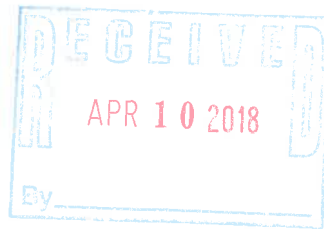


City of Rochester Planning Department
31 Wakefield Street
Rochester, NH 03867
(603) 335-1338



PRELIMINARY
Site Plan Application

Check one of the following: ☒ Design Review ☐ Conceptual (design review is strongly encouraged)

Property information

Tax map #: 114; Lot #(s): 2; Zoning district: Highway Commercial
Property address/location: 400 North Main Street; # acres: 13.1
Name of project (if applicable): Proposed Commercial Development

Proposed project

Describe proposed project: This project consists of the construction of
approximately 46,328 SF of retail development with associated parking and site work.

Nonresidential: current bldg. size n/a s.f.; total proposed bldg. size 46,328 s.f.

Residential: current # units n/a; total proposed # units n/a

City water? yes X no ; how far is City water from the site? Water Main in adjacent street

City sewer? yes X no ; how far is City sewer from the site? Sewer main in adjacent street

Applicant/Agent

Property owner (include name of individual): 400 North Main Street, LLC

Property owner mailing address: 549 Route 1 Bypass, Portsmouth, NH 03801

Property owner phone # (603) 319-0440 email: adilorenzo@keyauto.com

Applicant/developer (if different from property owner): Kincora Development-William McCabe, III

Applicant/Developer mailing address: 170 Worcester Street, Suite 204, Wellesley, MA 02481

Applicant/developer phone # 781-722-1452 email: billmccabe@kincoradevelopment.com

Engineer/designer/agent: Tighe & Bond, Inc. - Kenneth Mavrogeorge, P.E.

Engineer/designer/agent phone # 603-433-8818 email: kamavrogeorge@tighebond.com

Signature

Date

[Office use only. Payment of fee. Amount \$ _____ Check # _____ Date paid _____]

Proposed Commercial Development - 400 North Main Street

TO: Planning Board – City of Rochester, NH
FROM: Kenneth A. Mavrogeorge, P.E.
Project Manager, Tighe & Bond, Inc.
DATE: April 10, 2018



This project narrative has been provided as part of the Preliminary Design Review Application for the proposed commercial development at 400 North Main Street in Rochester, NH (Tax Map 114 Lot 2). This review will provide additional information on the proposed development and the site upon which it is located.

Background:

The property at 400 North Main Street, which is currently vacant, is proposed to be subdivided as part of the proposed redevelopment plan. The development proposed with the enclosed application, is located on the southern lot which is approximately 8 acres.

The project site, which previously housed the Thompson Center Arms manufacturing plant, is located east of exit 15 from NH Route 16 northbound (Spaulding Turnpike), north of an existing shopping plaza, and west of North Main Street.

Site Plan

The following is a summary of the proposed improvements shown on the enclosed "Design Review Plans" dated April 10, 2018:

- Proposed Buildings/Uses:
 - o 42,378 sf of commercial space is being proposed with the following breakdown of uses:
 - 30,144 sf of retail
 - 3,850 sf of gas station/convenience store (10 proposed gas pumps)
 - 5,684 sf of sit down restaurant (with drive thru)
 - 2,700 sf of fast food restaurant (with drive thru)
- Proposed Parking:
 - o 253 parking spaces (includes 5 spaces from the proposed gas pumps) are proposed where 228 are required by the City of Rochester Zoning Ordinance (approximately 6.1 spaces per 1000 sf of GFA).
 - o 14 ADA accessible parking spaces are spread out throughout the development.
- Stormwater Management:
 - o The proposed stormwater management system will include four (4) underground infiltration basins that will collect runoff from a closed drainage system that utilized deep sump catch basins and oil separator hoods.
 - o Preliminary geotechnical investigations of the site have been performed and infiltration rates of 6 inches per minute were measured.
- Utilities:
 - o The proposed project includes the construction of underground utilities which are proposed to tie into the gas, sewer, and water mains on North Main Street.

- The proposed water and sewer mains will be stubbed to the neighboring property for future interconnection.
- Lighting:
 - A preliminary photometric plan has been prepared by CREE lighting and submitted with the application. The plan calls for 25-foot tall lightpoles with varying numbers of light fixtures spread out across the site. In addition to pole mounted light fixtures, wall mounted light fixtures have also been modelled and specified.
- Landscaping:
 - The preliminary landscape layout has been provided without identifying which specific species of plants would be used. This was purposely done to get feedback from City staff on layout prior to full design.

Permitting:**Site Plan Review (Local):**

The proposed project will require a major site plan review application from the City of Rochester.

Subdivision (Local):

The project will require City of Rochester subdivision approval. This subdivision, to be proposed under a separate application, would result in two lots of approximately 8 (south) and 5 acres (north).

Traffic (Local):

Traffic consultants, Greenman-Pedersen, Inc., have prepared a Traffic Impact Study, Site Trip Generation, and Signal Warrant Analysis for the project and have recommended a full signalized intersection at the proposed main entrance to the development. The traffic signal will also incorporate the driveway for the abutting property across North Main Street. The offsite improvements will be submitted to the NHDOT for review due to the proximity of the site to NH Route 16 and Route 11.

The proposed project also includes a full access driveway on the southern end of the development. This driveway is proposed to be the main entrance for large delivery vehicles (sized for WB-67s).

Wetlands (NHDES Dredge and Fill):

The proposed project will require the filling of approximately 2,305 sf of wetlands. The wetlands were delineated on the southern portion of the site, in an existing swale, by Gove Environmental Services in 2017. Since the wetland is less than ½ acre, the site does not fall under the conservation overlay district. To fill the wetlands, a dredge and fill permit will need to be filed with the NHDES.

Stormwater (NHDES Alteration of Terrain):

The proposed project will require disturbance of more than 100,000 contiguous square feet and thus a NHDES Alteration of Terrain (stormwater) permit will be required.

Wastewater (NHDES Sewer Connection Permit):

The proposed project will require a sewer connection permit from the NHDES in order to connect to the municipal sewer system in North Main Street. As part of the wastewater

collection system, the proposed restaurants will each have a grease trap. The size of the grease trap will depend on the specific needs of the tenant.

Floodplain:

The proposed project will require work within areas designated as floodplains by the Federal Emergency Management Agency (FEMA). Thus, this property falls within the Flood Hazard Overlay District. However, the intent of the project is to construct buildings, parking and other site appurtenances above the established base flood elevation of 226. In addition, it is also the intent of the project to reconstruct the swale along the southern property line to have a volume that is at least equal to the volume in the current drainage swale.

The project team has reached out to the Floodplain Management Program Coordinator (New Hampshire Office of Strategic Initiatives – Division of Planning) to discuss the project. The following response was received on April 4, 2018:

"I reviewed the plan you sent and the FEMA map. It does appear that the proposed project is located on land that is at or above the base flood elevation (226 ft) and that is located outside of the floodway. I believe there was a question whether the relocation of a swale would require further requirements. It doesn't appear that anything further would be required under the minimum NFIP requirements."

Special Note

It should be noted that developments of this nature are somewhat fluid in nature and may evolve as tenants are secured and building designs are determined and specific tenant needs are identified.

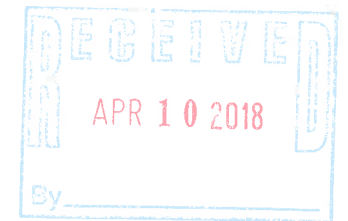
J:\K\K5002 Kincora\002 - Rochester Retail Development\Report_Evaluation\Applications\Site Plan Review\Preliminary Design Review\Narrative.docx

PROPOSED COMMERCIAL DEVELOPMENT

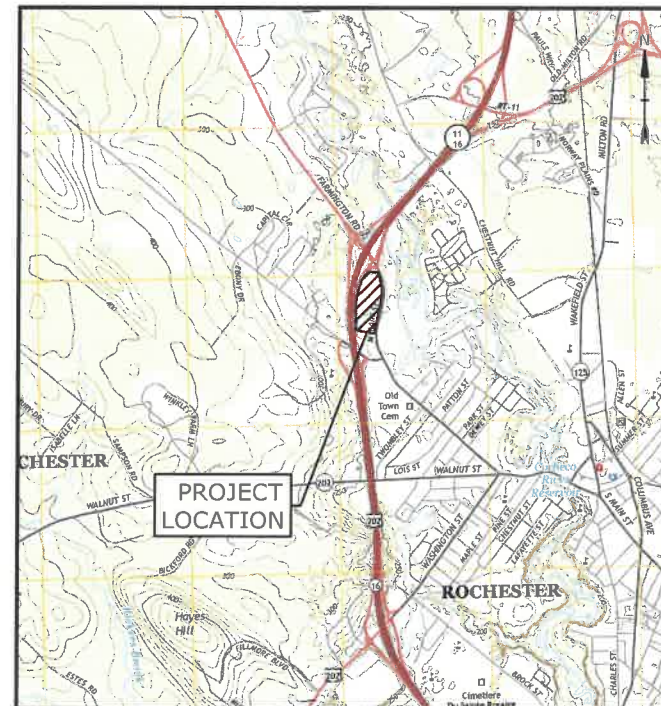
400 NORTH MAIN STREET
ROCHESTER, NEW HAMPSHIRE

APRIL 10, 2018

DESIGN REVIEW PLANS



LIST OF DRAWINGS		
SHEET NO.	SHEET TITLE	LAST REVISED
	COVER SHEET	04/10/2018
G-101	NOTES AND LEGEND SHEET	04/10/2018
1 OF 2	EXISTING CONDITIONS PLAN	04/02/2018
2 OF 2	EXISTING CONDITIONS PLAN	04/02/2018
C-101	OVERALL EXISTING CONDITIONS AND DEMOLITION PLAN	04/10/2018
C-102	OVERALL SITE PLAN	04/10/2018
C-103	SITE PLAN	04/10/2018
C-104	GRADING, DRAINAGE, AND EROSION CONTROL PLAN	04/10/2018
C-105	UTILITIES PLAN	04/10/2018
C-106	TRUCK TURNING PLAN	04/10/2018
C-501	EROSION CONTROL NOTES AND DETAILS SHEET	04/10/2018
C-502	DETAILS SHEET	04/10/2018
C-503	DETAILS SHEET	04/10/2018
C-504	DETAILS SHEET	04/10/2018
C-505	DETAILS SHEET	04/10/2018
C-506	DETAILS SHEET	04/10/2018
C-507	DETAILS SHEET	04/10/2018
L-101	LANDSCAPE PLAN	04/10/2018
E-101	PHOTOMETRIC PLAN	04/10/2018



LOCATION MAP
SCALE: 1" = 2,000'

PREPARED BY:

Tighe & Bond
www.tighebond.com



BRAD MEZQUITA, P.E.



KEN A. MAVROGEORGE P.E.

OWNER:

400 NORTH MAIN STREET, LLC
549 ROUTE 1 BYPASS
PORTSMOUTH, NH 03801

APPLICANT:

KINCORA DEVELOPMENT, LLC
170 WORCESTER STREET - SUITE 204
WELLESLEY, MA 02481

CONSTRUCTION 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 & BOND, ASSUMES NO RESPONSIBILITY FOR ANY ISSUES LEGAL OR OTHERWISE, RESULTING FROM CHANGES MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION OF TIGHE & BOND.



FINAL APPROVAL BY ROCHESTER PLANNING BOARD

CERTIFIED BY _____ DATE _____

FOR MORE INFORMATION ABOUT THESE SITE PLANS CONTACT
THE CITY OF ROCHESTER PLANNING DEPARTMENT (603) 335-1338.

COMPLETE SET 19 SHEETS

ABUTTERS WEST OF SPAULDING TURNPIKE

221-153
HOWARD MCPHERSON
23 TEN ROD RD
ROCHESTER, NH 03867-4243
S.C.R.D. BK. 1705, PG. 325

221-152
TRUE MEMORIAL BAPTIST CHURCH
PO BOX 1001
ROCHESTER, NH 03866-1001

221-151
TEN PINES AT TEN ROD ROAD CONDO
C/O EVERGREEN MANAGEMENT
PO BOX 4579 DEPT 355
HOUSTON, TX 77210-4579
S.C.R.D. BK. 2992, PG. 672

221-169
STATE OF NEW HAMPSHIRE
STATE BUREAU OF TURNPIKE
PO BOX 2950
CONCORD, NH 03302-2950
S.C.R.D. 667-175

114-001
R E L COMMONS, LLC
1 GATE ST SUITE 520
PORTSMOUTH, NH 03801
S.C.R.D. BK. 3152, PG. 596

114-008
MAINLY ROCHESTER PIZZA LLC
4 MILK ST SUITE 103
PORTLAND, ME 04101-4164
S.C.R.D. BK. 3699, PG. 744

114-007
OPPORTUNITY REALTY
OF ROCHESTER LLC
PO BOX 1330
ROCHESTER, NH 03866-1330
S.C.R.D. BK. 2252, PG. 150

114-006
DICK'S REALTY INC
PO BOX 1330
ROCHESTER, NH 03866-1330
S.C.R.D. BK. 1269, PG. 216

114-005
JOHN & FRANCES MEE
321 NORTH MAIN ST
ROCHESTER, NH 03867-4302



SPAULDING TURNPIKE
(NH ROUTE 16/US ROUTE 202)

EXIT 15 (OFF RAMP)

CONC. RETAINING WALL
W/ CHAIN LINK FENCE

TRACT I PER RECORD
DESCRIPTION

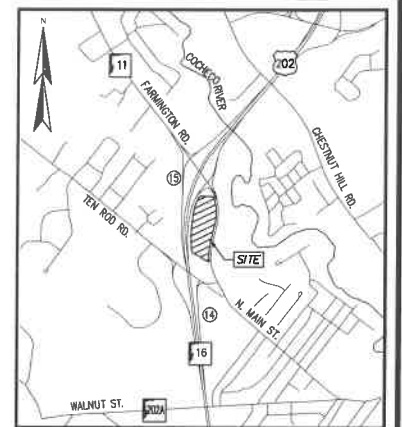
TAX MAP 114 LOT 2

NO BUILDINGS
ON THIS SITE

TRACT III PER RECORD
DESCRIPTION

TRACT II PER RECORD
DESCRIPTION

SHEET 1
SHEET 2



LOCATION MAP (n.t.s.)

