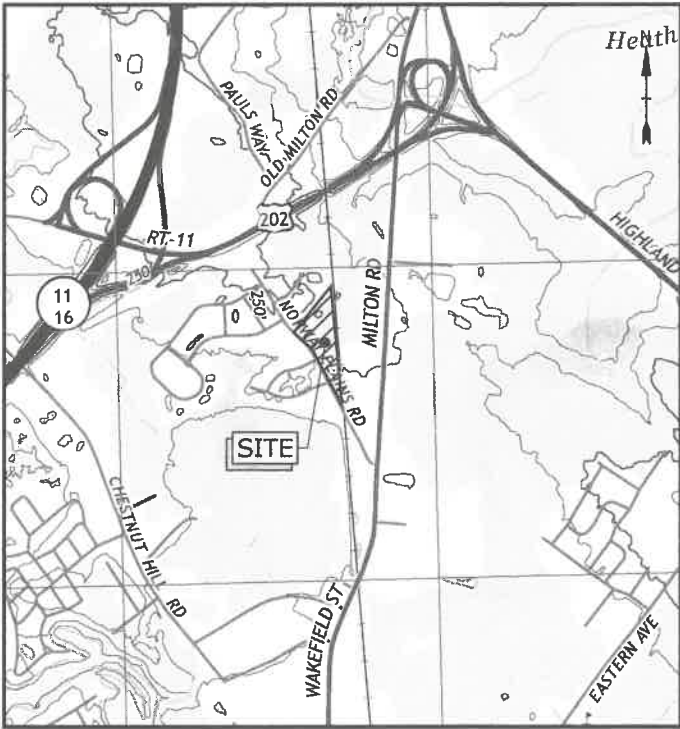


PROPOSED MULTI-FAMILY DEVELOPMENT  
15 NORWAY PLAINS ROAD  
ROCHESTER, NEW HAMPSHIRE  
(TAX MAP 215 LOT 17 AND LOT 17-1)  
SITE PLANS

SEPTEMBER 6, 2016  
(REVISED: JUNE 10, 2021)



LIST OF DRAWINGS	
SHEET NO.	SHEET TITLE
	COVER
G-001	GENERAL NOTES, LEGEND AND ABBREVIATIONS
G-002	EROSION CONTROL NOTES SHEET
G-003	PERMITS
G-004	NHDES APPROVED SEWER SPECIFICATIONS
1 OF 1	EXISTING CONDITIONS
V-101	EXISTING CONDITIONS/DEMOLITION PLAN
C-101	SITE PLAN
C-102	GRADING PLAN
C-103	UTILITIES PLAN
C-104	SEWER PLAN AND PROFILE
L-101	LANDSCAPE PLAN
C-501	DETAILS SHEET
C-502	DETAILS SHEET
C-503	DETAILS SHEET
C-504	DETAILS SHEET
C-505	DETAILS SHEET
C-506	DETAILS SHEET
C-601	ADDRESS PLAN
F-101	FIRE TRUCK TURNING PLAN
E-101	PHOTOMETRICS PLAN



LOCATION MAP  
SCALE: 1" = 1000'

PREPARED BY:

**Tighe & Bond**  
www.tighebond.com

SURVEYOR:

North Easterly Surveying, Inc.  
191 State Road, Suite 1  
Kittery, ME 03904

PREPARED FOR:

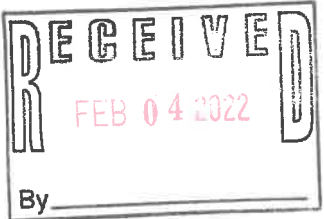
Tenants In Common:

Robert Graham  
81 Lakeview Drive  
Nottingham, NH  
03290

Michael Anderson  
2637 E Atlantic Blvd #172  
Pompano Beach FL  
33062-4939

OWNER:

The Estate of Bruce J. Roberts  
15 Norway Plains Road  
Rochester, NH 03868



PERMIT	APPROVAL #
ROCHESTER SITE PLAN REVIEW	215-17-R2-16
ROCHESTER SUBDIVISION	215-17-R2-16
ROCHESTER ZBA	2016-20 & 2016-29
NHDES AOT	AOT-1197
NHDES WASTEWATER CONNECTION	D2016-1106

FINAL APPROVAL BY ROCHESTER PLANNING BOARD

CERTIFIED BY *Shanna B. Saunders* DATE *2/24/22*

*Per Nov 2021 PB Mtg*

**COMPLETE SET 19 SHEETS**

**FOR MORE INFORMATION CONTACT:**

**THE CITY OF ROCHESTER PLANNING DEPARTMENT AT (603) 335-1338**

- NOTES:**
1. THE CONTRACTOR SHALL NOT RELY ON SCALED DIMENSIONS AND SHALL CONTACT THE ENGINEER FOR CLARIFICATION IF A REQUIRED DIMENSION IS NOT PROVIDED ON THE PLANS.
  2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, AND FOR SITE CONDITIONS THROUGHOUT CONSTRUCTION. NEITHER THE PLANS NOR THE SEAL OF THE ENGINEER AFFIXED HEREON EXTEND TO OR INCLUDE SYSTEMS REQUIRED FOR THE SAFETY OF THE CONTRACTOR, THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING AND IMPLEMENTING SAFETY PROCEDURES AND SYSTEMS AS REQUIRED BY THE UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AND ANY STATE OR LOCAL SAFETY REGULATIONS.
  3. TIGHE AND BOND ASSUMES NO RESPONSIBILITY FOR ANY ISSUES LEGAL OR OTHERWISE, RESULTING FROM CHANGES MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION OF TIGHE AND BOND.



GENERAL NOTES:

- THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE SURVEYOR OR THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK.
- COORDINATE ALL WORK WITHIN NORWAY PLAINS ROAD WITH THE CITY OF ROCHESTER.
- CONTRACTOR SHALL EMPLOY A NEW HAMPSHIRE LICENSED ENGINEER/SURVEYOR TO DETERMINE ALL LINES AND GRADES.
- CONTRACTOR TO SUBMIT AS-BUILT PLANS ON REPRODUCIBLE MYLARS AND IN DIGITAL FORMAT (.DWG FILE) ON DISK TO THE CITY OF ROCHESTER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER AND CONFORM TO THE CITY OF ROCHESTER STANDARDS.
- ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISHED GRADE.
- CONTRACTOR SHALL THOROUGHLY CLEAN ALL CATCH BASINS AND DRAIN LINES, WITHIN THE LIMIT OF WORK, OF SEDIMENT IMMEDIATELY UPON COMPLETION OF CONSTRUCTION.
- SEE NORTH EASTERLY SURVEYING, INC. "EXISTING CONDITIONS PLAN", PREPARED BY NORTH EASTERLY SURVEYING, INC ON JUNE, 22, 2016 FOR BENCHMARK INFORMATION.
- CONTRACTOR SHALL CONTACT "DIG-SAFE" 72 HOURS PRIOR TO COMMENCING CONSTRUCTION. CONTRACTOR SHALL HAVE THE "DIG-SAFE" NUMBER ON-SITE AT ALL TIMES.
- THE CONTRACTOR SHALL PHASE DEMOLITION AND CONSTRUCTION AS REQUIRED TO PROVIDE CONTINUOUS SERVICE TO EXISTING BUSINESSES AND HOMES THROUGHOUT THE CONSTRUCTION PERIOD. EXISTING BUSINESS AND HOME SERVICES INCLUDE, BUT ARE NOT LIMITED TO ELECTRICAL, COMMUNICATION, FIRE PROTECTION, DOMESTIC WATER, AND SEWER SERVICES. TEMPORARY SERVICES, IF REQUIRED, SHALL COMPLY WITH ALL FEDERAL, STATE, LOCAL, AND UTILITY COMPANY STANDARDS. CONTRACTOR SHALL PROVIDE DETAILED CONSTRUCTION SCHEDULE TO OWNER PRIOR TO ANY DEMOLITION/CONSTRUCTION ACTIVITIES.
- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL, STATE AND CITY OF ROCHESTER DEPARTMENT OF PUBLIC WORKS AND CONSTRUCTION SPECIFICATIONS, LATEST REVISIONS.
- ORANGE SNOW FENCE IS TO BE PLACED ALONG THE LIMITS OF CLEARING PRIOR TO ANY ONSITE CUTTING/ACTIVITY.
- AS BUILT LOCATIONS OF THE SITE FEATURE CHANGES MADE FOR THE MODIFICATION TO APPROVED PROJECT APPLICATION SUBMISSION ON JUNE 11, 2021 WAS BASED SITE PLAN MARK UPS PROVIDED BY SEVERINO TRUCKING CO. INC. ON JUNE 10, 2021.

CONSTRUCTION SCHEDULE:

- CONSTRUCTION IS ANTICIPATED TO BEGIN IN SPRING 2017 AND BE COMPLETE BY FALL 2019.

DEMOLITION NOTES:

- ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS, ORDINANCES AND CODES.
- COORDINATE REMOVAL, RELOCATION, DISPOSAL OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.
- UTILITIES SHALL BE TERMINATED AT THE MAIN LINE PER UTILITY COMPANY STANDARDS. THE CONTRACTOR SHALL REMOVE ALL ABANDONED UTILITIES LOCATED WITHIN THE LIMITS OF WORK. CONTRACTOR SHALL VERIFY ORIGIN OF ALL DRAINS AND UTILITIES PRIOR TO REMOVAL/TERMINATION TO DETERMINE IF DRAINS OR UTILITY IS ACTIVE AND SERVICES ANY ON OR OFF-SITE STRUCTURE TO REMAIN. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY SUCH UTILITY FOUND AND SHALL MAINTAIN THESE UTILITIES UNTIL PERMANENT SOLUTION IS IN PLACE.
- ANY EXISTING WORK OR PROPERTY DAMAGED OR DISRUPTED BY CONSTRUCTION/ DEMOLITION ACTIVITIES SHALL BE REPLACED OR REPAIRED TO MATCH ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- SAWCUT AND REMOVE PAVEMENT ONE FOOT OFF PROPOSED EDGE OF PAVEMENT OR EXISTING CURB LINE IN ALL AREAS WHERE PAVEMENT TO BE REMOVED ABUTS EXISTING PAVEMENT OR CONCRETE TO REMAIN.
- PAVEMENT REMOVAL LIMITS ARE SHOWN FOR CONTRACTOR'S CONVENIENCE. ADDITIONAL PAVEMENT REMOVAL MAY BE REQUIRED DEPENDING ON THE CONTRACTOR'S OPERATION. CONTRACTOR TO VERIFY FULL LIMITS OF PAVEMENT REMOVAL PRIOR TO BID.
- CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES WITHIN THE WORK LIMITS SHOWN AND CALLED OUT TO BE REMOVED. ITEMS TO BE REMOVED INCLUDE, BUT ARE NOT LIMITED TO: PAVEMENT, PROCESSED ROCK FILL, CATCH BASINS, UNDERGROUND PIPING, SIGNS, TREES, AND SHRUBS. CONTRACTOR SHALL NOTIFY ENGINEER IF THERE ARE EXISTING FEATURES THAT MUST BE REMOVED TO COMPLETE THE WORK BUT ARE NOT CALLED OUT TO BE REMOVED ON THE DEMOLITION PLANS. EXISTING FEATURES CALLED OUT TO BE REMOVED BUT THAT ARE LOCATED OUTSIDE THE LIMIT OF WORK SHALL BE REMOVED BY THE DEVELOPER'S SITE CONTRACTOR.
- REMOVE TREES AND BRUSH AS REQUIRED FOR COMPLETION OF WORK. CONTRACTOR SHALL GRUB AND REMOVE ALL STUMPS WITHIN LIMITS OF WORK AND DISPOSE OF OFF SITE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.
- CONTRACTOR SHALL PROTECT ALL PROPERTY MONUMENTATION THROUGHOUT DEMOLITION AND CONSTRUCTION OPERATIONS. SHOULD ANY MONUMENTATION BE DISTURBED BY BY THE CONTRACTOR, CONTRACTOR SHALL EMPLOY A LICENSED SURVEYOR TO REPLACE IT.
- THE CONTRACTOR SHALL PAY ALL COSTS NECESSARY FOR TEMPORARY PARTITIONING, BARRICADING, FENCING, SECURITY AND SAFETY DEVICES REQUIRED FOR THE MAINTENANCE OF A CLEAN AND SAFE CONSTRUCTION SITE.
- SAWCUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL UTILITIES TO BE REMOVED AND PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN.

SITE NOTES:

- STOP BARS SHALL BE THERMOPLASTIC AND CONFORM TO CURRENT MUTCD STANDARDS.
- SEE DETAILS SHEETS FOR PAVEMENT MARKINGS, SIGNS, AND SIGN POSTS.
- STOP BARS SHALL BE EIGHTEEN (18) INCHES WIDE WHITE LINES.
- CLEAN AND COAT VERTICAL FACE OF EXISTING PAVEMENT AT SAWCUT LINE WITH RS-1 EMULSION IMMEDIATELY PRIOR TO PLACING NEW BITUMINOUS CONCRETE.
- ALL WORK SHALL COMPLY WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, "STANDARD SPECIFICATIONS OF ROAD AND BRIDGE CONSTRUCTION", CURRENT EDITION.
- ALL SIGNS SHALL CONFORM WITH "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS", AND THE AMERICANS WITH DISABILITIES ACT REQUIREMENTS, LATEST EDITIONS.
- ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.

GRADING AND DRAINAGE NOTES:

- COMPACTION REQUIREMENTS  
BELOW PAVED OR CONCRETE AREAS 95%  
  
TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL 95%  
  
BELOW LOAM AND SEED AREAS 90%

\*ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557, METHOD C FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH ASTM D-1556 OR ASTM-2922.

- ALL STORM DRAINAGE PIPES SHALL BE HIGH DENSITY POLYETHYLENE (HANCOR HI-Q, ADS N-12 OR APPROVED EQUAL) OR RCP CLASS IV, UNLESS OTHERWISE SPECIFIED.
- CONTRACTOR SHALL PROVIDE A FINISHED PAVEMENT SURFACE AND LAWN AREAS FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCES, EXITS, RAMPS AND LOADING DOCK AREAS ADJACENT TO THE BUILDING.
- ALL PROPOSED CATCH BASINS SHALL BE EQUIPPED WITH 4' SUMPS.
- ALL DRAINAGE PIPE WITH LESS THAN 4' OF COVER SHALL BE INSULATED WITH 2 INCH RIGID FOAM INSULATION.
- CATCHBASINS AND DRAIN MANHOLES SHALL BE 4 FT IN DIAMETER UNLESS OTHERWISE NOTED.
- ALL STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT) STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, LATEST EDITION.

UTILITY NOTES:

- COORDINATE ALL UTILITY WORK WITH APPROPRIATE UTILITY COMPANY.  
SEWER/WATER/DRAINAGE: CITY OF ROCHESTER  
ELECTRIC: EVERSOURCE ENERGY (FORMERLY PSNH)  
TELEPHONE/DATA: METROCAST AND /OR FAIRPOINT
- ALL WATER MAIN INSTALLATIONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE.
- ALL WATER MAIN INSTALLATIONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER CONSTRUCTION PRIOR TO ACTIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE CHLORINATION AND TESTING WITH THE CITY OF ROCHESTER, NEW HAMPSHIRE PUBLICS WORKS DEPARTMENT.
- ALL SEWER PIPE SHALL BE PVC SDR 35 UNLESS OTHERWISE STATED.

- CONNECTION TO EXISTING WATER MAIN SHALL BE CONSTRUCTED TO CITY OF ROCHESTER STANDARDS.
- ALL ELECTRICAL MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.
- ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL.
- A 10-FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN ALL WATER AND SANITARY SEWER LINES. AN 18-INCH MINIMUM OUTSIDE TO OUTSIDE VERTICAL SEPARATION SHALL BE PROVIDED AT ALL WATER/SANITARY SEWER CROSSINGS.
- HYDRANTS, GATE VALVES, FITTINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF ROCHESTER.
- COORDINATE TESTING OF SEWER CONSTRUCTION WITH THE CITY OF ROCHESTER.
- ALL SEWER PIPE WITH LESS THAN 4' OF COVER IN UNPAVED AREAS AND LESS THAN 6' OF COVER IN PAVED AREAS SHALL BE INSULATED.
- CONTRACTOR SHALL COORDINATE ALL ELECTRIC WORK INCLUDING BUT NOT LIMITED TO: CONDUIT CONSTRUCTION, MANHOLE CONSTRUCTION, UTILITY POLE CONSTRUCTION, OVERHEAD WIRE RELOCATION, AND TRANSFORMER CONSTRUCTION WITH EVERSOURCE AND FAIRPOINT COMMUNICATIONS.

LANDSCAPE NOTES:

- THE CONTRACTOR SHALL FURNISH AND PLANT ALL PLANTS IN QUANTITIES AS SHOWN ON THIS PLAN. NO SUBSTITUTIONS WILL BE PERMITTED UNLESS APPROVED BY OWNER. ALL PLANTS SHALL BE NURSERY GROWN.
- ALL PLANTS SHALL BE NURSERY GROWN AND PLANTS AND WORKMANSHIP SHALL CONFORM TO THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS, INCLUDING BUT NOT LIMITED TO SIZE, HEALTH, SHAPE, ETC., AND SHALL BE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO ARRIVAL ON-SITE AND AFTER PLANTING.
- PLANT STOCK SHALL BE GROWN WITHIN THE HARDINESS ZONES 4 THRU 7 ESTABLISHED BY THE PLANT HARDINESS ZONE MAP, MISCELLANEOUS PUBLICATIONS NO. 814, AGRICULTURAL RESEARCH SERVICE, UNITED STATES DEPARTMENT AGRICULTURE, LATEST REVISION.
- PLANT MATERIAL SHALL BARE THE SAME RELATIONSHIP TO FINISHED GRADE AS TO THE ORIGINAL PLANTING GRADE PRIOR TO DIGGING.
- THE NUMBER OF EACH INDIVIDUAL PLANT TYPE AND SIZE PROVIDED IN THE PLANT LIST OR ON THE PLAN IS FOR THE CONTRACTOR'S CONVENIENCE ONLY. IF A DISCREPANCY EXISTS BETWEEN THE NUMBER OF PLANTS ON THE LABEL AND THE NUMBER OF SYMBOLS SHOWN ON THE DRAWINGS, THE GREATER NUMBER SHALL APPLY.
- NO SUBSTITUTION OF PLANT MATERIALS WILL BE ALLOWED WITHOUT THE PRIOR WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL LOCATE, VERIFY AND MARK ALL EXISTING AND NEWLY INSTALLED UNDERGROUND UTILITIES PRIOR TO ANY LAWN WORK OR PLANTING. ANY CONFLICTS WHICH MIGHT OCCUR BETWEEN PLANTING AND UTILITIES SHALL IMMEDIATELY BE REPORTED TO THE OWNER SO THAT ALTERNATE PLANTING LOCATIONS CAN BE DETERMINED.
- ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED, SHALL RECEIVE SIX (6) INCHES OF LOAM AND SEED. NO FILL SHALL BE PLACED IN ANY WETLAND AREA.
- THREE (3) INCH BARK MULCH IS TO BE USED AROUND THE TREE AND SHRUB PLANTING AS SPECIFIED IN THE DETAILS. WHERE BARK MULCH IS TO BE USED IN A CURBED ISLAND THE BARK MULCH SHALL MEET THE TOP INSIDE EDGE OF THE CURB. ALL OTHER AREAS SHALL RECEIVE SIX (6) INCHES OF LOAM AND SEED.
- LANDSCAPING SHALL BE LOCATED WITHIN 150 FT OF EXTERIOR HOSE ATTACHMENT OR SHALL BE PROVIDED WITH AN IRRIGATION SYSTEM..
- SEE PLANTING DETAILS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- TREE STAKES SHALL REMAIN IN PLACE FOR NO LESS THAN 6 MONTHS AND NO MORE THAN 1 YEAR.
- PLANTING SHALL BE COMPLETED FROM APRIL 15TH THROUGH OCTOBER 1ST. NO PLANTING DURING JULY AND AUGUST UNLESS SPECIAL PROVISIONS ARE MADE FOR DROUGHT.
- PARKING AREA PLANTED ISLANDS TO HAVE MINIMUM OF 1'-0" TOPSOIL PLACED TO WITHIN 3 INCHES OF THE TOP OF CURB ELEVATION. REMOVE ALL CONSTRUCTION DEBRIS BEFORE PLACING TOPSOIL.
- TREES SHALL BE PRUNED IN ACCORDANCE WITH THE LATEST EDITION OF ANSI A300 'TREES, SHRUBS AND OTHER WOOD PLANT MAINTENANCE STANDARD PRACTICES.
- ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24 HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL BE WATERED WEEKLY, OR MORE OFTEN, IF NECESSARY DURING THE FIRST GROWING SEASON.
- EXISTING TREES AND SHRUBS SHOWN ON THE PLAN ARE TO REMAIN UNDISTURBED. ALL EXISTING TREES AND SHRUBS SHOWN TO REMAIN ARE TO BE PROTECTED WITH A 4-FOOT SNOW FENCE PLACED AT THE DRIP LINE OF THE BRANCHES OR AT 8 FEET MINIMUM FROM THE TREE TRUNK. ANY EXISTING TREE OR SHRUB SHOWN TO REMAIN, WHICH IS REMOVED DURING CONSTRUCTION, SHALL BE REPLACED BY A TREE OF COMPARABLE SIZE AND SPECIES TREE OR SHRUB.
- THE CONTRACTOR SHALL GUARANTEE ALL PLANTINGS TO BE IN GOOD HEALTHY, FLOURISHING AND ACCEPTABLE CONDITION FOR A PERIOD OF (1) YEAR BEGINNING AT THE DATE OF ACCEPTANCE OF SUBSTANTIAL COMPLETION. ALL RASSES, TREES AND SHRUBS THAT, IN THE OPINION OF THE LANDSCAPE ARCHITECT, SHOW LESS THAN 80% HEALTHY GROWTH AT THE END OF ONE YEAR PERIOD SHALL BE REPLACED BY THE CONTRACTOR.
- UPON EXPIRATION OF THE CONTRACTOR'S ONE YEAR GUARANTEE PERIOD, THE OWNER SHALL BE RESPONSIBLE FOR LANDSCAPE MAINTENANCE INCLUDING WATERING DURING PERIODS OF DROUGHT
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PLANTING AND LAWNS AGAINST DAMAGE FROM ONGOING CONSTRUCTION. THIS PROTECTION SHALL BEGIN AT THE TIME THE PLANT IS INSTALLED AND CONTINUE UNTIL THE FORMAL ACCEPTANCE OF ALL THE PLANTINGS.
- PRE-PURCHASE PLANT MATERIAL AND ARRANGE FOR DELIVERY TO MEET PROJECT SCHEDULE AS REQUIRED IT MAY BE NECESSARY TO PRE-DIG CERTAIN SPECIES WELL IN ADVANCE OF ACTUAL PLANTING DATES.

EXISTING DRAINAGE AND SEWER STRUCTURE TABLE										
	S.M.H. #1	S.M.H. #2	S.M.H. #3	S.M.H. #4	S.M.H. #5	C.B. #1	C.B. #2	C.B. #3	C.B. #4	C.B. #5
SIZE	32" DIA.	32" DIA	32" DIA	32" DIA	32" DIA	24" DIA.	22"x24"	24" DIA.	24"x24"	22"x24"
RIM ELEVATION	246.95'	244.20'	240.80'	238.60'	239.85'	240.45'	239.55'	239.15'	238.05'	237.25'
SUMP	239.75'	237.40'	233.95'	232.00'	230.95'	237.90'	235.50'	235.00'	234.60'	233.45'
PIPE "A"	INVERT	239.80'	237.55'	234.00'	232.00'	231.10'	238.70'	237.20'	236.80'	235.65'
	TYPE	10" P.V.C.	10" P.V.C.	10" P.V.C.	10" P.V.C.	12" P.V.C.	12" C.P.P.	12" C.M.P.	12" C.P.P.	14" R.C.P.
PIPE "B"	INVERT	239.75'	237.40'	233.95'	232.00'	230.95'	238.60'	237.45'	236.60'	236.30'
	TYPE	10" P.V.C.	10" P.V.C.	10" P.V.C.	12" P.V.C.	12" P.V.C.	12" C.M.P.	12" C.P.P.	12" C.P.P.	
PIPE "C"	INVERT	239.80'			232.00'					
	TYPE	10" P.V.C.			10" P.V.C.					

SOIL DELINEATION NOTES:

A SITE SPECIFIC SOIL SURVEY WAS PREPARED ON JUNE 29, 2016, BY JAMES P. GOVE, CSS # 004, GOVE ENVIRONMENTAL SERVICES, INC.

SOILS WERE IDENTIFIED WITH THE NEW HAMPSHIRE STATE-WIDE NUMERICAL SOILS LEGEND, USDA NRCS, DURHAM, NH. ISSUE #10, JANUARY 2011.

