RESIDENTIAL SITE PLAN
FOR
LEDGEVIEW II
HANSONVILLE ROAD
ROCHESTER, N.H.
TAX MAP 251, LOT 120 &
TAX MAP 251, LOT 121

NOTE:

BERRY SURVEYING & ENGINEERING HAS PREPARED AN INSPECTION & MAINTENANCE MANUAL AS PART OF THIS PROJECTS DOCUMENTATION. ALL USERS ARE BOUND TO THIS DOCUMENT AS PART OF THIS PLAN SET. COPIES OF THE YEARLY INSPECTIONS ARE TO BE DELIVERED TO THE CITY OF ROCHESTER PLANNING DEPARTMENT.

RECEIVED
JUL 31 2018
By

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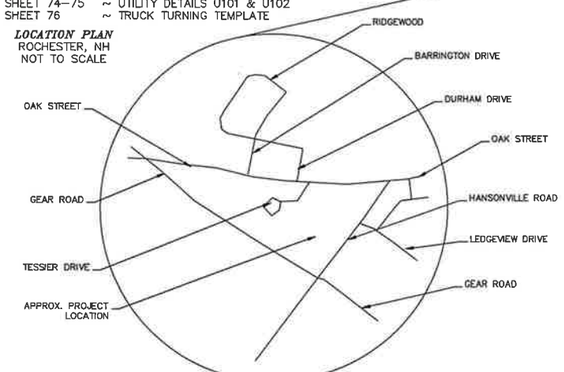
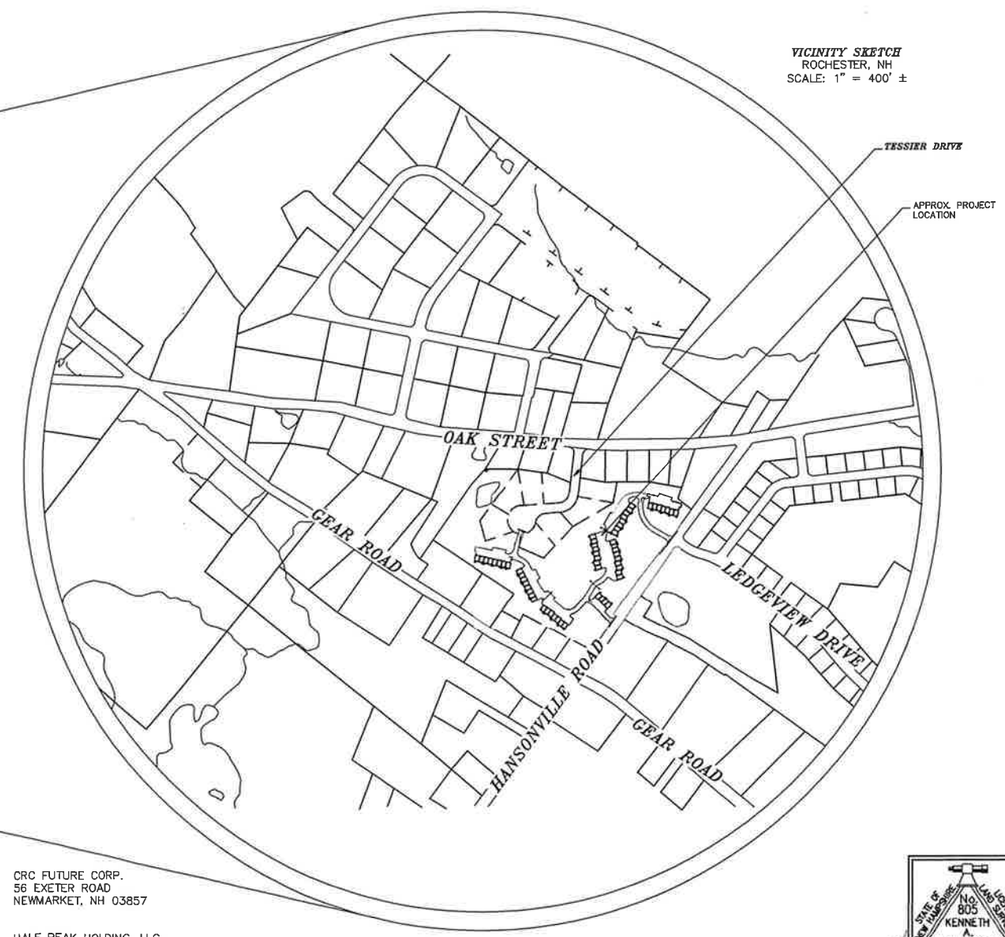
SHEET 74–75 ~ UTILITY DETAILS U101 & U102
SHEET 76 ~ TRUCK TURNING TEMPLATE

LOCATION PLAN
ROCHESTER, NH
NOT TO SCALE



VICINITY SKETCH
ROCHESTER, NH
SCALE: 1" = 400' ±



SURVEYOR OF RECORD: KENNETH A. BERRY, PE, LLS
CPESC, CESSWI, CPSWQ
BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825
(603) 332–2863

ENGINEER OF RECORD: KENNETH A. BERRY, PE, LLS
CPESC, CESSWI, CPSWQ
BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825
(603) 332–2863

WETLAND & SOILS: STONEY RIDGE ENVIRONMENTAL
CYNTHIA M. BALCIUS, CSS, CWS, CPESC
229 PARKER MOUNTAIN ROAD
ALTON, NH 03809
603–776–5825

INFILTRATION TEST PITS: STONEY RIDGE ENVIRONMENTAL LLC
229 PROSPECT MOUNTAIN RD.
ALTON, NH 03809
603–776–5825

GENERAL PLAN SET NOTES:

1.) 11x17" PLANS ARE HALF THE PUBLISHED SCALE.

2.) ALL PLANS ARE CONSIDERED TO BE NOT FOR CONSTRUCTION UNLESS THEY CONTAIN THE STATEMENT "FOR CONSTRUCTION" IN THE REVISION BLOCK.

REQUIRED PERMITS:

1.) NHDES ALTERATION OF TERRAIN: AoT – 1444

2.) NHDES SEWER DISCHARGE PERMIT: D2018–0414

3.) EPA NOTICE OF INTENT & STORM WATER POLUTION PREVENTION PLAN: NHR1000HA

4.) LOCAL CHAPTER 50 STORM WATER PERMIT: D–18–23

OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

APPLICANT: HALF PEAK HOLDING, LLC
P.O. BOX 1297
NORTH HAMPTON, NH 03862

REVISION	DATE	DESCRIPTION
#7	07–30–2018	SUBMITTED FOR CONSTRUCTION
#6a	06–18–2018	REVISED PER AoT COMMENT
#5b	05–24–2018	NHDES WWEB RESPONSE
#4	05–02–2018	AoT REVISIONS
#3	04–11–2018	SEWER & WATER REVISIONS
#2	04–09–2018	GENERAL PLAN SET
#1	03–30–2018	GENERAL PLAN SET

COVER SHEET
AND OF
CRC FUTURE, CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332–2863

SCALE: AS NOTED.

DATE : JANUARY 22, 2018

FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
No. 805
KENNETH A. BERRY
SIGNATURE
LICENSED LAND SURVEYOR

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14245
LICENSED
PROFESSIONAL ENGINEER

ABBREVIATION LEGEND:

S.G.C.	SLOPED GRANITE CURB
V.G.C.	VERTICAL GRANITE CURB
E.O.P.	EDGE OF PAVEMENT
B.C.C.	BITUMINOUS CONCRETE CURB
BITUM.	BITUMINOUS
E.O.P.	EDGE OF PAVEMENT
E.S.H.W.T	ESTIMATE SEASONAL HIGH WATER TABLE
TYP.	TYPICAL
T. BLOCK	THRUST BLOCK
CONC.	CONCRETE
U.G.E.	UNDER GROUND ELECTRIC / UTILITY
U.D.	UNDER DRAIN
F.E.S.	FLARED END SECTION
HDPE	HIGH DENSITY POLYETHYLENE
RCP	REINFORCED CONCRETE PIPE
F.G.	FINISHED GRADE
E.G.	EXISTING GRADE
T.W.	TRAVELED WAY
T.B.R.	TO BE REMOVED
'/.	FEET / FEET

{ } SSL ( ) ~ {SIZE} SINGLE SOLID LINE (COLOR W=WHITE, Y=YELLOW)
{ } DSL ( ) ~ {SIZE} DOUBLE SOLID LINE (COLOR W=WHITE, Y=YELLOW)
{ } SSB ( ) ~ {SIZE} SINGLE SOLID W/ BROKEN LINE (COLOR W=WHITE, Y=YELLOW)
{ } SBL ( ) ~ {SIZE} SINGLE BROKEN LINE (COLOR W=WHITE, Y=YELLOW)
{ } DBL ( ) ~ {SIZE} DOUBLE BROKEN LINE (COLOR W=WHITE, Y=YELLOW)

EXISTING LEGEND:

- IRON BOUND ~TBS~
- IRON BOUND ~FND~
- GRANITE BOUND ~FND~
- STONE BOUND ~FND~
- UTILITY POLE
- GUY WIRE
- CURB STOP
- GATE VALVE
- GAS VALVE
- FIRE HYDRANT
- CATCH BASIN
- SEWER MANHOLE
- SINGLE POST SIGN
- TEST PIT
- TREE
- BUILDING SETBACK LINE
- EASEMENT LINE
- GAS LINE
- WATER LINE
- SEWER LINE
- OVERHEAD UTILITIES
- HIGHWAY FENCE
- SOILS LINE
- EXISTING CONTOUR MINOR
- EXISTING CONTOUR MAJOR
- EXISTING CULVERT PIPE

PROPOSED LEGEND:

- UTILITY POLE
- UTILITY PADS
- SEWER MANHOLE
- WATER SHUT OFF / VALVE
- HYDRANT
- THRUST BLOCK
- LIGHTING
- CATCH BASIN / DRAIN MANHOLE
- SIGNAGE
- LAMP
- CHECK DAM–MATERIAL AS SPECIFIED
- 241 — CONTOUR MINOR
- 240 — CONTOUR MAJOR
- 270.73 — SPOT GRADE
- CULVERT W/ FLARED END SECTION (F.E.S.)
- E101 / E6 — DETAIL SHEET / DETAIL
- TREE LINE
- CENTER LINE
- UGE — UNDERGROUND UTILITY TRANSFORMER / J.BOX
- U.D — UNDER DRAIN
- W — WATER LINE
- S — SEWER LINE
- G — GAS LINE
- SF — SILT FENCE / EROSION MIX BERM
- SS — FILTREXX 8" – 12" SILT SOXX AS SPECIFIED
- C — ORANGE CONSTRUCTION PERIMETER FENCE

SIGN ID NUMBER	SIGN SIZE (WIDTH x HEIGHT)	SIGN	TEXT DIMENSIONS	NO. OF SIGNS	BACKGROUND	LEGEND	BORDER	POST SIZE & QUANTITY
R1–1	36"x36"	STOP	SEE STANDARD HIGHWAY SIGNS 2004 EDITION PUBLISHED BY USDOT – FHWA	7	RED	WHITE	WHITE	SQUARE (7)
R7–8	12"x18"	SPEED LIMIT 25	SEE STANDARD HIGHWAY SIGNS 2004 EDITION PUBLISHED BY USDOT – FHWA	3	WHITE	BLACK	BLACK	SQUARE (3)
R8–31	12"x18"	NO PARKING FIRE LANE	SEE STANDARD HIGHWAY SIGNS 2004 EDITION PUBLISHED BY USDOT – FHWA	19	WHITE	RED	RED	SQUARE (19)

ABUTTERS WITHIN 200':

N/F CRC FUTURE CORP
56 EXETER ROAD
NEWMARKET, NH 03857
TAX MAP 251, LOT 121
S.C.R.D. BOOK 2975, PAGE 469

N/F TESSIER, PETER J
5 HANSONVILLE ROAD
ROCHESTER, NH 03839
TAX MAP 251, LOT 122
S.C.R.D. BOOK 2157, PAGE 434

N/F NOBLE, JOHN P & MARY A
74 OAK STREET
ROCHESTER, NH 03839
TAX MAP 251, LOT 123
S.C.R.D. BOOK 1585, PAGE 160

N/F EBBESON, KRISTIN A
76 OAK STREET
ROCHESTER, NH 03839
TAX MAP 251, LOT 124
S.C.R.D. BOOK 3656, PAGE 138

N/F MONTIGNY, DONALD J
78 OAK ST
ROCHESTER, NH 03839
TAX MAP 251, LOT 125
S.C.R.D. BOOK 2161, PAGE 001

N/F FOOTE, HAZEL E
82 OAK ST
ROCHESTER, NH 03839
TAX MAP 251, LOT 126
S.C.R.D. BOOK 1507, PAGE 387

N/F SALLY BEMIS REV TST
SALLY BEMIS TSTEE
8 ASH TREE TRL
WELLS, ME 04090
TAX MAP 251, LOT 128
S.C.R.D. BOOK 3169, PAGE 873

N/F SPOSATO, JOHN & KRISTIN A
14 TESSIER DR
ROCHESTER, NH 03839
TAX MAP 251, LOT 129
S.C.R.D. BOOK 4217, PAGE 345

N/F GRAVES, DENNIS & LORRE
35 TESSIER DR
ROCHESTER, NH 03839
TAX MAP 251, LOT 130 & 131
S.C.R.D. BOOK 3234, PAGE 933

ABUTTERS WITHIN 200' CONT.:

N/F MURTAGH, RYAN MICHAEL
25 TESSIER DR
ROCHESTER, NH 03839
TAX MAP 251, LOT 132
S.C.R.D. BOOK 3883, PAGE 735

N/F RICHARDSON, SARAH E & WILLIAM B
23 TESSIER DR
ROCHESTER, NH 03839
TAX MAP 251, LOT 133
S.C.R.D. BOOK 4486, PAGE 671

N/F MCCABE, KATHLEEN T
21 TESSIER DR
ROCHESTER, NH 03839
TAX MAP 251, LOT 134
S.C.R.D. BOOK 3146, PAGE 868

N/F NITROPOULOS, FRANK & TRACY L
88 OAK ST
ROCHESTER, NH 03839
TAX MAP 251, LOT 137
S.C.R.D. BOOK 1374, PAGE 452

N/F MARSHBURN FAMILY REV TST
HOWARD & PATRICIA MARSHBURN
90 OAK ST
ROCHESTER, NH 03839
TAX MAP 251, LOT 138
S.C.R.D. BOOK 3393, PAGE 322

N/F DUPUIS, PAUL R & SIM, NARETH
756 WASHINGTON ST
BARRINGTON, NH 03825
TAX MAP 251, LOT 139
S.C.R.D. BOOK 4437, PAGE 453

N/F MORRIS, SUSAN E & FRANCIS J
129 GEAR RD
ROCHESTER, NH 03839
TAX MAP 251, LOT 115
S.C.R.D. BOOK 2350, PAGE 207

N/F DOLE, BRADLEY R & SUSAN E
125 GEAR RD
ROCHESTER, NH 03839
TAX MAP 251, LOT 116
S.C.R.D. BOOK 1238, PAGE 527

ABUTTERS WITHIN 200' CONT.:

N/F LADISHEFF, DANIEL & DONNA A
121 GEAR RD
ROCHESTER, NH 03839
TAX MAP 251, LOT 117
S.C.R.D. BOOK 3910, PAGE 718

N/F FORNIER, CHRISTOPHER D
119 GEAR RD
ROCHESTER, NH 03839
TAX MAP 216, LOT 118
S.C.R.D. BOOK 4120, PAGE 685

N/F MCGOWAN, CONNOR B & MORRISON SHAUNI
SHAUNI MORRISON
117 GEAR RD
ROCHESTER, NH 03839
TAX MAP 251, LOT 119
S.C.R.D. BOOK 4522, 590

N/F CRC FUTURE CORP
56 EXETER RD
NEWMARKET, NH 03857
TAX MAP 251, LOT 120
S.C.R.D. BOOK 2975, PAGE 469

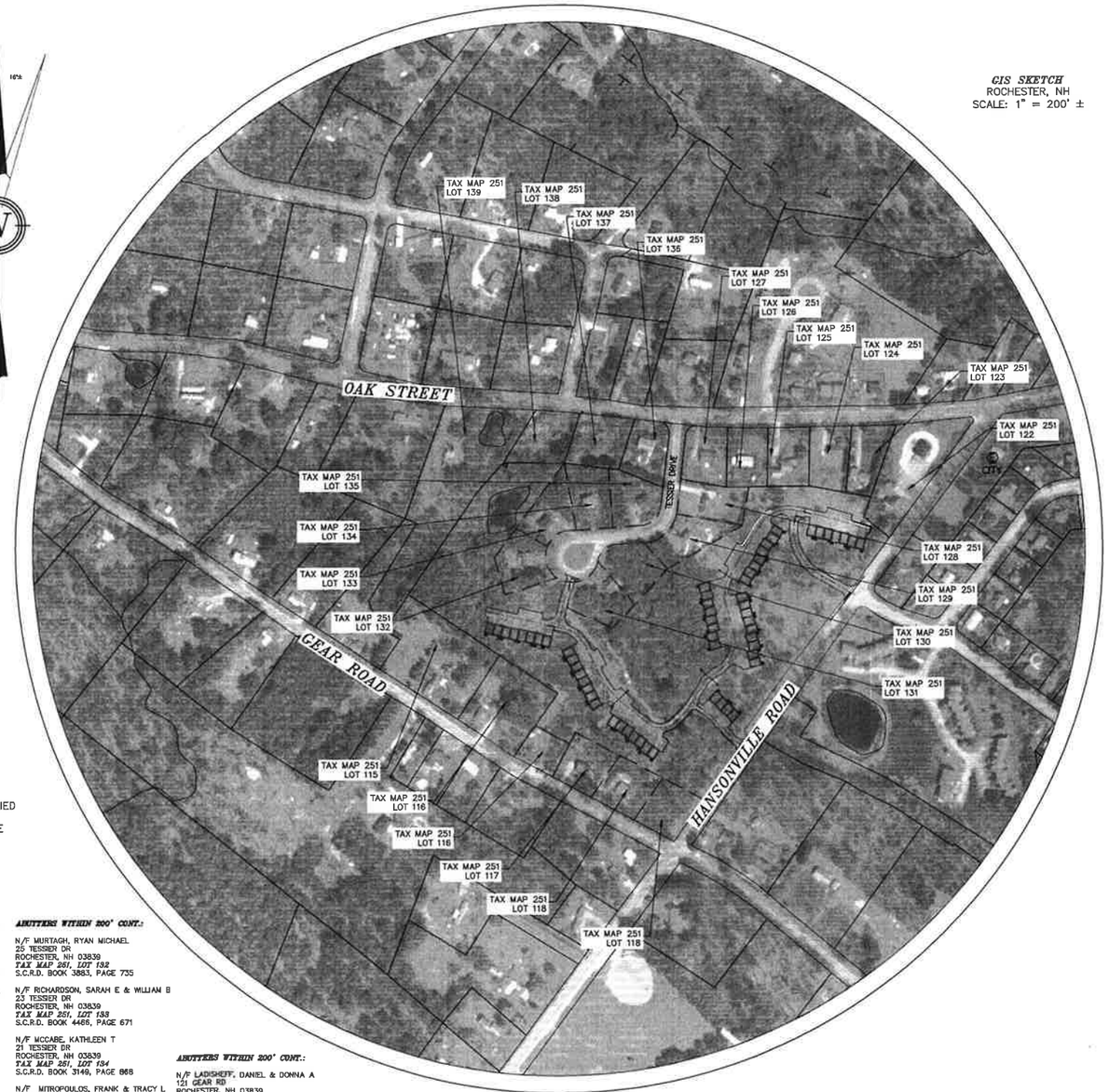
N/F DUPUIS, ARMAND G & SIMMONE A
DUPUIS AGASA REV LV TST
109 GEAR RD
ROCHESTER, NH 03839
TAX MAP 251, LOT 83
S.C.R.D. BOOK 4426, PAGE 803

ABUTTERS WITHIN 200' CONT.:

N/F GREAT BRIDGE ROCHESTER LTD
STEWART PARTNERSHIP
PO BOX 10540
BEDFORD, NH 03110
TAX MAP 251, LOT 10
S.C.R.D. BOOK 2902, PAGE 719

N/F LEDGEVIEW CONDOMINIUM ASSOC
EXECUTIVE PROPERTIES
PO BOX 353
ROCHESTER, NH 03866
TAX MAP 251, LOT 54
S.C.R.D. BOOK 1464, PAGE 155

N/F MAXFIELD DAN E & JAN C
PO BOX 384
ROCHESTER, NH 03866
TAX MAP 251, LOT 82
S.C.R.D. BOOK 2242, PAGE 250



REVISION	DATE	DESCRIPTION
#7	07–30–2018	SUBMITTED FOR CONSTRUCTION
#6a	06–18–2018	REVISED PER AoT COMMENT
#5b	05–24–2018	NHDES WWEB RESPONSE
#4	05–02–2018	AOT REVISIONS
#3	04–11–2018	SEWER & WATER REVISIONS
#2	04–09–2018	GENERAL PLAN SET
#1	03–30–2018	GENERAL PLAN SET

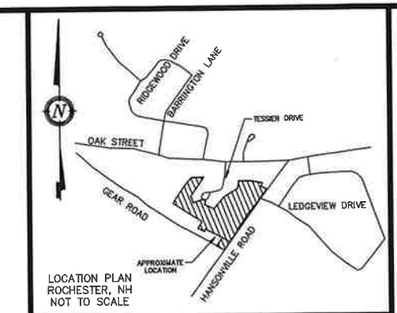
NEIGHBORHOOD PLAN
LAND OF
CRC FUTURE CORP.
&
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332–2863

SCALE: AS NOTED.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE LICENSED LAND SURVEYOR No. 805 KENNETH A. BERRY SIGNATURE

STATE OF NEW HAMPSHIRE KENNETH A. BERRY No. 14245 LICENSED PROFESSIONAL ENGINEER



LOCATION PLAN
ROCHESTER, NH
NOT TO SCALE

NOTES:

1.) THE INTENT OF THIS PLAN IS TO DEMONSTRATE THE PHASING PLAN FOR 59 THREE BEDROOM CONDOMINIUM TOWNHOUSES.

2.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

3.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

4.) THE PROJECT PARCEL IS SHOWN AS LOT NO. 120, MAP 251 OF THE CITY OF ROCHESTER TAX ASSESSOR'S MAPS.

5.) THE PROJECT PARCEL CONTAINS 13.84 ACRES OR 602,671 SQUARE FEET AREA OF LAND.

6.) PROJECT PLAN REFERENCES: S.C.R.D. BOOK 2975, PAGE 469

DISTURBANCE PER PHASES:

PHASE 1 IS REQUIRED TO BUILT AND STABILIZED PRIOR TO THE COMMENCEMENT OF PHASE 2. THERE IS TO BE NO MORE THAN FIVE ACRES OF OPEN DISTURBANCE AT ANY ONE TIME.

PHASE 1: 169,518 Sq. Ft., 3.89 Ac.

- INFRASTRUCTURE PROPOSED AS PART OF THE 600 FEET OF HALF PEAK LANE, TOPAZ LANE AND JAY PEAK LANE.
- SEWER EXTENSION TO TESSIER DRIVE
- CONSTRUCTION OF TOPAZ LANE, JAY PEAK LANE AND HALF PEAK LANE TO 6+00.
- LANDSCAPING, EROSION AND SEDIMENT CONTROL FOR JAY PEAK LANE, TOPAZ LANE AND HALF PEAK LANE TO 6+00.

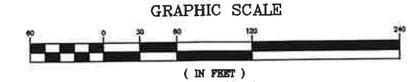
PHASE 2: 144,985 Sq. Ft., 3.32 Ac.

- CONSTRUCTION OF MARWARI LANE, HALF PEAK LANE 6+00 TO END
- ALL ASSOCIATED UTILITIES, LANDSCAPING AND EROSION AND SEDIMENT CONTROL.

LEGEND:

- PROPOSED EASEMENT LINE
- EXISTING EASEMENT LINE
- BOUNDARY LINE
- WETLAND LINE
- STONE WALL
- PHASE LINE

GRAPHIC SCALE



(IN FEET)
1 inch = 60 ft.

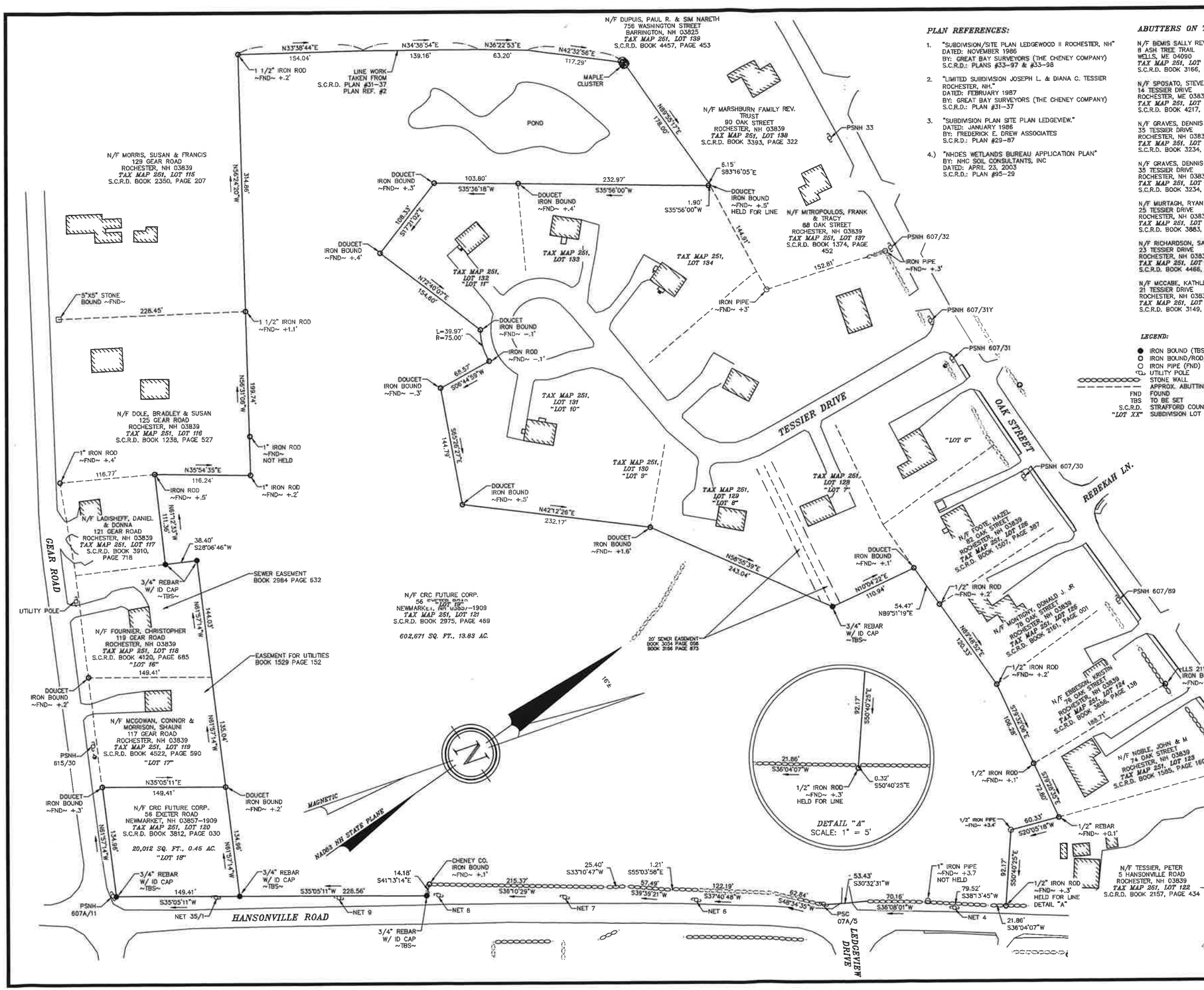
REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#6b	05-24-2018	NHDES WHEC RESPONSE
#4	04-12-2018	AoT RESPONSE
#2	04-11-2018	SEWER & WATER REVISIONS
#1	04-09-2018	GENERAL PLAN SET
	03-30-2018	GENERAL PLAN SET

PHASING PLAN
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 60 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER



PLAN REFERENCES:

1. "SUBDIVISION/SITE PLAN LEDGEWOOD II ROCHESTER, NH"
   DATED: NOVEMBER 1986
   BY: GREAT BAY SURVEYORS (THE CHENEY COMPANY)
   S.C.R.D.: PLANS #33-97 & #33-98
2. "LIMITED SUBDIVISION JOSEPH L. & DIANA C. TESSIER ROCHESTER, NH."
   DATED: FEBRUARY 1987
   BY: GREAT BAY SURVEYORS (THE CHENEY COMPANY)
   S.C.R.D.: PLAN #31-37
3. "SUBDIVISION PLAN SITE PLAN LEDGEVIEW."
   DATED: JANUARY 1986
   BY: FREDERICK E. DREW ASSOCIATES
   S.C.R.D.: PLAN #29-87
4.) "NHDES WETLANDS BUREAU APPLICATION PLAN"
   BY: NHC SOIL CONSULTANTS, INC
   DATED: APRIL 23, 2003
   S.C.R.D.: PLAN #95-29

ABUTTERS ON TESSIER DRIVE:

N/F BEMIS SALLY REV. TRUST
8 ASH TREE TRAIL
WELLS, ME 04090
TAX MAP 251, LOT 128
S.C.R.D. BOOK 3166, PAGE 873

N/F SPOSATO, STEVEN & KRISTIN
14 TESSIER DRIVE
ROCHESTER, ME 03839
TAX MAP 251, LOT 129
S.C.R.D. BOOK 4217, PAGE 345

N/F GRAVES, DENNIS & LORIE
35 TESSIER DRIVE
ROCHESTER, NH 03839
TAX MAP 251, LOT 130
S.C.R.D. BOOK 3234, PAGE 555

N/F GRAVES, DENNIS & LORIE
35 TESSIER DRIVE
ROCHESTER, NH 03839
TAX MAP 251, LOT 131
S.C.R.D. BOOK 3234, PAGE 555

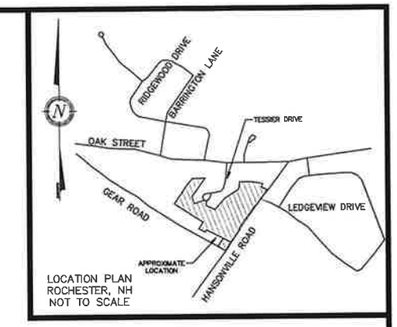
N/F MURTAGH, RYAN
25 TESSIER DRIVE
ROCHESTER, NH 03839
TAX MAP 251, LOT 132
S.C.R.D. BOOK 3863, PAGE 735

N/F RICHARDSON, SARAH & WILLIAM
23 TESSIER DRIVE
ROCHESTER, NH 03839
TAX MAP 251, LOT 133
S.C.R.D. BOOK 4466, PAGE 671

N/F MCCABE, KATHLEEN
21 TESSIER DRIVE
ROCHESTER, NH 03839
TAX MAP 251, LOT 134
S.C.R.D. BOOK 3149, PAGE 868

LEGEND:

- ● IRON BOUND (TBS)
- O IRON BOUND/ROD/REBAR (FND)
- ○ IRON PIPE (FND)
- UTILITY POLE
- STONE WALL
- APPROX. ABUTTING LOT LINE
- FND FOUND
- TBS TO BE SET
- S.C.R.D. STRAFFORD COUNTY REGISTRY OF DEEDS
- "LOT XX" SUBDIVISION LOT NUMBER



LOCATION PLAN
ROCHESTER, NH
NOT TO SCALE

NOTES:

1.) OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

APPLICANT: HALF PEAK HOLDING, LLC
P.O. BOX 1297
NORTH HAMPTON, NH 03862

2.) A.) TAX MAP 251, LOT 120
B.) TAX MAP 251, LOT 121

3.) LOT AREA:
A.) 20,012 Sq. Ft., 0.45 Ac.
B.) 602,671 Sq. Ft., 13.83 Ac.

4.) S.C.R.D.
A.) BOOK 2975, PAGE 469
B.) BOOK 2975, PAGE 469

5.) THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF BOUNDARIES OF TAX MAP 251, LOT 120 & 121 IN ACCORDANCE WITH AND IN RELATION TO THE CURRENT AND ORIGINAL LEGAL DESCRIPTIONS, AND IS NOT AN ATTEMPT TO DEFINE UNWRITTEN RIGHTS, DETERMINE THE EXTENT OF OWNERSHIP, OR DEFINE THE LIMITS OF TITLE.

6.) NH STANDARD PROPERTY SURVEY WITH A CLOSURE OF 1:26,264.

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

KENNETH A. BERRY L.L.S. 805 DATE

REVISION	DATE	DESCRIPTION
#1	03-12-2018	EASEMENT REFERENCE

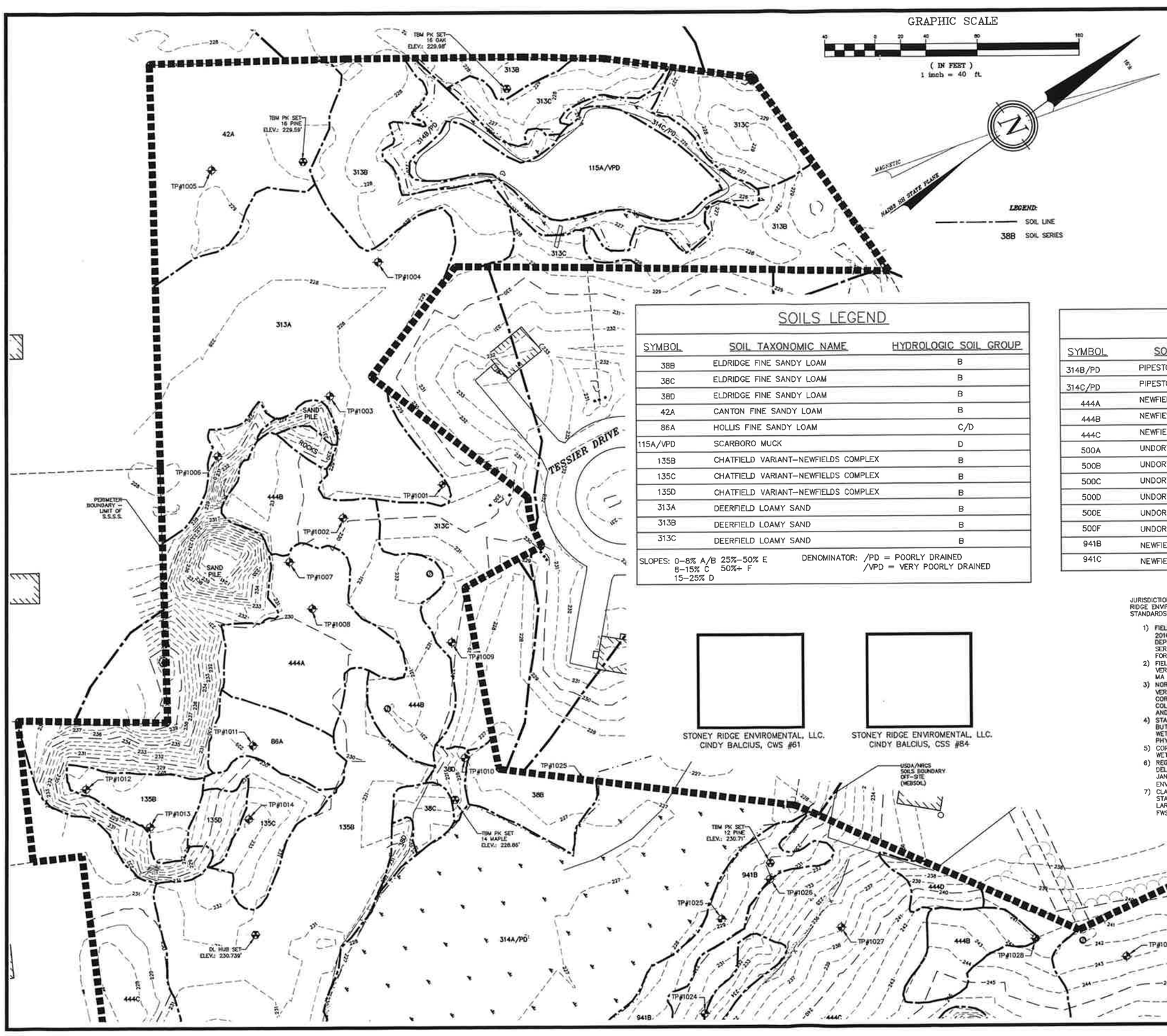
BOUNDARY PLAN
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
MAP 251, LOT 120 & 121

STATE OF NEW HAMPSHIRE LICENSED LAND SURVEYOR No. 805 KENNETH A. BERRY

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT RD.
BARRINGTON, N.H. (603)332-2863

SCALE : 1 IN. EQUALS 60 FT.
DATE : JANUARY 15, 2018
FILE NO. : DB 2017-167

SHEET 2 OF 76



NOTES:

1.) OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857-1909

APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

2.) A.) TAX MAP 251, LOT 120

B.) TAX MAP 251, LOT 121

3.) LOT AREA:

A.) 20,012 Sq. Ft., 0.45 Ac.

B.) 602,671 Sq. Ft., 13.83 Ac.

4.) S.C.R.D. BOOK 2975, PAGE 469

5.) ZONING: RESIDENTIAL-1 (R1)
FRONTAGE ~ 100'
MINIMUM LOT SIZE ~ 10,000 Sq. Ft.
FRONT SETBACK ~ 10.0'
REAR SETBACK ~ 20.0'
SIDE SETBACK ~ 10.0'
WETLANDS BUFFER ~ 50.0' IF OVER HALF ACRE
MAX. LOT COVERAGE: 35%

6.) I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE & BELIEF, THIS PARCEL DOES NOT FALL WITHIN THE FLOOD PLAIN FLOOD HAZARD REF.: FEMA COMMUNITY# -330150, MAP# - 33017C0204D & 33017C0212D, DATED: MAY 17, 2005

7.) VERTICAL DATUM BASED ON USGS NAVD88 ELEVATIONS. HORIZONTAL COORDINATES BASED ON NAD83. COORDINATES GATHERED USING TOPCON HIPER SR SURVEY GRADE GPS RECEIVERS.

8.) THE INTENT OF THIS PLAN IS TO REPRESENT THE SITE SPECIFIC SOILS ON TAX MAP 251 LOTs 120 & 121, AS DETERMINED BY STONEY RIDGE ENVIRONMENTAL LLC

SOILS LEGEND

SYMBOL	SOIL TAXONOMIC NAME	HYDROLOGIC SOIL GROUP
38B	ELDRIDGE FINE SANDY LOAM	B
38C	ELDRIDGE FINE SANDY LOAM	B
38D	ELDRIDGE FINE SANDY LOAM	B
42A	CANTON FINE SANDY LOAM	B
86A	HOLLIS FINE SANDY LOAM	C/D
115A/VPD	SCARBORO MUCK	D
135B	CHATFIELD VARIANT-NEWFIELDS COMPLEX	B
135C	CHATFIELD VARIANT-NEWFIELDS COMPLEX	B
135D	CHATFIELD VARIANT-NEWFIELDS COMPLEX	B
313A	DEERFIELD LOAMY SAND	B
313B	DEERFIELD LOAMY SAND	B
313C	DEERFIELD LOAMY SAND	B

SLOPES: 0-8% A/B 25%-50% E
8-15% C 50%+ F
15-25% D

DENOMINATOR: /PD = POORLY DRAINED
/VPD = VERY POORLY DRAINED

SOILS LEGEND

SYMBOL	SOIL TAXONOMIC NAME	HYDROLOGIC SOIL GROUP
314B/PD	PIPESTONE FINE SANDY LOAM	B
314C/PD	PIPESTONE FINE SANDY LOAM	B
444A	NEWFIELDS FINE SANDY LOAM	B
444B	NEWFIELDS FINE SANDY LOAM	B
444C	NEWFIELDS FINE SANDY LOAM	B
500A	UNDORTHENTS LOAMY	C
500B	UNDORTHENTS LOAMY	C
500C	UNDORTHENTS LOAMY	C
500D	UNDORTHENTS LOAMY	C
500E	UNDORTHENTS LOAMY	C
500F	UNDORTHENTS LOAMY	C
941B	NEWFIELDS VARIANT	
941C	NEWFIELDS VARIANT	

JURISDICTIONAL WETLANDS WERE DELINEATED BY CINDY BALCIUS OF STONEY RIDGE ENVIRONMENTAL LLC IN JULY OF 2017 UTILIZING THE FOLLOWING STANDARDS:

1) FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 7.0. 2010. L.M. VASILAS, G.W. HURT, AND C.V. NOBLE (EDS.). UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, IN COOPERATION WITH THE NATIONAL TECHNICAL COMMITTEE FOR HYDRIC SOILS.
2) FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND. VERSION 3. APRIL 2004. NEIWPCC WETLANDS WORKGROUP. WILMINGTON, MA 01887.
3) NORTH AMERICAN DIGITAL FLORA: NATIONAL WETLAND PLANT LIST, VERSION 2.1.0 (HTTP://WETLAND_PLANTS.USACE.ARMY.MIL). U.S. ARMY CORPS OF ENGINEERS, ENGINEER RESEARCH AND DEVELOPMENT CENTER, COLD REGIONS RESEARCH AND ENGINEERING LABORATORY, HANOVER, NH, AND BONAP, CHAPEN HILL.
4) STATE OF NEW HAMPSHIRE 2014 WETLAND PLANT LIST. LICHVAR, R.W., M. BUTTERWICH, N.C. MELVIN, AND W.N. KIRCHNER. 2014. THE NATIONAL WETLAND PLANT LIST: 2014 UPDATE OF WETLAND RATINGS. PHYTONEURON 2014-41:1-42.
5) CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL. JANUARY 1987. WETLANDS RESEARCH PROGRAM TECHNICAL REPORT Y-87-1.
6) REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION. JANUARY 2012, VERSION 2. U.S. ARMY CORPS OF ENGINEERS. ENVIRONMENTAL LABORATORY ERDC/EL TR-12-1.
7) CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES. DECEMBER 1979. L. COWARDIN, V. CARTER, F. GOLET, AND E. LAROE. US DEPARTMENT OF THE INTERIOR. FISH AND WILDLIFE SERVICE. FWS/OBS-79/31.

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-02-2018	AOT REVISIONS
#3	04-12-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

SITE SPECIFIC SOILS MAP WEST
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 40 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER

JURISDICTIONAL WETLANDS WERE DELINEATED BY CINDY BALCIUS OF STONEY RIDGE ENVIRONMENTAL LLC IN JULY OF 2017 UTILIZING THE FOLLOWING STANDARDS:

1) FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 7.0. 2010. L.M. VASILAS, G.W. HURT, AND C.V. NOBLE (EDS.). UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, IN COOPERATION WITH THE NATIONAL TECHNICAL COMMITTEE FOR HYDRIC SOILS.
2) FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND. VERSION 3. APRIL 2004. NEIWPCC WETLANDS WORKGROUP. WILMINGTON, MA 01887.
3) NORTH AMERICAN DIGITAL FLORA: NATIONAL WETLAND PLANT LIST, VERSION 2.1.0 (HTTP://WETLAND_PLANTS.USACE.ARMY.MIL). U.S. ARMY CORPS OF ENGINEERS, ENGINEER RESEARCH AND DEVELOPMENT CENTER, COLD REGIONS RESEARCH AND ENGINEERING LABORATORY, HANOVER, NH, AND BONAP, CHAPEN HILL.
4) STATE OF NEW HAMPSHIRE 2014 WETLAND PLANT LIST. LICHVAR, R.W., M. BUTTERWICH, N.C. MELVIN, AND W.N. KIRCHNER. 2014. THE NATIONAL WETLAND PLANT LIST: 2014 UPDATE OF WETLAND RATINGS. PHYTONEURON 2014–41: 1–42.
5) CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL. JANUARY 1987. WETLANDS RESEARCH PROGRAM TECHNICAL REPORT Y–87–1.
6) REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION. JANUARY 2012, VERSION 2. U.S. ARMY CORPS OF ENGINEERS. ENVIRONMENTAL LABORATORY ERDC/EL TR–12–1.
7) CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES. DECEMBER 1979. L. COWARDIN, V. CARTER, F. GOLET, AND E. LAROE. US DEPARTMENT OF THE INTERIOR, FISH AND WILDLIFE SERVICE. FWS/OBS–79/31.

STONEY RIDGE ENVIROMENTAL, LLC.
CINDY BALCIUS, CWS #61

STONEY RIDGE ENVIROMENTAL, LLC.
CINDY BALCIUS, CSS #84

SOILS LEGEND

SYMBOL	SOIL TAXONOMIC NAME	HYDROLOGIC SOIL GROUP
38B	ELDRIDGE FINE SANDY LOAM	B
38C	ELDRIDGE FINE SANDY LOAM	B
38D	ELDRIDGE FINE SANDY LOAM	B
42A	CANTON FINE SANDY LOAM	B
86A	HOLLIS FINE SANDY LOAM	C/D
115A/VPD	SCARBORO MUCK	D
135B	CHATFIELD VARIANT–NEWFIELDS COMPLEX	B
135C	CHATFIELD VARIANT–NEWFIELDS COMPLEX	B
135D	CHATFIELD VARIANT–NEWFIELDS COMPLEX	B
313A	DEERFIELD LOAMY SAND	B
313B	DEERFIELD LOAMY SAND	B
313C	DEERFIELD LOAMY SAND	B

SLOPES: 0–8% A/B 25%–50% E
8–15% C 50%+ F
15–25% D

DENOMINATOR: /PD = POORLY DRAINED
/VPD = VERY POORLY DRAINED

SOILS LEGEND

SYMBOL	SOIL TAXONOMIC NAME	HYDROLOGIC SOIL GROUP
314B/PD	PIPESTONE FINE SANDY LOAM	B
314C/PD	PIPESTONE FINE SANDY LOAM	B
444A	NEWFIELDS FINE SANDY LOAM	B
444B	NEWFIELDS FINE SANDY LOAM	B
444C	NEWFIELDS FINE SANDY LOAM	B
500A	UNDORTHENTS LOAMY	C
500B	UNDORTHENTS LOAMY	C
500C	UNDORTHENTS LOAMY	C
500D	UNDORTHENTS LOAMY	C
500E	UNDORTHENTS LOAMY	C
500F	UNDORTHENTS LOAMY	C
941B	NEWFIELDS VARIANT	
941C	NEWFIELDS VARIANT	

NOTES:

1.) OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857–1909

APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

2.) A.) TAX MAP 251, LOT 120
B.) TAX MAP 251, LOT 121

3.) LOT AREA:
A.) 20,012 Sq. Ft., 0.45 Ac.
B.) 602,671 Sq. Ft., 13.83 Ac.

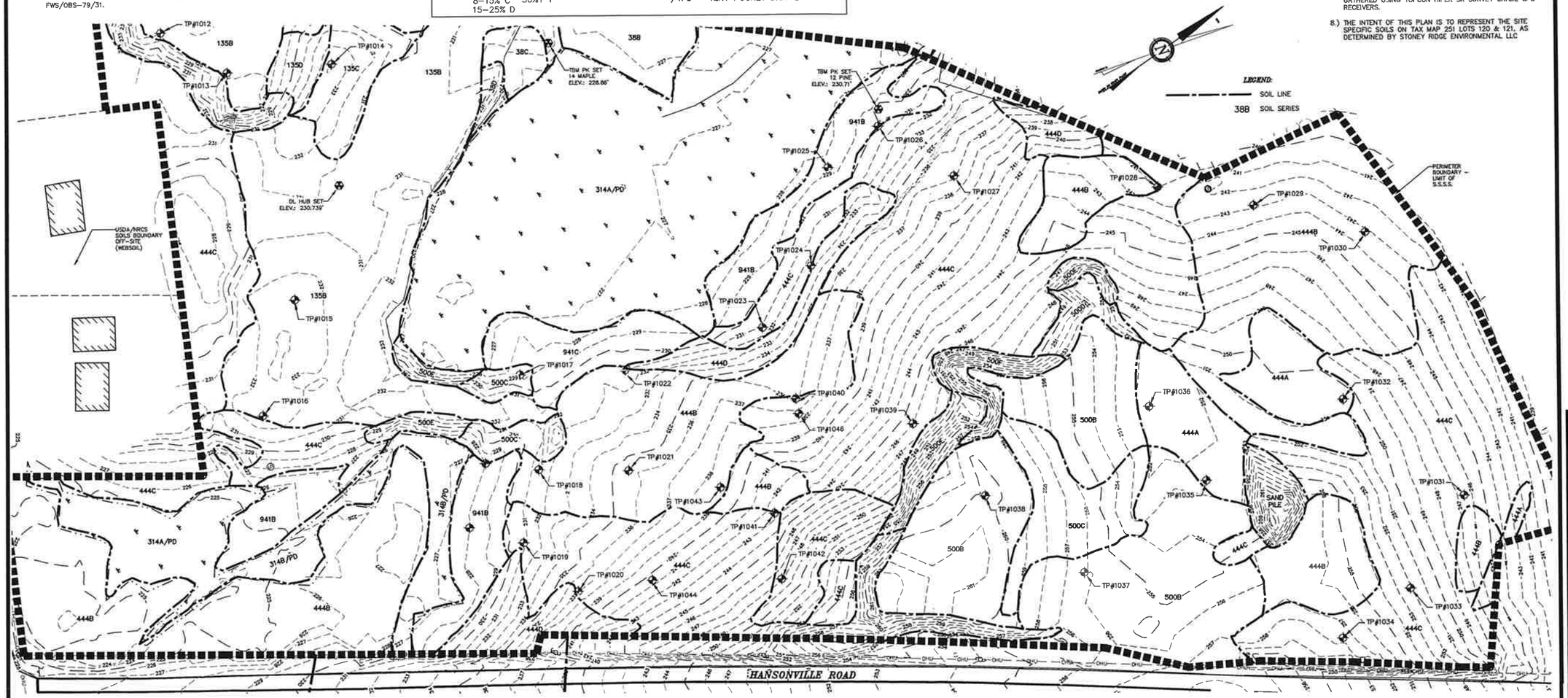
4.) S.C.R.D. BOOK 2975, PAGE 469

5.) ZONING: RESIDENTIAL–1 (R1)
FRONTAGE ~ 100'
MINIMUM LOT SIZE ~ 10,000 Sq. Ft.
FRONT SETBACK ~ 10.0'
REAR SETBACK ~ 20.0'
SIDE SETBACK ~ 10.0'
WETLANDS BUFFER ~ 50.0' IF OVER HALF ACRE
MAX. LOT COVERAGE: 35%

6.) I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE & BELIEF, THIS PARCEL DOES NOT FALL WITHIN THE FLOOD PLAIN FLOOD HAZARD REF.: FEMA COMMUNITY# –330150, MAP# – 33017C0204D & 33017C0212D, DATED: MAY 17, 2005

7.) VERTICAL DATUM BASED ON USGS NAVD88 ELEVATIONS. HORIZONTAL COORDINATES BASED ON NAD83. COORDINATES GATHERED USING TOPCON HIPER SR SURVEY GRADE GPS RECEIVERS.

8.) THE INTENT OF THIS PLAN IS TO REPRESENT THE SITE SPECIFIC SOILS ON TAX MAP 251 LOTS 120 & 121, AS DETERMINED BY STONEY RIDGE ENVIRONMENTAL LLC



REVISION	DATE	DESCRIPTION
#7	07–30–2018	SUBMITTED FOR CONSTRUCTION
#6a	06–18–2018	REVISED PER AoT COMMENT
#5b	05–24–2018	NHDES WWER RESPONSE
#4	05–02–2018	AoT RESPONSE
#3	04–13–2018	NHDES WWER REVISIONS
#2	04–05–2018	GENERAL PLAN SET
#1	03–30–2018	GENERAL PLAN SET

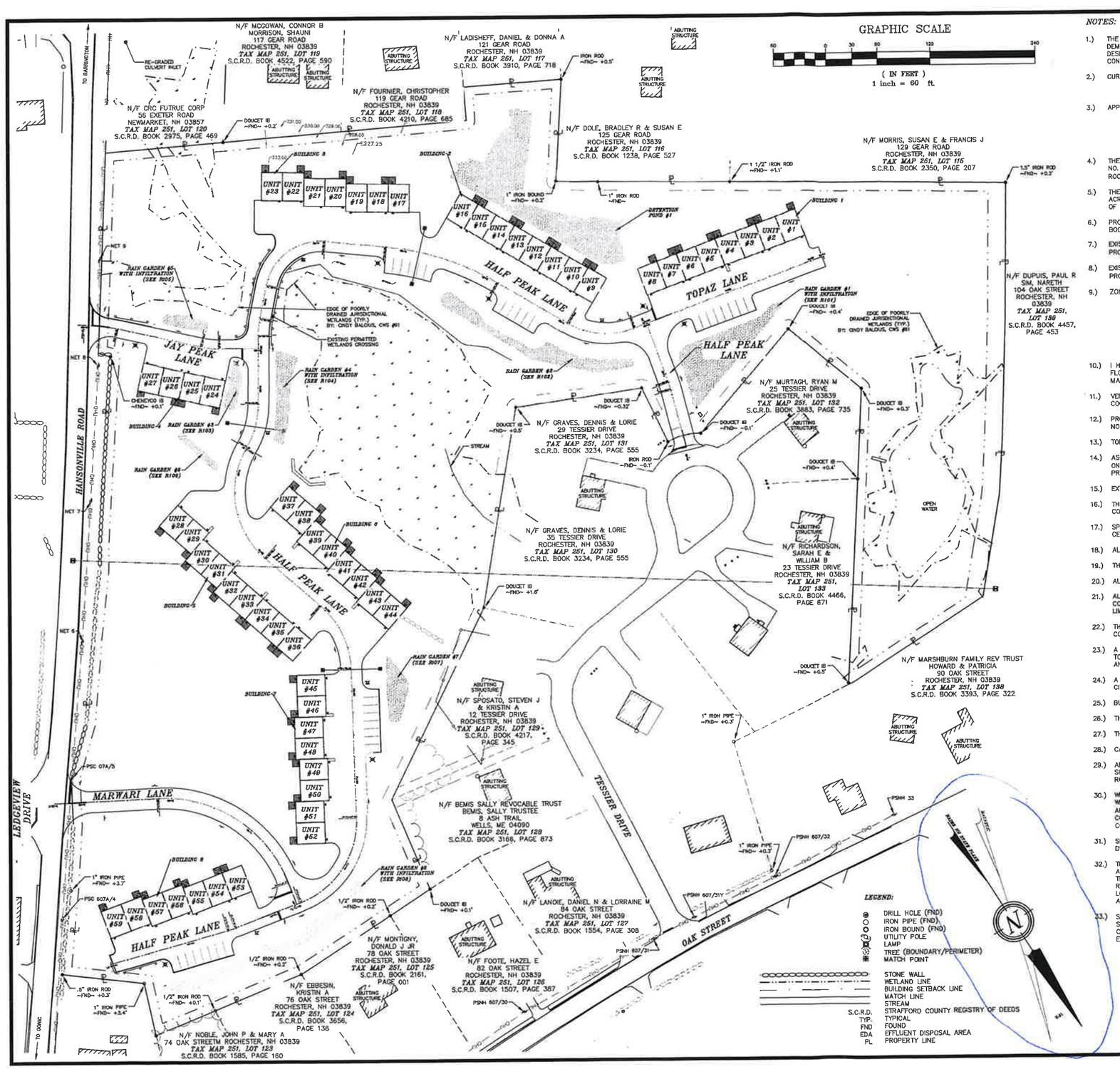
SITE SPECIFIC SOILS MAP EAST
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332–2863

SCALE : 1 IN. EQUALS 80 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 1425
LICENSED
PROFESSIONAL ENGINEER

SHEET 8 OF 76



NOTES:

1.) THE INTENT OF THIS PLAN IS TO DEMONSTRATE THE OVERVIEW SITE PLAN DESIGN FOR 59 THREE BEDROOM CONDOMINIUM TOWNHOUSES.

2.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

3.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

4.) THE PROJECT PARCEL IS SHOWN AS LOT NO. 120, MAP 251 OF THE CITY OF ROCHESTER TAX ASSESSOR'S MAPS.

5.) THE PROJECT PARCEL CONTAINS 13.84 ACRES OR 602,671 SQUARE FEET AREA OF LAND.

6.) PROJECT PLAN REFERENCES: S.C.R.D. BOOK 2975, PAGE 469

7.) EXISTING IMPERVIOUS AREA ON LOT = 0 Sq.Ft. (0% OF LOT)
PROPOSED IMPERVIOUS AREA ON LOT = 145,044 Sq.Ft. (24.1% OF LOT)

8.) EXISTING PRINCIPAL BUILDING LOT COVERAGE = 0 Sq.Ft. (0% OF LOT)
PROPOSED PRINCIPAL BUILDING LOT COVERAGE = 45,312 Sq.Ft. (7.52% OF LOT)

9.) ZONING: RESIDENTIAL-1 (R1)
FRONTAGE ~ 100'
MINIMUM LOT SIZE ~ 10,000 Sq. Ft.
FRONT SETBACK ~ 10.0'
REAR SETBACK ~ 20.0'
SIDE SETBACK ~ 10.0'
WETLANDS BUFFER ~ 50.0' IF OVER HALF ACRE
MAX. LOT COVERAGE: 35%

10.) I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE & BELIEF, THIS PARCEL DOES NOT FALL WITHIN THE FLOOD PLAIN FLOOD HAZARD REF.: FEMA COMMUNITY# -330150, MAP# - 33017C0204D & 33017C0212D, DATED: MAY 17, 2005

11.) VERTICAL DATUM IS BASED ON NAVD88 (USGS) ELEVATIONS. HORIZONTAL COORDINATES ARE BASED ON NAD83. COORDINATES WERE GATHERED USING TOPCON HIPER SR SURVEY GRADE GPS RECEIVERS.

12.) PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY BERRY SURVEYING & ENGINEERING IN NOVEMBER OF 2017, WITH AN ERROR NOT GREATER THAN 1 IN 26,264.

13.) TOPOGRAPHIC SURVEY PERFORMED BY BERRY SURVEYING & ENGINEERING IN NOVEMBER OF 2017.

14.) AS-BUILT PLANS OF THE SITE SHALL BE SUBMITTED ON A REPRODUCIBLE MYLAR MEDIUM AND IN A DIGITAL DXF FORMAT ON DISK TO THE CITY OF ROCHESTER ENGINEER'S OFFICE UPON COMPLETION OF PROJECT. AS-BUILT PLANS SHALL BE PREPARED AND CERTIFIED CORRECT BY A L.L.S. OR P.E.

15.) EXTERIOR LIGHTING SHALL BE CUT-OFF TYPE FIXTURES AND SHALL PROVIDE LIGHTING DIRECTED ON-SITE ONLY.

16.) THE PROPOSED STRUCTURES SHALL BE SERVED BY SPRINKLER SYSTEMS AS REQUIRED BY THE 2009 STATE BUILDING CODES.

17.) SPRINKLER CONNECTIONS MUST BE FLUSHED IN ACCORDANCE WITH NFPA 24 AND A CONTRACTOR'S MATERIALS AND TEST CERTIFICATE FOR UNDERGROUND PIPING FORM MUST BE COMPLETED.

18.) ALL NEW ON-SITE UTILITIES SHALL BE INSTALLED UNDERGROUND, UNLESS OVERHEAD UTILITIES ALREADY EXIST

19.) THE SUBJECT PARCEL IS SERVED BY MUNICIPAL WATER AND SEWER.

20.) ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO APPLICABLE TOWN AND STATE CODES.

21.) ALL EROSION CONTROL NOTES SHALL INCLUDE PROVISIONS FOR CONSTRUCTION SEQUENCING, TEMPORARY EROSION CONTROL MEASURES, AND PERMANENT STANDARDS SUCH AS LOAM SPREAD RATE FOR DISTURBED AREAS, RATES OF LIME, TYPE AND RATES FOR FERTILIZER, AND SEED AND MULCH MIXTURE WITH RATES OF APPLICATION.

22.) THE LIMITS OF CONSTRUCTION DISTURBANCE SHALL BE STAKED, FLAGGED, AND CLEARLY IDENTIFIED PRIOR TO THE COMMENCEMENT OF SITE WORK.

23.) A LETTER OF CREDIT FOR THE COST OF REVEGETATING ALL DISTURBED AREAS ON THE SITE SHALL BE SUBMITTED PRIOR TO ANY EARTH DISTURBING ACTIVITY OCCURS. COORDINATE WITH CITY OF ROCHESTER, DEPARTMENT OF PUBLIC WORKS AND PLANNING DEPARTMENT.

24.) A PRE-CONSTRUCTION CONFERENCE WITH THE DEVELOPER, THE DESIGN ENGINEER, THE EARTHWORK CONTRACTOR, THE CITY ENGINEER, AND HEAD OF PLANNING SHALL OCCUR PRIOR TO ANY EARTH DISTURBING ACTIVITY.

25.) BUILDING ADDRESSES SHALL BE ASSIGNED BY THE BUILDING OFFICIAL AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.

26.) THE PROPOSED USE FOR THE SITE IS A RESIDENTIAL 2-3 BEDROOM TOWN HOUSES.

27.) THIS PLAN PROPOSES APPROXIMATELY 310,000 SQ. FT. OF DISTURBANCE.

28.) CALL DIG SAFE PRIOR TO BEGINNING WORK (1-888-344-7233)

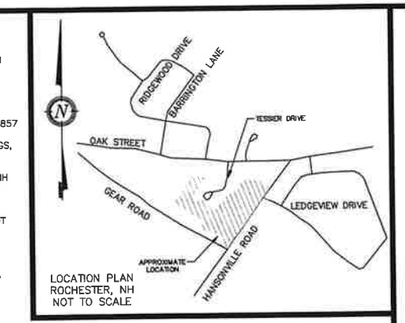
29.) ALL CONSTRUCTION SHALL CONFORM TO THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. CONSTRUCTION SHALL ALSO CONFORM TO THE CITY OF ROCHESTER POLICIES AND PRACTICES.

30.) WRITTEN DIMENSION ON THIS PLAN TAKE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN THE EVENT OF A CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWINGS AND/OR SPECIFICATIONS, THE ENGINEER SHALL BE NOTIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR IS TO CONFIRM ALL ELEVATIONS. CONFLICTS WILL BE REPORTED TO THE DESIGN ENGINEER PRIOR TO CONSTRUCTION.

31.) SNOW STORAGE AREAS ARE AS SHOWN ON THIS SITE PLAN. EXCESS SNOW WILL BE REMOVED FROM THIS SITE AND DISPOSED OF IN A QUALIFIED LOCATION. A 1:6 RATIO OF STORAGE WAS USED TO DETERMINE ADEQUACY SHOWN.

32.) THE OWNER OF RECORD SHALL RECORD AT THE REGISTRY OF DEEDS DOCUMENTATION SUFFICIENT TO PROVIDE NOTICE TO ALL PERSONS THAT MAY ACQUIRE ANY PROPERTY SUBJECT TO THE REQUIREMENTS AND RESPONSIBILITIES DESCRIBED IN THE APPROVED STORMWATER MANAGEMENT PLAN. THE NOTICE SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS FOR RECORDING CONTAINED IN RSA 477 AND 478. THE NOTICE NEED NOT SET FORTH THE REQUIREMENTS AT LENGTH, SO LONG AS IT IS SUFFICIENT TO PROVIDE NOTICE TO PROSPECTIVE PURCHASERS TO THE REQUIREMENTS FOR MAINTENANCE AND REPORTING.

33.) SITE CONSTRUCTION HOURS SHALL BE LIMITED TO MONDAY-FRIDAY 7 AM - 6 PM, SATURDAY 9 AM - 4 PM, WITH NO SUNDAY HOURS. HOURS OF CONSTRUCTION MUST BE DOCUMENTED ON A SITE CONSTRUCTION SIGN ALONG WITH THE CONTACT INFORMATION FOR THE GENERAL CONTRACTOR. SAID SIGNAGE MUST BE LOCATED AND APPROVED BY THE CITY ENGINEER OR ASSISTANT CITY MANAGER.



LOCATION PLAN
ROCHESTER, NH
NOT TO SCALE

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AGEWORKS
#5b	05-02-2018	AOT COMMENT
#4	04-11-2018	AOT REVISIONS
#3	04-09-2018	SEWER & WATER REVISIONS
#2	03-30-2018	GENERAL PLAN SET
#1		GENERAL PLAN SET

OVERVIEW SITE PLAN
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 60 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

NOTES:

1.) THE INTENT OF THIS PLAN IS TO DEMONSTRATE THE DESIGN FOR UNITS 1–16 CONDOMINIUM TOWNHOUSES.

2.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

3.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

4.) THE PROJECT PARCEL IS SHOWN AS LOT NO. 121, MAP 251 OF THE CITY OF ROCHESTER TAX ASSESSOR'S MAPS.

5.) THE PROJECT PARCEL CONTAINS 13.84 ACRES OR 602,671 SQUARE FEET AREA OF LAND.

N/F DOLE, BRADLEY R & SUSAN E
125 GEAR ROAD
ROCHESTER, NH 03839
TAX MAP 251, LOT 116
S.C.R.D. BOOK 1238, PAGE 527

N/F MORRIS, SUSAN E & FRANCIS J
129 GEAR ROAD
ROCHESTER, NH 03839
TAX MAP 251, LOT 115
S.C.R.D. BOOK 2350, PAGE 207

N/F MURTAGH, RYAN M
25 TESSIER DRIVE
ROCHESTER, NH 03839
TAX MAP 251, LOT 132
S.C.R.D. BOOK 3883, PAGE 735

N/F GRAVES, DENNIS & LORIE
29 TESSIER DRIVE
ROCHESTER, NH 03839
TAX MAP 251, LOT 131
S.C.R.D. BOOK 3234, PAGE 555

HALF PEAK LANE

TOPAZ LANE

TESSIER DRIVE

Half Peak Lane

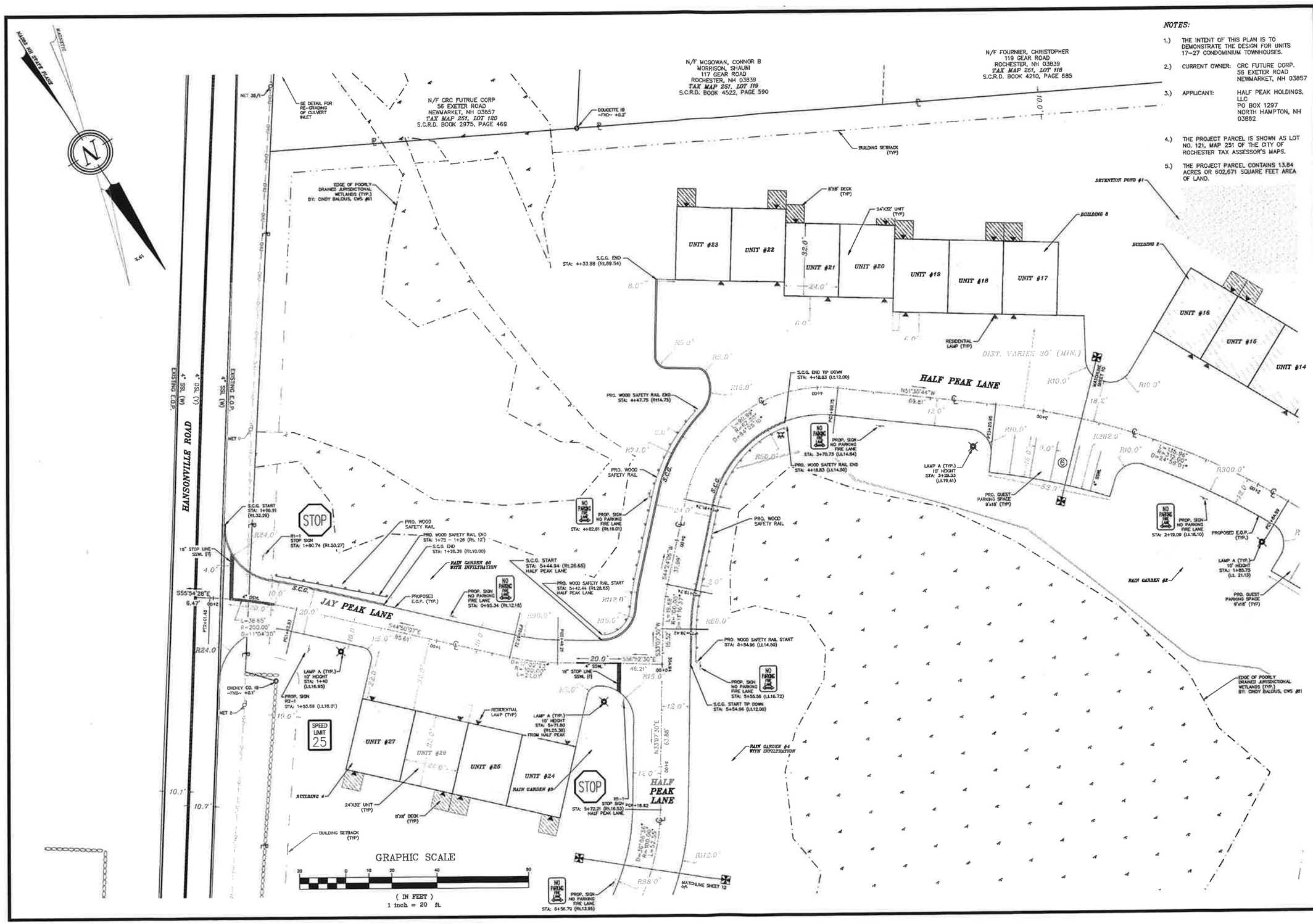
REVISION	DATE	DESCRIPTION
#7	07–30–2018	SUBMITTED FOR CONSTRUCTION
#6a	06–18–2018	REVISED PER AoT COMMENT
#5b	05–24–2018	UNDER WRB RESPONSE
#4	05–02–2018	ADD SEWER
#3	04–11–2018	SEWER & WATER REVISIONS
#2	04–09–2018	GENERAL PLAN SET
#1	03–30–2018	GENERAL PLAN SET

SITE PLAN UNITS 1 – 16
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332–2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14793
LICENSED
PROFESSIONAL ENGINEER



NOTES:

1.) THE INTENT OF THIS PLAN IS TO DEMONSTRATE THE DESIGN FOR UNITS 17–27 CONDOMINIUM TOWNHOUSES.

2.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

3.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

4.) THE PROJECT PARCEL IS SHOWN AS LOT NO. 121, MAP 251 OF THE CITY OF ROCHESTER TAX ASSESSOR'S MAPS.

5.) THE PROJECT PARCEL CONTAINS 13.84 ACRES OR 602,671 SQUARE FEET AREA OF LAND.