- LEGEND**
- LOT LINE
 - APPROXIMATE LOT LINE
 - EASEMENT LINE
 - APPROXIMATE ABUTTERS LOT LINE
 - WIRE FENCE
 - CHAIN LINK FENCE
 - OVERHEAD WIRE
 - SEWER LINE
 - DRAIN LINE
 - GAS LINE
 - DRAIN LINE PER REF. PLAN 5
 - MAJOR CONTOUR LINE
 - MINOR CONTOUR LINE
 - TREE LINE
 - SHRUB LINE
 - EDGE OF WETLAND
 - APPROXIMATE WATER LINE
 - CONCRETE
 - UTILITY POLE
 - UTILITY POLE & GUY WIRE
 - GUY POLE
 - LIGHT POLE (ONE ARM)
 - SIGN
 - SIGN (TWO POSTS)
 - BOUND FOUND
 - IRON PIPE/ROD FOUND
 - FIRE HYDRANT
 - WATER GATE VALVE
 - GAS GATE VALVE
 - CATCH BASIN
 - DRAIN MANHOLE
 - WATER MANHOLE
 - SEWER MANHOLE
 - WETLAND AREA
 - CONIFEROUS TREE
 - DECIDUOUS TREE
 - MONITORING WELL
 - DRAINAGE FLOW DIRECTION ARROW
 - TYP. CONC.
 - NH&B FND.
 - D.H.
 - EP
 - VCC
 - SBB
 - SWL
 - SYL
 - DYL
 - DSYL
 - DSWL

EXISTING CONDITIONS PLAN
FOR
KINCORA DEVELOPMENT, LLC
OF
TAX MAP 114 LOT 2
400 NORTH MAIN STREET
ROCHESTER, NEW HAMPSHIRE

NO.	DATE	DESCRIPTION	BY

DRAWN BY:	M.T.L.	DATE:	APRIL 2, 2018
CHECKED BY:	J.F.K.	DRAWING NO.:	5228A
JOB NO.:	5228	SHEET	1 OF 2

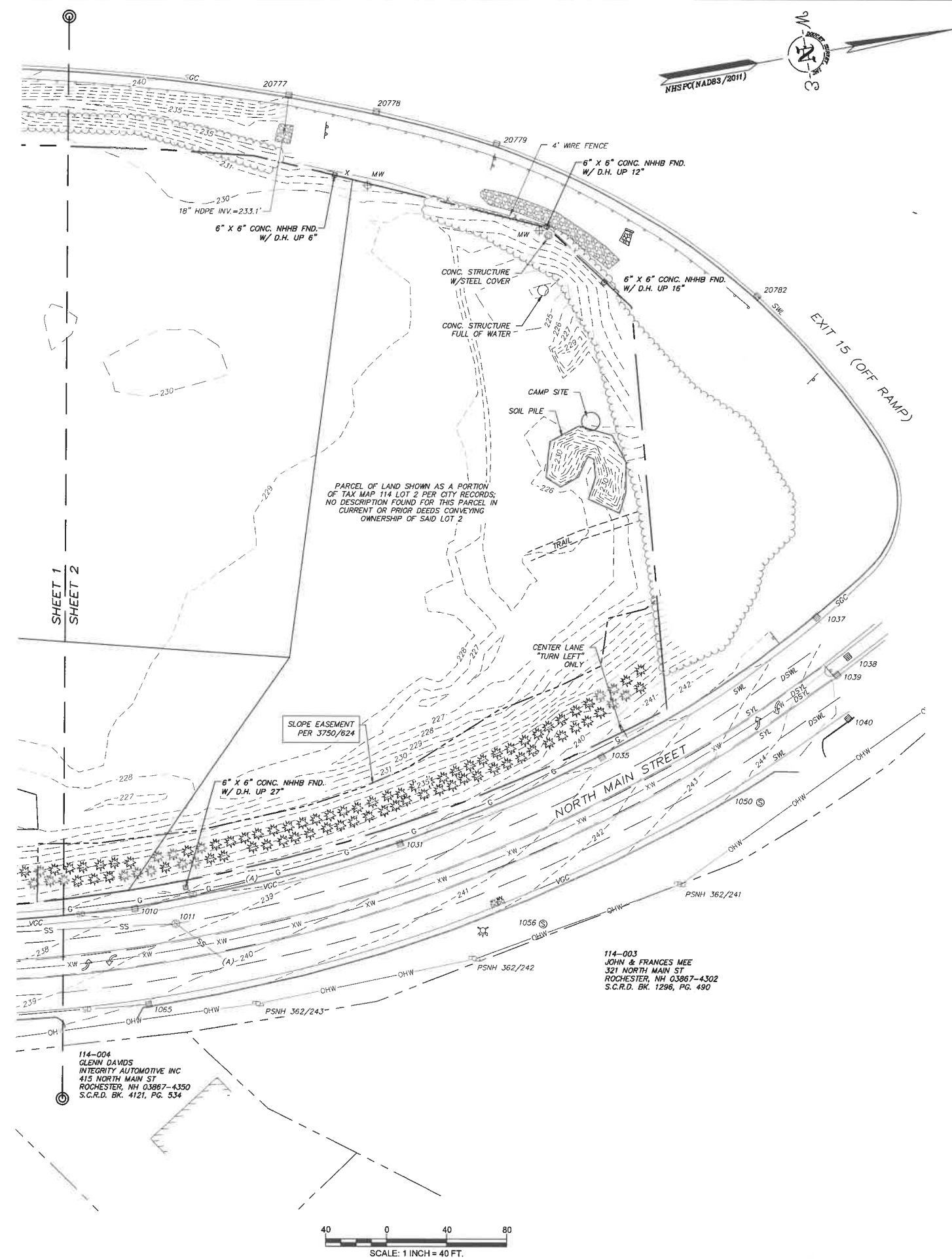


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2 Commerce Drive (Suite 202) Bedford, NH 03110 (603) 614-4060
10 Storers Street (Riverview Suite) Kennebunk, ME (207) 502-7005
<http://www.doucetsurvey.com>

40 0 40 80
SCALE: 1 INCH = 40 FT.

DRAINAGE STRUCTURES	
CB 1007 RIM ELEV.=236.7' (1010) 18" RCP INV.=230.6' (1447) 18" RCP INV.=230.4'	CB 1447 RIM ELEV.=233.7' (1007) 18" RCP INV.=228.4' (1439) 24" RCP INV.=228.4'
CB 1010 RIM ELEV.=238.1' (A) 18" RCP INV.=232.3' (1007) 18" RCP INV.=231.1'	CB 1457 RIM ELEV.=233.4' (1024) 15" RCP INV.=227.3' (30041) 15" RCP INV.=227.1'
CB 1020 RIM ELEV.=238.6' (1065) 15" RCP INV.=233' (1024) 15" RCP INV.=233.6'	DMH 1461 RIM ELEV.=227.8' (A) 15" HDPE INV.=222.8' (OUTFALL) 24" HDPE INV.=222.7' (1463) 24" HDPE INV.=222.5'
CB 1024 RIM ELEV.=236' (1457) 15" RCP INV.=230.7' (1020) 15" RCP INV.=231'	CB 1462 RIM ELEV.=227.5' (1443) 24" HDPE INV.=223.3' (1463) 24" HDPE INV.=223.2'
CB 1065 RIM ELEV.=240.1' (1020) 15" RCP INV.=234.5'	DMH 1463 RIM ELEV.=228.3' (1461) 24" HDPE INV.=223.8' (A) 15" HDPE INV.=222.8' (1462) 24" HDPE INV.=222.7'
CB 1311 RIM ELEV.=230.3' (1443) 15" RCP INV.=225.1'	DMH 1465 RIM ELEV.=231' (A) 30" RCP INV.=221.8' (1468) 30" RCP INV.=221.6'
CB 1439 RIM ELEV.=232.1' (1447) 24" RCP INV.=228.5' (1441) 24" RCP INV.=228.2'	DMH 1468 RIM ELEV.=230.2' (1465) 30" RCP INV.=222.4' (OUTFALL) 30" HDPE INV.=222.4'
CB 1441 RIM ELEV.=230.8' (1439) 24" RCP INV.=226.7' (1443) 24" RCP INV.=226.5'	CB 30041 RIM ELEV.=229.2' (1457) 15" RCP INV.=224.1'
CB 1443 RIM ELEV.=230.1' (1311) 15" RCP INV.=224.6' (1441) 24" RCP INV.=223.4' (1462) 24" HDPE INV.=223.4'	

SEWER STRUCTURES	
SMH 1011 RIM ELEV.=238.9' (A) 13" PVC INV.=232' (1466) 13" PVC INV.=231.8'	SMH 1312 RIM ELEV.=230.4' (1442) 18" PVC INV.=224.1' (1315) 18" PVC INV.=224'
SMH 1315 RIM ELEV.=231' (A) 4" PVC INV.=223.9' (1312) 18" PVC INV.=223.6' (B) 18" PVC INV.=223.5'	SMH 1440 RIM ELEV.=231' (A) 4" PVC INV.=225.8' (B) 10" DIP INV.=225.3' (1449) 18" PVC INV.=224.8' (1442) 18" PVC INV.=224.7'
SMH 1442 RIM ELEV.=230' (A) 4" PVC INV.=225.2' (B) 4" PVC INV.=225.2' (1440) 18" PVC INV.=224.2' (1312) 18" PVC INV.=224.2'	SMH 1449 RIM ELEV.=234.1' (1440) 18" PVC INV.=225.2' (A) 10" DIP INV.=225.2' (B) 8" DIP INV.=225.1' (1466) 15" PVC INV.=225.1'
SMH 1466 RIM ELEV.=236.2' (A) 13" PVC INV.=230.1' (1011) 13" PVC INV.=227.8' (1449) 15" PVC INV.=227.6'	



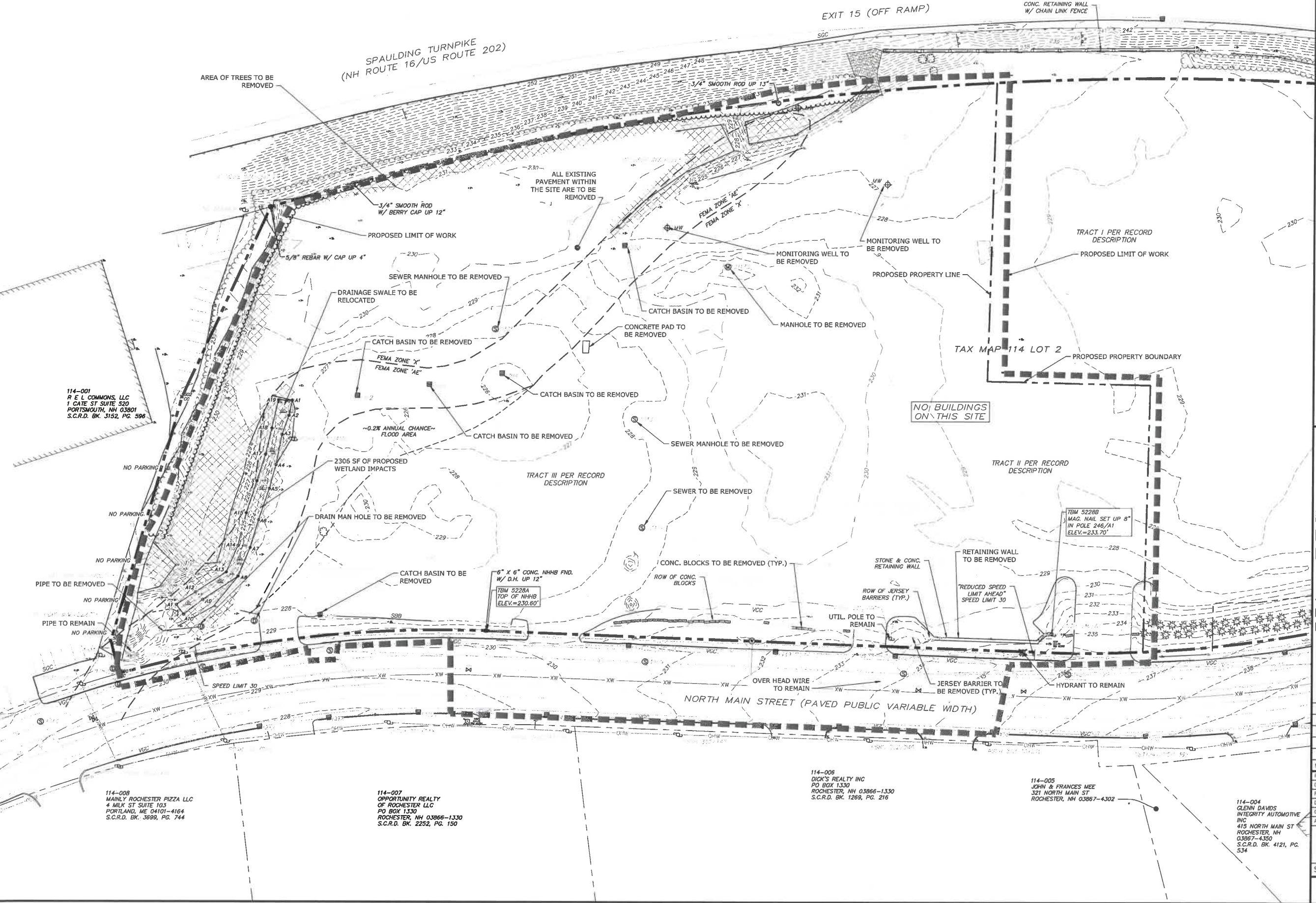
- NOTES:
- REFERENCE: TAX MAP 114, LOT 002
 - TOTAL PARCEL AREA: SQ. FT. OR AC.
 - OWNER OF RECORD: 400 NORTH MAIN STREET, LLC
549 ROUTE 1 BYPASS
PORTSMOUTH, NH 03801
S.C.R.D. BK 4061, PG 957
 - ZONE: HIGHWAY COMMERCIAL
DIMENSIONAL REQUIREMENTS:
MIN. LOT AREA 20,000 sq.ft.
MIN. LOT AREA/DWELLING UNIT 5,000 sq.ft./7,500 sq.ft.
MIN. FRONTAGE 100 ft.
MIN. FRONT SETBACK 20 ft.
MIN. SIDE SETBACK 10 ft.
MIN. REAR SETBACK 25 ft.
MAX. LOT COVERAGE 85 %
MAX. BUILDING STORIES 3
WETLAND BUFFER 50 ft.
 - ZONING INFORMATION LISTED HEREON IS BASED ON THE CITY OF ROCHESTER ZONING ORDINANCE DATED 02/02/17 AS AVAILABLE ON THE CITY WEBSITE ON 01/08/18. ADDITIONAL REGULATIONS APPLY, AND REFERENCE IS HEREBY MADE TO THE EFFECTIVE ZONING ORDINANCE. THE LAND OWNER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE MUNICIPAL, STATE AND FEDERAL REGULATIONS.
 - FIELD SURVEY PERFORMED BY E.J.S. & T.J.M. DURING DECEMBER 2017 USING A TRIMBLE S6 TOTAL STATION WITH A TRIMBLE TSC3 DATA COLLECTOR AND A SOKKIA B21 AUTO LEVEL. TRAVERSE ADJUSTMENT BASED ON LEAST SQUARE ANALYSIS.
 - ADDITIONAL FIELD SURVEY PERFORMED BY L.P.S. ON DECEMBER 10, 2017 USING A DJI PHANTOM PRO UAV WITH AN AVERAGE GROUND SAMPLING DISTANCE OF 1.04 CM/0.41 IN. DATA WAS PROCESSED USING PIX4D SOFTWARE.
 - JURISDICTIONAL WETLANDS DELINEATED BY GOVE ENVIRONMENTAL SERVICES, INC. ON SEPTEMBER 7, 2017 IN ACCORDANCE TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0, JANUARY 2012, US ARMY CORPS OF ENGINEERS.
 - FLOOD HAZARD ZONE: "X" & "AE", PER FIRM MAP 33017C02030, DATED 5/17/05.
 - HORIZONTAL DATUM BASED ON NEW HAMPSHIRE STATE PLANE(2800) NAD83(2011) DERIVED FROM REDUNDANT GPS OBSERVATIONS UTILIZING THE KEYNET GPS VRS NETWORK, CONSISTENT WITH CITY OF ROCHESTER GIS DATUM.
 - VERTICAL DATUM IS BASED ON NHDOT DISK H 52 1978 NAVD88 ELEVATION = 231.79'.
 - PROPER FIELD PROCEDURES WERE FOLLOWED IN ORDER TO GENERATE CONTOURS AT 1' INTERVALS. ANY MODIFICATION OF THIS INTERVAL WILL DIMINISH THE INTEGRITY OF THE DATA, AND DOUCET SURVEY, INC. WILL NOT BE RESPONSIBLE FOR ANY SUCH ALTERATION PERFORMED BY THE USER.
 - UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON OBSERVABLE PHYSICAL EVIDENCE AND PAINT MARKS FOUND ON-SITE.
 - THE ACCURACY OF MEASURED UTILITY INVERTS AND PIPE SIZES/TYPES IS SUBJECT TO NUMEROUS FIELD CONDITIONS, INCLUDING: THE ABILITY TO MAKE VISUAL OBSERVATIONS, DIRECT ACCESS TO THE VARIOUS ELEMENTS, MANHOLE CONFIGURATION, ETC.
 - THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF BOUNDARIES IN ACCORDANCE WITH AND IN RELATION TO THE CURRENT LEGAL DESCRIPTION, AND IS NOT AN ATTEMPT TO DEFINE UNWRITTEN RIGHTS, DETERMINE THE EXTENT OF OWNERSHIP, OR DEFINE THE LIMITS OF TITLE.
 - DUE TO THE COMPLEXITY OF RESEARCHING ROAD RECORDS AS A RESULT OF INCOMPLETE, UNORGANIZED, INCONCLUSIVE, OBLITERATED, OR LOST DOCUMENTS, THERE IS AN INHERENT UNCERTAINTY INVOLVED WHEN ATTEMPTING TO DETERMINE THE LOCATION AND WIDTH OF A ROADWAY RIGHT OF WAY. THE EXTENT OF (THE ROAD(S)) AS DEPICTED HEREON ARE BASED ON RESEARCH CONDUCTED AT THE STRAFFORD COUNTY REGISTRY OF DEEDS AND NH DEPARTMENT OF TRANSPORTATION.
 - FINAL MONUMENTATION MAY BE DIFFERENT THAN THE PROPOSED MONUMENTATION SHOWN HEREON, DUE TO THE FACT THAT SITE CONDITIONS WILL DICTATE THE ACTUAL LOCATION AND TYPE OF MONUMENTS INSTALLED IN THE FIELD. PLEASE REFER TO EITHER THE "MONUMENTATION LOCATION PLAN" TO BE RECORDED OR CONTACT DOUCET SURVEY, INC. FOR CLARIFICATION OF MONUMENTS SET. (A RECORDED PLAN WILL BE PRODUCED AT THE DISCRETION OF DOUCET SURVEY, INC.).
 - ALL ELECTRIC, GAS, TEL. WATER, SEWER AND DRAIN SERVICES ARE SHOWN IN SCHEMATIC FASHION, THEIR LOCATIONS ARE NOT PRECISE OR NECESSARILY ACCURATE. NO WORK WHATSOEVER SHALL BE UNDERTAKEN ON THIS SITE USING THIS PLAN TO LOCATE THE ABOVE SERVICES. CONSULT WITH THE PROPER AUTHORITIES CONCERNED WITH THE SUBJECT SERVICE LOCATIONS FOR INFORMATION REGARDING SUCH. CALL DIG-SAFE AT 1-888-DIG-SAFE.
- REFERENCE PLANS:
- "STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, RIGHT-OF-WAY PLANS, NH PROJECT NO. 10620-D SPAULDING TURNPIKE NH ROUTE 16." DATED JANUARY 11, 2011.
 - STATE OF NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS, PLANS OF PROPOSED LS 1827(I) NH NO. P-2692-V." DATED FEBRUARY 28, 1985.
 - "ALTA/ACSM LAND TITLE SURVEY, TAX MAP 114 LOT 1, PROPERTY OF REL COMMONS, LLC, 306 NORTH MAIN STREET, ROCHESTER, NEW HAMPSHIRE, COUNTY OF STRAFFORD" DATED FEBRUARY 12, 2015 BY MSC NOT RECORDED.
 - "PLAN OF LAND OF FIRST DEVELOPMENT CORPORATION GLOBE DEPARTMENT STORES ROUTE 11 ROCHESTER, NH" DATED NOV. 27, 1990 BY BERRY SURVEYING & ENGINEERING S.C.R.D. PLAN 38A-41.
 - 400 NORTH MAIN STREET DIGITAL CAD FILE FURNISHED BY NORWAY PLAINS ASSOCIATES.