THE SOIL DELINEATION WAS CONDUCTED WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOIL SURVEY. IT IS A SPECIAL PURPOSE PRODUCT, INTENDED FOR INFILTRATION REQUIREMENTS BY THE NHDES ALTERATION OF TERRAIN BUREAU. IT WAS PRODUCED BY A PROFESSIONAL SOIL SCIENTIST, AND IS NOT A PRODUCT OF THE USDA NATURAL RESOURCES CONSERVATION SERVICE. A REPORT HAS BEEN PREPARED THAT ACCOMPANIES THIS SOILS DELINEATION.

SOIL LEGEND

MAP UNIT SYMBOL	MAP UNIT NAME	HYDROLOGIC SOIL GROUP
89	CHATFIELD, FINE SANDY LOAM	B
444	NEWFIELDS, FINE SANDY LOAM	B
500	UDORTHEMETS, LOAMY	B (ESTIMATED)
546/P	WALPOLE, FINE SANDY LOAM	D (ESTIMATED)
600/P	ENDOAGUEMETS, LOAMY	D (ESTIMATED)

SLOPES: 0-8% = B  
DRAINAGE: POORLY DRAINED = /P

TEST PIT DATA

TEST PITS CONDUCTED BY GOVE ENVIRONMENTAL SERVICES ON 5/17/16. TEST PITS WERE LOGGED BY JIM GOVE AND VIEWED BY ROBERT GRAHAM OF EKIMBOR, LLC.

DEPTH	COLOR	TEXTURE	STRUCTURE	CONSISTENCE	REDOX FEATURES
0-12"	10YR3/2	LS	GR	FR	
12-24"	10YR5/4	LS	GR	FR	
24-50"	2.5Y5/3	S	SG	L	7.5YR5/6 C/P
REFUSAL AT 50", ESHWT AT 24", OBSERVED WATER 42"					

DEPTH	COLOR	TEXTURE	STRUCTURE	CONSISTENCE	REDOX FEATURES
0-6"	10YR3/2	FSL	GR	FR	
6-22"	10YR4/6	LS	GR	FR	
22-55"	2.5Y5/3	LS	OM	FR	7.5YR5/6 C/P
REFUSAL AT 55", ESHWT AT 22", OBSERVED WATER 50"					

DEPTH	COLOR	TEXTURE	STRUCTURE	CONSISTENCE	REDOX FEATURES
0-9"	10YR3/2	LS	GR	FR	
9-23"	10YR5/4	LS	GR	FR	
23-67"	2.5Y5/3	FSL	OM	FI	5YR5/6 C/P
REFUSAL AT 50", ESHWT AT 23", OBSERVED WATER - NONE, RESTRICTIVE LAYER AT 23"					

DEPTH	COLOR	TEXTURE	STRUCTURE	CONSISTENCE	REDOX FEATURES
0-12"	10YR3/2	FSL	GR	FR	
12-19"	2.5Y6/2	FSL	GR	FR	
19-23"	10YR4/6	FSL	GR	FR	
23-68"	2.5y5/3	FSL	OM	FI	5YR5/6 C/P
REFUSAL AT 68", ESHWT AT 23", OBSERVED WATER 60", RESTRICTIVE LAYER AT 23"					

DEPTH	COLOR	TEXTURE	STRUCTURE	CONSISTENCE	REDOX FEATURES
0-9"	10YR3/2	FSL	GR	FR	
9-33"	10YR4/6	FSL	GR	FR	
33"	BEDROCK				
REFUSAL AT 33", ESHWT AT 33"					

DEPTH	COLOR	TEXTURE	STRUCTURE	CONSISTENCE	REDOX FEATURES
0-6"	10YR3/2	FSL	GR	FR	
6-35"	10YR4/6	FSL	GR	FR	
35"	BEDROCK				
REFUSAL AT 35", ESHWT AT 35"					

DEPTH	COLOR	TEXTURE	STRUCTURE	CONSISTENCE	REDOX FEATURES
0-4"	10YR3/2	FSL	GR	FR	
4-28"	10YR4/6	FSL	GR	FR	
28-52"	2.5Y5/3	LS	OM	FI	7.5YR5/6 C/P
REFUSAL AT 52", ESHWT AT 28", OBSERVED WATER - NONE, RESTRICTIVE LAYER AT 28"					

DEPTH	COLOR	TEXTURE	STRUCTURE	CONSISTENCE	REDOX FEATURES
0-14"	10YR4/4	SAND	MASSIVE	FRIABLE	NONE
14-26"	10YR4/6	L. SAND	MASSIVE	FRIABLE	NONE
26-30"	2.5Y5/3	L. SAND	MASSIVE	FRIABLE	7.5YR5/6, 5%
30+"	REFUSAL				
REFUSAL AT 30", ESHWT AT 26"					

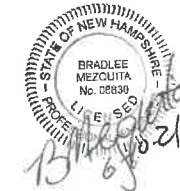
DEPTH	COLOR	TEXTURE	STRUCTURE	CONSISTENCE	REDOX FEATURES
0-20"	10YR3/3	GR. SAND	MASSIVE	FRIABLE	NONE
20-24"	10YR3/2	F.S.LOAM	GRANULAR	FRIABLE	NONE
24-30"	10YR5/6	F.S.LOAM	GRANULAR	FRIABLE	NONE
30-63"	2.5Y5/3	L. SAND	MASSIVE	FRIABLE	7.5YR4/6, 10%
63+"	REFUSAL				
REFUSAL AT 63", ESHWT AT 30"					

DEPTH	COLOR	TEXTURE	STRUCTURE	CONSISTENCE	REDOX FEATURES
0-12"	10YR4/4	GR. SAND	MASSIVE	FRIABLE	NONE
12-27"	10YR5/6	L. SAND	MASSIVE	FRIABLE	NONE
27-32"	10YR6/2	L. SAND	MASSIVE	FRIABLE	7.5YR4/6, 10%
32-33"	10YR2/1	SAND	MASSIVE	VERY FIRM	7.5YR4/6, 10%
33-87"	10YR4/3	SAND	MASSIVE	FRIABLE	7.5YR4/6, 10%
87+"	REFUSAL				
REFUSAL AT 87", ESHWT AT 27"					

