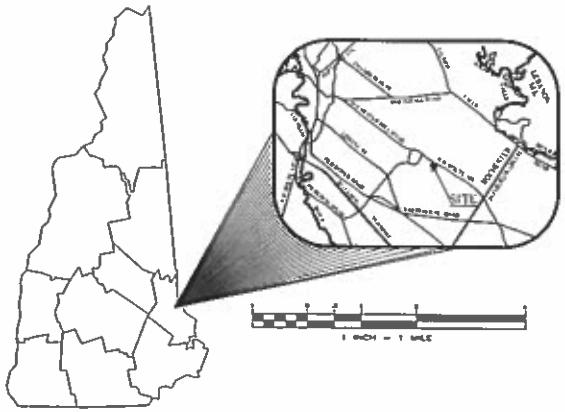
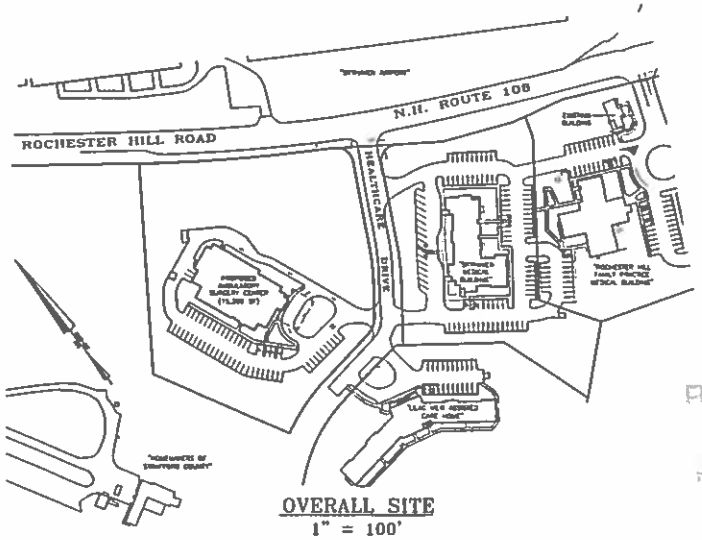
LAND SURVEYORS - SEPTIC SYSTEM DESIGNERS — CIVIL ENGINEERS - TRANSPORTATION PLANNERS

PROPOSED SKYHAVEN SURGERY CENTER
FOR
DEW PROPERTIES, LLC
13 HEALTHCARE DRIVE
ROCHESTER, N.H. 03867





OVERALL SITE
1" = 100'

RECEIVED
MAR 25 2014
Planning Dept

CIVIL ENGINEERS
NORWAY PLAINS ASSOCIATES, INC.
2 CONTINENTAL BOULEVARD
ROCHESTER, NEW HAMPSHIRE 03867
(603) 335-3948

ARCHITECTS
LAVALLEE | BRENSINGER ARCHITECTS
155 DOW STREET, SUITE 400
MANCHESTER, NEW HAMPSHIRE 03101
(603) 622-5450

LANDSCAPING ARCHITECTS
WOODBURN & COMPANY LANDSCAPE ARCHITECTURE, LLC
103 KENT PLACE
NEWMARKET, NEW HAMPSHIRE 03857
(603) 659-5949

OWNER OF RECORD
FRISBIE FOUNDATION
11 WHITEHALL ROAD
ROCHESTER, NEW HAMPSHIRE 03867
(802) 335-6151

APPLICANT
DEW PROPERTIES, LLC
277 BLAIR PARK ROAD, SUITE 130
WILLISTON, VERMONT 05494
(802) 872-0505

STATE AND FEDERAL PERMITS:
STATE OF NEW HAMPSHIRE PERMIT NUMBERS

NHDES ALTERATION OF TERRAIN	PENDING
NHDES WETLANDS PERMIT	NOT REQUIRED
NHDES 401 PERMIT	NOT REQUIRED
NHDES SUBDIVISION PERMIT	NOT REQUIRED
NHDES SUBSURFACE SYSTEMS PERMIT	NOT REQUIRED
NHDES WATER PERMIT	PENDING
NHDOT DRIVEWAY/ENTRANCE PERMIT	PENDING

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES):
NPDES PERMITS ARE ONLY REQUIRED FOR PROJECTS NOT ONLY THE DISTURBED AREA DIRECTLY BELOW AND HAVING A POINT SOURCE STORMWATER DISCHARGE FROM THE SITE TO AN ADJACENT WETLAND OR WATER BODY (I.E. CULVERT, SWALE, ETC. DIRECTLY TO A WETLAND, CREEK, STREAM OR RIVER)

NPDES PERMIT: REQUIRED

NPDES PERMITS CONSIST OF A NOTICE OF INTENT (NOI) FILED WITH THE ENVIRONMENTAL PROTECTION AGENCY AT LEAST 14 DAYS PRIOR TO CONSTRUCTION COMMENCING AND A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) BEING PREPARED, KEPT ON SITE AND FOLLOWED BY THE CONTRACTOR.

FOR STATUS OF THIS PERMIT, CONTACT THE PROJECT GENERAL CONTRACTOR.

FINAL APPROVAL BY
ROCHESTER PLANNING BOARD

CERTIFIED BY: _____ DATE: _____

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO ENSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITH IN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948.

SHEET INDEX

		COVER	
SHEET	C-1	OVERALL SITE PLAN	1" = 40'
SHEET	C-1	EXISTING FEATURES PLAN	1" = 40'
SHEET	C-2	SITE LAYOUT PLAN	1" = 40'
SHEET	C-3	GRADING AND DRAINAGE PLAN	1" = 40'
SHEET	C-4	UTILITY PLAN	1" = 40'
SHEET	C-5	EROSION AND SEDIMENTATION CONTROL PLAN	1" = 40'
SHEET	C-6	CONSTRUCTION DETAILS	AS SHOWN
SHEET	C-7	DRAINAGE DETAILS	AS SHOWN
SHEET	C-8	GRAVEL WETLANDS BASIN DETAILS	AS SHOWN
SHEET	C-9	INFILTRATION BASINS DETAILS	AS SHOWN
SHEET	C-10	TEMPORARY EROSION AND SEDIMENTATION CONTROL DETAILS	AS SHOWN
SHEET	C-11	PERMANENT EROSION AND SEDIMENTATION CONTROL DETAILS	AS SHOWN
SHEET	C-12	UTILITY DETAILS	AS SHOWN
SHEET	C-13	SEWER DETAILS	AS SHOWN
SHEET	L-1	LANDSCAPING PLAN AND DETAILS	1" = 40'

FILE NO. 102
PLAN NO. C-2695
DWG. NO. 13124/SP-1
F.B. NO. "33" "CAR"

31 Mooney Street, Alton, N.H. 603-875-3948
NORWAY PLAINS ASSOCIATES, INC.
2 Continental Blvd., Rochester, N.H. 603-335-3948

LAND SURVEYORS – SEPTIC SYSTEM DESIGNERS

CIVIL ENGINEERS – TRANSPORTATION PLANNERS

LEGEND

- PROPERTY LINE
- APPROXIMATE WETLANDS
- 25 FEET WETLANDS BUFFER SETBACK
- EXISTING TREE LINE

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO ENSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITH ON THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED ON THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948

CURVE TABLE

C1	R=30.00'	L=43.44'	=82°57'46"
C2	R=375.00'	L=60.03'	=9°10'16"
C3	R=50.00'	L=38.24'	=44°38'11"

LINE TABLE

L1	S 59°40'17" E	L=16.39'
L2	N 34°27'45" E	L=60.25'

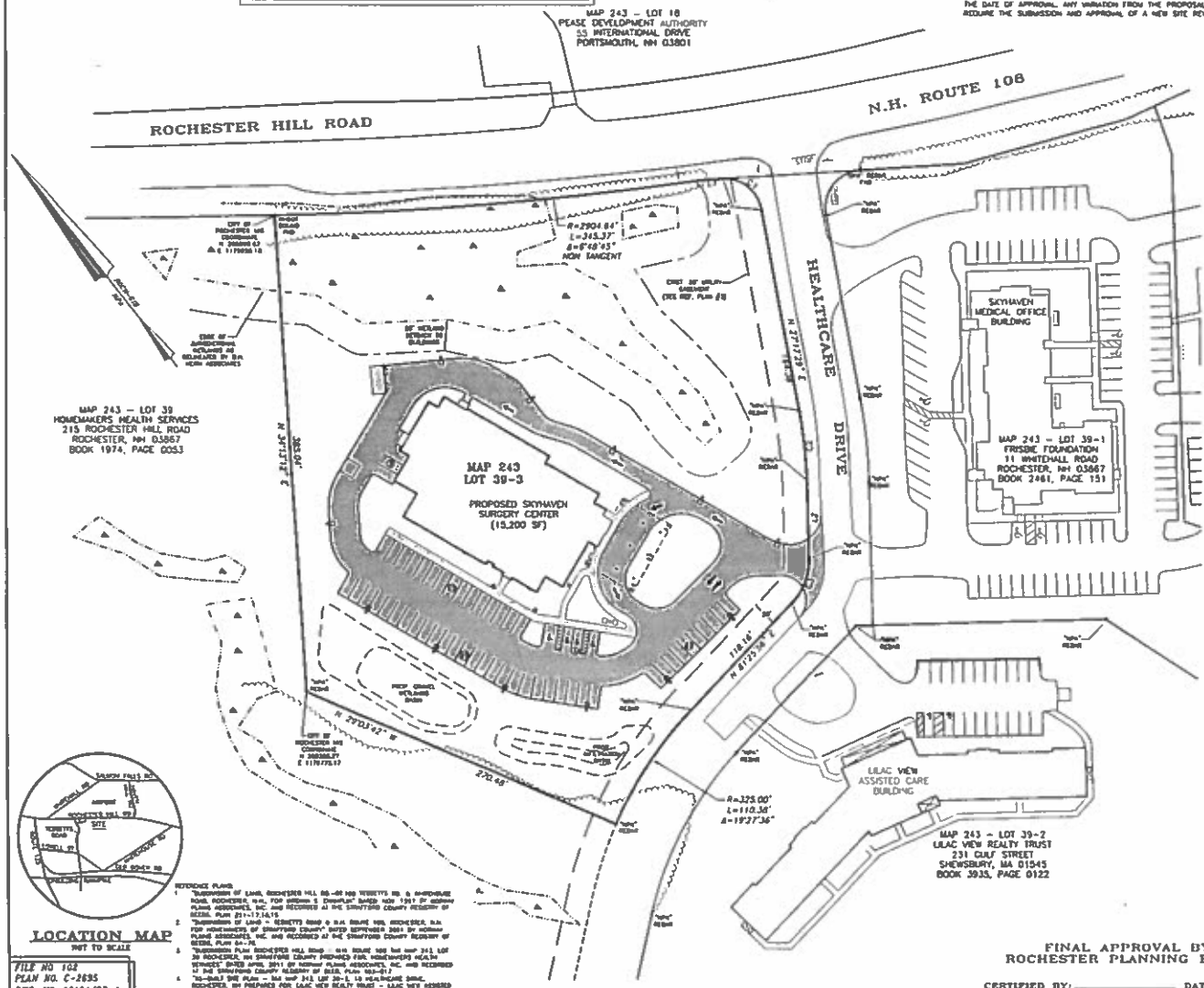
SITE REVIEW APPROVAL

WHETHER OR NOT OTHERWISE EXPRESSLY RECITED ON THIS SITE REVIEW PLAN, THE SITE REVIEW APPROVAL GRANTED IS CONDITIONED ON FAITHFUL AND DILIGENT ADHERENCE BY THE OWNER/DEVELOPER TO ALL WRITTEN AND VERBAL REPRESENTATIONS MADE REGARDING SUCH MATTERS AS USE, NUMBER OF EMPLOYEES, DRAINAGE, CONSTRUCTION, ETC. AS WELL AS ALL OTHER TERMS, CONDITIONS, PROVISIONS, REQUIREMENTS AND SPECIFICATIONS OF THE SITE PLAN REVIEW REGULATIONS OF THE CITY OF ROCHESTER, N.H., AS AMENDED, IN EFFECT ON THE DATE OF APPROVAL. ANY VARIATION FROM THE PROPOSAL AS APPROVED MAY ALSO REQUIRE THE SUBMISSION AND APPROVAL OF A NEW SITE REVIEW APPLICATION

DIG SAFE

1-888-344-7233

3/24/14 – REVISE PARKING CALCULATIONS AND PARKING LAYOUT



GENERAL NOTES

1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE CONSTRUCTION OF A 15,200 SQUARE FOOT AMBULATORY SURGERY CENTER (ASC) FACILITY ON MAP 243, LOT 39-3
2. THIS PARCEL IS LOCATED IN AGRICULTURAL (A) ZONE AND PLANNED UNIT DEVELOPMENT (PUD-3).
3. PER THE PUD, SETBACKS SHALL BE ESTABLISHED WHEN THE LOT IS DEVELOPED.
4. PARCEL IS NOT LOCATED WITHIN ZONE A (100 YR FLOOD) AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY MAP, COMMUNITY #330179G0100
5. DIMENSIONS HORIZONTAL AND VERTICAL DATUMS – CITY OF ROCHESTER GIS.
6. SOIL TYPES ARE PER NATURAL RESOURCES CONSERVATION SERVICES SOILS SURVEY
   CHD – CHARLTON FINE SANDY LOAM, 3 TO 8% SLOPES
   PWC – PAXTON VERY STONEY FINE SANDY LOAM, 8 TO 15% SLOPES
7. FOR MORE INFORMATION ABOUT THIS SUBDIVISION PLAN, CONTACT THE CITY OF ROCHESTER PLANNING DEPARTMENT, 31 WAKEFIELD ST., ROCHESTER, NH 03867 (603) 330-1338
8. THE PARCEL IS SUBJECT TO A UTILITY EASEMENT AS SHOWN ON REFERENCE PLAN #3
9. SEE THE HOMEMAKERS PLANNED UNIT DEVELOPMENT, JUNE 2, 2003, ON FILE IN THE PLANNING DEPARTMENT FOR MORE INFORMATION. THE PUD STATES THE COMMERCIAL BUILDING (FOR THIS LOT) IS DESIGNATED FOR USES THAT WOULD SERVE AND BE COMPLEMENTARY TO THE PUD. THE PREFERRED USE (BUT NOT REQUIRED) IS FOR A RESTAURANT, CAFE, COMMUNITY CENTER, POSSIBLY A PUB/TAVERN, OR CHURCH. OFFICE USE WOULD ALSO LIKELY BE APPROPRIATE BUT IS A SECONDARY CHOICE. DEVELOPMENT OF THIS PARTICULAR SITE SHALL BE SUBJECT TO STRICT REVIEW AND REASONABLE DISCRETION BY THE PLANNING BOARD TO ENSURE THAT THE USE, DESIGN, AND TREATMENT OF PARKING IS HARMONIOUS WITH THE INTENT OF THIS PROVISION AND THE PUD.
10. THIS PUD IS EXEMPT FROM SECTION 42.16 CONSERVATION OVERLAY DISTRICT, BUT THE APPLICANT IS ENCOURAGED TO COMPLY WITH THE BUFFER AND OTHER PROVISIONS OF THIS SECTION. THE PUD REQUIRES ALL STRUCTURES TO BE SET BACK AT LEAST 25 FEET FROM WETLANDS.
11. THIS LOT MUST BE SERVED BY CITY WATER AND SEWER.
12. THE MASTER PLAN CALLS FOR THE ROAD FRONTING THIS LOT TO BECOME A CITY STREET AT SOME TIME IN THE FUTURE WHEN THE PUD IS SIGNIFICANTLY DEVELOPED. IT IS UNCERTAIN AT THIS TIME, WHEN AND IF THE ROAD WILL BE CONVEYED TO THE CITY.
13. PARKING REQUIREMENTS (ZONING REGS. SECTION 42.50(3))
    OFFICE (MEDICAL – DOCTOR, DENTIST, CHIROPRACTOR, ETC)
    1 SPACE PER 100 SQUARE FEET OF GROSS FLOOR AREA (GFA); OR, 5 SPACES PER PROFESSIONAL PERSON KEEPING OFFICE AND 1 SPACE PER STAFF MEMBER, WHICHEVER IS GREATER
    15,200 SF GFA ÷ 1 SPACE / 100 SF GFA = 152 SPACES
    OR
    6 PROFESSIONALS X 5 SPACES / PROFESSIONAL = 30 SPACES
    AND
    30 STAFF MEMBERS x 1 SPACE / STAFF MEMBER = 30 SPACES
    TOTAL = 60 SPACES
    TOTAL REQUIRED SPACES = 152 SPACES OR 60 SPACES
    TOTAL PROVIDED SPACES = 57 SPACES (SEE NOTE #16)
    ACCESSIBLE PARKING (SITE PLAN REGULATIONS SECTION 10.9(1))
    THE SPACES ARE PART OF THE TOTAL ABOVE.
    ACCESSIBLE PARKING SPACES = 51 TO 75 = 3 SPACES
    TOTAL PROVIDED SPACES = 4 SPACES
14. A WAIVER TO ALLOW FOR PARKING LESS THAN THE REQUIRED PURSUANT TO SECTION 42.50(3)(3) IS REQUESTED.
15. THIS DEVELOPMENT MUST BE IN COMPLIANCE WITH ALL APPLICABLE LAW – INCLUDING ALL PERTINENT PROVISIONS OF THE CITY OF ROCHESTER SITE PLAN REGULATIONS – UNLESS OTHERWISE WAIVED.
16. THE APPLICANT SHALL OBTAIN A STORMWATER MANAGEMENT PERMIT FROM THE PUBLIC WORKS DEPARTMENT (UNLESS DETERMINED TO BE UNNECESSARY BY THE CITY ENGINEER) AND FOLLOW THE REQUIREMENTS OF THE CITY ORDINANCE CHAPTER 38. THE PERMITTEE SHALL PREPARE A WRITTEN PLAN FOR MANAGING STORMWATER THAT ENTERS THE CONSTRUCTION SITE AND SHALL PRESENT IT TO THE INSPECTION ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE PERMITTEE SHALL FOLLOW BEST MANAGEMENT PRACTICES TO PREVENT EROSION IN AREAS WHERE SOIL HAS BEEN DISTURBED.
17. ACCESS INTO THE SITE FOR FIRE APPARATUS MUST BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION PROCESS. THIS IS THE SOLE RESPONSIBILITY OF THE APPLICANT/DEVELOPER TO MAINTAIN THIS ACCESS. PLEASE CONTACT THE FIRE DEPARTMENT AT 330-7152 WITH ANY QUESTIONS REGAR ACCESS REQUIREMENTS.
18. SNOW SHALL NOT BE PILED IN SUCH A MANNER AS TO BLOCK THE VISIBILITY OF THE VEHICLES ON HEALTHCARE DRIVE AND ALL EXCESS SNOW SHALL BE REMOVED FROM THE SITE.
19. ALL OUTSIDE CONSTRUCTION ACTIVITY RELATED TO THE DEVELOPMENT OF THIS SITE IS RESTRICTED TO THE HOURS OF 7:00 A.M. TO 6:00 P.M. MONDAY THROUGH FRIDAY AND 8:00 A.M. TO 6:00 P.M. SATURDAY.
20. ALL UTILITIES MUST BE UNDERGROUND, INCLUDING UTILITIES EXTENDED OVER THE SITE FROM EXISTING POLES NEAR THE SITE. HOWEVER, IF THE ONLY POLE NEARBY IS ACROSS THE STREET, ONE ADDITIONAL POLE MAY BE PLACED ON/NEAR THE PROPERTY TO ALLOW FOR OVERHEAD EXTENSION OF WIRES ACROSS THE STREET. UTILITIES EXTENDING FROM ANY SUCH NEW POLE MUST BE UNDERGROUND. THE APPLICANT MAY WORK WITH THE CITY STAFF AS APPROPRIATE TO ADDRESS THIS REQUIREMENT.
21. THE CODE ENFORCEMENT OFFICER HOWEVER'S THE CITY OF ROCHESTER SIGN ORDINANCE. SIGNAGE SUBMITTED AS PART OF THIS SITE PLAN PACKAGE IS STILL SUBJECT TO THE REVIEW TO ENSURE COMPLIANCE WITH THAT ORDINANCE AND OTHER APPLICABLE CODES, INDEPENDENT FROM THIS SITE PLAN REVIEW. IN ADDITION, IF ANY SIGNIFICANT CHANGE OR EXPANSION IS PROPOSED TO THE DESIGN OF THE APPROVED FREESTANDING SIGN OR TO THE OVERALL ADVERTISING SIGNAGE FOR THE SITE (NOT INCLUDING ACCESSORY SIGNAGE, SUCH AS HANDICAP PARKING SIGNS), THE PROPOSED SIGN DESIGNS MUST BE PRESENTED TO THE PLANNING BOARD FOR REVIEW PRIOR TO ISSUANCE OF THOSE SIGN PERMITS. A SIGN PERMIT MUST BE OBTAINED PRIOR TO INSTALLATION OF ANY SIGNS ON SITE.
22. ALL ELEMENTS SHOWN ON THE APPROVED SITE PLAN MUST BE PROPERLY COMPLETED PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY UNLESS APPROPRIATE SURETY IS PLACED WITH THE PLANNING DEPARTMENT.
23. NOTE THAT THIS APPROVAL IS FOR THE SITE PLAN ONLY. LIFE SAFETY CODE AND BUILDING CODE REVIEW WILL BE REQUIRED AS PART OF THE BUILDING PERMIT PROCESS WHEN THE CONSTRUCTION PLANS ARE SUBMITTED. VARIOUS REQUIREMENTS REGARDING THE BUILDING DESIGN POSSIBLY INCLUDING A SPRINKLER SYSTEM – MAY BE SPECIFIED AT THAT TIME.
24. THE SEWER IMPACT CONTRIBUTION MUST BE PAID IN FULL, TO THE CODE ENFORCEMENT DEPARTMENT, PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY. THE SEWER IMPACT IS A ONE TIME PAYMENT OF $1,000 PER GALLON FOR AVERAGE DAILY FLOW.
25. THIS PROJECT PROPOSED TO DISTURB OVER ONE ACRE OF EXISTING GROUND COVER AND MEETS OTHER SPECIFIC REQUIREMENTS RELATED TO PERMIT CRITERIA FOR EPA NPDES COMPLIANCE. THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPMENT AND IMPLEMENTATION OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP), SUBMISSION OF A NOTICE OF INTENT (NOI) TO EPA, INSPECTIONS AND MAINTENANCE OF SEDIMENT CONTROL MEASURES, DOCUMENTATION OF MAINTENANCE ACTIVITIES, AND SUBMISSION OF A NOTICE OF TERMINATION (NOT) TO EPA. THE CONTRACTOR IS ALSO RESPONSIBLE TO COMPLY WITH ANY OR ALL OTHER ASPECTS OF THE CURRENT FEDERAL, STATE AND LOCAL STORM WATER ON NPDES REGULATIONS OR REQUIREMENTS.
26. THE CONTRACTOR MUST SUBMIT A TAX FORM 7480-1 A MINIMUM OF 60-DAYS PRIOR TO THE START OF CONSTRUCTION TO ENSURE THAT IT WILL NOT MEANINGLY IMPACT FLIGHTS IN AND AROUND SKYHAVEN AIRPORT. THE APPLICATION MUST INCLUDE ANY CRANES THAT MIGHT BE USED. BILL HOPPER AT PEASE DEVELOPMENT MUST BE COPIED ON THE APPLICATION AND NOTIFIED OF THE RESULTS AT B.HOPPER@PEASEDEVELOPMENT.COM

