

CRAIG PAEPRER  
*Chairman*

ANTHONY GIANNICO  
*Vice Chairman*

**BOARD MEMBERS**  
RAYMOND COTE  
ROBERT FRENKEL  
VICTORIA CAUSA  
JOHN NUCULOVIC

**TOWN OF CARMEL**  
**PLANNING BOARD**



60 McAlpin Avenue  
Mahopac, New York 10541  
Tel. (845) 628-1500 – Ext.190  
[www.ci.carmel.ny.us](http://www.ci.carmel.ny.us)

MICHAEL CARNAZZA  
*Director of Code  
Enforcement*

RICHARD FRANZETTI, P.E.  
*Town Engineer*

PATRICK CLEARY,  
AICP, CEP, PP, LEED AP  
*Town Planner*

**PLANNING BOARD AGENDA**  
**APRIL 13, 2023– 7:00 P.M.**

**REVISION #1**

**TAX MAP # PUB. HEARING MAP DATE COMMENTS**

**RESOLUTION**

1. Glenacom Lake Cell Tower – Walton Drive	87.5-1-90		3/3/23	Special Permit & Site Plan
2. Gateway Summit Multi-Family – Lot 6 2054 Route 6	55.-2-24.6-1, 55.-2-24.6-2		1/28/22	Corrected Resolutions
3. The Fairways Multi-Family – Lot 7 2054 Route 6	55.-2-24.8-1, 55.-2-24.8-2		1/28/22	Corrected Resolutions

**PUBLIC HEARING**

4. Platinum Propane – 1035 Route 6	65.10-2-11	04/13/23	3/30/23	Site Plan
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**SITE PLAN**

5. NYCDEP West Branch Auxiliary Dam – 34 Drewville Road	65.-1-5		3/31/23	Site Plan
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**MISCELLANEOUS**

6. Minutes – 02/09/23
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April 3, 2023

Town of Carmel Planning Board  
60 McAlpin Avenue  
Mahopac, New York 10541

RE: 1035 Rt 6 – Platinum Propane  
Town of Carmel  
TM# 65.10-2-11

Dear Chairman Paepre and Members of the Board:

Please find enclosed the following plans and documents in support of an application for site plan approval for the above referenced project:

- Architectural Rendering by Michael Piccirillo Architecture PLLC, dated March 15, 2023.

All comments from the Town's consultants to this point have been satisfied.

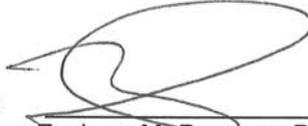
With regard to comments raised at the March 9, 2023 meeting of the Planning Board by the Chairman and other members, regarding the proposed materials for the lean to building, we offer the enclosed architectural rendered elevation, which includes material swatches. The architect will also make samples available for distribution at the April 13 meeting.

Please place the project on the April 13, 2023 Planning Board agenda for a public hearing and discussion of the project with the Board. Should you have any questions or comments regarding this information, please feel free to contact our office.

Very truly yours,

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

By:



\_\_\_\_\_  
Zachary M. Pearson, PE  
Principal Engineer

ZMP/adt

Enclosures

cc: (All via email only) Joseph Covais, Michael Velardo, Stacy Silvers, Mahopac Fire Department



6 3D View 1



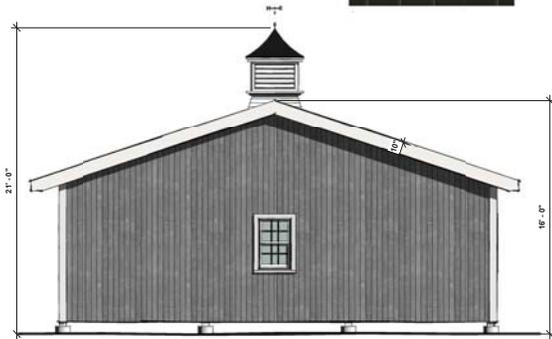
7 3D View 2



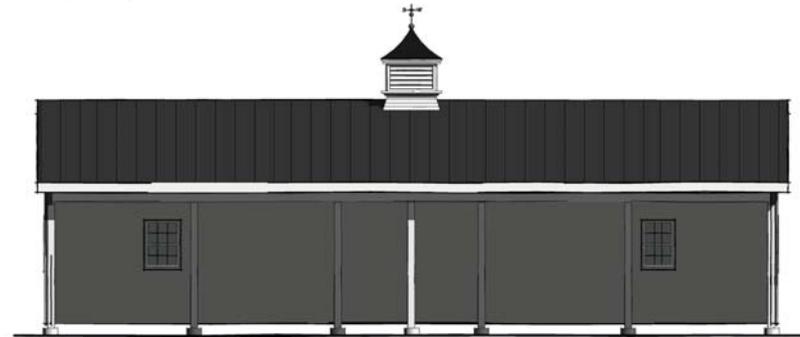
ROOF:  
STANDING SEAM METAL,  
BLACK



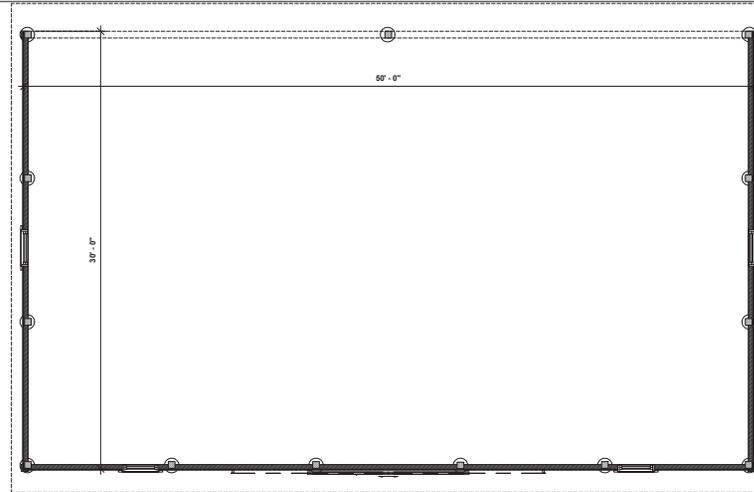
SIDING:  
LP SMARTSIDE GROOVED 4\"/>



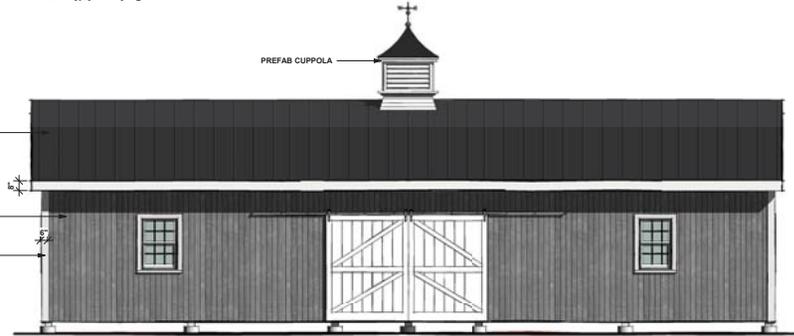
3 LEFT ELEVATION  
1/4" = 1'-0"



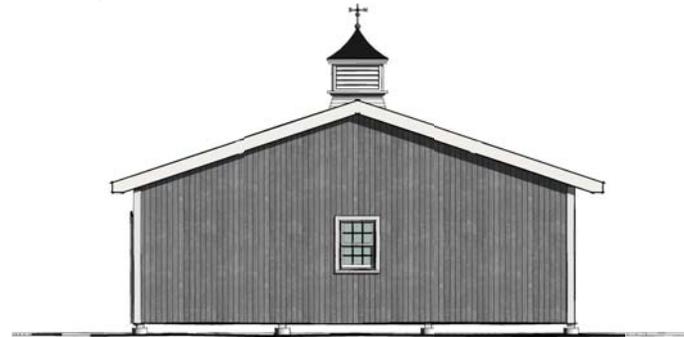
4 BACK ELEVATION  
1/4" = 1'-0"



1 FIRST FLOOR  
1/4" = 1'-0"



2 FRONT ELEVATION  
1/4" = 1'-0"



5 RIGHT ELEVATION  
1/4" = 1'-0"

No.	DATE	ISSUE
1	3/15/22	ISSUED
2	9/27/22	ISSUED
3	2/24/23	REVISED
4	3/30/23	ISSUED

PROJECT NAME:

PLATINUM PROPANE

PROJECT ADDRESS:

ROUTE 6  
MAHOPAC, NY



MICHAEL A PICCIRILLO, AIA  
345 KEAR STREET, SUITE 203  
YORKTOWN HEIGHTS, NY 10598

TELEPHONE: 914-368-9838  
FACSIMILE: 914-368-9839  
michael@piccirilloarchitect.com  
www.mpiccirilloarchitect.com

PLANS/  
ELEVATIONS

A101



**Environmental  
Protection**

**Rohit T. Aggarwala**  
*Commissioner*

**Ana Barrio**  
*Deputy Commissioner*  
Bureau of Engineering  
Design & Construction

**Sean McAndrew, P.E.**  
*Executive Director*  
Water System Capital  
Program

16 Little Hollow Road  
Grahamsville, NY 12740

Tel. (845) 334-7195  
Fax (845) 985-2282  
[mcandrews@dep.nyc.gov](mailto:mcandrews@dep.nyc.gov)

April 5, 2023

Town of Carmel  
Environmental Conservation Board  
Attn: Rose Trombetta  
60 McAlpin Avenue  
Mahopac, NY 10541

**RE: CRO-534: West Branch Reservoir Auxiliary Dam (Putnam County) Slope  
Improvement Project**

New York City Department of Environmental Protection  
Bureau of Engineering, Design and Construction

Dear Planning Board Members,

The New York City Department of Environmental Protection (DEP) have met with the Town of Carmel's Environmental Conservation Board (ECB) and have addressed their comments. The Thirty (30) days public notice will end in mid-April. We are anticipating that we will receive the permit from ECB on April 20, 2023.

The DEP is requesting to be added to the Planning Board's next available meeting agenda.

Should there be questions or additional information required to process this application, please contact Linda Singh (Accountable Manager) at 917-207-9477 or via e-mail at [LindaSi@dep.nyc.gov](mailto:LindaSi@dep.nyc.gov).

Very truly yours,

Paul Costa, P.E.  
Portfolio Manager



Lead: David B. & Date: 05/26/2022, Thursday, May 26, 2022, and Date: 05/26/2022, Thursday, May 26, 2022, 10:15:53 AM  
 Plot Size: ANSI D (22.00 X 34.00 INCHES) Plot Scale: N/A  
 Drawing Name: & Location: C:\p\p\DWG\1028637\G-001\_00.dwg  
 Plot Style: TableBDDC\_Drawing.ctb

INDEX OF DRAWINGS		
SHEET #	DRAWING #	SHEET TITLE
1	C-000.00	COVER SHEET
2	G-001.00	INDEX
3	G-002.00	LEGEND & ABBREVIATIONS
4	G-003.00	GENERAL NOTES
5	G-004.00	SITE PLAN OVERVIEW
6	V-001.00	EXISTING CONDITIONS PLAN (1 OF 5)
7	V-002.00	EXISTING CONDITIONS PLAN (2 OF 5)
8	V-003.00	EXISTING CONDITIONS PLAN (3 OF 5)
9	V-004.00	EXISTING CONDITIONS PLAN (4 OF 5)
10	V-005.00	EXISTING CONDITIONS PLAN (5 OF 5)
11	C-001.00	PROPOSED SITE PLAN (1 OF 5)
12	C-002.00	PROPOSED SITE PLAN (2 OF 5)
13	C-003.00	PROPOSED SITE PLAN (3 OF 5)
14	C-004.00	PROPOSED SITE PLAN (4 OF 5)
15	C-005.00	PROPOSED SITE PLAN (5 OF 5)
16	C-006.00	GENERAL SITE GRADING PLAN (1 OF 2)
17	C-007.00	GENERAL SITE GRADING PLAN (2 OF 2)
18	C-008.00	FINAL SITE GRADING PLAN - TEMPORARY ACCESS ROAD
19	C-009.00	PROPOSED DAM SECTIONS (1 OF 2)
20	C-010.00	PROPOSED DAM SECTIONS (2 OF 2)
21	C-011.00	ROADWAY PLAN (1 OF 3)
22	C-012.00	ROADWAY PLAN (2 OF 3)
23	C-013.00	ROADWAY PLAN (3 OF 3)
24	C-014.00	ROADWAY PROFILES
25	C-015.00	SITE ACCESS ROAD PROFILE (1 OF 2)
26	C-016.00	SITE ACCESS ROAD PROFILE (2 OF 2)
27	C-017.00	TYPICAL ROADWAY SECTIONS (1 OF 2)
28	C-018.00	TYPICAL ROADWAY SECTIONS (2 OF 2)
29	C-019.00	WORK ZONE TRAFFIC CONTROL NOTES
30	C-020.00	WORK ZONE TRAFFIC CONTROL PLAN - STAGE I
31	C-021.00	WORK ZONE TRAFFIC CONTROL PLAN - STAGE II
32	C-022.00	WORK ZONE TRAFFIC CONTROL PLAN - STAGES III-A, IV-A & VI-A
33	C-023.00	WORK ZONE TRAFFIC CONTROL PLAN - STAGES III-B, IV-B & VI-B
34	C-024.00	WORK ZONE TRAFFIC CONTROL PLAN - STAGE V
35	C-025.00	WORK ZONE TRAFFIC CONTROL PLAN - STAGE VI-C
36	C-026.00	WORK ZONE TRAFFIC CONTROL PLAN - STAGE VI-D
37	C-027.00	WORK ZONE TRAFFIC CONTROL - TEMPORARY TRAFFIC SIGNAL PLAN
38	C-028.00	WORK ZONE TRAFFIC CONTROL - MISCELLANEOUS DETAILS
39	C-029.00	WORK ZONE TRAFFIC CONTROL STAGING SECTIONS (1 OF 2)
40	C-030.00	WORK ZONE TRAFFIC CONTROL STAGING SECTIONS (2 OF 2)
41	C-031.00	DRAINAGE & PIPING PLAN (1 OF 2)
42	C-032.00	DRAINAGE & PIPING PLAN (2 OF 2)
43	C-033.00	BIORETENTION SWALE PLAN & DETAILS
44	C-034.00	STORM DRAIN PIPING PROFILE
45	C-035.00	TOE DRAIN PIPING PROFILE
46	C-036.00	DRAINAGE DETAILS (1 OF 2)
47	C-037.00	DRAINAGE DETAILS (2 OF 2)
48	C-038.00	FLUME DETAILS
49	C-039.00	SEEPAGE CHAMBER DETAILS
50	C-040.00	INTERMEDIATE VAULT DETAILS (1 OF 2)
51	C-041.00	INTERMEDIATE VAULT DETAILS (2 OF 2)
52	C-042.00	PHASE 0 SOIL EROSION & SEDIMENT CONTROL PLAN (1 OF 2)
53	C-043.00	PHASE 0 SOIL EROSION & SEDIMENT CONTROL PLAN (2 OF 2)
54	C-044.00	PHASE I SOIL EROSION & SEDIMENT CONTROL PLAN (1 OF 2)
55	C-045.00	PHASE I SOIL EROSION & SEDIMENT CONTROL PLAN (2 OF 2)
56	C-046.00	PHASE II SOIL EROSION & SEDIMENT CONTROL PLAN (1 OF 2)
57	C-047.00	PHASE II SOIL EROSION & SEDIMENT CONTROL PLAN (2 OF 2)
58	C-048.00	SOIL EROSION & SEDIMENT CONTROL DETAILS (1 OF 2)
59	C-049.00	SOIL EROSION & SEDIMENT CONTROL DETAILS (2 OF 2)
60	C-050.00	GUIDE RAIL PLAN (1 OF 3)
61	C-051.00	GUIDE RAIL PLAN (2 OF 3)
62	C-052.00	GUIDE RAIL PLAN (3 OF 3)
63	C-053.00	GUIDE RAIL DETAILS (1 OF 6)
64	C-054.00	GUIDE RAIL DETAILS (2 OF 6)
65	C-055.00	GUIDE RAIL DETAILS (3 OF 6)
66	C-056.00	GUIDE RAIL DETAILS (4 OF 6)
67	C-057.00	GUIDE RAIL DETAILS (5 OF 6)
68	C-058.00	GUIDE RAIL DETAILS (6 OF 6)

INDEX OF DRAWINGS		
SHEET #	DRAWING #	SHEET TITLE
69	C-059.00	SIGN & PAVEMENT MARKING PLAN (1 OF 3)
70	C-060.00	SIGN & PAVEMENT MARKING PLAN (2 OF 3)
71	C-061.00	SIGN & PAVEMENT MARKING PLAN (3 OF 3)
72	L-001.00	TREE REMOVAL PLAN (1 OF 4)
73	L-002.00	TREE REMOVAL PLAN (2 OF 4)
74	L-003.00	TREE REMOVAL PLAN (3 OF 4)
75	L-004.00	TREE REMOVAL PLAN (4 OF 4)
76	GI-001.00	INSTRUMENTATION LEGEND
77	I-001.00	INSTRUMENTATION PLAN
78	I-002.00	CONTROL SYSTEM ARCHITECTURE
79	I-003.00	AUXILIARY DAM MONITORING P&ID
80	I-004.00	INSTALLATION DETAILS (1 OF 2)
81	I-005.00	INSTALLATION DETAILS (2 OF 2)

NYSDOT ITEM #	DESCRIPTION	UNIT
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY
203.03	EMBANKMENT IN PLACE	CY
203.21	SELECT STRUCTURAL FILL	CY
206.0201	TRENCH AND CULVERT EXCAVATION	CY
207.20	GEOTEXTILE BEDDING	SY
207.21	GEOTEXTILE SEPARATION	SY
209.110601	CHECK DAM (DITCH BOTTOM WIDTH 0.0 FT TO 3 FT) - PERMANENT	EA
209.13	SILT FENCE - TEMPORARY	LF
209.1501	TURBIDITY CURTAIN - TEMPORARY	LF
209.1801	ROLLED EROSION CONTROL PRODUCT, CLASS I TYPE A, SHORT TERM	SY
209.22	CONSTRUCTION ENTRANCE	SY
304.11	SUBBASE COURSE, TYPE 1	CY
304.15	SUBBASE COURSE, OPTIONAL TYPE	CY
402.097204	9.5 F2 TOP COURSE HMA, 70 SERIES COMPACTION	TON
402.197904	19 F9 BINDER COURSE HMA, 70 SERIES COMPACTION	TON
402.377904	37.5 F9 BASE COURSE HMA, 70 SERIES COMPACTION	TON
407.0103	STRAIGHT TACK COAT	GAL
416.10000018	COLD RECYCLING ASPHALT CONCRETE - COARSE	SY
416.20000018	ASPHALT EMULSION	GAL
416.22000018	PERFORMANCE GRADED BINDER	GAL
416.30000018	FOG SEAL	GAL
418.7603	ASPHALT PAVEMENT JOINT ADHESIVE	LF
490.30	MISCELLANEOUS COLD MILLING	SY
520.09000010	SAW CUTTING ASPHALT CONCRETE	LF
552.17	SHIELDS AND SHORING	SF
603.171116	GALVANIZED STEEL END SECTIONS - PIPE (2-2/3" X 1/2" CORRUGATIONS) 15 INCH DIAMETER, 16 GAUGE	EA
603.171216	GALVANIZED STEEL END SECTIONS - PIPE (2-2/3" X 1/2" CORRUGATIONS) 18 INCH DIAMETER, 16 GAUGE	EA
603.171614	GALVANIZED STEEL END SECTIONS - PIPE (2-2/3" X 1/2" CORRUGATIONS) 30 INCH DIAMETER, 16 GAUGE	EA
603.98060005	POLYVINYL CHLORIDE PRESSURE PIPE (SEWER) 6 NPS	LF
603.98100402	SMOOTH INTERIOR PERFORATED CORRUGATED POLYETHYLENE UNDERDRAIN PIPE - 4 INCH	LF
603.9812	SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT AND STORM DRAIN PIPE (12")	LF
603.9815	SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT AND STORM DRAIN PIPE (15")	LF
603.9824	SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT AND STORM DRAIN PIPE (24")	LF
604.10	PREFABRICATED ADJUSTMENT RINGS FOR MANHOLES	EA
604.300203	RECTANGULAR DRAINAGE STRUCTURE - STRUCTURE TYPE 02 - FRAME NO. 03	LF
604.301873	RECTANGULAR DRAINAGE STRUCTURE - STRUCTURE TYPE R FOR CAST IRON R3 FRAME	LF
604.4048	4FT DIAMETER PRECAST MANHOLE	LF
604.4072	6FT DIAMETER PRECAST MANHOLE	LF
605.0901	UNDERDRAIN FILTER, TYPE I	CY
605.1602	PERFORATED POLYVINYL CHLORIDE UNDERDRAIN PIPE (6")	LF

**SUMMARY OF PROPOSED WORK & CONSTRUCTION SEQUENCE**

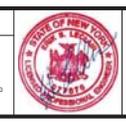
1. PROVIDE REQUIRED SUBMITTALS & OBTAIN APPROVALS
2. MOBILIZE TO PROJECT SITE
3. IMPLEMENT SWPPP & INSTALL SOIL & WATER POLLUTION CONTROL MEASURES
4. INSTALL WORK ZONE TRAFFIC CONTROL SYSTEMS
5. COMPLETE TREE REMOVALS
6. CONSTRUCT TEMPORARY SITE ACCESS ROAD & ENTRANCE WIDENING
7. INSTALL EMBANKMENT TOE DRAIN & SEEPAGE INSTRUMENTATION
8. CONSTRUCT BIOSWALE
9. INSTALL SLOPE MONITORING INSTRUMENTATION
10. ACCESS LOW LEVEL OUTLET TUNNEL & REMOVE OUTLET PIPE
11. CONSTRUCT EMBANKMENT FILL
12. INSTALL HIGHWAY DRAINAGE SYSTEM
13. CONSTRUCT ROUTE 6 IMPROVEMENTS
14. PARTIALLY REMOVE TEMPORARY SITE ACCESS ROAD
15. RESURFACE EXISTING SITE ACCESS ROAD
16. SITE RESTORATION
17. CONTRACT CLOSEOUT

NYSDOT ITEM #	DESCRIPTION	UNIT
606.10	BOX BEAM GUIDE RAILING	LF
606.100002	BOX BEAM GUIDE RAILING (SHOP BENT OR SHOP MITERED)	LF
606.120101	BOX BEAM END ASSEMBLY, TYPE I	EA
606.18	WEAK-POST, CORRUGATED BEAM GUIDE RAIL	LF
606.180001	WEAK-POST, CORRUGATED BEAM GUIDE RAIL (SHOP CURVED)	LF
606.22	ANCHORAGE UNITS FOR CORRUGATED BEAM GUIDE RAILING	EA
606.71	REMOVING AND DISPOSING CORRUGATED BEAM GUIDE RAILING	LF
606.73	REMOVING AND DISPOSING BOX BEAM GUIDE RAILING	EA
606.7910	REMOVING AND DISPOSING ANCHORAGE UNITS FOR CORRUGATED BEAM GUIDE RAILING AND MEDIAN BARRIER	LF
606.8101	GUIDE RAIL TRANSITION WEAK-POST CORRUGATED BEAM TO BOX BEAM GUIDE RAIL (ONE OR TWO WAY OPERATION)	EA
609.0401	CAST-IN-PLACE CONCRETE CURB	LF
610.1402	TOPSOIL - ROADSIDE	CY
610.1601	TURF ESTABLISHMENT - ROADSIDE	SY
619.01	BASIC WORK ZONE TRAFFIC CONTROL	LS
619.1301	TEMPORARY TRAFFIC SIGNALS	ELOC
619.1302	TEMPORARY TRAFFIC SIGNALS	ELOC
619.1303	TEMPORARY TRAFFIC SIGNALS	ELOC
619.1304	TEMPORARY TRAFFIC SIGNALS	ELOC
619.1305	TEMPORARY TRAFFIC SIGNALS	ELOC
619.1712	TEMPORARY POSITIVE BARRIER - CATEGORY 2 (PINNING PERMITTED)	LF
619.24	NIGHTTIME OPERATIONS	LS
619.25	TRAFFIC CONTROL SUPERVISOR	MO
620.03	LIGHT STONE FILL	CY
620.04	MEDIUM STONE FILL	CY
620.0801	BEDDING MATERIAL, TYPE 1	CY
623.03	CRUSHED STONE (BY WEIGHT)	TON
625.01	SURVEY OPERATIONS	LS
645.5202	GROUND MOUNTED SIGN PANELS LESS THAN OR EQUAL TO 30 SQ FT, WITH 2-BARS, HIGH VISIBILITY SHEETING	SF
645.81	TYPE A SIGN POSTS	EA
645.81090003	RETROREFLECTIVE SIGN POST STRIP	EA
646.22	DELINEATOR, SNOWPLOWING MARKER, SUPPLEMENTARY SNOWPLOWING MARKER PANELS	EA
646.31	STEEL POST, 1.1 LB/FT	EA
647.51	REMOVE AND DISPOSE SIGN PANEL, SIGN PANEL ASSEMBLY SIZE 1 (UNDER 30 SQ FT)	EA
647.83001002	REMOVE AND DISPOSE OF DELINEATORS AND/OR REFERENCE MARKERS WITH OR WITHOUT POSTS	EA
655.0706	CAST FRAME F3, UNMOUNTABLE CURB BOX CUB3 & RETICULINE GRATE G3	EA
655.1003	WELDED FRAME & RECTANGULAR GRATE 3	EA
655.1202	MANHOLE FRAME AND COVER	EA
685.01	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 15 MILS	LF
685.02	YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPES - 15 MILS	LF

**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY:  
M. POWELL  
CHECKED BY:  
E. LECLAIR  
DESIGN LEAD:  
S. MURPHY  
SECTION MANAGER:  
E. LECLAIR



**NYC**  
Environmental  
Protection

APPROVED FOR THE CITY OF NEW YORK  
L. SINGH  
ACCOUNTABLE MANAGER  
D. COSTA  
PORTFOLIO MANAGER

\*WARNING! THIS IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW, SECTION 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION LAW, SECTION 7209.2.\*

**NEW YORK CITY**  
**ENVIRONMENTAL PROTECTION**  
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
CORONA, NEW YORK 11368  
www.nyc.gov/dcp

**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
**PUTNAM COUNTY, NEW YORK**  
  
INDEX

DATE: 3/31/2023  
SCALE: N/A  
SHEET NO.:  
2 OF 81  
DRAWING NO.:  
G-001.00

# LEGEND

## EXISTING

--- ST ---	STORM SEWER DRAINAGE LINE	(D)	STORM SEWER MANHOLE
--- SAN ---	SANITARY SEWER LINE	[ ]	CATCH BASIN
--- O/H ---	OVERHEAD UTILITY LINE	[ ]	STORM SEWER WEIR
--- U/G ---	UNDERGROUND GAS LINE	(S)	SANITARY SEWER MANHOLE
---	DEEP UTILITY LINE	(WH)	MONITORING WELL
---	TREE LINE	(U)	UTILITY POLE
---	EDGE OF WATER/FLOW LINE	(G)	GUY POLE
---	DRIVEWAY	(T)	CONIFEROUS TREE
---	EDGE OF PAVEMENT	(D)	DECIDUOUS TREE
--- xxx ---	MAJOR CONTOUR	(T)	TRAFFIC SIGN
---	MINOR CONTOUR	(B)	CONTROL BENCHMARK
o o o	BOX BEAM GUIDERAIL	(P)	CONTROL POINT
--- R ---	CONTROL BASELINE	(A)	CDM SMITH HAND AUGER BORING
---	RIGHT-OF-WAY LINE	(B)	CDM SMITH BORING
o o o o o	STONE WALL	(B)	URS-CDM BORING (2010)
---	DITCH		
---	ROADWAY CENTERLINE		
o o o o o	STONE RIP-RAP		

## PROPOSED

--- ST ---	STORM SEWER DRAINAGE LINE	(D)	STORM SEWER MANHOLE
--- SAN ---	SANITARY SEWER LINE	[ ]	CATCH BASIN
--- SPG ---	SEEPAGE COLLECTION LINE	(S)	SANITARY SEWER MANHOLE
--- O/H ---	OVERHEAD UTILITY LINE	(U)	UTILITY POLE
--- X O/H ---	OVERHEAD UTILITY LINE REMOVAL	(G)	GUY POLE
---	TREE LINE/LIMITS OF CLEARING	(T)	TRAFFIC SIGN
---	EDGE OF PAVEMENT	(B)	MANHOLE
--- xxx ---	MAJOR CONTOUR	(P)	SOLAR PANEL DATA COLLECTION UNIT & ANTENNA
---	MINOR CONTOUR	(T)	CONIFEROUS TREE REMOVAL
o o o	BOX BEAM GUIDERAIL	(D)	DECIDUOUS TREE REMOVAL
---	ROADWAY CENTERLINE	(WB)	TOWN OF CARMEL WETLAND BOUNDARY MARKER
---	TURBIDITY CURTAIN		
o o o	SAFETY FENCE		
o o o o o	STONE RIP-RAP		

# ABBREVIATIONS

APPROX	APPROXIMATE	RR	RAILROAD
ASPH	ASPHALT	RT	RIGHT
B	BORING	SAN	SANITARY
BIT	BITUMINOUS CONCRETE	SICPP	SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE
BW	BOTTOM OF WALL	SMH	SANITARY MANHOLE
CB	CATCH BASIN	SQ	SQUARE
CC	CONCRETE CURB	ST	STORM
CLF	CHAIN LINK FENCE	STA	STATION
CMP	CORRUGATED METAL PIPE	T	TANGENT
CO	CLEAN OUT	TEMP	TEMPORARY
COMM	COMMUNICATION	TGL	THEORETICAL GRADE LINE
CONC	CONCRETE	TW	TOP OF WALL
CONST	CONSTRUCTION	TYP	TYPICAL
CR	COUNTY ROUTE	W	WIDE/WIDTH
DIP	DUCTILE IRON PIPE	W/	WITH
DMH	DRAINAGE MANHOLE	XFMR	TRANSFORMER
EHS	ENVIRONMENTAL HEALTH & SAFETY	UG	UNDERGROUND
EOP	EDGE OF PAVEMENT	UNO	UNLESS NOTED OTHERWISE
E	EASTING	UP	UTILITY POLE
ELEC	ELECTRIC	V	VERTICAL
EL	ELEVATION	Ø	DIAMETER
ELEV	ELEVATION	Δ	DELTA
EX, EXIST	EXISTING	R	BASELINE
FNC	FENCE	C	CENTERLINE
FND	FOUND		
FO	FIBER-OPTIC		
GRES	GEOSYNTHETIC REINFORCED EARTH SYSTEM		
H	HORIZONTAL		
HDPE	HIGH-DENSITY POLYETHYLENE		
HMA	HOT-MIX ASPHALT		
IN	INCHES		
INV	INVERT		
L	LENGTH		
LT	LEFT		
MAX	MAXIMUM		
N	NORTHING		
N/A	NOT APPLICABLE / NOT AVAILABLE		
N/F	NOW/FORMERLY		
NYCDEP	NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION		
NYSDEC	NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION		
NYSDOT	NEW YORK STATE DEPARTMENT OF TRANSPORTATION		
NYSEG	NEW YORK STATE ELECTRIC & GAS		
OH	OVERHEAD		
PI	POINT OF INTERSECTION		
PL	PROPERTY LINE		
PROP	PROPOSED		
PVI	POINT OF VERTICAL INTERSECTION		
PVC	POLYVINYL CHLORIDE PIPE		
PVMT	PAVEMENT		
R	RADIUS		
RCP	REINFORCED CONCRETE PIPE		
RD	ROAD		
REC	RECORD		
ROW	RIGHT OF WAY		

Lead: Susan B. & Dale POWELL LLP, Esq., March 31, 2023 and Dale Powell/Friday, March 31, 2023, 10:53:57 PM  
 Paper Size: ANSI D (22.00 X 34.00 INCHES) Plot Scale: N/A  
 Plot Style: TableBECG\_Drawing.ctb  
 Drawing Name & Location: C:\p\p\POWELL\LD\0268637\G-002\_00.dwg

**100% SUBMISSION**  
 DATE SUBMITTED: 5/26/2022

NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY: M. POWELL CHECKED BY: E. LECLAIR DESIGN LEAD: S. MURPHY	DRAWN BY: M. POWELL  <small>11500 American Blvd, Suite 200 Latham, NY 12110 Tel: (518) 762-6900</small>
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APPROVED FOR THE CITY OF NEW YORK L. SINGH ACCOUNTABLE MANAGER	D. COSTA PORTFOLIO MANAGER
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 CORONA, NEW YORK 11368  
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<b>WEST BRANCH AUXILIARY DAM          SLOPE SAFETY IMPROVEMENTS          PUTNAM COUNTY, NEW YORK</b>	DATE: 3/31/2023 SCALE: N/A SHEET NO.: <div style="text-align: center;">3 OF 81</div> DRAWING NO. G-002.00
LEGEND & ABBREVIATIONS	

# GENERAL NOTES

## GENERAL NOTES

- THE CONTRACTOR SHALL NOTIFY THE ACCOUNTABLE MANAGER AT THE NYC ENVIRONMENTAL PROTECTION, BUREAU OF ENGINEERING DESIGN & CONSTRUCTION AT LEAST 20 DAYS BEFORE THE START OF CONSTRUCTION TO SCHEDULE A PRE-CONSTRUCTION MEETING.
- PRIOR TO ANY WORK PERMITS BEING ISSUED, A PRE-CONSTRUCTION MEETING WILL BE HELD TWENTY (20) DAYS IN ADVANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT). THE CONTRACTOR SHALL PROVIDE A CONSTRUCTION SCHEDULE TO THE NYSDOT TWENTY (20) DAYS IN ADVANCE TO THE NYSDOT MEETING. THE ARRANGEMENTS FOR THE MEETING WILL BE COORDINATED BY THE NYCDPEP.
- CONTRACTOR SHALL PROVIDE ACCESS FOR EMERGENCY TRAFFIC AT ALL TIMES UPON DEMAND. THE CONTRACTOR SHALL BE REQUIRED TO MOVE AND RESTORE BARRICADES AS ORDERED BY THE ENGINEER FOR EMERGENCY ACCESS AT NO DIRECT PAYMENT. CONTRACTOR SHALL MAINTAIN AT ALL TIMES A MINIMUM OF TEN (10) FEET OF ROADWAY ACCESS ON US ROUTE 6 FOR EMERGENCY VEHICLES.
- ELEVATIONS SHOWN ON THIS DRAWING REFER TO VERTICAL DATUM NAVD 1988. TO CONVERT FROM NAVD 1988 TO NGVD 1929 ADD 1.038 FEET.
- THE CONTRACTOR SHALL FIELD VERIFY EXISTING LOCATIONS, DIMENSIONS AND ELEVATIONS PRIOR TO THE START OF WORK IN ACCORDANCE TO NYSDOT STANDARD SPECIFICATION SECTION 625, SURVEY OPERATIONS.
- REFER TO WORK ZONE TRAFFIC CONTROL PLANS FOR TRAFFIC RELATED NOTES.
- THE CONTRACTOR SHALL PROVIDE THREE (3) VARIABLE MESSAGE SIGN (VMS) BOARDS DURING CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT PROPOSED SIGN LOCATIONS AND MESSAGES TO BE DISPLAYED FOR REVIEW AND APPROVAL. BY THE ENGINEER. THE CONTRACTOR IS HEREBY ADVISED THAT INITIALLY APPROVED LOCATION OF SIGNS AND MESSAGES TO BE DISPLAYED CAN BE REVISED AS NEEDED BASED ON ACTUAL FIELD CONDITIONS IN COORDINATION WITH THE ENGINEER AT NO ADDITIONAL COST. THE REPOSITIONING OF SIGNS AND CHANGES TO ITS VARIABLE MESSAGE LIBRARY SHALL BE DEEMED INCLUDED IN THE CONTRACTOR'S BID PRICE FOR ITEM 619.01.
- BEFORE LEAVING THE CONSTRUCTION AREA, PROVISIONS MUST BE MADE TO REMOVE EXCESS SOIL, DUST AND DIRT FROM VEHICLES IN ORDER TO KEEP THE PUBLIC STREETS CLEAN. ADDITIONALLY, STREETS MAY NEED TO BE CLEANED PERIODICALLY OR EVERYDAY TO REMOVE SAID DUST/DIRT.
- CONTRACTOR SHALL FREQUENTLY DAMPEN SOIL IN WORK AREA TO REDUCE DUST FROM THE WORK. THE COST FOR DUST CONTROL SHALL BE DEEMED INCLUDED IN THE CONTRACTOR'S BID PRICE FOR ITEM 619.01.
- MATERIALS USED FOR THE TEMPORARY ACCESS ROAD SHALL CREATE A DURABLE SURFACE (CRUSHED STONE OR EQUAL) AND SHALL LIMIT TRACKING OF SEDIMENT ONTO ADJACENT ROADWAYS OR SURFACES. THE CONTRACTORS ATTENTION IS DIRECTED TO THE STEEP SLOPE OF THE TEMPORARY ACCESS ROAD, AND THIS ROAD SHALL BE MAINTAINED THROUGHOUT THE CONTRACT.
- ALL REQUIRED PERMITS LISTED IN SPECIFICATION 01 41 00 - REGULATORY REQUIREMENTS MUST BE APPROVED PRIOR TO INITIATION OF WORK (CLEARING AND GRUBBING). THIS INCLUDES PERMITS TO BE OBTAIN BOTH BY THE CONTRACTOR AND THE OWNER (ON BEHALF OF THE CONTRACTOR).

## GENERAL CONDITIONS

- LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE ONLY, AND ARE NOT WARRANTED TO BE CORRECT. ALL EXISTING UTILITIES SHALL BE VERIFIED FOR SERVICE, SIZE, INVERT ELEVATION, LOCATIONS ETC. PRIOR TO THE START OF ANY WORK IN THE GENERAL AREA. CONTRACTOR MUST NOTIFY "DIG SAFELY, NEW YORK" AT 1-800-962-7962 OR 811 WITHIN NEW YORK, AT LEAST 72 HOURS PRIOR TO ANY CONSTRUCTION. NOTIFY ENGINEER IN WRITING OF ANY AND ALL DISCREPANCIES PRIOR TO COMMENCING ANY WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING AND MAINTAINING THE EXISTING OVERHEAD AND BURIED UTILITIES THROUGHOUT THE DURATION OF THE PROJECT.
- THE DESIGNATED COMPETENT PERSON FOR EXCAVATION SHALL HAVE A CERTIFIED EXCAVATOR CERTIFICATION AS PROVIDED FOR IN NEW YORK STATE.
- THE RESPONSIBILITY FOR SAFETY IN, ON OR ABOUT THE JOBSITE SHALL BE THAT OF THE CONSTRUCTION CONTRACTOR. THESE DRAWINGS DO NOT INCLUDE COMPONENTS WHICH MAY BE NECESSARY FOR CONSTRUCTION SAFETY. REFER TO EHS SPECIFICATION SECTION 01 35 27.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION, EXCEPT WHERE SPECIFICALLY DETAILED IN THE PLANS. SPECIFICATIONS, SWPPP, PERMIT REQUIREMENTS AND WORK RESTRICTIONS. LIKEWISE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SEQUENCE OF THE WORK, EXCEPT WHERE SPECIFICALLY DETAILED IN THE PLANS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SURFACE AND GROUNDWATER CONTROL DURING THE WORK OF THE CONTRACT. TEMPORARY WATER CONTROL MEASURES SHALL BE, AT MINIMUM, AS REQUIRED BY THE PROJECT PLANS, SPECIFICATIONS, AND PERMIT CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ADDITIONAL MEASURES NECESSARY FOR WATER CONTROL NECESSARY TO EXECUTE THE WORK OF THE CONTRACT IN THE DRY. CONTRACTOR'S METHODS OF WATER CONTROL ARE SUBJECT TO LIMITS AND CONDITIONS AS DESCRIBED IN THE PLANS AND SPECIFICATIONS. THE RESERVOIR WATER LEVEL IS CONTROLLED BY THE NYCDPEP AT THEIR SOLE DISCRETION.

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY SEDIMENT AND EROSION CONTROL DURING THE WORK OF THE CONTRACT. TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE, AT MINIMUM, AS REQUIRED BY THE PROJECT PLANS, DETAILS AND SPECIFICATIONS, AND PERMIT CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL MEASURES NECESSARY FOR THE PREVENTION OF SEDIMENT DISCHARGE OR EROSION AT THE SITE. WORK SHALL BE DONE IN ACCORDANCE WITH NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION SPOES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITY PERMIT NUMBER GP-0-20-001 & SWPPP. SEE DRAWINGS C-042.00 TO C-049.00 FOR TEMPORARY SEDIMENT AND EROSION CONTROL NOTES.
- THE CONTRACTOR SHALL RESTORE AREAS DISTURBED BY CONSTRUCTION PER THE PLANS AND SPECIFICATIONS. WHERE NO SPECIFIC INSTRUCTION IS GIVEN, RESTORATION SHALL BE TO THE ORIGINAL CONDITION AND AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR IS SPECIFICALLY INFORMED THAT THE RESTORATION REQUIREMENT APPLIES TO ALL AREAS DISTURBED AS A RESULT OF THE PROJECT.
- IN THE EVENT OF THE DISCOVERY OF THE PRESENCE OF AN ENDANGERED PLANT OR ANIMAL IN THE WORK AREA OR STAGING AREAS, ALL WORK IN THE IMMEDIATE AREA OF THE FIND SHALL STOP AND THE OWNER AND ENGINEER SHALL BE NOTIFIED IMMEDIATELY. WORK IN THE IMMEDIATE AREA SHALL BE DISCONTINUED UNTIL CLEARANCE IS GRANTED BY THE OWNER. REFER TO SPECIFICATION SECTION 01 14 00 - WORK RESTRICTIONS.
- IN THE EVENT OF THE DISCOVERY OF A PREVIOUSLY UNKNOWN ARCHEOLOGICAL SITE, POTENTIAL CULTURAL ARTIFACTS OR RESOURCES, OR ANY OTHER UNUSUAL ITEMS OR CONDITIONS, ALL WORK IN THE IMMEDIATE AREA OF THE FIND SHALL STOP AND THE OWNER AND ENGINEER WILL BE NOTIFIED IMMEDIATELY. WORK IN THE IMMEDIATE AREA SHALL BE DISCONTINUED UNTIL CLEARANCE IS GRANTED BY THE OWNER. REFER TO SPECIFICATION SECTION 01 14 00 - WORK RESTRICTIONS.
- THE CONTRACTOR IS HEREBY NOTIFIED THERE IS LIMITED WORK AREA AND LIMITED AREAS FOR STAGING AS NOTED ON DRAWING G-004.00. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING MEANS AND METHODS WHICH ACCOUNT FOR THESE SITE CONSTRAINTS. NO STOCKPILES WILL BE ALLOWED IN WORK AREAS.
- THE CONTRACTOR IS HEREBY NOTIFIED THAT NO CONCRETE WASHOUT IS ALLOWED ON THE PROJECT SITE.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY SECURITY GATES, AND SHALL REMOVE, STORE AND RESET THE EXISTING SECURITY GATE TO THE CURRENT CONDITION. THE SUCCESSFUL BIDDER WILL COORDINATE WITH NYCDPEP BUREAU OF POLICE AND SECURITY.
- THE CONTRACTOR SHALL PROVIDE A SAFETY FENCE ALONG THE EDGE OF THE TREE CLEARING LINE TO PREVENT ACCESS INTO THE WETLANDS.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A STABLE AND DRY EXCAVATION USING DEWATERING SYSTEMS. DEWATERING MUST BE CONTROLLED AND MONITORED TO ENSURE SLOPE STABILITY. SLOPE STABILIZING MATERIALS (I.E. SAND, STONE, FILTER FABRIC, ETC.) MUST BE AVAILABLE ON SITE AND READY FOR USE. THE CONTRACTOR MUST BE PREPARED TO FILL AND STABILIZE ANY EXCAVATION EXHIBITING SIGNS OF POTENTIAL SLOPE FAILURE.
- THE CONTRACTOR SHALL PREPARE A CONSTRUCTION PROTECTION PLAN MEETING NYS OFFICE OF PARKS, RECREATION & HISTORIC PRESERVATION (OPRHP) REQUIREMENTS SPECIFIC TO AVOIDING IMPACT TO THE WEST BRANCH AUXILIARY DAM GATEHOUSE LOCATED ALONG US ROUTE 6.
- THE CONTRACTOR SHALL MAINTAIN THE PERMANENT ACCESS ROAD THROUGHOUT THE DURATION OF THE WORK, INCLUDING IMPORTING GRAVEL SUBBASE AS REQUIRED TO ACCOMMODATE TRUCK TRAFFIC. NO ADDITIONAL PAYMENT WILL BE MADE FOR MAINTAINING THE ACCESS ROAD.
- THE CONTRACTOR SHALL MILL A PORTION OF THE EXISTING PAVEMENT WITHIN THE FULL DEPTH RECONSTRUCTION AREA SHOWN ON THE PLANS IN ADDITION TO THE PAVEMENT MILLING AND OVERLAY AREA SHOWN ON THE PLANS. CONTRACTOR SHALL MILL PAVEMENT TO PRODUCE THE REQUIRED QUANTITIES OF MILLINGS FOR RESURFACING THE ACCESS ROAD. PAYMENT FOR THE MILLING IS INCLUDED UNDER ITEM 490.30. ALL REMAINING PAVEMENT TO BE REMOVED IS INCLUDED UNDER ITEM 203.02.
- THE GENERAL SCOPE OF WORK FOR THIS PROJECT IS TO CONSTRUCT SLOPE IMPROVEMENTS TO THE WEST BRANCH AUXILIARY DAM AND RECONSTRUCT PORTIONS OF US ROUTE 6 WITHIN PROJECT LIMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MATERIAL, EQUIPMENT, AND LABOR NECESSARY TO CONSTRUCT THE PROJECT IN ACCORDANCE WITH THE PLANS, NOTES, AND DETAILS, AS SHOWN ON THE FINAL CONDITIONS PLAN.
- TREE CUTTING SHALL ONLY OCCUR BETWEEN NOVEMBER 1ST AND MARCH 31ST IN CONSIDERATION OF THE NORTHERN LONG EARED BAT AND THE INDIANA BAT.

## RECOMMENDED HIGHWAY CONSTRUCTION STAGING

THE FOLLOWING HIGHWAY CONSTRUCTION STAGING IS RECOMMENDED BASED ON COORDINATION WITH THE TOWN OF CARMEL AND NYCDPEP. CONTRACTOR MAY PROPOSE REVISIONS TO HIGHWAY CONSTRUCTION STAGING FOR APPROVAL BY THE ENGINEER PRIOR TO IMPLEMENTING ANY WORK ZONE TRAFFIC CONTROL MEASURES.

### STAGE I

PLACE EMBANKMENT FILL FROM BASE OF DAM TO TOP OF PROPOSED SUBBASE COURSE. MAINTAIN EXISTING TRAFFIC PATTERNS ON US ROUTE 6 AS SHOWN ON SHEET C-020.00.

### STAGE II

INSTALL PROPOSED DRAINAGE PIPES AND CATCH BASINS. DRAINAGE STRUCTURES TO BE SET TO TOP OF SUBBASE GRADE. COVER

EXISTING STRUCTURES WITH STEEL PLATING. INSTALL SUBBASE COURSE WITHIN THE LIMITS OF THE DRAINAGE TRENCH TO THE FINAL SUBBASE LIMITS TO THE EAST. MAINTAIN EXISTING TRAFFIC PATTERNS ON US ROUTE 6 AS SHOWN ON SHEET C-021.00.

### STAGE III

REMOVE EXISTING PAVEMENT STRUCTURE AND INSTALL SUBBASE COURSE FROM EXISTING CENTERLINE TO LIMITS OF DRAINAGE TRENCH INSTALLED DURING STAGE II. REMOVE EXISTING GUIDE RAILING AND PLACE TEMPORARY CONCRETE BARRIER ALONG SHOULDER. ESTABLISH WORK ZONE TRAFFIC CONTROL WITH TEMPORARY TRAFFIC SIGNALS FOR ONE-LANE TWO-WAY ALTERNATING TRAFFIC AS SHOWN ON SHEETS C-022.00 TO C-023.00. REMOVE EXISTING PAVEMENT AND CONSTRUCT SUBBASE IN TWO PHASES TO ALLOW ONE TRAVEL LANE OPEN TO TRAFFIC AT ALL TIMES.

### STAGE IV

INSTALL BASE COURSE AND BINDER COURSE PAVEMENT. PROVIDE TEMPORARY EMBANKMENT AT EDGE OF PAVEMENT TO ENSURE STABILITY OF PAVEMENT COURSES. ADJUST DRAINAGE STRUCTURES TO FINISHED GRADE. ESTABLISH WORK ZONE TRAFFIC CONTROL WITH TEMPORARY TRAFFIC SIGNALS FOR ONE-LANE TWO-WAY ALTERNATING TRAFFIC AS SHOWN ON SHEETS C-022.00 TO C-023.00. PAVING OPERATIONS SHALL OCCUR IN TWO PHASES TO ALLOW ONE TRAVEL LANE OPEN TO TRAFFIC AT ALL TIMES.

### STAGE V

INSTALL CURBING USING A CONCRETE BASE WITHIN THE PAVEMENT LIMITS. CONTRACTOR MAY ELECT TO USE BASE AND BINDER COURSES IN LIEU OF CONCRETE BASE IF PAVED WIDTH FOR CURB INSTALLATION IS 4' WIDE MINIMUM. BACKFILL BEHIND CURB USING EMBANKMENT AND TOPSOIL & SEEDING TO FINISHED GRADE. INSTALL GUIDE RAILING ON EAST AND WEST SIDES OF THE ROADWAY. INSTALL PROPOSED SIGNAGE. ESTABLISH WORK ZONE TRAFFIC CONTROL WITH SHOULDER CLOSURE AS SHOWN ON SHEET C-024.00. MAINTAINING ONE LANE OF TRAFFIC IN EACH DIRECTION. ESTABLISH WORK ZONE TRAFFIC CONTROL WITH TEMPORARY TRAFFIC SIGNALS FOR ONE-LANE TWO-WAY ALTERNATING TRAFFIC AS SHOWN ON SHEETS C-022.00 TO C-023.00 IF REQUIRED FOR GUIDE RAILING INSTALLATION.

### STAGE VI

INSTALL TOP COURSE PAVEMENT TO FINISHED GRADE. ESTABLISH WORK ZONE TRAFFIC CONTROL WITH FLAGGING OPERATION FOR ONE-LANE TWO-WAY ALTERNATING TRAFFIC AS SHOWN ON SHEET C-028.00 FOR WORK AREAS OUTSIDE THE TEMPORARY TRAFFIC SIGNAL LIMITS, AND WITH TEMPORARY TRAFFIC SIGNALS FOR ONE-LANE TWO-WAY ALTERNATING TRAFFIC AS SHOWN ON SHEETS C-022.00 TO C-023.00 AND C-025.00 TO C-026.00 FOR WORK AREAS WITHIN THE SIGNAL LIMITS. PAVING OPERATIONS SHALL OCCUR IN ONE LANE AT A TIME TO MAINTAIN TRAFFIC IN ONE LANE AT ALL TIMES.

### STAGE VII

COMPLETE STRIPING OPERATIONS AND FINAL CLEANING OF THE SITE. ESTABLISH WORK ZONE TRAFFIC CONTROL WITH FLAGGING OPERATION FOR ONE-LANE TWO-WAY ALTERNATING TRAFFIC AS SHOWN ON SHEET C-028.00 FOR WORK AREAS OUTSIDE THE TEMPORARY TRAFFIC SIGNAL LIMITS, AND WITH TEMPORARY TRAFFIC SIGNALS FOR ONE-LANE TWO-WAY ALTERNATING TRAFFIC AS SHOWN ON SHEETS C-022.00 TO C-023.00 AND C-025.00 TO C-026.00 FOR WORK AREAS WITHIN THE SIGNAL LIMITS. STRIPING OPERATIONS SHALL OCCUR IN ONE LANE AT A TIME TO MAINTAIN TRAFFIC IN ONE LANE AT ALL TIMES.

## PAYMENT NOTES:

- NYSDOT STANDARD PAYMENT ITEMS ARE USED FOR MEASUREMENT AND PAYMENT OF VARIOUS WORK ITEMS AS LABELED WITHIN THE PLANS. WITHIN PAYMENT LIMITS OF THE ROADWAY (US ROUTE 6 AND DREWVILLE ROAD) ARE IDENTIFIED WITH NYSDOT PAYMENT ITEM NUMBERS AND SHALL BE PAID BY UNIT PRICE. SPECIFIC ITEMS OF WORK WITHIN THE PROJECT SITE (OUTSIDE OF THE ROADWAY) WHICH ARE LABELED WITH NYSDOT ITEM NUMBERS SHALL ALSO BE PAID BY UNIT PRICE. ALL WORK NOT SPECIFICALLY IDENTIFIED WITH NYSDOT STANDARD PAY ITEM NUMBERS OR AS UNIT PRICE ITEMS IN THE BID ITEM LIST SHALL BE INCLUDED AND PAID UNDER THE LUMP SUM PAYMENT ITEMS LS-1 TO LS-5.
- INSTALLATION AND MAINTENANCE OF TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL MEASURES IN ACCORDANCE WITH THE SWPPP SHALL BE PAID UNDER LUMP SUM LS-3, EXCEPT WITHIN THE ROADWAY WORK LIMITS WHERE THEY ARE SPECIFICALLY IDENTIFIED FOR PAYMENT UNDER A NYSDOT UNIT PRICE PAYMENT ITEM NUMBER.
- FOR ADDITIONAL PAYMENT DETAILS REFER TO SPECIFICATION 01 27 00 - MEASUREMENT AND PAYMENT.

## SURVEY DETAILS:

- FIELD SURVEY PERFORMED BY RYAN BIGGS CLARK DAVIS ENGINEERING & SURVEYING IN DECEMBER 2016 AND SUPPLEMENTED IN MAY 2021.
- BATHYMETRIC SURVEY PERFORMED BY SHUMAKER CONSULTING ENGINEERING & LAND SURVEYING IN SEPTEMBER 2016.
- WETLAND DELINEATION FLAGGING WAS COMPLETED BY CDM SMITH IN AUGUST, 2016.

## UTILITY POLE RELOCATION:

- ALL UTILITY POLE AND OVERHEAD LINE RELOCATIONS SHOWN ON THE PLANS ARE TO BE COMPLETED BY THE UTILITY OWNERS AT THEIR EXPENSE. THE CONTRACTOR SHALL COORDINATE HIS/HER WORK WITH EACH UTILITY OWNER TO AVOID CONSTRUCTION DELAY. ANY COSTS TO THE CONTRACTOR FOR COORDINATION WITH UTILITY OWNERS OR ACCOMMODATIONS MADE FOR SITE ACCESS BY THE UTILITY OWNERS SHALL BE INCLUDED IN THE PRICE BID FOR PAYMENT ITEMS LS-2 AND LS-3. THE CONTRACTOR SHALL NOT BE ENTITLED TO ANY ADDITIONAL PAYMENT RESULTING FROM DELAYS RESULTING FROM THE UTILITY RELOCATIONS.

