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By

# *Amendment to Approved Project*

## City of Rochester, New Hampshire

Case 216-8, 9, 10 Property Address 60 Farmington Road

Type of project: Site Plan X; Subdivision ___; Lot Line Adjustment ___; Other ___

Project name Proposed Commercial Development - Phase II

Date of original Planning Board approval February 22, 2016

Description of amendment The Site Plans have been amended based on anticipated tenant needs for the front commercial pads along Route 11

and the re-alignment of Marketplace Boulevard. Site improvements forthe front and rear commercial pads including access, parking, utilities, landscaping and stormwater

management have been modified based on these layout revisions. The Stormwater management systems have been designed tocollect and treat runoff from thecommercial

development areas andthe City's extension of Marketplace Boulevard. Stormwater management isdesigned inaccordance the NHDES Alteration of Terrain regulations.

Would this affect a wetland or wetland buffer or require a conditional use? Yes X No ___

Name of applicant or agent filling out this form Patrick M. Crimmins, PE(Tighe &Bond)

Mailing Address: 177 Corporate Drive, Portsmouth NH, 03801

Phone Number: 603.433.8818 Email Address: PMCrimmins@TigheBond.com

Please check box: Applicant ☐ Agent ☐

**Please note**: There is a $125.00 fee for amendments. They are reviewed by the Planning Board and a public hearing is held. Abutters must be renotified by the applicant. The applicant must submit any supplementary materials necessary to explain and support the amendment, such as a narrative and plans. This form, the abutter's list, the fee when applicable, and other necessary materials must be submitted at least 17 days prior to the Planning Board meeting at which the amendment will be presented (by the Friday, 2-1/2 weeks prior to the meeting to allow for public notice).

Signature of person completing form: Joshua Long Date: 11/25/19

Signature of property owner (if different): Joshua Long Date 11/25/19

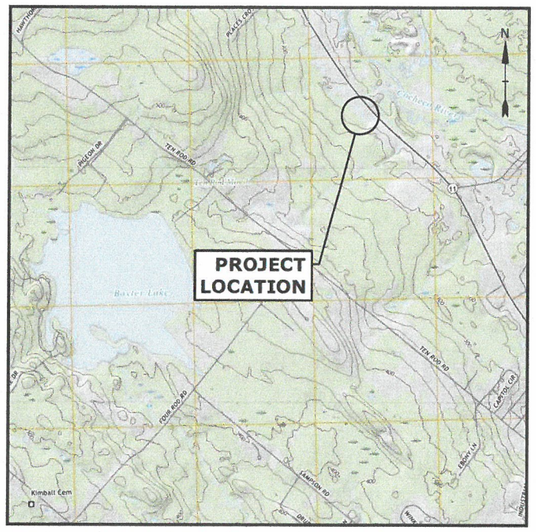
# PROPOSED COMMERCIAL DEVELOPMENT PHASE II

## 60 FARMINGTON ROAD (ROUTE 11)
## ROCHESTER, NEW HAMPSHIRE 03867
## PERMIT DRAWINGS
## NOVEMBER 25, 2019

RECEIVED
DEC 02 2019
By

| LIST OF DRAWINGS | | |
|---|---|---|
| SHEET NO. | SHEET TITLE | LAST REVISED |
| | COVER SHEET | 11/25/2019 |
| 1 OF 3 | EXISTING CONDITIONS PLAN | 10/23/2014 |
| 2 OF 3 | EXISTING CONDITIONS PLAN | 10/23/2014 |
| 3 OF 3 | EXISTING CONDITIONS PLAN | 10/23/2014 |
| C-101 | OVERALL EXCAVATION / EXISTING CONDITIONS PLAN | 11/25/2019 |
| C-102 | OVERALL SITE PLAN | 11/25/2019 |
| C-102.1 | SITE PLAN | 11/25/2019 |
| C-102.2 | SITE PLAN | 11/25/2019 |
| C-103 | OVERALL GRADING, DRAINAGE & EROSION CONTROL PLAN | 11/25/2019 |
| C-103.1 | GRADING, DRAINAGE & EROSION CONTROL PLAN | 11/25/2019 |
| C-103.2 | GRADING, DRAINAGE & EROSION CONTROL PLAN | 11/25/2019 |
| C-104 | OVERALL UTILITY PLAN | 11/25/2019 |
| C-104.1 | UTILITY PLAN | 11/25/2019 |
| C-104.2 | UTILITY PLAN | 11/25/2019 |
| C-105 | OVERALL LANDSACPE PLAN | 11/25/2019 |
| C-105.1 | LANDSCAPE PLAN | 11/25/2019 |
| C-105.2 | LANDSCAPE PLAN | 11/25/2019 |
| C-106.1 | PHOTOMETRICS PLAN | 11/25/2019 |
| C-107.1 | TRUCK TURNING PLAN | 11/25/2019 |
| C-501 | EROSION CONTROL NOTES & DETAILS SHEET | 11/25/2019 |
| C-502 | DETAILS SHEET | 11/25/2019 |
| C-503 | DETAILS SHEET | 11/25/2019 |
| C-504 | DETAILS SHEET | 11/25/2019 |
| C-505 | DETAILS SHEET | 11/25/2019 |
| C-506 | DETAILS SHEET | 11/25/2019 |
| C-507 | DETAILS SHEET | 11/25/2019 |
| C-508 | DETAILS SHEET | 11/25/2019 |
| C-509 | DETAILS SHEET | 11/25/2019 |

| LIST OF PERMITS & APPROVALS | | |
|---|---|---|
| FEDERAL | STATUS | DATE |
| EPA - CONSTRUCTION GENERAL PERMIT | PENDING | |
| STATE | | |
| NHDES - SEWER CONNECTION PERMIT | PENDING | |
| NHDES - ALTERATION OF TERRAIN PERMIT | PENDING | |
| LOCAL | | |
| SITE PLAN REVIEW PERMIT | PENDING | |
| SUBDIVISION PERMIT APPROVAL | PENDING | |




LOCATION MAP
SCALE: 1" = 2,000'

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.

**PREPARED BY:**
Tighe&Bond
Engineers | Environmental Specialists

PATRICK M. CRIMMINS, PE
BRAD MEZQUITA, PE

**OWNERS:**
Map 216 Lot 10
Public Service Co. of NH
Eversource Energy DBA
PO Box 270
Hartford, CT 06141

Map 216 Lot 8 & 9
Farmington Associates
Properties, LLC
322 Reservoir Street
Needham, MA 02494

**SURVEY CONSULTANT:**
DOUCET SURVEY INC
Serving Your Professional Surveying & Mapping Needs
102 Kent Place, Newmarket, NH 03857 (603) 659-6560
2 Commerce Drive (Suite 202) Bedford, NH 03110 (603) 614-4060
10 Storer Street (Riverview Suite) Kennebunk, ME (207) 502-7005
http://www.doucetsurvey.com

**APPLICANT:**
Farmington Associates
Properties, LLC
322 Reservoir Street
Needham, MA 02494

**COMPLETE SET 28 SHEETS**

Last Save Date: November 25, 2019 11:04 AM By: CML
Plot Date: Monday, November 25, 2019 Plotted By: Craig M. Langton
T&B File Location: J:\W\W5008 Waterstone Retail\004 - Ridge Marketplace Phase 2\Drawings_Figures\AutoCAD\Sheet\W5008-004_CS.dwg Layout Tab: CS

# EXISTING CONDITIONS PLAN
FOR
## COPPER CREEK CAPITAL PARTNERS
LAND OF
## STRATHAM INDUSTRIAL PROPERTIES, INC.
(TAX MAP 216, LOT 9)
AND
## PACKY'S INVESTMENT PROPERTIES, LLC
(TAX MAP 216, LOT 8)
ROUTE 11 (A.K.A. FARMINGTON ROAD)
ROCHESTER, NEW HAMPSHIRE

MATCH LINE — SHEET 2 / SHEET 1

MAP 216, LOT 8
263,435 Sq. Ft.
6.048 Acres

MAP 216, LOT 9
880,798 Sq. Ft.
20.220 Acres

MAP 216, LOT 7
CASACCIO RE HOLDINGS, LLC
P.O. BOX 1598
ROCHESTER, NH 03866-1598
S.C.R.D. BOOK 2923, PAGE 201

MAP 216, LOT 24
BLACK MARBLE REALTY TRUST
C/O SEACOAST MOTORCYCLES INC.
P O BOX 1740
NO. HAMPTON, NH 03862-1740
S.C.R.D. BOOK 4144, PAGE 142

MAP 216, LOT 20
NEWPORT PARTNERS LLC
P O BOX 1998
ROCHESTER, NH 03866-1998
S.C.R.D. BOOK 2558, PAGE 313

MAP 216, LOT 10
PUBLIC SERVICE CO OF NH
C/O TAX ACCOUNTING
P O BOX 3430
MANCHESTER, NH 03105-3430
S.C.R.D. BOOK 851, PAGE 488

MAP 216, LOT 19
PUBLIC SERVICE CO OF NH
C/O TAX ACCOUNTING
P O BOX 3430
MANCHESTER, NH 03105-3430
S.C.R.D. BOOK 851, PAGE 488

N. H. ROUTE 11 (PUBLIC - C.A.R.O.W. - SEE NOTE #9)

"RSA REALTY" — "ROCHESTER COUNTRY CLUB" — "NH REAL ESTATE" — "UNITED WAY" — "HIGH KICKS" — "FOR SALE" — "MILE 103" — "MILE 103.4"

CRANE DRIVE — WOODS ROAD — TRAIL

STREAM BED — EDGE OF JURISDICTIONAL WETLAND (SEE NOTE #11) — EDGE OF JURISDICTIONAL WETLAND (SEE NOTE #11) AND EDGE OF STREAM

~GRAVEL AREA~ — ~STUMP PILE~ — STUMP PILE — STUMP PILE

BOULDER RET. WALL — ROW OF 6" SQUARE WOODEN POSTS — BOULDER RET. WALL — CHAINLINK FENCE — PAVED WALKWAY — CONC. BLOCK RET. WALL — WOOD STAIRS — DECK — OIL TANK — TIMBER RET. WALL — STONE HEAD WALL — STONE HEADWALL — STONE HEADWALL — 2.5' SQUARE STONE INV.=245.0' — 2.5' SQUARE STONE INV.=244.7' — GRANITE STEPS — 2ND FLOOR DECK — CONC. BLOCK — MAILBOX (X3) — 4.5' SQUARE CONC. BOUND FOUND (HELD FOR LINE) (S 40°21'48" W 2.48' TO CORNER) — 4"X4" CONC. BOUND FOUND, UP 4" W/1/2" REBAR IN CENTER — CONC. BOUND FOUND — CONC. BOUND FOUND

WOOD STEPS — STORAGE CONTAINER — WOOD STEP — DECK — N 33°23'25" E 79.98' — DECK — WOOD STEPS — AC UNIT (TYP.) — WINDOW WELL (TYP.) — WOOD STEPS — DECK — SHED — BULKHEAD — N 38°54'04" E 54.92' — 8" HDPE INV.=250.7' — AC PAD — 6" PVC INV.=251.1' — TIMBER RET. WALL — NET&T# 77-S — #PSNH/362/221D — PSNH# 4/77 W/ CONDUIT — PSNH# 4/78S — PSNH# 78 — #NETT/79 — 60" RCP INV.=242.1' — 12" CMP INV.=251.4' — 12" CMP INV.=251.8' — 24" RCP W/FES INV.=247.3' — 24" RCP W/FES INV.=254.3' — 12" HDPE INV.=254.8' — #PSNH/362/45/N — #PSNH/362/219 W/CONDUIT — #PSNH/362/218 — #362/216 — #362/214 — #391/24 — #385/23 — NO# — NO#

3/4" REBAR FOUND, FLUSH — #BA/71 — REBAR W/BERRY CAP FOUND, UP 5" (HELD FOR LINE) (N 37°11'51" E, 0.33' TO CORNER)

N 38°25'56" E 358.63' — N 35°37'25" E 199.97' — N 40°21'48" E 1726.61' — S 26°41'36" E 221.16' — S 26°41'36" E 544.75'

NHSPCS (NAD83/2011)

TBM "3944-0" MAG NAIL SET UP 12" IN PSNH# 362/217 ELEV.=251.41'

TBM "3944-A" MAG NAIL SET UP 6" IN VZ #78 ELEV.=253.30'

| DRAINAGE TABLE |
|---|
| CB #6256 |
| RIM ELEV.=252.9' |
| (A) 6" HDPE INV.=252.1' |
| (B) 4" HDPE INV.=252.2' |
| CBR #6173 |
| RIM ELEV.=252.8' |
| 6" HDPE INV.=251.9' |
| SUMP ELEV.=249.5' |
| CB #6297 |
| RIM ELEV.=253.2' |
| (A) 8" HDPE INV.=251.0' |
| (B) 6" HDPE INV.=251.1' |

| SEWER TABLE |
|---|
| SMH #2622 |
| RIM ELEV.=256.2' |
| (A) 10" ASBESTOS INV.=244.3' |
| (B) 10" ASBESTOS INV.=244.4' |
| (C) 6" PVC INV.=244.9' |
| SMH #2820 |
| RIM ELEV.=250.9' |
| (A) 10" ASBESTOS INV.=245.2' |
| (B) 10" ASBESTOS INV.=245.3' |
| SMH #3156 |
| RIM ELEV.=251.5' |
| (A) 10" ASBESTOS INV.=247.4' |
| (B) 10" ASBESTOS INV.=247.5' |
| SMH #3724 |
| RIM ELEV.=251.1' |
| (A) 6" PVC INV.=246.1' |
| (B) 4" PVC INV.=246.5' |
| (C) 3" PVC INV.=246.6' (DROP INLET) |
| SMH #6024 |
| RIM ELEV.=253.3' |
| (A) 10" ASBESTOS INV.=248.4' |
| (B) 10" ASBESTOS INV.=248.5' |
| SMH #6295 |
| RIM ELEV.=254.0' |
| (UNDERGROUND TANK) |
| SMH #6296 |
| RIM ELEV.=254.1' |
| (UNDERGROUND TANK) |

LEGEND

| | | | |
|---|---|---|---|
| UTILITY POLE & GUY WIRE | CONIFEROUS TREE | EM | ELECTRIC METER |
| LIGHT POLE (TWO ARMS) | DECIDUOUS TREE | BEARING DIST | LOT LINES |
| SIGN | CONCRETE | | STOCKADE FENCE |
| GRANITE BOUND FOUND | LANDSCAPED AREA | | WIRE FENCE |
| DRILL HOLE FOUND | | | CHAINLINK FENCE |
| IRON PIPE/ROD FOUND | LEDGE OUTCROP | OHW | OVERHEAD WIRES |
| BARBED WIRE FOUND ON GROUND | | S | SEWER LINE |
| 5/8" REBAR W/ ID CAP TO BE SET | BOLLARD | D | DRAIN LINE |
| FIRE HYDRANT | TRAFFIC FLOW DIRECTION ARROW | | APPROX. ABUTTERS LOT LINE |
| WATER GATE VALVE | DRAINAGE FLOW DIRECTION ARROW | | EASEMENT LINE |
| CATCH BASIN (ROUND) | WELL | | TREE LINE |
| CATCH BASIN | TYP. TYPICAL | | SHRUB LINE |
| DRAIN MANHOLE | RET. RETAINING | | STONE WALL |
| SEWER MANHOLE | FF FINISHED FLOOR | 100 | CONTOUR LINE |
| MANHOLE | OFC OIL FILL CAP | | HISS LINE |
| JURISDICTIONAL WETLAND SYMBOL | EP EDGE OF PAVEMENT | | EDGE OF VERY POORLY DRAINED WETLAND (SEE NOTE #11) |
| TREE STUMP/SNAG | SWL SINGLE WHITE LINE | | EDGE OF JURISDICTIONAL WETLAND (SEE NOTE #11) |
| SEE NOTE #9 | DSWL DASHED SINGLE WHITE LINE | | EDGE OF TRAVELED WAY |
| | EG EDGE OF GRAVEL | XS | SEWER LINE PER REF. PLAN #9 |
| | CONC. CONCRETE | XW | WATER LINE PER REF. PLAN #9 |
| | 4HBH HISS SYMBOL | | |
| | D.H.F. DRILL HOLE FOUND | | |

| NO. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

NOTE:
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.

STATE OF NEW HAMPSHIRE — LUKE HURLEY — 11/9/16 — CERTIFIED WETLAND SCIENTIST No. 232

| FINISH FLOOR TABLE | | |
|---|---|---|
| FF1 | WOOD THRESHOLD | ELEV.=254.1' |
| FF2 | WOOD THRESHOLD | ELEV.=256.8' |

STATE OF NEW HAMPSHIRE — LICENSED LAND SURVEYOR — NO. 984 — JEFFREY A. GOLDKNOPF — SIGNATURE — 10/23/2014

GRAPHIC SCALE
50 0 25 50 100 200
( IN FEET )
1 inch = 50 ft.

I certify that this survey plat is not a subdivision pursuant to this title (NHRSA Title LXIV) 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.

I certify that this survey and plan were prepared by me or by those under my direct supervision and falls under the Urban Survey Classification of the NH Code of Administrative Rules of the Board of Licensure for Land Surveyors. I certify that this survey was made on the ground and is correct to the best of my knowledge and belief. Random traverse survey by Total Station, with a precision greater than 1:15,000.

The certifications shown hereon are intended to meet registry of deed requirements and are not a certification to title or ownership of property shown. Owners of adjoining properties are according to current town assessors records.

JEFFREY A. GOLDKNOPF — 10/23/2014 — REGISTRATION NO. 984

SEE SHEET 2 FOR LOCUS
SEE SHEET 3 FOR NOTES

| | | | |
|---|---|---|---|
| DRAWN BY: | J.P.E. | DATE: | OCT 23, 2014 |
| CHECKED BY: | J.A.G. | DRAWING NO.: | 3944A |
| JOB NO.: | 3944 | SHEET | 1 OF 3 |

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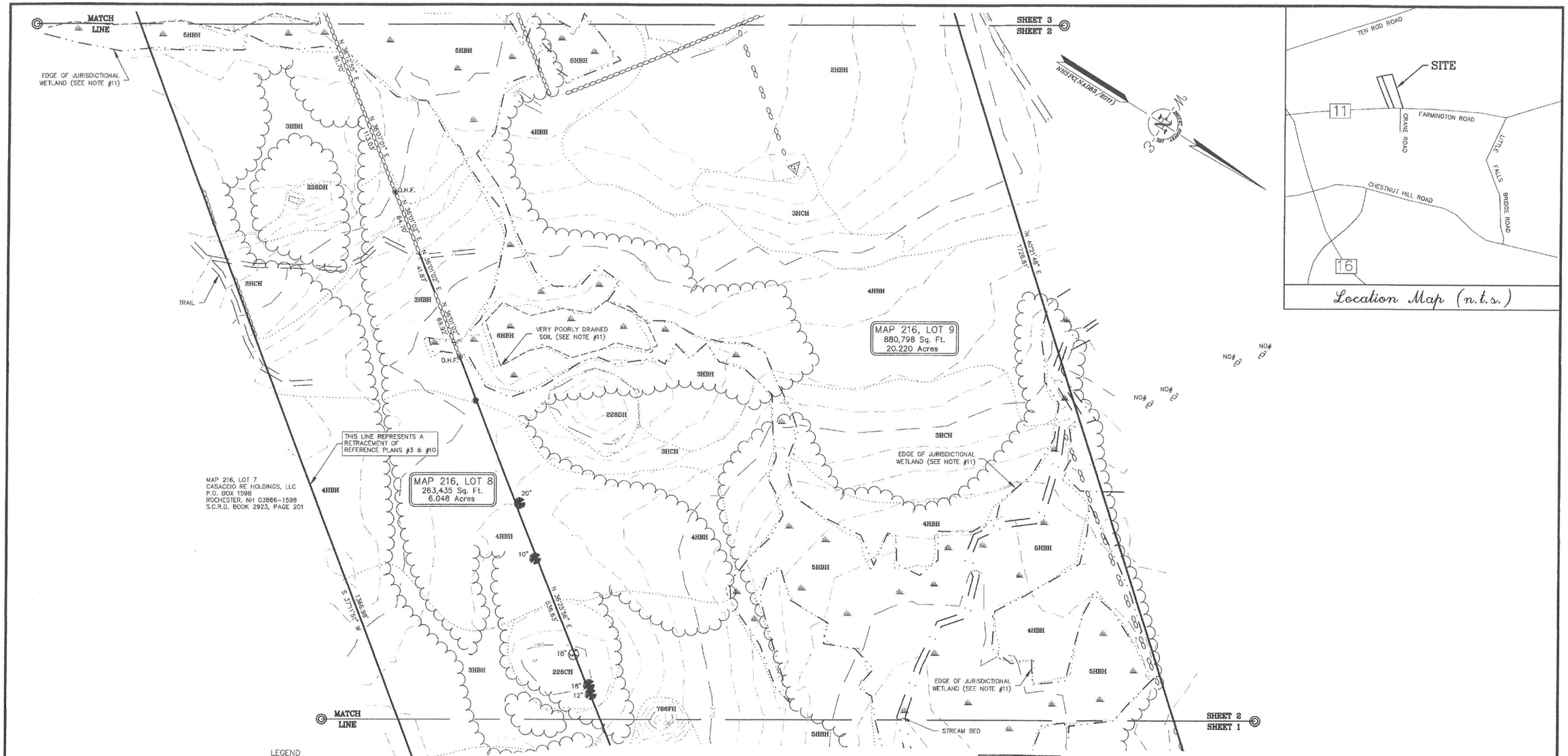
(603) 659-6560 http://www.doucetsurvey.com

FILE NAME: Y:\PROJECTS\3944 CARLSON\DWG\3944A.DWG LAYOUT NAME: 3944-EC-01 PLOTTED: Friday, January 13, 2016 - 1:27pm







Location Map (n.t.s.)

## LEGEND

| | | | |
|---|---|---|---|
| | UTILITY POLE & GUY WIRE | | CONIFEROUS TREE |
| | LIGHT POLE (TWO ARMS) | | DECIDUOUS TREE |
| | SIGN | CONC. | CONCRETE |
| | GRANITE BOUND FOUND | | LANDSCAPED AREA |
| | DRILL HOLE FOUND | | |
| | IRON PIPE/ROD FOUND | | LEDGE OUTCROP |
| | BARBED WIRE FOUND ON GROUND | | |
| | 5/8" REBAR W/ ID CAP TO BE SET | | BOLLARD |
| | FIRE HYDRANT | | TRAFFIC FLOW DIRECTION ARROW |
| WV | WATER GATE VALVE | | DRAINAGE FLOW DIRECTION ARROW |
| | CATCH BASIN (ROUND) | W | WELL |
| | CATCH BASIN | TYP. | TYPICAL |
| D | DRAIN MANHOLE | RET. | RETAINING |
| S | SEWER MANHOLE | FF | FINISHED FLOOR |
| M | MANHOLE | OFC | OIL FILL CAP |
| | JURISDICTIONAL WETLAND SYMBOL | EP | EDGE OF PAVEMENT |
| | TREE STUMP/SNAG | SWL | SINGLE WHITE LINE |
| | | DSWL | DASHED SINGLE WHITE LINE |
| [+] | SEE NOTE #9 | EG | EDGE OF GRAVEL |
| | | CONC. | CONCRETE |
| | | 4HBH | HISS SYMBOL |
| | | D.H.F. | DRILL HOLE FOUND |

| | |
|---|---|
| EM | ELECTRIC METER |
| BEARING / DIST | LOT LINES |
| - o - o - o - | STOCKADE FENCE |
| - X - X - | WIRE FENCE |
| - o - o - o - | CHAINLINK FENCE |
| OHW | OVERHEAD WIRES |
| S | SEWER LINE |
| D | DRAIN LINE |
| | APPROX. ABUTTERS LOT LINE |
| | EASEMENT LINE |
| | TREE LINE |
| | SHRUB LINE |
| | STONE WALL |
| 100 | CONTOUR LINE |
| | HISS LINE |
| | EDGE OF VERY POORLY DRAINED WETLAND (SEE NOTE #11) |
| | EDGE OF JURISDICTIONAL WETLAND (SEE NOTE #11) |
| | EDGE OF TRAVELED WAY |
| XS | SEWER LINE PER REF. PLAN #9 |
| XW | WATER LINE PER REF. PLAN #9 |

| NO. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

NOTE:
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.

GRAPHIC SCALE

50 0 25 50 100 200

( IN FEET )
1 inch = 50 ft.

STATE OF NEW HAMPSHIRE
LUKE HURLEY
11/24/14
No. 232
CERTIFIED WETLAND SCIENTIST

STATE OF NEW HAMPSHIRE
No. 964
JEFFREY A. GOLDKNOPF
SIGNATURE
LAND SURVEYOR

I certify that this survey plat is not a subdivision pursuant to this title (NHRSA Title LXIV) 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.

I certify that this survey and plan were prepared by me or by those under my direct supervision and falls under the Urban Survey Classification of the NH Code of Administrative Rules of the Board of Licensure for Land Surveyors. I certify that this survey was made on the ground and is correct to the best of my knowledge and belief. Random traverse survey by Total Station, with a precision greater than 1:15,000.

The certifications shown hereon are intended to meet registry of deed requirements and are not a certification to title or ownership of property shown. Owners of adjoining properties are according to current town assessors records.

JEFFREY A. GOLDKNOPF — 10/23/2014 — REGISTRATION NO. 964

# EXISTING CONDITIONS PLAN
FOR
COPPER CREEK CAPITAL PARTNERS
LAND OF
STRATHAM INDUSTRIAL PROPERTIES, INC.
(TAX MAP 216, LOT 9)
AND
PACKY'S INVESTMENT PROPERTIES, LLC
(TAX MAP 216, LOT 8)
ROUTE 11 (A.K.A. FARMINGTON ROAD)
ROCHESTER, NEW HAMPSHIRE

| | | | |
|---|---|---|---|
| DRAWN BY: | J.P.E. | DATE: | OCT 23, 2014 |
| CHECKED BY: | J.A.G. | DRAWING NO.: | 3944A |
| JOB NO.: | 3944 | SHEET | 2 OF 3 |

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FILE NAME: Y:\PROJECTS\3944 CARLSON\DWG\3944A.DWG LAYOUT NAME: 3944-EC-S2 PLOTTED: Friday, January 16, 2015 - 1:37pm

NOTES:

1. REFERENCE: TAX MAP 261, LOTS 8 & 9

2. TOTAL PARCEL AREA: TAX MAP 261, LOT 8: 263,435 Sq. Ft. OR 6.048 Acres
   TAX MAP 261, LOT 9: 880,798 Sq. Ft. OR 20.220 Acres

3. OWNER OF RECORD: MAP 216, LOT 8
   SITE ADDRESS: 60 FARMINGTON ROAD
   PACKYS INVESTMENT PROPERTIES, LLC
   60 FARMINGTON RD
   ROCHESTER, NH 03867-4327
   S.C.R.D. BOOK 2552, PAGE 335

   MAP 216, LOT 9
   SITE ADDRESS: 68 FARMINGTON ROAD
   STRATHAM INDUSTRIAL PROPERTIES, INC
   P O BOX 284
   STRATHAM, NH 03885-0284
   S.C.R.D. BOOK 1199, PAGE 640

4. ZONE: GRANITE RIDGE DEVELOPMENT DISTRICT (GRDD)

5. FLOOD HAZARD ZONE: "X", PER FIRM MAP #33017C0184D, DATED 5/17/05.

6. HORIZONTAL DATUM BASED ON NEW HAMPSHIRE STATE PLANE(2800) NAD83(2011) DERIVED FROM STATIC GPS OBSERVATIONS PROCESSED BY THE NATIONAL GEODETIC SURVEY ON-LINE POSITIONING USER SERVICE (OPUS).

7. VERTICAL DATUM IS BASED ON NAVD88 PER DISK X-4-1933 (PUBLISHED ELEV.=234.93').

8. 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.