EXISTING CONDITIONS PLAN
FOR
KINCORA DEVELOPMENT, LLC
OF
TAX MAP 114 LOT 2
400 NORTH MAIN STREET
ROCHESTER, NEW HAMPSHIRE

NO.	DATE	DESCRIPTION	BY
DRAWN BY:	M.T.L.	DATE:	APRIL 2, 2018
CHECKED BY:	J.F.K.	DRAWING NO.:	5228A
JOB NO.:	5228	SHEET	2 OF 2

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10 Storer Street (Riverview Suite) Kennebunk, ME (207) 502-7005
<http://www.doucetsurvey.com>

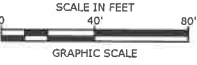
SEE SHEET G-101 FOR NOTES
AND LEGEND INFORMATION



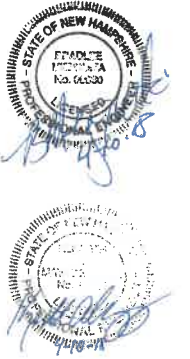
**Proposed
Commercial
Development**

Kincora
Development,
LLC

400 North Main Street
Rochester,
New Hampshire



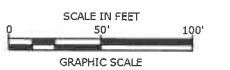
MARK	DATE	DESCRIPTION
PROJECT NO.	K5002-002	
DATE:	04/10/2018	
FILE:	K5002-002-C-101.DWG	
DRAWN BY:	JPC	
CHECKED:	KAM	
APPROVED:	BLM	
EXISTING CONDITIONS AND DEMOLITION PLAN		
SCALE: AS SHOWN		
C-101		



Proposed Commercial Development

Kincora Development, LLC

400 North Main Street
Rochester,
New Hampshire



MARK	DATE	DESCRIPTION
PROJECT NO.	K5002-002	
DATE:	04/10/2018	
FILE:	K5002-002-C-102.DWG	
DRAWN BY:	JPC	
CHECKED:	KAM	
APPROVED:	BLM	

OVERALL SITE PLAN

SCALE: AS SHOWN

C-102

EXIT 15 (OFF RAMP)

SPAULDING TURNPIKE
(NH ROUTE 16/US ROUTE 202)

PROPOSED LOT 2
7.9 ACRES

PROPOSED PROPERTY LINE

PROPOSED TEMPORARY CONSTRUCTION EASEMENT

PROPOSED LOT 1
5.4 ACRES

RESERVED FOR POTENTIAL CONNECTION TO ADJACENT PROPERTY

TOTAL AREA OF SNOW STORAGE =
18,900 SF (1 SF/9 SF OF PAVEMENT/SIDEWALK)
MIN. SNOW STORAGE REQ. = 17,000 SF
(1 SF/10 SF OF PAVEMENT/SIDEWALK)

NORTH MAIN STREET (PAVED PUBLIC VARIABLE WIDTH)

PROPOSED SIGNALIZED INTERSECTION

PROPOSED PYLON SIGN

114-004
GLENN DAVIDS
INTEGRITY AUTOMOTIVE INC
415 NORTH MAIN ST
ROCHESTER, NH 03867-4350
S.C.R.D. BK. 4121, PG. 234

114-005
JOHN & FRANCES MEE
321 NORTH MAIN ST
ROCHESTER, NH 03867-4302

114-006
DICK'S REALTY INC
PO BOX 1330
ROCHESTER, NH 03866-1330
S.C.R.D. BK. 1269, PG. 216

114-007
OPPORTUNITY REALTY
OF ROCHESTER LLC
PO BOX 1330
ROCHESTER, NH 03866-1330
S.C.R.D. BK. 2252, PG. 150

114-008
ROCHESTER PIZZA LLC
4 MILK ST SUITE 103
PORTLAND, ME 04101-4164
S.C.R.D. BK. 3699, PG. 744

PARKING CALCULATIONS:

RESTAURANTS	5,690 SF TOTAL; 191 SEATS TOTAL
PARKING REQUIREMENTS:	1 SPACE/3 SEATS
191 X 1 / 3 = 64 SPACES	
FAST FOOD RESTAURANT	2,700 SF; 54 SEATS WITH DRIVE-THRU
PARKING REQUIREMENTS:	1 SPACE/2 SEATS
54 X 1 / 2 = 27 SPACES	
GAS STATION	3,850 SF
PARKING REQUIREMENTS:	1 SPACE/250 SF
3,850 X 1 / 250 = 16 SPACES	
RETAIL	23,000 SF
PARKING REQUIREMENTS (≤ 30,000 SF):	1 SPACE/250 SF
23,000 X 1 / 250 = 92 SPACES	
RETAIL	7,144 SF
PARKING REQUIREMENTS (≤ 30,000 SF):	1 SPACE/250 SF
7,144 X 1 / 250 = 29 SPACES	
TOTAL	
RESTAURANT =	64 SPACES
FAST FOOD RESTAURANT =	27 SPACES
GAS STATION =	16 SPACES
RETAIL =	92 SPACES
RETAIL =	29 SPACES
TOTAL =	228 SPACES

SITE DATA:

ZONE: HIGHWAY COMMERCIAL ZONE (HC)
OVERLAY DISTRICT: N/A
ALLOWED USES: RETAIL (SALES AND SERVICE)
GROCERY STORE
RESTAURANT
RESTAURANT WITH DRIVE-THRU
GAS STATION

DIMENSIONAL REQUIREMENTS:

	REQUIRED	PROVIDED
MINIMUM LOT SIZE:	20,000 SQ. FT	13.1 ACRES*
MINIMUM FRONTAGE:	100 FT	901 FT
MINIMUM FRONT SETBACK:	20 FT	435 FT
MINIMUM SIDE SETBACK:	10 FT	458 FT
MINIMUM REAR SETBACK:	25 FT	448 FT
MINIMUM OPEN SPACE:	15%	±27%
MAXIMUM BUILDING HEIGHT:	35 FT	±35 FT
MINIMUM FRONT PAVEMENT SETBACK:	10 FT	112 FT
MINIMUM SIDE PAVEMENT SETBACK:	5 FT	±10 FT
MINIMUM REAR PAVEMENT SETBACK:	10 FT	±17 FT
MINIMUM FRONT LANDSCAPE SETBACK:	15 FT	±5 FT
MINIMUM SIDE LANDSCAPE SETBACK:	10 FT	±10 FT
MINIMUM GREENSPACE REQUIRED	25%	13.5%

PARKING REQUIREMENTS:

	REQUIRED	PROVIDED
PARKING STALL SIZE:	9' X 18'	9' X 18'
MINIMUM DRIVE AISLE:	24 FT	±24 FT
TOTAL SPACES:	228 SPACES	253 SPACES
TOTAL ACCESSIBLE SPACES:	7 SPACES	14 SPACES

LEGEND

[Pattern]	STANDARD DUTY PAVEMENT
[Pattern]	HEAVY DUTY PAVEMENT
[Pattern]	SNOW STORAGE

SNOW STORAGE NOTES:

IF SNOW STORAGE AREAS ARE EXCEEDED, EXCESS SNOW SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL LAWS.

TOTAL WETLAND AREA

EXISTING: ±2,306 SF (±.05 ACRES)
PROPOSED: ±0 SF (±0 ACRES)

SEE SHEET G-101 FOR NOTES
AND LEGEND INFORMATION

WAIVERS:

- FRONT LANDSCAPING BUFFER SECTION 5.D.(2) OF SITE PLAN REVIEW REGULATIONS
- GREEN SPACE REQ. SECTION 5.B.(12) OF SITE PLAN REVIEW REGULATION



C-103

SEE SHEET G-101 FOR NOTES
AND LEGEND INFORMATION

Last Save Date: April 11, 2018 8:45 PM By: KAM
Plot Date: Monday, April 09, 2018 Plotted by: Kenneth A. Mayne
T&B File Location: J:\KWS002 Kinora\002 - Rochester Retail Development\Drawings\Figures\AutoCAD\Sheet\K5002-002-C-104.dwg Layout Tab: grade

DRAINAGE STRUCTURES	
CB 1007 RIM ELEV.=236.7' (1010) 18" RCP INV.=230.6' (1447) 18" RCP INV.=230.4'	CB 1447 RIM ELEV.=233.7' (1007) 18" RCP INV.=228.4' (1439) 24" RCP INV.=228.4'
CB 1010 RIM ELEV.=238.1' (A) 18" RCP INV.=232.3' (1007) 18" RCP INV.=232.1'	CB 1457 RIM ELEV.=233.4' (1024) 15" RCP INV.=227.3' (30041) 15" RCP INV.=227.1'
CB 1020 RIM ELEV.=238.6' (1085) 15" RCP INV.=233' (1024) 15" RCP INV.=233.6'	DMH 1461 RIM ELEV.=227.8' (A) 15" HDPE INV.=222.8' (OUTFALL) 24" HDPE INV.=222.7' (1463) 24" HDPE INV.=222.5'
CB 1024 RIM ELEV.=236' (1457) 15" RCP INV.=230.7' (1020) 15" RCP INV.=231'	CB 1462 RIM ELEV.=227.5' (1443) 24" HDPE INV.=223.3' (1463) 24" HDPE INV.=223.2'
CB 1065 RIM ELEV.=240.1' (1020) 15" RCP INV.=234.5'	DMH 1463 RIM ELEV.=228.3' (1461) 24" HDPE INV.=223.8' (A) 15" HDPE INV.=222.8' (1462) 24" HDPE INV.=222.7'
CB 1311 RIM ELEV.=230.3' (1443) 15" RCP INV.=225.1'	DMH 1465 RIM ELEV.=231' (A) 30" RCP INV.=221.8' (1468) 30" RCP INV.=221.6'
CB 1439 RIM ELEV.=232.1' (1447) 24" RCP INV.=228.5' (1441) 24" RCP INV.=228.2'	DMH 1468 RIM ELEV.=230.2' (1465) 30" RCP INV.=222.4' (OUTFALL) 30" HDPE INV.=222.4'
CB 1441 RIM ELEV.=230.8' (1439) 24" RCP INV.=226.7' (1443) 24" RCP INV.=226.5'	CB 30041 RIM ELEV.=229.2' (1457) 15" RCP INV.=224.1'
CB 1443 RIM ELEV.=230.1' (1311) 15" RCP INV.=224.6' (1441) 24" RCP INV.=223.4' (1462) 24" HDPE INV.=223.4'	

