BURLINGTON SOLAR ONE, LLC

Prospect Street
Burlington, Connecticut

LIST OF DRAWINGS:

1	COVER SHEET
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5	EROSION & SEDIMENTATION CONTROL PLAN - PHASE 2
6	EROSION & SEDIMENTATION CONTROL PLAN - PHASE 3
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8	STORMWATER QUALITY BASIN #1
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15	DEVELOPED DRAINAGE MAP

REVISIONS:
10-30-20; Revised Panel Layout
02-10-21; First Design Submittal
04-07-21; Revised Landscaping
06-29-21; Revised Panel Layout and DEEP Comments

PREPARED FOR: Burlington Solar One, LLC
Verogy VCP, LLC
150 Trumbull Street
Hartford, Connecticut 06103

STATE OF CONNECTICUT ROBERT R. HILTBRAND No. 1.025 LICENSED PROFESSIONAL ENGINEER
Robert R. Hiltbrand

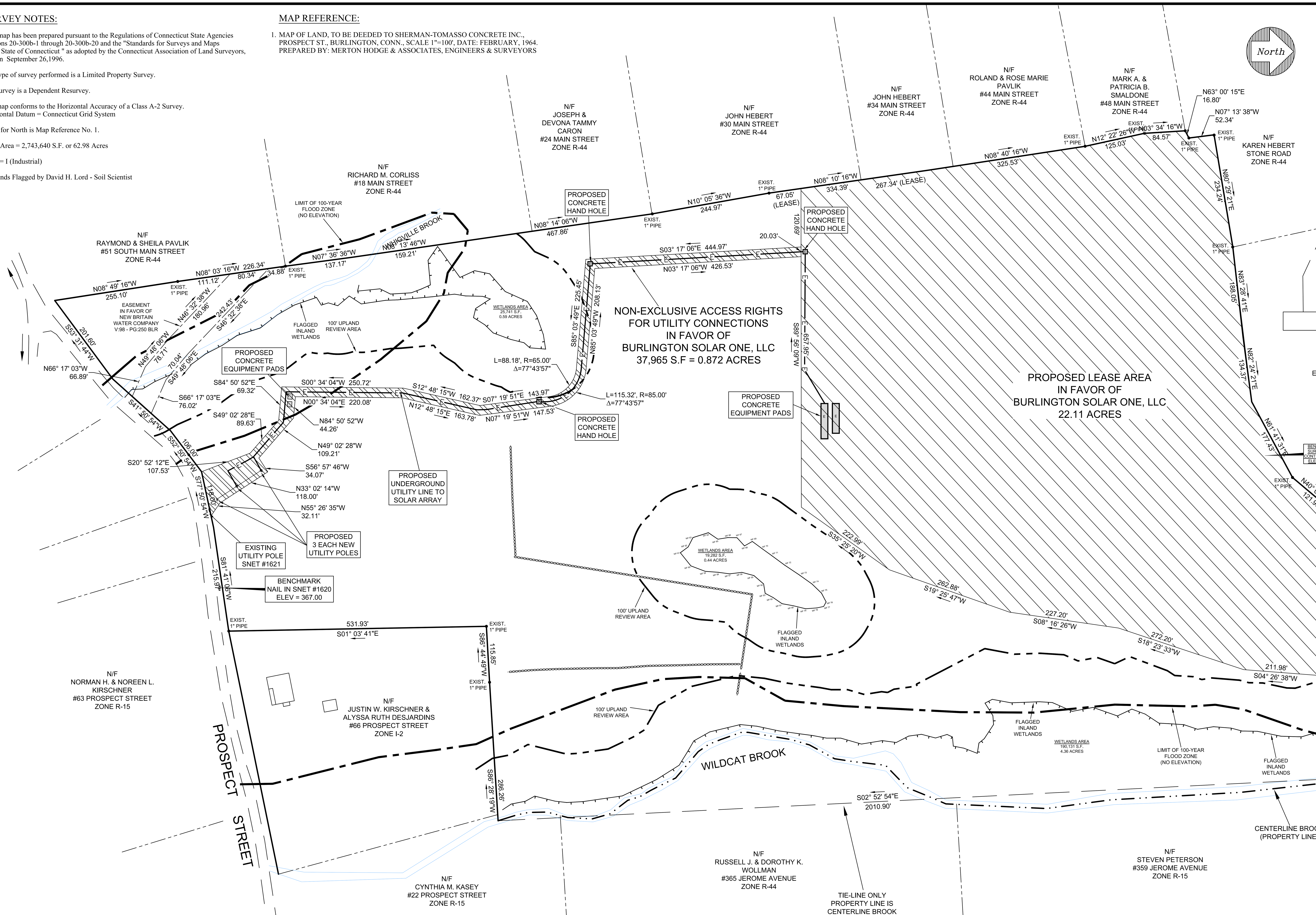
ENGINEER: R. R. Hiltbrand Engineers & Surveyors
575 North Main Street
Bristol, Connecticut
06010

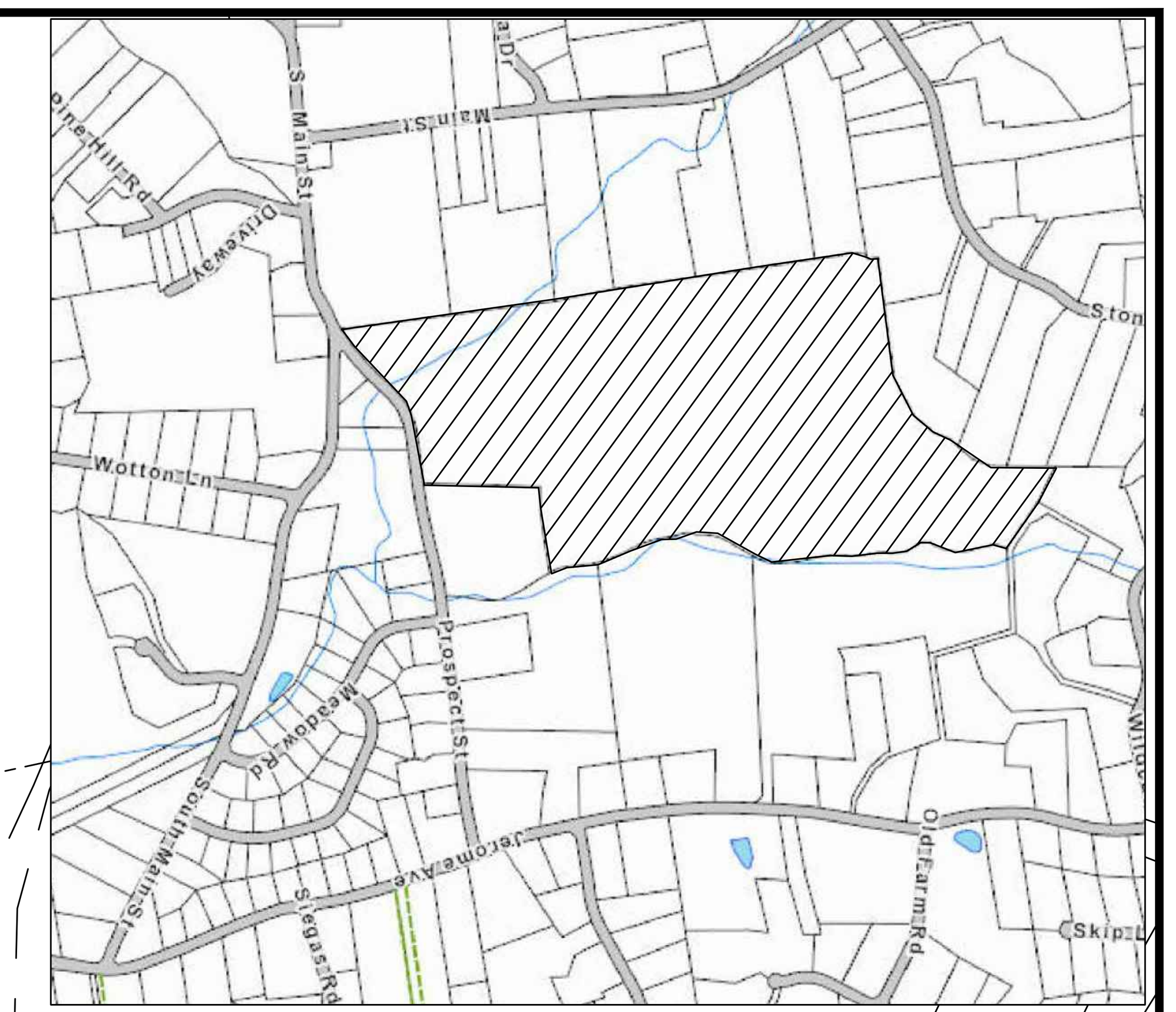
SURVEY NOTES:

1. This map has been prepared pursuant to the Regulations of Connecticut State Agencies Sections 20-300b-1 through 20-300b-20 and the "Standards for Surveys and Maps in the State of Connecticut " as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26,1996.
2. The type of survey performed is a Limited Property Survey.
3. The survey is a Dependent Resurvey.
4. The map conforms to the Horizontal Accuracy of a Class A-2 Survey. Horizontal Datum = Connecticut Grid System
5. Basis for North is Map Reference No. 1.
6. Total Area = 2,743,640 S.F. or 62.98 Acres
7. Zone = I (Industrial)
8. Wetlands Flagged by David H. Lord - Soil Scientist

MAP REFERENCE:

1. MAP OF LAND, TO BE DEEDED TO SHERMAN-TOMASSO CONCRETE INC., PROSPECT ST., BURLINGTON, CONN., SCALE 1"=100', DATE: FEBRUARY, 1964. PREPARED BY: MERTON HODGE & ASSOCIATES, ENGINEERS & SURVEYORS





SITE LOCATION PLAN
SCALE: 1"=750'±

GRAPHIC SCALE

100 50 0 100 200

1 Inch = 100 Feet

UTILITY NOTE:
LOCATION OF UNDERGROUND UTILITIES DEPICTED HEREON ARE BASED UPON FIELD SURVEY OF VISIBLE SURFACE STRUCTURES SUCH AS CATCH BASINS AND MANHOLES, TOGETHER WITH RECORD MAPPING OBTAINED FROM UTILITY COMPANIES AND GOVERNMENTAL AGENCIES AS NOTED UNDER MAP REFERENCES. THESE LOCATIONS MUST BE CONSIDERED APPROXIMATE IN NATURE. IN ADDITION, OTHER UTILITIES MAY ALSO EXIST, UNKNOWN TO THE SURVEYOR. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG 1-800-922-4455.

REVISED 06/29/21: REVISED LEASE AREA AND DEEP COMMENTS
REVISED 02/10/21: FIRST DESIGN SUBMITTAL

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON. THIS MAP AND SURVEY WERE PREPARED IN ACCORDANCE WITH THE STANDARDS OF A CLASS "A-2" SURVEY AS DEFINED IN THE CODE OF PRACTICE FOR STANDARDS OF ACCURACY OF SURVEYS AND MAPS, ADOPTED SEPT. 26, 1996 AS AMENDED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INCORPORATED.

CARMINE J. MATRASCIA – L.S. # 70219
NOT VALID WITHOUT EMBOSSED SEAL

PREPARED FOR:
Burlington Solar One, LLC
Verogy VCP, LLC
150 Trumbull Street
Hartford, CT 06103

R. R. HILTBRAND Engineers and Surveyors

PROPERTY SURVEY
Lot 33
Prospect Street
Burlington, Connecticut

June 16, 2020

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

SHEET 2 OF 15

SURVEY NOTES:

1. This map has been prepared pursuant to the Regulations of Connecticut State Agencies Sections 20-300b-1 through 20-300b-20 and the "Standards for Surveys and Maps in the State of Connecticut " as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26,1996.
2. The type of survey performed is a Limited Property Survey.
3. The survey is a Dependent Resurvey.
4. The map conforms to the Horizontal Accuracy of a Class A-2 Survey.
   Horizontal Datum = Connecticut Grid System
   Vertical Datum = NGVD 1988 Datum
5. Basis for North is Map Reference No. 1.
6. Total Area = 2,743,640 S.F. or 62.98 Acres
7. Zone = I (Industrial)
8. Wetlands Flagged by David H. Lord - Soil Scientist on 11-4-14 & 12-21-16

MAP REFERENCE:

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SOIL TYPES

WETLAND SOILS

Ru RIPPOWAM

RN LEICESTER, RIDGEBURY & WHITMAN

UPLAND SOILS

Af AGAWAM - SANDY LOAM

Hk HINCKLEY - SANDY LOAM

GRAPHIC SCALE

100 50 0 100 200

1 Inch = 100 Feet

REVISED 06/29/21: REVISED PANEL LAYOUT AND DEEP COMMENTS
REVISED 02/10/21: FIRST DESIGN SUBMITTAL

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON. THIS MAP AND SURVEY WERE PREPARED IN ACCORDANCE WITH THE STANDARDS OF A CLASS "A-2 & T-2" SURVEY AS DEFINED IN THE CODE OF PRACTICE FOR STANDARDS OF ACCURACY OF SURVEYS AND MAPS, ADOPTED SEPT. 26, 1996 AS AMENDED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INCORPORATED.

