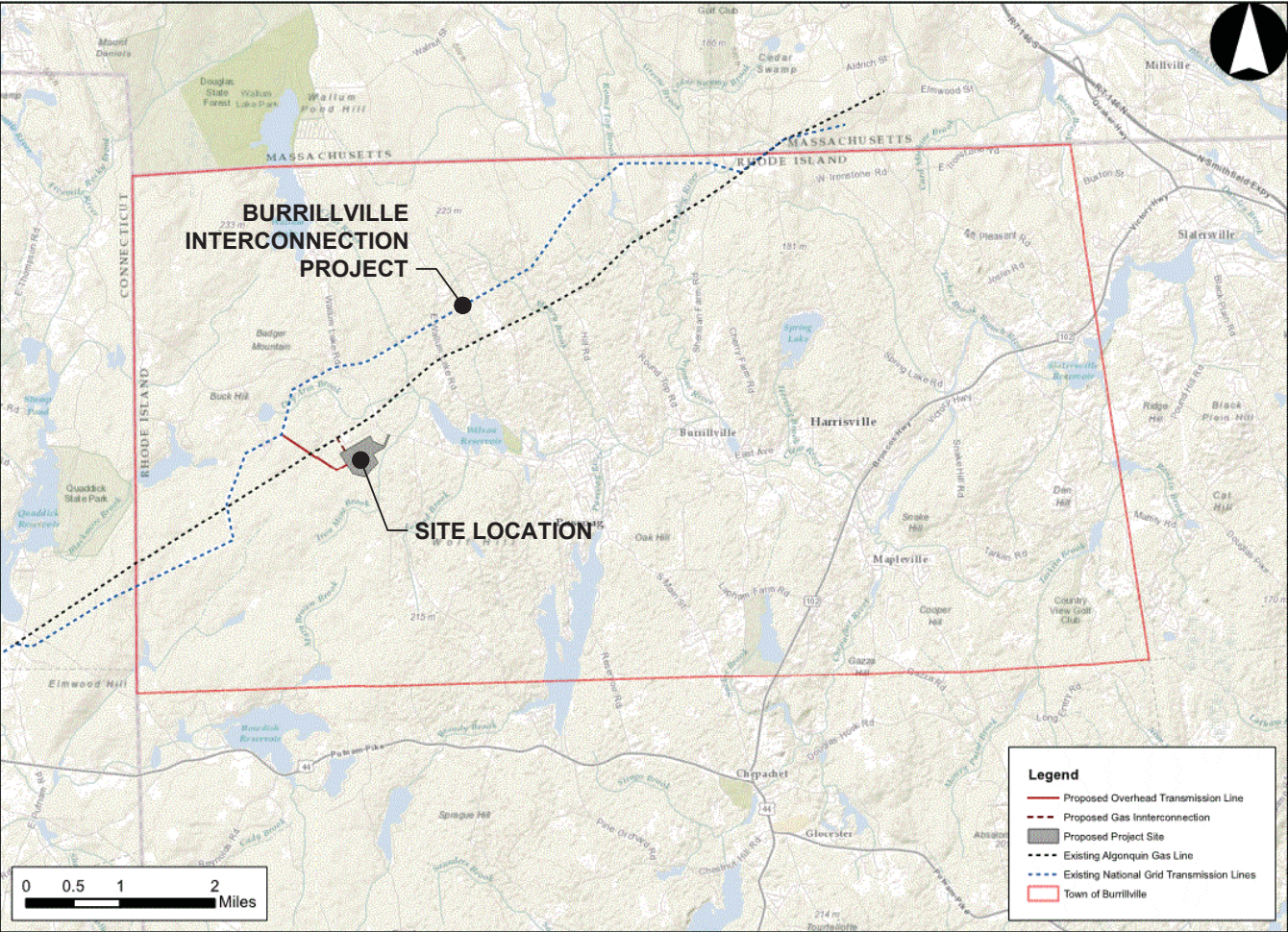


Appendix A

Site Plans



Drawing Package For

INVENERGY

Clear River Energy Center and Burrillville Interconnection Project

Project No.
10021318

Burrillville, Rhode Island
March, 2017

INDEX OF DRAWINGS
STORMWATER MANAGEMENT & SESC DRAWING PACKAGE
BURRILLVILLE INTERCONNECTION PROJECT RIDEM APPLICATION NO. 17-XXX DRAWING PACKAGE



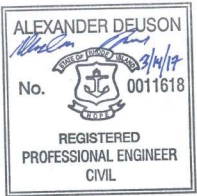
5405 DATA COURT
ANN ARBOR, MI
48108-8949

Stormwater Management & SESC

Clear River
Energy LLC

Project No.
000000000238926

Burrillville, Rhode Island
March 2017



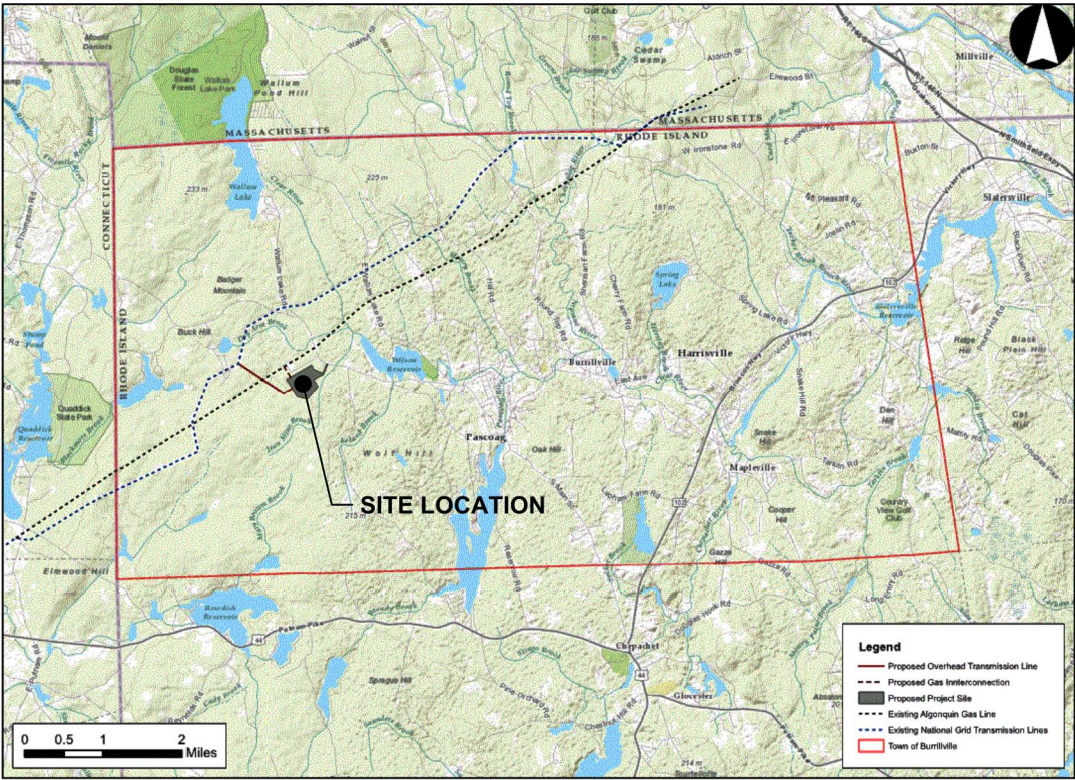
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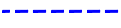
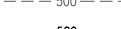
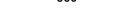
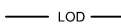
SITE PLANS

01C000	COVER
01C001	LEGEND
01C002	OVERALL SITE ARRANGEMENT
01C003	OVERALL GENERAL ARRANGEMENT
01C100	EXISTING CONDITIONS
01C101	EXISTING CONDITIONS
01C102	EXISTING CONDITIONS
01C103	EXISTING CONDITIONS
01C104	EXISTING DRAINAGE CONDITIONS
01C105	EXISTING DRAINAGE CONDITIONS
01C106	EXISTING DRAINAGE CONDITIONS
01C107	EXISTING DRAINAGE CONDITIONS
01C200	PROPOSED SITE LAYOUT PLAN
01C201	PROPOSED SITE LAYOUT PLAN
01C202	PROPOSED SITE LAYOUT PLAN
01C203	PROPOSED SITE LAYOUT PLAN
01C300	PROPOSED GRADING PLAN
01C301	PROPOSED GRADING PLAN
01C302	PROPOSED GRADING PLAN
01C303	PROPOSED GRADING PLAN
01C304	PROPOSED DRAINAGE & WATER QUALITY PLAN
01C305	PROPOSED DRAINAGE & WATER QUALITY PLAN
01C306	PROPOSED DRAINAGE & WATER QUALITY PLAN
01C307	PROPOSED DRAINAGE & WATER QUALITY PLAN
01C400	PROPOSED DRAINAGE PLAN
01C600	ROADWAY PLAN AND PROFILE
01C601	ROADWAY PLAN AND PROFILE
01C700	PROPOSED REFORESTATION PLAN
01C701	PROPOSED REFORESTATION PLAN
01C702	PROPOSED REFORESTATION PLAN
01C703	PROPOSED REFORESTATION PLAN
01C800	PROPOSED SITE DRAINAGE DETAILS
01C801	PROPOSED SITE DRAINAGE DETAILS
01C802	PROPOSED SITE DRAINAGE DETAILS
01C803	PROPOSED SITE DRAINAGE DETAILS
01C804	PROPOSED SITE DRAINAGE DETAILS
01C805	PROPOSED SITE DRAINAGE DETAILS

EROSION CONTROL

01C900	SESC NOTES
01C901	SESC EXISTING CONDITIONS AND SITE CONSTRAINTS MAP
01C902	SESC EXISTING CONDITIONS AND SITE CONSTRAINTS MAP
01C903	SESC EXISTING CONDITIONS AND SITE CONSTRAINTS MAP
01C904	SESC EXISTING CONDITIONS AND SITE CONSTRAINTS MAP
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01C908	SESC PLAN PHASE I SHEET 4 OF 5
01C909	SESC PLAN PHASE I SHEET 5 OF 5
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01C911	SESC PLAN PHASE II SHEET 2 OF 4
01C912	SESC PLAN PHASE II SHEET 3 OF 4
01C913	SESC PLAN PHASE II SHEET 4 OF 4
01C914	SESC PLAN PHASE III SHEET 1 OF 4
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01C919	SESC PLAN PHASE IV SHEET 2 OF 4
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01C923	SESC DETAILS
01C924	SESC DETAILS
01C925	SESC DETAILS

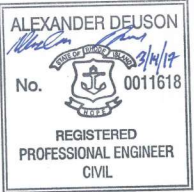


1	2	3	4	5	6	7	8	
CIVIL MAPPING SYMBOLOGY				UTILITY/CIVIL LINE SYMBOLOGY				
 (11R) BIOLOGICAL WETLANDS SPECIAL AQUATIC SITE PROPOSED STORM STRUCTURE PROPOSED STORM PIPE POINT OF DISCHARGE EXISTING LIGHT POLE EXISTING SIGN CONSTRUCTION STAGGING AREA EXISTING POWER POLE WITH IDENTIFICATION NUMBER BH-13 BORING HOLE LOCATION SOIL MAP UNIT SILT FENCE INLET PROTECTION DIRECTION OF OVERLAND FLOW DURING & AFTER MASS GRADING X.XX DIRECTION OF OVERLAND FLOW W/ GRADE SEDIMENT BASIN TEMPORARY STONE CONSTRUCTION EXIT TEMPORARY DIVERSION DITCH/BERM POTABLE WATER WELL				 SPECTRA PROPERTY LINE  PROPERTY LINE SETBACK  PROPERTY LINE  EXISTING CONTOUR ELEVATIONS  PROPOSED CONTOUR ELEVATIONS  WETLAND PERIMETER EDGE  EXISTING STREAM  EXISTING INTERMITTENT STREAM  EXISTING STREAM BANK  50' PERIMETER WETLAND  100' RIVERBANK WETLAND  200' RIVERBANK WETLAND  RIGHT OF WAY  DRAINAGE AREAS  TREELINE  GAS PROPOSED GAS LINE  LOD LIMITS OF DISTURBANCE (SILT FENCE INSTALLATION, SEE SHEET 01C904)  SF PROPOSED SILT FENCE  FLOOD PLAIN LINE				GENERAL NOTES: 1. THIS IS A STANDARD CIVIL SYMBOLOGY SHEET. ALL SYMBOLS ARE NOT NECESSARILY USED ON THIS PROJECT. 2. SCREENING OR SHADING OF WORK IS USED TO INDICATE EXISTING COMPONENTS OR TO DE-EMPHASIZE PROPOSED IMPROVEMENTS TO HIGHLIGHT SELECTED TRADE WORK. REFER TO CONTEXT OF EACH SHEET FOR USAGE.



ISSUE	DATE	DESCRIPTION
3	3/27/2017	REVISION
2	2/17/2017	REVISION
1	8/17/2016	SOIL EROSION SEDIMENT CONTROL PLAN

PROJECT MANAGER C. JACOBS	
PROJECT NUMBER	10021318

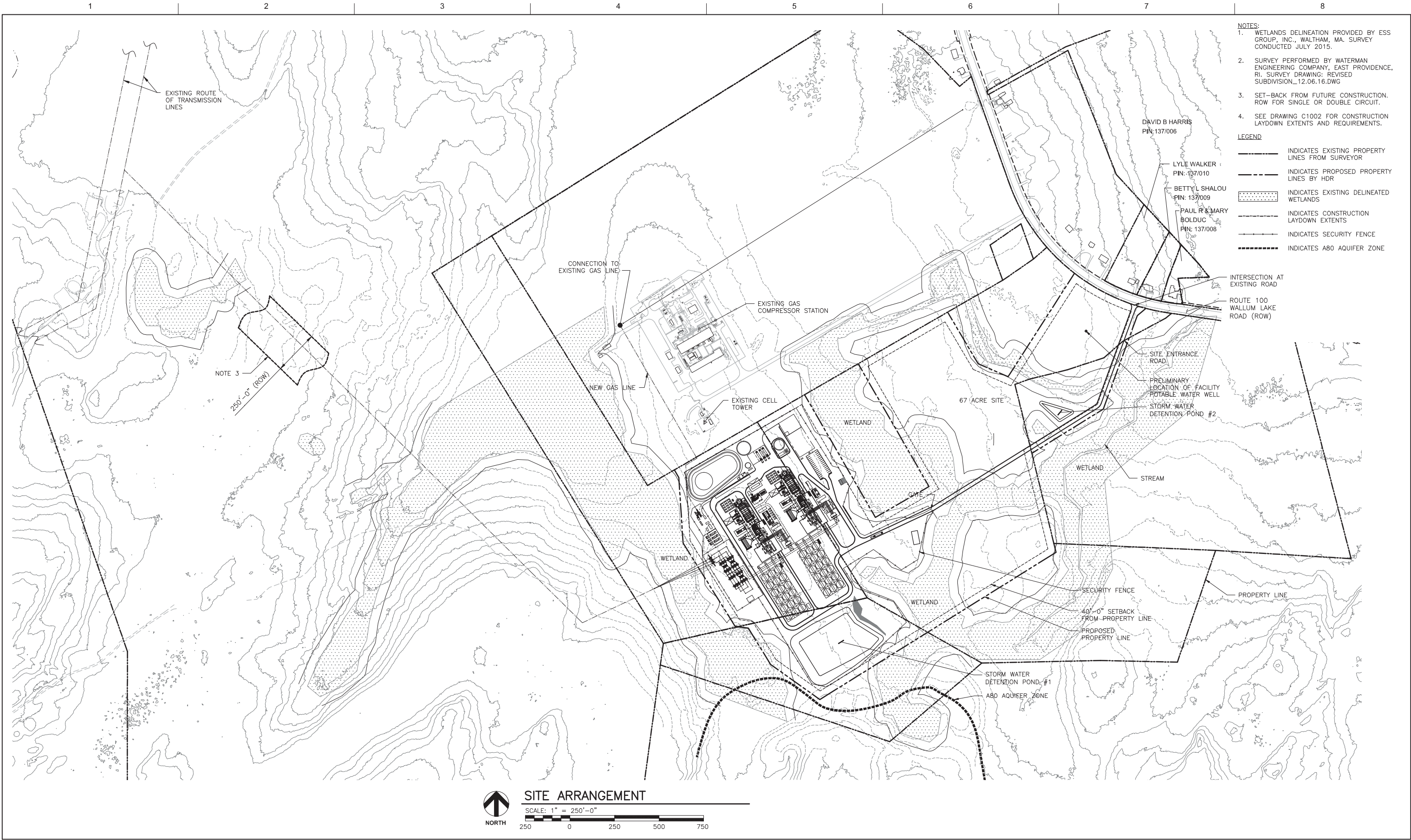


CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

LEGEND

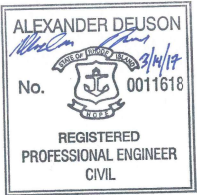
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SHEET
01C001



0	03/27/17	ISSUED FOR PERMIT
ISSUE	DATE	DESCRIPTION

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APPROVED	D. MITAS
CHECKED	D. MITAS
ENGINEERED	A. HOSSAIN
DRAWN	E. CHURCH
PROJECT NUMBER	10021318



CLEAR RIVER ENERGY LLC
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135-002, 137-002, 137-003, 137-021,
153-001, 153-002
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PROVIDENCE COUNTY, RHODE ISLAND

OVERALL SITE ARRANGEMENT



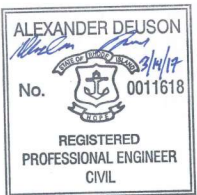
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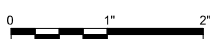
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ISSUE	DATE	DESCRIPTION

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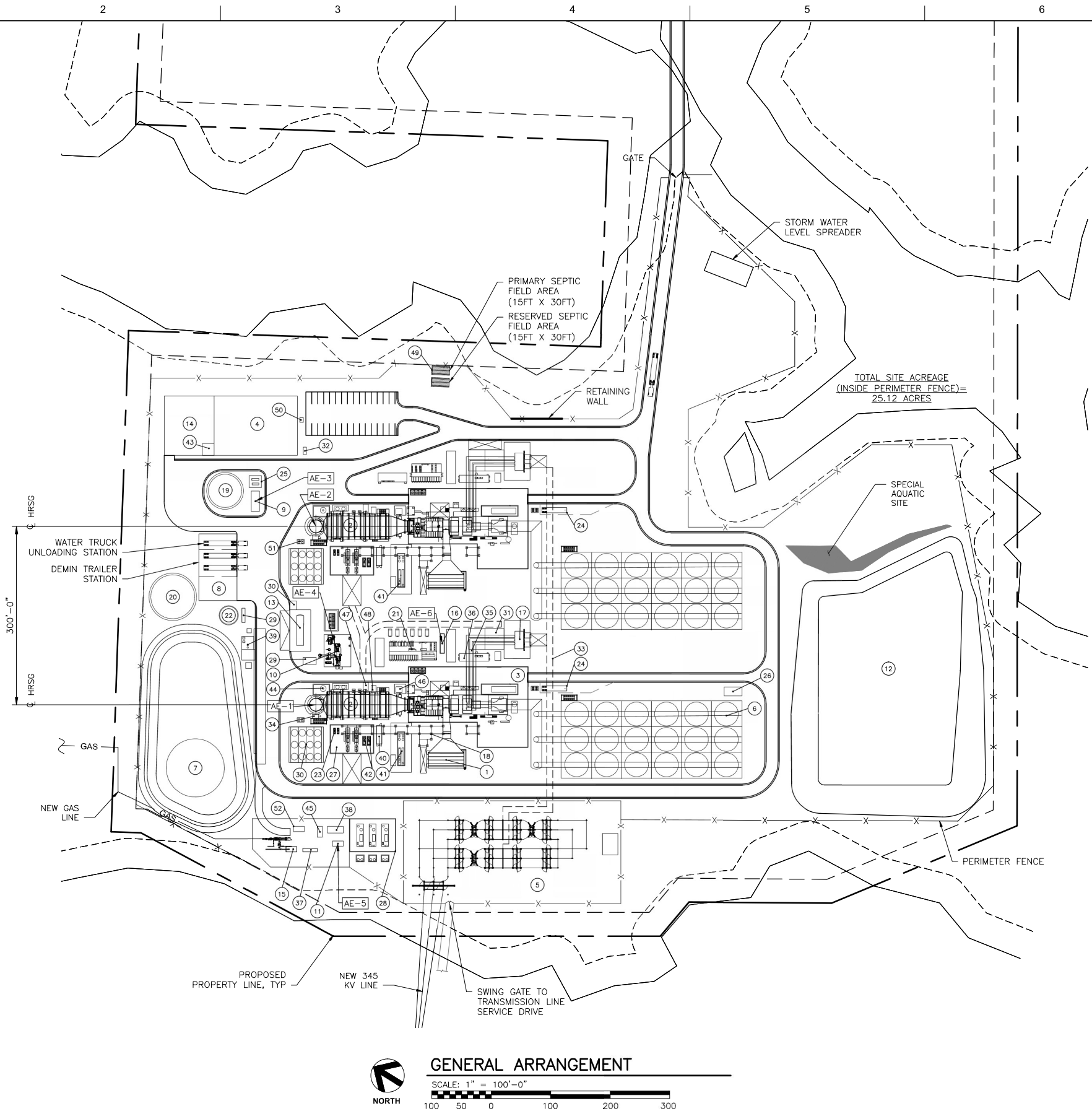
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
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OVERALL GENERAL ARRANGEMENT



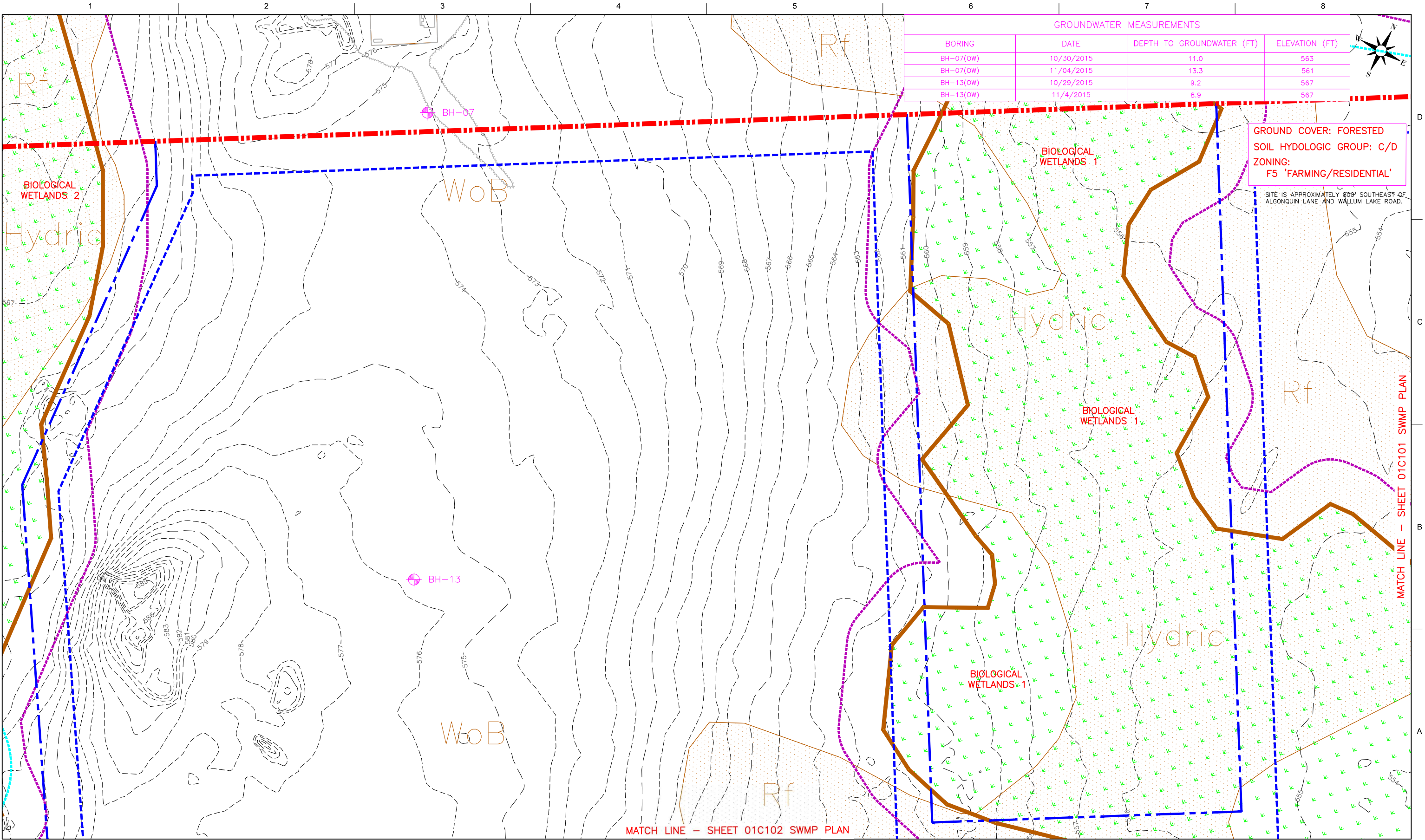
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SCALE | AS NOTED

SHEET
01C003



BUILDING AND EQUIPMENT LIST				
NO	NAME	SIZE (DIMENSIONS IN FEET)		
		LENGTH	WIDTH	HEIGHT
1	COMBUSTION TURBINE INLET FILTER	60	27	50
2	HEAT RECOVERY STEAM GENERATOR	103	44	135
3	TURBINE BUILDING	202	136	80
4	ADMINISTRATION/CONTROL BUILDING	140	100	25
5	SWITCHYARD	367	153	25
6	AIR-COOLED CONDENSER	305	130	110
7	FUEL OIL STORAGE TANK	90ø	-	48
8	WATER TREATMENT BUILDING	112	64	30
9	FIRE PUMP BUILDING	34	14	15
10	AUXILIARY BOILER BUILDING	54	45	35
11	CTG FUEL GAS DEW POINT HEATER	18	9	15
12	STORM WATER DETENTION POND #1	-	-	-
13	AMMONIA STORAGE TANK	50	12	15
14	WAREHOUSE	100	84	25
15	FUEL GAS FILTER/SEPARATOR	24	6	15
16	EMERGENCY DIESEL GENERATOR	33	8	15
17	GSU TRANSFORMER	48	27	15
18	PIPE RACK	313	15	55
19	FIRE/SERVICE WATER TANK	64ø	-	49
20	DEMINERALIZED WATER STORAGE TANK	86ø	-	55
21	BOP ELECTRICAL	80	30	25
22	WASTE WATER TANK	32.5ø	-	30
23	HRSG LTE RECIRCULATION PUMPS	10	4	6
24	HYDROGEN TUBE TRAILER	42	8.5	15
25	WATER TRANSFER PUMP BUILDING	21	10	15
26	WASTE OIL STORAGE SHELTER	30	15	12
27	FEEDWATER PUMP BUILDING	74	49	25
28	GAS COMPRESSOR BUILDING	78.5	56	30
29	OIL WATER SEPARATOR	24	5	-
30	CCCW HEAT EXCHANGER	60	58	32
31	AUX. TRANSFORMERS	20	16	15
32	SUS TRANSFORMERS	51	25	12
33	345 KV UNDERGROUND DUCT BANK	-	5	-
34	CEMS SHELTER	9	8	12
35	GENERATOR CIRCUIT BREAKER	23.5	8	20
36	LCI EXCITATION CONTAINER	52	12	12
37	FUEL GAS FLOW METER	18	9	6
38	FUEL GAS PRESSURE REGULATION	27	11	6
39	FUEL OIL EQUIPMENT BUILDING	40	20	20
40	SAMPLE PANEL ENCLOSURE	31	9	12
41	FUEL GAS PERFORMANCE HEATER	57	13	10
42	CCCW PUMPS	16	16	6
43	WORKSHOP	20	20	25
44	BLOWDOWN TANK	10ø	-	10
45	LP FUEL GAS DEW POINT HEATER	18	9	8
46	WATER WASH DRAIN TANK	11	11	-
47	DUCT BURNER FUEL SKID	16	8.5	8
48	DUCT BURNER COOLING AIR BLOWER	12	8.5	6
49	SEPTIC LEACH FIELD	60	30	-
50	SEPTIC TANK	8	6	-
51	NITROGEN/CO BOTTLES	12	7.5	-
52	LP REGULATION	18	8.5	-

AIR EMISSION SOURCES (COMBUSTION SOURCES)				
NO	NAME	UTM COORDINATES		ELEVATION
		N	E	
AE-1	HRSG EXHAUST STACK 1	N4,649,602	E271,730	770.00'
AE-2	HRSG EXHAUST STACK 2	N4,649,648	E271,808	770.00'
AE-3	DIESEL FIRE WATER PUMP SKID VENT	N4,649,684	E271,800	587.00'
AE-4	AUXILIARY BOILER STACK	N4,649,606	E271,759	625.00'
AE-5	CTG FUEL GAS DEW POINT HEATER STACK	N4,649,557	E271,674	601.00'
AE-6	EMERGENCY DIESEL GENERATOR STACK	N4,649,562	E271,789	591.00'
1. UTM COORDINATES ARE FOR UTM GRID ZONE 19T. COORDINATES REMAIN UNCHANGED FOR ZONE 19 NORTHERN HEMISPHERE, UTM ZONE 19N DESIGNATION.				
2. BASE ELEVATION IS 575 FEET AMSL				



GROUNDWATER MEASUREMENTS			
BORING	DATE	DEPTH TO GROUNDWATER (FT)	ELEVATION (FT)
BH-07(OW)	10/30/2015	11.0	563
BH-07(OW)	11/04/2015	13.3	561
BH-13(OW)	10/29/2015	9.2	567
BH-13(OW)	11/4/2015	8.9	567

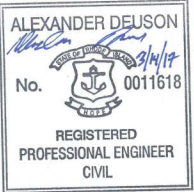
GROUND COVER: FORESTED
SOIL HYDLOGIC GROUP: C/D
ZONING:
F5 'FARMING/RESIDENTIAL'

SITE IS APPROXIMATELY 800' SOUTHEAST OF
ALGONQUIN LANE AND WALLUM LAKE ROAD.

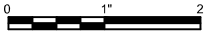


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PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318

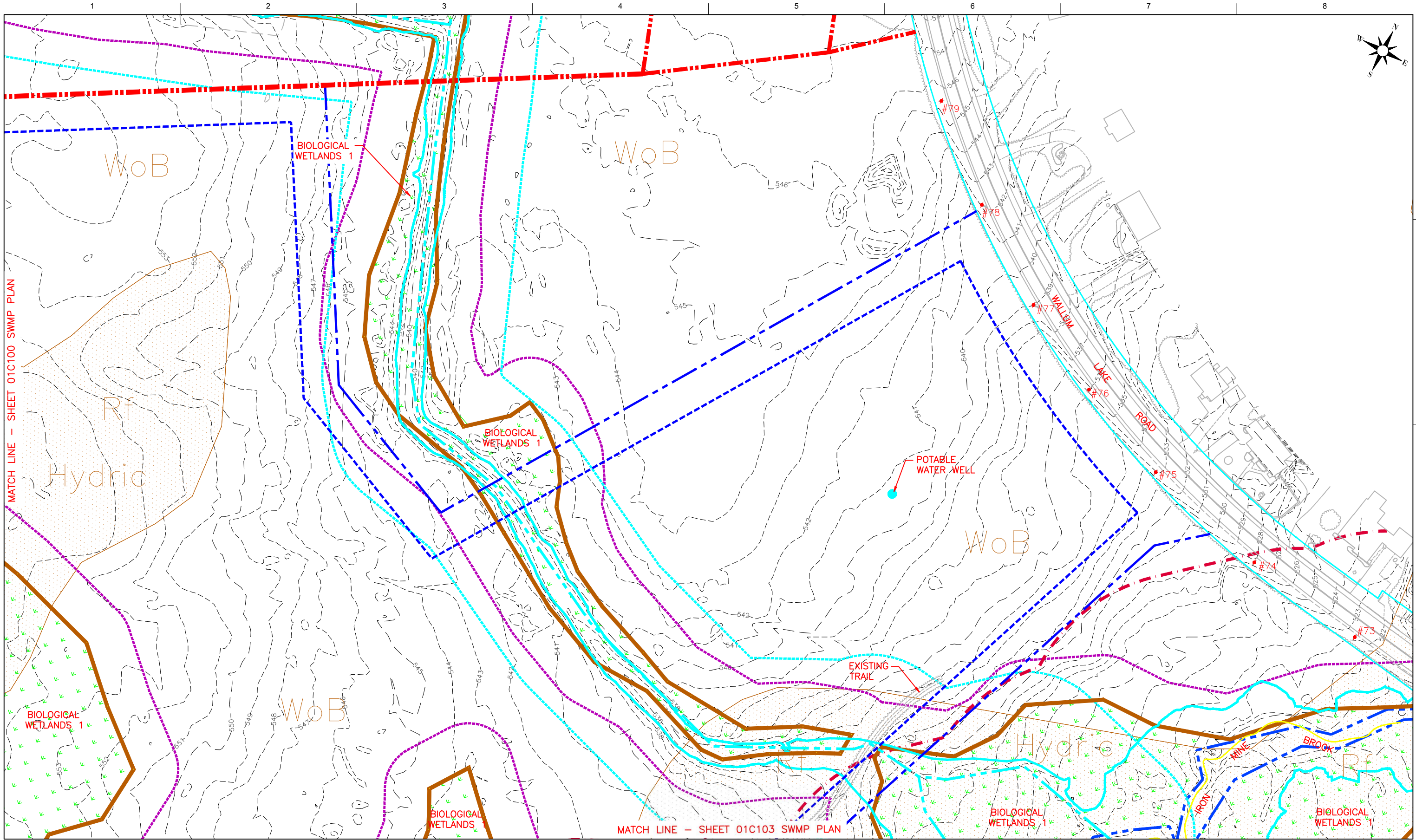


CLEAR RIVER ENERGY LLC
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153-001, 153-002
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PROVIDENCE COUNTY, RHODE ISLAND



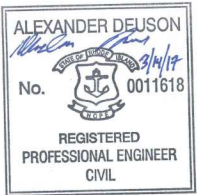
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01C100



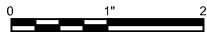
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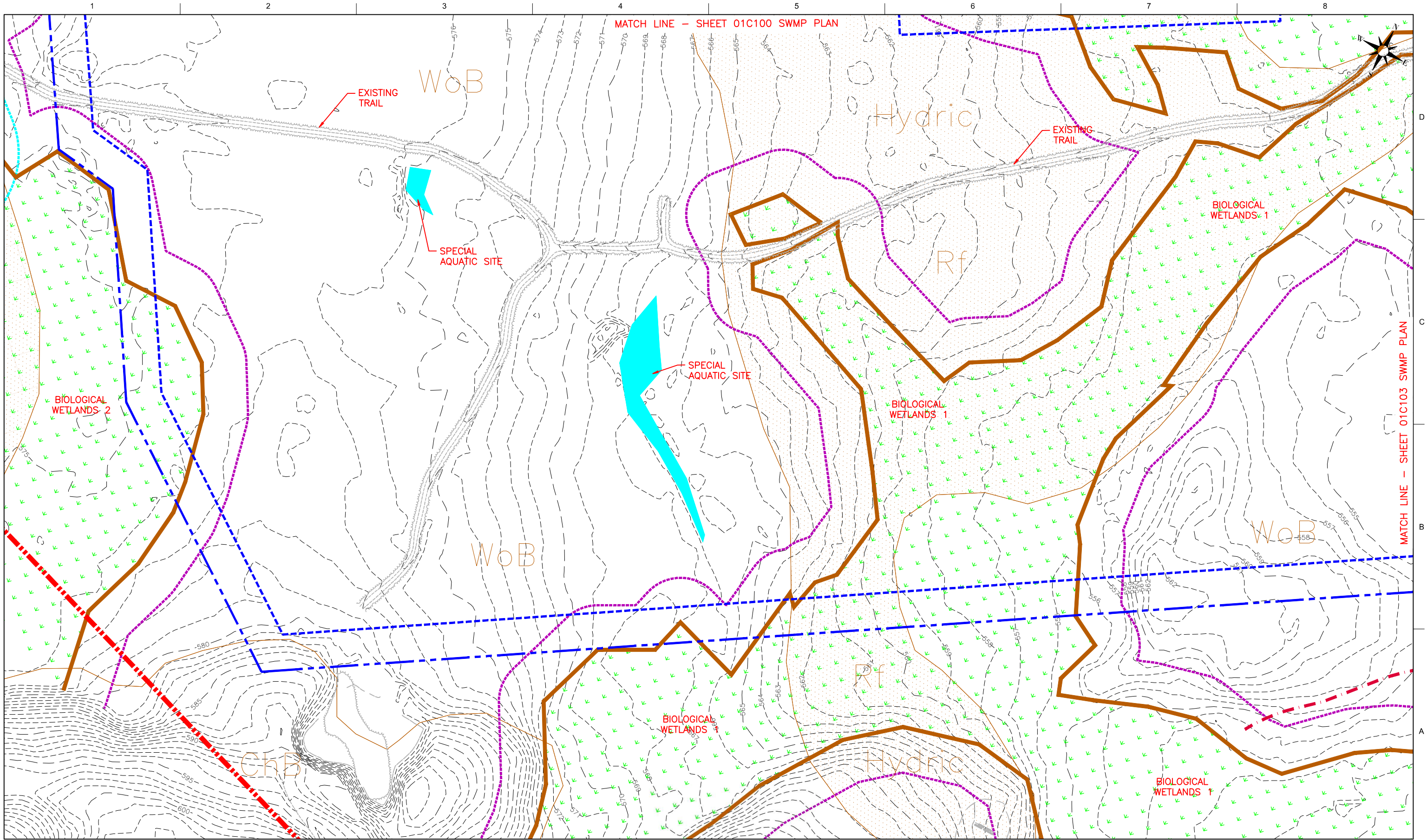
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CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

EXISTING CONDITIONS



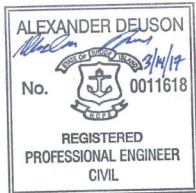
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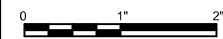


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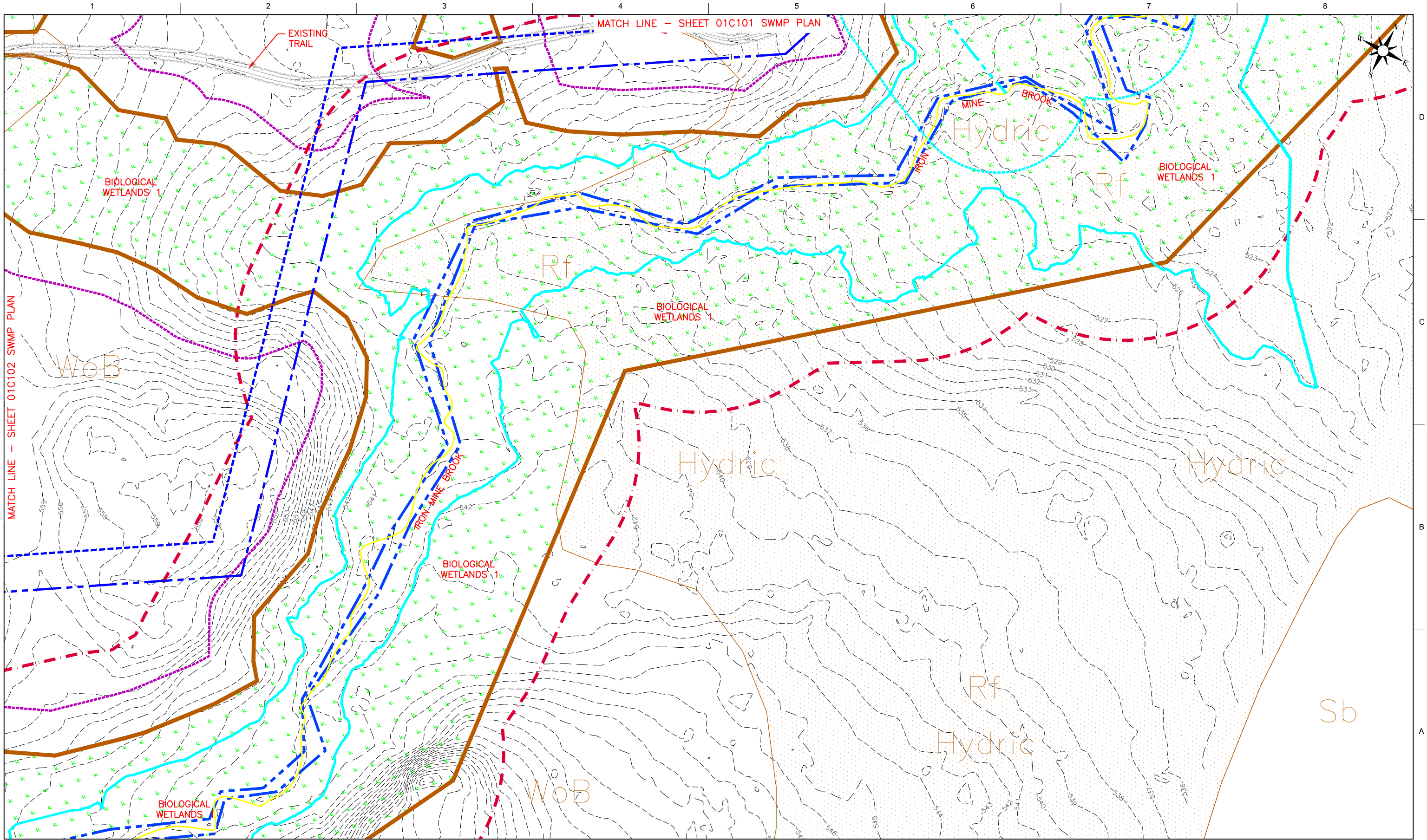
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135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND



EXISTING CONDITIONS

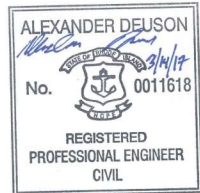
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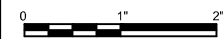


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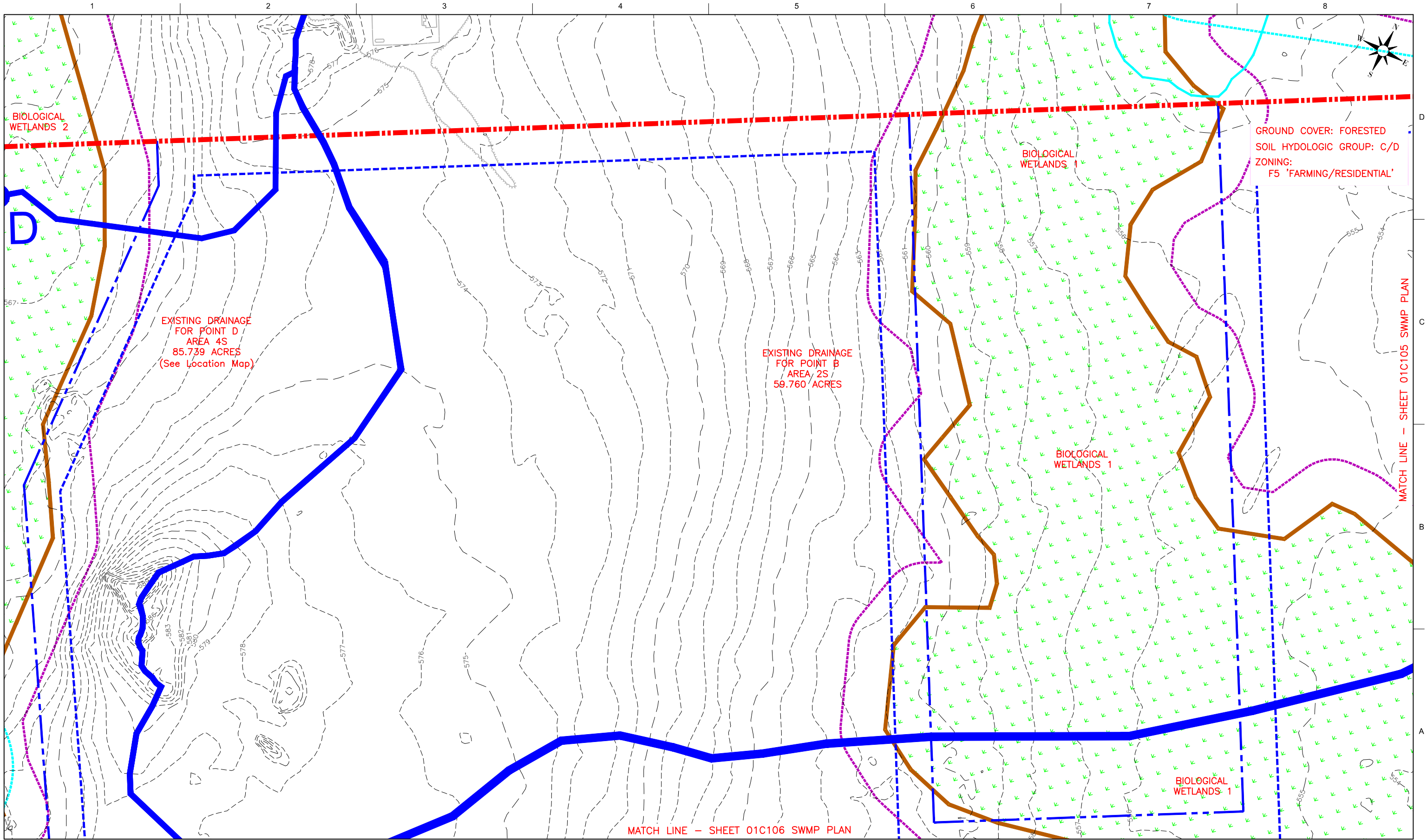
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CLEAR RIVER ENERGY CENTER
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135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND



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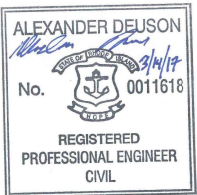
EXISTING CONDITIONS

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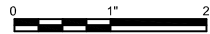


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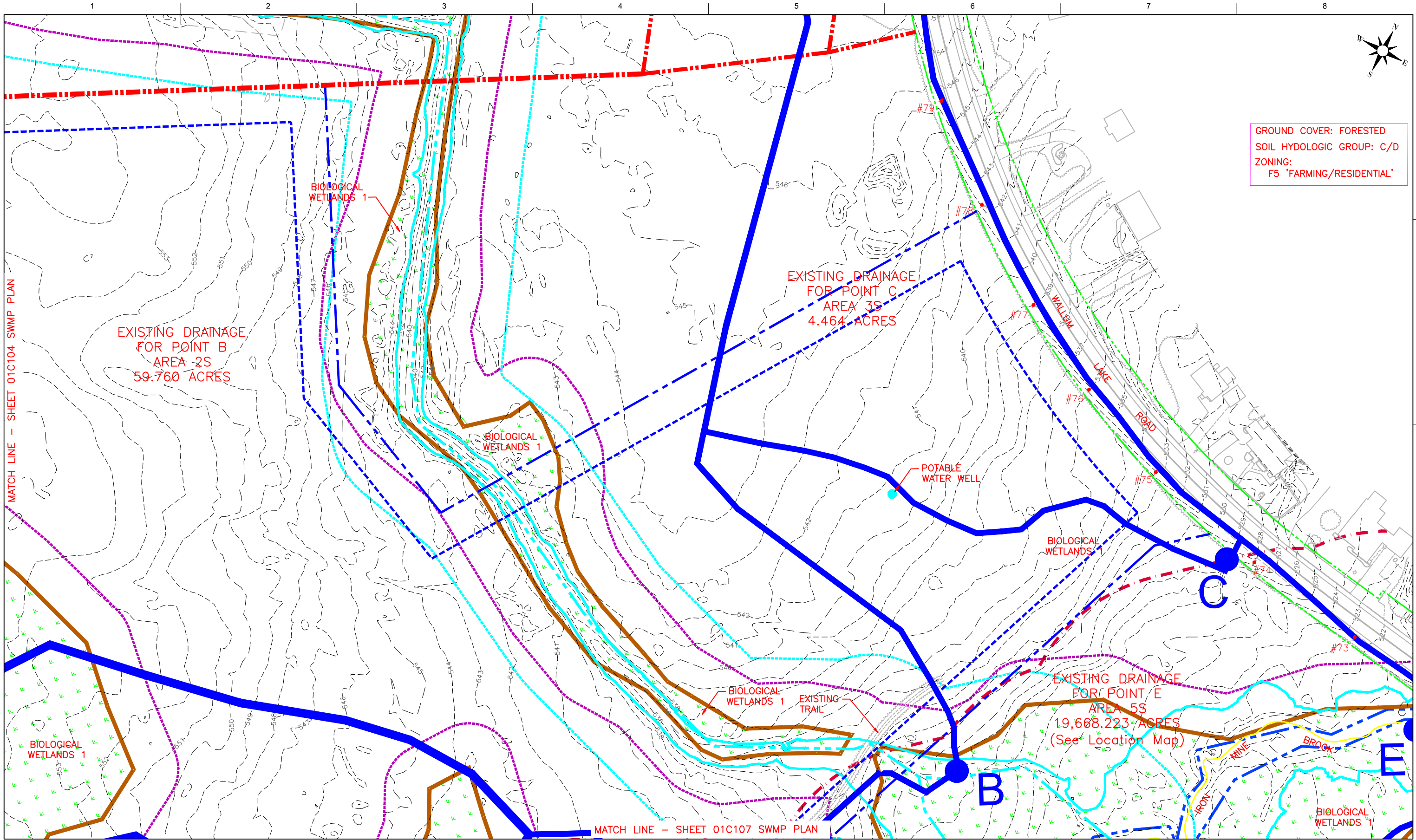
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND



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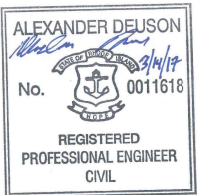
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CONDITIONS

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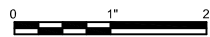


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PROJECT NUMBER	10021318



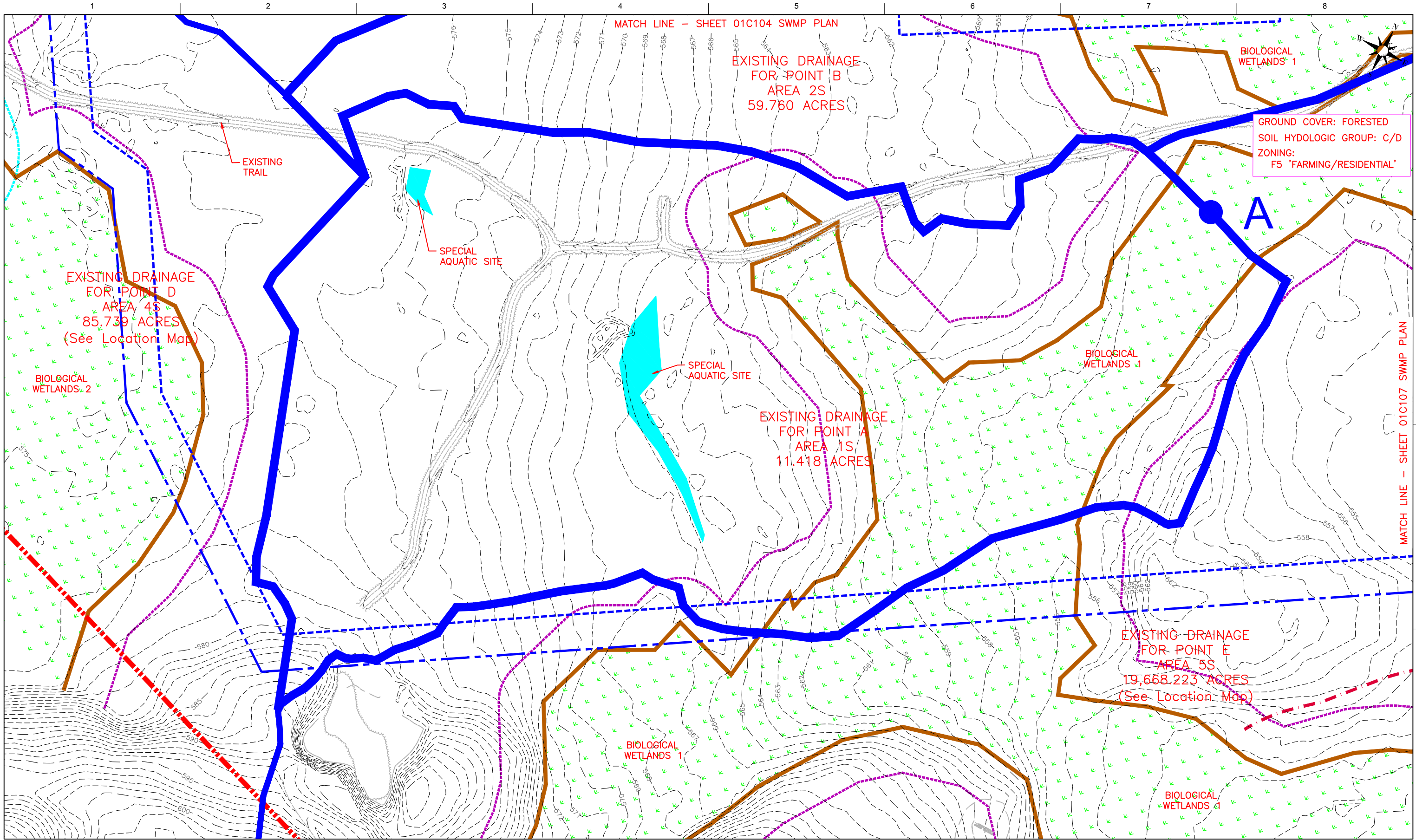
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WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
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TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND



**EXISTING DRAINAGE
CONDITIONS**

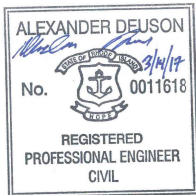
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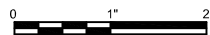


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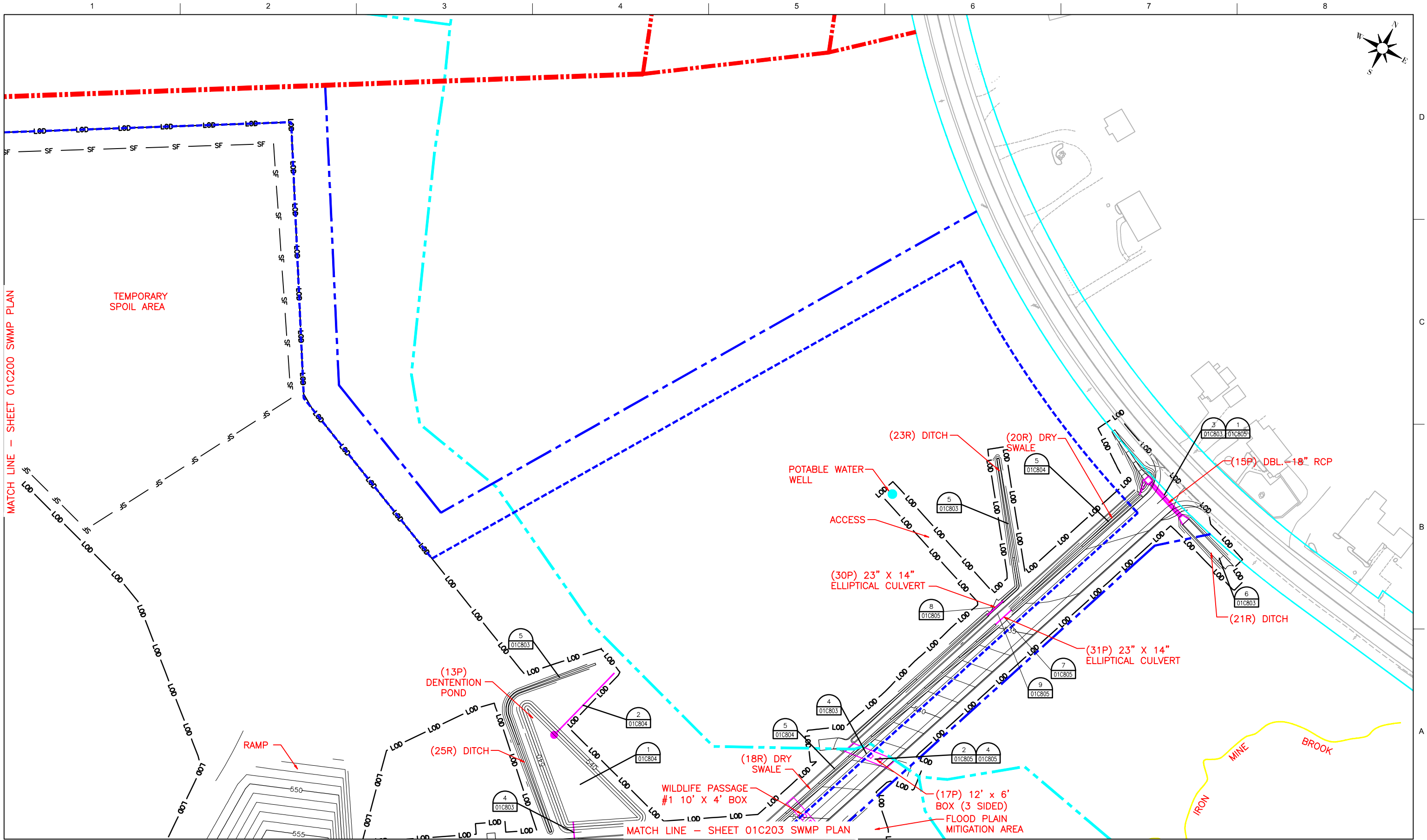
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
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135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND



**EXISTING DRAINAGE
CONDITIONS**

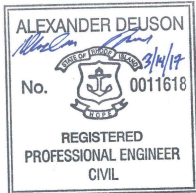
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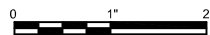


ISSUE	DATE	DESCRIPTION
3	3/27/2017	REVISION
2	2/17/2017	REVISION
1	8/17/2016	SOIL EROSION SEDIMENT CONTROL PLAN

PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318

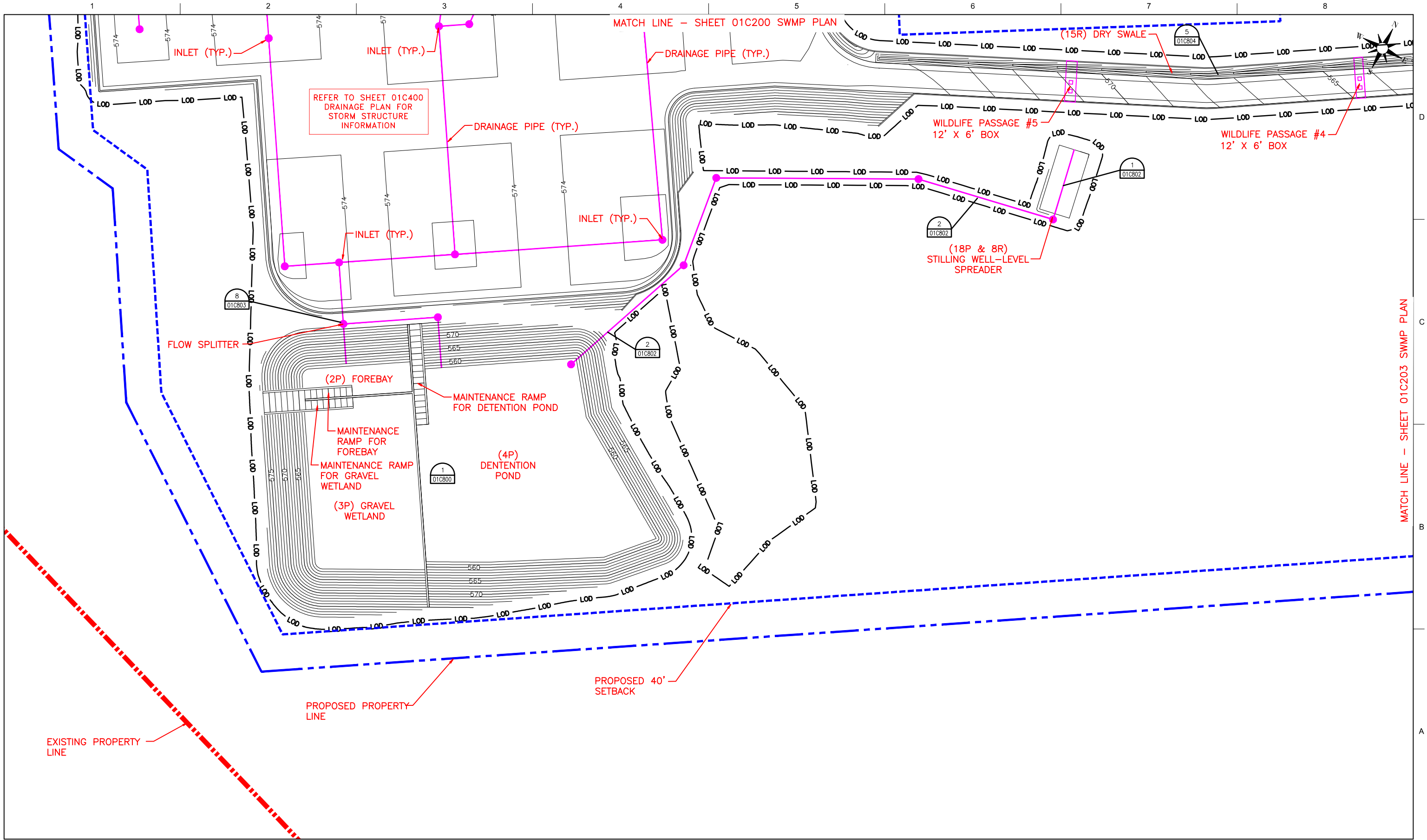


CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND



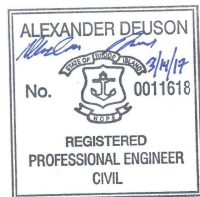
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LAYOUT PLAN
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SHEET
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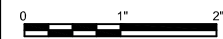


ISSUE	DATE	DESCRIPTION
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1	8/17/2016	SOIL EROSION SEDIMENT CONTROL PLAN

PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



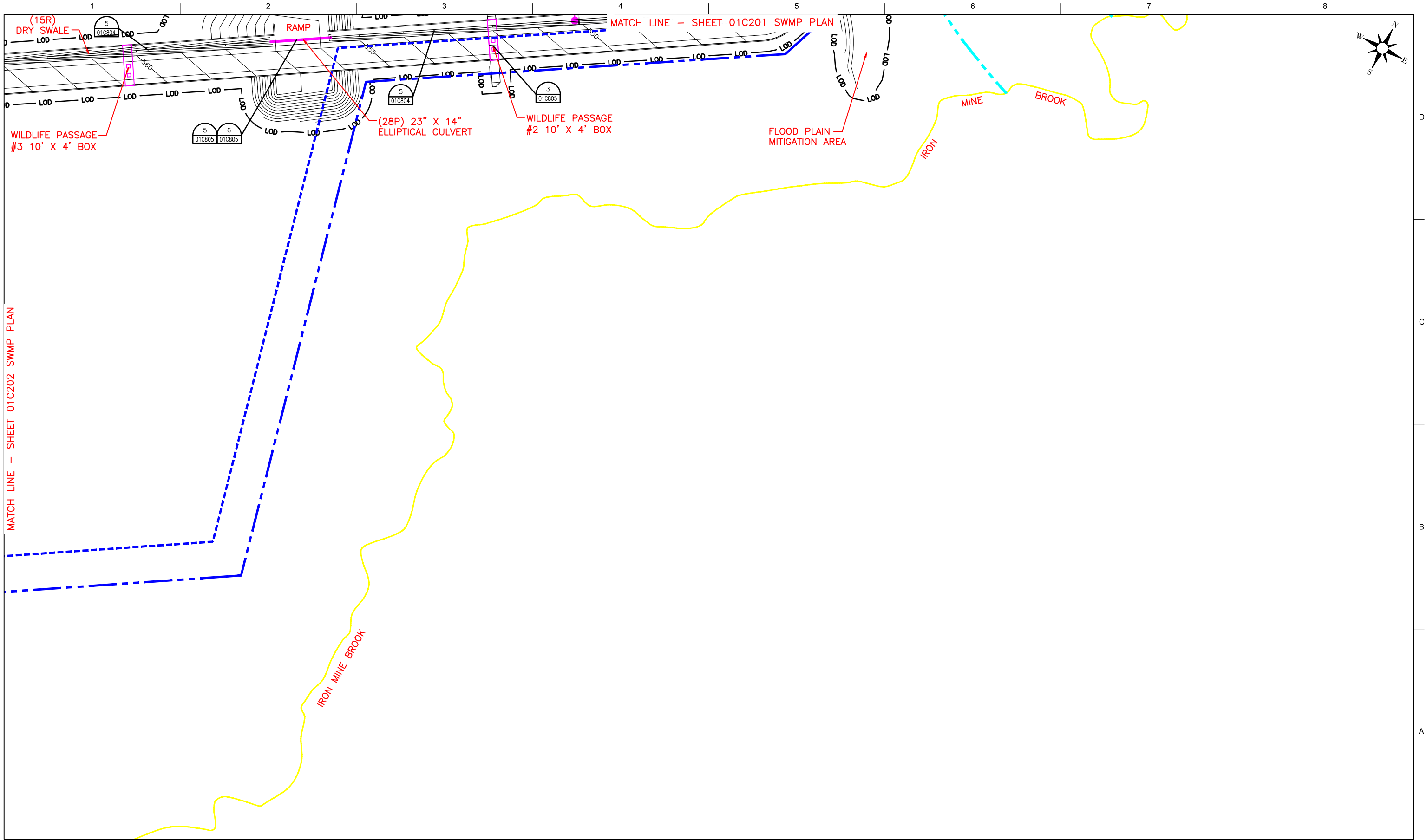
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND



PROPOSED SITE LAYOUT PLAN

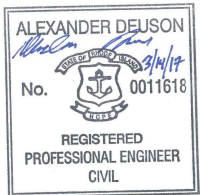
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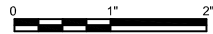


ISSUE	DATE	DESCRIPTION
3	3/27/2017	REVISION
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1	8/17/2016	SOIL EROSION SEDIMENT CONTROL PLAN

PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318

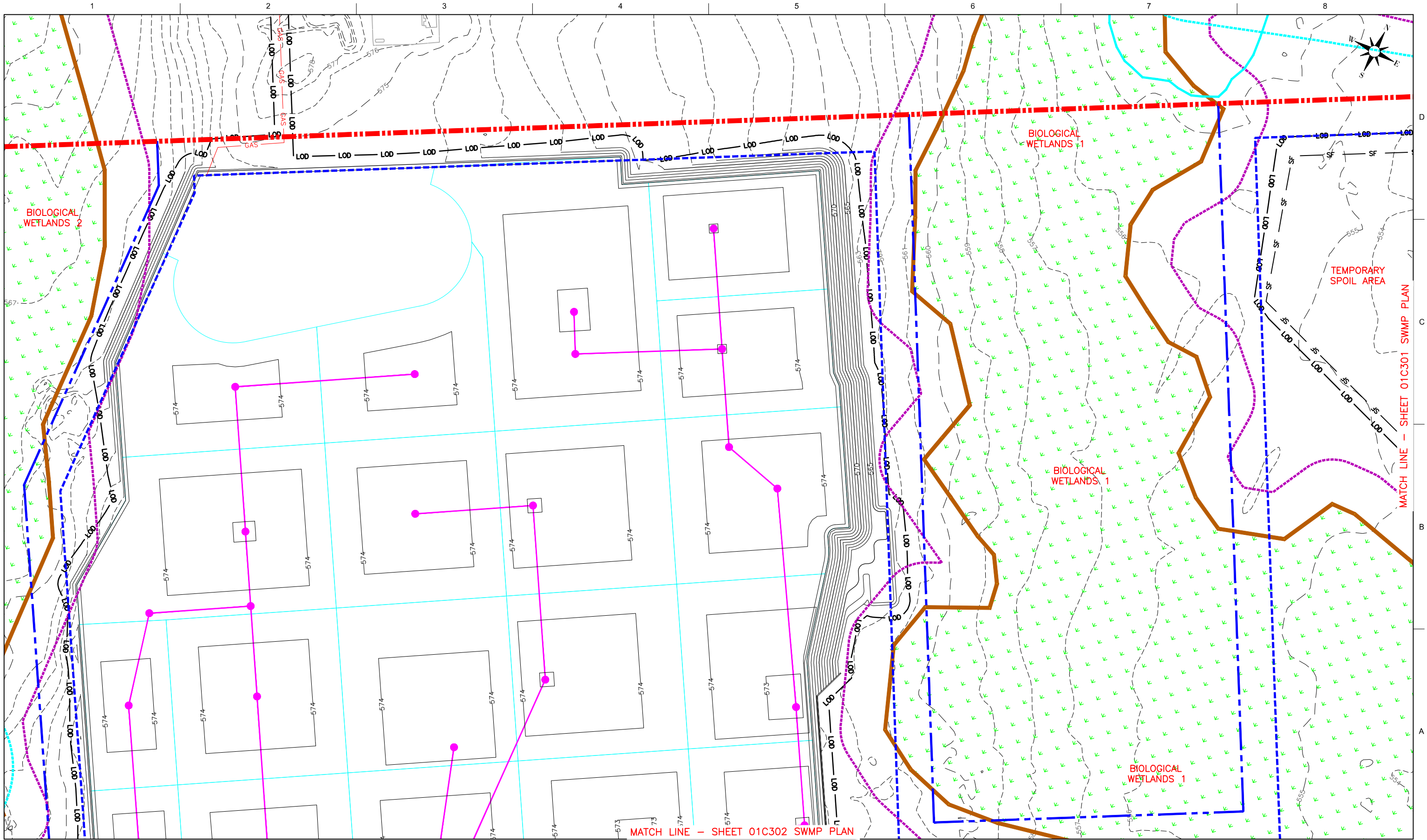


CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND



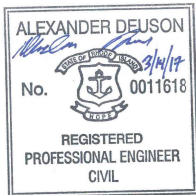
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LAYOUT PLAN
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SCALE 1" = 50'

SHEET
01C203



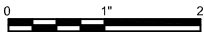
ISSUE	DATE	DESCRIPTION
3	3/27/2017	REVISION
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PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



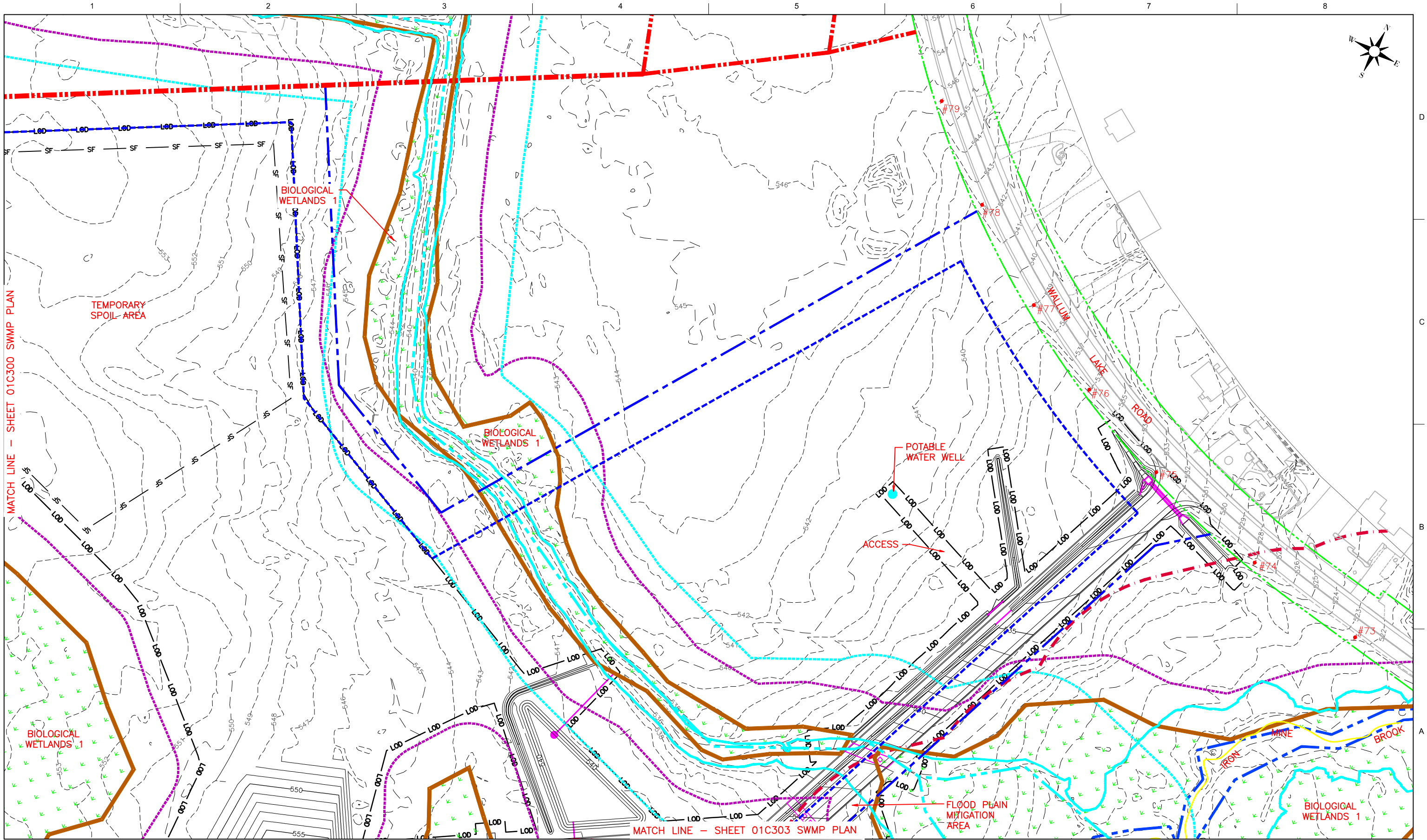
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

PROPOSED GRADING PLAN



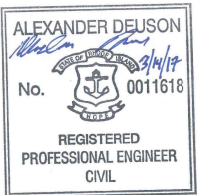
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SHEET
01C300

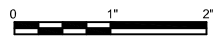


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PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



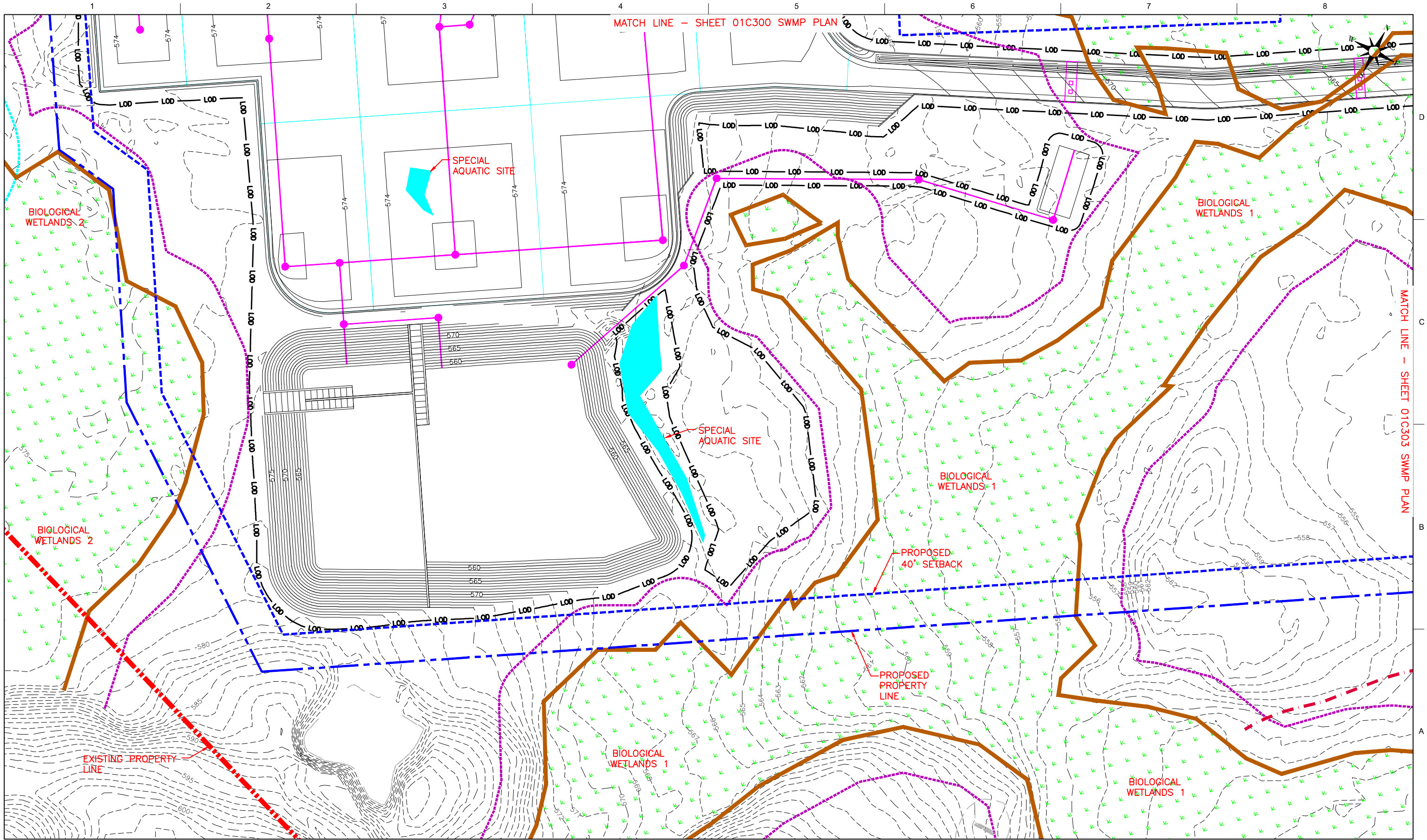
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND



FILENAME 01C301.dwg
SCALE 1" = 50'

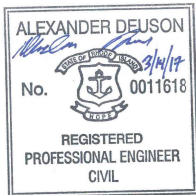
PROPOSED GRADING PLAN

SHEET
01C301



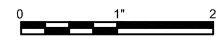
ISSUE	DATE	DESCRIPTION
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PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



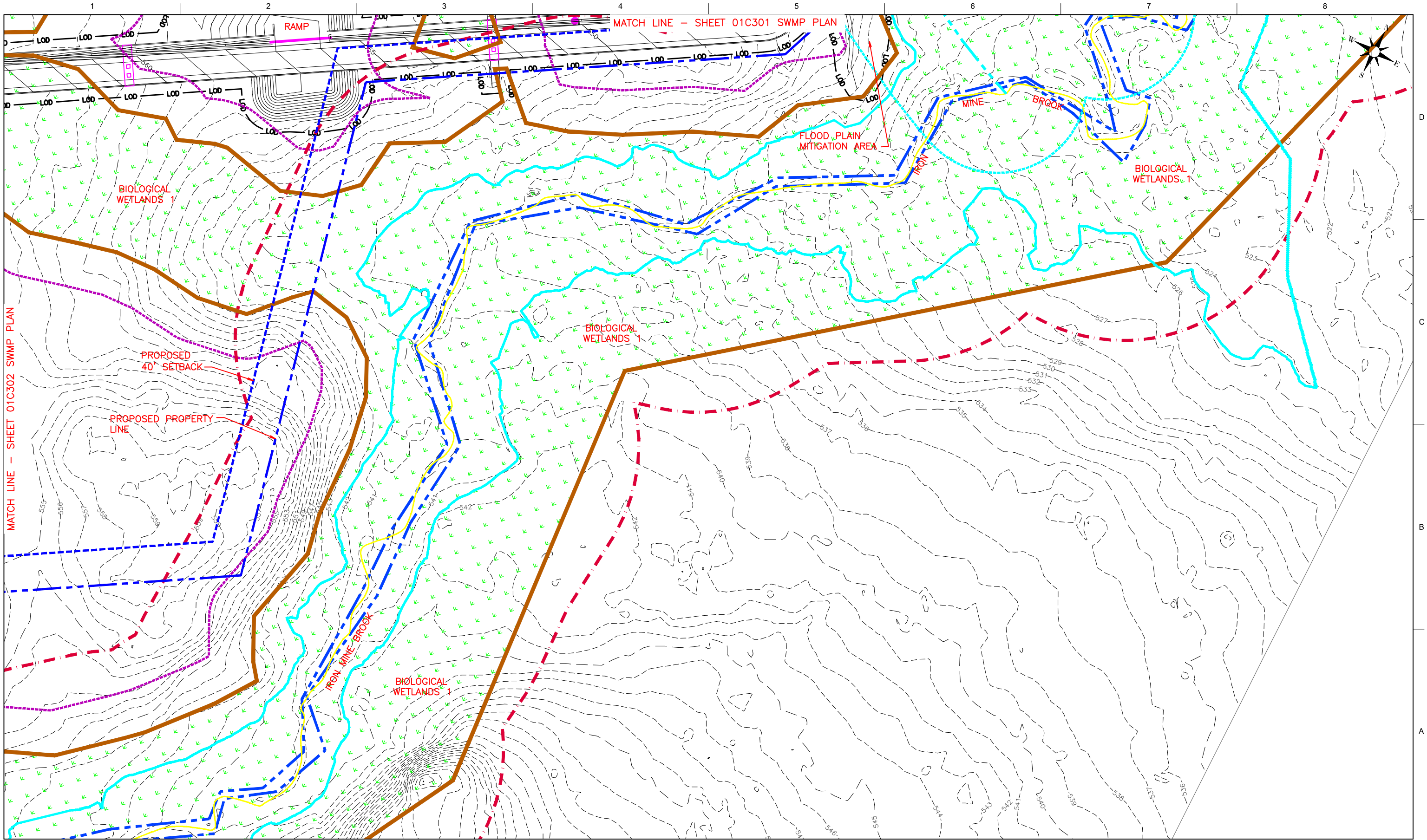
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

PROPOSED GRADING PLAN



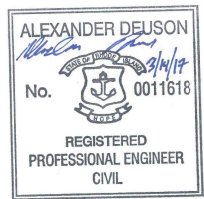
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SHEET
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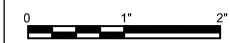


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PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



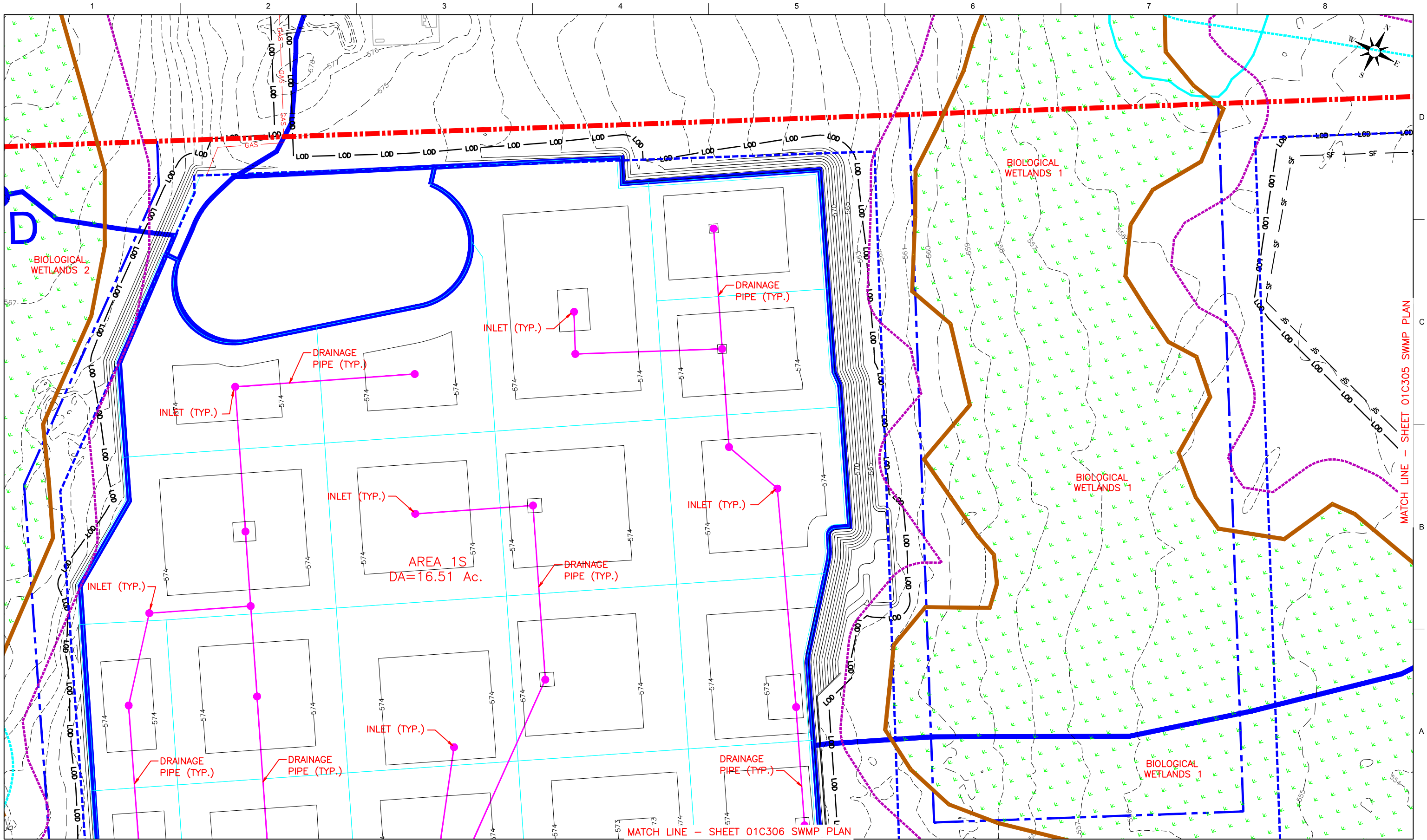
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND



PROPOSED GRADING PLAN

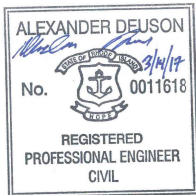
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SHEET
01C303



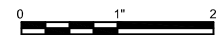
ISSUE	DATE	DESCRIPTION
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PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



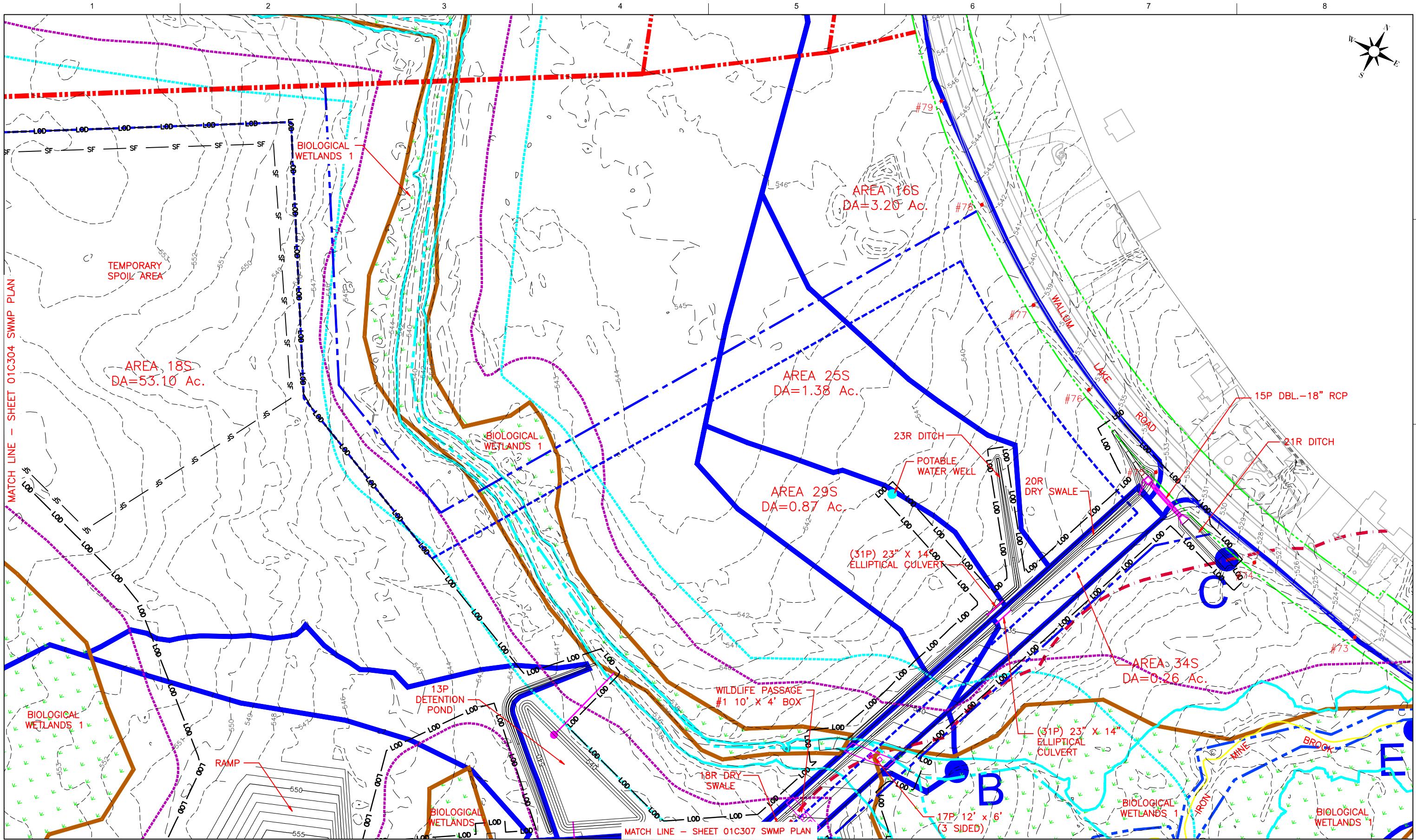
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

PROPOSED DRAINAGE AND WATER QUALITY PLAN



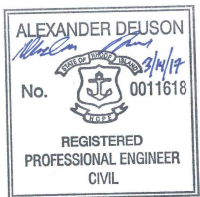
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SHEET
01C304



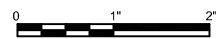
ISSUE	DATE	DESCRIPTION
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PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



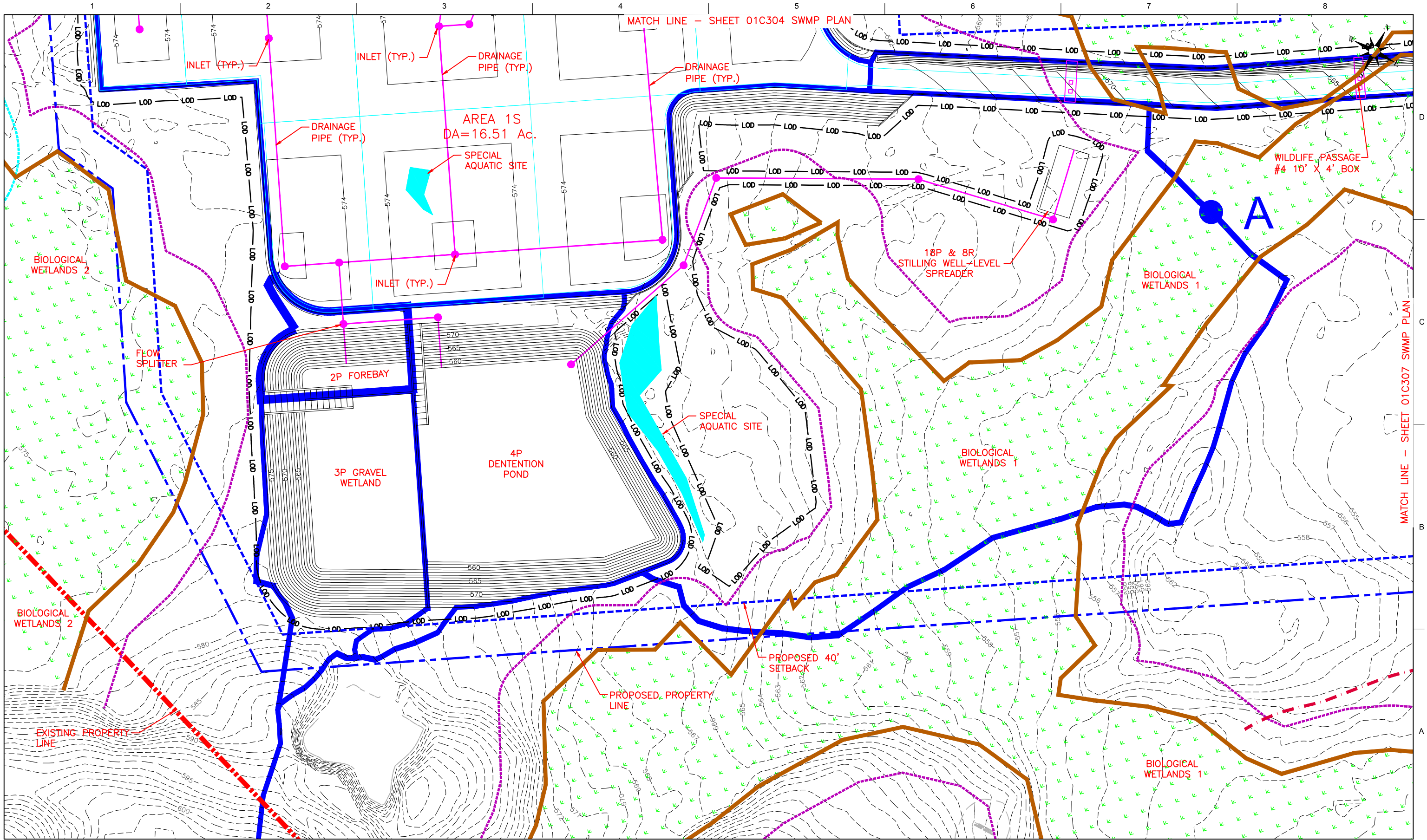
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

PROPOSED DRAINAGE AND WATER QUALITY PLAN



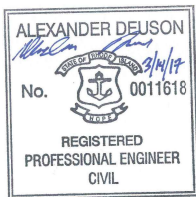
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SHEET
01C305



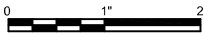
ISSUE	DATE	DESCRIPTION
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PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



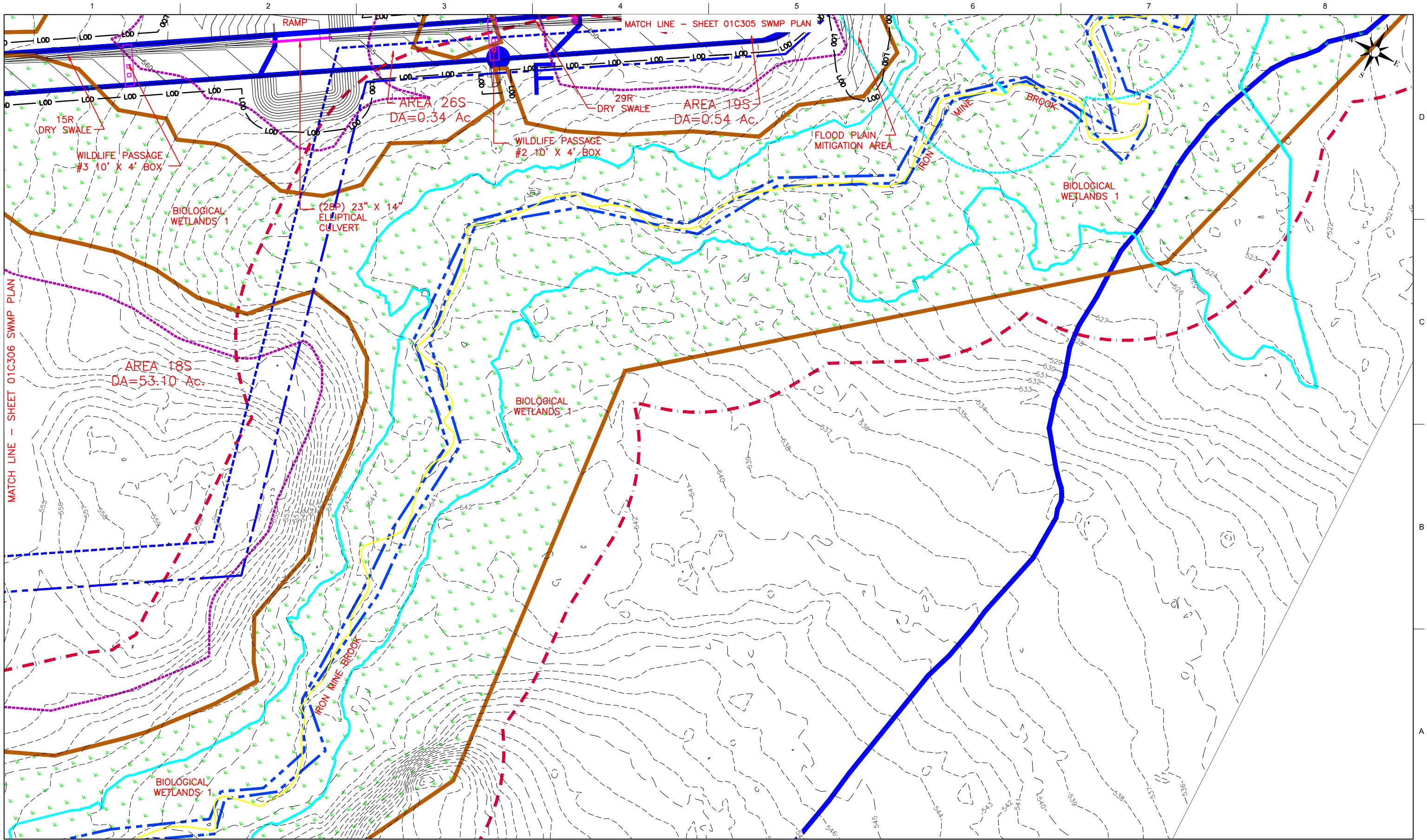
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

PROPOSED DRAINAGE AND
WATER QUALITY PLAN



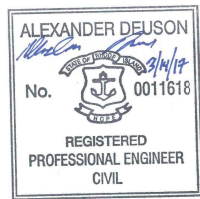
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SHEET
01C306



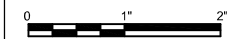
ISSUE	DATE	DESCRIPTION
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1	8/17/2016	SOIL EROSION SEDIMENT CONTROL PLAN

PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



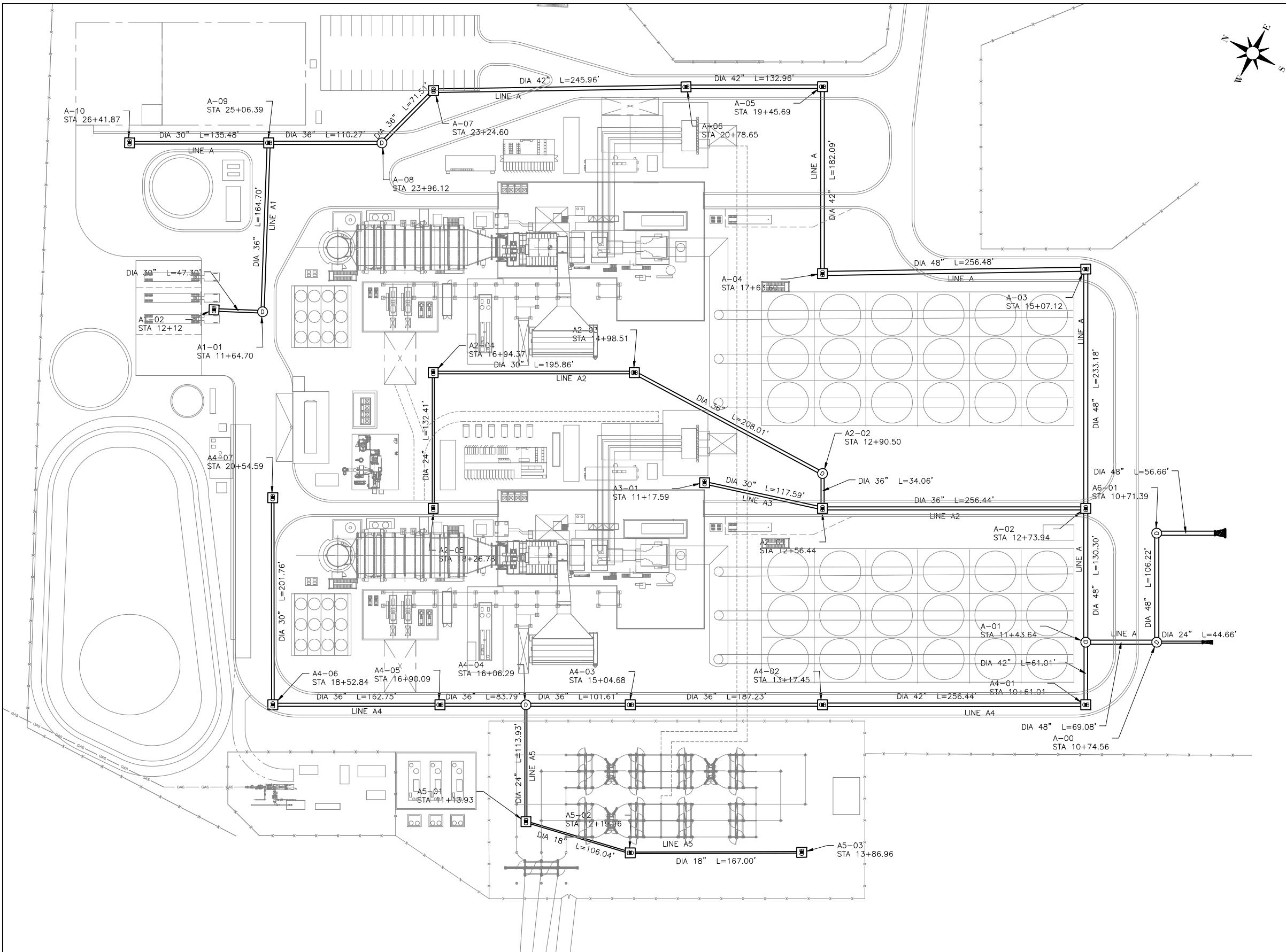
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

PROPOSED DRAINAGE AND
WATER QUALITY PLAN



FILENAME 01C307.dwg
SCALE 1" = 50'

SHEET
01C307



STRUCTURE TABLE				
NAME	TYPE	LAYOUT COORDINATES	LID	SUMP ELEVATION
A-00	FLOW SPLITTER	N:320779.39 E:259167.35	575.96	562.96
A-01	MANHOLE	N:320837.98 E:259130.75	573.78	563.12
A-02	DROP BOX INLET	N:320907.01 E:259241.27	572.62	563.43
A-03	DROP BOX INLET	N:321030.54 E:259439.04	572.38	564.02
A-04	DROP BOX INLET	N:321245.76 E:259299.53	572.69	564.66
A-05	DROP BOX INLET	N:321342.22 E:259453.97	572.94	565.11
A-06	DROP BOX INLET	N:321454.91 E:259383.40	572.57	565.43
A-07	DROP BOX INLET	N:321661.52 E:259249.96	573.02	566.05
A-08	MANHOLE	N:321677.22 E:259180.19	573.50	566.25
A-09	DROP BOX INLET	N:321770.75 E:259121.77	573.00	566.52
A-10	DROP BOX INLET	N:321885.65 E:259050.00	573.00	566.86
A1-01	MANHOLE	N:321688.60 E:258979.02	573.36	566.89
A1-02	DROP BOX INLET	N:321729.69 E:258955.59	572.77	567.01
A2-01	DROP BOX INLET	N:321124.51 E:259105.41	573.16	564.09
A2-02	MANHOLE	N:321142.55 E:259134.30	573.59	564.18
A2-03	DROP BOX INLET	N:321350.11 E:259120.61	572.95	564.70
A2-04	DROP BOX INLET	N:321516.23 E:259016.85	572.95	565.19
A2-05	DROP BOX INLET	N:321446.08 E:258904.55	573.17	565.52
A3-01	DROP BOX INLET	N:321235.22 E:259065.79	573.16	564.88
A4-01	DROP BOX INLET	N:320805.65 E:259079.00	572.62	563.27

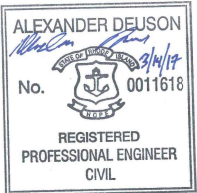
STRUCTURE TABLE				
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A4-03	DROP BOX INLET	N:321181.95 E:258843.96	573.16	564.38
A4-04	MANHOLE	N:321268.12 E:258790.13	574.34	564.63
A4-05	DROP BOX INLET	N:321339.19 E:258745.74	572.89	564.84
A4-06	DROP BOX INLET	N:321477.23 E:258659.52	573.50	565.29
A4-07	DROP BOX INLET	N:321584.23 E:258830.56	573.50	565.77
A5-01	DROP BOX INLET	N:321207.77 E:258693.50	574.34	564.91
A5-02	DROP BOX INLET	N:321105.53 E:258721.62	573.45	565.18
A5-03	DROP BOX INLET	N:320964.15 E:258810.50	573.26	565.60
A6-01	MANHOLE	N:320835.66 E:259257.44	574.84	562.43

STRUCTURE TABLE				
NAME	TYPE	LAYOUT COORDINATES	LID	SUMP ELEVATION
B-01	MANHOLE	N:321256.01 E:259815.13	558.92	551.20
B-02	MANHOLE	N:321225.30 E:259660.67	561.99	553.00
B-03	MANHOLE	N:321120.14 E:259459.76	565.53	555.27
B-04	MANHOLE	N:321016.43 E:259473.41	566.17	556.32



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PROJECT MANAGER C. JACOBS	
PROJECT NUMBER	10021318

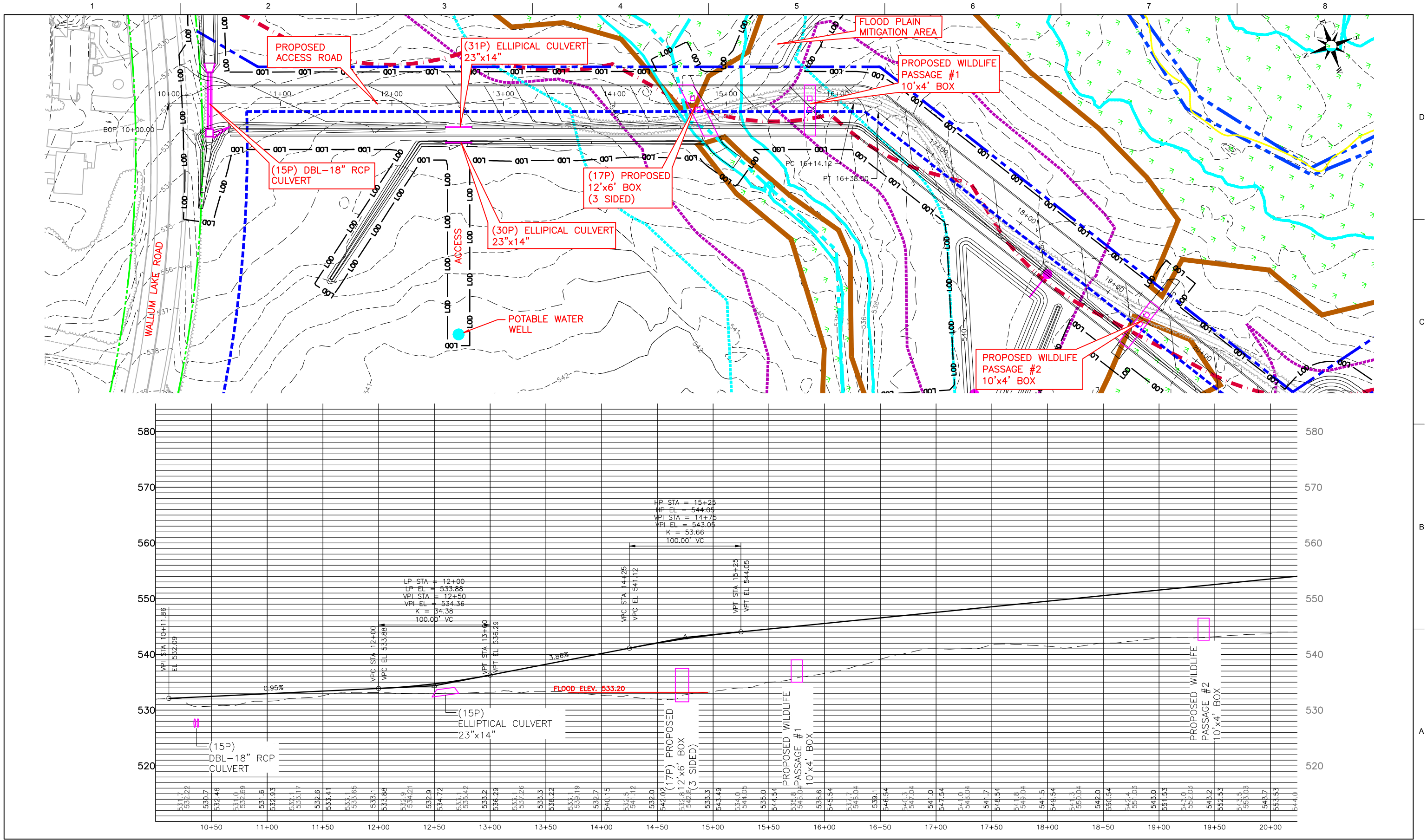


CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

PROPOSED DRAINAGE PLAN

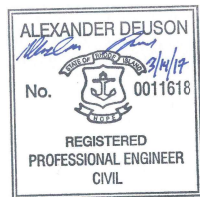
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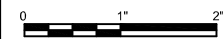


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PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318

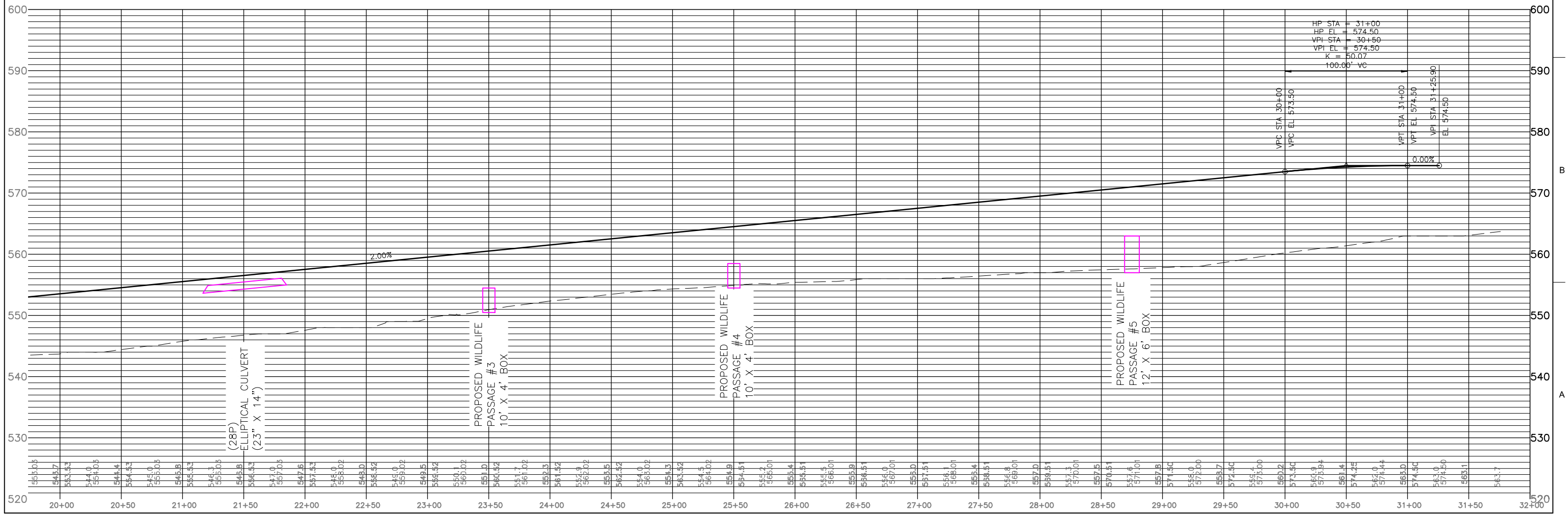
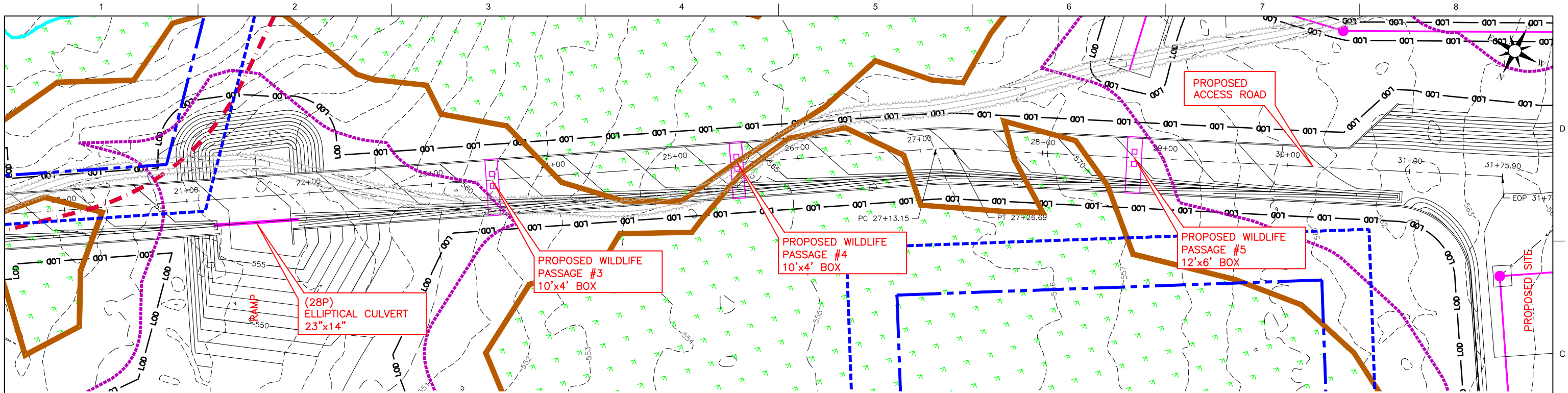


CLEAR RIVER ENERGY LLC
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135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND



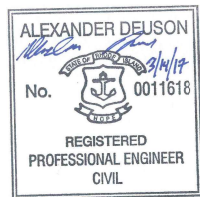
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PLAN & PROFILE
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SHEET
01C600

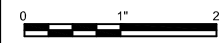


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PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318

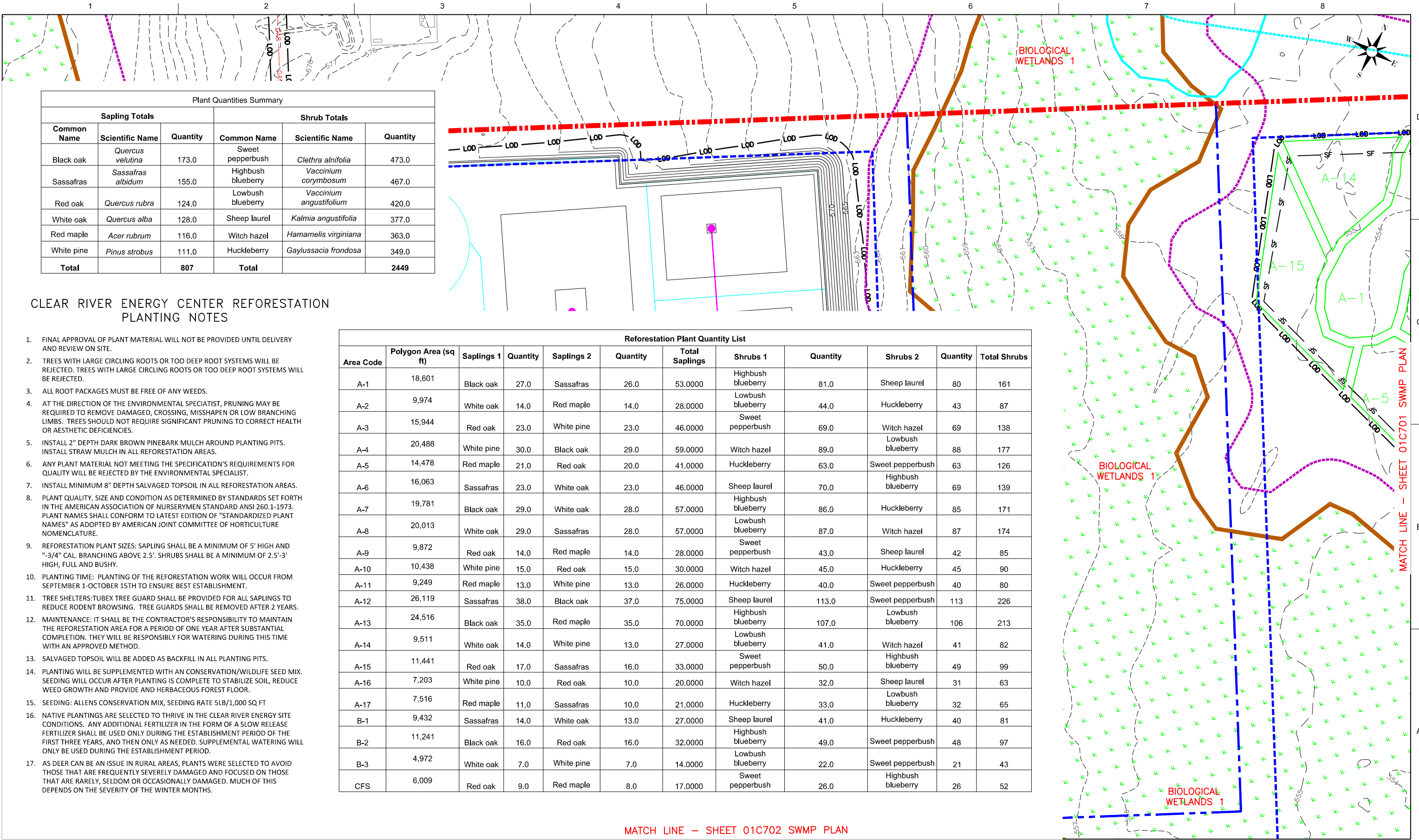


CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
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135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND



ROADWAY
PLAN & PROFILE
FILENAME 01C601.dwg
SCALE 1" = 40'

SHEET
01C601



Plant Quantities Summary					
Sapling Totals			Shrub Totals		
Common Name	Scientific Name	Quantity	Common Name	Scientific Name	Quantity
Black oak	<i>Quercus velutina</i>	173.0	Sweet pepperbush	<i>Clethra alnifolia</i>	473.0
Sassafras	<i>Sassafras albidum</i>	155.0	Highbush blueberry	<i>Vaccinium corymbosum</i>	467.0
Red oak	<i>Quercus rubra</i>	124.0	Lowbush blueberry	<i>Vaccinium angustifolium</i>	420.0
White oak	<i>Quercus alba</i>	128.0	Sheep laurel	<i>Kalmia angustifolia</i>	377.0
Red maple	<i>Acer rubrum</i>	116.0	Witch hazel	<i>Hamamelis virginiana</i>	363.0
White pine	<i>Pinus strobus</i>	111.0	Huckleberry	<i>Gaylussacia frondosa</i>	349.0
Total		807	Total		2449

CLEAR RIVER ENERGY CENTER REFORESTATION
PLANTING NOTES

- FINAL APPROVAL OF PLANT MATERIAL WILL NOT BE PROVIDED UNTIL DELIVERY AND REVIEW ON SITE.
- TREES WITH LARGE CIRCLING ROOTS OR TOO DEEP ROOT SYSTEMS WILL BE REJECTED. TREES WITH LARGE CIRCLING ROOTS OR TOO DEEP ROOT SYSTEMS WILL BE REJECTED.
- ALL ROOT PACKAGES MUST BE FREE OF ANY WEEDS.
- AT THE DIRECTION OF THE ENVIRONMENTAL SPECIATIST, PRUNING MAY BE REQUIRED TO REMOVE DAMAGED, CROSSING, MISSHAPEN OR LOW BRANCHING LIMBS. TREES SHOULD NOT REQUIRE SIGNIFICANT PRUNING TO CORRECT HEALTH OR AESTHETIC DEFICIENCIES.
- INSTALL 2" DEPTH DARK BROWN PINEBARK MULCH AROUND PLANTING PITS. INSTALL STRAW MULCH IN ALL REFORESTATION AREAS.
- ANY PLANT MATERIAL NOT MEETING THE SPECIFICATION'S REQUIREMENTS FOR QUALITY WILL BE REJECTED BY THE ENVIRONMENTAL SPECIALIST.
- INSTALL MINIMUM 8" DEPTH SALVAGED TOPSOIL IN ALL REFORESTATION AREAS.
- PLANT QUALITY, SIZE AND CONDITION AS DETERMINED BY STANDARDS SET FORTH IN THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARD ANSI 260.1-1973. PLANT NAMES SHALL CONFORM TO LATEST EDITION OF "STANDARDIZED PLANT NAMES" AS ADOPTED BY AMERICAN JOINT COMMITTEE OF HORTICULTURE NOMENCLATURE.
- REFORESTATION PLANT SIZES: SAPLING SHALL BE A MINIMUM OF 5' HIGH AND "-3/4" CAL. BRANCHING ABOVE 2.5'. SHRUBS SHALL BE A MINIMUM OF 2.5'-3' HIGH, FULL AND BUSHY.
- PLANTING TIME: PLANTING OF THE REFORESTATION WORK WILL OCCUR FROM SEPTEMBER 1-OCTOBER 15TH TO ENSURE BEST ESTABLISHMENT.
- TREE SHELTERS:TUBEX TREE GUARD SHALL BE PROVIDED FOR ALL SAPLINGS TO REDUCE RODENT BROWSING. TREE GUARDS SHALL BE REMOVED AFTER 2 YEARS.
- MAINTENANCE: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE REFORESTATION AREA FOR A PERIOD OF ONE YEAR AFTER SUBSTANTIAL COMPLETION. THEY WILL BE RESPONSIBLY FOR WATERING DURING THIS TIME WITH AN APPROVED METHOD.
- SALVAGED TOPSOIL WILL BE ADDED AS BACKFILL IN ALL PLANTING PITS.
- PLANTING WILL BE SUPPLEMENTED WITH AN CONSERVATION/WILDLIFE SEED MIX. SEEDING WILL OCCUR AFTER PLANTING IS COMPLETE TO STABILIZE SOIL, REDUCE WEED GROWTH AND PROVIDE AND HERBACEOUS FOREST FLOOR.
- SEEDING: ALLENS CONSERVATION MIX, SEEDING RATE 5LB/1,000 SQ FT
- NATIVE PLANTINGS ARE SELECTED TO THRIVE IN THE CLEAR RIVER ENERGY SITE CONDITIONS. ANY ADDITIONAL FERTILIZER IN THE FORM OF A SLOW RELEASE FERTILIZER SHALL BE USED ONLY DURING THE ESTABLISHMENT PERIOD OF THE FIRST THREE YEARS, AND THEN ONLY AS NEEDED. SUPPLEMENTAL WATERING WILL ONLY BE USED DURING THE ESTABLISHMENT PERIOD.
- AS DEER CAN BE AN ISSUE IN RURAL AREAS, PLANTS WERE SELECTED TO AVOID THOSE THAT ARE FREQUENTLY SEVERELY DAMAGED AND FOCUSED ON THOSE THAT ARE RARELY, SELDOM OR OCCASIONALLY DAMAGED. MUCH OF THIS DEPENDS ON THE SEVERITY OF THE WINTER MONTHS.

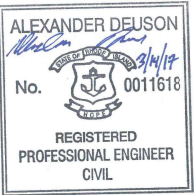
Reforestation Plant Quantity List											
Area Code	Polygon Area (sq ft)	Saplings 1	Quantity	Saplings 2	Quantity	Total Saplings	Shrubs 1	Quantity	Shrubs 2	Quantity	Total Shrubs
A-1	18,601	Black oak	27.0	Sassafras	26.0	53.0000	Highbush blueberry	81.0	Sheep laurel	80	161
A-2	9,974	White oak	14.0	Red maple	14.0	28.0000	Lowbush blueberry	44.0	Huckleberry	43	87
A-3	15,944	Red oak	23.0	White pine	23.0	46.0000	Sweet pepperbush	69.0	Witch hazel	69	138
A-4	20,488	White pine	30.0	Black oak	29.0	59.0000	Witch hazel	89.0	Lowbush blueberry	88	177
A-5	14,478	Red maple	21.0	Red oak	20.0	41.0000	Huckleberry	63.0	Sweet pepperbush	63	126
A-6	16,063	Sassafras	23.0	White oak	23.0	46.0000	Sheep laurel	70.0	Highbush blueberry	69	139
A-7	19,781	Black oak	29.0	White oak	28.0	57.0000	Highbush blueberry	86.0	Huckleberry	85	171
A-8	20,013	White oak	29.0	Sassafras	28.0	57.0000	Lowbush blueberry	87.0	Witch hazel	87	174
A-9	9,872	Red oak	14.0	Red maple	14.0	28.0000	Sweet pepperbush	43.0	Sheep laurel	42	85
A-10	10,438	White pine	15.0	Red oak	15.0	30.0000	Witch hazel	45.0	Huckleberry	45	90
A-11	9,249	Red maple	13.0	White pine	13.0	26.0000	Huckleberry	40.0	Sweet pepperbush	40	80
A-12	26,119	Sassafras	38.0	Black oak	37.0	75.0000	Sheep laurel	113.0	Sweet pepperbush	113	226
A-13	24,516	Black oak	35.0	Red maple	35.0	70.0000	Highbush blueberry	107.0	Lowbush blueberry	106	213
A-14	9,511	White oak	14.0	White pine	13.0	27.0000	Lowbush blueberry	41.0	Witch hazel	41	82
A-15	11,441	Red oak	17.0	Sassafras	16.0	33.0000	Sweet pepperbush	50.0	Highbush blueberry	49	99
A-16	7,203	White pine	10.0	Red oak	10.0	20.0000	Witch hazel	32.0	Sheep laurel	31	63
A-17	7,516	Red maple	11.0	Sassafras	10.0	21.0000	Huckleberry	33.0	Lowbush blueberry	32	65
B-1	9,432	Sassafras	14.0	White oak	13.0	27.0000	Sheep laurel	41.0	Huckleberry	40	81
B-2	11,241	Black oak	16.0	Red oak	16.0	32.0000	Highbush blueberry	49.0	Sweet pepperbush	48	97
B-3	4,972	White oak	7.0	White pine	7.0	14.0000	Lowbush blueberry	22.0	Sweet pepperbush	21	43
CFS	6,009	Red oak	9.0	Red maple	8.0	17.0000	Sweet pepperbush	26.0	Highbush blueberry	26	52

MATCH LINE – SHEET 01C702 SWMP PLAN



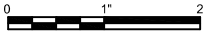
3	3/27/2017	REVISION
2	2/17/2017	REVISION
1	8/17/2016	SOIL EROSION SEDIMENT CONTROL PLAN
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER C. JACOBS	
PROJECT NUMBER	10021318



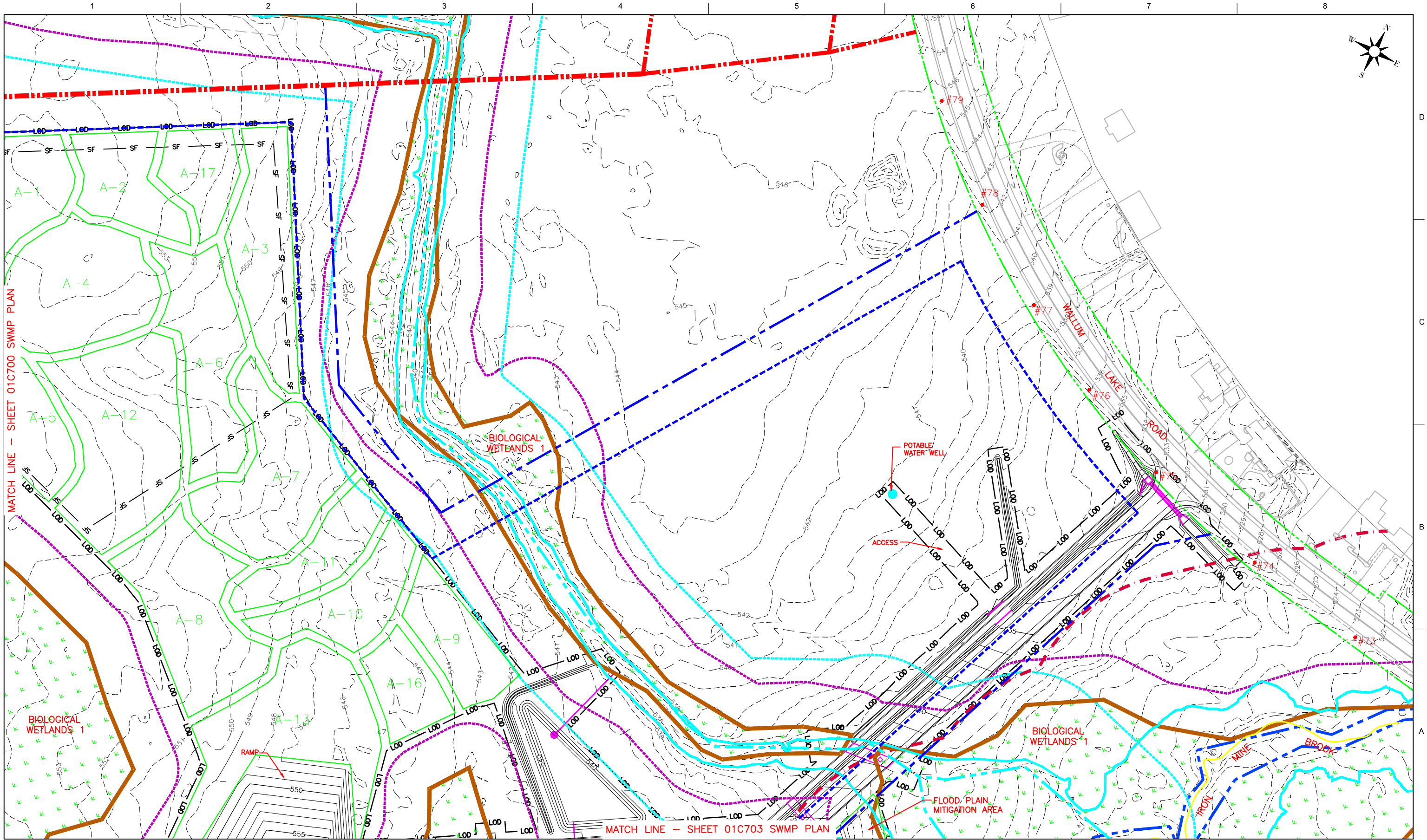
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

PROPOSED REFORESTATION PLAN



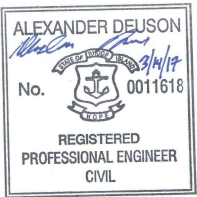
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SCALE 1" = 50'

SHEET
01C700



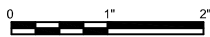
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PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



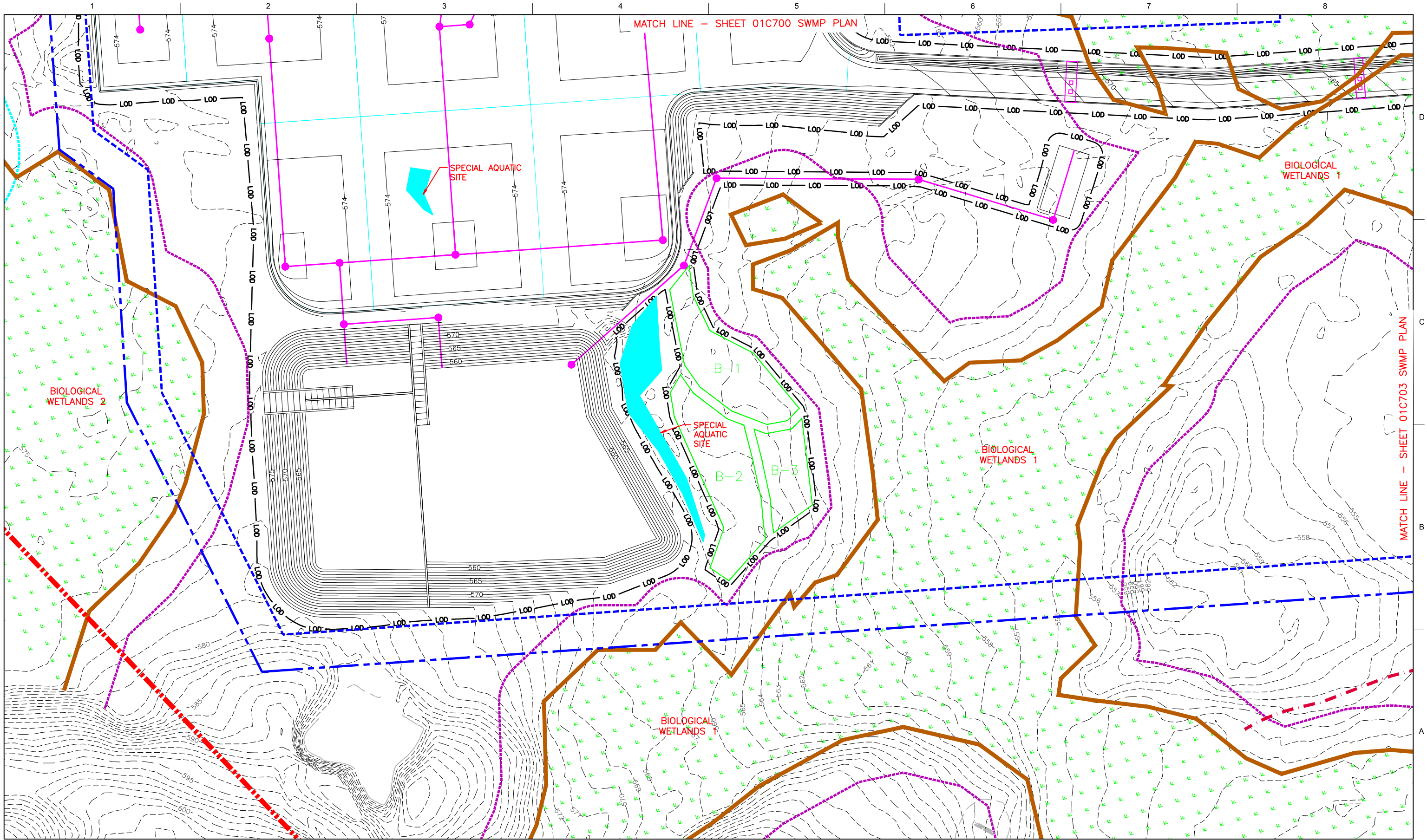
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135-002, 137-002, 137-003, 137-021,
153-001, 153-002
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PROPOSED REFORESTATION PLAN



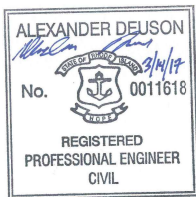
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SCALE 1" = 50'

SHEET
01C701

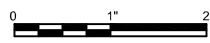


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PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



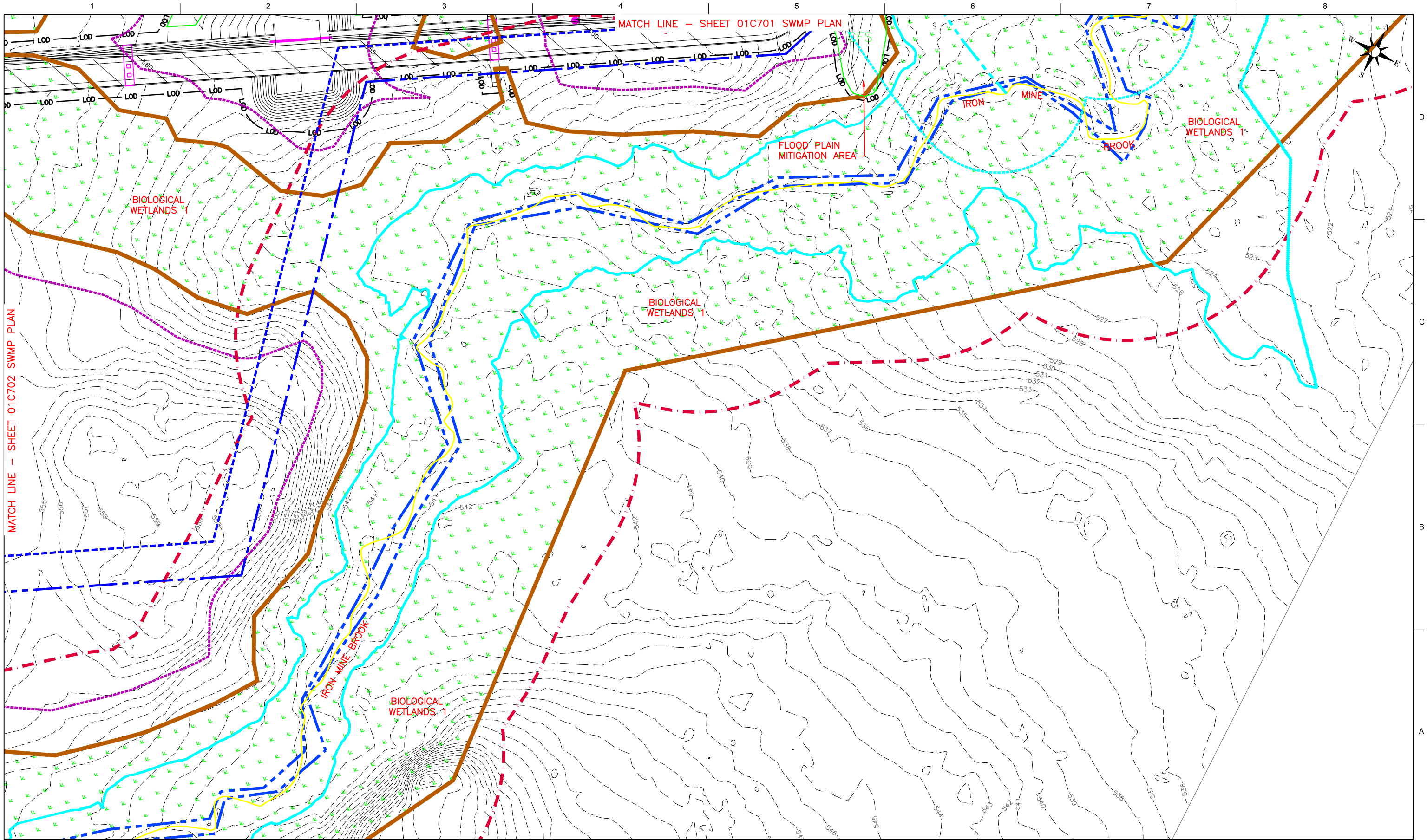
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135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
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FILENAME 01C702.dwg
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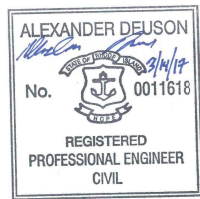
PROPOSED REFORESTATION PLAN

SHEET
01C702

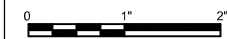


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PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318

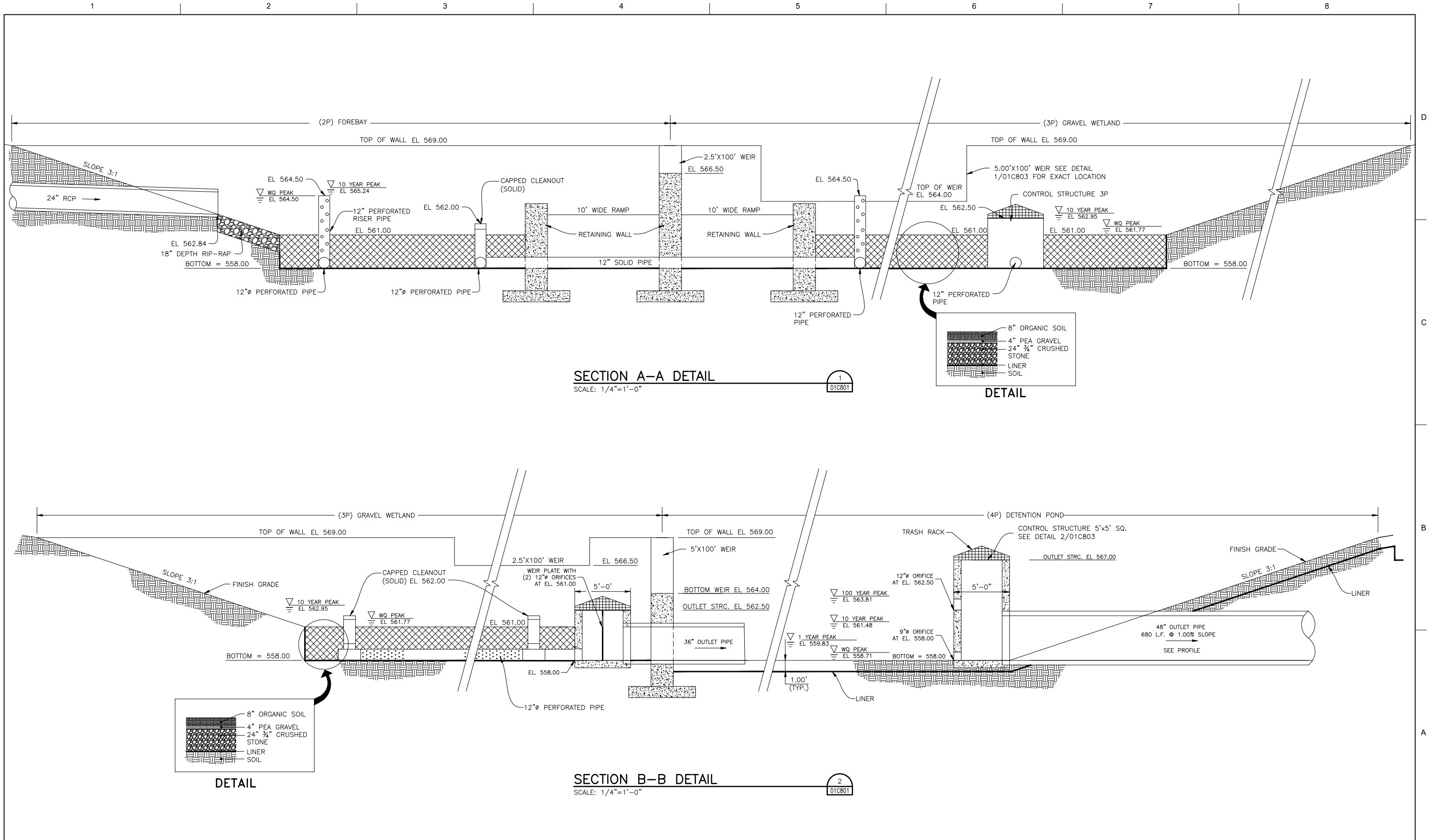


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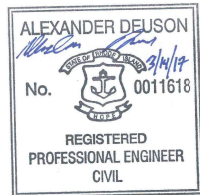
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SCALE 1" = 50'

SHEET
01C703



ISSUE	DATE	DESCRIPTION
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PROJECT NUMBER	10021318

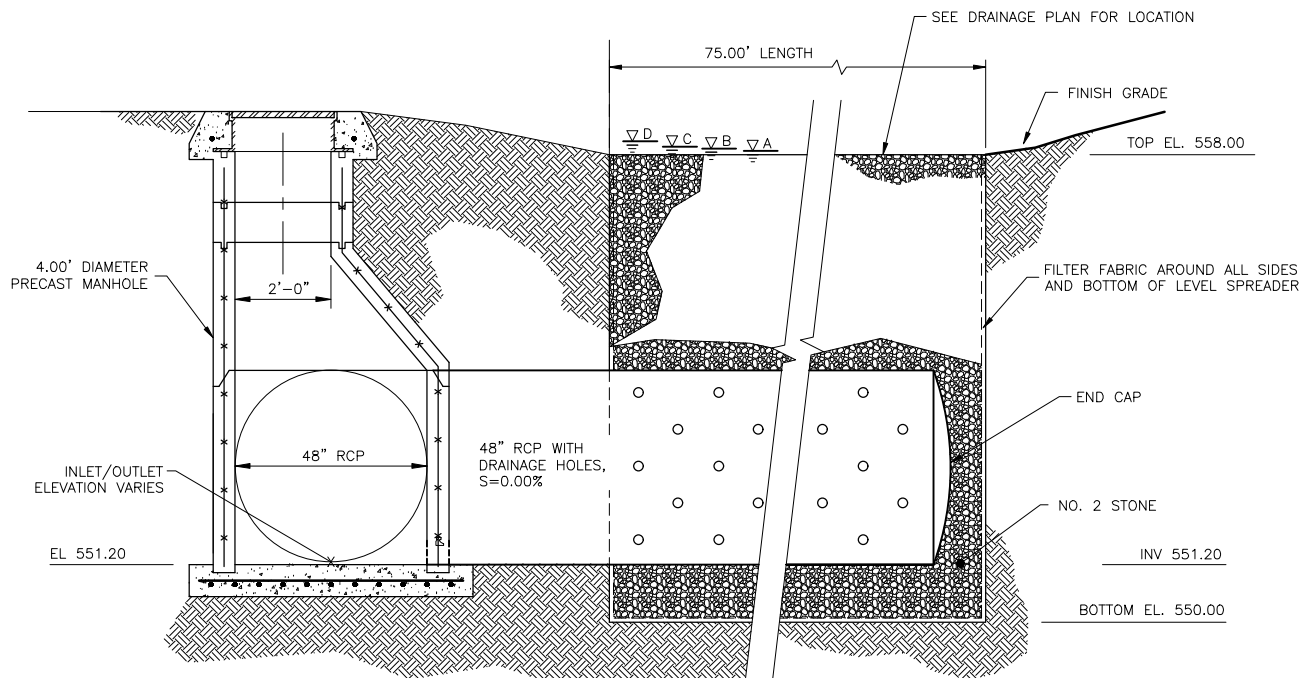


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153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

**PROPOSED SITE
DRAINAGE DETAILS**

FILENAME 01C801.dwg
SCALE 1" = 1'

SHEET
01C801



WATER DEPTH SCHEDULE		
	STORM EVENT	ELEVATION
A	WQ PEAK	558.08
B	1 YR PEAK	558.13
C	10 YR PEAK	558.17
D	100 YR PEAK	558.29

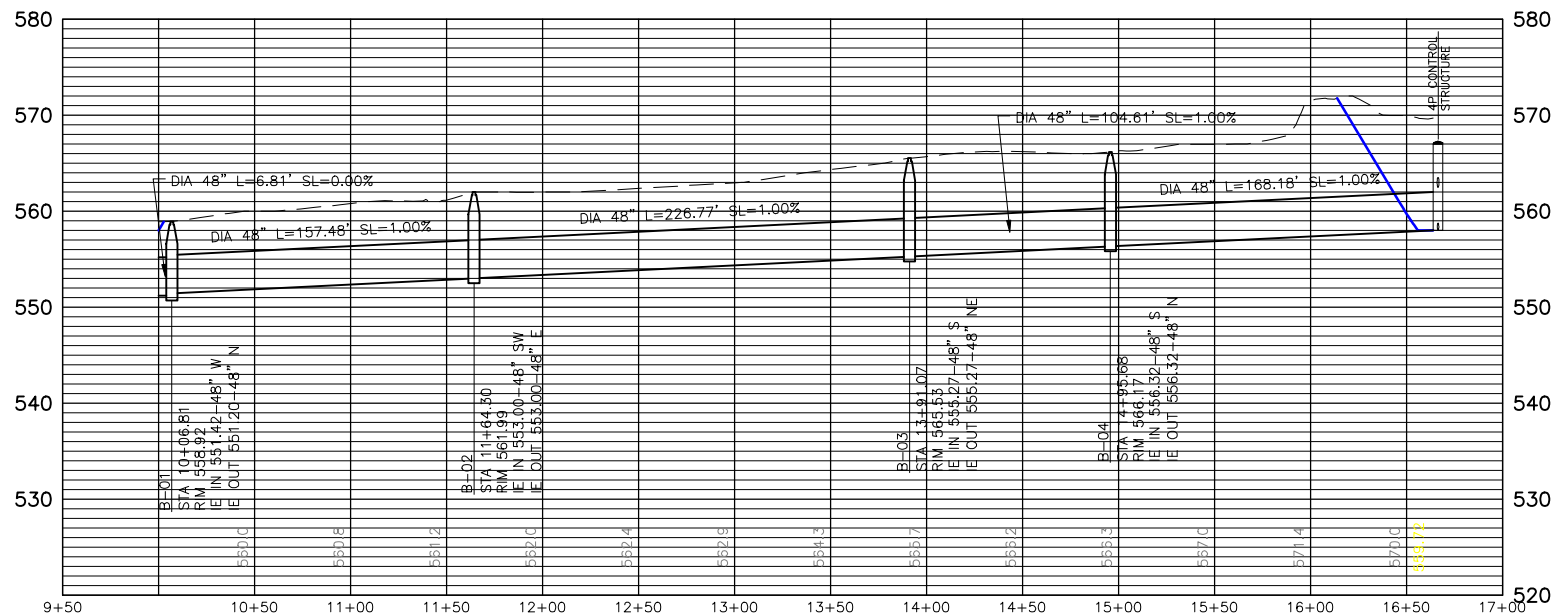
NOTE:

- 1) 48" I.D. PERFORATED UNDERDRAIN WITH FILTER SOCK. LAY PIPE WITH PERFORATIONS ON BOTTOM OF PIPE AND CAP END OF PIPE. LAY UNDERDRAIN AT 0.00% SLOPE FROM MANHOLE INVERT AND THRU BOTTOM OF LEVEL SPREADER.
- 2) WATER DEPTH MEASURED FROM TOP OF LEVEL SPREADER = EL 558.00.