OWNER OF RECORD:
FRISBIE FOUNDATION
11 WHITEHALL ROAD
ROCHESTER, NH 03867
SCRD BK 4030, PG 0386

OVERALL SITE PLAN
TAX MAP 243, LOT 39-3
13 HEALTHCARE DRIVE
ROCHESTER, NH

PREPARED FOR:
DEW PROPERTIES, LLC

SCALE: 1" = 40' MARCH 2014

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 INCH = 40 FEET

LOCATION MAP
NOT TO SCALE

REFERENCE PLANS:
1. "SUBDIVISION OF LAND, ROCHESTER HILL RD.-NH 108 WHITTEN RD. & HAMPSHIRE ROAD, ROCHESTER, N.H., FOR WILLIAM & DONALD" DATED NOV. 1961 BY HORNER PLANS ASSOCIATES, INC. AND RECORDED AT THE STRAFFORD COUNTY REGISTRY OF DEEDS, PLAN #31-117&119
2. "SUBDIVISION OF LAND – WHITTEN ROAD & N.H. ROUTE 108, ROCHESTER, N.H. FOR HOMEMAKERS OF STRAFFORD COUNTY" DATED SEPTEMBER 2001 BY HORNER PLANS ASSOCIATES, INC. AND RECORDED AT THE STRAFFORD COUNTY REGISTRY OF DEEDS, PLAN 64-76
3. "SUBDIVISION PLAN ROCHESTER HILL ROAD – N.H. ROUTE 108 TAX MAP 243 LOT 39 ROCHESTER, NH STRAFFORD COUNTY PREPARED FOR: HOMEMAKERS HEALTH SERVICES" DATED APRIL 2011 BY NORWAY PLAINS ASSOCIATES, INC. AND RECORDED AT THE STRAFFORD COUNTY REGISTRY OF DEEDS, PLAN 103-017
4. "AS-BUILT SITE PLAN – TAX MAP 243 LOT 39-1, 13 HEALTHCARE DRIVE, ROCHESTER, NH PREPARED FOR: LILAC VIEW REALTY TRUST – LILAC VIEW ASSISTED CARE HOME" DATED NOVEMBER 2011 BY NORWAY PLAINS ASSOCIATES, INC. AND ON FILE AT THE CITY OF ROCHESTER PLANNING DEPARTMENT

FILE NO 108
PLAN NO. C-2835
DWG. NO. 13124/SP-1
F.B. NO "33" "CAR"

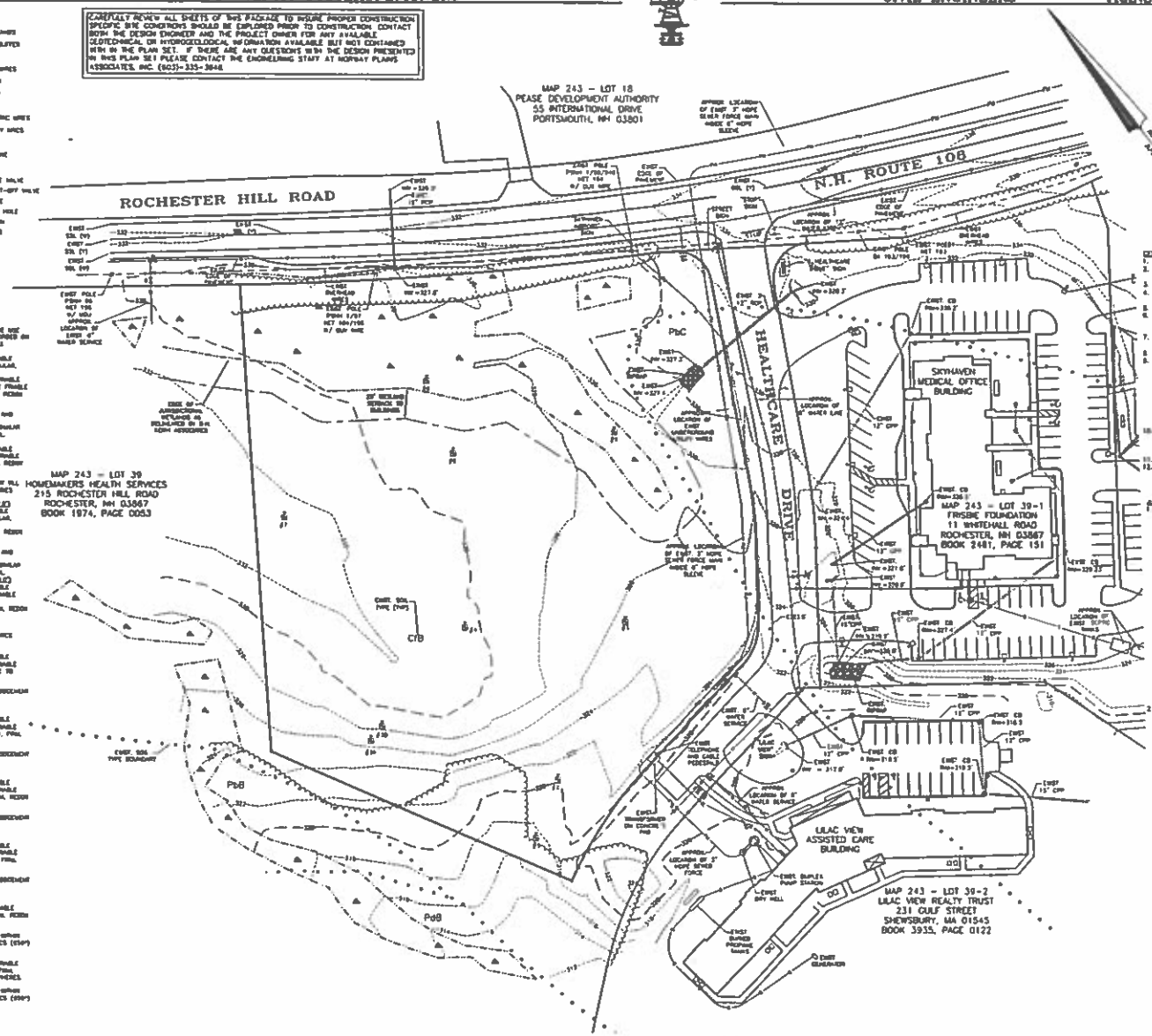
FINAL APPROVAL BY
ROCHESTER PLANNING BOARD

CERTIFIED BY: _____ DATE: _____

LAND SURVEYORS – SEPTIC SYSTEM DESIGNERS

CIVIL ENGINEERS – TRANSPORTATION PLANNERS

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITH IN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948



GENERAL NOTES

1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING FEATURES ON MAP 243, LOT 39-3.
2. THIS PARCEL IS LOCATED IN AGRICULTURAL (A) ZONE AND PLANNED UNIT DEVELOPMENT (PUD).
3. PER THE PUD, SETBACKS SHALL BE ESTABLISHED WHEN THE LOT IS DEVELOPED.
4. PARCEL IS NOT LOCATED WITHIN ZONE A (100 YR FLOOD) AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY MAP, COMMUNITY (33817)0210D.
5. ORIENTATION HORIZONTAL AND VERTICAL DATUMS – CITY OF ROCHESTER GIS.
6. SOIL TYPES ARE PER NATURAL RESOURCES CONSERVATION SERVICES SOILS SURVEY.
   CtB – CHARLTON FINE SANDY LOAM, 3 TO 8% SLOPES
   PbC – PLAISTOW VERY STONEY FINE SANDY LOAM, 8 TO 15% SLOPES
7. FOR MORE INFORMATION ABOUT THIS SUBDIVISION PLAN, CONTACT THE CITY OF ROCHESTER PLANNING DEPARTMENT, 31 WAKEFIELD ST., ROCHESTER, NH 03867, (603) 330-1330.
8. THIS PARCEL IS SUBJECT TO A UTILITY EASEMENT AS SHOWN ON REFERENCE PLAN #1.
9. SEE THE HOMEMAKERS PLANNED UNIT DEVELOPMENT, JUNE 5, 2003, ON FILE IN THE PLANNING DEPARTMENT FOR MORE INFORMATION. THE PUD STATES "THE COMMERCIAL BUILDING (FOR THIS LOT) IS DESIGNATED FOR USES THAT WOULD SERVE AND BE COMPLEMENTARY TO THE PUD. THE PREFERRED USE (BUT NOT REQUIRED) IS FOR A RESTAURANT, CAFE, COMMUNITY CENTER, POSSIBLY A PUB/TAVERN OR CHURCH. OFFICE USE WOULD ALSO LIKELY BE APPROPRIATE BUT IS A SECONDARY CHOICE. DEVELOPMENT OF THIS PARTICULAR SITE SHALL BE SUBJECT TO STRICT REVIEW AND REASONABLE DISCRETION BY THE PLANNING BOARD TO ENSURE THAT THE USE, DESIGN, AND TREATMENT OF PARKING IS HARMONIOUS WITH THE WHOLE OF THIS PROGRAM AND THE PUD."
10. THIS PUD IS EXEMPT FROM SECTION 42.19 CONSERVATION OVERLAY DISTRICT, BUT THE APPLICANT IS ENCOURAGED TO COMPLY WITH THE BUFFER AND OTHER PROVISIONS OF THIS SECTION. THE PUD REQUIRES ALL STRUCTURES TO BE SET BACK AT LEAST 25 FEET FROM WETLANDS.
11. THIS LOT MUST BE SERVED BY CITY WATER AND SEWER.
12. THE MASTER PLAN CALLS FOR THE ROAD FRONTING THIS LOT TO BECOME A CITY STREET AT SOME TIME IN THE FUTURE WHEN THE PUD IS SUBSTANTIALLY DEVELOPED. IT IS UNCERTAIN AT THIS TIME, WHEN AND IF THE ROAD WILL BE CONVEYED TO THE CITY.

JURISDICTIONAL WETLANDS MAPPING NOTES

STATE AND FEDERAL JURISDICTIONAL WETLANDS WERE DELINEATED BY N.H. CERTIFIED WETLAND SCIENTIST, SHARON M. KERNA, ON OCTOBER 10, 2013 AS LOCATED BY NORWAY PLAINS ASSOCIATES, INC. IN OCTOBER 2013. WETLAND DELINEATION AND CLASSIFICATIONS WERE CONDUCTED USING METHODS AND IN ACCORDANCE WITH THE FOLLOWING GUIDANCE DOCUMENTS.

A. N.H. CODE OF ADMINISTRATIVE RULES (ENV-WT 301-311) WITH THE TECHNIQUES OUTLINED IN THE 1987 "U.S. ARMY CORPS OF ENGINEERS WETLAND DELINEATION MANUAL, TECHNICAL REPORT Y-87-1."
B. U.S. ARMY CORPS OF ENGINEERS, 2009 "REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, U.S. ARMY CORPS OF ENGINEERS RESEARCH AND DEVELOPMENT CENTER, ENVIRONMENTAL LABORATORY (ERDC/EL) TR-09-19."
C. U.S. ARMY CORPS OF ENGINEERS, 2012, "NATIONAL LIST OF PLANT SPECIES THAT OCCUR IN WETLANDS: NORTHEAST REGION, U.S. ARMY CORPS OF ENGINEERS RESEARCH AND DEVELOPMENT CENTER, ENVIRONMENTAL LABORATORY.
D. N.H. CODE OF ADMINISTRATIVE RULES (ENV-WT 301-302) WITH THE U.S. FISH AND WILDLIFE SERVICE MANUAL, FWS/OBS-79/31 ENTITLED "CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES, COWARDIN ET AL. 1979."
E. NEW ENGLAND HYDRIC SOILS TECHNICAL COMMITTEE, 2004 3RD ED., "FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND." NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION, LOWELL, MA.
F. U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE, 2010, "FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 7.0" L.M. VASILAS, G.W. HURT, AND C.V. NOBLE (EDS.) USDA, NRCS, IN COOPERATION WITH THE NATIONAL TECHNICAL COMMITTEE FOR HYDRIC SOILS.

WETLANDS CLASSIFICATIONS FOUND ON SITE ARE AS FOLLOWS:

PEM1E – PALUSTRINE, EMERGENT, SEASONALLY FLOODED/SATURATED, POORLY DRAINED

OWNER OF RECORD:
FRISBIE FOUNDATION
11 WHITEHALL ROAD
ROCHESTER, NH 03867
SCRD BK 4030, PG 0368

EXISTING FEATURES PLAN
TAX MAP 243, LOT 39-3
13 HEALTHCARE DRIVE
ROCHESTER, NH

PREPARED FOR:

DEW PROPERTIES, LLC

SCALE: 1" = 40' MARCH 2014

GRAPHIC SCALE

40 0 20 40 80 100

(IN FEET)
1 INCH = 40 FEET

FILE NO. 102
PLAN NO. C-2695
DWG. NO. 13124/SP-1
F.B. NO. "33" "CAK"

31 Mooney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

2 Continental Blvd., Rochester, N.H. 603-335-3948

E-1

LAND SURVEYORS - SEPTIC SYSTEM DESIGNERS

CIVIL ENGINEERS - TRANSPORTATION PLANNERS

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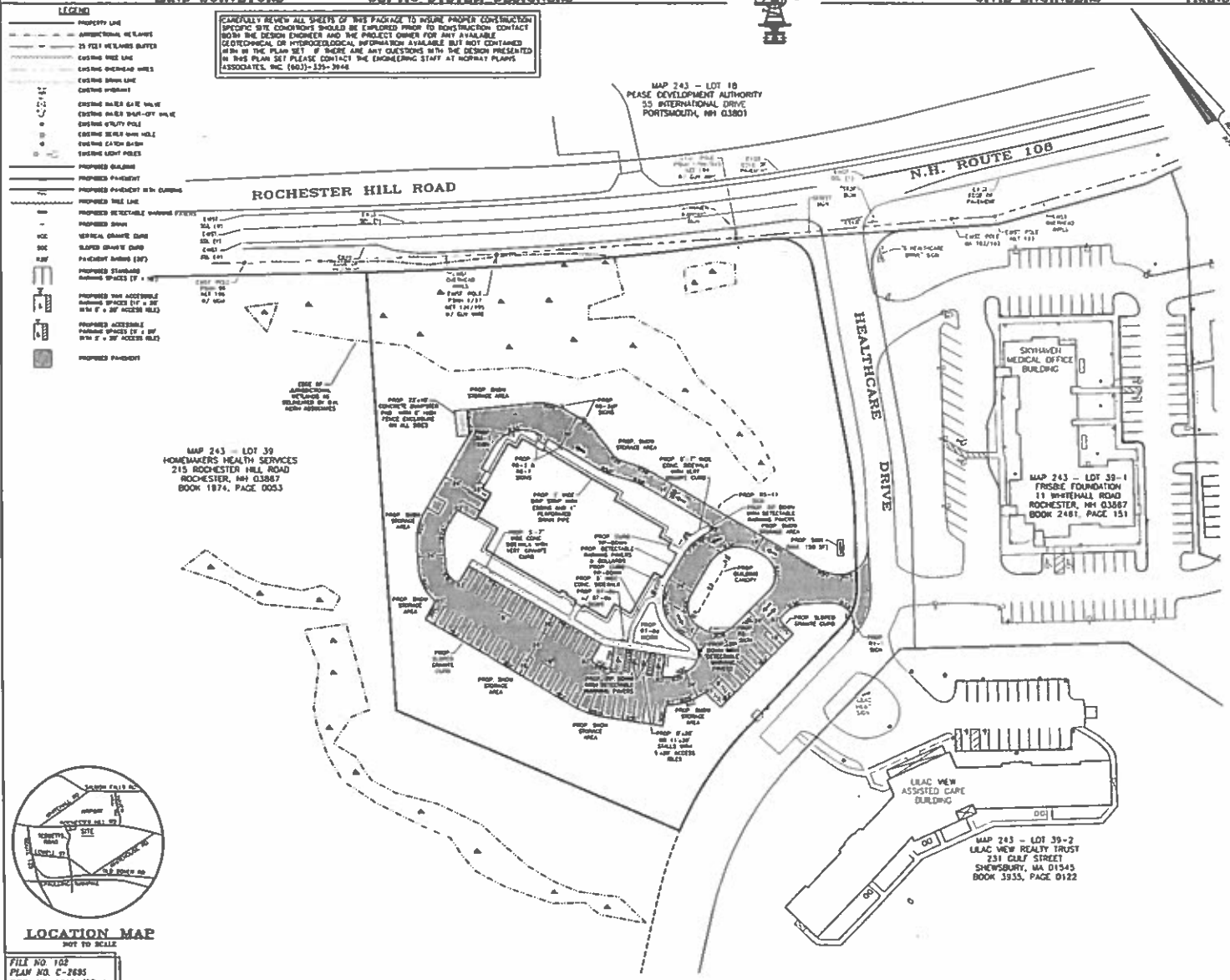


LOCATION MAP
NOT TO SCALE

FILE NO. 108
PLAN NO. C-2695
DWG NO. 13124/SP-1
F.B. NO. "33" "CLK"

SITE LAYOUT PLAN
TAX MAP 243, LOT 39-3
13 HEALTHCARE DRIVE
ROCHESTER, NH

PREPARED FOR:
DEW PROPERTIES, LLC

SCALE: 1" = 40' MARCH 2014

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 INCH = 40 FEET

31 Mooney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

2 Continental Blvd., Rochester, N.H. 603-335-3948

C-2

LAND SURVEYORS - SEPTIC SYSTEM DESIGNERS - CIVIL ENGINEERS - TRANSPORTATION PLANNERS

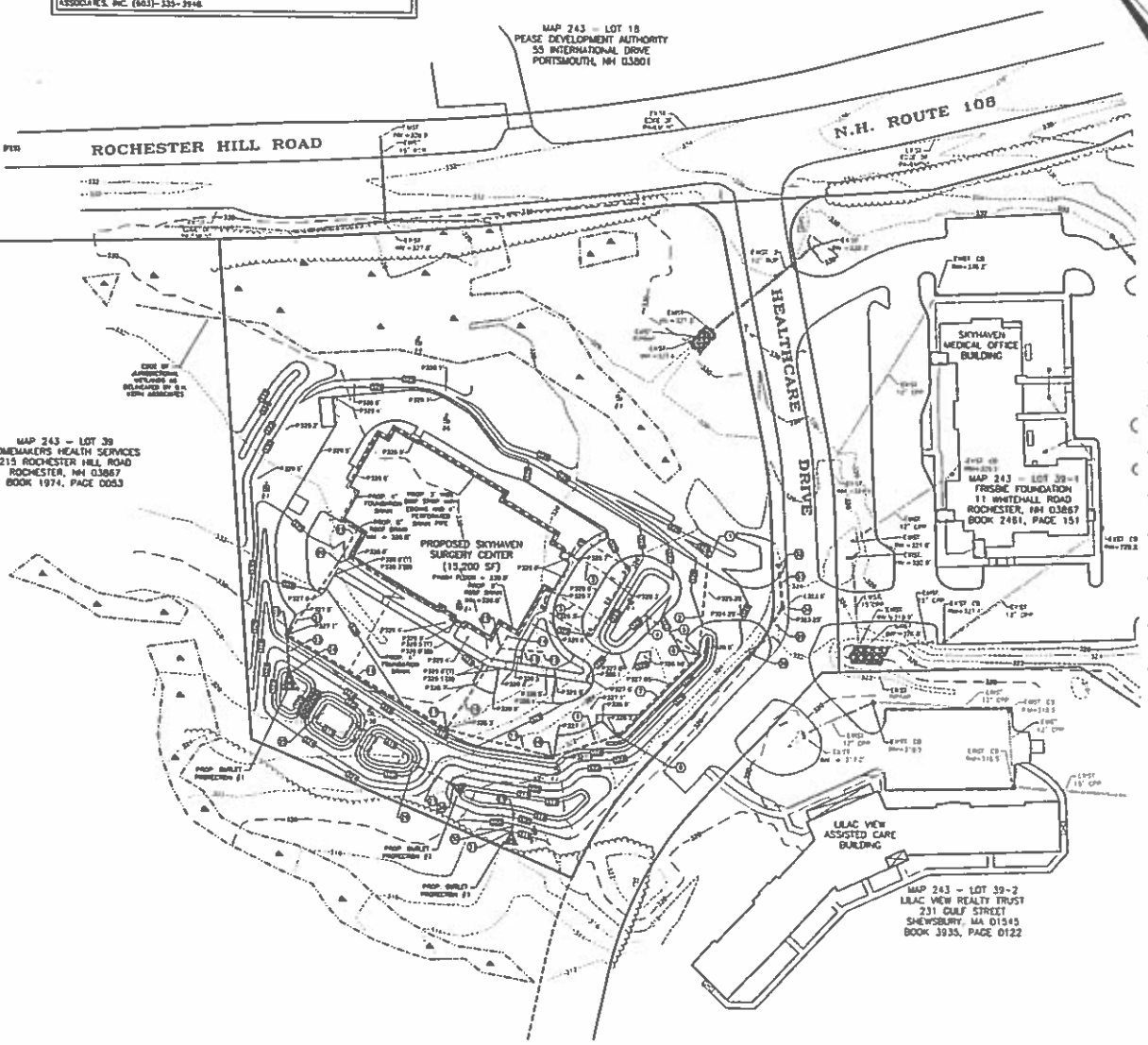
LEGEND

- PROPERTY LINE
- JURISDICTIONAL WETLANDS
- EXISTING TREE LINE
- EXISTING DRAIN LINE
- EXISTING CONTOUR LINE
- EXISTING CATCH BASIN
- EXISTING TEST PIT
- EXISTING SPOT GRADE
- PROPOSED SPOT GRADE
- PROPOSED TREE LINE
- PROPOSED DRAIN LINE
- PROPOSED CONTOUR LINE
- PROPOSED CATCH BASIN
- PROPOSED DRAIN MANHOLE
- PROPOSED FLARED END SECTION (FES)
- CORRUGATED POLYETHYLENE PIPE
- CATCH BASIN
- AREA DRAIN

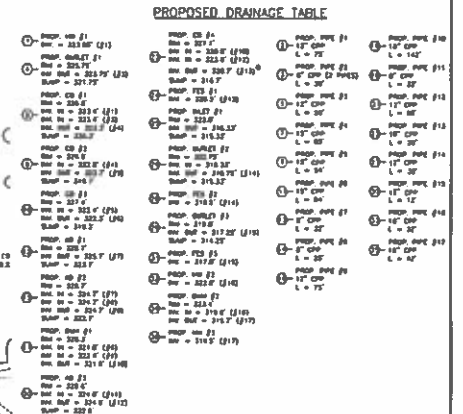
CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED HERE IN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948.