9. 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 ROUTE 11 (FARMINGTON ROAD) AS DEPICTED HEREON IS BASED ON RESEARCH CONDUCTED AT THE STRAFFORD COUNTY REGISTRY OF DEEDS, ROCHESTER CITY HALL, NHDOT R.O.W. OFFICE, AND THE NHDOT DIVISION VI OFFICE.
   9A. SEE RETURN OF LAYOUT AT S.C.R.D. BOOK 681, PAGE 134, INDIVIDUAL TAKING AT BOOK 681, PAGE 287, AND REFERENCE PLAN #12.
   9B. ROUTE 11 (FARMINGTON ROAD A.K.A. FARMINGTON DOCK ROAD) IS AN ANCIENT ROADWAY WHICH HAS BEEN LAID OUT AND/OR STRAIGHTENED & WIDENED NUMEROUS TIME THROUGHOUT HISTORY. THE FORMER LOCATION OF THE ROADWAY AS DEPICTED HEREON IS SHOWN PER REFERENCE PLAN #11 AND PHYSICAL EVIDENCE AS SHOWN HEREON. REFERENCE IS HEREBY MADE TO CITY OF ROCHESTER BOOK 5, PAGE 242 FOR THE 1917-1918 STRAIGHTENING AND WIDENING. THOUGH ONE MAY EXIST, NO DISCONTINUANCE WAS FOUND OR PROVIDED BY THE CITY REGARDING THIS PORTION OF SAID ROADWAY.

10. 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.

11. JURISDICTIONAL WETLANDS DELINEATED BY GOVE ENVIRONMENTAL SERVICES, INC. DURING OCTOBER 2014 IN ACCORDANCE WITH: 1987 CORPS OF ENGINEERS WETLANDS DELINEATIONS MANUAL, TECHNICAL REPORT Y-87-1. SITE SPECIFIC HISS MAPPING COMPLETED BY GOVE ENVIRONMENTAL SERVICES, INC. DURING OCTOBER 2014

12. TAX MAP 261, LOT 9 IS EITHER SUBJECT TO OR IN BENEFIT OF, BUT NOT LIMITED TO, THE FOLLOWING EASEMENTS/RIGHTS OF RECORD:
   A. RIGHTS OF ACCESS TO/FROM ROUTE 11 (A CONTROLLED ACCESS HIGHWAY). 5 POINTS OF ACCESS WERE RESERVED ON THE WESTERLY SIDE OF ROUTE 11 IN THE DEED TO THE STATE OF NH AT VOLUME 680, PAGE 445. THE CURRENT DEED REFERENCES 3 POINTS OF ACCESS. SAID CURRENT DEED COVERS TAX MAP 261, LOTS 9 & 11. NHDOT SHOULD BE CONTACTED ABOUT CURRENT ACCESS LIMITATIONS. (NOT PLOTTABLE)

   B. AN EASEMENT FOR THE BENEFIT OF THE PARCEL WAS RESERVED IN THE DEED TO WATERSTONE ROCHESTER, LLC RECORDED IN VOLUME 4238, PAGE 739. (OFF SITE - NOT SHOWN HEREON)

   C. RIGHTS OF ACCESS, AIR, VIEW, LIGHT, SLOPES, AND PIPE AND DITCH RIGHTS AS GRANTED TO THE STATE OF NH BY DEED AT VOLUME 680, PAGE 445; AS AFFECTED BY COMMISSIONERS RETURN OF HIGHWAY LAYOUT AT VOLUME 681, PAGE 134. (WITHIN CURRENT STATE R.O.W.)

13. TAX MAP 261, LOT 8 IS EITHER SUBJECT TO OR IN BENEFIT OF, BUT NOT LIMITED TO, THE FOLLOWING EASEMENTS/RIGHTS OF RECORD:
   A. RIGHTS OF ACCESS, AIR, VIEW, LIGHT, SLOPES, AND PIPE AND DITCH RIGHTS AS GRANTED TO THE STATE OF NH BY DEED AT VOLUME 681, PAGE 286; AS AFFECTED BY COMMISSIONERS RETURN OF HIGHWAY LAYOUT AT VOLUME 681, PAGE 134. (WITHIN CURRENT STATE R.O.W.)

   B. ONE 50 FOOT RIGHT OF ACCESS FROM ROUTE 11 (A CONTROLLED ACCESS HIGHWAY) AS RESERVED IN THE DEED TO THE STATE OF NH AT VOLUME 681, PAGE 286.

REFERENCE PLANS:

1. "PROPOSED SUBDIVISION AND OF MARY E. GRENIER TEN ROD ROAD ROCHESTER, NH." BY BERRY SURVEYING & ENGINEERING. DATED JANUARY 14, 2000. S.C.R.D. PLAN #58-38
2. "LOT LINE ADJUSTMENT FOR LAND OF JEFFERY J. & KAREN M. LABRECQUE & DONALD R. FORCIER ON TEN ROD ROAD ROCHESTER, NH 03867 TAX MAP 220 LOTS 32-5 & 32-4." BY BRUCE L. POHOPECK LAND SURVEYOR. DATED AUGUST 28, 2000. S.C.R.D. PLAN# 61-49
3. "EXISTING CONDITIONS PLAN LAND OF STRATHAM INDUSTRTIAL PROPERTIES INC. & PACKY'S INVESTMENT PROPERTIES LLC ROUTE 11/ FARMINGTON RD ROCHESTER, NH TAX MAP 216 LOT 8 & 9." BY BERRY SURVEYING AND ENGINEERING DATED OCTOBER 20, 2009. (NOT RECORDED)
4. "ALTA/ACSM LAND TITLE SURVEY NH ROUTE 11/ FARMINGTON RD ROCHESTER, NH, STRAFFORD COUNTY" FOR RT 11 INVESTMENTS, INC. BY NORWAY PLAINS ASSOCIATES, INC. DATED JULY 2007.
5. "PLAN OF LAND OF SPENCER W. HAMILTON FARMINGTON ROAD ROCHESTER, NH" BY BERRY CONST. CO., INC. DATED JUNE 16, 1973 S.C.R.D. PLAN#38 POCKET #12 FOLDER#2.
6. "PLAN OF LAND OF RICHARD L. COUSINEAU ROUTE 11, ROCHESTER, NH" BY BERRY CONST. CO., INC. DATED FEBRUARY 5, 1975 S.C.R.D. PLAN #16 POCKET #15 FOLDER #1.
7. "SURVEY OF THE LAND OF NORTHGATE APARTMENT COMPLEX ROCHESTER, NH." BY HOLDEN ENGINEERING & SURVEYING. DATED JANUARY 5, 1982. S.C.R.D. PLAN#23A-23
8. "LAND PURCHASED FROM TUFTS ESTATE IN THE TOWN OF ROCHESTER, NH." BY PUBLIC SERVICE CO. OF NEW HAMPSHIRE ENGINEERING DEPARTMENT. DATED SEPTEMBER 1967 S.C.R.D BOOK 851 PAGES 492 & 494.
9. "STATE OF NH CITY OF ROCHESTER AS-BUILT WATER & SEWER EXTENSION PLAN & PROFILE", BY DELUCA-HOFFMAN ASSOCIATES, INC., DATED 2-23-94.
10. "PROPOSED SITE REVIEW FOR ED CASACCIO, ROUTE 11, ROCHESTER, NH." BY BERRY SURVEYING AND ENGINEERING. DATED NOVEMBER 9, 1998. (NOT RECORDED)
11. "PLAN OF THE FARMINGTON ROAD, ROCHESTER, NH" BY WILLIAM A. GROVE CIVIL ENGINEERING. THIS PLAN IS ON FILE AT THE ROCHESTER CITY HALL AND IS REFERENCED IN THE 1917-1918 STRAIGHTENING AND WIDENING OF FARMINGTON ROAD. SAID STRAIGHTENING AND WIDENING IS ALSO ON FILE AT THE ROCHESTER CITY HALL IN BOOK 5, PAGE 242.
12. "STATE OF NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS PLANS OF PROPOSED FEDERAL AID PROJECT F-022-1(1)", N.H. PROJECT NO. P-3346, N.H. ROUTE 11-HENRY WILSON HIGHWAY", DATED 1957. ON FILE WITH NHDOT.

| NO. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

NOTE:
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.

HIGH INTENSITY MAP SYMBOL

523BH

**DRAINAGE CLASS** (5)
1. EXCESSIVELY DRAINED
2. WELL DRAINED
3. MODERATELY WELL DRAINED
4. SOMEWHAT POORLY DRAINED
5. POORLY DRAINED
6. VERY POORLY DRAINED
7. NOT DETERMINABLE

**PARENT MATERIAL** (2)
1. GLACIOFLUVIAL
2. GLACIAL TILL
3. MARINE OR GLACIOLCUSTRINE VERY FINE SAND AND SILT
4. MARINE OR GLACIOLACUSTRINE LOAMY/SANDY OVER SILT/CLAY
5. MARINE OR GLACIOLACUSTRINE SILT AND CLAY
6. EXCAVATED, REGRADED, OR FILLED
7. ALLUVIAL DEPOSITS
8. ORGANIC MATERIALS FRESH WATER
9. ORGANIC MATERIALS TIDAL MARSH

**IDENTIFIER** (H)
H. INDICATES HIGH INTENSITY SOIL MAP
P. INDICATES PRELIMINARY MAP

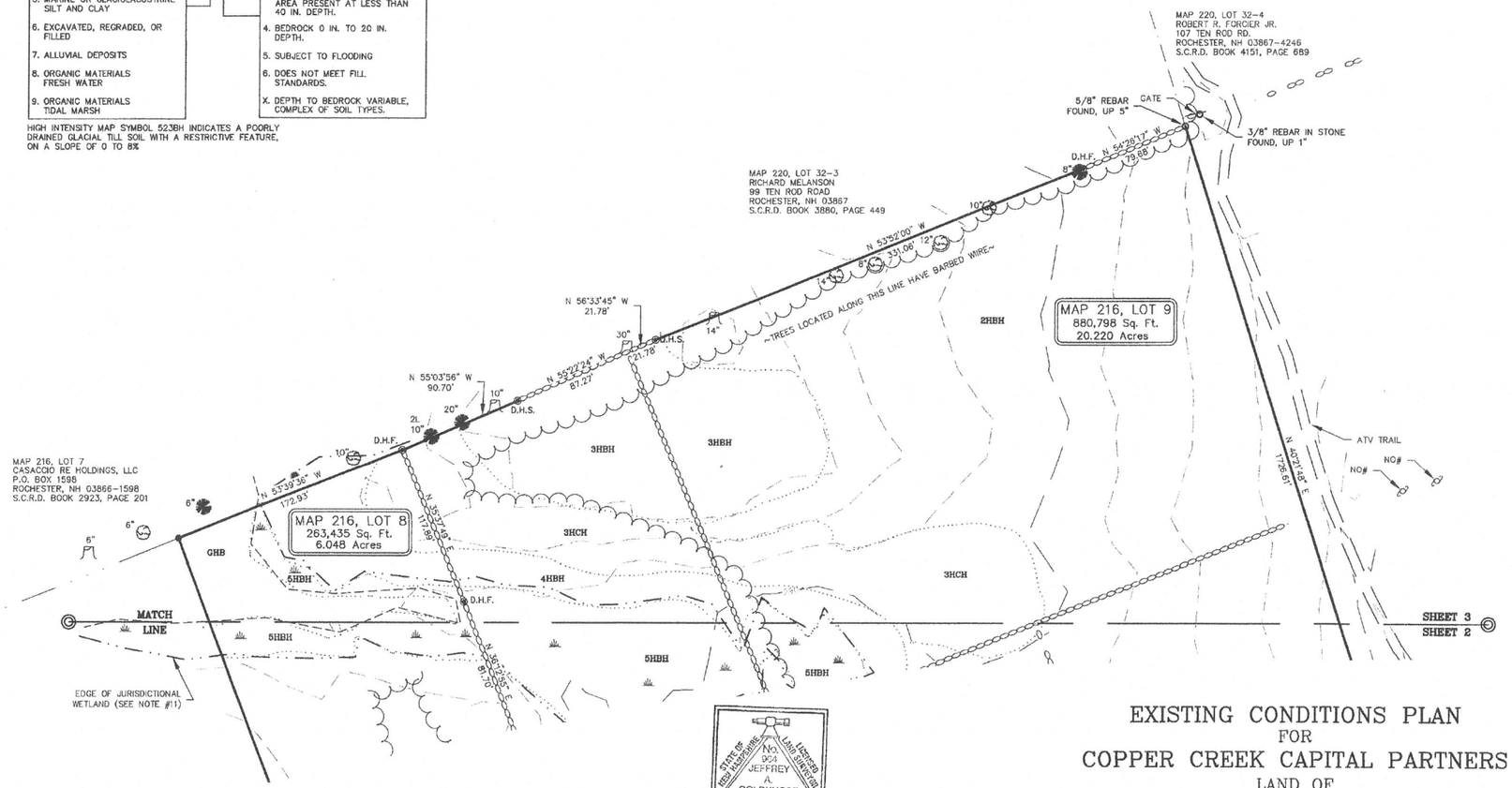
**SLOPE CLASS** (B)
B. 0 TO 8%
C. 8 TO 15%
D. 15 TO 25%
E. MORE THAN 25%

**RESTRICTIVE FEATURES** (3)
1. NONE
2. BOULDERY, WITH MORE THAN 15% OF SURFACE COVERED
3. MINERAL RESTRICTIVE LAYER(S) AREA PRESENT AT LESS THAN 40 IN. DEPTH.
4. BEDROCK 0 IN. TO 20 IN. DEPTH.
5. SUBJECT TO FLOODING
6. DOES NOT MEET FILL STANDARDS.
X. DEPTH TO BEDROCK VARIABLE, COMPLEX OF SOIL TYPES.

HIGH INTENSITY MAP SYMBOL 523BH INDICATES A POORLY DRAINED GLACIAL TILL SOIL WITH A RESTRICTIVE FEATURE, ON A SLOPE OF 0 TO 8%

LEGEND

| | | | |
|---|---|---|---|
| UTILITY POLE & GUY WIRE | CONIFEROUS TREE | EM | ELECTRIC METER |
| LIGHT POLE (TWO ARMS) | DECIDUOUS TREE | BEARING / DIST | LOT LINES |
| SIGN | CONCRETE | | STOCKADE FENCE |
| GRANITE BOUND FOUND | | X X | WIRE FENCE |
| DRILL HOLE FOUND | LANDSCAPED AREA | O O O | CHAINLINK FENCE |
| IRON PIPE/ROD FOUND | | OHW | OVERHEAD WIRES |
| BARBED WIRE FOUND ON GROUND | LEDGE OUTCROP | S | SEWER LINE |
| 5/8" REBAR W/ ID CAP TO BE SET | | D | DRAIN LINE |
| FIRE HYDRANT | BOLLARD | | APPROX. ABUTTERS LOT LINE |
| WATER GATE VALVE | TRAFFIC FLOW DIRECTION ARROW | | EASEMENT LINE |
| CATCH BASIN (ROUND) | DRAINAGE FLOW DIRECTION ARROW | | TREE LINE |
| CATCH BASIN | WELL | | SHRUB LINE |
| DRAIN MANHOLE | TYP. TYPICAL | | STONE WALL |
| SEWER MANHOLE | RET. RETAINING | 100 | CONTOUR LINE |
| MANHOLE | FF FINISHED FLOOR | | HISS LINE |
| JURISDICTIONAL WETLAND SYMBOL | OFC OIL FILL CAP | | EDGE OF VERY POORLY DRAINED WETLAND (SEE NOTE #11) |
| TREE STUMP/SNAG | EP EDGE OF PAVEMENT | | EDGE OF JURISDICTIONAL WETLAND (SEE NOTE #11) |
| SEE NOTE #9 | SWL SINGLE WHITE LINE | | EDGE OF TRAVELED WAY |
| | DSWL DASHED SINGLE WHITE LINE | XS | SEWER LINE PER REF. PLAN #9 |
| | EG EDGE OF GRAVEL | XW | WATER LINE PER REF. PLAN #9 |
| | CONC. CONCRETE | | |
| | 4HBH HISS SYMBOL | | |
| | D.H.F. DRILL HOLE FOUND | | |




STATE OF NEW HAMPSHIRE — LUKE HUBLEY — 10/29/16 — No. 232 — CERTIFIED WETLAND SCIENTIST

STATE OF NEW HAMPSHIRE — No. 964 — JEFFREY A. GOLDKNOPP — SIGNATURE — LICENSED LAND SURVEYOR

I certify that this survey plat is not a subdivision pursuant to this title (NHRSA Title LXIV) 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.

I certify that this survey and plan were prepared by me or by those under my direct supervision and falls under the Urban Survey Classification of the NH Code of Administrative Rules of the Board of Licensure for Land Surveyors. I certify that this survey was made on the ground and is correct to the best of my knowledge and belief. Random traverse survey by Total Station, with a precision greater than 1:15,000.

The certifications shown hereon are intended to meet registry of deed requirements and are not a certification to title or ownership of property shown. Owners of adjoining properties are according to current town assessors records.

10/25/2016
JEFFREY A. GOLDKNOPP — REGISTRATION NO. 964

GRAPHIC SCALE
50 0 25 50 100 200
( IN FEET )
1 inch = 50 ft.

# EXISTING CONDITIONS PLAN
FOR
# COPPER CREEK CAPITAL PARTNERS
LAND OF
# STRATHAM INDUSTRIAL PROPERTIES, INC.
(TAX MAP 216, LOT 9)
AND
# PACKY'S INVESTMENT PROPERTIES, LLC
(TAX MAP 216, LOT 8)
ROUTE 11 (A.K.A. FARMINGTON ROAD)
ROCHESTER, NEW HAMPSHIRE

| | | | |
|---|---|---|---|
| DRAWN BY: | J.P.E. | DATE: | OCT 23, 2014 |
| CHECKED BY: | J.A.G. | DRAWING NO.: | 3944A |
| JOB NO.: | 3944 | SHEET | 3 OF 3 |

DOUCET SURVEY INC
Serving Your Professional Surveying & Mapping Needs
102 Kent Place, Newmarket, NH 03857
(603) 659-6560 http://www.doucetsurvey.com

FILE NAME: Y:\PROJECTS\3944 CARLSON\DWG\3944.DWG LAYOUT NAME: 3944-EC-03 PLOTTED: Friday, January 13, 2016 - 1:27pm

MAP 220, LOT 32-4
ROBERT R. FORCIER JR.
107 TEN ROD RD.
ROCHESTER, NH 03867-4246
S.C.R.D. BOOK 4151, PAGE 689

MAP 220, LOT 32-3
RICHARD MELANSON
99 TEN ROD ROAD
ROCHESTER, NH 03867
S.C.R.D. BOOK 3880, PAGE 449

MAP 216, LOT 18-2
ROCHESTER HOSPITALITY LLC
C/O RAICHE & CO CPAS PA
680 CENTRAL AVE SUITE 101
DOVER, NH 03820
S.C.R.D. BOOK 3477, PAGE 761

MAP 216, LOT 10
PUBLIC SERVICE CO OF NH
C/O TAX ACCOUNTING
P O BOX 3430
MANCHESTER, NH 03105-3430
S.C.R.D. BOOK 851, PAGE 488

MAP 216, LOT 19
PUBLIC SERVICE CO OF NH
C/O TAX ACCOUNTING
P O BOX 3430
MANCHESTER, NH 03105-3430
S.C.R.D. BOOK 851, PAGE 488

MAP 216, LOT 8 & 9
1,144,233 Sq. Ft.
26.268 Acres

MAP 216, LOT 20
NEWPORT PARTNERS LLC
P O BOX 1998
ROCHESTER, NH 03866-1998
S.C.R.D. BOOK 2558, PAGE 313

MAP 216, LOT 7
CASACCIO RE HOLDINGS, LLC
P.O. BOX 1598
ROCHESTER, NH 03866-1598
S.C.R.D. BOOK 2923, PAGE 201

**COORDINATION NOTES:**
1. **THIS PLAN IS PROVIDED TO REPRESENT THE APPROXIMATE EXISTING CONDITIONS AS PER SITEWORK COMPLETED IN SPRING 2019 FOR THE APPROVED EXCAVATION AREA. THIS PLAN IS NOT A SURVEY. CONTRACTOR SHALL CONFIRM EXISTING CONDITIONS PRIOR TO CONSTRUCTION.**

Tighe&Bond
Engineers | Environmental Specialists

STATE OF NEW HAMPSHIRE
BRADLEE MEZQUITA
No. 08539
LICENSED PROFESSIONAL ENGINEER
11-25-19

STATE OF NEW HAMPSHIRE
PATRICK M. CRIMMINS
No. 12509
LICENSED PROFESSIONAL ENGINEER
11-25-19

SCALE IN FEET
0 80' 160'
GRAPHIC SCALE

# Proposed Commercial Development Phase II

Farmington Associates, LLC

60 Farmington Road (Route 11)
Rochester, NH

| MARK | DATE | DESCRIPTION |
|---|---|---|
| A | 11/25/2019 | Site Plan Review Submission |

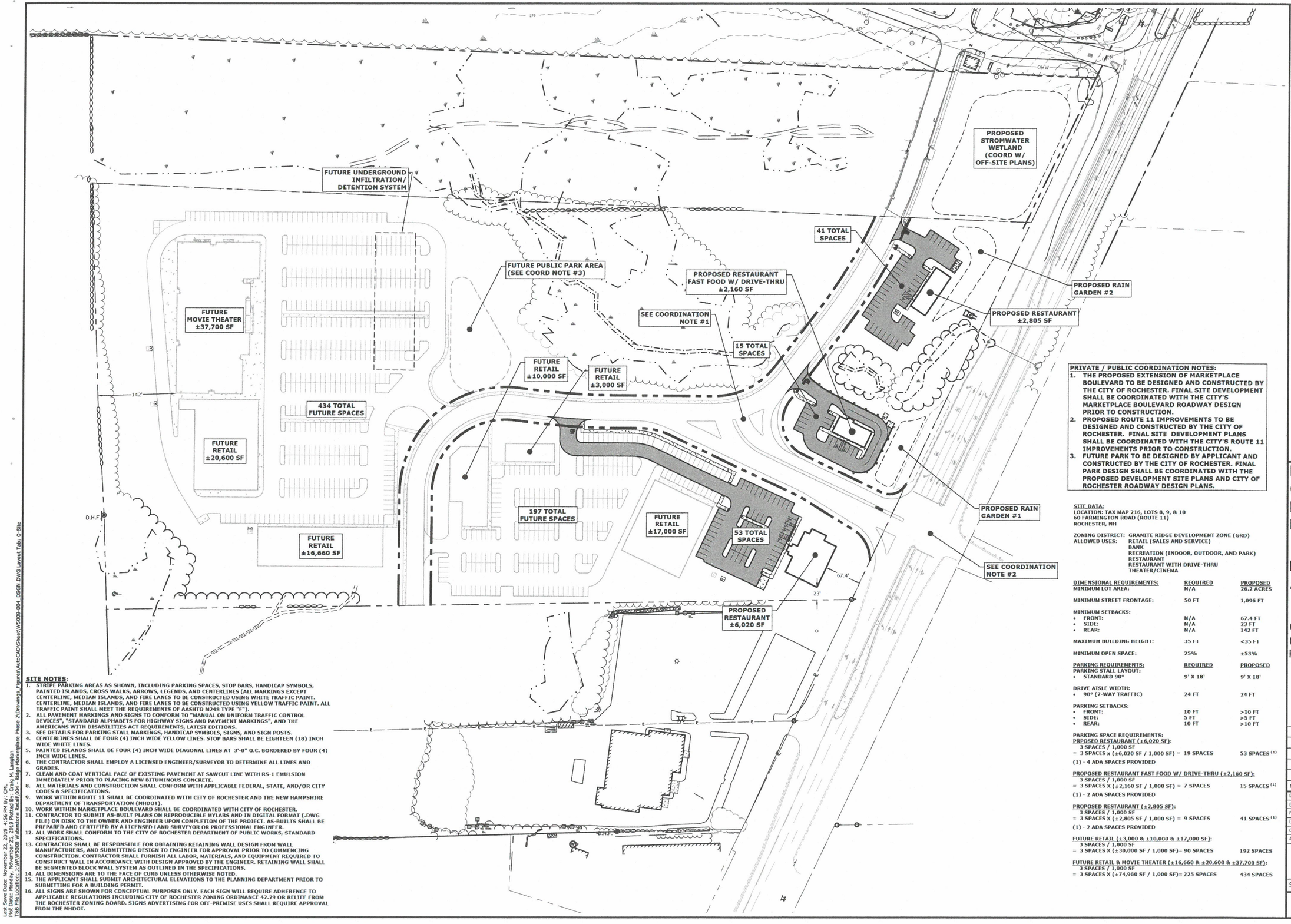
| | |
|---|---|
| PROJECT NO: | W5008-004 |
| DATE: | 11/25/2019 |
| FILE: | W5008-004_DSGN.DWG |
| DRAWN BY: | CML |
| CHECKED: | PMC |
| APPROVED: | BLM |

OVERALL EXCAVATION PLAN

SCALE: AS SHOWN

C-101

Last Save Date: November 25, 2019 4:43 PM By: CML
Plot Date: Wednesday, November 27, 2019 Plotted By: Craig M. Langton
T&B File Location: J:\W\W5008 Wakerstone Retail\004 - Ridge Marketplace Phase 2\Drawings, Figures\AutoCAD\Sheet\W5008-004_DSGN.dwg Layout Tab: O-Exist




**PRIVATE / PUBLIC COORDINATION NOTES:**

1. THE PROPOSED EXTENSION OF MARKETPLACE BOULEVARD TO BE DESIGNED AND CONSTRUCTED BY THE CITY OF ROCHESTER. FINAL SITE DEVELOPMENT SHALL BE COORDINATED WITH THE CITY'S MARKETPLACE BOULEVARD ROADWAY DESIGN PRIOR TO CONSTRUCTION.
2. PROPOSED ROUTE 11 IMPROVEMENTS TO BE DESIGNED AND CONSTRUCTED BY THE CITY OF ROCHESTER. FINAL SITE DEVELOPMENT PLANS SHALL BE COORDINATED WITH THE CITY'S ROUTE 11 IMPROVEMENTS PRIOR TO CONSTRUCTION.
3. FUTURE PARK TO BE DESIGNED BY APPLICANT AND CONSTRUCTED BY THE CITY OF ROCHESTER. FINAL PARK DESIGN SHALL BE COORDINATED WITH THE PROPOSED DEVELOPMENT SITE PLANS AND CITY OF ROCHESTER ROADWAY DESIGN PLANS.

**SITE NOTES:**

1. STRIPE PARKING AREAS AS SHOWN, INCLUDING PARKING SPACES, STOP BARS, HANDICAP SYMBOLS, PAINTED ISLANDS, CROSS WALKS, ARROWS, LEGENDS, AND CENTERLINES (ALL MARKINGS EXCEPT CENTERLINE, MEDIAN ISLANDS, AND FIRE LANES TO BE CONSTRUCTED USING WHITE TRAFFIC PAINT. CENTERLINE, MEDIAN ISLANDS, AND FIRE LANES TO BE CONSTRUCTED USING YELLOW TRAFFIC PAINT. ALL TRAFFIC PAINT SHALL MEET THE REQUIREMENTS OF AASHTO M248 TYPE "I").
2. ALL PAVEMENT MARKINGS AND SIGNS TO CONFORM TO "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS", AND THE AMERICANS WITH DISABILITIES ACT REQUIREMENTS, LATEST EDITIONS.
3. SEE DETAILS FOR PARKING STALL MARKINGS, HANDICAP SYMBOLS, SIGNS, AND SIGN POSTS.
4. CENTERLINES SHALL BE FOUR (4) INCH WIDE YELLOW LINES. STOP BARS SHALL BE EIGHTEEN (18) INCH WIDE WHITE LINES.
5. PAINTED ISLANDS SHALL BE FOUR (4) INCH WIDE DIAGONAL LINES AT 3'-0" O.C. BORDERED BY FOUR (4) INCH WIDE LINES.
6. THE CONTRACTOR SHALL EMPLOY A LICENSED ENGINEER/SURVEYOR TO DETERMINE ALL LINES AND GRADES.
7. CLEAN AND COAT VERTICAL FACE OF EXISTING PAVEMENT AT SAWCUT LINE WITH RS-1 EMULSION IMMEDIATELY PRIOR TO PLACING NEW BITUMINOUS CONCRETE.
8. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL, STATE, AND/OR CITY CODES & SPECIFICATIONS.
9. WORK WITHIN ROUTE 11 SHALL BE COORDINATED WITH CITY OF ROCHESTER AND THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT).
10. WORK WITHIN MARKETPLACE BOULEVARD SHALL BE COORDINATED WITH CITY OF ROCHESTER.
11. CONTRACTOR TO SUBMIT AS-BUILT PLANS ON REPRODUCIBLE MYLARS AND IN DIGITAL FORMAT (.DWG FILE) ON DISK TO THE OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER.
12. ALL WORK SHALL CONFORM TO THE CITY OF ROCHESTER DEPARTMENT OF PUBLIC WORKS, STANDARD SPECIFICATIONS.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING RETAINING WALL DESIGN FROM WALL MANUFACTURERS, AND SUBMITTING DESIGN TO ENGINEER FOR APPROVAL PRIOR TO COMMENCING CONSTRUCTION. CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO CONSTRUCT WALL IN ACCORDANCE WITH DESIGN APPROVED BY THE ENGINEER. RETAINING WALL SHALL BE SEGMENTED BLOCK WALL SYSTEM AS OUTLINED IN THE SPECIFICATIONS.
14. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
15. THE APPLICANT SHALL SUBMIT ARCHITECTURAL ELEVATIONS TO THE PLANNING DEPARTMENT PRIOR TO SUBMITTING FOR A BUILDING PERMIT.
16. ALL SIGNS ARE SHOWN FOR CONCEPTUAL PURPOSES ONLY. EACH SIGN WILL REQUIRE ADHERENCE TO APPLICABLE REGULATIONS INCLUDING CITY OF ROCHESTER ZONING ORDINANCE 42.29 OR RELIEF FROM THE ROCHESTER ZONING BOARD. SIGNS ADVERTISING FOR OFF-PREMISE USES SHALL REQUIRE APPROVAL FROM THE NHDOT.