STILLING WELL-LEVEL SPREADER DETAIL (18P)

SCALE: 1/2"=1'-0"

1
01C802



PROFILE OF LINE B

SCALE: HOR- 1"=50' VER- 1" = 5'

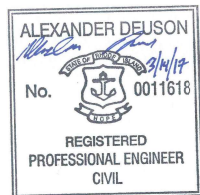
2
01C802



ISSUE	DATE	DESCRIPTION
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PROJECT MANAGER C. JACOBS

PROJECT NUMBER 10021318

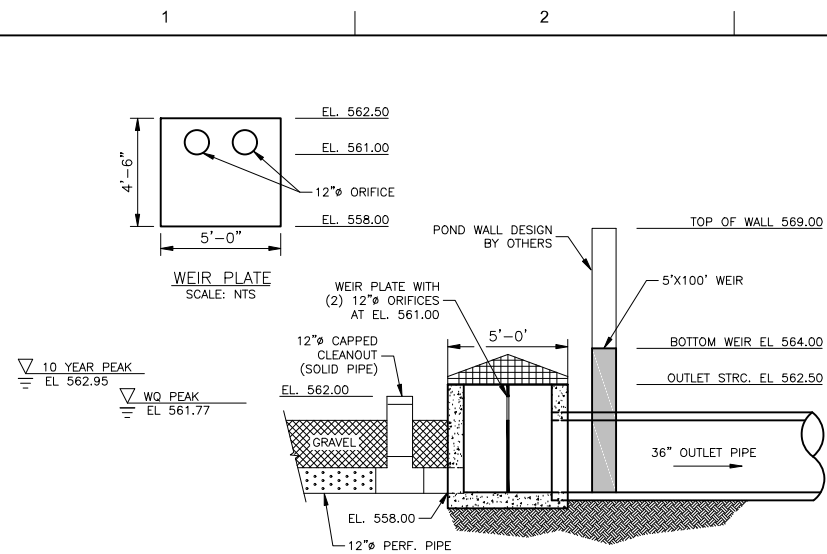


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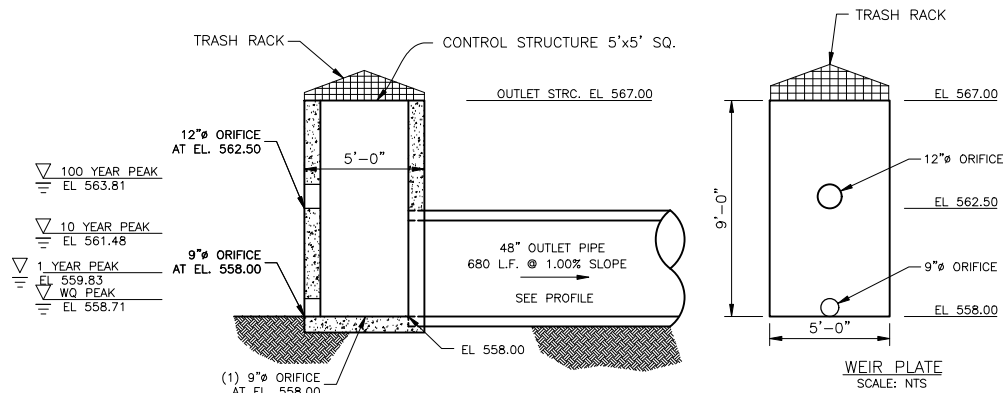
PROPOSED SITE DRAINAGE DETAILS

FILENAME 01C802.dwg
SCALE 1" = 20'

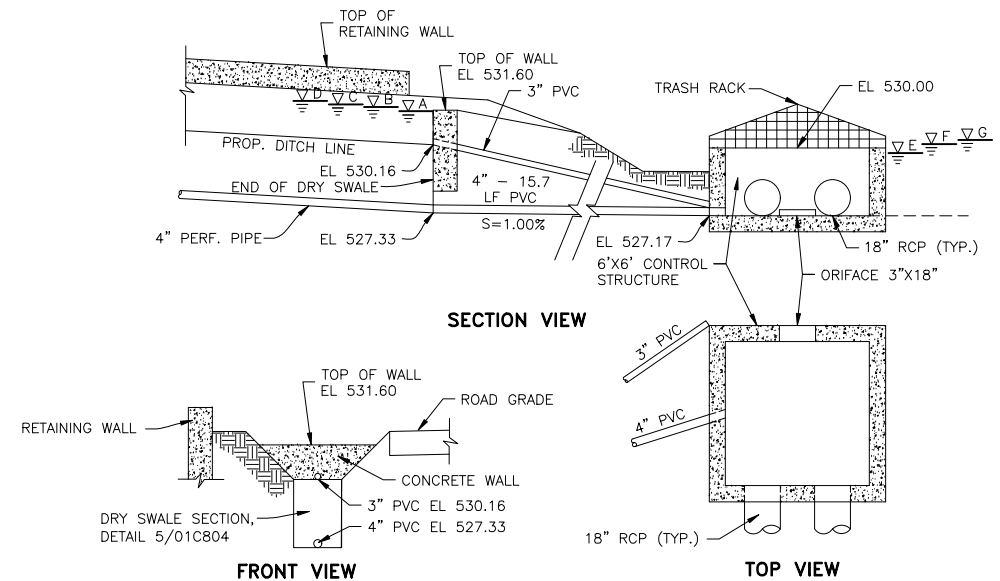
SHEET
01C802



CONTROL STRUCTURE DETAIL (3P)
SCALE: NTS



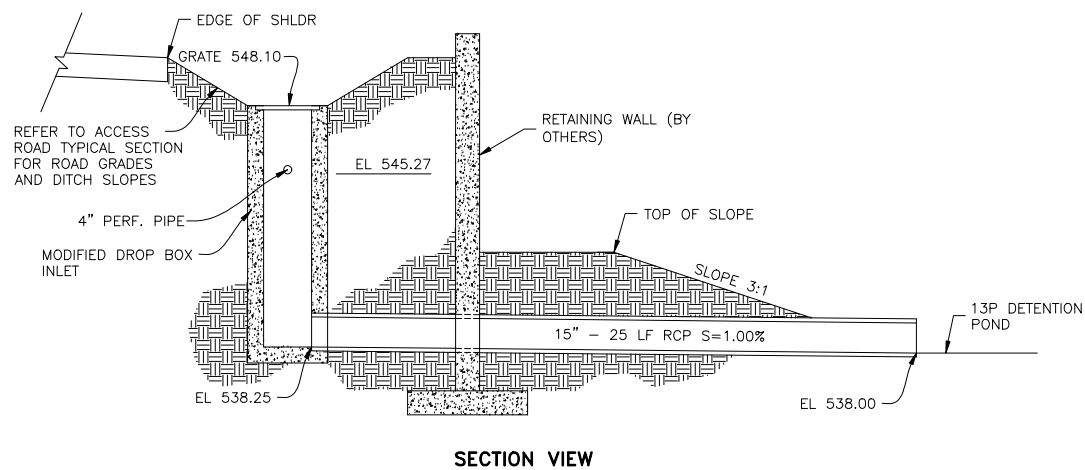
CONTROL STRUCTURE DETAIL (4P)
SCALE: NTS



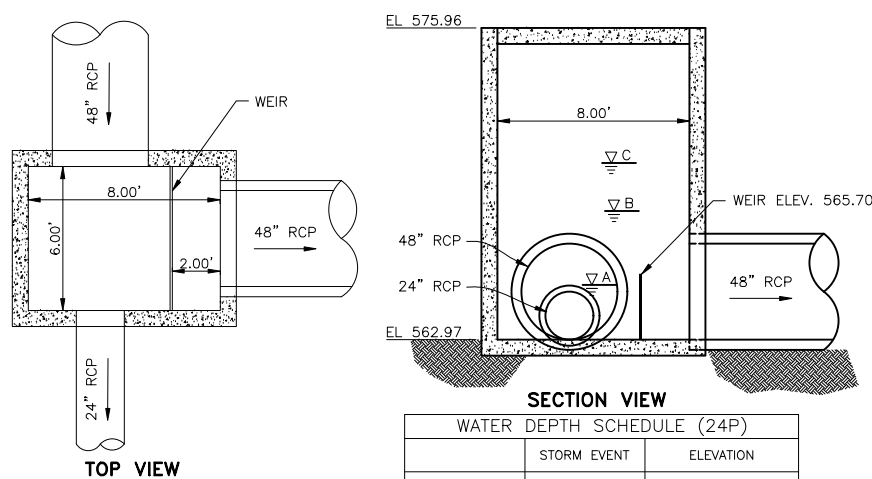
WATER DEPTH SCHEDULE (23P)		
	STORM EVENT	ELEVATION
A	WQ PEAK	531.30
B	1 YR PEAK	531.74
C	10 YR PEAK	531.85
D	100 YR PEAK	532.00

WATER DEPTH SCHEDULE (15P)		
	STORM EVENT	ELEVATION
E	1 YR PEAK	529.84
F	10 YR PEAK	530.16
G	100 YR PEAK	530.33

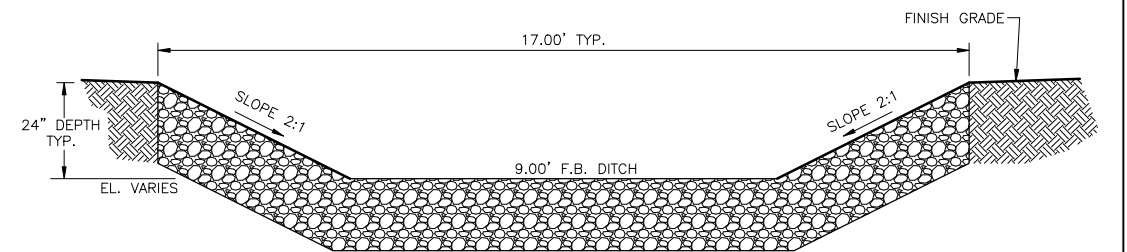
END OF SWALE (20R) DETAIL (23P)(15P)
SCALE: 1/4"=1'-0"



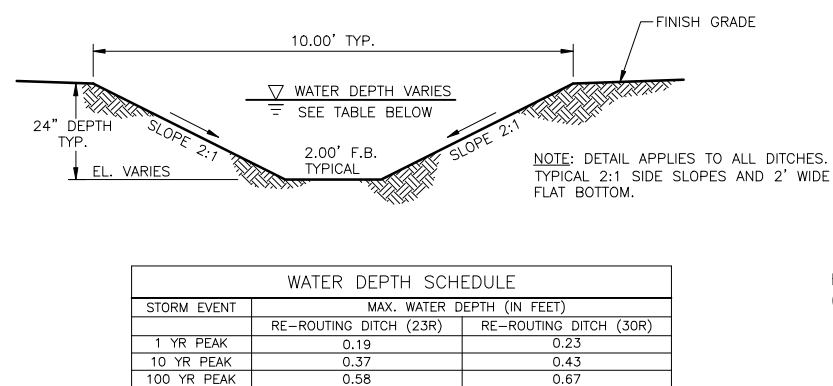
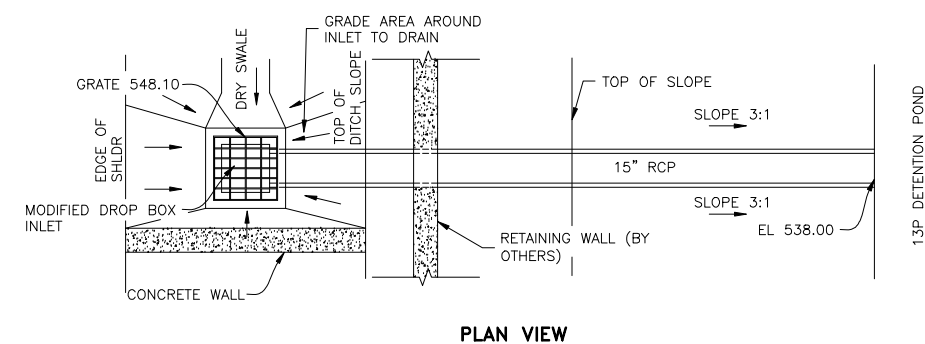
END OF SWALE DETAIL (29R)
SCALE: 1/4"=1'-0"



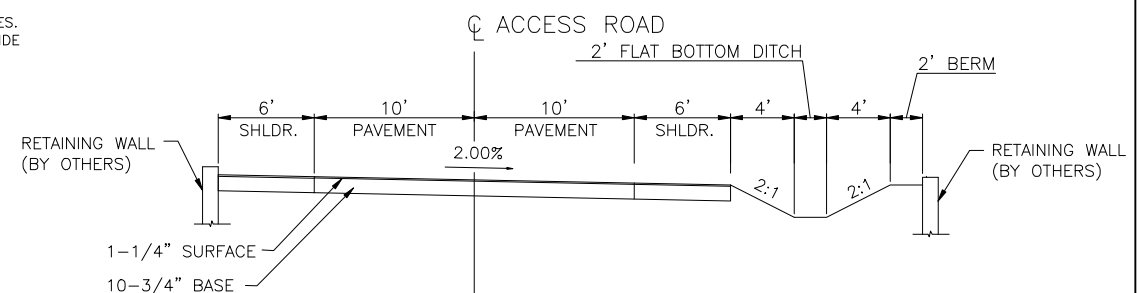
FLOW SPLITTER (24P)
SCALE: 1/4"=1'-0"



OUTLET CHANNEL FOR DBL 18" RCP (21R)
SCALE: 1/2"=1'-0"



TYPICAL DITCH SECTION (23R)(30R)
SCALE: 1/2"=1'-0"

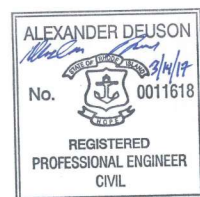


ACCESS ROAD TYPICAL SECTION
SCALE: 1/4"=1'-0"



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PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318

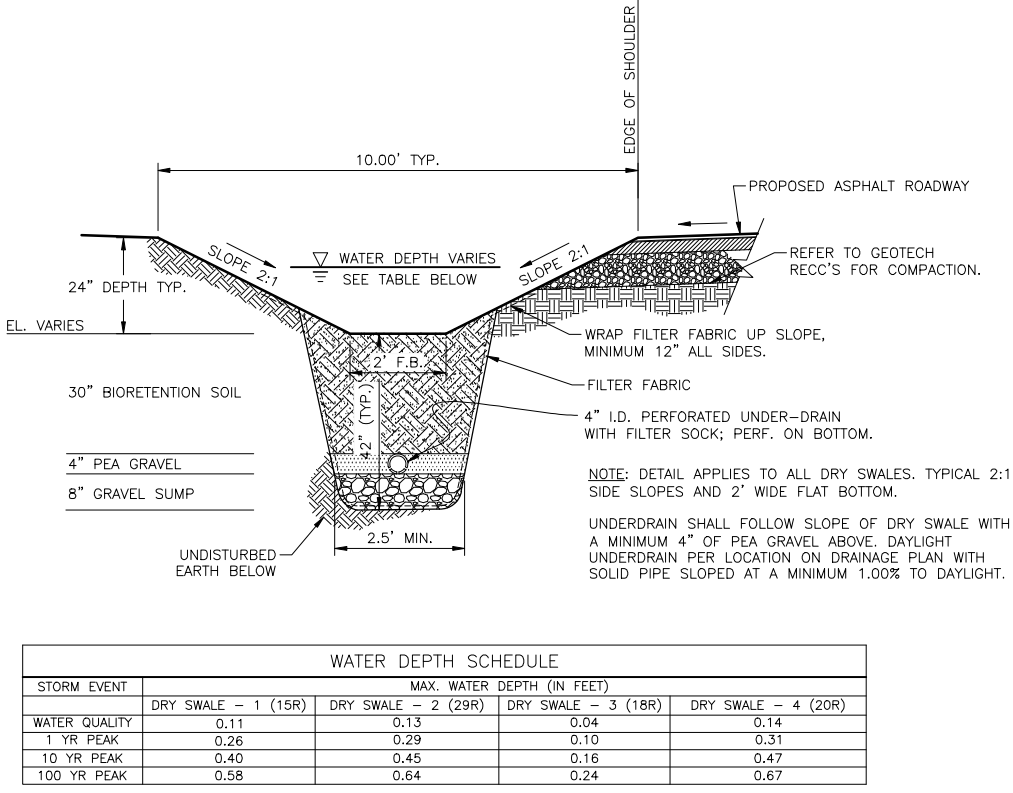
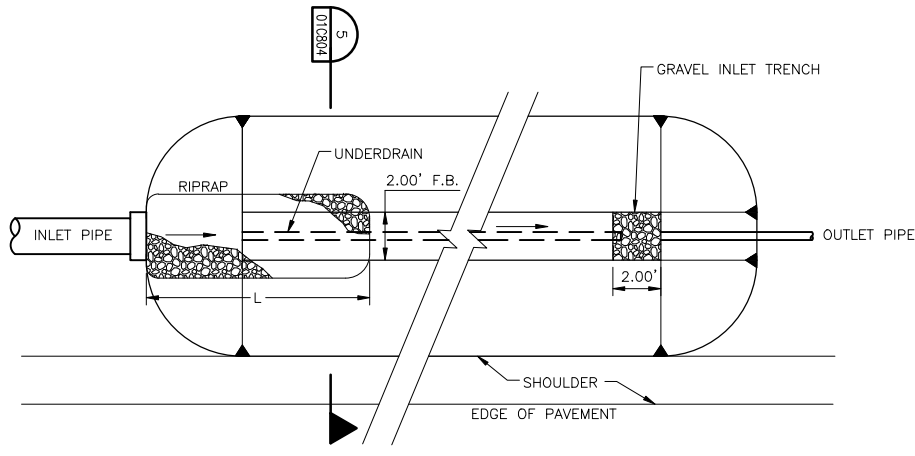
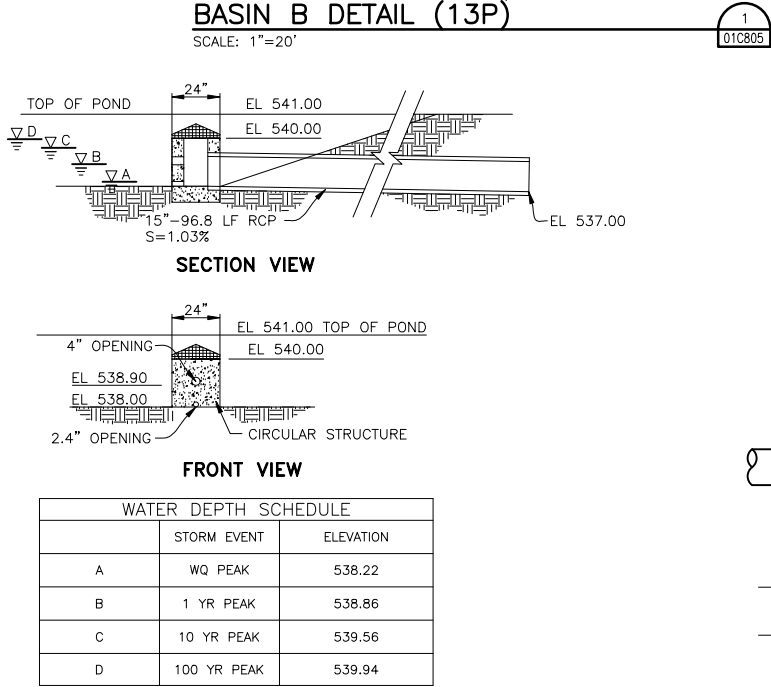
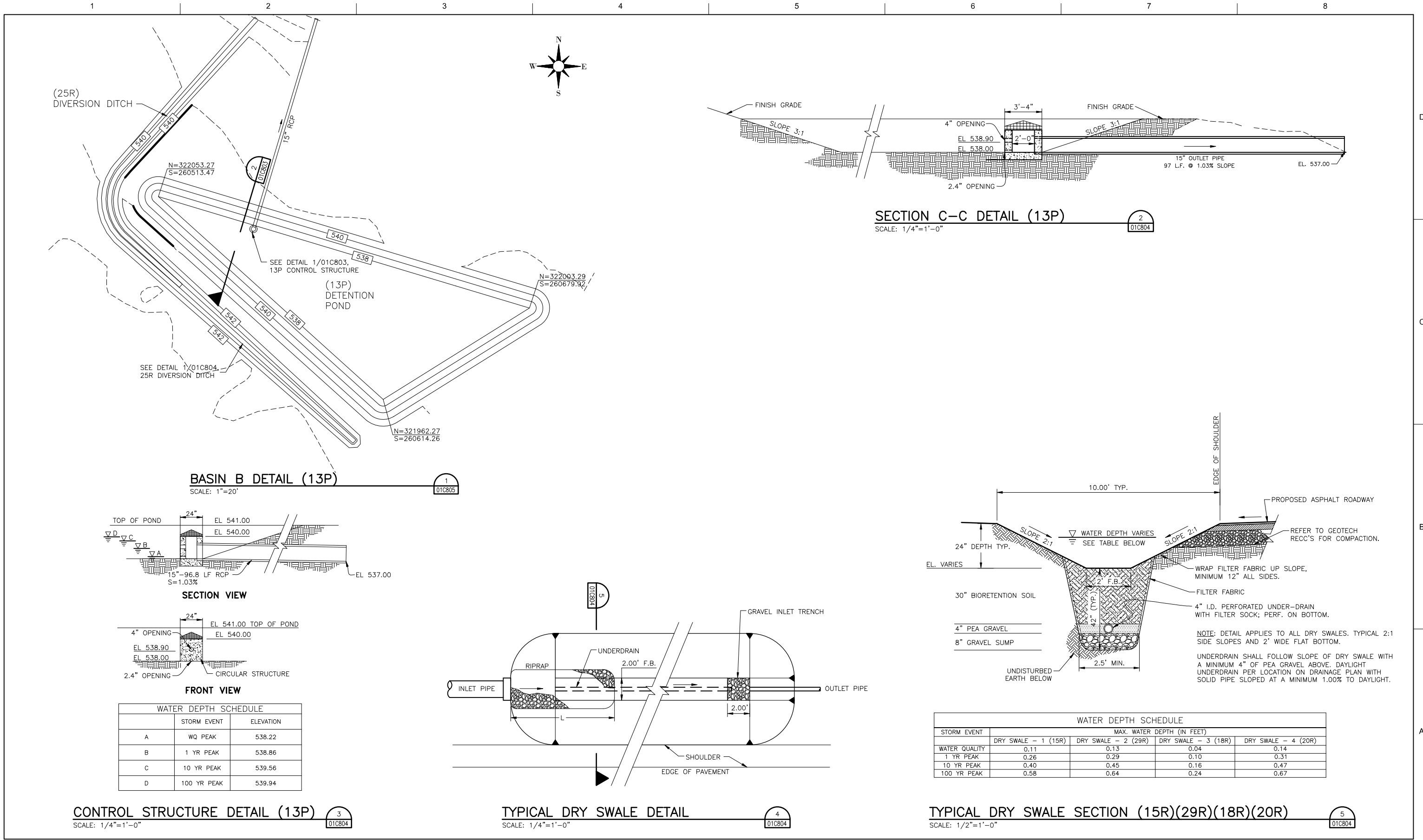


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153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

**PROPOSED SITE
DRAINAGE DETAILS**

FILENAME 01C803.dwg
SCALE 1"=20'

SHEET
01C803



CONTROL STRUCTURE DETAIL (13P)
SCALE: 1/4"=1'-0"

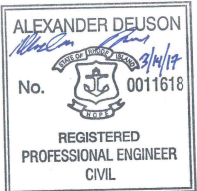
TYPICAL DRY SWALE DETAIL
SCALE: 1/4"=1'-0"

TYPICAL DRY SWALE SECTION (15R)(29R)(18R)(20R)
SCALE: 1/2"=1'-0"



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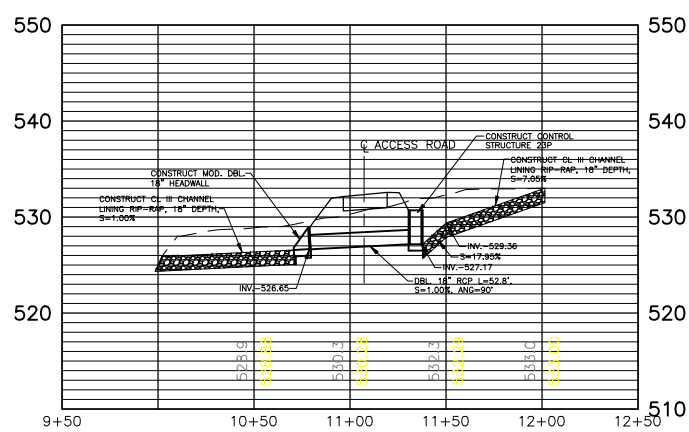


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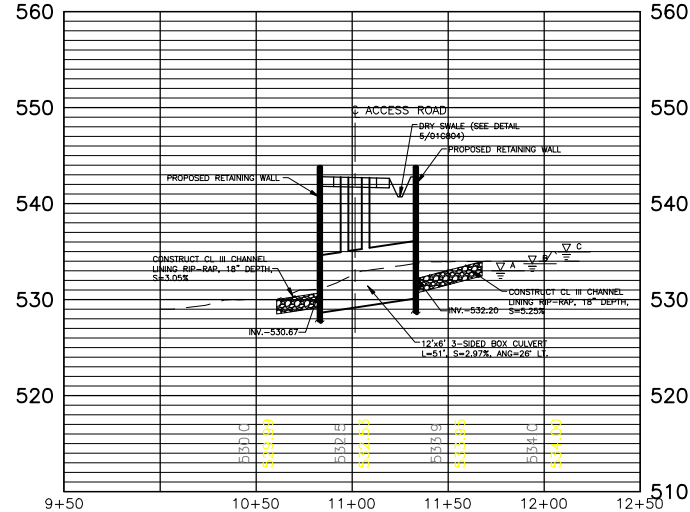
**PROPOSED SITE
DRAINAGE DETAILS**

FILENAME | 01C804.dwg
SCALE | 1" = 20'

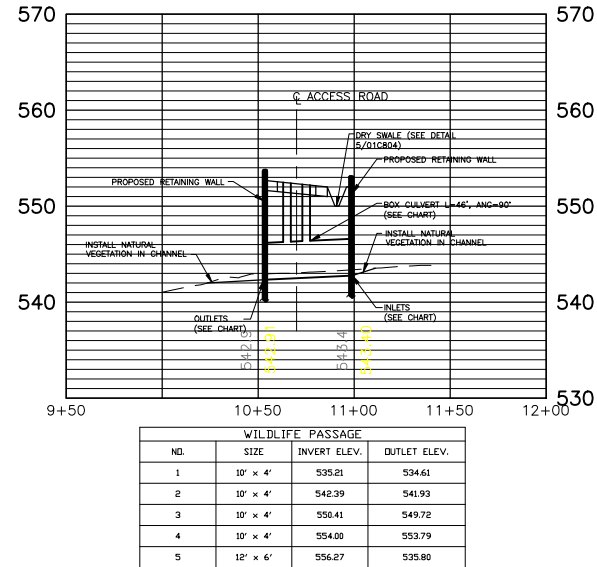
SHEET
01C804



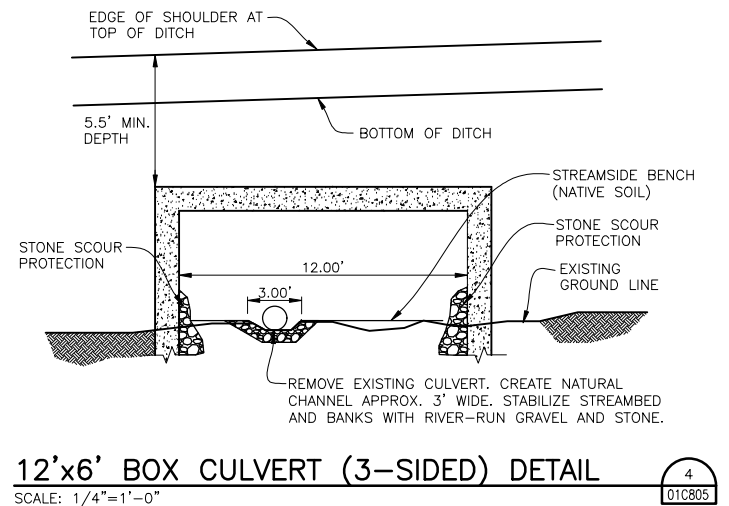
CULVERT #1 SECTION (15P)
SCALE: HOR- 1"=50' VER- 1"=5'



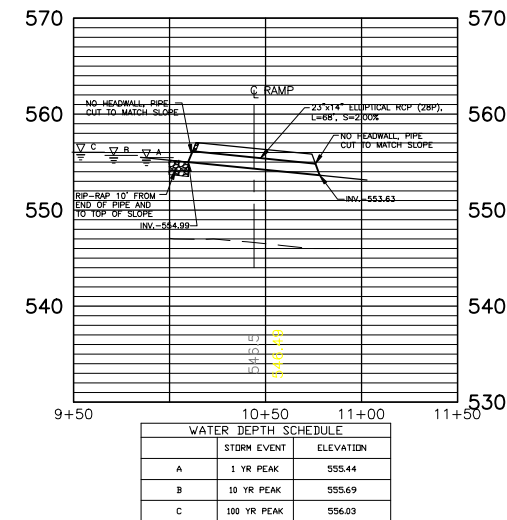
CULVERT #2 SECTION (17P)
SCALE: HOR- 1"=50' VER- 1"=5'



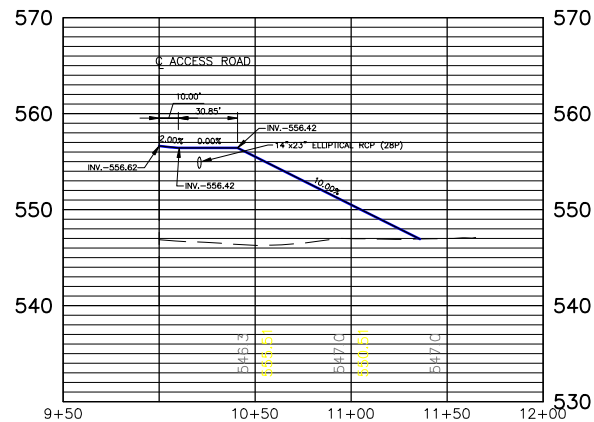
TYPICAL WILDLIFE PASSAGE SECTION (3)
SCALE: HOR- 1"=50' VER- 1"=5'



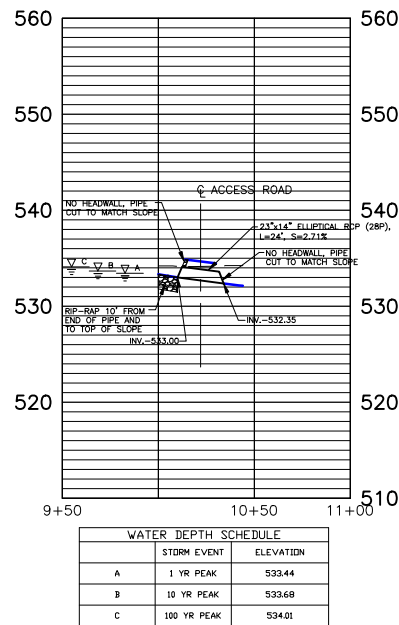
12'x6' BOX CULVERT (3-SIDED) DETAIL
SCALE: 1/4"=1'-0"



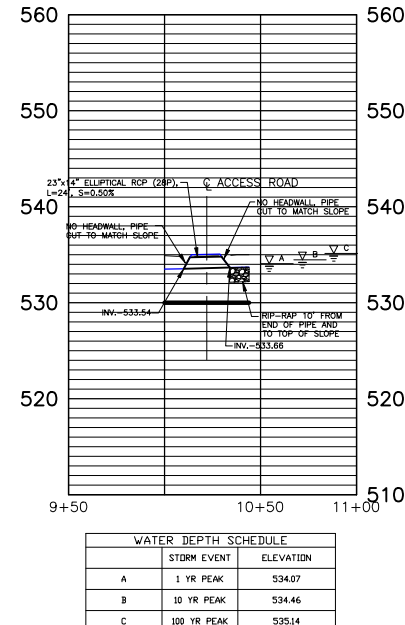
RAMP PIPE SECTION (28P)
SCALE: HOR- 1"=50' VER- 1"=5'



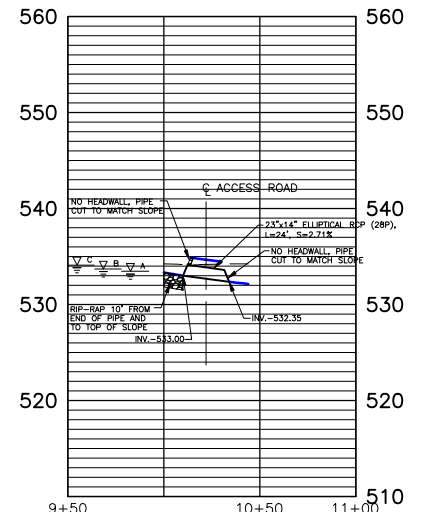
RAMP PIPE SECTION (28P)
SCALE: HOR- 1"=50' VER- 1"=5'



ACCESS ROAD PIPE SECTION (31P)
SCALE: HOR- 1"=50' VER- 1"=5'



ACCESS ROAD PIPE SECTION (30P)
SCALE: HOR- 1"=50' VER- 1"=5'

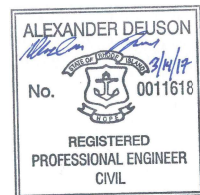


ACCESS ROAD SECTION (9)
SCALE: HOR- 1"=50' VER- 1"=5'



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**PROPOSED SITE
DRAINAGE DETAILS**

FILENAME 01C805.dwg
SCALE 1" = 20'

SHEET
01C805

ALL MEASURES STATED ON THESE SOIL EROSION AND SEDIMENT CONTROL PLAN SHEETS, AND IN THE WRITTEN SOIL EROSION AND SEDIMENT CONTROL PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON A MINIMUM OF ONCE EVERY SEVEN (7) DAYS OR 24 HOURS AFTER A 0.25 INCH RAINFALL EVENT AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

- WASTE DISPOSAL NOTES:

1. THE CONTRACTOR SHALL IDENTIFY AN AREA WITHIN THE CONSTRUCTION STAGING AREA FOR WASTE DISPOSAL AND DENOTE ON THE PLAN UPON ARRIVAL BY THE RESIDENT ENGINEER FOR THE PROJECT.

PHASE I SHEETS 01C905 THRU 01C909

- "HALT"**
PERFORM INSPECTION OF BMPs. GENERAL CONTRACTOR SHALL SCHEDULE AND CONDUCT STORM WATER PRE-CONSTRUCTION MEETING WITH ENGINEER AND ALL GROUND DISTURBING CONTRACTORS BEFORE PROCEEDING WITH CONSTRUCTION.

5. CONSTRUCT TEMPORARY SEDIMENT/DETENTION BASIN "A", DIVERSION DITCHES, OUTLET STRUCTURES, OUTLET PROTECTIONS AND SEED BASIN.

PHASE II SHEETS 01C910 THRU 01C913

1. CLEAR AND GRUB THE SITE.
2. STRIP TOPSOIL AND STOCKPILE IN LOCATION SHOWN ON PLANS. INSTALL TEMPORARY SEEDING ON STOCKPILE AT END OF TOPSOIL STRIPPING ACTIVITIES.
3. CONSTRUCT SEDIMENT/DETENTION BASIN "B". OUTLET STRUCTURE AND OUTLET PROTECTION. SEED BASIN. CONSTRUCT DIVERSION DITCH/CONTAINMENT BERM. STORM RUNOFF WILL BE DIVERTED TO BASIN B AS THE SITE GRADING PROGRESSES TO FACILITATE THE EVENTUAL REMOVAL OF BASIN "A".
4. BEGIN GRADING THE SITE. TEMPORARY SEDIMENT BASIN "A" SIZE WILL BE REDUCED AS GRADING DIVERTS RUNOFF TO BASIN B THROUGH THE NEW DIVERSION DITCH. MOVE DITCH TO THE EAST AS NEEDED TO FACILITATE MASS GRADING. ONCE RUNOFF FROM AREAS THAT WERE ENTERING SEDIMENT BASIN A HAVE BEEN DIVERTED TO BASIN B, BASIN A CAN BE REMOVED TO FACILITATE FINAL MASS GRADING OF THE SITE.
5. BEGIN CONSTRUCTION OF RETAINING WALLS AND ENTRANCE ROAD CONSTRUCTION.

PHASE III SHEETS 01C914 THRU 01C917

1. INSTALL STORM DRAINAGE SYSTEM. INSTALL INLET PROTECTIONS AROUND ALL STORM SEWER STRUCTURES AS THEY ARE INSTALLED.
2. INSTALL UTILITIES AND BEGIN BUILDING PAD CONSTRUCTION.
3. PERFORM FINISH GRADING.
4. INSTALL PERMANENT SEEDING ON ALL PERIMETER AREAS.
5. INSTALL GRAVEL STABILIZATION TO ALL AREAS AS FINISH GRADING IS COMPLETED IN PREPARATION FOR PAVING.

PHASE IV SHEETS 01C918 THRU 01C921

1. PAVE SITE.
2. INSTALL INLET PROTECTION DEVICES IN PAVED AREAS. USE INLET FILTERS FOR ALL INLETS.
3. COMPLETE FINISH GRADING AND INSTALL PERMANENT SEEDING, SODDING AND PLANTING.
4. CONVERT BASIN "B" INTO FINAL WATER QUALITY/DETENTION BASIN.
5. COMPLETE SPILL CONTAINMENT AREA.
6. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES (ONLY IF SITE IS STABILIZED AND APPROVED BY CONSTRUCTION MANAGER AND GOVERNING AGENCIES).
7. REGRADE AND REPLANT CONSTRUCTION STAGING AREA PER REFORESTATION PLAN SHEETS 01C700 THRU 01C703.

CAUTION NOTICE TO CONTRACTOR

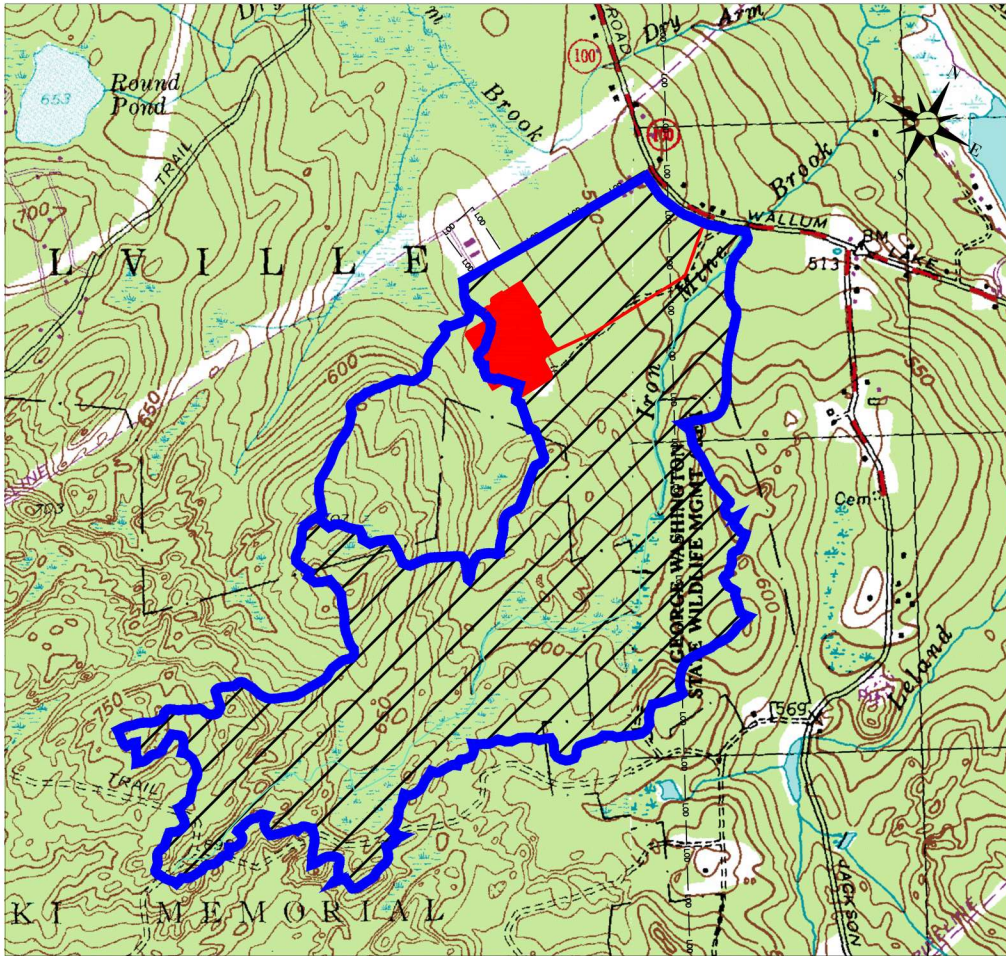
IF PROPERLY IMPLEMENTED, THIS PLAN WILL PROVIDE AN EFFECTIVE MEANS FOR CONTROLLING EROSION. HOWEVER, IT IS ACKNOWLEDGED THAT NO ONE PLAN CAN BE PREPARED THAT WILL DEPICT ALL POSSIBLE CONTROL MEASURES NECESSARY FOR VARIOUS STAGES OF CONSTRUCTION. THE CONTRACTOR SHALL INCLUDE IN THE BASE BID ADEQUATE FUNDS TO PROVIDE ALL EROSION CONTROL MEASURES NECESSARY TO COMPLY WITH CODES FOR THE DURATION OF THE CONSTRUCTION PROJECT.

SPECIFICATION REQUIREMENTS

THE REQUIREMENTS SHOWN ON THIS PLAN ARE SUPPLEMENTED BY THE WRITTEN SOIL EROSION AND SEDIMENT CONTROL PLAN AND ANY SPECIFICATIONS CONTAINED WITHIN THE PROJECT SPECIFICATIONS. IN CASE OF CONFLICTS BETWEEN THE PLAN SHEETS, THE WRITTEN PLAN, PROJECT SPECIFICATIONS AND THE ACTUAL GENERAL PERMIT, THE MOST STRINGENT REQUIREMENTS SHALL APPLY.

A. THE SOIL EROSION AND SEDIMENT CONTROL PLAN IS COMPRISED OF SHEETS 01C000 "COVER SHEET", 01C900 "SEDC PLAN NOTES", 01C901 THRU 01C904 "EXISTING CONDITIONS AND SITE CONSTRAINTS MAP", 01C905 THRU 01C909 "PHASE I PLAN", 01C910 THRU 01C913 "PHASE II PLAN", 01C914 THRU 01C917 "PHASE III PLAN", 01C918 THRU 01C921 "PHASE IV PLAN", 01C922 THRU 01C925 "DETAILS", THE WRITTEN SOIL EROSION AND SEDIMENT CONTROL PLAN AND ASSOCIATED APPENDICES AND ATTACHMENTS, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.

- ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OF RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (RHODES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
- C. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY SITE CONDITIONS ENCOUNTERED AT NO ADDITIONAL COST TO THE OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
- D. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
- E. SEE SITE MAP FOR DELINEATION OF ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
- F. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL, OR AS REQUIRED BY THE PERMIT. ALL WORK SHALL REMAIN WITHIN THE LIMITS OF DISTURBED SHOWN ON THE PLANS. ANY WORK OUTSIDE THE LIMIT OF DISTURBANCE MUST BE APPROVED BY THE APPROPRIATE GOVERNING AGENCIES BEFORE ANY DISTURBANCE OUTSIDE THE LIMITS OF DISTURBANCE OCCURS.
- G.) GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
- H. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED ONSITE AND PROPERLY TREATED OR DISPOSED OF IN ACCORDANCE WITH THE APPROPRIATE GOVERNING REGULATIONS.
- I. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLotation BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
- J. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
- K. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SLASH CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- L. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
- M. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS STOPPED FOR AT LEAST 14 DAYS, SHALL BE TEMPORARILY SEEDED IMMEDIATELY AND NO LATER THAN THE END OF THE NEXT WORK DAY. FOR AREAS WHERE IT IS KNOWN THAT A PORTION OF THE SITE WILL NOT HAVE ANY CONSTRUCTION ACTIVITIES FOR MORE THAN 14 DAYS, THESE AREAS SHALL HAVE BE TEMPORARILY SEEDED WITHIN 14 DAYS AS SOON AS THAT DETERMINATION IS KNOWN.
- N. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN FOR DETAILS.
- O. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
- P. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- Q. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE TEMPORARY SEDIMENT BASIN, THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
- R. ON-SITE & OFF-SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
- S. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
- T. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, DIVERSION DITCHES, ETC.) TO PREVENT EROSION.
- U. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINIOUS PAVING FOR ROAD CONSTRUCTION.



SCALE: 1" = 1000'

SITE IS APPROXIMATELY 800' SOUTHEAST OF ALGONQUIN
LANE AND OFF OF WALLUM LAKE ROAD.

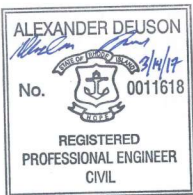
SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE

NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE

[illegible]

3	3/27/2017	REVISION
2	2/17/2017	REVISION
1	8/17/2016	SOIL EROSION SEDIMENT CONTROL PLAN
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318

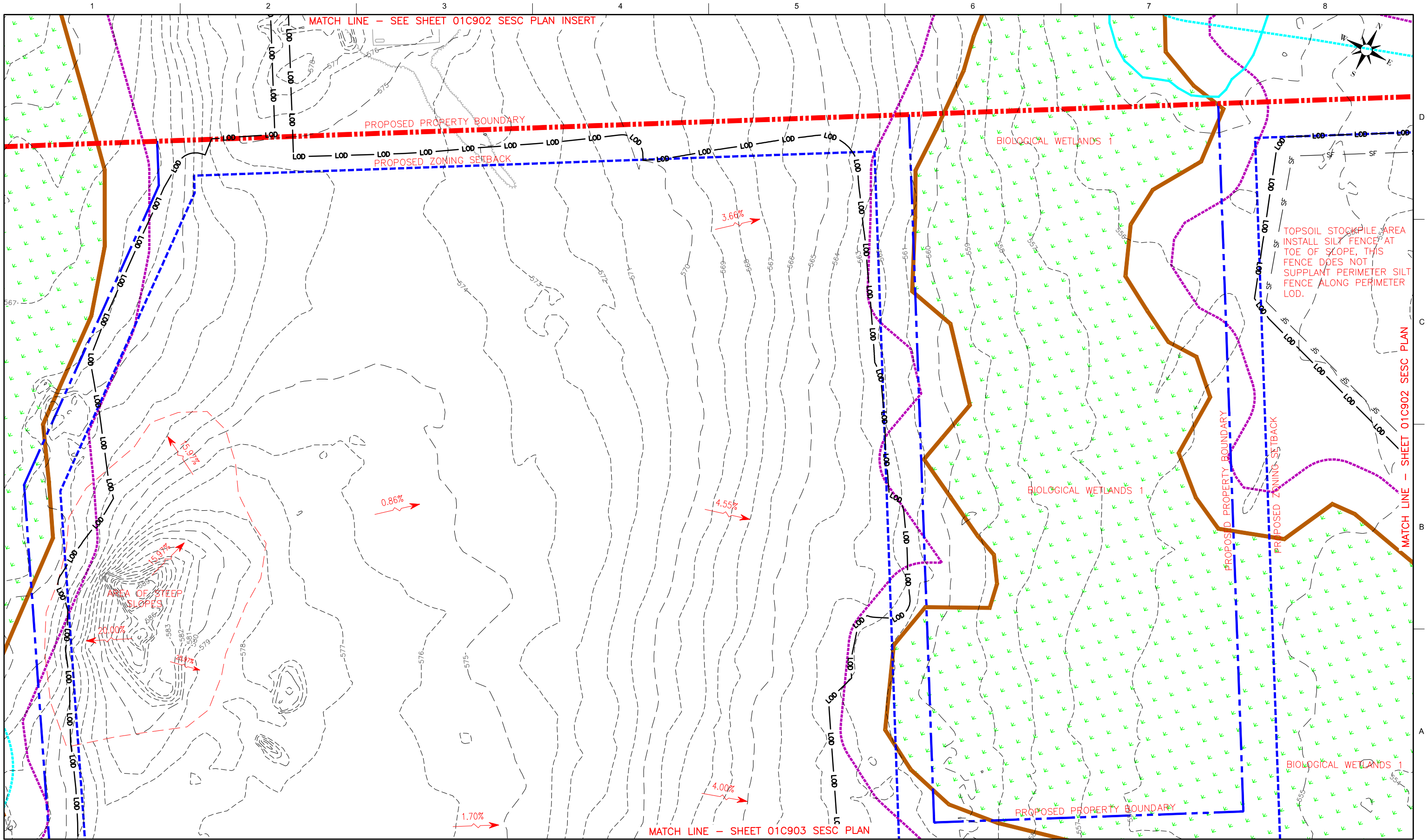


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153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

SESC NOTES

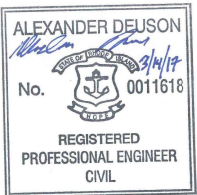
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SHEET
01C900



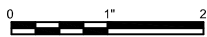
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PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



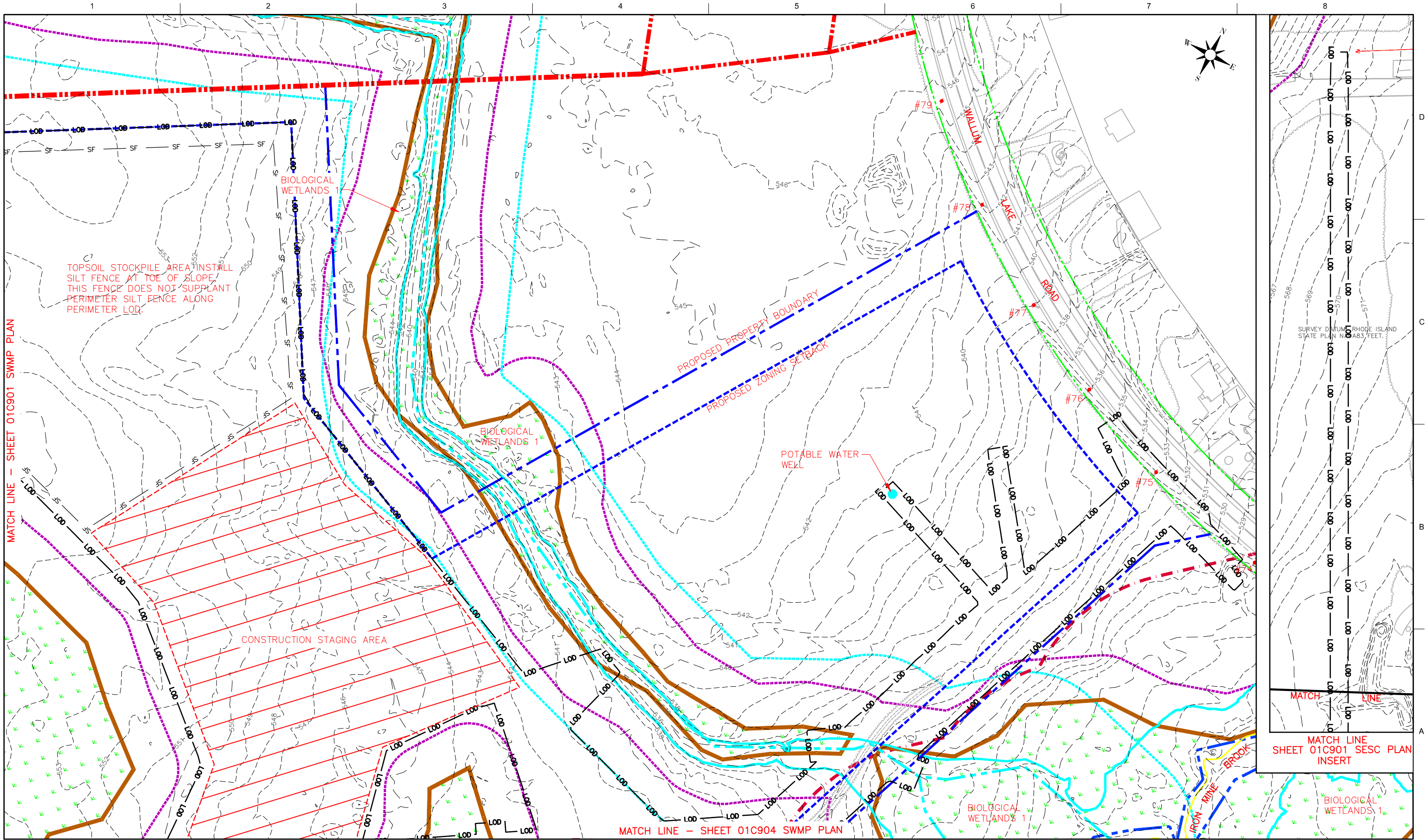
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SESC EXISTING CONDITIONS AND
SITE CONSTRAINTS MAP



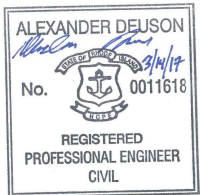
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SHEET
01C901

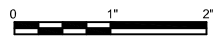


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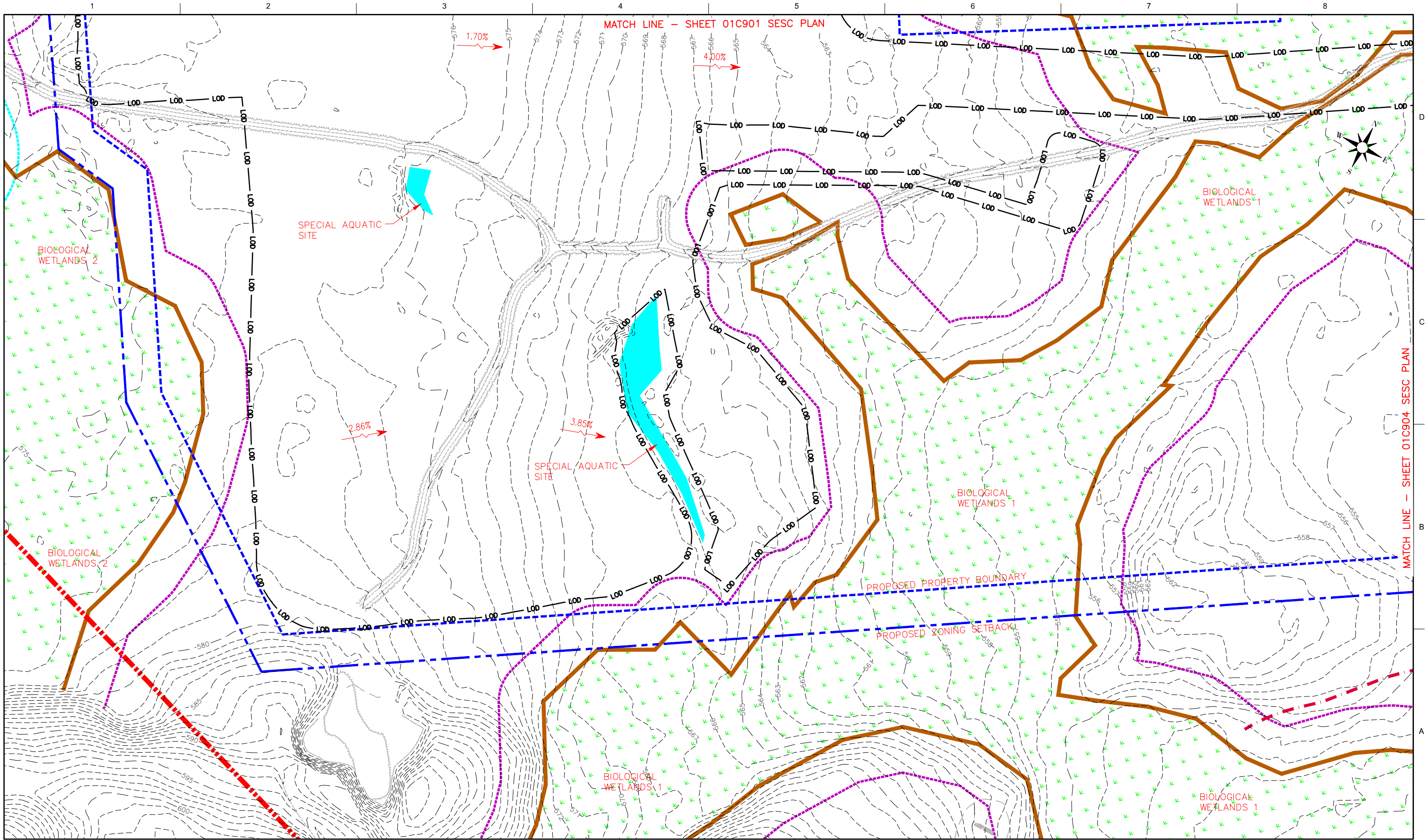
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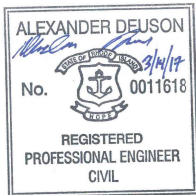
SESC EXISTING CONDITIONS AND SITE CONSTRAINTS MAP

SHEET
01C902



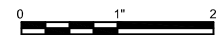
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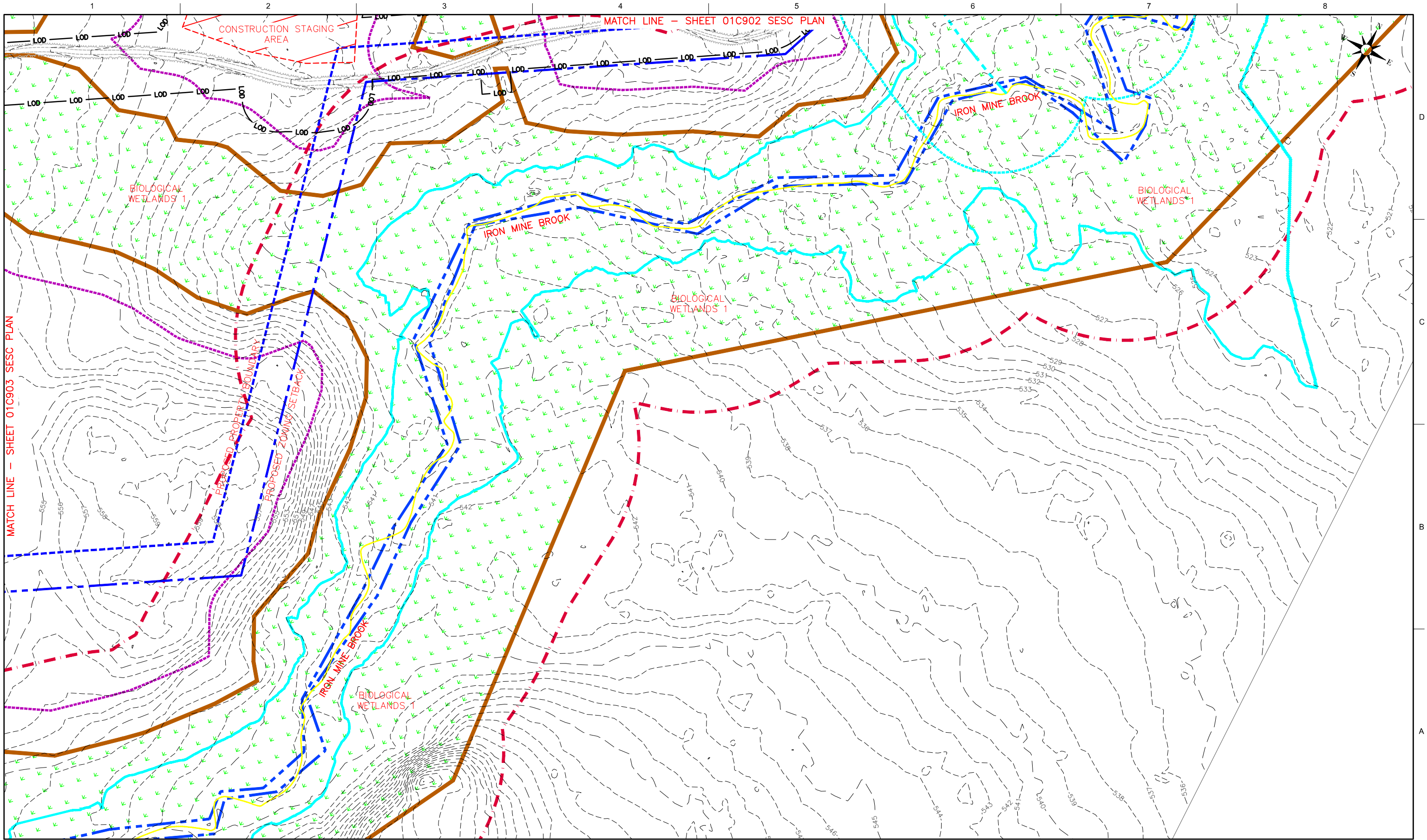
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**SESC EXISTING CONDITIONS AND
SITE CONSTRAINTS MAP**



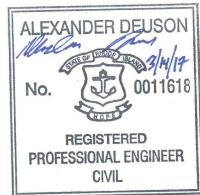
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SHEET
01C903



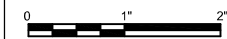
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**SESC EXISTING CONDITIONS AND
SITE CONSTRAINTS MAP**



FILENAME 01C904.dwg
SCALE 1" = 50'

SHEET
01C904

REFER TO 01C900 SESC PLAN FOR NOTES

NOTE: REFERENCES IN () ARE NODE LABELS IN CALCULATIONS

TEMP. DIVER. DITCH DB #1 (11R)
@ 0.5% SLOPE MAX.
DA=5.1 AC.
Q₁₀=18.6 CFS
V₁₀=3.8 FPS
NORMAL DEPTH=1.15 FT
TRAPEZOID CHANNEL
BOTTOM WIDTH=2 FT.
SIDESLOPES 2:1
TOTAL BERM DEPTH 2 FT
Q_{CAP}=61.8 CFS

TEMP. DIVER. DITCH DB #2 (13R)
@ 0.7% SLOPE MAX.
DA=5.4 AC.
Q₁₀=20.0 CFS
V₁₀=4.3 FPS
NORMAL DEPTH=1.11 FT
TRAPEZOID CHANNEL
BOTTOM WIDTH=2 FT.
SIDESLOPES 2:1
TOTAL BERM DEPTH 2 FT
Q_{CAP}=71.2 CFS

POND ENTRY DITCH DB #3 (14R)
@ 21.9% SLOPE MAX.
DA=10.5 AC.
Q₁₀=38.6 CFS
V₁₀=10.4 FPS
NORMAL DEPTH=0.63 FT
TRAPEZOID CHANNEL
BOTTOM WIDTH=4 FT.
SIDESLOPES 3:1
TOTAL BERM DEPTH 2 FT
Q_{CAP}=392.7 CFS

LINE POND ENTRY DITCH WITH
NON-WOVEN FILTER FABRIC,
6 INCHES OF #2 STONE WITH
RIP-RAP ON TOP CONSISTING
OF STONE WITH AN AVERAGE
DIAMETER OF 20 INCHES
FROM TOP OF BASIN
ENBANKMENT TO BOTTOM

TSB "A" (8P) POND DATA

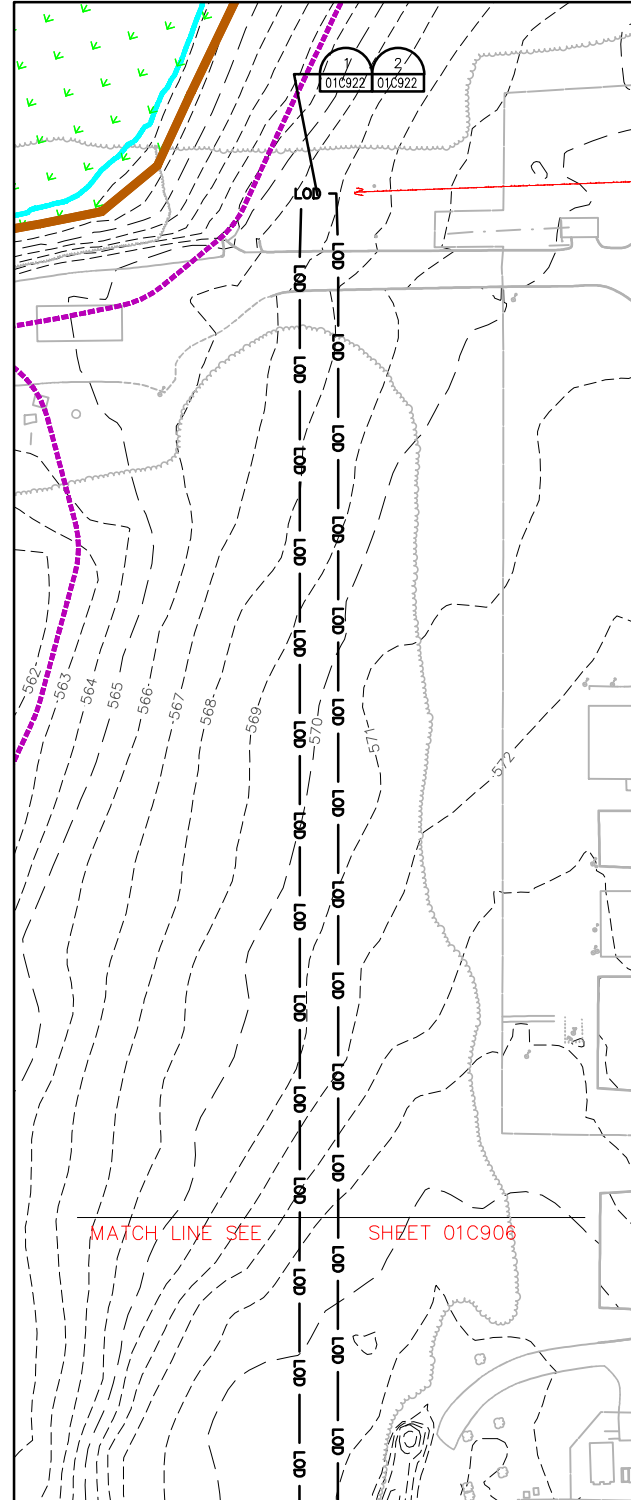
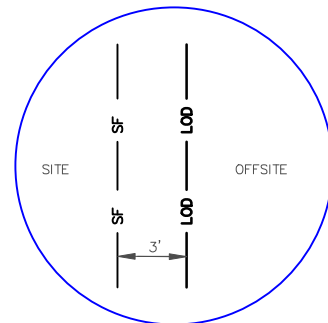
TOP=569.00
BOTTOM=563.00
SIDE SLOPES=3:1
PRIMARY INLET ELEV (4-4" Dia Holes) =565.5'
EMERGENCY OVERFLOW 18" RISER ELEV = 566.5'
Q_{in} (10 YR. STORM)=50.4 CFS
Q_{out} (10 YR. STORM)=0.85 CFS
VELOCITY (10 YR. STORM)=2.3 FPS
SED. VOLUME REQ'D, 1 YEAR STORAGE = 6,098 CF
SED. VOLUME PROV. (TO ELEV. 563.20')=14,480 CF
WATER SURFACE ELEV. (10 YR. STORM)=565.17'

ACREAGE SUMMARY
in ACRES

TOTAL DISTURBED	3.2 AC±
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PERIMETER SILT FENCE INSTALLATION NOTES:

1. INSTALL TEMPORARY SILT FENCES ALONG AND INSIDE OF LIMITS OF DISTURBANCE FENCING.
2. PERIMETER SILT FENCING IS NOT ACTUALLY SHOWN ON DRAWINGS DUE TO PROXIMITY TO LOD FENCING FOR CLARITY. TYPICALLY FENCING SHOULD BE INSTALLED 3 FEET INSIDE LOD FENCING FOR MAINTENANCE ACCESS. HOWEVER, THERE ARE AREAS WHERE THE SILT FENCE WILL HAVE TO BE DIRECTLY ADJACENT TO LOD FENCING FOR CONSTRUCTION PURPOSES. LOCATION OF SILT FENCE WILL BE AT CONTRACTORS DISCRETION.
3. ADDITIONAL SILT FENCE INSTALLATIONS (OTHER THAN PERIMETER) WILL BE NOTED ON PLANS.