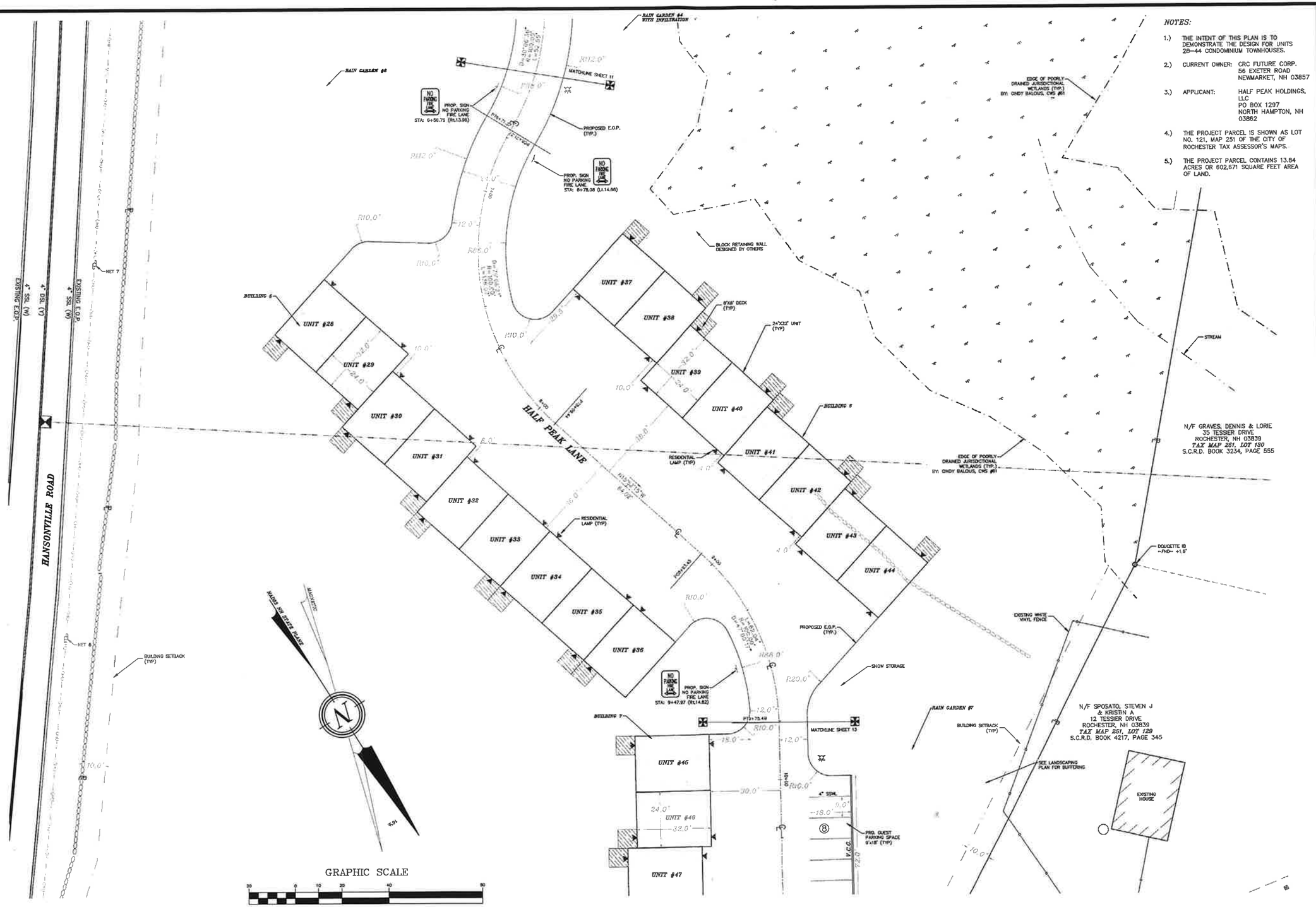
REVISION	DATE	DESCRIPTION
#7	07–30–2018	SUBMITTED FOR CONSTRUCTION
#6a	06–18–2018	REVISED PER AoT COMMENT
#5b	05–24–2018	NHDES WWEB RESPONSE
#4	05–02–2018	NHDES RESPONSE
#3	04–11–2018	SEWER & WATER REVISIONS
#2	04–09–2018	GENERAL PLAN SET
#1	03–30–2018	GENERAL PLAN SET

SITE PLAN UNITS 17 – 27
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332–2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14043
LICENSED
PROFESSIONAL ENGINEER



NOTES:

1.) THE INTENT OF THIS PLAN IS TO DEMONSTRATE THE DESIGN FOR UNITS 28–44 CONDOMINIUM TOWNHOUSES.

2.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

3.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

4.) THE PROJECT PARCEL IS SHOWN AS LOT NO. 121, MAP 251 OF THE CITY OF ROCHESTER TAX ASSESSOR'S MAPS.

5.) THE PROJECT PARCEL CONTAINS 13.84 ACRES OR 602,671 SQUARE FEET AREA OF LAND.

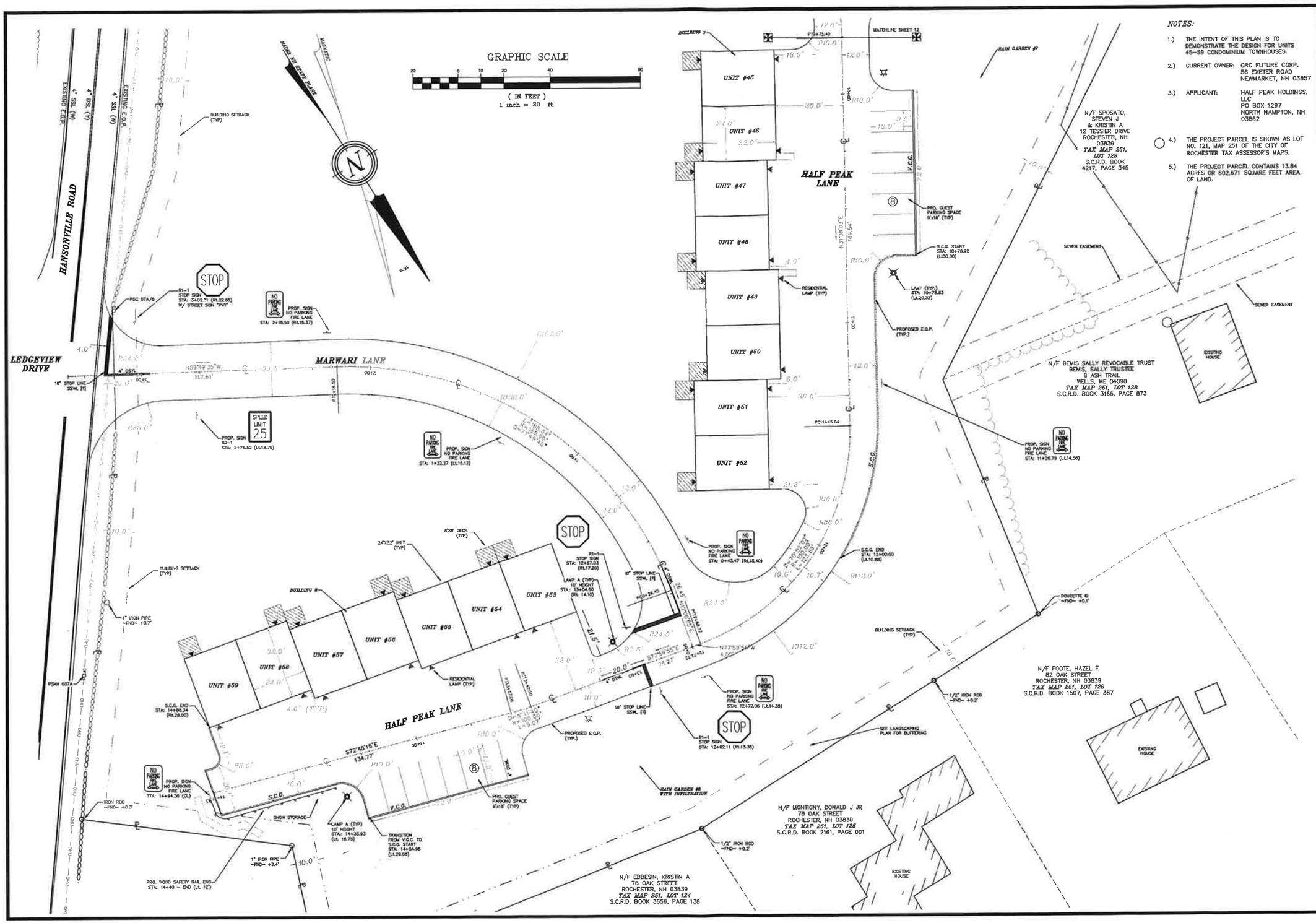
REVISION	DATE	DESCRIPTION
#7	07–30–2018	SUBMITTED FOR CONSTRUCTION
#6a	06–18–2018	REVISED PER AoT COMMENT
#5b	05–24–2018	NHDES WWEB RESPONSE
#4	05–02–2018	SEWER & WATER REVISIONS
#3	04–11–2018	GENERAL PLAN SET
#2	04–09–2018	GENERAL PLAN SET
#1	03–30–2018	GENERAL PLAN SET

SITE PLAN UNITS 28 – 44
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332–2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER



NOTES:

1.) THE INTENT OF THIS PLAN IS TO DEMONSTRATE THE DESIGN FOR UNITS 45–59 CONDOMINIUM TOWNHOUSES.

2.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

3.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

4.) THE PROJECT PARCEL IS SHOWN AS LOT NO. 121, MAP 251 OF THE CITY OF ROCHESTER TAX ASSESSOR'S MAPS.

5.) THE PROJECT PARCEL CONTAINS 13.84 ACRES OR 602,671 SQUARE FEET AREA OF LAND.

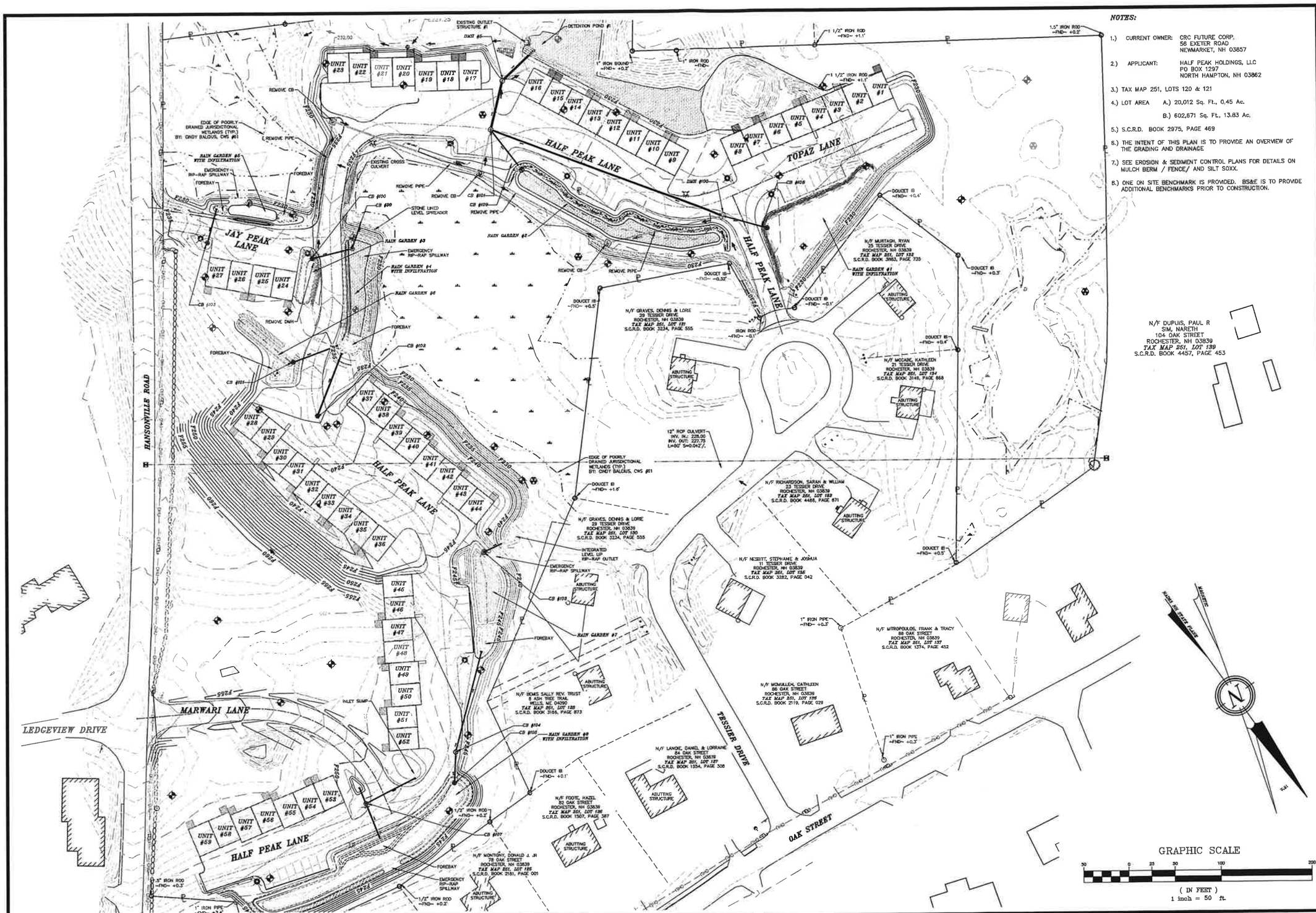
REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWED RESPONSE
#4	05-02-2018	AoT REVISIONS
#3	04-11-2018	SITE PLAN REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

SITE PLAN UNITS 45 – 59
LAND OF
CRC FUTURE CORP.
&
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY No. 7820
LICENSED PROFESSIONAL ENGINEER



NOTES:

1.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

2.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

3.) TAX MAP 251, LOTS 120 & 121

4.) LOT AREA A.) 20,012 Sq. Ft., 0.45 Ac.
B.) 602,671 Sq. Ft., 13.83 Ac.

5.) S.C.R.D. BOOK 2975, PAGE 469

6.) THE INTENT OF THIS PLAN IS TO PROVIDE AN OVERVIEW OF THE GRADING AND DRAINAGE

7.) SEE EROSION & SEDIMENT CONTROL PLANS FOR DETAILS ON MULCH BERM / FENCE/ AND SILT SOXX.

8.) ONE ON SITE BENCHMARK IS PROVIDED. BS&E IS TO PROVIDE ADDITIONAL BENCHMARKS PRIOR TO CONSTRUCTION.

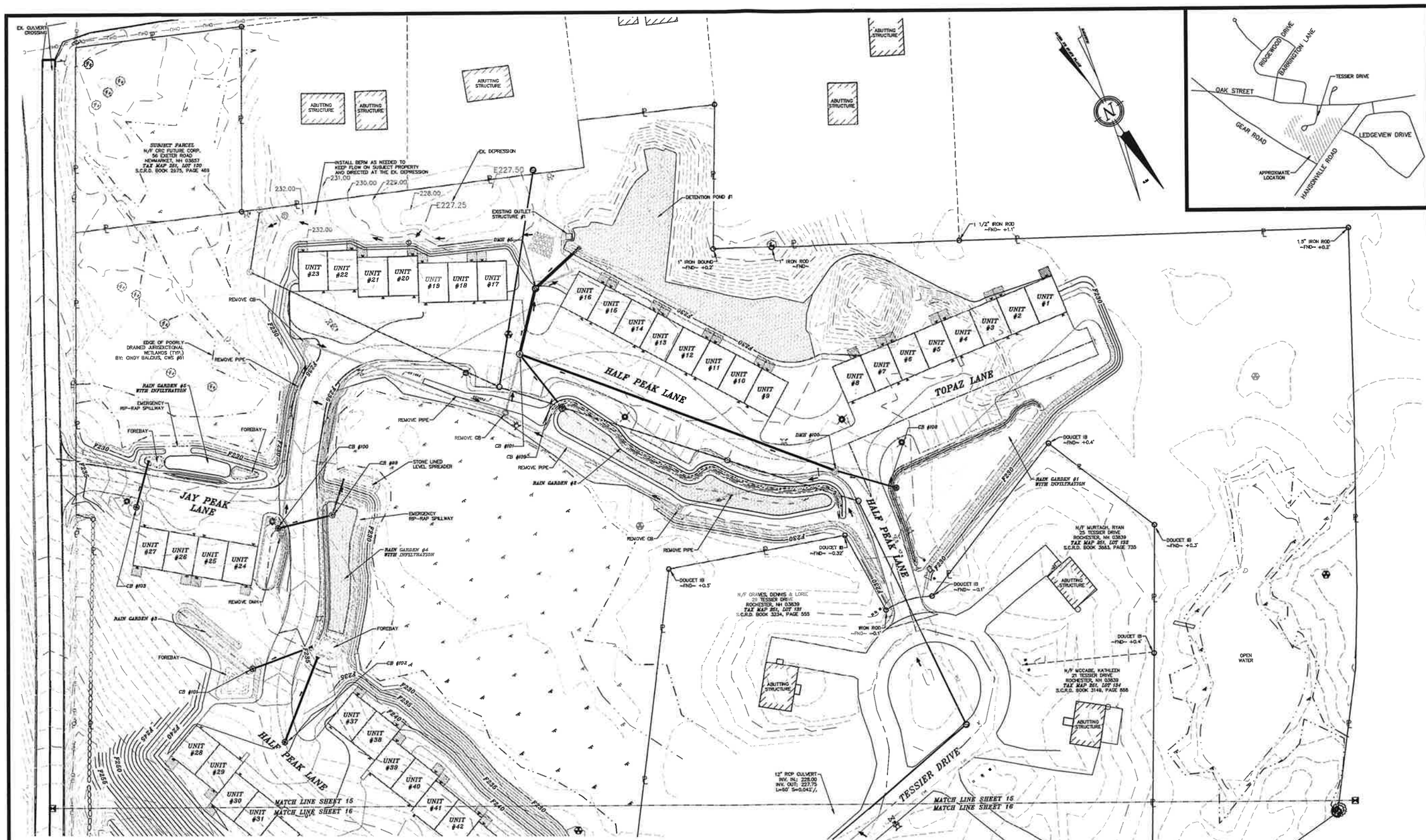
REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	04-17-2018	SEWER & WATER REVISIONS
#3	03-14-2018	GENERAL PLAN SET
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

GRADING AND DRAINAGE OVERVIEW PLAN
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 50 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14043
LICENSED
PROFESSIONAL ENGINEER



LEGEND:

- DRILL HOLE (FND)
- IRON PIPE (FND)
- IRON BOUND (FND)
- UTILITY POLE/GUY WIRE
- WATER GATE VALVE
- HYDRANT
- TREE
- CATCH BASIN (CB)
- SEWER MANHOLE (SMH)
- DRAIN MANOLE (DMH)

LEGEND:

- MATCH LINE
- NRCS SOIL DELINEATION LINE
- STONE WALL
- WETLAND LINE
- BUIDLING SETBACK LINE
- OVERHEAD UTILITIES LINE
- EXISTING WATER LINE
- S.C.R.D. STRAFFORD COUNTY REGISTRY OF DEEDS
- TYP. TYPICAL
- FND FOUND
- PL PROPERTY LINE
- T.B.M. TEMPORARY BENCHMARK
- TH TEST HOLE
- RAIN GARDEN
- RIP-RAP
- BERM

NOTES:

1.) OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857-1909

APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
HAMPTON, NH 03862

2.) A.) TAX MAP 251, LOT 120
B.) TAX MAP 251, LOT 121

3.) LOT AREA:
A.) 20,012 Sq. FL. 0.45 Ac.
B.) 602,671 Sq. FL. 13.83 Ac.

4.) S.C.R.D.
A.) BOOK 2975, PAGE 469
B.) BOOK 2975, PAGE 489

NOTES CONT.:

5.) THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF BOUNDARIES OF TAX MAP 251, LOT 120 & 121 IN ACCORDANCE WITH AND IN RELATION TO THE CURRENT AND ORIGINAL LEGAL DESCRIPTIONS, AND IS NOT AN ATTEMPT TO DEFINE UNWRITTEN RIGHTS, DETERMINE THE EXTENT OF OWNERSHIP, OR DEFINE THE LIMITS OF TITLE.

6.) I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE & BELIEF, THIS PARCEL DOES NOT FALL WITHIN THE FLOOD PLAIN FLOOD HAZARD REF.: FEMA COMMUNITY# -330150, MAP# - 33017C0204G & 33017C0212G, DATED: MAY 17, 2005

7.) VERTICAL DATUM BASED ON NAVD88 ELEVATIONS. HORIZONTAL COORDINATES BASED ON NAD83. COORDINATES GATHERED USING TOPCON HIPER SR SURVEY GRADE GPS RECEIVERS.

8.) THE BOUNDARY LINES SHOWN ON THIS PLAN ARE THE RESULT OF A CLOSED TRAVERSE PERFORMED BY THIS OFFICE IN NOVEMBER OF 2017, WITH AN ERROR OF CLOSURE OF 1 PART IN 26,264

9.) THE INTENT OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS ON TAX MAP 251, LOT 120 & 121 AS OF NOVEMBER 2017.

10.) SEE SITE SPECIFIC SOILS MAP

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

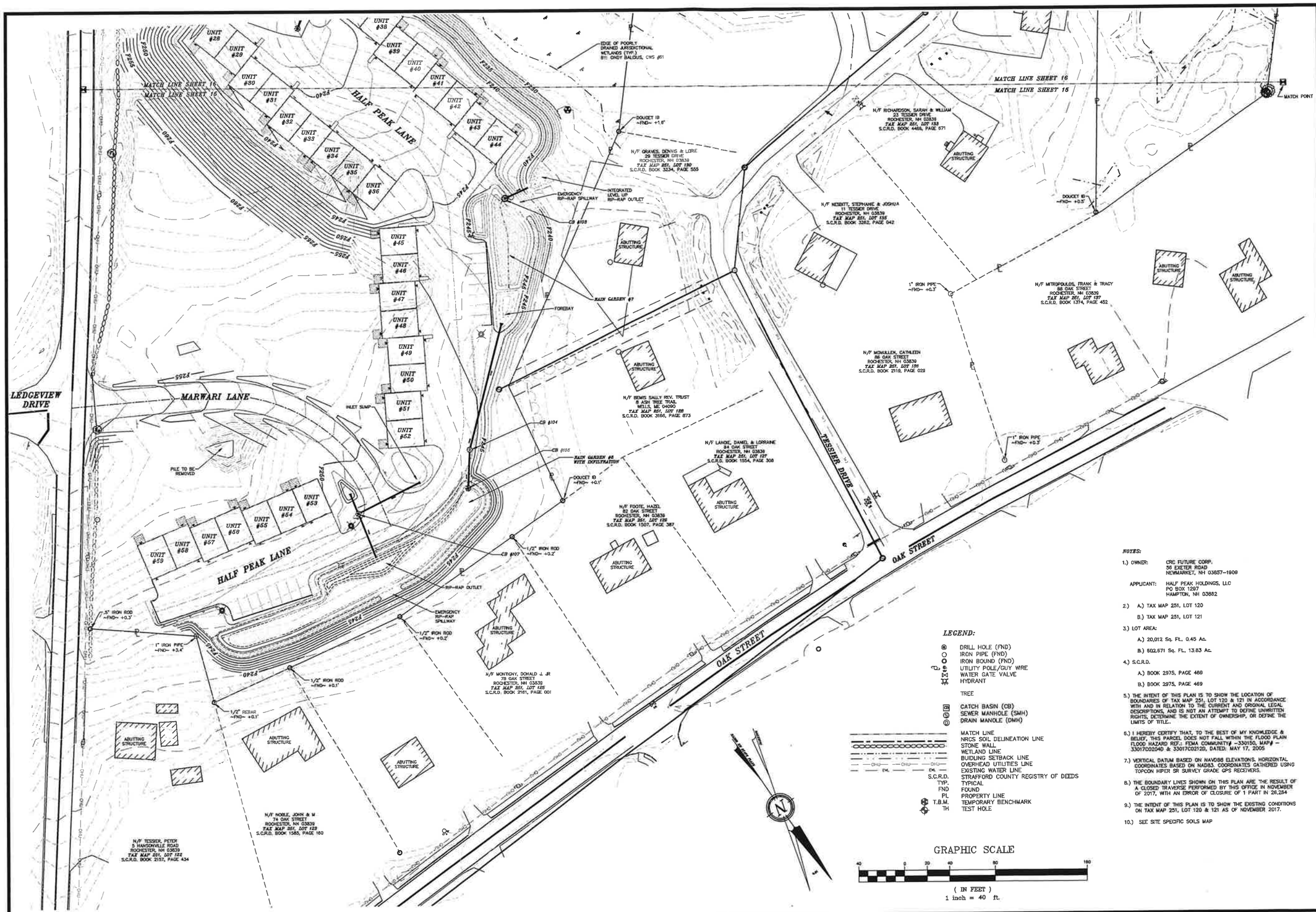
REVISION	DATE	DESCRIPTION
#7	07-30-2016	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-02-2018	AOT REVISIONS
#3	04-13-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

GRADING AND DRAINAGE PLAN SOUTH
LAND OF
CRC FUTURE CORP.
56 EXETER ROAD
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 40 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14743
LICENSED
PROFESSIONAL ENGINEER



LEGEND:

- DRILL HOLE (FND)
- IRON PIPE (FND)
- IRON BOUND (FND)
- UTILITY POLE/GUY WIRE
- WATER GATE VALVE
- HYDRANT
- TREE
- CATCH BASIN (CB)
- SEWER MANHOLE (SMH)
- DRAIN MANOLE (DMH)
- MATCH LINE
- NRCS SOIL DELINEATION LINE
- STONE WALL
- WETLAND LINE
- BUIDLING SETBACK LINE
- OVERHEAD UTILITIES LINE
- EXISTING WATER LINE
- S.C.R.D. STRAFFORD COUNTY REGISTRY OF DEEDS
- TYP. TYPICAL
- FND FOUND
- PL PROPERTY LINE
- T.B.M. TEMPORARY BENCHMARK
- TH TEST HOLE

NOTES:

1.) OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857-1909

APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
HAMPTON, NH 03882

2.) A.) TAX MAP 251, LOT 120
B.) TAX MAP 251, LOT 121

3.) LOT AREA:
A.) 20,012 Sq. Ft.. 0.45 Ac.
B.) 602,671 Sq. Ft.. 13.83 Ac.

4.) S.C.R.D.
A.) BOOK 2975, PAGE 468
B.) BOOK 2975, PAGE 469

5.) THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF BOUNDARIES OF TAX MAP 251, LOT 120 & 121 IN ACCORDANCE WITH AND IN RELATION TO THE CURRENT AND ORIGINAL LEGAL DESCRIPTIONS, AND IS NOT AN ATTEMPT TO DEFINE UNWRITTEN RIGHTS, DETERMINE THE EXTENT OF OWNERSHIP, OR DEFINE THE LIMITS OF TITLE..

6.) I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE & BELIEF, THIS PARCEL DOES NOT FALL WITHIN THE FLOOD PLAIN FLOOD HAZARD REF.: FEMA COMMUNITY# -330150, MAP# - 33017C0204D & 33017C0212D, DATED: MAY 17, 2005

7.) VERTICAL DATUM BASED ON NAVD88 ELEVATIONS. HORIZONTAL COORDINATES BASED ON NAD83. COORDINATES GATHERED USING TOPCON HIPER SR SURVEY GRADE GPS RECEIVERS.

8.) THE BOUNDARY LINES SHOWN ON THIS PLAN ARE THE RESULT OF A CLOSED TRAVERSE PERFORMED BY THIS OFFICE IN NOVEMBER OF 2017, WITH AN ERROR OF CLOSURE OF 1 PART IN 26,254

9.) THE INTENT OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS ON TAX MAP 251, LOT 120 & 121 AS OF NOVEMBER 2017.

10.) SEE SITE SPECIFIC SOILS MAP

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	04-27-2018	NHDES WWEB
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

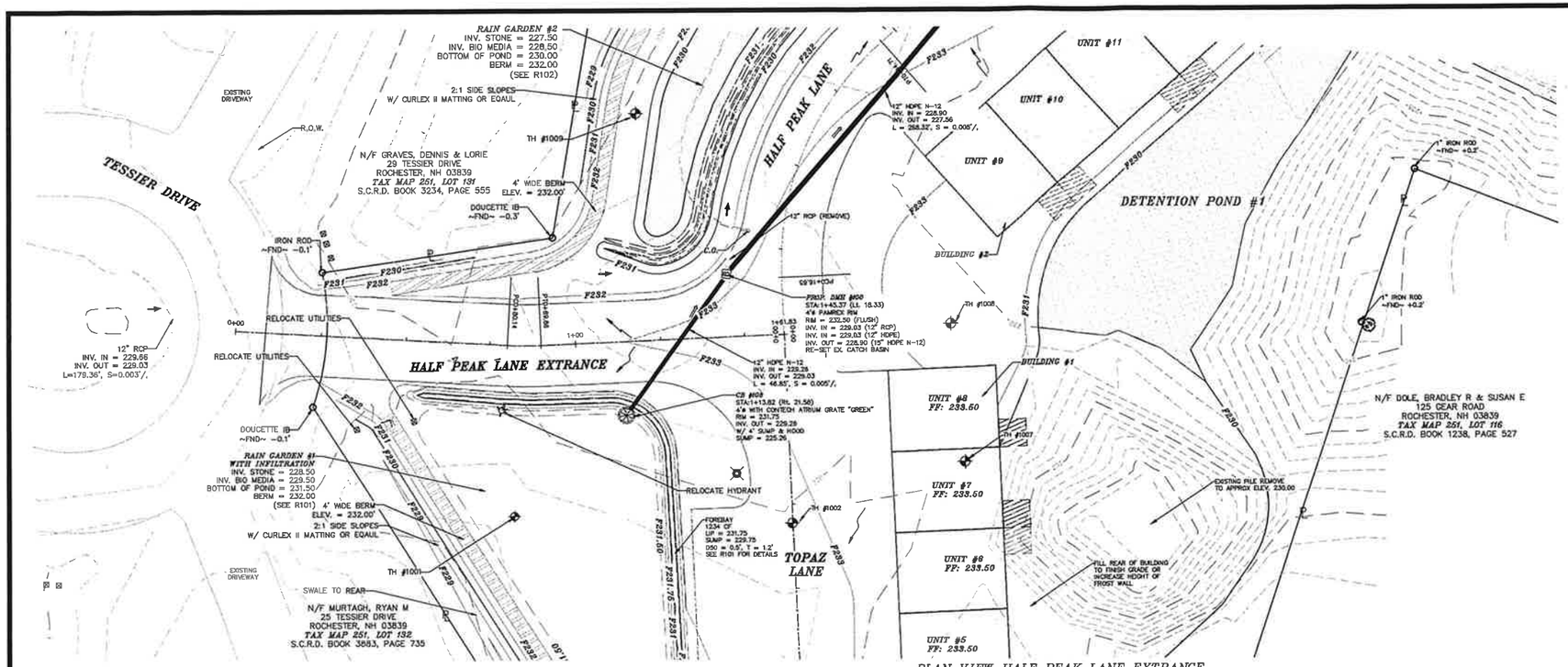
GRADING AND DRAINAGE PLAN NORTH
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

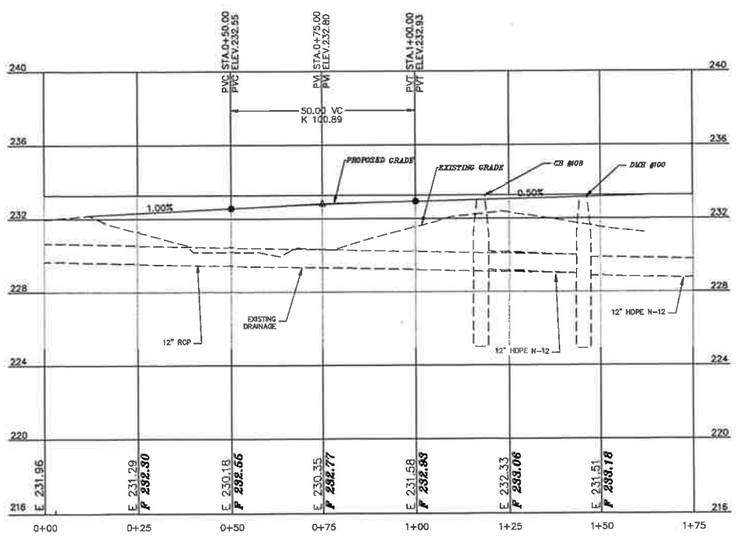
SCALE : 1 IN. EQUALS 40 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER

SHEET 16 OF 76



PLAN VIEW HALF PEAK LANE EXTRANCE



PROFILE VIEW HALF PEAK LANE EXTRANCE

NOTES:

1.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

2.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

3.) TAX MAP 251, LOTS 120 & 121

4.) LOT AREA: A.) 20,012 Sq. Ft., 0.45 Ac.
B.) 602,671 Sq. Ft., 13.83 Ac.

5.) S.C.R.D. BOOK 2975, PAGE 469

6.) THE INTENT OF THIS PLAN IS TO PROVIDE AN ENGINEERING DETAIL OF HALF PEAK LANE ENTRANCE.

7.) SEE EROSION & SEDIMENT CONTROL PLANS FOR DETAILS ON MULCH BERM / FENCE/ AND SILT SOXX.

8.) ONE ON SITE BENCHMARK IS PROVIDED. BS&E IS TO PROVIDE ADDITIONAL BENCHMARKS PRIOR TO CONSTRUCTION.

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

STANDARD CONSTRUCTION NOTES:

1.) EXISTING CONDITIONS INFORMATION IS BASED ON A SURVEY PERFORMED BY BERRY SURVEYING & ENGINEERING AND IS ENCLOSED IN THIS PACKAGE.

2.) THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH NHDOT STANDARD SPECIFICATIONS DATED 2016. CURRENT STANDARD PLANS, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS INCLUDED IN THE PROPOSAL.

3.) CONTRACTOR SHALL TAKE SPECIAL CARE IN NOT DISTURBING EXISTING MONUMENTS BOUNDS, AND OR BENCHMARKS WITHOUT FIRST MAKING PROVISIONS FOR RELOCATION

4.) THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE EXACTLY AND TO PRESERVE ANY AND ALL UNDERGROUND UTILITIES CALL "DIG-SAFE" 1-888-DIGSAFE (344-7233) AT LEAST 72 HOURS BEFORE COMMENCING CONSTRUCTION

5.) WHERE AN EXISTING UNDERGROUND UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.

6.) THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.

7.) AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.

8.) THE TERM "PROPOSED" (PROP.) MEANS WORK TO BE CONSTRUCTED USING NEW MATERIALS, OR, WHERE APPLICABLE, RE-USING EXISTING MATERIALS IDENTIFIED AS "REMOVE & RESET" (R & R)

9.) ALL SYMBOLS, WORDS, TRANSVERSE MARKINGS (STOP BARS, CROSSWALK LINES, AND RAILROAD SYMBOLS), LANE LINES, AND ALL OTHER MARKINGS NOTED WITH {T} SHALL BE THERMOPLASTIC

10.) ALL DISTURBED AREAS NOT DESIGNATED TO BE PAVED SHALL HAVE LOAM PLACED AND SEEDED. THE LOAM SHALL HAVE A MINIMUM DEPTH OF 4 INCHES AND SHALL BE PLACED FLUSH WITH THE TOP OF THE ADJACENT CURB, EDGING, BERM OR PAVEMENT SURFACE.

11.) COMMERCIAL VEHICLE ROUTE DURING CONSTRUCTION SHALL CONFORM WITH CITY OF DOVER CODE OR BE COORDINATED WITH THE COMMUNITY SERVICES DIRECTOR.

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

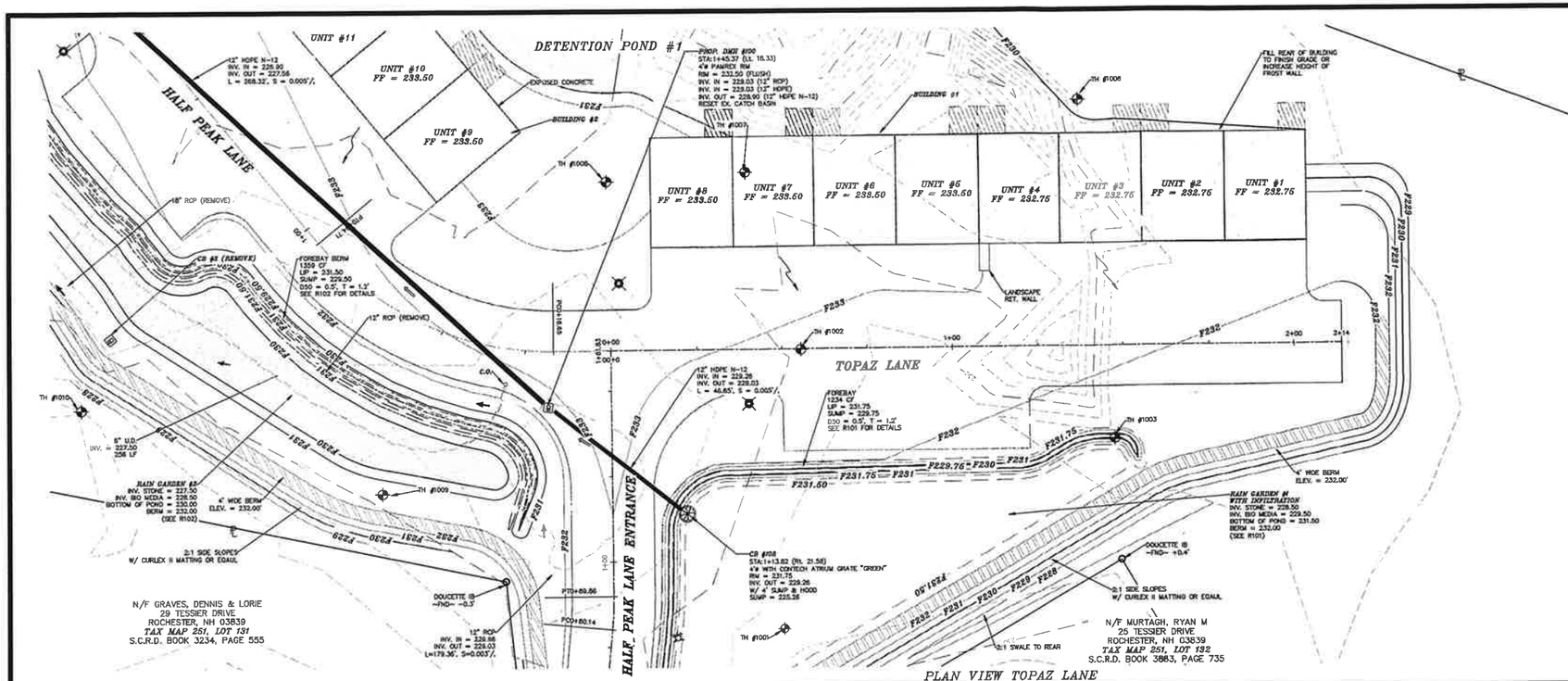
VERTICAL SCALE: 1" = 4'

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWED RESPONSE
#4	05-02-2018	AOT REVISIONS
#3	04-11-2018	NHDES WWER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

PLAN & PROFILE HALF PEAK LANE EXTRANCE 0+00 TO END
LAND OF
CRC FUTURE CORP.
56 EXETER ROAD
HALF PEAK HOLDINGS,
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863
SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14245
LICENSED
PROFESSIONAL ENGINEER



PLAN VIEW TOPAZ LANE

NOTES:

1.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

2.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

3.) TAX MAP 251, LOTS 120 & 121

4.) LOT AREA: A.) 20,012 Sq. Ft., 0.45 Ac.
B.) 602,671 Sq. Ft., 13.83 Ac.

5.) S.C.R.D. BOOK 2975, PAGE 469

6.) THE INTENT OF THIS PLAN IS TO PROVIDE AN ENGINEERING DETAIL OF TOPAZ LANE.

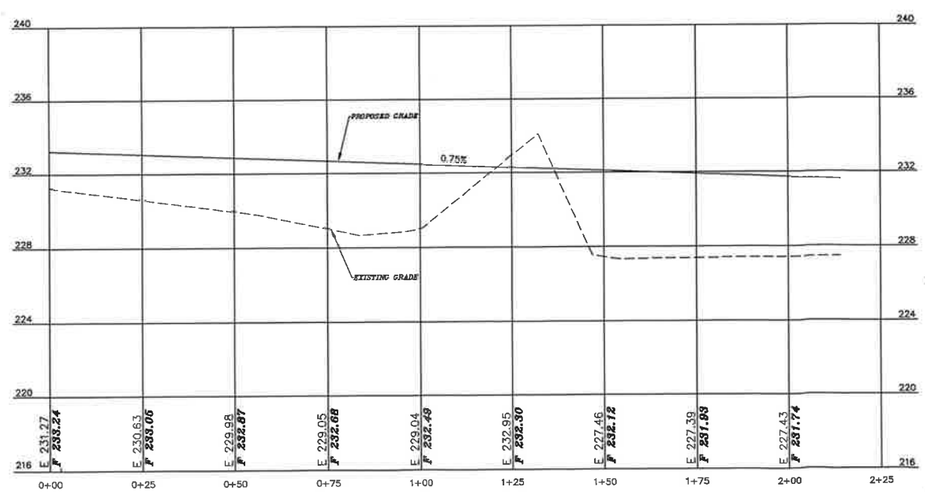
7.) SEE EROSION & SEDIMENT CONTROL PLANS FOR DETAILS ON MULCH BERM / FENCE/ AND SILT SOXX.

8.) ONE ON SITE BENCHMARK IS PROVIDED. BS&E IS TO PROVIDE ADDITIONAL BENCHMARKS PRIOR TO CONSTRUCTION.

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

PROFILE VIEW TOPAZ LANE



GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.
VERTICAL SCALE: 1" = 4'

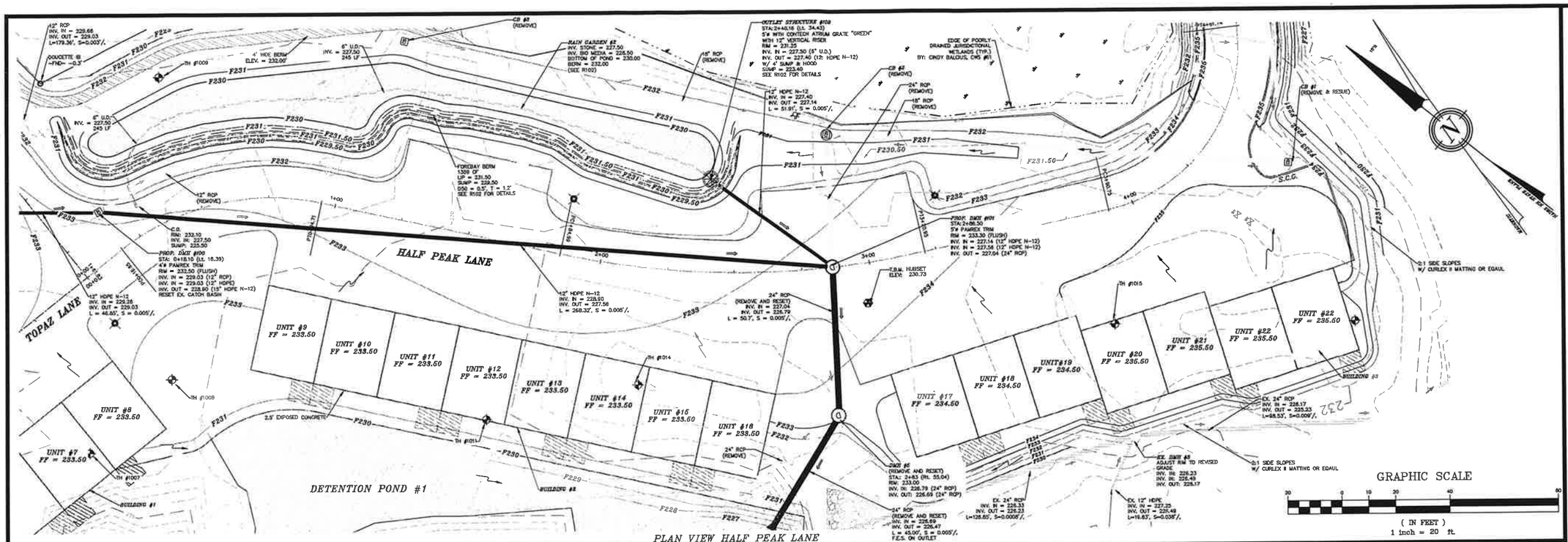
REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-29-2018	NHDES WHERE IS RESPONSE
#4	04-17-2018	AoT REVISIONS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

PLAN & PROFILE TOPAZ LANE 0+00 TO 2+14
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

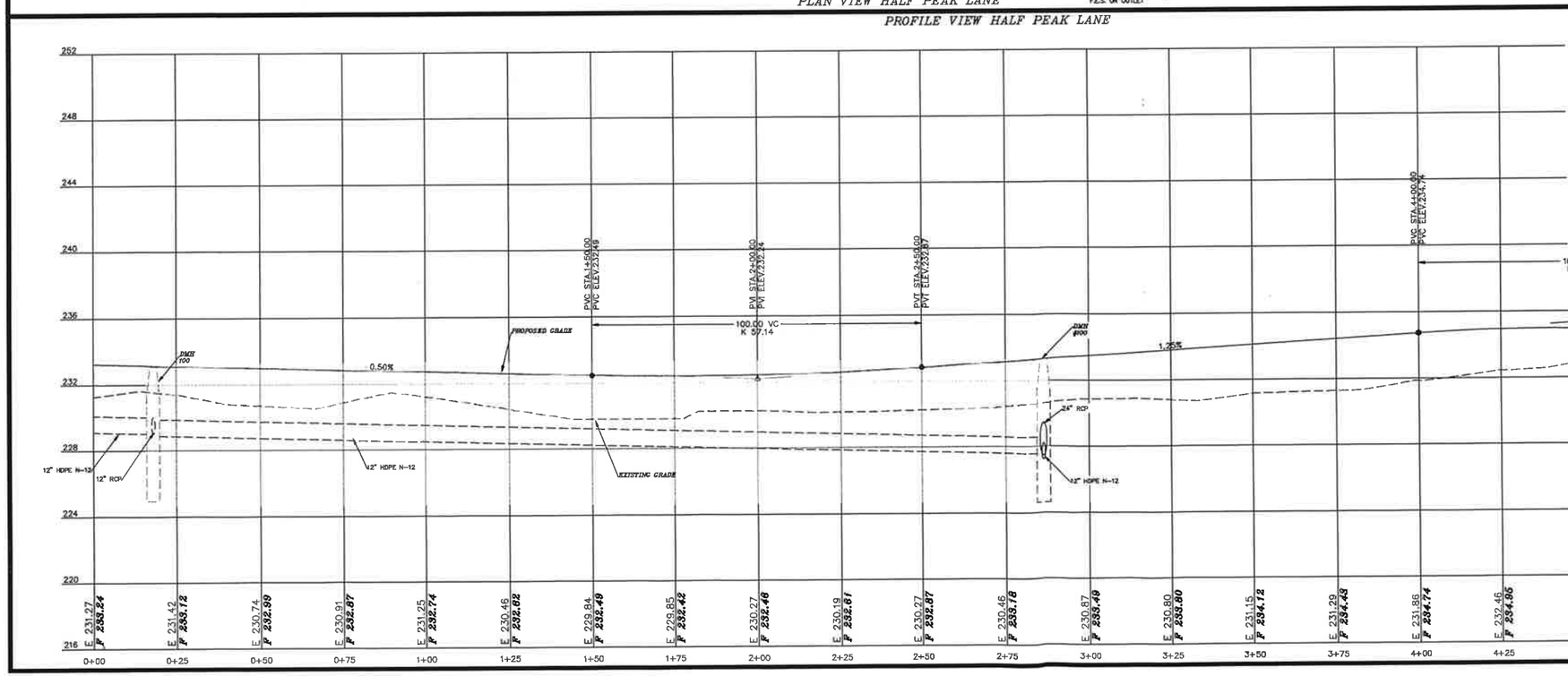
SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY No. 14245
LICENSED PROFESSIONAL ENGINEER



PLAN VIEW HALF PEAK LANE

PROFILE VIEW HALF PEAK LANE



GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

VERTICAL SCALE: 1" = 4'

NOTES:

1.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

2.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

3.) TAX MAP 251, LOTS 120 & 121

4.) LOT AREA: A.) 20,012 Sq. Ft., 0.45 Ac.
B.) 602,671 Sq. Ft., 13.83 Ac.

5.) S.C.R.D. BOOK 2975, PAGE 469

6.) THE INTENT OF THIS PLAN IS TO PROVIDE AN ENGINEERING DETAIL OF HALF PEAK LANE.

7.) SEE EROSION & SEDIMENT CONTROL PLANS FOR DETAILS ON MULCH BERM / FENCE/ AND SILT SOXX.

8.) ONE ON SITE BENCHMARK IS PROVIDED. BS&E IS TO PROVIDE ADDITIONAL BENCHMARKS PRIOR TO CONSTRUCTION.

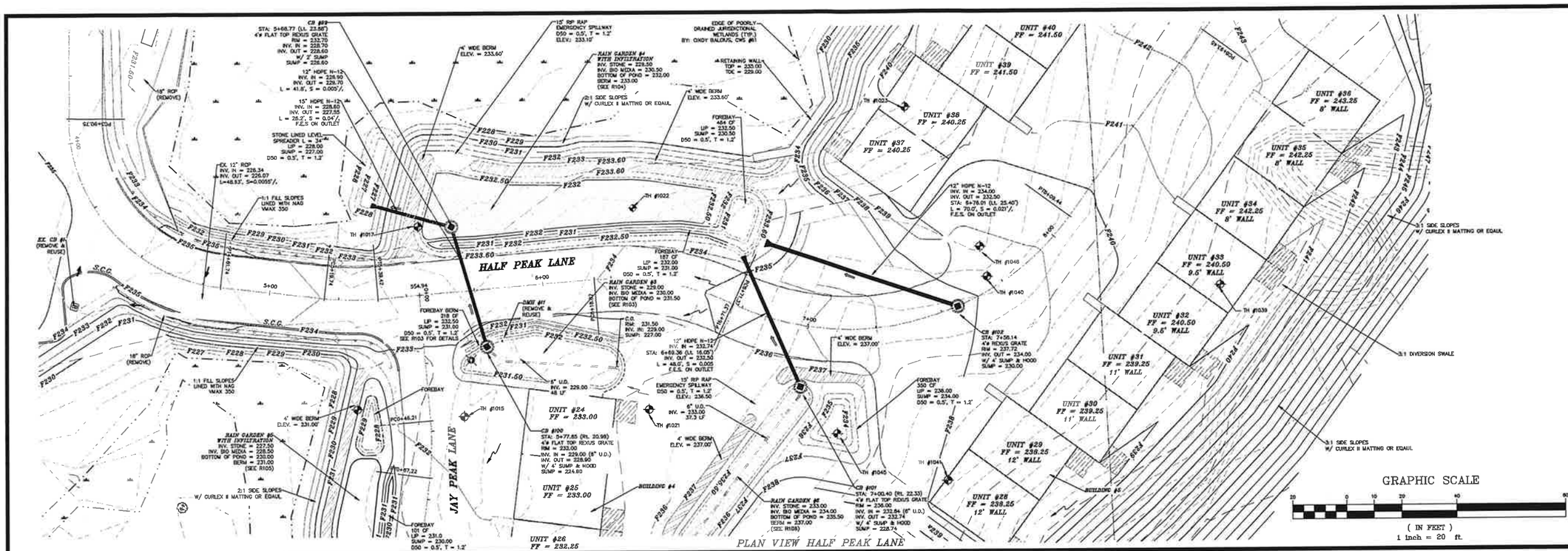
REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-02-2018	SITE, SEWER & WATER REVISIONS
#3	04-09-2018	GENERAL PLAN SET
#2	03-30-2018	GENERAL PLAN SET
#1		

PLAN & PROFILE HALF PEAK LANE 0+00 TO 4+25
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

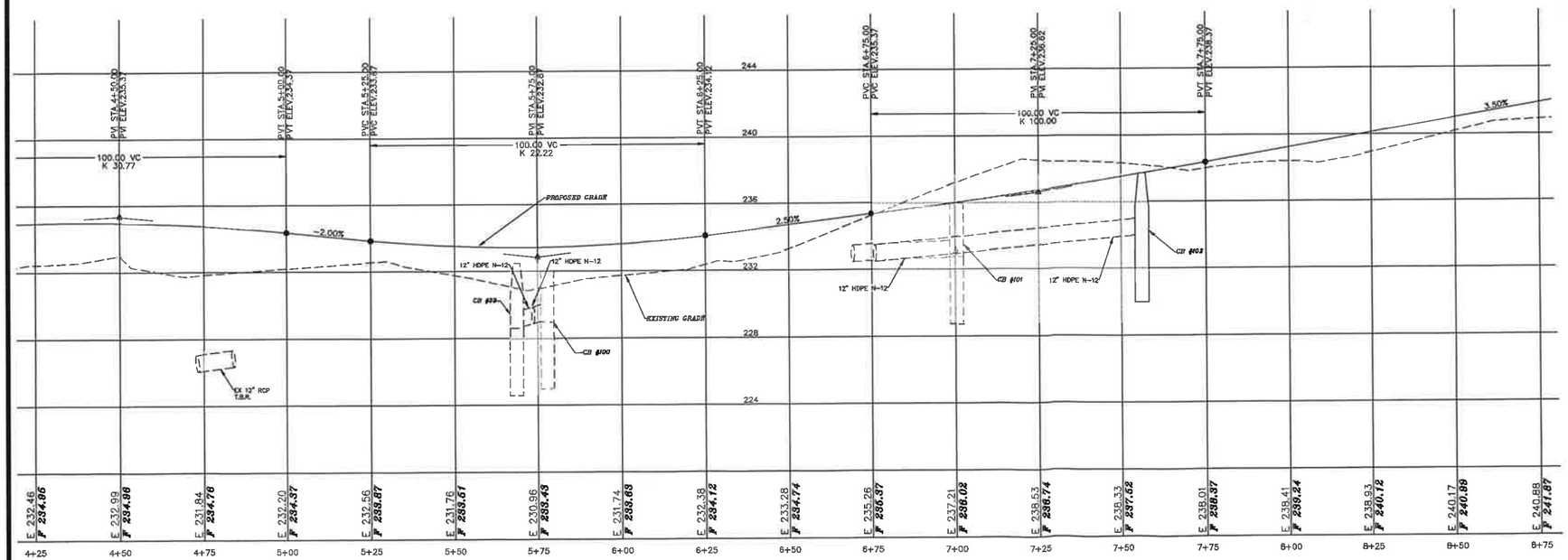
SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14443
LICENSED
PROFESSIONAL ENGINEER



PLAN VIEW HALF PEAK LANE

PROFILE VIEW HALF PEAK LANE



GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

VERTICAL SCALE: 1" = 4'

NOTES:

1.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

2.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

3.) TAX MAP 251, LOTS 120 & 121

4.) LOT AREA: A.) 20,012 Sq. Ft., 0.45 Ac.
B.) 602,671 Sq. Ft., 13.83 Ac.

5.) S.C.R.D. BOOK 2975, PAGE 469

6.) THE INTENT OF THIS PLAN IS TO PROVIDE AN ENGINEERING DETAIL OF HALF PEAK LANE.

7.) SEE EROSION & SEDIMENT CONTROL PLANS FOR DETAILS ON MULCH BERM / FENCE/ AND SILT SOXX.

8.) ONE ON SITE BENCHMARK IS PROVIDED. BS&E IS TO PROVIDE ADDITIONAL BENCHMARKS PRIOR TO CONSTRUCTION.

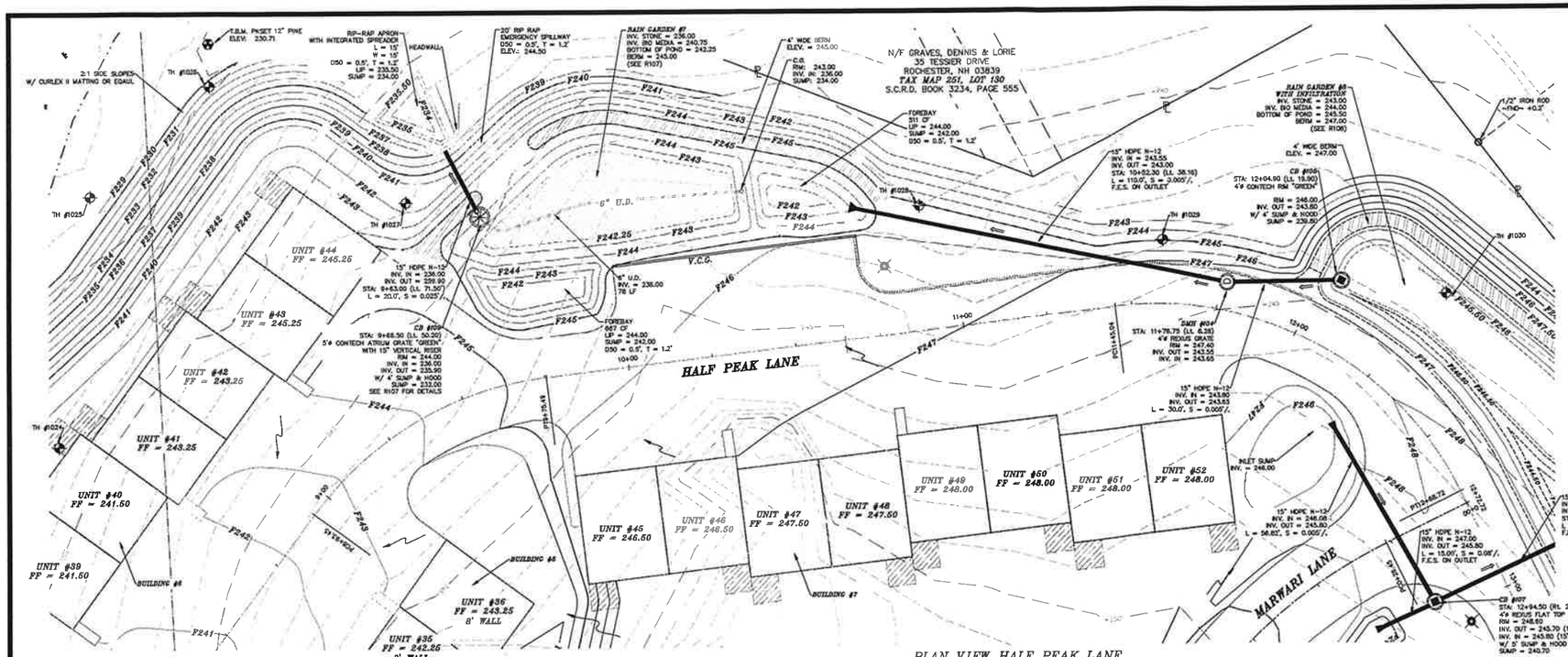
REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-11-2018	SEWER & WATER REVISIONS
#3	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

PLAN & PROFILE HALF PEAK LANE 4+25 TO 8+75
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14247
LICENSED
PROFESSIONAL ENGINEER



PLAN VIEW HALF PEAK LANE

NOTES:

1.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

2.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

3.) TAX MAP 251, LOTS 120 & 121

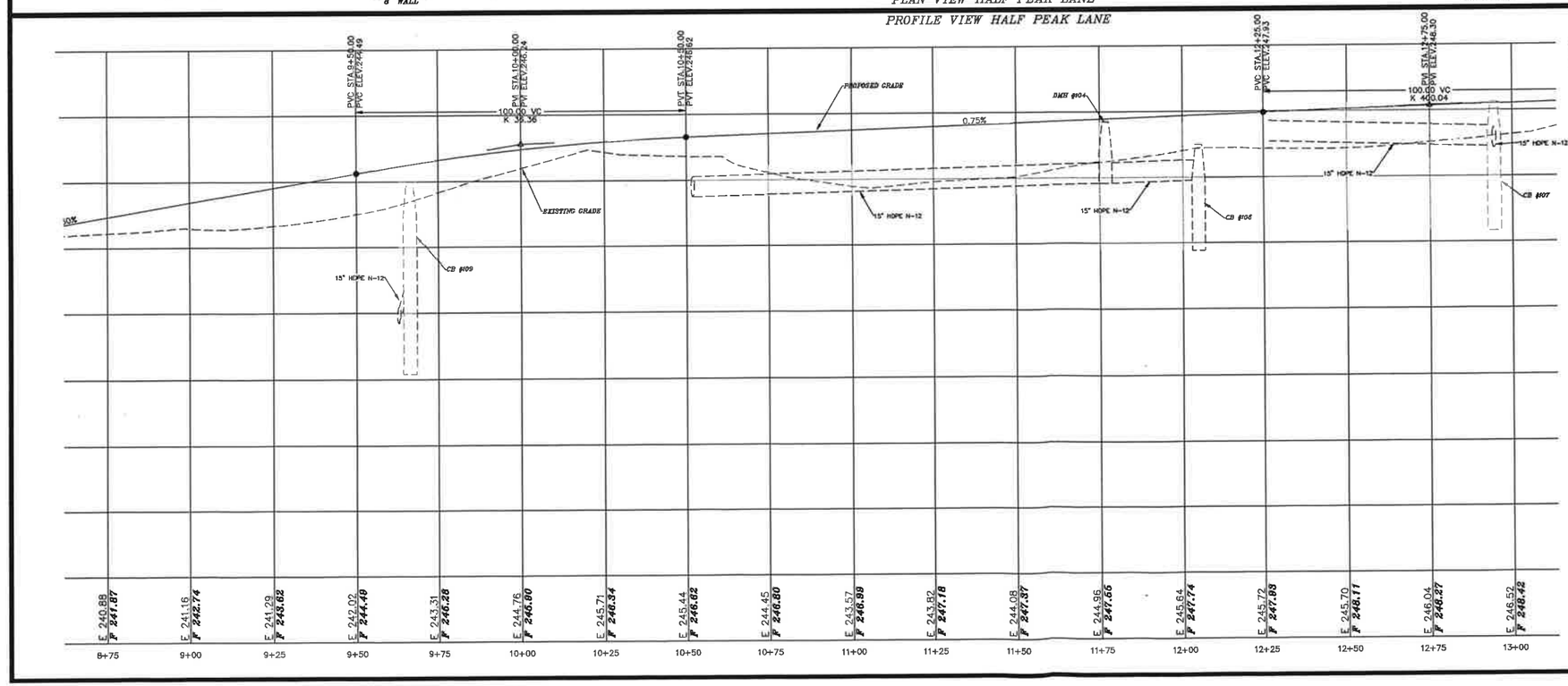
4.) LOT AREA: A.) 20,012 Sq. Ft., 0.45 Ac.
B.) 602,671 Sq. Ft., 13.83 Ac.

5.) S.C.R.D. BOOK 2975, PAGE 469

6.) THE INTENT OF THIS PLAN IS TO PROVIDE AN ENGINEERING DETAIL OF HALF PEAK LANE.

7.) SEE EROSION & SEDIMENT CONTROL PLANS FOR DETAILS ON MULCH BERM / FENCE/ AND SILT SOXX.

8.) ONE ON SITE BENCHMARK IS PROVIDED. BS&E IS TO PROVIDE ADDITIONAL BENCHMARKS PRIOR TO CONSTRUCTION.



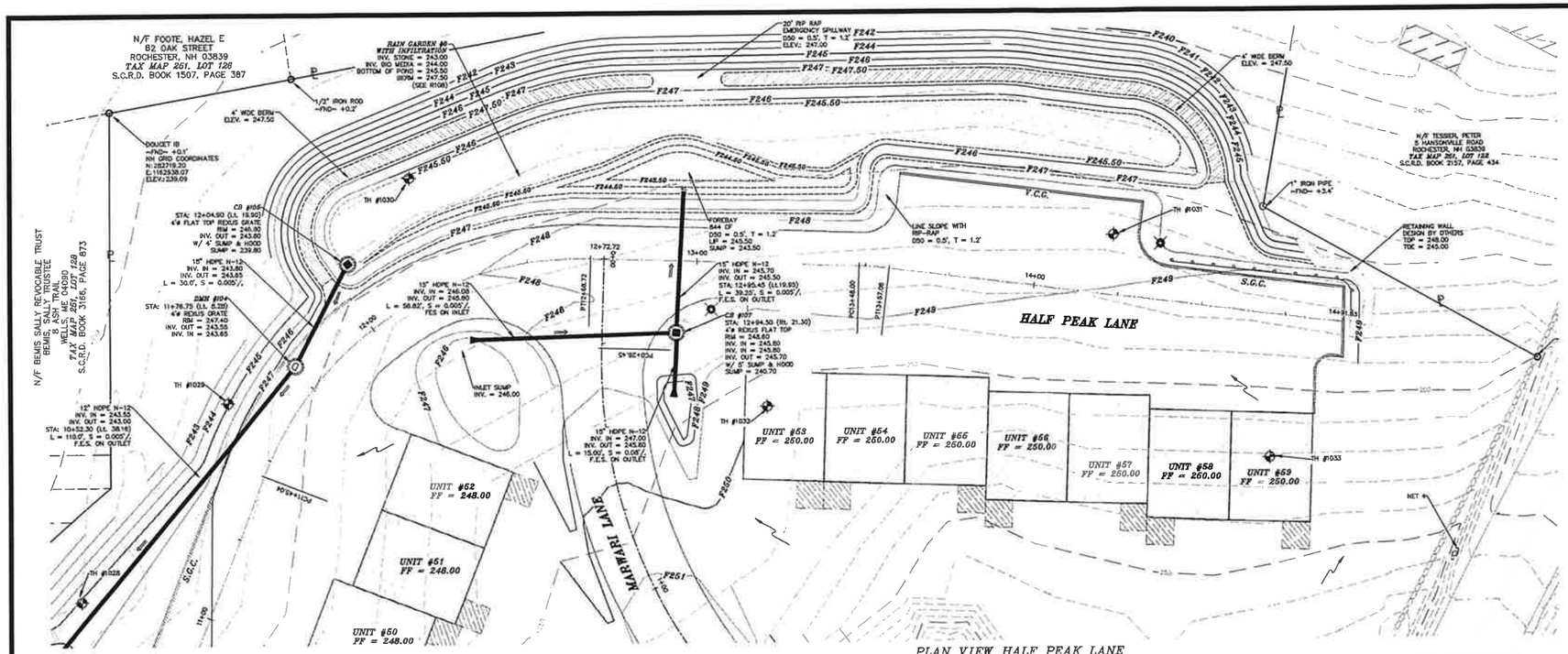
REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWES RESPONSE
#4	05-02-2018	ADD REVISIONS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

PLAN & PROFILE HALF PEAK LANE 8+75 TO 13+00
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 7070
LICENSED PROFESSIONAL ENGINEER



PLAN VIEW HALF PEAK LANE

NOTES:

1.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

2.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

3.) TAX MAP 251, LOTS 120 & 121

4.) LOT AREA: A.) 20,012 Sq. Ft., 0.45 Ac.
B.) 602,671 Sq. Ft., 13.83 Ac.

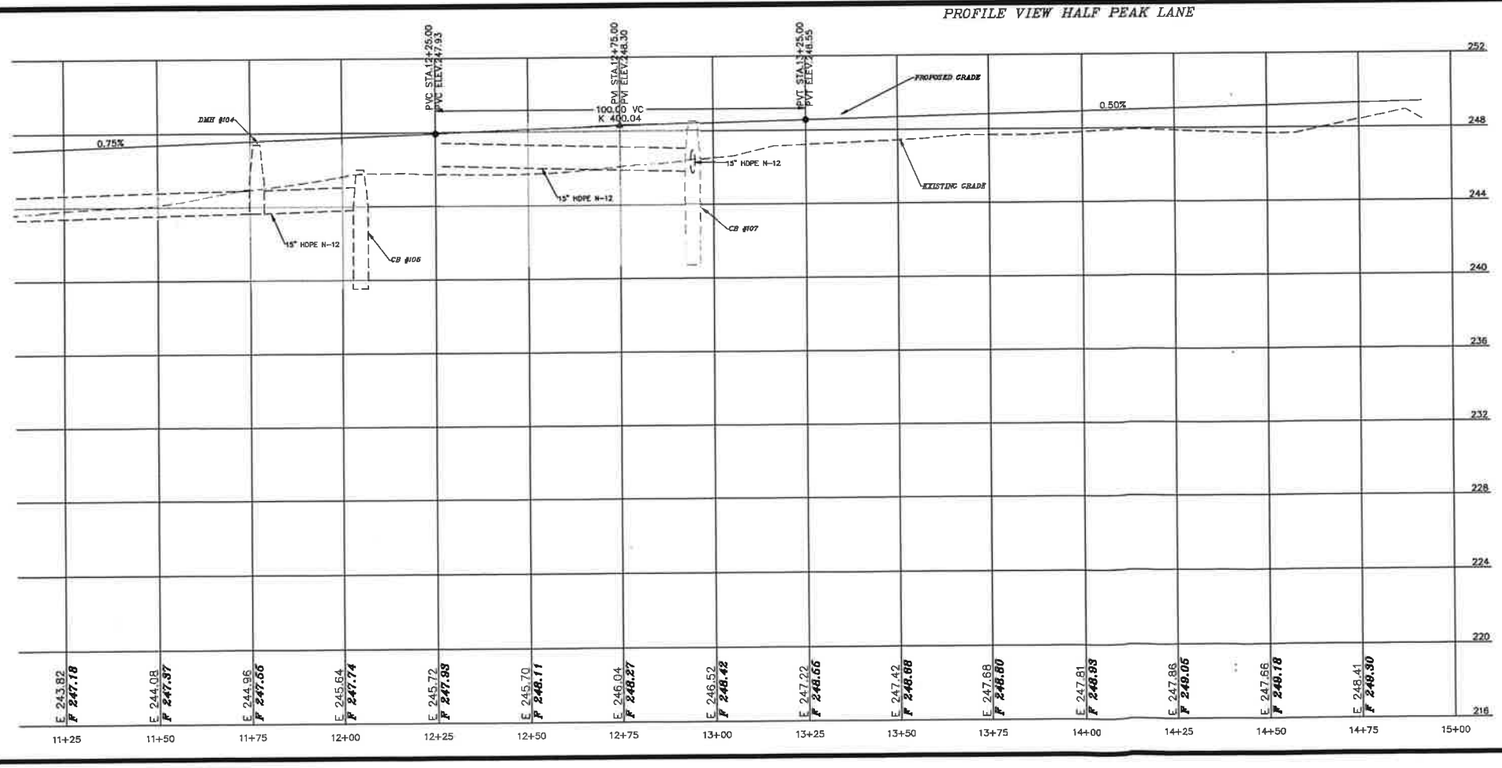
5.) S.C.R.D. BOOK 2975, PAGE 469

6.) THE INTENT OF THIS PLAN IS TO PROVIDE AN ENGINEERING DETAIL OF HALF PEAK LANE.

7.) SEE EROSION & SEDIMENT CONTROL PLANS FOR DETAILS ON MULCH BERM / FENCE/ AND SILT SOXX.

8.) ONE ON SITE BENCHMARK IS PROVIDED. BS&E IS TO PROVIDE ADDITIONAL BENCHMARKS PRIOR TO CONSTRUCTION.

