



NONRESIDENTIAL SITE PLAN APPLICATION

City of Rochester, New Hampshire

[office use only. Check # _____ Amount \$ _____ Date paid _____]

Date: 04/05/2019 Is a conditional use needed? Yes: _____ No: X Unclear: _____
(If so, we encourage you to submit an application as soon as possible.)

Property information

Tax map #: 117; Lot #'s: 2-8; Zoning district: General Industrial

Property address/location: 53 Allen Street, Rochester, NH

Name of project (if applicable): Proposed Contractor Storage Yard

Size of site: 2.56 acres; overlay zoning district(s)? Conservation Overlay

Property owner

Name (include name of individual): Norman P. Vetter Rev. Trust & Stacia R. Vetter Rev. Trust

Mailing address: PO Box 181, Rochester, NH 03866-0181

Telephone #: (603)332-0354 Email: _____

Applicant/developer (if different from property owner)

Name (include name of individual): Same as property owner

Mailing address: _____

Telephone #: _____ Email: _____

Engineer/designer

Name (include name of individual): Scott A. Lawler, PE

Mailing address: PO Box 249, Rochester, NH 03866

Telephone #: (603)335-3948 Fax #: _____

Email address: slawler@norwayplains.com Professional license #: 10026

Proposed activity (check all that apply)

New building(s): X Site development (other structures, parking, utilities, etc.): X

Addition(s) onto existing building(s): _____ Demolition: _____ Change of use: _____

(Continued Nonresidential Site Plan application Tax Map: 117 Lot: 2-8 Zone GI)

Describe proposed activity/use: Proposed 60' X 72' Vehicle Storage Building with associated parking

Describe existing conditions/use (vacant land?): Site plan under construction, case # 117-2-8-I-18

Utility information

City water? yes ☒ no ☐; How far is City water from the site? Approx. 125'

City sewer? yes ☒ no ☐; How far is City sewer from the site? Approx. 120'

If City water, what are the estimated total daily needs? 150 gallons per day

If City water, is it proposed for anything other than domestic purposes? yes ☐ no ☒

If City sewer, do you plan to discharge anything other than domestic waste? yes ☐ no ☒

Where will stormwater be discharged? into the city's closed drainage system

Building information

Type of building(s): 60' X 72' metal vehicle storage building

Building height: 25' Finished floor elevation: 237.0'

Other information

parking spaces: existing: 0 total proposed: 25; Are there pertinent covenants? no

Number of cubic yards of earth being removed from the site no earth will be removed

Number of existing employees: 0; number of proposed employees total: 6

Check any that are proposed: variance ☐; special exception ☐; conditional use ☐

Wetlands: Is any fill proposed? ☐; area to be filled: ☐; buffer impact? ☐

Proposed <u>post-development</u> disposition of site (should total 100%)		
	Square footage	% overall site
Building footprint-vehicle storage building	12,960	11.63
Building footprint-office building	896	0.80
Parking and vehicle circulation	28,905	25.92
Planted/landscaped areas (excluding drainage)	47,596	42.68
Natural/undisturbed areas (excluding wetlands)	4,436	3.98
Wetlands	1,753	1.57
Other – drainage structures, outside storage, etc.	14,968	13.42

Comments

Please feel free to add any comments, additional information, or requests for waivers here:

Submission of application

This application must be signed by the property owner, applicant/developer (if different from property owner), and/or the agent.

I/we hereby submit this Site Plan application to the City of Rochester Planning Board pursuant to the City of Rochester Site Plan Regulations and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant/developer (if different from property owner)/as agent, I attest that I am duly authorized to act in this capacity.

Signature of property owner: _____

Date: _____

4/8/19

Signature of applicant/developer: _____

Date: _____

Signature of agent: _____

Date: _____

4/5/19

Authorization to enter subject property

I hereby authorize members of the Rochester Planning Board, Zoning Board of Adjustment, Conservation Commission, Planning Department, and other pertinent City departments, boards and agencies to enter my property for the purpose of evaluating this application including performing any appropriate inspections during the application phase, review phase, post-approval phase, construction phase, and occupancy phase. This authorization applies specifically to those particular individuals legitimately involved in evaluating, reviewing, or inspecting this specific application/project. It is understood that these individuals must use all reasonable care, courtesy, and diligence when entering the property.

Signature of property owner: _____

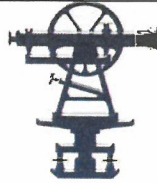
Date: _____

4/8/19

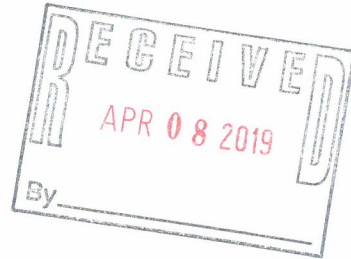
NORWAY PLAINS ASSOCIATES, INC.

SURVEYORS • SEPTIC SYSTEM DESIGNERS • ENGINEERS

P.O. Box 249
Continental Blvd. (03867)
Rochester, NH 03866-0249
Fax (603)332-0098
Phone (603) 335-3948 / (800) 479-3948
slawler@norwayplains.com



P. O. Box 268
31 Mooney St.
Alton, NH 03809
Phone & Fax (603) 875-3948
www.norwayplains.com
rtetreault@norwayplains.com



April 5, 2019

Seth Creighton, Chief Planner
Department of Planning and Development
33 Wakefield Street
Rochester, NH 03867-1917

Re: Non- Residential Site Plan Application; Norman Vetter Inc. – 53 Allen Street, Map 117, Lot 2-8.

Dear Mr. Creighton:

On behalf of Norman Vetter, Inc., we hereby submit plans and nonresidential site plan application for a proposed Contractor Storage Yard facility at 53 Allen Street. Norman Vetter Inc is looking to construct a third building on the site that has previously been through site review and was approved in September 2018.

Norman Vetter Inc. is proposing to construct a 60-foot by 72-foot building on the property. With this building, more parking is required. The parking lot has been expanded to include 5 additional spaces. The new building will not include any additional employees.

The stormwater from the new impervious surface will be directed towards the infiltration basin being constructed. The roof of the new building will be sloped into a stone drip edge with a perforated pipe that will outlet in the infiltration basin. The size of the basin has been slightly increased to accommodate the increase in stormwater going into it. There is a revised drainage report attached.

As is the case with the buildings under construction, the new building will to be serviced by City water and sewer systems. The water will be run from the other vehicle storage building on the site. The sewer will come from the sewer manhole. The site will have underground utility conduits run in from the street. The applicant is proposing one wall mounted lights.

We look forward to discussing this project with staff and the Planning Board. Thank you for your consideration

Sincerely,

NORWAY PLAINS ASSOCIATES, INC.



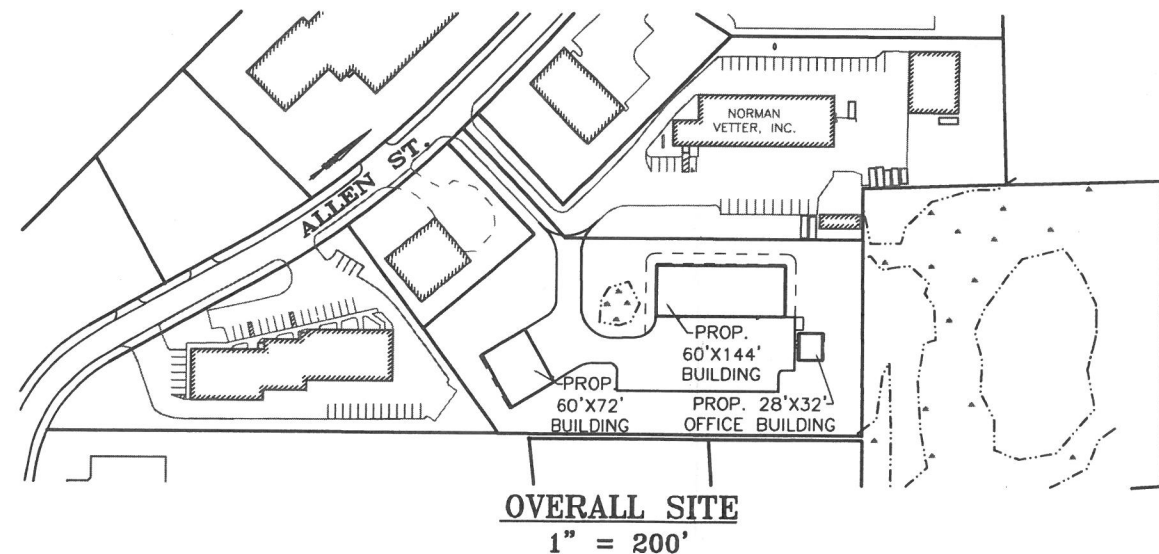
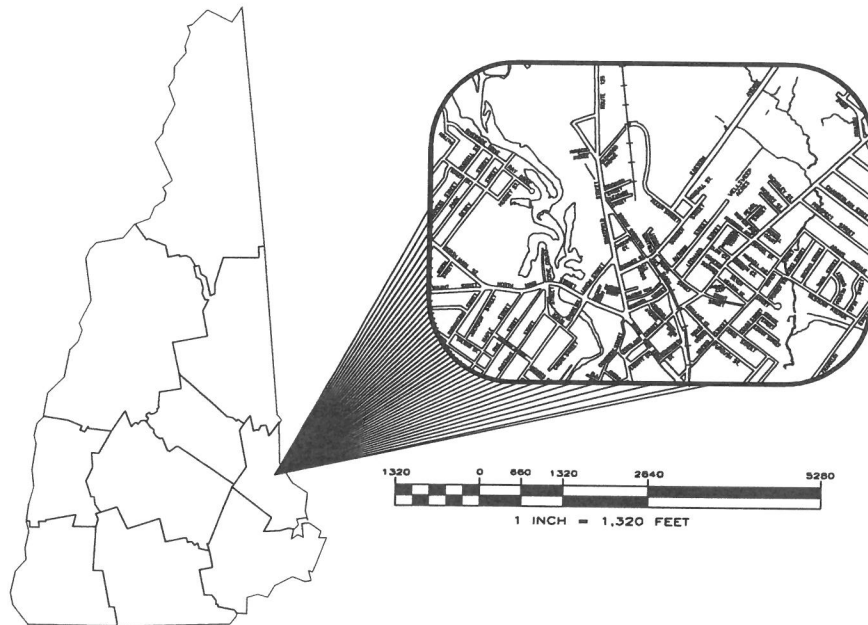
By:
Scott A. Lawler, PE, Project Engineer

cc: Norman Vetter



PROPOSED CONTRACTOR STORAGE YARD

PREPARED FOR
NORMAN VETTER, INC.
53 ALLEN STREET
ROCHESTER, NH 03867
APRIL 2019



CIVIL ENGINEERS

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

APPLICANT

NORMAN VETTER, INC.
PO BOX 181
ROCHESTER, NEW HAMPSHIRE 03866-0181
(603) 332-0354

OWNER OF RECORD

TAX MAP 117, LOT 2-8
OWNER OF RECORD:
NORMAN P. VETTER REV. TRUST &
STACIA R. VETTER REV. TRUST
PO BOX 181
ROCHESTER, NH 03866-0181
SCRD BOOK 4578, PAGE 864

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.

STATE AND FEDERAL PERMITS:

STATE OF NEW HAMPSHIRE PERMIT NUMBERS:	
NHDES ALTERATION OF TERRAIN:	NOT REQUIRED
NHDES WETLANDS PERMIT:	NOT REQUIRED
NHDES DAM PERMIT:	NOT REQUIRED
NHDES SUBDIVISION PERMIT:	NOT REQUIRED
NHDES SUBSURFACE SYSTEMS PERMIT:	NOT REQUIRED
NHDES WASTEWATER PERMIT:	NOT REQUIRED
NHDOT DRIVEWAY/ENTRANCE PERMIT:	NOT REQUIRED

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES):
NPDES PERMITS ARE ONLY REQUIRED FOR PROJECTS MEETING THE DISTURBED AREA CRITERIA BELOW AND HAVING A POINT SOURCE STORMWATER DISCHARGE FROM THE SITE TO AN ADJACENT WETLAND OR WATER BODY (I.E. CULVERT, SWALE, ETC. OUTLETING 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: _____

SHEET INDEX

SHEET	DESCRIPTION	SCALE
C-0	COVER	AS SHOWN
E-1	EXISTING FEATURES	1" = 30'
C-1	OVERALL SITE PLAN	1" = 30'
C-2	SITE LAYOUT PLAN	1" = 30'
C-3	GRADING, DRAINAGE, EROSION AND SEDIMENTATION CONTROL PLAN	1" = 30'
C-4	UTILITY PLAN	1" = 30'
C-5	CONSTRUCTION DETAILS	AS SHOWN
C-6	DRAINAGE DETAILS	AS SHOWN
C-7	UTILITY DETAILS	AS SHOWN
C-8	SEWER DETAILS	AS SHOWN
C-9	EROSION CONTROL DETAILS	AS SHOWN
L-1	LIGHTING PLAN AND DETAILS	1" = 30'

FILE NO. 210
PLAN NO. C-2917
DWC. NO. 18120/SP-2
F.B. NO.

LAND SURVEYORS

CIVIL ENGINEERS

LEGEND

- PROPERTY LINE
- LIMITS OF JURISDICTIONAL WETLANDS
- 50' WETLANDS BUFFER
- EXISTING TREE LINE
- EXISTING STONEWALLS
- EXISTING CONTOUR LINE
- EXISTING DRAIN LINE
- EXISTING OVERHEAD WIRES
- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING UTILITY POLE
- EXISTING SQUARE CATCH BASIN
- EXISTING ROUND CATCH BASIN
- EXISTING SEWER MANHOLE
- EXISTING HYDRANT
- EXISTING WATER GATE OR SHUT-OFF VALVE
- EXISTING WETLANDS

BEARINGS AND DISTANCES LEGEND			
C1	ARC LENGTH = 15.89'	R	= 1025'
L1	BEARING = S05°21'03"E	L	= 9.11'

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 HYDROLOGICAL 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.



REVISIONS:
8/30/18 PER TRG REVIEW LETTER DATED AUGUST 28, 2018

- GENERAL SITE PLAN NOTES
- THIS PARCEL IS LOCATED IN THE GENERAL INDUSTRIAL (G) ZONE.
 - TOTAL PARCEL AREA: 111514 SQUARE FEET OR 2.56 ACRES.
 - THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING FEATURES ON THE LOT.
 - ALL EXISTING UTILITIES LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATION PRIOR TO ANY WORK BEING PERFORMED.
 - THESE PLANS SHOW ONLY THOSE FEATURES THAT WERE VISUALLY PER REFERENCED PLAN 1.
 - DIMENSIONAL REGULATIONS PER ZONING ORDINANCE:
GENERAL INDUSTRIAL (G) ZONE:
MINIMUM LOT AREA = 20,000 SF
MINIMUM LOT FRONTAGE = 100 FEET
MINIMUM YARD SETBACKS:
FRONT = 25'
SIDE = 20' (CONTRACTOR STORAGE YARD = 25')
REAR = 25'
MAXIMUM LOT COVERAGE = 75%
MAXIMUM BUILDING HEIGHT = 55'
7. ORIENTATION: HORIZONTAL DATUM IS BASED ON CITY OF ROCHESTER GIS AND VERTICAL DATUM IS NGVD1929.
 - PARCEL IS NOT LOCATED WITHIN ZONE A (100YR FLOOD) AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY MAP, PANEL #33017C0211D DATED MAY 17, 2005.
 - SOIL TYPES ARE PER NATURAL RESOURCES CONSERVATION SERVICE (NRCS) REPORT:
Data - DEERFIELD LOAMY SAND, 0-3 % SLOPES
 - ON SITE WETLANDS DELINEATED BY BARRY H. KEITH IN APRIL 2018. OFF SITE WETLANDS DELINEATED BY B.H. ASSOCIATES AS DEPICTED ON RECORDED SUBDIVISION PLAN #57-70.