CARMINE J. MATRASCIA – L.S. # 70219
NOT VALID WITHOUT EMBOSSED SEAL

PREPARED FOR:
Burlington Solar One, LLC
Verogy VCP, LLC
150 Trumbull Street
Hartford, CT 06103

R. R. HILTBRAND Engineers and Surveyors

IMPROVEMENT LOCATION SURVEY
Lot 33
Prospect Street
Burlington, Connecticut

September 1, 2020

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

N/F
JOSEPH &
DEVONA TAMMY
CARON
#24 MAIN STREET
ZONE R-44

N/F
JOHN HEBERT
#30 MAIN STREET
ZONE R-44

N/F
JOHN HEBERT
#34 MAIN STREET
ZONE R-44

N/F
ROLAND & ROSE MARIE
PAVLIK
#44 MAIN STREET
ZONE R-44

N/F
MARK A. &
PATRICIA B.
SMALDONE
#48 MAIN STREET
ZONE R-44

N/F
KAREN HEBERT
STONE ROAD
ZONE R-44

N/F
EWELINA & RICHARD
CZERCZAK
#56 STONE ROAD
ZONE R-44

N/F
DONNA C. GASKI
#62 STONE ROAD
ZONE R-44

North

N08° 14' 06"W
467.86'

N10° 05' 36"W
244.97'

N08° 10' 16"W
334.39'

N08° 40' 16"W
325.53'

N12° 22' 26"W
125.03'

N03° 34' 16"W
84.57'

N63° 00' 15"E
16.80'

N07° 13' 38"W
52.34'

N80° 29' 21"E
234.24'

N83° 28' 41"E
188.05'

N82° 26' 21"E
134.37'

N61° 41' 31"E
177.43'

N40° 09' 21"E
121.90'

N26° 12' 51"E
77.30'

N41° 30' 21"E
136.09'

N15° 55' 51"E
82.65'

EXIST.
1" PIPE

EXIST.
1" PIPE

EXIST.
1" PIPE

EXIST.
1" PIPE

EXIST.
1" PIPE

EXIST.
1" PIPE

EXIST.
1" PIPE

EXIST.
1" PIPE

EXIST.
1" PIPE

EXISTING
TOPSOIL
STOCKPILE

EXISTING
TOPSOIL
STOCKPILE

EXISTING
ROUND
STONE
STOCKPILES

EXISTING
SEPTIC SAND
STOCKPILE

EXISTING
SCREENED
SAND
STOCKPILE

EXISTING
FILL
STOCKPILE

EXISTING
EDGE OF
CLEARING

PROCESSED
GRAVEL
STOCKPILE

"RESTORED FIELD"

EXISTING STONE WALL

100' UPLAND
REVIEW AREA

FLAGGED
INLAND
WETLANDS

WETLANDS AREA
25,741 S.F.
0.59 ACRES

WETLANDS AREA
19,282 S.F.
0.44 ACRES

12" MODIFIED GRADE RIP-RAP
EMERGENCY SPILLWAY
6'W x 8'L 3:1 SIDE SLOPES
UNDERLAIN WITH NON-WOVEN
FILTER FABRIC
ELEV. 401.50

PROPOSED STORM WATER
QUALITY BASIN #1
(TOP BERM ELEV. 402.50)

PROPOSED ¾" CRUSHED STONE
INFILTRATION TRENCH
(SEE DETAIL)

PROPOSED
OUTLET STRUCTURE #1
TOP GRATE = 401.00
6" ORIFICE = 398.50
18" OUTLET = 395.00

2% SLOPED GRASS
INFILTRATION SHELF

SLOPE ABOVE SILT FENCE
TO BE TEMPORARY MULCHED

PROPOSED DOUBLE ROW OF
GEO-TEXTILE SILTFENCE
INSTALL WOODCHIPS BETWEEN
ROWS (SEE DETAIL)

LIMIT OF GRADING FOR
STORMWATER QUALITY
BASIN INSTALLATION

STORMWATER QUALITY BASIN AND
SWALE AREAS SHALL BE RESTORED
WITH TOPSOIL, SEED, AND SLOPES
LINED WITH TENSAR NORTH AMERICAN
GREEN S75 OR EQUAL EROSION
CONTROL FABRIC

PROPOSED
GEO-TEXTILE
SILTFENCE

LIMIT OF CLEARING
(TYPICAL)

AREA OF CLEARING (16.6 ACRES)
STUMPS SHALL REMAIN EXCEPT
FOR AREAS RELATED TO
EROSION CONTROL FEATURES
AND STORM WATER
QUALITY BASINS

PHASE 1
CONSTRUCT STORM WATER QUALITY BASINS
NO UP-SLOPE DISTURBANCE OTHER THAN
CLEARING OF TREES (STUMPS TO REMAIN)
SEE CONSTRUCTION SEQUENCE ON
DETAILS SHEET (PAGE 12 OF 15)

PROPOSED
415' 18" CPP
@ 0.7%

PROPOSED
175' - 18" CPP
@ 5.1%

PROPOSED 10' x 10'
MODIFIED GRADE RIP-RAP
OR NATIVE BOULDER
LEVEL SPREADER
UNDERLAIN WITH
NON-WOVEN FILTER FABRIC

PROPOSED
18" RCP FLARED END
FL = 392.00

12" MODIFIED GRADE RIP-RAP
EMERGENCY SPILLWAY
10'W x 10'L 3:1 SIDE SLOPES
UNDERLAIN WITH NON-WOVEN
FILTER FABRIC
ELEV. 399.50

PROPOSED
18" RCP FLARED END
FL = 379.00

PROPOSED 15' x 15'
INTERMEDIATE RIP-RAP
OR NATIVE BOULDER
LEVEL SPREADER
UNDERLAIN WITH
NON-WOVEN FILTER FABRIC

PROPOSED
OUTLET STRUCTURE #2
TOP GRATE = 399.50
6" WIDE x 46" HIGH WEIR = 392.80
18" OUTLET = 388.00

PROPOSED STORM WATER
QUALITY BASIN #2
(TOP 10' WIDE BERM ELEV. 401.00)

PROPOSED GEO-TEXTILE
SILTFENCE BACKED WITH
12" HIGH SEDIMENT LOG

PROPOSED GRASS-LINED
SWALE TO PROPOSED
STORM WATER QUALITY
BASIN

PROPOSED SWALE SHALL
BE LINED WITH TENSAR
NORTH AMERICAN GREEN
S75 OR EQUAL EROSION
CONTROL FABRIC

END OF GRASS SWALE
(PHASE 1)

PROPOSED GEO-TEXTILE
SILTFENCE CHECK DAMS
BACKED WITH
12" HIGH SEDIMENT LOG

PROPOSED GEO-TEXTILE
SILTFENCE BACKED WITH
12" HIGH SEDIMENT LOG

BENCHMARK
SURVEYOR'S
CONTROL POINT
ELEV. 431.76

APPARENT LEDGE
OUTCROPS

BOULDER
SPLIT BY TREE

48" WHITE
PINE

428x67
429x28
428x63
429x46
429x77
428x60
429x57
429x60
429x90
429x30
441x61
441x39
440x98
402x01

BOULDER
COOL
BOULDER

100' UPLAND
REVIEW AREA

EXISTING
6" PVC OUTLET
FL = 365.52

EXISTING
12" PVC OUTLET
FL = 370.05

EXISTING CRUSHED STONE
INFILTRATION TRENCH
W/ 6" PVC (PERF) PIPE

EXISTING 3" MINUS NATIVE
ROUND STONE BERM

EXISTING TEMPORARY
SEDIMENT TRAP
336 C.Y. TO ELEV. 397.00
(321.6 C.Y. REQUIRED)
HIGH WATER MARK 394.95

EXISTING SILT FENCE
(REJECT AND STAPLE
SILT FENCE AS REQUIRED)

EXISTING
MODIFIED GRADE
NATIVE ROUND STONE
TOP SPILLWAY
ELEV. 397.36

EXISTING
SILT FENCE

EXISTING
GRAVEL
DRIVE

EXISTING
FILL
STOCKPILE

EXISTING
TREELINE
(TYPICAL)

CRUSHED STONE
INFILTRATION TRENCH
W/ 8" PVC (PERF) PIPE

PREPARED FOR:
Burlington Solar One, LLC
Verogy VCP, LLC
150 Trumbull Street
Hartford, CT 06103

R. R. HILTBRAND
Engineers
and
Surveyors

EROSION AND SEDIMENTATION CONTROL PLAN - PHASE 1

Lot 33
Prospect Street
Burlington, Connecticut

September 1, 2020

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

SHEET 4 OF 15

REVISED 06/29/21: REVISED PANEL LAYOUT AND DEEP COMMENTS
REVISED 02/10/21: FIRST DESIGN SUBMITTAL

GRAPHIC SCALE
60 30 0 60 120
1 Inch = 60 Feet

PREPARED FOR:
Burlington Solar One, LLC
Verogy VCP, LLC
150 Trumbull Street
Hartford, CT 06103

EROSION AND SEDIMENTATION CONTROL PLAN - PHASE 2

Lot 33
Prospect Street
Burlington, Connecticut

September 1, 2020

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

REVISED 06/29/21: REVISED PANEL LAYOUT AND DEEP COMMENTS
REVISED 02/10/21: FIRST DESIGN SUBMITTAL

N/F
JOSEPH &
DEVONA TAMMY
CARON
#24 MAIN STREET
ZONE R-44

N/F
JOHN HEBERT
#30 MAIN STREET
ZONE R-44

N/F
JOHN HEBERT
#34 MAIN STREET
ZONE R-44

N/F
ROLAND & ROSE MARIE
PAVLIK
#44 MAIN STREET
ZONE R-44

N/F
MARK A. &
PATRICIA B.
SMALDONE
#48 MAIN STREET
ZONE R-44

N/F
KAREN HEBERT
STONE ROAD
ZONE R-44

N/F
EWELINA & RICHARD
CZERCZAK
#56 STONE ROAD
ZONE R-44

N/F
DONNA C. GASKI
#62 STONE ROAD
ZONE R-44

North

N08° 14' 06"W
467.86'

N10° 05' 36"W
244.97'

N08° 10' 16"W
334.39'

N08° 40' 16"W
325.53'

N12° 22' 26"W
125.03'

N03° 34' 16"W
84.57'

N63° 00' 15"E
16.80'

N07° 13' 38"W
52.34'

N83° 28' 41"E
188.05'

N82° 26' 21"E
134.37'

N81° 41' 31"E
177.43'

N40° 08' 21"E
121.90'

N26° 12' 51"E
77.30'

N41° 36' 21"E
136.08'

N15° 55' 51"E
82.65'

EXIST.
1" PIPE

EXISTING
TOPSOIL
STOCKPILE

EXISTING
ROUND
STONE
STOCKPILES

EXISTING
SEPTIC SAND
STOCKPILE

EXISTING
TOPSOIL
STOCKPILE

EXISTING
SCREENED
SAND
STOCKPILE

EXISTING
FILL
STOCKPILE

EXISTING
EDGE OF
CLEARING

PROCESSED
GRAVEL
STOCKPILE

30' WIDE
CONSTRUCTION
ACCESS

WETLANDS AREA
25,741 S.F.
0.59 ACRES

WETLANDS AREA
19,282 S.F.
0.44 ACRES

100' UPLAND
REVIEW AREA

FLAGGED
INLAND
WETLANDS

EXISTING STONE WALL

"RESTORED FIELD"

12" MODIFIED GRADE RIP-RAP
EMERGENCY SPILLWAY
6'W x 8'L 3:1 SIDE SLOPES
UNDERLAIN WITH NON-WOVEN
FILTER FABRIC
ELEV. 401.50

PROPOSED STORM WATER
QUALITY BASIN #1
(TOP BERM ELEV. 402.50)

