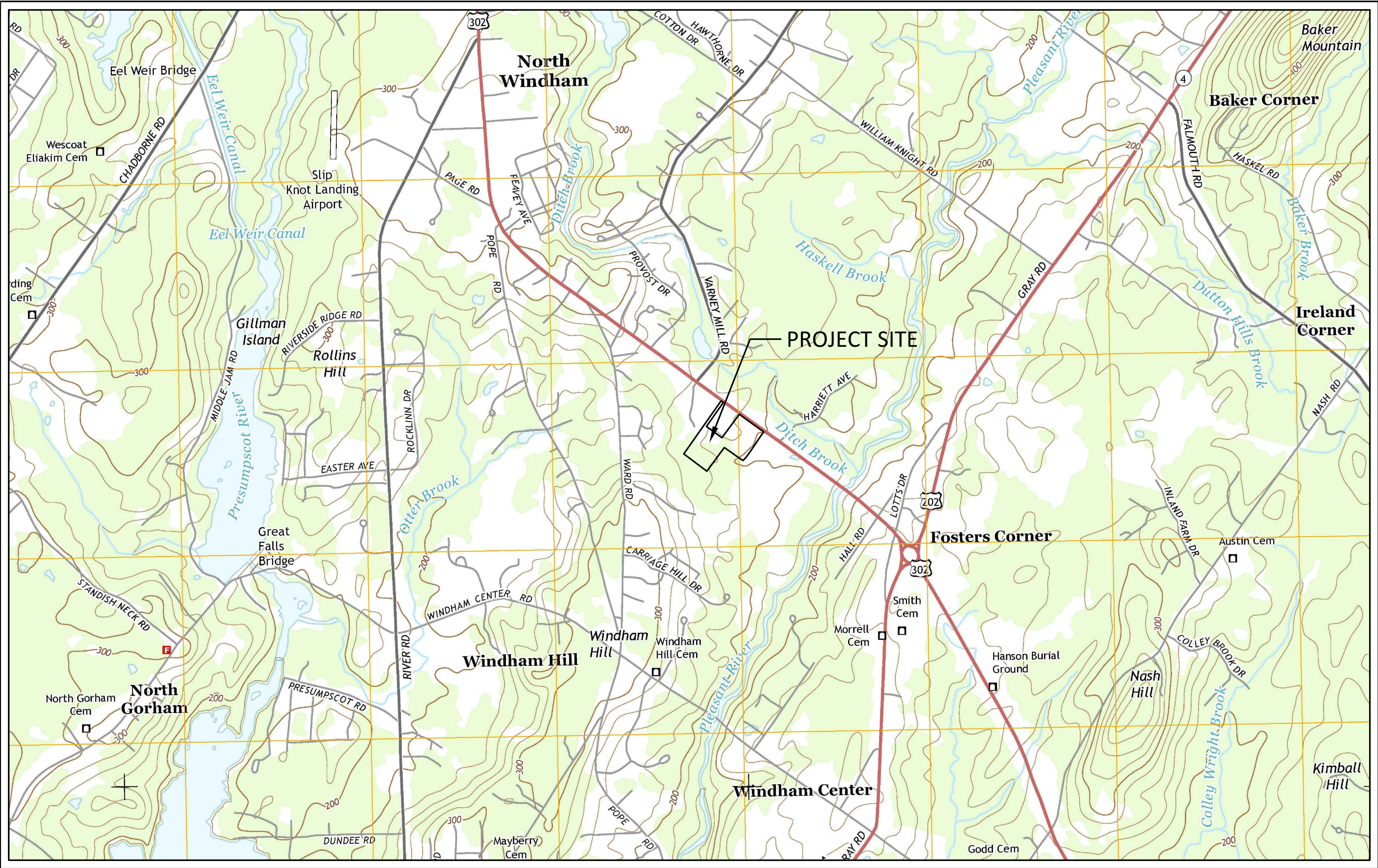


CAMPING WORLD SURFACE PARKING FACILITY

ROOSEVELT TRAIL & DANIELLE DRIVE
WINDHAM, MAINE

CONSULTANTS	
CIVIL ENGINEER	DM ROMA CONSULTING ENGINEERS
LAND SURVEYOR	SURVEY, INC.
WETLAND SCIENTIST	DONALD MURPHY
SOIL SCIENTIST	ALBERT FRICK ASSOCIATES



PROJECT VICINITY MAP

ISSUED FOR PERMITTING - NOT FOR CONSTRUCTION
SEPTEMBER 29, 2021

PREPARED BY:

DM ROMA

CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 310 - 0506

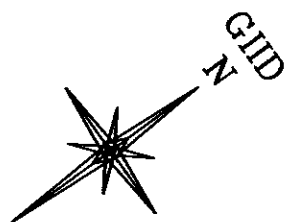
APPLICANT:

FRHP LINCOLNSHIRE, LLC
250 PARKWAY DRIVE, SUITE 270
LINCOLNSHIRE, IL 60069

CAMPING WORLD - SURFACE PARKING FACILITY

DRAWING SHEET INDEX

PAGE NO.	DESCRIPTION
1	TITLE SHEET
2	ALTA/ACSM LAND TITLE SURVEY
3	SITE PLAN
4	OVERALL GRADING PLAN
5	POND PLAN - WET POND
6	POND PLAN - FILTER BASIN FB-1
7	POND PLAN - FILTER BASINS FB-2 & FB-3
8	DETAILS
9	DETAILS



N/F
DKD LLC
15379/40

N/F
Biskup Properties, LLC
26241/142

N/F
Shawn F. Cohen
Jean M. Cohen
19350/79

N/F
Windham Hill Woods Condominiums
8987/256
(Plan Reference 2)

N/F
Peter A. Woodbury & Marlyse B.
Woodbury
4076/38

N/F
Lee's Family Trailer Sales & Service
6460/312

LEGAL DESCRIPTION

A certain lot or parcel of land lying on the southeasterly side of Roosevelt Trail (Route 302) in the Town of Windham, County of Cumberland, State of Maine, bounded and described as follows:

Beginning at a point on the southeasterly side of Roosevelt Trail, said point lying S 53°42'03"E by said Roosevelt Trail a distance of Fifty and 01/100 (50.01) feet from a 5/8" capped iron rod (PLS 2320*) at the northeasterly corner of land now or formerly of Shawn F. Cohen and Jean M. Cohen as described in a deed recorded in the Cumberland County Registry of Deeds in Book 19350, Page 79. Thence:

- 1) S 53°42'03"E by said Roosevelt Trail a distance of Three Hundred Fifty and 00/100 (350.00) feet to a point.
- 2) S 36°23'43"W a distance of Five Hundred Sixteen and 00/100 (516.00) feet to a point.
- 3) N 53°40'50"W a distance of Three Hundred Thirty-eight and 00/100 (338.00) feet to a point on the southeasterly line of an easement depicted as "Easement benefiting DMK Parcel" as delineated on an ALTA/ACSM Land Title Survey made for Oak Engineers by Titcomb Associates dated April 26, 2011 and revised through May 6, 2011.
- 4) N 35°03'46"E by said easement a distance of Five Hundred Sixteen and 00/100 (516.00) feet to the point of beginning.

Bearings are referenced to grid north, Maine State Plane Coordinate System, NAD83, West Zone.

The above described property contains 4.07 acres and being a portion of land now or formerly of Skillin's Windham, LLC as described in a deed recorded in the Cumberland County Registry of Deeds in Book 19972, Page 327. The above described parcel is depicted as "DMK Parcel-Parcel to be conveyed" on a plan entitled "ALTA/ACSM Land Title Survey" made for Oak Engineers by Titcomb Associates dated April 26, 2011 and revised through May 6, 2011.

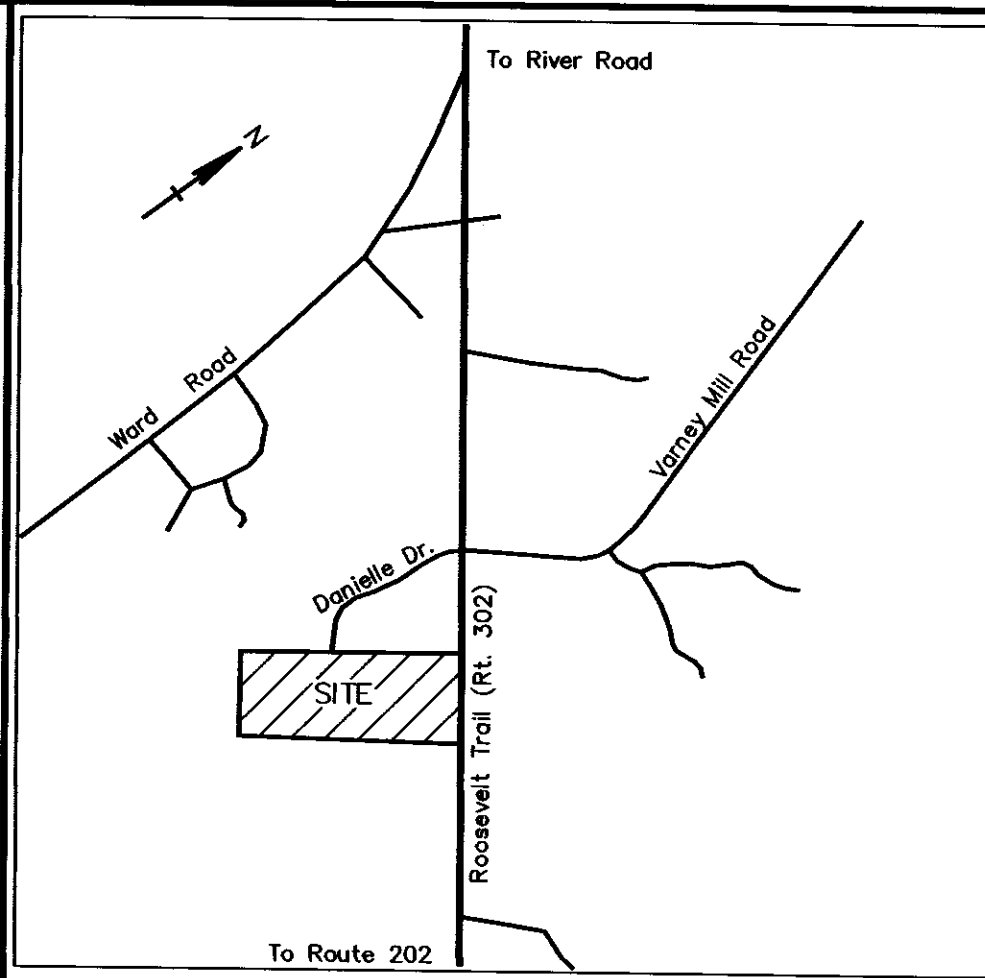
The above described parcel benefits from an Access and Utility Easement lying on the southeasterly side of Roosevelt Trail (Route 302) in the Town of Windham, County of Cumberland, State of Maine, bounded and described as follows:

Beginning at a 5/8" capped iron rod (PLS 2320*) on the southeasterly side of Roosevelt Trail (Route 302) at the northeasterly corner of land now or formerly of Shawn F. Cohen and Jean M. Cohen as described in a deed recorded in the Cumberland County Registry of Deeds in Book 19350, Page 79. Thence:

- 1) S 53°42'03"E by said Roosevelt Trail a distance of Fifty and 01/100 (50.01) feet to a point at the northeasterly corner of land depicted as DMK Parcel-Parcel to be conveyed" as delineated on an ALTA/ACSM Land Title Survey made for Oak Engineers by Titcomb Associates dated April 26, 2011 and revised through May 6, 2011.
- 2) S 35°03'46"W by said DMK Parcel a distance of Six Hundred Thirty-two and 48/100 (632.48) feet to a point.
- 3) N 54°56'14"W a distance of Fifty and 00/100 (50.00) feet to a point at the southeasterly terminus of Danielle Drive.
- 4) N 35°03'46"E by said Danielle Drive, by land now or formerly of Biskup Properties, LLC as described in a deed recorded in said Registry in Book 26241, Page 142, and by said land of Cohen a distance of Six Hundred Thirty-three and 56/100 (633.56) feet to the point of beginning.

Bearings are referenced to grid north, Maine State Plane Coordinate System, NAD83, West Zone.

The above described easement contains 0.73 acres and lying over a portion of land now or formerly of Skillin's Windham, LLC as described in a deed recorded in the Cumberland County Registry of Deeds in Book 19972, Page 327. The above described parcel is depicted as "Access and Utility Easement benefiting DMK Parcel" on a plan entitled "ALTA/ACSM Land Title Survey" made for Oak Engineers by Titcomb Associates dated April 26, 2011 and revised through May 6, 2011.



VICINITY MAP

No Scale

NOTES

- 1) Book and Page references are to the Cumberland County Registry of Deeds.
- 2) Bearings are referenced to grid north, Maine State Plane Coordinate System, NAD83, West Zone.
- 3) Omitted intentionally.
- 4) Utility information on this plan is based on location of visible features, including a gas line marked by others. DigSafe and/or the appropriate utilities should be contacted prior to any construction.
- 5) Property lies within Zone C based on FIRM Community #230189 Panel #0015 B, dated September 2, 1981. It does not lie within a special flood hazard area.
- 6) No visible buildings currently exist on the property. The location of an old building foundation is shown.
- 7) Title information was provided in Title Commitment File Number 10028878, effective April 4, 2011 at 4:30 p.m. by Commonwealth Land Title Insurance Company.
- 8) No parking striping was observed on the locus property.
- 9) Pins have not been set to date and will be set when proposed lot is agreed upon by buyer and seller.

PLAN REFERENCES

- 1) Site Plan made for Lloyd Bennett by Robert P. Titcomb Inc. dated August 11, 1984.
- 2) State of Maine Department of Transportation Right of Way Map, State Highway 14 dated September, 1986, D.O.T. File No. 3-346, sheets 3 & 4 of 5.
- 3) Existing Conditions Survey Commercial Subdivision made for Correll-Palmer Consulting Engineers Inc. by Titcomb Associates dated April 6, 2001 and revised through October 31, 2001, recorded in Plan Book 202, Page 372.
- 4) Tractor Supply Co., Conceptual Site Plan 1, by Oak Engineers, Project 094.06035 dated October 19, 2010.