PROFILE VIEW HALF PEAK LANE



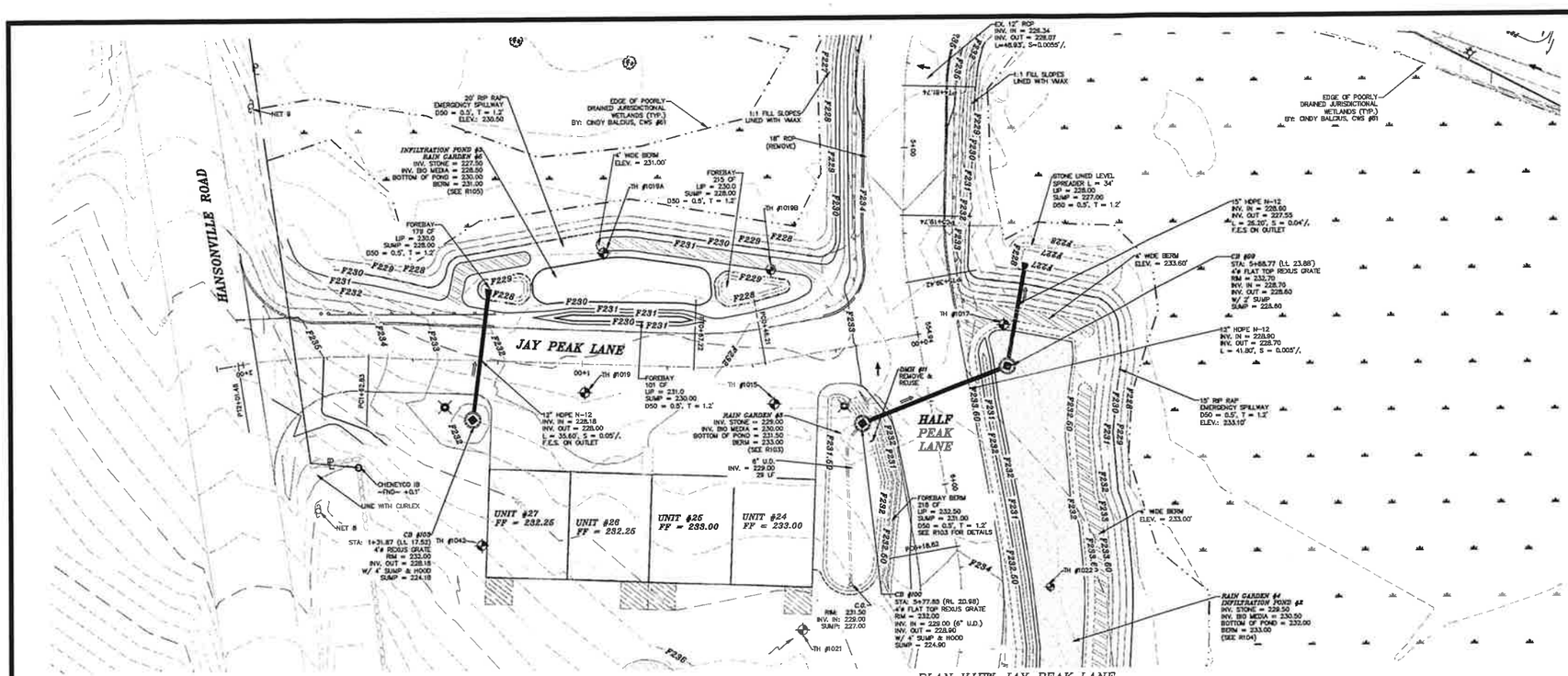
GRAPHIC SCALE
(IN FEET)
1 inch = 20 ft.
VERTICAL SCALE: 1" = 4'

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WECB RESPONSE
#4	04-12-2018	DPW & UTILITY REVISIONS
#3	03-02-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

PLAN & PROFILE HALF PEAK LANE 13+00 TO END
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863
SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 7420
LICENSED
PROFESSIONAL ENGINEER



PLAN VIEW JAY PEAK LANE

NOTES:

1.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

2.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

3.) TAX MAP 251, LOTS 120 & 121

4.) LOT AREA: A.) 20,012 Sq. Ft., 0.45 Ac.
B.) 602,671 Sq. Ft., 13.83 Ac.

5.) S.C.R.D. BOOK 2975, PAGE 469

6.) THE INTENT OF THIS PLAN IS TO PROVIDE AN ENGINEERING DETAIL OF JAY PEAK LANE.

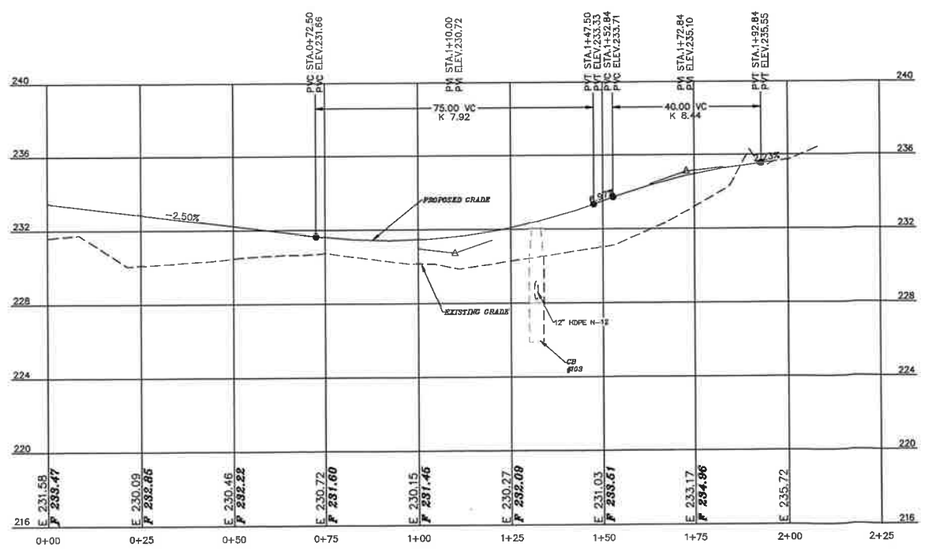
7.) SEE EROSION & SEDIMENT CONTROL PLANS FOR DETAILS ON MULCH BERM / FENCE/ AND SILT SOXX.

8.) ONE ON SITE BENCHMARK IS PROVIDED. BS&E IS TO PROVIDE ADDITIONAL BENCHMARKS PRIOR TO CONSTRUCTION.

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

PROFILE VIEW JAY PEAK LANE



GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

VERTICAL SCALE: 1" = 4'

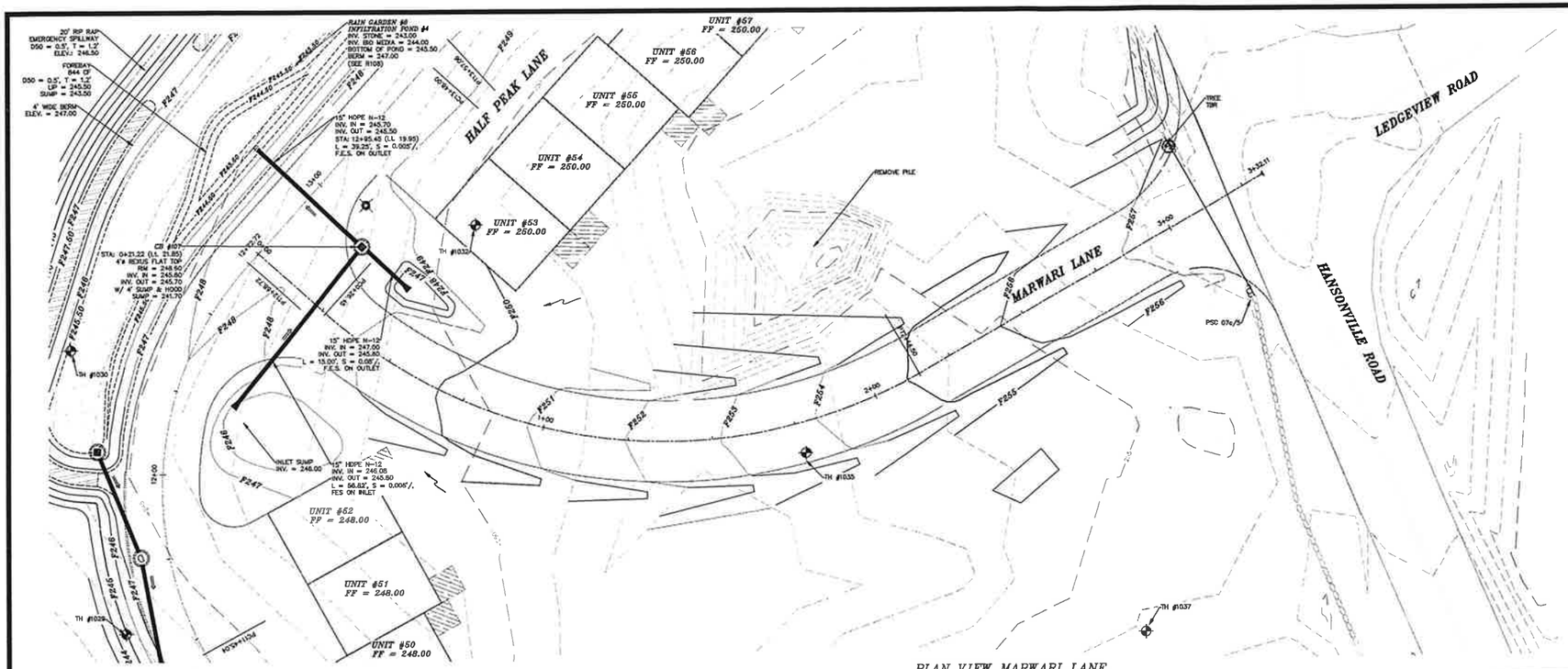
REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WETLANDS RESPONSE
#4	04-17-2018	SEWER & WATER REVISIONS
#2	04-11-2018	GENERAL PLAN SET
#1	04-09-2018	GENERAL PLAN SET
	03-30-2018	GENERAL PLAN SET

PLAN & PROFILE JAY PEAK LANE 0+00 TO END
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

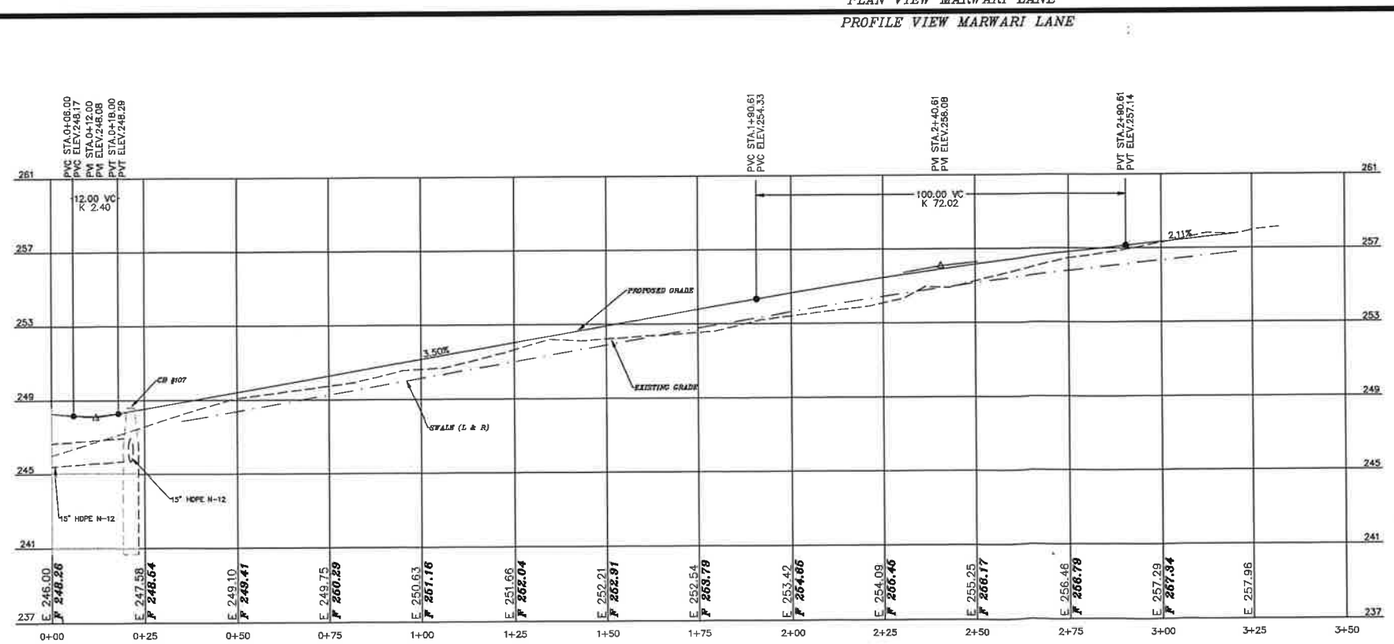
BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14245
LICENSED
PROFESSIONAL ENGINEER



PLAN VIEW MARWARI LANE



PROFILE VIEW MARWARI LANE

NOTES:

1.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

2.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

3.) TAX MAP 251, LOTS 120 & 121

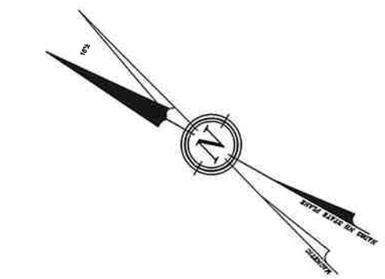
4.) LOT AREA: A.) 20,012 Sq. Ft., 0.45 Ac.
B.) 602,671 Sq. Ft., 13.83 Ac.

5.) S.C.R.D. BOOK 2975, PAGE 469

6.) THE INTENT OF THIS PLAN IS TO PROVIDE AN OVERVIEW OF ENGINEERING DETAIL OF MARWARI LANE.

7.) SEE EROSION & SEDIMENT CONTROL PLANS FOR DETAILS ON MULCH BERM / FENCE/ AND SILT SOXX.

8.) ONE ON SITE BENCHMARK IS PROVIDED. BS&E IS TO PROVIDE ADDITIONAL BENCHMARKS PRIOR TO CONSTRUCTION.



GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

VERTICAL SCALE: 1" = 4'

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-02-2018	AoT REVIEW SET
#3	04-11-2018	NHDES & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

PLAN & PROFILE MARWARI LANE 0+00 TO END
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14249
LICENSED
PROFESSIONAL ENGINEER

FILTER MEDIA MIXTURES

Component Material	Percent of Mixture by Volume	Gradation of material: Sieve No.	Gradation of material: Percent by Weight Passing Standard Sieve
Filter Media Option A			
ASTM C-33 concrete sand	50 to 55		
Loamy sand topsoil, with fines as indicated	20 to 30	200	15 to 25
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 to 30	200	< 5

CRUSHED STONE BEDDING*

SIEVE SIZE	% PASSING BY WEIGHT
1"	100
3/4"	90 – 100
3/8"	20 – 55
# 4	0 –10
# 8	0 – 5

* EQUIVALENT TO STANDARD STONE SIZE #67 – SECTION 702 OF NHDOT NHDOT STANDARD SPECIFICATIONS

CRUSHED STONE BEDDING*

SIEVE SIZE	% PASSING BY WEIGHT
1/2"	100
3/8"	90 – 100
#4"	20 – 55
# 8	5 –30
# 16	0 – 10
# 50	0 – 5

* EQUIVALENT TO STANDARD STONE SIZE #89 – SECTION 702 OF NHDOT NHDOT STANDARD SPECIFICATIONS

NOTES

1. WHEN CONTRACTOR EXCAVATES RAIN GARDEN AREA TO SUBGRADE, DESIGN ENGINEER SHALL PERFORM SUBSURFACE EVALUATION PRIOR TO THE PLACEMENT OF ANY SELECT MATERIAL OR OTHER BACKFILL.
2. SOIL FILTER MEDIA SHALL BE AS SHOWN ABOVE.
3. COMPACTION IS NOT TO OCCUR IN THE RAIN GARDEN AREAS PRIOR TO CONSTRUCTION. SCARIFICATION REQUIRED IN THE EVENT COMPACTION TAKES PLACE.
4. DO NOT PLACE THE BIORETENTION SYSTEM INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
5. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF WATER FROM EXCAVATIONS) TO THE BIORETENTION AREA DURING ANY STAGE OF CONSTRUCTION.
6. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.

MAINTENANCE REQUIREMENTS

1 SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL EXCEEDING 2.5 INCHES IN A 24-HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS A WARRANTED BY SUCH INSPECTION.

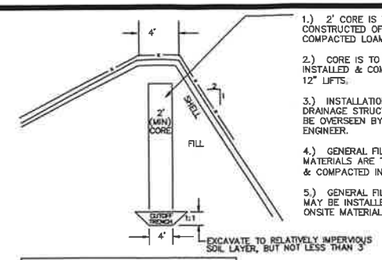
2 PRETREATMENT MEASURES SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND CLEANED OF ACCUMULATED SEDIMENT AS WARRANTED BY INSPECTION, BUT NO LESS THAN ONCE ANNUALLY.

3 AT LEAST ONCE ANNUALLY, SYSTEM SHOULD BE INSPECTED FOR DRAWDOWN TIME. IF BIORETENTION SYSTEM DOES NOT DRAIN WITHIN 72-HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE FILTRATION FUNCTION OR INFILTRATION FUNCTION (AS APPLICABLE), INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR RECONSTRUCTION OF THE FILTER MEDIA.

4 VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING, PRUNING, REMOVAL, AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES.

DESIGN REFERENCES

1 UNH STORMWATER CENTER
2 NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 2, DECEMBER 2008 AS AMENDED.



1.) 2' CORE IS TO BE CONSTRUCTED OF COMPACTED LOAM MATERIAL.

2.) CORE IS TO BE INSTALLED & COMPACTED IN 12" LIFTS.

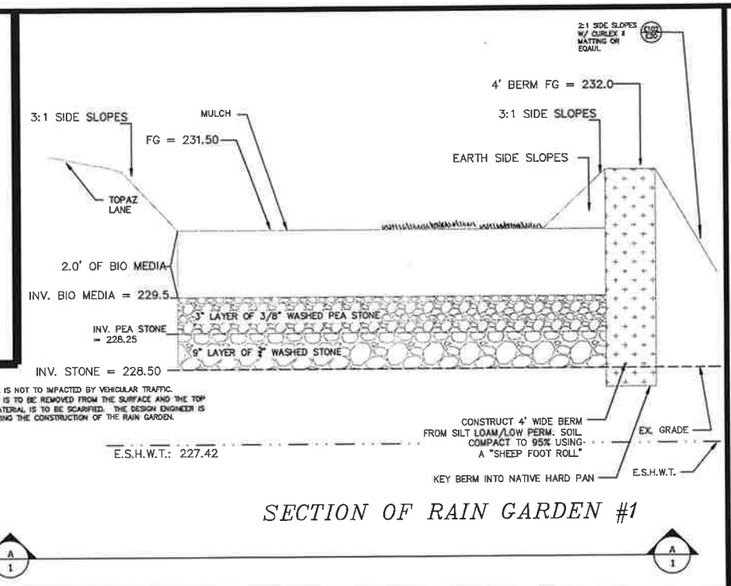
3.) INSTALLATION OF ENTIRE DRAINAGE STRUCTURE IS TO BE OVERSEEN BY DESIGN ENGINEER.

4.) GENERAL FILL MATERIALS ARE TO PLACED & COMPACTED IN 12" LIFTS.

5.) GENERAL FILL MATERIAL MAY BE INSTALLED USING ONSITE MATERIALS.

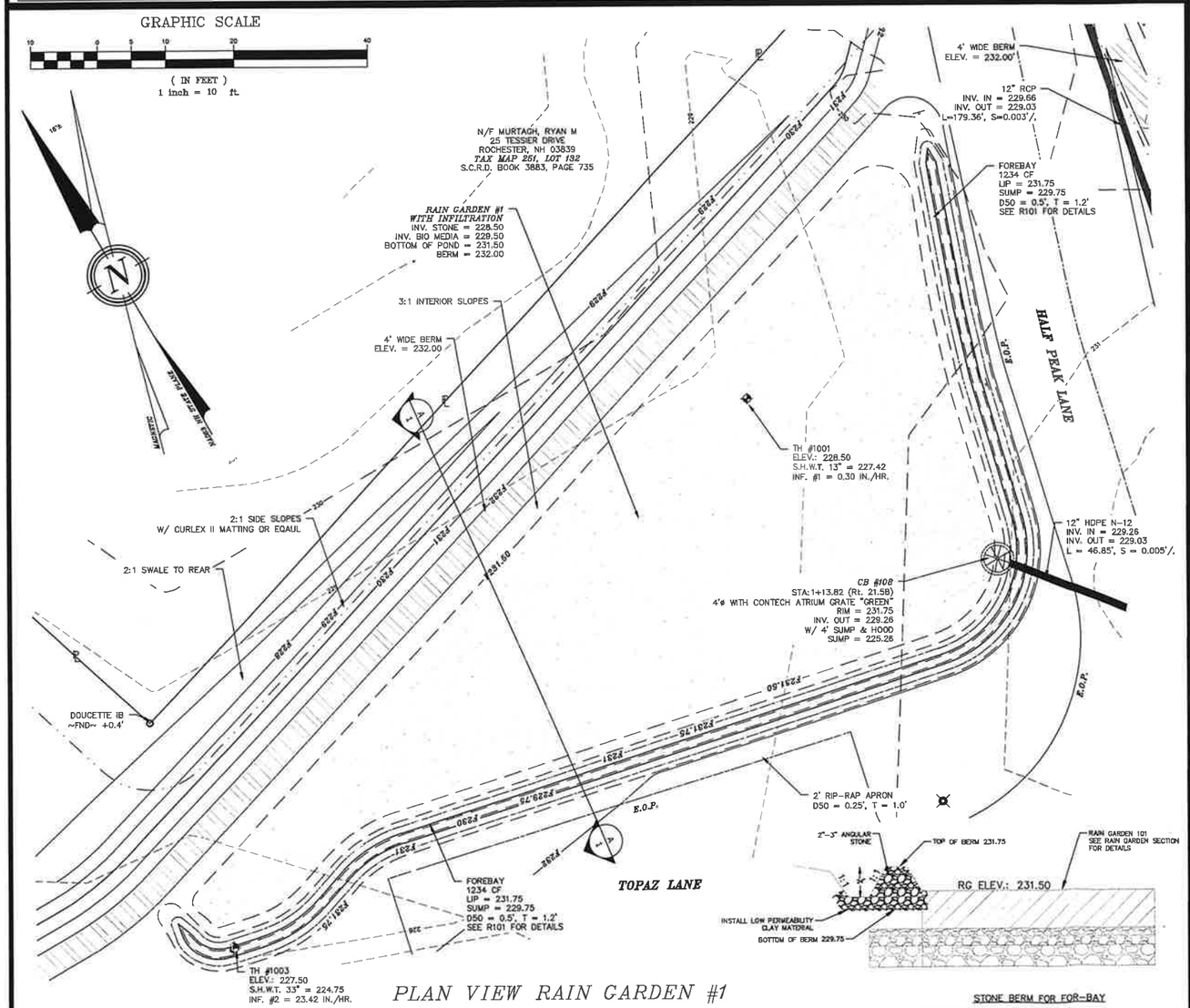
LOW PERMEABILITY MATERIAL GRADATION

SIEVE SIZE	% PASSING BY WEIGHT
#4	95 – 100
#40	60 – 95
#100	40 – 60
#200	25 – 45

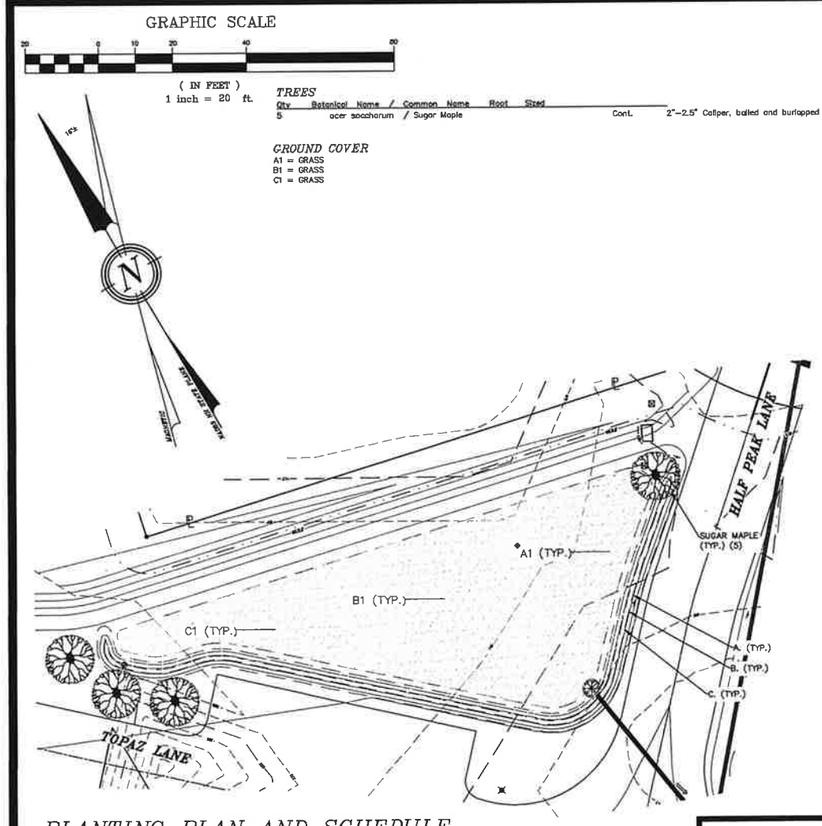


1 SUBGRADE MATERIAL IS NOT TO IMPACTED BY VEHICULAR TRAFFIC.
2 THE LOAM MATERIAL IS TO BE REMOVED FROM THE SURFACE AND THE TOP 6" OF SUBGRADE MATERIAL IS TO BE SCARIFIED. THE DESIGN ENGINEER IS TO BE PRESENT DURING THE CONSTRUCTION OF THE RAIN GARDEN.

SECTION OF RAIN GARDEN #1



PLAN VIEW RAIN GARDEN #1



TREES

Qty	Botanical Name / Common Name	Root	Sized
5	acer saccharum / Sugar Maple	Cont.	2"-2.5" Caliper, balled and burlapped

GROUND COVER
A1 = GRASS
B1 = GRASS
C1 = GRASS

PLANTING PLAN AND SCHEDULE FOR RAIN GARDEN #1

R101

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-11-2018	SEWER & WATER REVISIONS
#3	04-09-2018	GENERAL PLAN SET
#2	03-30-2018	GENERAL PLAN SET
#1		

RAIN GARDEN #1 WITH INFILTRATION DETAILS
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 10 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14245
LICENSED
PROFESSIONAL ENGINEER

FILTER MEDIA MIXTURES			
Component Material	Percent of Mixture by Volume	Gradation of material	
		Sieve No.	Percent by Weight Passing Standard Sieve
Filter Media Option A			
ASTM C-33 concrete sand	50 to 55		
Loamy sand topsoil, with fines as indicated	20 to 30	200	15 to 25
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 to 30	200	< 5

CRUSHED STONE BEDDING *

SIEVE SIZE	% PASSING BY WEIGHT
1"	100
3/4"	90 – 100
3/8"	20 – 55
# 4	0 –10
# 8	0 – 5

* EQUIVALENT TO STANDARD STONE SIZE #67 – SECTION 702 OF NHDOT NHDOT STANDARD SPECIFICATIONS

CRUSHED STONE BEDDING *

SIEVE SIZE	% PASSING BY WEIGHT
1/2"	100
3/8"	90 – 100
#4"	20 – 55
# 8	5 –30
# 16	0 – 10
# 50	0 – 5

* EQUIVALENT TO STANDARD STONE SIZE #89 – SECTION 702 OF NHDOT NHDOT STANDARD SPECIFICATIONS

NOTES

1. WHEN CONTRACTOR EXCAVATES RAIN GARDEN AREA TO SUBGRADE, DESIGN ENGINEER SHALL PERFORM SUBSURFACE EVALUATION PRIOR TO THE PLACEMENT OF ANY SELECT MATERIAL OR OTHER BACKFILL.
2. SOIL FILTER MEDIA SHALL BE AS SHOWN ABOVE.
3. COMPACTION IS NOT TO OCCUR IN THE RAIN GARDEN AREAS PRIOR TO CONSTRUCTION. SCARIFICATION REQUIRED IN THE EVENT COMPACTION TAKES PLACE.
4. DO NOT PLACE THE BIORETENTION SYSTEM INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
5. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF WATER FROM EXCAVATIONS) TO THE BIORETENTION AREA DURING ANY STAGE OF CONSTRUCTION.
6. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.

MAINTENANCE REQUIREMENTS

1 SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL EXCEEDING 2.5 INCHES IN A 24-HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS A WARRANTED BY SUCH INSPECTION.

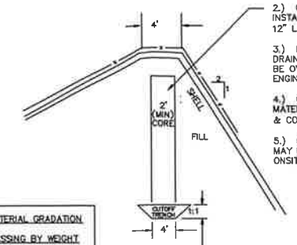
2 PRETREATMENT MEASURES SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND CLEANED OF ACCUMULATED SEDIMENT AS WARRANTED BY INSPECTION, BUT NO LESS THAN ONCE ANNUALLY.

3 AT LEAST ONCE ANNUALLY, SYSTEM SHOULD BE INSPECTED FOR DRAWDOWN TIME. IF BIORETENTION SYSTEM DOES NOT DRAIN WITHIN 72-HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE FILTRATION FUNCTION OR INFILTRATION FUNCTION (AS APPLICABLE), INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR RECONSTRUCTION OF THE FILTER MEDIA.

4 VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING, PRUNING, REMOVAL, AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES.

DESIGN REFERENCES

1 UNH STORMWATER CENTER
2 NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 2, DECEMBER 2008 AS AMENDED.



1.) 2' CORE IS TO BE CONSTRUCTED OF COMPACTED LOAM MATERIAL.

2.) CORE IS TO BE INSTALLED & COMPACTED IN 12" LIFTS.

3.) INSTALLATION OF ENTIRE DRAINAGE STRUCTURE IS TO BE OVERSEEN BY DESIGN ENGINEER.

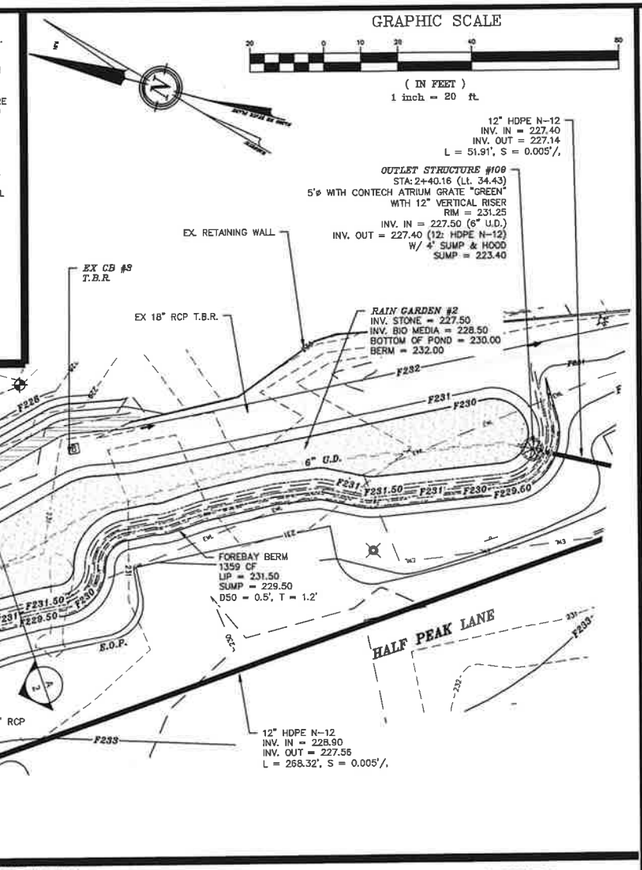
4.) GENERAL FILL MATERIALS ARE TO PLACED & COMPACTED IN 12" LIFTS.

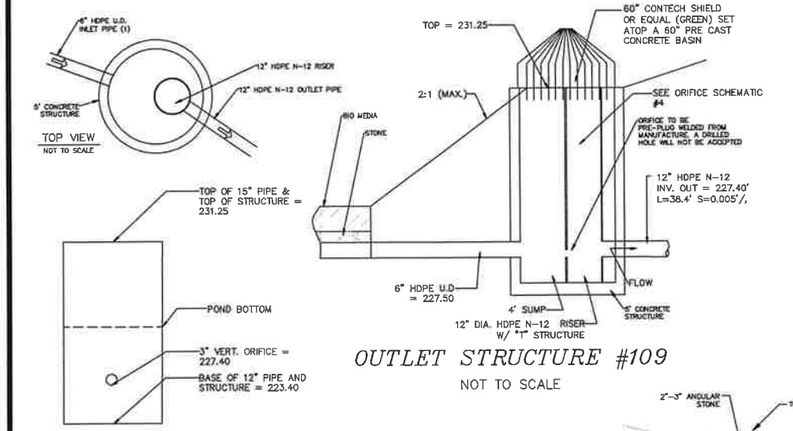
5.) GENERAL FILL MATERIAL MAY BE INSTALLED USING ONSITE MATERIALS.

EXCAVATE TO RELATIVELY IMPERVIOUS SOIL LAYER, BUT NOT LESS THAN 3'

LOW PERMEABILITY MATERIAL GRADATION

SIEVE SIZE	% PASSING BY WEIGHT
#4	95 – 100
#40	60 – 95
#100	40 – 60
#200	25 – 45



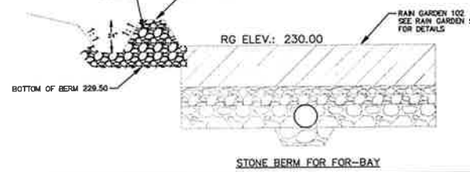


OUTLET STRUCTURE #109

NOT TO SCALE

ORIFICE SCHEMATIC #109

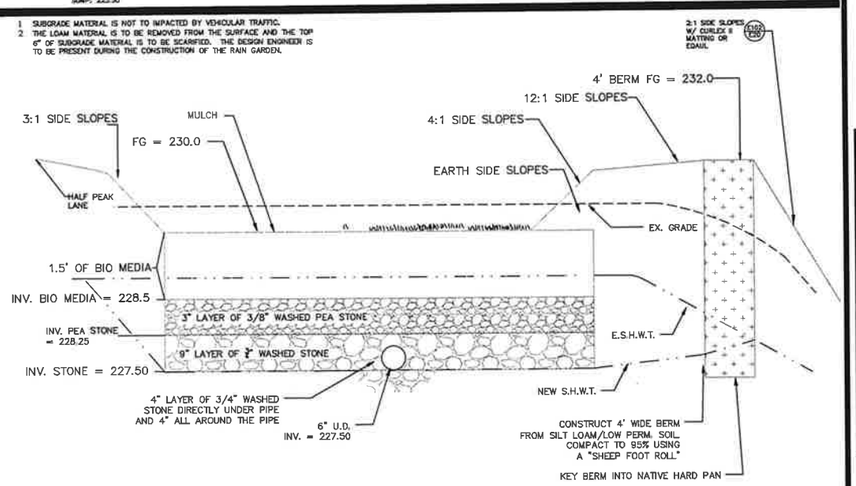
NOT TO SCALE



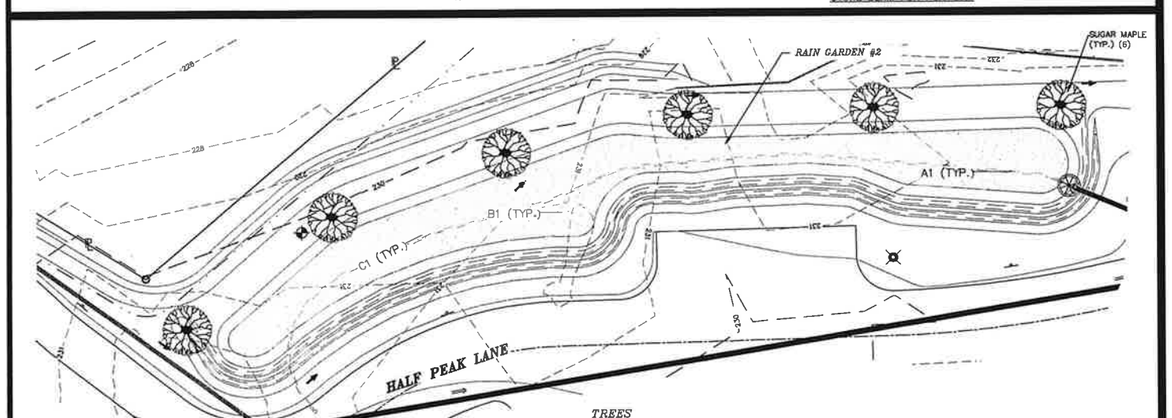
STONE BERM FOR FOR-BAY

PLAN VIEW RAIN GARDEN #2

1 SUBGRADE MATERIAL IS NOT TO IMPACTED BY VEHICULAR TRAFFIC.
2 THE LOAM MATERIAL IS TO BE REMOVED FROM THE SURFACE AND THE TOP 6" OF SUBGRADE MATERIAL IS TO BE SCARIFIED. THE DESIGN ENGINEER IS TO BE PRESENT DURING THE CONSTRUCTION OF THE RAIN GARDEN.



SECTION OF RAIN GARDEN #2



PLANTING PLAN AND SCHEDULE FOR RAIN GARDEN #2

TREES

Qty	Botanical Name / Common Name	Root	Sized
6	acer saccharum / Sugar Maple	ConL	2"–2.5" Caliper, balled and burlapped

GROUND COVER

A1 = GRASS
B1 = GRASS
C1 = GRASS

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-11-2018	ADD RE-SHAPE
#3	04-17-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

RAIN GARDEN #2 DETAILS
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER

R102

FILTER MEDIA MIXTURES			
Component Material	Percent of Mixture by Volume	Gradation of material	
		Sieve No.	Percent by Weight Passing Standard Sieve
Filter Media Option A			
ASTM C-33 concrete sand	50 to 55		
Loamy sand topsoil, with fines as indicated	20 to 30	200	15 to 25
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 to 30	200	< 5

CRUSHED STONE BEDDING *

SIEVE SIZE	% PASSING BY WEIGHT
1"	100
3/4"	90 – 100
3/8"	20 – 55
# 4	0 –10
# 8	0 – 5

* EQUIVALENT TO STANDARD STONE SIZE #67 – SECTION 702 OF NHDOT NHDOT STANDARD SPECIFICATIONS

CRUSHED STONE BEDDING *

SIEVE SIZE	% PASSING BY WEIGHT
1/2"	100
3/8"	90 – 100
#4"	20 – 55
# 8	5 –30
# 16	0 – 10
# 50	0 – 5

* EQUIVALENT TO STANDARD STONE SIZE #89 – SECTION 702 OF NHDOT NHDOT STANDARD SPECIFICATIONS

NOTES

1. WHEN CONTRACTOR EXCAVATES RAIN GARDEN AREA TO SUBGRADE, DESIGN ENGINEER SHALL PERFORM SUBSURFACE EVALUATION PRIOR TO THE PLACEMENT OF ANY SELECT MATERIAL OR OTHER BACKFILL.
2. SOIL FILTER MEDIA SHALL BE AS SHOWN ABOVE.
3. COMPACTION IS NOT TO OCCUR IN THE RAIN GARDEN AREAS PRIOR TO CONSTRUCTION. SCARIFICATION REQUIRED IN THE EVENT COMPACTION TAKES PLACE.
4. DO NOT PLACE THE BIORETENTION SYSTEM INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
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MAINTENANCE REQUIREMENTS

1 SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL EXCEEDING 2.5 INCHES IN A 24-HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS A WARRANTED BY SUCH INSPECTION.

2 PRETREATMENT MEASURES SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND CLEANED OF ACCUMULATED SEDIMENT AS WARRANTED BY INSPECTION, BUT NO LESS THAN ONCE ANNUALLY.

3 AT LEAST ONCE ANNUALLY, SYSTEM SHOULD BE INSPECTED FOR DRAWDOWN TIME. IF BIORETENTION SYSTEM DOES NOT DRAIN WITHIN 72-HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE FILTRATION FUNCTION OR INFILTRATION FUNCTION (AS APPLICABLE), INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR RECONSTRUCTION OF THE FILTER MEDIA.

4 VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING PRUNING, REMOVAL, AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES.

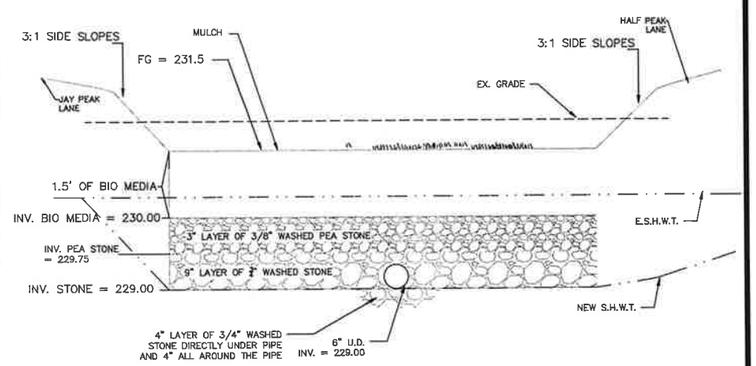
DESIGN REFERENCES

1 UNH STORMWATER CENTER
2 NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 2, DECEMBER 2008 AS AMENDED.

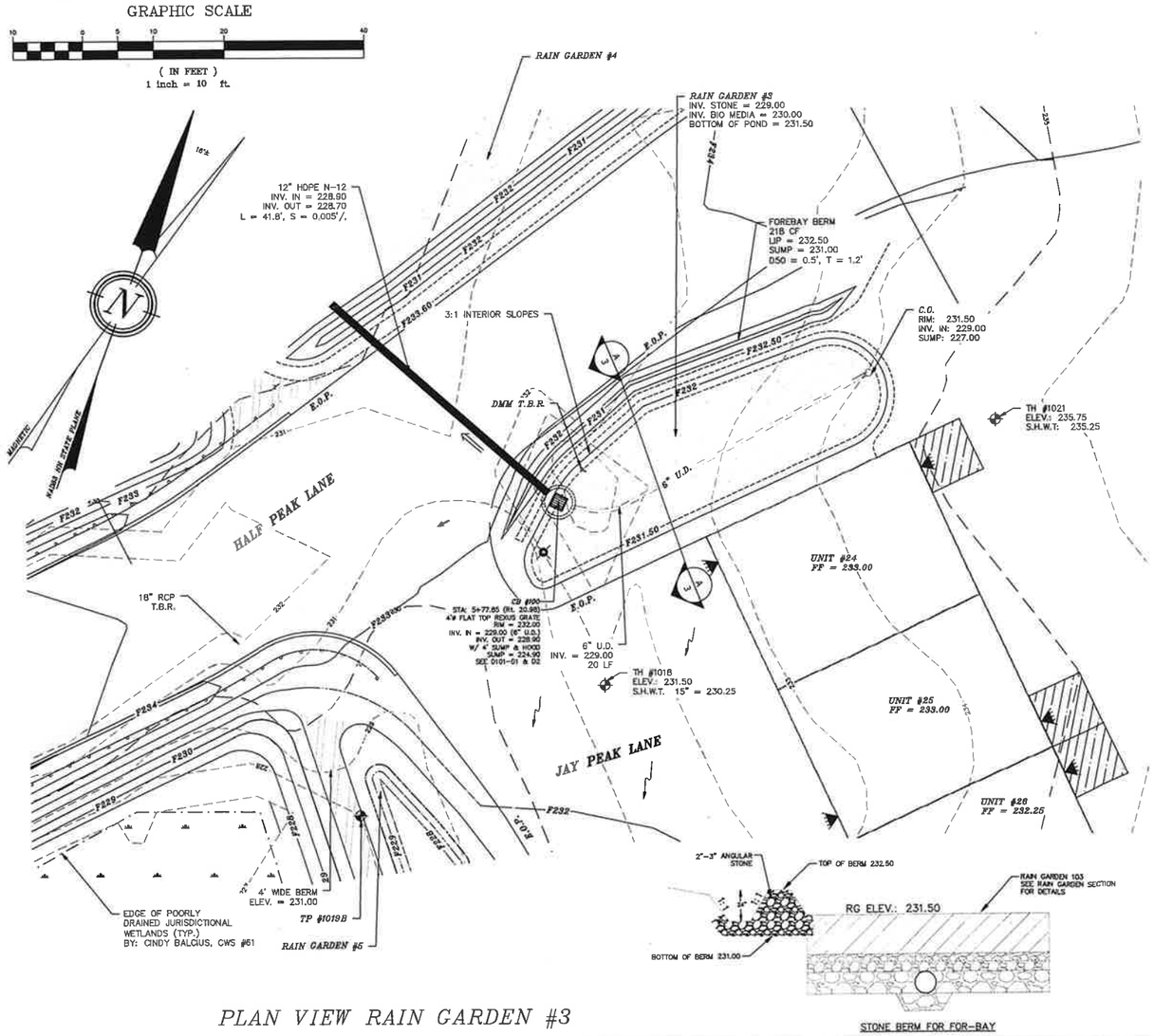
LOW PERMEABILITY MATERIAL GRADATION

SIEVE SIZE	% PASSING BY WEIGHT
#4	95 – 100
#40	60 – 95
#100	40 – 60
#200	25 – 45

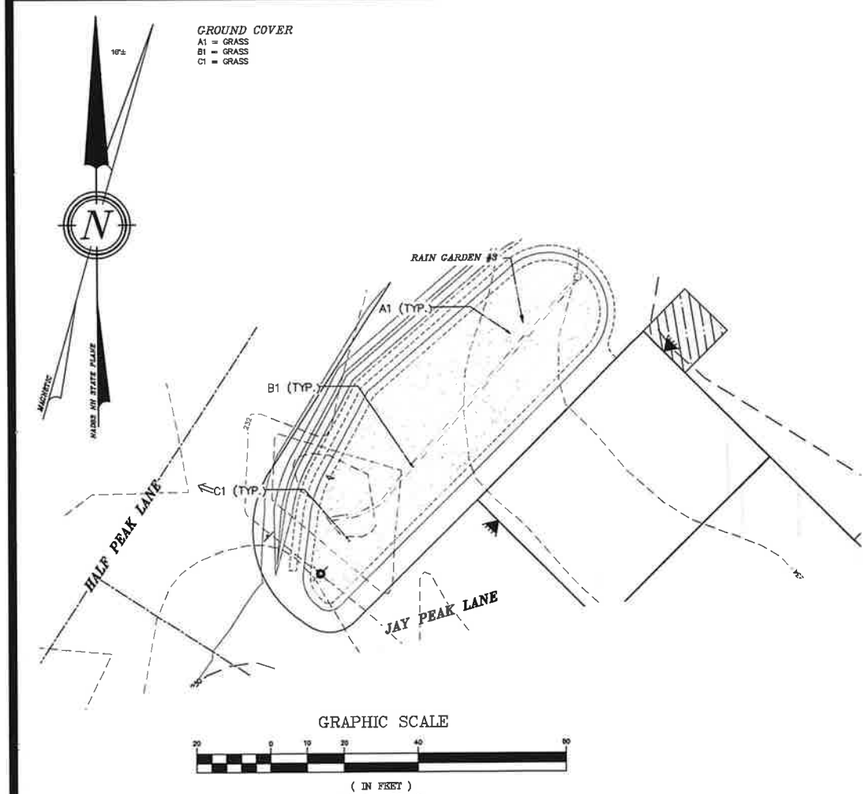
1 SUBGRADE MATERIAL IS NOT TO IMPACTED BY VEHICULAR TRAFFIC.
2 THE LOAM MATERIAL IS TO BE REMOVED FROM THE SURFACE AND THE TOP 6" OF SUBGRADE MATERIAL IS TO BE SCARIFIED. THE DESIGN ENGINEER IS TO BE PRESENT DURING THE CONSTRUCTION OF THE RAIN GARDEN.



A 3 — *SECTION OF RAIN GARDEN #3* — A 3



PLAN VIEW RAIN GARDEN #3



PLANTING PLAN AND SCHEDULE FOR RAIN GARDEN #3

R103

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-02-2018	AOT REVISIONS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

RAIN GARDEN #3 DETAILS
LAND OF
CRG PROPERTIES CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 10 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 4243
LICENSED
PROFESSIONAL ENGINEER

FILTER MEDIA MIXTURES			
Component Material	Percent of Mixture by Volume	Gradation of material	
		Sieve No.	Percent by Weight Passing Standard Sieve
Filter Media Option A			
ASTM C-33 concrete sand	50 to 55		
Loamy sand topsoil, with fines as indicated	20 to 30	200	15 to 25
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 to 30	200	< 5

CRUSHED STONE BEDDING*

SIEVE SIZE	% PASSING BY WEIGHT
1"	100
3/4"	90 – 100
3/8"	20 – 55
# 4	0 –10
# 8	0 – 5

* EQUIVALENT TO STANDARD STONE SIZE #67 – SECTION 702 OF NHDOT
NHDOT STANDARD SPECIFICATIONS

CRUSHED STONE BEDDING*

SIEVE SIZE	% PASSING BY WEIGHT
1/2"	100
3/8"	90 – 100
#4*	20 – 55
# 8	5 –30
# 16	0 – 10
# 50	0 – 5

* EQUIVALENT TO STANDARD STONE SIZE #89 – SECTION 702 OF NHDOT
NHDOT STANDARD SPECIFICATIONS

NOTES

1. WHEN CONTRACTOR EXCAVATES RAIN GARDEN AREA TO SUBGRADE, DESIGN ENGINEER SHALL PERFORM SUBSURFACE EVALUATION PRIOR TO THE PLACEMENT OF ANY SELECT MATERIAL OR OTHER BACKFILL.
2. SOIL FILTER MEDIA SHALL BE AS SHOWN ABOVE.
3. COMPACTION IS NOT TO OCCUR IN THE RAIN GARDEN AREAS PRIOR TO CONSTRUCTION, SCARIFICATION REQUIRED IN THE EVENT COMPACTION TAKES PLACE.
4. DO NOT PLACE THE BIORETENTION SYSTEM INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
5. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF WATER FROM EXCAVATIONS) TO THE BIORETENTION AREA DURING ANY STAGE OF CONSTRUCTION.
6. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.

MAINTENANCE REQUIREMENTS

1 SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL EXCEEDING 2.5 INCHES IN A 24-HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS A WARRANTED BY SUCH INSPECTION.

2 PRETREATMENT MEASURES SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND CLEANED OF ACCUMULATED SEDIMENT AS WARRANTED BY INSPECTION, BUT NO LESS THAN ONCE ANNUALLY.

3 AT LEAST ONCE ANNUALLY, SYSTEM SHOULD BE INSPECTED FOR DRAWDOWN TIME. IF BIORETENTION SYSTEM DOES NOT DRAIN WITHIN 72-HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE FILTRATION FUNCTION OR INFILTRATION FUNCTION (AS APPLICABLE), INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR RECONSTRUCTION OF THE FILTER MEDIA.

4 VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING, PRUNING, REMOVAL, AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES.

DESIGN REFERENCES

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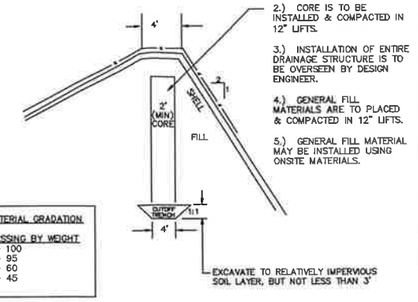
2 NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 2, DECEMBER 2008 AS AMENDED.



1.) 2' CORE IS TO BE CONSTRUCTED OF COMPACTED LOAM MATERIAL.

2.) CORE IS TO BE INSTALLED & COMPACTED IN 12" LIFTS.

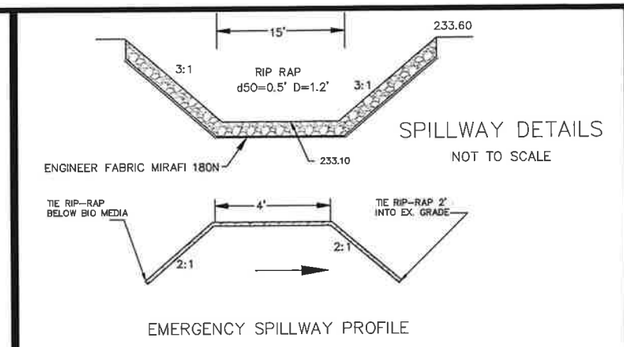
3.) INSTALLATION OF ENTIRE DRAINAGE STRUCTURE IS TO BE OVERSEEN BY DESIGN ENGINEER.

4.) GENERAL FILL MATERIALS ARE TO PLACED & COMPACTED IN 12" LIFTS.

5.) GENERAL FILL MATERIAL MAY BE INSTALLED USING ONSITE MATERIALS.

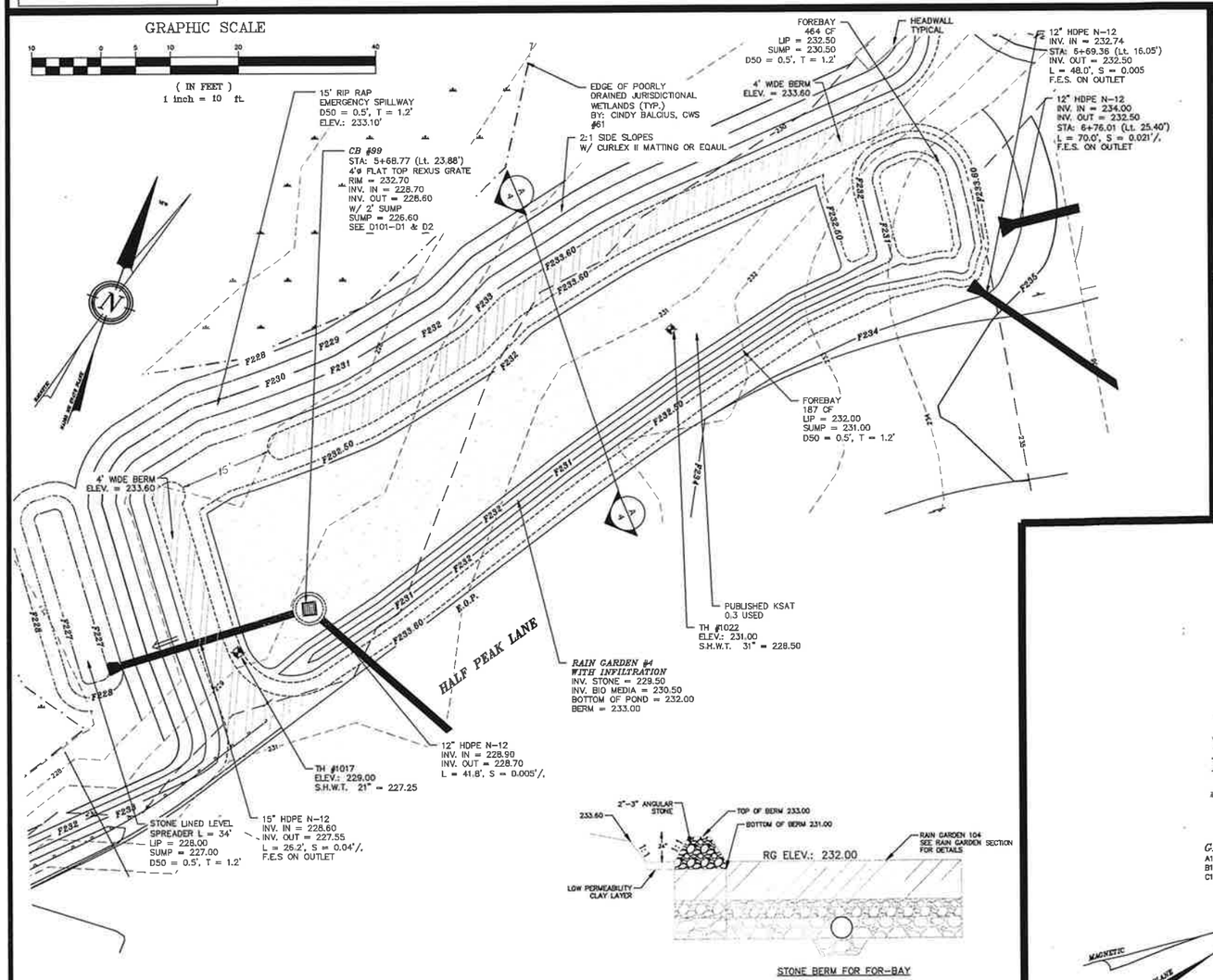
LOW PERMEABILITY MATERIAL GRADATION

SIEVE SIZE	% PASSING BY WEIGHT
#4	95 – 100
#40	60 – 95
#100	40 – 60
#200	25 – 45



SPILLWAY DETAILS
NOT TO SCALE

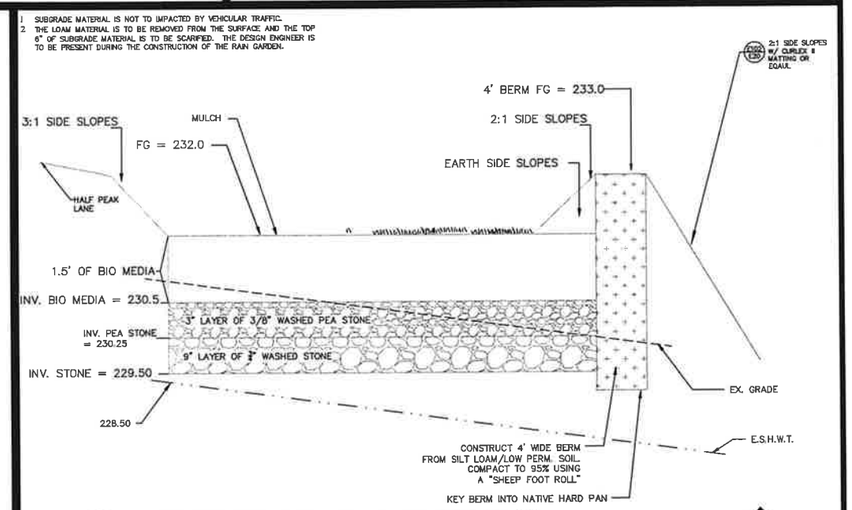
EMERGENCY SPILLWAY PROFILE



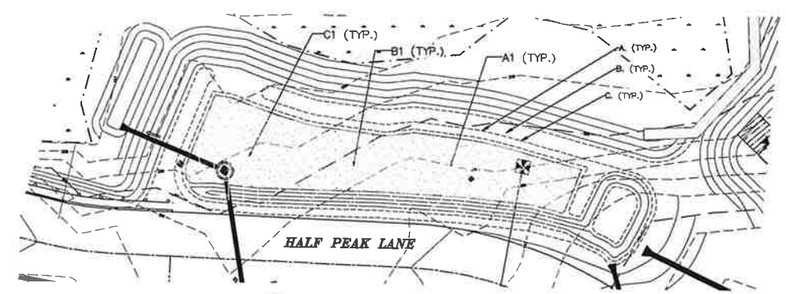
STONE BERM FOR FOR-BAY

PLAN VIEW RAIN GARDEN #4

1 SUBGRADE MATERIAL IS NOT TO IMPACTED BY VEHICULAR TRAFFIC.
2 THE LOAM MATERIAL IS TO BE REMOVED FROM THE SURFACE AND THE TOP 6" OF SUBGRADE MATERIAL IS TO BE SCARIFIED. THE DESIGN ENGINEER IS TO BE PRESENT DURING THE CONSTRUCTION OF THE RAIN GARDEN.



SECTION OF RAIN GARDEN #4



PLANTING PLAN AND SCHEDULE FOR RAIN GARDEN #4

R104

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-02-2018	SEWER REVISIONS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

RAIN GARDEN #4 WITH INFILTRATION DETAILS
LAND OF
ORC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 10 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY No. 14245
LICENSED PROFESSIONAL ENGINEER

SHEET 28 OF 76

FILTER MEDIA MIXTURES			
Component Material	Percent of Mixture by Volume	Gradation of material	
		Sieve No.	Percent by Weight Passing Standard Sieve
Filter Media Option A			
ASTM C-33 concrete sand	50 to 55		
Loamy sand topsoil, with fines as indicated	20 to 30	200	15 to 25
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 to 30	200	< 5

CRUSHED STONE BEDDING *

SIEVE SIZE	% PASSING BY WEIGHT
1"	100
3/4"	90 – 100
3/8"	20 – 55
# 4	0 –10
# 8	0 – 5

* EQUIVALENT TO STANDARD STONE SIZE #67 – SECTION 702 OF NHDOT
NHDOT STANDARD SPECIFICATIONS

CRUSHED STONE BEDDING *

SIEVE SIZE	% PASSING BY WEIGHT
1/2"	100
3/8"	90 – 100
#4"	20 – 55
# 8	5 –30
# 16	0 – 10
# 50	0 – 5

* EQUIVALENT TO STANDARD STONE SIZE #89 – SECTION 702 OF NHDOT
NHDOT STANDARD SPECIFICATIONS

NOTES

1. WHEN CONTRACTOR EXCAVATES RAIN GARDEN AREA TO SUBGRADE, DESIGN ENGINEER SHALL PERFORM SUBSURFACE EVALUATION PRIOR TO THE PLACEMENT OF ANY SELECT MATERIAL OR OTHER BACKFILL.
2. SOIL FILTER MEDIA SHALL BE AS SHOWN ABOVE.
3. COMPACTION IS NOT TO OCCUR IN THE RAIN GARDEN AREAS PRIOR TO CONSTRUCTION, SCARIFICATION REQUIRED IN THE EVENT COMPACTION TAKES PLACE.
4. DO NOT PLACE THE BIORETENTION SYSTEM INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
5. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF WATER FROM EXCAVATIONS) TO THE BIORETENTION AREA DURING ANY STAGE OF CONSTRUCTION.
6. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.

MAINTENANCE REQUIREMENTS

1 SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL EXCEEDING 2.5 INCHES IN A 24-HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS A WARRANTED BY SUCH INSPECTION.

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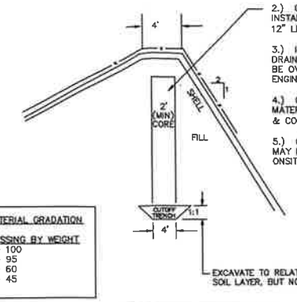
DESIGN REFERENCES

1 UNH STORMWATER CENTER
2 NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 2, DECEMBER 2008 AS AMENDED.



1.) 2' CORE IS TO BE CONSTRUCTED OF COMPACTED LOAM MATERIAL.

2.) CORE IS TO BE INSTALLED & COMPACTED IN 12" LIFTS.

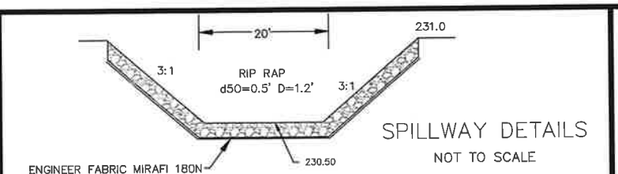
3.) INSTALLATION OF ENTIRE DRAINAGE STRUCTURE IS TO BE OVERSEEN BY DESIGN ENGINEER.

4.) GENERAL FILL MATERIALS ARE TO PLACED & COMPACTED IN 12" LIFTS.

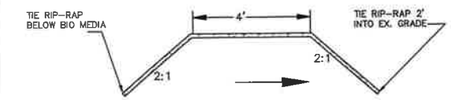
5.) GENERAL FILL MATERIAL MAY BE INSTALLED USING ONSITE MATERIALS.

LOW PERMEABILITY MATERIAL GRADATION

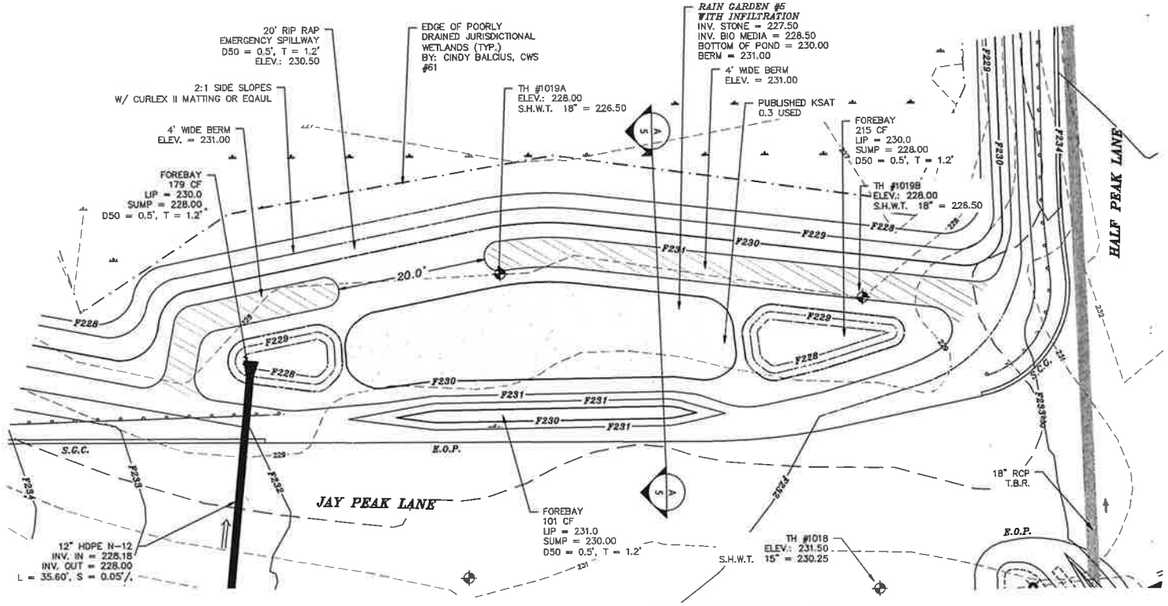
SIEVE SIZE	% PASSING BY WEIGHT
#4	95 – 100
#40	60 – 95
#100	40 – 60
#200	25 – 45



SPILLWAY DETAILS
NOT TO SCALE

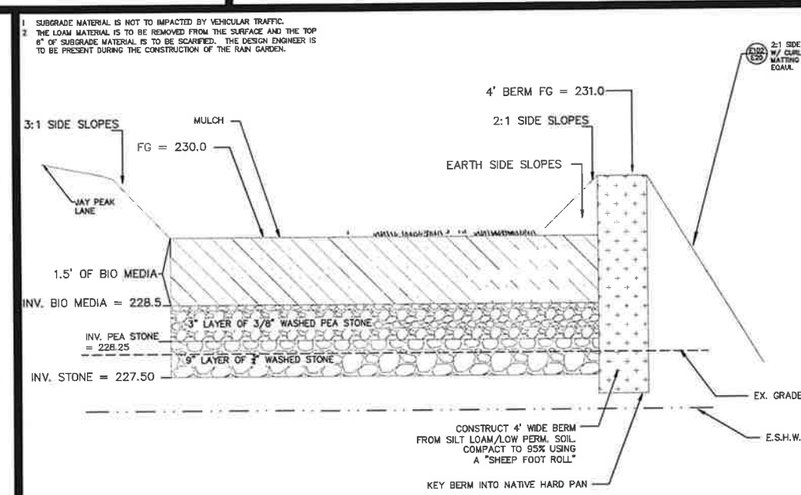


EMERGENCY SPILLWAY PROFILE

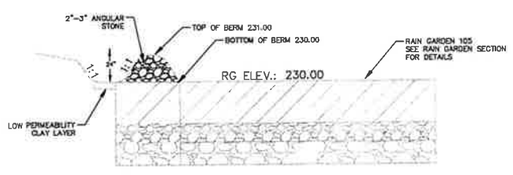


PLAN VIEW RAIN GARDEN #5

1 SUBGRADE MATERIAL IS NOT TO IMPACTED BY VEHICULAR TRAFFIC.
2 THE LOAM MATERIAL IS TO BE REMOVED FROM THE SURFACE AND THE TOP 8" OF SUBGRADE MATERIAL IS TO BE SCARIFIED. THE DESIGN ENGINEER IS TO BE PRESENT DURING THE CONSTRUCTION OF THE RAIN GARDEN.



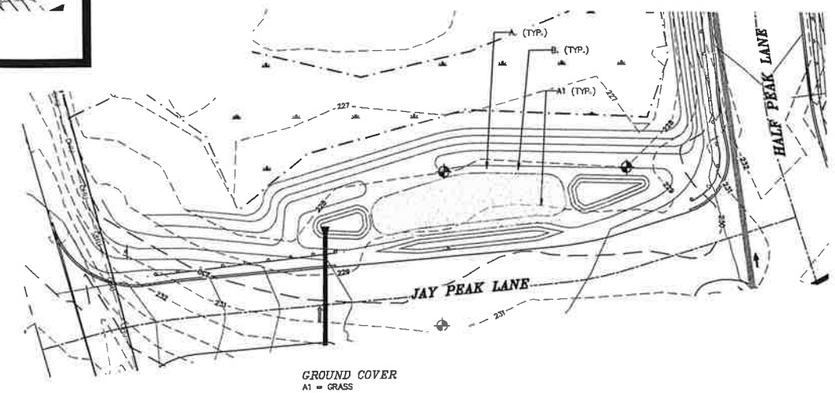
SECTION OF RAIN GARDEN #5



STONE BERM FOR FOR-BAY

GRAPHIC SCALE

(IN FEET)
1 inch = 10 ft.



GROUND COVER
A1 = GRASS
B1 = GRASS
C1 = GRASS

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

PLANTING PLAN AND SCHEDULE FOR RAIN GARDEN #5

R105

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-11-2018	AoT COMMENTS
#3	04-09-2018	SEWER & WATER REVISIONS
#2	03-30-2018	GENERAL PLAN SET
#1		GENERAL PLAN SET

RAIN GARDEN #5 WITH INFILTRATION DETAILS
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 10 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 4020
LICENSED
PROFESSIONAL ENGINEER

FILTER MEDIA MIXTURES			
Component Material	Percent of Mixture by Volume	Gradation of material	
		Sieve No.	Percent by Weight Passing Standard Sieve
Filter Media Option A			
ASTM C-33 concrete sand	50 to 55		
Loamy sand topsoil, with fines as indicated	20 to 30	200	15 to 25
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 to 30	200	< 5

CRUSHED STONE BEDDING *

SIEVE SIZE	% PASSING BY WEIGHT
1"	100
3/4"	90 – 100
3/8"	20 – 55
# 4	0 –10
# 8	0 – 5

* EQUIVALENT TO STANDARD STONE SIZE #67 – SECTION 702 OF NHDOT NHDOT STANDARD SPECIFICATIONS

CRUSHED STONE BEDDING *

SIEVE SIZE	% PASSING BY WEIGHT
1/2"	100
3/8"	90 – 100
#4"	20 – 55
# 8	5 –30
# 16	0 – 10
# 50	0 – 5

* EQUIVALENT TO STANDARD STONE SIZE #89 – SECTION 702 OF NHDOT NHDOT STANDARD SPECIFICATIONS

NOTES

1. WHEN CONTRACTOR EXCAVATES RAIN GARDEN AREA TO SUBGRADE, DESIGN ENGINEER SHALL PERFORM SUBSURFACE EVALUATION PRIOR TO THE PLACEMENT OF ANY SELECT MATERIAL OR OTHER BACKFILL.
2. SOIL FILTER MEDIA SHALL BE AS SHOWN ABOVE.
3. COMPACTION IS NOT TO OCCUR IN THE RAIN GARDEN AREAS PRIOR TO CONSTRUCTION, SCARIFICATION REQUIRED IN THE EVENT COMPACTION TAKES PLACE.
4. DO NOT PLACE THE BIORETENTION SYSTEM INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
5. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF WATER FROM EXCAVATIONS) TO THE BIORETENTION AREA DURING ANY STAGE OF CONSTRUCTION.
6. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.

MAINTENANCE REQUIREMENTS

1 SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL EXCEEDING 2.5 INCHES IN A 24-HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS A WARRANTED BY SUCH INSPECTION.

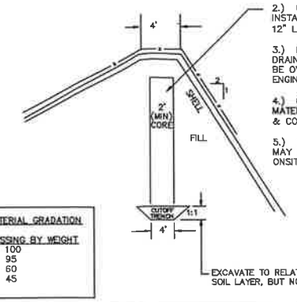
2 PRETREATMENT MEASURES SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND CLEANED OF ACCUMULATED SEDIMENT AS WARRANTED BY INSPECTION, BUT NO LESS THAN ONCE ANNUALLY.

3 AT LEAST ONCE ANNUALLY, SYSTEM SHOULD BE INSPECTED FOR DRAWDOWN TIME. IF BIORETENTION SYSTEM DOES NOT DRAIN WITHIN 72-HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE FILTRATION FUNCTION OR INFILTRATION FUNCTION (AS APPLICABLE), INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR RECONSTRUCTION OF THE FILTER MEDIA.

4 VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING, PRUNING, REMOVAL, AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES.

DESIGN REFERENCES

1 UNH STORMWATER CENTER
2 NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 2, DECEMBER 2008 AS AMENDED.



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2.) CORE IS TO BE INSTALLED & COMPACTED IN 12" LIFTS.

