

F H W A REGION	STATE	TOWN	FED. AID PROJ. NOS.	PROJ. NO.	YEAR	SHEET NUMBER
1	CONN.	VARIOUS	CT-05-0109 CT-90-X519	301-0145	2013	01.01.001

# CONNECTICUT DEPARTMENT OF TRANSPORTATION PLAN

FOR CATENARY REPLACEMENT

## CATENARY SECTION C-1a and C-2

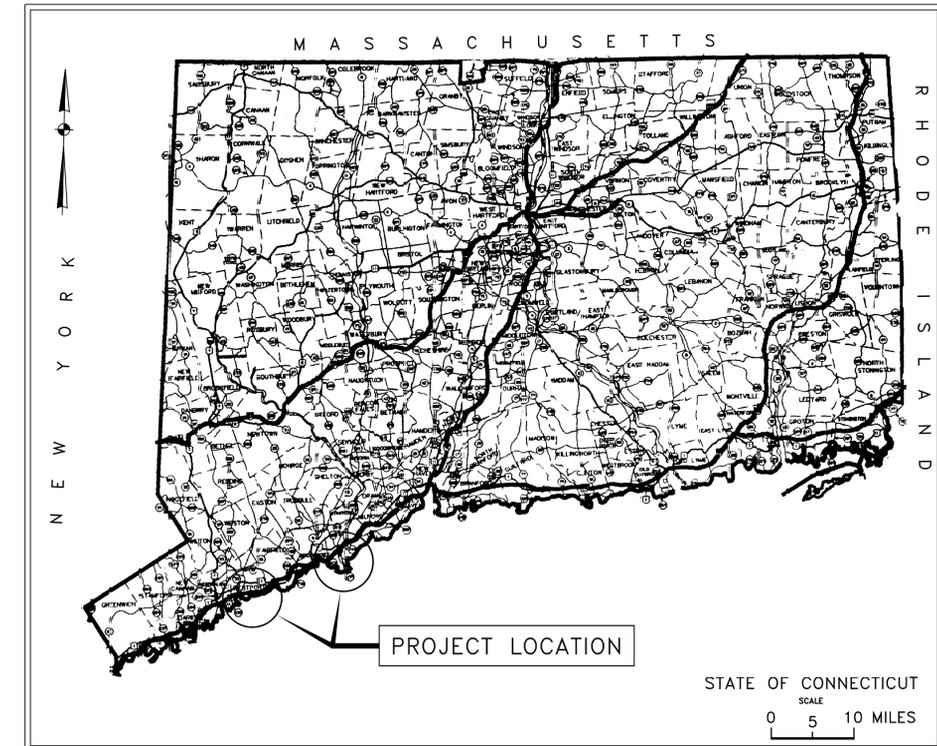
BETWEEN WALK BRIDGE AND CATENARY STRUCTURE 636

IN THE TOWNS OF  
NORWALK AND WESTPORT

AND BETWEEN PECK BRIDGE AND DEVON BRIDGE

IN THE TOWNS OF  
BRIDGEPORT AND STRATFORD

**STATE PROJECT NO. 301-0145**  
**FTA PROJECT NOS. CT-05-0109 & CT-90-X519**



2004 SPECIFICATIONS FORM NO. 816 W/SUPPLEMENT OF TOWN Nos. 301  
JULY, 2013 ALL ELEVATIONS ON THIS PROJECT BASED PROJECT Nos. 145  
ON NGVD 1929 OR AS NOTED.