SEWER MANHOLE INFORMATION

SEWER MANHOLE INFORMATION	SEWER MANHOLE INFORMATION
CB 1 RM = 235.4' INV. IN = 231.9' INV. OUT = 232.0' SUMP = 229.1'	SMH 1 RM = 236.19' SMH 2 RM = 235.03'
CB 2 RM = 235.48'	SMH 3 RM = 237.16' INV. IN = 230.4' INV. OUT = 230.4'
CB 3 RM = 235.59'	
CB 4 RM = 235.98'	

OUTLET STRUCTURE 1

RM = 233.5'	3'-1" ORIFICES = 233.5'
INV. OUT = 233.4'	

OUTLET STRUCTURE 2

RM = 235.73'	INV. OUT = 232.8'
SUMP = 231.6'	

TEST PIT DATA
OBSERVED BY NORWAY PLAINS ASSOCIATES, INC., CHARLES KARCHER JR.
ON JULY 27, 2018

TP #1
0'-18": 10 YR 5/6 COARSE SAND AND GRAVEL (FILL)
18"-24": 10 YR 3/3 SANDY LOAM
24"-36": 10 YR 6/3 SAND FIRM
36"-38": 2.5 YR 6/2 SAND WITH ROCKS
OBSERVED WATER @ 36"
VERY FIRM CEMENTED LAYER 36" AND DOWN
SHWT @ 24"

TP #2
0'-22": 10 YR 5/6 SAND AND GRAVEL (FILL)
22"-28": 10 YR 3/3 OLD TOP SOIL
28"-36": 10 YR 5/4 SANDY LOAM WITH ROCKS
OBSERVED WATER @ 36"
SHWT @ 28"

TP #3
0'-14": 10 YR 5/6 SAND AND GRAVEL
14"-24": 10 YR 3/3 SANDY LOAM ORGANICS
24"-36": 10 YR 5/6 SAND
OBSERVED WATER @ 36"
SHWT @ 24"

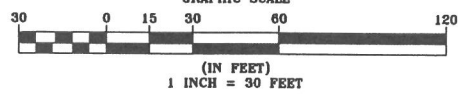
TP #4
0'-24": SAND AND GRAVEL (FILL)
24"-36": ORGANIC LAYER
36"-48": 10 YR 5/6 SAND
MOTTLED THROUGHOUT
OBSERVED WATER @ 48"
SHWT @ 36"

TAX MAP 134, LOT 5
OWNER OF RECORD:
NORMAN P. VETTER REV. TRUST &
STACIA R. VETTER REV. TRUST
PO BOX 181
ROCHESTER, NH 03866-0181
SCRD BOOK 4578, PAGE 864

EXISTING FEATURES PLAN
TAX MAP 117, LOT 2-8
53 ALLEN STREET
ROCHESTER, NH
PREPARED FOR:
NORMAN VETTER, INC.

FINAL APPROVAL BY
ROCHESTER PLANNING BOARD

CERTIFIED BY: _____ DATE: _____



FILE NO. 210
PLAN NO. C-2917
DWG. NO. 18120/SP-2
F.B. NO.

- REFERENCE PLAN
- SUBDIVISION PLAN OF LAND GLENWOOD AVENUE & ALLEN STREET, ROCHESTER, NH FOR MT. WALDO OPERATIONS, INC. DATED: APRIL 1998; BY NORWAY PLAINS ASSOCIATES, INC. RECORDED: SCRD PLAN #57-70
 - SITE PLAN ALLEN STREET EXTENSION, ROCHESTER, NH DATED: MARCH, 2006; BY NORWAY PLAINS ASSOCIATES, INC.

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

NORWAY PLAINS ASSOCIATES, INC.

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

E-1

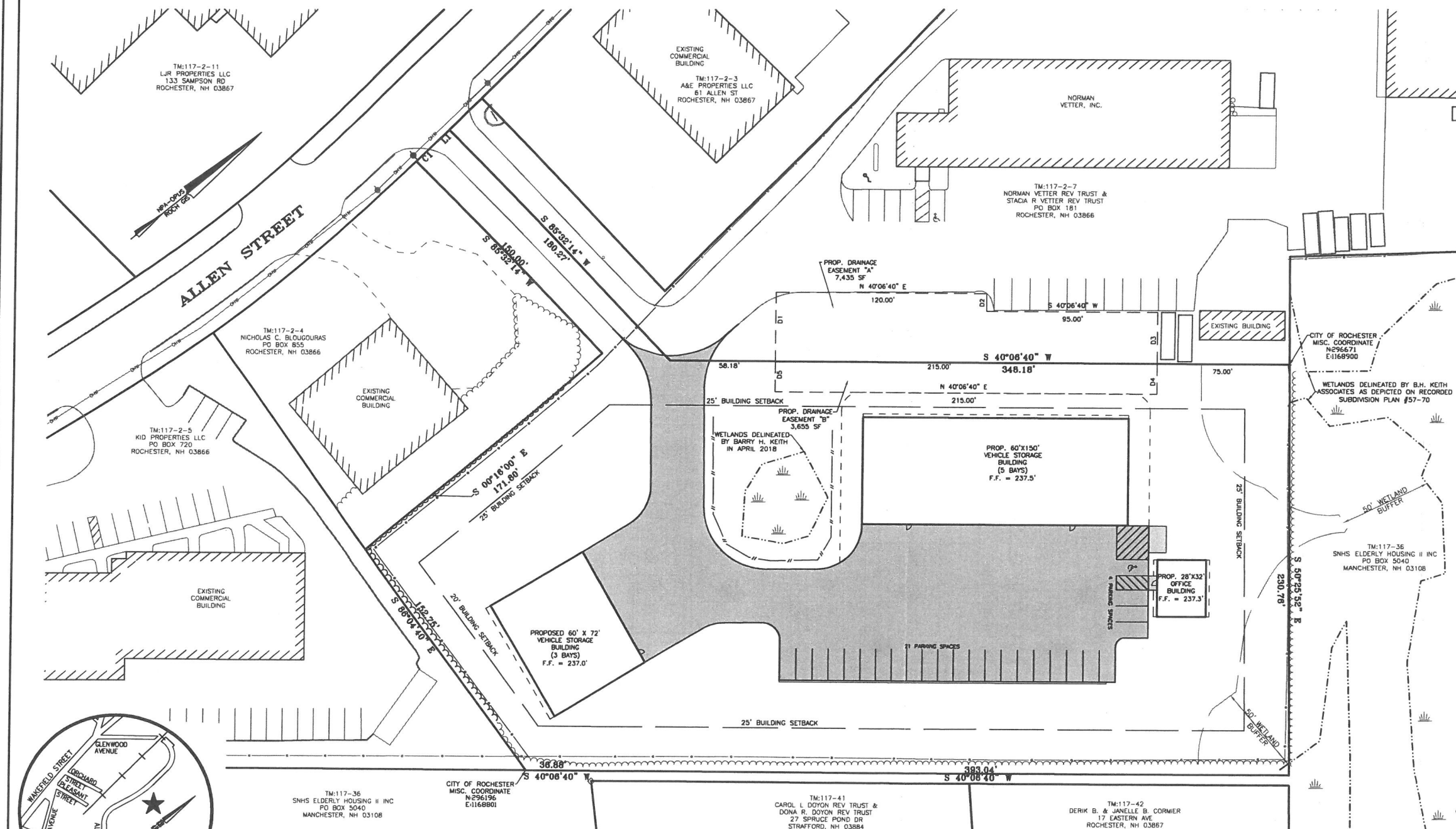
	PROPERTY LINE
	JURISDICTIONAL WETLANDS
	EXISTING TREE LINE
	EXISTING OVERHEAD WIRES
	EXISTING HYDRANT
	EXISTING WATER GATE OR SHUT-OFF VALVE
	EXISTING UTILITY POLE
	EXISTING SEWER MAN HOLE
	EXISTING CATCH BASIN
	EXISTING LIGHT POLES
	PROPOSED BUILDING
	PROPOSED PAVEMENT
	PROPOSED PAVEMENT WITH CURBING
	PROPOSED TREE LINE

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.

WHETHER OR NOT OTHERWISE EXPRESSLY SET FORTH IN 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.

BEARINGS AND DISTANCES LEGEND		
C1	ARC LENGTH = 15.89'	R = 1029'
L1	BEARING = S05°21'03"E	L = 9.11'

DRAINAGE EASEMENT LINE TABLE		
D1	S 49°53'20" E	39.00'
D2	N 49°53'20" W	10.00'
D3	N 49°53'20" W	29.00'
D4	N 49°53'20" W	17.00'
D5	S 49°53'20" E	17.00'



REVISIONS:
8/30/18 PER TRG REVIEW LETTER DATED AUGUST 28, 2018
03/29/19 ADD PROPOSED THIRD BUILDING, REVISE PARKING
REQUIREMENT.

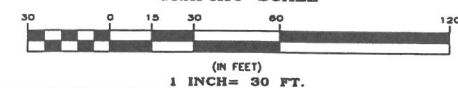
- GENERAL SITE PLAN NOTES
1. THIS PARCEL IS LOCATED IN THE GENERAL INDUSTRIAL (G1) ZONE.
2. TOTAL PARCEL AREA: 115154 SQUARE FEET OR 2.56 ACRES
3. THE PURPOSE OF THIS SITE IS TO DEPICT A PROPOSED 60'X144' VEHICLE STORAGE BUILDING AND 24'X32' OFFICE BUILDING
4. ALL EXISTING UTILITIES LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATION PRIOR TO ANY WORK BEING PERFORMED.
5. THE PLANS SHOW ONLY THOSE FEATURES THAT WERE VISUALLY PER REFERENCE PLAN 1.
6. DIMENSIONAL REGULATIONS PER ZONING ORDINANCE:
 - GENERAL INDUSTRIAL (G1) ZONE:
 - MINIMUM LOT AREA = 20,000 SF
 - MINIMUM LOT FRONTAGE = 100 FEET
 - MINIMUM YARD SETBACKS:
 - FRONT = 25'
 - REAR = 25'
 - SIDE = 20' (CONTRACTOR STORAGE YARD = 25')
 - SEAR = 25'
 - MAXIMUM LOT COVERAGE = 75%
 - MAXIMUM BUILDING HEIGHT = 35'
7. ORIENTATION: HORIZONTAL DATUM IS BASED ON CITY OF ROCHESTER GIS AND VERTICAL DATUM IS NGVD1989.
8. PARCEL IS NOT LOCATED WITHIN ZONE A (100'X1,000') AS SHOWN ON FEDERAL AGENCY MANAGEMENT AGENCY MAP: PANEL J33017000101 DATED MAY 17, 2004
9. SOIL TYPES ARE PER NATURAL RESOURCES CONSERVATION SERVICE (NRCS) REPORT, D6A - DEERFIELD LOAMY SAND, 0-3 SLOPES
10. ON SITE WETLANDS DELINEATED BY BARRY H. KEITH IN APRIL 2018.
11. OFF SITE WETLANDS DELINEATED BY B.H. ASSOCIATES AS DEPICTED ON RECORDED SUBDIVISION PLAN 157-70
12. FOR MORE INFORMATION ABOUT THIS SITE PLAN, CONTACT THE CITY OF ROCHESTER PLANNING DEPARTMENT, 33 WAKEFIELD ST., ROCHESTER, NY 03667. (603) 335-1338.
13. PARCEL REQUIREMENTS (SITE PLAN REGULATIONS; SECTION 10 (A)):
 - GENERAL INDUSTRIAL USE:
 - 1 SPACE PER 600 SQ. FT. IN BUILDING = 22 SPACES OR
 - 1 SPACE PER EMPLOYEE = 6 SPACES
 - OFFICE, GENERAL USE:
 - 1 SPACE PER 300 SQ. FT. = 3 SPACES
 - TOTAL SPACES REQUIRED = 25 SPACES
 - TOTAL SPACES PROVIDED = 25 SPACES
 - ACCESSIBLE PARKING (SITE PLAN REGULATIONS SECTION 10(D)(2))
 - THE SPACE IS PART OF THE TOTAL ABOVE
 - ACCESSIBLE PARKING SPACES 10 TO 25 = 1 SPACE
 - TOTAL PROVIDED SPACES = 1 SPACE
13. 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
14. 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 50. THE PERMITTEE SHALL PREPARE A WRITTEN STORMWATER MANAGEMENT PLAN AND SUBMIT IT TO THE CITY ENGINEER 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 DESTROYED
15. 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 ACCESS AS REQUIRED AS PART OF THE FIRE DEPARTMENT AT 330-7162 WITH ANY QUESTIONS ABOUT ACCESS REQUIREMENTS.
16. SNOW SHALL NOT BE PILED IN SUCH A MANNER AS TO BLOCK THE VISIBILITY OF THE VEHICLES TO THE ADJACENT STREET. EXCESS SNOW SHALL BE REMOVED FROM THE SITE.
17. ALL OUTSIDE CONSTRUCTION ACTIVITY RESTRICTED 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.
18. UTILITIES MUST BE UNDERGROUND, INCLUDING UTILITIES EXTENDED ONTO THE SITE FROM EXISTING PILES NEAR THE SITE. HOWEVER, IF THE ONLY PILE NEARBY IS ACROSS THE STREET, ONE ADDITIONAL POLE MAY BE PLACED ON/NEAR THE PROPERTY TO ALLOW FOR OVERHEAD EXTENSION OF WIRELESS COMMUNICATIONS UTILITIES EXTENDING FROM ANY SUCH POLE. UTILITIES MUST BE UNDERGROUND. THE APPLICANT MAY WORK WITH THE CITY STAFF AS APPROPRIATE TO ADDRESS THIS REQUIREMENT.
19. THE CITY ENGINEER OR CITY ADMINISTRATOR THE CITY OF ROCHESTER SIGN ORDINANCE. SIGNAGE SUBMITTED AS PART OF THIS SITE PLAN PACKAGE IS STILL SUBJECT TO HIS REVIEW TO ENSURE COMPLIANCE WITH THAT ORDINANCE AND OTHER APPLICABLE CODES, INDEPENDENT FROM THE CITY SITE PLAN REVIEW AS PART OF THE CITY OF ROCHESTER DEVELOPMENT DEPARTMENT. IT IS THE DESIGNER'S RESPONSIBILITY TO ENSURE THAT THE SIGNAGE SUBMITTED TO THE DESIGN OF THE APPROVED PRESTANDARD 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 SIGNS PERMITS. A SIGN PERMIT MUST BE OBTAINED PRIOR TO INSTALLATION OF ANY SIGNS ON SITE.
20. ALL ELEMENTS SHOWN ON THE APPROVED SITE PLAN MUST BE PROPERLY COMPLETED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY. THE APPLICANT MUST NEED TO BE SUPPLIED TO THE PLANNING DEPARTMENT PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
21. NOTE THAT THIS APPROVAL IS FOR THE SITE PLAN ONLY. LIFE SAFETY CODE AND BUILDING CODE REQUIREMENTS WILL BE REVIEWED AS PART OF THE CITY OF ROCHESTER DEVELOPMENT DEPARTMENT PLANS ARE SUBMITTED. VARIOUS REQUIREMENTS REGARDING THE BUILDING DESIGN POSSIBLY INCLUDING A SPRINKLER SYSTEM - MAY BE SPECIFIED AT THAT TIME.
22. THE IMPACT CONTRIBUTION MUST BE PAID IN FULL, TO THE CITY OF ROCHESTER ENFORCEMENT DEPARTMENT, PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY. THE SEWER IMPACT IS A ONE TIME PAYMENT OF \$2.00 PER GALLON FOR AVERAGE DAILY FLOW.
23. THIS PROJECT PROPOSED TO DISTURB OVER ONE ACRE OF EXISTING GRASS COVER AND MEETS OTHER CRITERIA 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, MAINTENANCE ACTIVITIES, AND SUBMISSION OF A CERTIFICATE OF OCCUPANCY TO EPA. THE CONTRACTOR IS ALSO RESPONSIBLE TO COMPLY WITH ANY OR ALL OTHER ASPECTS OF THE CURRENT FEDERAL, STATE AND LOCAL STORM WATER OR NPDES REGULATIONS OR REQUIREMENTS.
24. THE CITY ENGINEER WILL REVIEW THE WAREHOUSE AND BUILDING DESIGN AND DETERMINE THERE WILL BE NO OUTSIDE STORAGE ON THE SITE UNLESS PRESENTED TO AND APPROVED BY THE PLANNING BOARD.
25. THE CITY MONUMENTS MUST BE SET PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.
26. PARCEL IS SUBJECT TO A JOINT EASEMENT EASEMENT AS SPECIFIED ON BOOK 4378, PAGE 856.

OVERALL SITE PLAN
TAX MAP 117, LOT 2-8
53 ALLEN STREET
ROCHESTER, NH
PREPARED FOR:
NORMAN VETTER, INC.

FINAL APPROVAL BY
ROCHESTER PLANNING BOARD

CERTIFIED BY: _____ DATE: _____

GRAPHIC SCALE



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

C-1

TAX MAP 134, LOT 5
OWNER OF RECORD:
NORMAN P. VETTER REV. TRUST &
STACIA R. VETTER REV. TRUST
PO BOX 181
ROCHESTER, NH 03866-0181
SCRD BOOK 4578, PAGE 864

FILE NO. 210
PLAN NO. C-2917
DWG. NO. 18120/SP-2
F.B. NO.

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

REFERENCE PLAN

1) "SUBDIVISION PLAN OF LAND GLENWOOD AVENUE & ALLEN STREET, ROCHESTER, NH FOR MT. WALDO OPERATIONS, INC. DATED: APRIL 1998; BY NORWAY PLAINS ASSOCIATES, INC. RECORDED: SCRD PLAN #57-70

2) "SITE PLAN ALLEN STREET EXTENSION, ROCHESTER, NH" DATED: MARCH, 2008: BY NORWAY PLAINS ASSOCIATES, INC.

NORWAY PLAINS ASSOCIATES, INC.