PROPOSED ¾" CRUSHED STONE
INFILTRATION TRENCH
(SEE DETAIL)

PROPOSED
OUTLET STRUCTURE #1
TOP GRATE = 401.00
6" ORIFICE = 398.50
18" OUTLET = 395.00

2% SLOPED GRASS
INFILTRATION SHELF

SLOPE ABOVE SILT FENCE
TO BE TEMPORARY MULCHED

PROPOSED DOUBLE ROW OF
GEO-TEXTILE SILTFENCE
INSTALL WOODCHIPS BETWEEN
ROWS (SEE DETAIL)

LIMIT OF GRADING FOR
STORMWATER QUALITY
BASIN INSTALLATION

STORMWATER QUALITY BASIN AND
SWALE AREAS SHALL BE RESTORED
WITH TOPSOIL, SEED, AND SLOPES
LINED WITH TENSAR NORTH AMERICAN
GREEN S75 OR EQUAL EROSION
CONTROL FABRIC

PROPOSED
GEO-TEXTILE
SILTFENCE

LIMIT OF CLEARING
(TYPICAL)

TEMPORARY SEDIMENT TRAP #2
2,530 S.F. x 2' DEEP
STORAGE VOLUME = 4,025 FT³
(PHASE 3A & 3B)

PVC RISER OUTLET
(TYPICAL)
(SEE DETAIL SHEET)

PROPOSED
415' 18" CPP
@ 0.7%

PROPOSED 10' x 10'
MODIFIED GRADE RIP-RAP
OR NATIVE BOULDER
LEVEL SPREADER
UNDERLAIN WITH
NON-WOVEN FILTER FABRIC

PROPOSED
18" RCP FLARED END
FL = 392.00

12" MODIFIED GRADE RIP-RAP
EMERGENCY SPILLWAY
10'W x 10'L 3:1 SIDE SLOPES
UNDERLAIN WITH NON-WOVEN
FILTER FABRIC
ELEV. 399.50

PROPOSED
175' - 18" CPP
@ 5.1%

PROPOSED
18" RCP FLARED END
FL = 379.00

PROPOSED
OUTLET STRUCTURE #2
TOP GRATE = 399.50
6" WIDE x 46" HIGH WEIR = 392.80
18" OUTLET = 388.00

PROPOSED STORM WATER
QUALITY BASIN #2
(TOP 10' WIDE BERM ELEV. 401.00)

PROPOSED 15' x 15'
INTERMEDIATE RIP-RAP
OR NATIVE BOULDER
LEVEL SPREADER
UNDERLAIN WITH
NON-WOVEN FILTER FABRIC

PROPOSED
TEMPORARY
GEO-TEXTILE
SILTFENCE

PROPOSED
TOPSOIL STOCKPILE
FOR EAST ARRAY
(LOWER PORTION)

TEMPORARY SEDIMENT TRAP #3
3,530 S.F. x 2' DEEP (3:1 SIDESLOPES)
STORAGE VOLUME = 5,200 FT³
(PHASE 3A)

PROPOSED DOUBLE ROW OF
GEO-TEXTILE SILTFENCE
INSTALL WOODCHIPS BETWEEN
ROWS (SEE DETAIL)

PVC RISER OUTLET
(TYPICAL)
(SEE DETAIL SHEET)

- COMPLETION OF GRADING OF EAST ARRAY
- INSTALLATION OF EAST ARRAY PANELS
- STABILIZATION OF GROUND SURFACES
(ALL DURING PHASE 3)

2% SLOPED GRASS
INFILTRATION SHELF

TEMPORARY SEDIMENT TRAP #4
2,950 S.F. x 2' DEEP (3:1 SIDESLOPES)
STORAGE VOLUME = 4,600 FT³
(PHASE 3A & 3B)

PROPOSED SWALE SHALL
BE LINED WITH TENSAR
NORTH AMERICAN GREEN
S75 OR EQUAL EROSION
CONTROL FABRIC

PROPOSED GEO-TEXTILE
SILTFENCE BACKED WITH
12" HIGH SEDIMENT LOG

PVC RISER OUTLET
(TYPICAL)
(SEE DETAIL SHEET)

PROPOSED GEO-TEXTILE
SILTFENCE BACKED WITH
12" HIGH SEDIMENT LOG

PROPOSED GRASS-LINED
SWALE TO PROPOSED
STORM WATER QUALITY
BASIN

PROPOSED
6" PVC SDR-35
CRUSHED STONE (¾")
INFILTRATION TRENCH

BENCHMARK
SURVEYOR'S
CONTROL POINT
ELEV. 431.76

APPARENT LEDGE
OUTCROPS

BOULDER
BOULDER SPLIT BY TREE
COOL BOULDER

428x67
429x28
428x63
429x46
429x77
428x60
429x57
429x90
429x30
441x61
441x39
440x99

EXISTING
SILT FENCE

EXISTING
GRAVEL
CURB

EXISTING
6" PVC OUTLET
FL - 365.52

EXISTING 3" MINUS NATIVE
ROUND STONE BERM

EXISTING TEMPORARY
SEDIMENT TRAP
336 C.Y. TO ELEV. 367.00
(327.6 C.Y. REQUIRED)
HIGH WATER MARK 364.95

EXISTING CRUSHED STONE
INFILTRATION TRENCH
W/ 6" PVC (PERF) PIPE

EXISTING SILT FENCE
(RE-DIRECT AND STAPLE
SILT FENCE AS REQUIRED)

EXISTING
MODIFIED GRADE
NATIVE ROUND STONE
TOP SPILLWAY
ELEV. 367.36

FLAGGED INLAND
WETLANDS
(TYPICAL)

EXISTING
TREELINE
(TYPICAL)

EXISTING
FILL
STOCKPILE

12" WHITE
PINE

PREPARED FOR:
Burlington Solar One, LLC
Verogy VCP, LLC
150 Trumbull Street
Hartford, CT 06103

R. R. HILTBRAND
Engineers
and
Surveyors

EROSION AND SEDIMENTATION CONTROL
PLAN - PHASE 3
Lot 33
Prospect Street
Burlington, Connecticut

September 1, 2020

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4546

SHEET 6 OF 15

REVISED 06/29/21: REVISED PANEL LAYOUT AND DEEP COMMENTS
REVISED 02/10/21: FIRST DESIGN SUBMITTAL

GRAPHIC SCALE
60 30 0 60 120
1 Inch = 60 Feet

N/F
JOSEPH &
DEVONA TAMMY
CARON
#24 MAIN STREET
ZONE R-44

N/F
JOHN HEBERT
#30 MAIN STREET
ZONE R-44

N/F
JOHN HEBERT
#34 MAIN STREET
ZONE R-44

N/F
ROLAND & ROSE MARIE
PAVLIK
#44 MAIN STREET
ZONE R-44

N/F
MARK A. &
PATRICIA B.
SMALDONE
#48 MAIN STREET
ZONE R-44

N/F
KAREN HEBERT
STONE ROAD
ZONE R-44

N/F
EWELINA & RICHARD
CZERCZAK
#56 STONE ROAD
ZONE R-44

N/F
DONNA C. GASKI
#62 STONE ROAD
ZONE R-44

North

N08° 14' 06"W
467.86'

EXIST.
1" PIPE

N10° 05' 36"W
244.97'

EXIST.
1" PIPE

N08° 10' 16"W
334.39'

N08° 40' 16"W
325.53'

EXIST.
1" PIPE

N12° 22' 26"W
125.03'

EXIST.
1" PIPE

N03° 34' 16"W
84.57'

EXIST.
1" PIPE

N63° 00' 15"E
16.80'

N07° 13' 38"W
52.34'

EXIST.
1" PIPE

441x61

N80° 29' 21"E
234.24'

209.76'

441x39

167.06'

191.48'

EXIST.
1" PIPE

N83° 28' 41"E
188.05'

N82° 26' 21"E
134.37'

APPARENT LEDGE
OUTCROPS

185.02'

N61° 41' 31"E
177.43'

BENCHMARK
SURVEYOR'S
CONTROL POINT
ELEV. 431.76

EXIST.
1" PIPE

140.62'

N40° 09' 21"E
121.90'

90.85'

N26° 12' 51"E
7.30'

57.52'

EXIST.
1" PIPE

N41° 36' 21"E
136.08'

50.00'

N15° 55' 51"E
82.65'

EXIST.
1" PIPE

100' UPLAND
REVIEW AREA

12" MODIFIED GRADE RIP-RAP
EMERGENCY SPILLWAY
6'W x 8'L 3:1 SIDE SLOPES
UNDERLAIN WITH NON-WOVEN
FILTER FABRIC
ELEV. 401.50

CRUSHED STONE
INFILTRATION TRENCH
W/ 8" PVC (PERF.) PIPE

8" PVC OUTLET
FL=370.05

PROPOSED STORM WATER
QUALITY BASIN #1
(TOP BERM ELEV. 402.50)

EXISTING
TREELINE
(TYPICAL)

EXISTING
ROUND
STONE
STOCKPILES

EXISTING
SEPTIC SAND
STOCKPILE

EXISTING
TOPSOIL
STOCKPILE

EXISTING
TOPSOIL
STOCKPILE

PROPOSED ¾" CRUSHED STONE
INFILTRATION TRENCH
(SEE DETAIL)

PROPOSED
OUTLET STRUCTURE #1
TOP GRATE = 401.00
6" ORIFICE = 398.50
18" OUTLET = 395.00

WETLANDS AREA
25,741 S.F.
0.59 ACRES

100' UPLAND
REVIEW AREA

EXISTING
SILT FENCE

EXISTING
GRAVEL
DRIVE

EXISTING
SCREENED
SAND
STOCKPILE

30' WIDE
CONSTRUCTION
ACCESS

PROPOSED
CONCRETE
EQUIPMENT PADS

EXISTING
FILL
STOCKPILE

EXISTING
EDGE OF
CLEARING

EXISTING
6" PVC OUTLET
FL = 365.52

EXISTING 3' MINUS NATIVE
ROUND STONE BERM

EXISTING TEMPORARY
SEDIMENT TRAP
336 C.Y. TO ELEV. 367.00
(321.6 C.Y. REQUIRED)
HIGH WATER MARK 364.95

EXISTING CRUSHED STONE
INFILTRATION TRENCH
W/ 6" PVC (PERF.) PIPE

PROCESSED
GRAVEL
STOCKPILE

EXISTING SILT FENCE
(RE-ERECT AND STAPLE
SILT FENCE AS REQUIRED)

EXISTING
MODIFIED GRADE
NATIVE ROUND STONE
TOP SPILLWAY
ELEV. 367.36

100' UPLAND
REVIEW AREA

FLAGGED INLAND
WETLANDS
(TYPICAL)

WETLANDS AREA
19,282 S.F.
0.44 ACRES

EXISTING STONE WALL

"RESTORED FIELD"

100' UPLAND
REVIEW AREA

FLAGGED
INLAND
WETLANDS

PROPOSED
415' 18" CPP
@ 0.7%

PROPOSED
18" RCP FLARED END
FL = 392.00

PROPOSED 10' x 10'
MODIFIED GRADE RIP-RAP
OR NATIVE BOULDER
LEVEL SPREADER
UNDERLAIN WITH
NON-WOVEN FILTER FABRIC

12" MODIFIED GRADE RIP-RAP
EMERGENCY SPILLWAY
10'W x 10'L 3:1 SIDE SLOPES
UNDERLAIN WITH NON-WOVEN
FILTER FABRIC
ELEV. 399.50

PROPOSED
175' - 18" CPP
@ 5.1%

229.93' TO
WETLANDS

PROPOSED
18" RCP FLARED END
FL = 379.00

110.45' TO
WETLANDS

PROPOSED
OUTLET STRUCTURE #2
TOP GRATE = 399.50
6" WIDE x 46" HIGH WEIR = 392.80
18" OUTLET = 388.00

PROPOSED STORM WATER
QUALITY BASIN #2
(TOP BERM ELEV. 401.00)