LEGEND

---	EXISTING PROPERTY LINE	⊕	TEST PIT (SEE ABOVE)
- - - -	PROPOSED PROPERTY LINE	⊙	EXISTING SANITARY SEWER MANHOLE
~~~~~	WETLAND LINE	⊙	PROPOSED SANITARY SEWER MANHOLE
=====	TREELINE	200	EXISTING STONEWALL
-----W-----	EXISTING WATER LINE	FF	PROPOSED SPOT GRADE
-----PW-----	PROPOSED WATER LINE	⊙	PROPOSED FINISHED FLOOR ELEVATION
-----SS-----	EXISTING SEWER LINE	⊙	EXISTING CATCH BASIN
-----SS-----	PROPOSED SANITARY SEWER LINE	⊙	PROPOSED CATCH BASIN
-----OE-----	EXISTING OVERHEAD ELECTRIC	⊙	EXISTING DRAIN MANHOLE
-----OE-----	PROPOSED OVERHEAD ELECTRIC	⊙	PROPOSED DRAIN MANHOLE
-----PE&C-----	PROPOSED UNDERGROUND ELECTRIC	⊙	PROPOSED UNDERGROUND PROPANE TANK
-----252-----	PROPOSED TRANSFORMER	⊙	PROPOSED SIGN
-----250-----	1 FT CONTOUR	⊙	PROPOSED LIGHT
-----250-----	5 FT CONTOUR	⊙	INLET PROTECTION BARRIER
-----250-----	PROPOSED GRADE	⊙	EXISTING UTILITY POLE
=====	EXISTING DRAIN LINE	⊙	PROPOSED UTILITY POLE
=====	PROPOSED DRAIN LINE	⊙	EXISTING FIRE HYDRANT
=====	PROPOSED PIPE WITH 2 INCH RIGID FOAM INSULATION	⊙	PROPOSED FIRE HYDRANT
-----G-----	PERIMETER CONTROL BARRIER	⊙	EXISTING WATER VALVE
-----G-----	PROPOSED GAS LINE	⊙	PROPOSED WATER VALVE
=====	PROPOSED STABILIZED CONSTRUCTION LOCATION	⊙	
=====	LIMIT OF CLEARING AND GRUBBING	⊙	
=====	FENCE	⊙	
=====	PROPOSED RIP RAP	⊙	

**Tighe&Bond**  
www.tighebond.com



## Proposed Multi-family Development

### Norway Plains Road Site Plans

Tenants In Common:  
Robert Graham  
81 Lakeview Drive  
Nottingham, NH  
03290

Michael Anderson  
2637 E Atlantic Blvd #172  
Pompano Beach FL 33062-4939

### Rochester, New Hampshire

2.	6/10/2021	MODIFICATION TO APPROVED PROJECT APPLICATION
1.	12/16/16	RESPONSE TO CITY COMMENTS
A	10/11/2016	City Review Comments
MARK	DATE	DESCRIPTION
PROJECT NO: G-0693		
DATE: 09/06/2016		
FILE: G0693-G-001_GENERAL-NOTES.dwg		
DRAWN BY: ERC/KAM		
CHECKED: KAM		
APPROVED: BLM		

### GENERAL NOTES, LEGEND, AND ABBREVIATIONS

SCALE:

G-001



PROJECT NAME AND LOCATION  
NORWAY PLAINS ROAD SUBDIVISION  
15 NORWAY PLAINS ROAD  
ROCHESTER, NH 03686

43°-19'-28"N  
70°-58'-40"W

#### DESCRIPTION

THE PROJECT CONSISTS OF THE CONSTRUCTION OF A RESIDENTIAL DEVELOPMENT WITH ASSOCIATED PARKING, ROAD, DRAINAGE, UTILITIES, AND LANDSCAPING CONSISTENT WITH THE CITY OF ROCHESTER'S MASTER PLAN.

#### DISTURBED AREA

THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY ±4.1 ACRES.

#### SOIL CHARACTERISTICS

BASED ON SITE SPECIFIC SOIL SURVEY CONDUCTED BY NHSC, INC. THE SITE CONSISTS OF WELL TO POORLY DRAINED SOILS WITH HYDROLOGIC SOIL GROUPS B, C, AND D.

#### NAME OF RECEIVING WATERS

THE STORM WATER RUNOFF WILL BE DISCHARGED VIA OVERLAND FLOW TO UNNAMED WETLAND WHICH ULTIMATELY FLOWS TO THE COCHECO RIVER.

#### SEQUENCE OF MAJOR ACTIVITIES

- ORANGE SNOW FENCE IS TO BE PLACED ALONG THE LIMITS OF CLEARING PRIOR TO ANY ONSITE CUTTING/ACTIVITY.
- CUT AND CLEAR TREES.
- CONSTRUCT TEMPORARY AND PERMANENT SEDIMENT, EROSION AND DETENTION CONTROL FACILITIES. EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATIONS THAT WILL INFLUENCE STORMWATER RUNOFF SUCH AS:
  - NEW CONSTRUCTION
  - DEVELOPMENT OF BORROW PIT AREAS
  - DISPOSAL OF SEDIMENT SPOIL, STUMP AND OTHER SOLID WASTE
  - FLOOD PLAIN EXCAVATION WORK
  - STREAM CHANNEL MODIFICATIONS
  - CONTROL OF DUST
  - CONSTRUCTION OF ACCESS AND HAUL ROAD
  - NEARNESS OF CONSTRUCTION SITE TO RECEIVING WATERS
  - CONSTRUCTION DURING LATE WINTER AND EARLY SPRING
- ALL PERMANENT DITCHES, SWALES, DETENTION, RETENTION AND SEDIMENTATION BASINS TO BE STABILIZED USING THE VEGETATIVE AND NON-STRUCTURAL BMPs PRIOR TO DIRECTING RUNOFF TO THEM.
- CLEAR AND DISPOSE OF DEBRIS.
- CONSTRUCT TEMPORARY CULVERTS AND DIVERSION CHANNELS AS REQUIRED.
- GRADE AND GRAVEL ROADWAYS AND PARKING AREAS - ALL ROADS AND PARKING AREA SHALL BE STABILIZED IMMEDIATELY AFTER THEIR CONSTRUCTION.
- BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED IMMEDIATELY AFTER THEIR CONSTRUCTION.
- DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SILT FENCES, SEDIMENT TRAPS, ETC., MULCH AND SEED AS REQUIRED.
- FINISH PAVING ALL ROADWAYS AND PARKING LOTS.
- INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES.
- COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- REMOVE TRAPPED SEDIMENTS FROM COLLECTOR DEVICES AS APPROPRIATE AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES.

NOTE: THE CONSTRUCTION SEQUENCE MUST LIMIT THE DURATION AND AREA OF DISTURBANCE.

#### EROSION CONTROL NOTES

- ALL EROSION CONTROL MEASURES AND PRACTICES SHALL CONFORM TO THE "NEW HAMPSHIRE STORMWATER MANUAL VOLUME 3: EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION" PREPARED BY THE NHDES.
- CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL BARRIERS, INCLUDING HAY BALE, SILT FENCES, SILT SACKS AND SILT SOCKS, AS SHOWN IN THESE DRAWINGS AS THE FIRST ORDER OF WORK.
- SILT SACK INLET PROTECTION SHALL BE INSTALLED IN ALL EXISTING AND PROPOSED CATCH BASIN INLETS WITHIN THE WORK LIMITS AND BE MAINTAINED FOR THE DURATION OF THE PROJECT.
- PERIMETER CONTROLS INCLUDING SILT FENCES, HAY BALE BARRIERS, AND/OR SILT SOCKS SHALL MAINTAINED FOR THE DURATION OF THE PROJECT UNTIL NON-PAVED AREAS HAVE BEEN STABILIZED.
- THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION.
- ALL DISTURBED AREAS NOT OTHERWISE BEING TREATED SHALL RECEIVE 6" LOAM, SEED, AND FERTILIZER.
- INSPECT ALL INLET PROTECTION AND PERIMETER CONTROLS WEEKLY AND AFTER EACH RAIN STORM OF 0.25 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY OF FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE FILTER HEIGHT.
- CONSTRUCT EROSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1.

#### STABILIZATION

- AN AREA SHALL BE CONSIDERED STABLE WHEN ONE OF THE FOLLOWING HAS OCCURRED:
  - BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED.
  - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED.
  - A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED
  - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- WINTER STABILIZATION PRACTICES:
  - ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY NOVEMBER 15TH, OR WHICH ARE DISTURBED AFTER NOVEMBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 4:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHOR NETTING, ELSEWHERE.
  - ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITION.
  - AFTER NOVEMBER 15TH, INCOMPLETE ROAD SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3-INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.
- STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES, AND DISTURBED AREAS, WHERE CONSTRUCTION ACTIVITY SHALL NOT OCCUR FOR MORE THAN TWENTY-ONE (21) CALENDAR DAYS BY THE FOURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA. STABILIZATION MEASURES TO BE USED INCLUDE:
  - TEMPORARY SEEDING
  - MULCHING
- WHEN CONSTRUCTION ACTIVITY PERMANENTLY OR TEMPORARILY CEASES WITHIN 100 FEET OF NEARBY SURFACE WATERS OR DELINEATED WETLANDS, THE AREA SHALL BE STABILIZED WITHIN SEVEN (7) DAYS OR PRIOR TO A RAIN EVENT. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN THESE AREAS, SILT FENCES AND HAY BALE BARRIERS AND ANY EARTH/DIKES SHALL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.
- DURING CONSTRUCTION, RUNOFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE FILTERED THROUGH HAY BALE BARRIERS AND SILT FENCES OR SILT SOCKS. ALL STORM DRAIN BASIN INLETS SHALL BE PROVIDED WITH FLARED END SECTIONS AND TRASH RACKS. THE SITE SHALL BE STABILIZED FOR THE WINTER BY NOVEMBER 15.

#### DUST CONTROL:

- THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD.
- DUST CONTROL METHODS SHALL INCLUDE, BUT BE NOT LIMITED TO SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED DUMP TRUCKS LEAVING THE SITE, AND TEMPORARY MULCHING.
- DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ABUTTING AREAS INCLUDING BUT NOT LIMITED TO ROUTE 11 (FARMINGTON ROAD).

#### STOCKPILES

- LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM CATCH BASINS, SWALES, AND CULVERTS.
- ALL STOCKPILES SHOULD BE SURROUNDED WITH TEMPORARY EROSION CONTROL MEASURES PRIOR TO THE ONSET OF PRECIPITATION.
- PERIMETER BARRIERS SHOULD BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS NEEDED TO ACCOMMODATE THE DELIVERY AND REMOVAL OF MATERIALS FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIER SHOULD BE INSPECTED AT THE END OF EACH WORKING DAY.
- PROTECT ALL STOCKPILES FROM STORMWATER RUN-OFF USING TEMPORARY EROSION CONTROL MEASURES SUCH AS BERMS, SILT SOCK, OR OTHER APPROVED PRACTICE TO PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE CONFINES OF THE STOCKPILES.

#### OFF SITE VEHICLE TRACKING

THE CONTRACTOR SHALL CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES PRIOR TO ANY EXCAVATION ACTIVITIES.

#### VEGETATION

- TEMPORARY GRASS COVER
    - SEEDBED PREPARATION:  
APPLY FERTILIZER AT THE RATE OF 600 POUNDS PER ACRE OF 10-10-10. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF THREE (3) TONS PER ACRE.
    - SEEDING
      - UTILIZE ANNUAL RYE GRASS AT A RATE OF 40 LBS/ACRE.
      - WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF TWO (2) INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
      - APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). HYDROSEEDINGS, WHICH INCLUDE MULCH, MAY BE LEFT ON SOIL SURFACE. SEEDING RATES MUST BE INCREASED 10% WHEN HYDROSEEDING.
    - MAINTENANCE
      - TEMPORARY SEEDING SHALL BE PERIODICALLY INSPECTED. AT A MINIMUM, 95% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND OTHER TEMPORARY MEASURES USED IN THE INTERIM (MULCH, FILTER BARRIERS, CHECK DAMS, ETC.).
  - VEGETATIVE PRACTICE
    - FOR PERMANENT MEASURES AND PLANTINGS.
      - LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF THREE (3) TONS PER ACRE IN ORDER TO PROVIDE A PH VALUE OF 5.5 TO 6.5.
      - FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 800 POUNDS PER ACRE OF 10-20-20 FERTILIZER.
      - SOIL CONDITIONERS AND FERTILIZER SHALL BE APPLIED AT THE RECOMMENDED RATES AND SHALL BE THOROUGHLY WORKED INTO THE LOAM. LOAM SHALL BE RAKED UNTIL THE SURFACE IS FINELY PULVERIZED, SMOOTH AND EVEN, AND THEN COMPACTED TO AN EVEN SURFACE CONFORMING TO THE REQUIRED LINES AND GRADES WITH APPROVED ROLLERS WEIGHING BETWEEN 4-1/2 POUNDS AND 5-1/2 POUNDS PER INCH OF WIDTH.
      - SEED SHALL BE SOWN AT THE RATE SHOWN BELOW. SOWING SHALL BE DONE ON A CALM, DRY DAY, PREFERABLY BY MACHINE, BUT IF BY HAND, ONLY BY EXPERIENCED WORKMEN. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO THE SOIL TO A DEPTH NOT OVER 1/4 INCH AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH.
    - HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AS INDICATED ABOVE.
    - THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT WASHING AWAY THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED WITH GRASS SHALL BE RESEDED, AND ALL NOXIOUS WEEDS REMOVED.
    - THE CONTRACTOR SHALL PROTECT AND MAINTAIN THE SEEDED AREAS UNTIL ACCEPTED.
    - A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL BE APPLIED AT THE INDICATED RATES:

CREeping RED FESCUE	50 LBS/ACRE
KENTUCKY BLUEGRASS	100 LBS/ACRE
PERRENIAL RYE GRASS	50 LBS/ACRE
- IN NO CASE SHALL THE WEED CONTENT EXCEED ONE (1) PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH STATE AND FEDERAL SEED LAWS. SEEDING SHALL BE DONE NO LATER THAN SEPTEMBER 15. IN NO CASE SHALL SEEDING TAKE PLACE OVER SNOW.
- DORMANT SEEDING (SEPTEMBER 15 TO FIRST SNOWFALL)  
FOLLOW PERMANENT MEASURES SLOPE, LIME, FERTILIZER AND GRADING REQUIREMENTS. APPLY SEED MIXTURE AT TWICE THE INDICATED RATE. APPLY MULCH AS INDICATED FOR PERMANENT MEASURES.

#### CONCRETE WASHOUT AREA

- THE FOLLOWING ARE THE ONLY NON-STORMWATER DISCHARGES ALLOWED. ALL OTHER NON-STORMWATER DISCHARGES ARE PROHIBITED ON SITE.
  - THE CONCRETE DELIVERY TRUCKS SHALL, WHENEVER POSSIBLE, USE WASHOUT FACILITIES AT THEIR OWN PLANT OR DISPATCH FACILITY.
  - IF IT IS NECESSARY, SITE CONTRACTOR SHALL DESIGNATE SPECIFIC WASHOUT AREAS AND DESIGN FACILITIES TO HANDLE ANTICIPATED WASHOUT WATER.
  - CONTRACTOR SHALL LOCATE WASHOUT AREAS AT LEAST 150 FEET AWAY FROM STORM DRAINS, SWALES AND SURFACE WATERS OR DELINEATED WETLANDS.
  - INSPECT WASHOUT FACILITIES DAILY TO DETECT LEAKS OR TEARS AND TO IDENTIFY WHEN MATERIALS NEED TO BE REMOVED.

#### ALLOWABLE NON-STORMWATER DISCHARGES

- DISCHARGES FROM FIRE-FIGHTING ACTIVITIES
- FIRE HYDRANT FLUSHINGS
- WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED
- WATER USED TO CONTROL DUST
- POTABLE WATER INC. UNCONTAMINATED WATER LINE FLUSHINGS
- ROUTINE EXTERNAL BUILDING WASH DOWN -NO DETERGENTS
- PAVEMENT WASH WATERS -NO SPILLS OR DETERGENTS
- UNCONTAMINATED AIR CONDITIONING/COMPRESSOR CONDENSATE
- UNCONTAMINATED GROUND WATER OR SPRING WATER
- FOUNDATION OR FOOTING DRAINS -NOT CONTAMINATED
- UNCONTAMINATED EXCAVATION DEWATERING
- LANDSCAPE IRRIGATION

#### WASTE DISPOSAL

- WASTE MATERIALS
  - ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN A DUMPSTER.
  - NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE.
  - ALL PERSONNEL SHALL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.
- HAZARDOUS WASTE
  - ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER.
  - SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.
- SANITARY WASTE
  - ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

#### SPILL PREVENTION

- CONTRACTOR SHALL BE FAMILIAR WITH SPILL PREVENTION MEASURES REQUIRED BY LOCAL, STATE AND FEDERAL AGENCIES. AT A MINIMUM, CONTRACTOR SHALL FOLLOW THE BEST MANAGEMENT SPILL PREVENTION PRACTICES OUTLINED BELOW.
- THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF:
  - GOOD HOUSEKEEPING:  
THE FOLLOWING GOOD HOUSEKEEPING PRACTICES SHALL BE FOLLOWED ON SITE DURING THE CONSTRUCTION PROJECT:
    - ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB SHALL BE STORED ON SITE.
    - ALL MATERIALS STORED ON SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
    - MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.
    - THE SITE SUPERINTENDENT SHALL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.
    - SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
    - WHENEVER POSSIBLE ALL OF A PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
  - HAZARDOUS PRODUCTS:  
THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:
    - PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
    - ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION.
    - SURPLUS PRODUCT THAT MUST BE DISPOSED OF SHALL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.
- PRODUCT SPECIFICATION PRACTICES  
THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE FOLLOWED ON SITE:
  - PETROLEUM PRODUCTS:
    - ALL ON SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE.
    - PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
  - FERTILIZERS:

- FERTILIZERS USED SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS.
  - ONCE APPLIED FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER.
  - STORAGE SHALL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
- PAINTS:
    - ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE.
    - EXCESS PAINT SHALL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM.
    - EXCESS PAINT SHALL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
  - SPILL CONTROL PRACTICES  
IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
    - MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
    - MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS SHALL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
    - ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
    - THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL SHALL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
    - SPILLS OF TOXIC OR HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE LOCAL, STATE OR FEDERAL AGENCIES AS REQUIRED.
    - THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.
  - VEHICLE FUELING AND MAINTENANCE PRACTICE:
    - CONTRACTOR SHALL MAKE AN EFFORT TO PERFORM EQUIPMENT/VEHICAL FUELING AND MAINTENANCE AT AN OFF-SITE FACILITY.
    - CONTRACTOR SHALL PROVIDE AN ON-SITE FUELING AND MAINTENANCE AREA THAT IS CLEAN AND DRY.
    - IF POSSIBLE THE CONTRACTOR SHALL KEEP AREA COVERED.
    - CONTRACTOR SHALL KEEP A SPILL KIT AT THE FUELING AND MAINTENANCE AREA.
    - CONTRACTOR SHALL VEHICLES SHALL BE INSPECTED REGULARLY FOR LEAKS AND DAMAGE.
    - CONTRACTOR SHALL USE DRIP PANS, DRIP CLOTHS, OR ABSORBENT PADS WHEN REPLACING SPENT FLUID.

#### EROSION CONTROL OBSERVATIONS AND MAINTENANCE PRACTICES

THIS PROJECT EXCEEDS ONE (1) ACRE OF DISTURBANCE AND THUS REQUIRES A SWPPP. THE SWPPP SHALL BE PREPARED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE FAMILIAR WITH THE SWPPP AND KEEP AN UPDATED COPY OF THE SWPPP ONSITE AT ALL TIMES.

THE FOLLOWING REPRESENTS THE GENERAL OBSERVATION AND REPORTING PRACTICES THAT SHALL BE FOLLOWED AS PART OF THIS PROJECT.

- OBSERVATIONS OF THE PROJECT FOR COMPLIANCE WITH THE SWPPP SHALL BE MADE BY THE CONTRACTOR AT LEAST ONCE A WEEK OR WITHIN 24 HOURS OF A STORM 0.25 INCHES OR GREATER.
- AN OBSERVATION REPORT SHALL BE MADE AFTER EACH OBSERVATION AND DISTRIBUTED TO THE ENGINEER, THE OWNER, AND THE CONTRACTOR.
- A REPRESENTATIVE OF THE SITE CONTRACTOR, SHALL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR ACTIVITIES.
- IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS OF REPORT.

#### BLASTING NOTES

IF MORE THAN 5000 CUBIC YARDS ARE TO BE BLASTED A BLASTING PLAN SHALL BE PROVIDED. BLASTING PLAN SHALL INCLUDE:

- LOCATION AND IDENTIFICATION OF DRINKING WATER WELLS LOCATED WITHIN 2000 FEET OF THE PROPOSED BLASTING ACTIVITIES.
- A GROUNDWATER QUALITY SAMPLING PROGRAM, APPROVED BY NHDES PRIOR TO INITIATING BLASTING, TO MONITOR FOR NITRATE AND NITRITE EITHER IN THE DRINKING WATER SUPPLY WELLS OR IN OTHER WELLS THAT ARE REPRESENTATIVE OF THE DRINKING WATER SUPPLY WELLS IN THE AREA.
  - THE GROUNDWATER SAMPLING PROGRAM MUST BE IMPLEMENTED ONCE APPROVED BY NHDES.
  - THE FOLLOWING BEST MANAGEMENT PROCEDURES FOR BLASTING SHALL BE COMPLIED WITH:
- LOADING PRACTICES.  
THE FOLLOWING BLASTHOLE LOADING PRACTICES TO MINIMIZE ENVIRONMENTAL EFFECTS SHALL BE FOLLOWED:
  - DRILLING LOGS SHALL BE MAINTAINED BY THE DRILLER AND COMMUNICATED DIRECTLY TO THE BLASTER.
  - THE LOGS SHALL INDICATE DEPTHS AND LENGTHS OF VOIDS, CAVITIES, AND FAULT ZONES OR OTHER WEAK ZONES ENCOUNTERED AS WELL AS GROUNDWATER CONDITIONS.
  - EXPLOSIVE PRODUCTS SHALL BE MANAGED ON-SITE SO THAT THEY ARE EITHER USED IN THE BOREHOLE, RETURNED TO THE DELIVERY VEHICLE, OR PLACED IN SECURE CONTAINERS FOR OFF-SITE DISPOSAL.
  - SPILLAGE AROUND THE BOREHOLE SHALL EITHER BE PLACED IN THE BOREHOLE OR CLEANED UP AND RETURNED TO AN APPROPRIATE VEHICLE FOR HANDLING OR PLACEMENT IN SECURED CONTAINERS FOR OFF-SITE DISPOSAL.
  - LOADED EXPLOSIVES SHALL BE DETONATED AS SOON AS POSSIBLE AND SHALL NOT BE LEFT IN THE BLASTHOLES OVERNIGHT, UNLESS WEATHER OR OTHER SAFETY CONCERNS REASONABLY DICTATE THAT DETONATION SHOULD BE POSTPONED.
  - LOADING EQUIPMENT SHALL BE CLEANED IN AN AREA WHERE WASTEWATER CAN BE PROPERLY CONTAINED AND HANDLED IN A MANNER THAT PREVENTS RELEASE OF CONTAMINANTS TO THE ENVIRONMENT.
  - EXPLOSIVES SHALL BE LOADED TO MAINTAIN GOOD CONTINUITY IN THE COLUMN LOAD TO PROMOTE COMPLETE DETONATION. INDUSTRY ACCEPTED LOADING PRACTICES FOR PRIMING, STEMMING, DECKING AND COLUMN RISE NEED TO BE ATTENDED TO.
- EXPLOSIVE SELECTION  
THE FOLLOWING BMPs SHALL BE FOLLOWED TO REDUCE THE POTENTIAL FOR GROUNDWATER CONTAMINATION WHEN EXPLOSIVES ARE USED:
  - EXPLOSIVE PRODUCTS SHALL BE SELECTED THAT ARE APPROPRIATE FOR SITE CONDITIONS AND SAFE BLAST EXECUTION.
  - EXPLOSIVE PRODUCTS SHALL BE SELECTED THAT HAVE THE APPROPRIATE WATER RESISTANCE FOR THE SITE CONDITIONS PRESENT TO MINIMIZE THE POTENTIAL FOR HAZARDOUS EFFECT OF THE PRODUCT UPON GROUNDWATER.
- PREVENTION OF MISFIRES. APPROPRIATE PRACTICES SHALL BE DEVELOPED AND IMPLEMENTED TO PREVENT MISFIRES.
- MUCK PILE MANAGEMENT  
MUCK PILES (THE BLASTED PIECES OF ROCK) AND ROCK PILES SHALL BE MANAGED IN A MANNER TO REDUCE THE POTENTIAL FOR CONTAMINATION BY IMPLEMENTING THE FOLLOWING MEASURES:
  - REMOVE THE MUCK PILE FROM THE BLAST AREA AS SOON AS REASONABLY POSSIBLE.
  - MANAGE THE INTERACTION OF BLASTED ROCK PILES AND STORMWATER TO PREVENT CONTAMINATION OF WATER SUPPLY WELLS OR SURFACE WATER.
- SPILL PREVENTION MEASURES AND SPILL MITIGATION  
SPILL PREVENTION AND SPILL MITIGATION MEASURES SHALL BE IMPLEMENTED TO PREVENT THE RELEASE OF FUEL AND OTHER RELATED SUBSTANCES TO THE ENVIRONMENT. THE MEASURES SHALL INCLUDE AT A MINIMUM:
  - THE FUEL STORAGE REQUIREMENTS SHALL INCLUDE:
    - STORAGE OF REGULATED SUBSTANCES ON AN IMPERVIOUS SURFACE;
    - SECURE STORAGE AREAS AGAINST UNAUTHORIZED ENTRY;
    - LABEL REGULATED CONTAINERS CLEARLY AND VISIBLY;
    - INSPECT STORAGE AREAS WEEKLY;
    - COVER REGULATED CONTAINERS IN OUTSIDE STORAGE AREAS;
    - WHEREVER POSSIBLE, KEEP REGULATED CONTAINERS THAT ARE STORED OUTSIDE MORE THAN 50 FEET FROM SURFACE WATER AND STORM DRAINS, 75 FEET FROM PRIVATE WELLS, AND 400 FEET FROM PUBLIC WELLS; AND