LAND SURVEYORS



CIVIL ENGINEERS

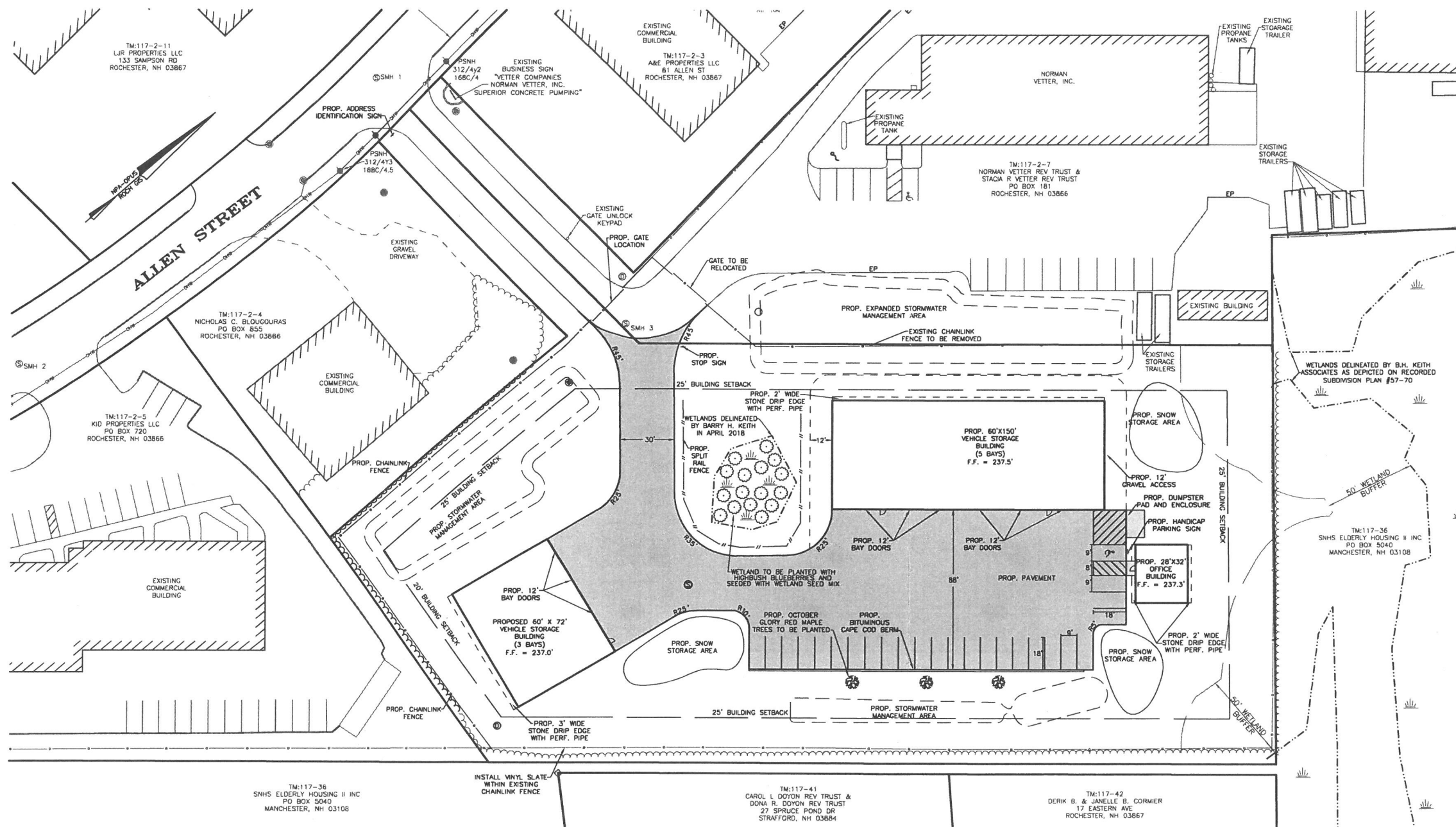
LEGEND

—	PROPERTY LINE	■	PROPOSED PAVEMENT
- - -	JURISDICTIONAL WETLANDS	■	PROPOSED CONCRETE
~	EXISTING TREE LINE	■	PROPOSED SIGNS
—	EXISTING OVERHEAD WIRES	○	PAVEMENT RADIUS (20')
—	EXISTING HYDRANT	□	PROPOSED STANDARD PARKING SPACES (9' x 18')
—	EXISTING WATER GATE OR SHUT-OFF VALVE	□	PROPOSED ACCESSIBLE PARKING SPACES (9' x 18' WITH 8' x 18' ACCESS ISLE)
—	EXISTING UTILITY POLE		
—	EXISTING SEWER MAN HOLE		
—	EXISTING SQUARE CATCH BASIN		
—	EXISTING ROUND CATCH BASIN		
—	EXISTING LIGHT POLES		
—	PROPOSED BUILDING		
—	PROPOSED PAVEMENT		
—	PROPOSED TREE LINE		

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.



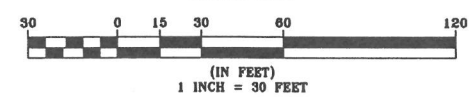
REVISIONS:
08/30/18 PER TRC REVIEW LETTER DATED AUGUST 28, 2018
03/29/19 ADD PROPOSED THIRD BUILDING AND PARKING SPACES.



CONSTRUCTION NOTES:
1. ALL DISTURBED AREA NOT PAVED OR GRAVEL SHALL HAVE A MINIMUM OF 4 INCHES OF LOAM, BE SEED AND MULCHED.
2. A KNOX BOX MUST BE INSTALLED AT THE GATE TO ENSURE EASY ACCESS FOR EMERGENCY VEHICLES.
3. ADDRESS IDENTIFICATION SIGN MUST BE AT LEAST 3.5' TALL, CONTRASTING COLOR, AND CLEARLY VISIBLE.

SITE LAYOUT PLAN
TAX MAP 117, LOT 2-8
53 ALLEN STREET
ROCHESTER, NH
PREPARED FOR:
NORMAN VETTER, INC.

APRIL 2019
GRAPHIC SCALE



FINAL APPROVAL BY
ROCHESTER PLANNING BOARD

CERTIFIED BY: _____ DATE: _____

FILE NO. 210
PLAN NO. C-2917
DWG. NO. 18120/SP-2
F.B. NO.

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



CIVIL ENGINEERS

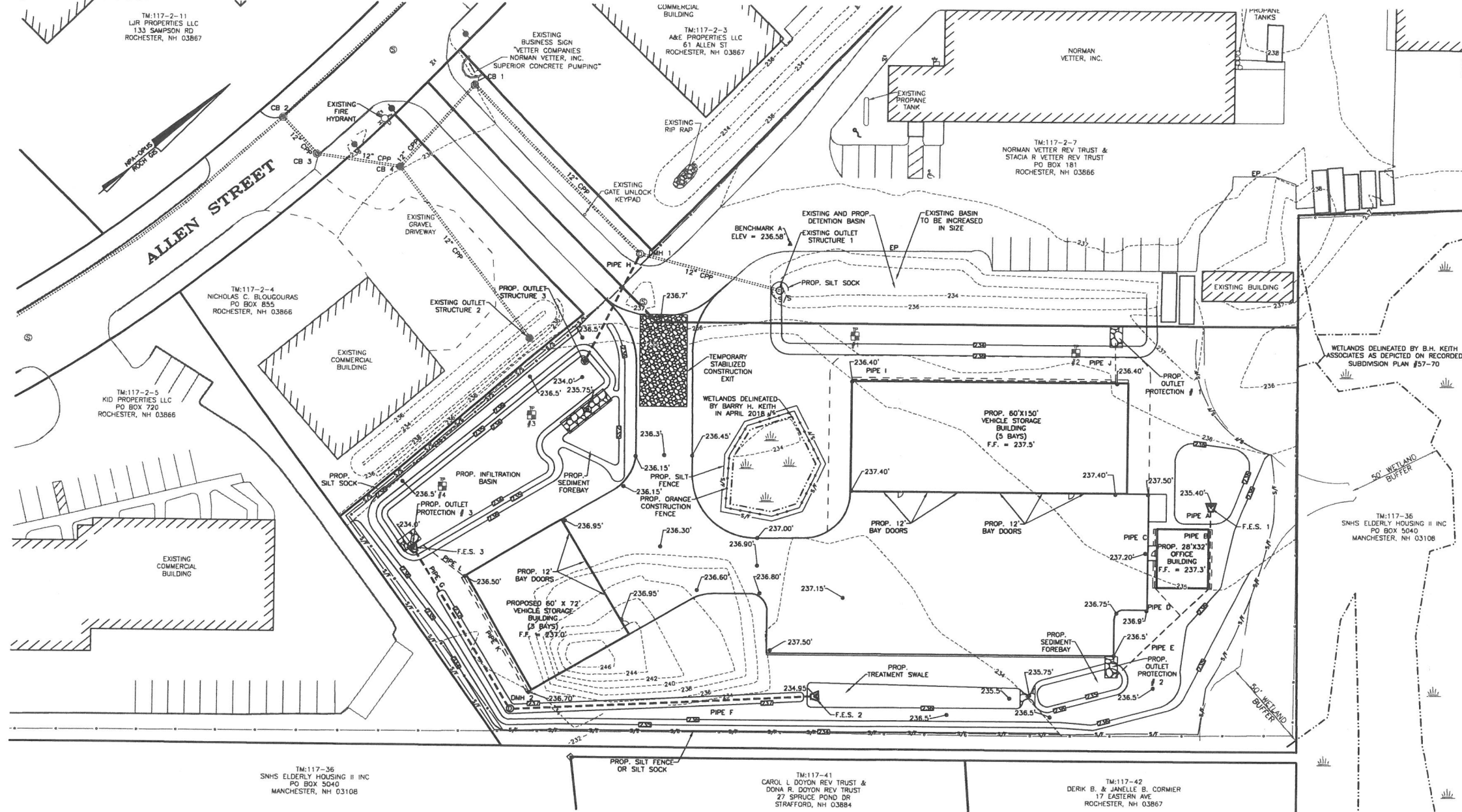


REVISIONS:
03/29/19 ADD PROPOSED THIRD BUILDING AND PARKING SPACES, REVISE STORMWATER BASIN, DRAINAGE PIPES, ETC.

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.

LEGEND

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



PROPOSED DRAINAGE STRUCTURE AND PIPE INFORMATION	EXISTING DRAINAGE STRUCTURE INFORMATION
PROP. DMH 2 RM = 237.11' INV. IN = 234.43' INV. OUT = 234.31'	FLARED END SECTION 1 6" CPP INV. = 235.4'
PROP. OUTLET STRUCTURE 3 RM = 235.5' 3-1" ORIFICES = 234.75' INV. OUT = 233.85'	FLARED END SECTION 2 15" CPP INV. = 234.95'
PIPE A 6" AREA DRAIN L = 10'	FLARED END SECTION 3 15" CPP INV. = 234.0'
PIPE B 6" PERFORATED PIPE L = 32'	
PIPE C 4" PERFORATED PIPE L = 32'	
PIPE D 4" CPP L = 20.5'	
PIPE E 6" CPP L = 70'	
PIPE F 15" CPP L = 162'	
PIPE G 15" CPP L = 100'	
PIPE H 12" CPP L = 65'	
PIPE I 4" PERFORATED PIPE L = 150'	
PIPE J 4" SDR 35 L = 21'	
PIPE K 4" PERFORATED PIPE L = 72'	
PIPE L 4" SDR 35 L = 28'	
	CB 1 RM = 235.4' INV. IN = 231.9' INV. OUT = 232.0' SUMP = 229.1'
	CB 2 RM = 235.48'
	CB 3 RM = 235.59'
	CB 4 RM = 235.98'
	DMH 1 RM = 236.75' INV. IN = 233.4' PROP. INV. IN = 233.4' INV. OUT = 233.3' SUMP = 229.9'
	OUTLET STRUCTURE 1 RM = 235.6' 3-1" ORIFICES = 233.5' INV. OUT = 233.4'
	OUTLET STRUCTURE 2 RM = 235.75' INV. OUT = 232.8' SUMP = 231.6'

TEST PIT DATA OBSERVED BY NORWAY PLAINS ASSOCIATES, INC., CHARLES KARCHER JR. ON JULY 27, 2018

- TP #1
0-19": 10 YR 5/6 COARSE SAND AND GRAVEL (FILL)
19"-24": 10 YR 3/3 SANDY LOAM
24"-36": 10 YR 6/3 SAND FIRM
36"-38": 2.5 YR 6/2 SAND WITH ROCKS
OBSERVED WATER @ 36"
VERY FIRM CEMENTED LAYER 38" AND DOWN
SHWT @ 24"
- TP #2
0-22": 10 YR 5/6 SAND AND GRAVEL (FILL)
22"-28": 10 YR 3/3 OLD TOP SOIL
28"-36": 10 YR 5/4 SANDY LOAM WITH ROCKS
OBSERVED WATER @ 36"
SHWT @ 28"
- TP #3
0-14": 10 YR 5/6 SAND AND GRAVEL
14"-24": 10 YR 3/3 SANDY LOAM ORGANICS
24"-36": 10 YR 5/6 SAND
OBSERVED WATER @ 36"
SHWT @ 24"
- TP #4
0-24": SAND AND GRAVEL (FILL)
24"-36": ORGANIC LAYER
36"-48": 10 YR 5/6 SAND
MOTTLED THROUGHOUT
OBSERVED WATER @ 48"
SHWT @ 36"

GRADING, DRAINAGE, EROSION & SEDIMENTATION CONTROL PLAN

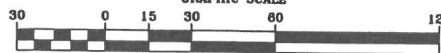
TAX MAP 117, LOT 2-8

53 ALLEN STREET
ROCHESTER, NH

PREPARED FOR:
NORMAN VETTER, INC.

APRIL 2019

GRAPHIC SCALE



(IN FEET)

1 INCH = 30 FEET

FILE NO. 210
PLAN NO. C-2917
DWG. NO. 18120/SP-2
F.B. NO.

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

NORWAY PLAINS ASSOCIATES, INC.

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

C-3

LAND SURVEYORS



CIVIL ENGINEERS

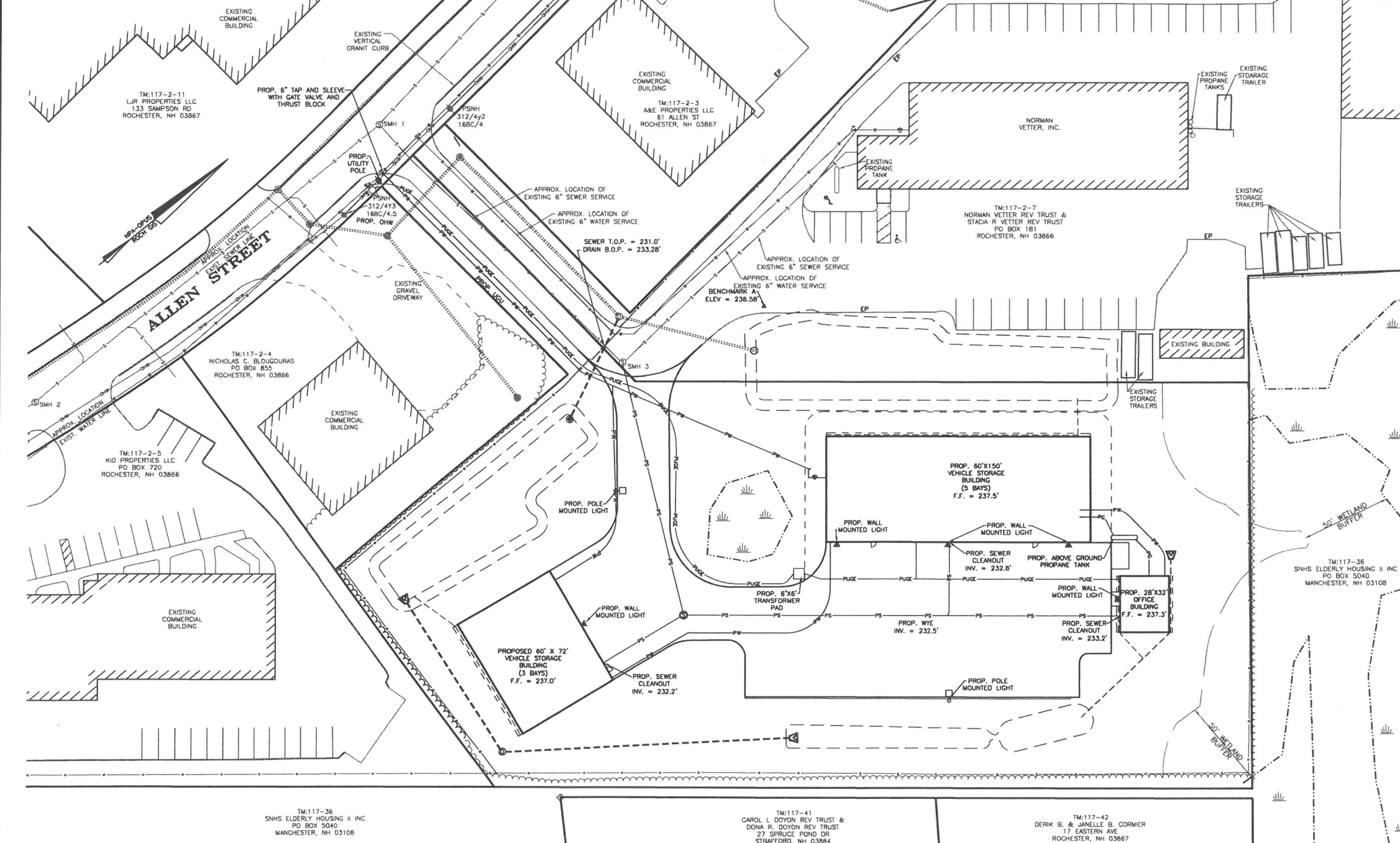
CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN 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.

