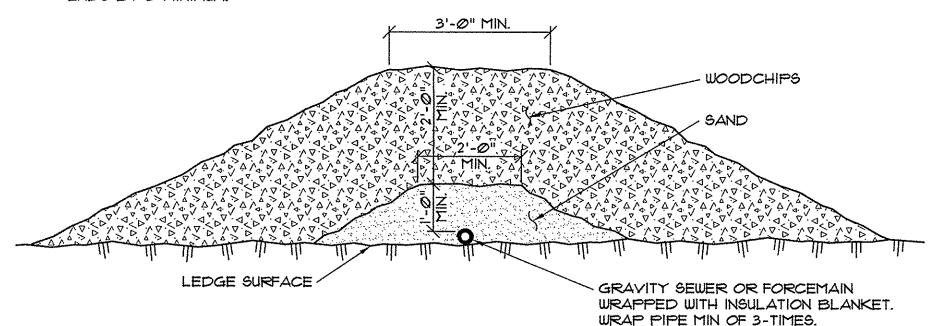


#### SECTION WITH 12" TO 20" SOIL OVER LEDGE

#### NOTES:

OVERLAND

- WHERE 2 PIPES SHARE A TRENCH MAINTAIN 18" MIN. SEPERATION BETWEEN THEM.
- 2. INSULATION: ESP BY LOW-E REFLECTIVE INSULATION, CUT 8' WIDE, ROLL IN HALF AND WRAP 4' WIDE STRIP AROUND THE PIPE. INSULATION COMES IN 60' LONG ROLLS. USE ZIP TIES EVERY 10 FEET TO KEEP WRAP TIGHT. OVER LAP ENDS BY 2' MINIMUM.



FRAME AND COVER ETHERIDGE

ADJUST TO GRADE WITH CONCRETE

MANHOLE DONUTS OR BRICK, 12"

REINFORCED POLYPROPYLENE

MANHOLE STEPS AT 12" O.C.

·COMPACTED GRAVEL, 12" MIN.

SLOPE BENCH TOWARD INVERT

BENCH HEIGHT AT TOP OF PIPE

CONSTRUCTED OF BRICK MASONRY

APPLY DAMPPROOFING COMPOUND

TO THE EXTERIOR OF THE MANHOLE

-3/4" CRUSHED STONE, 12" DEEP MIN.

-WATERTIGHT FLEXIBLE BOOT

E2456 OR APPROVED EQUAL,

MARKED "SEWER"

MAXIMUM HEIGHT

-PRECAST CONCRETE

COVER (H-20 LOAD)

SHIPLAP JOINTS W/

2 - 1" PBUTYL ROPES

PRECAST REINFORCED

CONCRETE SECTIONS

FINISH GRADE

SECTION ON LEDGE TRENCH SECTION ON LEDGE

GRAVEL

CONCRETE MANHOLE SECTION

# TRENCH SECTION AT ROAD SHOULDER

LOAM & SEED DISTURBED AREA

BACKFILL WITH SUITABLE SOILS FROM

ON-SITE EXCAVATION OR IF SUITABLE

SOILS ARE UNAVAILABLE USE GRANULAR

SHALL MEET THE REQUIREMENTS OF MOOT

703.18. PLACE AND COMPACT IN LAYERS

NOT TO SCALE

NOT TO SCALE

BORROW (MDOT 703.19), SUITABLE SOILS

TO DITCH AS REQ'D

12" THICK OR LESS.

- 3/4" CRUSHED STONE

- FORCEMAIN

GRAVEL SHOULDER

11 - - 11 - - 11 - 1 - - 11 - - - 11 - - - 11

.V.:V.:V.:V.:V.:V.

3'-0" MIN.

6" MIN.

EDGE OF

GRAVEL ROAD

0.0000

CONSTRUCTION USE - 4" COMPACTED AGGREGATE GRAVEL BASE, MDOT 703,06(a) TYPE A - 15" COMPACTED AGGREGATE SUBBASE, MDOT 703.06(b) TYPE D SOUTH STREET - COMPACTED SUBGRADE REPAIR -4" TOPSOIL, NO STONES <u>GRASS</u> OVER 3/4" DIA. - GRANULAR MATERIAL IN ALL DISTURBED FILL AREAS AREAS 

FLOAT SWITCHES

VENT PIPE .

