MATCHLINE TO GENERAL PLAN No. 7

MATCHLINE TO GENERAL PLAN No. 5

MATCHLINE TO GENERAL PLAN No. 8

EQUATION STATION
525+08.53 HARTFORD AVENUE=
60+00.00 HARTFORD AVENUE EASTBOUND JUGHANDLE
N: 272,391.2982
E: 321,207.0333

54/21
275 ATWOOD LLC
Book 2324 Page 475000

Hartford Avenue (Route 6)

NEW S.H.L. PLAT NO. 2998

S.H.L. PLAN Map 105

FORESTED WETLAND LESS THAN 3/4 ACRES

TEB

PCC 525+21.8

EQUATION STATION
529+20.54 HARTFORD AVENUE=
-0+52.34 EASTERN ACCESS ROAD
N: 272,322.0060
E: 321,611.7755

EQUATION STATION
529+20.06 HARTFORD AVENUE=
30+16.61 AP 54 LOT 21 DRIVEWAY
N: 272,322.1539
E: 321,611.3207

PT 528+76.3

REMOVE AND RELOCATE COUNT STATION/SYSTEM TO STA. 522+35 RIGHT

REMOVE AND RELOCATE EXISTING DYNAMIC MESSAGE SYSTEM

REMOVE AND DISPOSE LOOP COUNT STATION

REMOVE AND DISPOSE CONCRETE BLOCKS

L=285.78 R=260.00

S.H.L. PLAT NO. 1443A

S.H.L. PLAT NO. 14

REMOVE AND DISPOSE CONCRETE BLOCKS

PROPOSED RED SIGNAL AHEAD WIRING PER MANUFACTURER (TYP.)

WORK BY OTHERS (REFER TO RETAIL DISTRIBUTION CENTER SITE DEVELOPMENT PLANS FOR DETAILS OF WORK IN THIS AREA)

WORK BY OTHERS (REFER TO RETAIL DISTRIBUTION CENTER SITE DEVELOPMENT PLANS FOR DETAILS OF WORK IN THIS AREA)

101
TOWN OF JOHNSTON
Book/Page Unknown

LIMIT OF CONSTRUCTION END STA. 0+44.22 EASTERN ACCESS ROAD
N: 272,230.2187
E: 321,581.7793

PDB

54/81
SASA & RHONDA MOHAMMAD
Book 1577 Page 155000

54/42
AMAZON.COM SERVICES, LLC
Book 1919 Page 100

PRC 62+36.8 L=57.79 R=220.00

PCC 63+43.6 L=98.57 R=136.00

S71° 54' 09.17"E 31.83

PT 64+42.1

EQUATION STATION
2+00.39 EASTERN ACCESS ROAD=
64+73.97 HARTFORD AVENUE EASTBOUND JUGHANDLE
N: 272,081.9272
E: 321,532.7914

L=259.85 R=150.00 PC 2+31.5

NEW S.H.L. PLAT NO. 2998

50' WETLAND BUFFER

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM

NOTE PER DEM:

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: JAN 18 2023 FILE #: 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

RED SIGNAL AHEAD SIGN MATERIALS LIST

ITEM NO.	LEGEND	ITEM CODE	ITEM DESCRIPTION
1a	■	T05.0100	PRECAST TYPE "A" HANDHOLE STD. 18.2.0
2b	———	T06.5120	2 INCH POLYVINYL CHLORIDE PLASTIC CONDUIT (SCHEDULE 40) – UNDERGROUND
2n	———	T06.5420	2 INCH POLYVINYL CHLORIDE PLASTIC CONDUIT (SCHEDULE 80) – UNDER EXISTING PAVEMENT

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS
1	7/18/2022	HCP	PJB	SAND FILTER "O" HAS BEEN ELIMINATED

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE
20 0 20 40
SCALE IN FEET: 1"=20'

UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
GENERAL PLAN No. 6

RI Environmental Management
SEP 20 2022
Office of Water Resources

BETA JOB NO. 7394

ISSUE DATE JULY 2022

SHEET NO. 24 OF 48

MATCHLINE TO GENERAL PLAN No. 6

EQUATION STATION
2+00.39 EASTERN ACCESS ROAD=
64+73.97 HARTFORD AVENUE EASTBOUND JUGHANDLE
N: 272,081.9272
E: 321,532.7914

NEW S.H.L. PLAT NO. 2998

64+42.1

64+73.97

R=150.00'

PT 2+31.5

L=239.85'

3+00

POB

50' WETLAND BUFFER

54/42
AMAZON COM SERVICES, LLC
Book 1919 Page 100

WORK BY OTHERS
(REFER TO RETAIL DISTRIBUTION CENTER SITE DEVELOPMENT PLANS FOR DETAILS OF WORK IN THIS AREA)

14.2.0

FUTURE DEVELOPMENT ACCESS ROAD TO LOT 54/34 (PAP NO. 201201-A)

LIMIT OF CONSTRUCTION
END STA. 33+18.00
AP 54 LOT 21 DRIVEWAY
N: 272,608.2464
E: 321,548.0576

54/34
SITWELL PARK LLC
Book 2482 Page Unknown

33+70

108.79'
N17° 05' 30.33"W

7.1.0S

33+00

POTENTIAL FUTURE ACCESS DRIVEWAY TO LOT 54/21

54/21
275 ATWOOD LLC
Book 2324 Page 475000

PT 32+61.2

LOR
(TYP.)

BCP3

L=90.66' R=1015.00'

32+00

PC 31+70.5

N22° 12' 34.59"W

65.27'

7.1.0C

DFP

BCD

LS

7.2.0C

BSL

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: JAN 10 2023 FILE #: 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Environmental Management
SEP 20 2022
Office of the Director

MATCHLINE TO GENERAL PLAN No. 6

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS
1	7/18/2022	HCP	PJB	SAND FILTER "O" HAS BEEN ELIMINATED

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE
20 0 20 40
SCALE IN FEET: 1"=20'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
GENERAL PLAN No. 7

BETA JOB NO. 7394
ISSUE DATE JULY 2022
SHEET NO. 25 OF 48

7/21/2022 11:52 AM N:\7300S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_009_GEN_DEM_UPDATED (JULY 2022).DWG (BETA STB BW.STB)

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 7

MATCHLINE TO GENERAL PLAN No. 6

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 8

Hartford Avenue (Route 6)

16LF–12" RCP
S=0.012 FT./FT.
(4') 4.4.0M 6.3.4 7.1.8 7.2.2
STA. 524+36, 0.9' LT.
RIM=285.5
INV. (12" NE) OUT=281.10

180LF–15" RCP
S=0.058 FT./FT.

4.2.0 6.2.1
STA. 524+46, 19.6' LT.
RIM=285.1
INV. (15" W) IN=280.60
INV. (12" SW) IN=280.90
INV. (15" E) OUT=280.50

199LF–15" RCP
S=0.059 FT./FT.

LIMIT OF DISTURBANCE (TYP.)

54/21
275 ATWOOD LLC
Book 2324 Page 475000

19LF–12" RCP
S=0.010 FT./FT.
(4') 4.4.0M 6.3.4 7.1.8 7.2.2
STA. 526+42, 3.0' LT.
RIM=273.5
INV. (12" NE) OUT=269.00

4.2.0 6.2.1
STA. 526+47, 23.6' LT.
RIM=273.3
INV. (12" SW) IN=268.80
INV. (15" W) IN=268.80
INV. (15" E) OUT=268.70

146LF–15" RCP
S=0.052 FT./FT.

3LF–12" RCP
S=0.067 FT./FT.

4.2.0 6.2.1
STA. 527+96, 23.0' LT.
RIM=267.0
INV. (15" W) IN=261.10
INV. (12" N) IN=261.70
INV. (15" S) OUT=260.95

150LF–15" HDPE
S=0.020 FT./FT.

(4') 4.4.0 6.3.4 7.1.8
STA. 529+85, 41.1' LT.
RIM=257.4
INV. (12" S) OUT=253.50

12LF–12" RCP
S=0.008 FT./FT.

ABM 6.2.1 DFG RCBC
STA. 529+85, 25.0' LT.
RIM=257.6
INV. (12" N) IN=253.40

PC 30+54.6
PT 528+76.3

17LF–24" HDPE
S=0.113 FT./FT.

4.2.0 6.2.1
STA. 525+86, 46.4' RT.
RIM=275.6
INV. (24" W) IN=269.50
INV. (24" SE) OUT=267.20

106LF–24" HDPE
S=0.015 FT./FT.

REMOVE AND DISPOSE HEADWALL CAP AND ABANDON PIPE

PROP. 6LF–12" HDPE WATER LINE SERVICE

PROP. 4LF COPPER WATER LINE SERVICE

3LF–12" HDPE
S=0.038 FT./FT.

94LF–24" HDPE
S=0.062 FT./FT.

190LF–24" HDPE
S=0.056 FT./FT.

(4') 4.4.0 6.3.4 7.1.8
STA. 525+62, 52.8' RT.
RIM=276.8
INV. (12" NE) OUT=272.60

4.2.0 6.2.1
STA. 525+65, 46.7' RT.
RIM=277.7
INV. (24" W) IN=271.50
INV. (12" SW) IN=272.50
INV. (24" E) OUT=271.40

(4') 4.4.0 6.3.4 7.1.8
STA. 524+58, 47.0' RT.
RIM=283.3
INV. (12" SE) OUT=279.10

4.2.0 6.2.0
STA. 524+65, 55.0' RT.
RIM=565.0
INV. (24" W) IN=277.40
INV. (12" NW) IN=279.00
INV. (24" E) OUT=277.30

54/81
SASA & RHONDA MOHAMMAD
Book 1577 Page 155000

54/42
AMAZON.COM SERVICES, LLC
Book 1919 Page 100

WORK BY OTHERS (REFER TO RETAIL DISTRIBUTION CENTER SITE DEVELOPMENT PLANS FOR DETAILS OF WORK IN THIS AREA)

WORK BY OTHERS (REFER TO RETAIL DISTRIBUTION CENTER SITE DEVELOPMENT PLANS)

TO TOWN OF JOHNSTON Book/Page Un

WORK BY OTHERS (REFER TO RETAIL DISTRIBUTION CENTER SITE DEVELOPMENT PLANS FOR DETAILS OF WORK IN THIS AREA)

NEW S.H.L. PLAT NO. 2998

S.H.L. PLAT NO. 1443A

S.H.L. PLAT NO. 14

PDB

PRC 62+85.6

PCC 63+43.6

PT 64+42.1

PC 2+31.5

LIMIT OF CONSTRUCTION
END STA. 0+44.22
EASTERN ACCESS ROAD
N: 272,230.2187
E: 321,581.7793

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATE: JAN 10 2023 FILE #: 21-0346
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Martin D. Wencek

RECEIVED
JAN 20 2023
Environmental Protection

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 7

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS
1	7/18/2022	HCP	PJB	SAND FILTER "O" HAS BEEN ELIMINATED

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY: BETA www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE: 20 0 20 40 — SCALE IN FEET: 1"=20'

UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

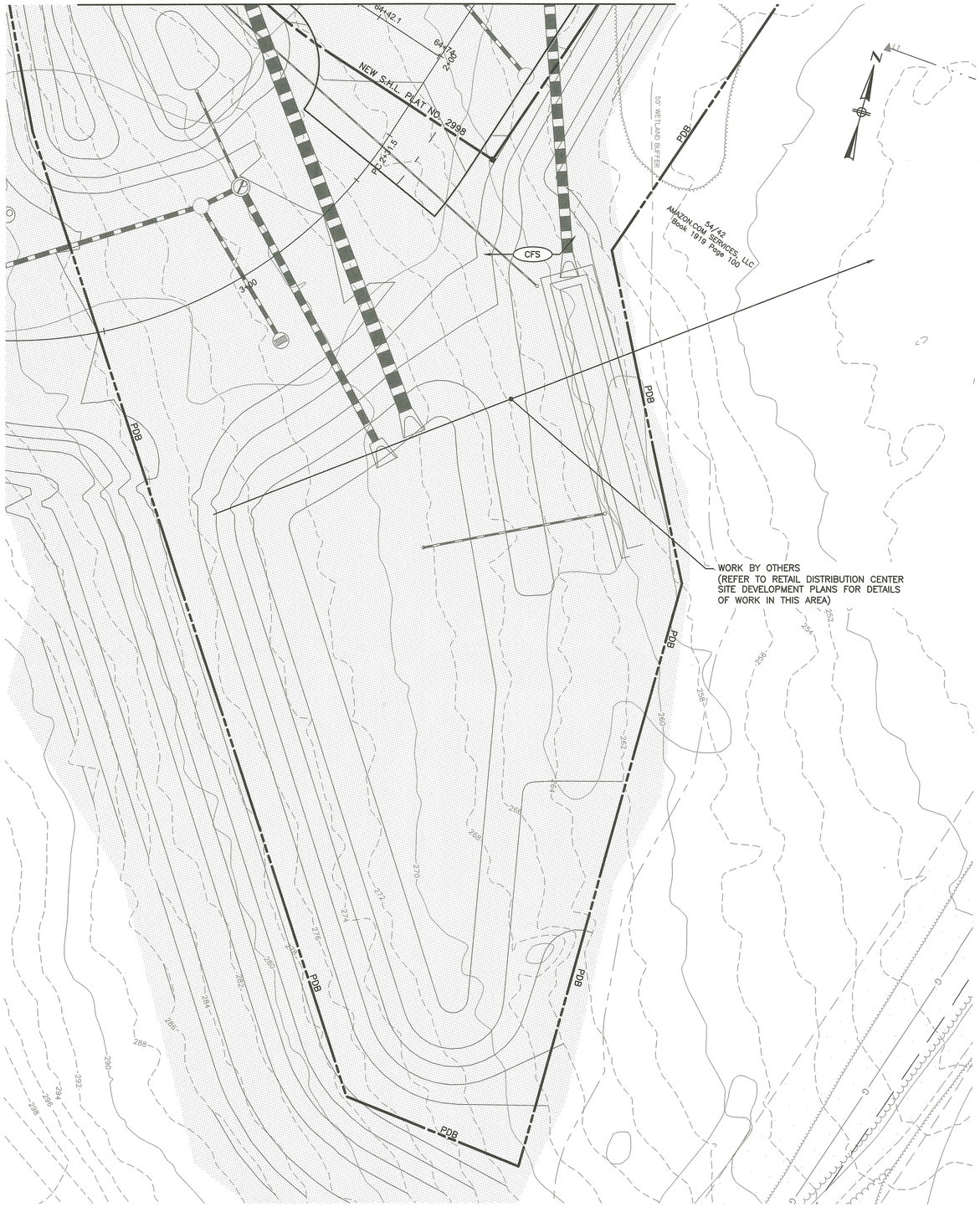
PROJECT: **Highway Safety Improvements to Hartford Avenue (Route 6)** — JOHNSTON, RHODE ISLAND

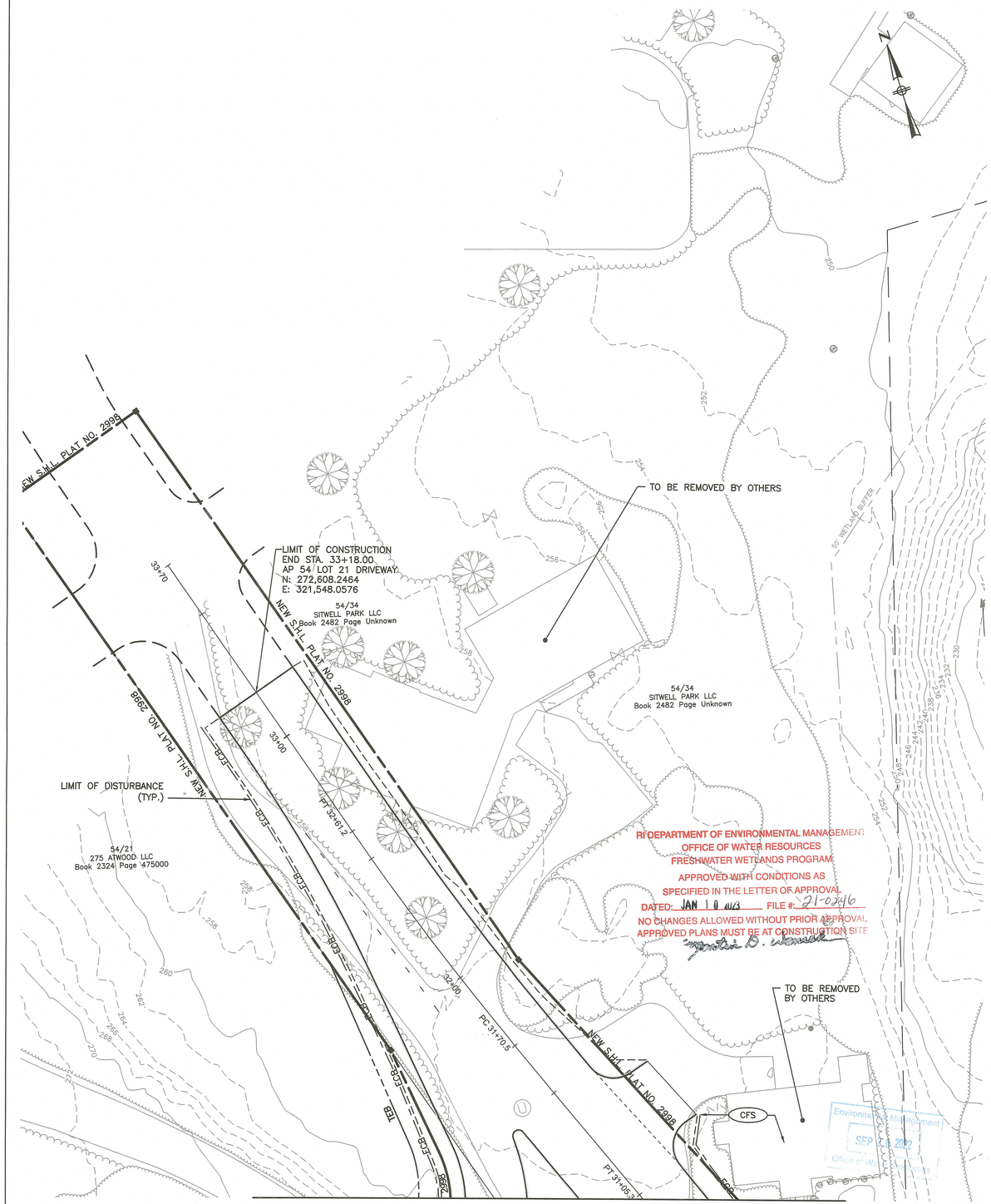
TITLE: DRAINAGE & UTILITY PLAN No. 6

BETA JOB NO. 7394
ISSUE DATE JULY 2022
SHEET NO. 35 OF 48

7/21/2022 11:56 AM N:\7300s\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_011_DU_DEM_UPDATED (JULY 2022).DWG (BETA STB BW.STB)

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 6





MATCHLINE TO DRAINAGE & UTILITY PLAN No. 6

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS
1	7/18/2022	HCP	PJB	SAND FILTER "O" HAS BEEN ELIMINATED

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

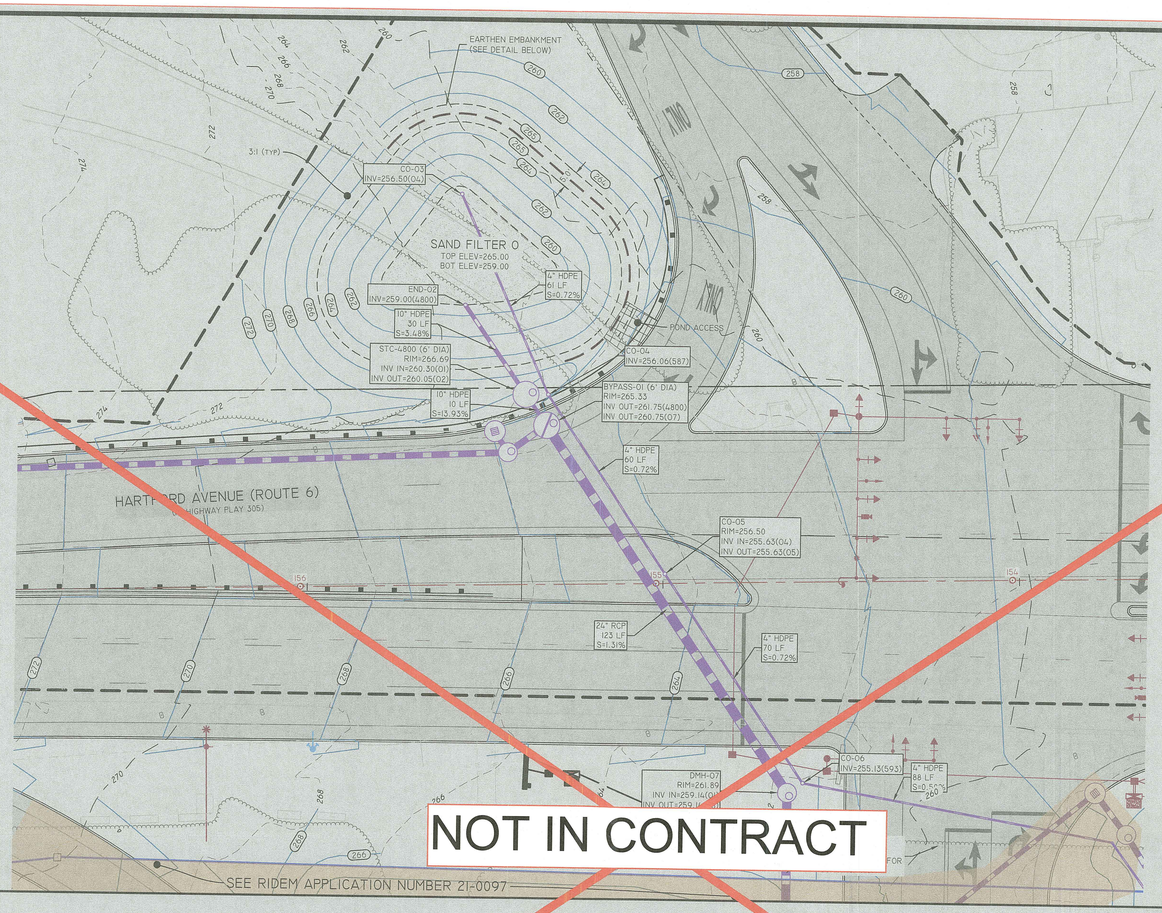
SCALE
20 0 20 40
SCALE IN FEET: 1"=20'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
DRAINAGE & UTILITY PLAN
No. 7

BETA JOB NO. 7394
ISSUE DATE JULY 2022
SHEET NO. 36 OF 48

7/21/2022 11:57 AM N:\7300\ST394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_011_DU_DEM_UPDATED (JULY 2022).DWG (BETA STB BW.STB)

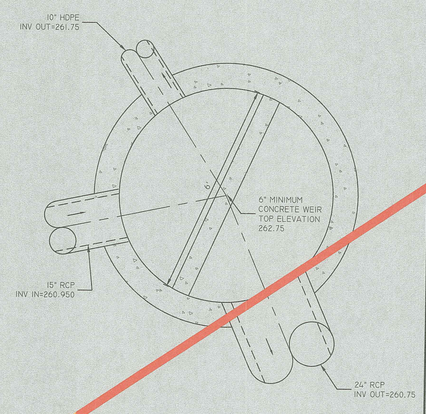


NOT IN CONTRACT

SAND FILTER 0

SCALE: 1"=20'

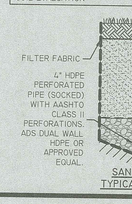
0 10' 20' 40'



BYPASS-01(6'Ø MANHOLE)

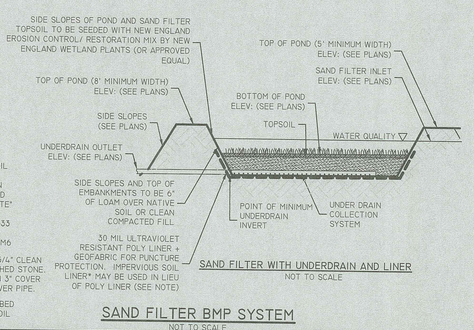
SCALE 1"=2'

DESCRIPTION	SNDF-0
TOP OF POND ELEVATION	265.00
100 YEAR STORM ELEVATION	263.82
10 YEAR STORM ELEVATION	263.17
1 YEAR STORM ELEVATION	262.80
WQ STORM ELEVATION	260.26
BOTTOM OF POND ELEVATION	259.00
TOP SOIL DEPTH	0.50
SAND DEPTH	1.50
MINIMUM UNDERDRAIN INVERT	256.50
UNDERDRAIN OUTLET ELEVATION	254.25
BOTTOM OF SAND ELEVATION	257.00
SEASONAL HIGH GWT ELEVATION	NA
SOIL EVALUATION	NA



SAND FILTER
TYPICAL SECTION

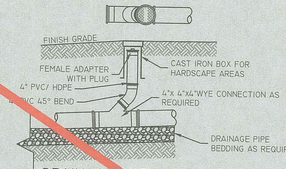
*NOTE: SOIL LINER SHALL BE 1' MINIMUM THICKNESS AND HAVE A MAXIMUM PERMEABILITY OF 0.03 FT/DAY (1*10^-5 CM/SEC). LINER MAY BE COMPRISED OF NATIVE MATERIALS WITH MIN OF 90% PASSING THE #200 SIEVE OR CLAY WITH A MINIMUM OF 15% PASSING THE #200 SIEVE. SOIL LINER TO EXTEND UP SIDES TO EXISTING GRADE AT A MINIMUM.
POLY LINER JOINTS MUST BE WATERTIGHT AND SEALED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



SAND FILTER WITH UNDERDRAIN AND LINER
NOT TO SCALE

SAND FILTER BMP SYSTEM
NOT TO SCALE

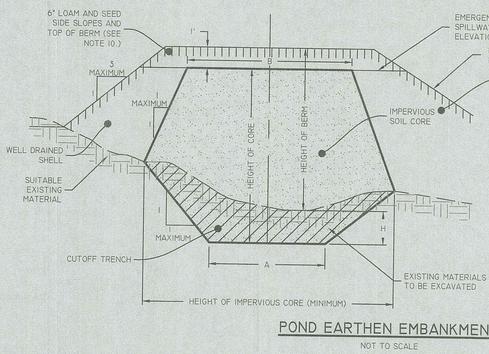
NOTES:
1. ALL PIPE AND FITTINGS SHALL BE SCH-40 PVC.
2. PIPE BEDDING AND BACKFILL FOR CLEANOUTS SHALL MEET APPLICABLE DRAINAGE SPECIFICATIONS UNLESS OTHERWISE NOTED BY ENGINEER.
3. FOR PAVED/ ROADWAY/ HARDSCAPE AREAS, ALL CLEANOUTS SHALL BE SLEEVED WITH A CAST-IRON BOX SET FLUSH WITHIN THE FINAL GRADE. FOR TRAFFICABLE APPLICATIONS, THE CAST-IRON BOX MUST MEET H-20 LOADING. FOR SOFTSCAPE AREAS, CLEANOUT ACCESS COVER SHALL BE SET FLUSH WITH FINAL GRADE (CAST-IRON BOX NOT REQUIRED).



DRAINAGE CLEANOUT
NOT TO SCALE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: JAN 10 2023 FILE #: 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Environmental Review
SEP 20 2022
Office of Water Resources



BERM HEIGHT (FT.)	TOP WIDTH OF CORE - B (FT)
0-6.5	8.2
6.6-9.8	9.2
9.9-13.1	9.8
13.2-16.4	10.8
16.5-19.7	11.5

NOTES:
1. IMPERVIOUS SOIL CORE TO BE PROVIDED FOR ALL POND EMBANKMENTS.
2. IMPERVIOUS SOIL CORE TO BE CONSTRUCTED OF A MATERIAL WITH A MINIMUM OF 55% PASSING THE #200 SIEVE AND A MAXIMUM PERMEABILITY OF 0.0000015 CM/S.
3. WELL DRAINED SHELL TO BE CONSTRUCTED OF GRAVEL AND/OR SAND WITH LESS THAN 5% PASSING THE #200 SIEVE.
4. MINIMUM DEPTH OF CUTOFF TRENCH (H) SHALL BE 1/2 OF THE TOTAL BERM HEIGHT.
5. THE IMPERVIOUS CORE AT A MINIMUM SHALL EXTEND UP TO THE ABUTMENTS TO THE EMERGENCY SPILLWAY ELEVATION.
6. THE MINIMUM BOTTOM WIDTH (A) SHALL BE 5'-8", AND WIDE ENOUGH TO PERMIT OPERATION OF COMPACTION EQUIPMENT.
7. SIDE SLOPES OF THE TRENCH SHALL BE NO STEEPER THAN 1:1.
8. IF BEDROCK IS ENCOUNTERED BELOW THE DAM THE CUT OFF TRENCH CAN BE REDUCED TO 1'x1' (AXH).
9. COMPACTION REQUIREMENTS FOR THE SHELL AND IMPERVIOUS CORE TO BE 95% OF THE MODIFIED PROCTOR PER ASTM D1557. ALL FILL TO BE PLACED IN LIFTS NOT EXCEEDING 12".
10. SIDE SLOPE OF POND EMBANKMENT TO BE 3:1 MAXIMUM.
11. THE IMPERVIOUS CORE SHALL BE KEPT FREE FROM STANDING WATER DURING THE BACKFILL OPERATION.
12. ALL EMBANKMENT INSTALLATIONS TO BE SUPERVISED BY A GEOTECHNICAL ENGINEER.
13. ANY PROPOSED DEVIATIONS FROM THIS DETAIL MUST BE DESIGNED BY A GEOTECHNICAL ENGINEER AND SUBMITTED TO THE SITE ENGINEER (AND AHJ WHERE REQUIRED) FOR REVIEW PRIOR TO CONSTRUCTION.

POND EARTHEN EMBANKMENT
NOT TO SCALE

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
tel 401 943 1000 fax 401 464 6066 www.diprete-eng.com
Boston • Providence • Newport

BRIAN C. GIROUX
No. 19341
REGISTERED
PROFESSIONAL ENGINEER
CIVIL

THIS PLAN SET MUST NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS STAMPED "ISSUED FOR CONSTRUCTION" AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER OF DIPRETE ENGINEERING.

DIPRETE ENGINEERING ONLY WARRANTS PLANS ON A DIPRETE PROFESSIONAL ENGINEER'S SEAL AFFIXED BY A REGISTERED PROFESSIONAL ENGINEER OF DIPRETE ENGINEERING. DIPRETE ENGINEERING DOES NOT WARRANT PLANS BY ANY OTHER PARTY.

THE CONTRACTOR IS RESPONSIBLE FOR ALL OF THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION. DIPRETE ENGINEERING ASSUMES NO RESPONSIBILITY FOR CONSTRUCTION PERFORMANCE IN THE IMPLEMENTATION OF THIS PLAN AND DESIGN.

EXISTING UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. DIPRETE ENGINEERING ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED DUE TO LOCATIONS OF EXISTING UTILITIES.

NO.	DATE	DESCRIPTION	BY:
1	11/07/2022	ADDED HARTFORD LLC AS APPLICANT	K.E.D.
2	08/31/2022	REVISED PER RIDEM COMMENTS	K.E.D.
3	08/31/2022	ADDED 2ND HARTFORD AVE	K.E.D.

DESIGN BY: K.E.D.
DRAWN BY: S.R.

SAND FILTER 0
HIGHWAY SAFETY IMPROVEMENTS TO HARTFORD AVENUE (ROUTE 6)
HARTFORD AVENUE
JOHNSTON, RI

PREPARED FOR:
RHODE ISLAND DEPARTMENT OF TRANSPORTATION
380 WESTMINSTER STREET, SUITE 601
PROVIDENCE, RI 02903-3239

SHEET 48 OF 48

DR. JOB NO. 3295-029, COPYRIGHT 2022 BY DIPRETE ENGINEERING ASSOCIATES, INC.