**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY: S. MURPHY	DRAWN BY: S. MURPHY
CHECKED BY: E. LECLAR	SECTION MANAGER: E. LECLAR
DESIGN LEAD: S. MURPHY	

 115550 American Blvd, Suite 200 Lubbock, TX 79410 Tel: (817) 765-8900
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L. SINGH ACCOUNTABLE MANAGER	
J. COSTA PORTFOLIO MANAGER	

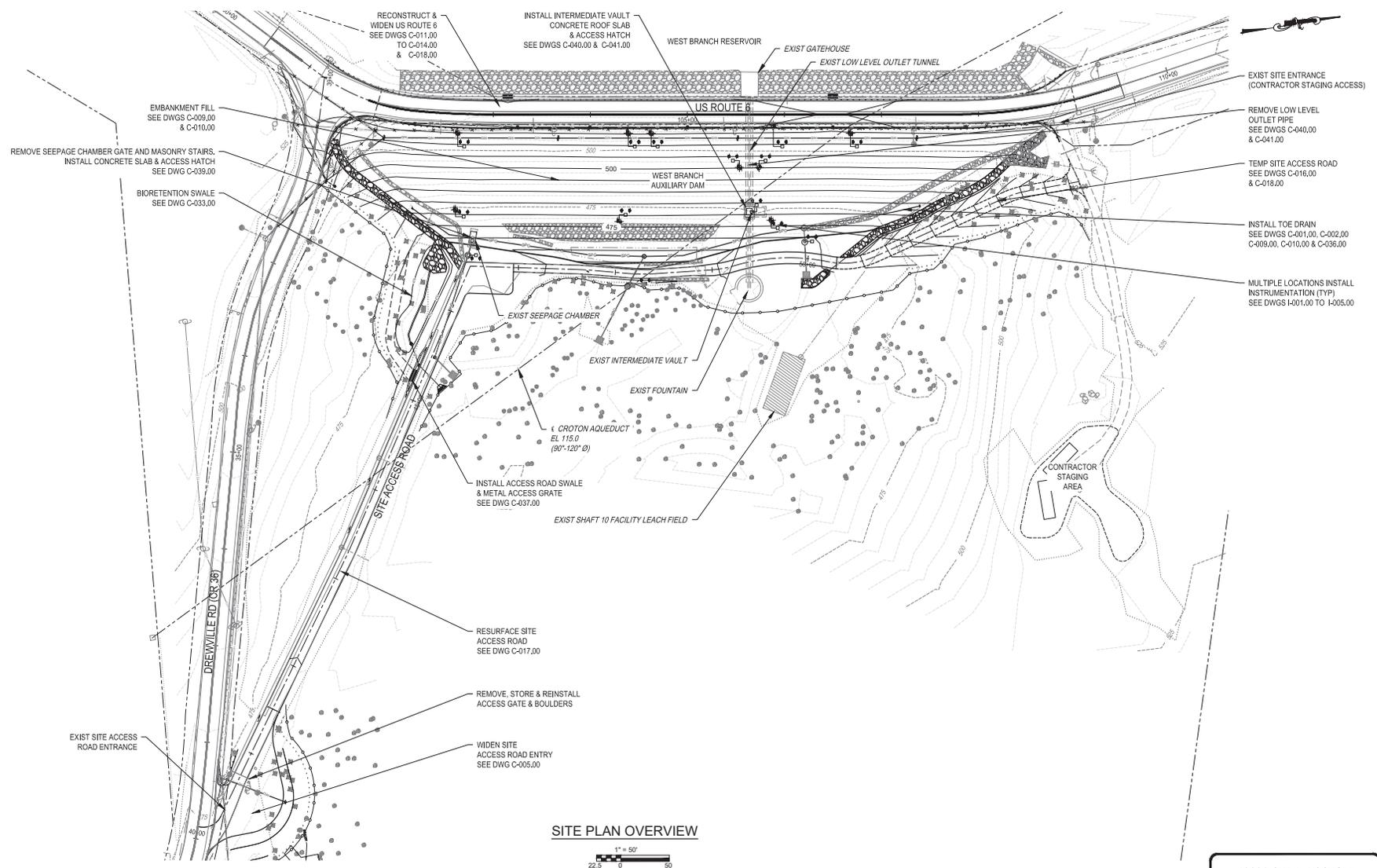
**NEW YORK CITY**  
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BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
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**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
**PUTNAM COUNTY, NEW YORK**

GENERAL NOTES

DATE: 3/31/2023
SCALE: NA
SHEET NO: 4 OF 81
DRAWING NO: G-003.00

Last Saved By: E. Leclair, Date Saved: May 21, 2023, 09:14:14 PM  
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 Paper Size (ANSI): D (22.00 X 34.00 INCHES) Plot Scale: 1"=50'  
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DESIGNED BY:  
M. POWELL

CHECKED BY:  
E. LECLAIR

DESIGN LEAD:  
S. MURPHY

SECTION MANAGER:  
E. LECLAIR

DRAWN BY:  
M. POWELL

**GDM Smith**

17500 American Blvd, Suite 200  
Latham, NY 12110  
Tel: (518) 762-6800



APPROVED FOR THE CITY OF NEW YORK

L. SINGH  
ACCOUNTABLE MANAGER

D. COSTA  
PORTFOLIO MANAGER

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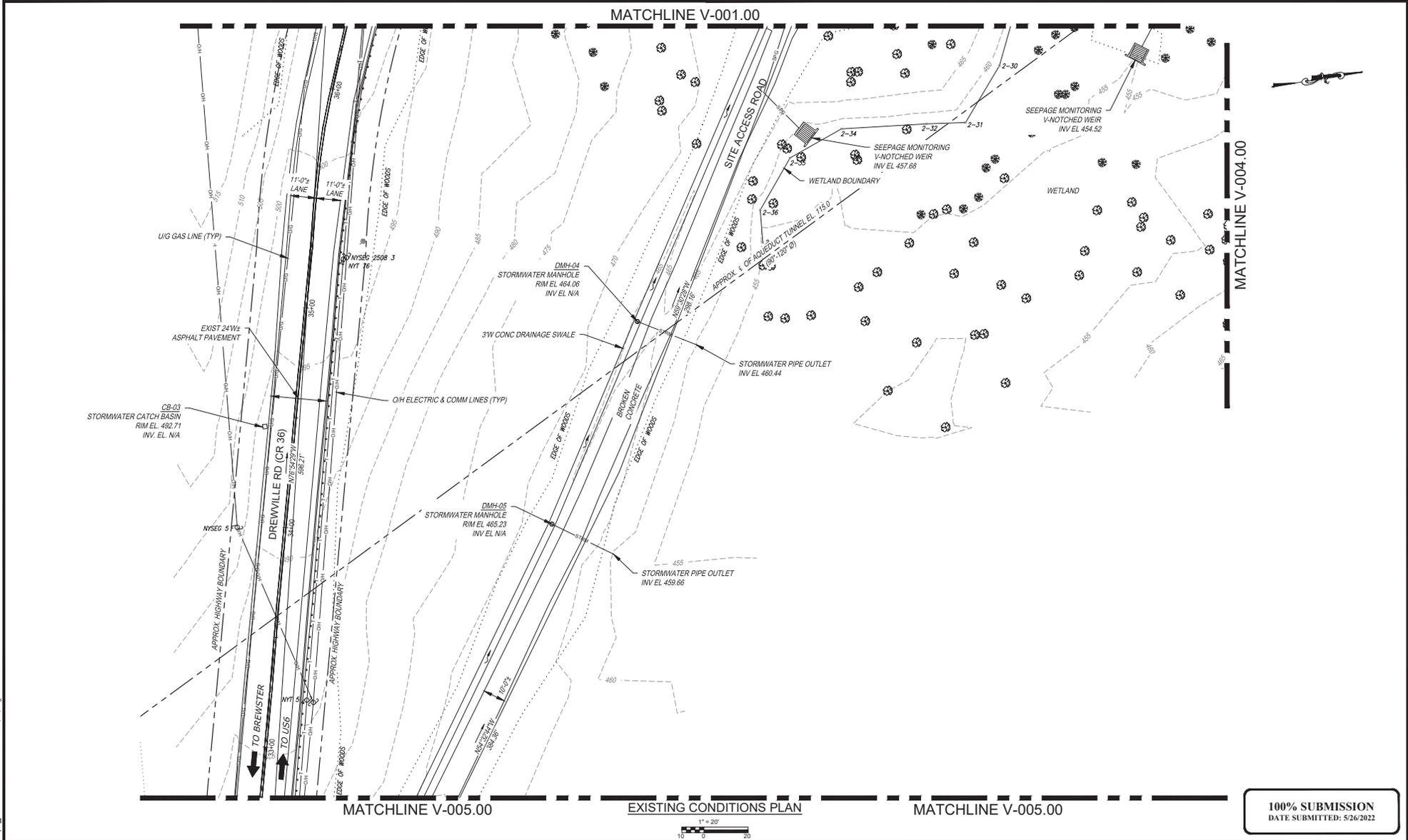
SITE PLAN OVERVIEW

DATE: 3/31/2023  
SCALE: 1"=50'  
SHEET NO.:  
5 OF 81  
DRAWING NO.:  
G-004.00

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 Drawing Name: C:\Users\leclair\OneDrive\Documents\Projects\2022\2022-05-26\10-14-05 AM\10-14-05 AM.dwg

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY: S. MURPHY	DRAWN BY: M. POWELL
CHECKED BY: E. LECLAIR	SECTION MANAGER: E. LECLAIR
DESIGN LEAD: S. MURPHY	

  
 11000 American Blvd, Suite 200  
 Luben, NY 12110  
 Tel: (518) 782-6800

  
 APPROVED FOR THE CITY OF NEW YORK

L. SINGH  
 ACCOUNTABLE MANAGER

P. COSTA  
 PORTFOLIO MANAGER

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**WEST BRANCH AUXILIARY DAM SLOPE SAFETY IMPROVEMENTS**  
 PUTNAM COUNTY, NEW YORK

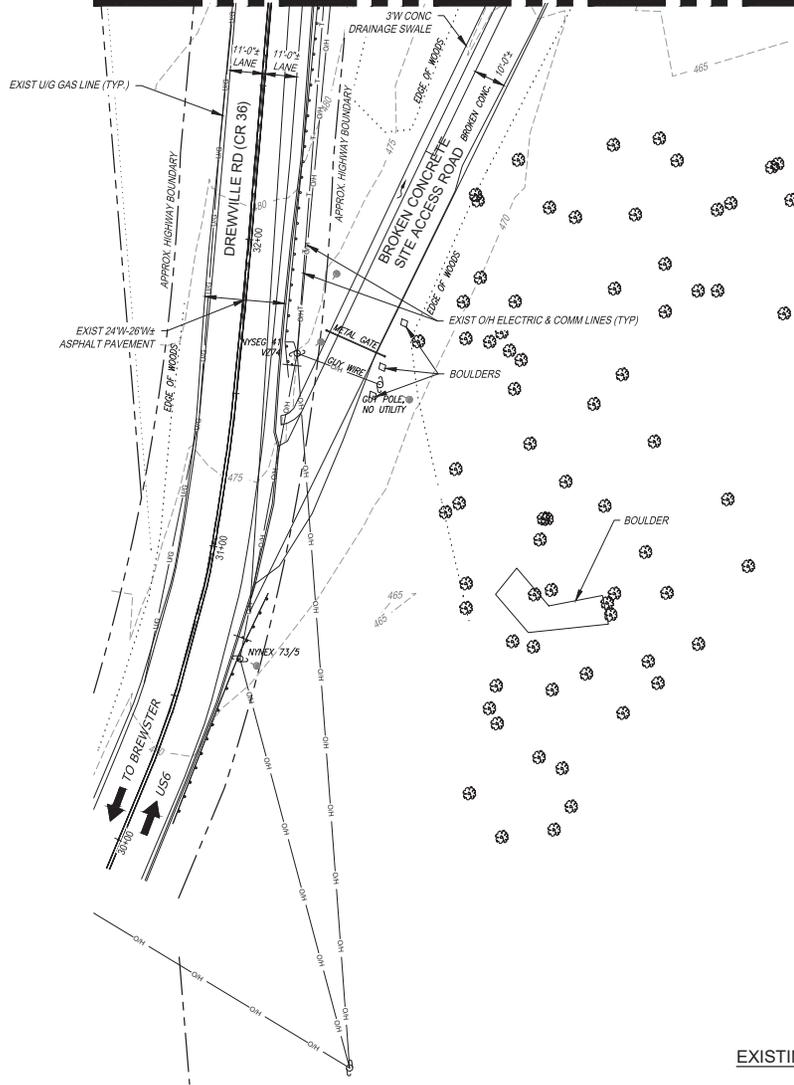
EXISTING CONDITIONS PLAN (3 OF 5)

DATE: 3/31/2023
SCALE: 1"=20'
SHEET NO.: 8 OF 81
DRAWING NO. V-003.00

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MATCHLINE V-003.00



EXISTING CONDITIONS PLAN



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Last Saved By: GPOWELL.LMD, Tuesday, May 24, 2022 at 10:14:46 PM  
 Plot Size: ANSI (D) 24.00 X 34.00 INCHES Plot Scale: 1"=20'  
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NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

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S. MURPHY  
CHECKED BY:  
E. LECLAR  
DESIGN LEAD:  
S. MURPHY  
SECTION MANAGER:  
E. LECLAR

DRAWN BY:  
M. POWELL  
**GPM Smith**  
11800 American Blvd, Suite 200  
Latham, NY 12110  
Tel: (518) 762-6800



APPROVED FOR THE CITY OF NEW YORK  
L. SINGH  
ACCOUNTABLE MANAGER  
D. COSTA  
PORTFOLIO MANAGER

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**NEW YORK CITY**  
**ENVIRONMENTAL PROTECTION**  
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
CORONA, NEW YORK 11368  
www.nyc.gov/dcp

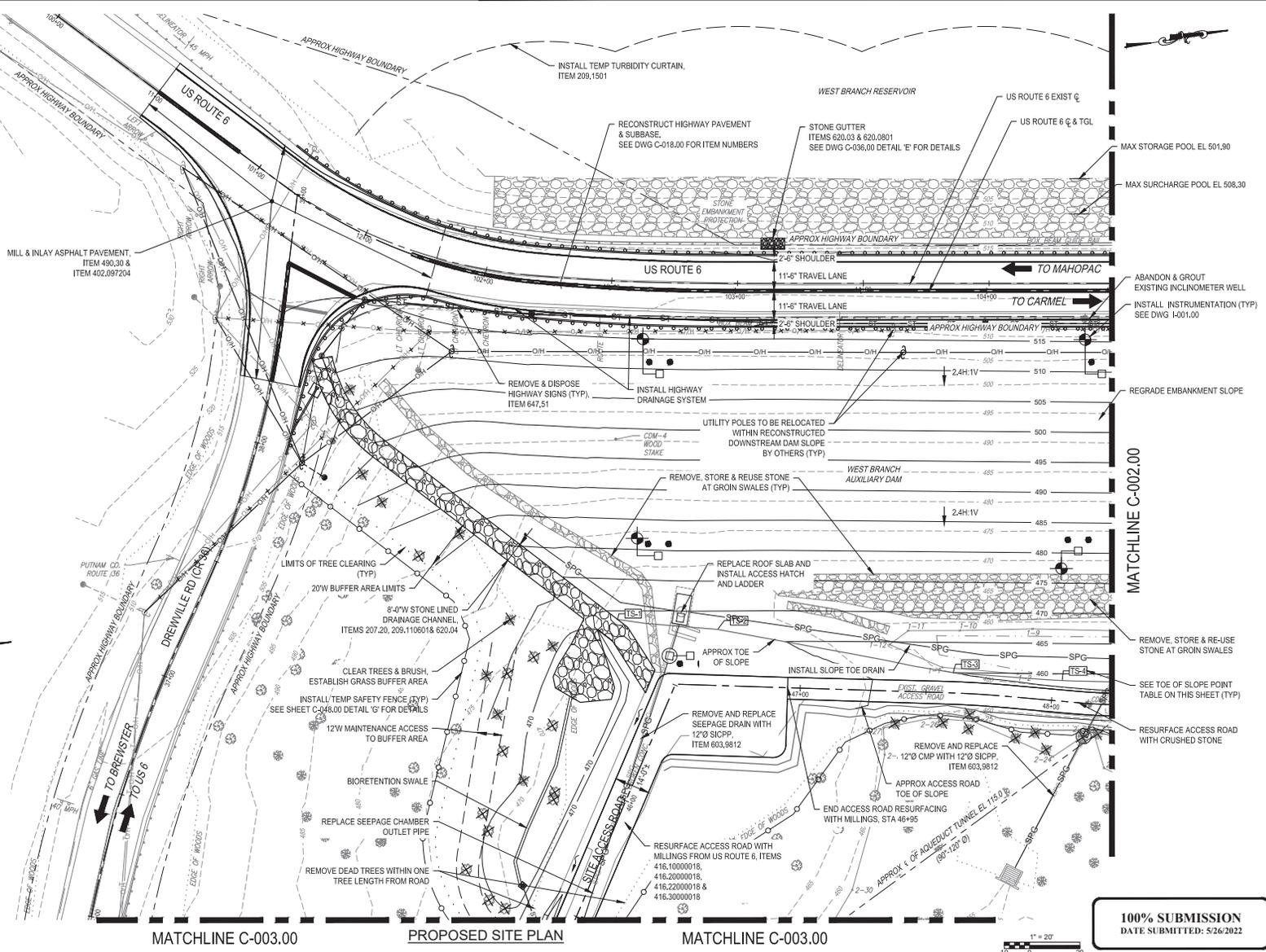
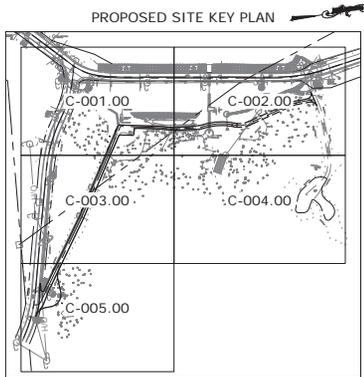
WEST BRANCH AUXILIARY DAM  
SLOPE SAFETY IMPROVEMENTS  
PUTNAM COUNTY, NEW YORK  
EXISTING CONDITIONS PLAN (5 OF 5)

DATE: 3/31/2023  
SCALE: 1"=20'  
SHEET NO.:  
10 OF 81  
DRAWING NO.:  
V-005\_00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: 6 Data-Powell, Eddy, March 31, 2023 at 10:45:05 PM  
 Plot Size: ANSI D (22.00 X 34.00 INCHES) Plot Scale: 1"=20'  
 Drawing Name: & Location: C:\p\POWELL\DWG\0266637\C-001.DWG

TOE OF SLOPE POINT TABLE				
POINT #	DESCRIPTION	ELEVATION	NORTHING	EASTING
13	TS-1	468.77	935649.13	710036.48
14	TS-2	467.40	935687.78	710046.86
15	TS-3	460.00	935777.32	710079.03
16	TS-4	458.87	935819.56	710089.15
17	TS-5	458.97	935849.09	710094.51
18	TS-6	460.21	935898.17	710098.10
19	TS-7	468.08	935964.64	710089.78
20	TS-8	470.16	936031.45	710094.85
21	TS-9	474.35	936088.56	710094.23



**100% SUBMISSION**  
 DATE SUBMITTED: 5/26/2022

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY:  
 M. POWELL  
 CHECKED BY:  
 E. LECLAR  
 DESIGN LEAD:  
 S. MURPHY  
 SECTION MANAGER:  
 E. LECLAR

DRAWN BY:  
 M. POWELL  



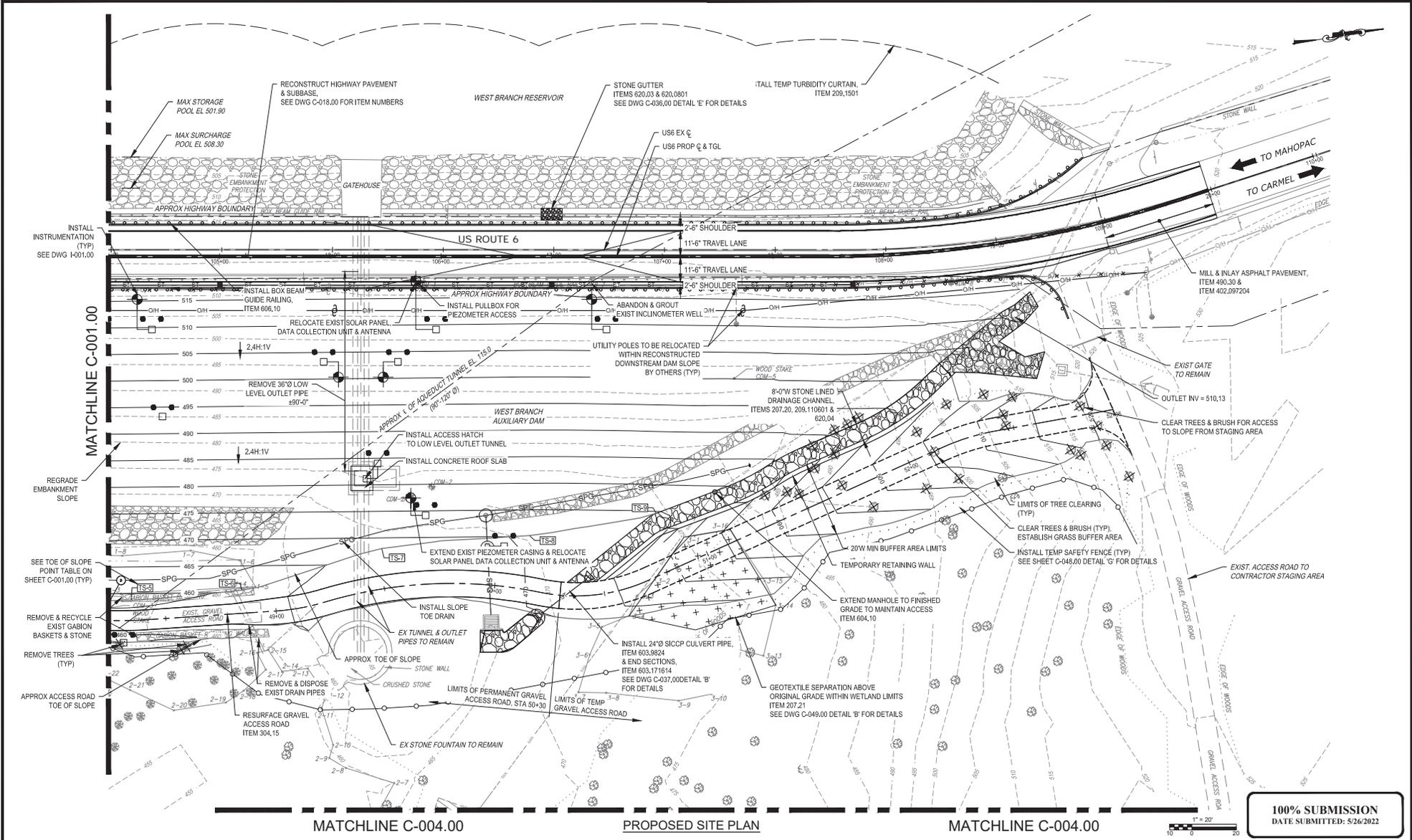

APPROVED FOR THE CITY OF NEW YORK  
 L. SINGH  
 ACCOUNTABLE MANAGER  
 J. COSTA  
 PORTFOLIO MANAGER

**NEW YORK CITY**  
**ENVIRONMENTAL PROTECTION**  
 BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
 96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
 CORONA, NEW YORK 11368  
 www.nyc.gov/dcp

**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
 PUTNAM COUNTY, NEW YORK  
 PROPOSED SITE PLAN (1 OF 5)

DATE: 3/31/2023  
 SCALE: 1"=20'  
 SHEET NO.:  
 11 OF 81  
 DRAWING NO.:  
 C-001.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

Lead: Ryan B. & Dan POWELL LLP, Esq., March 31, 2023 and Date Plotted: Friday, March 31, 2023, 10:45:13 AM  
 Paper Size: ANSI (D) (24.00 X 34.00 INCHES) Plot Scale: 1"=20'  
 Drawing Name & Location: C:\p\POWELL\DWG\0286637\C-001.00.dwg

NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY:  
M. POWELL  
 CHECKED BY:  
E. LECLAR  
 DESIGN LEAD:  
S. MURPHY  
 SECTION MANAGER:  
E. LECLAR

DRAWN BY:  
M. POWELL  
  
 11500 American Blvd, Suite 200  
 Luben, NY 12110  
 Tel: (518) 782-4800



APPROVED FOR THE CITY OF NEW YORK  
 L. SINGH  
 ACCOUNTABLE MANAGER  
 P. COSTA  
 PORTFOLIO MANAGER

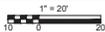
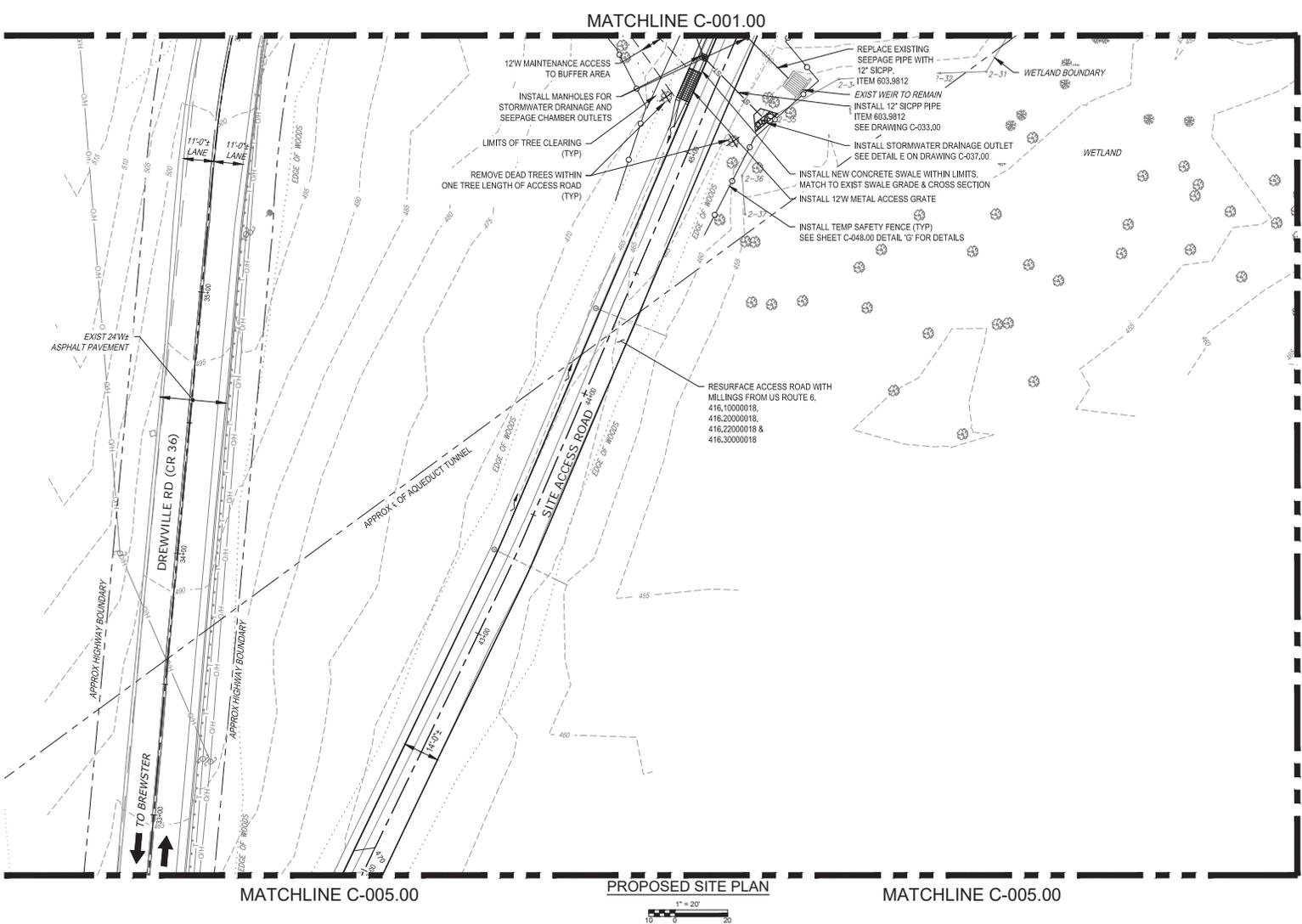
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 CORONA, NEW YORK 11368  
 www.nyc.gov/dcp

**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
**PUTNAM COUNTY, NEW YORK**  
 PROPOSED SITE PLAN (2 OF 5)  
 DATE: 3/31/2023  
 SCALE: 1"=20'  
 SHEET NO.: 12 OF 81  
 DRAWING NO.: C-002.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: E. Leclair; Date: 03/11/2023 10:45:18 AM  
 Plot Size: 11x17  
 Plot Style Table: BDDC\_Drawing.ctb  
 Drawing Name: & Location: C:\p\POWELL\DWG\026637\C-001.00.dwg



**100% SUBMISSION**  
 DATE SUBMITTED: 5/26/2022

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY:  
 M. POWELL  
 CHECKED BY:  
 E. LECLAIR  
 DESIGN LEAD:  
 S. MURPHY  
 SECTION MANAGER:  
 E. LECLAIR

DRAWN BY:  
 M. POWELL  
  
 11000 American Blvd, Suite 200  
 Luben, NY 12110  
 Tel: (518) 762-6800



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 L. SINGH  
 ACCOUNTABLE MANAGER  
 J. COSTA  
 PORTFOLIO MANAGER

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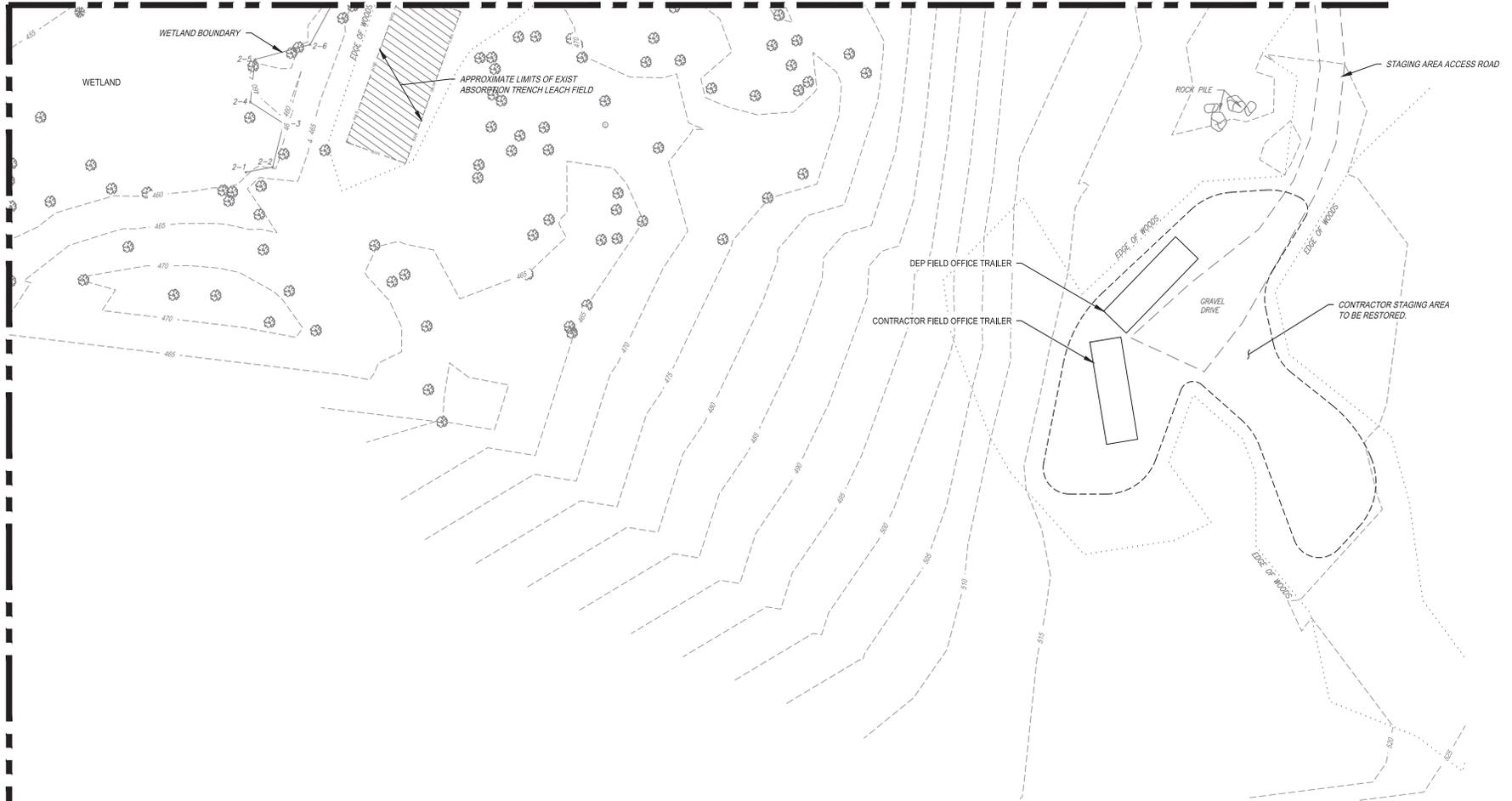
**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
**PUTNAM COUNTY, NEW YORK**  
 PROPOSED SITE PLAN (3 OF 5)  
 DATE: 3/31/2023  
 SCALE: 1"=20'  
 SHEET NO.:  
 13 OF 81  
 DRAWING NO.  
 C-003.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



MATCHLINE C-002.00

MATCHLINE C-003.00



PROPOSED SITE PLAN



**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022  
REVISED 3/31/2023

Last Saved By: E. Leclair; File Path: C:\Users\leclair\OneDrive - City of New York\Documents\2023\19-15-03 PM  
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 Drawing Name: & Location: C:\Users\leclair\OneDrive - City of New York\Documents\2023\19-15-03 PM\19-15-03 PM.dwg

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY:  
M. POWELL  
CHECKED BY:  
E. LECLAIR  
DESIGN LEAD:  
S. MURPHY  
SECTION MANAGER:  
E. LECLAIR

DRAWN BY:  
M. POWELL  
**GDM Smith**  
11500 American Blvd, Suite 200  
Latham, NY 12110  
Tel: (518) 762-6800



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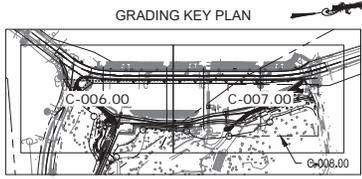
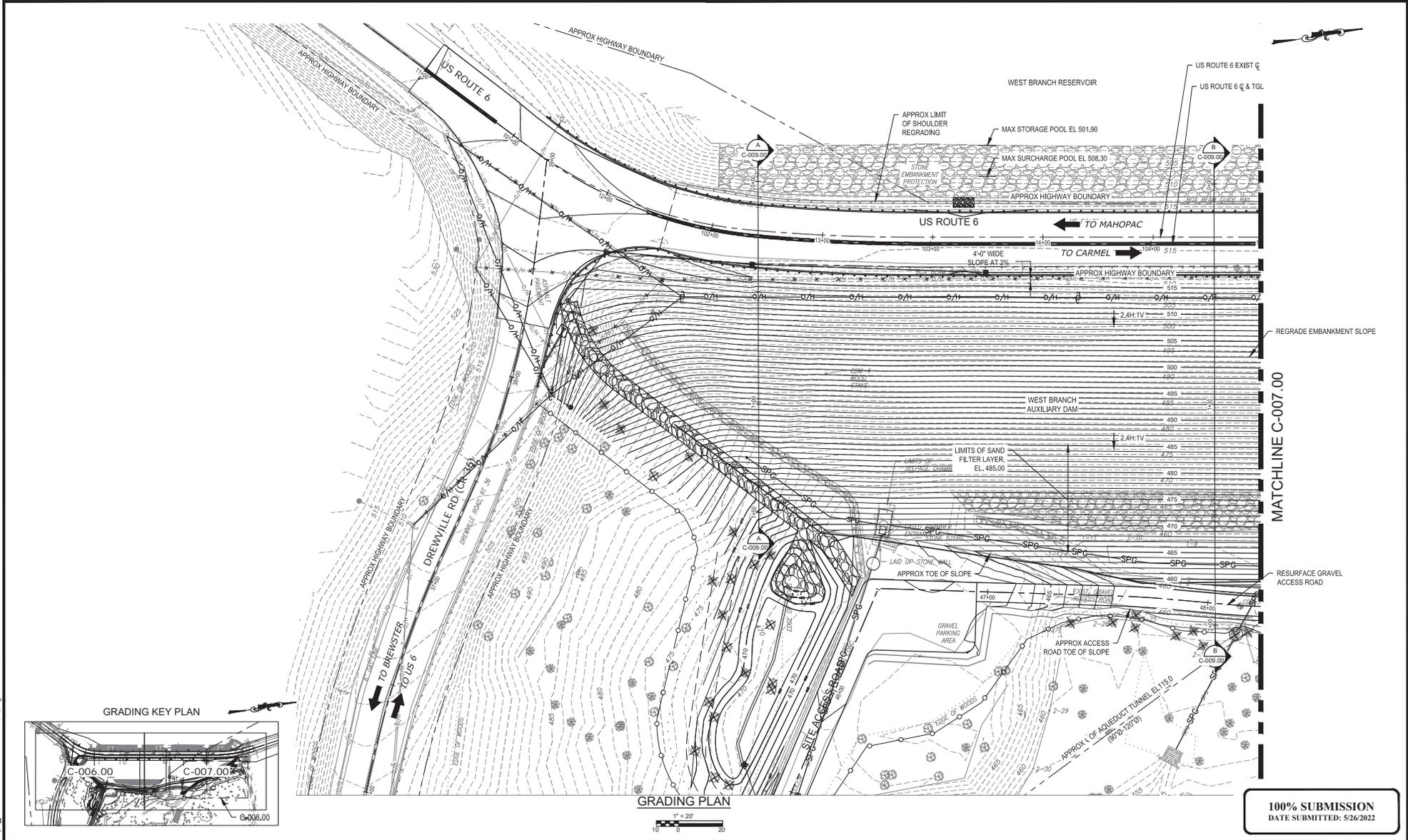
**NEW YORK CITY**  
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BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
CORONA, NEW YORK 11368  
www.nyc.gov/dcp

**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
**PUTNAM COUNTY, NEW YORK**  
  
PROPOSED SITE PLAN (4 OF 5)

DATE: 3/31/2023  
SCALE: 1"=20'  
SHEET NO.:  
14 OF 81  
DRAWING NO.:  
C-004\_00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.





GRADING PLAN  
1" = 20'

100% SUBMISSION  
DATE SUBMITTED: 5/26/2022

East Coast Rd. & Gate Powell Ltd., Thursday, May 26, 2022, 12:16:40 PM  
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 Drawing Name: & Location: C:\p\p\POWELL\DWG\026637\C-006.00.dwg

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY:  
S. MURPHY  
CHECKED BY:  
E. LECLAIR  
DESIGN LEAD:  
S. MURPHY  
SECTION MANAGER:  
E. LECLAIR



**NYC**  
Environmental  
Protection

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L. SINGH  
ACCOUNTABLE MANAGER  
D. COSTA  
PORTFOLIO MANAGER

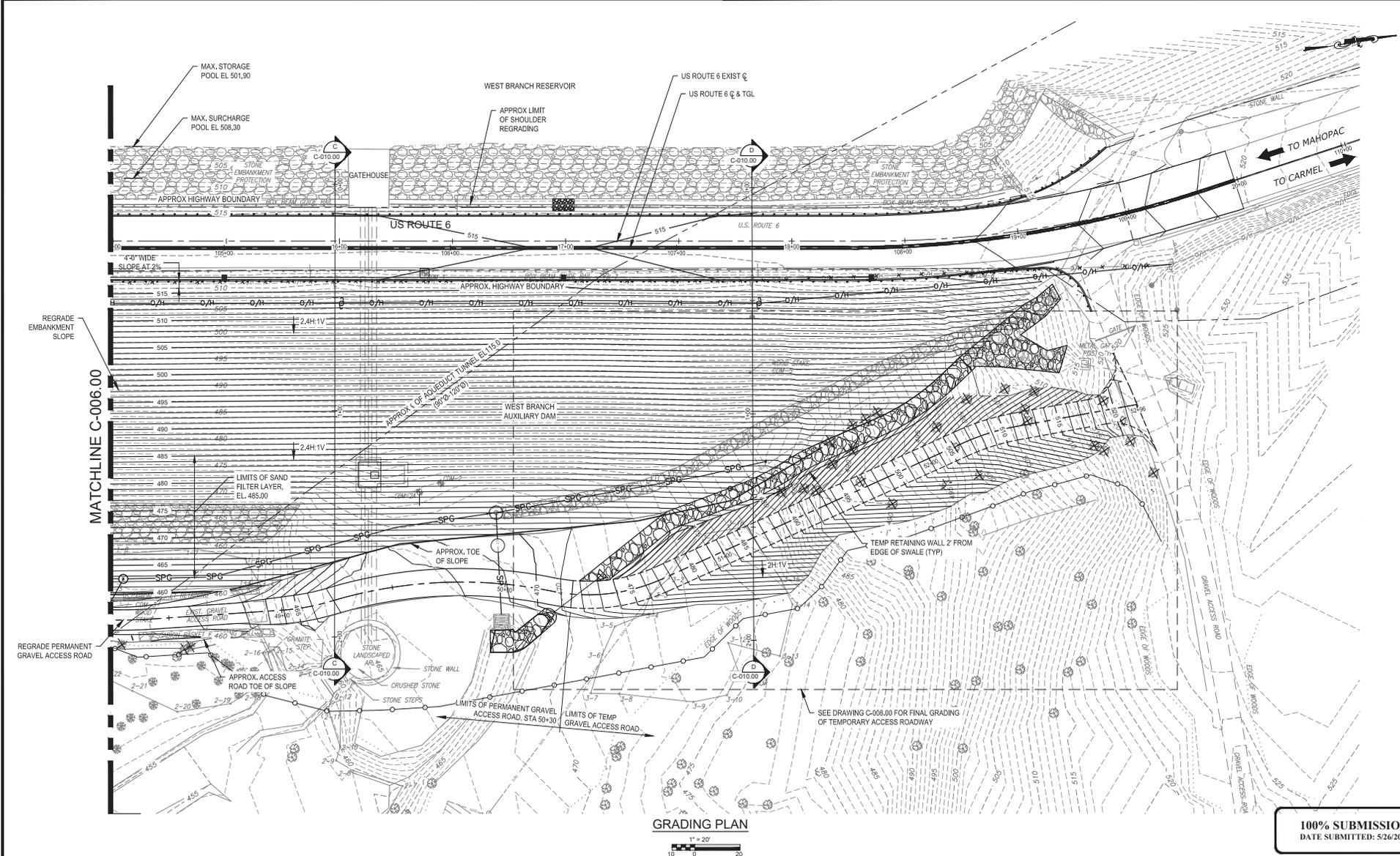
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**WEST BRANCH AUXILIARY DAM  
SLOPE SAFETY IMPROVEMENTS**  
PUTNAM COUNTY, NEW YORK  
GENERAL SITE GRADING PLAN (1 OF 2)

DATE: 3/31/2023  
SCALE: 1"=20'  
SHEET NO.:  
16 OF 81  
DRAWING NO.:  
C-006.00

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**GRADING PLAN**  
 1" = 20'

**100% SUBMISSION**  
 DATE SUBMITTED: 5/26/2022

Lead: S. B. & B. POWELL, LLC, Thursday, May 28, 2022, 12:16:55 PM  
 Project: WEST BRANCH AUXILIARY DAM SLOPE SAFETY IMPROVEMENTS  
 Drawing Name: & Location: C:\p\POWELL\DWG\0286837\C-006.00.dwg

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY:  
S. MURPHY  
 CHECKED BY:  
E. LECLAR  
 DESIGN LEAD:  
S. MURPHY  
 SECTION MANAGER:  
E. LECLAR

DRAWN BY:  
M. POWELL  
  
 11800 American Blvd, Suite 200  
 Luthers, NY 12110  
 Tel: (518) 782-6800



APPROVED FOR THE CITY OF NEW YORK  
 L. SINGH  
 ACCOUNTABLE MANAGER  
 P. COSTA  
 PORTFOLIO MANAGER

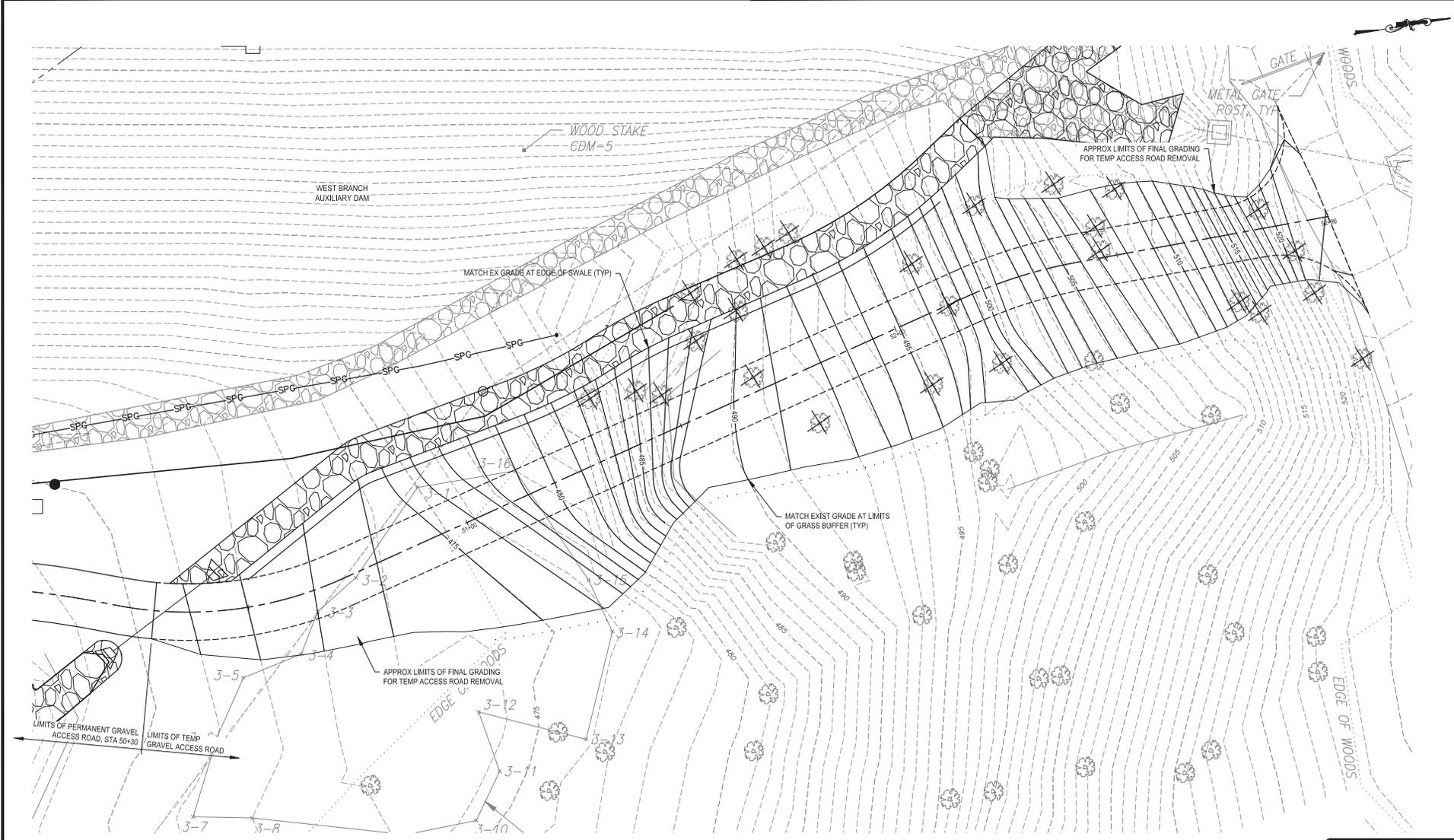
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**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
 PUTNAM COUNTY, NEW YORK  
 GENERAL SITE GRADING PLAN (2 OF 2)

DATE: 3/31/2023  
 SCALE: 1"=20'  
 SHEET NO.:  
 17 OF 81  
 DRAWING NO.:  
 C-007.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



**GRADING PLAN**  
 1" = 20'  
 10' 0' 20'

**100% SUBMISSION**  
 DATE SUBMITTED: 5/26/2022

Last Saved By: E. Leclair, Thursday, May 26, 2022 and Date Plotted: Friday, March 31, 2023, 10:45:04 PM  
 Plot Size: Tabular (BEC) Drawing.ctb  
 Plot Style Table: Tabular (BEC) Drawing.ctb  
 Drawing Name: & Location: C:\p\p\DWELLING\0268637C\008.DWG

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY:  
S. MURPHY  
 CHECKED BY:  
E. LECLAIR  
 DESIGN LEAD:  
S. MURPHY  
 SECTION MANAGER:  
E. LECLAIR

DRAWN BY:  
S. MURPHY  
  
 11500 American Blvd, Suite 200  
 Latham, NY 12110  
 Tel: (518) 762-6800



APPROVED FOR THE CITY OF NEW YORK  
 L. SINGH  
 ACCOUNTABLE MANAGER  
 P. COSTA  
 PORTFOLIO MANAGER

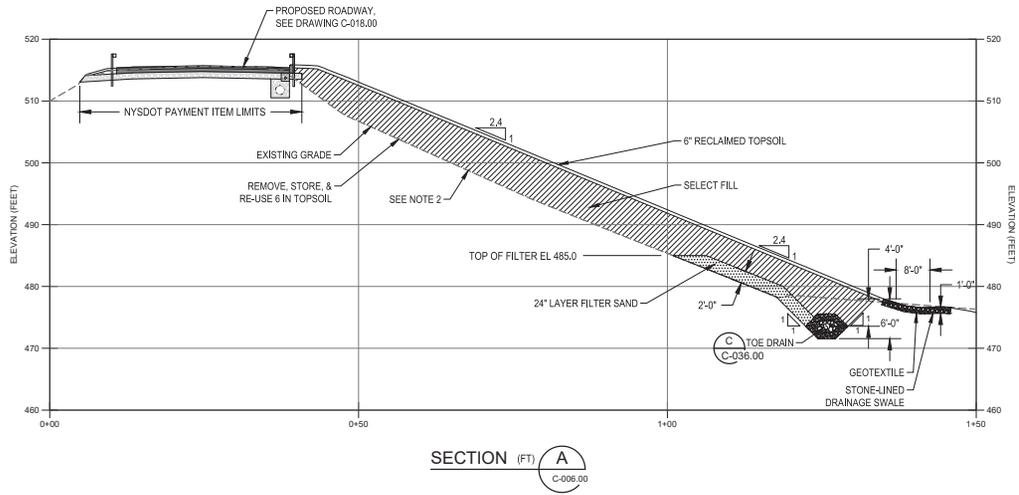
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 96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
 CORONA, NEW YORK 11368  
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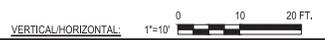
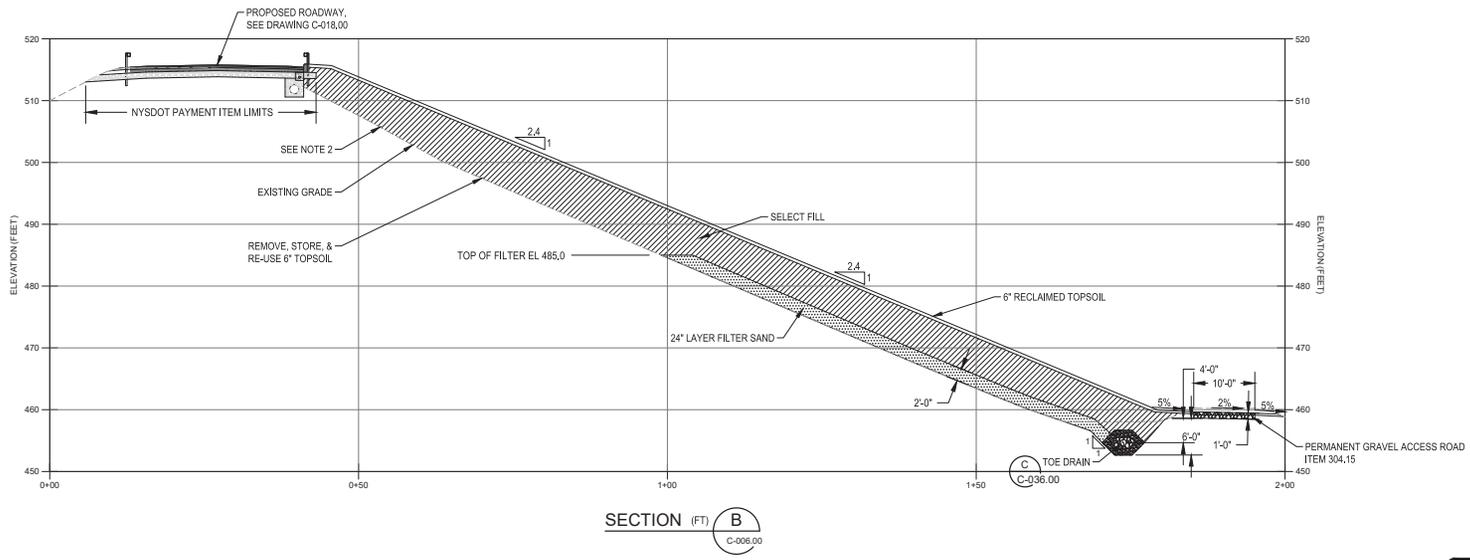
**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
**PUTNAM COUNTY, NEW YORK**  
 FINAL SITE GRADING PLAN - TEMPORARY ACCESS ROAD

DATE: 3/31/2023  
 SCALE: 1"=20'  
 SHEET NO.:  
 18 OF 81  
 DRAWING NO.:  
 C-008.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



- NOTES:**
- EXCAVATIONS AND PLACEMENT OF FILL SHALL BE IN ACCORDANCE WITH CONTRACTOR'S EXCAVATION AND FILL PLACEMENT PLAN. THE OPEN EXCAVATION LIMIT IS UP TO 15' MEASURED PERPENDICULAR TO THE SLOPE.
  - THE SELECT FILL INTO SLOPE BY BENCHING 6'-8" [VERTICALLY] INTO EMBANKMENT SLOPE
  - ELEVATIONS ARE REFERENCED TO NAVD88.