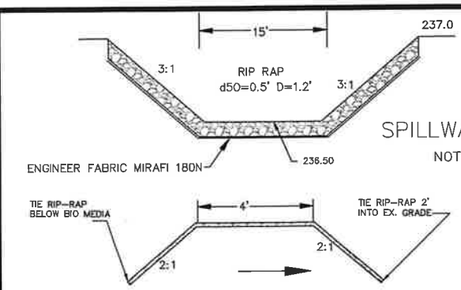
3.) INSTALLATION OF ENTIRE DRAINAGE STRUCTURE IS TO BE OVERSEEN BY DESIGN ENGINEER.

4.) GENERAL FILL MATERIALS ARE TO PLACED & COMPACTED IN 12" LIFTS.

5.) GENERAL FILL MATERIAL MAY BE INSTALLED USING ONSITE MATERIALS.

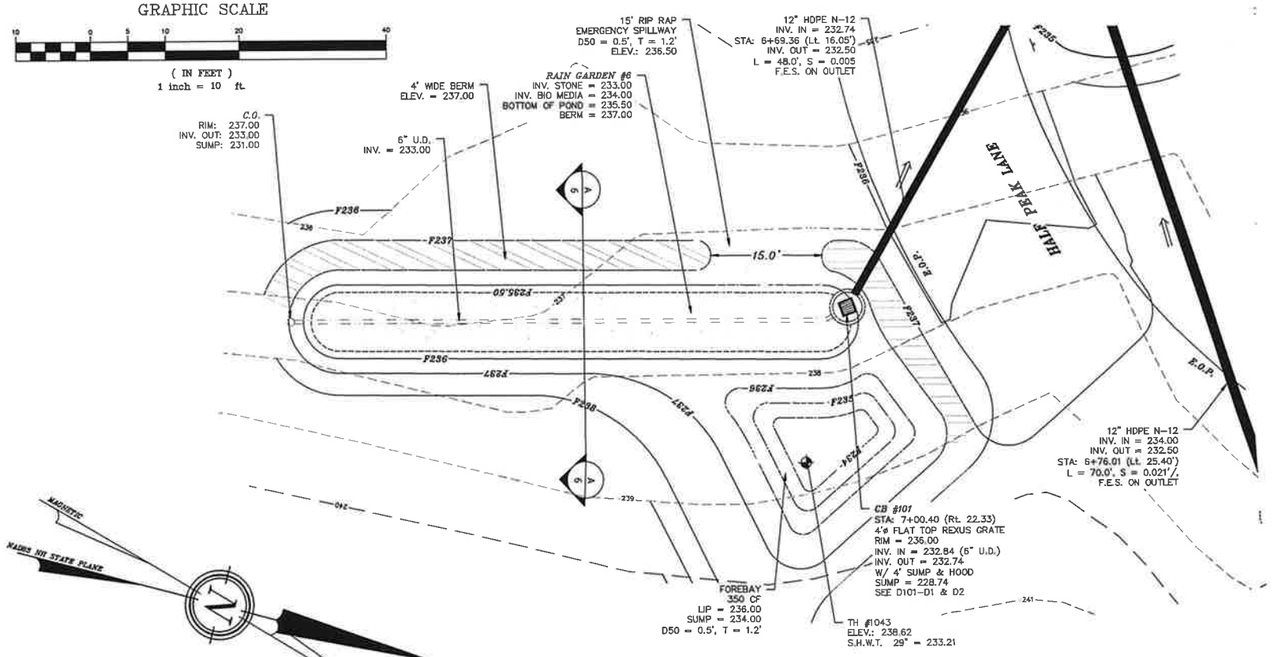
LOW PERMEABILITY MATERIAL GRADATION

SIEVE SIZE	% PASSING BY WEIGHT
#4	95 – 100
#40	60 – 95
#100	40 – 60
#200	25 – 45



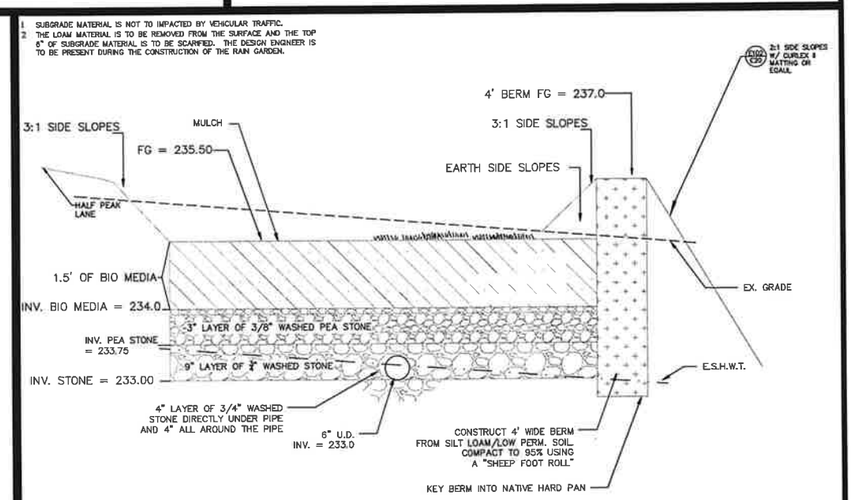
SPILLWAY DETAILS
NOT TO SCALE

EMERGENCY SPILLWAY PROFILE

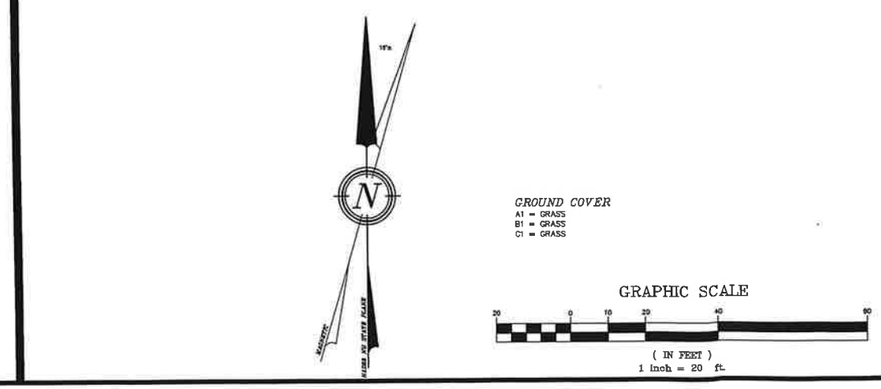


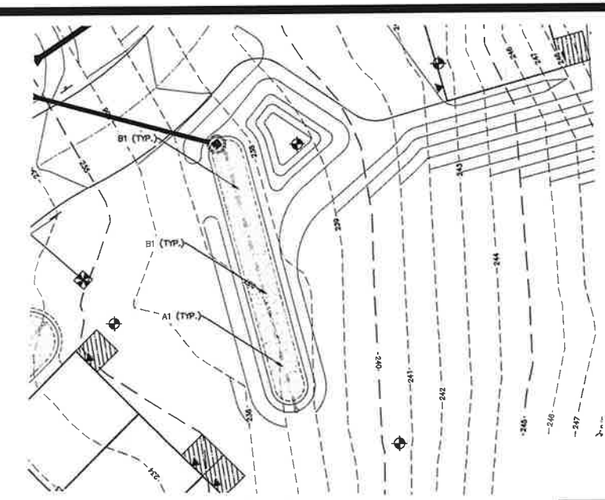
PLAN VIEW RAIN GARDEN #6

1 SUBGRADE MATERIAL IS NOT TO IMPACTED BY VEHICULAR TRAFFIC.
2 THE LOAM MATERIAL IS TO BE REMOVED FROM THE SURFACE AND THE TOP 6" OF SUBGRADE MATERIAL IS TO BE SCARIFIED. THE DESIGN ENGINEER IS TO BE PRESENT DURING THE CONSTRUCTION OF THE RAIN GARDEN.



SECTION OF RAIN GARDEN #6





PLANTING PLAN AND SCHEDULE FOR RAIN GARDEN #6

R106

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WINDOW RESPONSE
#4	04-20-2018	SEWER & WATER REVISIONS
#3	04-11-2018	GENERAL PLAN SET
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

RAIN GARDEN #6 DETAILS
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 10 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14723
LICENSED
PROFESSIONAL ENGINEER

FILTER MEDIA MIXTURES			
Component Material	Percent of Mixture by Volume	Gradation of material	
		Sieve No.	Percent by Weight Passing Standard Sieve
Filter Media Option A			
ASTM C-33 concrete sand	50 to 55		
Loamy sand topsoil, with fines as indicated	20 to 30	200	15 to 25
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 to 30	200	< 5

CRUSHED STONE BEDDING *

SIEVE SIZE	% PASSING BY WEIGHT
1"	100
3/4"	90 – 100
3/8"	20 – 55
# 4	0 –10
# 8	0 – 5

* EQUIVALENT TO STANDARD STONE SIZE #67 – SECTION 702 OF NHDOT NHDOT STANDARD SPECIFICATIONS

CRUSHED STONE BEDDING *

SIEVE SIZE	% PASSING BY WEIGHT
1/2"	100
3/8"	90 – 100
#4"	20 – 55
# 8	5 –30
# 16	0 – 10
# 50	0 – 5

* EQUIVALENT TO STANDARD STONE SIZE #89 – SECTION 702 OF NHDOT NHDOT STANDARD SPECIFICATIONS

NOTES

1. WHEN CONTRACTOR EXCAVATES RAIN GARDEN AREA TO SUBGRADE, DESIGN ENGINEER SHALL PERFORM SUBSURFACE EVALUATION PRIOR TO THE PLACEMENT OF ANY SELECT MATERIAL OR OTHER BACKFILL.
2. SOIL FILTER MEDIA SHALL BE AS SHOWN ABOVE.
3. COMPACTION IS NOT TO OCCUR IN THE RAIN GARDEN AREAS PRIOR TO CONSTRUCTION. SCARIFICATION REQUIRED IN THE EVENT COMPACTION TAKES PLACE.
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MAINTENANCE REQUIREMENTS

1 SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL EXCEEDING 2.5 INCHES IN A 24-HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS A WARRANTED BY SUCH INSPECTION.

2 PRETREATMENT MEASURES SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND CLEANED OF ACCUMULATED SEDIMENT AS WARRANTED BY INSPECTION, BUT NO LESS THAN ONCE ANNUALLY.

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4 VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING, PRUNING, REMOVAL, AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES.

DESIGN REFERENCES

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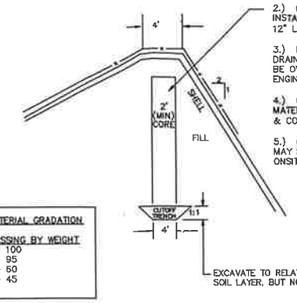
2 NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 2, DECEMBER 2008 AS AMENDED.



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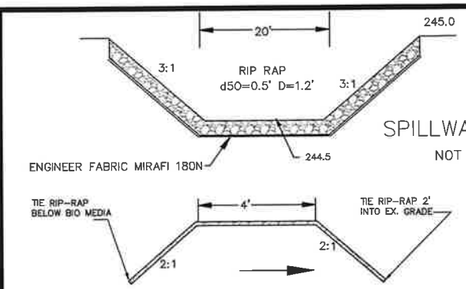
3.) INSTALLATION OF ENTIRE DRAINAGE STRUCTURE IS TO BE OVERSEEN BY DESIGN ENGINEER.

4.) GENERAL FILL MATERIALS ARE TO PLACED & COMPACTED IN 12" LIFTS.

5.) GENERAL FILL MATERIAL MAY BE INSTALLED USING ONSITE MATERIALS.

LOW PERMEABILITY MATERIAL GRADATION

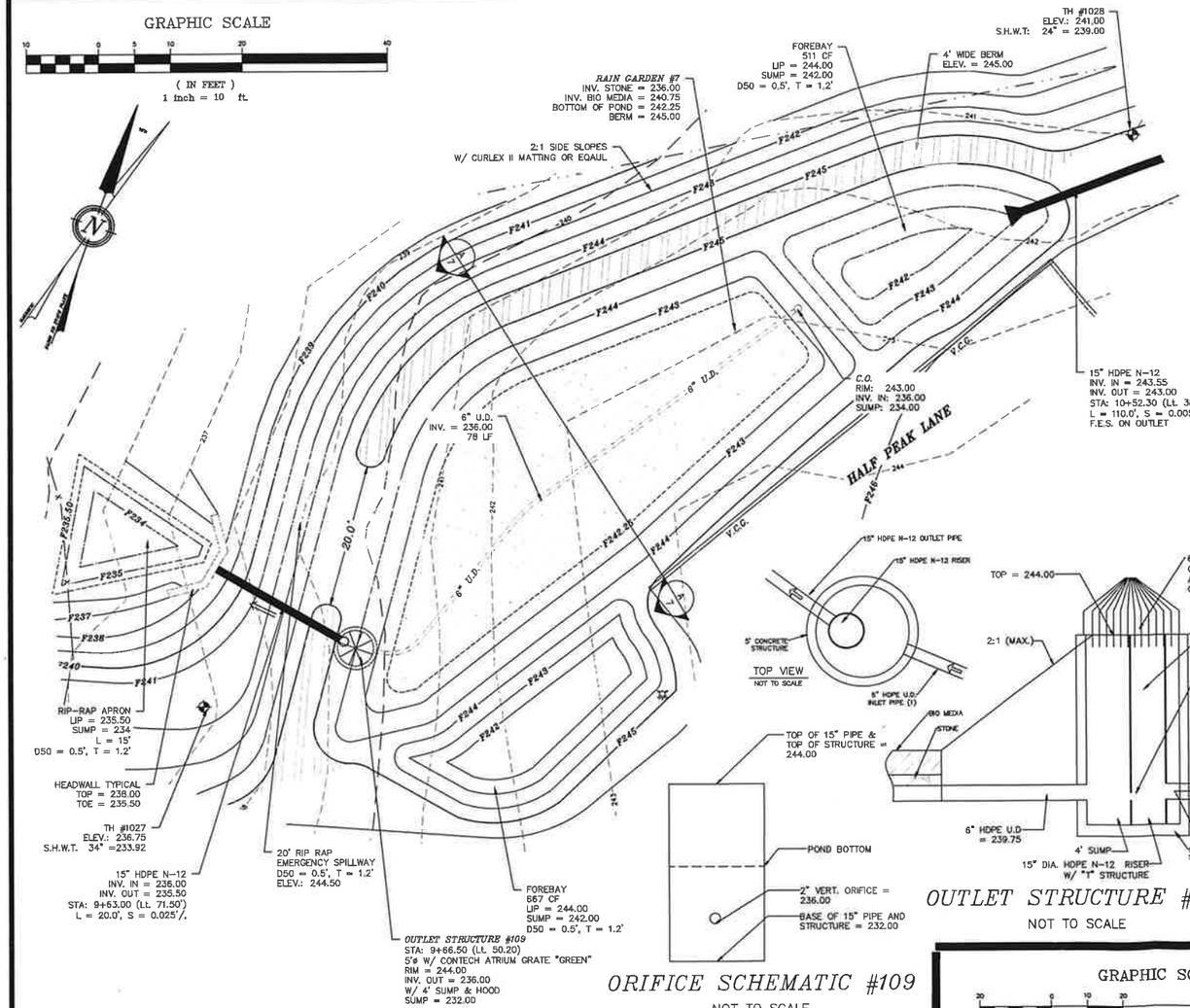
SIEVE SIZE	% PASSING BY WEIGHT
#4	95 – 100
#40	60 – 95
#100	40 – 60
#200	25 – 45



SPILLWAY DETAILS
NOT TO SCALE

EMERGENCY SPILLWAY PROFILE

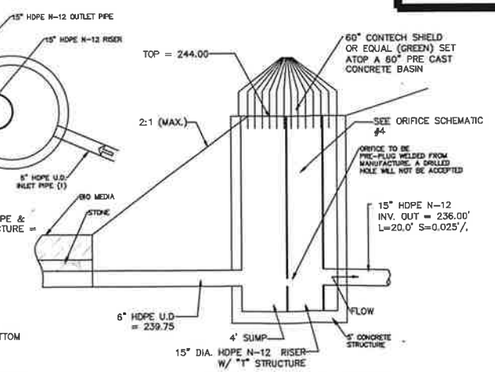
REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WMED RESPONSE
#4	05-02-2018	AoT RESPONSE
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET



PLAN VIEW RAIN GARDEN #7

TOP VIEW
NOT TO SCALE

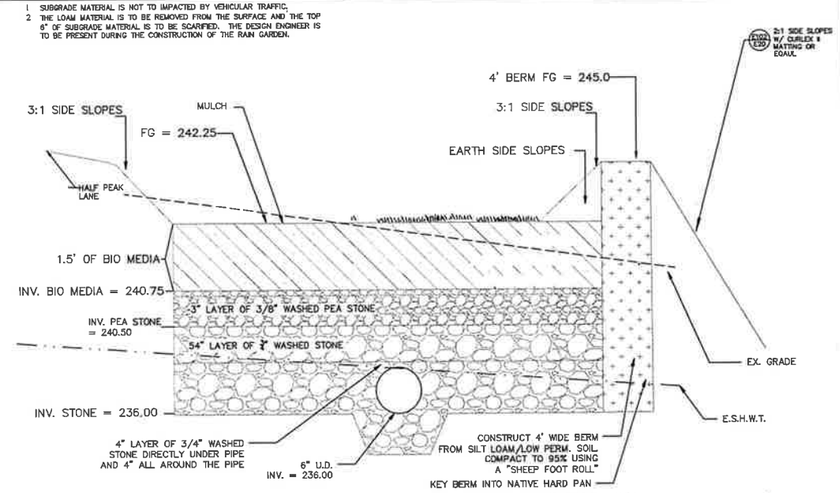
ORIFICE SCHEMATIC #109
NOT TO SCALE



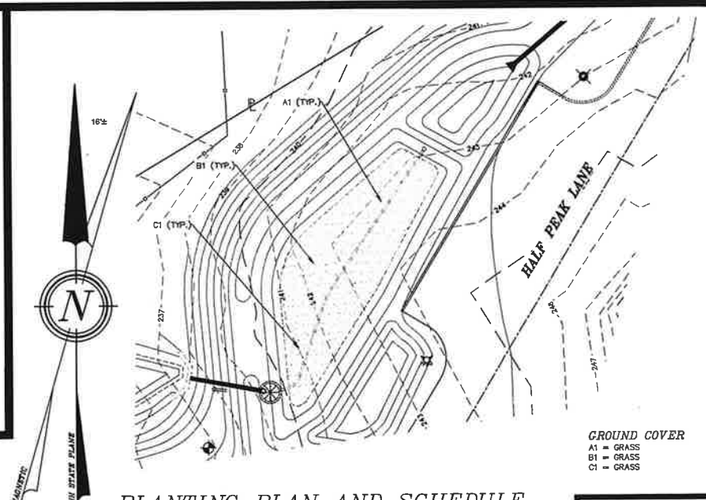
OUTLET STRUCTURE #109
NOT TO SCALE

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

1 SUBGRADE MATERIAL IS NOT TO IMPACTED BY VEHICULAR TRAFFIC.
2 THE LOAM MATERIAL IS TO BE REMOVED FROM THE SURFACE AND THE TOP 6" OF SUBGRADE MATERIAL IS TO BE SCARFIED. THE DESIGN ENGINEER IS TO BE PRESENT DURING THE CONSTRUCTION OF THE RAIN GARDEN.



SECTION OF RAIN GARDEN #7



PLANTING PLAN AND SCHEDULE FOR RAIN GARDEN #7

R107

RAIN GARDEN #7 DETAILS
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 10 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14045
LICENSED PROFESSIONAL ENGINEER

SHEET 31 OF 76

FILTER MEDIA MIXTURES			
Component Material	Percent of Mixture by Volume	Gradation of material	
		Sieve No.	Percent by Weight Passing Standard Sieve
Filter Media Option A			
ASTM C-33 concrete sand	50 to 55		
Loamy sand topsoil, with fines as indicated	20 to 30	200	15 to 25
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 to 30	200	< 5

CRUSHED STONE BEDDING *

SIEVE SIZE	% PASSING BY WEIGHT
1"	100
3/4"	90 – 100
3/8"	20 – 55
# 4	0 –10
# 8	0 – 5

* EQUIVALENT TO STANDARD STONE SIZE #67 – SECTION 702 OF NHDOT NHDOT STANDARD SPECIFICATIONS

CRUSHED STONE BEDDING *

SIEVE SIZE	% PASSING BY WEIGHT
1/2"	100
3/8"	90 – 100
#4*	20 – 55
# 8	5 –30
# 16	0 – 10
# 50	0 – 5

* EQUIVALENT TO STANDARD STONE SIZE #89 – SECTION 702 OF NHDOT NHDOT STANDARD SPECIFICATIONS

NOTES

1. WHEN CONTRACTOR EXCAVATES RAIN GARDEN AREA TO SUBGRADE, DESIGN ENGINEER SHALL PERFORM SUBSURFACE EVALUATION PRIOR TO THE PLACEMENT OF ANY SELECT MATERIAL OR OTHER BACKFILL.
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DESIGN REFERENCES

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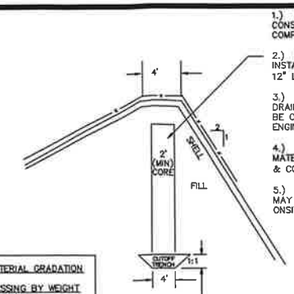
2 NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 2, DECEMBER 2008 AS AMENDED.



1.) 2' CORE IS TO BE CONSTRUCTED OF COMPACTED LOAM MATERIAL.

2.) CORE IS TO BE INSTALLED & COMPACTED IN 12" LIFTS.

3.) INSTALLATION OF ENTIRE DRAINAGE STRUCTURE IS TO BE OVERSEEN BY DESIGN ENGINEER.

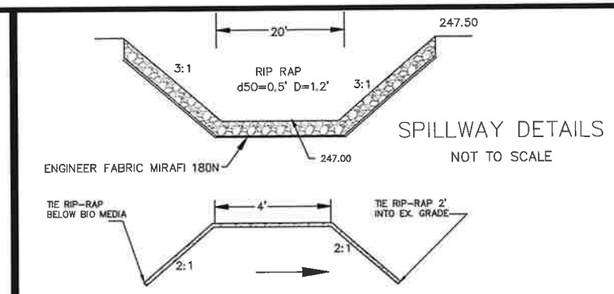
4.) GENERAL FILL MATERIALS ARE TO PLACED & COMPACTED IN 12" LIFTS.

5.) GENERAL FILL MATERIAL MAY BE INSTALLED USING ONSITE MATERIALS.

EXCAVATE TO RELATIVELY IMPERVIOUS SOIL LAYER, BUT NOT LESS THAN 3'

LOW PERMEABILITY MATERIAL GRADATION

SIEVE SIZE	% PASSING BY WEIGHT
#4	95 – 100
#40	60 – 95
#100	40 – 60
#200	25 – 45



SPILLWAY DETAILS
NOT TO SCALE

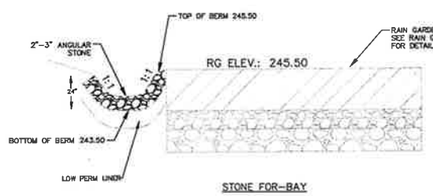
EMERGENCY SPILLWAY PROFILE

REVISION	DATE	DESCRIPTION
#7	07–30–2018	SUBMITTED FOR CONSTRUCTION
#6a	06–18–2018	REVISED PER AoT COMMENT
#5b	05–24–2018	NHDES WWEB RESPONSE
#4	04–12–2018	NHDES WWEB
#3	04–11–2018	SEWER & WATER REVISIONS
#2	04–09–2018	GENERAL PLAN SET
#1	03–30–2018	GENERAL PLAN SET

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

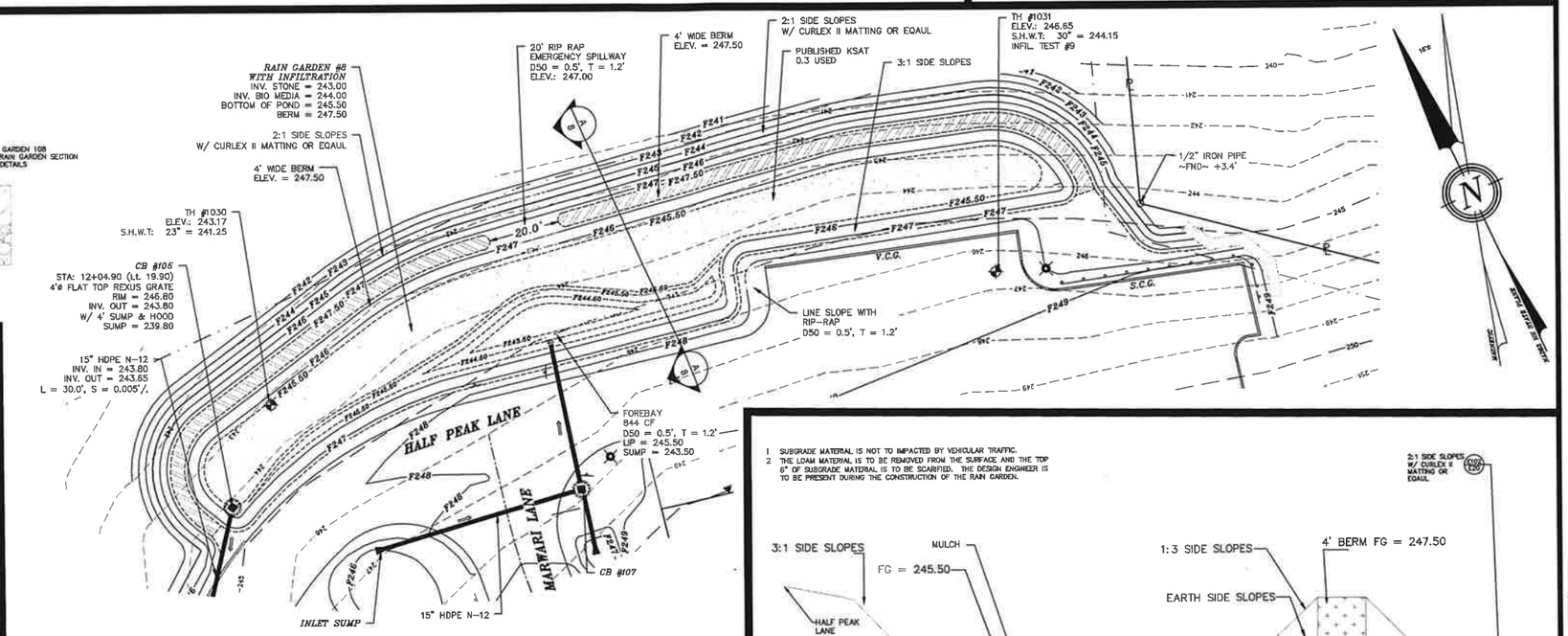


STONE FOR-BAY

GRAPHIC SCALE

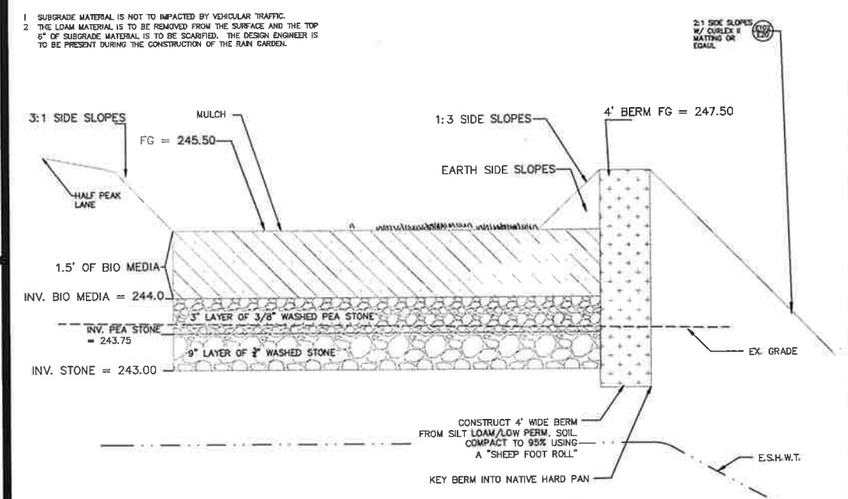
20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

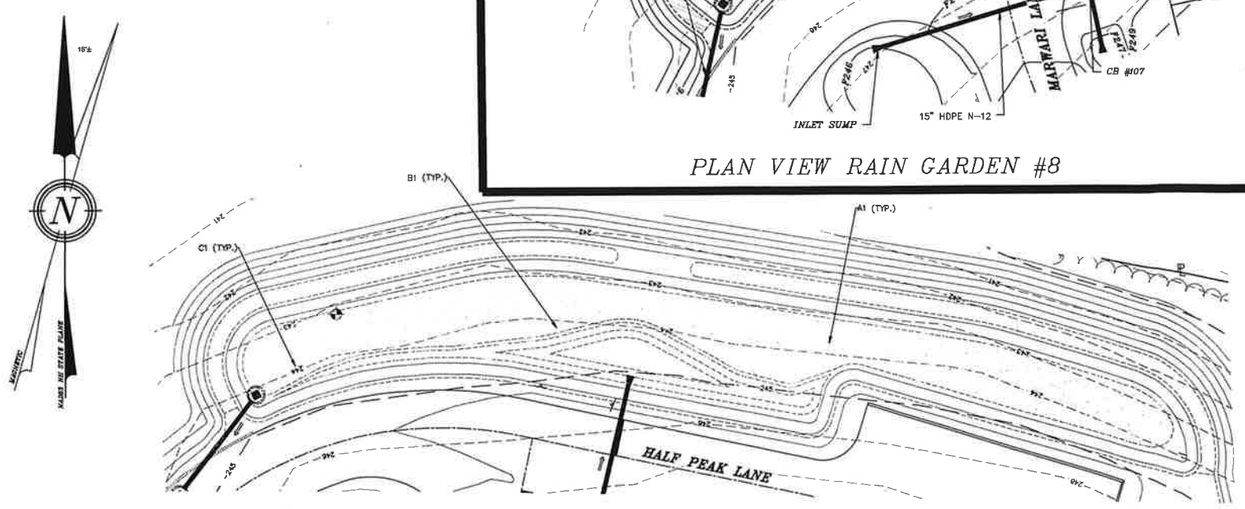


PLAN VIEW RAIN GARDEN #8

1 SUBGRADE MATERIAL IS NOT TO IMPACTED BY VEHICULAR TRAFFIC.
2 THE LOAM MATERIAL IS TO BE REMOVED FROM THE SURFACE AND THE TOP 6" OF SUBGRADE MATERIAL IS TO BE SCARIFIED. THE DESIGN ENGINEER IS TO BE PRESENT DURING THE CONSTRUCTION OF THE RAIN GARDEN.



SECTION OF RAIN GARDEN #8



GROUND COVER
A1 = GRASS
B1 = GRASS
C1 = GRASS

PLANTING PLAN AND SCHEDULE FOR RAIN GARDEN #8

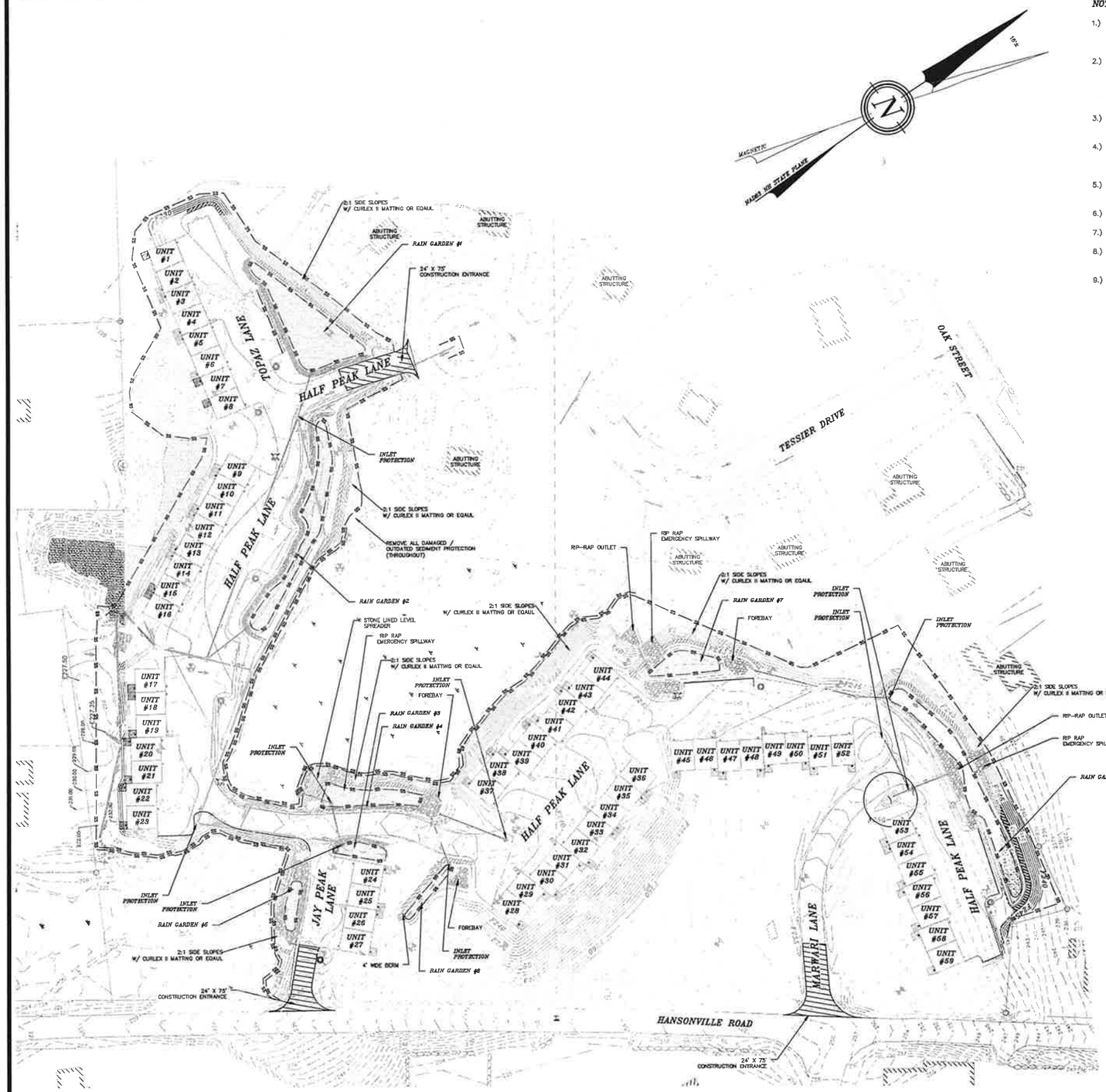
RAIN GARDEN #8 WITH INFILTRATION DETAILS
LAND DEVELOPMENT
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332–2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER

R108



NOTES:

1.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

2.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

A.) TAX MAP 251, LOT 120 & 121

3.) THE PURPOSE OF THIS PLAN IS TO DEMONSTRATE OVERVIEW PROPER EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION PRACTICES FOR LEDGEVIEW TWO

4.) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVE AND BELOW GROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ANY UTILITY CONFLICTS SHOULD BE REPORTED IMMEDIATELY TO THE DESIGN ENGINEER.

5.) THE CONTRACTOR SHALL CALL AND COORDINATE WITH DIGSAFE 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.

6.) SEE DETAILS CONCERNING SITE LAYOUT, DRAINAGE, UTILITY AND SEDIMENT AND EROSION CONTROLS.

7.) ALL DRAINAGE PIPE IS TO BE HDPE N-12. INDIVIDUAL PIPE SIZES ARE SPECIFIED ON GRADING AND DETAIL PLAN SHEETS.

8.) ALL ELEVATIONS TO BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE DESIGN ENGINEER IS TO BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY. TEMPORARY BENCHMARKS (T.B.M.) ARE TO BE PROVIDED BY THE DESIGN ENGINEER.

9.) UPON FINAL COMPLETION AND 85% STABILIZATION, THE DRAINAGE SYSTEM IS TO BE CLEANED OF ALL DEBRIS, SEDIMENT CONTROL PRACTICES REMOVED AND DISPOSED OF PROPERLY, AND ANNUAL MAINTENANCE PREFORMED ON ALL DRAINAGE PRACTICES.

SOILS LEGEND:

36B	ELDRIDGE	FINE SAND LOAM	K= 0.24
36C	ELDRIDGE	FINE SANDY LOAM	K= 0.24
36D	ELDRIDGE	FINE SANDY LOAM	K= 0.24
42A	CANTON	FINE SANDY LOAM	K= 0.28
86A	HOLLIS	FINE SANDY LOAM	K= 0.32
115A	SCARBORO	MUCK	K= 0.17
135B	CHATFIELD	VARIANT-NEWFIELDS COMPLEX	K= 0.20
135C	CHATFIELD	VARIANT-NEWFIELDS COMPLEX	K= 0.20
135D	CHATFIELD	VARIANT-NEWFIELDS COMPLEX	K= 0.20
313A	DEERFIELD	LOAMY SAND	K= 0.17
313B	DEERFIELD	LOAMY SAND	K= 0.17
313C	DEERFIELD	LOAMY SAND	K= 0.17
314B	PIPESTONE	FINE SANDY LOAM	K= 0.17
314C	PIPESTONE	FINE SANDY LOAM	K= 0.17
444A	NEWFIELDS	FINE SANDY LOAM	K= 0.28
444B	NEWFIELDS	FINE SANDY LOAM	K= 0.28
444C	NEWFIELDS	FINE SANDY LOAM	K= 0.28
500A	UNDORTHENTS	LOAMY	K= N/A
500B	UNDORTHENTS	LOAMY	K= N/A
500C	UNDORTHENTS	LOAMY	K= N/A
500D	UNDORTHENTS	LOAMY	K= N/A
500E	UNDORTHENTS	LOAMY	K= N/A
500F	UNDORTHENTS	LOAMY	K= N/A
941B	NEWFIELDS	VARIANT	K= 0.28
941C	NEWFIELDS	VARIANT	K= 0.28

SOILS & DEWATERING:

SEE SITE SPECIFIC SOILS MAP (SSSM)
SEE WEBSOIL USDA-NRCS
ERODIBILITY FACTOR - K, CPESC MANUAL, ENVIROCERT INTERNATIONAL INC. & ROCKINGHAM COUNTTY SOIL SURVEY, ROCKWEB SOIL ATTRIBUTES

THE SOIL ERODIBILITY FACTOR (K) OF THE SOILS VARY FROM RELATIVELY LOW (K=0.17.) TO RELATIVELY HIGH (K=.43) CONTRACTOR TO BE AWARE OF THE SOIL PROFILES AND ENSURE THAT PROPER EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ARE TAKEN AT ALL TIMES. ANY DEWATERING REQUIREMENTS IN NEW HAMPSHIRE REQUIRE SPECIAL PROVISIONS IN ACCORDANCE WITH THE "CLARIFICATION OF SECTION 9.1.2 (STATE OF NEW HAMPSHIRE CONDITIONS) AND OTHER NH SPECIFIC INFORMATION FOR THE U.S. EPA 2012 NPDES CONSTRUCTION GENERAL PERMIT (CGP)" DATED MAY 3, 2012 INCLUDED IN THE SWPPP.

COVER MANAGEMENT DURING CONSTRUCTION FOR EXPOSED SOIL WILL INCLUDE HAY / STRAW APPLIED AT A RATE OF 2.0 TONS PER ACRE, TEMPORARY SEEDING OF ANNUAL RYE GRASS, AND PERMANENT SEEDING AT THE EARLIES OPPORTUNITY. SEE ADDITIONAL REQUIREMENT FOR STABILIZATION ON THE EROSION AND SEDIMENT CONTROL DETAIL SHEETS, E-101 AND E-102.

THE CONSTRUCTION SCHEDULE WILL BE MANAGED SO THAT ALL STORMWATER STRUCTURES WILL BE BUILT AND STABILIZED PRIOR TO RECEIVING SURFACE WATER RUNOFF. CONTRACTOR TO BE RESPONSIBLE FOR ALL DIVERSIONS DURING CONSTRUCTION AND FOR INTERIM SEDIMENT AND EROSION CONTROL MEASURES.

LEGEND:

IRON PIPE (FND)
IRON BOUND (FND)
REBAR (FND)
UTILITY POLE
GUY WIRE
WELL
BENCHMARK
CONIFEROUS TREE
DECIDUOUS TREE
SF — SILT FENCE
SS — FILTREXX SILTSOXX
SS — TREE LINE
GsB — NRCS SOIL DELINEATION SOIL TYPE

GRAPHIC SCALE
80 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

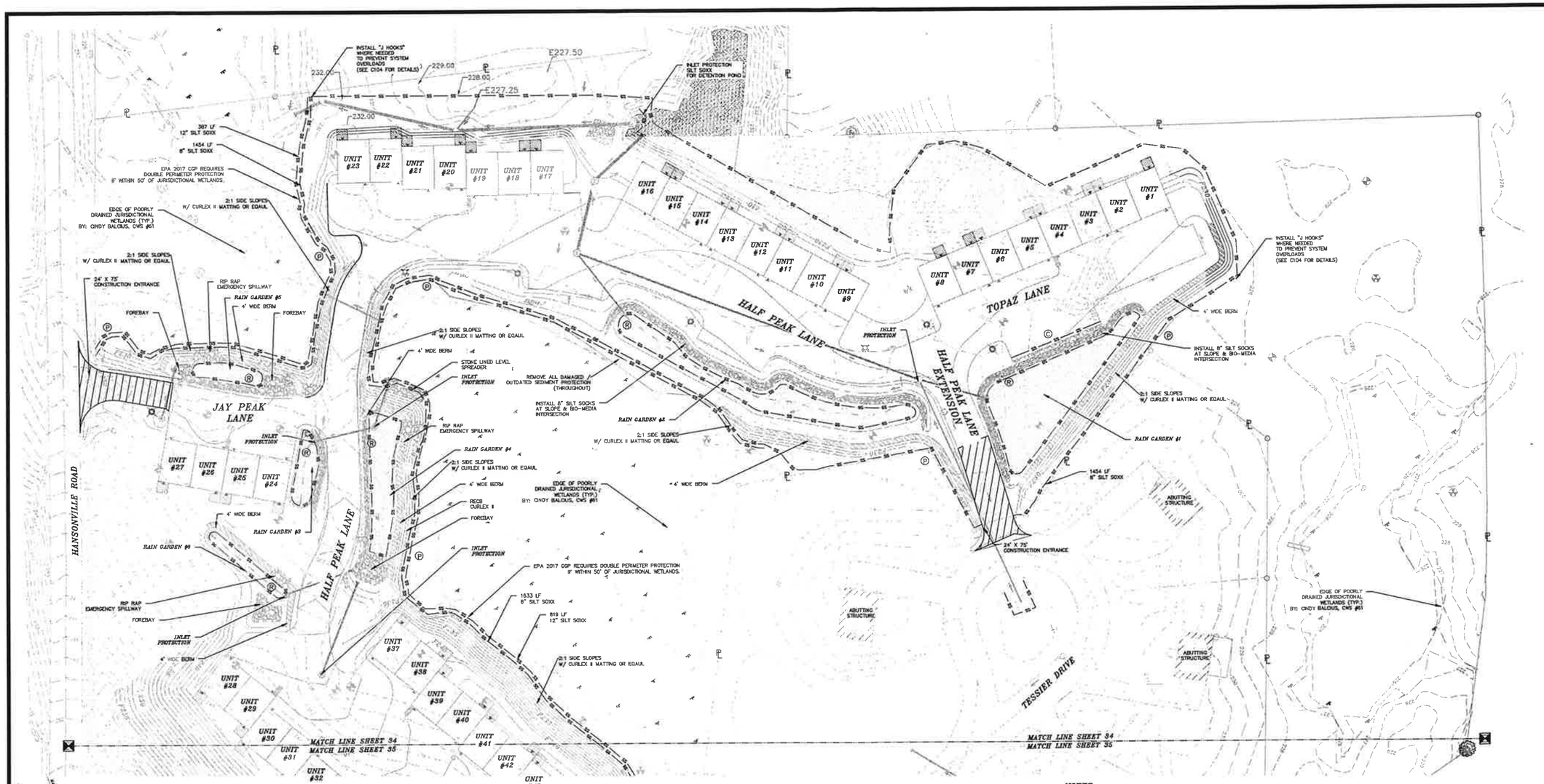
REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	02-02-2018	AOT REVISIONS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

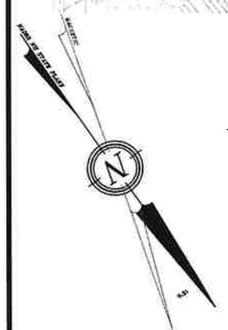
OVERVIEW EROSION AND SEDIMENT CONTROL PLAN
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 60 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14743
LICENSED
PROFESSIONAL ENGINEER





LEGEND:

- SEDIMENT PROTECTION
  - (R) RAIN GARDEN
  - (P) PERIMETER
  - (C) CONSTRUCTION
- IRON PIPE (FND)
- IRON BOUND (FND)
- REBAR (FND)
- UTILITY POLE
- GUY WIRE
- WELL
- BENCHMARK
- CONIFEROUS TREE
- DECIDUOUS TREE
- SILT FENCE
- FILTREXX SILTSOXX
- TREE LINE
- NRCS SOIL DELINEATION SOIL TYPE

SOILS LEGEND:

38B	ELDRIDGE	FINE SAND LOAM	K= 0.24
38C	ELDRIDGE	FINE SANDY LOAM	K= 0.24
38D	ELDRIDGE	FINE SANDY LOAM	K= 0.24
42A	CANTON	FINE SANDY LOAM	K= 0.28
86A	HOLLIS	FINE SANDY LOAM	K= 0.32
115A	SCARBORO	MUCK	K= 0.17
136B	CHATFIELD	VARIANT-NEWFIELDS COMPLEX	K= 0.20
136C	CHATFIELD	VARIANT-NEWFIELDS COMPLEX	K= 0.20
136D	CHATFIELD	VARIANT-NEWFIELDS COMPLEX	K= 0.20
313A	DEERFIELD	LOAMY SAND	K= 0.17
313B	DEERFIELD	LOAMY SAND	K= 0.17
313C	DEERFIELD	LOAMY SAND	K= 0.17
314B	PIPESTONE	FINE SANDY LOAM	K= 0.17
314C	PIPESTONE	FINE SANDY LOAM	K= 0.17
444A	NEWFIELDS	FINE SANDY LOAM	K= 0.28
444B	NEWFIELDS	FINE SANDY LOAM	K= 0.28
444C	NEWFIELDS	FINE SANDY LOAM	K= 0.28
500A	UNDORTHENTS	LOAMY	K= N/A
500B	UNDORTHENTS	LOAMY	K= N/A
500C	UNDORTHENTS	LOAMY	K= N/A
500D	UNDORTHENTS	LOAMY	K= N/A
500E	UNDORTHENTS	LOAMY	K= N/A
500F	UNDORTHENTS	LOAMY	K= N/A
941B	NEWFIELDS	VARIANT	K= 0.28
941C	NEWFIELDS	VARIANT	K= 0.28

SOILS & DEWATERING:

SEE SITE SPECIFIC SOILS MAP (SSSM)
SEE WEBSOIL USDA-NRCS
ERODIBILITY FACTOR -- K, CPESC MANUAL, ENVIROCERT INTERNATIONAL INC. &
STRAFFORD COUNTY SOIL SURVEY, ROCKWEB SOIL ATTRIBUTES

THE SOIL ERODIBILITY FACTOR (K) OF THE SOILS VARY FROM RELATIVELY LOW (K=0.17,) TO RELATIVELY HIGH (K=.43) CONTRACTOR TO BE AWARE OF THE SOIL PROFILES AND ENSURE THAT PROPER EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ARE TAKEN AT ALL TIMES. ANY DEWATERING REQUIREMENTS IN NEW HAMPSHIRE REQUIRE SPECIAL PROVISIONS IN ACCORDANCE WITH THE "CLARIFICATION OF SECTION 9.1.2 (STATE OF NEW HAMPSHIRE CONDITIONS) AND OTHER NH SPECIFIC INFORMATION FOR THE U.S. EPA 2012 NPDES CONSTRUCTION GENERAL PERMIT (CGP)" DATED MAY 3, 2012 INCLUDED IN THE SWPPP.

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NOTES:

1.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

2.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

A.) TAX MAP 251, LOT 120 & 121

3.) THE PURPOSE OF THIS PLAN IS TO DEMONSTRATE PROPER EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION PRACTICES FOR LEDGEMEW TWO

4.) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVE AND BELOW GROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ANY UTILITY CONFLICTS SHOULD BE REPORTED IMMEDIATELY TO THE DESIGN ENGINEER.

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7.) ALL DRAINAGE PIPE IS TO BE HDPE N-12. INDIVIDUAL PIPE SIZES ARE SPECIFIED ON GRADING AND DETAIL PLAN SHEETS.

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GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

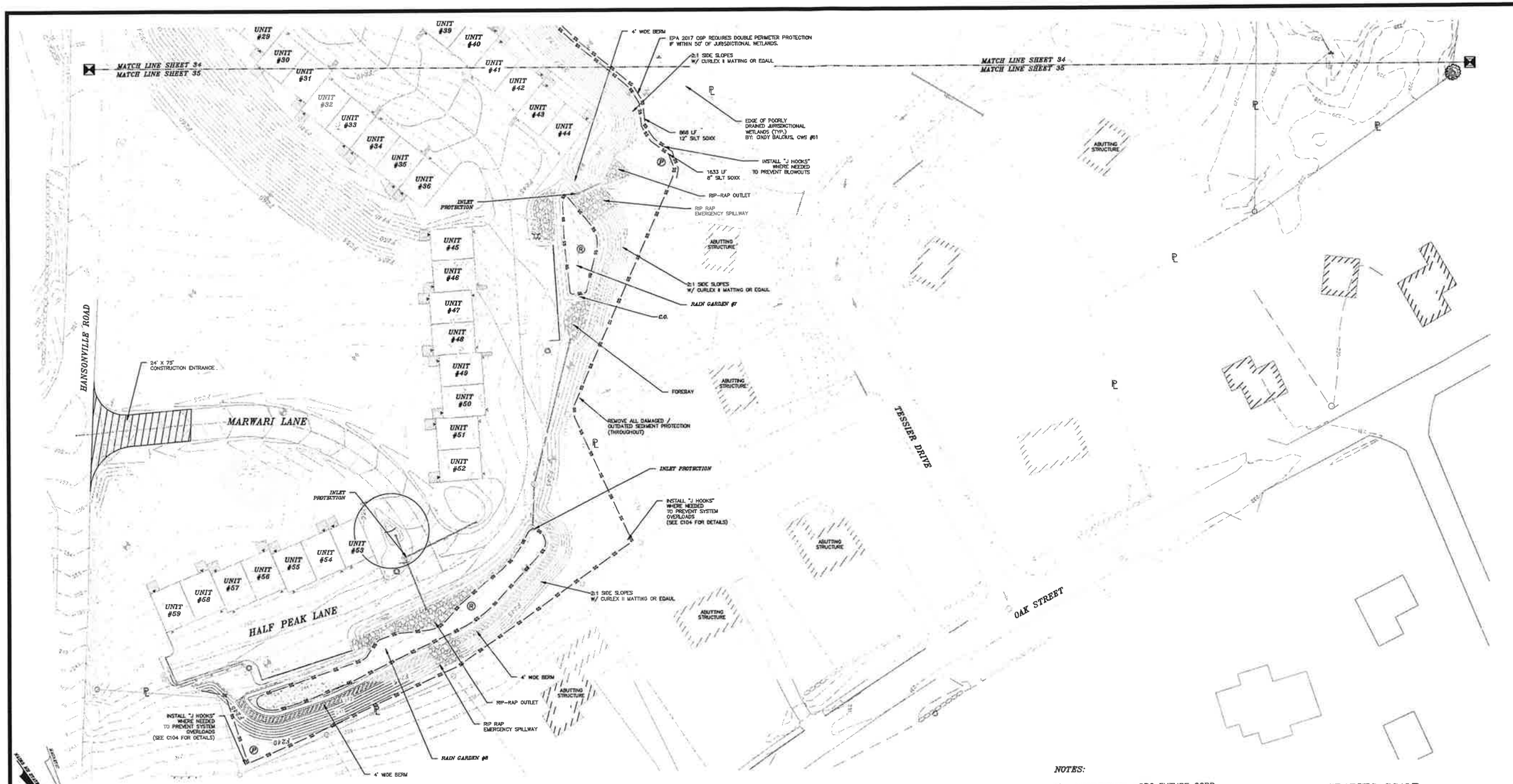
REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AGT COMMENT
#5b	05-24-2018	NHDES WHED RESPONSE
#4	05-02-2018	SEWER & WATER REVISIONS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

35 SOUTH EROSION AND SEDIMENT CONTROL PLAN
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 40 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER



LEGEND:

- (R) RAIN GARDEN BIO-MEDIA PROTECTION
- (P) PERIMETER CONTROL
- (C) RESIDENTIAL/ROADWAY CONSTRUCTION
- IRON PIPE (FND)
- IRON BOUND (FND)
- REBAR (FND)
- UTILITY POLE
- GUY WIRE
- WELL
- BENCHMARK
- CONIFEROUS TREE
- DECIDUOUS TREE
- SF — SILT FENCE
- SS — FILTREXX SILTSOXX / TREE LINE
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- GsB — SOIL TYPE

SOILS LEGEND:

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38C	ELDRIDGE	FINE SANDY LOAM	K= 0.24
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116A	SCARBORO	MUCK	K= 0.17
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136C	CHATFIELD	VARIANT-NEWFIELDS COMPLEX	K= 0.20
136D	CHATFIELD	VARIANT-NEWFIELDS COMPLEX	K= 0.20
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313B	DEERFIELD	LOAMY SAND	K= 0.17
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500A	UNDORTHANTS	LOAMY	K= N/A
500B	UNDORTHANTS	LOAMY	K= N/A
500C	UNDORTHANTS	LOAMY	K= N/A
500D	UNDORTHANTS	LOAMY	K= N/A
500E	UNDORTHANTS	LOAMY	K= N/A
500F	UNDORTHANTS	LOAMY	K= N/A
941B	NEWFIELDS	VARIANT	K= 0.28
941C	NEWFIELDS	VARIANT	K= 0.28

SOILS & DEWATERING:

SEE SITE SPECIFIC SOILS MAP (SSSM)
SEE WEBSOIL USDA-NRCS
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NOTES:

1.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

2.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

A.) TAX MAP 251, LOT 120 & 121

3.) THE PURPOSE OF THIS PLAN IS TO DEMONSTRATE PROPER EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION PRACTICES FOR LEDGEWEW TWO

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GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-02-2018	AoT REVISIONS
#3	04-16-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

35 NORTH EROSION AND SEDIMENT CONTROL PLAN
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 40 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14744
LICENSED
PROFESSIONAL ENGINEER

NOTES:

1.) OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857-1909

APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
HAMPTON, NH 03862

2.) A.) TAX MAP 251, LOT 120

B.) TAX MAP 251, LOT 121

3.) LOT AREA:

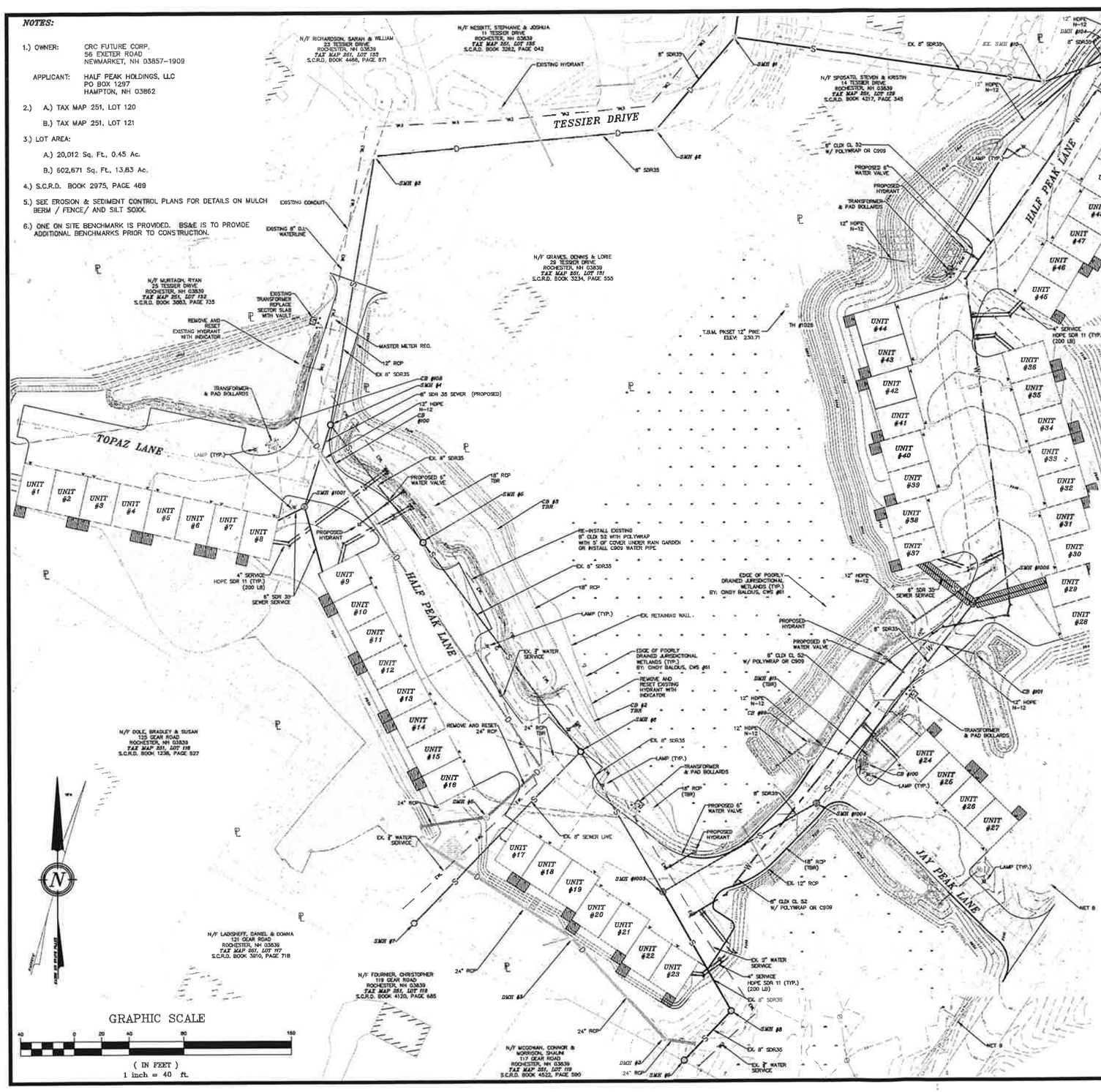
A.) 20,012 Sq. Ft., 0.45 Ac.

B.) 602,671 Sq. Ft., 13.83 Ac.

4.) S.C.R.D. BOOK 2975, PAGE 489

5.) SEE EROSION & SEDIMENT CONTROL PLANS FOR DETAILS ON MULCH BERM / FENCE/ AND SILT SOXX.

6.) ONE ON SITE BENCHMARK IS PROVIDED. BS&E IS TO PROVIDE ADDITIONAL BENCHMARKS PRIOR TO CONSTRUCTION.



NOTES CONTINUED:

8.) THE PURPOSE OF THIS PLAN IS TO DEMONSTRATE THE OVERVIEW OF PRIVATE UTILITIES WITHIN THE SITE PLAN.

9.) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVE AND BELOW GROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ANY UTILITY CONFLICTS SHOULD BE REPORTED IMMEDIATELY TO THE DESIGN ENGINEER.

10.) THE CONTRACTOR SHALL CALL AND COORDINATE WITH DIGSAFE 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.

11.) PROTECTION OF SUBGRADE: THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN STABLE, DEWATERED SUBGRADES, TRENCHES, AND OTHER AREAS DURING CONSTRUCTION. SUBGRADE DISTURBANCE MAY BE INFLUENCED BY EXCAVATION METHODS, MOISTURE, PRECIPITATION, GROUNDWATER CONTROL, AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT SUBGRADE DISTURBANCE. SUCH PRECAUTIONS MAY INCLUDE DIVERTING STORMWATER RUNOFF AWAY FROM CONSTRUCTION AREAS, REDUCING TRAFFIC IN SENSITIVE AREAS, AND MAINTAINING AN EFFECTIVE DEWATERING PROGRAM. SOILS EXHIBITING HEAVING OR INSTABILITY SHALL BE OVER EXCAVATED TO MORE COMPETENT BEARING SOIL AND REPLACED WITH FREE DRAINING STRUCTURAL FILL MEETING THE ENGINEERS SPECIFIC RECOMMENDED CRITERIA.

12.) IF THE EARTHWORK IS PERFORMED DURING FREEZING WEATHER (NOT ALLOWED IN CITY R.O.W.), EXPOSED SUBGRADES ARE SUSCEPTIBLE TO FROST. NO FILL OR UTILITIES SHALL BE PLACED ON FROZEN GROUND. THIS WILL LIKELY REQUIRE REMOVAL OF A FROZEN SOIL CRUST AT THE COMMENCEMENT OF EACH DAY'S OPERATION. THE FINAL SUBGRADE ELEVATION WOULD ALSO REQUIRE AN APPROPRIATE DEGREE OF INSULATION AGAINST FREEZING.

13.) PLACEMENT OF BORROW MATERIALS SHALL BE PERFORMED IN A MANNER THAT PREVENTS LONG TERM DIFFERENTIAL SETTLEMENT. EXCESSIVELY WET MATERIALS SHALL BE STOCKPILED AND ALLOWED TO DRAIN BEFORE PLACEMENT. FROZEN MATERIAL SHALL NOT BE USED FOR CONSTRUCTION. VOIDS BETWEEN STONES AND CLUMPS OF MATERIAL SHALL BE FILLED WITH FINE MATERIALS.

14.) FINAL UTILITY LOCATIONS TO BE COORDINATED BETWEEN THE CONTRACTOR, ALL APPROPRIATE UTILITY COMPANIES AND THE ROCHESTER DPW.

15.) CONTRACTOR TO CONTACT ROCHESTER DPW A MINIMUM OF TWO WEEKS PRIOR TO ANY CONSTRUCTION TO COORDINATE ALL WORK CONCERNING INSTALLATION OF ANY PROPOSED WATER LINE IMPROVEMENTS.

16.) ALL WATER MAIN AND SERVICE INSTALLATIONS SHALL CONFORM TO CITY OF ROCHESTER STANDARDS. ALL HIGHWAY CONSTRUCTION WILL MEET THE CITY OF ROCHESTER STANDARDS AS MODIFIED BY WAIVER REQUEST AT THE PLANNING BOARD.

17.) CONTRACTOR SHALL COORDINATE ALL ELECTRICAL INSTALLATIONS WITH EVERSOURCE AT (800) 662-7764. ALL ELECTRIC CONDUIT INSTALLATION SHALL BE INSPECTED BY EVERSOURCE PRIOR TO BACKFILL. A 48-HOUR MINIMUM NOTICE IS REQUIRED.

18.) ALL SEWER INSTALLATIONS SHALL CONFORM TO THE REQUIREMENTS OF NHDES & ROCHESTER DPW SEWER DIVISION STANDARDS. ALL PVC PIPE IS TO CONFORM WITH ENV-WQ 704.05(c)-(e). SDR-21 PVC FORCE MAIN PIPE MATERIAL IS REQUIRED IN FOUR LOCATIONS AS SHOWN. SDR-21 PVC FORCEMAIN PIPE WILL CONFORM TO ENV-WQ 704.08.

19.) CONTRACTOR SHALL COORDINATE ALL TELECOMMUNICATIONS INSTALLATIONS WITH FAIRPOINT COMMUNICATIONS AT (603) 427-5525.

20.) CONTRACTOR SHALL COORDINATE ALL CABLE INSTALLATIONS WITH METROCAST.

21.) ALL SEWER MAN HOLE RIMS & COVERS ARE TO BE PAMREX.

22.) ALL WATER SERVICES ARE TO BE WITNESSED WITH A 2"X4" PAINTED BLUE. ALL SEWER SERVICES ARE TO BE WITNESSED WITH A 2"X4" PAINTED YELLOW, IS STUBBED PRIOR TO BUILDING CONSTRUCTION.

23.) THE FIRE LOW & DOMESTIC FLOW REQUIREMENTS ARE UNKNOWN. IF IT IS DETERMINED THAT THE 4" LINES TO THE STRUCTURE ARE NOT NEEDED BY A FIRE SUPRESSION SPECIALIST THEY MAY BE REDUCED. COORDINATE REVISION WITH A DESIGN ENGINEER AND THE DEPARTMENT OF PUBLIC WORKS.

24.) COORDINATE WATER LINE RE-CONSTRUCTION WITH ABUTTING LAND OWNERS.

25.) FIRE HYDRANTS ARE TO BE SPACED NO FURTHER THAN 500' APART ALONG THE TRAVELED WAY AND MUST BE WITHIN 100' OF THE CONNECTION TO THE BUILDING.

26.) A NFPA 13R FIRE SUPPRESSION SYSTEM WILL BE REQUIRED.

27.) SECURITY AND FIRE ALARM SYSTEMS ARE REQUIRED.

28.) SEE EXISTING CONDITIONS PLAN FOR DATUM. VERTICAL DATUS BASED ON NAVD88 ELEVATIONS. HORIZONTAL DATUS BASED ON NAD83 STATE PLANE COORDINATES GATHERED USING TOPCON HIPER SR SURVEY GRADE GPS.

29.) FINAL UGE DESIGN, TRANSFORMER LOCATION AND SIZING TO BE COORDINATED WITH EVERSOURCE PRIOR TO THE START OF CONSTRUCTION.

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
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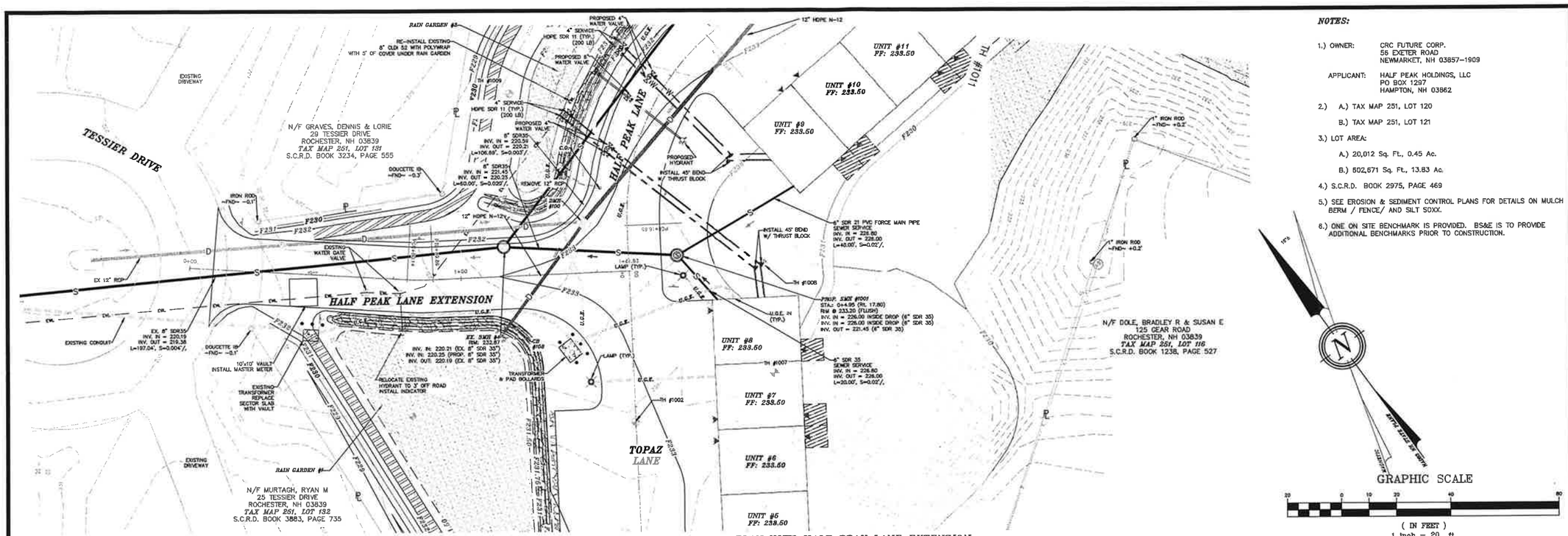
#4	05-02-2018	ADD REVISIONS
#3	04-25-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

OVERVIEW UTILITY PLAN
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 40 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14293
LICENSED
PROFESSIONAL ENGINEER



PLAN VIEW HALF PEAK LANE EXTENSION

NOTES:

1.) OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857-1909

APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
HAMPTON, NH 03862

2.) A.) TAX MAP 251, LOT 120

B.) TAX MAP 251, LOT 121

3.) LOT AREA:

A.) 20,012 Sq. Ft., 0.45 Ac.

B.) 502,671 Sq. Ft., 13.83 Ac.

4.) S.C.R.D. BOOK 2975, PAGE 469

5.) SEE EROSION & SEDIMENT CONTROL PLANS FOR DETAILS ON MULCH BERM / FENCE/ AND SILT SOXX.

6.) ONE ON SITE BENCHMARK IS PROVIDED. BS&E IS TO PROVIDE ADDITIONAL BENCHMARKS PRIOR TO CONSTRUCTION.

