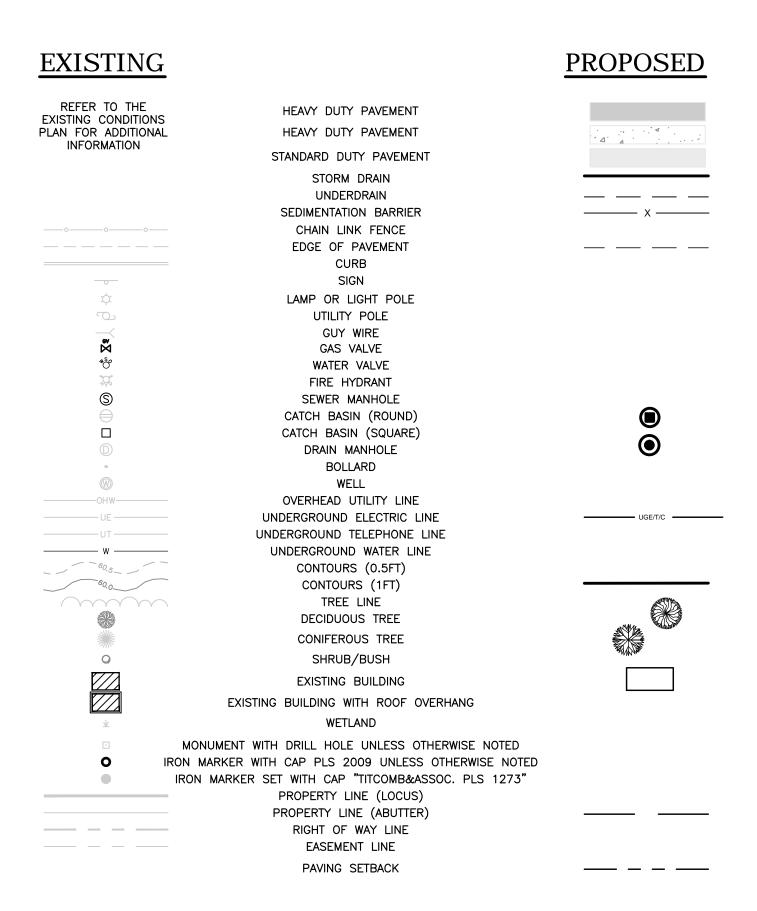
ELDREDGE LUMBER & HARDWARE, INC. 165 PRESUMPSCOT STREET PORTLAND, MAINE

LEGEND:



ABBREVIATIONS:

PARTIAL LIST OF ABBREVIATIONS AND THERE CORRESPONDING MEANING. PLEASE CONTACT THE ENGINEER FOR ANY CLARIFICATION:

> EX = EXISTINGPROP = PROPOSEDPVC = POLYVINYL CHLORIDE SDR = STANDARD DIMENSION RATIO PE = PROFESSIONAL ENGINEER PLS = PROFESSIONAL LAND SURVEYOR TYP = TYPICAL ELEV. = ELEVATIONINV. = INVERTH.P. = HORSEPOWERBOT. = BOTTOMMAX. = MAXIMUMCB = CATCH BASIN MH = MANHOLES = SLOPEL = LENGTHID = INNER DIMENSION DIA. = DIAMETERIN. = INCH

FT. = FEETPSI = POUNDS PER SQUARE INCH OHE/T/C = OVERHEAD ELECTRIC/TELEPHONE/CABLE RD= ROOF DRAIN UD = UNDERDRAIN

PERF. SD = PERFORATED STORMDRAIN

UTILITIES

SEWER:

PUBLIC SERVICES ENGINEERING DEPARTMENT 55 PORTLAND STREET PORTLAND, MAINE 04101 CONTACT: DAVID MARGOLIS-PINEO, P.E. (207) 874-8850

WATER:

PORTLAND WATER DISTRICT 225 DOUGLAS STREET PO BOX 3553 PORTLAND, MAINE 04104 ATTN: RICO SPUGNARDI, PE (207) 761-8310

ELECTRIC:

CENTRAL MAINE POWER COMPANY (CMP) 162 CANCO ROAD PORTLAND, MAINE 04103 CONTACT: JAMIE COUGH (207) 842-2367

TELEPHONE:

FAIRPOINT COMMUNICATIONS 45 FOREST AVE PORTLAND MAINE 04101 SUE SERRETTE (207) 797 - 1842

CABLE:

TIME WARNER CABLE 118 JOHNSON ROAD PORTLAND, MAINE04102 (877)546-0962

NATURAL GAS:

UNITIL SERVICE CORP PO BOX 3586 PORTLAND, MAINE 04104 CONTACT: BRIDGET MATHERS (207) 541-2536

CALL BEFORE YOU DIG 1-888-DIG-SAFE 1-888-344-7233

PERMIT DRAWINGS

INDEX:

COVER SHEET, GENERAL NOTES & LEGEND

EXISTING CONDITIONS PLAN - TITCOMB ASSOCIATES

SITE PLAN

GRADING, DRAINAGE & EROSION CONTROL PLAN

SITE DETAILS

DRAINAGE DETAILS

UTILITY. LANDSCAPING. EROSION CONTROL DETAILS

EROSION CONTROL DETAILS & NOTES

GENERAL NOTES:

1. THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANIES AND DIG SAFE AT LEAST 4 DAYS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION FOR UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO LOCATE THE UNDERGROUND ELECTRICAL CONNECTION TO THE ABOVE GROUND L.P. TANK ADJACENT TO BUILDING 1. OTHERWISE IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES AND LOCATE ANY POTENTIAL CONFLICTS WITH THE APPROVED PLANS PRIOR TO CONSTRUCTION.

2. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF ALL EROSION CONTROL MEASURES SHOWN ON THE PLAN. IF DEEMED NECESSARY BY THE OWNER OR OWNER'S REPRESENTATIVE, ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED AT NO ADDITIONAL COST TO THE OWNER.

3. THE CONTRACTOR SHALL PREPARE THEIR OWN MATERIAL SCHEDULE BASED ON THE PLANS AND FIELD VERIFICATION BY THE CONTRACTOR. ALL MATERIAL SCHEDULES SHOWN WITHIN THE PLAN SET ARE FOR GENERAL INFORMATION ONLY.

4. ALL CONSTRUCTION METHODS, TESTING AND MATERIALS SHALL CONFORM TO THE MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, THE CITY OF PORTLAND AND SERVICING UTILITY REQUIREMENTS, IF ANY. IN CASES WERE THESE CONFLICT THE MOST STRINGENT SPECIFICATION SHALL APPLY AT NO ADDITIONAL COST TO THE OWNER

5. THE SITE CONTRACTOR SHALL MAINTAIN A SET OF DRAWINGS WHICH SHALL RECORE THE ACTUAL LOCATION, DIMENSIONS, ELEVATIONS, MATERIALS OF THEIR WORK INDICATING THEREON ALL VARIATIONS FROM THE CONTRACT DRAWINGS. CONTRACTOR SHALL PROVIDE THE OWNER WITH ONE COMPLETE SET OF REPRODUCIBLE RECORD DRAWINGS STAMPED "AS-BUILT".

6. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMANCE OF WORK IN ACCORDANCE WITH THE FEDERAL RAILROAD ADMINISTRATION SAFETY STANDARDS, STATE OF MAINE, AND ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

7. CONSTANT COORDINATION WILL BE NECESSARY BETWEEN THE CONTRACTOR AND OWNER DURING CONSTRUCTION. SITE FEATURES THAT WILL BE RELOCATED DURING CONSTRUCTION ACTIVITIES WILL INCLUDE BUT NOT LIMITED TO EXISTING SHEDS. TRAILERS. SOLID WASTE RECEPTACLES, AND LUMBER SUPPLIES. FOLLOWING CONSTRUCTION ITEMS THAT WERE RELOCATED SHALL BE PUT BACK IN PLACE.

8. THE CONTRACTOR WILL REMAIN SOLELY AND COMPLETELY RESPONSIBLE FOR ENFORCEMENT OF AND COMPLIANCE WITH 1) ALL CONTRACT PLANS AND SPECIFICATIONS AND 2) ALL SITE WORKING CONDITIONS AND SAFETY REQUIREMENTS, DAY AND NIGHT, FOR BOTH PERSONS AND PROPERTY, IN EACH CASE BOTH BY THE CONTRACTOR AND ITS SUBCONTRACTORS. THESE INCLUDE ALL OSHA, NIOSH, U.S. EPA AND ANY OTHER APPLICABLE GOVERNMENTAL REGULATIONS.

LAYOUT NOTES:

1. MONUMENTS DELINEATING PROPERTY LINES OR RIGHT OF WAYS SHALL NOT BE DISTURBED DURING CONSTRUCTION OPERATIONS. IN THE CASE A MONUMENT IS DISTURBED, AT THE CONTRACTOR'S EXPENSE, THE MONUMENT SHALL BE RESET TO THEIR ORIGINAL LOCATION BY A REGISTERED LAND SURVEYOR.

2. ALL DIMENSIONS ON THE FOLLOWING SHEETS TAKE PRECEDENT OVER SCALED DIMENSIONS. EACH DRAWING WITH A BAR SCALE MEANS THAT THE DRAWING/DETAIL HAS BEEN SCALED AS ACCURATELY AS POSSIBLE. AND THE BAR SCALE IS FOR GENERAL REFERENCE ONLY. IF NO BAR SCALE IS PRESENT, THEN THERE IS NO SCALE TO THAT DRAWING/DETAIL. AT NO TIME SHOULD DRAWINGS BE SCALED FROM.

3. SIGNAGE, STRIPING AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)

PERMITTING NOTES

1. THIS PROJECT IS SUBJECT TO THE TERMS AND CONDITIONS OF SITE PLAN - LEVEL II PERMIT FROM THE CITY OF PORTLAND.

2. THIS PROJECT IS SUBJECT TO THE TERMS AND CONDITIONS OF A MAINE CONSTRUCTION GENERAL PERMIT FROM THE MAINE DEP.

3. THE CONTRACTOR SHALL REVIEW THE ABOVE REFERENCED PERMITS PRIOR TO SUBMITTING A BID FOR THIS PROJECT, AND INCLUDE COSTS AS NECESSARY TO COMPLY WITH THE CONDITIONS OF THESE PERMITS.

GRADING AND DRAINAGE NOTES:

. TOPSOIL STRIPPED FROM THE SITE THAT IS SUITABLE FOR REUSE AS LOAM SHALL BE STOCKPILED WITHIN THE PROPOSED LIMIT OF WORK AREA. THE CONTRACTOR SHALL NOT ASSUME THAT ANY LOAM WILL BE ACCEPTABLE FOR REUSE WITH THEIR ESTIMATE.

2. THE CONTRACTOR SHALL ANTICIPATE THAT GROUNDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION AND SHALL INCLUDE SUFFICIENT COSTS WITHIN THEIR BID TO PROVIDE DEWATERING AS NECESSARY; NO SEPARATE PAYMENT SHALL BE MADE TO THE CONTRACTOR FOR DEWATERING.

3. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ANY EASEMENT OR TEMPORARY CONSTRUCTION RIGHTS AS NECESSARY BY ADJACENT LAND OWNERS. THE CONTRACTOR SHALL NOT DISTURB ANY SOIL BEYOND THE PROPERTY LINE WITHOUT NOTIFYING AND OBTAINING SUCH EASEMENT OR TEMPORARY CONSTRUCTION RIGHT FROM THE OWNER.

4. THE CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS. THE MINIMUM SLOPE SHALL MEET OR EXCEED 0.5% IN ALL CASES. ALL SLOPES SHALL BE AWAY FROM BUILDINGS AND TOP OF PAVEMENT SHALL BE AT OR BELOW EXISTING FINISH FLOOR ELEVATIONS.

5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION REPORT BY SOIL METRICS, LLC.