193.34' TO
WETLANDS

PROPOSED 15' x 15'
INTERMEDIATE RIP-RAP
OR NATIVE BOULDER
LEVEL SPREADER
UNDERLAIN WITH
NON-WOVEN FILTER FABRIC

319.63' TO EDGE
OF WILDCAT BROOK

344.45' TO EDGE
OF WILDCAT BROOK

PROPOSED GRASS-LINED
SWALE TO PROPOSED
STORM WATER QUALITY
BASIN

171.5' TO
WETLANDS

PROPOSED
6" PVC SDR-35
CRUSHED STONE (¾")
INFILTRATION TRENCH

191.72' TO EDGE
OF WILDCAT BROOK

111.48' TO
WETLANDS

428x67

BOULDER

429x28

428x63

429x46

BOULDER

429x77

BOULDER

BOULDER

428x30

429x57

429x60

BOULDER

429x90

BOULDER

COOL
BOULDER

BOULDER

BOULDER

BOULDER

MT WHITE
LINE

BOULDER

429x30

BOULDER

BOULDER

BOULDER
SPLIT BY TREE

BOULDER

SWALE

GRAPHIC SCALE
60 30 0 60 120
1 Inch = 60 Feet

PREPARED FOR:
Burlington Solar One, LLC
Verogy VCP, LLC
150 Trumbull Street
Hartford, CT 06103

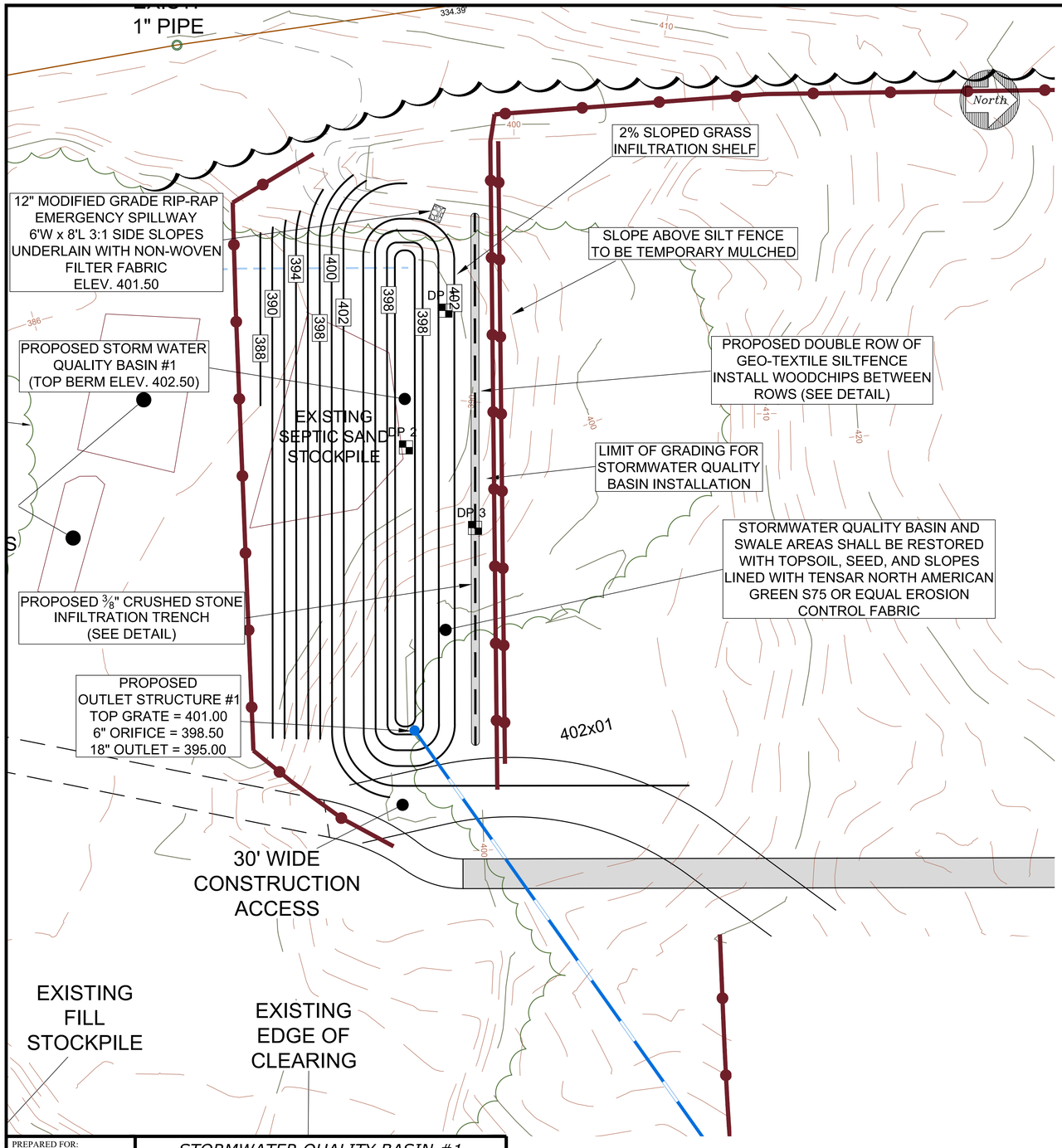
FINAL GRADING PLAN
Lot 33
Prospect Street
Burlington, Connecticut
September 1, 2020

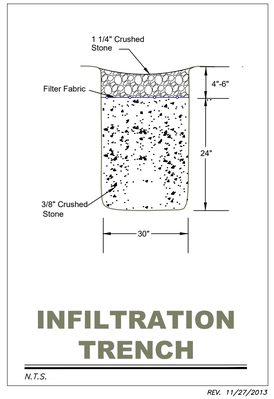
R. R. HILTBRAND
Engineers
and
Surveyors

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

SHEET 7 OF 15

REVISED 06/29/21: REVISED PANEL LAYOUT AND DEEP COMMENTS
REVISED 04/07/21 - REVISED LANDSCAPING
REVISED 02/10/21 - FIRST DESIGN SUBMITTAL
REVISED 10/30/20 - REVISED PANEL LAYOUT

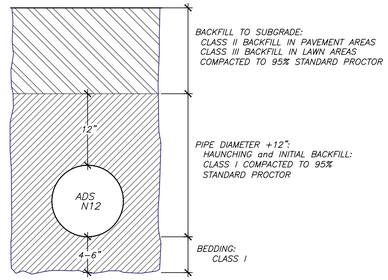




INFILTRATION TRENCH

N.T.S.

REV. 11/27/2013



CLASS I BACKFILL:
ANGULAR CRUSHED STONE OR ROCK, DENSE OR OPEN-GRADED WITH LITTLE OR NO FINES (¼ INCH TO 2½ INCHES IN SIZE).

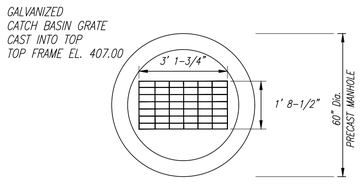
CLASS II BACKFILL:
CLEAN, COARSE-GRAINED MATERIALS, SUCH AS GRAVEL, COARSE SANDS AND GRAVEL/SAND MIXTURES (1 ½inches max. size).

CLASS III BACKFILL:
COARSE-GRAINED MATERIALS WITH FINES INCLUDING SILTY OR CLAYEY GRAVELS OR SANDS. GRAVEL OR SAND MUST COMPRISE MORE THAN 50 PERCENT OF CLASS III MATERIALS (1 ½INCHES MAX. SIZE).

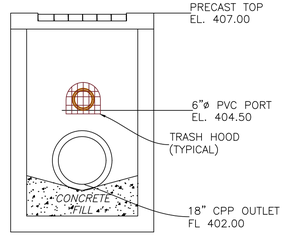
ADS N-12 (CPP) TRENCH DETAIL N.T.S.

DEEP TEST PITS - JANUARY 21, 2021

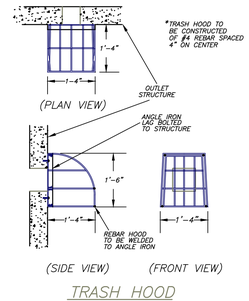
DP #1	0 - 2"	FOREST LITTER
EL. 403.0	2 - 10"	BROWN MEDIUM SAND
	10 - 60"	BROWN COARSE SAND & GRAVEL
DP #2	0 - 48"	MIXED NATIVE FILL
EL. 401.0		FINE TO MEDIUM SAND & GRAVEL
DP #3	0 - 2"	FOREST LITTER
EL. 404.0	2 - 70"	BROWN FINE/MEDIUM SAND & GRAVEL (LARGE ROCKS 24"-30")
		GROUNDWATER @ 63" (EL. 398.8±)



–PLAN VIEW–



–SECTION–
PROPOSED OUTLET STRUCTURE #1



TRASH HOOD DETAIL
N.T.S.

PREPARED FOR:
Burlington Solar One, LLC
Verogy VCP, LLC
150 Trumbull Street
Hartford, CT 06103

R. R. HILTBRAND Engineers and Surveyors

STORMWATER QUALITY BASIN #1
Lot 33
Prospect Street
Burlington, Connecticut
January 15, 2021

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

GRAPHIC SCALE
30 15 0 30 60
1 Inch = 30 Feet

REVISED 06/29/21: REVISED PANEL LAYOUT AND DEEP COMMENTS
REVISED 02/10/21: FIRST DESIGN SUBMITTAL

SEE CONSTRUCTION SEQUENCE ON DETAILS SHEET (PAGE 12 OF 15)

North

COOL BOULDER

STORMWATER QUALITY BASIN AND SWALE AREAS SHALL BE RESTORED WITH TOPSOIL, SEED, AND SLOPES LINED WITH TENSAR NORTH AMERICAN GREEN S75 OR EQUAL EROSION CONTROL FABRIC

BOULDER

PROPOSED DOUBLE ROW OF GEO-TEXTILE SILTFENCE INSTALL WOODCHIPS BETWEEN ROWS (SEE DETAIL)

OSED
" CPP
.7%

PROPOSED 10' x 10' MODIFIED GRADE RIP-RAP OR NATIVE BOULDER LEVEL SPREADER UNDERLAIN WITH NON-WOVEN FILTER FABRIC

PROPOSED 18" RCP FLARED END FL = 392.00

DP 3

12" MODIFIED GRADE RIP-RAP EMERGENCY SPILLWAY 10'W x 10'L 3:1 SIDE SLOPES UNDERLAIN WITH NON-WOVEN FILTER FABRIC ELEV. 399.50

PROPOSED CRUSHED STONE INFILTRATION TRENCH (SEE DETAIL)

BOULDER

2% SLOPED GRASS INFILTRATION SHELF

48" WHI PINE

PROPOSED 175' - 18" CPP @ 5.1%

229.93' TO WETLANDS

PROPOSED 18" RCP FLARED END FL = 379.00

DP 2

DP 1

74
WF 75
WF 76
WF 77
8

110.45' TO WETLANDS

PROPOSED OUTLET STRUCTURE #2
TOP GRATE = 399.50
6" WIDE x 46" HIGH WEIR = 392.80
18" OUTLET = 388.00

SWALE

370

PROPOSED 15' x 15' INTERMEDIATE RIP-RAP OR NATIVE BOULDER LEVEL SPREADER UNDERLAIN WITH NON-WOVEN FILTER FABRIC

PROPOSED STORM WATER QUALITY BASIN #2
(TOP 10' WIDE BERM ELEV. 401.00)

193.34' TO WETLAND

PROPOSED GEO-TEXTILE SILTFENCE BACKED WITH 12" HIGH SEDIMENT LOG

344.45' TO EDGE OF WILDCAT BROOK

319.63' TO EDGE OF WILDCAT BROOK

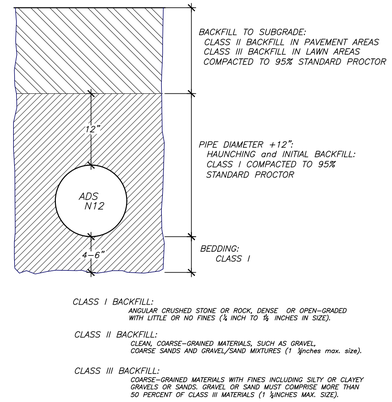
PROPOSED GRASS-LINED SWALE TO PROPOSED STORM WATER QUALITY BASIN

171.5' TO WETLANDS

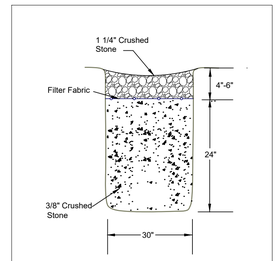
FLAGGED INLAND WETLANDS

WETLANDS AREA
190,131 S.F.
4.36 ACRES

GRAPHIC SCALE
30 15 0 30 60
1 Inch = 30 Feet



ADS N-12 (CPP) TRENCH DETAIL N.T.S.