Z:\DEMAIN\PROJECTS\03295-029 HARTFORD AVENUE\AUTOCAD DRAWINGS\03295-029-BMP-0.DWG Plotted: 11/2/2022

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
PERMITTING SUBMISSION

FOR

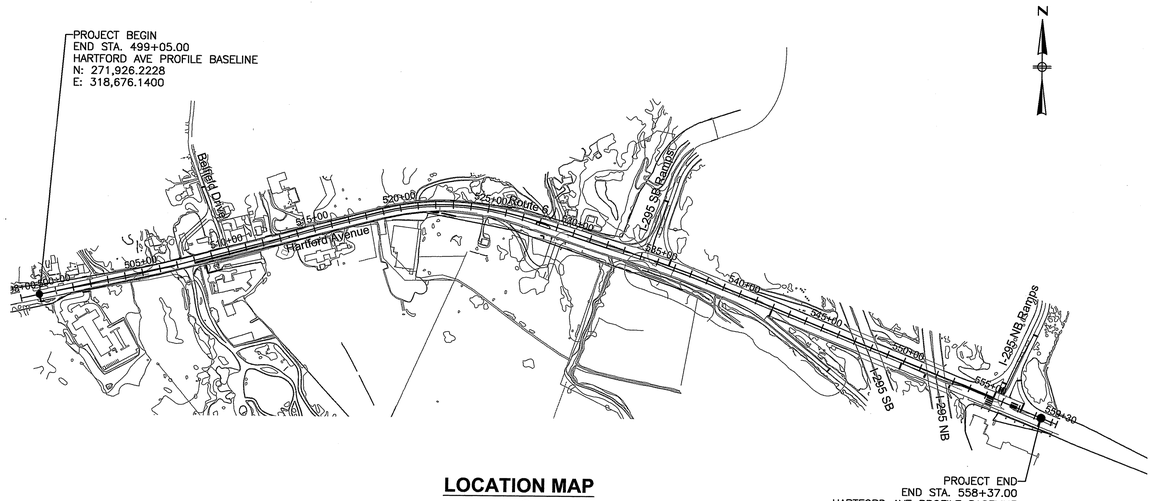
Highway Safety Improvements to Hartford Avenue (Route 6)

Johnston, RI

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

PLAN INDEX

SHEET NO.	DESCRIPTION
1	COVER SHEET
2-3	LEGENDS & ABBREVIATIONS
4	GENERAL NOTES
5-6	TYPICAL SECTIONS
7	KEY PLAN
8-18	EXISTING CONDITIONS PLAN Nos. 1-11
19-29	GENERAL PLAN Nos. 1-11
30-40	DRAINAGE AND UTILITY PLAN Nos. 1-11
41-44	PROFILES Nos. 1-4
45	DETAILS
46	BASIN PLAN - SAND FILTER O
47	SESC PLAN
48	SESC DETAILS



LOCATION MAP
Not to Scale

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0946
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
COPY OF PERMIT MUST BE AT CONSTRUCTION SITE

Martin D. Womack

PERMITTING SUBMISSION

PREPARED BY:

BETA
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IN ASSOCIATION WITH:

DiPrete Engineering
Engineers • Planners • Surveyors

Environmental Management
NOV 12 2021
Resources

RICHARD A. BERNARDO
No. 6100
REGISTERED PROFESSIONAL ENGINEER

11/11/2021
REGISTERED PROFESSIONAL DATE

ISSUE DATE: SEPTEMBER 2021

EXISTING

- EDGE OF PAVEMENT
- BERM
- CURB
- GUARDRAIL
- MB — MAILBOX
- NO. — UTILITY POLE
- POLE GUY
- LUMINARE
- SIGN — SIGN
- (SIZE)SD — SUBDRAIN
- (SIZE)D — STORMDRAIN
- (SIZE)S — SANITARY SEWER
- (SIZE)W — WATER MAIN
- (SIZE)G — GAS MAIN
- (SIZE)T — TELEPHONE DUCT
- (SIZE)E — ELECTRIC DUCT
- PLUG AND CAP PIPE
- ABANDONED UTILITY
- FLARED END SECTION
- HEADWALL
- WG OR GG — WATER OR GAS GATE
- CB — CATCH BASIN
- MH — MANHOLE
- HYD — HYDRANT
- 1+00 — BASELINE OR CENTERLINE
- EXIST. S.H.L. PLAT NO. XX — STATE HIGHWAY LINE
- EXIST. S.F.L. PLAT NO. XX — STATE FREEWAY LINE
- EXIST. P.E.B. — PERMANENT EASEMENT LINE
- EXIST. T.E.B. — TEMPORARY EASEMENT LINE
- CITY NAME / TOWN NAME — CITY OR TOWN LINE
- PWW — PAVED WATERWAY
- ELEV. — CONTOUR LINE
- OPEN DITCH
- R.I.H.B. — R.I. HIGHWAY BOUND
- S.B. — STONE BOUND
- RETAINING WALL
- FIELD STONE WALL
- NO. — BORINGS
- TYPE — FENCE
- WOOD OR BRUSH LINE
- (NAME) — TREES
- RIVER OR STREAM
- WETLAND AREA
- NO. / TYPE / MATERIAL — BUILDING
- FOUNDATION
- BUILDING TO BE REMOVED
- RAILROAD TRACKS
- CUT AND MATCH
- RIP-RAP
- CUT SLOPE
- FILL SLOPE
- ROCK CUT
- 00x00 — SPOT GRADE
- AREA GRADED TO DRAIN
- BALED HAY RI STD 9.1.0
- BALED HAY & SILT FENCE RI STD. 9.3.0
- 123 124 125 — EDGE OF WETLAND
- WETLAND PERIMETER
- ASSF — AREA SUBJECT TO STORM FLOW
- 100 YR. FLOOD BOUNDARY — 100-YEAR FLOOD PLAIN
- LIMIT OF DISTURBANCE
- LIMIT OF CLEARING
- 50' WETLAND BUFFER
- 100' RIVERBANK WETLAND

NEW

- NO.
- GUY
- N(SIZE)SD — (Length → Size)
- (Length → Size)
- N(SIZE)W
- N(SIZE)G
- N-#(SIZE)T
- N-#(SIZE)E
- WG OR GG
- 1+00
- NEW S.H.L. PLAT NO. XX
- NEW S.F.L. PLAT NO. XX
- NEW P.E.B.
- NEW T.E.B.
- ELEV.
- RIHB
- STN. BND
- NO.
- ROADWAY / TOP OF SLOPE / ROADWAY / TOE OF SLOPE
- ROCK SHELF / ROCK / CUT
- 00.00
- ELEV. x
- LIMIT OF DISTURBANCE
- LIMIT OF CLEARING

1.1.0	UNDERDRAIN	7.4.2 GRANITE TRANSITION CURB (VERTICAL FACE TO SLOPE FACE)
1.3.0	CONCRETE CONNECTING COLLAR	7.5.0 BITUMINOUS CONCRETE LIP CURB
2.1.0	CONCRETE HEADWALLS FOR PIPE CULVERTS	7.5.1A BITUMINOUS BERM (CONSTRUCTION METHOD A)
2.2.0	STANDARD HEADWALLS FOR MULTIPLE 3'-6" TO 7'-0' PIPE CULVERTS	7.5.1B BITUMINOUS BERM (CONSTRUCTION METHOD B)
2.3.0 (DIA.)	PRECAST CONCRETE FLARED END SECTION	7.6.0 CURB SETTING DETAIL
3.2.0	BRICK/SOLID BLOCK 4'-0" ROUND MANHOLE	8.2.0 BITUMINOUS CONCRETE DITCH
3.2.1 (DIA.)	BRICK/SOLID BLOCK 5'-0" OR 6'-0" ROUND MANHOLE	8.3.0 RIP-RAP DITCH
3.3.0	BRICK/SOLID BLOCK TYPE "D" SQUARE CATCH BASIN	8.4.0 PAVED WATERWAY
3.3.2	BRICK/SOLID BLOCK TYPE "F" SQUARE CATCH BASIN	9.1.0 BALED HAY EROSION CHECK
3.3.3	SOLID BLOCK FLUSH SQUARE CATCH BASIN	9.2.0 SILT FENCE DETAIL
3.4.0	BRICK/SOLID BLOCK TYPE "D" ROUND CATCH BASIN	9.3.0 BALED HAY DITCH EROSION CHECK AND SILT FENCE COMBINED
3.4.1	BRICK/SOLID BLOCK ROUND CATCH BASIN WITH GUTTER INLET	9.4.0 BALED HAY DITCH AND SWALE EROSION CHECK
3.4.2	BRICK/SOLID BLOCK TYPE "F" ROUND CATCH BASIN	9.5.0 LOG AND HAY CHECK DAM
3.4.3	BRICK/SOLID BLOCK TYPE "R" CATCH BASIN	9.7.0 DEWATERING BASIN
3.4.4	SOLID BLOCK FLUSH ROUND CATCH BASIN	9.8.0 BALED HAY CATCH BASIN INLET PROTECTION
3.4.5 (DIA.)	BRICK/SOLID BLOCK 5'-0" OR 6'-0" ROUND CATCH BASIN	9.9.0 CONSTRUCTION ACCESS
3.5.0	SOLID BLOCK SHALLOW TYPE "F" SQUARE CATCH BASIN	10.1.0 WET STONE MASONRY RETAINING WALL
3.5.1 (SIZE)	SOLID BLOCK SHALLOW 5'-0" OR 6'-0" SQUARE CATCH BASIN	10.2.0 RUBBLE MASONRY WALL
3.6.0	BRICK/SOLID BLOCK DROP INLET	10.3.0 CONCRETE RETAINING WALL
3.7.0 (DIA.)	BRICK/SOLID BLOCK ROUND MANHOLE OR CATCH BASIN GREATER THAN 12'-0"	10.4.0 STONE MASONRY STEPS
4.2.0	PRECAST 4'-0" ROUND MANHOLE	14.1.0 CONCRETE HIGHWAY BOUND
4.2.1	PRECAST 5'-0" ROUND MANHOLE	15.1.0 POST AND MOUNTINGS FOR RURAL MAILBOX
4.2.2	PRECAST 6'-0" ROUND MANHOLE	15.2.0 (NO.) POST AND MULTIPLE MOUNTINGS FOR RURAL MAILBOXES
4.3.0 (SIZE)	PRECAST 4'-0" OR 6'-0" SQUARE MANHOLE OR CATCH BASIN	18.2.0 PRECAST TYPE "A" HANDHOLE
4.4.0 (DIA.)	PRECAST 4'-0", 5'-0", OR 6'-0" ROUND CATCH BASIN	18.2.2 HEAVY DUTY TYPE "H" HANDHOLE
4.5.0	PRECAST CONCRETE DROP INLET	18.3.0 ALUMINUM LIGHTING STANDARDS
4.5.1	PRECAST CONCRETE DROP INLET LATERAL OUTLET	20.2.0 BI-DIRECTIONAL CONTROL DEVICE
4.5.2	PRECAST CONCRETE DROP INLET LONGITUDINAL OUTLET	24.6.1 STREET SIGN MOUNTING DETAIL
5.3.0	CATCH BASIN AND MANHOLE STEP	26.2.0 POLYETHYLENE DRUM WITH MARKINGS
5.4.0	CONCRETE COLLARS	26.3.0 PVC PLASTIC PIPE TYPE III BARRICADE
6.1.0	LIGHT-DUTY SQUARE FRAME AND ROUND COVER	31.1.0 CHAIN LINK FENCE 3'-0" TO 4'-0"
6.1.1	HEAVY DUTY SQUARE FRAME AND ROUND COVER	31.2.0 CHAIN LINK FENCE 5'-0" TO 6'-0"
6.2.0	LIGHT-DUTY ROUND FRAME AND COVER	31.2.1 CHAIN LINK FENCE 5'-0" TO 6'-0" INTERMEDIATE POST
6.2.1	HEAVY-DUTY ROUND FRAME AND COVER	31.3.0 WOVEN WIRE RIGHT-OF-WAY FENCE (STEEL POST)
6.3.0	SQUARE FRAME AND GRATE	34.1.0 TYPICAL GUARDRAIL INSTALLATION
6.3.1	SQUARE FRAME AND GRATE	34.2.0 STEEL BEAM GUARDRAIL
6.3.2	SQUARE FRAME AND GRATE (BICYCLE SAFE)	34.2.1 STEEL BEAM GUARDRAIL DETAILS
6.3.3	HIGH CAPACITY FRAME AND GRATE	34.2.2 STEEL BEAM GUARDRAIL DOUBLE FACED ASSEMBLY
6.3.4	HIGH CAPACITY FRAME AND GRATE (BICYCLE SAFE)	34.2.3 STEEL BEAM GUARDRAIL FIXTURES
6.4.0	ROUND FRAME AND GRATE	34.2.5 STEEL BEAM GUARDRAIL REFLECTORIZED TRIANGULAR DELINEATOR
7.1.0S	PRECAST CONCRETE CURB (STRAIGHT)	34.3.1 GUARDRAIL END SECTION
7.1.0C	PRECAST CONCRETE CURB (CIRCULAR)	34.3.2 TERMINAL END SECTION (SINGLE FACE)
7.1.1	3'-0" PRECAST CONCRETE TRANSITION CURB	34.3.3 ANCHORAGE DETAILS APPROACH END SECTION
7.1.2	6'-0" PRECAST CONCRETE TRANSITION CURB	34.3.4 ANCHORAGE DETAILS TRAILING END SECTION
7.1.4	PRECAST 2'-0" RADIUS CORNER	34.4.0 STEEL BACKED TIMBER GUARDRAIL
7.1.5	PRECAST CONCRETE INLET STONE (FOR SQUARE CATCH BASIN)	34.4.1 STEEL BACKED TIMBER GUARDRAIL TERMINAL SECTION-TYPE 1
7.1.6	PRECAST CONCRETE INLET STONE (FOR ROUND CATCH BASIN)	40.1.0 DOUBLE-FACED PRECAST MEDIAN BARRIER
7.1.7	PRECAST CONCRETE APRON STONE (FOR SQUARE CATCH BASIN)	40.2.0 SINGLE-FACED PRECAST MEDIAN BARRIER
7.1.8	PRECAST CONCRETE APRON STONE (FOR ROUND CATCH BASIN)	40.2.1 SINGLE-FACED PRECAST MEDIAN BARRIER
7.2.0S	PRECAST CONCRETE SLOPED FACE CURB (STRAIGHT)	40.3.0 PRECAST MEDIAN BARRIER TRANSITION UNIT
7.2.0C	PRECAST CONCRETE SLOPED FACE CURB (CIRCULAR)	40.5.0 PRECAST MEDIAN BARRIER FOR TEMPORARY TRAFFIC CONTROL
7.2.1	PRECAST CONCRETE SLOPED FACE TRANSITION CURB	43.1.0 CEMENT CONCRETE SIDEWALK
7.2.2	PRECAST CONCRETE TRANSITION CURB (VERTICAL FACE TO SPLOPED FACE)	43.2.0 BITUMINOUS CONCRETE SIDEWALK
7.3.0S	GRANITE CURB (STRAIGHT)	43.3.0 WHEELCHAIR RAMP
7.3.0C	GRANITE CURB (CIRCULAR)	43.3.1 WHEELCHAIR RAMP FOR LIMITED RIGHT-OF-WAY AREAS
7.3.1	3'-0" GRANITE TRANSITION CURB	43.4.0 DRIVEWAY DEVELOPMENT FOR 3'-0" TRANSITION CURB
7.3.2	6'-0" GRANITE TRANSITION CURB	43.4.1 DRIVEWAY DEVELOPMENT FOR 6'-0" TRANSITION CURB
7.3.3	GRANITE WHEELCHAIR RAMP TRANSITION CURB	43.5.0 CEMENT CONCRETE DRIVEWAYS
7.3.4	GRANITE 2'-0" RADIUS CORNER	48.1.0 DETECTABLE WARNING SYSTEM
7.3.5	GRANITE INLET STONE (FOR SQUARE CATCH BASIN)	51.1.0 TREE PROTECTION DEVICE
7.3.6	GRANITE INLET STONE (FOR ROUND CATCH BASIN)	51.1.1 DRIP LINE TREE PROTECTION DEVICE FOR EXISTING TREES
7.3.7	GRANITE APRON STONE (FOR SQUARE CATCH BASIN)	51.2.0 SHRUB PROTECTION DEVICE
7.3.8	GRANITE APRON STONE (FOR ROUND CATCH BASIN)	51.3.0 TREE WELL
7.4.0	GRANITE SLOPED FACE CURB	51.4.0 TREE WALL
7.4.1	GRANITE SLOPED FACE TRANSITION CURB	

AB	ADJUST CATCH BASIN TO GRADE
ABM	ADJUST CATCH BASIN TO MANHOLE
AC	ADJUST CURB STOP TO GRADE
AD	ADJUST DRAINAGE MANHOLE TO GRADE
AE	ADJUST ELECTRIC MANHOLE TO GRADE
AFC	ADJUST FRAME AND COVER TO GRADE
AFG	ADJUST FRAME AND GRATE TO GRADE
AG	ADJUST GAS GATE BOX TO GRADE
AHH	ADJUST HANDHOLE TO GRADE
AS	ADJUST SANITARY SEWER MANHOLE TO GRADE
AT	ADJUST TELEPHONE MANHOLE TO GRADE
AW	ADJUST WATER GATE BOX TO GRADE
BCD	BITUMINOUS CONCRETE DRIVEWAY 3" BITUMINOUS CONCRETE TYPE I-2 8" GRAVEL BORROW SUBBASE COURSE
BPS	BUILD NEW STRUCTURE OVER EXISTING PIPE
CCB	CLEAN CATCH BASIN
CCP	CUT AND CAP PIPE WITH RESTRAINT (ALL SIZES)
CFP	CLEAN AND FLUSH PIPE
CG	CLEARING AND GRUBBING
CMH	CLEAN MANHOLE
CP (DEPTH)	COLD PLANE
CPP	CUT AND PLUG PIPE (ALL TYPES, ALL SIZES)
DB	REMOVE AND DISPOSE BITUMINOUS CURB
DC	REMOVE AND DISPOSE CONCRETE CURB
DCB	REMOVE AND DISPOSE CATCH BASIN
DDI	REMOVE AND DISPOSE DROP INLET
DF	REMOVE AND DISPOSE FENCE
DFC	REMOVE AND DISPOSE FRAME AND COVER
DFE	REMOVE AND DISPOSE FLARED END SECTION
DFG	REMOVE AND DISPOSE FRAME AND GRATE
DFH	REMOVE AND DISPOSE FIRE HYDRANT
DFP	REMOVE AND DISPOSE FLEXIBLE PAVEMENT
DG	REMOVE AND DISPOSE GUARDRAIL
DH	REMOVE AND DISPOSE HEADWALL
DHB	REMOVE AND DISPOSE HIGHWAY BOUND
DHH	REMOVE AND DISPOSE HANDHOLE
DL	REMOVE AND DISPOSE LIGHT AND FOUNDATION
DMB	REMOVE AND DISPOSE MEDIAN BARRIER
DMH	REMOVE AND DISPOSE MANHOLE
DMM	REMOVE AND DISPOSE MEDIAN MARKER
DOW	REMOVE AND DISPOSE OBSERVATION WELL
DP	REMOVE AND DISPOSE PIPE
DPB	REMOVE AND DISPOSE PAVEMENT AND RIGID BASE
DRB	REMOVE AND DISPOSE RIGID BASE
DS	REMOVE AND DISPOSE SIGN
DSS	REMOVE AND DISPOSE TRAFFIC SIGNAL SYSTEM
DSW	REMOVE AND DISPOSE SIDEWALK
DTD	REMOVE AND DISPOSE TELEPHONE DUCT BANKS
DUP	REMOVE AND DISPOSE UTILITY POLE
DWW	REMOVE AND DISPOSE PAVED WATERWAY
FF	FILTER FABRIC RIPRAP FLARED END UNDERLAYMENT
GET	FLARED GUARDRAIL END TREATMENT
IA	IMPACT ATTENUATOR
IDL	IMPERVIOUS DITCH LINER
LOD	LIMIT OF DISTURBANCE
LOR	LIMIT OF REGRADING
LS	4" LOAM AND SEED

NFH	NEW FIRE HYDRANT WITH GATE VALVE
NIC	NOT IN THIS CONSTRUCTION CONTRACT
NWB	FURNISH AND INSTALL NEW WATER GATE VALVE BOX
NWVB	FURNISH AND INSTALL NEW WATER GATE VALVE AND BOX
NWCB	FURNISH AND INSTALL NEW WATER CURB STOP BOX
NWSB	FURNISH AND INSTALL NEW WATER CURB STOP AND BOX
PCD	PERMANENT CHECK DAM
PS	4" PLANTABLE SOIL AND SEED
RCB	RECONSTRUCT TYPE "D" CATCH BASIN, TO CATCH BASIN WITH GUTTER INLET
RCM	R.I.D.O.T. COMMUNICATIONS MANHOLE
RHH	REMOVE, HANDLE, HAUL, TRIM, RESET CURB EDGING, STRAIGHT, CIRCULAR (ALL TYPES)
RLP	RELOCATE LAMP POST
RMB	RELOCATE MAILBOX (BY OTHERS)
RPM	REMOVE PAVEMENT MARKINGS
RRP	RIP-RAP PAD (SEE DETAIL)
RRS	REMOVE AND RELOCATE SIGN
RUP	RELOCATE UTILITY POLE (BY OTHERS)
SB	STONE BAFFLE
SBAE	STEEL BEAM BRIDGE CONNECTION APPROACH END (W/O NESTED RAIL)
SBTE	STEEL BEAM BRIDGE CONNECTION TRAILING END (W/NESTED RAIL)
SD-	STRUCTURAL DISPOSITION - SEE CS PAGES OF SPECIFICATION
SF	REMOVE AND STOCKPILE FENCE
SGA	SPECIAL GRADED AGGREGATE
SGC	REMOVE AND STOCKPILE GRANITE CURB
SGR	REMOVE AND STOCKPILE GUARDRAIL
SH	REMOVE AND STOCKPILE HYDRANT
SS	REMOVE AND STOCKPILE SIGN
STS	REMOVE AND STOCKPILE TRAFFIC SIGNAL SYSTEM
TB	CONCRETE THRUST BLOCK
TEP	TIE EXISTING PIPE INTO NEW STRUCTURE
TNP	TIE NEW PIPE INTO EXISTING STRUCTURE
TBT	THRIE BEAM TRANSITION
TBBC	THRIE BEAM BRIDGE CONNECTION
TT	TREE TRIMMING
WCM	4" WOOD CHIP MULCH
4DY	4" EPOXY RESIN PAVEMENT MARKINGS - DOUBLE YELLOW
6W	6" EPOXY RESIN PAVEMENT MARKINGS - WHITE
12W	12" EPOXY RESIN PAVEMENT MARKINGS - WHITE
6WT	6" PREFORMED PATTERNED MARKING (HIGH PERFORMANCE TAPE)
4Y	4" EPOXY RESIN PAVEMENT MARKINGS - YELLOW
6Y	6" EPOXY RESIN PAVEMENT MARKINGS - YELLOW
P.G.L.	PROFILE GRADE LINE

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Martin D. Wencek

Environmental Management
NOV 12 2021
Office of Water Resources

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY: BETA www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE: NONE

UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT: **Highway Safety Improvements to Hartford Avenue (Route 6)**
JOHNSTON, RHODE ISLAND

TITLE: STANDARD PLAN SYMBOLS AND LEGEND

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 2 OF 48

11/11/2021 1:15 PM N:\7300\87394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_002_STDSYM_1.DWG (BETA STB BW.STB)

LEGEND

- (BCP1) 2" MODIFIED CLASS 12.5 HMA
- (BCP2) 2" MODIFIED CLASS 12.5 HMA SURFACE COURSE
2.5" CLASS 12.5 HMA INTERMEDIATE COURSE
8" CLASS 19.0 HMA BASE COURSE
12" GRAVEL BORROW SUBBASE COURSE
- (BCP3) 2" MODIFIED CLASS 12.5 HMA SURFACE COURSE
4" CLASS 19.0 HMA BASE COURSE
12" GRAVEL BORROW SUBBASE COURSE
- (BCP4) 4" MODIFIED CLASS 12.5 HMA (2 LIFTS)
- (BCP5) 4" MODIFIED CLASS 12.5 HMA (2 LIFTS)
9" CLASS 19.0 HMA
12" GRAVEL BORROW SUBBASE
- (BCP6) 1.5" FRICTION COURSE
2" MODIFIED CLASS 12.5 HMA
9" CLASS 19.0 HMA
12" GRAVEL BORROW SUBBASE
- (BCP7) 1.5" FRICTION COURSE
- (CCFM) CEMENT CONCRETE FLUSH MEDIAN
- (CCM) CEMENT CONCRETE MEDIAN
- (CEG) GUARDRAIL TRANSITION (MASH) TO EXISTING GUARDRAIL
- (CFS) COMPOST FILTER SOCK
- (CSM) CLOVER SEED MIX
- (DGC) REMOVE AND DISPOSE GRANITE CURB
- (DGCB) SPECIAL CATCH BASIN – 4' DOGHOUSE
- (DGMH) SPECIAL MANHOLE – 4' DOGHOUSE
- (DMSP) DEMOLITION AND SITE PREPARATION
- (ETEAS) ENERGY ABSORBING END TREATMENT SINGLE FACE (MASH)
- (ETEAD) ENERGY ABSORBING END TREATMENT DOUBLE FACE (MASH)
- (ISCD) INLET SEDIMENT CONTROL DEVICE
- (MBG) MILLINGS BENEATH GUARDRAIL
- (MM) MICRO-MILLING (2")
- (MM1.5) MICRO-MILLING (1.5")
- (MM4) MICRO-MILLING (4")
- (PVCC) 3 INCH POLYVINYL CHLORIDE PLASTIC CONDUIT (SCHEDULE 80) UNDER EXISTING PAVEMENT
- (RCBC) RECONSTRUCT CATCH BASIN/CORBEL CONES
- (RET) CONCRETE RETAINING WALL
- (RFH) REMOVE AND RELOCATE FIRE HYDRANT
- (RLS) REMOVE AND RELOCATE LIGHT STANDARD ON NEW FOUNDATION (RI STD. 18.1.0)
- (RMHC) RECONSTRUCT DRAIN MANHOLE/CORBEL CONES
- (RRLB) REMOVE AND RELOCATE LANDSCAPE BLOCK
- (RRPS) REMOVE AND RELOCATE PRIVATE SIGN
- (RRSF) REMOVE AND RELOCATE SCHOOL ZONE FLASHER ASSEMBLY
- (SLB) REMOVE AND STOCKPILE LANDSCAPE BLOCK
- (TESW) TRAILING END ANCHORAGE SECTION FOR W-BEAM GUARDRAIL (MASH)
- (TEST) TRAILING END ANCHORAGE SECTION FOR THRIE-BEAM GUARDRAIL (MASH)
- (TL3WS) GUARDRAIL STEEL W-BEAM SINGLE FACE – TEST LEVEL 3 (MASH)
- (TL3WD) GUARDRAIL STEEL W-BEAM DOUBLE FACE – TEST LEVEL 3 (MASH)
- (WTTP) GUARDRAIL STEEL W-BEAM TO THRIE-BEAM TRANSITION PANELTEST LEVEL 3 (MASH)
- (12Y) 12" EPOXY RESIN PAVEMENT MARKINGS – YELLOW
- (BWLL) 6" BROKEN WHITE EPOXY RESIN PAVEMENT MARKINGS (10' STRIPE WITH 30' GAP)
- (6WSS) 6" WHITE EPOXY RESIN PAVEMENT MARKINGS (2' STRIPE WITH 4' GAP)
- (12WSS) 12" WHITE EPOXY RESIN PAVEMENT MARKINGS (3' STRIPE WITH 9' GAP)

ECB EROSION CONTROL BARRIER

TYP. TYPICAL

LANDSCAPE NOTES:

1. ALL PLANT MATERIAL MUST BE TAGGED AT THE NURSERY (A RECOGNIZED GROWER OF PLANT MATERIAL) IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION. ALL PLANT MATERIAL MUST BE NURSERY GROWN; NO PLANTATION GROWN PLANT MATERIAL WILL BE ACCEPTED.
2. ALL PLANT SUBSTITUTIONS AND/OR CHANGES IN PLANT LOCATION MUST BE APPROVED IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
3. ALL PLANT MATERIAL IS TO BE FIELD LOCATED BY A REPRESENTATIVE FROM THE R.I.D.O.T. LANDSCAPE ARCHITECTURE UNIT.
4. A R.I.D.O.T. LANDSCAPE REPRESENTATIVE MUST BE ON SITE TO APPROVE ALL TRIMMING AND CLEARING NECESSARY TO COMPLETE THE WORK AS SHOWN ON THE PLANS.
5. ANY TOPSOIL USED AS PLANTABLE SOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS, AND SHALL CONFORM TO SECTION M.18 OF THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
6. ALL TREES AND SHRUBS SHALL BE MULCHED WITH PINE BARK MULCH IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
7. ALL TREES AND/OR SHRUBS THAT ARE PLANTED AS A BED SHALL BE MULCHED AS A BED.
8. PROVIDE A MINIMUM 6'-8" BRANCHING STANDARD ON ALL TREES INSTALLED ADJACENT TO SIDEWALKS AND/OR PEDESTRIAN ACCESS AREAS.

CONSTRUCTION NOTES:

1. THE CURRERI COLLISION BUSINESS SIGN AT 2160 HARTFORD AVENUE SHALL BE REMOVED AND RELOCATED AS SHOWN ON THE PLANS INCLUDING ALL NECESSARY COMPONENTS SUCH AS A NEW FOUNDATION, CONDUIT/WIRING FOR POWER, ETC.
2. THE TRINITY ASSEMBLY OF GOD SIGN AT 2119 HARTFORD AVENUE SHALL BE REMOVED AND RELOCATED AS SHOWN ON THE PLANS INCLUDING ALL NECESSARY COMPONENTS SUCH AS A NEW FOUNDATION, CONDUIT/WIRING FOR POWER, ETC.
3. THE EXISTING DYNAMIC MESSAGE SIGN (DMS) SYSTEM TO BE REMOVED AND RELOCATED SHALL INCLUDE THE DYNAMIC MESSAGE SIGN AND POST ON A NEW FOUNDATION, THE CONTROL CABINET INCLUDING ALL EQUIPMENT INSIDE THE CABINET ON A NEW FOUNDATION INCLUDING A 4" CONCRETE WORK PAD, NEW CONDUIT/WIRING, REWIRING, AND POWER CONNECTION TO AN EXISTING UTILITY POLE AS SHOWN ON THE PLANS.
4. PROPOSED RELOCATED DMS SUPPORT STRUCTURE, CONTROL CABINET, CONDUIT, AND HANDHOLE LOCATIONS ARE APPROXIMATE. LOCATIONS SHALL BE DETERMINED BASED ON THE FIELD CONDITIONS AND APPROVED BY THE ENGINEER.
5. DMS CABLING/WIRING SHALL BE CONTINUOUS FROM THE CONTROL CABINET TO THE MOUNTED EQUIPMENT. NO SPLICING IS ALLOWED,
6. PLACE THE NEAR EDGE OF THE DMS A MINIMUM OF 4'-0" BEHIND THE PROPOSED GUARDRAIL.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING RELOCATION OF THE POWER AND COMMUNICATION UTILITIES TO THE NEW DMS LOCATION WITH THE APPROPRIATE UTILITY COMPANIES.
8. THE TRAFFIC COUNT STATION SYSTEM TO BE REMOVED AND RELOCATED SHALL INCLUDE THE WOOD POLE, RADAR COUNT UNIT, THE CONTROLLER BOX ON NEW FOUNDATION INCLUDING A 4" CONCRETE WORK PAD, CONDUIT/WIRING, REWIRING, AND POWER CONNECTION TO AN EXISTING UTILITY POLE AS SHOWN ON THE PLANS AND ALL INCIDENTALS TO MAKE THE SYSTEM FULLY FUNCTIONAL IN ACCORDANCE WITH EXISTING OPERATIONS.
9. A FRANGIBLE BOX (2'x2' MIN.) AROUND GUARDRAIL POSTS SHALL BE PROVIDED WHEN INSTALLING WITHIN CONCRETE OR HOT MIX ASPHALT SURFACE. EXCAVATABLE CONTROLLED DENSITY FILL SHALL BE USED WITH THE FRANGIBLE BOX.
10. THE CONTRACTOR IS MADE AWARE THAT THERE IS AN EXISTING CONCRETE BASE THROUGHOUT THE PROJECT LIMITS ON HARTFORD AVENUE THOUGH SECTIONS HAVE BEEN REMOVED FROM PREVIOUS UTILITY INSTALLATIONS. THE CONTRACTOR SHALL SAWCUT AND REMOVE THE RIGID CONCRETE BASE AS SHOWN ON THE PLANS OR AT ANY OTHER LOCATION REQUIRE TO CONSTRUCT THE IMPROVEMENTS DEPICTED IN THE PLAN SET AND SHALL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THAT ITEM.
11. ALL WORK TO BE DONE WITHIN THE STATE HIGHWAY RIGHT OF WAY (ROW) SHALL CONFORM TO THE RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION (AMENDED MARCH 2018) WITH ALL REVISIONS AND ADDENDA. STANDARD DETAILS FOR THIS WORK ARE RHODE ISLAND STANDARD DETAILS, 1998 EDITION (AMENDED JUNE 2019) WITH ALL REVISIONS.