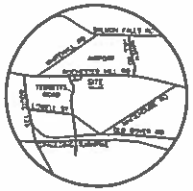
DIG SAFE — 1-888-344-7233

3/24/14 — ADD EARTHEN BERM AT REAR OF BUILDING



PROPOSED DRAINAGE TABLE





LOCATION MAP
NOT TO SCALE

FILE NO. 102
PLAN NO. C-2695
DWG. NO. 13124/SP-1
F.B. NO. "33" "CAR"

GRADING AND DRAINAGE PLAN
TAX MAP 243, LOT 39-3
13 HEALTHCARE DRIVE
ROCHESTER, NH

PREPARED FOR:
DEW PROPERTIES, LLC

SCALE: 1" = 40' MARCH 2014

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 INCH = 40 FEET

31 Meaney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

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C-3

LAND SURVEYORS - SEPTIC SYSTEM DESIGNERS - CIVIL ENGINEERS - TRANSPORTATION PLANNERS

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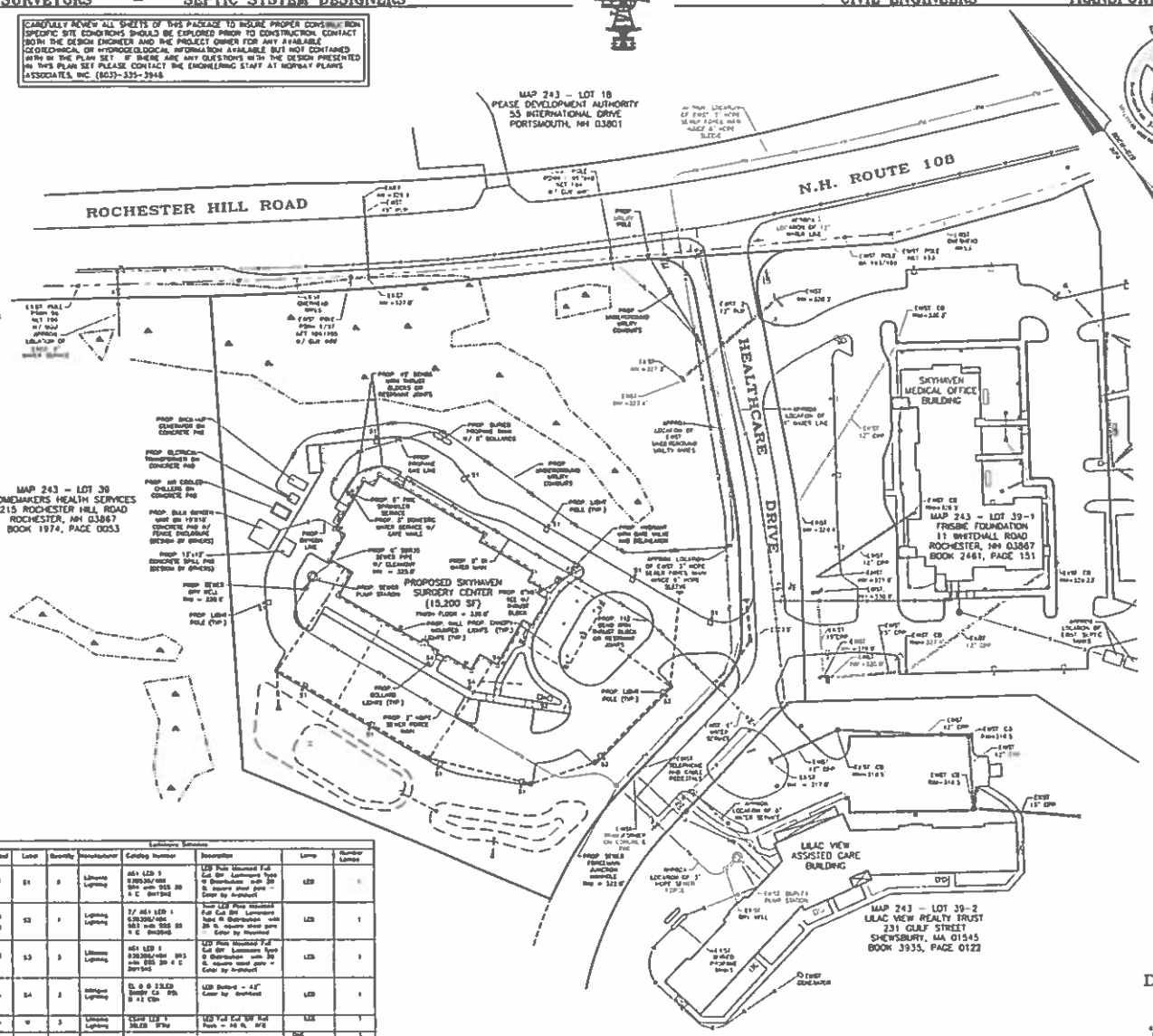
LEGEND

- PROPERTY LINE
- JURISDICTIONAL WETLANDS
- 25 FOOT WETLANDS BUFFER
- EXISTING TREE LINE
- EXISTING OVERHEAD WIRES
- EXISTING WATER MAIN
- EXISTING SEWER MAIN
- SEWER FORCE MAIN
- UNDERGROUND ELECTRIC WIRES
- UNDERGROUND UTILITY WIRES
- EXISTING DRAIN LINE
- EXISTING CONTOUR LINE
- EXISTING HYDRANT
- EXISTING WATER GATE VALVE
- EXISTING WATER SHUT-OFF VALVE
- EXISTING UTILITY POLE
- EXISTING SEWER MANHOLE
- EXISTING CATCH BASIN
- EXISTING LIGHT POLES
- PROPOSED DRAIN LINE
- PROPOSED WATER SERVICE
- PROPOSED SEWER LINE
- PROPOSED SEWER FORCE MAIN LINE
- PROPOSED PROPANE GAS LINE
- PROPOSED UNDERGROUND UTILITY WIRES
- PROPOSED UNDERGROUND ELECTRIC WIRES
- PROPOSED DRAIN LINE
- PROPOSED HYDRANT
- PROPOSED WATER VALVE
- PROPOSED WATER SHUT-OFF VALVE
- PROPOSED UTILITY POLE
- PROPOSED SEWER MANHOLE
- PROPOSED DRAIN MANHOLE
- PROPOSED CATCH BASIN



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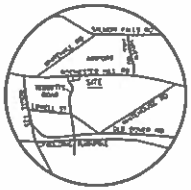

LOCATION MAP
NOT TO SCALE

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps
	S1	8	Lithonia Lighting	[illegible]	LED Pole Mounted Full Cut Off Luminaire Type II Distribution with 30 ft. square steel pole - Color by Architect	LED	1
	S2	1	Lithonia Lighting	[illegible]	Twin LED Pole Mounted Full Cut Off Luminaires type II Distribution with 30 ft. square steel pole - Color by Architect	LED	1
	S3	3	Lithonia Lighting	[illegible]	LED Pole Mounted Full Cut Off Luminaire Type II Distribution with 30 ft. square steel pole - Color by Architect	LED	1
	S4	2	Lithonia Lighting	[illegible]	LED Bollard - 42" Color by Architect	LED	1
	W	3	Lithonia Lighting	[illegible]	LED Full Cut Off Wall Pack - 40 ft. AFG	LED	1
	WC	9	Lithonia Lighting	[illegible]	LED Under Canopy Surface Mounted Fixture at 12.5 ft. AFG	LED 365-Watt LED, Downlight POS	1

FILE NO. 102
PLAN NO. C-2685
DWG NO. 13124/SP-1
F.B. NO. "33" "GAR"

UTILITY PLAN
TAX MAP 243, LOT 39-3
13 HEALTHCARE DRIVE
ROCHESTER, NH

PREPARED FOR:
DEW PROPERTIES, LLC

SCALE: 1" = 40' MARCH 2014

GRAPHIC SCALE
40 0 20 40 80 100
(IN FEET)
1 INCH = 40 FEET

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C-4

LAND SURVEYORS - SEPTIC SYSTEM DESIGNERS

CIVIL ENGINEERS - TRANSPORTATION PLANNERS

LEGEND

- PROPERTY LINE
- JURISDICTIONAL WETLANDS
- EXISTING TREE LINE
- EXISTING DRAIN LINE
- EXISTING CONTOUR LINE
- EXISTING CATCH BASIN
- PROPOSED TREE LINE
- PROPOSED DRAIN LINE
- PROPOSED CONTOUR LINE
- PROPOSED SILTATION FENCE
- PROPOSED CATCH BASIN
- PROPOSED DRAIN MANHOLE
- PROPOSED FLARED END SECTION (FES)
- PROPOSED TEMPORARY CATCH BASIN FILTERS
- PROPOSED TEMPORARY STAGING AREA CONSTRUCTION ENTRANCE
- PROPOSED TEMPORARY STONE CHECK DAMS

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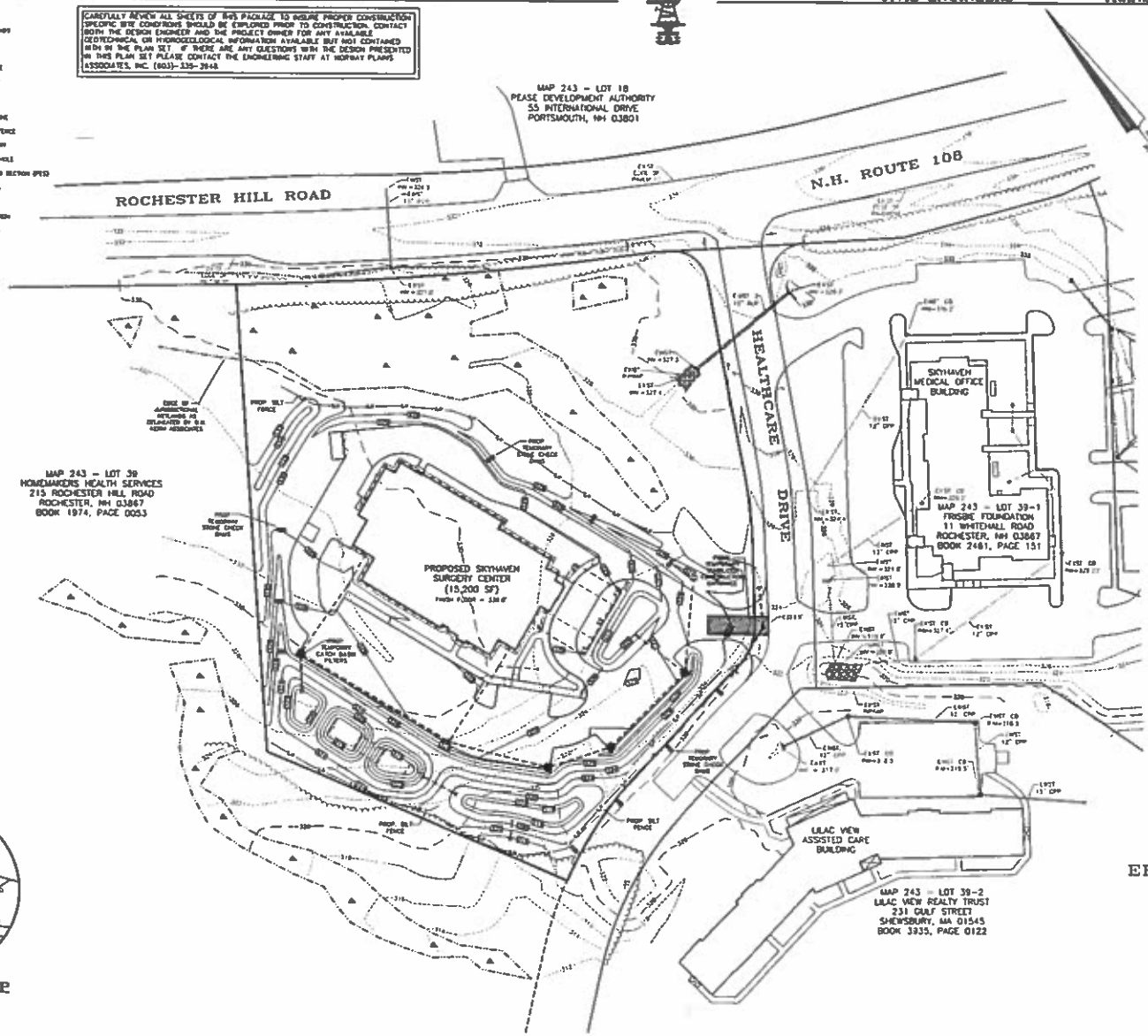


DIG SAFE

1-888-344-7233

PROJECT SPECIFIC CONSTRUCTION PHASING:

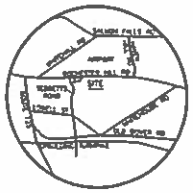
1. PRIOR TO THE INITIATION OF CONSTRUCTION ACTIVITIES, HOLD A PRE-CONSTRUCTION CONFERENCE IN ACCORDANCE WITH THE FOLLOWING PHASING. THE GENERAL CONSTRUCTION PHASING NOTES APPLY TO THE OVERALL CONSTRUCTION AND SHALL BE ADHERED TO.
2. INSTALL ALL TEMPORARY SEDIMENT CONTROL BARRIERS (I.E. SILT FENCE, EROSION CONTROL MIX BERM, STONE CHECK DAMS, ETC.) AROUND THE OUTER PERIMETER OF THE CONSTRUCTION SITE AS INSPECTED ON SHEET C-3 PRIOR TO EARTH DISTURBANCE OPERATIONS.
3. INSTALL ORANGE SNOW FENCE AROUND THE PERIMETER OF THE INFILTRATION BASIN AND THE FENCE SHALL REMAIN IN PLACE UNTIL CONSTRUCTION OF THE BASIN HAS STARTED.
4. CLEAR, GRUB AND STRIP THE SITE. STRIPS, GRUB AND STORE ORGANIC MATTER WHICH IS TO BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
5. INSTALL A TEMPORARY CONSTRUCTION EXIT AT THE LOCATION OF THE PROPOSED DRIVEWAY CONNECTION TO HEALTHCARE DRIVE. MAINTAIN AS DIRECTED BY THE "TEMPORARY CONSTRUCTION EXIT DETAIL".
6. STOCKPILE STRIPPED TOPSOIL AND CUT MATERIAL TO BE REMOVED ON SITE IN AN APPROPRIATE LOCATION IN ACCORDANCE WITH THE "SOIL STOCKPILE PRACTICE". MAINTAIN THE STOCKPILES AS DIRECTED IN THE "SOIL STOCKPILE PRACTICE".
7. PERFORM THE NECESSARY CUTS AND FILLS TO CONSTRUCT THE GRAVEL WETLANDS BASIN AS INSPECTED ON SHEET C-3 AND IN ACCORDANCE WITH THE INFILTRATION BASIN DETAILS SHOWN ON SHEET C-5.
8. PERFORM THE NECESSARY CUTS AND FILLS TO CONSTRUCT THE INFILTRATION BASIN AS INSPECTED ON SHEET C-3 AND IN ACCORDANCE WITH THE INFILTRATION BASIN DETAILS SHOWN ON SHEET C-5.
9. CONSTRUCT THE INFILTRATION BASIN AND OUTLET PROTECTION. LEAVE SIDES AND WALLS THE SIDE SLOPES OF THE BASIN AS DIRECTED IN THE INFILTRATION BASIN DETAILS.
10. CONSTRUCT THE GRAVEL WETLANDS BASIN, SEDIMENT FOREBAY AND OUTLET PROTECTION. LEAVE SIDES AND WALLS THE SIDE SLOPES OF THE BASIN AS DIRECTED IN THE INFILTRATION BASIN DETAILS.
11. ALL BASINS/SWALES/AND BASINS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
12. PERFORM THE NECESSARY CUTS AND FILLS TO RUGHOUT IN THE BUILDING AND PARKING LOT AREAS.
    A) INSTALL REQUIRED FILLS IN MAXIMUM 8-INCH LIFTS AND COMPACT EACH LIFT TO 95% MAXIMUM PROCTOR DENSITY.
13. AS MAINTAINED AS NOTED INSTALL REMAINING SEDIMENT CONTROL BARRIERS WITHIN THE SITE (I.E. ADDITIONAL SILT FENCE, CHECK DAMS AND SEDIMENT CONTROLS AND CATCH BASINS, ETC.)
14. INSTALL ALL UTILITIES AND CLOSED DRAINAGE SYSTEM COMPONENTS (I.E. PIPE CULVERTS, CATCH BASINS AND RESPONSE WATER DRAIN PER THE CORRESPONDING DETAILS AND AS SHOWN ON SHEETS C-3 AND C-4. AS EACH STRUCTURE IS COMPLETED INSTALL THE CORRESPONDING TEMPORARY SEDIMENT CONTROL BARRIER DEPICTED ON SHEET C-5.
15. ALL CUT AND FILL SLOPES AND LAWN AREAS NOT TO BE PAVED SHALL BE LOAMED AND SEEDED FOR PERMANENT SEAL TO RUN AND STABILIZATION AS DESCRIBED UNDER THE "PERMANENT VEGETATION PRACTICE" WITHIN 3 DAYS OF ACHIEVING FINAL GRADE.
16. INSTALL ALL GRAVEL TOP AND GRADED GRAVEL MATERIALS FOR THE PARKING AREA AS SPECIFIED IN THE CORRESPONDING DETAILS.
17. THE PARKING AREAS SHALL BE STABILIZED CONSTRUCTED TO GRAVEL BASE COMPLETE WITHIN 3 DAYS OF ACHIEVING PROPOSED SUBGRADE ELEVATIONS.
18. INSTALL PAVEMENT SURFACES AS SOON AS POSSIBLE AFTER THE INSTALLATION OF THE GRAVEL BASE AND COARSE GRAVEL, IN ORDER TO LIMIT THE USE, EROSION AND POLLUTION OF THE GRAVEL MATERIALS WITH GRAVEL MATERIALS. IN NO CASE SHALL AREAS TO BE PAVED BE LEFT UNPROTECTED THROUGH OUT THE WINTER MONTHS.
19. ALL DISTURBED AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE. IN NO CASE SHALL ANY DISTURBED AREA BE LEFT UN-STABILIZED FOR LONGER THAN 21 DAYS. IF NECESSARY TEMPORARY STABILIZATION MEASURES AS DESCRIBED IN THE "GENERAL CONSTRUCTION PHASING NOTES" AND MORE, VOL. 2 SHALL BE EMPLOYED.

MAINTENANCE AND REPAIRING

20. DURING CONSTRUCTION ALL TEMPORARY AND PERMANENT SEDIMENT, EROSION CONTROL AND STORMWATER MANAGEMENT PRACTICES SHOULD BE INSPECTED WEEKLY, AFTER EVERY 1/2 INCH OF RAINFALL AND MONTHLY.
21. DEBRIS SEDIMENT SHOULD BE REMOVED FROM TEMPORARY SEDIMENT, EROSION CONTROL AND STORMWATER MANAGEMENT PRACTICES WHEN IT REACHES PRESCRIBED THRESHOLDS DESCRIBED IN THE DETAILS FOR EACH PRACTICE.
22. ALL DAMAGED TEMPORARY AND PERMANENT SEDIMENT, EROSION CONTROL AND STORMWATER MANAGEMENT PRACTICES SHOULD BE REPAIRED OR REPLACED IMMEDIATELY UPON NOTICE.
23. SEDIMENT SHALL BE DISPOSED OF PROPERLY STORED ON SITE OR OFF SITE.

PROJECT COMPLETION AND STABILIZATION

24. UPON PROJECT COMPLETION, ONCE THE SITE IS DEEMED STABILIZED (VEGETATION IS REPRESENTED), THE TEMPORARY SEDIMENT CONTROL BARRIERS AND EROSION CONTROL PRACTICES SHALL BE REMOVED. ANY DISTURBANCE CREATED DURING REMOVAL SHALL BE REPAIRED IN AN APPROPRIATE MANNER.
25. ACCUMULATED SEDIMENT SHALL BE REMOVED FROM ALL ON SITE CATCH BASINS AND THE SEDIMENT FOREBAYS TO THE GRAVEL WETLANDS BASIN.



LOCATION MAP
NOT TO SCALE

FILE NO. 102
PLAN NO. C-2695
DWG. NO. 13124/SP-1
F.B. NO. "33" "GAK"

EROSION AND SEDIMENTATION CONTROL PLAN
TAX MAP 243, LOT 39-3
13 HEALTHCARE DRIVE
ROCHESTER, NH

PREPARED FOR:

DEW PROPERTIES, LLC

SCALE: 1" = 40' MARCH 2014

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 INCH = 40 FEET

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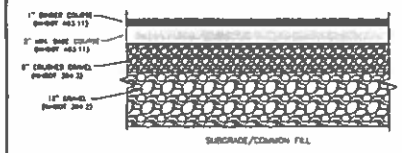
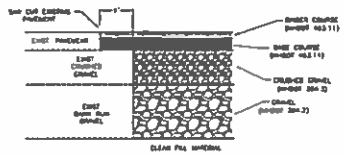
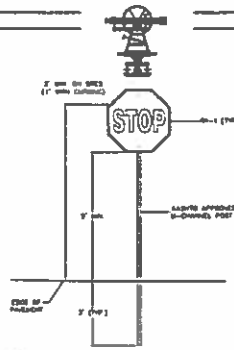


PARKING LOT CROSS-SECTIONS
NOT TO SCALE



TYPICAL PAVEMENT MATCHING DETAIL
NOT TO SCALE

NOTES:
1. PLACE COMMON FILL IN 12 INCH LIFTS. COMPACT COMMON FILL TO 95% MAXIMUM PROCTOR DENSITY.
2. PLACE GRAVEL IN MAXIMUM 8 INCH LIFTS. COMPACT TO 95% MAXIMUM PROCTOR DENSITY.
3. PLACE CRUSHED GRAVEL IN MAXIMUM 6 INCH LIFTS. COMPACT TO 95% MAXIMUM PROCTOR DENSITY.
4. PAVEMENT MUST BE INSTALLED IN TWO COURSES. A BINDER COURSE AND A WEARING COURSE.



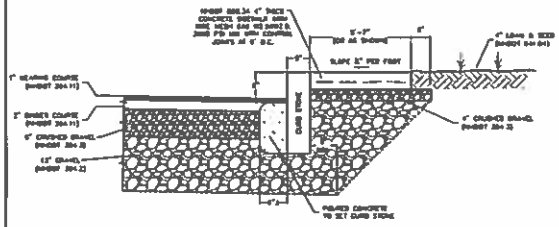
TYPICAL TRAFFIC SIGN
NOT TO SCALE

NOTES:
1. SIGN POST SHALL BE AASHTO APPROVED U-CHANNEL OR BINDER PER AASHTO "SPECIFICATIONS FOR STRUCTURAL SUPPORT OF HIGHWAY SIGNS, LUMINAIRES AND SIGNALS", LATEST EDITION.
2. SIGNS SHALL BE MOUNTED 5 FT FROM GROUND TO BOTTOM EDGE WHERE PARKING AND PEDESTRIAN LOT MOVEMENTS TAKE PLACE.
3. SIGNS SHALL BE PLACED 30 MAX. NEAREST EDGE OF 2 FT FROM EDGE OF PAVEMENT UNLESS OTHERWISE.

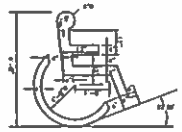
ITEM NO.	SIGN SIZE HEIGHT	SIGN SIZE WIDTH	FEXT	NO. SIGNS REQ'D
R1-1	30"	30"	STOP	1
R5-1	30"	30"		3
R5-11	24"	30"	AUTHORIZED VEHICLES ONLY	1
R7-8a	18"	12"		4
R7-8b	6"	12"	NON-ACCESSIBLE	1
R8-3	18"	12"		2
R8-3aP	18"	24"	LOADING ZONE	2
R8-7	24"	30"	EMERGENCY STOPPING ONLY	2

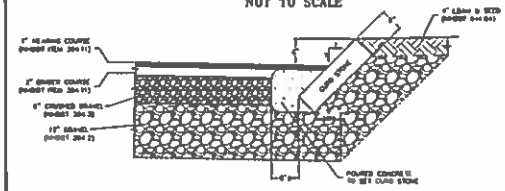
NOTES:
1. ALL SIGNS SHALL BE PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.

