



Chapter 3 - Document Introduction

Document Introduction

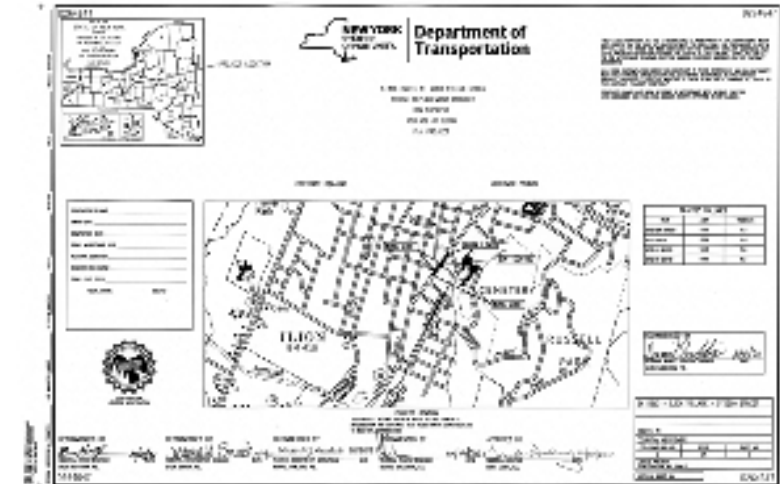
Route 51 over Steele Creek

Reference Documents

1. Construction Document Package for State Route 51 over Steel Creek Bridge Replacement Project (BIN 1026490), Contract D2646487
2. New York State Department of Transportation Standard Specifications and Standard Sheets (US Customary) – Year 2022

<https://www.dot.ny.gov/main/business-center/engineering/specifications/>

See “Lesson 0” for Extended Discussion on Standard Specifications



Construction Documents

Route 51 over Steele Creek

ExPr

- 94 Pages, PDF
- Paper Size: 11 inches by 17 inches
- Generally Black and White, with Some Color Sheets

Rough Categories

<u>Rough Categories</u>	<u>PDF Page #</u>
1. Introduction & Typical Sections	(1-6)
2. Surveys & Boundaries	(7-10)
3. Work Zone Traffic Control	(11-16)
4. General Civil and Utilities	(17-59)
5. Bridge Plans	(60-94)

INDEX		TOTAL NUMBER OF SHEETS
SHEET NUMBER	DESCRIPTION	DRAWING NUMBER
1	TITLE SHEET	COVER
2	INDEX AND ABBREVIATIONS	INDEX
3-4	LEGEND, LINE AND POINT SYMBOLS	LEG-1 TO LEG-2
5-6	TYPICAL SECTIONS	TYP-1 TO TYP-2
7	BASELINE TIES & BENCHMARKS	BLT-1
8	RIGHT OF WAY TABLES	RWT-1
9-10	RIGHT OF WAY PLANS	RWP-1 TO RWP-2
11	WORK ZONE TRAFFIC CONTROL NOTES	WZN
12-15	WORK ZONE TRAFFIC CONTROL PLANS	WZTC-1 TO WZTC-4
16	MAINTENANCE JURISDICTION PLAN	MJP
17-23	MISCELLANEOUS TABLES	MST-1 TO MST-7
24-30	MISCELLANEOUS DETAILS	MSD-1 TO MSD-7
31	EARTHWORK SUMMARY SHEET	ESS
32-36	GENERAL PLANS	GWP-1 TO GWP-5
37-38	PROFILE	PRD-1 TO PRD-2
39	DRAINAGE PROFILE	DP-1
40	SANITARY PROFILE	SP-1
41	WATERMAIN PROFILE	WP-1
42	DISPOSITION TABLE	DTT
43-45	UTILITY PLANS	UT-1 TO UT-3
46-50	SIGN, STRIPING, AND LANDSCAPE PLANS	SSL-1 TO SSL-5
51	TRAFFIC SIGNAL PLAN AND NOTES	TSP-1
52	LANDSCAPE NOTES	LAN-1
53-54	LANDSCAPE TABLES	LAT-1 TO LAT-2
55-59	LANDSCAPE DETAILS	LAD-1 TO LAD-5
60-94	BRIDGE PLANS	ST-1 TO ST-35

Construction Documents

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- Typical Abbreviations, Symbols, and Linetypes are defined in the front of the package and apply throughout all of the sheets.

01	CONCRETE	02	STEEL
02	CONCRETE	03	STEEL
03	CONCRETE	04	STEEL
04	CONCRETE	05	STEEL
05	CONCRETE	06	STEEL
06	CONCRETE	07	STEEL
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97	CONCRETE	98	STEEL
98	CONCRETE	99	STEEL
99	CONCRETE	100	STEEL