LEGEND

- Iron marker - found
- Iron marker - set (#5 rebar)
- Existing Property line (locus)
- Proposed property line (locus)
- Right of way line
- Easement line
- Property line (abutter)
- Wire fence
- Underground gas line
- Edge of traveled way
- Edge of pavement
- Water valve
- Gas valve
- Utility pole
- Well
- Hydrant
- Overhead utility wires
- Chain link fence
- Guardrail
- Now of Formerly
- Deed reference (Book/Page)
- Capped iron rod/surveyor license #
- Existing building

OWNERS OF RECORD

Skillin's Windham, LLC; Book 19972, Page 327

Revised 5/17/2011 - add guardrail.
Revised 5/12/2011 - add legal description.
Revised 5/06/2011 - per Title Company comments.

ALTA/ACSM Land Title Survey
Property to be conveyed by Skillin's Windham, LLC
496 Roosevelt Trail
Windham, Maine

MADE FOR
Oak Engineers

400 Commercial Street
Portland, Maine

JOB #8430.1
BOOK #827
8430-1-ALTA-R1.dwg
FILE #1931

DATE: April 26, 2011
SCALE: 1" = 50'

Titcomb Associates
133 Gray Road
Falmouth, Maine 04105 (207)797-9199

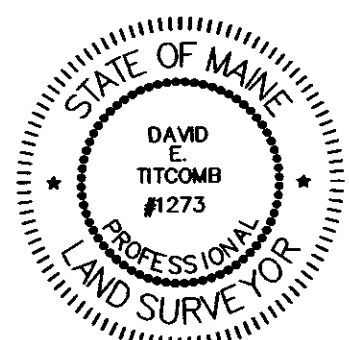
CERTIFICATION

To DMK Development-Windham, LLC, Commonwealth Land Title Insurance Company, Katahdin Trust Company and Tractor Supply Company, a Delaware Corporation:

This is to certify that this map or plot and the survey on which it is based were made in accordance with the 2011 Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1 (see note 9), 2, 3, 4, 6, 8, 9, 11(a) and 13 of Table A thereof. The field work was completed on 4/26/11.

This survey conforms to the current standards of the Maine State Board of Licensure for Land Surveyors.

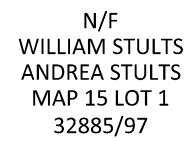
Date of Plat or Map: 4/28/2011
David E. Titcomb, License # 1273



ZONING

Zone: Commercial District III

Minimum Lot Size:	Dwellings—80,000 square feet Non-Residential—20,000 square feet
Net Residential Density:	60,000 feet
Minimum Lot Width:	Dwellings—200 feet Non-Residential: 100 feet
Minimum Front Yard:	Arterial Street—60 feet Non-Arterial Street—40 feet
Minimum Landscaped Buffer Strip:	20 feet
Minimum Side Yard:	10 feet
Minimum Rear Yard:	10 feet
Maximum Building Height:	Dwellings—35 feet Non-Residential—None

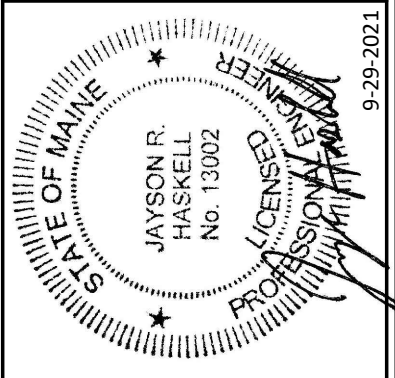


1. THE OWNER OF RECORD OF THE PROPERTY IS RHPH LINCOLNSHIRE, LLC BY DEED RECORDED IN THE CUMBERLAND COUNTY Registry OF DEEDS BOOK 38058 PAGE 108.
2. TOTAL AREA OF THE PARCEL IS APPROXIMATELY 15.47+ ACRES.
3. PARCEL TAX MAP REFERENCE: TOWN OF WINDHAM ASSESSORS MAP 15, LOTS 1A & 2.
4. PLAN REFERENCES:
 - A) "FINAL SITE PLAN OF PROPOSED EXPANSION" FOR LEE'S FAMILY TRAILER SALES PREPARED BY SEBAGO TECHS, INC. DATED NOVEMBER 1, 1993 AND REVISED THROUGH DECEMBER 28, 1993.
 - B) "ALTA/ACSM LAND TITLE SURVEY OF PROPERTY TO BE CONVEYED BY SKILLIN'S WINDHAM, LLC MADE FOR DAK ENGINEERS" PREPARED BY TITCOMB ASSOCIATES DATED APRIL 26, 2011
 - C) "SUBDIVISION PLAN OF MOOSE LANDING NORTH, WINDHAM, MAINE" PREPARED FOR MOOSE LANDING NORTH, LLC PREPARED BY DM ROMA CONSULTING ENGINEERS DATED OCTOBER 2, 2017.
5. PROPERTY BOUNDARY SURVEY HEREON WAS PROVIDED BY SURVEY, INC. BASED ON FIELD SURVEYS PERFORMED IN FEBRUARY 2017 AND SEPTEMBER 2017 AND UTILIZING THE PROPERTY BOUNDARY ON PLAN REFERENCE 4B. BEARINGS ARE REFERENCED TO GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, NAD83, WEST ZONE.
6. TOPOGRAPHIC CONTOURS SHOWN HEREON ARE BASED ON GSI LIDAR CONTOURS OBTAINED FROM THE MAINE OFFICE OF G.S. VERTICAL DATUM IS REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88D)
7. THE PROPERTY IS LOCATED IN THE C-3 COMMERCIAL DISTRICT.
8. SPACE AND BULK REQUIREMENTS: C-3 DISTRICT

MIN LOT SIZE:	20,000 SF
MIN STREET FRONTAGE:	100 FT
MIN FRONT YARD:	60 FT (ARTERIAL)
	40 FT (NON-ARTERIAL)
MIN SIDE/REAR YARD:	10 FT
MAX BUILDING HEIGHT:	NONE
9. WETLAND DELINEATION ON ABUTTING PROPERTY PERFORMED BY DONALD MURPHY, WETLAND SCIENTIST AND LOCATED BY LOST CORNER LAND SURVEYING, LLC IN MARCH OF 2017.
10. THE PROJECT SITE IS SUBJECT TO THE FOLLOWING PERMIT ORDERS:
 - MAINE DEP STORAGE/WARE PERMIT # L-27551-N-A-N
 - MAINE DEP NRPA PERMIT # L-27551-TC-B-N
 - MAINE DEP NRPA PERMIT-BY-RULE
 - ARMY CORPS OF ENGINEERS PERMIT # NAE-2017-01829
 - MAINE DEP SITE LAW PERMIT # L-27551-26-C-N
11. THE WINDHAM ZONING BOARD OF APPEALS GRANTED APPROVAL OF AN EXPANSION OF THE EXISTING NON-CONFORMING USE ON MAY 4, 2017.
12. A ROW OF LANDSCAPING SHALL BE INSTALLED AND MAINTAINED ALONG THE EDGE OF THE PARKING AREA AS SHOWN ON THIS PLAN. TREES SHALL BE ALTERNATING BETWEEN DECIDUOUS AND EVERGREEN SPECIES AND SHALL BE SPACED 25 TO 30 FEET ON CENTER.
13. THE TOTAL SITE IMPERVIOUS AREA SHOWN ON THIS PLAN IS APPROXIMATELY 6.50 ACRES AND THE TOTAL SITE DEVELOPMENT AREA IS APPROXIMATELY 10.04 ACRES

CHAIRPERSON	DATE
-------------	------

ATTEST: _____ REGISTER



DM ROMA
CONSULTING ENGINEERS

REV	DATE	BY	DESCRIPTION
A	2-26-21	JRH	MDEP PRE-SUBMISSION
B	4-1-21	JRH	ISSUED FOR MDEP SLODA PERMIT REVIEW
C	9-7-21	JRH	REVISED PER TOWN REVIEW
D	9-29-21	JRH	REVISED PER TOWN REVIEW

SITE PLAN

SURFACE PARKING FACILITY

ROOSEVELT TRAIL & DANIELLE DRIVE
WINDHAM, MAINE

FOR:
FRHP LINCOLNSHIRE LLC

250 PARKWAY DRIVE, SU
LINCOLNSHIRE, IL 60069

17011

JOB NUMBER:

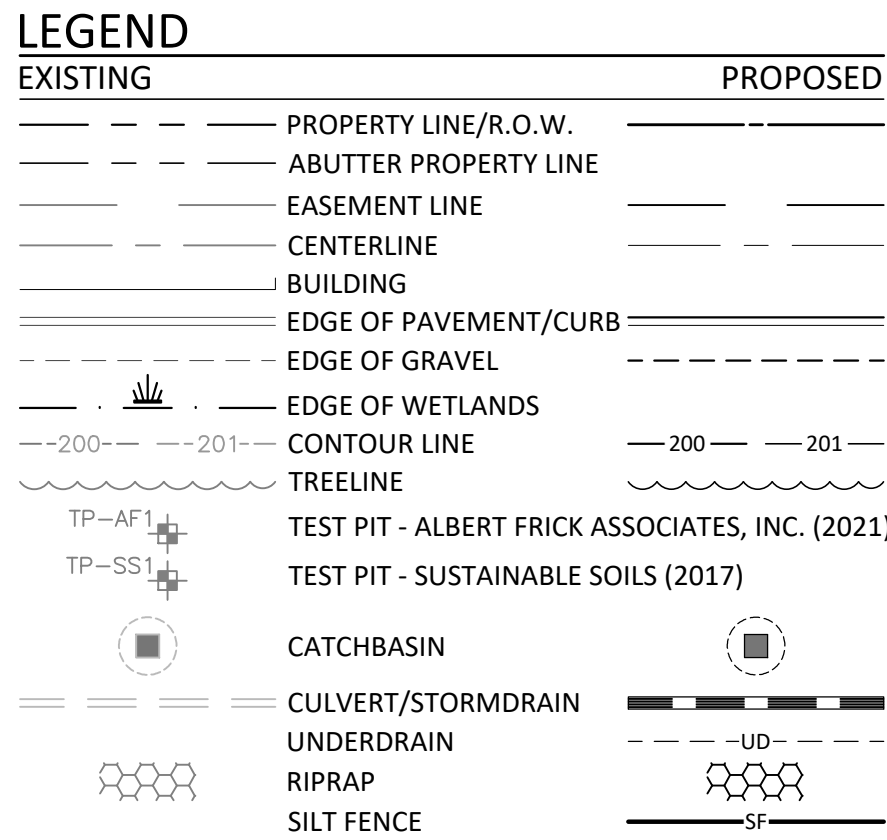
$$1'' = 60$$

9-29-2021

DATE: _____

SHEET 3 OF 9

S-1

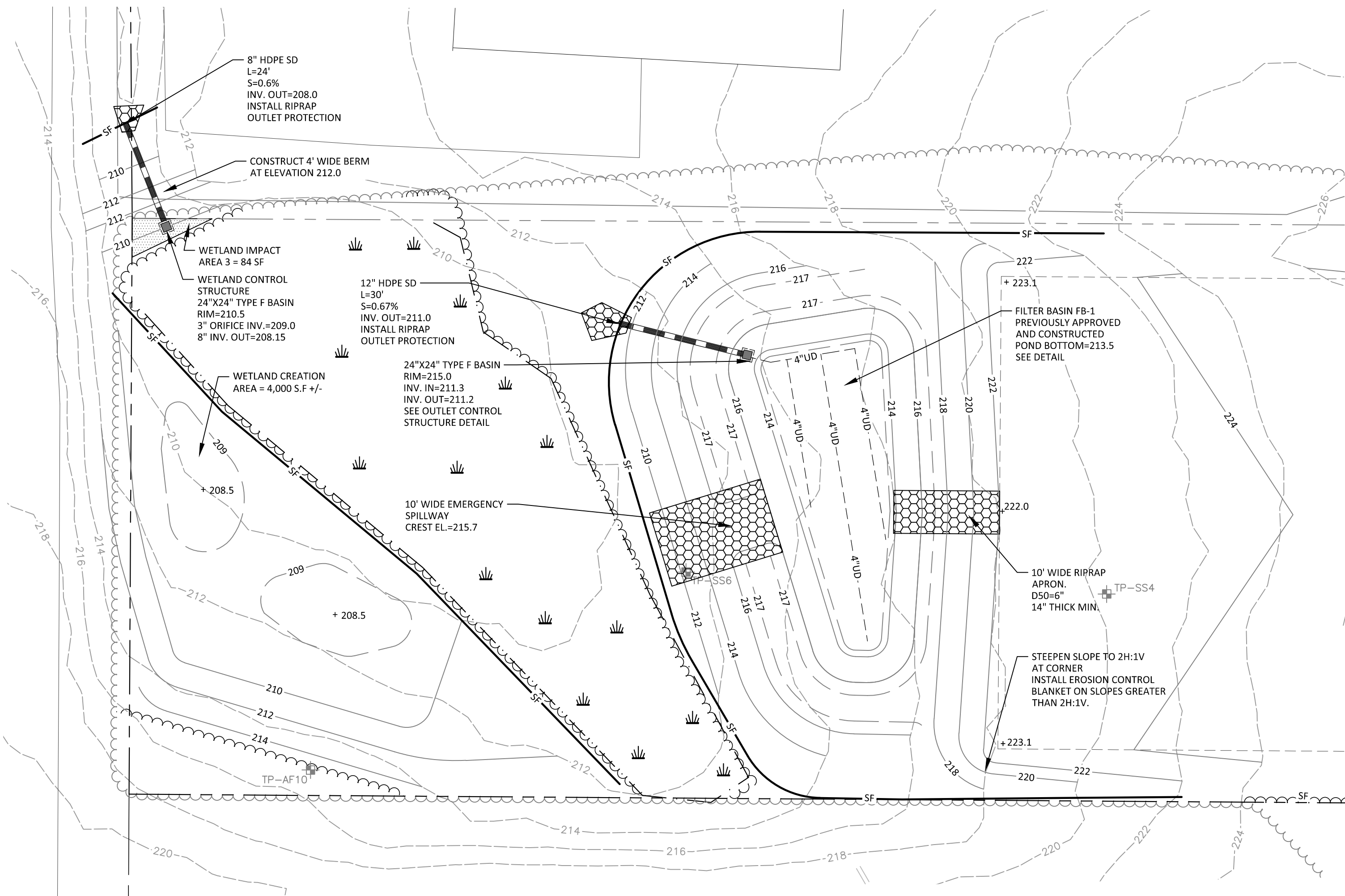


OVERALL GRADING PLAN

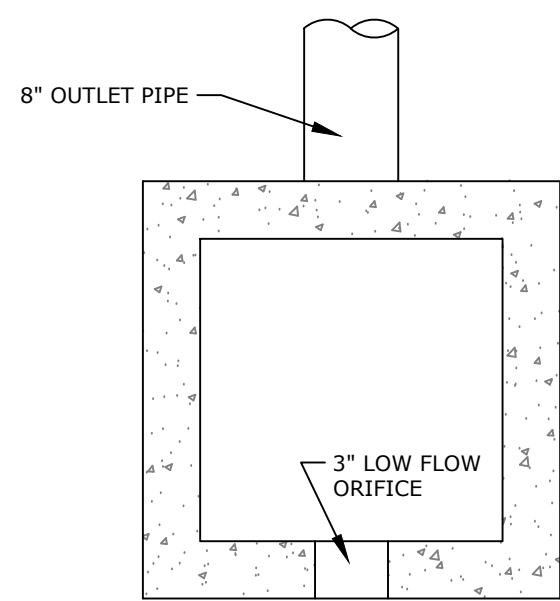
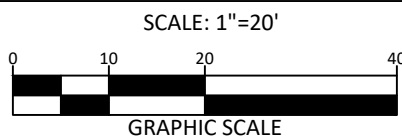
SURFACE PARKING FACILITY
ROOSEVELT TRAIL & DANIELLE DRIVE
WINDHAM, MAINE