SIGN SCHEDULE
NOT TO SCALE

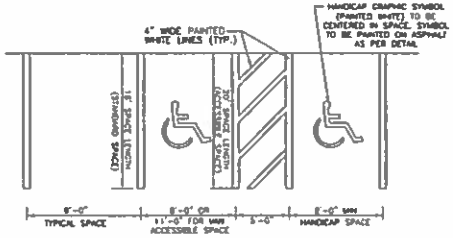


CONCRETE SIDEWALK WITH GRANITE CURB DETAIL
NOT TO SCALE

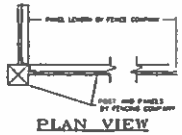




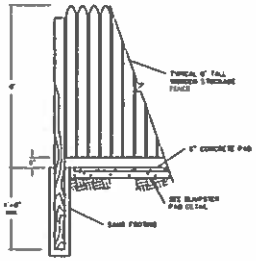
GRANITE SLOPE CURB DETAIL
NOT TO SCALE



STALL STRIPING DETAIL
NOT TO SCALE

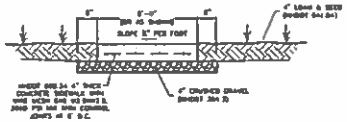


PLAN VIEW

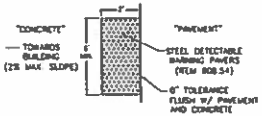


ELEVATION VIEW

DUMPSTER ENCLOSURE
NOT TO SCALE

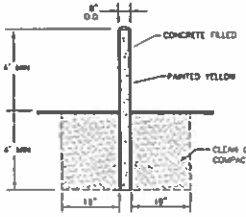


CONCRETE SIDEWALK DETAIL

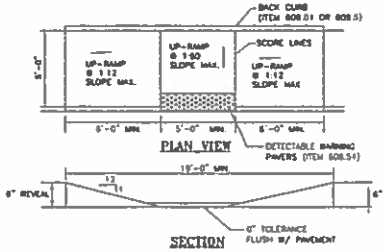


DETECTABLE WARNING PAVER DETAIL
NOT TO SCALE

GENERAL SIDEWALK NOTES:
1. THE MAXIMUM CROSS OF CONCRETE WALKWAY SLOPE IS 2%. THE SLOPE OF THE LANDING SHALL NOT EXCEED 2% IN ANY DIRECTION.
2. TRANSITIONS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES.
3. DETECTABLE WARNING PAVERS (ITEM 608.54) SHALL BE USED ON CONCRETE RAMPS AS SHOWN. EACH TACTICAL WARNING STRIP PANEL SHALL A TRUNCATED DOMED SURFACE AT LEAST 2'-0" IN WIDTH, MEASURED FROM THE BACK OF THE CURB TIP DOWN, AND 5'-0" IN LENGTH MEASURE PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAVEL.
4. DETECTABLE WARNING PAVERS SHALL BE CAST IN PLACE DURING CONCRETE INSTALLATION.



STEEL BOLLARD DETAIL
NOT TO SCALE

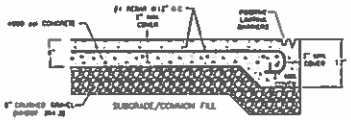


PLAN VIEW

SECTION

HANDICAP RAMP DETAIL "A"
NOT TO SCALE

GENERAL SIDEWALK NOTES:
1. THE MAXIMUM PLANNING SLOPE OF ANY SIDEWALK CURB IS 1:12. THE MAXIMUM CROSS SLOPE IS 2%. THE SLOPE OF THE LANDING SHALL NOT EXCEED 2% IN ANY DIRECTION.
2. TRANSITIONS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES.
3. DETECTABLE WARNING PAVERS (ITEM 608.54) SHALL BE USED ON CONCRETE RAMPS AS SHOWN. EACH TACTICAL WARNING STRIP PANEL SHALL A TRUNCATED DOMED SURFACE AT LEAST 2'-0" IN WIDTH, MEASURED FROM THE BACK OF THE CURB TIP DOWN, AND 5'-0" IN LENGTH MEASURE PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAVEL.



CONCRETE DUMPSTER PAD DETAIL
NOT TO SCALE

NOTES:
1. PLACE COMMON FILL IN 12 INCH LIFTS. COMPACT COMMON FILL TO 95% MAXIMUM PROCTOR DENSITY.
2. PLACE CRUSHED GRAVEL IN MAXIMUM 6 INCH LIFT. COMPACT TO 95% MAXIMUM PROCTOR DENSITY.
3. A MINIMUM OF 2 U-CHANNEL PRESTOVE LANDING BARRED TRENCHES (IF [illegible]) SHALL BE [illegible] AROUND THE PERIMETER OF PAD TO CONTAIN POTENTIAL LEACHATE FROM FLOWING OFF THE PAVEMENT.

CONSTRUCTION DETAILS
TAX MAP 243, LOT 39-3
13 HEALTHCARE DRIVE
ROCHESTER, NH

PREPARED FOR:
DEW PROPERTIES, LLC
SCALE: AS SHOWN MARCH 2014

FILE NO. 102
PLAN NO. C-2895
DWG. NO. 13124/SP-1
F.B. NO. "33" "CAR"

31 Mooney Street, Alton, N.H. 603-875-3948
NORWAY PLAINS ASSOCIATES, INC.
2 Continental Dive., Rochester, N.H. 603-335-3948

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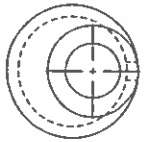
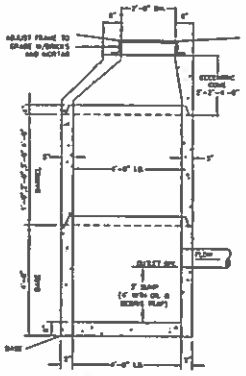


PLAN VIEW

DRAIN LINE DIAMETER	SIZE OF DRAIN LINE DIAMETER	CATCH BASIN DIAMETER
12" TO 18"	LESS THAN 24"	4'
21" TO 27"	LESS THAN 72"	5'
30" TO 33"	LESS THAN 84"	6'
36" & LARGER	GREATER THAN 84"	REFER TO DOT STANDARDS

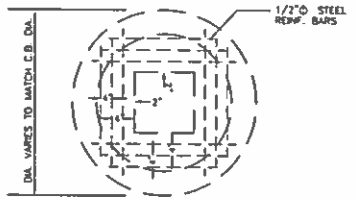
NOTES
1. CONCRETE, AIRED PSI AFTER 28 DAYS
2. REINFORCING SHALL BE PROVIDED FOR 4"-20 LOADING
3. SHIPLAP JOINTS SEALED WITH 1 STRIP OF BUTYL RUBBER SEALANT
4. PIPE OPENINGS CAST IN AS REQUIRED
5. INVERT HEIGHT VARIES 1', 2', 3' OR 4' TO REACH REQUIRED DEPTH
6. PIPE CONNECTIONS SHALL BE WATERTIGHT
7. PRECAST SECTIONS SHALL CONFORM TO ASTM C-478
8. SEE SLAB TOP DETAIL FOR STRUCTURES REQUIRING SLAB TOPS, I.E. DOUBLE GRATE AND FRAME STRUCTURES



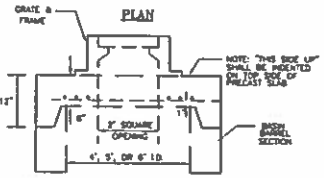
SECTION VIEW

PRE-CAST REINFORCED CATCH BASIN

NOT TO SCALE



PLAN

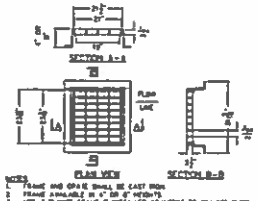


ELEVATION

NOTE:
1. SLAB TO BE PLACED IN LIEU OF TAPERED SECTION WHERE PIPE WOULD OTHERWISE ENTER INTO TAPERED SECTION OF THE STRUCTURE AND WHERE PERMITTED.
2. SLAB TOP MAY BE CASTED WITH MINIMUM OR NO INTERLOCKING CHANNEL. HOWEVER, THE CONTRACTOR MUST ENSURE THE SLAB TOP IS FINALLY ATTACHED TO THE STRUCTURE.

REINFORCED CONCRETE SLAB COVER

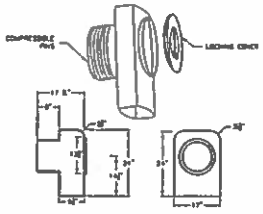
NOT TO SCALE



NOTES
1. FRAME AND GRATE SHALL BE CAST IRON
2. FRAME AVAILABLE IN 4" OR 6" HEIGHTS
3. USE 3 FLANGE FRAME IF INSTALLED ADJACENT TO GRANITE CURB
4. ALL DIMENSIONS ARE NOMINAL

CATCH BASIN TYPE 'B' GRATE DETAIL

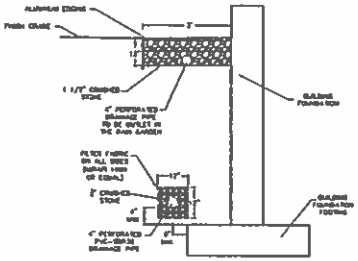
NOT TO SCALE



ELIMINATOR CATCH BASIN OIL AND DEBRIS TRAP DETAIL

NOT TO SCALE

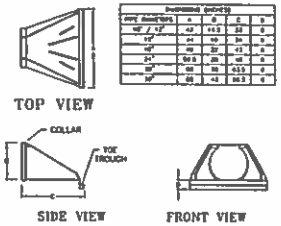
NOTES
1. POOR SHALL BE "THE ELIMINATOR" OIL & FLOATING DEBRIS TRAP AS MANUFACTURED BY GRANITE WATER RESCUE, INC. QUINCY, MA. TEL. 617-773-1100 ON THE WEB @ WWW.GRANITEWATER.COM
2. DIMENSIONS ARE FOR 12" DIAMETERS.
3. UNITS ARE AVAILABLE IN 8", 10", 12", 15" AND 18" DIAMETERS.



NOTES
1. ROOF DRAINS OR ROOF EDGE DRAINS SHALL NOT BE TIED INTO FOUNDATION DRAIN.
2. FOUNDATION DRAIN PIPE CLEAN OUT SHOULD BE LOCATED AT GRADE AND NO GREATER THAN 175 FT ON CENTER

PERIMETER DRIP EDGE AND FOUNDATION DRAIN DETAIL

NOT TO SCALE

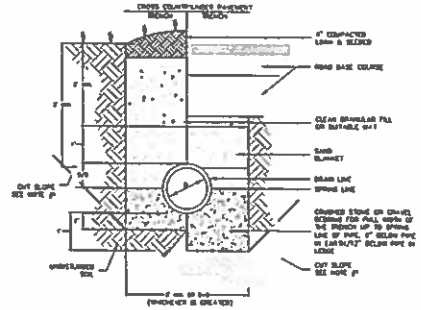


DIMENSIONS (INCHES)					
PIPE DIAMETER	A	B	C	D	E
18" / 12"	42	44.5	22	6	
15"	41	40	24	6	
18"	48	52	27	6	
24"	54.5	65	40	6	
30"	66	78	45.5	6	
36"	66	43	54.5	6	

TOP VIEW

FLAIRED END SECTION DETAIL

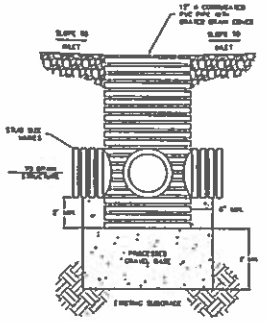
NOT TO SCALE



NOTES
1. PIPE'S MAY BE DEPRESSED BY EXCAVATING AT OTHER TRENCH WITH THE SLOPES OF 1:1 CHANGE TO A DEPTH OF 4.0 FT. BELOW GRADE BEFORE THEY ARE REQUIRED TO USE OF A SIGNIFICANT CUT.
2. PIPE TRANSITIONS SHALL BE AS DEPICTED ON THE DESIGN PLANS.
3. SAND BLANKET CUT BE SHAPED THE CONTRACTOR CONCRETE PIPE.

DRAINAGE PIPE TRENCH INSTALLATION DETAIL

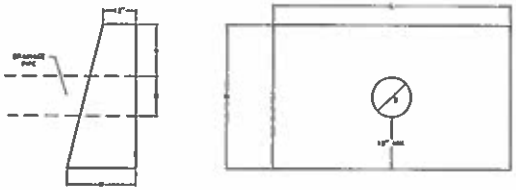
NOT TO SCALE



NOTES
1. AREA DRAINS TO BE ADS PIPE SIZE & WHERE SECTIONS OF 24 INCHES, OR EQUAL.
2. AREA DRAINS WILL BE SET ON 2 FT OF PROCESSED GRAVEL BASE, COMPACTED TO 95% PROCTOR DENSITY
3. PIPE STONE CLEAN GRANULAR FILL OR SHARP CRUSHED GRAVEL FOR THE PROCESSED GRAVEL BASE.

AREA DRAIN DETAIL

NOT TO SCALE



PRE-CAST CONCRETE HEADWALL DETAIL

NOT TO SCALE

DIA. D	HEADWALL LENGHT L	HEADWALL HEIGHT H	PIPE COVER A	HEADWALL BTM HEIGHT B
12"	4'9"	3'6"	1'0"	1'
15"	5'	4'0"	1'0"	1'1"
18"	5'	4'6"	1'0"	1'2"
24"	6'	5'	1'0"	1'6"
30"	11'	5'6"	1'0"	2'0"
36"	12'	6'	1'0"	2'6"
42"	13'6"	6'6"	1'0"	2'6"
48"	17'6"	7'0"	1'0"	2'10"

DRAINAGE DETAILS
TAX MAP 243, LOT 39-3
13 HEALTHCARE DRIVE
ROCHESTER, NH

PREPARED FOR:
DEW PROPERTIES, LLC

SCALE: AS SHOWN MARCH 2014

FILE NO. 102
PLAN NO. C-2895
DWG NO. 13124/SP-1
F.B. NO. "35" "CAK"

31 Mooney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

2 Continental Blvd., Rochester, N.H. 603-335-3948

LAND SURVEYORS – SEPTIC SYSTEM DESIGNERS

CIVIL ENGINEERS – TRANSPORTATION PLANNERS

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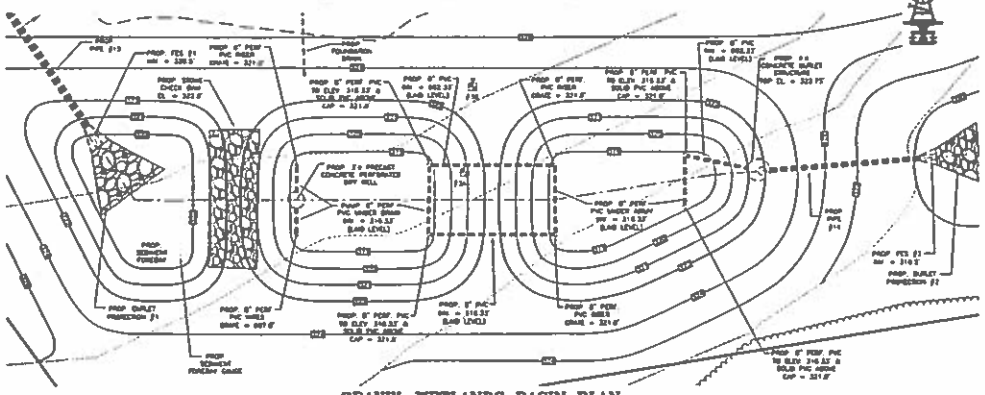
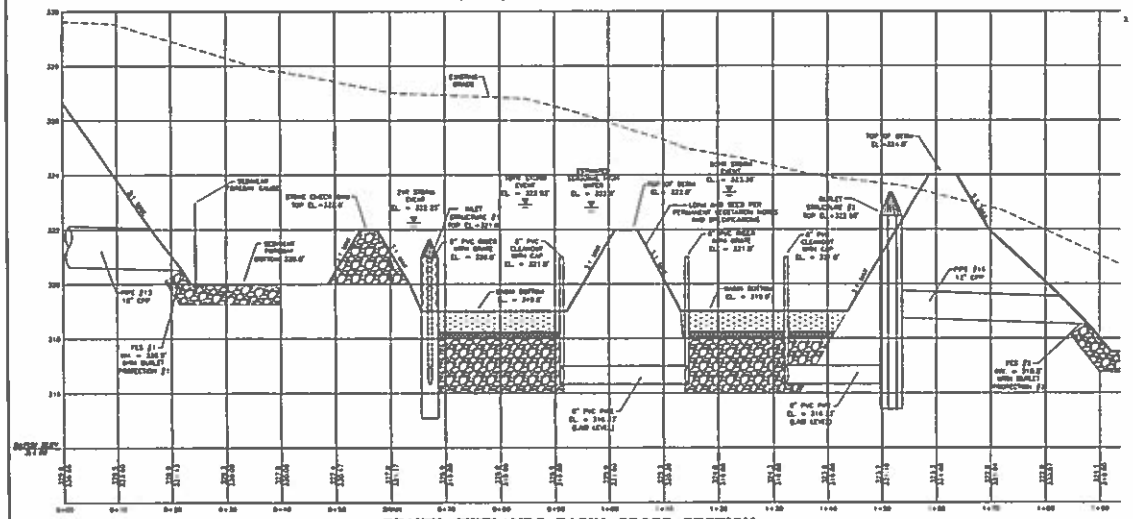


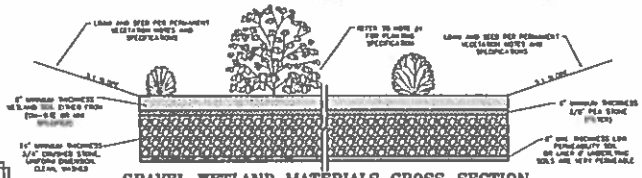
GRAVEL WETLANDS BASIN PLAN

1" = 10'



GRAVEL WETLANDS BASIN CROSS SECTION

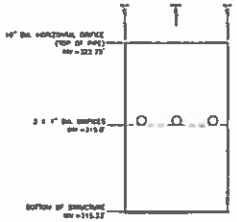
1" = 10' (HORZ.) & 1" = 2' (VERT.)



GRAVEL WETLAND MATERIALS CROSS-SECTION

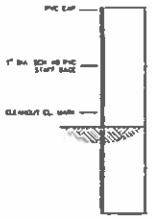
NOT TO SCALE

LOG PERMEABILITY MATERIAL SELECTION	
SIEVE SIZE	SEASONAL
#4	95-100
#10	80-90
#40	60-80
#200	25-45



GRAVEL WETLAND ORIFICE SCHEMATIC

SCALE: NOT TO SCALE



SEDIMENT FOREBAY GAUGE DETAIL

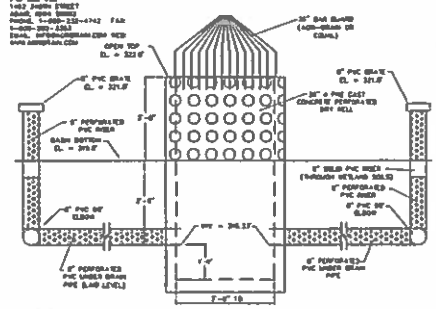
NOT TO SCALE

NOTES:

1. STAFF GAGE TO BE SCHEDULE 40 PVC PIPE(S) OR PLACED IN GROUND A MINIMUM 2'-0".
2. CLEANOUT MARK ON STAFF TO BE RED PAINT 18"± 4-INCHES FROM BOTTOM OF BASIN.

CONTACT INFORMATION FOR ACRI-GRAND CORPORATION

1. THE BAG BLANKS SCREEN ON TOP OF THE INLET CONTROL STRUCTURE IS ACRI-GRAND CORPORATION PRODUCTS (SEE (2)-A).
2. ACRI-GRAND CORPORATION CAN BE CONTACTED AT THE FOLLOWING ADDRESS, TELEPHONE NUMBER, FAX NUMBER AND EMAIL ACCORDING ACRI-GRAND CORPORATION
   P.O. BOX 158
   1463 SMITH STREET
   ADAMS, NEW YORK
   PHONE: 1-800-232-4742 FAX: 1-800-232-4363
   EMAIL: INFO@ACRIGRAND.COM
   WWW.ACRIGRAND.COM

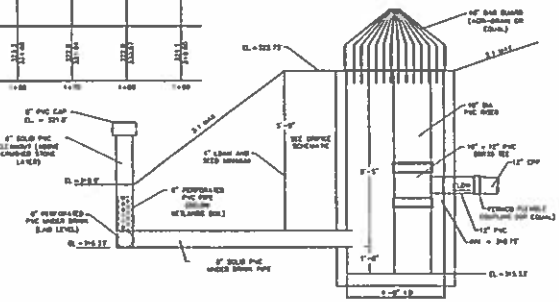


GRAVEL WETLANDS INLET STRUCTURE DETAIL

SCALE: NOT TO SCALE

NOTES:

1. 6" PERFORATED PIPE SHALL BE SUPPLIED WITH 4 SPAWS OF 1" TO 1" DIAMETER HOLES EVERY 3 INCHES
2. PERFORATED PIPES SHALL BE PERFORATED IN ACCORDANCE TO ASTM F-758



GRAVEL WETLANDS OUTLET STRUCTURE DETAIL

SCALE: NOT TO SCALE

SEDIMENT FOREBAY:

SPECIFICATIONS

1. CONSTRUCT THE SEDIMENT FOREBAY TO THE GRADES DEPICTED ON THE PLAN AND CROSS-SECTION.
2. LOAM AND SEED THE SLOPES AND BOTTOM OF THE SEDIMENT FOREBAY AS PRESCRIBED IN THE "PERMANENT VEGETATION" NOTES FOUND ON SHEET C-10
   SEED MIXTURE = A

MAINTENANCE REQUIREMENTS

1. INSPECT SEDIMENT FOREBAY BI-ANNUALLY ONCE IN THE SPRING PRIOR TO MAY 15 AND ONCE IN THE FALL PRIOR TO OCTOBER 15.
2. CONDUCT PERIODIC MOWING OF THE SEDIMENT FOREBAY SLOPES AND EMBANKMENTS MINIMUM TWICE A YEAR TO ELIMINATE WOODY GROWTH FROM THE EMBANKMENTS AND BOTTOM. REMOVE THE SEDIMENT FOREBAY EMBANKMENTS WHEN MOWING THE REST OF THE SITE IS RECOMMENDED.
3. REMOVE DEBRIS FROM THE OUTLET STRUCTURE OF THE SEDIMENT FOREBAY B.E. STONE CHECK DAMS AT LEAST ONCE ANNUALLY.
4. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENT BASED ON INSPECTION. WHEN SEDIMENT HAS REACHED THE RED MARK ON THE SEDIMENT STAFF GAUGE INSTALLED IN THE FOREBAY REMOVE SEDIMENT AND DISPOSE OF IT OFF-SITE IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
   ELEVATION OF RED CLEANOUT MARK ON STAFF GAUGE = 324.50

GRAVEL WETLAND:

SPECIFICATIONS

1. CONSTRUCT THE GRAVEL WETLAND TO THE GRADES DEPICTED ON THE PLAN AND CROSS-SECTION. OVER EXCAVATE THE 3/4-INCH STONE MEDIA BED AS DEPICTED BY ACCOMMODATE THE 24-INCHES OF STONE AND 3-INCHES OF 1/4" PEA GRAVEL AS SHOWN ON THE CROSS-SECTION.
2. INSTALL THE WETLANDS SOIL ON AN 8-INCH LAYER COMPRISED (WITHIN NON-SITE WETLAND SOIL. ONLY HAS BEEN SPECIALLY FOR RE-USE OF WETLAND SOILS ARE
   COMPOST = 25%
   LOAM = 25%
   PEAT MOSS = 25%
   COARSE SAND (ASTM C) = 25%
3. LOAM AND SEED ALL THE SLOPES OF THE GRAVEL WETLAND AS PRESCRIBED IN THE PERMANENT VEGETATION" NOTES FOUND ON SHEET C-10 SEED MIX NUMBER = A
4. PLANT THE BOTTOM OF THE GRAVEL WETLAND AS PRESCRIBED IN THE FOLLOWING DESCRIPTION

WET MEADOW SEED MIX

LEAN SUPERIOR (ALNUS CAP LAT), SHRUBLIS SERVICEBERRY (AMELANCHIER CANADENSIS) BLACK-CHOKE (PRUNUS VIRGINIANA) (ILEX VERTICILLATA) GREEN ARROW (ARUNDINARIA GIGANTEA) BUTTERFLYWEED (ASCLEPIAS TUBEROSA) HONEYBEE MASTER (CHELONE GLABRA) CARDINAL FLOWER (LOBELIA CARDINALIS) HONEYBEE ALBA (PRUNUS SERRULATA) SWAMP MILKWEED (ASCLEPIAS INCARNATA) SWAMP MILKWEED AND EVERGREEN GRAMINOIDS (MARGINA LEAF WOLDMARSH)

THIS MIX IS USED FOR STRAIGHT SEEDING APPLICATIONS OR WET MEADOW CREATION AREAS IT CAN ALSO BE USED AS AN UNDERSTORY SUPPLEMENTAL SEED MIX IN ANY WETLAND CREATION, RESTORATION OR ENHANCEMENT APPLICATION. SEED MIX SHOULD BE APPLIED UNDER WETLAND SOILS ONE SPRINGER. SEEDING CAN BE COMPLETED ON FROZEN GROUND, HOWEVER, WE RECOMMEND A HIGHER SEEDING RATE TO ACCOUNT FOR PROBABLE SEED LOSS.

