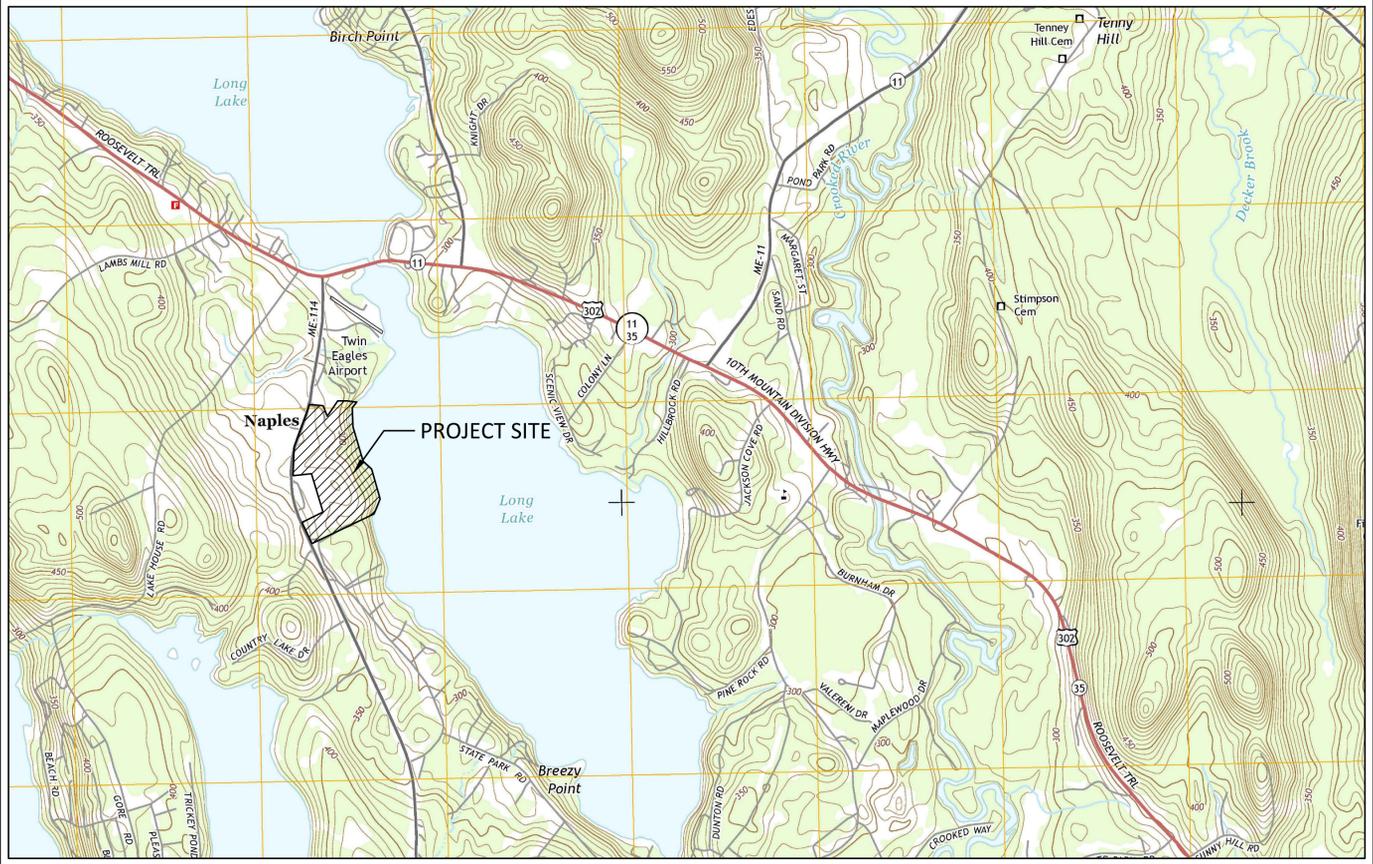


# BRANDY CROSSING SUBDIVISION

SEBAGO ROAD  
NAPLES, MAINE

CONSULTANTS	
CIVIL ENGINEER	DM ROMA CONSULTING ENGINEERS
LAND SURVEYOR	SAWYER ENGINEERING & SURVEYING, INC.
SITE EVALUATOR	SAWYER ENGINEERING & SURVEYING, INC.
GEOLOGIST	SUMMIT GEOENGINEERING SERVICES
SOIL SCIENTIST	LONGVIEW PARTNERS, LLC



PROJECT VICINITY MAP

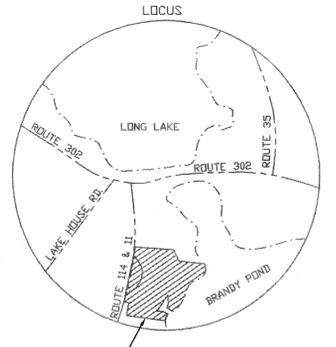
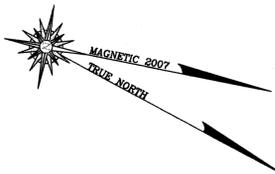
ISSUED FOR TOWN APPROVAL - NOT FOR CONSTRUCTION  
APRIL 16, 2019

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

APPLICANT:  
FRONT NINE HOMES, LLC  
28 WEARE ROAD  
SEABROOK, NH 03874

BRANDY CROSSING SUBDIVISION  
DRAWING SHEET INDEX

PAGE NO.	DESCRIPTION
1	TITLE SHEET
2	SUBDIVISION PLAN-LOT #9 (EXISTING BOUNDARY PLAN)
3	SUBDIVISION PLAN
4	PLAN OF WASTEWATER DISPOSAL SYSTEMS
5	PLAN & PROFILE: FAIRWAY DRIVE
6	PLAN & PROFILE: FAIRWAY DRIVE
7	PLAN & PROFILE: FAIRWAY DRIVE
8	PLAN & PROFILE: SECONDARY ACCESS ROAD
9	STORMWATER POND PLAN
10	STORMWATER POND PLAN
11	DOCK SITE PLAN
12	DETAILS
13	DETAILS



**LEGEND**

- IRON PIN FOUND
- 5/8 REBAR WITH CAP RLS 1229 SET
- ⊙ WELL
- STONE POST FOUND
- UTILITY POLE
- ⊙ TEST PIT
- SHORELINE
- EDGE OF TRAVELED WAY
- TREELINE
- 100' SHORELINE SETBACK
- 250' SHORELINE SETBACK
- LIMIT OF CLEARED AREA-BUILDING ENVELOPE
- GRASSED SWALE

LINE	BEARING	DISTANCE
L1	N 83°23'57" E	39.79'
L2	S 59°36'33" W	46.09'
L3	S 78°03'48" W	70.00'
L4	N 83°26'12" W	50.00'
L6	S 13°33'59" E	18.98'
L10	S 38°11'55" E	6.14'
L11	N 03°33'06" W	57.60'
L12	S 86°33'41" E	35.40'
L13	N 06°33'48" E	25.00'
L14	S 83°26'12" E	50.00'
L15	N 08°33'48" E	50.00'
L18	N 83°26'12" W	50.00'
L17	N 06°33'48" E	25.00'
L18	N 63°57'53" W	23.87'
L19	S 15°33'59" E	18.98'
L20	N 00°04'57" E	55.92'

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	2914.93'	337.10'	336.91'	N32°43'47"E	06°37'34"
C2	1892.44'	1481.09'	1443.58'	N13°37'19"E	44°50'30"
C3	136.26'	115.10'	111.71'	S39°45'46"E	46°23'54"
C4	388.85'	106.21'	105.88'	S07°44'21"E	15°38'56"
C5	107.57'	116.72'	111.08'	N37°36'09"W	82°10'01"
C6	57.57'	82.47'	59.45'	S37°36'09"E	82°10'01"
C7	86.26'	72.86'	70.72'	S 39°45'58" E	46°23'54"
C8	338.85'	92.55'	92.26'	S 07°44'31" E	15°38'56"

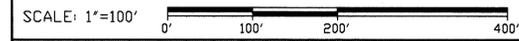
- REFERENCE IS MADE TO THE FOLLOWING:
- DEED FROM LEWIS P. KNIGHT TO NAPLES GOLF & COUNTRY CLUB RECORDED IN C.C.R.D. BOOK 1246 PAGE 371.
  - 'PLAN OF LAND RTE 11 & 114 NAPLES, MAINE' MADE FOR NAPLES GOLF & COUNTRY CLUB BY SAWYER ENGINEERING & SURVEYING, INC., PLAN NO. 103-43 APPROVED BY NAPLES PLANNING BOARD 3/16/04 AND RECORDED IN C.C.R.D. PLAN BOOK 204 PAGE 243.
  - 'PLAN OF EXISTING COURSE NAPLES GOLF & COUNTRY CLUB NAPLES, MAINE' BY SAWYER ENGINEERING & SURVEYING, INC. PLAN NO. 194-10B.
  - 'AMENDED SUBDIVISION PLAN FAIRWAYS AT NAPLES, MAINE' BY SURVEY, INC. APPROVED BY NAPLES PLANNING BOARD 12/24/93 RECORDED IN C.C.R.D. PLAN BOOK 194 PAGE 3.
  - 'MAINE STATE HIGHWAY COMMISSION RIGHT-OF-WAY MAPS STATE HIGHWAY 126' NAPLES, MAINE. S.H.C. FILE NO. 3-164 SHEETS 3 & 4 OF 5.
  - 'REVISED SUBDIVISION PLAN 4 LOT EXPANSION NAPLES, MAINE' PREPARED BY SAWYER ENGINEERING AND SURVEYING INC. DATED 5-29-2009 PLAN NO. 107-28R RECORDED IN CUMBERLAND COUNTY REGISTRY OF DEEDS PLAN BOOK 209 PAGE 296.