**SITE DATA:**
LOCATION: TAX MAP 216, LOTS 8, 9, & 10
60 FARMINGTON ROAD (ROUTE 11)
ROCHESTER, NH

ZONING DISTRICT: GRANITE RIDGE DEVELOPMENT ZONE (GRD)
ALLOWED USES: RETAIL (SALES AND SERVICE)
BANK
RECREATION (INDOOR, OUTDOOR, AND PARK)
RESTAURANT
RESTAURANT WITH DRIVE-THRU
THEATER/CINEMA

| DIMENSIONAL REQUIREMENTS: | REQUIRED | PROPOSED |
|---|---|---|
| MINIMUM LOT AREA: | N/A | 26.2 ACRES |
| MINIMUM STREET FRONTAGE: | 50 FT | 1,096 FT |
| MINIMUM SETBACKS: | | |
| • FRONT: | N/A | 67.4 FT |
| • SIDE: | N/A | 23 FT |
| • REAR: | N/A | 142 FT |
| MAXIMUM BUILDING HEIGHT: | 35 FT | <35 FT |
| MINIMUM OPEN SPACE: | 25% | ±53% |

| PARKING REQUIREMENTS: | REQUIRED | PROPOSED |
|---|---|---|
| PARKING STALL LAYOUT: | | |
| • STANDARD 90° | 9' X 18' | 9' X 18' |
| DRIVE AISLE WIDTH: | | |
| • 90° (2-WAY TRAFFIC) | 24 FT | 24 FT |
| PARKING SETBACKS: | | |
| • FRONT: | 10 FT | >10 FT |
| • SIDE: | 5 FT | >5 FT |
| • REAR: | 10 FT | >10 FT |

PARKING SPACE REQUIREMENTS:

PROPOSED RESTAURANT (±6,020 SF):
3 SPACES / 1,000 SF
= 3 SPACES x (±6,020 SF / 1,000 SF) = 19 SPACES — 53 SPACES (1)
(1) - 4 ADA SPACES PROVIDED

PROPOSED RESTAURANT FAST FOOD W/ DRIVE-THRU (±2,160 SF):
3 SPACES / 1,000 SF
= 3 SPACES X (±2,160 SF / 1,000 SF) = 7 SPACES — 15 SPACES (1)
(1) - 2 ADA SPACES PROVIDED

PROPOSED RESTAURANT (±2,805 SF):
3 SPACES / 1,000 SF
= 3 SPACES X (±2,805 SF / 1,000 SF) = 9 SPACES — 41 SPACES (1)
(1) - 2 ADA SPACES PROVIDED

FUTURE RETAIL (±3,000 & ±10,000 & ±17,000 SF):
3 SPACES / 1,000 SF
= 3 SPACES X (±30,000 SF / 1,000 SF)= 90 SPACES — 192 SPACES

FUTURE RETAIL & MOVIE THEATER (±16,660 & ±20,600 & ±37,700 SF):
3 SPACES / 1,000 SF
= 3 SPACES X (±74,960 SF / 1,000 SF)= 225 SPACES — 434 SPACES

Tighe&Bond
Engineers | Environmental Specialists

BRADLEE MEZQUITA No. 08630 LICENSED PROFESSIONAL ENGINEER — STATE OF NEW HAMPSHIRE — 11-25-19

PATRICK M. CRIMMINS No. 12 LICENSED PROFESSIONAL ENGINEER — STATE OF NEW HAMPSHIRE — 11-25-19

SCALE IN FEET
0 80' 160'
GRAPHIC SCALE

# Proposed Commercial Development Phase II

Farmington Associates, LLC

60 Farmington Road (Route 11)
Rochester, NH

| MARK | DATE | DESCRIPTION |
|---|---|---|
| A | 11/25/2019 | Site Plan Review Submission |

| | |
|---|---|
| PROJECT NO: | W5008-004 |
| DATE: | 11/25/2019 |
| FILE: | W5008-004_DSGN.DWG |
| DRAWN BY: | CML |
| CHECKED: | PMC |
| APPROVED: | BLM |

OVERALL SITE PLAN

SCALE: AS SHOWN

C-102

Last Save Date: November 22, 2019 4:56 PM By: CML
Plot Date: Monday, November 25, 2019 Plotted By: Craig M. Langton
T&B File Location: J:\W\W5008 Watertone Retail\004 - Ridge Marketplace Phase 2\Drawings, Figures\AutoCAD\Sheet\W5008-004_DSGN.DWG Layout Tab: O-Site

FUTURE PUBLIC PARK AREA (SEE COORD NOTE #3)

FUTURE RETAIL ±10,000 SF

FUTURE RETAIL ±3,000 SF

197 FUTURE PARKING SPACES

FUTURE RETAIL ±17,000 SF

BEGIN SGC (COORD W/ OFF-SITE PLANS)

END SGC W/ TIPDOWN

CONST. "STOP" SIGN, BAR AND LEGEND (TYP.)

COORDINATE SIDEWALK CONNECTION WITH OFF-SITE PLANS (TYP)

PROPOSED RIGHT OF WAY LINE (COORD W/ OFF-SITE DWGS)

PROPOSED PAVEMENT SECTION (TYP)

END SGC W/ TIP DOWN

BEGIN SGC (COORD W/ OFF-SITE PLANS)

PROPOSED GUARDRAIL (TYP)

CONST. "STOP" SIGN, BAR AND LEGEND (TYP.)

END SGC (COORD W/ OFF-SITE PLANS)

COORDINATE SIDEWALK CONNECTION WITH OFF-SITE PLANS (TYP)

BEGIN SGC (COORD W/ OFF-SITE PLANS)

END SGC (COORD W/ OFF-SITE PLANS)

PROPOSED 6' WIDE CONCRETE SIDEWALK (TYP)

PROPOSED R7-8 "RESERVED" & R7-8A "VAN ACCESSIBLE" SIGNS

CONST. "STOP" SIGN, BAR AND LEGEND (TYP.)

CONST TRANSFORMER PAD (COORD W/ BLDG DWGS & EVERSOURCE)

CONST TRANSFORMER PAD (COORD W/ BLDG DWGS & EVERSOURCE)

PROPOSED TIP-DOW RAMP WITH DETECTABLE WARNING PANEL (TYP)

PROPOSED RESTAURANT FAST FOOD W/ DRIVE-THRU ±2,160 SF

PROPOSED TIP-DOW RAMP WITH DETECTABLE WARNING PANEL (TYP)

PROPOSED DUMPSTER PAD WITH ENCLOSURE (COORD W/ OWNER / TENANT) (TYP)

PROPOSED STROMWATER WETLAND (COORD W/ OFF-SITE PLANS)

CONST TRANSFORMER PAD (COORD W/ BLDG DWGS & EVERSOURCE)

PROPOSED DUMPSTER PAD WITH ENCLOSURE (COORD W/ OWNER / TENANT) (TYP)

PROPOSED TIP-DOW RAMP WITH DETECTABLE WARNING PANEL (TYP)

PROPOSED BOLLARD MOUNTED R7-8 "RESERVED" & R7-8A "VAN ACCESSIBLE" SIGNS

PROPOSED RESTAURANT ±6,020 SF

PROPOSED GUARDRAIL (TYP)

PROPOSED DOUBLE-SIDED 30'X13.5' PYLON SIGN

PROPOSED RAIN GARDEN #1

PROPOSED RAIN GARDEN #2

PROPOSED 6' WIDE CONCRETE SIDEWALK (TYP)

PROPOSED RESTAURANT ±2,805 SF

PROPOSED BILLBOARD (COORD W/ OWNER)

POTENTIAL RAIN GARDEN (COORD W/ OFF-SITE PLANS)

CONST TRANSFORMER PAD (COORD W/ BLDG DWGS & EVERSOURCE)

PROPOSED DUMPSTER PAD WITH ENCLOSURE (COORD W/ OWNER / TENANT) (TYP)

PROPOSED TIP-DOW RAMP WITH DETECTABLE WARNING PANEL (TYP)

PROPOSED 6' WIDE CONCRETE SIDEWALK (TYP)

PROPOSED R7-8 "RESERVED" & R7-8A "VAN ACCESSIBLE" SIGNS

PROPOSED TIP-DOW RAMP WITH DETECTABLE WARNING PANEL (TYP)

PROPOSED DUMPSTER PAD WITH ENCLOSURE (COORD W/ OWNER / TENANT) (TYP)

PROPOSED STROMWATER WETLAND (COORD W/ OFF-SITE PLANS)

CONST TRANSFORMER PAD (COORD W/ BLDG DWGS & EVERSOURCE)

PROPOSED DUMPSTER PAD WITH ENCLOSURE (COORD W/ OWNER / TENANT) (TYP)

PROPOSED TIP-DOW RAMP WITH DETECTABLE WARNING PANEL (TYP)

PROPOSED BILLBOARD (COORD W/ OWNER)

PROPOSED STROMWATER WETLAND (COORD W/ OFF-SITE PLANS)

PROPOSED RAIN GARDEN #2

PROPOSED 6' WIDE CONCRETE SIDEWALK (TYP)

PROPOSED RESTAURANT ±2,805 SF

PROPOSED BILLBOARD (COORD W/ OWNER)

SEE COORDINATION NOTE #2 ON SHEET C-102

SEE COORDINATION NOTE #2 ON SHEET C-102

(FARMINGTON ROAD)

CRANE DRIVE

Last Save Date: November 22, 2019 4:56 PM By: CML
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Tighe&Bond
Engineers | Environmental Specialists

SCALE IN FEET
0 50' 100'
GRAPHIC SCALE

# Proposed Commercial Development Phase II

Farmington Associates, LLC

60 Farmington Road (Route 11)
Rochester, NH

| MARK | DATE | DESCRIPTION |
|---|---|---|
| A | 11/25/2019 | Site Plan Review Submission |

| | |
|---|---|
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| APPROVED: | BLM |

SITE PLAN

SCALE: AS SHOWN

C-102.1

FUTURE
MOVIE THEATER
±37,700 SF

FUTURE
RETAIL
±20,600 SF

434 FUTURE
PARKING SPACES

FUTURE
RETAIL
±16,660 SF

FUTURE
RETAIL
±10,000 SF

FUTURE UNDERGROUND
INFILTRATION/
DETENTION SYSTEM

FUTURE PUBLIC PARK AREA
(SEE COORD NOTE #3)

Tighe&Bond
Engineers | Environmental Specialists

N

BRADLEE
MEZQUITA
No. 08530
LICENSED
PROFESSIONAL ENGINEER
STATE OF NEW HAMPSHIRE
11-25-19

PATRICK
M.
CRIMMINS
No. 18
LICENSED
PROFESSIONAL ENGINEER
STATE OF NEW HAMPSHIRE
11-25-19

SCALE IN FEET
0 50' 100'
GRAPHIC SCALE

# Proposed Commercial Development Phase II

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(Route 11)
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SITE PLAN

SCALE: AS SHOWN

C-102.2

Last Save Date: November 22, 2019 4:56 PM By: CML
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## GRADING AND DRAINAGE NOTES:

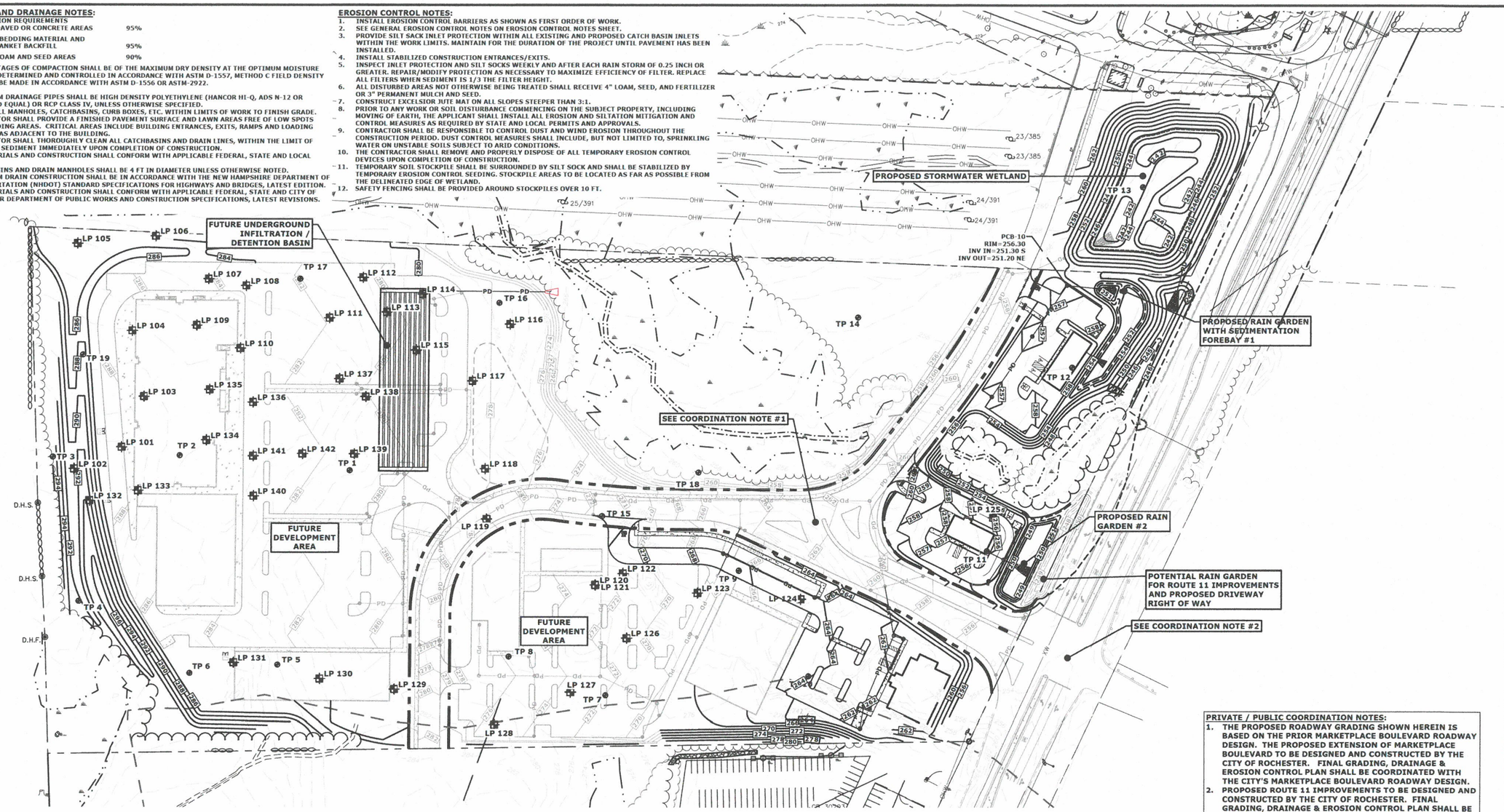
1. COMPACTION REQUIREMENTS
   - BELOW PAVED OR CONCRETE AREAS — 95%
   - TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL — 95%
   - BELOW LOAM AND SEED AREAS — 90%

*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.

2. 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.
3. ADJUST ALL MANHOLES, CATCHBASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
4. 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.
5. CONTRACTOR SHALL THOROUGHLY CLEAN ALL CATCHBASINS AND DRAIN LINES, WITHIN THE LIMIT OF WORK, OF SEDIMENT IMMEDIATELY UPON COMPLETION OF CONSTRUCTION.
6. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL, STATE AND LOCAL CODES.
7. CATCHBASINS AND DRAIN MANHOLES SHALL BE 4 FT IN DIAMETER UNLESS OTHERWISE NOTED.
8. ALL STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT) STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, LATEST EDITION.
9. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL, STATE AND CITY OF ROCHESTER DEPARTMENT OF PUBLIC WORKS AND CONSTRUCTION SPECIFICATIONS, LATEST REVISIONS.

## EROSION CONTROL NOTES:

1. INSTALL EROSION CONTROL BARRIERS AS SHOWN AS FIRST ORDER OF WORK.
2. SEE GENERAL EROSION CONTROL NOTES ON EROSION CONTROL NOTES SHEET.
3. PROVIDE SILT SACK INLET PROTECTION WITHIN ALL EXISTING AND PROPOSED CATCH BASIN INLETS WITHIN THE WORK LIMITS. MAINTAIN FOR THE DURATION OF THE PROJECT UNTIL PAVEMENT HAS BEEN INSTALLED.
4. INSTALL STABILIZED CONSTRUCTION ENTRANCES/EXITS.
5. INSPECT INLET PROTECTION AND SILT SOCKS 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.
6. ALL DISTURBED AREAS NOT OTHERWISE BEING TREATED SHALL RECEIVE 4" LOAM, SEED, AND FERTILIZER OR 3" PERMANENT MULCH AND SEED.
7. CONSTRUCT EXCELSTOR JUTE MAT ON ALL SLOPES STEEPER THAN 3:1.
8. PRIOR TO ANY WORK OR SOIL DISTURBANCE COMMENCING ON THE SUBJECT PROPERTY, INCLUDING MOVING OF EARTH, THE APPLICANT SHALL INSTALL ALL EROSION AND SILTATION MITIGATION AND CONTROL MEASURES AS REQUIRED BY STATE AND LOCAL PERMITS AND APPROVALS.
9. CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST AND WIND EROSION THROUGHOUT THE CONSTRUCTION PERIOD. DUST CONTROL MEASURES SHALL INCLUDE, BUT NOT LIMITED TO, SPRINKLING WATER ON UNSTABLE SOILS SUBJECT TO ARID CONDITIONS.
10. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION.
11. TEMPORARY SOIL STOCKPILE SHALL BE SURROUNDED BY SILT SOCK AND SHALL BE STABILIZED BY TEMPORARY EROSION CONTROL SEEDING. STOCKPILE AREAS TO BE LOCATED AS FAR AS POSSIBLE FROM THE DELINEATED EDGE OF WETLAND.
12. SAFETY FENCING SHALL BE PROVIDED AROUND STOCKPILES OVER 10 FT.




## PRIVATE / PUBLIC COORDINATION NOTES:

1. THE PROPOSED ROADWAY GRADING SHOWN HEREIN IS BASED ON THE PRIOR MARKETPLACE BOULEVARD ROADWAY DESIGN. THE PROPOSED EXTENSION OF MARKETPLACE BOULEVARD TO BE DESIGNED AND CONSTRUCTED BY THE CITY OF ROCHESTER. FINAL GRADING, DRAINAGE & EROSION CONTROL PLAN SHALL BE COORDINATED WITH THE CITY'S MARKETPLACE BOULEVARD ROADWAY DESIGN.
2. PROPOSED ROUTE 11 IMPROVEMENTS TO BE DESIGNED AND CONSTRUCTED BY THE CITY OF ROCHESTER. FINAL GRADING, DRAINAGE & EROSION CONTROL PLAN SHALL BE COORDINATED WITH THE CITY'S ROUTE 11 IMPROVEMENTS PRIOR TO CONSTRUCTION.

## LEGEND

- LIMIT OF AQUIFER PROTECTION DISTRICT
- EDGE OF JURISDICTIONAL WETLAND
- EDGE OF STREAM BED
- TP-1 — TEST PIT LOCATION AND DESIGNATION
- LP-101 — LEDGE PROBE LOCATION AND DESIGNATION
- PD PD — PROPOSED DRAINLINE
- PD PD — PROPOSED FUTURE / OFF-SITE DRAIN LINE (COORD W/ OFF-SITE DWGS)
- 256 — PROPOSED CONTOUR
- 256 — PROPOSED FUTURE / OFF-SITE CONTOUR (COORD W/ OFF-SITE DWGS)

**TP-1**
ELEV.=282.1
GROUNDWATER=275.6
REFUSAL=273.60

**TP-2**
ELEV.=290.19
GROUNDWATER=282.7
REFUSAL=281.69

**TP-3**
ELEV.=297.20
GROUNDWATER=286.2
REFUSAL=285.20

**TP-4**
ELEV.=295.95
GROUNDWATER=289.5
REFUSAL=286.45

**TP-5**
ELEV.=288.43
REFUSAL=283.93

**TP-6**
ELEV.=294.80
REFUSAL=290.80

**TP-7**
ELEV.=276.75
REFUSAL=271.25

**TP-8**
ELEV.=276.35
REFUSAL=269.35

**TP-9**
ELEV.=271.16
REFUSAL=258.16

**TP-10**
ELEV.=264.04
REFUSAL=257.04

**TP-11**
ELEV.=249.86
REFUSAL=241.36

**TP-12**
ELEV.=249.84
GROUNDWATER=242.9
REFUSAL=242.84

**TP-13**
ELEV.=256.04
REFUSAL=248.54

**TP-14**
ELEV.=258.35
GROUNDWATER=251.4
REFUSAL=248.35

**TP-15**
ELEV.=268.34
GROUNDWATER=260.8
REFUSAL=259.84

**TP-16**
ELEV.=273.66
GROUNDWATER=268.2
REFUSAL=267.66

**TP-17**
ELEV.=283.71
GROUNDWATER=274.2
REFUSAL=274.21

**TP-18**
ELEV.=260.07
REFUSAL=240.00

**TP-19**
ELEV.=291.55
GROUNDWATER=283.6
REFUSAL=276.05

| LEDGE PROBE-101 | LEDGE PROBE-108 | LEDGE PROBE-115 | LEDGE PROBE-122 | LEDGE PROBE-129 | LEDGE PROBE-136 |
|---|---|---|---|---|---|
| ELEV.=296.42 | ELEV.=284.45 | ELEV.=277.01 | ELEV.=274.31 | ELEV.=282.41 | ELEV.=288.45 |
| LEDGE=285.42 | LEDGE=265.45 | LEDGE=268.01 | LEDGE=265.31 | LEDGE=279.41 | LEDGE=284.45 |
| LEDGE PROBE-102 | LEDGE PROBE-109 | LEDGE PROBE-116 | LEDGE PROBE-123 | LEDGE PROBE-130 | LEDGE PROBE-137 |
| ELEV.=296.84 | ELEV.=287.24 | ELEV.=272.5 | ELEV.=271.47 | ELEV.=283.93 | ELEV.=289 |
| LEDGE=284.34 | LEDGE=273.24 | LEDGE=261.50 | LEDGE=251.47 | LEDGE=265.93 | LEDGE=284.00 |
| LEDGE PROBE-103 | LEDGE PROBE-110 | LEDGE PROBE-117 | LEDGE PROBE-124 | LEDGE PROBE-131 | LEDGE PROBE-138 |
| ELEV.=292.86 | ELEV.=288.43 | ELEV.=275.39 | ELEV.=269.02 | ELEV.=295.3 | ELEV.=282.66 |
| LEDGE=281.86 | LEDGE=275.43 | LEDGE=262.39 | LEDGE=263.02 | LEDGE=291.30 | LEDGE=275.66 |
| LEDGE PROBE-104 | LEDGE PROBE-111 | LEDGE PROBE-118 | LEDGE PROBE-125 | LEDGE PROBE-132 | LEDGE PROBE-139 |
| ELEV.=289.83 | ELEV.=275.37 | ELEV.=272.98 | ELEV.=249.04 | ELEV.=296.56 | ELEV.=282.53 |
| LEDGE=277.83 | LEDGE=280.37 | LEDGE=258.98 | LEDGE=241.54 | LEDGE=284.96 | LEDGE=274.53 |
| LEDGE PROBE-105 | LEDGE PROBE-112 | LEDGE PROBE-119 | LEDGE PROBE-126 | LEDGE PROBE-133 | LEDGE PROBE-140 |
| ELEV.=285.87 | ELEV.=282.7 | ELEV.=274.18 | ELEV.=276.61 | ELEV.=294.54 | ELEV.=287.47 |
| LEDGE=273.87 | LEDGE=275.70 | LEDGE=268.18 | LEDGE=261.61 | LEDGE=289.54 | LEDGE=276.47 |
| LEDGE PROBE-106 | LEDGE PROBE-113 | LEDGE PROBE-120 | LEDGE PROBE-127 | LEDGE PROBE-134 | LEDGE PROBE-141 |
| ELEV.=283.55 | ELEV.=281.11 | ELEV.=276.55 | ELEV.=276.85 | ELEV.=289.7 | ELEV.=288.64 |
| LEDGE=268.55 | LEDGE=272.11 | LEDGE=261.55 | LEDGE=263.85 | LEDGE=284.70 | LEDGE=277.64 |
| LEDGE PROBE-107 | LEDGE PROBE-114 | LEDGE PROBE-121 | LEDGE PROBE-128 | LEDGE PROBE-135 | LEDGE PROBE-142 |
| ELEV.=285.10 | ELEV.=275.9 | ELEV.=276.61 | ELEV.=281.85 | ELEV.=290.72 | ELEV.=286.56 |
| LEDGE=269.10 | LEDGE=266.40 | LEDGE=261.61 | LEDGE=263.85 | LEDGE=288.72 | LEDGE=283.56 |

Tighe&Bond
Engineers | Environmental Specialists

SCALE IN FEET
0 80' 160'
GRAPHIC SCALE

# Proposed Commercial Development Phase II

Farmington Associates, LLC

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| APPROVED: | BLM |

OVERALL GRADING, DRAINAGE, & EROSION CONTROL PLAN

SCALE: AS SHOWN

C-103

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AREAS OF FUTURE DEVELOPMENT

PCB-03
RIM=266.70
INV OUT=258.35 NE

2 LF 12" HDPE
@ S=0.025

43 LF 24" HDPE
@ S=0.005

31 LF 24" HDPE
@ S=0.005
WITH STUB FOR
FUTURE CONNI

PDMH-04
RIM=266.60
INV IN=258.30 SW
INV IN=258.30 NE
INV IN=258.30 SE
INV OUT=258.20 NW

CONNECT INTO PROPOSED
STRUCTURE IN NEW CITY ROW
@ ELEV=258.00
(COORD W/ OFF-SITE DWGS)

141 LF 12" HDPE
@ S=0.005

PCB-01
RIM=264.25
INV OUT=259.00 SW

CONNECT INTO PROPOSED
STRUCTURE IN NEW CITY ROW
@ ELEV=255.55
(COORD W/ OFF-SITE DWGS)

110 LF 12" HDPE
@ S=0.005

72 LF 12" HDPE
@ S=0.005

PDMH-03
RIM=261.85
INV IN=256.60 SE
INV IN=256.60 NE
INV OUT=256.50 NW

PDMH-02
RIM=258.95
INV IN=256.00 SE
INV IN=256.00 NE
INV OUT=255.90 NW

30 LF 12" HDPE
@ S=0.005

PCB-11
RIM=261.50
INV OUT=256.75 NW

6 LF 12" HDPE
@ S=0.008

PCB-02
RIM=261.75
INV OUT=256.65 SW

11 LF 12" HDPE
@ S=0.041

PROPOSED ROOF LEADER
32 LF 8" PVC @ S=0.011
INV @ BLDG=257.50
(COORD W/ BLDG DWGS)

PCB-05
RIM=261.55
INV OUT=256.45 SW

PCB-06
RIM=255.30
INV OUT=250.30 N

PROPOSED ROOF LEADER
27 LF 6" PVC @ S=0.050
INV @ BLDG=251.45
(COORD W/ BLDG DWGS)