RECOMMENDED SEEDING RATES

SUPPLEMENTAL LB/ACRE 30 FT OR STRAIGHT LB/1,000 SQFT.

MAINTENANCE REQUIREMENTS

1. INSPECT PRETREATMENT MEASURES (I.E. SEDIMENT FOREBAY(S), INFLOWS CATCH BASINS, ETC.) BI-ANNUALLY ONCE IN THE SPRING PRIOR TO MAY 15 AND ONCE IN THE FALL PRIOR TO OCTOBER 15.
2. INSPECT GRAVEL WETLAND SURFACE BI-ANNUALLY ONCE IN THE SPRING PRIOR TO MAY 15 AND ONCE IN THE FALL PRIOR TO OCTOBER 15.
3. INSPECT GRAVEL WETLAND AFTER ANY RAINFALL EVENT OF 2.5-INCHES OR A 24-HOUR PERIOD OR GREATER.
4. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENT BASED ON INSPECTION REPAIR AREAS OF REMOVAL AS NECESSARY.
5. PERFORM MAIN-TENANCE AND REHABILITATION BASED ON INSPECTIONS.
6. REMOVE DEBRIS (IF ANY) FROM INFILTRATION BASIN OUTLET BASED ON INSPECTION.
7. CONDUCT PERIODIC MOWING OF THE INFILTRATION BASIN SLOPES AND EMBANKMENTS MINIMUM TWICE A YEAR TO ELIMINATE WOODY GROWTH FROM THE EMBANKMENTS AND BOTTOM. MOWING THE INFILTRATION BASIN EMBANKMENTS WHEN MOWING THE REST OF THE SITE IS RECOMMENDED.
8. REMOVE PLANT MATERIAL THAT DIES BACK IN THE FALL FROM THE GRAVEL WETLAND SURFACE (I.E. BRAMBLES, BEDING, ETC.) ONLY REMOVE THE WOODY GROWTH THAT DOES NOT DIE BACK. LEAVE THE DEAD PLANT MATERIAL.
9. IF THE GRAVEL WETLAND DOES NOT DRAIN WITHIN 72-HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL (I.E. PROFESSIONAL ENGINEER, CERTIFIED WETLAND OR SOILS SCIENTIST OR LANDSCAPE ARCHITECT, ETC.) SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE WHETHER IT IS UNDER ITS INTENDED FUNCTION, INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENT OR RECONSTRUCTION OF THE STONE BED AND PIPE WORK.

GRAVEL WETLAND BASIN DETAILS

TAX MAP 243, LOT 39-3

13 HEALTHCARE DRIVE

ROCHESTER, NH

PREPARED FOR:

DEW PROPERTIES, LLC

SCALE: AS SHOWN MARCH 2014

FILE NO 102
PLAN NO. C-2695
DWG NO. 13124/SP-1
FB NO "33" "GAK"

31 Mooney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

2 Continental Blvd., Rochester, N.H. 603-335-3948

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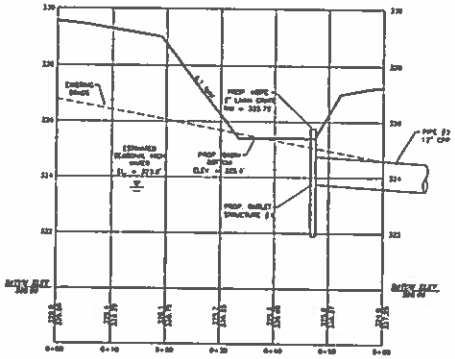
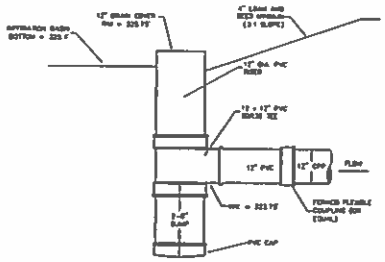
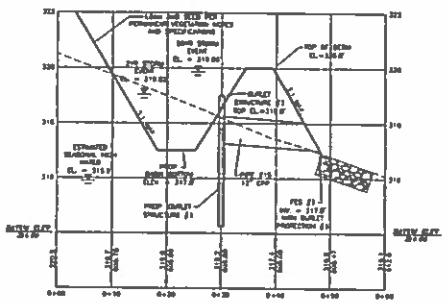


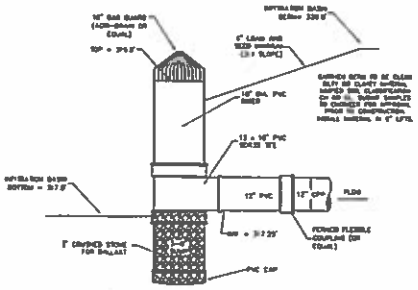
INFILTRATION BASIN #1 CROSS SECTION
1" = 10' (HORZ.) & 1" = 2' (VERT.)



INFILTRATION BASIN #1
OUTLET STANDPIPE DETAIL
NOT TO SCALE



INFILTRATION BASIN #2 CROSS SECTION
1" = 10' (HORZ.) & 1" = 2' (VERT.)



INFILTRATION BASIN #2
OUTLET STANDPIPE DETAIL
NOT TO SCALE

INFILTRATION BASIN:

SPECIFICATIONS

1. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (SUMP, WATER FROM EXCAVATIONS) TO THE INFILTRATION BASIN.
2. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT IF FEASIBLE. PLACEMENT EXCAVATIONS WITH EQUIPMENT PERFORMED OUTSIDE THE LIMITS OF THE INFILTRATION BASIN.
3. AFTER THE BASIN IS EXCAVATED TO THE FINAL DESIGN ELEVATION, THE FLOOR SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW TO RESTORE INFILTRATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG.
4. VEGETATION SHALL BE ESTABLISHED IMMEDIATELY AFTER FINAL GRADING IS COMPLETED.
5. CONSTRUCT THE INFILTRATION BASIN TO THE GRADES DEPICTED ON THE PLAN AND CROSS-SECTION.
6. LOAM AND SEED ONLY THE SLOPES OF THE INFILTRATION BASIN AS PRESCRIBED IN THE "TEMPORARY MEASURES" NOTES FOUND ON SHEET 13 "SESC DETAILS".
7. DO NOT PLACE INFILTRATION SYSTEMS INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

MAINTENANCE REQUIREMENTS

1. INSPECT PRE-TREATMENT MEASURES (I.E. SEDIMENT FORE-BAYS, HOODED CATCH BASINS, ETC.) AT LEAST ONCE A YEAR AND AFTER EVERY STORM EXCEEDS OVER 2.5 INCHES OF RAIN OVER A 24-HOUR PERIOD.
2. INSPECT INFILTRATION SURFACE BI-ANNUALLY: ONCE IN THE SPRING PRIOR TO MAY 15 AND ONCE IN THE FALL PRIOR TO OCTOBER 15.
3. INSPECT INFILTRATION SURFACE AFTER ANY RAINFALL EVENT OF 2.5-INCHES OR GREATER IN A 24-HOUR PERIOD.
4. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENT BASED ON INSPECTION. REPAIR AREA OF SEDIMENT AS NECESSARY TO RESTORE INFILTRATION CAPACITY.
5. PERFORM MAINTENANCE AND REHABILITATION BASED ON INSPECTIONS.
6. REMOVE DEBRIS OF ANY KIND FROM INFILTRATION BASIN INLET BASED ON INSPECTION.
7. CONDUCT PERIODIC MOWING OF THE INFILTRATION BASIN SLOPES AND EMBANKMENTS (MINIMUM TWICE A YEAR) TO ELIMINATE WOODY GROWTH FROM THE EMBANKMENTS AND BOTTOM. MOWING THE INFILTRATION BASIN EMBANKMENTS MUST BEGIN AT THE BEST OF THE SITE IS RECOMMENDED.
8. IF THE INFILTRATION SYSTEM DOES NOT DRAIN WITHIN 72-HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL (I.E. PROFESSIONAL ENGINEER, CERTIFIED SOIL SCIENTIST, ETC.) SHALL ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE INFILTRATION FUNCTION, INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR RECONSTRUCTION OF THE INFILTRATION SURFACE.

INFILTRATION BASIN DETAILS
TAX MAP 243, LOT 39-3
13 HEALTHCARE DRIVE
ROCHESTER, NH

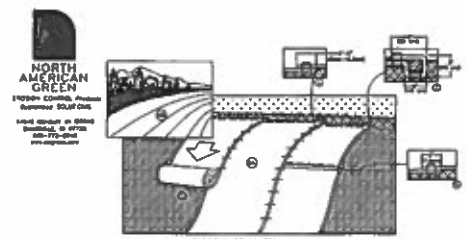
PREPARED FOR:
DEW PROPERTIES, LLC
SCALE: AS SHOWN MARCH 2014

FILE NO. 102
PLAN NO. C-2695
DWG NO. 13124/SP-1
F.B. NO. "31" "CAK"

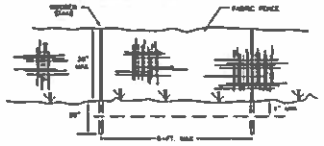
31 Mooney Street, Alton, N.H. 603-875-3948

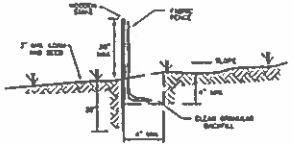
NORWAY PLAINS ASSOCIATES, INC.

2 Continental Blvd., Rochester, N.H. 603-335-3948



SLOPE INSTALLATION



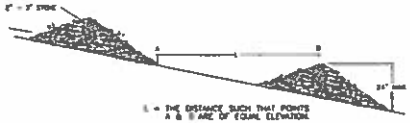


TEMPORARY EROSION CONTROL BLANKET DETAIL

NOT TO SCALE

SPACING BETWEEN CHECK DAMS	
SLOPE (%)	LENGTH (FT)
0-5%	75
5-8%	50
8-12%	35
12-16%	25
16-20%	15
20-25%	13
25-33%	10

DRAINAGE WAY CROSS-SECTION



L = THE DISTANCE SUCH THAT POINTS A & B ARE OF EQUAL ELEVATION

SPACING BETWEEN STONE CHECK DAMS

STONE CHECK DAM INSTALLATION DETAIL

NOT TO SCALE

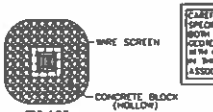
SILTATION CONTROL FENCE DETAIL

NOT TO SCALE

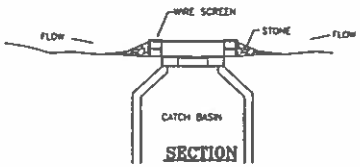
TEMPORARY VEGETATION SEEDING RECOMMENDATIONS

SPECIES	PER ACRE (POUNDS (PLS) OR POUNDS (LBS))	PER 1,000 SF	REMARKS
WINTER RYE	2.5 BU OR 112 LBS	2.5 LBS.	BEST FOR FALL SEEDING. SEED FROM AUGUST 15 TO SEPTEMBER 15 FOR BEST COVER. SEED TO A DEPTH OF 1 INCH
OATS	2.5 BU OR 80 LBS	2.0 LBS.	BEST FOR SPRING SEEDING. SEED 100 LBS PER BU AT 75 PER CENT GERMINATION. SEED TO A DEPTH OF 1 INCH
PERENNIAL RYE GRASS	40 LBS.	1.0 LB.	GROWS QUICKLY, BUT IS OF SHORT DURATION. USE WHEN APPEARANCE IS IMPORTANT. SEED EARLY SPRING AND/OR BETWEEN AUGUST 15 AND SEPTEMBER 15. COVER THE SEED WITH NO MORE THAN 0.25 INCH OF SOIL
PERENNIAL RYE GRASS	30 LBS.	0.7 LBS.	BEST FOR FALL SEEDING. SEED FROM AUGUST 15 TO SEPTEMBER 15 FOR BEST COVER. SEED TO A DEPTH OF 1 INCH

SOURCES:
1. USDA NATURAL RESOURCES CONSERVATION MANUAL, VOLUME 2, TABLE 6-1
2. HANNON, E.L. AND H.I. MARSHALL, (AUGUST 1992)



PLAN



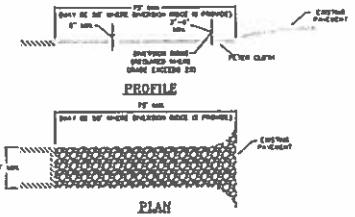
SECTION

BLOCK AND GRAVEL DROP INLET SEDIMENT FILTER

NOT TO SCALE

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO ENSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN OR THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948

TEMPORARY VEGETATION:



TEMPORARY CONSTRUCTION EXIT

NOT TO SCALE

TEMPORARY EROSION AND SEDIMENTATION CONTROL DETAILS

TAX MAP 243, LOT 39-3
13 HEALTHCARE DRIVE
ROCHESTER, NH

PREPARED FOR:
DEW PROPERTIES, LLC

SCALE: AS SHOWN MARCH 2014

FILE NO 102
PLAN NO. C-2695
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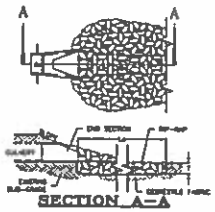
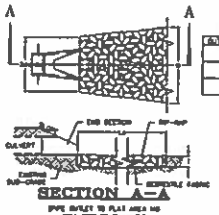


RIP-RAP GRADATION

.050 = 3"		
% OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE (INCHES)	
100	3	6
85	1	5
50	1	3
15	1	2

.050 = 4"		
% OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE (INCHES)	
100	4	8
85	1	6
50	1	4
15	1	3



APRON DIMENSION TABLE

OUTLET PIPE	APRON DIMENSIONS					
		D	W	L1	L2	H
8"	8" CMP OUTLET	4'0"	10'0"	14'0"	12'0"	2'0"
12"	12" CMP OUTLET	5'0"	12'0"	19'0"	15'0"	2'0"
15"	15" CMP OUTLET	7'0"	14'0"	22'0"	18'0"	2'0"

NOTES:
1. ALL PIPE OUTLETS SHALL HAVE END SECTIONS OR HEADWALLS. END SECTION MATERIAL AND CONSTRUCTION SHALL MATCH THAT OF THE PIPE OUTLET.
2. THE LARGEST RIP-RAP SIZE DETERMINED FROM HYDRAULIC ANALYSIS HAS BEEN USED FOR ALL OUTLETS FOR ECONOMY AND SIMPLICITY.
3. APRON LENGTHS, WIDTHS AND THICKNESSES HAVE BEEN ROUNDED UP TO WHOLE NUMBERS FOR EASE OF CONSTRUCTION.

CONSTRUCTION SPECIFICATIONS
1. PREPARE SUB-GRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIP-RAP TO THE GRADES SHOWN ON THE PLANS.
2. SPREAD 6" SAND/GRAVEL BEDDING OR GEOTEXTILE FABRIC REQUIRED UNDER ALL BLOCK RIP-RAP.
3. THE BLOCK OF GRAVEL USED FOR FILTER ON RIP-RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
4. GEOTEXTILE FABRIC SHALL BE PROTECTED FROM PUNCTURE OR TEARING WHILE THE PLACEMENT OF BLOCK RIP-RAP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO OR MORE PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
5. LIKEWISE THE RIP-RAP MUST BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.
6. RIP-RAP SIZE CHANGES FOR THE WIDER CASE OF ALL OUTLETS. ALL RIP-RAP USED FOR PIPE OUTLET PROTECTION WILL HAVE THE SAME GRADATION AND THICKNESS.

MAINTENANCE NOTES
1. OUTLETS SHALL BE INSPECTED AND CLEANED ANNUALLY AND AFTER ANY MAJOR STORM EVENT. ANY EROSION OR DAMAGE TO THE RIP-RAP SHALL BE REPAIRED IMMEDIATELY.
2. THE CHANNEL IMMEDIATELY DOWNSTREAM FROM THE OUTLET SHOULD BE CHECKED TO SEE THAT NO EROSION IS OCCURRING.
3. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, BRUSH, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPE. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO THE OUTLET PROTECTION WORK.

PIPE OUTLET PROTECTION DETAIL

DUST CONTROL PRACTICES:

1. APPLY DUST CONTROL MEASURES AS NECESSARY TO MAINTAIN CONTROL OF DUST ON SITE.
2. WATER APPLICATION
   A) WATER SPRAYED ON SURFACES PERIODICALLY WITH SUFFICIENT WATER TO CONTROL DUST
   B) AVOID EXCESSIVE APPLICATION OF WATER THAT COULD RESULT IN MOBILIZING SEDIMENT AND SUBSEQUENT DEPOSITION IN NATURAL WATERWAYS.
3. STONE APPLICATION
   A) COVER SURFACE WITH CRUSHED OR COARSE GRAVEL.
   B) IN AREAS NEAR WATERWAYS USE ONLY CHEMICALLY STABILIZED OR COARSE AGGREGATE.
4. REFER TO "NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 2 CONSTRUCTION PHASE EROSION AND SEDIMENT CONTROLS, DECEMBER 2008" FOR OTHER ALLOWABLE DUST CONTROL PRACTICES (I.E. COMMERCIAL TACKIFIERS OR CHEMICAL TREATMENTS SUCH AS CALCIUM CHLORIDE, ETC.)

STOCKPILE PRACTICES:

1. LOCATE STOCKPILES A MINIMUM OF 50-FT AWAY FROM CONCENTRATED FLOWS OF STORMWATER, DRAINAGE COURSES OR WATER.
2. PROTECT ALL STOCKPILES FROM STORMWATER RUN-ON USING TEMPORARY PERIMETER MEASURES SUCH AS SANDBAGS, SILTSACKS, SANDBAGS OR OTHER APPROVED PRACTICES.
3. STOCKPILES SHALL BE SURROUNDED BY SEDIMENT BARRIERS AS REFERENCED ON THE PLANS AND IN NHDES VOL. 3 TO PREVENT SEDIMENTATION OF WATERWAY BEYOND THE DOWNHILL EDGE(S) OF THE STOCKPILE.
4. IMPLEMENT WIND EROSION CONTROL PRACTICES AS APPROPRIATE ON ALL STOCKPILED MATERIAL.
5. PLACE BARRIER MATERIALS ON PALLETS OR UNDERNEATH.

PROTECTION OF INACTIVE STOCKPILES
1. INACTIVE SOIL STOCKPILES SHALL BE COVERED WITH ANCHORED TARPS OR PROTECTED WITH SOIL STABILIZATION MEASURES (TEMPORARY SEED AND MULCH OR OTHER TEMPORARY STABILIZATION PRACTICE) AND TEMPORARY PERIMETER SEDIMENT BARRIERS (I.E. SILT FENCE, ETC.) AT ALL TIMES.
2. INACTIVE STOCKPILES OF CONCRETE RUBBLE, ASPHALT CONCRETE RUBBLE, AGGREGATE MATERIALS AND SIMILAR MATERIALS SHALL BE PROTECTED WITH TEMPORARY SEDIMENT PERIMETER BARRIERS (I.E. SILT FENCE, ETC.) AT ALL TIMES. IF THE MATERIALS ARE A SOURCE OF DUST, THEY SHALL ALSO BE COVERED.

PROTECTION OF ACTIVE STOCKPILES
1. ALL STOCKPILES SHALL BE SURROUNDED WITH TEMPORARY LINED SEDIMENT BARRIERS (I.E. SILT FENCE, ETC.) PRIOR TO THE START OF CONSTRUCTION. PERIMETER BARRIERS SHALL BE MAINTAINED AT ALL TIMES, AND REPAIRED AS NEEDED TO ACCOMMODATE THE DELIVERY AND REMOVAL OF MATERIAL FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIER SHALL BE INSPECTED AT THE END OF EACH WORKING DAY.
2. WHEN A STORM IS FORECAST, STOCKPILES SHALL BE PROTECTED WITH AN ANCHORED PERIMETER COVERING.

PERMANENT VEGETATION:

MULCHING
1. INSTALL MULCH AS NECESSARY TO PROTECT AREAS FROM EROSION UNTIL PERMANENT VEGETATION IS ESTABLISHED.

SEED PREPARATION
1. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL SEEDBED PREPARATION SHALL BE ON THE GENERAL CONTOUR. CONTOUR TILLAGE WITH A SEEDBOX IS ADVISED. FINE SEEDING IS PREFERRED. ALL DRY SLAT AND SILT SOILS SHALL BE ROLLED TO PACK THE SEEDBED OVERNIGHT (TIMELY).
2. REMOVE STONES OVER 6 INCHES ALL STONES 6 INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS SUCH AS WIRE, CABLE, TRUE ROOTS, CONCRETE CLODS, LUMPS, BRUSH OR OTHER UNSUITABLE MATERIAL.
3. IMPORT SEDIMENT JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE TILLED AND FORMED AS ABOVE.
4. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 3 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
5. IF AVAILABLE, FERTILIZER AND ORGANIC SOIL AMENDMENTS SHALL BE APPLIED DURING THE GROWING SEASON.
6. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. FERTILIZER SHALL BE REFERENCED TO LOW, GOOD AND HIGH LEVEL PHOSPHATE AND SLOW RELEASE NITROGEN (WHERE NEEDED, UNLESS A SOIL TEST DOCUMENTS OTHERWISE). IF SOIL TESTING IS NOT FEASIBLE THE SOIL WILL BE HANDLED THUS. ON GROSS GRADE IN CRITICAL FERTILIZER AND LIMESTONE MAY BE APPLIED AT THE FOLLOWING RATES.