CONDITION OF APPROVAL:  
 UNTIL THE DEP APPROVED STORMWATER MANAGEMENT CONTROLS ARE INSTALLED AND INSPECTED BY A QUALIFIED ENGINEER, AND WRITTEN CONFIRMATION THAT INSTALLED CONTROLS MEET THE DESIGN STANDARDS IS GIVEN TO THE CED, NO CERTIFICATE OF OCCUPANCY WILL BE ISSUED.

APPROVED  
 TOWN OF NAPLES  
 PLANNING BOARD  
*James J. ...*  
 M.D. Clement

DATE 7/4/11

- REVISED 7-12-2011
- REVISED 5-23-2011
- REVISED 4-5-2011
- REVISED 3-10-2011
- REVISED 3-7-2011

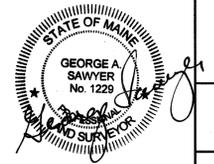


**SUBDIVISION PLAN**  
**LOT #9**  
**NAPLES, MAINE**

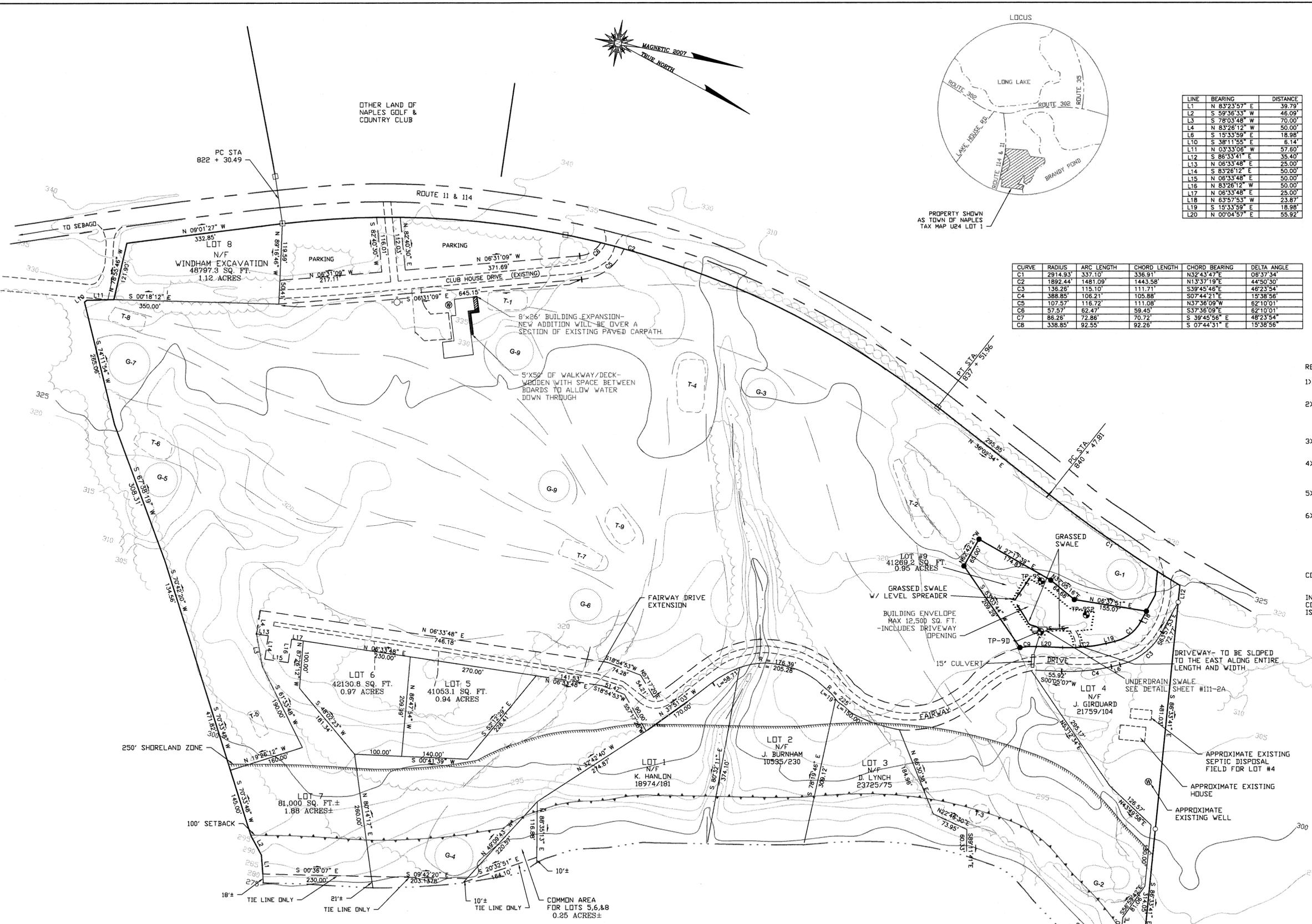
RECORD OWNER:  
**NAPLES GOLF & COUNTRY CLUB**  
 P.O. BOX 98 NAPLES, MAINE 04055

SAWYER ENGINEERING & SURVEYING, INC.  
 2 ELM STREET  
 BRIDGTON, MAINE 04009

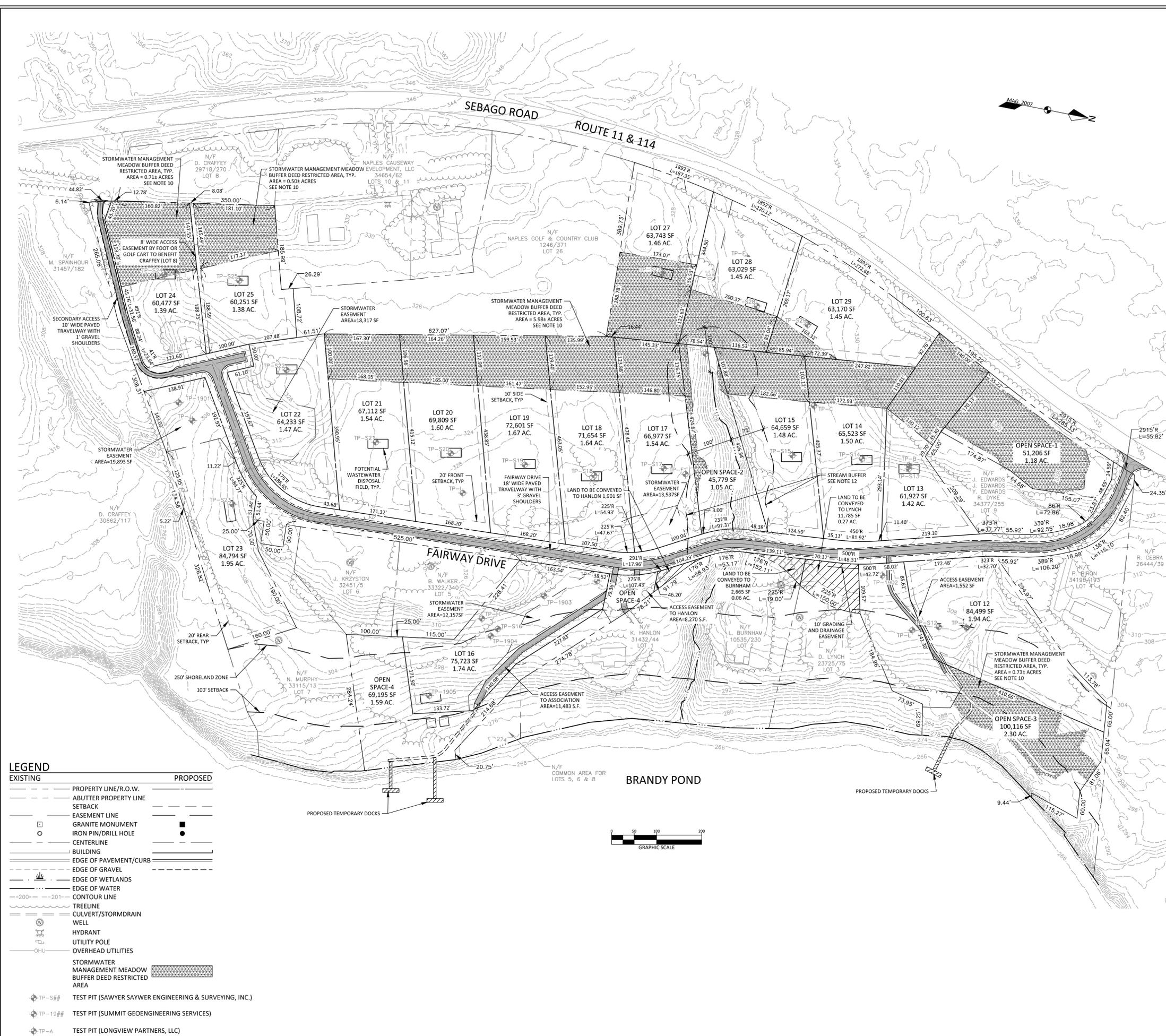
SURVEY BY	DATE	DRAFTSMAN	SCALE	PLAN NO.
J.WIESEMANN	2-7-2011	J.WIESEMANN	1"=100'	111-2