**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

Last Saved By: E. Leclair@NYC.EPC; Friday, May 20, 2022 12:46:16 PM  
 Please Save ANSI D (22.00 X 34.00 INCHES) Plot Scale: 1"=20'  
 Drawing Name & Location: C:\p\POWELL\LAND\0266637\C-009.00.dwg

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY:  
M. SCHULTZ  
CHECKED BY:  
E. LECLAIR  
DESIGN LEAD:  
M. SCHULTZ  
SECTION MANAGER:  
E. LECLAIR

DRAWN BY:  
M. POWELL  
**GDM Smith**  
11500 American Blvd, Suite 200  
Latham, NY 12110  
Tel: (518) 762-6800



APPROVED FOR THE CITY OF NEW YORK  
L. SINGH  
ACCOUNTABLE MANAGER  
D. COSTA  
PORTFOLIO MANAGER

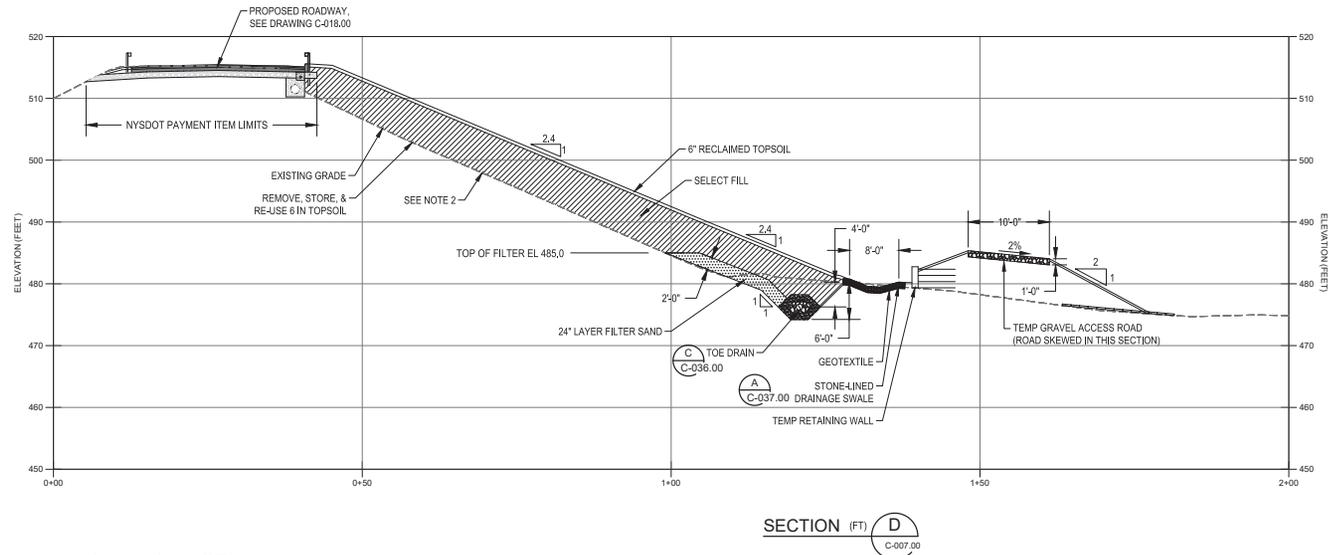
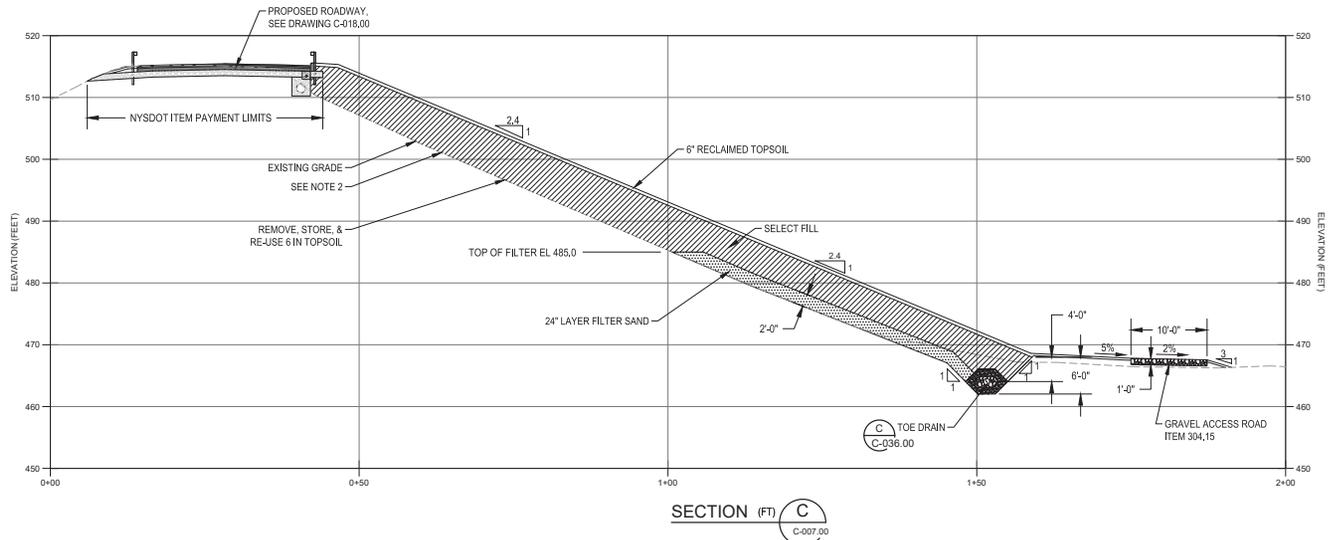
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CORONA, NEW YORK 11368  
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**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
PUTNAM COUNTY, NEW YORK  
PROPOSED DAM SECTIONS (1 OF 2)

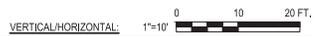
DATE: 3/31/2023  
SCALE: 1"=20'  
SHEET NO.: 19 OF 61  
DRAWING NO.: C-009.00

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**NOTES:**

1. EXCAVATIONS AND PLACEMENT OF FILL SHALL BE IN ACCORDANCE WITH CONTRACTOR'S EXCAVATION AND FILL PLACEMENT PLAN, THE OPEN EXCAVATION LIMIT IS UP TO 15' MEASURED PERPENDICULAR TO THE SLOPE.
2. TIE SELECT FILL INTO SLOPE BY BENCHING 6'-8" [VERTICALLY] INTO EMBANKMENT SLOPE
3. ELEVATIONS ARE REFERENCED TO NAVD88.

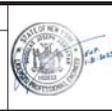


Last Saved By: E:\Data\POWELL\DWG\_Editing\_May\_20\_2022.mxd Date Plotted: Friday, May 20, 2022 12:16:29 PM  
 Plot Size: ANSI (D) (24.00 X 36.00 INCHES) Plot Scale: 1"=20'  
 Drawing Name: & Location: C:\p\POWELL\DWG\0286837\C-009.00.dwg

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY: M. SCHULTZ	DRAWN BY: M. POWELL
CHECKED BY: E. LECLAR	
DESIGN LEAD: M. SCHULTZ	
SECTION MANAGER: E. LECLAR	

  
 11500 American Blvd, Suite 200  
 Luban, NY 12110  
 Tel: (518) 782-6800



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L. SINGH ACCOUNTABLE MANAGER	
D. COSTA PORTFOLIO MANAGER	

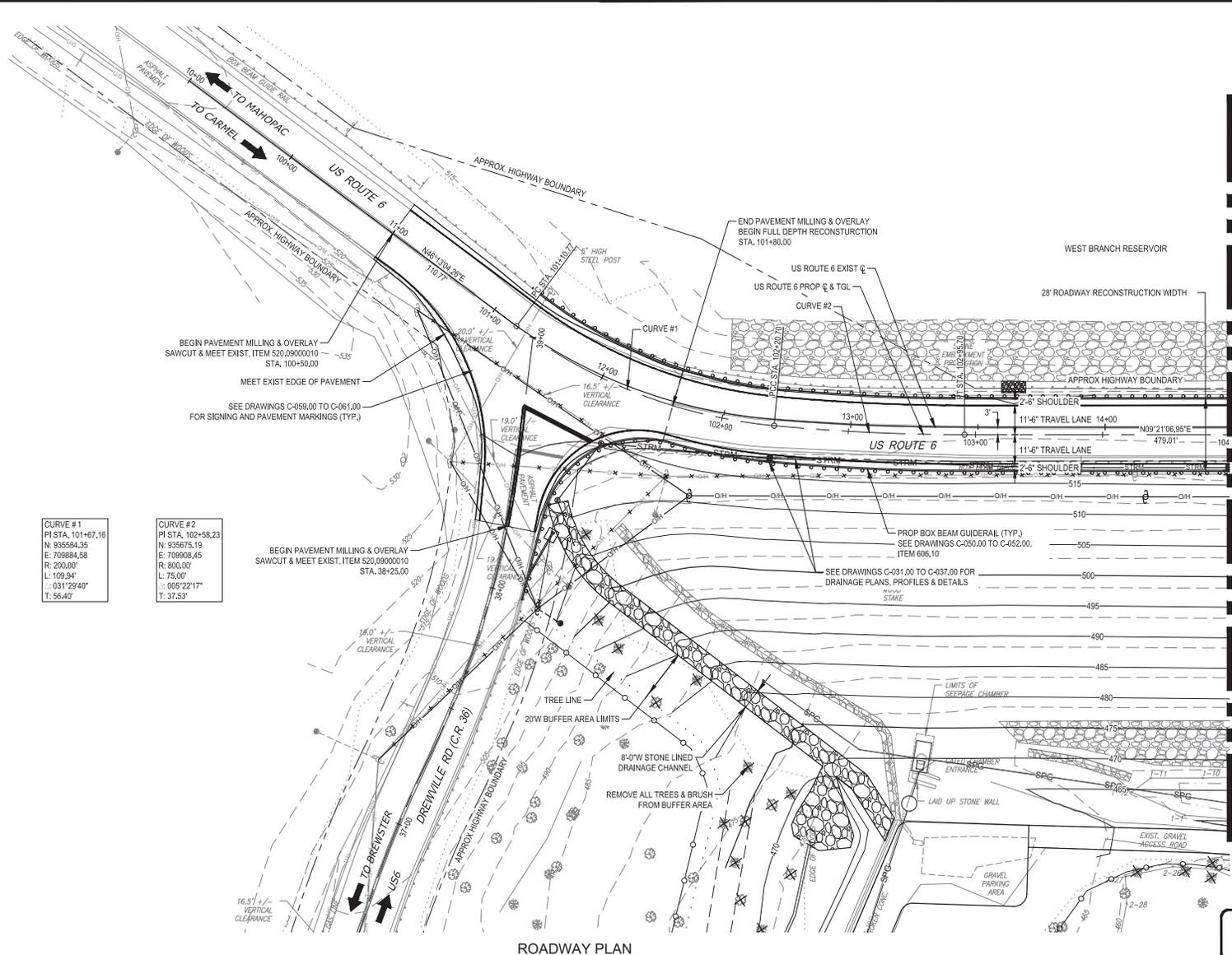
**NEW YORK CITY**  
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 BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
 96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
 CORONA, NEW YORK 11368  
 www.nyc.gov/dcp

**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
 PUTNAM COUNTY, NEW YORK  
 PROPOSED DAM SECTIONS (2 OF 2)

DATE: 3/31/2023
SCALE: 1"=20'
SHEET NO.: 20 OF 81
DRAWING NO. C-010.00

**100% SUBMISSION**  
 DATE SUBMITTED: 5/26/2022

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



**CURVE #1**  
 PI STA. 101+67.16  
 N: 935564.35  
 E: 709884.58  
 R: 200.00'  
 L: 109.94'  
 Δ: 031°29'40"  
 T: 56.40'

**CURVE #2**  
 PI STA. 102+58.23  
 N: 935675.19  
 E: 709926.45  
 R: 800.00'  
 L: 75.00'  
 Δ: 005°22'17"  
 T: 37.53'



**100% SUBMISSION**  
 DATE SUBMITTED: 5/26/2022

Lead: David B. & Date: POWELL, Thursday, May 26, 2022, and Date: Peter Friday, March 31, 2023, 12:16:55 PM  
 Please Save (ANSI) (2.00, 0.00 X 34.00 INCHES) Plot Scale: 1"=20'  
 Drawing Name & Location: C:\p\POWELL\DWG\0266837\C-011.DWG  
 Plot Style: Table: BDED\_C\_Drawing.ctb

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY:  
 S. MURPHY  
 CHECKED BY:  
 E. LECLAIR  
 DESIGN LEAD:  
 S. MURPHY  
 SECTION MANAGER:  
 E. LECLAIR

DRAWN BY:  
 S. MURPHY  
  
 11500 American Blvd, Suite 200  
 Luthers, NY 12110  
 Tel: (518) 762-6800



APPROVED FOR THE CITY OF NEW YORK  
 L. SINGH  
 ACCOUNTABLE MANAGER  
 P. COSTA  
 PORTFOLIO MANAGER

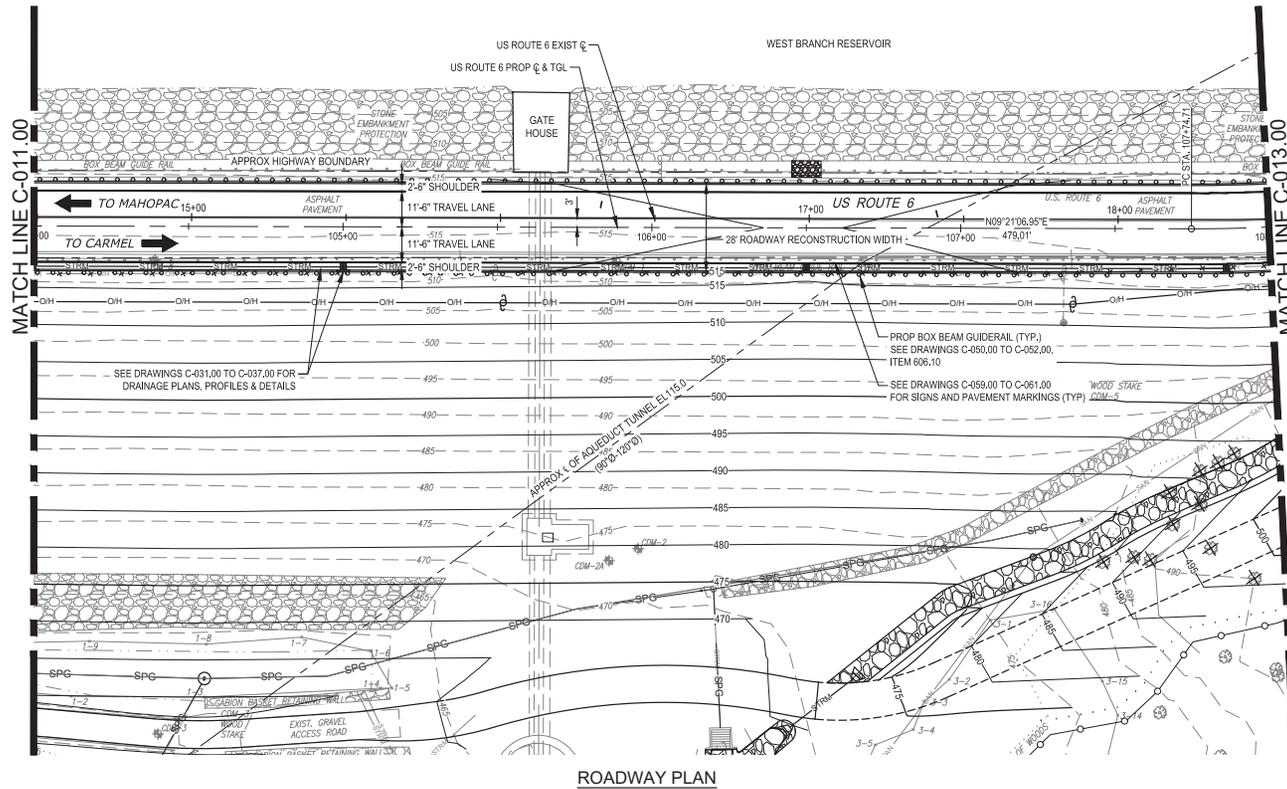
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 BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
 96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
 CORONA, NEW YORK 11368  
 www.nyc.gov/dcp

**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
 PUTNAM COUNTY, NEW YORK  
 ROADWAY PLAN (1 OF 3)

DATE: 3/31/2023  
 SCALE: 1"=20'  
 SHEET NO.:  
 21 OF 81  
 DRAWING NO.:  
 C-011.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



ROADWAY PLAN



**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

Lead: Gary B. & John POWELL L.L.D., Thursday, May 26, 2022, and Date: Peter Friday, March 31, 2023, 12:16:43 PM.  
 Please Save (ANSI) D:\22.00 X 34.00 (INCHES) Plot Scale: 1"=20'  
 Drawing Name: & Location: C:\pwr\_gf\POWELL\LD\0268637\C-011.DWG

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY:  
S. MURPHY  
CHECKED BY:  
E. LECLAIR  
DESIGN LEAD:  
S. MURPHY  
SECTION MANAGER:  
E. LECLAIR

DRAWN BY:  
S. MURPHY  
**GDM Smith**  
11500 American Blvd, Suite 200  
Luthers, NY 12110  
Tel: (518) 782-6800



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L. SINGH  
ACCOUNTABLE MANAGER  
P. COSTA  
PORTFOLIO MANAGER

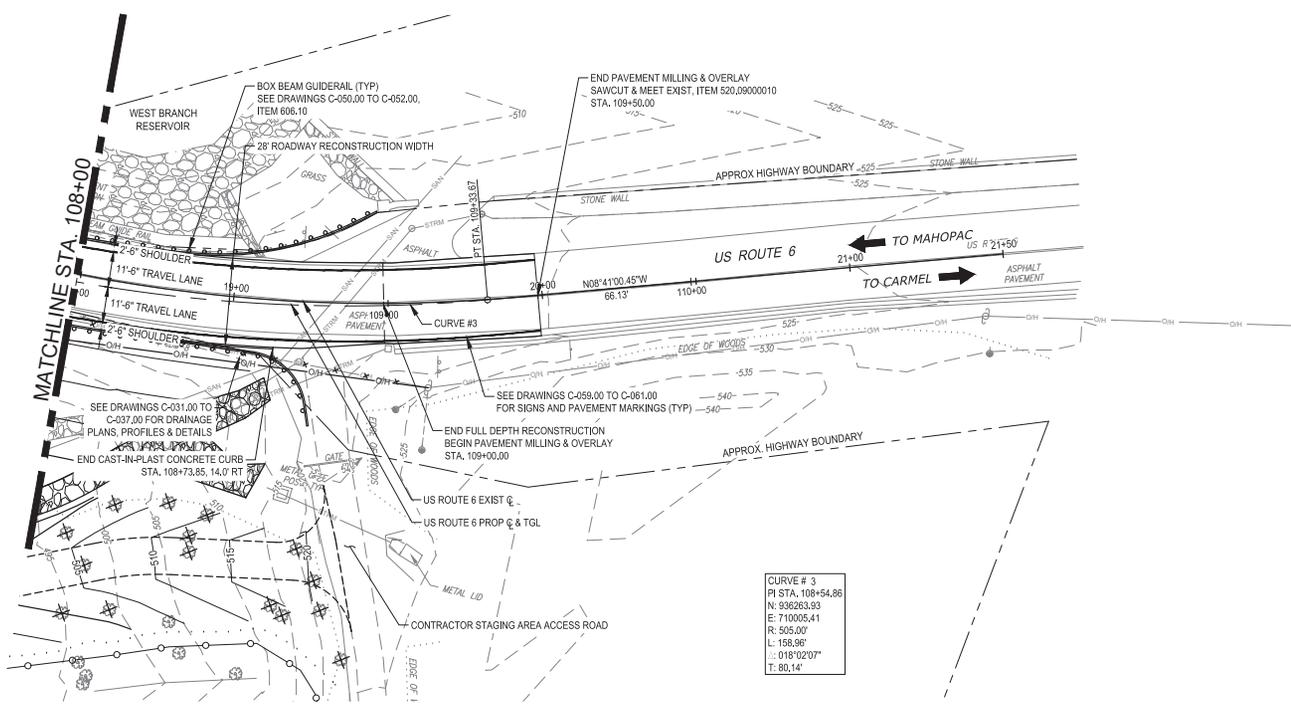
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WEST BRANCH AUXILIARY DAM  
SLOPE SAFETY IMPROVEMENTS  
PUTNAM COUNTY, NEW YORK  
ROADWAY PLAN (2 OF 3)

DATE: 3/31/2023  
SCALE: 1"=20'  
SHEET NO.:  
22 OF 81  
DRAWING NO.:  
C-012.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



**CURVE # 3**  
 PI STA. 108+54.86  
 N: 936263.93  
 E: 714005.41  
 R: 505.00'  
 L: 158.96'  
 Δ: 018°02'07"  
 T: 80.14'

**ROADWAY PLAN**



**100% SUBMISSION**  
 DATE SUBMITTED: 5/26/2022

Last Saved By: & Date: P0WELL.LMD, Thursday, May 26, 2022, and Date Plotted: Friday, March 31, 2023, 12:16:49 PM.  
 Plot Size (ANSI): 12.00 X 34.00 (INCHES) Plot Scale: 1"=20'  
 Drawing Name & Location: C:\p\p\p\DWELL\MD\0268637\C-013.DWG

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY:  
S. MURPHY

CHECKED BY:  
E. LECLAIR

DESIGN LEAD:  
S. MURPHY

SECTION MANAGER:  
E. LECLAIR

DRAWN BY:  
S. MURPHY

**GDM Smith**

11800 American Blvd, Suite 200  
 Luban, NY 12110  
 Tel: (518) 782-6800



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L. SINGH  
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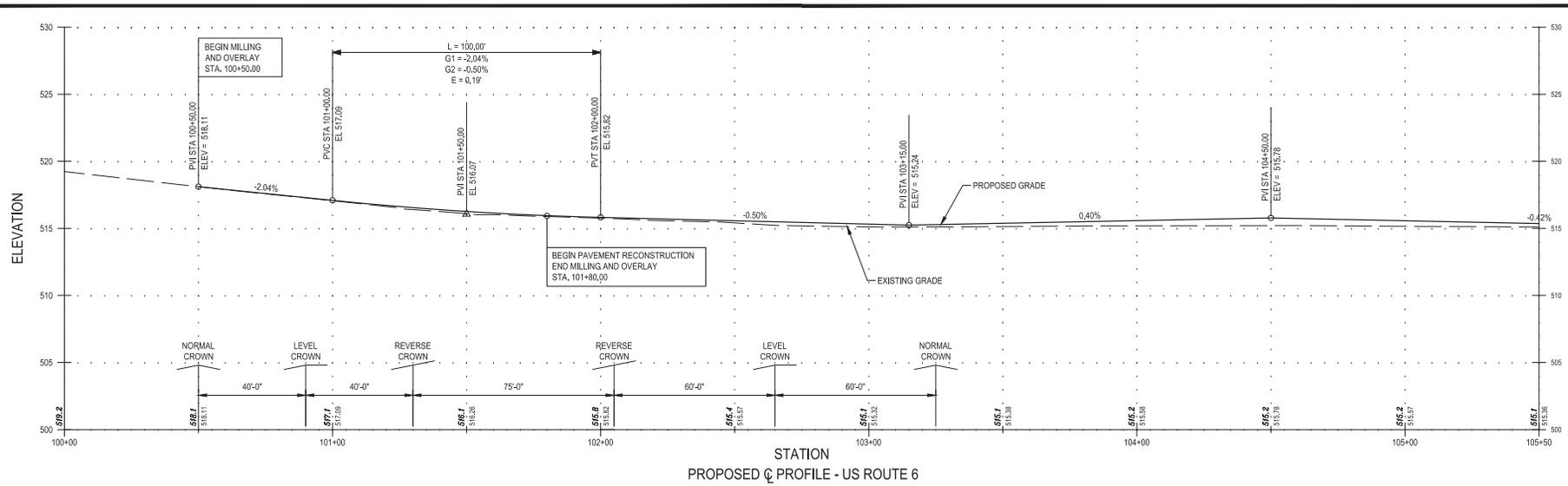
**WEST BRANCH AUXILIARY DAM SLOPE SAFETY IMPROVEMENTS**  
 PUTNAM COUNTY, NEW YORK

ROADWAY PLAN (3 OF 3)

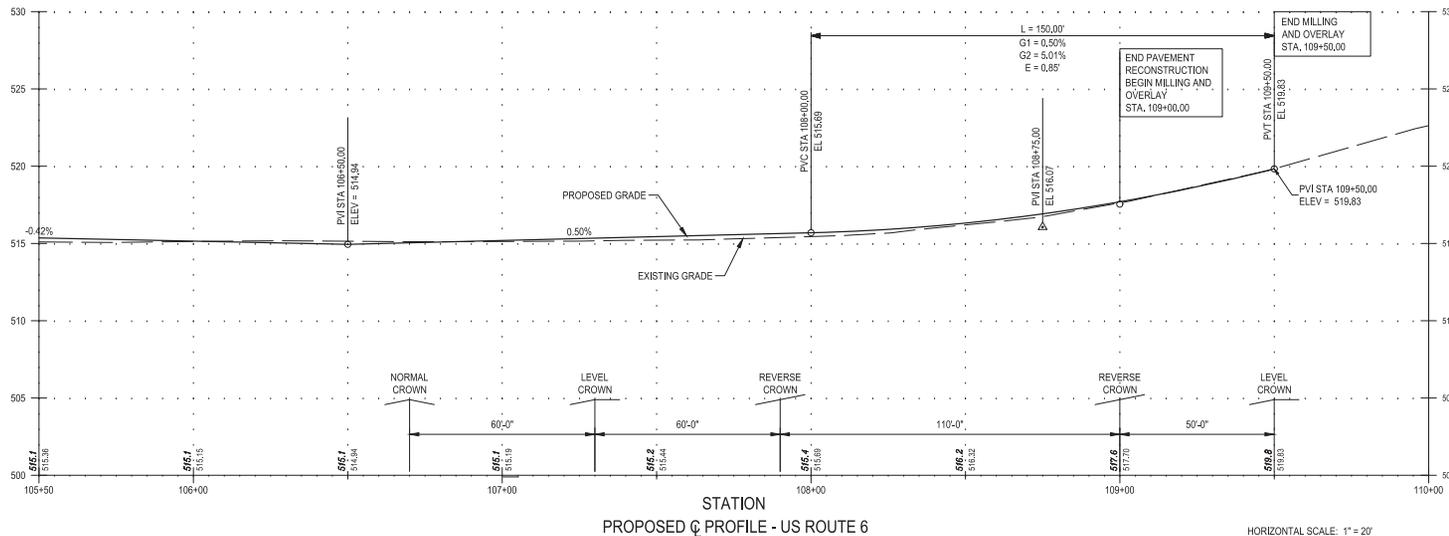
DATE: 3/31/2023  
 SCALE: 1"=20'  
 SHEET NO.: 23 OF 81  
 DRAWING NO.: C-013.00

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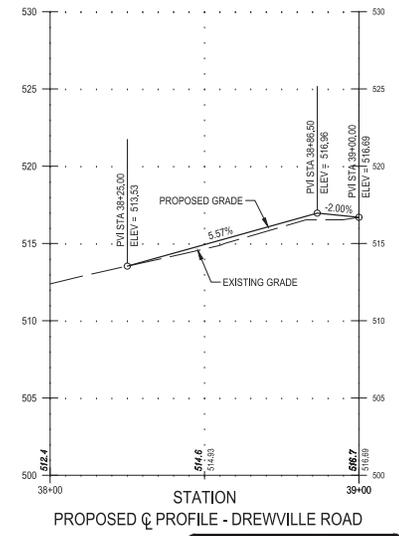
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 Drawing Name: & Location: C:\p\p\POWELL\MD\0286837C\01-00.dwg



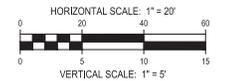
STATION  
PROPOSED  $\zeta$  PROFILE - US ROUTE 6



STATION  
PROPOSED  $\zeta$  PROFILE - US ROUTE 6



STATION  
PROPOSED  $\zeta$  PROFILE - DREWVILLE ROAD



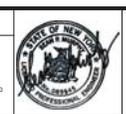
**100% SUBMISSION**  
 DATE SUBMITTED: 5/26/2022

NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY:  
 S. MURPHY  
 CHECKED BY:  
 E. LECLAR  
 DESIGN LEAD:  
 S. MURPHY  
 SECTION MANAGER:  
 E. LECLAR

DRAWN BY:  
 S. MURPHY  

 11 8300 American Blvd, Suite 200  
 Luban, NY 12110  
 Tel: (518) 782-8200

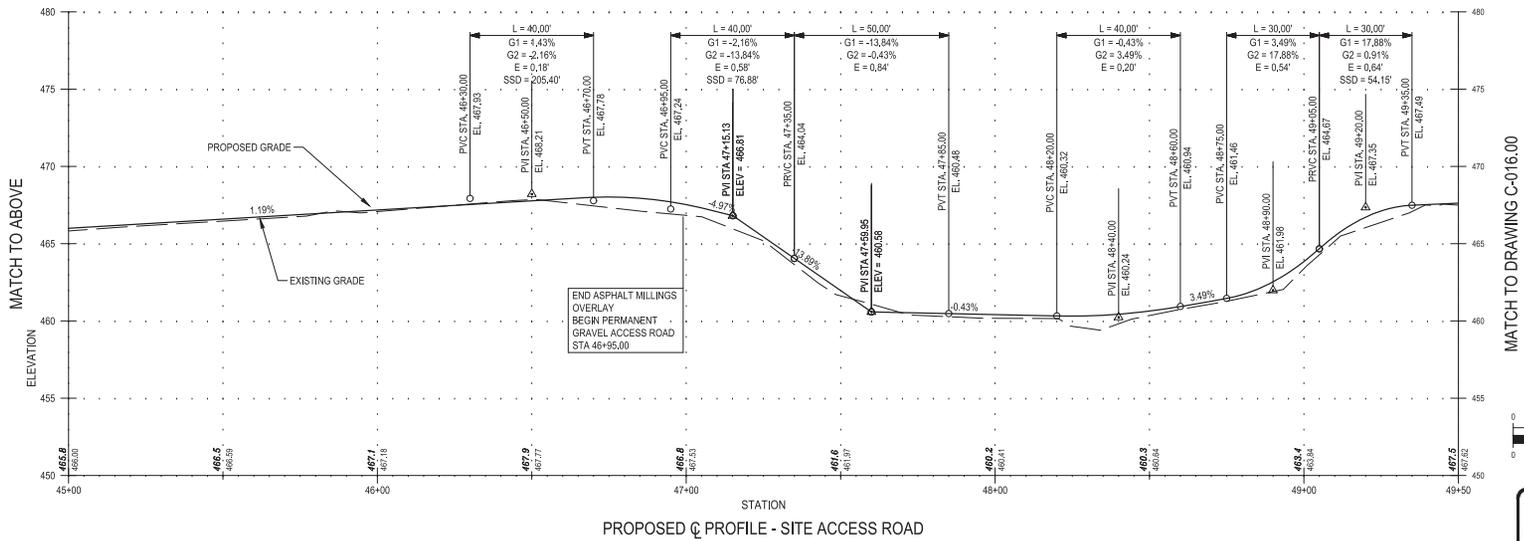
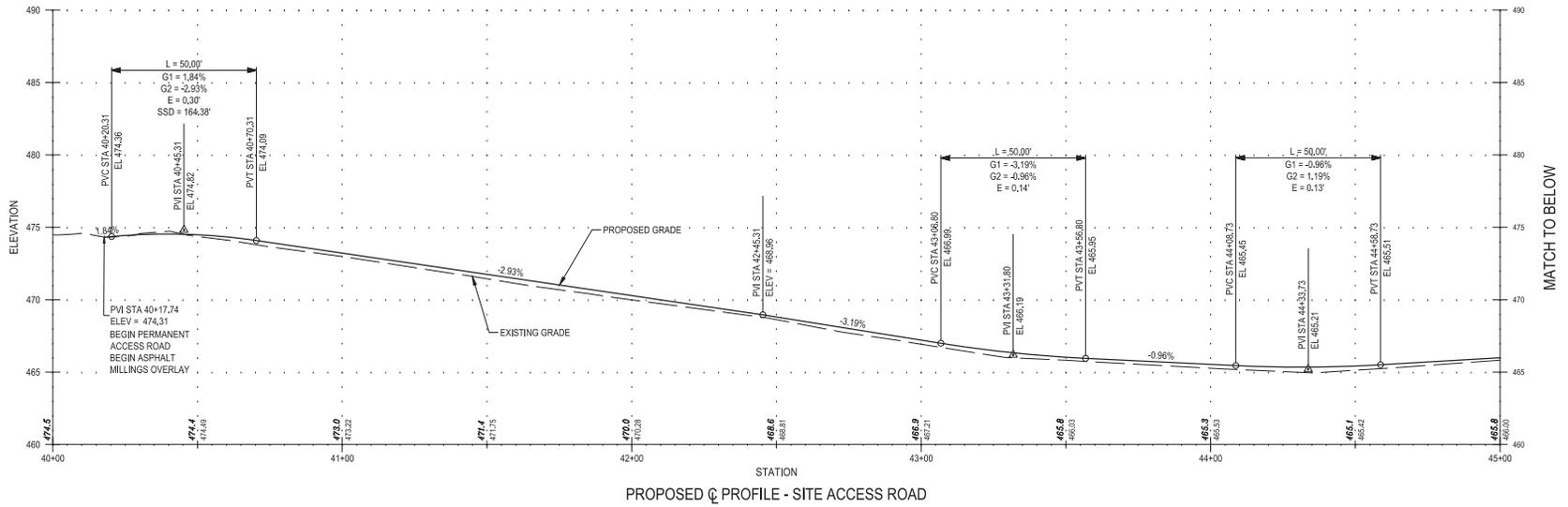


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 L. SINGH  
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 D. COSTA  
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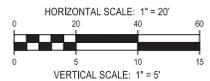
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**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
**PUTNAM COUNTY, NEW YORK**  
 ROADWAY PROFILES  
 DATE: 3/31/2023  
 SCALE: 1"=20'  
 SHEET NO.:  
 24 OF 81  
 DRAWING NO.  
 C-014,00



MATCH TO ABOVE

MATCH TO DRAWING C-016.00



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DATE SUBMITTED: 5/26/2022

Last Saved By: E. Leclair, Wednesday, October 20, 2022 11:03:54 AM  
 Plot Size (ANSI) (22.00 X 34.00 INCHES) Plot Scale: 1"=20'  
 Drawing Name & Location: C:\p\p\POWELL\0268637\C-01-0.00.dwg

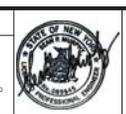
NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY: S. MURPHY	SECTION MANAGER: E. LECLAIR
CHECKED BY: E. LECLAIR	
DESIGN LEAD: S. MURPHY	
DRAWN BY: S. MURPHY	

DRAWN BY:  
**S. MURPHY**

**GPM Smith**

17500 American Blvd, Suite 200  
Latham, NY 12110  
Tel: (518) 762-8500



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L. SINGH ACCOUNTABLE MANAGER
D. COSTA PORTFOLIO MANAGER

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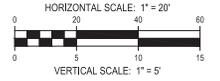
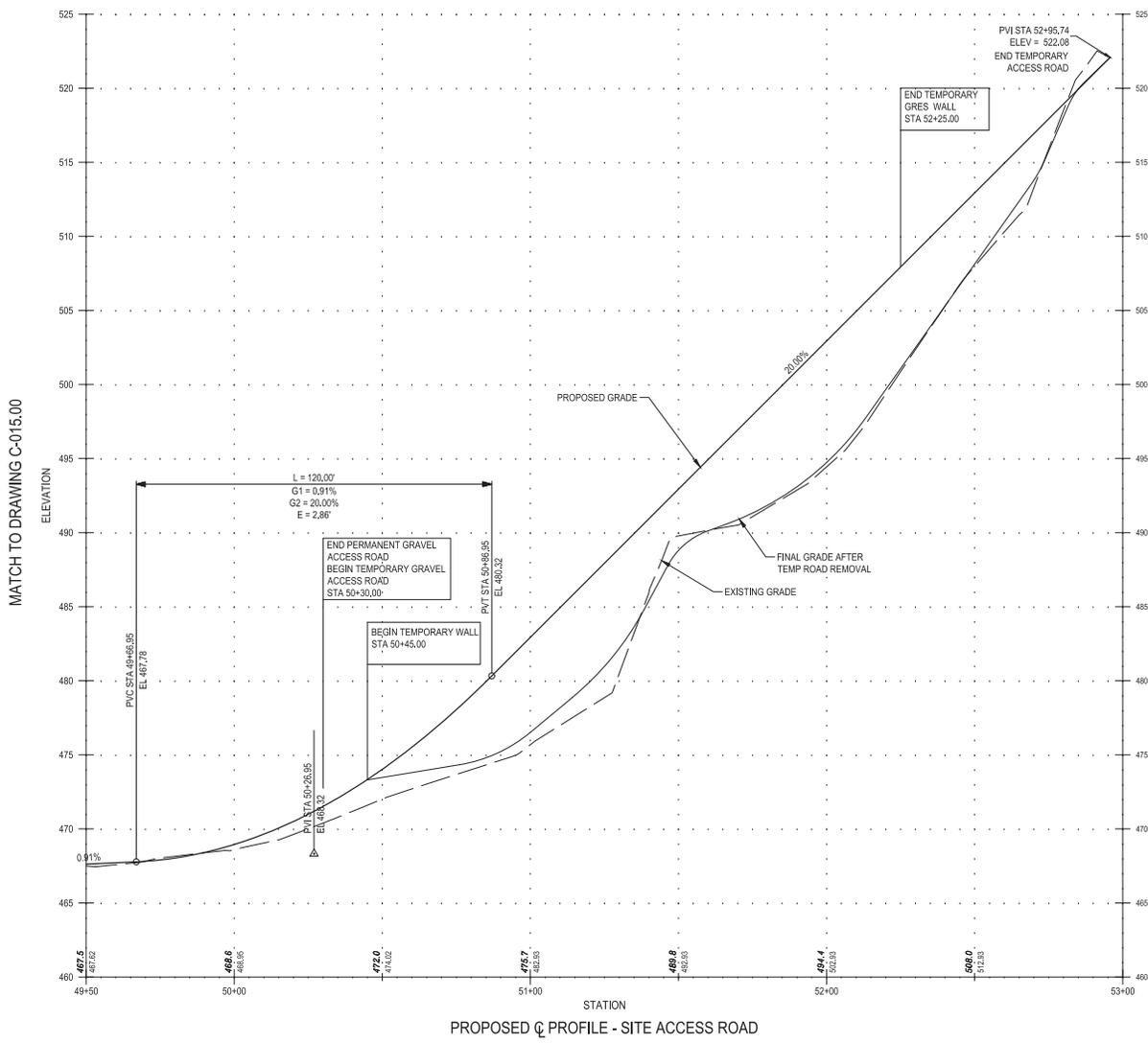
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CORONA, NEW YORK 11368  
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**WEST BRANCH AUXILIARY DAM SLOPE SAFETY IMPROVEMENTS**  
PUTNAM COUNTY, NEW YORK

SITE ACCESS ROAD PROFILE (1 OF 2)

DATE: 3/31/2023
SCALE: 1"=20'
SHEET NO.: 25 OF 81
DRAWING NO.: C-015.00

LHM, S. B. & B. POWELL L.L.P., Wednesday, October 20, 2021 10:45:55 AM  
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 Drawing Name: & Location: C:\p\p\POWELL\LD\0268637\C-016.00.dwg



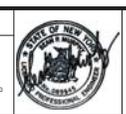
**100% SUBMISSION**  
 DATE SUBMITTED: 5/26/2022

NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY: S. MURPHY	SECTION MANAGER: E. LECLAIR
CHECKED BY: E. LECLAIR	
DESIGN LEAD: S. MURPHY	
APPRD.	

DRAWN BY:  
 S. MURPHY  

 11500 American Blvd, Suite 200  
 Luben, NY 12110  
 Tel: (518) 762-6900



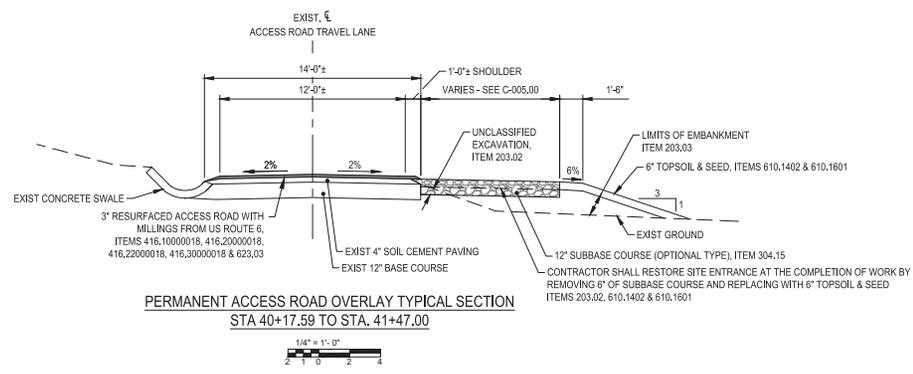
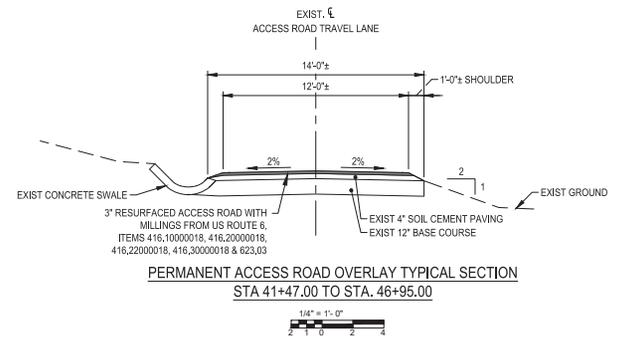
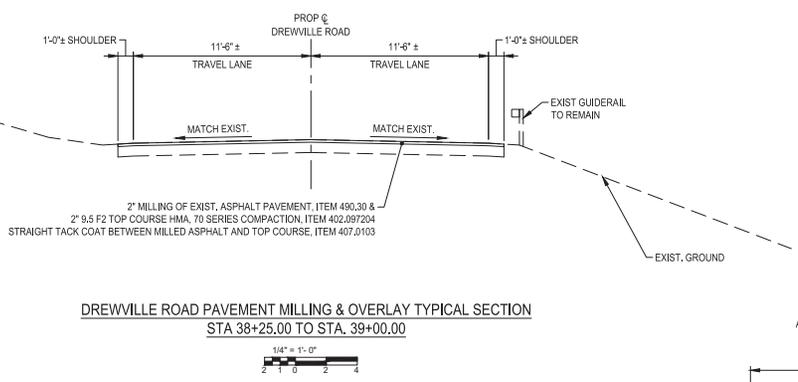
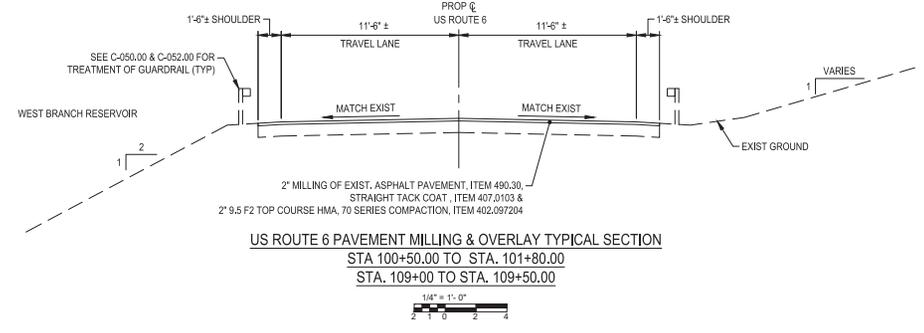
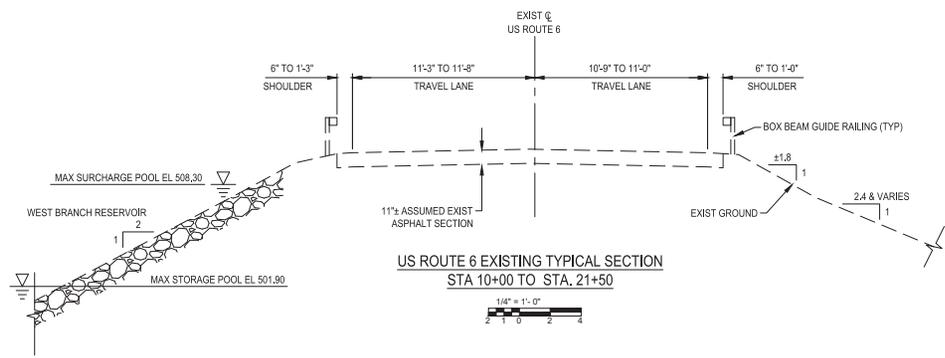
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L. SINGH ACCOUNTABLE MANAGER
P. COSTA PORTFOLIO MANAGER

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 CORONA, NEW YORK 11368  
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WEST BRANCH AUXILIARY DAM SLOPE SAFETY IMPROVEMENTS PUTNAM COUNTY, NEW YORK SITE ACCESS ROAD PROFILE (2 OF 2)	DATE: 3/31/2023 SCALE: 1"=20' SHEET NO.: 26 OF 81 DRAWING NO.: C-016.00
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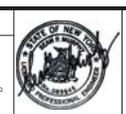
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 Drawing Name: & Location: C:\p\p\DWG\0268637\C-017.00.dwg



**100% SUBMISSION**  
 DATE SUBMITTED: 5/26/2022

NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY:  
 M. POWELL  
 CHECKED BY:  
 E. LECLAIR  
 DESIGN LEAD:  
 S. MURPHY  
 SECTION MANAGER:  
 E. LECLAIR



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 L. SINGH  
 ACCOUNTABLE MANAGER  
 P. COSTA  
 PORTFOLIO MANAGER

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 CORONA, NEW YORK 11368  
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**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
 PUTNAM COUNTY, NEW YORK  
 TYPICAL ROADWAY SECTIONS  
 (1 OF 2)

DATE: 3/31/2023  
 SCALE: 1/4"=1'-0"  
 SHEET NO.:  
 27 OF 81  
 DRAWING NO.:  
 C-017.00



**GENERAL**

1. THE CONTRACTOR SHALL MAINTAIN TRAFFIC THROUGHOUT THE LENGTH AND DURATION OF THE CONTRACT IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 619 OF THE NEW YORK STATE STANDARD SPECIFICATIONS, THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND NYS SUPPLEMENT, AND THE BASIC WORK ZONE TRAFFIC CONTROL DETAILS IN THE PLANS OR AS ORDERED BY ENGINEER (AGEE).
2. FOR TYPICAL APPLICATIONS OF TRAFFIC CONTROL DEVICES IN CONSTRUCTION AREAS NOT SPECIFIED ON THE PLANS, THE PROVISIONS OF PART 6 OF THE NATIONAL MUTCD AND NYS SUPPLEMENT SHALL APPLY. THE STANDARDS OF APPLICATION NOTED THEREIN AND ON THE PLANS ARE TO BE CONSIDERED MINIMUM STANDARDS, WHERE OPTIONS EXIST FOR SIGN SHAPE, THE DIAMOND SHAPE SHALL BE USED.
3. FLAGGERS MUST BE ABLE TO COMMUNICATE WITH EACH OTHER IN THE SAME LANGUAGE AND MUST BE ABLE TO UNDERSTAND AND TAKE INSTRUCTIONS/DIRECTIONS FROM ENGINEER OR INSPECTOR.

**LANE CLOSURES**

1. THE CONTRACTOR SHALL SCHEDULE WORK SO THAT ALL TRAVEL LANES IN EACH DIRECTION ARE OPEN WHEN THE CONTRACTOR'S OPERATIONS ARE CLOSED DOWN OR SUBSTANTIALLY CLOSED DOWN. THE MINIMUM WIDTH OF A TRAVELED LANE SHALL BE 10 FEET UNLESS OTHERWISE SHOWN ON THE PLANS.
2. THE CONTRACTOR SHALL MAINTAIN TRAFFIC AND SHALL PROVIDE FLAGGERS AS SHOWN ON THE PLANS OR ABOVE TO CONTROL TRAFFIC MOVEMENT AT THE SITE OF WORK OPERATIONS REQUIRING TEMPORARY CLOSING OF PORTIONS OF THE TRAVELED WAY.
3. THE CONTRACTOR SHALL PERFORM ALL ROADWAY RECONSTRUCTION DURING NIGHTTIME WORK HOURS OF 8:00 P.M. TO 6:00 A.M. CONTRACTOR SHALL FULLY OPEN THE ROADWAY TO UNRESTRICTED TWO-WAY TRAFFIC AT THE END OF EACH WORK SHIFT. NO LANE CLOSURES ARE PERMITTED FROM 6:00 A.M. TO 8:00 P.M. UNLESS APPROVED IN ADVANCE BY NYCDOT AND NYSOT.
4. THE OWNER AND/OR NYCDOT RESERVES THE RIGHT TO PRECLUDE LANE OR SHOULDER CLOSURES DURING PERIODS OF INCLEMENT WEATHER, WET OR Icy PAVEMENT, REDUCED VISIBILITY, TRAFFIC ACCIDENTS OR OTHER EMERGENCIES.
5. THE OWNER AND/OR NYCDOT MAY ALTER ANY LANE OR SHOULDER CLOSURES SHOULD TRAFFIC CONDITIONS OR OTHER UNFORESEEN CIRCUMSTANCES ARISE WHICH WOULD ADVERSELY AFFECT TRAFFIC FLOW.
6. THE CONTRACTOR IS ALERTED TO THE FACT THAT INCIDENT MANAGEMENT OR TRAFFIC CONDITIONS MIGHT FORCE HIGHER CONSTRUCTION OPERATION TO STOP, EVEN DURING TIME WHERE SUCH OPERATION WOULD NORMALLY BE PERMITTED.
7. THE CONTRACTOR SHALL HAVE NO CLAIM AGAINST NYCDOT OR ANY OTHER MUNICIPAL ENTITY FOR ANY DELAYS OR EXTRA COSTS INCURRED IN COMPLYING WITH THESE RESTRICTIONS.
8. LANE OR SHOULDER CLOSURES THAT WILL BE HIGHLY DISRUPTIVE TO TRAFFIC REQUIRE A ONE-WEEK ADVANCE ADVERTISING THROUGH VMS (VARIABLE MESSAGE SIGNS) TO FORWARD LOCAL AND REGULAR HIGHWAY USERS OF THE EXPECTED DELAYS.
9. THE NYSOT REGION 8 TRAFFIC MANAGEMENT CENTER MUST BE NOTIFIED AT: (914) 742-4100
  - 1) AT LEAST TWO DAYS BEFORE SCHEDULED LANE OR SHOULDER CLOSURES AND IF THE SCHEDULE IS CANCELED OR DELAYED.
  - 2) EACH OCCURRENCE WHEN A LANE OR SHOULDER CLOSURE IS SETUP (BY TELEPHONE ONLY FROM THE FIELD SITE) AND
  - 3) EACH OCCURRENCE WHEN A LANE OR SHOULDER CLOSURE IS REMOVED AND NORMAL HIGHWAY OPERATION RESUMES (BY TELEPHONE ONLY FROM THE FIELD SITE.)

**WORK RESTRICTIONS FOR HOLIDAYS AND OTHER EVENTS**

1. THE CONTRACTOR WILL NOT BE ALLOWED TO PERFORM ANY WORK DISRUPTIVE TO TRAFFIC, INCLUDING, BUT NOT LIMITED TO LANE OR SHOULDER CLOSURES ON THE FOLLOWING HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY, THANKSGIVING, CHRISTMAS DAY AND THE RELIGIOUS HOLIDAYS LISTED IN SPECIFICATION SECTION 01 14 00 - WORK RESTRICTIONS. CONSTRUCTION ACTIVITIES THAT WILL RESULT IN TEMPORARY LANE/SHOULDER CLOSURES SHALL BE SUSPENDED TO MINIMIZE TRAVEL DELAYS ASSOCIATED WITH ROAD WORK FOR THESE HOLIDAYS AS FOLLOWS:

HOLIDAY	FALLS ON	TEMPORARY LANE CLOSURES ARE NOT ALLOWED FROM
NEW YEAR'S DAY INDEPENDENCE DAY CHRISTMAS DAY	SUNDAY OR MONDAY	8:00 AM FRIDAY BEFORE TO 6:00 AM TUESDAY AFTER
	TUESDAY	6:00 AM SATURDAY BEFORE TO 6:00 AM WEDNESDAY AFTER (STARTING AT 6:00 AM FRIDAY BEFORE TO 6:00 AM WEDNESDAY AFTER FOR CHRISTMAS DAY)
MEMORIAL DAY LABOR DAY	WEDNESDAY	6:00 AM TUESDAY BEFORE TO 6:00 AM THURSDAY AFTER (STARTING AT 6:00 AM SATURDAY BEFORE TO 6:00 AM THURSDAY AFTER FOR CHRISTMAS DAY)
	THURSDAY	6:00 AM THURSDAY TO 6:00 AM MONDAY AFTER (STARTING AT 6:00 AM WEDNESDAY BEFORE TO 6:00 AM MONDAY AFTER FOR CHRISTMAS DAY)
THANKSGIVING DAY	FRIDAY OR SATURDAY	6:00 AM THURSDAY BEFORE TO 6:00 AM MONDAY AFTER
RELIGIOUS HOLIDAYS	MONDAY	6:00 AM FRIDAY BEFORE TO 6:00 AM TUESDAY AFTER
	THURSDAY	6:00 AM WEDNESDAY BEFORE TO 6:00 AM MONDAY AFTER
	N/A	4:00 PM DAY BEFORE TO 8:00 AM DAY AFTER

**WORK AREA COORDINATION**

NO	DATE	REVISIONS/DESCRIPTION	APPRD.	SECTION MANAGER: E. LECLAIR

1. WHEN TWO OR MORE WORK ARE ADJACENT, OVERLAP, OR ARE IN CLOSE PROXIMITY AS DETERMINED BY THE ENGINEER, THE CONTRACTOR SHALL ENSURE THERE IS NO CONFLICT IN SIGNING AND THAT LANE CONTINUITY IS MAINTAINED THROUGHOUT ALL WORK AREAS.
2. THE CONTRACTOR SHALL COORDINATE ALL CONTRACT WORK WITH ANY UTILITY WORK. SUBCONTRACTOR WORK, PUBLIC MAINTENANCE OPERATIONS OR OTHER CONSTRUCTION ACTIVITIES IN THE AREA TO ENSURE THAT THERE ARE NO BASIC WORK ZONE TRAFFIC CONTROL CONFLICTS.
3. OUTSIDE THE PERMANENT CLOSURE AREA ALL VEHICLES, EQUIPMENT, WORKERS, AND ACTIVITIES SHALL BE RESTRICTED TO ONE SIDE OF THE ROADWAY AT A TIME.