LIMESTONE APPLICATION RATE = 2 TONS/ACRE (100 LB /1,000-SF)
"EQUIVALENT TO ONE CALCIUM PLUS MAGNESIUM BASE"

FERTILIZER APPLICATION RATE = 500 LB/ACRE (20 LB /1,000-SF)
"LOW PHOSPHATE FERTILIZER (0-0-4) OR EQUIVALENT"

SEEDING
1. INSTALLATION ALL SEEDING NEEDS WITH THE CORRECT TYPE OF INOCULANT.
2. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, GRASS SEED BROADCASTER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). NORMAL SEEDING DEPTH IS FROM 1/4 TO 1/2 INCH. HYDROSEEDING THAT INCLUDES MULCH MAY BE LEFT ON SOIL SURFACE.
3. SHOW FEASIBLE EXCEPT WHERE STRONG CLAY-SHALE TYPE SEEDER OR HYDROSEEDER IS USED. THE SEEDBED SHALL BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A ROLLER, OR LIGHT DRAG.
4. SEEDING SEEDING USUALLY GIVES THE BEST RESULTS FOR ALL SEED MIXES AND WITH LIMITED PERMANENT SEEDING SHALL BE COMPLETED AS EARLY PRIOR TO FIRST KILLING FROST. WHEN GROWTH WITH IS SEEDED IN LATE SUMMER AT LEAST 300 OF THE SEED SHALL BE HARD SEED (DORMANT). IF SEEDING CANNOT BE DONE WITHIN THE SPECIFIED SEEDING DATES, REFER ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING" PRACTICE REFERENCED IN THE GROWING VOL. 2.
5. AREAS SEEDED BETWEEN MAY 15 AND AUGUST 15 SHALL BE COVERED WITH HAY OR STRAW MULCH, ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING" PRACTICE REFERENCED IN THE GROWING VOL. 2.
6. VEGETATED GROWTH MUST CONSTITUTE AT LEAST 85% OF THE DISTURBED AREA SHALL BE ACHIEVED PRIOR TO REMOVAL TO. IF THE CONDITION IS NOT ACHIEVED, IMPLEMENT OTHER TEMPORARY STABILIZATION MEASURES FOR OVER WINTER PROTECTION.

MAINTENANCE
1. UPON WORKMANSHIPS (MANDATORY) APPLICATIONS, PREPARE THE SEEDBED AS SPECIFIED ABOVE ON DRY GROUND IN LOBBLE AND SHOWER THE SOIL AND REACHE SURFACE EXPOSES LONGER THAN 2 INCHES ON GRADE TEE.
2. SLOPES SHOT OF ANY GRADIENT THAN 3:1 (3 FEET HORIZONTALLY BY 1 FOOT VERTICALLY) ARE NORMALLY
3. LIME AND FERTILIZER MUST BE APPLIED SIMULTANEOUSLY WITH THE SEED. THE USE OF FIBER MULCH ON CRITICAL AREAS IS NOT RECOMMENDED UNLESS IT IS NEED TO HOLD STRAW ON MULCH. ANCHORING THE STRAW MULCH AND MULCHING AT THE RATE OF 1 TON ABSORBENT MATERIALS ON 200 POUNDS PER ACRE OF WOOD FIBER MULCH.
4. REPAIR MULCH MUST BE INCREASED BY MORE OVER WORKMANSHIPS.

MAINTENANCE RECOMMENDATIONS
1. PERMANENT SEEDED AREAS SHALL BE INSPECTED AT LEAST MONTHLY DURING THE COURSE OF CONSTRUCTION. INSPECTION, MAINTENANCE AND CORRECTIVE ACTIONS SHALL CONTINUE UNTIL THE OWNER ASSUMES PERMANENT OPERATION OF THE SITE.
2. SEEDED AREAS SHALL BE MOWED AS NECESSARY TO MAINTAIN A HEALTHY STAND OF VEGETATION. MOWING HEIGHT AND FREQUENCY DEPENDS ON TYPE OF GRASS GROWN.
3. BARE OR DEFECTIVE AREAS SHALL BE RESEEDED TO ACHIEVE FULL STABILIZATION OF EXPOSED SOILS.
4. AT LEAST 85% OF THE SOIL SURFACE SHALL BE COVERED BY VEGETATION.
5. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND AREAS SHALL BE REVEGETATED WITH OTHER TEMPORARY MEASURES (I.E. MULCH, ETC.) UNTIL THE PROPER EROSION PROTECTION DURING THE PERIOD OF VEGETATION ESTABLISHMENT.

PERMANENT VEGETATION SEEDING RECOMMENDATIONS

USE	MIXTURE	SPECIES	LBS./ACRE	LBS./1,000-SF
DEEP CUTS AND FILLS, EROSION AND DISPERSAL AREAS	A	TALL FESCUE CREEPING RED FESCUE RED TOP TOTAL	30 30 2 62	0.70 0.70 0.05 1.45
INTENSIVE, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER	A	TALL FESCUE CREEPING RED FESCUE RED TOP TOTAL	30 30 2 62	0.70 0.70 0.05 1.45
LIGHTLY USED PARKING LOTS, CUT AREAS, UNUSED LANDS, AND LOW MAINTENANCE RECREATION SITES	A	TALL FESCUE CREEPING RED FESCUE RED TOP TOTAL	30 30 2 62	0.70 0.70 0.05 1.45
PLAY AREAS AND HIGH USE FIELDS (TROPICAL ESSENTIAL FOR GOOD TURF)	F	CREEPING RED FESCUE KENTUCKY BLUEGRASS TOTAL	50 50 100	1.15 1.15 2.30

REFERENCE
1. NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 3.
   TABLES 6-2 AND 6-3
2. DONNER, E.E. AND H.E. MARSHALL (AUGUST 1962)

GENERAL CONSTRUCTION PHASING:

1. STABILIZATION
   A) ALL AREAS STABILIZED WHICH IT IS IN A CONDITION IN WHICH THE SOIL ON THE HILL WILL NOT EXPERIENCE ACCELERATED OR EXCESSIVE EROSION UNDER THE CONDITIONS OF A 10-YEAR STORM EVENT, SUCH AS BUT NOT LIMITED TO:
   A) ALL AREAS SHALL BE WELL WITH SO FAR:
      1) A MINIMUM OF 85% VEGETATIVE COVER HAS BEEN ESTABLISHED
      2) A MINIMUM OF 3-INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE ON A COMPACTED COMPACT SUBGRADE HAS BEEN INSTALLED, OR
      CONSTRUCTION CONTINUES ACTIVELY HAS BEEN INSTALLED.
   B) ALL AREAS TO BE PLACED
      1) BARE COURSE GRAVELS HAVE BEEN INSTALLED
2. TEMPORARY STABILIZATION
   A) ALL AREAS OF EXPOSED OR DISTURBED SOIL SHALL BE TEMPORARILY STABILIZED AS SOON AS PRACTICABLE BUT NOT LATER THAN 14 DAYS FROM THE DATE OF INITIAL DISTURBANCE, UNLESS A SHORTER TIME IS SPECIFIED BY LOCAL AUTHORITIES. THE CONSTRUCTION SEQUENCE APPROVED AS PART OF THE ISSUED PERMIT OR AS SUBSEQUENTLY MODIFIED.
3. PERMANENT STABILIZATION
   A) ALL AREAS OF EXPOSED OR DISTURBED SOIL SHALL BE PERMANENTLY STABILIZED AS SOON AS PRACTICABLE BUT NOT LATER THAN 3 MONTHS FROM THE DATE OF THE INITIAL DISTURBANCE.
   B) THE INITIAL DISTURBANCE SHALL BE GUARDED DURING CONSTRUCTION, BUT IN NO CASE EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREA ARE STABILIZED.
4. ONLY METERS, CLEAR, OR GRADE AREAS NECESSARY FOR CONSTRUCTION
   A) PLAN OR GRADEPOINT DISTURBANCE AREAS NOT TO BE DISTURBED.
   B) INCLUDE VEHICLES AND CONSTRUCTION EQUIPMENT FROM DISTURBED AREAS TO PRESERVE NATURAL VEGETATION.
5. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED GRADING AND DRAINAGE PLAN DETAILED ON SHEET C-3.
6. ALL EROSION AND SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN DETAILED ON SHEET C-3.
7. TEMPORARY DIVERSIONS SHALL BE PROVIDED AS NECESSARY TO PROTECT EXPOSED AREAS FROM EROSION.
8. STOCKPILES, BORROW AREAS AND SPOILS SHALL BE STABILIZED AS NECESSARY TO PREVENT EROSION.
9. SLOPES SHALL NOT BE ERODED TO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJACENT PROPERTIES WITHOUT ADEQUATE PROTECTION AGAINST SEDIMENTATION, EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED DAMAGE.
10. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIALS.
11. AREAS SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 2-INCHES PRIOR TO PLACEMENT OF MATERIAL. TOPSOIL SHALL BE PLACED ON MOIST SUBGRADE CONSTRUCTED TO PROVIDE A GOOD BEDDING FOR PLACEMENT OF SOIL.
12. ALL FILLS SHALL BE COMPACTED IN ACCORDANCE WITH PROJECT SPECIFICATIONS TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE AND OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES, ROAD BEDS, OR OTHER FACILITIES SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
13. IN GENERAL, FILLS SHALL BE COMPACTED TO LAYERS NOT EXCEEDING 8 TO 24 INCHES IN THICKNESS. THE CONTRACTOR SHALL REVIEW THE PROJECT GEOTECHNICAL REPORT AND/OR THE "PROJECT SPECIFIC PHASING SHEET" FOR SPECIFIC GUIDANCE.
14. ANY ROCK AND FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS LARGER THAN 24-INC DEPTH OF THE LIFT BEING INSTALLED, LOGS, STUMPS, BUILDING BRICKS, PLASTER, MATERIAL AND OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY LIFTS.
15. FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE (I.E. CLAY, SILT) SOIL MATERIALS AND ANY MATERIAL THAT WOULD NOT PROVIDE THE REQUIRED ACCELERATED EROSION. NONE OF ABOVE OF THESE MATERIALS SHALL BE USED IN THE FILL CONSTRUCTION OF A PROFESSIONAL ENGINEER.
17. THE ENTIRE FACE OF THE FILL SLOPE SHALL BE COMPACTED TO STAY LOOSE, AND ROLLED OR COMPACTED, OR BLADE SMOOTHED. A BULLDOZER MAY RUN UP AND DOWN THE FILL SLOPE ON THE SMOOTH AND LOOSE TRACKS (TRACK ENGINE) CREATE GROOVES PERPENDICULAR TO THE SLOPE. IF THE SOIL IS WET FROM WORK, EXCESSIVE COMPACTION MAY NOT OCCUR. SEE "MANUAL REQUIREMENT" IN THE GROWING VOL.2
18. ROUGHEN THE SURFACE OF ALL SLOPES DURING THE CONSTRUCTION OPERATIONS TO RETAIN AND PROMOTE ANY VEGETATION AND FACILITATE VEGETATION ESTABLISHMENT.
19. ALL SLOPE PLANNED, SEED OR SHOWERED, SHOULD BE CONTOUR PLANNED AS APPROPRIATE TO REDUCE THE LENGTH OF CLIMBING SLOPES TO NO MORE THAN 3 ONE ALL GRADED AND PREVENT GULLY EROSION. ALL BROKEN SHALL BE KEPT FREE OF EROSION WITH A MINIMUM OF CONSTRUCTION.
20. STEPS OR BENCHES ENCOUNTERED DURING CONSTRUCTION SHALL BE EVALUATED BY A PROFESSIONAL ENGINEER PROFESSIONAL (AS ADVISED BY THE ENGINEER) TO DETERMINE IF THE PROPOSED DESIGN SHALL BE REVISED TO ADEQUATELY ADDRESS THE CONDITION.
21. STABILIZE ALL GRADED AREAS (AS ABOVE) WITH VEGETATION, CRUSHED STONE, DEPOSIT BLANKET OR OTHER GROUND COVER AS SOON AS GRADING IS COMPLETE OR IF WORK IS INTERRUPTED FOR 30 MINIMUM DAYS OR MORE. USE MULCH OR OTHER GROUND COVERING TO STABILIZE AREAS TEMPORARILY UNDER FINAL GRADING MUST BE DELAYED.
22. ALL GRADED AREAS SHALL SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.
23. THE PROJECT SHALL BE CONSTRUCTED TO MEET ALL REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AND RULE ALLOWS TO ENSURE SPECIES.

ABOVE NOTES EXCERPTED, ADAPTED AND REFERENCED FROM "NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 2 CONSTRUCTION PHASE EROSION AND SEDIMENT CONTROLS, DECEMBER 2008" (Section, Vol. 3)

PROJECT SPECIFIC CONSTRUCTION PHASING:

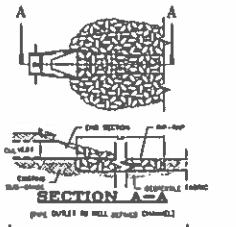
1. NOTE TO THE "GENERAL CONSTRUCTION PHASING" NOTES PRIOR TO COMMENCING CONSTRUCTION IN ACCORDANCE WITH THE FOLLOWING PHASING. THE "GENERAL CONSTRUCTION PHASING" NOTES APPLY TO THE OVERALL CONSTRUCTION AND SHALL BE ADHERED TO.
2. INSTALL ALL TEMPORARY SEDIMENT CONTROL BARRIERS (I.E. SILT FENCE, EROSION CONTROL, SAN SERIA, STONE CHECK DAMS, ETC.) AROUND THE OUTER PERIMETER OF THE CONSTRUCTION SITE AS REFERENCED ON SHEET C-3.
3. INSTALL ALL GRADED AREA FENCE AROUND THE PERIMETER OF THE INFILTRATION GRADING AND THE FENCE SHALL REMAIN IN PLACE UNTIL CONSTRUCTION OF THE BASINS HAS STARTED.
4. CLEAR, GRUB AND STRIP THE TOPS, STUMPS, BRUSH AND OTHER GRADING SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
5. INSTALL A TEMPORARY CONSTRUCTION EXIT AT THE LOCATION OF THE PROPOSED DRIVEWAY CONNECTING TO HEALTHCARE DRIVE. DRAINAGE AS DIRECTED BY THE TEMPORARY CONSTRUCTION EXIT DETAIL.
6. STOCKPILE STRIPPED TOPSOIL AND CUT MATERIAL TO BE REMOVED ON SITE IN AN APPROPRIATE LOCATION IN ACCORDANCE WITH THE "SOIL STOCKPILE PRACTICE". MAINTAIN THE STOCKPILES AS DETAILED IN THE "SOIL STOCKPILE PRACTICE".
7. PERFORM THE NECESSARY CUTS AND FILLS TO CONSTRUCT THE GRAVEL WETLANDS BASIN AS REFERENCED ON SHEET C-3 AND IN ACCORDANCE WITH THE WETLANDS BASIN DETAIL DRAWN ON SHEET C-3.
8. PERFORM THE NECESSARY CUTS AND FILLS TO CONSTRUCT THE INFILTRATION BASIN AS REFERENCED ON SHEET C-3 AND IN ACCORDANCE WITH THE INFILTRATION BASIN DETAILS DRAWN ON SHEET C-3.
9. CONSTRUCT THE INFILTRATION BASIN AND OUTLET PROTECTION. LOAM SEED AND MULCH THE SIDE SLOPES OF THE BASIN AS DIRECTED IN THE INFILTRATION BASIN DETAILS.
10. CONSTRUCT THE GRAVEL WETLANDS BASIN, SEDIMENT FOREBAY AND OUTLET PROTECTION. LOAM SEED AND MULCH THE SIDE SLOPES OF THE BASIN AS DIRECTED IN THE INFILTRATION BASIN DETAILS.
11. ALL BASINS/SWALES/AND BASINS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
12. PERFORM THE NECESSARY CUTS AND FILLS TO SUBGRADE IN THE BUILDING AND PERFORM THE FOLLOWING:
   A) INSTALL REQUIRED FILLS IN MAXIMUM 8-INCH LIFTS AND COMPACT EACH LIFT TO 95% MAXIMUM PROCTOR DENSITY
   B) SUBGRADE IS ADVISED INSTALL REQUIRED SEDIMENT CONTROL BARRIERS WITHIN THE SITE (I.E. ADDITIONAL SILT FENCE, CHECK DAMS AND SEDIMENT CONTROL AND EXISTING BASINS, ETC.)
13. INSTALL ALL UTILITIES AND CLOSED DRAINAGE SYSTEM COMPONENTS (I.E. PIPE DIVERTS, CATCH BASINS, AND DRAINAGE INLETS MADE FOR THE CONSTRUCTION DETAILS AND AS SHOWN ON SHEET C-3 AND C-4. AS EACH CATCH BASIN IS INSTALLED, THE CONTRACTOR SHALL PROVIDE TEMPORARY SEDIMENT CONTROL BARRIER DETAILED ON SHEET C-3.
14. ALL DRAINAGE AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE OR LONGER THAN 30 DAYS AFTER THE LAST DISTURBANCE. USE TEMPORARY STABILIZATION MEASURES AS DETAILED ON SHEET C-3 AND IN ACCORDANCE WITH THE "TEMPORARY AND PERMANENT MULCHING PRACTICE" WITHIN 3 DAYS OF ACHIEVING FINISHED GRADE.
15. ALL SIDE SLOPES, BERM AND GRADED GRAVEL SHALL BE KEPT FREE OF EROSION AREA AS SPECIFIED IN THE CORRESPONDING DETAILS.
16. WITHIN 72 HOURS OF STOCKPILING SOIL MATERIALS SHALL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT RATE THE NORMAL RATE OR WITH A 4-INCH LAYER OF EROSION CONTROL MIX, WHICH SHALL BE REDISTRIBUTED PRIOR TO ANY RAIN OR SNOWFALL. SOIL STOCKPILE SHALL BE PLACED EVEN CONTOUR WITH MULCH WITHIN 10-FT OF ANY WETLAND OR BASIN AND NO BERM.
17. FROZEN MATERIAL (I.E. FROST LAYER REMOVED DURING WINTER CONSTRUCTION) SHALL BE STOCKPILED SEPARATELY AND IN A LOCATION AWAY FROM ANY AREA NEEDING PROTECTION. FROZEN MATERIAL STOCKPILES CAN NOT BE GROUND AND BECOME UNMANAGEABLE AND DIFFICULT TO TRANSPORT DUE TO HIGH SOIL MOISTURE CONTENT.
18. INSTALLATION OF EROSION CONTROL BLANKETS SHALL NOT OCCUR UNTIL SNOW DEPTH OF GREATER THAN 3 INCH IN DEPTH ON ON FROZEN GROUND.
19. ALL GRADED-LINED DITCHES AND CHANNELS SHALL BE CONSTRUCTED BY SEPTEMBER 1. ALL DITCHES AND SWALES WHICH DO NOT CONTAIN DATA VEGETATION GROWTH BY 80 AND DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE FOR EROSION CONTROL BLANKETS APPROPRIATE TO FOR THE DESIGN FLOW CONDITIONS AS DETERMINED BY A PROFESSIONAL ENGINEER. IF STONE LINING IS NECESSARY, THE CONTRACTOR SHALL INSTALL 30-FT-LONGER THE TOE OF SLOPE TO PROVIDE ADEQUATE EROSION SECTION OF THE ALLOWING FOR PLACEMENT OF THE STONE.
20. ALL STONE LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY OCTOBER 15.
21. AFTER WINTERIZED 15, INCOMPLETE GRADE OR PAVING AREAS WHERE ACTIVE CONSTRUCTION HAS STOPPED FOR THE WINTER SHALL BE PROTECTED WITH A MINIMUM 3 INCH LAYER OF SAND AND GRAVEL WITH A GRADATION THAT IS LESS THAN 125 OF THE SAND FRACTION, OR MATERIAL PASSING THE NUMBER 4 SIEVE, BY WEIGHT, PASSES THE NUMBER 200 SIEVE.
22. SEDIMENT BARRIERS THAT ARE INSTALLED DURING FROZEN CONDITIONS SHALL CONSIST OF EROSION CONTROL MIX BERMS OR CONTAINING CONTAINED BERMS. SILT FENCES AND HAY BALES SHALL NOT BE INSTALLED WHEN FROZEN CONDITIONS PREVENT PROPER EMBEDMENT OF THESE BARRIERS.

CONSTRUCTION PRACTICES:

MAINTENANCE REQUIREMENTS
1. MAINTENANCE REQUIRED SHALL BE PERFORMED THROUGHOUT CONSTRUCTION, INCLUDING ONCE THE PROJECT PHASE IS OFF LONG SHALL. INSPECTIONS OR PERIOD OF TRAINING AND GUARDS. THE SITE CONTRACTOR SHALL CONDUCT INSPECTION OF ALL INSTALLED EROSION CONTROL PRACTICES AND PERFORM REPAIRS AS NEEDED TO ENSURE THEIR CONTINUED FUNCTIONS.
2. FOR ANY AREA STABILIZED BY TEMPORARY OR PERMANENT SEEDING PRIOR TO THE ONSET OF THE WINTER SEASON, THE CONTRACTOR SHALL CONDUCT AN INSPECTION IN THE SPRING TO ASCERTAIN THE CONDITION OF THE VEGETATION AND REPAIR ANY DAMAGED AREAS ON BARE SPOTS AND RESEED AS REQUIRED TO ACHIEVE AN ESTABLISHED VEGETATIVE COVER (AT LEAST 85% OF AREA VEGETATED WITH HEALTHY, VIGOROUS GROWTH.)