    - SECONDARY CONTAINMENT IS REQUIRED FOR CONTAINERS CONTAINING REGULATED SUBSTANCES STORED OUTSIDE, EXCEPT FOR ON PREMISE USE HEATING FUEL TANKS, OR ABOVEGROUND OR UNDERGROUND STORAGE TANKS OTHERWISE REGULATED.
  - THE FUEL HANDLING REQUIREMENTS SHALL INCLUDE:
    - EXCEPT WHEN IN USE, KEEP CONTAINERS CONTAINING REGULATED SUBSTANCES CLOSED AND SEALED;
    - PLACE DRIP PANS UNDER SPIGOTS, VALVES, AND PUMPS;
    - HAVE SPILL CONTROL AND CONTAINMENT EQUIPMENT READILY AVAILABLE IN ALL WORK AREAS;
    - USE FUNNELS AND DRIP PANS WHEN TRANSFERRING REGULATED SUBSTANCES; AND
    - PERFORM TRANSFERS OF REGULATED SUBSTANCES OVER AN IMPERVIOUS SURFACE.
  - THE TRAINING OF ON-SITE EMPLOYEES AND THE ON-SITE POSTING OF RELEASE RESPONSE INFORMATION DESCRIBING WHAT TO DO IN THE EVENT OF A SPILL OF REGULATED SUBSTANCES.
- FUELING AND MAINTENANCE OF EXCAVATION, EARTHMOVING AND OTHER CONSTRUCTION RELATED EQUIPMENT SHALL COMPLY WITH THE REGULATIONS OF THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES THESE REQUIREMENTS ARE SUMMARIZED IN WD-DWGB-22-6 BEST MANAGEMENT PRACTICES FOR FUELING AND MAINTENANCE OF EXCAVATION AND EARTHMOVING EQUIPMENT" OR ITS SUCCESSOR DOCUMENT. (SEE [HTTP://DES.NH.GOV/ORGANIZATION/COMMISSIONER/PIP/FACTSHEETS/DWGB/DOCUMENTS/DWGB-22-6.PDF](http://DES.NH.GOV/ORGANIZATION/COMMISSIONER/PIP/FACTSHEETS/DWGB/DOCUMENTS/DWGB-22-6.PDF))

**Tighe&Bond**  
www.tighebond.com



## Proposed Multi-family Development

### Norway Plains Road Site Plans

Tenants In Common:

Robert Graham  
81 Lakeview Drive  
Nottingham, NH  
03290

Michael Anderson  
2637 E Atlantic Blvd #172  
Pompano Beach FL 33062-4939

### Rochester, New Hampshire

MARK	DATE	DESCRIPTION
1.	12/16/16	RESPONSE TO CITY COMMENTS
A	10/11/2016	City Review Comments
PROJECT NO: G-0693		
DATE: 09/06/2016		
FILE: G0693-G-002_EROSION-CONTROL-NOTES.dwg		
DRAWN BY: ERC/KAM		
CHECKED: KAM		
APPROVED: BLH		

#### EROSION CONTROL NOTES

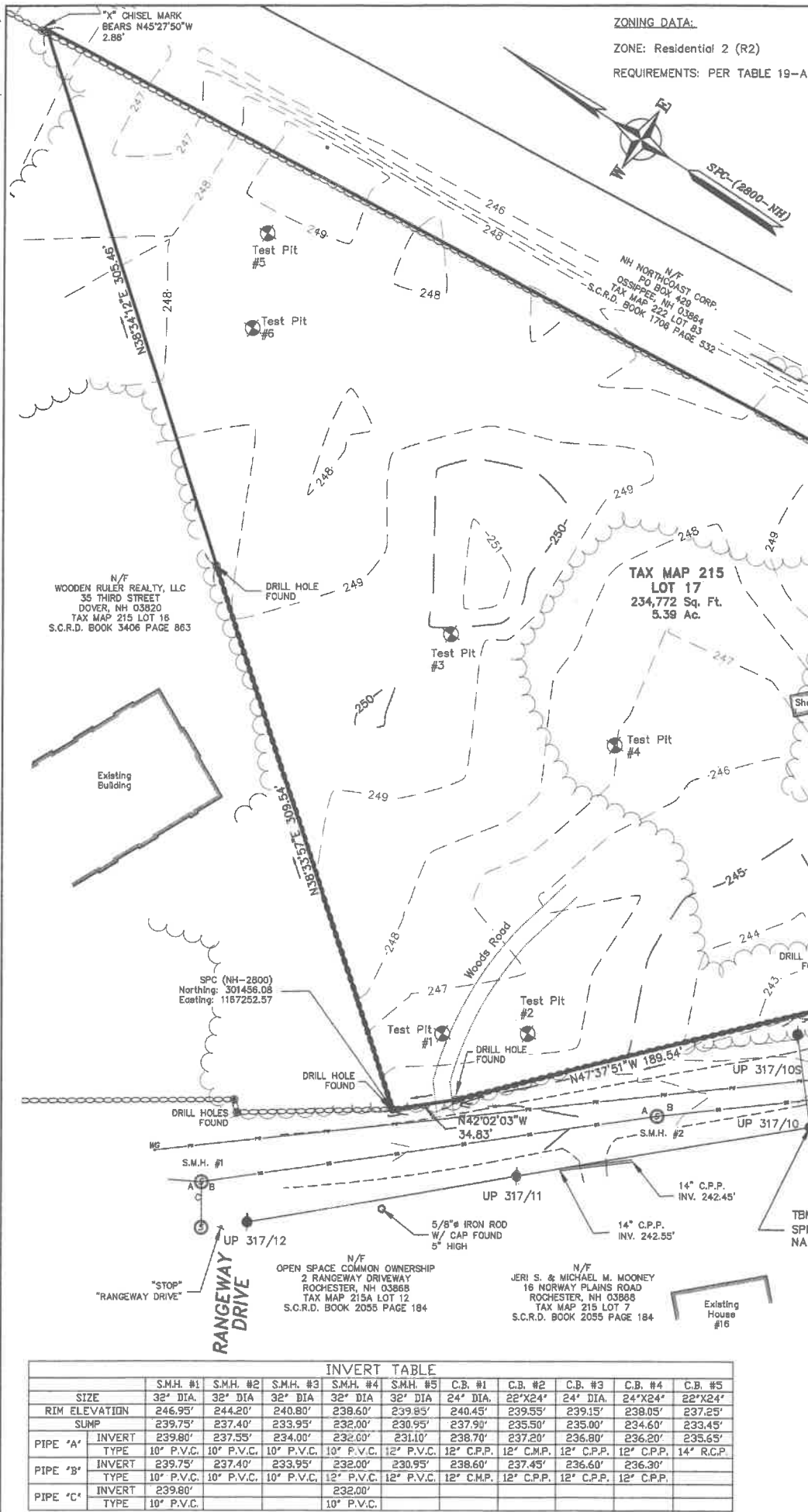
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G-002

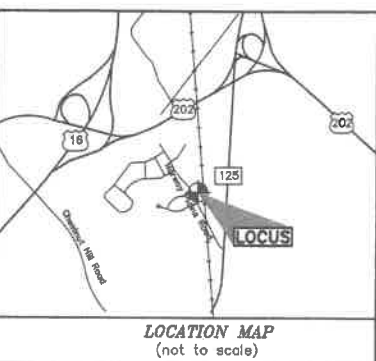








RESIDENTIAL DISTRICTS	LOTS			SETBACKS				OTHERS				STANDARDS, NOTES, AND REFERENCES
	MINIMUM LOT AREA (SQ. FT.)	MINIMUM FRONTAGE (FT.)	MINIMUM LOT AREA (SQ. FT.)	MINIMUM FRONT (FT.)	MINIMUM SIDE (FT.)	MINIMUM REAR (FT.)	MINIMUM BUILDING FOOTPRINT (SQ. FT.)	MINIMUM LOT COVERAGE (%)	MINIMUM NUMBER OF STORIES	MINIMUM BUILDING HEIGHT	MINIMUM BUILDING HEIGHT	
SINGLE FAMILY	6,000	60	-	10	8	20	30	35			35	SEE SECTION 42.19 - DIMENSIONAL STANDARDS
TWO FAMILY	6,000	80	-	10	8	20	30	45			35	SEE SECTION 42.19 - DIMENSIONAL STANDARDS
THREE & FOUR FAMILY	12,000 & 15,000	80	-	15	10	25	30	60			35	SEE SECTION 42.19 - DIMENSIONAL STANDARDS
MULTIFAMILY	30,000	100	5,000 OR 7,500	15	10	25	30	60			35	SEE SECTION 42.19 - DIMENSIONAL STANDARDS
ALL OTHER USES	9,000	80	-	10	8	20	30	35			35	



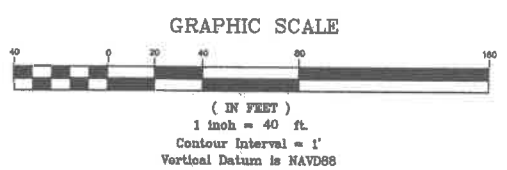
- NOTES:
- OWNERS OF RECORD:  
TAX MAP 215 LOTS 17  
J. BRUCE & JUNE L. ROBERTS  
S.C.R.D. BOOK 886 PAGE 419  
DATED JUNE 23, 1971
  - TOTAL EXISTING PARCEL AREA:  
TAX MAP 215 LOTS 17  
234,772 SQ. FT. (5.39 AC.)
  - BASIS OF BEARING IS PER PLAN REFERENCE #1.
  - APPROXIMATE ABUTTER'S LINES SHOWN HEREON ARE FOR REFERENCE PURPOSES ONLY AND SHALL NOT BE RELIED UPON AS BOUNDARY INFORMATION.
  - EASEMENTS OR OTHER UNWRITTEN RIGHTS MAY EXIST THAT ENCUMBER OR BENEFIT THE PROPERTY NOT SHOWN HEREON.
  - WETLANDS WERE DELINEATED BY JIM GOVE OF GOVE ENVIRONMENTAL SERVICES, INC. ON APRIL 20, 2016.
  - UNDERGROUND UTILITIES ARE APPROXIMATE LOCATIONS. VERIFY IN FIELD PRIOR TO DESIGN OR CONSTRUCTION.
  - ERROR OF CLOSURE OF TRAVERSE IS 1:10,000.
  - THE SUBJECT PROPERTY IS LOCATED IN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS SHOWN ON FEMA F.I.R.M. 33017C0203D, EFFECTIVE DATE MAY 17, 2005.
  - THERE ARE NO VERY POORLY DRAINED SOILS ON SITE. THE WETLANDS CONSIST OF ONLY POORLY DRAINED SOILS.

PLAN REFERENCES:

1. "PLAN OF LAND, ROCHESTER, N.H. FOR J. BRUCE & JUNE L. ROBERTS", PREPARED BY JOHN W. DURGIN ASSOCIATES, INC., DATED JUNE 13, 1979 AND RECORDED AT THE S.C.R.D. AS PLAN No. 19A-10.
2. "REVISED SUBDIVISION PLAN, JOHN E. KELLEY, ROCHESTER, N.H.", PREPARED BY FREDERICK E. DREW ASSOCIATES, DATED NOV. 1982 AND RECORDED AT THE S.C.R.D. AS PLAN No. 23A-132.
3. "NORWAY PLAINS ROAD HOUSING, ROCHESTER, N.H. J.J.S. REALTY - STRATHAM, N.H.", PREPARED BY KIMBALL CHASE, DATED 7-23-86 AND RECORDED AT THE S.C.R.D. AS PLAN No. 33-88.

LEGEND:

- STREET SIGN MONUMENT FOUND UTILITY POLE WETLAND NOW OR FORMERLY N/F STRAFFORD COUNTY REGISTRY OF DEEDS S.C.R.D. PROPERTY LINE SEWER LINE WATER LINE OVERHEAD UTILITIES EDGE OF WETLAND EDGE OF PAVEMENT APPROX. TREE LINE
- WATER VALVE FIRE HYDRANT WATER GATE SEWER MAN HOLE CATCH BASIN



INVERT TABLE										
SIZE	S.M.H. #1	S.M.H. #2	S.M.H. #3	S.M.H. #4	S.M.H. #5	C.B. #1	C.B. #2	C.B. #3	C.B. #4	C.B. #5
32" DIA.	246.95'	244.20'	240.80'	238.60'	236.40'	234.20'	232.00'	229.80'	227.60'	225.40'
RIM ELEVATION	239.75'	237.40'	235.05'	232.70'	230.35'	228.00'	225.65'	223.30'	220.95'	218.60'
SUMP	239.80'	237.55'	235.30'	233.05'	230.80'	228.55'	226.30'	224.05'	221.80'	219.55'
PIPE "A"	INVERT	10" P.V.C.	10" P.V.C.	10" P.V.C.	10" P.V.C.	12" C.P.P.	12" C.P.P.	12" C.P.P.	12" C.P.P.	14" R.C.P.
PIPE "B"	INVERT	10" P.V.C.	10" P.V.C.	10" P.V.C.	10" P.V.C.	12" C.P.P.	12" C.P.P.	12" C.P.P.	12" C.P.P.	14" R.C.P.
PIPE "C"	INVERT	10" P.V.C.	10" P.V.C.	10" P.V.C.	10" P.V.C.	12" C.P.P.	12" C.P.P.	12" C.P.P.	12" C.P.P.	14" R.C.P.



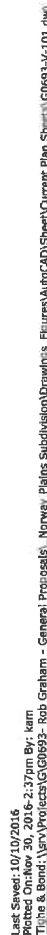
CERTIFICATION

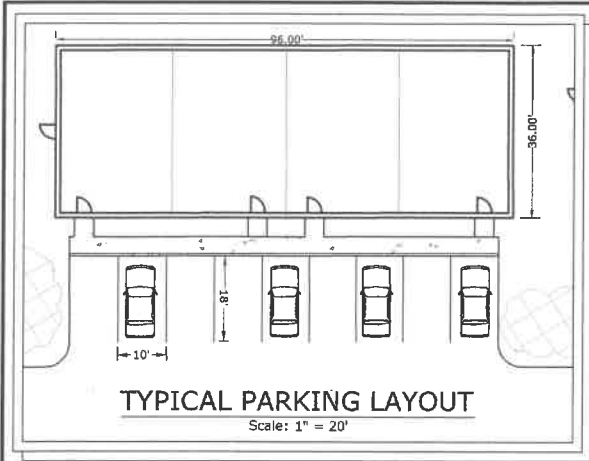
"I certify that this survey plat is not a subdivision pursuant to this title and that the lines of streets and ways shown are those of public or private streets or ways already established and that no new ways are shown."

Peter L. Agardnia, L.L.S. #829

12/29/16

C	12/19/16	REVISE NOTE #6 TO INCLUDE NAME JIM GOVE	A.M.P.	P.L.A.	P.L.A.
B	10/5/16	REVISIONS PER TRG REVIEW DATED 9/28/16	A.M.P.	P.L.A.	P.L.A.
A	9/1/16	ADD TEST PITS / ABUTTERS	A.M.P.	P.L.A.	P.L.A.
REV.	DATE	STATUS	BY	CHKD	APPD.

Rochester, New  
HampshireV-101

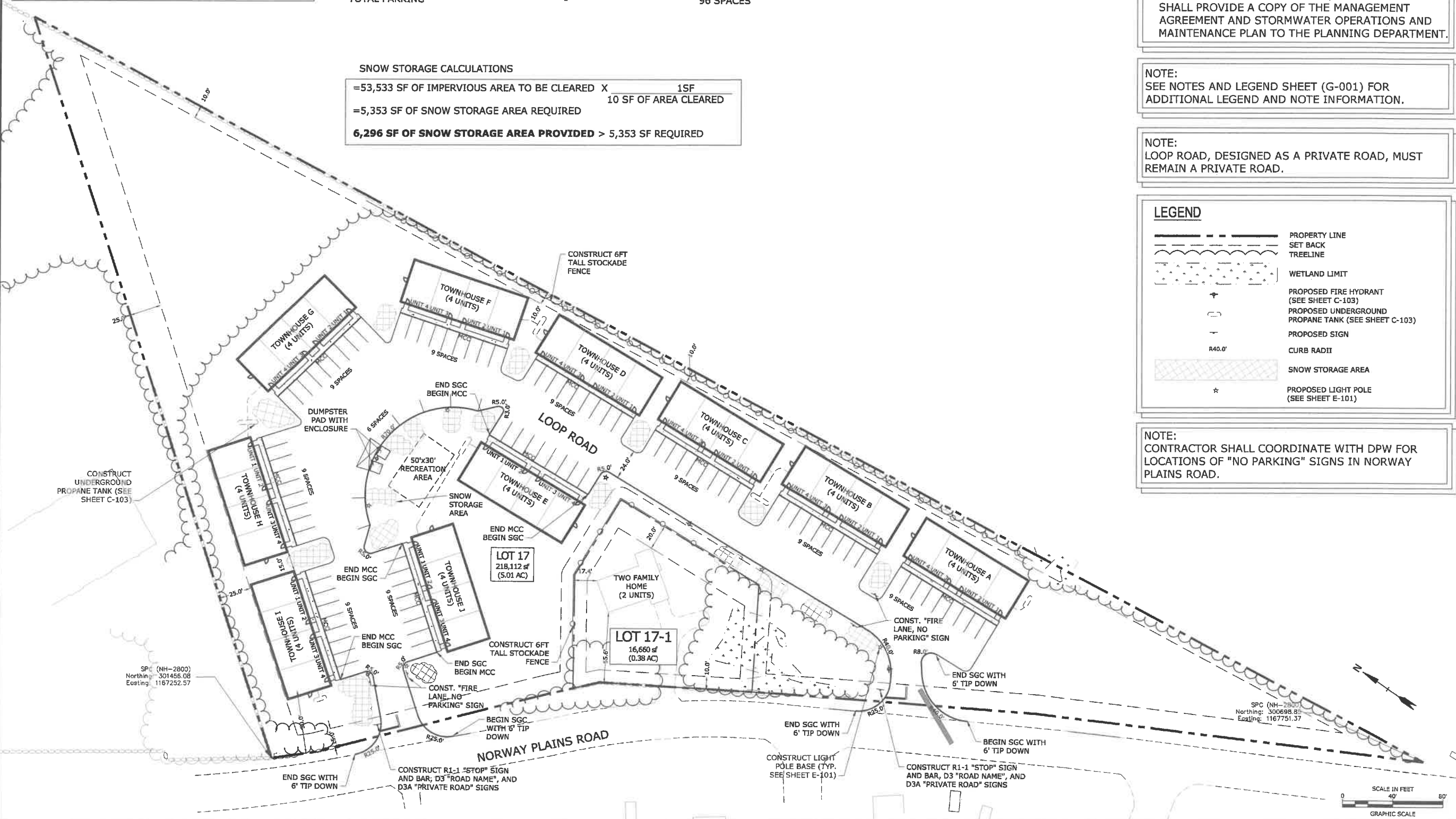


DIMENSIONAL REQUIREMENTS										
	BUILDING TYPE	LOT AREA SQ FT	FRONTAGE	SETBACKS			BUILDING FOOTPRINT (%)	LOT COVERAGE	BUILDING HEIGHT	UNITS
				FRONT	SIDE	REAR				
REQUIRED	TOWNHOUSE	7,500 /UNIT MIN.	80' MIN.	15.0'	10.0'	25.0'	30% MAX.	60% MAX.	35' MAX.	4
LOT 17	TOWNHOUSE	218,112**	775'	50.0'	10.0'	25.0'	16%*	40%*	≤35'	4
REQUIRED	TWO FAMILY	9,000	80' MIN.	10.0'	8.0'	20.0'	30% MAX.	45% MAX.	35' MAX.	2
LOT 17-1	TWO FAMILY	16,660	142'	56.6'	17.4'	20.0'	9%	17%*	≤35'	2

\*ASSUMES 36' x 96' BUILDING FOOTPRINT  
\*\* 218,112 sf / 40 UNITS = 5452 sf/UNIT  
VARIANCE GRANTED FOR REDUCED LOT DENSITY ON AUGUST 10, 2016

PARKING CALCULATIONS:	REQUIRED (SINGLE FAMILY)	REQUIRED (FOUR FAMILY)	PROVIDED
RESIDENTIAL			
PARKING STALLS	-	2 (PER UNIT) 2 X 40 = 80 SPACES	90 SPACES
VISITOR PARKING	-	-	6 SPACES
TOTAL PARKING	-	-	96 SPACES

SNOW STORAGE CALCULATIONS  
=53,533 SF OF IMPERVIOUS AREA TO BE CLEARED X 1SF  
10 SF OF AREA CLEARED  
=5,353 SF OF SNOW STORAGE AREA REQUIRED  
6,296 SF OF SNOW STORAGE AREA PROVIDED > 5,353 SF REQUIRED



FINAL APPROVAL BY ROCHESTER PLANNING BOARD

CERTIFIED BY \_\_\_\_\_ DATE \_\_\_\_\_

- SPECIAL NOTES:
1. APPLICANT SHALL BE RESPONSIBLE FOR REMOVING AND PROPERLY DISPOSING OF SNOW IF IT EXCEEDS DESIGNATED SNOW STORAGE AREAS.
  2. REFUSE AND RECYCLING PICK UP SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER/ASSOCIATION. RECYCLING AND REFUSE BINS WILL BE PICKED UP AT EACH BUILDING BY A PRIVATE CONTRACTOR.
  3. PRIOR TO PLAN CERTIFICATION, THE APPLICANT SHALL PROVIDE A COPY OF THE MANAGEMENT AGREEMENT AND STORMWATER OPERATIONS AND MAINTENANCE PLAN TO THE PLANNING DEPARTMENT.

NOTE:  
SEE NOTES AND LEGEND SHEET (G-001) FOR ADDITIONAL LEGEND AND NOTE INFORMATION.

NOTE:  
LOOP ROAD, DESIGNED AS A PRIVATE ROAD, MUST REMAIN A PRIVATE ROAD.

LEGEND

- PROPERTY LINE
- SET BACK
- TREELINE
- WETLAND LIMIT
- PROPOSED FIRE HYDRANT (SEE SHEET C-103)
- PROPOSED UNDERGROUND PROPANE TANK (SEE SHEET C-103)
- PROPOSED SIGN
- CURB RADIUS
- SNOW STORAGE AREA
- PROPOSED LIGHT POLE (SEE SHEET E-101)

NOTE:  
CONTRACTOR SHALL COORDINATE WITH DPW FOR LOCATIONS OF "NO PARKING" SIGNS IN NORWAY PLAINS ROAD.



Proposed Multi-family Development

Norway Plains Road Site Plans

Tenants In Common:  
Robert Graham  
81 Lakeview Drive  
Nottingham, NH  
03290

Michael Anderson  
2637 E Atlantic Blvd #172  
Pompano Beach FL 33062-4939

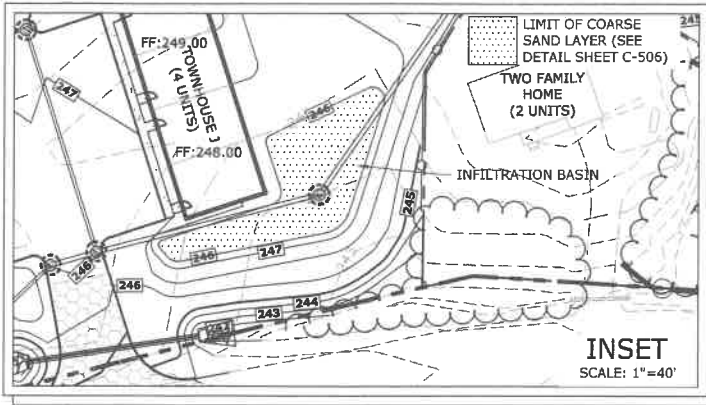
Rochester, New Hampshire

3.	6/10/2021	MODIFICATION TO APPROVED PROJECT APPLICATION
2.	3/23/2018	REVISED FOOTPRINTS
1.	12/16/2016	RESPONSE TO CITY COMMENTS
A	10/11/2016	City Review Comments

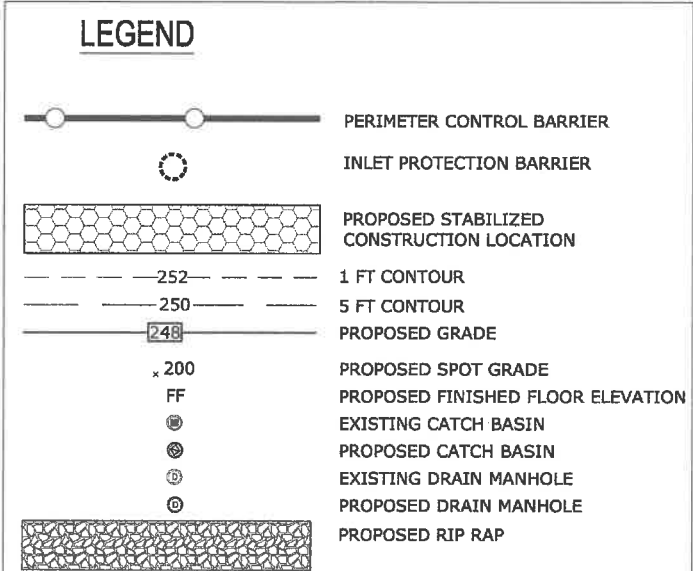
MARK	DATE	DESCRIPTION

PROJECT NO:	G-0693
DATE:	09/06/2016
FILE:	G0693-C-101.dwg
DRAWN BY:	ERC/KAM
CHECKED BY:	KAM
APPROVED BY:	BLM
SITE PLAN	
SCALE:	AS SHOWN
C-101	





NOTE:  
1. SEE NOTES AND LEGEND SHEET FOR ADDITIONAL LEGEND, DRAINAGE STRUCTURE TABLES AND NOTE INFORMATION.  
2. STORMWATER RUNOFF SHALL BE DIVERTED AWAY FROM STORMWATER MANAGEMENT PRACTICES UNTIL THE INFILTRATION BASIN AND GRAVEL WETLANDS ARE STABILIZED.



STRUCTURE TABLE	
PCB-1	RIM=246.90 INV.IN=239.10 - W INV.OUT=239.00 - S
PCB-2	RIM=246.90 INV.OUT=239.25 - E
PCB-3	RIM=243.30 INV.OUT=237.90 - E
PCB-4	RIM=243.30 INV.IN=237.75 - W INV.IN=237.75 - N INV.OUT=237.65 - S
PCB-5	RIM=240.20 INV.OUT=237.45 - SE
PCB-6	RIM=240.20 INV.IN=237.35 - NW INV.OUT=237.25 - SE
PCB-7	RIM=247.50 INV.OUT=242.50 - SE
PCB-8	RIM=247.45 INV.IN=242.30 - NW INV.OUT=242.20 - SW
PCB-9	RIM=245.50 INV.OUT=240.75 - E
PCB-10	RIM=246.00 INV.IN=240.60 - W INV.OUT=240.50 - SE
PCB-11	RIM=246.00 INV.IN=240.40 - NW INV.IN=240.40 - NE INV.OUT=240.30 - SE
PCB-12	RIM=246.50 INV.IN=239.85 - NW INV.OUT=239.75 - E
PDMH-1	RIM=246.95 INV.IN=238.85 - N INV.IN=238.85 - W INV.OUT=238.75 - S
PDMH-2 (6 FT DIA.)	RIM=243.50 INV.IN=237.15 - NW INV.IN=237.15 - N INV.OUT=237.05 - SE



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03290

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Pompano Beach FL 33062-4939

### Rochester, New Hampshire

3.	6/10/2021	MODIFICATION TO APPROVED PROJECT APPLICATION
3.	01/11/2018	GRADING REVISIONS
2.	12/15/2016	RESPONSE TO CITY COMMENTS
1.	10/24/2016	Revised Per DPW Comment
A	10/11/2016	City Review Comments
MARK	DATE	DESCRIPTION
PROJECT NO:		G-0693
DATE:		09/06/2016