FOR:
FRHP LINCOLNSHIRE, LLC
250 PARKWAY DRIVE, SUITE 270
LINCOLNSHIRE, IL 60069

17011 JOB NUMBER:
1" = 40' SCALE:
9-29-2021 DATE:
SHEET 4 OF 9
OG-1



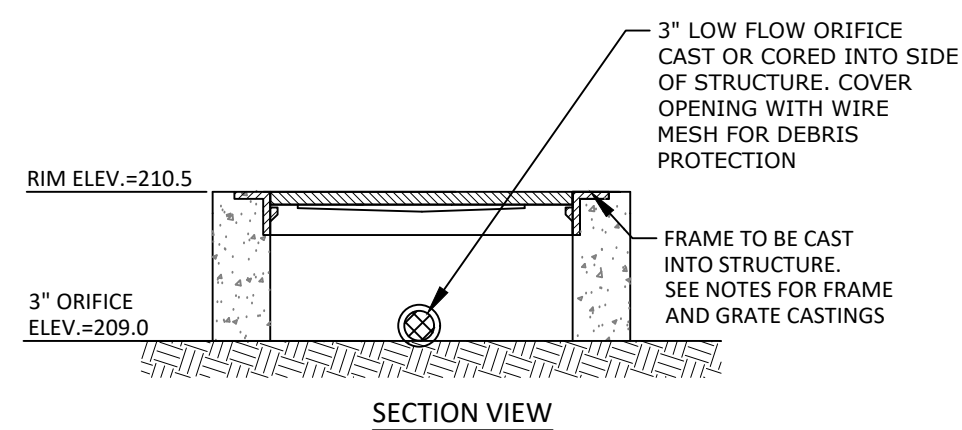
PLAN VIEW: UNDERDRAINED FILTER BASIN (FB-1)



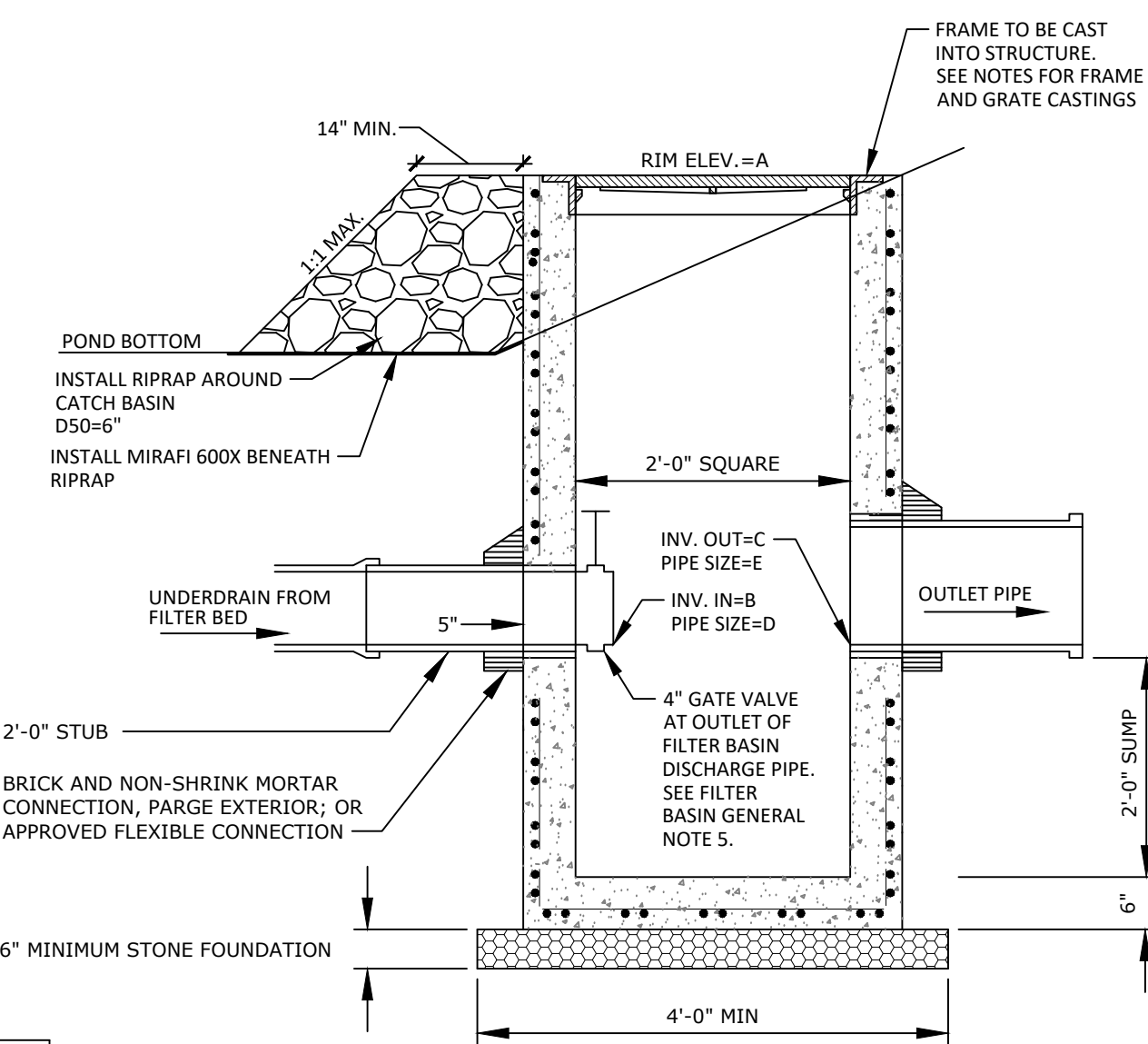
PLAN VIEW

WETLAND CONTROL STRUCTURE DETAIL

NOT TO SCALE



SECTION VIEW



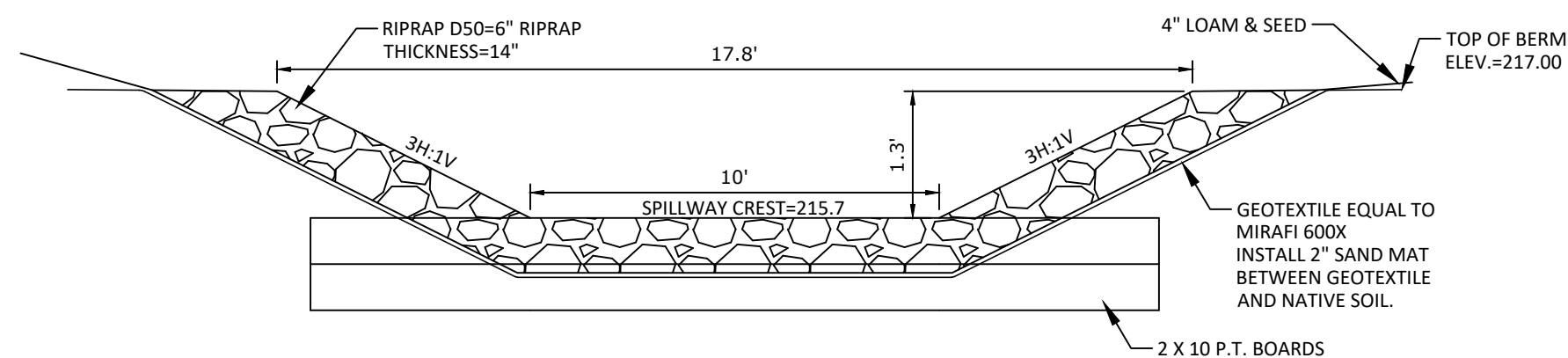
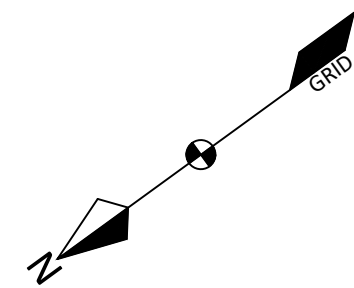
NOTES:

- CAST IRON FRAME SHALL BE EQUAL TO EAST JORDAN IRON WORKS, PRODUCT NO. 45622011. REVERSIBLE FRAME AND GRATE SHALL BE EQUAL TO EAST JORDAN IRON WORKS, PRODUCT NO. 45622531, HEAVY DUTY GRATE.
- SUBMIT SHOP DRAWINGS AND CASTING SPECIFICATIONS TO ENGINEER FOR APPROVAL.

OUTLET STRUCTURES 24"X24" TYPE F

NOT TO SCALE

STRUCTURE DATA					
POND	A	B	C	D	E
FB-1	215.00	211.30	211.20	4"	12"
WETLAND	210.50	N/A	208.15	N/A	8"



EMERGENCY SPILLWAY CROSS-SECTION

NOT TO SCALE

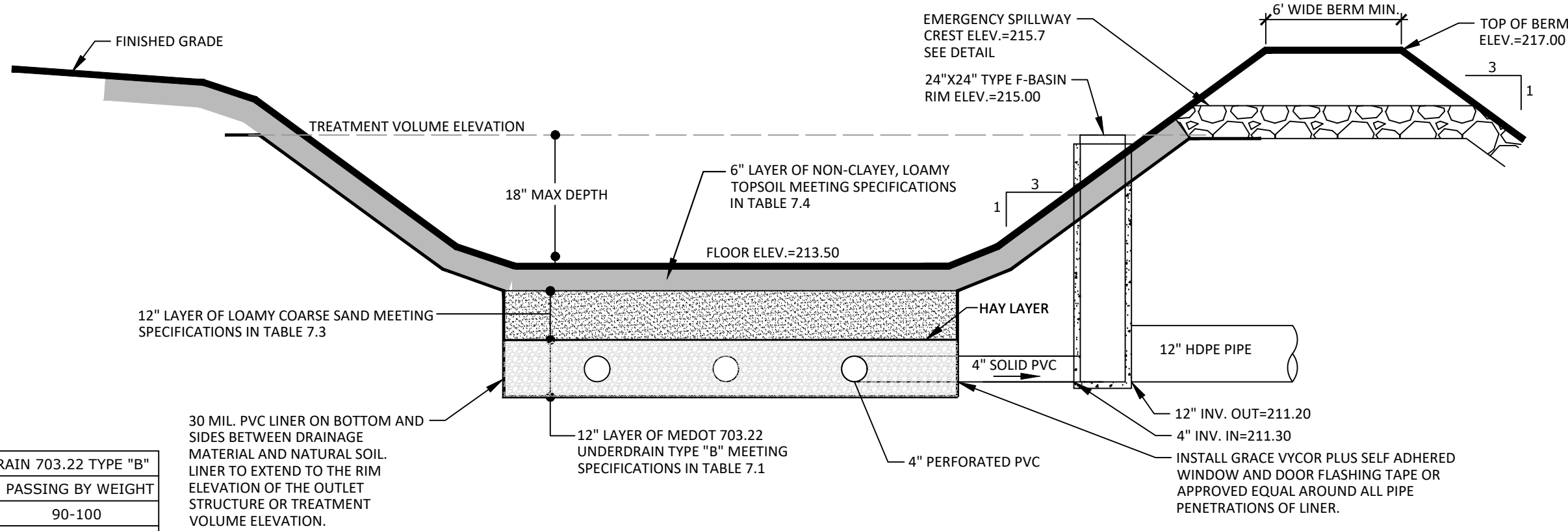


TABLE 7.1 UNDERDRAIN 703.22 TYPE "B"		
SIEVE SIZE	% PASSING BY WEIGHT	
1"	90-100	
1/2"	75-100	
#4	50-100	
#20	15-80	
#50	0-15	
#200	0-5	

TABLE 7.3 LOAMY COARSE SAND		
SIEVE SIZE	% PASSING BY WEIGHT	
#10	85-100	
#20	70-100	
#60	15-40	
#200	8-15	
200 CLAY	<2.0	

TABLE 7.4 SANDY LOAM		
SIEVE SIZE	% PASSING BY WEIGHT	
#4	75-95	
#10	60-90	
#40	35-85	
#200	20-70	
200 CLAY	<2.0	

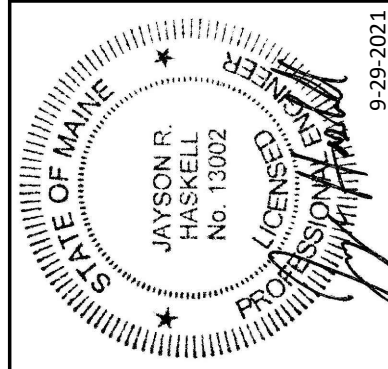
30 MIL PVC LINER ON BOTTOM AND SIDES BETWEEN DRAINAGE MATERIAL AND NATURAL SOIL. LINER TO EXTEND TO THE RIM ELEVATION OF THE OUTLET STRUCTURE OR TREATMENT VOLUME ELEVATION.