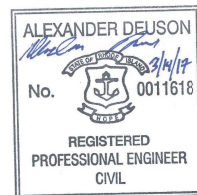
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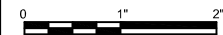
ISSUE	DATE	DESCRIPTION
3	3/27/2017	REVISION
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1	8/17/2016	SOIL EROSION SEDIMENT CONTROL PLAN

PROJECT MANAGER C. JACOBS

PROJECT NUMBER 10021318

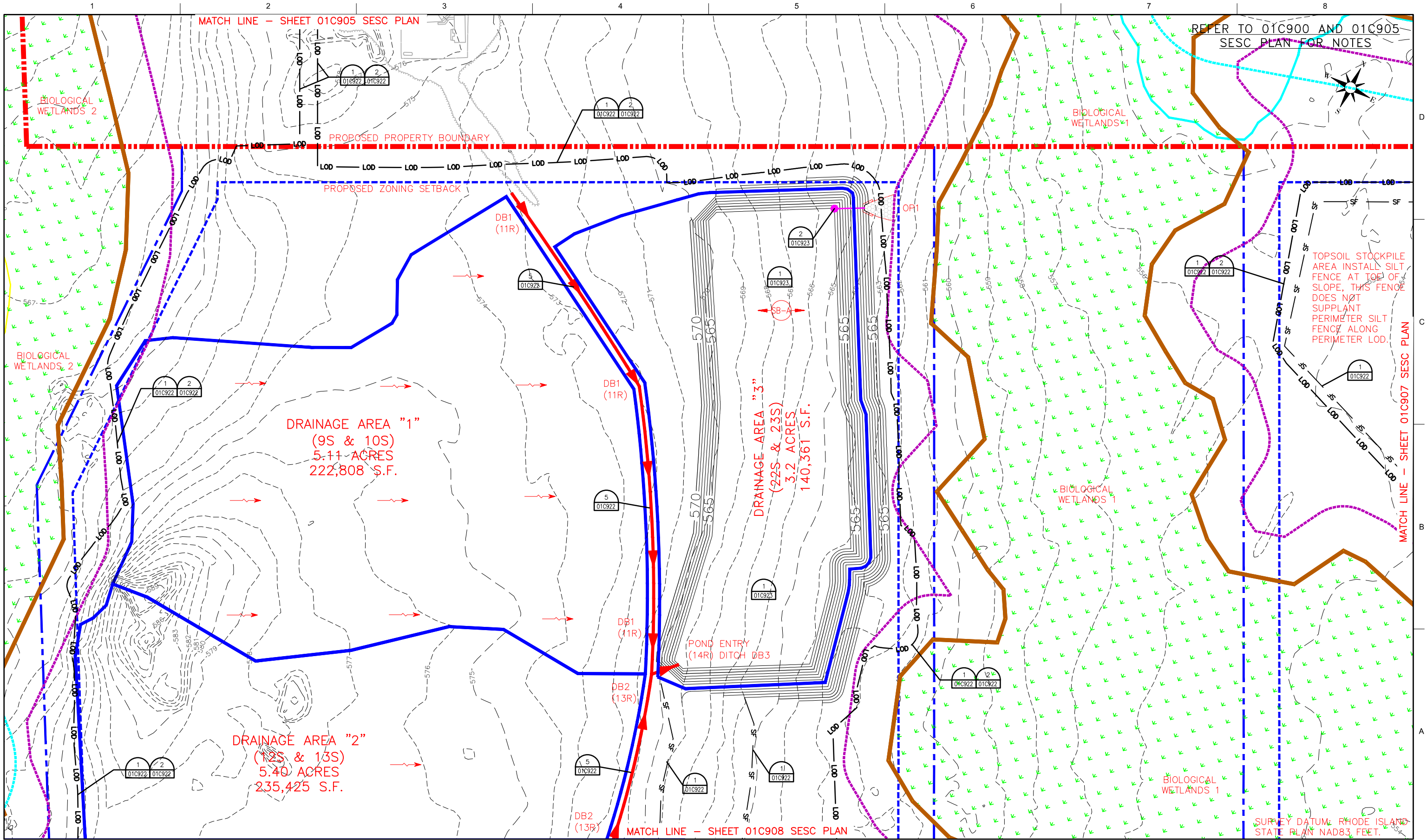


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SESC PLAN PHASE I
SHEET 1 OF 5

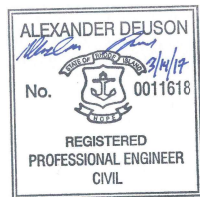
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SHEET
01C905



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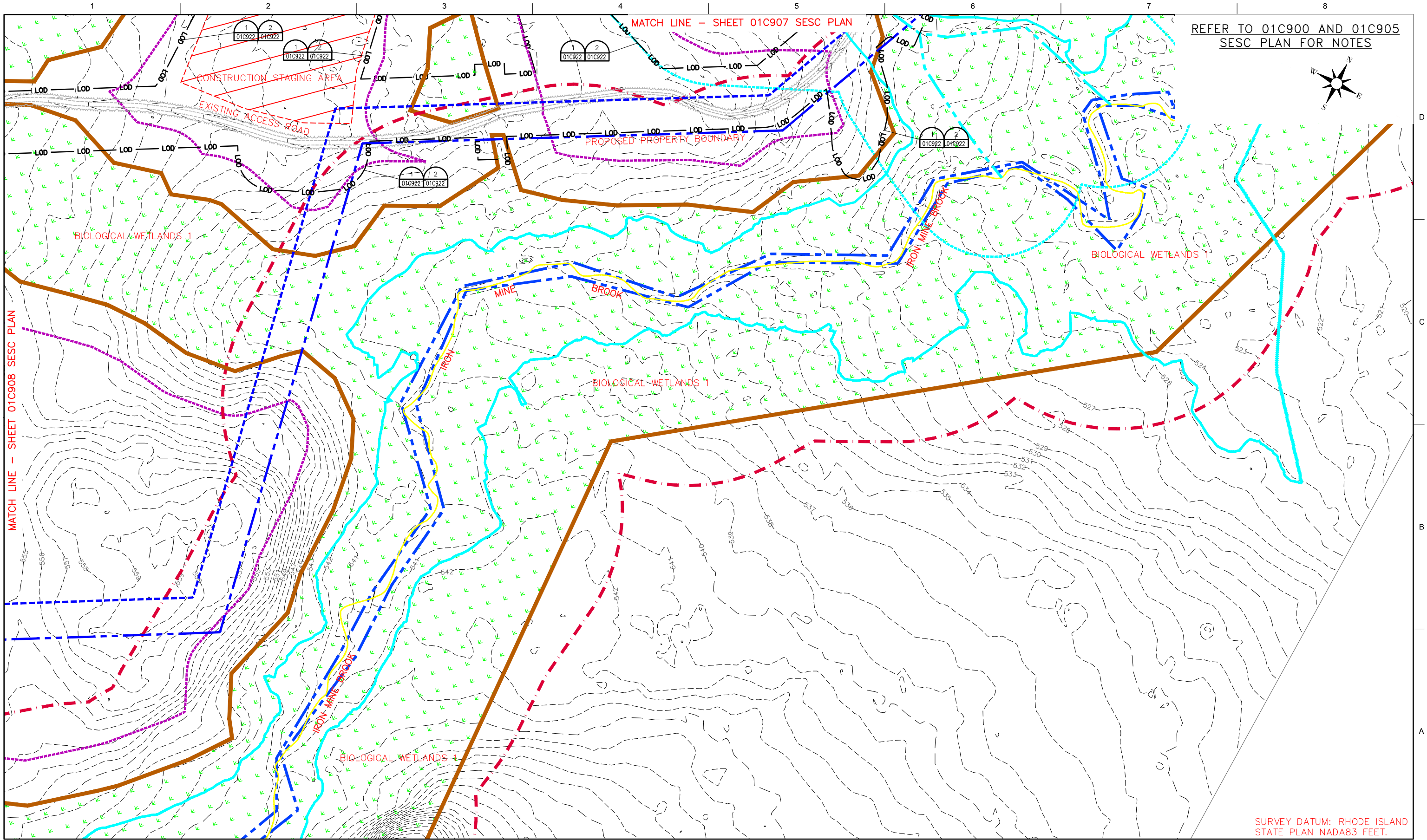
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SESC PLAN PHASE I
SHEET 2 OF 5



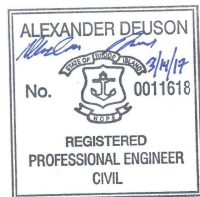
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SHEET
01C906



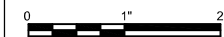
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PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



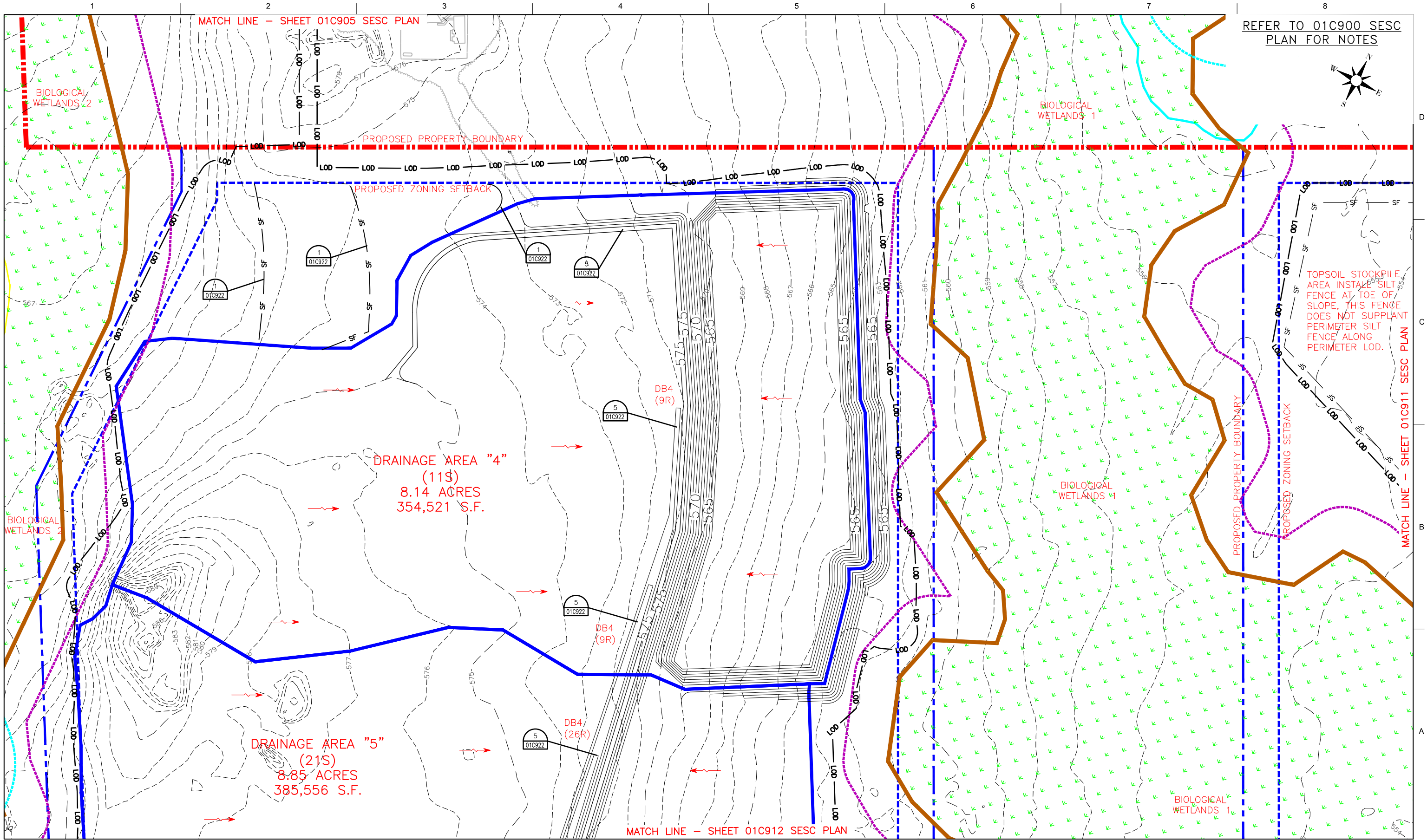
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153-001, 153-002
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SESC PLAN PHASE I
SHEET 5 OF 5



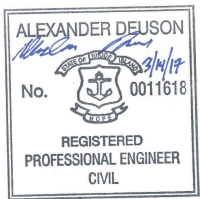
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SHEET
01C909

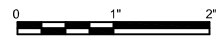


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3	3/27/2017	REVISION
2	2/17/2017	REVISION
1	8/17/2016	SOIL EROSION SEDIMENT CONTROL PLAN

PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



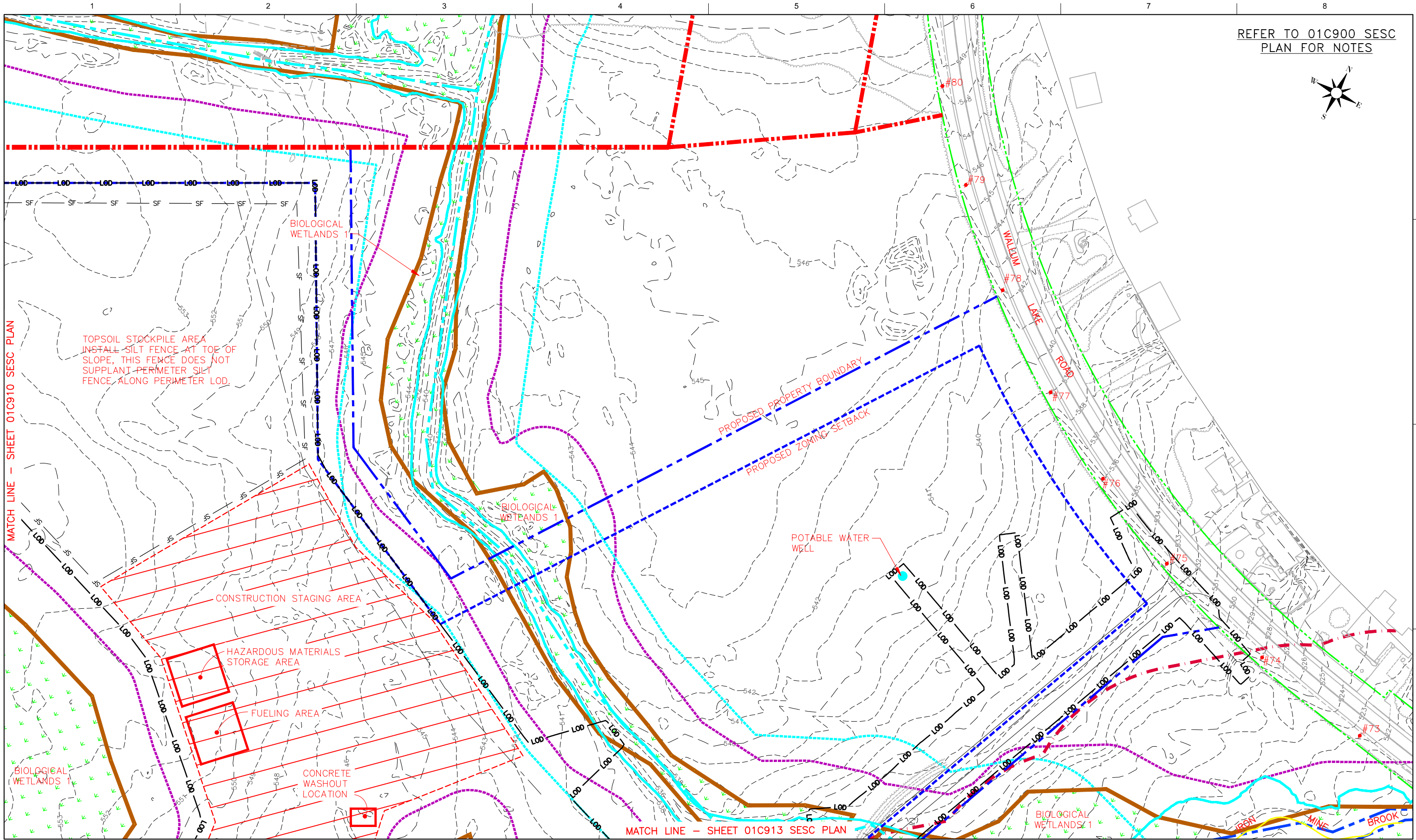
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND



SESC PLAN PHASE II
SHEET 1 OF 4

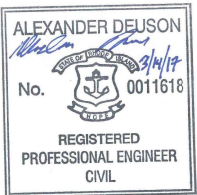
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SHEET
01C910



ISSUE	DATE	DESCRIPTION
3	3/27/2017	REVISION
2	2/17/2017	REVISION
1	8/17/2016	SOIL EROSION SEDIMENT CONTROL PLAN

PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318

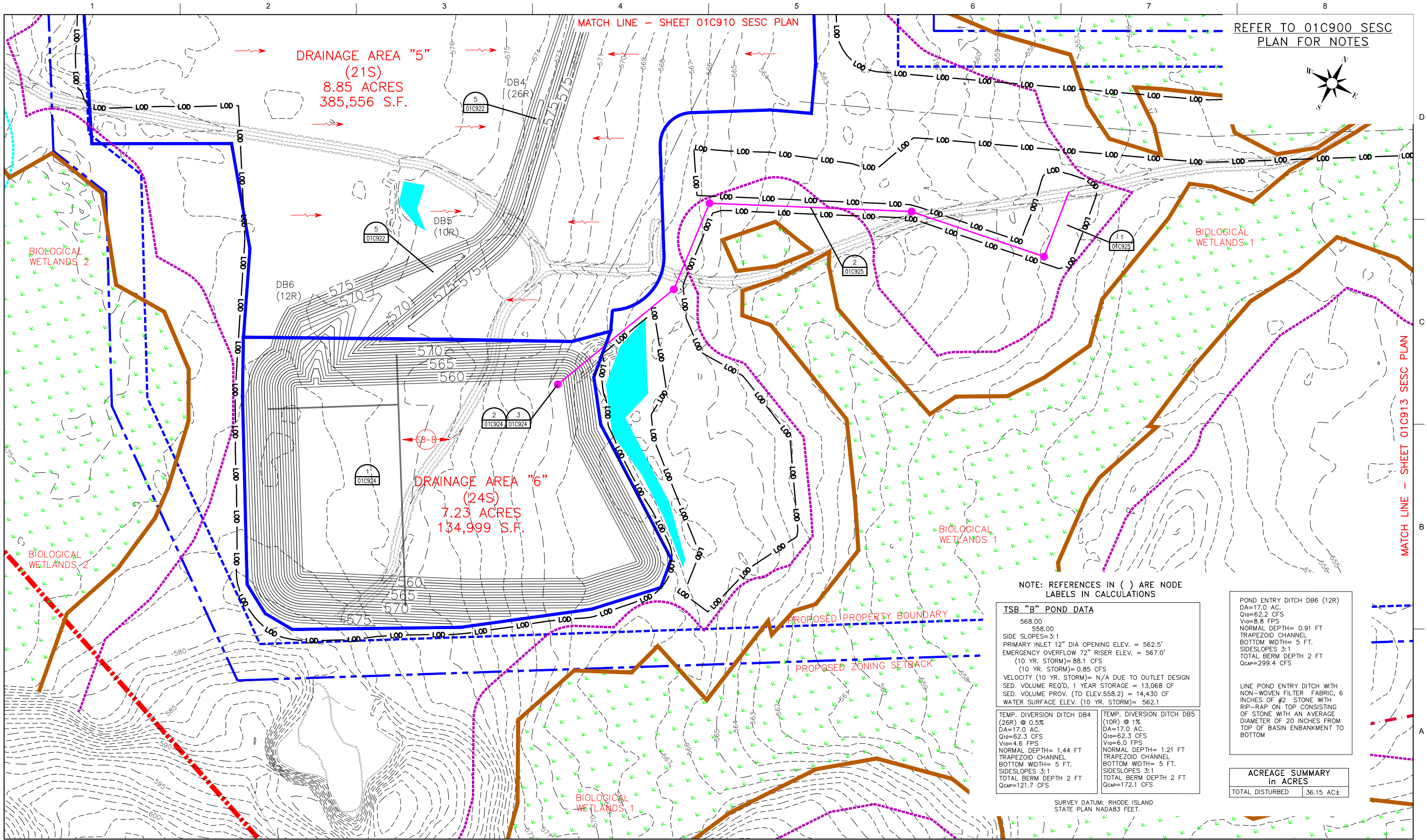


CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

SESC PLAN PHASE II
SHEET 2 OF 4

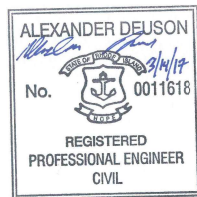
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SHEET
01C911



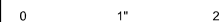
ISSUE	DATE	DESCRIPTION
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1	8/17/2016	SOIL EROSION SEDIMENT CONTROL PLAN

PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



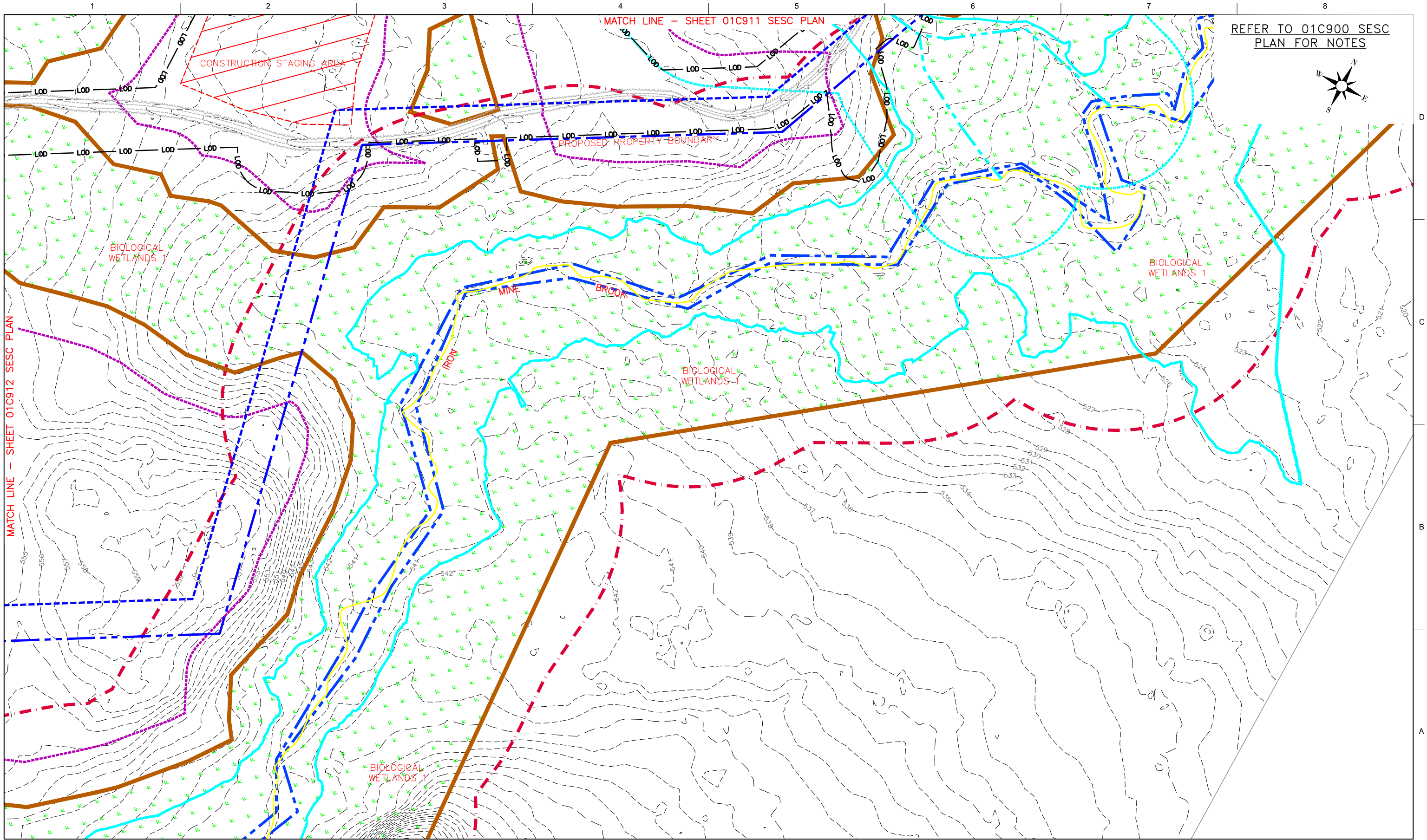
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

SESC PLAN PHASE II
SHEET 3 OF 4



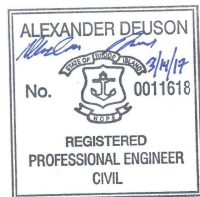
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SHEET
01C912



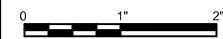
ISSUE	DATE	DESCRIPTION
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1	8/17/2016	SOIL EROSION SEDIMENT CONTROL PLAN

PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



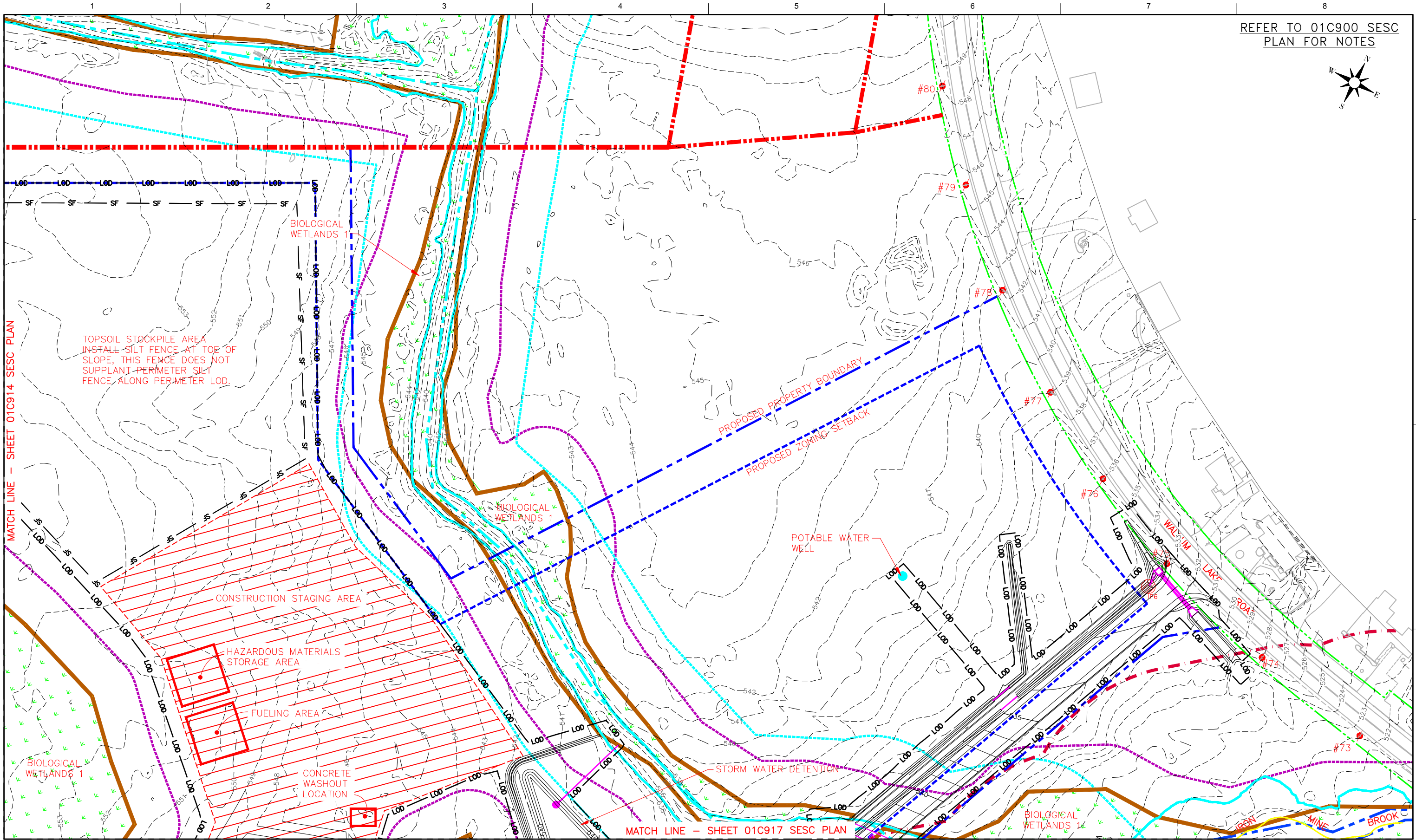
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

SESC PLAN PHASE II
SHEET 4 OF 4

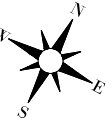


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SHEET
01C913

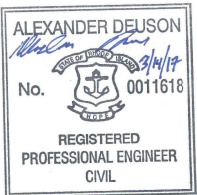


REFER TO 01C900 SESC
PLAN FOR NOTES



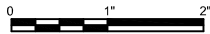
ISSUE	DATE	DESCRIPTION
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1	8/17/2016	SOIL EROSION SEDIMENT CONTROL PLAN

PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



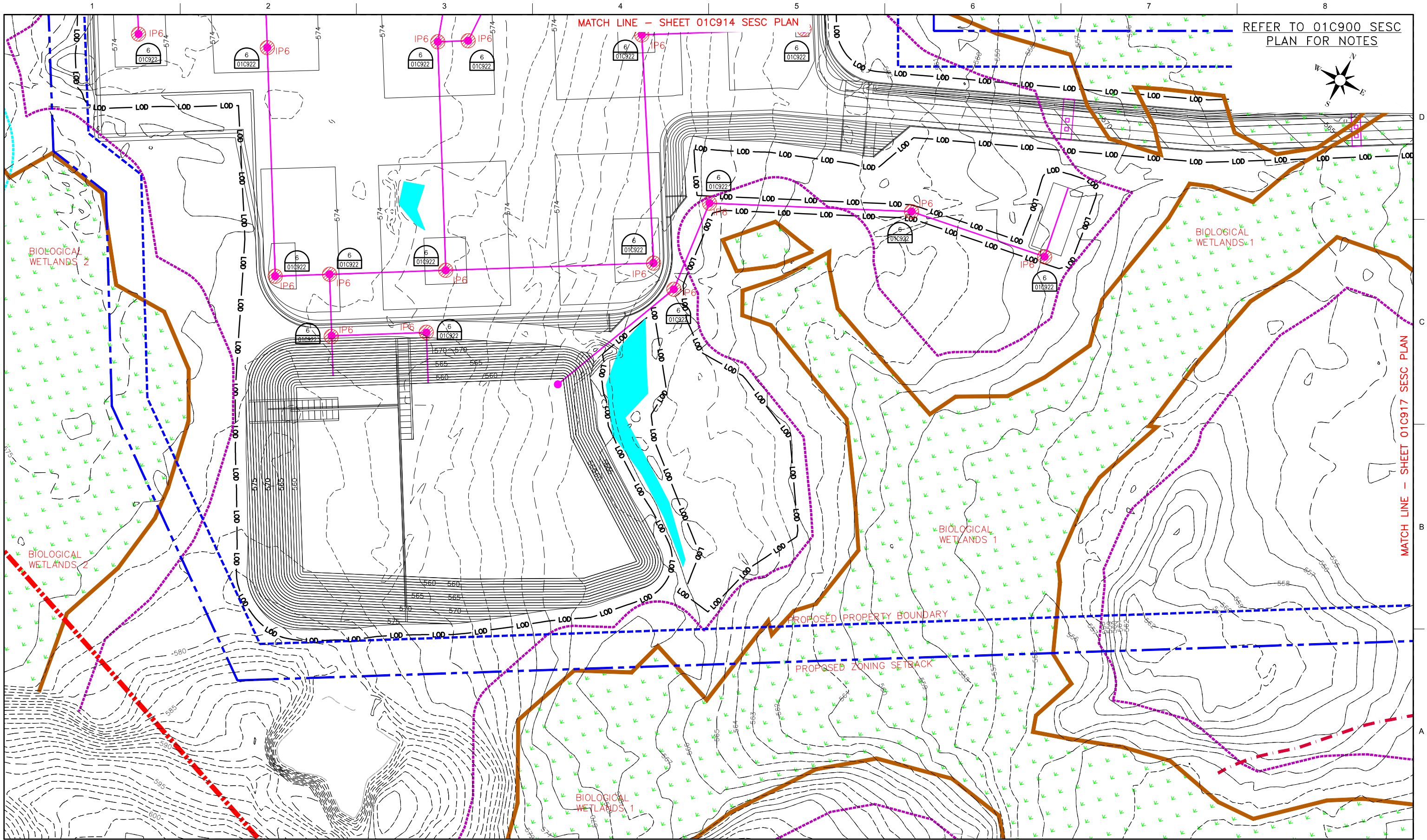
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

SESC PLAN PHASE III
SHEET 2 OF 4



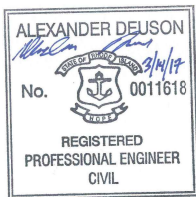
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SHEET
01C915

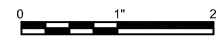


ISSUE	DATE	DESCRIPTION
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1	8/17/2016	SOIL EROSION SEDIMENT CONTROL PLAN

PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318

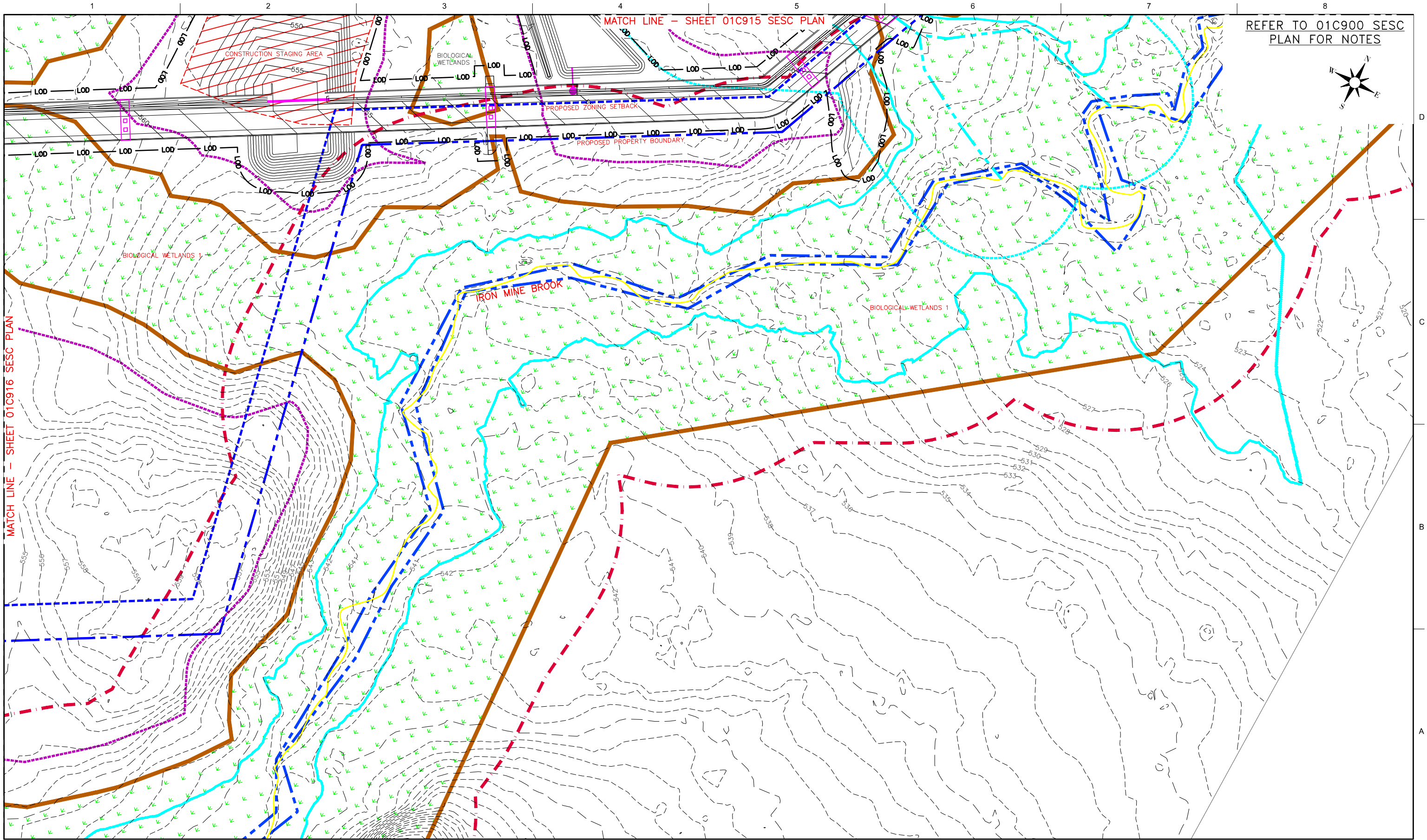


CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND



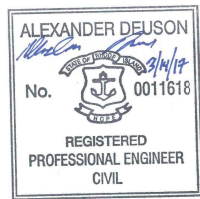
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SHEET
01C916

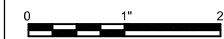


ISSUE	DATE	DESCRIPTION
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1	8/17/2016	SOIL EROSION SEDIMENT CONTROL PLAN

PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



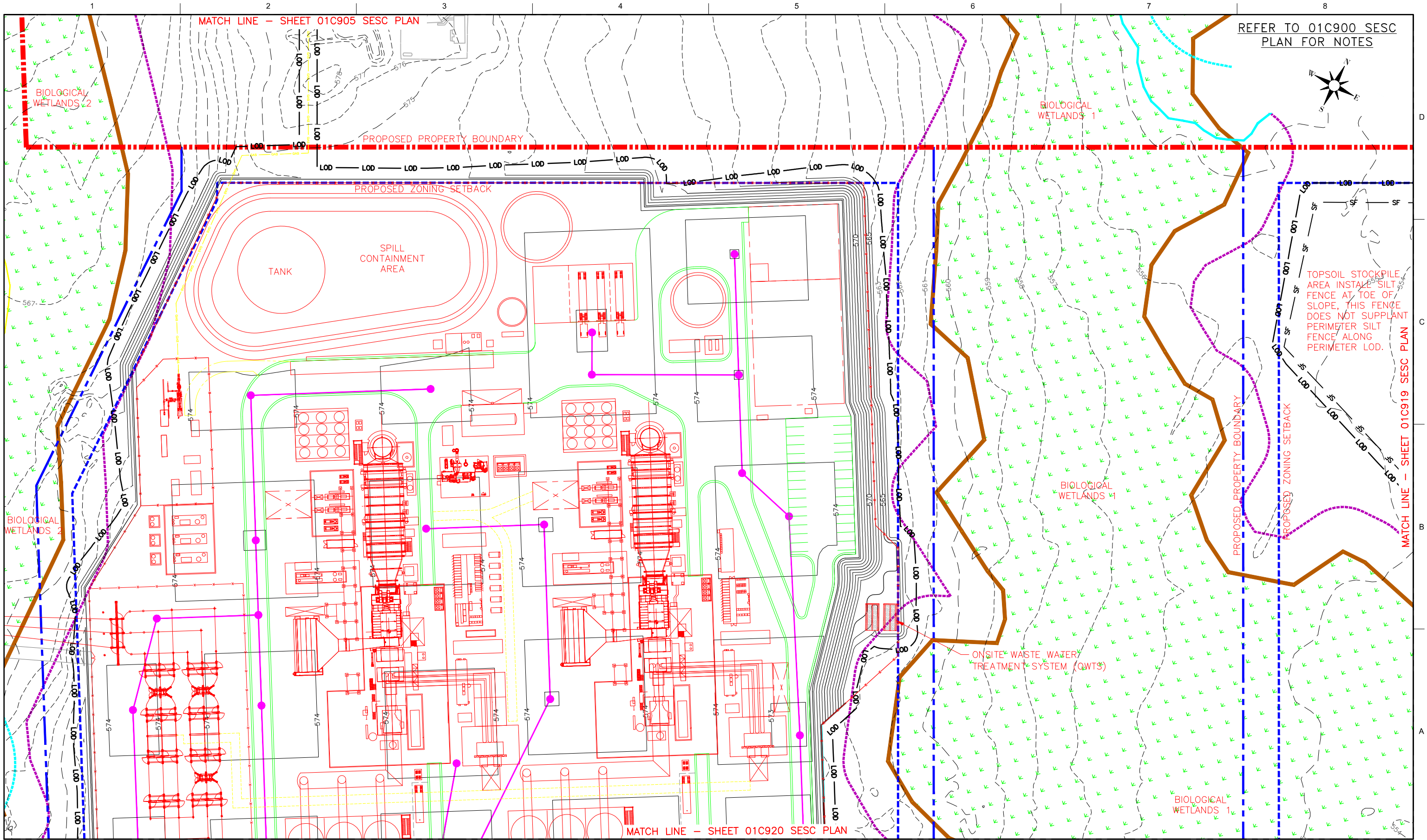
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND



FILENAME 01C917.dwg
SCALE 1" = 50'

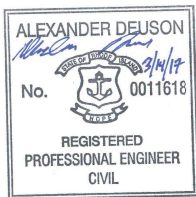
SESC PLAN PHASE III
SHEET 4 OF 4

SHEET
01C917



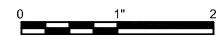
ISSUE	DATE	DESCRIPTION
3	3/27/2017	REVISION
2	2/17/2017	REVISION
1	8/17/2016	SOIL EROSION SEDIMENT CONTROL PLAN

PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



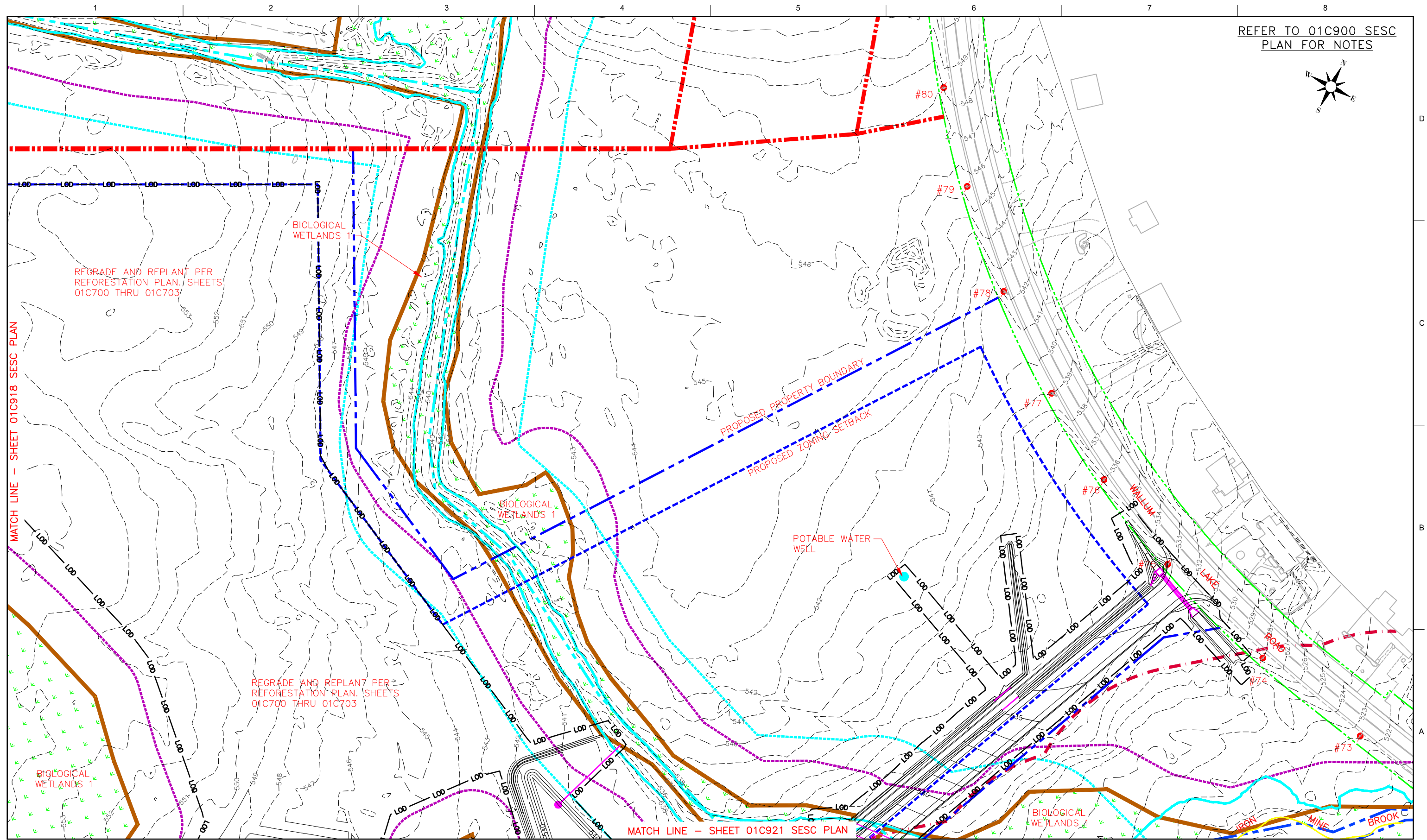
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

SESC PLAN PHASE IV
SHEET 1 OF 4



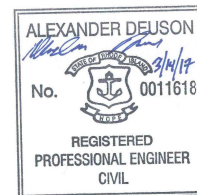
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SHEET
01C918



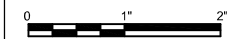
3	3/27/2017	REVISION
2	2/17/2017	REVISION
1	8/17/2016	SOIL EROSION SEDIMENT CONTROL PLAN
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



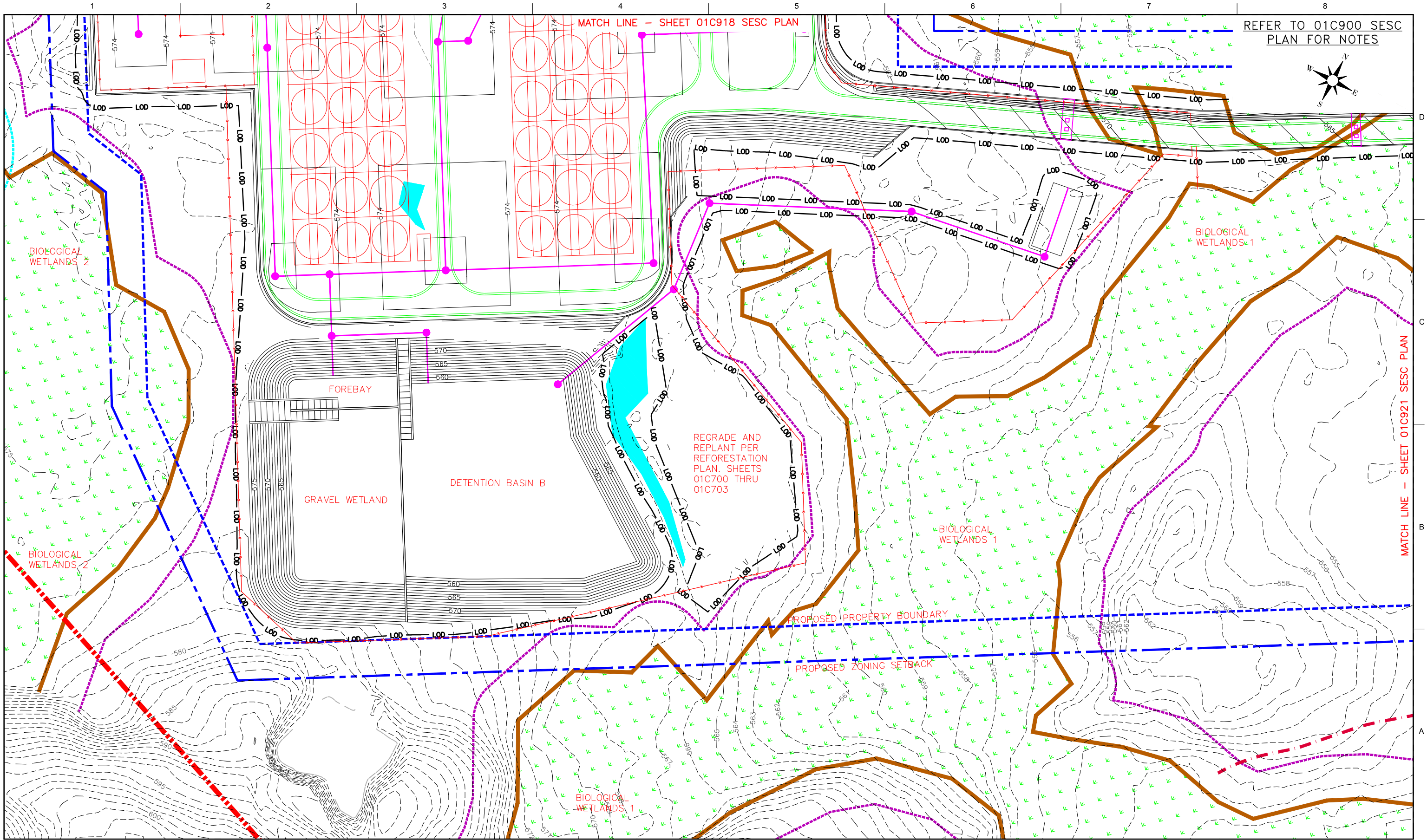
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

SESC PLAN PHASE IV
SHEET 2 OF 4



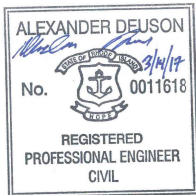
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01C919



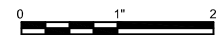
ISSUE	DATE	DESCRIPTION
3	3/27/2017	REVISION
2	2/17/2017	REVISION
1	8/17/2016	SOIL EROSION SEDIMENT CONTROL PLAN

PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



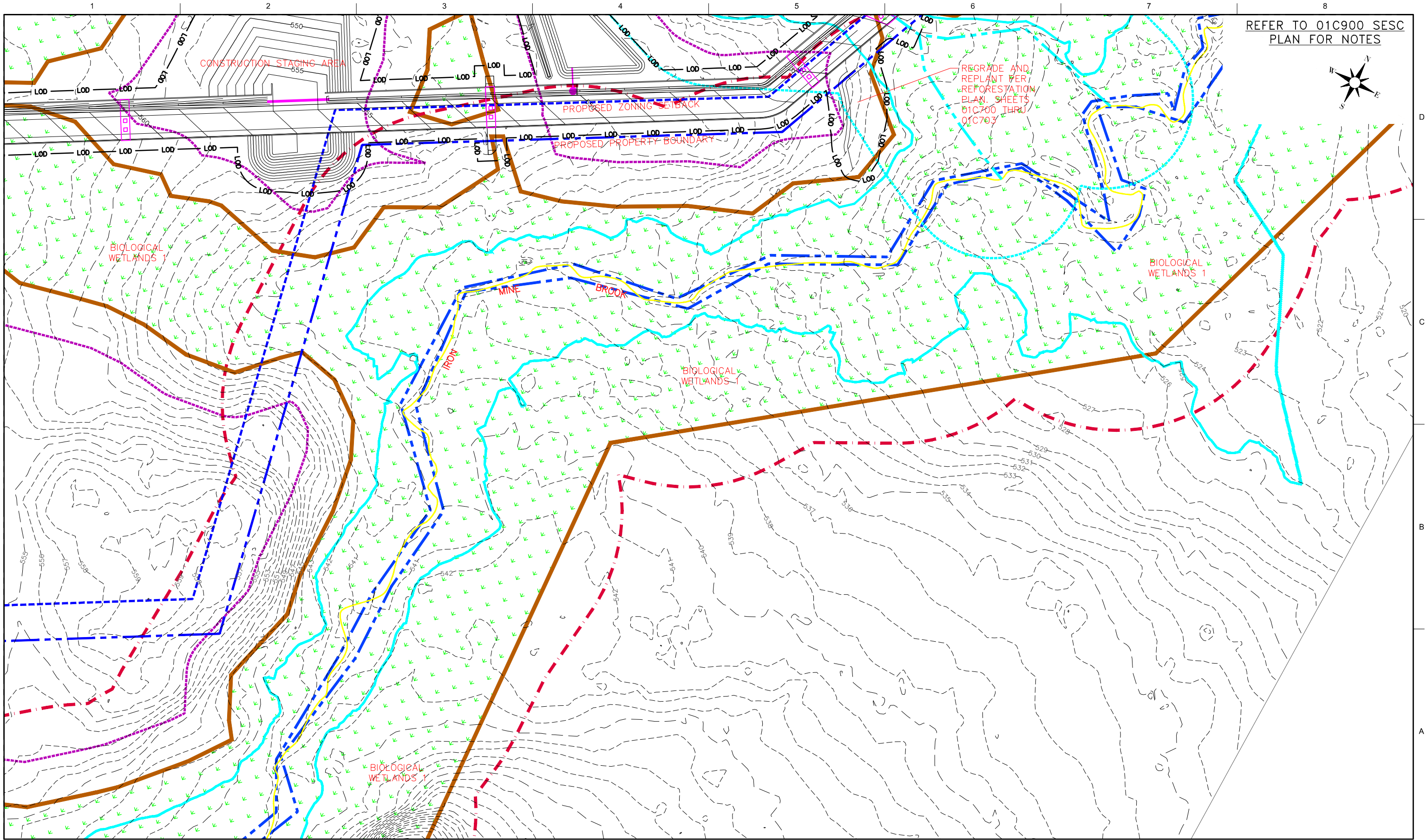
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

SESC PLAN PHASE IV
SHEET 3 OF 4



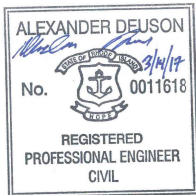
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01C920



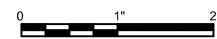
ISSUE	DATE	DESCRIPTION
3	3/27/2017	REVISION
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1	8/17/2016	SOIL EROSION SEDIMENT CONTROL PLAN

PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

SESC PLAN PHASE IV
SHEET 4 OF 4



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SCALE 1" = 50'

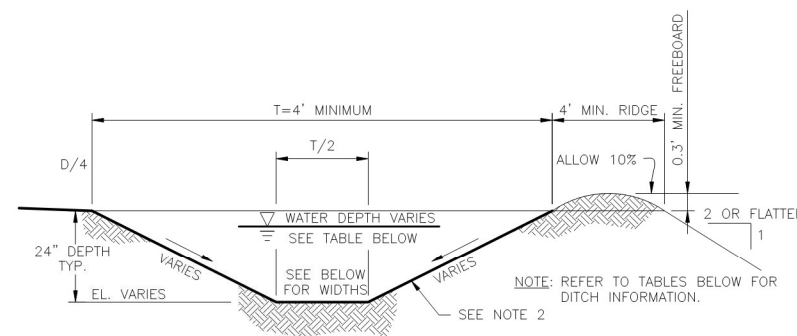
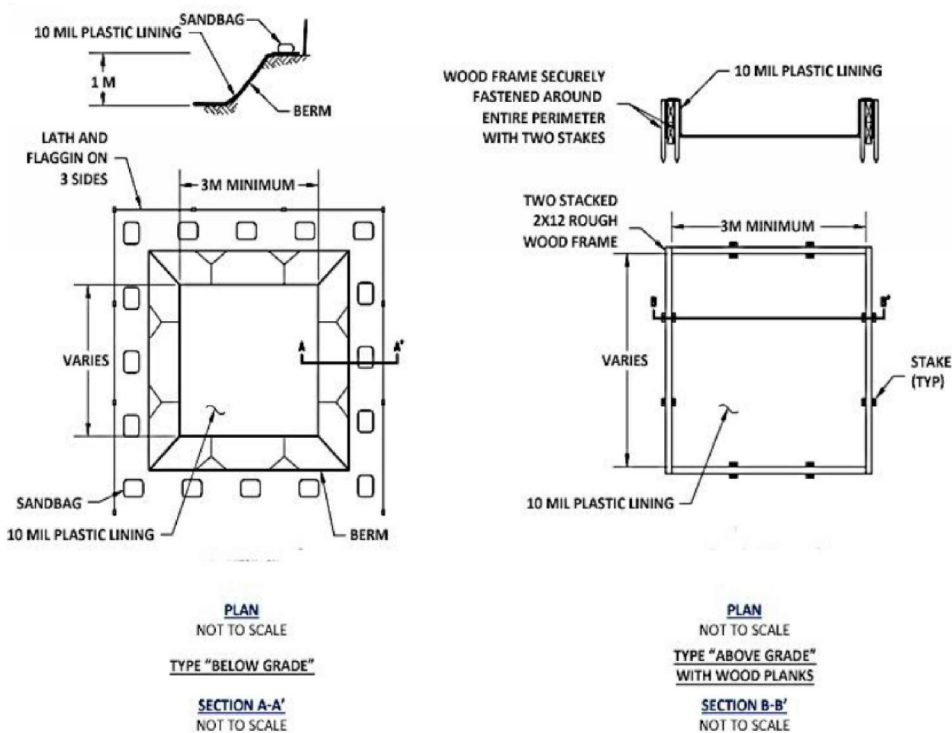
SHEET
01C921

SILT FENCE DETAIL

SCALE: NTS

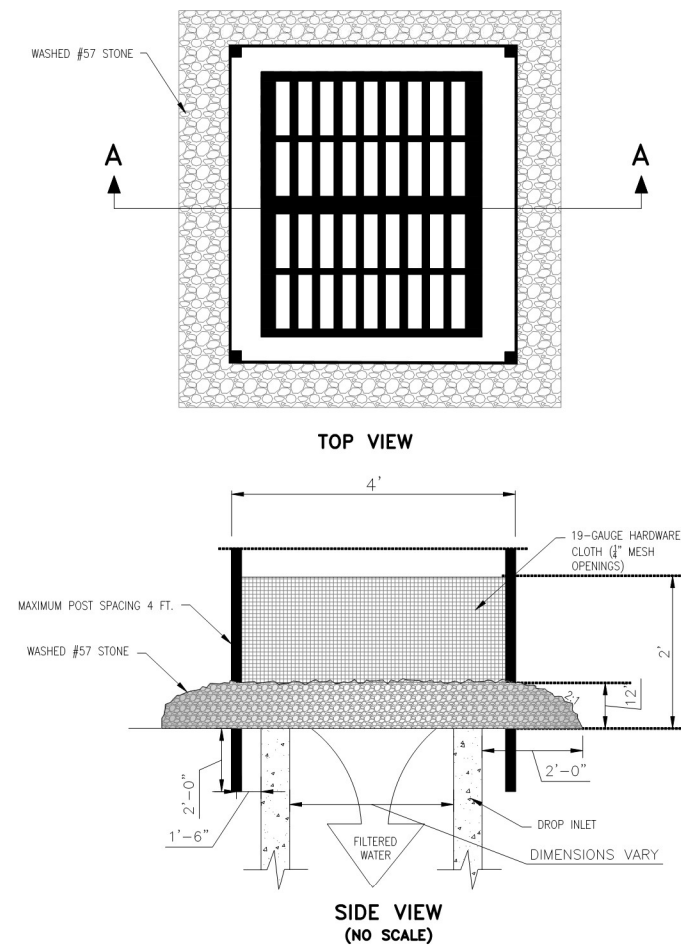
CONSTRUCTION FENCE DETAIL

CONSTRUCTION ENTRANCE
SCALE: NTS



- NOTES:
1. MINIMUM DESIGN CAPACITY SHALL CONVEY A 10 YR.-24 HR. PEAK FLOW WITHOUT EROSION.
 2. INSTALL EROSION CONTROL BLANKETS OR TURF REINFORCEMENT MATS AS NEEDED FOR EROSION RESISTANCE.

DIVERSION DITCH INFORMATION							
DITCH NO.	BOTTOM WIDTH (FT.)	SIDE SLOPES	HEIGHT (FT.)	DITCH SLOPE	LINING	WATER DEPTH 10 YR. STORM	WATER DEPTH 100 YR. STORM
DB1	2	2 TO 1	2	0.5%	NONE	1.15'	1.53'
DB2	2	2 TO 1	2	0.7%	NONE	1.11'	1.48'
DB3	4	3 TO 1	2	21.9%	RIP-RAP	0.63'	0.87'
DB4	5	3 TO 1	2	0.5%	NONE	1.44'	1.95'
DB5	5	3 TO 1	2	1.0%	NONE	1.21'	1.65'
DB6	5	3 TO 1	2	10.0%	RIP-RAP	0.91'	1.25'



CONCRETE WASHOUT DETAIL

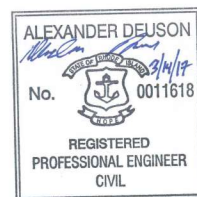
DIVERSION DITCH DETAIL

FABRIC DROP INLET PROTECTION
SCALE: NTS



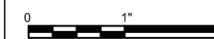
3	3/27/2017	REVISION
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1	8/17/2016	SOIL EROSION SEDIMENT CONTROL PLAN
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



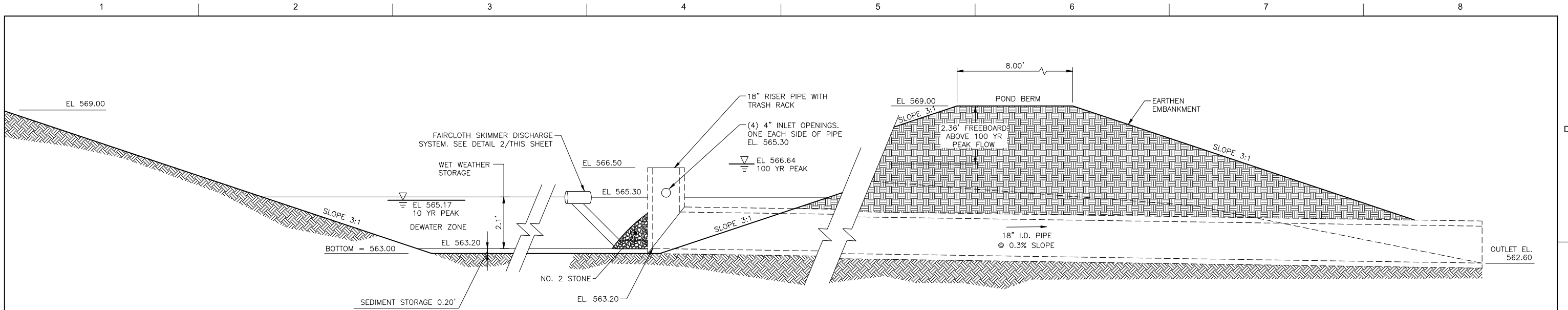
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

SESC DETAILS



FILENAME	01C922.dwg
SCALE	NTS

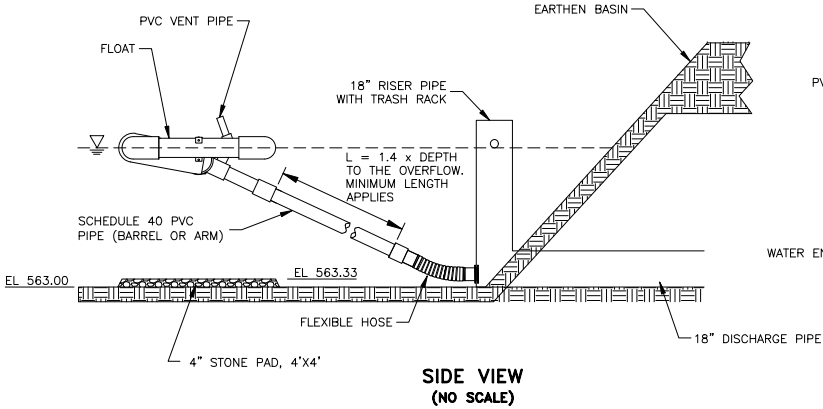
SHEET
01C922



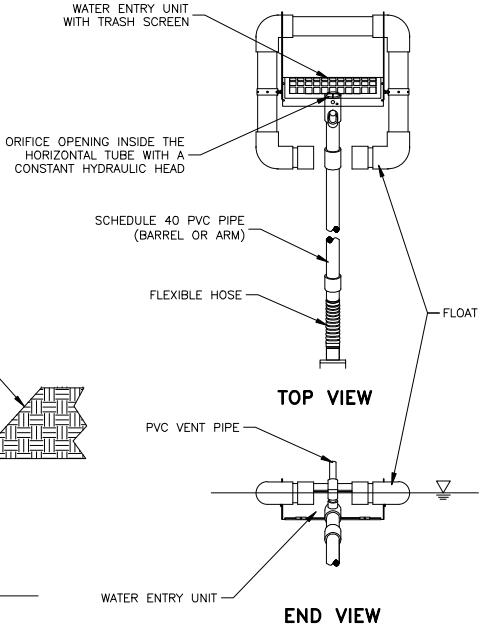
BASIN A DETAIL
SCALE: 1/2"=1'-0"

- GENERAL NOTES:
1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE PIPING AROUND DISCHARGE PIPE.
 2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. MODIFICATIONS MAY BE REQUIRED IF FIELD CONDITIONS WARRANT A CHANGE.
 3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
 4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED.
 5. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
 6. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.

NOTE: SIZE SKIMMER FOR 0.85 CFS OUTFLOW.

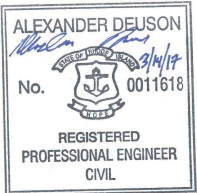


FAIRCLOTH® SKIMMER
DISCHARGE SYSTEM WITH EMBANKMENT – BASIN A
SCALE: NTS

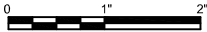


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PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318

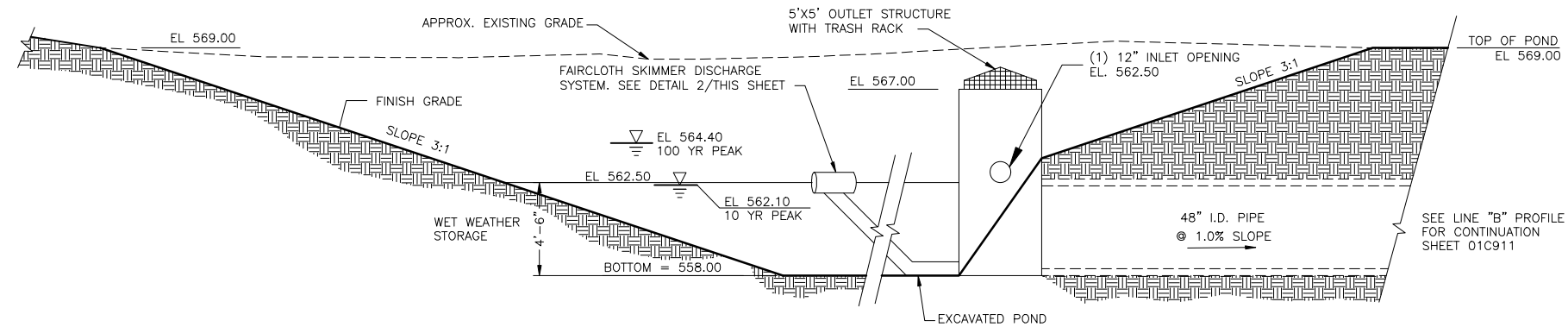


CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND



SESC DETAILS
FILENAME 01C923.dwg
SCALE AS SHOWN

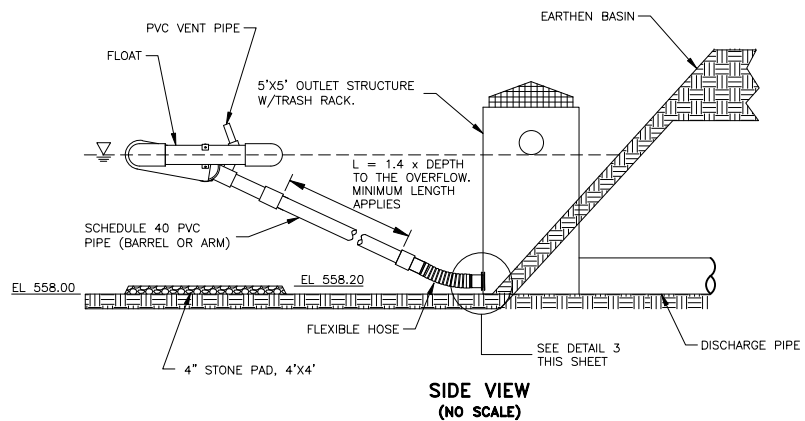
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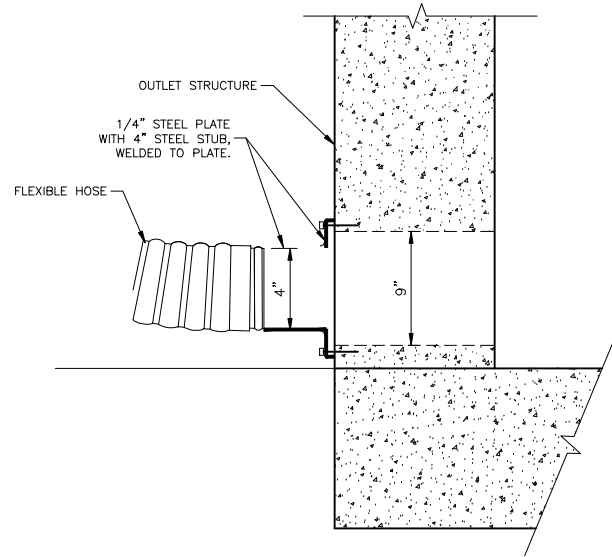
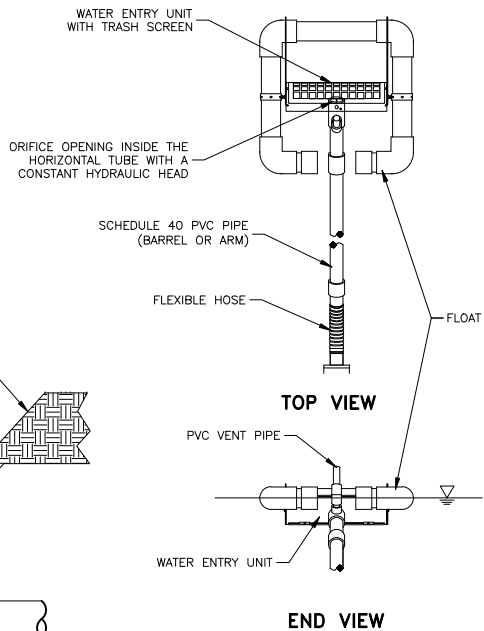
BASIN B DETAIL
SCALE: 1/2"=1'-0"

- GENERAL NOTES:
1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE PIPING AROUND DISCHARGE PIPE.
 2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. MODIFICATIONS MAY BE REQUIRED IF FIELD CONDITIONS WARRANT A CHANGE.
 3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
 4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED.
 5. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
 6. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.

NOTE: SIZE SKIMMER FOR 0.85 CFS OUTFLOW.



FAIRCLOTH® SKIMMER
DISCHARGE SYSTEM WITH EMBANKMENT – BASIN B
SCALE: NTS

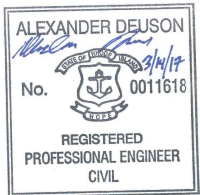


SKIMMER CONNECTION DETAIL
SCALE: NTS



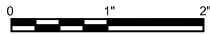
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PROJECT MANAGER	C. JACOBS
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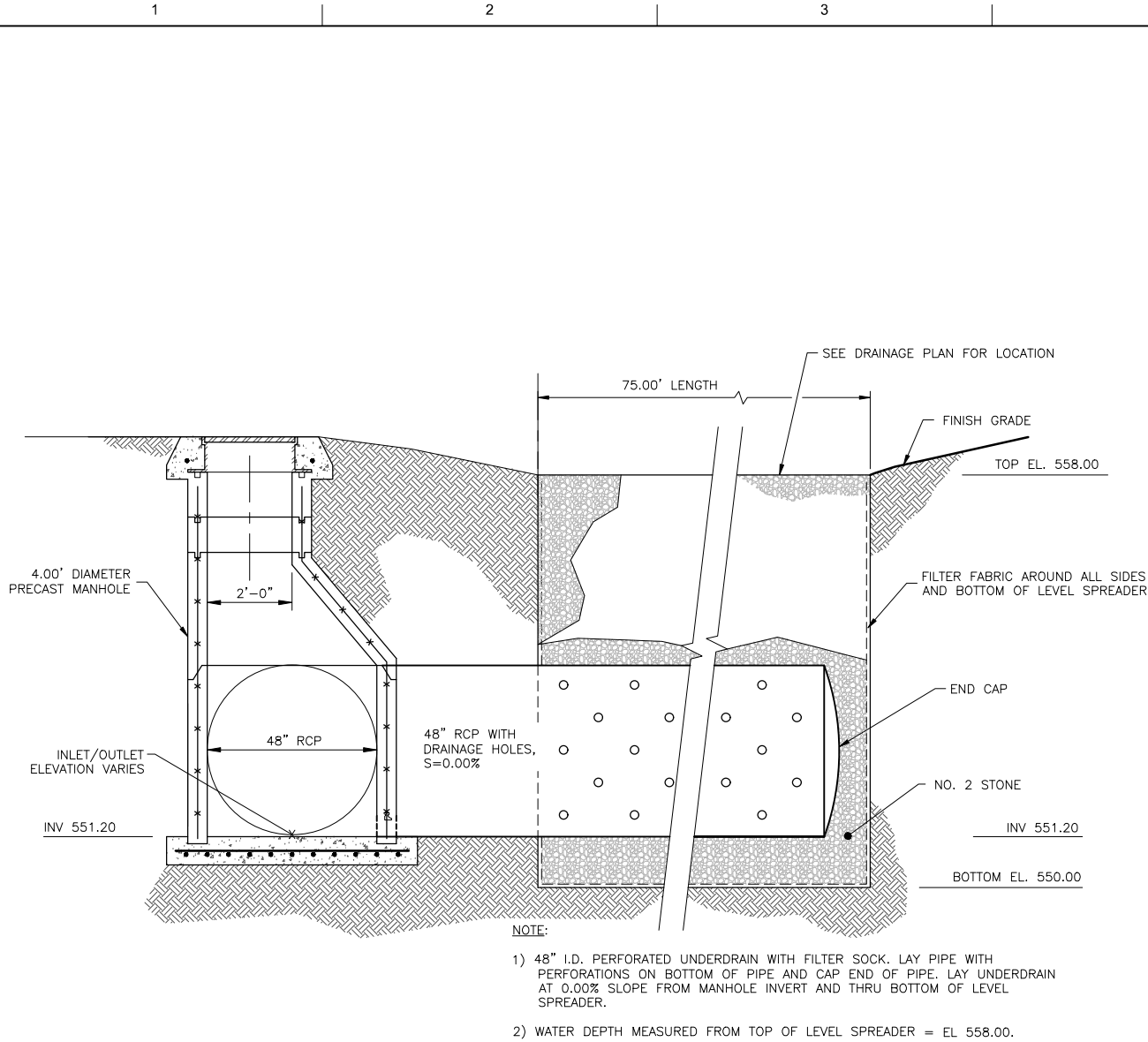
CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

SESC DETAILS



FILENAME 01C924.dwg
SCALE AS SHOWN

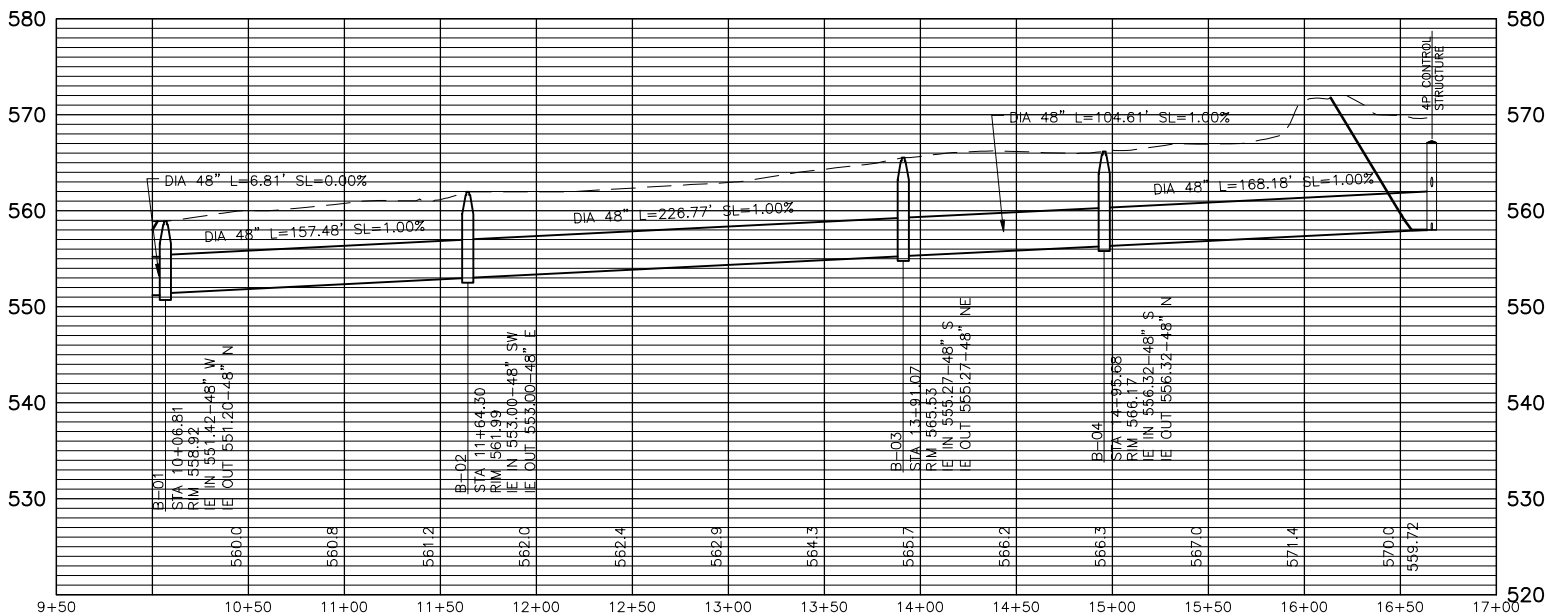
SHEET
01C924



STILLING WELL-LEVEL SPREADER DETAIL (18P)

SCALE: 1/2"=1'-0"

1
01C925



PROFILE OF LINE B

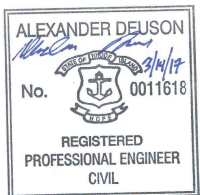
SCALE: HOR- 1"=50' VER- 1"= 5'

2
01C925



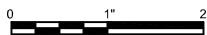
ISSUE	DATE	DESCRIPTION
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1	8/17/2016	SOIL EROSION SEDIMENT CONTROL PLAN

PROJECT MANAGER	C. JACOBS
PROJECT NUMBER	10021318



CLEAR RIVER ENERGY LLC
CLEAR RIVER ENERGY CENTER
WALLUM LAKE ROAD LOT NO.
135-002, 137-002, 137-003, 137-021,
153-001, 153-002
TOWN OF BURRILLVILLE,
PROVIDENCE COUNTY, RHODE ISLAND

SESC DETAILS



FILENAME 01C925.dwg
SCALE AS SHOWN

SHEET
01C925

The Narragansett Electric Company d/b/a National Grid
Clear River Energy, LLC

Burrillville Interconnection Project
Burrillville, Rhode Island

RIDEM Application No. 17-XXX

POWER Engineers, Inc
100 John L. Dietsch Square
North Attleboro, MA 02763

Owner/Applicant:
The Narragansett Electric Company d/b/a National Grid
280 Melrose Street
Providence, RI 02907

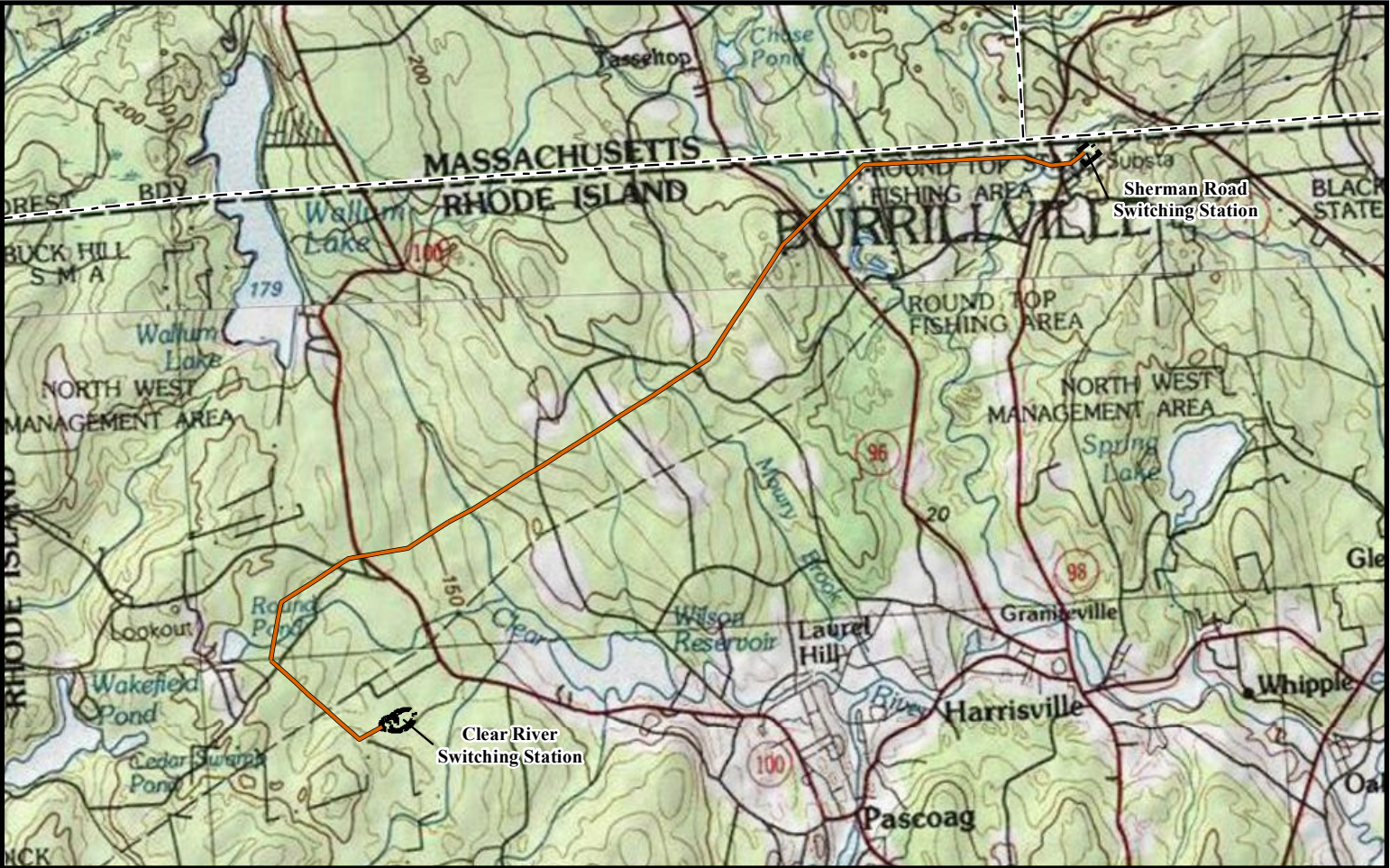
Clear River Energy, LLC
One South Wacker Drive, Suite 1800
Chicago, IL 60606

Plans

Issued for Permitting Not for Construction
Date Issued: March 27, 2017
Latest Issue: March 27, 2017

Index

No.	Drawing Title	Latest Issue
1	Title Sheet and Notes	03/27/2017
2	Erosion and Sediment Control Notes	03/13/2017
3 to 5	Cross Sections	03/22/2017
6	Key Sheet	03/13/2017
7 to 33	Burrillville Interconnection Plan	03/22/2017
34 to 63	Engineering Plan Set	03/27/2017



Plan Set
Notes

1. Planimetric Base Mapping - Planimetric base mapping was developed by James W. Sewall Company from April 15, 2007, 1:1200 scale color aerial photography. Scanned aerial photography was utilized to perform aerotriangulation and develop exterior orientation parameters, which were then used in subsequent photogrammetric compilation and orthorectification processes.
2. Contour Data - Contour data was acquired from RIGIS (Rhode Island Geographic Information System), 1:5000 scale two-foot contour line data dated 9/2013. Nominal point spacing (NPS) <= 1m, Vertical RMSE 15cm, Fundamental vertical accuracy 29.4cm @ 95% confidence level (open terrain).
3. Aerial Mapping - Aerial mapping utilized 1:6000 scale color imagery acquired from Google Earth 5/11/2016 and 8/23/2016.
4. Wetland Delineation on TNEC ROW performed by AECOM between May 2007 and November 2007, and updated in 2011 for the Interstate Reliability Project, RIDEM Permit to Alter Freshwater Wetlands, Application No. 12-0117 and RIPDES No. RIR 100950, issued October 9, 2013, revised April 14, 2014. Updates to the wetland delineation and additional field surveys performed by POWER Engineers on 8/2/2016, 8/5/2016, 8/30/2016, 9/1/2016, and 3/9/2017.
5. Wetland Delineation for CREC and CREC ROW performed by ESS Group between fall of 2014 and spring of 2015. RIDEM biologist verified wetland edges via RIDEM Application No. 15-0239 (January 28, 2016).
6. Wetland flags were located in the field with a Trimble GeoXT or Geo XH GPS receivers. Field data was postprocessed, differentially corrected, and back-checked on a series of 1:2000 scale aerial photo base maps.
7. Existing pole structure numbers and right-of-way boundary location is based on the following transmission line sheets (T-sheets) provided by Narragansett Electric Company: H300078-5 Rev 5 issued 6/10/16, T-4499 Rev. 9 issued 6/10/16, T-4498 Rev. 7 issued 6/10/16, T-4497 Rev. 8 issued 6/10/16, T-4496 Rev. 7 issued 6/10/16, T-4495 Rev. 7 issued 6/10/16, T-4604 Rev. 6 issued 6/10/16, T-5603 Rev. 6 issued 6/10/16, T-4602 Rev. 5 issued 6/10/16.
8. Limits of ROW shown are approximate.
9. Rhode Island PE Seal 9008 is applicable only to the proposed transmission structure locations shown.
10. Proposed transmission structure locations are approximate.