STRUCTURAL NOTES FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS:

GENERAL

1. ALL SUPPORT DESIGNS AND ASSOCIATED SHOP DRAWING REVIEWS SHALL BE IN CONFORMANCE WITH THE LATEST EDITION, OF THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS (THE "SPECIFICATIONS"), INCLUDING THE LATEST INTERIM SPECIFICATIONS, EXCEPT AS MODIFIED HEREIN.

CONSTRUCTION DRAWINGS AND DETAILS

1. THE FOLLOWNG NOTES SHALL BE INCLUDED ON ALL PLANS AND/OR SHOP DRAWINGS IN REFERENCE TO ANCHOR BOLTS:
   - "PRETENSIONING OF ALL ANCHOR NUTS IS REQUIRED, AND SHALL BE ACCOMPLISHED BY TIGHTENING TO 1/6TH TURN BEYOND THE SNUG-TIGHT POSITION."
   - "THE MAXIMUM CLEARANCE BETWEEN THE BOTTOM OF THE LEVELING NUTS AND THE TOP OF THE CONCRETE IS CRITICAL AND SHALL NOT EXCEED THE AMOUNT SPECIFIED ON THIS DRAWING."
2. THE USE OF GROUT UNDER BASE PLATES SHALL GENERALLY NOT BE PERMITTED. IF SPECIFIC CONDITIONS WARRANT ITS USE, THE GROUT SHALL NOT BE CONSIDERED LOAD CARRYING; LOADS SHALL BE DIRECTLY SUPPORTED BY THE ANCHOR BOLTS. ADEQUATE DRAINAGE SHALL BE PROVIDED.
3. THE DAMPENING EFFECTS OF VIBRATION MITIGATION DEVICES SHALL NOT BE CONSIDERED IN THE DESIGN OF STRUCTURAL SUPPORTS FOR SIGNS AND TRAFFIC SIGNALS. IF THE CONTRACTOR CHOOSES TO USE THESE DEVICES FOR WARRANTY PURPOSES, THE TYPE OF DEVICES PROPOSED SHALL BE APPROVED BY THE DEPARTMENT PRIOR TO FABRICATION OF SUPPORTS.

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 2 4 2021 FILE # 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Environmental Management
NOV 12 2021
Office of Water Resources

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY: BETA www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE: NONE

UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT: **Highway Safety Improvements to Hartford Avenue (Route 6)**
JOHNSTON, RHODE ISLAND

TITLE: JOB SPECIFIC PLAN SYMBOLS AND LEGEND

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 3 OF 48

11/11/2021 1:15 PM N:\7300S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_003_JS_LEGEND.DWG (BETA STB BW.STB)

GENERAL NOTES:

1. ANY DAMAGE TO EXISTING PAVEMENT, BRIDGES, CONDUIT, SIDEWALK, FENCES, ETC., CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.

2. THE CONTRACTOR SHALL PLACE ALL EQUIPMENT AND MATERIAL AS FAR AWAY AS POSSIBLE FROM THE EDGE OF THE TRAVEL LANE SO AS NOT TO CAUSE A SAFETY HAZARD, IN ACCORDANCE WITH SECTION 106.06 OF THE R.I.D.O.T. STANDARD SPECIFICATION, LATEST EDITION.

3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE EXISTING CONDITIONS ARE NOT OBLITERATED BEFORE CONTROL POINTS ARE LOCATED AND CONSTRUCTION LAYOUT IS ESTABLISHED. THE CONSTRUCTION LAYOUT SHALL BE PROVIDED IN SUFFICIENT DETAIL, THEREBY ENABLING HIM TO CONSTRUCT THE PROJECT IN CONFORMITY WITH THE PLANS AND SPECIFICATIONS. SURVEY WILL BE PROVIDED BY THE CONTRACTOR. THE RESIDENT ENGINEER WILL NOT AUTHORIZE CONSTRUCTION ACTIVITIES TO BEGIN UNTIL HE IS SATISFIED THAT ALL GROUND CONTROL HAS BEEN ESTABLISHED, TIED DOWN, AND DULY RECORDED IN STANDARD FIELD BOOKS.

4. ALL R.I. STD. 9.9.0 CONSTRUCTION ACCESS ROADS SHALL BE CONSTRUCTED PRIOR TO ANY ROADWAY ACCEPTING CONSTRUCTION TRAFFIC.

5. THE FREQUENCY AND APPLICATION RATES FOR THE DUST CONTROL ITEMS WILL BE AS DIRECTED BY THE ENGINEER.

6. ALL SIDEWALK AND DRIVEWAYS DESIGNATED FOR REPLACEMENT SHALL BE CUT AND MATCHED AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

7. ASPHALT EMULSION TACK COAT SHALL BE PLACED PRIOR TO PAVEMENT PLACEMENT ON THE CONCRETE BASE OR COLD PLANED PAVEMENT, AND ON ANY NEW COURSE WHICH HAS BEEN OPEN TO TRAFFIC, OR ANY NEW COURSE WHICH HAS BEEN EXPOSED FOR MORE THAN 3 DAYS, AND/OR AS DIRECTED BY THE ENGINEER. IT SHALL ALSO BE APPLIED TO VERTICAL PAVEMENT FACES BETWEEN AND ADJOINING PAVEMENT SECTIONS. ALL APPLICATIONS ON BOTH HORIZONTAL AND VERTICAL SURFACES SHALL BE PAID FOR UNDER THE CONTRACT UNIT BID PRICE FOR CODE 403.0300 "ASPHALT EMULSION TACK COAT."

8. THE LIMITS OF CLEARING AND SURFACE DISTURBANCE MUST BE STRICTLY ADHERED TO IN ALL AREAS. IN ADDITION TO THOSE AREAS SPECIFICALLY DESIGNATED ON THE PLANS, THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND PLACING, AT HIS OWN EXPENSE, PLANTABLE SOIL AND SEED IN AREAS WHICH ARE OUTSIDE OF THE PROJECT'S AREAS OF DISTURBANCE AND WHICH ARE IMPACTED BY CONSTRUCTION OPERATIONS INCLUDING THOSE AREAS WHERE VEHICLES, EQUIPMENT AND MATERIALS ARE STORED WITH THE PERMISSION OF THE ENGINEER.

9. UNDER NO CIRCUMSTANCE WILL THE CONTRACTOR BE ALLOWED TO STOCKPILE REMOVED PAVEMENT MATERIALS WITHIN THE PROJECT LIMITS.

10. CLEANING AND SWEEPING OF PAVEMENT WILL INCLUDE REMOVAL OF ALL PAVEMENT DEBRIS PRIOR TO THE PLACEMENT OF EACH BITUMINOUS PAVEMENT LIFT. ALL CLEANING AND SWEEPING SHALL BE DONE TO THE SATISFACTION OF THE ENGINEER.

11. PRIOR TO INSTALLATION, ALL SIGNS, MOUNTINGS AND LOCATIONS SHALL BE APPROVED OR MODIFIED BY THE ENGINEER.

12. THE COORDINATE SYSTEM, IF SHOWN, IS THE RHODE ISLAND STATE PLANE COORDINATE SYSTEM.

13. PAVEMENT OPERATIONS FOR CURBED SECTIONS: IN AREAS WHERE CURBING IS SET TO FINISH LINE AND GRADE, THE CONTRACTOR WILL NOT BE REQUIRED TO UTILIZE THE SENSOR AND SKY-TYPE DEVICE FOR AUTOMATIC GRADE CONTROL, BUT WILL BE ALLOWED TO MANUALLY ADJUST THE BITUMINOUS PAVER FOR CONTROLLING GRADE.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ROADWAYS FREE OF DEBRIS RESULTING FROM THEIR CONSTRUCTION OPERATIONS. ALL DEBRIS SHALL BE REMOVED TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.

15. NO FUEL STORAGE, VEHICLE REFUELING, OR EQUIPMENT STORAGE SHALL TAKE PLACE IN DESIGNATED WETLANDS, NOR WITHIN 100' OF ANY WATER BODY. THIS REQUIREMENT SHALL NOT SUPERSEDE ANY FEDERAL, STATE OR LOCAL LAW, ORDINANCE, RULE OR REGULATION THAT APPLIES TO THE SAME, UNLESS THIS REQUIREMENT IS MORE STRINGENT THAN SAID LAW, ORDINANCE, RULE OR REGULATION.

16. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT AT THE END OF FINAL PAVING OPERATIONS, FLOW TO EXISTING DRAINAGE STRUCTURES HAS BEEN REESTABLISHED AND THAT NO ISOLATED DEPRESSIONS REMAIN. THERE SHALL BE NO SEPARATE PAYMENT FOR THIS PROVISION; IT SHALL BE CONSIDERED INCIDENTAL TO PAVING AND COLD PLANING OPERATIONS.

17. ALL EMBANKMENTS SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 12" (AFTER COMPACTION) AND SHALL BE COMPACTED AS SPECIFIED BEFORE THE NEXT LAYER IS PLACED. ALSO, EMBANKMENT CONSTRUCTION SHALL CONFORM TO SECTION 202.03.2 OF THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.

18. IF THIS PROJECT IS ON A HURRICANE EVACUATION AND DIVERSIONARY ROUTE, AS DESIGNATED ON THE COVERSHEET, THE CONTRACTOR IS ADVISED THAT UPON 12 (TWELVE) HOURS NOTICE THE ROADWAY SHALL BE OPEN TO EVACUEES AND EMERGENCY PERSONNEL. ANY EXTRA WORK NECESSARY TO COMPLY WITH THIS REQUIREMENT WILL BE REIMBURSED UNDER FORCE ACCOUNT PROCEDURES.

19. THE CONTRACTOR SHALL READ, BECOME FAMILIAR WITH, AND ADHERE TO ALL OF THE PROVISIONS, CONDITIONS, AND STIPULATIONS STATED IN THE ENVIRONMENTAL APPROVALS ISSUED FOR THE PROJECT FROM THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (RIDEM). AND/OR THE ARMY CORPS OF ENGINEERS (ACOE). AND/OR THE COASTAL RESOURCES MANAGEMENT COUNCIL (CRMC). COPIES OF EACH OF THESE PERMITS ARE INCLUDED IN THE CS PAGES OF THE CONTRACT DOCUMENTS. ALL COSTS ASSOCIATED WITH THESE CONDITIONS SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND INCLUDED WITH THE COST FOR THE ASSOCIATED BID ITEM(S).

20. FOR ALL PROJECTS INVOLVING KNOWN SITE REMEDIATION ISSUES, THE CONTRACTOR SHALL READ, BECOME FAMILIAR WITH, AND ADHERE TO ALL OF THE CONSTRUCTION RELATED PROVISIONS, CONDITIONS, AND STIPULATIONS OF ANY REMEDIAL PLANS DEVELOPED FOR THE PROJECT. COPIES OF THESE DOCUMENTS ARE INCLUDED IN THE CS PAGES OF THE CONTRACT DOCUMENTS. ALL COSTS ASSOCIATED WITH COMPLIANCE WITH THESE DOCUMENTS SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND INCLUDED WITH THE COST FOR THE ASSOCIATED BID ITEM(S).

21. NO UNPROTECTED CONSTRUCTED FEATURE MAY PROJECT MORE THAN 4 INCHES ABOVE THE FINISHED GRADE OF A TRAVERSABLE SLOPE IN A CLEAR ZONE, e.g. HEADWALL, DRAINAGE INLET, ETC.

22. THE REMAINING SECTION OR STUB OF A BREAKAWAY BASE MAY NOT PROJECT MORE THAN 4 INCHES ABOVE THE FINISHED GRADE OF A TRAVERSABLE SLOPE IN A CLEAR ZONE, e.g. SIGN POSTS, LIGHT POLES, FIRE HYDRANTS, ETC.

DRAINAGE AND EROSION CONTROL NOTES:

1. FOR ALL PROJECTS WITH AT LEAST ONE(1) ACRE OF SOIL DISTURBANCE. R.I.D.O.T. IS REQUIRED TO DEVELOP AND ENFORCE A SITE SPECIFIC STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ORDER TO REMAIN IN COMPLIANCE WITH THE RIPDES GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL READ, BECOME FAMILIAR WITH, AND ADHERE TO ALL OF THE PROVISIONS, CONDITIONS, AND STIPULATIONS OF THE GENERAL PERMIT AND THE SITE SPECIFIC SWPPP FOR THIS PROJECT. COPIES OF THESE DOCUMENTS ARE INCLUDED IN THE CS PAGES OF THE CONTRACT DOCUMENTS. ALL COSTS ASSOCIATED WITH ADHERENCE TO THE SWPPP SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND INCLUDED WITH THE COST FOR THE ASSOCIATED BID ITEM(S).

2. NO UNDISTURBED AREAS SHALL BE CLEARED OF EXISTING VEGETATION AFTER OCTOBER 15 OF ANY CALENDAR YEAR OR DURING ANY PERIOD OF FULL OR LIMITED WINTER SHUTDOWN. ALL DISTURBED SOILS EXPOSED PRIOR TO OCTOBER 15 OF ANY CALENDAR YEAR SHALL BE SEEDED OR PROTECTED BY THAT DATE. ANY SUCH AREAS THAT DO NOT HAVE ADEQUATE VEGETATIVE STABILIZATION, AS DETERMINED BY THE RESIDENT ENGINEER OR ENVIRONMENTAL INSPECTOR, BY NOVEMBER 15 OF ANY CALENDAR YEAR, MUST BE STABILIZED THROUGH THE USE OF EROSION CONTROL MATTING OR HAY MULCH, IN ACCORDANCE WITH SPECIFICATIONS CONTAINED WITHIN THE R.I. SOIL EROSION AND SEDIMENT CONTROL HANDBOOK. IF WORK CONTINUES WITHIN ANY OF THESE AREAS DURING THE PERIOD FROM OCTOBER 15 THROUGH APRIL 15, CARE MUST BE TAKEN TO ENSURE THAT ONLY THE AREA REQUIRED FOR THAT DAY'S WORK IS EXPOSED, AND ALL ERODIBLE SOIL MUST BE RESTABILIZED WITHIN 9 WORKING DAYS. ANY WORK TO CORRECT PROBLEMS RESULTING FROM FAILURE TO COMPLY WITH THIS PROVISION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THERE WILL BE NO SEPARATE PAYMENT FOR THIS PROVISION, IT SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION OPERATIONS. STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN 2 WEEKS OF FINAL GRADING.

3. STOCKPILES OF MATERIAL SHALL NOT BE LOCATED WITHIN REGULATED WETLANDS OR BUFFER ZONE AREAS. THEY SHALL HAVE SIDE SLOPES NO GREATER THAN 30% AND STOCKPILES OF ERODABLE MATERIAL SHALL ALSO BE SEEDED AND RINGED WITH R.I. STD. 9.1.0 TO STABILIZE.

4. IF THE PLANS INCLUDE SPECIFIC AREAS FOR PLACEMENT OF CONSTRUCTION DEWATERING BASINS AND/OR EQUIPMENT AND MATERIALS STORAGE AND STOCKPILING, AND IF THE CONTRACTOR ELECTS TO UTILIZE ANY OTHER AREAS FOR THESE PURPOSES, THIS SHALL BE APPROVED BY THE ENGINEER ONLY AFTER OBTAINING ANY NECESSARY PERMITS AND/OR PERMIT MODIFICATIONS FROM THE APPROPRIATE REGULATORY AUTHORITY(IES). ANY PERMITTING REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE ACCOMPLISHED AT NO COST TO THE STATE. THE ENGINEER WILL COORDINATE SUBMISSION OF ANY REQUIRED PERMIT APPLICATION MATERIALS WITH THE R.I.D.O.T. OFFICE OF ENVIRONMENTAL PROGRAMS.

5. JUTE MESH SHALL BE USED TO STABILIZE PLANTABLE SOIL AND/OR LOAM IN ALL DITCHES, ON ALL SLOPES ADJACENT TO WETLANDS AND WETLAND PERIMETERS, AND ON ALL SLOPES WITHIN WATER QUALITY BASINS. JUTE MESH IN DITCHES SHALL EXTEND TO AN ELEVATION 2 FEET ABOVE THE BOTTOM OF THE DITCH.

6. SEEDING ON ALL SLOPES 3 TO 1 OR STEEPER SHALL CONSIST OF THE FOLLOWING APPLICATIONS UNLESS CHANGED IN THE CONTRACT.

   SEEDING TYPE I.

   ADHESIVE MULCH STABILIZER

7. UNVEGETATED SLOPES SHALL NOT BE UNATTENDED OR EXPOSED FOR PERIODS IN EXCESS OF 2 WEEKS OR THROUGH THE INACTIVE WINTER SEASON.

8. PRIOR TO DRAINAGE AND UTILITY CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION (HORIZONTAL AND VERTICAL) OF ALL EXISTING PIPES AND/OR STRUCTURES WHICH ARE TO BE CONNECTED. ANY VARIATION FOUND FROM THE PLANS MUST BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO DRAINAGE AND UTILITY CONSTRUCTION. WORK CAN COMMENCE ONLY UPON THE ENGINEER'S AUTHORIZATION.

9. ALL DRAINAGE AND UTILITY STRUCTURES WITHIN THE PAVED ROADWAY SHALL BE ADJUSTED TO GRADE WITH THE SURROUNDING PAVEMENT PRIOR TO THE WINTER SHUTDOWN.

10. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL THROUGHOUT THE WORK AREA.

11. CATCH BASIN RIM GRADES NOTED ON PLANS ARE DEPRESSED 0.1' LOWER THAN THE GUTTER GRADE. RIM ELEVATIONS SHOWN ARE FINAL GRADES. THE CONTRACTOR SHALL PLACE FRAMES AND GRATES 0.1' BELOW THE GRADE CONSTRUCTED IN THIS CONTRACT OR AS DIRECTED BY THE ENGINEER.

12. PROVISIONS FOR CLEARING TO ACCESS OUTFALLS DURING THE CLEANING AND FLUSHING OF THE CLOSED DRAINAGE SYSTEM SHALL BE KEPT TO A MINIMUM.

    ANY VEGETATIVE CLEARING SHALL BE LIMITED TO BRUSH AND TREES LESS THAN 3" DIAMETER.

    NO HEAVY EQUIPMENT MAY ENCROACH UPON VEGETATED PERIMETER OR RIVERBANK WETLANDS AS WELL AS BIOLOGICAL WETLANDS.

13. THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL DEVICES FOR OUTLET PROTECTION PRIOR TO CLEANING AND FLUSHING STORM WATER DRAINAGE. EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL ALL FLUSHED SEDIMENTS ARE REMOVED. AT ALL OUTFALL LOCATIONS WHERE PIPES ARE TO BE CLEANED AND FLUSHED, OUTLET PROTECTION (R.I. STD. 9.1.0 OR 9.3.0) SHALL BE INSTALLED TO TRAP SEDIMENTS. THESE SEDIMENTS SHALL THEN BE REMOVED AND DISPOSED OF LEGALLY BEFORE THE OUTLET PROTECTION DEVICES ARE REMOVED. IF OUTLET PROTECTION AT THE OUTFALL IS NOT FEASIBLE, THEN THE OUTLET PIPE OF THE LAST DRAINAGE STRUCTURE TO BE CLEANED SHALL BE PLUGGED TO CAPTURE ALL MATERIALS FLUSHED FROM PIPES. AFTER THE MATERIALS ARE REMOVED FROM THE DRAINAGE STRUCTURE, THE OUTLET SHALL BE UNPLUGGED TO RESUME NORMAL FUNCTIONING.

14. INLET SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AT ALL CATCH BASINS AND INLETS WHENEVER SUBBASE IS EXPOSED, AND SHALL REMAIN IN PLACE UNTIL THE ABUTTING GROUND SURFACES ARE STABILIZED.

15. WHERE INLET SEDIMENT CONTROL DEVICES AND SILT FENCES ARE USED AT CATCH BASINS, THEY SHALL BE REMOVED AT THE END OF THE PROJECT OR AS DIRECTED BY THE ENGINEER IN ORDER TO PREVENT CLOGGING OF THE INLET.

16. INLET SEDIMENTATION CONTROL DEVICES SHALL BE PROVIDED AT EACH CATCH BASIN AND INLET WITHIN THE PROJECT LIMITS.

17. ALL EXISTING DRAIN PIPES SHALL BE CLEANED AND FLUSHED PRIOR TO AND AFTER CONSTRUCTION WITHIN THE PROJECT LIMITS.

DRAINAGE AND EROSION CONTROL NOTES (CONTINUED):

18. DETENTION AND RETENTION BASINS MAY BE ROUGH GRADED AND STABILIZED WITH VEGETATION AND/OR OTHER EROSION CONTROL MEASURES AS REQUIRED BY THE ENGINEER PRIOR TO USE AS TEMPORARY SEDIMENTATION BASINS DURING PROJECT CONSTRUCTION. FINAL BASIN CONSTRUCTION SHALL NOT COMMENCE UNTIL ALL SOURCES OF SEDIMENT HAVE BEEN ELIMINATED, FINAL ROADSIDE VEGETATION IS ESTABLISHED AND USE OF TEMPORARY BASINS IS NO LONGER REQUIRED AS DIRECTED BY THE ENGINEER. ANY ISSUES RELATING TO EROSION AND/OR SEDIMENT TRANSPORT INTO WETLAND AREAS RESULTING FROM SUCH USE OF SEDIMENTATION BASINS DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ANY CORRECTIVE ACTION REQUIRED TO RESOLVE SUCH ISSUES SHALL BE COMPLETED BY THE CONTRACTOR.

19. THE TOE OF ANY FILL SLOPE IS TO REMAIN AT LEAST 1' INSIDE OF ALL EROSION CONTROLS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR COVER ANY PORTION OF THE EROSION CONTROL MEASURES WITH MATERIAL. ANY MATERIAL THAT IS PLACED ON ANY EROSION CONTROLS BY THE CONTRACTOR, OR ANY AGENT OF THE CONTRACTOR, SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR, AND ANY NECESSARY REPAIRS TO THE EROSION CONTROLS ACCOMPLISHED.

20. PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES, EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AT THOSE AREAS INDICATED ON THE PLANS. CLEARING MAY OCCUR PRIOR TO INSTALLATION OF SUCH CONTROLS, HOWEVER NO GRUBBING, GRADING, FILLING, OR OTHER SOIL DISTURBANCE SHALL OCCUR PRIOR TO INSTALLATION. THE LIMITS OF CLEARING AND SURFACE DISTURBANCE MUST BE STRICTLY ADHERED TO IN ALL AREAS.

21. ALL COMPOST FILTER SOCK, SILT FENCE OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS IS ESTABLISHED. IF NEEDED, TEMPORARY SEEDING CAN HELP TO MINIMIZE EROSION. TEMPORARY SEED WILL CONFORM TO R.I.D.O.T. STANDARD TEMPORARY SEED MIX.

22. THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE YEAR AND HE SHALL DO SO AT NO ADDITIONAL EXPENSE TO THE STATE.

23. THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE SPECIFIED IN SUBSECTION L.02.03 OF THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.

24. ADDITIONAL EROSION CONTROLS, SHALL BE INSTALLED AS DIRECTED BY THE RESIDENT ENGINEER. THESE ADDITIONAL ITEMS WILL BE PAID AT THE UNIT PRICE FOR THAT BID ITEM.

25. CONTRACTOR SHALL PROVIDE 'AS-BUILTS' FOR ENTIRE DRAINAGE SYSTEM WITH PIPE SIZES, MATERIALS, INVERT ELEVATIONS; RIM AND INVERT GRADES FOR CATCH BASINS AND MANHOLES, AND ALL INVERT, BOTTOM AND GRADING ELEVATIONS FOR ANY STORMWATER TREATMENT UNITS.

TRAFFIC SIGNAL NOTES:

1. ALL SALVAGED TRAFFIC SIGNAL EQUIPMENT SHALL BE DELIVERED TO THE R.I.D.O.T. MAINTENANCE HEADQUARTERS, 360 LINCOLN AVENUE, WARWICK, RHODE ISLAND, 02888.

2. BACK PLATES SHALL BE INSTALLED ON ALL TRAFFIC SIGNAL HEADS.

3. THE CONTRACTOR SHALL SUPPLY AND INSTALL ON THE UPPER LEFT HAND CORNER OF THE BACK OF THE CONTROLLER CABINET DOOR A LAMINATED INTERSECTION GRAPHIC AND TABLE DEPICTING THE TRAFFIC DETECTOR RELAY CHANNEL ASSIGNMENTS. THE DIAGRAM SHALL BE A GRAPHIC OF THE INDIVIDUAL INTERSECTION ORIENTED SIMILAR TO THE PLANS SHOWING THE LOCATIONS OF EACH OF THE LOOP DETECTORS. THE DIAGRAM SHALL, AT A MINIMUM, INCLUDE DETECTOR NUMBERS, STREET NAME LABELS, NORTH ARROW, AND CONTROLLER CABINET LOCATION. THE ASSIGNMENT INFORMATION SHALL BE INCLUDED IN A TABLE WHICH SHALL INCLUDE, AT A MINIMUM, THE APPROACH NAME, DETECTOR NUMBER, TERMINAL NUMBER, DETECTOR RACK SLOT NUMBER, RELAY NUMBER, RELAY CHANNEL NUMBER, AND PHASE ASSOCIATED WITH EACH DETECTOR.

4. TRAFFIC CONTROLLER CABINETS, UNLESS OTHERWISE NOTED, SHALL BE NEMA TS2 TYPE 1 CABINET SIZE 6 ("P" TYPE) WITH NOMINAL DIMENSIONS OF 52"Hx44"Wx24"D.

5. ALL DELAY AND EXTENSION TIMES, AS CALLED FOR ON THE PLANS, FOR PROPOSED LOOP DETECTORS SHALL BE PROGRAMMED IN THE TRAFFIC SIGNAL CONTROLLER AND NOT THE DETECTOR RELAY.

6. A BARE GROUND WIRE SHALL BE PLACED IN ALL PVC CONDUITS AND SHALL BE BONDED TO GROUND RODS IN ACCORDANCE WITH SECTION T.03 OF THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

7. THE FINAL POSITION OF SIGNAL HEADS, PEDESTRIAN PUSHBUTTONS, DETECTORS, AND STOP LINE AND CROSSWALK PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER IN THE FIELD ACCORDING TO ACTUAL INTERSECTION CHARACTERISTICS.

8. A 2' MINIMUM BUFFER SHALL BE PROVIDED BETWEEN THE CURB AND ALL LATERAL OBSTRUCTIONS (INCLUDING ALL SIGNAL POLES AND TRAFFIC/PEDESTRIAN SIGNAL HEADS) TO PROVIDE ADEQUATE CLEARANCE FOR TURNING VEHICLES.

9. ALL FOUNDATIONS MUST HAVE CONES OR BARRELS BOLTED TO FOUNDATION BASES UNTIL ACTUAL POLE IS INSTALLED.

10. WHEN PLACING TRAFFIC SIGNAL HANDHOLES OR CONDUIT IN EXISTING PORTLAND CEMENT CONCRETE SIDEWALKS, THE ENTIRE SIDEWALK SQUARE OF CONCRETE SHALL BE REPLACED IN ACCORDANCE WITH R.I. STD. 43.1.0. NO PATCHES WILL BE ALLOWED.

11. ALL PEDESTRIAN PUSHBUTTONS SHALL BE COMPLIANT WITH "THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES" (ADAAG) AND SHALL INCLUDE A PRESSURE-ACTIVATED (NON-MOVING) BUTTON. SIGNS APPLICABLE TO PUSHBUTTON ACTUATION SHALL BE INSTALLED SUCH THAT THE CROSSING ASSIGNED TO EACH BUTTON IS CLEARLY INDICATED. IF SITE CONDITIONS DO NOT ALLOW PEDESTRIAN PUSHBUTTONS TO BE INSTALLED WHERE CALLED FOR ON THE PLANS, THE R.I.D.O.T. TRAFFIC ENGINEERING UNIT SHALL BE CONSULTED WITH THROUGH AN R.F.I. PRIOR TO INSTALLING THE PUSHBUTTONS. THE FINAL PLACEMENT OF ALL PEDESTRIAN PUSHBUTTONS SHALL BE IN ACCORDANCE WITH ADAAG AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

12. ALL LOOP DETECTORS SHALL BE CENTERED WITHIN EACH LANE AS DELINEATED, UNLESS OTHERWISE DIMENSIONED ON PLANS.

13. ALL LOOP DETECTORS SHALL BE CUT INTO THE FINAL PAVEMENT SURFACE COURSE.

14. TRAFFIC SIGNAL CONTROLLERS SHALL BE WIRED SO THAT ANY FIRE PRE-EMPTION SHALL OVERRIDE MANUAL (PUSH BUTTON) OPERATION.

15. THE CONTRACTOR SHALL WORK CONTINUOUSLY TO RESTORE TRAFFIC SIGNAL OPERATION TO ITS INTENDED PURPOSE WHEN REPLACING THE TRAFFIC SIGNAL EQUIPMENT. A POLICE DETAIL IS REQUIRED TO DIRECT TRAFFIC AT THE INTERSECTION AT ALL TIMES WHEN THE TRAFFIC SIGNAL IS INOPERATIVE. AT NO TIME SHALL THE CONTRACTOR LEAVE THE SITE BEFORE RESTORING FULL TRAFFIC OPERATIONS.

UTILITY NOTES:

1. EXISTING UTILITIES HAVE BEEN SHOWN ON THE PLANS USING THE BEST AVAILABLE INFORMATION AND ARE APPROXIMATE. BUILDING SERVICE CONNECTIONS (ELECTRIC, GAS, TELEPHONE, WATER AND SANITARY) ARE NOT SHOWN. CONTRACTOR IS TO ASSUME SERVICES ARE PRESENT.

2. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING DRAINAGE AND UTILITIES BOTH UNDERGROUND AND OVERHEAD BEFORE EXCAVATION BEGINS IN ACCORDANCE WITH CHAPTER 39-1.2 OF THE R.I. GENERAL LAWS ENTITLED "EXCAVATION NEAR UNDERGROUND UTILITY FACILITIES", WITH AMENDMENTS EFFECTIVE AS OF NOVEMBER 1, 2009 AND, WHEN NECESSARY, BY CONTACTING THE INDIVIDUAL UTILITY COMPANIES. EXCAVATION SHALL BE IN ACCORDANCE WITH ALL STATUTES, ORDINANCES, RULES AND REGULATIONS OF ANY APPLICABLE CITY, TOWN, STATE OR FEDERAL AGENCY. THE CONTRACTOR SHOULD UNDERSTAND THAT NOT ALL UTILITIES SUBSCRIBE TO THE DIG SAFE PROGRAM. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES AND ENSURE THAT ALL UTILITIES HAVE BEEN MARKED PRIOR TO COMMENCING THEIR WORK. ANY DAMAGE TO EXISTING UTILITIES MARKED IN THE FIELD, OR AS A RESULT OF FAILING TO CONTACT THE APPROPRIATE UTILITY COMPANY, SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE STATE.