- NOTES:
- CONSTRUCTION WILL CONFORM TO THE FOLLOWING UTILITIES STANDARDS AND SPECIFICATION:
 - SANITARY SEWER DISPOSAL - NHDES
 - ELECTRIC DISTRIBUTION - EVERSOURCE
 - TELEPHONE - CONSOLIDATED COMMUNICATIONS
 - CABLE - ATLANTIC BROADBAND
 - WATER - CITY OF ROCHESTER, STANDARDS
 - ALL PROPOSED ON-SITE UTILITIES SHALL BE INSTALLED UNDERGROUND.



REVISIONS:
08/30/18 PER TRC REVIEW LETTER DATED AUGUST 28, 2018
03/29/19 ADD PROPOSED THIRD BUILDING AND ASSOCIATED UTILITY CONNECTIONS, ETC.

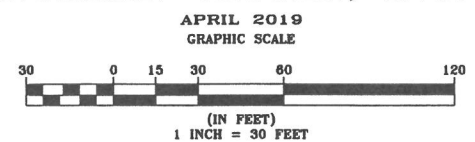
LEGEND	
—	PROPERTY LINE
---	JURISDICTIONAL WETLANDS
—	EXISTING OVERHEAD WIRES
—	EXISTING WATER MAIN
—	EXISTING GRAVITY SEWER MAIN
—	EXISTING SEWER FORCE MAIN
—	EXISTING UNDERGROUND ELECTRIC WIRES
—	EXISTING UNDERGROUND UTILITY WIRES
—	EXISTING GAS PIPE
—	EXISTING DRAIN LINE
—	EXISTING HYDRANT
—	EXISTING WATER GATE OR 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 PIPE HOPE SDR 11
---	PROPOSED PROPANE GAS LINE
---	PROPOSED UNDERGROUND UTILITY WIRES
---	PROPOSED UNDERGROUND ELECTRIC WIRES
---	PROPOSED HYDRANT
---	PROPOSED WATER VALVE
---	PROPOSED WATER SHUT-OFF VALVE
---	PROPOSED SEWER SHUT-OFF VALVE
---	PROPOSED UTILITY POLE
---	PROPOSED SEWER MANHOLE
---	PROPOSED DRAIN MANHOLE
---	PROPOSED CATCH BASIN
---	PROPOSED LIGHT POLES
---	PROPOSED BUILDING LIGHT FIXTURES
---	TOP OF PIPE
---	BOTTOM OF PIPE



- PROPOSED SEWER SYSTEM**
- PROP. SDR 35 PVC 6" SEWER PIPE L = 245'
 - PROP. SDR 35 PVC 6" SEWER PIPE L = 45'
 - PROP. SEWER MANHOLE #1 RM = 236.60' INV. IN = 231.6' INV. OUT = 231.5'
 - PROP. SDR 35 PVC 6" SEWER PIPE L = 50'
 - PROP. SDR35 PVC 6" SEWER PIPE L = 144.0'
 - EXISTING SEWER MANHOLE RM = 237.16' INV. IN = 230.4' INV. OUT = 230.4' PROP. INV. IN = 230.5'

- PROPOSED WATER SYSTEM**
- PROP. 6" D.I. CLASS 52 WATER MAIN
 - PROP. 6" TO 4" REDUCER D.I. CLASS 52
 - PROP. 6" CAP FOR FUTURE
 - PROP. 2" HOPE DOMESTIC WATER LINE
 - PROP. 1" HOPE DOMESTIC WATER LINE

UTILITY PLAN
TAX MAP 117, LOT 2-8
53 ALLEN STREET
ROCHESTER, NH
PREPARED FOR:
NORMAN VETTER, INC.



FILE NO. 210
PLAN NO. C-2917
DWG. NO. 18120/SP-2
F.B. NO.

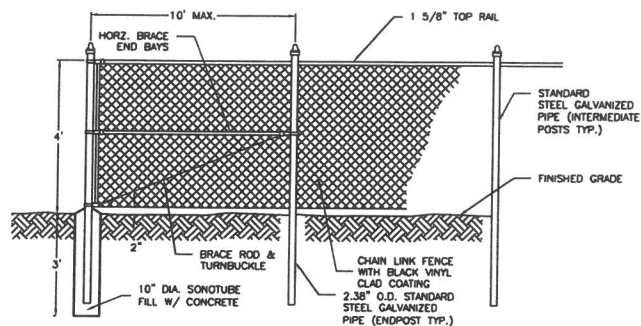
31 Mooney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

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

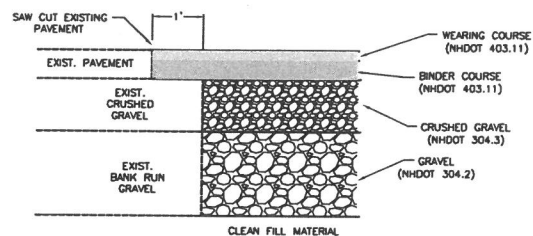
C-4

LAND SURVEYORS



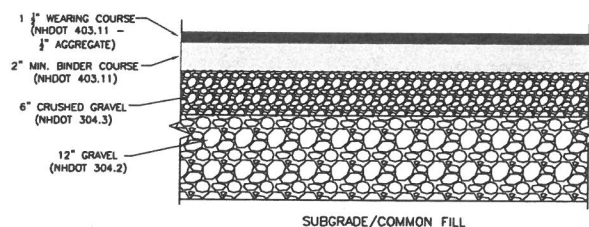
TYPICAL CHAINLINK FENCE DUMPSTER ENCLOSURE

NOT TO SCALE



TYPICAL PAVEMENT MATCHING DETAIL

NOT TO SCALE

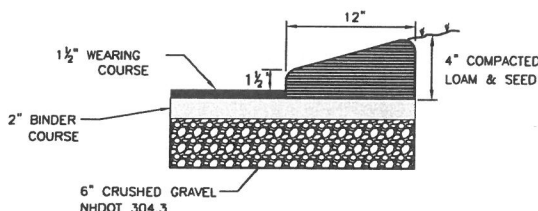


PARKING LOT CROSS-SECTIONS

NOT TO SCALE

PAVEMENT 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 8 INCH LIFTS. COMPACT TO 95% MAXIMUM PROCTOR DENSITY.
4. PAVEMENT MUST BE INSTALLED IN TWO COURSES, A BINDER COURSE AND A WEARING COURSE.

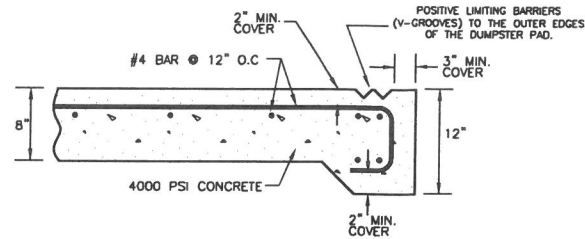


BITUMINOUS CAPE COD BERM DETAIL

NOT TO SCALE

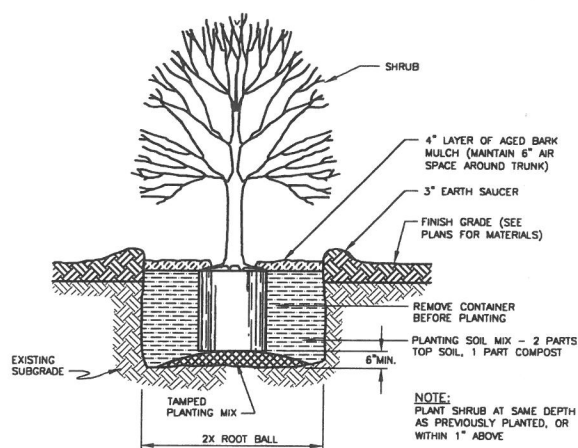
NOTES:

1. BITUMINOUS CAPE COD BERM SHALL BE INSTALLED ON TOP OF BINDER COURSE.



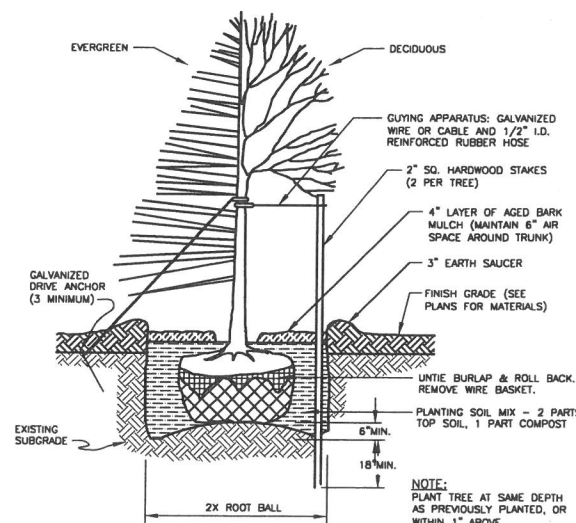
DUMPSTER PAD DETAIL

NOT TO SCALE



SHRUB PLANTING DETAIL

NOT TO SCALE



TREE PLANTING DETAIL

N.T.S.

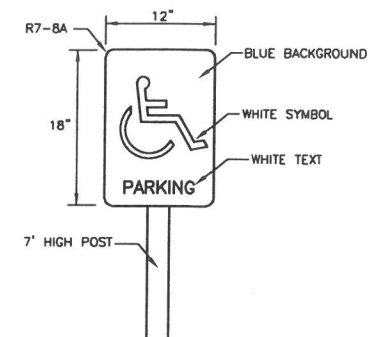
CIVIL ENGINEERS

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.



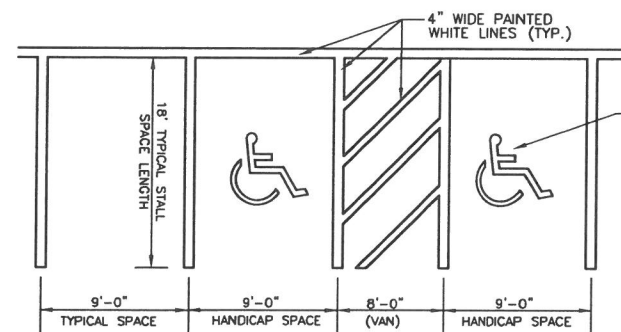
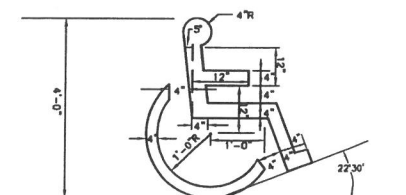
REVISIONS:
8/30/18 PER TRG REVIEW LETTER DATED AUGUST 28, 2018

ITEM NO.	SIGN SIZE		TEXT	NO. SIGNS REQ'D
	HEIGHT	WIDTH		
R1-1	30"	30"	STOP	1
R7-8a	18"	12"	PARKING	1



SIGN DETAIL

NOT TO SCALE



STALL STRIPING DETAIL

NOT TO SCALE

CONSTRUCTION SEQUENCE

1. CUT ALL TREES AND REMOVE ALL STUMPS.
2. CONSTRUCT SILT FENCE AND INSTALL SILT SOCKS AS SHOWN. MAINTAIN THE FENCE AND SILT SOCKS AS CONSTRUCTION PROGRESSES AND UNTIL ALL DISTURBED AREAS ARE STABLE.
3. CONSTRUCT THE DETENTION AND INFILTRATION BASIN AS SHOWN ON THE PLAN. LOAM, SEED, AND MULCH IMMEDIATELY AFTER CONSTRUCTION.
4. THE DETENTION AND INFILTRATION BASIN MUST BE STABILIZED BEFORE DIRECTING RUNOFF TO THEM. EROSION CONTROL BLANKETS (CURLX EXCELSIOR BY AMERICAN EXCELSIOR COMPANY, OR EQUAL) SHALL BE USED WHERE SOD IS NOT PLACED AND VEGETATION IS NOT ESTABLISHED.
5. REMOVE THE LOAM AND VEGETATION FROM THE BUILDING, PARKING LOT AND BACKSLOPE AREAS. THE LOAM WILL NEED TO BE STORED FOR USE LATER IN STABILIZING THE SWALES AND SIDESLOPES. THE LOAM PILE SHALL BE SEEDED FOR TEMPORARY PROTECTION SHOULD IT REMAIN INACTIVE FOR MORE THAN 30 DAYS.
6. CUT THE PARKING LOT, BACKSLOPE AREAS, AND BUILDING AREAS TO SUB-GRADE.
7. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED OR COVERED WITH AN EROSION CONTROL BLANKET IMMEDIATELY AFTER THEIR CONSTRUCTION.
8. CONSTRUCT THE CLOSED DRAINAGE SYSTEM AS SHOWN ON THE PLAN.
9. INSTALL ALL UNDERGROUND UTILITIES AS DEPICTED ON THE UTILITY PLAN.
10. INSTALL THE GRAVEL BASE IN ALL AREAS TO BE PAVED.
11. INSTALL ALL NEW PAVEMENT.
12. ALL DISTURBED AREAS EXCLUDING BUILDINGS AND PARKING SHALL BE STABILIZED AS SOON AS POSSIBLE, BUT IN NO CASE SHALL BE LEFT UNSTABILIZED FOR MORE THAN 30 DAYS. BUILDINGS, PARKING LOTS, AND DRIVEWAYS SHALL BE CONSTRUCTED AS PRACTICABLE, BUT IN NO CASE SHALL BE LEFT UNPROTECTED OVER THE WINTER MONTHS.
13. REMOVE TEMPORARY EROSION CONTROL (SILT FENCES AND SILT SOCKS) TO ELIMINATE FLOW IMPEDIMENTS ONCE SEEDING IS FIRMLY ESTABLISHED.

1. SIGN POST SHALL BE AASHTO APPROVED U-CHANNEL OR OTHER 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 PARKING LOT MOVEMENTS TAKE PLACE.
3. SIGNS SHALL BE PLACED SO THAT NEAREST EDGE IS 2 FT. FROM EDGE OF PAVEMENT UNLESS CURBED.

TYPICAL TRAFFIC SIGN

NOT TO SCALE

CONSTRUCTION DETAILS
TAX MAP 117, LOT 2-8
53 ALLEN STREET
ROCHESTER, NH
PREPARED FOR:
NORMAN VETTER, INC.
APRIL 2019

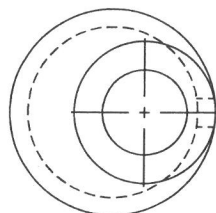
FILE NO. 210
PLAN NO. C-2917
DWC. NO. 18120/SP-2
F.B. NO.

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

NORWAY PLAINS ASSOCIATES, INC.

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

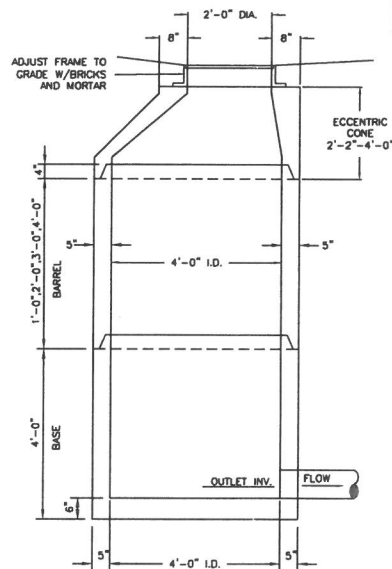
C-5



PLAN VIEW

DRAIN LINE DIAMETER	SUM OF DRAIN LINE DIAMETER	DRAIN MANHOLE DIAMETER
15" TO 18"	LESS THAN 34"	4'
21" TO 27"	LESS THAN 72"	5'
30" TO 33"	LESS THAN 90"	6'
36" & LARGER	GREATER THAN 90"	REFER TO THE STANDARD

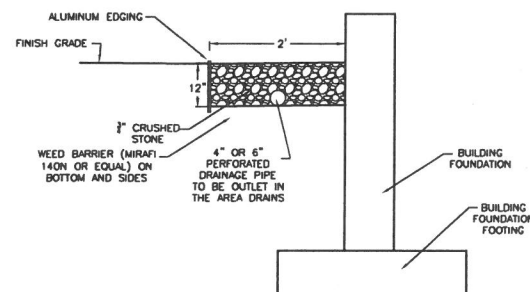
- NOTES:
1. CONCRETE: 4,000 PSI AFTER 28 DAYS.
 2. REINFORCING: SHALL BE PROVIDED FOR H-20 LOADING.
 3. SHUTTER JOINTS SEALED WITH 1 STRIP OF BUTYL RUBBER SEALANT.
 4. PIPE OPENINGS CAST IN AS REQUIRED.
 5. RISER HEIGHT VARIES 1', 2', 3' OR 4' TO REACH DESIRED DEPTH.
 6. PIPE CONNECTIONS SHALL BE MORTARED.
 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.