6. IF THE CONTRACTOR DURING GRADING ACTIVITIES UNCOVERS AN ARCHEOLOGICAL RESOURCE THE CONTRACTOR SHALL STOP EXCAVATION ADJACENT TO THE RESOURCE AND CONTACT THE OWNER IMMEDIATELY. THE OWNER SHALL CONTACT THE CITY HISTORIC PRESERVATION PROGRAM AND MAINE HISTORIC PRESERVATION COMMISSION. THE OWNER SHALL THEN CONTACT THE ENGINEER TO MODIFY THE LAYOUT OF THE AFFECTED INFRASTRUCTURE.

EROSION CONTROL NOTES

1. ALL ROUTINE MAINTENANCE ACTIVITIES SHALL BE CONDUCTED IN SUCH A WAY TO LIMIT THE AMOUNT OF DISTURBED AREA AT ONE TIME TO THE EXTENT PRACTICABLE.

2. PRIOR TO THE START OF ANY CLEARING/LAND DISTURBING ACTIVITIES. THE CONTRACTOR SHALL INSTALL APPLICABLE EROSION CONTROL DEVICES SUCH AS PERIMETER SILT FENCE, AND OTHER APPLICABLE MEASURES. IN THE EVENT THE CONTRACTOR IS NOT SURE A EROSION CONTROL MEASURE SHOULD BE IMPLEMENTED, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD TO CONFIRM IMPLEMENTATION OF ANY EROSION CONTROL DEVICES.

3. ALL GROUND AREAS GRADED FOR CONSTRUCTION SHALL BE GRADED, LOAMED, SEEDED AND MULCH SHALL BE APPLIED AS SOON AS POSSIBLE WITHIN 7 DAYS FOLLOWING THE COMPLETION OF ANY SOIL DISTURBANCE, AND PRIOR TO ANY STORM

4. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL SHALL BE INSTALLED TO THE SATISFACTION OF THE CITY. THE CONTRACTOR SHALL REFERENCE THE APPROVED EROSION AND SEDIMENTATION CONTROL REPORT FOR TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL DEVICES IN ADDITION TO THE PLAN SET. THE CONTRACTOR SHALL ALSO REFER TO THE MAINE D.E.P.'S PERMIT CONDITIONS, FINDINGS OF FACT AND ORDER (IF ANY), AND THE CURRENT MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL FOR ADDITIONAL INFORMATION.

UTILITY NOTES:

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED UPON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO TEST PIT TO DETERMINE THE EXACT LOCATION AND ELEVATION OF UTILITIES TO COORDINATE WITH THE PROPOSED CONNECTIONS OR CROSSING. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE CIVIL ENGINEER FOR FURTHER DIRECTIONS BEFORE ANY ADDITIONAL WORK PROCEEDS.

2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

3. DO NOT SCALE THESE DRAWINGS. ANY DISCREPANCIES BETWEEN DRAWINGS, DETAILS, SPECIFICATIONS, AND THE FIELD CONDITION SHALL BE IMMEDIATELY REPORTED TO THE CIVIL ENGINEER FOR FURTHER DIRECTIONS BEFORE ANY ADDITIONAL WORK PROCEEDS.

DEMOLITION NOTES:

1. THE EXISTING ASPHALT SHOULD BE STRIPPED AND EITHER PROCESSED ONSITE, REMOVED FROM THE SITE OR DISPOSED OF ONSITE.

2. TWO LAYERS OF PAVEMENT MAY BE PRESENT BENEATH THE EXISTING PAVED AREAS. THE CONTRACTOR SHALL REMOVE BOTH LAYERS AT NO ADDITIONAL COST TO THE OWNER. THE PAVEMENT MAY BE RECLAIMED AND USED FOR THE PROPOSED PAVEMENT BASE MATERIAL. RECLAIMED MATERIAL SHALL MEET MAINE DOT SECTION 306.

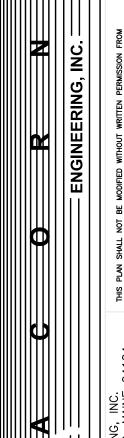
3. REFER TO THE GEOTECHNICAL INVESTIGATION REPORT BY SOIL METRICS, LLC FOR BORING LOG INFORMATION.

4. ALL DISPOSAL OF DEMOLITION DEBRIS OR WASTE SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, & FEDERAL REGULATIONS. CONTRACTORS SHALL PROVIDE OWNER WITH APPROPRIATE "BILLS OF LADING" DEMONSTRATING PROPER DISPOSAL OF ALL MATERIALS.

5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FINAL MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION VOLUNTARY RESPONSE ACTION PROGRAM DEVELOPED BY ACADIA ENVIRONMENTAL TECHNOLOGY. PRESENTLY THE PROJECT DOES NOT PROPOSE TO REMOVE ANY MATERIAL OFFSITE.

ISSUED FOR COMMENT RESPONSE MAINE DEP-MCGP REVISION

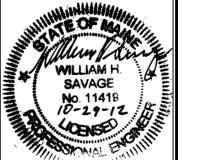
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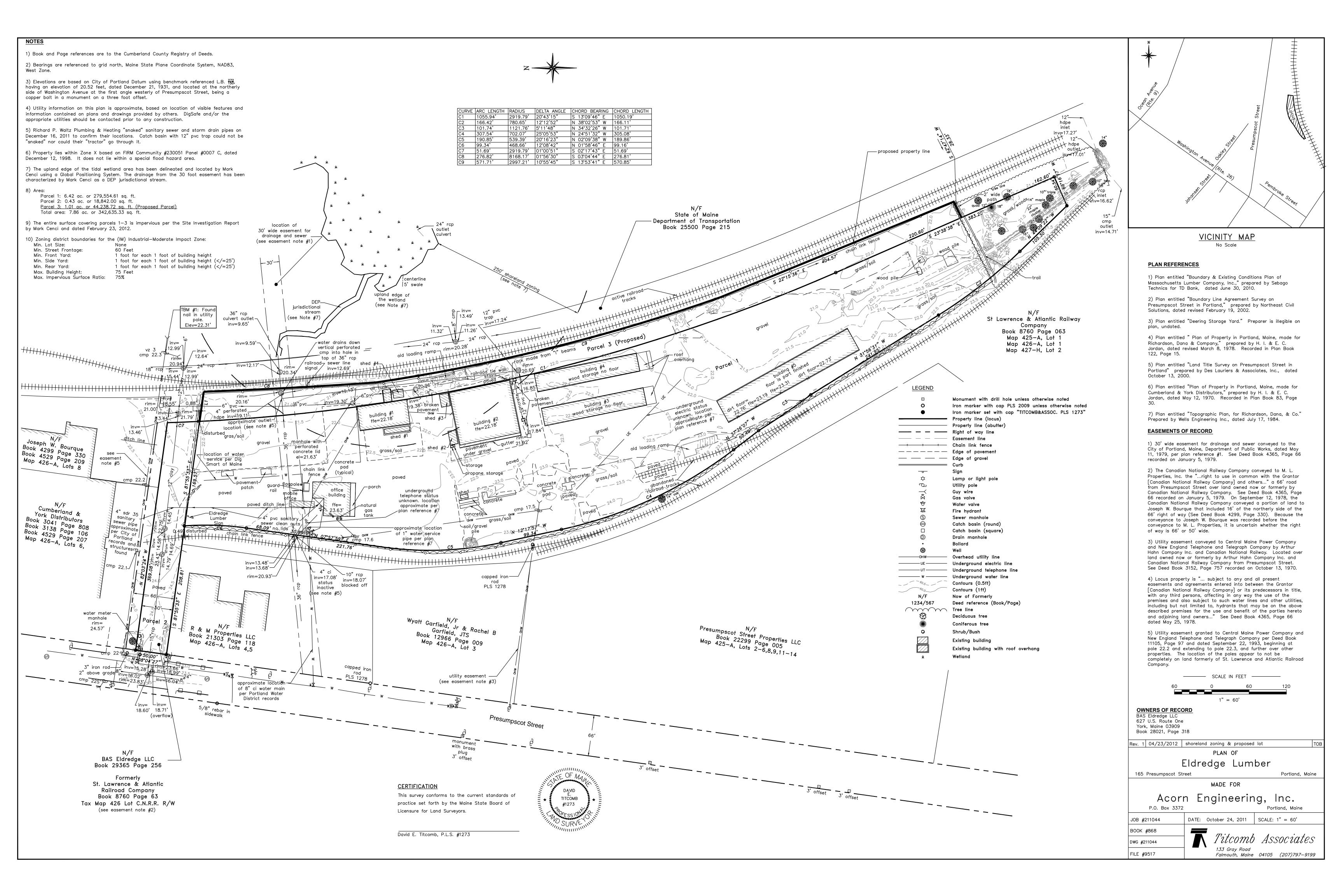
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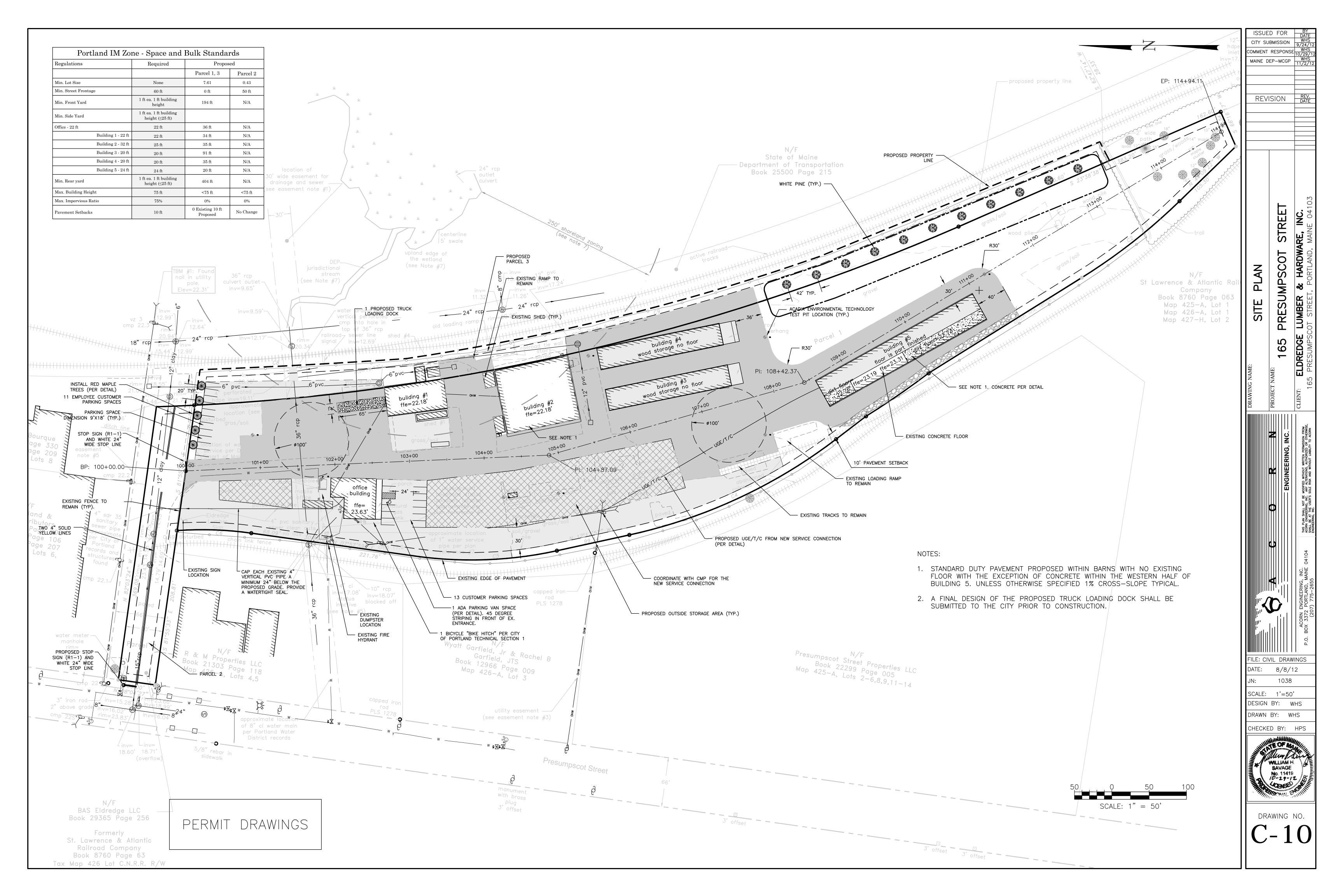
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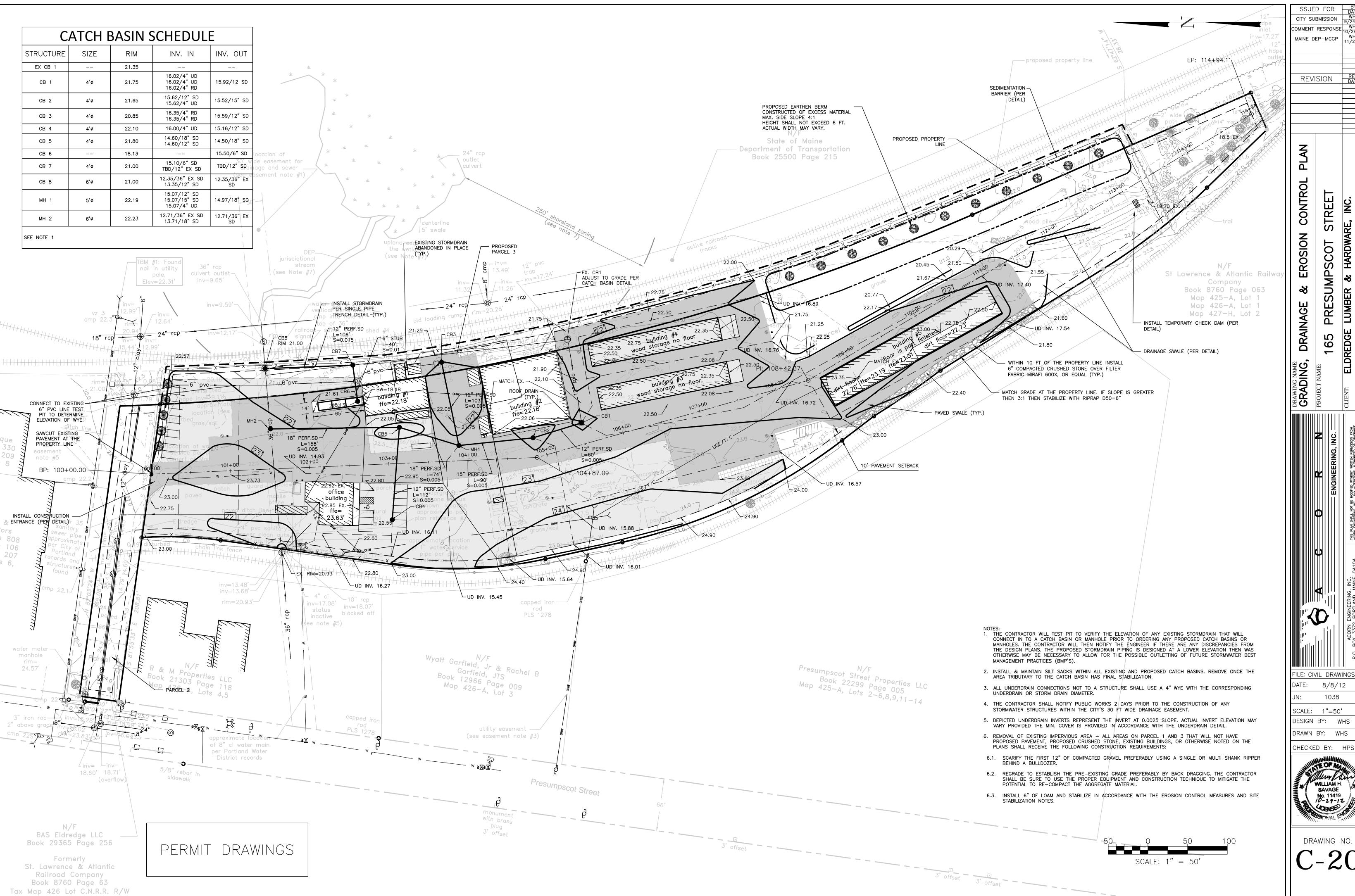
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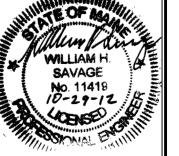