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
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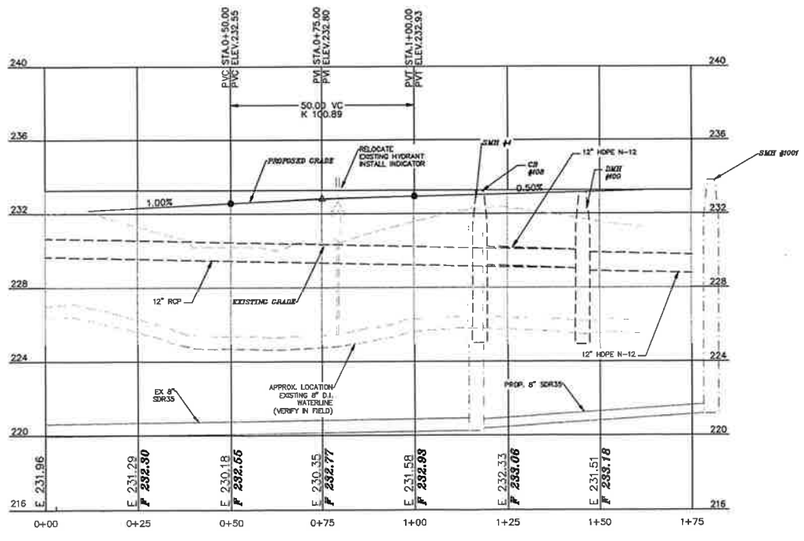
#3	04-11-2018	GENERAL PLAN SET
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

PROFILE VIEW HALF PEAK LANE EXTENSION



GRAPHIC SCALE

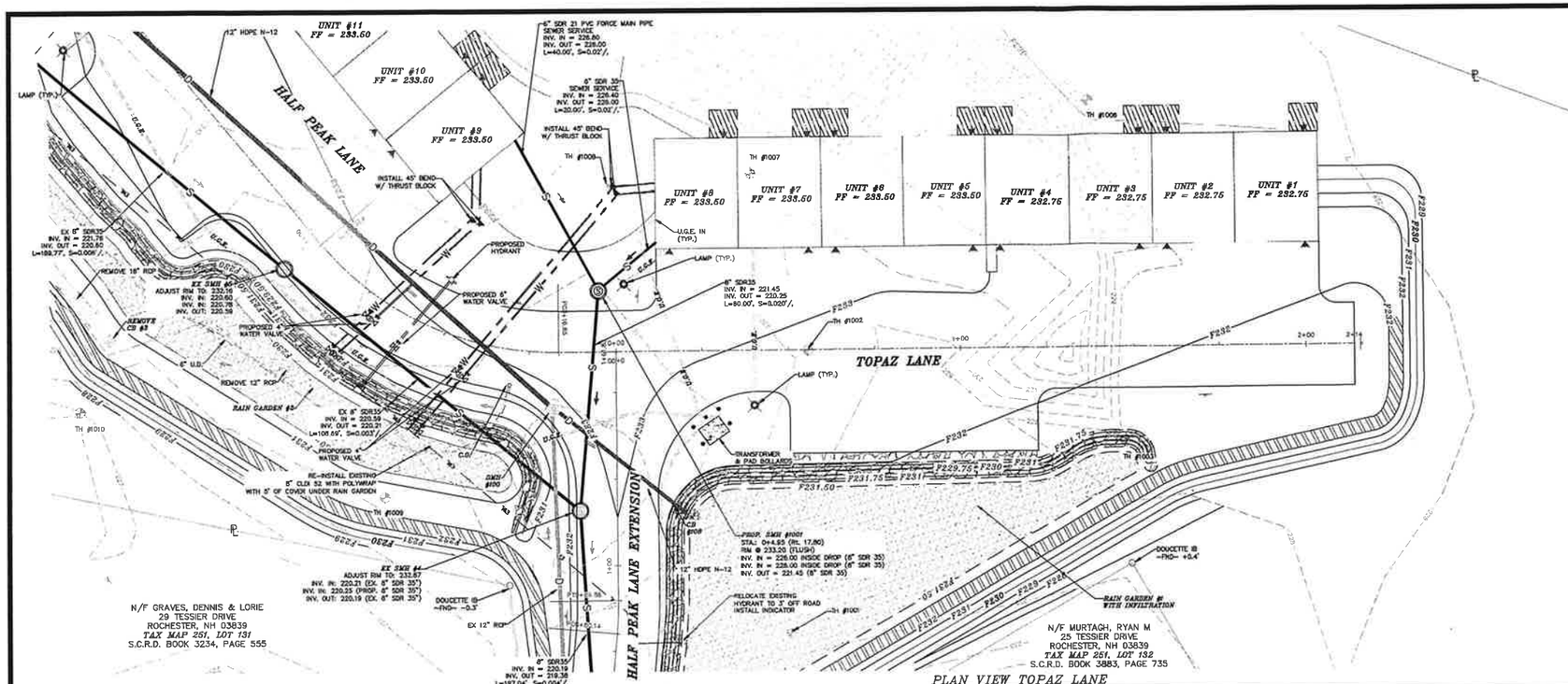
(IN FEET)
1 inch = 20 ft.
VERTICAL SCALE: 1" = 4'

UTILITY PLAN HALF PEAK LANE EXTENSION 0+00 TO END
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

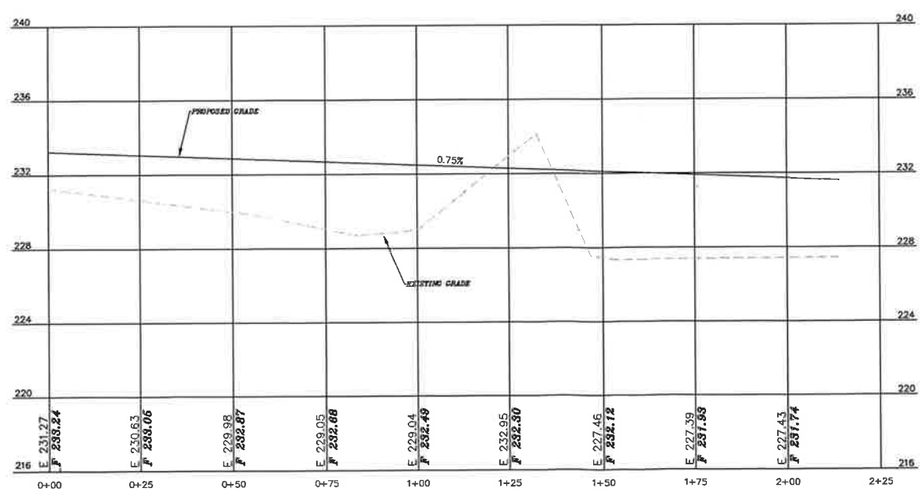
SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14245
LICENSED
PROFESSIONAL ENGINEER



PLAN VIEW TOPAZ LANE

PROFILE VIEW TOPAZ LANE



NOTES:

1.) OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857-1909

APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
HAMPTON, NH 03862

2.) A.) TAX MAP 251, LOT 120

B.) TAX MAP 251, LOT 121

3.) LOT AREA:

A.) 20,012 Sq. Ft., 0.45 Ac.

B.) 602,671 Sq. Ft., 13.83 Ac.

4.) S.C.R.D. BOOK 2975, PAGE 489

5.) SEE EROSION & SEDIMENT CONTROL PLANS FOR DETAILS ON MULCH BERM / FENCE/ AND SILT SOXX.

6.) ONE ON SITE BENCHMARK IS PROVIDED. BS&E IS TO PROVIDE ADDITIONAL BENCHMARKS PRIOR TO CONSTRUCTION.

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

VERTICAL SCALE: 1" = 4'

REVISION	DATE	DESCRIPTION
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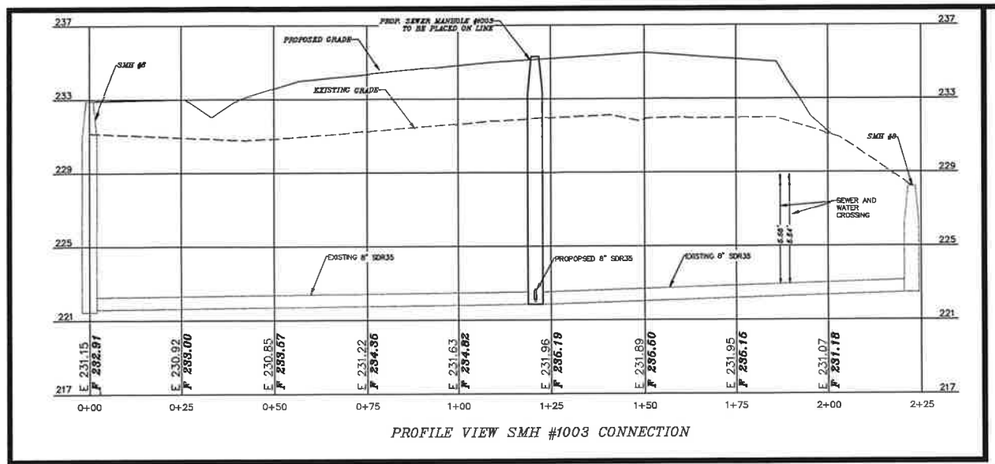
#4	05-02-2018	AOT REVISIONS
#3	04-19-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

UTILITY PLAN TOPAZ LANE 0+00 TO 2+14
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

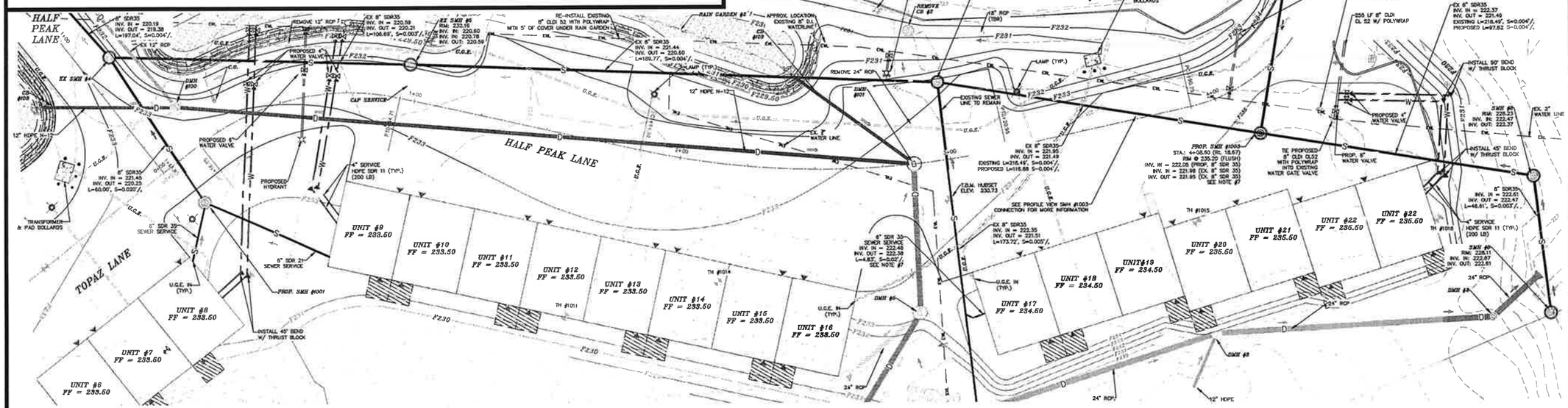
BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14245
LICENSED
PROFESSIONAL ENGINEER

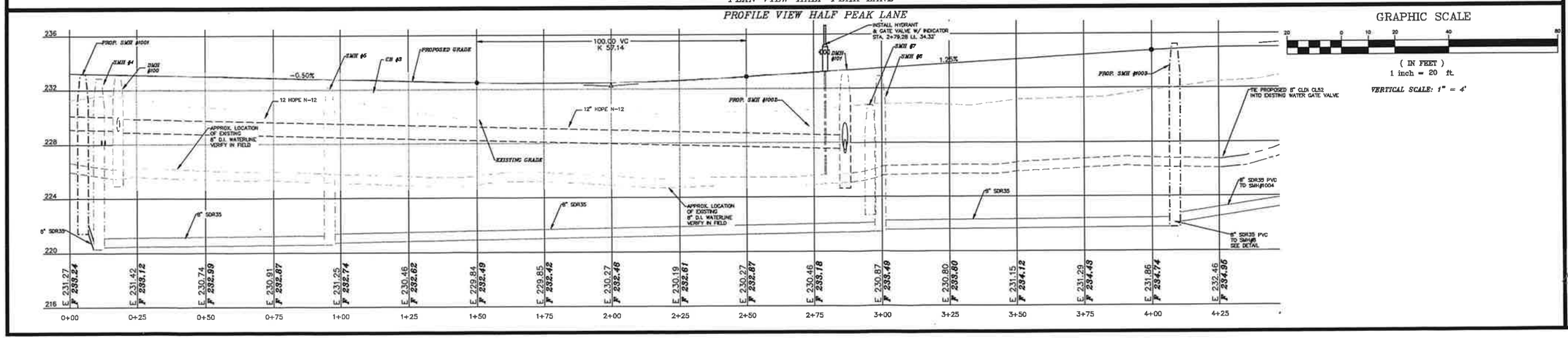


PROFILE VIEW SMH #1003 CONNECTION



PLAN VIEW HALF PEAK LANE

PROFILE VIEW HALF PEAK LANE



NOTES:

1.) OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857–1909

APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
HAMPTON, NH 03862

2.) A.) TAX MAP 251, LOT 120

B.) TAX MAP 251, LOT 121

3.) LOT AREA:

A.) 20,012 Sq. Ft., 0.45 Ac.

B.) 602,671 Sq. Ft., 13.83 Ac.

4.) S.C.R.D. BOOK 2975, PAGE 469

5.) SEE EROSION & SEDIMENT CONTROL PLANS FOR DETAILS ON MULCH BERM / FENCE/ AND SILT SOXX.

6.) ONE ON SITE BENCHMARK IS PROVIDED. BS&E IS TO PROVIDE ADDITIONAL BENCHMARKS PRIOR TO CONSTRUCTION.

7.) IT IS UP TO THE CONTRACTOR TO DEVELOP THE MEANS AND METHODS TO PROVIDE CONTINUOUS SERVICE TO TAX MAP 251, LOT 118, AND LOT 119 DURING THE SMH INSTALLATION AND SERVICE CONNECTION.

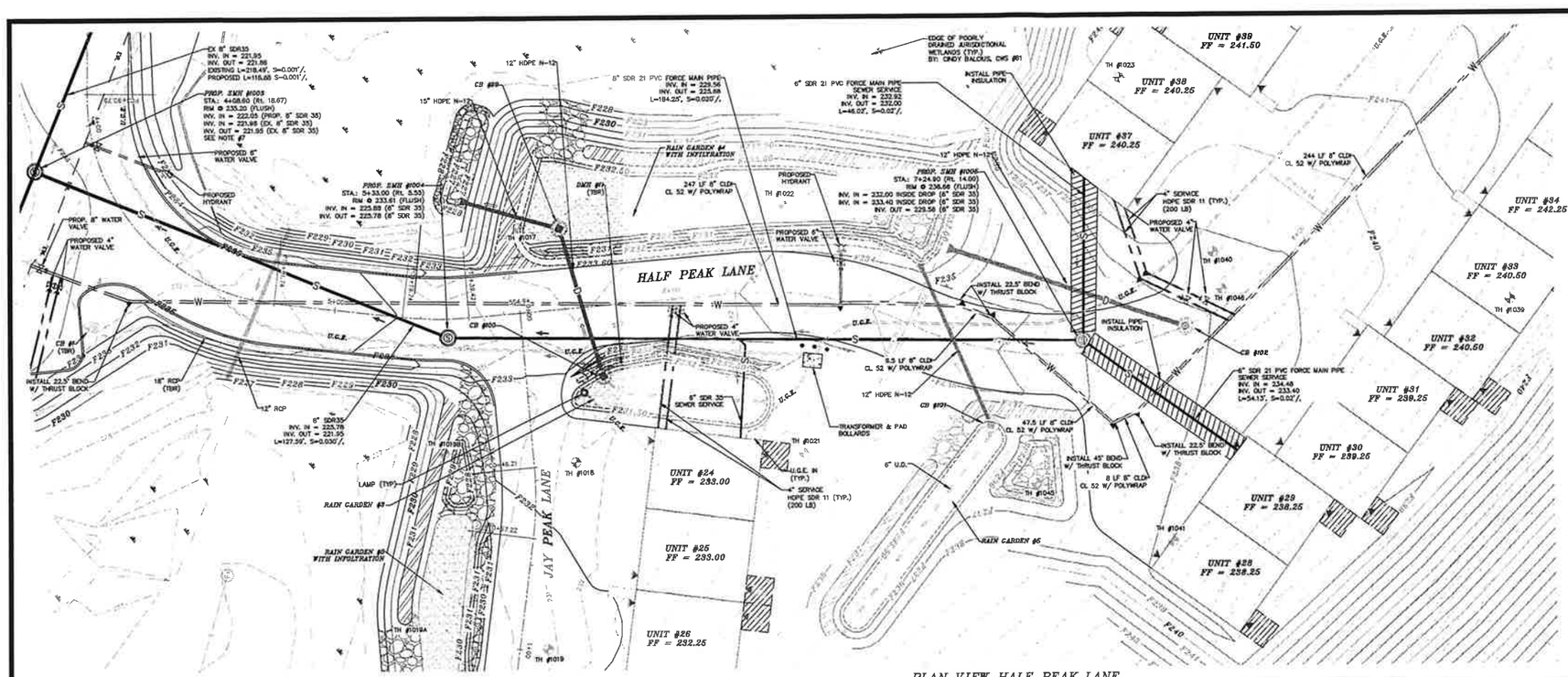
REVISION	DATE	DESCRIPTION
#7	07–30–2018	SUBMITTED FOR CONSTRUCTION
#6a	06–18–2018	REVISED PER AoT COMMENT
#5b	05–24–2018	NHDES WWED RESPONSE
#4	05–02–2018	ADD REVISIONS
#3	04–12–2018	SEWER & WATER REVISIONS
#2	04–09–2018	GENERAL PLAN SET
#1	03–30–2018	GENERAL PLAN SET

UTILITY PLAN HALF PEAK LANE 0+00 TO 4+25
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

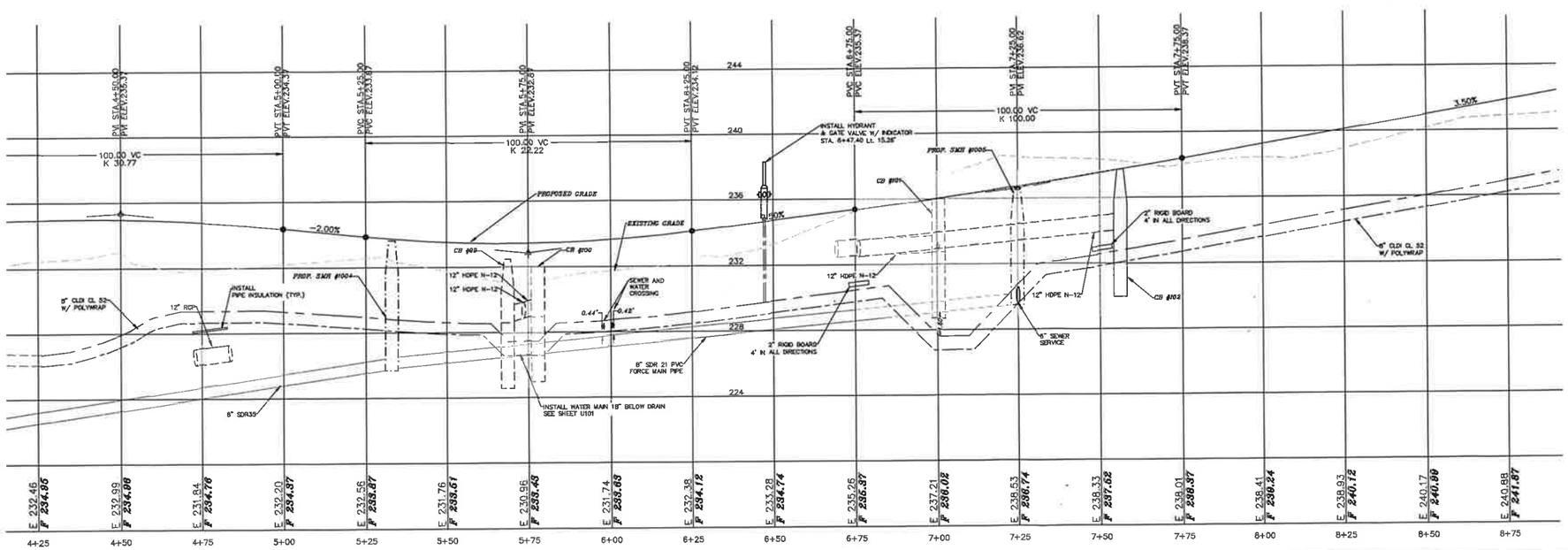
BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332–2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14245
LICENSED
PROFESSIONAL ENGINEER



PLAN VIEW HALF PEAK LANE



PROFILE VIEW HALF PEAK LANE

NOTES:

1.) OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857-1909

APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
HAMPTON, NH 03862

2.) A.) TAX MAP 251, LOT 120

B.) TAX MAP 251, LOT 121

3.) LOT AREA:

A.) 20,012 Sq. Ft., 0.45 Ac.

B.) 602,671 Sq. Ft., 13.83 Ac.

4.) S.C.R.D. BOOK 2975, PAGE 469

5.) SEE EROSION & SEDIMENT CONTROL PLANS FOR DETAILS ON MULCH BERM / FENCE/ AND SILT SOXX.

6.) ONE ON SITE BENCHMARK IS PROVIDED. BS&E IS TO PROVIDE ADDITIONAL BENCHMARKS PRIOR TO CONSTRUCTION.

7.) BETWEEN SMH 1004 AND SMH 1005, 8-INCH SDR 21 PVC FORCE MAIN PIPE MATERIAL IS REQUIRED AND WILL BE LAID BETWEEN THE STRUCTURES. SIX-INCH SDR 21 PVC FORCE MAIN PIPE MATERIAL IS REQUIRED FOR THE SERVICE OF BOTH BUILDING. SERVICES WILL REQUIRE INSULATION WHEN DEPTH IS LESS THAN SIX-FEET.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

VERTICAL SCALE: 1" = 4'

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER ACT COMMENT
#5b	05-29-2018	NHDES RESPONSE
#4	04-11-2018	ADDED REVISIONS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

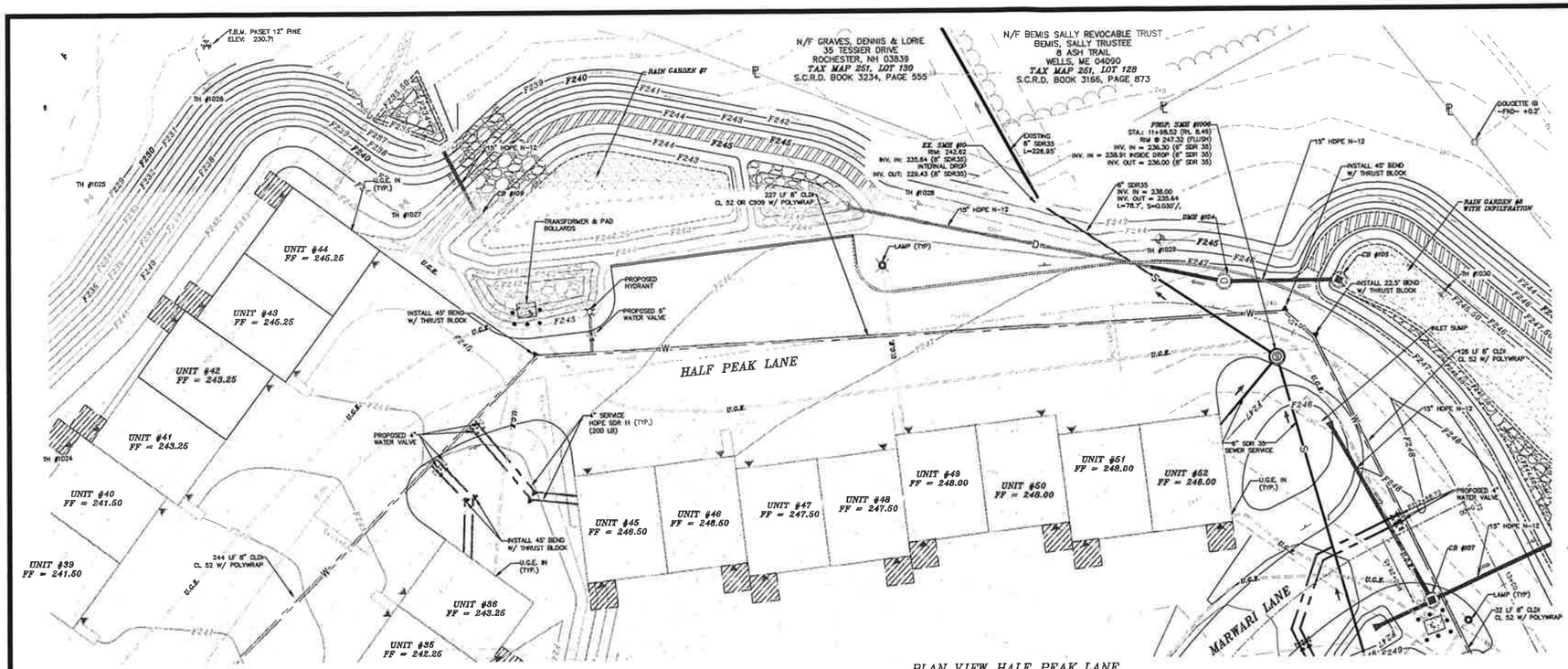
UTILITY PLAN HALF PEAK LANE 4+25 TO 8+75

LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14295
LICENSED
PROFESSIONAL ENGINEER



PLAN VIEW HALF PEAK LANE

NOTES:

1.) OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857-1909

APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
HAMPTON, NH 03862

2.) A.) TAX MAP 251, LOT 120

B.) TAX MAP 251, LOT 121

3.) LOT AREA:

A.) 20,012 Sq. Ft., 0.45 Ac.

B.) 602,671 Sq. Ft., 13.83 Ac.

4.) S.C.R.D. BOOK 2975, PAGE 469

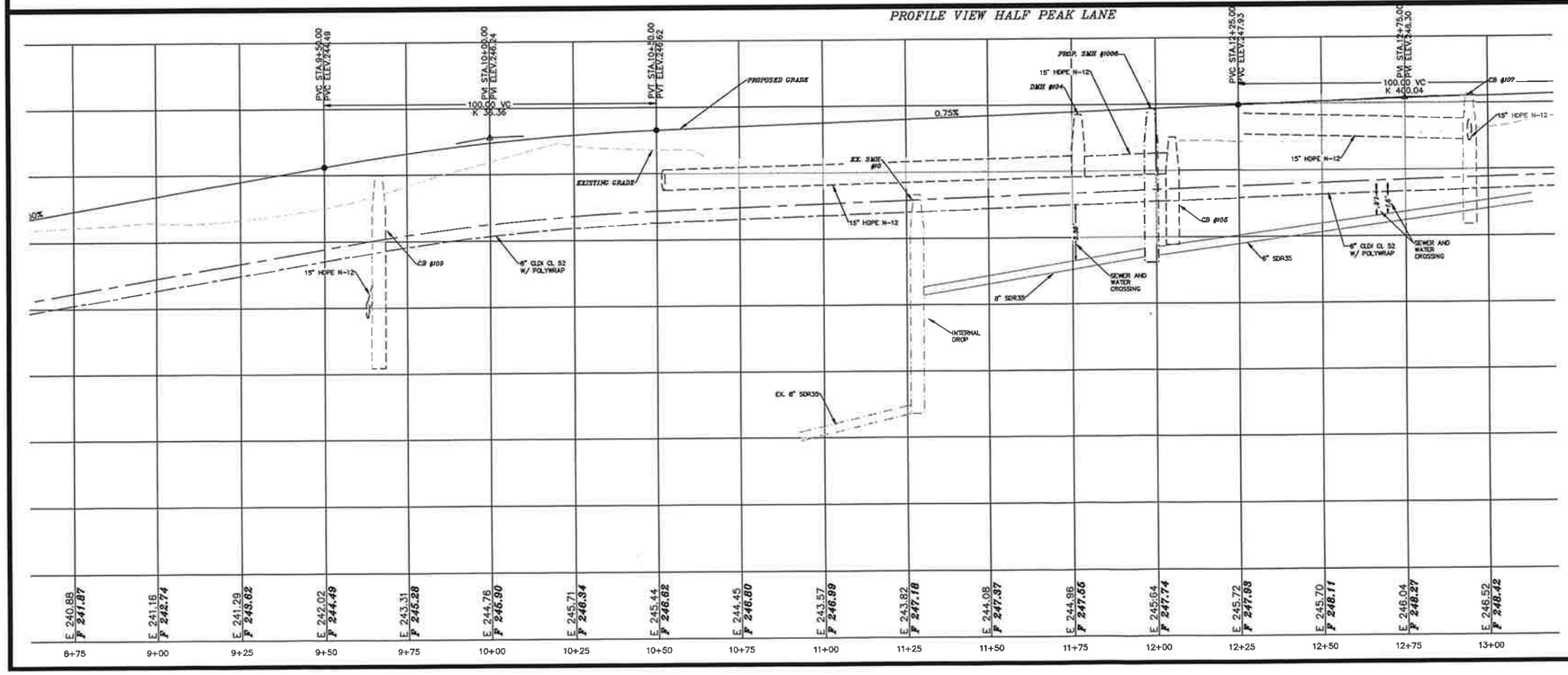
5.) SEE EROSION & SEDIMENT CONTROL PLANS FOR DETAILS ON MULCH BERM / FENCE/ AND SILT SOXX.

6.) ONE ON SITE BENCHMARK IS PROVIDED. BS&E IS TO PROVIDE ADDITIONAL BENCHMARKS PRIOR TO CONSTRUCTION.

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

PROFILE VIEW HALF PEAK LANE



GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

VERTICAL SCALE: 1" = 4'

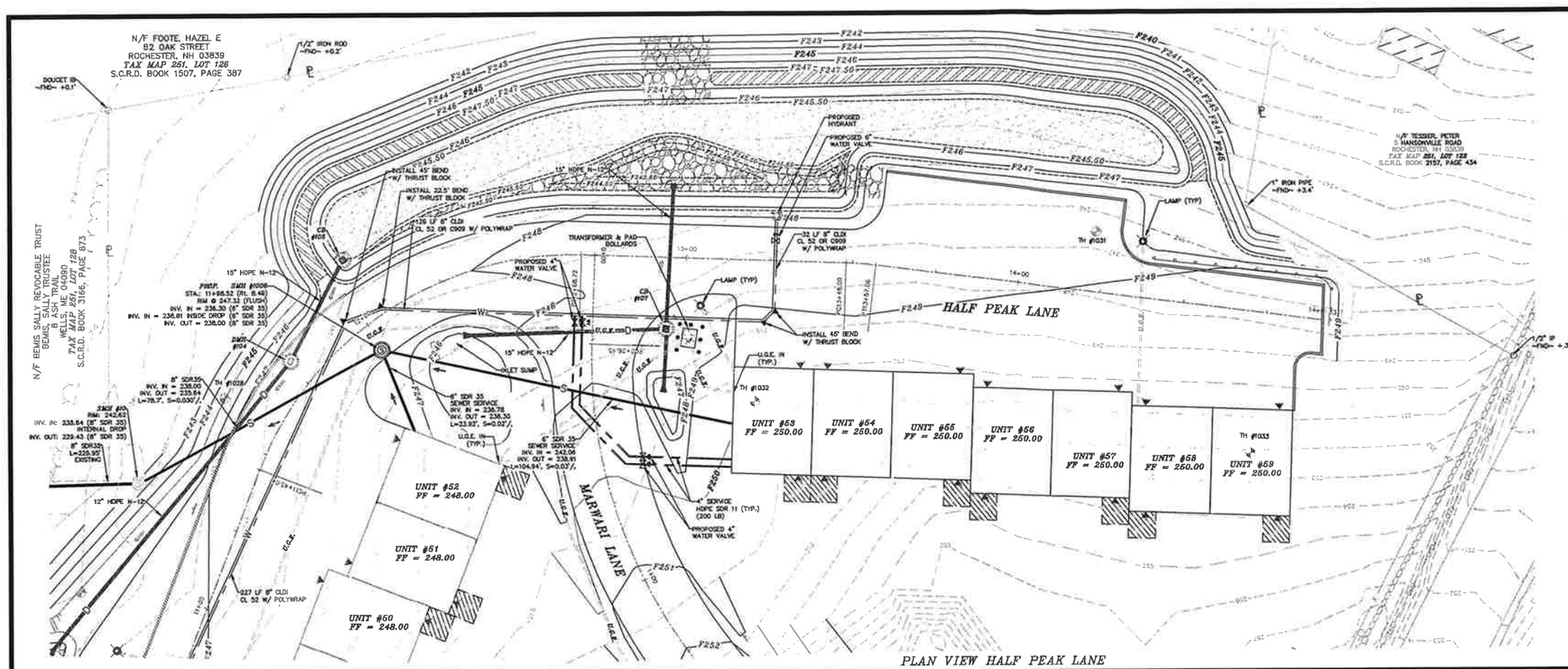
REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-02-2018	ACE REVISIONS
#3	04-16-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

UTILITY PLAN HALF PEAK LANE 8+75 TO 13+00
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

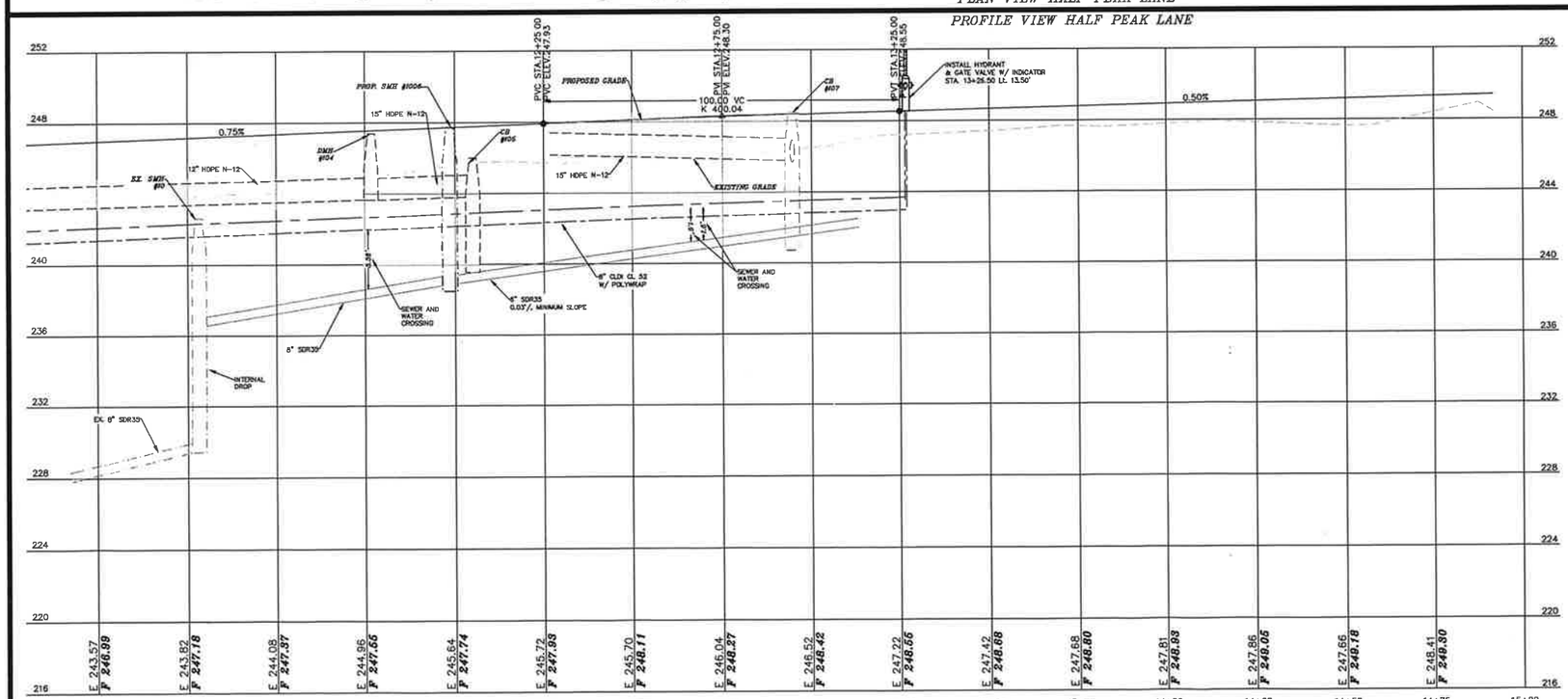
BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER



PLAN VIEW HALF PEAK LANE



PROFILE VIEW HALF PEAK LANE

NOTES:

1.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

2.) APPLICANT: HALF PEAK HOLDINGS
PO BOX 1297
HAMPTON, NH 03862

3.) TAX MAP 251, LOTS 120 & 121

4.) LOT AREA: A.) 20,012 Sq. Ft., 0.45 Ac.

B.) 602,671 Sq. Ft., 13.83 Ac.

5.) S.C.R.D. BOOK 2975, PAGE 469

6.) THE INTENT OF THIS PLAN IS TO PROVIDE AN OVERVIEW OF UTILITY LAYOUT DETAIL OF HALF PEAK LANE.

7.) ONE ON SITE BENCHMARK IS PROVIDED. BS&E IS TO PROVIDE ADDITIONAL BENCHMARKS PRIOR TO CONSTRUCTION.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

VERTICAL SCALE: 1" = 4'

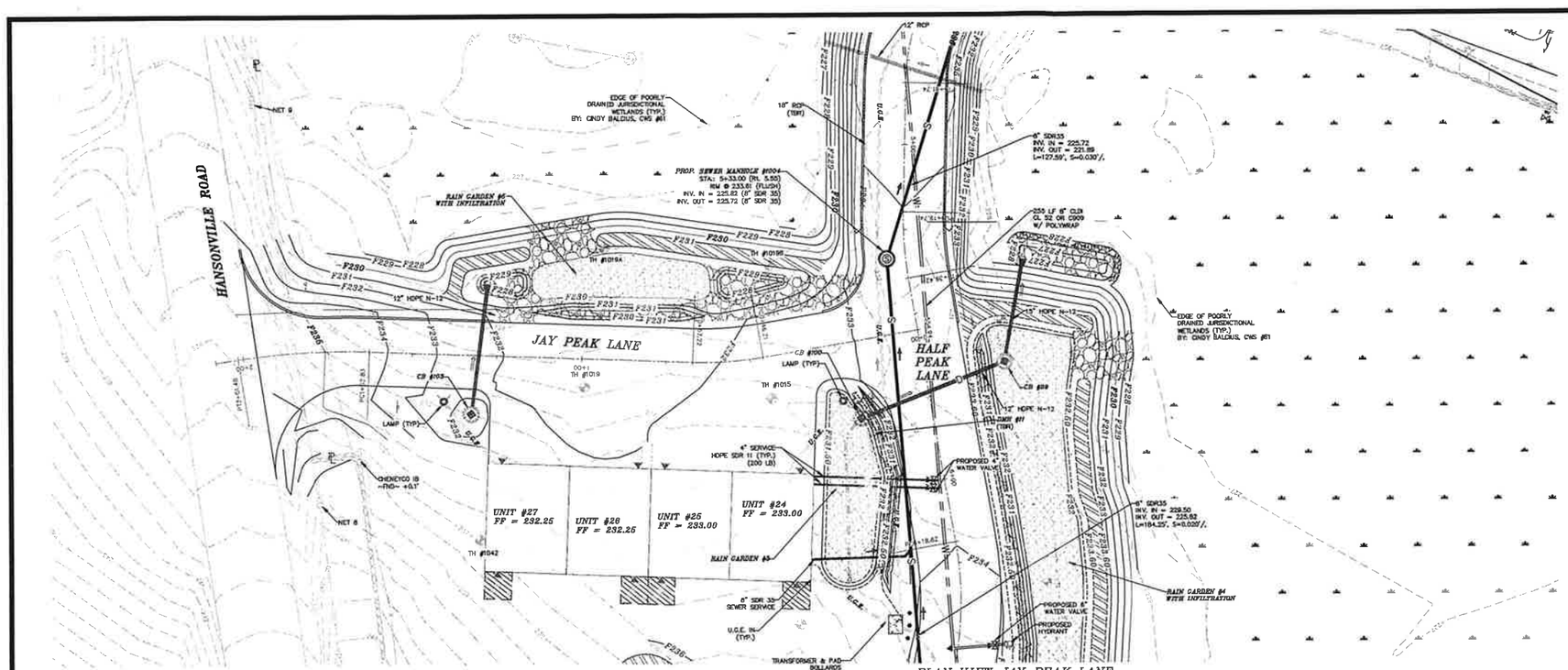
REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AOT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-11-2018	AOT REVISIONS
#3	04-17-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

UTILITY PLAN HALF PEAK LANE 13+00 TO END
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

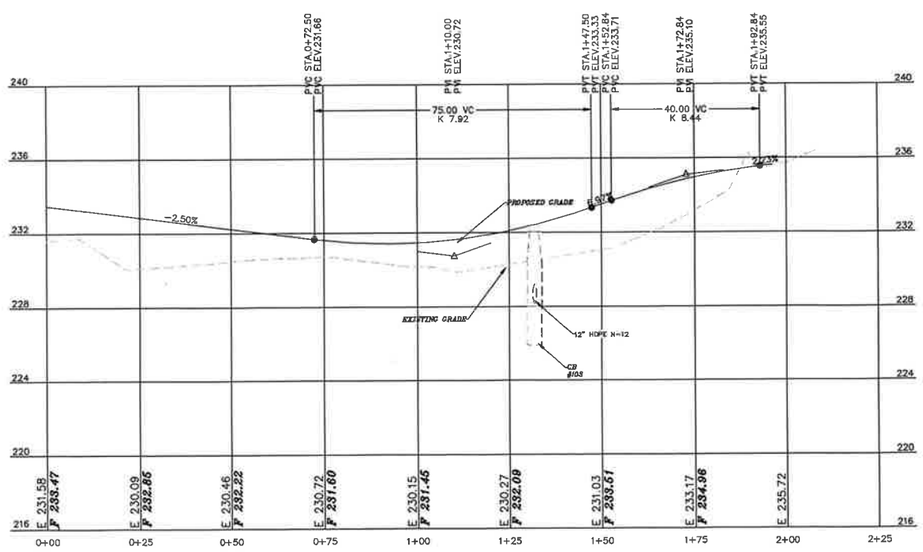
BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 11945
LICENSED
PROFESSIONAL ENGINEER



PLAN VIEW JAY PEAK LANE



PROFILE VIEW JAY PEAK LANE

NOTES:

1.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

2.) APPLICANT: HALF PEAK HOLDINGS
PO BOX 1297
HAMPTON, NH 03862

3.) TAX MAP 251, LOTS 120 & 121

4.) LOT AREA: A.) 20,012 Sq. Ft., 0.45 Ac.
B.) 602,671 Sq. Ft., 13.83 Ac.

5.) S.C.R.D. BOOK 2975, PAGE 469

6.) THE INTENT OF THIS PLAN IS TO PROVIDE AN OVERVIEW OF UTILITY LAYOUT DETAIL OF JAY PEAK LANE.

7.) ONE ON SITE BENCHMARK IS PROVIDED. BS&E IS TO PROVIDE ADDITIONAL BENCHMARKS PRIOR TO CONSTRUCTION.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

VERTICAL SCALE: 1" = 4'

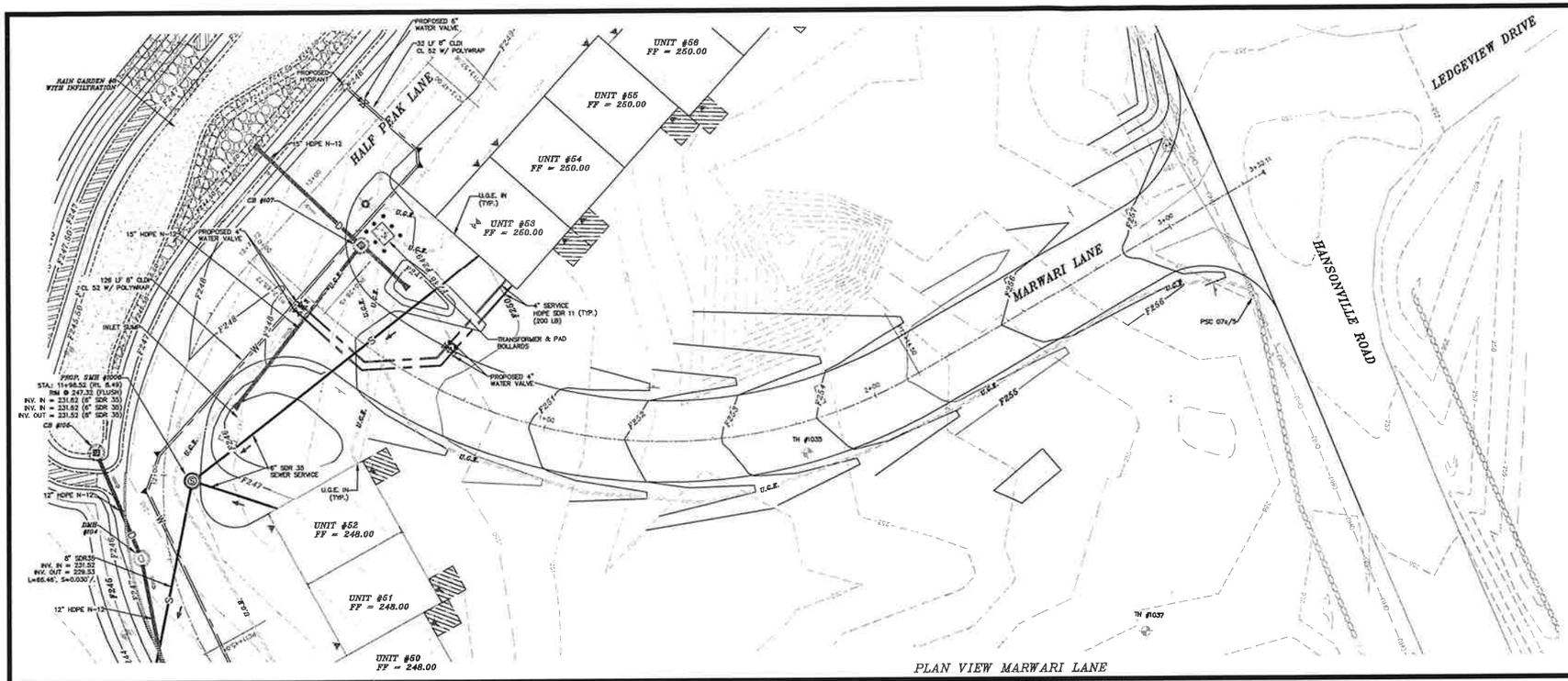
REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WMED RESPONSE
#4	05-02-2018	AoT REVISIONS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

UTILITY PLAN JAY PEAK LANE 0+00 TO END
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER



PLAN VIEW MARWARI LANE

NOTES:

1.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

2.) APPLICANT: HALF PEAK HOLDINGS
PO BOX 1297
HAMPTON, NH 03862

3.) TAX MAP 251, LOTS 120 & 121

4.) LOT AREA: A.) 20,012 Sq. Ft., 0.45 Ac.
B.) 602,671 Sq. Ft., 13.83 Ac.

5.) S.C.R.D. BOOK 2975, PAGE 469

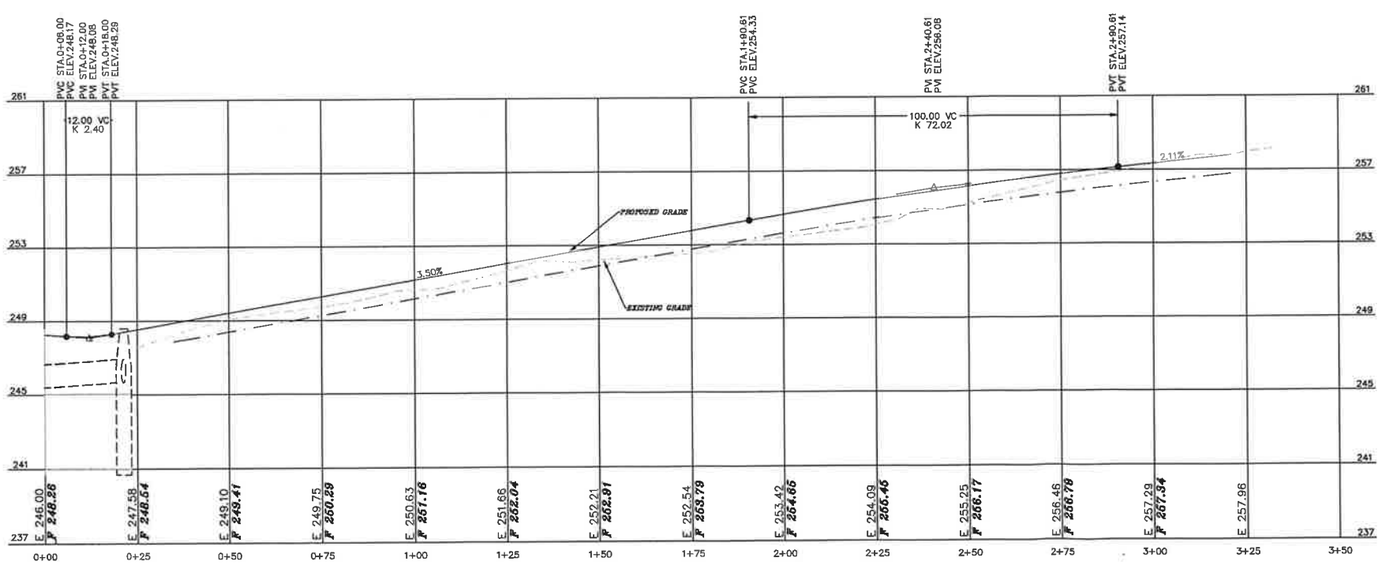
6.) THE INTENT OF THIS PLAN IS TO PROVIDE AN OVERVIEW OF UTILITY LAYOUT DETAIL OF MARWARI LANE.

7.) ONE ON SITE BENCHMARK IS PROVIDED. BS&E IS TO PROVIDE ADDITIONAL BENCHMARKS PRIOR TO CONSTRUCTION.

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

PROFILE VIEW MARWARI LANE



GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

VERTICAL SCALE: 1" = 4'

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-02-2018	SEWER REVISIONS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

UTILITY PLAN MARWARI LANE 0+00 TO END
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

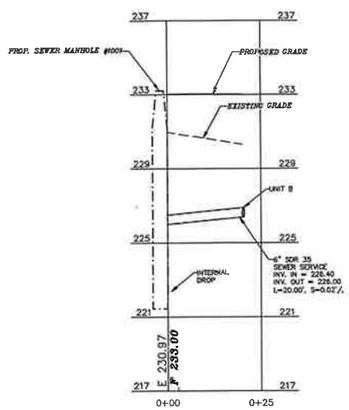
SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

VERTICAL SCALE: 1" = 4'

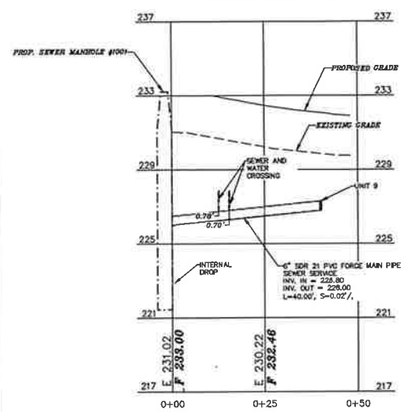


PROFILE VIEW SMH #1001 CONNECTION FROM UNIT 8

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

VERTICAL SCALE: 1" = 4'

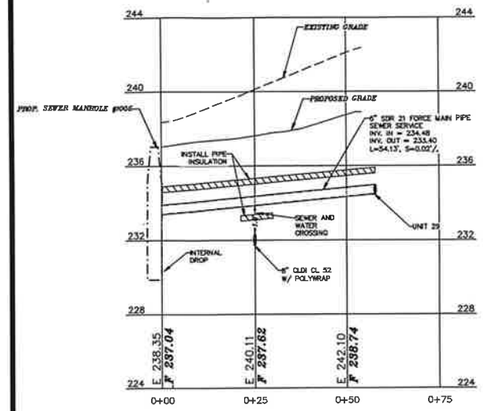


PROFILE VIEW SMH #1001 CONNECTION FROM UNIT 9

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

VERTICAL SCALE: 1" = 4'

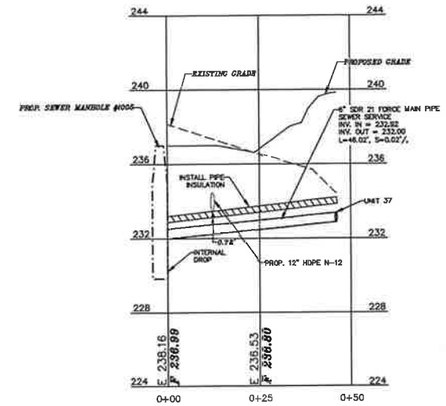


PROFILE VIEW SMH #1005 CONNECTION FROM UNIT 29

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

VERTICAL SCALE: 1" = 4'

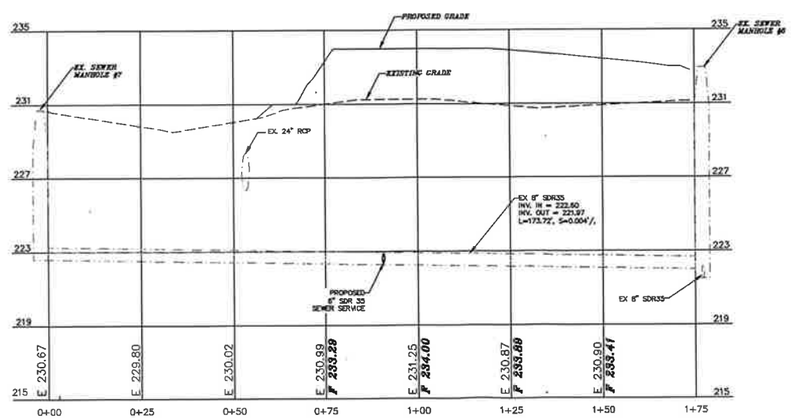


PROFILE VIEW SMH #1005 CONNECTION FROM UNIT 37

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

VERTICAL SCALE: 1" = 4'



PROFILE VIEW SMH #6 TO SMH #7

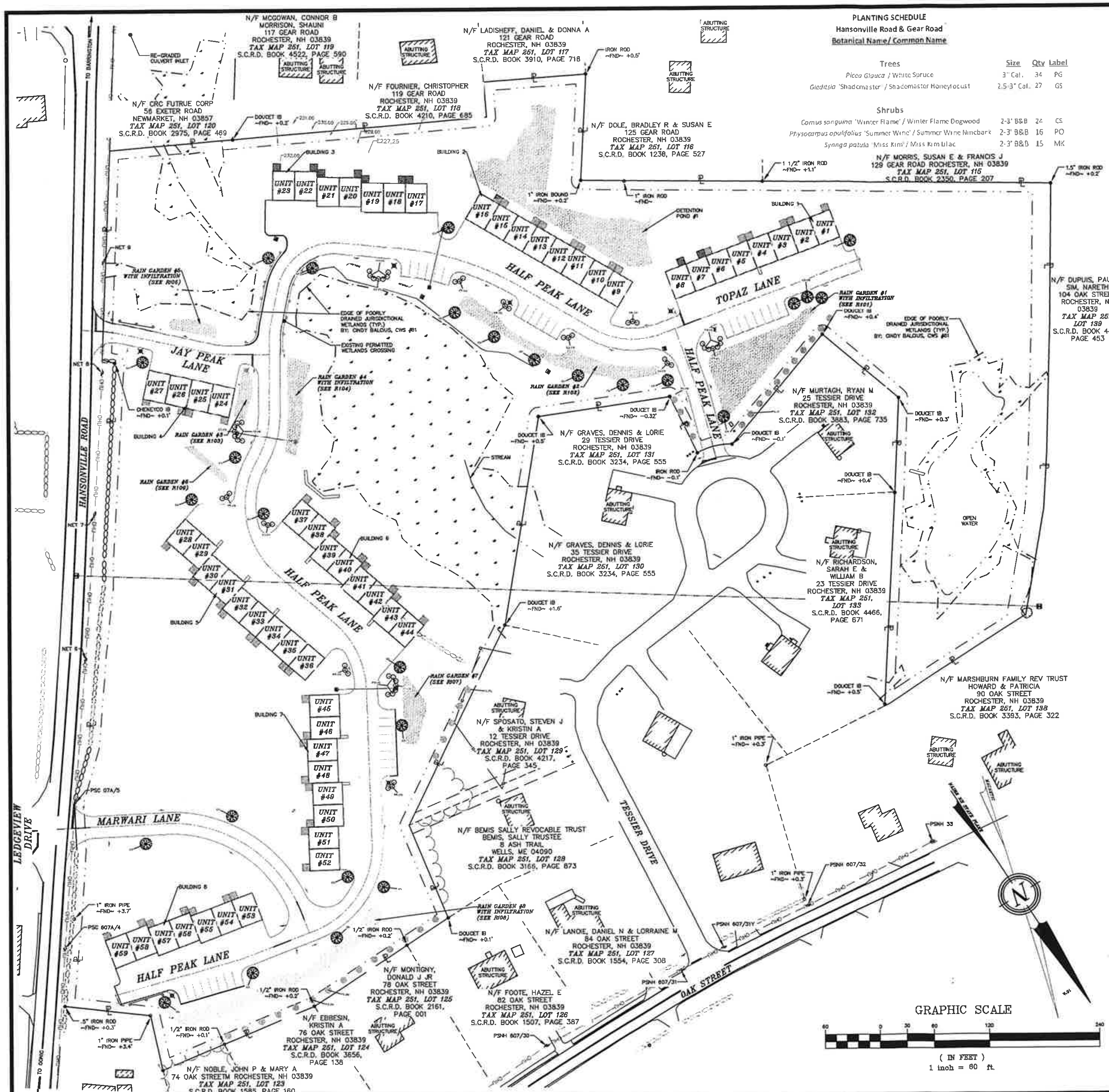
REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-02-2018	AoT REVISIONS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

SEWER PROFILES
LAND OF
CRG FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 11243
LICENSED
PROFESSIONAL ENGINEER



PLANTING SCHEDULE
Hansonville Road & Gear Road
Botanical Name/ Common Name

Trees	Size	Qty	Label
Picea Glauca / White Spruce	3" Cal.	34	PG
Gleditsia 'Shademaster' / Shademaster Honeylocust	2.5-3" Cal.	27	GS
Shrubs			
Cornus sanguinea 'Winter Flame' / Winter Flame Dogwood	2-3' B&B	24	CS
Physocarpus opulifolius 'Summer Wine' / Summer Wine Ninebark	2-3' B&B	16	PO
Syringa patula 'Miss Kim' / Miss Kim Lilac	2-3' B&B	15	MK

NOTES:

1.) THE INTENT OF THIS PLAN IS TO DEMONSTRATE THE OVERVIEW LANDSCAPING DESIGN FOR 59 CONDOMINIUM TOWNHOUSES.

2.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

3.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
HAMPTON, NH 03862

4.) THE PROJECT PARCEL IS SHOWN AS LOT NO. 120, MAP 251 OF THE CITY OF ROCHESTER TAX ASSESSOR'S MAPS.

5.) THE PROJECT PARCEL CONTAINS 13.84 ACRES OR 602,671 SQUARE FEET AREA OF LAND.

6.) PROJECT PLAN REFERENCES: S.C.R.D. BOOK 2975, PAGE 469

7.) CALL DIG SAFE PRIOR TO BEGINNING WORK. (1-888-344-7233). THE LANDSCAPE CONTRACTOR IS ADVISED OF THE PRESENCE OF UNDERGROUND UTILITIES AND SHALL VERIFY THE EXISTENCE AND LOCATION OF THE SAME BEFORE COMMENCING AND DIGGING OPERATIONS. THE LANDSCAPE CONTRACTOR SHALL REPLACE OR REPAIR UTILITIES, PAVING, WALKS, CURBING, ETC DAMAGED IN PERFORMANCE OF THIS JOB AT NO ADDITIONAL COST TO THE OWNER OR GENERAL CONTRACTOR.

8.) CONTRACTOR SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL SITE CONDITIONS PRIOR TO CONSTRUCTION BIDDING.

9.) THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS SHOWN ON THE DRAWINGS. VARIATIONS IN QUANTITIES ARE TO BE APPROVED BY THE DESIGN ENGINEER.

10.) PROVIDED SMOOTH TRANSITION WHERE NEW WORK MEETS EXISTING CONDITIONS.

11.) ALL PLANT MATERIAL INSTALLED SHALL MEET THE SPECIFICATIONS OF "AMERICAN STANDARD FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSERYMEN

12.) ALL PLANT MATERIALS SHALL BE FREE FROM INSECTS AND DISEASE.

13.) ALL PLANTINGS SHALL BE DONE IN ACCORDANCE WITH ACCEPTABLE HORTICULTURAL PRACTICES. THIS IS TO INCLUDE PROPER PLANTING MIX, PLANT BED AND TREE PIT PREPARATION, PRUNING STAKING OR GUYING, WRAPPING, SPRAYING, FERTILIZATION, PLANTING AND ADEQUATE MAINTENANCE UNTIL ACCEPTANCE FROM OWNER.

14.) ALL GRASS, OTHER VEGETATION AND DEBRIS SHALL BE REMOVED FROM ALL PLANTING AREAS PRIOR TO PLANTING.

15.) THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING AND NEWLY PLANTED TREES AND SHRUBS DURING THE CONSTRUCTION PROCESS. WHERE REQUIRED, THE CONTRACTOR SHALL INSTALL TEMPORARY FENCING (SNOW OR EQUAL) AROUND EXISTING TREES AND SHRUBS THAT COULD BE IMPACTED BY THE CONSTRUCTION PROCESS. STORAGE OF CONSTRUCTION EQUIPMENT, CONSTRUCTION MATERIALS, SNOW STORAGE AND OR VEHICLE PARKING SHALL NOT BE PERMITTED WITHIN THE DRIP LINE OF TREES OR TWENTY FEET WHICH EVER IS GREATER.

16.) NEW PLANTINGS SHALL BE INSTALLED PER PROJECT DRAWINGS AND SPECIFICATION THAT INCLUDE FERTILIZATION AND MULCHING AS REQUIRED.

17.) ALL SHRUB BEDS AND TREE PITS SHALL BE MULCHED WITH 3" CLEAN SHREDDED BLACK MULCH

18.) WHERE INDICATED ON PLAN, PLANTING SOIL MIXTURE FOR GROUND COVER AND PERENNIAL BED AREAS SHALL CONSIST OF FOUR PARTS TOPSOIL, TWO PARTS SPHAGNUM PEAT MOSS, AND ONE PART HORTICULTURAL PERLITE BY VOLUME. PEAT MOSS MAY BE SUBSTITUTED WITH WELL-ROTTED OR DEHYDRATED MANURE OR COMPOST. ROTOTILL BEDS TO A DEPTH OF 8 INCHES.

19.) MAINTENANCE OF NEW PLANTINGS AND LAWNS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND OR LANDSCAPE SUBCONTRACTOR UNTIL ACCEPTANCE BY THE OWNER. RESPONSIBILITIES SHALL INCLUDE WATERING WEEDING AND MOWING AS NECESSARY. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE, REPLACEMENT MATERIAL SHALL BE GUARANTEED FOR AND ADDITIONAL YEAR FROM TIME OF INSTALLATION.

20.) THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY EROSION CONTROL MEASURES DURING THE CONSTRUCTION PHASE AND UNTIL ALL AREAS HAVE BEEN STABILIZED AND ACCEPTED BY THE OWNER. THE GENERAL CONTRACTOR SHALL PROVIDE WEEKLY INSPECTIONS OF EROSION MEASURE AND IMMEDIATELY AFTER STORM EVENTS AND REPAIR AS NECESSARY.

21.) THE GENERAL CONTRACTOR AND OR THE LANDSCAPE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL THREE CUYING MATERIAL ONCE PLANT MATERIAL HAS BEEN ESTABLISHED. (MINIMUM OF ONE GROWING SEASON). ALL TEMPORARY EROSION CONTROL MEASURE SHALL BE REMOVED ONCE STABILIZATION OF DISTURBANCE HAS BEEN ACCEPTED BY OWNER.

22.) THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR A MINIMUM OF TWO MOWINGS FOR ALL TURF AREAS OR UNTIL ACCEPTANCE BY THE OWNER. A MINIMUM UNIFORM 75% CATCH OF TURF IS REQUIRED FOR ACCEPTANCE.

23.) ALL PLANTINGS SHALL BE WATERED REGULARLY DURING THEIR FIRST YEAR AND MAINTAINED PERMANENTLY IN GOOD GROWING CONDITION AS AN EFFECTIVE VISUAL SCREEN.

24.) SHRUBS OR TREES WHICH DIE SHALL BE REPLACED WITHIN ONE GROWING SEASON WITH NEW SHRUBS OR TREES TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE LANDSCAPING REQUIREMENTS.

25.) ALL REQUIRED LANDSCAPING SHALL BE INSTALLED BEFORE OCCUPANCY, OR WITHIN SIX MONTHS IF OCCUPANCY OCCURS DURING WINTER CONDITIONS.

26.) TREES ARE TO BE 6' TALL AT PLANTING.

27.) ALL PLANT STOCK SHALL CONFORM TO ANSI Z260.1 – NURSERY STOCK, LATEST EDITIONS (AMERICAN ASSOCIATION OF NURSERYMEN, INC.)

28.) 4" AGED PINEBARK MULCH AND A WEED BARRIER (TY-PAR FABRIC OR APPROVED EQUAL) SHALL BE APPLIED TO ALL SHRUB AND GROUND COVER BEDS. INSTALL WEED BARRIER AS PER MANUFACTURERS RECOMMENDATIONS.

29.) PLANT-PIT BACK-FILL SHALL BE MIXED AT A RATE OF 7 PARTS OF TOPSOIL TO 2 PARTS OF DEHYDRATED COW MANURE. SLOW RELEASE FERTILIZER SHALL BE APPLIED AS PER MANUFACTURERS RECOMMENDATIONS. USE EXISTING ON-SITE TOPSOIL AS PART OF BACK FILL WHEN AVAILABLE.

30.) ALL LANDSCAPED AREAS NOT PLANTED WITH TREES, SHRUBS OR GROUNDCOVER SHALL BE RESTORED WITH SEED OR SOD AS INDICATED ON PLANS.

31.) TOPSOIL WILL BE TESTED FOR FERTILIZATION REQUIREMENTS, AND SLOW RELEASE ENVIRONMENTALLY FRIENDLY FERTILIZER WILL BE APPLIED AT THE RECOMMENDED RATES.

32.) ALL DISTURBED WETLAND BUFFER AREAS, EXCEPT FOR AREAS THAT ARE PART OF THE DRAINAGE SYSTEM, ARE TO BE RESEEDED WITH A CONSERVATION SEED MIX AND ONLY MOWED TWICE PER YEAR.

33.) ALL PLANT SUBSTITUTIONS MUST BE APPROVED BY THE ENGINEER.

34.) PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, UPON DELIVERY OR AT THE JOB SITE WHILE WORK IS ONGOING TO CONFORMITY TO SPECIFIED QUALITY, SIZE AND VARIETY.

35.) PLANTS FURNISHED IN CONTAINERS SHALL HAVE THE ROOTS WELL ESTABLISHED IN THE SOIL MASS AND SHALL HAVE AT LEAST ONE (1) GROWING SEASON. ROOT-BOUND PLANTS OR INADEQUATELY SIZED CONTAINERS TO SUPPORT THE PLANT MAY BE DEEMED UNACCEPTABLE.

36.) ALL PLANTS SHALL BE GUARANTEED BY THE CONTRACTOR FOR NO LESS THAN ONE FULL YEAR FROM THE TIME OF INSTALLATION. DURING THIS TIME, THE OWNER SHALL MAINTAIN ALL PLANT MATERIALS IN THE ABOVE MANNER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSPECT THE PLANTS TO ENSURE PROPER CARE. IF THE CONTRACTOR IS DISSATISFIED WITH THE CARE GIVEN, HE SHALL IMMEDIATELY, AND IN SUFFICIENT TIME TO PERMIT THE CONDITION TO BE RECTIFIED, NOTIFY THE OWNER IN WRITING OR OTHERWISE FORFEIT HIS CLAIM.

37.) BY THE END OF THE GUARANTEE PERIOD, THE CONTRACTOR SHALL HAVE REPLACED ANY PLANT MATERIAL THAT IS MISSING, NOT TRUE TO SIZE AS SPECIFIED, THAT HAS DIED, THAT HAS LOST NATURAL SHAPE DUE TO DEAD BRANCHES, EXCESS PRUNING OR INADEQUATE OR IMPROPER CARE, OR IS, IN THE OPINION OF THE OWNER, IN UNHEALTHY OR UNSIGHTLY CONDITION.

38.) THE CONTRACTOR IS TO USE TEMPORARY MEASURES FOR WATERING PLANTS DURING THE ESTABLISHMENT PERIOD. INCLUDING CONNECTING TEMPORARY HOSES TO THE STRUCTURE WATER SUPPLY LINE AND UTILIZING SPRINKLERS UNTIL 85% GROWTH OCCURS.

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-02-2018	AOT REVISIONS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

LANDSCAPING OVERVIEW PLAN
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 60 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

N/F DOLE, BRADLEY R & SUSAN E
125 GEAR ROAD
ROCHESTER, NH 03839
TAX MAP 251, LOT 116
S.C.R.D. BOOK 1238, PAGE 527

N/F MORRIS, SUSAN E & FRANCIS J
129 GEAR ROAD
ROCHESTER, NH 03839
TAX MAP 251, LOT 115
S.C.R.D. BOOK 2350, PAGE 207

N/F MURTAGH, RYAN M
25 TESSIER DRIVE
ROCHESTER, NH 03839
TAX MAP 251, LOT 132
S.C.R.D. BOOK 3883, PAGE 735

N/F GRAVES, DENNIS & LORIE
29 TESSIER DRIVE
ROCHESTER, NH 03839
TAX MAP 251, LOT 131
S.C.R.D. BOOK 3234, PAGE 555

NOTES:

1.) THE INTENT OF THIS PLAN IS TO DEMONSTRATE THE LANDSCAPING DESIGN FOR UNITS 1-16 CONDOMINIUM TOWNHOUSES.

2.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

3.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

4.) THE PROJECT PARCEL IS SHOWN AS LOT NO. 121, MAP 251 OF THE CITY OF ROCHESTER TAX ASSESSOR'S MAPS.

5.) THE PROJECT PARCEL CONTAINS 13.84 ACRES OR 602,671 SQUARE FEET AREA OF LAND.

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-02-2018	ASWER & WATER REVISIONS
#3	04-13-2018	GENERAL PLAN SET
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

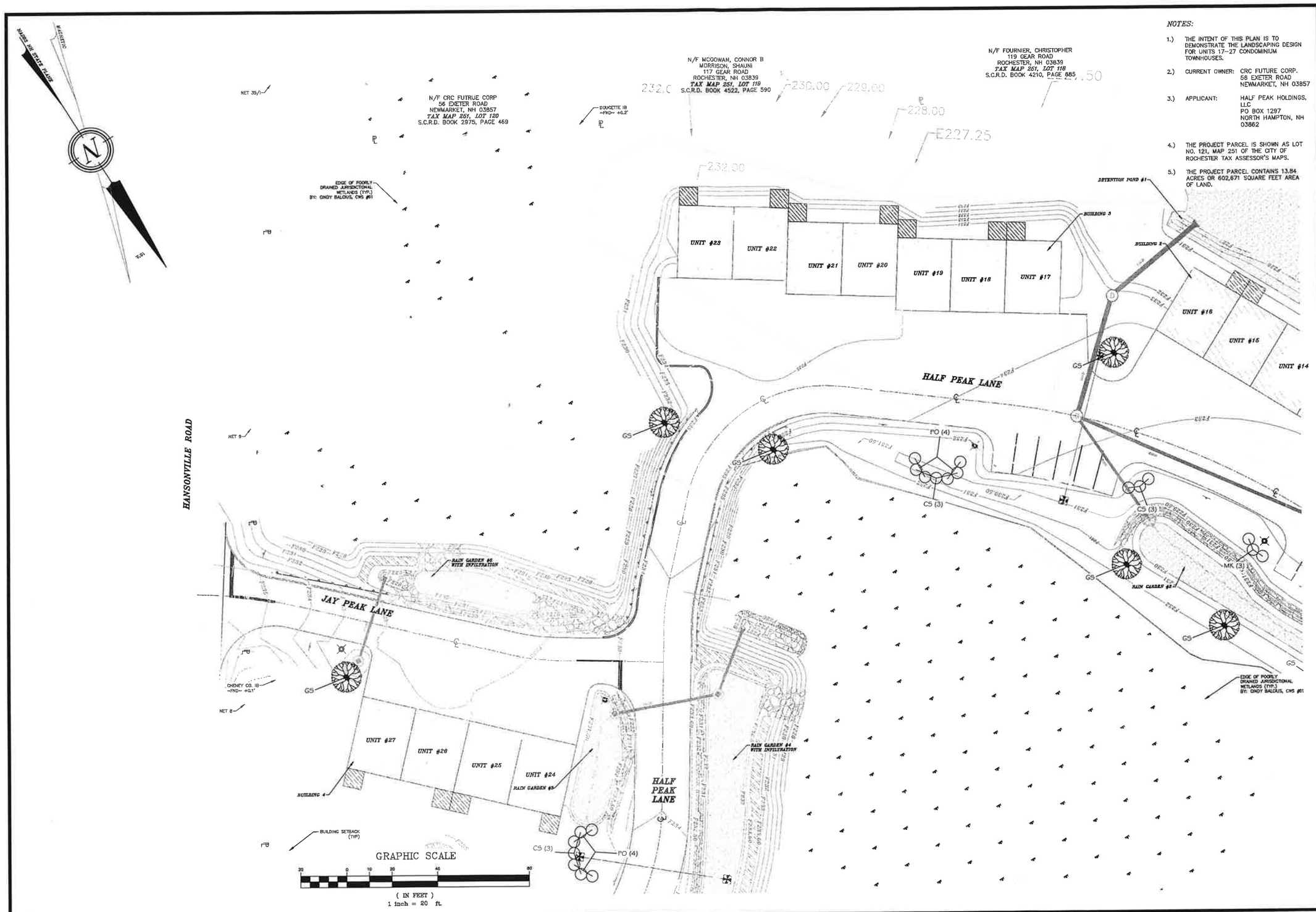
LANDSCAPING PLAN UNITS 1 - 16
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER

SHEET 47 OF 76



NOTES:

1.) THE INTENT OF THIS PLAN IS TO DEMONSTRATE THE LANDSCAPING DESIGN FOR UNITS 17–27 CONDOMINIUM TOWNHOUSES.