3. ALL EXISTING UTILITIES TO BE ABANDONED SHALL BE CAPPED.

4. EXISTING WATER SERVICES SHALL BE RECONNECTED TO THE NEW WATER MAINS.

5. UTILITY SERVICE CONNECTIONS SHALL BE MAINTAINED TO ALL EXISTING FACILITIES TO REMAIN.

6. FIRE HYDRANTS SHALL NOT BE REMOVED FROM SERVICE WITHOUT WRITTEN AUTHORIZATION FROM THE FIRE DEPARTMENT OR THE WATER AUTHORITY.

7. ALL NEW WATER LINES SHALL BE DISINFECTED TO THE SATISFACTION OF THE WATER AUTHORITY IN ACCORDANCE WITH THE SPECIFICATIONS.

8. ALL UTILITY POLE RELATED WORK SHALL BE BY OTHERS.

9. WHEN RELOCATING EXISTING UTILITY POLES, CARE MUST BE TAKEN AS TO NOT DAMAGE THE EXISTING DRAINAGE PIPES. ANY DAMAGE TO THE STATE'S DRAINAGE SYSTEM SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

10. SANITARY SEWER, GAS, WATER, AND OTHER UTILITY SERVICES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.

11. ALL EXISTING MANHOLES, CATCH BASINS, AND ROADWAY BOXES FOR ALL UTILITIES WITHIN THE PAVEMENT LIMITS SHALL BE ADJUSTED TO GRADE AS REQUIRED EXCEPT WHERE REPLACEMENT IS CALLED FOR ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

12. ANY ADJUSTMENTS TO VERIZON OWNED UNDERGROUND EQUIPMENT (MANHOLES, FRAME AND COVER, CONDUITS, ETC.) SHALL BE PERFORMED BY VERIZON.

13. ALL GAS VALVE BOXES SHALL BE ADJUSTED TO THE NEW ROAD/SIDEWALK SURFACE. VALVE BOXES, IF REQUIRED FOR REPLACEMENT CAN BE OBTAINED AT NATIONAL GRID'S PROVIDENCE LOCATION, 477 DEXTER STREET, PROVIDENCE, RI OR LINCOLN LOCATION, 645 GEORGE WASHINGTON HIGHWAY (QUANTITIES 5 OR LESS). GAS VALVE BOXES NEED TO BE ACCESSIBLE AT ALL TIMES TO BE OPERATED BY NATIONAL GRID IN THE EVENT OF AN EMERGENCY.

14. ALL CATHODIC PROTECTION BOXES (BOXES THAT CONTAIN WIRES THAT GO DOWN TO THE GAS MAIN) SHALL BE ADJUSTED TO THE NEW ROAD/SIDEWALK SURFACE. CARE SHALL BE EXERCISED WHEN ADJUSTING SO AS NOT TO DAMAGE WIRES. ID THE WIRES ARE DAMAGED OR IF ASSISTANCE IS NEEDED, CONTACT NATIONAL GRID CORROSION ENGINEER TO VISIT THE SITE. CONTACT ASAD AKINFOLARIN AT 401-215-5678 OR RON VINCENT AT 617-438-5192. THE CONTRACTOR SHALL FOLLOW THE GUIDELINES LISTED IN NATIONAL GRID'S "GUIDELINES FOR WORKING AROUND CORROSION CONTROL SYSTEM COMPONENTS".

MAINTENANCE AND PROTECTION OF TRAFFIC NOTES:

1. ALL MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL SETUPS, SIGNS, CHANNELIZING DEVICES, ETC., SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

2. ALL SIGN MOUNTINGS FOR TEMPORARY AND CONSTRUCTION SIGNS SHALL BE IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.

3. THE CONTRACTOR SHALL COVER ALL EXISTING AND/OR TEMPORARY SIGNS THAT ARE NOT RELEVANT TO THE TRAFFIC CONTROL REQUIRED DURING ANY PARTICULAR STAGE OF THE CONTRACT.

4. ADVANCE FLAGPERSON SIGNS (W20-7A) SHALL BE USED IN ADVANCE OF ANY POINT AT WHICH A FLAGPERSON OR A POLICE OFFICER HAS BEEN STATIONED TO CONTROL TRAFFIC. WHEN NEEDED, AN APPROPRIATE DISTANCE MESSAGE MAY BE DISPLAYED ON A SUPPLEMENTAL PLATE (24"x18") BELOW THE FLAGPERSON SYMBOL SIGN. THE SIGN SHALL BE PROMPTLY REMOVED OR COVERED WHENEVER THE FLAGPERSON IS NOT AT THE STATION.

5. POLICE OFFICERS (AND NOT FLAGPERSONS) SHALL BE UTILIZED WHEN WORK WILL IMPACT SIGNALIZED INTERSECTIONS AND LIMITED ACCESS HIGHWAYS.

6. POLYETHYLENE DRUMS SHALL BE UTILIZED AS A CHANNELIZING DEVICE WHEN A TRAFFIC CONTROL SET-UP IS TO REMAIN BEYOND WORKING HOURS WHEN NO WORKERS ARE PRESENT. CONES SHALL BE UTILIZED WHEN A TRAFFIC CONTROL SET-UP IS TO REMAIN ONLY DURING WORKING HOURS AND IS SUBSEQUENTLY BROKEN DOWN AT THE END OF THE WORKDAY.

7. ARROW PANELS SHALL BE SET IN THE FLASHING FOUR CORNERS CAUTION MODE UNLESS UTILIZED FOR A MERGING TAPER. ARROW PANELS SET IN THE FLASHING ARROW MODE SHALL NOT BE UTILIZED FOR LANE SHIFTS.

8. TEMPORARY CONSTRUCTION SIGNS AND OTHER WORKZONE TRAFFIC CONTROL DEVICES THAT ARE DAMAGED OR REQUIRE RELOCATION SHALL BE REPLACED AND / OR RELOCATED UNDER THE PAY ITEM FOR "MAINTENANCE AND MOVEMENT TRAFFIC PROTECTION."

9. THE PRIVATE VEHICLES OF CONSTRUCTION WORKERS SHALL NOT BE PARKED ON THE TRAVEL LANES OR

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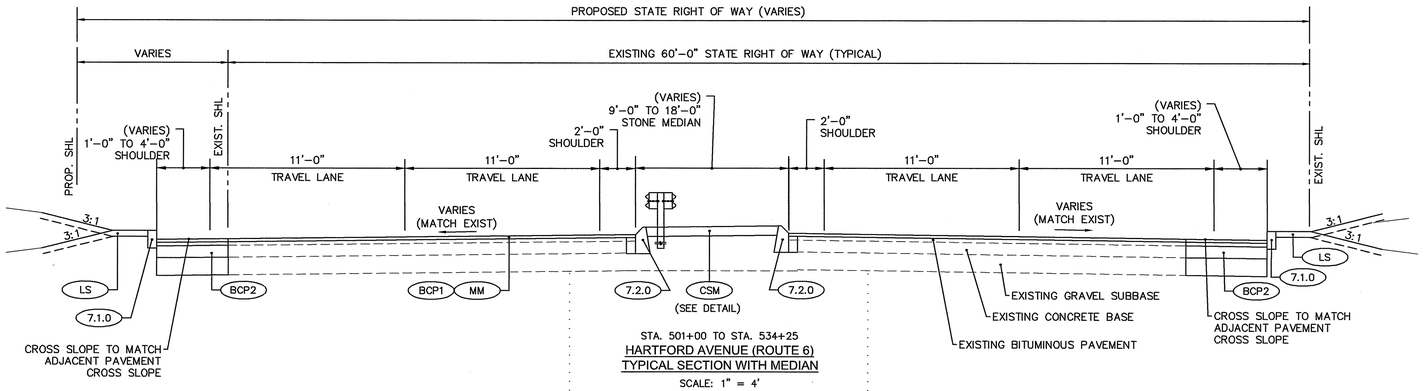
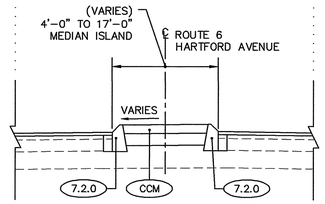
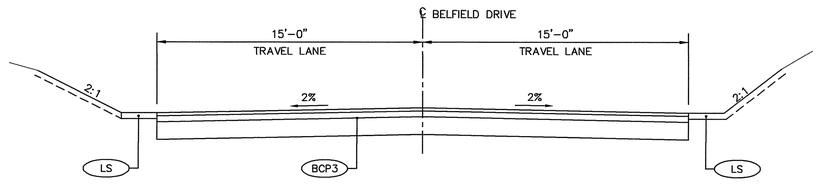


STA. 501+00 TO STA. 534+25
HARTFORD AVENUE (ROUTE 6)
TYPICAL SECTION WITH MEDIAN
SCALE: 1" = 4'



STA. 501+05 TO STA. 506+80
STA. 508+00 TO STA. 513+50
STA. 528+00 TO STA. 528+55
STA. 529+70 TO STA. 534+20
SCALE: 1" = 4'



STA. 11+15 TO STA. 13+00
BELFIELD DRIVE
TYPICAL SECTION
SCALE: 1" = 4'

DEPARTMENT OF ENVIRONMENTAL MANAGEMEN
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

PAVEMENT LEGEND

- (BCP1) 2" MODIFIED CLASS 12.5 HMA
- (BCP2) 2" MODIFIED CLASS 12.5 HMA SURFACE COURSE
  2.5" CLASS 12.5 HMA INTERMEDIATE COURSE
  8" CLASS 19.0 HMA BASE COURSE
  12" GRAVEL BORROW SUBBASE COURSE
- (BCP3) 2" MODIFIED CLASS 12.5 HMA SURFACE COURSE
  4" CLASS 19.0 HMA BASE COURSE
  12" GRAVEL BORROW SUBBASE COURSE

Environmental Management
NOV 12 2021

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY: BETA www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE: AS SHOWN
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT: **Highway Safety Improvements to Hartford Avenue (Route 6)**
JOHNSTON, RHODE ISLAND

TITLE: TYPICAL SECTIONS No. 1

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 5 OF 48

11/11/2021 1:15 PM N:\7300S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_006_TYP.DWG (BETA STB BW.STB)

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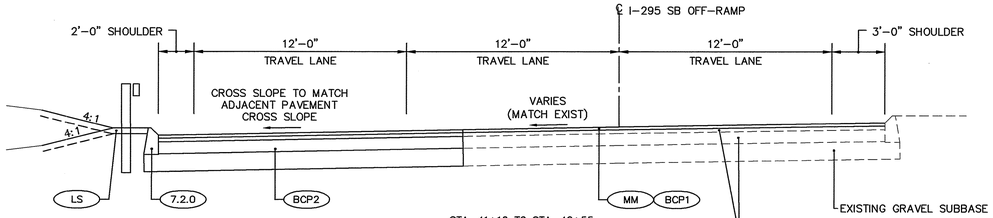
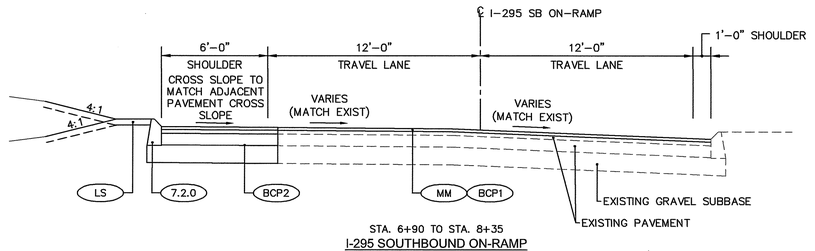
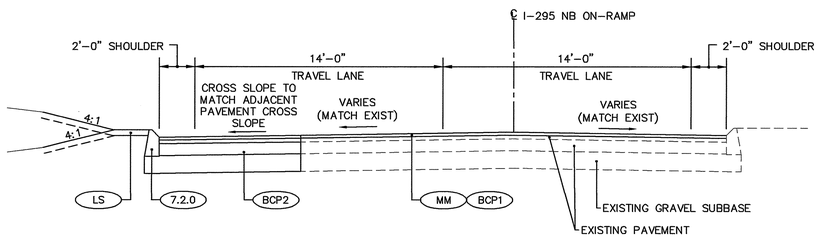


STA. 41+10 TO STA. 42+55
I-295 SOUTHBOUND OFF-RAMP
TYPICAL SECTION
SCALE: 1" = 4'



STA. 6+90 TO STA. 8+35
I-295 SOUTHBOUND ON-RAMP
TYPICAL SECTION
SCALE: 1" = 4'



I-295 NORTHBOUND ON-RAMP
TYPICAL SECTION
SCALE: 1" = 4'

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0346
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APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Christine D. Venneck

PAVEMENT LEGEND

- (BCP1) 2" MODIFIED CLASS 12.5 HMA
- (BCP2) 2" MODIFIED CLASS 12.5 HMA SURFACE COURSE
  2.5" CLASS 12.5 HMA INTERMEDIATE COURSE
  8" CLASS 19.0 HMA BASE COURSE
  12" GRAVEL BORROW SUBBASE COURSE
- (BCP3) 2" MODIFIED CLASS 12.5 HMA SURFACE COURSE
  4" CLASS 19.0 HMA BASE COURSE
  12" GRAVEL BORROW SUBBASE COURSE

Environmental Management
NOV 12 2021
Office of Water Resources

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

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REGISTERED PROFESSIONAL

PREPARED BY: BETA www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE: AS SHOWN
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PROJECT: **Highway Safety Improvements to Hartford Avenue (Route 6)**
JOHNSTON, RHODE ISLAND

TITLE: TYPICAL SECTIONS No. 2

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 6 OF 48

11/11/2021 1:15 PM N:\7300\87394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_006_TYP.DWG (BETA STB BW.STB)

PROJECT BEGIN
END STA. 499+05.00
HARTFORD AVE PROFILE BASELINE
N: 271,926.2228
E: 318,676.1400

N

BELFIELD DRIVE

Hartford Avenue (Route 6)

I-295 SB OFF-RAMP

I-295 SB ON-RAMP

I-295 SB

I-295 SB ON-RAMP

PROPOSED
DISTRIBUTION
FACILITY

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

MATCHLINE TO BELOW

MATCHLINE TO ABOVE

I-295 NB OFF-RAMP

I-295 NB ON-RAMP

I-295 NB

Hartford Avenue (Route 6)

PROJECT END
END STA. 558+37.00
HARTFORD AVE PROFILE BASELINE
N: 271,278.4954
E: 324,334.1330

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0296
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Martin D. Venezia

Environmental Management
NOV 12 2021
Office of Water Resources

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IN ASSOCIATION WITH

SCALE
150 0 150 300
SCALE IN FEET: 1"=150'
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PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
KEY PLAN

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 7 OF 48

11/11/2021 1:15 PM N:\7300\S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_006-2_KEY.DWG (BETA STB BW.STB)

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54/120
JAMES FARIA
Book 951 Page Unknown

54/10
JAMES FARIA
Book 951 Page Unknown

54/111
DALTON CHAPLIN PARTNERS LLC
Book 2417 Page Unknown

54/103
DALTON CHAPLIN PARTNERS LLC
Book 2417 Page Unknown

S.H.L. PLAT NO. 305

Hartford Avenue (Route 6)

BARRELS FILLED WITH CONCRETE

54/43
SANDMOOR REALTY LLC
Book 1711 Page Unknown

54/53
PROGRESSIVE CASUALTY INSURANCE COMPANY
Book 1712 Page Unknown

54/97
SANDMOOR REALTY, LLC
Book 1711 Page Unknown

MATCHLINE TO EXISTING CONDITIONS PLAN No. 2

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 2 6 2021 FILE # 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Martin D. Vanecek

Environmental Management
NOV 12 2021

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IN ASSOCIATION WITH

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UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
EXISTING CONDITIONS PLAN No. 1

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 8 OF 48

11/1/2021 1:16 PM N:\7300\ST7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_007_EXIST_COND.DWG (BETA STB BW.STB)

MATCHLINE TO EXISTING CONDITIONS PLAN No. 3

MATCHLINE TO EXISTING CONDITIONS PLAN No. 1

MATCHLINE TO EXISTING CONDITIONS PLAN No. 4

54/12
CASSISI DOMENIC & FRANCESCO
Book 2417 Page 181

54/13
A & A REALTY CORP
Book 191 Page 0

54/12
HARRY SMITH LOT
RI HISTORICAL CEMETERY
Book Unknown Page Unknown

54/85
PETER CONTI
Book 7682 Page 1

54/42
CASSISI DOMENIC & FRANCESCO TC
Book 2008 Page 0

54/141
LC LLC
Book 855
Page Unknown

54/141
LC LLC
Book 692 Page 390000

Belfield Drive

Hartford Avenue (Route 6)

S.H.L. PLAT NO. 305

50' WETLAND BUFFER

FORESTED WETLAND

WETLAND EDGE VERIFICATION
APPLICATION NO. 21-0005

INVERT 18" PIPE 371.3

CONCRETE WALL WITH FENCE

CONCRETE BLOCK WALL

SCHOOL FLASHER W/ SPEED LIMIT SIGN

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0046
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Martin D. Wencek
(Environmental Management)

NOV 12 2021
RECEIVED

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IN ASSOCIATION WITH

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20 0 20 40
SCALE IN FEET: 1"=20'
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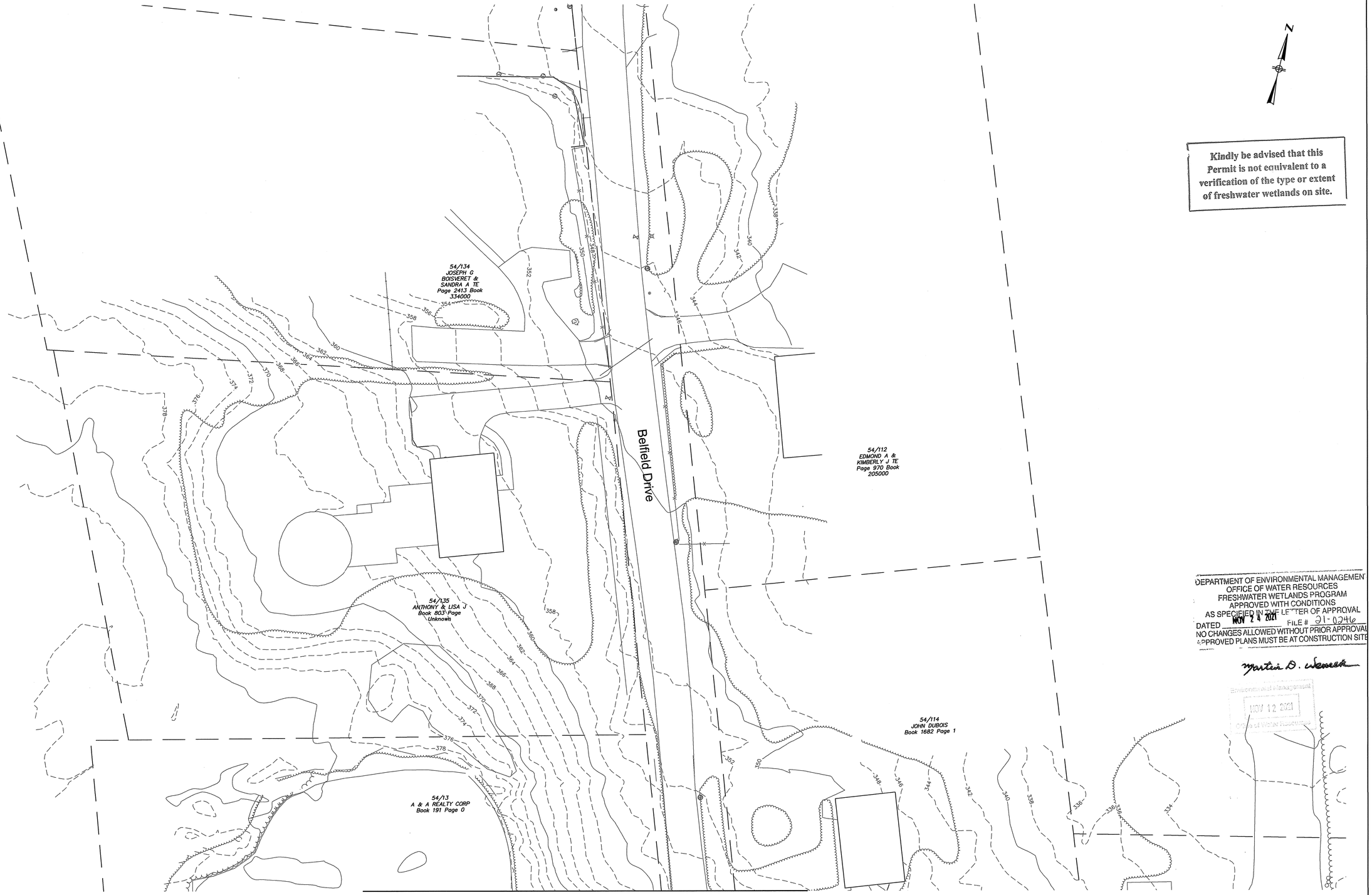
PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
EXISTING CONDITIONS PLAN No. 2

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 9 OF 48

11/11/2021 1:16 PM N:\7300S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_007_EXIST_COND.DWG (BETA STB BW.STB)



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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 12 2021 FILE # 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Martin D. Wencek

Environmental Management
NOV 12 2021
OFFICE OF WATER RESOURCES

MATCHLINE TO EXISTING CONDITIONS PLAN No. 2

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

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REGISTERED PROFESSIONAL

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IN ASSOCIATION WITH

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PROJECT: **Highway Safety Improvements to Hartford Avenue (Route 6)**
JOHNSTON, RHODE ISLAND

TITLE: EXISTING CONDITIONS PLAN No. 3

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 10 OF 48

11/11/2021 1:16 PM N:\7300\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_007_EXIST_COND.DWG (BETA STB BW.STB)

MATCHLINE TO EXISTING CONDITIONS PLAN No. 2

MATCHLINE TO EXISTING CONDITIONS PLAN No. 5

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

54/85
PETER CONTI
Book 1682 Page 1

54/20
MICHAEL W SUSI
Book 2113 Page Unknown

54/122
TRINITY ASSEMBLY OF GOD INC
Book 141 Page 0

S.H.L. PLAT NO. 305

Hartford Avenue (Route 6)

FORESTED WETLAND
LESS THAN 1/2 ACRES

54/41
BEL-AIR MOTOR INN LLC
Book 777 Page 530000

54/87
BEL-AIR MOTOR INN LLC
Book 777 Page 530000

54/88
JEREMY KELL
Book 2548 Page 155000

STONE RETAINING WALL

ROLL-PER WALL

SEPTIC TANK COVERS

ISDS

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0246
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Environmental Management
NOV 24 2021
Freshwater Wetlands

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

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IN ASSOCIATION WITH

SCALE

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SCALE IN FEET: 1"=20'

UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT

Highway Safety Improvements to Hartford Avenue (Route 6)

JOHNSTON, RHODE ISLAND

TITLE

EXISTING CONDITIONS
PLAN No. 4

BETA JOB NO. 7394

ISSUE DATE NOVEMBER 2021

SHEET NO. 11 OF 48

11/11/2021 1:16 PM N:\7300\ST394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWING\FILES\PLANSET\PAP\PAP_007_EXIST_COND.DWG (BETA STB BW.STB)

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N

MATCHLINE TO EXISTING CONDITIONS PLAN No. 4

MATCHLINE TO EXISTING CONDITIONS PLAN No. 6

54/21
275 ATWOOD LLC
Book 2324 Page 475000

54/89
THE SHELBURNE CO LLC &
LOTOJOSA LLC
Book 1919 Page 100

54/91
THOMAS HARPER
Book 395 Page 0

54/90
THE SHELBURNE CO LLC &
LOTOJOSA LLC
Book 1919 Page 100

S.H.L. PLAT NO. 305

Hartford Avenue (Route 6)

SCHOOL FLASHER &
SPEED LIMIT SIGN

FORESTED WETLAND

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
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Martin D. Wencek

Department of Environmental Management
NOV 12 2021
Office of Water Resources

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
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IN ASSOCIATION WITH

SCALE
20 0 20 40
SCALE IN FEET: 1"=20'
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PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
EXISTING CONDITIONS PLAN No. 5

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 12 OF 48

11/11/2021 1:16 PM N:\7300\57394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_007_EXIST_COND.DWG (BETA STB BW.STB)

MATCHLINE TO EXISTING CONDITIONS PLAN No. 7

MATCHLINE TO EXISTING CONDITIONS PLAN No. 5

MATCHLINE TO EXISTING CONDITIONS PLAN No. 8

54/21
275 ATWOOD LLC
Book 2324 Page 475000

FORESTED WETLAND LESS THAN 1 ACRES

S.H.L. PLAT NO. 305

Hartford Avenue (Route 6)

S.H.L. PLAT NO. 1443A

S.H.L. PLAT NO. 14

54/81
SASA & RHONDA MOHAMMAD
Book 1577 Page 155000

54/39
THE SHELBURNE CO LLC &
LOTOJOSA LLC
Book 1919 Page 100

50' WETLAND BUFFER

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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
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MATCHLINE TO EXISTING CONDITIONS PLAN No. 7

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

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DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
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IN ASSOCIATION WITH

SCALE
20 0 20 40
SCALE IN FEET: 1"=20'
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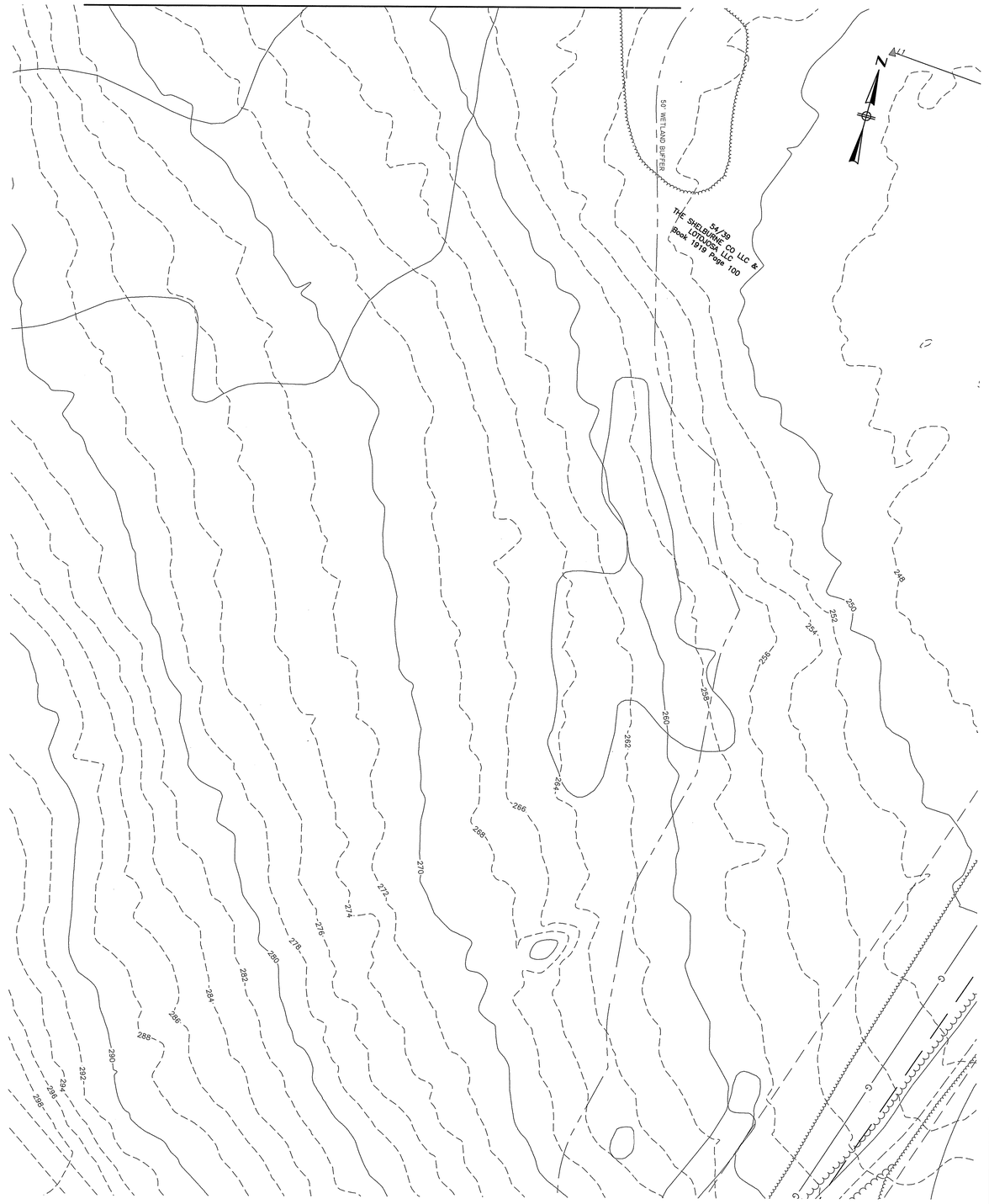
PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

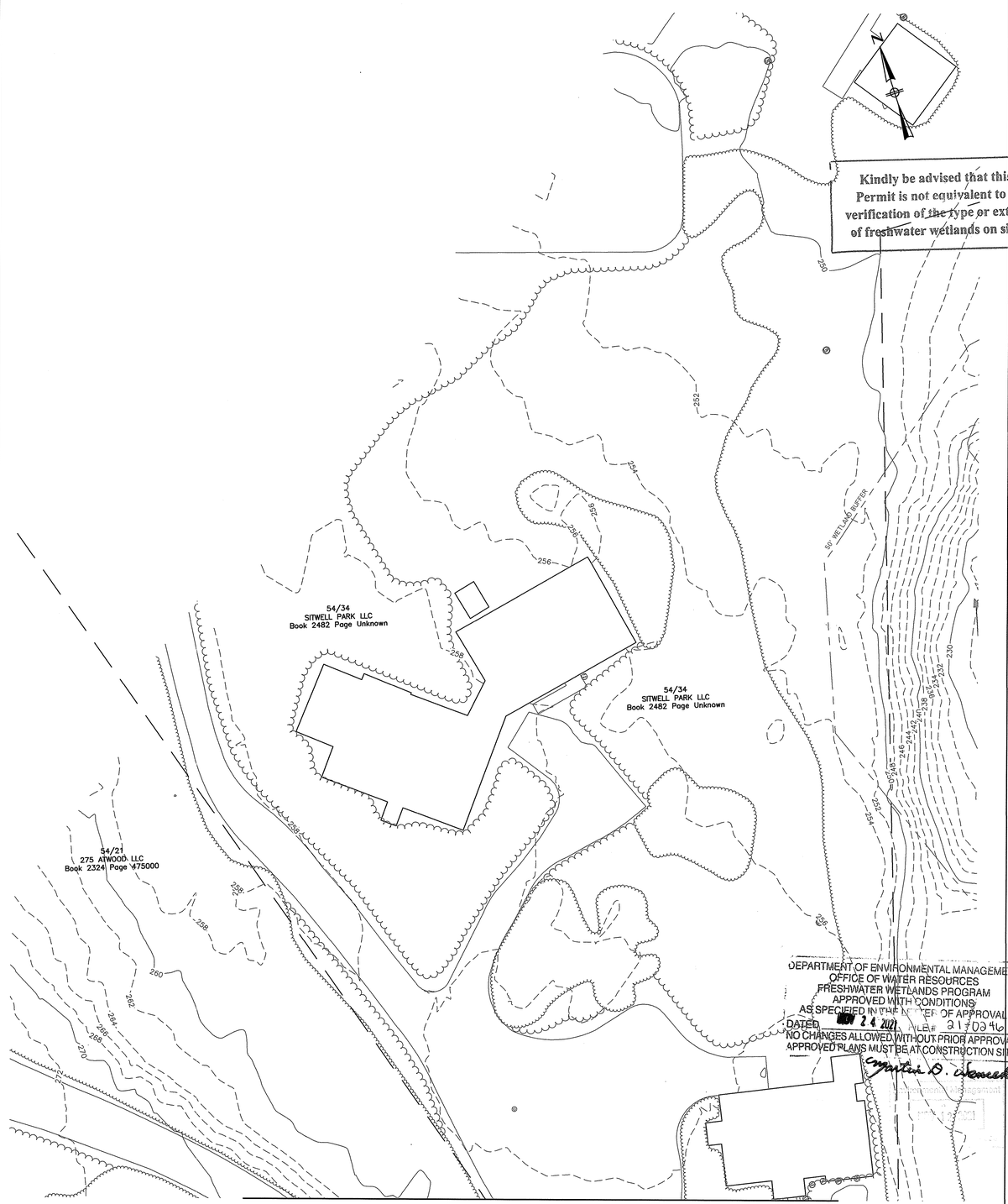
TITLE
EXISTING CONDITIONS PLAN No. 6

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 13 OF 48

11/11/2021 1:16 PM N:\7300S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_007_EXIST_COND.DWG (BETA.STB BW.STB)