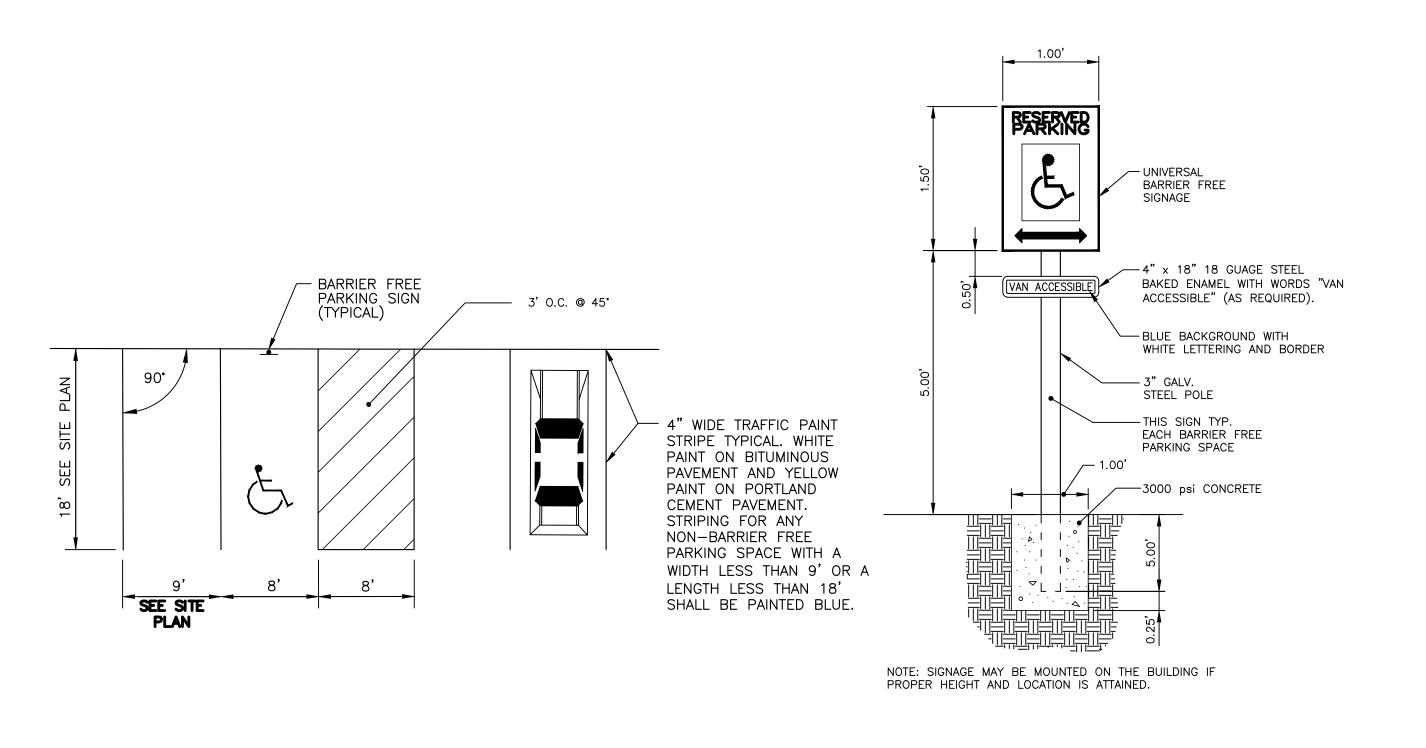


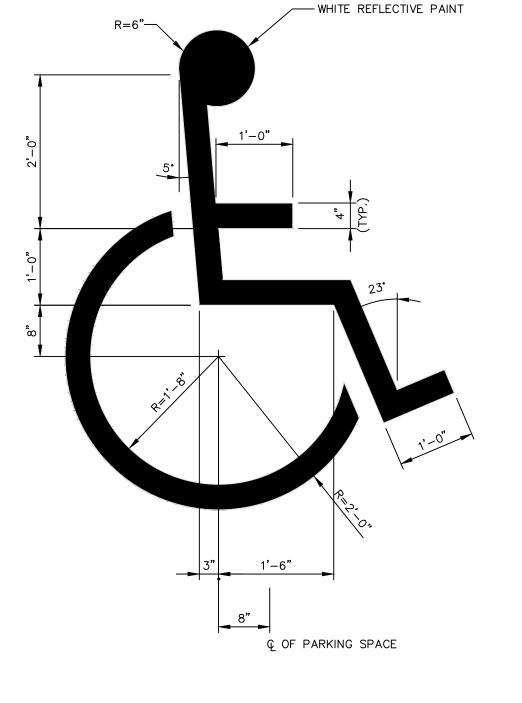
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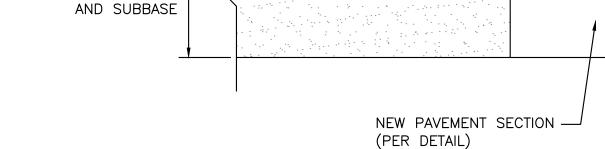


DRAWING NO.





INTERNATIONAL BARRIER FREE SYMBOL NOT TO SCALE



SAWCUT

1. SAWCUT EXISTING PAVEMENT AND REMOVE 2' STRIP OF EXISTING PAVEMENT. APPLY BITUMINOUS TACK COAT PRIOR TO PLACEMENT OF

2. THE NEW PAVEMENT SECTION SHALL MEET THE CITY OF PORTLAND

ARTERIAL BITUMINOUS PAVEMENT SECTION DETAIL AT A MINIMUM OR

THE THE EXISTING PAVEMENT AND AGGREGATE BASE AND SUBBASE

NOTES:

PAVEMENT

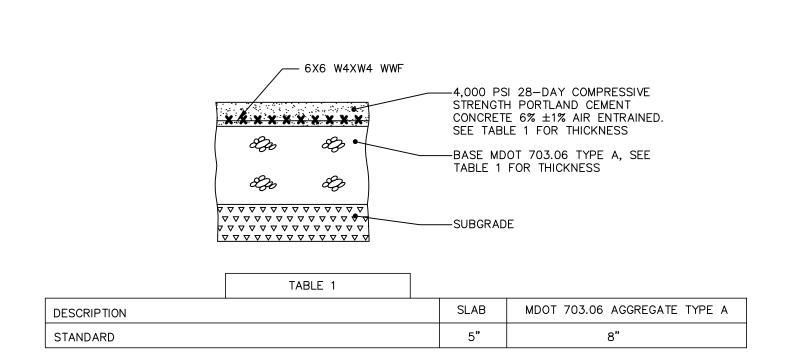
EXISTING BASE

NEW BITUMINOUS PAVEMENT.

DEPTH WHICHEVER IS GREATER.

PAVEMENT SAWCUT DETAIL

NOT TO SCALE



BARRIER FREE PARKING SIGN

NOT TO SCALE

NOTE:

1. COMPACT SUBGRADE TO 95% MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557.

2. CONCRETE PAVEMENT SHALL BE UNDERLAIN WITH 12 INCHES OF SUBBASE (MDOT 703.06 TYPE D).

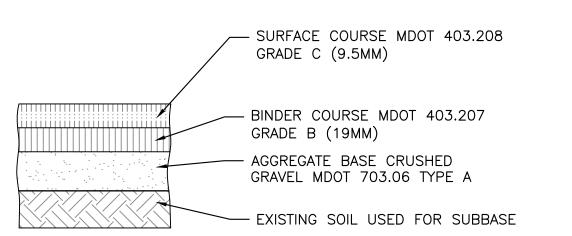
3. CONCRETE CONTROL JOINTS SHALL BE CONSTRUCTED WITH A ZIP STRIP PLACED AT 10'

4. FINISH WITH A STIFF, COARSE, FIBER BROOM.

(MAX.) ON-CENTER.