STANDARD CONVENTIONS	
North Arrow W/No.Coar.	Grid Arrow
Edge Of Road	Limit Of Marsh
Concrete Pavement	Stone Wall
Dirt Road	Ledge Outcrop
B.C.L.C.	Inland Wetland Limits
Granite Curb	STATE LINE
Outside Rail	Power Line
Concrete Median Barrier	Swamp
Bituminous Walk	Building
Concrete Sidewalk	Transmission Tower
Railroad Tracks	Riprap
Chain Link Fence	Hedge Row
Rustic Fence	Tree Line
Pipe Fence	Shrub
Board Fence	Evergreen Tree
Water Edge	Deciduous Tree
Stream	Retaining Wall
Ditch	Highway Line
TOWN LINE	Street Line
	Property Line
	Lot Line
	Easement Line

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### LIST OF VOLUMES

VOLUME NO.	VOLUME TITLE	* VOLUME SHEET COUNT
1.01	GENERAL	5
1.02	REVISIONS	1
1.03	CATENARY DETAILS 1	115
1.04	CATENARY DETAILS 2	151
1.05	ENVIRONMENTAL PLANS	35
1.06	M&PT PLANS	7
2.01	C-1A ERECTION DIAGRAMS	149
3.01	C-2 ERECTION DIAGRAMS 1	110
3.02	C-2 ERECTION DIAGRAMS 2	70
4.01	STAGING PLANS	31
5.01	FIBER OPTIC	85
6.01	TRAFFIC STANDARD SHEETS	4

\*THE INITIAL VOLUME SHEET COUNT DOES NOT INCLUDE ADDENDUMS AND CHANGE ORDERS

### LIST OF DRAWINGS

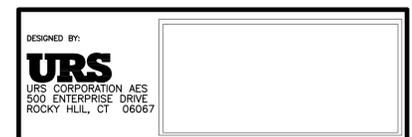
DRAWING TITLE	DRAWING NO.
COVER SHEET	G-1-1
SITE PLAN 1	G-SP1
SITE PLAN 2	G-SP2
SITE PLAN 3	G-SP3
DETAILED ESTIMATE SHEET	G-6

PROJECT CONTROL DATE: 09/13/13  
DISK FILENAME: G-1-1.dwg  
100% DESIGN



URS CORPORATION AES  
500 ENTERPRISE DRIVE  
ROCKY HILL, CT 06067

**URS** URS CORPORATION AES  
500 ENTERPRISE DRIVE  
ROCKY HILL, CT 06067  
1-(860)-529-8882



DRAWING NO. G-1-1

F H W A REGION	STATE	TOWN	FED. AID PROJ. NO.	PROJ. NO.	YEAR	SHEET NUMBER
1	CONN.	VARIOUS	CT-05-0109	301-0145	2013	01.01.002



PROJECT CONTROL DATE: 09/13/13 DISK FILENAME: G-SP1.DWG 100% DESIGN

STATE OF CONNECTICUT  
DEPARTMENT OF TRANSPORTATION

SECTION C-1a & C-2 NEW HAVEN LINE

CATENARY REPLACEMENT BETWEEN  
WALK BRIDGE AND STRUCTURE 636,  
PECK BRIDGE AND STRUCTURE 863

SITE PLAN-1

ENGINEER: URS CORPORATION AES	
DESIGNER: RW	DRAFTER: AMK
CHECKER: AJM	
APPROVED: T. HOLLAND	DATE: 09/13/13
STRUCTURE NO.	BRIDGE LOG NO.
	STRUCTURE SHEET NO.
	G-SP1



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THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE TRUE CONDITIONS OR ACTUAL QUANTITIES OR DISTRIBUTION OF QUANTITIES OF WORK WHICH WILL BE REQUIRED.

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NO.	DATE	DESCRIPTION

F H W A REGION	STATE	TOWN	FED. AID PROJ. NO.	PROJ. NO.	YEAR	SHEET NUMBER
1	CONN.	VARIOUS	CT-05-0109	301-0145	2013	01.01.003