Example

1. Elevation
2. Square Feet
3. Overhead Electric Line
4. Underground Gas Line
5. Overhead Gas Line

PDF Page

- EL or ELEV
SF
--- OE ---
--- G ---
--- OG ---

STYLE	NAME	DESCRIPTION
— C —	UC	CONDUIT, UNDERGROUND
— C —	UCH	CONDUIT, HANGING
— OC —	UCO	CONDUIT, OVERHEAD
— E —	UE	ELECTRIC LINE, UNDERGROUND
— E —	UEH	ELECTRIC LINE, HANGING
— OE —	UEO	ELECTRIC LINE, OVERHEAD
— OET —	UETO	ELECTRIC TRANSMISSION, OVERHEAD
— X X X X X —	UESS	ELECTRIC, SUBSTATIONS
— FO —	UFO	FIBER OPTIC, UNDERGROUND
— F —	UFH	FIBER OPTIC, HANGING
— FO —	UFOO	FIBER OPTIC, OVERHEAD
— G —	UG	GAS, UNDERGROUND
— G —	UGH	GAS, HANGING
— OG —	UGO	GAS, OVERHEAD

Construction Documents

Route 51 over Steele Creek

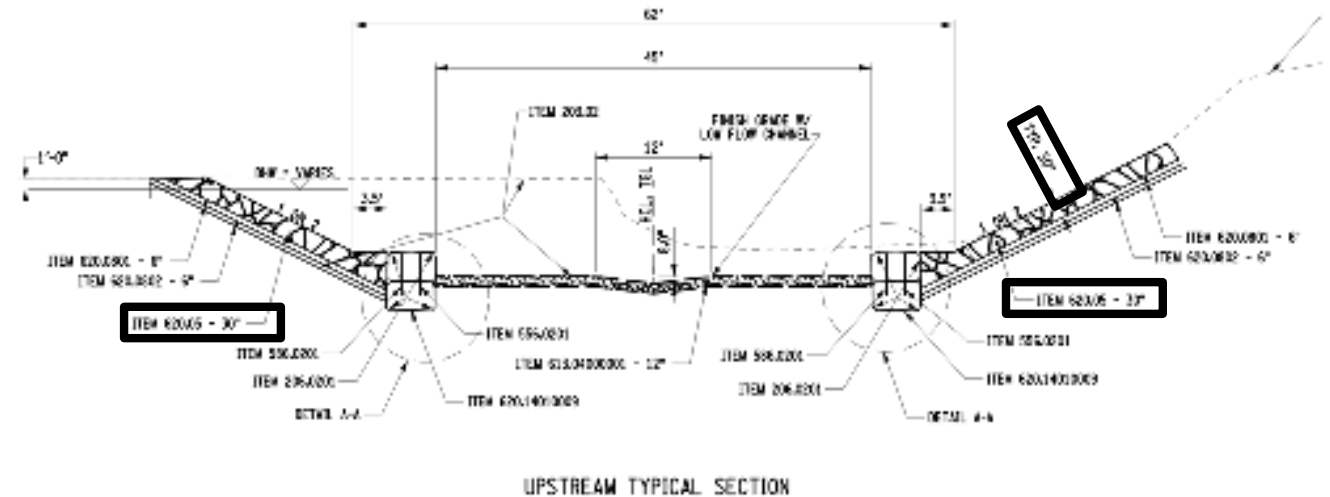
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- Materials and work are often referenced as “Items”.
- Items are described in more detail in the “Standard Specifications” and require cross-referencing

Example

Each side of the stream requires a 30” thick layer of Item 620.05, which is called “Stone Fill (Heavy).

Specification 620.05 then refers to 733-21 “Stone Filling”, which calls heavy stones to be at least 600 pounds and meet other size and gradation blend requirements.



ITEM	DESCRIPTION	UNIT	ITEM
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CF	
206.0001	TRENCH AND CULVERT EXCAVATION	CF	
506.0201	#4 UNGRADED BAR REINFORCEMENT FOR CONCRETE STRUCTURES	LB	
506.0301	DRILLING AND GRouting SHELTS OR REINFORCEMENT BARS	EA	
620.05	STONE FILL (HEAVY)	CF	
620.0602	BEDDING MATERIAL, TYPE 2	CF	
620.1400000	EXTRA HEAVY STONE, TYPE A	CF	

Construction Documents

Route 51 over Steele Creek

Bridge Plans (60-94)

- Describes the work required for the construction of the bridge structure itself.
- See “Page Turn” Video for Additional Information and Discussion.
- Let’s first focus on the Drawing Numbers “ST-1 (60) and ST-2 (61)”

INDEX OF DRAWINGS		TOTAL NUMBER OF SHEETS
SHEET NUMBER	DESCRIPTION	DRAWING NUMBER
60	GENERAL PLAN BRIDGE	ST-1
61	BRIDGE TYPICALS	ST-2
62	BRIDGE PROFILE 1:5	ST-3
63	ESTIMATE OF QUANTITY & INDEX BRIDGE	ST-4
64	GENERAL NOTES	ST-5
65	BORING LOCATION PLAN	ST-6
66	GENERAL SUBSURFACE PROFILE	ST-7
67	EARTHWORK PLAN	ST-8
68	EARTHWORK SECTION	ST-9
69-71	BEGIN ABUTMENT, PILE LAYOUT, PLAN, ELEVATION	ST-10 TO ST-12
72-74	END ABUTMENT, PILE LAYOUT, PLAN, ELEVATION VIEW	ST-13 TO ST-15
75	INTEGRAL ABUTMENTS	ST-16
76	TRANSVERSE SECTION	ST-17
77	FRAMING PLAN	ST-18
78	GIRDER DETAILS	ST-19
79	DIAPHRAGM DETAILS	ST-20
80	MOMENT, SHEAR, CAMBER, AND DESIGN LOAD TABLES	ST-21
81	HAUNCH TABLES	ST-22
82	SUPERSTRUCTURE SLAB DETAILS	ST-23
83	APPROACH SLAB DETAILS	ST-24
84	VERTICAL CONCRETE BARRIER LAYOUT	ST-25
85	BARRIER REINFORCEMENT PLAN	ST-26
86	BARRIER DETAILS	ST-27
87	TRANSITION RAILING DETAILS	ST-28
88	SPLICE DETAILS	ST-29
89-90	MISCELLANEOUS DETAILS	ST-30 TO ST-31
91-94	BAR LIST	ST-32 TO ST-35