State of Maine, Cumberland SS.  
 Registry of Deeds  
 Received August 2, 2011  
 at 2:08 p.m. P M and recorded in  
 Plan Book 211 Page 495  
 Attest: *Janet E. Foley*  
 Register



- NOTE:
- REMAINING LAND OF NAPLES GOLF & COUNTRY CLUB 44 ACRES±, AREA INCLUDES FAIRWAY DRIVE, CLUB HOUSE DRIVE, BIRDIE LANE.
  - CONTOUR INTERVAL 5'. ELEVATION APPROXIMATES MEAN SEA LEVEL. CONTOURS DEVELOPED BY JAMES SEWALL CO. THROUGH AERIAL PHOTOGRAPHY.
  - FAIRWAY DRIVE & FAIRWAY DRIVE EXTENSION ARE, AND SHALL REMAIN PRIVATE ROADS MAINTAINED BY THE OWNERS OF LOTS 5,6,7,8, 9.
  - SEPTIC DISPOSAL SYSTEM SHALL BE LOCATED IN AREAS OF TEST PITS. WELLS SHALL BE LOCATED AS SHOWN.
  - LOTS WITHIN SHORELAND ZONE SHALL HAVE MINIMUM 60,000 SF. AREA, 200 FEET SHORE FRONTAGE & 100 FEET ROAD FRONTAGE.
  - LOTS OUTSIDE SHORELAND ZONE (LOT 9) SHALL HAVE 40,000 SF. AREA, & 100 FEET ROAD FRONTAGE.
  - NO PORTION OF DEVELOPMENT AREA IS SHOWN ON FEMA MAPS AS BEING WITHIN THE 100 YEAR FLOOD ZONE.
  - PORTION OF LOT 9 OUTSIDE THE BUILDING ENVELOPE SHOWN SHALL REMAIN IN THE CURRENT STATE AS TO GROUND COVER. WOODED AREAS MUST REMAIN DISTURBED, THAT INCLUDES TREES, UNDERGROWTH, AND FOREST DUFF. LARGE DEAD OR DISEASED TREES THAT COULD CAUSE HARM TO THE BUILDINGS MAY BE REMOVED. EXISTING GRASSED AREAS SHALL REMAIN GRASSED OR MAY BE ALLOWED TO REVERT TO WOODED VEGETATION.



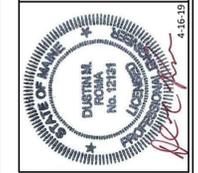
**LEGEND**

EXISTING	PROPOSED
--- PROPERTY LINE/R.O.W.	--- PROPERTY LINE/R.O.W.
--- ABUTTER PROPERTY LINE	--- ABUTTER PROPERTY LINE
--- SETBACK	--- SETBACK
--- EASEMENT LINE	--- EASEMENT LINE
○ GRANITE MONUMENT	● GRANITE MONUMENT
○ IRON PIN/DRILL HOLE	● IRON PIN/DRILL HOLE
--- CENTERLINE	--- CENTERLINE
--- BUILDING	--- BUILDING
--- EDGE OF PAVEMENT/CURB	--- EDGE OF PAVEMENT/CURB
--- EDGE OF GRAVEL	--- EDGE OF GRAVEL
--- EDGE OF WETLANDS	--- EDGE OF WETLANDS
--- EDGE OF WATER	--- EDGE OF WATER
--- CONTOUR LINE	--- CONTOUR LINE
--- TREELINE	--- TREELINE
--- CULVERT/STORMDRAIN	--- CULVERT/STORMDRAIN
○ WELL	○ WELL
○ HYDRANT	○ HYDRANT
○ UTILITY POLE	○ UTILITY POLE
--- OVERHEAD UTILITIES	--- OVERHEAD UTILITIES
--- STORMWATER MANAGEMENT MEADOW BUFFER DEED RESTRICTED AREA	--- STORMWATER MANAGEMENT MEADOW BUFFER DEED RESTRICTED AREA
TP-### TEST PIT (SAWYER SAWYER ENGINEERING & SURVEYING, INC.)	
TP-19## TEST PIT (SUMMIT GEOENGINEERING SERVICES)	
TP-A TEST PIT (LONGVIEW PARTNERS, LLC)	

- GENERAL NOTES:**
- THE OWNER OF RECORD OF THE PROPERTY IS NAPLES GOLF & COUNTRY CLUB BY DEED RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS BOOK 1246 PAGE 371.
  - TOTAL AREA OF THE PARCEL IS APPROXIMATELY 36.41 ACRES.
  - PARCEL TAX MAP REFERENCE: TOWN OF NAPLES ASSESSORS MAP U-24, LOT 1.
  - PLAN REFERENCES:
    - A) "SUBDIVISION PLAN, LOT 19, NAPLES, MAINE MADE FOR RECORD OWNER NAPLES GOLF & COUNTRY CLUB" PREPARED BY SAWYER ENGINEERING & SURVEYING, INC. AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS PLAN BOOK 211 PAGE 195 ON AUGUST 2, 2011.
  - HORIZONTAL DATUM: MAGNETIC NORTH 2007
  - VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
  - BOUNDARY INFORMATION SHOWN HEREON IS BASED ON PLAN REFERENCE 4A. TOPOGRAPHIC CONTOURS ARE 2 FT LIDAR CONTOURS OBTAINED FROM THE MAINE OFFICE OF GIS.
  - THE PROPERTY IS LOCATED IN THE VILLAGE DISTRICT.
  - SPACE AND BULK REQUIREMENTS: V DISTRICT
    - MIN LOT SIZE: 60,000 SF (RESIDENTIAL)
    - MIN LOT FRONTAGE: 100 FT
    - MIN FRONT YARD: 20 FT
    - MIN SIDE YARD: 10 FT
    - MIN REAR YARD: 20 FT
    - MAX BUILDING HEIGHT: 55 FT
    - MAX BUILDING COVERAGE: 50%
    - MAX IMPERVIOUS COVERAGE: 75%
  - THE STORMWATER BUFFER DEED RESTRICTED AREAS SHOWN HEREON ARE PART OF THE PROJECTS STORM WATER INFRASTRUCTURE AND CONSIDERED A REQUIREMENT OF THIS PERMIT. STORMWATER BUFFER DEED RESTRICTED AREAS THAT ARE REQUIRED TO REMAIN IN PERPETUITY AS DESCRIBED IN THE HOMEOWNERS ASSOCIATIONS DECLARATIONS OF RIGHTS, RESTRICTIONS, COVENANTS & EASEMENTS, AND/OR THE DEED FOR THE PROPERTY THAT THE EASEMENT IS LOCATED UPON. STORMWATER BUFFER DEED RESTRICTED AREAS SHALL REMAIN OR REVERT TO A MEADOW AREA (WITH A MAXIMUM OF TWO MOWINGS PER YEAR TO A MINIMUM HEIGHT OF 6 INCHES, IF ANY), OR IF CURRENTLY FORESTED, SHALL REMAIN AS A FOREST IN A NATURAL STATE. THE DEED RESTRICTIONS FOR THESE AREAS CAN BE FOUND EITHER AS PART OF THE DEEDS FOR THESE LOTS, OR THE DECLARATION OF RESTRICTIONS, RIGHTS, COVENANTS & EASEMENTS, AND HAVE BEEN INCLUDED AS APPENDIX A OF THE PROJECTS INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN STORMWATER. THE LIMITED DISTURBANCE EASEMENT AREA SHOWN HEREON TOTALS 7.94± ACRES, WITH A TOTAL MAINTAINED MEADOW AREA OF 7.41± ACRES AND TOTAL FORESTED AREA OF 0.53± ACRES.
  - A PORTION OF THE PROPERTY IS LOCATED WITHIN A A2 FLOOD HAZARD AREA AS IDENTIFIED ON THE FEMA FLOOD INSURANCE MAP COMMUNITY PANEL NUMBER 23050 0016 B WITH AN EFFECTIVE DATE OF APRIL 1, 1982 WITH A BASE FLOOD ELEVATION OF 274.0' (NGVD 29).
  - EXISTING FORESTED BUFFER ON LOT 15 AND LOT 17 WITHIN STREAM BUFFER SHALL BE PRESERVED AND ANY EXISTING LAWN TO BE MAINTAINED AS MEADOW (SEE NOTE 10 FOR RESTRICTIONS). THE STREAM BUFFER SHALL BE TEMPORARILY MARKED IN THE FIELD PRIOR TO SITE DISTURBANCE, AND PERMANENTLY MARKED AFTER THE LOT IS DEVELOPED.