MATCHLINE TO EXISTING CONDITIONS PLAN No. 6





MATCHLINE TO EXISTING CONDITIONS PLAN No. 6

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:

DESIGNED BY:

CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY

BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE

20 0 20 40
SCALE IN FEET: 1"=20'

UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT

Highway Safety Improvements to Hartford Avenue (Route 6)

JOHNSTON, RHODE ISLAND

TITLE

EXISTING CONDITIONS
PLAN No. 7

BETA JOB NO. 7394

ISSUE DATE NOVEMBER 2021

SHEET NO. 14 OF 48

11/1/2021 1:16 PM N:\7300s\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_007_EXIST_COND.DWG (BETA STB BW.STB)

MATCHLINE TO INSET BELOW

MATCHLINE TO ABOVE

MATCHLINE TO EXISTING CONDITIONS PLAN No. 6

MATCHLINE TO EXISTING CONDITIONS PLAN No. 9

I-295 SB Off-Ramp

I-295 SB On-Ramp

Hartford Avenue (Route 6)

50' WETLAND BUFFER

100' RIVERBANK WETLAND

FORESTED WETLAND

STREAM

GAS TRANSMISSION LINE EASEMENT

S.F.L. PLAT NO. 1443A

S.H.L. PLAT NO. 1443A

54/80
SITWELL PARK LLC
Book 1712 Page 400000

54/39
THE SHELBURNE CO LLC &
LOTOJOSA LLC
Book 1919 Page 100

54/38
GREEN MONSTER LLC
Book 1265 Page 140000

54/37
CABRINA REALTY ASSOC
Book 1957 Page 1

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0346
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Martha P. Seneca

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE
20 0 20 40
SCALE IN FEET: 1"=20'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
EXISTING CONDITIONS PLAN No. 8

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 15 OF 48

11/11/2021 1:17 PM N:\7300S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_007_EXIST_COND.DWG (BETA STB BW.STB)

MATCHLINE TO EXISTING CONDITIONS PLAN No. 8

Hartford Avenue (Route 6)

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

MATCHLINE TO BELOW

I-295 SB On-Ramp

MATCHLINE TO ABOVE

I-295 SB On-Ramp

DEPARTMENT OF ENVIRONMENTAL MANAGEMEN
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0296
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Martin D. Wencek

Environmental Management
NOV 12 2021
Office of Water Resources

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE
20 0 20 40
SCALE IN FEET: 1"=20'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

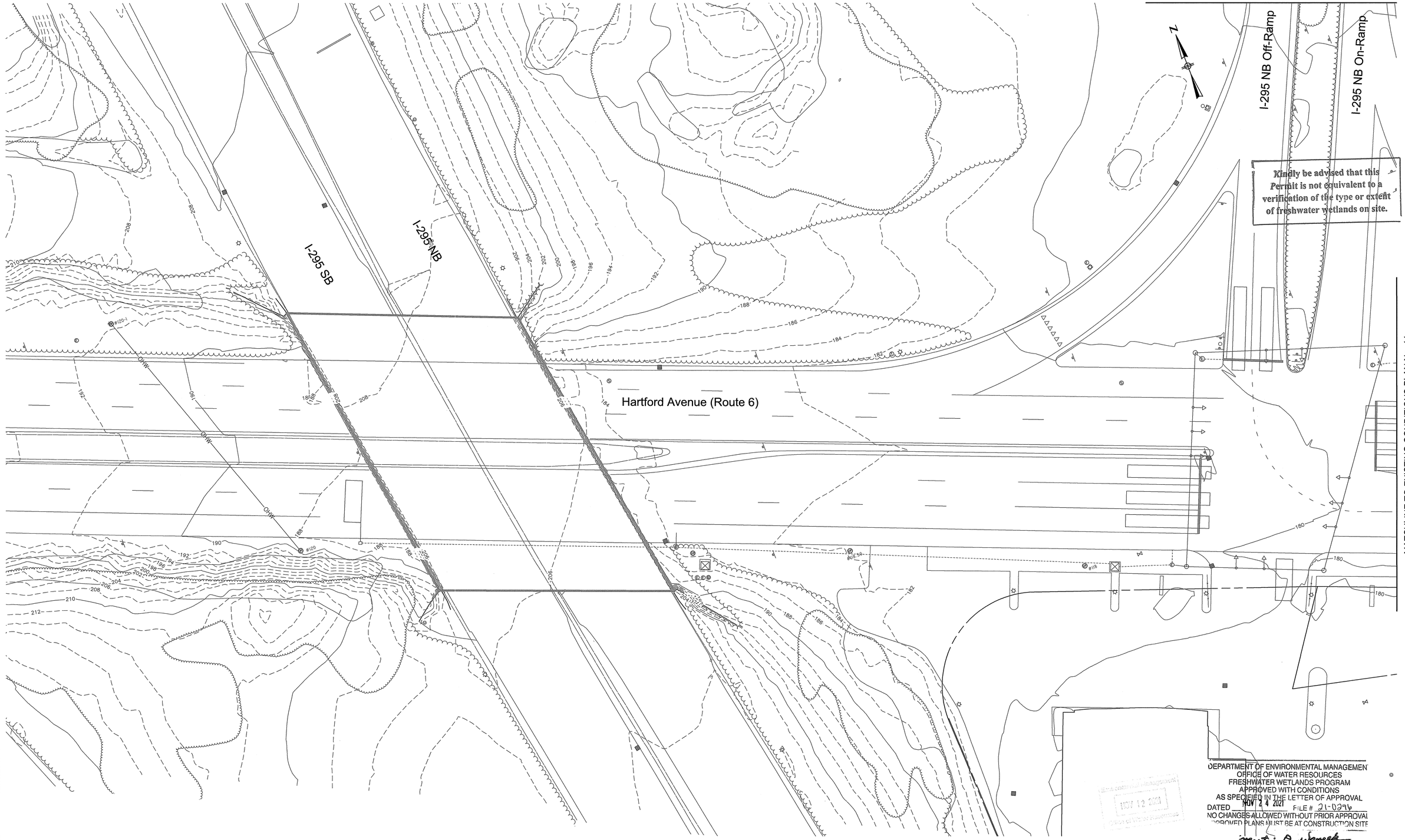
PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
EXISTING CONDITIONS PLAN No. 9

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 16 OF 48

11/11/2021 1:17 PM N:\7300SY\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_007_EXIST_COND.DWG (BETA STB BW.STB)

MATCHLINE TO EXISTING CONDITIONS PLAN No. 11



MATCHLINE TO EXISTING CONDITIONS PLAN No. 11

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0396
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Martin D. Wenek

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY: BETA www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE: 20 0 20 40 — SCALE IN FEET: 1"=20'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT: **Highway Safety Improvements to Hartford Avenue (Route 6)**
JOHNSTON, RHODE ISLAND

TITLE: EXISTING CONDITIONS PLAN No. 10

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 17 OF 48

11/11/2021 1:17 PM N:\7300\57394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_007_EXIST_COND.DWG (BETA.STB BW.STB)

11/1/2021 1:17 PM N:\7300S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_007_EXIST_COND.DWG (BETA STB BW.STB)

MATCHLINE TO EXISTING CONDITIONS PLAN No. 10

53/281
BAR 1705 LLC
Book 2546 Page 12730000

I-295 NB On-Ramp

Hartford Avenue (Route 6)

I-295 NB Off-Ramp

I-295 NB On-Ramp

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Martin D. Vernacchia

MATCHLINE TO EXISTING CONDITIONS PLAN No. 10

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
www.BETA-Inc.com

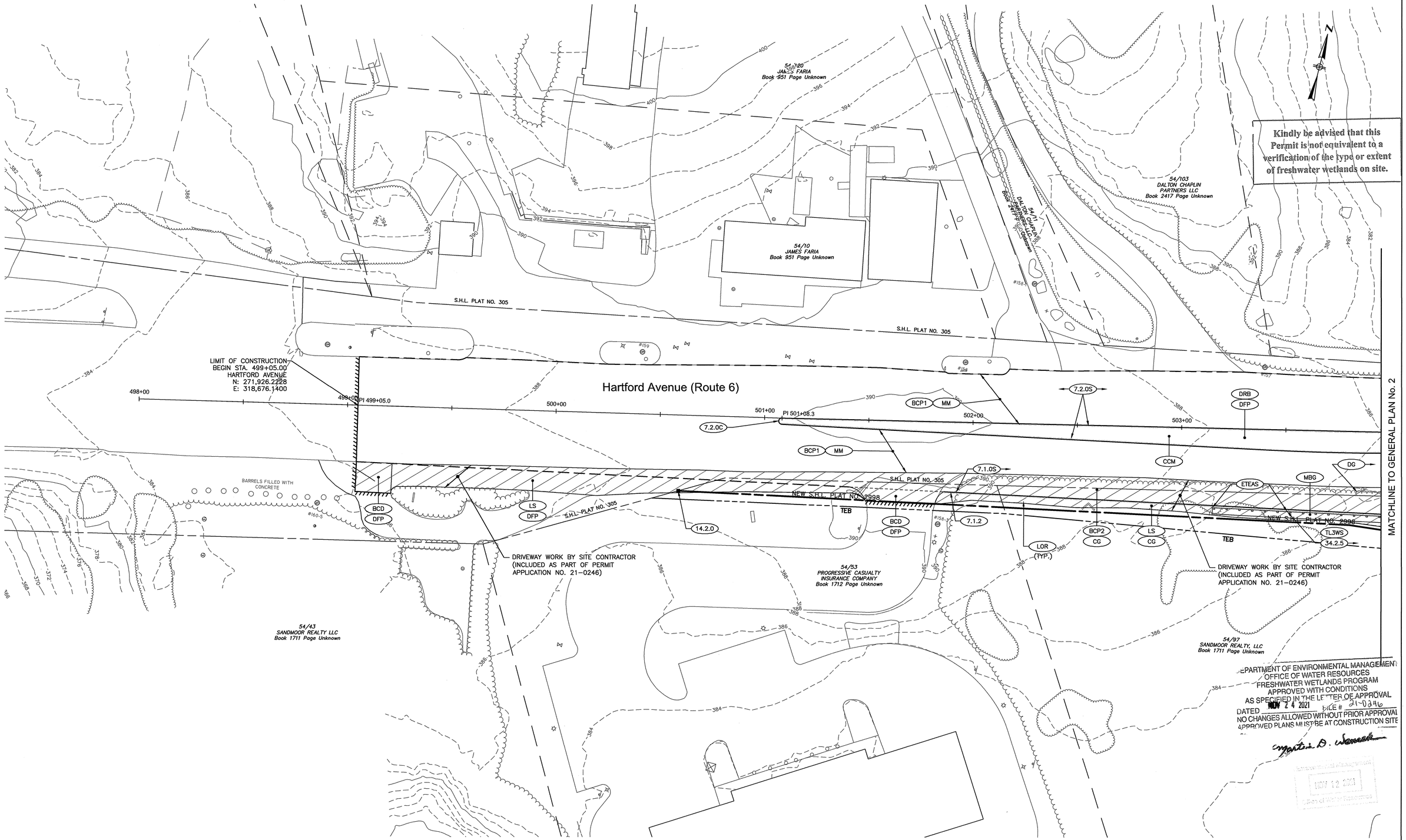
IN ASSOCIATION WITH

SCALE
20 0 20 40
SCALE IN FEET: 1"=20'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
EXISTING CONDITIONS PLAN No. 11

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 18 OF 48



NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:

DESIGNED BY:

CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY

BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE

20 0 20 40

SCALE IN FEET: 1"=20'

UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT

Highway Safety Improvements to Hartford Avenue (Route 6)

JOHNSTON, RHODE ISLAND

TITLE

GENERAL PLAN No. 1

BETA JOB NO. 7394

ISSUE DATE NOVEMBER 2021

SHEET NO. 19 OF 48

11/11/2021 3:00 PM N:\7300\87394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_009_GEN_DEM.DWG (BETA STB BW.STB)

MATCHLINE TO GENERAL PLAN No. 3

MATCHLINE TO GENERAL PLAN No. 1

MATCHLINE TO GENERAL PLAN No. 4

Belfield Drive

Old Belfield Drive

Hartford Avenue (Route 6)

54/12
CASSISI DOMENIC & FRANCESCO
Book 2417 Page 181

54/13
A & A REALTY CORP
Book 191 Page 0

54/12
HARRY SMITH LOT
RI HISTORICAL CEMETERY
Book Unknown Page Unknown

54/85
PETER CONTI
Book 1682 Page 1

54/42
CASSISI DOMENIC & FRANCESCO TC
Book 2008 Page 0

54/141
LC LLC
Book 855
Page Unknown

54/141
LC LLC
Book 692 Page 390000

NEW S.H.L. PLAT NO. 2998

S.H.L. PLAT NO. 305

SEE SHEET NO. 6 FOR DEMO AND SITE PREPARATION.

EQUATION STATION
507+48.14 HARTFORD AVENUE=
10+00.00 BELFIELD DRIVE
N: 272,113.4047
E: 319,498.1844

EQUATION STATION
509+79 HARTFORD AVENUE=
20+00.00 OLD BELFIELD DRIVE
N: 272,172.8134
E: 319,721.2683

EQUATION STATION
507+47.99 HARTFORD AVENUE=
-0+24.79 WESTERN ACCESS ROAD
N: 272,113.3656
E: 319,498.0375

LIMIT OF CONSTRUCTION
END STA. 0+05.90
WESTERN ACCESS ROAD
N: 272,083.5720
E: 319,505.3849

DRIVEWAY WORK BY SITE CONTRACTOR
(INCLUDED AS PART OF PERMIT
APPLICATION NO. 21-0246)

DRIVEWAY WORK BY SITE CONTRACTOR
APPROVED UNDER PERMIT
APPLICATION NO. 21-0097

WETLAND EDGE VERIFICATION
APPLICATION NO. 21-0005

FORESTED WETLAND

50' WETLAND BUFFER

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Martin B. Wenesk

NOT TO SCALE

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:

DESIGNED BY:

CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY: BETA www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE: 20 0 20 40 SCALE IN FEET: 1"=20'

UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT: **Highway Safety Improvements to Hartford Avenue (Route 6)**
JOHNSTON, RHODE ISLAND

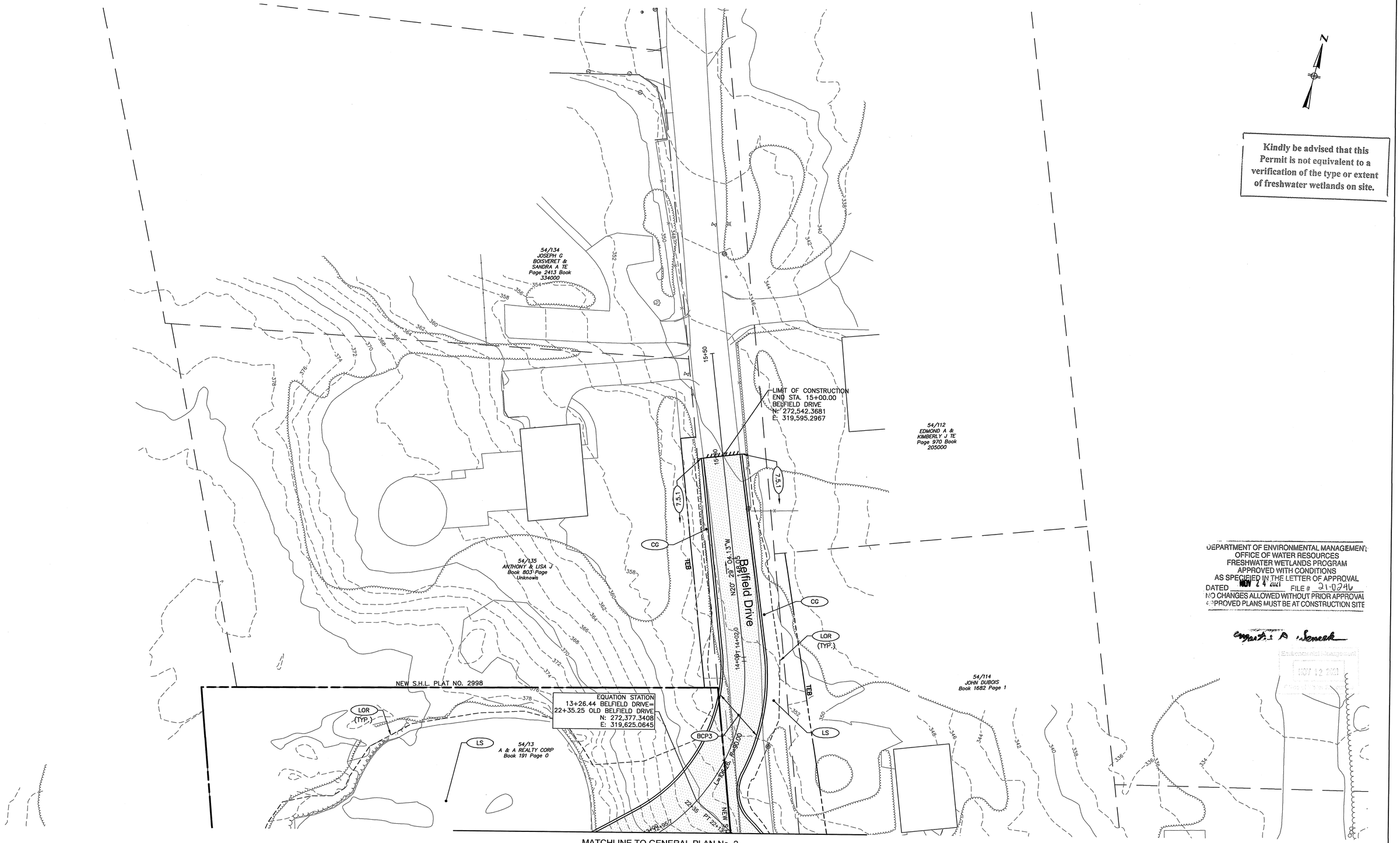
TITLE: GENERAL PLAN No. 2

BETA JOB NO. 7394

ISSUE DATE NOVEMBER 2021

SHEET NO. 20 OF 48

11/11/2021 2:48 PM N:\7300S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_009_GEN_DEM.DWG (BETA STB BW.STB)



MATCHLINE TO GENERAL PLAN No. 2

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:

DESIGNED BY:

CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY: BETA www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE: 20 0 20 40 — SCALE IN FEET: 1"=20'

UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT: **Highway Safety Improvements to Hartford Avenue (Route 6)** — **JOHNSTON, RHODE ISLAND**

TITLE: GENERAL PLAN No. 3

BETA JOB NO. 7394

ISSUE DATE NOVEMBER 2021

SHEET NO. 21 OF 48

11/11/2021 1:29 PM N:\7300S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_009_GEN_DEM.DWG (BETA STB BW.STB)

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

MATCHLINE TO GENERAL PLAN No. 2

MATCHLINE TO GENERAL PLAN No. 5

54/85
PETER CONTI
Book 1682 Page 1

54/20
MICHAEL W SUSI
Book 2113 Page Unknown

54/122
TRINITY ASSEMBLY OF GOD INC
Book 141 Page 0

54/41
BEL-AIR MOTOR INN LLC
Book 777 Page 530000

54/87
BEL-AIR MOTOR INN LLC
Book 777 Page 530000

54/88
JEREMY KELL
Book 2548 Page 155000

Hartford Avenue (Route 6)

NEW S.H.L. PLAT NO. 2998

S.H.L. PLAT NO. 305

PC 513+19.2

PRC 513+96.4

PT 516+37.4

3' GAP BETWEEN GUARDRAIL AT NEW HYDRANT LOCATION FOR ACCESS

FORESTED WETLAND LESS THAN 3 ACRES

STONE RETAINING WALL

BOULDER WALL

SEPTIC TANK COVERS

ISDS

TEB

PDB

LOR (TYP.)

RET

CCM

DRB

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE# 21-0346
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE
20 0 20 40
SCALE IN FEET: 1"=20'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
GENERAL PLAN No. 4

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 22 OF 48

11/11/2021 1:29 PM N:\7300\ST7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_009_GEN_DEM.DWG (BETA STB BW.STB)

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

N

54/21
275 ATWOOD LLC
Book 2324 Page 475000

54/89
THE SHELBURNE CO LLC &
LOTOJOSA LLC
Book 1919 Page 100

54/91
THOMAS HARPER
Book 395 Page 0

Hartford Avenue (Route 6)

S.H.L. PLAT NO. 305

NEW S.H.L. PLAT NO. 2998

SCHOOL FLASHER
SPEED LIMIT SIGN

PC 518+80.2

518+00 519+00 520+00 521+00 522+00 523+00

ETEAS LS LOR (TYP.) CG TEB CSM DRB DFP BCD TESW TL3WS MBG BCP1 MM BCP2 MM4 BCP4 BCP5 DG

34.2.5 TL3WD 7.1.0S 7.1.2 7.2.0S

P9 P18 P19 P20 P21

FORESTED WETLAND

REMOVE AND RELOCATE COUNT STATION/SYSTEM FROM STA. 529+60 RIGHT

MATCHLINE TO GENERAL PLAN No. 4

MATCHLINE TO GENERAL PLAN No. 6

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0946
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Environmental Management
NOV 12 2021
Office of Water Resources

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE
20 0 20 40
SCALE IN FEET: 1"=20'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
GENERAL PLAN No. 5

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 23 OF 48

11/11/2021 1:29 PM N:\7300\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_009_GEN_DEM.DWG (BETA STB BW.STB)

MATCHLINE TO GENERAL PLAN No. 7

MATCHLINE TO GENERAL PLAN No. 5

MATCHLINE TO GENERAL PLAN No. 8

SEE SAND FILTER O DETAIL

Hartford Avenue (Route 6)

EQUATION STATION
525+08.53 HARTFORD AVENUE=
60+00.00 HARTFORD AVENUE EASTBOUND JUGHANDLE
N: 272,391.2982
E: 321,207.0333

EQUATION STATION
529+20.54 HARTFORD AVENUE=
-0+52.34 EASTERN ACCESS ROAD
N: 272,322.0060
E: 321,611.7755

EQUATION STATION
529+20.06 HARTFORD AVENUE=
30+16.61 AP 54 LOT 21 DRIVEWAY
N: 272,322.1539
E: 321,611.3207

EQUATION STATION
2+00.39 EASTERN ACCESS ROAD=
64+73.97 HARTFORD AVENUE EASTBOUND JUGHANDLE
N: 272,081.9272
E: 321,532.7914

54/21
275 ATWOOD LLC
Book 2324 Page 475000

54/81
SASA & RHONDA MOHAMMAD
Book 1577 Page 155000

54/39
THE SHELBURNE CO LLC &
LOTOJOSA LLC
Book 1919 Page 100

NEW S.H.L. PLAT NO. 2998

S.H.L. PLAT NO. 305

S.H.L. PLAT NO. 1443A

S.H.L. PLAT NO. 14

FORESTED WETLAND LESS THAN 5 ACRES

REMOVE AND DISPOSE CONCRETE BLOCKS

REMOVE AND DISPOSE LOOP COUNT STATION

REMOVE AND RELOCATE EXISTING DYNAMIC MESSAGE SYSTEM

REMOVE AND RELOCATE COUNT STATION/SYSTEM TO STA. 522+35 RIGHT

LIMIT OF CONSTRUCTION
END STA. 0+44.22
EASTERN ACCESS ROAD
N: 272,230.2187
E: 321,581.7793

DRIVEWAY WORK BY SITE CONTRACTOR
APPROVED UNDER PERMIT
APPLICATION NO. 21-0097

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 210240
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Signature of Freshwater Wetlands Program Supervisor

Environmental Management
State of Rhode Island

THE
Bo

PC 528+56.6 R=1,430.00 L=50.64

PT 528+76.3

PCC 63+43.6 L=98.57 R=136.00

PRC 62+28.84 L=577.76 R=220.00

PT 64+42.1

L=285.78 R=260.00

L=259.85 R=150.00

N16° 44' 13.33"E 54.83

S71° 54' 09.17"E 31.83

-0+78

2+05

1+00

0+00

20+00

524+00 525+00 526+00 527+00 528+00 529+00 530+00

60+00 61+00 62+00 64+00 64+74

TEB PDB

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:

DESIGNED BY:

CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE
20 0 20 40
SCALE IN FEET: 1"=20'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
GENERAL PLAN No. 6

BETA JOB NO. 7394

ISSUE DATE NOVEMBER 2021

SHEET NO. 24 OF 48

11/11/2021 2:59 PM N:\7300S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_009_GEN_DEM.DWG (BETA STB BW.STB)

MATCHLINE TO GENERAL PLAN No. 6

EQUATION STATION
2+00.39 EASTERN ACCESS ROAD=
64+73.97 HARTFORD AVENUE EASTBOUND JUGHANDLE
N: 272,081.9272
E: 321,532.7914

NEW S.H.L. PLAT No. 2998

L=259.85, R=50.00', PC 2+31.5

64+42.1

64+76

3+00

50' WETLAND BUFFER

54/39
THE SHELBURNE GP LLC & LOTDOWN LLC
Book 1919 Page 100

PDB

DRIVEWAY WORK BY SITE CONTRACTOR
APPROVED UNDER PERMIT
APPLICATION NO. 21-0097

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

FUTURE ACCESS EASEMENT TO AP 54, LOT 21
TO BE PROVIDED AT LOCATION TO BE DETERMINED

LIMIT OF CONSTRUCTION
END STA. 33+18.00
AP 54 LOT 21 DRIVEWAY
N: 272,608.2464
E: 321,548.0576

54/34
SITWELL PARK LLC
Book 2482 Page Unknown

33+70

N17° 05' 30.23"W 108.79

7.1.05

33+00

PT 32+61.2

54/21
275 ATWOOD LLC
Book 2324 Page 475000

LOR (TYP.)

L=90.66, R=1015.00

BCP3

ETEAS

14.2.0

LS

TEB

TL3WS
34.2.5

DFP
BCD

7.2.0C

N22° 17' 34.59"W 85.27

PC 31+70.5

PT 31+06.2

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Matthew D. Edmonds

MATCHLINE TO GENERAL PLAN No. 6

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE
20 0 20 40
SCALE IN FEET: 1"=20'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
GENERAL PLAN No. 7

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 25 OF 48

11/1/2021 2:53 PM N:\7300S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_009_GEN_DEM.DWG (BETA STB BW.STB)

MATCHLINE TO BELOW

MATCHLINE TO ABOVE

MATCHLINE TO GENERAL PLAN No. 6

MATCHLINE TO GENERAL PLAN No. 9

LIMIT OF CONSTRUCTION
END STA. 43+56.00
I-295 SB OFF-RAMP
N: 272,485.6098
E: 322,205.9548

I-295S RAMPS

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0216
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

REMOVE AND DISPOSE TRAFFIC SIGNAL SYSTEM

EQUATION STATION
534+31.79 HARTFORD AVENUE=
40+14.56 I-295 SB OFF-RAMP
N: 272,161.9178
E: 322,097.2928

LIMIT OF CONSTRUCTION
END STA. 535+67.00
HARTFORD AVENUE
N: 272,136.6043
E: 322,231.6215

Environmental Management
NOV 12 2021
Office of Water Resources

Hartford Avenue (Route 6)

54/80
SITWELL PARK LLC
Book 1712 Page 400000

S.F.L. PLAT NO. 1443A

RELOCATED VARIABLE MESSAGE SYSTEM (LOCATION TBD)

54/39
THE SHELBURNE CO LLC & LOTJOSA LLC
Book 1919 Page 100

54/38
GREEN MONSTER LLC
Book 1265 Page 140000

54/37
CABRINA REALTY ASSOC
Book 1957 Page 1

S.H.L. PLAT NO. 1443A

FORESTED WETLAND

100' RIVERBANK WETLAND

50' WETLAND BUFFER

GAS TRANSMISSION LINE EASEMENT

METAL SPAN POLE

STREAM

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:

DESIGNED BY:

CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY: BETA www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE: 20 0 20 40 SCALE IN FEET: 1"=20'

UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT: **Highway Safety Improvements to Hartford Avenue (Route 6)**
JOHNSTON, RHODE ISLAND

TITLE: GENERAL PLAN No. 8

BETA JOB NO. 7394

ISSUE DATE NOVEMBER 2021

SHEET NO. 26 OF 48

11/11/2021 1:30 PM N:\7300S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_009_GEN_DEM.DWG (BETA STB BW.STB)

MATCHLINE TO GENERAL PLAN No. 8

Hartford Avenue (Route 6)

EQUATION STATION
540+03.33 HARTFORD AVENUE=
5+00.00 I-295 SB ON-RAMP
N: 271,946.3125
E: 322,626.3557

537+00 538+00 539+00 540+00 541+00 542+00 543+00

PT 537+97.3

100' RIVERBANK WETLAND

BCP1 MM DGC 7.1.2 7.2.1 DGC 7.2.0S BCP2 DGC 7.2.1 BCP1 MM 7.2.0S 7.2.0S CG LS LOR (TYP.) BCP6 BCP7 MM1.5 BCP7 MM1.5 DC

7.1.0S

50' WETLAND BUFFER

NATIONAL GRID ACCESS EASEMENT

DFP BCD

S51° 02' 01.73"E 314.13

6+00 7+00 8+00

PC 8+14.1
L=37.94, R=10000.00

LIMIT OF CONSTRUCTION
END STA. 542+00.00
HARTFORD AVENUE
N: 271,857.0907
E: 322,802.4963

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

FORESTED WETLAND LESS THAN 5 ACRES

STREAM

NO. 1443A

54/36
NARRAGANSETT ELECTRIC CO
Book 78 Page 0

FORESTED WETLAND

MATCHLINE TO BELOW

MATCHLINE TO ABOVE

100' RIVERBANK WETLAND

LS CG LOR (TYP.) BCP6 7.2.0S DC

PT 8+52.1 9+00 10+00 11+00 11+60

S50° 48' 59.11"E 307.93

BCP7 MM1.5

LIMIT OF CONSTRUCTION
END STA. 11+50.00
I-295 SB ON-RAMP
N: 271,536.6189
E: 323,130.9840

STREAM

RIVERBANK WETLAND

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0346
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Environmental Management
NOV 12 2021
Office of Water Resources

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE
20 0 20 40
SCALE IN FEET: 1"=20'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
GENERAL PLAN No. 9

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 27 OF 48

11/11/2021 1:30 PM N:\7300S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGS\FILES\PLANSET\PAPIPAP_009_GEN_DEM.DWG (BETA STB BW.STB)

MATCHLINE TO GENERAL PLAN No. 11

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

I-295 SB

I-295 NB

I-295 NB Off-Ramp

I-295 NB On-Ramp

Hartford Avenue (Route 6)

550+00 551+00 552+00 PC 552+64.2 553+00 PT 553+17.3 554+00 555+00 556+00

LIMIT OF CONSTRUCTION
BEGIN STA. 549+91.00
HARTFORD AVENUE
N: 271,563.2565
E: 323,536.8959

LIMIT OF CONSTRUCTION
BEGIN STA. 11+00.00
I-295 NB ON-RAMP
N: 271,472.5892
E: 324,125.3923

DC 7.2.0S DSW CCM DFP BCP2 BCP1 MM LS CG BCP7 MM1.5 BCP6 7.2.0C DHH

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
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DATED NOV 24 2021 FILE # 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Environmental Management
NOV 12 2021
Office of Water Resources

MATCHLINE TO GENERAL PLAN No. 11

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY: BETA www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE: 20 0 20 40 SCALE IN FEET: 1"=20'

UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT: **Highway Safety Improvements to Hartford Avenue (Route 6)**
JOHNSTON, RHODE ISLAND

TITLE: GENERAL PLAN No. 10

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 28 OF 48

11/11/2021 1:30 PM N:\7300S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_009_GEN_DEM.DWG (BETA STB BW.STB)

11/11/2021 1:30 PM N:\7300S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_009_GEN_DEM.DWG (BETA STB BW.STB)

MATCHLINE TO GENERAL PLAN No. 10

53/281
BAR 1705 LLC
Book 2546 Page 12730000

I-295 NB On-Ramp

Hartford Avenue (Route 6)

BCP1 MM

557+00 558+00 559+00 559+30

LIMIT OF CONSTRUCTION
END STA. 558+37.00
HARTFORD AVENUE
N: 271,248.3437
E: 324,321.9075

BCP1 MM

#115 #114

MATCHLINE TO GENERAL PLAN No. 10

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

I-295 NB Off-Ramp

I-295 NB On-Ramp

14+50 14+00 13+00 12+40.8 PI

7.2 DS DC

LIMIT OF CONSTRUCTION
END STA. 14+18.00
I-295 NB ON-RAMP
N: 271,743.1392
E: 324,298.9161

LS MM1.5 BCP7 BCP6 CG

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 2 4 2021 FILE # 21-0346
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Christian D. Udoma

MATCHLINE TO GENERAL PLAN No. 10

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE
20 0 20 40
SCALE IN FEET: 1"=20'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
GENERAL PLAN No. 11

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 29 OF 48

11/1/2021 3:02 PM N:\7300\ST\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSETPAPI\PAP_011_DU_DEM.DWG (BETA STB BW.STB)

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

54/120
JAMES FARIA
Book 951 Page Unknown

54/10
JAMES FARIA
Book 951 Page Unknown

54/11PLA
DALTON CHAPLIN PARTNERS LLC
Book 2417 Page Unknown

54/103
DALTON CHAPLIN PARTNERS LLC
Book 2417 Page Unknown

54/43
SANDMOOR REALTY LLC
Book 1711 Page Unknown

54/53
PROGRESSIVE CASUALTY INSURANCE COMPANY
Book 1712 Page Unknown

54/97
SANDMOOR REALTY, LLC
Book 1711 Page Unknown

S.H.L. PLAT NO. 305

NEW S.H.L. PLAT NO. 2998

Hartford Avenue (Route 6)

LIMIT OF CONSTRUCTION
BEGIN STA. 499+05.00
HARTFORD AVENUE
N: 271,926.2228
E: 318,676.1400

498+00
499+00
PI 499+05.0
500+00
501+00
PI 501+08.3
502+00
503+00

BARRELS FILLED WITH CONCRETE

DRIVEWAY WORK BY SITE CONTRACTOR (INCLUDED AS PART OF PERMIT APPLICATION NO. 21-0246)

DRIVEWAY WORK BY SITE CONTRACTOR (INCLUDED AS PART OF PERMIT APPLICATION NO. 21-0246)

OHW
W
S
G
ECB
TEB
CFS
ECR

#159
#160-S
#158
#167

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 1

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE
20 0 20 40
SCALE IN FEET: 1"=20'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
DRAINAGE & UTILITY PLAN
No. 1

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 30 OF 48

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 3

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 1

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 4

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

Hartford Avenue (Route 6)

Belfield Drive

Old Belfield Drive

NEW S.H.L. PLAT NO. 2998

S.H.L. PLAT NO. 305

54/12 CASSISI DOMENIC & FRANCESCO Book 2417 Page 181

54/13 A & A REALTY CORP Book 191 Page 0

54/12 HARRY SMITH LOT RI HISTORICAL CEMETERY Book Unknown Page Unknown

54/85 PETER CONTI Book 1682 Page 1

54/42 CASSISI DOMENIC & FRANCESCO TC Book 2008 Page 0

54/141 LC LLC Book 855 Page Unknown

54/141 LC LLC Book 692 Page 390000

13LF–12" RCP S=0.015 FT./FT.