GENERAL NOTES:

- CONSTRUCTION SEQUENCE: THE SOIL FILTER MEDIA AND VEGETATION MUST NOT BE INSTALLED UNTIL THE AREA THAT DRAINS TO THE FILTER HAS BEEN PERMANENTLY STABILIZED WITH PAVEMENT OR OTHER STRUCTURE, 90% VEGETATION COVER, OR OTHER PERMANENT STABILIZATION UNLESS THE RUNOFF FROM THE CONTRIBUTING DRAINAGE AREA IS DIVERTED AROUND THE FILTER UNTIL STABILIZATION IS COMPLETED.
- COMPACTION OF SOIL FILTER: FILTER SOIL MEDIA AND UNDERDRAIN BEDDING MATERIAL MUST BE COMPACTED BETWEEN 90% AND 92% STANDARD PROCTOR. THE BED SHOULD BE INSTALLED IN AT LEAST TWO LIFTS TO PREVENT POCKETS OF LOOSE MEDIA.
- CONSTRUCTION OVERSIGHT: INSPECTION BY THE DESIGN ENGINEER OR SUITABLE THIRD PARTY WILL OCCUR AT A MINIMUM:
A) AFTER THE PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED.
B) AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA.
C) AFTER THE FILTER MEDIA HAS BEEN INSTALLED AND SEEDED.
D) AFTER ONE YEAR TO INSPECT HEALTH OF THE VEGETATION AND MAKE CORRECTIONS.
E) ALL THE MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN MUST BE CONFIRMED AS SUITABLE BY THE DESIGN ENGINEER. TESTING MUST BE DONE BY A CERTIFIED LABORATORY TO SHOW THAT THEY ARE PASSING MDEP SPECIFICATIONS.
- TESTING AND SUBMITTALS: THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE OF EACH COMPONENT OF THE FILTER MEDIA. ALL RESULTS OF FIELD AND LABORATORY TESTING SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR CONFIRMATION. THE CONTRACTOR SHALL:
A) SELECT SAMPLES FOR SAMPLING OF EACH TYPE OF MATERIAL TO BE BLENDED FOR THE MIXED FILTER MEDIA AND SAMPLES OF THE UNDERDRAIN BEDDING MATERIAL. SAMPLES MUST BE A COMPOSITE OF THREE DIFFERENT LOCATIONS (GRABS) FROM THE STOCKPILE OR PIT FACE. SAMPLE SIZE REQUIRED WILL BE DETERMINED BY THE TESTING LABORATORY.
B) PERFORM A SIEVE ANALYSIS CONFORMING TO STM C136 (STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COARSE 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 BY HYDROMETER GRAIN SIZE ANALYSIS) AND HAVE 10% DRY WEIGHT OF ORGANIC MATTER.
C) PERFORM A PERMIABILITY TEST ON THE SOIL FILTER MEDIA MIXTURE CONFORMING TO ASTM D2434 WITH THE MIXTURE COMPACTED TO 90-92% OF MAXIMUM DRY DENSITY BASED ON ASTM D698 COMPLETELY WITHIN 24 TO 48 HOURS.
- AFTER CONSTRUCTION IS COMPLETE, THE DESIGN ENGINEER SHALL ADJUST THE PVC GATE VALVE AT THE OUTLET OF THE FILTER BED DISCHARGE PIPE TO ENSURE THE TREATMENT VOLUME DRAINS COMPLETELY WITHIN 24 TO 48 HOURS.
- WITHIN 30 DAYS OF COMPLETION OF THE FILTRATION BMP, THE APPLICANT SHALL SUBMIT A LOG OF INSPECTION REPORTS DETAILING THE ITEMS INSPECTED, PHOTOS TAKEN, AND THE DATES OF EACH INSPECTION TO THE MAINE DEP BUREAU OF LAND RESOURCES FOR REVIEW.

FILTER BASIN SECTION

NOT TO SCALE



DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 310-0506

REV	DATE	BY	DESCRIPTION
A	2/26/21	JRH	MDEP PRE-SUBMISSION
B	4/1/21	JRH	ISSUED FOR MDEP SLODA PERMIT REVIEW
C	6/24/21	JRH	REVISED PER MDEP REVIEW COMMENTS
D	7/29/21	JRH	REVISED PER MDEP REVIEW COMMENTS
E	9/29/21	JRH	REVISED PER TOWN REVIEW

POND PLAN - FILTER BASIN FB-1

SURFACE PARKING FACILITY

ROOSEVELT TRAIL & DANIELLE DRIVE

WINDHAM, MAINE

FOR: FRHP LINCOLNSHIRE, LLC

250 PARKWAY DRIVE, SUITE 270

LINCOLNSHIRE, IL 60069

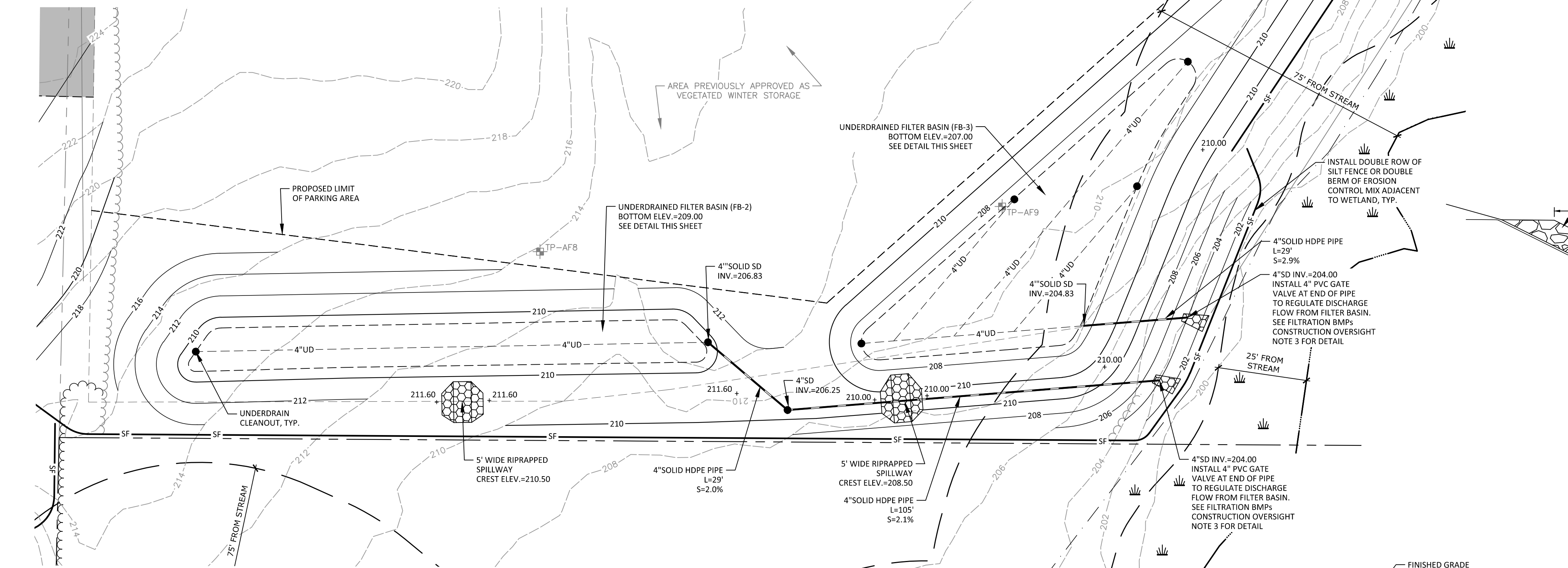
17011
JOB NUMBER:

1" = 20'
SCALE:

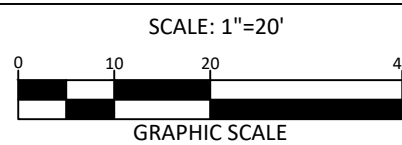
9-29-2021
DATE:

SHEET 6 OF 9

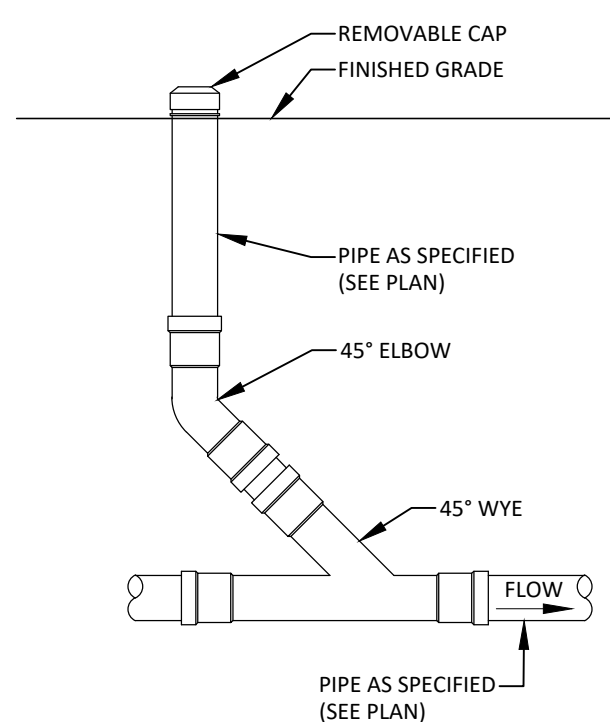
P-2



PLAN VIEW: UNDERDRAINED FILTER BASINS FB-2 & FB-3



LEGEND	
EXISTING	PROPOSED
	PROPERTY LINE/R.O.W.
	ABUTTER PROPERTY LINE
	EASEMENT LINE
	CENTERLINE
	EDGE OF PAVEMENT/CURB
	EDGE OF GRAVEL
	EDGE OF WETLANDS
	CENTERLINE OF STREAM
	CONTOUR LINE
	TREELINE
	TEST PIT - ALBERT FRICK ASSOCIATES, INC. (2021)
	TEST PIT - SUSTAINABLE SOILS (2017)
	CATCHBASIN
	CULVERT/STORMDRAIN
	UNDERDRAIN
	RIPRAP
	SILT FENCE

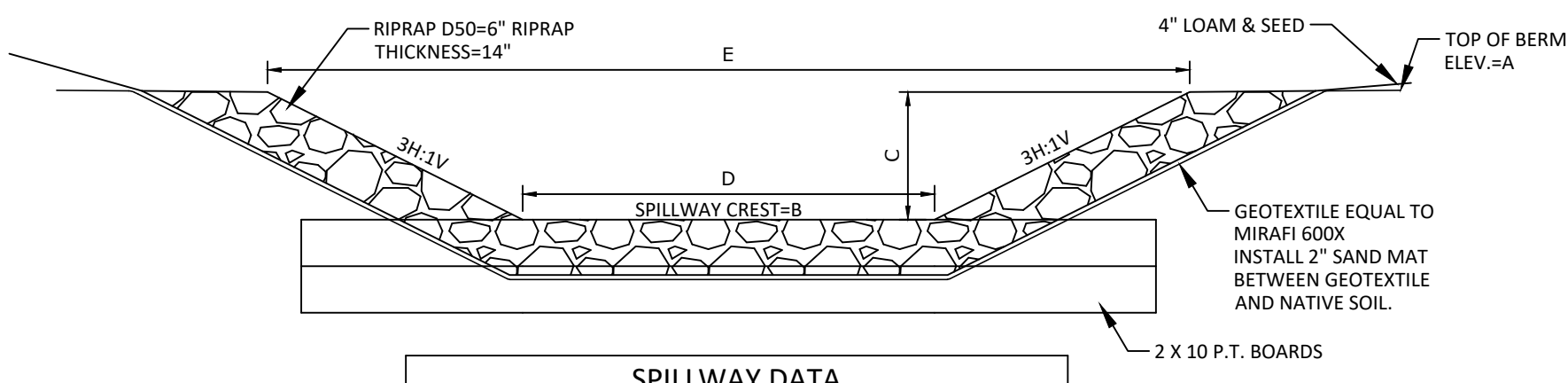


UNDERDRAIN CLEANOUT DETAIL
NOT TO SCALE

TABLE 7.1 UNDERDRAIN 703.22 TYPE "B"	
SIEVE SIZE	% PASSING BY WEIGHT
1"	90-100
1/2"	75-100
#4	50-100
#20	15-80
#50	0-15
#200	0-5

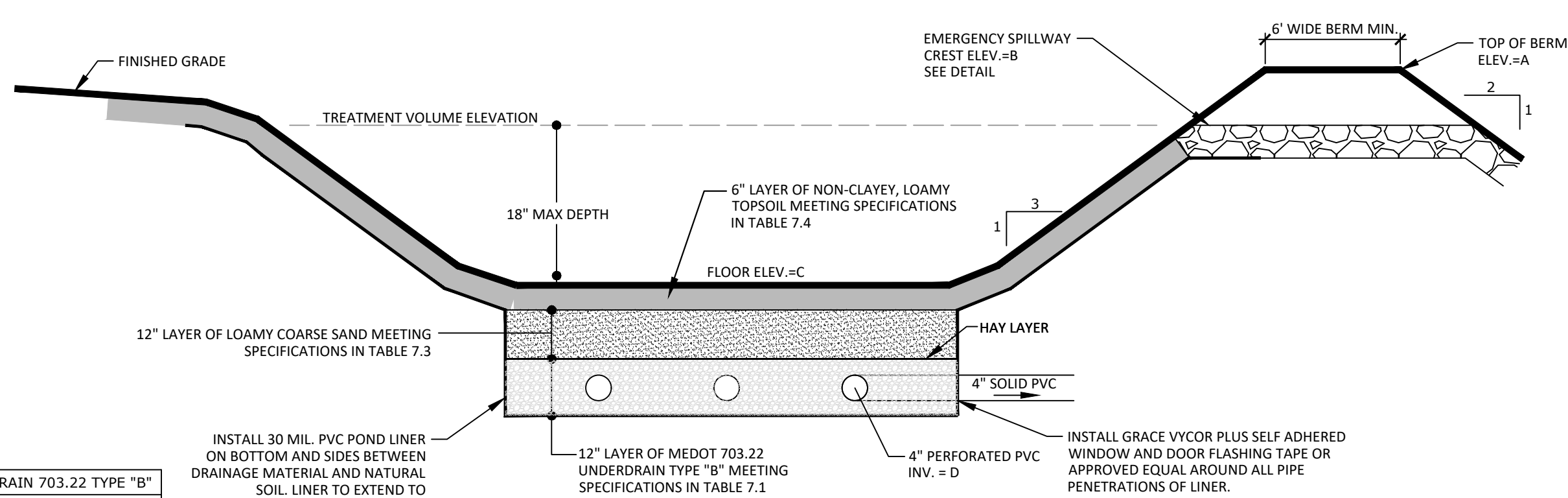
TABLE 7.3 LOAMY COARSE SAND	
SIEVE SIZE	% PASSING BY WEIGHT
#10	85-100
#20	70-100
#60	15-40
#200	8-15
200 CLAY	<2.0