NOT FOR CONSTRUCTION



This document has been reviewed for Critical Energy Infrastructure Information (CEII). [February 2017]

BURRILLVILLE INTERCONNECTION PROJECT THE NARRAGANSETT ELECTRIC CO. D/B/A NATIONAL GRID & CLEAR RIVER ENERGY, LLC			RIDEM AND USACE PERMIT DRAWINGS TITLE SHEET AND NOTES BURRILLVILLE, RHODE ISLAND	
DATE: 3/27/2017	DRAWN: TDH	142704	SHEET 01 OF 63	

Erosion and Sediment Control General Notes:

1. Areas outside the limit of work disturbed by the contractor’s operations shall be restored by the contractor to their original condition at the contractor’s expense, to the satisfaction of the National Grid Environmental Engineer.
2. Contractor shall be solely responsible for site security and job safety. All construction activity shall be in accordance with OSHA regulations and local and state requirements.
3. All materials are to be disposed of per applicable laws and regulations.
4. Dewatering activities shall occur outside of wetlands and watercourses with approved dewatering controls such as filter bags, filter socks, weir tanks or dewatering basins. Where this is not possible, dewatering effluent shall be transported offsite.
5. All work shall conform to and be in compliance with the individual permit issued by the U.S. Army Corp of Engineers for this project.
6. RIDEM file number signage and a copy of the completed RIPDES NOI as submitted to the RIDEM shall be conspicuously posted in agreed upon locations in each municipality prior to commencing work. Signage locations shall be determined in coordination with the National Grid Environmental Scientist.
7. All wetland and waterways shall be flagged prior to commencing work activities at the site.
8. Maintain undisturbed vegetated buffers between work areas and wetlands/waterways wherever possible.
9. Limit removal of, and damage to, existing vegetation wherever possible.
10. Avoid unnecessary disturbance of site soils wherever possible.
11. Upon completion of construction in a given location (structure, work area, etc.), disturbed or exposed soils shall be immediately stabilized with mulch, blankets or similar temporary erosion and sediment control practice adequate for providing temporary stabilization while vegetation becomes established.
12. Where temporary erosion control, or permanent seed mixes are placed, appropriate temporary measures shall be taken to prevent soil erosion while seed is germinating.
13. Mulch shall not be used as a temporary erosion control practice in drainageways. Mulch placement on steep slopes (>3:1) shall be limited to hydraulic mulch or rolled erosion control products (e.g., erosion control blankets, etc.).
14. Seeding shall occur only during specified planting seasons unless otherwise directed by the National Grid Environmental Scientist.
15. Seed mixes shall be approved by the National Grid Environmental Scientist prior to placement. Seed mixes shall be appropriate for the site conditions (e.g. wetland, upland, etc.).
16. Low growing, woody plant species and root systems shall be retained in locations where work pads and access roads are not proposed. Care shall be taken to protect such plants and their root systems from damage and compaction.
17. Perimeter sediment control locations shown on the plans contained herein are approximations, and may change depending on field conditions at the time of construction or as directed by the National Grid Environmental Scientist. Perimeter sediment controls shall not be installed directly in wetlands without prior written approval from the National Grid Environmental Scientist.
18. Where resources areas occur immediately adjacent to and down gradient from the work, sediment perimeter controls (e.g. straw wattles, compost filter socks, excelsior sediment logs, straw bales, reinforced silt fence, etc.) shall be placed between the resource area and the work zone prior to the commencement of work. Perimeter controls shall be installed as close to the area of disturbance as possible. Perimeter control selection should occur in coordination with the National Grid Environmental Scientist.
19. Perimeter sediment controls shall be placed along the down slope edge of unpaved access roads as indicated on the plans wherever wetlands resource areas are closer than 50’ to the edge of road and/or adjacent to slopes exceeding a grade of 3:1, or as directed by the National Grid Environmental Scientist.

20. If required, alternatives to silt fence and/or straw/hay bales (e.g., compost socks, wattles, excelsior sediment logs, etc.) are preferred within wetlands adjacent to the edge of the construction pad. Care should be taken to avoid disturbing wetland soils outside of limits of the construction pad and/or area while installing perimeter controls (refer to general note 17).
21. Mud box/drill cutting box locations, dewatering areas, concrete washout areas, and temporary soil stockpile areas shown on the plan indicate only that such devices and practices may be required and do not approximate locations. Final locations for such devices and practices will be determined during construction as field condition require and allow. Dewatering may be required in additional locations depending on field conditions during construction.
22. Where water bars are installed on improved access roads, they should be installed such that runoff is directed to a level spreader, stabilized outlet, or other feature designed to prevent concentrated flows from eroding adjacent locations. Wherever possible, runoff should be directed away from wetlands, waterways, and waterbodies.
23. Install inlet protection if catch basins present.
24. When swamp mats are used in locations where excavations/mud boxes are required for structure installation, the swamp mat surface shall be adequately protected to prevent siltation through the swamp mats to wetlands below.
25. Where necessary, or as directed by the National Grid Environmental Scientist, stone transition ramps shall be installed in association with swamp mats.
26. All erosion and sediment controls, devices, and practices shall be properly maintained, replaced, supplemented, or modified as necessary throughout the life of the project in order to minimize soil erosion and to prevent sediment from being deposited in any wetlands.
27. The Contractor shall prepare and follow an approved Snow Management Plan and a Wet Soil Management Plan.
28. Soil stockpiles shall be contained within approved construction work pads or designated stockpiling areas.
29. Where possible, soil stockpiles shall not exceed 5 feet high in height. Soil stockpiles shall be covered with matting, tarp, or other similar material and weights at the end of each construction day if necessary. Install perimeter controls around all stockpiles in close proximity to wetlands and buffers.
30. No vehicle or equipment refueling shall occur within 100 feet of a wetland, waterbody, or waterway.
31. Stone, soil, or other fill materials shall not be placed in any wetlands, waterbodies, or waterways.
32. Where work will occur in wetlands, or where waterway crossing are proposed, swamp mats, or swamp mat bridges shall be installed respectively prior to commencing construction.
33. Upon permanent stabilization of all disturbed soils, temporary erosion and/or sediment controls and swamp mats shall be removed from, and disposed of properly, off-site.
34. Unless otherwise directed, all erosion and sediment controls shall be installed in accordance with, and work shall conform to National Grid’s Environmental Guidance-303.
35. Any potentially impacted soils or water encountered during construction activities shall be managed in accordance with applicable local, state and federal regulations.

Erosion and Sediment Control Maintenance During Construction:

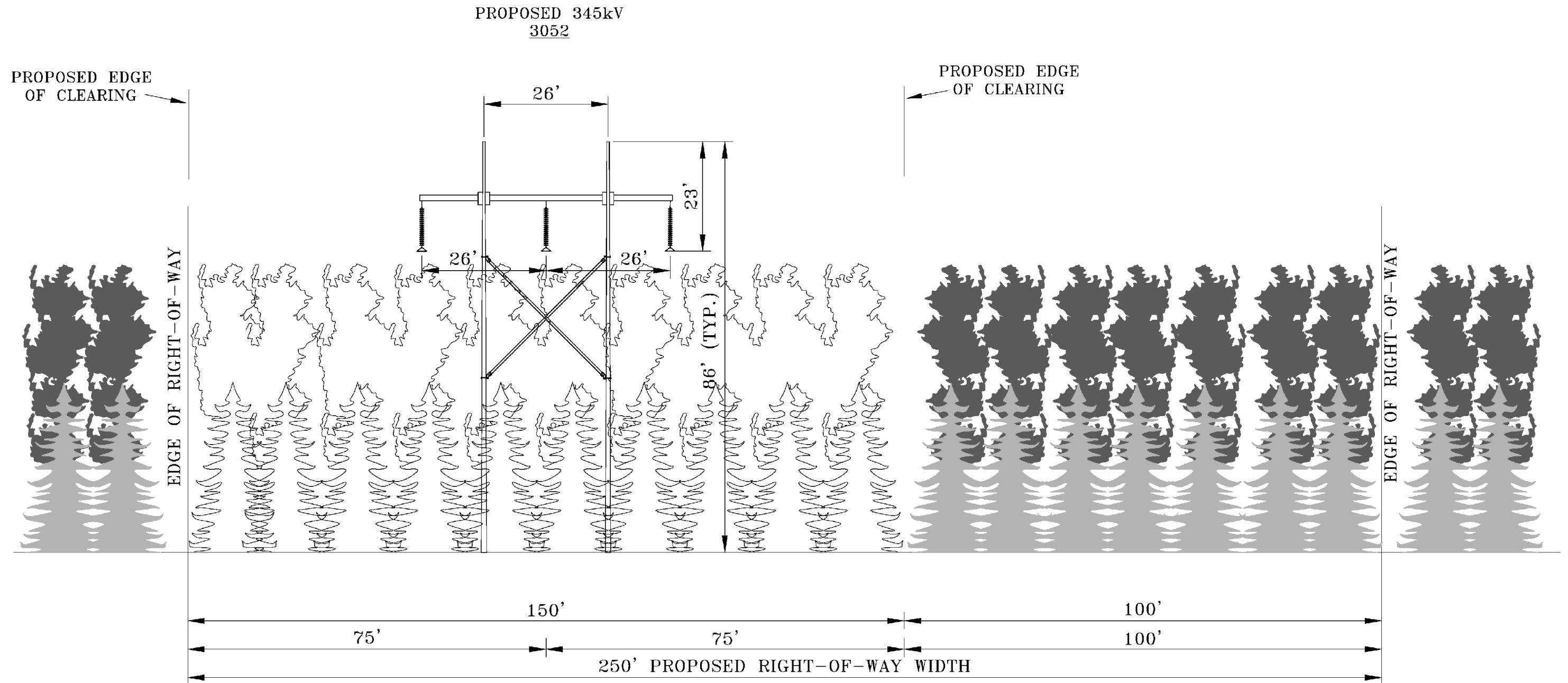
1. All Erosion and sediment control measures shall be inspected for stability and proper function after every runoff producing storm event, or at least weekly. All necessary repairs shall be made immediately.
2. Trapped sediment shall be removed from behind perimeter control devices before the deposits reach 50 percent (1/2) of the above-ground height of the device, unless otherwise noted, or according to manufacturer’s specifications.
3. Sediment shall be removed from sediment traps or sedimentation ponds when design capacity has been reduced by 50 percent (50%).
4. In disturbed areas where adequate seed stock is not present, or where topsoil has been displaced, soils shall be prepared in a manner suitable for supporting plant growth prior to placing seed, mulch, and or other erosion control practices appropriate for the site.



BURRILLVILLE INTERCONNECTION PROJECT THE NARRAGANSETT ELECTRIC CO. & CLEAR RIVER ENERY, LLC			RIDEM AND USACE PERMIT DRAWINGS EROSION AND SEDIMENT CONTROL GENERAL NOTES BURRILLVILLE, RHODE ISLAND	
DATE: 3/13/2017	DRAWN: TDH	142704	FIGURE T-1	SHEET 02 OF 63

NOT FOR CONSTRUCTION

Path: W:\142704_Burrillville_Interconnect_Project\DD\GIS\Apps\RIDEM_Submission\RIDEM_2_Erosion_Controls_Page.mxd



View Facing Southeast Toward CREC

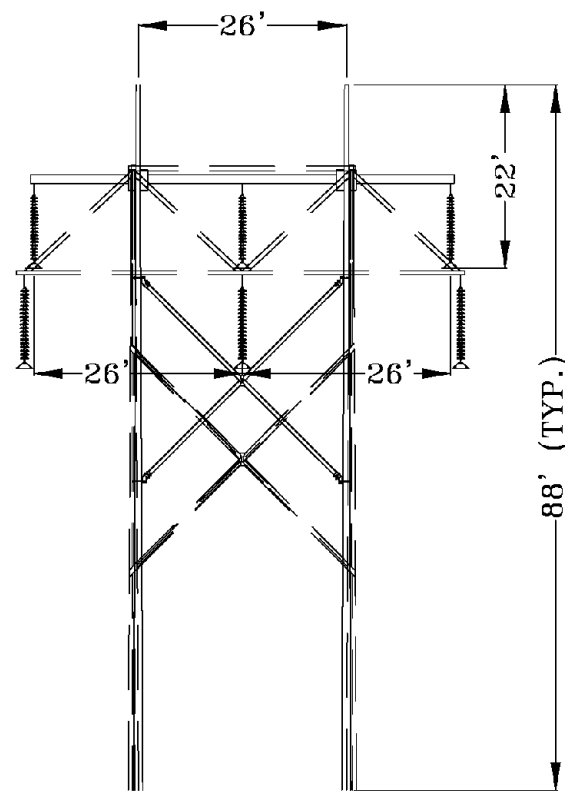
Segment 1 CREC ROW
Approximately 0.8 Mile

Notes:
-Proposed structure types and heights shown are typical. Final structure will vary.
-Existing ROW limits and proposed limits of clearing shown are approximate.

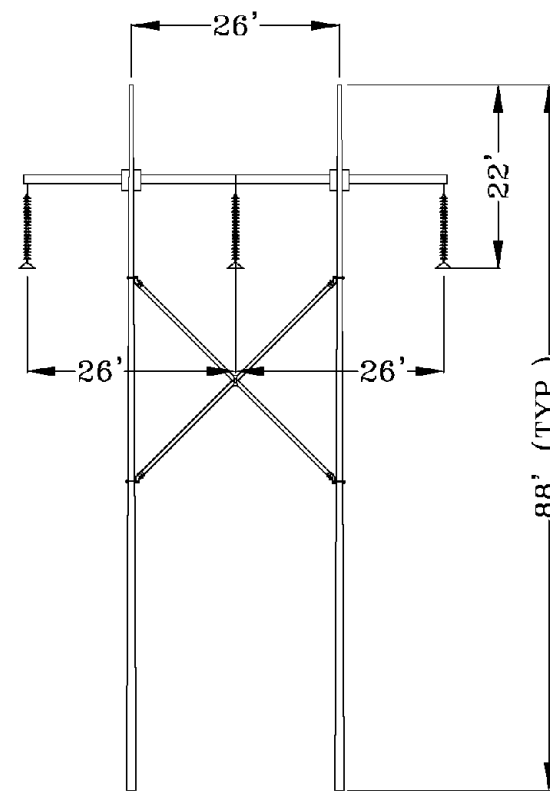
NOT FOR CONSTRUCTION



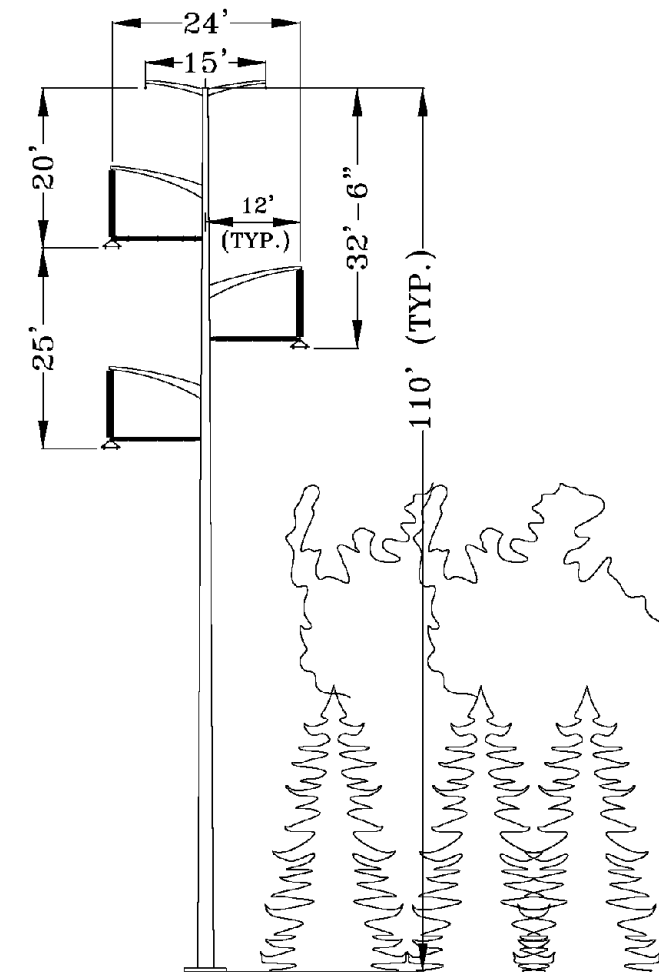
REMOVE EXISTING 347 LINE
AND REPLACE WITH PROPOSED
NEW 345KV TRANSMISSION LINE



PROPOSED REUSE EXISTING 341
STRUCTURES AND CONDUCTOR
FOR NEW 347 LINE

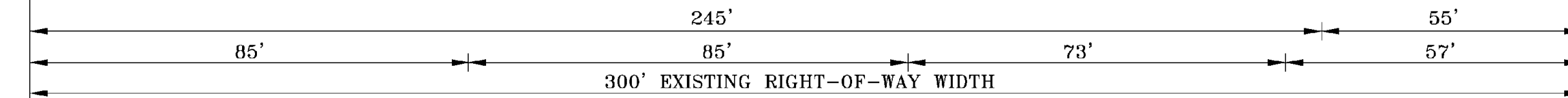


PROPOSED 341 LINE
WITH NEW STRUCTURES



PROPOSED EDGE
OF CLEARING

EDGE OF RIGHT-OF-WAY

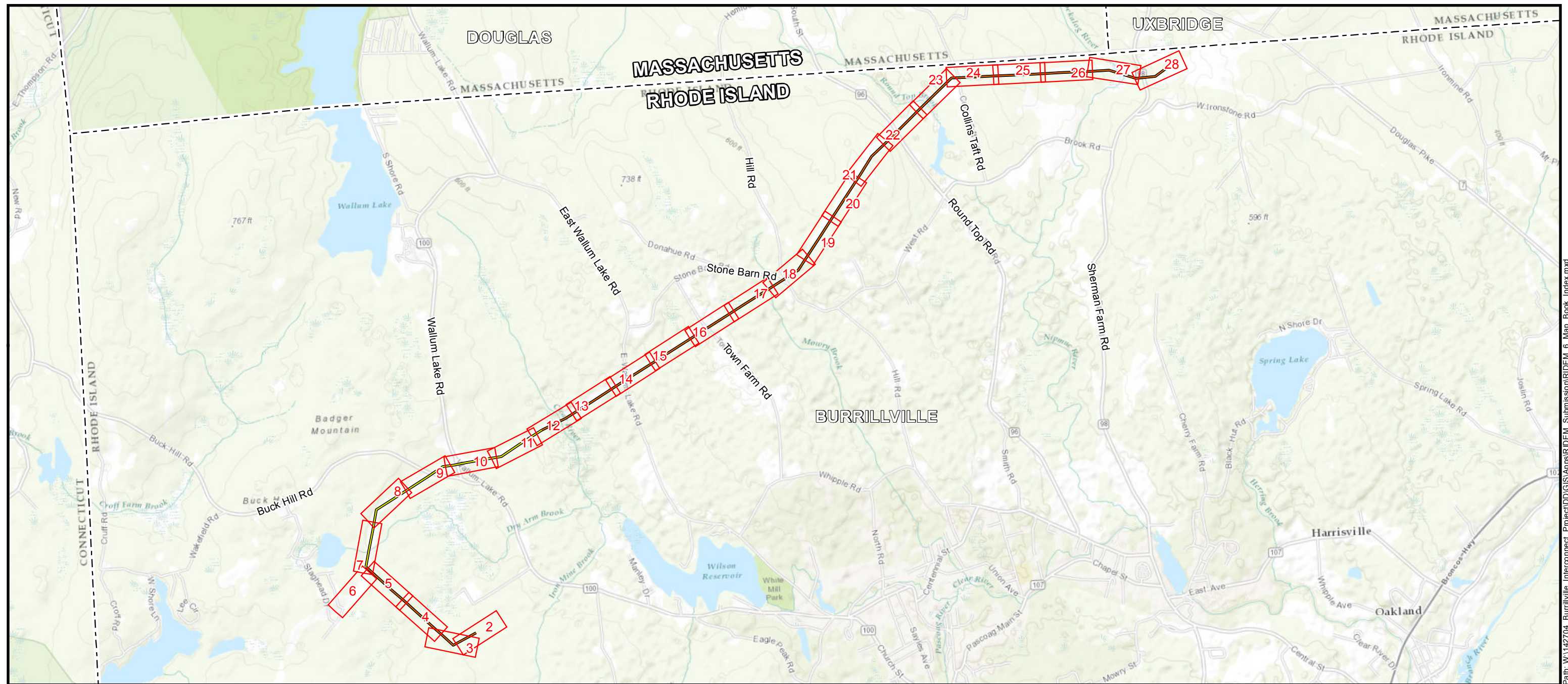


View Facing Southwest

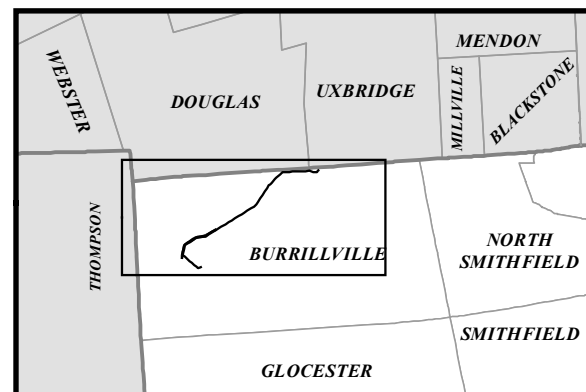
Segment 2 TNEC ROW to 0.19 Mile
West of the Clear River
Approximately 1.6 Miles

Notes:
-Proposed structure types and heights shown are typical. Final structure will vary.
-Existing ROW limits and proposed limits of clearing shown are approximate.

NOT FOR CONSTRUCTION



Map Location



Legend

- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Town Boundary



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BURRILLVILLE INTERCONNECTION PROJECT
THE NARRAGANSETT ELECTRIC CO.
& CLEAR RIVER ENERY, LLC

RIDEM AND USACE PERMIT DRAWINGS
KEY SHEET
BURRILLVILLE, RHODE ISLAND

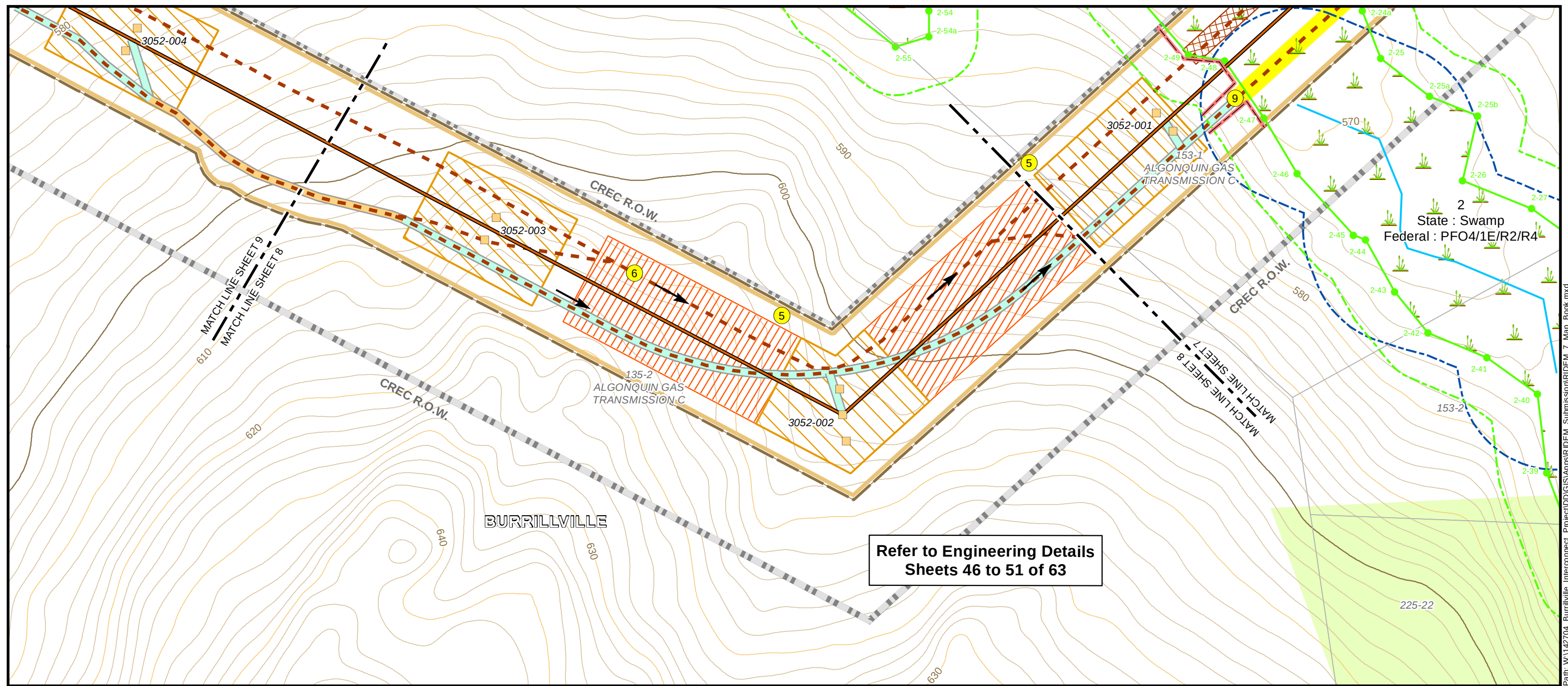
DATE: 3/13/2017

DRAWN: TDH

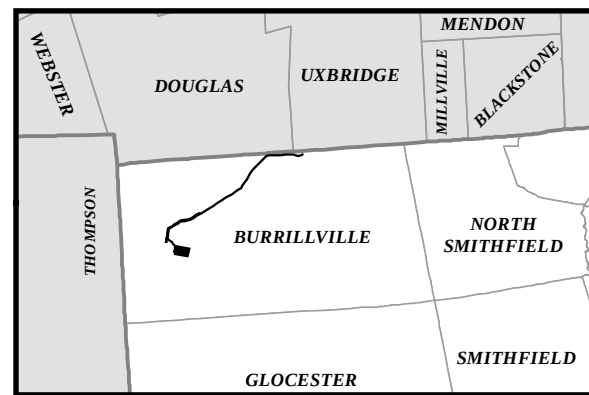
142704

FIGURE T-3

SHEET 06 OF 63



Map Location



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland
- Vernal Pool
- Vernal Pool Location
- Surveyed Floodplain
- FEMA Flood Hazard (DFIRM 100yr)
- Floodway
- Parcel Boundary
- Building
- Edge of Wooded
- Stone Feature
- Stone Grouping
- Stone Wall
- Major Index Contour (50' Interval)
- Index Contour (10' Interval)
- Contour (2' Interval)
- Protected Habitat
- Conservation Land

Proposed

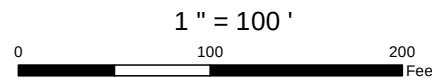
- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access
- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance

- 1 Stabilized construction ingress/egress
- 2 Mud box / drill cutting box (see Erosion & Sediment Control General Notes)
- 3 Laydown or landing area
- 4 Stockpiling / staging area (see Erosion & Sediment Control General Notes)
- 5 Dewatering area (see Erosion & Sediment Control General Notes)
- 6 Concrete washout basin / testing area (see Erosion & Sediment Control General Notes)

- 7 If access road grading required on steep terrain (exceeding 3:1 slope), water bars should be installed during road bed preparation
 - 8 Stream and ASSF crossings will be accomplished using one of the stream crossing techniques shown on the swamp mat details (mat bridge detail). Access road crossings and construction work pads will be elevated in such a manner to span the stream or ASSF and not obstruct the flow of water.
 - 9 Perimeter soil erosion & sediment controls (see Erosion & Sediment Control General Notes)
- Notes:
- Limits of ROW shown are approximate.
 - Rhode Island PE Seal 9008 is applicable only to the proposed transmission structure locations shown.
 - Proposed transmission structure locations are approximate.

NOT FOR CONSTRUCTION

Invenergy
nationalgrid



BURRILLVILLE INTERCONNECTION PROJECT
THE NARRAGANSETT ELECTRIC CO.
& CLEAR RIVER ENERY, LLC

DATE: 3/24/2017

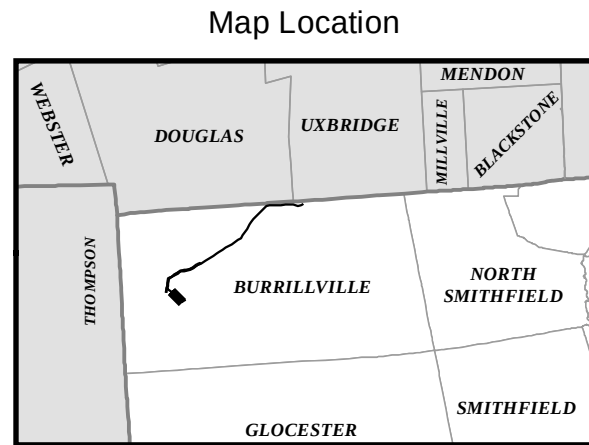
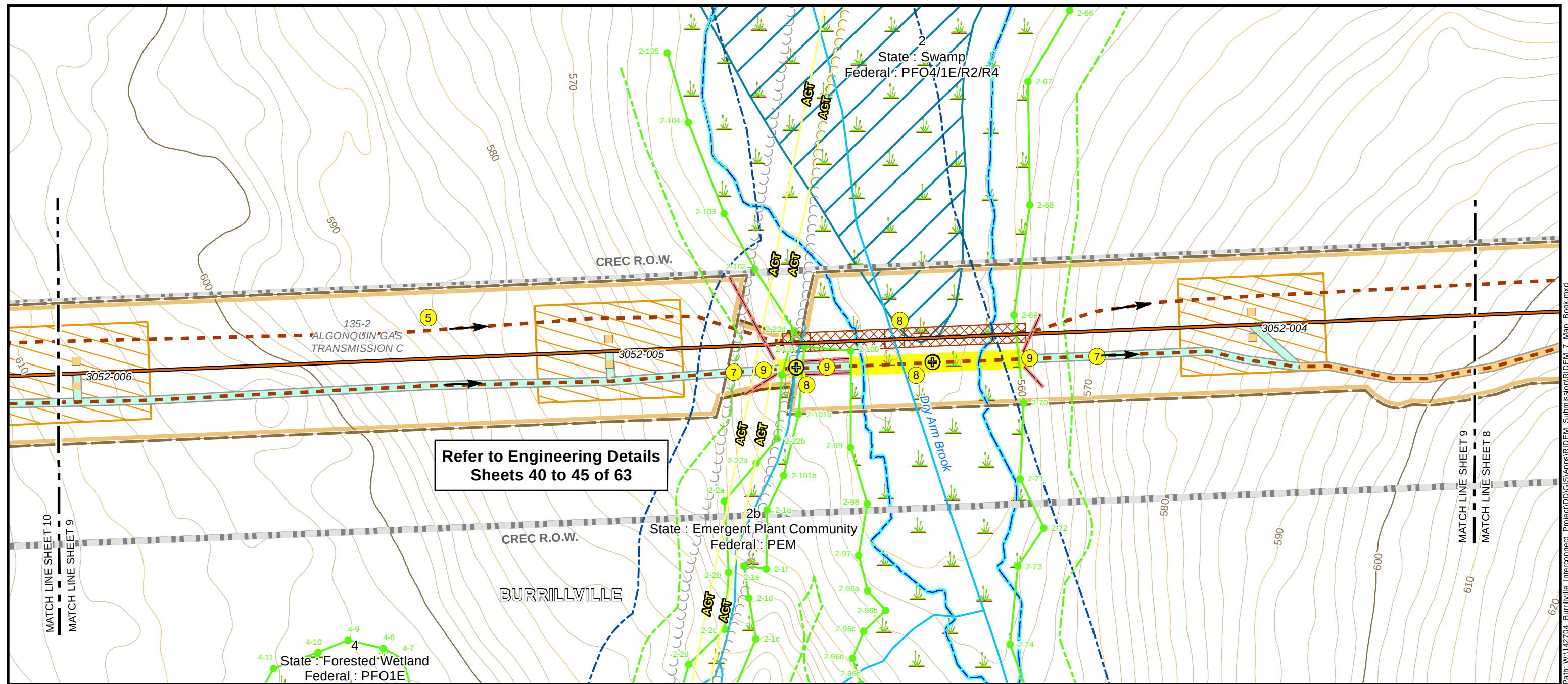
DRAWN: TDH

142704

RIDEM AND USACE PERMIT DRAWINGS
BURRILLVILLE, RHODE ISLAND

FIGURE T-3

SHEET 08 OF 63



Existing Conditions

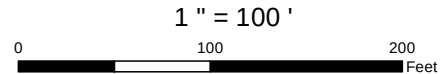
- Existing Steel Pole
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Proposed

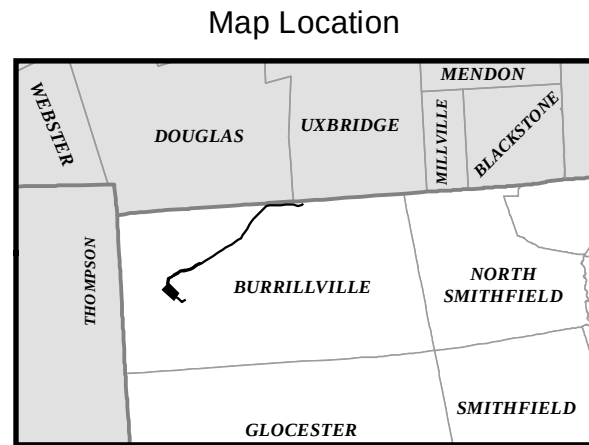
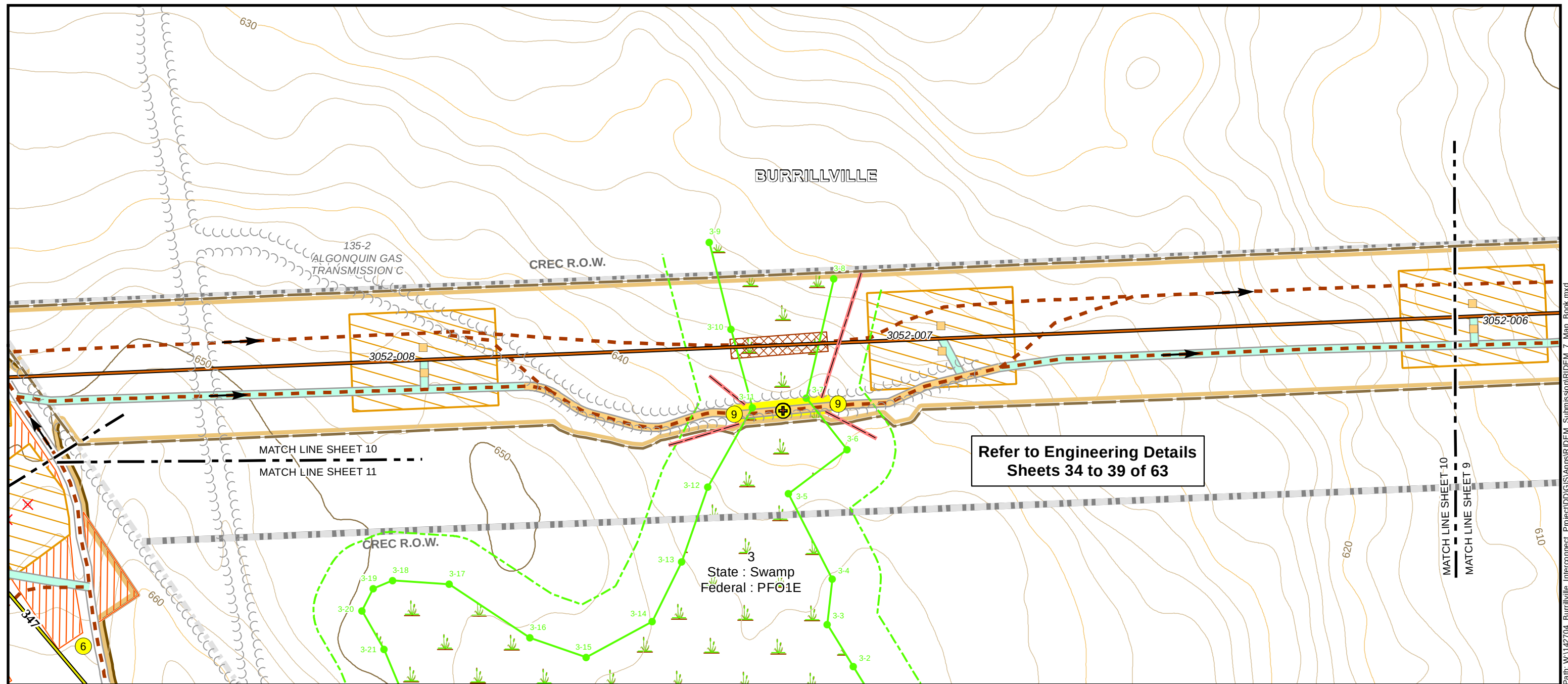
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- Replaced 345 kV Transmission Line
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BURRILLVILLE INTERCONNECTION PROJECT THE NARRAGANSETT ELECTRIC CO. & CLEAR RIVER ENERY, LLC			RIDEM AND USACE PERMIT DRAWINGS BURRILLVILLE, RHODE ISLAND	
DATE: 3/24/2017	DRAWN: TDH	142704	FIGURE T-3	SHEET 09 OF 63



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland

- Vernal Pool
- Vernal Pool Location
- Surveyed Floodplain
- FEMA Flood Hazard (DFIRM 100yr)
- Floodway
- Parcel Boundary
- Building
- Edge of Wooded
- Stone Feature
- Stone Grouping
- Stone Wall
- Major Index Contour (50' Interval)
- Index Contour (10' Interval)
- Contour (2' Interval)
- Protected Habitat
- Conservation Land

Proposed

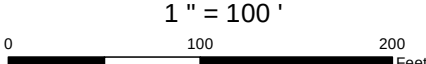
- Proposed or Reused Steel Pole
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- Proposed Wood Pole
- Wood Pole to be Removed
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- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access

- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance

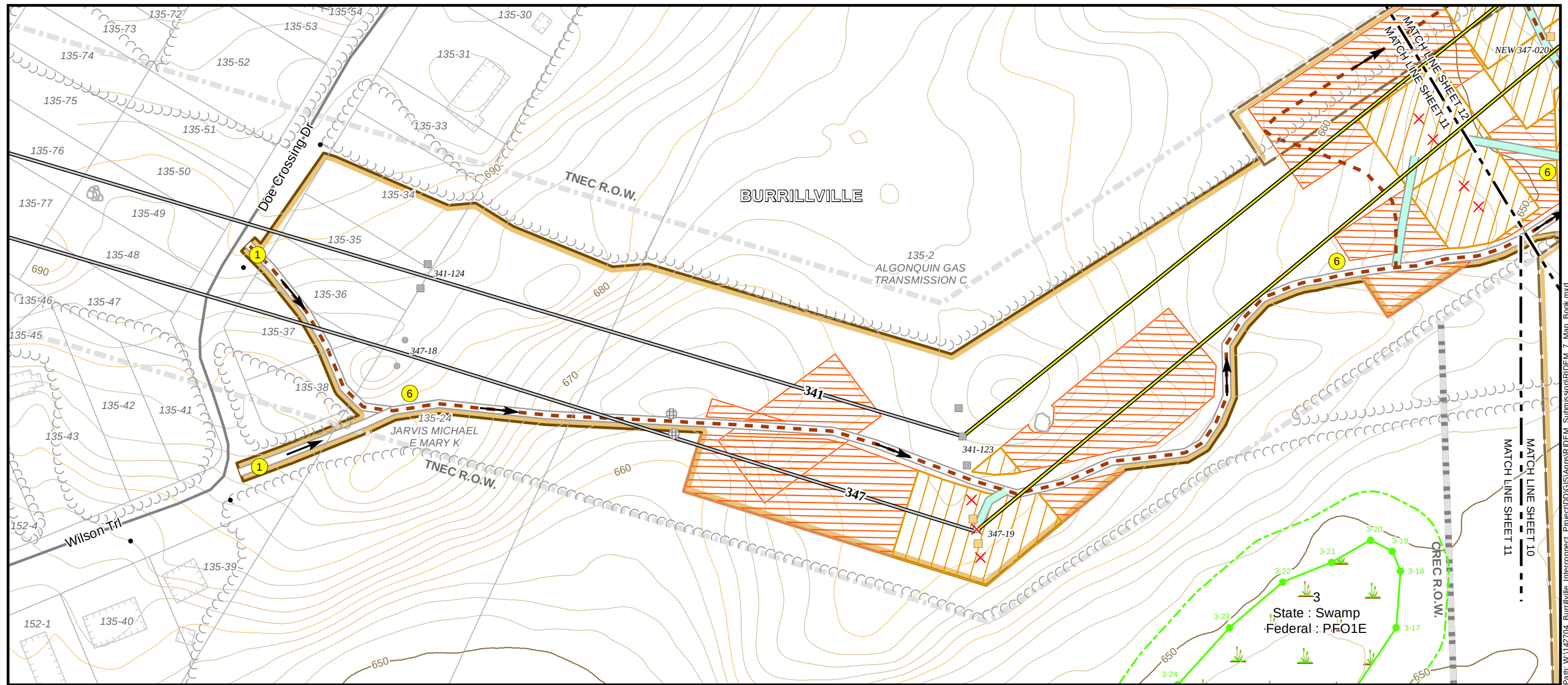
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- 2 Mud box / drill cutting box (see Erosion & Sediment Control General Notes)
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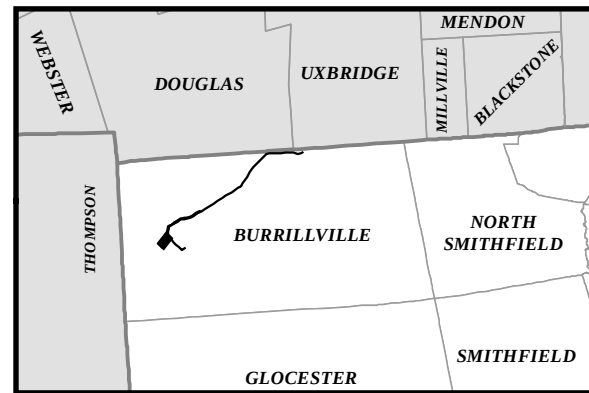
NOT FOR CONSTRUCTION



BURRILLVILLE INTERCONNECTION PROJECT THE NARRAGANSETT ELECTRIC CO. & CLEAR RIVER ENERY, LLC			RIDEM AND USACE PERMIT DRAWINGS BURRILLVILLE, RHODE ISLAND	
DATE: 3/24/2017	DRAWN: TDH	142704	FIGURE T-3	SHEET 10 OF 63



Map Location



Existing Conditions

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- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
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- Contour (2' Interval)
- Protected Habitat
- Conservation Land

Proposed

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- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access
- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
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- Swamp Mat (Tree Clearing)
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 - Rhode Island PE Seal 9008 is applicable only to the proposed transmission structure locations shown.
 - Proposed transmission structure locations are approximate.

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1" = 100'
0 100 200 Feet

BURRILLVILLE INTERCONNECTION PROJECT
THE NARRAGANSETT ELECTRIC CO.
& CLEAR RIVER ENERY, LLC

DATE: 3/24/2017

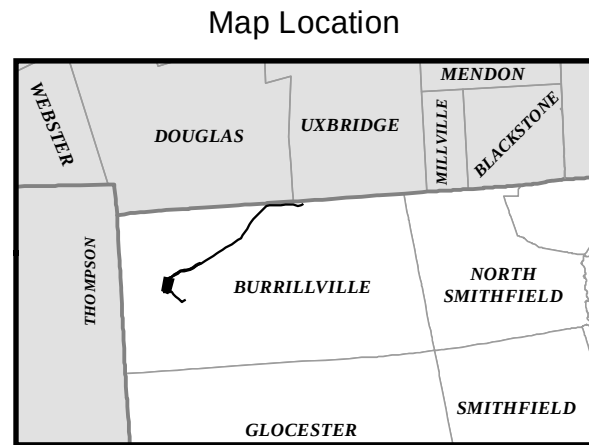
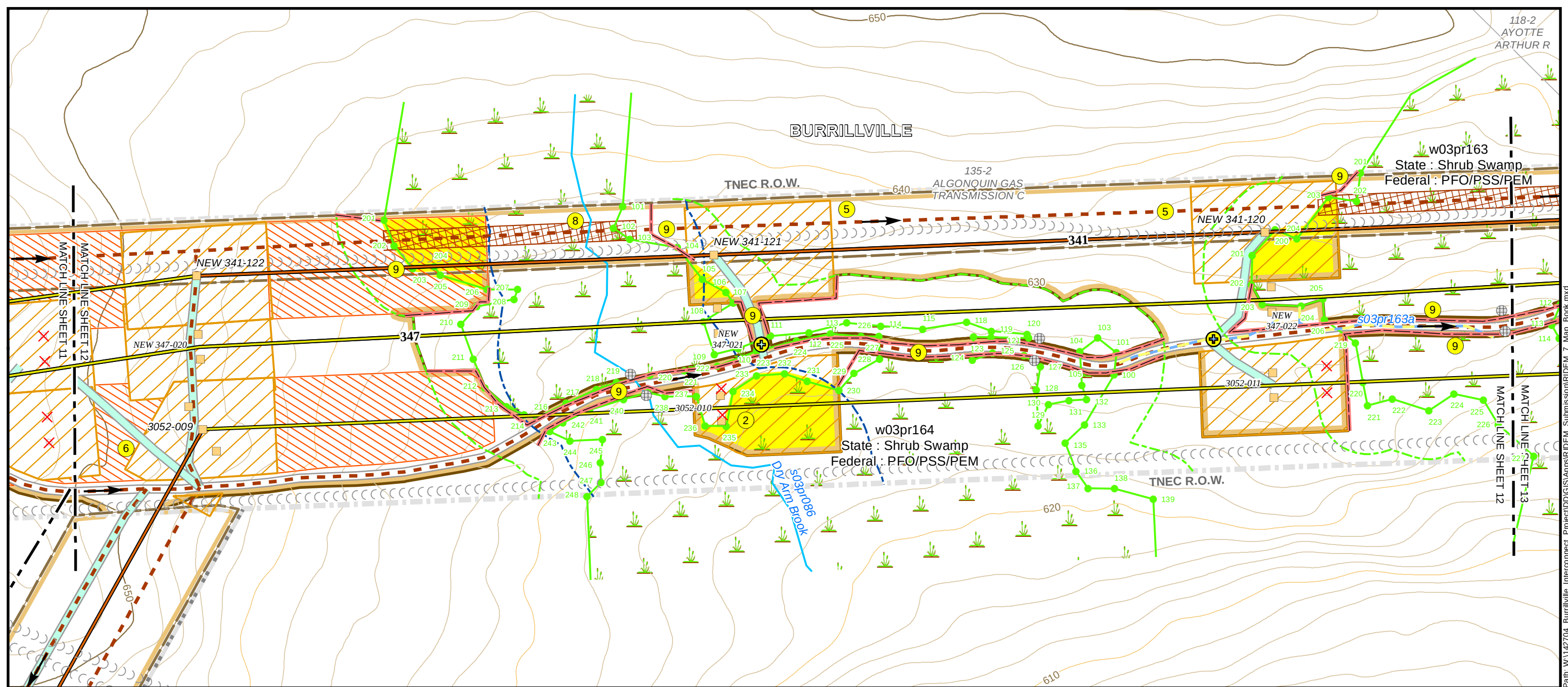
DRAWN: TDH

142704

RIDEM AND USACE PERMIT DRAWINGS
BURRILLVILLE, RHODE ISLAND

FIGURE T-3

SHEET 11 OF 63



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland

- Vernal Pool
- Vernal Pool Location
- Surveyed Floodplain
- FEMA Flood Hazard (DFIRM 100yr)
- Floodway
- Parcel Boundary
- Building
- Edge of Wooded
- Stone Feature
- Stone Grouping
- Stone Wall
- Major Index Contour (50' Interval)
- Index Contour (10' Interval)
- Contour (2' Interval)
- Protected Habitat
- Conservation Land

Proposed

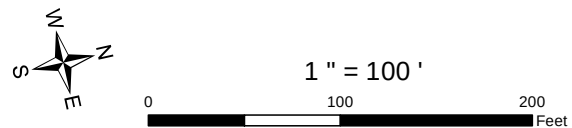
- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access

- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance

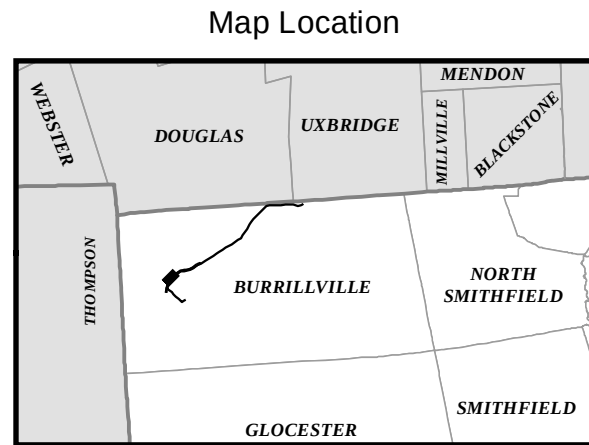
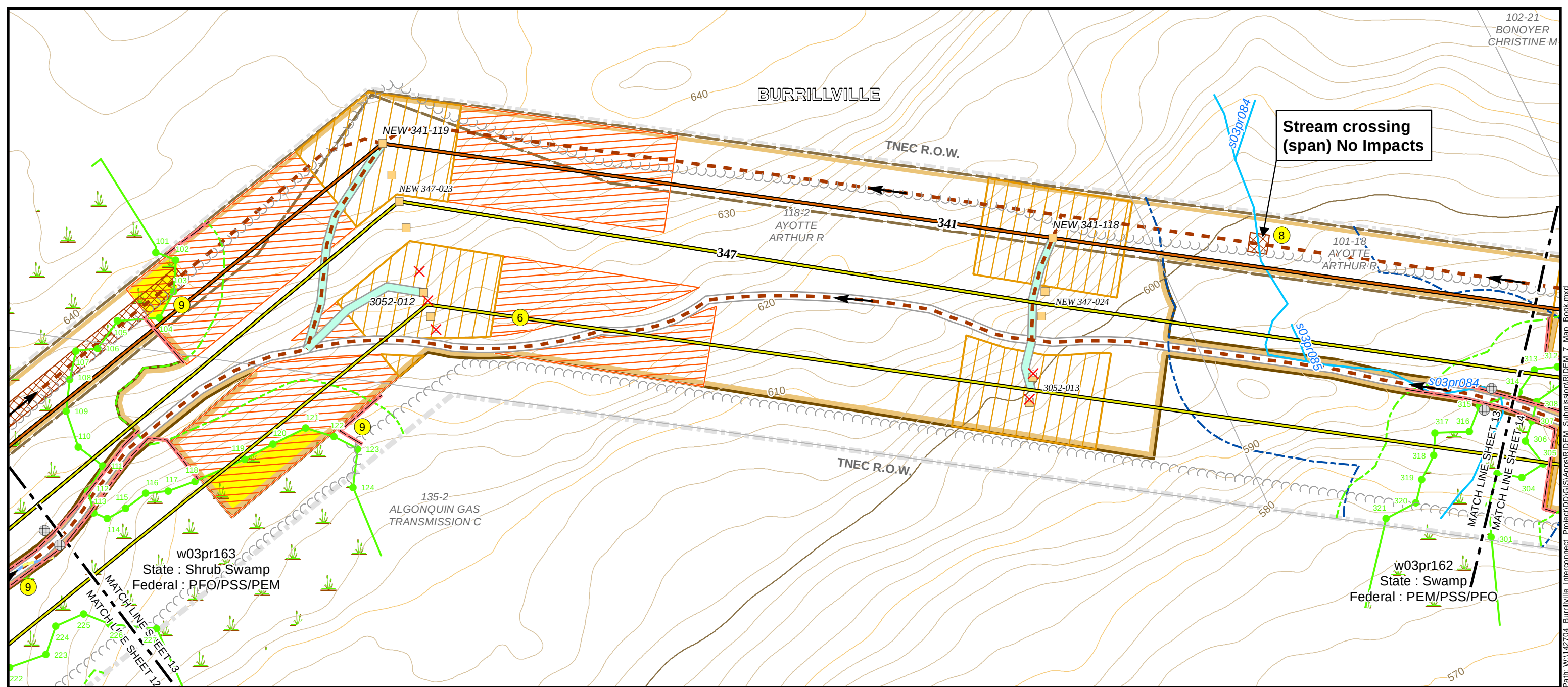
- 1 Stabilized construction ingress/egress
- 2 Mud box / drill cutting box (see Erosion & Sediment Control General Notes)
- 3 Laydown or landing area
- 4 Stockpiling / staging area (see Erosion & Sediment Control General Notes)
- 5 Dewatering area (see Erosion & Sediment Control General Notes)
- 6 Concrete washout basin / testing area (see Erosion & Sediment Control General Notes)

- 7 If access road grading required on steep terrain (exceeding 3:1 slope), water bars should be installed during road bed preparation
 - 8 Stream and ASSF crossings will be accomplished using one of the stream crossing techniques shown on the swamp mat details (mat bridge detail). Access road crossings and construction work pads will be elevated in such a manner to span the stream or ASSF and not obstruct the flow of water.
 - 9 Perimeter soil erosion & sediment controls (see Erosion & Sediment Control General Notes)
- Notes:
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BURRILLVILLE INTERCONNECTION PROJECT THE NARRAGANSETT ELECTRIC CO. & CLEAR RIVER ENERY, LLC			RIDEM AND USACE PERMIT DRAWINGS BURRILLVILLE, RHODE ISLAND	
DATE: 3/24/2017	DRAWN: TDH	142704	FIGURE T-3	SHEET 12 OF 63



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland

- Vernal Pool
- Vernal Pool Location
- Surveyed Floodplain FEMA Flood Hazard (DFIRM 100yr)
- Floodway
- Parcel Boundary
- Building
- Edge of Wooded
- Stone Feature
- Stone Grouping
- Stone Wall
- Major Index Contour (50' Interval)
- Index Contour (10' Interval)
- Contour (2' Interval)
- Protected Habitat
- Conservation Land

Proposed

- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access

- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance

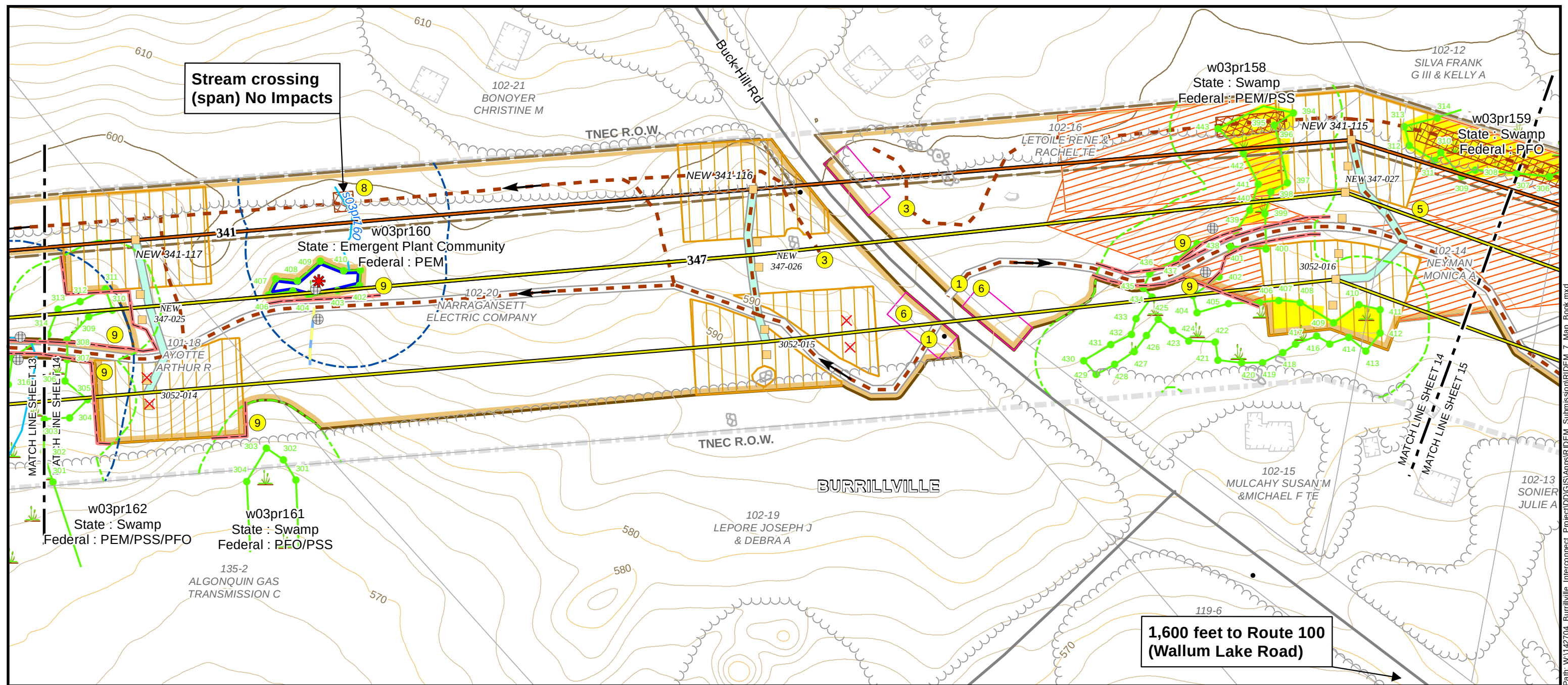
- 1 Stabilized construction ingress/egress
- 2 Mud box / drill cutting box (see Erosion & Sediment Control General Notes)
- 3 Laydown or landing area
- 4 Stockpiling / staging area (see Erosion & Sediment Control General Notes)
- 5 Dewatering area (see Erosion & Sediment Control General Notes)
- 6 Concrete washout basin / testing area (see Erosion & Sediment Control General Notes)

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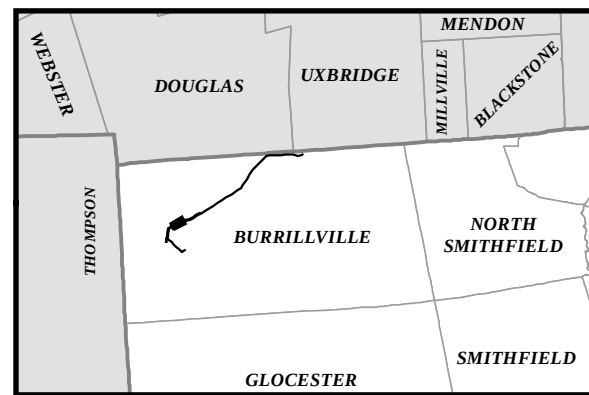
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BURRILLVILLE INTERCONNECTION PROJECT
THE NARRAGANSETT ELECTRIC CO.
& CLEAR RIVER ENERY, LLC

RIDEM AND USACE PERMIT DRAWINGS
BURRILLVILLE, RHODE ISLAND



Map Location



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland
- Vernal Pool
- Vernal Pool Location
- Surveyed Floodplain FEMA Flood Hazard (DFIRM 100yr)
- Floodway
- Parcel Boundary
- Building
- Edge of Wooded
- Stone Feature
- Stone Grouping
- Stone Wall
- Major Index Contour (50' Interval)
- Index Contour (10' Interval)
- Contour (2' Interval)
- Protected Habitat
- Conservation Land

Proposed

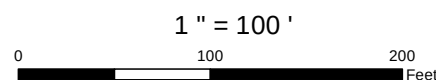
- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access
- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance

- 1 Stabilized construction ingress/egress
- 2 Mud box / drill cutting box (see Erosion & Sediment Control General Notes)
- 3 Laydown or landing area
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BURRILLVILLE INTERCONNECTION PROJECT
THE NARRAGANSETT ELECTRIC CO.
& CLEAR RIVER ENERGY, LLC

DATE: 3/24/2017

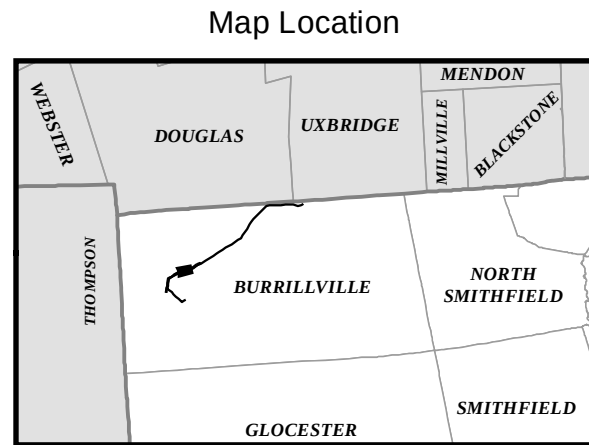
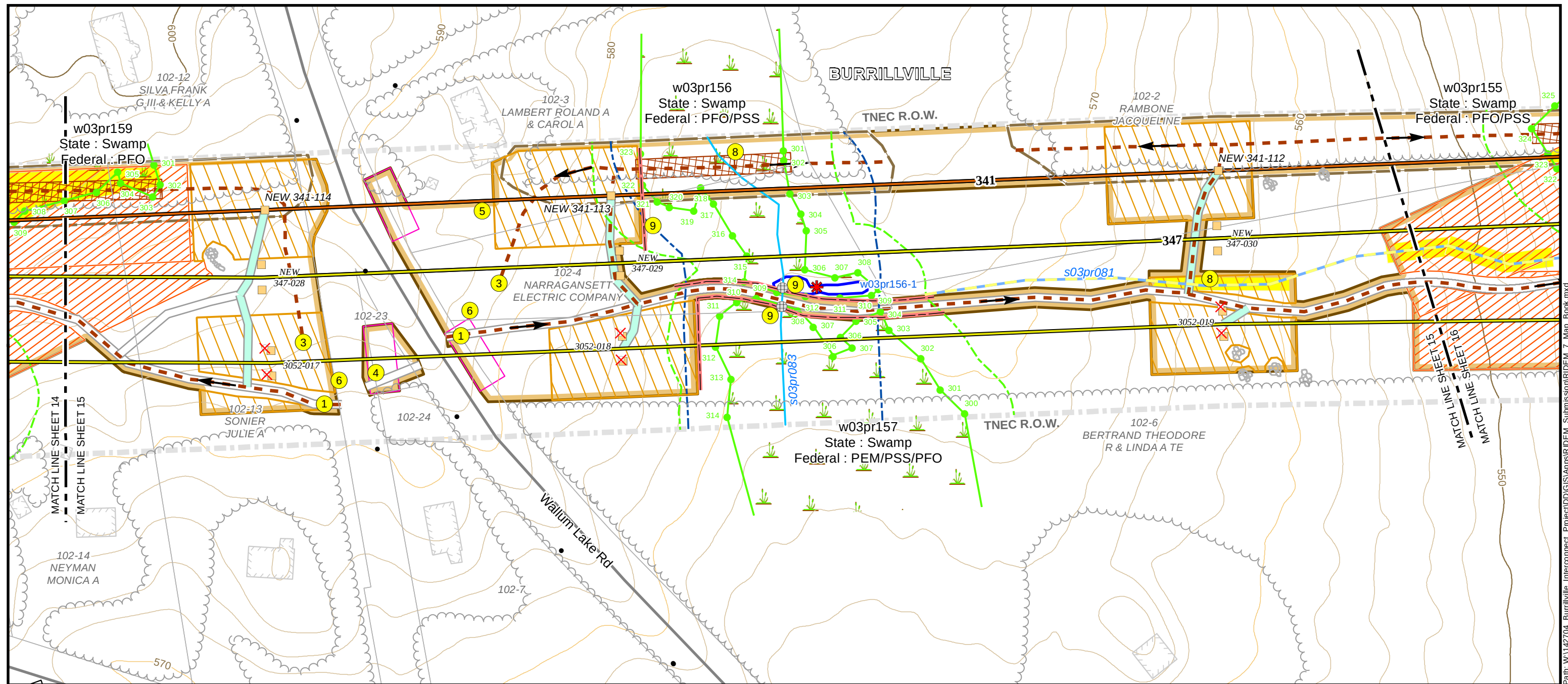
DRAWN: TDH

142704

RIDEM AND USACE PERMIT DRAWINGS
BURRILLVILLE, RHODE ISLAND

FIGURE T-3

SHEET 14 OF 63



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland

- Vernal Pool
- Vernal Pool Location
- Surveyed Floodplain
- FEMA Flood Hazard (DFIRM 100yr)
- Floodway
- Parcel Boundary
- Building
- Edge of Wooded
- Stone Feature
- Stone Grouping
- Stone Wall
- Major Index Contour (50' Interval)
- Index Contour (10' Interval)
- Contour (2' Interval)
- Protected Habitat
- Conservation Land

Proposed

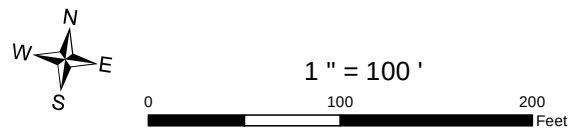
- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access

- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance

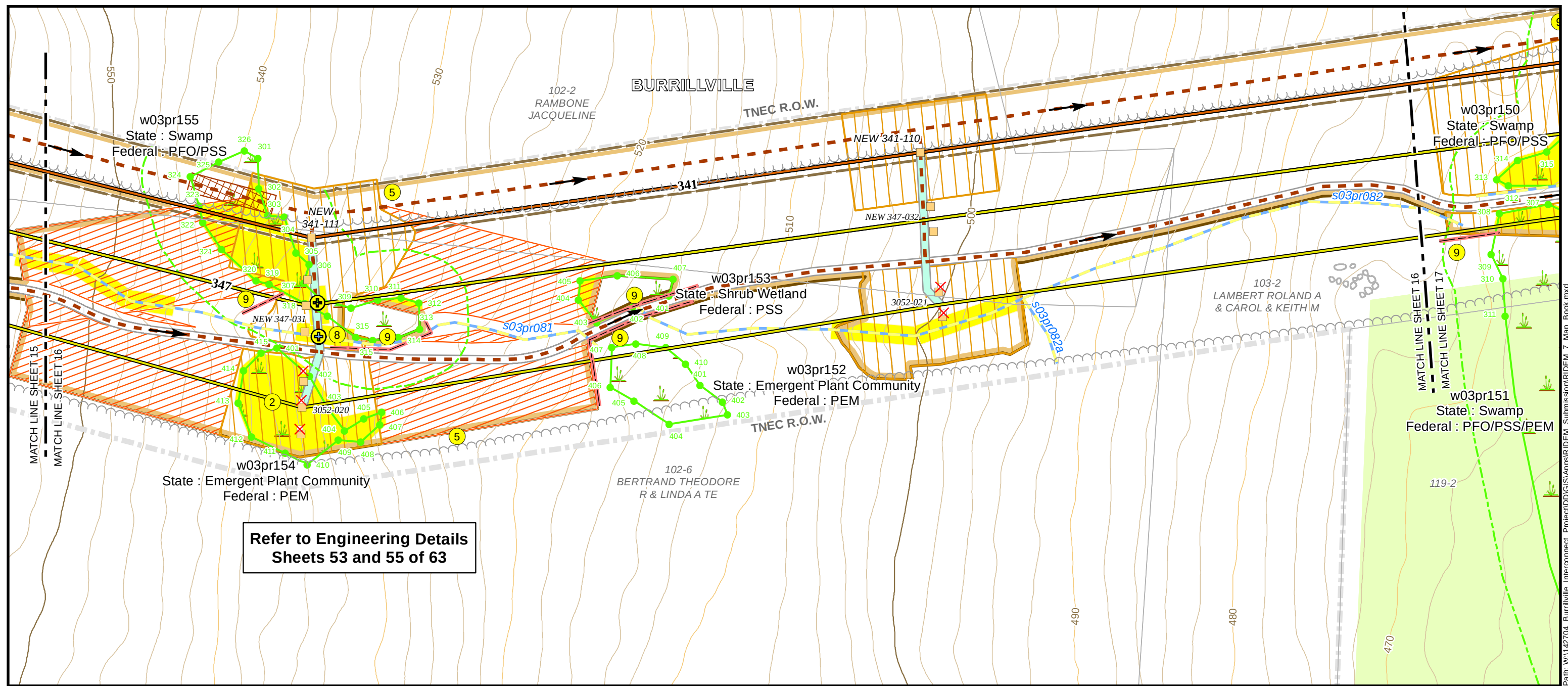
- 1 Stabilized construction ingress/egress
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- 3 Laydown or landing area
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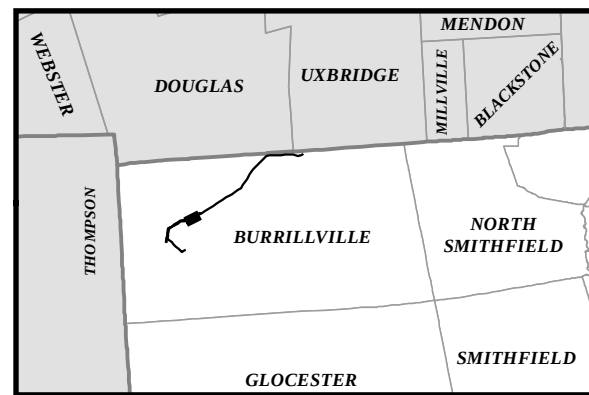


BURRILLVILLE INTERCONNECTION PROJECT THE NARRAGANSETT ELECTRIC CO. & CLEAR RIVER ENERY, LLC			RIDEM AND USACE PERMIT DRAWINGS BURRILLVILLE, RHODE ISLAND	
DATE: 3/24/2017	DRAWN: TDH	142704	FIGURE T-3	SHEET 15 OF 63



Refer to Engineering Details
Sheets 53 and 55 of 63

Map Location



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland

Proposed

- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access
- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance

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1" = 100'
0 100 200 Feet

BURRILLVILLE INTERCONNECTION PROJECT
THE NARRAGANSETT ELECTRIC CO.
& CLEAR RIVER ENERGY, LLC

DATE: 3/24/2017

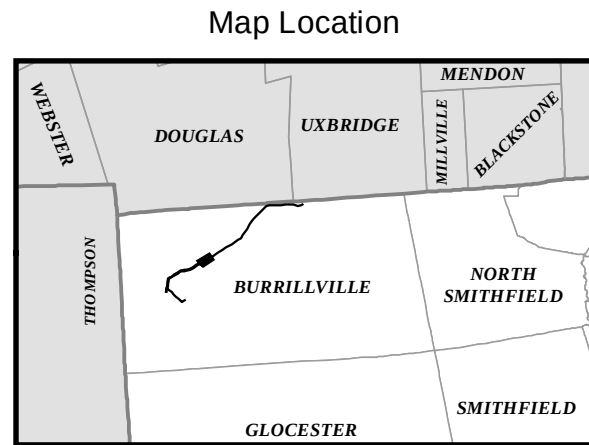
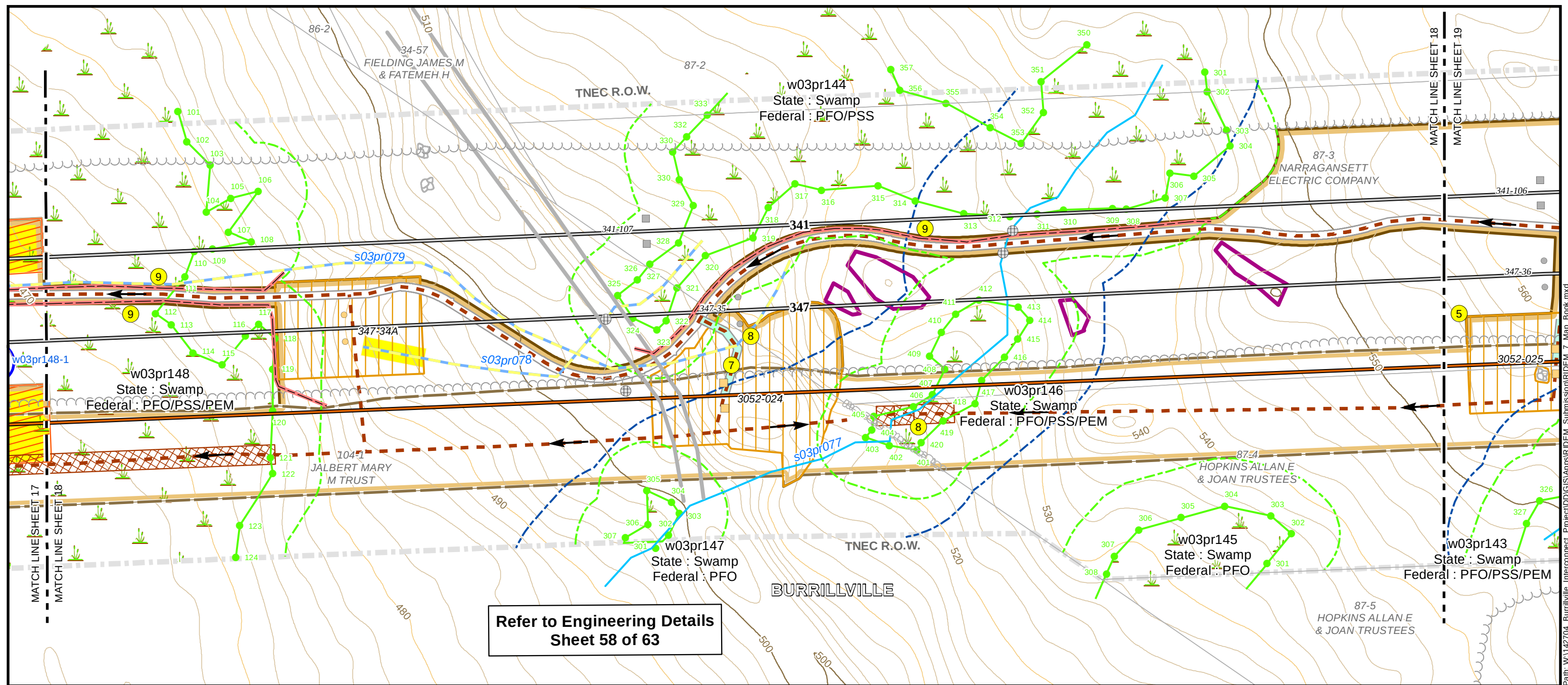
DRAWN: TDH

142704

RIDEM AND USACE PERMIT DRAWINGS
BURRILLVILLE, RHODE ISLAND

FIGURE T-3

SHEET 16 OF 63



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland

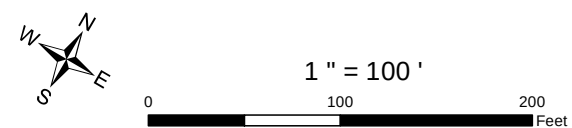
Proposed

- Vernal Pool
- Vernal Pool Location
- Surveyed Floodplain
- FEMA Flood Hazard (DFIRM 100yr)
- Floodway
- Parcel Boundary
- Building
- Edge of Wooded
- Stone Feature
- Stone Grouping
- Stone Wall
- Major Index Contour (50' Interval)
- Index Contour (10' Interval)
- Contour (2' Interval)
- Protected Habitat
- Conservation Land
- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access
- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance

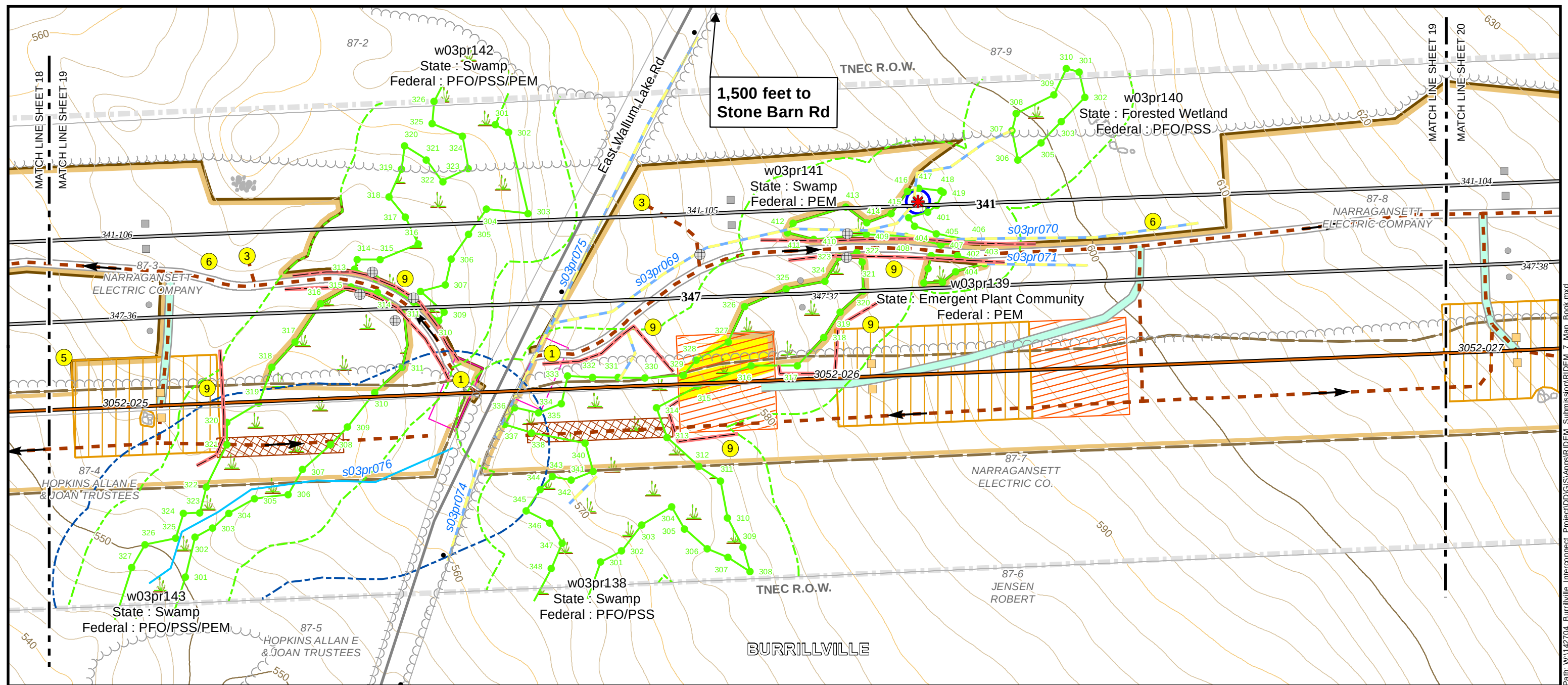
- 1 Stabilized construction ingress/egress
- 2 Mud box / drill cutting box (see Erosion & Sediment Control General Notes)
- 3 Laydown or landing area
- 4 Stockpiling / staging area (see Erosion & Sediment Control General Notes)
- 5 Dewatering area (see Erosion & Sediment Control General Notes)
- 6 Concrete washout basin / testing area (see Erosion & Sediment Control General Notes)

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 - 9 Perimeter soil erosion & sediment controls (see Erosion & Sediment Control General Notes)
- Notes:
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NOT FOR CONSTRUCTION

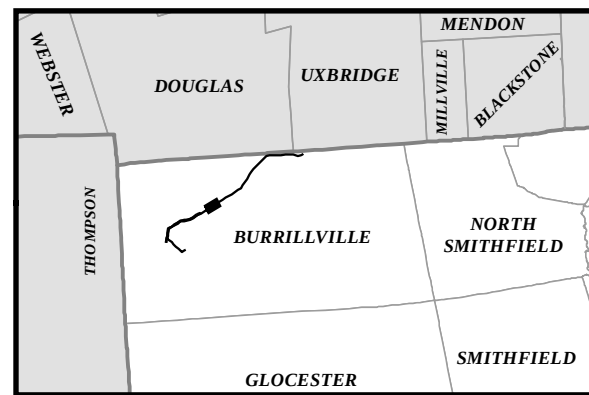


BURRILLVILLE INTERCONNECTION PROJECT THE NARRAGANSETT ELECTRIC CO. & CLEAR RIVER ENERY, LLC			RIDEM AND USACE PERMIT DRAWINGS BURRILLVILLE, RHODE ISLAND	
DATE: 3/24/2017	DRAWN: TDH	142704	FIGURE T-3	SHEET 18 OF 63



Path: W:\142704_Burrillville_Interconnect_Project\GIS\Map\RIDEM_Submission\RIDEM_7_Map_Book.mxd

Map Location



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland
- Vernal Pool
- Vernal Pool Location
- Surveyed Floodplain FEMA Flood Hazard (DFIRM 100yr)
- Floodway
- Parcel Boundary
- Building
- Edge of Wooded
- Stone Feature
- Stone Grouping
- Stone Wall
- Major Index Contour (50' Interval)
- Index Contour (10' Interval)
- Contour (2' Interval)
- Protected Habitat
- Conservation Land

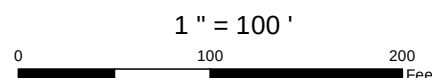
Proposed

- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access
- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance
- 1 Stabilized construction ingress/egress
- 2 Mud box / drill cutting box (see Erosion & Sediment Control General Notes)
- 3 Laydown or landing area
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BURRILLVILLE INTERCONNECTION PROJECT
THE NARRAGANSETT ELECTRIC CO.
& CLEAR RIVER ENERY, LLC

DATE: 3/24/2017

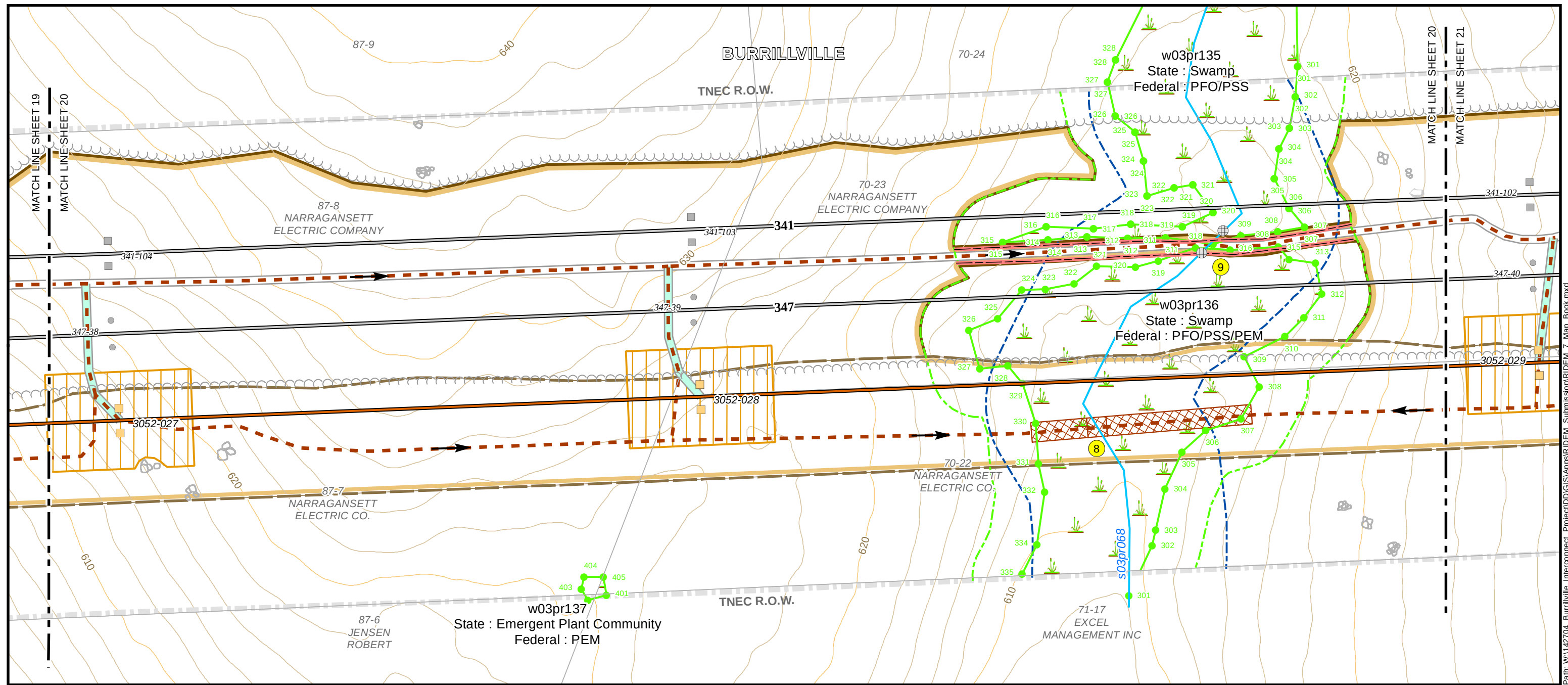
DRAWN: TDH

142704

RIDEM AND USACE PERMIT DRAWINGS
BURRILLVILLE, RHODE ISLAND

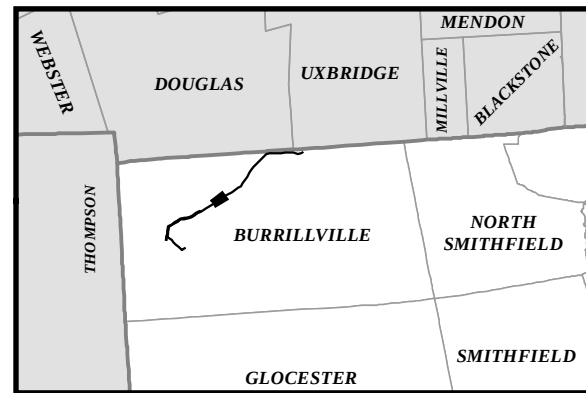
FIGURE T-3

SHEET 19 OF 63



Path: W:\142704_Burrillville_Interconnect_Project\DDGIS\Map\PRIDEM_Submission\RIDEM_7_Map_Book.mxd

Map Location



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland
- Vernal Pool
- Vernal Pool Location
- Surveyed Floodplain FEMA Flood Hazard (DFIRM 100yr)
- Floodway
- Parcel Boundary
- Building
- Edge of Wooded
- Stone Feature
- Stone Grouping
- Stone Wall
- Major Index Contour (50' Interval)
- Index Contour (10' Interval)
- Contour (2' Interval)
- Protected Habitat
- Conservation Land

Proposed

- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access
- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance
- 1 Stabilized construction ingress/egress
- 2 Mud box / drill cutting box (see Erosion & Sediment Control General Notes)
- 3 Laydown or landing area
- 4 Stockpiling / staging area (see Erosion & Sediment Control General Notes)
- 5 Dewatering area (see Erosion & Sediment Control General Notes)
- 6 Concrete washout basin / testing area (see Erosion & Sediment Control General Notes)

- 7 If access road grading required on steep terrain (exceeding 3:1 slope), water bars should be installed during road bed preparation
 - Stream and ASSF crossings will be accomplished using one of the stream crossing techniques shown on the swamp mat details (mat bridge detail). Access road crossings and construction work pads will be elevated in such a manner to span the stream or ASSF and not obstruct the flow of water.
 - 8
 - 9 Perimeter soil erosion & sediment controls (see Erosion & Sediment Control General Notes)
- Notes:
- Limits of ROW shown are approximate.
 - Rhode Island PE Seal 9008 is applicable only to the proposed transmission structure locations shown.
 - Proposed transmission structure locations are approximate.