**APPROVED - NAPLES PLANNING BOARD:**

CHAIRPERSON	DATE



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

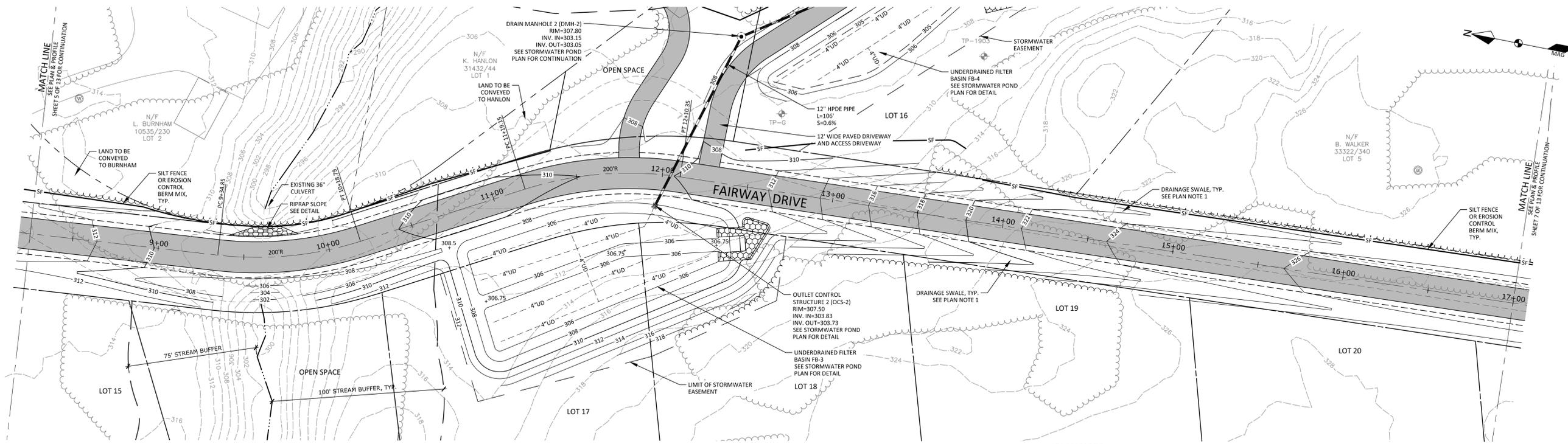
REV	DATE	BY	DESCRIPTION
A	7-31-18	DMR	ISSUED TO TOWN FOR PRELIMINARY REVIEW
B	10-12-18	DMR	ISSUED FOR WDP SODA REVIEW
C	12-10-18	DMR	ISSUED FOR PERMIT REVIEW
D	2-14-19	DMR	REVISED PER WDP REVIEW
E	3-19-19	DMR	REVISED PER WDP REVIEW
F	4-9-19	DMR	REVISED PER WDP REVIEW
G	4-16-19	DMR	ISSUED FOR TOWN APPROVAL

**SUBDIVISION PLAN**  
BRANDY CROSSING SUBDIVISION  
NAPLES, MAINE  
FOR: FRONT NINE HOMES, LLC  
28 WEBER ROAD  
SEBAGO, ME 04982

18001  
JOB NUMBER:  
1" = 100'  
SCALE:  
4-16-2019  
DATE:  
SHEET 3 OF 13  
SB-1

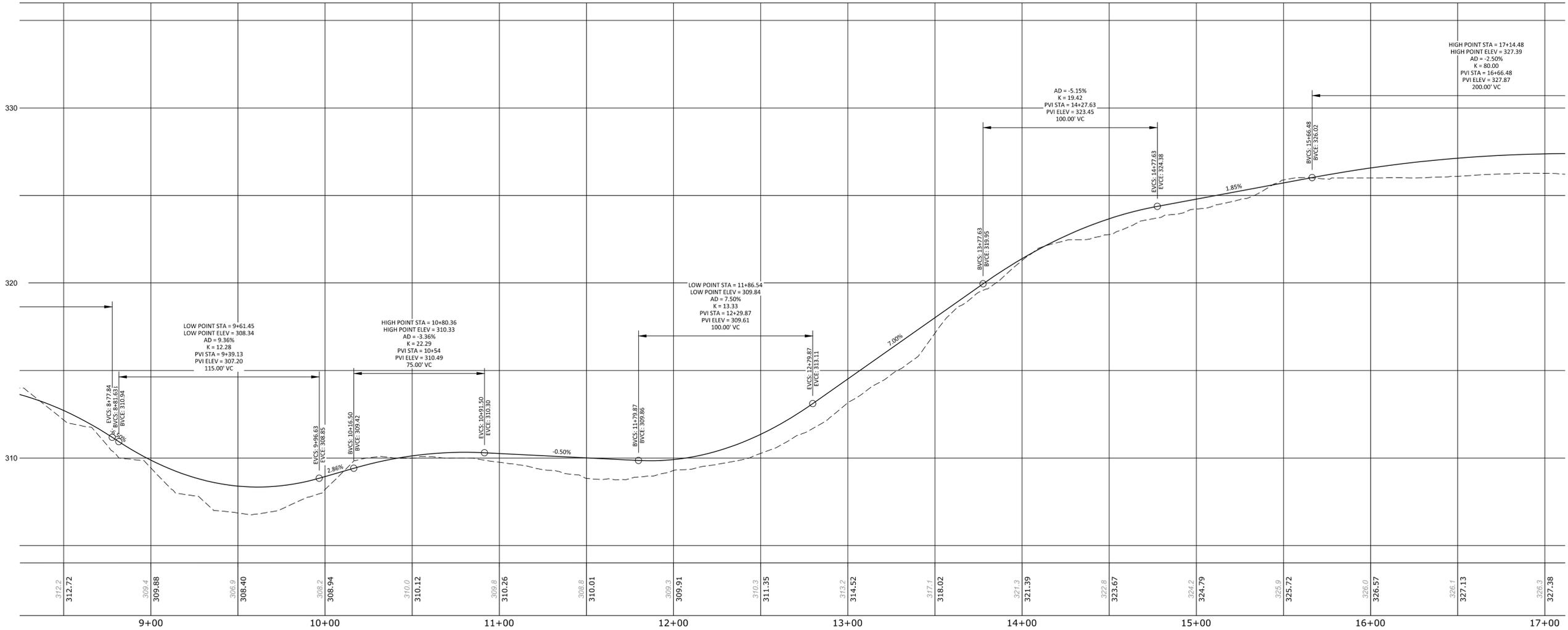






**PLAN VIEW**  
SCALE: 1"=30'  
GRAPHIC SCALE

**PLAN NOTE:**  
1. THE PROPOSED DRAINAGE SWALE ASSOCIATED WITH PROPOSED FAIRWAY DRIVE IS INTENDED TO DIRECT STORMWATER TO PROPOSED DRAINAGE FACILITIES. AS SUCH, CONTRACTOR SHALL INSTALL CULVERTS AT PROPOSED AND EXISTING DRIVEWAY CROSSINGS AS NECESSARY AND PROVIDE PAVED CONNECTIONS FROM NEW FAIRWAY DRIVE TO ANY EXISTING DRIVEWAY.



**ROAD PROFILE**  
SCALE: HORIZ.: 1"=30'  
VERT.: 1"=3'



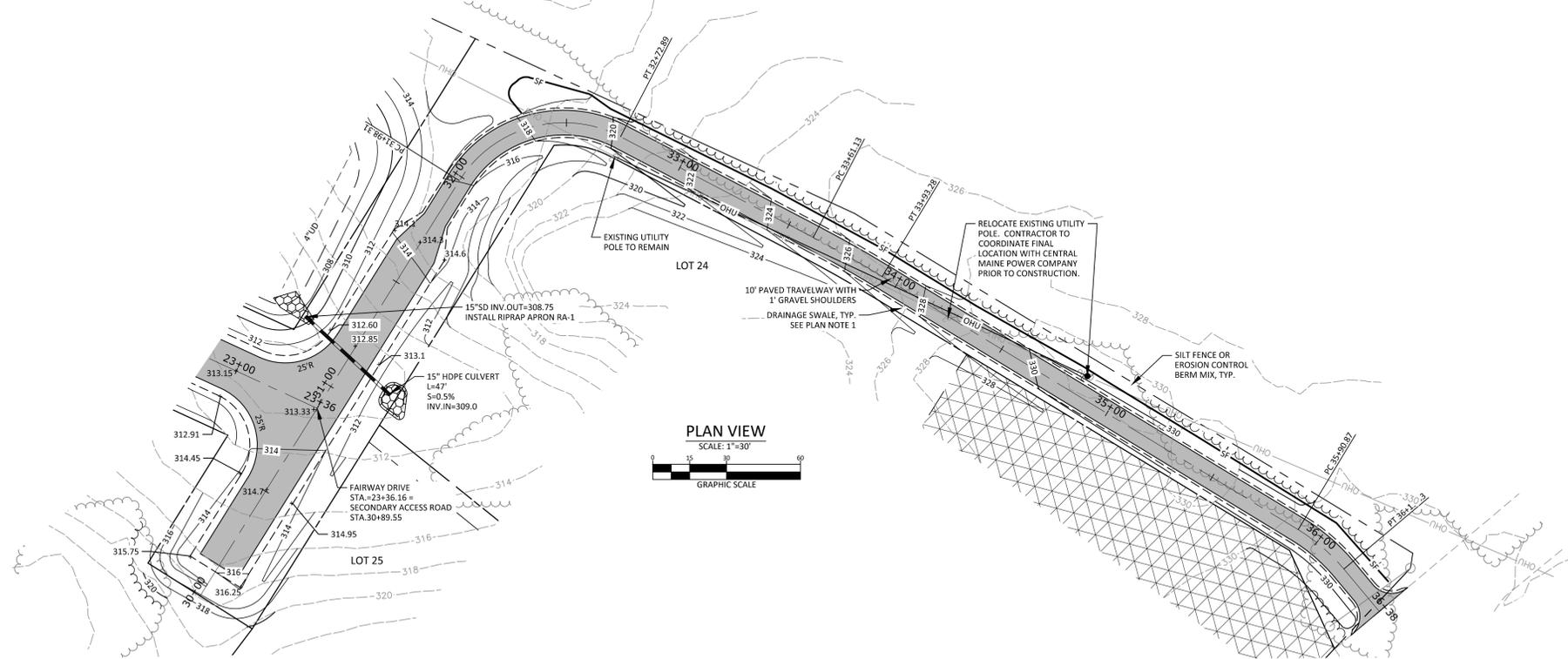
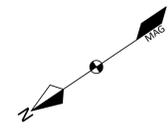
**DM ROMA**  
CONSULTING ENGINEERS  
P.O. BOX 1116  
WINDHAM, ME 04092  
(207) 310-0506