CONCRETE PAVEMENT SECTION

NOT TO SCALE



NOTE:

1. THE EXISTING LAYER(S) OF PAVEMENT SHALL BE REMOVED OR RECLAIMED. THE EXISTING SOILS SHALL BE USED AS THE SUBBASE.

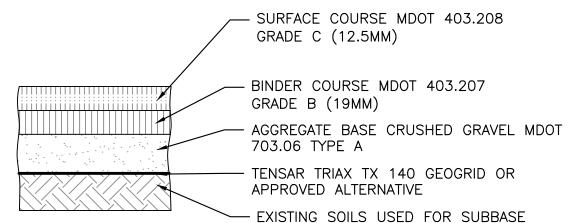
- 2. PROOF ROLL AND COMPACT THE SUBBASE TO 95% MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557 AFTER THE PAVEMENT DRAINS HAVE BEEN INSTALLED AND ARE FULLY FUNCTIONING. IF PROOF ROLLING IS NOT SUCCESSFUL THEN GEOGRID SHALL BE INSTALLED DIRECTLY ON THE SUBBASE SURFACE. THE DECISION TO PLACE GEOGRID SHALL BE MADE WITH THE CONCURRENCE OF THE OWNER AND OWNER'S ENGINEER BASED UPON FIELD OBSERVATIONS. GEOGRID SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS WITH A MIN. 1 FT OVERLAP. THE CONTRACTOR SHALL SUBMIT A SEPARATE UNIT COST FOR GEOGRID.
- COMPACT THE AGGREGATE BASE 95% MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557.
 MINIMUM 2 MODIFIED LABORATORY PROCTOR TEST AND FIELD DENSITY TESTING AT APPROXIMATELY
 MINIMUM SPACING OF 50 FEET ON CENTER PER LIFT.
- 4. PAVING OPERATIONS SHALL BE SUBJECT TO THE MINIMUM REQUIREMENTS OF THE MAINE DOT SECTION 401.19 QUALITY CONTROL METHOD D, UNLESS WAIVED BY THE OWNER.

THICKNESS	ΩF	IAYERS

	77.77.1.123	
STANDARD	LAYERS	
1-1/4"	SURFACE COURSE MDOT 403.208 GRADE C (12.5mm)	
2"	BINDER COURSE MDOT 403.207 GRADE B (19mm)	
4"	AGGREGATE BASE CRUSHED GRAVEL MDOT 703.06 TYPE A	

STANDARD DUTY BITUMINOUS PAVEMENT PROFILE

NOT TO SCALE



NOTE:

1. THE EXISTING LAYER(S) OF PAVEMENT SHALL BE REMOVED. THE EXISTING SOILS SHALL BE USED AS THE SUBBASE.

- 2. PROOF ROLE THE SUBBASE TO 95% MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557 AFTER THE PAVEMENT DRAINS HAVE BEEN INSTALLED AND ARE FULLY FUNCTIONING. MINIMUM OF 5 MODIFIED PROCTOR TESTS ON EXISTING SUBGRADE MATERIALS, BASED UPON FIELD OBSERVATIONS OF MATERIAL GRADATION. FIELD DENSITY TESTING AT A MINIMUM OF 50 FOOT SPACING.
- 3. COMPACT THE AGGREGATE BASE TO 95% MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557.
- 4. PLACE GEOGRID DIRECTLY ON THE SUBBASE SURFACE, IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS WITH A MINIMUM 1 FT OVERLAP. MINIMUM 2 MODIFIED LABORATORY PROCTOR TEST AND FIELD DENSITY TESTING AT APPROXIMATELY MINIMUM SPACING OF 50 FEET ON CENTER PER LIFT.
- 5. PAVING OPERATIONS SHALL BE SUBJECT TO THE MINIMUM REQUIREMENTS OF THE MAINE DOT SECTION 401.19 QUALITY CONTROL METHOD D, UNLESS WAIVED BY THE OWNER.

THICKNESS	OF	LAYERS
	•	

	STANDARD	LAYERS		
1-1/2" SURFACE COURSE MDOT 403.208		SURFACE COURSE MDOT 403.208 GRADE C (12.5mm)		
	2-1/2"	BINDER COURSE MDOT 403.207 GRADE B (19mm)		
	6"	AGGREGATE BASE CRUSHED GRAVEL MDOT 703.06 TYPE A		

HEAVY DUTY BITUMINOUS PAVEMENT PROFILE

NOT TO SCALE

PERMIT DRAWINGS

PARKING SPACE DIMENSIONS

NOT TO SCALE

DRAWING NAME:

COORDINATE NAME:

PROJECT NAME:

165 PRESUMPSCOT

CLIENT: ELDREDGE LUMBER & HARDWA

165 PRESUMPSCOT STREET, PORTLAND,

ISSUED FOR

CITY SUBMISSION

9/

COMMENT RESPONSE

10/

MAINE DEP-MCGP

REVISION

STREET

FILE: CIVIL DRAWINGS

DATE: 8/8/12

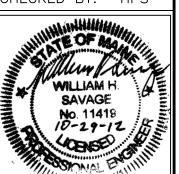
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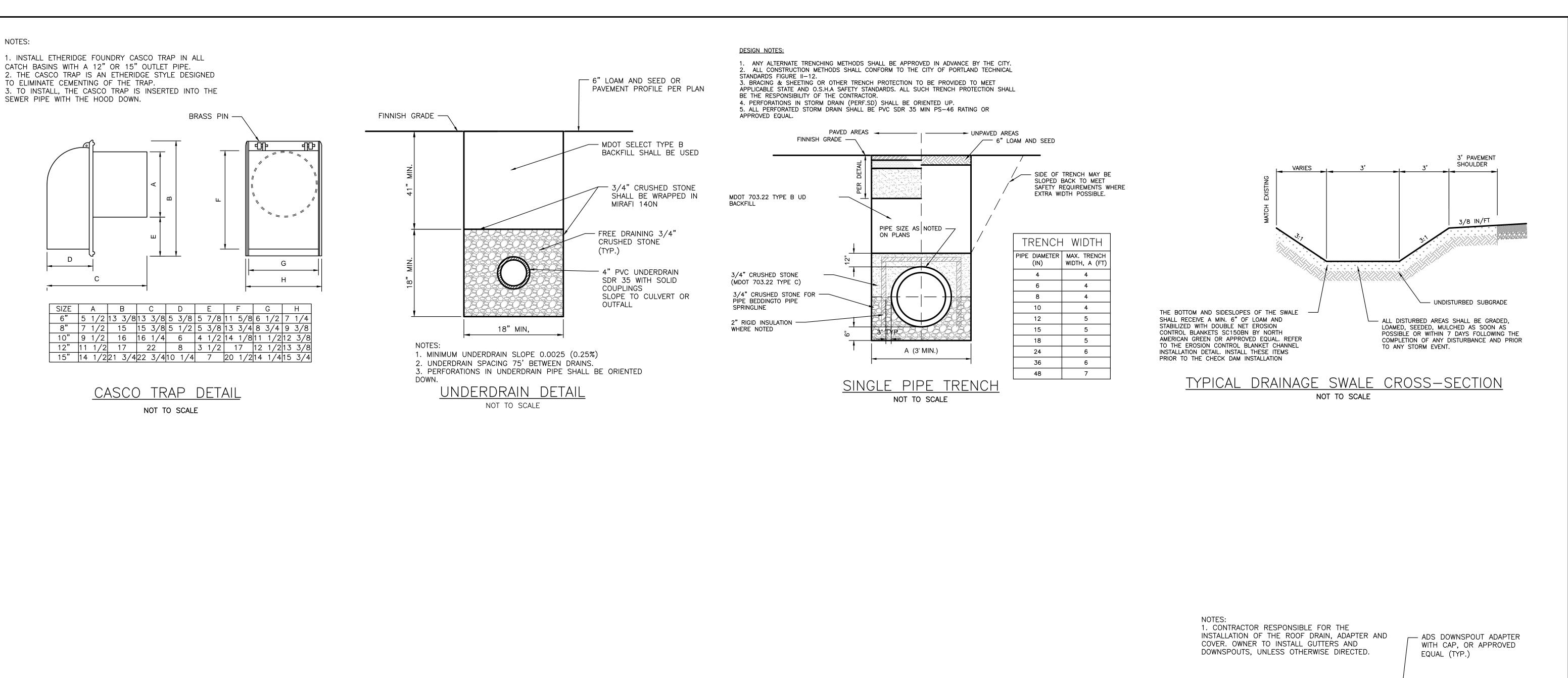
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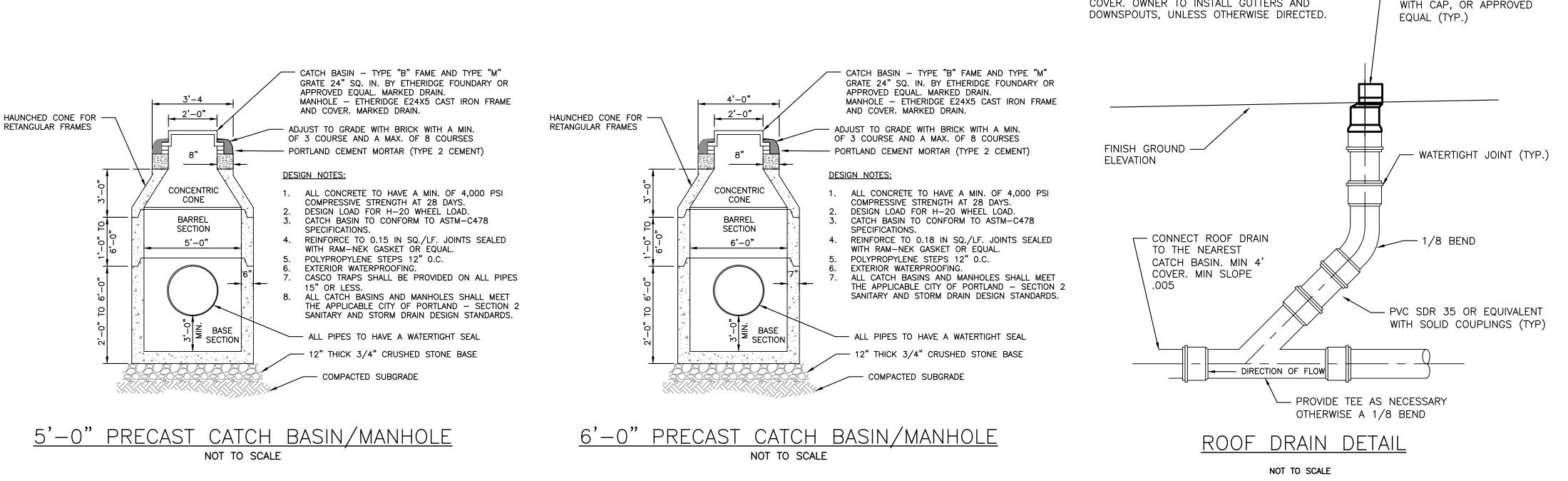
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C-30





PERMIT DRAWINGS

- CATCH BASIN - TYPE "B" FAME AND TYPE "M"

APPROVED EQUAL. MARKED DRAIN.

ADJUST TO GRADE WITH BRICK WITH A MIN.

PORTLAND CEMENT MORTAR (TYPE 2 CEMENT)

COMPRESSIVE STRENGTH AT 28 DAYS.

DESIGN LOAD FOR H-20 WHEEL LOAD.

WITH RAM-NEK GASKET OR EQUAL.

POLYPROPYLENE STEPS 12" O.C.

EXTERIOR WATERPROOFING.

COMPACTED SUBGRADE

OF 3 COURSE AND A MAX. OF 8 COURSES

AND COVER. MARKED DRAIN.

DESIGN NOTES:

SPECIFICATIONS.

15" OR LESS.

2'-0"

CONCENTRIC

CONE

SECTION

BASE

[≥] SECTION [[]

4'-0" PRECAST CATCH BASIN/MANHOLE

NOT TO SCALE

HAUNCHED CONE FOR -

RETANGULAR FRAMES

GRATE 24" SQ. IN. BY ETHERIDGE FOUNDARY OR

MANHOLE - ETHERIDGE E24X5 CAST IRON FRAME

ALL CONCRETE TO HAVE A MIN. OF 4,000 PSI

REINFORCE TO 0.15 IN SQ./LF. JOINTS SEALED

CASCO TRAPS SHALL BE PROVIDED ON ALL PIPES

THE APPLICABLE CITY OF PORTLAND - SECTION 2

SANITARY AND STORM DRAIN DESIGN STANDARDS.