41 LF 12" HDPE
@ S=0.007

PCB-07
RIM=255.40
INV OUT=250.40 SE

35 LF 12" PVC
@ S=0.006

9 LF 12" HDPE
@ S=0.028

PROPOSED RAIN
GARDEN #1

PFES-01
INV=249.75

PDMH-01
RIM=256.20
INV IN=250.10 NW
INV IN=250.10 S
INV IN=250.10 SW
INV OUT=250.00 NE

PCB-08
RIM=256.60
INV OUT=252.35 N

PCB-09
RIM=256.60
INV IN=251.85 S
INV OUT=251.75 N

PROPOSED
STORMWATER
WETLAND
(SEE DETAIL)

105 LF 12" HDPE
@ S=0.005

88 LF 12" HDPE
@ S=0.005

PROPOSED ROOF LEADER
13 LF 12" HDPE @ S=0.008
INV @ BLDG=251.10
(COORD W/ BLDG DWGS)

PFES-04
INV=251.00

PFES-05
INV=251.00

PROPOSED RAIN
GARDEN #2

PCB-10
RIM=256.30
INV IN=251.30 S
INV OUT=251.20 NE

42 LF 12" HDPE
@ S=0.005

(FARMINGTON ROAD)

CRANE DRIVE

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**Tighe&Bond**
Engineers | Environmental Specialists

BRADLEE MEZQUITA
No. 08530
LICENSED
PROFESSIONAL ENGINEER
STATE OF NEW HAMPSHIRE
11-25-19

PATRICK M. CRIMMINS
No. 12506
LICENSED
PROFESSIONAL ENGINEER
STATE OF NEW HAMPSHIRE
11-25-19

SCALE IN FEET
0 50' 100'
GRAPHIC SCALE

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GRADING, DRAINAGE, & EROSION CONTROL PLAN

SCALE: AS SHOWN

C-103.1

PROPOSED FUTURE UNDERGROUND INFILTRATION / DETENTION BASIN

Tighe&Bond
Engineers | Environmental Specialists

BRADLEE MEZQUITA
No. 06530
LICENSED
PROFESSIONAL ENGINEER
STATE OF NEW HAMPSHIRE
11-25-19

PATRICK M. CRIMMINS
No. 13340
LICENSED
PROFESSIONAL ENGINEER
STATE OF NEW HAMPSHIRE
11-25-19

SCALE IN FEET
0 50' 100'
GRAPHIC SCALE

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GRADING, DRAINAGE, & EROSION CONTROL PLAN

SCALE: AS SHOWN

C-103.2

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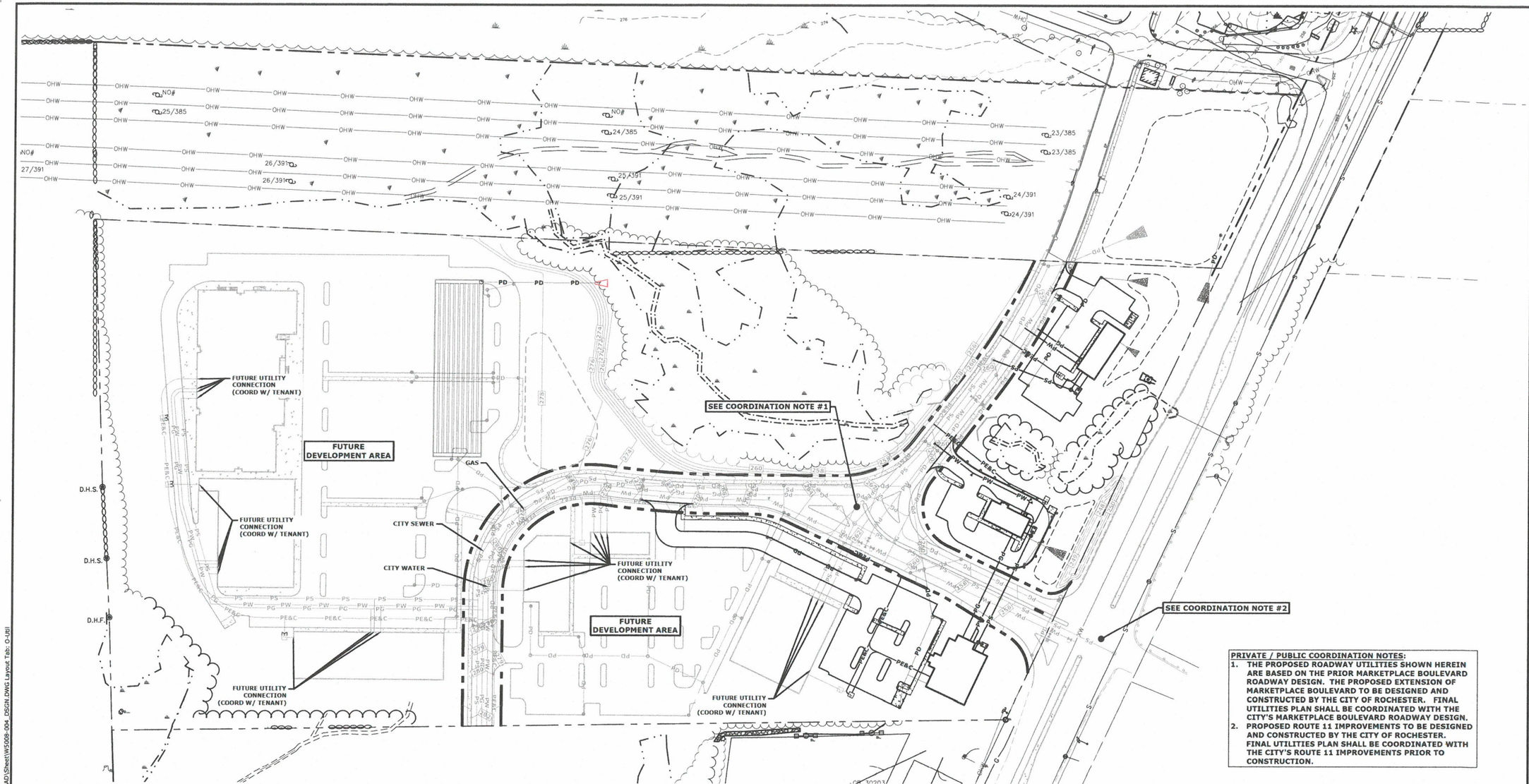


**PRIVATE / PUBLIC COORDINATION NOTES:**

1. THE PROPOSED ROADWAY UTILITIES SHOWN HEREIN ARE BASED ON THE PRIOR MARKETPLACE BOULEVARD ROADWAY DESIGN. THE PROPOSED EXTENSION OF MARKETPLACE BOULEVARD TO BE DESIGNED AND CONSTRUCTED BY THE CITY OF ROCHESTER. FINAL UTILITIES PLAN SHALL BE COORDINATED WITH THE CITY'S MARKETPLACE BOULEVARD ROADWAY DESIGN.
2. PROPOSED ROUTE 11 IMPROVEMENTS TO BE DESIGNED AND CONSTRUCTED BY THE CITY OF ROCHESTER. FINAL UTILITIES PLAN SHALL BE COORDINATED WITH THE CITY'S ROUTE 11 IMPROVEMENTS PRIOR TO CONSTRUCTION.

**UTILITY NOTES**

1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR 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 AT NO ADDITIONAL COST TO THE OWNER.
2. COORDINATE ALL UTILITY WORK WITH APPROPRIATE UTILITY COMPANY.
3. SEE GRADING, DRAINAGE, AND EROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONTROL MEASURES.
4. ALL WATER MAIN INSTALLATIONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE.
5. 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 PUBLIC WORKS DEPARTMENT.
6. ALL SEWER PIPE SHALL BE PVC SDR 35 UNLESS OTHERWISE STATED.
7. ALL WORK WITHIN CITY ROWS SHALL BE COORDINATED WITH CITY OF ROCHESTER.
8. CONTRACTOR SHALL MAINTAIN UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT CONSTRUCTION.
9. CONNECTION TO EXISTING WATER MAIN SHALL BE CONSTRUCTED TO CITY STANDARDS.
10. ALL ELECTRICAL MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.
11. THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH THE BUILDING DRAWINGS AND THE UTILITY COMPANIES.
12. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
13. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
14. THE CONTRACTOR SHALL OBTAIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, ARRANGE FOR ALL INSPECTIONS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE OWNER PRIOR TO THE COMPLETION OF THIS PROJECT.
15. 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.
16. CONTRACTOR SHALL PROVIDE EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR NATURAL GAS SERVICES.
17. 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.
18. THE CONTRACTOR SHALL CONTACT "DIG-SAFE" 72 HOURS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL HAVE THE "DIG-SAFE" NUMBER ON SITE AT ALL TIMES.
19. CONTRACTOR TO SUBMIT AS-BUILT PLANS ON REPRODUCIBLE MYLARS AND IN DIGITAL FORMAT (.DXF FILES) TO THE OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER.
20. SAWCUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN.
21. HYDRANTS, GATE VALVES, FITTINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF ROCHESTER.
22. COORDINATE TESTING OF SEWER CONSTRUCTION WITH THE CITY OF ROCHESTER.
23. ALL SEWER PIPE WITH LESS THAN 4' OF COVER IN UNPAVED AREAS AND LESS THAN 6' OF COVER IN PAVED AREAS SHALL BE INSULATED.
24. 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 POWER COMPANY.
25. CONTRACTOR SHALL PHASE UTILITY CONSTRUCTION, PARTICULARLY WATER MAIN AND GAS MAIN CONSTRUCTION AS TO MAINTAIN CONTINUOUS SERVICE TO ABUTTING PROPERTIES. CONTRACTOR SHALL COORDINATE TEMPORARY SERVICES TO ABUTTERS WITH THE UTILITY COMPANY AND AFFECTED ABUTTER.
26. SITE LIGHTING SPECIFICATIONS, CONDUIT LAYOUT AND CIRCUITRY FOR PROPOSED SITE LIGHTING AND SIGN ILLUMINATION SHALL BE PROVIDED BY THE PROJECT ELECTRICAL ENGINEER.
27. ALL WORK WITHIN ROUTE 11 SHALL BE COORDINATED WITH THE CITY OF ROCHESTER AND THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.
28. ALL WATER LINE BUILDING CONNECTIONS SHALL BE EQUIPPED WITH A BACKFLOW PREVENTER. THE INSPECTIONS SHALL BE COORDINATED WITH THE BUILDING DEPARTMENT.

**LEGEND**

| | |
|---|---|
| PS PS | PROPOSED SEWER LINE |
| PS PS | PROPOSED FUTURE / OFF-SITE SEWER LINE (COORD W/ OFF-SITE DWGS) |
| PW PW | PROPOSED WATER LINE |
| PW PW | PROPOSED FUTURE / OFF-SITE WATER LINE (COORD W/ OFF-SITE DWGS) |
| PE&C PE&C | PROPOSED ELECTRIC AND COMMUNICATIONS |
| PE&C PE&C | PROPOSED FUTURE / OFF-SITE ELECTRIC AND COMMUNICATIONS (COORD W/ OFF-SITE DWGS) |
| PG PG | PROPOSED GAS LINE |
| PG PG | PROPOSED FUTURE / OFF-SITE GAS LINE (COORD W/ OFF-SITE DWGS) |

Tighe&Bond
Engineers | Environmental Specialists

STATE OF NEW HAMPSHIRE — BRADLEE MEZQUITA No. 08530 LICENSED PROFESSIONAL ENGINEER — 11/25/19

STATE OF NEW HAMPSHIRE — PATRICK M. CROSSMAN No. 12... LICENSED PROFESSIONAL ENGINEER — 11-25-19

SCALE IN FEET
0 80' 160'
GRAPHIC SCALE

# Proposed Commercial Development Phase II

Farmington Associates, LLC

60 Farmington Road (Route 11)
Rochester, NH

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| A | 11/25/2019 | Site Plan Review Submission |

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| CHECKED: | PMC |
| APPROVED: | BLM |

OVERALL UTILITIES PLAN

SCALE: AS SHOWN

C-104

Last Save Date: November 22, 2019 4:56 PM By: CML
Plot Date: Monday, November 25, 2019 Plotted By: Craig M. Langton
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CONNECT TO PROPOSED ELECTRIC IN NEW CITY ROW (SEE COORDINATION NOTES)

CONNECT TO PROPOSED WATER IN NEW CITY ROW (COORD W/ OFF-SITE DWGS)

CONST TRANSFORMER (COORD W/ BLDG DWGS & EVERSOURCE)

PROPOSED ELECTRIC AND TELECOMMUNICATIONS CONNECTION (COORD W/ BLDG DWGS)

PROPOSED GAS SERVICE CONNECTION (COORD W/ BLDG DWGS & UNITIL)

PROPOSED DOMESTIC & FIRE SERVICE (COORD W/ BLDG DWGS & DPW)

PROPOSED SANITARY SERVICE CONNECTION 11 LF 6" PVC @ S=0.012 INV OUT @ BLDG=250.50 (COORD W/ BLDG DWGS)

PROPOSED GREASE WASTE CONNECTION 10 LF 4" PVC @ S=0.010 INV OUT @ BLDG=250.75 (COORD W/ BLDG DWGS)

PSMH-01 RIM=253.25 INV IN=250.35 SE INV IN=250.35 NE INV OUT=250.25 NW

74 LF 6" PVC @ S=0.010

3 LF 4" PVC @ S=0.010

GREASE TRAP-01 1,000 GALLON INV IN=250.65 SE INV OUT=250.40 SW (COORD W/ BLDG DWGS)

CONNECT TO PROPOSED GAS MAIN IN NEW CITY ROW (SEE COORDINATION NOTES)

CONNECT INTO PROPOSED STRUCTURE IN NEW CITY ROW @ ELEV=249.50 (COORD W/ OFF-SITE DWGS)

PROPOSED GREASE WASTE CONNECTION 9 LF 4" PVC @ S=0.011 INV OUT @ BLDG=250.50 (COORD W/ BLDG DWGS)

PROPOSED SANITARY SERVICE CONNECTION 10 LF 6" PVC @ S=0.008 INV OUT @ BLDG=250.20 (COORD W/ BLDG DWGS)

PROPOSED GAS SERVICE CONNECTION (COORD W/ BLDG DWGS & UNITIL)

104 LF 6" PVC @ S=0.005

3 LF 4" PVC @ S=0.010

PSMH-02 RIM=256.00 INV IN=250.10 NW INV IN=250.10 SW INV OUT=250.00 SE

CONNECT INTO PROPOSED STRUCTURE IN NEW CITY ROW @ ELEV=253.50 (COORD W/ OFF-SITE DWGS)

127 LF 6" PVC @ S=0.010

PSMH-03 RIM=258.20 INV IN=254.95 E INV IN=254.95 N INV OUT=254.85 SW

5 LF 4" PVC @ S=0.015

PROPOSED DOMESTIC & FIRE SERVICE (COORD W/ BLDG DWGS & DPW)

PROPOSED ELECTRIC AND TELECOMMUNICATIONS CONNECTION (COORD W/ BLDG DWGS)

CONST TRANSFORMER (COORD W/ BLDG DWGS & EVERSOURCE)

GREASE TRAP-02 1,000 GALLON INV IN=250.40 SW INV OUT=250.15 SE (COORD W/ BLDG DWGS)

PROPOSED GAS SERVICE CONNECTION (COORD W/ BLDG DWGS & UNITIL)

PROPOSED DOMESTIC & FIRE SERVICE (COORD W/ BLDG DWGS & DPW)

PROPOSED SANITARY SERVICE CONNECTION 31 LF 6" PVC @ S=0.018 INV OUT @ BLDG=255.55 (COORD W/ BLDG DWGS)

PROPOSED GREASE WASTE CONNECTION 24 LF 4" PVC @ S=0.011 INV OUT @ BLDG=255.55 (COORD W/ BLDG DWGS)

PREASE TRAP-03 1,000 GALLON INV IN=255.30 N INV OUT=255.05 W (COORD W/ BLDG DWGS)

CONNECT TO PROPOSED GAS MAIN IN NEW CITY ROW (SEE COORDINATION NOTES)

CONNECT TO PROPOSED WATER IN NEW CITY ROW (COORD W/ OFF-SITE DWGS)

CONNECT TO PROPOSED GAS MAIN IN NEW CITY ROW (SEE COORDINATION NOTES)

CONNECT TO PROPOSED ELECTRIC IN NEW CITY ROW (SEE COORDINATION NOTES)

TE 11 (FARMINGTON ROAD)

CRANE DRIVE

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Tighe&Bond
Engineers | Environmental Specialists

STATE OF NEW HAMPSHIRE
BRADLEE MEZQUITA
No. 16830
LICENSED PROFESSIONAL ENGINEER
11-25-19

STATE OF NEW HAMPSHIRE
PATRICK M. CRIMMINS
No. 12524
LICENSED PROFESSIONAL ENGINEER
11-25-19

SCALE IN FEET
0 50' 100'
GRAPHIC SCALE

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UTILITIES PLAN

SCALE: AS SHOWN

C-104.1

Tighe&Bond
Engineers | Environmental Specialists

BRADLEE MEZQUITA
No. 08530
LICENSED
PROFESSIONAL ENGINEER
STATE OF NEW HAMPSHIRE

PATRICK M. CUMMINS
No. 15[illegible]
LICENSED
PROFESSIONAL ENGINEER
STATE OF NEW HAMPSHIRE
11-25-19

SCALE IN FEET
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GRAPHIC SCALE

# Proposed Commercial Development Phase II

Farmington Associates, LLC

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UTILITIES PLAN

SCALE: AS SHOWN

C-104.2

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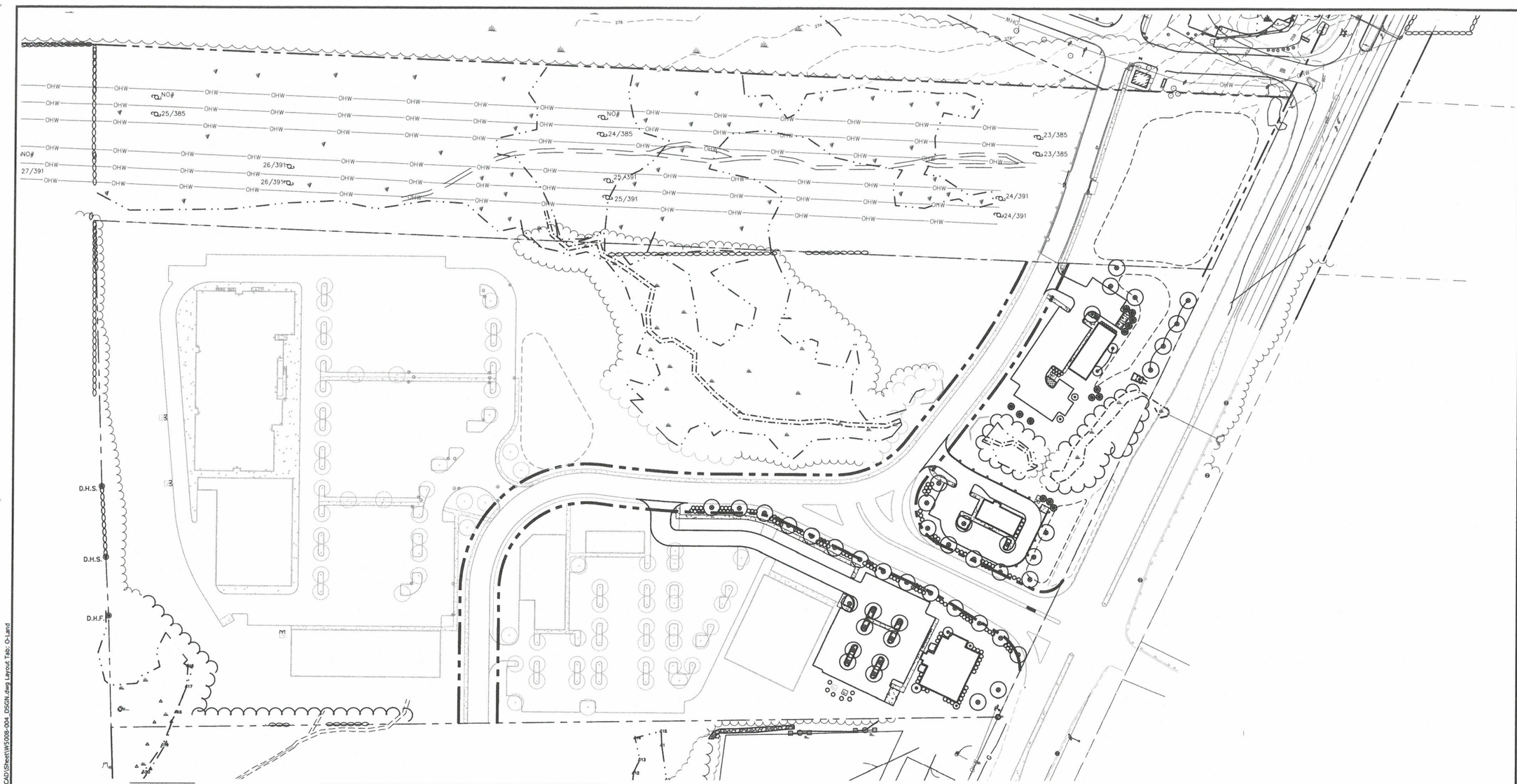


**LANDSCAPE NOTES:**

1. 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.
2. 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.
3. 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.
4. PLANT MATERIAL SHALL BARE THE SAME RELATIONSHIP TO FINISHED GRADE AS TO THE ORIGINAL PLANTING GRADE PRIOR TO DIGGING.
5. 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.
6. NO SUBSTITUTION OF PLANT MATERIALS WILL BE ALLOWED WITHOUT THE PRIOR WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE.
7. 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.
8. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED, SHALL RECEIVE 6" OF LOAM AND SEED. NO FILL SHALL BE PLACED IN ANY WETLAND AREA.
9. THREE INCHES (3") OF 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 6" INCHES OF LOAM AND SEED.
10. LANDSCAPING SHALL BE LOCATED WITHIN 150 FT OF EXTERIOR HOSE ATTACHMENT OR SHALL BE PROVIDED WITH AN IRRIGATION SYSTEM.
11. SEE PLANTING DETAILS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
12. TREE STAKES SHALL REMAIN IN PLACE FOR NO LESS THAN 6 MONTHS AND NO MORE THAN 1 YEAR.
13. PLANTING SHALL BE COMPLETED FROM APRIL 15TH THROUGH OCTOBER 1ST. NO PLANTING DURING JULY AND AUGUST UNLESS SPECIAL PROVISIONS ARE MADE FOR DROUGHT.
14. 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.
15. TREES SHALL BE PRUNED IN ACCORDANCE WITH THE LATEST EDITION OF ANSI A300 'TREES, SHRUBS AND OTHER WOOD PLANT MAINTENANCE STANDARD PRACTICES.
16. 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. LANDSCAPE CONTRACTOR SHALL COORDINATE WATERING SCHEDULE WITH OWNER DURING THE ONE (1) YEAR GUARANTEE PERIOD.
17. 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.
18. THE CONTRACTOR SHALL GUARANTEE ALL PLANTINGS TO BE IN GOOD HEALTHY, FLOURISHING AND ACCEPTABLE CONDITION FOR A PERIOD OF ONE (1) YEAR BEGINNING AT THE DATE OF ACCEPTANCE OF SUBSTANTIAL COMPLETION. ALL GRASSES, 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.
19. UPON EXPIRATION OF THE CONTRACTOR'S ONE YEAR GUARANTEE PERIOD, THE OWNER SHALL BE RESPONSIBLE FOR LANDSCAPE MAINTENANCE INCLUDING WATERING DURING PERIODS OF DROUGHT
20. 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.
21. 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.

**PLANT SCHEDULE:**

**TREES:**

| CODE | BOTANICAL NAME | COMMON NAME | SIZE | REMARKS |
|---|---|---|---|---|
| GT | GLEDITSIA TRIACANTHOS 'SHADEMASTER' | SHADEMASTER HONEYLOCUST | 3-3½" CALIPER | B & B |
| ZS | ZELKOVA SERRATA 'GREEN VASE' | GREEN VASE ZELKOVA | 3-3½" CALIPER | B & B |
| PC | PYRUS CALLERYANA 'CHANTICLEER' | CHANTICLEER PEAR | 3-3½" CALIPER | B & B |
| UA | ULMUS AMERICANA 'PRINCETON' | PRINCETON AMERICAN ELM | 3-3½" CALIPER | B & B |
| QR | QUERCUS RUBRA | RED OAK | 3-3½" CALIPER | B & B |
| AR | ACER RUBRUM | RED MAPLE | 3-3½" CALIPER | B & B |
| AG | AMALANCHIER GRANDIFLORA 'AUTUMN BRILLIANCE' | AUTUMN BRILLIANCE SERVICEBERRY | 2½-3" CALIPER | B & B (SINGLE STEM) |
| MC | MALUS CENTURION | CENTURION CRABAPPLE | 2½-3" CALIPER | B & B |
| PG | PICEA GLAUCA | WHITE SPRUCE | 8 - 10' HT. | B & B |
| PS | PINUS STROBUS | WHITE PINE | 8 - 10' HT. | B & B (SHEARED) |
| JC | JUNIPERUS CHINENSIS 'MOUNTBATTEN' | MOUNTBATTEN JUNIPER | 7 - 8' HT | B & B |
| MS | MAGNOLIA STELLATA | STAR MAGNOLIA | 7 - 8' HT | B & B |

**SHRUBS:**

| CODE | BOTANICAL NAME | COMMON NAME | SIZE | REMARKS |
|---|---|---|---|---|
| SB | SPIREA BUMALDA 'ANTHONY WATERER' | ANTHONY WATERER SPIREA | #3 | CONTAINER |
| SM | SYRINGA MEYERI 'PALIBIN' | DWARF KOREAN LILAC | #5 | CONTAINER |
| VD | VIBURNUM DENTATUM 'BLUE MUFFIN' | BLUE MUFFIN VIBURNUM | #5 | CONTAINER |
| FN | FORSYTHIA 'NORTHERN GOLD' | NORTHERN GOLD FORSYTHIA | #5 | CONTAINER |
| RA | RHUS AROMATICA 'GROW LOW' | GROW LOW SUMAC | #3 | CONTAINER |
| CS | CORNUS SERICEA 'ALLEMAN'S COMPACT' | ALLEMAN'S RED STEM DOGWOOD | #5 | CONTAINER |
| JP | JUNIPERUS CHINENSIS 'SEAGREEN' | SEAGREEN JUNIPER | #5 | CONTAINER |
| JPC | JUNIPERUS PFITZERIANA 'COMPACTA' | COMPACT PFITZER JUNIPER | #3 | CONTAINER |
| TM | TAXUS MEDIA 'TAUNTONII' | TAUNTON YEW | #5 | CONTAINER |
| RK | ROSA KNOCKOUT | KNOCKOUT ROSE | #3 | CONTAINER |
| VA | VIBVRIVUM CARLESII 'AURORA' | AURURA MAYFLOWER | 5 GAL | CONTAINER |

**GROUNDCOVERS & PERENNIALS:**

| CODE | BOTANICAL NAME | COMMON NAME | SIZE | REMARKS |
|---|---|---|---|---|
| PV | PANICUM VIRGATUM 'SHENANDOAH' | SHENANDOAH SWITCH GRASS | #3 | CONTAINER |
| CF | CALAMAGROSTIS 'KARL FOERSTER' | FEATHER REED GRASS | #3 | CONTAINER |
| JS | JUNIPERUS CHINENSIS 'SARGENTI' | GREEN SARGENT JUNIPER | #3 | CONTAINER |
| DL | HEMEROCALLIS 'STELLA DORO' | STELLA DORO DAYLILY | #2 | CONTAINER |
| RG | RUDBECKIA 'GOLDSTURM' | GOLDSTURM BLACK EYED SUSAN | #2 | CONTAINER |
| EP | ECHINACEA PURPUREA | PURPLE CONEFLOWER | #2 | CONTAINER |
| SP | SEDUM PURPUREUM 'VERA JAMESON' | VERA JAMESON SEDUM | #2 | CONTAINER |
| NW | NEPETA 'WALKERS LOW' | WALKERS LOW CATMINT | #2 | CONTAINER |
| H | HOSTA 'ROYAL STANDARD' | ROYAL STANDARD HOSTA | #2 | CONTAINER |