TABLE 7.4 SANDY LOAM	
SIEVE SIZE	% PASSING BY WEIGHT
#4	75-95
#10	60-90
#40	35-85
#200	20-70
200 CLAY	<2.0



SPILLWAY DATA					
POND	A	B	C	D	E
FB-2	211.60	210.50	1.1'	5.0'	11.6'
FB-3	210.00	208.50	1.5'	5.0'	14.0'

EMERGENCY SPILLWAY CROSS-SECTION
NOT TO SCALE

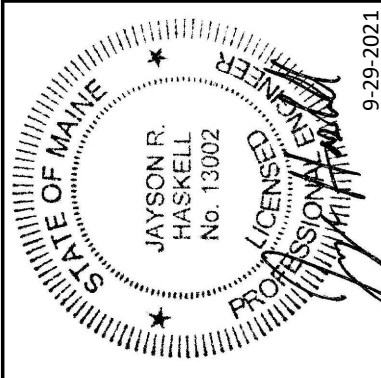


FILTER BASIN DATA				
POND	A	B	C	D
FB-2	211.60	210.50	209.00	206.83
FB-3	210.00	208.50	207.00	204.83

FILTRATION BMPs CONSTRUCTION OVERSIGHT NOTES:

- INSPECTION BY THE DESIGN ENGINEER OR SUITABLE THIRD PARTY WILL OCCUR AT A MINIMUM:
A) AFTER THE PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED.
B) AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA.
C) AFTER THE FILTER MEDIA HAS BEEN INSTALLED AND SEEDED.
D) AFTER ONE YEAR TO INSPECT HEALTH OF THE VEGETATION AND MAKE CORRECTIONS.
E) ALL THE MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN MUST BE CONFIRMED AS SUITABLE BY THE DESIGN ENGINEER. TESTING MUST BE DONE BY A CERTIFIED LABORATORY TO SHOW THAT THEY ARE PASSING MDEP SPECIFICATIONS.
- TESTING AND SUBMITTALS: THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE OF EACH COMPONENT OF THE FILTER MEDIA. ALL RESULTS OF FIELD AND LABORATORY TESTING SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR CONFIRMATION. THE CONTRACTOR SHALL:
A) SELECT SAMPLES FOR SAMPLING OF EACH TYPE OF MATERIAL TO BE BLENDED FOR THE MIXED FILTER MEDIA AND SAMPLES OF THE UNDERDRAIN BEDDING MATERIAL. SAMPLES MUST BE A COMPOSITE OF THREE DIFFERENT LOCATIONS (GRABS) FROM THE STOCKPILE OR PIT FACE. SAMPLE SIZE REQUIRED WILL BE DETERMINED BY THE TESTING LABORATORY.
B) PERFORM A SIEVE ANALYSIS CONFORMING TO STM C136 (STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COARSE 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 BY HYDROMETER GRAIN SIZE ANALYSIS) AND HAVE 10% DRY WEIGHT OF ORGANIC MATTER.
C) PERFORM A PERMIABILITY TEST ON THE SOIL FILTER MEDIA MIXTURE CONFORMING TO ASTM D2434 WITH THE MIXTURE COMPACTED TO 90-92% OF MAXIMUM DRY DENSITY BASED ON ASTM D698.
- AFTER CONSTRUCTION IS COMPLETE, THE DESIGN ENGINEER SHALL ADJUST THE PVC GATE VALVE AT THE OUTLET OF THE FILTER BED DISCHARGE PIPE TO ENSURE THE TREATMENT VOLUME DRAINS COMPLETELY WITHIN 24 TO 48 HOURS.
- WITHIN 30 DAYS OF COMPLETION OF THE FILTRATION BMP, THE APPLICANT SHALL SUBMIT A LOG OF INSPECTION REPORTS DETAILING THE ITEMS INSPECTED, PHOTOS TAKEN, AND THE DATES OF EACH INSPECTION TO THE MAINE DEP BUREAU OF LAND RESOURCES FOR REVIEW.

FILTER BASIN SECTION
NOT TO SCALE



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REV	DESCRIPTION	BY	DATE
A	MDP PRE-SUBMISSION	JRH	2/26/21
B	ISSUED FOR MDEP SLOCA PERMIT REVIEW	JRH	4/1/21
C	REVISED PER MDEP REVIEW COMMENTS	JRH	6/24/21
D	REVISED PER MDEP REVIEW COMMENTS	JRH	7/29/21
E	REVISED PER TOWN REVIEW	JRH	9/7/21
F	REVISED PER TOWN REVIEW	JRH	9/29/21

POND PLAN - FILTER BASINS FB-2 & FB-3
SURFACE PARKING FACILITY
ROOSEVELT TRAIL & DANIELLE DRIVE
WINDHAM, MAINE
FOR: **FRHP LINCOLNSHIRE, LLC**
250 PARKWAY DRIVE, SUITE 270
LINCOLNSHIRE, IL 60069

17011
JOB NUMBER:
1" = 20'
SCALE:
9-29-2021
DATE:
SHEET 7 OF 9
P-3

EROSION AND SEDIMENTATION CONTROL NOTES:

EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS TO OCCUR DURING THE FOLLOWING 15 DAYS AND THAT CAN BE MULCHED IN ONE DAY.

IN ORDER TO EFFECTIVELY PREVENT AND CONTROL EROSION RELATED TO SOIL DISTURBANCE, THE FOLLOWING BEST MANAGEMENT PRACTICES (BMPs) SHALL BE EMPLOYED:

1. POLLUTION PREVENTION

MINIMIZE DISTURBED AREAS AND PROTECT NATURAL DOWNGRADE 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 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 FEET 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.

2. TEMPORARY SOIL STABILIZATION BMPs

TEMPORARY MULCHING SHALL BE APPLIED IMMEDIATELY TO ANY AREAS THAT HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED. ANY DISTURBED SOIL WITHIN 75' OF A STREAM, WATER BODY OR WETLAND MUST RECEIVE TEMPORARY MULCH WITHIN 48 HOURS FOLLOWING DISTURBANCE AND BEFORE ANY STORM EVENT. OTHER AREAS SHALL RECEIVE TEMPORARY MULCH WITHIN 7 DAYS OF DISTURBANCE. AREAS WHICH CANNOT BE SEEDED DURING THE GROWING SEASON SHALL BE MULCHED FOR OVER-WINTER PROTECTION. THE FOLLOWING ARE ACCEPTABLE TEMPORARY MULCHING METHODS:

HAY OR STRAW MULCHES NEED TO BE AIR-DRIED, FREE OF UNDESIRABLE SEEDS AND COARSE MATERIALS. APPLICATION RATE MUST BE 2 BALES (70-90 POUNDS) PER 1000 SQ FT OR 1.5 TO 2 TONS (90-100 BALES) PER ACRE TO COVER 75-90% OF THE GROUND SURFACE. HAY OR STRAW CAN BE DRIVEN INTO THE GROUND WITH TRACKED EQUIPMENT IF SLOPES ARE LESS THAN 3%, OR CAN BE ANCHORED WITH JUTE, WOOD FIBER OR PLASTIC NETTING ON STEEPER SLOPES.

EROSION CONTROL MIX MUST CONSIST PRIMARILY OF ORGANIC MATERIAL AND WILL INCLUDE ANY OF THE FOLLOWING: SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK OR OTHER ACCEPTABLE PRODUCTS BASED ON A SIMILAR RAW SOURCE. WOOD OR BARK CHIPS, GROUND CONSTRUCTED WOOD PRODUCTS ARE NOT ACCEPTABLE. EROSION CONTROL MIX CAN BE USED AS A STAND-ALONE REINFORCEMENT ON SLOPES OF 2 HORIZONTAL TO 1 VERTICAL OR LESS AND DRAINING IN SHEET FLOW. IT CAN BE PLACED WITH A HYDRAULIC BUCKET, WITH A PNEUMATIC BLOWER OR BY HAND, AND MUST PROVIDE 100% SOIL COVERAGE.

EROSION CONTROL MIX SHALL MEET THE FOLLOWING SPECIFICATIONS:
-ORGANIC MATTER CONTENT SHALL BE BETWEEN 80-100%, DRY WEIGHT BASIS.
-PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 5 IN. SCREEN AND BETWEEN 70-85% PASSING 0.75 IN. SCREEN
-ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED
-LARGE PORTIONS OF SILTS, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX

WHEN USED AS MULCH, THE THICKNESS OF THE ERISION CONTROL MIX IS BASED UPON THE FOLLOWING:

LENGTH OF SLOPE	3:1 SLOPE OR LESS	BETWEEN 2:1 AND 3:1 SLOPE
LESS THAN 20 FT	2.0 IN.	4.0 IN.
BETWEEN 20 - 60 FT	3.0 IN.	5.0 IN.
BETWEEN 60 - 100 FT	4.0 IN.	6.0 IN.

CHEMICAL MULCHES AND SOIL BINDERS MAY BE USED AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL CONSULT WITH THE MANUFACTURER TO DETERMINE ADEQUATE APPLICATION RATES AND METHODS.

TEMPORARY MULCH SHALL BE INSPECTED FOLLOWING ANY SIGNIFICANT RAINFALL EVENT. IF LESS THAN 90% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHALL BE IMMEDIATELY APPLIED. ERISION CONTROL MATS AND MULCH ANCHORING MUST BE INSPECTED AFTER RAINFALL EVENTS FOR DISLOCATION OR FAILURE, AND REPAIRED IMMEDIATELY. INSPECTIONS SHALL TAKE PLACE UNTIL 95% OF THE SOIL SURFACE IS COVERED WITH PERMANENT VEGETATION. WHERE MULCH IS USED WITH ORNAMENTAL PLANTINGS, INSPECT PERIODICALLY THROUGHOUT THE YEAR TO DETERMINE IF MULCH IS MAINTAINING COVERAGE OF THE SOIL SURFACE, AND REPAIR AS NEEDED.

TEMPORARY VEGETATION SHALL BE ESTABLISHED ON SOILS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A PERIOD OF MORE THAN 30 DAYS. IF TEMPORARY VEGETATION CANNOT BE ESTABLISHED PRIOR TO OCTOBER 15, TEMPORARY MULCH SHALL BE APPLIED THROUGH THE WINTER AND TEMPORARY VEGETATION SHALL BE PLANTED AT THE BEGINNING OF THE GROWING SEASON THE FOLLOWING YEAR. TO PREPARE THE SEEDED, THE CONTRACTOR SHALL APPLY FERTILIZER AT A RATE OF 600 POUNDS PER ACRE OF 10-10-10 (N-P205-K20) OR EQUIVALENT AND LIMESTONE AT A RATE OF 3 TONS PER ACRE, IF NECESSARY. LOOSEN SOIL TO A DEPTH OF 2 INCHES IN AREAS THAT HAVE BEEN COMPACTED BY CONSTRUCTION ACTIVITIES. GRASS SEED SHALL BE SELECTED BASED UPON THE TIME OF YEAR THE PLANTING WILL TAKE PLACE AS SUMMARIZED IN THE FOLLOWING TABLE:

SEED	LB. PER ACRE	RECOMMENDED SEEDING DATES
WINTER RYE	112	8/15 - 10/1
OATS	80	4/1 - 7/1 8/15 - 9/15
ANNUAL RYEGRASS	40	4/1 - 7/1

TEMPORARY SEEDING SHALL BE PERIODICALLY INSPECTED TO MAINTAIN AT LEAST 95% VEGETATIVE COVER OF SOIL SURFACE. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND OTHER TEMPORARY MEASURES SHALL BE USED IN THE INTERIM SUCH AS TEMPORARY MULCH, FILTER BARRIERS, ETC.

3. SEDIMENT BARRIER BMPs

PRIOR TO CONSTRUCTION TEMPORARY SEDIMENT BARRIERS SHALL BE INSTALLED AT THE DOWNGRADE EDGE OF ANY AREA TO BE DISTURBED AND ADJACENT TO ANY DRAINAGE CHANNELS WITHIN THE DISTURBED AREA. SEDIMENT BARRIERS INCLUDE ANY OF THE FOLLOWING:

FILTER BARRIER FENCE, ALSO CALLED SILT FENCE, SHALL BE INSTALLED WHERE SHOWN ON THE PLANS AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. THE FILTER FABRIC SHALL BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER OR ETHYLENE YARN AND SHALL PROVIDE A MINIMUM OF 6 MONTHS USABLE CONSTRUCTION LIFE INCLUDING PROTECTION AGAINST ULTRA-VIOLET LIGHT. THE HEIGHT OF THE FENCE SHALL EXCEED 36 INCHES INSTALLED AND POST SPACING SHALL NOT EXCEED 6 FEET. JOINTS IN THE FENCE SHALL BE AVOIDED TO THE EXTENT POSSIBLE, AND IF NECESSARY SHALL BE SPICED TOGETHER AT A SUPPORT POST WITH A MINIMUM 6 INCH OVERLAP. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 6 INCHES WIDE AND 6 INCHES DEEP, AND THE BOTTOM 6-8 INCHES OF FABRIC SHALL BE "TOED-IN" TO THE TRENCH AND COMPACTED. THE TRENCH SHOULD BE UPHILL OF THE FABRIC PRIOR TO BURLAP.

EROSION CONTROL MIX BERMS ARE LINEAR BARRIERS COMPOSED OF EROSION CONTROL MIX AS SPECIFIED ABOVE. THE BERM MUST BE A MINIMUM OF 12 INCHES TALL AND 24 INCHES WIDE AT THE BASE IF UPHILL SLOPES ARE LESS THAN 5%. STEEPER SLOPES OR SLOPES GREATER THAN 20 FEET LONG MAY REQUIRE A LARGER WIDTH BERM. EROSION CONTROL MIX BERMS SHALL BE PROHIBITED AT THE BASE OF A LONG OR STEEP SLOPE (8% OR GREATER) WITHOUT THE ADDITIONAL SUPPORT OF A FILTER FENCE INSTALLED ON THE DOWNHILL SIDE OF THE BERM.