REV.	DATE	BY	DESCRIPTION
A	7-31-18	DMR	ISSUED TO TOWN FOR PRELIMINARY REVIEW
B	10-12-18	DMR	ISSUED FOR MDP/ SODA REVIEW
C	12-10-18	DMR	ISSUED FOR PERMIT REVIEW
D	2-1-19	DMR	REVISED PER MDP REVIEW
E	3-19-19	DMR	REVISED PER MDP REVIEW
F	4-9-19	DMR	REVISED PER MDP REVIEW
G	4-16-19	DMR	ISSUED FOR TOWN APPROVAL

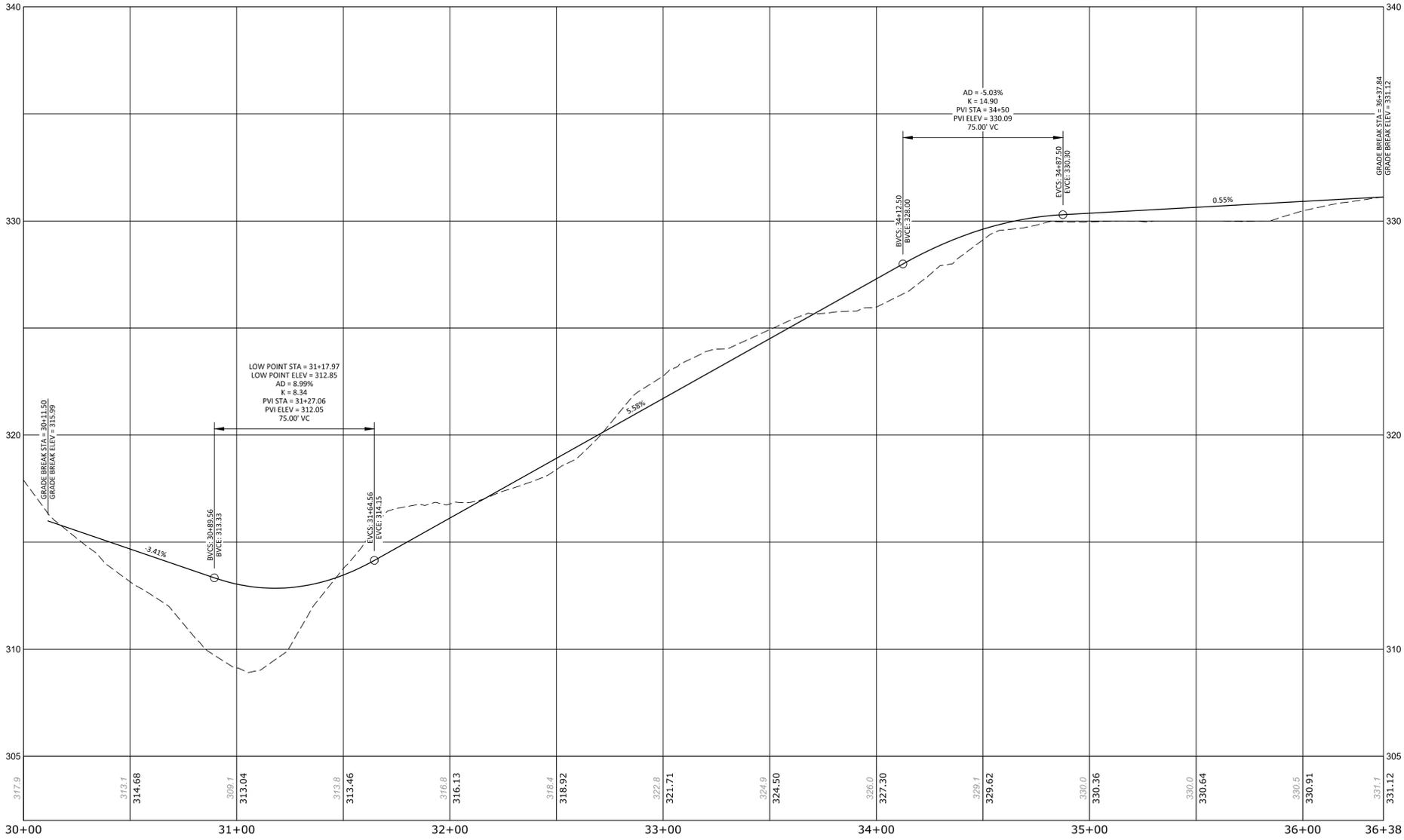
**PLAN & PROFILE: FAIRWAY DRIVE**  
BRANDY CROSSING SUBDIVISION  
NAPLES, MAINE  
FOR:  
FRONT NINE HOMES, LLC  
28 WEBER ROAD  
BRANDY CROSSING, ME 04984

18001  
JOB NUMBER:  
AS NOTED  
SCALE:  
4-16-2019  
DATE:  
SHEET 6 OF 13  
PP-2





**PLAN VIEW**  
SCALE: 1"=30'  
GRAPHIC SCALE



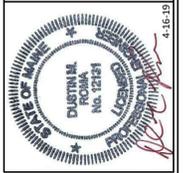
**ROAD PROFILE: SECONDARY ACCESS ROAD**  
SCALE: HORIZ. 1"=30'  
VERT. 1"=3'

**PLAN NOTE:**

1. THE PROPOSED DRAINAGE SWALE ASSOCIATED WITH PROPOSED FAIRWAY DRIVE IS INTENDED TO DIRECT STORMWATER TO PROPOSED DRAINAGE FACILITIES. AS SUCH, CONTRACTOR SHALL INSTALL CULVERTS AT PROPOSED AND EXISTING DRIVEWAY CROSSINGS AS NECESSARY AND PROVIDE PAVED CONNECTIONS FROM NEW FAIRWAY DRIVE TO ANY EXISTING DRIVEWAY.
2. THE STORMWATER BUFFER DEED RESTRICTED AREAS SHOWN HEREON ARE PART OF THE PROJECT'S STORM WATER INFRASTRUCTURE AND CONSIDERED A REQUIREMENT OF THIS PERMIT. STORMWATER BUFFER DEED RESTRICTED AREAS THAT ARE REQUIRED TO REMAIN IN PERPETUITY AS DESCRIBED IN THE HOMEOWNERS ASSOCIATIONS DECLARATIONS OF RIGHTS, RESTRICTIONS, COVENANTS & EASEMENTS, AND/OR THE DEED FOR THE PROPERTY THAT THE EASEMENT IS LOCATED UPON. STORMWATER BUFFER DEED RESTRICTED AREAS SHALL REMAIN OR REVERT TO A MEADOW AREA (WITH A MAXIMUM OF TWO MOWINGS PER YEAR TO A MINIMUM HEIGHT OF 6 INCHES, IF ANY), OR IF CURRENTLY FORESTED, SHALL REMAIN AS A FOREST IN A NATURAL STATE. THE DEED RESTRICTIONS FOR THESE AREAS CAN BE FOUND EITHER AS PART OF THE DEEDS FOR THESE LOTS, OR THE DECLARATION OF RESTRICTIONS, RIGHTS, COVENANTS & EASEMENTS, AND HAVE BEEN INCLUDED AS APPENDIX A OF THE PROJECT'S INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN STORMWATER. THE LIMITED DISTURBANCE EASEMENT AREA SHOWN HEREON TOTALS 7.94± ACRES, WITH A TOTAL MAINTAINED MEADOW AREA OF 7.41± ACRES AND TOTAL FORESTED AREA OF 0.53± ACRES.