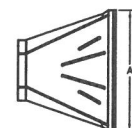
SECTION VIEW

PRE-CAST REINFORCED DRAIN MANHOLE

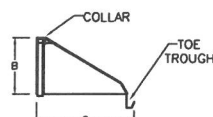
NOT TO SCALE

**FOUNDATION AND DRIP EDGE DRAIN DETAIL**

NOT TO SCALE



TOP VIEW



SIDE VIEW



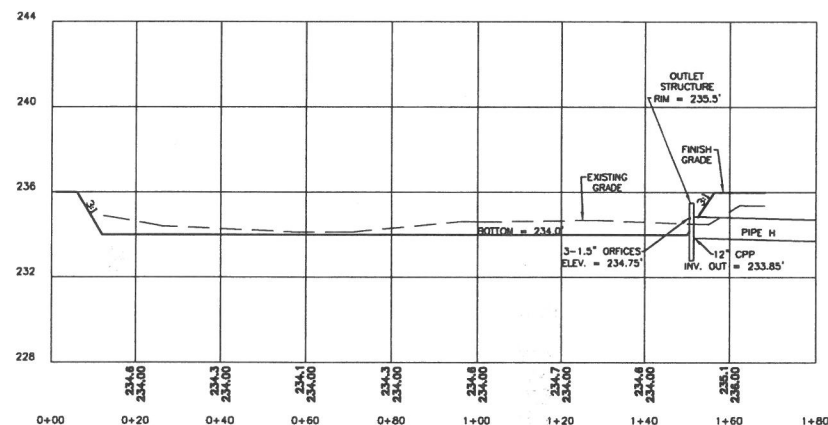
FRONT VIEW

FLARED END SECTION DETAIL

NOT TO SCALE

PIPE DIAMETERS	A	B	C	D
10" / 12"	42	14.5	33	6
15"	41	19	34	6
18"	48	22	43	6
24"	56.5	26	48	6
30"	66	36	63.5	6
36"	88	43	66.5	6

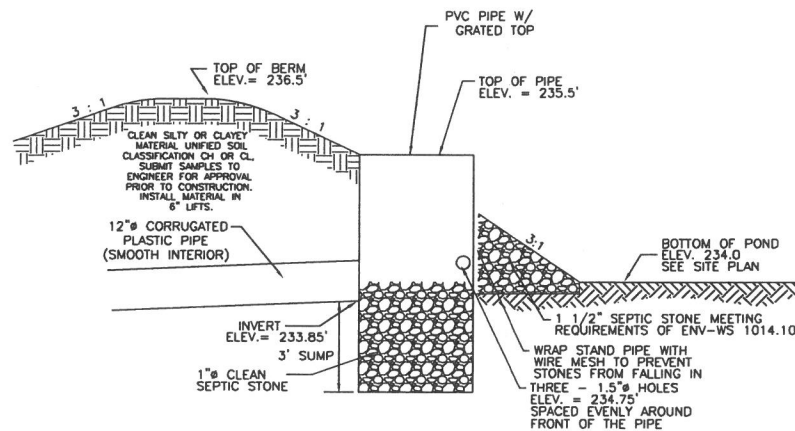
CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN 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.

**INFILTRATION BASIN CROSS SECTION**

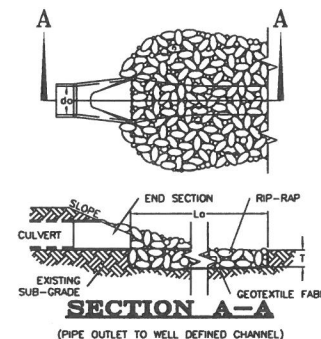
1" = 20' (HORZ.) & 1" = 4' (VERT.)

INFILTRATION BASIN:

- SPECIFICATIONS:**
1. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO THE INFILTRATION BASIN.
 2. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED 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 "PERMANENT VEGETATION" NOTES ON SHEET C-9.
 7. SEED MIXTURE = A
 8. DO NOT PLACE INFILTRATION SYSTEMS INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
- MAINTENANCE REQUIREMENTS:**
1. INSPECT PRETREATMENT MEASURES (I.E. SEDIMENT FOREBAY(S), HOODED CATCH BASINS, ETC.) AT LEAST TWICE A YEAR AND AFTER EVERY STORM GREATER THAN 2.5 INCHES OF RAIN OVER A 24-HOUR PERIOD.
 2. INSPECT INFILTRATION SURFACE B-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 REMOVAL AS NECESSARY TO RESTORE INFILTRATION CAPACITY.
 5. PERFORM MAINTENANCE AND REHABILITATION BASED ON INSPECTIONS.
 6. REMOVE DEBRIS (IF ANY) 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 WHEN MOWING THE REST 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 SOILS 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 OUTLET CONTROL STRUCTURE**

NOT TO SCALE

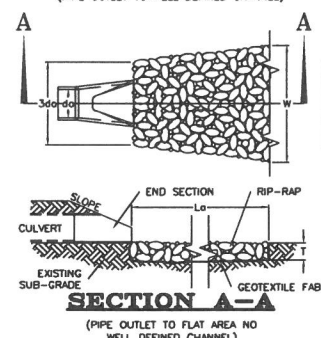
**RIP-RAP GRADATION**

d50 = 3"

% OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE (INCHES)
100	3 TO 6
85	4 TO 5
50	3 TO 5
15	1 TO 2

d50 = 4"

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

**APRON DIMENSION TABLE**

OUTLET PROT. #	PIPE OUTLET	W _o	W	L _o	T	d50
#1	36" CPP INTO FORABAY	9'	21.8'	32.2'	18"	6"
#2	30" CPP INTO INFILTRATION BASIN	7.5'	27.5'	20.0'	9"	3"
#3	24" CPP OUTLET	6'	21.85'	15.85'	9"	3"

- NOTES:**
1. ALL PIPE CULVERTS SHALL HAVE END SECTIONS OR HEADWALLS. END SECTION MATERIAL AND MANUFACTURER SHALL MATCH THAT OF THE PIPE CULVERT.
 2. THE LARGEST RIP-RAP SIZE DETERMINED DURING HYDROLOGIC 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 THE SUB-GRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIP-RAP TO THE GRADES SHOWN ON THE PLANS.
 2. MINIMUM 6" SAND/GRAVEL BEDDING OR GEOTEXTILE FABRIC REQUIRED UNDER ALL ROCK RIP-RAP.
 3. THE ROCK OR GRAVEL 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. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO (2) PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
 5. STONE FOR THE RIP-RAP MAY 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 CHOSEN FOR THE WORST 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, DEBRIS, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO THE OUTLET PROTECTION APRON.

PIPE OUTLET PROTECTION DETAIL

DRAINAGE DETAILS
TAX MAP 117, LOT 2-8
53 ALLEN STREET
ROCHESTER, NH
 PREPARED FOR:
NORMAN VETTER, INC.
 APRIL 2019

FILE NO. 210
 PLAN NO. C-2917
 D.W.C. NO. 18120/SP-2
 F.B. NO.

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

NORWAY PLAINS ASSOCIATES, INC.

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

C-6

LAND SURVEYORS

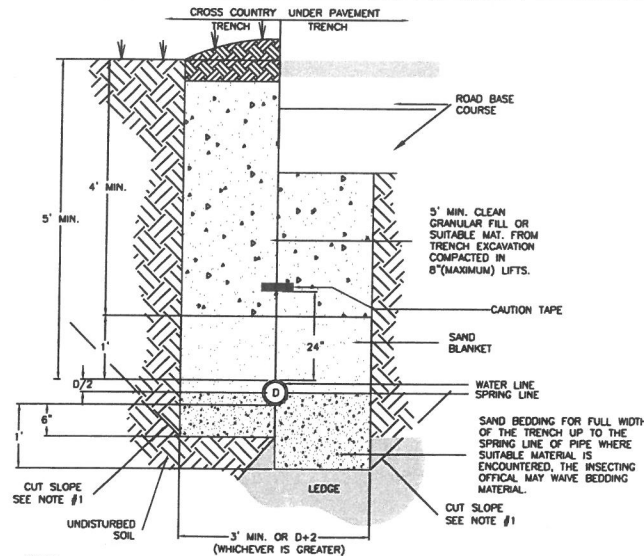


CIVIL ENGINEERS

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.



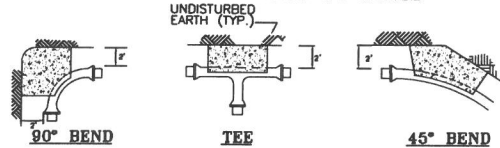
05/20/2016 - REVISED PLAN PER ROCHESTER TRC COMMENTS
09/11/2018 - REMOVE FIRE CONNECTION DETAIL



- NOTES:
1. PIPES MAY BE INSTALLED BY EXCAVATING AN OPEN TRENCH WITH SIDE SLOPES OF 1:1 MAXIMUM TO A DEPTH OF 4-FT. INSTALLATIONS DEEPER THAN 4-FT REQUIRE THE USE OF TRENCH BOX.
2. PIPE MATERIALS SHALL BE AS SPECIFIED ON THE DESIGN PLAN.
3. SAND BLANKET MAY BE OMITTED FOR REINFORCED CONCRETE PIPE.

WATER PIPE TRENCH INSTALLATION DETAIL

NOT TO SCALE



PIPE SIZE	90° BEND	TEE	PLUG	45° BEND	22 1/2°
6"	5	4	3	2	2
8"	10	8	6	6	3
12"	24	18	8	12	8

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

WATER MAIN THRUST BLOCK DETAILS

NOT TO SCALE

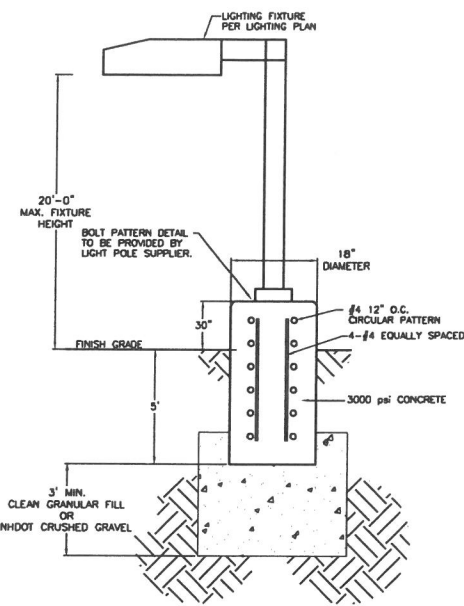
DUCTILE IRON MECHANICAL RETRAINED LENGTH (FEET)																							
PIPE DIAMETER (INCHES)	BENDS																DEAD END						
	11 1/4'				22 1/2'				45'				90'										
	50 psi	100 psi	150 psi	200 psi	50 psi	100 psi	150 psi	200 psi	50 psi	100 psi	150 psi	200 psi	50 psi	100 psi	150 psi	200 psi	50 psi	100 psi	150 psi	200 psi			
2"	0	0	1	1	0	1	1	1	1	1	2	3	2	4	5	7	4	8	12	17			
6"	0	0	1	1	1	1	2	2	1	2	3	4	3	5	8	10	6	12	18	23			
8"	0	1	1	1	1	1	2	3	1	3	4	6	3	7	10	13	8	15	23	31			
10"	0	1	1	2	1	2	2	3	2	3	5	7	4	8	12	16	9	19	28	37			
12"	0	1	1	2	1	2	3	4	2	4	6	8	5	9	14	19	11	22	33	44			
TEE*																REDUCER							
SAME SIZE				ONE SIZE SMALLER				ONE SIZE SMALLER				TWO SIZE SMALLER											
	50 psi	100 psi	150 psi	200 psi	50 psi	100 psi	150 psi	200 psi	50 psi	100 psi	150 psi	200 psi	50 psi	100 psi	150 psi	200 psi							
2"	1	1	1	1	1	1	1	1	1	3	4	5	-	-	-	-							
6"	1	1	1	4	1	1	1	1	3	6	9	12	4	8	12	16							
8"	1	1	3	11	1	1	1	1	3	6	10	13	6	11	17	22							
10"	1	1	8	17	1	1	1	6	3	6	10	13	6	11	17	23							
12"	1	2	13	24	1	1	4	13	5	11	16	22	6	12	18	23							

* BASED ON A MINIMUM ATTACHED PIPE ALONG RUN (Lr) = 5 FEET

MECHANICAL RETRAINED LENGTH SCHEDULE

NOT TO SCALE

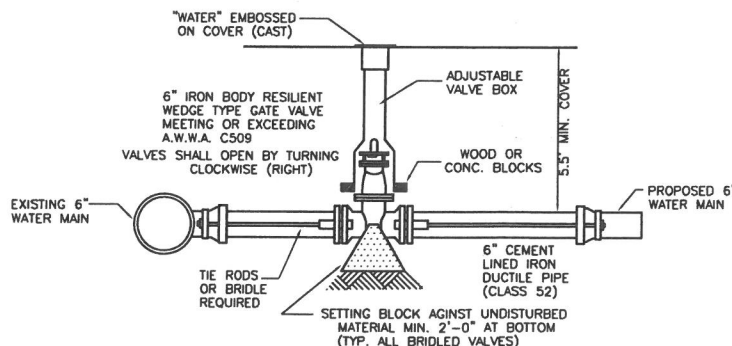
- NOTES:
1. PIPE IS BURIED TO A DEPTH OF 6 FEET WITH A MINIMUM OF 4 INCHES OF COMPACTED GRANULAR MATERIAL UNDER THE PIPE TO THE SPRING LINE OF THE PIPE.
2. THE EXISTING SOIL IS POORLY GRADED GRAVEL AND GRAVEL SAND MIXTURE WITH LITTLE TO NO FINES.
3. ALL CALCULATIONS ARE BASED ON A FACTOR OF SAFETY OF 1.5 TO 1.
4. ALL CALCULATIONS ARE BASED ON THE "RESTRAINED LENGTH CALCULATION PROGRAM" BY EBAA IRON, INC., RELEASE 3.1.



POLE MOUNTED LIGHT DETAIL

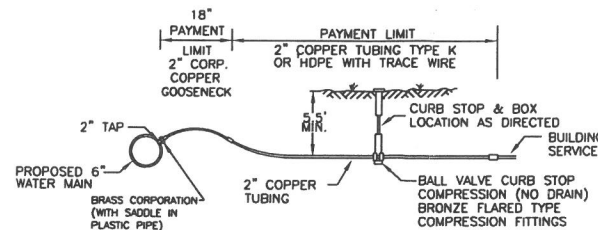
NOT TO SCALE

- NOTE:
1. THE LIGHT POLE BASES CAN BE PRECAST, WITH COORDINATION WITH THE LIGHTING FIXTURE MANUFACTURE FOR BOLT PATTERN.