SEDIMENT BARRIERS SHOULD BE INSTALLED DOWNGRADE OF SOIL OR SEDIMENT STOCKPILES AND STORMWATER PREVENTED RUNNING ONTO THE STOCKPILE. SEDIMENT BARRIERS SHALL BE INSPECTED AFTER ANY SIGNIFICANT RAINFALL EVENT AND REPAIRED IMMEDIATELY IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THE BARRIERS. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR EDGES OF THE BARRIER, OR IF LARGE VOLUMES OF WATER ARE IMPOUNDED BEHIND THE BARRIER, IT MAY BE NECESSARY TO INSTALL A SEDIMENT BASIN UPGRADIENT OF THE SEDIMENT BARRIER. SEDIMENT SHALL BE REMOVED ONCE IT REACHES HALF THE BARRIER HEIGHT. AFTER THE BARRIER IS REMOVED, ANY REMAINING SILT SHALL EITHER BE REMOVED OR GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

TEMPORARY EROSION CONTROL MEASURES ARE REMOVED ONCE THE SITE IS PERMANENTLY STABILIZED AND CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.

4. STORM DRAIN INLET PROTECTION

STORM DRAIN INLETS THAT ARE MADE OPERATIONAL BEFORE THEIR DRAINAGE AREA IS STABILIZED SHALL BE PROTECTED WITH A FILTER UNTIL THE DRAINAGE AREA IS EITHER PAVED OR STABILIZED WITH 95% VEGETATIVE GROWTH. THE FOLLOWING ARE ACCEPTABLE BMPs ASSOCIATED WITH STORM DRAIN INLET PROTECTION:

MANUFACTURED SEDIMENT FILTERS ARE THE PREFERRED METHOD FOR PROTECTING CATCH BASIN INLETS IN PAVED OR GRAVEL ROADWAYS. THE FILTERS TYPICALLY CONSIST OF A FABRIC OR OTHER PERVIOUS MATERIAL PLACED ABOVE OR BELOW THE GRATE THAT TRAPS SEDIMENT ON THE SURFACE AND ALLOWS WATER TO FLOW THROUGH THE GRATE. CONSIDERATIONS SUCH AS WEATHER CONDITIONS, SLOPES, TRIBUTARY WATERSHED AREA AND EXPECTED SEDIMENT ACCUMULATION SHOULD BE FACTORED INTO MAKING A DECISION ON ANY PARTICULAR PRODUCT, AND THE MANUFACTURER'S RECOMMENDATIONS ON INSTALLATION AND MAINTENANCE SHALL BE STRICTLY ADHERED TO.

5. STABILIZED CONSTRUCTION ENTRANCE/EXIT

TO REDUCE THE TRACKING OF SEDIMENT ONTO ROADWAYS, A STABILIZED CONSTRUCTION EXIT SHALL BE INSTALLED AT ALL POINTS OF EGRESS WHERE VEHICLES MAY TRAVEL FROM THE PROJECT SITE TO A PUBLIC ROAD OR OTHER PAVED AREA. THE STONE PAD SHALL CONSIST OF A MINIMUM 6-INCH DEPTH OF 2-3 INCH CRUSHED STONE, AND SHALL BE PLACED ON A GEOTEXTILE FABRIC. THE PAD SHALL EXTEND AT LEAST 50 FEET INTO THE PROJECT SITE AND BE A MINIMUM OF 10 FEET WIDE. THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC ROADS OF-WAY, AND THE CONTRACTOR SHALL SWEEP PAVEMENT AT EXITS THAT HAVE EXPERIENCED ANY MUD-TRACKING PRIOR TO THE NEXT STORM EVENT. MAINTAIN THE PAD UNTIL ALL DISTURBED AREAS ARE STABILIZED.

INSPECTION & MAINTENANCE NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE ALL CONSTRUCTION OPERATIONS COMPLY WITH THE INSPECTION AND MAINTENANCE PROCEDURES FOR THE PROJECT, INCLUDING, BUT NOT LIMITED TO THOSE INCLUDED IN THIS PLAN SET, THE "INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN", AND THE "MAINE EROSION AND SEDIMENTATION CONTROL PRACTICES FIELD GUIDE FOR CONTRACTORS". INSPECTION SHALL OCCUR ON ALL DISTURBED AND IMPERVIOUS AREAS, EROSION CONTROL MEASURES, MATERIAL STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. THESE AREAS SHALL BE INSPECTED AT LEAST ONCE A WEEK AS WELL AS 24 HOURS BEFORE AND AFTER A STORM EVENT GENERATING MORE THAN 0.5 INCH OF RAINFALL OVER A 24-HOUR PERIOD 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.
- EROSION CONTROLS SHALL BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED. IF BEST MANAGEMENT PRACTICES (BMPs) NEED TO BE REPAIRED, THE REPAIR WORK SHOULD BE INITIATED UPON DISCOVERY OF THE PROBLEM BUT NO LATER THAN THE END OF THE NEXT WORKDAY. IF BMPs NEED TO BE MAINTAINED OR MODIFIED, ADDITIONAL BMPs ARE NECESSARY, OR OTHER CORRECTIVE ACTION IS NEEDED, IMPLEMENTATION MUST BE COMPLETED WITHIN SEVEN CALENDAR DAYS AND PRIOR TO ANY RAINFALL EVENT.
- A REPORT SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN MUST BE MAINTAINED ON SITE. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS; THE DATE(S) OF THE INSPECTIONS; AND THE MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, MATERIALS STORAGE AREAS, AND VEHICLE ACCESS POINTS TO THE PARCEL. MAJOR OBSERVATIONS MUST INCLUDE BMPs THAT NEED MAINTENANCE, BMPs THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPs ARE NEEDED. FOR EACH BMP REQUIRING MAINTENANCE, BMP NEED REPAIR, REPLACEMENT, AND LOCATION NEEDING ADDITIONAL BMPs, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN. THE LOG MUST BE MADE ACCESSIBLE TO TOWN AND STAFF, AND A COPY MUST BE PROVIDED UPON REQUEST. THE OWNER SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

6. DUST CONTROL

THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST ON THE PROJECT SITE AND ON ADJACENT ROADWAYS. EXPOSED SOIL SURFACES SHALL BE MOISTENED PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST. GRAVEL SURFACES SHALL EITHER BE TREATED WITH AN APPLICATION OF CALCIUM CHLORIDE OR COVERED WITH CRUSHED STONE IF DUST CONTROL BECOMES DIFFICULT WITH NORMAL WATER APPLICATIONS.

7. LAND GRADING AND SLOPE PREPARATION

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 NEXT PHASE. ANY EXPOSED AREA THAT WILL NOT BE FINISH GRADED WITHIN 7 DAYS SHALL BE TREATED WITH MULCH OR PLANTED WITH TEMPORARY VEGETATION. PROVISIONS SHALL BE MADE TO SAFELY CONVEY SURFACE RUNOFF TO STORM DRAINS, PROTECTED OUTLETS OR TO STABLE WATER COURSES TO ENSURE THAT SURFACE RUNOFF WILL NOT DAMAGE SLOPES OR OTHER GRADED AREAS. CUT AND FILL SLOPES THAT ARE TO BE STABILIZED WITH GRASS SHALL NOT BE STEEPER THAN 2:1. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIALS. AREAS SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 INCHES PRIOR TO PLACEMENT OF TOPSOIL. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SURFACE SETTLEMENT OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES. ALL FILLS SHALL BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 8 INCHES IN THICKNESS. FILL MATERIAL SHALL BE FREE OF STUMPS, BUILDING DEBRIS AND OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY LIFTS. FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILL SLOPES OR STRUCTURAL FILLS. FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED APPROPRIATELY. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.

8. TOPSOIL

IF POSSIBLE, TOPSOIL SHALL BE STOCKPILED ON THE PROJECT SITE AND REUSED. HIGH QUALITY TOPSOIL SHALL BE FRIABLE AND LOAMY (LOAM, SANDY LOAM, SILT LOAM, SANDY CLAY LOAM, CLAY LOAM), AND SHALL BE FREE OF DEBRIS, TRASH, STUMPS, ROCKS, ROOTS AND NOXIOUS WEEDS. AFTER THE AREAS TO BE TOPSOILED HAVE BEEN BROUGHT TO GRADE, AND IMMEDIATELY PRIOR TO SPREADING THE TOPSOIL, THE SUBGRADE SHALL BE LOOSENEED BY SCARIFYING TO A DEPTH OF AT LEAST 2 INCHES TO ENSURE BONDING WITH SUBSOIL. THE TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED TO A MINIMUM COMPACTED DEPTH OF 4 INCHES. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS. IT IS NECESSARY TO COMPACT THE TOPSOIL ENOUGH TO ENSURE GOOD CONTACT WITH THE UNDERLYING SOIL, BUT UNDUCE COMPACTION IS TO BE AVOIDED.

9. PERMANENT SOIL STABILIZATION

IF THE 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. IF USING VEGETATION FOR STABILIZATION, SELECT THE PROPER VEGETATION FOR THE LIGHT, MOISTURE, AND SOIL CONDITIONS; AMEND AREAS OF DISTURBED SUBSOILS WITH TOPSOIL, COMPOST, OR FERTILIZERS; 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 REESTABLISHED 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.

SEEDED AREAS: TO PREPARE THE SEEDED, APPLY 10-20-20 FERTILIZER AT A RATE OF 800 POUNDS PER ACRE AND GROUND LIMESTONE AT A RATE OF 3 TONS PER ACRE. WORK THE FERTILIZER AND LIMESTONE INTO THE TOPSOIL TO A DEPTH OF 4 INCHES AND REMOVE ANY STONES, ROOTS OR OTHER VISIBLE DEBRIS. SELECT A SEED MIXTURE THAT IS APPROPRIATE FOR THE SOIL TYPE AND MOISTURE CONTENT AS FOUND AT THE SITE, AND FOR THE AMOUNT OF SUN EXPOSURE AND FOR LEVEL OF USE. REFER TO THE USDA SOIL CONSERVATION SERVICE OR THE LOCAL SOIL AND WATER CONSERVATION DISTRICT FOR APPROPRIATE SEED MIXTURES. APPLY SEED UNIFORMLY IN ACCORDANCE WITH SUPPLIER RECOMMENDATIONS AND IMMEDIATELY COVER WITH MULCH AS DESCRIBED IN THE TEMPORARY MULCHING SECTION OF THIS PLAN.

HYDROSEEDING SHALL BE DONE IN ACCORDANCE WITH SUPPLIER'S RECOMMENDATIONS. FOR SEEDED AREAS TO BE PERMANENTLY STABILIZED, 90% OF THE DISTURBED SOIL SHALL BE COVERED WITH MATURE HEALTHY PLANTS WITH NO EVIDENCE OF EROSION OR RILLING OF THE TOPSOIL.

SOD STRIPS SHALL BE LAID AT RIGHT ANGLES TO DIRECTION OF SLOPE OR FLOW OF WATER STARTING AT LOWEST ELEVATION. JOINTS SHALL BE STAGGERED, AND ALL STRIPS SHALL BE ROLLED OR TAMPED INTO PLACE. ON SLOPES, SOD SHALL BE ANCHORED WITH STAPLES, WIRE OR PINS. IRRIGATE SODDED AREA IMMEDIATELY AFTER INSTALLATION. FOR SODDED AREAS TO BE PERMANENTLY STABILIZED, THE ROOTS OF THE SOD MUST BE COMPLETELY BOUND INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.

PERMANENT MULCH IS A LONG TERM COVER THAT PROVIDES A GOOD BUFFER AROUND DISTURBED AREAS. THE EROSION CONTROL MIX SHALL CONSIST PRIMARILY OF ORGANIC MATERIAL AND MAY INCLUDE SHREDDED BARK, STUMP GRINDINGS OR COMPOSTED BARK. WOOD CHIPS, GROUND CONSTRUCTION DEBRIS, REPROCESSED WOOD PRODUCTS ARE NOT ACCEPTABLE. THE EROSION CONTROL MIX SHALL CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4 INCHES IN DIAMETER. EROSION CONTROL MIX MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS AND MATERIAL TOXIC TO PLANT GROWTH.

RIRAPAP STONE SHALL CONSIST OF SUB-ANGULAR FIELD STONE OR ROUGH UNEVEN QUARRY STONE OF APPROXIMATELY RECTANGULAR SHAPE. THE DEPTH OF STONE SHALL BE A MINIMUM OF 2.2 TIMES THE MAXIMUM STONE DIAMETER. A GRAVEL OR GEOTEXTILE FILTER BLANKET SHALL BE PLACED BETWEEN THE RIPRAP AND UNDERLYING SOIL SURFACE. GRAVEL FILTER BLANKETS SHALL MEET MOOT TYPE-C UNDERDRAIN MATERIAL SPECIFICATIONS AND BE AT LEAST 6 INCHES THICK. GEOTEXTILE FILTER BLANKETS SHALL BE SPECIFIED BASED ON SITE CONDITIONS. RIPRAP SLOPES SHALL BE TOED INTO THE BASE OF THE EMBANKMENT BY EXCAVATING A TRENCH AT THE BOTTOM OF THE SLOPE AND INSTALLING A STABLE BASE OF RIPRAP TO GRADE.

DITCHES, CHANNELS AND SWALES ARE CONSIDERED PERMANENTLY STABILIZED WHEN THE CHANNEL HAS 90% COVER OF HEALTHY VEGETATION WITH A WELL GRADED RIPRAP LINING, EROSION CONTROL BLANKET, 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 BANKS, OR DOWNCUTTING OF THE CHANNEL.

10. STORMWATER CHANNELS

EACH CHANNEL SHOULD BE CONSTRUCTED IN SECTIONS SO THAT THE SECTION'S GRADING, SHAPING, AND INSTALLATION OF THE PERMANENT LINING CAN BE COMPLETED THE SAME DAY. IF A CHANNEL'S FINAL GRADING OR LINING INSTALLATION MUST BE DELAYED, THEN DIVERSION BERMS MUST BE USED TO DIVERT STORMWATER AWAY FROM THE CHANNEL. PROPERLY-SPACED CHECK DAMS MUST BE INSTALLED IN THE CHANNEL TO SLOW THE WATER VELOCITY, AND A TEMPORARY LINING INSTALLED ALONG THE CHANNEL TO PREVENT SCOURING.