**CONES, DRUMS, BARRICADES AND MARKERS**

1. ALL CHANNELIZING/DELINEATION DEVICES ARE TO BE PLACED 30 AS TO PROVIDE A MINIMUM OF 2 FEET CLEARANCE TO THE TRAVELED WAY UNLESS OTHERWISE SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAKE CERTAIN THAT PLACEMENT OF CONES, DRUMS OR MARKERS OR BARRICADES SHALL NOT INTERFERE WITH SIGHT DISTANCE.
2. LONGITUDINAL SPACING SHALL BE 1 FOOT FOR EVERY 1 MPH OF THE SPEED LIMIT, BUT NOT MORE THAN 40 FEET. (IE. 30 MPH = 30 FOOT SPACING). REDUCED SPACING MAY BE REQUIRED AS SHOWN ON THE PLANS OR ABOVE. INTERSECTIONS AND DRIVEWAYS SHALL BE CHANNELIZED AT 5 FOOT SPACING.
3. A DRUM MOUNTED WITH A TYPE B FLASHING HIGH INTENSITY WARNING LIGHT SHALL BE PLACED ON ALL APPROACHES TO A BUMP OR DIP IN THE PAVEMENT (A PAVEMENT CONDITION CONSIDERED BY THE ENGINEER TO BE SUFFICIENTLY ABRUPT ENOUGH TO CAUSE CONSIDERABLE DISCOMFORT, CARGO SHIFTING, OR DEFLECTION OF A VEHICLE FROM ITS TRUE COURSE AT PREVAILING DRIVING SPEEDS). THE COST OF THESE DRUMS AND LIGHTS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 619.01, BASIC WORK ZONE TRAFFIC CONTROL.
4. PROVIDE A LATERAL BUFFER SPACE OF 1 FOOT BETWEEN THE WORK ZONE AND THE LINE OF DELINEATION DEVICES WHERE POSSIBLE.
5. FOR CLARITY, THE BASIC WORK ZONE TRAFFIC CONTROL DRAWINGS MAY NOT SHOW ALL CHANNELIZING DEVICES. CHANNELIZING DEVICES SHALL BE PLACED FROM THE BEGINNING OF THE TAPER, AND CONTINUE THROUGH THE ACTIVITY AREA ADJACENT TO TRAFFIC.
6. THE COST OF ANY DELINEATION AND GUIDING DEVICES (CONES, DRUMS, ETC.) SHALL BE INCLUDED IN THE PRICE FOR BID ITEM TRAFFIC CONTROL.
7. DRUMS ARE THE PREFERRED CHANNELIZING DEVICES TO USE DURING THE HOURS OF DARKNESS. TWO LIGHTS SHALL BE REQUIRED ON THE FIRST TWO DRUMS AND ON THE FIRST TWO DRUMS AFTER EACH INTERSECTION. CONES AND VEHICLE PANELS MAY BE USED IN WELL LIT AREAS.
8. CONTRACTOR SHALL MAINTAIN LANE WIDTHS OF 10 FT OR GREATER AT ALL TIMES.

**PRELIMINARY WORK**

1. PRIOR TO THE START OF ANY WORK OPERATIONS, ALL RELATED WORK FOR PROPOSED WORK ZONE TRAFFIC CONTROL, AS DETERMINED BY THE ENGINEER, SHALL BE COMPLETE. THIS INCLUDES, BUT IS NOT LIMITED TO, ALL SIGNS, SIGNALS, PAVEMENT MARKINGS, BARRIERS, DELINEATION (CONES, DRUMS, ETC.), FLAGGERS, PAVEMENT MODIFICATIONS, AND ANY OTHER RELATED WORK.

**SIGNS**

1. THE CORRECT SEQUENCE AND SPACING OF APPROPRIATE SIGNS MUST BE MAINTAINED AT ALL TIMES IN ACCORDANCE WITH THE NATIONAL MUTCD AND NYS SUPPLEMENT, THE PROPOSAL, AND AS DIRECTED BY THE ENGINEER OR GOVERNING AGENCY.
2. COLORS USED FOR CONSTRUCTION SIGNING (INCLUDING TEMPORARY OR MODIFIED GUIDE SIGNS) SHALL BE BLACK LEGEND ON ORANGE BACKGROUND WITH THE FOLLOWING EXCEPTIONS: EMERGENCY SERVICE MARKERS, ROUTE MARKERS AND THEIR CORRESPONDING AUXILIARY SIGNS SHALL BE THE COLORS SPECIFIED IN THE NATIONAL MUTCD AND NYS SUPPLEMENT, (ANY AUXILIARY SIGNS WHICH ARE NOT INCLUDED IN THE NATIONAL MUTCD AND NYS SUPPLEMENT SHALL BE BLACK LEGEND ON ORANGE BACKGROUND). BLANK COVERS USED TO COVER PORTIONS OF EXISTING SIGNS SHALL BE OF A COLOR AND REFLECTORIZED MATERIAL MATCHING THAT OF THE SIGN BEING PARTIALLY COVERED. ANY REGULATORY SIGNS REQUIRED SHALL BE THE COLORS SPECIFIED IN THE NATIONAL MUTCD AND NYS SUPPLEMENT.
3. THE CONTRACTOR SHALL INSTALL GUIDE SIGN G20-1 AT THE LIMITS OF THE PROJECT AND ROAD WORK AHEAD INITIAL WARNING SIGN W20-1 ON ALL SIDE ROADS (EXCEPT DEAD END STREETS) WHENEVER A CONSTRUCTION CONDITION EXISTS AT OR NEAR THE INTERSECTION. SIGN PLACEMENT SHALL BE IN ACCORDANCE WITH NATIONAL MUTCD AND NYS SUPPLEMENT. THESE SIGNS SHALL BE COVERED OR REMOVED WHEN THERE IS NO CONSTRUCTION CONDITION IN EFFECT.
4. DURING WINTER SHUTDOWN IF APPLICABLE, EXISTING SIGNS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AND/OR LOCATION. ALL INAPPROPRIATE CONSTRUCTION SIGNS SHALL BE REMOVED OR COVERED ABOVE, AND THE ENTIRE HIGHWAY SYSTEM OPEN TO TRAFFIC.
5. W-1 BUMP SIGNS SHALL BE PLACED ON ALL APPROACHES 300 FEET AHEAD OF A BUMP OR DIP IN THE PAVEMENT CAUSED BY CONSTRUCTION OPERATIONS SUCH AS ROAD PLATES, ETC. NUMEROUS BUMPS OR DIPS SHALL WARRANT THE USE OF W-8 ROUGH ROAD SIGNS INSTEAD OF W-1 BUMP SIGNS. THE COST OF THE SIGNS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM TRAFFIC CONTROL.
6. THE CONTRACTOR SHALL TAKE ALL ACTION, AS DIRECTED BY THE ENGINEER OR GOVERNING AGENCY, TO ELIMINATE BUMPS, ONLY WHEN IT IS NOT POSSIBLE OR FEASIBLE. IN THE OPINION OF THE ENGINEER, TO ELIMINATE A BUMP SHALL IT BE ALLOWED TO REMAIN.
7. IF ADVANCE SIGNING OBSTRUCTS THE VISIBILITY OF THE FLAGGER OR CONFLICTS WITH DRIVEWAYS OR SIDEROADS, SIGNS SHOULD BE MOVED UPSTREAM AS DIRECTED BY THE ENGINEER OR GOVERNING AGENCY.
8. THE CONTRACTOR SHALL TRIM ANY FOLIAGE OBSTRUCTING THE VISIBILITY OF SIGNS, WHETHER PERMANENT OR TEMPORARY, NEEDED FOR WORK ZONE TRAFFIC CONTROL, AS DETERMINED BY THE ENGINEER. THE COST SHALL BE INCLUDED IN THE PRICE FOR BID ITEM 619.01, BASIC WORK ZONE TRAFFIC CONTROL.
9. ANY CONSTRUCTION SIGNS DEEMED NECESSARY BY THE ENGINEER AND NOT ON THE PLANS SHALL BE INCLUDED IN THE PRICE FOR BID ITEM TRAFFIC CONTROL.

10. ALL SIGNS NECESSARY FOR THE BASIC WORK ZONE TRAFFIC CONTROL, INCLUDING RELOCATION AND/OR MODIFICATION AND/OR RESTORATION OF EXISTING SIGN PANELS AS NOTED IN THE PLANS, STANDARD SPECIFICATIONS, NATIONAL MUTCD AND NYS SUPPLEMENT, OR ABOVE SHALL BE INCLUDED IN THE PRICE FOR BID ITEM TRAFFIC CONTROL.
11. ANY DAMAGE TO EXISTING SIGNS IS TO BE DOCUMENTED AND ANY SUBSEQUENT DAMAGE REMOVED. THE CONTRACTOR SHALL BE LIABLE FOR THE DAMAGE DONE, DUE TO THE CONTRACTOR'S METHODS, TO TEMPORARILY REMOVE, RELOCATE OR COVER SIGN PANELS OR SIGN TEXT. REFER TO SECTION 645-6.09 "COVERING SIGN PANELS" IN THE NYSOT STANDARD SPECIFICATIONS.
12. ALL SIGNS SHALL BE MOUNTED AT A HEIGHT PER THE NATIONAL MUTCD AND NYS SUPPLEMENT.

**PUBLIC INGRESS AND EGRESS**

1. THE CONTRACTOR SHALL NOTIFY PROPERTY OWNERS AT LEAST ONE DAY IN ADVANCE OF CLOSING DRIVEWAYS AND SHALL PROVIDE PROPERTY OWNERS WITH PROPER ACCESS ABOVE TO THEIR DRIVEWAYS AND SHALL MAINTAIN THEM THROUGH ALL WORK AREAS AND SHALL DELINEATE THEM BY MEANS OF SIGNS, CONES, AND/OR DRUMS ABOVE. THE COSTS FOR SIGNS AND ANY OTHER DELINEATION AND GUIDING DEVICES (CONES, DRUMS, ETC.) SHALL BE INCLUDED IN THE PRICE FOR BID ITEM TRAFFIC CONTROL.
2. WHERE DIRECT ACCESS TO DRIVEWAYS IS NOT POSSIBLE DUE TO NECESSARY CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL PLAN ALTERNATE MEANS OF ACCESS AND SUBMIT SUCH PLANS TO THE ENGINEER FOR APPROVAL. OCCUPANT SHALL HAVE 24 HOURS NOTICE OF ANY CHANGES. COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE FOR BID ITEM TRAFFIC CONTROL.
3. SIGNS DENOTING COMMERCIAL ESTABLISHMENTS SHALL BE PROVIDED AND PLACED NEXT TO COMMERCIAL DRIVEWAYS. SIGNS SHALL BE AS SHOWN IN THE PLANS AND/OR AS APPROVED BY THE ENGINEER. THE COST FOR THESE SIGNS SHALL BE INCLUDED IN THE PRICE FOR BID ITEM TRAFFIC CONTROL. SIGNS SHALL NOT BE PLACED IN A LOCATION THAT OBSTRUCTS SIGHT DISTANCES.
4. WHEN A SIDE ROAD OR DRIVEWAY INTERSECTS THE HIGHWAY WITHIN THE TEMPORARY TRAFFIC CONTROL ZONE, ADDITIONAL TRAFFIC CONTROL DEVICES SHALL BE ERRECTED AND FLAGGERS POSTED AT APPROPRIATE LOCATIONS OR ABOVE. ALL COSTS INVOLVED SHALL BE INCLUDED IN THE PRICE FOR BID ITEM TRAFFIC CONTROL.

**CONSTRUCTION INGRESS AND EGRESS**

1. VEHICLES, MATERIALS, AND/OR EQUIPMENT, INCLUDING OUT OF SERVICE SIGNS, SHALL NOT BE PARKED OR STORED WITHIN 10 FEET OF A ROADWAY USED BY THE GENERAL PUBLIC OR ANY OTHER AREAS DEEMED HAZARDOUS BY THE ENGINEER.
2. THE CONTRACTOR SHALL KEEP TO A MINIMUM MOVEMENT OF CONSTRUCTION VEHICLES AND EQUIPMENT IN AND OUT OF DESIGNATED TRAVEL LANES.

**PAVEMENT MARKINGS**

1. PRIOR TO THE BEGINNING OF ANY WORK, THE CONTRACTOR SHALL INVENTORY ALL EXISTING PAVEMENT MARKINGS SO THAT THE PAVEMENT MARKINGS CAN BE LAID OUT AND REPLACED IN KIND BY THE CONTRACTOR UPON COMPLETION OF WORK. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR TRAFFIC CONTROL.
2. WHERE PAVEMENT MARKINGS ARE REMOVED, THEY SHALL BE REMOVED BY A METHOD, SUBJECT TO APPROVAL BY THE ENGINEER, WHICH WILL FULLY REMOVE THE MARKINGS AND CAUSE NO SIGNIFICANT DAMAGE TO THE PAVEMENT. PAVEMENT MARKINGS WHICH ARE COVERED SHALL BE COVERED UTILIZING AN APPROVED PAVEMENT MARKING COVERING TAPE, SPECIFICALLY DESIGNED FOR THE PURPOSE OF COVERING PAVEMENT MARKINGS, AND APPROVED BY THE ENGINEER.
3. THE CONTRACTOR SHALL PROVIDE PAVEMENT MARKINGS AT ALL TIMES ON ALL PAVEMENT, WHETHER EXISTING, TEMPORARY OR NEW, UNTIL PERMANENT MARKINGS ARE INSTALLED OR RESTORED. THIS SHALL INCLUDE AT ALL APPROPRIATE LOCATIONS, EDGE LINES, LANE LINES (SOLID OR BROKEN), CHANNELIZING LINES, DOTTED LINES, PLUS ANY MARKINGS ORDERED BY THE ENGINEER. ALL MARKINGS SHALL BE APPROVED PAVEMENT MARKING COVERING TAPE, SPECIFICALLY DESIGNED FOR THE PURPOSE OF COVERING PAVEMENT MARKINGS, AND APPROVED BY THE ENGINEER.
4. THE CONTRACTOR SHALL PROVIDE PAVEMENT MARKINGS AT ALL TIMES ON ALL PAVEMENT, WHETHER EXISTING, TEMPORARY OR NEW, UNTIL PERMANENT MARKINGS ARE INSTALLED OR RESTORED. THIS SHALL INCLUDE AT ALL APPROPRIATE LOCATIONS, EDGE LINES, LANE LINES (SOLID OR BROKEN), CHANNELIZING LINES, DOTTED LINES, PLUS ANY MARKINGS ORDERED BY THE ENGINEER. ALL MARKINGS SHALL BE APPROVED PAVEMENT MARKING COVERING TAPE, SPECIFICALLY DESIGNED FOR THE PURPOSE OF COVERING PAVEMENT MARKINGS, AND APPROVED BY THE ENGINEER.

**FLAGGERS**

1. ALL FLAGGERS MUST BE ADEQUATELY TRAINED IN FLAGGING OPERATIONS BY NYSOT RECOGNIZED TRAINING PROGRAMS. THE CONTRACTOR SHALL SUBMIT A LIST OF CERTIFIED FLAGGERS TO THE ENGINEER FOR REVIEW AND APPROVAL IN ADVANCE OF ANY FLAGGING OPERATIONS.
2. WHEN FLAGGERS ARE BEING USED FOR TRAFFIC CONTROL PURPOSES, FLAGGER SIGNS W20-7A SHALL BE PLACED AS SHOWN IN THE PROPOSAL, OR ABOVE ON ALL APPROACHES TO THE AREAS BEING FLAGGED. THE COST OF FLAGGER SIGNS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM TRAFFIC CONTROL. FLAGGER SIGNS SHALL NOT BE USED FOR BRIEF PERIODS OF INCIDENTAL FLAGGING. FLAGGER SIGNS SHALL NOT BE VISIBLE WHEN FLAGGERS ARE NOT PRESENT BEING USED.
3. STOP/SLOW PADDLES SHALL BE USED FOR FLAGGING AND SHALL CONFORM TO THE REQUIREMENTS IN THE NATIONAL MUTCD AND NYS SUPPLEMENT BUT SHALL BE A MINIMUM OF 24 INCH. THE COST OF THESE PADDLES AND ALL FLAGGERS SHALL BE INCLUDED IN THE PRICE FOR BID ITEM TRAFFIC CONTROL.
4. FLAGGERS SHALL NOT POSITION THEMSELVES DIRECTLY IN THE PATH OF ONCOMING TRAFFIC. THE FLAGGER SHOULD STAND EITHER ON THE SHOULDER ADJACENT TO THE TRAFFIC BEING CONTROLLED OR IN THE CLOSED/CHANNELIZED LANE, AT ALL TIMES. THE CONTRACTOR SHALL PROVIDE FLAGGERS WITH A CLEAR ESCAPE PATH, FREE OF PARKED VEHICLES, EQUIPMENT OR OTHER OBSTACLES.
5. THE CONTRACTOR SHALL PROVIDE FLAGGERS WHERE SIGHT DISTANCES ARE IMPAIRED BY THE OPERATION OR IN ANY OTHER SITUATION ABOVE.
6. FLAGGERS SHALL BE REQUIRED TO USE TWO-WAY RADIOS, WALKIE-TALKIES, OR OTHER FORMS OF ENHANCED COMMUNICATION WHEN ONE FLAGGER IS NOT VISIBLE TO THE OTHER OR IF THE ENGINEER DEEMS IT NECESSARY. ALL COSTS SHALL BE INCLUDED IN THE PRICE FOR BID ITEM TRAFFIC CONTROL.
7. FLAGGERS SHALL USE THE FREE HAND FOR EMPHASIS AS SHOWN IN THE NATIONAL MUTCD AND NYS SUPPLEMENT. EACH FLAGGER SHALL CONTROL NO MORE THAN ONE APPROACH OF TRAFFIC UNLESS THE APPROACHES PRESENT UNUSUALLY LOW SPEEDS AND/OR UNUSUALLY LOW VOLUMES, WITH ADEQUATE SIGHT DISTANCE FOR THE SAFE HANDLING OF TRAFFIC, AS DETERMINED BY THE ENGINEER.

8. THE ENGINEER SHALL DETERMINE THE NUMBER OF FLAGGERS NEEDED FOR EACH WORK ZONE. UNDER CERTAIN GEOMETRIC AND TRAFFIC SITUATIONS, MORE THAN ONE FLAGGER STATION MAY BE REQUIRED FOR EACH DIRECTION OF TRAFFIC. AT TWO-WAY, UNUSUALLY LOW-VOLUME AND/OR UNUSUALLY LOW-SPEED SHORT LANE CLOSINGS, WHERE ADEQUATE SIGHT DISTANCE IS AVAILABLE FOR SAFE HANDLING OF TRAFFIC, THE USE OF ONE FLAGGER MAY BE SUFFICIENT. IN THIS SITUATION, A POSITION MAY HAVE TO BE TAKEN OPPOSITE THE WORK TO OPERATE EFFECTIVELY.
9. FLAGGER STATIONS SHOULD BE VISIBLE FAR ENOUGH AHEAD TO PERMIT ALL VEHICLES TO STOP. THE FLAGGER SHOULD BE STATIONED FAR ENOUGH AHEAD OF THE WORK FORCE TO WARN THEM (FOR EXAMPLE WITH HORNS, WHISTLES, ETC.) OF APPROACHING DANGER, SUCH AS VEHICLES OUT OF CONTROL.
10. WHEN A SIDE ROAD OR DRIVEWAY INTERSECTS THE HIGHWAY WITHIN THE TEMPORARY TRAFFIC CONTROL ZONE, ADDITIONAL TRAFFIC CONTROL DEVICES AND FLAGGERS SHALL BE PROVIDED.

**NIGHTTIME OPERATIONS AND LIGHTING PLAN**

1. THE CONTRACTOR IS TO SUBMIT A NIGHTTIME OPERATIONS AND LIGHTING PLAN TO THE ENGINEER FOR APPROVAL. THE PLAN SHALL BE UPDATED AS NECESSARY AND INCLUDE ALL DETAILS FOR TRAFFIC CONTROL AND LIGHTING PLAN AS IN ACCORDANCE WITH SECTION 619 OF THE NYSOT STANDARD SPECIFICATIONS (US CUSTOMARY UNITS) DATED JANUARY 1, 2020 WITH CURRENT ADDITIONS AND MODIFICATIONS.

**PAVEMENT EDGE DROP-OFF**

1. THE CONTRACTOR SHALL SUBMIT ALTERNATE TRAFFIC CONTROL PLANS TO THE ENGINEER FOR APPROVAL AT LEAST 30 CALENDAR DAYS PRIOR TO PROPOSED WORK WHICH WILL CREATE A DROP-OFF OF OVER 24 INCHES WITHIN 10 FEET FROM THE EDGE OF THE TRAVELED WAY FOR DURATIONS LONGER THAN ONE SHIFT.
2. THE CONTRACTOR SHALL PROVIDE PAVEMENT EDGE DROP-OFF PROTECTION IN ACCORDANCE WITH THE TABLE BELOW. CHANNELIZING DEVICES USED TO MARK DROP-OFFS SHALL BE PLACED AS PRACTICABLE TO NOT REDUCE THE AVAILABLE TRAVEL LANE WIDTH AT THE ELEVATION OF THE OPEN TRAVEL LANE IN ORDER TO PROVIDE MAXIMUM TARGET VALUE AND VISIBILITY FOR MOTORISTS.
3. A DROP-OFF OF GREATER THAN 24 INCHES WITHIN 10 FEET FROM THE EDGE OF THE TRAVELED WAY TO REMAIN AT THE END OF A WORK SHIFT SHALL BE SEPARATED FROM TRAFFIC WITH TEMPORARY BARRIER. FOR POSTED SPEED LIMITS OF 45 MPH AND LESS, A DROP-OFF OF GREATER THAN 24 INCHES WITHIN 10 FEET FROM THE EDGE OF THE TRAVELED WAY THAT IS 100-FOOT OR LESS IN LENGTH WILL BE ALLOWED WITH CHANNELIZING DEVICES CONSISTING OF DRUMS, EXTRA TALL CONES OR OVERSIZED VERTICAL PANELS ONLY AT A MAXIMUM SPACING OF 20 FEET FOR SHORT DURATIONS NOT TO EXCEED ONE WORK SHIFT.
4. CONTRACTOR SHALL BEGIN WORK TO ELIMINATE UNPROTECTED DROP-OFFS CREATED BY CONTRACT WORK WITHIN 7 CALENDAR DAYS OF THE COMPLETION OF THE WORK CREATING THE DROP-OFF. WORK SHALL CONTINUE IN A TIMELY MANNER UNTIL SUCH TIME AS THE UNPROTECTED DROP-OFF CONDITION IS ELIMINATED.
5. WHERE PAVEMENT EDGE LINES ARE NOT PROVIDED, CHANNELIZING DEVICES SHALL BE PRECEDED BY A "NO SHOULDER" W8-3 SIGN, REPEATED AT ALL INTERSECTIONS, WHERE PAVEMENT EDGE LINES ARE PROVIDED, CHANNELIZING DEVICES SHALL BE PRECEDED BY "SHOULDER DROP-OFF" W8-17 SIGNS, REPEATED AT ALL INTERSECTIONS.

PAVEMENT EDGE DROP-OFF PROTECTION TABLE				
DROP-OFF HEIGHT	DRUM / VERTICAL PANEL SPACING (FT)	TUBULAR MARKER SPACING (FT)	TALL CONE SPACING (FT)	SIGNS
DROP-OFF AT OR WITHIN SHOULDER AREA				
WITHIN 4 FT. FROM TRAVEL LANE				
2-6 IN	100	N/A	N/A	SHOULDER DROP-OFF
6-24 IN	40	N/A	N/A	SHOULDER DROP-OFF
MORE THAN 4 FT. FROM TRAVEL LANE				
2-6 IN	200	100	100	SHOULDER DROP-OFF
6-24 IN	40	N/A	N/A	SHOULDER DROP-OFF
DROP-OFF OUTSIDE OF SHOULDER EDGE				
SHOULDER WIDTH ≤ TO 4 FT.				
2-6 IN	100	N/A	N/A	SHOULDER DROP-OFF
6-24 IN	40	N/A	N/A	SHOULDER DROP-OFF
SHOULDER WIDTH > 4 FT.				
2-6 IN	200	100	100	SHOULDER DROP-OFF
6-24 IN	100	40	40	SHOULDER DROP-OFF

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DATE SUBMITTED: 5/26/2022

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DESIGNED BY:  
S. MURPHY

CHECKED BY:  
E. LECLAIR

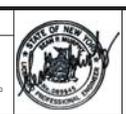
DESIGN LEAD:  
S. MURPHY

SECTION MANAGER:  
E. LECLAIR

DRAWN BY:  
S. MURPHY

APPROVED FOR THE CITY OF NEW YORK  
L. SINGH  
ACCOUNTABLE MANAGER

J. COSTA  
PORTFOLIO MANAGER



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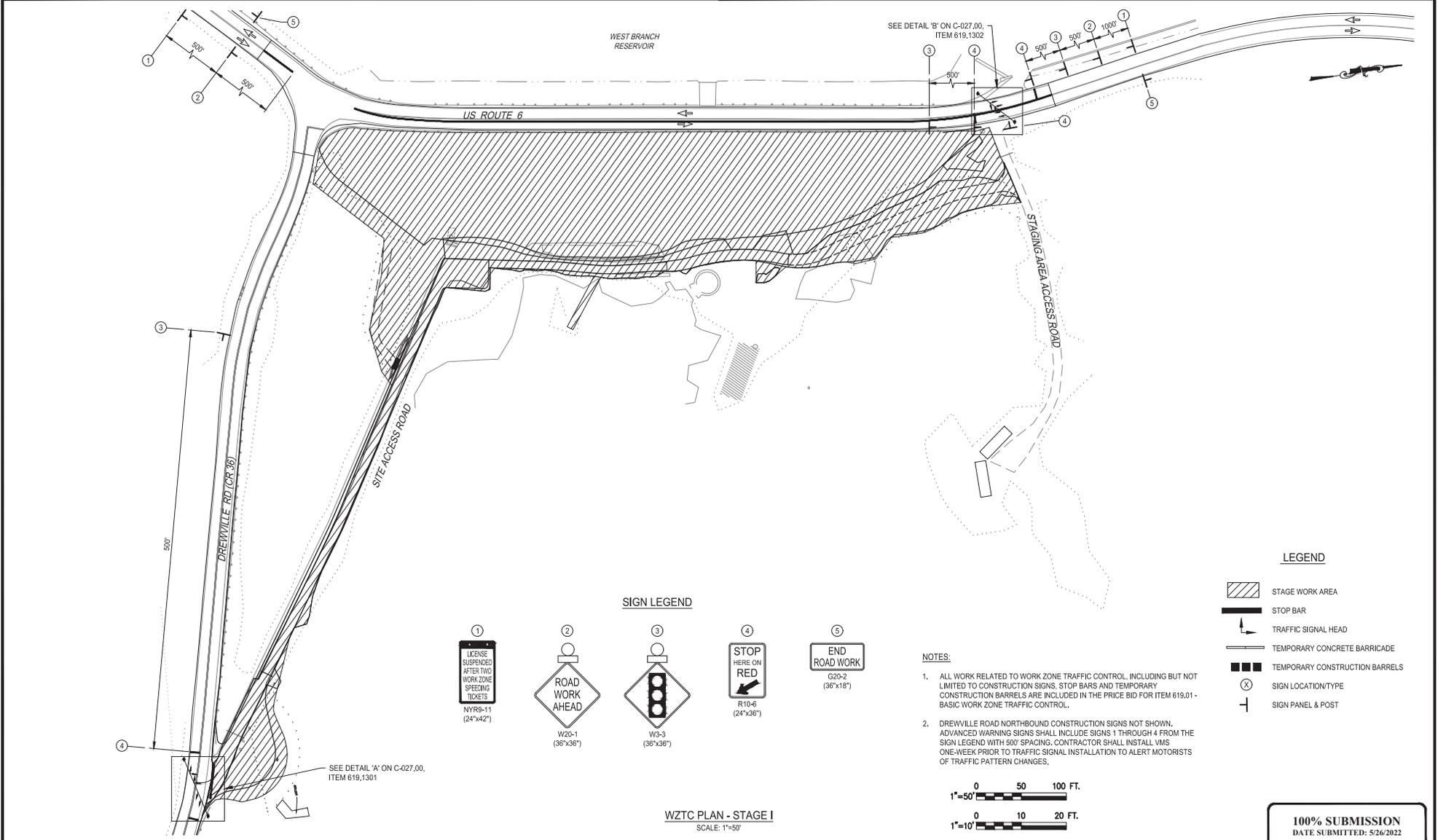
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**WEST BRANCH AUXILIARY DAM SLOPE SAFETY IMPROVEMENTS PUTNAM COUNTY, NEW YORK**

WORK ZONE TRAFFIC CONTROL NOTES

DATE: 3/31/2023  
SCALE: N/A  
SHEET NO.:  
29 OF 81  
DRAWING NO. C-019.00

Lead: David B. & Date: POWELL L.L.P., Thursday, May 08, 2022, and Date: Release: Friday, March 31, 2023, 12:12:27 PM  
 Plot Size: ANSI D (22.00 X 34.00 INCHES) Plot Scale: 1"=50'  
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 Plot Style: Table: BEDC\_Drawing.ctb



NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY: S. MURPHY  
 CHECKED BY: E. LECLAIR  
 DESIGN LEAD: S. MURPHY  
 SECTION MANAGER: E. LECLAIR

DRAWN BY: S. MURPHY  
**GDM Smith**  
 11 8000 American Blvd, Suite 200  
 Luben, NY 12110  
 Tel: (518) 782-6800



APPROVED FOR THE CITY OF NEW YORK  
 L. SINGH  
 ACCOUNTABLE MANAGER  
 P. COSTA  
 PORTFOLIO MANAGER

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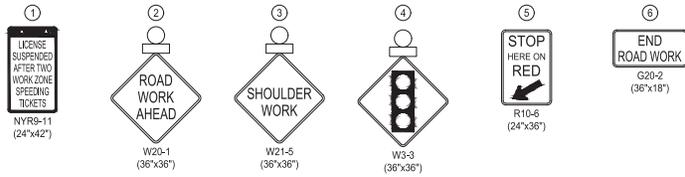
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**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
**POTNAM COUNTY, NEW YORK**  
 WORK ZONE TRAFFIC CONTROL PLAN - STAGE I  
 DATE: 3/31/2023  
 SCALE: 1"=50'  
 SHEET NO.: 30 OF 81  
 DRAWING NO.: C-020.00

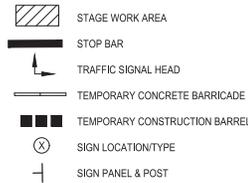
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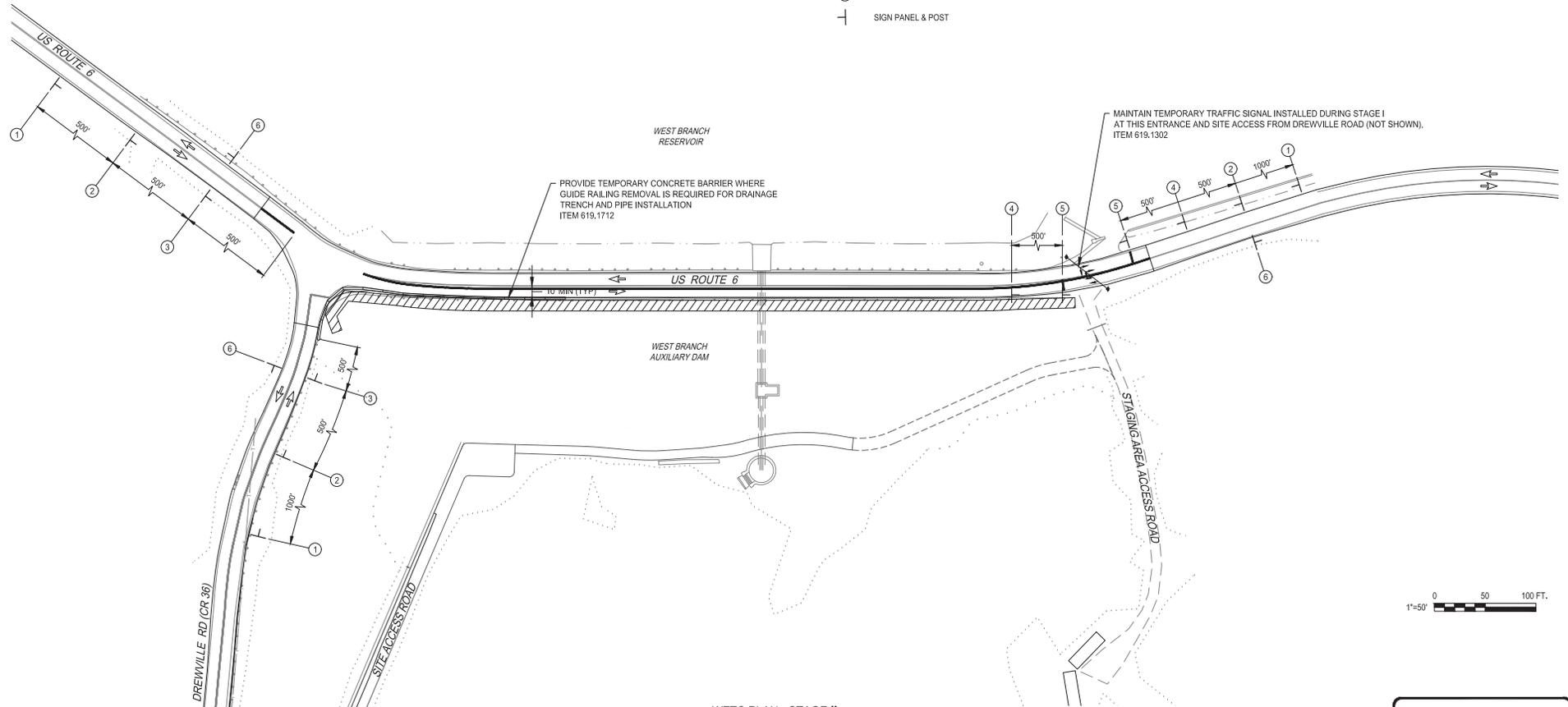


**LEGEND**



**NOTE:**

ALL WORK RELATED TO WORK ZONE TRAFFIC CONTROL, INCLUDING BUT NOT LIMITED TO CONSTRUCTION SIGNS, STOP BARS AND TEMPORARY CONSTRUCTION BARRELS ARE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL.



**WZTC PLAN - STAGE II**  
SCALE: 1"=50'



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 Drawing Name: & Location: C:\pwr\_ellum\DWG\0268637\C-021.DWG Plot Style: TableBDDC\_Drawing.ctb

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY: S. MURPHY	DRAWN BY: S. MURPHY
CHECKED BY: E. LECLAIR	SECTION MANAGER: E. LECLAIR
DESIGN LEAD: S. MURPHY	

**GDM Smith**  
 11800 American Blvd, Suite 200  
 Luban, NY 12110  
 Tel: (518) 782-6800



APPROVED FOR THE CITY OF NEW YORK
L. SINGH ACCOUNTABLE MANAGER
D. COSTA PORTFOLIO MANAGER

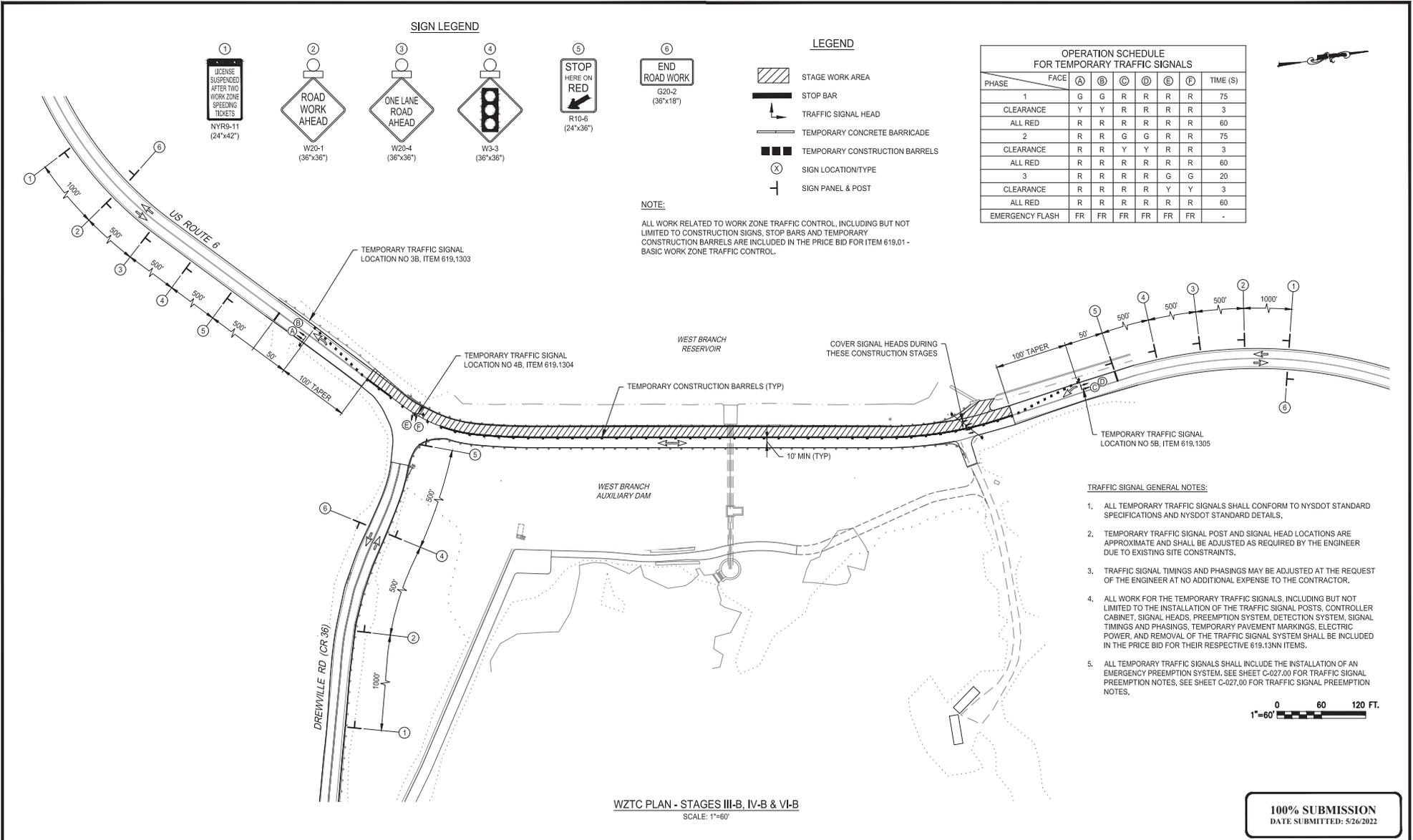
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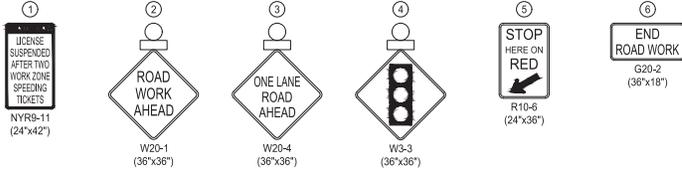
WEST BRANCH AUXILIARY DAM SLOPE SAFETY IMPROVEMENTS PUTNAM COUNTY, NEW YORK	DATE: 3/31/2023
WORK ZONE TRAFFIC CONTROL PLAN - STAGE II	SCALE: 1"=50'
	SHEET NO.: 31 OF 81
	DRAWING NO. C-021.00

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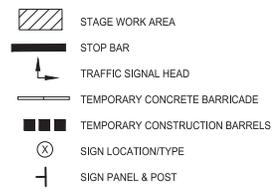




**SIGN LEGEND**



**LEGEND**



**NOTE:**  
 ALL WORK RELATED TO WORK ZONE TRAFFIC CONTROL, INCLUDING BUT NOT LIMITED TO CONSTRUCTION SIGNS, STOP BARS AND TEMPORARY CONSTRUCTION BARRELS ARE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL.

**OPERATION SCHEDULE FOR TEMPORARY TRAFFIC SIGNALS**

PHASE	FACE	SIGNAL PHASING						TIME (S)
		(A)	(B)	(C)	(D)	(E)	(F)	
1	G	G	R	R	R	R	R	75
	CLEARANCE	Y	Y	R	R	R	R	3
2	ALL RED	R	R	R	R	R	R	60
	CLEARANCE	R	R	G	G	R	R	75
3	ALL RED	R	R	R	R	R	R	60
	CLEARANCE	R	R	R	R	Y	Y	3
EMERGENCY FLASH	FR	FR	FR	FR	FR	FR	FR	-

**TRAFFIC SIGNAL GENERAL NOTES:**

- ALL TEMPORARY TRAFFIC SIGNALS SHALL CONFORM TO NYS DOT STANDARD SPECIFICATIONS AND NYS DOT STANDARD DETAILS.
- TEMPORARY TRAFFIC SIGNAL POST AND SIGNAL HEAD LOCATIONS ARE APPROXIMATE AND SHALL BE ADJUSTED AS REQUIRED BY THE ENGINEER DUE TO EXISTING SITE CONSTRAINTS.
- TRAFFIC SIGNAL TIMINGS AND PHASINGS MAY BE ADJUSTED AT THE REQUEST OF THE ENGINEER AT NO ADDITIONAL EXPENSE TO THE CONTRACTOR.
- ALL WORK FOR THE TEMPORARY TRAFFIC SIGNALS, INCLUDING BUT NOT LIMITED TO THE INSTALLATION OF THE TRAFFIC SIGNAL POSTS, CONTROLLER CABINET, SIGNAL HEADS, PREEMPTION SYSTEM, DETECTION SYSTEM, SIGNAL TIMINGS AND PHASINGS, TEMPORARY PAVEMENT MARKINGS, ELECTRIC POWER, AND REMOVAL OF THE TRAFFIC SIGNAL SYSTEM SHALL BE INCLUDED IN THE PRICE BID FOR THEIR RESPECTIVE 619.13NN ITEMS.
- ALL TEMPORARY TRAFFIC SIGNALS SHALL INCLUDE THE INSTALLATION OF AN EMERGENCY PREEMPTION SYSTEM. SEE SHEET C-027.00 FOR TRAFFIC SIGNAL PREEMPTION NOTES. SEE SHEET C-027.00 FOR TRAFFIC SIGNAL PREEMPTION NOTES.



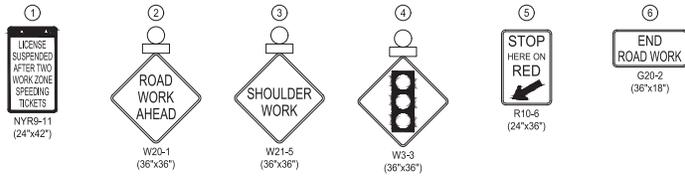
**WZTC PLAN - STAGES III-B, IV-B & VI-B**  
 SCALE: 1"=60'

**100% SUBMISSION**  
 DATE SUBMITTED: 5/26/2022

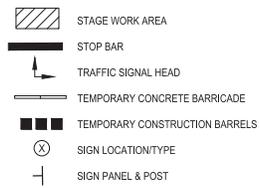
	DESIGNED BY: S. MURPHY CHECKED BY: E. LECLAR DESIGN LEAD: E. LECLAR SECTION MANAGER: E. LECLAR	DRAWN BY: S. MURPHY  11 BROADWAY, 10th Floor, Suite 200 Latham, NY 12110 Tel: (518) 762-6800		APPROVED FOR THE CITY OF NEW YORK L. SINGH ACCOUNTABLE MANAGER P. COSTA PORTFOLIO MANAGER	<small>*WARNING! THIS IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW, SECTION 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION LAW, SECTION 7209.2.*</small>	<b>NEW YORK CITY</b> <b>ENVIRONMENTAL PROTECTION</b> BUREAU OF ENGINEERING DESIGN & CONSTRUCTION 96-05 HORACE HARDING EXPRESSWAY 5th FLOOR CORONA, NEW YORK 11368 www.nyc.gov/dcp	<b>WEST BRANCH AUXILIARY DAM SLOPE SAFETY IMPROVEMENTS</b> PUTNAM COUNTY, NEW YORK WORK ZONE TRAFFIC CONTROL PLAN - STAGES III-B, IV-B & VI-B	DATE: 3/31/2023 SCALE: 1"=60' SHEET NO.: 33 OF 81 DRAWING NO.: C-023.00
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All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

**SIGN LEGEND**

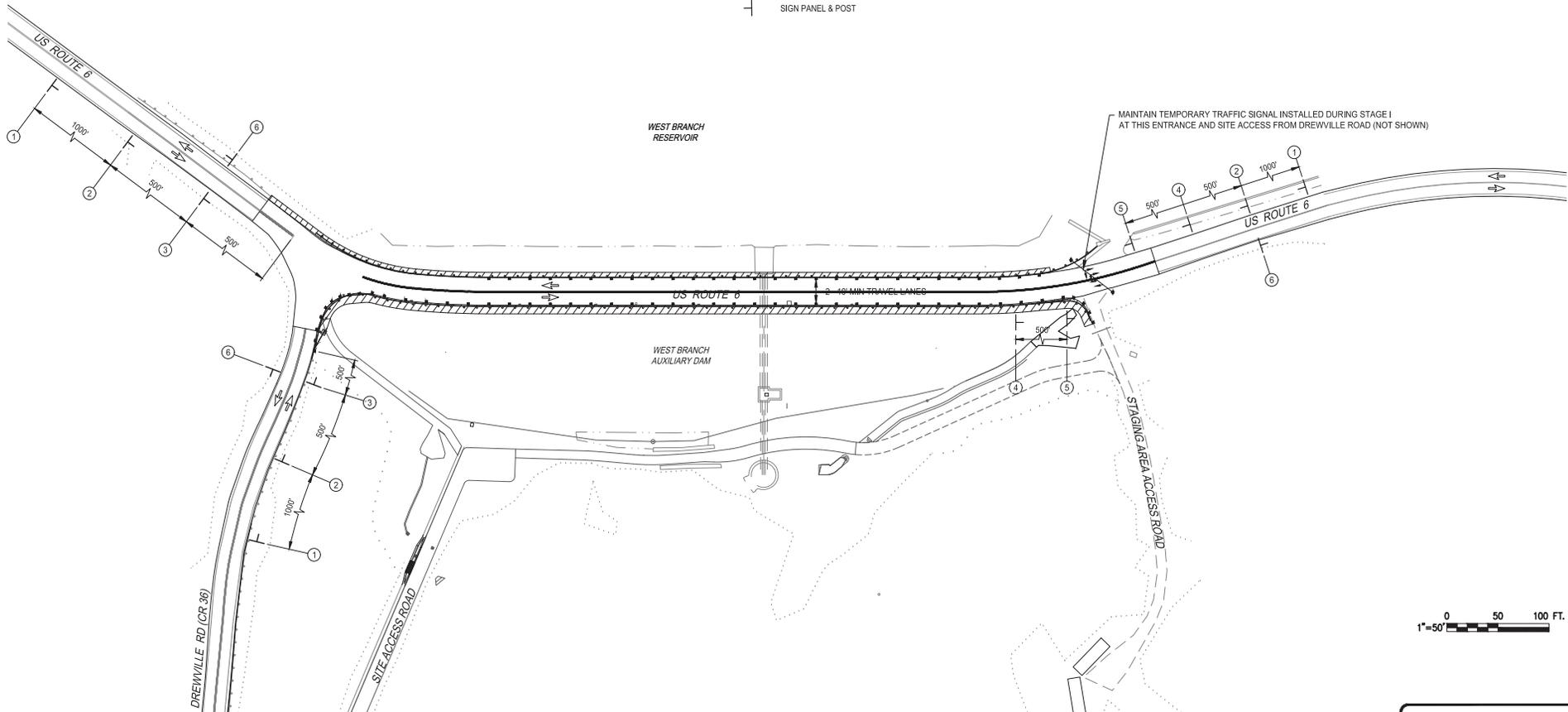


**LEGEND**

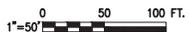


**NOTE:**

ALL WORK RELATED TO WORK ZONE TRAFFIC CONTROL, INCLUDING BUT NOT LIMITED TO CONSTRUCTION SIGNS, STOP BARS AND TEMPORARY CONSTRUCTION BARRELS ARE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL.



**WZTC PLAN - STAGE V**  
SCALE: 1"=50'



**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

Last Saved By: B. & B. POVELL L.L.P., Thursday, May 05, 2022, and Date Plotted Friday, March 31, 2023, 12:10:05 PM.  
 Paper Size: ANSI D (22.00 X 34.00 INCHES) Plot Scale: 1"=50'  
 Drawing Name: & Location: C:\pvc\_gf\POVELL\LD\026637\C-024.00.dwg Plot Style: TableBDDC\_Drawing.ctb

NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY:  
S. MURPHY  
CHECKED BY:  
E. LECLAIR  
DESIGN LEAD:  
S. MURPHY  
SECTION MANAGER:  
E. LECLAIR

DRAWN BY:  
S. MURPHY  
**GDM Smith**  
11800 American Blvd, Suite 200  
Latham, NY 12110  
Tel: (518) 762-6800



APPROVED FOR THE CITY OF NEW YORK  
L. SINGH  
ACCOUNTABLE MANAGER  
D. COSTA  
PORTFOLIO MANAGER

"WARNING! IT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW, SECTION 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION LAW, SECTION 7209.2."

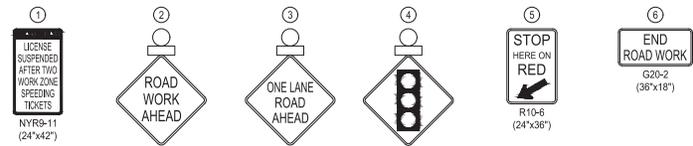
**NEW YORK CITY**  
**ENVIRONMENTAL PROTECTION**  
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
CORONA, NEW YORK 11368  
www.nyc.gov/dcp

**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
**PUTNAM COUNTY, NEW YORK**  
WORK ZONE TRAFFIC CONTROL PLAN - STAGE V  
DATE: 3/31/2023  
SCALE: 1"=50'  
SHEET NO.: 34 OF 81  
DRAWING NO.: C-024.00

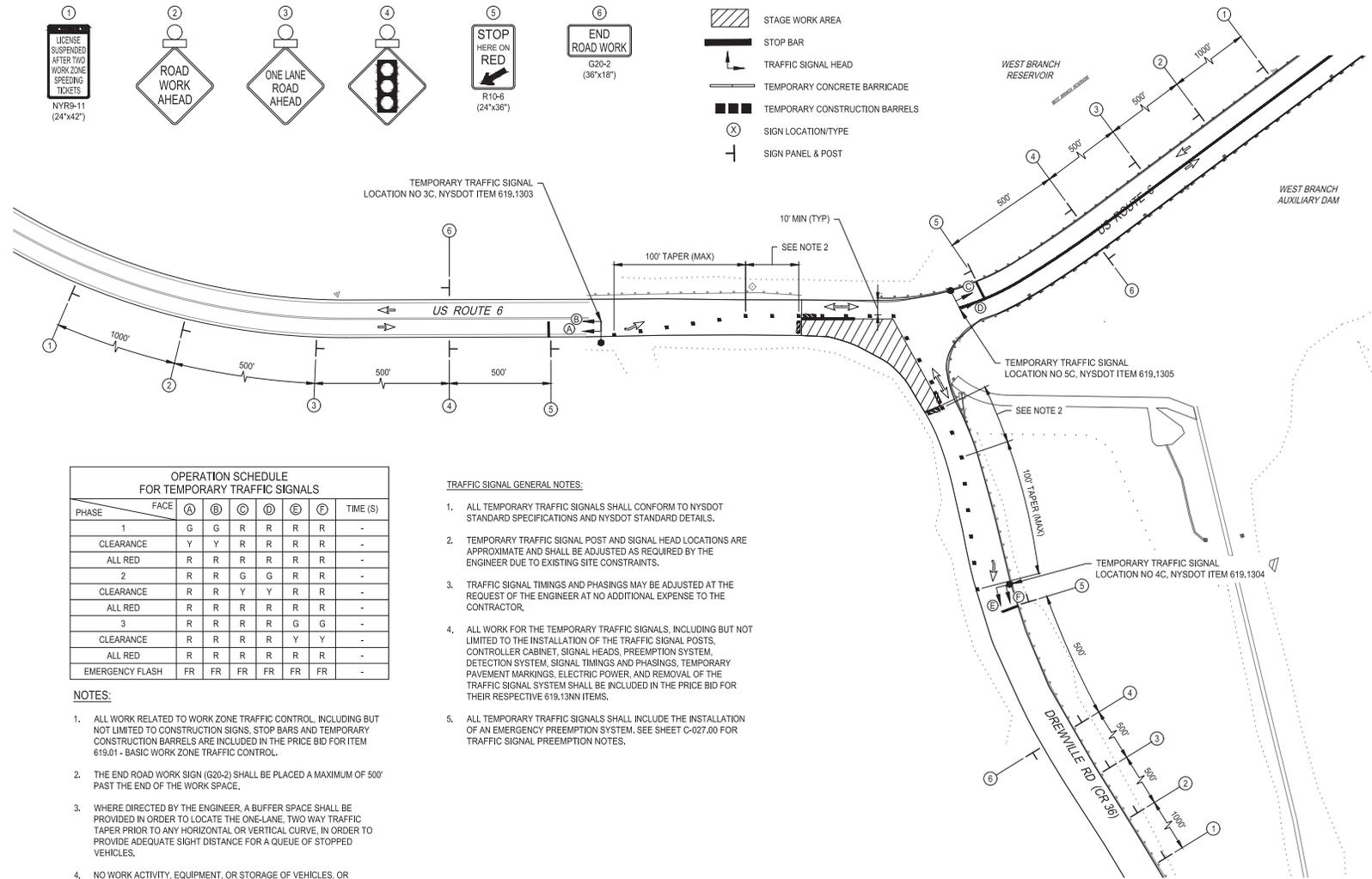
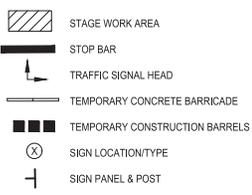
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By & Date: POWELL, Thursday, May 26, 2022 and Date Plotted: Friday, March 31, 2023 12:18:16 PM  
 Paper Size: ANSI D (22.00 X 34.00 INCHES) Plot Scale: 1"=50'  
 Drawing Name: S:\Location\Drawings\DWG\POWELL\DWG\2022\6687\WZTC-025.00.dwg

**SIGN LEGEND**



**LEGEND**



**OPERATION SCHEDULE FOR TEMPORARY TRAFFIC SIGNALS**

PHASE	FACE	(A)	(B)	(C)	(D)	(E)	(F)	TIME (S)
1	G	G	R	R	R	R	R	-
CLEARANCE	Y	Y	R	R	R	R	R	-
ALL RED	R	R	R	R	R	R	R	-
2	R	R	G	G	R	R	R	-
CLEARANCE	R	R	Y	Y	R	R	R	-
ALL RED	R	R	R	R	R	R	R	-
3	R	R	R	R	G	G	R	-
CLEARANCE	R	R	R	R	Y	Y	R	-
ALL RED	R	R	R	R	R	R	R	-
EMERGENCY FLASH	FR	FR	FR	FR	FR	FR	FR	-

- TRAFFIC SIGNAL GENERAL NOTES:**
- ALL TEMPORARY TRAFFIC SIGNALS SHALL CONFORM TO NYSDOT STANDARD SPECIFICATIONS AND NYSDOT STANDARD DETAILS.
  - TEMPORARY TRAFFIC SIGNAL POST AND SIGNAL HEAD LOCATIONS ARE APPROXIMATE AND SHALL BE ADJUSTED AS REQUIRED BY THE ENGINEER DUE TO EXISTING SITE CONSTRAINTS.
  - TRAFFIC SIGNAL TIMINGS AND PHASINGS MAY BE ADJUSTED AT THE REQUEST OF THE ENGINEER AT NO ADDITIONAL EXPENSE TO THE CONTRACTOR.
  - ALL WORK FOR THE TEMPORARY TRAFFIC SIGNALS, INCLUDING BUT NOT LIMITED TO THE INSTALLATION OF THE TRAFFIC SIGNAL POSTS, CONTROLLER CABINET, SIGNAL HEADS, PREEMPTION SYSTEM, DETECTION SYSTEM, SIGNAL TIMINGS AND PHASINGS, TEMPORARY PAVEMENT MARKINGS, ELECTRIC POWER, AND REMOVAL OF THE TRAFFIC SIGNAL SYSTEM SHALL BE INCLUDED IN THE PRICE BID FOR THEIR RESPECTIVE 619.13NN ITEMS.
  - ALL TEMPORARY TRAFFIC SIGNALS SHALL INCLUDE THE INSTALLATION OF AN EMERGENCY PREEMPTION SYSTEM. SEE SHEET C-027.00 FOR TRAFFIC SIGNAL PREEMPTION NOTES.