**LEGEND**

EXISTING	PROPOSED
--- PROPERTY LINE/R.O.W.	--- PROPERTY LINE/R.O.W.
--- ABUTTER PROPERTY LINE	--- ABUTTER PROPERTY LINE
--- EASEMENT LINE	--- EASEMENT LINE
--- CENTERLINE	--- CENTERLINE
--- BUILDING	--- BUILDING
--- EDGE OF PAVEMENT/CURB	--- EDGE OF PAVEMENT/CURB
--- EDGE OF GRAVEL	--- EDGE OF GRAVEL
--- CONTOUR LINE	--- CONTOUR LINE
--- TREELINE	--- TREELINE
--- CULVERT/STORMDRAIN	--- CULVERT/STORMDRAIN
--- HYDRANT	--- HYDRANT
--- UTILITY POLE	--- UTILITY POLE
--- OHU	--- OHU
--- UGU	--- UGU
--- TRANSFORMER PAD	--- TRANSFORMER PAD
--- RIPRAP	--- RIPRAP
--- SILT FENCE	--- SILT FENCE
--- STORMWATER MANAGEMENT MEADOW	--- STORMWATER MANAGEMENT MEADOW
--- BUFFER DEED RESTRICTED AREA	--- BUFFER DEED RESTRICTED AREA



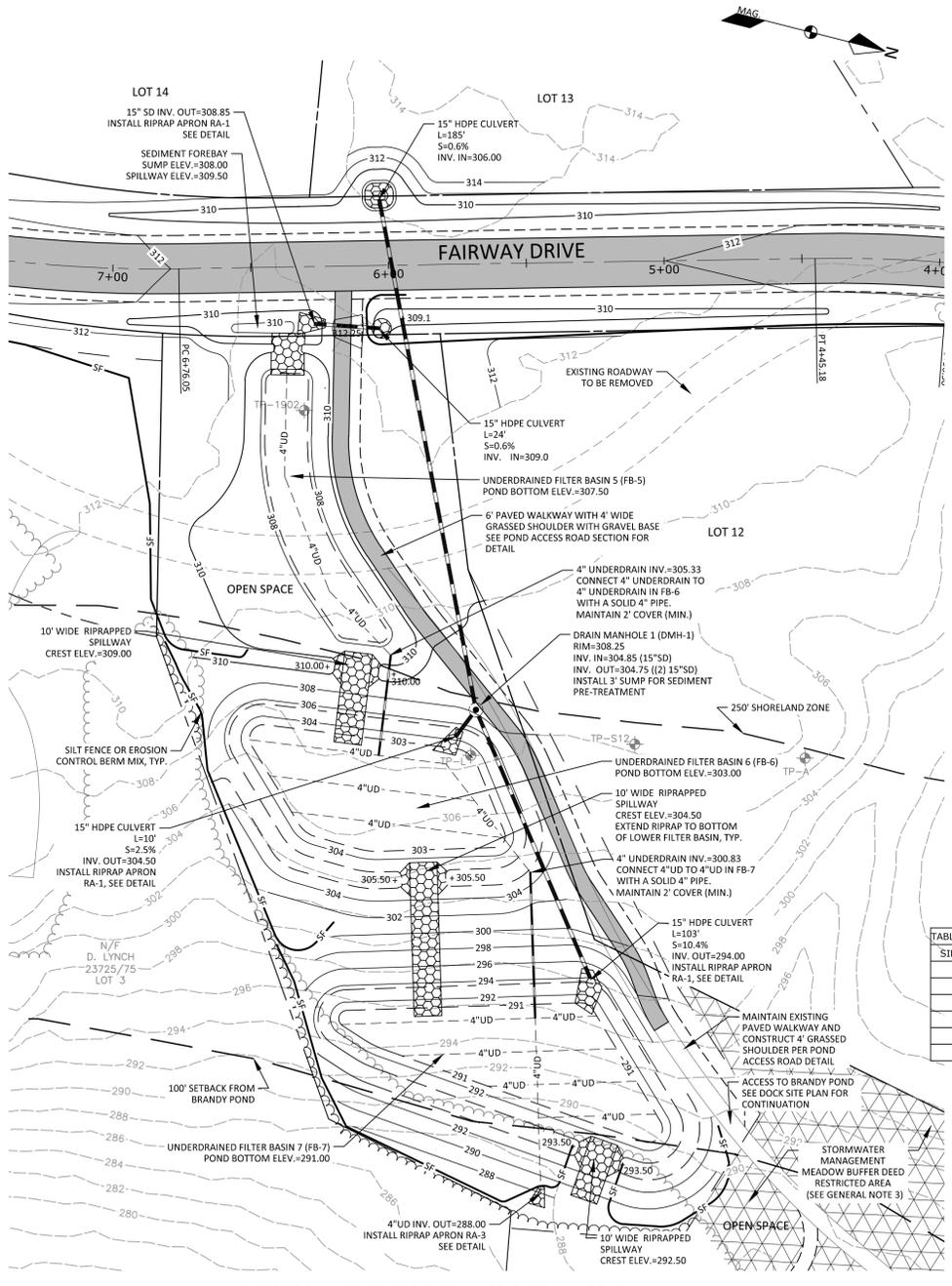
**DM ROMA**  
CONSULTING ENGINEERS  
P.O. BOX 1116  
WINDHAM, ME 04062  
(207) 310-0506

REV	DATE	BY	DESCRIPTION
A	7-31-18	DMR	ISSUED TO TOWN FOR PRELIMINARY REVIEW
B	10-12-18	DMR	ISSUED FOR MDEP SODA REVIEW
C	12-10-18	DMR	ISSUED FOR PERMIT REVIEW
D	2-4-19	DMR	REVISED PER MDEP REVIEW
E	3-19-19	DMR	REVISED PER MDEP REVIEW
F	4-9-19	DMR	REVISED PER MDEP REVIEW
G	4-16-19	DMR	ISSUED FOR TOWN APPROVAL

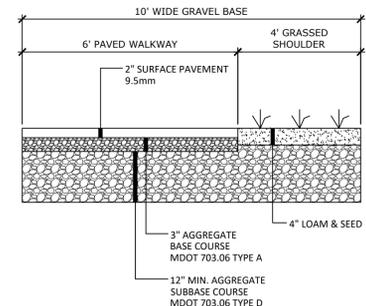
**PLAN & PROFILE: SECONDARY ACCESS ROAD**  
BRANDY CROSSING SUBDIVISION  
NAPLES, MAINE  
FOR: FRONT NINE HOMES, LLC  
28 WEBER ROAD  
SUNBROOK, VT 05284

18001 JOB NUMBER:
AS NOTED SCALE:
4-16-2019 DATE:
SHEET 8 OF 13
PP-4





**UNDERDRAINED FILTER BASINS FB-5, FB-6 & FB-7**  
SCALE: 1"=30'



**TYPICAL POND ACCESS ROAD 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**

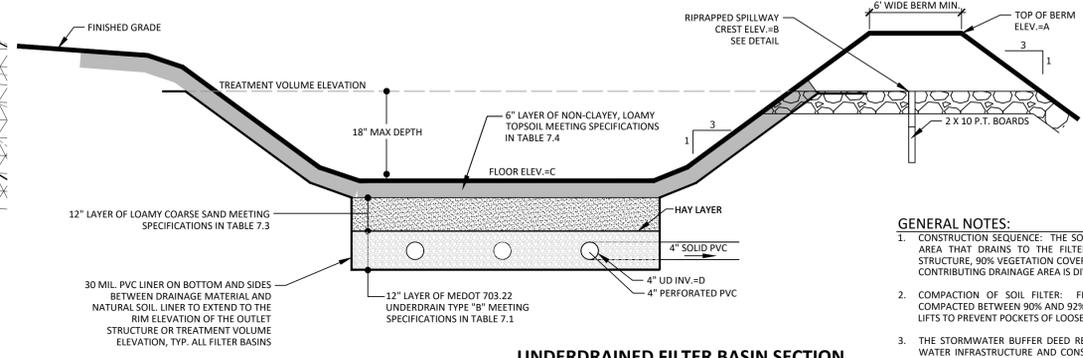
SIEVE SIZE	% PASSING BY WEIGHT
#10	85-100
#20	70-100
#60	15-40
#200	8-15
200 CLAY	<2.0

**TABLE 7.4 SANDY LOAM**

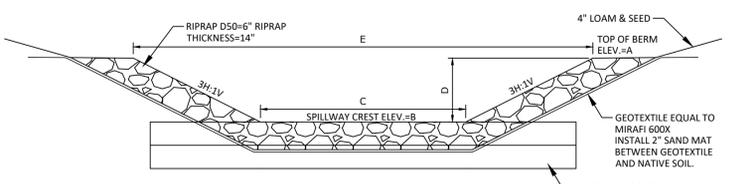
SIEVE SIZE	% PASSING BY WEIGHT
#4	75-95
#10	60-90
#40	35-85
#200	20-70
200 CLAY	<2.0

**FILTER BASIN DATA**

POND ID	A	B	C	D
FB-5	310.00	309.00	307.50	305.33
FB-6	305.50	304.50	303	300.83
FB-7	293.50	292.50	291.00	288.83
FB-8	324.00	323.00	321.50	319.33