PROJECT CONTROL DATE: 09/13/13 100% DESIGN DISK FILENAME: G-SP2.DWG

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STATE OF CONNECTICUT  
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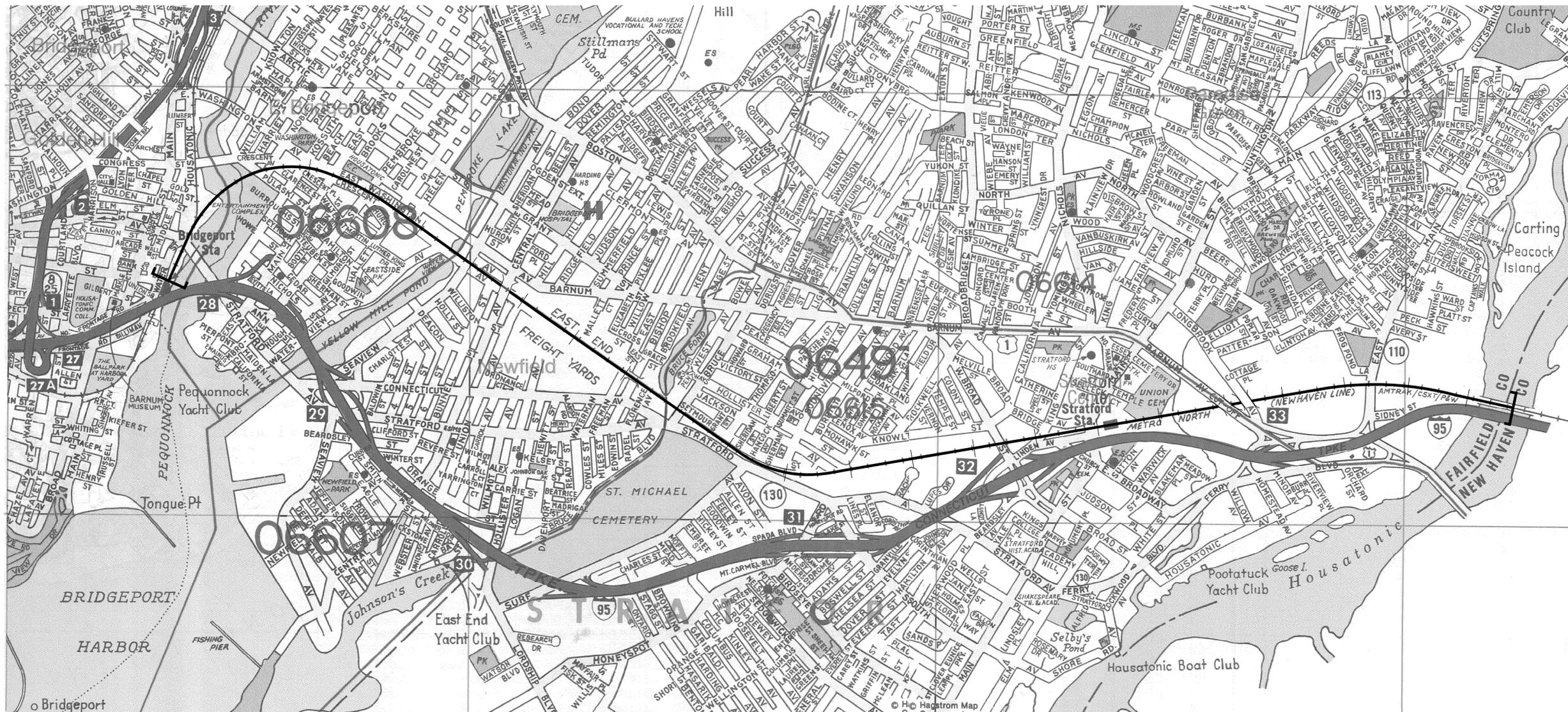
SECTION C-1a & C-2 NEW HAVEN LINE

CATENARY REPLACEMENT BETWEEN  
 WALK BRIDGE AND STRUCTURE 636,  
 PECK BRIDGE AND STRUCTURE 863

SITE PLAN-2

ENGINEER: URS CORPORATION AES	
DESIGNER: RW	CHECKER: AJM
DRAFTER: AMK	DATE: 09/13/13
APPROVED: T. HOLLAND	DATE: 09/13/13
NO. DATE	DESCRIPTION
REVISIONS	STRUCTURE NO.
BRIDGE LOG NO.	STRUCTURE SHEET NO. G-SP2