SEE SHEET G-101 FOR NOTES
AND LEGEND INFORMATION

Tighe & Bond
Engineers | Environmental Specialists



Proposed Commercial Development

Kincora Development, LLC

400 North Main Street
Rochester,
New Hampshire

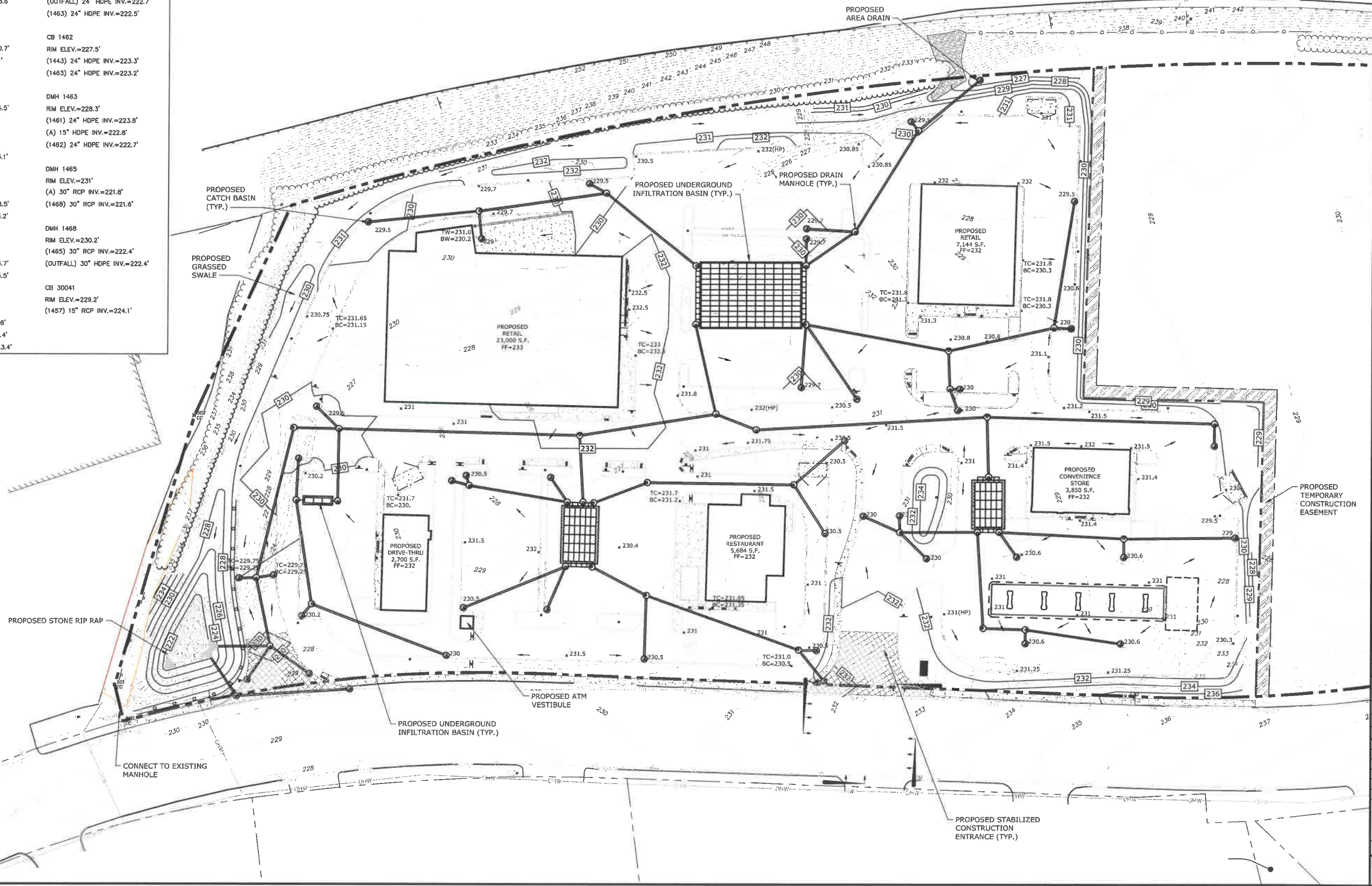
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GRAPHIC SCALE

MARK	DATE	DESCRIPTION
PROJECT NO:	K5002-002	
DATE:	04/10/2018	
FILE:	K5002-002-C-104.DWG	
DRAWN BY:	JPC	
CHECKED:	KAM	
APPROVED:	BLM	

GRADING, DRAINAGE, AND
EROSION CONTROL PLAN

SCALE: AS SHOWN

C-104



SEWER STRUCTURES
SMH 1011
RIM ELEV.=238.9'
(A) 13" PVC INV.=232'
(1466) 13" PVC INV.=231.8'

SMH 1312
RIM ELEV.=230.4'
(1442) 18" PVC INV.=224.1'
(1315) 18" PVC INV.=224'

SMH 1315
RIM ELEV.=231'
(A) 4" PVC INV.=223.9'
(1312) 18" PVC INV.=223.6'
(B) 18" PVC INV.=223.5'

SMH 1440
RIM ELEV.=231'
(A) 4" PVC INV.=225.8'
(B) 10" DIP INV.=225.3'
(1449) 18" PVC INV.=224.8'
(1442) 18" PVC INV.=224.7'

SMH 1442
RIM ELEV.=230'
(A) 4" PVC INV.=225.2'
(B) 4" PVC INV.=225.2'
(1440) 18" PVC INV.=224.2'
(1312) 18" PVC INV.=224.2'

SMH 1449
RIM ELEV.=234.1'
(1440) 18" PVC INV.=225.2'
(A) 10" DIP INV.=225.2'
(B) 8" DIP INV.=225.1'
(1466) 15" PVC INV.=225.1'

SMH 1466
RIM ELEV.=236.2'
(A) 13" PVC INV.=230.1'
(1011) 13" PVC INV.=227.8'
(1449) 15" PVC INV.=227.6'

SEE SHEET G-101 FOR NOTES
AND LEGEND INFORMATION



Tighe & Bond
Engineers | Environmental Specialists



Proposed Commercial Development

Kincora Development, LLC

400 North Main Street
Rochester, New Hampshire

SCALE IN FEET
0 40' 80'
GRAPHIC SCALE

MARK	DATE	DESCRIPTION
PROJECT NO:	K5002-002	
DATE:	04/10/2018	
FILE:	K5002-002-C-105.DWG	
DRAWN BY:	JPC	
CHECKED:	KAM	
APPROVED:	BLM	

UTILITIES PLAN

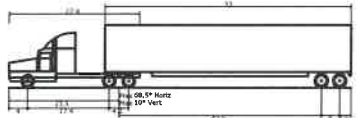
SCALE: AS SHOWN

C-105

Last Save Date: April 9, 2018, 12:00 PM By: JPCOLLINS
Plot Date: Monday, April 09, 2018 Plotted By: Kenneth A. Mayhew
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SEE SHEET G-101 FOR NOTES
AND LEGEND INFORMATION

Tighe & Bond
Engineers | Environmental Specialists



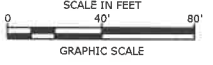
WB-67 - Interstate Semi-Trailer
Overall Length 73.50ft
Overall Width 8.50ft
Overall Body Height 13.50ft
Min Body Ground Clearance 1.34ft
Max Track Width 6.50ft
Lock-to-lock time 6.00s
Max Steering Angle (Virtual) 28.40°



**Proposed
Commercial
Development**

Kincora
Development,
LLC

400 North Main Street
Rochester,
New Hampshire



MARK	DATE	DESCRIPTION
PROJECT NO.	K5002-002	
DATE:	04/10/2018	
FILE:	K5002-002-C-106.DWG	
DRAWN BY:	JPC	
CHECKED:	KAM	
APPROVED:	BLM	

TRUCK TURNING PLAN

SCALE: AS SHOWN

C-106

114-001
R.E.L. COMMONS, LLC
1 CATE ST SUITE 520
PORTSMOUTH, NH 03801
S.C.R.D. BK. 3152, PG. 596

114-008
MAINLY ROCHESTER PIZZA LLC
4 MILK ST SUITE 103
PORTLAND, ME 04101-4164
S.C.R.D. BK. 3699, PG. 744

114-007
OPPORTUNITY REALTY
OF ROCHESTER LLC
PO BOX 1330
ROCHESTER, NH 03866-1330
S.C.R.D. BK. 2252, PG. 150

114-006
DICK'S REALTY INC
PO BOX 1330
ROCHESTER, NH 03866-1330
S.C.R.D. BK. 1269, PG. 216

114-005
JOHN & FRANCES MEE
321 NORTH MAIN ST
ROCHESTER, NH 03867-4302

114-004
GLENN DAVIDS
INTEGRITY AUTOMOTIVE
INC
415 NORTH MAIN ST
ROCHESTER, NH
03867-4350
S.C.R.D. BK. 4121, PG.
534

Last Save Date: April 6, 2018 5:45 PM By: KAM
Plot Date: April 10, 2018 10:13 AM By: P. Collins
TSS File Location: J:\K5002 Kincora\002 - Rochester Retail Development\Drawings - Figures\AutoCAD\Sheet\K5002-002-C-106.dwg Layout Tab: truck

PROJECT NAME AND LOCATION

PROPOSED DEVELOPMENT PLAN

400 NORTH MAIN STREET

ROCHESTER, NEW HAMPSHIRE 03657

43°-18'-56.21"N

70°-59'-42.56"W

DESCRIPTION

THE PROJECT CONSISTS OF THE CONSTRUCTION OF APPROXIMATELY 45,328 SQUARE FEET OF RETAIL DEVELOPMENT WITH ASSOCIATED PARKING AND SITE WORK. THE WORK IS ANTICIPATED TO START IN 2018, AND BE COMPLETED BY 2019.

THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY ±8.15 ACRES.

SOIL CHARACTERISTICS

BASED ON THE NRCS WEB SOIL SURVEY FOR STRAFFORD COUNTY COUNTY, THE SOILS ON SITE CONSIST OF HINCKLEY LOAMY SAND AND GLOUCESTER FINE SANDY LOAM SOILS WHICH ARE IN HYDROLOGIC SOIL GROUP RATING A.

NAME OF RECEIVING WATERS

THE STORMWATER RUNOFF FROM THE SITE WILL BE DISCHARGED VIA OVERLAND FLOW TO AN UNNAMED WETLAND AND ULTIMATELY FLOWS TO THE COCHECO RIVER.

SEQUENCE OF MAJOR ACTIVITIES

1. CUT AND CLEAR TREES

2. 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

3. 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.

4. CLEAR AND DISPOSE OF DEBRIS.

5. CONSTRUCT TEMPORARY CULVERTS AND DIVERSION CHANNELS AS REQUIRED.

6. GRADE AND GRAVEL ROADWAYS AND PARKING AREAS - ALL ROADS AND PARKING AREA SHALL BE STABILIZED IMMEDIATELY AFTER THEIR CONSTRUCTION.

7. BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED IMMEDIATELY AFTER THEIR CONSTRUCTION.

8. DAILY, OR AS REQUEST TEMPORARY BERMS, DRAINS, DITCHES, SILT FENCES, SEDIMENT TRAPS, ETC., MULCH AND SEED AS REQUIRED.

9. FINISH PAVING ALL ROADWAYS AND PARKING LOTS.

10. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES.

11. COMPLETE PERMANENT SEEDING AND LANDSCAPING.

12. 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

1. 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.

2. 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.

3. 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.

4. 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.

5. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION.

6. ALL DISTURBED AREAS NOT OTHERWISE BEING TREATED SHALL RECEIVE 6" LOAM, SEED, AND FERTILIZER.

7. 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 1/2 THE FILTER HEIGHT.

8. CONSTRUCT EROSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1.

STABILIZATION

1. A SITE SHALL BE CONSIDERED STABLE WHEN IT IS IN A CONDITION IN WHICH THE SOILS ON THE SITE WILL NOT ERODE UNDER THE CONDITIONS OF A 10-YEAR STORM, SUCH AS BUT NOT LIMITED TO:

- A. IN AREAS THAT WILL NOT BE PAVED, A MINIMUM OF 85% VEGETATIVE COVER HAS BEEN ESTABLISHED, A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL, SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED, OR EROSION CONTROL BLANKETS HAVE BEEN INSTALLED IN ACCORDANCE WITH ENV-HQ 1506.03; OR
- B. IN AREAS TO BE PAVED, BASE COURSE GRAVELS MEETING THE GRADATION REQUIREMENTS OF NHDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, 2006, ITEM NO. 304.1 OR 304.2 HAVE BEEN INSTALLED.

2. WINTER STABILIZATION PRACTICES:

- A. ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 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.
- B. 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.
- C. AFTER OCTOBER 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.

3. 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:

- A. TEMPORARY SEEDING
- B. MULCHING
- C. 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.
- D. 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 OCTOBER 15.

DUST CONTROL

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD.

2. 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.

3. DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ADJUTING AREAS INCLUDING BUT NOT LIMITED TO ROUTE 11 (FARMINGTON ROAD).

STOCKPILES

1. LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM CATCH BASINS, SWALES, AND CULVERTS.

2. ALL STOCKPILES SHOULD BE SURROUNDED WITH TEMPORARY EROSION CONTROL MEASURES PRIOR TO THE ONSET OF PRECIPITATION.

3. 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.

4. 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

1. TEMPORARY GRASS COVER

- A. 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.
- B. SEEDING
 - 1. UTILIZE ANNUAL RYE GRASS AT A RATE OF 40 LBS/ACRE.
 - 2. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF TWO (2) INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
 - 3. APPLY SEED UNIFORMLY BY HAND, CYCLO-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.
- C. 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, CHAIN DAMS, ETC.).

2. VEGETATIVE PRACTICE

- A. FOR PERMANENT MEASURES AND PLANTINGS.
- 1. 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.
- 2. 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.

3. 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 CONFORMING 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.

4. 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.

5. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AS INDICATED ABOVE.

6. 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 RESEED, AND ALL NOXIOUS WEEDS REMOVED.

7. THE CONTRACTOR SHALL PROTECT AND MAINTAIN THE SEEDED AREAS UNTIL ACCEPTED.

8. A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL BE APPLIED AT THE INDICATED RATE:

- CREeping RED FESCUE 50 LBS/ACRE
- KENTUCKY BLUEGRASS 100 LBS/ACRE
- PERENNIAL 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.

9. 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

1. THE FOLLOWING ARE THE ONLY NON-STORMWATER DISCHARGES ALLOWED. ALL OTHER NON-STORMWATER DISCHARGES ARE PROHIBITED ON SITE.

- A. THE CONCRETE DELIVERY TRUCKS SHALL, WHENEVER POSSIBLE, USE WASHOUT FACILITIES AT THEIR OWN PLANT OR DISPATCH FACILITY.
- B. IF IT IS NECESSARY, SITE CONTRACTOR SHALL DESIGNATE SPECIFIC WASHOUT AREAS AND DESIGN FACILITIES TO HANDLE ANTICIPATED WASHOUT WATER.
- C. CONTRACTOR SHALL LOCATE WASHOUT AREAS AT LEAST 150 FEET AWAY FROM STORM DRAINS, SWALES AND SURFACE WATERS OR DELINEATED WETLANDS.
- D. INSPECT WASHOUT FACILITIES DAILY TO DETECT LEAKS OR TEARS AND TO IDENTIFY WHEN MATERIALS NEED TO BE REMOVED.

ALLOWABLE NON-STORMWATER DISCHARGES

1. DISCHARGES FROM FIRE-FIGHTING ACTIVITIES

2. FIRE HYDRANT FLUSHINGS

3. WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED

4. WATER USED TO CONTROL DUST

5. POTABLE WATER INC. UNCONTAMINATED WATER LINE FLUSHINGS

6. ROUTINE EXTERNAL BUILDING WASH DOWN -NO DETERGENTS

7. PAVEMENT WASH WATERS -NO SPILLS OR DETERGENTS

8. UNCONTAMINATED AIR CONDITIONING/COMPRESSOR CONDENSATE

9. UNCONTAMINATED GROUND WATER OR SPRING WATER

10. FOUNDATION OR FOOTING DRAINS -NOT CONTAMINATED

11. UNCONTAMINATED EXCAVATION DEWATERING

12. LANDSCAPE IRRIGATION

WASTE DISPOSAL

1. WASTE MATERIALS

- A. ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN A DUMPSITE.
- B. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE.
- C. ALL PERSONNEL SHALL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.