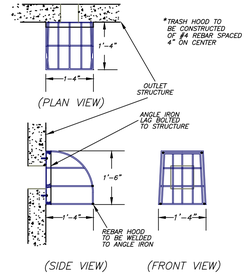
INFILTRATION TRENCH

N.T.S.

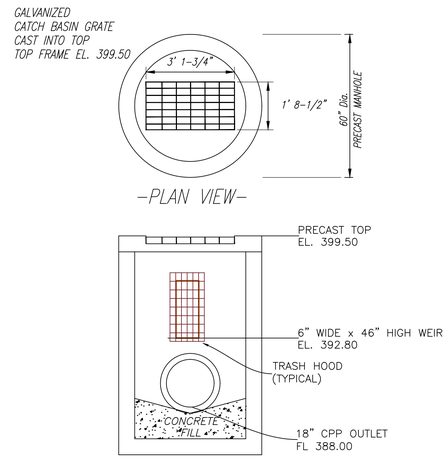
REV. 11/27/2013

DEEP TEST PITS - JANUARY 21, 2021

DP #1	(IN PATH)	
EL. 402.0	0 - 20"	BROWN FINE TO MEDIUM SAND
	20 - 62"	TAN MEDIUM TO COARSE SAND
	62 - 140"	TAN COARSE SAND & GRAVEL
	NO GROUNDWATER	
DP #2	0 - 2"	FOREST LITTER
EL. 400.0	2 - 36"	TAN FINE TO MEDIUM SAND
	36 - 120"	TAN COARSE SAND & GRAVEL
	NO GROUNDWATER	
DP #3	0 - 2"	FOREST LITTER
EL. 400.0	3 - 11"	TOP SOIL
	11 - 26"	ORANGE BROWN FINE SANDY LOAM
	26 - 108"	TAN COARSE SAND & GRAVEL
	GROUNDWATER @ 98" (EL. 392.0±)	



TRASH HOOD DETAIL
N.T.S.



PROPOSED OUTLET STRUCTURE #2

PREPARED FOR:
Burlington Solar One, LLC
Verogy VCP, LLC
150 Trumbull Street
Hartford, CT 06103

R. R. HILTBRAND Engineers and Surveyors

STORMWATER QUALITY BASIN #2
Lot 33
Prospect Street
Burlington, Connecticut
January 15, 2021

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

SHEET 9 OF 15

REVISED 06/29/21: REVISED PANEL LAYOUT AND DEEP COMMENTS
REVISED 02/10/21: FIRST DESIGN SUBMITTAL

PREPARED FOR:
Burlington Solar One, LLC
Verogy VCP, LLC
150 Trumbull Street
Hartford, CT 06103

GRADING PLAN
Lot 33
Prospect Street
Burlington, Connecticut

September 1, 2020

R. R. HILTBRAND Engineers and Surveyors

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

REVISED 06/29/21: REVISED PANEL LAYOUT AND DEEP COMMENTS
REVISED 04/07/21 - REVISED LANDSCAPING
REVISED 03/18/21 - REVISED PANEL LAYOUT
REVISED 02/10/21 - FIRST DESIGN SUBMITTAL
REVISED 10/30/20 - REVISED PANEL LAYOUT

N/F
JOSEPH &
DEVONA TAMMY
CARON
#24 MAIN STREET
ZONE R-44

N/F
JOHN HEBERT
#30 MAIN STREET
ZONE R-44

N/F
JOHN HEBERT
#34 MAIN STREET
ZONE R-44

N/F
ROLAND & ROSE MARIE
PAVLIK
#44 MAIN STREET
ZONE R-44

N/F
MARK A. &
PATRICIA B.
SMALDONE
#48 MAIN STREET
ZONE R-44

N/F
KAREN HEBERT
STONE ROAD
ZONE R-44

N/F
EWELINA & RICHARD
CZERCZAK
#56 STONE ROAD
ZONE R-44

N/F
DONNA C. GASKI
#62 STONE ROAD
ZONE R-44

North

PLANTING LIST:

SYMBOL	DESCRIPTION	SIZE	QUANTITY
	NORWAY SPRUCE or WHITE PINE	5' - 6' HIGH	156
	SUGAR MAPLE or HERITAGE BIRCH	1.5" - 2" CAL.	18
	CATAWVA RHODODENDRON	24" - 30" HIGH	7

23 EACH MIX OF
5' - 6' HIGH NORWAY SPRUCE
AND
5' - 6' HIGH EASTERN WHITE PINE
(AT 15' ON CENTER)

PROPOSED 8' HIGH
CHAIN LINK FENCE
(TYPICAL)

4' HIGH
EARTHEN BERM

6' HIGH NORWAY SPRUCE
TREES ALONG MUTUAL
PROPERTY LINE OFFERED TO
PROPERTY OWNER TO BE
PLANTED PRIOR TO
CONSTRUCTION

6' HIGH
EARTHEN BERM

PROPOSED
8' HIGH GATE

30' WIDE
CONSTRUCTION
ACCESS

PROPOSED
CONCRETE
EQUIPMENT PADS

EXISTING
EDGE OF
CLEARING

14 EACH MIX OF
5' - 6' HIGH NORWAY SPRUCE
AND
5' - 6' HIGH EASTERN WHITE PINE
(AT 15' ON CENTER)

PROPOSED 8' HIGH
CHAIN LINK FENCE
ON TOP OF BERM
(TYPICAL)

4' HIGH
EARTHEN BERM

PROPOSED 8' HIGH
CHAIN LINK FENCE
(TYPICAL)

BENCHMARK
SURVEYOR'S
CONTROL POINT
ELEV. 431.76

4' HIGH
EARTHEN BERM

100' UPLAND
REVIEW AREA

EXISTING
TOPSOIL
STOCKPILE

EXISTING
TOPSOIL
STOCKPILE

EXISTING
ROUND
STONE
STOCKPILES

EXISTING
SCREENED
SAND
STOCKPILE

EXISTING
SCREENED
SAND
STOCKPILE

EXISTING
FILL
STOCKPILE

PROCESSED
GRAVEL
STOCKPILE

WETLANDS AREA
25,741 S.F.
0.59 ACRES

WETLANDS AREA
19,282 S.F.
0.44 ACRES

FLAGGED
INLAND
WETLANDS

EXISTING STONE WALL

"RESTORED FIELD"

APPARENT LEDGE
OUTCROPS

BOULDER
BOULDER SPLIT BY TREE
COOL BOULDER
MT WHITE LINE

GRAPHIC SCALE
60 30 0 60 120
1 Inch = 60 Feet

PREPARED FOR:
Burlington Solar One, LLC
Verogy VCP, LLC
150 Trumbull Street
Hartford, CT 06103

LANDSCAPING PLAN
Lot 33
Prospect Street
Burlington, Connecticut

January 14, 2021

R. R. HILTBRAND
Engineers and Surveyors

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

SHEET 11 OF 15

REVISED 06/29/21: REVISED PANEL LAYOUT AND DEEP COMMENTS
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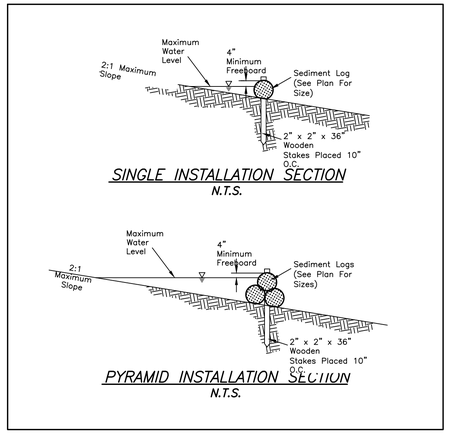
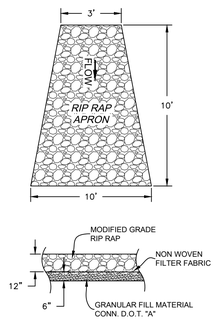
REVISED 02/10/21 - FIRST DESIGN SUBMITTAL
REVISED 10/30/20 - REVISED PANEL LAYOUT



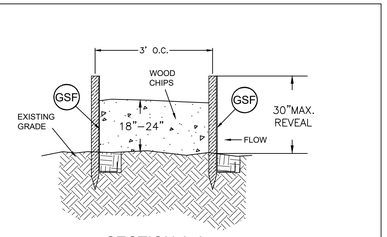
SEDIMENT LOG
N.T.S.



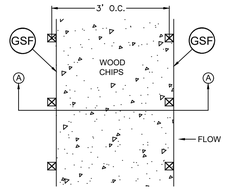
OP

RIP RAP APRON FOR 18" RCP OUTFALLS

N.T.S.



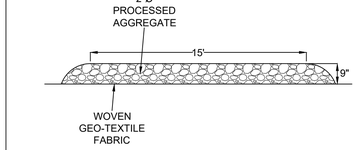
SECTION A-A



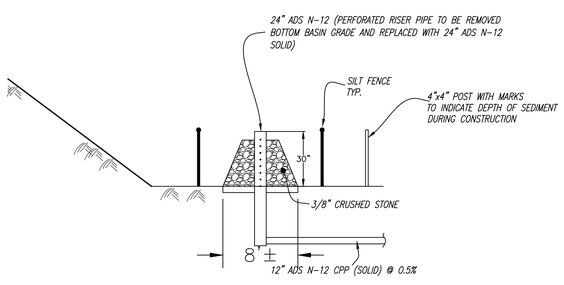
PLAN

DOUBLE ROW GEO-TEXTILE SILT FENCE INSTALLATION DETAIL

N.T.S.



PROPOSED GRAVEL ACCESS ROAD
N.T.S.



TEMPORARY SEDIMENT TRAP OUTLET DURING CONSTRUCTION

TST

N.T.S.

Construction Sequence
Burlington Solar One

Phase 1 (Clearing and Site Erosion Controls)

1. Call Before You Dig at 1-800-922-4455 or 811 prior to any construction.
2. Survey flag limits of clearing.
3. Conduct a pre-construction meeting with land clearer to discuss operations and limits.
4. Clear trees and brush. 16.6 Acres
5. Only stump and grub areas for perimeter erosion control measures and east and west stormwater quality basins. 3.9 Acres
6. Install perimeter erosion control measures. Measures shall be inspected weekly or after all rainfall events of 0.5" rainfall or greater. Fix any defects in erosion control measures immediately.
7. Strip topsoil within the stormwater quality basin areas and stockpile in the existing topsoil pile (unscreened) within the existing earth removal operation.
8. Complete earthwork for east and west stormwater quality basins.
9. Install drainage components of east and west stormwater quality basins.
10. Install crushed stone infiltration trench above east and west stormwater quality basins.
11. Restore east and west stormwater quality basin areas and slopes with topsoil.
12. Seed bottom of basins and slopes with New England Wetlands Mix.
13. Use erosion control fabric (Tensar North American Green S75 or equal) on all slopes greater than 5:1.
14. Erect temporary erosion control measures up-slope of both stormwater quality basins as shown.
15. Up-slope temporary grading to be covered with hay mulch for temporary protection until next phase of construction.

Phase 2 (West Array)

1. Stump and grub remainder of the site. 12.7 Acres
2. All stumps, etc., to be ground and removed off-site.
3. Install Temporary Sediment Traps #1 and #2.
4. Erect temporary erosion control measures on east array as shown.
5. Strip and stockpile topsoil as required to complete west array grading. Topsoil pile to be protected with geo-textile silt fence. Stockpile time frame shall be short term. (2 weeks or less)
6. Complete grading for the west array as shown. East array shall remain un-graded during west array construction.
7. Restore all graded areas with topsoil, 6" minimum depth.
8. Install west array solar panels and associated appurtenances.
9. Remove Temporary Sediment Trap #1. (Temporary Sediment Trap #2 to remain for Phase 2)
10. Hydro-seed west array area with wildflower mix upon completion of solar panel installation.
11. Maintain down-slope erosion control measures until turf has been established.
12. Construct gravel access road at end of Phase 2 construction.

Phase 3 (East Array)

1. Install Temporary Sediment Trap #3 and #4. Remove accumulated sediment from West Array construction activities from Temporary Sediment Trap #2
2. Strip and stockpile topsoil as required to complete east array grading.
3. Complete grading for the east array as shown.
4. Install northern half of east array.
5. Stabilize northern half of east array with 6" of topsoil.
6. Remove Temporary Sediment Trap #3
7. Install southern half of east array solar panels and associated appurtenances.
8. Stabilize southern half of east array with 6" of topsoil.
9. Remove Temporary Sediment Traps #2 and #4.
10. Restore all graded areas with topsoil, 6" minimum depth.
11. Hydro-seed east array area with wildflower mix upon completion of solar panel installation.
12. Maintain down-slope erosion control measures until turf has been established.