(4') 4.4.0M 6.3.4 7.1.8
STA. 13+05, 14.0' RT.
RIM=359.1
INV. (12" N) OUT=354.70

43LF–12" RCP S=0.005 FT./FT.

4.2.0 6.2.1
STA. 21+88, 1.8' RT.
RIM=358.5
INV. (12" W) IN=354.20
INV. (12" SE) IN=354.80
INV. (12" S) OUT=353.90

3LF–12" RCP S=0.008 FT./FT.

(4') 4.4.0M 6.3.4 7.1.8
STA. 21+73, 9.0' RT.
RIM=359.1
INV. (12" NW) OUT=354.90

RUP

39LF–15" RCP S=0.009 FT./FT.

4.2.0 6.2.0
STA. 510+18, 26.2' LT.
RIM=362.9
INV. (12" S) IN=353.85
INV. (15" W) IN=352.75
INV. (15" NE) OUT=352.65

23LF–15" RCP S=0.049 FT./FT

4.2.0 6.2.1
STA. 509+76, 37.3' LT.
RIM=364.6
INV. (12" N) IN=353.20
INV. (12" SW) IN=353.50
INV. (15" E) OUT=353.10

146LF–12" RCP S=0.005 FT./FT.

(5') (DOUBLE) 4.4.0M 6.3.4 7.1.8
STA. 509+59, 23.1' LT.
RIM=365.3
INV. (12" NE) OUT=353.70

17LF–12" RCP S=0.011 FT./FT.

AT (BY OTHERS)

34LF–12" RCP S=0.009 FT./FT.

6.2.1 DFC
8" HDPE (UNDERDRAIN)

4.2.0 6.2.0
STA. 510+44, 31.6' LT.
RIM=360.7
INV. (15" SW) IN=351.50
INV. (12" SE) IN=356.10
INV. (15" E) OUT=351.27

7LF–12" RCP S=0.015 FT./FT.

(4') 4.4.0M 6.3.4 7.1.8
STA. 510+16, 12.0' RT.
RIM=362.2
INV. (12" N) OUT=354.15

3.4.1 6.2.0 6.3.4 7.1.8
STA. 510+50, 25.7' LT
RIM=360.4
INV. (12" NW) OUT = 356.20

DRIVEWAY WORK BY SITE CONTRACTOR (INCLUDED AS PART OF PERMIT APPLICATION NO. 21–0246)

DRIVEWAY WORK BY SITE CONTRACTOR APPROVED UNDER PERMIT APPLICATION NO. 21–0097

DRIVEWAY WORK BY SITE CONTRACTOR APPROVED UNDER PERMIT APPLICATION NO. 21–0097

LIMIT OF CONSTRUCTION
END STA. 0+05.90
WESTERN ACCESS ROAD
N: 272,083.5720
E: 319,505.3849

APPROVED RIDEM LIMIT OF DISTURBANCE (APPLICATION NO. 21–0097)

WETLAND EDGE VERIFICATION APPLICATION NO. 21–0005

FORESTED WETLAND

50' WETLAND BUFFER

LIMIT OF DISTURBANCE (TYP.)

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

RECEIVED
NOV 12 2021
Office of Water Resources

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

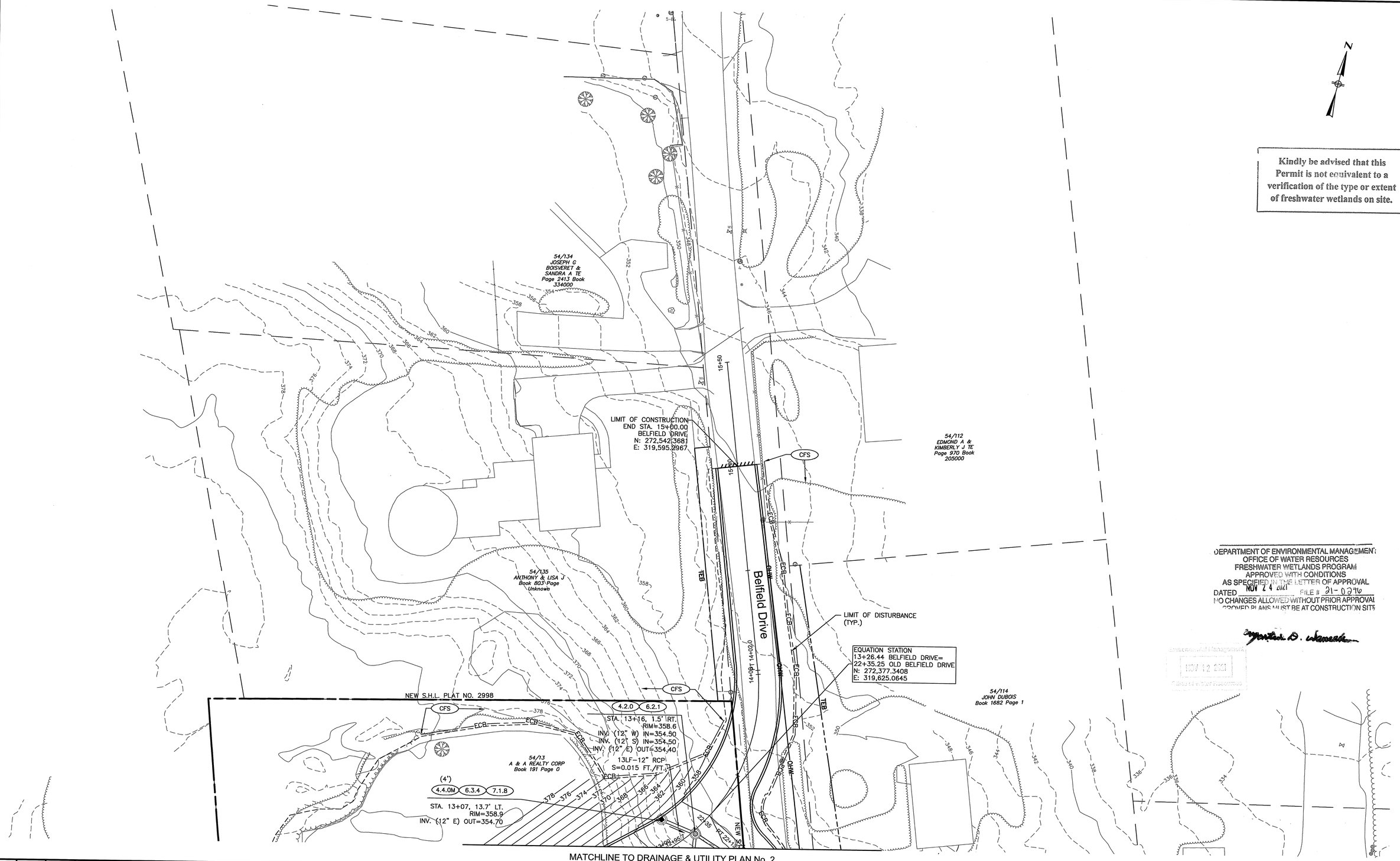
SCALE
20 0 20 40
SCALE IN FEET: 1"=20'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
DRAINAGE & UTILITY PLAN No. 2

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 31 OF 48

11/11/2021 3:04 PM N:\7300\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_011_DU_DEM.DWG (BETA STB BW.STB)



Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0240
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Jonathan D. Womack

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
NOV 12 2021
OFFICE OF WATER RESOURCES

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 2

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY: BETA www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE: 20 0 20 40 — SCALE IN FEET: 1"=20'

UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT: **Highway Safety Improvements to Hartford Avenue (Route 6)**
JOHNSTON, RHODE ISLAND

TITLE: DRAINAGE & UTILITY PLAN No. 3

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 32 OF 48

11/11/2021 1:31 PM N:\7300\87394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_011_DU_DEM.DWG (BETA STB BW.STB)

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 2

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 5

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

N

4.2.0 6.2.0
STA. 511+36, 30.9' LT.
RIM=355.1
INV. (15" W) IN=349.00
INV. (12" SW) IN=351.00
INV. (15" E) OUT=348.90

6LF–12" RCP
S=0.016 FT./FT.

54/85
PETER CONTI
Book 1682 Page 1

3.4.1 6.2.0 6.3.4 7.1.8
STA 511+29, 25.6' LT.
RIM=355.3
INV. (12" NE) OUT=351.10

87LF–15" RCP
S=0.026 FT./FT.

4.2.0 6.2.0
STA. 512+62, 27.9' LT.
RIM=345.5
INV. (12" SE) IN=340.20
INV. (12" S) IN=339.40
INV. (15" W) IN=339.40
INV. (15" E) OUT=338.80

54/20
MICHAEL W SUSI
Book 2113 Page Unknown

122LF–15" RCP
S=0.078 FT./FT.

35LF–12" RCP
S=0.011 FT./FT.

(4') 4.4.0M 6.3.4 7.1.8
STA. 512+67, 23.4' LT.
RIM=344.5
INV. (12" NW) OUT=340.30

3LF–12" RCP
S=0.033 FT./FT.

LIMIT OF DISTURBANCE (TYP.)

147LF–15" RCP
S=0.065 FT./FT.

4.2.0 6.2.1
STA. 514+13, 20.7' LT.
RIM=334.2
INV. (15" W) IN=329.20
INV. (12" NE) IN=329.40
INV. (15" E) OUT=328.00

54/122
TRINITY ASSEMBLY OF GOD INC
Book 161 Page 0

(4') 4.4.0M 6.3.4 7.1.8
STA. 514+19, 25.1' LT.
RIM=333.7
INV. (12" SW) OUT=329.50

3LF–12" RCP
S=0.035 FT./FT.

214LF–15" RCP
S=0.050 FT./FT.

(4') 4.4.0M 6.3.4 7.1.8
STA. 516+24, 25.1' LT.
RIM=323.2
INV. (12" E) OUT=318.90

177LF–15" RCP
S=0.019 FT./FT.

5LF–12" RCP
S=0.022 FT./FT.

LESS THAN 1 ACRE DISTURBED WETLAND

4.2.0 6.2.1
STA. 516+31, 20.0' LT.
RIM=323.1
INV. (15" W) IN=317.30
INV. (12" W) IN=318.80
INV. (15" E) OUT=317.20

PT 516+37.4

Hartford Avenue (Route 6)

S.H.L. PLAT NO. 305

NEW S.H.L. PLAT NO. 2998

(4') 4.4.0M 6.3.4 7.1.8
STA. 512+41, 5.9' RT.
RIM=348.9
INV. (12" N) OUT=339.80

54/41
BEL–AIR MOTOR INN LLC
Book 777 Page 530000

54/87
BEL–AIR MOTOR INN LLC
Book 777 Page 530000

54/88
JEREMY KELL
Book 2548 Page 155000

STONE RETAINING WALL

ROLL-BEAR WALL

SEPTIC TANK COVERS

ISDS

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 2 4 2021 FILE # 21-0314
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE
20 0 20 40
SCALE IN FEET: 1"=20'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
DRAINAGE & UTILITY PLAN
No. 4

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 33 OF 48

11/11/2021 1:32 PM N:\7300S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAPP\AP_011_DU_DEM.DWG (BETA STB BW.STB)

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

APPROXIMATE WETLAND PERIMETER (TO BE FLAGGED)

FLAGGED WETLAND PERIMETER

FORESTED WETLAND

Hartford Avenue (Route 6)

(4') 4.4.0M 6.3.4 7.1.8
STA. 518+07, 25.0' LT.
RIM=318.2
INV. (12" SE) OUT=314.00

177LF–15" RCP
S=0.019 FT./FT.

3LF–12" RCP
S=0.033 FT./FT.

4.2.0 6.2.1
STA. 518+11, 19.4' LT.
RIM=318.2
INV. (12" NW) IN=313.90
INV. (15" W) IN=313.90
INV. (15" E) OUT=313.80

54/21
275 ATWOOD LLC
Book 2324 Page 475000

LIMIT OF DISTURBANCE (TYP.)

19BLF–15" RCP
S=0.034 FT./FT.

16LF–12" RCP
S=0.012 FT./FT.

(4') 4.4.0M 6.3.4 7.1.8
STA. 520+02, 1.0' LT.
RIM=312.1
INV. (12" N) OUT=307.60

4.2.0 6.2.1
STA. 520+12, 18.6' LT.
RIM=311.6
INV. (15" W) IN=307.10
INV. (12" S) IN=307.40
INV. (15" E) OUT=307.00

114LF–15" RCP
S=0.054 FT./FT.

4.2.0 6.2.1
STA. 521+29, 19.1' LT.
RIM=305.3
INV. (15" W) IN=300.80
INV. (15" E) OUT=300.80

(4') 4.4.0M 6.3.4 7.1.8
STA. 522+56, 0.9' LT.
RIM=298.0
INV. (12" N) OUT=292.70

134LF–15" RCP
S=0.072 FT./FT.

18LF–12" RCP
S=0.011 FT./FT.

4.2.0 6.2.1
STA. 522+64, 21.2' LT.
RIM=295.7
INV. (15" W) IN=291.20
INV. (12" S) IN=292.50
INV. (15" E) OUT=291.10

180LF–15" RCP
S=0.058 FT./FT.

54/21
275 ATWOOD LLC
Book 2324 Page 475000

8.4.0
8.3.0M
(SEE DETAIL)

16LF–24" HDPE
S=0.189 FT./FT.

4.2.0 6.2.0
STA. 522+24, 45.0' RT.
RIM=298.3
INV. (24" W) IN=294.00
INV. (24" E) OUT=292.50

35LF–24" HDPE
S=0.128 FT./FT.

4.2.0 6.2.0
STA. 522+64, 44.9' RT.
RIM=295.9
INV. (24" W) IN=288.00
INV. (24" E) OUT=288.00

190LF–24" HDPE
S=0.056 FT./FT.

LIMIT OF DISTURBANCE (TYP.)

54/89
THE SHELBURNE CO LLC &
LOTOJOSA LLC
Book 1919 Page 100

54/81
THOMAS HARPER
Book 395 Page 0

54/90
THE SHELBURNE CO LLC &
LOTOJOSA LLC
Book 1919 Page 100

S.H.L. PLAT NO. 305

NEW S.H.L. PLAT NO. 2998

SCHOOL PLACE (PAVED LIMIT SHOWN)

AS (BY OTHERS)
AT (BY OTHERS)
AG
AW
RMHC
CFS
RUP
TEB
ECB
OHW
12" PVC

518+00 519+00 520+00 521+00 522+00 523+00

PC 518+89.2

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 4

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 6

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 12 2021 FILE # 21-0046
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Environmental Management
NOV 12 2021

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE
20 0 20 40
SCALE IN FEET: 1"=20'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
DRAINAGE & UTILITY PLAN
No. 5

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 34 OF 48

11/1/2021 1:32 PM N:\7300S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_011_DU_DEM.DWG (BETA STB BW.STB)

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 7

MATCHLINE TO GENERAL PLAN No. 6

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 8

Hartford Avenue (Route 6)

LIMIT OF DISTURBANCE (TYP.)

54/21
275 ATWOOD LLC
Book 2324 Page 475000

54/81
SASA & RHONDA MOHAMMAD
Book 1577 Page 155000

54/39
THE SHELBURNE CO LLC &
LOTOJOSA LLC
Book 1919 Page 100

NEW S.H.L. PLAT NO. 2998

S.H.L. PLAT NO. 1443A

16LF–12" RCP S=0.012 FT./FT.
(4') 4.4.0M 6.3.4 7.1.8
STA. 524+38, 0.9' LT. RIM=285.5
INV. (12" NE) OUT=281.10

180LF–15" RCP S=0.058 FT./FT.

4.2.0 6.2.1
STA. 524+46, 19.6' LT. RIM=285.1
INV. (15" W) IN=280.60
INV. (12" SW) IN=280.90
INV. (15" E) OUT=280.50

199LF–15" RCP S=0.059 FT./FT.

19LF–12" RCP S=0.010 FT./FT.
(4') 4.4.0M 6.3.4 7.1.8
STA. 526+42, 3.0' LT. RIM=273.5
INV. (12" NE) OUT=269.00

4.2.0 6.2.1
STA. 526+47, 23.6' LT. RIM=273.3
INV. (12" SW) IN=268.80
INV. (15" W) IN=268.80
INV. (15" E) OUT=268.70

8LF–15" RCP S=0.012 FT./FT.

SEE SAND FILTER O DETAIL

146LF–15" RCP S=0.053 FT./FT.

(4') 4.4.0M 6.3.4 7.1.8
STA. 527+93, 28.9' LT. RIM=266.1
INV. (12" S) OUT=261.90

3LF–12" RCP S=0.067 FT./FT.

4.2.0 6.2.1
STA. 527+96, 23.0' LT. RIM=265.9
INV. (15" W) IN=261.00
INV. (12" N) IN=261.70
INV. (15" E) OUT=260.95

SEE SAND FILTER O DETAIL

(4') 4.4.0 6.3.4 7.1.8
STA. 528+85, 41.1' LT. RIM=257.4
INV. (12" S) OUT=253.50

12LF–12" RCP S=0.008 FT./FT.

ABM 6.2.1 DFG RCBC
STA. 529+85, 25.0' LT. RIM=257.6
INV. (12" N) IN=253.40

PT 528+76.3

PC 530+54.8

4.2.0 6.2.1
STA. 525+86, 46.4' RT. RIM=275.7
INV. (24" W) IN=269.50
INV. (24" SE) OUT=267.20

17LF–24" HDPE S=0.113 FT./FT.

REMOVE AND DISPOSE HEADWALL CAP AND ABANDON PIPE

106LF–24" HDPE S=0.015 FT./FT.

7LF–12" HDPE S=0.015 FT./FT.

3LF–12" HDPE S=0.038 FT./FT.

94LF–24" HDPE S=0.062 FT./FT.

190LF–24" HDPE S=0.056 FT./FT.

(4') 4.4.0 6.3.4 7.1.8
STA. 525+62, 52.8' RT. RIM=276.8
INV. (12" NE) OUT=272.60

4.2.0 6.2.1
STA. 525+65, 46.7' RT. RIM=277.7
INV. (24" W) IN=271.50
INV. (12" SW) IN=272.50
INV. (24" E) OUT=271.40

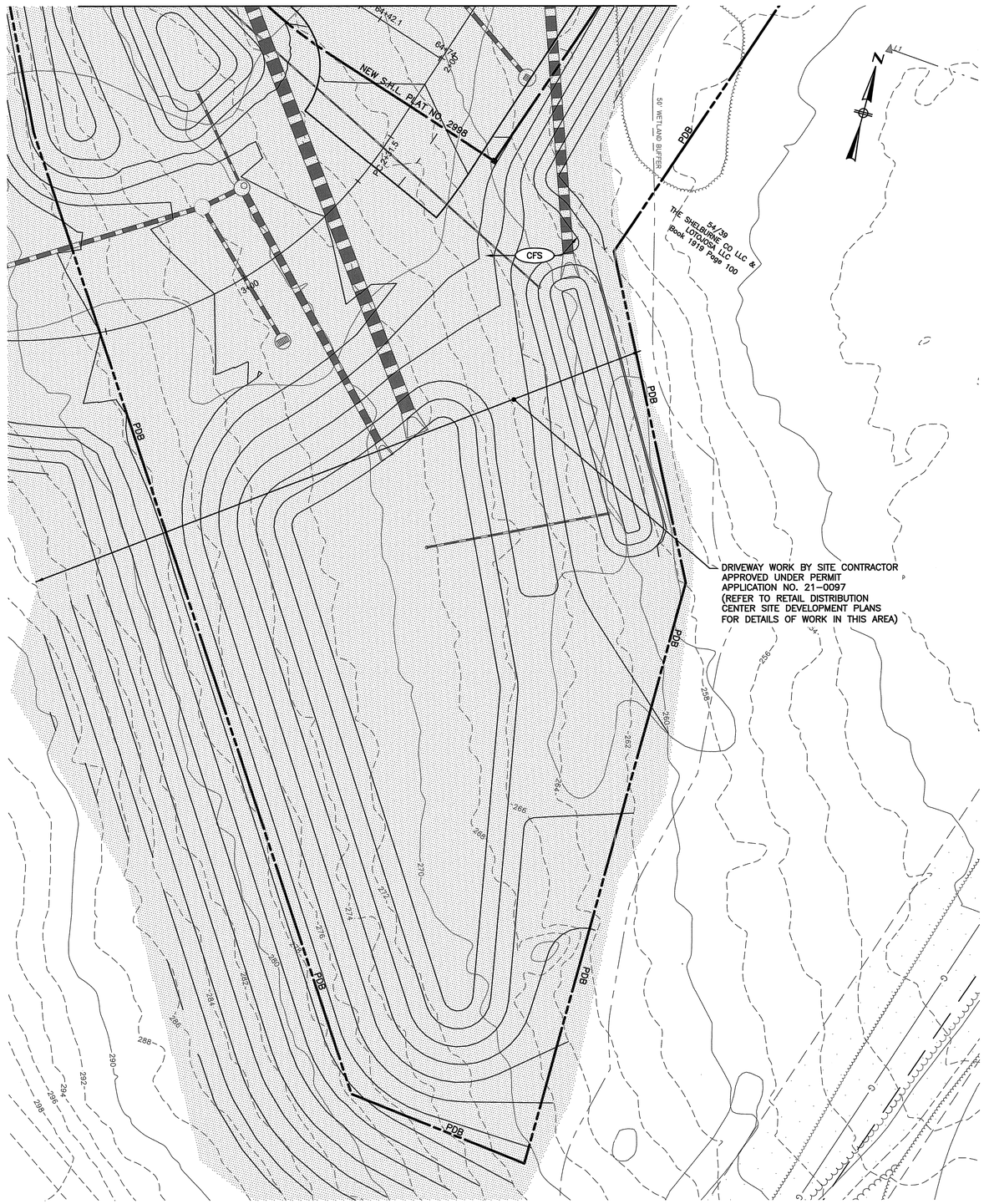
(4') 4.4.0 6.3.4 7.1.8
STA. 524+58, 47.0' RT. RIM=283.3
INV. (12" SE) OUT=279.10

4.2.0 6.2.0
STA. 524+65, 55.0' RT. RIM=282.2
INV. (24" W) IN=279.40
INV. (12" NW) IN=279.00
INV. (24" E) OUT=277.30

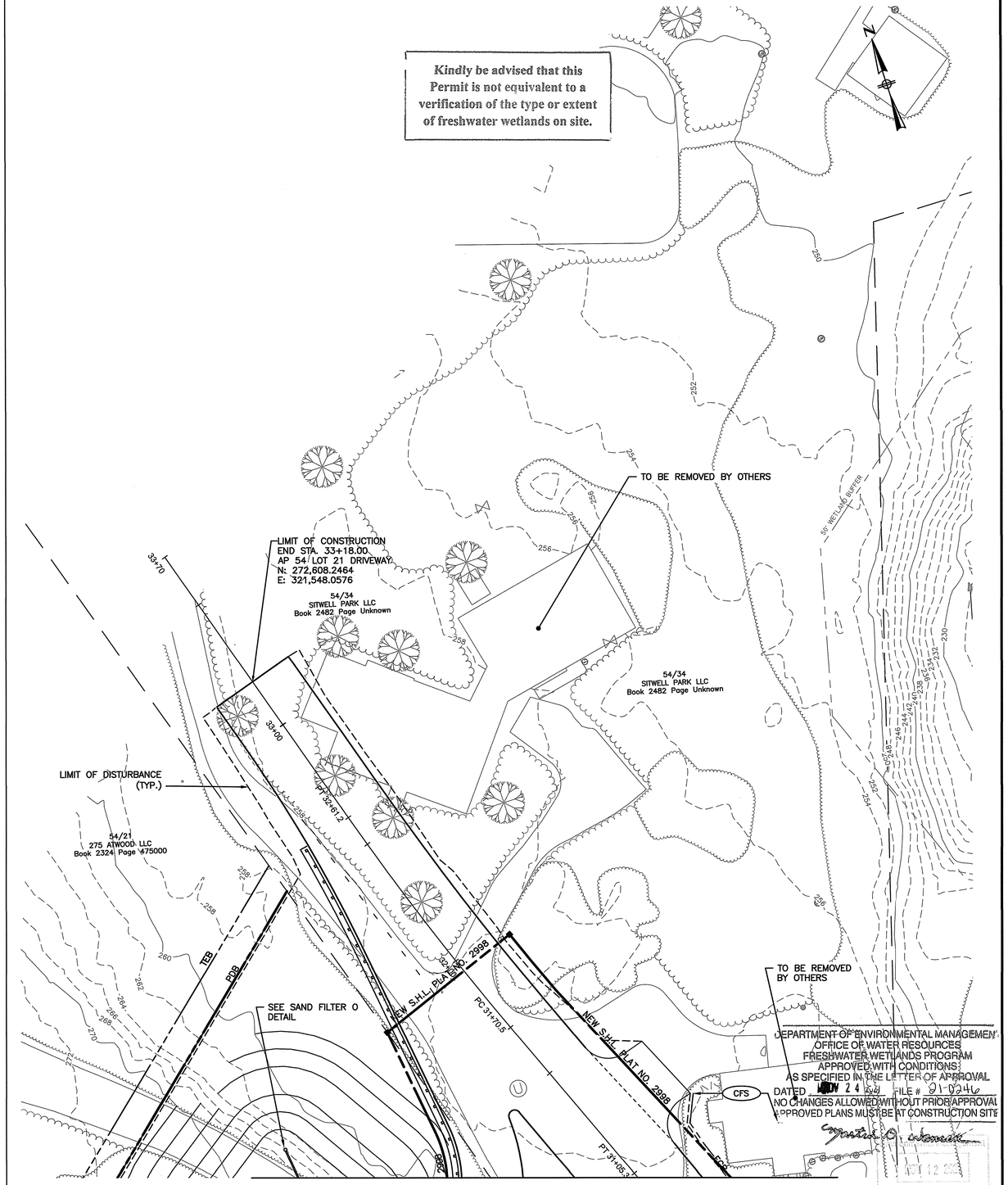
AFC AG AW AS CFS DHH RUP RFH AT (BY OTHERS)

PC 525+21.8 PT 525+42.1 PC 525+74.5 PT 525+93.5 PC 526+43.8 PT 526+62.8 PC 527+43.8 PT 527+62.8 PC 528+43.8 PT 528+62.8 PC 529+43.8 PT 529+62.8 PC 530+43.8 PT 530+62.8 PC 531+43.8 PT 531+62.8 PC 532+43.8 PT 532+62.8 PC 533+43.8 PT 533+62.8 PC 534+43.8 PT 534+62.8 PC 535+43.8 PT 535+62.8 PC

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 6



Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 91-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Signature of Administrator
NOV 12 2021
Office of Water Resources

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 6

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE
20 0 20 40
SCALE IN FEET: 1"=20'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
DRAINAGE & UTILITY PLAN
No. 7

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 36 OF 48

11/1/2021 3:49 PM N:\7300S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_011_DU_DEM.DWG (BETA STB BW.STB)

MATCHLINE TO BELOW

MATCHLINE TO ABOVE

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 6

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 9

FLAGGED WETLAND PERIMETER

LIMIT OF CONSTRUCTION
END STA. 43+56.00
I-295 SB OFF-RAMP
N: 272,485.6098
E: 322,205.9548

LIMIT OF DISTURBANCE (TYP.)

I-295S RAMPS

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 2 4 2021 FILE # 21-0346
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

TO BE REMOVED BY OTHERS

54/80
SITWELL PARK LLC
Book 1712 Page 400000

S.F.L. PLAT NO. 1443A

Hartford Avenue (Route 6)

LIMIT OF CONSTRUCTION
END STA. 535+67.00
HARTFORD AVENUE
N: 272,136.6043
E: 322,231.6215

STA. 532+07, 60.1' RT.
RIM=245.4
N: 272,176.3760
E: 321,865.2407

STA. 534+38, 57.9' RT.
RIM=234.2
N: 272,105.1139
E: 322,084.3720

54/39
THE SHELBURNE CO LLC &
LOTOJOSA LLC
Book 1919 Page 100

54/38
GREEN MONSTER LLC
Book 1265 Page 140000

54/37
CABRINA REALTY ASSOC
Book 1957 Page 1

GAS TRANSMISSION LINE EASEMENT

S.H.L. PLAT NO.