WINTER EROSION AND SEDIMENTATION CONTROL NOTES:

THE WINTER CONSTRUCTION PERIOD TYPICALLY BEGINS IN EARLY NOVEMBER AND ENDS IN MID APRIL. IF A CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE OR RIPRAP BY NOVEMBER 15 THEN THE SITE NEEDS TO BE PROTECTED WITH OVER-WINTER STABILIZATION. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS TO OCCUR DURING THE FOLLOWING 15 DAYS AND THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT. AN AREA SHALL BE CONSIDERED DENUDED UNTIL THE SUBBASE GRAVEL IS INSTALLED IN THE ROADWAY AREAS OR THE AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOADED, SEEDED AND MULCHED. A COVER OF EROSION CONTROL MIX IS THE PREFERRED TEMPORARY MULCH DURING WINTER CONDITIONS.

1. NATURAL RESOURCE PROTECTION

ANY AREAS WITHIN 75 FEET FROM ANY REGULATED NATURAL RESOURCES SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH AN EROSION CONTROL COVER. DURING WINTER CONSTRUCTION, A DOUBLE ROW OF SEDIMENT BARRIERS (FOR EXAMPLE, SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) WILL BE PLACED BETWEEN ANY REGULATED NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE REGULATED NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 1 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS.

2. SEDIMENT BARRIERS

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.

3. MULCHING

ALL AREAS SHALL BE CONSIDERED TO BE DENUDED UNTIL SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 3 TONS PER ACRE (TWICE THE NORMAL ACCEPTED RATE) AND SHALL BE PROPERLY ANCHORED. EROSION CONTROL MIX MUST BE APPLIED WITH A MINIMUM 4 INCHES THICKNESS. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. SNOW MUST BE REMOVED DOWN TO A ONE-INCH DEPTH PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA WILL BE PROPERTY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES ARE EITHER MULCHED OR COVERED WITH A MULCH SO THAT THE 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 WITH THE GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. AFTER NOVEMBER 15, MULCH AND ANCHORING OF ALL EXPOSED SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORKDAY.

4. SOIL STOCKPILING

STOCKPILES OF SOIL OR SUBSOIL WILL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE FOR WITH A FOUR-INCH LAYER OF EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STACKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED WITHIN 100 FEET FROM ANY REGULATED NATURAL RESOURCE.

5. SEEDING

BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINISH GRADED AND PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1 AND IF THE EXPOSED AREA HAS BEEN LOOSED, FINAL GRADED 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. IF DORMANT SEEDING IS USED, ALL DISTURBED AREAS SHALL RECEIVE 4 INCHES OF LOAM AND SEED AT AN APPLICATION RATE OF 5 LBS PER 1,000 S.F. ALL AREAS INSUFFICIENTLY VEGETATED (LESS THAN 75%) IN THE SPRING SHALL BE REVEGETATED.

6. OVER-WINTER STABILIZATION OF DITCHES AND CHANNELS

ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED BY NOVEMBER 1. ALL GRASS-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY SEPTEMBER 1. IF A GRASS-LINED DITCH OR CHANNEL IS STABILIZED BY SEPTEMBER 1, THEN EITHER A SOD LINING SHALL BE INSTALLED PRIOR TO OCTOBER 1 OR THE DITCH MUST BE LINED WITH STONE RIPRAP BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE PRIOR TO NOVEMBER 1.

7. OVER-WINTER STABILIZATION OF DISTURBED SLOPES

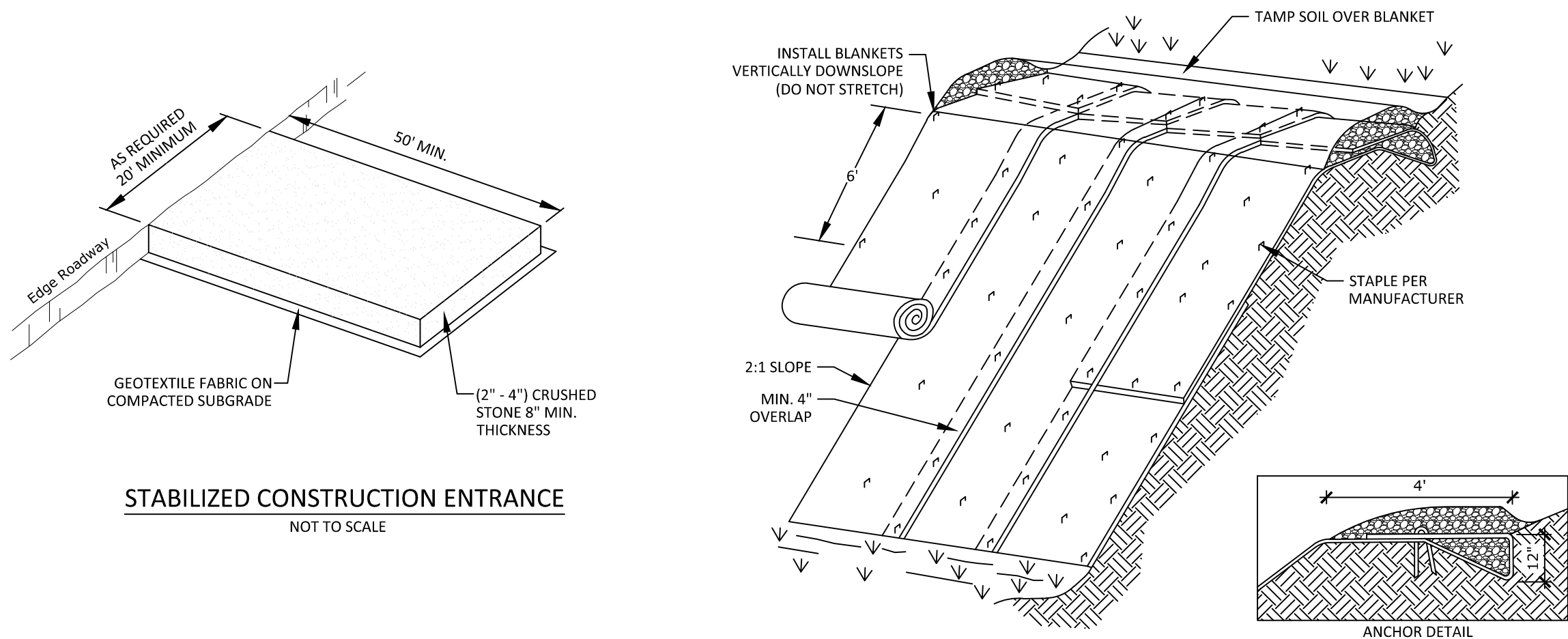
ALL STONE-COVERED SLOPES MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15. ALL SLOPES TO BE VEGETATED MUST BE SEEDED AND MULCHED BY SEPTEMBER 1. ALL AREAS HAVING A GRADE STEEPER THAN 8% SHALL BE CONSIDERED A SLOPE. IF A SLOPE TO BE VEGETATED IS NOT STABILIZED BY SEPTEMBER 1, THEN THE SLOPE SHALL EITHER BE STABILIZED WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS BY OCTOBER 1, SOD BY OCTOBER 1, EROSION CONTROL MIX BY NOVEMBER 1 OR STONE RIPRAP BY NOVEMBER 15. SEE APPLICABLE SECTIONS UNDER EROSION AND SEDIMENTATION CONTROL NOTES FOR PROPER INSTALLATION METHODS.

8. OVER-WINTER STABILIZATION OF DISTURBED SOILS

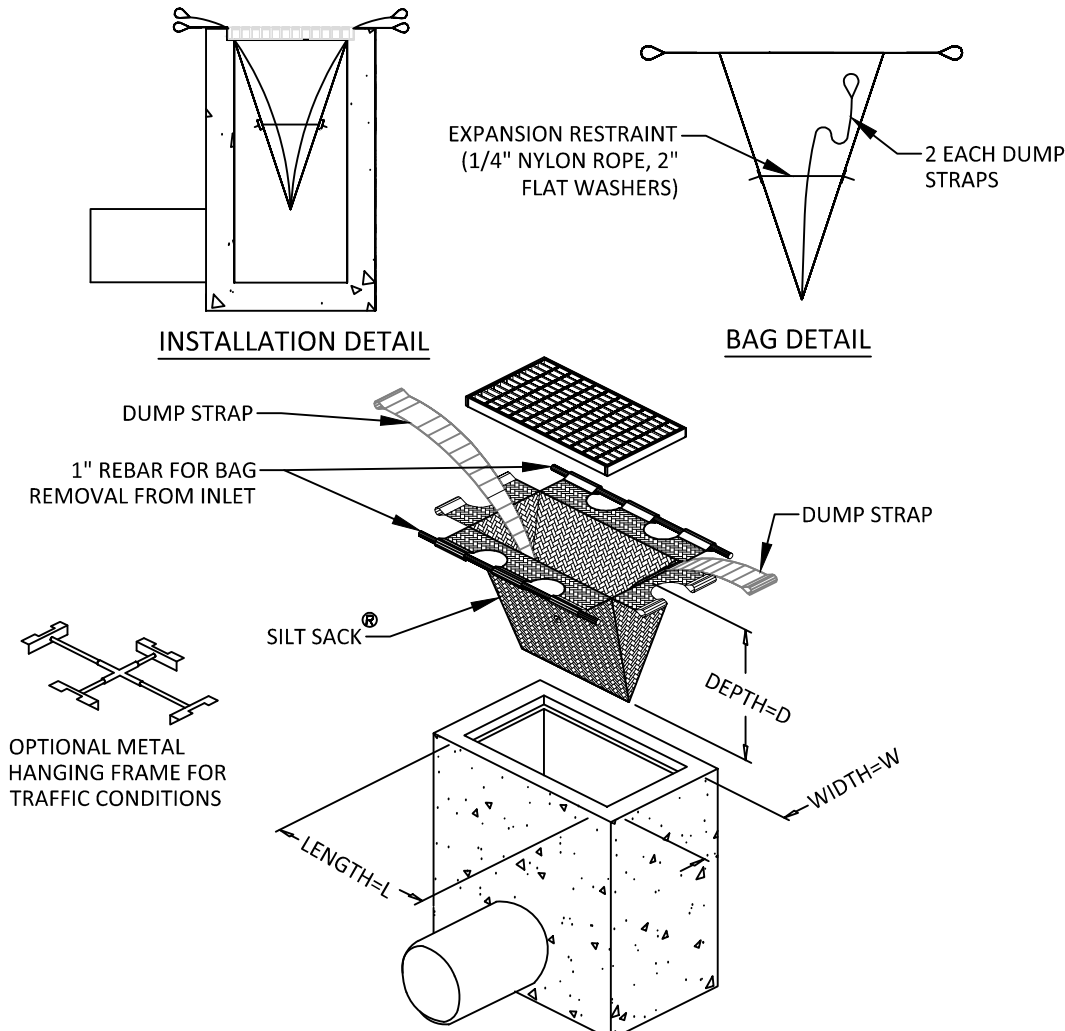
BY SEPTEMBER 15, ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15% MUST BE SEEDED AND MULCHED. IF THE DISTURBED AREAS ARE NOT STABILIZED BY THIS DATE, THEN THE AREA SHALL EITHER BE STABILIZED WITH TEMPORARY VEGETATION BY OCTOBER 1, SOD BY OCTOBER 1, OR MULCH BY NOVEMBER 15. SEE APPLICABLE SECTIONS UNDER EROSION AND SEDIMENTATION CONTROL NOTES FOR PROPER INSTALLATION METHODS.

9. MAINTENANCE

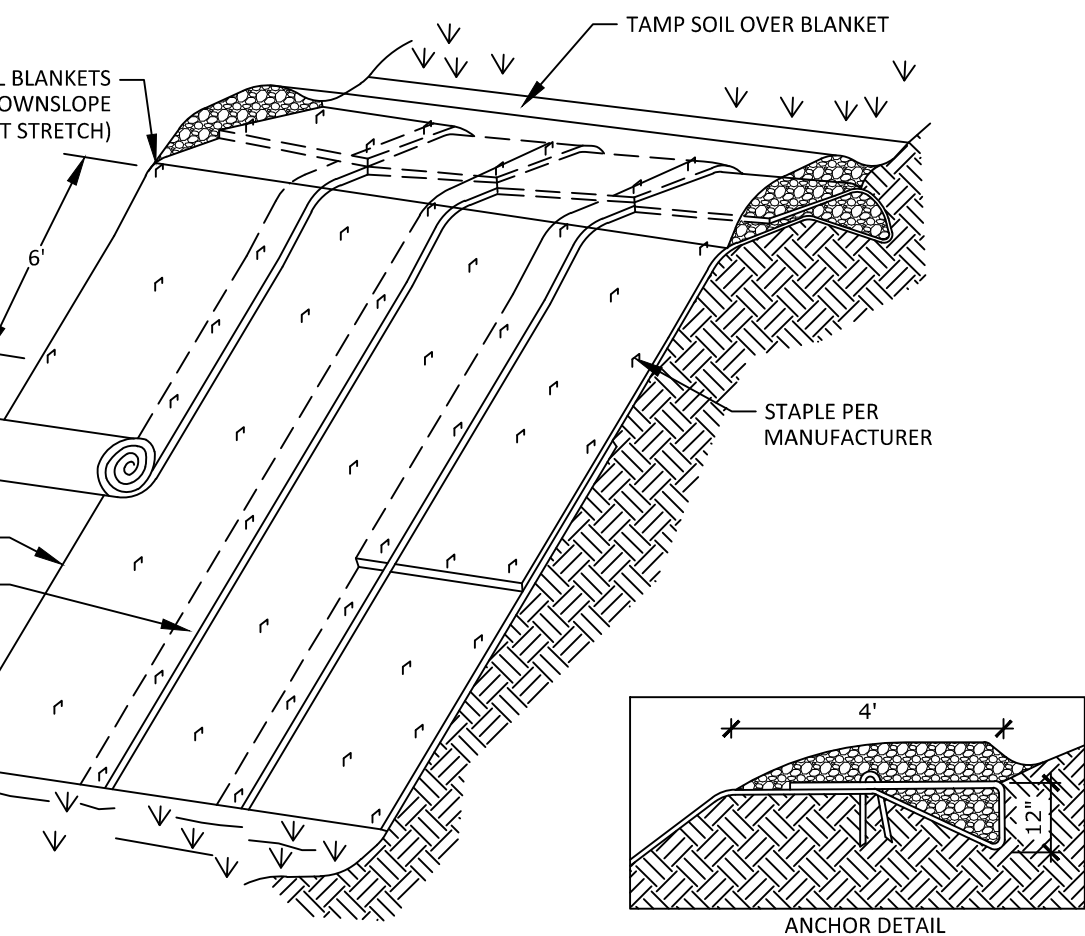
MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AFTER EACH RAINFALL, SNOW STORM, PERIOD OF THAWING AND RUNOFF AND AT LAST ONCE A WEEK, THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUOUS FUNCTION. FOLLOWING THE TEMPORARY AND/OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL, IN THE SPRING, INSPECT AND REPAIR ANY DAMAGES AND/OR BARE SPOTS. AN ESTABLISHED VEGETATIVE COVER MEANS A MINIMUM OF 90% OF AREAS VEGETATED WITH VIGOROUS GROWTH.