- ALL PIPES TO HAVE A WATERTIGHT SEAL

- 12" THICK 3/4" CRUSHED STONE BASE

ALL CATCH BASINS AND MANHOLES SHALL MEET

CATCH BASIN TO CONFORM TO ASTM-C478

DESIGN BY:

SOUTH THE PLAN SHALL

ACORN ENGINEERING, INC.

BY SA STATE PORTLAND, MAINE 04104

SOUTH SEATON TO STATE PORTLAND, MAINE OF TO STATE POWNERMOR, INC.

CON 775-2655

CON 17418

CON 17418

CON 1745-2655

CON 1775-2655

CON 175-2655

ISSUED FOR CITY SUBMISSION

MAINE DEP-MCGP

REVISION

STREET

SCOT

PRESUMP

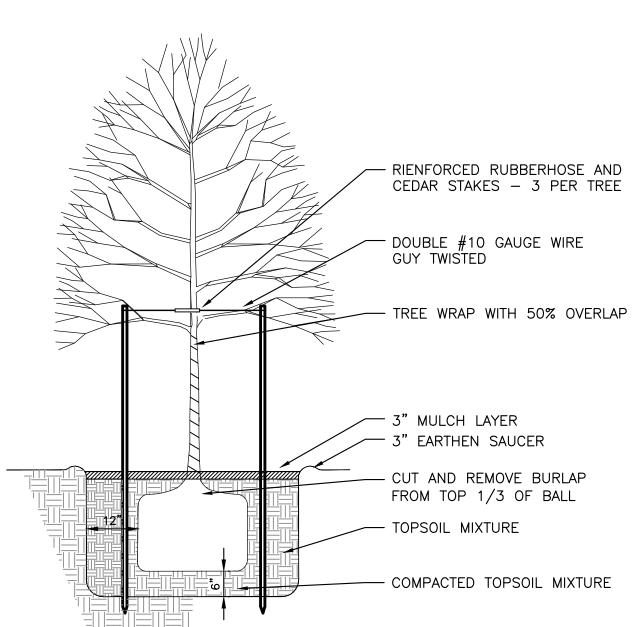
165

DETAIL

DRAINAGE

HARDWAF

COMMENT RESPONSE



TREE PLANTING DETAIL NOT TO SCALE

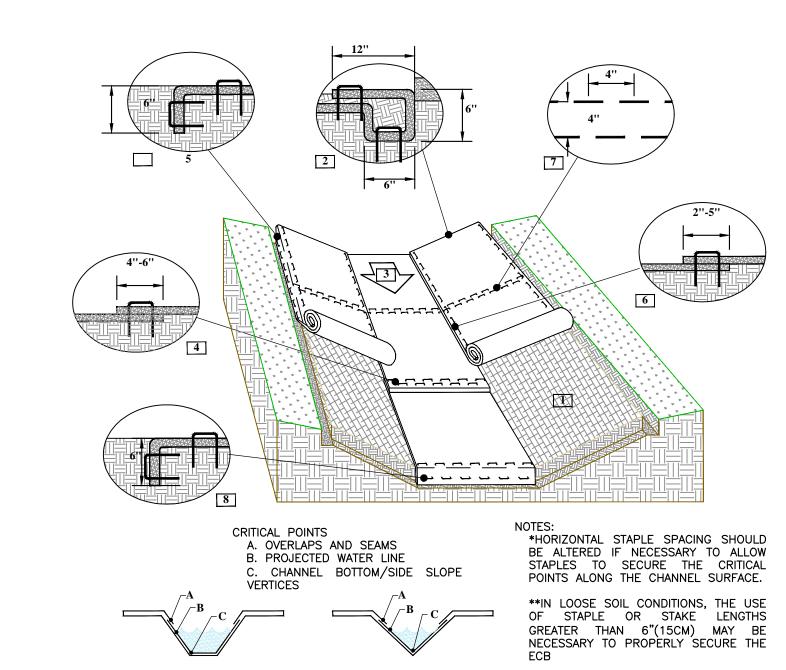
PLANTING NOTES

- 1. ALL PLANT SELECTION AND INSTALLATION WILL BE IN COMPLIANCE WILL THE CITY OF PORTLAND TECHNICAL MANUAL (SECTION 4).
- 2. NO PLANTING WILL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN IMMEDIATE AREA.
- 3. ALL MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, AMERICAN ASSOCIATION OF
- 4. CONTRACTOR SHALL GUARANTEE NEW TREE MATERIAL THROUGH ONE CALENDAR YEAR FROM TIME OF PROVISIONAL ACCEPTANCE.
- 5. ALL PROPOSED TREES SHALL BE LOCATED CAREFULLY AS SHOWN ON THE PLANS AND THE PLACEMENTS SHALL BE APPROVED BY ENGINEER BEFORE THE PLANTS ARE INSTALLED.
- 6. FOR TREE PLANTING IN LAWN AREAS, ANY DISTURBED LAWN SHALL BE LOAMED AND SEEDED AS NECESSARY.
- 7. ALL TREES GREATER THEN 10" DIA. TO BE PROTECTED ON SITE.
- 8. TREE INSTALLATION: 8.1. DIG HOLE AT LEAST 2 TIMES THE DIA. OF THE ROOT BALL AND AS DEEP AS THE ROOT BALL (NO DEEPER). SET ROOT BALL CENTERED, WITH THE TOP AT GROUND LEVEL CORRECT HOLE

DEPTH AS REQUIRED.

5.5 NOR MORE THAN 7.0.

- 8.2. TOPSOIL BACKFILL SHALL BE NATURAL FRIABLE, FERTILE, FINE LOAMY SOIL POSSESSING THE CHARACTERISTICS OF TOPSOILS IN THE VICINITY WHICH PRODUCE A HEAVY GROWTH. TOPSOIL SHALL CONTAIN NOT LESS THAN 6% NOR MORE THAN 20% ORGANIC MATTER. TOP SOIL SHALL HAVE A pH VALUE OF NOT LESS THAN
- 8.3. BACKFILL THE HOLE WITH TOPSOIL TO A DEPTH NOT TO EXCEED 8" THEN WATER SUFFICIENTLY TO SETTLE TOPSOIL, REPEAT SOIL BACKFILL, WATER, DRAIN. TOPSOIL SHALL BE TAMPED UNDER EDGES OF THE BALLED PLANTS. BACKFILL TO FINISH GRADE AND CREATE AN EARTHEN SAUCER. SOAK PLANTS WITH WATER TWICE WITHIN THE FIRST TWENTY-FOUR HOURS OF PLANTING.



EROSION CONTROL BLANKET CHANNEL INSTALLATION

NOT TO SCALE

CHANNEL INSTALLATION DETAIL

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL BLANKET (ECB), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND

2.BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE ECB IN A 6"(15CM) DEEP X 6"(15CM) WIDE TRENCH WITH APPROXIMATELY 12"(30CM) OF ECB EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. USE SHOREMAX MAT AT THE CHANNEL/CULVERT OUTLET AS SUPPLEMENTAL SCOUR PROTECTION AS NEEDED. ANCHOR THE ECB WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12"(30CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO THE COMPACTED SOIL AND FOLD THE REMAINING 12"(30CM) PORTION OF ECB BACK OVER THE SEED AND COMPACTED SOIL. SECURE ECB OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE ECB. 3.ROLL CENTER ECB IN DIRECTION OF WATER FLOW

IN BOTTOM OF CHANNEL. ECB WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL ECB MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.

4.PLACE CONSECUTIVE ECB END-OVER-END (SHINGLE STYLE) WITH A 4"-6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE ECB. THE TOP LAYER SHALL GO OVER THE DOWNSTREAM LAYER. 5.FULL LENGTH EDGE OF ECB AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12"(30CM) APART IN A 6"(15CM) DEEP X 6"(15CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

6.ADJACENT ECB MUST BE OVERLAPPED APPROXIMATELY 2"-5" (5-12.5CM) (DEPENDING ON ECB TYPE) AND STAPLED. 7.IN HIGH FLOW CHANNEL APPLICATIONS A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9 -12M) INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4"(10CM) APART AND 4"(10CM) ON CENTER OVER ENTIRE WIDTH OF THE

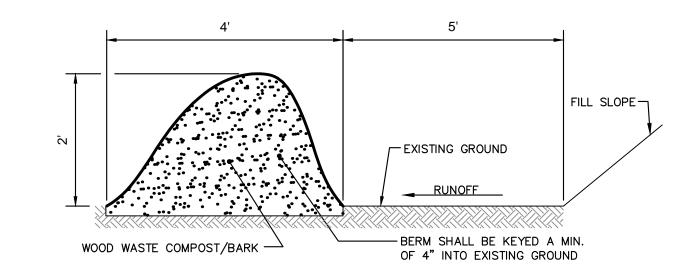
8.THE TERMINAL END OF THE ECB MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30CM) APART IN A 6"(15CM) DEEP X 6"(15CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

1. THE EROSION CONTROL MIX SHALL CONFORM TO THE FOLLOWING STANDARDS AND IN ACCORDANCE WITH THE MAINE DEP'S EROSION AND SEDIMENT CONTROL BMPS SECTION B-1:

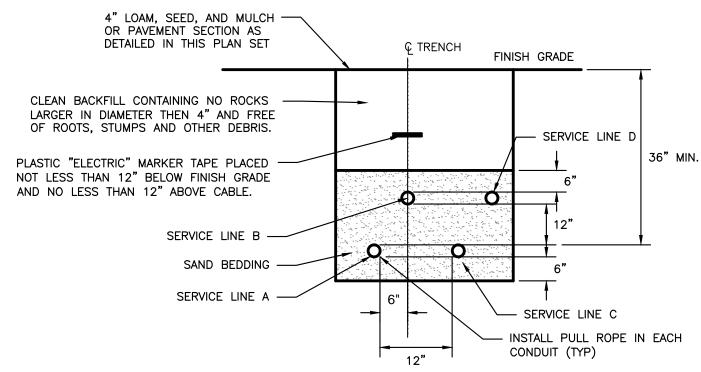
- A. THE ORGANIC PORTIONS SHALL BE FIBROUS AND ELONGATED TO ALLOW FOR THE INTERLOCKING OF MATERIAL
- pH 5.0 8.0. C. PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 6" SCREEN AND A MINIMUM OF 70% TO A MAXIMUM 85% PASSING A 0.75" (3/4") SCREEN.
- D. THE ORGANIC MATTER CONTENT SHALL BE BETWEEN 80 AND 100% DRY WEIGHT BASIS
- . NO STONES LARGER THAN 4" IN DIAMETER. LARGE PORTIONS OF SILTS, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX.

2. THE BERM SHOULD BE PLACED, UNCOMPACTED, ALONG A RELATIVELY LEVEL CONTOUR, WHEN NECESSARY THE BERM MAY BE PLACED PERPENDICULAR TO THE SLOPE ALONG THE PROPERTY LINE TO CONTAIN THE SEDIMENT PROVIDED A BERM IS LOCATED AT THE BASE OF THE SLOPE.

3. THE BERM MAY BE USED IN LIEU OF SILTATION FENCE, AT THE TOE OF SHALLOW SLOPES, ON FROZEN GROUND, LEDGE OUT CROPS, VERY ROOTED FORESTED AREA OR AT THE EDGE OF GRAVEL PARKING AREAS. 4. BERMS SHALL REMAIN IN PLACE UNTIL UPSTREAM AREA IS STABILIZED OR 90% CATCH OF VEGETATION IS ATTAINED. BERMS SHALL BE REMOVED OFFSITE OR BY SPREADING SUCH THAT NATIVE EARTH CAN BE SEEN BELOW.