Phase 4 (Perimeter Limit of Disturbance)

1. Complete restoration of all perimeter areas with wildflower mix.
2. Complete supplemental landscaping for buffers to abuttors and subject property.
3. Install fencing.
4. Install equipment pad and underground utilities to pole location on Prospect Street.
5. Maintain all erosion control measures until turf all up-slope areas have been stabilized.

TEMPORARY SEDIMENT TRAP SIZING (WEST ARRAY)

AREA = 6.3 ACRES
DISTURBANCE TIMEFRAME - 6 MONTHS OR LESS
FAILURE WILL NOT RESULT IN DAMAGE TO PROPERTY

(A) AVERAGE EROSION 50 TONS PER ACRE PER YEAR
(DR) DELIVERY RATIO - 37%
(TE) TRAP EFFICIENCY - 80%
¥ - 110 LBS PER FT^3

VOLUME = 6.3 (50) (0.80) (2000 LBS/TON) / (110) (43,560) = 0.105 AcFt = 4,581 FT^3

(2) SEDIMENT TRAPS COMBINED #1 & #2 = 6,795 FT^3

TEMPORARY SEDIMENT TRAP SIZING (EAST ARRAY)

AREA = 4.3 ACRES (NORTH) - 2.75 ACRES (SOUTH)
DISTURBANCE TIMEFRAME - 3 MONTHS OR LESS
FAILURE WILL NOT RESULT IN DAMAGE TO PROPERTY

(A) AVERAGE EROSION 50 TONS PER ACRE PER YEAR
(DR) DELIVERY RATIO - 37%
(TE) TRAP EFFICIENCY - 80%
¥ - 110 LBS PER FT^3

VOLUME NORTH = 4.3 (50) (0.80) (2000 LBS/TON) / (110) (43,560) = 0.072 AcFt = 3,127 FT^3

SEDIMENT TRAP #3 = 5,200 FT^3

VOLUME SOUTH = 2.75 (50) (0.80) (2000 LBS/TON) / (110) (43,560) = 0.046 AcFt = 2,000 FT^3

(2) SEDIMENT TRAPS COMBINED #2 & #4 = 8,625 FT^3

REVISED 06/29/21 - REVISED PANEL LAYOUT AND DEEP COMMENTS
REVISED 02/10/21 - FIRST DESIGN SUBMITTAL
REVISED 10/30/20 - REVISED PANEL LAYOUT

NEW ENGLAND WETLAND PLANTS, INC
820 WEST STREET, AMHERST, MA 01002
PHONE: 413-548-8000 FAX 413-549-4000
EMAIL: INFO@NEWP.COM WEB ADDRESS: WWW.NEWP.COM

New England Erosion Control/Restoration Mix For Detention Basins and Moist Sites

Botanical Name	Common Name	Indicator
Elymus riparius	Riverbank Wild Rye	FACW
Schizachyrium scoparium	Little Bluestem	FACU
Festuca rubra	Red Fescue	FACU
Andropogon gerardii	Big Bluestem	FAC
Panicum virgatum	Switch Grass	FAC
Vernonia noveboracensis	New York Ironweed	FACW+
Agrostis perennans	Upland Bentgrass	FACU
Bidens frondosa	Beggar Ticks	FACW
Eupatorium maculatum (Eutrochium maculatum)	Spotted Joe Pye Weed	OBL
Eupatorium perfoliatum	Boneset	FACW
Aster novae-angliae (Symphyotrichum novae-angliae	New England Aster	FACW-
Scirpus cyperinus	Wool Grass	FACW
Juncus effusus	Soft Rush	FACW+

PRICE PER LB. $37.00 MIN. QUANITY 3 LBS. TOTAL: $111.00 APPLY: 35 LBS/ACRE :1250 sq ft/lb

The New England Erosion Control/Restoration Mix for Detention Basins and Moist Sites contains a selection of native grasses and wildflowers designed to colonize generally moist, recently disturbed sites where quick growth of vegetation is desired to stabilize the soil surface. It is an appropriate seed mix for ecologically sensitive restorations that require stabilization as well as long-term establishment of native vegetation. This mix is particularly appropriate for detention basins that do not hold standing water. Many of the plants in this mix can tolerate infrequent inundation, but not constant flooding. The mix may be applied by hand, by mechanical spreader, or by hydro-seeder. After sowing, lightly rake, roll or cultipack to insure good seed-to-soil contact. Best results are obtained with a Spring or late Summer seeding. Late Fall and Winter dormant seeding requires an increase in the application rate. A light mulching of clean, weed-free straw is recommended

New England Wetland Plants, Inc. may modify seed mixes at any time depending upon seed availability. The design criteria and ecological function of the mix will remain unchanged. Price is $/bulk pound, FOB warehouse, Plus SH and applicable taxes.

SEED MIX FOR BOTTOM OF INFILTRATION BASINS

NEW ENGLAND WETLAND PLANTS, INC
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PHONE: 413-548-8000 FAX 413-549-4000
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New England Conservation/Wildlife Mix

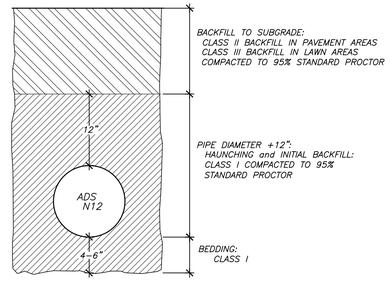
Botanical Name	Common Name	Indicator
Elymus virginicus	Virginia Wild Rye	FACW-
Schizachyrium scoparium	Little Bluestem	FACU
Andropogon gerardii	Big Bluestem	FAC
Festuca rubra	Red Fescue	FACU
Sorghastrum nutans	Indian Grass	UPL
Panicum virgatum	Switch Grass	FAC
Chamaecrista fasciculata	Partridge Pea	FACU
Desmodium canadense	Showy Tick Trefoil	FAC
Asclepias tuberosa	Butterfly Milkweed	NI
Bidens frondosa	Beggar Ticks	FACW
Eupatorium purpureum (Eutrochium maculatum)	Purple Joe Pye Weed	FAC
Rudbeckia hirta	Black Eyed Susan	FACU-
Aster pilosus (Symphyotrichum pilosum)	Heath (or Hairy) Aster	UPL
Solidago juncea	Early Goldenrod	

PRICE PER LB. $39.50 MIN. QUANITY 2 LBS. TOTAL: $79.00 APPLY: 25 LBS/ACRE :1750 sq ft/lb

The New England Conservation/Wildlife Mix provides a permanent cover of grasses, wildflowers, and legumes for both good erosion control and wildlife habitat value. The mix is designed to be a no maintenance seeding, and is appropriate for cut and fill slopes, detention basin side slopes, and disturbed areas adjacent to commercial and residential projects.

New England Wetland Plants, Inc. may modify seed mixes at any time depending upon seed availability. The design criteria and ecological function of the mix will remain unchanged. Price is $/bulk pound, FOB warehouse, Plus SH and applicable taxes.

SEED MIX FOR INFILTRATION BASIN SLOPES & OUTSIDE OF FENCE TO LIMIT OF DISTURBANCE



CLASS I BACKFILL:
ANGULAR CRUSHED STONE OR ROCK, DENSE OR OPEN-GRADED WITH LITTLE OR NO FINES (¼ INCH TO 1½ INCHES IN SIZE).

CLASS II BACKFILL:
CLEAN, COARSE-GRAINED MATERIALS, SUCH AS GRAVEL, COARSE SANDS AND GRAVEL/SAND MIXTURES (1 ½inches max. size).

CLASS III BACKFILL:
COARSE-GRAINED MATERIALS WITH FINES INCLUDING SILTY OR CLAYEY GRAVELS OR SANDS. GRAVEL OR SAND MUST COMPRISE MORE THAN 50 PERCENT OF CLASS III MATERIALS (1 ½INCHES MAX. SIZE).

ADS N-12 (CPP) TRENCH DETAIL N.T.S.

PREPARED FOR:
Burlington Solar One, LLC
Verogy VCP, LLC
150 Trumbull Street
Hartford, CT 06103

R. R. HILTBRAND Engineers and Surveyors

SITE DETAILS
Lot 33
Prospect Street
Burlington, Connecticut
September 1, 2020

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

DESIGN REFERENCE:

SEDIMENT & EROSION CONTROL BASED ON 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL D.E.P. BULLETIN 34 BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION.

Erosion & Sediment Controls and Stabilization Practices

a. Temporary seeding.
b. Mulching.
c. Stone Rip-rap.

During construction, sheet runoff from the site will be filtered through hay bale barriers and silt fences. All storm drain inlets shall be provided with barrier filters. Stone rip-rap shall be provided at the outlets of drainage pipe in which erosive velocities are encountered.

Off Site Vehicle Tracking

Stabilized construction entrances will be installed at all proposed entrances.

Installation, Maintenance and Inspection Procedures of Erosion & Sediment Controls

A. General–

These are the general inspection and maintenance practices that will be used to implement the plan.

– The smallest practical portion of the site will be denuded at one time.

– All erosion control measures will be inspected at least once a week and following any storm event of 0.25 inches or greater.

– All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of the report.

– Built up sediment will be removed from the silt fence or hay bale barriers when it has reached one third the height of the of the fence or barrier.

– A maintenance inspection report will be made after each inspection.

– The contractor's site superintendent will be responsible for inspections, maintenance and repair activities, and completing the inspection and maintenance report.

– R.R. Hiltbrand Engineers & Surveyors shall inspect the site on a periodic basis to assure compliance with the plan.

B. Filters –

1. Straw/ hay bales
   a. Sheet Flow Applications
      1. Bales shall be placed in a single row , lengthwise on the contour, with the ends of the adjacent bales tightly abutting one another.
      2. All bales shall be either wire bound or string tied. Bales shall be installed so that the bindings are oriented around the sides rather than along the tops and bottoms of the bales to prevent deterioration of the bindings.
      3. The barrier shall be entrenched and backfilled. A trench shall be excavated the width of a bale and the length of the proposed barrier to a minimum depth of (4) inches. After the bales are staked and chinked, the excavated soil shall be backfilled against the barrier. Backfill soil shall conform to the ground level on the downhill side and shall be built-up to (4) inches against the uphill side of the barrier. Ideally, bales should be placed ten (10) feet away from the toe of slope.
      4. Each bale shall be securely anchored by at least two (2) stakes or rebars driven through the bale. The first stake in each bale shall be driven toward the previously laid bale to force the bales together. Stakes and rebars shall be driven deep enough into the ground to securely anchor the bales.
      5. The gaps between bales shall be chinked (filled by wedging) with straw/hay to prevent water from escaping between the bales.
2. Silt Fence
   a. Synthetic filter fabric shall be a pervious sheet of propylene, nylon, polyester or ethylene yarn and shall be certified by the manufacturer or supplier as conforming to the following requirements.

Physical Property Test Requirements

Filtering Efficiency ASTM 5.41 75% minimum

Grab Tensile Strength ASTM D4632 100lbs.
Elongation & Failure ASTM D4632 15%
Puncture Strength
ASTM 4833 50 lbs.

Flow Rate ASTM D4491 0.2gal./ft2/min.

Ultra-Violet Radiation Stability % ASTM D4355 70% after 500 hours of exposure

b. The height of a silt fence shall not exceed thirty (30) inches above grade.

c. The filter fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are necessary, filter cloth shall be spliced together only at the support posts, with a min. six (6) inch overlap, and securely sealed.

d. Posts shall be spaced a maximum of ten (10) feet apart at the barrier location and driven securely into the ground (min. of 12 inches).

e. A trench shall be excavated approximately six (6) inches wide and six (6) inches deep along the line of posts and upslope from the barrier.

f. When 'standard strength' filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least one inch long, tie wires or hog rings. The wire shall extend no more than 30 inches above the original ground surface.

g. The 'standard strength' filter fabric shall be stapled or wired to the fence, and eight (8) inches of the fabric shall be extended into the trench. The fabric shall not extend more than 30 inches above the original ground surface.

h. When 'extra strength' filter fabric and closer post spacing are used, the wire mesh support fence may be eliminated. In such a case the filter fabric is stapled or wired directly to the posts with all other provisions of item 'g' applying.

i. The trench shall be backfilled and the soil compacted over the filter fabric.

j. Silt fences shall be removed when they have served their useful purpose, but not before the upslope areas have been permanently stabilized.