- NOTES:**
- ALL WORK RELATED TO WORK ZONE TRAFFIC CONTROL, INCLUDING BUT NOT LIMITED TO CONSTRUCTION SIGNS, STOP BARS AND TEMPORARY CONSTRUCTION BARRIERS ARE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL.
  - THE END ROAD WORK SIGN (G20-2) SHALL BE PLACED A MAXIMUM OF 500' PAST THE END OF THE WORK SPACE.
  - WHERE DIRECTED BY THE ENGINEER, A BUFFER SPACE SHALL BE PROVIDED IN ORDER TO LOCATE THE ONE-LANE, TWO WAY TRAFFIC TAPER PRIOR TO ANY HORIZONTAL OR VERTICAL CURVE, IN ORDER TO PROVIDE ADEQUATE SIGHT DISTANCE FOR A QUEUE OF STOPPED VEHICLES.
  - NO WORK ACTIVITY, EQUIPMENT, OR STORAGE OF VEHICLES, OR MATERIAL SHALL OCCUR WITHIN THE BUFFER SPACE AT ANY TIME.



**WZTC PLAN - STAGE VI-C**  
SCALE: 1"=40'

**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY:  
S. MURPHY

CHECKED BY:  
E. LECLAIR

DESIGN LEAD:  
S. MURPHY

SECTION MANAGER:  
E. LECLAIR

DRAWN BY:  
S. MURPHY

**CDM Smith**

11 Ellison Avenue  
Latham, NY 12110  
Tel: (518) 784-4500



APPROVED FOR THE CITY OF NEW YORK

L. SINGH  
ACCOUNTABLE MANAGER

P. COSTA  
PORTFOLIO MANAGER

\*WARNING#1 IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION 7209.2.

**NEW YORK CITY**  
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CORONA, NEW YORK 11368  
www.nyc.gov/dcp

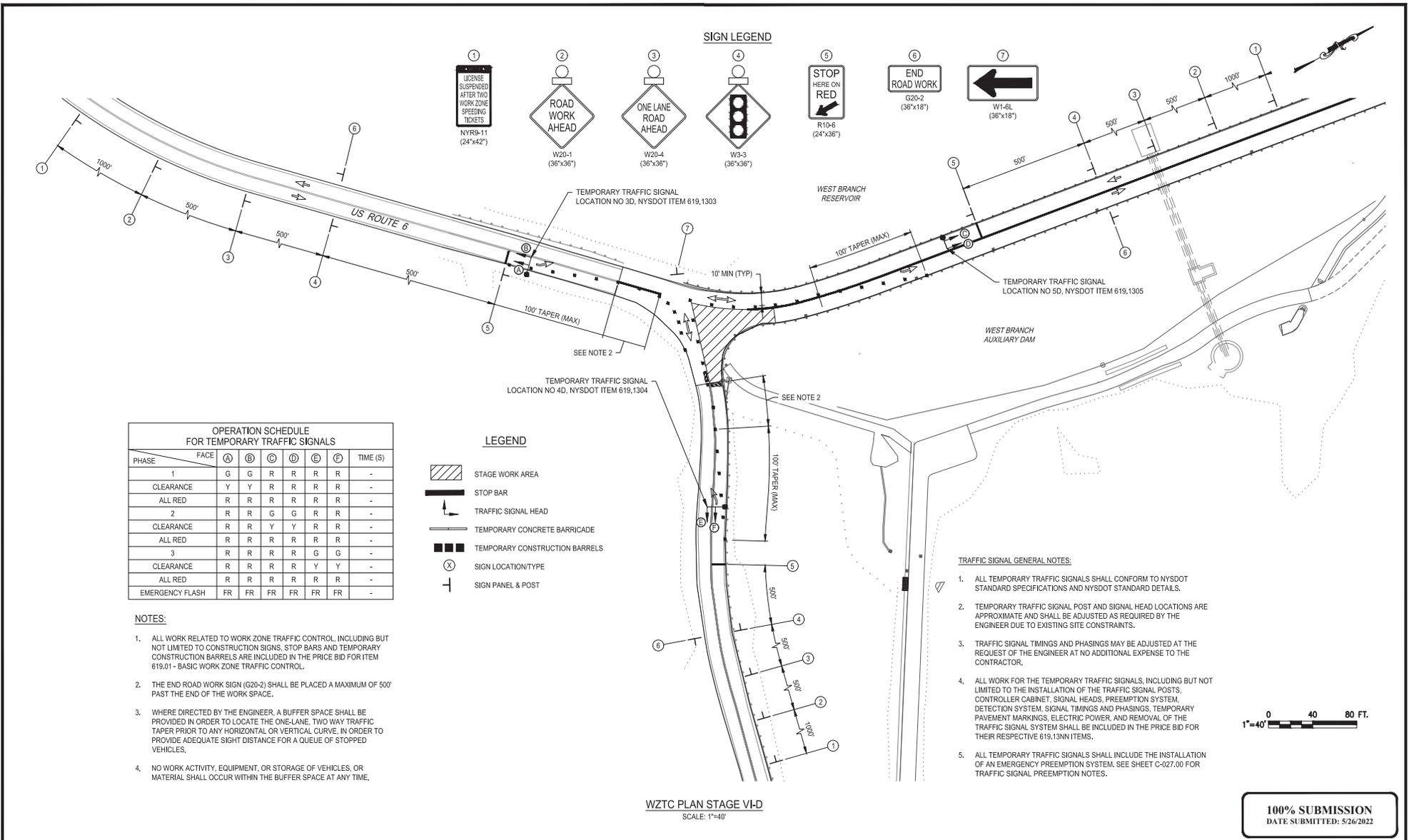
**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
**PUTNAM COUNTY, NEW YORK**

WORK ZONE TRAFFIC CONTROL PLAN - STAGE VI-C

DATE: 3/31/2023  
SCALE: 1"=50'  
SHEET NO:  
35 OF 81  
DRAWING NO.  
C-025.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: & Date: PDM/ELL/MD, Thursday, May 08, 2023, 03:19:27 PM  
 Plot Size: ANSI (D) (24.00 X 36.00 INCHES) Plot Scale: 1/4" = 40'  
 Drawing Name: & Location: C:\p\p\DWELL/MD/0268637/C-026.F00.dwg



**OPERATION SCHEDULE FOR TEMPORARY TRAFFIC SIGNALS**

PHASE	FACE	(A)	(B)	(C)	(D)	(E)	(F)	TIME (S)
1	G	G	R	R	R	R	R	-
CLEARANCE	Y	Y	R	R	R	R	R	-
ALL RED	R	R	R	R	R	R	R	-
2	R	R	G	G	R	R	R	-
CLEARANCE	R	R	Y	Y	R	R	R	-
ALL RED	R	R	R	R	R	R	R	-
3	R	R	R	R	G	G	R	-
CLEARANCE	R	R	R	R	Y	Y	R	-
ALL RED	R	R	R	R	R	R	R	-
EMERGENCY FLASH	FR	FR	FR	FR	FR	FR	FR	-

- NOTES:**
1. ALL WORK RELATED TO CONSTRUCTION SIGNS, STOP BARS AND TEMPORARY CONSTRUCTION BARRIERS ARE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL.
  2. THE END ROAD WORK SIGN (G20-2) SHALL BE PLACED A MAXIMUM OF 500' PAST THE END OF THE WORK SPACE.
  3. WHERE DIRECTED BY THE ENGINEER, A BUFFER SPACE SHALL BE PROVIDED IN ORDER TO LOCATE THE ONE-LANE, TWO WAY TRAFFIC TAPER PRIOR TO ANY HORIZONTAL OR VERTICAL CURVE, IN ORDER TO PROVIDE ADEQUATE SIGHT DISTANCE FOR A QUEUE OF STOPPED VEHICLES.
  4. NO WORK ACTIVITY, EQUIPMENT, OR STORAGE OF VEHICLES, OR MATERIAL SHALL OCCUR WITHIN THE BUFFER SPACE AT ANY TIME.

- TRAFFIC SIGNAL GENERAL NOTES:**
1. ALL TEMPORARY TRAFFIC SIGNALS SHALL CONFORM TO NYS DOT STANDARD SPECIFICATIONS AND NYS DOT STANDARD DETAILS.
  2. TEMPORARY TRAFFIC SIGNAL POST AND SIGNAL HEAD LOCATIONS ARE APPROXIMATE AND SHALL BE ADJUSTED AS REQUIRED BY THE ENGINEER DUE TO EXISTING SITE CONSTRAINTS.
  3. TRAFFIC SIGNAL TIMINGS AND PHASINGS MAY BE ADJUSTED AT THE REQUEST OF THE ENGINEER AT NO ADDITIONAL EXPENSE TO THE CONTRACTOR.
  4. ALL WORK FOR THE TEMPORARY TRAFFIC SIGNALS, INCLUDING BUT NOT LIMITED TO THE INSTALLATION OF THE TRAFFIC SIGNAL POSTS, CONTROLLER CABINET, SIGNAL HEADS, PREEMPTION SYSTEM, DETECTION SYSTEM, SIGNAL TIMINGS AND PHASINGS, TEMPORARY PAVEMENT MARKINGS, ELECTRIC POWER, AND REMOVAL OF THE TRAFFIC SIGNAL SYSTEM SHALL BE INCLUDED IN THE PRICE BID FOR THEIR RESPECTIVE 619.13N ITEMS.
  5. ALL TEMPORARY TRAFFIC SIGNALS SHALL INCLUDE THE INSTALLATION OF AN EMERGENCY PREEMPTION SYSTEM. SEE SHEET C-027.00 FOR TRAFFIC SIGNAL PREEMPTION NOTES.



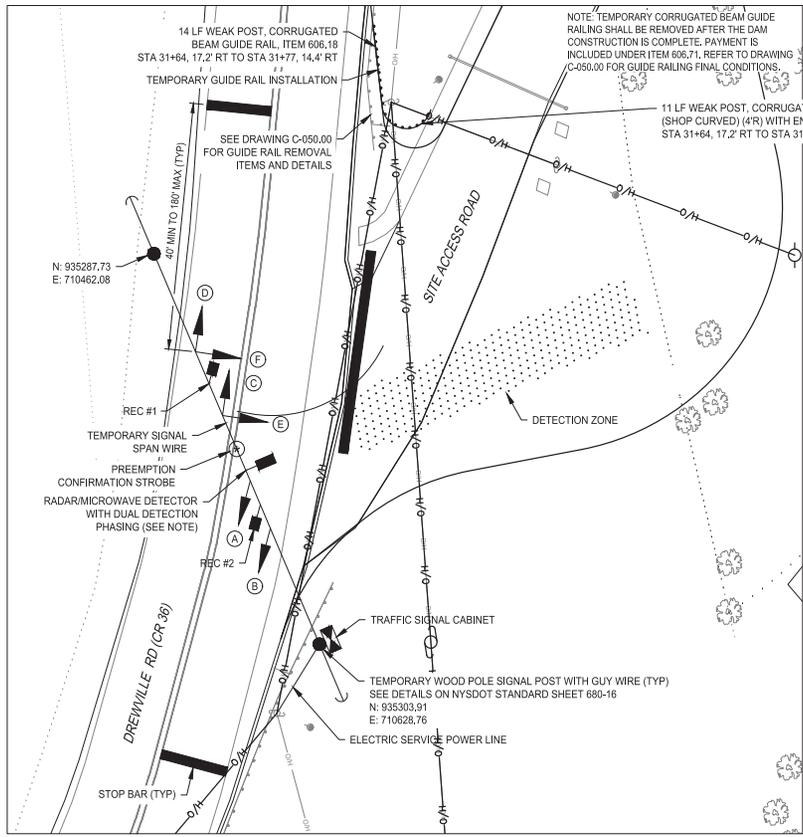
**WZTC PLAN STAGE VI-D**  
SCALE: 1"=40'

**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

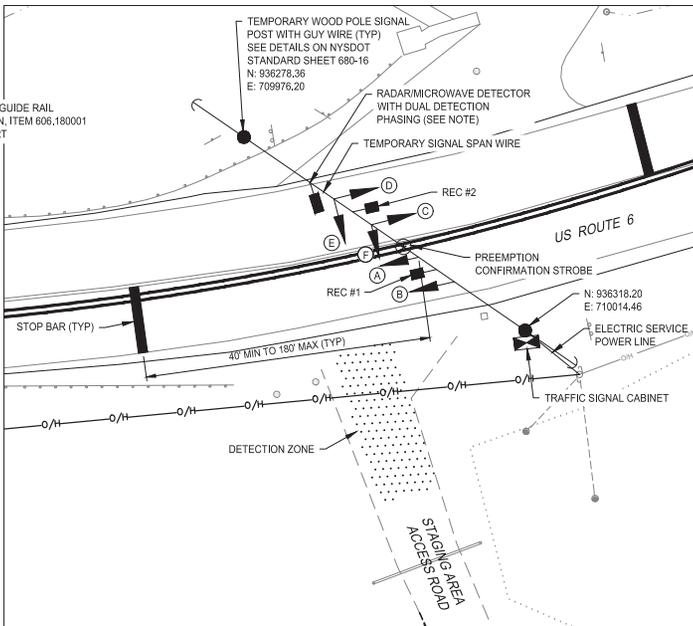
	DESIGNED BY: S. MURPHY CHECKED BY: E. LECLAIR DESIGN LEAD: S. MURPHY	DRAWN BY: S. MURPHY 11 8100 American Blvd, Suite 200 Luben, NY 12110 Tel: (518) 782-6800	APPROVED FOR THE CITY OF NEW YORK L. SINGH ACCOUNTABLE MANAGER D. COSTA PORTFOLIO MANAGER	<p style="font-size: small;">*WARNING! THIS IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW, SECTION 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION LAW, SECTION 7209.2.*</p> <p style="text-align: center;"><b>NEW YORK CITY</b> <b>ENVIRONMENTAL PROTECTION</b> BUREAU OF ENGINEERING DESIGN &amp; CONSTRUCTION 96-05 HORACE HARDING EXPRESSWAY 5th FLOOR CORONA, NEW YORK 11368 www.nyc.gov/dcp</p>	<p style="text-align: center;"><b>WEST BRANCH AUXILIARY DAM</b> <b>SLOPE SAFETY IMPROVEMENTS</b> <b>PUTNAM COUNTY, NEW YORK</b></p> <p style="text-align: center;">WORK ZONE TRAFFIC CONTROL PLAN - STAGE VI-D</p>	DATE: 3/31/2023 SCALE: 1"=40' SHEET NO.: 36 OF 81 DRAWING NO.: C-026.00
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All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: E. Leclair, Thursday, May 26, 2022 at 10:18:14 AM  
 Plot Style Table: BDDC\_Drawing.ctb  
 Paper Size: ANSI D (22.00 X 34.00 INCHES) Plot Scale: 1"=10'  
 Drawing Name: A\_Location:C:\p\DWELL\DWG\026837C-027.00.dwg



**DETAIL 'A' - TEMPORARY TRAFFIC SIGNAL LOCATION NO. 1 - ITEM 619.1301**  
SCALE: 1"=10'



**DETAIL 'B' - TEMPORARY TRAFFIC SIGNAL LOCATION NO. 2 - ITEM 619.1302**  
SCALE: 1"=10'

- EMERGENCY VEHICLE PREEMPTION NOTES**
1. THE EMERGENCY VEHICLE PREEMPTION SYSTEM SHALL BE INSTALLED IN THE SAME CABINET AS THE CONTROLLER. THE MAKE AND MODEL OF THE PREEMPTION SYSTEM FOR THIS PROJECT SHALL BE FULLY COMPATIBLE WITH THE LOCAL EMERGENCY SERVICES SYSTEM. THE CONTRACTOR SHALL COORDINATE WITH ALL LOCAL EMERGENCY SERVICES TO SELECT THE PROPER MAKE AND MODEL OF THE PREEMPTION EQUIPMENT PRIOR TO INSTALLATION OF THE PREEMPTION SYSTEM. THE CABLE FOR THE PREEMPTION SYSTEM SHALL BE SEPARATE FROM THE CABLE ASSOCIATED WITH THE TRAFFIC SIGNAL SYSTEM.
  2. THE EMERGENCY VEHICLE PREEMPTION CONTROL SYSTEM SHALL CONSIST OF A DATA-ENCODED PHASE SELECTOR TO BE INSTALLED WITHIN THE TRAFFIC CONTROL CABINET. THIS UNIT WILL SERVE TO VALIDATE, IDENTIFY, CLASSIFY AND RECORD THE SIGNAL FROM THE OPTICAL DETECTORS LOCATED ON SUPPORT STRUCTURES AT THE INTERSECTION. UPON RECEIVING A VALID SIGNAL FROM THE DETECTOR, THE PHASE SELECTOR SHALL GENERATE A PREEMPT CALL TO THE CONTROLLER INITIATING A PREEMPTION OPERATION. ONCE PREEMPTION HAS CLEARED, NORMAL OPERATION SHALL START UP IN THE MAIN LINE GREEN PHASE.
  3. THE OPTICAL DETECTORS SHALL BE SINGLE INPUT, SINGLE OUTPUT UNITS USED TO CONTROL ONE APPROACH. ALL TRAFFIC SIGNAL INSTALLATIONS SHALL BE SUPPLIED WITH A MINIMUM OF TWO OPTICAL DETECTORS.
  4. THE PHASE SELECTOR SHALL BE A RACK-MOUNTED PLUG-IN TWO OR FOUR CHANNEL DUAL PRIORITY DEVICE. THE PHASE SELECTOR SHALL PLUG INTO A SHELF-MOUNTED SINGLE CARD SLOT CHASSIS. PROGRAMMING THE PHASE SELECTOR SHALL BE VIA A PC-BASED COMPUTER UTILIZING UNIT SPECIFIC SOFTWARE. A HARD COPY OF FINAL PROGRAMMING DATA SHALL BE LEFT IN THE CONTROL CABINET. THE CONTRACTOR SHALL SUPPLY A COMPLETE SET OF INTERFACE CABLES FOR PHASE SELECTOR TO LAPTOP CONNECTION.
  5. THE CONTRACTOR SHALL INSTALL A CONFIRMATION STROBE AT THE TRAFFIC SIGNAL LOCATION AS SHOWN ON THE PLANS. THE CONFIRMATION STROBE SHALL SERVE TO VALIDATE TO THE DRIVER OF THE EMERGENCY VEHICLE THAT THE TRAFFIC SIGNAL HAS RECOGNIZED THE PREEMPTION CALL AND WILL INITIATE THE PROPER PREEMPTION SEQUENCE. THE CONFIRMATION STROBE SHALL HAVE A CLEAR/WHITE LENS.
  6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER PROGRAMMING OF THE PHASE SELECTOR, ORIENTATION OF THE OPTICAL DETECTORS, AND ALL OTHER WORK NECESSARY TO PROVIDE A COMPLETE AND OPERATING EMERGENCY VEHICLE PREEMPTION SYSTEM. THE CONTRACTOR MAY BE REQUIRED TO FIELD ADJUST THE LOCATION OF THE OPTICAL DETECTORS IN THE PRESENCE OF THE ENGINEER TO PROPERLY DETECT PREEMPTION CALLS FROM APPROACHING VEHICLES.
  7. CONTRACTOR SHALL INSTALL EMERGENCY PREEMPTION CONTROL SYSTEM AS DESCRIBED IN THE ABOVE NOTES FOR EACH OF THE TEMPORARY TRAFFIC SIGNALS RELATED TO ITEMS 619.1303, 619.1304, 619.1305

**TRAFFIC SIGNAL GENERAL NOTES:**

1. ALL TEMPORARY TRAFFIC SIGNALS SHALL CONFORM TO NYS DOT STANDARD SPECIFICATIONS AND NYS DOT STANDARD DETAILS.
2. TEMPORARY TRAFFIC SIGNAL POST AND SIGNAL HEAD LOCATIONS ARE APPROXIMATE AND SHALL BE ADJUSTED AS REQUIRED BY THE ENGINEER DUE TO EXISTING SITE CONSTRAINTS.
3. TRAFFIC SIGNAL TIMINGS AND PHASINGS MAY BE ADJUSTED AT THE REQUEST OF THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
4. ALL WORK FOR THE TEMPORARY TRAFFIC SIGNALS, INCLUDING BUT NOT LIMITED TO THE INSTALLATION OF THE TRAFFIC SIGNAL POSTS, CONTROLLER CABINET, SIGNAL HEADS, DETECTION SYSTEM, SIGNAL TIMINGS AND PHASINGS, TEMPORARY PAVEMENT MARKINGS, ELECTRIC POWER, AND REMOVAL OF THE TRAFFIC SIGNAL SYSTEM SHALL BE INCLUDED IN THE PRICE BID FOR THEIR RESPECTIVE 619.130N ITEMS.

**TRAFFIC SIGNAL DETECTION NOTES:**

5. CONTRACTOR SHALL INSTALL DETECTION SYSTEM USING CONTRACTOR'S OPTION OF RADIO OR MICROWAVE DETECTION. CONTRACTOR MAY ELECT TO USE VIDEO DETECTION AT NO ADDITIONAL COST. LOOP DETECTION IS NOT ACCEPTABLE.
6. DETECTION SHALL HAVE DELAY FEATURE WITH DELAY DETECTION OF 10 SECONDS AFTER INITIAL DETECTION (DREWWILLE ROAD SITE ACCESS) AND 5.0 SECONDS (US ROUTE 6 CONTRACTOR STAGING AREA ENTRANCE).

**LEGEND**

- TRAFFIC SIGNAL POST WITH GUY WIRE
- TRAFFIC SIGNAL HEAD
- TRAFFIC SIGNAL DETECTOR
- TRAFFIC SIGNAL CABINET
- TRAFFIC SIGN FACE

**OPERATION SCHEDULE FOR TEMPORARY TRAFFIC SIGNALS - LOCATION NO. 1**

PHASE	FACE	A	B	C	D	E	F	TIME (S)
1	G	G	G	G	R	R	R	-
CLEARANCE		Y	Y	Y	Y	R	R	3
ALL RED		R	R	R	R	R	R	3
2	R	R	R	R	G	G	G	20
CLEARANCE		R	R	R	Y	Y	Y	3
ALL RED		R	R	R	R	R	R	3
EMERGENCY FLASH	FR	FR	FR	FR	FR	FR	FR	-

**OPERATION SCHEDULE FOR TEMPORARY TRAFFIC SIGNALS - LOCATION NO. 2**

PHASE	FACE	A	B	C	D	E	F	TIME (S)
1	G	G	G	G	R	R	R	-
CLEARANCE		Y	Y	Y	Y	R	R	3
ALL RED		R	R	R	R	R	R	3
2	R	R	R	R	G	G	G	12
CLEARANCE		R	R	R	Y	Y	Y	3
ALL RED		R	R	R	R	R	R	3
EMERGENCY FLASH	FR	FR	FR	FR	FR	FR	FR	-



**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY: E. LECLAIR  
 CHECKED BY: E. LECLAIR  
 DESIGN LEAD: S. MURPHY  
 SECTION MANAGER: E. LECLAIR

DRAWN BY: S. MURPHY

**GDM Smith**  
 11800 American Blvd, Suite 200  
 Luban, NY 12110  
 Tel: 518-782-6800

**NYC Environmental Protection**

APPROVED FOR THE CITY OF NEW YORK

L. SINGH  
ACCOUNTABLE MANAGER

P. COSTA  
PORTFOLIO MANAGER

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**NEW YORK CITY ENVIRONMENTAL PROTECTION**  
 BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
 96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
 CORONA, NEW YORK 11368  
 www.nyc.gov/dcp

**WEST BRANCH AUXILIARY DAM SLOPE SAFETY IMPROVEMENTS**  
 PUTNAM COUNTY, NEW YORK

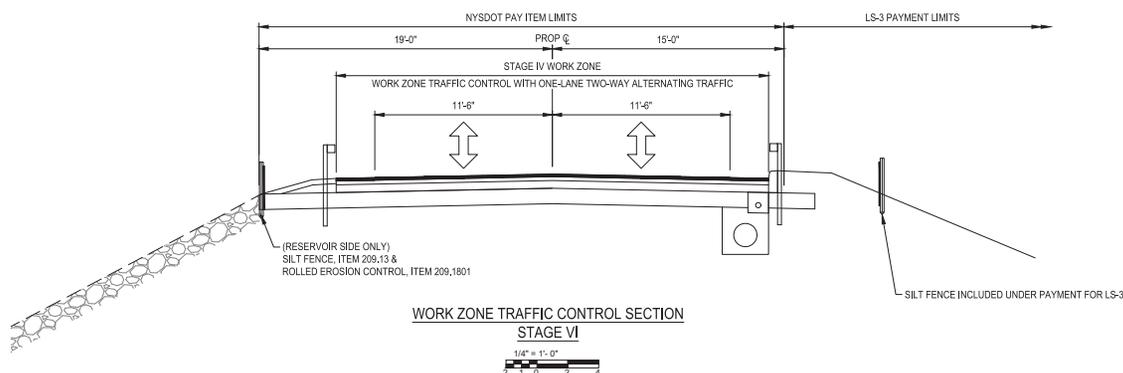
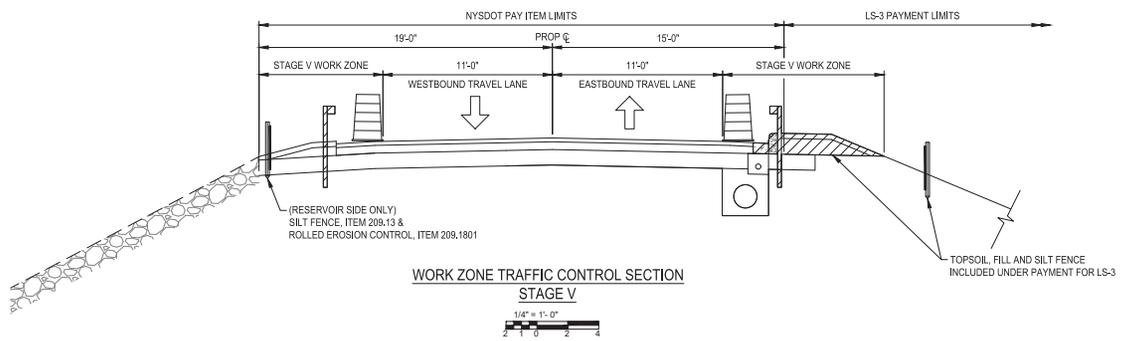
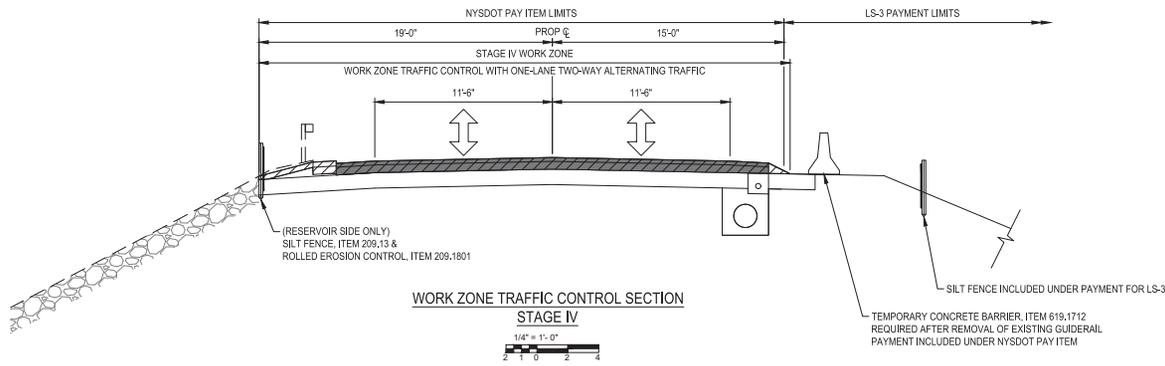
WORK ZONE TRAFFIC CONTROL - TEMPORARY TRAFFIC SIGNAL PLAN

DATE: 3/31/2023  
 SCALE: 1"=10'  
 SHEET NO.: 37 OF 81  
 DRAWING NO.: C-027.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.







**NOTES:**

1. REFER TO GENERAL NOTES ON DRAWING G-003.00 FOR RECOMMENDED CONSTRUCTION STAGING.
2. STAGES III THRU VI TO BE COMPLETED DURING NIGHTTIME WORK HOURS (8PM TO 6AM).
3. CONTRACTOR SHALL PHASE ONE-LANE TWO-WAY ALTERNATING TRAFFIC INTO TWO SUBSTAGES (PHASES) AS SHOWN ON DRAWINGS C-022.00 AND C-023.00 WITH THE PHASE "A" REFERRING TO RECONSTRUCTION OF THE EASTBOUND LANE AND PHASE "B" REFERRING TO RECONSTRUCTION OF THE WESTBOUND LANE.
4. CONTRACTOR SHALL PHASE ONE-LANE TWO-WAY ALTERNATING TRAFFIC FOR STAGE VI AT THE INTERSECTION OF ROUTE 6 AND DREWVILLE ROAD INTO TWO PHASES (VI-C & VI-D) AS SHOWN ON DRAWINGS C-025.00 AND C-026.00.
5. CONTRACTOR MAY ELECT TO CONTRUCT STAGE V IN TWO PHASES IN ORDER TO MAXIMIZE THE AVAILABLE WORK ZONE AREA. TWO 10' MIN WIDE TRAVEL LANES MUST BE OPEN TO TRAFFIC AT ALL TIMES DURING THIS STAGE.

**LEGEND**

STAGE WORK AREA

**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022  
REVISED 1/11/2023

Last Saved By: & Date: PDM/ELL/MD, Friday, March 31, 2023, 10:46:55 PM  
Plot Size: ANSI D (22.00 X 34.00 INCHES) Plot Scale: 1/4" = 1'-0"  
Drawing Name: & Location: C:\pvc\pvc\ell\md\0266637C\026.00.dwg

NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY: S. MURPHY	DRAWN BY: S. MURPHY
CHECKED BY: E. LECLAIR	
DESIGN LEAD: S. MURPHY	
SECTION MANAGER: E. LECLAIR	

**GDM Smith**  
11500 American Blvd, Suite 200  
Latham, NY 12110  
Tel: (518) 762-6000



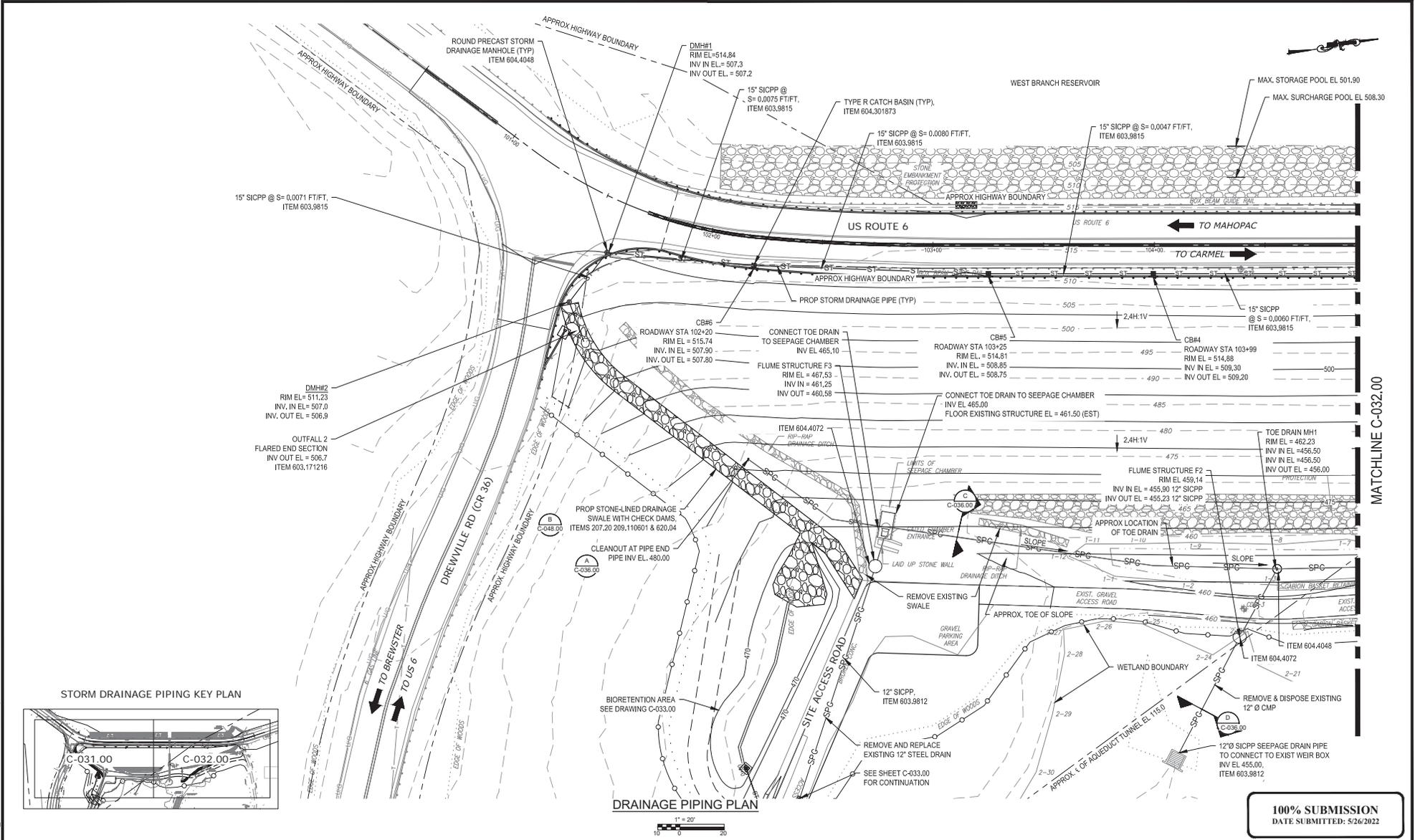
**NYC Environmental Protection**

APPROVED FOR THE CITY OF NEW YORK
L. SINGH ACCOUNTABLE MANAGER
P. COSTA PORTFOLIO MANAGER

"WARNING! THIS IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW, SECTION 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION LAW, SECTION 7209.2."

**NEW YORK CITY ENVIRONMENTAL PROTECTION BUREAU OF ENGINEERING DESIGN & CONSTRUCTION**  
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
CORONA, NEW YORK 11368  
www.nyc.gov/dcp

WEST BRANCH AUXILIARY DAM SLOPE SAFETY IMPROVEMENTS PUTNAM COUNTY, NEW YORK	DATE: 3/31/2023 SCALE: 1/4"=1'-0" SHEET NO.: 40 OF 81
WORK ZONE TRAFFIC CONTROL STAGING SECTIONS (2 OF 2)	DRAWING NO.: C-030.00



Last Saved By: C:\p\POWELL\LD... Thursday, May 08, 2022 and Drain Plan.dwg Friday, March 31, 2023 10:19:41 AM  
 Pipe Size (ANSI) (D:22.00 X 24.00 (NCHES)) Pipe Scale: P=20  
 Drawing Name: & Location: C:\p\POWELL\LD\026637\C-031.dwg  
 Plot Style: Tablr-BEEDC.ctb

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY:  
D. ROSENTHAL

CHECKED BY:  
E. LECLAIR

DESIGN LEAD:  
D. ROSENTHAL

SECTION MANAGER:  
E. LECLAIR

DRAWN BY:  
R. HAINES

APPROVED FOR THE CITY OF NEW YORK

L. SINGH  
ACCOUNTABLE MANAGER

D. COSTA  
PORTFOLIO MANAGER

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BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
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CORONA, NEW YORK 11368  
www.nyc.gov/dcp

**WEST BRANCH AUXILIARY DAM  
SLOPE SAFETY IMPROVEMENTS  
PUTNAM COUNTY, NEW YORK**

DRAINAGE & PIPING PLAN (1 OF 2)

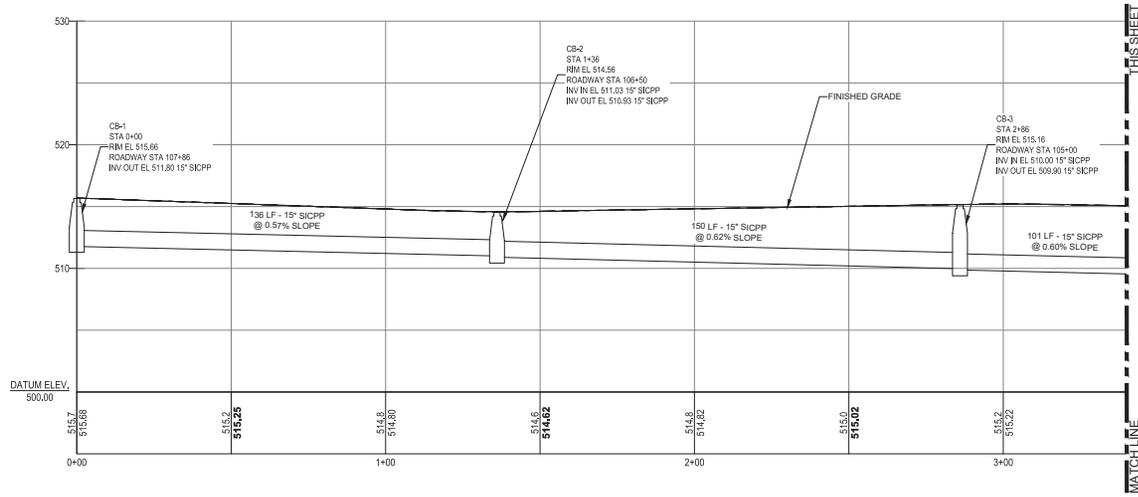
DATE: 3/31/2023  
SCALE: 1"=20'  
SHEET NO.:  
41 OF 81  
DRAWING NO.:  
C-031.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

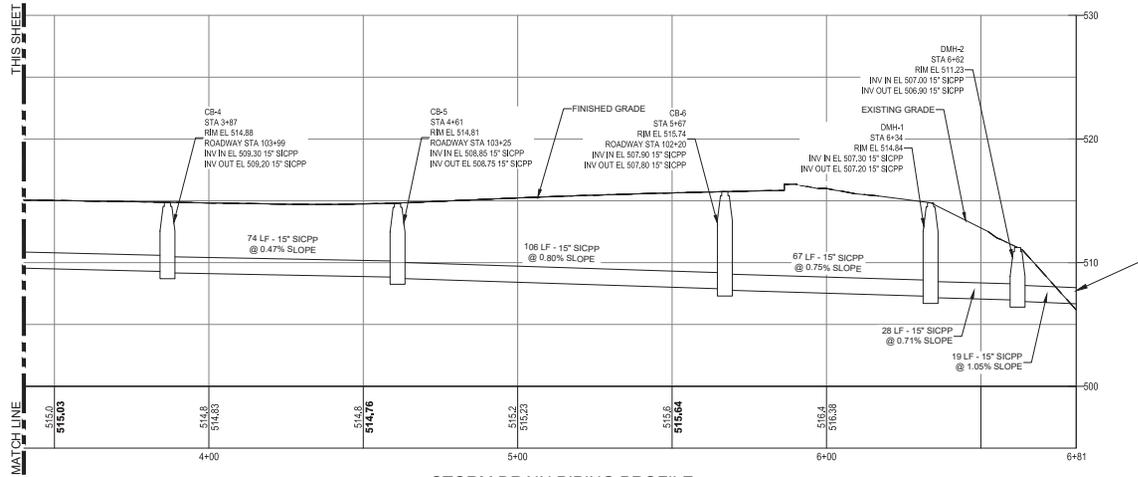




Lead: Cesar, B. & Date: 05/11/2022, Thursday, May 11, 2022, 12:18:49 PM  
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 Drawing Name & Location: C:\p\p\POWELL\DWG\026637\C-034.00.dwg



- PAYMENT NOTES:**
- ALL 15" SICPP SHOWN ARE ITEM 603.9815
  - ALL CATCHBASINS [CB] SHOWN ARE ITEM 604.301873, WITH FRAMES AND GRATES ITEM 655.0706
  - ALL MANHOLES [DMH] SHOWN ARE ITEM 604.4048, WITH FRAME AND COVER ITEM 655.1202.



OUTFALL 2  
INV OUT EL = 506.7

**STORM DRAIN PIPING PROFILE**



**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY: D. ROSENTHAL  
 CHECKED BY: E. LECLAIR  
 DESIGN LEAD: D. ROSENTHAL  
 SECTION MANAGER: E. LECLAIR

DRAWN BY: R. HANES  

 11500 American Blvd, Suite 200  
 Luban, NY 12110  
 Tel: (518) 782-6900



APPROVED FOR THE CITY OF NEW YORK  
 L. SINGH  
 ACCOUNTABLE MANAGER  
 P. COSTA  
 PORTFOLIO MANAGER

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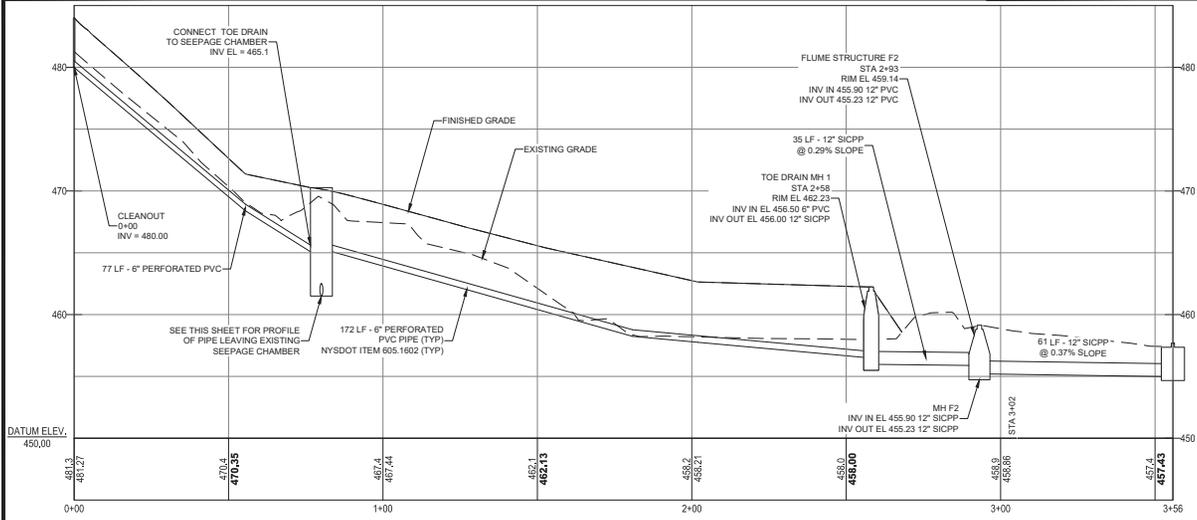
**NEW YORK CITY**  
**ENVIRONMENTAL PROTECTION**  
 BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
 96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
 CORONA, NEW YORK 11368  
 www.nyc.gov/dcp

**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
**PUTNAM COUNTY, NEW YORK**

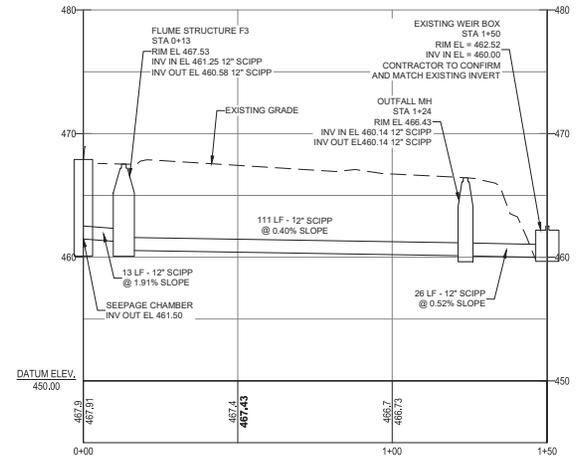
STORM DRAIN PIPING PROFILE

DATE: 3/31/2023  
 SCALE: 1"=20'  
 SHEET NO.: 44 OF 81  
 DRAWING NO.: C-034.00

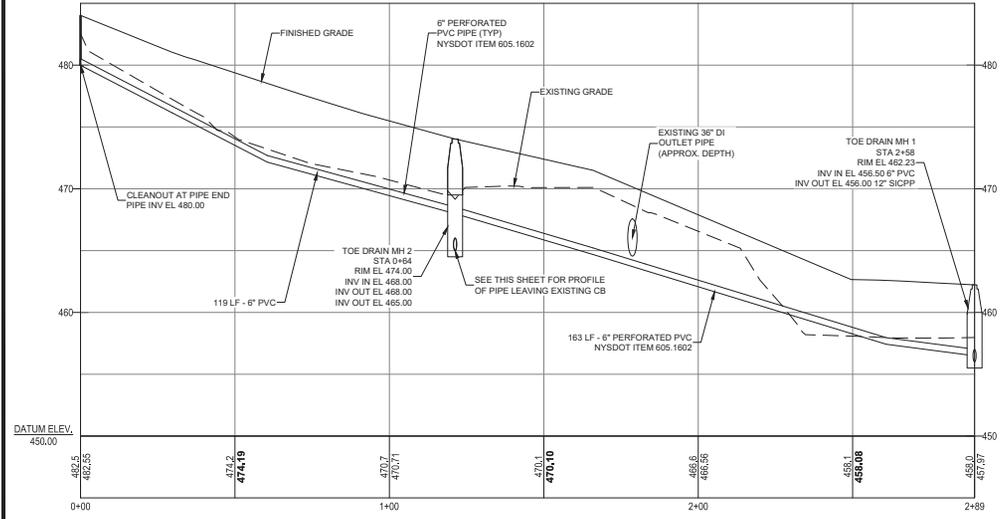
Lead: Sanyal, B. & Date: 05/11/2022, Thursday, May 11, 2022, 12:20:00 PM  
 Pipe Size: 12" (12.00 X 34.00 INCHES) Pipe Scale: 1"=20'  
 Plot Style: TableBEECD\_Drawing.ctb  
 Drawing Name: & Location: C:\p\p\POWELL\DWG\026637\C-034-00.dwg



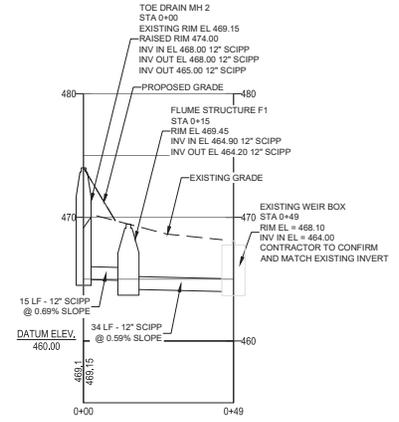
**TOE DRAIN PROFILE**



**SEEPAGE CHAMBER OUTFALL PROFILE**



**TOE DRAIN PROFILE**



**CATCH BASIN OUTFALL PROFILE**



**PAYMENT NOTES:**

1. ALL 12" SICPP SHOWN ARE ITEM 603.9812
2. ALL MANHOLES (MH) SHOWN ARE ITEM 604.4048, WITH FRAME AND COVERS ITEM 655.1202
3. FLUME STRUCTURES ARE ITEM 604.4072, MANHOLE FRAME AND COVER ITEM 655.1202

**100% SUBMISSION**  
 DATE SUBMITTED: 5/26/2022

NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY:  
 D. ROSENTHAL  
 CHECKED BY:  
 E. LECLAIR  
 DESIGN LEAD:  
 D. ROSENTHAL  
 SECTION MANAGER:  
 E. LECLAIR

DRAWN BY:  
 R. HANES  
  
 11500 American Blvd, Suite 200  
 Luben, NY 12110  
 Tel: (518) 792-6900



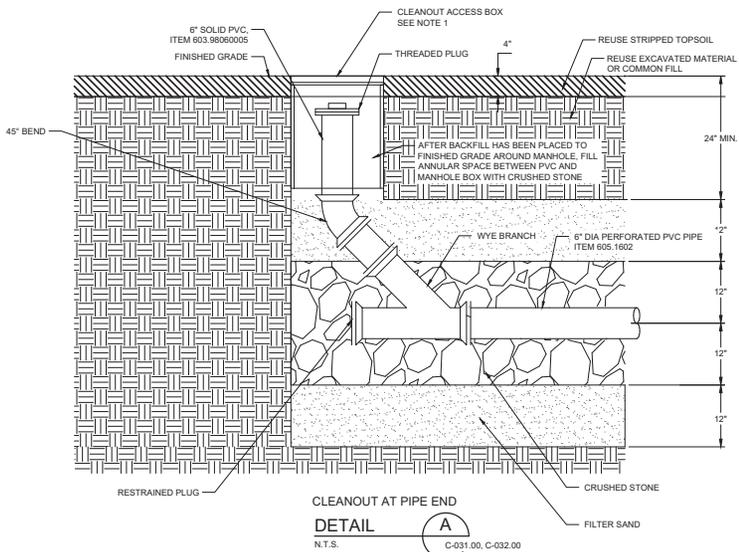
APPROVED FOR THE CITY OF NEW YORK  
 L. SINGH  
 ACCOUNTABLE MANAGER  
 J. COSTA  
 PORTFOLIO MANAGER

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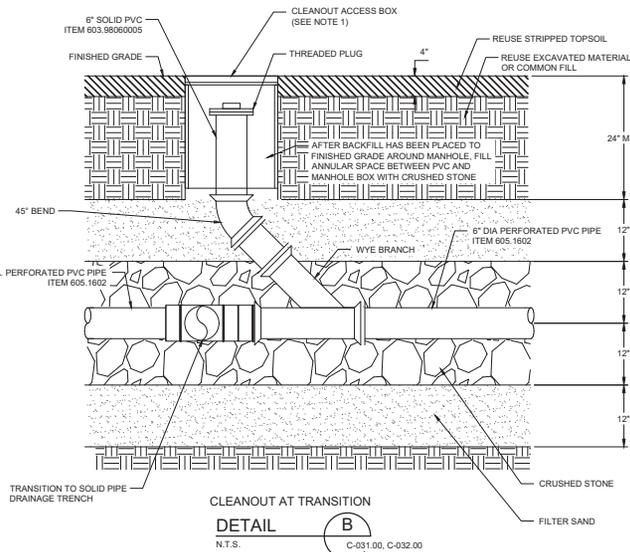
**NEW YORK CITY**  
**ENVIRONMENTAL PROTECTION**  
 BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
 96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
 CORONA, NEW YORK 11368  
 www.nyc.gov/dcp

**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
 PUTNAM COUNTY, NEW YORK  
 TOE DRAIN PIPING PROFILE

DATE: 3/31/2023
SCALE: 1"=20'
SHEET NO.: 45 OF 81
DRAWING NO. C-035.00

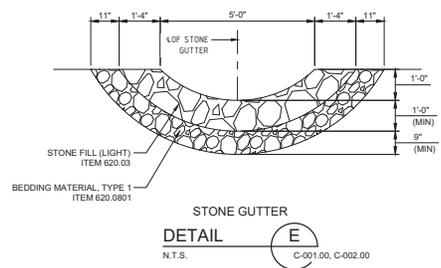


**CLEANOUT AT PIPE END**  
**DETAIL A**  
 N.T.S. C-031.00, C-032.00

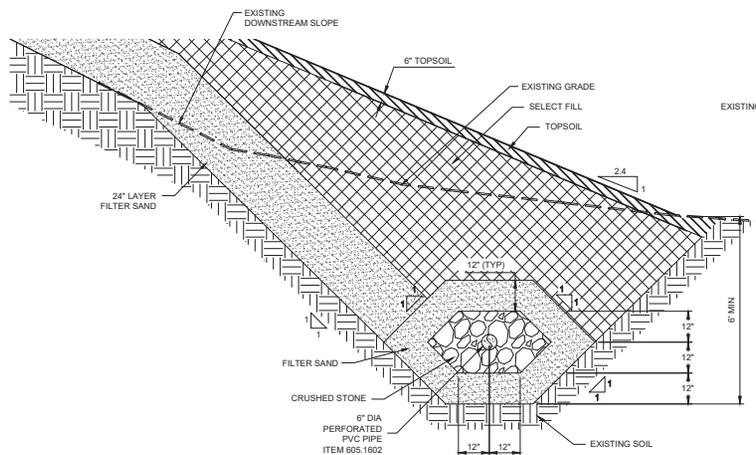


**CLEANOUT AT TRANSITION**  
**DETAIL B**  
 N.T.S. C-031.00, C-032.00

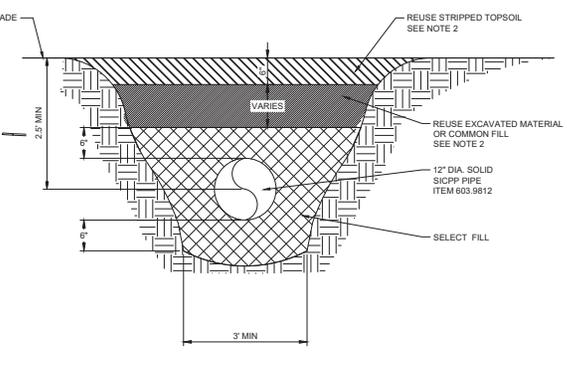
- NOTES:**
- CLEANOUT BOXES SHALL BE RATED FOR AT LEAST AASHTO H10 TRUCK LOADING (8,000 LBS). REFER TO SPECIFICATION 33 41 53 FOR ADDITIONAL DETAILS AND REQUIREMENTS.
  - SOIL EXCAVATED FOR PIPE TRENCHING WITHIN WETLAND BOUNDARIES SHALL BE STOCKPILED AND REUSED AS TRENCH COVER FILL ABOVE THE SELECT FILL PIPE BEDDING MATERIAL.