WATER MAIN CONNECTION

NOT TO SCALE



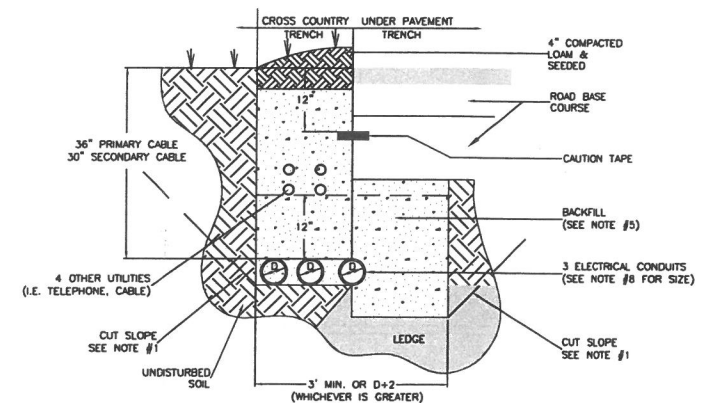
NOTE: SERVICE LINE SHALL BE TYPE K COPPER CONFORMING TO ASTM-D88

TYPICAL DOMESTIC SERVICE CONNECTION

NOT TO SCALE

GENERAL UTILITY NOTES

- CONTRACTOR SHALL NOTIFY DIG-SAFE (1-888 344-7233) 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
- ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR LOCATIONS AND ELEVATIONS.
- THESE PLAN SHOWS ONLY THOSE FEATURES THAT WERE VISUALLY APPARENT ON THE DATE OF THE SURVEY. THE ABSENCE OF SUBSURFACE STRUCTURES, UTILITIES, ETC. FROM THIS PLAN, BUT IN EXISTENCE IS NOT INTENDED OR IMPLIED.
- ANY UTILITY POLES THAT NEED TO BE RELOCATED SHALL BE COORDINATED WITH EVERSOURCE OR VERIZON, WHOM EVER HAS CONTROL OVER THEM.
- PROPOSED UTILITIES ARE TO BE UNDERGROUND. COORDINATE LOCATION OF UNDERGROUND UTILITIES AND TRANSFORMER PADS WITH PSNH AND OTHER PERTINENT UTILITY COMPANIES.
- WATER AND SEWER LINES SHALL BE INSTALLED A MINIMUM OF 10-FT APART HORIZONTALLY.
- WHERE SEWER AND WATER LINES MUST CROSS, SEWER PIPE JOINTS SHALL BE LOCATED A MINIMUM 9-FT HORIZONTALLY FROM THE WATER LINE AND A VERTICAL SEPARATION OF 18-INCHES SHALL BE MAINTAINED.
- SEWER PIPE JOINTS SHALL BE TESTED WITH ZERO LEAKAGE AT 25 POUNDS PER SQUARE INCH FOR GRAVITY SEWER AND AT 1-1/2 TIMES WORKING PRESSURE FOR ALL FORCE MAINS.
- WATERLINE CONSTRUCTION:
A.) ALL PROPOSED WATER LINE MATERIAL USED SHALL MEET ROCHESTER WATER DEPARTMENT AND ROCHESTER ENGINEERING DEPARTMENT SPECIFICATIONS. WATER LINES SHALL BE A.W.W.A. C 151, CLASS 52, DOUBLE THICKNESS CEMENT LINED, SEAL COATED IN ACCORDANCE WITH A.W.W.A. C104 AND DUCTILE IRON PIPE.
B.) PROPOSED WATER GATE VALVES SHALL BE MANUFACTURED BY KENNEDY OF AMERICAN FLOW CONTROL, RESILIENT SEAT TYPE.
C.) ALL WATER LINES SHALL BE BURIED A MINIMUM OF 5'.
D.) IF 5' OF COVER IS NOT AVAILABLE WATER LINE SHALL BE INSULATED AS SHOWN IN THE "SHALLOW COVER TRENCH DETAIL FOR INSULATED WATER PIPE".
E.) FITTINGS:
a. PRESSURE RATING OF 250 PSI
b. FLANGE SHALL BE ANSI B16.1, CLASS 152
c. CEMENT LINED AND SEAL COATED
d. FACTORY APPLIED BITUMINOUS COATING SHALL BE FURNISHED
F.) PROPOSED WATER GATE VALVE SHALL OPEN COUNTERCLOCKWISE (RIGHT).
G.) IF 5' OF COVER IS NOT AVAILABLE WATER LINE SHALL BE INSULATED AS SHOWN IN THE "SHALLOW COVER TRENCH DETAIL FOR INSULATED WATER PIPE".
H.) WORK TO CONNECT INTO THE WATER OR SEWER MAINS REQUIRES A PERMIT FROM THE ROCHESTER PUBLIC WORKS DEPARTMENT. CONTRACTORS ARE TO BE PRE-QUALIFIED.



- NOTES:
1. ALL NON-METALLIC CONDUIT AND FITTINGS SHALL BE ELECTRICAL GRADE, SCHEDULE 40 PVC, AND SHALL CONFORM TO THE APPLICABLE SECTIONS OF NEMA 12C-1990 AND BE UL LISTED. ONLY GRAY-COLORED CONDUIT WILL BE ACCEPTED. ANY PVC CONDUIT NOT HAVING THE PROPER NEMA AND UL MARKINGS WILL NOT BE ACCEPTED. ALL STEEL CONDUITS SHALL CONFORM TO ASTM A113 AND BE RIGID GALVANIZED STEEL. ALL PVC JOINTS MUST BE CEMENTED. STEEL FITTINGS SHALL BE SEALED WITH COMPOUND.
2. ALL 90 DEGREE SWEEPS WILL BE MADE USING RIGID GALVANIZED STEEL WITH A MINIMUM RADIUS OF 36 INCHES FOR PRIMARY CABLES AND 24 INCHES FOR SECONDARY CABLES. ALL STEEL SWEEPS WITHIN 18" OF THE SURFACE SHALL BE PROPERLY GROUNDING.
3. A 10-FOOT HORIZONTAL SECTION OF RIGID GALVANIZED STEEL CONDUIT WILL BE REQUIRED AT EACH SWEEP, UNLESS IN THE OPINION OF THE PSNH DESIGNER, THE SWEEP-PVC JOINT IS NOT SUBJECT TO FAILURE DURING CABLE PULLING.
4. THE CONDUIT SHALL CROSS PAVED AREAS AT APPROXIMATELY 90 DEGREES.
5. BACKFILL MAY BE MADE WITH EXCAVATED MATERIAL OR COMPACTABLE, UNLESS MATERIAL IS DEEMED UNSUITABLE BY PSNH. BACKFILL SHALL BE THOROUGHLY COMPACTED IN 6-INCH LAYERS.
6. A SUITABLE PULL STRING, CAPABLE OF 200 POUNDS OF PULL, MUST BE INSTALLED IN THE CONDUIT BEFORE PSNH IS NOTIFIED TO INSTALL CABLE. THE STRING SHOULD BE BLOWN INTO THE CONDUIT AFTER THE RUN IS ASSEMBLED TO AVOID BLOWING THE STRING TO THE CONDUIT.
7. THE ROUTING OF THE CONDUIT AND INSPECTION PRIOR TO BACKFILL WILL BE PROVIDED BY PSNH. INSTALLATION OF THE CONDUIT WILL BE DONE BY THE CONTRACTOR. THE PSNH SUPERVISOR MUST BE NOTIFIED 2 BUSINESS DAYS PRIOR TO BACKFILLING THE TRENCH. IN THE EVENT THAT A CABLE CANNOT BE SUCCESSFULLY PULLED THROUGH THE COMPLETED CONDUIT SYSTEM DUE TO A CONSTRUCTION ERROR, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND REPAIR THE INVOLVED CONDUIT. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL REPAIRING EXPENSES.
8. NORMAL CONDUIT SIZES FOR PSNH ARE 3-INCH FOR SINGLE PHASE PRIMARY AND SECONDARY VOLTAGE CABLES, 4-INCH FOR THREE PHASE SECONDARY, AND 3-INCH FOR THREE PHASE PRIMARY.
9. ALL CONDUIT INSTALLATIONS MUST CONFORM TO THE CURRENT EDITION OF THE NATIONAL ELECTRICAL SAFETY CODE, STATE AND LOCAL CODES AND ORDINANCES, AND WHERE APPLICABLE THE NATIONAL ELECTRICAL CODE.
10. CONDUIT MAY BE INSTALLED BY EXCAVATING AN OPEN TRENCH WITH SIDE SLOPES OF 1:1 MAXIMUM TO A DEPTH OF 4-FT. INSTALLATIONS DEEPER THAN 4-FT REQUIRE THE USE OF A TRENCH BOX.

ELECTRICAL & UNDERGROUND UTILITY TRENCH INSTALLATION DETAIL

NOT TO SCALE

UTILITY DETAILS
TAX MAP 117, LOT 2-8
53 ALLEN STREET
ROCHESTER, NH

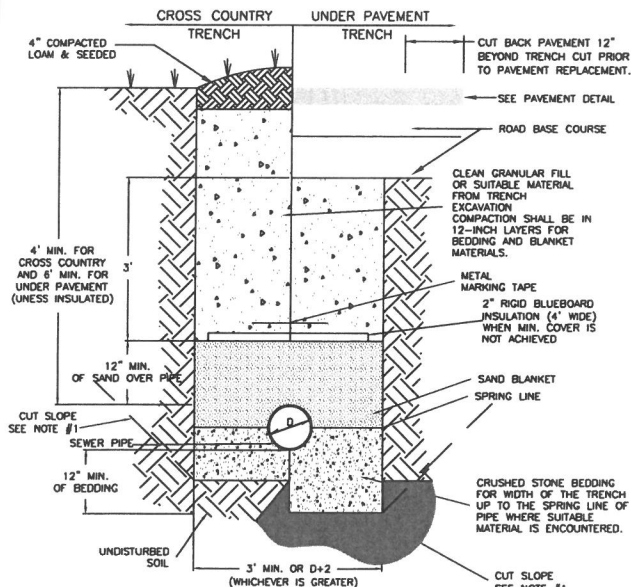
PREPARED FOR:
NORMAN VETTER, INC.

AS SHOWN APRIL 2019

FILE NO. 210
PLAN NO. C-2917
DWG. NO. 18120/SP-2
F.B. NO.

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

NORWAY PLAINS ASSOCIATES, INC.

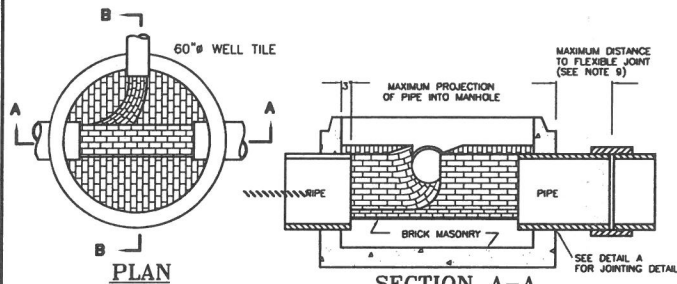


- NOTES:
- PIPES MAY BE INSTALLED BY EXCAVATING AN OPEN TRENCH WITH SIDE SLOPES OF 1:1 MAXIMUM TO A DEPTH OF 4-FT. INSTALLATIONS DEEPER THAN 4-FT REQUIRE THE USE OF A TRENCH BOX.
 - PIPE MATERIALS SHALL BE AS SPECIFIED ON THE DESIGN PLAN.
 - SAND BLANKET MAY BE OMITTED FOR REINFORCED CONCRETE PIPE.
 - WHERE SHEETING IS PLACED ALONGSIDE THE PIPE AND EXTENDS BELOW MID-DIAMETER, THE SHEETING SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN ONE FOOT ABOVE THE TOP OF THE PIPE AND AT LEAST 3 FEET BELOW FINISHED GRADE.
 - THE PIPE SAND BLANKET MATERIAL SHALL BE GRADED SAND FREE FROM ORGANIC MATERIALS, GRADED SUCH THAT 100 PERCENT PASSES A 1/4-INCH SIEVE AND A MAXIMUM OF 15 PERCENT PASSES A #200 SIEVE.
 - TRENCH BACKFILL MATERIAL IN ROADWAY LOCATIONS SHALL BE NATURAL MATERIALS EXCAVATED FROM THE TRENCH DURING CONSTRUCTION, EXCLUDING:
 - DEBRIS;
 - PIECES OF PAVEMENT;
 - ORGANIC MATERIAL;
 - TOP SOIL;
 - WET OR SOFT MUCK;
 - PEAT OR CLAY;
 - EXCAVATED LEDGE MATERIAL;
 - ROCKS OVER 6 INCHES IN THE LARGEST DIMENSION; AND
 - ANY MATERIAL NOT APPROVED BY THE ENGINEER.

SEWER PIPE TRENCH INSTALLATION DETAIL

NOT TO SCALE

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.



FILE NO. 210
PLAN NO. C-2917
DWG. NO. 18120/SP-2
F.B. NO.

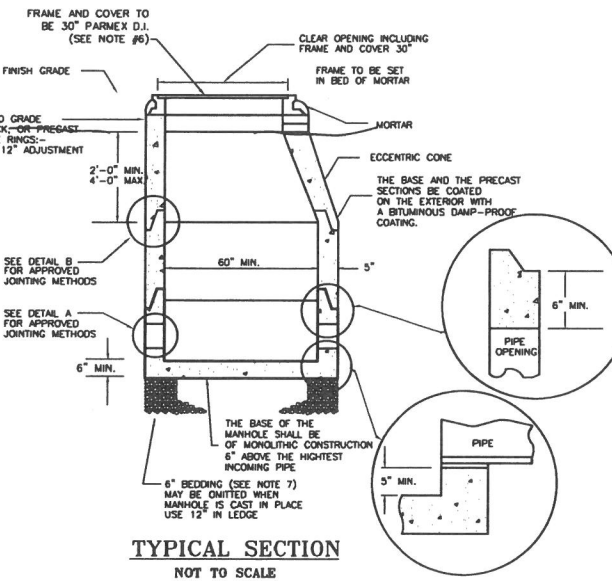
31 Mooney Street, Alton, N.H. 603-875-3948