2.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

3.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

4.) THE PROJECT PARCEL IS SHOWN AS LOT NO. 121, MAP 251 OF THE CITY OF ROCHESTER TAX ASSESSOR'S MAPS.

5.) THE PROJECT PARCEL CONTAINS 13.84 ACRES OR 602,671 SQUARE FEET AREA OF LAND.

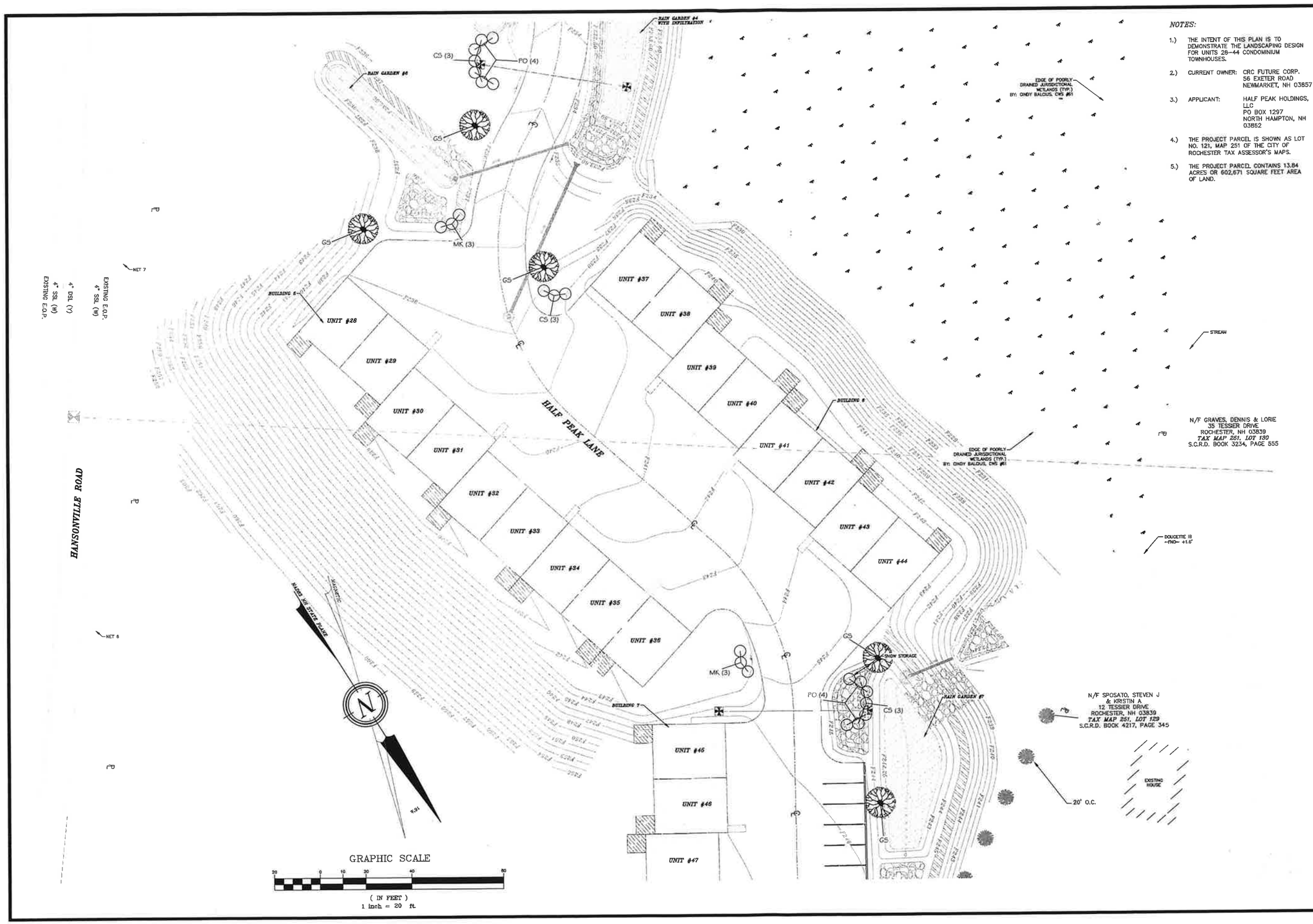
REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-10-2018	AoT REVIEWS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

LANDSCAPING PLAN UNITS 17 – 27
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14245
LICENSED
PROFESSIONAL ENGINEER



NOTES:

1.) THE INTENT OF THIS PLAN IS TO DEMONSTRATE THE LANDSCAPING DESIGN FOR UNITS 28–44 CONDOMINIUM TOWNHOUSES.

2.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

3.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

4.) THE PROJECT PARCEL IS SHOWN AS LOT NO. 121, MAP 251 OF THE CITY OF ROCHESTER TAX ASSESSOR'S MAPS.

5.) THE PROJECT PARCEL CONTAINS 13.84 ACRES OR 602,671 SQUARE FEET AREA OF LAND.

REVISION	DATE	DESCRIPTION
#7	07–30–2018	SUBMITTED FOR CONSTRUCTION
#6a	06–18–2018	REVISED PER AoT COMMENT
#5b	05–24–2018	NHDES WWEB RESPONSE
#4	05–11–2018	AoT RESPONSE
#3	04–12–2018	SEWER & WATER REVISIONS
#2	04–09–2018	GENERAL PLAN SET
#1	03–30–2018	GENERAL PLAN SET

LANDSCAPING PLAN UNITS 28 – 44
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332–2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14210
LICENSED
PROFESSIONAL ENGINEER

SHEET 49 OF 76

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

HANSONVILLE ROAD

LEDGEVIEW DRIVE

MARWARI LANE

HALF PEAK LANE

BUILDING 7

BUILDING 8

UNIT #45
UNIT #46
UNIT #47
UNIT #48
UNIT #49
UNIT #50
UNIT #51
UNIT #52
UNIT #53
UNIT #54
UNIT #55
UNIT #56
UNIT #57
UNIT #58
UNIT #59

RAIN GARDEN #7

RAIN GARDEN #6 WITH INFILTRATION

SNOW STORAGE

SEWER EASEMENT

EXISTING HOUSE

PSC 07A/5

PSNH 607A

1" IRON PIPE ~FND~ +3.7'

1" IRON PIPE ~FND~ +3.4'

IRON ROD ~FND~ +0.3'

1/2" IRON ROD ~FND~ +0.2'

DOUCETTE B ~FND~ +0.1'

20' O.C.

PO (4)

CS (3)

PG (5)

PG (6)

GS

MK (3)

N/F SPOSATO, STEVEN J & KRISTIN A
12 TESSIER DRIVE
ROCHESTER, NH 03839
TAX MAP 251, LOT 129
S.C.R.D. BOOK 4217, PAGE 345

N/F BEMIS SALLY REVOCABLE TRUST
BEMIS, SALLY TRUSTEE
8 ASH TRAIL
WELLS, ME 04090
TAX MAP 251, LOT 128
S.C.R.D. BOOK 3166, PAGE 873

N/F FOOTE, HAZEL E
82 OAK STREET
ROCHESTER, NH 03839
TAX MAP 251, LOT 126
S.C.R.D. BOOK 1507, PAGE 387

N/F MONTIGNY, DONALD J JR
78 OAK STREET
ROCHESTER, NH 03839
TAX MAP 251, LOT 125
S.C.R.D. BOOK 2161, PAGE 001

N/F EBBESIN, KRISTIN A
76 OAK STREET
ROCHESTER, NH 03839
TAX MAP 251, LOT 124
S.C.R.D. BOOK 3856, PAGE 138

NOTES:

1.) THE INTENT OF THIS PLAN IS TO DEMONSTRATE THE LANDSCAPING DESIGN FOR UNITS 45–59 CONDOMINIUM TOWNHOUSES.

2.) CURRENT OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857

3.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

4.) THE PROJECT PARCEL IS SHOWN AS LOT NO. 121, MAP 251 OF THE CITY OF ROCHESTER TAX ASSESSOR'S MAPS.

5.) THE PROJECT PARCEL CONTAINS 13.84 ACRES OR 602,671 SQUARE FEET AREA OF LAND.

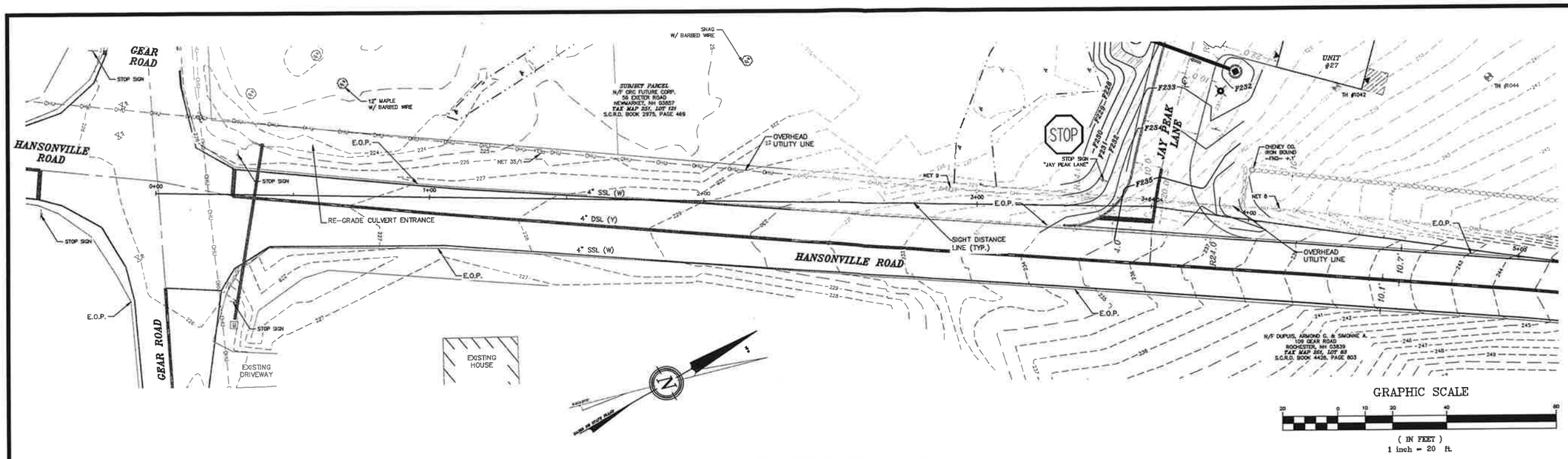
REVISION	DATE	DESCRIPTION
#7	07–30–2018	SUBMITTED FOR CONSTRUCTION
#6a	06–18–2018	REVISED PER AoT COMMENT
#5b	05–24–2018	NHDES WWEB RESPONSE
#4	05–02–2018	AoT REVISIONS
#3	04–11–2018	SEWER & WATER REVISIONS
#2	04–09–2018	GENERAL PLAN SET
#1	03–30–2018	GENERAL PLAN SET

LANDSCAPING PLAN UNITS 45 – 59
CRC FUTURE CORP.
LAND OF
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332–2863

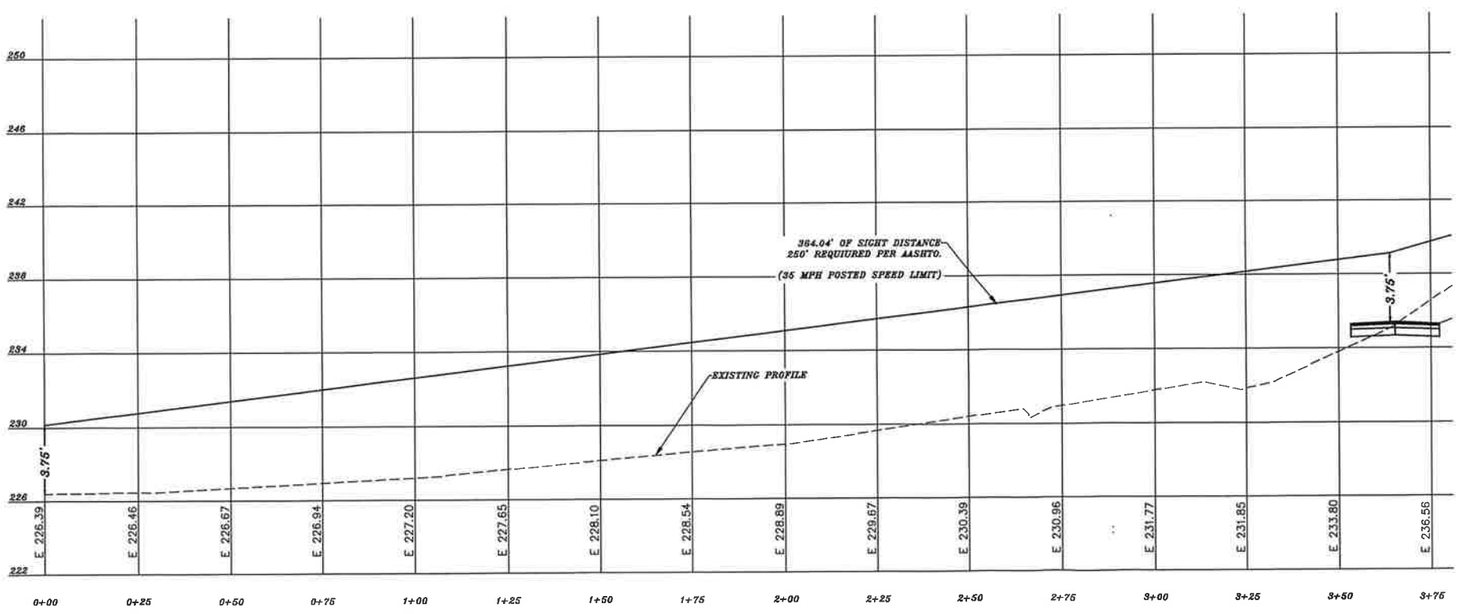
SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED PROFESSIONAL ENGINEER



PLAN VIEW HANSONVILLE ROAD

PROFILE VIEW SIGHT LINE



GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.
VERTICAL SCALE: 1" = 4'

NOTES:

1.) OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857-1909

APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

2.) A.) TAX MAP 251, LOT 120

B.) TAX MAP 251, LOT 121

3.) LOT AREA:

A.) 20,012 Sq. Ft., 0.46 Ac.

B.) 602,671 Sq. Ft., 13.83 Ac.

4.) S.C.R.D.

A.) BOOK 2975, PAGE 469

B.) BOOK 2975, PAGE 469

5.) THE INTENT OF THIS PLAN IS TO PROVIDE SIGHT DISTANCE CALCULATIONS FOR HALF PEAK LANE LOOKING SOUTHWEST.

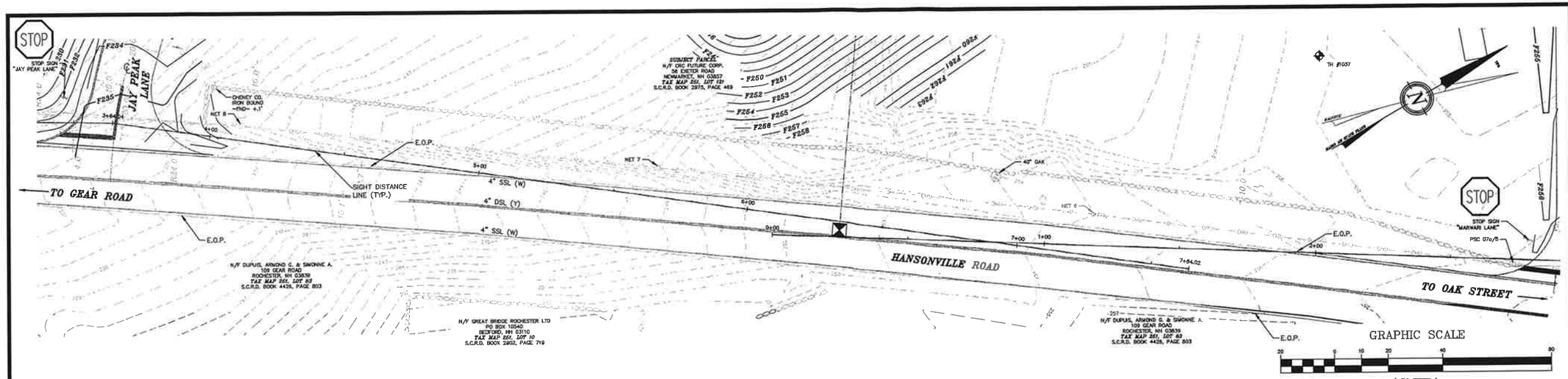
REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	04-02-2018	AOT REVISIONS
#2	04-11-2018	SEWER & WATER REVISIONS
#1	04-09-2018	GENERAL PLAN SET
	03-30-2018	GENERAL PLAN SET

HIGHWAY ACCESS JAY PEAK SOUTHWEST
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

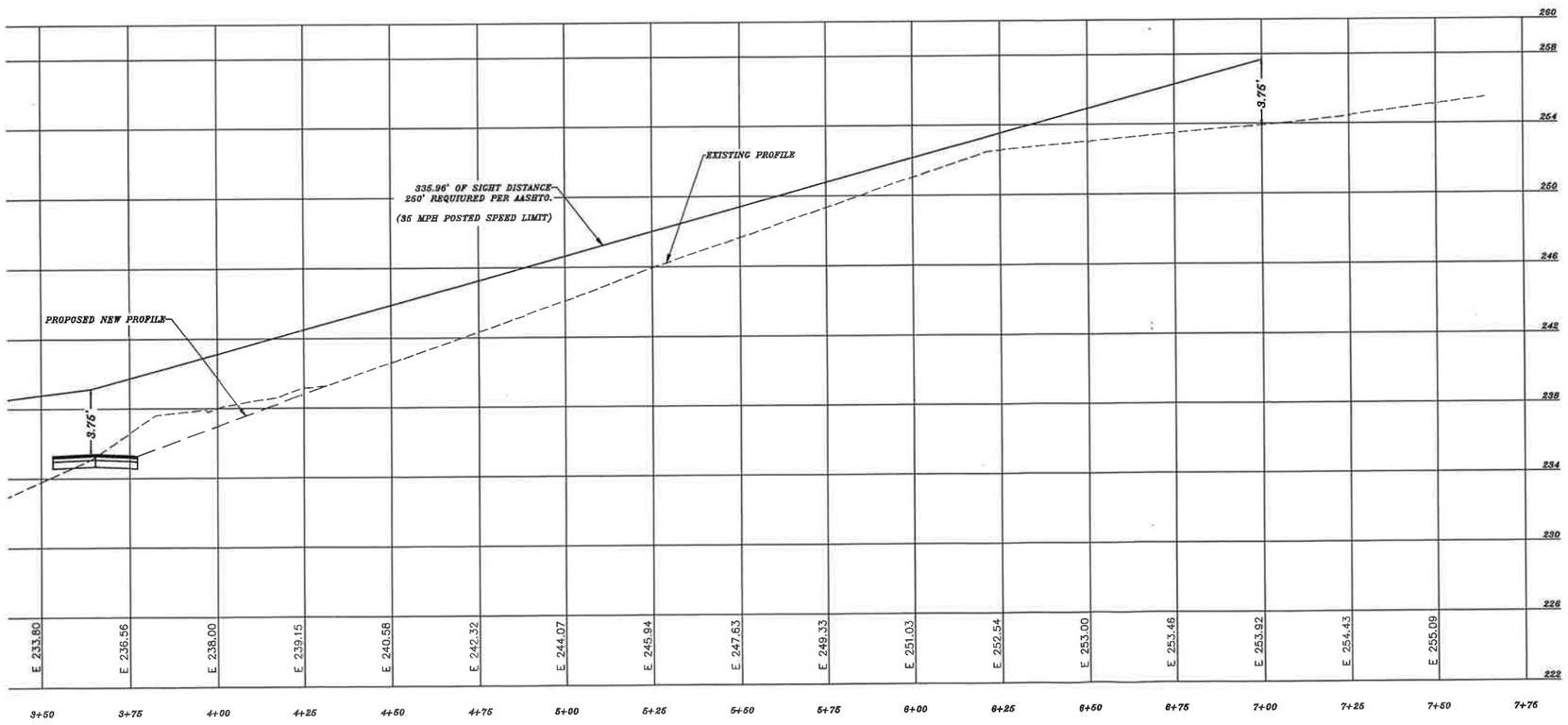
SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER



PLAN VIEW HANSONVILLE ROAD

PROFILE VIEW SIGHT LINE



NOTES:

1.) OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857-1909

APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

2.) A.) TAX MAP 251, LOT 120
B.) TAX MAP 251, LOT 121

3.) LOT AREA:
A.) 20,012 Sq. Ft., 0.45 Ac.
B.) 602,671 Sq. Ft., 13.83 Ac.

4.) S.C.R.D.
A.) BOOK 2975, PAGE 469
B.) BOOK 2975, PAGE 469

5.) THE INTENT OF THIS PLAN IS TO PROVIDE SIGHT DISTANCE CALCULATIONS FOR HALF PEAK LANE LOOKING NORTHEAST.

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.
VERTICAL SCALE: 1" = 4'

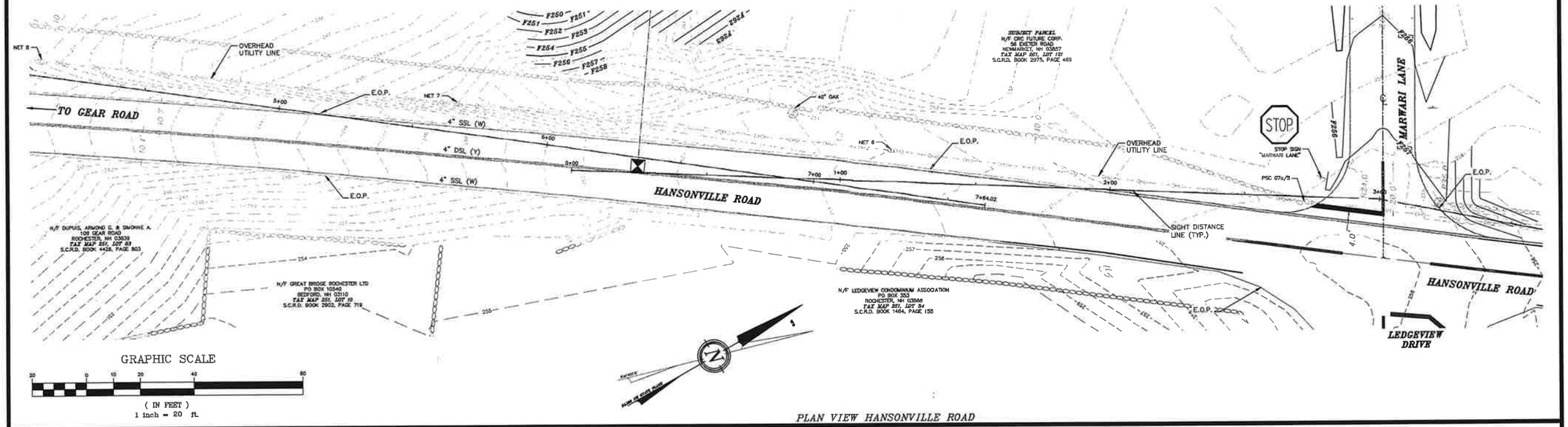
REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WMCB RESPONSE
#4	05-12-2018	SEWER & WATER REVISIONS
#3	04-11-2018	GENERAL PLAN SET
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

HIGHWAY ACCESS JAY PEAK NORTHEAST
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER



PLAN VIEW HANSONVILLE ROAD

PROFILE VIEW SIGHT LINE

NOTES:

1.) OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857-1909

APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

2.) A.) TAX MAP 251, LOT 120

B.) TAX MAP 251, LOT 121

3.) LOT AREA:

A.) 20,012 Sq. Ft., 0.45 Ac.

B.) 602,671 Sq. Ft., 13.83 Ac.

4.) S.C.R.D.

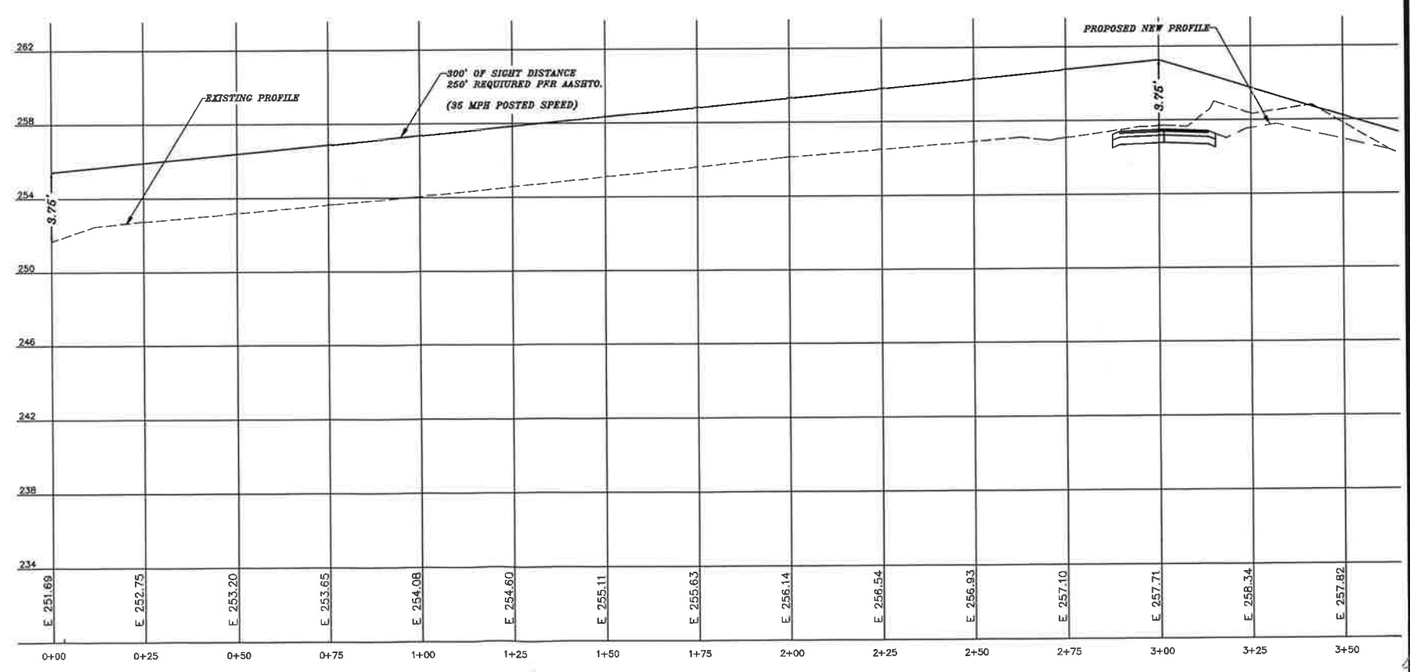
A.) BOOK 2975, PAGE 489

B.) BOOK 2975, PAGE 469

5.) THE INTENT OF THIS PLAN IS TO PROVIDE SIGHT DISTANCE CALCULATIONS FOR MARWARI LANE LOOKING SOUTHWEST.

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.
VERTICAL SCALE: 1" = 4'



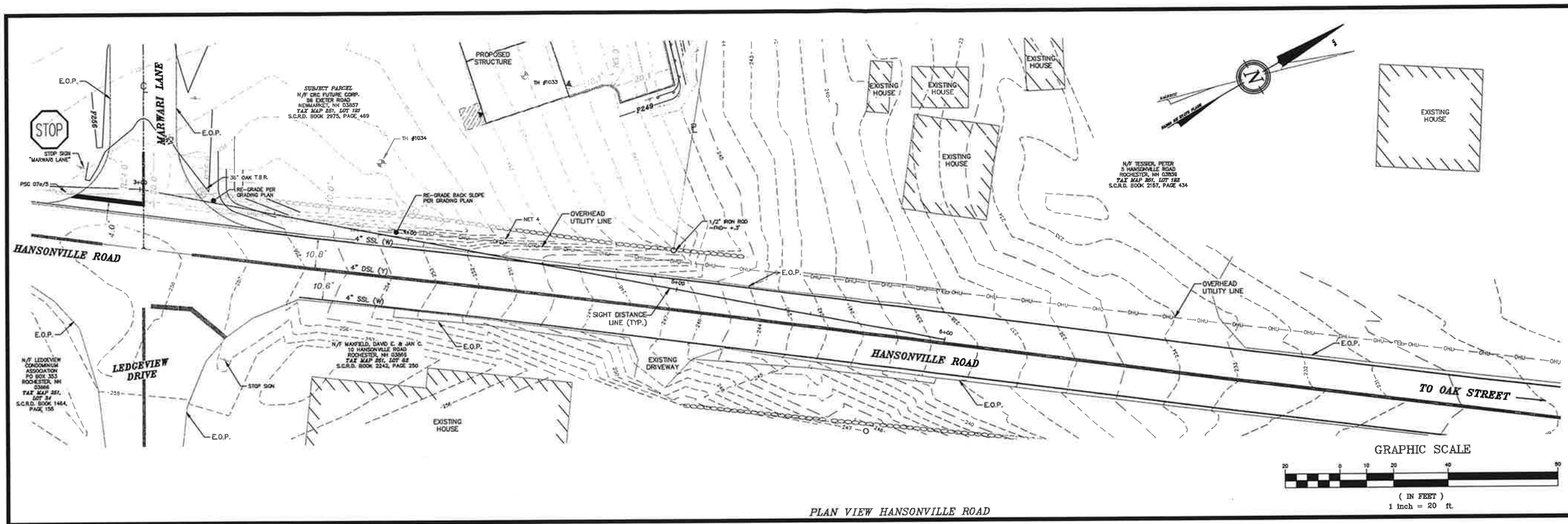
REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWED RESPONSE
#4	05-02-2018	AOT REVISIONS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

HIGHWAY ACCESS MARWARI SOUTHWEST
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

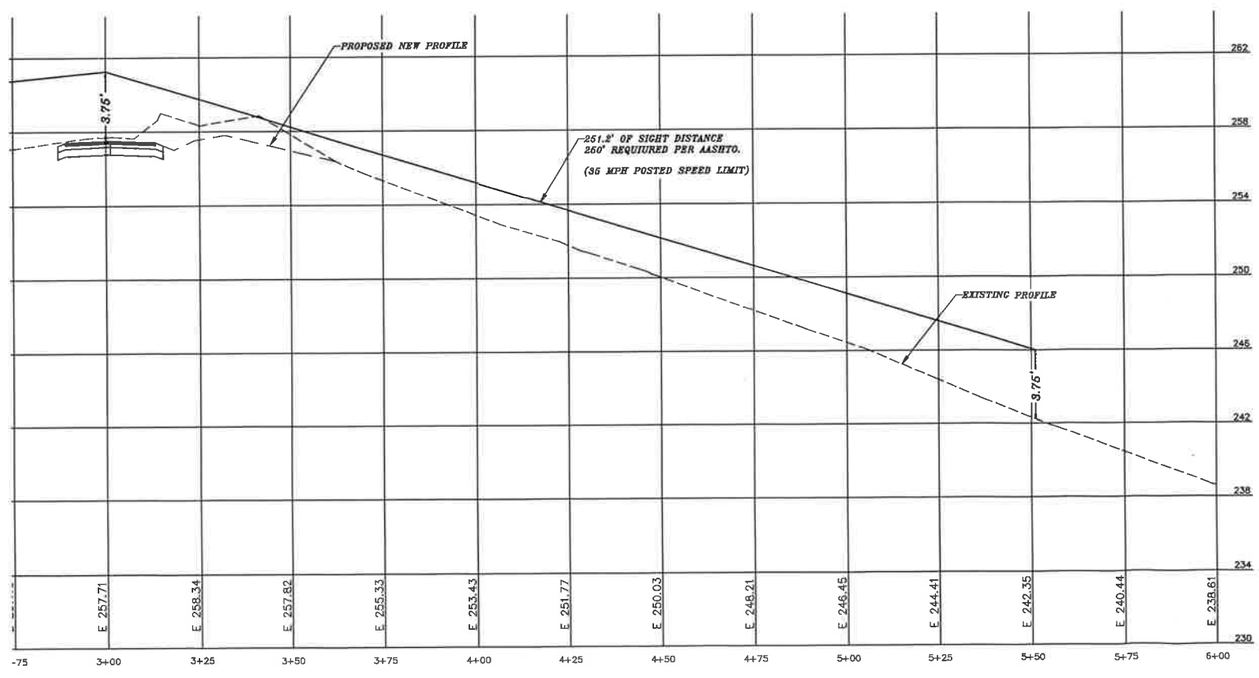
SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER



PLAN VIEW HANSONVILLE ROAD

PROFILE VIEW SIGHT LINE



NOTES:

1.) OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857-1909

APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

2.) A.) TAX MAP 251, LOT 120

B.) TAX MAP 251, LOT 121

3.) LOT AREA:

A.) 20,012 Sq. Ft., 0.45 Ac.

B.) 602,571 Sq. Ft., 13.83 Ac.

4.) S.C.R.D.

A.) BOOK 2975, PAGE 469

B.) BOOK 2975, PAGE 469

5.) THE INTENT OF THIS PLAN IS TO PROVIDE SIGHT DISTANCE CALCULATIONS FOR MARWARI LANE LOOKING NORTHEAST.

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.
VERTICAL SCALE: 1" = 4'

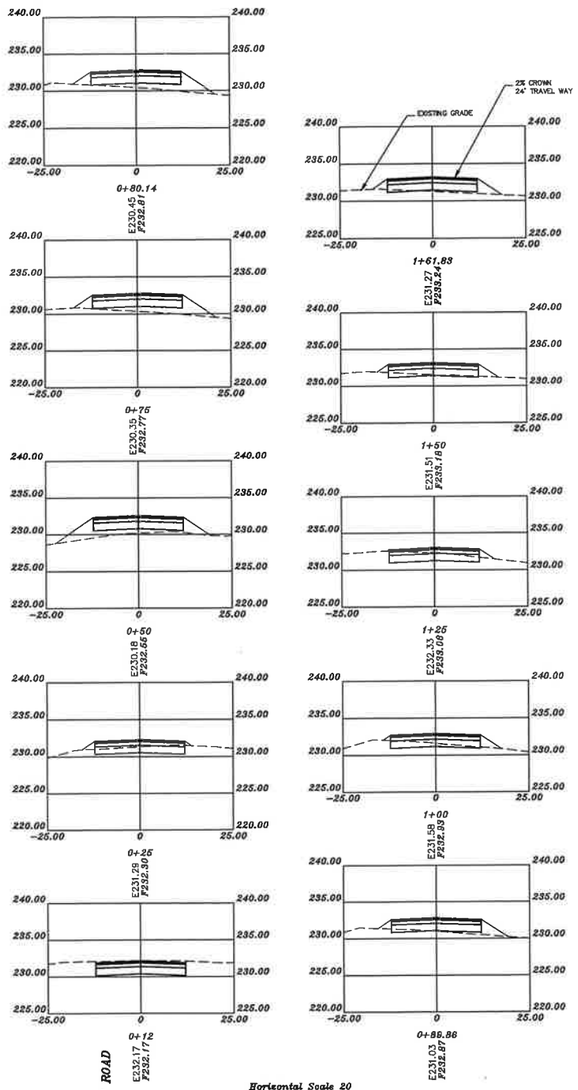
REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-02-2018	ADDITIONAL SEWER REVISIONS
#3	04-13-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

HIGHWAY ACCESS MARWARI NORTHEAST
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

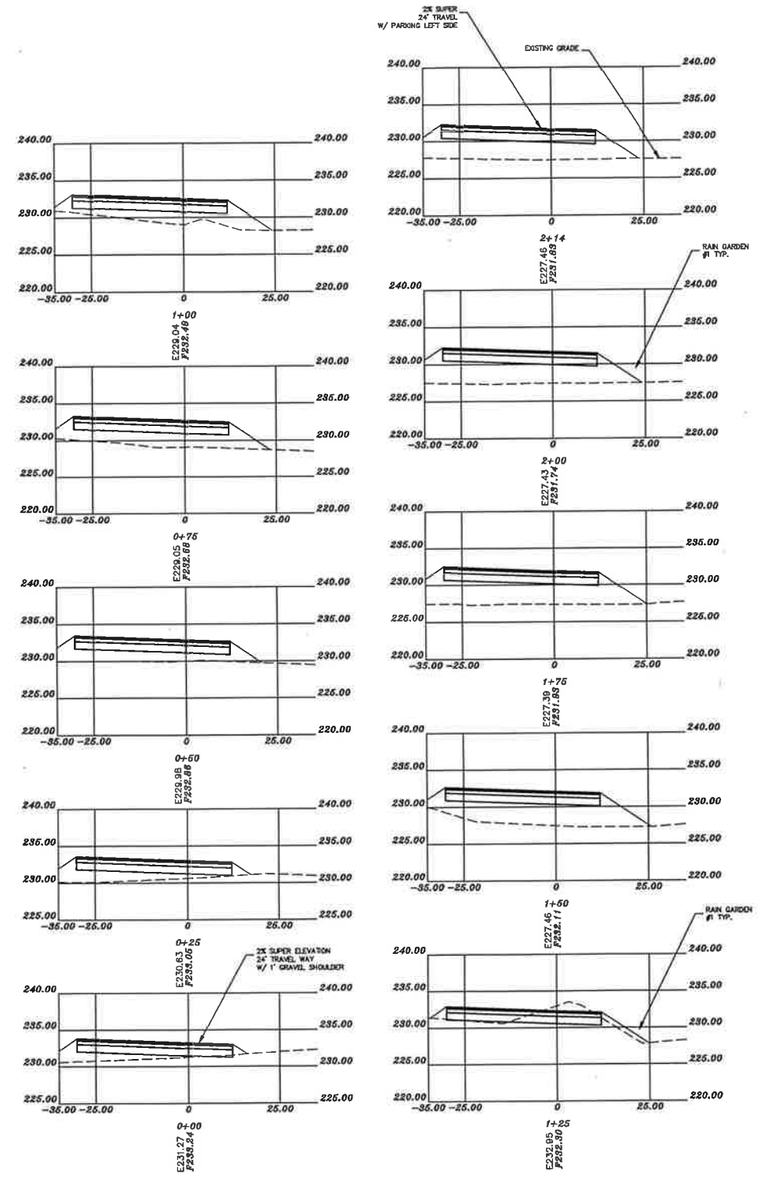
BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER



HALF PEAK ENTRANCE ROAD



TOPAZ LANE

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.
Vertical Scale 10

REVISION	DATE	DESCRIPTION
#7	D7-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	D6-18-2018	REVISED PER AoT COMMENT
#5b	D5-24-2018	NHDES WWEB RESPONSE
#4	D4-27-2018	AoT REVISIONS
#3	D3-11-2018	SEWER & WATER REVISIONS
#2	D4-09-2018	GENERAL PLAN SET
#1	D3-30-2018	GENERAL PLAN SET

HALF PEAK LANE 0+00 – 1+61.83 & TOPAZ LANE 0+00 – 2.14.00

CRC LAND & FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

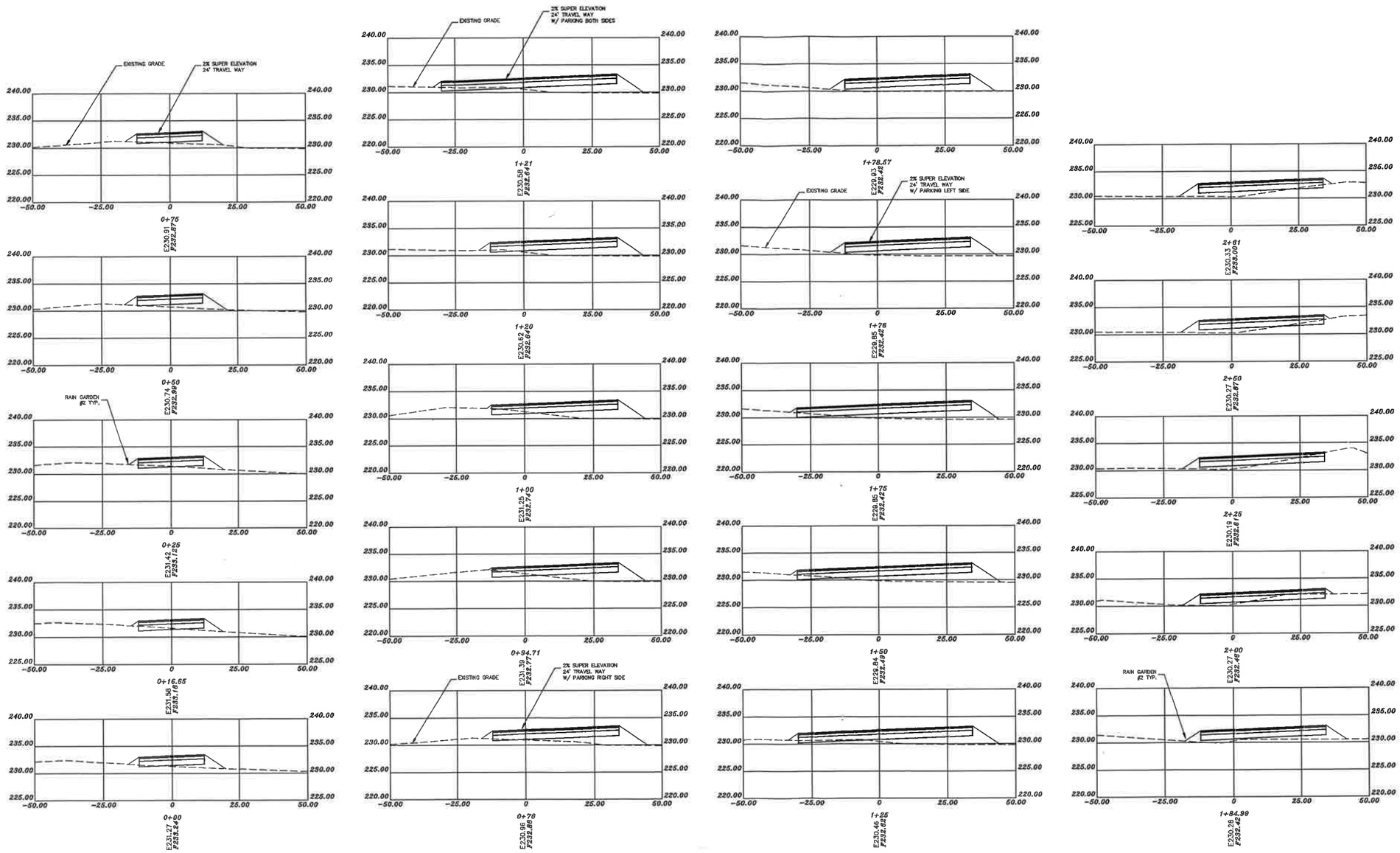
SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14703
LICENSED
PROFESSIONAL ENGINEER

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.
Vertical Scale 10



Horizontal Scale 20
Vertical Scale 10

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-02-2018	AOT REVISIONS
#3	04-09-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

HALF PEAK LANE CROSS SECTIONS 0+00 – 2+61.00
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

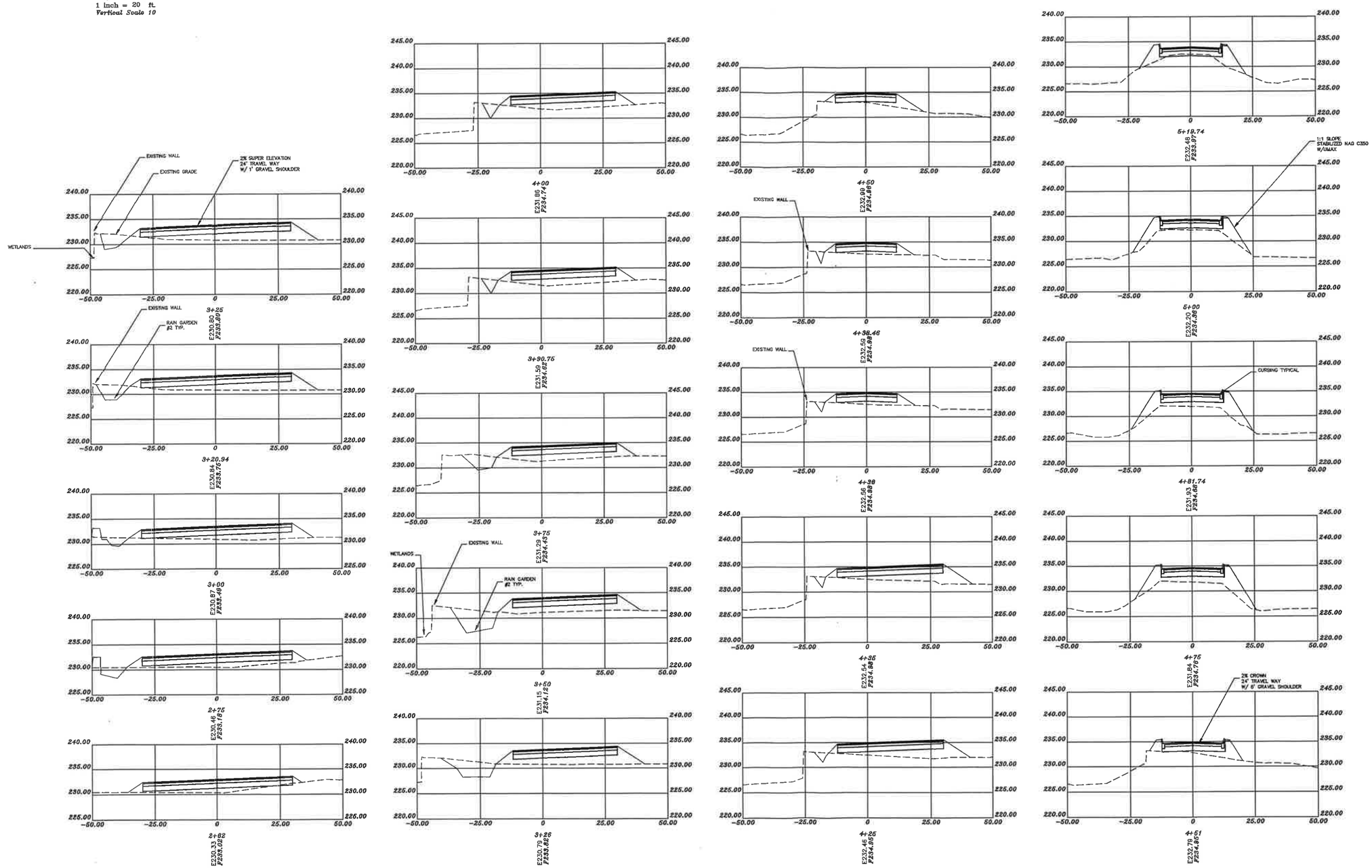
SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14245
LICENSED
PROFESSIONAL ENGINEER

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.
Vertical Scale 10



Horizontal Scale 20
Vertical Scale 10

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-02-2018	AoT REVISIONS
#3	04-11-2018	SITE PLAN REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

HALF PEAK LANE CROSS SECTIONS 2+62 – 5+19.74
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

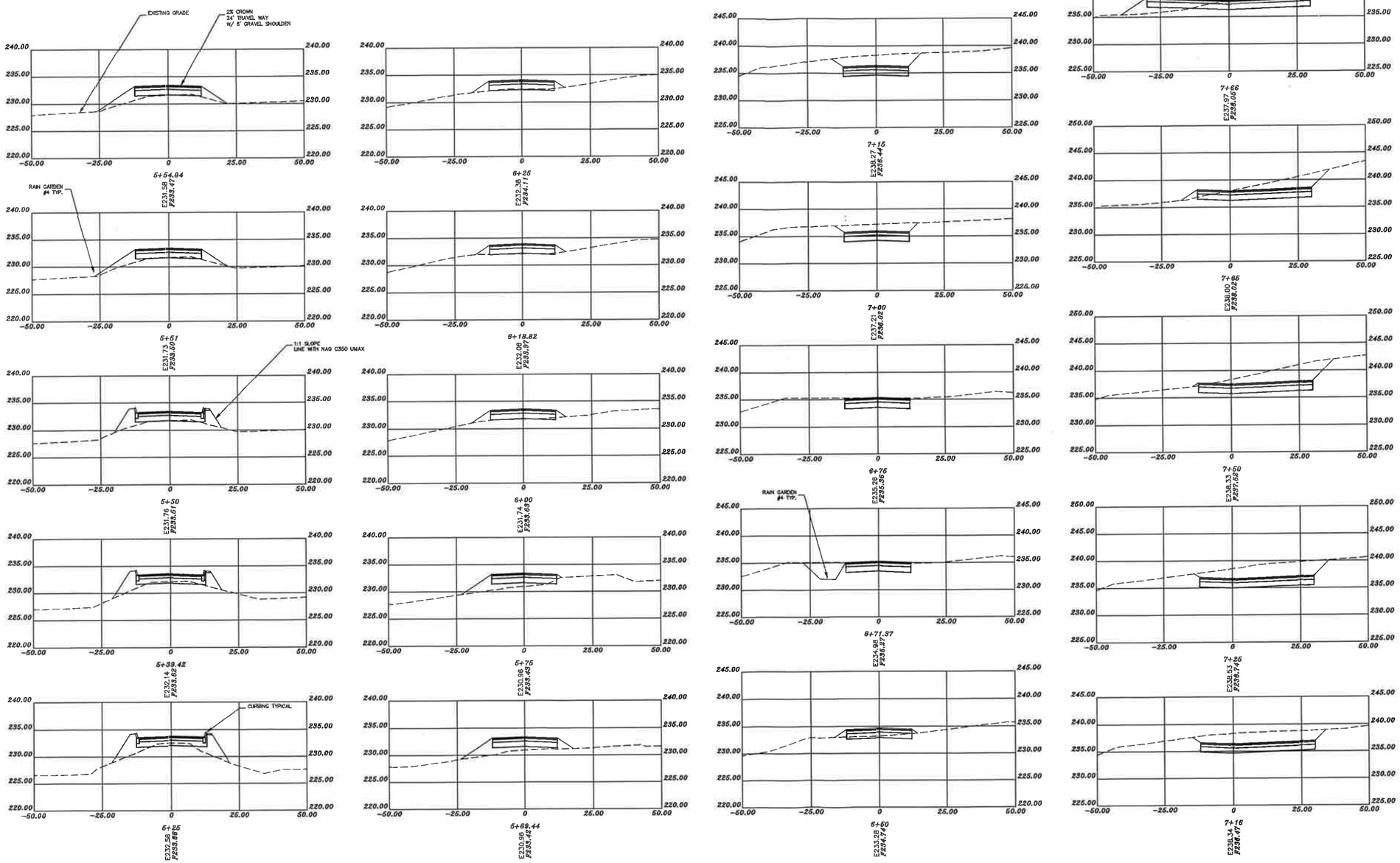
BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.
Vertical Scale 10



Horizontal Scale 20
Vertical Scale 10

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-02-2018	AOT REVISIONS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

HALF PEAK LANE CROSS SECTIONS 5+25 – 7+66
LAND OF
CRC FUTURE CORP.
FOR:
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14241
LICENSED
PROFESSIONAL ENGINEER

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-02-2018	AOT REVISIONS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

HALF PEAK LANE CROSS SECTIONS 7+75 – 10+75

LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

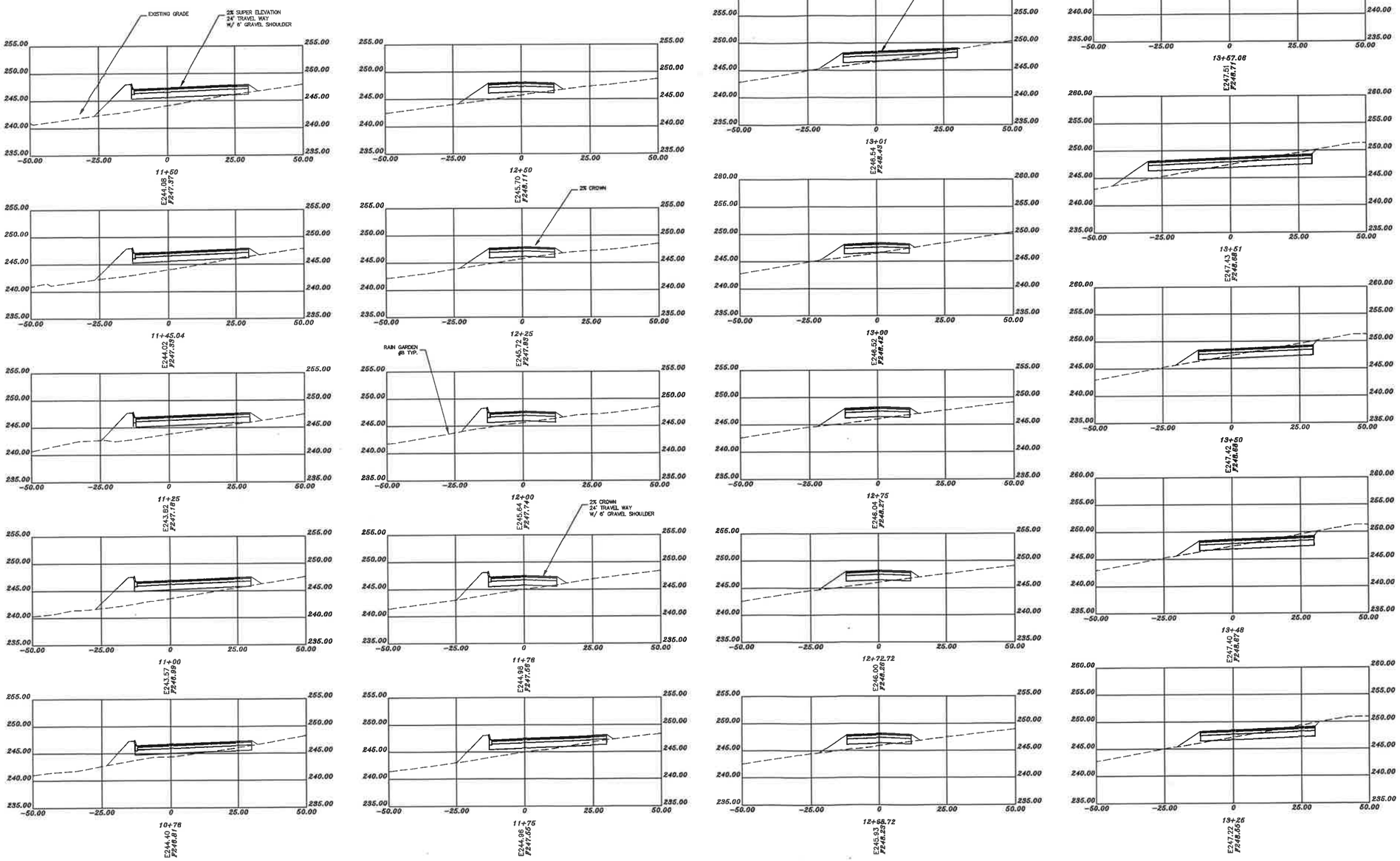
SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14245
LICENSED
PROFESSIONAL ENGINEER

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft
Vertical Scale 10



Horizontal Scale 20
Vertical Scale 10

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-02-2018	AOT REVISIONS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

HALF PEAK LANE CROSS SECTIONS 10+76 – 13+57.06
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

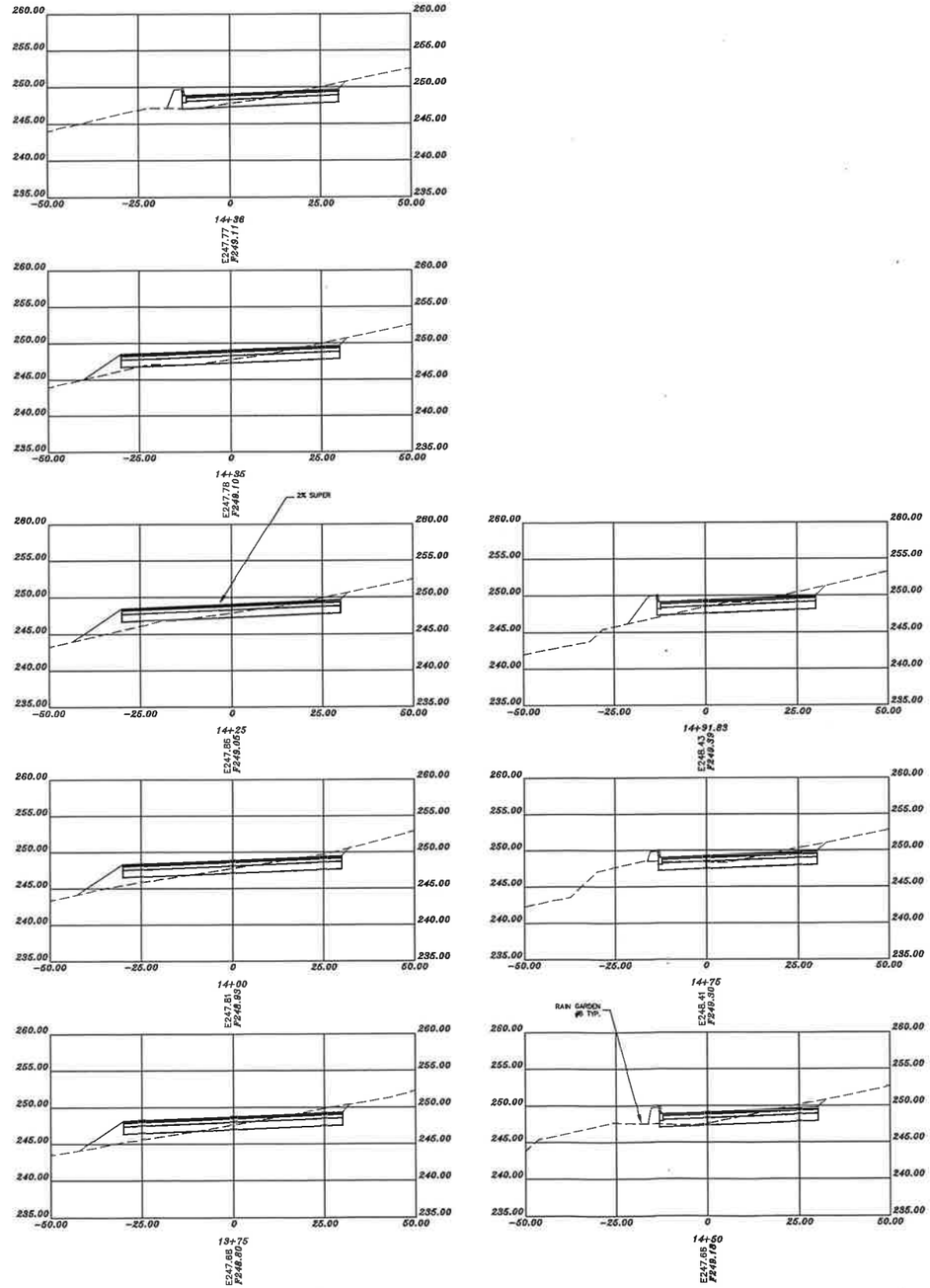
SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 4293
LICENSED
PROFESSIONAL ENGINEER

SHEET 60 OF 76

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.
Vertical Scale 10



Horizontal Scale 20
Vertical Scale 10

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES/WED RESPONSE
#4	04-20-2018	AoT REVISIONS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

HALF PEAK LANE CROSS SECTIONS 13+75 – END

LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

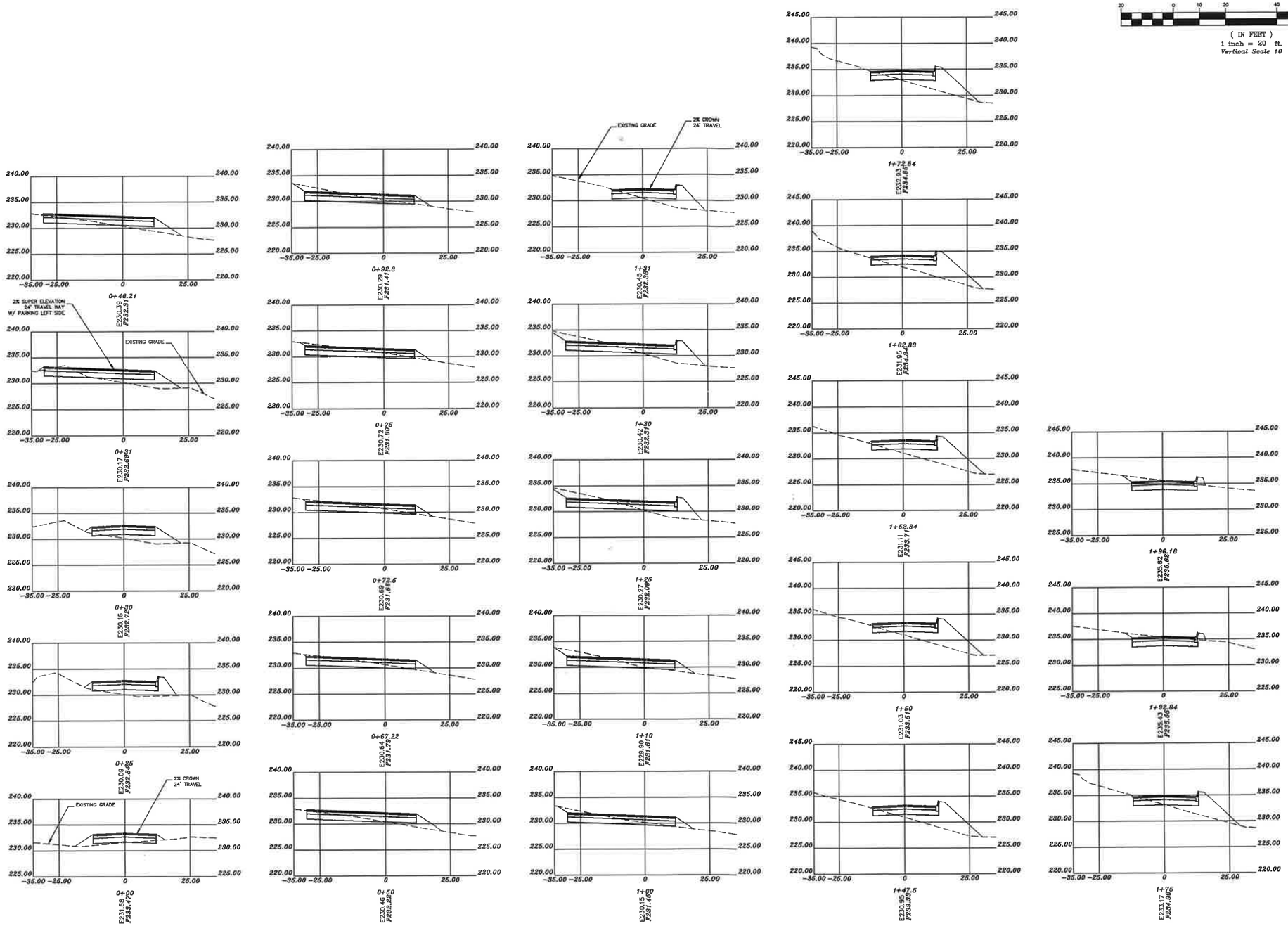
BERRY & SURVEYING ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14943
LICENSED
PROFESSIONAL ENGINEER

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.
Vertical Scale 10



Horizontal Scale 20
Vertical Scale 10

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-02-2018	AOT REVISIONS
#3	04-11-2018	SITEWORK WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

JAY PEAK LANE CROSS SECTIONS 0+00 – 1+96.16
LAND OF
CRC FUTURE CORP.
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

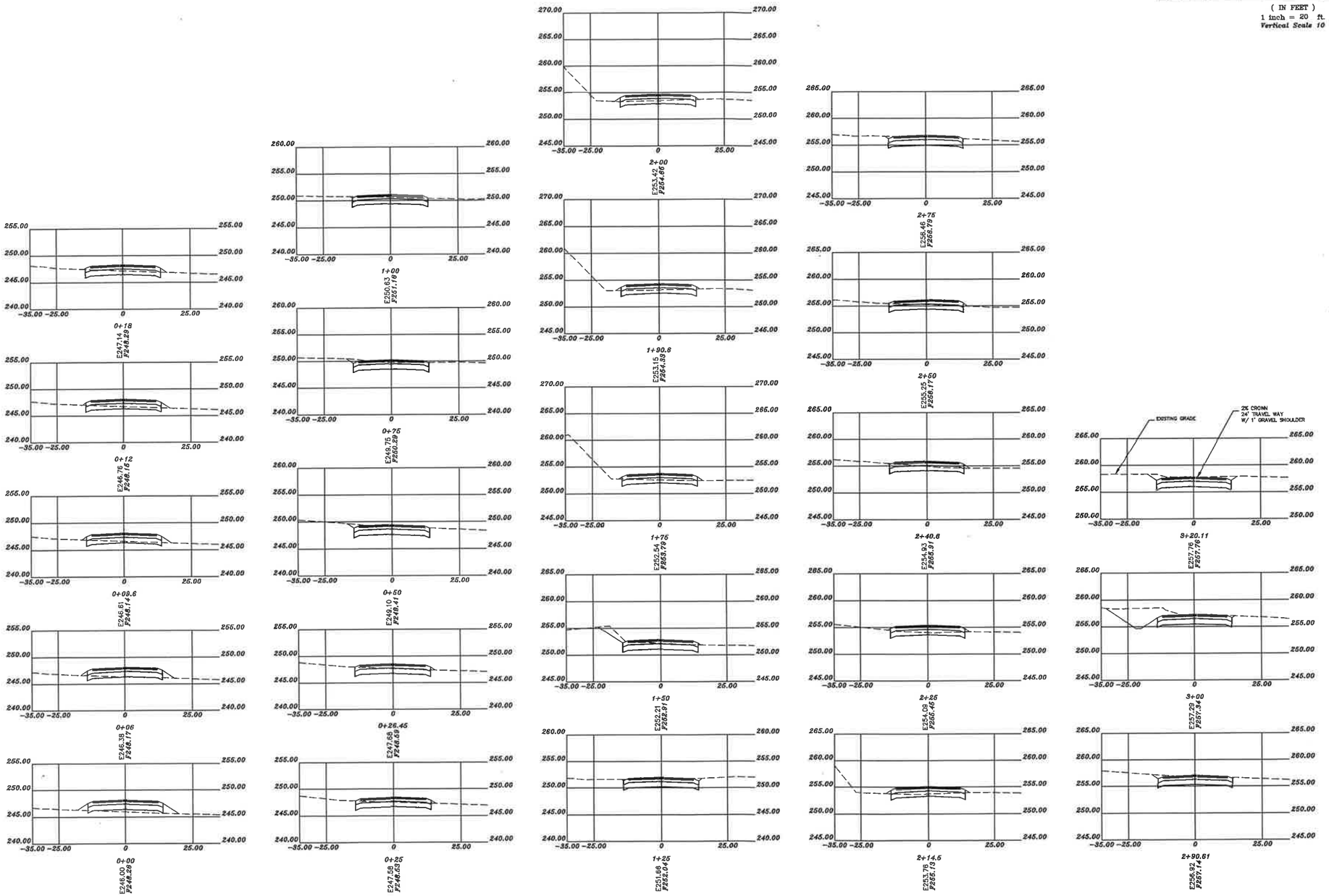
SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14313
LICENSED
PROFESSIONAL ENGINEER

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.
Vertical Scale 10



Horizontal Scale 20
Vertical Scale 10

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-02-2018	AOT REVISIONS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

MARWARI LANE CROSS SECTIONS 0+00 – 3+20.11

LAND OF
CRC FUTURE, CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER

SHEET 63 OF 76

NOTES:

1.) OWNER: CRC FUTURE CORP.
56 EXETER ROAD
NEWMARKET, NH 03857-1909

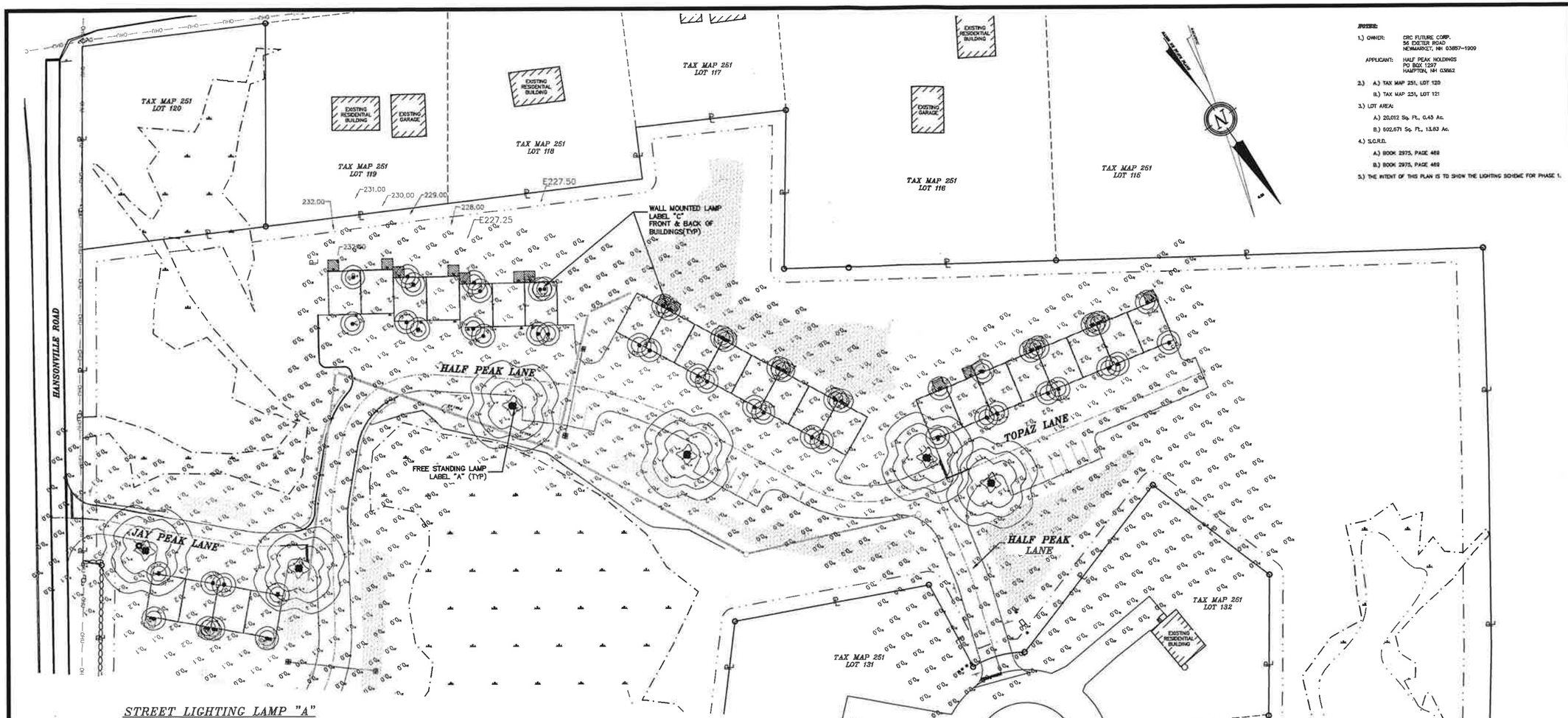
APPLICANT: HALF PEAK HOLDINGS
PO BOX 1297
HAMPTON, NH 03862

2.) A.) TAX MAP 251, LOT 120
B.) TAX MAP 251, LOT 121

3.) LOT AREA:
A.) 20,012 Sq. Ft., 0.45 Ac.
B.) 602,671 Sq. Ft., 13.83 Ac.