F H W A REGION	STATE	TOWN	FED. AID PROJ. NO.	PROJ. NO.	YEAR	SHEET NUMBER
1	CONN.	VARIOUS	CT-05-0109	301-0145	2013	01.01.004



100% DESIGN

DISK FILENAME: G-SP3.DWG

PROJECT CONTROL DATE: 09/13/13



STATE OF CONNECTICUT  
DEPARTMENT OF TRANSPORTATION

SECTION C-1a & C-2 NEW HAVEN LINE

CATENARY REPLACEMENT BETWEEN  
WALK BRIDGE AND STRUCTURE 636,  
PECK BRIDGE AND STRUCTURE 863

SITE PLAN-3

ENGINEER: URS CORPORATION AES  
DESIGNER: RW      DRAFTER: AMK      CHECKER: AJM

APPROVED: T. HOLLAND      DATE:  
STRUCTURE NO.      BRIDGE LOG NO.      STRUCTURE SHEET NO.  
G-SP3



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NO.	DATE	DESCRIPTION

F H W A REGION	STATE	TOWN	FED. AID PROJ. NO.	PROJ. NO.	YEAR	SHEET NUMBER
1	CONN.	VARIOUS	CT-05-0109	301-0145	2013	01.01.005

ITEM	DESCRIPTION	UNIT	QTY
0020903A	LEAD COMPLIANCE FOR MISCELLANEOUS EXTERIOR TASKS	LS	1
0090001A	SANDY POCKET	EA	12
0090002A	ENCASE STEEL BASE IN CONCRETE	EA	204
0090003A	REPLACE CONCRETE TOPPING	EA	320
0090004A	GROUT FILL	EA	2
0090007A	REPAIR BASE PLATE	EA	1
0090009A	WATERSHED REPLACEMENT	EA	95
0090010A	REMOVE OVERGROWN VEGETATION	EA	19
0090011A	REPAIR ANCHOR BOLT	EA	3
0090015A	PAINT CONCRETE FOUNDATION	EA	370
0090017A	REPLACE CORRODING/MISSING LACING BAR	EA	1,409
0090022A	REMOVE DIRT AND DEBRIS	EA	153
0090028A	CATENARY POLE FOUNDATION, TYPE A	EA	23
0090033A	CATENARY GUY ROCK ANCHOR	EA	4
0090037A	DOWN GUYS	EA	164
0090042A	CATENARY SYSTEMS	LF	12,045
0090045A	AERIAL GROUND WIRE SYSTEM	LF	119,219
0090046A	STAGGER/HEIGHT GAUGE	LS	1
0090050A	HIGH-SPEED SECTION INSULATORS	EA	8
0090054A	REPAIR FOUNDATION WITH REINFORCED CONCRETE	EA	80
0090055A	REPAIR FOUNDATION CRACKS WITH EPOXY INJECTION	EA	1
0090056A	WATERSHED REMOVAL	EA	88
0090057A	REMOVE LACING BAR	EA	918
0090059A	BRIDGE PLATE	EA	40
0090061A	ERECTION/REMOVAL CYCLE - BRIDGE PLATE	EA	192
0090066A	DRIP SHIELDS	LF	618
0090067A	INSTALL ANCHOR BOLT WATERSHED	EA	17
0090073A	CABLE SUPPORT MESSENGER WIRE	LF	2,251
0090094A	GUY ANCHOR, TYPE 4	EA	20
0090120A	INSTALLATION OF CATENARY IN CURVES	LS	1
0090122A	TOP CHORD ANGLE REPAIR, TYPE K	EA	1
0090123A	TOP CHORD ANGLE REPAIR, TYPE L	EA	484
0090124A	TOP CHORD ANGLE REPAIR, TYPE M	EA	498
0090125A	TRUSS COLUMN REPAIR, TYPE N	EA	12
0090126A	COLUMN REPAIR, TYPE PT	EA	3
0090127A	TEMPORARY BRIDLE WIRE INSTALLATION	LF	55,229
0090128A	COLUMN REPAIR, TYPE ST	EA	2
0096050A	AUTO-TENSIONED CATENARY	LF	298,063
0096056A	SUSPENSION OF C&S CABLE MESSENGERS	LS	1
0096064A	CATENARY GUY ANCHORS IN SOIL	EA	94
0096065A	REMOVAL OF CATENARY	LF	243,267
0096066A	REMOVAL OF SIGNAL AND COMMUNICATION CABLES	LF	109,116
0096067A	REMOVAL OF SIGNAL HEADS INCLUDING DROP TUBES	EA	42
0096079A	REPAIR TRUSS TOP CHORD ANGLE	EA	124
0096081A	REMOVAL OF FEEDER OR AERIAL GROUND WIRE	LF	106,412
0096084A	MOTOR OPERATED DISCONNECT SWITCH	EA	12
0096085A	DISCONNECT SWITCHES	EA	5
0099010A	REMOVAL OF ABANDONED RAILROAD EQUIPMENT	EA	40
0100101A	FEEDER WIRE ATTACHMENT	LS	1