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
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IN ASSOCIATION WITH

SCALE
20 0 20 40
SCALE IN FEET: 1"=20'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
DRAINAGE & UTILITY PLAN
No. 8

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 37 OF 48

11/1/2021 1:33 PM N:\7300S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_011_DU_DEM.DWG (BETA STB BW.STB)

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 8

Hartford Avenue (Route 6)

537+00 538+00 PT 537+97.3 539+00 540+00 541+00 542+00 543+00

100' RIVERBANK WETLAND

8LF–12" RCP
S=0.007 FT./FT.

6LF–12" RCP
S=0.006 FT./FT.

AW

50' WETLAND BUFFER

NATIONAL GRID ACCESS EASEMENT

RFH

CFS

ABM 6.2.1 DFG RCBC

STA. 536+83, 48.9' RT.
RIM=229.8
INV. (12" SW) IN=228.00
N: 272,032.9358
E: 322,317.1633

(4') 4.4.0 6.3.4 7.1.8

STA. 536+76, 56.7' RT.
RIM=229.7
INV. (12" NE) OUT=227.95

54/36
NARRAGANSETT ELECTRIC CO
Book 78 Page 0

FORESTED WETLAND

STREAM

LESS THAN 3' WIDE

STA. 539+87, 51.4' RT.
RIM=227.3
INV. (12" W) IN=225.62
N: 271,919.3307
E: 322,598.2524

(4') 4.4.0 6.3.4 7.1.8

STA. 539+80, 56.5' RT.
RIM=227.3
INV. (12" E) OUT=225.66

LIMIT OF CONSTRUCTION
END STA. 542+00.00
HARTFORD AVENUE
N: 271,857.0907
E: 322,802.4963

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

6+00 7+00 8+00 PC 8+14.1

AB

MATCHLINE TO BELOW

100' RIVERBANK WETLAND

MATCHLINE TO ABOVE

PT 8+52.1 9+00 10+00 11+00 11+60

LIMIT OF CONSTRUCTION
END STA. 11+50.00
I–295 SB ON–RAMP
N: 271,536.6189
E: 323,130.9840

STREAM

RIVERBANK WETLAND

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Martin D. Wencek

Environmental Management
NOV 12 2021
Office of Water Resources

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY: BETA www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE: 20 0 20 40 SCALE IN FEET: 1"=20'

UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT: **Highway Safety Improvements to Hartford Avenue (Route 6)**
JOHNSTON, RHODE ISLAND

TITLE: DRAINAGE & UTILITY PLAN No. 9

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 38 OF 48

11/11/2021 1:33 PM N:\7390\SV\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_011_DU_DEM.DWG (BETA STB BW.STB)

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 11

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

I-295 NB Off-Ramp

I-295 NB On-Ramp

LIMIT OF CONSTRUCTION
BEGIN STA. 11+00.00
I-295 NB ON-RAMP
N: 271,472.5892
E: 324,125.3923

Hartford Avenue (Route 6)

550+00 551+00 552+00 PC 552+64.2 553+00 PT 553+17.3 554+00 555+00 556+00

10+00 11+00 12+00

AE AB

LIMIT OF CONSTRUCTION
BEGIN STA. 549+91.00
HARTFORD AVENUE
N: 271,563.2565
E: 323,536.8959

OHW #120 #119 #118 #116.50

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Environmental Management
NOV 12 2021
Office of Water Resources

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 11

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE
20 0 20 40
SCALE IN FEET: 1"=20'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
DRAINAGE & UTILITY PLAN
No. 10

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 39 OF 48

11/11/2021 1:33 PM N:\7300S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGS\FILES\PLANSET\PAP\PAP_011_DU_DEM.DWG (BETA STB BW.STB)

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 10

53/281
BAR 1705 LLC
Book 2546 Page 12730000

Hartford Avenue (Route 6A)

AB

AT
(BY OTHERS)

LIMIT OF CONSTRUCTION
END STA. 557+16.00
HARTFORD AVENUE
N: 271,336.4623
E: 324,227.0686

557+00 558+00 559+00 559+30

LIMIT OF CONSTRUCTION
END STA. 558+37.00
HARTFORD AVENUE
N: 271,248.3437
E: 324,321.9075

AB

AT
(BY OTHERS)

#115 #114

180 180 180

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 10

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

LIMIT OF CONSTRUCTION
END STA. 14+18.00
I-295 NB ON-RAMP
N: 271,743.1353
E: 324,298.9240

14+50 14+00 13+00

I-295 NORTHBOUND ON-RAMP

PI 12+40.8

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED 12/14/21 FILE # 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Department of Environmental Management
DEC 12 2021
Received

MATCHLINE TO DRAINAGE & UTILITY PLAN No. 10

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE
20 0 20 40
SCALE IN FEET: 1"=20'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

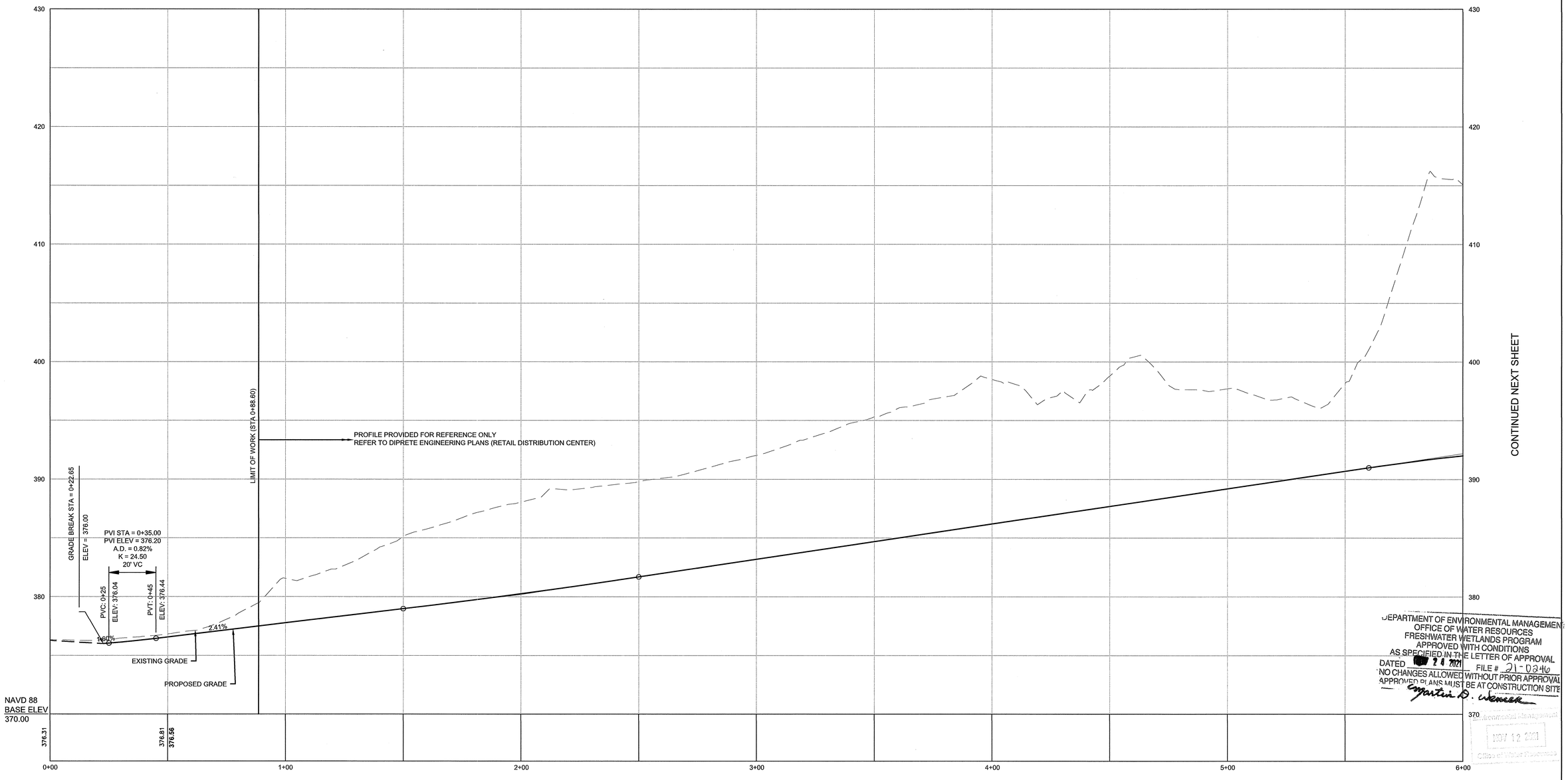
TITLE
DRAINAGE & UTILITY PLAN
No. 11

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 40 OF 48

11/11/2021 1:34 PM N:\7300\ST7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_011_DU_DEM.DWG (BETA STB BW.STB)

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

WESTERN RETAIL DISTRIBUTION CENTER ACCESS ROAD



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED 12 2021 FILE # 21-0340
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Martin D. Wencek

Environmental Management
NOV 12 2021
Office of Water Resources

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE
HOR. SCALE IN FEET: 1"=20'
20 0 20 40
4 0 4 8
VER. SCALE IN FEET: 1"=4'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

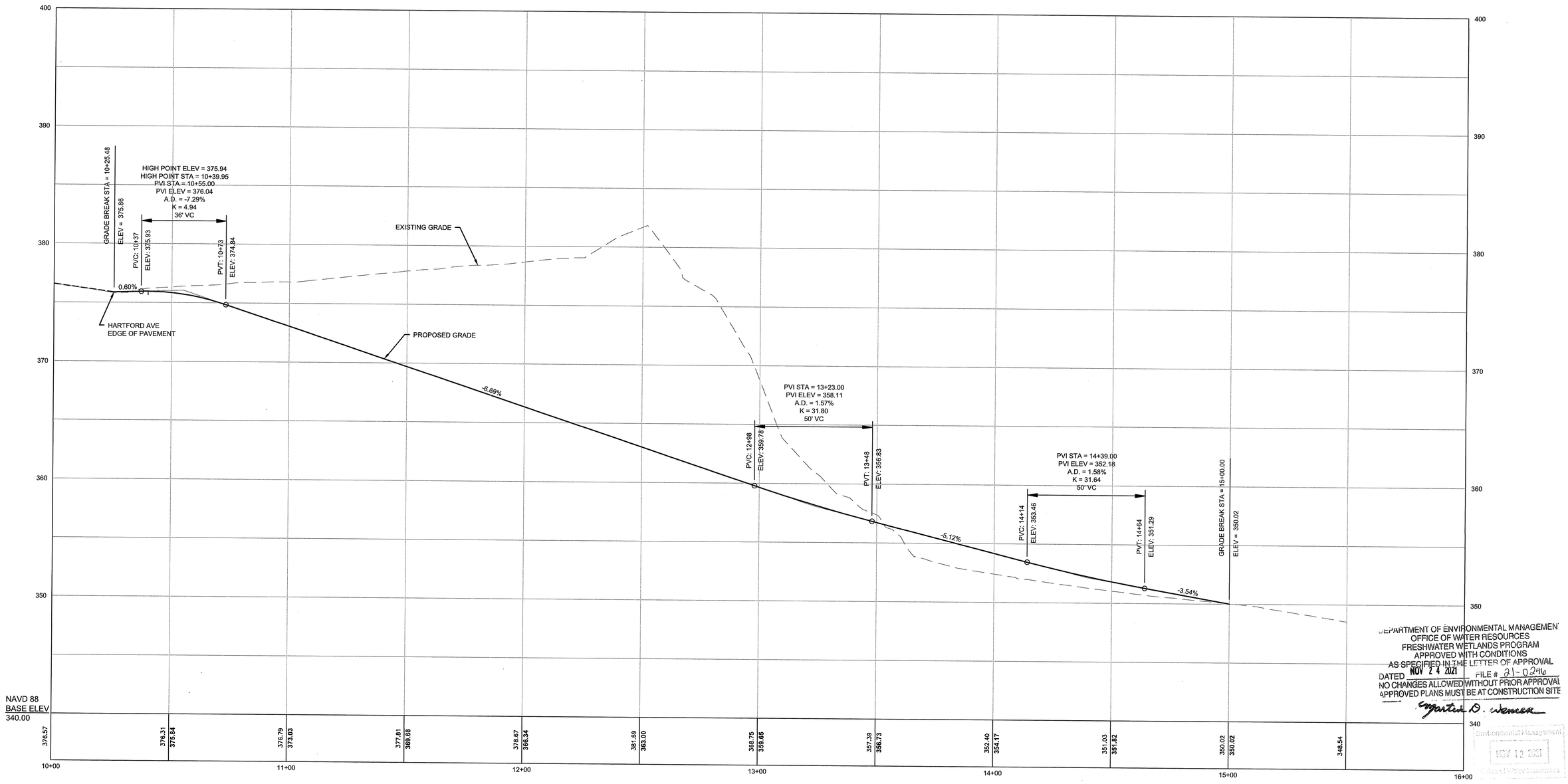
TITLE
PROFILES No. 1

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 41 OF 48

11/11/2021 1:36 PM N:\7300\57394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_X_PROFILES.DWG (BETA STB BW.STB)

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

REALIGNED BELFIELD DRIVE



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Martin D. Wencek

Environmental Management
NOV 12 2021
Office of Water Resources

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY
BETA
www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE
HOR. SCALE IN FEET: 1"=20'
20 0 20 40
4 0 4 8
VER. SCALE IN FEET: 1"=4'
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

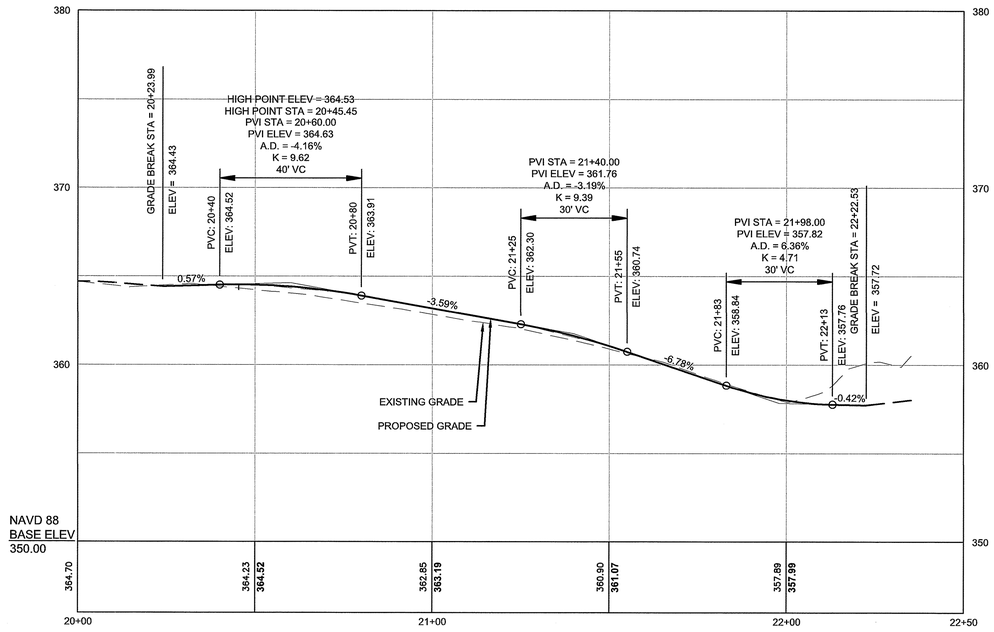
PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
PROFILES No. 2

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 42 OF 48

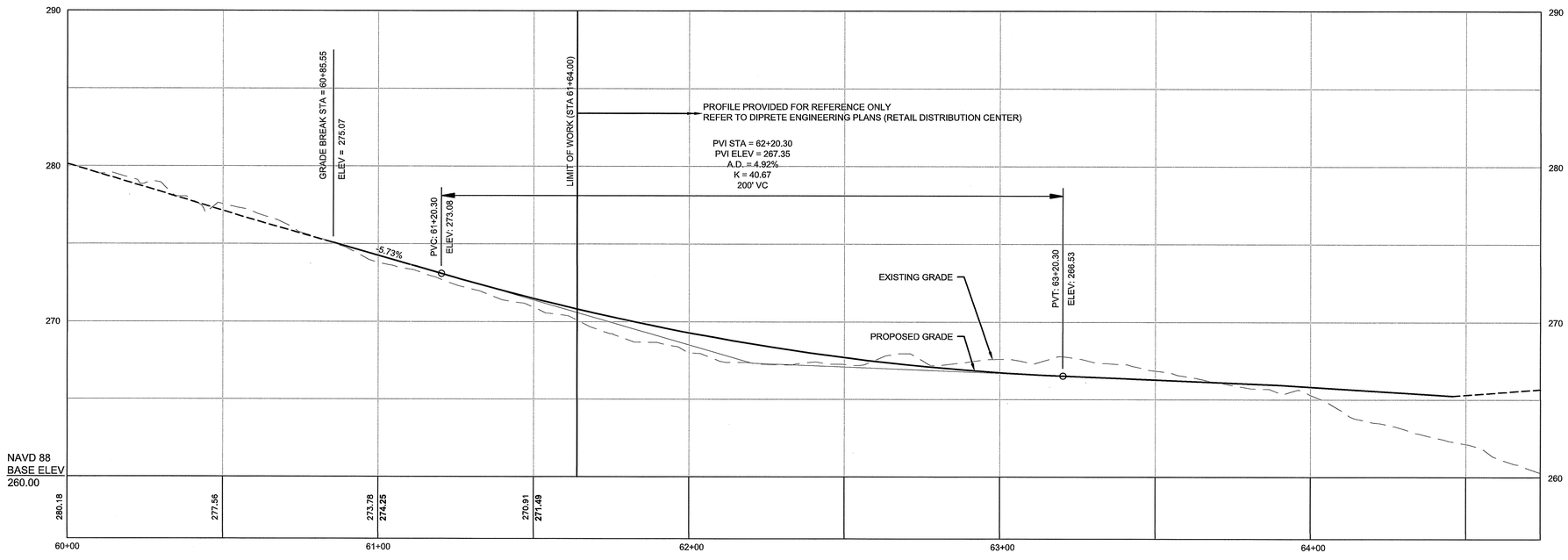
11/1/2021 1:36 PM N:\7300\ST394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_X_PROFILES.DWG (BETA STB BW.STB)

OLD BELFIELD DRIVE



Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

HARTFORD AVENUE EASTBOUND JUGHANDLE



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Gregory D. Wilcox

NOV 12 2021
Office of Water Resources

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY: BETA www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE
HOR. SCALE IN FEET: 1"=20'
20 0 20 40
VER. SCALE IN FEET: 1"=4'
4 0 4 8
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

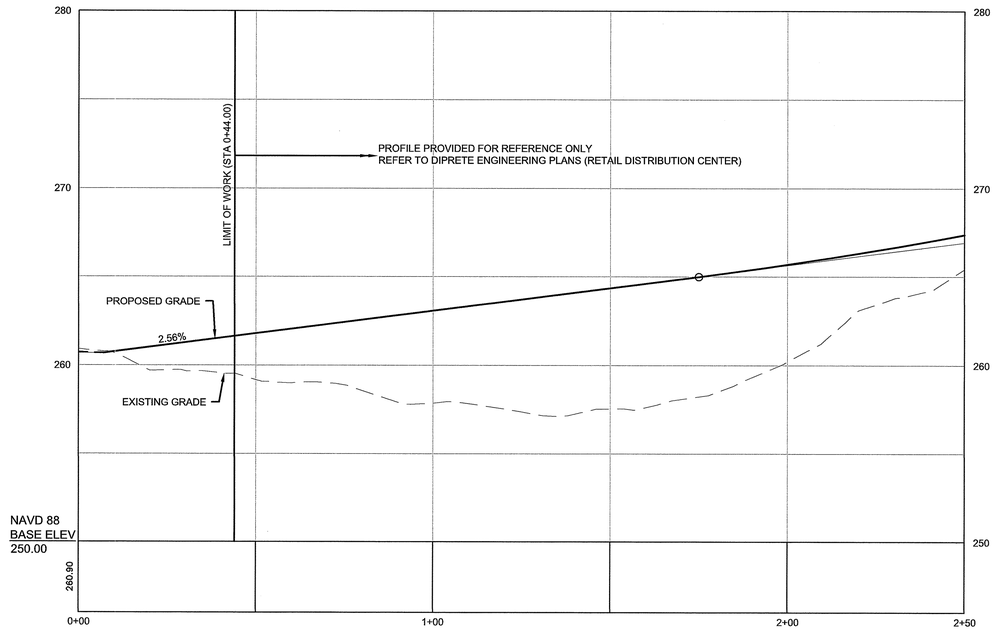
PROJECT
Highway Safety Improvements to Hartford Avenue (Route 6)
JOHNSTON, RHODE ISLAND

TITLE
PROFILES No. 3

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 43 OF 48

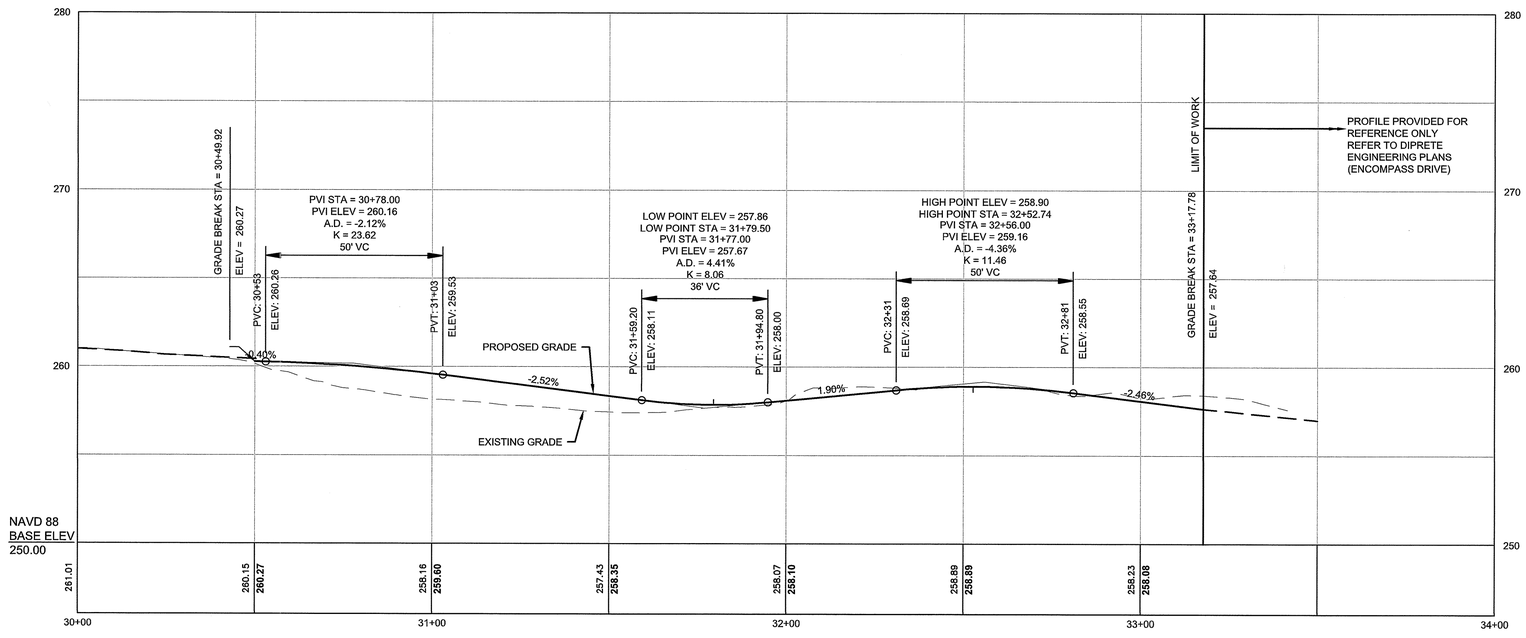
11/11/2021 1:37 PM N:\7300\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_X_PROFILES.DWG (BETA STB BW.STB)

EASTERN RETAIL DISTRIBUTION CENTER ACCESS ROAD



Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

AP 54 LOT 34 DRIVEWAY



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 2 4 2021 FILE # 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Department of Environmental Management
NOV 12 2021
Office of Water Resources

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY: BETA www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE: HOR. SCALE IN FEET: 1"=20' (20 0 20 40); VER. SCALE IN FEET: 1"=4' (4 0 4 8)

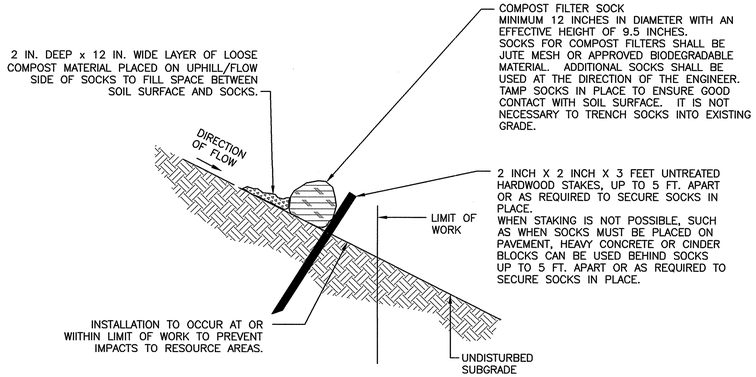
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT: **Highway Safety Improvements to Hartford Avenue (Route 6)**
JOHNSTON, RHODE ISLAND

TITLE: PROFILES No. 4

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 44 OF 48

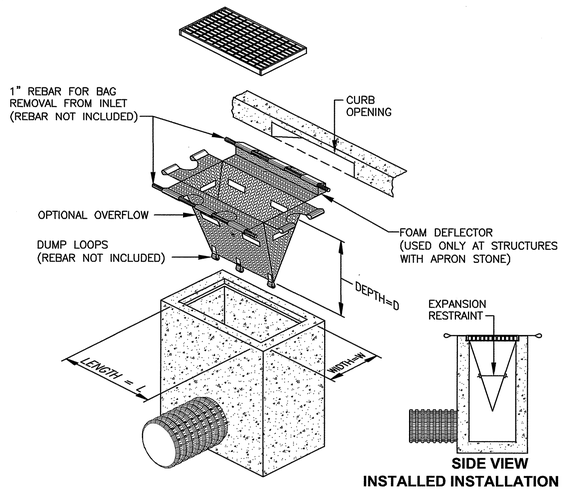
11/1/2021 1:37 PM N:\7300\ST\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSET\PAP\PAP_X_PROFILES.DWG (BETA STB BW.STB)



NOTES:

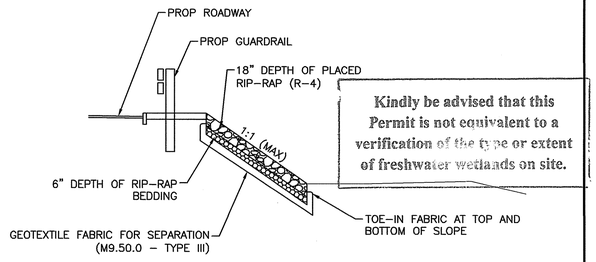
1. PROVIDE A MINIMUM SOCK DIAMETER OF 12 INCHES FOR SLOPES UP TO 50 FEET IN LENGTH WITH A SLOPE RATIO OF 3H:1V OR STEEPER. LONGER SLOPES OF 3H:1V MAY REQUIRE LARGER SOCK DIAMETER OR ADDITIONAL COURSING OF FILTER SOCKS TO CREATE A FILTER BERM. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SITUATIONS WITH LONGER OR STEEPER SLOPES.
2. INSTALL SOCKS ALONG CONTOURS AND PERPENDICULAR TO SHEET OR CONCENTRATED FLOW.
3. DO NOT INSTALL IN PERENNIAL, EPHEMERAL OR INTERMITTENT STREAMS.
4. CONFIGURE SOCKS AROUND EXISTING SITE FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORMWATER RUN-OFF.

COMPOST FILTER SOCK (CFS)
NOT TO SCALE



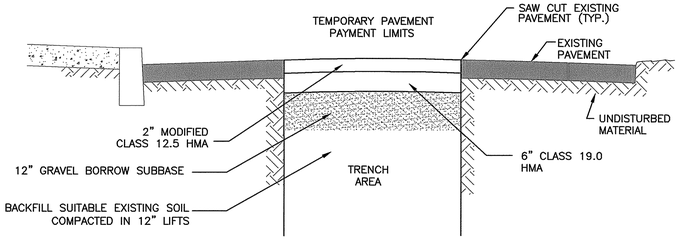
INSTALLED INSTALLATION DETAIL

INLET SEDIMENT CONTROL DEVICE (WITH OPTIONAL CURB DEFLECTOR) (ISCD)
NOT TO SCALE



Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

RIP RAP SLOPE
NOT TO SCALE



TEMPORARY PAVEMENT
NOT TO SCALE

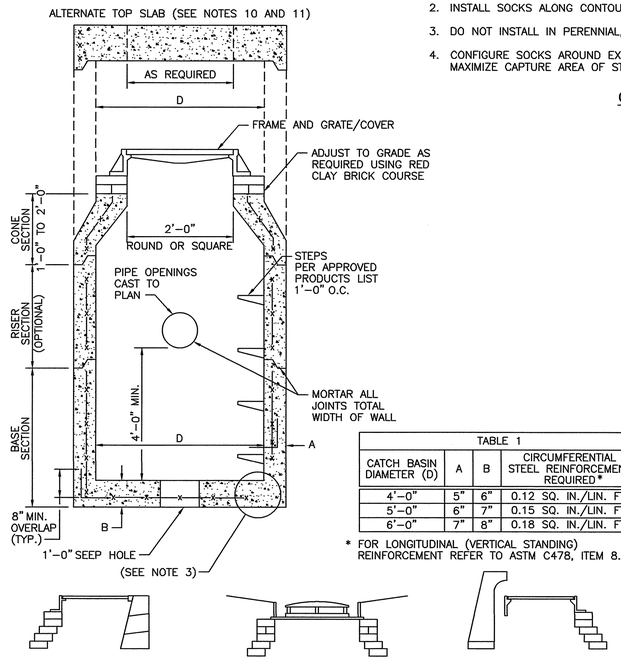


TABLE 1			
CATCH BASIN DIAMETER (D)	A	B	CIRCUMFERENTIAL STEEL REINFORCEMENT REQUIRED *
4'-0"	5"	6"	0.12 SQ. IN./LIN. FT.
5'-0"	6"	7"	0.15 SQ. IN./LIN. FT.
6'-0"	7"	8"	0.18 SQ. IN./LIN. FT.