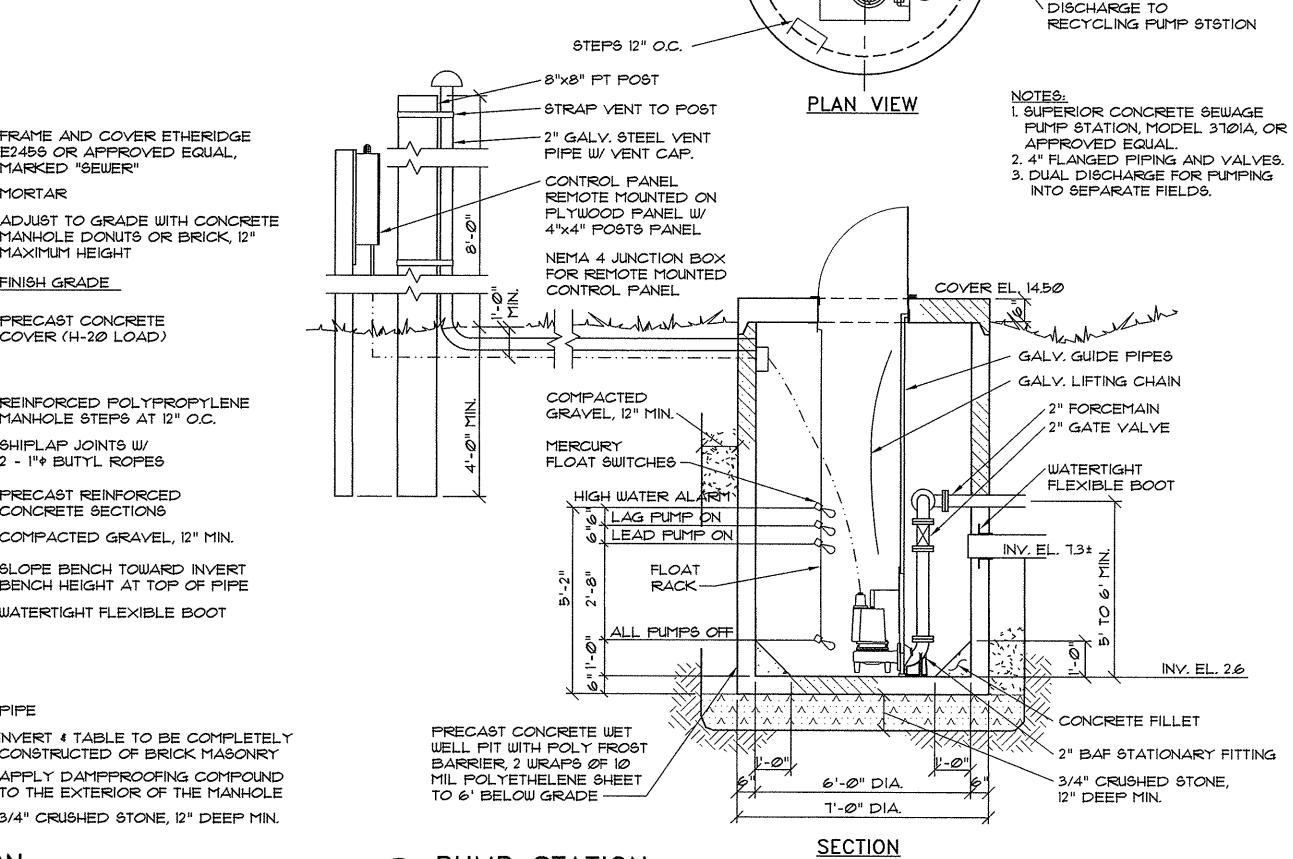
2'-6" × 4'-0"

LOCKABLE

ACCESS COVER -

- 1. MDOT = MAINE DEPARTMENT OF TRANSPORTATION.
- 2. ALL COURSE THICKNESS AFTER FINAL COMPACTION.

## SCHEDULE OF SURFACE FINISHES



### **EROSION CONTROL NOTES**

#### **GENERAL:**

SEPTEMBER 15.