- NOTES:
- IT IS INTENTION OF THE CITY OF ROCHESTER PUBLIC WORKS DEPARTMENT THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE SPACE, STRENGTH AND LEAK PROOF QUALITIES CONSIDERED NECESSARY BY THE PUBLIC WORKS DEPARTMENT FOR THE INTENDED SERVICE. SPACE REQUIREMENTS AND CONFIGURATIONS SHALL BE AS SHOWN ON THE DRAWING. MANHOLES MAY BE AN ASSEMBLY OF PRECAST SECTIONS, WITH OR WITHOUT STEEL REINFORCEMENT, WITH ADEQUATE JOINTING, OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH OR WITHOUT REINFORCEMENT. IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS (H-20 LOADING) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE, CONTINUOUSLY FOR THE LIFE OF THE STRUCTURE. A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES.
 - BARRELS AND CONE SECTIONS SHALL BE PRECAST REINFORCED CONCRETE, OR POURED IN PLACE REINFORCED CONCRETE. PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL CONFORM TO ASTM C478. ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OR TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDENTED MARKED ON THE INSIDE WALL.
 - VACUUM LEAKAGE TESTING (ASTM C1244) SHALL BE PERFORMED FOR ALL MANHOLES, LOW-PRESSURE AIR TESTING (ASTM F1417) AND DEFLECTION TESTING USING A "CO/NO GO" MANHOLE FOR ALL SANITARY SEWERS, IN ACCORDANCE WITH THE NHDES SEWER REGULATIONS AND THE CITY OF ROCHESTER DEPARTMENT OF PUBLIC WORKS REQUIREMENTS.
 - INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW. AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYERMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY, BRICK MASONRY SHALL CONFORM TO ASTM C32. INVERTS AND SHELVES SHALL NOT BE INSTALLED UNTIL AFTER SUCCESSFUL TESTING IS COMPLETED.
 - FRAMES AND COVERS: MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30-INCH CLEAR OPENING. A 3-INCH (MINIMUM HEIGHT) LETTER "SEWER" FOR SEWERS OR "DRAIN" FOR DRAINS SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER.
 - SEWER MANHOLE FRAME AND COVER: PARTEX 32" D.I. MANHOLE FRAME AND COVER SEWER - E.J. PRESCOTT PRODUCT/1113-32-S. IMMEDIATELY FOLLOWING THE LEAKAGE TEST, THE FRAME AND COVER SHALL BE PLACED ON THE TOP OF THE MANHOLE OR SOME OTHER MEANS USED TO PREVENT ACCIDENTAL ENTRY BY UNAUTHORIZED PERSONS, CHILDREN, OR ANIMALS. UNTIL THE CONTRACTOR IS READY TO MAKE FINAL ADJUSTMENT TO GRADE.
 - BEDDING: MIN. 4" OF 3/4" CRUSHED STONE (12" IN LEDGE) FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33: 100% PASSING 1 INCH SCREEN 90-100% PASSING 3/4 INCH SCREEN 20-55% PASSING 3/8 INCH SCREEN 0-10% PASSING #4 SIEVE 0-5% PASSING #8 SIEVE WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, CRUSHED STONE MIN. 3/4" SHALL BE USED.
 - CONCRETE FOR DROP SUPPORT SHALL CONFORM TO THE REQUIREMENT FOR CLASS A (3000#) CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS STANDARD SPECIFICATIONS AS FOLLOWS: CEMENT: 6.0 BAGS/CU. YD WATER: 5.75 GALLONS PER BAG CEMENT MAXIMUM SIZE OF AGGREGATE: 1 INCH.
 - FLEXIBLE JOINT: A FLEXIBLE JOINT SHALL BE PROVIDED WITHIN THE FOLLOWING DISTANCES: RCP & CI PIPE - ALL SIZES - 48" AC & VC PIPE - UP THROUGH 12" DIA. - 18" SEE NOTE 9.A AC & VC PIPE - LARGER THAN 12" DIA. - 36" DI PIPE - NONE REQUIRED PVC (ASTM 3034) - UP THROUGH 15" DIA. - NONE REQUIRED PVC (ASTM 3034) - LARGER THAN 15" DIA. - 40" TO 60" PVC (ASTM 3034) - LARGER THAN 60" DIA. - 40" TO 60" 9.A. UNDER SEVERE CONDITIONS WHEN DIFFERENTIAL SETTING CANNOT BE CONTROLLED WITHIN NORMAL LIMITS, VARIATIONS IN THE SUB LENGTH MAY BE NECESSARY. OTHER PLASTIC PIPES SHALL BE REVIEWED BY CASE BY CASE. SHALL BE USED FOR FORCE MAINS SHALL CONFORM TO ASTM D-2241 AND D-1784 (CLASS 1254-B). A SAFETY FACTOR OF 2.5 SHALL BE USED FOR PRESSURE RATING DETERMINATION WITH A STANDARD DIMENSION RATIO (SDR) NO HIGHER THAN 26.
 - DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.
 - JOINTS SHALL BE DEPENDENT UPON A NEOPRENE OR ELASTOMERIC GASKET FOR WATER TIGHTNESS. ALL JOINTS SHALL BE PROPERLY MATCHED WITH THE PIPE MATERIAL USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER WYE OR AT THE FOUNDATION WALL, APPROPRIATE MANUFACTURED ADAPTERS SHALL BE USED.
 - TEES OR WYES: WHERE A TEE OR WYE IS NOT AVAILABLE IN THE EXISTING STREET SEWER, AN APPROPRIATE CONNECTION SHALL BE MADE, FOLLOWING MANUFACTURER'S INSTRUCTIONS USING A BOLTED, CLAMPED, OR EXPLO-CLAMPED SADDLE TAPPED INTO A SMOOTHLY DRILLED OR SAWN OPENING IN THE SEWER. THE PRACTICE OF BREAKING AN OPENING WITH A SLEDGE HAMMER, STUFFING CLOTH OR OTHER SUCH MATERIAL AROUND THE JOINT, OR APPLYING MORTAR TO HOLD THE CONNECTION, AND ANY OTHER SIMILAR CRUDE PRACTICES OR HEFT OR HASTY IMPROVISATIONS WILL NOT BE PERMITTED. THE CONNECTION SHALL BE CONCRETE ENCASED AS SHOWN IN THE DETAIL UP TO AND INCLUDING 15" DIAMETER. DOES (NOT APPLY TO INSTALLATIONS WHERE TEES & WYES ARE USED).
 - PIPE INSTALLATION: THE PIPE SHALL BE HANDLED, PLACED, AND JOINTED IN ACCORDANCE WITH INSTALLATION GUIDES OF THE APPROPRIATE MANUFACTURER IT SHALL BE CAREFULLY BEDDED ON A 4 INCH LAYER OF CRUSHED STONE AS SPECIFIED IN NOTE 10. BEDDING AND RE-FILL FOR A DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH THE APPROPRIATE MECHANICAL DEVICES. THE PIPE SHALL BE LAID AT A CONTINUOUS AND CONSTANT GRADE FROM THE STREET SEWER CONNECTION TO THE HOUSE FOUNDATION AT A GRADE OF NOT LESS THAN 1/8 INCH PER FOOT PIPE JOINTS MUST BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DRY THE TRENCH.
 - TESTING: THE COMPLETED HOUSE SEWER SHALL BE SUBJECTED TO A LEAKAGE TEST IN ANY OF THE FOLLOWING MANNERS (PRIOR TO BACKFILLING) A. AN OBSERVATION TEE SHALL BE INSTALLED AS SHOWN AND, WHEN READY FOR TESTING, AN INFLATABLE BLADDER OR PLUG SHALL BE INSERTED JUST UPSTREAM FROM THE OPENING IN THE TEE AFTER INFLATION, WATER SHALL BE INTRODUCED INTO THE SYSTEM ABOVE THE PLUG TO A HEIGHT OF 3 FEET ABOVE THE LEVEL OF THE PLUG. B. THE PIPE SHALL BE LEFT EXPOSED AND LIBERALLY HOSED WITH WATER TO SIMULATE, AS NEARLY AS POSSIBLE, WET TRENCH CONDITIONS OR, IF THE TRENCH IS WET, THE GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE INSPECTIONS FOR LEAKS SHALL BE MADE THROUGH THE CLEANSUIT WITH A FLASHLIGHT. C. DRY FLUORESCENCE DYE SHALL BE SPRINKLED INTO THE TRENCH OVER THE PIPE. IF THE TRENCH IS DRY, THE PIPE SHALL BE LIBERALLY HOSED WITH WATER, OR IF THE TRENCH IS WET, GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. OBSERVATION FOR LEAKS SHALL BE MADE IN THE FIRST DOWNSTREAM MANHOLE LEAKAGE OBSERVED IN ANY OF THE ABOVE ALTERNATE TESTS SHALL BE CAUSE FOR NON-ACCEPTANCE AND THE PIPE SHALL BE DUG-UP IF NECESSARY AND RE-LAD SO AS TO ASSURE WATER-TIGHTNESS.
 - ILLEGAL CONNECTION: NOTHING BUT SANITARY WASTE FLOW FROM THE HOUSE TOILETS, SINKS, LAUNDRY ETC. SHALL BE PERMITTED. ROOF LEADERS, FOOTING DRAINS OR SUMP PUMPS OR ANY OTHER SIMILAR CONNECTION CARRYING RAIN WATER, DRAINAGE, OR GROUND WATER SHALL NOT BE MADE INTO THE HOUSE SEWER.
 - HOUSE AND WATER SERVICE SHOULD NOT BE LAID IN THE SAME TRENCH AS SEWER SERVICE, BUT WHEN NECESSARY, SHALL BE PLACED ABOVE AND TO THE SIDE OF THE HOUSE SEWER AS SHOWN.
 - BEDDING: MIN. 3/4" CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATERIAL AND MEETING ASTM C33.6 100% PASSING 1 INCH SCREEN 90-100% PASSING 3/4 INCH SCREEN 20-55% PASSING 3/8 INCH SCREEN 0-10% PASSING #4 SIEVE 0-5% PASSING #8 SIEVE WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, MIN. 3/4" CRUSHED STONE SHALL BE USED.
 - LOCATION: THE LOCATION OF THE TEE OR WYE SHALL BE RECORDED IN THE MUNICIPAL RECORDS. IN ADDITION, A FERROUS METAL ROD OR PIPE SHALL BE PLACED OVER THE TEE OR WYE AS DESCRIBED IN THE TYPICAL "CHIMNEY" DETAIL, TO AID IN LOCATING THE BURIED PIPE WITH A DIP NEEDLE OR PIPEFINDER.
 - CONCRETE: CONCRETE SHALL CONFORM TO THE REQUIREMENTS FOR CLASS A (3000 PSI) CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS STANDARD SPECIFICATIONS AS FOLLOWS: CEMENT: 6.0 BAGS/CU. YD WATER: 5.75 GALLONS/BAG OF CEMENT AGGREGATE: 1 1/2" MAX.
 - CHIMNEYS: IF VERTICAL DROP INTO SEWER IS GREATER THAN 4', A CHIMNEY SHALL BE CONSTRUCTED FOR THE HOUSE CONNECTION. 23- ALL DRAINAGE AND SEWER STRUCTURES INCLUDING FRAMES SHALL BE H-20 LOADING. RECORDS, IN SEWER CONSTRUCTION SHALL BE CONSTRUCTED TO NHDES AND THE CITY OF ROCHESTER STANDARDS & SPECIFICATIONS.
 - HORIZONTAL JOINTS: BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF A TYPE APPROVED BY THE COMMISSION, WHICH TYPE SHALL, IN GENERAL, DEPEND FOR WATER TIGHTNESS UPON AN ELASTOMERIC OR MASTIC-LIKE GASKET.
 - PIPE TO MANHOLE JOINTS: SHALL BE ONLY AS APPROVED BY THE COMMISSION AND IN GENERAL, WILL DEPEND FOR WATER TIGHTNESS UPON EITHER AN APPROVED NON-SHRINKING MORTAR OR ELASTOMERIC SEALANT.
 - FOR BITUMASTIC TYPE JOINTS: THE AMOUNT OF SEALANT SHALL BE SUFFICIENT TO FILL AT LEAST 75% OF THE JOINT CAVITY APPROVED BITUMASTIC SEALANTS: RAM-NEK KENT SEAL NO.2 EZ.
 - THE CONTRACTOR SHALL NOTIFY DIG-SAFE 1-888-344-7233 PRIOR TO CONSTRUCTION.

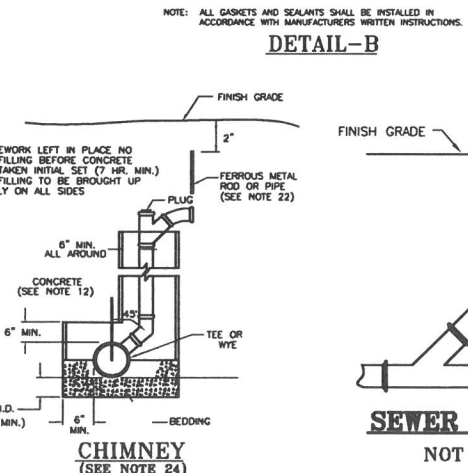
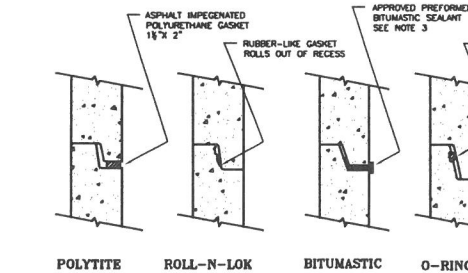
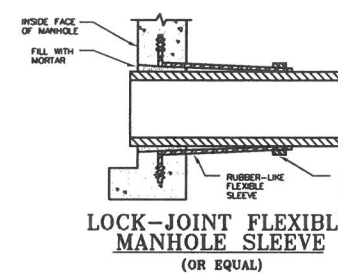
MORTAR USED IN MANHOLE CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING: MORTAR SHALL BE COMPOSED OF TYPE I PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LINE ADDITION. PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE AS SHOWN BELOW:

	NONE	4.5 PARTS	1.5 PARTS
0.5 PARTS	4.5 PARTS	1.5 PARTS	

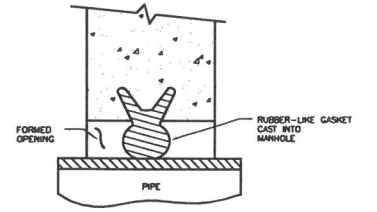
CEMENT SHALL BE TYPE I PORTLAND CEMENT THAT IS CERTIFIED BY ITS MANUFACTURER AS CONFORMING TO THE ASTM C150/C150M STANDARD IN EFFECT AT THE TIME THE CEMENT WAS MANUFACTURED. HYDRATED LINE SHALL BE TYPE S THAT IS CERTIFIED BY ITS MANUFACTURER AS CONFORMING TO THE ASTM C207 STANDARD IN EFFECT AT THE TIME THE HYDRATED LINE WAS PROCESSED. SAND SHALL CONSIST OF INERT NATURAL SAND THAT IS CERTIFIED BY ITS SUPPLIER AS CONFORMING TO THE ASTM C33 STANDARD IN EFFECT AT THE TIME THE SAND IS PROCESSED BY "STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATE"



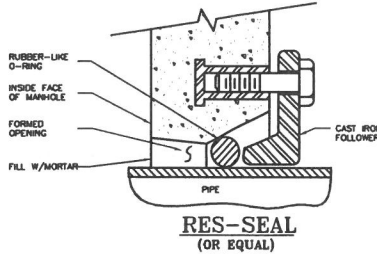
TYPICAL SECTION
NOT TO SCALE



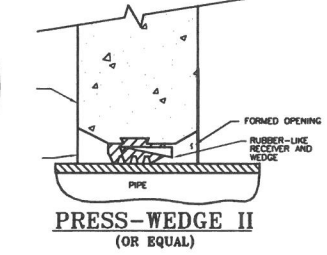
SEWER CLEAN OUT
NOT TO SCALE



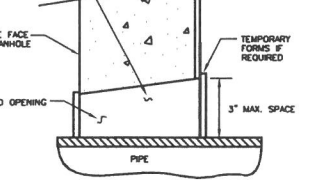
A-LOK (OR EQUAL)



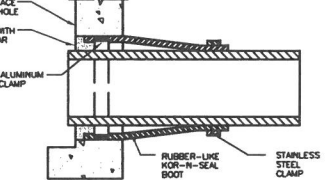
RES-SEAL (OR EQUAL)



PRESS-WEDGE II (OR EQUAL)



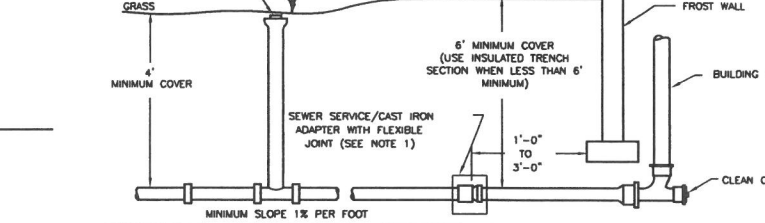
NON-SHRINKING MORTAR (OR EQUAL)



KOR-N-SEAL JOINT SLEEVE (OR EQUAL)

DETAIL-A

CONCRETE FULL ENCASEMENT



TYPICAL BUILDING SEWER SERVICE DETAIL
NOT TO SCALE

SANITARY SEWER DETAILS
TAX MAP 117, LOT 2-8
53 ALLEN STREET
ROCHESTER, NH
PREPARED FOR:
NORMAN VETTER, INC.
APRIL 2019

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

C-8



PERMANENT VEGETATION:

SPECIFICATIONS:

SITE PREPARATION:

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

SEEDBED PREPARATION:

1. WORK LINE 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 HARROWING OPERATION SHALL BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY AND SILT SOILS SHALL BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.
2. REMOVE FROM THE SURFACE ALL STONES ZINCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, CONCRETE CLODS, LUMPS, TRASH OR OTHER UNSUITABLE MATERIAL.
3. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED; THE AREA MUST BE TILLED AND FIRMED 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 ORGANIC 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 WARRANTS OTHERWISE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER AND LIMESTONE MAY BE APPLIED AT THE FOLLOWING RATES:

LIMESTONE APPLICATION RATE = 3 TONS/ACRE (138 LB./1,000-SF)
*EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE

FERTILIZER APPLICATION RATE = 870 LB./ACRE (20 LB./1,000-SF)
*LOW PHOSPHATE FERTILIZER (6-0-4) OR EQUIVALENT

SEEDING:

1. INOCULATE ALL LEGUME SEED WITH THE CORRECT TYPE OF INOCULANT.
2. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL CULTIPACKER 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. WHERE FEASIBLE EXCEPT WHERE EITHER CULTIPACKER TYPE SEEDER OR HYDROSEEDER IS USED, THE SEEDBED SHALL BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A ROLLER, OR LIGHT DRAG.
4. SPRING SEEDING USUALLY GIVES THE BEST RESULTS FOR ALL SEED MIXES OR WITH LEGUMES. PERMANENT SEEDING SHALL BE COMPLETED 45 DAYS PRIOR TO FIRST KILLING FROST. WHEN CROWN VETCH IS SEEDING IN LATE SUMMER AT LEAST 35% OF THE SEED SHALL BE HAND SEED (UNSCARIFIED). IF SEEDING CANNOT BE DONE WITHIN THE SPECIFIED SEEDING DATES, MULCH ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING" PRACTICE DESCRIBED IN THE NHSSM, VOL. 3, AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
5. AREAS SEEDING BETWEEN MAY 15 AND AUGUST 15 SHALL BE COVERED WITH HAY OR STRAW MULCH, ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING" PRACTICE DESCRIBED IN THE NHSSM, VOL. 3.
6. VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED AREA SHALL BE ACHIEVED PRIOR TO OCTOBER 15. IF THIS CONDITION IS NOT ACHIEVED, IMPLEMENT OTHER TEMPORARY STABILIZATION MEASURES FOR OVER WINTER PROTECTION.

HYDROSEEDING:

1. WHEN HYDROSEEDING (HYDRAULIC APPLICATION), PREPARE THE SEEDBED AS SPECIFIED ABOVE OR BY HAND RAVING TO LOOSEN AND SMOOTH THE SOIL AND REMOVE SURFACE STONES LARGER THAN 2 INCHES IN DIAMETER.
2. SLOPES MUST BE NO STEEPER THAN 2:1 (2 FEET HORIZONTALLY BY 1 FOOT VERTICALLY).
3. LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. THE USE OF FIBER MULCH ON CRITICAL AREAS IS NOT RECOMMENDED (UNLESS IT IS USED TO HOLD STRAW OR HAY). BETTER PROTECTION IS GAINED BY USING STRAW MULCH AND HOLDING IT WITH ADHESIVE MATERIALS OR 500 POUNDS PER ACRE OF WOOD FIBER MULCH.
4. SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.

MAINTENANCE REQUIREMENTS:

1. PERMANENT SEEDING 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. SEEDING AREAS SHALL BE MONITORED AS REQUIRED TO MAINTAIN A HEALTHY STAND OF VEGETATION. MOWING HEIGHT AND FREQUENCY DEPEND OF TYPE OF GRASS COVER.
3. BASED ON INSPECTION, AREAS SHALL BE RESEEDED TO ACHIEVE FULL STABILIZATION OF EXPOSED SOIL.
4. AT A MINIMUM 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 RESEEDED, WITH OTHER TEMPORARY MEASURES (I.E. MULCH, ETC.) USED TO PROVIDE EROSION PROTECTION DURING THE PERIOD OF VEGETATION ESTABLISHMENT.