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1" = 100'
0 100 200 Feet

BURRILLVILLE INTERCONNECTION PROJECT
THE NARRAGANSETT ELECTRIC CO.
& CLEAR RIVER ENERGY, LLC

DATE: 3/24/2017

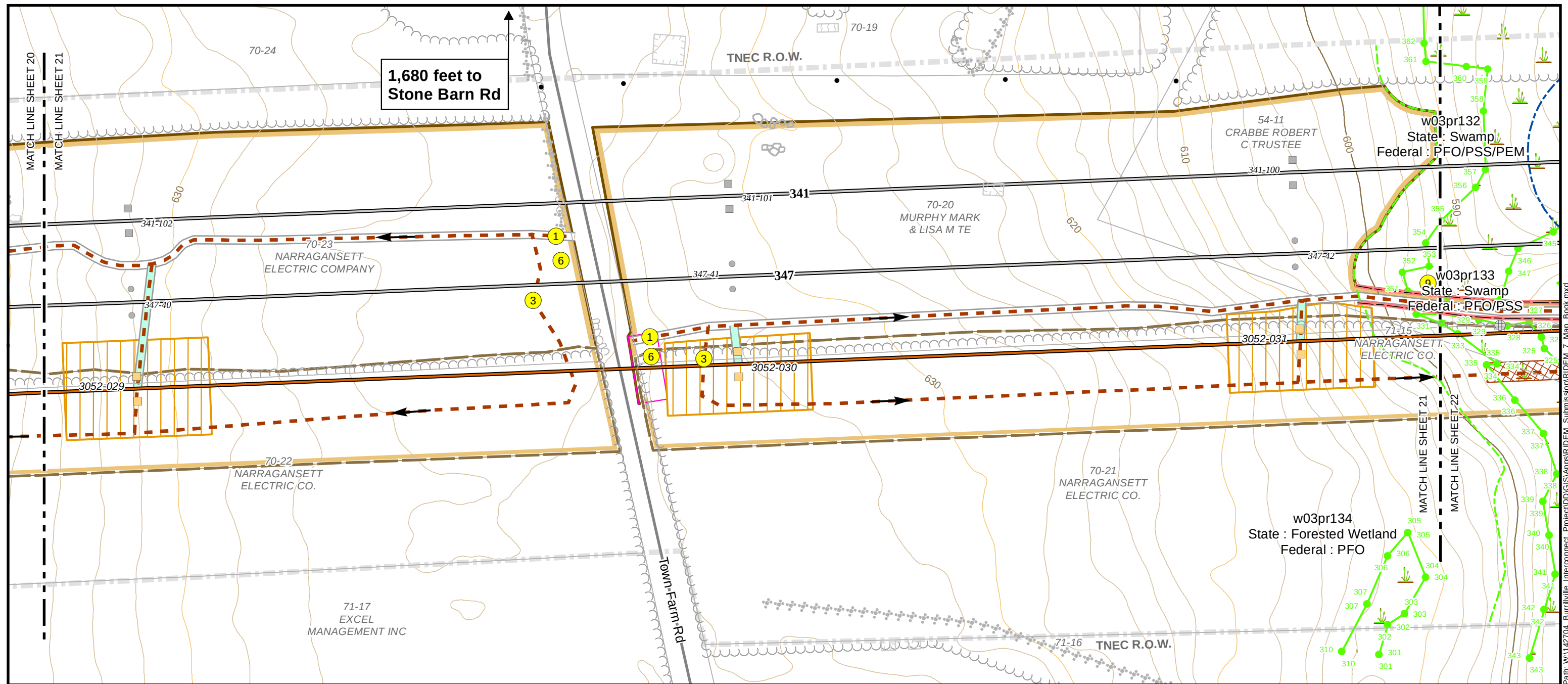
DRAWN: TDH

142704

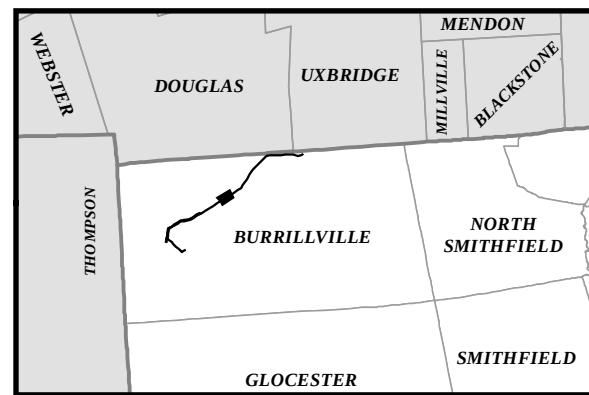
RIDEM AND USACE PERMIT DRAWINGS
BURRILLVILLE, RHODE ISLAND

FIGURE T-3

SHEET 20 OF 63



Map Location



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland
- Vernal Pool
- Vernal Pool Location
- Surveyed Floodplain FEMA Flood Hazard (DFIRM 100yr)
- Floodway
- Parcel Boundary
- Building
- Edge of Wooded
- Stone Feature
- Stone Grouping
- Stone Wall
- Major Index Contour (50' Interval)
- Index Contour (10' Interval)
- Contour (2' Interval)
- Protected Habitat
- Conservation Land

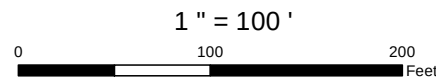
Proposed

- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access
- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance
- 1 Stabilized construction ingress/egress
- 2 Mud box / drill cutting box (see Erosion & Sediment Control General Notes)
- 3 Laydown or landing area
- 4 Stockpiling / staging area (see Erosion & Sediment Control General Notes)
- 5 Dewatering area (see Erosion & Sediment Control General Notes)
- 6 Concrete washout basin / testing area (see Erosion & Sediment Control General Notes)
- 7 If access road grading required on steep terrain (exceeding 3:1 slope), water bars should be installed during road bed preparation
- 8 Stream and ASSF crossings will be accomplished using one of the stream crossing techniques shown on the swamp mat details (mat bridge detail). Access road crossings and construction work pads will be elevated in such a manner to span the stream or ASSF and not obstruct the flow of water.
- 9 Perimeter soil erosion & sediment controls (see Erosion & Sediment Control General Notes)

- Notes:
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 - Rhode Island PE Seal 9008 is applicable only to the proposed transmission structure locations shown.
 - Proposed transmission structure locations are approximate.

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BURRILLVILLE INTERCONNECTION PROJECT
THE NARRAGANSETT ELECTRIC CO.
& CLEAR RIVER ENERY, LLC

DATE: 3/24/2017

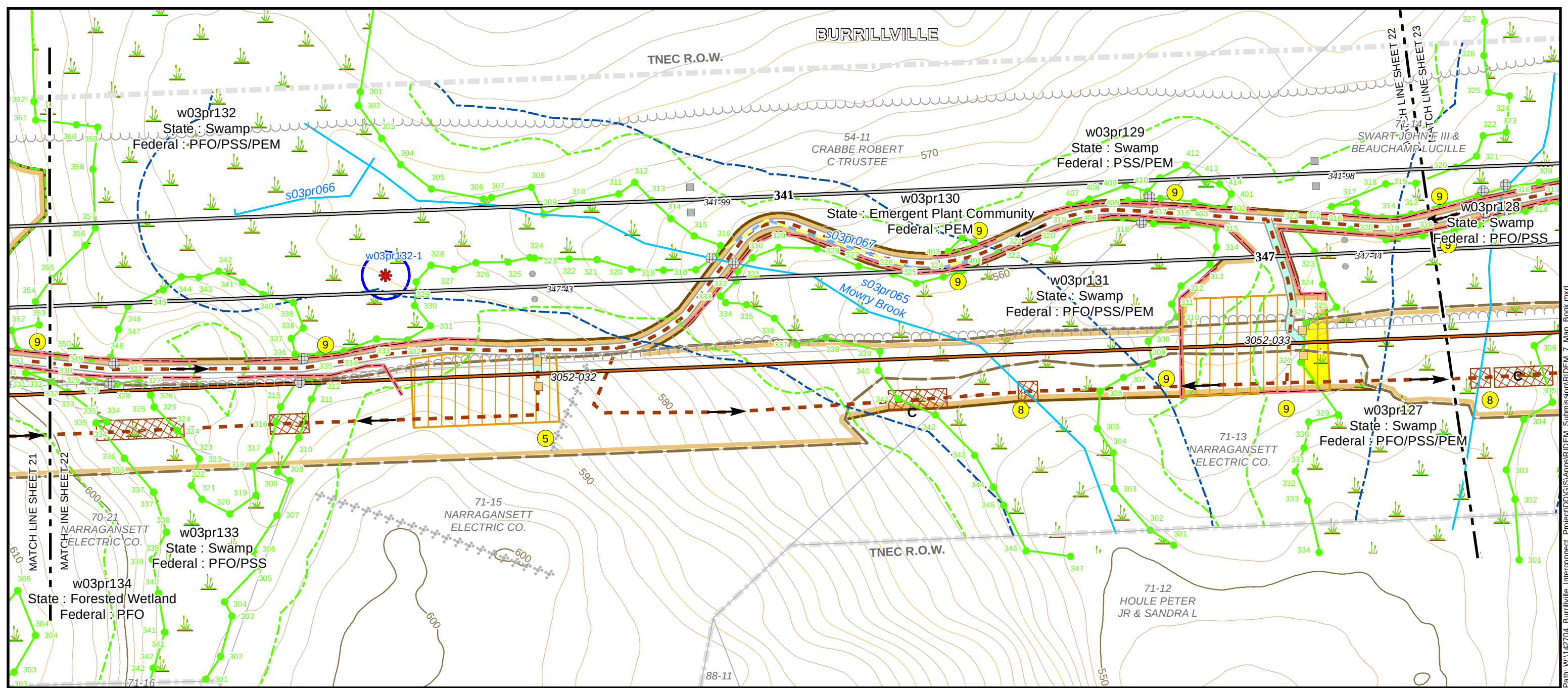
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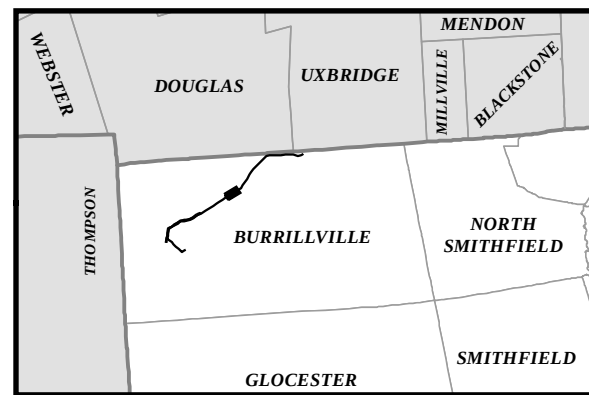
RIDEM AND USACE PERMIT DRAWINGS
BURRILLVILLE, RHODE ISLAND

FIGURE T-3

SHEET 21 OF 63



Map Location



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland
- Vernal Pool
- Vernal Pool Location
- Surveyed Floodplain FEMA Flood Hazard (DFIRM 100yr)
- Floodway
- Parcel Boundary
- Building
- Edge of Wooded
- Stone Feature
- Stone Grouping
- Stone Wall
- Major Index Contour (50' Interval)
- Index Contour (10' Interval)
- Contour (2' Interval)
- Protected Habitat
- Conservation Land

Proposed

- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access
- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance
- 1 Stabilized construction ingress/egress
- 2 Mud box / drill cutting box (see Erosion & Sediment Control General Notes)
- 3 Laydown or landing area
- 4 Stockpiling / staging area (see Erosion & Sediment Control General Notes)
- 5 Dewatering area (see Erosion & Sediment Control General Notes)
- 6 Concrete washout basin / testing area (see Erosion & Sediment Control General Notes)

- 7 If access road grading required on steep terrain (exceeding 3:1 slope), water bars should be installed during road bed preparation
 - 8 Stream and ASSF crossings will be accomplished using one of the stream crossing techniques shown on the swamp mat details (mat bridge detail). Access road crossings and construction work pads will be elevated in such a manner to span the stream or ASSF and not obstruct the flow of water.
 - 9 Perimeter soil erosion & sediment controls (see Erosion & Sediment Control General Notes)
- Notes:
- Limits of ROW shown are approximate.
 - Rhode Island PE Seal 9008 is applicable only to the proposed transmission structure locations shown.
 - Proposed transmission structure locations are approximate.

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1" = 100'
0 100 200 Feet

BURRILLVILLE INTERCONNECTION PROJECT
THE NARRAGANSETT ELECTRIC CO.
& CLEAR RIVER ENERY, LLC

DATE: 3/24/2017

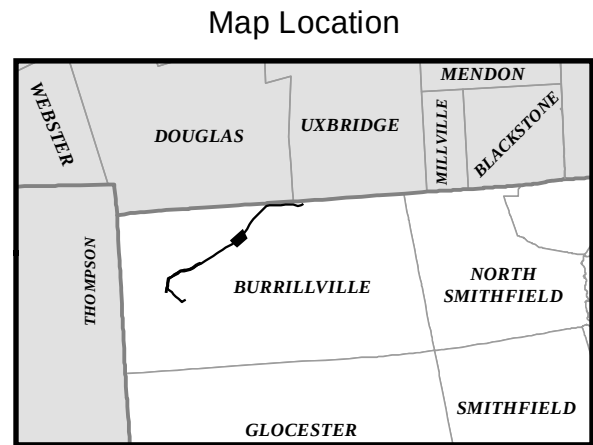
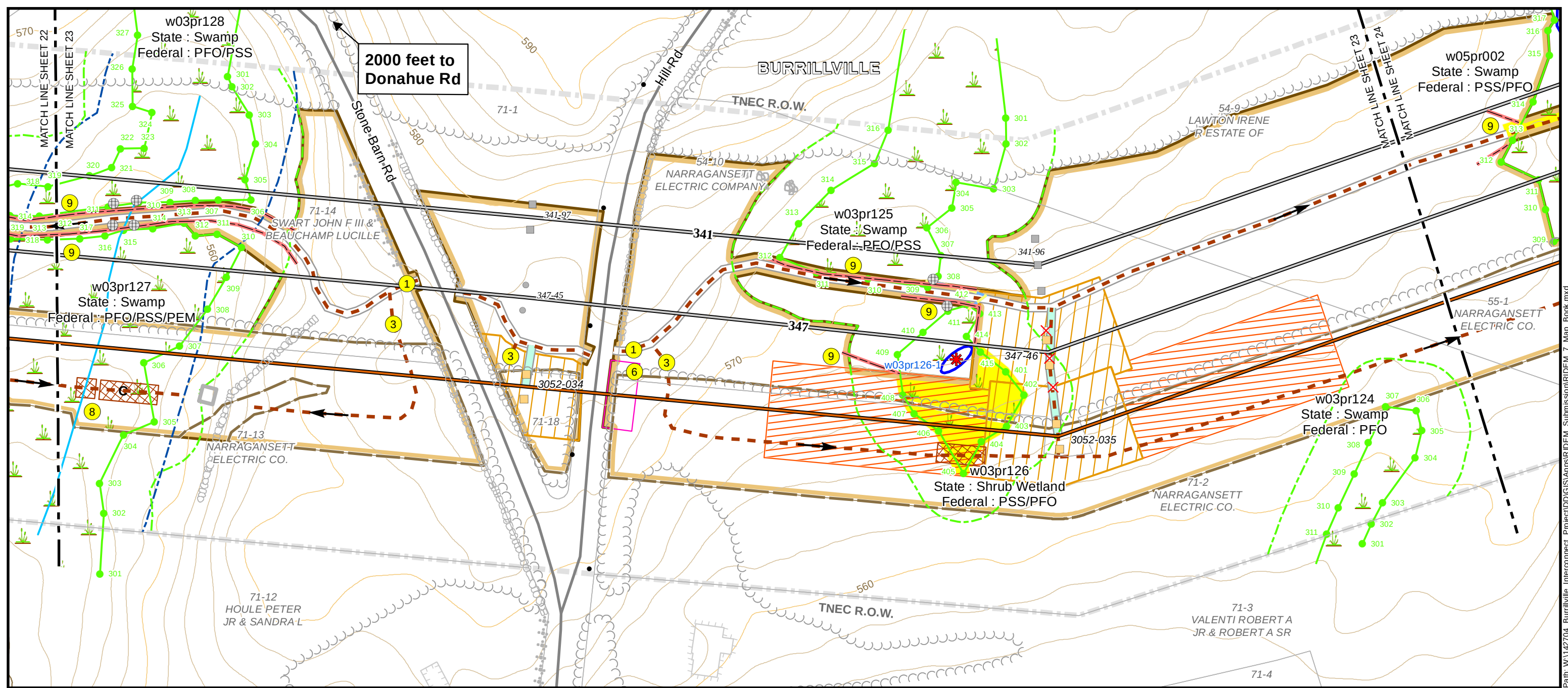
DRAWN: TDH

142704

RIDEM AND USACE PERMIT DRAWINGS
BURRILLVILLE, RHODE ISLAND

FIGURE T-3

SHEET 22 OF 63



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland
- Vernal Pool
- Vernal Pool Location
- Surveyed Floodplain
- FEMA Flood Hazard (DFIRM 100yr)
- Floodway
- Parcel Boundary
- Building
- Edge of Wooded
- Stone Feature
- Stone Grouping
- Stone Wall
- Major Index Contour (50' Interval)
- Index Contour (10' Interval)
- Contour (2' Interval)
- Protected Habitat
- Conservation Land

Proposed

- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access
- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance
- 1 Stabilized construction ingress/egress
- 2 Mud box / drill cutting box (see Erosion & Sediment Control General Notes)
- 3 Laydown or landing area
- 4 Stockpiling / staging area (see Erosion & Sediment Control General Notes)
- 5 Dewatering area (see Erosion & Sediment Control General Notes)
- 6 Concrete washout basin / testing area (see Erosion & Sediment Control General Notes)
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- 9 Perimeter soil erosion & sediment controls (see Erosion & Sediment Control General Notes)

- Notes:
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BURRILLVILLE INTERCONNECTION PROJECT
THE NARRAGANSETT ELECTRIC CO.
& CLEAR RIVER ENERY, LLC

RIDEM AND USACE PERMIT DRAWINGS
BURRILLVILLE, RHODE ISLAND

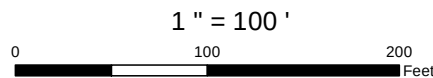
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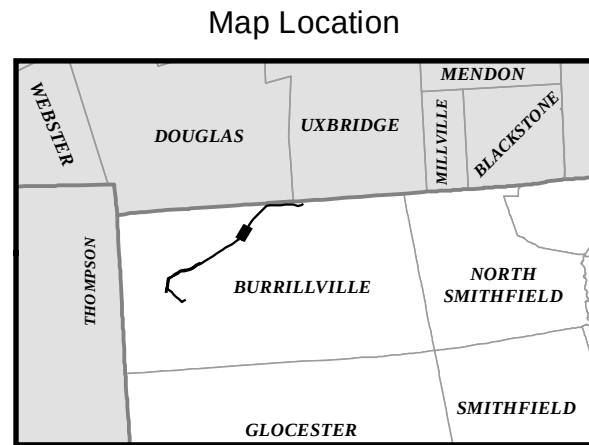
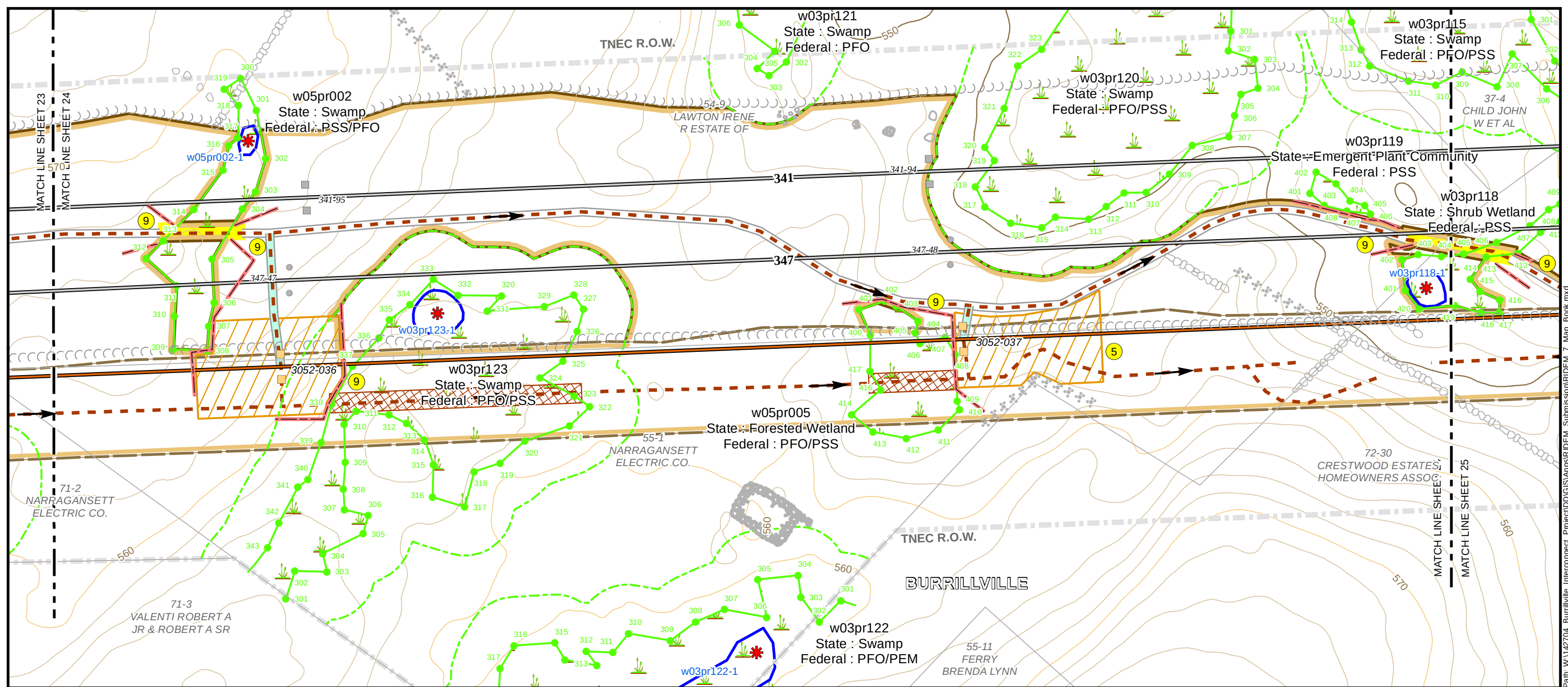
DRAWN: TDH

142704

FIGURE T-3

SHEET 23 OF 63





Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland

- Vernal Pool
- Vernal Pool Location
- Surveyed Floodplain FEMA Flood Hazard (DFIRM 100yr)
- Floodway
- Parcel Boundary
- Building
- Edge of Wooded
- Stone Feature
- Stone Grouping
- Stone Wall
- Major Index Contour (50' Interval)
- Index Contour (10' Interval)
- Contour (2' Interval)
- Protected Habitat
- Conservation Land

Proposed

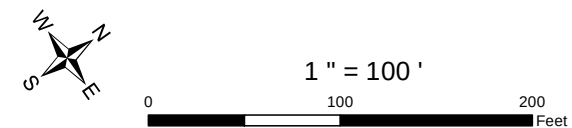
- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access

- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance

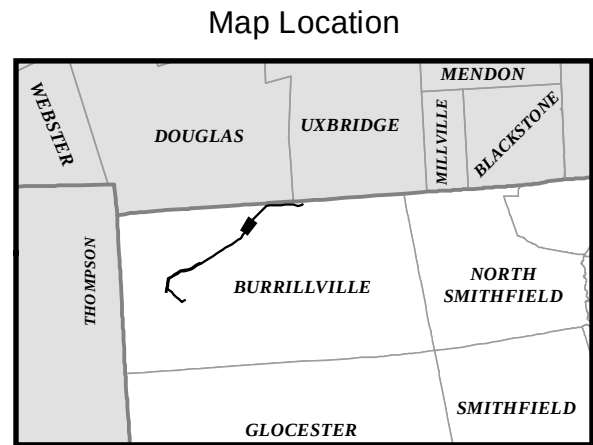
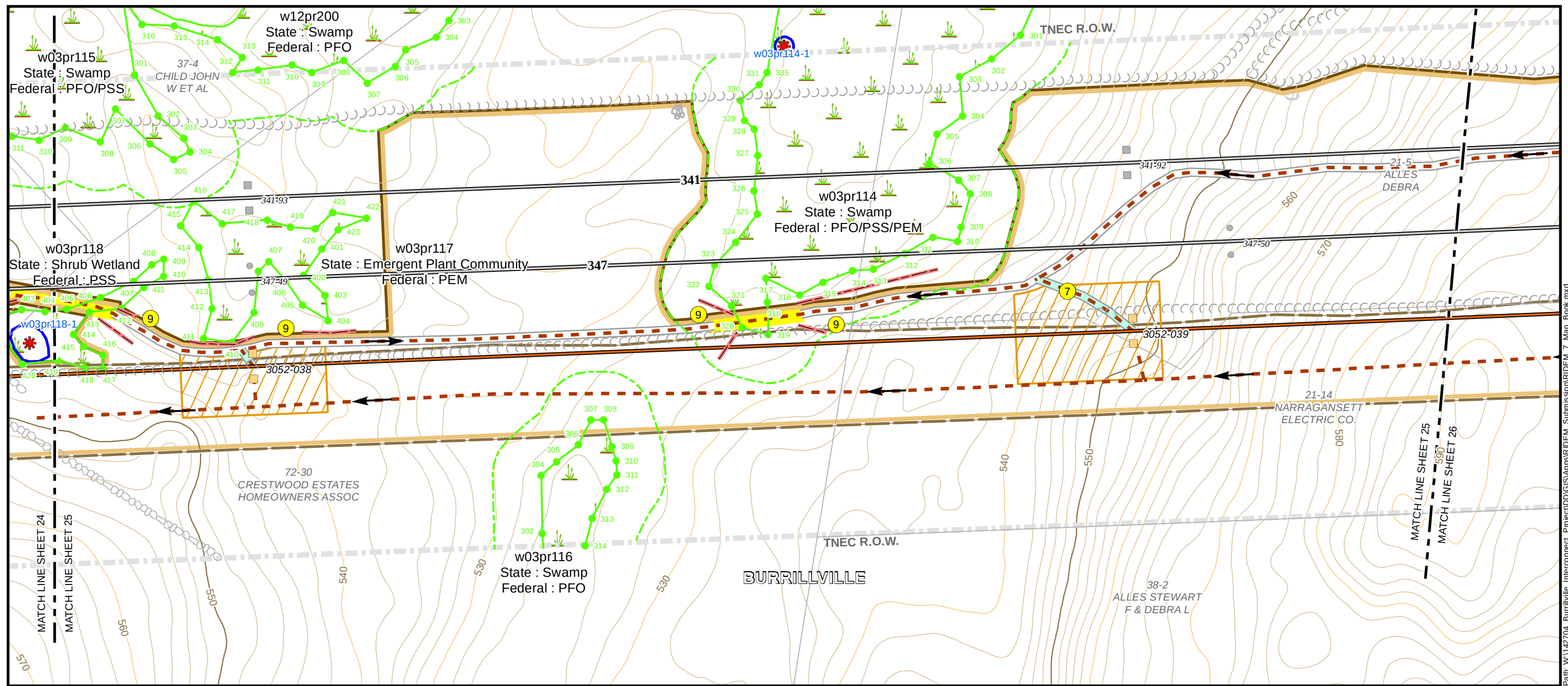
- 1 Stabilized construction ingress/egress
- 2 Mud box / drill cutting box (see Erosion & Sediment Control General Notes)
- 3 Laydown or landing area
- 4 Stockpiling / staging area (see Erosion & Sediment Control General Notes)
- 5 Dewatering area (see Erosion & Sediment Control General Notes)
- 6 Concrete washout basin / testing area (see Erosion & Sediment Control General Notes)

- 7 If access road grading required on steep terrain (exceeding 3:1 slope), water bars should be installed during road bed preparation
 - 8 Stream and ASSF crossings will be accomplished using one of the stream crossing techniques shown on the swamp mat details (mat bridge detail). Access road crossings and construction work pads will be elevated in such a manner to span the stream or ASSF and not obstruct the flow of water.
 - 9 Perimeter soil erosion & sediment controls (see Erosion & Sediment Control General Notes)
- Notes:
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BURRILLVILLE INTERCONNECTION PROJECT THE NARRAGANSETT ELECTRIC CO. & CLEAR RIVER ENERGY, LLC			RIDEM AND USACE PERMIT DRAWINGS BURRILLVILLE, RHODE ISLAND	
DATE: 3/24/2017	DRAWN: TDH	142704	FIGURE T-3	SHEET 24 OF 63



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland
- Vernal Pool
- Vernal Pool Location
- Surveyed Floodplain
- FEMA Flood Hazard (DFIRM 100yr)
- Floodway
- Parcel Boundary
- Building
- Edge of Wooded
- Stone Feature
- Stone Grouping
- Stone Wall
- Major Index Contour (50' Interval)
- Index Contour (10' Interval)
- Contour (2' Interval)
- Protected Habitat
- Conservation Land

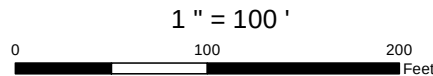
Proposed

- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access
- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance

- 1 Stabilized construction ingress/egress
- 2 Mud box / drill cutting box (see Erosion & Sediment Control General Notes)
- 3 Laydown or landing area
- 4 Stockpiling / staging area (see Erosion & Sediment Control General Notes)
- 5 Dewatering area (see Erosion & Sediment Control General Notes)
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NOT FOR CONSTRUCTION



BURRILLVILLE INTERCONNECTION PROJECT
THE NARRAGANSETT ELECTRIC CO.
& CLEAR RIVER ENERY, LLC

DATE: 3/24/2017

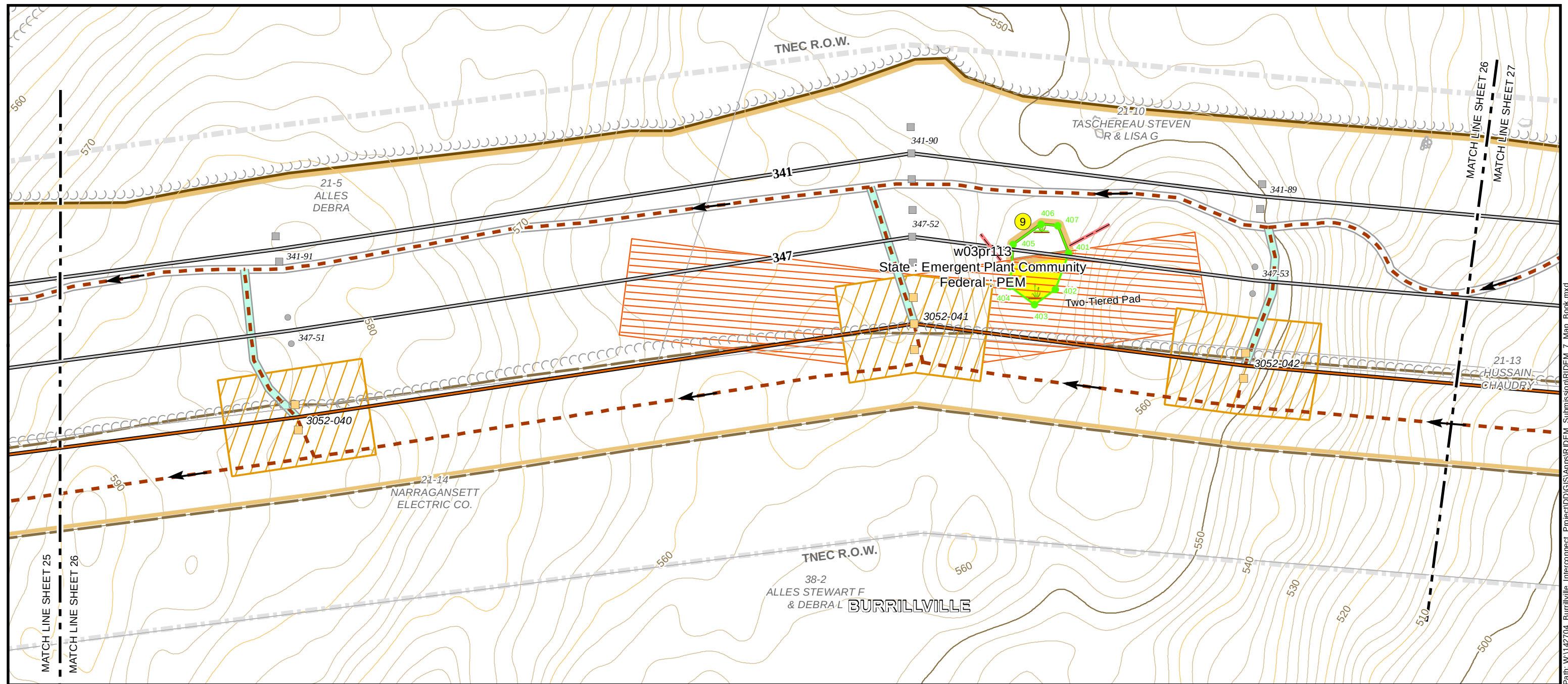
DRAWN: TDH

142704

RIDEM AND USACE PERMIT DRAWINGS
BURRILLVILLE, RHODE ISLAND

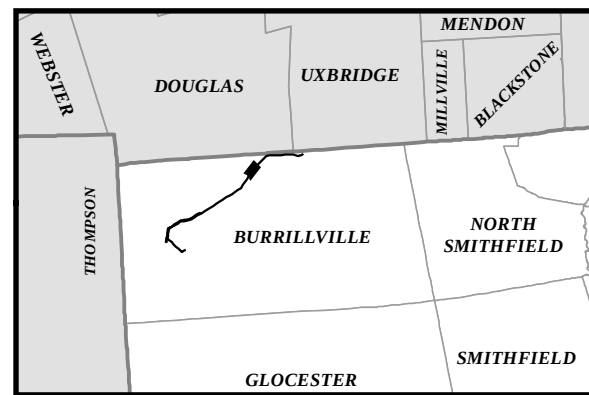
FIGURE T-3

SHEET 25 OF 63



Path: W:\142704- Burrillville Interconnect- Project\DDGIS\Map\RIDEM_Submission\RIDEM_7_Map_Book.mxd

Map Location



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland
- Vernal Pool
- Vernal Pool Location
- Surveyed Floodplain
- FEMA Flood Hazard (DFIRM 100yr)
- Floodway
- Parcel Boundary
- Building
- Edge of Wooded
- Stone Feature
- Stone Grouping
- Stone Wall
- Major Index Contour (50' Interval)
- Index Contour (10' Interval)
- Contour (2' Interval)
- Protected Habitat
- Conservation Land

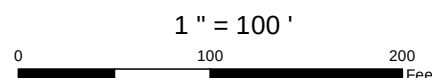
Proposed

- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access
- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance
- 1 Stabilized construction ingress/egress
- 2 Mud box / drill cutting box (see Erosion & Sediment Control General Notes)
- 3 Laydown or landing area
- 4 Stockpiling / staging area (see Erosion & Sediment Control General Notes)
- 5 Dewatering area (see Erosion & Sediment Control General Notes)
- 6 Concrete washout basin / testing area (see Erosion & Sediment Control General Notes)

- 7 If access road grading required on steep terrain (exceeding 3:1 slope), water bars should be installed during road bed preparation
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BURRILLVILLE INTERCONNECTION PROJECT
THE NARRAGANSETT ELECTRIC CO.
& CLEAR RIVER ENERY, LLC

DATE: 3/24/2017

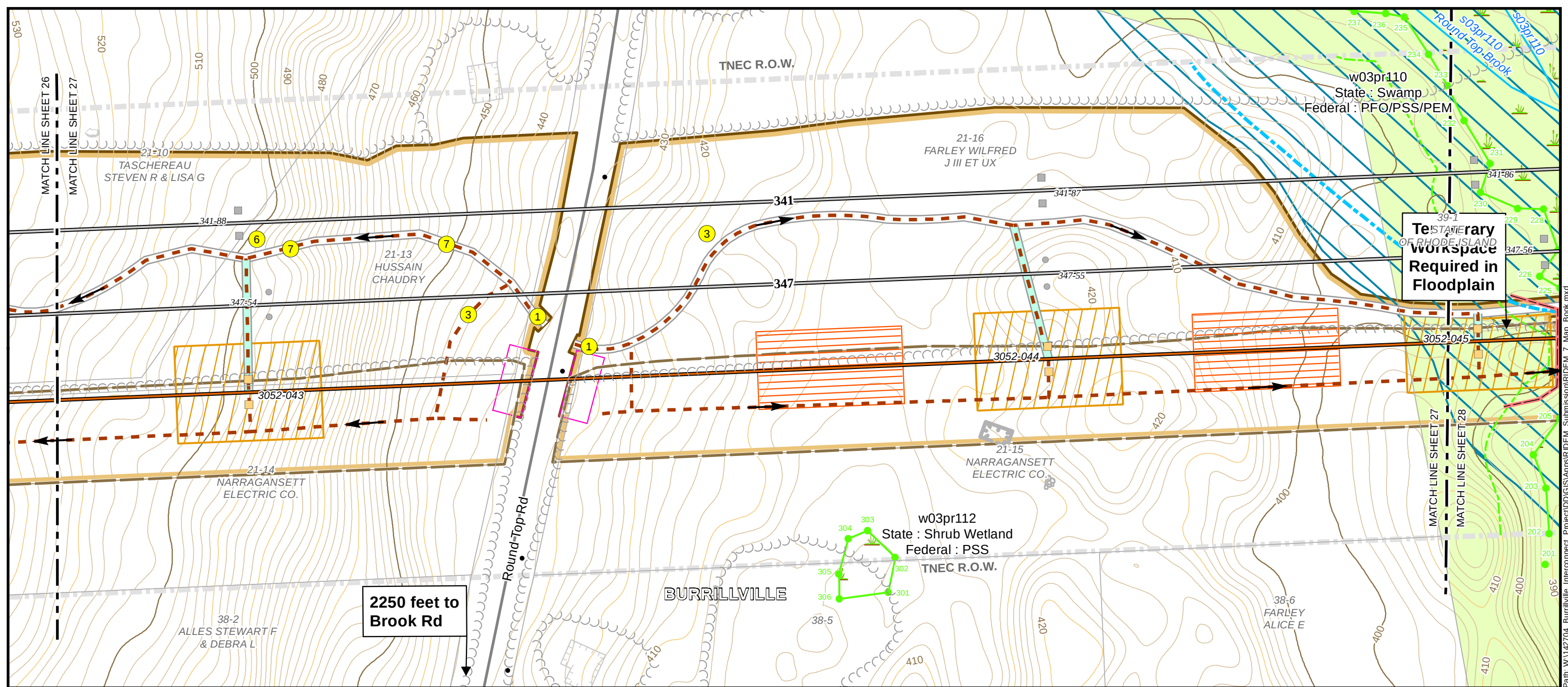
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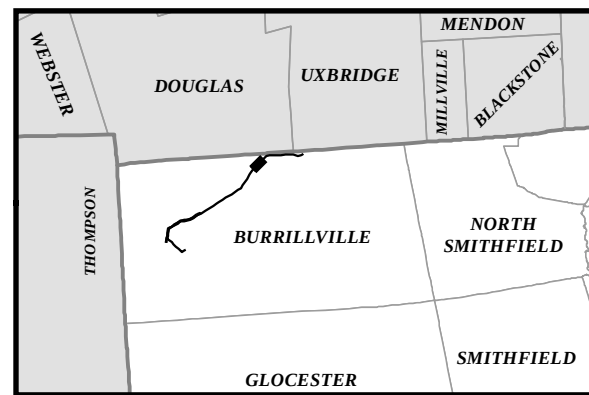
RIDEM AND USACE PERMIT DRAWINGS
BURRILLVILLE, RHODE ISLAND

FIGURE T-3

SHEET 26 OF 63



Map Location



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland

- Vernal Pool
- Vernal Pool Location
- Surveyed Floodplain
- FEMA Flood Hazard (DFIRM 100yr)
- Floodway
- Parcel Boundary
- Building
- Edge of Wooded
- Stone Feature
- Stone Grouping
- Stone Wall
- Major Index Contour (50' Interval)
- Index Contour (10' Interval)
- Contour (2' Interval)
- Protected Habitat
- Conservation Land

Proposed

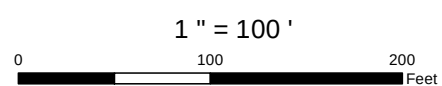
- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access

- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance

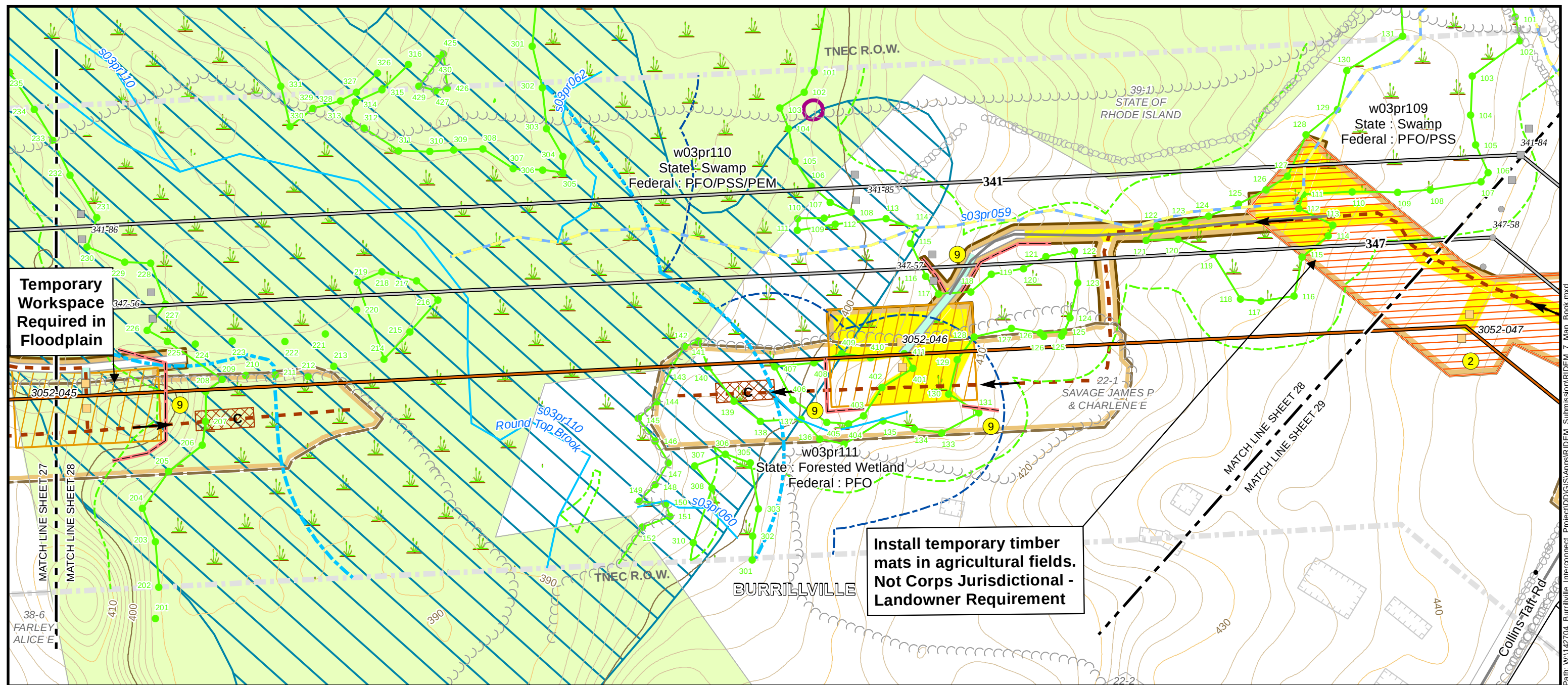
- 1 Stabilized construction ingress/egress
- 2 Mud box / drill cutting box (see Erosion & Sediment Control General Notes)
- 3 Laydown or landing area
- 4 Stockpiling / staging area (see Erosion & Sediment Control General Notes)
- 5 Dewatering area (see Erosion & Sediment Control General Notes)
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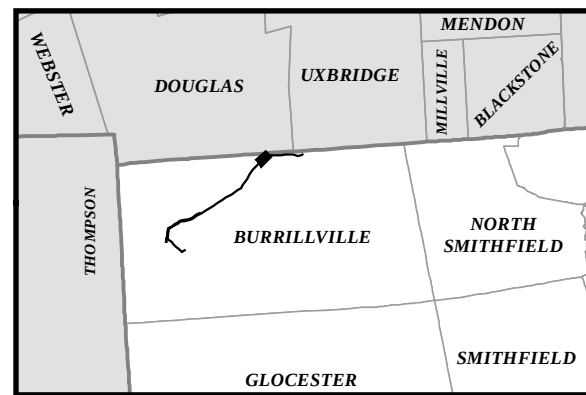
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BURRILLVILLE INTERCONNECTION PROJECT THE NARRAGANSETT ELECTRIC CO. & CLEAR RIVER ENERY, LLC			RIDEM AND USACE PERMIT DRAWINGS BURRILLVILLE, RHODE ISLAND	
DATE: 3/24/2017	DRAWN: TDH	142704	FIGURE T-3	SHEET 27 OF 63



Map Location



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland
- Vernal Pool
- Vernal Pool Location
- Surveyed Floodplain
- FEMA Flood Hazard (DFIRM 100yr)
- Floodway
- Parcel Boundary
- Building
- Edge of Wooded
- Stone Feature
- Stone Grouping
- Stone Wall
- Major Index Contour (50' Interval)
- Index Contour (10' Interval)
- Contour (2' Interval)
- Protected Habitat
- Conservation Land

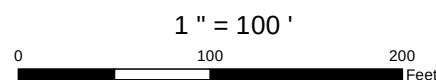
Proposed

- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access
- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance
- 1 Stabilized construction ingress/egress
- 2 Mud box / drill cutting box (see Erosion & Sediment Control General Notes)
- 3 Laydown or landing area
- 4 Stockpiling / staging area (see Erosion & Sediment Control General Notes)
- 5 Dewatering area (see Erosion & Sediment Control General Notes)
- 6 Concrete washout basin / testing area (see Erosion & Sediment Control General Notes)

- 7 If access road grading required on steep terrain (exceeding 3:1 slope), water bars should be installed during road bed preparation
 - 8 Stream and ASSF crossings will be accomplished using one of the stream crossing techniques shown on the swamp mat details (mat bridge detail). Access road crossings and construction work pads will be elevated in such a manner to span the stream or ASSF and not obstruct the flow of water.
 - 9 Perimeter soil erosion & sediment controls (see Erosion & Sediment Control General Notes)
- Notes:
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 - Rhode Island PE Seal 9008 is applicable only to the proposed transmission structure locations shown.
 - Proposed transmission structure locations are approximate.

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BURRILLVILLE INTERCONNECTION PROJECT
THE NARRAGANSETT ELECTRIC CO.
& CLEAR RIVER ENERGY, LLC

DATE: 3/24/2017

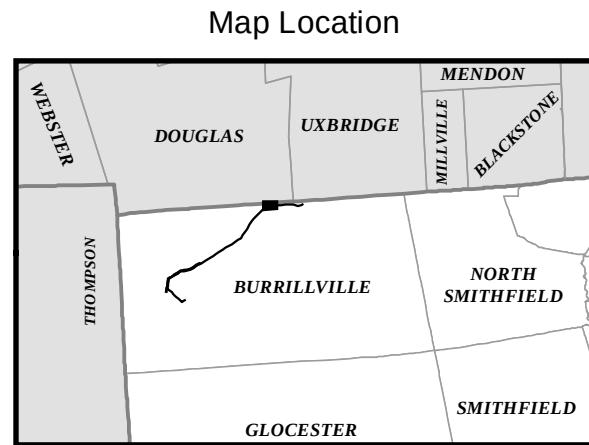
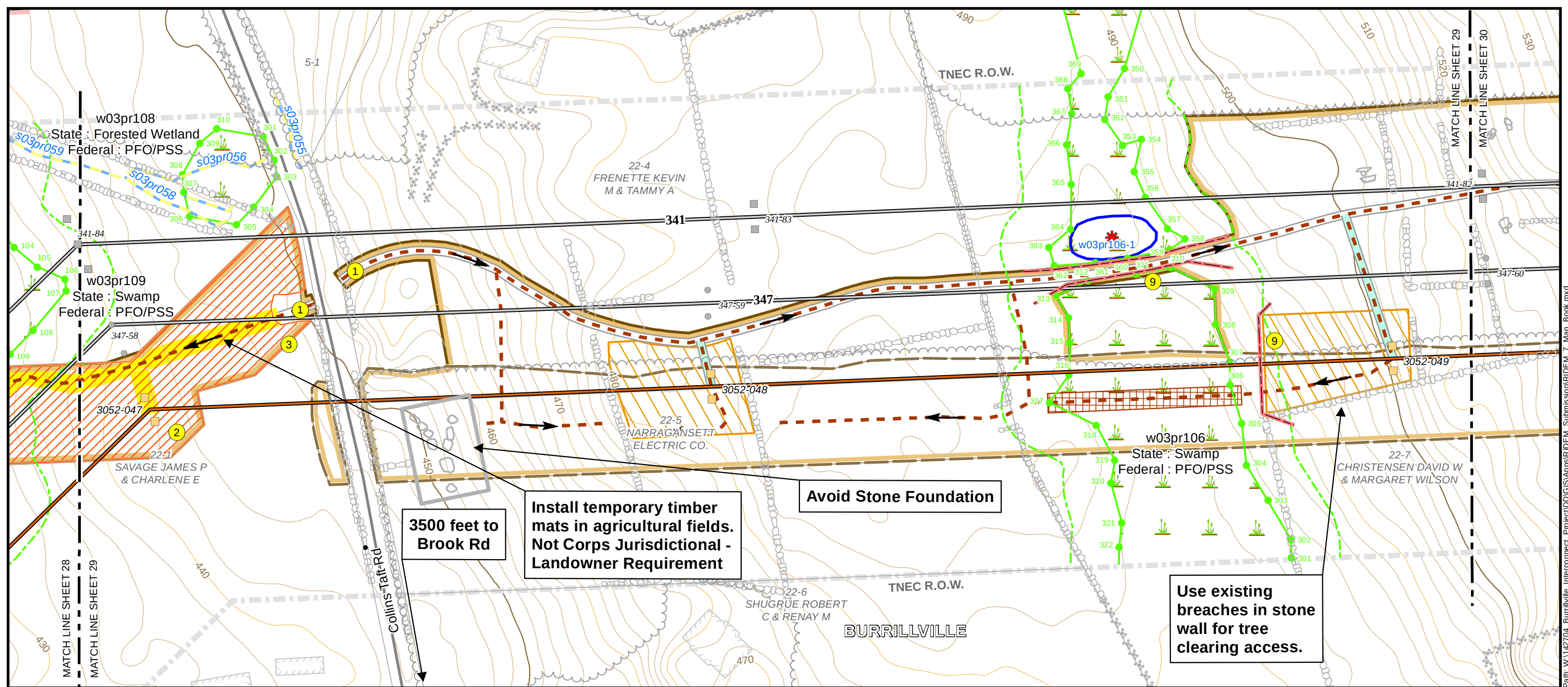
DRAWN: TDH

142704

RIDEM AND USACE PERMIT DRAWINGS
BURRILLVILLE, RHODE ISLAND

FIGURE T-3

SHEET 28 OF 63



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland

Proposed

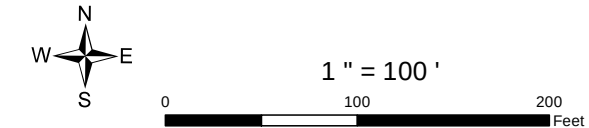
- Vernal Pool
- Vernal Pool Location
- Surveyed Floodplain
- FEMA Flood Hazard (DFIRM 100yr)
- Floodway
- Parcel Boundary
- Building
- Edge of Wooded
- Stone Feature
- Stone Grouping
- Stone Wall
- Major Index Contour (50' Interval)
- Index Contour (10' Interval)
- Contour (2' Interval)
- Protected Habitat
- Conservation Land
- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access

Proposed

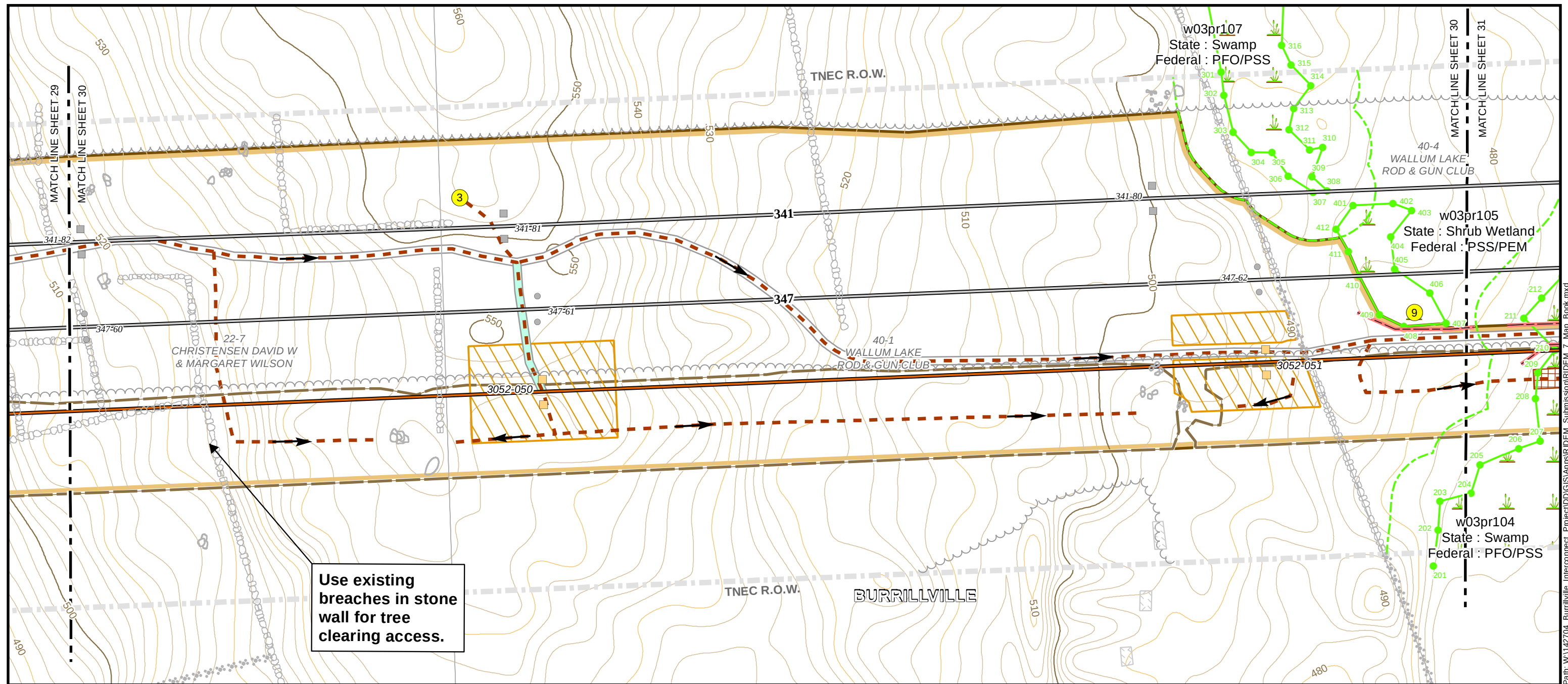
- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance

- 1 Stabilized construction ingress/egress
- 2 Mud box / drill cutting box (see Erosion & Sediment Control General Notes)
- 3 Laydown or landing area
- 4 Stockpiling / staging area (see Erosion & Sediment Control General Notes)
- 5 Dewatering area (see Erosion & Sediment Control General Notes)
- 6 Concrete washout basin / testing area (see Erosion & Sediment Control General Notes)

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- Notes:
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- Proposed transmission structure locations are approximate.

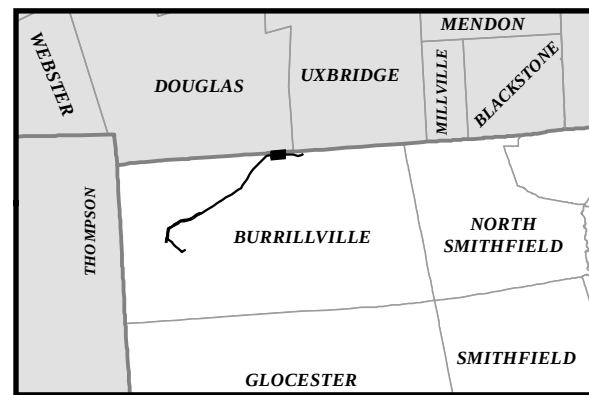


BURRILLVILLE INTERCONNECTION PROJECT THE NARRAGANSETT ELECTRIC CO. & CLEAR RIVER ENERY, LLC			RIDEM AND USACE PERMIT DRAWINGS BURRILLVILLE, RHODE ISLAND	
DATE: 3/24/2017	DRAWN: TDH	142704	FIGURE T-3	SHEET 29 OF 63



Use existing
breaches in stone
wall for tree
clearing access.

Map Location



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland
- Vernal Pool
- Vernal Pool Location
- Surveyed Floodplain
- FEMA Flood Hazard (DFIRM 100yr)
- Floodway
- Parcel Boundary
- Building
- Edge of Wooded
- Stone Feature
- Stone Grouping
- Stone Wall
- Major Index Contour (50' Interval)
- Index Contour (10' Interval)
- Contour (2' Interval)
- Protected Habitat
- Conservation Land

Proposed

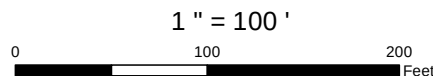
- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access
- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance

- 1 Stabilized construction ingress/egress
- 2 Mud box / drill cutting box (see Erosion & Sediment Control General Notes)
- 3 Laydown or landing area
- 4 Stockpiling / staging area (see Erosion & Sediment Control General Notes)
- 5 Dewatering area (see Erosion & Sediment Control General Notes)
- 6 Concrete washout basin / testing area (see Erosion & Sediment Control General Notes)

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 - 8 Stream and ASSF crossings will be accomplished using one of the stream crossing techniques shown on the swamp mat details (mat bridge detail). Access road crossings and construction work pads will be elevated in such a manner to span the stream or ASSF and not obstruct the flow of water.
 - 9 Perimeter soil erosion & sediment controls (see Erosion & Sediment Control General Notes)
- Notes:
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 - Proposed transmission structure locations are approximate.