Sequence of Installation

Sediment barriers shall be installed prior to any soil disturbance of the contributing drainage area above them.

Maintenance

a. Straw/ hay bale barrier and silt fence barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. They shall be repaired if there are any signs of erosion or sedimentation below them. Any required repairs shall be made immediately. If there are signs of undercutting at the center or the ends, or impounding of large volumes of water behind them, sediment barriers shall be replaced with a temporary check dam.

b. Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier still is necessary, the fabric shall be replaced promptly.

c. Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately (1/3) the height of the barrier.

d. Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform to the existing grade, prepared and seeded.

C. Mulching

1. Timing

In order for mulch to be effective, it must be in place prior to major storm events There are two (2) types of standards which shall be used to assure this.

a. Apply mulch prior to any storm event.

This is applicable when working within 100 feet of wetlands. It will be necessary to closely monitor weather predictions, usually by contacting the National Weather Service in Massachusetts (508– 822– 0634), to have adequate warning of significant storms.

b. Required mulching within a specified time period.

The time period can range from 14 to 21 days of inactivity on an area, the length of time varying with site conditions. Professional judgment shall be used to evaluate the interaction of site conditions (soil erodibility, season of year, extent of disturbance, proximity to sensitive resources, etc.) and the potential impact of erosion on adjacent areas to choose an appropriate time restriction.

2. Guidelines for winter mulch application.

When mulch is applied to provide protection over winter (past the growing season) it shall be at a rate of 6000 lb. of hay or straw per acre. A tackifier may be added to the mulch.

3. Maintenance

All mulches must be inspected periodically, in particular after rain storms, to check for erosion. If less than 90% of the soil surface is covered by mulch, additional mulch shall be immediately applied.

D. Temporary Grass Cover

1. Seedbed Preparation

Apply fertilizer at the rate of 300 lb. / acre of 10–10–10. Apply limestone (equivalent to 50% calcium plus magnesium oxide) at a rate of (1) tons/ acre.

2. Seeding

a. Utilize annual rye grass at a rate of 40 lb./ acre.

b. Where the soil has been compacted by construction operations, loosen soil to a depth of two (2) inches before applying fertilizer, lime and seed.

c. Apply seed uniformly by hand, cyclone seeder, or hydroseeder (slurry including seed and fertilizer). Hydroseedings, which include mulch, may be left on soil surface. Seeding rates must be increased 10% when hydroseeding.

3. Maintenance

Temporary seedings shall be periodically inspected. At a minimum, 95% of the soil surface shall be covered by vegetation. If any evidence of erosion or sedimentation is apparent, repairs shall be made and other temporary measures used in the interim (mulch, filter barriers, check dams, etc.).

E. Permanent Grass Cover

1. Seedbed Preparation

Apply fertilizer at the rate of 300 lb. / acre of 10–10–10. Apply limestone (equivalent to 50% calcium plus magnesium oxide) at a rate of (1) tons/ acre.

2. Seeding	Lbs./1,000 Sq. Ft.
a. Utilize Creeping Red Fescue (Pennlawn, Wintergreen)	.45
Redtop (Streeker, Common)	.10
Tall Fescue (Kentucky 31 or Smooth Bromegrass (Saratoga, Lincoln)	.45
	1.00

b. Where the soil has been compacted by construction operations, loosen soil to a depth of two (2) inches before applying fertilizer, lime and seed.

c. Apply seed uniformly by hand, cyclone seeder, or hydroseeder (slurry including seed and fertilizer). Hydroseedings, which include mulch, may be left on soil surface. Seeding rates must be increased 10% when hydroseeding.

F. Storm Drain Inlet Protection

1. Straw Bale Inlet Structure

a. Bales shall be either wire bound or string tied with the bindings oriented around the sides rather than over and under the bales.

b. Bales shall be placed lengthwise in a single row surrounding the inlet, with the ends of adjacent bales pressed together.

c. The filter barrier shall be entrenched and backfilled. A trench shall be excavated around the inlet the width of a bale to a minimum depth of four (4) inches. After the bales are staked, the excavated soil shall be backfilled and compacted against the filter barrier.

d. Each bale shall be securely anchored and held in place by at least two (2) stakes or rebars driven through the bale.

e. Loose straw shall be wedged between bales to prevent water from entering between bales.

F. Stabilized Construction Entrance

1. Specifications

a. Aggregate Size: Use two (2) inch stone. (Gradation Shall Be D.O.T. No. 3)

b. Aggregate thickness: Not less than six (6) inches.

c. Width: Ten (10) foot minimum, but not less than the full width of points where ingress or egress occurs.

d. Length: As required, but not less than one hundred (50) feet.

e. Geotextile: To be placed over the entire area to be covered with aggregate. Piping of surface water under entrance(s) shall be provided as required.

f. Criteria for Geotextile: The fabrics shall be Trevia Spunbound 1135, Mirafi 6000x, or equal.

2. Maintenance

The entrance(s) shall be maintained in a condition which will prevent tracking of sediment onto the public right-of-way. When washing is required, it shall be completed on an area stabilized with aggregate which drains into an approved sediment trapping device. All sediment shall be prevented from entering storm drains, ditches or waterways.

Timing of Controls/ Measures

As indicated in the sequence of Major Activities the hay bales and silt fences shall be installed prior to commencing any clearing, demolition or grading of the site. Structural controls shall be installed concurrently with the applicable activity, Area(s) where construction activity temporarily ceases for more than twenty one (21) days will be stabilized with a temporary seed and mulch within fourteen (14) days of the last disturbance. Once construction activity ceases permanently in an area, silt fences and hay bale barriers will be removed once permanent measures are established.

Waste Disposal

A. Waste Materials

All waste materials will be collected and stored in securely lidded receptacles. All trash and construction debris from the site will be deposited into a dumpster. No construction waste materials will be buried on site. All personnel will be instructed regarding the correct procedure for waste disposal by the superintendent.

B. Hazardous Waste

All hazardous waste materials will be disposed of in the manner specified by local or state regulation or by the manufacturer. Site personnel will be instructed in the practices by the superintendent.

C. Sanitary Waste

All sanitary waste will be collected from the portable units a minimum of once per week by a licensed sanitary waste management contractor.

Spill Prevention

A. Material Management Practices

The following are the materials management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances during construction to storm water runoff:

Good Housekeeping:

The following good housekeeping practices will be followed on site during the construction project:

–An effort will be made to store only sufficient amounts of products to do the job.

–All materials stored on site will be stored in a neat, orderly manner in their proper (original if possible) containers and, if possible, under a roof or other enclosure.

–Manufacturer's recommendations for proper use and disposal will be followed.

–The site superintendent will inspect daily to ensure proper use and disposal of materials.

–Substances will not be mixed with one another unless recommended by the manufacturer.

–When ever possible all of a product will be used up before disposing of the container.

Hazardous Products:

The following practices will be used to reduce the risks associated with hazardous products:

–Products will be kept in their original containers unless they are not re-sealable

–Original labels and product safety data will be retained for important product information.

–Surplus product that must be disposed of will be discarded according to the manufacturer's recommended methods of disposal.

B. Product Specific Practices

The following product specific practices will be followed on site:

Petroleum Products:

All on site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled. Any asphalt based substances used on site will be applied according to the manufacturer's recommendations.

Fertilizers:

Fertilizers used will be applied only in the minimum amounts directed by the specifications. Once applied, fertilizer will be worked into the soil to limit exposure to storm water Storage will be in a covered shed or enclosed trailers. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

Paints:

All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system but will be disposed of properly according to manufacturer's instructions or state and local regulations.

Concrete Trucks:

Concrete trucks will discharge and wash out surplus concrete or drum wash water in a contained area on site..

C. Spill Control Practices

In addition to good housekeeping and material management practices discussed in the previous section the following practices will be followed for spill prevention and cleanup:

–Manufacturer's recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.

–Materials and equipment necessary for spill cleanup will be kept in the material storage area on site. Equipment and materials will include but not limited to brooms, dustpans, mops, rags, gloves, goggles, kitty litter, sand, sawdust and plastic or metal trash containers specifically for this purpose.

–All spills will be cleaned up immediately after discovery.

–The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.

–Spills of toxic or hazardous material will be reported to the appropriate state or local government agency, regardless of the size.

–The spill prevention plan will be adjusted to include measures to prevent this type of spill from recurring and how to cleanup the spill if it recurs. A description of the spill, its cause, and the cleanup measures will be included.

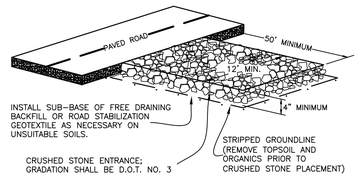
–The site superintendent responsible for day to day operations will be the spill prevention and cleanup coordinator.

Burlington Solar One, LLC/R.R. Hiltbrand Construction, LLC

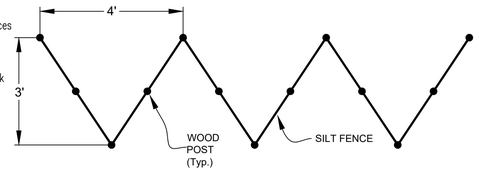
are assigned the responsibility for implementing this erosion and sediment control plan. This responsibility includes the installation and maintenance of control measures, informing all parties engaged on the construction site of the requirements and objectives of the plan, notifying the Planning and Zoning office of any transfer of this responsibility, and for conveying a copy of the Sediment & Erosion Control Plan if the title to the land is transferred.

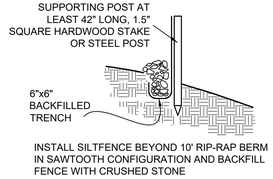
Contingency Erosion Plan

Should unforeseen erosion or sedimentation problems arise, the design engineer of record. (R.R. Hiltbrand Engineers & Surveyors) and the local enforcement agent shall be notified immediately. An inspection of the affected area(s) shall be promptly performed. A remedial action plan shall be formulated with the local enforcement agent's approval. The site contractor shall then implement the recommended course of action which has been determined by both the engineer and local enforcement agent.



CONSTRUCTION ENTRANCE n.t.s.

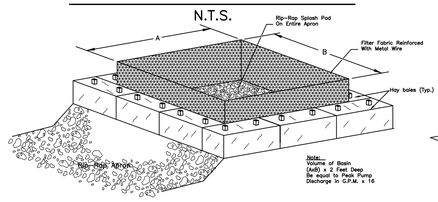




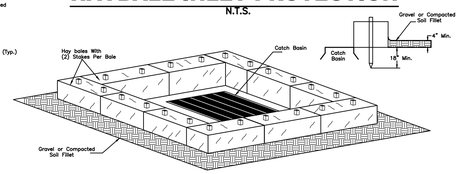
SAWTOOTH SILT FENCE DETAIL

n.t.s.

TEMPORARY SEDIMENT BASIN FOR DEWATERING DISCHARGE



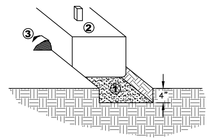
HAYBALE INLET PROTECTION

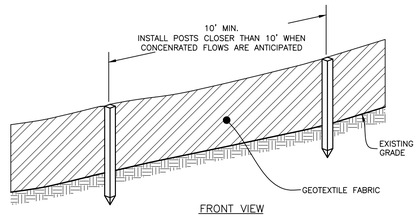


PLACEMENTand CONSTRUCTION OF HAY BALE BARRIER

N.T.S.

1. EXCAVATE TRENCH 4" AND PLACE FILL UP–SLOPE OF TRENCH.
   PLACE HAYBALE & STAKE FIRST STAKE AT ANGLE TOWARDS
2. FIRST HAYBALE. STAKES ARE 18" MIN. INTO GROUND.
3. BACKFILL & COMPACT EXCAVATED FILL ALONG HAY BALE.
4. WEDGE LOOSE HAY BETWEEN BALES.





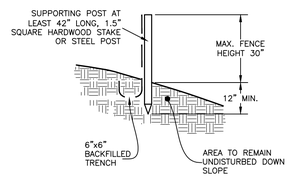
FRONT VIEW

DETAIL FOR FENCE JOINT

* POSITION POSTS TO OVERLAP AS SHOWN ABOVE, MAKING CERTAIN THAT THE FABRIC FOLDS AROUND EACH POST ONE FULL TURN
* DRIVE POSTS TIGHTLY TOGETHER AND SECURE TOPS OF POSTS BY TYING OFF WITH CORD OR WIRE TO PREVENT FLOW–THROUGH OF BUILT–UP SEDIMENT AT JOINT.

