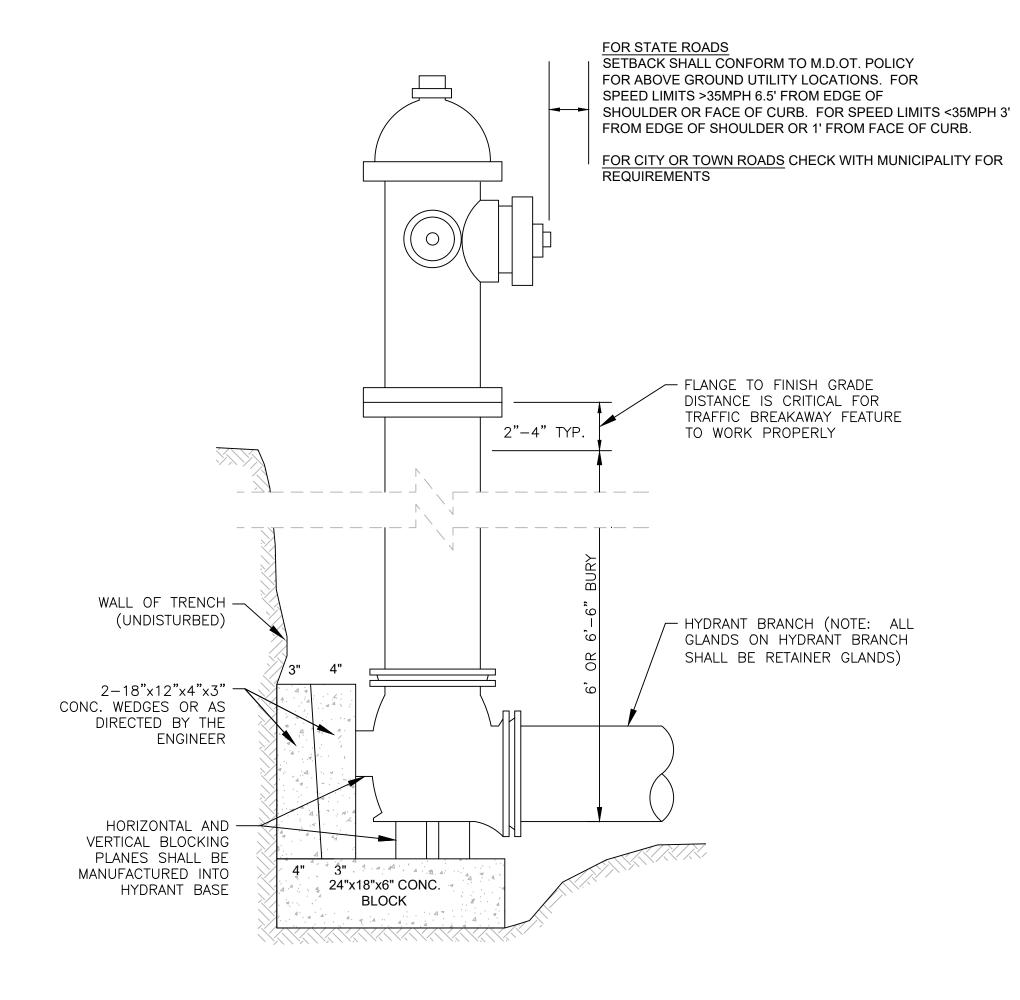


TYPICAL AIR VALVE (1)





STANDARD BEND BLOCKING



TYPICAL HYDRANT INSTALLATION DETAIL



DATE: 9-22-2019

P.E.: JEFFREY D. AMOS

K ROAD CONDOMINIUMS
SRAY ROAD
DARD WATER DETAILS

11/18/2018

LRB

1841

DATE:

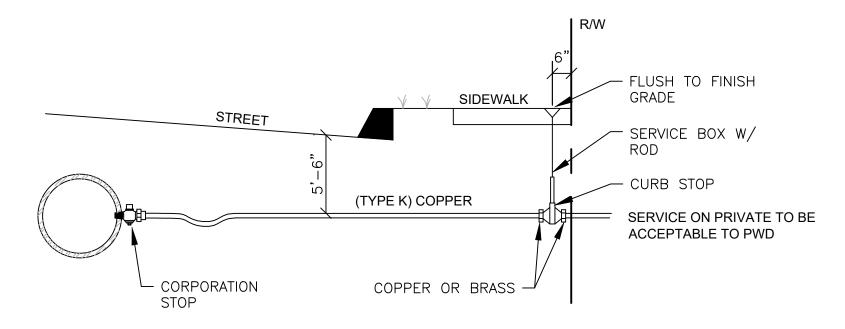
SCALE: DESIGNED:

JOB NO:

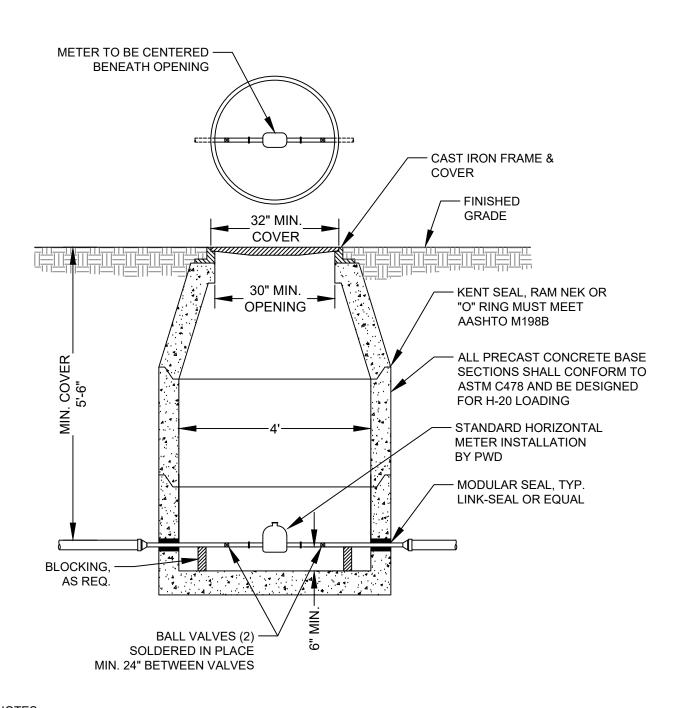
SHEET **C-5.5**

SERVICE TAP (3/4" AND 1" C.C. THREAD)

SERVICE SADDLE (1-1/2" AND 2" C.C. THREAD)