**PLANT SCHEDULE @ UPLAND EDGE OF WETLAND OR STREAM**

**TREES:**

| CODE | BOTANICAL NAME | COMMON NAME | SIZE | REMARKS |
|---|---|---|---|---|
| AR | ACER RUBRUM | RED MAPLE | 2½-3" CALIPER | B & B |
| QR | QUERCUS RUBRA | RED OAK | 2½-3" CALIPER | B & B |
| BA | BETULA ALLEGHENIENSIS | YELLOW BIRCH | 8 - 10' HT | B & B (CLUMP) |
| AC | AMALANCHIER CANADENSIS | SHADBLOW SERVICEBERRY | 6 -7' HT | B & B (CLUMP) |
| PS | PINUS STROBUS | WHITE PINE | 7 - 8' HT | B & B (SHEARED) |

**SHRUBS:**

| CODE | BOTANICAL NAME | COMMON NAME | SIZE | REMARKS |
|---|---|---|---|---|
| VD | VIBURNUM DENTATUM | ARROWWOOD VIBURNUM | #3 | CONTAINER |
| CA | CLETHERA ALNIFOLIA(SWEET PEPPER BUSH) | SUMMERSWEET CLETHERA | #3 | CONTAINER |
| IV | ILEX VERTICILLATA | WINTERBERRY | #3 | CONTAINER |
| VC | VACCINIUM CORYMBOSUM | HIGHBUSH BLUEBERRY | #3 | CONTAINER |
| CS | CORNUS SERICEA | RED STEM DOGWOOD | #3 | CONTAINER (MIX M&F) |

**WETLAND PERENNIALS:**

| CODE | BOTANICAL NAME | COMMON NAME | SIZE | REMARKS |
|---|---|---|---|---|
| F | FERN OSMUNDA REGALIS | ROYAL FERN | #2 | CONTAINER |

Tighe&Bond
Engineers | Environmental Specialists

STATE OF NEW HAMPSHIRE
BRADLEE MEZQUITA
No. 08535
LICENSED
PROFESSIONAL ENGINEER

STATE OF NEW HAMPSHIRE
PATRICK M. CROSBERG
No. 12038
LICENSED
Professional Engineer
11-25-19

SCALE IN FEET
0 80' 160'
GRAPHIC SCALE

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Farmington Associates, LLC

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OVERALL LANDSCAPE PLAN

SCALE: AS SHOWN

C-105

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Tighe&Bond
Engineers | Environmental Specialists

N

STATE OF NEW HAMPSHIRE
BRADLEE MEZQUITA
No. 08530
LICENSED PROFESSIONAL ENGINEER
11-25-19

STATE OF NEW HAMPSHIRE
PATRICK M. CUMMINS
No. 12[illegible]
LICENSED PROFESSIONAL ENGINEER
11-25-19

SCALE IN FEET
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LANDSCAPE PLAN

SCALE: AS SHOWN

C-105.1

7 JP
1 UA
7 JP
1 ZS
3 FN
1 UA
7 JP
1 ZS
3 FN
1 UN
7 JP
1 ZS
3 FN
1 UA
7 JP
1 ZS
3 FN
1 UA
7 JP
1 ZS
3 FN
1 UA
5 JP
1 ZS
5 RA
1 AR
1 AR
6 VD
5 RA
2 QR
5 RA
2 RA
2 RA
2 QR
1 QR
1 QR
3 SB
2 SB
5 CF
3 SB
1 MS
1 VA
3 SB
1 VA
3 SB
5 TM
5 TM
2 AR
7 JP
1 PC
1 PC
3 FN
1 UA
5 JP
1 ZS
3 FN
1 UA
7 JP
1 ZS
3 FN
1 UA
7 JP
1 ZS
3 FN
1 PC
9 RA
1 AR
4 RA
5 TM
2 AR
3 PS
10 RA
LAWN
7 VD
1 MC
1 MC
2 AG
3 PS
1 ZS
6 DL
6 PV
8 TM
5 PG
1 QR
1 PC
1 AR
LAWN
4 AR
XW
XW
XW
XW
XS
TE 11 (FARMINGTON ROAD)
CRANE DRIVE
FARMINGTON ROAD (ROUTE 11)
SECONDARY DRIVE
199

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Tighe&Bond
Engineers | Environmental Specialists

BRADLEE MEZOLITA No. 08530 LICENSED PROFESSIONAL ENGINEER – STATE OF NEW HAMPSHIRE

PATRICK M. CUMMINS No. 13295 LICENSED PROFESSIONAL ENGINEER – STATE OF NEW HAMPSHIRE 11-25-19

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LANDSCAPE PLAN

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Last Save Date: November 22, 2019 4:56 PM By: CML
Plot Date: Monday, November 25, 2019 Plotted By: Craig M. Langton
T&B File Location: J:\W\W5008 Waterstone Retail\004 - Ridge Marketplace Phase 2\Drawings_Figures\AutoCAD\Sheet\W5008-004_DSGN.dwg Layout Tab: Land-2

StatArea_1
PARKING LOT A
Illuminance (Fc)
Average = 2.05
Maximum = 4.9
Minimum = 0.5
Avg/Min Ratio = 4.10
Max/Min Ratio = 9.80

StatArea_2
B PARKING LOT
Illuminance (Fc)
Average = 1.92
Maximum = 4.6
Minimum = 0.5
Avg/Min Ratio = 3.84
Max/Min Ratio = 9.20

StatArea_3
C PARKING LOT
Illuminance (Fc)
Average = 1.57
Maximum = 3.8
Minimum = 0.5
Avg/Min Ratio = 3.14
Max/Min Ratio = 7.60

StatArea_4
D LOT
Illuminance (Fc)
Average = 1.86
Maximum = 6.3
Minimum = 0.7
Avg/Min Ratio = 2.66
Max/Min Ratio = 9.00

StatArea_5
E LOT
Illuminance (Fc)
Average = 1.98
Maximum = 4.4
Minimum = 0.5
Avg/Min Ratio = 3.96
Max/Min Ratio = 8.80

| Luminaire Schedule | | | | |
|---|---|---|---|---|
| Symbol | Qty | Label | Arrangement | Description |
| | 5 | P5-2 | BACK-BACK | GLEON-AF-01-LED-E1-5WQ/ SSS4A17.5SFN2 MTD ON 2.5' PED BY OTHERS (20' AFG) |
| | 5 | S3 | SINGLE | GLEON-AF-02-LED-E1-SL3-HSS/ SSS4A17.5SFN1 MTD ON 2.5' PED BY OTHERS (20' AFG) |
| | 7 | S4 | SINGLE | GLEON-AF-02-LED-E1-SL4-HSS/ SSS4A17.5SFN1 MTD ON 2.5' PED BY OTHERS (20' AFG) |
| | 23 | S5-2 | BACK-BACK | GLEON-AF-02-LED-E1-5WQ/ SSS4A17.5SFN2 MTD ON 2.5' PED BY OTHERS (20' AFG) |

Tighe&Bond
Engineers | Environmental Specialists

STATE OF NEW HAMPSHIRE
BRADLEE MEZQUITA
No. 06530
LICENSED
PROFESSIONAL ENGINEER
11-25-19

STATE OF NEW HAMPSHIRE
PATRICK M. CRIMMINS
No. 12
LICENSED
PROFESSIONAL ENGINEER
11-25-19

SCALE IN FEET
0 80' 160'
GRAPHIC SCALE

# Proposed Commercial Development Phase II

Farmington Associates, LLC

60 Farmington Road
(Route 11)
Rochester, NH

| MARK | DATE | DESCRIPTION |
|---|---|---|
| A | 11/25/2019 | Site Plan Review Submission |

| | |
|---|---|
| PROJECT NO: | W5008-004 |
| DATE: | 11/25/2019 |
| FILE: | W5008-004_DSGN.DWG |
| DRAWN BY: | CML |
| CHECKED: | PMC |
| APPROVED: | BLM |

PHOTOMERTICS PLAN

SCALE: AS SHOWN

C-106.1

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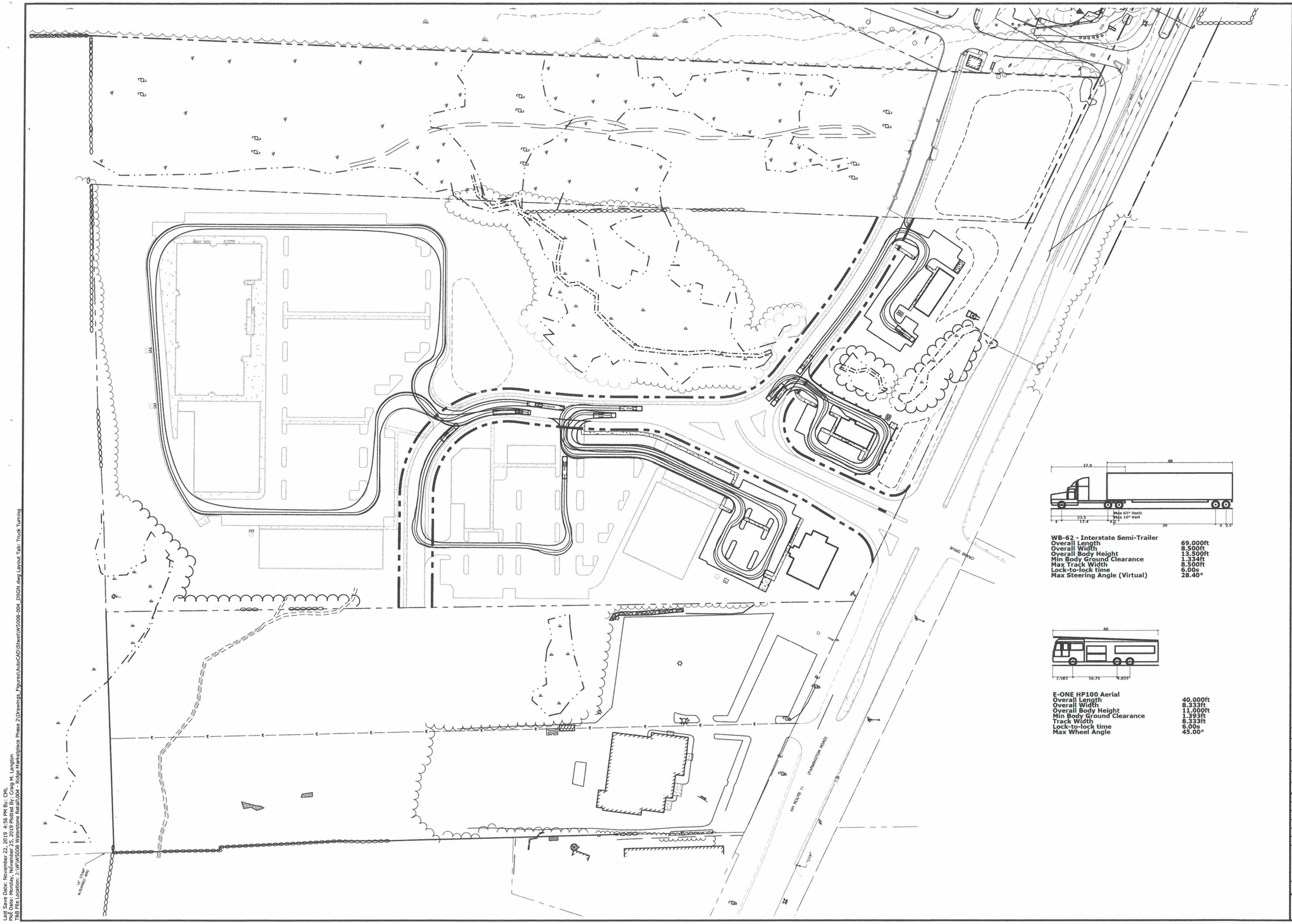





**WB-62 - Interstate Semi-Trailer**

| | |
|---|---|
| Overall Length | 69.000ft |
| Overall Width | 8.500ft |
| Overall Body Height | 13.500ft |
| Min Body Ground Clearance | 1.334ft |
| Max Track Width | 8.500ft |
| Lock-to-lock time | 6.00s |
| Max Steering Angle (Virtual) | 28.40° |




**E-ONE HP100 Aerial**

| | |
|---|---|
| Overall Length | 40.000ft |
| Overall Width | 8.333ft |
| Overall Body Height | 11.000ft |
| Min Body Ground Clearance | 1.393ft |
| Track Width | 8.333ft |
| Lock-to-lock time | 6.00s |
| Max Wheel Angle | 45.00° |

Tighe&Bond
Engineers | Environmental Specialists

STATE OF NEW HAMPSHIRE
BRADLEE MEZQUITA
No. 08530
LICENSED PROFESSIONAL ENGINEER
11-25-19

STATE OF NEW HAMPSHIRE
PATRICK M. CRIMMINS
No. 18
LICENSED PROFESSIONAL ENGINEER
11-25-19

SCALE IN FEET
0 80' 160'
GRAPHIC SCALE

# Proposed Commercial Development Phase II

Farmington Associates, LLC

60 Farmington Road
(Route 11)
Rochester, NH

| MARK | DATE | DESCRIPTION |
|---|---|---|
| A | 11/25/2019 | Site Plan Review Submission |

| | |
|---|---|
| PROJECT NO: | W5008-004 |
| DATE: | 11/25/2019 |
| FILE: | W5008-004_DSGN.DWG |
| DRAWN BY: | CML |
| CHECKED: | PMC |
| APPROVED: | BLM |

TRUCK TURNING

SCALE: AS SHOWN

C-107.1

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**GENERAL PROJECT INFORMATION**

PROJECT OWNER: FARMINGTON ASSOCIATES, LLC
322 RESERVOIR STREET
NEEDHAM, MA 02494

PROJECT NAME: PROPOSED COMMERCIAL DEVELOPMENT
PROJECT ADDRESS: 60 FARMINGTON ROAD
ROCHESTER, NH 03867
PROJECT MAP / LOT: MAP 216 / LOTS 8, 9, 10
PROJECT LATITUDE: 43°-19'-45"N
PROJECT LONGITUDE: 71°-00'-18"W

**PROJECT DESCRIPTION**

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

**DISTURBED AREA**

THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY ±25.0 ACRES.

**SOIL CHARACTERISTICS**

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

**NAME OF RECEIVING WATERS**

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

**CONSTRUCTION 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 WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
7. BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
8. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, PERIMETER EROSION CONTROL MEASURES, SEDIMENT TRAPS, ETC., MULCH AND SEED AS REQUIRED.
9. SEDIMENT TRAPS AND/OR BASINS SHALL BE USED AS NECESSARY TO CONTAIN RUNOFF UNTIL SOILS ARE STABILIZED.
10. FINISH PAVING ALL ROADWAYS AND PARKING LOTS.
11. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES.
12. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
13. REMOVE TRAPPED SEDIMENTS FROM COLLECTOR DEVICES AS APPROPRIATE AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES.

**SPECIAL CONSTRUCTION NOTES:**

1. THE CONSTRUCTION SEQUENCE MUST LIMIT THE DURATION AND AREA OF DISTURBANCE.
2. THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430-53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.
3. LOT DISTURBANCE, OTHER THAN THAT SHOWN ON THE APPROVED PLANS, SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE. – THIS NOTE IS APPLICABLE TO SINGLE/DUPLEX FAMILY SUBDIVISIONS, WHEN LOT DEVELOPMENT IS NOT PART OF THE PERMIT.

**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. PRIOR TO ANY WORK OR SOIL DISTURBANCE, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EROSION CONTROL MEASURES AS REQUIRED IN THE PROJECT MANUAL.
3. CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL BARRIERS, INCLUDING HAY BALES, SILT FENCES, MULCH BERMS, SILT SACKS AND SILT SOCKS AS SHOWN IN THESE DRAWINGS AS THE FIRST ORDER OF WORK.
4. 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.
5. PERIMETER CONTROLS INCLUDING SILT FENCES, MULCH BERM, SILT SOCK, AND/OR HAY BALE BARRIERS SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT UNTIL NON-PAVED AREAS HAVE BEEN STABILIZED.
6. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION.
7. ALL DISTURBED AREAS NOT OTHERWISE BEING TREATED SHALL RECEIVE 6" LOAM, SEED AND FERTILIZER.
8. 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.
9. CONSTRUCT EROSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1.

**STABILIZATION:**

1. AN AREA SHALL BE CONSIDERED STABLE WHEN ONE OF THE FOLLOWING HAS OCCURRED:
   A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
   B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
   C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED;
   D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.;
   E. IN AREAS TO BE PAVED, "STABLE" MEANS THAT BASE COURSE GRAVELS MEETING THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2 HAVE BEEN INSTALLED.
2. WINTER STABILIZATION PRACTICES:
   A. ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS;
   B. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS;
   C. AFTER OCTOBER 15, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, 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.
4. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
5. 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, MULCH BERMS, HAY BALE BARRIERS AND ANY EARTH/DIKES SHALL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.
6. 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 SILT FENCES, MULCH BERMS, HAY BALE BARRIERS, 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 ABUTTING AREAS.

**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:**

1. THE CONTRACTOR SHALL CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE(S) PRIOR TO ANY EXCAVATION ACTIVITIES.

**VEGETATION:**

1. TEMPORARY GRASS COVER:
   A. SEEDBED PREPARATION:
      a. 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:
      a. UTILIZE ANNUAL RYE GRASS AT A RATE OF 40 LBS/ACRE;
      b. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF TWO (2) INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED;
      c. 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;
   C. MAINTENANCE:
      a. 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.).
2. PERMANENT MEASURES AND PLANTINGS:
   A. 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;
   B. 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;
   C. 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;
   D. 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;
   E. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AS INDICATED ABOVE;
   F. 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 RESEEDED, AND ALL NOXIOUS WEEDS REMOVED;
   G. THE CONTRACTOR SHALL PROTECT AND MAINTAIN THE SEEDED AREAS UNTIL ACCEPTED;
   H. A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL BE APPLIED AT THE INDICATED RATE:

| SEED MIX | APPLICATION RATE |
|---|---|
| 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.
3. DORMANT SEEDING (SEPTEMBER 15 TO FIRST SNOWFALL):
   A. 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. FIRE-FIGHTING ACTIVITIES;
2. FIRE HYDRANT FLUSHING;
3. WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED;
4. WATER USED TO CONTROL DUST;
5. POTABLE WATER INCLUDING UNCONTAMINATED WATER LINE FLUSHING;
6. ROUTINE EXTERNAL BUILDING WASH DOWN WHERE DETERGENTS ARE NOT USED;
7. PAVEMENT WASH WATERS WHERE DETERGENTS ARE NOT USED;
8. UNCONTAMINATED AIR CONDITIONING/COMPRESSOR CONDENSATION;
9. UNCONTAMINATED GROUND WATER OR SPRING WATER;
10. FOUNDATION OR FOOTING DRAINS WHICH ARE UNCONTAMINATED;
11. UNCONTAMINATED EXCAVATION DEWATERING;
12. LANDSCAPE IRRIGATION.

**WASTE DISPOSAL:**

1. WASTE MATERIAL:
   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 DUMPSTER;
   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 PRACTICE SHALL BE FOLLOWED ON SITE DURING CONSTRUCTION:
      a. ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB SHALL BE STORED ON SITE;
      b. ALL REGULATED 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, ON AN IMPERVIOUS SURFACE;
      c. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED;
      d. THE SITE SUPERINTENDENT SHALL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS;
      e. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER;
      f. WHENEVER POSSIBLE ALL OF A PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
      g. 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.
   B. HAZARDOUS PRODUCTS - THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:
      a. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE;
      b. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION;
      c. SURPLUS PRODUCT THAT MUST BE DISPOSED OF SHALL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.
   C. PRODUCT SPECIFIC PRACTICES - THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE FOLLOWED ON SITE:
      a. PETROLEUM PRODUCTS:
      i. ALL ON SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE;
      ii. 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.
      iii. SECURE FUEL STORAGE AREAS AGAINST UNAUTHORIZED ENTRY;
      iv. INSPECT FUEL STORAGE AREAS WEEKLY;
      v. 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;
      vi. COVER REGULATED CONTAINERS IN OUTSIDE STORAGE AREAS;
      vii. 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.
      viii. THE FUEL HANDLING REQUIREMENTS SHALL INCLUDE:
         (1) EXCEPT WHEN IN USE, KEEP CONTAINERS CONTAINING REGULATED SUBSTANCES CLOSED AND SEALED;
         (2) PLACE DRIP PANS UNDER SPIGOTS, VALVES, AND PUMPS;
         (3) HAVE SPILL CONTROL AND CONTAINMENT EQUIPMENT READILY AVAILABLE IN ALL WORK AREAS;
         (4) USE FUNNELS AND DRIP PANS WHEN TRANSFERRING REGULATED SUBSTANCES;
         (5) PERFORM TRANSFERS OF REGULATED SUBSTANCES OVER AN IMPERVIOUS SURFACE.
      ix. 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.
      HTTPS://WWW.DES.NH.GOV/ORGANIZATION/COMMISSIONER/PIP/FACTSHEETS/DWGB/DOCUMENTS/DWGB-22-6.PDF
      b. FERTILIZERS:
      i. FERTILIZERS USED SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS;
      ii. ONCE APPLIED FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER;
      iii. 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.
      c. PAINTS:
      i. ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE;
      ii. EXCESS PAINT SHALL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM;
      iii. EXCESS PAINT SHALL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
   D. 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:
      a. 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;
      b. 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;
      c. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY;
      d. THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL SHALL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE;
      e. SPILLS OF TOXIC OR HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE LOCAL, STATE OR FEDERAL AGENCIES AS REQUIRED;
      f. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.
   E. VEHICLE FUELING AND MAINTENANCE PRACTICE:
      a. CONTRACTOR SHALL MAKE AN EFFORT TO PERFORM EQUIPMENT/VEHICLE FUELING AND MAINTENANCE AT AN OFF-SITE FACILITY;
      b. CONTRACTOR SHALL PROVIDE AN ON-SITE FUELING AND MAINTENANCE AREA THAT IS CLEAN AND DRY;
      c. IF POSSIBLE THE CONTRACTOR SHALL KEEP AREA COVERED;
      d. CONTRACTOR SHALL KEEP A SPILL KIT AT THE FUELING AND MAINTENANCE AREA;
      e. CONTRACTOR SHALL REGULARLY INSPECT VEHICLES FOR LEAKS AND DAMAGE;
      f. CONTRACTOR SHALL USE DRIP PANS, DRIP CLOTHS, OR ABSORBENT PADS WHEN REPLACING SPENT FLUID.

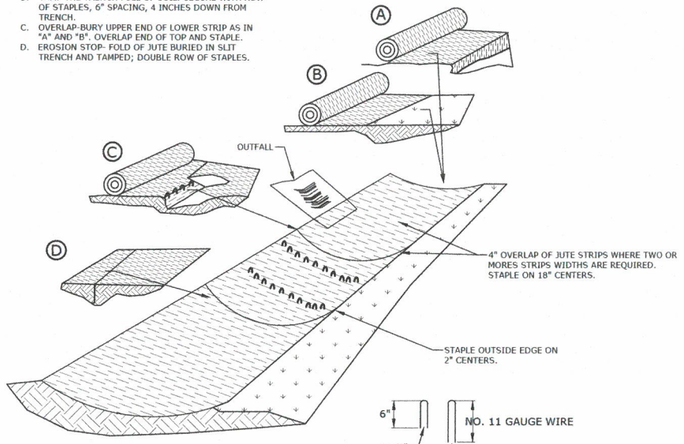
**EROSION CONTROL OBSERVATIONS AND MAINTENANCE PRACTICES**

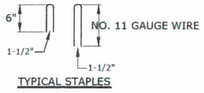
1. THIS PROJECT (DOES NOT) EXCEED(S) ONE (1) ACRE OF DISTURBANCE AND THUS (DOES NOT) REQUIRE(S) A SWPPP. THE SWPPP SHALL BE PREPARED BY THE ENGINEER (CONTRACTOR). THE CONTRACTOR SHALL BE FAMILIAR WITH THE SWPPP AND KEEP AN UPDATED COPY OF THE SWPPP ONSITE AT ALL TIMES.
2. THE FOLLOWING REPRESENTS THE GENERAL OBSERVATION AND REPORTING PRACTICES THAT SHALL BE FOLLOWED AS PART OF THIS PROJECT:
   A. OBSERVATIONS OF THE PROJECT FOR COMPLIANCE WITH THE SWPPP SHALL BE MADE BY THE ENGINEER (CONTRACTOR) AT LEAST ONCE A WEEK OR WITHIN 24 HOURS OF A STORM 0.25 INCHES OR GREATER;
   B. AN OBSERVATION REPORT SHALL BE MADE AFTER EACH OBSERVATION AND DISTRIBUTED TO THE ENGINEER, THE OWNER, AND THE CONTRACTOR;
   C. A REPRESENTATIVE OF THE SITE CONTRACTOR, SHALL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR ACTIVITIES;
   D. IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS OF REPORT.

**BLASTING NOTES:**

1. CONTRACTOR SHALL CONTACT THE NHDES PRIOR TO COMMENCING ANY BLASTING ACTIVITIES
2. FOR ANY PROJECT FOR WHICH BLASTING OF BEDROCK IS ANTICIPATED, THE APPLICANT SHALL SUBMIT:
   A. A BLASTING PLAN THAT IDENTIFIES:
      a. WHERE THE BLASTING ACTIVITIES ARE ANTICIPATED TO OCCUR;
      b. THE ESTIMATED QUANTITY OF BLAST ROCK IN CUBIC YARDS; AND
      c. SITE-SPECIFIC BLASTING BEST MANAGEMENT PRACTICES.
3. IF MORE THAN 5000 CUBIC YARDS OF BLAST ROCK WILL BE GENERATED AND THERE ARE ONE OR MORE PUBLIC DRINKING WATER WELLS WITHIN 2000 FEET OF THE BLASTING ACTIVITIES, A PLAN TO MONITOR GROUNDWATER TO DETECT ANY CONTAMINATION IN SUFFICIENT TIME TO PROTECT THE WATER SUPPLY WELLS SHALL BE PROVIDED TO THE NHDES. THE GROUNDWATER MONITORING PLAN SHALL INCLUDE:
   A. MONITORING 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:
      a. THE GROUNDWATER SAMPLING PROGRAM MUST BE IMPLEMENTED ONCE APPROVED BY THE NHDES.
   B. THE FOLLOWING BEST MANAGEMENT PROCEDURES FOR BLASTING SHALL BE COMPLIED WITH:
      a. LOADING PRACTICES - THE FOLLOWING BLASTHOLE LOADING PRACTICES TO MINIMIZE ENVIRONMENTAL EFFECTS SHALL BE FOLLOWED:
      i. 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;
      ii. 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;
      iii. 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;
      iv. 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;
      v. 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;
      vi. 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

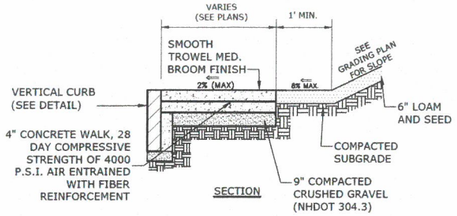
NOTES:
A. BURY THE TOP END OF THE JUTE STRIPS IN A TRENCH 6" OR MORE IN DEPTH.
B. TAMP THE TRENCH FULL OF SOIL. SECURE WITH ROW OF STAPLES, 6" SPACING, 4 INCHES DOWN FROM TRENCH.
C. OVERLAP-BURY UPPER END OF LOWER STRIP AS IN "A" AND "B". OVERLAP END OF TOP AND STAPLE.
D. EROSION STOP- FOLD OF JUTE BURIED IN SLIT TRENCH AND TAMPED; DOUBLE ROW OF STAPLES.