2. HAZARDOUS WASTE

- A. ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER.
- B. SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.

3. SANITARY WASTE

- A. 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

1. 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.

2. 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:

- A. GOOD HOUSEKEEPING:
 - THE FOLLOWING GOOD HOUSEKEEPING PRACTICES SHALL BE FOLLOWED ON SITE DURING THE CONSTRUCTION PROJECT:
 - 1. ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB SHALL BE STORED ON SITE.
 - 2. 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.
 - 3. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.
 - 4. THE SITE SUPERINTENDENT SHALL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.
 - 5. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
 - 6. WHENEVER POSSIBLE ALL OF A PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
 - B. HAZARDOUS PRODUCTS:
 - THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:
 - 1. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
 - 2. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION.
 - 3. SURPLUS PRODUCT THAT MUST BE DISPOSED OF SHALL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.
 - C. PRODUCT SPECIFICATION PRACTICES:
 - THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE FOLLOWED ON SITE:
 - 1. PETROLEUM PRODUCTS:
 - a. ALL ON SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE.
 - b. 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.
 - 2. FERTILIZERS:
 - a. FERTILIZERS USED SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS.
 - b. ONCE APPLIED FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER.
 - c. 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.
 - 3. PAINTS:
 - a. ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE.
 - b. EXCESS PAINT SHALL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM.
 - c. EXCESS PAINT SHALL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
 - D. SPILL CLEANUP 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:
 - 1. 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.
 - 2. 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.
 - 3. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
 - 4. THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL SHALL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
 - 5. SPILLS OF TOXIC OR HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE LOCAL, STATE OR FEDERAL AGENCIES AS REQUIRED.
 - 6. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.
 - E. VEHICLE FUELING AND MAINTENANCE PRACTICE:
 - 1. CONTRACTOR SHALL MAKE AN EFFORT TO PERFORM EQUIPMENT/VEHICAL FUELING AND MAINTENANCE AT AN OFF-SITE FACILITY.
 - 2. CONTRACTOR SHALL PROVIDE AN ON-SITE FUELING AND MAINTENANCE AREA THAT IS CLEAN AND DRY.
 - 3. IF POSSIBLE THE CONTRACTOR SHALL KEEP AREA COVERED.
 - 4. CONTRACTOR SHALL KEEP A SPILL KIT AT THE FUELING AND MAINTENANCE AREA.
 - 5. CONTRACTOR SHALL VEHICLES SHALL BE INSPECTED REGULARLY FOR LEAKS AND DAMAGE.
 - 6. 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 ON SITE AT ALL TIMES.

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

- 1. 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.
- 2. AN OBSERVATION REPORT SHALL BE MADE AFTER EACH OBSERVATION AND DISTRIBUTED TO THE ENGINEER, THE OWNER, AND THE CONTRACTOR.
- 3. A REPRESENTATIVE OF THE SITE CONTRACTOR, SHALL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR ACTIVITIES.
- 4. IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS OF REPORT.

PLAN VIEW

75' MIN

(5' MIN. IF 3 TO 6 INCH BERM IS INSTALLED)

EXISTING GROUND

EXISTING PAVEMENT

MINIMUM 3 INCH STONE

PROFILE

50' MIN.

MIRAFI FW-700 OR EQUAL

NOTE: SEE EROSION CONTROL NOTES FOR MATERIAL, INSTALLATION, AND MAINTENANCE REQUIREMENTS.

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

STONE CHECK DAM

NOT TO SCALE

2"-3" STONE

24"

24"

2"-3" STONE

6"

24"

FRONT VIEW

SIDE VIEW

WATER FLOW

AREA TO BE PROTECTED

WORK AREA

SILT SOCK

2" X 2" WOODEN STAKE

SILT SOCK (12" - 18" TYPICAL)

3' - 4'

12' ±

SILT SOCK

NOT TO SCALE

NOTE:

1. INLET PROTECTION BARRIER SHALL BE SILT SACK BY ACF ENVIRONMENTAL OR APPROVED EQUAL.

2. INLET PROTECTION BARRIER SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

3. INLET PROTECTION BARRIER SHALL BE USED IN CATCHBASIN WHERE PATH IS WITHIN VEHICULAR TRAVEL WAY.

INLET PROTECTION BARRIER

NOT TO SCALE

FLOW

FLOW

FLOW

DIKE, IF NECESSARY, TO DIVERT FLOW INTO TRAP

WEIR OR EMBANKMENT IF USING STONE OUTLET OR PIPE OUTLET

PERFORATED RISER IF USING PIPE OUTLET

EXCAVATION FOR REQUIRED STORAGE

3:1 MAX. SLOPE SIDE SLOPES TO BE STABILIZED

SECTION

C. OVERLAP-BURY UPPER END OF LOWER STRIP AS IN "A" AND "B". OVERLAP END OF TOP AND STAPLE.

OVERFLOW

STAPLE OUTSIDE EDGE ON 2 INCH CENTERS.

4 INCH OVERLAP OF JUTE STRIPS WHERE TWO OR MORE STRIP WIDTHS ARE REQUIRED. STAPLE ON 18 INCH CENTERS.

D. EROSION STOP-FOLD OF JUTE BURIED IN SLIT TRENCH AND TAMPED; DOUBLE ROW OF STAPLES.

JUTE MATTING DETAIL

NOT TO SCALE

SEDIMENT TRAP

NOT TO SCALE

MARK

DATE

DESCRIPTION

PROJECT NO: K5002-002

DATE: 04/10/2018

FILE: K5002-002-C-501.DWG

DRAWN BY: JPC

CHECKED: KAM

APPROVED: BLM

EROSION CONTROL NOTES AND DETAILS SHEET

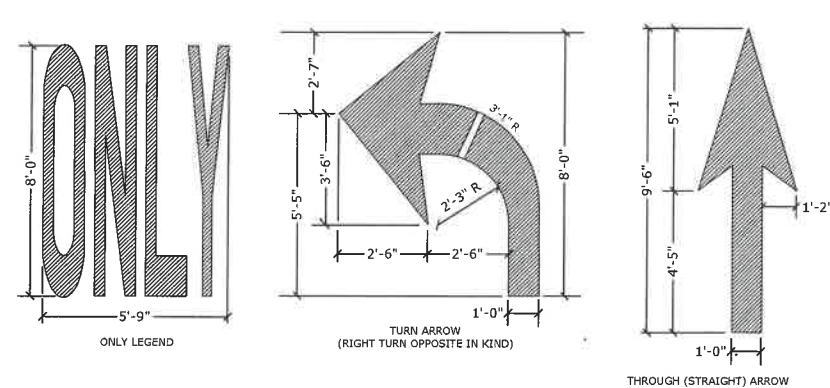
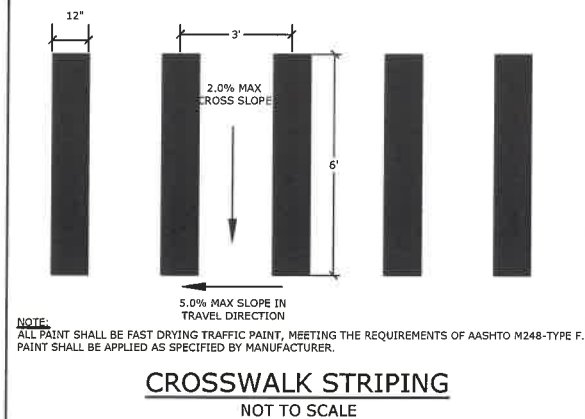
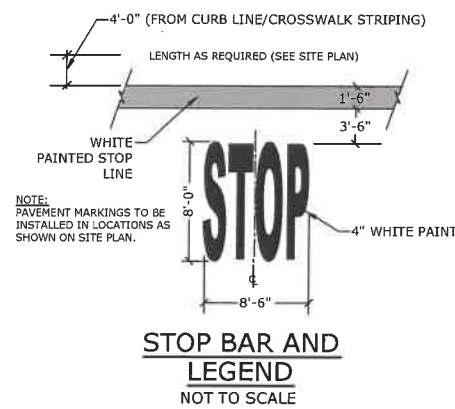
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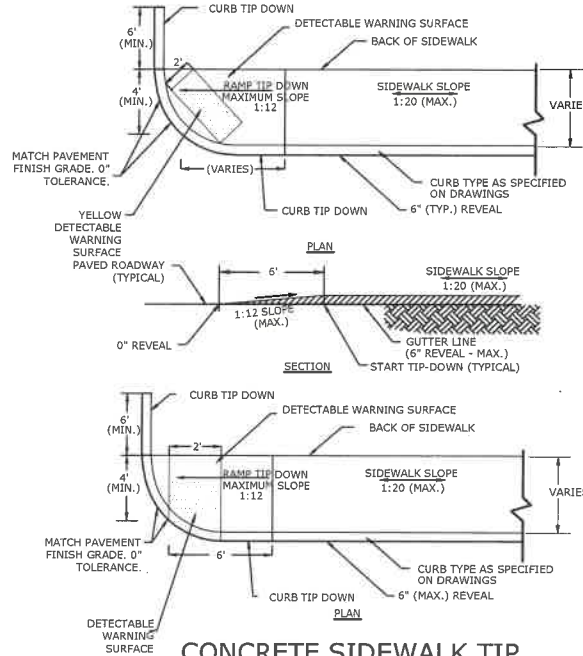
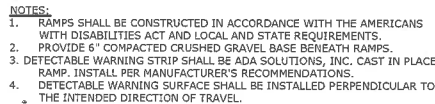
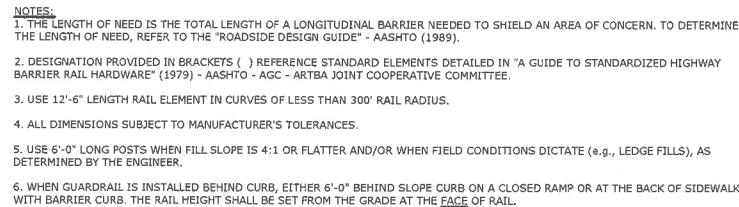
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PLOT DATE: Friday, April 06, 2018 10:18 PM BY: Kenneth A. Narrogeorge