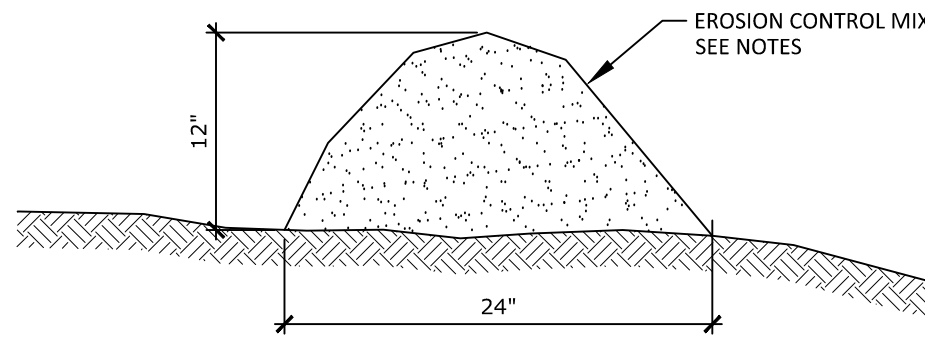
STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



CATCH BASIN INLET PROTECTION
NOT TO SCALE

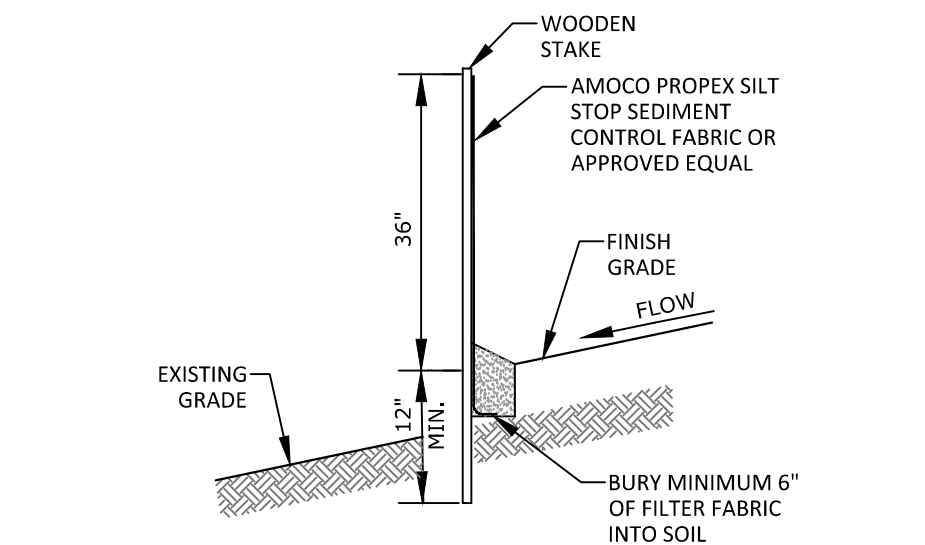


EROSION CONTROL BLANKET
NOT TO SCALE



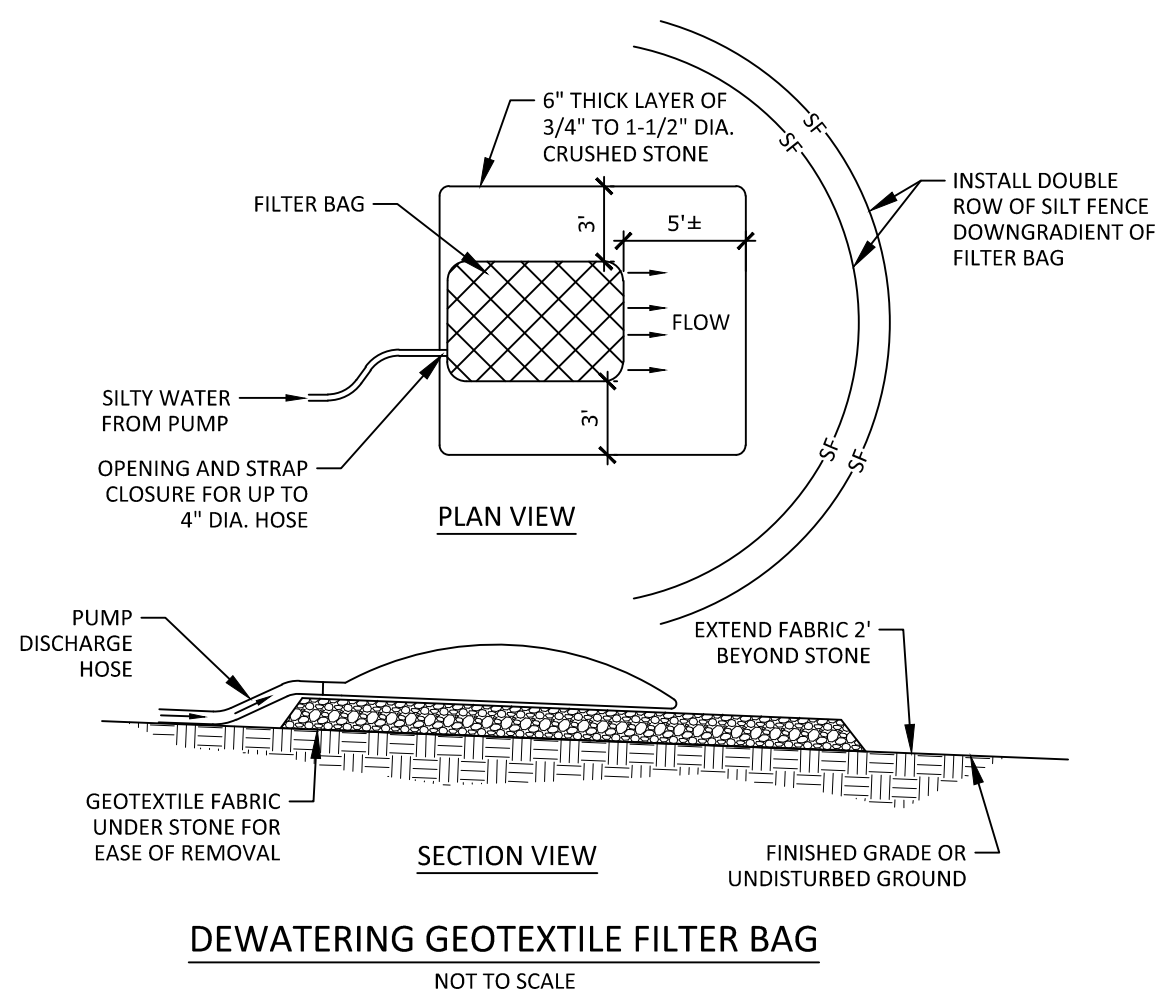
- NOTES:
- EROSION CONTROL MIX BERM INSTALLED 12" HIGH AND 24" WIDE CONSISTING OF STUMP GRINDINGS WITH NO ROCKS GREATER THAN 4" OR LARGE AMOUNTS OF FINES.
 - SEE SECTION 3 OF THE EROSION AND SEDIMENTATION CONTROL NOTES, THIS SHEET, FOR INSTALLATION LOCATION REQUIREMENTS AND ADDITIONAL DETAIL.

EROSION CONTROL MIX BERM
NOT TO SCALE

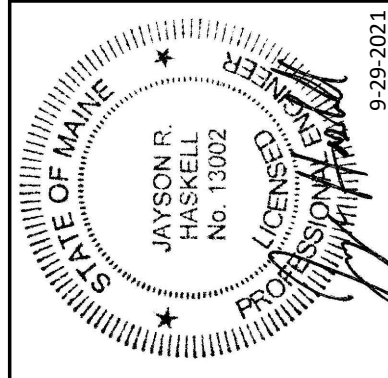


- NOTES:
- SEE SECTION 3 OF THE EROSION AND SEDIMENTATION CONTROL NOTES, THIS SHEET, FOR INSTALLATION LOCATION REQUIREMENTS AND ADDITIONAL DETAIL.

SEDIMENT FILTER FENCE
NOT TO SCALE



DEWATERING GEOTEXTILE FILTER BAG
NOT TO SCALE



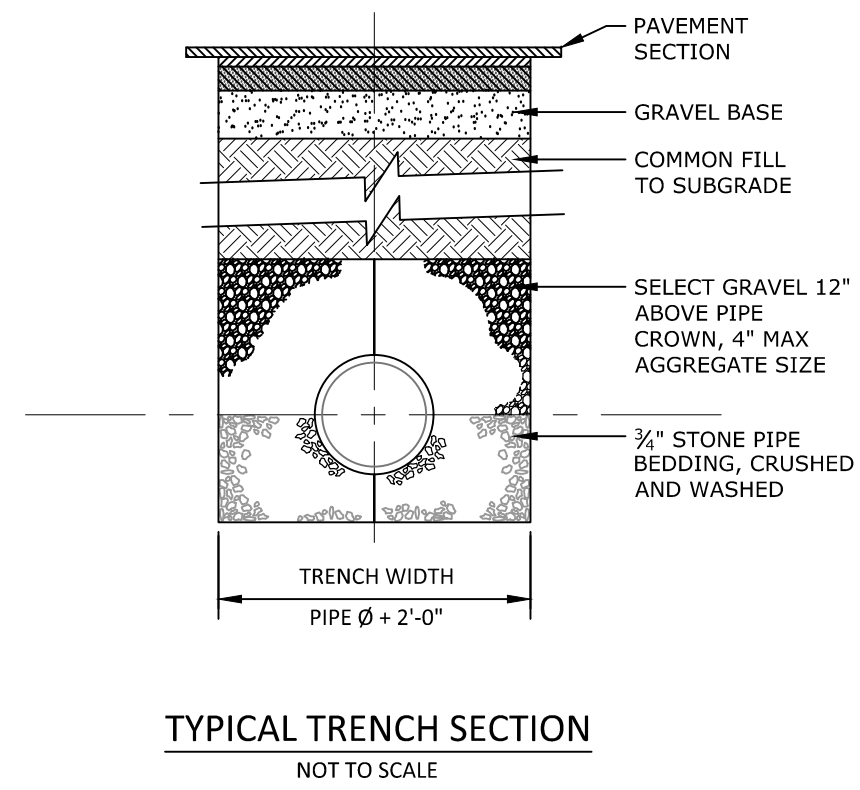
DM ROMA
CONSULTING ENGINEERS

P.O. BOX 1116
WINDHAM, ME 04062
(207) 310-0506

REV.	DATE	BY	DESCRIPTION
A	2/26/21	JRH	MOEP PRE-SUBMISSION
B	4-1-21	JRH	ISSUED FOR MOEP SLOD PERMIT REVIEW
C	9-29-21	JRH	REVISED PER TOWN REVIEW

DETAILS
SURFACE PARKING FACILITY ROOSEVELT TRAIL & DANIELLE DRIVE WINDHAM, MAINE
FOR: FRHP LINCOLNSHIRE, LLC 250 PARKWAY DRIVE, SUITE 270 LINCOLNSHIRE, IL 60069

17011 JOB NUMBER:
AS NOTED SCALE:
9-29-2021 DATE:
SHEET 8 OF 9
D-1



TYPICAL TRENCH SECTION
NOT TO SCALE

NOT TO SCALE

1. LARGER DIAMETER STRUCTURES MAY BE REQUIRED DUE TO SIZE OR GEOMETRY OF PIPE CONNECTIONS AT MANHOLE. WALL THICKNESS TO INCREASE BY 1" FOR EACH 1'-0" DIA. INCREASE. PROVIDE SHOP DRAWINGS.
2. DRAINAGE STRUCTURES TO BE DESIGNED FOR H-20 LOADING.
3. CAST IRON GRATES SHALL BE EQUAL TO EAST JORDAN IRON WORKS, PRODUCT NO. 45622531C01, HEAVY DUTY GRATE OR ENGINEER APPROVED EQUAL. SUBMIT CATALOG SHEETS TO ENGINEER FOR APPROVAL.

The diagram illustrates the installation of a riprap inlet and outlet. It consists of two views: a plan view (top) and a side view (bottom).

Plan View Labels:

- ANGULAR STONE D50=D THICKNESS=T
- TOE INTO EXISTING GRADE
- GEOTEXTILE EQUAL TO MIRAF 600X INSTALL 2" SAND MAT BETWEEN GEOTEXTILE AND NATIVE SOIL.
- PIPE FLOW
- PIPE DIA. = D_o
- 1.00
- L_a

Side View Labels:

- L_a
- W₁ 300
- W₂ = L_a + D_o

NOTES:

1. RIPRAP INLET AND OUTLET TO BE INSTALLED AT THE TIME OF CULVERT INSTALLATION.

RIPRAP APRON DATA					
SD DIA.	W1	W2	La	D	T
18"	5'	11'	9'	6"	14"
24"	6'	15'	13'	6"	14"
36"	9'	23'	20'	8"	18"

3" BASE GRAVEL
MDOT 703.06 TYPE C

18" SUBBASE GRAVEL
MDOT 703.06 TYPE C

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DETAILS

SURFACE PARKING FACILITY
ROOSEVELT TRAIL & DANIELLE DRIVE
WINDHAM, MAINE

FOR:
FRHP LINCOLNSHIRE, LLC
250 PARKWAY DRIVE, SUITE 270
LINCOLNSHIRE, IL 60069

17011 JOB NUMBER:
AS NOTED SCALE:
9-29-2021 DATE:
SHEET 9 OF 9
D-2