PERMANENT VEGETATION SEEDING RECOMMENDATIONS

USE	MIXTURE	SPECIES	LBS./ACRE	LBS./1,000-SF
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A	TALL FESCUE	20	0.45
		CREeping RED FESCUE	20	0.45
		TOTAL	42	0.95
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER	A	TALL FESCUE	20	0.45
		CREeping RED FESCUE	2	0.05
		TOTAL	42	0.95
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY RECREATION SITES	A	TALL FESCUE	20	0.45
		CREeping RED FESCUE	20	0.45
		TOTAL	42	0.95
PLAY AREAS AND ATHLETIC FIELDS (TOPSOIL ESSENTIAL FOR GOOD TURF)	F	CREeping RED FESCUE	50	1.15
		KENTUCKY BLUEGRASS	50	1.15
		TOTAL	100	2.30

SOURCES:

1. NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 3, TABLES 4-2 AND 4-3
2. MINNICK, E.L. AND H.T. MARSHALL, (AUGUST 1992)

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 THIS 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:

SPECIFICATIONS:

SITE PREPARATION:

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

SEEDBED PREPARATION:

1. STONES AND TRASH SHALL BE REMOVED SO AS NOT TO INTERFERE WITH THE SEEDING AREA.
2. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
3. IF APPLICABLE, FERTILIZER AND ORGANIC SOIL AMENDMENTS SHALL BE APPLIED DURING THE GROWING SEASON.
4. 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 WARRANTS OTHERWISE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER AND LIMESTONE MAY BE APPLIED AT THE FOLLOWING RATES:

LIMESTONE APPLICATION RATE = 3 TONS/ACRE (138 LB./1,000-SF)
*EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE

FERTILIZER APPLICATION RATE = 870 LB./ACRE (20 LB./1,000-SF)
*LOW PHOSPHATE FERTILIZER (6-0-4) OR EQUIVALENT

SEEDING:

1. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL CULTIPACKER TYPE SEEDER OR HYDRO SEEDER (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. SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.
2. TEMPORARY SEED SHALL TYPICALLY OCCUR PRIOR TO SEPTEMBER 15.
3. AREAS SEEDING BETWEEN MAY 15 AND AUGUST 15 SHALL BE COVERED WITH HAY OR STRAW MULCH, ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING" PRACTICE DESCRIBED IN THE NHSSM, VOL. 3.
4. VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED AREA SHALL BE ACHIEVED PRIOR TO OCTOBER 15. IF THIS CONDITION IS NOT ACHIEVED, IMPLEMENT OTHER TEMPORARY STABILIZATION MEASURES FOR OVER WINTER PROTECTION.

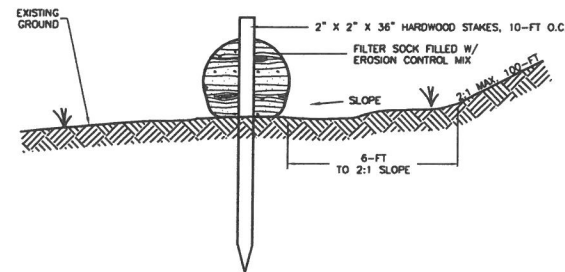
MAINTENANCE REQUIREMENTS:

1. TEMPORARY SEEDING SHALL BE INSPECTED WEEKLY AFTER ANY RAINFALL EXCEEDING 1/2 INCH IN 24 HOURS ON ACTIVE CONSTRUCTION SITES. TEMPORARY SEEDING SHALL BE INSPECTED JUST PRIOR TO SEPTEMBER 15, TO ASCERTAIN WHETHER ADDITIONAL SEEDING IS REQUIRED TO PROVIDE STABILIZATION OVER THE WINTER PERIOD.
2. BASED ON INSPECTION, AREAS SHALL BE RESEEDED TO ACHIEVE FULL STABILIZATION OF EXPOSED SOILS. IF IT IS TOO LATE IN THE PLANTING SEASON TO APPLY ADDITIONAL SEED, THEN OTHER TEMPORARY STABILIZATION MEASURES SHALL BE IMPLEMENTED.
3. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND AREAS SHALL BE RESEEDED, WITH OTHER TEMPORARY MEASURES (I.E. MULCH, ETC.) USED TO PROVIDE EROSION PROTECTION DURING THE PERIOD OF VEGETATION ESTABLISHMENT.

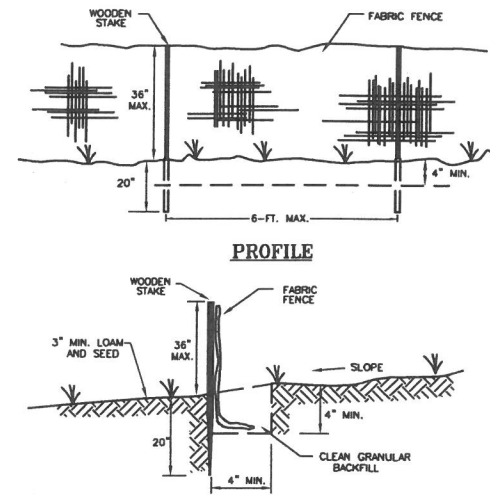
TEMPORARY VEGETATION SEEDING RECOMMENDATIONS

SPECIES	PER ACRE BUSHELS (BU) 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.
DATS	2.5 BU OR 80 LBS.	2.0 LBS.	BEST FOR SPRING SEEDING. SEED NO LATER THAN MAY 15 FOR SUMMER PROTECTION. SEED TO A DEPTH OF 1 INCH.
ANNUAL RYE GRASS	40 LBS.	1.0 LB.	GROWS QUICKLY, BUT IS OF SHORT DURATION. USE WHERE APPEARANCES ARE 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. NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 3, TABLE 4-1			
2. MINNICK, E.L. AND H.T. MARSHALL, (AUGUST 1992)			

FILTER SOCK CONNECTION PLAN VIEW



FILTER SOCK CROSS-SECTION



CROSS-SECTION

MAINTENANCE REQUIREMENTS:

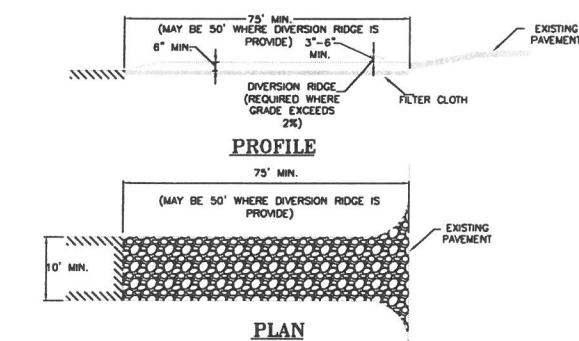
1. FENCES SHALL BE INSPECTED AND MAINTAINED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALLS.
2. SEDIMENT DEPOSITION SHALL BE REMOVED, AT A MINIMUM, WHEN DEPOSITION ACCUMULATES TO ONE-HALF THE HEIGHT OF THE FENCE, AND MOVED TO AN APPROPRIATE LOCATION SO THE SEDIMENT IS NOT TRANSPORTED BACK TOWARD THE SILT FENCE.
3. SILT FENCES SHALL BE REPAIRED IMMEDIATELY IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES OF THE BARRIER, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SEDIMENT BARRIERS SHALL BE REPLACED WITH A TEMPORARY CHECK DAM.
4. SHALL THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
5. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE PREPARED AND SEEDING.
6. IF THERE IS EVIDENCE OF END FLOW OR PROPERLY INSTALLED BARRIERS, EXTEND BARRIERS UPHILL OR CONSIDER REPLACING THEM WITH OTHER MEASURES, SUCH AS TEMPORARY DIVERSIONS AND SEDIMENT TRAPS.
7. SILT FENCES HAVE A USEFUL LIFE OF ONE SEASON, ON LONGER CONSTRUCTION PROJECTS, SILT FENCE SHALL BE REPAIRED PERIODICALLY AS REQUIRED TO MAINTAIN EFFECTIVENESS.

CONSTRUCTION SPECIFICATIONS:

1. FENCES SHALL BE USED IN AREAS WHERE EROSION WILL OCCUR ONLY IN THE FORM OF SHEET EROSION AND THERE IS NO CONCENTRATION OF WATER IN A CHANNEL OR DRAINAGE WAY ABOVE THE FENCE. SEDIMENT BARRIERS SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.
2. THE MAXIMUM CONTRIBUTING DRAINAGE AREA ABOVE THE FENCE SHALL BE LESS THAN 1 ACRE PER 100 LINEAR FEET OF FENCE.
3. THE MAXIMUM LENGTH OF SLOPE ABOVE THE FENCE SHALL BE 100 FEET.
4. THE MAXIMUM SLOPE ABOVE THE FENCE SHALL BE 1:1.
5. FENCES SHALL BE INSTALLED FOLLOWING THE CONTOUR OF THE LAND AS CLOSELY AS POSSIBLE, AND
- A. THE ENDS OF THE FENCE SHALL BE FLARED UPSLOPE.
- B. THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 4 INCHES IN DEPTH AND INCHES IN WIDTH IN A TRENCH EXCAVATED INTO THE GROUND, OR IF SITE CONDITIONS INCLUDE FROZEN GROUND, LEDGE, OR THE PRESENCE OF HEAVY ROOTS, THE BASE OF THE FABRIC SHALL BE EMBEDDED WITH A MINIMUM THICKNESS OF 8 INCHES OF 3/4-INCH STONE.
- C. THE SOIL SHALL BE COMPACTED OVER THE EMBEDDED FABRIC.
- D. SUPPORT POSTS SHALL BE SIZED AND ANCHORED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS WITH MAXIMUM POST SPACING OF 8 FEET.
- E. ADJOINING SECTIONS OF THE FENCE SHALL BE OVERLAPPED BY A MINIMUM OF 6 INCHES (24 INCHES IS PREFERRED), FOLDED AND STAPLED TO A SUPPORT POST. IF METAL POSTS ARE USED, FABRIC SHALL BE WIRE-TIED DIRECTLY TO THE POSTS WITH THREE DIAGONAL TIES.
6. SILT FENCING SHALL NOT BE STAPLED OR NAILED TO TREES.
7. THE FILTER FABRIC SHALL BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER OR ETHYLENE YARN AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER.
8. THE FILTER FABRIC SHALL CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 DEGREES FAHRENHEIT TO 120 DEGREES FAHRENHEIT.
9. POSTS FOR SILT FENCES SHALL BE EITHER 4-INCH DIAMETER WOOD OR 1.33 POUNDS PER LINEAR FOOT STEEL WITH A MINIMUM LENGTH OF 5 FEET. STEEL POSTS SHALL HAVE PROJECTIONS FOR FASTENING WIRE TO THEM. POSTS SHALL BE PLACED ON THE DOWN SLOPE SIDE OF THE FABRIC.
10. THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36 INCHES AS HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.
11. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPICED TOGETHER ONLY AT SUPPORT POSTS, WITH A MINIMUM 6-INCH OVERLAP, AND SECURELY SEALED.
12. A MANUFACTURED SILT FENCE SYSTEM WITH INTEGRAL POSTS MAY BE USED.
13. POST SPACING SHALL NOT EXCEED 8 FEET.
14. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES WIDE AND 4 INCHES DEEP ALONG THE LINE OF POSTS AND UP GRADIENT FROM THE BARRIER.
15. THE STANDARD STRENGTH OF FILTER FABRIC SHALL BE STAPLED OR WIRE TO THE POST, AND 8 INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
16. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.
17. SILT FENCE MAY BE INSTALLED BY "SLICING" USING MECHANICAL EQUIPMENT SPECIFICALLY DESIGNED FOR THIS PROCEDURE. THE SLICING METHOD USES AN IMPLEMENT TOWED BEHIND A TRACTOR TO "PLOW" OR SLICE THE SILT FENCE MATERIAL INTO THE SOIL. THE SLICING METHOD MINIMALLY DISRUPTS THE SOIL UPWARD AND SLIGHTLY DISPLACES THE SOIL, MAINTAINING THE SOIL'S PROFILE AND CREATING AN OPTIMAL CONDITION FOR SUBSEQUENT MECHANICAL COMPACTION.
18. SILT FENCES SHALL BE INSTALLED WITH "SHAKES" OR "J-HOOKS" TO REDUCE THE DRAINAGE AREA THAT ANY SEGMENT WILL IMPOUND.
19. THE ENDS OF THE FENCE SHALL BE TURNED UPHILL.
20. SILT FENCES PLACED AT THE TOE OF A SLOPE SHALL BE SET AT LEAST 6 FEET FROM THE TOE TO ALLOW SPACE FOR SHALLOW PONDING AND TO ALLOW FOR MAINTENANCE ACCESS WITHOUT DISTURBING THE SLOPE.
21. SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.

CONTINUOUS CONTAINED BERM "FILTER SOCK" DETAIL

NOT TO SCALE



TEMPORARY CONSTRUCTION EXIT

NOT TO SCALE

MAINTENANCE REQUIREMENTS:

1. WHEN THE CONTROL PAD BECOMES INEFFECTIVE, THE STONE SHALL BE REMOVED ALONG WITH THE COLLECTED SOIL MATERIAL, REGRADED ON SITE, AND STABILIZED. THE ENTRANCE SHALL THEN BE RECONSTRUCTED.
2. THE CONTRACTOR SHALL SWEEP THE PAVEMENT AT EXITS WHENEVER SOIL MATERIALS ARE TRACKED ONTO THE ADJACENT PAVEMENT OR TRAVELED WAY.
3. WHEN WHEEL WASHING IS REQUIRED, IT SHALL BE CONDUCTED ON AN AREA STABILIZED WITH AGGREGATE, WHICH DRAINS INTO AN APPROVED SEDIMENT-TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERWAYS.

CONSTRUCTION SPECIFICATIONS:

1. THE MINIMUM STONE USED SHALL BE 3-INCH CRUSHED STONE.
2. THE MINIMUM LENGTH OF THE PAD SHALL BE 75 FEET, EXCEPT THAT THE MINIMUM LENGTH MAY BE REDUCED TO 50 FEET IF A 3-INCH TO 6-INCH BERM IS INSTALLED AT THE ENTRANCE OF THE PROJECT SITE.
3. THE PAD SHALL BE THE FULL WIDTH OF CONSTRUCTION ACCESS ROAD OR 10 FEET, WHICHEVER IS GREATER.
4. THE PAD SHALL SLOPE AWAY FROM THE EXISTING ROADWAY.
5. THE PAD SHALL BE AT LEAST 6 INCHES THICK.
6. THE GEOTEXTILE FILTER FABRIC SHALL BE PLACED BETWEEN THE STONE PAD AND THE EARTH SURFACE BELOW THE PAD.
7. THE PAD SHALL BE MAINTAINED OR REPLACED WHEN MUD AND SOIL PARTICLES CLOG THE VOIDS IN THE STONE SUCH THAT MUD AND SOIL PARTICLES ARE TRACKED OFF-SITE.
8. NATURAL DRAINAGE THAT CROSSES THE LOCATION OF THE STONE PAD SHALL BE INTERCEPTED AND PIPED BENEATH THE PAD, AS NECESSARY, WITH SUITABLE OUTLET PROTECTION.

SILTATION CONTROL FENCE DETAIL

NOT TO SCALE

EROSION CONTROL DETAILS TAX MAP 117, LOT 2-8

53 ALLEN STREET
ROCHESTER, NH

PREPARED FOR:
NORMAN VETTER, INC.

APRIL 2019

FILE NO. 210
PLAN NO. C-2917
DWG. NO. 18120/SP-2
F.B. NO.

LAND SURVEYORS



CIVIL ENGINEERS

LEGEND

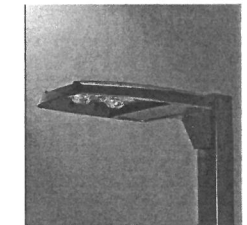
- PROPERTY LINE
- JURISDICTIONAL WETLANDS
- EXISTING OVERHEAD WIRES
- EXISTING LIGHT POLES
- PROPOSED BUILDING
- PROPOSED PAVEMENT
- PROPOSED PAVEMENT WITH CURBING
- PROPOSED LIGHT POLES
- PROPOSED BUILDING LIGHT FIXTURES
- PROPOSED LIGHT FOOTCANDLE
- PROPOSED LIGHT ISOLUMINATION LINES

Luminaire Schedule				
Symbol	Label	Qty	Arrangement	Description
□	S3	2	SINGLE	PRV-A25-D-UNV-T3-B2-HSS/ SSS4A20SHN1 (20' AFG)
◀	W4	4	SINGLE	GWC-AF-01-LED-E1-SL4-600/ WALL MTD 14' AFG

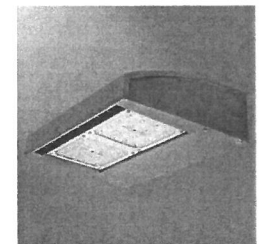
CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN 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.



THE SOURCE FOR ALL THINGS L.E.D.



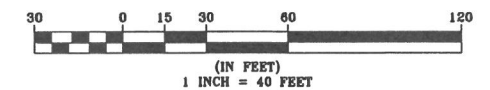
PRV PREVAIL BY EATON LIGHTING POLE MOUNTED FIXTURE



GWC GALLEON WALL LUMINAIRE BY EATON LIGHTING WALL MOUNTED FIXTURE

LIGHTING PLAN
TAX MAP 117, LOT 2-8
53 ALLEN STREET
ROCHESTER, NH
 PREPARED FOR:
NORMAN VETTER, INC.

APRIL 2019
 GRAPHIC SCALE



FILE NO. 210
 PLAN NO. C-2917
 DWG. NO. 18120/SP-2
 F.B. NO.

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

NORWAY PLAINS ASSOCIATES, INC.