ITEM	DESCRIPTION	UNIT	QTY
0100102A	TRANSMISSION LINE POST INSULATOR ASSEMBLY	EA	114
0100103A	TRANSMISSION LINE GROUND WIRE SUSPENSION ASSEMBLY	EA	38
0100244A	SIGNS	EA	278
0100426A	WATER TRANSPORTATION FOR RESCUE OPERATIONS	DAY	10
0100600A	CONSTRUCTION ACCESS	LS	1
0101000A	ENVIRONMENTAL HEALTH AND SAFETY	LS	1
0101109A	HAZARDOUS MATERIAL EXCAVATION	CY	310
0101117A	CONTROLLED MATERIALS HANDLING	CY	550
0101126A	DISPOSAL OF HAZARDOUS WASTE	TON	470
0101128A	SECURING, CONSTRUCTION AND DISMANTLING OF A WASTE STOCKPILE AND TREATMENT AREA	LS	1
0101130A	ENVIRONMENTAL WORK - SOLIDIFICATION	TON	60
0104033A	WALL FOUNDATION, TYPE 3	EA	7
0104034A	WALL FOUNDATION, TYPE 4	EA	1
0104051A	POLE FOUNDATION, TYPE B	EA	20
0104055A	POLE FOUNDATION, TYPE F	EA	46
0104056A	POLE FOUNDATION, TYPE R	EA	8
0104061A	FOUNDATION, TYPE 1	EA	4
0104062A	FOUNDATION, TYPE 2	EA	5
0104073A	SNOWMELTER UNIT SUBSTATIONS	EA	2
0125499A	ACCEPTANCE TESTING	LS	1
0125740A	TECHNICAL MANUALS	LS	1
0125741A	SPARE PARTS MANUALS	LS	1
0125742A	SPECIAL TOOLS	LS	1
0201001	CLEARING AND GRUBBING	LS	1
0202101A	ROCK EXCAVATION	CY	150
0202315A	DISPOSAL OF CONTROLLED MATERIALS	TON	600
0202317A	DISPOSAL OF HAZARDOUS MATERIALS	TON	17
0202318A	MANAGEMENT OF REUSABLE CONTROLLED MATERIAL	CY	170
0202629A	SETTLEMENT MONITORING PROGRAM	LS	1
0204213A	HANDLING CONTAMINATED GROUNDWATER	LS	1
0219003	SEDIMENTATION CONTROL FABRIC FENCE SYSTEM	LF	1000
0502182A	RUBBER GRADE CROSSING	LF	1,140
0506026A	RETAINING WALL	SF	100
0603253A	DISPOSAL OF LEAD DEBRIS	BBL	2
0603431A	STEEL (MISCELLANEOUS)	CWT	9,109
0603801A	STRUCTURAL STEEL	CWT	8,076
0609030A	REPOINT MORTAR JOINTS	LF	2,400
0702078A	DRILLED SHAFT ROCK EXCAVATION (3' DIA)	LF	134
0702086A	DRILLED SHAFT ROCK EXCAVATION (4.5' DIA)	LF	84
0702101	FURNISHING STEEL PILES	LB	10,800
0702111	DRIVING STEEL PILES	LF	120
0702115	SPLICING STEEL PILES	EA	4
0702120	POINT REINFORCEMENT FOR STEEL PILES	EA	4
0702860A	DRILLED SHAFT ROCK EXCAVATION (3.5' DIA)	LF	276
0822001	TEMPORARY PRECAST CONCRETE BARRIER CURB	LF	2,440
0822002	RELOCATED TEMPORARY PRECAST CONCRETE BARRIER CURB	LF	1,128
0901005A	BOLLARD	EA	14
0914004A	GALVANIZED STEEL HANDRAIL	LF	85