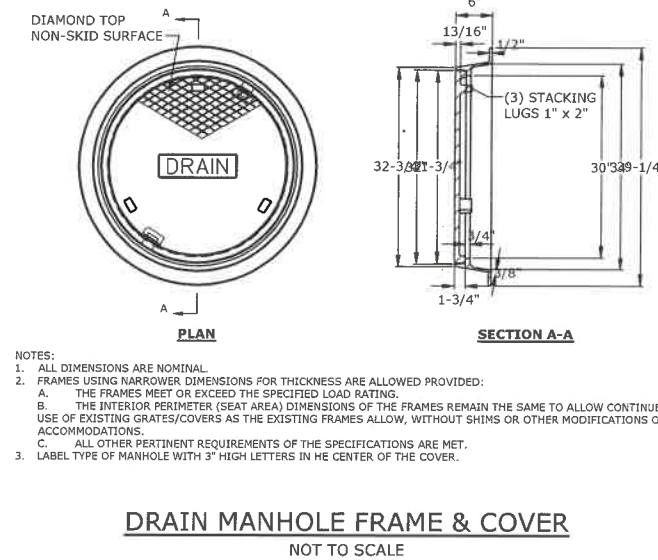
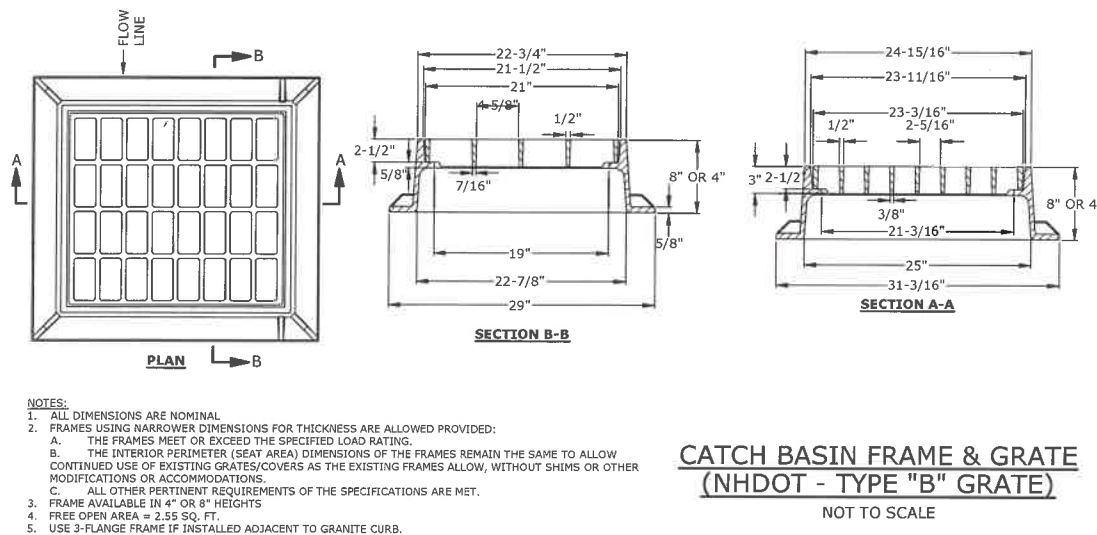
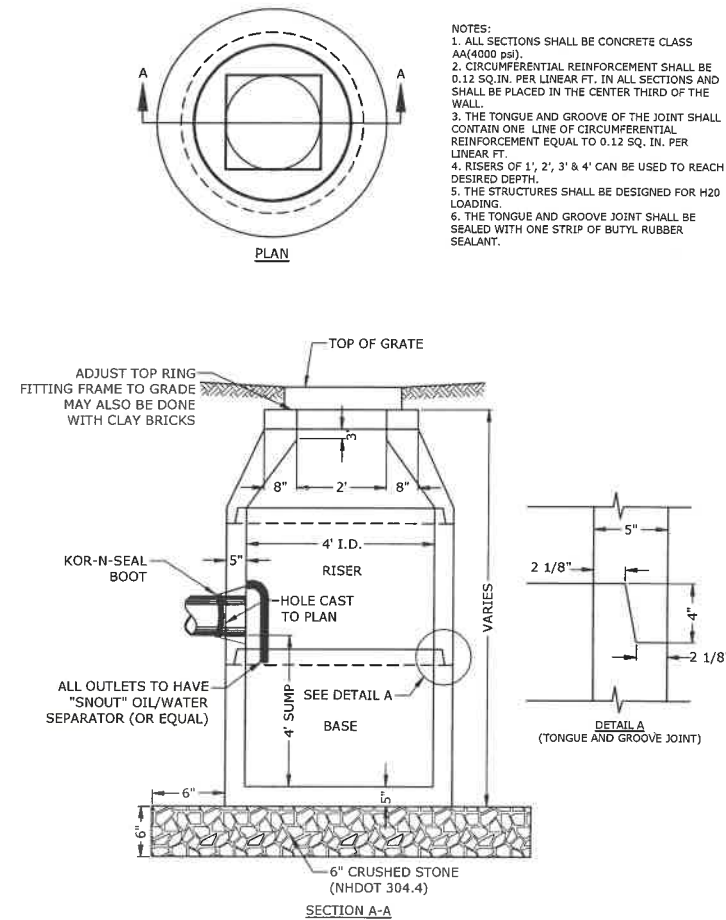
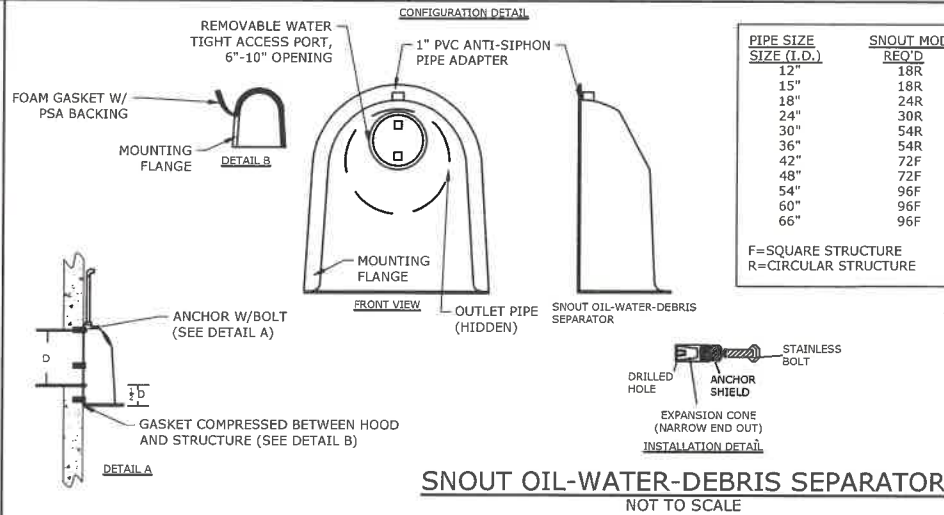
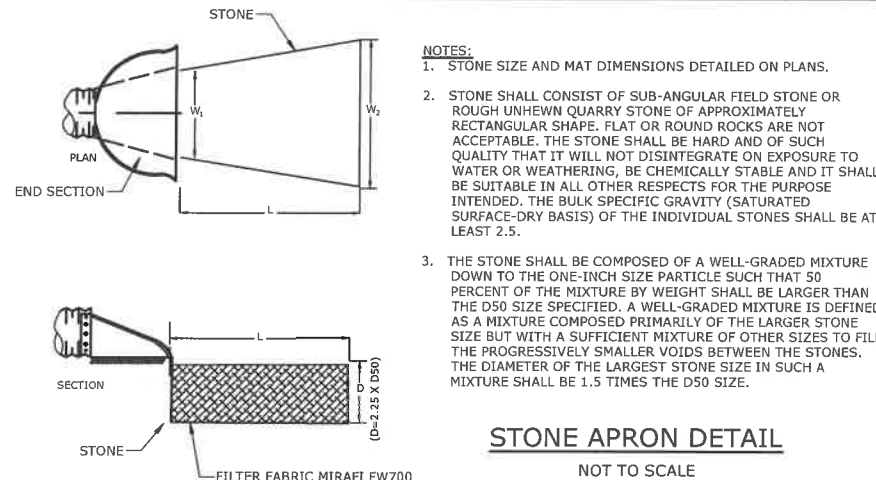
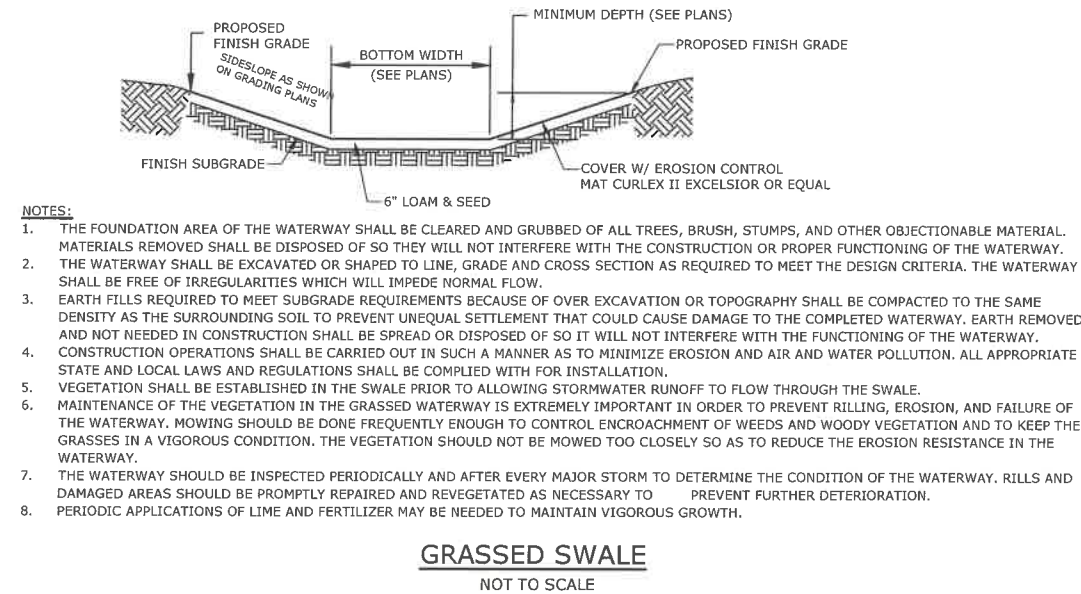
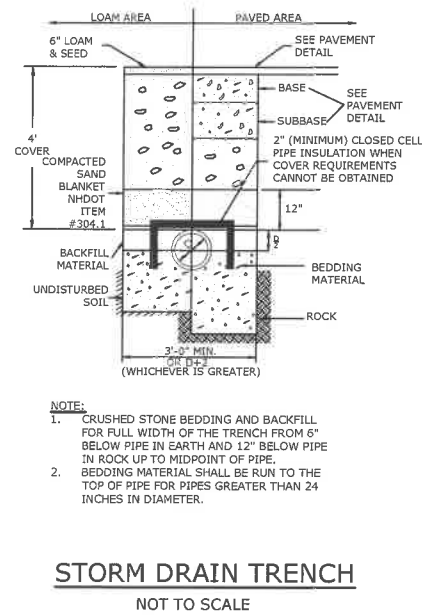
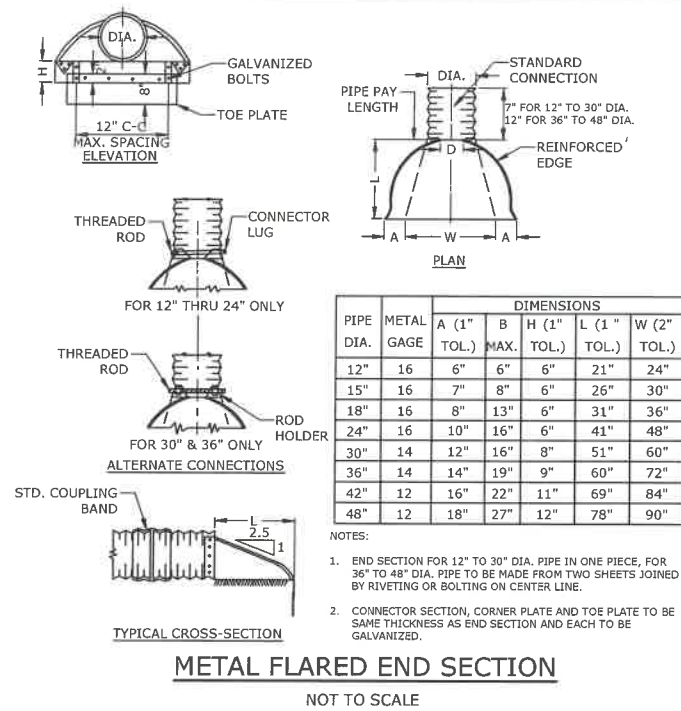
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Proposed Commercial Development

Kincora Development, LLC

400 North Main Street
Rochester, New Hampshire

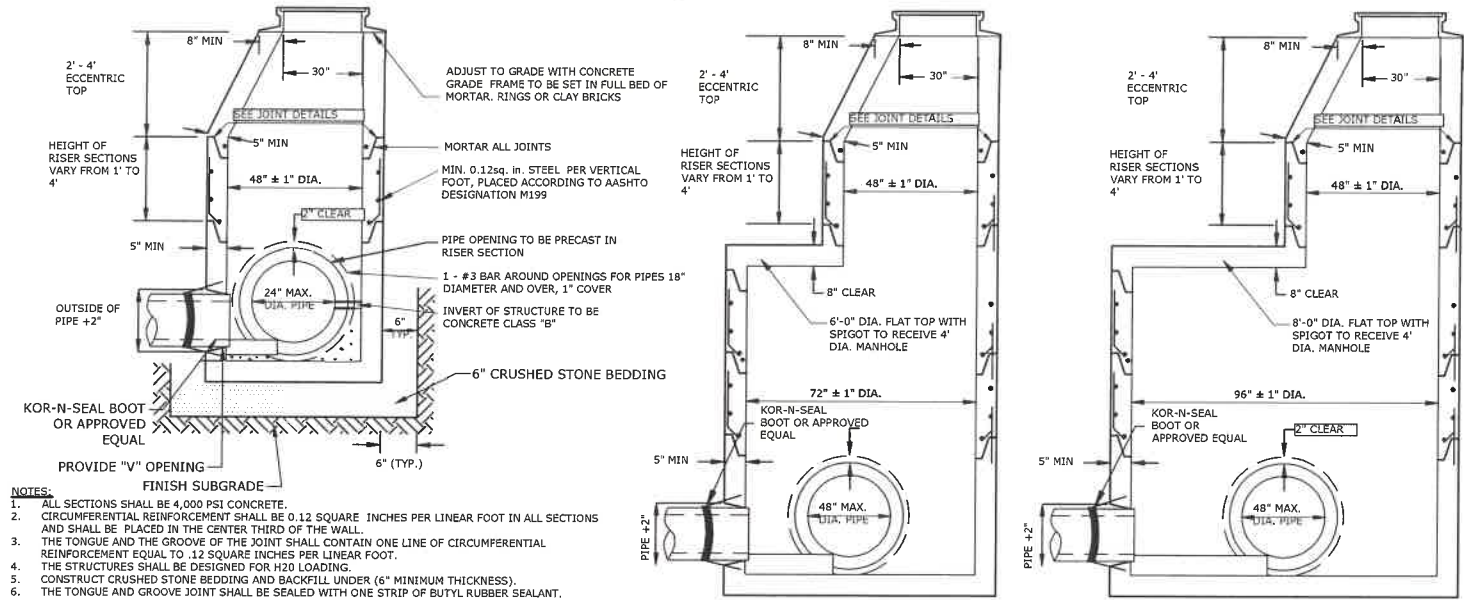
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DATE:	04/10/2018	
FILE:	K5002-002-C-501.DWG	
DRAWN BY:	JPC	
CHECKED:	KAM	
APPROVED:	BLM	

DETAILS SHEET

SCALE: AS SHOWN

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Plot Date: Monday, April 09, 2018 Plotter: JPC P. Collins
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DRAIN MANHOLE (4' DIA)

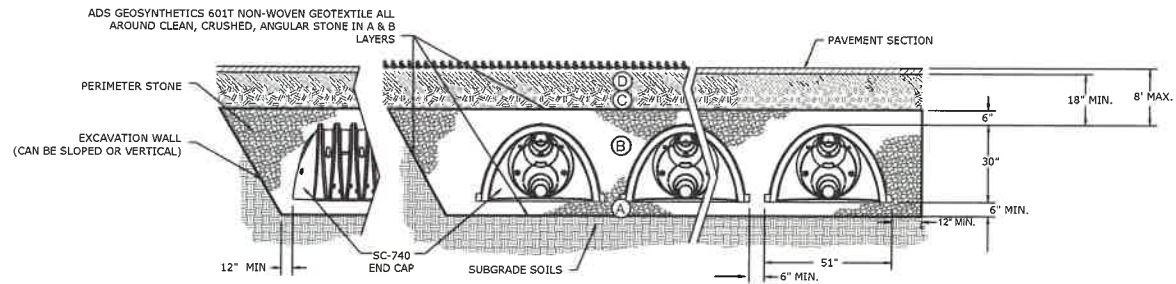
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DRAIN MANHOLE (6' DIA)

NOT TO SCALE

DRAIN MANHOLE (8' DIA)

NOT TO SCALE



ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	COMMON FILL (LOAM AND SEED AREAS) OR PAVEMENT SUBBASE (PAVED AREAS)	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M43 #57	BEGIN COMPACTIONS AFTER 12" OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs. DYNAMIC FORCE NOT TO EXCEED 20,000 lbs.
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 #57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 #57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ¹

PLEASE NOTE:

- WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.

STORMTECH SC-740 NOTES:

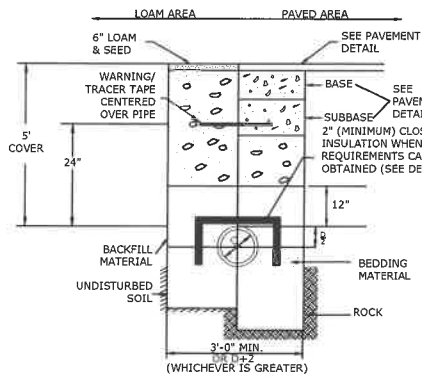
- SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.

UNDERGROUND INFILTRATION BASIN NOTES:

- SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) SHALL NOT BE DISCHARGED TO THE INFILTRATION SYSTEM.
- EXPOSED SOIL SURFACE SHALL NOT BE TRAFFICKED WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, EXCAVATIONS SHALL BE PERFORMED WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION SYSTEM.
- AFTER AREA IS EXCAVATED TO FINAL DESIGN ELEVATION, THE FLOOR SHOULD BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW TO RESTORE INFILTRATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG.
- INFILTRATION SYSTEMS SHALL NOT BE PLACED INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
- FOR ALL UNDERGROUND INFILTRATION SYSTEMS, A LETTER SHALL BE PROVIDED TO THE NHDES ALTERATION OF TERRAIN BUREAU BY A QUALIFIED ENGINEER STATING THAT THE INDIVIDUAL OBSERVED SUCH SYSTEMS PRIOR TO BACKFILL AND THAT THE SYSTEM CONFORMS TO THE APPROVED PLANS AND SPECIFICATIONS.