NOT TO SCALE



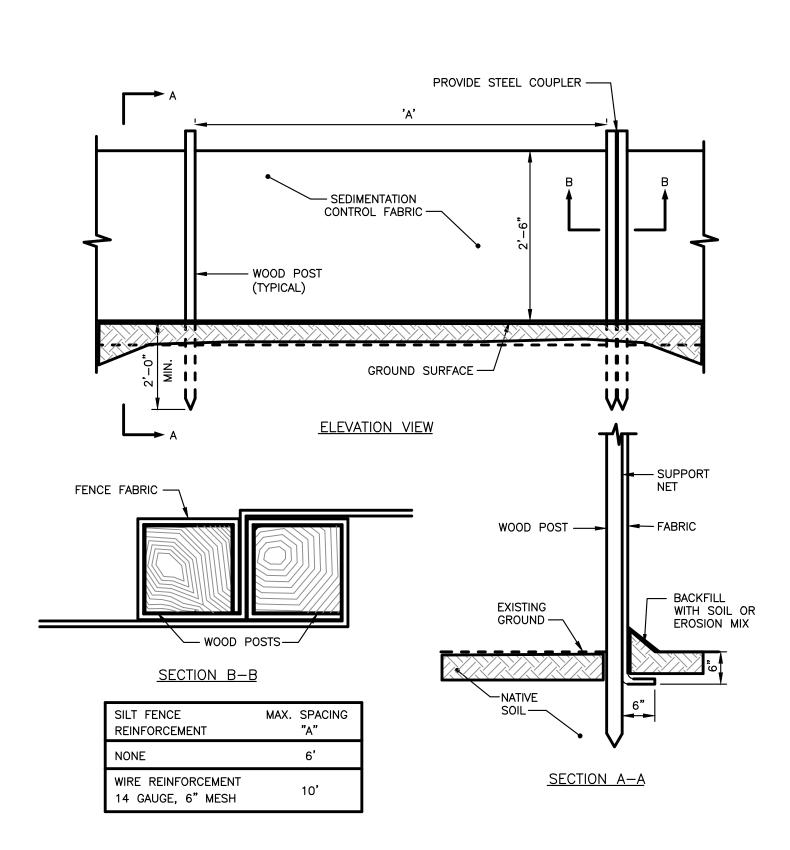
CONDUIT TYPE				
<u>SERVICE</u>	<u>CONDUIT</u> <u>SIZE</u>	<u>GRASS AND</u> <u>PAVED AREAS</u>	UTILITY	<u>REMARKS</u>
Α	2-5"	SCHEDULE 40 PVC ELECTRICAL GRADE	PRIMARY POWER	SEE NOTE 1
В	2-4"	SCHEDULE 40 PVC	COMMUNICATION	-
С	2-4"	SCHEDULE 40 PVC ELECTRICAL GRADE	SPARE	IF REQUIRED
D	2-4"	SCHEDULE 40 PVC	CABLE	_

1. ONE CONDUIT CAPPED FOR SPARE, PROVIDE GALVANIZED STEEL LONG SWEEP AT RISER POLE AND EXTEND GALVANIZED CONDUIT TO 10" ABOVE GRADE AT POLE WITH STAND-OFF BRACKETS.

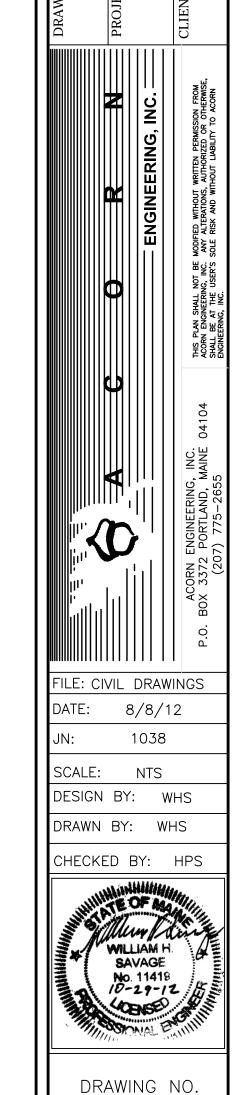
2. MINIMUM SEPARATION OF 24 INCHES BETWEEN PRIMARY CABLE/CONDUIT AND GAS LINES SHALL BE MAINTAINED.

UTILITY TRENCH - PRIMARY AND SECONDARY TELEPHONE, AND CABLE

NOT TO SCALE



SILTATION FENCE DETAIL NOT TO SCALE



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1.0 EROSION CONTROL MEASURES AND SITE STABILIZATION

AS PART OF THE SITE DEVELOPMENT, THE FOLLOWING TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE IMPLEMENTED.

DEVICES SHALL BE INSTALLED AS DESCRIBED IN THIS REPORT OR WITHIN THE PLAN SET. SEE THE MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES FOR FURTHER REFERENCE.

1.1 TEMPORARY EROSION CONTROL MEASURES

THE FOLLOWING TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES ARE PLANNED FOR THE PROJECT'S CONSTRUCTION PERIOD.

1.1.1 CRUSHED STONE STABILIZED CONSTRUCTION ENTRANCES SHALL BE PLACED AT ALL ACCESS POINTS TO THE PROJECT SITE WHERE THERE ARE DISTURBED

AREAS. THE FOLLOWING SPECIFICATIONS SHALL BE FOLLOWED AT A MINIMUM:

• STONE SIZE SHALL BE 2-3 INCHES, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.

THE THICKNESS OF THE ENTRANCE SHALL BE NO LESS THAN 6 INCHES.
THE ENTRANCE SHALL NOT BE LESS THAN 10 FEET WIDE, HOWEVER NOT LESS THAN THE FULL WIDTH OF POINTS WHERE INGRESS OR EGRESS OCCURS. THE

LENGTH SHALL NOT BE LESS THAN 50 FEET IN LENGTH.

• GEOTEXTILE FABRIC (WOVEN OR NON WOVEN) SHALL BE PLACED OVER THE ENTIRE ENTRANCE AREA. PIPING FOR SURFACE WATER DRAINAGE SHALL BE PROVIDED

UNDER THE ENTRANCE; HOWEVER A MOUNTABLE BERM WITH 5:1 SLOPES SHALL BE PERMITTED.

• THE ENTRANCE/EXIT SHALL BE MAINTAINED TO THE EXTENT THAT IT WILL PREVENT THE TRACKING OF SEDIMENT ONTO PUBLIC ROAD WAYS.

1.1.2 SILTATION FENCE OR EROSION CONTROL BERM SHALL BE INSTALLED DOWNSTREAM OF ANY DISTURBED AREAS TO TRAP RUNOFF BORNE SEDIMENTS UNTIL PERMANENT STABILIZATION IS ACHIEVED. THE SILT FENCE OR EROSION CONTROL BERM SHALL BE INSTALLED PER THE DETAILS PROVIDED IN THE PLAN SET AND

INSPECTED BEFORE AND IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. REPAIRS SHALL BE MADE IF THERE ARE ANY

SIGNS OF EROSION OR SEDIMENTATION BELOW THE FENCE LINE OR BERM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THE FENCE OR BERM, THE BARRIER SHALL BE REPLACED WITH A STONE CHECK DAM.

1.1.3 HAY MULCH INCLUDING HYDRO SEEDING IS INTENDED TO PROVIDE COVER FOR DENUDED OR SEEDED AREAS UNTIL REVEGETATION IS ESTABLISHED.

MULCH PLACED BETWEEN APRIL 15TH AND NOVEMBER 1ST ON SLOPES OF LESS THAN 15 PERCENT SHALL BE COVERED BY FABRIC NETTING AND ANCHORED

WITH STAPLES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION. MULCH PLACED BETWEEN NOVEMBER 1ST AND APRIL 15TH ON SLOPES EQUAL

TO OR STEEPER THAN 8 PERCENT AND EQUAL TO OR FLATTER THAN 2:1 SHALL USE MATS OR FABRIC NETTING AND ANCHORED WITH STAPLES IN ACCORDANCE

WITH THE MANUFACTURER'S RECOMMENDATION.
1.1.4 ALL SLOPES 3:1 or GREATER SHALL BE STABILIZED WITH DOUBLE NET EROSION CONTROL BLANKET BIONET SC150BN BY NORTH AMERICAN GREEN OR

APPROVED EQUAL, OR EROSION CONTROL MIX SLOPE PROTECTION AS DETAILED WITHIN THE PLANS.
1.1.5 PRESUMPSCOT STREET SHALL BE SWEPT TO CONTROL MUD AND DUST AS NECESSARY. ADD ADDITIONAL STONE TO THE STABILIZED CONSTRUCTION

ENTRANCE TO MINIMIZE THE TRACKING OF MATERIAL OFF THE SITE AND ONTO THE SURROUNDING ROADWAYS.

1.1.6 DURING CLEARING AND GRUBBING OPERATIONS STONE CHECK DAMS SHALL BE INSTALLED AT ANY AREAS OF CONCENTRATED FLOW. THE TRIBUTARY AREA

TO A DITCH OR SWALE SHALL NOT EXCEED 10 ACRES IN SIZE. THE MAXIMUM HEIGHT OF THE CHECK DAM SHALL NOT EXCEED 2 FEET. THE CENTER OF THE

CHECK DAM SHALL BE 6 INCHES BELOW THE OUTER EDGES OF THE DAME. THE CONTRACTOR SHALL MULCH. THE SIDE SLOPES AND INSTALL STONE CHECK DAMS

FOR ALL NEWLY EXCAVATED DITCH LINES WITHIN 24 HOURS OF THEIR CREATION.

1.1.7 SILT FENCE STAKE SPACING SHALL NOT EXCEED 6 FEET UNLESS THE FENCE IS SUPPORTED WITH 14 GAUGE WIRE IN WHICH CASE THE MAXIMUM SPACING

SHALL NOT EXCEED 10 FEET. THE SILT FENCE SHALL BE "TOED" INTO THE GROUND.

1.1.8 STORMDRAIN INLET PROTECTION SHALL BE PROVIDED THROUGH THE USE OF ANY OF THE FOLLOWING: HAY BALE DROP INLET STRUCTURES, SILT FENCE DROP INLET SEDIMENT FILTER, GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER, OR CURB INLET SEDIMENT FILTER. BARRIERS SHALL BE INSPECTED AFTER EVERY RAINFALL EVENT AND REPAIRED AS NECESSARY. SEDIMENTS SHALL BE REMOVED WHEN ACCUMULATION HAS REACHED ½ THE DESIGN HEIGHT.

1.1.9DUST CONTROL SHALL BE ACCOMPLISHED BY THE USE OF ANY OF THE FOLLOWING: WATER, CALCIUM CHLORIDE, STONE, OR AN APPROVED MDEP PRODUCT. DUST CONTROL SHALL BE APPLIED AS NEEDED TO ACCOMPLISH DUST CONTROL.
1.1.10 TEMPORARY LOAM, SEED, AND MULCHING SHALL BE USED IN AREAS WHERE NO OTHER EROSION CONTROL MEASURE IS USED. APPLICATION RATES FOR

SEEDING ARE PROVIDED AT THE END OF THIS REPORT.

1.1.11 STOCKPILES SHALL BE STABILIZED WITHIN 7 DAYS OF FORMATION UNLESS A SCHEDULED RAIN EVENT OCCURS PRIOR TO THE 7 DAY WINDOW, IN WHICH CASE

THE STOCKPILE SHALL BE STABILIZED PRIOR TO THE RAIN EVENT. METHODS OF STABILIZATION SHALL BE MULCH, EROSION CONTROL MIX, OR EROSION CONTROL BLANKETS/MATS. SILT FENCE OR A WOOD WASTE COMPOST FILTER BERM SHALL BE PLACED DOWNHILL OF ANY SOIL STOCKPILE LOCATION.

1.1.1.12 FOR DISTURBANCE BETWEEN NOVEMBER 1 AND APRIL 15, PLEASE REFER TO WINTER STABILIZATION PLAN IN THIS REPORT AND THE MAINE EROSION AND

SEDIMENT CONTROL BMP MANUAL FOR FURTHER INFORMATION.

1.1.13 IT IS OF THE UTMOST IMPORTANCE THAT STORMWATER RUNOFF AND POTENTIAL SEDIMENT FROM THE CONSTRUCTION SITE BE DIVERTED AROUND THE PROPOSED UNDERDRAINS UNTIL THE TRENCH IS BACKFILLED.