4.) S.C.R.D.
A.) BOOK 2975, PAGE 468
B.) BOOK 2975, PAGE 469

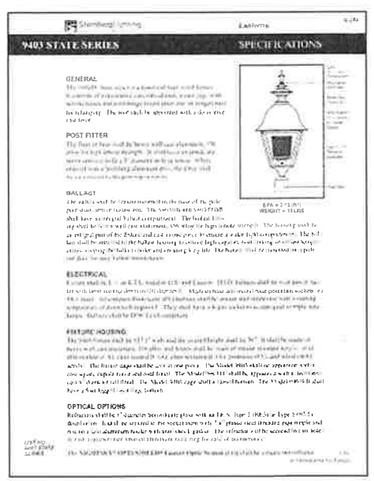
5.) THE INTENT OF THIS PLAN IS TO SHOW THE LIGHTING SCHEME FOR PHASE 1.

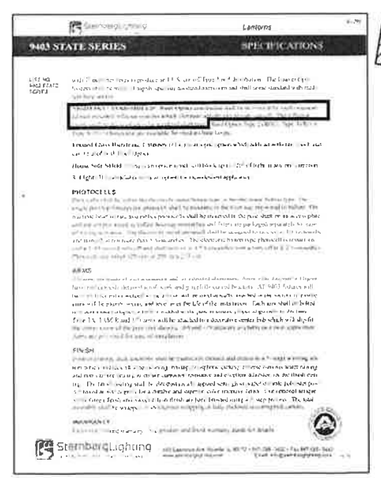


STREET LIGHTING LAMP "A"

NOT TO SCALE

SEE SITE PLAN FOR LOCATIONS AND MOUNTING HEIGHTS
ALL LAMPS WILL BE "NIGHT SKY" COMPLIANT AND SIDE SHIELDS (FULL-CUT OFF) FOR FIXTURES TO PREVENT LIGHT FROM SPILLING OVER THE PROPERTY LINE.





TYPICAL RESIDENTIAL LAMP "C"

NOT TO SCALE

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWED
#4	05-02-2018	ADDITIONAL REVISIONS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

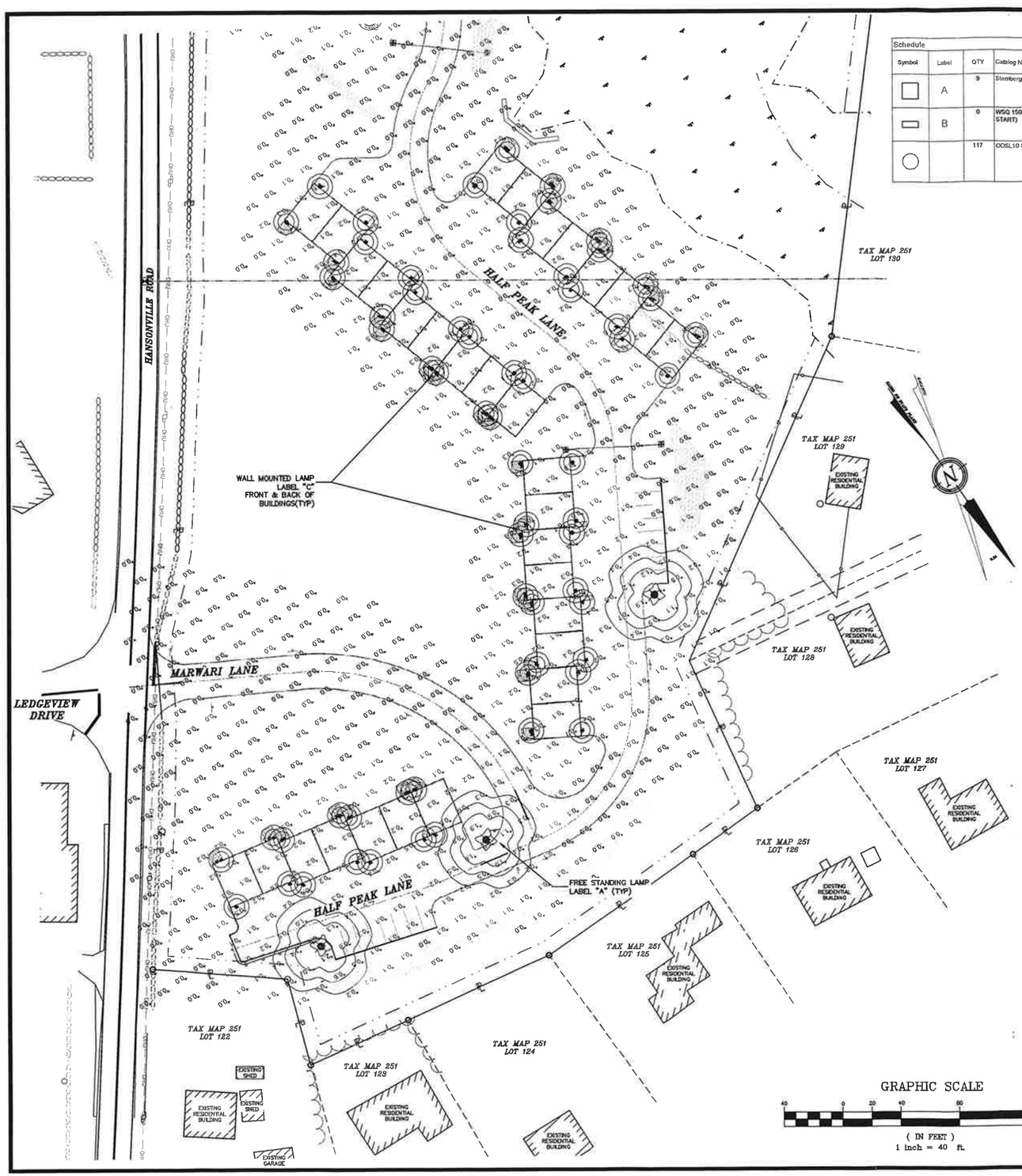
LIGHTING PLAN – PHASE I
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 40 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14743
LICENSED
PROFESSIONAL ENGINEER

SHEET 64 OF 76



Schedule									
Symbol	Label	QTY	Catalog Number	Description	Lamp	Number Lamps	Lumens per Lamp	LLF	Wattage
	A	9	Sternberg 8830	CAST ALUMINUM HOUSING, TRANSLUCENT WHITE GLASS CHIMNEY SURROUNDING LAMP, CLEAR ACRYLIC ENCLOSURE.	ONE CLEAR VBO M57 175 WATT B17 METAL HAUIDE LAMP RATED AT 14,000 LUMENS.	1	14000	1	175
	B	0	WSQ 150M FT (PULSE START)	ARCHITECTURAL SCONCE WITH FORWARD THROW DISTRIBUTION WITH CLEAR, FLAT GLASS LENS. CLEAR LAMP. MEETS THE "NIGHTTIME FRIENDLY" CRITERA	ONE 150-WATT CLEAR ED17 PULSE START METAL HAUIDE, HORIZONTAL POS.	1	14000	1	189
		117	ODSL10 SRC	CRAFTSTON WALL MOUNTED SMALL DECORATIVE LANTERN, ONE LAMP 13W SPIRAL COMPACT FLUORESCENT, WHITE GLASS DIFFUSER 4.25" DIA. X 6.65" HIGH, ELECTRONIC BALLAST	ONE 13-WATT T4 SPIRAL COMPACT FLUORESCENT, VERTICAL BASE UP POSITION.	1	900	1	12.5

SEE SITE PLAN FOR LOCATIONS AND MOUNTING HEIGHTS
ALL LAMPS WILL BE "NIGHT SKY" COMPLIANT AND SIDE SHIELDS (FULL-CUT OFF) FOR FIXTURES TO PREVENT LIGHT FROM SPILLING OVER THE PROPERTY LINE.

NOTES:

1.) OWNER: CRC FUTURE CORP.
58 EXETER ROAD
NEWMARKET, NH 03857-1909

APPLICANT: HALF PEAK HOLDINGS
PO BOX 1287
HAMPTON, NH 03862

2.) A.) TAX MAP 251, LOT 120

B.) TAX MAP 251, LOT 121

3.) LOT AREA:

A.) 20,012 Sq. Ft., 0.46 Ac.

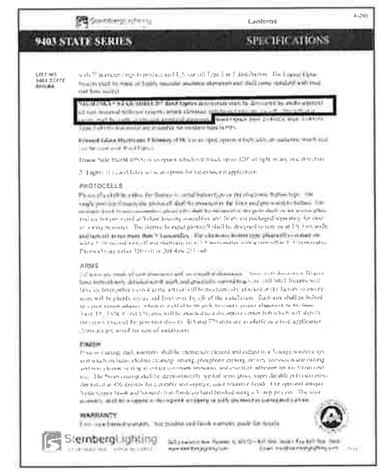
B.) 602,671 Sq. Ft., 13.83 Ac.

4.) S.C.R.D.

A.) BOOK 2975, PAGE 469

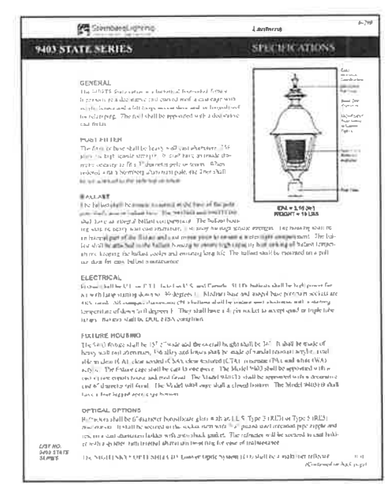
B.) BOOK 2975, PAGE 468

5.) THE INTENT OF THIS PLAN IS TO SHOW THE LIGHTING SCHEME FOR PHASE 2.


Sternberg Lighting
Lanterns
9403 STATE SERIES
SPECIFICATIONS

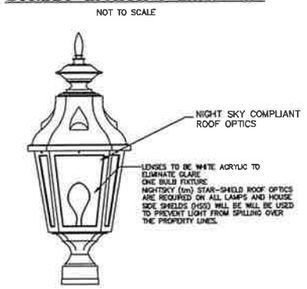
TYPICAL RESIDENTIAL LAMP "C"

NOT TO SCALE


Sternberg Lighting
Lanterns
9403 STATE SERIES
SPECIFICATIONS

STREET LIGHTING LAMP "A"

NOT TO SCALE



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#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
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#5b	05-24-2018	NHDES WWEB RESPONSE
#4	04-12-2018	REVISED SITE
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

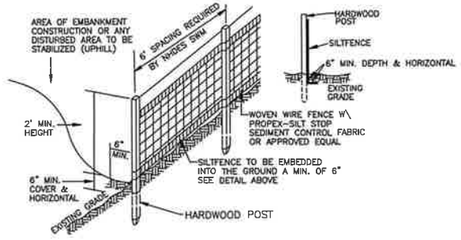
LIGHTING PLAN – PHASE II
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 40 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 4820
LICENSED
PROFESSIONAL ENGINEER

E1



SILT FENCE CONSTRUCTION SPECIFICATIONS

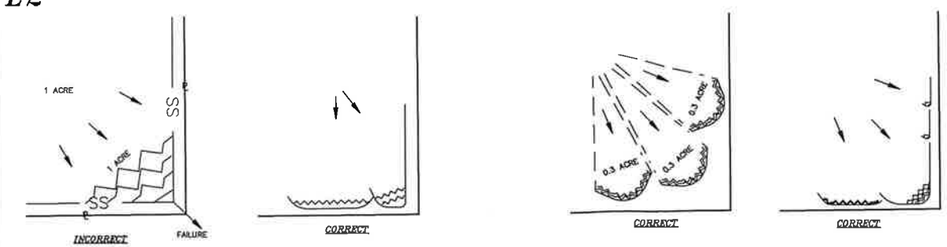
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES AND FILTER CLOTH SHALL BE FASTENED TO WOVEN WIRE EVERY 24" AT TOP MID AND BOTTOM SECTIONS AND BE EMBEDDED INTO GROUND A MINIMUM OF 8" THE FENCE POSTS SHALL BE A MINIMUM 48" LONG, SPACED A MAXIMUM 10' APART, AND DRIVEN A MINIMUM OF 16" INTO THE GROUND.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THE ENDS OF THE FABRIC SHALL BE OVERLAPPED BY SIX INCHES, FOLDED AND STAPLED TO PREVENT SEDIMENT FROM BY-PASSING.
3. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE AND PROPERLY DISPOSED OF. SEE MAINTENANCE NOTE BELOW, REMOVAL OF SEDIMENT REQUIRED AT A DEPTH OF 6-INCHES.
4. PLACE THE ENDS OF THE SILT FENCE UP CONTOUR TO PROVIDE FOR SEDIMENT STORAGE.
5. SILT FENCES SHALL BE REMOVED WHEN NO LONGER NEEDED AND THE SEDIMENT COLLECTED SHALL BE DISPOSED AS DIRECTED BY THE ENGINEER.
6. THE AREA DISTURBED BY THE REMOVAL SHALL BE SMOOTHED AND RE-VEGETATED.
7. TO BE CONSTRUCTED IAW NH SWM #3 4-2 SEDIMENT CONTROL PRACTICES, SILT FENCE, PAGE 90.
8. SEE DETAIL C4 FOR CONSTRUCTION OF SILT FENCE ALONG PROPERTY LINES.

SILT FENCE MAINTENANCE

1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
2. IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN THEY REACH SIX-INCHES IN DEPTH.
4. SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

SILT FENCE DETAIL
NOT TO SCALE

E2



NOTES

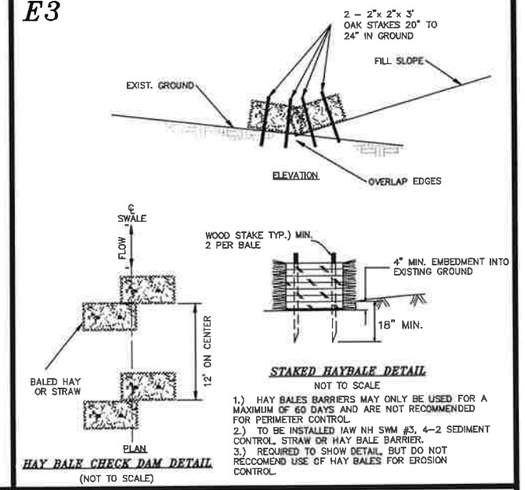
1. DO NOT LAYOUT PERIMETER CONTROL ALONG SLOPING PROPERTY PERIMETER WITHOUT INSTALLING "J HOOKS" AT HIGH CONCENTRATION AREAS. RUNOFF WILL CONCENTRATE AND CAUSE FAILURES ALONG THE PERIMETER.
2. "J HOOKS" CAN BE USED TO HELP LIMIT THE CONCENTRATION OF RUNOFF AND PROVIDE MORE STABILITY TO THE PERIMETER.
3. SILT FENCE AND EROSION CONTROL MULCH BERM MAY BE USED INTERCHANGEABLY. IN SPECIFIED AREA, SILT FENCE MAY NOT BE SUBSTITUTED FOR FILTREXX SILT SOXX OR APPROVED ALTERNATIVE.
4. SEE HAMPSHIRE STORM WATER MANUAL: VOLUME 3, PAGE 99 FOR FURTHER DETAILS AND SPECIFICATIONS

DESIGN CONSITERATIONS:

1. THE MAXIMUM LENGTH OF SLOPE ABOVE PERIMETER CONTROL IS 100 FEET.
2. THE MAXIMUM GRADIENT BEHIND CONTROL WILL NOT EXCEED 5%.
3. THE MAXIMUM CONTRIBUTING DRAINAGE AREA OF ONE-QUARTER ACRE PER 100-FEET OF PRACTICE LENGTH.
4. PERIMETER CONTROL IS TO BE INSTALLED PRIOR TO EARTH MOVING ACTIVITEIS, INCLUDING GRUBBING AND CLEARING.

PERIMETER CONTROL
NOT TO SCALE

E3



HAY BALE CHECK DAM DETAIL
(NOT TO SCALE)

STAKED HAYBALE DETAIL
NOT TO SCALE

1.) HAY BALES BARRIERS MAY ONLY BE USED FOR A MAXIMUM OF 60 DAYS AND ARE NOT RECOMMENDED FOR PERIMETER CONTROL.
2.) TO BE INSTALLED IAW NH SWM #3, 4-2 SEDIMENT CONTROL, STRAW OR HAY BALE BARRIER.
3.) REQUIRED TO SHOW DETAIL, BUT DO NOT RECCOMEND USE OF HAY BALES FOR EROSION CONTROL.

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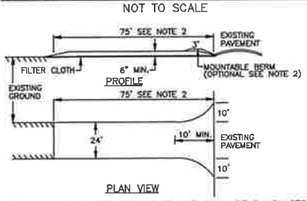
#4	05-02-2018	AOT REVISIONS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

E4 STABILIZED CONSTRUCTION ENTRANCE

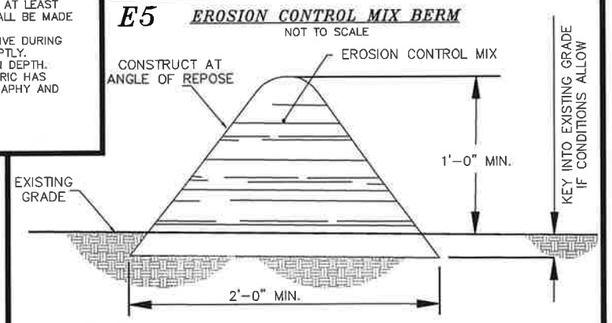
NOT TO SCALE



1. STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 3 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 75 FEET, EXCEPT THAT THE MINIMUM LENGTH MAY BE REDUCED TO 50 FEET IF A 3-INCH TO 6-INCH BERM IS INSTALLED AT THE ENTRANCE OF THE PROJECT SITE.
3. THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICH EVER IS GREATER.
5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING
6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.
8. TO BE CONSTRUCTED IAW NH SWM #3 4-2 SEDIMENT CONTROL PRACTICES, TEMPORARY CONSTRUCTION EXIT, PAGE 124.

E5 EROSION CONTROL MIX BERM

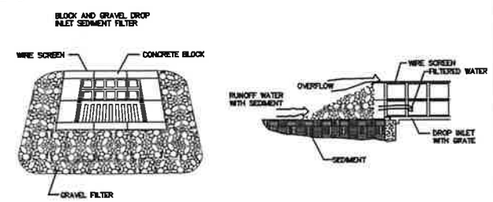
NOT TO SCALE



EROSION CONTROL MIX BERMS SHALL BE USED ONLY AS FOLLOWS:

1. BERMS SHALL BE USED IN AREAS WHERE EROSION WILL OCCUR ONLY IN THE FORM OF SHEET EROSION AND THERE IS NO CONCENTRATION OF WATER IN A CHANNEL OR DRAINAGE WAY ABOVE THE BERM.
2. THE BERMS SHALL BE INSTALLED FOLLOWING THE CONTOUR OF THE LAND AS CLOSLY AS POSSIBLE.
3. THE BERMS SHALL BE INSTALLED ON SLOPES LESS THAN 5%.
4. SUBJECT TO (E), BELOW, THE MIX SHALL HAVE AN ORGANIC PORTION BETWEEN 80 AND 100%, DRY WEIGHT BASIS, AND BE FIBROUS AND ELONGATED SUCH AS FROM SHREDDED BARK, STUMP GRINDINGS, COMPOSED BARK, OR EQUIVALENT MANUFACTURED PRODUCTS.
5. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS, OR REPROCESSED WOOD PRODUCTS SHALL NOT BE USED AS ORGANIC MATERIAL.
6. THE MIX SHALL NOT CONTAIN SILTS, CLAY, OR FINE SANDS.
7. THE MIX SHALL HAVE A PARTICLE SIZE BY WEIGHT OF 70 TO 85% PASSING A 6-INCH SCREEN AND A MAXIMUM OF 85% PASSING THE 0.75-INCH SCREEN.
8. THE MIX PH SHALL BE BETWEEN 5.0 AND 8.0.
9. THE BERM SHALL BE AT LEAST 12 INCHES HIGH AND AT LEAST 2 FEET WIDE.
10. TO BE CONSTRUCTED IAW NH SWM #3 4-2 SEDIMENT CONTROL PRACTICES, EROSION CONTROL MIX BERMS, PAGE 106.

E6



MAINTENANCE

ALL STRUCTURES SHOULD BE INSPECTED AFTER EVERY RAIN STORM AND REPAIRS MADE AS NECESSARY. SEDIMENT SHOULD BE REMOVED FROM TRAPPING DEVICES AFTER THE SEDIMENT HAS REACHED A MAXIMUM OF ONE HALF THE DEPTH OF THE TRAP. THE SEDIMENT SHOULD BE DISPOSED OF IN A SUITABLE AREA AND PROTECTED FROM EROSION BY EITHER STRUCTURE OR VEGETATIVE MEANS. THE TEMPORARY TRAPS SHOULD BE REMOVED AND THE AREA REPAIRED AS SOON AS THE CONTRIBUTING DRAINAGE AREA TO THE INLET HAS BEEN COMPLETELY STABILIZED.

BLOCK & GRAVEL DROP INLET SEDIMENT FILTER
NOT TO SCALE

TO BE USED IN ALL AREAS WHERE THERE WILL BE NO TRAFFIC.

TO BE CONSTRUCTED IAW NH SWM #3 4-2 SEDIMENT CONTROL PRACTICES, TEMPORARY STORM DRAIN INLET PROTECTION, PAGE 118.

E7 TEMPORARY EROSION CONTROL MEASURES

1. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME.
2. EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND AT LOCATIONS AS REQUIRED, DIRECTED BY THE ENGINEER.
3. ALL DISTURBED AREAS SHALL BE RETURNED TO ORIGINAL GRADES AND ELEVATIONS. DISTURBED AREAS SHALL BE LOAMED WITH A MINIMUM OF 4" OF LOAM AND SEEDED WITH NOT LESS THAN ONE POUND OF SEED PER 50 SQUARE YARDS OF AREA. (SEE SEED SPECIFICATIONS THIS SHEET)
4. ALL DISTURBED AREAS WILL BE RESTABILIZED WITHIN 45 DAYS. AT ANY ONE TIME, NO MORE THAN 5 ACRES, (217,800 Sq. Ft.) WILL BE DISTURBED.
5. SILT FENCES AND PERIMETER BARRIERS SHALL BE INSPECTED PERIODICALLY AND AFTER EVERY RAIN DURING THE LIFE OF THE PROJECT. ALL DAMAGED AREAS SHALL BE REPAIRED, SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED OF.
6. AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE REMOVED AND THE AREA DISTURBED BY THE REMOVAL SMOOTHED AND RE-VEGETATED.
7. PER THE EPA CGP REQUIREMENTS THERE WILL BE REPORTS OF THE EROSION CONTROL INSPECTIONS IAW SWPPP PREPARED BY BS&E. ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER 0.5" OR GREATER RAIN EVENT.
8. DITCHES, SWALES, AND BASINS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
9. DO NOT TRAFFIC EXPOSED SOIL SURFACES WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION SYSTEM.
10. ALL PAVED AREAS AND CUT AND FILL SPLOPES MUST BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINAL GRADE.
11. STABILIZATION MEANS:

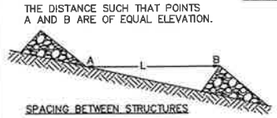
11.1. A MINIMUM OF 85% OF VEGETATIVE COVER HAS BEEN ESTABLISHED.
11.2. A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED, OR
11.3. EROSION CONTROL BLANKETS HAVE BEEN INSTALLED.
11.4. INSTALLATION OF BASE COURSE GRAVEL.

12. THIS 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.
13. THE NHDES STORMWATER MANUAL, IN THREE VOLUMES, DATED DECEMBER 2008, IS A PART OF THIS PLAN SET AND THE MORE RESTRICTIVE WILL GOVERN. (NH SWM)

SEDIMENT & EROSION CONTROL DETAILS
LAND OF
ORC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

E8

THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION.

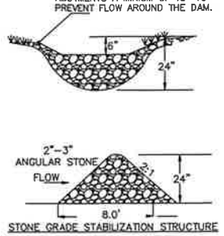


SPACING BETWEEN STRUCTURES

1.) CHECK DAMS SHOULD BE INSTALLED BEFORE RUNOFF IS DIRECTED TO THE SWALE OR DRAINAGE DITCH.
2.) THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE DAM SHOULD BE LESS THEN ONE ACRE.
3.) THE MAXIMUM HEIGHT OF THE DAM SHOULD BE TWO FEET.
4.) THE CENTER OF THE DAM SHOULD BE AT LEAST SIX INCHES LOWER THAN THE OUTER EDGES.
5.) THE MAXIMUM SPACING IS AS SHOWN ON THE PROJECT SITE PLANS.
6.) CHECK DAMS WILL NOT BE USED IN A FLOWING STREAM.
7.) TEMPORARY CHECK DAMS WILL BE REMOVED ONCE THE SWALE OR DITCH IS DETERMINED STABLE.
8.) TO BE CONSTRUCTED IAW NH SWM #3 4-2 SEDIMENT CONTROL PRACTICES, TEMPORARY CHECK DAMS, PAGE 114.

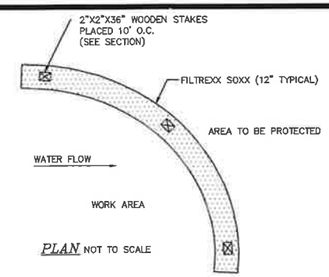
STONE CHECK DAM
NOT TO SCALE

NOTE: KEY STONE INTO CHANNEL BANKS AND EXTEND IT BEYOND THE ABUTMENTS A MINIUM OF 18" TO PREVENT FLOW AROUND THE DAM.



STONE GRADE STABILIZATION STRUCTURE

E9



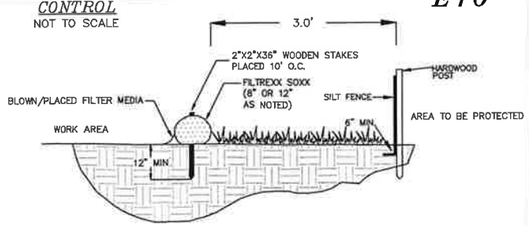
PLAN NOT TO SCALE

NOTES

1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2. FILTER MEDIA FILL TO MEET APPLICATION REQUIRMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.
4. SILTSOXX MAY BE USED IN PLACE OF SILT FENCE OR OTHER SEDIMENT BARRIERS.
5. SILTSOXX COMPOST/SOIL/ROCK/SEED FILL MATERIAL SHALL BE ADJUSTED AS NECESSARY TO MEET THE REQUIRMENTS OF THE SPECIFIC APPLICATION.
6. FILTREXX SOXX IS A REGISTERED TRADEMARK OF FILTREXXIN TERNATIONAL, LLC.
7. SILT FENCE IS NOT A SUBSTITUTION FOR SILT SOXX AND ANY EQUAL SUBSTITUTION TO BE APPROVED.
8. TO BE CONSTRUCTED IAW FILTREXX, SECTION 1:EROSION & SEDIMENT CONTROL (PAGE 323) - CONSTRUCTION ACTIVITIES, SWPPP CUT SHEET: FILTREXX SEDIMENT CONTROL

FILTREXX SEDIMENT CONTROL
NOT TO SCALE

E10

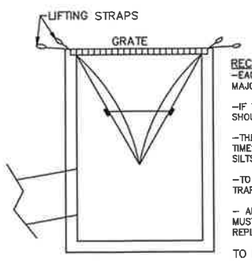


Filtrexx International, LLC
35481 Grafton Eastern Rd | Grafton, Oh 44044
440-926-2607 | fax: 440-926-4021
WWW.FILTREXX.COM
OR APPROVED EQUAL

NOTE: FOR AREAS REQUIRING DOUBLE PERIMETER CONTROL WITHIN 50' OF JURISDICTIONAL WETLANDS AND NOT FOR ALL SILT SOXX APPLICATIONS. THIS DUPLICATION MAY BE SPECIFIED AS 12" SILT SOXX OR ORANGE CONSTRUCTION FENCE AS NOTED.

SECTION NOT TO SCALE

E11



RECOMMENDED MAINTENANCE SCHEDULE

-EACH SILTSACK SHOULD BE INSPECTED AFTER EVERY MAJOR RAIN EVENT, AND MUST BE MAINTAINED.

-IF THERE HAVE BEEN NO MAJOR EVENTS, SILTSACK SHOULD BE INSPECTED EVERY 2-3 WEEKS.

-THE RESTRAINT CORD SHOULD BE VISIBLE AT ALL TIMES. IF CORD IS COVERED WITH SEDIMENT, THE SILTSACK SHOULD BE EMPTIED.

-TO BE USED IN ALL AREAS WHERE THERE WILL BE TRAFFIC.

- ARE SUBJECT TO DAMAGE BY SNOW PLOWS, AND MUST BE INSPECTED AFTER ANY SNOW EVENT AND REPLACED AS REQUIRED.

TO BE CONSTRUCTED IAW NH SWM #3 4-2 SEDIMENT CONTROL PRACTICES, TEMPORARY STORM DRAIN INLET PROTECTION, PAGE 118.

SILTSACK DETAIL
NOT TO SCALE

E-101

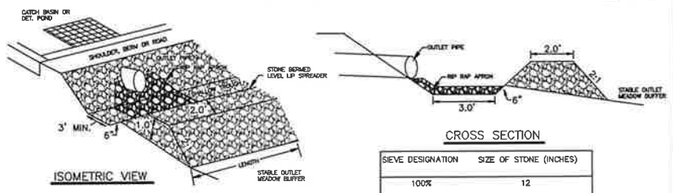
BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE: NONE
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE KENNETH A. BERRY No. 14245 LICENSED PROFESSIONAL ENGINEER

E12 — STONE BERM LEVEL SPREADER

NOT TO SCALE



ISOMETRIC VIEW

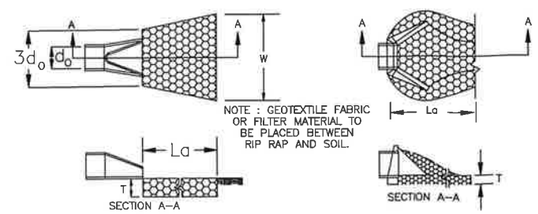
CROSS SECTION

SIEVE DESIGNATION	SIZE OF STONE (INCHES)
100%	12
84–100%	6
68–83%	3
42–55%	1
8–12%	NO. 4

1. CONSTRUCT THE LEVEL SPREADER LIP ON A 0% GRADE TO INSURE UNIFORM SPREADING OF RUNOFF.
2. LEVEL SPREADER SHALL BE CONSTRUCTED ON UNDISTURBED SOIL AND NOT ON FILL.
3. THE ENTIRE LEVEL LIP AREA SHALL BE PROTECTED BY PLACING EXCELSIOR ENFORCER MATTING BENEATH THE STONE. EACH STRIP SHALL OVERLAP BY AT LEAST SIX INCHES.
4. THE FLOW FROM THE LEVEL SPREADER SHALL OUTLET ONTO STABILIZED AREAS. WATER SHOULD NOT RE–CONCENTRATE IMMEDIATELY BELOW THE SPREADER.
5. MAINTENANCE: THE LEVEL SPREADER SHOULD BE CHECKED PERIODICALLY AND AFTER EVERY MAJOR STORM TO DETERMINE IF THE LIP HAS BEEN DAMAGED AND THE DESIGN CONDITIONS HAVE NOT CHANGED. ANY DETRIMENTAL SEDIMENT ACCUMULATION SHOULD BE REMOVED. IF STONE REMOVAL HAS TAKEN PLACE ON THE LIP, THEN THE DAMAGE SHOULD BE REPAIRED.
6. REFERENCE IS MADE TO NHDES SWM VOL. 2, 4–6, STONE BERM LEVEL SPREADERS, PAGE 162

E13 — PIPE OUTLET PROTECTION

NOT TO SCALE



PIPE OUTLET TO FLAT AREA WITH NO DEFINED CHANNEL

PIPE OUTLET TO WELL–DEFINED CHANNEL

PIPE OUTLET PROTECTION CONSTRUCTION SPECIFICATIONS

1. THE SUB GRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIP RAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
2. THE ROCK OR GRAVEL USED FOR FILTER OF RIP RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIP RAP DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
4. STONE FOR THE RIP RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.
5. TO BE CONSTRUCTED IAW NH SWM #2 4–6 CONVEYANCE PRACTICES, 6. OUTLET PROTECTION, PAGE 172.

E14

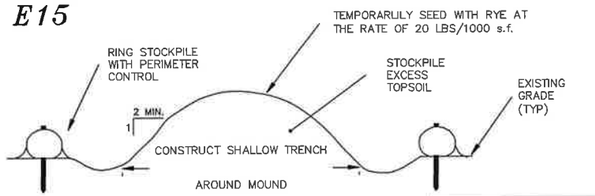
TABLE 7–24––RECOMMENDED RIP RAP GRADATION RANGES

d50 SIZE= 0.5 FEET 6 INCHES		
% OF WEIGHT SMALLER THAN THE GIVEN d50 SIZE	SIZE OF STONE (INCHES) FROM	TO
100%	9	12
85%	8	11
50%	6	9
15%	2	3

REVISION	DATE	DESCRIPTION
#7	07–30–2018	SUBMITTED FOR CONSTRUCTION
#6a	06–18–2018	REVISED PER AoT COMMENT
#5b	05–24–2018	NHDES WMB RESPONSE
#4	04–12–2018	AoT RESPONSE
#3	04–11–2018	SEWER & WATER REVISIONS
#2	04–09–2018	GENERAL PLAN SET
#1	03–30–2018	GENERAL PLAN SET

E15 — TOPSOIL STOCKPILE MOUND

NOT TO SCALE



1.) TO BE CONSTRUCTED IAW NH SWM #3 CHAPTER 4–1, EROSION PRACTICE, SOIL STOCKPILE PRACTICES, PAGE 46.

E16 — WINTER STABILIZATION NOTES

1. ALL DISTURBED AREAS THAT DO NOT HAVE AT LEAST 85% VEGETATIVE COVERAGE PRIOR TO OCTOBER 15TH, SHALL BE STABILIZED BY APPLYING MULCH AT A RATE OF 3–4 TONS PER ACRE. ALL SIDE SLOPES, STEEPER THAN 4:1, THAT ARE NOT DIRECTED TO SWALES OR DETENTION BASINS, SHALL BE LINED WITH BIODEGRADABLE/PHOTODEGRADABLE "JUTE MATTING" (EXCELSIOR'S CURLEX II OR EQUAL). ALL OTHER SLOPES SHALL BE MULCHED AND TACKED AT A RATE OF 3–4 TONS PER ACRE. THE APPLICATION OF MULCH AND/OR JUTE MATTING SHALL NOT OCCUR OVER EXISTING SNOW COVER. IF THE SITE IS ACTIVE AFTER NOVEMBER 15TH, ANY SNOW THAT ACCUMULATES ON DISTURBED AREAS SHALL BE REMOVED. PRIOR TO SPRING THAW ALL AREAS WILL BE STABILIZED, AS DIRECTED ABOVE.

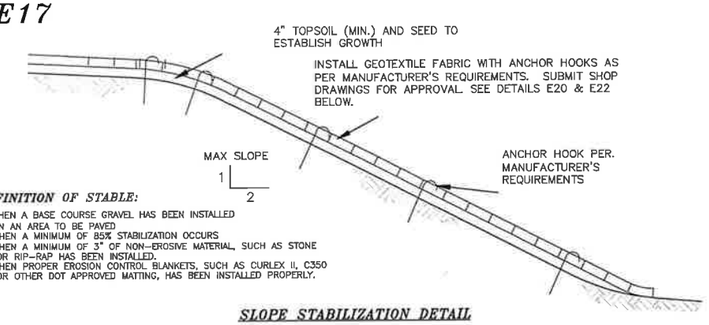
2. ALL SWALES THAT DO NOT HAVE FULLY ESTABLISHED VEGETATION SHALL BE EITHER LINED WITH TEMPORARY JUTE MATTING OR TEMPORARY STONE CHECK DAMS (APPROPRIATELY SPACED). STONE CHECK DAMS WILL BE MAINTAINED THROUGHOUT THE WINTER MONTHS. IF THE SWALES ARE TO BE MATTED WITH PERMANENT LINERS OR RIPRAP WITH ENGINEERING FABRIC, THIS SHALL BE COMPLETED PRIOR TO WINTER SHUTDOWN OR AS SOON AS THEY ARE PROPERLY GRADED AND SHAPED.

3. PRIOR TO NOV. 15TH ALL ROADWAY AND PARKING AREAS SHALL BE BROUGHT UP TO AND THROUGH THE BANK RUN GRAVEL APPLICATION. IF THESE AREAS' ELEVATIONS ARE PROPOSED TO REMAIN BELOW THE PROPOSED SUBGRADE ELEVATION, THE SUBGRADE MATERIAL SHALL BE ROUGHLY CROWNED AND A 3" LAYER OF CRUSHED GRAVEL SHALL BE PLACED AND COMPACTED. THIS WILL ALLOW THE SUBGRADE TO SHED RUNOFF AND WILL REDUCE ROADWAY EROSION. THIS CRUSHED GRAVEL DOES NOT HAVE TO CONFORM TO NH DOT 304.3, BUT SHALL HAVE BETWEEN 15–25% PASSING THE #200 SIEVE AND THE LARGEST STONE SIZE SHALL BE 2". IF THE SITE IS ACTIVE AFTER NOVEMBER 15TH, ANY ACCUMULATED SNOW SHALL BE REMOVED FROM ALL ROADWAY AND PARKING AREAS.

4. AFTER OCTOBER 15TH, THE END OF NEW HAMPSHIRE'S AVERAGE GROWING SEASON, NO ADDITIONAL LOAM SHALL BE SPREAD ON SIDE SLOPES AND SWALES. THE STOCKPILES THAT WILL BE LEFT UNDISTURBED UNTIL SPRING SHALL BE SEEDED BY THIS DATE. AFTER OCTOBER 15TH, ANY NEW OR DISTURBED PILES SHALL BE MULCHED AT A RATE OF 3–4 TONS PER ACRE. ALL STOCKPILES THAT WILL REMAIN THROUGHOUT THE WINTER SHALL BE SURROUNDED WITH SILT FENCING.

E17 — SLOPE STABILIZATION DETAIL

NOT TO SCALE

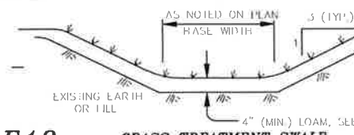


DEFINITION OF STABLE:

1. WHEN A BASE COURSE GRAVEL HAS BEEN INSTALLED IN AN AREA TO BE PAVED
2. WHEN A MINIMUM OF 85% STABILIZATION OCCURS
3. WHEN A MINIMUM OF 3" OF NON–EROSIVE MATERIAL, SUCH AS STONE OR RIP–RAP HAS BEEN INSTALLED.
4. WHEN PROPER EROSION CONTROL BLANKETS, SUCH AS CURLEX II, C350 OR OTHER DOT APPROVED MATTING, HAS BEEN INSTALLED PROPERLY.

E18 — GRASS TREATMENT SWALE

NOT TO SCALE



1.) INSPECT ANNUALLY FOR EROSION, SEDIMENT ACCUMULATIONS, VEGETATION LOSS, & INVASIVE SPECIES. REPAIR AS NECESSARY. MOW GRASS ANNUALLY TO A DEPTH OF 4".
2.) TO BE CONSTRUCTED IAW NH SWM #2 CHAPTER 4, #5 TREATMENT SWALES, PAGE 123.

E19 — SEEDING SPECIFICATIONS

NOTE: Temporary seed mix for stabilization of turf shall be winter rye or oats at a rate of 2.5 lbs. per 1000 s.f. and shall be placed prior to OCT. 15, if permanent seeding not yet complete.

SEEDING GUIDE

USE	SEEDING MIXTURE 1/	DROUGHTY	WELL DRAINED	MODERATELY WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A	FAIR	GOOD	GOOD	FAIR
	B	POOR	GOOD	FAIR	FAIR
	C	POOR	GOOD	EXCELLENT	GOOD
	D	FAIR	FAIR	GOOD	EXCELLENT
	E	FAIR	EXCELLENT	EXCELLENT	POOR
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER.	A	GOOD	GOOD	GOOD	FAIR
	C	GOOD	EXCELLENT	EXCELLENT	FAIR
	D	GOOD	EXCELLENT	EXCELLENT	FAIR
LIGHTLY USED PARKING LOTS, DOG AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES.	A	GOOD	GOOD	GOOD	FAIR
	C	GOOD	GOOD	FAIR	POOR
	E	GOOD	EXCELLENT	EXCELLENT	FAIR
	G	FAIR	GOOD	GOOD	EXCELLENT
PLAY AREAS AND ATHLETIC FIELDS. (TOPSOIL IS ESSENTIAL FOR GOOD TURF.)	F	FAIR	EXCELLENT	EXCELLENT	2/
	G	FAIR	EXCELLENT	EXCELLENT	2/

RECOMMENDED *

GRAVEL PIT, SEE NH–PM–24 IN APPENDIX FOR RECOMMENDATION REGARDING RECLAMATION OF SAND AND GRAVEL PITS.

1/ REFER TO SEEDING MIXTURES AND RATES IN TABLE 7–36.
2/ POORLY DRAINED SOILS ARE NOT DESIRABLE FOR USE AS PLAYING AREA AND ATHLETIC FIELDS.

SEEDING RATES

MIXTURE	POUNDS PER ACRE	POUNDS PER 1,000 SQ. FT.
A. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
RED TOP	2	0.05
TOTAL	42	0.95
B. TALL FESCUE	15	0.35
CREEPING RED FESCUE	10	0.25
CROWN VETCH	15	0.35
OR		
FLAT PEA	20	0.75
TOTAL	40 OR 55	0.95 OR 1.35
C. TALL FESCUE	24	0.55
CREEPING RED FESCUE	24	0.55
BIRDS FOOT TREFOIL	REMOVED	REMOVED
TOTAL	48	1.10
D. TALL FESCUE	20	0.45
FLAT PEA	20	0.75
TOTAL	40	1.20
E. CREEPING RED FESCUE 1/	50	1.15
KENTUCKY BLUEGRASS 1/	50	1.15
TOTAL	100	2.30
F. TALL FESCUE 1	150	3.60

SEEDING SPECIFICATIONS

1. Grading and Shaping
   a. Slopes shall not be steeper than 2:1;3:1 slopes or flatter are preferred. Where mowing will be done, 3:1 slopes or flatter are recommended.
2. Seedbed Preparation
   a. Surface and seepage water should be drained or diverted from the site to prevent drowning or winter killing of the plants.
   b. Stones larger than 4 inches and trash should be removed because they interfere with seeding and future maintenance of the area. Where feasible, the soil should be tilled to a depth of about 4 inches to prepare a seedbed and mix fertilizer and lime into the soil. The seedbed should be left in reasonably firm and smooth condition. The last tillage operation should be performed across the slope wherever practical.
3. Establishing a Stand
   a. Lime and fertilizer should be applied prior to or at the time of seeding and incorporated into the soil kinds and amounts of lime and fertilizer should be based on an evaluation of soil tests. When a soil test is not available, the following minimum amounts should be applied:

   Agricultural limestone, 2 tons per acre or 100lbs. per 1,000 sq.ft.

   Nitrogen(N), 50lbs. per acre or 1.1lbs. per 1,000 sq.ft.

   Phosphate(P2O5), 100lbs. per acre or 2.2lbs. per 1,000 sq.ft.

   Potash(K2O), 100lbs. per acre or 2.2lbs. per 1,000 sq.ft.

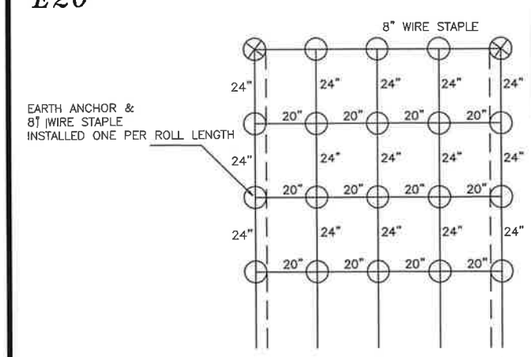
   (Note: This is the equivalent of 500lbs. per acre of 10–20–20 fertilizer or 1,000lbs. per acre of 5–10–10.)

   b. Seed should be spread uniformly by the method most appropriate for the site. Methods include broadcasting, drilling and hydroseeding. Where broadcasting is used, cover seed with .25 inch of soil or less, by cultipacking or raking.
   C. Refer to Table(G–E1 this sheet) for appropriate seed mixtures and Table(H–E1 this sheet) for rates of seeding. All legumes (crownvetch, birdsfoot trefoil, and flatpea) must be inoculated with their specific inoculant.
   d. When seeded areas are mulched, plantings may be made from early spring to early October. When seeded areas are not mulched, plantings should be made from early spring to May 20 or from August 10 to September 1.

   4.Mulch
   a. Hay, straw, or other mulch, when needed, should be applied immediately after seeding.
   b. Mulch will be held in place using appropriate techniques from the Best Management Practice for mulching. Hay or straw mulch shall be placed at a rate of 90lbs per 1000 s.f.

   5. Maintenance to Establish a Stand
   a. Planted area should be protected from damage by fire, grazing, traffic, and dense weed growth.
   b. Fertilization needs should be determined by onsite inspections. Supplemental fertilizer is usually the key to fully complete the establishment of the stand because most perennial stake 2 to 3 years to become established.
   c. In waterways, channels, or swales where uniform flow conditions are anticipated, occasional mowing may be necessary to control growth of woody vegetation.

E20



3.4 STAPLES PER SQ YD
TOTAL WIDTH: 6' 8"

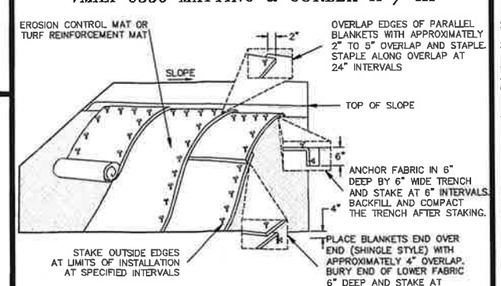
E21

CONSERVATION MIX	POUNDS PER ACRE	POUNDS PER 1,000 S.F.
RED FESCUE (35%)	75	1.75
TALL FESCUE (25%)	55	1.25
ANNUAL RYEGRASS (12%)	33	0.75
PERENNIAL RYEGRASS (10%)	26	0.60
KENTUCKY BLUEGRASS (10%)	22	0.50
WHITE CLOVER (3%)	7	0.15

1.) THE BEGINNING AND END OF EACH ROW OF NAG VMAX C350 WILL BE BURIED SIX TO 12 INCHES DEEP.
2.) AT THE TOP OF EACH ROW WHERE THE ROWS OVERLAP, AN EARTH ANCHOR WILL BE INSTALLED TO A MINIMUM DEPTH OF 30 INCHES.
3.) STAPLES WILL BE INSTALLED AT A RATE OF 3.4 STAPLES PER SQUARE YARD AS DEMONSTRATED.
4.) STAPLES WILL BE INSTALLED TO A MINIMUM DEPTH OF 8 INCHES.
5.) ROWS OF NAG ROLLMAX WILL BE INSTALLED PARALLEL WITH AN AVERAGE OF THREE AND ONE–HALF INCHES OF OVERLAP. STAPLES WILL BE INSTALLED ALONG THE OVERLAP SEAM, AS SHOWN.
6.) MATTING TO BE USED ON ALL SLOPES GREATER THAN 3:1. TURF REINFORCEMENT TO BE USED ON SLOPES GREATER THAN 2:1.
7.) TEMPORARY EROSION CONTROL BLANKET OR ROLLED EROSION CONTROL BLANKET (RECB) ARE TO BE INSTALLED IAW NH SWM #3 4–1 TEMPORARY EROSION CONTROL BLANKET, PAGE 68. NORTH AMERICAN GREEN VMAX C–350 TURF REINFORCEMENT MAT IS TO BE INSTALLED IAW MANUFACTURERS RECOMMENDATIONS, OR APPROVED EQUAL. AMERICAN EXCELSIOR COMPANY CURLEX BLANKETS ARE TO BE INSTALLED IAW MANUFACTURERS RECOMMENDATIONS, OR APPROVED EQUAL.
8.) IF SPECIFIED, WILDLIFE FRIENDLY RECB SUCH AS AEC CURLEX III FIBRENET, NAG S150BN, OR EAST COAST EROSION CONTROL ECC–2B, ARE NOT TO BE SUBSTITUTED UNLESS AN ALTERNATIVE IS APPROVED BY THE PROJECT ENGINEER, NHF&G AND NHDES.

VMAX3 MATTING
STAPLE PATTERN GUIDE

E22 — VMAX C350 MATTING & CURLEX II / III



NOTE : STAKING PATTERNS SHALL FOLLOW MANUFACTURERS RECOMMENDATIONS. MINIMUM SPACING ACROSS FABRIC AS SHOWN.

INSTALLATION OF EROSION CONTROL BLANKET

NOT TO SCALE

E23

CONSTRUCTION SEQUENCE:

1.) ALL SEDIMENT & EROSION CONTROLS ARE TO BE INSTALLED PRIOR TO ANY EARTH MOVING DISTURBANCE (STUMPING)
CUT AND REMOVE TREES IN CONSTRUCTION AREA ONLY AS REQUIRED AFTER INSTALLATION OF SEDIMENT & EROSION CONTROLS. ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY HALF–INCH OF RAINFALL.
2.) CONSTRUCT AND/OR INSTALL TEMPORARY AND PERMANENT SEDIMENT EROSION AND DETENTION CONTROL FACILITIES AS REQUIRED.
3.) DETENTION CONTROL FACILITY SHALL BE INSTALLED & STABILIZED PRIOR TO ANY EARTH MOVING OPERATION & OR DIRECTING RUNOFF TO THEM. DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
4.) CLEAR, CUT AND DISPOSE OF DEBRIS IN APPROVED FACILITY.
5.) CONSTRUCT TEMPORARY CULVERTS AS REQUIRED, OR DIRECTED
6.) CONSTRUCT ROADWAYS FOR ACCESS TO DESIRED CONSTRUCTION AREAS. ALL ROADS SHALL BE STABILIZED IMMEDIATELY AFTER GRADING. PONDS AND SWALES SHALL BE INSTALLED EARLY ON IN THE CONSTRUCTION SEQUENCE (BEFORE ROUGH GRADING THE SITE.)
7.) INSTALL PIPE AND CONSTRUCTION ASSOCIATED APPURTENANCES AS REQUIRED OR DIRECTED. ALL DISTURBED AREAS SHALL STABILIZED IMMEDIATELY AFTER GRADING.
8.) BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES AND DISTURBED AREAS SHALL BE SEEDED OR MULCHED AS REQUIRED, OR DIRECTED. NO AREA IS ALLOWED TO BE DISTURBED FOR A LENGTH OF TIME THAT EXCEEDS 45 DAYS BEFORE BEING STABILIZED. DAILY, OR AS REQUIRED.
9.) CONSTRUCT TEMPORARY BERMS, DRAINS DITCHES, SILT FENCES, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED. TEMPORARY WATER DIVERSION MUST BE USED UNTIL AREAS ARE STABILIZED.
10.) INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION
11.) COMPLETE PERMANENT SEEDING AND LANDSCAPING.
12.) REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDING AREAS HAVE ESTABLISHED THEMSELVES AND SITE IMPROVEMENTS ARE COMPLETE.
13.) SMOOTH AND RE–VEGETATE ALL DISTURBED AREAS.
14.) FINISH PAVING ALL ROADWAYS

INVASIVE SPECIES NOTE:

THAT 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.

E–102

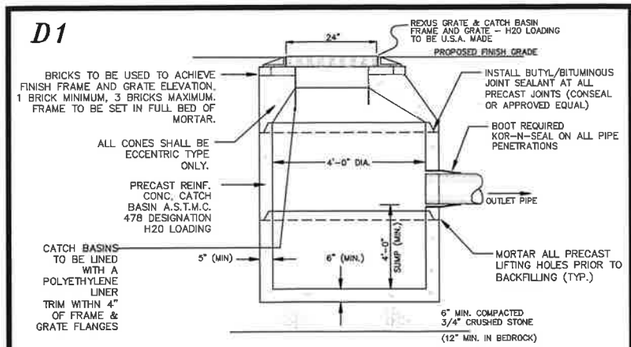
SEDIMENT & EROSION CONTROL DETAILS
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332–2863

SCALE: NONE
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE — KENNETH A. BERRY No. 14743 — LICENSED PROFESSIONAL ENGINEER

D1



CATCH BASIN DETAIL

NOT TO SCALE

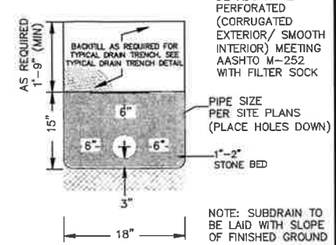
D2

Manhole Castings L-1

Rexus Ductile Iron Frame & Cover

CATCH BASIN FRAME AND GRATE WILL BE REXUS, OR APPROVED EQUAL, 24 INCH OPENING, DUCTILE IRON, H20 LOADING.

D3



TYPICAL CROSS SECTION

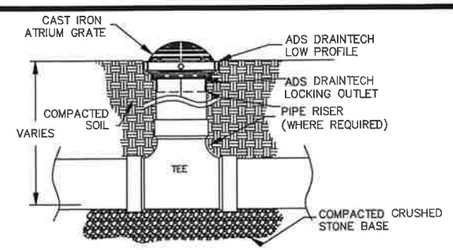
NOTES:

1. CROWN OF 6" SUBDRAIN PIPES TO MATCH CROWN OF DRAIN PIPES IN CATCH BASINS
2. SUBDRAIN TO BE INSTALLED AS INDICATED ON THE DRAWINGS AND AS DIRECTED BY THE ENGINEER.
3. SHORING AND STABILIZING OF TRENCH SIDEWALLS DURING EXCAVATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ANY TRENCH EXCAVATION BEYOND THE LIMITS OF PAY EXCAVATION INDICATED.

SUBDRAIN DETAIL TYPICAL

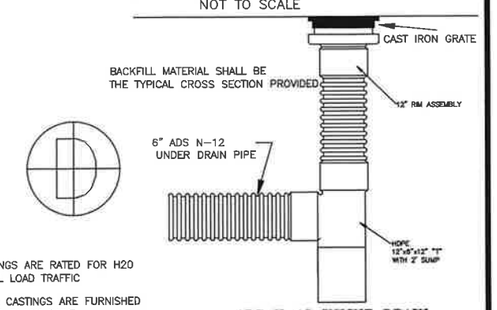
NOT TO SCALE

D4



12" CAST IRON GRATE

NOT TO SCALE



CASTINGS ARE RATED FOR H20 WHEEL LOAD TRAFFIC

PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT

ADS N-12 INLINE DRAIN

NOT TO SCALE USED FOR CLEANOUTS

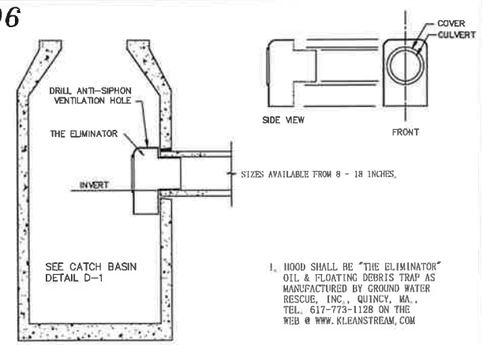
D5

Manhole Castings L-2

Pamrex Ductile Iron Frame & Cover

DRAIN MAN HOLE FRAME AND GRATE WILL BE PAMREX, OR APPROVED EQUAL, 24 INCH OPENING, DUCTILE IRON, H20 LOADING.

D6

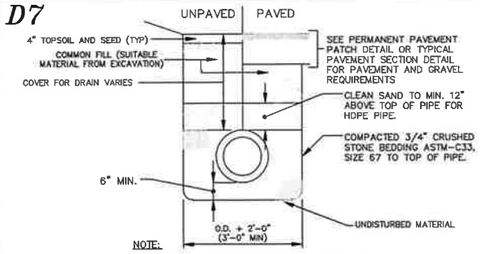


1. HOOD SHALL BE "THE ELIMINATOR" OIL & FLOATING DEBRIS TRAP AS MANUFACTURED BY GROUND WATER RESCUE, INC., QUINCY, MA., TEL. 617-773-1128 ON THE WEB @ WWW.KLEANSTREAM.COM

CATCH BASIN HOOD DETAIL

NOT TO SCALE

D7



NOTE:

PLASTIC DRAIN PIPE (HDPE) SHALL BE ADS N-12 (CORRUGATED EXTERIOR/SMOOTH INTERIOR) OR EQUAL MEETING AASHTO M-252 AND H-20 LOADING.

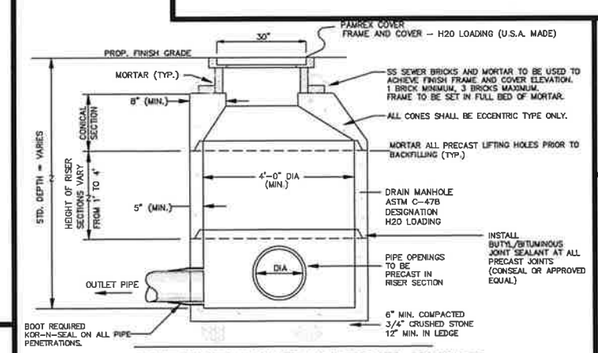
DI DRAIN PIPE SHALL BE CL. 50.

RC DRAIN PIPE SHALL BE CLASS III UNLESS OTHERWISE NOTED.

TYPICAL DRAIN AND SEWER PIPE TRENCH

NOT TO SCALE

D8



PRECAST DRAIN MANHOLE DETAIL

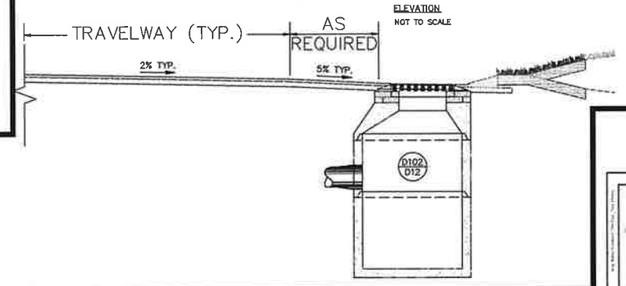
NOT TO SCALE

D9

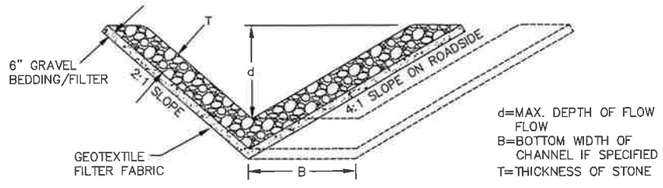
DETAIL FOR DRAINAGE STRUCTURES NOT LOCATED AT EDGE OF TRAVEL WAY

ELEVATION

NOT TO SCALE

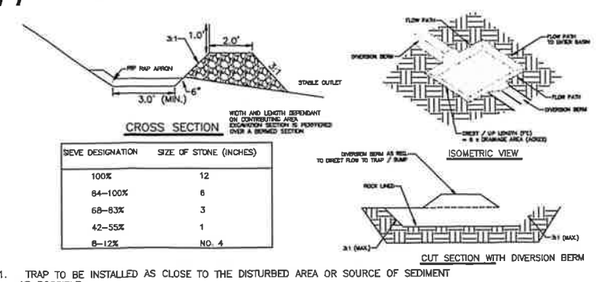


D10



TYPICAL SECTION FOR A RIPRAP LINED CHANNEL

D11



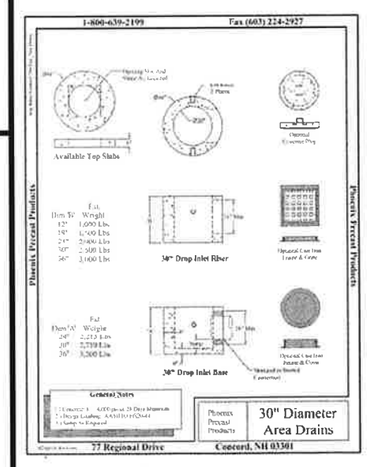
WIDTH AND LENGTH DEPENDANT ON CONTRIBUTING AREA. EXCAVATION SECTION IS PREFERRED OVER A BERMED SECTION

SIEVE DESIGNATION	SIZE OF STONE (INCHES)
100%	12
84–100%	6
68–83%	3
42–55%	1
8–12%	NO. 4

1. TRAP TO BE INSTALLED AS CLOSE TO THE DISTURBED AREA OR SOURCE OF SEDIMENT AS POSSIBLE.
2. THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE TRAP SHALL BE LESS THAN 5 ACRES.
3. THE MINIMUM VOLUME OF THE TRAP SHALL BE 3,600 CUBIC FEET OF STORAGE FOR EACH ACRE OF DRAINAGE AREA.
4. THE SIDE SLOPES OF THE TRAP SHALL BE 3:1 OR FLATTER AND SHALL BE STABILIZED IMMEDIATELY AFTER THEIR CONSTRUCTION.
5. THE OUTLET OF THE TRAP SHALL BE A MINIMUM OF ONE FOOT BELOW THE CREST OF THE TRAP AND SHALL DISCHARGE TO A STABILIZED AREA.
6. THE TRAP SHALL BE CLEANED WHEN 50 PERCENT OF THE ORIGINAL VOLUME IS FILLED.
7. THE MATERIALS REMOVED FROM THE TRAP SHALL BE PROPERLY DISPOSED OF AND STABILIZED.

STONE LINED SEDIMENT TRAP

D12



REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WEB RESPONSE
#4	05-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

DRAINAGE CONSTRUCTION DETAILS
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

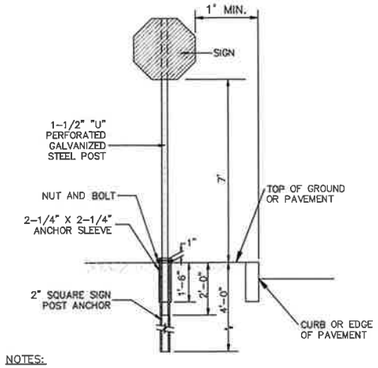
BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE: NONE
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE KENNETH A. BERRY No. 14245 LICENSED PROFESSIONAL ENGINEER

D-101

C1

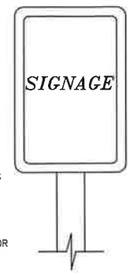


NOTES:

1. ALL SIGNAGE SHALL BE TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS AND NHDOT STANDARDS.
2. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS/CATALOG CUTS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ERECTING SIGNS.
3. THE LOCATION OF THE SIGNS SHALL BE AS INDICATED ON THE DRAWINGS AND/OR AS DIRECTED BY THE CITY OF ROCHESTER DEPARTMENT OF PUBLIC WORKS.

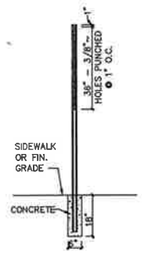
TYPICAL SIGN POST

(NOT TO SCALE)



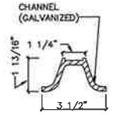
PARTIAL ELEVATION

N.T.S.



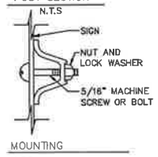
POST

N.T.S.



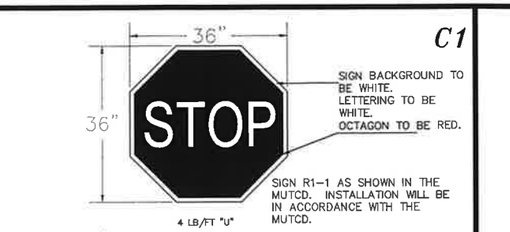
POST SECTION

N.T.S



MOUNTING

N.T.S.



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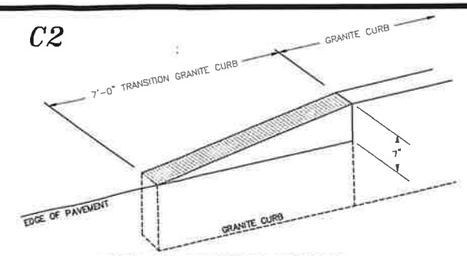
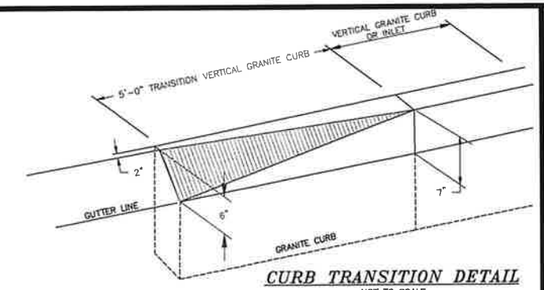


CURB TRANSITION DETAIL

NOT TO SCALE

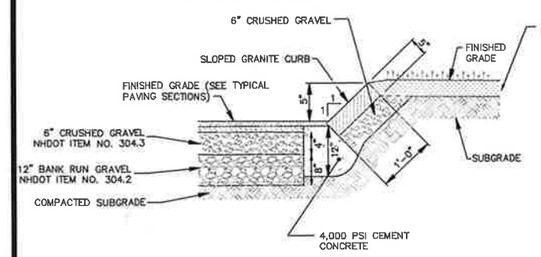
TO BE USED FOR TRANSITION FROM GRANITE CURB TO EDGE OF PAVEMENT



CURB TRANSITION DETAIL

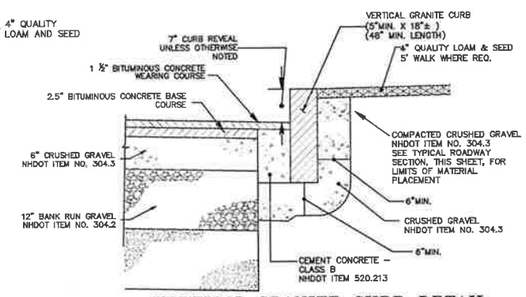
NOT TO SCALE

TO BE USED FOR TRANSITION FROM VERTICAL GRANITE CURB TO SLOPED GRANITE CURB



SLOPE GRANITE CURB DETAIL

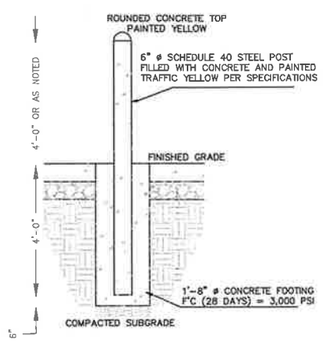
NOT TO SCALE



VERTICAL GRANITE CURB DETAIL

NOT TO SCALE

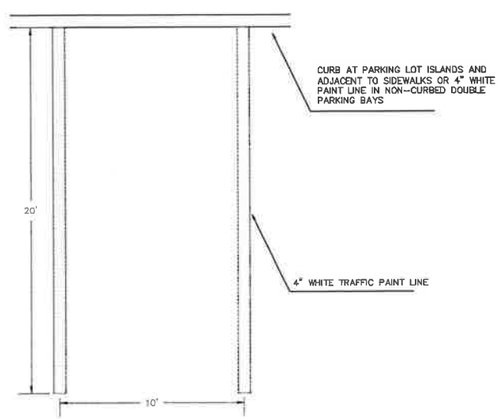
C3



BOLLARD DETAIL

NOT TO SCALE

C4



NOTES:

1.) PROVIDE TWO COATS OF PAINT ON ALL PARKING LINES.

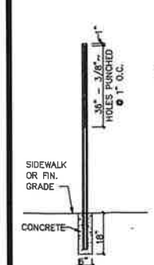
2.) SEE PROPOSED SITE PLANS FOR LOCATION OF PARKING SPACES.

3.) PAINTED SPACES ONLY WHERE MARKED ON SITE PLAN

PARKING SPACE DETAIL

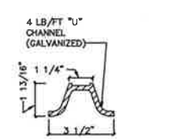
NOT TO SCALE

C19



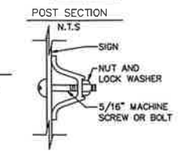
POST

N.T.S.



POST SECTION

N.T.S

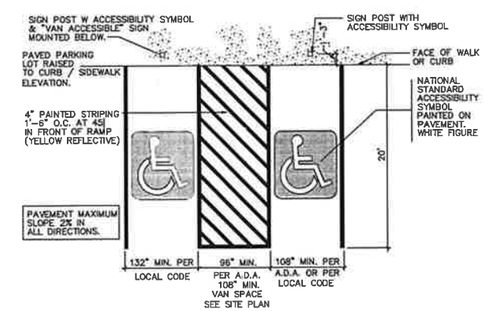


MOUNTING

N.T.S.

PARTIAL ELEVATION

N.T.S.



PARKING STALL SIGNAGE FOR THE PHYSICALLY CHALLENGED

NOT TO SCALE

C-101

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWED RESPONSE
#4	02-02-2018	AOT REVISIONS
#3	01-10-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
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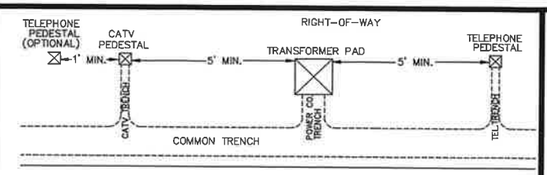
CONSTRUCTION DETAILS
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14241
LICENSED
PROFESSIONAL ENGINEER

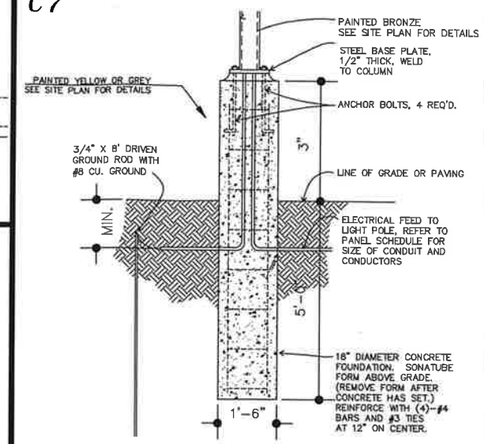
C5



C6

PEDESTAL PLACEMENT

C7



POLE FOUNDATION

PARKING LOT LIGHT BASE DETAIL

NOT TO SCALE

C8

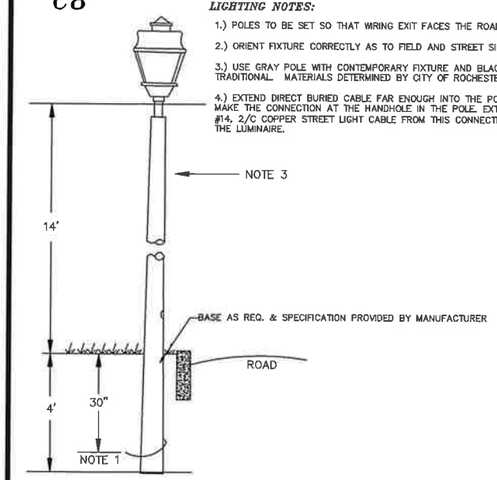
LIGHTING NOTES:

1.) POLES TO BE SET SO THAT WIRING EXIT FACES THE ROAD.