**STONE GUTTER**  
**DETAIL E**  
 N.T.S. C-001.00, C-002.00



**TOE DRAIN**  
**DETAIL C**  
 N.T.S. C-031.00, C-032.00



**SOLID PIPE DRAINAGE TRENCH**  
**DETAIL D**  
 N.T.S. C-031.00, C-032.00

- NOTES:**
- CONTRACTOR SHALL PLACE FILTER SAND AND CRUSHED STONE INCREMENTALLY TO ACHIEVE THE LAYER THICKNESSES AND GEOMETRY OF THE TOE DRAIN AS DEPICTED IN DETAIL 'C'

**100% SUBMISSION**  
 DATE SUBMITTED: 5/26/2022  
 REVISED 10/28/2022

Last Saved By: E:\Data\DWELLING, Friday, March 31, 2023, 10:29:20 AM  
 Plot Style Table: RECC\_Drawing.ctb  
 Paper Size: ANSI D (22.00 X 34.00 INCHES) Plot Scale: N/A  
 Drawing Name: & Location: C:\p\DWELLING\02286637\C-036.00.dwg

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY:  
D. ROSENTHAL  
 CHECKED BY:  
E. LECLAR  
 DESIGN LEAD:  
D. ROSENTHAL  
 SECTION MANAGER:  
E. LECLAR

DRAWN BY:  
R. HANES  
  
 11500 American Blvd, Suite 200  
 Luben, NY 12110  
 Tel: (518) 762-6600

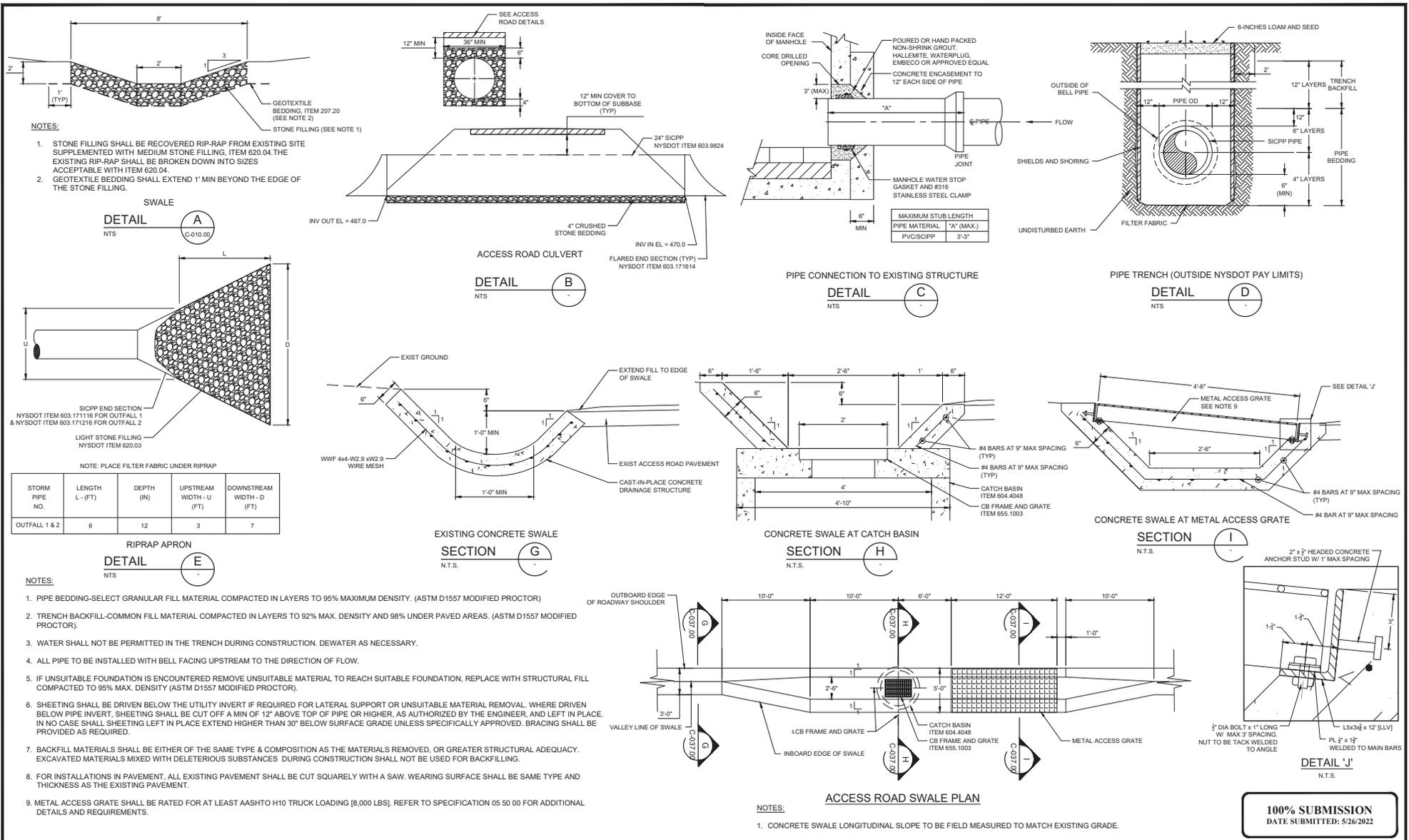
APPROVED FOR THE CITY OF NEW YORK  
 L. SINGH  
 ACCOUNTABLE MANAGER  
 P. COSTA  
 PORTFOLIO MANAGER

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**ENVIRONMENTAL PROTECTION**  
 BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
 96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
 CORONA, NEW YORK 11368  
 www.nyc.gov/dcp

**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
 PUTNAM COUNTY, NEW YORK  
 DRAINAGE DETAILS (1 OF 2)  
 DATE: 3/31/2023  
 SCALE: N/A  
 SHEET NO.: 46 OF 81  
 DRAWING NO. C-036.00

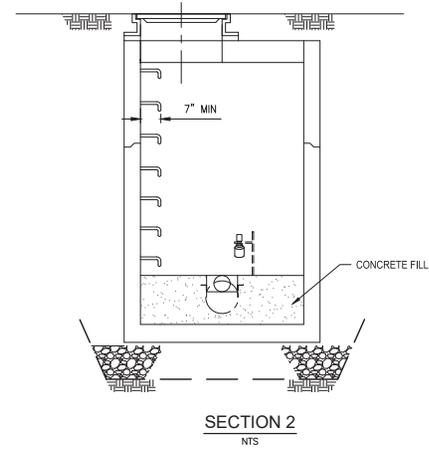
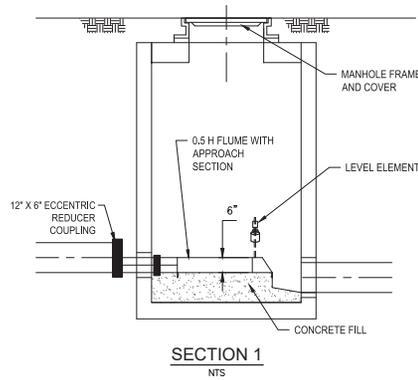
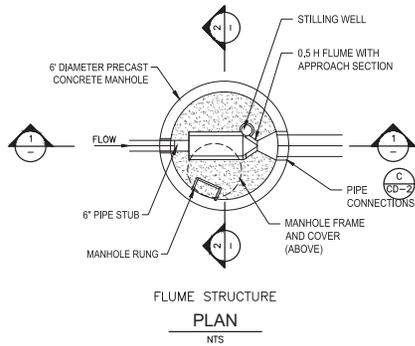
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



Lead: Steven B. & Ryan POWELL LLC, Thursday, May 28, 2022 and Date: Revised Friday, March 31, 2023, 12:20:20 PM  
 Pipe Size (ANSI) (D 102.00 X 34.00 INCHES) Pipe Scale: N/A  
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 Plot Style: TableBEC02\_Drawing.ctb

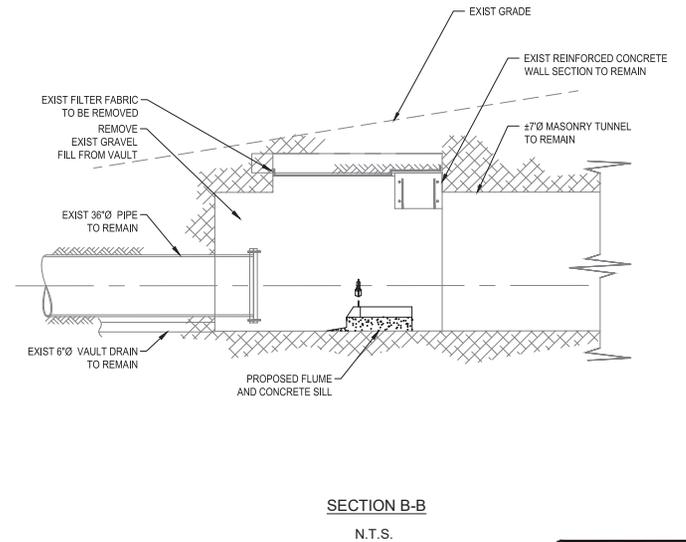
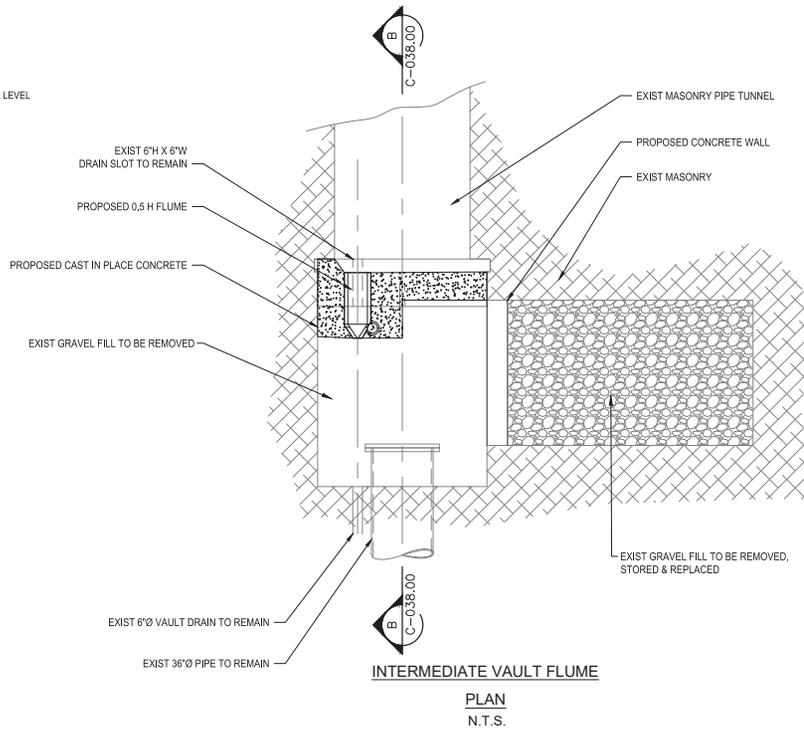
DESIGNED BY: D. ROSENTHAL CHECKED BY: E. LECLAR DESIGN LEAD: D. ROSENTHAL SECTION MANAGER: E. LECLAR		DRAWN BY: R. HANES 		APPROVED FOR THE CITY OF NEW YORK L. SINGH ACCOUNTABLE MANAGER P. COSTA PORTFOLIO MANAGER		*WARNING! IT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW, SECTION 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION LAW, SECTION 7209.2.* <b>NEW YORK CITY ENVIRONMENTAL PROTECTION</b> BUREAU OF ENGINEERING DESIGN & CONSTRUCTION 96-05 HORACE HARDING EXPRESSWAY 5th FLOOR CORONA, NEW YORK 11368 www.nyc.gov/dcp		<b>WEST BRANCH AUXILIARY DAM SLOPE SAFETY IMPROVEMENTS</b> PUTNAM COUNTY, NEW YORK DRAINAGE DETAILS (2 OF 2)		DATE: 3/31/2023 SCALE: N/A SHEET NO.: 47 OF 81 DRAWING NO.: C-037_00	
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All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



**NOTES:**

1. REFERENCE I-004.00 DETAIL 'B' FOR LEVEL ELEMENT INSTALLATION.



**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY:  
S. MURPHY  
CHECKED BY:  
E. LECLAIR  
DESIGN LEAD:  
E. LECLAIR  
SECTION MANAGER:  
E. LECLAIR



**NYC**  
Environmental  
Protection

APPROVED FOR THE CITY OF NEW YORK  
L. SINGH  
ACCOUNTABLE MANAGER  
D. COSTA  
PORTFOLIO MANAGER

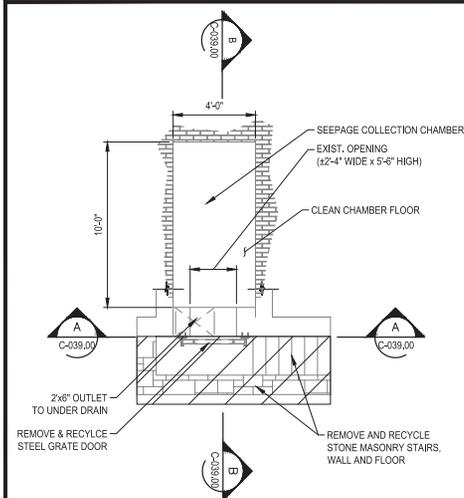
\*WARNING! IT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW, SECTION 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION 7209.2.\*

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**ENVIRONMENTAL PROTECTION**  
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
CORONA, NEW YORK 11368  
www.nyc.gov/dcp

**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
**PUTNAM COUNTY, NEW YORK**  
  
FLUME DETAILS

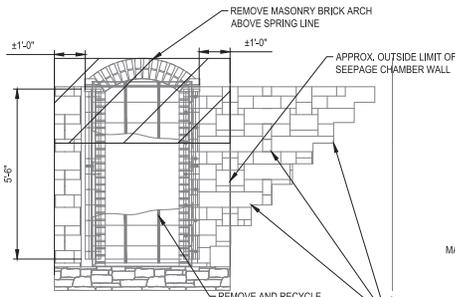
DATE: 3/31/2023  
SCALE: 1" = 6'  
SHEET NO.:  
48 OF 81  
DRAWING NO.:  
C-038.00

Lead: Sanyal, B. & Date: POWELL LLP, Modified: May 25, 2022 and Date: Pletcher/Fisher, March 31, 2023, 12:20:39 PM  
 Project: West Branch Auxiliary Dam Slope Safety Improvements  
 File: Sanyal, B. & Date: POWELL LLP, Modified: May 25, 2022 and Date: Pletcher/Fisher, March 31, 2023, 12:20:39 PM  
 Drawing Name: S. & Location: C:\p\11\POWELL\DWG\0268637\C-039.00.dwg



**EXISTING PLAN SEEPAGE CHAMBER**

0 3 6 FT.  
1"=3"

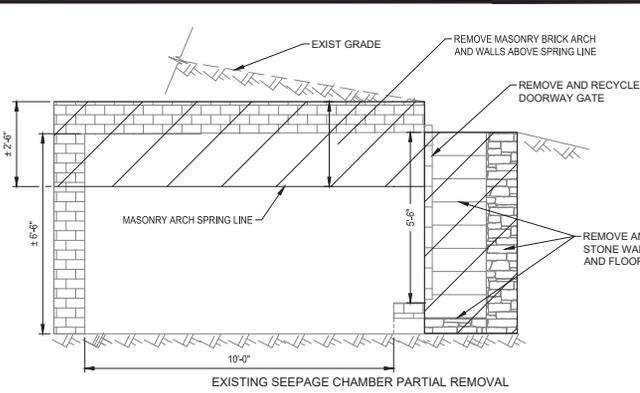


**EXISTING SEEPAGE CHAMBER PARTIAL REMOVAL**

0 2 4 FT.  
1"=2"

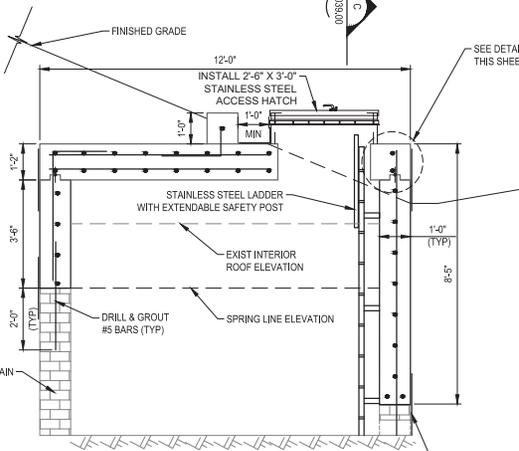
**MATERIAL NOTES:**

- FOR NYSDOT ITEMS, USE MATERIALS SPECIFIED IN THE NYSDOT SPECIFICATIONS AND STANDARD DRAWINGS.
- STEEL ANGLES TO BE GRADE A36 U.S. N.O.
- BOLTS ARE TO BE ASTM F3125 U.S. N.O.
- BOLT HOLES ARE TO BE STANDARD SIZE U.S. N.O.
- HEADED STUDS TO BE ASTM A108
- WELD ELECTRODES TO BE E70XX U.S. N.O.
- REBAR TO BE GRADE 60 AND EPOXY COATED U.S. N.O.
- REBAR CLEAR COVER AGAINST GROUND TO BE 3" U.S. N.O. OTHERWISE, REBAR CLEAR COVER TO BE 2" U.S. N.O.



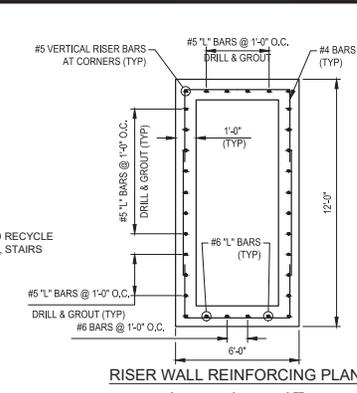
**EXISTING SEEPAGE CHAMBER PARTIAL REMOVAL**

0 2 4 FT.  
1"=2"



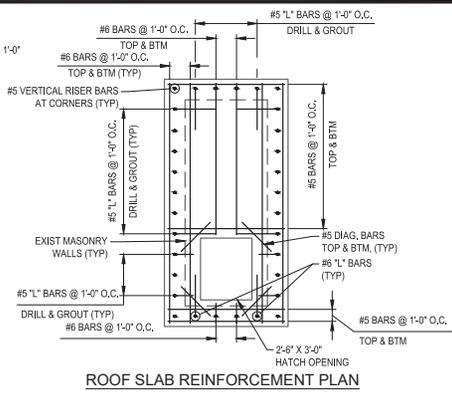
**PROPOSED SEEPAGE CHAMBER SLAB & RISER**

0 2 4 FT.  
1"=2"



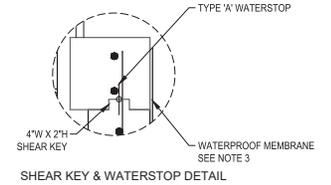
**RISER WALL REINFORCING PLAN**

0 3 6 FT.  
1"=3"



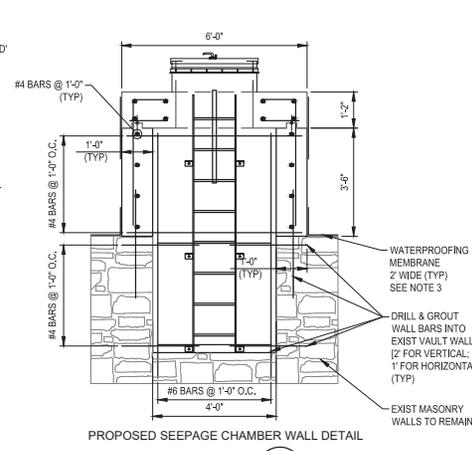
**ROOF SLAB REINFORCING PLAN**

0 3 6 FT.  
1"=3"



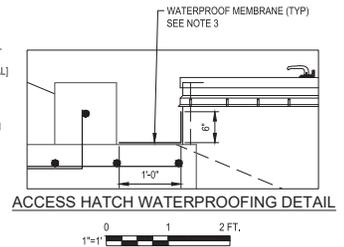
**SHEAR KEY & WATERSTOP DETAIL**

0 1 2 FT.  
1"=1"



**PROPOSED SEEPAGE CHAMBER WALL DETAIL**

0 2 4 FT.  
1"=2"



**ACCESS HATCH WATERPROOFING DETAIL**

0 1 2 FT.  
1"=1"

**NOTES:**

- SLAB DIMENSIONS ARE APPROXIMATE BASED ON RECORD PLANS. CONTRACTOR TO FIELD VERIFY AND NOTIFY ENGINEER OF ANY DIFFERENCE IN ACTUAL SEEPAGE CHAMBER INTERIOR DIMENSIONS.
- HEIGHT OF RISER TO BE FIELD VERIFIED BY CONTRACTOR.
- WATERPROOF-MEMBRANE SHALL BE APPLIED ALONG THE PERIMETER OF THE ACCESS HATCH AS SHOWN. WATERPROOFING MEMBRANE SHALL CONFORM TO REQUIREMENTS IN SPECIFICATION 07 14 16 - COLD LIQUID-APPLIED WATERPROOFING.
- TYPE 'A' WATERSTOP TO BE INSTALLED AT ALL CONSTRUCTION JOINTS.

REINFORCEMENT LAP SPlice LENGTH	BAR SIZE	LAP LENGTH
	#4	25
	#5	31
	#6	37

**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY:  
M. POWELL  
CHECKED BY:  
E. LECLAR  
DESIGN LEAD:  
M. POWELL  
SECTION MANAGER:  
E. LECLAR

DRAWN BY:  
M. POWELL  
**GPM Smith**  
11800 American Blvd, Suite 200  
Luthers, NY 12110  
Tel: (518) 762-6800



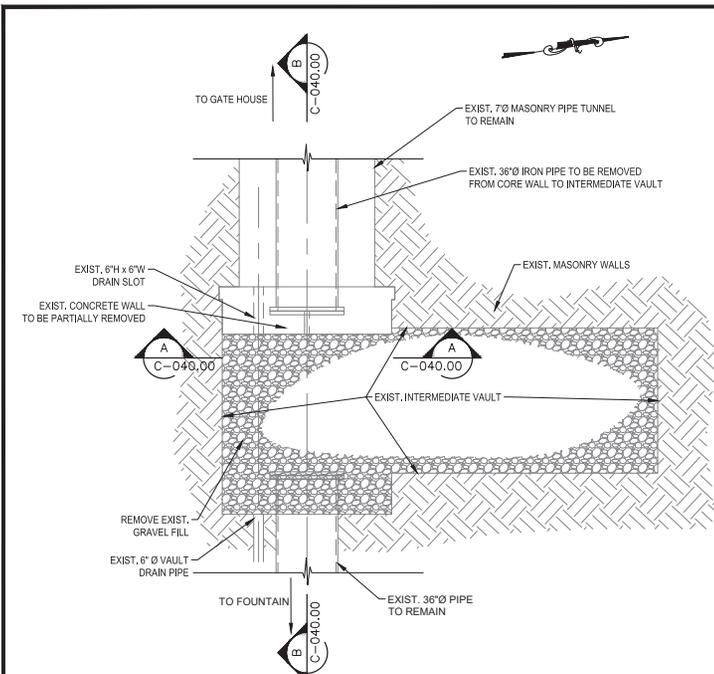
APPROVED FOR THE CITY OF NEW YORK  
L. SINGH  
ACCOUNTABLE MANAGER  
D. COSTA  
PORTFOLIO MANAGER

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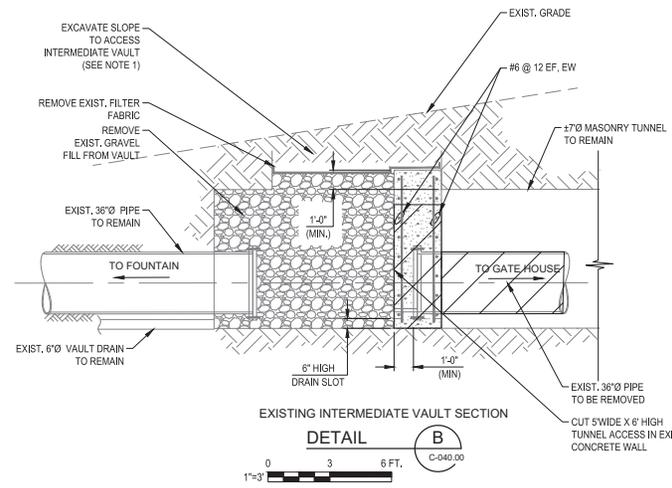
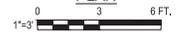
**NEW YORK CITY**  
**ENVIRONMENTAL PROTECTION**  
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
CORONA, NEW YORK 11368  
www.nyc.gov/dcp

**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
**PUTNAM COUNTY, NEW YORK**  
SEEPAGE CHAMBER DETAILS  
DATE: 3/31/2023  
SCALE: 1"=2"  
SHEET NO.:  
49 OF 81  
DRAWING NO.  
C-039.00

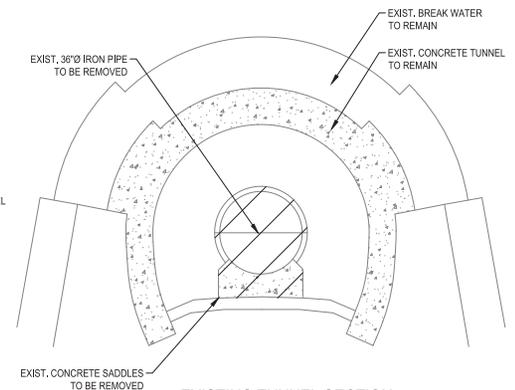
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 Plot Size: ANSI (D) (24.00 X 34.00 INCHES) Plot Scale: 1"=20'  
 Drawing Name & Location: C:\p\POWERLTD\0286637C\038.00.dwg



**EXISTING INTERMEDIATE VAULT PLAN**



**EXISTING INTERMEDIATE VAULT SECTION**



**EXISTING TUNNEL SECTION**

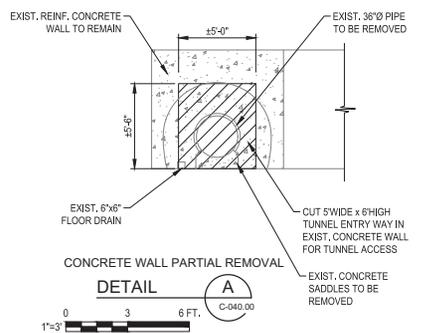


**NOTES:**

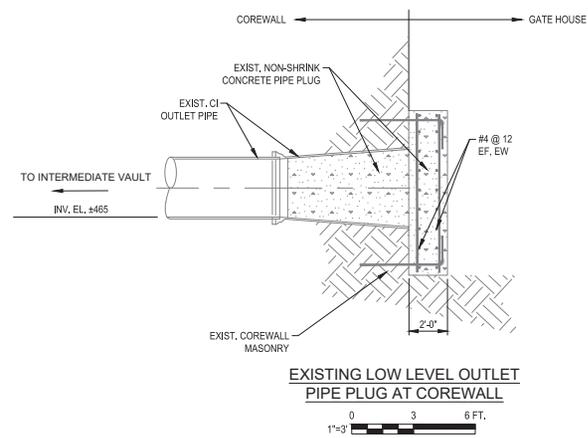
- CONTRACTOR TO CAREFULLY EXCAVATE TO EXPOSE THE TOP OF THE INTERMEDIATE VAULT, THE GRADE SHALL BE LAID BACK WITHIN ACCEPTABLE OSHA SLOPES. PER RECORD PLANS, THE TOP OF THE OUTLET TUNNEL IS WITHIN 2FT OF THE EXISTING GRADE AT THE INTERMEDIATE VAULT. IF THE VAULT IS NOT LOCATED WITHIN 2FT OF THE EXISTING GRADE, CONTRACTOR SHALL STOP EXCAVATION ACTIVITIES AND NOTIFY THE ENGINEER.

**INTERMEDIATE VAULT/LOW LEVEL TUNNEL WORK SEQUENCE:**

- EXCAVATE SLOPE TO EXPOSE EXISTING INTERMEDIATE VAULT (SEE NOTE 1).
  - REMOVE EXISTING GRAVEL FROM INTERMEDIATE VAULT.
  - RELIEVE ANY POTENTIAL WATER PRESSURE IN THE LOW LEVEL TUNNEL IN ACCORDANCE WITH DEWATERING SPECIFICATION.
  - PARTIALLY REMOVE THE CONCRETE CORE WALL AT THE INTERMEDIATE VAULT.
  - PERFORM VIDEO INSPECTION WITH MOTORIZED CRAWLER CAMERA (OR OTHER MEANS), AND PROVIDE AN INSPECTION REPORT CERTIFIED BY THE CONTRACTOR'S PROFESSIONAL ENGINEER. PREPARE REPAIR PLAN IF REQUIRED.
  - OBTAIN CONFINED SPACE PERMIT AND PROVIDE ADEQUATE FORCED AIR VENTILATION IN THE LOW LEVEL OUTLET TUNNEL.
  - PERFORM SAMPLING FOR HAZARDOUS/REGULATED MATERIALS IN THE TUNNEL IN ACCORDANCE WITH SPECIFICATION 01 35 45. REMEDIATE/PROVIDE APPLICABLE CONTROLS AND MANAGEMENT IF HAZARDOUS/REGULATED MATERIALS ARE FOUND.
  - PERFORM TUNNEL REPAIRS IF REQUIRED.
  - REMOVE EXISTING PIPE AND SADDLES.
  - INSTALL VAULT ROOF SLAB AND ACCESS HATCH.
- REFER TO SPECIFICATIONS 02 44 13, 02 44 16, AND 02 44 19 FOR ADDITIONAL DETAILS.



**DETAIL A**



**EXISTING LOW LEVEL OUTLET PIPE PLUG AT COREWALL**



**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY:  
M. POWELL  
CHECKED BY:  
E. LECLAIR  
DESIGN LEAD:  
M. POWELL  
SECTION MANAGER:  
E. LECLAIR

DRAWN BY:  
M. POWELL

APPROVED FOR THE CITY OF NEW YORK

L. SINGH  
ACCOUNTABLE MANAGER

P. COSTA  
PORTFOLIO MANAGER

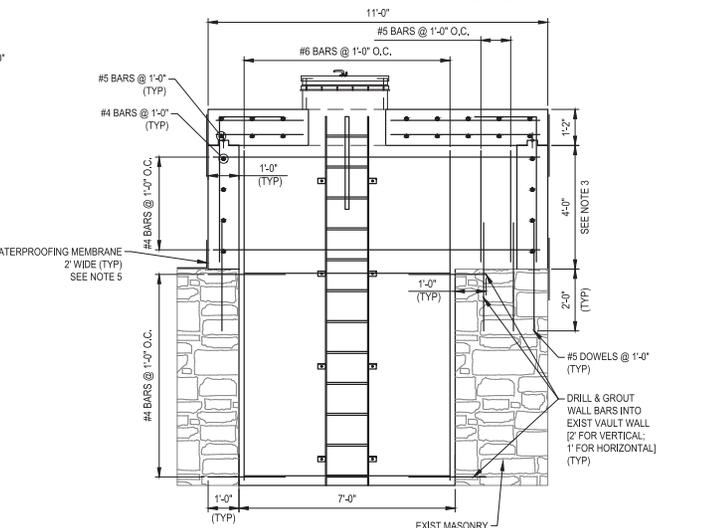
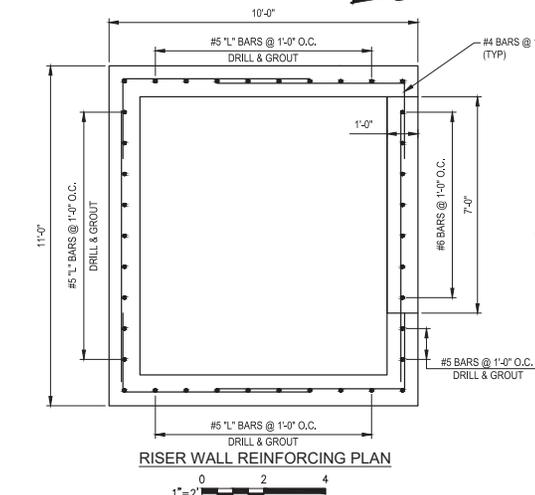
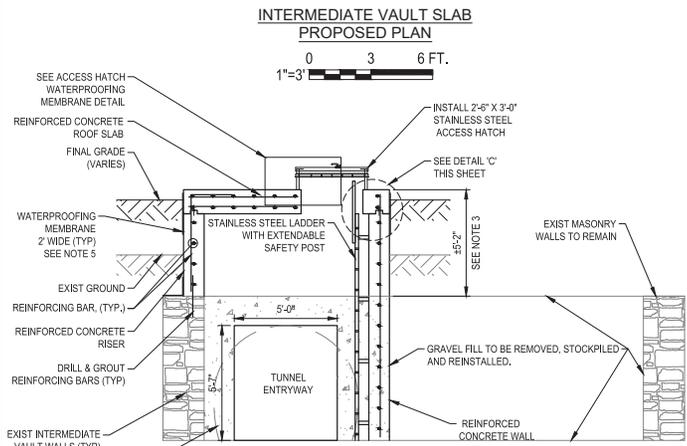
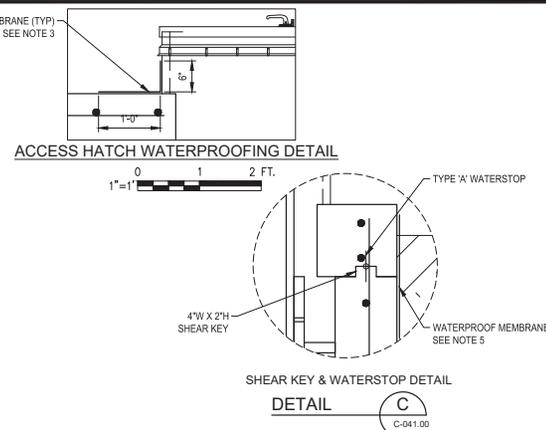
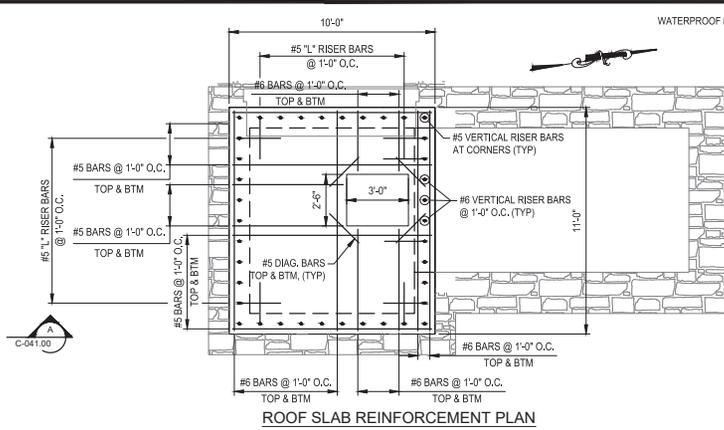
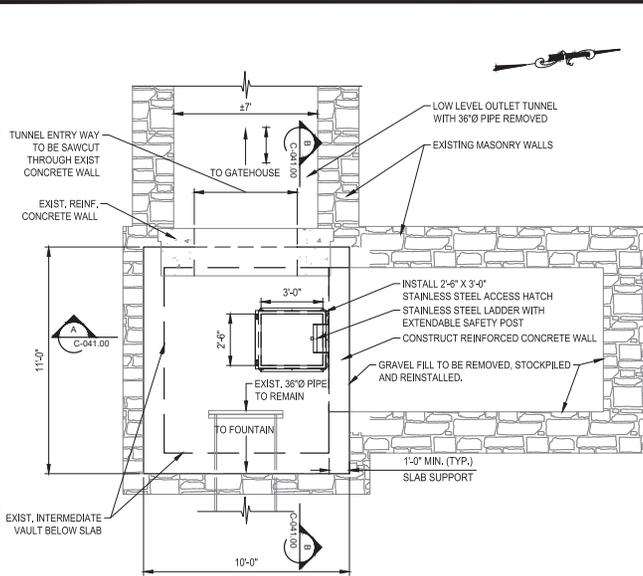
"WARNING! THIS IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW, SECTION 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION LAW, SECTION 7209.2."

**NEW YORK CITY ENVIRONMENTAL PROTECTION**  
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
CORONA, NEW YORK 11368  
www.nyc.gov/dcp

**WEST BRANCH AUXILIARY DAM SLOPE SAFETY IMPROVEMENTS**  
PUTNAM COUNTY, NEW YORK

INTERMEDIATE VAULT DETAILS (1 OF 2)

DATE: 3/31/2023  
SCALE: 1"=20'  
SHEET NO.: 50 OF 81  
DRAWING NO.: C-040.00



- NOTES:**
- SLAB DIMENSIONS ARE APPROXIMATE BASED ON RECORD PLANS. CONTRACTOR TO FIELD VERIFY AND NOTIFY ENGINEER OF ANY DIFFERENCE IN ACTUAL SEEPAGE CHAMBER INTERIOR DIMENSIONS.
  - HEIGHT OF RISER TO BE FIELD VERIFIED BY CONTRACTOR.
  - WATERPROOF MEMBRANE SHALL BE APPLIED ALONG THE PERIMETER OF THE ACCESS HATCH AS SHOWN. WATERPROOFING MEMBRANE SHALL CONFORM TO REQUIREMENTS IN SPECIFICATION 07 14 16 - COLD LIQUID-APPLIED WATERPROOFING.
  - FOR MATERIAL NOTES REFER TO SHEET C-039.00.
  - WATERPROOF MEMBRANE SHALL BE APPLIED ALONG THE PERIMETER OF THE ACCESS HATCH AS SHOWN. WATERPROOFING MEMBRANE SHALL CONFORM TO REQUIREMENTS IN SPECIFICATION 07 14 16 - COLD LIQUID-APPLIED WATERPROOFING.
  - TYPE 'A' WATERSTOP TO BE INSTALLED AT ALL CONSTRUCTION JOINTS.

REINFORCEMENT LAP SPICE LENGTH	BAR SIZE	LAP LENGTH
	#4	25
	#5	31
	#6	37

NOTES: 1. THIS DRAWING IS THE PROPERTY OF GPM SMITH AND SHALL BE KEPT IN CONFIDENCE. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF GPM SMITH. 2. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. 3. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. 4. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. 5. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. 6. 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NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY: M. POWELL  
 CHECKED BY: E. LECLAR  
 DESIGN LEAD: M. POWELL  
 SECTION MANAGER: E. LECLAR

DRAWN BY: M. POWELL

**GPM Smith**  
 11000 American Blvd, Suite 200  
 Luban, NY 12110  
 Tel: (518) 782-6800

**NYC Environmental Protection**

APPROVED FOR THE CITY OF NEW YORK

L. SINGH  
 ACCOUNTABLE MANAGER

D. COSTA  
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**NEW YORK CITY ENVIRONMENTAL PROTECTION**  
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**WEST BRANCH AUXILIARY DAM SLOPE SAFETY IMPROVEMENTS**  
 PUTNAM COUNTY, NEW YORK

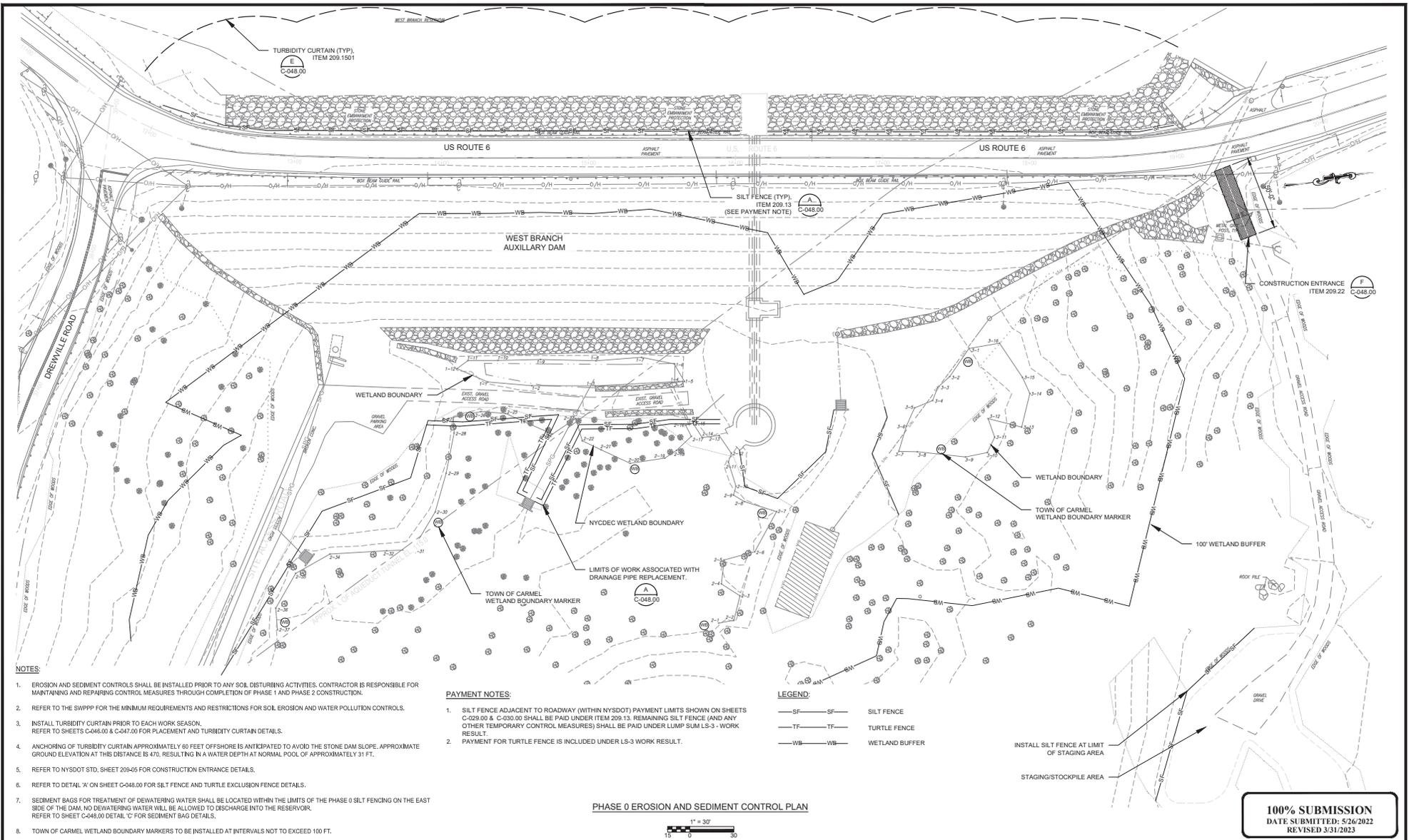
INTERMEDIATE VAULT DETAILS  
 (2 OF 2)

DATE: 3/31/2023  
 SCALE: NA  
 SHEET NO.: 51 OF 81  
 DRAWING NO.: C-041.00

**100% SUBMISSION**  
 DATE SUBMITTED: 5/26/2022

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Lead: Sanyal, B. & Date: 03/11/2023 and Date: 03/11/2023 and Date: 03/11/2023 and Date: 03/11/2023  
 File: Sanyal, B. & Date: 03/11/2023 and Date: 03/11/2023 and Date: 03/11/2023 and Date: 03/11/2023  
 Drawing Name: Sanyal, B. & Date: 03/11/2023 and Date: 03/11/2023 and Date: 03/11/2023 and Date: 03/11/2023



- NOTES:**
- EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBING ACTIVITIES. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AND REPAIRING CONTROL MEASURES THROUGH COMPLETION OF PHASE 1 AND PHASE 2 CONSTRUCTION.
  - REFER TO THE SWPPP FOR THE MINIMUM REQUIREMENTS AND RESTRICTIONS FOR SOIL EROSION AND WATER POLLUTION CONTROLS.
  - INSTALL TURBIDITY CURTAIN PRIOR TO EACH WORK SEASON. REFER TO SHEETS C-046.00 & C-047.00 FOR PLACEMENT AND TURBIDITY CURTAIN DETAILS.
  - ANCHORING OF TURBIDITY CURTAIN APPROXIMATELY 60 FEET OFFSHORE IS ANTICIPATED TO AVOID THE STONE DAM SLOPE. APPROXIMATE GROUND ELEVATION AT THIS DISTANCE IS 470, RESULTING IN A WATER DEPTH AT NORMAL POOL OF APPROXIMATELY 31 FT.
  - REFER TO NYSDOT STD. SHEET 209-65 FOR CONSTRUCTION ENTRANCE DETAILS.
  - REFER TO DETAIL 'A' ON SHEET C-048.00 FOR SILT FENCE AND TURTLE EXCLUSION FENCE DETAILS.
  - SEDIMENT BAGS FOR TREATMENT OF DEWATERING WATER SHALL BE LOCATED WITHIN THE LIMITS OF THE PHASE 0 SILT FENCING ON THE EAST SIDE OF THE DAM. NO DEWATERING WATER WILL BE ALLOWED TO DISCHARGE INTO THE RESERVOIR. REFER TO SHEET C-048.00 DETAIL 'C' FOR SEDIMENT BAG DETAILS.
  - TOWN OF CARMEL WETLAND BOUNDARY MARKERS TO BE INSTALLED AT INTERVALS NOT TO EXCEED 100 FT.

- PAYMENT NOTES:**
- SILT FENCE ADJACENT TO ROADWAY (WITHIN NYSOT) PAYMENT LIMITS SHOWN ON SHEETS C-029.00 & C-030.00 SHALL BE PAID UNDER ITEM 209.13. REMAINING SILT FENCE (AND ANY OTHER TEMPORARY CONTROL MEASURES) SHALL BE PAID UNDER LUMP-SUM LS-3 - WORK RESULT.
  - PAYMENT FOR TURTLE FENCE IS INCLUDED UNDER LS-3 WORK RESULT.

- LEGEND:**
- ST—ST— SILT FENCE
  - TF—TF— TURTLE FENCE
  - WB—WB— WETLAND BUFFER

INSTALL SILT FENCE AT LIMIT OF STAGING AREA  
 STAGING/STOCKPILE AREA

**PHASE 0 EROSION AND SEDIMENT CONTROL PLAN**



**100% SUBMISSION**  
 DATE SUBMITTED: 5/26/2022  
 REVISED 3/31/2023

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY:  
R. HANES  
 CHECKED BY:  
E. LECLAR  
 DESIGN LEAD:  
D. ROSENTHAL  
 SECTION MANAGER:  
E. LECLAR

DRAWN BY:  
R. HANES

APPROVED FOR THE CITY OF NEW YORK

L. SINGH  
ACCOUNTABLE MANAGER

D. COSTA  
PORTFOLIO MANAGER

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**NEW YORK CITY**  
**ENVIRONMENTAL PROTECTION**  
 BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
 96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
 CORONA, NEW YORK 11368  
 www.nyc.gov/dcp

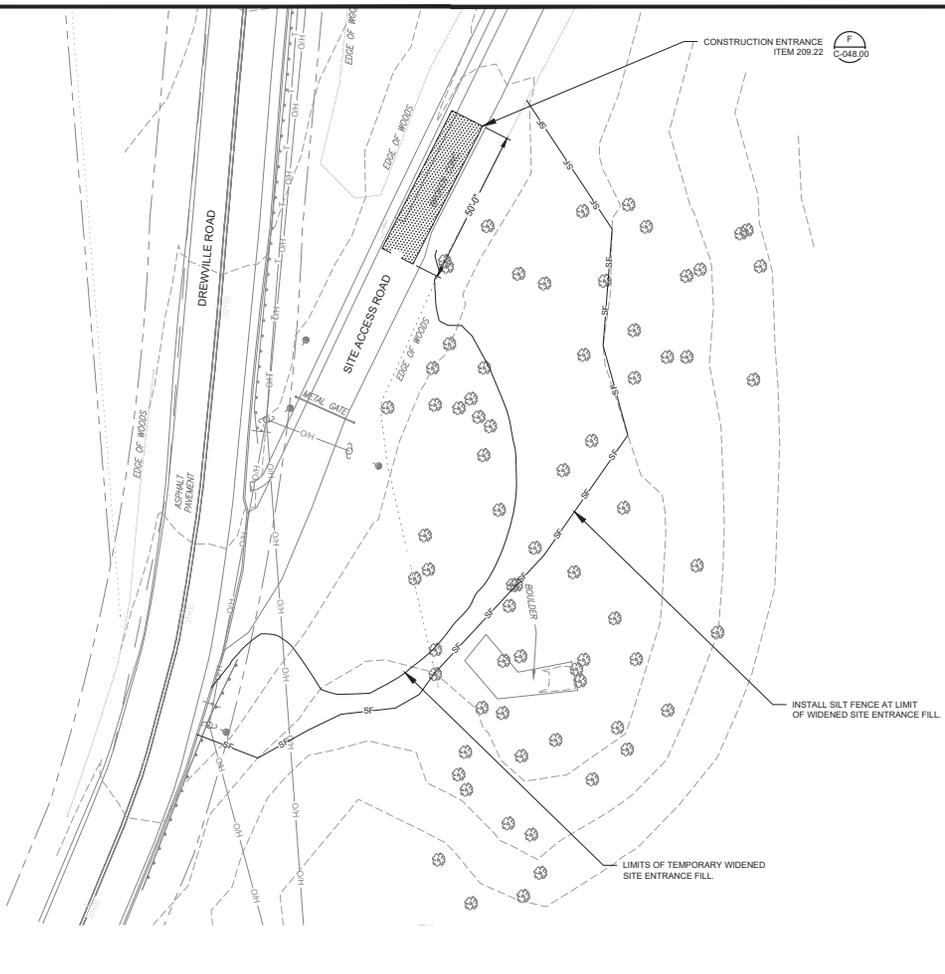
**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
 PUTNAM COUNTY, NEW YORK

PHASE 0 SOIL EROSION & SEDIMENT CONTROL PLAN  
 (1 OF 2)

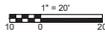
DATE: 3/31/2023  
 SCALE: 1"=30'  
 SHEET NO.:  
 52 OF 81  
 DRAWING NO.:  
 C-042.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Leaf: C:\p\B\6 Data\POWELL\LD\_Erty\_March 31, 2023 and Date Plotted\Friday, March 31, 2023 10:24:03 PM  
 Plot Size: ANSI (D) (24.00 X 36.00 INCHES) Plot Scale: 1"=30'  
 Drawing Name & Location: C:\p\B\6 Data\POWELL\LD\0266637C-A2-20.dwg



PHASE 0 EROSION AND SEDIMENT CONTROL PLAN



LEGEND:  
 —SF— SF— SILT FENCE

**100% SUBMISSION**  
 DATE SUBMITTED: 5/26/2022

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY:  
D. ROSENTHAL  
 CHECKED BY:  
E. LECLAR  
 DESIGN LEAD:  
D. ROSENTHAL  
 SECTION MANAGER:  
E. LECLAR

DRAWN BY:  
M. POWELL  
  
 11500 American Blvd, Suite 200  
 Luban, NY 12110  
 Tel: (518) 782-6800



APPROVED FOR THE CITY OF NEW YORK  
 L. SINGH  
 ACCOUNTABLE MANAGER  
 P. COSTA  
 PORTFOLIO MANAGER

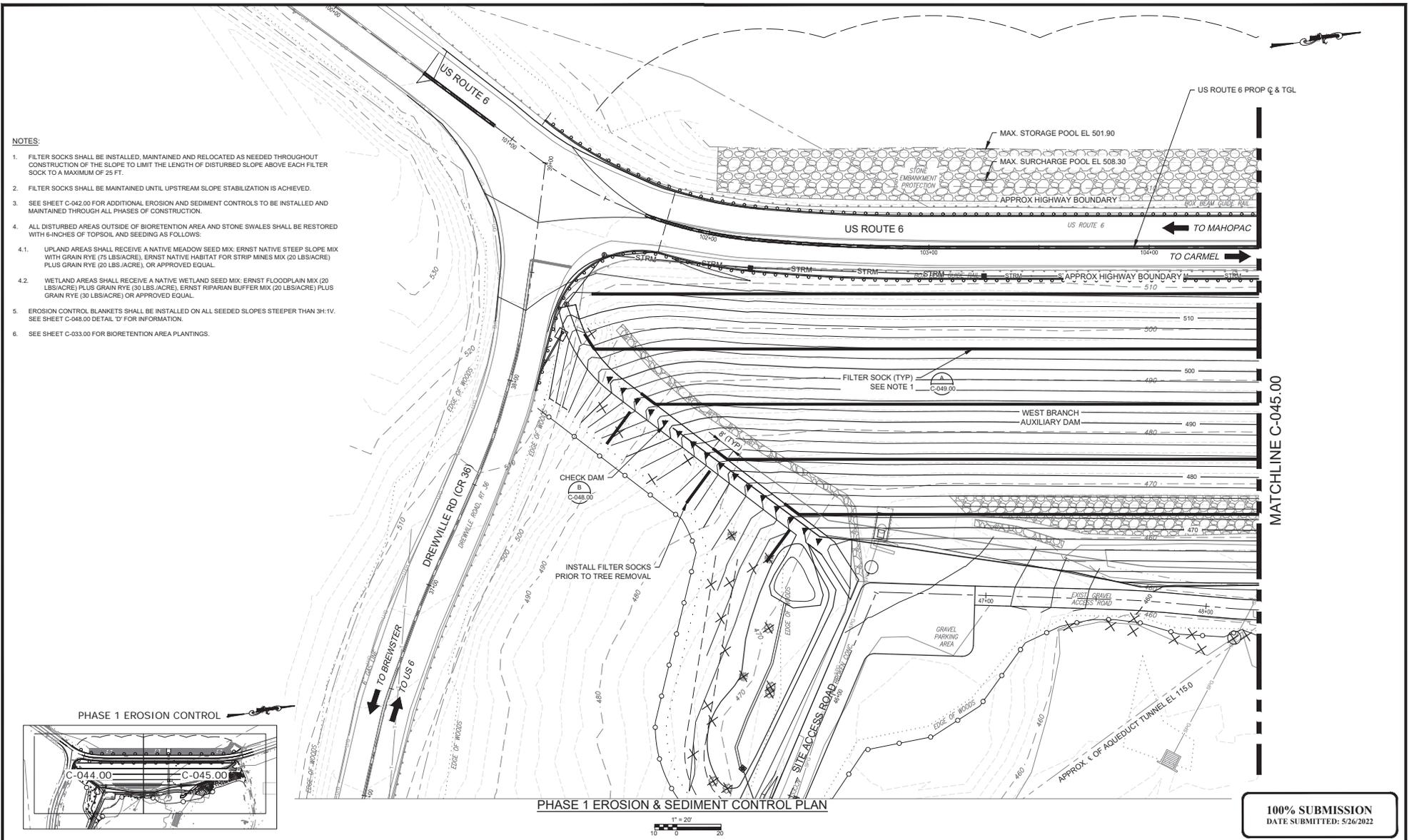
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 CORONA, NEW YORK 11368  
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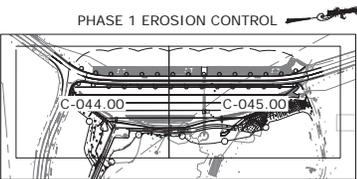
**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
 PUTNAM COUNTY, NEW YORK  
 PHASE 0 SOIL EROSION & SEDIMENT CONTROL PLAN  
 (2 OF 2)

DATE: 3/31/2023  
 SCALE: 1"=30'  
 SHEET NO.:  
 53 OF 81  
 DRAWING NO.:  
 C-043.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



- NOTES:**
1. FILTER SOCKS SHALL BE INSTALLED, MAINTAINED AND RELOCATED AS NEEDED THROUGHOUT CONSTRUCTION OF THE SLOPE TO LIMIT THE LENGTH OF DISTURBED SLOPE ABOVE EACH FILTER SOCK TO A MAXIMUM OF 25 FT.
  2. FILTER SOCKS SHALL BE MAINTAINED UNTIL UPSTREAM SLOPE STABILIZATION IS ACHIEVED.
  3. SEE SHEET C-042.00 FOR ADDITIONAL EROSION AND SEDIMENT CONTROLS TO BE INSTALLED AND MAINTAINED THROUGH ALL PHASES OF CONSTRUCTION.
  4. ALL DISTURBED AREAS OUTSIDE OF BIORETENTION AREA AND STONE SWALES SHALL BE RESTORED WITH 6-INCHES OF TOPSOIL AND SEEDING AS FOLLOWS:
    - 4.1. UPLAND AREAS SHALL RECEIVE A NATIVE MEADOW SEED MIX: ERNST NATIVE STEEP SLOPE MIX WITH GRAIN RYE (75 LBS/ACRE), ERNST NATIVE HABITAT FOR STRIP MINES MIX (20 LBS/ACRE) PLUS GRAIN RYE (20 LBS/ACRE), OR APPROVED EQUAL.
    - 4.2. WETLAND AREAS SHALL RECEIVE A NATIVE WETLAND SEED MIX: ERNST FLOODPLAIN MIX (20 LBS/ACRE) PLUS GRAIN RYE (30 LBS/ACRE), ERNST RIPARIAN BUFFER MIX (20 LBS/ACRE) PLUS GRAIN RYE (30 LBS/ACRE) OR APPROVED EQUAL.
  5. EROSION CONTROL BLANKETS SHALL BE INSTALLED ON ALL SEEDED SLOPES STEEPER THAN 3H:1V. SEE SHEET C-048.00 DETAIL 'D' FOR INFORMATION.
  6. SEE SHEET C-033.00 FOR BIORETENTION AREA PLANTINGS.