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BURRILLVILLE INTERCONNECTION PROJECT
THE NARRAGANSETT ELECTRIC CO.
& CLEAR RIVER ENERY, LLC

DATE: 3/24/2017

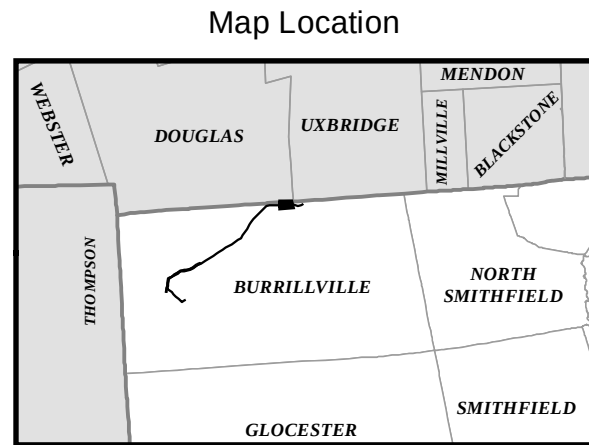
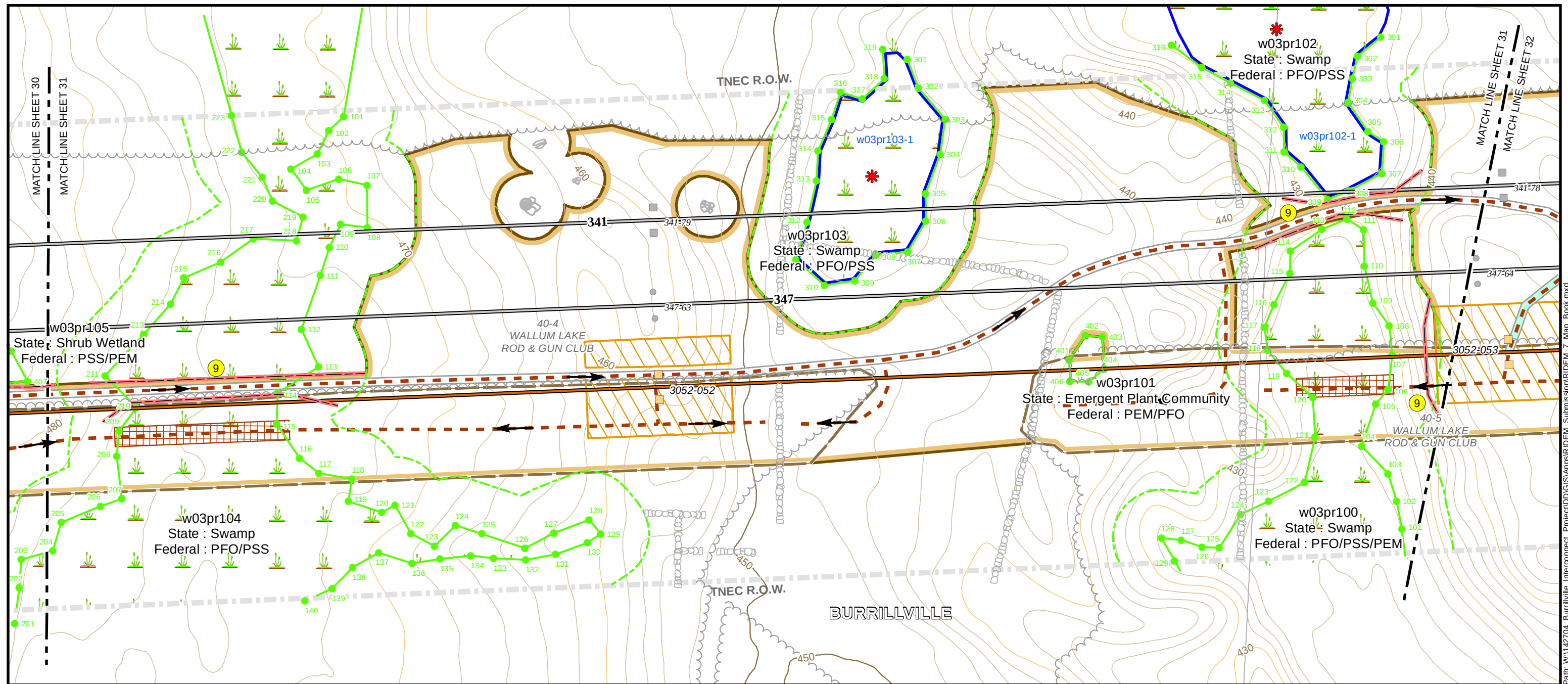
DRAWN: TDH

142704

RIDEM AND USACE PERMIT DRAWINGS
BURRILLVILLE, RHODE ISLAND

FIGURE T-3

SHEET 30 OF 63



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland

- Vernal Pool
- Vernal Pool Location
- Surveyed Floodplain
- FEMA Flood Hazard (DFIRM 100yr)
- Floodway
- Parcel Boundary
- Building
- Edge of Wooded
- Stone Feature
- Stone Grouping
- Stone Wall
- Major Index Contour (50' Interval)
- Index Contour (10' Interval)
- Contour (2' Interval)
- Protected Habitat
- Conservation Land

Proposed

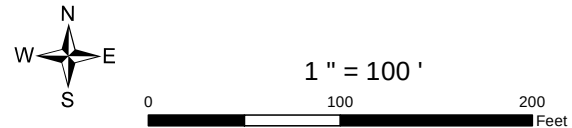
- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access

- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance

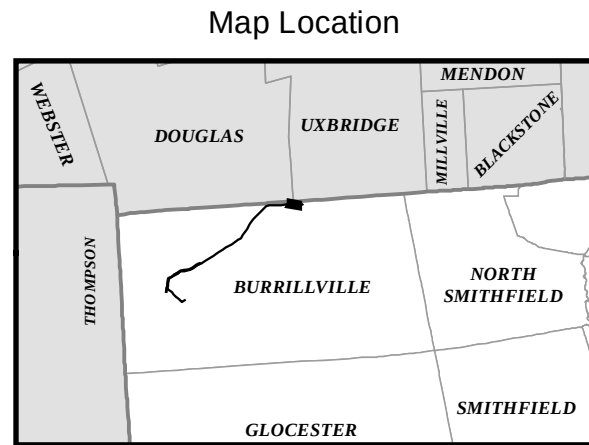
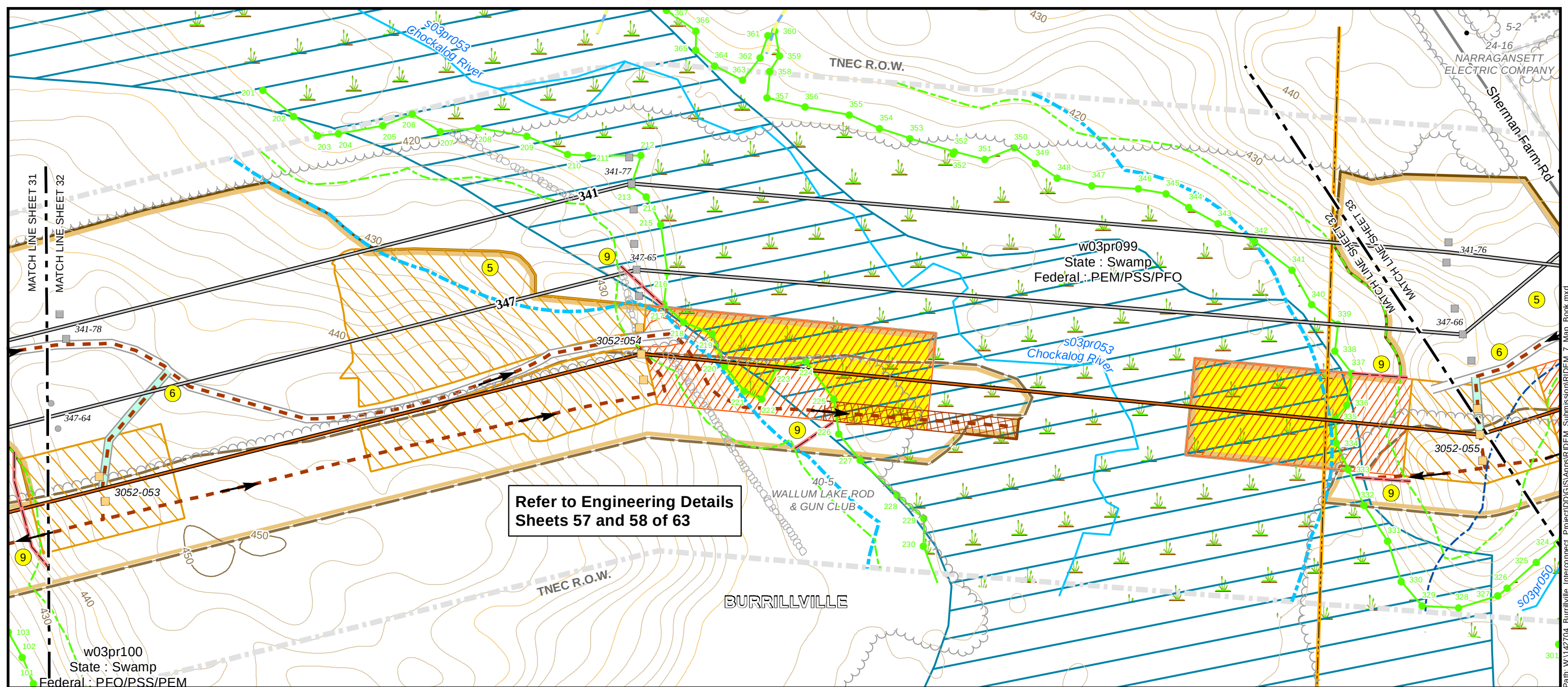
- 1 Stabilized construction ingress/egress
- 2 Mud box / drill cutting box (see Erosion & Sediment Control General Notes)
- 3 Laydown or landing area
- 4 Stockpiling / staging area (see Erosion & Sediment Control General Notes)
- 5 Dewatering area (see Erosion & Sediment Control General Notes)
- 6 Concrete washout basin / testing area (see Erosion & Sediment Control General Notes)

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NOT FOR CONSTRUCTION



BURRILLVILLE INTERCONNECTION PROJECT THE NARRAGANSETT ELECTRIC CO. & CLEAR RIVER ENERY, LLC			RIDEM AND USACE PERMIT DRAWINGS BURRILLVILLE, RHODE ISLAND	
DATE: 3/24/2017	DRAWN: TDH	142704	FIGURE T-3	SHEET 31 OF 63



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland

- Vernal Pool
- Vernal Pool Location
- Surveyed Floodplain
- FEMA Flood Hazard (DFIRM 100yr)
- Floodway
- Parcel Boundary
- Building
- Edge of Wooded
- Stone Feature
- Stone Grouping
- Stone Wall
- Major Index Contour (50' Interval)
- Index Contour (10' Interval)
- Contour (2' Interval)
- Protected Habitat
- Conservation Land

Proposed

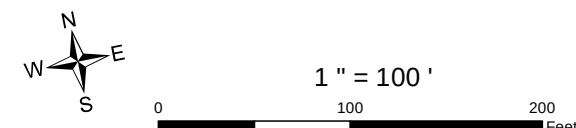
- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access

- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance

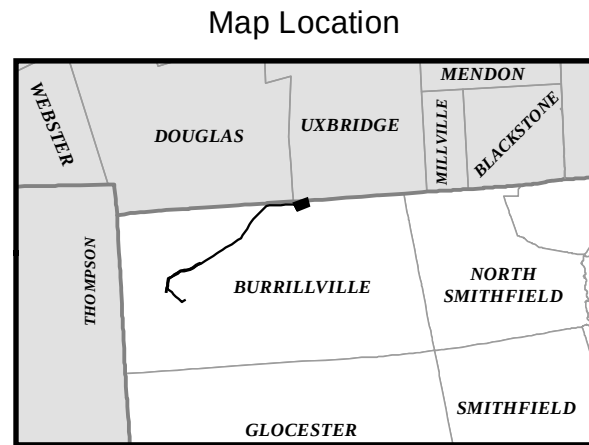
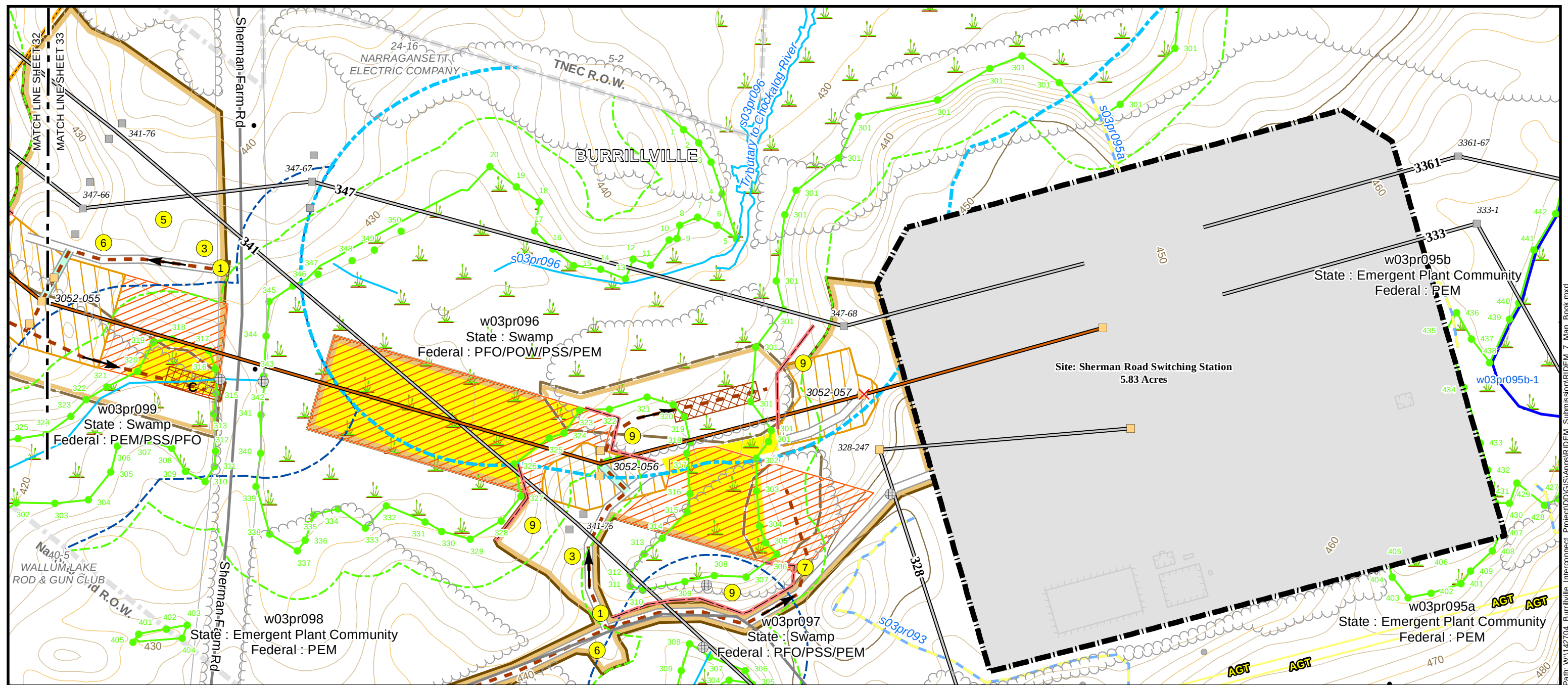
- 1 Stabilized construction ingress/egress
- 2 Mud box / drill cutting box (see Erosion & Sediment Control General Notes)
- 3 Laydown or landing area
- 4 Stockpiling / staging area (see Erosion & Sediment Control General Notes)
- 5 Dewatering area (see Erosion & Sediment Control General Notes)
- 6 Concrete washout basin / testing area (see Erosion & Sediment Control General Notes)

- 7 If access road grading required on steep terrain (exceeding 3:1 slope), water bars should be installed during road bed preparation
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- Notes:
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NOT FOR CONSTRUCTION



BURRILLVILLE INTERCONNECTION PROJECT THE NARRAGANSETT ELECTRIC CO. & CLEAR RIVER ENERY, LLC			RIDEM AND USACE PERMIT DRAWINGS BURRILLVILLE, RHODE ISLAND	
DATE: 3/24/2017	DRAWN: TDH	142704	FIGURE T-3	SHEET 32 OF 63



Existing Conditions

- Existing Steel Pole
- Existing Wood Pole
- Wood Distribution Pole
- Existing Transmission Line
- Natural Gas Pipeline
- AT&T Fiber Optic Line
- Existing Power Facility
- Existing Road
- Existing Right of Way
- Existing Culvert or Stream Ford
- Watercourse
- Area Subject to Storm Flowage (ASSF)
- 100' Riverbank Buffer
- 200' Riverbank Buffer
- Wetland Flag
- Field Delineated Wetland
- 50' Perimeter Wetland

Proposed

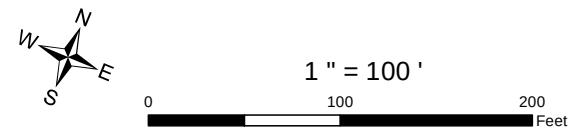
- Proposed or Reused Steel Pole
- Steel Pole to be Removed
- Proposed Wood Pole
- Wood Pole to be Removed
- Proposed 345 kV Transmission Line
- Replaced 345 kV Transmission Line
- Proposed Clear River Switching Station
- Proposed Culvert or Stream Ford
- Proposed New Right-of-Way
- Use Existing Access
- Improve Existing Road
- Construct New Access

- Tree Clearing Access
- Perimeter Sediment Control
- Limit of Tree Clearing
- Swamp Mat (Construction)
- Road Crossing Guard
- Swamp Mat (Tree Clearing)
- Tree Clearing Cluster Mat
- Wire Pulling Station
- Work Pad /
- Limit of Disturbance

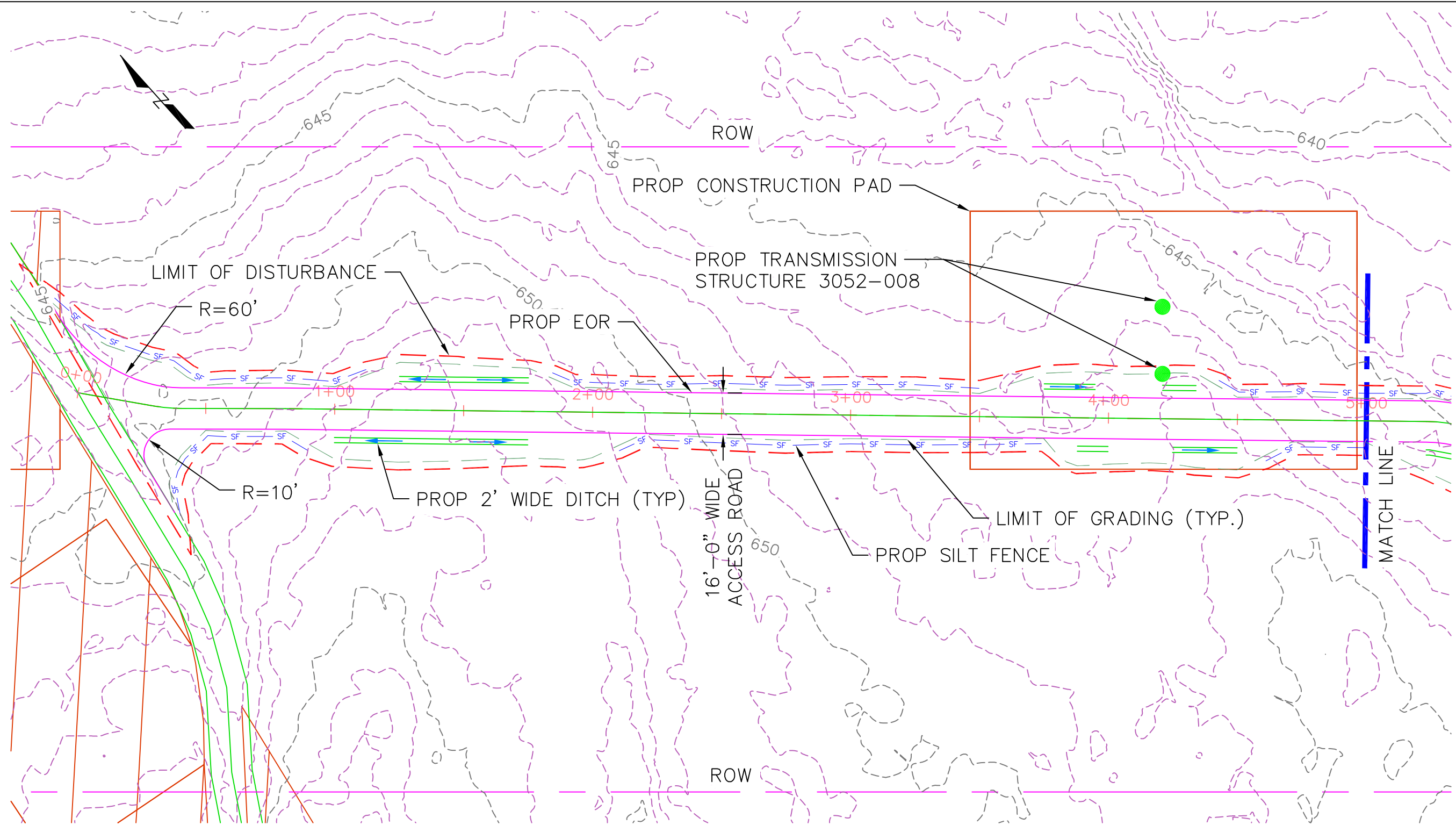
- 1 Stabilized construction ingress/egress
- 2 Mud box / drill cutting box (see Erosion & Sediment Control General Notes)
- 3 Laydown or landing area
- 4 Stockpiling / staging area (see Erosion & Sediment Control General Notes)
- 5 Dewatering area (see Erosion & Sediment Control General Notes)
- 6 Concrete washout basin / testing area (see Erosion & Sediment Control General Notes)

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 - 8
 - 9 Perimeter soil erosion & sediment controls (see Erosion & Sediment Control General Notes)
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NOT FOR CONSTRUCTION



BURRILLVILLE INTERCONNECTION PROJECT THE NARRAGANSETT ELECTRIC CO. & CLEAR RIVER ENERGY, LLC			RIDEM AND USACE PERMIT DRAWINGS BURRILLVILLE, RHODE ISLAND	
DATE: 3/24/2017	DRAWN: TDH	142704	FIGURE T-3	SHEET 33 OF 63



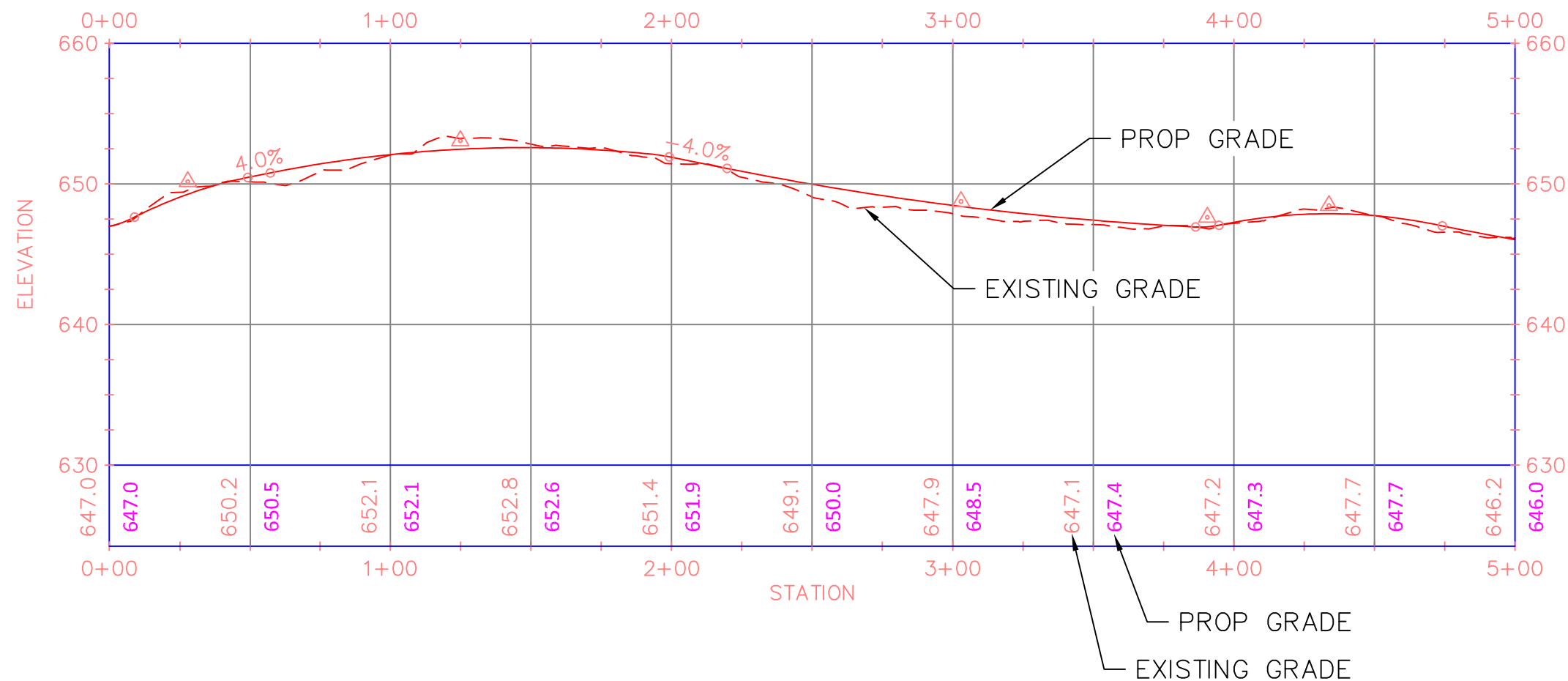
ROAD PLAN STATION 0+00 TO 5+00
SCALE: 1"=40'



NOTE: THE LIMITS OF GRADING SHOWN ON THE PLANS ARE APPROXIMATE AND MAY NEED TO BE ADJUSTED BASED ON FIELD CONDITIONS. EXISTING GRADES ARE BASED OFF LIDAR SURVEY. LIMITS OF ROW SHOWN ARE APPROXIMATE. RHODE ISLAND PE SEAL 9008 IS APPLICABLE ONLY TO THE PROPOSED TRANSMISSION STRUCTURE LOCATIONS SHOWN. PROPOSED TRANSMISSION STRUCTURE LOCATIONS ARE APPROXIMATE.

RHODE ISLAND PE SEAL 8879 IS APPLICABLE ONLY TO THE PROPOSED SITEWORK AND ESC MEASURES.

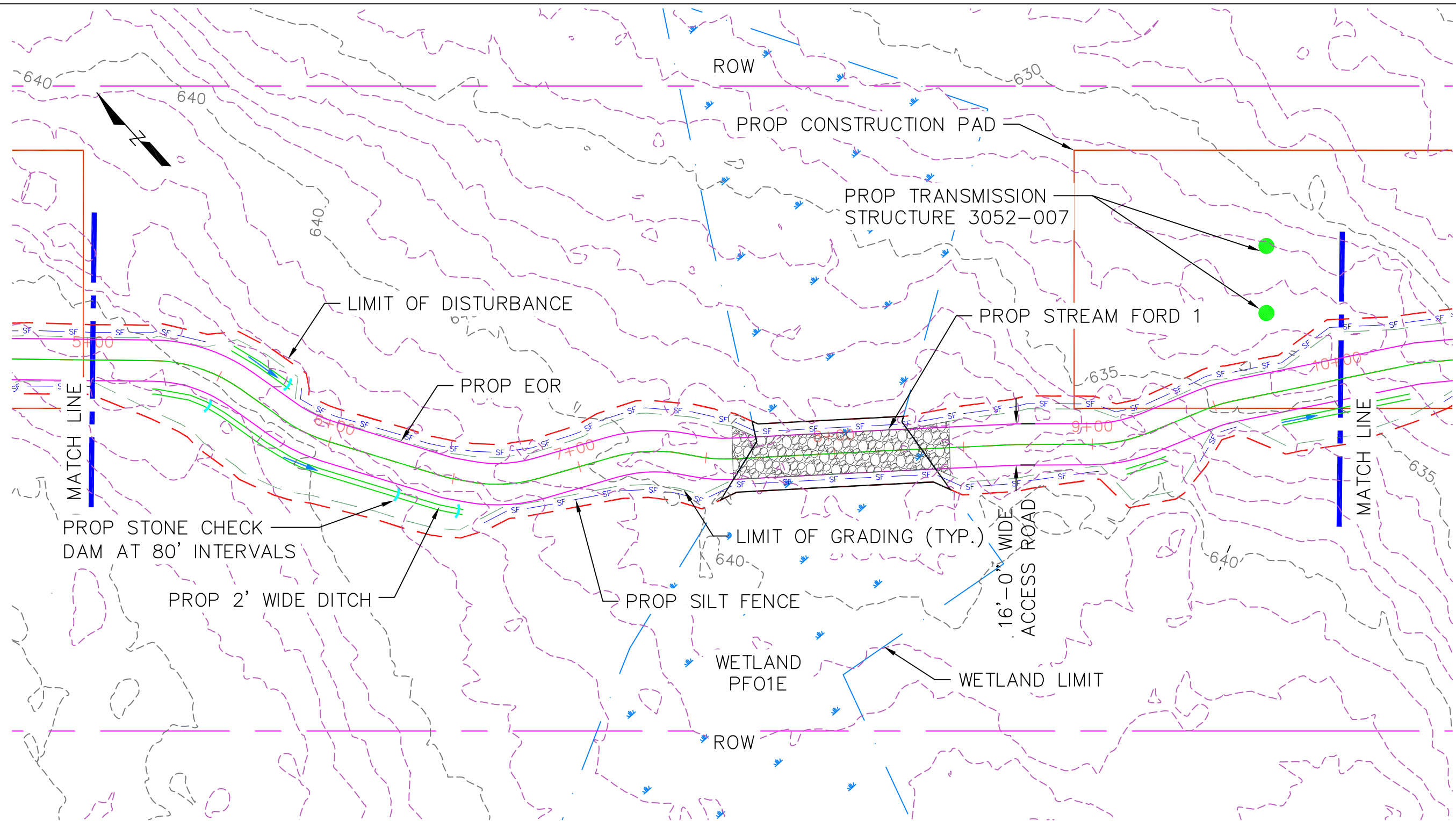
NOT FOR CONSTRUCTION



ROAD PROFILE STATION 0+00 TO 5+00
 HORIZ. SCALE: 1"=50'
 VERT. SCALE: 1"=10'

RHODE ISLAND PE SEAL 8879 IS APPLICABLE ONLY
 TO THE PROPOSED SITEWORK AND ESC MEASURES.

NOT FOR CONSTRUCTION



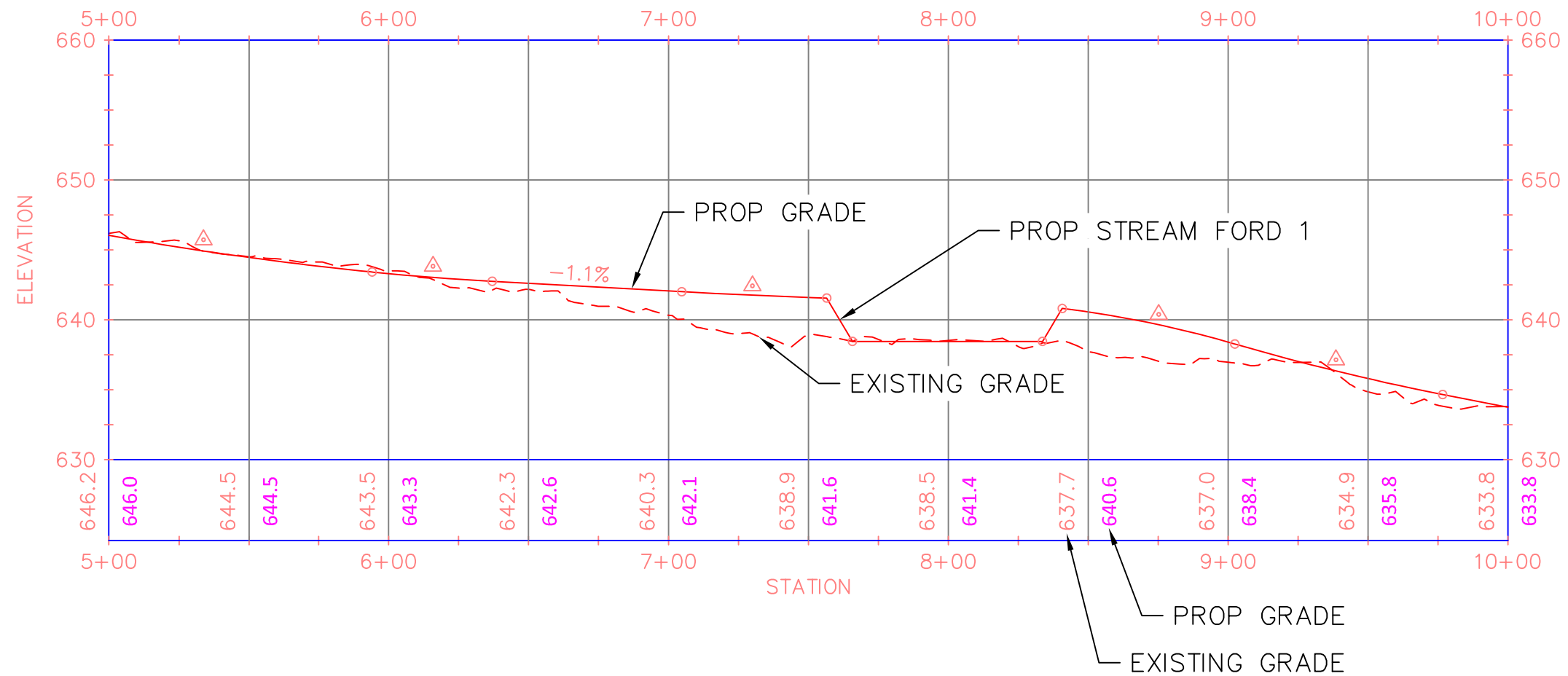
ROAD PLAN STATION 5+00 TO 10+00
SCALE: 1"=40'



NOTE: THE LIMITS OF GRADING SHOWN ON THE PLANS ARE APPROXIMATE AND MAY NEED TO BE ADJUSTED BASED ON FIELD CONDITIONS. EXISTING GRADES ARE BASED OFF LIDAR SURVEY. LIMITS OF ROW SHOWN ARE APPROXIMATE. RHODE ISLAND PE SEAL 9008 IS APPLICABLE ONLY TO THE PROPOSED TRANSMISSION STRUCTURE LOCATIONS SHOWN. PROPOSED TRANSMISSION STRUCTURE LOCATIONS ARE APPROXIMATE.

RHODE ISLAND PE SEAL 8879 IS APPLICABLE ONLY TO THE PROPOSED SITEWORK AND ESC MEASURES.

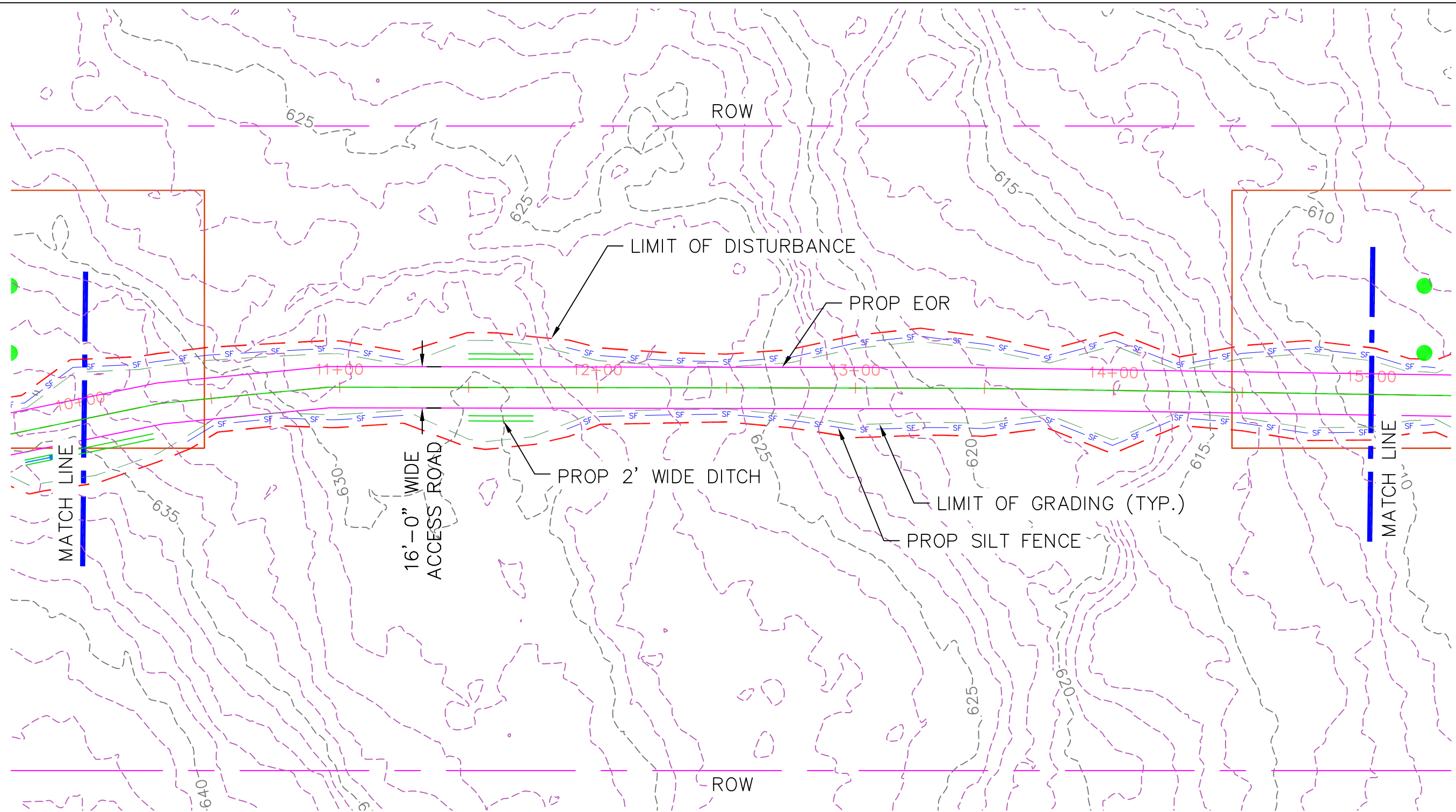
NOT FOR CONSTRUCTION



ROAD PROFILE STATION 5+00 TO 10+00
 HORIZ. SCALE: 1"=50'
 VERT. SCALE: 1"=10'

RHODE ISLAND PE SEAL 8879 IS APPLICABLE ONLY
 TO THE PROPOSED SITEWORK AND ESC MEASURES.

NOT FOR CONSTRUCTION



ROAD PLAN STATION 10+00 TO 15+00
SCALE: 1"=40'



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NOTE: THE LIMITS OF GRADING SHOWN ON THE PLANS ARE APPROXIMATE AND MAY NEED TO BE ADJUSTED BASED ON FIELD CONDITIONS. EXISTING GRADES ARE BASED OFF LIDAR SURVEY. LIMITS OF ROW SHOWN ARE APPROXIMATE. RHODE ISLAND PE SEAL 9008 IS APPLICABLE ONLY TO THE PROPOSED TRANSMISSION STRUCTURE LOCATIONS SHOWN. PROPOSED TRANSMISSION STRUCTURE LOCATIONS ARE APPROXIMATE.

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NOT FOR CONSTRUCTION

BURRILLVILLE INTERCONNECTION PROJECT
THE NARRAGANSETT ELECTRIC CO.
& CLEAR RIVER ENERGY, LLC

RIDEM AND USACE PERMIT DRAWINGS
PROPOSED ACCESS ROAD
BURRILLVILLE, RHODE ISLAND

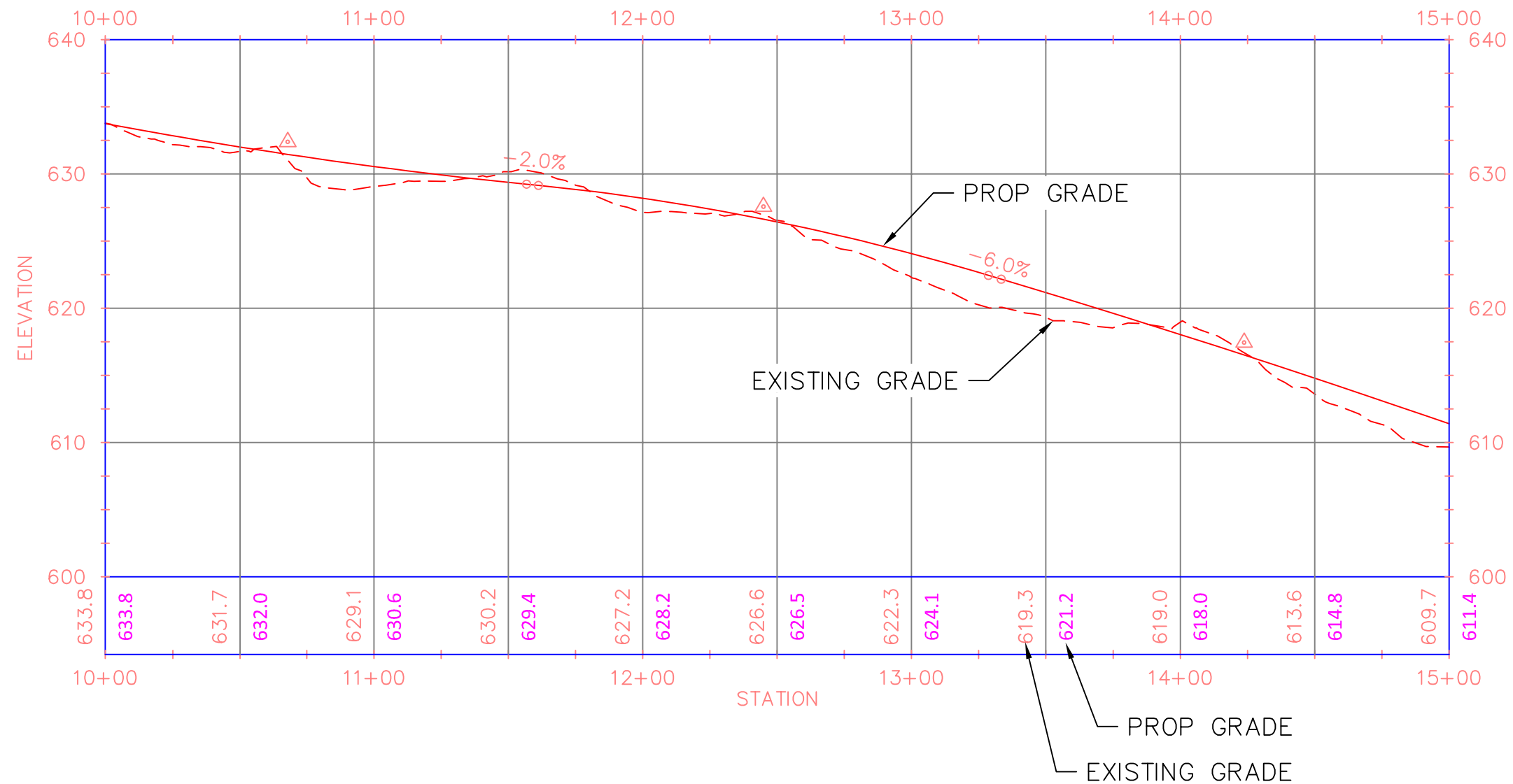
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DRAWN: RST

142704

FIGURE T-4

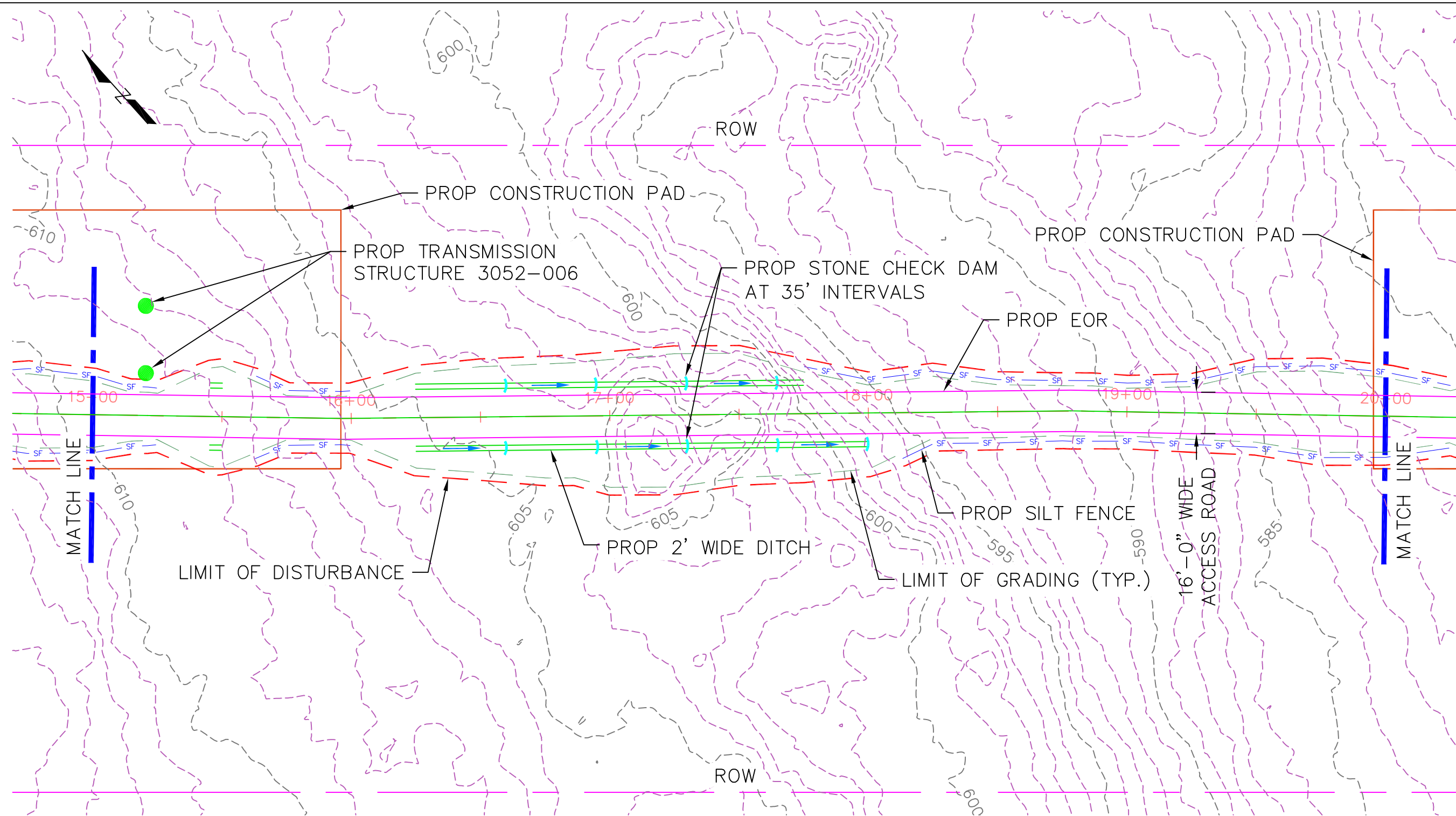
SHEET 38 OF 63



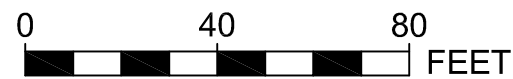
ROAD PROFILE STATION 10+00 TO 15+00
 HORIZ. SCALE: 1"=50'
 VERT. SCALE: 1"=10'

RHODE ISLAND PE SEAL 8879 IS APPLICABLE ONLY TO THE PROPOSED SITEWORK AND ESC MEASURES.

NOT FOR CONSTRUCTION



ROAD PLAN STATION 15+00 TO 20+00
SCALE: 1"=40'



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NOTE: THE LIMITS OF GRADING SHOWN ON THE PLANS ARE APPROXIMATE AND MAY NEED TO BE ADJUSTED BASED ON FIELD CONDITIONS. EXISTING GRADES ARE BASED OFF LIDAR SURVEY. LIMITS OF ROW SHOWN ARE APPROXIMATE. RHODE ISLAND PE SEAL 9008 IS APPLICABLE ONLY TO THE PROPOSED TRANSMISSION STRUCTURE LOCATIONS SHOWN. PROPOSED TRANSMISSION STRUCTURE LOCATIONS ARE APPROXIMATE.

RHODE ISLAND PE SEAL 8879 IS APPLICABLE ONLY TO THE PROPOSED SITEWORK AND ESC MEASURES.

NOT FOR CONSTRUCTION

BURRILLVILLE INTERCONNECTION PROJECT
THE NARRAGANSETT ELECTRIC CO.
& CLEAR RIVER ENERGY, LLC

RIDEM AND USACE PERMIT DRAWINGS
PROPOSED ACCESS ROAD
BURRILLVILLE, RHODE ISLAND

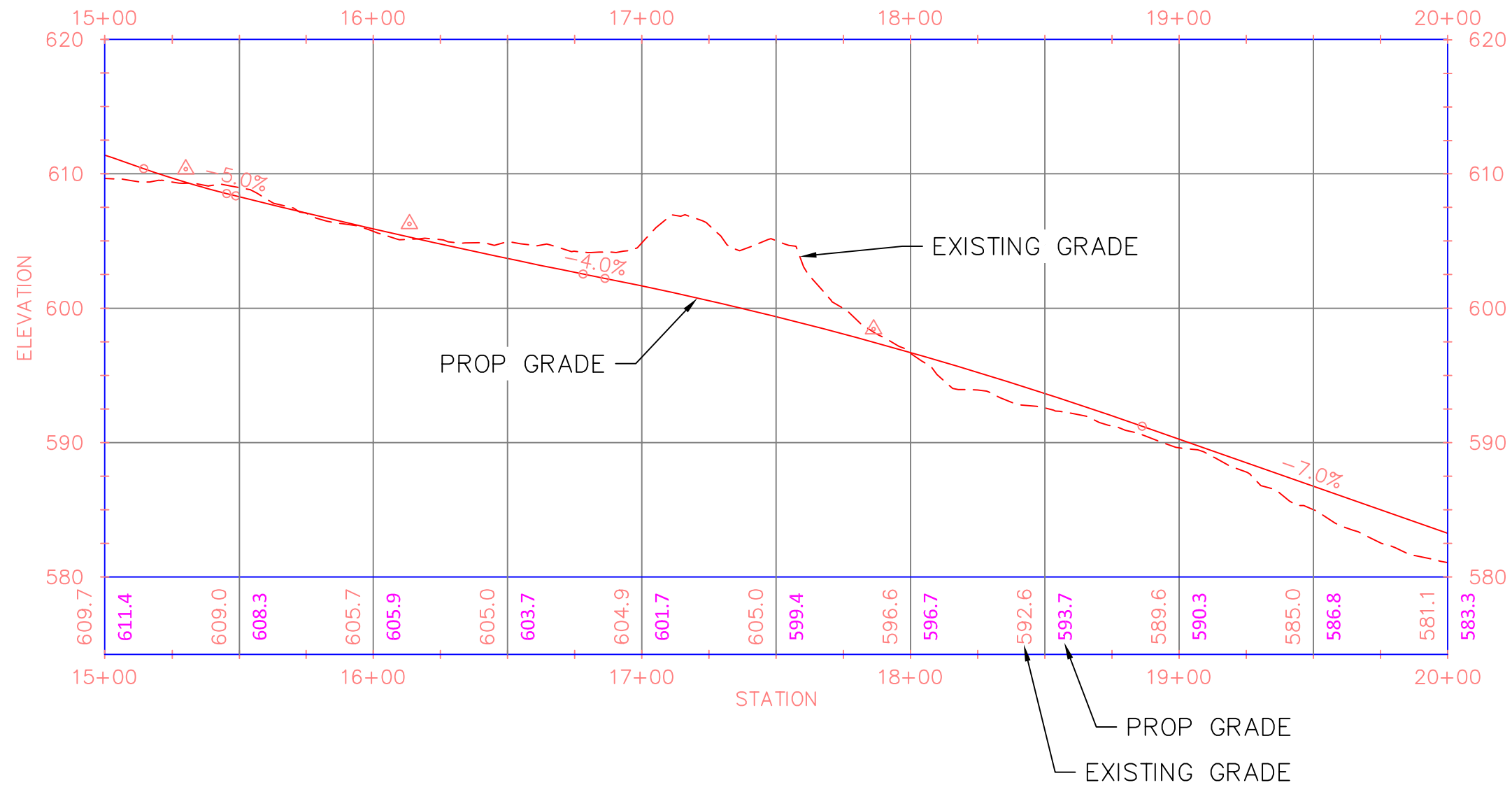
DATE: 3/22/2017

DRAWN: RST

142704

FIGURE T-4

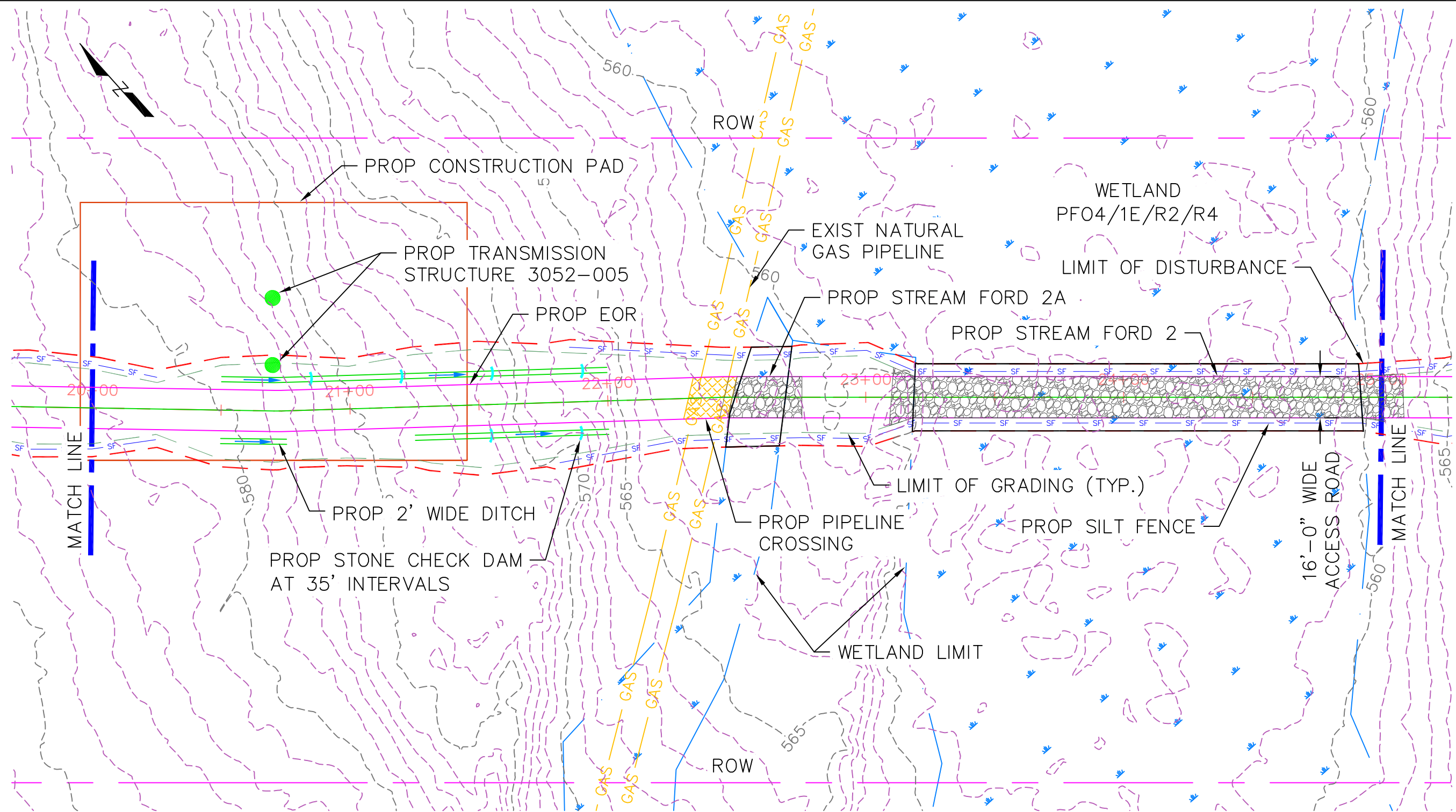
SHEET 40 OF 63



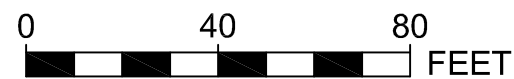
ROAD PROFILE STATION 15+00 TO 20+00
 HORIZ. SCALE: 1"=50'
 VERT. SCALE: 1"=10'

RHODE ISLAND PE SEAL 8879 IS APPLICABLE ONLY TO THE PROPOSED SITEWORK AND ESC MEASURES.

NOT FOR CONSTRUCTION



ROAD PLAN STATION 20+00 TO 25+00
SCALE: 1"=40'



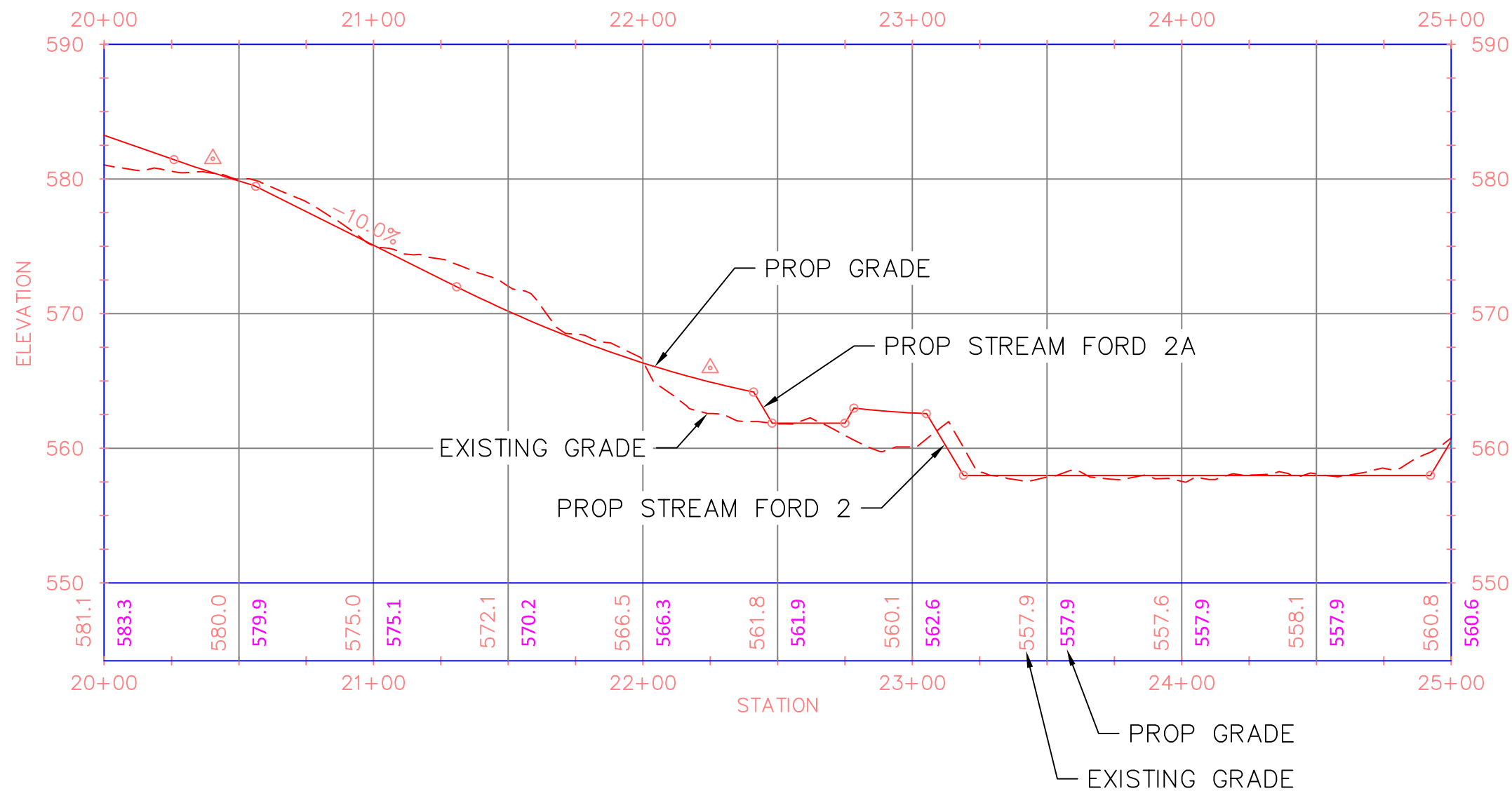
NOTE: THE LIMITS OF GRADING SHOWN ON THE PLANS ARE APPROXIMATE AND MAY NEED TO BE ADJUSTED BASED ON FIELD CONDITIONS. EXISTING GRADES ARE BASED OFF LIDAR SURVEY. LIMITS OF ROW SHOWN ARE APPROXIMATE. RHODE ISLAND PE SEAL 9008 IS APPLICABLE ONLY TO THE PROPOSED TRANSMISSION STRUCTURE LOCATIONS SHOWN. PROPOSED TRANSMISSION STRUCTURE LOCATIONS ARE APPROXIMATE.

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NOT FOR CONSTRUCTION



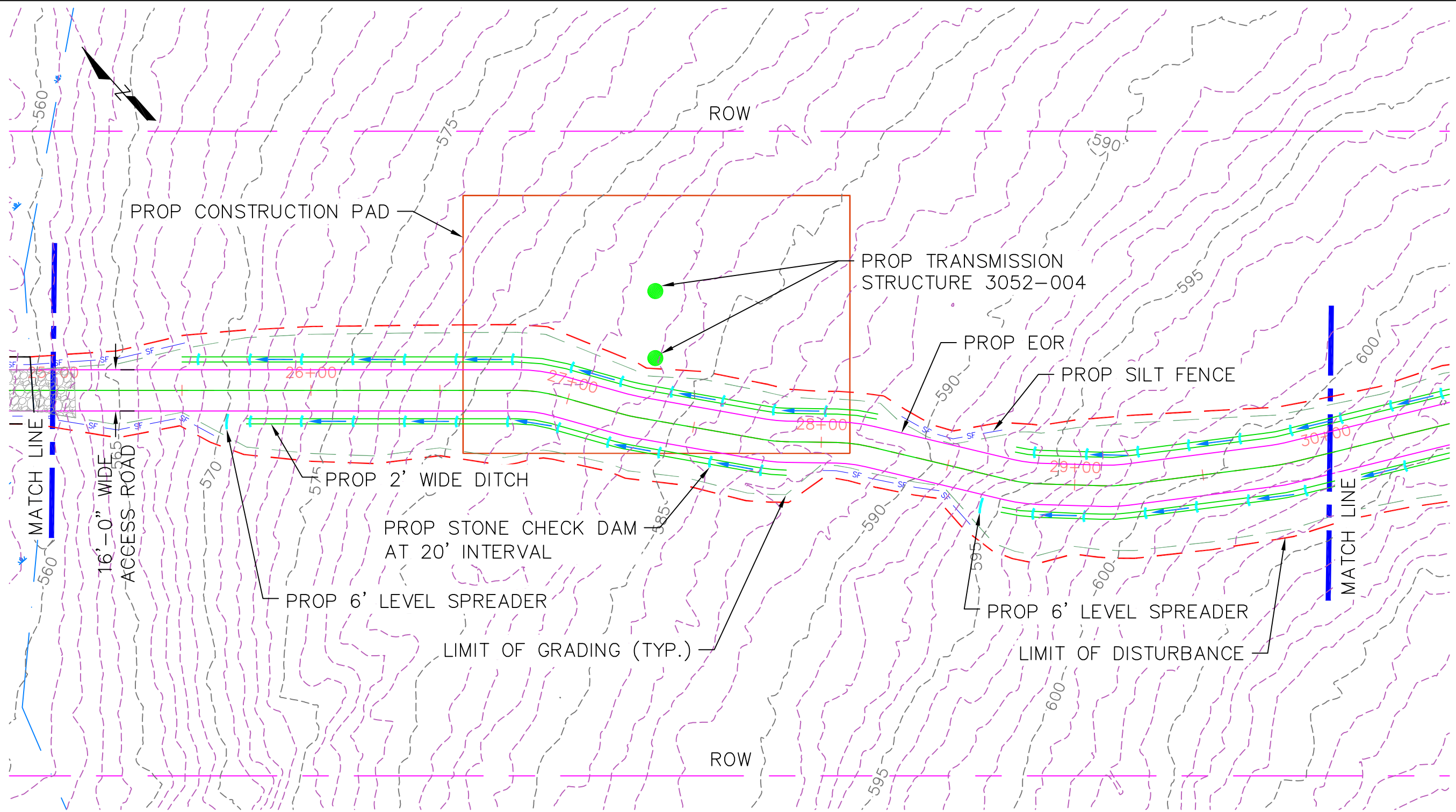
BURRILLVILLE INTERCONNECTION PROJECT THE NARRAGANSETT ELECTRIC CO. & CLEAR RIVER ENERGY, LLC			RIDEM AND USACE PERMIT DRAWINGS PROPOSED ACCESS ROAD BURRILLVILLE, RHODE ISLAND	
DATE: 3/22/2017	DRAWN: RST	142704	FIGURE T-4	SHEET 42 OF 63



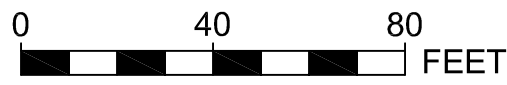
ROAD PROFILE STATION 20+00 TO 25+00
 HORIZ. SCALE: 1"=50'
 VERT. SCALE: 1"=10'

RHODE ISLAND PE SEAL 8879 IS APPLICABLE ONLY
 TO THE PROPOSED SITEWORK AND ESC MEASURES.

NOT FOR CONSTRUCTION



ROAD PLAN STATION 25+00 TO 30+00
SCALE: 1"=40'



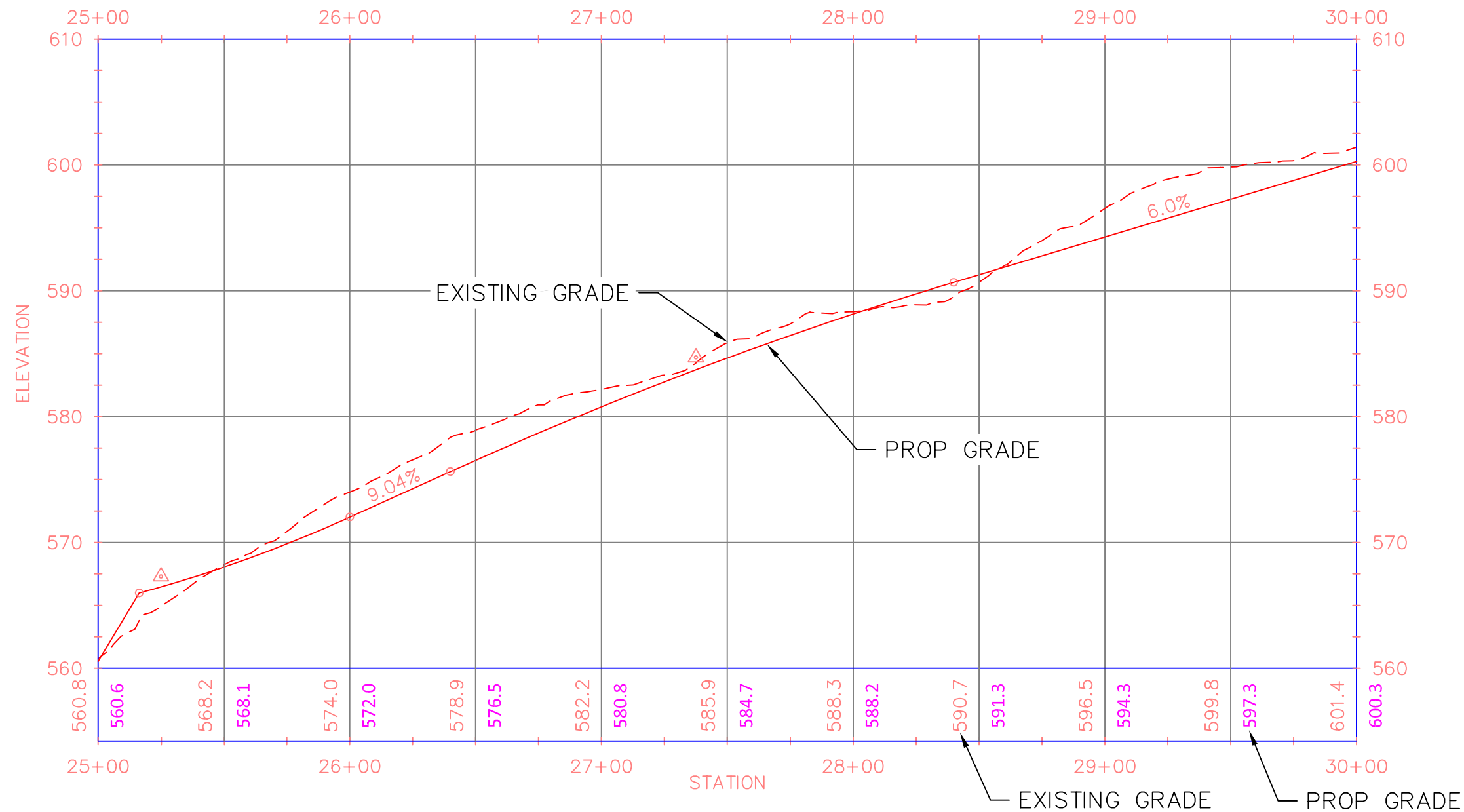
NOTE: THE LIMITS OF GRADING SHOWN ON THE PLANS ARE APPROXIMATE AND MAY NEED TO BE ADJUSTED BASED ON FIELD CONDITIONS. EXISTING GRADES ARE BASED OFF LIDAR SURVEY. LIMITS OF ROW SHOWN ARE APPROXIMATE. RHODE ISLAND PE SEAL 9008 IS APPLICABLE ONLY TO THE PROPOSED TRANSMISSION STRUCTURE LOCATIONS SHOWN. PROPOSED TRANSMISSION STRUCTURE LOCATIONS ARE APPROXIMATE.

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NOT FOR CONSTRUCTION



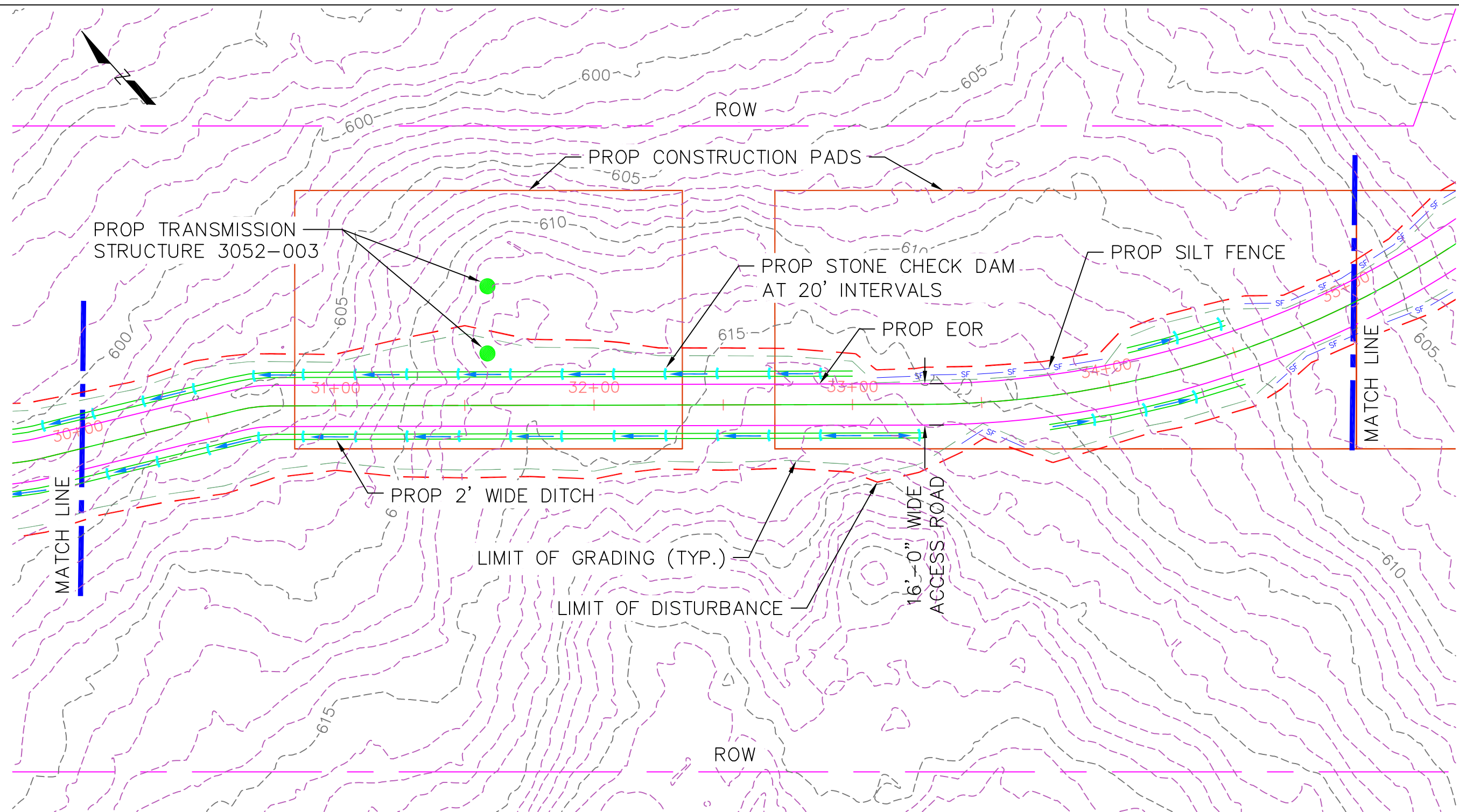
Burrillville Interconnection Project The Narragansett Electric Co. & Clear River Energy, LLC			RIDEM and USACE Permit Drawings Proposed Access Road Burrillville, Rhode Island	
DATE: 3/22/2017	DRAWN: RST	142704	FIGURE T-4	SHEET 44 OF 63



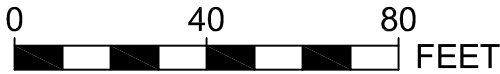
ROAD PROFILE STATION 25+00 TO 30+00
 HORIZ. SCALE: 1"=50'
 VERT. SCALE: 1"=10'

RHODE ISLAND PE SEAL 8879 IS APPLICABLE ONLY TO THE PROPOSED SITEWORK AND ESC MEASURES.

NOT FOR CONSTRUCTION



ROAD PLAN STATION 30+00 TO 35+00
SCALE: 1"=40'



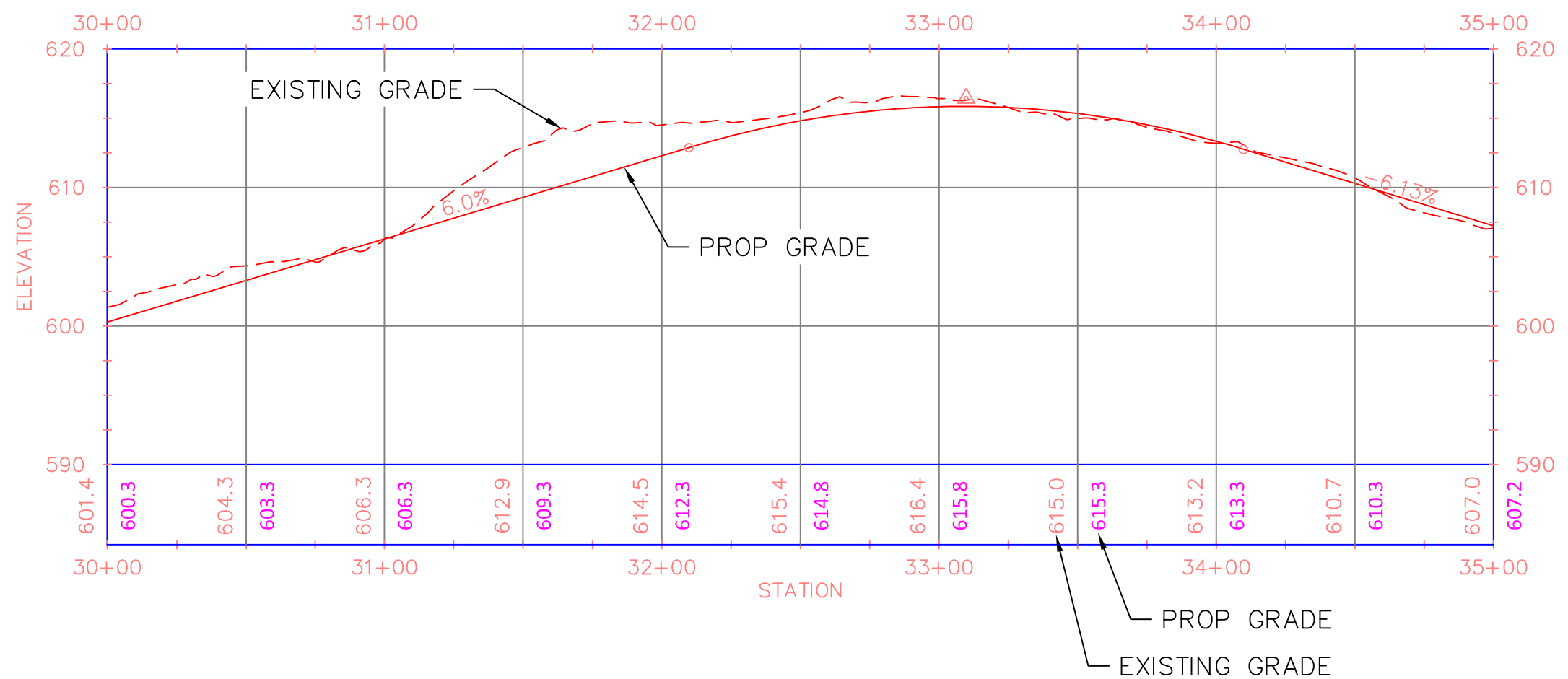
NOTE: THE LIMITS OF GRADING SHOWN ON THE PLANS ARE APPROXIMATE AND MAY NEED TO BE ADJUSTED BASED ON FIELD CONDITIONS. EXISTING GRADES ARE BASED OFF LIDAR SURVEY. LIMITS OF ROW SHOWN ARE APPROXIMATE. RHODE ISLAND PE SEAL 9008 IS APPLICABLE ONLY TO THE PROPOSED TRANSMISSION STRUCTURE LOCATIONS SHOWN. PROPOSED TRANSMISSION STRUCTURE LOCATIONS ARE APPROXIMATE.

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NOT FOR CONSTRUCTION



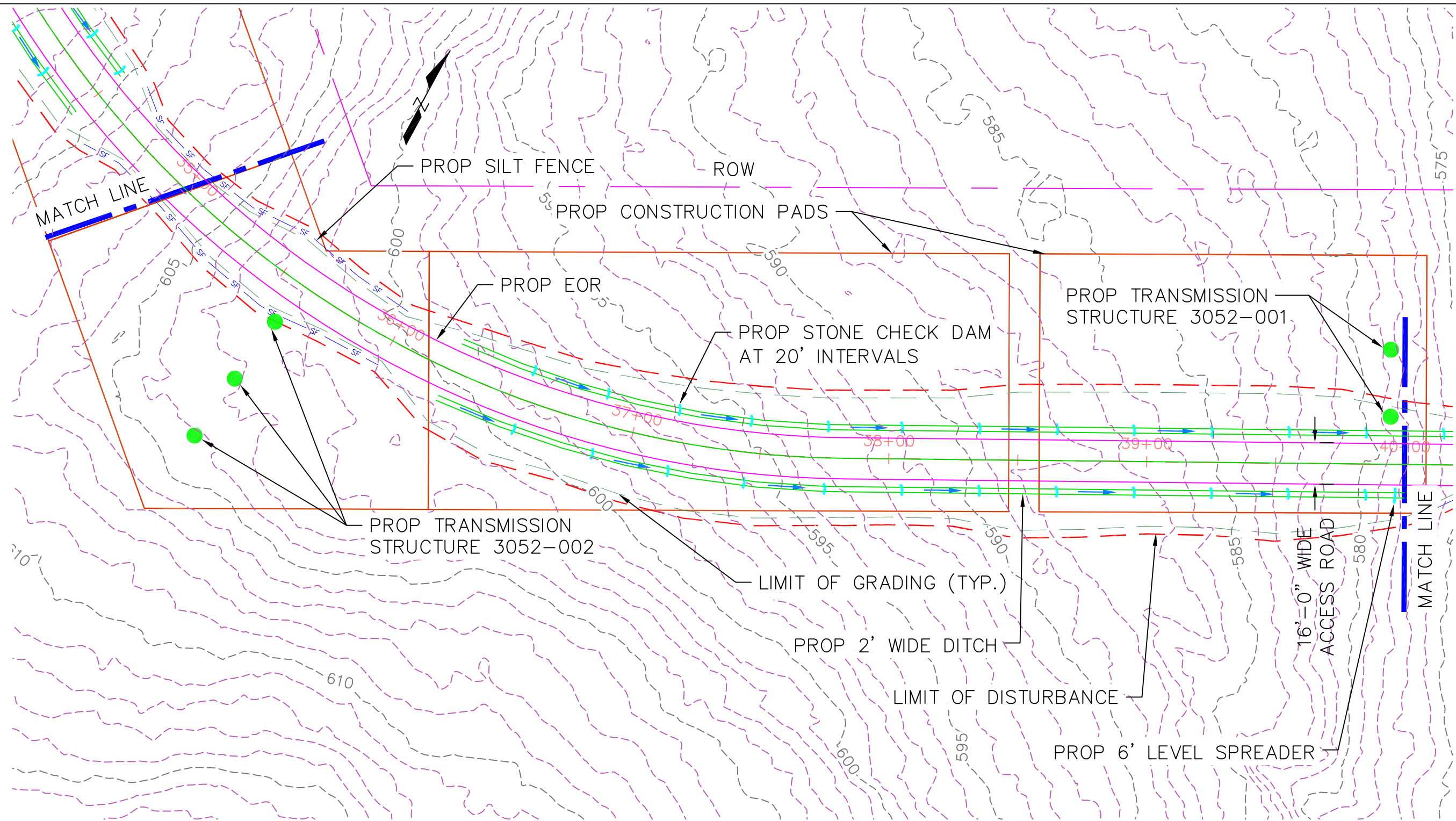
BURRILLVILLE INTERCONNECTION PROJECT THE NARRAGANSETT ELECTRIC CO. & CLEAR RIVER ENERGY, LLC			RIDEM AND USACE PERMIT DRAWINGS PROPOSED ACCESS ROAD BURRILLVILLE, RHODE ISLAND	
DATE: 3/22/2017	DRAWN: RST	142704	FIGURE T-4	SHEET 46 OF 63



ROAD PROFILE STATION 30+00 TO 35+00
 HORIZ. SCALE: 1"=50'
 VERT. SCALE: 1"=10'

RHODE ISLAND PE SEAL 8879 IS APPLICABLE ONLY TO THE PROPOSED SITEWORK AND ESC MEASURES.