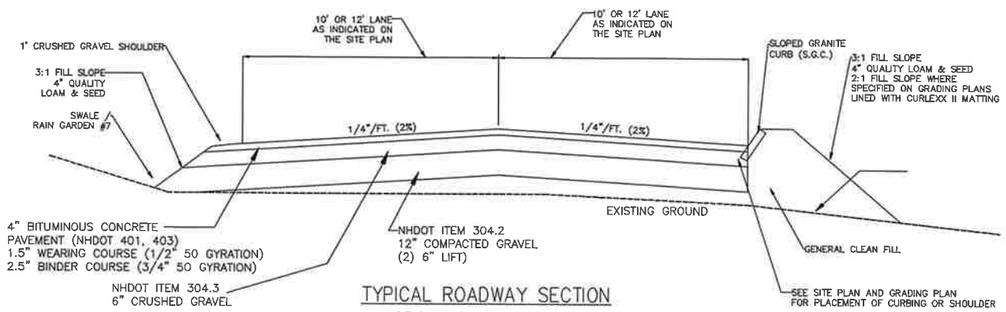
2.) ORIENT FIXTURE CORRECTLY AS TO FIELD AND STREET SIDE.

3.) USE GRAY POLE WITH CONTEMPORARY FIXTURE AND BLACK WITH TRADITIONAL. MATERIALS DETERMINED BY CITY OF ROCHESTER DPW

4.) EXTEND DIRECT BURIED CABLE FAR ENOUGH INTO THE POLE TO MAKE THE CONNECTION AT THE HANDHOLE IN THE POLE. EXTEND #14, 2/C COPPER STREET LIGHT CABLE FROM THIS CONNECTION TO THE LUMINAIRE.



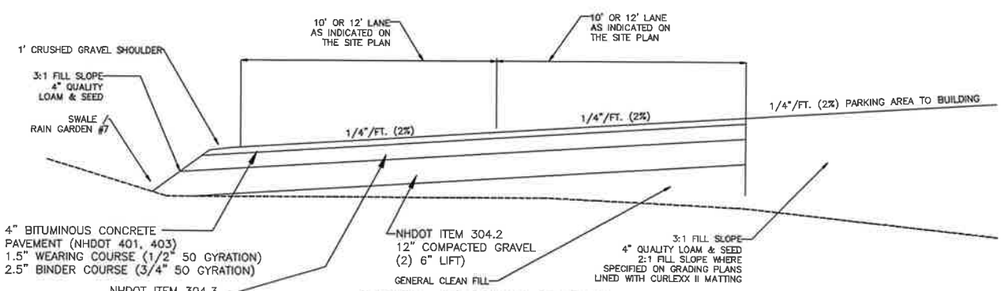
C9



TYPICAL ROADWAY SECTION

CROWNED ROADWAY

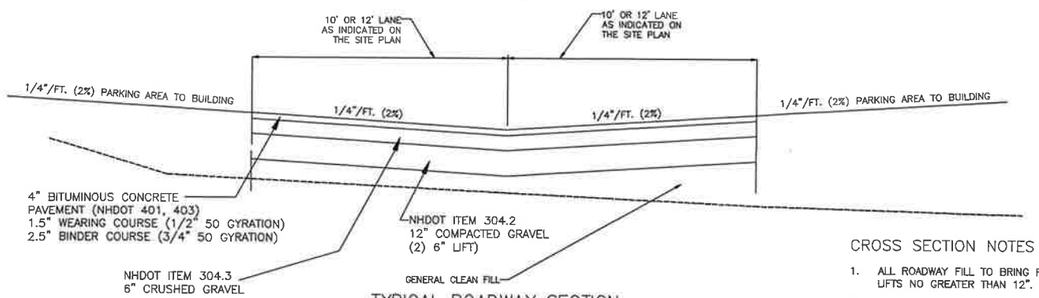
NOT TO SCALE



TYPICAL ROADWAY SECTION

SUPER-ELEVATED LEFT OR RIGHT

NOT TO SCALE



TYPICAL ROADWAY SECTION

7+75 TO 9+75

NOT TO SCALE

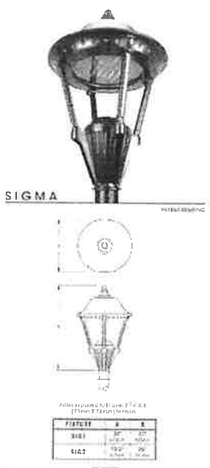
CROSS SECTION NOTES

1. ALL ROADWAY FILL TO BRING ROAD TO SUBGRADE SHALL BE INSTALLED IN LIFTS NO GREATER THAN 12".
2. ALL FILL SHALL BE COMPACTED TO 95% MINIMUM. COMPACTION TESTS TO BE CONDUCTED AT THE START OF THE PROJECT AND NO FURTHER THAN 100 FEET APART.
3. GUARD RAIL REQUIRED AS NOTED ON SITE PLANS.
4. COMPACTED SUBGRADE – CONTRACTOR SHALL SCARIFY SUBGRADE TO A DEPTH OF 30 INCHES BELOW F-GRADE. ALL STONES GREATER THAN 6" IN DIAMETER SHALL BE REMOVED FROM THE SCARIFIED LAYER. ANY IMPORTED FILL SHALL BE FREE OF ORGANICS AND FROST AND SHALL HAVE NO ROCKS LARGER THAN 6" IN DIAMETER. FILL MATERIAL SHALL BE APPROVED BY THE CITY'S AGENT AND/OR THE CITY'S ENGINEER.

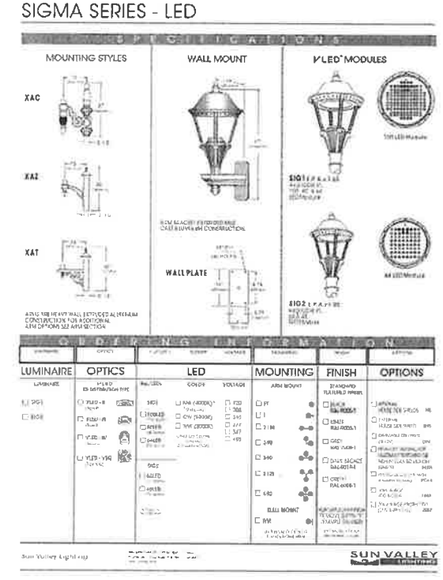
SOLID STATE AREA LIGHTING

SIGMA SERIES-LED

SPECIFICATIONS



SIGMA SERIES - LED



C10

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	05-02-2018	AOT REVISIONS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

CONSTRUCTION DETAILS

LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 236, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

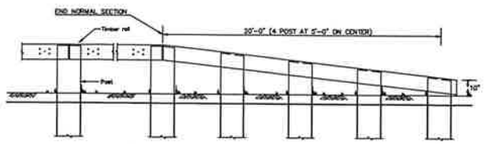
DATE : JANUARY 22, 2018

FILE NO. : DB 2017 – 167

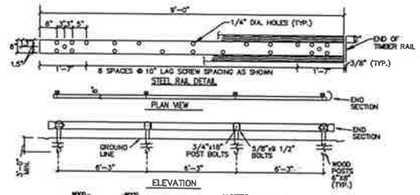
STATE OF NEW HAMPSHIRE KENNETH A. BERRY No. 14243 LICENSED PROFESSIONAL ENGINEER

C-102

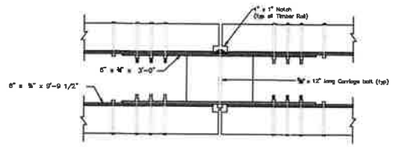
C11



STEEL BACKED WOOD GUARD RAIL
TERMINAL UNIT DETAIL



NOTES:
1. USE IN HEAVY TRAFFIC AREAS.
2. USE 6'-0" POSTS WHEN FILL SLOPE IS 4:1 OR FLATTER
3. ALL RAILS & POSTS TO BE TREATED WITH PRESERVATIVE MATERIAL CONFORMING TO AASHTO M133

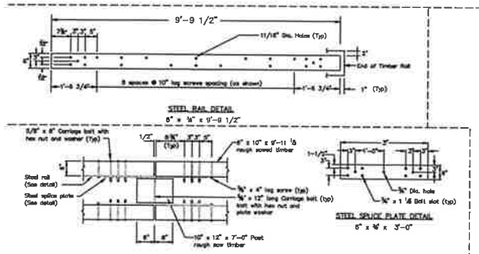


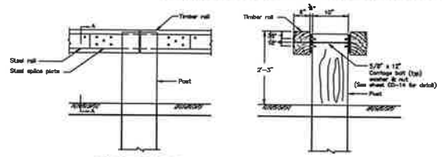
POST/RAIL CONNECTION DETAIL

NOTES:
1. POST TYPE : 10" x 12" WOOD
2. BEAM TYPE : 6" x 10" WOOD WITH STEEL PLATE BACKING
3. POST SPACING : 5'-0" O.C.
4. NOMINAL BARRIER HEIGHT : 27"

GUARD RAIL (STEEL BACKED WOODEN RAIL)

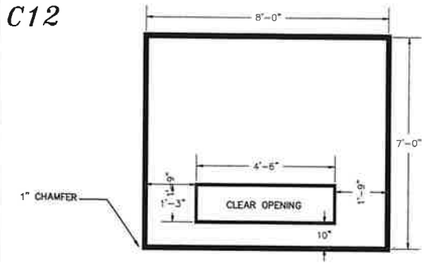
NOT TO SCALE



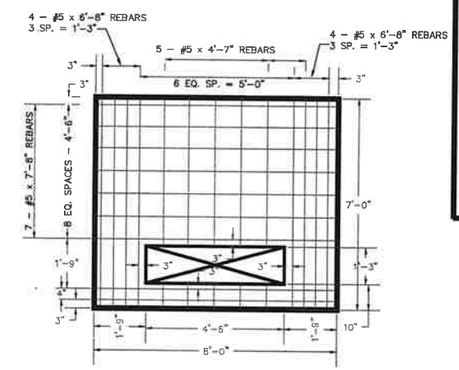


NOTES:
1. POST TYPE : 10" x 12" WOOD
2. BEAM TYPE : 6" x 10" WOOD WITH STEEL PLATE BACKING
3. POST SPACING : 10'-0" O.C.
4. NOMINAL BARRIER HEIGHT : 27"
5. STEEL PLATE BACKING AND SPLICE PLATE – A36 GALVANIZED STEEL
6. ALL BOLTS & WASHERS TO BE GALVANIZED

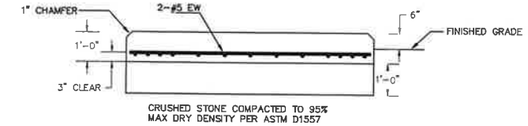
C12



PLAN VIEW



PLAN OF REINFORCING



SECTION VIEW

NOTES:
1.) CONFIRM SIZE WITH ELECTRIC COMPANY BEFORE CONSTRUCTION.
2.) USE LOCAL ELECTRIC COMPANY DETAILS AS REQUIRED.

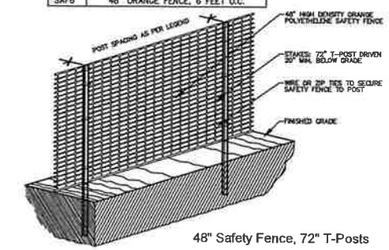
TRANSFORMER PAD DETAIL

NOT TO SCALE

C13

LEGEND

SAF12	48" ORANGE FENCE, 12 FEET O.C.
SAF11	48" ORANGE FENCE, 11 FEET O.C.
SAF10	48" ORANGE FENCE, 10 FEET O.C.
SAF9	48" ORANGE FENCE, 9 FEET O.C.
SAF8	48" ORANGE FENCE, 8 FEET O.C.
SAF7	48" ORANGE FENCE, 7 FEET O.C.
SAF6	48" ORANGE FENCE, 6 FEET O.C.



1. ALL SENSITIVE AREAS SHALL BE PROTECTED AS PER PLAN.
2. ALL TREES IN THE CONSTRUCTION AREA NOT SPECIFICALLY DESIGNATED FOR REMOVAL SHALL BE PRESERVED AND PROTECTED WITH HIGH VISIBILITY FENCE AS PER PLAN.
3. WHEN PRACTICABLE, INSTALL HIGH VISIBILITY 3 FEET OUTSIDE OF THE DRIP LINE OF THE TREE.
4. SAFETY FENCE SHOULD BE FASTENED SECURELY TO THE T-POSTS.
5. THE FENCING MUST REMAIN IN PLACE DURING ALL PHASES OF CONSTRUCTION; ANY CHANGE OF THE PROTECTIVE FENCING MUST BE APPROVED.

CONSTRUCTION SAFETY FENCE

NOT TO SCALE

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
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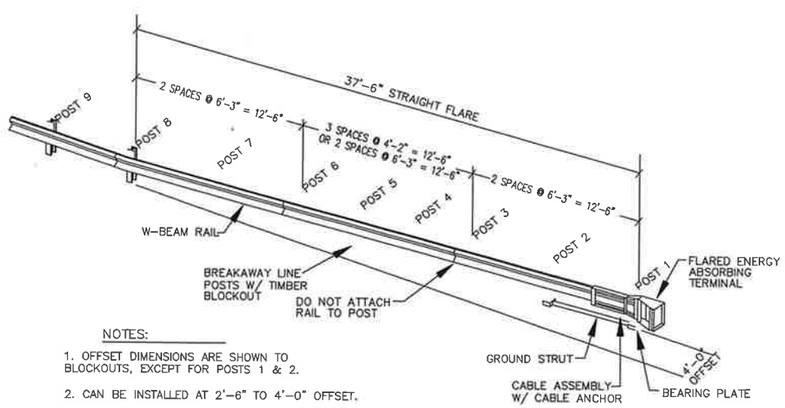
#4	05-02-2018	AOT REVISIONS
#3	04-19-2018	SEWER & WATER REVISIONS
#2	03-30-2018	SITE PLAN SET
#1	03-30-2018	GENERAL PLAN SET

CONSTRUCTION DETAILS
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 160 & 121

C14



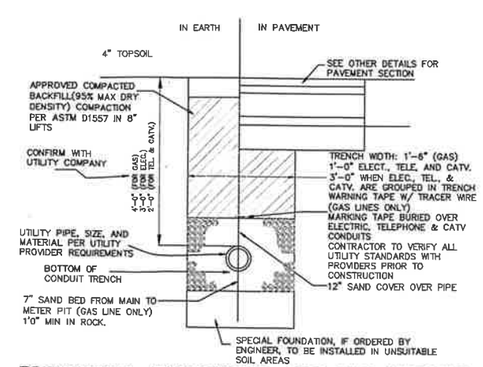
NOTES:

1. OFFSET DIMENSIONS ARE SHOWN TO BLOCKOUTS, EXCEPT FOR POSTS 1 & 2.
2. CAN BE INSTALLED AT 2'-6" TO 4'-0" OFFSET.
3. WOOD OR STEEL BREAKAWAY POSTS MUST BE USED FOR THIS SYSTEM.
4. NCHRP 350 TEST LEVEL 3 (37'6") LONG SYSTEM IS SHOWN. A REDUCED SPEED TEST LEVEL 2 (25'-0" LONG) SYSTEM IS ALSO AVAILABLE.

NHDOT GUARD RAIL DETAIL

NOT TO SCALE

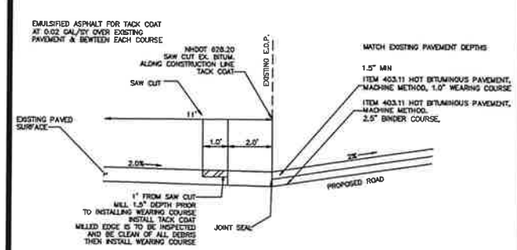
C15



ELECTRICAL, TELEPHONE, AND GAS TRENCH

NOT TO SCALE

C16



TYPICAL EDGE LINE CONSTRUCTION

NOT TO SCALE

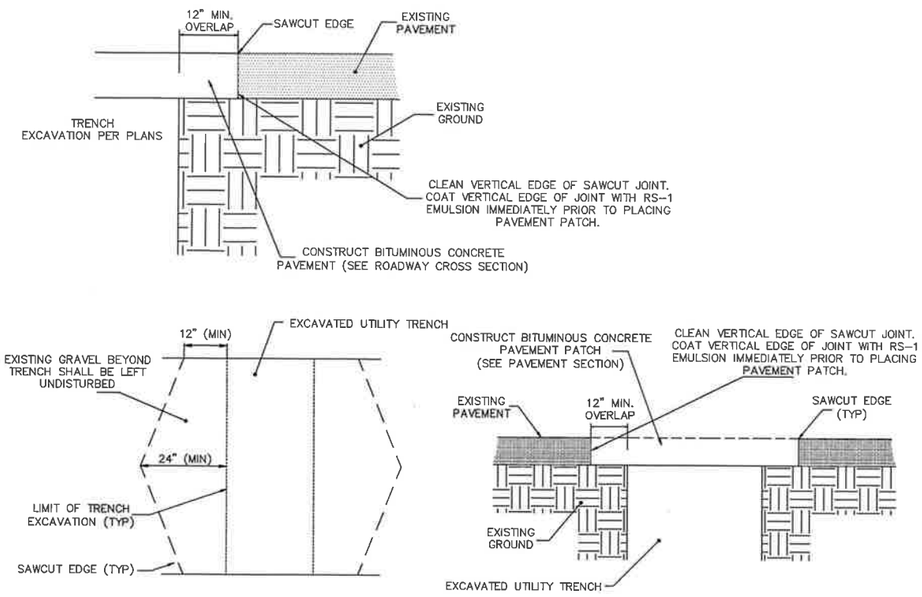
C-103

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER

C17



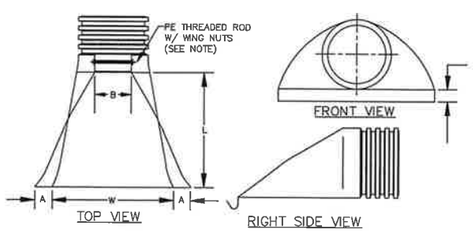
PLAN

SECTION

NOTES
1. MACHINE CUT EXISTING PAVEMENT.
2. ALL TEMPORARY, DAMAGED, OR DEFECTIVE PAVEMENT SHALL BE REMOVED PRIOR TO PLACEMENT OF PERMANENT TRENCH REPAIRS.
3. DIAMOND PATCHES, SHALL BE REQUIRED FOR ALL TRENCHES CROSSING ROADWAY. DIAMOND PATCHES SHALL MEET NHDOT REQUIREMENTS.

TYPICAL TRENCH PATCH
NOT TO SCALE

C19



PART No.	PIPE SIZE	A	B(MAX)	H	L	W
1510–NP	15" 375 mm	6.5" 165 mm	10" 254 mm	6.5" 165 mm	25" 635 mm	29" 735 mm
1810–NP	18" 450 mm	7.5" 190 mm	15" 380 mm	6.5" 165 mm	32" 812 mm	35" 890 mm
2410–NP	24" 600 mm	7.5" 190 mm	18" 450 mm	6.5" 165 mm	36" 900 mm	45" 1140 mm
3010–NP	30" 750 mm	10.5" 266 mm	N/A	7.0" 178 mm	53" 1345 mm	68" 1725 mm
3610–NP	36" 900 mm	10.5" 266 mm	N/A	7.0" 178 mm	53" 1345 mm	68" 1725 mm

NOTE: PE THREADED ROD W/ WING NUTS PROVIDED FOR END SECTIONS 15"–24". 30" & 36" END SECTIONS TO BE WELDED PER MANUFACTURER'S RECOMMENDATIONS.

ADS N–12 FLARED END SECTIONS
NOT TO SCALE (ALL DIMENSIONS ARE NOMINAL)

C18

NOTES:
1.) THE PROPOSED APPLICATION FOR THIS LOCK BLOCK OR EQUAL (AS DETERMINED BY THE DESIGN ENGINEER WITH APPROVAL BY DEPARTMENT OF PUBLIC WORKS (BS&E 603–332–2863) (DPW 603–335–7575) IS FOR A WALL THAT RANGES IN HEIGHT. INDIVIDUAL WALLS TO BE DESIGNED BY A STRUCTURAL / GEOTECHNICAL ENGINEER PRIOR TO ORDERING AND INSTALLATION.

2.) USE THE 41" BOTTOM BLOCK TO INSTALL THE FIRST COURSE. NOTE EMBEDMENT REQUIREMENT. COURSE DEPTH IS 1.5'

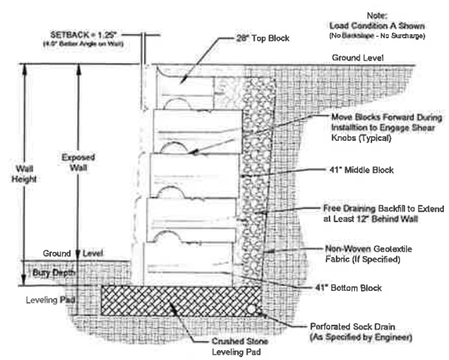
3.) USE 41" MIDDLE BLOCK FOR MIDDLE ROWS, APPROXIMATELY 7 COURSES DEPENDING ON WALL HEIGHT.

4.) USE 41" TOP BLOCK ALONG TOP OF WALL. NOTE WALL DROPS ARE TO BE FULL BLOCK DEPTHS.

5.) USE 41" HALF BLOCKS FOR RADIAL TURNS AND END SECTIONS.

6.) THE WALL MANUFACTURER TYPICALLY PROVIDES WALL PROFILE AND BLOCK COUNT TO THE CONTRACTOR AS REQUIRED FOR CONSTRUCTION. THIS IS TO BE REVIEWED BY BOTH DPW AND DESIGN ENGINEER FOR CORRELATION WITH PROJECT SITE PLANS.

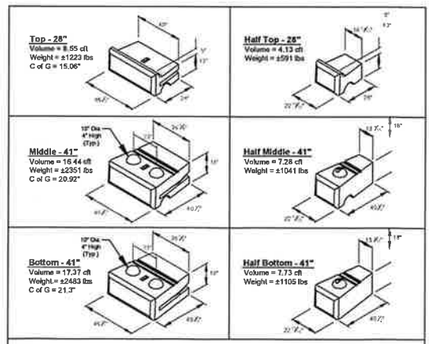
Typical Gravity Wall with 41" Blocks
No Scale



See Redi-Rock com for Detailed Section Drawings of Each Condition Shown in the Design Charts

NOTE: RETAINING WALL TO BE DESIGNED BY A LICENSED PROFESSIONAL STRUCTURAL ENGINEER.

41" SERIES BLOCKS



NOTES:
Volume and Center of Gravity (C of G) calculations are based on the blocks as shown.
Center of Gravity is measured from the back of the block.
Half blocks may include a 6x4 lift slot on one side
Actual weights and volumes may vary.
Weight shown is based on 145 pcf concrete.

Redi-Rock® International, LLC
RETAINING WALL DETAIL
NOT TO SCALE

C–104

REVISION	DATE	DESCRIPTION
#7	07–30–2018	SUBMITTED FOR CONSTRUCTION
#6a	06–18–2018	REVISED PER AoT COMMENT
#5b	05–24–2018	NHDES WWEB RESPONSE
#4	05–02–2018	AOT REVISIONS
#3	04–11–2018	SEWER & WATER REVISIONS
#2	04–09–2018	GENERAL PLAN SET
#1	03–30–2018	GENERAL PLAN SET

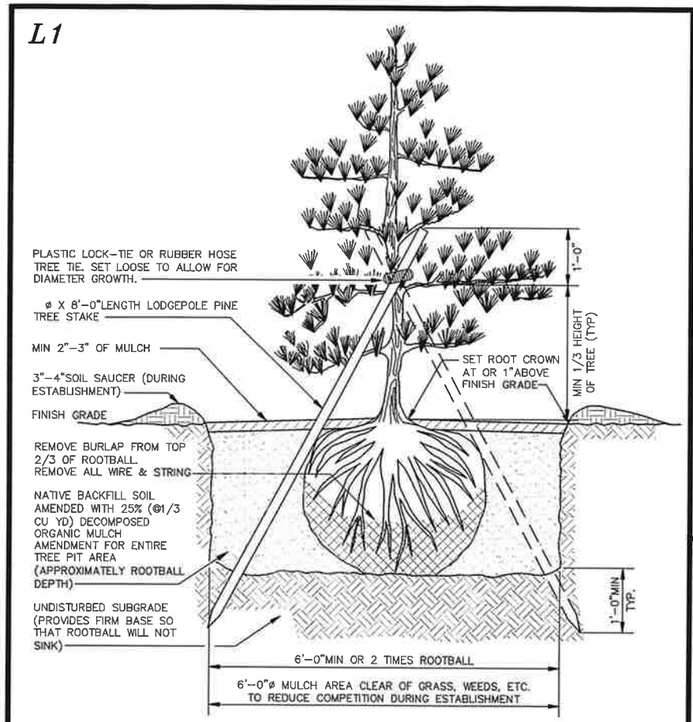
NHDOT PAVEMENT MARKING DETAILS
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 250, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332–2863

AS NOTED
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 – 167

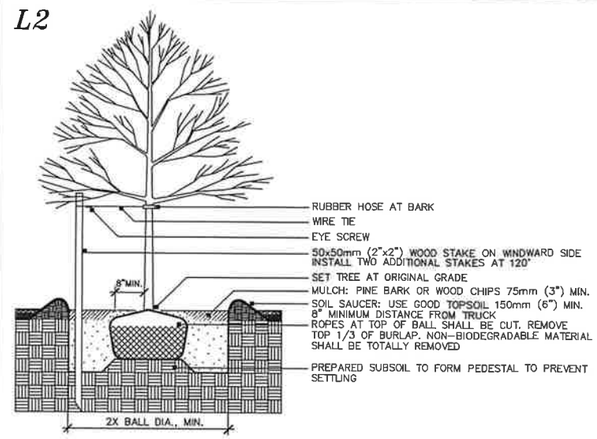
STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14143
LICENSED
PROFESSIONAL ENGINEER

L1



CONIFERIOUS TREE PLANTING

L2



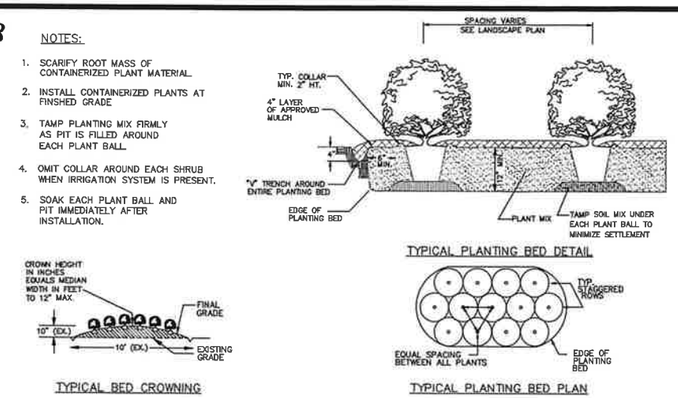
DECIDUOUS TREE PLANTING

NOTE: STAKING TO BE USED IN PARKING ISLANDS AND OTHER CONFINED AREAS AS NECESSARY TO AVOID CONFLICTS WITH PEDESTRIANS

L3

NOTES:

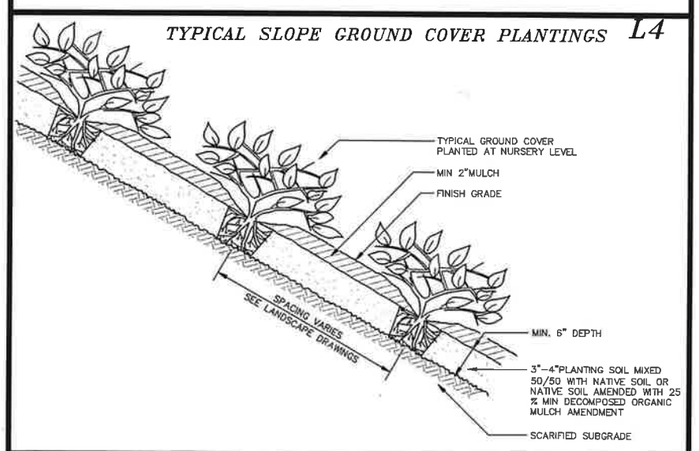
1. SCARIFY ROOT MASS OF CONTAINERIZED PLANT MATERIAL.
2. INSTALL CONTAINERIZED PLANTS AT FINSHED GRADE
3. TAMP PLANTING MIX FIRMLY AS PIT IS FILLED AROUND EACH PLANT BALL.
4. OMIT COLLAR AROUND EACH SHRUB WHEN IRRIGATION SYSTEM IS PRESENT.
5. SOAK EACH PLANT BALL AND PIT IMMEDIATELY AFTER INSTALLATION.



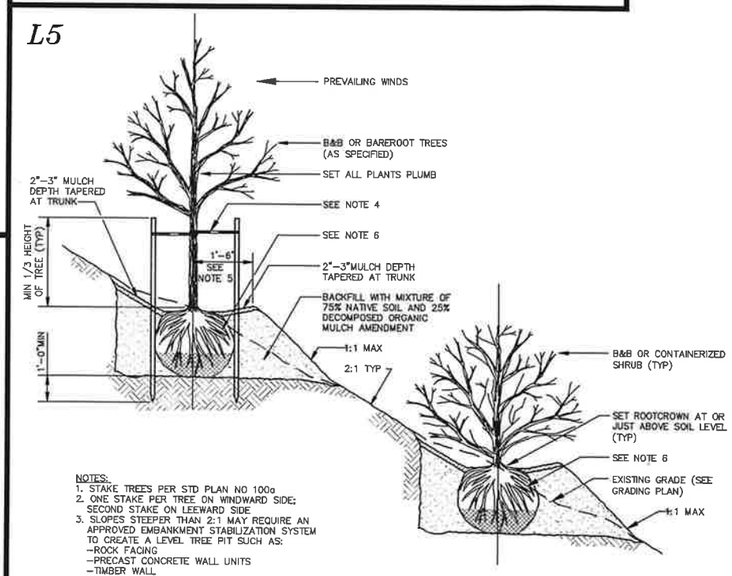
SHRUB & HEDGE PLANTING

L4

TYPICAL SLOPE GROUND COVER PLANTINGS



L5



NOTES:
1. STAKE TREES PER STD PLAN NO 100a
2. ONE STAKE PER TREE ON WINDWARD SIDE; SECOND STAKE ON LEEWARD SIDE
3. SLOPES STEEPER THAN 2:1 MAY REQUIRE AN APPROVED EMBANKMENT STABILIZATION SYSTEM TO CREATE A LEVEL TREE PIT SUCH AS:
   - ROCK FACING
   - PRECAST CONCRETE WALL UNITS
   - TIMBER WALL
   - MANUFACTURED SLOPE RETENTION UNITS
4. CHAINLOCK TREE TIE. LOOP EACH TIE AROUND TREE LOOSELY TO PROVIDE 1" SLACK FOR DIAMETER GROWTH.
5. SHAPE SOIL TO PROVIDE 3' DIAMETER OR ROOTBALL DIAMETER, WHICHEVER IS GREATER, WATERING RING.
6. REMOVE ALL WIRE AND STRING. REMOVE TOP 2/3 OF BURLAP.

TREE PLANTING ON SLOPES

L6

NOTES:

1.) CALL DIG SAFE PRIOR TO BEGINNING WORK. (1-888-344-7233). THE LANDSCAPE CONTRACTOR IS ADVISED OF THE PRESENCE OF UNDERGROUND UTILITIES AND SHALL VERIFY THE EXISTENCE AND LOCATION OF THE SAME BEFORE COMMENCING AND DIGGING OPERATIONS. THE LANDSCAPE CONTRACTOR SHALL REPLACE OR REPAIR UTILITIES, PAVING, WALKS, CURBING, ETC DAMAGED IN PERFORMANCE OF THIS JOB AT NO ADDITIONAL COST TO THE OWNER OR GENERAL CONTRACTOR.

2.) CONTRACTOR SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL SITE CONDITIONS PRIOR TO CONSTRUCTION BIDDING. SEE NOTE 8 ON OVERALL SITE PLAN.

3.) PROVIDED SMOOTH TRANSITION WHERE NEW WORK MEETS EXISTING CONDITIONS.

4.) ALL PLANT MATERIAL INSTALLED SHALL MEET THE SPECIFICATIONS OF "AMERICAN STANDARD FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSERYMEN

5.) ALL PLANT MATERIALS SHALL BE FREE FROM INSECTS AND DISEASE.

6.) ALL PLANTINGS SHALL BE DONE IN ACCORDANCE WITH ACCEPTABLE HORTICULTURAL PRACTICES. THIS IS TO INCLUDE PROPER PLANTING MIX, PLANT BED AND TREE PIT PREPARATION, PRUNING STAKING OR GUYING, WRAPPING, SPRAYING, FERTILIZATION, PLANTING AND ADEQUATE MAINTENANCE UNTIL ACCEPTANCE FROM OWNER.

7.) ALL GRASS, OTHER VEGETATION AND DEBRIS SHALL BE REMOVED FROM ALL PLANTING AREAS PRIOR TO PLANTING.

8.) THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING AND NEWLY PLANTED TREES AND SHRUBS DURING THE CONSTRUCTION PROCESS. WHERE REQUIRED, THE CONTRACTOR SHALL INSTALL TEMPORARY FENCING (SNOW OR EQUAL) AROUND EXISTING TREES AND SHRUBS THAT COULD BE IMPACTED BY THE CONSTRUCTION PROCESS. STORAGE OF CONSTRUCTION EQUIPMENT, CONSTRUCTION MATERIALS, SNOW STORAGE AND OR VEHICLE PARKING SHALL NOT BE PERMITTED WITHIN THE DRIP LINE OF TREES OR TWENTY FEET WHICH EVER IS GREATER.

9.) NEW PLANTINGS SHALL BE INSTALLED PER PROJECT DRAWINGS AND SPECIFICATION THAT INCLUDE FERTILIZATION AND MULCHING AS REQUIRED.

10.) ALL SHRUB BEDS AND TREE PITS SHALL BE MULCHED WITH 3" CLEAN SHREDDED BLACK MULCH

11.) WHERE INDICATED ON PLAN, PLANTING SOIL MIXTURE FOR GROUND COVER AND PERENNIAL BED AREAS SHALL CONSIST OF FOUR PARTS TOPSOIL, TWO PARTS SPHAGNUM PEAT MOSS, AND ONE PART HORTICULTURAL PERLITE BY VOLUME. PEAT MOSS MAY BE SUBSTITUTED WITH WELL-ROTTED OR DEHYDRATED MANURE OR COMPOST. ROTOTILL BEDS TO A DEPTH OF 8 INCHES.

12.) MAINTENANCE OF NEW PLANTINGS AND LAWNS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND OR LANDSCAPE SUBCONTRACTOR UNTIL ACCEPTANCE BY THE OWNER. RESPONSIBILITIES SHALL INCLUDE WATERING WEEDING AND MOWING AS NECESSARY. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE, REPLACEMENT MATERIAL SHALL BE GUARANTEED FOR AND ADDITIONAL YEAR FROM TIME OF INSTALLATION.

13.) THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY EROSION CONTROL MEASURES DURING THE CONSTRUCTION PHASE AND UNTIL ALL AREAS HAVE BEEN STABILIZED AND ACCEPTED BY THE OWNER. THE GENERAL CONTRACTOR SHALL PROVIDE WEEKLY INSPECTIONS OF EROSION MEASURE AND IMMEDIATELY AFTER STORM EVENTS AND REPAIR AS NECESSARY.

14.) THE GENERAL CONTRACTOR AND OR THE LANDSCAPE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL THREE GUYING MATERIAL ONCE PLANT MATERIAL HAS BEEN ESTABLISHED. (MINIMUM OF ONE GROWING SEASON). ALL TEMPORARY EROSION CONTROL MEASURE SHALL BE REMOVED ONCE STABILIZATION OF DISTURBANCE HAS BEEN ACCEPTED BY OWNER.

15.) THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR A MINIMUM OF TWO MOWINGS FOR ALL TURF AREAS OR UNTIL ACCEPTANCE BY THE OWNER. A MINIMUM UNIFORM 75% CATCH OF TURF IS REQUIRED FOR ACCEPTANCE.

16.) ALL PLANTINGS SHALL BE WATERED REGULARLY DURING THEIR FIRST YEAR AND MAINTAINED PERMANENTLY IN GOOD GROWING CONDITION AS AN EFFECTIVE VISUAL SCREEN.

17.) SHRUBS OR TREES WHICH DIE SHALL BE REPLACED WITHIN ONE GROWING SEASON WITH NEW SHRUBS OR TREES TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE LANDSCAPING REQUIREMENTS.

18.) ALL REQUIRED LANDSCAPING SHALL BE INSTALLED BEFORE OCCUPANCY, OR WITHIN SIX MONTHS IF OCCUPANCY OCCURS DURING WINTER CONDITIONS.

19.) TREES ARE TO BE 2-2.5" CALIPER.

20.) ALL PLANT STOCK SHALL CONFORM TO ANSI Z260.1 - NURSERY STOCK, LATEST EDITIONS (AMERICAN ASSOCIATION OF NURSERYMEN, INC.)

21.) 4" AGED PINEBARK MULCH AND A WEED BARRIER (TY-PAR FABRIC OR APPROVED EQUAL) SHALL BE APPLIED TO ALL SHRUB AND GROUND COVER BEDS. INSTALL WEED BARRIER AS PER MANUFACTURERS RECOMMENDATIONS.

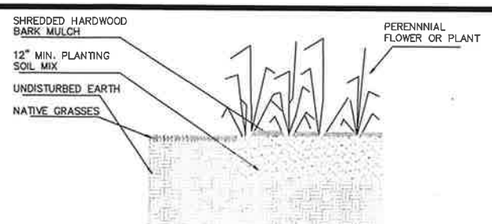
22.) PLANT-PIT BACK-FILL SHALL BE MIXED AT A RATE OF 7 PARTS OF TOPSOIL TO 2 PARTS OF DEHYDRATED COW MANURE. SLOW RELEASE FERTILIZER SHALL BE APPLIED AS PER MANUFACTURERS RECOMMENDATIONS. USE EXISTING ON-SITE TOPSOIL AS PART OF BACK FILL WHEN AVAILABLE.

23.) ALL LANDSCAPED AREAS NOT PLANTED WITH TREES, SHRUBS OR GROUNDCOVER SHALL BE RESTORED WITH SEED OR SOD AS INDICATED ON PLANS.

24.) THE REQUIRED STREET TREES MUST BE PLANTED BY OCTOBER 15 ON ANY LOT FOR WHICH A CERTIFICATE OF OCCUPANCY HAS BEEN ISSUED ON OR PRIOR TO AUGUST 31 OF THAT SAME YEAR. NO ADDITIONAL CERTIFICATES OF OCCUPANCY WILL BE ISSUED IF THIS REQUIREMENT IS NOT MET.

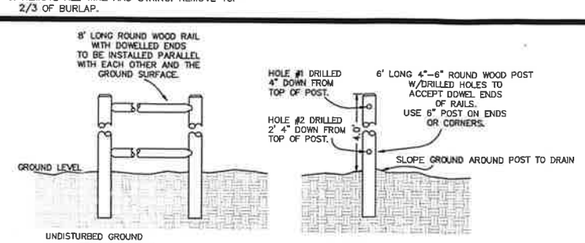
25.) STREET TREES TO BE CHOSEN FROM THE LIST OF APPROVED TREES WITHIN THE CITY OF ROCHESTER AND ARE TO HAVE A MINIMUM OF TWO SPECIES ALTERNATING DOWN THE STREET TO DISCOURAGE A MONO-CULTURE

L8



PERENNIAL PLANTING DETAIL

L7



TYPICAL POST & RAIL FENCE DETAIL

N.T.S.

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWED RESPONSE
#4	05-02-2018	AOT REVISIONS
#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

LANDSCAPING CONSTRUCTION DETAILS
LAYOUT PLAN
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

AS NOTED
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER

L-101

U1

1.) SEE DETAILS FOR SERVICE CONNECTION REQUIREMENTS

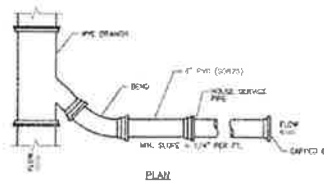
2.) SERVICE CONNECTION SHALL BE INSTALLED BELOW WATER MAIN WHERE POSSIBLE.

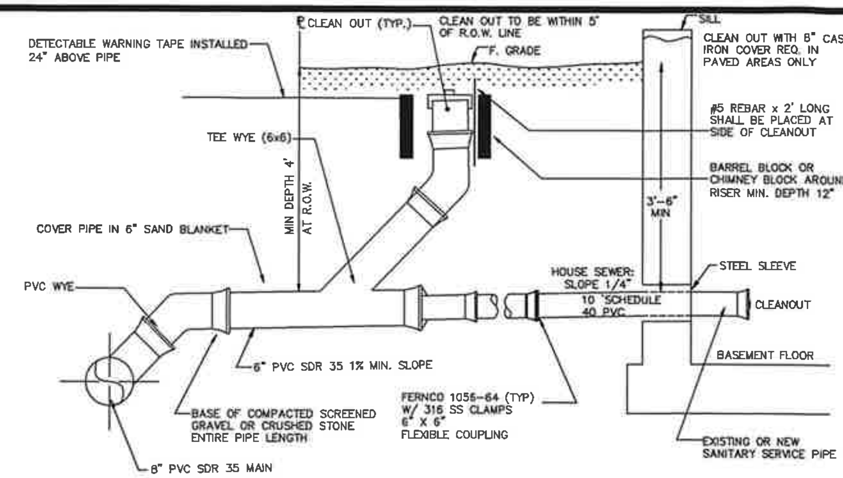
3.) CLEANOUTS SHALL BE INSTALLED AT EACH SERVICE CONNECTION.

4.) REBAR SHALL BE PLACED AT SIDE OF CLEANOUT.

5.) CLEANOUT SHALL BE USED TO PLUG AND TEST ALL NEW LATERALS WITH MINIMAL INTERRUPTION TO OPERATION OF HOMEOWNER SANITARY SYSTEM

6.) CLEANOUT RISER PIPE AND FITTINGS SHALL BE INSTALLED AT THE TIME OF RESIDENTIAL CONNECTION, AND IS NOT PART OF ROAD CONSTRUCTION.

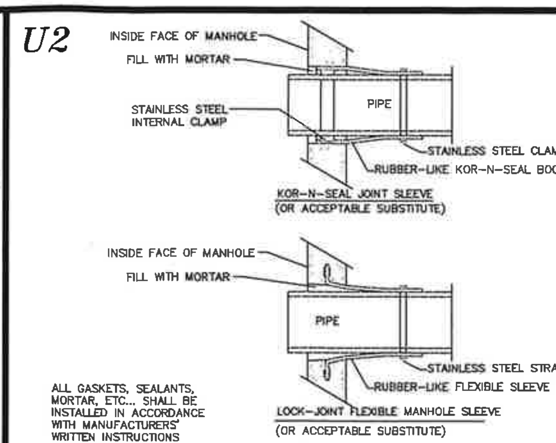




DETAIL OF UNIT SEWER SERVICE

NOT TO SCALE

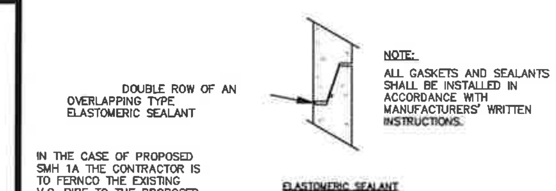
U2



ALL GASKETS, SEALANTS, MORTAR, ETC... SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS

DETAIL "A" – PIPE TO MANHOLE JOINTS

NOT TO SCALE

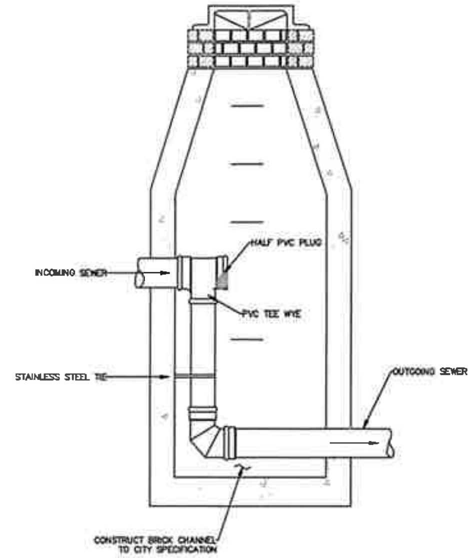


IN THE CASE OF PROPOSED SMH 1A THE CONTRACTOR IS TO FERNCO THE EXISTING V.C. PIPE TO THE PROPOSED SDR 35 STUBS WITHIN THE BASIN.

DETAIL "B" HORIZONTAL JOINTS

NOT TO SCALE

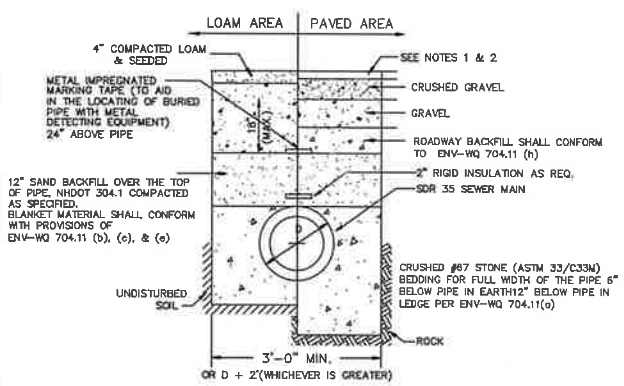
U3



DROP DETAIL (PIPE 6")

NOT TO SCALE

U4

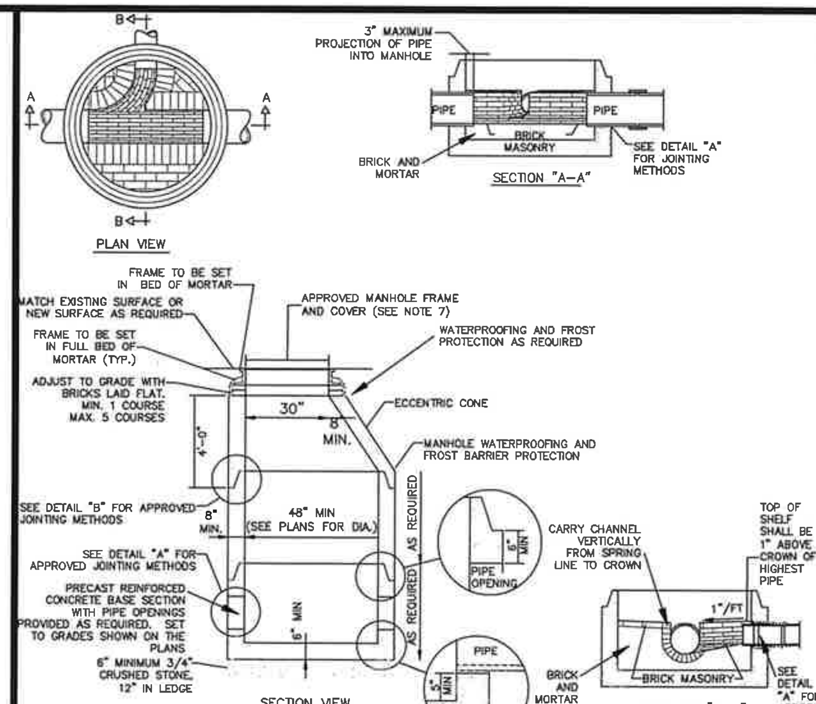


NOTE:
1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS.
2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO SUBDIVISION SPEC'S.
2. ANTI-SEEP COLLARS OR CLAY CHECK DAMS ON STEEP RUNS IN WET CONDITIONS

TYPICAL DRAIN AND SEWER PIPE TRENCH

NOT TO SCALE

U5



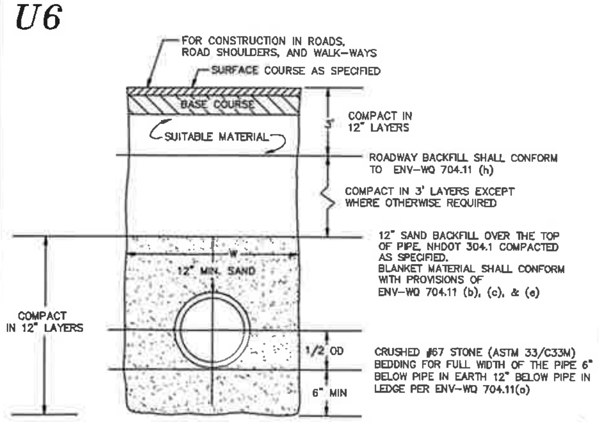
TYPICAL SEWER MANHOLE

NOT TO SCALE

NOTES ON MANHOLE CONSTRUCTION

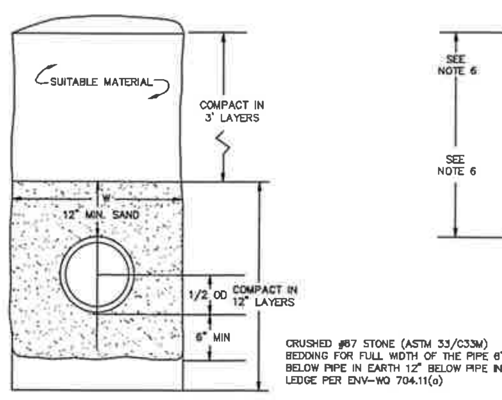
1) IT IS THE INTENTION THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE SPACE, STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE. SPACE REQUIREMENTS AND CONFIGURATIONS, SHALL BE AS SHOWN ON THE DRAWING. MANHOLES SHALL BE AN ASSEMBLY OF PRECAST SECTIONS, WITH STEEL REINFORCEMENT AND ADEQUATE JOINTING. THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND HS-20-44 LOADING, INCLUDING THE COVER. ALL SMH CONSTRUCTION AND MATERIALS WILL BE IAW ENV.-WQ 704.13 ADOPTED OCTOBER 15, 2014
2) BARRELS AND CONE SECTIONS SHALL BE PRECAST REINFORCED CONCRETE. (IAW ENV.-WQ 704.12 (d))
3) SEWER MANHOLE DIAMETER SHALL BE AS INDICATED ON THE PLANS.
4) PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL CONFORM TO ASTM C478.
5) GRAVITY SEWER PIPE TESTING WILL BE IN ACCORDANCE WITH ENV.-WQ 704.06 AND MAN HOLE TESTING IAW ENV.-WQ 704.17 DATED OCTOBER 15, 2014.
6) INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF THE PIPE AND FLOW. INVERT BRICKS SHALL BE LAID ON EDGE AND THE BASE SECTION SHALL BE FULL. AT CHANGES IN DIRECTIONS, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. CARE SHALL BE TAKEN TO ENSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE SEWER INVERT. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY. (IAW ENV.-WQ 704.13 (a). (9)). MORTAR SHALL CONFORM WITH REQUIREMENTS OF IAW ENV.-WQ 704.13 (c).
7) FRAMES AND COVERS: MANHOLES FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30-INCH CLEAR OPENING. 3-INCH (MINIMUM HEIGHT) LETTERS WITH THE WORD "SEWER" SHALL BE PLAINLY CAST INTO THE CENTER OF EACH MANHOLE COVER. (IAW ENV.-WQ 704.13 (a) (4-8)) SEWER MAN HOLE COVERS ARE TO PAMREX.
8) SHALLOW MANHOLE: IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H-20 LOADS.
9) HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF A TYPE APPROVED BY THE ROCHESTER DPW, WHICH TYPE SHALL, IN GENERAL, DEPEND FOR WATERTIGHTNESS UPON A DOUBLE ROW OF AN OVERLAPPING TYPE ELASTOMERIC OR MASTIC-LIKE GASKET. APPROVED ELASTOMERIC SEALANTS ARE: RAM-NEK, KENT SEAL NO. 2, EZ, OR EQUAL.
10) IN CROSS COUNTRY AREAS OUTSIDE OF THE PAVED ROADWAY SURFACE. THE MANHOLE FRAME ELEVATION SHALL BE A MINIMUM OF 6" ABOVE FINISHED GRADE. GRADE TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE MANHOLE.
11.) ALL FRAMES AND GRATES ARE TO BE U.S.A. MADE. MANHOLE STEPS ARE PROHIBITED IN THIS MUNICIPALITY AND MUST CONFORM TO THE REQUIREMENTS OF ENV-WQ 704.14.
12.) THE CONTRACTOR TO WORK WITH CITY OF ROCHESTER REVIEW ENGINEER AND SEWER DEPARTMENT ON THE MEANS AND METHODS USED TO INSTALL ALL SEWER STRUCTURES. SPECIFIC ATTENTION IS TO BE PAID TO THE INSTALLATION OF SMH 1A, WHEREAS THE EXISTING PIPE SLOPE IS UNKNOWN. DURING LOW FLOW CONDITIONS, CUT AND TEMPORARILY CAP THE EXISTING 8" VC LINE, OR INSTALL TEMPORARY BY-PASS LINE (OF EQUAL SIZE). AFTER INSTALLATION OF NEW BASIN, FERNCO THE NEW SDR 35 PIPES TO THE EXISTING VC LINES. THIS INSTALLATION IS TO BE COORDINATED WITH THE CITY OF ROCHESTER SEWER DEPARTMENT.

U6



LEDGE CONSTRUCTION

NOT TO SCALE



EARTH CONSTRUCTION

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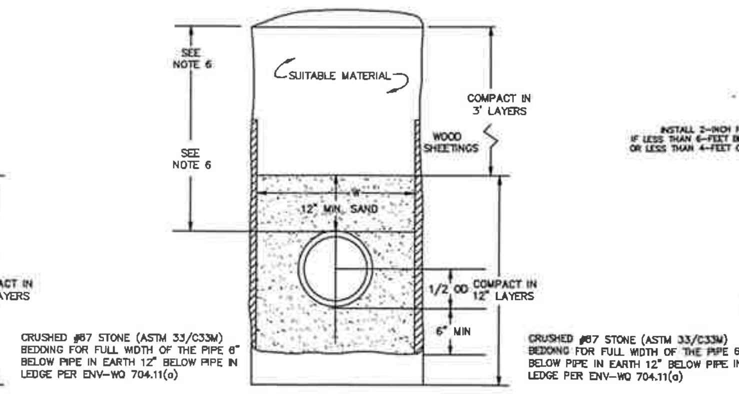
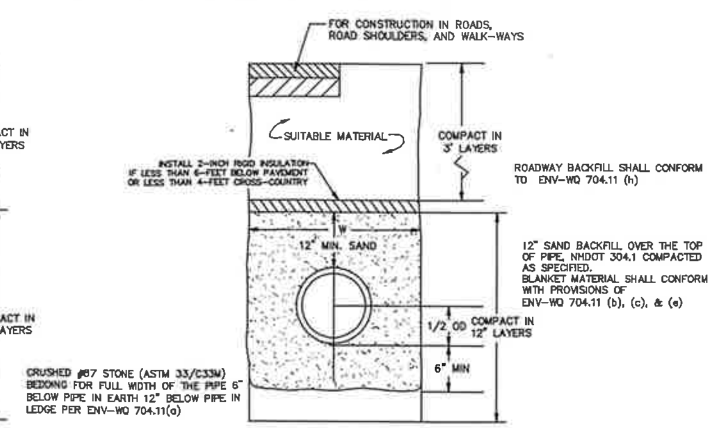


EARTH CONSTRUCTION WITH SHEETING

NOT TO SCALE



TRENCH INSULATION

NOT TO SCALE

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
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#3	04-11-2018	SEWER & WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

UTILITY DETAILS
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863
AS NOTED
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE – KENNETH A. BERRY No. 14243 LICENSED PROFESSIONAL ENGINEER

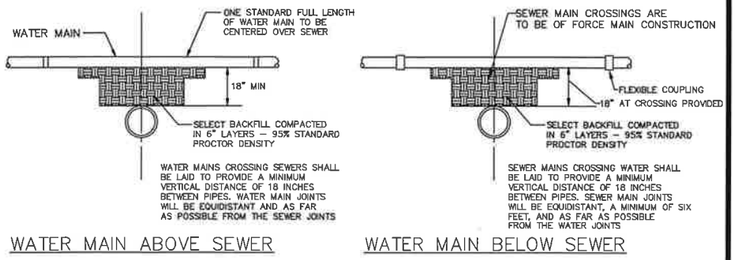
U-101

SHEET 74 OF 76

U8

SEPERATION NOTES:

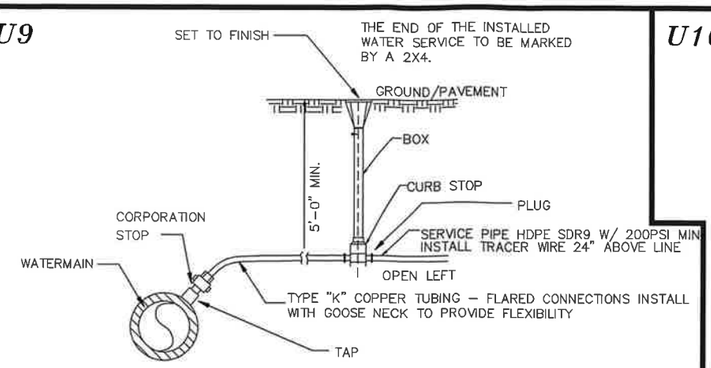
1. WATER MAIN SHALL BE IN ACCORDANCE WITH THE "RECOMMENDED STANDARDS FOR WATER WORKS" SO-CALLED TEN STATE STANDARDS AND NEW HAMPSHIRE WATER SUPPLY AND POLLUTION CONTROL DESIGN STANDARDS.
2. WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SEWERS. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IF THIS DISTANCE CANNOT BE OBTAINED, THEN THE PIPES SHALL BE INSTALLED IN A SEPERATE TRENCH AT AN ELEVATION SO THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.



TYPICAL WATER/SEWER SEPERATION DETAILS

NOT TO SCALE

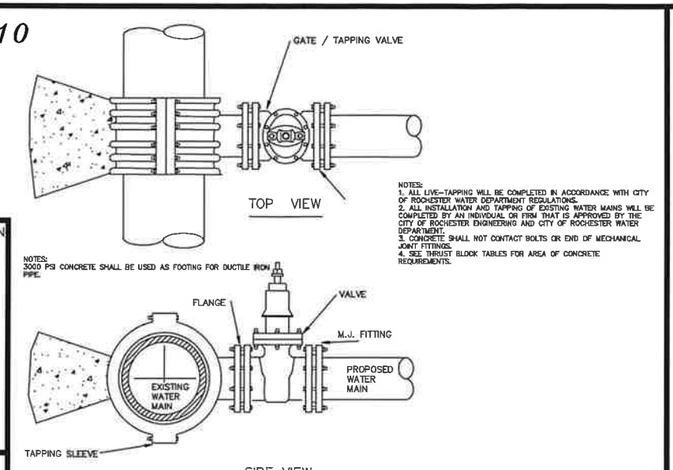
U9



TYPICAL WATER SERVICE CONNECTION

NOT TO SCALE

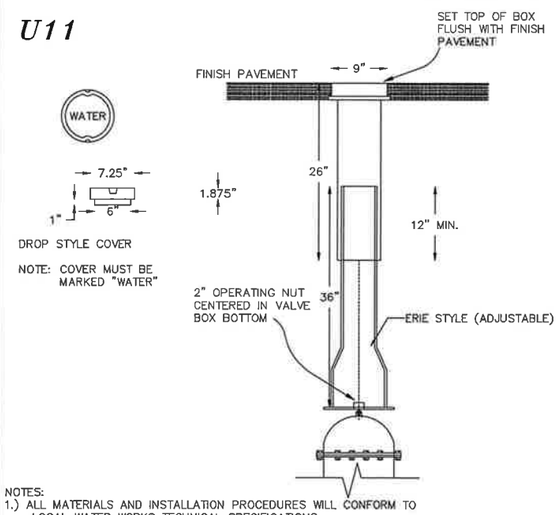
U10



DETAIL FOR STANDARD TAPPING SLEEVE AND VALVE ASSEMBLY

NOT TO SCALE

U11

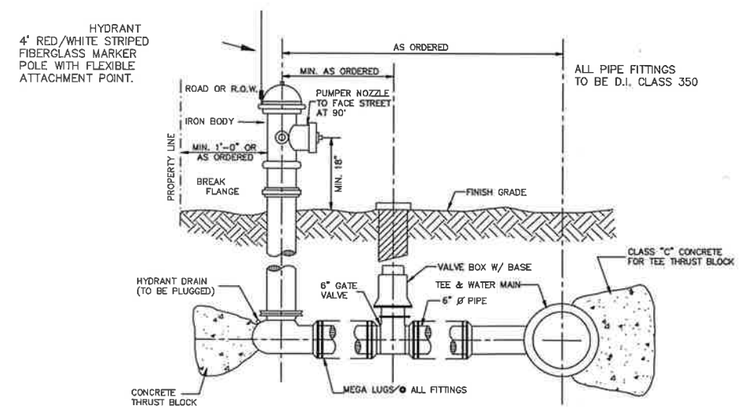


NOTES:
1.) ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO LOCAL WATER WORKS TECHNICAL SPECIFICATIONS.
2.) ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 6' FROM TOP OF PIPE TO FINISH GRADE.

VALVE BOX DETAIL

NOT TO SCALE

U12



NOTES :

1.) THE FIRE HYDRANT IS TO BE PAINTED CITY OF ROCHESTER STANDARD COLORS AND BE EQUIPPED WITH A HYDRANT LOCATOR.
2.) THE FIRE HYDRANT SHALL BE THE "KENNEDY" TYPE OR APPROVED EQUAL.
3.) K81A HYDRANTS AND GATE VALVES OPEN RIGHT

HYDRANT INSTALLATION DETAIL

NOT TO SCALE

U13

TYPICAL THRUST BLOCKS

NOT TO SCALE

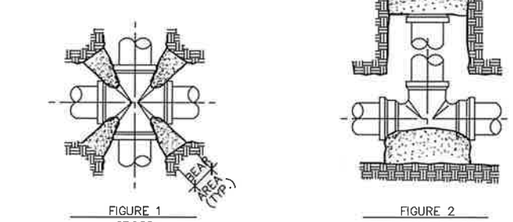


FIGURE 1
CROSS
(ONLY REQ'D IF ANY LEG IS LESS THAN 60 FT. LONG)

FIGURE 2
TEE, PLUG OR CAP

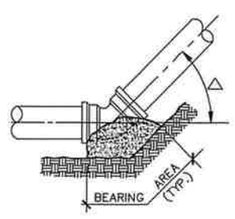


FIGURE 3
HORIZONTAL OR UPWARD VERTICAL BEND

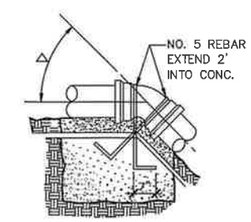
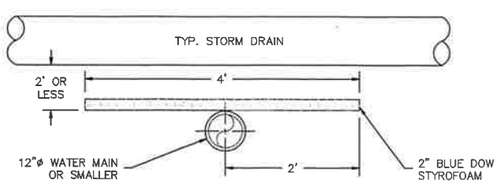


FIGURE 4
DOWNWARD VERTICAL BEND

NOTE:

MECHANICAL JOINTS AT ALL FITTINGS IE: BENDS, TEES, CROSSES, AND VALVES SHALL BE THRUST RESTRAINT. (MEGA-LUG OR APPROVED EQUAL).

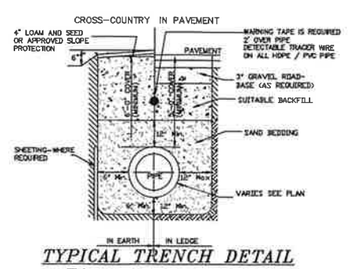
U14



INSULATE WATER PIPE WHERE CROSSING UNDER CULVERT

NOT TO SCALE

U15



TYPICAL TRENCH DETAIL FOR WATER SYSTEM

NOT TO SCALE

GENERAL NOTES:

1. ALL FITTINGS & EXPOSED REBAR TO BE WRAPPED W/ TWO LAYERS OF 6 MIL. POLYETHYLENE WHERE COVERED WITH CONCRETE.
2. ALL CONCRETE SHALL BE CLASS C 3000 P.S.I. MINIMUM 28 DAYS COMPRESSIVE STRENGTH.
3. PLACE CONCRETE AGAINST UNDISTURBED EARTH.
4. TABLE DENOTES MINIMUM BEARING AREA OR VOLUME OF THRUST BLOCK. SPECIAL DESIGN FOR EACH INSTALLATION IS REQUIRED IF ALLOWABLE SOIL BEARING CAPACITY IS LESS THAN 3000 P.S.F.
5. VERTICAL SURFACES NOT BEARING AGAINST UNDISTURBED EARTH SHALL BE FORMED.
6. KEEP CONCRETE AWAY FROM FLANGE BOLTS AND FITTINGS.

PIPE I.D.	BEARING AREA, SQUARE FEET						VOLUME OF CONC. CU.YD		
	FIGURE 1	FIGURE 2	FIGURE 3, △				FIGURE 4, △		
			90°	45°	22-1/2°	11-1/4°	45°	22-1/2°	11-1/4°
4"	2	2	2	1	1	1	1.0	.5	.5
6"	2	3	3	2	1	1	1.5	1.0	.5
8"	2	5	6	3	2	1	2.0	1.0	.5
10"	3	7	10	5	3	1	4.0	2.0	1.0
12"	3	10	14	8	4	2			
14"	4	14	20	10	5	3			
16"	4	20	24	12	7	4			
18"	5	24	30	16	10	5			
20"	5	28	40	20	12	6			

U-102

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWEB RESPONSE
#4	03-02-2018	AoT REVISIONS
#3	06-11-2015	SEWER MAIN REVISIONS
#2	04-09-2015	GENERAL PLAN SET
#1	03-30-2015	GENERAL PLAN SET

UTILITY DETAILS
LAND OF
CRC FUTURE CORP.
FOR
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 236, LOT 120 & 121

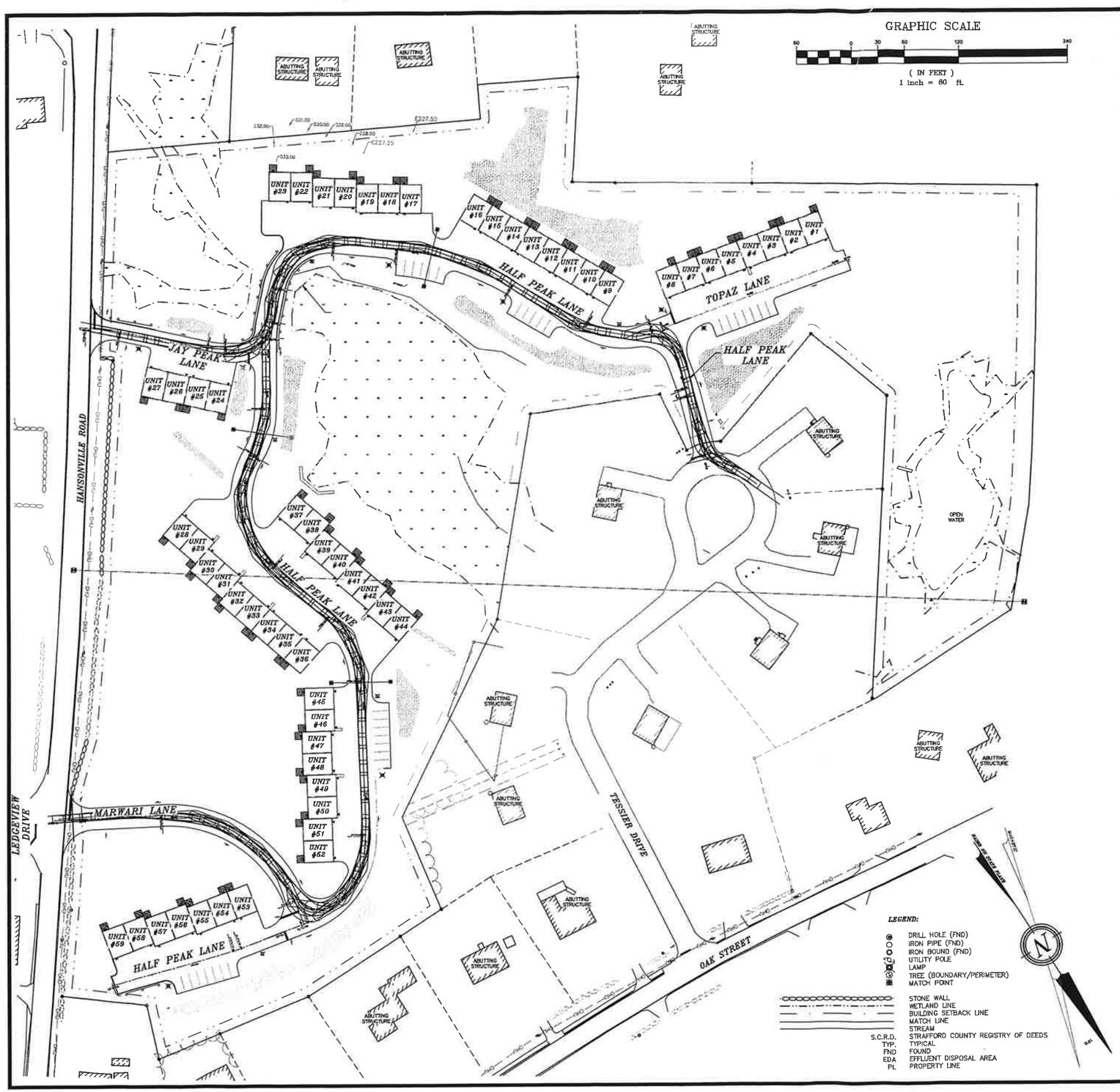
BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

AS NOTED

DATE : JANUARY 22, 2018

FILE NO. : DB 2017 – 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 11273
LICENSED
PROFESSIONAL ENGINEER



NOTES:

1.) THE INTENT OF THIS PLAN IS TO DEMONSTRATE THE OVERVIEW SITE PLAN AND THE TRACKING PATTERN OF THE ROCHESTER FIRE TRUCK.

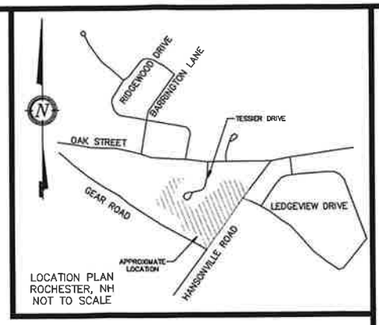
2.) CURRENT OWNER: CRC FUTURE CORP.
58 EXETER ROAD
NEWMARKET, NH 03857

3.) APPLICANT: HALF PEAK HOLDINGS, LLC
PO BOX 1297
NORTH HAMPTON, NH 03862

4.) THE PROJECT PARCEL IS SHOWN AS LOT NO. 120, MAP 251 OF THE CITY OF ROCHESTER TAX ASSESSOR'S MAPS.

5.) THE PROJECT PARCEL CONTAINS 13.84 ACRES OR 602,671 SQUARE FEET AREA OF LAND.

6.) PROJECT PLAN REFERENCES: S.C.R.D. BOOK 2975, PAGE 469



LOCATION PLAN
ROCHESTER, NH
NOT TO SCALE

REVISION	DATE	DESCRIPTION
#7	07-30-2018	SUBMITTED FOR CONSTRUCTION
#6a	06-18-2018	REVISED PER AoT COMMENT
#5b	05-24-2018	NHDES WWED
#4	05-02-2018	AOT REVISIONS
#3	04-11-2018	SITE WATER REVISIONS
#2	04-09-2018	GENERAL PLAN SET
#1	03-30-2018	GENERAL PLAN SET

VEHICLE TRACKING PLAN ROCHESTER FIRE TRUCK
LAND OF
CRC FUTURE CORP.
58 EXETER ROAD
NEWMARKET, NH 03857
HALF PEAK HOLDINGS
GEAR ROAD, HANSONVILLE ROAD, TESSIER DRIVE
ROCHESTER, NH 03867
TAX MAP 251, LOT 120 & 121

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 60 FT.
DATE : JANUARY 22, 2018
FILE NO. : DB 2017 - 167

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14245
LICENSED
PROFESSIONAL ENGINEER