1.2 PERMANENT EROSION CONTROL MEASURES

THE FOLLOWING PERMANENT EROSION CONTROL MEASURES ARE INTENDED FOR POST DISTURBANCE AREAS OF THE PROJECT.

1.2.1 ALL DISTURBED AREAS DURING CONSTRUCTION, NOT SUBJECT TO OTHER PROPOSED CONDITIONS, SHALL RECEIVE A MINIMUM 6" OF LOAM, LIMED, FERTILIZED, SEEDED, AND MULCHED. EROSION CONTROL BLANKETS OR MATS SHALL BE PLACED OVER THE MULCH IN AREAS NOTED IN PARAGRAPH 4.1 OF THIS REPORT.

1.2.2 ALL STORMDRAIN OUTLETS SHALL HAVE RIPRAP APRONS OR STABILIZED SWALES AS DEPICTED ON THE PLANS. THE RIPRAP APRONS OR STABILIZED APRONS SHALL BE CONSTRUCTED WITHIN 48 HOURS OF THE CONSTRUCTION OF THE STORMDRAIN OUTLET.

1.2.3 ALL STORMWATER DEVICES SHALL BE INSTALLED AND STABILIZED PRIOR RECEIVING STORMWATER.
1.2.4 REFER TO THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL FOR ADDITIONAL INFORMATION.

2.0 EROSION AND SEDIMENTATION CONTROL PLAN

2.1 THE EROSION AND SEDIMENTATION CONTROL PLAN IS INCLUDED WITHIN THE PLAN SET.

3.0 <u>DETAILS AND SPECIFICATIONS</u>

3.1 EROSION CONTROL DETAILS AND SPECIFICATION ARE INCLUDED IN THE PLAN SET.

4.0 STABILIZATION PLAN FOR WINTER CONSTRUCTION

WINTER CONSTRUCTION CONSISTS OF EARTHWORK DISTURBANCE BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15. IF A CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE, 75% MATURE VEGETATION COVER OR RIPRAP BY NOVEMBER 15, THEN THE SITE SHALL BE PROTECTED WITH OVER—WINTER STABILIZATION. ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MIX, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD SHALL BE CONSIDERED OPEN.

THE CONTRACTOR SHALL LIMIT THE WORK AREA TO AREAS THAT WORK WILL OCCUR IN DURING THE SUBSEQUENT 15 DAYS AND SO THAT IT CAN BE MULCHED ONE DAY PRIOR TO A SNOW EVENT. THE CONTRACTOR SHALL STABILIZE WORK AREAS PRIOR TO OPENING ADDITIONAL WORK AREAS TO MINIMIZE AREAS WITHOUT EROSION CONTROL MEASURES.

THE FOLLOWING MEASURES SHALL BE IMPLEMENTED DURING WINTER CONSTRUCTION PERIODS:

4.1 <u>SEDIMENT BARRIERS</u>

DURING FROZEN CONDITIONS, SEDIMENT BARRIERS MAY CONSIST OF EROSION CONTROL MIX BERMS OR ANY OTHER RECOGNIZED SEDIMENT BARRIERS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES OR SILT FENCES.

4.2 MULCHING

ALL AREAS SHALL BE CONSIDERED TO BE DENUDED UNTIL SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB. PER 1,000 SQUARE FEET OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 75-LBS./1,000 S.F. OR 1.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. EROSION CONTROL MIX MUST BE APPLIED WITH A MINIMUM 4 INCH THICKNESS. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW WILL BE REMOVED DOWN TO A ONE-INCH DEPTH OR LESS PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA WILL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED OR ADEQUATELY ANCHORED SO THAT GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER MULCH. NETTING, TRACKING OR WOOD CELLULOSE FIBER. THE COVER WILL BE CONSIDERED SUFFICIENT WHEN THE GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. AFTER NOVEMBER 1ST, MULCH AND ANCHORING OF ALL EXPOSED SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORKDAY.

4.3 SOIL STOCKPILING

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR WITH A FOUR—INCH LAYER OF EROSION CONTROL MIX. THIS SHALL BE DONE WITHIN 24 HOURS OF STOCKING AND RE—ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL.

4.4 <u>SEEDING</u>

BETWEEN THE DATES OF OCTOBER 15TH AND APRIL 1ST, LOAM OR SEED SHALL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS NOT BEEN LOAMED, FINAL GRADING WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED.

DORMANT SEEDING MAY BE PLACED PRIOR TO THE PLACEMENT OF MULCH OR EROSION CONTROL BLANKETS. IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 6" OF LOAM AND SEED AT AN APPLICATION RATE OF 5 LBS/1,000 S.F. ALL AREAS SEEDED DURING THE WINTER SHALL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS INSUFFICIENTLY VEGETATED (LESS THAN 75% CATCH) SHALL BE REVEGETATED BY REPLACING LOAM, SEED AND MULCH. IF DORMANT SEEDING IS NOT USED FOR THE SITE, ALL DISTURBED AREAS SHALL BE REVEGETATED IN THE SPRING.

4.5 OVER WINTER STABILIZATION OF DISTURBED SOILS

BY SEPTEMBER 15TH, ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15% SHALL BE SEEDED AND MULCHED. IF THE DISTURBED AREAS ARE NOT STABILIZED BY THIS DATE, THEN ONE OF THE FOLLOWING ACTIONS SHALL BE TAKEN TO STABILIZE THE SOIL FOR LATE FALL AND WINTER:

STABILIZE THE SOIL WITH TEMPORARY VEGETATION — BY OCTOBER 1ST, SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3LBS PER 1,000 S.F., LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 LBS PER 1,000 S.F., AND ANCHOR THE MULCH WITH PLASTIC NETTING. MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 1ST, THEN MULCH THE AREA FOR OVER—WINTER PROTECTION.

STABILIZE THE SOIL WITH SOD — STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1ST. PROPER INSTALLATION INCLUDES PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.

STABILIZE THE SOIL WITH MULCH — BY NOVEMBER 15TH, MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 LBS PER 1,000 S.F.
ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. IMMEDIATELY AFTER APPLYING THE MULCH, ANCHOR THE MULCH WITH PLASTIC NETTING TO
PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

4.6 OVER WINTER STABILIZATION OF DISTURBED SLOPES

ALL STONE—COVERED SLOPES SHALL BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15TH. ALL SLOPES TO BE VEGETATED SHALL BE SEEDED AND MULCHED BY SEPTEMBER 1ST. A SLOPE IS CONSIDERED A GRADE GREATER THAN 15%. IF A SLOPE TO BE VEGETATED IS NOT STABILIZED BY SEPTEMBER 1ST, THEN ONE OF THE FOLLOWING ACTION SHALL BE TAKEN TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER:

STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS — BY OCTOBER 1ST THE DISTURBED SLOPE SHALL BE SEEDED WITH WINTER RYE AT A SEEDING RATE OF 3 LBS PER 1,000 S.F. AND THEN INSTALL EROSION CONTROL MATS OR ANCHORED MULCH OVER THE SEEDING. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% F THE SLOPE BY NOVEMBER 1ST, THEN THE CONTRACTOR SHALL COVER THE SLOPE WITH A LAYER OF EROSION CONTROL MIX OR WITH STONE RIPRAP.

STABILIZE THE SOIL WITH SOD — THE DISTURBED SLOPE SHALL BE STABILIZED WITH PROPERLY INSTALLED SOD BY OCTOBER 1ST. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE CONTRACTOR SHALL NOT USE LATE—SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 3H:1V OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.

STABILIZE THE SOIL WITH EROSION CONTROL MIX — EROSION CONTROL MIX SHALL BE PROPERLY INSTALLED BY NOVEMBER 15TH. THE CONTRACTOR SHALL NOT USE EROSION CONTROL MIX TO STABILIZE SLOPES HAVING GRADES GREATER THAN 2H:1V OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.

STABILIZE THE SOIL WITH STONE RIPRAP — PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15TH. A REGISTERED PROFESSIONAL ENGINEER SHALL BE HIRED TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY ON THE SLOPE AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP.

5.0 <u>INSPECTION AND MAINTENANCE</u> A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHAL

A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT PERIODIC VISUAL INSPECTIONS OF INSTALLED EROSION CONTROL MEASURES. THE FREQUENCY OF INSPECTION SHALL OCCUR AT LEAST ONCE EVERY TWO WEEKS, PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES, AS WELL AS AFTER A "STORM EVENT". A "STORM EVENT" SHALL CONSIST 0.5 INCHES OF RAIN WITHIN A 24 HOUR PERIOD. THE FOLLOWING EROSION AND SEDIMENT CONTROL — BEST MANAGEMENT PRACTICES (BMP'S) SHALL INSPECTED IN THE MANNER AS DESCRIBED.

SEDIMENT BARRIERS: HAY BALE BARRIERS, SILT FENCES AND FILTER BERMS SHALL BE INSPECTED AND REPAIRED FOR THE FOLLOWING IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES OF THE BARRIER, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SEDIMENT BARRIERS SHALL BE REPLACED WITH A TEMPORARY CHECK DAM. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE—HALF THE HEIGHT OF THE BARRIER. FILTER BERMS SHOULD BE RESHAPED AS NEEDED. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHOULD BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

STABILIZED STONE CONSTRUCTION ENTRANCES THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. WHEN THE CONTROL PAD BECOMES INEFFECTIVE, THE STONE SHALL BE REMOVED ALONG WITH THE COLLECTED SOIL MATERIAL AND REDISTRIBUTED ON SITE IN A STABLE MANNER. THE ENTRANCE SHOULD THEN BE RECONSTRUCTED. THE CONTRACTOR SHALL SWEEP OR WASH PAVEMENT AT EXITS, WHICH HAVE EXPERIENCED MUD-TRACKING ON TO THE PAVEMENT OR TRAVELED WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH AGGREGATE, WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERWAYS.

MULCHED AREAS ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS, TO CHECK FOR RILL EROSION. IF LESS THAN 90% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHALL BE IMMEDIATELY APPLIED. NETS MUST BE INSPECTED AFTER RAIN EVENTS FOR DISLOCATION OR FAILURE. IF WASHOUTS OR BREAKAGE OCCUR, RE—INSTALL THE NETS AS NECESSARY AFTER REPAIRING DAMAGE TO THE SLOPE. INSPECTIONS SHALL TAKE PLACE UNTIL GRASSES ARE FIRMLY ESTABLISHED (95% SOIL SURFACE COVERED WITH GRASS).WHERE MULCH IS USED IN CONJUNCTION WITH ORNAMENTAL PLANTINGS, INSPECT PERIODICALLY THROUGHOUT THE YEAR TO DETERMINE IF MULCH IS MAINTAINING COVERAGE OF THE SOIL SURFACE. REPAIR AS NEEDED.

DUST CONTROL WHEN TEMPORARY DUST CONTROL MEASURES ARE USED, REPETITIVE TREATMENT SHALL BE APPLIED AS NEEDED TO ACCOMPLISH CONTROL.

STORMWATER APPURTENANCES INCLUDING THE UNDERDRAINS, STORM DRAINS, AND CATCH BASINS.

EROSION AND SEDIMENTATION CONTROL INSPECTIONS:

ACORN ENGINEERING HAS PERSONNEL QUALIFIED TO CONDUCT EROSION AND SEDIMENTATION CONTROL INSPECTIONS. FOR FURTHER INFORMATION CONTACT:

CONTACT: WILL SAVAGE, PE TELEPHONE: (207) 775–2655

QUALIFICATIONS:

> MAINE PROFESSIONAL ENGINEERING LICENSE #11419

> MAINE DEP — CERTIFIED IN MAINTENANCE & INSPECTION OF STORMWATER BMP'S CERT #14

> CERTIFIED EROSION, SEDIMENT AND STORM WATER INSPECTOR (CESSWI) CERT #0293
> CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC) CERT. #4620

THE CONTRACTOR HAS SOLE RESPONSIBILITY FOR COMPLYING WITH THE EROSION AND SEDIMENTATION REPORT/PLAN, INCLUDING CONTROL OF FUGITIVE DUST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MONETARY PENALTIES RESULTING FROM FAILURE TO COMPLY WITH THESE STANDARDS.