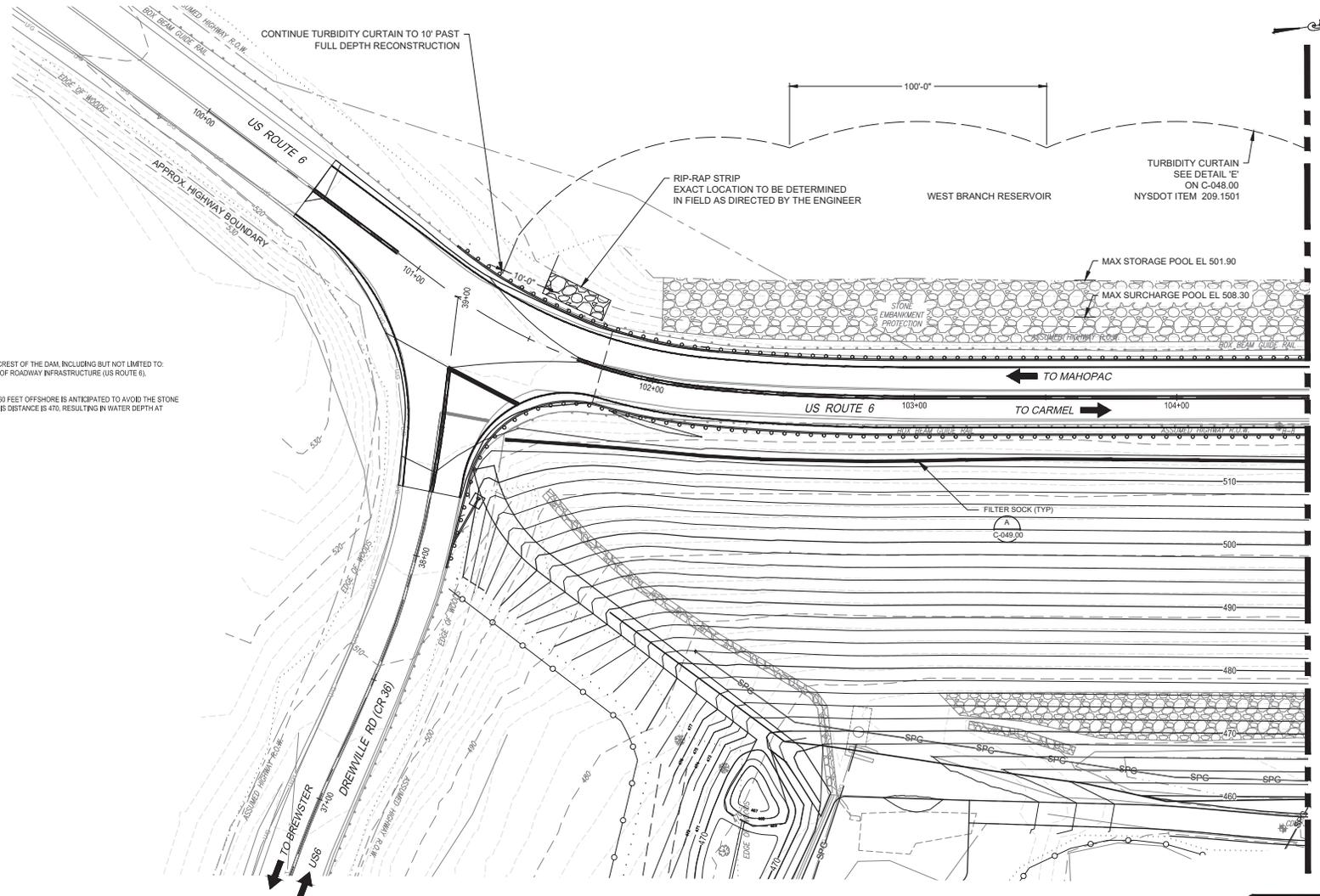
**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

Lead: David B. & Date: PIVELL, Thursday, May 26, 2022, 12:21:17 PM  
 Paper Size: ANSI D (22.00 X 34.00 INCHES) Plot Scale: 1"=20'  
 Drawing Name: & Location: C:\p\PIVELL\DWG\0286837\C-044.00.dwg

NO. DATE REVISIONS/DESCRIPTION APPRD.		DESIGNED BY: R. HANES CHECKED BY: E. LECLAIR DESIGN LEAD: D. ROSENTHAL SECTION MANAGER: E. LECLAIR	DRAWN BY: R. HANES 11500 American Blvd, Suite 200 Luthers, NY 12110 Tel: (518) 782-6800		APPROVED FOR THE CITY OF NEW YORK L. SINGH ACCOUNTABLE MANAGER D. COSTA PORTFOLIO MANAGER	*WARNING! THIS IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW, SECTION 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION LAW, SECTION 7209.2.* <b>NEW YORK CITY</b> <b>ENVIRONMENTAL PROTECTION</b> BUREAU OF ENGINEERING DESIGN & CONSTRUCTION 96-05 HORACE HARDING EXPRESSWAY 5th FLOOR CORONA, NEW YORK 11368 www.nyc.gov/dcp	<b>WEST BRANCH AUXILIARY DAM</b> <b>SLOPE SAFETY IMPROVEMENTS</b> PUTNAM COUNTY, NEW YORK PHASE 1 SOIL EROSION & SEDIMENT CONTROL PLAN (1 OF 2)	DATE: 3/31/2023 SCALE: 1"=20' SHEET NO.: 54 OF 81 DRAWING NO.: C-044.00
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All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.





- NOTES:
1. INSTALL TURBIDITY CURTAIN PRIOR TO WORK AT THE CREST OF THE DAM, INCLUDING BUT NOT LIMITED TO: UTILITY POLE RELOCATION, REMOVAL OR PLACEMENT OF ROADWAY INFRASTRUCTURE (US ROUTE 6), PLACEMENT OF FILL AT THE CREST OF THE DAM.
  2. ANCHORING OF TURBIDITY CURTAIN APPROXIMATELY 60 FEET OFFSHORE IS ANTICIPATED TO AVOID THE STONE DAM SLOPE. APPROXIMATE GROUND ELEVATION AT THIS DISTANCE IS 470, RESULTING IN WATER DEPTH AT NORMAL POOL OF APPROXIMATELY 31 FT.

PHASE 2 EROSION & SEDIMENT CONTROL



**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

Last Saved By: E. Leclair, Thursday, May 26, 2022, 4:21:33 PM  
 Plot Size (ANSI) (11.00 X 17.00 INCHES) Plot Scale: 1"=20'  
 Drawing Name: & Location: C:\p\p\DWELLING\0268637\C-046.dwg

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY:  
R. HANES  
CHECKED BY:  
E. LECLAIR  
DESIGN LEAD:  
D. ROSENTHAL  
SECTION MANAGER:  
E. LECLAIR

DRAWN BY:  
R. HANES  
**GDM Smith**  
11500 American Blvd, Suite 200  
Luthers, NY 12110  
Tel: (518) 782-6800



APPROVED FOR THE CITY OF NEW YORK  
L. SINGH  
ACCOUNTABLE MANAGER  
D. COSTA  
PORTFOLIO MANAGER

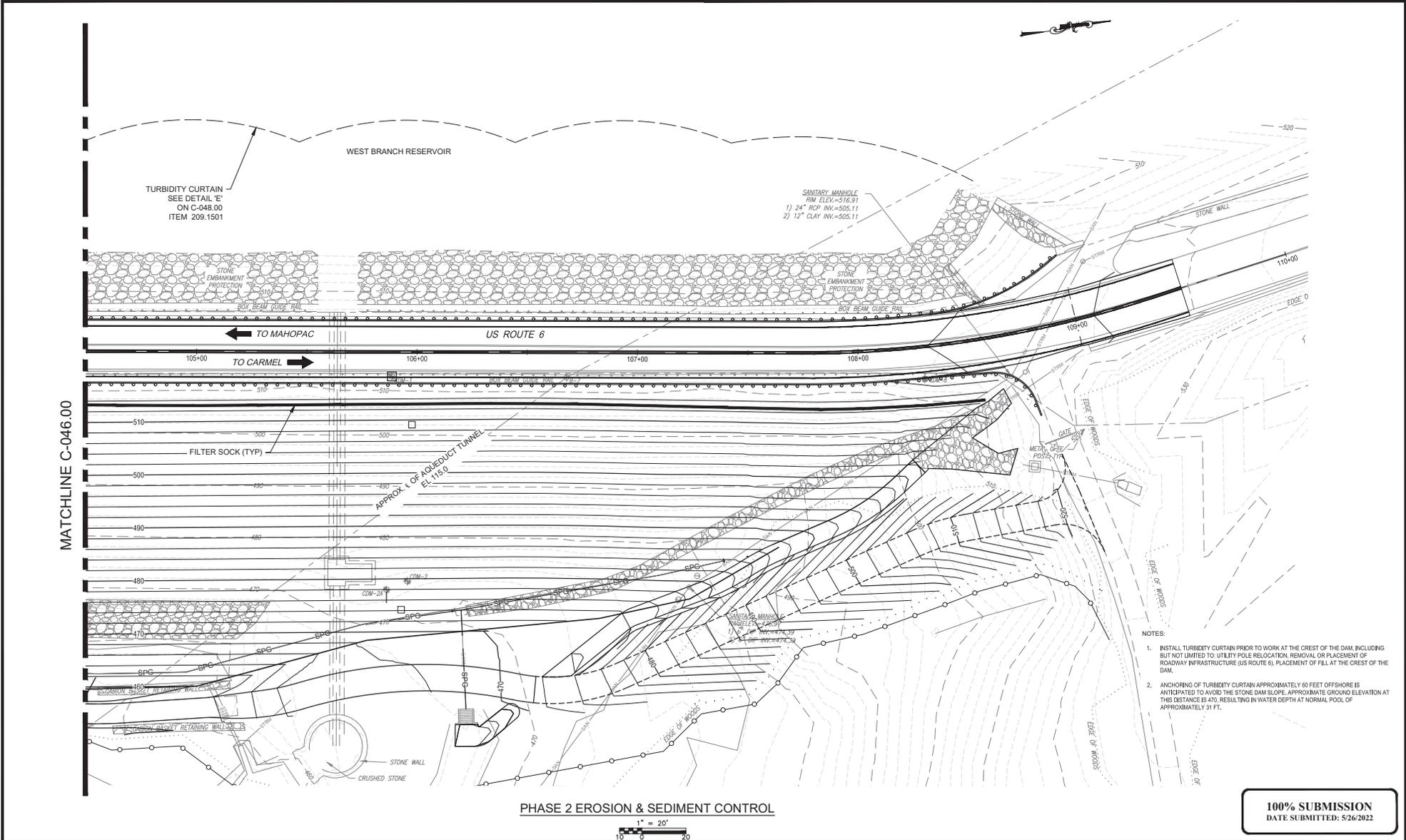
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**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
**PUTNAM COUNTY, NEW YORK**  
PHASE II SOIL EROSION & SEDIMENT CONTROL PLAN  
(1 OF 2)

DATE: 3/31/2023  
SCALE: 1"=20'  
SHEET NO.: 56 OF 81  
DRAWING NO.: C-046.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



- NOTES:
1. INSTALL TURBIDITY CURTAIN PRIOR TO WORK AT THE CREST OF THE DAM, INCLUDING BUT NOT LIMITED TO: UTILITY POLE RELOCATION, REMOVAL OR PLACEMENT OF ROADWAY INFRASTRUCTURE (US ROUTE 6), PLACEMENT OF FILL AT THE CREST OF THE DAM.
  2. ANCHORING OF TURBIDITY CURTAIN APPROXIMATELY 60 FEET OFFSHORE IS ANTICIPATED TO AVOID THE STONE DAM SLOPE. APPROXIMATE GROUND ELEVATION AT THIS DISTANCE IS 470, RESULTING IN WATER DEPTH AT NORMAL POOL OF APPROXIMATELY 31 FT.

**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

**PHASE 2 EROSION & SEDIMENT CONTROL**



NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY:  
R. HANES  
CHECKED BY:  
E. LECLAIR  
DESIGN LEAD:  
D. ROSENTHAL  
SECTION MANAGER:  
E. LECLAIR

DRAWN BY:  
R. HANES  
**GDM Smith**  
11800 American Blvd, Suite 200  
Luthers, NY 12110  
Tel: (518) 762-6800



APPROVED FOR THE CITY OF NEW YORK  
L. SINGH  
ACCOUNTABLE MANAGER  
D. COSTA  
PORTFOLIO MANAGER

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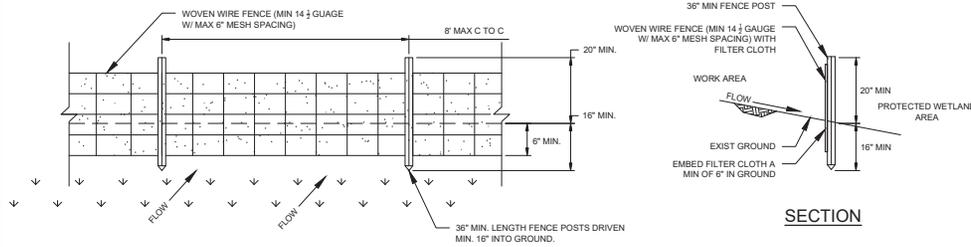
**NEW YORK CITY**  
**ENVIRONMENTAL PROTECTION**  
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
CORONA, NEW YORK 11368  
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**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
PUTNAM COUNTY, NEW YORK  
PHASE II SOIL EROSION & SEDIMENT CONTROL PLAN  
(2 OF 2)

DATE: 3/31/2023  
SCALE: 1"=20'  
SHEET NO.:  
57 OF 81  
DRAWING NO.:  
C-047.00

Leah Savard, R. & Dana POWELL LLP, Thursday, May 26, 2022, and Dana Powell Friday, March 31, 2023, 10:21, 1:37 PM  
 Please Save (ANSI) D:\22\00 X 24\00 (INCHES) Proj Scale 1"=20'  
 Drawing Name & Location: C:\p\p\POWELL\LAND\0286837\C-046.00.dwg

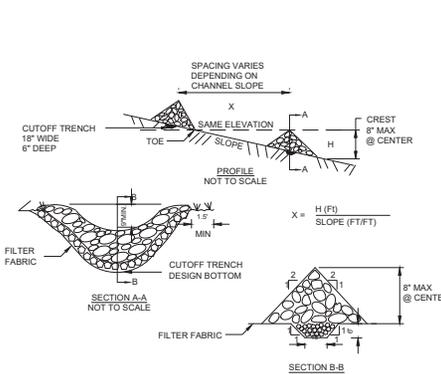
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



ELEVATION

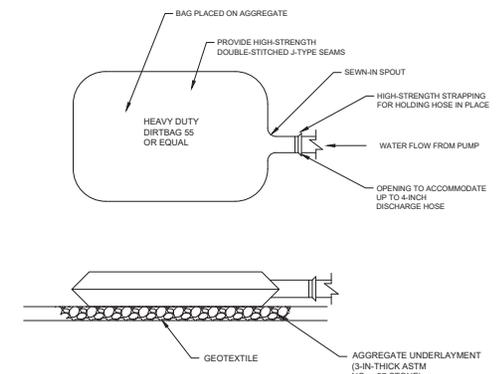
SILT FENCE & TURTLE FENCE

DETAIL A  
NTS C-042.00



PERMANENT CHECK DAM (ITEM 209.110602)

DETAIL B  
NTS C-031.00, C-044.00, C-045.00

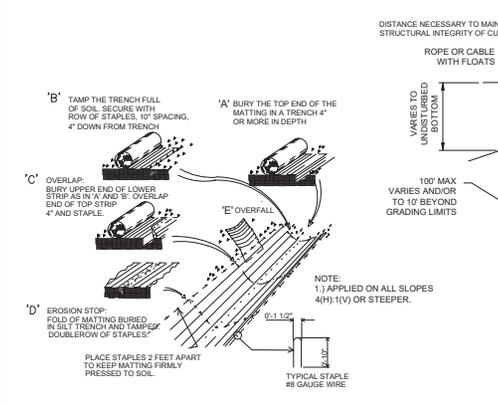


SEDIMENT BAG

DETAIL C  
NTS C-042.00

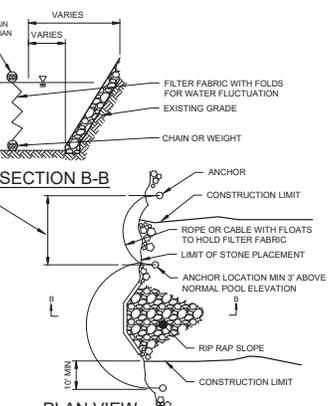
- TURTLE EXCLUSION FENCE NOTES:**
- PRIOR TO CONSTRUCTION ACTIVITY WITHIN THE WETLAND AREA, WORK AREA SHALL BE INVESTIGATED BY A QUALIFIED/TRAINED INDIVIDUAL (HERPETOLOGIST) TO ENSURE NO BOG TURTLES ARE PRESENT.
  - TURTLE EXCLUSION FENCING (DOUBLE ROW SILT FENCE) SHALL BE INSTALLED AS SHOWN ON THE PLAN AND SPACED 12 INCHES APART.
  - INSPECTION OF THE WORK AREA SHALL TAKE PLACE EACH MORNING BY THE QUALIFIED/TRAINED INDIVIDUAL (HERPETOLOGIST) PRIOR TO CONSTRUCTION ACTIVITIES.

- SILT FENCE NOTES:**
- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER 1" OR 1 1/2" TYPE, OR HARDWOOD.
  - FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
  - WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTERCLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUIVALENT.
  - PREFABRICATED UNITS SHALL BE GEOFAB, ENVIRONFENCE, OR APPROVED EQUIVALENT.
  - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.



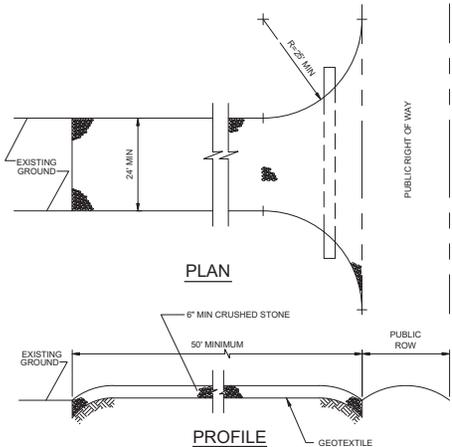
EROSION CONTROL BLANKET

DETAIL D  
NTS C-044.00, C-045.00



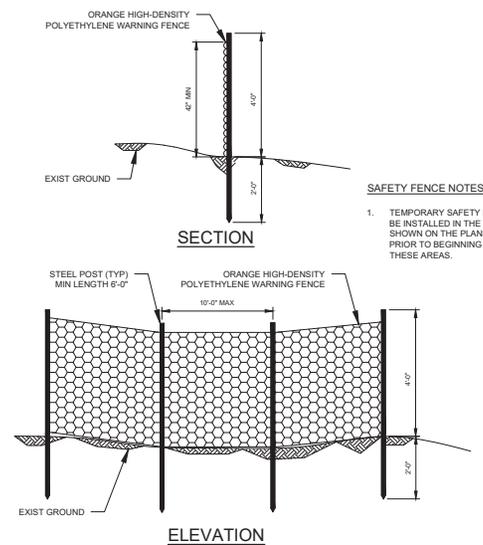
TURBIDITY CURTAIN (ITEM 209.1501)

DETAIL E  
NTS C-042.00, C-045.00, C-047.00



STABILIZED CONSTRUCTION ENTRANCE (ITEM 209.22)

DETAIL F  
NTS C-042.00



SAFETY FENCE NOTES:

- TEMPORARY SAFETY FENCE SHALL BE INSTALLED IN THE LOCATIONS SHOWN ON THE PLANS OR A.C.B.E. PRIOR TO BEGINNING ANY WORK IN THESE AREAS.

TEMPORARY SAFETY FENCE DETAIL

DETAIL G  
NTS C-001.00

**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

NOTES: SEE 209.25, C-045, C-046, C-047, C-048, C-049, C-050, C-051, C-052, C-053, C-054, C-055, C-056, C-057, C-058, C-059, C-060, C-061, C-062, C-063, C-064, C-065, C-066, C-067, C-068, C-069, C-070, C-071, C-072, C-073, C-074, C-075, C-076, C-077, C-078, C-079, C-080, C-081, C-082, C-083, C-084, C-085, C-086, C-087, C-088, C-089, C-090, C-091, C-092, C-093, C-094, C-095, C-096, C-097, C-098, C-099, C-100, C-101, C-102, C-103, C-104, C-105, C-106, C-107, C-108, C-109, C-110, C-111, C-112, C-113, C-114, C-115, C-116, C-117, C-118, C-119, C-120, C-121, C-122, C-123, C-124, C-125, C-126, C-127, C-128, C-129, C-130, C-131, C-132, C-133, C-134, C-135, C-136, C-137, C-138, C-139, C-140, C-141, C-142, C-143, C-144, C-145, C-146, C-147, C-148, C-149, C-150, C-151, C-152, C-153, C-154, C-155, C-156, C-157, C-158, C-159, C-160, C-161, C-162, C-163, C-164, C-165, C-166, C-167, C-168, C-169, C-170, C-171, C-172, C-173, C-174, C-175, C-176, C-177, C-178, C-179, C-180, C-181, C-182, C-183, C-184, 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NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY:  
R. HANES  
CHECKED BY:  
E. LECLAR  
DESIGN LEAD:  
D. ROSENTHAL  
SECTION MANAGER:  
E. LECLAR

DRAWN BY:  
R. HANES  
**GDM Smith**  
11000 American Blvd, Suite 200  
Luthers, NY 12110  
Tel: (518) 762-6800



APPROVED FOR THE CITY OF NEW YORK  
L. SINGH  
ACCOUNTABLE MANAGER  
D. COSTA  
PORTFOLIO MANAGER

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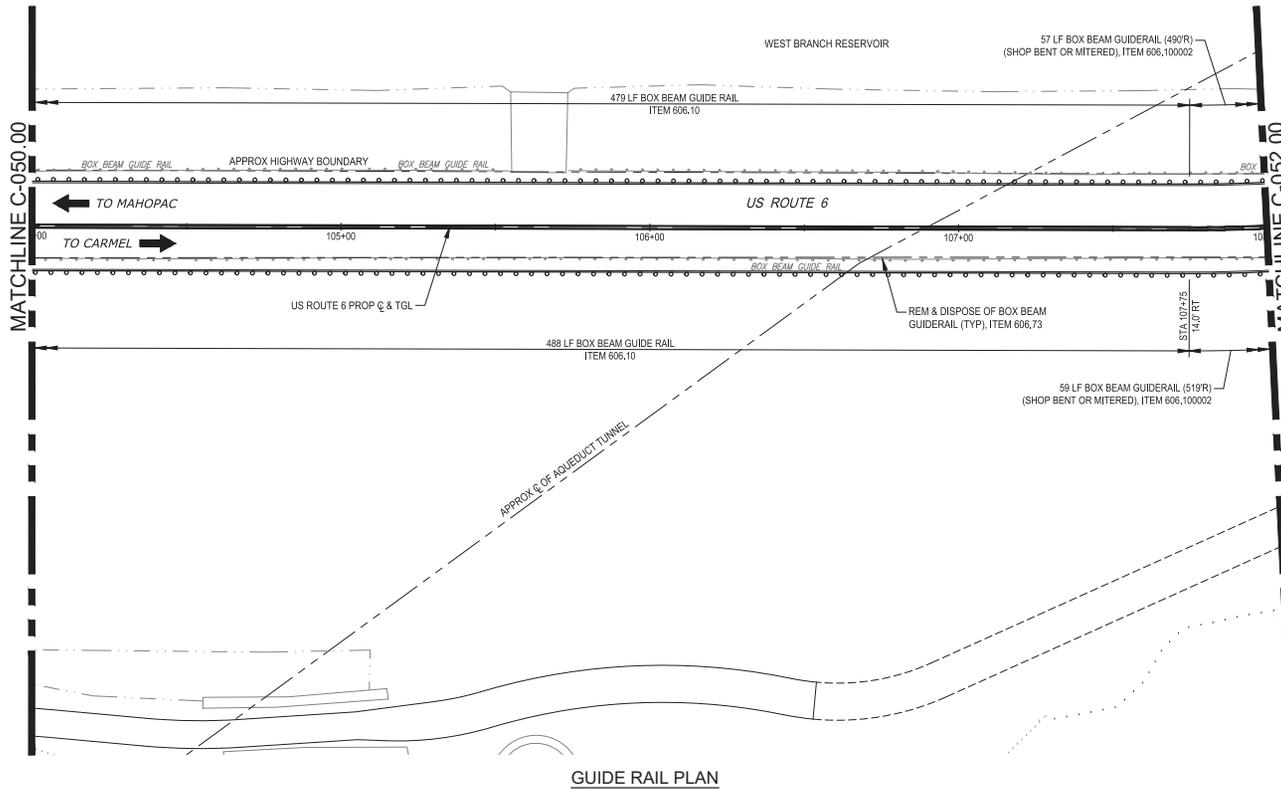
**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
**PUTNAM COUNTY, NEW YORK**  
SOIL EROSION & SEDIMENT CONTROL DETAILS  
(1 OF 2)

DATE: 3/31/2023  
SCALE: N/A  
SHEET NO.: 58 OF 81  
DRAWING NO.: C-048.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.







GUIDE RAIL PLAN

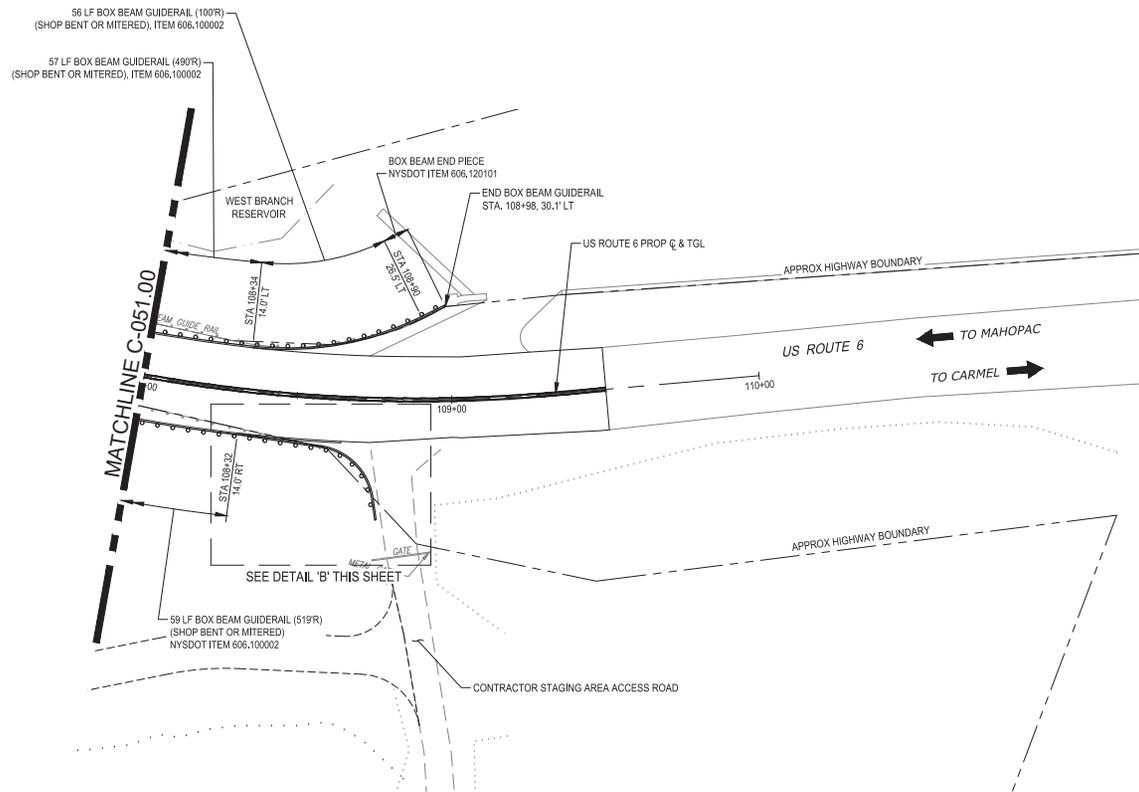


**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

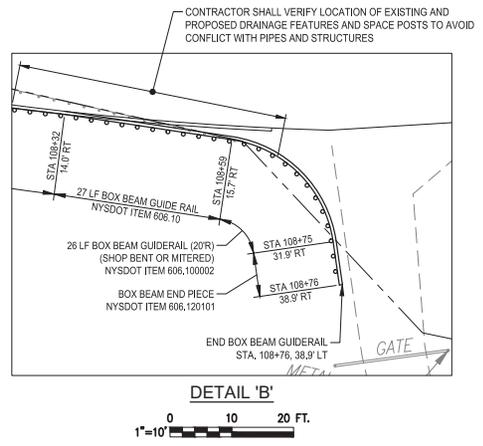
Last Saved By: B. & B. POWELL L.L.P., Thursday, May 26, 2022, 4:29:23 PM  
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 Drawing Name: & Location: C:\p\p\POWELL\LAND\0266637\C-050.00.dwg

DESIGNED BY: S. MURPHY CHECKED BY: E. LECLAIR DESIGN LEAD: S. MURPHY		DRAWN BY: S. MURPHY  11500 American Blvd, Suite 200 Luban, NY 12110 Tel: (518) 782-6800		 		APPROVED FOR THE CITY OF NEW YORK L. SINGH ACCOUNTABLE MANAGER D. COSTA PORTFOLIO MANAGER		<p><small>*WARNING! IT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW, SECTION 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION LAW, SECTION 7209.2.*</small></p> <p><b>NEW YORK CITY</b>  <b>ENVIRONMENTAL PROTECTION</b>          BUREAU OF ENGINEERING DESIGN &amp; CONSTRUCTION          96-05 HORACE HARDING EXPRESSWAY 5th FLOOR          CORONA, NEW YORK 11368          www.nyc.gov/dcp</p>		<p><b>WEST BRANCH AUXILIARY DAM</b>  <b>SLOPE SAFETY IMPROVEMENTS</b>          PUTNAM COUNTY, NEW YORK</p> <p>GUIDE RAIL PLAN (2 OF 3)</p>		DATE: 3/31/2023 SCALE: 1"=20' SHEET NO.: 61 OF 61 DRAWING NO.: C-051.00	
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All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



**GUIDE RAIL PLAN**  
 0 20 40 FT.  
 1"=20'



**DETAIL 'B'**  
 0 10 20 FT.  
 1"=10'

**100% SUBMISSION**  
 DATE SUBMITTED: 5/26/2022

Last Saved By: B. & B. POWELL L.L.P., Thursday, May 05, 2022, and Date Plotted: Friday, March 31, 2023, 12:29:29 PM.  
 Paper Size: ANSI D (22.00 X 34.00 INCHES) Plot Scale: 1"=20'  
 Drawing Name: & Location: C:\p\p\POWELL\LAND\0226637\C-050.00.dwg

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY: S. MURPHY	DRAWN BY: S. MURPHY
CHECKED BY: E. LECLAR	ACCOUNTABLE MANAGER: L. SINGH
DESIGN LEAD: S. MURPHY	PORTFOLIO MANAGER: D. COSTA
SECTION MANAGER: E. LECLAR	

**GPM Smith**  
 11 BROAD AVENUE 5TH FLOOR  
 LUTHER, NY 12110  
 TEL: (518) 782-6800



APPROVED FOR THE CITY OF NEW YORK  
 L. SINGH  
 ACCOUNTABLE MANAGER  
 D. COSTA  
 PORTFOLIO MANAGER

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**ENVIRONMENTAL PROTECTION**  
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**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
**PUTNAM COUNTY, NEW YORK**  
 GUIDE RAIL PLAN (3 OF 3)

DATE: 3/31/2023
SCALE: 1"=20'
SHEET NO.: 62 OF 81
DRAWING NO. C-052.00

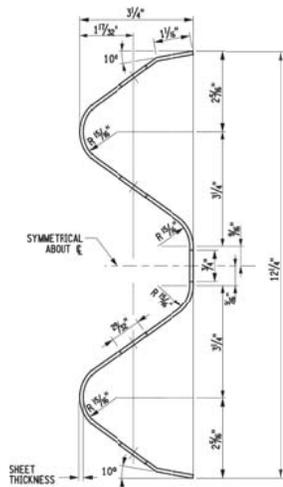
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



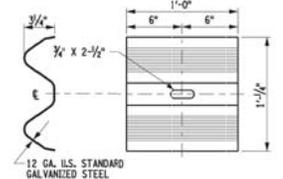




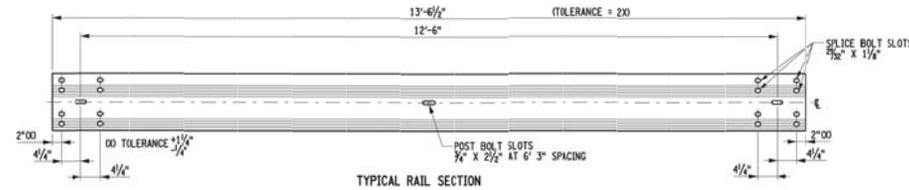




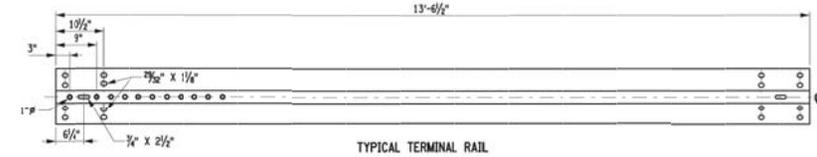
RAIL ELEMENT DETAIL



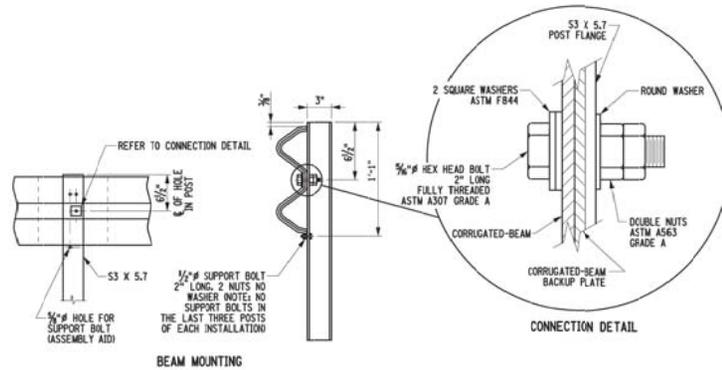
GUIDE RAIL POST BACKUP PLATE



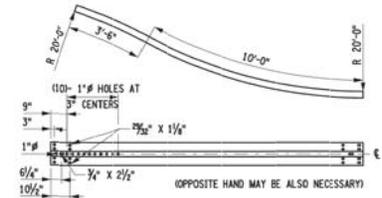
TYPICAL RAIL SECTION



TYPICAL TERMINAL RAIL



CONNECTION DETAIL

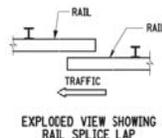


NOTE: OTHER RADI configurations which can be demonstrated to provide the installation shown in typical driveway and opening section may be approved.

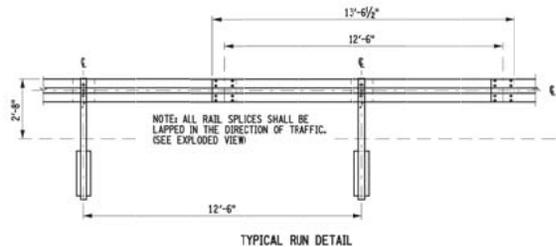
SHOP CURVED RAIL

NOTES:

- BEAMS TO BE ERECTED ON A RADIUS OF 150' OR LESS SHALL BE SHOP WORKED TO THE REQUIRED CURVATURE, AND PAYMENT FOR SUCH CURVED LENGTH WILL BE MADE UNDER THE APPROPRIATE ITEM. SEE SHOP CURVED RAIL. SEE TABLE "A" FOR POST SPACING.
- THE RAIL MOUNTING HEIGHT OF ALL GUIDE RAIL PLACED BEHIND CURB (REGARDLESS OF CURB HEIGHT OR SPEED) SHALL BE MEASURED FROM THE PAYMENT SURFACE WHEN THE OFFSET IS 12" OR LESS, OR FROM THE GROUND SURFACE UNDER THE FACE OF THE RAIL WHEN THE OFFSET IS GREATER THAN 12".
- ADDITIONAL POSTS REQUIRED TO REDUCE DEFLECTION DISTANCE OR BECAUSE OF HORIZONTAL CURVATURE SHALL NOT BE ATTACHED TO THE RAIL ELEMENT. PAYMENT FOR ADDITIONAL POSTS WILL BE MADE IN ACCORDANCE WITH THE PAYMENT FACTORS FOR REDUCED POST SPACING FOR CORRUGATED BEAM IN TABLE 606-2 IN SECTION 606-5.01 OF THE STANDARD SPECIFICATIONS.
- BACKUP PLATES ARE NOT REQUIRED AT END POST CONNECTIONS.



EXPLODED VIEW SHOWING RAIL SPLICE LAP



TYPICAL RUN DETAIL

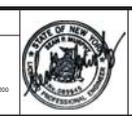
100% SUBMISSION  
DATE SUBMITTED: 5/26/2022

Eastman, B. & Bore-Powell, L.L.P., Tuesday, January 18, 2022 and Date: Plotter: Pktdwg.rvt, March 31, 2023, 10:25:55 PM  
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 Plot Style: TablaBECG.ctb  
 Drawing Name: & Location: C:\pwc\_gf\PROJECTS\10268637\C053.00.dwg

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY: S. MURPHY	DRAWN BY: S. MURPHY
CHECKED BY: E. LECLAIR	ACCOUNTABLE MANAGER: L. SINGH
DESIGN LEAD: S. MURPHY	APPROVED FOR THE CITY OF NEW YORK: D. COSTA
SECTION MANAGER: E. LECLAIR	PORTFOLIO MANAGER

**GPM Smith**  
 11 BROADWAY, Suite 200  
 LUTHER, NY 12110  
 TEL: (518) 762-6800



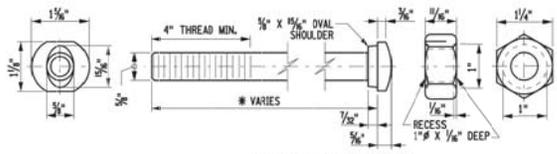
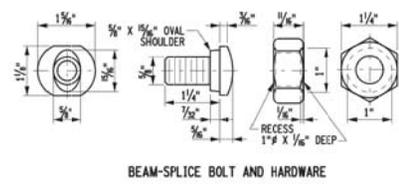
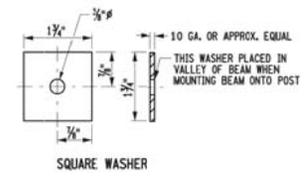
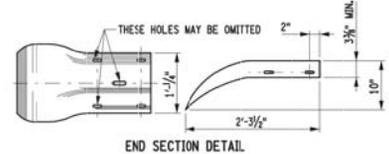
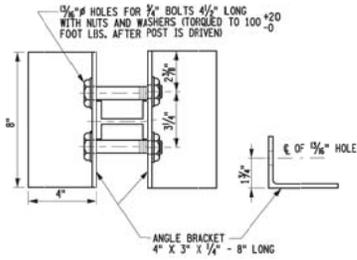
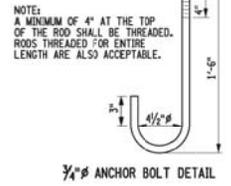
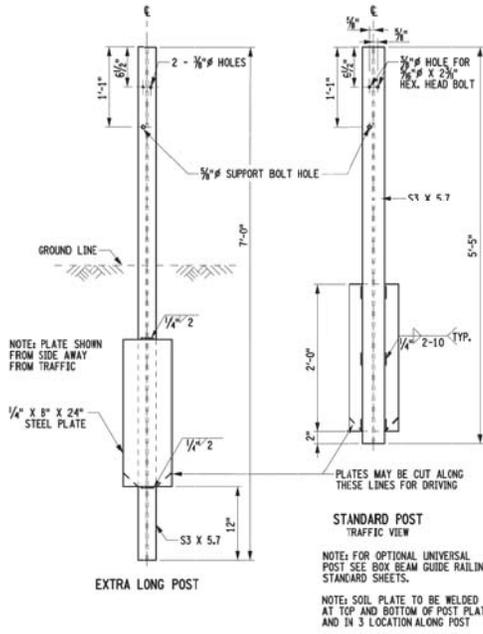
**NYC Environmental Protection**

APPROVED FOR THE CITY OF NEW YORK
L. SINGH ACCOUNTABLE MANAGER
D. COSTA PORTFOLIO MANAGER

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 CORONA, NEW YORK 11368  
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WEST BRANCH AUXILIARY DAM SLOPE SAFETY IMPROVEMENTS PUTNAM COUNTY, NEW YORK	DATE: 3/31/2023
GUIDE RAIL DETAILS (5 OF 6)	SCALE: 1"=20'
	SHEET NO.: 67 OF 81
	DRAWING NO. C-057.00



**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

Last Saved By: B. Bate-Powell Ltd., Tuesday, January 18, 2022 and Date Plotted: Friday, March 31, 2023, 10:25:00 PM  
 Plot Size: ANSI (D) (24.00 X 34.00 INCHES) Plot Scale: 1"=20'  
 Plot Style Table: BECCO\_Drawing.ctb  
 Drawing Name: & Location: C:\pwc\_gf\PROJECTS\140286837\C-058.00.dwg

NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY:  
S. MURPHY  
CHECKED BY:  
E. LECLAIR  
DESIGN LEAD:  
S. MURPHY  
SECTION MANAGER:  
E. LECLAIR



APPROVED FOR THE CITY OF NEW YORK  
L. SINGH  
ACCOUNTABLE MANAGER  
D. COSTA  
PORTFOLIO MANAGER

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CORONA, NEW YORK 11368  
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**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
**PUTNAM COUNTY, NEW YORK**  
GUIDE RAIL DETAILS (6 OF 6)  
DATE: 3/31/2023  
SCALE: 1"=20'  
SHEET NO.: 68 OF 81  
DRAWING NO.: C-058.00

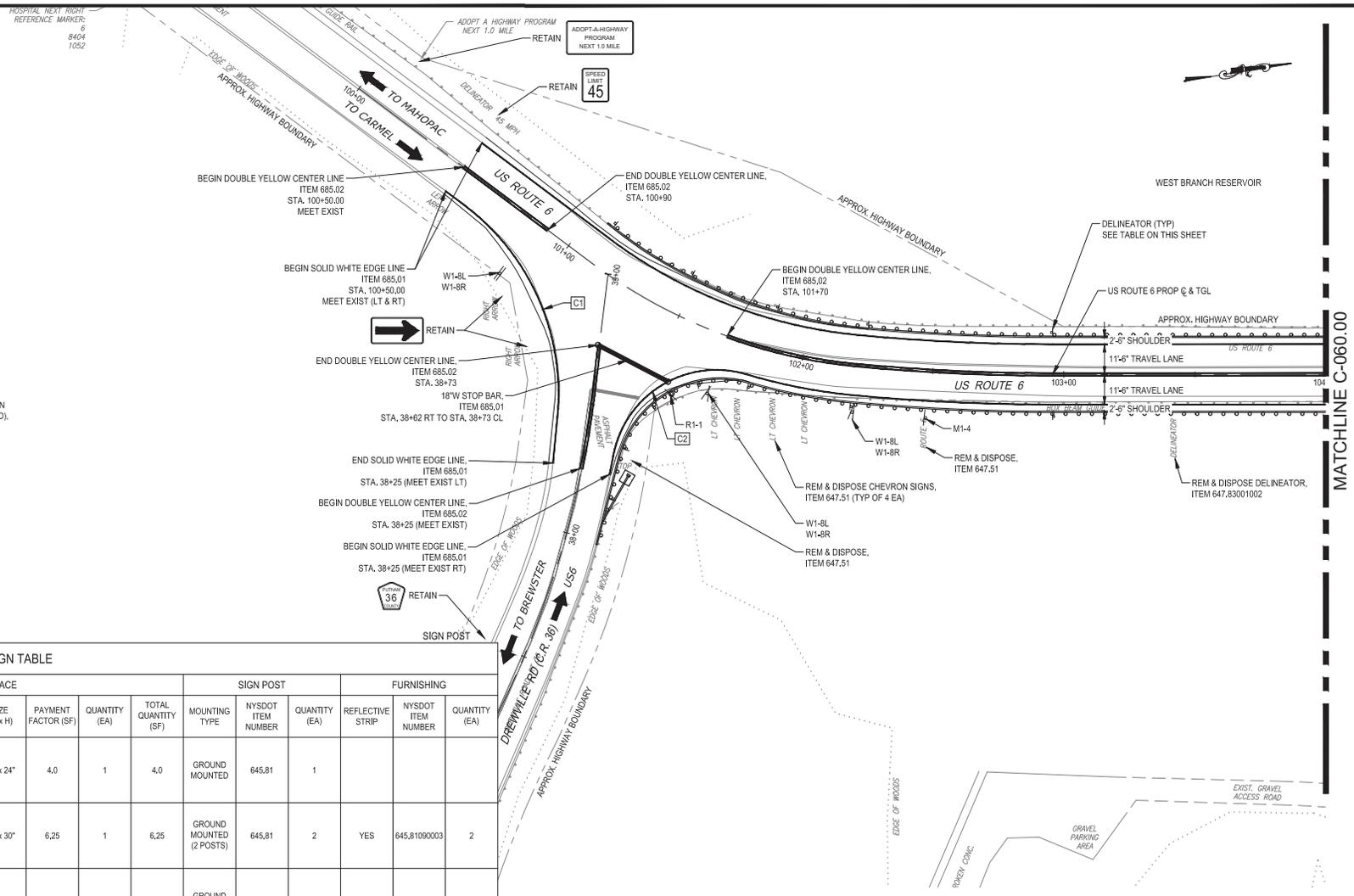
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101+48	LT	1 EA	1 EA	
101+66	RT	1 EA	1 EA	
101+83	RT	1 EA	1 EA	
101+86	LT	1 EA	1 EA	
102+20	RT	1 EA	1 EA	
102+24	LT	1 EA	1 EA	
102+96	RT	1 EA	1 EA	
102+96	LT	1 EA	1 EA	
105+35	LT	1 EA	1 EA	
105+35	RT	1 EA	1 EA	
107+75	LT	1 EA	1 EA	
107+75	RT	1 EA	1 EA	
108+32	RT	1 EA	1 EA	
108+34	LT	1 EA	1 EA	
38+16	RT	1 EA	1 EA	
38+34	RT	1 EA	1 EA	
38+51	RT	1 EA	1 EA	

NOTE: ALL DELINEATOR LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO DETERMINE THE EXACT LOCATION OF DELINEATORS PRIOR TO INSTALLATION. LOCATIONS SHALL CONFORM TO SECTION 317 OF THE NATIONAL MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE NYS DOT STANDARD SPECIFICATIONS AND NYS DOT STANDARD DETAILS.

NOTE: ALL STRIPING SHALL FOLLOW THE OFFSETS FROM THE PROPOSED CONSTRUCTION CENTERLINE AT OFFSETS WITH THE TYPICAL SECTIONS WITH THE EXCEPTION OF THE FOLLOWING:

<b>CURVE C1</b>	<b>CURVE C2</b>
PC STA 100+59.02, 11.50' RT	PC STA 38+25.00, 11.00' RT
PI STA 101+03.02, 11.50' RT	PI STA 101+38.02, 11.50' RT
PT STA 38+43.06, 12.40' LT	PT STA 101+81.20, 11.50' RT
PI N: 935558.23	PI N: 935558.31
PI E: 709850.99	PI E: 709871.20
R: 90.00'	R: 40.00'
L: 92.27'	L: 67.32'
A: 58°44'31"	A: 96°25'59"
T: 50.85'	T: 44.76'

SIGN TABLE														
LOCATION		SIGN FACE							SIGN POST			FURNISHING		
STATION	OFFSET	SIGN FACE LAYOUT	MUTCD NUMBER	NYS DOT ITEM NUMBER	SIZE (W x H)	PAYMENT FACTOR (SF)	QUANTITY (EA)	TOTAL QUANTITY (SF)	MOUNTING TYPE	NYS DOT ITEM NUMBER	QUANTITY (EA)	REFLECTIVE STRIP	NYS DOT ITEM NUMBER	QUANTITY (EA)
102+48	18' RT		M1-4	645.5202	24" x 24"	4.0	1	4.0	GROUND MOUNTED	645.81	1			
38+58	30' RT		R1-1	645.5202	30" x 30"	6.25	1	6.25	GROUND MOUNTED (2 POSTS)	645.81	2	YES	645.81090003	2
100+85	24' RT		W1-8L	645.5202	18" x 24"	3.0	3	9.0	GROUND MOUNTED	645.81	3	YES	645.81090003	6
101+70	23' RT		W1-8R	645.5202	18" x 24"	3.0	3	9.0	MOUNTED BACK TO BACK WITH W1-8L					



SIGN & PAVEMENT MARKING PLAN



**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

Last Saved By: B. & B. DATE: 05/26/2022, 10:10:23 AM  
 Plot Date: 05/26/2022, 10:10:23 AM  
 Plot Scale: 1"=20'  
 Drawing Name: C:\Location\Drawings\102686197\C-058.00.dwg

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY:  
S. MURPHY  
CHECKED BY:  
E. LECLAR  
DESIGN LEAD:  
S. MURPHY  
SECTION MANAGER:  
E. LECLAR



APPROVED FOR THE CITY OF NEW YORK  
L. SINGH  
ACCOUNTABLE MANAGER  
P. COSTA  
PORTFOLIO MANAGER

\*WARNING: IT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW, SECTION 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION LAW, SECTION 7209.2.\*

**NEW YORK CITY**  
**ENVIRONMENTAL PROTECTION**  
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
CORONA, NEW YORK 11368  
www.nyc.gov/dcp

**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
PUTNAM COUNTY, NEW YORK  
SIGN & PAVEMENT MARKING PLAN (1 OF 3)

DATE: 3/31/2023  
SCALE: 1"=20'  
SHEET NO.: 69 OF 81  
DRAWING NO.: C-058.00

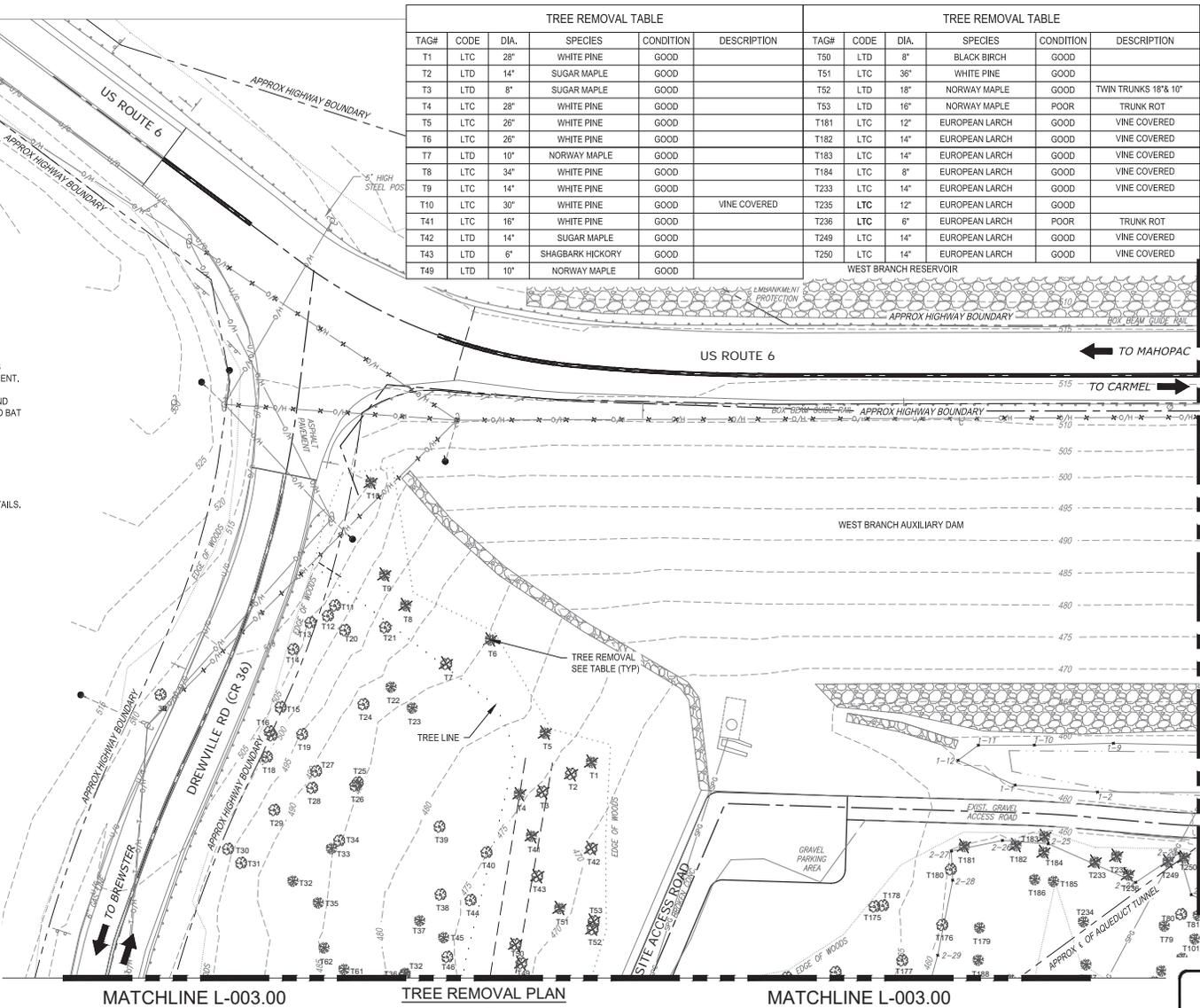
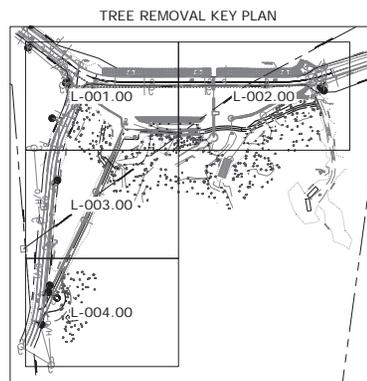
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.