Construction Documents

Route 51 over Steele Creek

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Upstream

North Arrow

Plan Information

Drawing Scale

Downstream

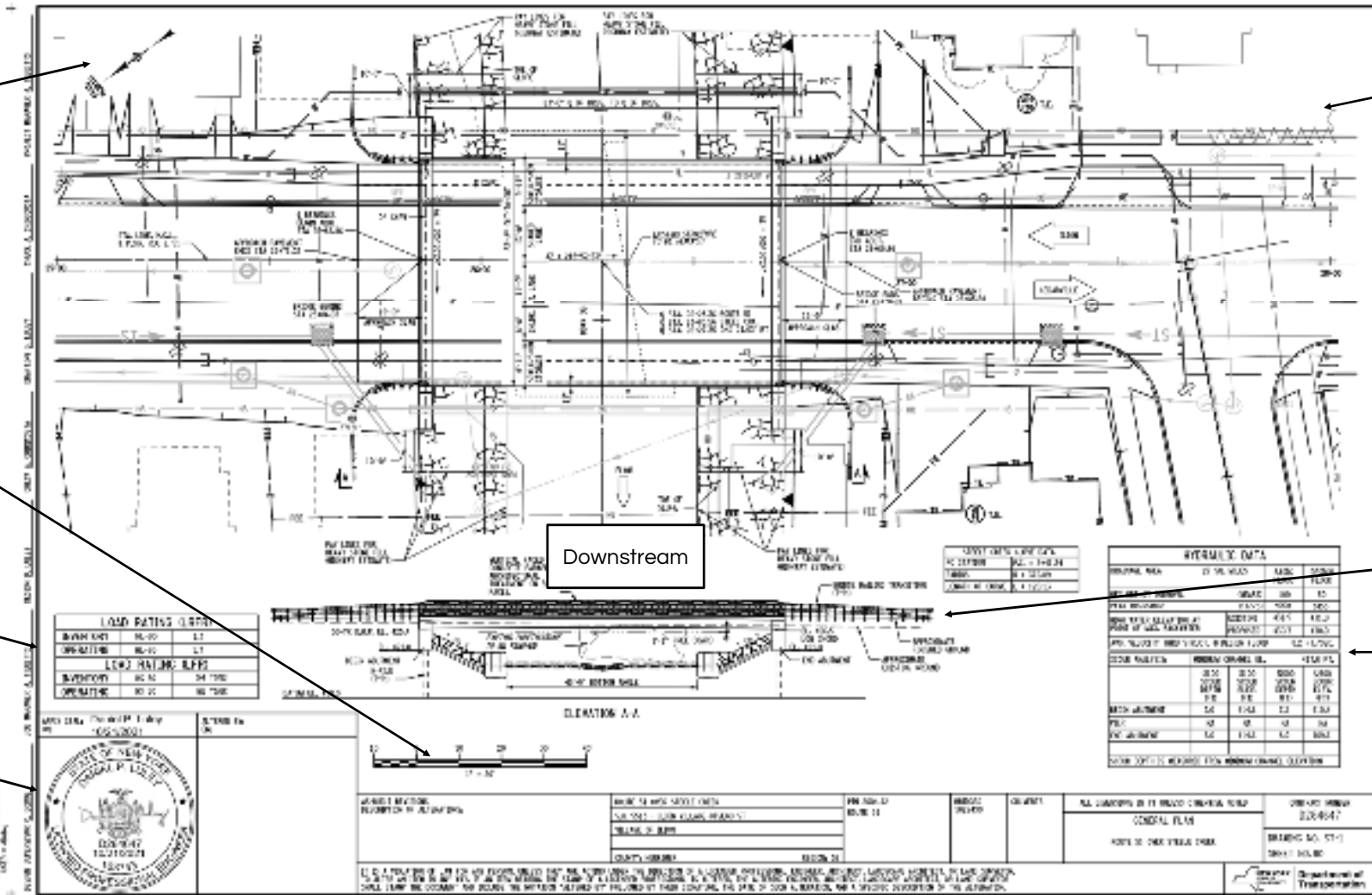
Load Ratings

Typical Finished Elevation View

Certifying Engineer

Hydraulic Data Summary

Titleblock Information



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Route 51 over Steele Creek

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