FILE:		G0693-C-102.dwg
DRAWN BY:		ERC/KAM
CHECKED:		KAM
APPROVED:		BLM

### GRADING PLAN

SCALE: AS SHOWN

C-102



## Proposed Multi-family Development

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Nottingham, NH  
03290

Michael Anderson  
2637 E Atlantic Blvd #172  
Pompano Beach FL 33062-4939

Rochester, New  
Hampshire

6.	6/10/2021	MODEL APPLICATION TO APPROVED PROJECT APPLICATION
5.	1/29/18	REVISED WATER
4.	1/17/18	REVISED SEWER
3.	1/10/18	REVISED SEWER AND WATER
2.	1/13/17	REVISED UNDERGROUND ELEC
1.	12/15/16	RESPONSE TO CITY COMMENTS
A	10/11/2016	City Review Comments
MARK	DATE	DESCRIPTION
PROJECT NO:		G-0593
DATE:		09/06/2016
FILE:		G0593-C-103.dwg
DRAWN BY:		ERC/KAM
CHECKED BY:		KAM
APPROVED BY:		BLM

UTILITIES PLAN

SCALE:

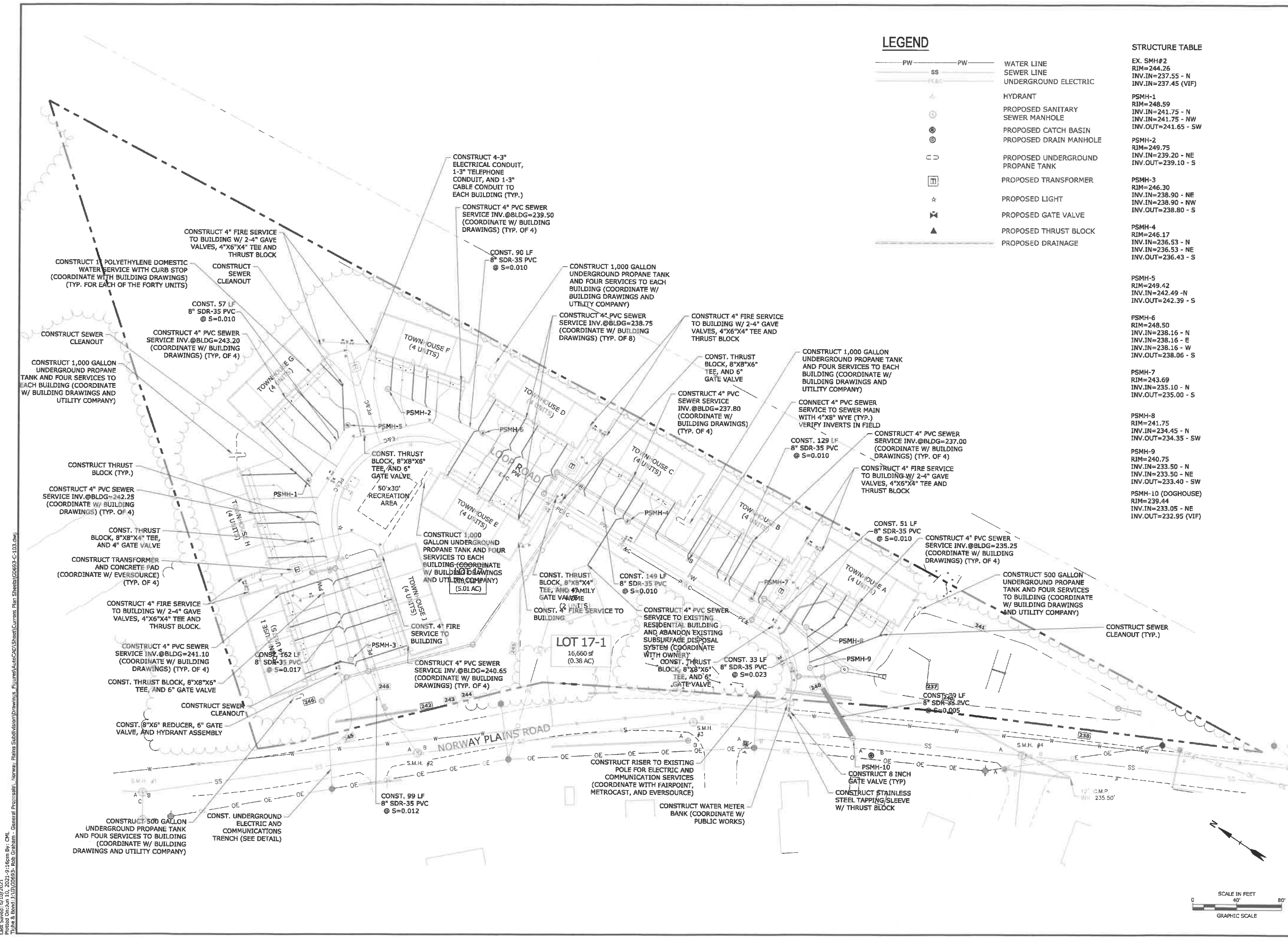
C-103

### LEGEND

PW	PW	WATER LINE
SS	SS	SEWER LINE
PE&C	PE&C	UNDERGROUND ELECTRIC
△	△	HYDRANT
○	○	PROPOSED SANITARY SEWER MANHOLE
⊗	⊗	PROPOSED CATCH BASIN
⊕	⊕	PROPOSED DRAIN MANHOLE
□	□	PROPOSED UNDERGROUND PROPANE TANK
☆	☆	PROPOSED TRANSFORMER
★	★	PROPOSED LIGHT
▲	▲	PROPOSED GATE VALVE
▲	▲	PROPOSED THRUST BLOCK
▲	▲	PROPOSED DRAINAGE

### STRUCTURE TABLE

EX. SMH#2	RIM=244.26	INV.IN=237.55 - N	INV.IN=237.45 (VIF)
PSMH-1	RIM=248.59	INV.IN=241.75 - N	INV.IN=241.75 - NW
		INV.OUT=241.65 - S	
PSMH-2	RIM=249.75	INV.IN=239.20 - NE	INV.OUT=239.10 - S
PSMH-3	RIM=246.30	INV.IN=238.90 - NE	INV.IN=238.90 - NW
		INV.OUT=238.80 - S	
PSMH-4	RIM=246.17	INV.IN=236.53 - N	INV.IN=236.53 - NE
		INV.OUT=236.43 - S	
PSMH-5	RIM=249.42	INV.IN=242.49 - N	INV.OUT=242.39 - S
PSMH-6	RIM=248.50	INV.IN=238.16 - N	INV.IN=238.16 - E
		INV.IN=238.16 - W	INV.OUT=238.06 - S
PSMH-7	RIM=243.69	INV.IN=235.10 - N	INV.OUT=235.00 - S
PSMH-8	RIM=241.75	INV.IN=234.45 - N	INV.OUT=234.35 - SW
PSMH-9	RIM=240.75	INV.IN=233.50 - N	INV.IN=233.50 - NE
		INV.OUT=233.40 - SW	
PSMH-10 (DOGHOUSE)	RIM=239.44	INV.IN=233.05 - NE	INV.OUT=232.95 (VIF)







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### Rochester, New Hampshire

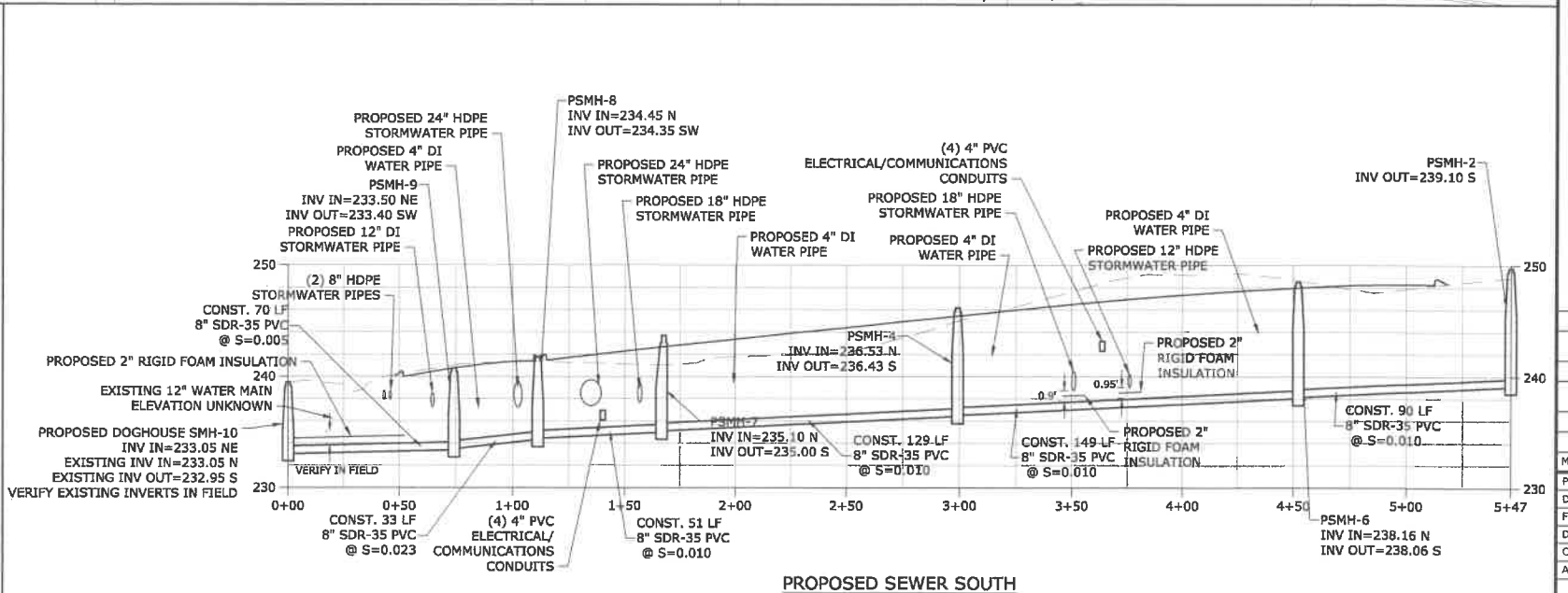
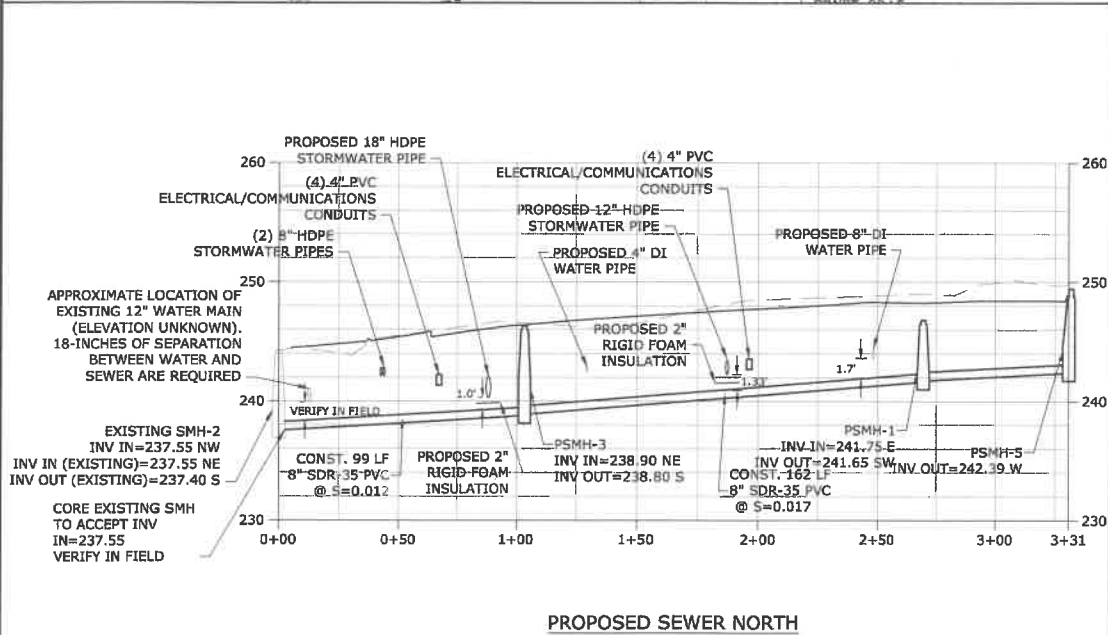
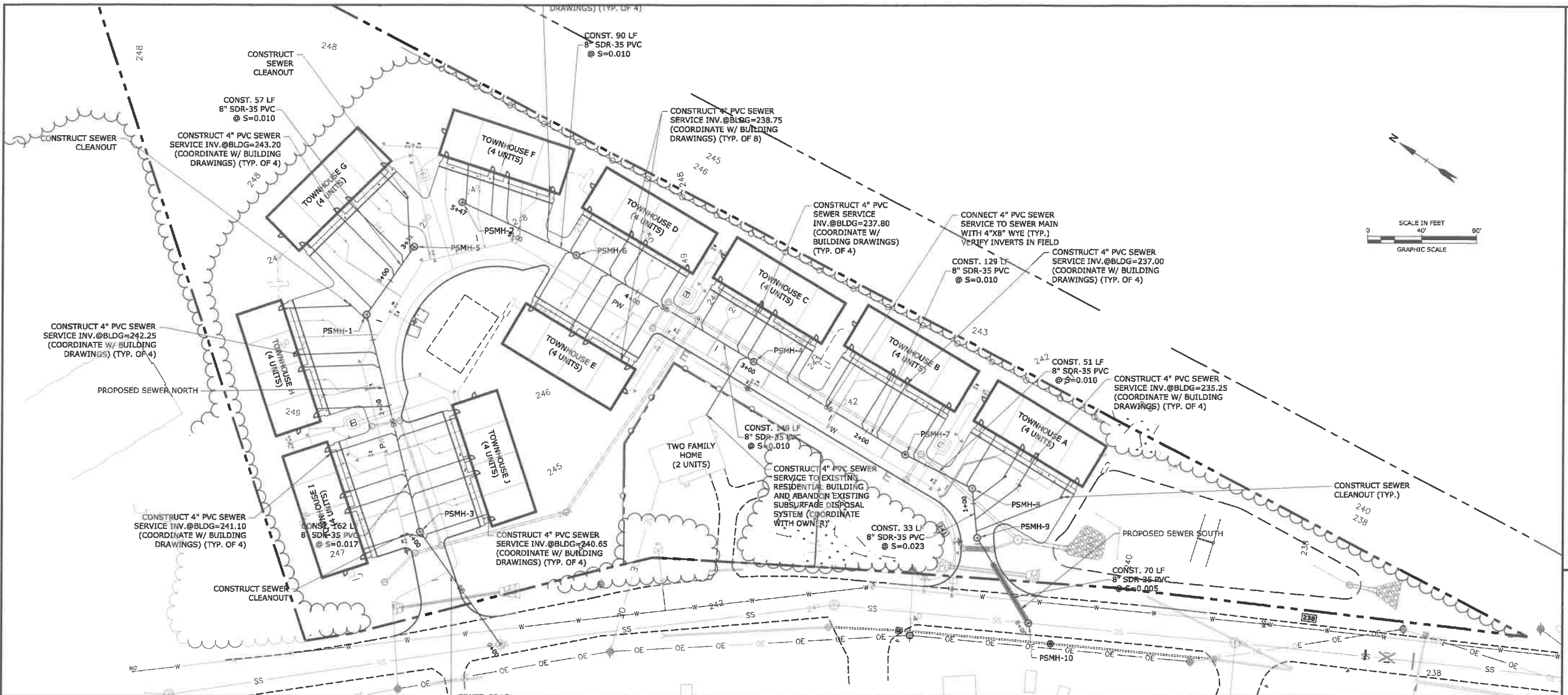
5.	6/10/2021	MULTIPLICATION TO APPROVED
4	1/13/2017	PROJECT APPLICATION
3	12/16/16	REVISED UNDERGROUND ELECTRIC
2	11/21/2016	RESPONSE TO CITY COMMENTS
1	10/24/2016	Revised per NHDES Comment
A	10/11/2016	Revised Per DPW Comment
MARK	DATE	CITY REVIEW COMMENTS

PROJECT NO:	G-0693
DATE:	10/11/2016
FILE:	G0693-C-104.dwg
DRAWN BY:	ERC/KAM
CHECKED:	KAM
APPROVED:	BLM

### SEWER PLAN AND PROFILE

SCALE: AS SHOWN

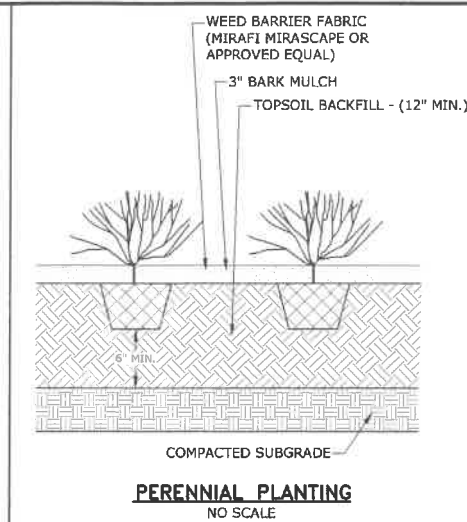
C-104



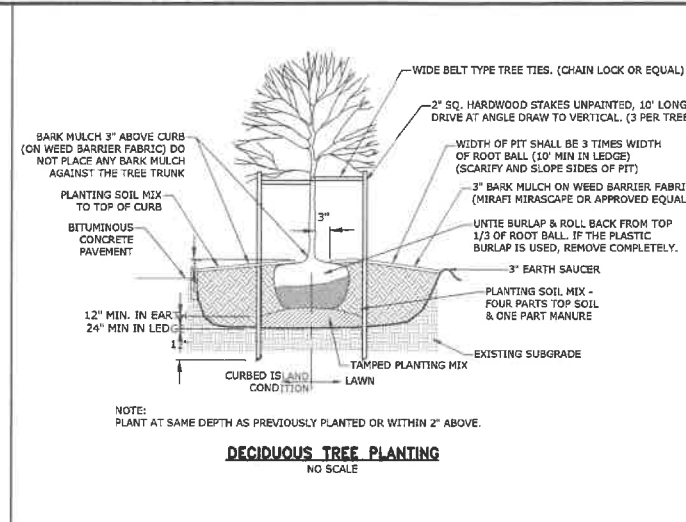
PROPOSED SEWER NORTH

PROPOSED SEWER SOUTH

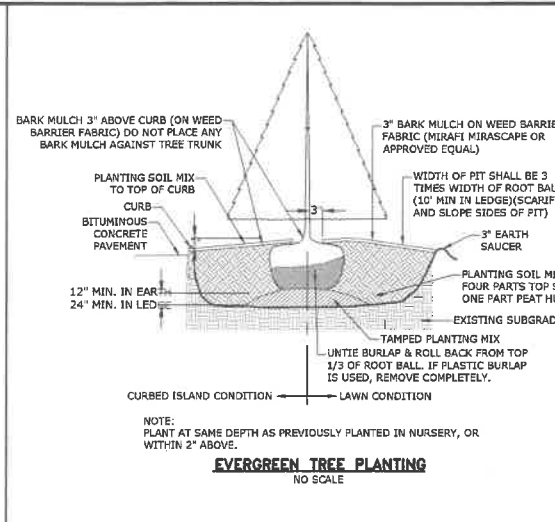
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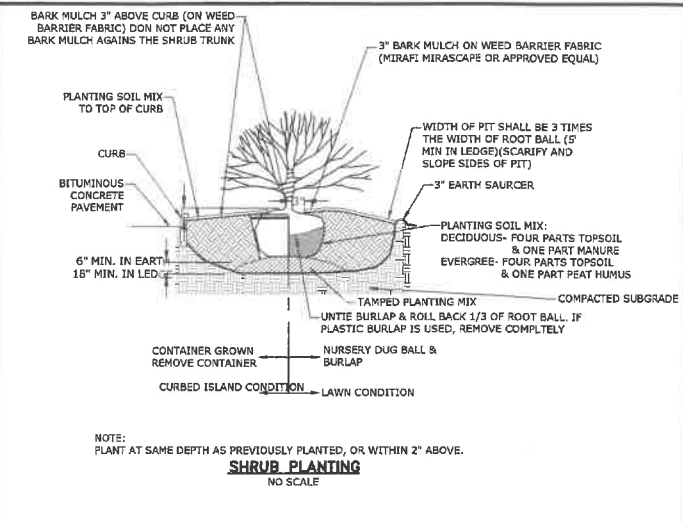
**PERENNIAL PLANTING**  
NO SCALE



**DECIDUOUS TREE PLANTING**  
NO SCALE



**EVERGREEN TREE PLANTING**  
NO SCALE

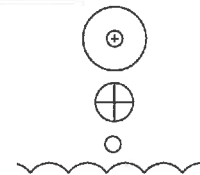


**SHRUB PLANTING**  
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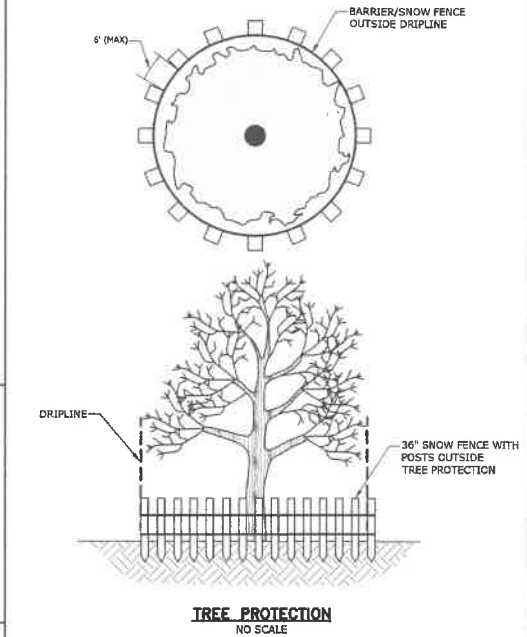
**PLANT SCHEDULE:**

TREES:			
CODE	BOTANICAL NAME	COMMON NAME	SIZE
PC	PYRUS CALLERYANA 'CHANTICLEER'	CHANTICLEER PEAR	3 - 3 1/2" CALIPER
UA	ULMUS AMERICANA 'PRINCETON'	PRINCETON AMERICAN ELM	3 - 3 1/2" CALIPER
AR	ACER RUBRUM	RED MAPLE	3 - 3 1/2" CALIPER
PA	PICEA ABIES	NORWAY SPRUCE	8 - 10' HT.
AC	ABIES CONCOLOR	WHITE FIR	8 - 10' HT.
JC	JUNIPERUS CHINENSIS 'MOUNTBATTEN'	MOUNTBATTEN JUNIPER	7 - 8' HT.
SHRUBS:			
CODE	BOTANICAL NAME	COMMON NAME	SIZE
SV	SYRINGA VULGARIS	COMMON PURPLE LILAC	5 - 6' HT.
VL	VIBURNUM LENTAGO	NANNYBERRY VIBURNAM	5 - 6' HT.
VD	VIBURNUM DENTATUM 'BLUE MUFFIN'	BLUE MUFFIN VIBURNAM	3 - 4' HT.
FN	FORSYTHIA 'NORTHERN GOLD'	NORTHERN GOLD FORSYTHIA	5 GALLON
CS	CORNUS SERICEA 'ALLEMAN'S COMPACT'	ALLEMAN'S RED STEM DOGWOOD	5 GALLON
ORNAMENTAL GRASSES & PERENNIALS:			
CODE	BOTANICAL NAME	COMMON NAME	SIZE
PV	PANICUM VIRGATUM 'SHENANDOAH'	SHENANDOAH SWITCH GRASS	#3
DL	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	#2
SS	SALVIA SUPERBA 'MAY NIGHT'	MAY NIGHT SAGE	#2

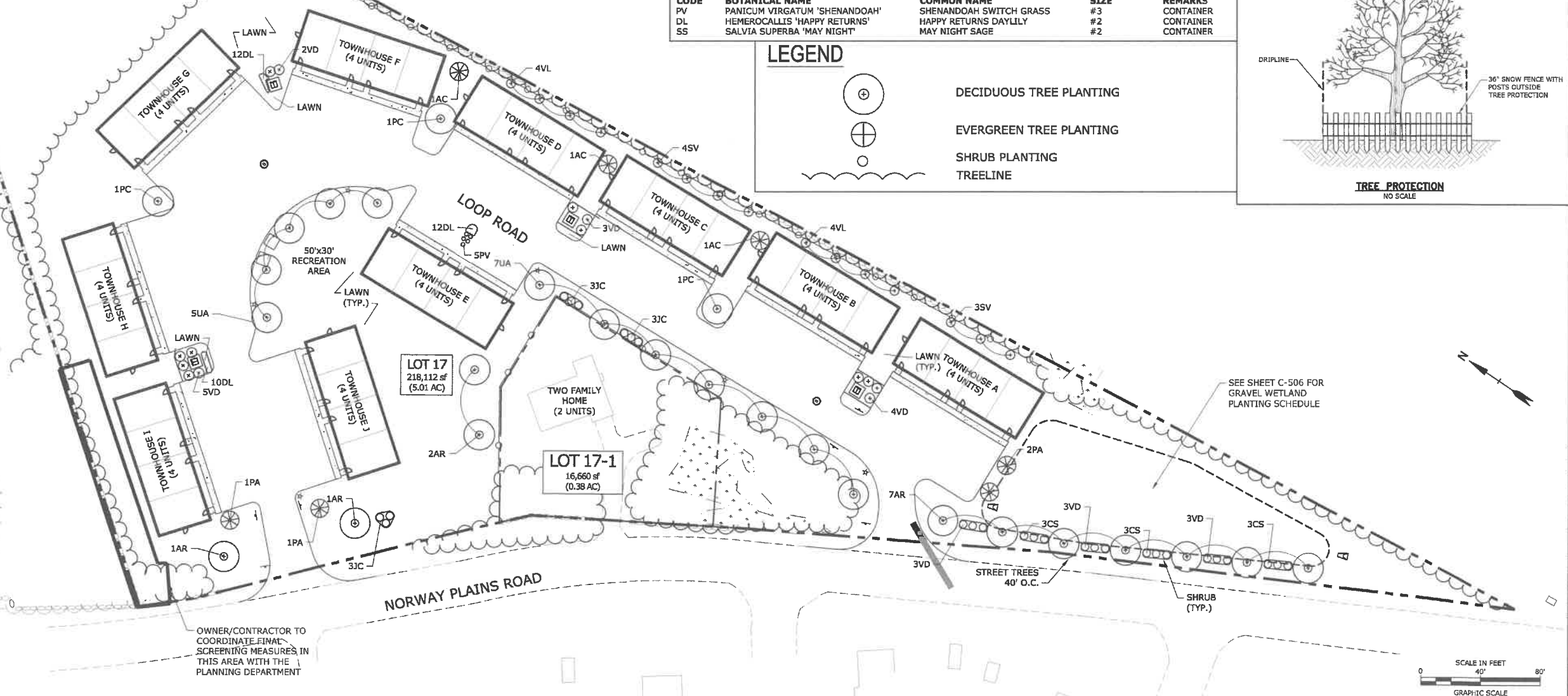
**LEGEND**



DECIDUOUS TREE PLANTING  
EVERGREEN TREE PLANTING  
SHRUB PLANTING  
TREE LINE



**TREE PROTECTION**  
NO SCALE



**Proposed  
Multi-family  
Development**

**Norway Plains Road  
Site Plans**

Tenants In Common:  
Robert Graham  
81 Lakeview Drive  
Nottingham, NH  
03290

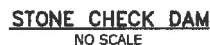
Michael Anderson  
2637 E Atlantic Blvd #172  
Pompano Beach FL 33062-4939

Rochester, New  
Hampshire

MARK	DATE	DESCRIPTION
3.	6/10/2021	MODIFICATION TO APPROVED PROJECT APPLICATION
2.	02/16/18	REV TO COORD WITH UTILITIES
1.	12/16/16	RESPONSE TO CITY COMMENTS
A	10/11/2016	City Review Comments

PROJECT NO:	G-0693
DATE:	09/05/2016
FILE:	G0693-L-101.dwg
DRAWN BY:	ERC/KAM
CHECKED:	KAM
APPROVED:	BLM
<b>LANDSCAPE PLAN</b>	
SCALE:	AS SHOWN
<b>L-101</b>	





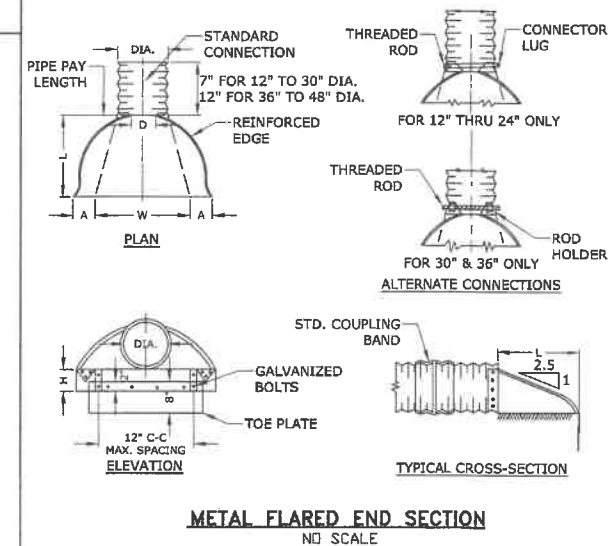
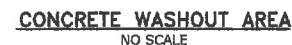
PIPE DIA.	METAL GAGE	DIMENSIONS			
		A (1" TOL.)	B (1" TOL.)	L (1" TOL.)	W (2" TOL.)
12"	16	6"	6"	21"	24"
15"	16	7"	8"	26"	30"
18"	16	8"	13"	31"	36"
24"	16	10"	16"	41"	48"
30"	14	12"	16"	51"	60"
36"	14	14"	19"	60"	72"
42"	12	16"	22"	69"	84"
48"	12	18"	27"	78"	96"

NOTES:

1. END SECTION FOR 12" TO 30" DIA. PIPE IN ONE PIECE, FOR 36" TO 48" DIA. PIPE TO BE MADE FROM TWO SHEETS JOINED BY RIVETING OR BOLTING ON CENTER LINE.
2. CONNECTOR SECTION, CORNER PLATE AND TOE PLATE TO BE SAME THICKNESS AS END SECTION AND EACH TO BE GALVANIZED.



1. CONTAINMENT MUST BE STRUCTURALLY SOUND AND LEAK FREE AND CONTAIN ALL LIQUID WASTES.
2. CONTAINMENT DEVICES MUST BE OF SUFFICIENT QUANTITY OR VOLUME TO COMPLETELY CONTAIN THE LIQUID WASTES GENERATED.
3. WASHOUT MUST BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE ONCE WASHOUT IS 75% FULL.
4. WASHOUT AREA(S) SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS.
5. ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
6. AT LEAST WEEKLY REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY.



- ## NOTES

1. THE FOUNDATION AREA OF THE WATERWAY SHALL BE CLEARED AND GRUBBED OF ALL TREES, BRUSH, STUMPS, AND OTHER OBJECTIONABLE MATERIAL. MATERIALS REMOVED SHALL BE DISPOSED OF SO THEY WILL NOT INTERFERE WITH THE CONSTRUCTION OR PROPER FUNCTIONING OF THE WATERWAY.
2. THE WATERWAY SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE AND CROSS-SECTION AS REQUIRED TO MEET THE DESIGN CRITERIA. THE WATERWAY SHALL BE FREE OF IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
3. EARTH FILLS REQUIRED TO MEET SUBGRADE REQUIREMENTS BECAUSE OF OVER EXCAVATION OR TOPOGRAPHY SHALL BE COMPACTED TO THE SAME DENSITY AS THE SURROUNDING SOIL TO PREVENT UNEQUAL SETTLEMENT THAT COULD CAUSE DAMAGE TO THE COMPLETED WATERWAY. EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE SPREAD OR DISPOSED OF SO IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE WATERWAY.
4. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER AS TO MINIMIZE EROSION AND AIR AND WATER POLLUTION. ALL APPROPRIATE STATE AND LOCAL LAWS AND REGULATIONS SHALL BE COMPLIED WITH FOR INSTALLATION.
5. VEGETATION SHALL BE ESTABLISHED IN THE SWALE PRIOR TO ALLOWING STORMWATER RUNOFF TO FLOW THROUGH THE SWALE.
6. MAINTENANCE OF THE VEGETATION IN THE GRASSSED WATERWAY IS EXTREMELY IMPORTANT IN ORDER TO PREVENT KILLING, EROSION, AND FAILURE OF THE WATERWAY. MOWING SHOULD BE DONE FREQUENTLY ENOUGH TO CONTROL ENCROACHMENT OF WEEDS AND WOODY VEGETATION AND TO KEEP THE GRASSES IN A VIGOROUS CONDITION. THE VEGETATION SHOULD NOT BE MOWED TOO CLOSELY SO AS TO REDUCE THE EROSION RESISTANCE IN THE WATERWAY.
7. THE WATERWAY SHOULD BE INSPECTED PERIODICALLY AND AFTER EVERY MAJOR STORM TO DETERMINE THE CONDITION OF THE WATERWAY. KILLS AND DAMAGED AREAS SHOULD BE PROMPTLY REPAIRED AND REVEGETATED AS NECESSARY TO PREVENT FURTHER DETERIORATION.
8. PERIODIC APPLICATIONS OF LIME AND FERTILIZER MAY BE NEEDED TO MAINTAIN VIGOROUS GROWTH.



NOTES:

1. STONE SIZE AND MAT DIMENSIONS DETAILED ON PLANS.
2. STONE SHALL CONSIST OF SUB-ANGULAR FIELD STONE OR ROUGH UNHEWN QUARRY STONE OF APPROXIMATELY RECTANGULAR SHAPE. FLAT OR ROUND ROCKS ARE NOT ACCEPTABLE. THE STONE SHALL BE HARD AND OF SUCH QUALITY THAT IT WILL NOT DISINTEGRATE ON EXPOSURE TO WATER OR WEATHERING, BE CHEMICALLY STABLE AND IT SHALL BE SUITABLE IN ALL OTHER RESPECTS FOR THE PURPOSE INTENDED. THE BULK SPECIFIC GRAVITY (SATURATED SURFACE-DRY BASIS) OF THE INDIVIDUAL STONES SHALL BE AT LEAST 2.5.
3. THE STONE SHALL BE COMPOSED OF A WELL-GRADED MIXTURE DOWN TO THE ONE-INCH SIZE PARTICLE SUCH THAT 50 PERCENT OF THE MIXTURE BY WEIGHT SHALL BE LARGER THAN THE D50 SIZE SPECIFIED. A WELL-GRADED MIXTURE IS DEFINED AS A MIXTURE COMPOSED PRIMARILY OF THE LARGER STONE SIZE BUT WITH A SUFFICIENT MIXTURE OF OTHER SIZES TO FILL THE PROGRESSIVELY SMALLER VOIDS BETWEEN THE STONES. THE DIAMETER OF THE LARGEST STONE SIZE IN SUCH A MIXTURE SHALL BE 1.5 TIMES THE D50 SIZE.



### Proposed Multi-family Development

## Norway Plains Road Site Plans

**Tenants In Common:**  
Robert Graham  
81 Lakeview Drive  
Nottingham, NH  
03290

Michael Anderson  
2637 E Atlantic Blvd #172  
Pompano Beach FL 33062-4939

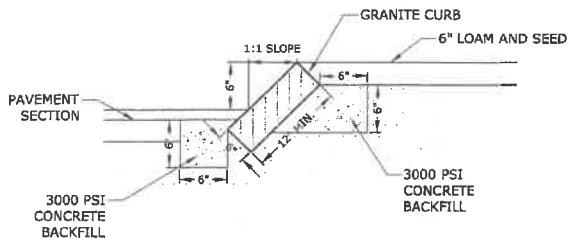
Rochester, New  
Hampshire

1	12/16/16	Revised per City Comment
A	10/11/2016	City Review Comments
MARK	DATE	DESCRIPTION
PROJECT NO:		G-0693
DATE: 09/06/2016		
FILE: G0693-C-01.dwg		
DRAWN BY:		ERC/KAM
CHECKED:		KAM
APPROVED:		BLM

## DETAILS SHEET

SCALE: AS SHOWN

C-501



#### NOTES:

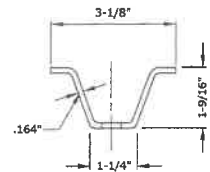
- SEE SITE PLAN FOR LIMITS OF CURBING.
- ADJOINING STONES OF STRAIGHT CURB LAID ON CURVES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH.
- MINIMUM LENGTH OF STRAIGHT CURB STONES = 18 INCHES.
- MAXIMUM LENGTH OF STRAIGHT CURB STONES = 8 FEET.
- MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES - SEE CHART.
- JOINTS BETWEEN STONES SHALL BE MORTARED.

RADIUS	MAXIMUM LENGTH
<2'	USE CURVED CURB
2'-15'	USE RADIAL JOINTS
16'-28'	1'-6"
29'-41'	2'
42'-55'	3'
56'-68'	4'
69'-82'	5'
83'-95'	6'
97'-110'	7'
OVER 110'	8'

**SLOPED GRANITE CURB**  
NO SCALE

SIGN ID NUMBER	SIGN SIZE WIDTH x HEIGHT	SIGN	TEXT DIMENSIONS	NO. OF SIGNS	BACK-GROUND	LEGEND	BORDER	POST SIZE & QUANTITY	UNIT AREA	AREA (SQ. FT.)
R1-1	30" x 30"	STOP	SEE STANDARD HIGHWAY SIGNS 2004 EDITION(W/2012 SUPPLEMENT) PUBLISHED BY USDOT - FHWA	2	RED	WHITE	WHITE	U-CHANNEL	6.25	12.5
D3	36" x 9"	LOOP ROAD		2	GREEN	WHITE	WHITE	U-CHANNEL	2.25	4.50