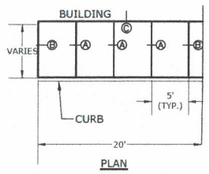




TYPICAL STAPLES

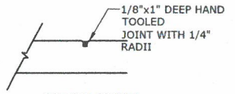
## JUTE MATTING DETAIL
NO SCALE



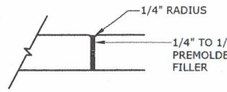

SECTION



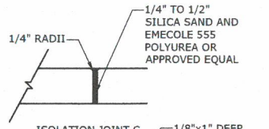

PLAN



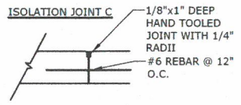

CONTROL JOINT A




EXPANSION JOINT B



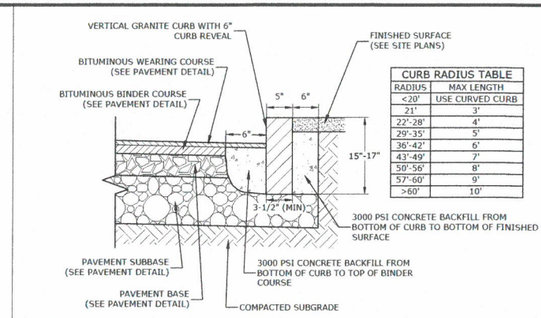

ISOLATION JOINT C




CONSTRUCTION JOINT

NOTES:
1. SIDEWALK SHALL BE CONSTRUCTED TO CITY OF ROCHESTER STANDARDS

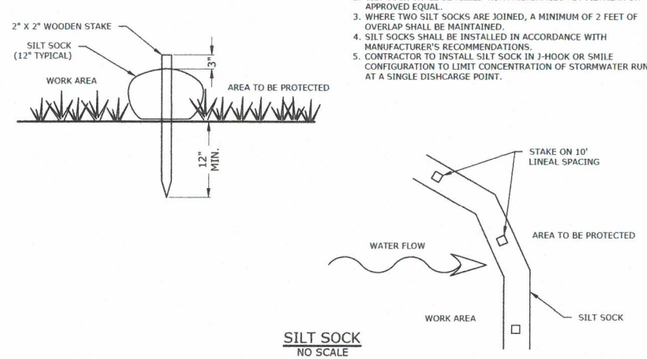
## TYPICAL CONCRETE SIDEWALK WITH GRANITE CURB
NO SCALE




| CURB RADIUS TABLE | |
|---|---|
| RADIUS | MAX LENGTH |
| <20' | USE CURVED CURB |
| 21' | 3' |
| 22'-28' | 4' |
| 29'-35' | 5' |
| 36'-42' | 6' |
| 43'-49' | 7' |
| 50'-56' | 8' |
| 57'-60' | 9' |
| >60' | 10' |

NOTES:
1. SEE SITE PLAN(S) FOR LIMITS OF VERTICAL GRANITE CURB (VGC).
2. ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH.
3. MINIMUM LENGTH OF STRAIGHT CURB STONES = 3'
4. MAXIMUM LENGTH OF STRAIGHT CURB STONES = 10'
5. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES (SEE TABLE).
6. ALL RADII 20 FEET AND SMALLER SHALL BE CONSTRUCTED USING CURVED SECTIONS.
7. JOINTS BETWEEN STONES SHALL HAVE A MAXIMUM SPACING OF 1/2" AND SHALL BE MORTARED.

## VERTICAL GRANITE CURB
NO SCALE

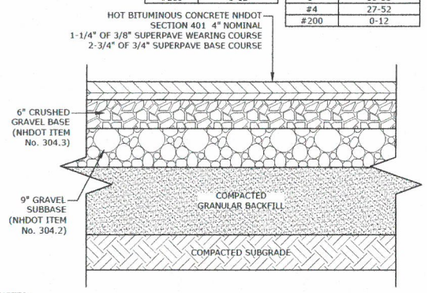



NOTES:
1. SILT SOCK SHALL BE SILT SOXX BY FILTREXX OR APPROVED EQUAL.
2. SILT SOCK SHALL BE FILLED WITH FILTERMEDIA BY FILTREXX OR APPROVED EQUAL.
3. WHERE TWO SILT SOCKS ARE JOINED, A MINIMUM OF 2 FEET OF OVERLAP SHALL BE MAINTAINED.
4. SILT SOCKS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
5. CONTRACTOR TO INSTALL SILT SOCK IN J-HOOK OR SMILE CONFIGURATION TO LIMIT CONCENTRATION OF STORMWATER RUNOFF AT A SINGLE DISHCARGE POINT.

## SILT SOCK
NO SCALE

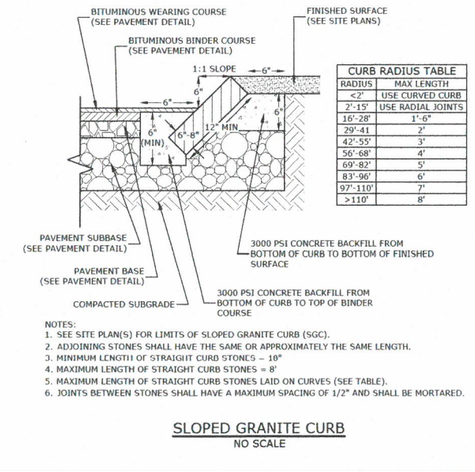
| NHDOT ITEM No. 304.2 (GRAVEL) | |
|---|---|
| SIEVE SIZE | % PASSING |
| 6" | 100 |
| #4 | 25-70 |
| #200 | 0-12 |

| NHDOT ITEM No. 304.3 (CRUSHED GRAVEL) | |
|---|---|
| SIEVE SIZE | % PASSING |
| 3" | 100 |
| 2" | 95-100 |
| 1" | 55-85 |
| #4 | 27-52 |
| #200 | 0-12 |




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

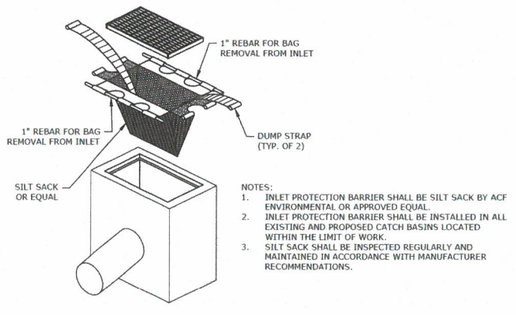
## STANDARD DUTY PAVEMENT SECTION
NO SCALE




| CURB RADIUS TABLE | |
|---|---|
| RADIUS | MAX 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'-96' | 6' |
| 97'-110' | 7' |
| >110' | 8' |

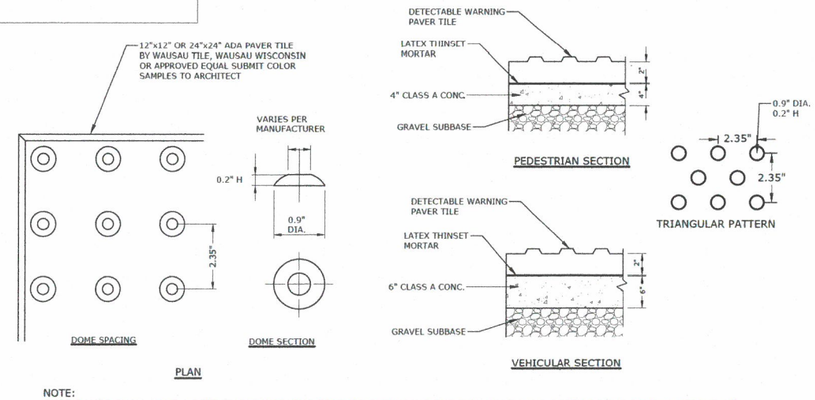
NOTES:
1. SEE SITE PLAN(S) FOR LIMITS OF SLOPED GRANITE CURB (SGC).
2. ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH.
3. MINIMUM LENGTH OF STRAIGHT CURB STONES = 10"
4. MAXIMUM LENGTH OF STRAIGHT CURB STONES = 8'
5. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES (SEE TABLE).
6. JOINTS BETWEEN STONES SHALL HAVE A MAXIMUM SPACING OF 1/2" AND SHALL BE MORTARED.

## SLOPED GRANITE CURB
NO SCALE



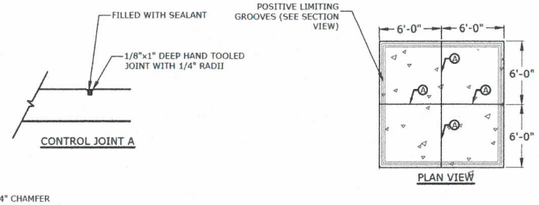

NOTES:
1. INLET PROTECTION BARRIER SHALL BE SILT SACK BY ACF ENVIRONMENTAL OR APPROVED EQUAL.
2. INLET PROTECTION BARRIER SHALL BE INSTALLED IN ALL EXISTING AND PROPOSED CATCH BASINS LOCATED WITHIN THE LIMIT OF WORK.
3. SILT SACK SHALL BE INSPECTED REGULARLY AND MAINTAINED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.

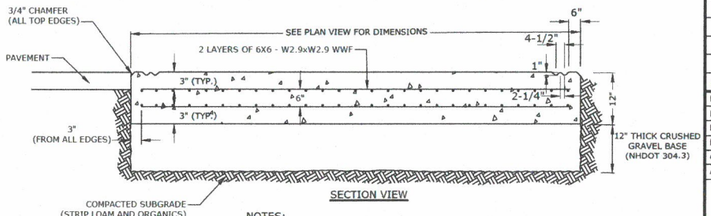
## INLET PROTECTION BARRIER
NO SCALE




NOTE:
CURB RAMPS SHALL HAVE A DETECTABLE WARNING FEATURE EXTENDING THE FULL WIDTH AND DEPTH OF THE RAMP, A HEIGHT OF NOMINAL 0.2 INCHES, THE DETECTABLE SURFACE SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 INCHES AND A CENTER TO CENTER SPACING OF NOMINAL 2.35 INCHES. THE TEXTURE OF THE DETECTABLE WARNING FEATURE SHALL CONTRAST VISUALLY WITH THE SURROUNDING SURFACES (EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT).

## DETECTABLE WARNING PAVER
NO SCALE




NOTES:
1. CONCRETE TO BE 4500 PSI, 7% AIR ENTRAINED
2. STANDARD BROOM FINISH.

## DUMPSTER PAD
NO SCALE

Tighe&Bond
Engineers | Environmental Specialists

BRADLEE MEZQUITA No. 08630 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE
11-25-19

PATRICK M. CUMMINS No. 12397 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE
11-25-19

# Proposed Commercial Development Phase II

Farmington Associates, LLC

60 Farmington Road (Route 11)
Rochester, NH

| MARK | DATE | DESCRIPTION |
|---|---|---|
| A | 11/25/2019 | Site Plan Review Submission |

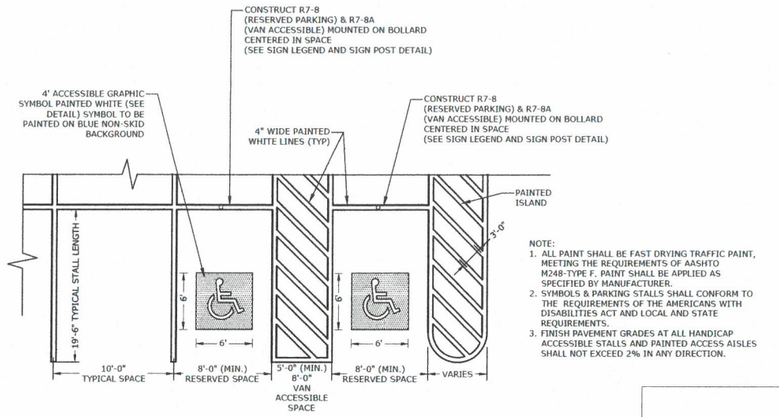
| | |
|---|---|
| PROJECT NO: | W5008-004 |
| DATE: | 11/25/2019 |
| FILE: | W5008-004_DTLS.DWG |
| DRAWN BY: | CML |
| CHECKED: | PMC |
| APPROVED: | BLM |

DETAILS SHEET

SCALE: AS SHOWN

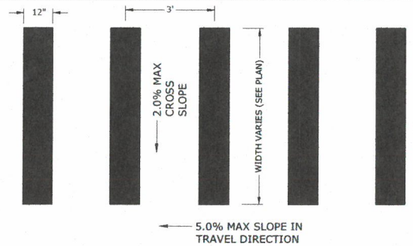
C-502

Last Save Date: November 18, 2019 4:55 PM By: CML
Plot Date: Monday, November 25, 2019 Plotted By: Craig M. Langton
T&B File Location: J:\W\W5008 Watertstone Retail\004 - Ridge Marketplace Phase 2\Drawings, Figures\AutoCAD\Sheet\W5008-004_DTLS.dwg Layout Tab: C-502




NOTE:
1. ALL PAINT SHALL BE FAST DRYING TRAFFIC PAINT, MEETING THE REQUIREMENTS OF AASHTO M248-TYPE F. PAINT SHALL BE APPLIED AS SPECIFIED BY MANUFACTURER.
2. SYMBOLS & PARKING STALLS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT AND LOCAL AND STATE REQUIREMENTS.
3. FINISH PAVEMENT GRADES AT ALL HANDICAP ACCESSIBLE STALLS AND PAINTED ACCESS AISLES SHALL NOT EXCEED 2% IN ANY DIRECTION.

## STALL STRIPING - SINGE STRIPE
NO SCALE




NOTE:
1. STRIPING SHALL BE CONSTRUCTED USING WHITE THERMO PLASTIC, REFLECTERIZED PAVEMENT MARKING MATERIAL MEETING THE REQUIREMENTS OF ASTM D 4505

## CROSSWALK STRIPING
NO SCALE

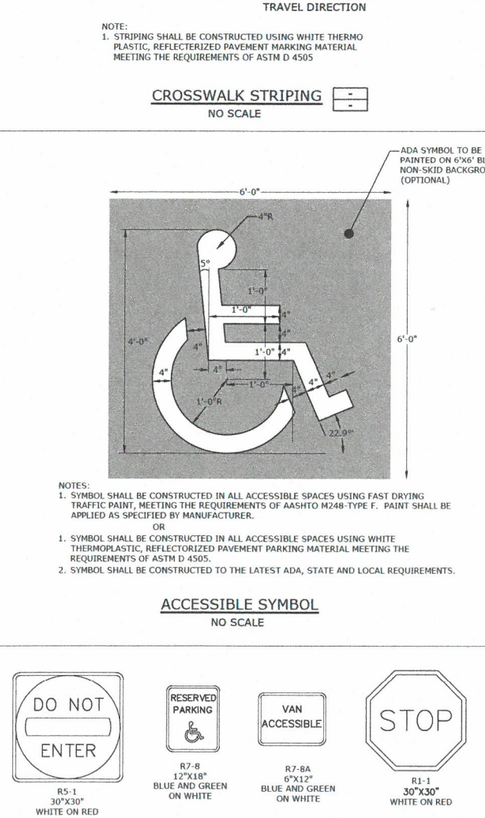



NOTES:
1. SYMBOL SHALL BE CONSTRUCTED IN ALL ACCESSIBLE SPACES USING FAST DRYING TRAFFIC PAINT, MEETING THE REQUIREMENTS OF AASHTO M248-TYPE F. PAINT SHALL BE APPLIED AS SPECIFIED BY MANUFACTURER.

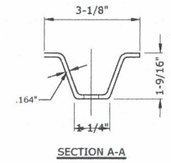
OR

1. SYMBOL SHALL BE CONSTRUCTED IN ALL ACCESSIBLE SPACES USING WHITE THERMOPLASTIC, REFLECTORIZED PAVEMENT PARKING MATERIAL MEETING THE REQUIREMENTS OF ASTM D 4505.
2. SYMBOL SHALL BE CONSTRUCTED TO THE LATEST ADA, STATE AND LOCAL REQUIREMENTS.

## ACCESSIBLE SYMBOL
NO SCALE




## TYPICAL SIGN LEGEND
NO SCALE

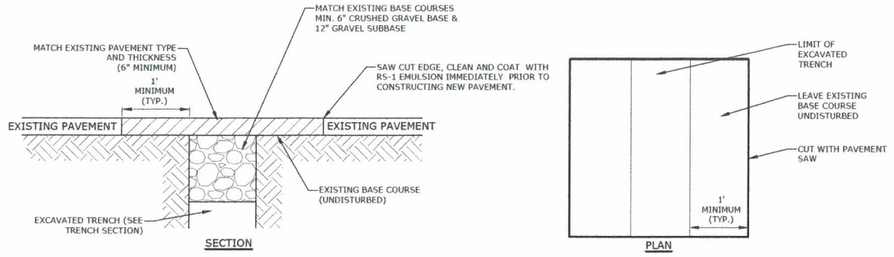



SECTION A-A

LENGTH: AS REQUIRED
WEIGHT PER LINEAR FOOT: 2.50 LBS (MIN.)
HOLES: 3/8" DIAMETER, 1" C-C FULL LENGTH
STEEL: SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASSTM A-576 (GRADE 1070 - 1080)

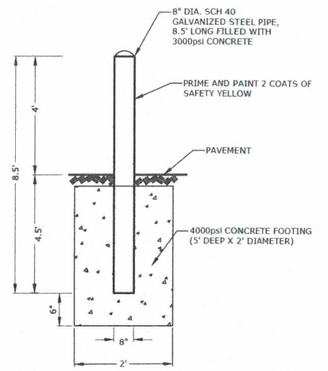
FINISH: SHALL BE PAINTED WITH TWO COATS OF AN APPROVED MEDIUM GREEN BAKED ON OR DRIED, PAINT OF WEATHER RESISTANT QUALITY. ALL FABRICATION SHALL BE COMPLETE BEFORE PAINTING.

NOTE:
1. ALL SIGNS TO BE INSTALLED AS INDICATED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

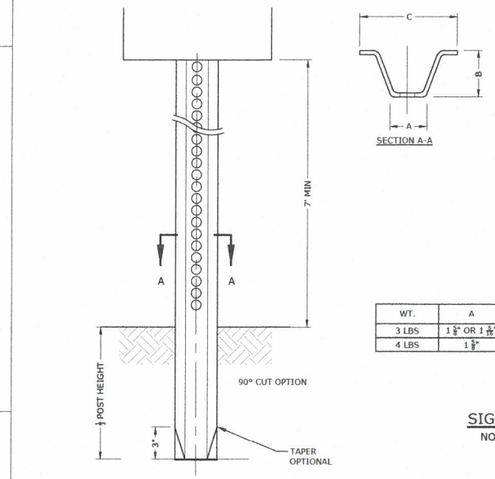



NOTE:
1. COORDINATE AND OBTAIN APPROVAL FOR ALL TRENCHING AND PATCHING WITHIN CITY RIGHT OF WAY WITH CITY OF ROCHESTER DPW PRIOR TO COMMENCING WORK.

## ROADWAY TRENCH PATCH
NO SCALE




## BOLLARD DETAIL
NO SCALE




NOTES:
1. STEEL FOR POSTS SHALL CONFORM TO THE MECHANICAL REQUIREMENTS OF ASTM A 499-81 GRADE 60 AND TO THE CHEMICAL REQUIREMENTS OF ASTM A1-76 CARBON STEEL TEE RAIL HAVING NOMINAL WEIGHT OF 91 LBS. OR GREATER PER LINEAR YARD.
2. AFTER FABRICATION, ALL STEEL POSTS SHALL BE GALVANIZED TO MEET THE REQUIREMENTS OF ASTM A 123.
3. ALL SIGN POSTS SHALL HAVE "BREAKAWAY" FEATURES THAT MEET AASHTO REQUIREMENTS CONTAINED IN "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS-1985." THE "BREAKAWAY" FEATURES SHALL BE STRUCTURALLY ADEQUATE TO CARRY THE SIGNS SHOWN IN THE PLANS AT 60 MPH WIND LOADINGS. INSTALLATIONS SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
4. TYPE A POSTS - 3 LB/FT TYPE B POSTS - 4 LB/FT.
5. ALL SIGNS TO BE CONSTRUCTED PER THE LATEST EDITION OF THE FHWA STANDARD HIGHWAY SIGNS MANUAL AND INSTALLED AS INDICATED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
6. MEET REQUIREMENTS OF SECTION 615 SIGNS OF NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2010 EDITION, AS AMENDED.

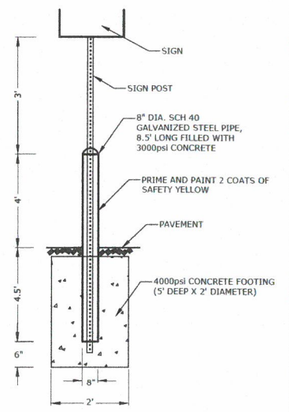
* IN LEDGE DRILL & GROUT TO A MIN OF 2'

| WT. | A | B | C |
|---|---|---|---|
| 3 LBS | 1 5/8" OR 1 13/16" | 1 1/2" OR 1 5/8" | 3 1/4" |
| 4 LBS | 1 5/8" | 1 1/2" | 3 1/4" |

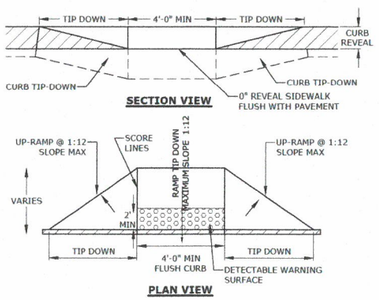
SIGN POST TO COMPLY WITH ALL ASPECTS OF NHDOT SECTION 615.

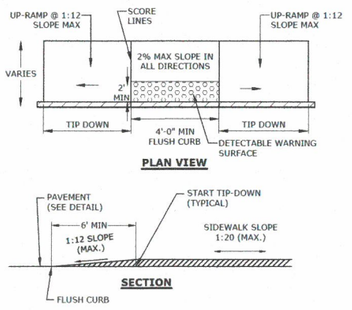
LENGTH: AS REQUIRED
WEIGHT PER LINEAR FOOT: 2.50 LBS (MIN.)
HOLES: 3/8" DIAMETER, 1" C-C FULL LENGTH
STEEL: SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASSTM A-576 (GRADE 1070 - 1080)
FINISH: SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M111.

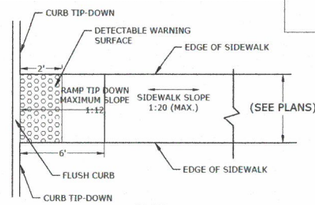
## SIGN POST
NO SCALE




## BOLLARD MOUNTED SIGN DETAIL
NO SCALE

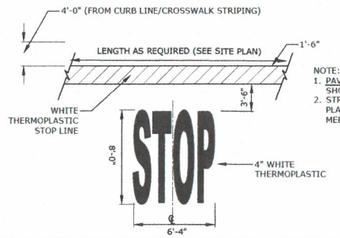



NOTES:
1. RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT AND LOCAL AND STATE REQUIREMENTS.
2. A 9" COMPACTED CRUSHED GRAVEL BASE (NHDOT ITEM No. 304.3) SHALL BE PROVIDED BENEATH RAMPS.
3. DETECTABLE WARNING PANEL SHALL BE CAST IRON WITH BLACK COATING

## CONCRETE SIDEWALK TIP-DOWN RAMPS WITH DETECTABLE WARNING PANEL
NO SCALE




NOTE:
1. PAVEMENT MARKINGS TO BE INSTALLED IN LOCATIONS AS SHOWN ON SITE PLAN.
2. STRIPING SHALL BE CONSTRUCTED USING WHITE THERMO PLASTIC, REFLECTERIZED PAVEMENT MARKING MATERIAL MEETING THE REQUIREMENTS OF ASTM D 4505

## STOP BAR AND LEGEND
NO SCALE

Tighe&Bond
Engineers | Environmental Specialists

BRADLEE MEZQUITA No. 08530 LICENSED PROFESSIONAL ENGINEER – STATE OF NEW HAMPSHIRE
11/25/19

PATRICK M. CRIMMINS No. 18241 LICENSED PROFESSIONAL ENGINEER – STATE OF NEW HAMPSHIRE
11-25-19

# Proposed Commercial Development Phase II

Farmington Associates, LLC

60 Farmington Road (Route 11)
Rochester, NH

| MARK | DATE | DESCRIPTION |
|---|---|---|
| A | 11/25/2019 | Site Plan Review Submission |

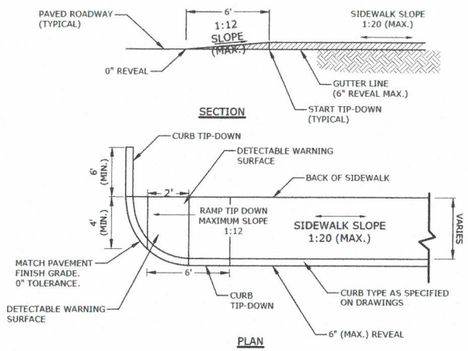
| | |
|---|---|
| PROJECT NO: | W5008-004 |
| DATE: | 11/25/2019 |
| FILE: | W5008-004_DTLS.DWG |
| DRAWN BY: | CML |
| CHECKED: | PMC |
| APPROVED: | BLM |

DETAILS SHEET

SCALE: AS SHOWN

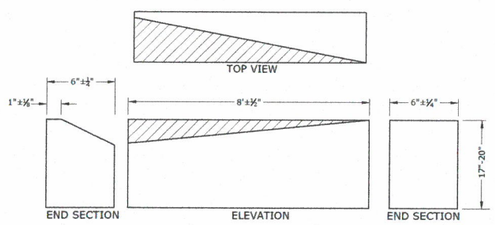
C-503

Last Save Date: November 18, 2019 4:55 PM By: CML
Plot Date: Monday, November 25, 2019 Plotted By: Craig M. Langton
T&B File Location: J:\W\W5008 Watertstone Retail\004 - Ridge Marketplace Phase 2\Drawings_Figures\AutoCAD\Sheet\W5008-004_DTLS.dwg Layout Tab: C-503




NOTES:
1. RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT AND LOCAL AND STATE REQUIREMENTS
2. PROVIDE 6" COMPACTED CRUSHED GRAVEL BASE BENEATH RAMPS.
3. DETECTABLE WARNING STRIP SHALL BE ADA SOLUTIONS, INC. CAST IN PLACE RAMP. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

## CONCRETE SIDEWALK TIP-DOWN RAMP
NO SCALE

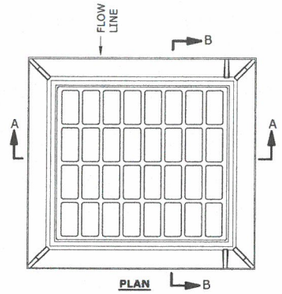


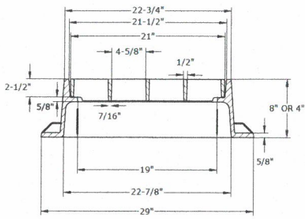

TRANSITION SECTION

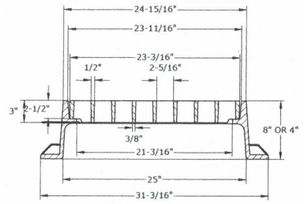
GRANITE SLOPE CURB TO VERTICAL GRANITE CURB

NOTES:
1. THE INTENT OF THIS ITEM IS TO PROVIDE A SMOOTH TRANSITION BETWEEN STRAIGHT GRANITE CURB AND SLOPE CURB WITHOUT REQUIRING FIELD CHIPPING DURING INSTALLATION. THE SLOPE CURB MAY REQUIRE ADJUSTMENTS TO MEET THE TRANSITION PIECE HEIGHT. TRANSITION SLOPE CURB TO STANDARD REVEAL AS QUICKLY AS POSSIBLE TO PROVIDE FOR THIS SMOOTH TRANSITION.

## CURB TRANSITION
NO SCALE

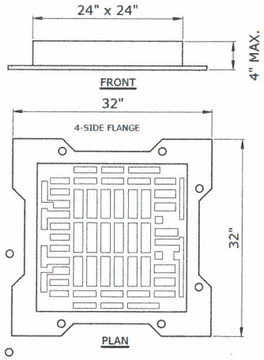



NOTES:
1. ALL DIMENSIONS ARE NOMINAL
2. FRAMES USING NARROWER DIMENSIONS FOR THICKNESS ARE ALLOWED PROVIDED:
   2.a. THE FRAMES MEET OR EXCEED THE SPECIFIED LOAD RATING.
   2.b. THE INTERIOR PERIMETER (SEAT AREA) DIMENSIONS OF THE FRAMES REMAIN THE SAME TO ALLOW CONTINUED USE OF EXISTING GRATES/COVERS AS THE EXISTING FRAMES ALLOW, WITHOUT SHIMS OR OTHER MODIFICATIONS OR ACCOMMODATIONS.
   2.c. ALL OTHER PERTINENT REQUIREMENTS OF THE SPECIFICATIONS ARE MET.
3. FRAME AVAILABLE IN 4" OR 8" HEIGHTS
4. FREE OPEN AREA = 2.55 SQ. FT.
5. USE 3-FLANGE FRAME IF INSTALLED ADJACENT TO GRANITE CURB.