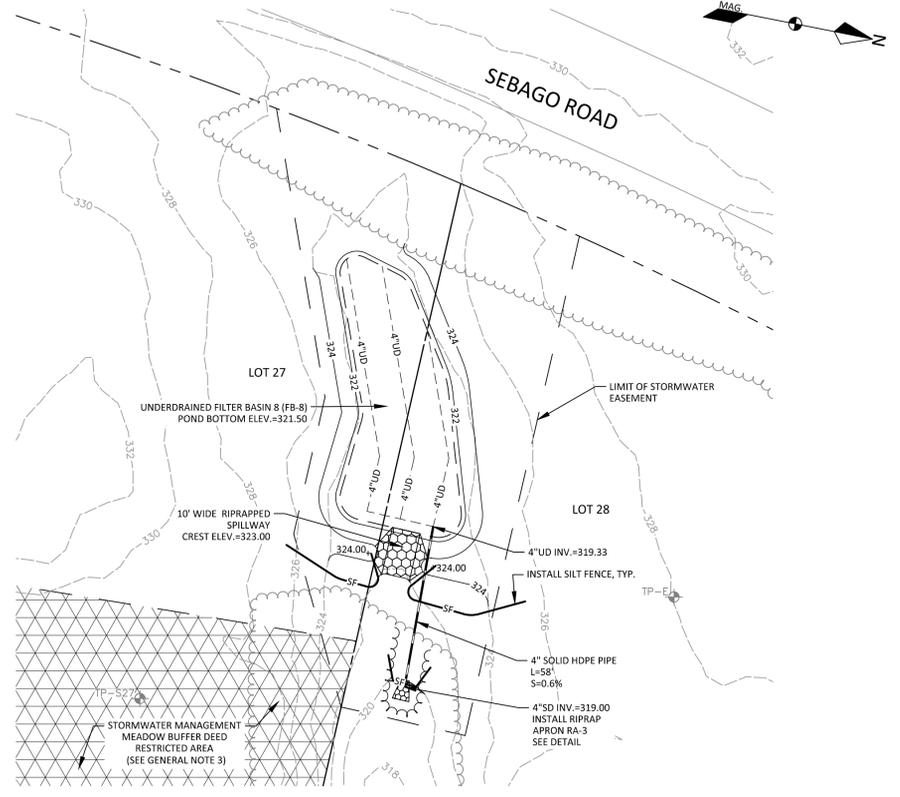
**UNDERDRAINED FILTER BASIN SECTION**  
NOT TO SCALE



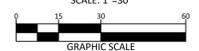
**SPILLWAY DATA**

POND ID	A	B	C	D	E
FB-5	310.00	309.00	10'	1.00'	16.0'
FB-6	305.50	304.50	10'	1.00'	16.0'
FB-7	293.50	292.50	10'	1.00'	16.0'
FB-8	324.00	323.00	10'	1.00'	16.0'

**RIPRAINED SPILLWAY CROSS-SECTION**  
NOT TO SCALE

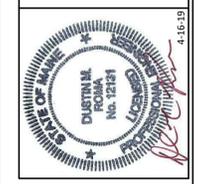


**UNDERDRAINED FILTER BASIN FB-8**  
SCALE: 1"=30'



- 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.
  - THE STORMWATER BUFFER DEED RESTRICTED AREAS SHOWN HEREON ARE PART OF THE PROJECT'S STORM WATER INFRASTRUCTURE AND CONSIDERED A REQUIREMENT OF THIS PERMIT. STORMWATER BUFFER DEED RESTRICTED AREAS THAT ARE REQUIRED TO REMAIN IN PERPETUITY AS DESCRIBED IN THE HOMEOWNER'S ASSOCIATIONS DECLARATIONS OF RIGHTS, RESTRICTIONS, COVENANTS & EASEMENTS, AND/OR THE DEED FOR THE PROPERTY THAT THE EASEMENT IS LOCATED UPON. STORMWATER BUFFER DEED RESTRICTED AREAS SHALL REMAIN OR REVERT TO A MEADOW AREA (WITH A MAXIMUM OF TWO MOWINGS PER YEAR TO A MINIMUM HEIGHT OF 6 INCHES, IF ANY), OR IF CURRENTLY FORESTED, SHALL REMAIN AS A FOREST IN A NATURAL STATE. THE DEED RESTRICTIONS FOR THESE AREAS CAN BE FOUND EITHER AS PART OF THE DEEDS FOR THESE LOTS, OR THE DECLARATION OF RESTRICTIONS, RIGHTS, COVENANTS & EASEMENTS, AND HAVE BEEN INCLUDED AS APPENDIX A OF THE PROJECT'S INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN STORMWATER. THE LIMITED DISTURBANCE EASEMENT AREA SHOWN HEREON TOTALS 7.342 ACRES, WITH A TOTAL MAINTAINED MEADOW AREA OF 7.415 ACRES AND TOTAL FORESTED AREA OF 0.532 ACRES.

- FILTRATION BMPs CONSTRUCTION OVERSIGHT NOTES:**
- INSPECTION BY THE DESIGN ENGINEER OR SUITABLE THIRD PARTY WILL OCCUR AT A MINIMUM:
    - AFTER THE PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED.
    - AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA.
    - AFTER THE FILTER MEDIA HAS BEEN INSTALLED AND SEEDS.
    - AFTER ONE YEAR TO INSPECT HEALTH OF THE VEGETATION AND MAKE CORRECTIONS.
  - 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:
    - 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.
    - 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.
    - 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



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REV.	DATE	BY	DESCRIPTION
A	7-31-18	DMR	ISSUED TO TOWN FOR PRELIMINARY REVIEW
B	10-12-18	DMR	ISSUED FOR MDEP SLODA REVIEW
C	12-10-18	DMR	ISSUED FOR PERMIT REVIEW
D	2-2-19	DMR	REVISED PER MDEP REVIEW
E	3-19-19	DMR	REVISED PER MDEP REVIEW
F	4-9-19	DMR	REVISED PER MDEP REVIEW
G	4-16-19	DMR	ISSUED FOR TOWN APPROVAL

**STORMWATER POND PLAN**  
BRANDY CROSSING SUBDIVISION  
NAPLES, MAINE  
FOR: FRONT NINE HOMES, LLC  
28 WEBER ROAD  
BRANDY CROSSING, ME 05201

18001  
JOB NUMBER:  
AS NOTED  
SCALE:  
4-16-2019  
DATE:  
SHEET 10 OF 13  
SP-2



## 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 DRAINAGE CHANNELS, SWALES, STREAM CHANNELS OR STREAM BANKS, UPLAND, OR COASTAL OR FRESHWATER WETLANDS OFF THE PROJECT SITE.

WHENEVER PRACTICABLE, NO DISTURBANCE ACTIVITIES SHOULD TAKE PLACE WITHIN 50 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. ALL 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 LUTE, 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 CONSTRUCTION DEBRIS OR REPROCESSED 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 AT LEAST 75% BY WEIGHT BASIS  
 -PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 6 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 EROSION 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.

EROSION CONTROL BLANKETS AND MATS SHALL BE USED ON SLOPES STEEPER THAN 3:1 AND IN THE BOTTOM OF GRASSED WATERWAYS, OR AS OTHERWISE DIRECTED BY THE ENGINEER. THEY SHALL BE INSTALLED WITH FIRM CONTINUOUS CONTACT WITH THE SOIL AND STAPLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

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. EROSION 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 SEEDBED, 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 - 10/2
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. SEDIMENT BARRIERS ARE TO BE INSTALLED ALONG THE ENTIRE LENGTH OF THE CONTOUR AND THE ENDS OF THE SEDIMENT BARRIER MUST BE TURNED UP TO CONTAIN RUNOFF TO BE TREATED. SEDIMENT BARRIERS ARE LIMITED TO 1/4 -ACRE OF DRAINAGE AREA PER 100 FEET OF BARRIER, AND SHALL NOT BE PLACED OR LOCATED IN AREAS OF CONCENTRATED RUNOFF, SUCH AS DRAINAGE CHANNELS OR CULVERT OUTLETS. 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 BARRIER SHALL BE A PEROUS SHEET OF PROPLENE, NYLON, POLYESTER OR ETHYLENE YARN AND SHALL BE AT LEAST 6 MONTHS USABLE CONSTRUCTION LIFE INCLUDING PROTECTION AGAINST ULTRA-VIOLET LIGHT. THE HEIGHT OF THE FENCE SHALL NOT 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 SPLICED TOGETHER AT A SUPPORT POST WITH A MINIMUM 6 INCH OVERLAP. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES WIDE AND 4 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 BURIAL.

STRAW/HAY BALES SHALL BE INSTALLED WHERE SPECIFIED ON THE PLANS IN A SINGLE ROW WITH THE ENDS OF ADJACENT BALES TIGHTLY BUTTING ONE ANOTHER. ALL BALES SHALL BE EITHER WIRE-BOUND OR STRAP-TIED. THE BARRIERS SHALL BE INSTALLED ALONG THE ENTIRE LENGTH TO A DEPTH OF AT LEAST 4 INCHES, AND THE BALES SHALL BE SECURED WITH AT LEAST TWO WOODEN STAKES OR STEEL REBAR PER BALE. STAKES SHALL BE DRIVEN IN A DIRECTION TO PUSH THE BALES TOGETHER. GAPS BETWEEN BALES SHALL BE CHINKED WITH HAY.