SILT FENCE

N.T.S.



SIDE VIEW

1. THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR SILT FENCES, OF THE '2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL'.
2. THE HEIGHT OF THE BARRIER SHALL NOT EXCEED 30 INCHES ABOVE GRADE.
3. POSTS SHALL BE SPACED A MAXIMUM OF (10) FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MIN. 12 INCHES). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL BE AS THE MANUFACTURER RECOMMENDS.
4. A TRENCH SHALL BE EXCAVATED APPROX.. (6) INCHES WIDE BY (6) INCHES DEEP ALONG THE LINE OF THE POSTS AND UPSLOPE FROM THE BARRIER IN ACCORDANCE WITH RECOMMENDATIONS.
5. THE FABRIC SHALL NOT EXTEND MORE THAN (30) INCHES ABOVE THE ORIGINAL GROUND SURFACE, AND WILL EXTEND A MINIMUM OF (8) INCHES INTO THE TRENCH. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
6. THE TRENCH SHALL BE BACKFILLED AND SOIL COMPACTED OVER THE FILTER FABRIC.
7. FILTER BARRIERS SHALL BE REMOVED WHEN THE HAVE SERVED THEIR USEFUL PURPOSE. BUT NOT BEFORE THE UPHILL SURFACE HAS BEEN PERMANENTLY STABILIZED.
8. FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL, AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
9. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
10. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN THEY REACH APPROXIMATELY ONE–HALF THE HEIGHT OF THE BARRIER.
11. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED, SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

REVISED 06/29/21 - REVISED PANEL LAYOUT AND DEEP COMMENTS
REVISED 02/10/21 - FIRST DESIGN SUBMITTAL
REVISED 10/30/20 - REVISED PANEL LAYOUT

PREPARED FOR:
Burlington Solar One, LLC
Verogy VCP, LLC
150 Trumbull Street
Hartford, CT 06103

R. R. HILTBRAND Engineers and Surveyors

SEDIMENT & EROSION CONTROL DETAILS SHEET

Lot 33
Prospect Street
Burlington, Connecticut

September 1, 2020

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548


TIME OF CONCENTRATION Tc = 105 MINUTES
DRAINAGE AREA DA-1 31.77 ACRES
POINT OF ANALYSIS
BENCHMARK NAIL IN SNET #1620 ELEV = 367.00
PROSPECT STREET
SOUTH MAIN STREET
WILDCAT BROOK
WHIGVILLE BROOK
N/F RAYMOND & SHEILA PAVLIK #51 SOUTH MAIN STREET ZONE R-44
N/F RICHARD M. CORLISS #18 MAIN STREET ZONE R-44
N/F JOSEPH & DEVONA TAMMY CARON #24 MAIN STREET ZONE R-44
N/F JOHN HEBERT #30 MAIN STREET ZONE R-44
N/F JOHN HEBERT #34 MAIN STREET ZONE R-44
N/F ROLAND & ROSE MARIE PAVLIK #44 MAIN STREET ZONE R-44
N/F MARK A. & PATRICIA B. SMALDONE #48 MAIN STREET ZONE R-44
N/F KAREN HEBERT STONE ROAD ZONE R-44
N/F EWELINA & RICHARD CZERCZAK #56 STONE ROAD ZONE R-44
N/F DONNA C. GASKI #62 STONE ROAD ZONE R-44
N/F OLIVER B. & LINDA R. DIAZ #72 STONE ROAD ZONE R-44
N/F LARRY A. & CYNTHIA P. RUEL #76 STONE ROAD ZONE R-44
N/F CRAIG C. & MEGHAN K. CARDER #29 WILDCAT ROAD ZONE R-44
N/F WHITE BARN FARM, LLC #303 JEROME AVENUE ZONE R-44
N/F STEVEN PETERSON #359 JEROME AVENUE ZONE R-15
N/F RUSSELL J. & DOROTHY K. WOLLMAN #365 JEROME AVENUE ZONE R-44
N/F CYNTHIA M. KASEY #22 PROSPECT STREET ZONE R-15
N/F JUSTIN W. KIRSCHNER & ALYSSA RUTH DESJARDINS #66 PROSPECT STREET ZONE I-2
N/F NORMAN H. & NOREEN L. KIRSCHNER #63 PROSPECT STREET ZONE R-15
EASEMENT IN FAVOR OF NEW BRITAIN WATER COMPANY V:98 - PG.250 BLR
LIMIT OF 100-YEAR FLOOD ZONE (NO ELEVATION)
FLAGGED INLAND WETLANDS
100' UPLAND REVIEW AREA
"RESTORED FIELD"
EXISTING/HISTORICAL ENTRANCE
EXISTING GATED ENTRANCE
BITUMINOUS MILLINGS ACCESS
PROCESSED GRAVEL STOCKPILE
EXISTING TOPSOIL STOCKPILE
EXISTING ROUND STONE STOCKPILES
EXISTING SEPTIC SAND STOCKPILE
EXISTING SCREENED SAND STOCKPILE
EXISTING FILL STOCKPILE
EXISTING EDGE OF CLEARING
EXISTING STONE WALL
TRAIL (TYPICAL)
BENCHMARK SURVEYOR'S CONTROL POINT ELEV. 431.76
CENTERLINE BROOK (PROPERTY LINE)
TIE-LINE ONLY PROPERTY LINE IS CENTERLINE BROOK
S02° 52' 54"E 2010.90'
S01° 03' 41"E 531.93'
GRAPHIC SCALE
1 Inch = 100 Feet

PREPARED FOR:
Burlington Solar One, LLC
Verogy VCP, LLC
150 Trumbull Street
Hartford, CT 06103

PRE-DEVELOPED DRAINAGE MAP

Lot 33
Prospect Street
Burlington, Connecticut

September 1, 2020

R. R. HILTBRAND ENGINEERS and SURVEYORS

575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

REVISED 06/29/21 - REVISED PANEL LAYOUT AND DEEP COMMENTS
REVISED 02/10/21 - FIRST DESIGN SUBMITTAL
REVISED 10/30/20 - REVISED PANEL LAYOUT

PREPARED FOR:
Burlington Solar One, LLC
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DEVELOPED DRAINAGE MAP
Lot 33
Prospect Street
Burlington, Connecticut
September 1, 2020

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

N/F
JOSEPH &
DEVONA TAMMY
CARON
#24 MAIN STREET
ZONE R-44

N/F
JOHN HEBERT
#30 MAIN STREET
ZONE R-44

N/F
JOHN HEBERT
#34 MAIN STREET
ZONE R-44

ROLAND & ROSE MARIE
PAVLIK
#44 MAIN STREET
ZONE R-44

MARK A. &
PATRICIA B.
SMALDONE
#48 MAIN STREET
ZONE R-44

N/F
KAREN HEBERT
STONE ROAD
ZONE R-44

N/F
EWELINA & RICHARD
CZERCZAK
#56 STONE ROAD
ZONE R-44

N/F
DONNA C. GA
#62 STONE RO
ZONE R-44

North

N10° 05' 36"W
244.97'

N08° 14' 06"W
467.86'

N08° 10' 16"W
334.39'

N08° 40' 16"W
325.53'

N12° 22' 26"W
125.03'

N03° 34' 16"W
84.57'

N63° 00' 15"E
16.80'

N07° 13' 38"W
52.34'

N80° 28' 21"E
234.24'

N83° 28' 41"E
188.05'

N82° 24' 21"E
134.37'

N61° 41' 51"E
177.43'

N40° 06' 21"E
121.90'

N26° 12' 51"E
77.30'

N41° 30' 21"E
136.08'

N15° 55' 51"
82.65'

EXIST. 1" PIPE

ORIGINAL LIMIT OF CLEARING

ORIGINAL SOLAR PANEL LOCATION

PROPOSED NEW LIMIT OF CLEARING

PROPOSED NEW SOLAR PANEL LOCATION (IN PURPLE)

BENCHMARK SURVEYOR'S CONTROL POINT ELEV. 431.76

EXISTING TOPSOIL STOCKPILE

EXISTING SEPTIC SAND STOCKPILE

EXISTING ROUND STONE STOCKPILES

EXISTING TOPSOIL STOCKPILE

EXISTING SCREENED SAND STOCKPILE

EXISTING FILL STOCKPILE

PROCESSED GRAVEL STOCKPILE

WETLANDS AREA
25,741 S.F.
0.59 ACRES

WETLANDS AREA
19,282 S.F.
0.44 ACRES

100' UPLAND REVIEW AREA

FLAGGED INLAND WETLANDS (TYPICAL)

EXISTING STONE WALL

"RESTORED FIELD"

12" MODIFIED GRADE RIP-RAP EMERGENCY SPILLWAY 6'W x 8'L 3:1 SIDE SLOPES UNDERLAIN WITH NON-WOVEN FILTER FABRIC ELEV. 401.50

PROPOSED STORM WATER QUALITY BASIN #1 (TOP BERM ELEV. 402.50)

PROPOSED ¾" CRUSHED STONE INFILTRATION TRENCH (SEE DETAIL)

PROPOSED OUTLET STRUCTURE #1 TOP GRATE = 401.00 6" ORIFICE = 398.50 18" OUTLET = 395.00

30' WIDE CONSTRUCTION ACCESS

EXISTING EDGE OF CLEARING

PROPOSED 415' 18" CPP @ 0.7%

PROPOSED 18" RCP FLARED END FL = 392.00

PROPOSED 10' x 10' MODIFIED GRADE RIP-RAP OR NATIVE BOULDER LEVEL SPREADER UNDERLAIN WITH NON-WOVEN FILTER FABRIC

12" MODIFIED GRADE RIP-RAP EMERGENCY SPILLWAY 10'W x 10'L 3:1 SIDE SLOPES UNDERLAIN WITH NON-WOVEN FILTER FABRIC ELEV. 399.50

PROPOSED 175' - 18" CPP @ 5.1%

229.93' TO WETLANDS

PROPOSED 18" RCP FLARED END FL = 379.00

110.45' TO WETLANDS

PROPOSED OUTLET STRUCTURE #2 TOP GRATE = 399.50 6" WIDE x 46" HIGH WEIR = 392.80 18" OUTLET = 388.00

PROPOSED 15' x 15' INTERMEDIATE RIP-RAP OR NATIVE BOULDER LEVEL SPREADER UNDERLAIN WITH NON-WOVEN FILTER FABRIC

319.63' TO EDGE OF WILDCAT BROOK

PROPOSED STORM WATER QUALITY BASIN #2 (TOP BERM ELEV. 401.00)

193.34' TO WETLANDS

344.45' TO EDGE OF WILDCAT BROOK

171.5' TO WETLANDS

PROPOSED GRASS-LINED SWALE TO PROPOSED STORM WATER QUALITY BASIN

SWALE

PROPOSED 6" PVC SDR-35 CRUSHED STONE (¾") INFILTRATION TRENCH

191.72' TO EDGE OF WILDCAT BROOK

111.48' TO WETLANDS

APPARENT LEDGE OUTCROPS

BOULDER

COOL BOULDER

BOULDER SPLIT BY TREE

48" WHITE PINE

428x67

429x28

428x63

429x46

429x77

428x30

429x67

429x60

429x90

429x30

441x61

441x39

440x98

EXISTING 6" PVC OUTLET FL = 365.52

EXISTING 3" MINUS NATIVE ROUND STONE BERM

EXISTING TEMPORARY SEDIMENT TRAP 336 C.Y. TO ELEV. 367.00 (521.8 C.Y. REQUIRED) HIGH WATER MARK 364.95

EXISTING MODIFIED GRADE NATIVE ROUND STONE TOP SPILLWAY ELEV. 367.36

EXISTING SILT FENCE (RE-DIRECT AND STAPLE SILT FENCE AS REQUIRED)

EXISTING CRUSHED STONE INFILTRATION TRENCH W/ 6" PVC (PERF) PIPE

EXISTING GRAVEL DRIVE

EXISTING SILT FENCE

EXISTING TREELINE (TYPICAL)

EXISTING FILL STOCKPILE

GRAPHIC SCALE
60 30 0 60 120
1 Inch = 60 Feet

PREPARED FOR:
Burlington Solar One, LLC
Verogy VCP, LLC
150 Trumbull Street
Hartford, CT 06103

ORIGINAL PLAN VS NEW PLAN
Lot 33
Prospect Street
Burlington, Connecticut

April 7, 2021

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548