REMOVAL
1. THE TEMPORARY STABILIZATION TECHNIQUES SHALL BE EMPLOYED DURING THE PERIOD FROM OCTOBER 15 THROUGH MAY 15.
2. THE AREA OF EXPOSED UNSTABILIZED SOIL SHALL BE LIMITED TO 1/4-ACRE AND SHALL BE PROTECTED AGAINST EROSION BY THE METHODS DETAILED IN GROWING VOL. 2 AND DESCRIBED IN THE PLAN SET, PRIOR TO ANY RAIN OR SNOWMELT EVENT.
3. STABILIZATION AS FOLLOWS SHALL BE COMPLETED WITHIN 3 DAY OF ESTABLISHING THE GRADE SHALL BE FINAL OR ANY OTHERWISE WILL EXIST FOR MORE THAN 3 DAYS.
   A. ALL PROPOSED HEIGHTENED AREAS HAVING A SLOPE OF LESS THAN THE SHOW AND NOT EXCEED 3 INCHES IN DEPTH SHALL BE SEEDED AND MULCHED AFTER OCTOBER 15, SHALL BE SEEDED AND COVERED WITH 3 TO 4 TONS OF HAY OR STRAW MULCH PER ACRE SECURED WITH ANCHORED NETTING, OR 2 INCHES OF EROSION CONTROL MIX PRIOR TO MARCH 1ST, 2 TON PER ACRE.
   B. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF GREATER THAN THE SHOW BUT NOT EXCEED 3 INCHES OF DEPTH AND VEGETATED BY OR ARE DISTURBED AFTER OCTOBER 15 SHALL BE SEEDED AND COVERED WITH A MINIMUM OF 4 INCHES OF EROSION CONTROL BLANKET OR WITH A MINIMUM OF 4 INCHES OF EROSION CONTROL MIX, UNLESS OTHERWISE SPECIFIED BY THE OWNER/OWNER. NOTE THAT COMMERCIAL BLANKETS SHALL NOT EXCEED 3 INCHES IN THICKNESS BUT THEY MAY OVERSEED.
3. ALL STONE CONFINED SLOPES MUST BE CONSTRUCTED AND STABILIZED BY OCTOBER 15.
4. INSTALLATION OF ANCHORED HAY BALES OR EROSION CONTROL MIX SHALL NOT BEGIN UNDER SNOW OR GREATER THAN 1 INCH IN DEPTH.
5. ALL BALES APP

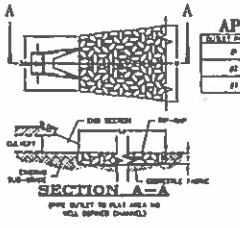
CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITH IN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948



RIP-RAP GRADATION

d50 = 3"			
% OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE (INCHES)		
100	4	6	8
85	3	5	7
50	2	3	4
15	1	2	3

d50 = 4"			
% OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE (INCHES)		
100	6	8	10
85	5	7	9
50	3	4	6
15	2	3	4



APRON DIMENSION TABLE

OUTLET PIPE #	PIPE OUTLET	Wa	W	La	L	d50
#1	12" CPP OUTLET NEW CULVERT	6'5"	20'	14'	12"	4"
#2	12" CPP OUTLET NEW CULVERT	5'	15'	9.5'	9"	3"
#3	12" CPP OUTLET NEW CULVERT	5'	15'	9'	9"	3"

NOTES:

1. ALL PIPE CAPACITY SHALL MEET OR EXCEED THE DESIGN CAPACITY.
2. THE LARGEST RAIN EVENT DETERMINED DURING HYDROLOGIC ANALYSIS HAS BEEN USED FOR ALL OUTLETS FOR CULVERT AND DUMPLOTS.
3. APRON LENGTHS, WIDTHS AND THICKNESS HAVE BEEN ROUNDED UP TO WHOLE NUMBERS FOR EASE OF CONSTRUCTION.

CONSTRUCTION SPECIFICATIONS

1. PREPARE THE SUB-GRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIP-RAP TO THE GRADES SHOWN ON THE PLANS.
2. INSTALL 6" SUBGRADE, SUBBASE OR GEOTEXTILE FABRIC REQUIRED UNDER ALL RIP-RAP.
3. THE ROCK OF SMALL SIZE USED FOR FILTER OR RIP-RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
4. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF ROCK RIP-RAP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. THE OVERLAPS REQUIRED FOR REPAIRS OR JOINS FOR SEWN PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
5. LARGE FOR THE RIP-RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED IN THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.
6. RIP-RAP SHALL BE CHECKED FOR THE PROPER SIZE OF ALL OUTLETS. ALL RIP-RAP USED FOR PIPE OUTLET PROTECTION WILL HAVE THE SAME GRADATION AND THICKNESS.

MAINTENANCE NOTES

1. OUTLETS SHALL BE INSPECTED AND CLEANED ANNUALLY AND AFTER ANY MAJOR STORM EVENT. ANY EROSION OR DAMAGE TO THE RIP-RAP SHALL BE REPAIRED IMMEDIATELY.
2. THE CHANNEL IMMEDIATELY DOWNSTREAM FROM THE OUTLET SHOULD BE CHECKED TO SEE THAT NO EROSION IS OCCURRING.
3. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, BRUSH, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR INCREASE EROSION ON THE PIPES. REPAIRS MUST BE MADE IMMEDIATELY IF ANY CHANGES OCCUR IN THE OUTLET PROTECTION APRON.

PIPE OUTLET PROTECTION DETAIL

DUST CONTROL PRACTICES:

1. APPLY DUST CONTROL MEASURES AS NECESSARY TO MAINTAIN CONTROL OF DUST ON SITE.
2. WATER APPLICATION
   A) WORKER EXPOSED SOIL SURFACE PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST.
   B) AVOID EXCESSIVE APPLICATION OF WATER THAT WOULD RESULT IN OVERLAND SEDIMENT AND POLLUTANT DEPOSITION IN WATERCOURSES OR WETLANDS.
3. TEMP. ANTI-GRADE
   A) SEAL SURFACE WITH CRUSHED OR COARSE GRAVEL.
   B) IN AREAS NEAR WATERWAYS USE ONLY CHEMically STABILIZED OR MULCHED MATERIAL.
4. REFER TO "NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 2 CONSTRUCTION PHASE EROSION AND SEDIMENT CONTROLS, DECEMBER 2008" FOR OTHER ALLOWABLE DUST CONTROL PRACTICES SUCH AS COMMERCIAL TACKIFIERS OR CHEMICAL TREATMENTS SUCH AS CALCIUM CHLORIDE, ETC.

STOCKPILE PRACTICES:

1. LOCATE STOCKPILES A MINIMUM OF 50-FT AWAY FROM CONCENTRATED FLOWS OF STORMWATER, DRAINAGE COURSES OR INLETS.
2. PROTECT ALL STOCKPILES FROM STORMWATER RUN-ON USING TEMPORARY PERIMETER MEASURES SUCH AS SANDBAGS, BERMS, SANDBAGS OR OTHER APPROVED PRACTICES.
3. STOCKPILES SHALL BE SURROUNDED BY SEDIMENT BARRIERS AS REQUIRED ON THE PLANS AND IN PERMIT NO. 2 TO PREVENT MOVEMENT OF MATERIAL BEYOND THE BARRIER COMPRISE OF THE STOCKPILE.
4. IMPLEMENT WIND EROSION CONTROL PRACTICES AS APPROPRIATE ON ALL EXPOSED MATERIAL.
5. PLACE SHREDDED MATERIALS ON PALLETS OR UNDERCOVER.

PROTECTION OF INACTIVE STOCKPILES

6. INACTIVE SOIL STOCKPILES SHALL BE COVERED OR OTHERWISE LEFT UNCOVERED AND PROTECTED WITH SOIL STABILIZATION MEASURES (TEMPORARY SEED AND MULCH OR OTHER TEMPORARY STABILIZATION PRACTICE) AND TEMPORARY PERIMETER SEDIMENT BARRIERS (E.G. SILT FENCE, ETC.) AT ALL TIMES.
7. INACTIVE STOCKPILES OF CONCRETE RUBBLE, ASPHALT CONCRETE RUBBLE, AGGREGATE MATERIALS, AND SIMILAR MATERIALS SHALL BE PROTECTED WITH TEMPORARY SEDIMENT PERIMETER BARRIERS (E.G. SILT FENCE, ETC.) AT ALL TIMES. IF THE MATERIALS ARE A SOURCE OF SPILL THEY SHALL ALSO BE COVERED.

PROTECTION OF ACTIVE STOCKPILES

8. ALL STOCKPILES SHALL BE SURROUNDED WITH TEMPORARY LINEAR SEDIMENT BARRIERS (E.G. SILT FENCE, ETC.) ALONG THE TOE (FRONT) OF PROTRUSION. PERIMETER BARRIERS SHALL BE MAINTAINED AT ALL TIMES, AND MODIFIED AS NEEDED TO ACCOMMODATE THE DELIVERY AND REMOVAL OF MATERIAL FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIER SHALL BE INSPECTED AT THE END OF EACH WORKING DAY.
9. WHEN A STORM IS FORECAST, STOCKPILES SHALL BE PROTECTED WITH AN ANCHORED PROTECTIVE COVERING.

PERMANENT VEGETATION:

VEGETATION

SITE PREPARATION

1. INSTALL SILTATION EROSION AND SEDIMENT CONTROL MEASURES SUCH AS SILTATION BARRIERS, DIVERSIONS, AND SEDIMENT TRAPS.
2. GRADE AS NEEDED FOR THE ACCESS OF EQUIPMENT FOR SEEDING PREPARATION. REMOVE BALDY APPLICATION AND MULCH ANCHORING.
3. REMOVE STONES AND OTHER DEBRIS FROM THE SEEDING AREA.
4. ON SLOPES 3:1 OR STEEPER, THE FINAL PREPARATION SHALL INCLUDE DRAWING HORIZONTAL GROOVES PERPENDICULAR TO THE DIRECTION OF THE SLOPE TO CATCH SEED AND REDUCE RUNOFF.

SEEDBED PREPARATION

1. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL PREPARATION SHOULD BE ON THE CONTOUR, CONVENIENT TO SEEDING EQUIPMENT. IF SEEDING OCCURS AT A SEASONALLY UNFAVORABLE TIME SEEDBED IS PREPARED, ALL DUT CLAY AND SILT SOILS SHALL BE REMOVED TO PRIOR THE SEEDED SURFACE FLAKES.
2. REMOVE FROM THE SURFACE ALL STONES, BRICKS OR LUMPS IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, OLD ROOTS, CONCRETE BLOCK LUMPS, TRASH OR OTHER UNSUITABLE MATERIAL.
3. SUBSOIL SEEDBED AND REMOVE SEEDING, IF TRAFFIC HAS LEFT THE SOIL COMPACTED. THE AREA MUST BE TILLED AND PREPARED AS ABOVE.
4. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
5. IF APPLICABLE, FERTILIZER AND BREAKING SOIL AMENDMENTS SHALL BE APPLIED DURING THE GROWING SEASON.
6. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. FERTILIZER SHALL BE RESTRICTED TO LIME, WOOD ASH OR LOW PHOSPHATE AND SLOW RELEASE NITROGEN VARIETIES, UNLESS A SOIL TEST DOCUMENTS OTHERWISE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR MODULE SITES, OR WHERE GROWTH IS CRITICAL FERTILIZER AND LIMESTONE MAY BE APPLIED AT THE FOLLOWING RATES.

LIMESTONE APPLICATION RATE – 3 TONS/ACRE (130 LB./1,000-SF)
EQUIVALENT TO 300 GALLONS PLUS ENGINEERING ADVICE

FERTILIZER APPLICATION RATE – 600 LB./ACRE (20 LB./1,000-SF)
*LOW PHOSPHATE FERTILIZER (5-20-20) RECOMMENDED

SEEDING

1. INOCULATE ALL LEGUME SEED WITH THE CORRECT TYPE OF INOCULANT.
2. APPLY SEED UNIFORMLY BY HAND, EXCLUDE SEEDER, SMALL SALE SPREADER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER). NORMAL SEEDING DEPTH IS 0 INCH 1/2 TO 1/4 INCH. HYDROSEEDING THAT INCLUDES MULCH MAY BE LEFT ON THE SURFACE.
3. WHEN PLANTING EXCEPT WHERE SEEDS DRILL MACHINE TYPE SEEDER OR HYDROSEEDER IS USED, THE SEEDED SURFACE SHALL BE PRESSED FOLLOWING SEEDING OPERATIONS WITH A ROLLER OR LIGHT DRAG.
4. SPRING SEEDING USUALLY GIVES THE BEST RESULTS FOR ALL SEED MIXES OF WITH LEGUMES. PERMANENT SEEDING SHALL BE COMPLETED AS QUICK PRIOR TO FIRST HALLOW FROST. WHEN GROWN WITH IS NEEDED IN LATE SUMMER AT LEAST 200 OF THE SEED SHALL BE ANNUAL RYE GRASS. IF SEEDING CANNOT BE DONE IN THE SPECIFIED SEEDING DATES, WORK ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING" PRACTICE DESCRIBED IN THE NHDES VOL. 3 AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
5. AREAS SEEDED BETWEEN MAY 15 AND AUGUST 15 SHALL BE COVERED WITH HAY OR SMALL MULCH, ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING" PRACTICE DESCRIBED IN THE NHDES VOL. 3.
6. NEW LAWNS GROWN CONSISTING AT LEAST ONE OF THE DESIRABLE AREA SHALL BE ACHIEVED PRIOR TO OCTOBER 15. IF THIS DATE IS NOT ACHIEVED, IMPLEMENT SPACE "TEMPORARY STABILIZATION MEASURES FOR OVER WINTER PROTECTION.

MAINTENANCE

1. WHEN HYDROSEEDING DURABLE APPLICATIONS, PREPARE THE SEEDBED AS SPECIFIED ABOVE ON BY 0-100 GROWS TO LOOSEN AND BROKEN THE SOIL AND REMOVE SURFACE STONES LARGER THAN 2 INCHES IN DIAMETER.
2. SLOPES STEEP OR SHORTER THAN 2:1 (1 FEET HORIZONTALLY ON 1 FOOT VERTICALLY) LAND AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. THE USE OF FIBER MULCH ON SUCH AREAS IS NOT RECOMMENDED UNLESS IT IS USED TO HOLD STRAW ON PLACE. SETTLE PROTECTION IS GAINED BY USING STRAW MULCH AND MULCHING OF THE ANCHORING MATERIALS ON THE PRIMARY FOR ACRE OF WOOD FIBER MULCH.
3. SEEDING DATES MAY BE INCREASED BY USE MULCH HYDROSEEDING.

MAINTENANCE RECOMMENDATIONS

1. PERMANENT SEEDING PLANS SHALL BE INSPECTED AT LEAST MONTHLY DURING THE COURSE OF CONSTRUCTION. INSPECTION, MAINTENANCE AND CORRECTIVE ACTIONS SHALL CONTINUE UNTIL THE SEEDING PROJECT IS PERMANENT OPEN FROM ON THE SITE.
2. SEEDED AREAS SHALL BE MOWED AS REQUIRED TO MAINTAIN A HEALTHY STAND OF VEGETATION. SEEDING HEIGHT AND FREQUENCY DEPENDS ON TYPE OF GRASS CHOSEN.
3. BASED ON INSPECTION, AREAS SHALL BE RESEEDED TO ACHIEVE FULL STABILIZATION OF EXPOSED SOILS.
4. AT A MINIMUM 80% OF THE SOIL SURFACE SHALL BE COVERED BY VEGETATION.
5. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND AREAS SHALL BE RESEEDED, WITH SUITABLE TEMPORARY MEASURES (E.G. MULCH, ETC.) USED TO PROVIDE EROSION CONTROL DURING THE PERIOD OF VEGETATION ESTABLISHMENT.

PERMANENT VEGETATION SEEDING RECOMMENDATIONS

USE	MIXTURE	SPECIES	LBS./ACRE	LBS./1,000-SF
SEEDS CUTS AND FILLS, BORROW AREAS AND DISPOSAL AREAS	A	TALL FESCUE CREEPING RED FESCUE REDTOP TOTAL	30 30 2 62	0.69 0.69 0.05 1.39
DETENTION, SEDIMENT SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER	A	TALL FESCUE CREEPING RED FESCUE REDTOP TOTAL	30 30 2 62	0.69 0.69 0.05 1.39
LIGHTLY USED PARKING LOTS, SOD AREAS, SHADED LANDS, AND LOW INTENSITY RECREATION SITES	A	TALL FESCUE CREEPING RED FESCUE REDTOP TOTAL	30 30 2 62	0.69 0.69 0.05 1.39
PLAY AREAS AND ATHLETIC FIELDS (TROPICAL ESTUARIAL AND GOOD TURF)	F	CREEPING RED FESCUE PERENNIAL RYEGRASS TOTAL	50 50 100	1.15 1.15 2.30

NOTES:

1. NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 3.
2. SEASONAL E.G. AND N.T. MATERIAL, (AUGUST MAX)

GENERAL CONSTRUCTION PHASING:

1. STABILIZATION
   A) THE DISTURBED STABILIZED WITH IT IS IN A CONDITION IN WHICH THE SOIL ON SITE WILL NOT EROSE/WASH UNDER THE CONDITIONS OF A 25-YEAR STORM EVENT, SUCH AS BUT NOT LIMITED TO:
   a) BLANKETS THAT WILL NOT BE PLACED
   b) A MINIMUM OF 85% VEGETATIVE COVER HAS BEEN ESTABLISHED.
   c) A MINIMUM OF 3-INCHES OF NON-ERODIBLE MATERIAL, SUCH AS STONE OR A CERTIFIED COMPOST BLANKET HAS BEEN INSTALLED, OR
   d) EROSION CONTROL BLANKETS HAVE BEEN INSTALLED.
   B) ON AREAS NO ON FACES.
   C) BARE SLOPES SHOULD HAVE BEEN INSTALLED.
2. TEMPORARY STABILIZATION
   ALL AREAS OF EXPOSED OR DISTURBED SOIL SHALL BE TEMPORARILY STABILIZED AS SOON AS PRACTICAL BUT NO LATER THAN 7 DAYS FOLLOWING FINAL GRADING OR INTERRUPTION OF CONSTRUCTION.
3. MANUAL AS AT CONSTRUCTION
   THE DISTURBED AREA SHALL BE REDUCED WHEN CONSTRUCTION, BUT IN NO CASE EXCEED 5 ACRES AT ANY TIME THE BEFORE DISTURBED AREA ARE STABILIZED.
4. SITE STATUS, CLEAR, OR GRADE AREAS NECESSARY FOR CONSTRUCTION
   A) PLAN OR DEVELOPED DISTURBED AREAS NOT TO BE DISTURBED
   B) EXCLUDE VEHICLES AND CONSTRUCTION EQUIPMENT FROM THESE AREAS TO PREVENT DAMAGE VEGETATION.
5. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED GRADING AND DRAINAGE PLAN REFERRED ON SHEET C-2.
6. ALL EROSION AND SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN REFERRED ON SHEET C-2.
7. REPORTS REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED FOR THE AMOUNT NECESSARY TO COMPLETE PROPOSED DRAINAGE AND BE PROTECTED FROM EROSION.
8. STOCKPILE DRAINAGE AREAS AND SLOPES SHALL BE STABILIZED AS DESCRIBED UNDER "TEMPORARY STABILIZATION".
9. SLOPES SHALL NOT BE CREATED IN CLOSE TO PROPERTY LINES AS TO ENDANGER ADJACENT PROPERTIES WITHOUT ADEQUATE PROTECTION AGAINST REPERCUSSIONS, EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED DAMAGE.
10. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIALS.
11. AREAS SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 2 INCHES PRIOR TO PLACEMENT OF TOPSOIL. TOPSOIL SHALL BE PLACED STRAIGHT DOWNHILL CONTOUR TO PROVIDE A LOOSE SURFACE FOR PLACEMENT OF SEED.
12. ALL FILL SHALL BE COMPACTED IN ACCORDANCE WITH PROJECT SPECIFICATIONS OR REQUIRE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. ALL AREAS TO BE BUILDING SUPPORT, BUILDINGS, STRUCTURES, SITE UTILITIES, DRIVEWAYS AND OTHER FACILITIES, SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
13. ON DRAINAGE, FILLS SHALL BE COMPACTED IN LAYERS NOT MORE THAN 4 TO 24 INCHES IN THICKNESS. THE CONTRACTOR SHALL REVIEW THE PROJECT GEOTECHNICAL REPORT AND/OR THE "PROJECT SPECIFIC PHASING SHEET" FOR SPECIFIC GUIDANCE.
14. ANY AND ALL FILL MATERIAL SHALL BE FREE OF ROOTS, RUBBISH, ROCKS LARGER THAN 3/4 THE DEPTH OF THE LIFT BEING INSTALLED, LOGS, STUMPS, BUILDING DEBRIS, FROZEN MATERIAL, AND OTHER OBJECTIONABLE MATERIALS THAT WILL INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY LIFTS.
15. FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE (E.G. CLAY, SILT) MATERIAL SHOULD NOT BE PLACED NEAR THE CENTER OF DEPRESSIONS OR OTHERWISE ACCELERATED EROSION.
16. SOME OR AREAS OF THESE MATERIALS SHALL BE PERFORMED UNDER THE DIRECTION OF A GEOTECHNICAL ENGINEER.
17. THE OUTER 2-FOOT OF THE FILL SLOPE SHALL BE PLACED TO ALLOW LOOSE, NOT ROLLED OR COMPACTED, ON SLOPE SURFACE. A BULDOZER MAY RUN UP AND DOWN THE FILL SLOPE AND THE RESULTANT TRACKS CREATE GROOVES PERPENDICULAR TO THE SLOPE. IF THE SOIL IS VERY DRY MORE EXCESSIVE COMPACTION FILL MAY OCCUR. SEE "PROJECT SPECIFIC PHASING" IN THE NHDES VOL. 3 REGARDING THE SURFACE OF ALL SLOPES DURING THE CONSTRUCTION PHASE TO REFRAIN ON EROSION, INCREASE SITE FACILITIES VEGETATION ESTABLISHMENT.
18. USE SLOPE DRAINS, SUCH AS SNOWFENCE, GRADES, OR CONTOUR FURROWS AS APPROPRIATE TO REDUCE THE LENGTH OF CONTINUAL SLOPES TO LAST SHEET AND ALL EROSION AND PREVENT RILLY EROSION. ALL BENCHES SHALL BE ALIGN FACE OF SLOPE DURING ALL PHASES OF CONSTRUCTION.
19. SLOPE OR DRAINAGE ENGINEERED DURING CONSTRUCTION SHALL BE ENGINEERED BY A PROFESSIONAL ENGINEER (PROFESSIONAL OF THE DESIGN ENGINEER) TO DETERMINE IF THE PROPOSED DESIGN SHALL BE REVIEWED TO PROPERLY CONTROL THE CONDITION.
20. STABILIZE ALL DRAINED AREAS (AS ABOVE) WITH VEGETATION. ENGINEER STONE, COMPOST BLANKET, OR OTHER STANDARD SOILS AS SOON AS DRAINED OR COMPLETE OR IF DONE IS INTERRUPTED FOR 21 WORKING DAYS OR MORE. USE MULCH OR OTHER APPROVED METHODS TO STABILIZE AREAS TEMPORARILY UNDER FINAL GRADING WHEN NOT DELAYED.
21. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED INDIVIDUALLY FOLLOWING FINISHED GRADING.
22. THE PROJECT SHALL BE CONSTRUCTED TO MEET ALL REQUIREMENTS AND INTENT OF RSA 485-A:17 AND CHAPTER ENV 2000 RELATING TO INVASIVE SPECIES.