- THE DRAWINGS DEPICT THE REQUIRED SOIL EROSION CONTROL MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE CONSTRUCTION SITE IN SUCH A MANNER THAT:
- I. SOIL EROSION IS KEPT TO A MINIMUM.
- 2. NO SEDIMENT LEAVES THE CONSTRUCTION SITE PROPER 3. ALL POSSIBLE MEASURES ARE EMPLOYED TO PREVENT SEDIMENT FROM ENTERING DRAINAGE COURSES AND WETLANDS EVEN BEYOND

THE DETAILS SHOWN ON THIS PLAN IF NECESSARY.

- 1. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENT CONTROL BMPS PUBLISHED BY THE BUREAU OF LAND AND WATER QUALITY, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 2003.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR ALL FINES RESULTING FROM EROSION OR SEDIMENTATION FROM THE SITE TO SURROUNDING PROPERTIES, WATERBODIES, OR WETLAND AS A RESULT OF THIS PROJECT.
- 3. LOAM AND SEED OR COVER WITH WOOD CHIPS ALL DISTURBED AREAS AS SOON AS POSSIBLE AFTER DISTURBANCE, BUT NO LONGER THAN 1 DAYS. LOAM AND SEED ANY DISTURBED AREA WITHIN 15' OF WETLANDS OR WATERBODEIS WITHIN 48 HOURS OR PRIOR TO AND STORM EVENT. USE WINTER SEED RATES AND SPECIFICATIONS IF APPROPRIATE
- INSPECT SOIL EROSION MEASURES WEEKLY AND AFTER SIGNIFICANT STORM EVENTS. MAKE ALL NECESSARY REPAIRS TO FACILITIES AS SOON AS POSSIBLE, BUT NO LONGER THAN 2 DAYS. CLEAN AND RESET SILT FENCES AND STONE CHECK DAMS WHICH ACCUMULATE SEDIMENT AND DEBRIS.
- PROTECT AND STABILIZE ALL AREAS NOT SCHEDULED FOR EROSION PREVENTION OR STABILIZATION BUT THAT SHOW SIGNS OF EROSION. NOTIFY OWNER OF ANY SIGNIFICANT EROSION PROBLEM.
- 6. APPLY MULCH TO BARE SOILS WITHIN I DAYS OF INITIAL DISTURBANCE OF SOILS, WITHIN 48 HOURS IF WITHIN 15' OF WETLAND OR WATERBODY, PRIOR TO ANY RAIN EVENT, OR PRIOR TO ANY WORK SHUTDOWN LASTING MORE THAN ONE DAY.
- TEMPORARILY SEED WITHIN I DAYS ANY AREA WHICH WILL BE LEFT DISTURBED AND UNWORKED FOR MORE THAN 14 DAYS WITH THE TEMPORARY SEED MIX LISTED BELOW. IF AREA IS WITHIN 15' OF A WETLAND OR WATERBODY, SEED WITHIN 48 HOURS. PERMANENTLY SEED ANY AREA WHICH CAN BE LOAMED AS SOON AS POSSIBLE WITH THE PERMANENT SEED MIX LISTED BELOW. DO NOT USE PERMANENT SEED MIX AFTER
- 8. MULCH ALL AREAS SEEDED SO THAT SOIL IS NOT VISIBLE THROUGH THE MULCH REGARDLESS OF THE APPLICATION RATE. DURING THE GROWING SEASON (APRIL 15 -SEPT. 30) USE EROSION CONTROL MESH (OR MULCH AND NETTING) ON:
  - -THE BASE OF GRASSED WATERWAYS -SLOPES STEEPER THAN 15% -WITHIN 100 ft. OF STREAMS AND WETLANDS
  - BETWEEN OCT. I AND APRIL 14 USE EROSION CONTROL MESH (OR MULCH AND NETTING)
    - -SIDE SLOPES OF GRASSED WATERWAYS -SLOPES STEEPER THAN 8%
- 9. FOLLOW SILT FENCE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS FOR INSTALLATION OF SILT FENCE. SECURE ENTIRE BOTTOM OF FENCE EITHER BY BURYING BOTTOM OF FENCE IN A TRENCH OR BERMING WITH SOIL OR CHIPPED GRUBBINGS. REFER TO SILT FENCE DETAILS.
- 10. PLACE AND GRADE LOAM IN A REASONABLY UNIFORM MANNER. WORK LIME AND FERTILIZER INTO THE SOIL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM SEED BED IS PREPARED, REMOVE FROM SURFACE ALL STONES LARGER THAN 2" AND ALL OTHER UNSUITABLE MATERIAL. LIME AND FERTILIZER SHOULD BE MIXED INTO SOIL PRIOR TO ROLLING EXCEPT IF INCLUDED IN HYDROSEED MIXTURE, PERMANENT STABLILIZATION OF REVEGETATED AREAS IS CONSIDERED AS 90% CATCH.
- II. WATER FROM CONSTRUCTION TRENCH DEWATERING OR TEMPORARY STREAM DIVERSION WILL PASS FIRST THROUGH A FILTER BAG OR SECONDARY CONTAINMENT STRUCTURE (E.G. HAY BALE OR EROSION CONTROL MIX LINED POOL) PRIOR TO DISCHARGE. THE DISCHARGE SITE SHALL BE SELECTED TO AVOID FLOODING. ICING, AND SEDIMENT DISCHARGES TO A PROTECTED RESOURCE. IN NO CASE SHALL THE FILTER BAG OR CONTAINMENT STRUCTURE BE LOCATED WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE.