NOT FOR CONSTRUCTION



ROAD PLAN STATION 35+00 TO 40+00
SCALE: 1"=40'



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NOT FOR CONSTRUCTION

BURRILLVILLE INTERCONNECTION PROJECT
THE NARRAGANSETT ELECTRIC CO.
& CLEAR RIVER ENERGY, LLC

RIDEM AND USACE PERMIT DRAWINGS
PROPOSED ACCESS ROAD
BURRILLVILLE, RHODE ISLAND

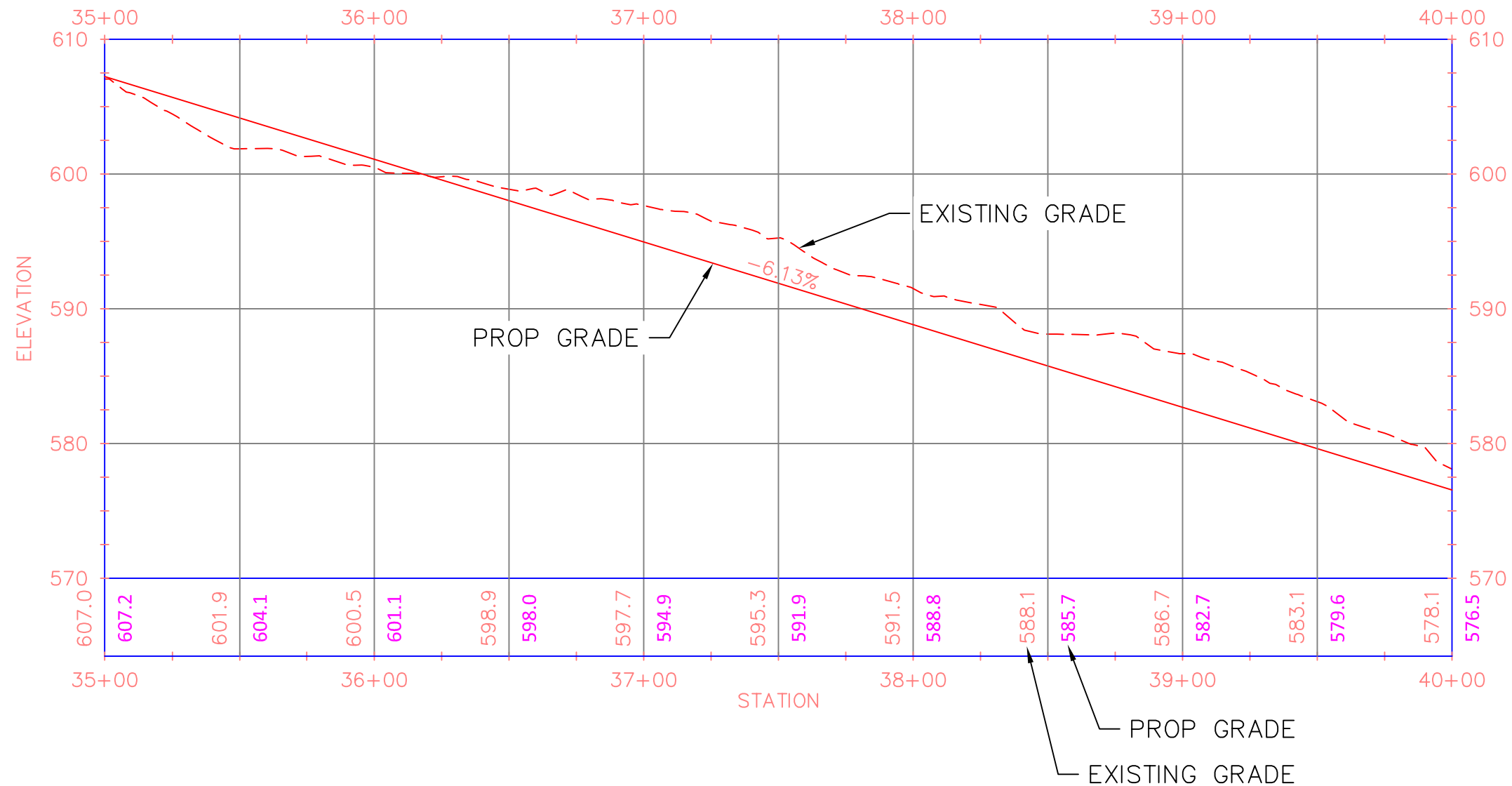
DATE: 3/22/2017

DRAWN: RST

142704

FIGURE T-4

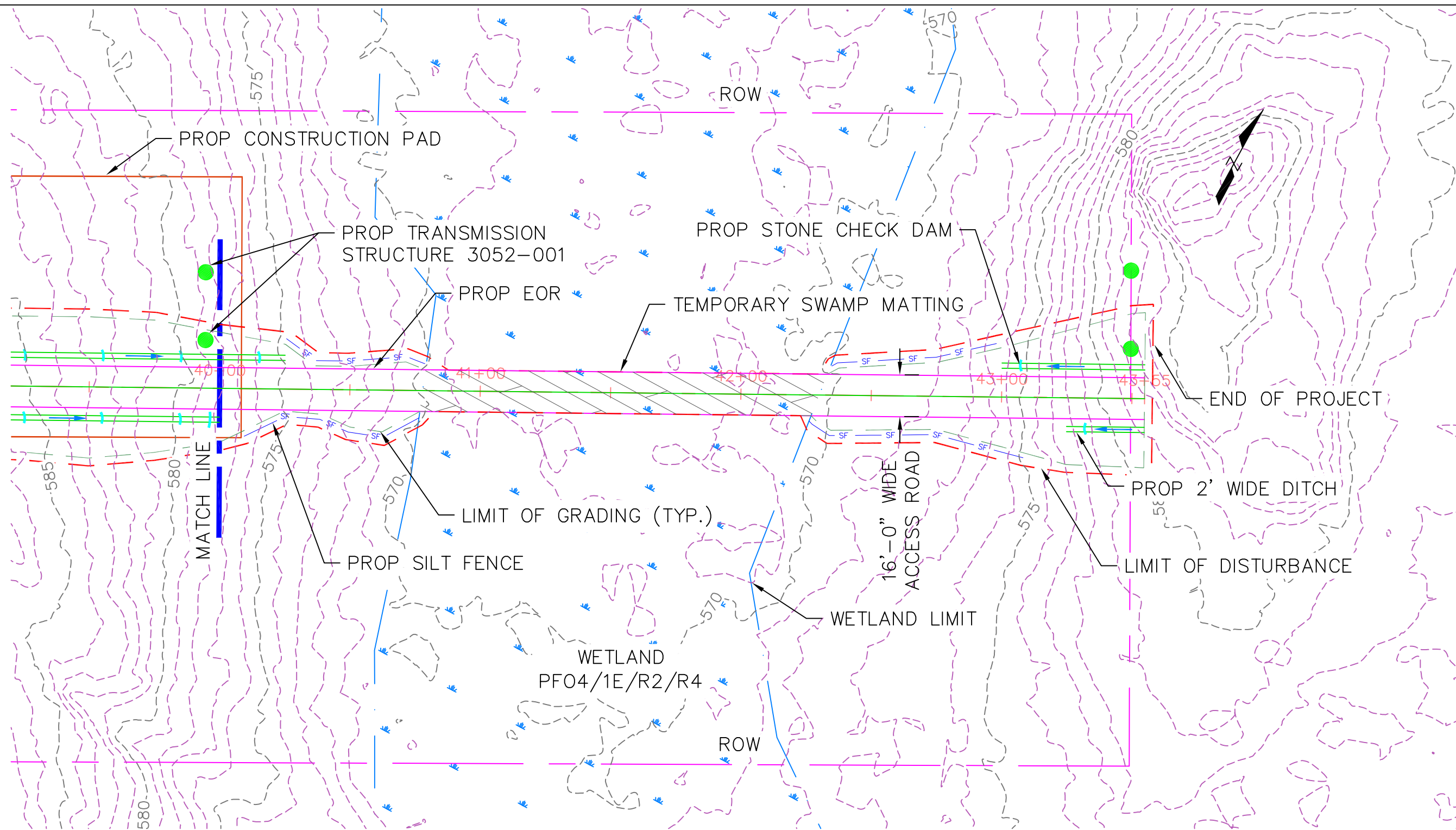
SHEET 48 OF 63



ROAD PROFILE STATION 35+00 TO 40+00
 HORIZ. SCALE: 1"=50'
 VERT. SCALE: 1"=10'

RHODE ISLAND PE SEAL 8879 IS APPLICABLE ONLY
 TO THE PROPOSED SITEWORK AND ESC MEASURES.

NOT FOR CONSTRUCTION



ROAD PLAN STATION 40+00 TO 43+55
SCALE: 1"=40'



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BURRILLVILLE INTERCONNECTION PROJECT
THE NARRAGANSETT ELECTRIC CO.
& CLEAR RIVER ENERGY, LLC

RIDEM AND USACE PERMIT DRAWINGS
PROPOSED ACCESS ROAD
BURRILLVILLE, RHODE ISLAND

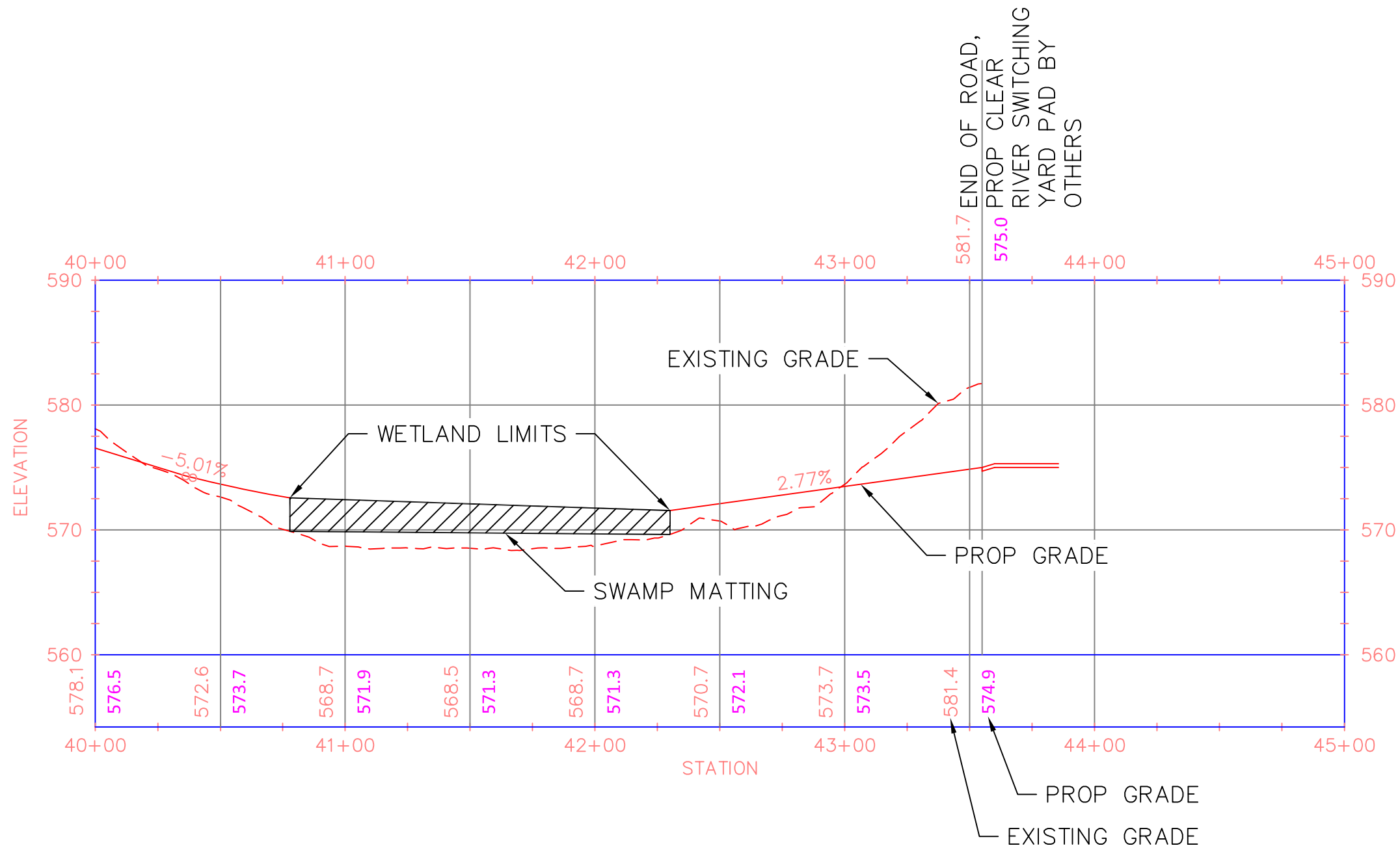
DATE: 3/22/2017

DRAWN: RST

142704

FIGURE T-4

SHEET 50 OF 63



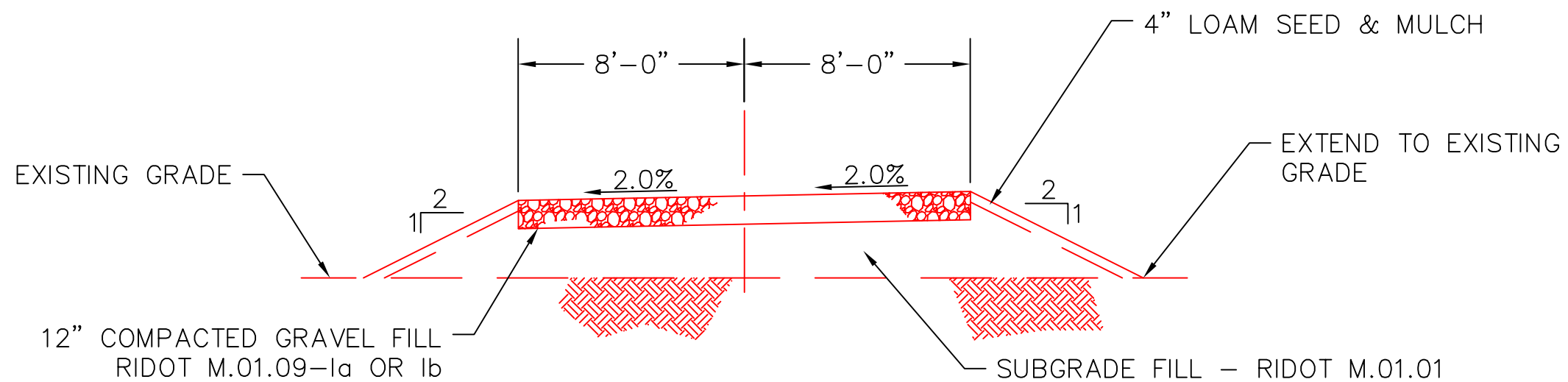
ROAD PROFILE STATION 40+00 TO 45+00

HORIZ. SCALE: 1"=50'

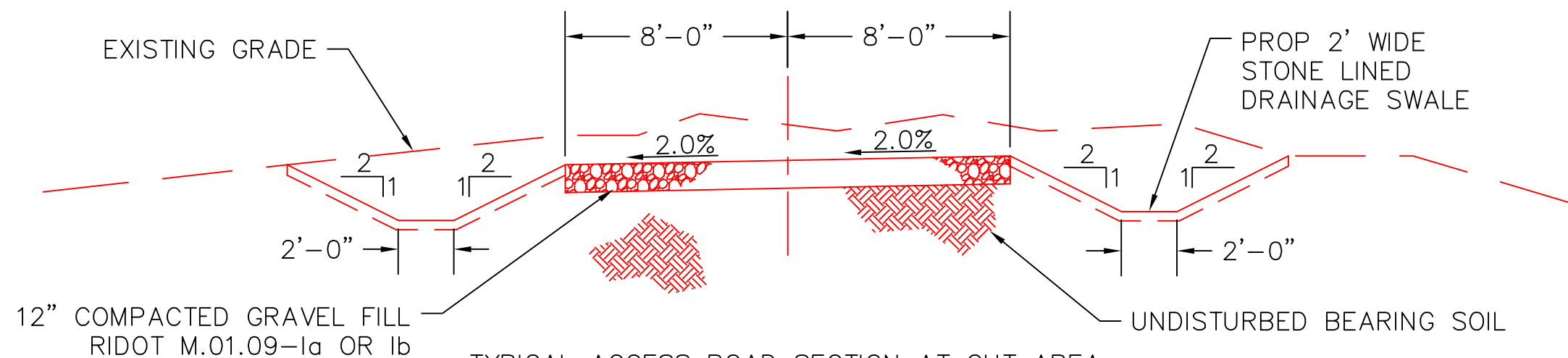
VERT. SCALE: 1"=10'

RHODE ISLAND PE SEAL 8879 IS APPLICABLE ONLY TO THE PROPOSED SITEWORK AND ESC MEASURES.

NOT FOR CONSTRUCTION



TYPICAL ACCESS ROAD AND SPUR SECTION AT FILL AREA



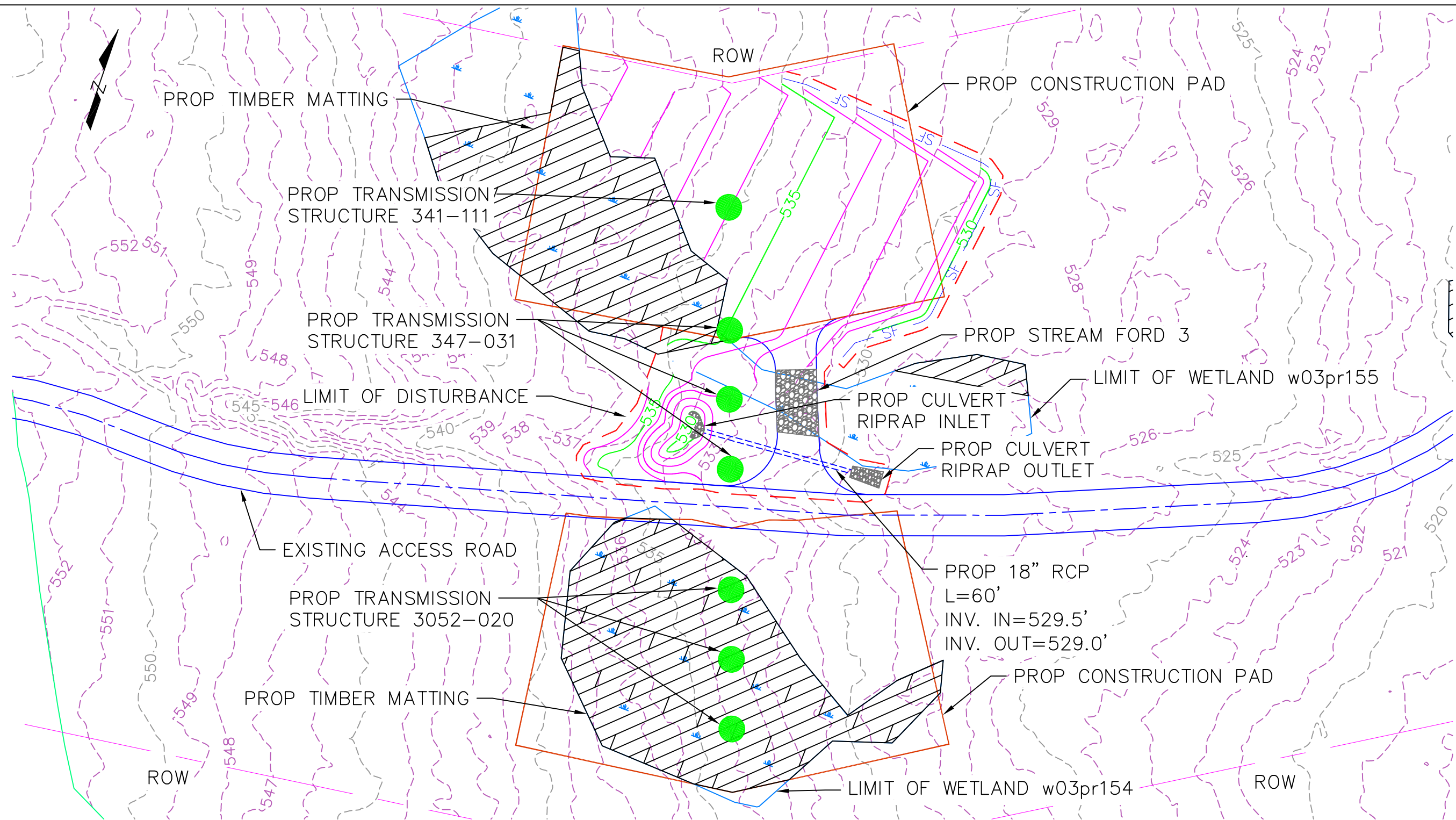
TYPICAL ACCESS ROAD SECTION AT CUT AREA

TYPICAL ACCESS ROAD SECTIONS

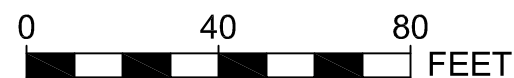
SCALE: 1"=5'

RHODE ISLAND PE SEAL 8879 IS APPLICABLE ONLY
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NOT FOR CONSTRUCTION



PROPOSED GRADING PLAN
AROUND STRUCTURE 347-031
SCALE: 1"=40'



NOTE: THE LIMITS OF GRADING SHOWN ON THE PLANS ARE APPROXIMATE AND MAY NEED TO BE ADJUSTED BASED ON FIELD CONDITIONS. EXISTING GRADES ARE BASED OFF LIDAR SURVEY. LIMITS OF ROW SHOWN ARE APPROXIMATE. RHODE ISLAND PE SEAL 9008 IS APPLICABLE ONLY TO THE PROPOSED TRANSMISSION STRUCTURE LOCATIONS SHOWN. PROPOSED TRANSMISSION STRUCTURE LOCATIONS ARE APPROXIMATE.

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& CLEAR RIVER ENERGY, LLC

RIDEM AND USACE PERMIT DRAWINGS
CONSTRUCTION PAD GRADING
BURRILLVILLE, RHODE ISLAND

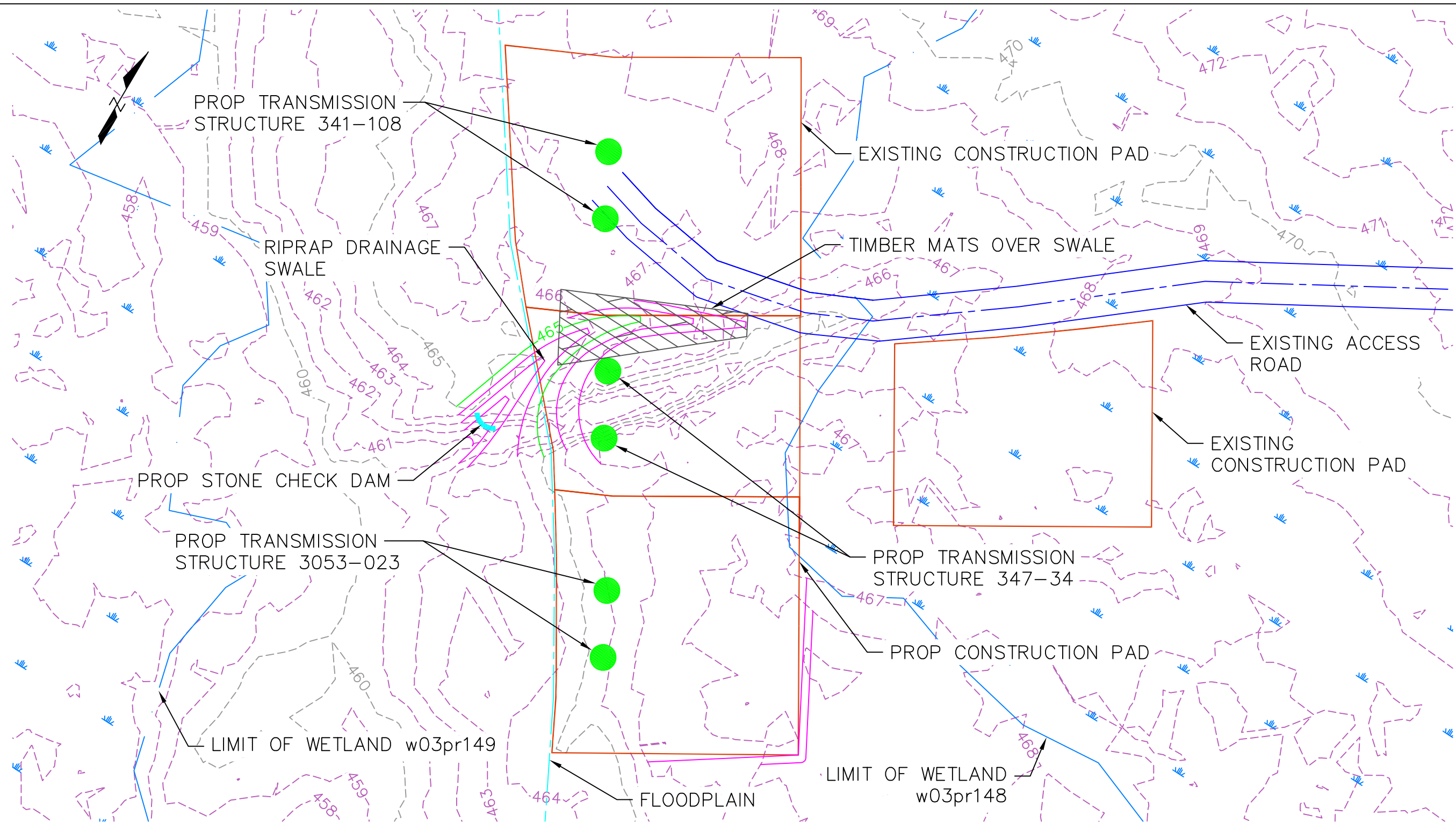
DATE: 3/22/2017

DRAWN: RST

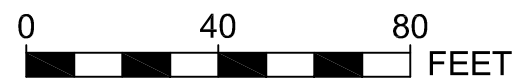
142704

FIGURE T-4

SHEET 53 OF 63



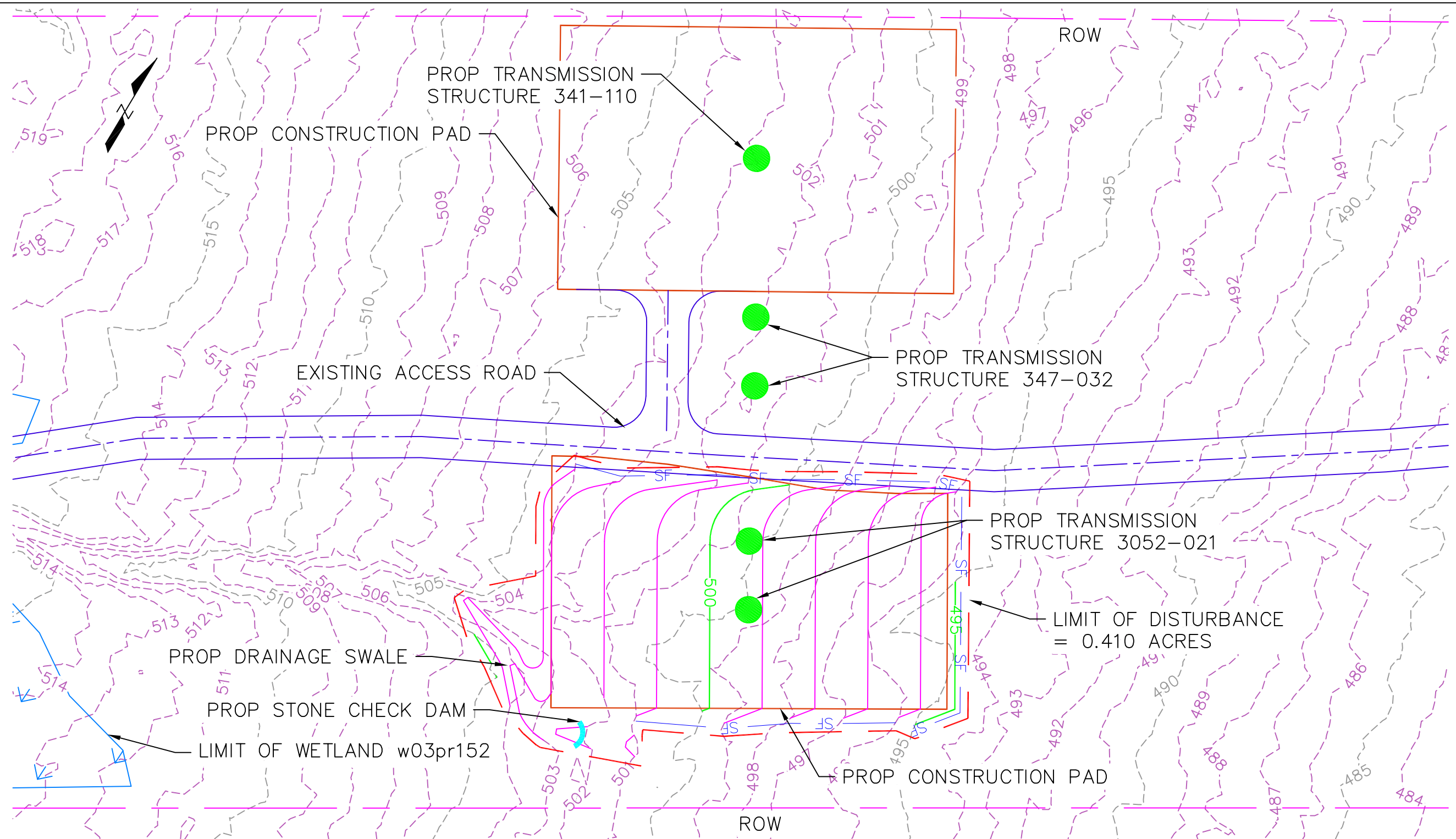
PROPOSED GRADING PLAN
AROUND STRUCTURE 347-034
SCALE: 1"=40'



NOTE: THE LIMITS OF GRADING SHOWN ON THE PLANS ARE APPROXIMATE AND MAY NEED TO BE ADJUSTED BASED ON FIELD CONDITIONS. EXISTING GRADES ARE BASED OFF LIDAR SURVEY. LIMITS OF ROW SHOWN ARE APPROXIMATE. RHODE ISLAND PE SEAL 9008 IS APPLICABLE ONLY TO THE PROPOSED TRANSMISSION STRUCTURE LOCATIONS SHOWN. PROPOSED TRANSMISSION STRUCTURE LOCATIONS ARE APPROXIMATE.

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NOT FOR CONSTRUCTION



PROPOSED GRADING PLAN
AROUND STRUCTURE 3052-021
SCALE: 1"=40'

NOTE: THE LIMITS OF GRADING SHOWN ON THE PLANS ARE APPROXIMATE AND MAY NEED TO BE ADJUSTED BASED ON FIELD CONDITIONS. EXISTING GRADES ARE BASED OFF LIDAR SURVEY. LIMITS OF ROW SHOWN ARE APPROXIMATE. RHODE ISLAND PE SEAL 9008 IS APPLICABLE ONLY TO THE PROPOSED TRANSMISSION STRUCTURE LOCATIONS SHOWN. PROPOSED TRANSMISSION STRUCTURE LOCATIONS ARE APPROXIMATE.

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RIDEM AND USACE PERMIT DRAWINGS
CONSTRUCTION PAD GRADING
BURRILLVILLE, RHODE ISLAND

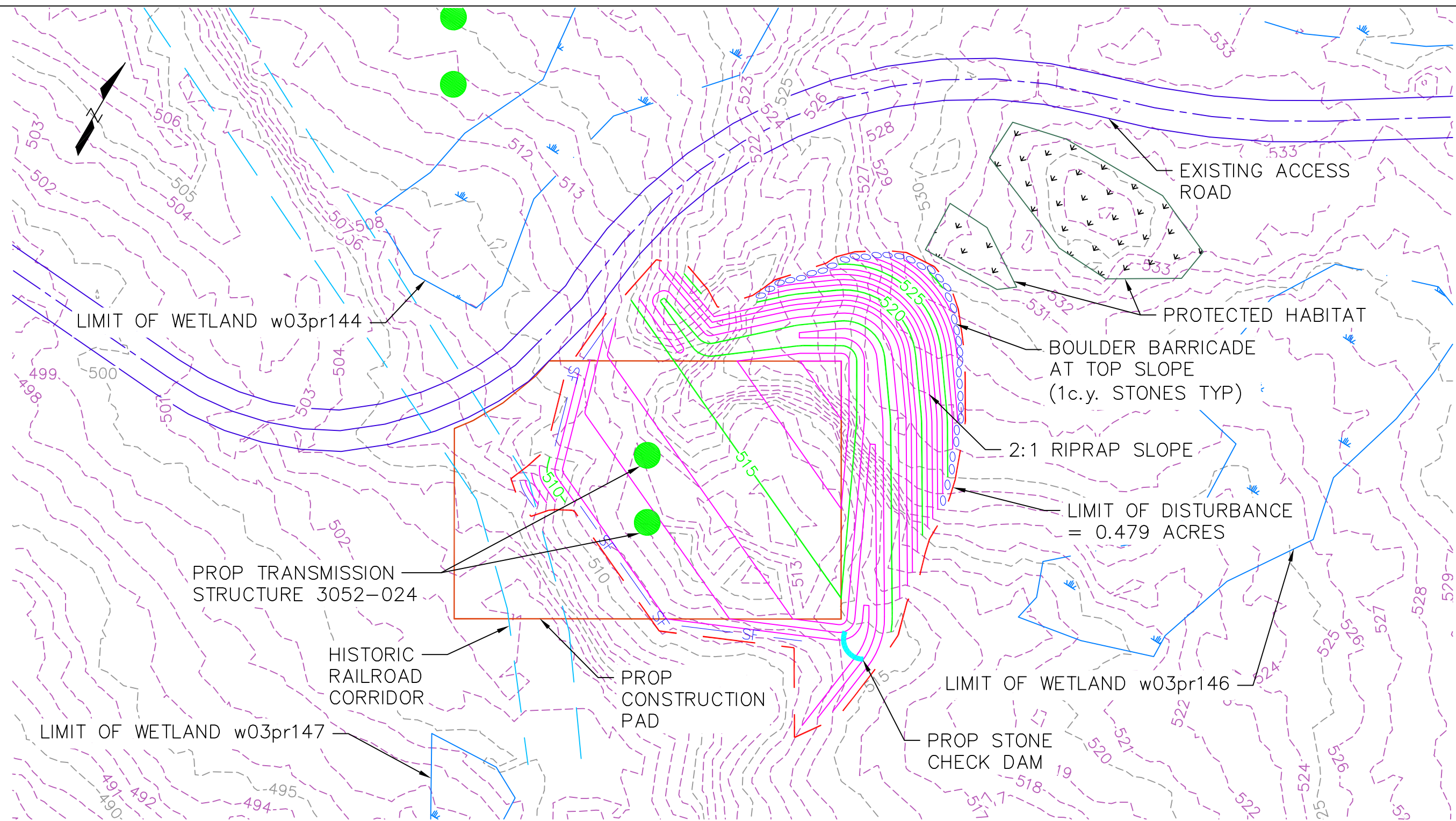
DATE: 3/22/2017

DRAWN: RST

142704

FIGURE T-4

SHEET 55 OF 63



PROPOSED GRADING PLAN
AROUND STRUCTURE 3052-024
SCALE: 1"=40'



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NOTE: THE LIMITS OF GRADING SHOWN ON THE PLANS ARE APPROXIMATE AND MAY NEED TO BE ADJUSTED BASED ON FIELD CONDITIONS. EXISTING GRADES ARE BASED OFF LIDAR SURVEY. LIMITS OF ROW SHOWN ARE APPROXIMATE. RHODE ISLAND PE SEAL 9008 IS APPLICABLE ONLY TO THE PROPOSED TRANSMISSION STRUCTURE LOCATIONS SHOWN. PROPOSED TRANSMISSION STRUCTURE LOCATIONS ARE APPROXIMATE.

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BURRILLVILLE INTERCONNECTION PROJECT
THE NARRAGANSETT ELECTRIC CO.
& CLEAR RIVER ENERGY, LLC

RIDEM AND USACE PERMIT DRAWINGS
CONSTRUCTION PAD GRADING
BURRILLVILLE, RHODE ISLAND

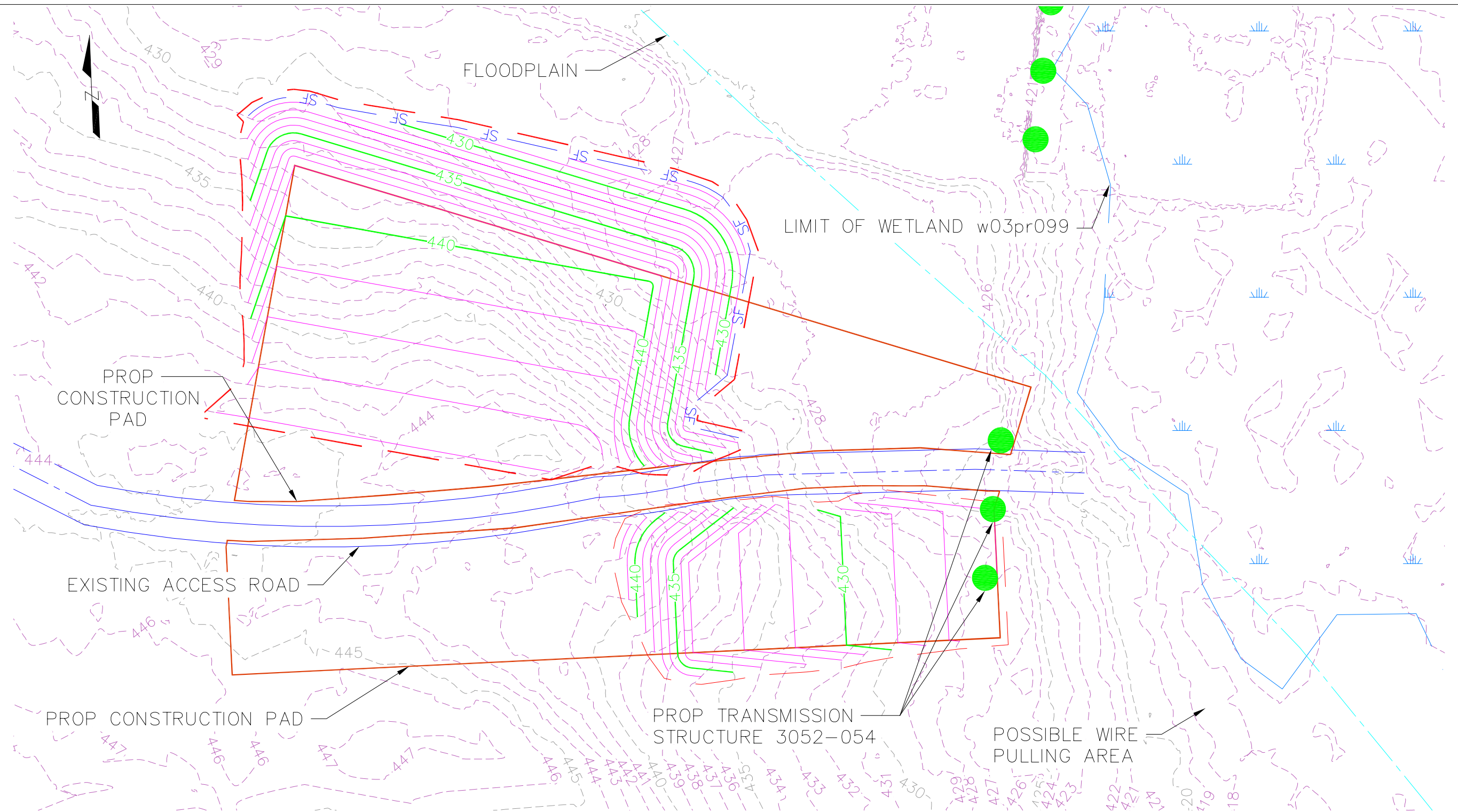
DATE: 3/22/2017

DRAWN: RST

142704

FIGURE T-4

SHEET 56 OF 63

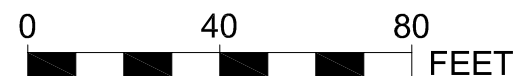


PROPOSED GRADING PLAN
AROUND STRUCTURE 3052-054

SCALE: 1"=40'

RHODE ISLAND PE SEAL 8879 IS APPLICABLE ONLY
TO THE PROPOSED SITEWORK AND ESC MEASURES.

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**BURRILLVILLE INTERCONNECTION PROJECT
THE NARRAGANSETT ELECTRIC CO.
& CLEAR RIVER ENERGY, LLC**

**RIDEM AND USACE PERMIT DRAWINGS
CONSTRUCTION PAD GRADING
BURRILLVILLE, RHODE ISLAND**

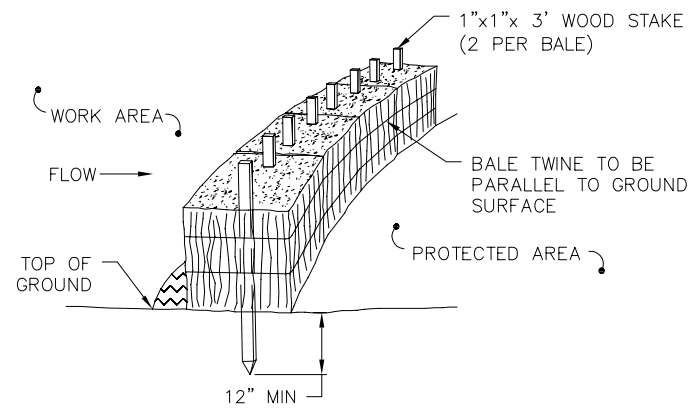
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DRAWN: RST

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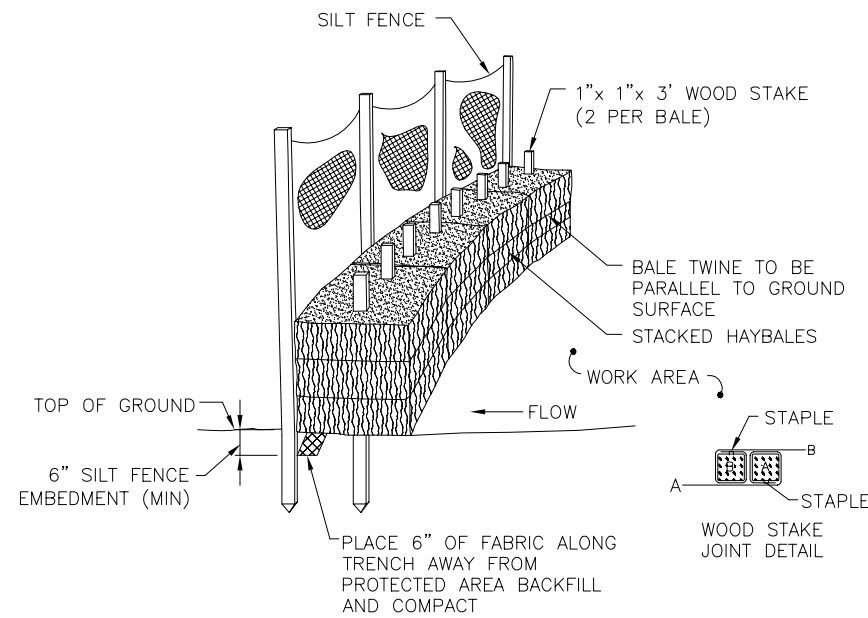
FIGURE T-4

SHEET 57 OF 63

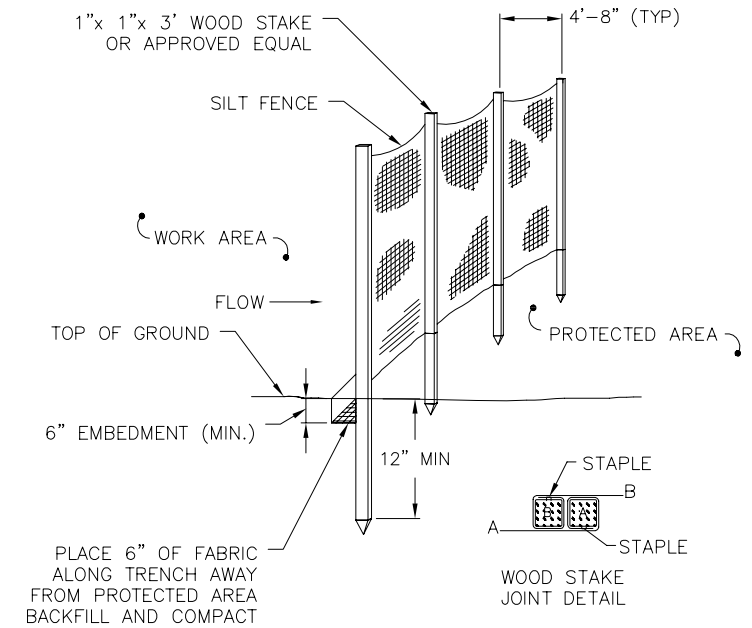


NOTES:
STRAW BALES SHALL BE USED
INSTEAD OF HAY BALES IN AREAS
(PARTICULARLY WETLANDS) WHERE
POTENTIAL INTRODUCTION OF
INVASIVE PLANT SPECIES IS OF
CONCERN.

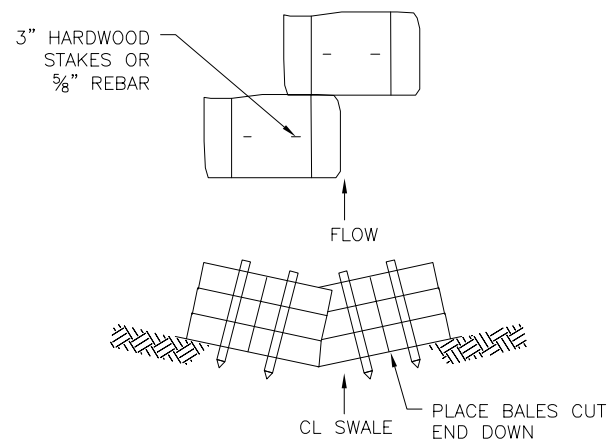
HAYBALE BARRIER NON-EMBEDDED
N.T.S.



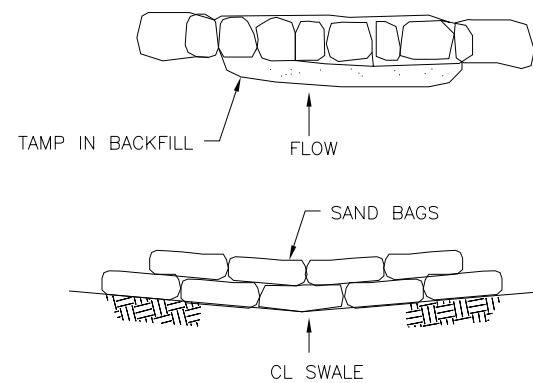
STACKED HAYBALES AND SILT FENCE
N.T.S.



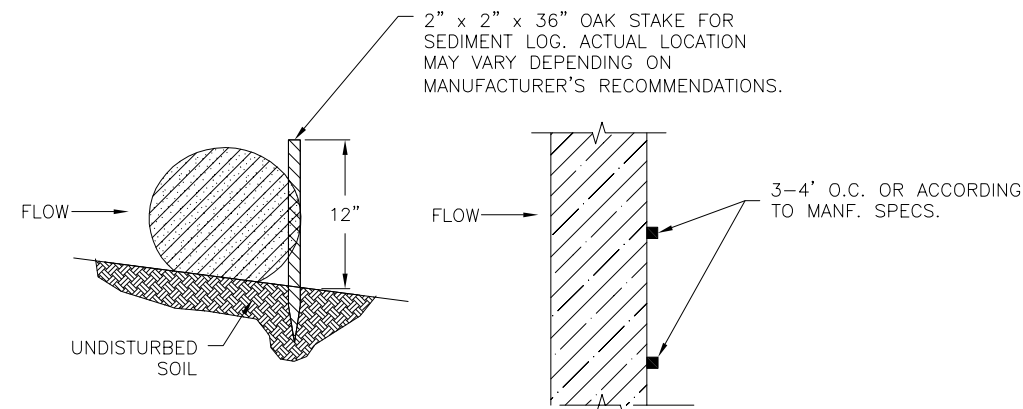
SILT FENCE BARRIER
N.T.S.



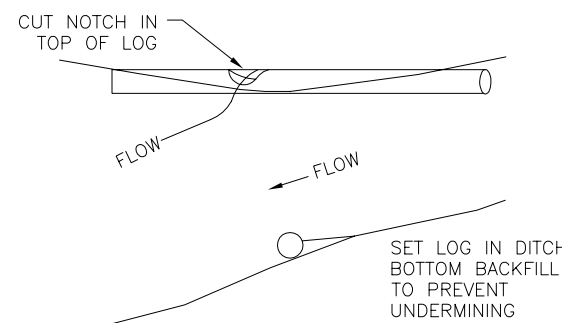
STRAW/HAYBALE CHECK DAM
N.T.S.



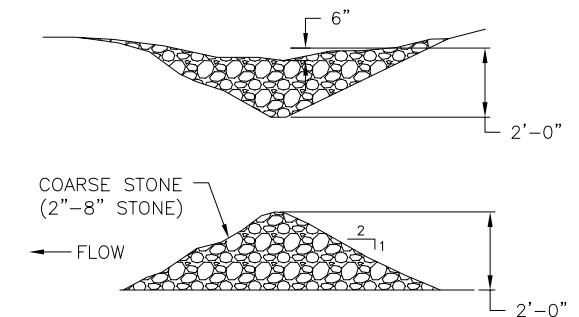
SANDBAG CHECK DAM
N.T.S.



STRAW WATTLE (BIOROLL BARRIER)
N.T.S.



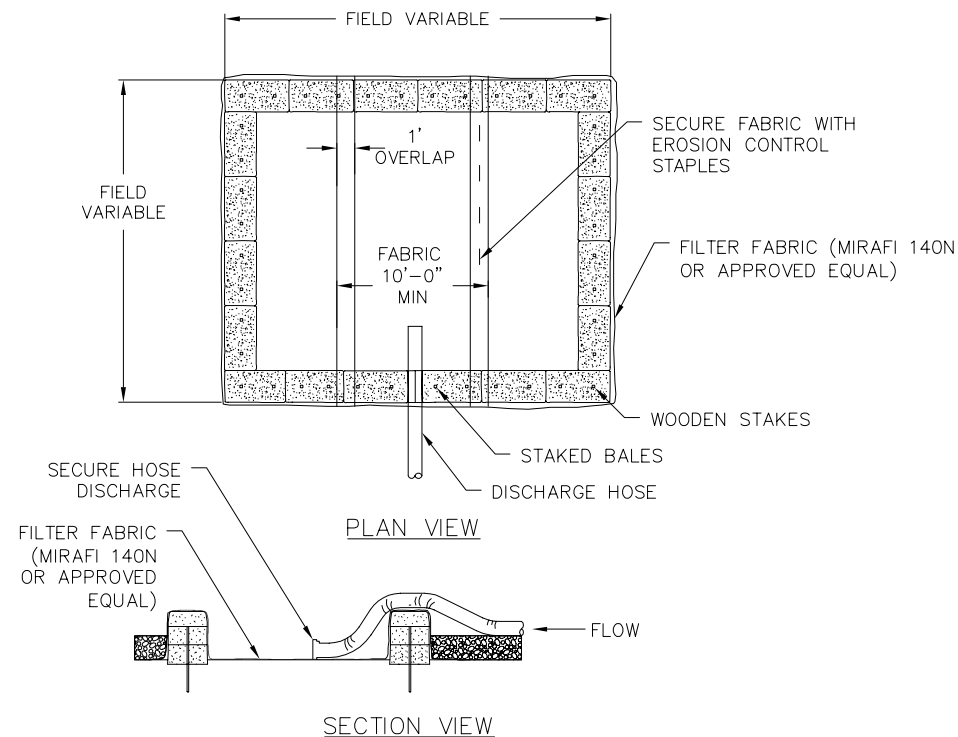
LOG CHECK DAM
N.T.S.



STONE CHECK DAM
N.T.S.

RHODE ISLAND PE SEAL 8879 IS APPLICABLE ONLY
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NOT FOR CONSTRUCTION

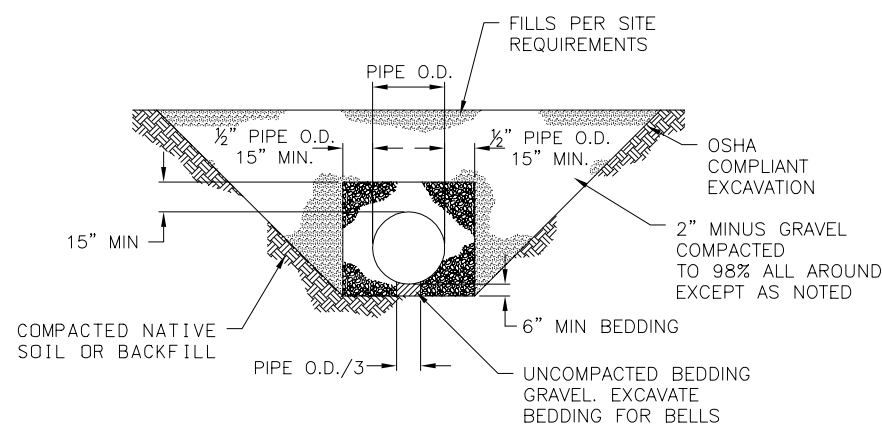


NOTES

1. NUMBER OF BALES MAY VARY DEPENDING ON SITE CONDITIONS.
2. THE BASIN TO BE SIZED TO PREVENT DISCHARGE WATER FROM OVERTOPPING BASIN.
3. KEEP AS FAR FROM WETLANDS AS PRACTICAL.
4. CLEAN, REMOVE AND REPLACE AGGREGATE SURFACING AS SOON AS DEWATERING IS COMPLETE.

DEWATERING HAYBALE BASIN

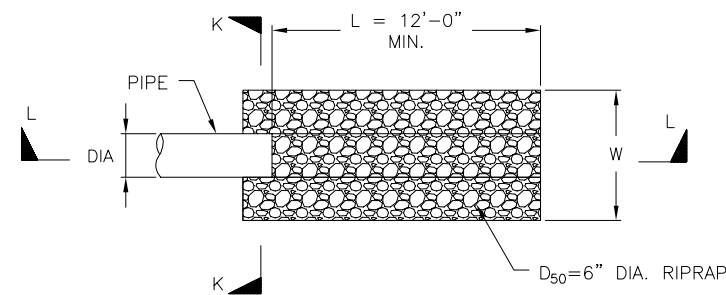
N.T.S.



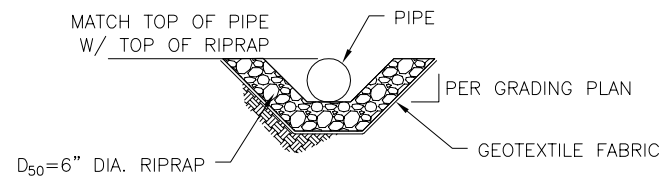
TYPICAL CULVERT SECTION

N.T.S.

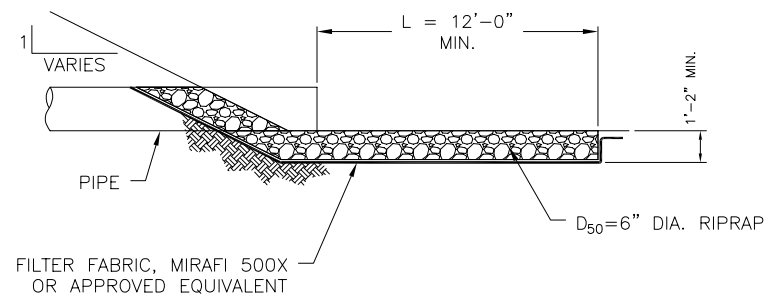
OUTLET PIPE DIA.	L(FT)	W(FT)
24"	35	20
30"	40	25



PLAN

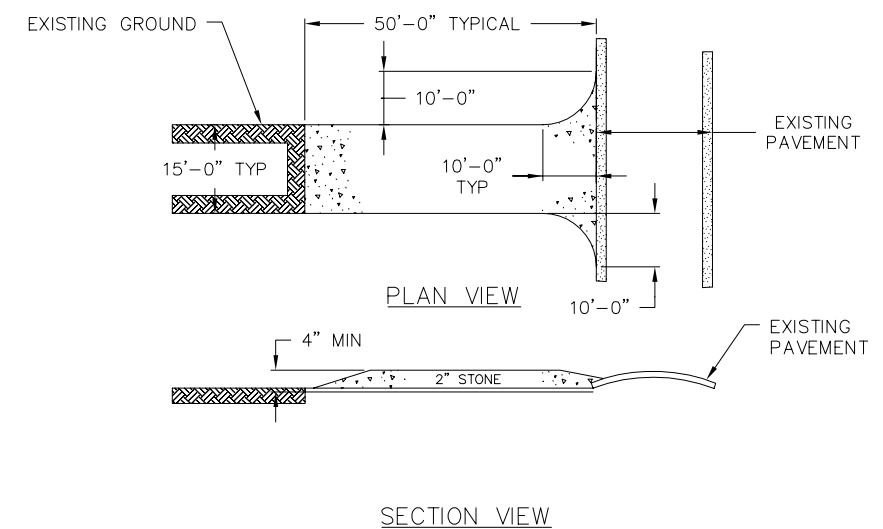


SECTION K-K



SECTION L-L CULVERT INLET/OUTLET PROTECTION DETAIL

N.T.S.



CONSTRUCTION SPECIFICATIONS:

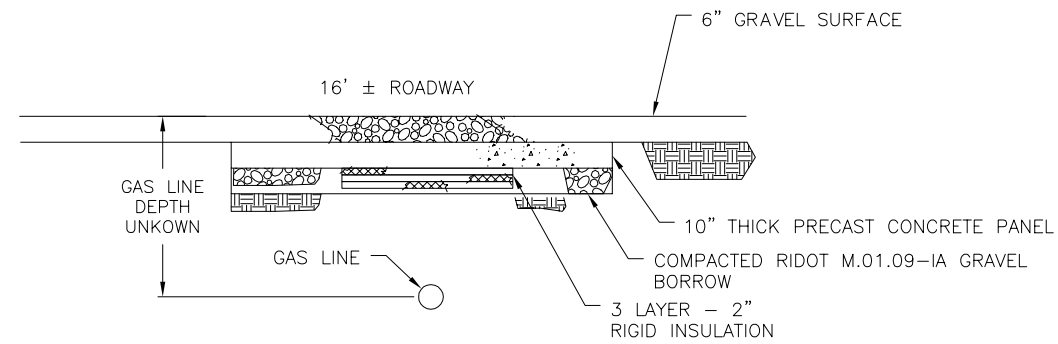
1. STONE SIZE - USE 2" STONE (MINIMUM) TO 6" STONE (MAXIMUM),
2. LENGTH - GREATER THAN OR EQUAL TO 50 FEET.
3. THICKNESS - 4".
4. WIDTH - FIFTEEN (15) FEET TYP., BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM SHALL BE PERMITTED.
6. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO ANY PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO ANY PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY.
7. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED. DEPENDING UPON SITE CONDITIONS, THIS ENTRANCE MAY OR MAY NOT BE PERMANENT.

STABILIZED CONSTRUCTION EXIT

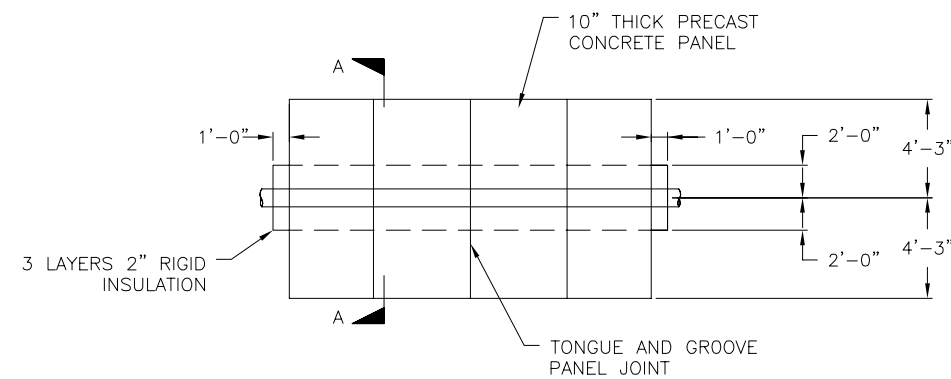
N.T.S.

RHODE ISLAND PE SEAL 8879 IS APPLICABLE ONLY TO THE PROPOSED SITEWORK AND ESC MEASURES.

NOT FOR CONSTRUCTION



SECTION A-A

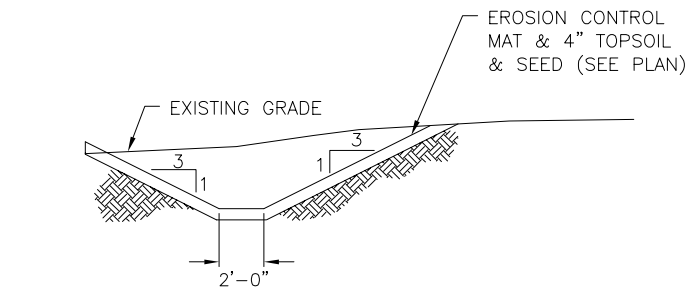


PIPELINE CROSSING PLAN
N.T.S.

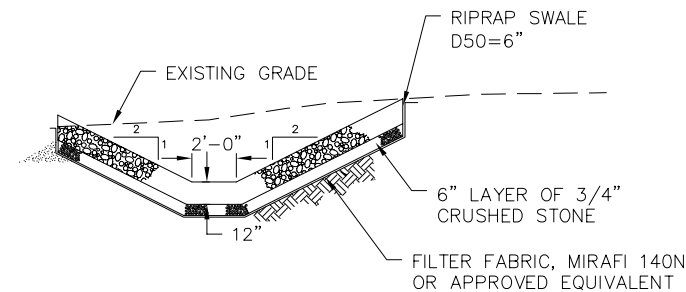
NOTES:
CONTRACTOR TO VERIFY FINAL
PIPELINE CROSSING DETAILS WITH
PIPELINE OWNER BEFORE
CONSTRUCTION.

RHODE ISLAND PE SEAL 8879 IS APPLICABLE ONLY
TO THE PROPOSED SITEWORK AND ESC MEASURES.

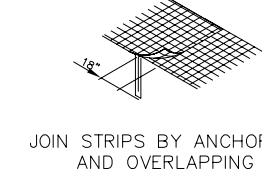
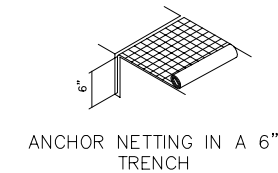
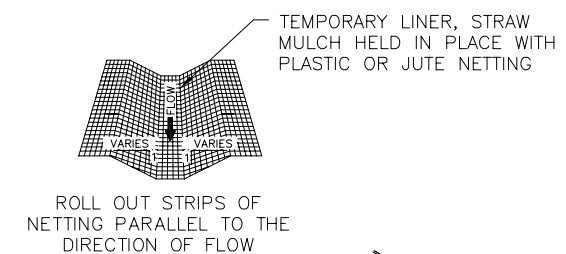
NOT FOR CONSTRUCTION



TYPICAL VEGETATED SWALE SECTION
N.T.S.

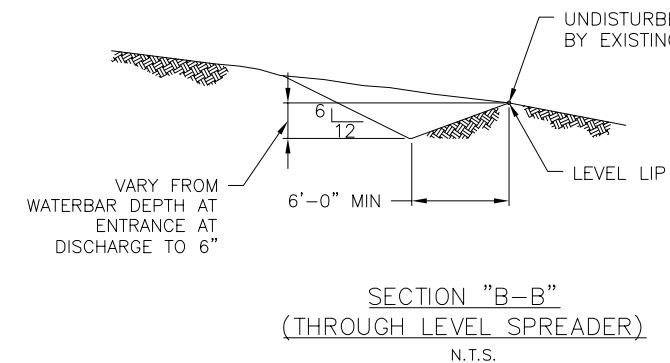


TYPICAL RIPRAP SWALE SECTION
N.T.S.



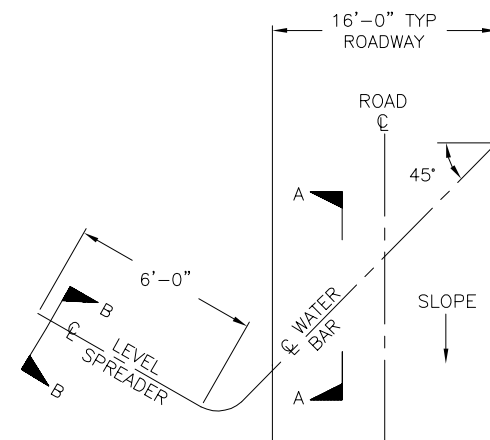
1. EXCAVATE THE CHANNEL AND SHAPE IT TO AN EVEN CROSS-SECTION AS SHOWN. WHEN STAKING INDICATE A 0.2' OVERCUT AROUND THE CHANNEL PERIMETER FOR SILTING AND BULKING.
2. GRADE SOIL AWAY FROM CHANNEL SO THAT SURFACE WATER MAY ENTER FREELY.
3. APPLY LIME, FERTILIZER AND SEED TO THE CHANNEL AND ADJOINING AREAS IN ACCORDANCE WITH THE EROSION CONTROL PLAN.
4. SPREAD HAY OR STRAW MULCH AT THE RATE OF 100 LB/1000 SF.
5. HOLD MULCH IN PLACE IMMEDIATELY AFTER SPREADING WITH A PLASTIC NETTING INSTALLED AS SHOWN.
6. START LAYING THE NET FROM THE TOP OF THE UPSTREAM AND OF THE CHANNEL AND UNROLL IT DOWN GRADE. DO NOT STRETCH THE NETTING.
7. BURY THE UP SLOPE END AND STAPLE THE NET EVERY 12" ACROSS THE TOP END, EVERY 3 FT AROUND THE EDGES AND ACROSS THE NET SO THAT THE STRAW IS HELD CLOSELY AGAINST THE SOIL. HOWEVER, DO NOT STRETCH THE NETTING WHEN STAPLING.
8. NETTING STRIPS SHALL BE JOINED TOGETHER ALONG THE SIDES WITH A 3" OVERLAP AND STAPLED TOGETHER.
9. TO JOIN ENDS OF STRIPS, INSERT A NEW ROLL OF NET IN A TRENCH AS WITH THE UP SLOPE END AND OVERLAP IT 18" WITH THE PREVIOUSLY LAID UPPER ROLL. TURN UNDER 6" OF THE 18" OVERLAP AND STAPLE EVERY 12" ACROSS THE END.

EROSION CONTROL MAT DETAIL
NTS

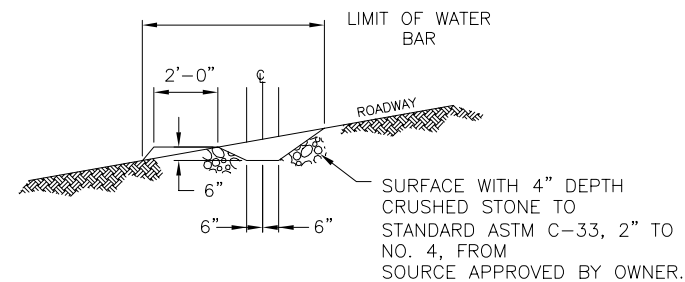


NOTES:

1. ALL LEVEL SPREADERS SHALL HAVE A LENGTH OF 6 FEET.
2. ALL DISTURBED SOIL TO BE STABILIZED, MULCHED AND SEEDED SUBJECT TO APPROVAL OF THE CORPORATION.
3. LEVEL LIP TO BE MAINTAINED AT CONSTANT ELEVATION OVER FULL LENGTH OF SPREADER.



WATER BAR AND LEVEL SPREADER PLAN
N.T.S.



NOTES:

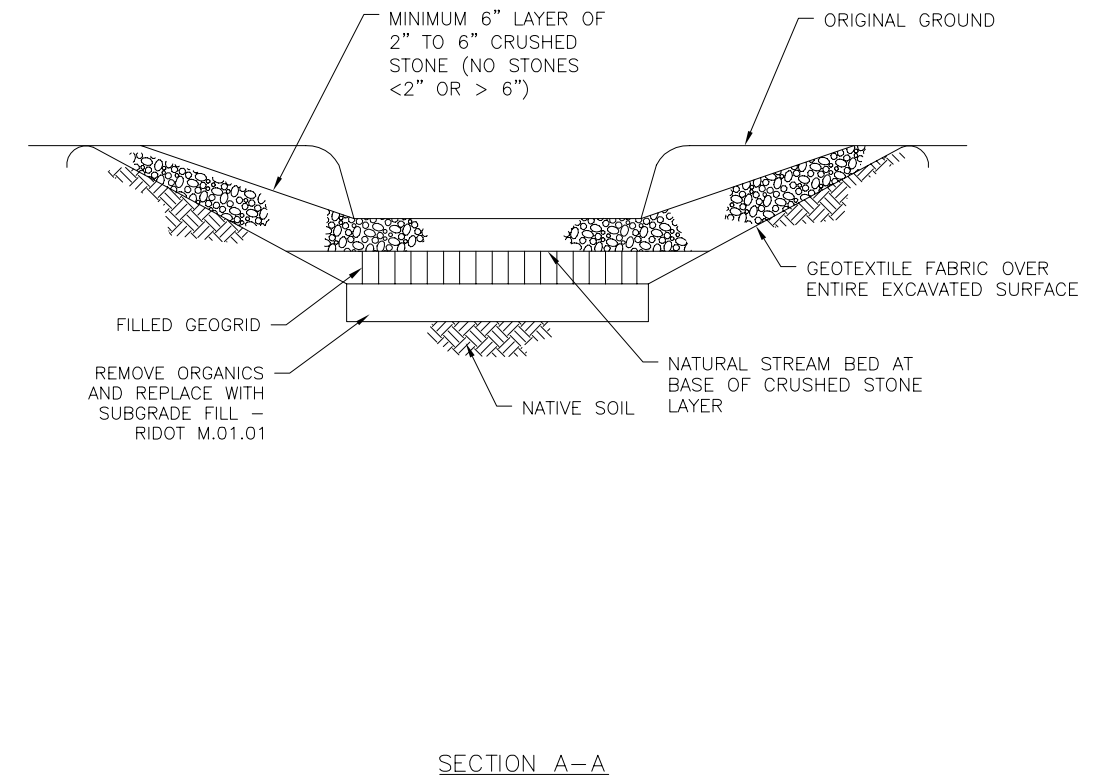
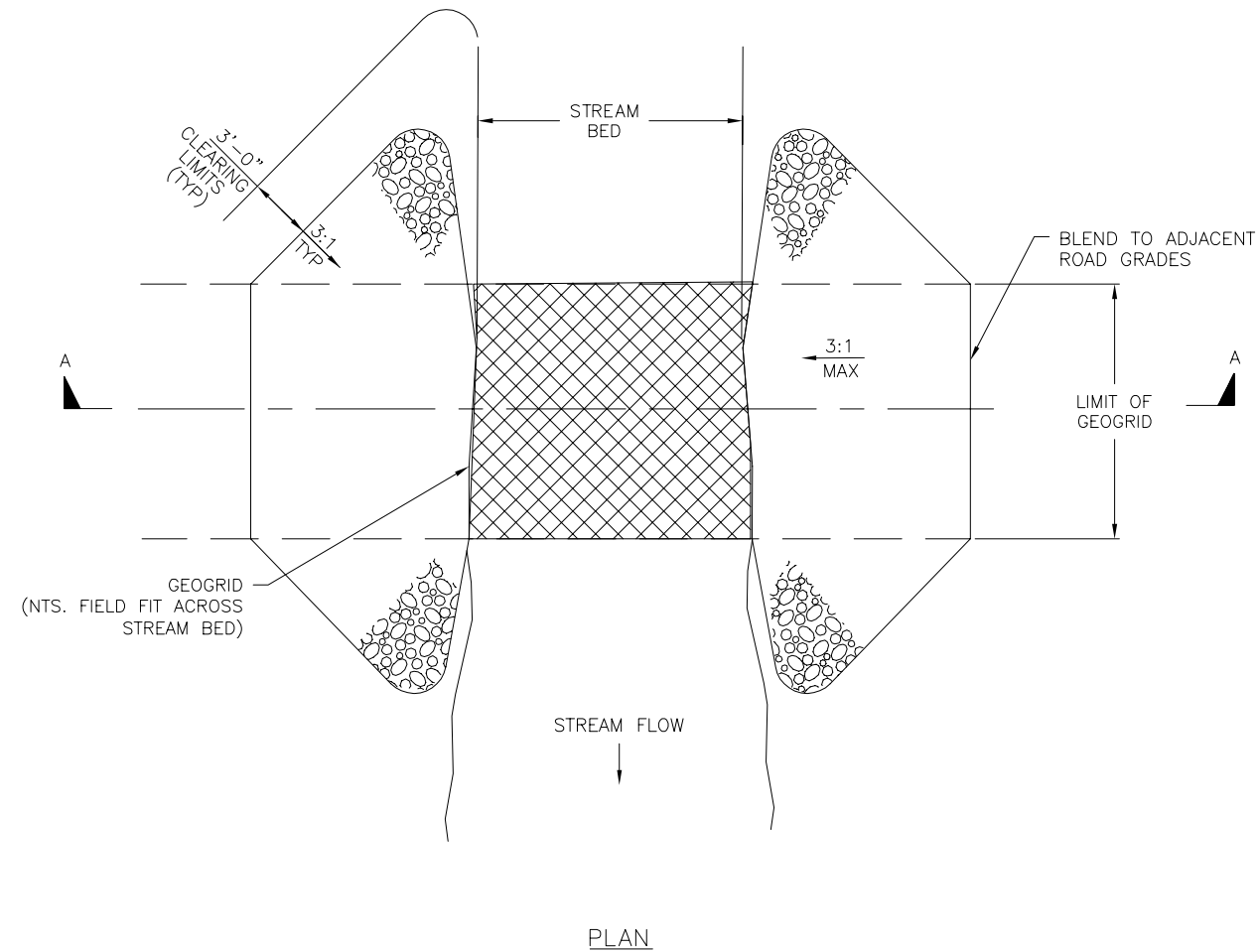
1. SLOPES OF WATER BAR TO BE MAINTAINED AT 1 ON 4
2. CLEAN 3 FT BEYOND LIMITS OF EXCAVATION FOR LEVEL SPREADER.

ROAD SLOPE PERCENT	WATER BAR SPACING - FT
5	150
10	100
15 AND OVER	50

SECTION "A-A"
(THROUGH WATER BAR)
N.T.S.

RHODE ISLAND PE SEAL 8879 IS APPLICABLE ONLY TO THE PROPOSED SITEWORK AND ESC MEASURES.

NOT FOR CONSTRUCTION



STREAM FORD
N.T.S.

NOTES:

1. USE PRESTO GEOSYSTEMS GEOWEB (OR APPROVED EQUAL) FOR GEOGRID AND CONNECT EACH SECTION TOGETHER.
2. ANCHOR GEOGRID IN PLACE WITH STAKES
3. FILL GEOGRID WITH AASHTO #5 CRUSHED STONE (OR APPROVED SIMILAR) TO STABILIZE EACH CELL.
4. LIMIT FILL DROP HEIGHT TO 3 FEET.
5. OVERFILL CELLS AT LEAST 2 INCHES BEFORE COMPACTING.

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