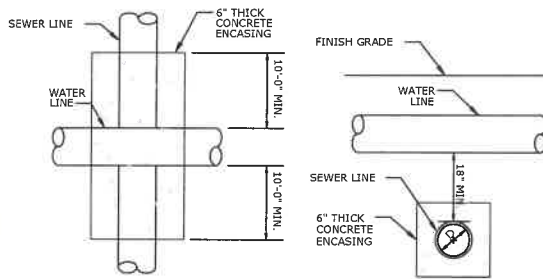
UNDERGROUND INFILTRATION BASINS (STORMTECH OR EQUAL)

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WATER TRENCH

NOT TO SCALE

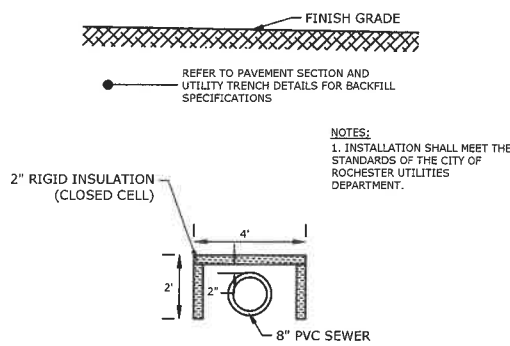


NOTES:

- A 10 FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN ALL WATER AND SANITARY SEWER CROSSINGS. WHERE SEWER AND WATER CROSS, ENCASE SEWER IN CONCRETE 6\"/>

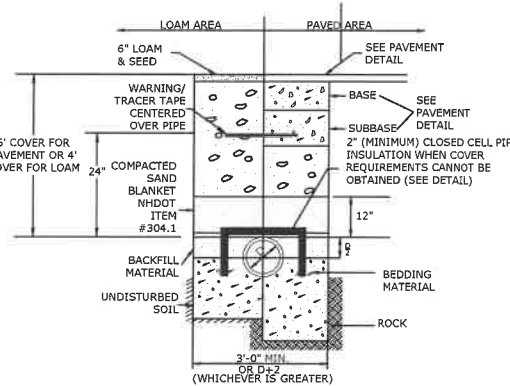
WATER & SEWER CROSSING

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UTILITY PIPE INSULATION DETAIL

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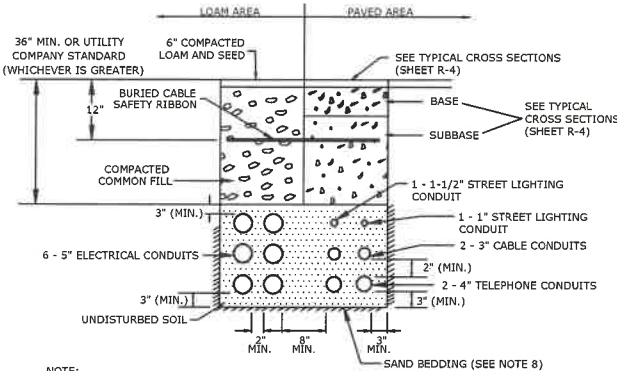


NOTE:

- CRUSHED STONE BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 6\"/>
- BEDDING MATERIAL SHALL BE RUN TO THE TOP OF PIPE FOR PIPES GREATER THAN 24 INCHES IN DIAMETER.

SEWER TRENCH

NOT TO SCALE



NOTE:

- 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.
- DIMENSIONS SHOWN REPRESENT OWNERS MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS MAY BE GREATER BASED ON UTILITY COMPANY STANDARDS, BUT SHALL NOT BE LESS THAN THOSE SHOWN.
- NO CONDUIT RUN SHALL EXCEED 360 DEGREES IN TOTAL BENDS.
- 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.
- 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.
- 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.
- ALL 90° SWEEPS WILL BE MADE USING RIGID GALVANIZED STEEL. SWEEPS WITH A 36 TO 48 INCH RADIUS.
- 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.

ELECTRICAL AND COMMUNICATION CONDUIT

NOT TO SCALE



Proposed Commercial Development

Kincora Development, LLC

400 North Main Street
Rochester,
New Hampshire

MARK	DATE	DESCRIPTION
PROJECT NO:	K5002-002	
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FILE:	K5002-002-C-501.DWG	
DRAWN BY:	JPC	
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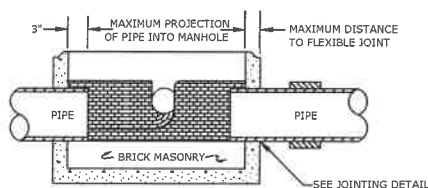
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SCALE: AS SHOWN

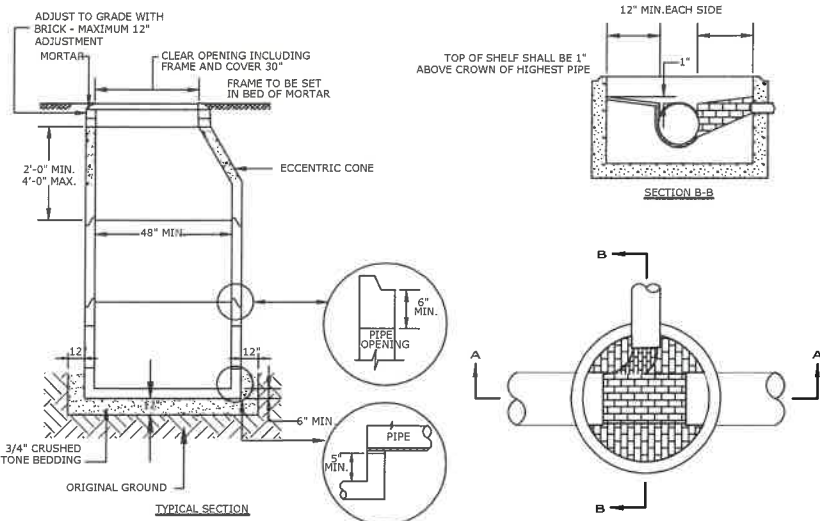
C-505

NOTES:

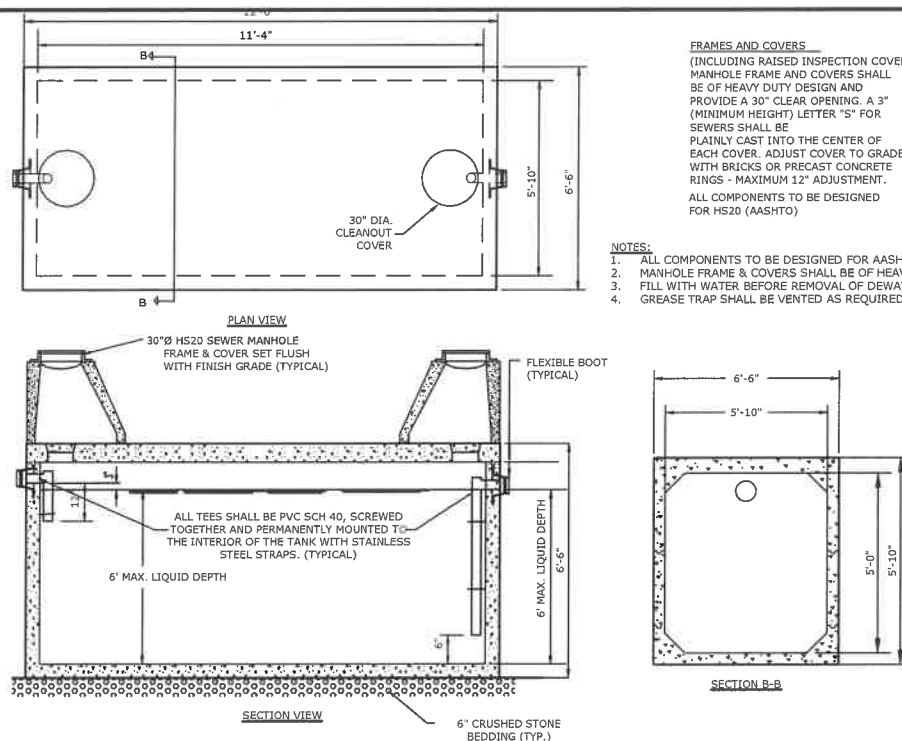
1. INVERT AND SHELVE TO BE PLACED AFTER EACH LEAKAGE TEST.
2. CARE SHALL BE TAKEN TO INSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE SEWER INVERT.
3. INVERT BRICKS SHALL BE LAID ON EDGE.
4. BITUMINOUS WATERPROOF COATING TO BE APPLIED TO ENTIRE EXTERIOR OF MANHOLE.
5. **FRAMES AND COVERS:** 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.
7. BARREL AND CONE SECTIONS SHALL BE PRECAST REINFORCED CONCRETE DESIGNED FOR H2O LOADING, AND CONFORMING TO ASTH C478-06.
8. OUTSIDE DROPS ARE NOT PERMITTED. ANY PIPE GREATER THAN 8" IN DIAMETER USED FOR A DROP SHALL REQUIRE A FIVE FOOT (5') INSIDE DIAMETER MANHOLE.



SECTION A-A



SEWER MANHOLE
NOT TO SCALE

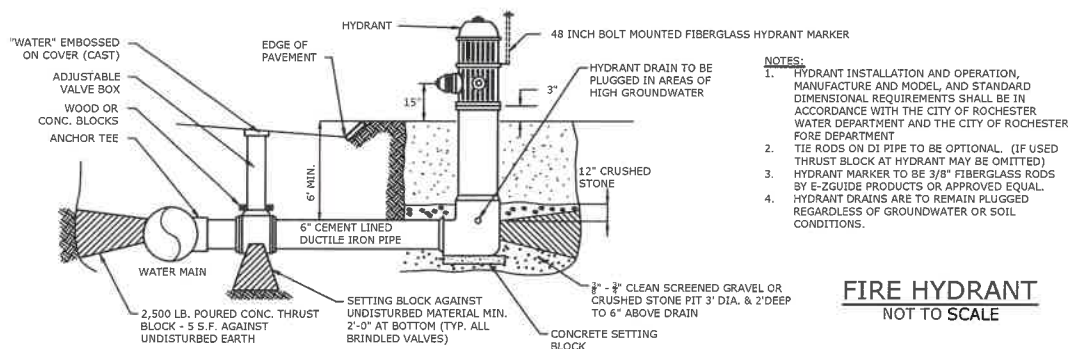


2,000 GALLON GREASE TRAP (TYP)
NOT TO SCALE

FRAMES AND COVERS
(INCLUDING RAISED INSPECTION COVERS)
MANHOLE FRAME AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30" CLEAR OPENING. A 3" (MINIMUM HEIGHT) LETTER "S" FOR SEWERS SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER. ADJUST COVER TO GRADE WITH BRICKS OR PRECAST CONCRETE RINGS - MAXIMUM 12" ADJUSTMENT. ALL COMPONENTS TO BE DESIGNED FOR HS20 (AASHTO)

NOTES:

1. ALL COMPONENTS TO BE DESIGNED FOR AASHTO H20 LOADING.
2. MANHOLE FRAME & COVERS SHALL BE OF HEAVY DUTY DESIGN.
3. FILL WITH WATER BEFORE REMOVAL OF DEWATERING DEVICES.
4. GREASE TRAP SHALL BE VENTED AS REQUIRED BY CODE.



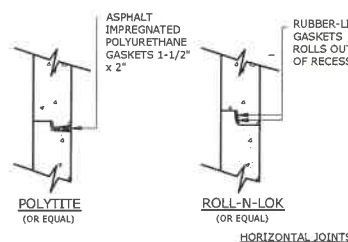
FIRE HYDRANT
NOT TO SCALE

NOTES:

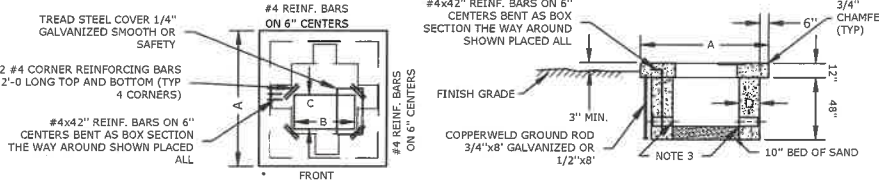
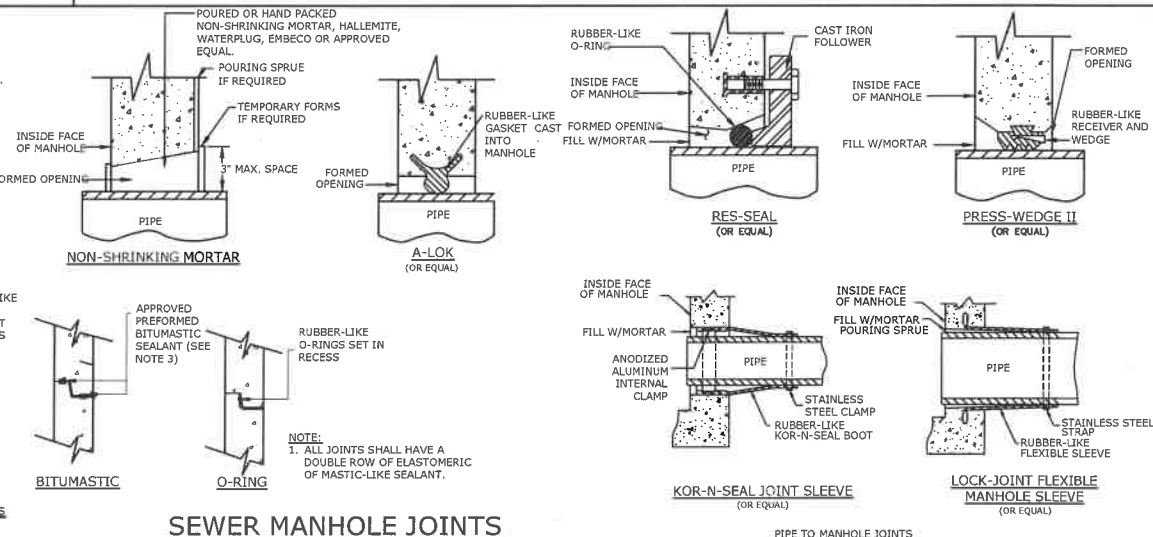
1. HYDRANT INSTALLATION AND OPERATION, MANUFACTURE AND MODEL, AND STANDARD DIMENSIONAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE CITY OF ROCHESTER WATER DEPARTMENT AND THE CITY OF ROCHESTER FORE DEPARTMENT.
2. TIE RODS ON DI PIPE TO BE OPTIONAL. (IF USED THRUST BLOCK AT HYDRANT MAY BE OMITTED)
3. HYDRANT MARKER TO BE 3/8" FIBERGLASS RODS BY E-ZGUIDE PRODUCTS OR APPROVED EQUAL. HYDRANT DRAINS ARE TO REMAIN PLUGGED REGARDLESS OF GROUNDWATER OR SOIL CONDITIONS.

NOTES:

1. HORIZONTAL JOINTS BETWEEN THE SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF A TYPE APPROVED BY THE ENGINEER, WHICH TYPE SHALL BE SEALED FOR WATER TIGHTNESS USING A DOUBLE ROW OF ELASTOMERIC OR MASTIC-LIKE SEALANT.
2. PIPE TO MANHOLE JOINTS SHALL BE ONLY AS APPROVED BY THE ENGINEER IN GENERAL AND, IN GENERAL, WILL DEPEND FOR WATER TIGHTNESS UPON EITHER AN APPROVED NON-SHRINKING MORTAR OR ELASTOMERIC SEALANT.
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
NOT TO SCALE

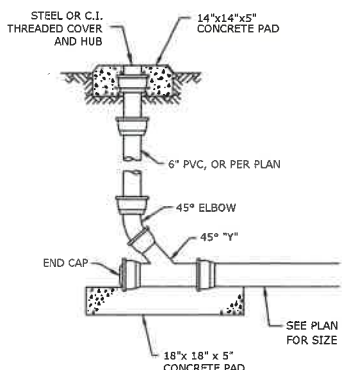


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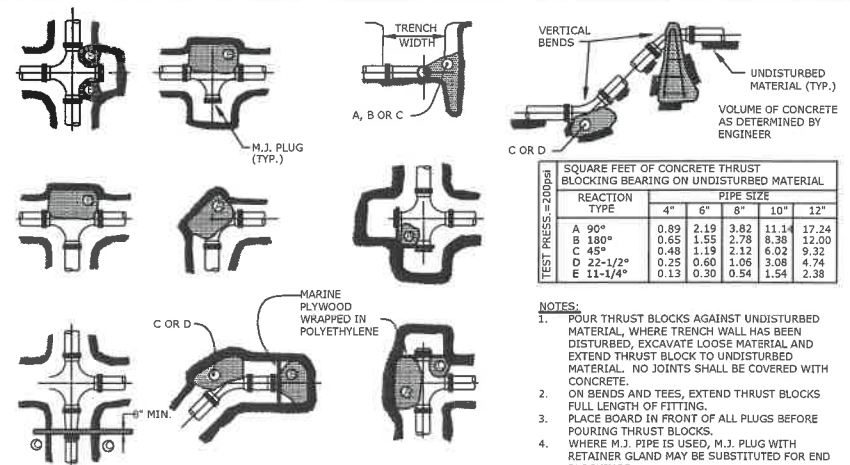
1. SET CONCRETE BOX PAD ON SUITABLE GRAVEL BASE AND PROVIDE ADEQUATE DRAINAGE AWAY FROM PAD. REINFORCE AS SHOWN. LOCATION TO BE ACCESSIBLE BY TRUCK AND SUITABLY PROTECTED FROM PLOW AND TRAFFIC DAMAGE.
2. "FRONT" DENOTES THE SIDE ON WHICH THE ACCESS DOORS ARE LOCATED. THE PAD MUST BE INSTALLED SO THAT 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.
4. PROVIDE REMOVABLE STEEL COVER, SET FLUSH WITH TOP OF CONCRETE- WITH MINIMUM OF 2" BEARING ON REAR EDGE AND ENDS.
5. INSTALL GROUND ROD 6" IN FRONT OF LEFT FRONT CORNER OF PAD. TOP OF GROUND ROD TO BE 6" BELOW FINAL GRADE.
6. COORDINATE AND VERIFY ALL PAD DIMENSIONS, LOCATIONS AND INSTALLATION WITH THE LOCAL ELECTRICAL POWER UTILITY COMPANY.