## CATCH BASIN FRAME AND GRATE (NHDOT - TYPE "B" GRATE
NO SCALE



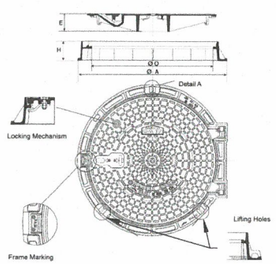

NOTES:
1. FRAME AND GRATE SHALL BE REXUS HINGED GRATE OR APPROVED EQUAL.
2. FRAME AND GRATE SHALL BE MANUFACTURED FROM DUCTILE IRON IN ACCORDANCE WITH ISO 1083.
3. GRATE SHALL INCORPORATE A NON-CAPTIVE HINGE SYSTEM.
4. GRATINGS SHALL BE ONE-MAN OPERABLE USING STANDARD TOOLS AND SHALL BE CAPABLE OF WITHSTANDING A MINIMUM LOAD OF 100,000 LBS.
5. GRATINGS SHALL INCORPORATE A SPRING BAR LOCK AS A DETERRENT TO ACCESS BY CHILDREN OR UNAUTHORIZED ADULTS. THE SPRING BAR LOCK SHOULD AUTOMATICALLY ACTIVATE WHEN THE GRATING IS PROPERLY CLOSED.
6. GRATINGS SHALL BE NON-ROCKING AND SILENT IN USE.
7. GRATINGS SHALL BE CAPABLE OF BEING FITTED WITH ADDITIONAL SECURITY DEVICES AFTER INSTALLATION.
8. GRATINGS WILL FEATURE RAISED STUDS AND SLOTS LAYOUT FOR INCREASED HYDRAULIC PERFORMANCE AND PEDESTRIAN AND CYCLIST SAFETY.
9. WATERWAY AREA SHALL NOT BE LESS THAN 290 SQUARE INCHES.
10. FRAME DEPTH SHALL NOT EXCEED 4" AND FLANGES SHALL INCORPORATE BOLT HOLES.
11. ALL COMPONENTS SHALL BE BLACK COATED.

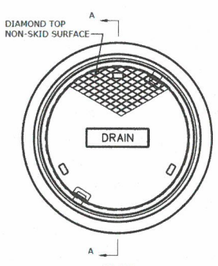
## REXUS CATCHBASIN FRAME AND GRATE
NO SCALE

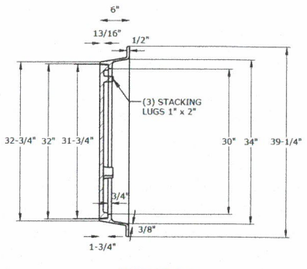
| Model | A inches | E inches | H inches | O inches | Reference | Total Weight lbs | Cover Weight lbs |
|---|---|---|---|---|---|---|---|
| Non-ventilated | 40 | 4 ½ | 5 | 32 | CDPA80EH | 269 | 162 |

NOTE:
PAMREX FRAME AND COVER SHALL BE USED WITHIN THE CITY OF ROCHESTER RIGHT-OF-WAY ONLY.

## PAMREX 32-INCH MANHOLE FRAME AND COVER
NO SCALE

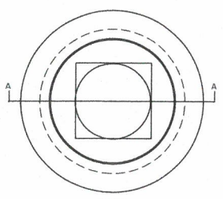


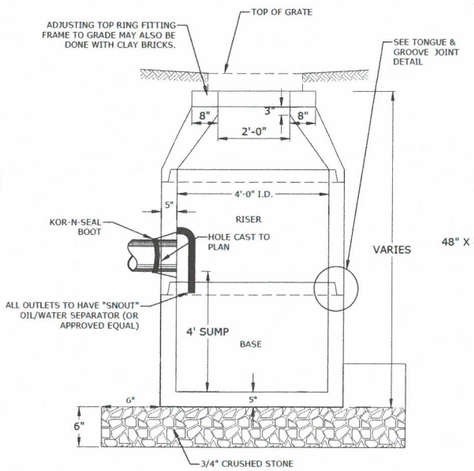



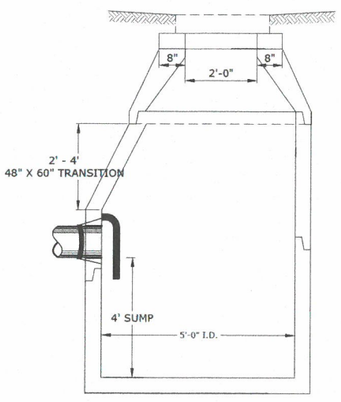

NOTES:
1. ALL DIMENSIONS ARE NOMINAL.
2. FRAMES USING NARROWER DIMENSIONS FOR THICKNESS ARE ALLOWED PROVIDED:
   A. THE FRAMES MEET OR EXCEED THE SPECIFIED LOAD RATING.
   B. THE INTERIOR PERIMETER (SEAT AREA) DIMENSIONS OF THE FRAMES REMAIN THE SAME TO ALLOW CONTINUED USE OF EXISTING GRATES/COVERS AS THE EXISTING FRAMES ALLOW, WITHOUT SHIMS OR OTHER MODIFICATIONS OR ACCOMMODATIONS.
   C. ALL OTHER PERTINENT REQUIREMENTS OF THE SPECIFICATIONS ARE MET.
3. LABEL TYPE OF MANHOLE WITH 3" HIGH LETTERS IN HE CENTER OF THE COVER.

## DRAIN MANHOLE FRAME & COVER
NO SCALE

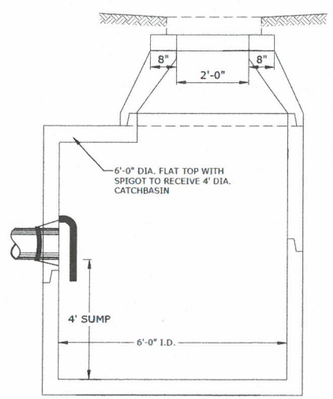


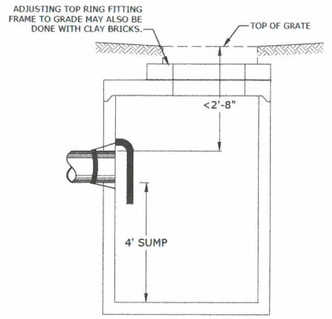

## 4' DIAMETER (SECTION A-A)
NO SCALE




## 5' DIAMETER (SECTION A-A)
NO SCALE




## 6' DIAMETER (SECTION A-A)
NO SCALE




## MINIMAL COVER (SECTION A-A)
NO SCALE

NOTES:
1. ALL SECTIONS SHALL BE CONCRETE CLASS AA(4000 psi).
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ.IN. PER LINEAR FT. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF WALL.
3. THE TONGUE AND GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT.
4. RISERS OF 1', 2', 3', & 4' CAN BE USED TO REACH DESIRED DEPTH.
5. THE STRUCTURES SHALL BE DESIGN FOR H20 LOADING.
6. THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.

## DEEP SUMP CATCHBASIN WITH OIL SEPARATOR
NO SCALE

Tighe&Bond
Engineers | Environmental Specialists

STATE OF NEW HAMPSHIRE – BRADLEE MEZQUITA No. 08530 LICENSED PROFESSIONAL ENGINEER 11-25-19

STATE OF NEW HAMPSHIRE – PATRICK M. CROSMAN No. 12826 LICENSED PROFESSIONAL ENGINEER 11-25-19

# Proposed Commercial Development Phase II

Farmington Associates, LLC

60 Farmington Road (Route 11)
Rochester, NH

| MARK | DATE | DESCRIPTION |
|---|---|---|
| A | 11/25/2019 | Site Plan Review Submission |

| | |
|---|---|
| PROJECT NO: | W5008-004 |
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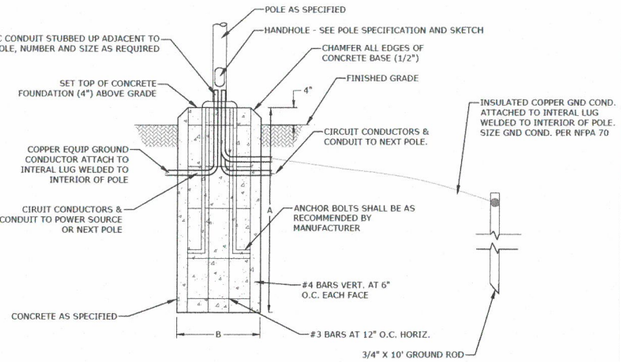
| DRAWN BY: | CML |
| CHECKED: | PMC |
| APPROVED: | BLM |

DETAILS SHEET

SCALE: AS SHOWN

C-504

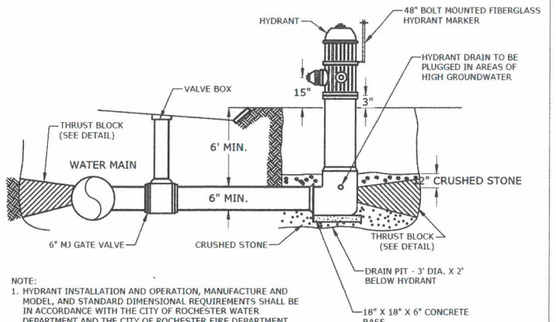
Last Save Date: November 18, 2019 4:55 PM By: CML
Plot Date: Monday, November 25, 2019 Plotted By: Craig M. Langton
T&B File Location: J:\W\W5008 Waterstone Retail\004 - Ridge Marketplace Phase 2\Drawings_Figures\AutoCAD\Sheet\W5008-004_DTLS.dwg Layout Tab: C-504




| POLE HEIGHT | A | B |
|---|---|---|
| 8'-12' | 36" | 12" |
| 13'-20' | 42" | 16" |
| 21'-25' | 72" | 24" |

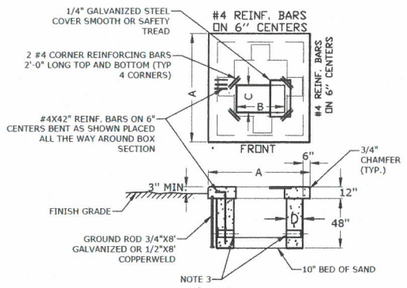
NOTES:
1. ALL LIGHT POLES, LUMINAIRES, AND WIRE TO BE FURNISHED AND INSTALLED BY THE POWER COMPANY. UNLESS OTHERWISE DIRECTED.
2. ANCHOR BOLTS, GROUND ROD & GROUND WIRE TO BE FURNISHED BY THE POWER COMPANY AND INSTALLED BY THE CONTRACTOR, UNLESS OTHERWISE DIRECTED.
3. BOLT CIRCLE DIAMETER SHALL BE VERIFIED WITH THE POWER COMPANY.
4. ALL BASES SHALL BE LOCATED 10'-0" (TO CENTER) FROM FACE OF CURB OR EDGE OF PAVED SHOULDER, UNLESS OTHERWISE NOTED.
5. REINFORCEMENT SHALL CONFORM TO SECTION 544 OF THE STANDARD SPECIFICATIONS.
6. ANY ANCHOR BOLTS DAMAGED DURING INSTALLATION SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER.
7. UPON INSTALLATION, ANCHOR BOLT THREADS SHALL BE CLEANED WITH A WIRE BRUSH.
8. TERRAIN SURROUNDING BASE MUST BE GRADED AS SHOWN IN DETAIL "A" TO PREVENT IMPACTING VEHICLES FORM SNAGGING ON BASE.

## LIGHT POLE BASE
NO SCALE




NOTE:
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

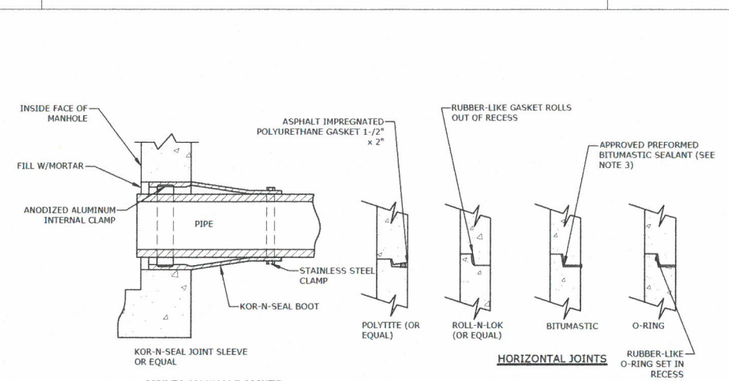
## FIRE HYDRANT
NO SCALE




NOTES:
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 INFORMATION WITH THE LOCAL ELECTRICAL POWER UTILITY COMPANY.

| 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" | 0'-8" | 16"X24"X1/4" |
| 75-150 | 35 | 7'-0" | 4'-0" | 1'-6" | 0'-8" | 16"X24"X1/4" |

## PRECAST CONCRETE TRANSFORMER PAD
NO SCALE




PIPE TO MANHOLE JOINTS

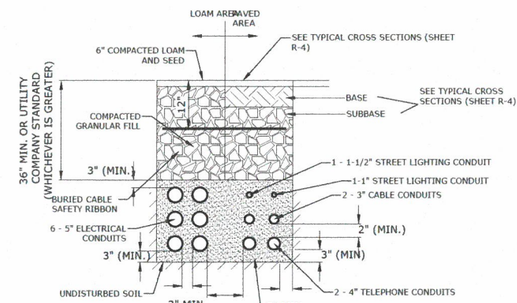
HORIZONTAL JOINTS

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.

## MANHOLE JOINTS
NO SCALE

| GRANULAR FILL (GRAVEL) | |
|---|---|
| SIEVE SIZE | % PASSING |
| 3" | 95-100 |
| #4 | 25-70 |

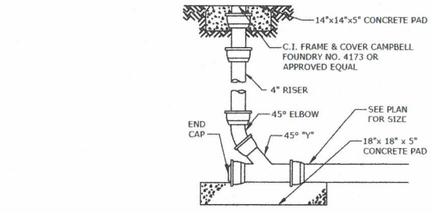
| SAND BLANKET | |
|---|---|
| SIEVE SIZE | % PASSING |
| 1/2" | 100 |
| #200 | 15 MAX |




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

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.

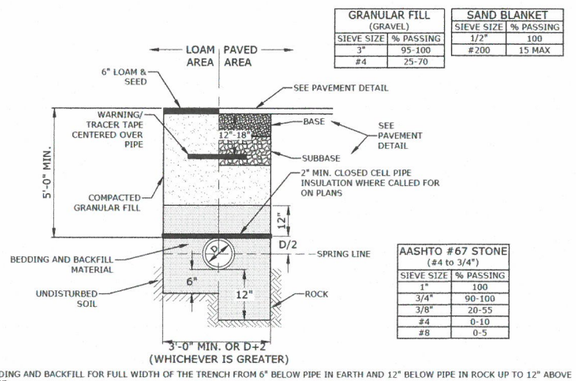
## ELECTRICAL AND COMMUNICATION CONDUIT
NO SCALE




## CLEAN-OUT
NO SCALE

| GRANULAR FILL (GRAVEL) | |
|---|---|
| SIEVE SIZE | % PASSING |
| 3" | 95-100 |
| #4 | 25-70 |

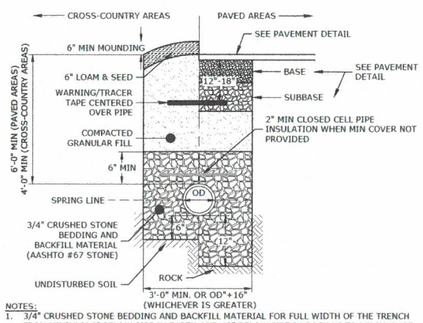
| SAND BLANKET | |
|---|---|
| SIEVE SIZE | % PASSING |
| #200 | 15 MAX |




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

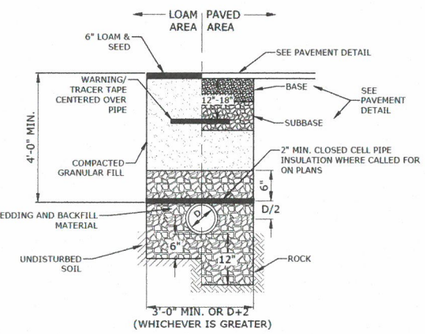
NOTE:
1. SAND BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO 12" ABOVE TOP OF PIPE.
2. ALL UTILITIES SHALL BE INSTALLED PER THE INDIVIDUAL UTILITY COMPANY STANDARDS. COORDINATE ALL INSTALLATIONS WITH INDIVIDUAL UTILITY COMPANIES AND THE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

## WATER TRENCH
NO SCALE



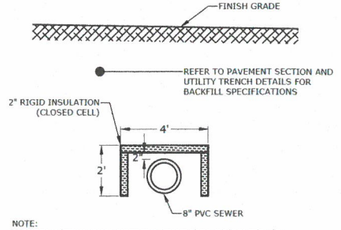

NOTES:
1. 3/4" CRUSHED STONE BEDDING AND BACKFILL MATERIAL FOR FULL WIDTH OF THE TRENCH FROM MINIMUM 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO MINIMUM OF 6" OVER THE TOP OF THE PIPE.
2. SANITARY SEWER SHALL BE INSTALLED PER THE CITY DEPARTMENT OF PUBLIC WORKS STANDARDS. COORDINATE ALL INSTALLATIONS WITH THE CITY OF ROCHESTER.

## TYPICAL SEWER TRENCH
NO SCALE




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

## STORM DRAIN TRENCH
NO SCALE




NOTE:
1. INSTALLATION SHALL MEET THE STANDARDS OF THE CITY OF ROCHESTER.

## SEWER INSULATION DETAIL
NO SCALE

Tighe&Bond
Engineers | Environmental Specialists

STATE OF NEW HAMPSHIRE — BRADLEE M. MEZQUITA No. 08530 LICENSED PROFESSIONAL ENGINEER — 11-25-19

STATE OF NEW HAMPSHIRE — PATRICK M. CUMMINS No. 12361 LICENSED PROFESSIONAL ENGINEER — 11-25-19

# Proposed Commercial Development Phase II

Farmington Associates, LLC

60 Farmington Road (Route 11)
Rochester, NH

| MARK | DATE | DESCRIPTION |
|---|---|---|
| A | 11/25/2019 | Site Plan Review Submission |

| | |
|---|---|
| PROJECT NO: | W5008-004 |
| DATE: | 11/25/2019 |
| FILE: | W5008-004_DTLS.DWG |
| DRAWN BY: | CML |
| CHECKED: | PMC |
| APPROVED: | BLM |

DETAILS SHEET

SCALE: AS SHOWN

C-505

Last Save Date: November 18, 2019 4:55 PM By: CML
Plot Date: Monday, November 25, 2019 Plotted By: Craig N. Langton
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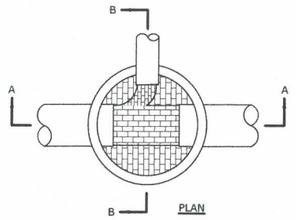
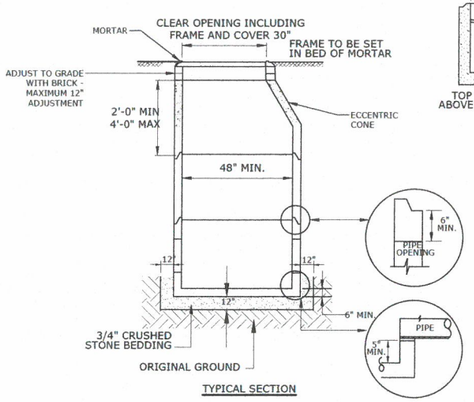
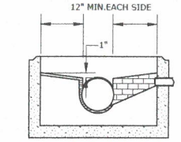



SECTION A-A



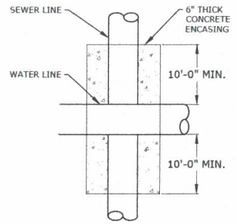

TYPICAL SECTION



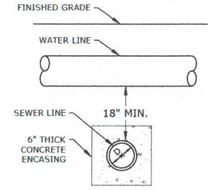

SECTION B-B

NOTES:
1. INVERT AND SHELF 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 H20 LOADING, AND CONFORMING TO ASTM C478-06.

## SEWER MANHOLE
NO SCALE



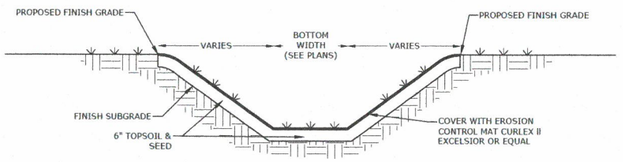

PLAN VIEW




PROFILE VIEW

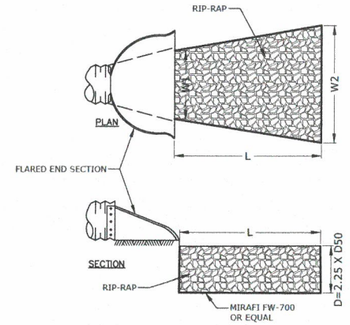
NOTES:
1. A 10 FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPARATION SHALL BE PROVIDED FROM ANY EXISTING OR PROPOSED WATER LINE.
2. AN 18" MINIMUM EDGE TO EDGE VERTICAL SEPARATION SHALL BE PROVIDED, WITH WATER ABOVE SEWER, AT ALL CROSSINGS.
3. SEWER PIPE JOINTS SHALL BE LOCATED AT LEAST 6 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN.
4. WHERE AN 18" VERTICAL SEPARATION CANNOT BE PROVIDED, SEWER PIPE SHALL BE CONSTRUCTED USING A SDR 26 PVC PIPE OR ENCASED CONCRETE FOR A MINIMUM DISTANCE OF 10 FEET ON BOTH SIDES OF THE LINE BEING CROSSED, AS SHOWN ABOVE.
5. CROSSINGS SHALL CONFORM TO THE CITY OF ROCHESTER STANDARDS AND SPECIFICATIONS.

## WATER & SEWER CROSSING
NO SCALE



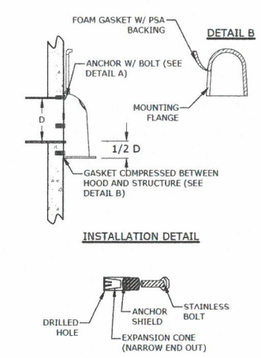

NOTES:
1. THE FOUNDATION AREA OF THE WATERWAY SHALL BE CLEARED AND GRUBBED OF ALL TREES, BRUSH, STUMPS, AND OTHER OBJECTIONABLE MATERIAL. MATERIALS REMOVED SHALL BE DISPOSED OF SO THEY WILL NOT INTERFERE WITH THE CONSTRUCTION OR PROPER FUNCTIONING OF THE WATERWAY.
2. THE WATERWAY SHALL BE EXCAVATED OR 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 GRASSED WATERWAY IS EXTREMELY IMPORTANT IN ORDER TO PREVENT RILLING, 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. RILLS 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.

## GRASS-LINED SWALE
NO SCALE



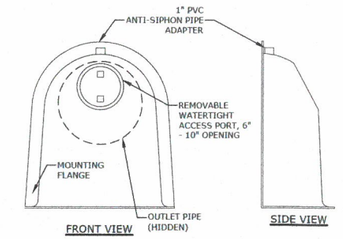

NOTES:
1. STONE SIZE AND MAT DIMENSIONS DETAILED ON PLANS.
2. STONE SHALL CONSIST OF SUB-ANGULAR FIELD STONE OR ROUGH UNHEWN QUARRY STONE OF APPROXIMATELY RECTANGULAR SHAPE. FLAT OR ROUND ROCKS ARE NOT ACCEPTABLE. THE STONE SHALL BE HARD AND OF SUCH QUALITY THAT IT WILL NOT DISINTEGRATE ON EXPOSURE TO 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.

## RIP-RAP APRON DETAIL
NO SCALE




INSTALLATION DETAIL

DETAIL A

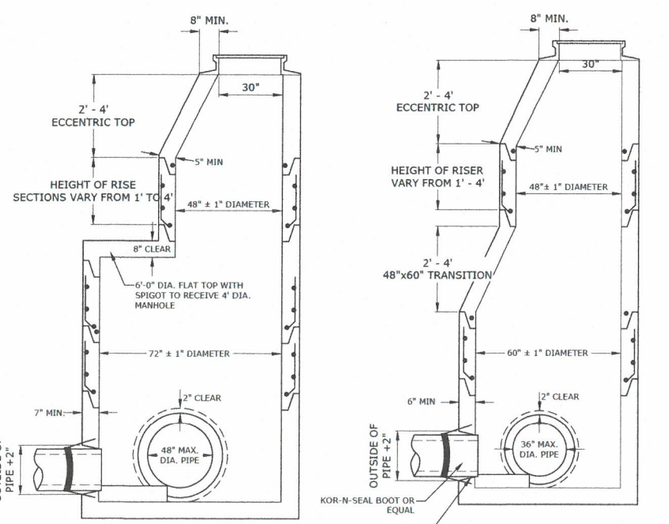



CONFIGURATION DETAIL

| PIPE SIZE (I.D.) | SNOUTH MODEL REQ'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

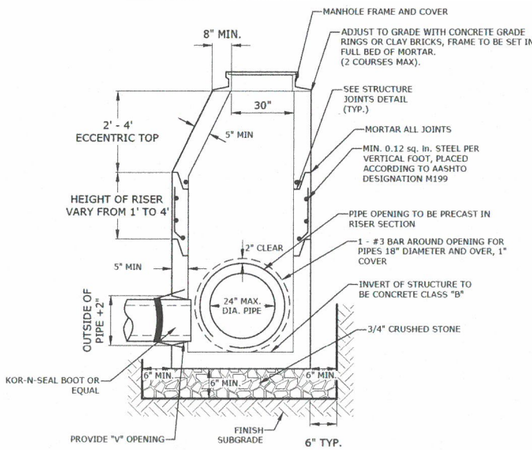
## OIL-WATER-DEBRIS SEPARATOR
NO SCALE




6' DIAMETER DRAIN MANHOLE
NO SCALE




5' DIAMETER DRAIN MANHOLE
NO SCALE




4' DIAMETER DRAIN MANHOLE
NO SCALE

NOTES:
1. ALL SECTIONS SHALL BE 4,000 PSI CONCRETE.
2. 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.
3. THE TONGUE AND 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 H20 LOADING.
5. CONSTRUCT CRUSHED STONE BEDDING AND BACKFILL UNDER (6" MINIMUM THICKNESS)
6. THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.
7. PIPE ELEVATIONS SHOWN ON PLANS SHALL BE FIELD VERIFIED PRIOR TO PRECASTING.
8. OUTSIDE EDGES OF PIPES SHALL PROJECT NO MORE THAN 3" BEYOND INSIDE WALL OF STRUCTURE.
9. 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.
10. 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.

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

| 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 | | |


Tighe&Bond
Engineers | Environmental Specialists


STATE OF NEW HAMPSHIRE – BRADLEE MEZQUITA No. 08530 LICENSED PROFESSIONAL ENGINEER

STATE OF NEW HAMPSHIRE – PATRICK M. CRIMMINS No. 18266 LICENSED PROFESSIONAL ENGINEER 11-25-19

# Proposed Commercial Development Phase II

Farmington Associates, LLC

60 Farmington Road (Route 11)
Rochester, NH

| MARK | DATE | DESCRIPTION |
|---|---|---|
| A | 11/25/2019 | Site Plan Review Submission |

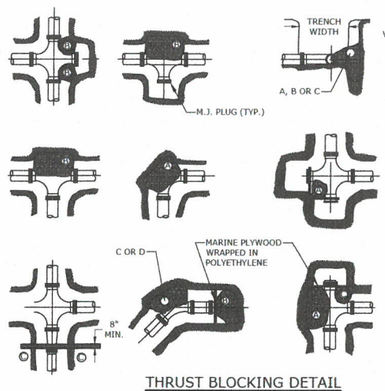
| | |
|---|---|
| PROJECT NO: | W5008-004 |
| DATE: | 11/25/2019 |
| FILE: | W5008-004_DTLS.DWG |
| DRAWN BY: | CML |
| CHECKED: | PMC |
| APPROVED: | BLM |

DETAILS SHEET

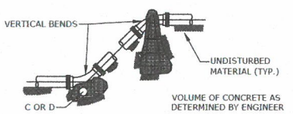
SCALE: AS SHOWN

C-506


Last Save Date: November 18, 2019 4:55 PM By: CML
Plot Date: Monday, November 25, 2019 Plotted By: Craig M. Langton
T&B File Location: J:\W\W5008 Waterstone Retail\004 - Ridge Marketplace Phase 2\Drawings, Figures\AutoCAD\Sheet\W5008-004_DTLS.dwg Layout Tab: C-506




THRUST BLOCKING DETAIL
NO SCALE

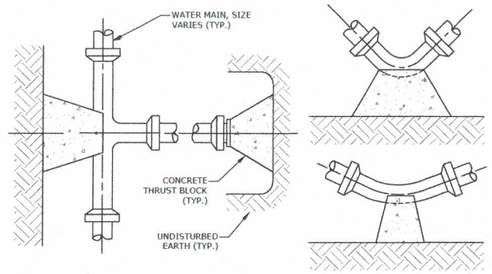



SQUARE FEET OF CONCRETE THRUST BLOCKING BEARING ON UNDISTURBED MATERIAL

TEST PRESSURE = 200PSI

| REACTION TYPE | PIPE SIZE 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 | 12.00 |
| 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 WATER DEPARTMENT STANDARDS.