6.0 IMPLEMENTATION SCHEDULE

THE FOLLOWING IMPLEMENTATION SEQUENCE IS INTENDED TO MAXIMIZE THE EFFECTIVENESS OF THE ABOVE DESCRIBED EROSION CONTROL MEASURES. CONTRACTORS SHOULD AVOID OVER EXPOSING DISTURBED AREAS AND LIMIT THE AMOUNT OF STABILIZATION AREA.

- INSTALL A STABILIZED CONSTRUCTION ENTRANCE IN ALL LOCATIONS WHERE CONSTRUCTION TRAFFIC WILL ENTER AND EXIT THE SITE.
- INSTALL PERIMETER SILT FENCE OR WOOD WASTE BERM. INSTALL ALL OTHER EROSION CONTROL DEVICES AS NECESSARY THROUGHOUT THE REMAINDER OF THIS SCHEDULE
- COMMENCE EARTHWORK OPERATIONS
- . COMMENCE INSTALLATION OF DRAINAGE INFRASTRUCTURE
- 6. CONTINUE EARTHWORK AND GRADING TO SUBGRADE AS NECESSARY FOR CONSTRUCTION 7. COMPLETE INSTALLATION OF DRAINAGE INFRASTRUCTURE
- 7. COMPLETE INSTALLATION OF DRAINAGE INFRASTRUCTURE
 8. COMPLETE REMAINING EARTHWORK OPERATIONS
- 9. INSTALL SUB-BASE (IF NECESSARY) AND BASE GRAVELS IN PAVED AREAS.
- 10. INSTALL BASE COURSE PAVING
 11. LOAM, LIME, FERTILIZE, SEED AND MULCH DISTURBED AREAS AND COMPLETE ALL LANDSCAPING.
- 12. INSTALL SURFACE COURSE PAVING
 13. ONCE THE SITE IS STABILIZED AND 90% CATCH OF VEGETATION HAS BEEN OBTAINED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.
 14. TOUCH UP LOAM AND SEED.

THE ABOVE IMPLEMENTATION SEQUENCE SHOULD BE GENERALLY FOLLOWED BY THE SITE CONTRACTOR. HOWEVER, THE CONTRACTOR MAY CONSTRUCT SEVERAL ITEMS SIMULTANEOUSLY. THE CONTRACTOR SHALL SUBMIT TO THE OWNER A SCHEDULE OF THE COMPLETION OF THE WORK. IF THE CONTRACTOR IS TO COMMENCE THE CONSTRUCTION OF MORE THAN ONE ITEM ABOVE, THEY SHALL LIMIT THE AMOUNT OF EXPOSED ARE TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDERTAKEN DURING THE FOLLOWING 30 DAYS.

THE CONTRACTOR SHALL REVEGETATE DISTURBED AREAS AS RAPIDLY AS POSSIBLE. ALL AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 7 DAYS OF FINAL GRADING OR BEFORE A STORM EVENT. THE CONTRACTOR SHALL INCORPORATE PLANNED INLETS AND DRAINAGE SYSTEMS AS EARLY AS POSSIBLE INTO THE CONSTRUCTION

7.0 CONCLUSION

THE ABOVE EROSION CONTROL NARRATIVE IS INTENDED TO MINIMIZE THE DEVELOPMENT IMPACT BY IMPLEMENTING TEMPORARY AND PERMANENT EROSION CONTROL MEASURES. THE CONTRACTOR SHALL ALSO REFER TO THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL FOR ADDITIONAL INFORMATION.

TEMPORARY SEEDING PLAN

SITE PREPARATION

THE SEEDED AREAS SHALL BE FEASIBLY GRADED OUT TO PROVIDE THE USE OF EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. IF NECESSARY, THE SITE MAY REQUIRE ADDITIONAL TEMPORARY EROSION CONTROL MEASURES OUTLINED IN THE EROSION CONTROL REPORT.

FERTILIZER SHALL BE APPLIED TO THE SITE AT A RATE OF 13.8 POUNDS PER 1,000 SQUARE FEET. THE COMPOSITION OF THE FERTILIZER SHALL BE 10-10-10 (N-P205-K20) OR EQUIVALENT.

LIMESTONE SHALL BE APPLIED TO THE SITE AT A RATE OF 138 POUNDS PER 1,000 SQUARE FEET.

<u>SEEDING</u>

REFER TO THE TEMPORARY SEED APPLICATION RATES TABLE.

<u>MULCHING</u>

MULCH SHALL BE APPLIED AT A RATE OF 70 LBS — 90 LBS PER 1,000 SQUARE FEET. THE MULCH SHALL BE INSTALLED AT A DEPTH OF 4 INCHES. THE SEEDED AREA SHALL BE MULCHED IMMEDIATELY AFTER SEED IS APPLIED. MULCHING DURING THE WINTER SEASON SHALL BE DOUBLE THE NORMAL AMOUNT.

CONCLUSION

PLEASE REFER TO THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL FOR ADDITIONAL INFORMATION PERTAINING TO TEMPORARY SEEDING AND MULCHING.

PERMANENT SEEDING PLAN

SITE PREPARATION

THE SEEDED AREAS SHALL BE FEASIBLY GRADED OUT TO PROVIDE THE USE OF EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. IF NECESSARY, THE SITE MAY REQUIRE ADDITIONAL TEMPORARY EROSION CONTROL MEASURES OUTLINED IN THE EROSION CONTROL REPORT.

SEEDBED PREPARATION

FERTILIZER SHALL BE APPLIED TO THE SITE AT A RATE OF 13.8 POUNDS PER 1,000 SQUARE FEET. THE COMPOSITION OF THE FERTILIZER SHALL BE 10-10-10 (N-P205-K20) OR EQUIVALENT.

LIMESTONE SHALL BE APPLIED TO THE SITE AT A RATE OF 138 POUNDS PER 1,000 SQUARE FEET.

REFER TO THE PERMANENT SEED APPLICATION RATES TABLE

IULCHING

MULCHING

MULCH SHALL BE APPLIED AT A RATE OF 70 LBS — 90 LBS PER 1,000 SQUARE FEET. THE MULCH SHALL BE INSTALLED AT A DEPTH OF 4 INCHES. THE SEEDED AREA SHALL BE MULCHED IMMEDIATELY AFTER SEED IS APPLIED. MULCHING DURING THE WINTER SEASON SHALL BE DOUBLE THE NORMAL AMOUNT.

RECOMMENDATIONS

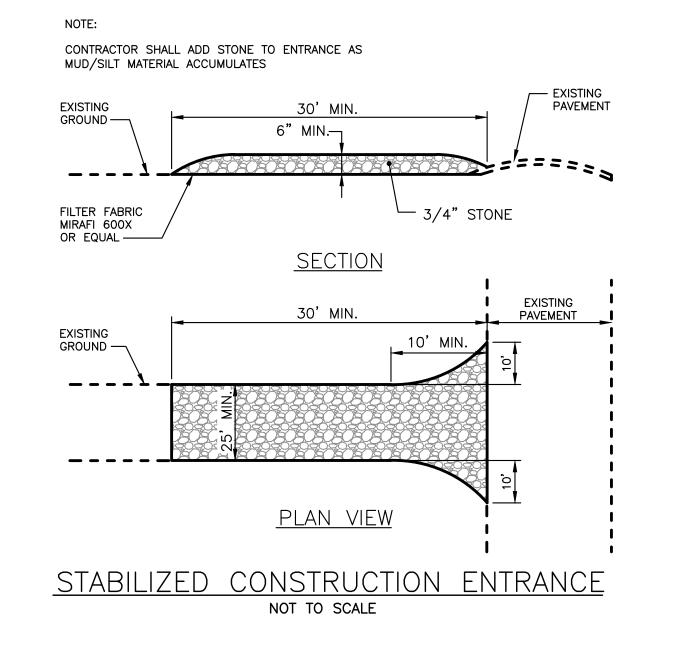
PERMANENT SEEDING IS RECOMMENDED TO BE COMPLETED IN THE SPRING. LATER SUMMER SEEDING IS ALLOWED IF COMPLETED PRIOR TO SEPTEMBER 1ST. IF SEEDING CANNOT BE ACCOMPLISHED DURING THE PERIODS RECOMMENDED FOR PERMANENT SEEDING, THEN THE CONTRACTOR SHALL PERFORM TEMPORARY SEEDING PER THE TEMPORARY SEEDING PLAN.

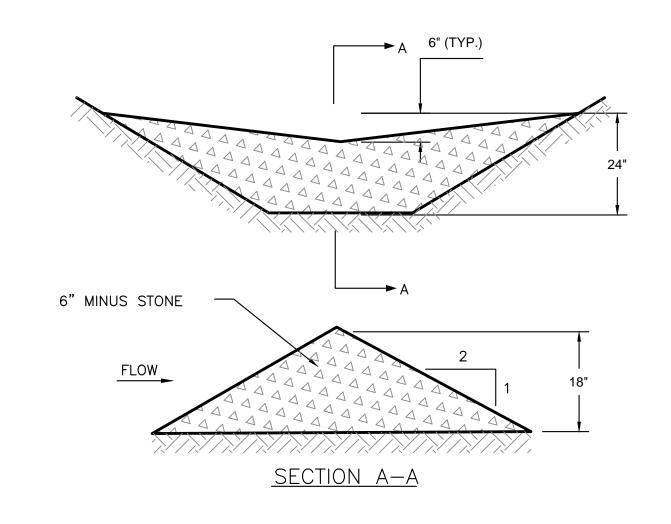
PLEASE REFER TO THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL FOR ADDITIONAL INFORMATION PERTAINING TO PERMANENT SEEDING AND MULCHING.

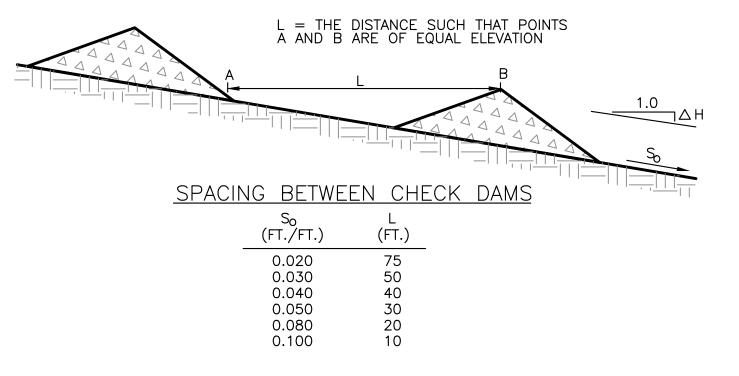
PERMIT DRAWINGS

PERMANENT SEED APPLICATION RATE — CONSERVATION SEED MIX			
SEED	LBS / ACRE		
TALL FESCUE	20.00		
CREEPING RED FESCUE	20.00		
BIRDSFOOT TREFOIL	8.00		
TOTAL	48 LBS/ACRE		

	TEMPORAR'	Y SEED APPLICAT	TION RATES
<	SEED	LBS / ACRE	RECOMMENDED SEEDING DATES
	WINTER RYE	2.57	8/15 TO 10/1
	OATS	1.84	4/1 TO 7/1 8/15 TO 9/15
	ANNUAL RYGRASS	0.92	4/1 TO 7/1
	SUDANGRASS	0.92	5/15 TO 8/15
	PERENNIAL	0.92	8/15 TO 9/15
	TOTAL	7.17 LBS/ACRE	







STONE CHECK DAM

ISSUED FOR DATE

CITY SUBMISSION

(COMMENT RESPONSE 10/29/12)

MAINE DEP-MCGP

WHS

11/2/12

REVISION

REV.
DATE

SUMPSCOT STREET

ER & HARDWARE, INC.

EROSION CONTROL DETA

PROJECT NAME:

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165 PRESUMPSCOT STREET, PORTLA

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FILE: CIVIL DRAWINGS

DATE: 8/8/12

JN: 1038

SCALE: NTS

DESIGN BY: WHS

DRAWN BY: WHS

CHECKED BY: HPS

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SAVAGE
NO. 11418

10-29-12

CHECKED BY: HPS

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