D3A	30" x 9"	PRIVATE ROAD		2	WHITE	BLACK	WHITE	U-CHANNEL	1.75	3.50
R7-1	12" x 18"	NO PARKING FIRE LANE		4	WHITE	RED	WHITE	U-CHANNEL	1.50	6.00

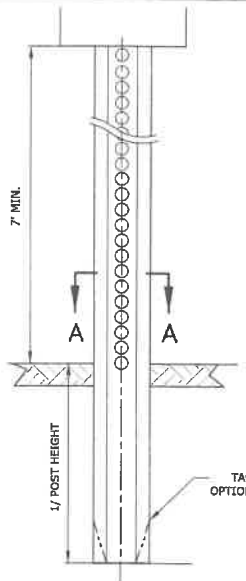
**SIGN LEGEND**  
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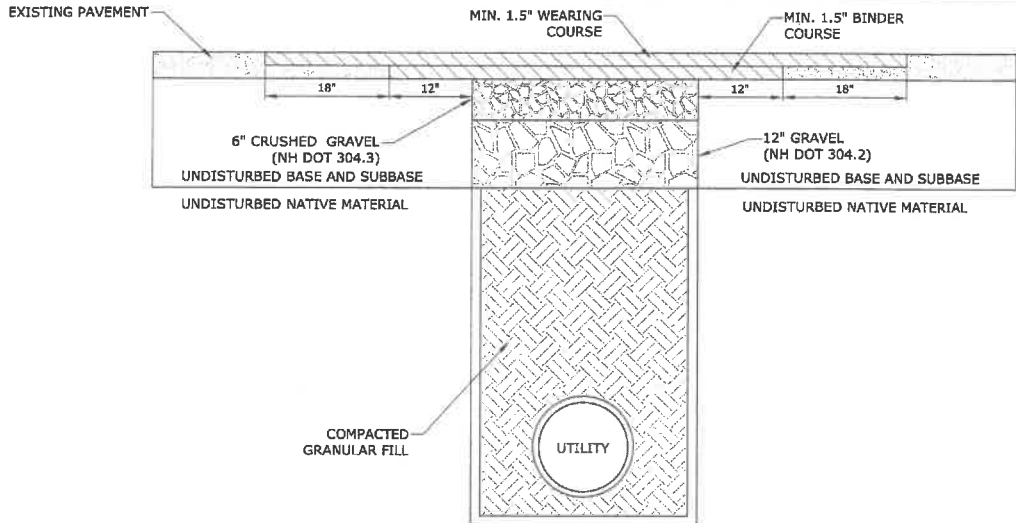
**SECTION A-A**

\* IN LEDGE DRILL & GROUT TO A MIN OF 2'

**TYPICAL METAL SIGN POST**  
NO SCALE



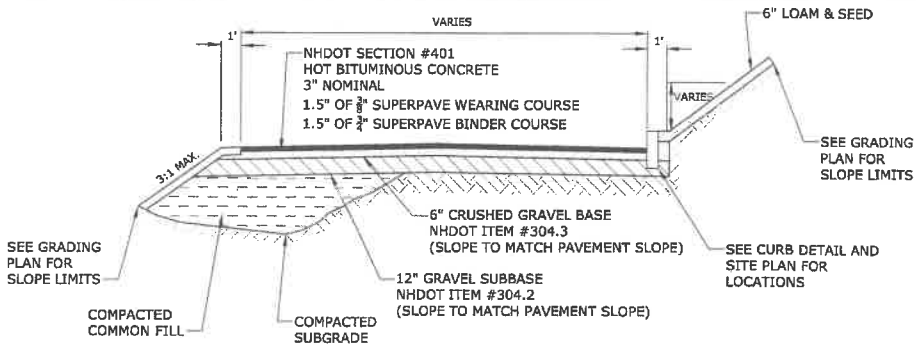
**Tighe&Bond**  
www.tighebond.com



#### NOTES:

- PAVEMENT EDGES SHALL BE DEFINED BY A STRAIGHT EDGE FORMED BY A MACHINED SAW CUT.
- TRENCH SUBGRADE MATERIAL SHALL BE BACKFILLED WITH GRANULAR FILL AND COMPACTED TO 95% OF ITS MAXIMUM DRY DENSITY.
- TOP 18" OF BACKFILL SHALL BE 6" IF COMPACTED 3/4" CRUSHED GRAVEL (NHDOT 304.3) SUPPORTED BY 12" OF COMPACTED GRAVEL (NHDOT 304.2).
- ALL VERTICAL AND HORIZONTAL JOINTS BETWEEN PAVEMENTS SHALL BE TACK COATED.
- PAVEMENT THICKNESS SHALL MATCH EXISTING BUT IN NO CASE SHALL BE LESS THAN 3" THICK TOTAL.
- PAVEMENT SHALL BE PLACED IN TWO PHASES:
  - THE FIRST PHASE SHALL CONSIST OF CUTTING BACK THE FULL DEPTH OF PAVEMENT 12" BEYOND THE EDGES OF THE DISTURBED TRENCH AND PAVING A BINDER COURSE THE FULL DEPTH OF THE PAVEMENT AS TO BRING THE PATCH FLUSH WITH THE EXISTING ROAD SURFACE.
  - THE SECOND PHASE SHALL BE CONDUCTED THE FOLLOWING YEAR AND SHALL CONSIST OF MILLING OVER THE EDGES OF THE PREVIOUS PATCH BY A MINIMUM OF 18" IN ALL DIRECTIONS TO A DEPTH OF 1.5". WEARING COURSE PAVEMENT SHALL BE USED TO CREATE A SMOOTH SURFACE WITH THE ROADWAY OVER THE EXTENTS OF THE MILLED AREA.
- ANY TRENCH PATCH REQUIRES PRE-APPROVAL BY DPW AND IS SUBJECT TO INSPECTION TO ENSURE COMPLIANCE WITH CITY STANDARDS.

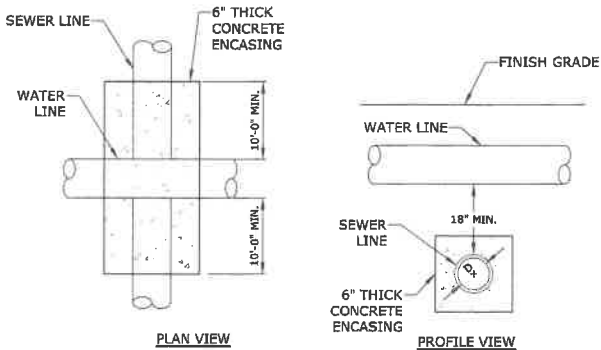
**ROCHESTER, NH UTILITY TRENCH PATCH**  
NO SCALE



#### NOTE:

- SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
- SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
- A TACK COAT SHALL BE PLACED ON TOP OF BINDER COURSE PAVEMENT PRIOR TO PLACING WEARING COURSE.
- CONTRACTOR SHALL HAVE THE OPTION OF RECLAIMING THE EXISTING PAVEMENT AND REMOVING THE MATERIAL, THEN REUSING THE RECLAIMED MATERIAL AS A PAVEMENT SUBBASE.

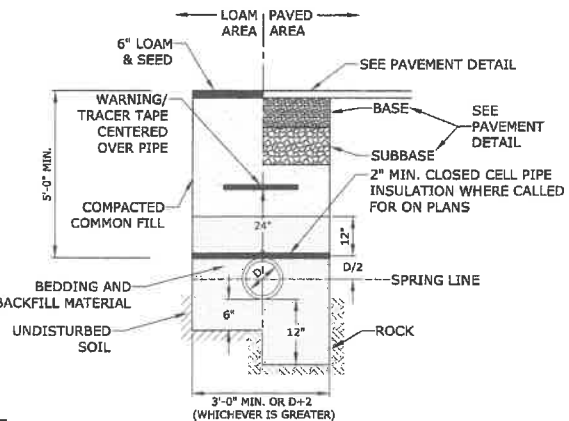
**STANDARD DUTY PAVEMENT SECTION**  
NO SCALE



#### NOTE:

A 10 FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN ALL WATER AND SANITARY SEWER LINES. AN 18" MINIMUM OUTSIDE TO OUTSIDE VERTICAL SEPARATION SHALL BE PROVIDED AT ALL WATER AND SANITARY SEWER CROSSINGS. WHERE SEWER AND WATER CROSS, ENCASE SEWER IN CONCRETE 6" THICK OR SUBSTITUTE RUBBER GASKETED PRESSURE PIPE WITH JOINTS FOR A MINIMUM DISTANCE OF 10 FEET EACH SIDE OF THE CROSSING. CROSSING SHALL CONFORM TO CITY OF ROCHESTER WATER DEPARTMENT STANDARDS AND SPECIFICATIONS.

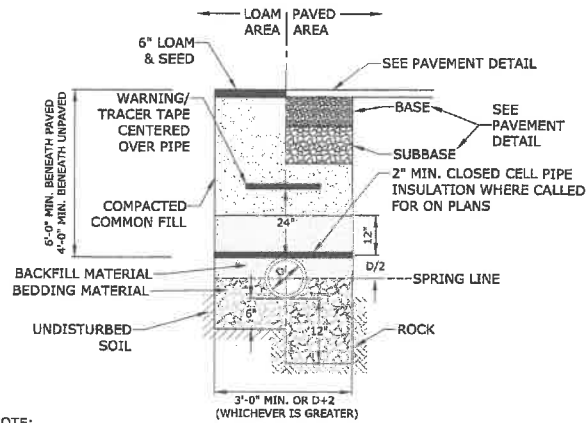
**WATER & SEWER CROSSING**  
NO SCALE



#### NOTE:

- SAND BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO 12" ABOVE TOP OF PIPE.
- ALL UTILITIES SHALL BE INSTALLED PER THE INDIVIDUAL UTILITY COMPANY STANDARDS. COORDINATE ALL INSTALLATIONS WITH INDIVIDUAL UTILITY COMPANIES AND THE CITY OF ROCHESTER.

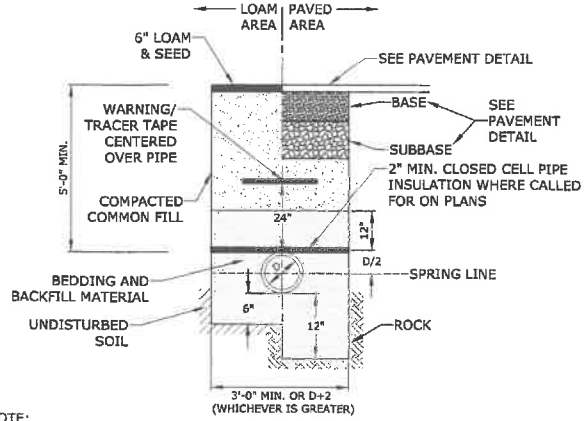
**WATER TRENCH**  
NO SCALE



#### NOTE:

- CRUSHED STONE BEDDING FOR FULL WIDTH OF THE TRENCH FROM 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO SPRING LINE.
- SAND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM SPRING LINE UP TO 12" ABOVE TOP OF PIPE.
- ALL UTILITIES SHALL BE INSTALLED PER THE INDIVIDUAL UTILITY COMPANY STANDARDS. COORDINATE ALL INSTALLATIONS WITH INDIVIDUAL UTILITY COMPANIES AND THE CITY OF ROCHESTER.

**SEWER TRENCH**  
NO SCALE



#### NOTE:

- SAND BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO 12" ABOVE TOP OF PIPE.
- ALL UTILITIES SHALL BE INSTALLED PER THE INDIVIDUAL UTILITY COMPANY STANDARDS. COORDINATE ALL INSTALLATIONS WITH INDIVIDUAL UTILITY COMPANIES AND THE CITY OF ROCHESTER.

**GAS TRENCH**  
NO SCALE

## Proposed Multi-family Development

### Norway Plains Road Site Plans

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Nottingham, NH  
03290

Michael Anderson  
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Rochester, New Hampshire

MARK	DATE	DESCRIPTION
1	12/16/16	Revised per City Comment
A	10/11/2016	City Review Comments
PROJECT NO:	G-0693	
DATE:	09/06/2015	
FILE:	G0693-C-502.dwg	
DRAWN BY:	ERC/KAM	
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APPROVED:	BLM	

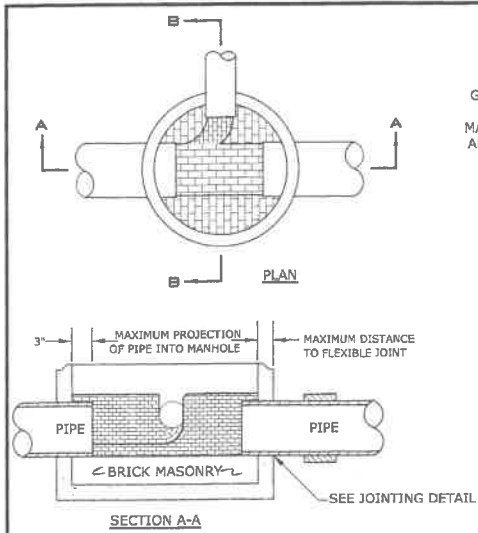
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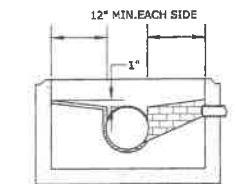
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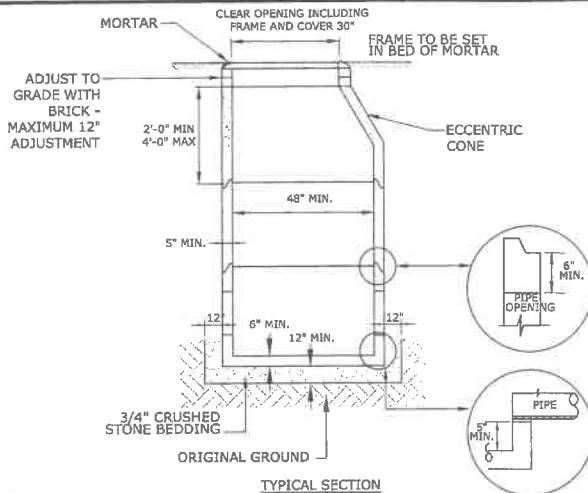


SECTION A-A



SECTION B-B

SEWER MANHOLE  
NO SCALE



TYPICAL SECTION

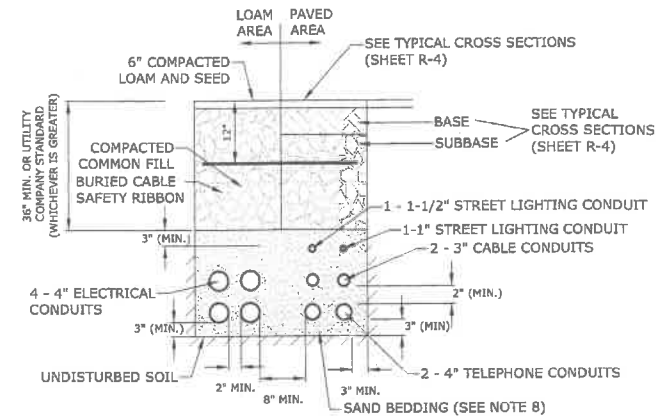
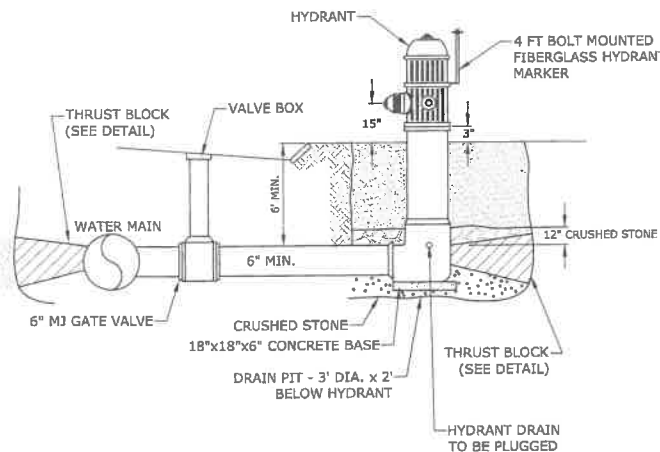
NOTES:

1. INVERT AND SHELVE TO BE PLACED AFTER EACH LEAKAGE TEST.
2. CARE SHALL BE TAKEN TO INSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE SEWER INVERT.
3. INVERT BRICKS SHALL BE LAID ON EDGE.
4. BITUMINOUS WATERPROOF COATING TO BE APPLIED TO ENTIRE EXTERIOR OF MANHOLE.
5. 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) WORD "SEWER" SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER.
6. HORIZONTAL JOINTS SHALL BE SEALED FOR WATER TIGHTNESS USING A DOUBLE ROW OF ELASTOMERIC OR MASTIC-LIKE SEALANT. BARREL AND CONE SECTIONS SHALL BE PRECAST REINFORCED CONCRETE DESIGNED FOR H2O LOADING, AND CONFORMING TO ASTM C478-06.
7. BASE SECTION OF MANHOLE SHALL BE OF MONOLITHIC CONSTRUCTION TO A POINT AT LEAST 6" ABOVE THE CROWN OF THE HIGHEST INCOMING PIPE. THIS REQUIREMENT SHOULD BE STATED IN THE SPECS AND/OR PLANS.
- 8.

NOTES:

1. HYDRANT INSTALLATION AND OPERATION, MANUFACTURE AND MODEL, AND STANDARD DIMENSIONAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE CITY OF ROCHESTER WATER DEPARTMENT AND THE CITY OF ROCHESTER FIRE DEPARTMENT.
2. HYDRANT MARKER TO BE 3/8" FIBERGLASS RODS BY E-ZGUIDE PRODUCTS OR APPROVED EQUAL.
3. COLOR CODED COLLARS ARE REQUIRED ON ALL PROPOSED HYDRANTS.
4. COLOR CODED COLLARS SHALL BE 4.5" NST REFLECTIVE 11" OD X 5-3/4" ID.
5. TESTING OF ALL HYDRANTS SHALL BE COORDINATED WITH THE CITY OF ROCHESTER FIRE DEPARTMENT AND DPW, AND BE PERFORMED PRIOR TO INSTALLING COLOR CODED COLLARS.

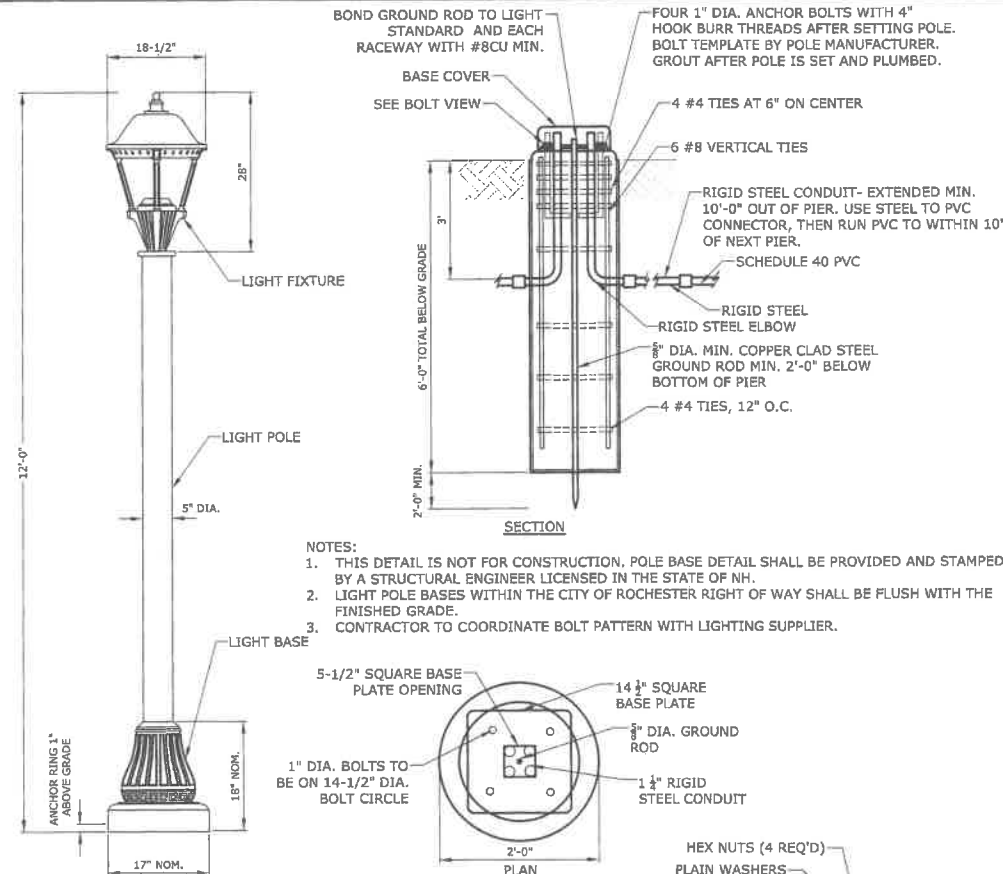
FIRE HYDRANT  
NO SCALE



NOTE:

1. NUMBER, MATERIAL, AND SIZE OF UTILITY CONDUITS TO BE DETERMINED BY LOCAL UTILITY OR AS SHOWN ON ELECTRICAL DRAWINGS. CONTRACTOR TO PROVIDE ONE SPARE CONDUIT FOR EACH UTILITY TO BUILDING.
2. DIMENSIONS SHOWN REPRESENT OWNERS MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS MAY BE GREATER BASED ON UTILITY COMPANY STANDARDS, BUT SHALL NOT BE LESS THAN THOSE SHOWN.
3. NO CONDUIT RUN SHALL EXCEED 360 DEGREES IN TOTAL BENDS.
4. A SUITABLE PULLING STRING, CAPABLE OF 200 POUNDS OF PULL, MUST BE INSTALLED IN THE CONDUIT BEFORE UTILITY COMPANY IS NOTIFIED TO INSTALL CABLE. THE STRING SHOULD BE BLOWN INTO THE CONDUIT AFTER THE RUN IS ASSEMBLED TO AVOID BONDING THE STRING TO THE CONDUIT.
5. UTILITY COMPANY MUST BE GIVEN THE OPPORTUNITY TO INSPECT THE CONDUIT PRIOR TO BACKFILL. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS SHOULD THE UTILITY COMPANY BE UNABLE TO INSTALL ITS CABLE IN A SUITABLE MANNER.
6. ALL CONDUIT INSTALLATIONS MUST CONFORM TO THE CURRENT EDITION OF THE NATIONAL ELECTRIC SAFETY CODE, STATE AND LOCAL CODES AND ORDINANCES, AND, WHERE APPLICABLE, THE NATIONAL ELECTRIC CODE.
7. ALL 90° SWEEPS WILL BE MADE USING RIGID GALVANIZED STEEL. SWEEPS WITH A 36 TO 48 INCH RADIUS.
8. SAND BEDDING TO BE REPLACED WITH CONCRETE ENCASEMENT WHERE COVER IS LESS THAN 3 FEET, WHEN LOCATED BELOW PAVEMENT, OR WHERE SHOWN ON THE UTILITIES PLAN.

UNDERGROUND ELECTRICAL AND  
COMMUNICATION UTILITY TRENCH  
NO SCALE



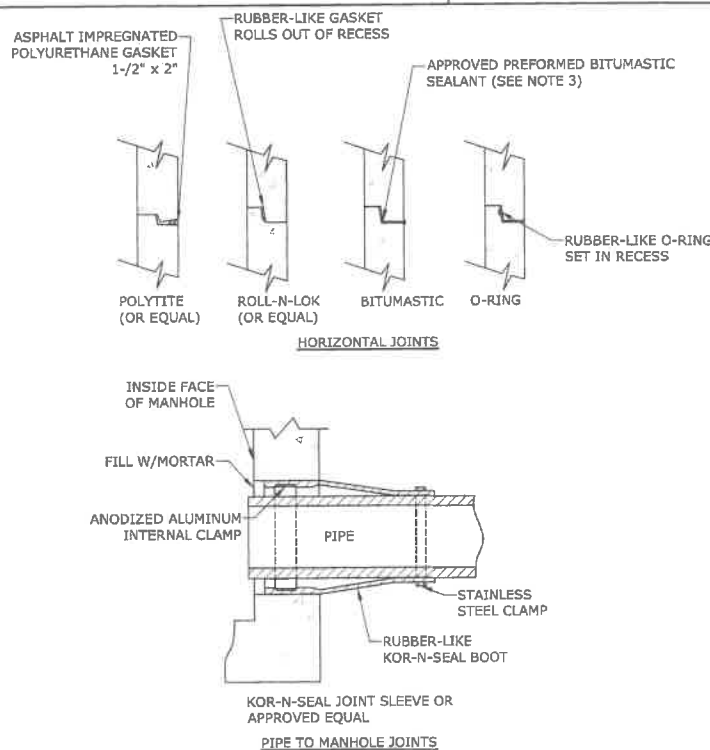
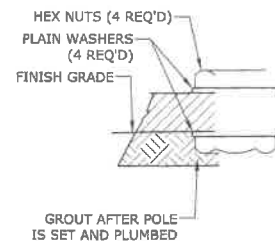
NOTES:

1. THIS DETAIL IS NOT FOR CONSTRUCTION. POLE BASE DETAIL SHALL BE PROVIDED AND STAMPED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF NH.
2. LIGHT POLE BASES WITHIN THE CITY OF ROCHESTER RIGHT OF WAY SHALL BE FLUSH WITH THE FINISHED GRADE.
3. CONTRACTOR TO COORDINATE BOLT PATTERN WITH LIGHTING SUPPLIER.

LIGHT POLE BASE

1. LIGHT POLE BASE SHALL BE SUN VALLEY 1700 BASE OR APPROVED EQUAL.
2. LIGHT POLE BASE SHALL BE CAST ALUMINUM.
3. LIGHT POLE SHALL BE 5" DIA. STRAIGHT ALUMINUM SHAFT (SUN VALLEY 1050 OR APPROVED EQUAL).
4. LIGHT FIXTURE SHALL BE SUN VALLEY SIGMA SERIES SIG2 OR APPROVED EQUAL.
5. LIGHT POLES WITHIN THE CITY OF ROCHESTER RIGHT-OF-WAY SHALL BE A MAXIMUM OF 12 FEET ABOVE FINISHED GRADE.
6. DUAL LIGHT FIXTURE MOUNT SHALL BE XAX-2-180 OR APPROVED EQUAL.

LIGHT POLE BASE  
NO SCALE

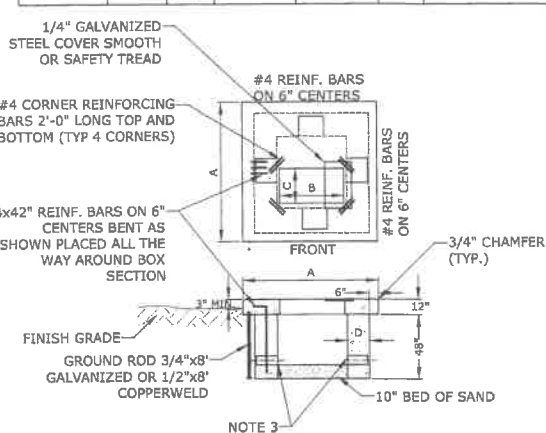


NOTES:

1. HORIZONTAL JOINTS BETWEEN THE SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE PER CITY OF ROCHESTER DPW STANDARD AND SHALL BE SEALED FOR WATERTIGHTNESS USING A DOUBLE ROW ELASTOMERIC OR MASTIC-LIKE GASKET.
2. PIPE TO MANHOLE JOINTS SHALL BE PER CITY OF ROCHESTER STANDARD.
3. FOR BITUMASTIC TYPE JOINTS THE AMOUNT OF SEALANT SHALL BE SUFFICIENT TO FILL AT LEAST 75% OF THE JOINT CAVITY.
4. ALL GASKETS, SEALANTS, MORTAR, ETC. SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS.

SEWER MANHOLE JOINTS  
NO SCALE

KVA	KV	A	B	C	D	STEEL COVER
750 - 2500	15	9'-0"	5'-8"	1'-6"	12"	24"x24"x1/4"
150 - 2500	35	9'-0"	5'-8"	1'-6"	12"	24"x24"x1/4"
75 - 500	15	7'-0"	4'-0"	1'-6"	8"	16"x24"x1/4"
75 - 150	35	7'-0"	4'-0"	1'-6"	8"	16"x24"x1/4"



NOTE:

1. SET CONCRETE BOX PAD ON SUITABLE GRAVEL BASE AND PROVIDE ADEQUATE DRAINAGE AWAY FROM PAD. REINFORCE ASS SHOWN. LOCATION TO BE ACCESSIBLE BY TRUCK AND SUITABLY PROTECTED FROM FLOW AND TRAFFIC DAMAGE.
2. "FRONT" DENOTES THE SIDE ON WHICH THE ACCESS DOORS ARE LOCATED. THE PAD MUST BE INSTALLED SO THAT THE FRONT IS READILY ACCESSIBLE.
3. PROVIDE 8" x 12" CABLE HOLES- ONE PER WALL OR MORE IF NEEDED. LINE UP WITH TRENCHES. HOLES MAY EXTEND TO BOTTOM OF WALLS. PROVIDE REMOVABLE STEEL COVER, SET FLUSH WITH TOP OF CONCRETE- WITH MINIMUM OF 2" BEARING ON READ EDGE AND ENDS.
4. INSTALL GROUND ROD 6" IN FRONT OR LEFT FRONT CORNER OF PAD. TOP OF GROUND ROD TO BE 6" BELOW FINAL GRADE.
6. COORDINATE AND VERIFY ALL INFORMATION WITH THE LOCAL ELECTRICAL POWER UTILITY COMPANY.

PRECAST CONCRETE TRANSFORMER PAD  
NO SCALE



## Proposed Multi-family Development

### Norway Plains Road Site Plans

Tenants In Common:  
Robert Graham  
81 Lakeview Drive  
Nottingham, NH  
03290

Michael Anderson  
2637 E Atlantic Blvd #172  