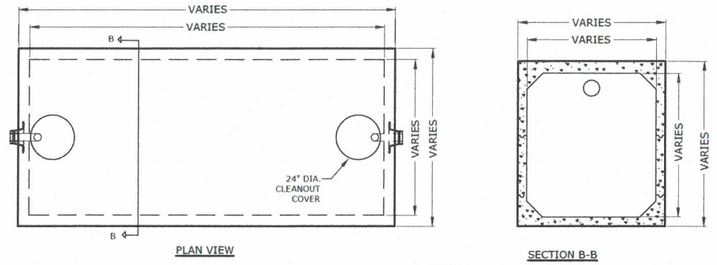

NOTES:
1. POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL, WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. NO JOINTS SHALL BE COVERED WITH CONCRETE.
2. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
3. PLACE BOARD IN FRONT 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 WITH CITY OF PORTSMOUTH WATER DEPARTMENT STANDARDS.

SQUARE FEET OF CONCRETE THRUST BLOCKING BEARING ON UNDISTURBED MATERIAL

TEST PRESSURE = 200psi

| REACTION TYPE | PIPE SIZE 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 | 12.00 |
| 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 |

**THRUST BLOCKING DETAIL**
NO SCALE

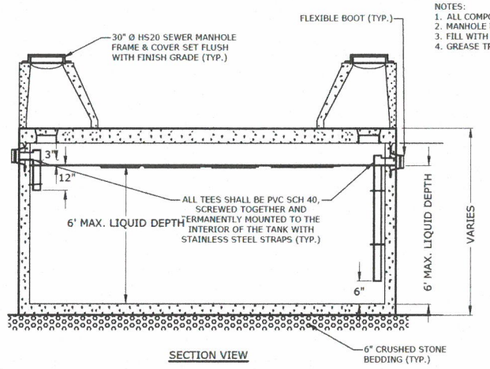



PLAN VIEW




SECTION B-B

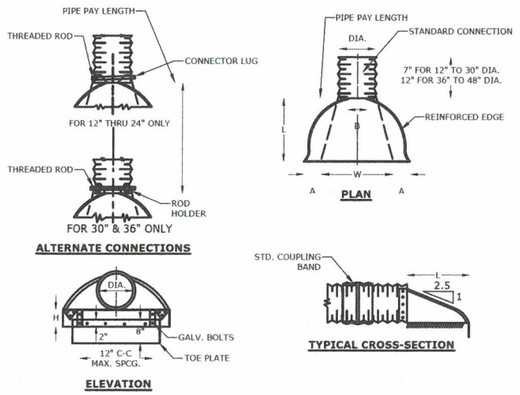
NOTES:
1. ALL COMPONENTS TO BE DESIGNED FOR AASHTO H-20 LOADING.
2. MANHOLE FRAME & COVERS SHALL BE OF HEAVY DUTY DEVICES.
3. FILL WITH WATER BEFORE REMOVAL OF DEWATERING DEVICES.
4. GREASE TRAP SHALL BE VENTED AS REQUIRED BY CODE.




SECTION VIEW

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 HS-20 (AASHTO)

**GREASE TRAP**
NO SCALE




**ALTERNATE CONNECTIONS**




**PLAN**




**ELEVATION**

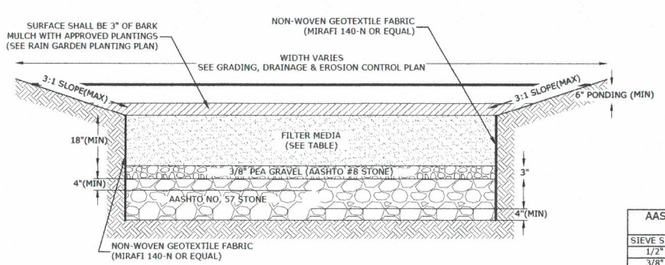



**TYPICAL CROSS-SECTION**

| PIPE Ø | METAL GAGE | DIMENSIONS A(1" TOL.) | B MAX | H(1" TOL.) | L(1" TOL.) | W(2" TOL.) |
|---|---|---|---|---|---|---|
| 12" | 16 | 6" | 6" | 6" | 21" | 24" |
| 15" | 16 | 7" | 8" | 6" | 26" | 30" |
| 18" | 16 | 8" | 13" | 6" | 31" | 36" |
| 24" | 16 | 10" | 16" | 6" | 41" | 48" |
| 30" | 14 | 12" | 16" | 8" | 51" | 60" |
| 36" | 14 | 14" | 19" | 9" | 60" | 72" |
| 42" | 12 | 16" | 22" | 11" | 69" | 84" |
| 48" | 12 | 18" | 27" | 12" | 78" | 90" |

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.

**METAL FLARED END SECTION**
NO SCALE




**SECTION VIEW**

FILTER MEDIA COMPOSITION:

| COMPONENT MATERIAL | PERCENT OF MIXTURE BY VOLUME | GRADATION OF MATERIAL SIEVE NO. | PERCENT PASSING |
|---|---|---|---|
| ASTM C-33 CONCRETE SAND | 50-55 | SEE NOTE #5 | |
| LOAMY SAND TOPSOIL | 20-30 | 200 | 15-25 |
| MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH | 20-30 | 200 | 5 MAX |

NOTES:
1. BARK MULCH SHALL BE AGED A MINIMUM OF 12 MONTHS AND SHALL NOT FLOAT.
2. RAIN GARDENS SHALL NOT BE PLACED INTO SERVICE UNTIL THE PRACTICE HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
3. DO NOT TRAFFIC EXPOSED SOIL SURFACES WITH CONSTRUCTION EQUIPMENT. CONTRACTOR SHALL KEEP ALL EXCAVATION EQUIPMENT OUTSIDE OF THE LIMIT OF THE RAIN GARDEN.
4. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR LOCATIONS, LAYOUTS, AND ELEVATIONS.
5. THE SAND PORTION OF THE FILTER MEDIA SHALL MEET THE FOLLOWING GRADATION (ASTM C-33):

| SIEVE SIZE | PERCENT PASSING |
|---|---|
| 3/8" | 100 |
| #4 | 95-100 |
| #8 | 80-100 |
| #16 | 50-85 |
| #30 | 25-60 |
| #50 | 5-30 |
| #100 | 0-10 |

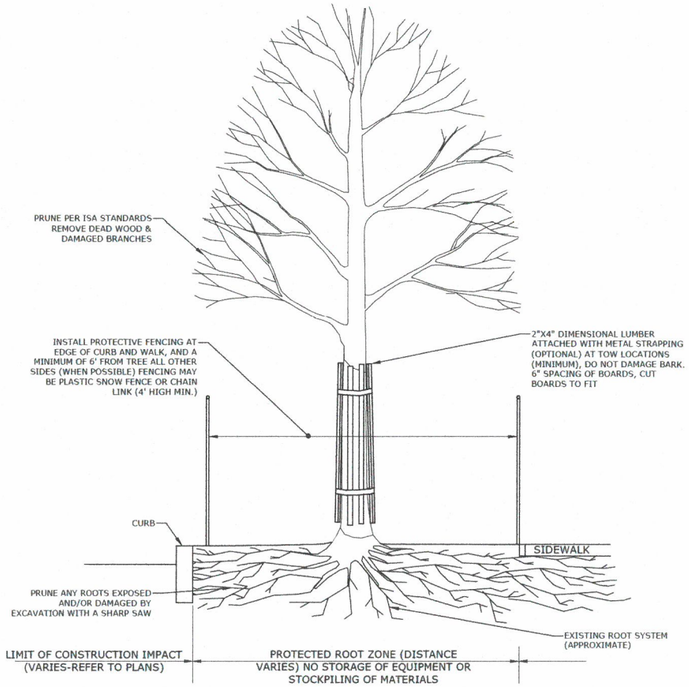
AASHTO #8 STONE (#8 to 3/8")

| SIEVE SIZE | % PASSING |
|---|---|
| 1/2" | 100 |
| 3/8" | 85-100 |
| #4 | 10-30 |
| #8 | 0-10 |
| #16 | 0-5 |

AASHTO #57 STONE (#4 to 1")

| SIEVE SIZE | % PASSING |
|---|---|
| 1-1/2" | 100 |
| 1" | 95-100 |
| 1/2" | 25-60 |
| #4 | 0-10 |
| #8 | 0-5 |

**RAIN GARDEN**
NO SCALE




**TREE PROTECTION FOR EXISTING TREE**
NO SCALE

Tighe&Bond
Engineers | Environmental Specialists

STATE OF NEW HAMPSHIRE - BRADLEE MEZQUITA No. 08530 LICENSED PROFESSIONAL ENGINEER

STATE OF NEW HAMPSHIRE - PATRICK M. CUMMINS No. 13295 LICENSED PROFESSIONAL ENGINEER 11-25-19

**Proposed Commercial Development Phase II**

Farmington Associates, LLC

60 Farmington Road (Route 11)
Rochester, NH

| MARK | DATE | DESCRIPTION |
|---|---|---|
| A | 11/25/2019 | Site Plan Review Submission |

| | |
|---|---|
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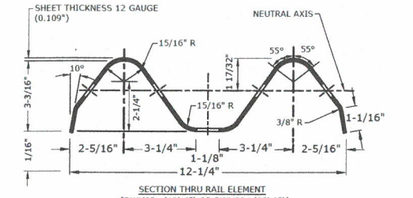
| APPROVED: | BLM |

DETAILS SHEET

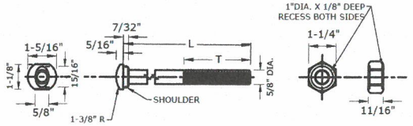
SCALE: AS SHOWN

C-507

Last Save Date: November 18, 2019 4:55 PM By: CML
Plot Date: Monday, November 25, 2019 Plotted By: Craig M. Langton
T&B File Location: J:\W\W5008 Waterstone Retail\004 - Ridge Marketplace Phase 2\Drawings, Figures\AutoCAD\Sheet\W5008-004_DTLS.dwg Layout Tab: C-507



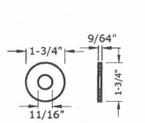

SECTION THRU RAIL ELEMENT
[RWM02a (12'-6") OR RWM22a (25'-0")]

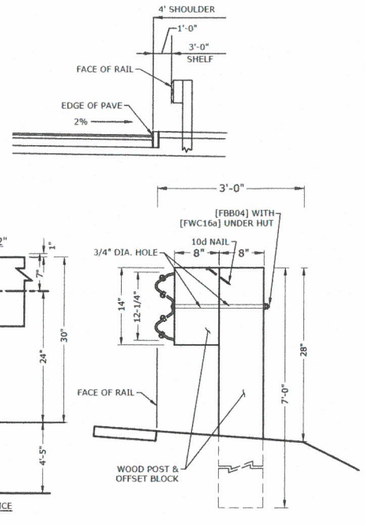



| DESIGNATOR | L | T | INTENDED USE |
|---|---|---|---|
| FBB01 | 1-1/4" | FULL LENGTH THREAD | RAIL SPLICE BOLTS |
| FBB02 | 2" | 1-3/4" MIN. THREAD LENGTH | POST BOLT (STEEL POSTS) |
| FBB03 | 10" | 4" MIN. THREAD LENGTH | POST BOLT |
| FBB04 | 18" | 4" MIN. THREAD LENGTH | POST BOLT (WOOD POSTS) |

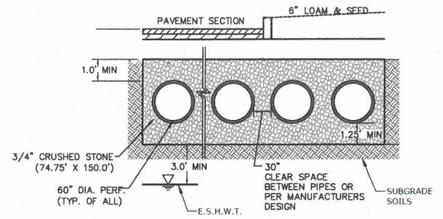
5/8" BUTTON HEAD BOLT AND RECESSED NUT
[FBB01-04]

NOTES:
1. THE LENGTH OF NEED IS THE TOTAL LENGTH OF A LONGITUDINAL BARRIER NEEDED TO SHIELD AN AREA OF CONCERN. TO DETERMINE THE LENGTH OF NEED, REFER TO THE "ROADSIDE DESIGN GUIDE" - AASHTO (1989).
2. DESIGNATION PROVIDED IN BRACKETS ( ) REFERENCE STANDARD ELEMENTS DETAILED IN "A GUIDE TO STANDARDIZED HIGHWAY BARRIER RAIL HARDWARE" (1979) - AASHTO - AGC - ARTBA JOINT COOPERATIVE COMMITTEE.
3. USE 12'-6" LENGTH RAIL ELEMENT IN CURVES OF LESS THAN 300' RAIL RADIUS.
4. ALL DIMENSIONS SUBJECT TO MANUFACTURER'S TOLERANCES.
5. USE 6'-0" LONG POSTS WHEN FILL SLOPE IS 4:1 OR FLATTER AND/OR WHEN FIELD CONDITIONS DICTATE (e.g., LEDGE FILLS), AS DETERMINED BY THE ENGINEER.
6. WHEN GUARDRAIL IS INSTALLED BEHIND CURB, EITHER 6'-0" BEHIND SLOPE CURB ON A CLOSED RAMP OR AT THE BACK OF SIDEWALK WITH BARRIER CURB. THE RAIL HEIGHT SHALL BE SET FROM THE GRADE AT THE FACE OF RAIL.



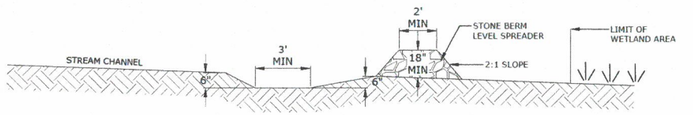




## WOOD POST/STEEL BEAM GUARDRAIL
NO SCALE

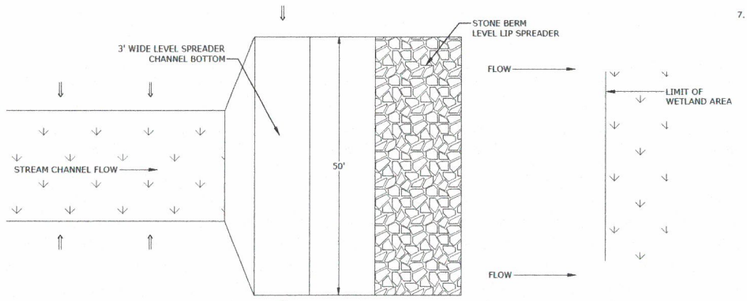



NOTES:
1. UNDERGROUND DETENTION SYSTEM TO BE ALUMINIZED 16 GAGE STEEL PIPE DESIGNED FOR H-20 LOADING. CONTRACTOR TO SUBMIT PIPE SPECIFICATIONS AND FINAL MANUFACTURES DESIGN TO ENGINEER FOR REVIEW AND APPROVAL.
2. MANUFACTURER TO SUBMIT PLANS STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE.
3. THE DESIGN ENGINEER SHALL PROVIDE SUFFICIENT INSPECTION TO CERTIFY THAT THE SYSTEM HAS BEEN INSTALLED PER THE PROPOSED DESIGN PLAN.
4. DESIGN SHALL REQUIRE INSPECTION PORTS/COVERS SUCH THAT SYSTEM CAN BE CLEANED BY VACUUM TRUCK. MIN. ONE EACH CORNER.
5. EXCAVATE 24 INCHES OF NATIVE MATERIALS BELOW BOTTOM OF SYSTEM AND REPLACE WITH FILL MATERIAL WITH AN INFILTRATION RATE OF 10 IN/HR.
6. A QUALIFIED SOIL SCIENTIST, GEOLOGIST, OR ENGINEER SHALL BE RETAINED TO DESIGN THE SOIL AMENDMENT AND PERFORM INFILTRATION TESTING AT THE BASIN LOCATION. THE INFORMATION AND TEST RESULTS SHALL BE PROVIDED TO THE NHDES ALTERATION OF TERRAIN BUREAU TO VERIFY THE ASSUMED DESIGN INFILTRATION RATES OF 5 IN/HR (ACTUAL INFILTRATION RATE OF 10 IN/HR) AND A MINIMUM SEPARATION OF 3 FEET FROM THE BOTTOM OF THE POND TO THE ELEVATION OF SEASONAL HIGH WATER. THE DEPTH OF AMENDED SOIL MUST BE AT LEAST 24 INCHES.

## UNDERGROUND INFILTRATION/DETENTION BASIN
NO SCALE




SECTION VIEW




PLAN VIEW

NOTES:
1. LEVEL SPREADERS SHALL BE INSTALLED UNDER THE DIRECT SUPERVISION OF THE ENGINEER.
2. CONSTRUCT LEVEL UP ON ZERO PERCENT GRADE TO INSURE UNIFORM SPREADING OF SEDIMENT-FREE RUNOFF (CONVERTING CHANNEL FLOW TO SHEET FLOW).
3. LEVEL SPREADER SHALL BE CONSTRUCTED ON UNDISTURBED SOIL (NOT ON FILL).
4. THE ENTIRE LEVEL LIP AREA SHALL BE PROTECTED BY PLACING TWO STRIPS OF JUTE OF EXCELSIOR PROTECTIVE MATERIAL.
5. THE ENTRANCE CHANNEL SHALL NOT EXCEED A 1% GRADE FOR AT LEAST 20 FEET BEFORE ENTERING THE SPREADER.
6. STORM RUNOFF CONVERTED TO SHEET FLOW SHALL OUTLET ONTO STABILIZED AREAS. WATER SHALL NOT BE RECONCENTRATED IMMEDIATELY BELOW THE POINT OF DISCHARGE.
7. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED.

| LEVEL SPREADER STONE BERM GRADATION | |
|---|---|
| SIEVE SIZE | % PASSING |
| 12" | 100 |
| 6" | 84-100 |
| 3" | 68-83 |
| 1" | 42-55 |
| #4 | 8-12 |

## LEVEL SPREADER
NO SCALE

Tighe&Bond
Engineers | Environmental Specialists

STATE OF NEW HAMPSHIRE
BRADLEE MEZQUITA
No. 08930
LICENSED
PROFESSIONAL ENGINEER
11/25/19

STATE OF NEW HAMPSHIRE
PATRICK M. CRIMMINS
No. 12997
LICENSED
PROFESSIONAL ENGINEER
11-25-19

# Proposed Commercial Development Phase II

Farmington Associates, LLC

60 Farmington Road
(Route 11)
Rochester, NH

| MARK | DATE | DESCRIPTION |
|---|---|---|
| A | 11/25/2019 | Site Plan Review Submission |

| | |
|---|---|
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| DRAWN BY: | CML |
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DETAILS SHEET

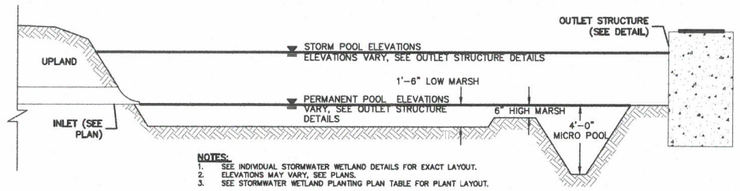
SCALE: AS SHOWN

C-508

Last Save Date: November 18, 2019 4:55 PM By: CML
Plot Date: Monday, November 25, 2019 Plotted By: Craig M. Langton
T&B File Location: J:\W\W5008 Waterstone Retail\004 - Ridge Marketplace Phase 2\Drawings_Figures\AutoCAD\Sheet\W5008-004_DTLS.dwg Layout Tab: C-508

## STORMWATER WETLAND 1 DETAIL

SCALE: 1" = 30'




NOTES:
1. SEE INDIVIDUAL STORMWATER WETLAND DETAILS FOR EXACT LAYOUT.
2. ELEVATIONS MAY VARY, SEE PLANS.
3. SEE STORMWATER WETLAND PLANTING PLAN TABLE FOR PLANT LAYOUT.

## TYPICAL STORMWATER WETLAND CROSS-SECTION

NOT TO SCALE

### STORMWATER WETLAND #1

PLANT SCHEDULE

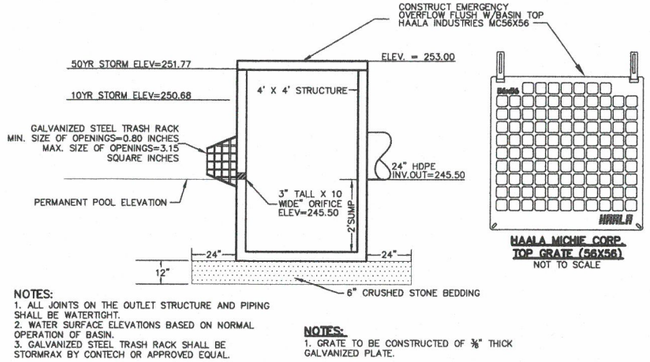
| | SHRUB AND TREE PLANTING (EL.254-256) | SYMBOL | QUANTITY | DESCRIPTION |
|---|---|---|---|---|
| ⊕ | ILEX VERTICILLATA | IV | 16 | 2-3' HT./CONTAINER |
| | CORNUS STOLINIFERA | CS | 12 | 2-3' HT./CONTAINER |
| | VIBURNUM DENTATUM | VD | 15 | 2-3' HT./CONTAINER |
| | BETULA NIGRA | BN | 6 | 12-14' HT./B & B |

| | LOW/HIGH MARSH (EL.254-255) | SYMBOL | QUANTITY | DESCRIPTION |
|---|---|---|---|---|
| | IRIS VERSICOLOR | - | 30 @ 2-1/2' O.C. | BARE ROOT/PLUG |
| | JUNCUS EFFUSUS | - | 30 @ 2-1/2' O.C. | BARE ROOT/PLUG |
| | SCIRPUS CYPERINUS | - | 30 @ 2-1/2' O.C. | BARE ROOT/PLUG |
| | SCIRPUS ATROVIRENS | - | 30 @ 2-1/2' O.C. | BARE ROOT/PLUG |
| | CAREX COMOSA | - | 30 @ 2-1/2' O.C. | BARE ROOT/PLUG |
| | CAREX LURIDA | - | 30 @ 2-1/2' O.C. | BARE ROOT/PLUG |

| | MICRO-POOL (EL.250-252) | SYMBOL | QUANTITY | DESCRIPTION |
|---|---|---|---|---|
| | POTAMOGETON NODOSUS | - | 20 @ 6' O.C. | BARE ROOT/PLUG |

NOTE:

ALL BARE ROOT PLUGS ARE TO BE PLANTED IN A STAGGERED ARRANGEMENT TO FILL THE LIMITS OF THE INTENDED AREA IN MASS GROUPINGS OF THE SAME SPECIES



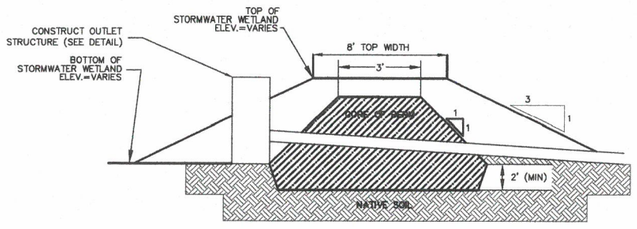

NOTES:
1. ALL JOINTS ON THE OUTLET STRUCTURE AND PIPING SHALL BE WATERTIGHT.
2. WATER SURFACE ELEVATIONS BASED ON NORMAL OPERATION OF BASIN.
3. GALVANIZED STEEL TRASH RACK SHALL BE STORMRAX BY CONTECH OR APPROVED EQUAL.




NOTES:
1. GRATE TO BE CONSTRUCTED OF ⅜" THICK GALVANIZED PLATE.

## STORMWATER WETLAND OUTLET STRUCTURE

NOT TO SCALE



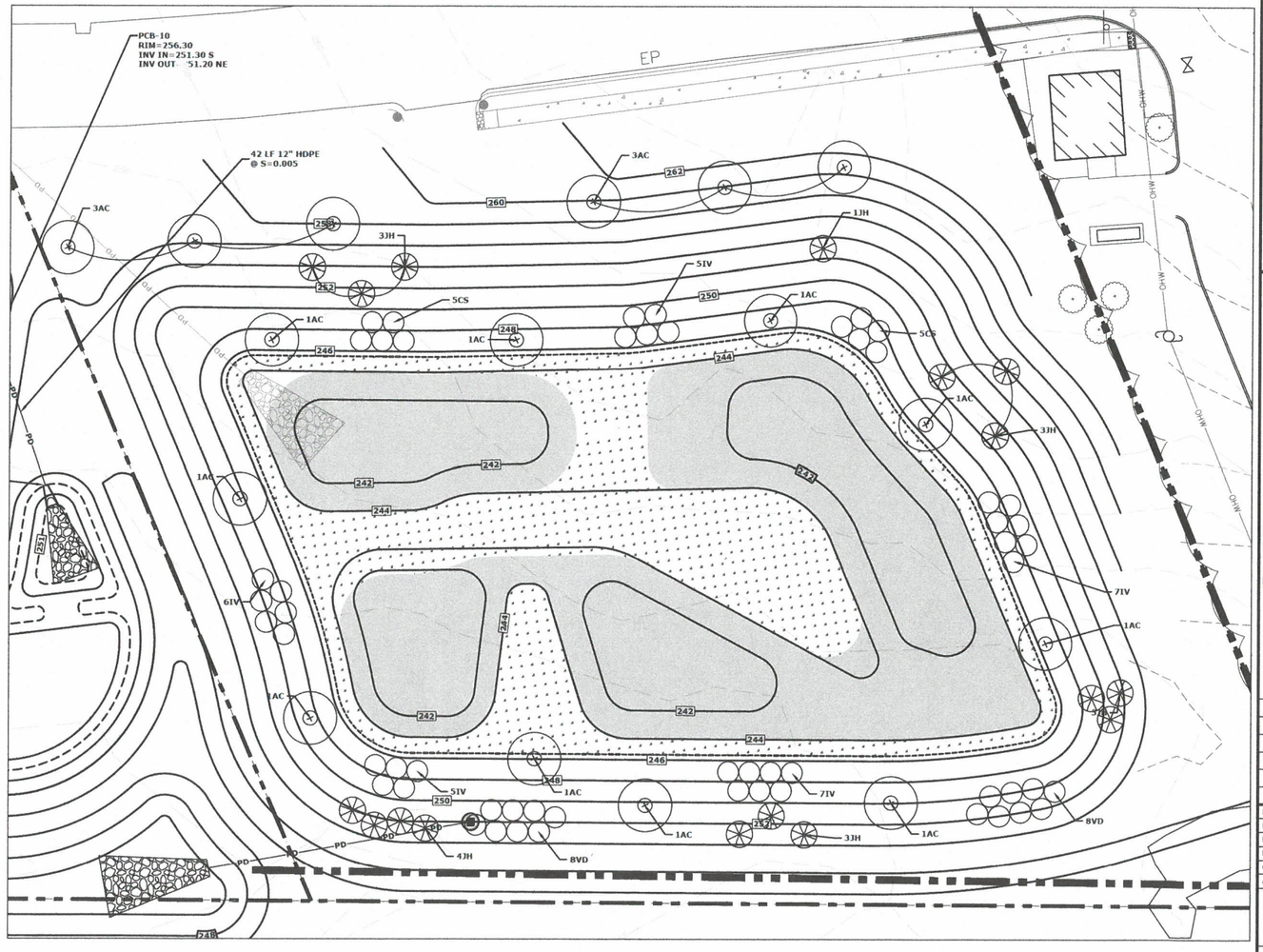

NOTES:
1. CORE MATERIAL SHALL MEET USGS CLASSIFICATION SC, SM, CL OR ML AND HAVE A MAXIMUM PARTICLE SIZE OF 3" AND A PERMEABILITY LESS THAN 0.000005 CM/S, AND MEET THE FOLLOWING GRADATION

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

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

## STORMWATER WETLAND BERM

NOT TO SCALE




## STORMWATER WETLAND DETAIL

SCALE: 1" = 20'

Tighe&Bond
Engineers | Environmental Specialists

N

BRADLEE MEZQUITA No. 08530 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE 11-25-19

PATRICK M. CRIMMINS No. 12506 Licensed Professional Engineer State of New Hampshire 11-25-19

SCALE IN FEET
0 50' 100'
GRAPHIC SCALE

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C-509

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