ITEM	DESCRIPTION	UNIT	QTY
0969000A	PROJECT COORDINATOR	LS	1
0969066A	CONSTRUCTION FIELD OFFICE, EXTRA LARGE	Mo.	42
0970007A	TRAFFICPERSON (UNIFORMED FLAGGER)	HR	112
0971001A	MAINTENANCE AND PROTECTION OF TRAFFIC	LS	1
0975002	MOBILIZATION	LS	1
0976002	BARRICADE WARNING LIGHTS - HIGH INTENSITY	DAY	2664
0979003A	CONSTRUCTION BARRICADE TYPE III	EA	5
0980001	CONSTRUCTION STAKING	LS	1
0981100	42" TRAFFIC CONE	EA	46
1008015	2" RIGID METAL CONDUIT - SURFACE	LF	5750
1017200A	SURGE ARRESTORS	EA	2
1019028A	AERIAL FIGURE 8 INNERDUCT	LF	133,000
1113042A	144 STRAND SINGLE-MODE FIBER OPTIC CABLE	LF	144,000
1113043A	24 STRAND SINGLE-MODE FIBER OPTIC CABLE	LF	11,000
1112243A	FIBER OPTIC CABLE STORAGE "SNOW SHOE"	EA	50
1205207	TYPE DE-7 DELINEATORS	EA	110
1208928A	SIGN FACE - SHEET ALUMINUM (TYPE III REFLECTIVE SHEETING)	SF	1,398
1211001	REMOVAL OF PAVEMENT MARKINGS	SF	3,586
1212001	TEMPORARY PLASTIC PAVEMENT MARKING TAPE - 4" YELLOW	LF	7,018
1212010	TEMPORARY PLASTIC PAVEMENT MARKING TAPE - 12" WHITE	LF	76
1220013A	CONSTRUCTION SIGNS - BRIGHT FLUORESCENT SHEETING	SF	241
1802020	TYPE A IMPACT ATTENUATION MODULE 700 LB.	EA	5
1802030	TYPE A IMPACT ATTENUATION MODULE 1400 LB.	EA	20
1802040	TYPE A IMPACT ATTENUATION MODULE 2100 LB.	EA	10

PROJECT CONTROL DATE: 09/13/13 DISK FILENAME: G-6.dwg 100% DESIGN

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SECTION C-1a & C-2 NEW HAVEN LINE

CATENARY REPLACEMENT BETWEEN WALK BRIDGE AND STRUCTURE 636, PECK BRIDGE AND STRUCTURE 863

DETAILED ESTIMATE SHEET

ENGINEER: URS CORPORATION AES		
DESIGNER: AJM	DRAFTER: AMK	CHECKER: RW
APPROVED: T. HOLLAND		DATE: 09/13/13
NO.	DATE	DESCRIPTION
REVISIONS		
STRUCTURE NO.	BRIDGE LOG NO.	STRUCTURE SHEET NO.
		G-6