ABOVE NOTES ENCRYPTED, ADAPTED AND REFERENCED FROM "NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 2 CONSTRUCTION PHASE EROSION AND SEDIMENT CONTROLS, DECEMBER 2008" (NHDES, VOL. 3)

PROJECT SPECIFIC CONSTRUCTION PHASING:

1. PRIOR TO THE [illegible] ACTIVITIES, THE SITE MUST BE PREPARED FOR CONSTRUCTION IN ACCORDANCE WITH THE FOLLOWING PROCESS. THE "GENERAL CONSTRUCTION PHASING" NOTES APPLY TO THE GENERAL CONSTRUCTION AND SHALL BE ADDRESSED TO.
2. INSTALL ALL TEMPORARY SEDIMENT CONTROL BARRIERS (E.G. SILT FENCE, EROSION CONTROL, AND SERIAL STONE CHECK DAMS, ETC.) AROUND THE OUTER PERIMETER OF THE CONSTRUCTION SITE AS DEPICTED ON SHEET C-2 PRIOR TO EARTH MOVING OPERATIONS.
3. INSTALL GRAVEL SEDIMENT FENCE AROUND THE PERIMETER OF THE INFILTRATION BASINS AND ALL FENCE SHALL REMAIN IN PLACE UNTIL CONSTRUCTION OF THE BASINS HAS STARTED.
4. CLEAR GRUB AND STRIP THE SITE. STRIPPED BRUSH AND OTHER ORGANIC MATERIAL SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
5. INSTALL A TEMPORARY CONSTRUCTION EXIT AT THE LOCATION OF THE PROPOSED DRIVEWAY CONNECTION TO HEALTHCARE DRIVE. MAINTAIN AS DIRECTED BY THE TEMPORARY CONSTRUCTION EXIT DETAIL.
6. STOCKPILE EXCESS TOPSOIL AND EXCAVATED MATERIAL TO BE REUSED ON SITE IN AN APPROPRIATE LOCATION IN ACCORDANCE WITH THE "SOIL STOCKPILE PRACTICE". MAINTAIN THE STOCKPILES AS OUTLINED IN THE "SOIL STOCKPILE PRACTICE".
7. PERFORM THE NECESSARY CUTS AND FILLS TO CONSTRUCT THE GRAVEL WETLANDS BASIN AS DEPICTED ON SHEET C-2 AND IN ACCORDANCE WITH THE INFILTRATION BASIN DETAILS SHOWN ON SHEET C-3.
8. PERFORM THE NECESSARY CUTS AND FILLS TO CONSTRUCT THE INFILTRATION BASIN AS DEPICTED ON SHEET C-2 AND IN ACCORDANCE WITH THE INFILTRATION BASIN DETAILS SHOWN ON SHEET C-3.
9. CONSTRUCT THE VEGETATED SWALES AS DEPICTED ON SHEET C-2. LOAM SEED AND MULCH THE SIDE SLOPES OF THE SWALE AS DEPICTED ON THE INFILTRATION BASIN DETAILS.
10. CONSTRUCT THE VEGETATED WETLANDS BASIN, SEDIMENT FOREBAY AND SLOPE PROTECTION. LOAM SEED AND MULCH THE SIDE SLOPES OF THE BASIN AS DEPICTED ON THE INFILTRATION BASIN DETAILS.
11. ALL BASINS/SWALES/FIRE BASINS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
12. PERFORM THE NECESSARY CUTS AND FILLS TO INCORPORATE ON THE BUILDING AND DRAINAGE LAY AREAS.
   A) INSTALL SUGGESTED FILLS IN MAXIMUM 8-INCH LIFTS AND COMPACT EACH LIFT TO 95% MAXIMUM PROCTOR DENSITY.
13. AS DRAINAGE IS ACHIEVED INSTALL DRAINAGE SEDIMENT CONTROL BARRIERS WITHIN THE SITE (E.G. ADDITIONAL SILT FENCE, CHECK DAMS AND SEDIMENT BASINS AND ACCESS ROADS, ETC.)
14. INSTALL ALL UTILITIES AND CLOSED DRAINAGE SYSTEM COMPONENTS (E.G. PIPE CULVERTS, CATCH BASINS AND MANHOLES) AS DEPICTED ON THE CONSTRUCTION DETAILS AND AS SHOWN ON SHEET C-2 AND C-3. AS EACH CATCH BASIN IS INSTALLED, INSTALL THE TEMPORARY SEDIMENT CONTROL BARRIER DEPICTED ON SHEET C-3.
15. ALL DRY FILL SLOPES SHALL BE STABILIZED AS SOON AS PRACTICAL BY SEEDING FOR PERMANENT VEGETATION AND STABILIZATION AS DESCRIBED UNDER THE "PERMANENT VEGETATION PRACTICE" WITHIN 3 DAYS OF ACHIEVING FINAL GRADE.
16. INSTALL ALL GRAVEL, CRUSHED GRAVEL, MATERIALS FOR THE PARKING AREA AS DEPICTED IN THE CONSTRUCTION DETAILS.
17. THE PARKING AREAS SHALL BE STABILIZED (CONSTRUCTED TO GRAVEL BASE COURSE) WITHIN 3 DAYS OF ACHIEVING PROPOSED SUBGRADE ELEVATIONS.
18. INSTALL PERMANENT SURFACES AS SOON AS PRACTICAL AFTER THE INSTALLATION OF THE GRAVEL BASE AND CRUSHED GRAVEL, IN ORDER TO LIMIT THE SOIL EROSION AND POLLUTION OF THE GRAVEL MATERIALS WITH SEDIMENT MATERIALS. IN NO CASE SHALL AREAS TO BE PAVED BE LEFT UNPROTECTED PRIOR TO PAVING OVER NIGHT.
19. ALL DISTURBED AREAS SHALL BE STABILIZED AS SOON AS PRACTICABLE. IN NO CASE SHALL ANY DISTURBED AREA BE LEFT UNSTABILIZED FOR LONGER THAN 21 DAYS. IF NECESSARY TEMPORARY STABILIZATION MEASURES AS DESCRIBED UNDER "TEMPORARY STABILIZATION PRACTICE" AND SHOWN ON SHEET C-3.
20. ALL DRAINAGE AREAS SHALL BE STABILIZED AS DESCRIBED UNDER "PERMANENT VEGETATION PRACTICE" AND SHOWN ON SHEET C-3.
21. ALL TEMPORARY AND PERMANENT SEDIMENT EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY, AFTER EVERY 1/2 INCH OF RAINFALL, AND ANNUALLY.
22. EXCESS SEDIMENT SHALL BE REMOVED FROM TEMPORARY SEDIMENT EROSION CONTROL MEASURES AS DESCRIBED UNDER "PERMANENT VEGETATION PRACTICE" WHEN IT REACHES SEDIMENTED PROCEDURES DESCRIBED IN THE DETAILS FOR EACH PRACTICE.
23. ALL DAMAGED TEMPORARY AND PERMANENT SEDIMENT EROSION CONTROL AND STORMWATER MANAGEMENT PRACTICES SHALL BE REPAIRED OR REPLACED IMMEDIATELY UPON NOTICE.
24. SEDIMENT SHALL BE DISPOSED OF PROPERLY OFFSITE ON SITE OR OFF SITE. PROJECT COMPLETION AND STABILIZATION
25. UPON COMPLETION OF THE SITE IS DEEMED STABILIZED (VEGETATION IS ESTABLISHED), THE TEMPORARY SEDIMENT CONTROL BARRIERS AND EROSION CONTROL PRACTICES SHALL BE REMOVED. ANY DISTURBANCE CREATED DURING REMOVAL SHALL BE REPAIRED IN AN APPROPRIATE MANNER.
26. ACCUMULATED SEDIMENT SHALL BE REMOVED FROM ALL ON SITE CATCH BASINS AND THE SEDIMENT FOREBAYS TO THE GRAVEL WETLANDS BASIN.

CONSTRUCTION PRACTICES:

MAINTENANCE REQUIREMENTS

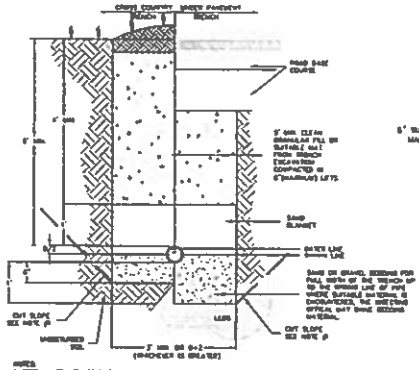
1. MAINTENANCE REQUIRED SHALL BE PERFORMED THROUGHOUT CONSTRUCTION, INCLUDING OVER THE WINTER PERIOD. AFTER EACH RAINFALL, INSPECTIONS OR REPORTS OF FLOODING AND FLOODING, THE SITE CONTRACTOR SHALL CONDUCT INSPECTION OF ALL INSTALLED EROSION CONTROL PRACTICES AND PERFORM REPAIRS AS NEEDED TO ENSURE THEIR INTENDED FUNCTION.
2. FOR ANY AREA STABILIZED BY TEMPORARY OR PERMANENT SEEDING PRIOR TO THE ONSET OF THE WINTER SEASON, THE CONTRACTOR SHALL CONDUCT AN INSPECTION IN THE SPRING TO ASCERTAIN THE CONDITION OF THE VEGETATION AND REPAIR ANY DAMAGED AREAS OR BARE SPOTS AND RESEED AS NEEDED TO ACHIEVE AN ESTABLISHED VEGETATIVE COVER (AT LEAST 85% OF AREA VEGETATED WITH HEALTHY, VIGOROUS GROWTH.)

SEQUENCING

1. ALL TEMPORARY STABILIZATION TECHNIQUES SHALL BE EMPLOYED DURING THE PERIOD FROM OCTOBER 15 THROUGH MAY 15.
2. THE AREA OF EXPOSED UNSTABILIZED SOIL SHALL BE LIMITED TO 5 ACRES AND SHALL BE CONNECTED AGAINST EROSION BY THE METHODS DESCRIBED IN NHDES VOL. 3 AND REFERENCED ON THIS PLAN SET, PRIOR TO ANY TIME OF GROUND MELT EVENT.
3. STABILIZATION AS FOLLOWS SHALL BE COMPLETED WITHIN A DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THAT EXCEEDS ALL EVENT FOR WORK TIME 3 DAYS.
   A. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF LESS THAN FIVE (FIVE) BY NOT EXCEED A MAXIMUM OVER VEGETATIVE EROSION ON SOIL ARE INTENDED AFTER DEPOSITED TO SHALL BE SEEDED AND COVERED WITH 2 TO 4 INCHES OF ORGANIC MATERIAL ACHIEVE ACCEPTABLE WITH ENGINEERED METHOD, OR 2 INCHES OF EROSION CONTROL AND COVERED TO WITHIN WELL 3 FOR SPECIFICATIONS.
   B. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF GREATER THAN (50 INCH ONE HALF) EXCEEDING OF ONE VEGETATIVE EROSION OF SOIL ARE DISTURBED AFTER DEPOSITED TO SHALL BE SEEDED AND COVERED WITH A PROPERLY ESTABLISHED EROSION CONT

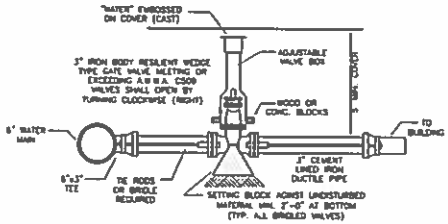
CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948

3/24/14 — NEW POLE MOUNTED LIGHT DETAIL



WATER PIPE TRENCH INSTALLATION DETAIL

NOT TO SCALE



TYPICAL DOMESTIC SERVICE CONNECTION

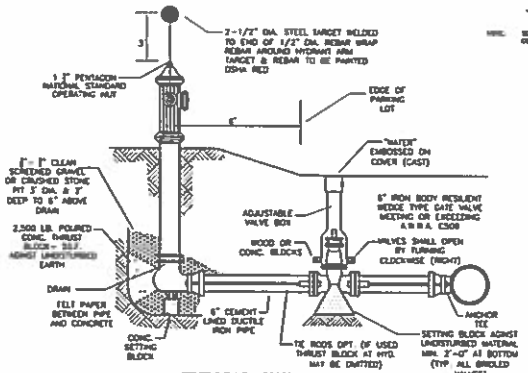
NOT TO SCALE

DIAMETER	90° BEND	TEE	PLUG	45° BEND	22½° BEND
6"	5	4	3	3	1
8"	10	6	4	4	2
12"	21	10	5	13	6

WATER MAIN THRUST BLOCK DETAILS

NOT TO SCALE

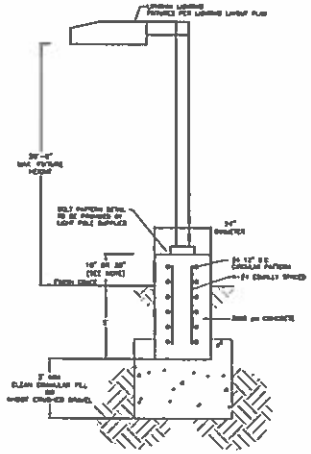
NOTE: SIZE OF THRUST BLOCKS MAY BE INCREASED BY THE ENGINEER TO MEET SOIL CONDITIONS FOUND DURING CONSTRUCTION.



TYPICAL HYDRANT SECTION

NOT TO SCALE

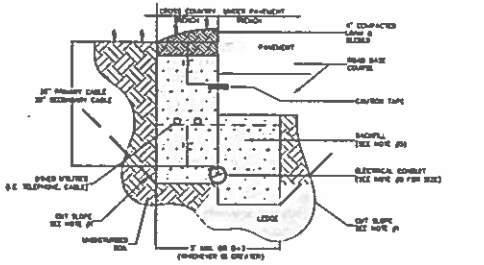
NOTES:
1. HYDRANTS ARE TO BE KENNEDY GUARDIAN MODEL #401A (OR EQUAL) WITH 6" MECHANICAL JOINT SHOE WITH BREAK FLANGE TO BE PROVIDED WITH DRAIN-OPENING CLOCKWISE (RIGHT).
2. HYDRANTS TO BE OSHA RED
3. HYDRANTS SHALL HAVE ONE 5 INCH PUMPER OUTLET AND TWO 2½-INCH HOSE OUTLETS.
4. HYDRANT SHALL BE GATED WITH A 5 INCH BOTTOM VALVE.
5. HYDRANTS SHALL MEET OR EXCEED ALL REQUIREMENTS OF A.W.W.A. STANDARD SPEC. C502



POLE MOUNTED LIGHT DETAIL

NOT TO SCALE

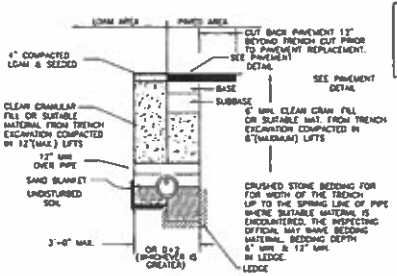
NOTE: LIGHT POLE BASE SHALL BE 12" ABOVE FINISH GRADE FOR NON VEHICLE IMPACT AREAS AND 30" FOR VEHICLE IMPACT AREAS.



NOTES:
1. ALL INSTALLATION STANDARD AND OPTIONAL RULES OF ELECTRICAL UTILITY, TELEPHONE OR PIPE, AND SHALL CONFORM TO THE APPLICABLE SECTIONS OF NEMA TC2-1990 AND ARE AS LISTED. ONLY [illegible] CONDUIT SHALL BE ACCEPTED. ANY PIPE MATERIAL NOT INSTALLED THE PROPER WAY AND IN ACCORDANCE WITH THE PLAN AND AS PER CONSTRUCTION SPECS. ALL THE PIPE SHALL BE SUPPORTED AS SPECIFIED. ALL THE PIPE SHALL BE SEALED WITH CONDUIT.
2. ALL THE CONDUIT PLACED THE ARE ABOVE PIPE CONDUITS ARE WITH A MINIMUM CLEARANCE OF 18 INCHES FROM PRIMARY CABLES AND 24 INCHES FROM SECONDARY CABLES. ALL THE CONDUIT SHALL BE SEALED WITH CONDUIT.
3. A 24-INCH CONDUIT SYSTEM OF THE CONDUIT PIPE, CONDUIT PIPE, OR CONDUIT PIPE, OR CONDUIT PIPE, OR

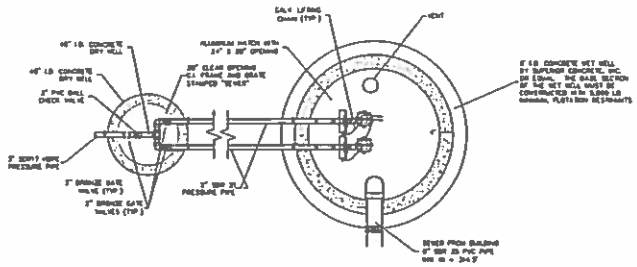
CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF PUMP CHAMBER, PUMP, AND CONTROL PANEL TO NORWAY PLAINS, ASSOCIATES, INC. PRIOR TO ORDERING AND DELIVERY. ENGINEER APPROVAL REQUIRED PRIOR TO ORDERING.

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITH OR THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948

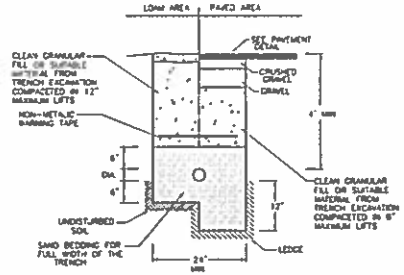


TRENCH DETAIL FOR SEWER PIPE

NOT TO SCALE

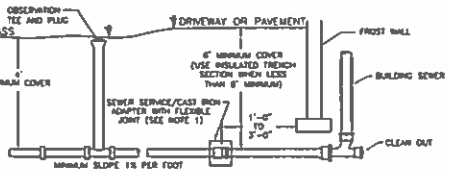


PLAN VIEW



TRENCH DETAIL FOR SEWER FORCE MAIN

NOT TO SCALE



SEWER SERVICE DETAIL

NOT TO SCALE

PUMP STATION DESIGN CALCULATIONS

DAILY FLOW

DAILY FLOW = 1,300 GPD

DAILY FLOW BASED ON 250 GALLONS PER DAY PER DWELLING PER 0 DWELLING

EMERGENCY OPERATION (Ref. Ch. 707.05)

(1) ALTERNATIVES IN A GENERATION SET MUST BE PROVIDED UNDER THE FOLLOWING CIRCUMSTANCES:
(1) PUMP STATIONS WITH A CAPACITY OF 100 GPM DAY WITHOUT SUFFICIENT STORAGE PROVIDED
(a) ADDITIONAL STORAGE FOR 4 HRS OF FLOW DESIGNED AT 100
(b) SUITABLE GENERATOR CONNECTION SHALL BE PROVIDED AT THE ELECTRICAL SUPPLY PANEL

REQUIRED EMERGENCY STORAGE CAPACITY

EMERGENCY STORAGE CAPACITY = (100/24 HR/DAY) X 8 HRS

EMERGENCY STORAGE CAPACITY = 375 GALLONS

EMERGENCY OPERATION (Ref. Ch. 707.05) CONTINUED

REQUIRED EMERGENCY STORAGE CAPACITY

PROVIDED STORAGE CAPACITY = (324.5-321.0') X 277 GAL/FT
(WET WELL)

PROVIDED STORAGE CAPACITY = 966.5 GAL.
(WET WELL)

PROVIDED EMERGENCY STORAGE = 966.5 GAL. vs 375 GAL. REQD

WET WELL AND PUMP OPERATION NOTES

WET WELL SHEETS

INV IN = 324.00'
HIGH WATER SLAB = 323.00'
LEAD PUMP ON = 322.00'
BASE DEPTH = 1.00 FT
PUMP OFF = 321.00'
DEPTH OF PUMP = 2.00 FT
SUBMERGED
CHAMBER BOTTOM = 319.00'

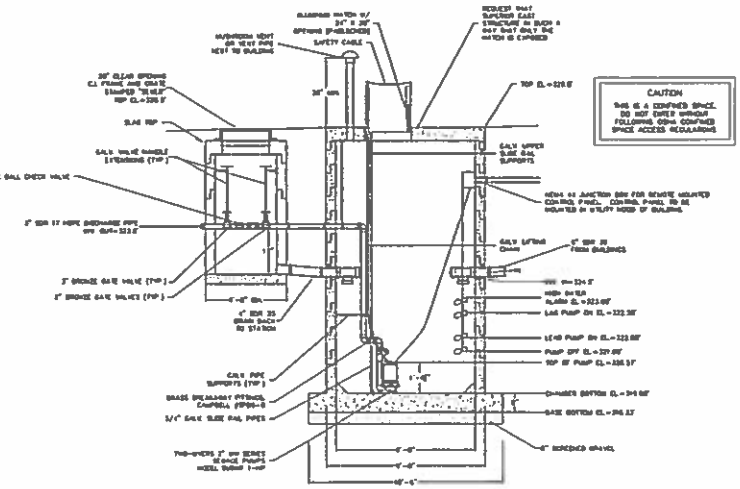
PUMP HEAD CALCULATIONS

STATIC HEAD
STATIC HEAD = INV IN OVER WW = 324.00'
PUMP OFF ELEV. = 321.00'
STATIC HEAD = 3.00'

HEAD CREATED BY PIPE AND FITTINGS = HEAD FROM PIPE/FITTINGS = 31.0 FT

TOTAL DYNAMIC HEAD
TOTAL DYNAMIC HEAD = STATIC HEAD + HEAD FROM PIPE/FITTINGS
TOTAL DYNAMIC HEAD = 34.0 FT

PUMP INFORMATION
PUMP = HOWARD 3" SERIES MANUAL SEWAGE PUMPS
MODEL = GRINDER 1 HP
PUMP OPERATING = 50 GPM
CAPACITY
RUN TIME = 4.2 MIN



CAUTION
THIS IS A CONFINED SPACE. DO NOT ENTER WITHOUT FOLLOWING OSHA CONFINED SPACE ACCESS REQUIREMENTS

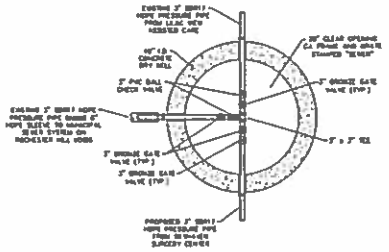
ELEVATION VIEW

PUMP STATION INSTALLATION NOTES

1. THE PUMP STATION IS BEING INSTALLED IN AN AREA WITH POTENTIAL SEASONAL HIGH WATER TABLE EFFECTS. THE SUPERIOR CONCRETE STRUCTURE HAS CHOSEN FOR ITS INTEGRAL FOOTING THAT THAT HOME SOIL LOAD TO THE STRUCTURE TO MOVE THE EFFECTS OF BUOYANCY. THIS STRUCTURE MUST BE PROVIDED. ANY DEVIATION FROM THE PROPOSED STRUCTURE MUST FIRST BE APPROVED BY THE DESIGN ENGINEER.
2. DURING INITIAL CONSTRUCTION, DEWATERING WILL BE NECESSARY IN THE HOLE FOR THE PUMP STATION. [illegible] SHOULD BE NO SPRING OF ALCHIVERS

PUMP STATION DETAIL

NOT TO SCALE



FORCE MAIN JUNCTION MANHOLE DETAIL

NOT TO SCALE

SANITARY SEWER DETAILS
TAX MAP 243, LOT 39-3
13 HEALTHCARE DRIVE
ROCHESTER, NH

PREPARED FOR:
DEW PROPERTIES, LLC

SCALE: AS SHOWN MARCH 2014

FILE NO. 108
PLAN NO. C-2635
DWG NO. 13124/SP-1
P.B NO "33" "CAS"

LAND SURVEYORS – SEPTIC SYSTEM DESIGNERS

CIVIL ENGINEERS – TRANSPORTATION PLANNERS

LEGEND

PROPERTY LINE

JURISDICTIONAL WETLANDS

TREE LINE

PROPOSED LIGHT POLES

PROPOSED BUILDING

PROPOSED BUILDING

Gravel Wetlands Specifications

Landscape Notes

Seeding Specifications

Tree Planting Detail

WOODBURN & COMPANY
Landscape Architecture LLC

LANDSCAPING PLAN AND DETAILS
TAX MAP 243, LOT 39-3
13 HEALTHCARE DRIVE
ROCHESTER, NH
PREPARED FOR:
DEW PROPERTIES, LLC

SCALE: 1" = 20' MARCH 2014

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 INCH = 20 FEET

FILE NO. 102
PLAN NO. C-2635
DWG. NO. 13124/SP-1
F.B. NO. "33" "CAM"

31 Mooney Street, Alton, N.H. 603-875-3940

NORWAY PLAINS ASSOCIATES, INC.

2 Continental Blvd., Rochester, N.H. 603-335-3940

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