Pompano Beach FL 33062-4939

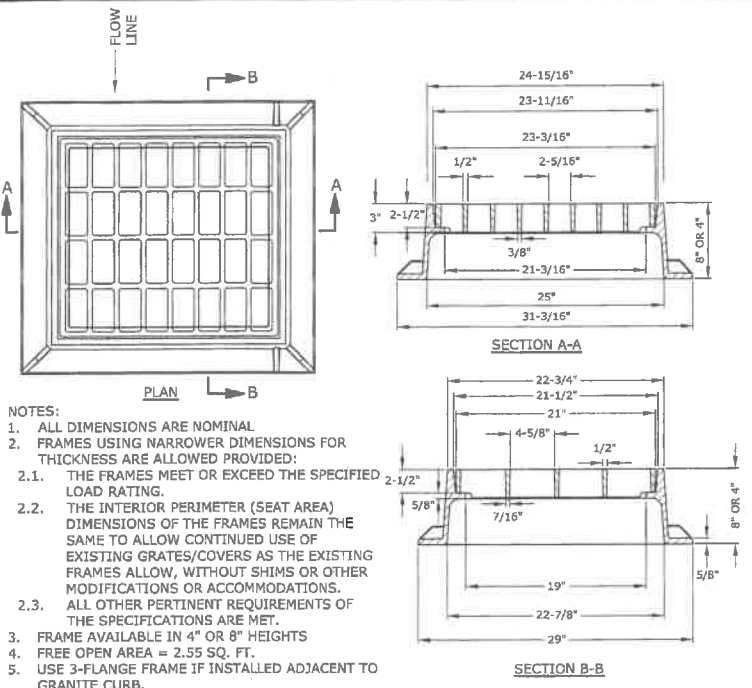
### Rochester, New Hampshire

MARK	DATE	DESCRIPTION
2.	12/16/16	Revised per City Comment
1.	11/21/16	Revised per NHDES Comment
A	10/11/2016	City Review Comments
PROJECT NO: G-0693		
DATE: 09/06/2016		
FILE: G0693-C-503.dwg		
DRAWN BY: ERC/KAM		
CHECKED: KAM		
APPROVED: BLM		

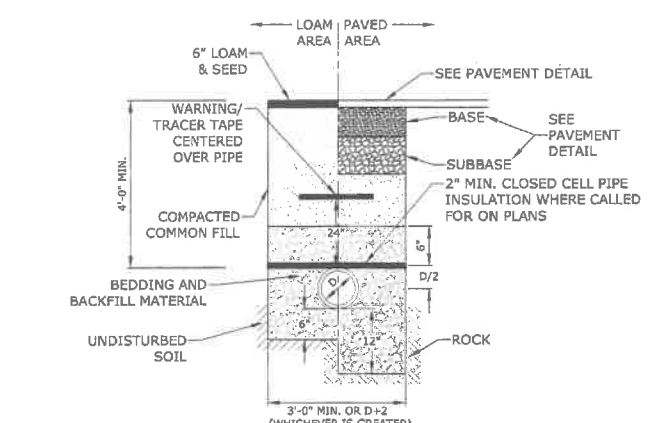
### DETAILS SHEET

SCALE: AS SHOWN

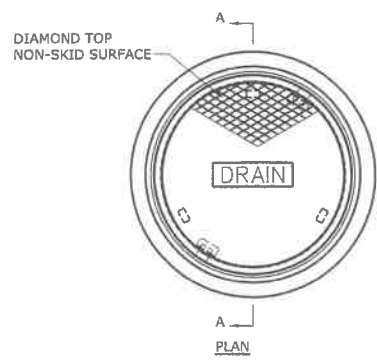
C-503



**TYPE "B" GRATE AND FRAME**  
NO SCALE

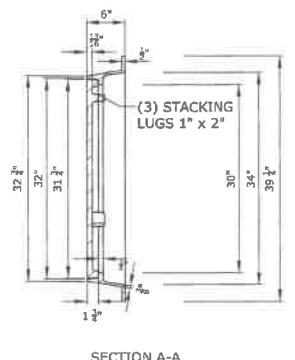


**STORM DRAIN TRENCH**  
NO SCALE



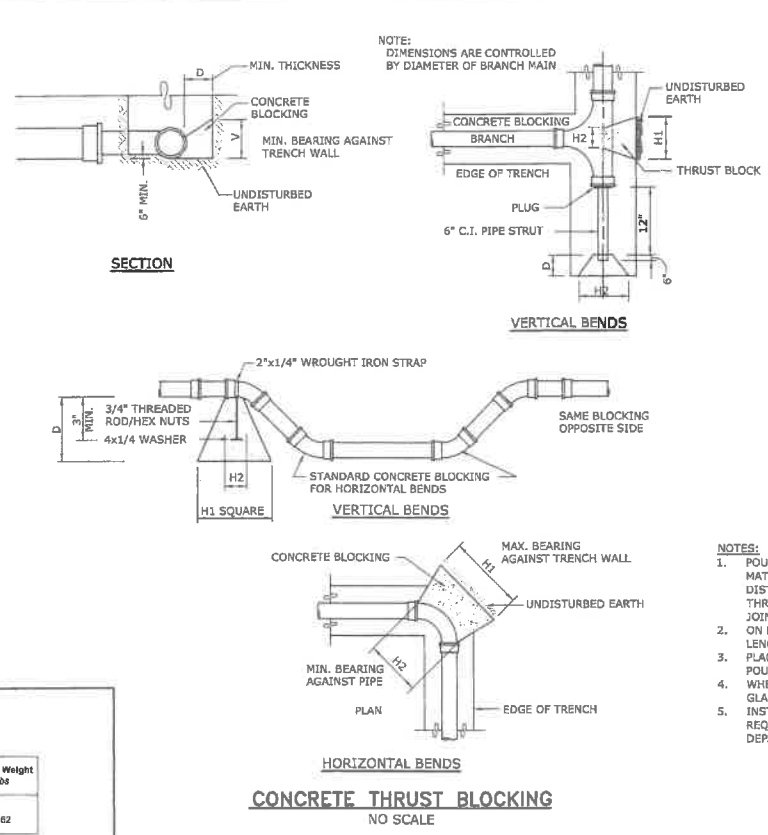
- NOTES:
- ALL DIMENSIONS ARE NOMINAL.
  - FRAMES USING NARROWER DIMENSIONS FOR THICKNESS ARE ALLOWED PROVIDED:
  - 2.A. THE FRAMES MEET OR EXCEED THE SPECIFIED LOAD RATING.
  - 2.B. THE INTERIOR PERIMETER (SEAT AREA) DIMENSIONS OF THE FRAMES REMAIN THE SAME TO ALLOW CONTINUED USE OF EXISTING GRATES/COVERS AS THE EXISTING FRAMES ALLOW, WITHOUT SHIMS OR OTHER MODIFICATIONS OR ACCOMMODATIONS.
  - 2.C. ALL OTHER PERTINENT REQUIREMENTS OF THE SPECIFICATIONS ARE MET.
  3. LABEL TYPE OF MANHOLE WITH 3" HIGH LETTERS IN THE CENTER OF THE COVER.
  4. SEE NHDOT DETAIL DR-2 "Grate and Frame, M.H. Cover and Pavement Depression Details" FOR MORE DETAILS

**DRAIN MANHOLE COVER AND FRAME**  
NO SCALE



CORE HOLE SIZE				
PIPE SIZE	RCP CORE HOLE DIA.		PLASTIC CORE HOLE DIA.	
INCHES	INCHES	FEET	INCHES	FEET
6			7	0.6
12	18	1.5	18	1.5
15	22	1.8	20	1.7
18	26	2.2	24	2.0
24	34	2.8	32	2.7
30	42	3.5	42	3.5
36	48	4.0	48	4.0
42	54	4.5	54	4.5
48	64	5.3	64	5.3
54	72	6.0		
60	78	6.5		

- NOTES:
- ALL SECTIONS SHALL BE 4,000 PSI CONCRETE.
  - CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQUARE INCHES PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
  - THE TONGUE AND THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQUARE INCHES PER LINEAR FOOT.
  - THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
  - CONSTRUCT CRUSHED STONE BEDDING AND BACKFILL UNDER (6" MINIMUM THICKNESS)
  - THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.
  - PIPE ELEVATIONS SHOWN ON PLANS SHALL BE FIELD VERIFIED PRIOR TO PRECASTING.
  - OUTSIDE EDGES OF PIPES SHALL PROJECT NO MORE THAN 3" BEYOND INSIDE WALL OF STRUCTURE.
  - PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT 4" HIGH AT AN 11° ANGLE CENTERED IN THE WIDTH OF THE WALL AND SHALL BE ASSEMBLED USING AN APPROVED FLEXIBLE SEALANT IN JOINTS.
  - ALL STRUCTURES WITH MULTIPLE PIPES SHALL HAVE A MINIMUM OF 12" OF INSIDE SURFACE BETWEEN HOLES, NO MORE THAN 75% OF A HORIZONTAL CROSS SECTION SHALL BE HOLES, AND THERE SHALL BE NO HOLES CLOSER THAN 3" TO JOINTS.



NOTE: ALL WATER SERVICE CONNECTIONS SHALL CONFORM TO CITY OF ROCHESTER STANDARDS.

**WATER SERVICE CONNECTION**  
NO SCALE

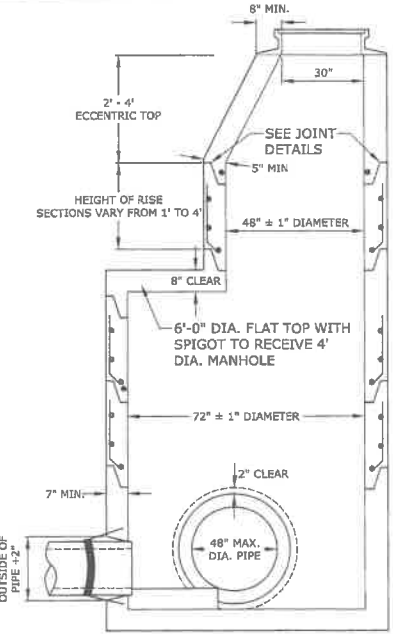
Model	A inches	E inches	H inches	O inches	Reference	Total Weight lbs	Cover Weight lbs
Non-ventilated	40	4 1/4	5	32	CDPA80EH	269	162

**PAMREX 32-INCH MANHOLE FRAME & COVER**  
NO SCALE

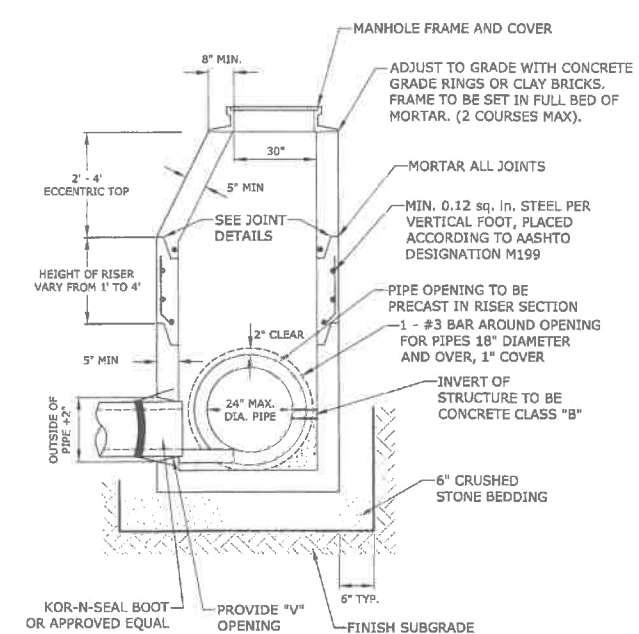
TABLE OF DIMENSIONS FOR CONCRETE BLOCKING																				
PIPE SIZE (H)	TEES, CROSSES & PLUGS				90° BENDS				45° BENDS				22 1/2° BENDS				11 1/4° BENDS			
	H1	H2	V	D	CJ. FT.	H1	H2	V	D	CJ. FT.	H1	H2	V	D	CJ. FT.	H1	H2	V	D	CJ. FT.
6"	24"	16"	18"	18"	3.50	30"	16"	18"	18"	4.05	24"	10"	16"	18"	3.20	24"	10"	16"	18"	3.20
8"	36"	18"	18"	18"	5.05	39"	18"	24"	18"	7.30	30"	11"	18"	18"	3.95	24"	11"	18"	18"	3.45
12"	54"	30"	24"	24"	13.4	54"	32"	36"	24"	18.15	42"	18"	24"	24"	9.60	24"	18"	24"	24"	6.60

- NOTES:
- POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL, WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. NO JOINTS SHALL BE COVERED WITH CONCRETE. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTINGS.
  - PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCKS.
  - WHERE M.J. PIPE IS USED, M.J. PLUG WITH RETAINER GLAND MAY BE SUBSTITUTED FOR END BLOCKINGS.
  - INSTALLATION AND STANDARD DIMENSIONAL REQUIREMENTS SHALL BE PER CITY WATER DEPARTMENT STANDARDS.

DIAMETER	WALL THICKNESS (MIN.)	FLOOR THICKNESS (MIN.)
4'	5"	6"
5'	6"	8"
6'	7"	8"
8'	9"	10"



**6' DIAMETER DRAIN MANHOLE**  
NO SCALE



**4' DIAMETER DRAIN MANHOLE**  
NO SCALE



**Proposed Multi-family Development**

**Norway Plains Road Site Plans**

Tenants In Common:  
Robert Graham  
81 Lakeview Drive  
Nottingham, NH  
03290

Michael Anderson  
2637 E Atlantic Blvd #172  
Pompano Beach FL 33062-4939

Rochester, New Hampshire

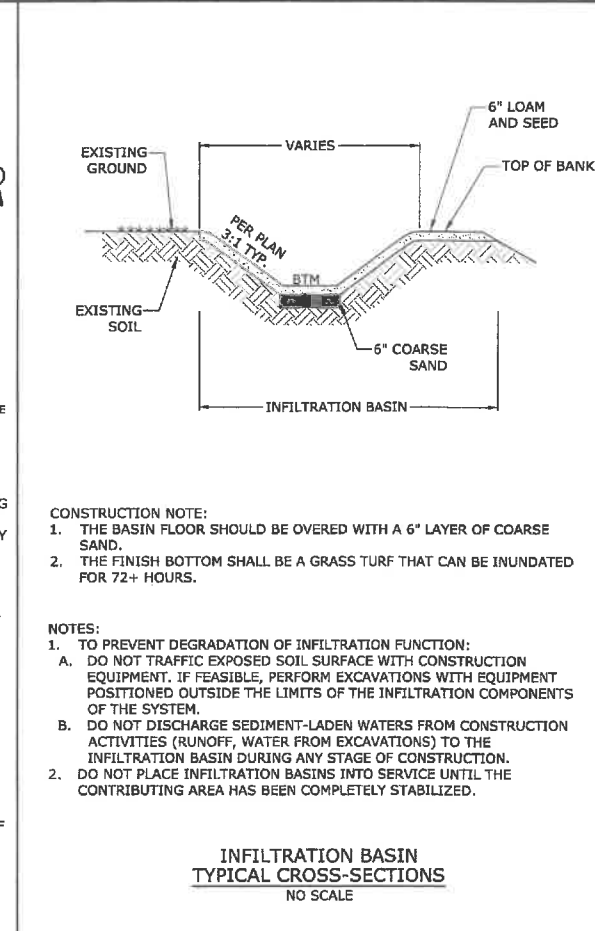
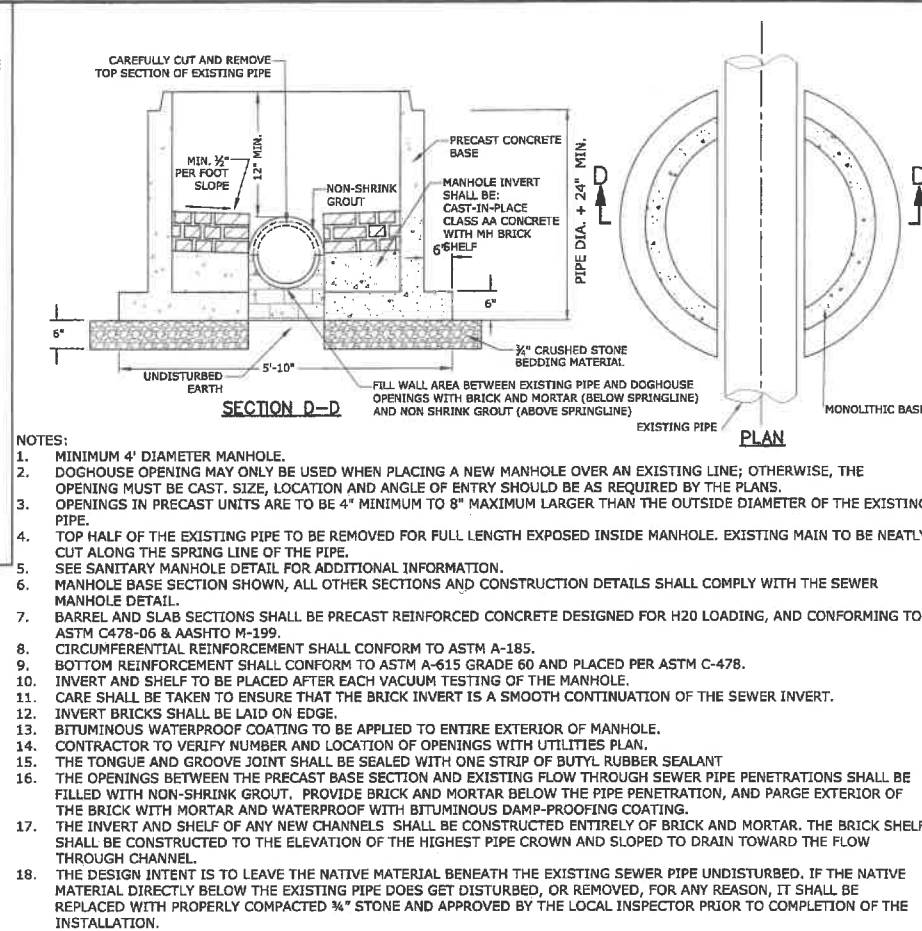
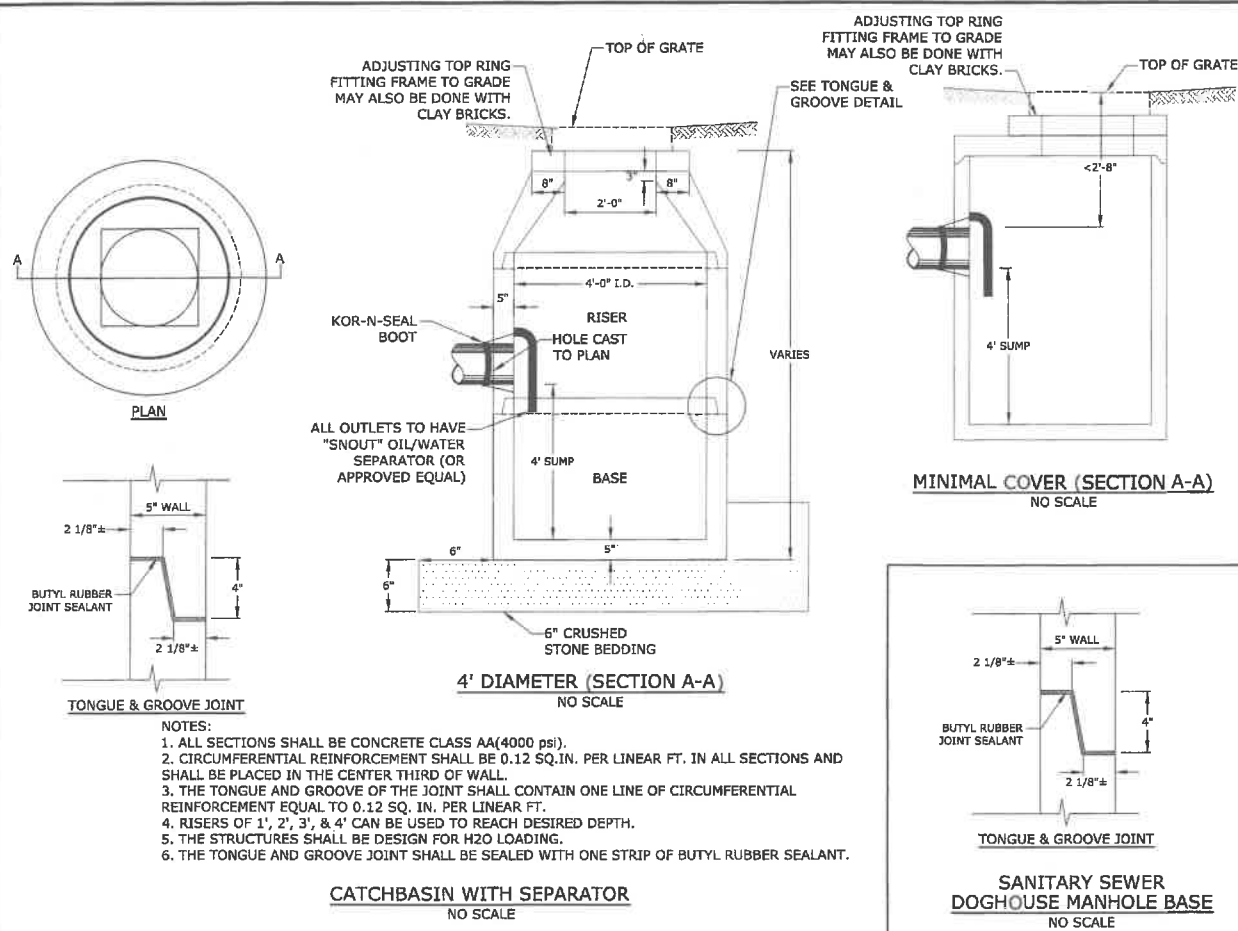
1	12/16/16	Revised per City Comment
A	10/11/2016	City Review Comments
MARK	DATE	DESCRIPTION
PROJECT NO: G-0593		
DATE: 09/06/2016		
FILE: G0593-C-504.dwg		
DRAWN BY: ERC/KAM		CHECKED: KAM
APPROVED: BLM		

DETAILS SHEET

SCALE: AS SHOWN

C-504





## Proposed Multi-family Development

### Norway Plains Road Site Plans

Tenants In Common:  
Robert Graham  
81 Lakeview Drive  
Nottingham, NH  
03290

Michael Anderson  
2637 E Atlantic Blvd #172  
Pompano Beach FL 33062-4939

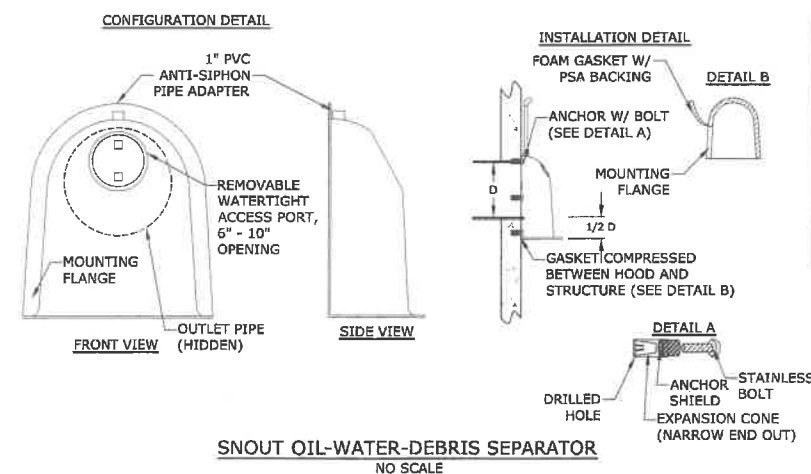
Rochester, New Hampshire

MARK	DATE	DESCRIPTION
2.	1/9/17	RESPONSE TO N-HDES COMMENTS
1.	12/16/16	RESPONSE TO CITY COMMENTS
A	10/11/2016	City Review Comments
PROJECT NO: G-0693		
DATE: 09/06/2016		
FILE: G0693-C-505.dwg		
DRAWN BY: ERC/KAM		
CHECKED: KAM		
APPROVED: BLM		

DETAILS SHEET

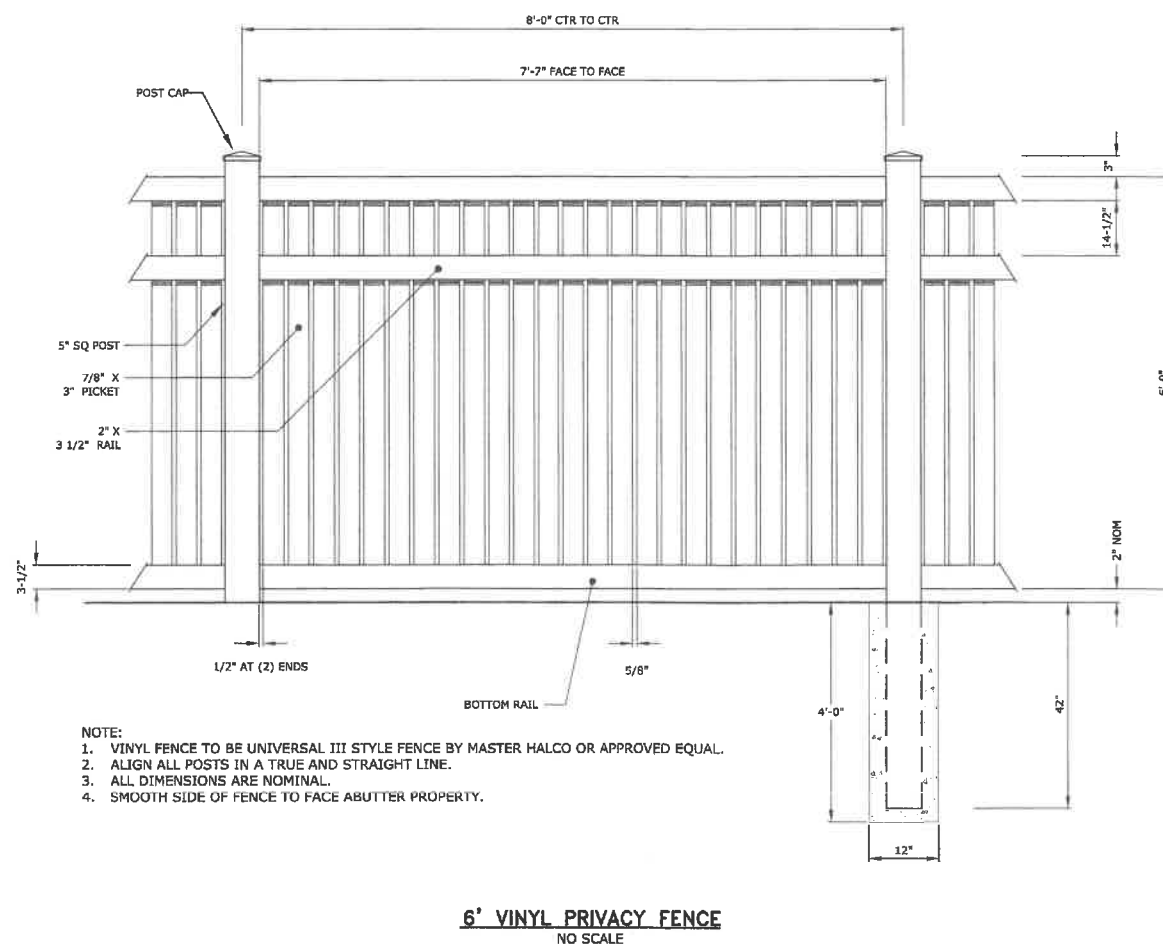
SCALE: AS SHOWN

C-505

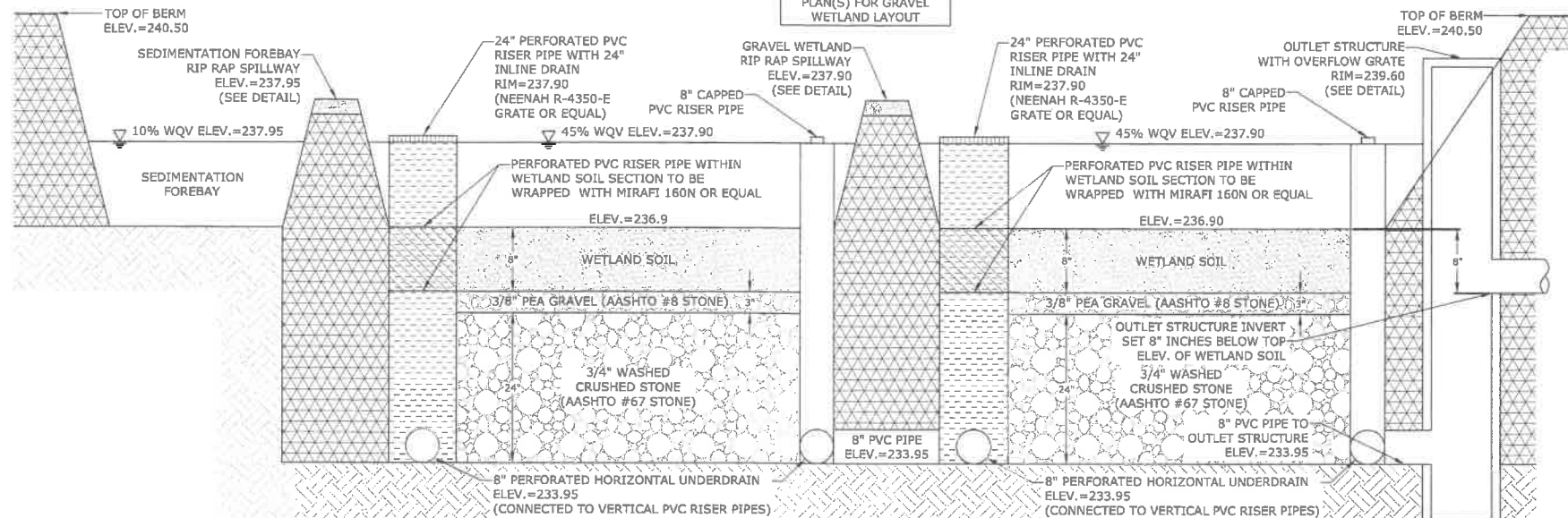


PIPE SIZE (I.D.)	SNOUT MODEL REC'D
12"	18R
15"	18R
18"	24R
24"	30R
30"	54R
36"	54R
42"	72F
48"	72F
54"	96F
60"	96F
66"	96F

F=SQUARE STRUCTURE  
R=CIRCULAR STRUCTURE



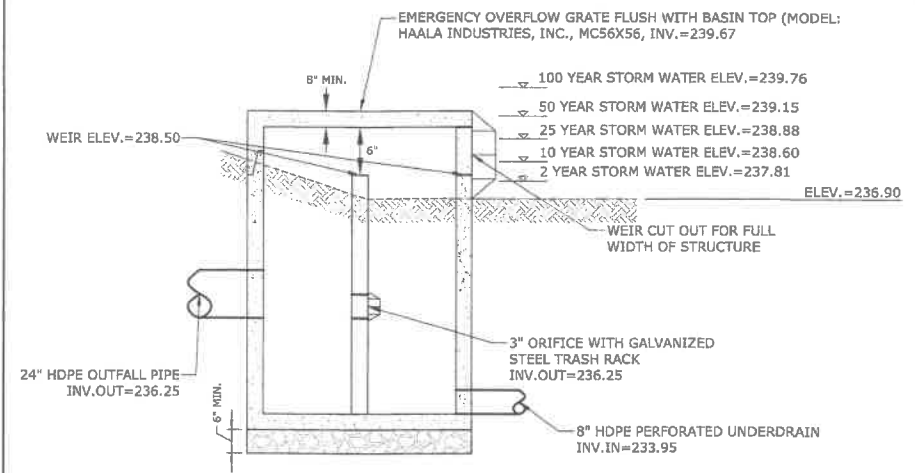
GRAVEL WETLAND PLANTING PLAN		
SPECIES	PLANT SIZE	QUANTITY/SPACING
UPLAND EROSION SOIL/RESTORATION MIX TOLERANT		35LB/ACRE
STIER DOGWOOD" S SERICEA	2'-3'	50/ 8'-10' ON CENTER
DOGWOOD" S AMMOMUM		50/ 8'-10' ON CENTER
	2'-3'	(ALTERNATING SHRUBS)
USH BLUEBERRY" UM CORYBOSSUSUM		



- NOTES:
1. WETLAND SOIL SHALL BE A SANDY CLAY LOAM WITH A HYDRAULIC CONDUCTIVITY OF 0.1-0.01 FT/DAY. ORGANIC CONTENT SHALL BE GREATER THAN 15% BY VOLUME. CLAY CONTENT SHALL BE LESS THAN 15% BY VOLUME.
  2. INFILTRATION TESTING OF THE NATIVE SOILS AT THE SUBGRADE OF THE PROPOSED GRAVEL WETLAND SHALL OCCUR PRIOR TO THE INSTALLATION OF THE GRAVEL WETLAND AND SHALL BE COORDINATED WITH THE ENGINEER. IF THE NATIVE SOILS EXCEED A PERMEABILITY RATE OF 0.03 FT/DAY THE SOILS SHOULD AMENDED OR LINED ADD AS DETERMINED BY THE ENGINEER.
  3. PERFORATED PVC RISERS SHALL HAVE VERTICAL SLOTS CUT INTO PVC RISERS ABOVE GRADE MEASURING 3"x1/8".

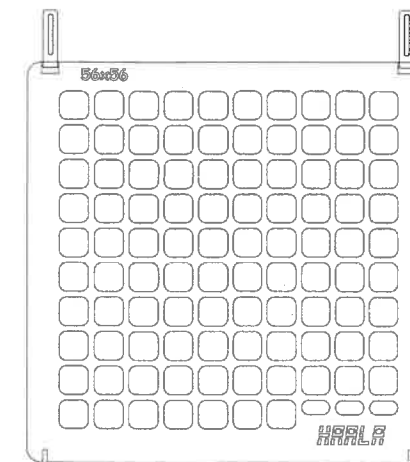
AASHTO #67 STONE (#4 to 3/4")		AASHTO #8 STONE (#8 to 3/8")	
SIEVE SIZE	% PASSING	SIEVE SIZE	% PASSING
1"	100	1/2"	100
3/4"	90-100	3/8"	85-100
3/8"	20-55	#4	10-30
#4	0-10	#8	0-10
#8	0-5	#16	0-5

GRAVEL WETLAND DETAIL SHEET  
NO SCALE



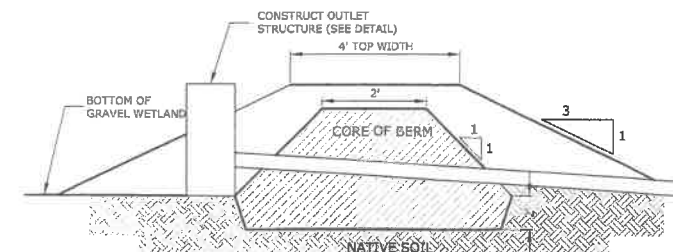
- NOTES:**
1. ALL SECTIONS SHALL BE 4,000 PSI CONCRETE (TYPE II CEMENT).
  2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQUARE INCHES PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER OF THE THIRD WALL.
  3. THE TONGUE OR THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQUARE INCHES PER LINEAR FOOT.
  4. THE STRUCTURES SHALL BE DESIGNED FOR H2O LOADING.
  5. ALL JOINTS ON THE STRUCTURE AND PIPING SHALL BE WATERTIGHT.

OUTLET STRUCTURE  
NO SCALE



- NOTES:**
1. GRATE SHALL BE HAALA INDUSTRIES, INC. MC56X56 TOP MOUNT GRATE OR EQUAL.
  2. GRATE TO BE SECURED TO CONCRETE STRUCTURE.

OVERFLOW GRATE  
NO SCALE



- NOTES:  
1. CORE MATERIAL SHALL MEET USGS CLASSIFICATION SC, SM, CL OR ML AND HAVE A MAXIMUM PARTICLE SIZE OF 3" AND A PERMEABILITY LESS THAN 0.000005 CM/S, AND MEET THE FOLLOWING GRADATION

SIEVE SIZE	PERCENT FINER BY WEIGHT
3 INCH	100
No. 200	50 -100.

2. PIPE SHALL BE FULLY EMBEDDED IN CORE TO ELIMINATE SEEPAGE

CLAY CORE BERM  
NO SCALE

Michael Anderson  
2637 E Atlantic Blvd #172  
Pompano Beach FL 33062-4939

Rochester, New  
Hampshire

1	12/16/16	Revised per City Comment
A	10/11/2016	City Review Comments
MARK	DATE	DESCRIPTION
PROJECT NO:		G-0693
DATE: 09/06/2016		
FILE: G0693-C-506.dwg		
DRAWN BY:		ERC-KAM
CHECKED:		KAM
APPROVED:		BLM

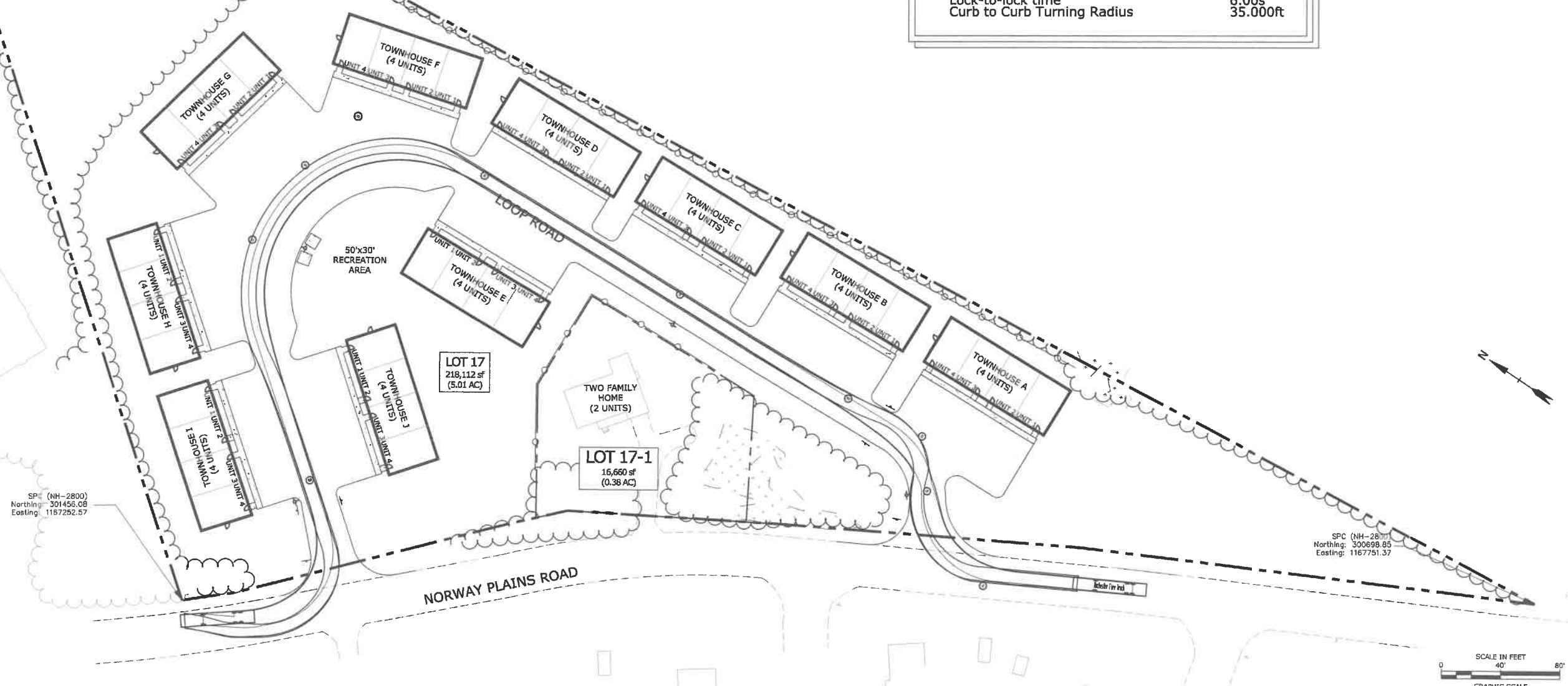
## DETAILS SHEET

SCALE: AS SHOWN

C-506

2.	6/10/2021	MODIFICATION TO APPROVED PROJECT (APPLICATION)
1	12/16/2016	Revised per City Comments
A	10/11/2016	City Review Comments
MARK	DATE	DESCRIPTION
PROJECT NO:		G-0693
DATE: 09/06/2016		
FILE: G0693-F-101.dwg		
DRAWN BY:		ERC/KAM
CHECKED:		KAM
APPROVED:		BLM

$= -101$



...ast Saved: 6/10/2021  
Plotted On: Jun 10, 2021 - 9:20pm By: CML  
Title & Band: J:\G0693- Rob Graham - General Plot\alsd\Drawings - Figures\Subdivision\Drawings - Figures\AutoCAD\Sheet\Current Plan Sheets\G0693-F-101.dwg



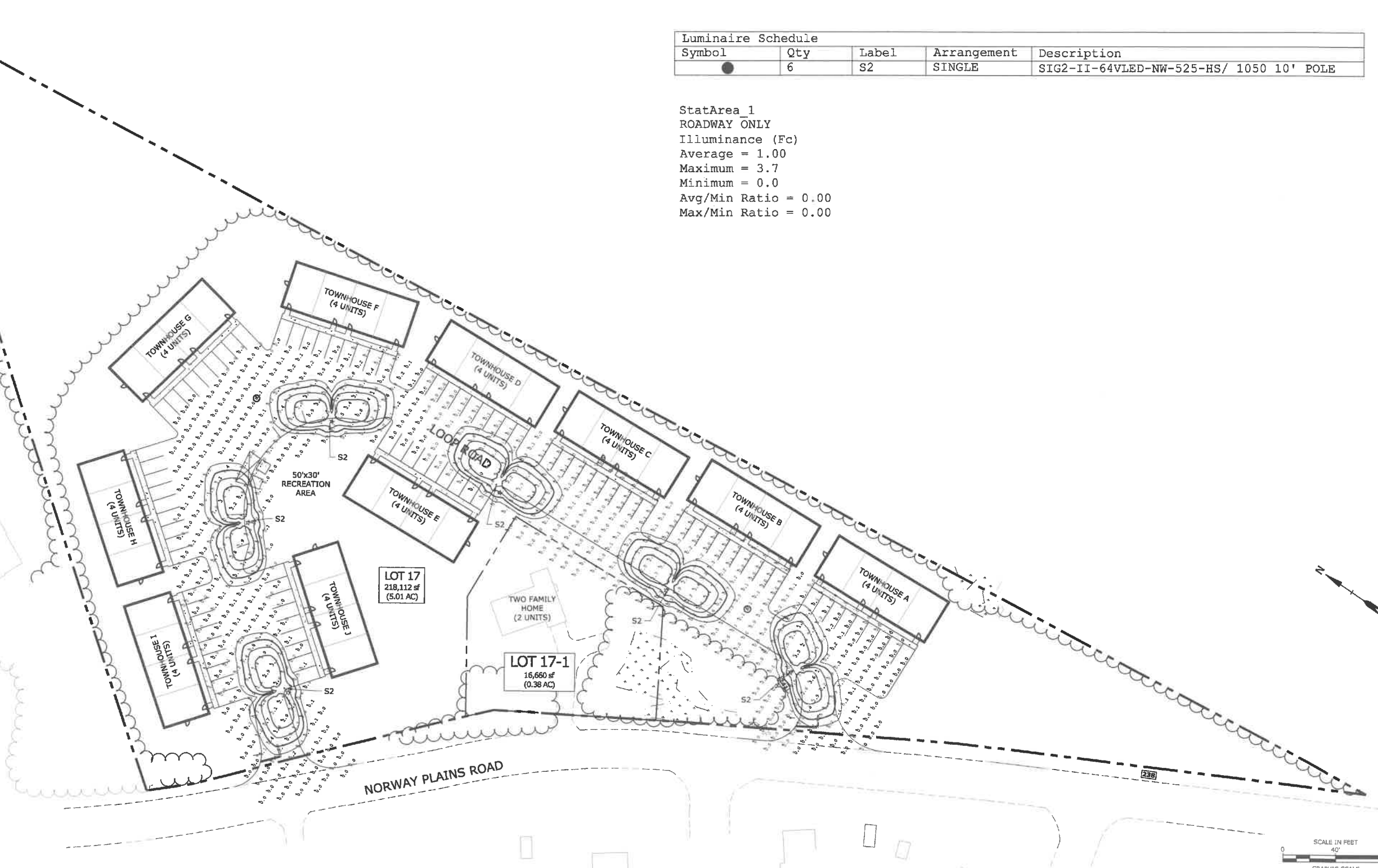
NOTE:  
SEE NOTES AND LEGEND SHEET FOR ADDITIONAL INFORMATION.

NOTE:  
PHOTOMETRICS DESIGN PROVIDED BY CHARRON, INC.

NOTE:  
SITE LIGHTING TO BE ON TIMERS AND ON ALL NIGHT.

Luminaire Schedule				
Symbol	Qty	Label	Arrangement	Description
●	6	S2	SINGLE	SIG2-II-64VLED-NW-525-HS/ 1050 10' POLE

StatArea 1  
ROADWAY ONLY  
Illuminance (Fc)  
Average = 1.00  
Maximum = 3.7  
Minimum = 0.0  
Avg/Min Ratio = 0.00  
Max/Min Ratio = 0.00



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Pompano Beach FL 33062-4939

Rochester, New  
Hampshire

MARK	DATE	DESCRIPTION
2.	6/10/2021	MODIFICATION TO APPROVED PROJECT APPLICATION
1	12/16/2016	Revised per Comment
A	10/11/2016	City Review Comments
PROJECT NO: G-0693		
DATE: 09/06/2016		
FILE: G0693-E-101.dwg		
DRAWN BY: ERC/KAM		
CHECKED: KAM		
APPROVED: BLM		

### PHOTOMETRICS PLAN

SCALE: AS SHOWN



TOWNHOUSE	ADDRESS
TOWNHOUSE A	3 LOOP ROAD
TOWNHOUSE B	7 LOOP ROAD
TOWNHOUSE C	11 LOOP ROAD
TOWNHOUSE D	15 LOOP ROAD
TOWNHOUSE E	16 LOOP ROAD
TOWNHOUSE F	19 LOOP ROAD
TOWNHOUSE G	23 LOOP ROAD
TOWNHOUSE H	27 LOOP ROAD
TOWNHOUSE I	31 LOOP ROAD
TOWNHOUSE J	32 LOOP ROAD

NOTE:  
LOOP ROAD, DESIGNED AS A PRIVATE ROAD, MUST  
REMAIN A PRIVATE ROAD.

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Rochester, New  
Hampshire

MARK	DATE	DESCRIPTION
2	6/10/2021	MODIFICATION TO APPROVED PROJECT APPLICATION
1.	12/16/16	REVISED PER CITY COMMENTS
A	10/11/2016	City Review Comments
PROJECT NO: G-0693		
DATE: 09/06/2016		
FILE: G0693-C-602.DWG		
DRAWN BY: ERC/KAM		
CHECKED: KAM		
APPROVED: BLM		

#### ADDRESS PLAN

SCALE: AS SHOWN

C-601