TREE REMOVAL TABLE						TREE REMOVAL TABLE					
TAG#	CODE	DIA.	SPECIES	CONDITION	DESCRIPTION	TAG#	CODE	DIA.	SPECIES	CONDITION	DESCRIPTION
T1	LTC	28"	WHITE PINE	GOOD		T50	LTD	8"	BLACK BIRCH	GOOD	
T2	LTD	14"	SUGAR MAPLE	GOOD		T51	LTC	36"	WHITE PINE	GOOD	
T3	LTD	8"	SUGAR MAPLE	GOOD		T52	LTD	18"	NORWAY MAPLE	GOOD	TWIN TRUNKS 18' & 10'
T4	LTC	28"	WHITE PINE	GOOD		T53	LTD	16"	NORWAY MAPLE	POOR	TRUNK ROT
T5	LTC	26"	WHITE PINE	GOOD		T181	LTC	12"	EUROPEAN LARCH	GOOD	VINE COVERED
T6	LTC	26"	WHITE PINE	GOOD		T182	LTC	14"	EUROPEAN LARCH	GOOD	VINE COVERED
T7	LTD	10"	NORWAY MAPLE	GOOD		T183	LTC	14"	EUROPEAN LARCH	GOOD	VINE COVERED
T8	LTC	34"	WHITE PINE	GOOD		T184	LTC	8"	EUROPEAN LARCH	GOOD	VINE COVERED
T9	LTC	14"	WHITE PINE	GOOD		T233	LTC	14"	EUROPEAN LARCH	GOOD	VINE COVERED
T10	LTC	30"	WHITE PINE	GOOD	VINE COVERED	T235	LTC	12"	EUROPEAN LARCH	GOOD	
T41	LTC	16"	WHITE PINE	GOOD		T236	LTC	6"	EUROPEAN LARCH	POOR	TRUNK ROT
T42	LTD	14"	SUGAR MAPLE	GOOD		T249	LTC	14"	EUROPEAN LARCH	GOOD	VINE COVERED
T43	LTD	6"	SHAGBARK HICKORY	GOOD		T250	LTC	14"	EUROPEAN LARCH	GOOD	VINE COVERED
T49	LTD	10"	NORWAY MAPLE	GOOD							

- NOTES:
- PAYMENT OF TREE REMOVAL SHALL BE BASED ON UNIT PRICE AS OUTLINED IN SPECIFICATION 01 27 00 - MEASUREMENT AND PAYMENT.
  - TREE CUTTING SHALL ONLY OCCUR BETWEEN NOVEMBER 1ST AND MARCH 31ST IN CONSIDERATION OF THE NORTHERN LONG EARED BAT AND THE INDIANA BAT.
  - TREE PROTECTION AS DESCRIBED IN THE SITE CLEARING SPECIFICATION WILL BE REQUIRED ON THE FOLLOWING TREES:  
T11; 20; 21; 40; 44; 169; 173; 175; 178; 180; 185 AND 186.
  - SEE DETAIL F ON DRAWING C-049.00 FOR TREE PROTECTION DETAILS.



MATCHLINE L-002.00

**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022  
REVISED 10/18/2022

Leaf Scan by: 6 DataPOWELL LLP, Friday, March 31, 2023, 12:25:30 PM  
Paper Size: ANSI (D) (24.00 X 34.00 INCHES) Plot Scale: 1"=20'  
Drawing Name: & Location: C:\p\POWELL\DWG\0266637L\001.00.dwg

DESIGNED BY: S. MURPHY	DRAWN BY: M. POWELL
CHECKED BY: E. LECLAR	ACCOUNTABLE MANAGER: L. SINGH
DESIGN LEAD: S. MURPHY	APPROVED FOR THE CITY OF NEW YORK: D. COSTA
SECTION MANAGER: E. LECLAR	



APPROVED FOR THE CITY OF NEW YORK  
L. SINGH  
ACCOUNTABLE MANAGER  
D. COSTA  
PORTFOLIO MANAGER

**NEW YORK CITY**  
**ENVIRONMENTAL PROTECTION**  
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
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CORONA, NEW YORK 11368  
www.nyc.gov/dcp

**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
SUTNAM COUNTY, NEW YORK

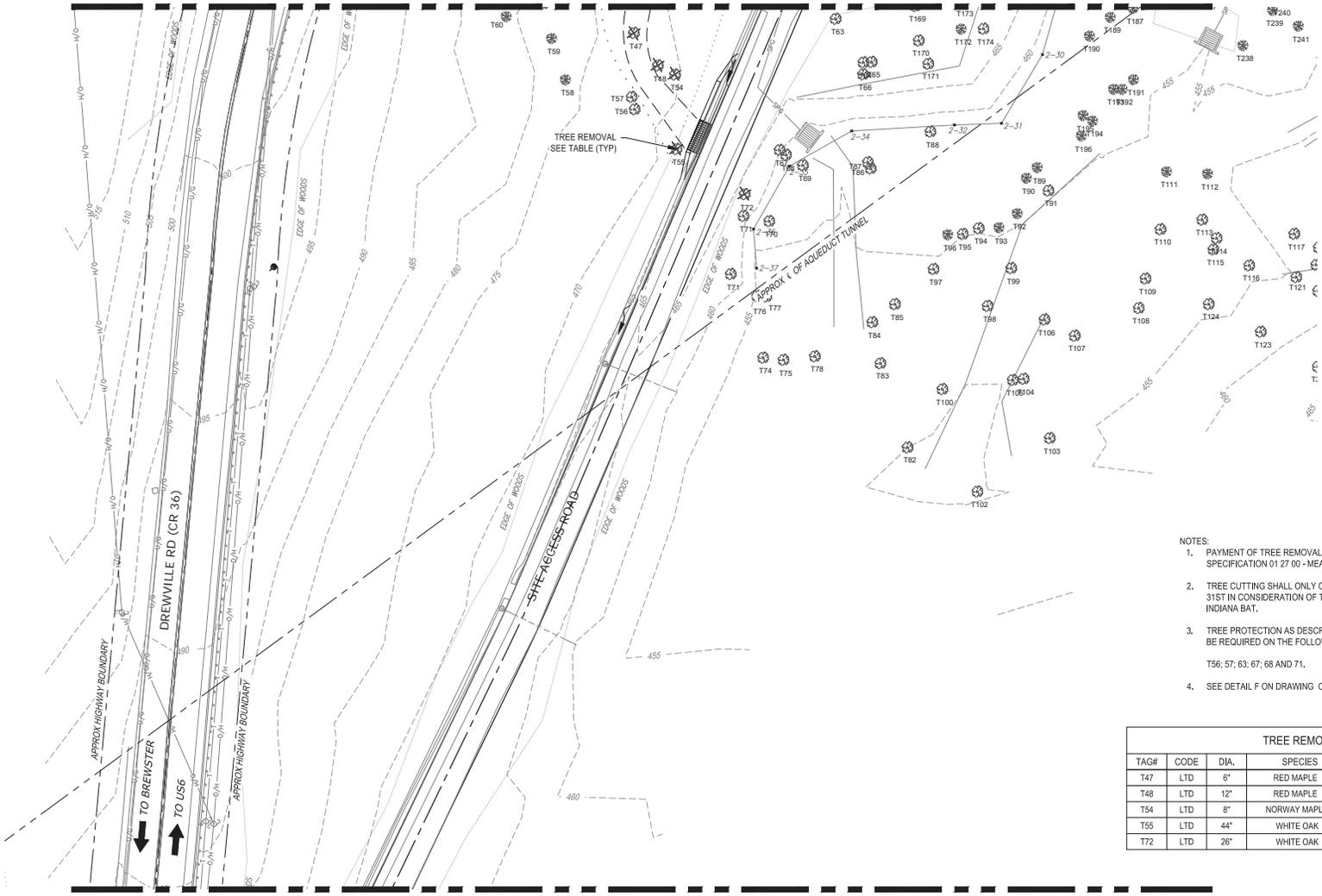
TREE REMOVAL PLAN (1 OF 4)

DATE: 3/31/2023  
SCALE: 1"=20'  
SHEET NO.: 72 OF 81  
DRAWING NO.: L-001.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



MATCHLINE L-001.00



MATCHLINE L-004.00

**TREE REMOVAL PLAN**



- NOTES:
- PAYMENT OF TREE REMOVAL SHALL BE BASED ON UNIT PRICE AS OUTLINED IN SPECIFICATION 01 27 00 - MEASUREMENT AND PAYMENT.
  - TREE CUTTING SHALL ONLY OCCUR BETWEEN NOVEMBER 1ST AND MARCH 31ST IN CONSIDERATION OF THE NORTHERN LONG EARED BAT AND THE INDIANA BAT.
  - TREE PROTECTION AS DESCRIBED IN THE SITE CLEARING SPECIFICATION WILL BE REQUIRED ON THE FOLLOWING TREES:  
T56; 57; 63; 67; 68 AND 71.
  - SEE DETAIL F ON DRAWING C-049.00 FOR TREE PROTECTION DETAILS.

TREE REMOVAL TABLE					
TAG#	CODE	DIA.	SPECIES	CONDITION	DESCRIPTION
T47	LTD	6"	RED MAPLE	GOOD	
T48	LTD	12"	RED MAPLE	GOOD	
T54	LTD	8"	NORWAY MAPLE	GOOD	VINE COVERED
T55	LTD	44"	WHITE OAK	POOR	TRUNK ROT
T72	LTD	26"	WHITE OAK	POOR	TRUNK ROT

**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022  
REVISED 10/18/2022

Last Saved By: E. Leclair  
 Date: 5/26/2022 10:23:43 AM  
 Plot Size: ANSI (D) (24.00 X 34.00 INCHES) Plot Scale: 1"=20'  
 Drawing Name: & Location: C:\p\p\POWELL\LD\026637\LD01.00.dwg

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY:  
S. MURPHY  
CHECKED BY:  
E. LECLAIR  
DESIGN LEAD:  
S. MURPHY  
SECTION MANAGER:  
E. LECLAIR

DRAWN BY:  
M. POWELL  
**GDM Smith**  
11500 American Blvd, Suite 200  
Latham, NY 12110  
Tel: (518) 762-6800



APPROVED FOR THE CITY OF NEW YORK  
L. SINGH  
ACCOUNTABLE MANAGER  
D. COSTA  
PORTFOLIO MANAGER

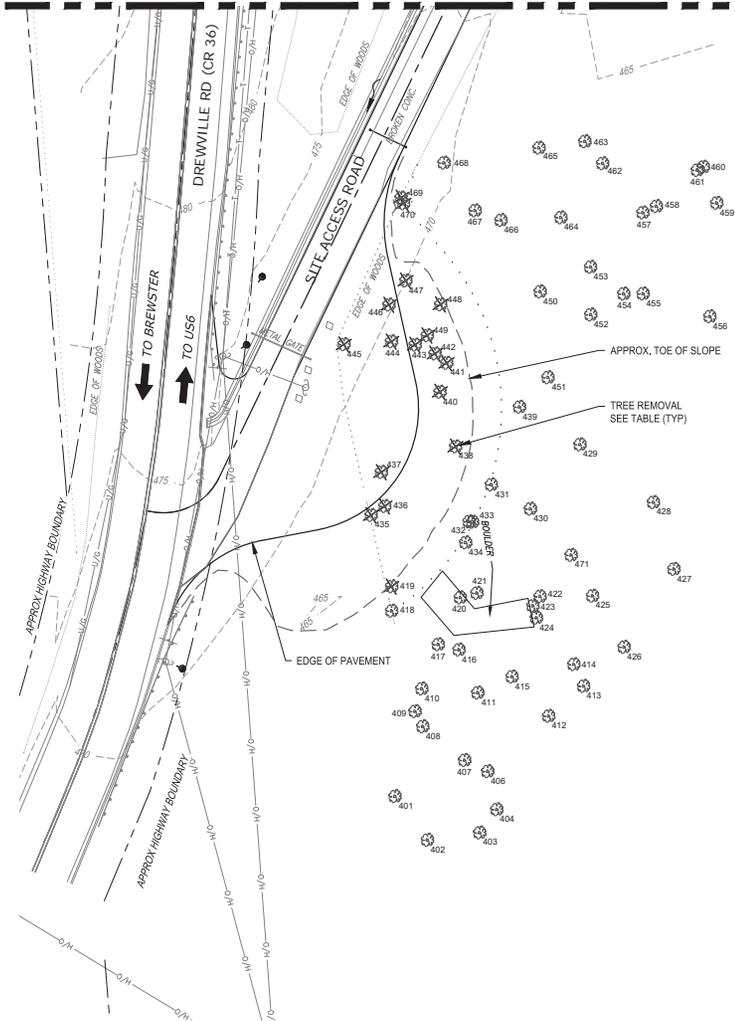
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www.nyc.gov/dcp

**WEST BRANCH AUXILIARY DAM SLOPE SAFETY IMPROVEMENTS**  
SUTNAM COUNTY, NEW YORK  
TREE REMOVAL PLAN (3 OF 4)  
DATE: 3/31/2023  
SCALE: 1"=20'  
SHEET NO.: 74 OF 81  
DRAWING NO.: L-003.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

MATCHLINE L-003.00



TREE REMOVAL TABLE					
TAG#	CODE	DIA.	SPECIES	CONDITION	DESCRIPTION
T419	LTD	15"	SUGAR MAPLE	GOOD	
T435	LTD	6"	SUGAR MAPLE	GOOD	
T436	LTD	28"	SUGAR MAPLE	POOR	TRUNK ROT
T437	LTD	5"	SUGAR MAPLE	GOOD	
T438	LTD	5"	SUGAR MAPLE	GOOD	
T440	LTD	8"	RED MAPLE	GOOD	
T441	LTD	16"	WHITE ASH	GOOD	
T442	LTD	5"	HOP HORNBEAM	GOOD	
T443	LTD	4"	SUGAR MAPLE	GOOD	
T444	LTD	9"	SUGAR MAPLE	GOOD	
T445	LTD	7"	AMERICAN ELM	GOOD	
T446	LTD	8"	HOP HORNBEAM	GOOD	
T447	LTD	8"	SUGAR MAPLE	GOOD	
T448	LTD	11"	RED MAPLE	GOOD	
T449	LTD	23"	WHITE ASH	GOOD	
T469	LTD	6"	AMERICAN ELM	GOOD	
T470	LTD	10"	RED MAPLE	GOOD	

- NOTES:
- PAYMENT OF TREE REMOVAL SHALL BE BASED ON UNIT PRICE AS OUTLINED IN SPECIFICATION 01 27 00 - MEASUREMENT AND PAYMENT.
  - TREE CUTTING SHALL ONLY OCCUR BETWEEN NOVEMBER 1ST AND MARCH 31ST IN CONSIDERATION OF THE NORTHERN LONG EARED BAT AND THE INDIANA BAT.
  - TREE PROTECTION AS DESCRIBED IN THE SITE CLEARING SPECIFICATION WILL BE REQUIRED ON THE FOLLOWING TREES:  
T418; 420; 421; 431; 432; 433; 434; 439; 450; 451; 466; 467 AND 468.
  - SEE DETAIL F ON DRAWING C-049.00 FOR TREE PROTECTION DETAILS.

TREE REMOVAL PLAN  
1" = 20'  
0 10 20

**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022  
REVISED 10/18/2022

Last Saved By: E. Leclair; Date: 5/26/2022 10:23:48 AM; File Path: C:\Users\leclair\OneDrive\Documents\2022\5/26/2022\1000\1000.dwg; Plot Style Table: REDUCED.ctb; Drawing Name: L-004.dwg; Location: C:\Users\leclair\OneDrive\Documents\2022\5/26/2022\1000\1000.dwg

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY:  
S. MURPHY  
CHECKED BY:  
E. LECLAIR  
DESIGN LEAD:  
S. MURPHY  
SECTION MANAGER:  
E. LECLAIR

DRAWN BY:  
M. POWELL  
**GPM Smith**  
11500 American Blvd, Suite 200  
Latham, NY 12110  
Tel: (518) 762-6800



APPROVED FOR THE CITY OF NEW YORK  
L. SINGH  
ACCOUNTABLE MANAGER  
D. COSTA  
PORTFOLIO MANAGER

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CORONA, NEW YORK 11368  
www.nyc.gov/dcp

**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
PUTNAM COUNTY, NEW YORK  
TREE REMOVAL PLAN (4 OF 4)

DATE: 3/31/2023  
SCALE: 1"=20'  
SHEET NO.:  
75 OF 81  
DRAWING NO.:  
L-004.00

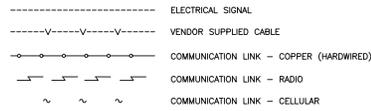
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

GENERAL INSTRUMENT OR FUNCTION SYMBOLS

SHARED DISPLAY/SHARED CONTROL	PRIMARY CHOICE	SECONDARY CHOICE	COMPUTER SOFTWARE	DISCRETE	LOCATION AND ACCESSIBILITY
					FIELD MOUNTED AND NORMALLY OPERATOR ACCESSIBLE
					PRIMARY CONTROL PANEL MOUNTED AND NORMALLY OPERATOR ACCESSIBLE
					PRIMARY CONTROL PANEL MOUNTED AND NOT NORMALLY OPERATOR ACCESSIBLE
					SECONDARY CONTROL PANEL MOUNTED AND NORMALLY OPERATOR ACCESSIBLE
					SECONDARY CONTROL PANEL MOUNTED AND NOT NORMALLY OPERATOR ACCESSIBLE



INSTRUMENT LINE SYMBOLS



ELECTRICAL SOURCES

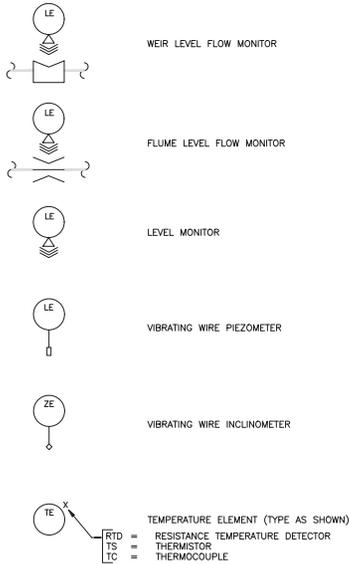


INSTRUMENTATION FUNCTION CODE

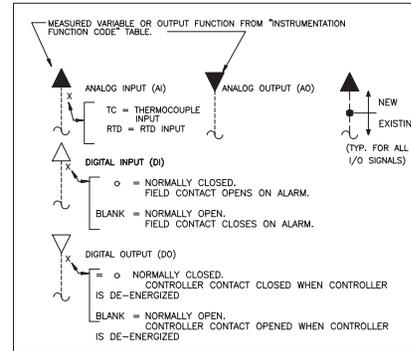
FIRST LETTERS	SUCCEEDING LETTERS				
	COLUMN 1 MEASURED/INITIATING VARIABLE	COLUMN 2 VARIABLE MODIFIER	COLUMN 3 READOUT/PASSIVE FUNCTION	COLUMN 4 OUTPUT/ACTIVE FUNCTION	COLUMN 5 FUNCTION MODIFIER
A ANALYSIS			ALARM		
B BURNER, COMBUSTION			USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
C USER'S CHOICE				CONTROL	CLOSED
D USER'S CHOICE	DIFFERENCE, DIFFERENTIAL				DEVIATION
E VOLTAGE			SENSOR, PRIMARY ELEMENT		
F FLOW, FLOW RATE	RATIO				
G USER'S CHOICE			GLASS, GAUGE, VIEWING DEVICE		
H HAND					HIGH
I CURRENT			INDICATE		
J POWER			SCAN		
K TIME, SCHEDULE	TIME RATE OF CHANGE			CONTROL STATION	
L LEVEL			LIGHT		LOW
M MOISTURE					MIDDLE, INTERMEDIATE
N USER'S CHOICE			USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
O USER'S CHOICE			ORIFICE, RESTRICTION POINT (TEST CONNECTION)		OPEN
P PRESSURE					
Q QUANTITY	INTEGRATE, TOTALIZE		INTEGRATE, TOTALIZE RECORD		
R RADIATION					RUN
S SPEED, FREQUENCY	SAFETY			SWITCH	STOP
T TEMPERATURE			MULTIFUNCTION	TRANSMIT	
U MULTIVARIABLE				VALVE, DAMPER, LOUVER	
V VIBRATION, MECHANICAL ANALYSIS					
W WEIGHT, FORCE			WELL, PROBE		
X UNCLASSIFIED (1)	X-AXIS		ACCESSORY DEVICES, UNCLASSIFIED (1)	UNCLASSIFIED (1)	UNCLASSIFIED (1)
Y EVENT, STATE, PRESENCE	Y-AXIS			AUXILIARY DEVICES	
Z POSITION, DIMENSION	Z-AXIS, SAFETY INSTRUMENT SYSTEM			DRIVER, ACTUATOR, UNCLASSIFIED, FINAL CONTROL ELEMENT	

TABLE NOTES:  
(1) WHEN USED SYMBOL OR SIGNAL LINE IS ANNOTATED.

PRIMARY ELEMENTS



I/O SIGNALS



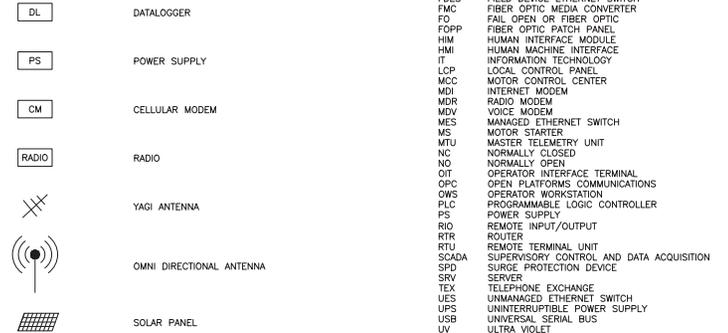
GENERAL NOTES

- THIS LEGEND APPLIES TO P&IDs ONLY AND MAY DIFFER FROM LEGENDS FOR OTHER SHEETS.
- IN GENERAL THIS LEGEND SHEET AND THE P&IDs ARE BASED ON THE INTERNATIONAL SOCIETY OF AUTOMATION (ISA) STANDARDS AND RECOMMENDED PRACTICES FOR INSTRUMENTATION AND CONTROL. SOME MODIFICATIONS, ADDITIONS AND ALTERATIONS HAVE BEEN MADE AS REQUIRED TO ACCOMMODATE PROJECT REQUIREMENTS.
- SOME PROCESS ITEMS SUCH AS EQUIPMENT ISOLATION VALVES, BYPASS LINES, ETC., WHICH ARE NOT CRITICAL FOR AN UNDERSTANDING OF THE INSTRUMENTATION FUNCTIONS ARE NOT SHOWN ON THE P&IDs.
- SEE ELECTRICAL AND MECHANICAL SHEETS AND SPECIFICATIONS FOR ADDITIONAL CONTROL AND INTERLOCK REQUIREMENTS.
- LIGHTER WEIGHT LINES, SHOWN AS \_\_\_\_\_, INDICATE EQUIPMENT, INSTRUMENTS OR PIPING THAT ARE EXISTING. WEIGHTED LINES, SHOWN AS \_\_\_\_\_ OR HEAVIER \_\_\_\_\_, INDICATE EQUIPMENT, INSTRUMENTS OR PIPING THAT ARE NEW. DASHED WEIGHTED LINES, SHOWN AS \_\_\_\_\_, INDICATED EQUIPMENT, INSTRUMENTS OR PIPING THAT ARE GROUPED AS A PACKAGE.

GENERAL ABBREVIATIONS

ACK	ACKNOWLEDGE
ADH	HARDWARE ALARM DIALER
AI	ANALOG INPUT
AO	ANALOG OUTPUT
ATS	AUTOMATIC TRANSFER SWITCH
CNV	PROTOCOL CONVERTER
CPU	CENTRAL PROCESSING UNIT
DI	DIGITAL OR DISCRETE INPUT
DO	DIGITAL OR DISCRETE OUTPUT
FC	FAIL CLOSED
FDES	FIELD DEVICE ETHERNET SWITCH
FMC	FIBER OPTIC MEDIA CONVERTER
FO	FAIL OPEN OR FIBER OPTIC
FOPP	FIBER OPTIC PATCH PANEL
HIM	HUMAN INTERFACE MODULE
HMI	HUMAN MACHINE INTERFACE
IT	INFORMATION TECHNOLOGY
LCP	LOCAL CONTROL PANEL
MCC	MOTOR CONTROL CENTER
MDI	INTERNET MODEM
MDR	RADIO MODEM
MDV	VOICE MODEM
MES	MANAGED ETHERNET SWITCH
MS	MOTOR STARTER
MTU	MASTER TELEMETRY UNIT
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
OIT	OPERATOR INTERFACE TERMINAL
OPC	OPEN PLATFORMS COMMUNICATIONS
OVS	OPERATOR WORKSTATION
PLC	PROGRAMMABLE LOGIC CONTROLLER
PS	POWER SUPPLY
RIO	REMOTE INPUT/OUTPUT
RTR	ROUTER
RTU	REMOTE TERMINAL UNIT
SCADA	SUPERVISORY CONTROL AND DATA ACQUISITION
SPD	SURGE PROTECTION DEVICE
SRV	SERVER
TEX	TELEPHONE EXCHANGE
UES	UNMANAGED ETHERNET SWITCH
UPS	UNINTERRUPTIBLE POWER SUPPLY
USB	UNIVERSAL SERIAL BUS
UV	ULTRA VIOLET
VFD	VARIABLE FREQUENCY DRIVE

SYSTEM ARCHITECTURE SYMBOLS

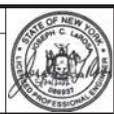


100% SUBMISSION  
DATE SUBMITTED: 5/26/2022

Lead: David B. & Date: 5/26/2022 Thursday, May 26, 2022 and Date Plotted: Friday, May 27, 2022 12:23:54 PM  
 Plot Size: ANSI D (11.00 X 17.00 INCHES) Plot Scale: 1:1  
 Drawing Name: & Location: C:\p\01\DWELLING\01\DWELLING\01\DWELLING.dwg

NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY: P. JENKINS	DRAWN BY: P. JENKINS
CHECKED BY: J. LAROSA	
DESIGN LEAD: P. JENKINS	
SECTION MANAGER: E. LECLAIR	



APPROVED FOR THE CITY OF NEW YORK
J. SINGH ACCOUNTABLE MANAGER
P. COSTA PORTFOLIO MANAGER

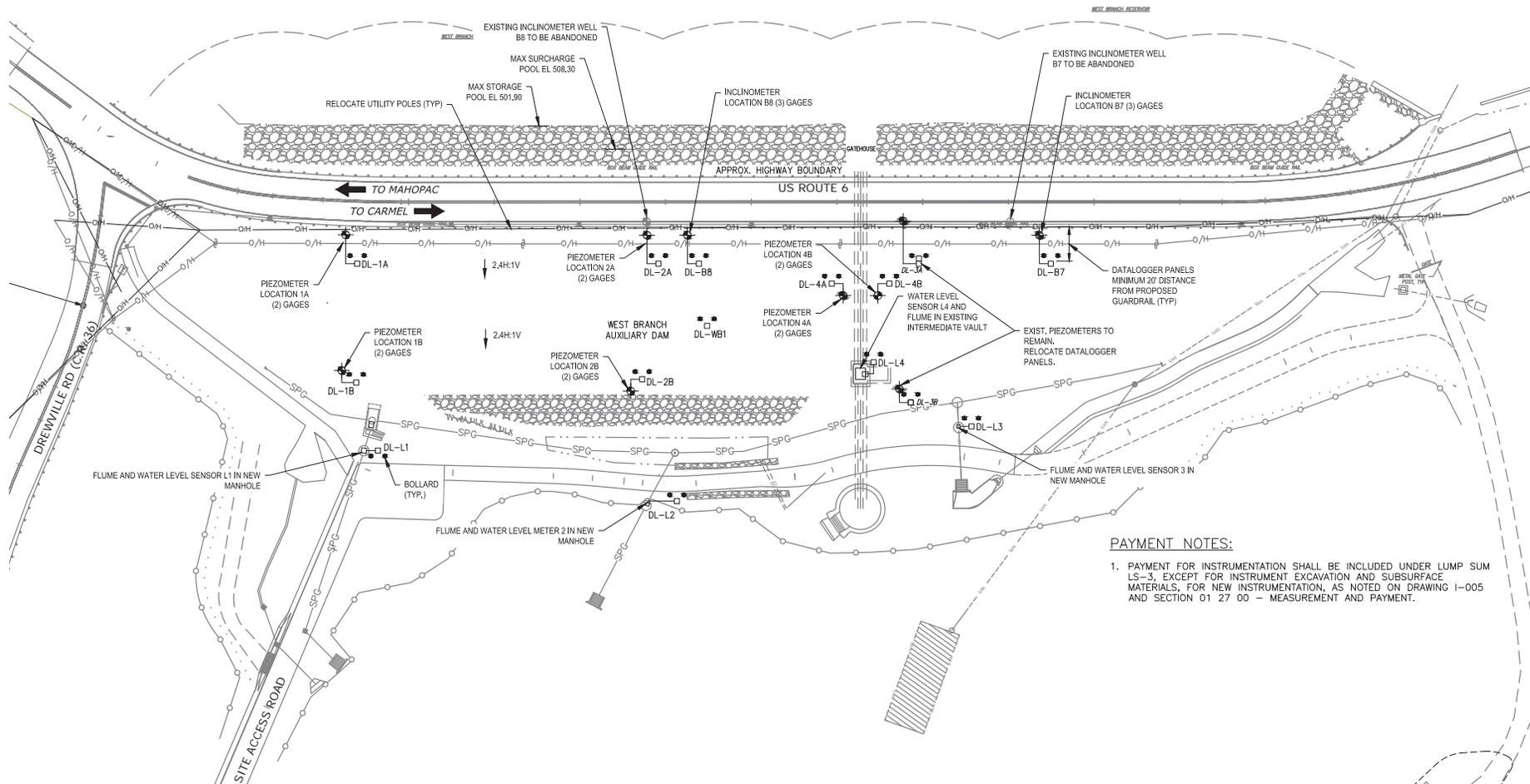
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CORONA, NEW YORK 11368  
www.nyc.gov/dcp

**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
**PUTNAM COUNTY, NEW YORK**  
  
INSTRUMENTATION LEGEND

DATE: 3/31/2023
SCALE: NA
SHEET NO: 76 OF 81
DRAWING NO: GI-001.00

Last Saved By: P. JENKINS Thursday, May 25, 2023 12:24:07 PM  
 Plot Size: ANSI D (24.00 X 36.00 INCHES) Plot Scale: 1" = 30'  
 Drawing Name: & Location: C:\pvc\_gf\PROJECTS\LAND\02666901\001-000.dwg



**PAYMENT NOTES:**

- PAYMENT FOR INSTRUMENTATION SHALL BE INCLUDED UNDER LUMP SUM LS-3, EXCEPT FOR INSTRUMENT EXCAVATION AND SUBSURFACE MATERIALS, FOR NEW INSTRUMENTATION, AS NOTED ON DRAWING I-005 AND SECTION 01 27 00 - MEASUREMENT AND PAYMENT.

**INSTRUMENTATION PLAN**

1" = 30'

15 0 30

**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.

DESIGNED BY:  
P. JENKINS

CHECKED BY:  
J. LAROSA

DESIGN LEAD:  
P. JENKINS

SECTION MANAGER:  
E. LECLAIR

DRAWN BY:  
P. JENKINS

**GDM Smith**

11500 American Blvd., Suite 200  
Latham, NY 12110  
Tel: (518) 762-6900



APPROVED FOR THE CITY OF NEW YORK

L. SINGH  
ACCOUNTABLE MANAGER

P. COSTA  
PORTFOLIO MANAGER

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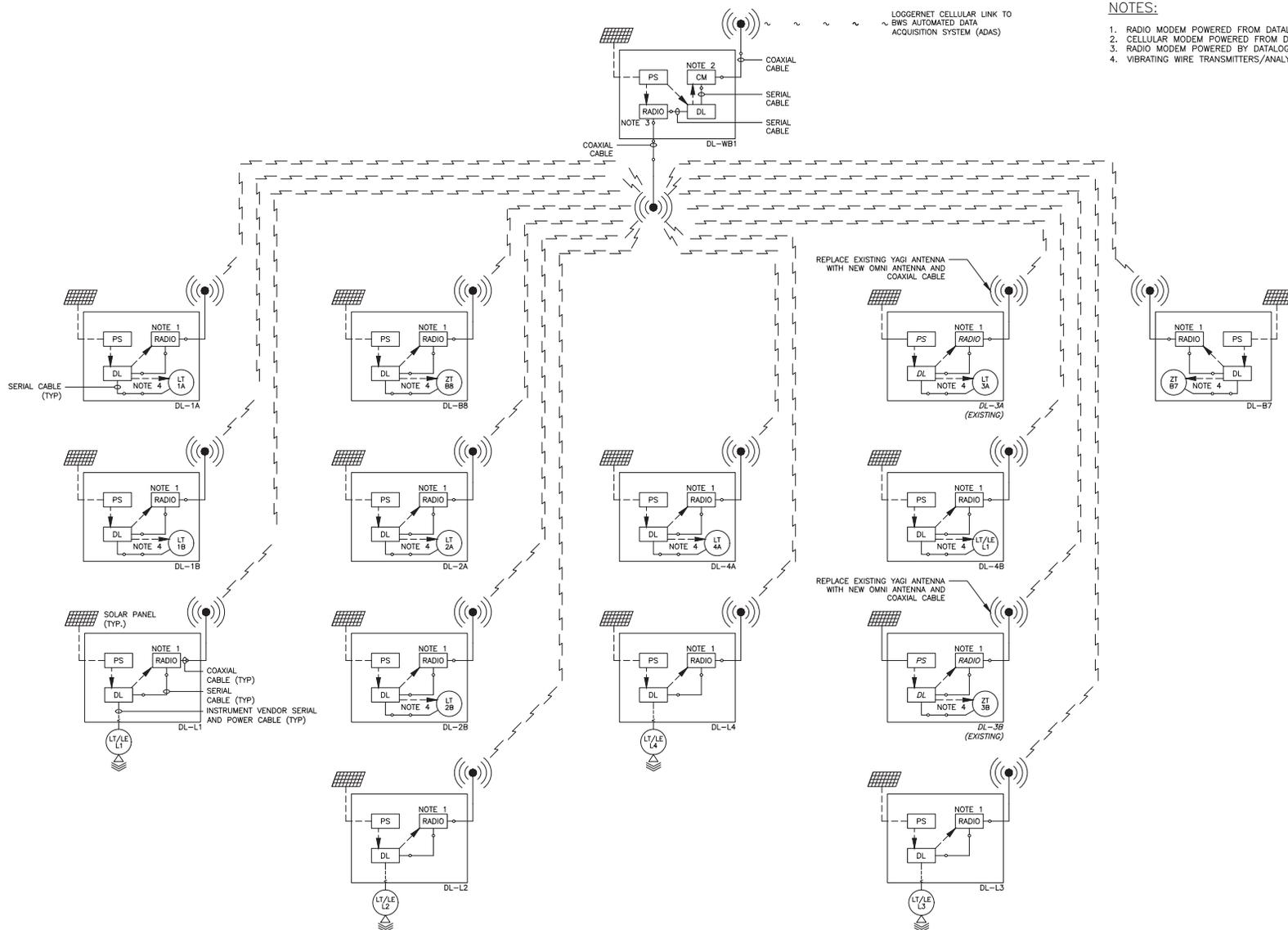
**NEW YORK CITY**  
**ENVIRONMENTAL PROTECTION**  
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
CORONA, NEW YORK 11368  
www.nyc.gov/dcp

**WEST BRANCH AUXILIARY DAM  
SLOPE SAFETY IMPROVEMENTS  
PUTNAM COUNTY, NEW YORK**

INSTRUMENTATION PLAN

DATE: 3/31/2023
SCALE: 1" = 30'
SHEET NO: 77 OF 81
DRAWING NO. I-001.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



- NOTES:**
1. RADIO MODEM POWERED FROM DATALOGGER.
  2. CELLULAR MODEM POWERED FROM DATALOGGER.
  3. RADIO MODEM POWERED BY DATALOGGER PANEL POWER SUPPLY.
  4. VIBRATING WIRE TRANSMITTERS/ANALYZERS POWERED FROM DATALOGGER.

Last Saved By: P. JENKINS Thursday, May 26, 2022 12:24:43 PM  
 Plot Size: 11.00 X 17.00 (INCHES) Plot Scale: 1:1  
 Plot Style Table: BIDD\_Drawing.ctb  
 Drawing Name: & Location: C:\p\p\DWELLING\0266901\02-00.dwg

**100% SUBMISSION**  
 DATE SUBMITTED: 5/26/2022

NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY:  
 P. JENKINS  
 CHECKED BY:  
 J. LAROSA  
 DESIGN LEAD:  
 P. JENKINS  
 SECTION MANAGER:  
 E. LECLAIR



APPROVED FOR THE CITY OF NEW YORK  
 L. SINGH  
 ACCOUNTABLE MANAGER  
 P. COSTA  
 PORTFOLIO MANAGER

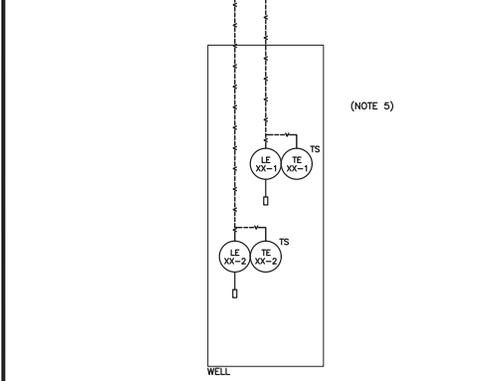
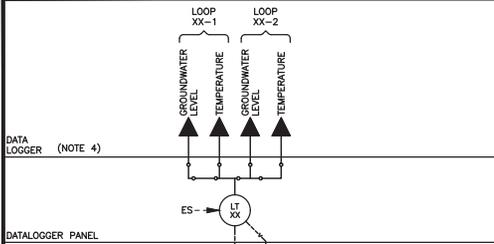
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**WEST BRANCH AUXILIARY DAM SLOPE SAFETY IMPROVEMENTS**  
 PUTNAM COUNTY, NEW YORK  
 CONTROL SYSTEM ARCHITECTURE

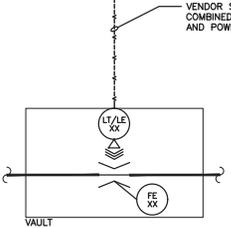
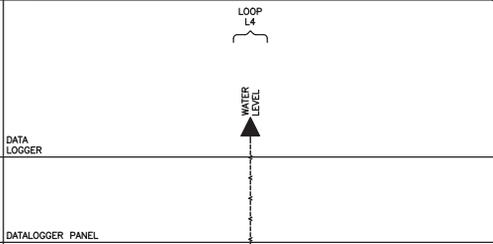
DATE: 3/31/2023
SCALE: NA
SHEET NO: 78 OF 81
DRAWING NO. I-002.00

Lisa Sward, B.S. & Data/Electronics Technician, May 05, 2022 and Date Plotted: Friday, March 31, 2023, 10:24:47 AM.  
 Plot Size: ANSI (D) (24.00 X 36.00 INCHES) Plot Scale: 1:1  
 Drawing Name: & Location: C:\proj\_01\POWELL\DWG\026869\01-003-00.dwg



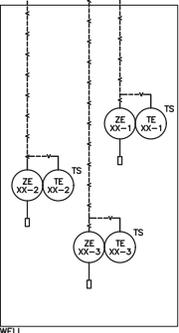
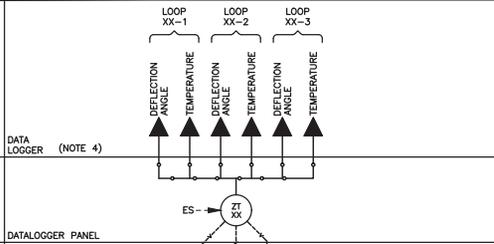
WELL LOCATION	LOOP NO. (XX)	DATALOGGER PANEL
1A	1A	DL-1A
1B	1B	DL-1B
2A	2A	DL-2A
2B	2B	DL-2B
3A (NOTE 1)	3A	DL-3A (EXISTING)
3B (NOTE 2)	3B	DL-3B (EXISTING)
4A	4A	DL-4A
4B	4B	DL-4B

GROUNDWATER MONITORING WELL



FLUME LOCATION	LOOP NO. (XX)	DATALOGGER PANEL
NEW MANHOLE MH-F3	L1	DL-L1
NEW MANHOLE MH-F2	L2	DL-L2
NEW MANHOLE MH-F1	L3	DL-L3
INTERMEDIATE VAULT	L4	DL-L4

FLUME FLOW MONITORING



WELL LOCATION	LOOP NO. (XX)	DATALOGGER PANEL
B7	B7	DL-B7
B8	B8	DL-B8

INCLINOMETER WELL

**NOTES:**

- WELL 3A IS EXISTING WELL CDM-1.
- WELL 3B IS EXISTING WELL CD-2A
- WHERE SHOWN, "XX" INDICATES THE LOOP NUMBER SHOWN IN THE ASSOCIATED TABLE.
- SEE ASSOCIATED TABLE FOR DATA LOGGER DESIGNATION.
- EACH GROUNDWATER MONITORING WELL WILL HAVE: (2) COMBINED VIBRATING WIRE PIEZOMETERS AND TEMPERATURE SENSORS IN WELL.
- EACH INCLINOMETER WELL WILL HAVE: (3) COMBINED INCLINOMETER AND TEMPERATURE SENSOR IN WELL.

**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY:  
P. JENKINS  
CHECKED BY:  
J. LAROSA  
DESIGN LEAD:  
P. JENKINS  
SECTION MANAGER:  
E. LECLAIR

DRAWN BY:  
P. JENKINS  
**CDM Smith**  
11500 American Blvd, Suite 200  
Latham, NY 12110  
Tel: (518) 764-6900



APPROVED FOR THE CITY OF NEW YORK  
L. SINGH  
ACCOUNTABLE MANAGER  
D. COSTA  
PORTFOLIO MANAGER

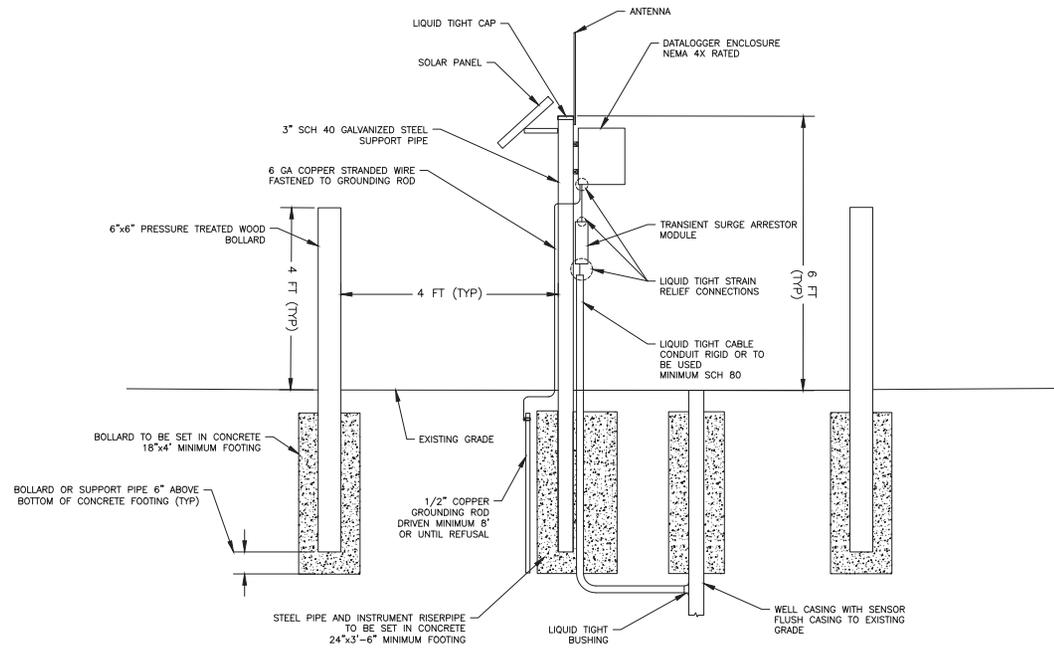
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**WEST BRANCH AUXILIARY DAM SLOPE SAFETY IMPROVEMENTS**  
PUTNAM COUNTY, NEW YORK  
AUXILIARY DAM PROCESS AND INSTRUMENTATION DIAGRAM

DATE: 3/31/2023  
SCALE: 1/4"  
SHEET NO.: 79 OF 81  
DRAWING NO.: I-003.00

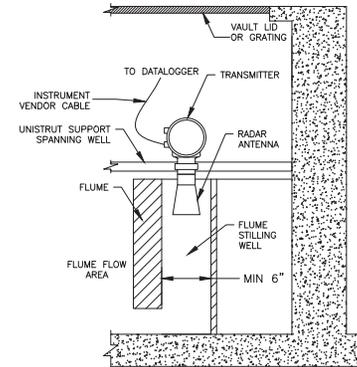
Last Saved By: P. JENKINS Thursday, May 25, 2022 12:24:24 PM  
 Plot Size: ANSI D (24.00 X 36.00 INCHES) Plot Scale: N/A  
 Drawing Name: & Location: C:\p\p\DWELLING\02666901-004-00.dwg



- NOTES:
1. SOLAR PANEL (20 WATT MIN) SHALL BE RATED HIGH ENOUGH TO PROVIDE THE PROPER POWER TO SUFFICIENTLY CHARGE THE BATTERY AND POWER THE INSTALLED EQUIPMENT.
  2. THE TRANSIENT SURGE ARRESTOR MODULE SHALL BE RATED FOR OUTDOOR USE.
  3. WATER TIGHT STRAIN RELIEF CONNECTIONS SHALL BE USED IN ANY LOCATIONS WHERE A CABLE EXISTS OR ENTERS CONDUIT OR WEATHER PROOF ENCLOSURES.
  4. DATALOGGER ENCLOSURE SHALL HOUSE THE DEVICES SHOWN ON THE CONTROL SYSTEM ARCHITECTURE AND P&ID.

WELL INSTRUMENTATION, CASING, AND DATALOGGER DETAIL

DETAIL A  
NTS



- NOTES:
1. MOUNT SENSOR IN STILLING WELL LEAVING WELL OPEN TO ATMOSPHERE.
  2. FLUME STILLING WELL TO BE METAL PLATED.
  3. SEE CIVIL DRAWINGS FOR FLUME DETAIL.

RADAR LEVEL (FLUME STILLING WELL INSTALL)

DETAIL B  
NTS

**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

NO.	DATE	REVISIONS/DESCRIPTION	APPRD.

DESIGNED BY:  
P. JENKINS  
CHECKED BY:  
J. LAROSA  
DESIGN LEAD:  
P. JENKINS  
SECTION MANAGER:  
E. LECLAIR

DRAWN BY:  
P. JENKINS

APPROVED FOR THE CITY OF NEW YORK

L. SINGH  
ACCOUNTABLE MANAGER

P. COSTA  
PORTFOLIO MANAGER

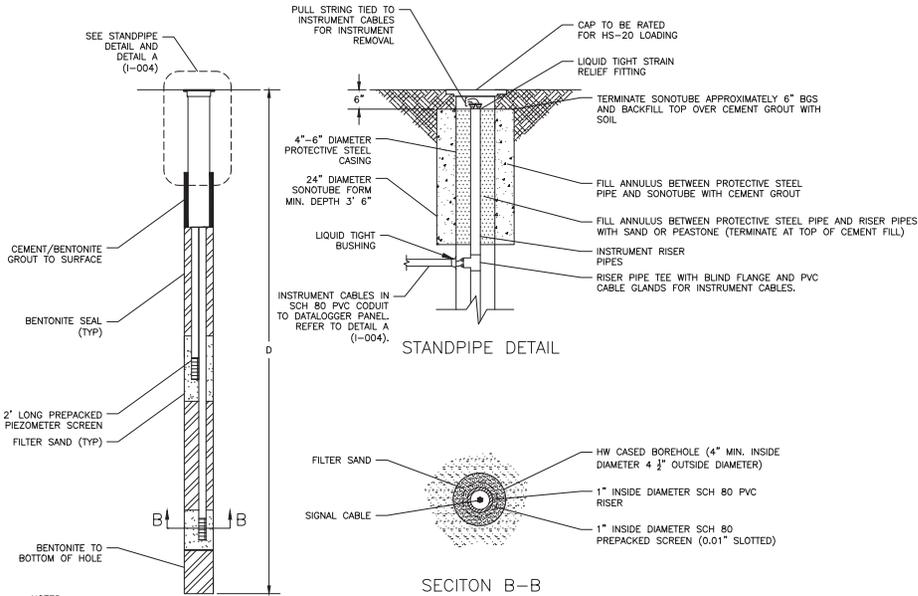
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**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
**PUTNAM COUNTY, NEW YORK**

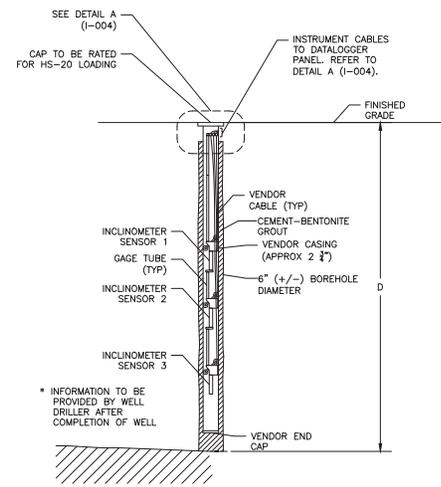
INSTRUMENTATION DETAILS 1

DATE: 3/31/2023  
SCALE: N/A  
SHEET NO.: 80 OF 81  
DRAWING NO.: I-004.00



**PAYMENT NOTES:**

- PAYMENT FOR INSTRUMENT EXCAVATION AND SUBSURFACE MATERIALS, FOR NEW INSTRUMENTS, SHALL BE PAID BY UNIT PRICE AS DETAILED IN SECTION 01 27 00 - MEASUREMENT AND PAYMENT. THE REMAINING INSTRUMENTATION WORK, INCLUDING WORK AND MATERIALS FOR THE EXISTING INSTRUMENTATION, SHALL BE PAID BY LUMP SUM LS-3.



- NOTES:
- WELL DEPTHS SHOWN ARE APPROXIMATE BASED ON ELEVATIONS SHOWN ON THE CIVIL DRAWINGS. VALIDATE ELEVATION AND ADJUST DEPTH TO MAINTAIN INSTRUMENT INSTALLATION ELEVATIONS.

- NOTES:
- COVERS FOR NEW STANDPIPES SHALL ACCOMMODATE A PADLOCK AND SHALL INCLUDE A RUBBER GASKET OR BE OTHERWISE SEALED AGAINST THE EXTERNAL ENVIRONMENT.
  - PROTECTIVE STEEL CASINGS SHALL BE A SCHEDULE 40 PIPE, AND BE COATED WITH RUST-INHIBITING PRIMER AND PAINT, OR OTHERWISE PROTECTED AGAINST CORROSION.
  - WELL DEPTHS SHOWN ARE APPROXIMATE BASED ON ELEVATIONS SHOWN ON THE CIVIL DRAWINGS. VALIDATE ELEVATION AND ADJUST DEPTH TO MAINTAIN INSTRUMENT INSTALLATION ELEVATIONS.
  - TWO (2) BOLLARDS REQUIRED PER WELL LOCATION. BOLLARD TO BE SET 2 FEET TO THE UPHILL SIDE OF 3" WELL PIPE.

WELL	WELL DEPTH D (FT)	PIEZOMETER 1 DEPTH (FT)	PIEZOMETER 2 DEPTH (FT)
1A	47	35	45
1B	23	15	20
2A	45	35	43
2B	20	12	17
3A	EXISTING	EXISTING	EXISTING
3B	EXISTING	EXISTING	EXISTING
4A	35	25	33
4B	35	25	33

INCLINOMETER	CASING DEPTH D (FT)	SENSOR 1 DEPTH (FT)	SENSOR 2 DEPTH (FT)	SENSOR 3 DEPTH (FT)
B7	50	10	25	40
B8	50	10	25	40

**GROUNDWATER MONITORING WELL**



**INCLINOMETER WELL**



**100% SUBMISSION**  
DATE SUBMITTED: 5/26/2022

Last Saved By: P. JENKINS Thursday, May 25, 2023 12:24:20 PM  
 Plot Style Table: BEEDC\_Drawing.ctb  
 Paper Size: ANSI D (24.00 X 36.00 INCHES) Plot Scale: 1:1  
 Drawing Name & Location: C:\pvc\PIPCWELL\DWG\02666901-005-00.dwg

NO.	DATE	REVISIONS/DESCRIPTION	APPROD.	SECTION MANAGER:
				E. LECLAIR

DESIGNED BY:  
P. JENKINS  
CHECKED BY:  
J. LAROSA  
DESIGN LEAD:  
P. JENKINS  
SECTION MANAGER:  
E. LECLAIR



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**WEST BRANCH AUXILIARY DAM**  
**SLOPE SAFETY IMPROVEMENTS**  
PUTNAM COUNTY, NEW YORK  
INSTRUMENTATION DETAILS 2  
DATE: 3/31/2023  
SCALE: NA  
SHEET NO.: 81 OF 81  
DRAWING NO.: I-005.00