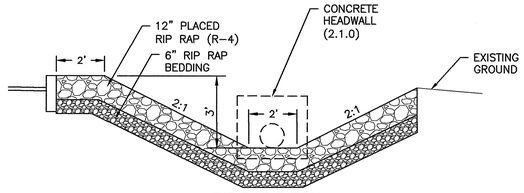
* FOR LONGITUDINAL (VERTICAL STANDING) REINFORCEMENT REFER TO ASTM C478, ITEM 8.1.2

TYPE CATCH BASIN AS REQUIRED

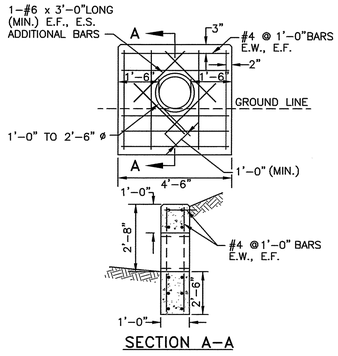
NOTES:

1. SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.
2. SEE TABLE 1 FOR STEEL REINFORCEMENT REQUIREMENTS.
3. STEEL REINFORCEMENT FOR BASE SECTION BOTTOM SHALL BE A MINIMUM OF 0.12 SQ. IN./LIN. FT. (BOTH WAYS).
4. STEPS SHALL CONFORM TO STD. 5.3.0 AND SHALL BE INSTALLED AT THE CASTING PLANT.
5. ONE POUR MONOLITHIC BASE SECTION.
6. ANY NECESSARY ADJUSTMENTS DURING CONSTRUCTION WILL BE DONE BY SAW-CUTTING AND/OR CORING ONLY. NO JACKHAMMERS, HAMMERS AND CHISELS OR PNEUMATIC TOOLS WILL BE ALLOWED.
7. CORBEL MADE OF RED CLAY BRICK WILL BE PERMITTED FOR THE "CONE SECTION" OF THE 4'-0"CATCH BASIN ONLY.
8. FOR CATCH BASIN TYPES "D" AND "F" STEPS MUST BE INSTALLED ON THE CURB SIDE OF THE STRUCTURE.
9. THE CENTERLINE OF THE OPENING MUST BE WITHIN 2'-0" FROM THE STEPS.
10. ALTERNATE TOP SLAB IS STEEL REINFORCED TO MEET OR EXCEED H-25 LOADING (SEE STD. 4.7.2).
11. ALTERNATE TOP SLAB IS ONLY FOR USE WHEN REDUCING SECTION DOES NOT FIT BECAUSE OF STRUCTURE DEPTH.
12. REFER TO STD. 5.2.0 FOR MAXIMUM PIPE SIZES.
13. PROVIDE A MINIMUM OF 12 INCHES OF COMPACTED GRAVEL BORROW AROUND THE STRUCTURE.

PRECAST DEEP SUMP 4'-0", 5'-0", OR 6'-0" ROUND CATCH BASIN (4.4.0M)
NOT TO SCALE



RIP RAP DITCH
NOT TO SCALE

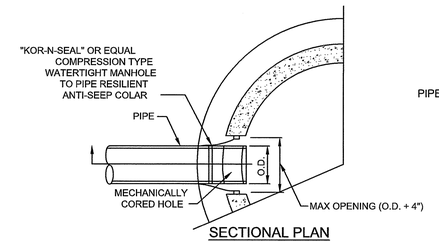


SECTION A-A

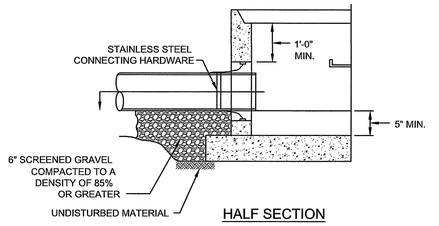
NOTES:

1. SHALL BE IN ACCORDANCE WITH SECTION 709 OF THE R.I. STANDARD SPECIFICATIONS.
2. 3/4" CHAMFER ON ALL EXPOSED EDGES.
3. 1'-0" COMPACTED GRAVEL UNDER HEADWALL.
4. ALL REINFORCING BARS SHALL BE EPOXY COATED.

CONCRETE HEADWALLS FOR PIPE CULVERTS (R.I. STANDARD 2.1.0)
NOT TO SCALE

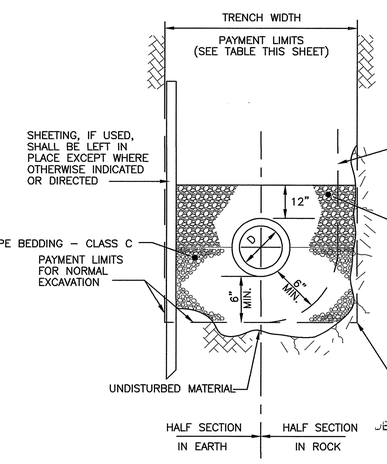


SECTIONAL PLAN



HALF SECTION

CORED HOLE AND ANTI-SEEP COLAR FOR CONNECTING PIPES TO EXISTING MANHOLES
NOT TO SCALE



DRAIN TRENCH SECTION

MAXIMUM PAYMENT LIMITS			
DIAMETER OF PIPE D IN INCHES	TRENCH WIDTH IN FEET	TEMPORARY PAVEMENT IN FEET, TRENCH DEPTH	
		< OR = 10'	> 10'
12 AND SMALLER	6.00	7.00	8.00
15	6.25	7.25	8.25
18	6.50	7.50	8.50
21	6.75	7.75	8.75
24	7.00	8.00	9.00
27	7.25	8.25	9.25
30	7.50	8.50	9.50
36	8.00	9.00	10.00
42	8.50	9.50	10.50
48	9.00	10.00	11.00
54	9.50	10.50	11.50

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Christina D. Scheck
Environmental Management
NOV 12 2021
Office of Water Resources

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

REGISTERED PROFESSIONAL

PREPARED BY: BETA www.BETA-Inc.com

IN ASSOCIATION WITH

SCALE: AS SHOWN
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

PROJECT: **Highway Safety Improvements to Hartford Avenue (Route 6)**
JOHNSTON, RHODE ISLAND

TITLE: DETAILS No. 2

BETA JOB NO. 7394
ISSUE DATE NOVEMBER 2021
SHEET NO. 45 OF 48

11/11/2021 1:42 PM N:\7300S\7394 - PROJECT SCHOONER DISTRIBUTION CENTER - ROUTE 6\DRAWINGFILES\PLANSETPAP\PAP_014_DETAILS.DWG (BETA STB BW.STB)

SOIL EROSION AND SEDIMENTATION CONTROL NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL EROSION AND SEDIMENT CONTROL ON SITE WHICH MUST BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE APPLICABLE REGULATIONS AND AUTHORITY HAVING JURISDICTION. THE CONTRACTOR IS TO NOTIFY THE DESIGN ENGINEER, THE DIRECTOR OF PUBLIC WORKS, THE TOWN ENGINEER, THE RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, AND RHODE ISLAND DEPARTMENT OF TRANSPORTATION AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
2. ALL EROSION CONTROL MUST BE INSTALLED PER THE LATEST EDITION OF THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL (RISESC) HANDBOOK AND SOIL EROSION & SEDIMENT CONTROL PLAN(S). NOTE THE SOIL EROSION AND SEDIMENT CONTROL SHOWN ON THESE PLANS ARE THE MINIMUM QUANTITY/TYPE OF EROSION CONTROL DEVICES AND MATERIALS DEEMED REQUIRED BY DIPRETE ENGINEERING TO MEET THE OBJECTIVES OF THE RISESC HANDBOOK, BUT IS CONSIDERED A GUIDE ONLY. ADDITIONAL MEASURES/ALTERNATE CONFIGURATIONS MAY BE REQUIRED IN ORDER TO MEET THE RISESC HANDBOOK BASED ON FACTORS INCLUDING (BUT NOT LIMITED TO) SITE PARAMETERS, WEATHER, INSPECTIONS AND UNIQUE FEATURES. THE SESC WILL CONTINUE TO EVOLVE THROUGHOUT CONSTRUCTION/PHASES. PURSUANT TO NOTE 1 ABOVE, SESC REMAINS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL THE SITE IS FULLY STABILIZED AND/OR SESC RESPONSIBILITIES ARE ASSUMED BY THE OWNER IN WRITING.
3. INLET PROTECTION MUST BE INSTALLED ON ALL CATCH BASINS ONCE CONSTRUCTED.
4. FOR SEQUENCE OF CONSTRUCTION, PROJECT PHASING AND CONSTRUCTION PHASING, SEE SESC PLAN PREPARED BY DIPRETE ENGINEERING.
5. CONTRACTOR MAY MODIFY SEQUENCE OF CONSTRUCTION WITH APPROVAL FROM DESIGN ENGINEER AND OWNER.
6. IF CONCRETE TRUCKS ARE WASHED OUT ON SITE, ALL WASHOUT MUST BE PERFORMED IN THE DESIGNATED CONCRETE WASHOUT AREA.
7. SESC SHOWN ON THIS PLAN REFLECTS THE INITIAL PHASE OF CONSTRUCTION. CONTRACTOR CAN MODIFY WITH APPROVAL OF DESIGN ENGINEER. AS CONSTRUCTION PROGRESSES, SESC MEASURES WILL NEED TO BE MODIFIED BASED ON SITE CONDITIONS, STABILIZED AREAS AND CURRENT CONSTRUCTION PHASE. REVISIONS TO THIS PLAN AND FUTURE PHASES MUST BE DOCUMENTED ONSITE IN THE SESC PLAN.
8. SEE SESC PLAN SUBMITTED UNDER RIDEM APPLICATION NUMBER 21-0097 FOR POND COMPLEXES G AND H

SOIL EROSION CONTROL LEGEND

- EROSION CONTROL (COMPOST SOCK, SILT FENCE (RI STD 9.2.0, OR APPROVED EQUAL)
- CLASS C SILT FENCE
- INLET SEDIMENT CONTROL
- LIMIT OF DISTURBANCE (NO SEDIMENT CONTROL)
- FINAL CONTOUR GRADE (305)
- CONSTRUCTION ENTRANCE (RIDOT STD 9.9.0)
- INFILTRATING AREA (TO BE PROTECTED BY COMPOST SOCK OR SILT FENCE)

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

HARTFORD AVENUE
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)(RIHP NO.305)

CONSTRUCTION STAGING, STOCKPILE AREAS AND CONCRETE WASHOUT AREAS TO BE DETERMINED BY CONTRACTOR PRIOR TO CONSTRUCTION. SILT SOCKS TO BE PLACED AROUND OUTER LIMIT OF AREA. SITE CONTRACTOR TO MODIFY STOCKPILE AND STAGING AREAS AS NEEDED DURING CONSTRUCTION UPON APPROVAL BY CIVIL ENGINEER

CEMETERY JN074

SEE RIDEM APPLICATION NUMBER 21-0097

See Below

See Above

CONSTRUCTION STAGING, STOCKPILE AREAS AND CONCRETE WASHOUT AREAS TO BE DETERMINED BY CONTRACTOR PRIOR TO CONSTRUCTION. SILT SOCKS TO BE PLACED AROUND OUTER LIMIT OF AREA. SITE CONTRACTOR TO MODIFY STOCKPILE AND STAGING AREAS AS NEEDED DURING CONSTRUCTION UPON APPROVAL BY CIVIL ENGINEER

INTERSTATE-295

SCALE: 1"=80'
0 40' 80' 160'

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
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NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Martin D. Vanecek

RECEIVED
NOV 22 2021
Office of Water Resources

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

BRIAN C. GIROUX
No. 9341
REGISTERED PROFESSIONAL ENGINEER
CIVIL
10/18/2021

THIS PLAN SET MUST NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS IT BEARS THE ORIGINAL SIGNATURE AND SEAL OF A REGISTERED PROFESSIONAL ENGINEER OF DIPRETE

DIPRETE ENGINEERING ONLY WARRANTS PLANS ON A DIPRETE ENGINEERING TITLE BLOCK STAMPED BY REGISTERED ENGINEER. DIPRETE ENGINEERING ASSUMES NO RESPONSIBILITY FOR ANY OTHER PARTY-ENGINEERING DOES NOT WARRANT PLANS BY ANY OTHER PARTY.

THE CONTRACTOR IS RESPONSIBLE FOR ALL OF THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND SAFETY CONFORMANCE IN THE IMPLEMENTATION OF THIS PLAN AND DESIGN.

THE UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. DIPRETE ENGINEERING ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED DUE TO LOCATIONS OF EXISTING UTILITIES

NO.	DATE	DESCRIPTION	BY:
1	10/18/2021	RIDEM HARTFORD AVE - RETC	K.E.D.
0	08/31/2021	RIDEM AND RIDOT HARTFORD AVE	K.E.D.

DRAWN BY: S.R. | DESIGN BY: K.E.D.

SOIL EROSION & SEDIMENT CONTROL PLAN

HIGHWAY SAFETY IMPROVEMENTS TO HARTFORD AVENUE (ROUTE 6)
HARTFORD AVENUE
JOHNSTON, RI

PREPARED FOR:
RHODE ISLAND DEPARTMENT OF TRANSPORTATION
380 WESTMINSTER STREET, SUITE 601
PROVIDENCE, RI 02903-3239

SHEET 46 OF 48

DE JOB NO. 3395-029 COPYRIGHT 2021 BY DIPRETE ENGINEERING ASSOCIATES, INC.

Z:\JOBS\NINPROJECTS\3395-029 HARTFORD AVENUE\AUTOCAD DRAWINGS\3395-029-SESC-DEFSITE.DWG PLOTTED: 10/18/2021

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 27 2024 FILE # 21-0246
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

NOV 12 2024
Office of Water Resources

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

BRIAN C. GIROUX
No. 19610341
REGISTERED PROFESSIONAL ENGINEER
CIVIL
10/18/2021

THIS PLAN SET IS NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS STAMPED "APPROVED FOR CONSTRUCTION" AND SIGNED BY A REGISTERED PROFESSIONAL ENGINEER OF DIPRETE ENGINEERING.

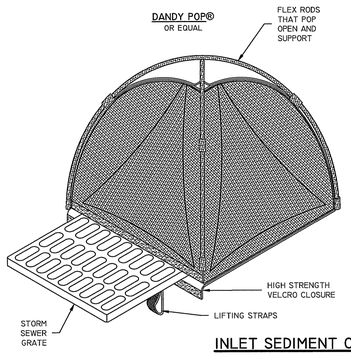
DIPRETE ENGINEERING ONLY WARRANTS PLANS ON A DIPRETE ENGINEERING TITLE BLOCK STAMPED BY REGISTERED PROFESSIONAL ENGINEER OF DIPRETE ENGINEERING. DIPRETE ENGINEERING DOES NOT WARRANT PLANS BY ANY OTHER PARTY.

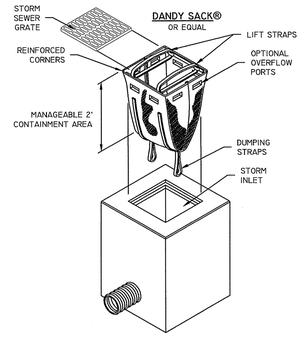
THE CONTRACTOR IS RESPONSIBLE FOR ALL MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT DOCUMENTS, AND FOR ENSURING THAT SUCH PORTIONS ARE IN CONFORMANCE IN THE IMPLEMENTATION OF THIS PLAN AND DESIGN.

ALL UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. DIPRETE ENGINEERING ASSUMES NO RESPONSIBILITY FOR THE EXACT LOCATIONS OF EXISTING UTILITIES

NO.	DATE	DESCRIPTION	BY:
1	10/18/2021	RIDEM HARTFORD AVE - SESC	K.E.D.
0	08/31/2021	RIDEM AND RIDOT HARTFORD AVE	K.E.D.

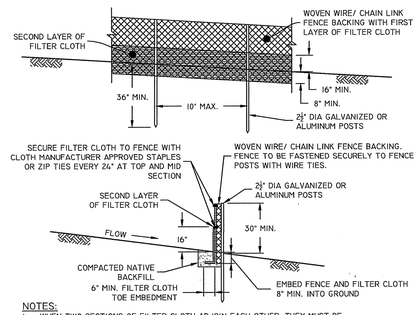
DESIGN BY: K.E.D.
DRAWN BY: S.R.





INLET SEDIMENT CONTROL DEVICES

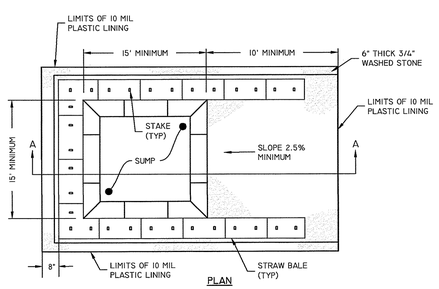
NOT TO SCALE



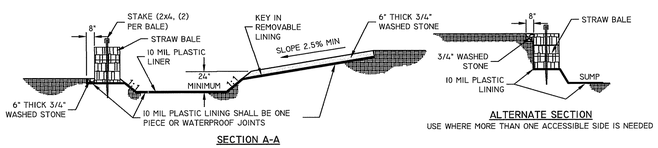
NOTES:
1. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY MUST BE OVERLAPPED BY A MINIMUM OF 6" AND FOLDED.
2. FILTER CLOTH TO BE MIRAFI 100 OR APPROVED EQUAL

Class C Silt Fence

NOT TO SCALE



PLAN



SECTION A-A

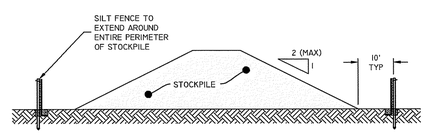
ALTERNATE SECTION
USE WHERE MORE THAN ONE ACCESSIBLE SIDE IS NEEDED

WASHOUT SIGN

NOTES:
1. PIT IS SPECIFICALLY DESIGNATED, DIKED AND IMPERVIOUS CONTAINMENT TO PREVENT CONTACT BETWEEN CONCRETE WASH AND STORMWATER.
2. WASH WATER SHALL NOT BE ALLOWED TO FLOW TO SURFACE WATER.
3. FACILITY MUST HOLD SUFFICIENT VOLUME TO CONTAIN CONCRETE WASTE WITH A MINIMUM FREEBOARD OF 12."
4. FACILITY SHALL NOT BE FILLED BEYOND 95% CAPACITY UNLESS A NEW FACILITY IS CONSTRUCTED.
5. SAWCUT PORTLAND CEMENT CONCRETE, RESIDUE FROM SAWCUT AND GRINDING TO BE DISPOSED OF IN THE PIT.
6. CONCRETE WASHOUTS SHALL BE LOCATED A MINIMUM OF 100' FROM DRAINAGE WAYS, INLETS, AND SURFACE WATERS.
7. MANUFACTURED CONCRETE WASHOUT DEVICES MAY BE USED IF REMOVED FROM THE SITE WHEN 95% FULL CAPACITY.

CONCRETE WASHOUT AREA

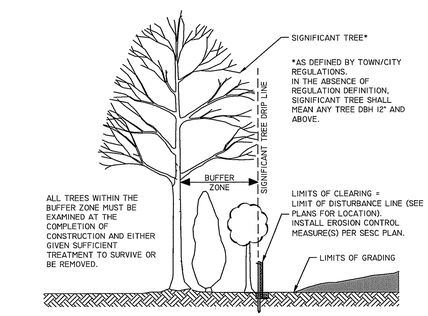
NOT TO SCALE



NOTES:
1. ALL STOCKPILES MUST BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH SECTION 3 "STOCKPILE AND STAGING AREA MANAGEMENT" OF THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HAND BOOK (CURRENT EDITION).
2. DIVERT ALL STORMWATER AWAY FROM STOCKPILES.
3. SOIL STOCKPILES THAT ARE NOT TO BE USED WITHIN 30 DAYS MUST BE SEEDED AND MULCHED IMMEDIATELY AFTER FORMATION OF THE STOCKPILE WITH SEED MIX COMPATIBLE WITH THE SOIL TYPE.
4. STOCKPILE AND SILT FENCE MUST BE INSPECTED AT LEAST ONCE PER WEEK AND AFTER RAIN EVENTS IN EXCESS OF ½" OF RAINFALL. REPAIR/ REPLACE SILT FENCE (AND STOCKPILE COVERS WHERE APPLICABLE) AS NEEDED TO KEEP THEM FUNCTIONING ADEQUATELY.
5. SEDIMENT TRAPPED BY SILT FENCES MUST BE REMOVED AND PROPERLY DISPOSED OF WHENEVER SIGNIFICANT ACCUMULATION OCCURS.

STOCKPILE PROTECTION

NOT TO SCALE



NOTE: LIMIT OF DISTURBANCE (LOD) MUST BE STAKED OUT PRIOR TO CONSTRUCTION. IF ANY SIGNIFICANT TREE DRIP LINE IS ENCROACHING PAST THE LOD, CONTRACTOR MUST CONTACT SITE ENGINEER PRIOR TO CONSTRUCTION.

LIMIT OF DISTURBANCE AT VEGETATION

NOT TO SCALE

SESC DETAILS

HIGHWAY SAFETY IMPROVEMENTS TO HARTFORD AVENUE (ROUTE 6)
HARTFORD AVENUE
JOHNSTON, RI

PREPARED FOR:
RHODE ISLAND DEPARTMENT OF TRANSPORTATION
380 WESTMINSTER STREET, SUITE 601
PROVIDENCE, RI 02903-3239

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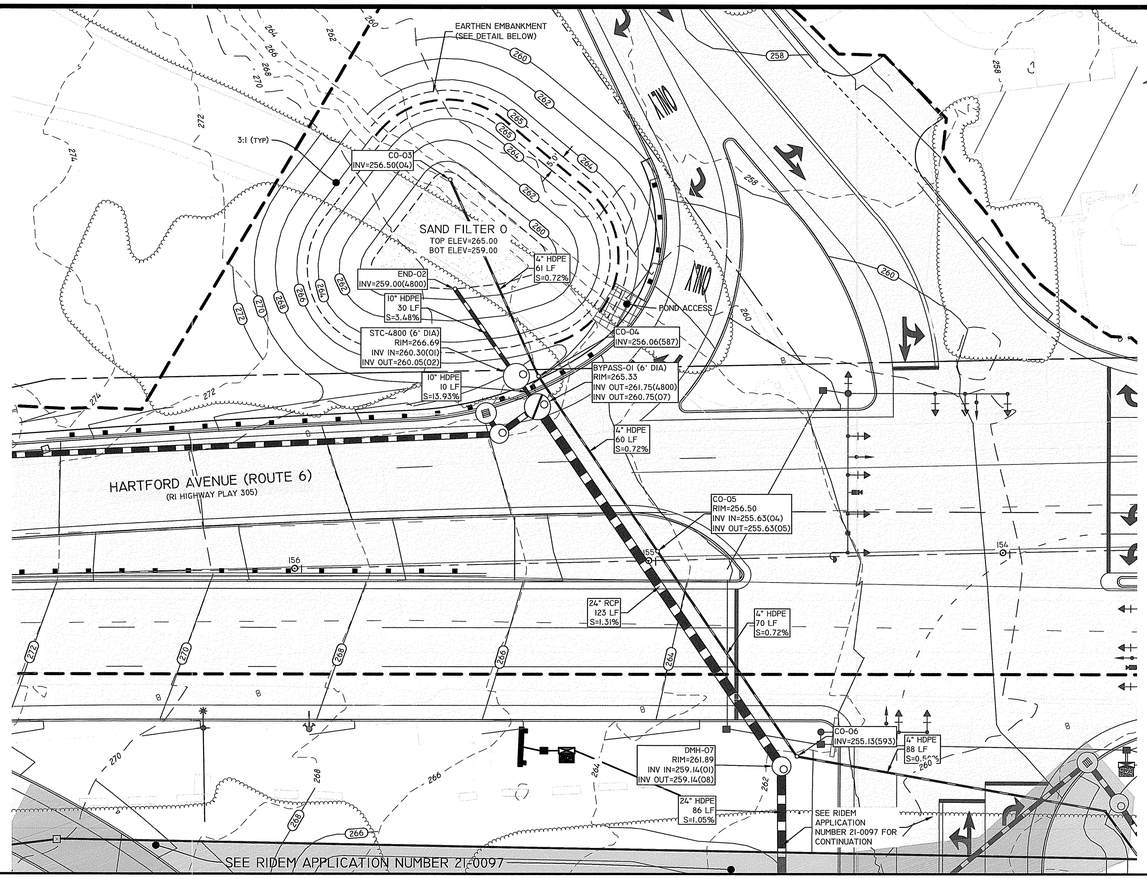


SAND FILTER 0

SCALE: 1"=20'

0 10' 20' 40'

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

BRIAN C. GIROUX
No. 19341
REGISTERED PROFESSIONAL ENGINEER
CIVIL
9/01/2021

THIS PLAN SET MUST NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS IT BEARS THE ORIGINAL SIGNATURE AND SEAL OF A REGISTERED PROFESSIONAL ENGINEER AND HAS BEEN SIGNED BY THE REGISTERED PROFESSIONAL ENGINEER OF DIPRETE

DIPRETE ENGINEERING ONLY WARRANTS PLANS ON A DIPRETE ENGINEERING TITLE BLOCK STAMPED BY REGISTERED PROFESSIONAL ENGINEER. DIPRETE ENGINEERING DOES NOT WARRANT PLANS BY ANY OTHER PARTY.

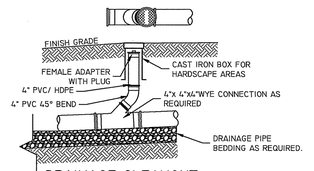
THE CONTRACTOR IS RESPONSIBLE FOR ALL OF THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND OSHA CONFORMANCE IN THE IMPLEMENTATION OF THIS PLAN AND DESIGN.

THE UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE. DIPRETE ENGINEERING ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED DUE TO LOCATIONS OF EXISTING UTILITIES.

NO.	DATE	DESCRIPTION	BY:
1	11/02/2020	RIDEM HARTFORD AVE - PRETC	K.E.D.
0	08/31/2020	RIDEM AND RIDOT HARTFORD AVE	K.E.D.

DESIGN BY: K.E.D.
DRAWN BY: S.R.

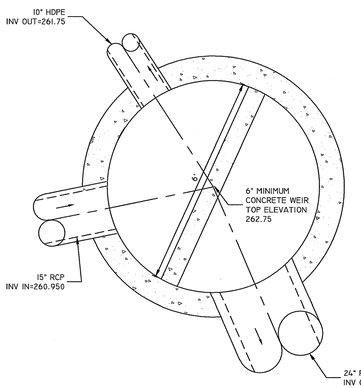
NOTES:
1. ALL PIPE AND FITTINGS SHALL BE SCH-40 PVC.
2. PIPE BEDDING AND BACKFILL FOR CLEANOUTS SHALL MEET APPLICABLE DRAINAGE SPECIFICATIONS UNLESS OTHERWISE NOTED BY ENGINEER.
3. FOR PAVED/ ROADWAY/ HARDSCAPE AREAS, ALL CLEANOUTS SHALL BE SLEEVED WITH A CAST-IRON BOX SET FLUSH WITHIN THE FINAL GRADE. FOR TRAFFICABLE APPLICATIONS, THE CAST-IRON BOX MUST MEET H-20 LOADING. FOR SOFTSCAPE AREAS, CLEANOUT ACCESS COVER SHALL BE SET FLUSH WITH FINAL GRADE (CAST-IRON BOX NOT REQUIRED).



DRAINAGE CLEANOUT
NOT TO SCALE

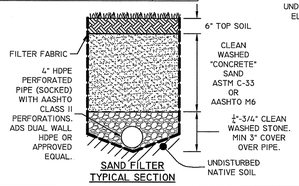
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED NOV 24 2021 FILE # 21-0294
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

NOV 12 2021
Office of Water Resources



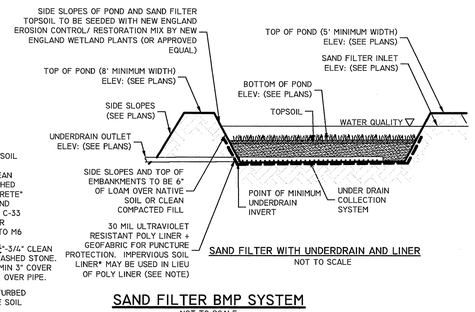
BYPASS-01(6'Ø MANHOLE)
SCALE 1"=2'

DESCRIPTION	SNDF-0
TOP OF POND ELEVATION	265.00
100 YEAR STORM ELEVATION	263.82
10 YEAR STORM ELEVATION	263.17
1 YEAR STORM ELEVATION	262.80
WQ STORM ELEVATION	260.26
BOTTOM OF POND ELEVATION	259.00
TOP SOIL DEPTH	0.50
SAND DEPTH	1.50
MINIMUM UNDERDRAIN INVERT	256.50
UNDERDRAIN OUTLET ELEVATION	254.25
BOTTOM OF SAND ELEVATION	257.00
SEASONAL HIGH GWT ELEVATION	NA
SOIL EVALUATION	NA



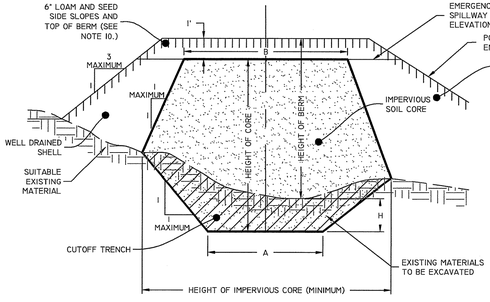
SAND FILTER
TYPICAL SECTION

*NOTE: SOIL LINER SHALL BE 1' MINIMUM THICKNESS AND HAVE A MAXIMUM PERMEABILITY OF 0.03 FT/DAY (1*10^-5 CM/SEC). LINER MAY BE COMPRISED OF NATIVE MATERIALS WITH MIN OF 90% PASSING THE #200 SIEVE OR CLAY WITH A MINIMUM OF 15% PASSING THE #200 SIEVE. SOIL LINER TO EXTEND UP SIDES TO EXISTING GRADE AT A MINIMUM.
POLY LINER JOINTS MUST BE WATERTIGHT AND SEALED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



SAND FILTER WITH UNDERDRAIN AND LINER
NOT TO SCALE

SAND FILTER BMP SYSTEM
NOT TO SCALE



BERM HEIGHT (FT)	TOP WIDTH OF CORE - B (FT)
0-6.5	8.2
6.6-9.8	9.2
9.9-13.1	9.8
13.2-16.4	10.8
16.5-19.7	11.5

NOTES:
1. IMPERVIOUS SOIL CORE TO BE PROVIDED FOR ALL POND EMBANKMENTS.
2. IMPERVIOUS SOIL CORE TO BE CONSTRUCTED OF A MATERIAL WITH A MINIMUM OF 55% PASSING THE #200 SIEVE AND A MAXIMUM PERMEABILITY OF 0.00005 CM/S.
3. WELL DRAINED SHELL TO BE CONSTRUCTED OF GRAVEL AND/OR SAND WITH LESS THAN 5% PASSING THE #200 SIEVE.
4. MINIMUM DEPTH OF CUTOFF TRENCH (H) SHALL BE 3/4 OF THE TOTAL BERM HEIGHT.
5. THE IMPERVIOUS CORE AT A MINIMUM SHALL EXTEND UP BOTH ABUTMENTS TO THE EMERGENCY SPILLWAY ELEVATION.
6. THE MINIMUM BOTTOM WIDTH (A) SHALL BE 5'-8", AND WIDE ENOUGH TO PERMIT OPERATION OF COMPACTION EQUIPMENT.
7. SIDE SLOPES OF THE TRENCH SHALL BE NO STEEPER THAN 1:1.
8. IF BEDROCK IS ENCOUNTERED BELOW THE DAM THE CUT OFF TRENCH CAN BE REDUCED TO 1'x1' (4x4).
9. COMPACTION REQUIREMENTS FOR THE SHELL AND IMPERVIOUS CORE TO BE 95% OF THE MODIFIED PROCTOR PER ASTM D1557. ALL FILL TO BE PLACED IN LIFTS NOT EXCEEDING 12".
10. SIDE SLOPE OF POND EMBANKMENT TO BE 3:1 MAXIMUM.
11. THE IMPERVIOUS CORE SHALL BE KEPT FREE FROM STANDING WATER DURING THE BACKFILL OPERATION.
12. ALL EMBANKMENT INSTALLATIONS TO BE SUPERVISED BY A GEOTECHNICAL ENGINEER.
13. ANY PROPOSED DEVIATIONS FROM THIS DETAIL MUST BE DESIGNED BY A GEOTECHNICAL ENGINEER AND SUBMITTED TO THE SITE ENGINEER (AND AHJ WHERE REQUIRED) FOR REVIEW PRIOR TO CONSTRUCTION.

POND EARTHEN EMBANKMENT
NOT TO SCALE

SAND FILTER 0

HIGHWAY SAFETY IMPROVEMENTS TO HARTFORD AVENUE (ROUTE 6)
HARTFORD AVENUE
JOHNSTON, RI

PREPARED FOR:
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360 WESTMINSTER STREET, SUITE 601
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SHEET 48 OF 48

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