#### UNDERGROUND UTILITIES WARNING TAPE

IDENTIFICATION TAPE TO BE INSTALLED ABOVE ALL NEW UNDERGROUND UTILITIES AND ABOVE ANY EXISTING UTILITIES THAT MAY BE EXPOSED BY THIS CONSTRUCTION.

DETECTABLE UNDERGROUND MARKING TAPE TO BE PERMANENT BRIGHT-COLORED, CONTINUOUS-PRINTED PLASTICIZED ALUMINUM TAPE, INTENDED FOR DIRECT-BURIAL SERVICE NOT LESS THAN 3" WIDE x 5 MILS THICK. PROVIDE TAPE WITH BLACK PRINTING IDENTIFYING THE UTILITY. DETECTABLE WARNING TAPE REQUIRED OVER ALL WATER, SEWER, DRAINAGE, OR GAS UTILITIES. TAPE TO BE TERRA TAPE BY REEF INDUSTRIES, INC., www.reefindustries.com, OR EQUAL.

APWA UNIFORM COLOR CODE:

ELECTRIC POWER LINES, CABLES, CONDUIT AND

LIGHTING CABLES

COMMUNICATION, ALARM OR SIGNAL LINES, CABLES OR CONDUIT

SEWERS AND DRAIN LINES

#### TOPSOIL:

- 1. SUITABLE TOPSOIL SALVAGED FROM SITE OR SCREENED, LOOSE AND FRIABLE SANDY LOAM OR LOAM AS DEFINED BY THE USDA SOIL CONSERVATION SERVICE CLASSIFICATION SYSTEM, FREE FROM ADMIXTURE OF SUBSOIL, REFUSE, LARGE STONES, CLODS, ROOTS, WEEDS, RHIZOMES OR OTHER UNDESIREABLE FOREIGN MATTER AS DETERMINED BY THE INSPECTING AUTHORITY. CONTRACTOR SHALL SUBMIT REPORTS OF LOAM TEST RESULTS PERFORMED BY AN INDEPENDENT TESTING LABORATORY FOR TOPSOIL FROM DIFFERENT SOURCES PRIOR TO PLACING. THE COST OF TESTING SHALL BE INCIDENTAL TO THE COST OF TOPSOIL TOPSOIL SHALL MEET THE FOLLOWING SPECIFICATIONS:
- 2. MATERIAL

SAND - 0.08 IN. TO 0.002 IN. DIAMETER (% BY VOLUME)..... 45 - 75 SILT - 0.002 IN. TO 0.00008 IN. DIAMETER (% BY VOLUME)... 20 - 40 CLAY - LESS THAN 0.00008 IN. DIAMETER (% BY VOLUME).... 5 - 15

ORGANICS (SHALL MEET THE REQUIREMENTS OF MOOT STANDARD SPECIFICATION 117.09 PEAT HUMUS) (% BY VOLUME). 10 - 20

CALCIUM (CA) (% SATURATION) .......... 60 - 80 MAGNESIUM (MG) (% SATURATION) ..... 10 - 25 POTASSIUM (K) (% SATURATION)..... 2.1 - 3.0