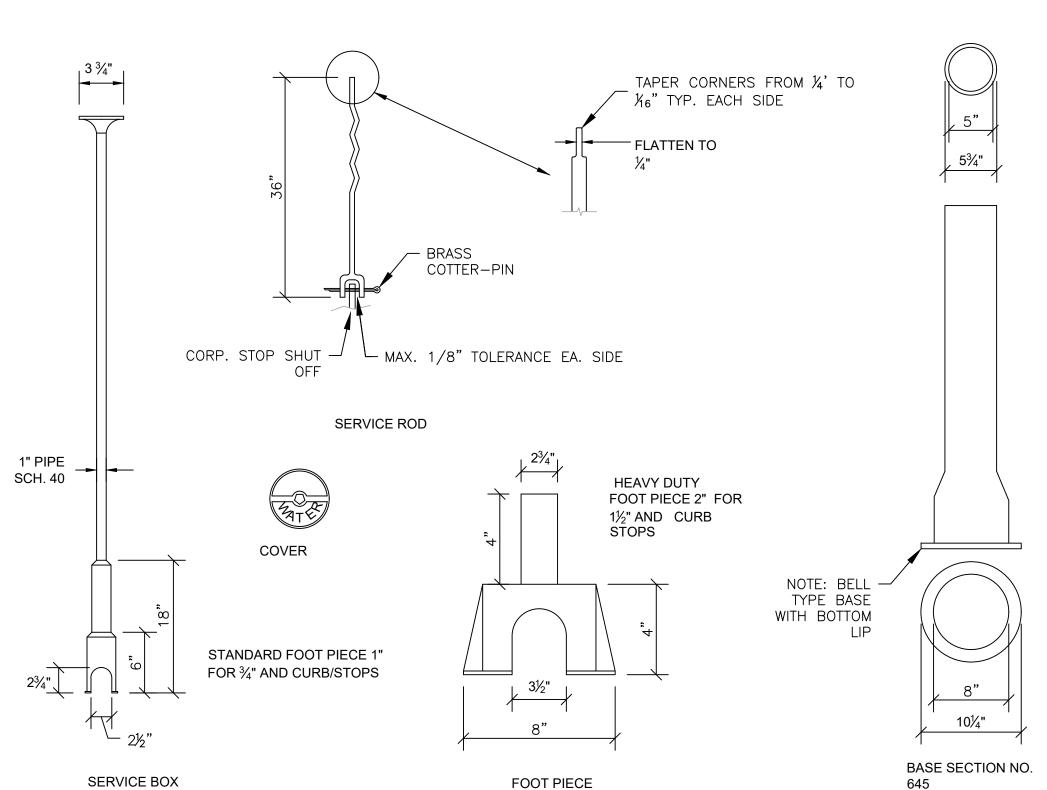
TYPICAL SERVICE CONNECTION



NOTES: 1. THE METER PIT SHALL BE LOCATED ON PRIVATE PROPERTY BETWEEN 10' AND 20' FROM THE

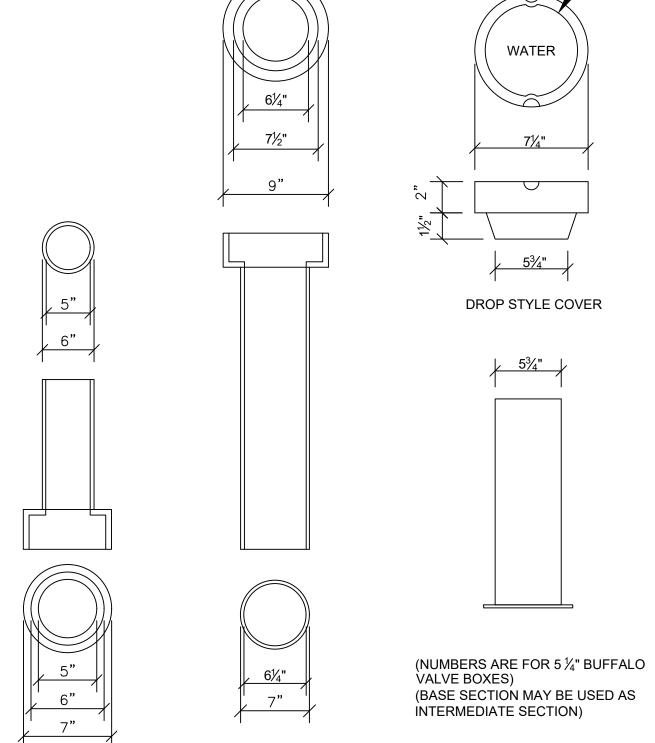
- PROPERTY LINE.
- 2. COVER SHALL HAVE "WATER" CAST IN 3. ALL PIPING INSIDE AND EXTENDING THROUGH THE METER PIT SHALL BE MADE OF COPPER, WITH A MINIMUM OF 6" CLEARANCE FROM THE METER PIT FLOOR. BLOCKING SHALL BE INSTALLED AS
- NECESSARY TO SUPPORT THE PIPE. 4. WALL-MOUNTED LADDER RUNGS SHALL NOT BE INSTALLED.
- 5. ONLY PWD PERSONNEL ARE AUTHORIZED TO INSTALL WATER METERS. PWD PERSONNEL AREA ADDITIONALLY AUTHORIZED TO OPERATE METER VALVES AS NEEDED FOR INSTALLATION AND
- MAINTENANCE. 6. PWD WILL SUPPLY THE WATER METER. ALL OTHER FITTINGS, INCLUDING A METER RESETTER FOR 1"
- OR SMALLER METERS, SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR. 7. FOR 1.5" AND 2" METERS, CONTRACTOR SHALL INSTALL A FLANGED METER SPOOL PIECE, SUPPLIED BY PWD AT NO ADDITIONAL CHARGE, PRIOR TO METER BEING SET. THE METER SPOOL WILL BE MADE AVAILABLE FOR CUSTOMER PICKUP AT PWD CUSTOMER SERVICE, 225 DOUGLASS STREET, PORTLAND,
- MAINE DURING NORMAL BUSINESS HOURS. 8. CONTRACTOR TO INSTALL TWO BALL VALVES AT LEAST 24" APART FOR METER INSTALLATION, ALLOWING FOR THE WATER METER TO BE CENTERED UNDER THE METER PIT OPENING. THE BALL
- VALVES SHALL BE SOLDERED IN PLACE. 9. THE METER PIT MAY HOUSE UP TO TWO $\frac{5}{8}$ ", $\frac{3}{4}$ ", OR 1" METERS WITH PRIOR APPROVAL FROM PWD.

TYPICAL WATER METER PIT (5/8" TO 2" METER) NOT TO SCALE





2. 1" THREADED PIPE (THIS IS TO BE A NON-WELDED, TWO PIECE ARRANGEMENT. SLIP ON ADAPTERS ARE NOT PERMISSIBLE.)



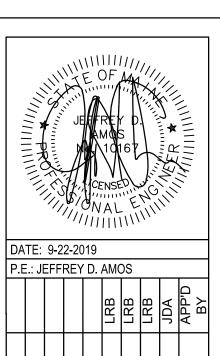
VALVE BOX COVER

TOP SECTION

NO.56

INTERMEDIATE

SECTION NO.58



72				
ı	4	12/23/2019	FINAL PLANNING BOARD REVIEW	LRB
_	3	9/22/2019	REVISED PER MDEP COMMENTS	LRB
	2	12/31/2018	RESPONSE TO REVIEW COMMENTS	LRB
	_	11/19/2018	PRELIMINARY SUBDIVISION & SITE PLAN	JDA
TING	NO.	DATE	REVISIONS	APP'D BY

1	NEW GLOUCESTER, ME 04260	PORTLAN
ADYN INTS, LLC	OFFICE: (207) 926-5111 FAX: (207) www.terradynconsultants.com	⁻ AX: (207) om
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JMS						
SHEET DESCRIPTION CONDOMINIUMS	306 GRAY ROAD	STANDARD WATER DETAILS	PREPARED FOR	MR. JAMES CUMMINGS	P.O. BOX 957	WINDHAM, MAINE 04062
DATE:			1	1/18	/20	18

LRB

1841

SCALE: DESIGNED:

JOB NO:

SHEET **C-5.6**