PRECAST CONCRETE TRANSFORMER PAD
NOT TO 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"



CLEAN-OUT
NOT TO SCALE



THRUST BLOCKING DETAIL
NOT TO SCALE

SQUARE FEET OF CONCRETE THRUST BLOCKING BEARING ON UNDISTURBED MATERIAL

REACTION TYPE	4"	6"	8"	10"	12"
A 90°	0.89	2.19	3.82	11.14	17.24
B 180°	0.65	1.55	2.78	8.38	12.50
C 45°	0.48	1.19	2.12	6.02	9.32
D 22-1/2°	0.25	0.60	1.06	3.08	4.74
E 11-1/4°	0.13	0.30	0.54	1.54	2.38

NOTES:

1. 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.
2. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
3. PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCKS.
4. WHERE M.J. PIPE IS USED, M.J. PLUG WITH RETAINER GLAND MAY BE SUBSTITUTED FOR END BLOCKINGS.
5. INSTALLATION AND STANDARD DIMENSIONAL REQUIREMENTS SHALL BE PER CITY OF ROCHESTER WATER DEPARTMENT STANDARDS.

Proposed Commercial Development

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MARK DATE DESCRIPTION

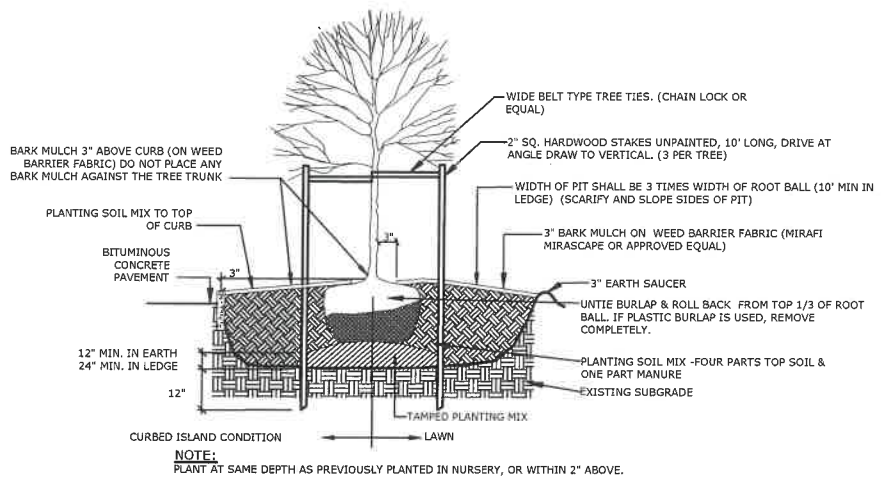
PROJECT NO: K5002-002
DATE: 04/10/2018
FILE: K5002-002-C-501.DWG
DRAWN BY: JPC
CHECKED: KAM
APPROVED: BLM

DETAILS SHEET

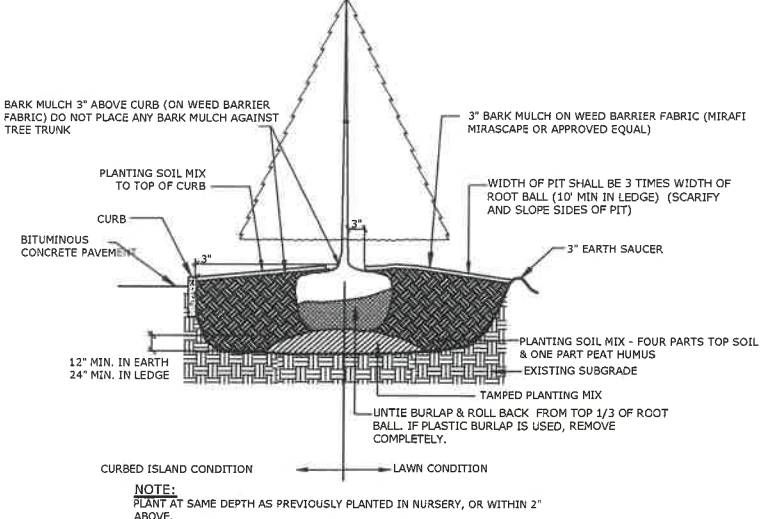
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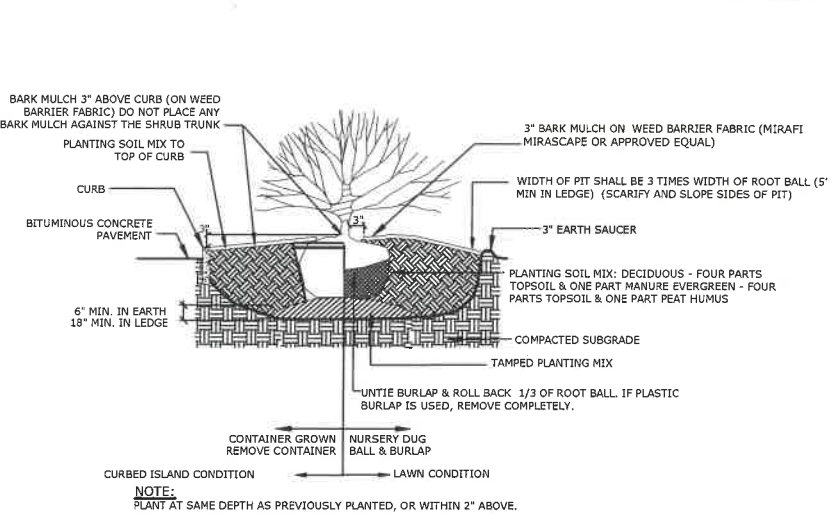
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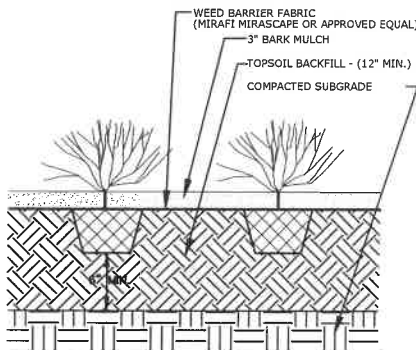
DECIDUOUS TREE PLANTING
 NOT TO SCALE



EVERGREEN TREE PLANTING
 NOT TO SCALE



SHRUB PLANTING
 NOT TO SCALE



PERENNIAL PLANTING
 NOT TO SCALE



Proposed
 Commercial
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 LLC

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SEE SHEET G-101 FOR NOTES
AND LEGEND INFORMATION

LEGEND

- DECIDUOUS SHADE TREE
- DECIDUOUS ORNAMENTAL TREE
- EVERGREEN TREE
- SHRUBS OR PERENNIALS

Tighe&Bond
Engineers | Environmental Specialists

**Proposed
Commercial
Development**

Kincora
Development,
LLC

400 North Main Street
Rochester,
New Hampshire

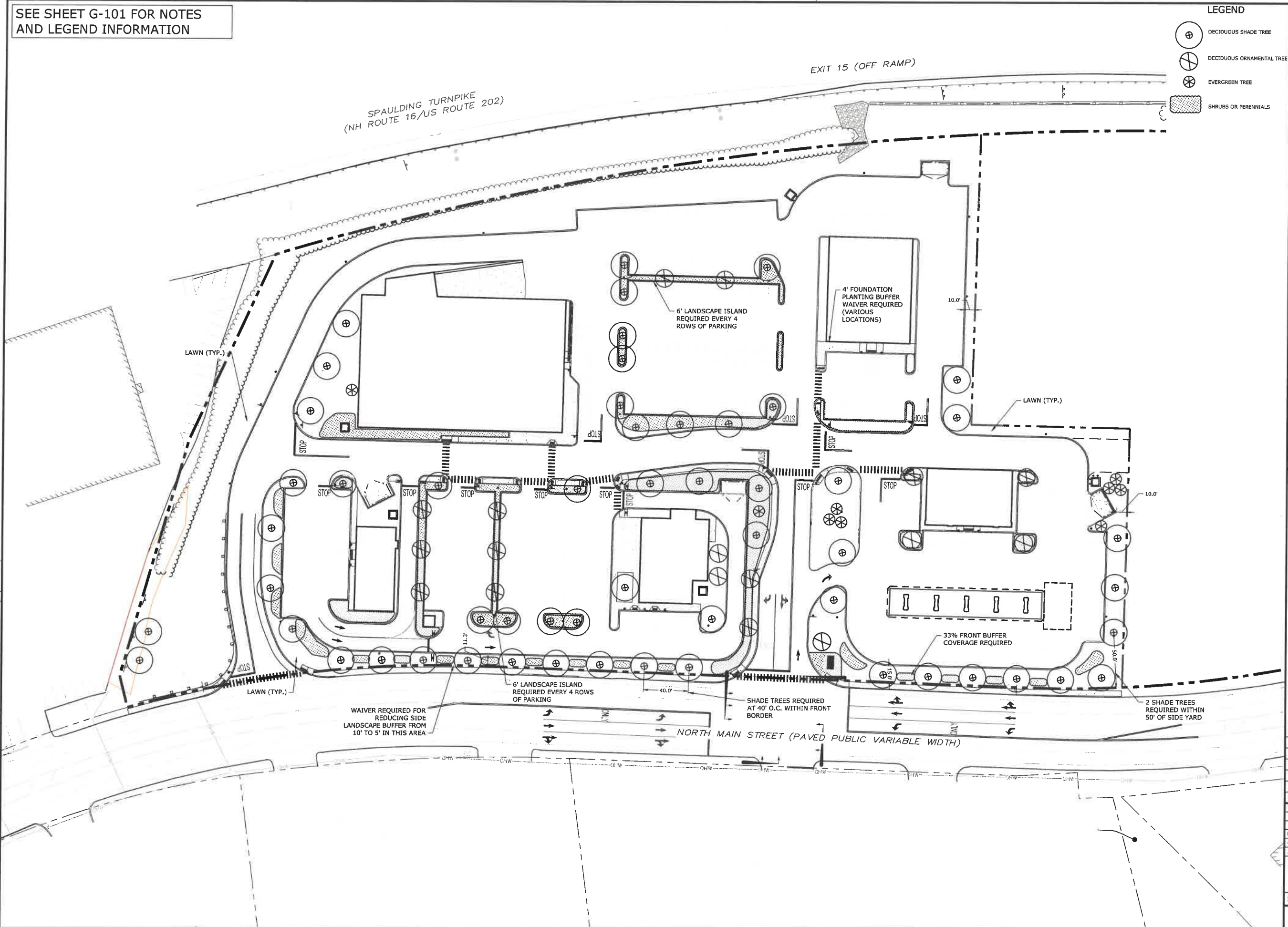
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DATE:	04/10/2018	
FILE:	K5002-002-L-101.DWG	
DRAWN BY:	JPC	
CHECKED:	KAM	
APPROVED:	BLM	

LANDSCAPE PLAN

SCALE: AS SHOWN

L-101

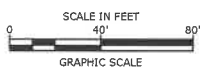
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Proposed Commercial Development

Kincora Development, LLC

400 North Main Street
Rochester,
New Hampshire



MARK	DATE	DESCRIPTION
PROJECT NO:	K5002-002	
DATE:	04/10/2018	
FILE:	K5002-002-E-101.DWG	
DRAWN BY:	JPC	
CHECKED:	KAM	
APPROVED:	BLM	

PHOTOMETRIC PLAN

SCALE: AS SHOWN

E-101

Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Lumens/Lamp	LLF	Total Watts
	15	L21	SINGLE	3819	1.000	630
	6	L23	SINGLE	N.A.	1.000	252
	11	L31	SINGLE	11648	1.000	946
	1	L32a	2 @ 90 DEGREES	11648	1.000	172
	1	L32b	BACK-BACK	11648	1.000	172
	4	L33	3 @ 90°	11648	1.000	1032
	8	L34	4 @ 90 DEGREES	11648	1.000	2752
	20	C	SINGLE	6408	1.000	1040
Description						
XSPW-A-0-3-30K-C-U-CS-P						
AL-42WLED-UD-CG-120-30K						
OSQ-A-NM-4ME-B-57K-UL-CS + OSQ-DACS DIRECT ARM						
OSQ-A-NM-4ME-B-57K-UL-CS						
OSQ-A-NM-4ME-B-57K-UL-CS						
OSQ-A-NM-4ME-B-57K-UL-CS						
OSQ-A-NM-4ME-B-57K-UL-CS + OSQ-DACS DIRECT ARM						
CPY250-B-DM-D-A-UL-WH-57K-PML-(6.9)						

Footcandles calculated using a 1.00 LLF					
Label	Avg	Max	Min	Avg/Min	Max/Min
All Calc Points	1.41	11.5	0.0	N.A.	N.A.
Gas Canopy	20.94	25	12	1.75	2.08

NATIONAL ACCOUNT PRICING, PLEASE CALL MIKE KREINER AT CREE LIGHTING:
224-250-1561 OR MIKE.KREINER@CREE.COM

Additional Required Equipment:
(59) OSQ-DACS Direct Arm Mount

Poles:
(11) CL-SSP-4011-25-D1-PS (25' x 4" x 11ga STEEL SQUARE POLE, Single)
(1) CL-SSP-4011-25-D3-PS (25' x 4" x 11ga STEEL SQUARE POLE, 2@90°)
(1) CL-SSP-4011-25-D2-PS (25' x 4" x 11ga STEEL SQUARE POLE, 2@180°)
(4) CL-SSP-4011-25-D5-PS (25' x 4" x 11ga STEEL SQUARE POLE, 3@90°)
(8) CL-SSP-4011-25-D6-PS (25' x 4" x 11ga STEEL SQUARE POLE, 4@90°)
Proposed poles meet 100 MPH sustained winds.
Mount 25' Pole on a 4" Concrete Base to Achieve MH=25'.
*** Iso-lines Represent 0.5FC Min ***