PERMEABILITY (INCHES PER HOUR)....3 - 10

PHOSPHORUS (P) (POUNDS/ACRE) ..... 10 - 40

#### 

### **SEEDING:**

USE PERMANENT SEED MIXES AND RATES BETWEEN 5/15 AND 9/30. USE TEMPORARY SEED MIXES FOR PERIODS LESS THAN 12 MONTHS. IF USING TEMPORARY SEED MIXES AND RATES BETWEEN 10/1 AND 5/14, RE-SEED WITH PERMANENT SEED MIX AFTER 5/15.

#### PERMANENT SEED:

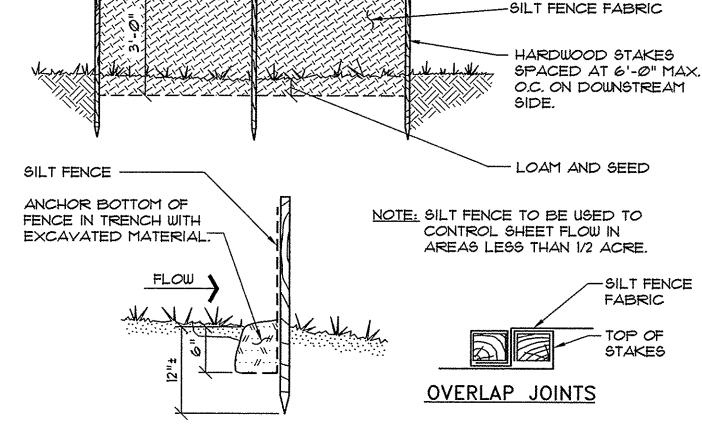
MDOT 117.03(a) METHOD NUMBER 2

#### TEMPORARY SEED: OATS ..... 80.00 LBS/ACRE 4/01 - 5/14 ANNUAL RYEGRASS ...... 4000 LBS/ACRE SUDANGRASS ..... 40.00 LBS/ACRE 5/15 - 8/14 ANNUAL RYEGRASS ..... 80.00 LBS/ACRE 5/15 - 9/14 WINTER RYE ...... 112.00 LBS/ACRE 9/15 - 9/30 WINTER RYE (W/ MULCH COVER) . . . . . 112.00 LBS/ACRE 10/01 - 3/31

#### LIME AND FERTILIZER:

APPLY GROUND LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 POUNDS PER 1000 SQUARE FEET). APPLY FERTILIZER (10-20-20) AT A RATE OF 800 POUNDS PER ACRE (18.4 POUNDS PER 1000 SQUARE FEET).

STRAW OR HAY (ANCHORED)..... 70 - 90 LBS PROTECTED AREAS STRAW OR HAY (ANCHORED)..... 185 - 275 LBS WINDY AREAS SHREDDED OR CHOPPED ....... 185 - 275 LBS JUTE MESH ..... AS REQUIRED MODERATE TO HIGH VELOCITY AREAS 4 EXCELSIOR MAT ..... AS REQUIRED STEEP SLOPES



SILT FENCE DETAIL NOT TO SCALE

2 |6/25/13| RELOCATED FORCEMAIN 3/26/13 REVISED FORCEMAIN LOCATION & INSTALLATION REV. DATE DESCRIPTION

> CLIFF ISLAND SEPTIC SYSTEM ASSOCIATION P.O. BOX 78, CLIFF ISLAND, MAINE

 $\equiv$  WASTEWATER TREATMENT \_ CLIFF ISLAND, PORTLAND MAINE

CONSULTING ENGINEERS 28 VANNAH AVENUE DISPOSAL BED SYSTEM DETAILS

SCALE: AS SHOWN DRN BY: JDC  $\sim$ DATE: OCTOBER 5, 2012 DESG BY: TSG CHK BY: TGG PROJECT: 11161

6/25/13

WATE OF MA

THOMAS

GREER

No. 4206

**CENSE** 

PINKHAM&GREER

NOT TO SCALE

NOT TO SCALE

PUMP STATION

NOT TO SCALE