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 WITH BERM. EROSION CONTROL MIX BERMS AT THE BASE OF A LONG OR STEEP SLOPE MAY ALSO REQUIRE A FILTER FENCE OR EROSION CONTROL MIX TO BE INSTALLED ON THE DOWNSTREAM SIDE. ADDITIONAL STABILIZATION AGAINST HIGH RUNOFF FLOWS. EROSION CONTROL MIX BERM IS NOT REFERRED TO AS A FILTER SOCK. THE BOTTOM OF SLOPES 8% OR STEEPER OR WITH FLOWING WATER.

CONTINUOUS CONTAINED BERMS, WHICH ARE NOT REFERRED TO AS THE FILTER SOCK, PROVIDES ADDITIONAL STABILITY TO AN EROSION CONTROL MIX BERM AND SHOULD BE USED IN FROZEN GROUND CONDITIONS OR IN AREAS THAT RECEIVE CONCENTRATED FLOW.

SEDIMENT BARRIERS SHOULD BE INSTALLED DOWNGRADE OF SOIL OR SEDIMENT STOCKPILES AND STORMWATER PREVENTED RUNNING ONTO THE STOCKPILE. SEDIMENT BARRIERS SHALL BE INSPECTED AT LEAST ONCE PER WEEK, AS WELL AS 24 HOURS BEFORE AND AFTER A STORM EVENT, AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES, 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, IT MAY BE NECESSARY TO REPLACE THE BARRIER WITH A CHECK DAM. SEDIMENT BARRIERS 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.

### 4. TEMPORARY CHECK DAMS

STONE CHECK DAMS SHALL BE INSTALLED IN SWALES OR DRAINAGE DITCHES TO REDUCE STORMWATER VELOCITIES AS SHOWN ON THE PLANS. STONE CHECK DAMS ARE NOT EFFECTIVE IN REMOVING SEDIMENT AND SHOULD BE USED IN CONJUNCTION WITH SEDIMENT BARRIERS IDENTIFIED ABOVE. TEMPORARY CHECK DAMS MAY BE LEFT IN PLACE PERMANENTLY IN MOST CASES. CHECK DAMS SHOULD BE NO HIGHER THAN 24 INCHES, AND THE CENTER OF THE CHECK DAM MUST BE AT LEAST 6 INCHES LOWER THAN THE OUTSIDE EDGES. CHECK DAMS SHOULD BE SPACED SUCH THAT THE CREST OF THE DOWNGRADE CHECK DAM IS AT THE SAME ELEVATION AS THE TOE OF THE UPSTREAM CHECK DAM. CHECK DAMS IN DRAINAGE CHANNELS SHOULD BE INSTALLED PRIOR TO DIRECTING RUNOFF TO THEM.

### 5. 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:

HAY BALE OR SILT FENCE INLET STRUCTURE CONSISTS OF HAY BALES OR SILT FENCE CONFIGURED AROUND A CATCH BASIN INLET FRAME AND INSTALLED ACCORDING TO THE METHODS OUTLINED ABOVE. THIS METHOD IS SUITABLE FOR OPEN PIPE (CULVERT) INLETS, FIELD INLETS OR ROAD INLETS THAT HAVE NOT YET BEEN PAVED.

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 THAT IS 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.

### 6. 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 AND BE A MINIMUM OF 10 FEET WIDE. THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT PREVENTS TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, AND THE CONTRACTOR SHALL SWEEP PAVEMENT AT EXITS THAT HAVE EXPERIENCED ANY MUD-TRACKING. MAINTAIN THE PAD UNTIL ALL DISTURBED AREAS ARE STABILIZED, AND IN THE EVENT THE PAD BECOMES FILLED WITH SEDIMENT OR BECOMES INEFFECTIVE AT PREVENTING TRACKING, THE PAD SHALL BE REMOVED AND REPLACED. IF TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY OCCURS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR SWEEPING THE AFFECTED AREAS IMMEDIATELY, AND THEREAFTER WEEKLY AT A MINIMUM AND PRIOR TO ANY SIGNIFICANT RAINFALL EVENT.

### 7. 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.

### 8. 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 FINAL PHASE UP TO FINAL GRADING AND SEEDING BEFORE STARTING THE NEXT PHASE. ANY EXPOSED AREA THAT WILL NOT BE FINISH GRADED WITHIN 14 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 SHALL NOT EXCEED 1.5:1. CUT AND FILL SLOPES THAT ARE TO BE STABILIZED WITH GRASS SHALL NOT BE STEEPER THAN 3:1; CUT AND FILL SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED WITH EROSION CONTROL BLANKETS OR MATS; CUT AND FILL SLOPES STEEPER THAN 2:1 SHALL BE STABILIZED WITH RIP RAP OR APPROVED EQUIVALENT. 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, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDOLITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES. ALL PLACES TO BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 8 INCHES IN THICKNESS. FILL MATERIALS SHALL BE FREE OF STUMPS, BUILDING DEBRIS AND OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS. FROZEN MATERIALS, FILL, MUCKY 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.

### 9. 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 TREATED HAVE BEEN BROUGHT TO GRADE, AND IMMEDIATELY PRIOR TO SPREADING THE TOPSOIL, THE SUBGRADE SHALL BE LOOSENED 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 UNDUE COMPACTION IS TO BE AVOIDED.

### 10. 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 SOILING, PLANTING AND SEEDING TO AVOID DROUGHT AND FALL FROSTS. NEWLY SEED OR SODDED AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC OR EXCESSIVE PEDESTRIAN TRAFFIC, AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL-ESTABLISHED WITH 90% COVER WITH HEALTHY VEGETATION. IF NECESSARY, AREAS MUST BE REWORKED AND REESTABLISHED IF GERMINATION IS SPOPPY, OR TOPSOIL EROSION IS EVIDENT. ONE OR MORE OF THE FOLLOWING MAY APPLY TO A PARTICULAR SITE.

SEEDED AREAS: TO PREPARE THE SEEDBED, 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 SUPPLIERS RECOMMENDATIONS. FOR SEEDED AREAS TO BE PERMANENTLY STABILIZED, 90% OF THE DISTURBED SOIL SHALL BE COVERED WITH MATURE HEALTHY PLANTS WITH NO EVIDENCE OF WASHING 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. ANCHORS, SODS 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 OR BARK CHIPS 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.

RIPRAP 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 MDOT TYPE C UNDERDRAIN MATERIAL SPECIFICATIONS AND BE AT LEAST 6 INCHES THICK. 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 OTHER APPROVED PERVIOUS 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.

### 11. 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.

### 12. INSPECTION & MAINTENANCE

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, AND CONSTRUCTION VEHICLE ENTRANCE(S) AND/OR EXITS). THESE AREAS SHALL BE INSPECTED AT LEAST ONCE PER WEEK, AS WELL AS 24 HOURS BEFORE AND AFTER A STORM EVENT, AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES. INSPECTIONS ARE TO BE CONDUCTED BY A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING STANDARDS AND CONDITIONS IN THE PERMIT.

MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, 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 85% OF AREAS VEGETATED WITH VIGOROUS GROWTH.

## 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, 75% MATURE VEGETATION COVER 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 EXPOSED 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, IF NOT STABILIZED WITH A MINIMUM OF 75% MATURE VEGETATION CATCH, 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 AT THE END OF ANY AREAS CROSSING THE 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 PROPERTLY 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, ASPHALT EMULSION CHALKING, 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 FINE GRADED AND EITHER PROTECTED 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 WILL BE DORMANT SEED 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 SOIL 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.

## INSPECTION & MAINTENANCE NOTES:

1. 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".

2. INSPECTION SHALL OCCUR ON ALL DISTURBED AND IMPERVIOUS AREAS, EROSION CONTROL MEASURES, MATERIAL STORAGE AREAS, AND CONSTRUCTION VEHICLE ENTRANCE(S) AND/OR EXITS). THESE AREAS SHALL BE INSPECTED AT LEAST ONCE PER WEEK, AS WELL AS 24 HOURS BEFORE AND AFTER A STORM EVENT, AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES. INSPECTIONS ARE TO BE CONDUCTED BY A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING STANDARDS AND CONDITIONS IN THE PERMIT.

3. MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, 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 85% OF AREAS VEGETATED WITH VIGOROUS GROWTH.

## HOUSEKEEPING NOTES

- SPILL PREVENTION: CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS ON SITE TO ENTER STORMWATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER. THE SITE CONTRACTOR OR OPERATOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES.
- GROUNDWATER PROTECTION: DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAMINANT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS. ANY PROJECT PROPOSING INFILTRATION OF STORMWATER MUST PROVIDE ADEQUATE PRE-TREATMENT OF STORMWATER PRIOR TO DISCHARGE OF STORMWATER TO THE INFILTRATION AREA, OR PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN ORDER TO PREVENT THE ACCUMULATION OF FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND DESTABILIZATION.
- FUGITIVE DUST AND DUST: ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL, BUT OTHER WATER ADDITIVES MAY BE CONSIDERED AS NECESSARY. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHOULD BE INCLUDED TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEEP IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. OPERATIONS DURING DUST PROBLEMS, THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD BE TOWN DOWN UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT AND DUST.
- DEBRIS AND OTHER MATERIALS: MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

