Appendix R. Documentation of CI Consultation Occurred

Appendix R

Upland Co-Located Utility Summation Matrix

Example Collocated Infrastructure Owner Email Notification

Utility Typical Separation Details

Compiled Log of Design Package Transmittal Messages

Champlain Hudson Power Express

Upland Co-Located Utility Summation Matrix

Revision Date: 04/05/2022

Segment	General Location of Utility		Owner	Utility	Size	Invert	Utility Length (feet)	Utility		Comments	Quality Level (A/B/C/D)	
	Station (Starting Point for Parallel and Crossing Point for Perpendicular)	Station (Ending Point for Parallel)						Parallel/ Perpendicular	Description (optional)			
	Package 1A											
			Level 3	Fiber Cable in HDPE Duct				Perpendicular	Fiber Located in RR ROW - East Side	Crossing is at the junction between the marine and upland projects	D	Placed on Supplimental DWG
			AT&T	Fiber Cable in HDPE Duct				Perpendicular	Fiber Located in RR ROW - West Side	Crossing is at the junction between the marine and upland projects	D	Placed on Supplimental DWG
	10000+90		Washington County	Storm Drainage Pipe/Culvert	48"	100.2	50	Perpendicular	HDP - Route 3		B	CPA Survey dated 3/22/2022
	10004+90		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 3		B	CPA Survey dated 3/22/2022
	10006+05		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 3	Also parrallel for ~200' West Side of Route 3	B	CPA Survey dated 3/22/2022
	10006+10	10008_00	National Grid	Utility (Electric)				Parallel	Overhead Lines - Route 3		D	Site Walk
	10007+90		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 3		B	CPA Survey dated 3/22/2022
	10007+90	10009+40	Verizon	Overhead Telecomm			150	Parallel	Short Aerial Route		B	CPA Survey dated 3/22/2022
	10009+00	10000+90	Washington County	Storm Drainage Pipe/Culvert	15"	174.6	63	Perpendicular	HDP - Route 3		B	CPA Survey dated 3/22/2022
	10009+40	10222+65	Verizon	Fiber Cable In HDPE Duct			1325	Parallel	Approx. 15' off West edge of pavement - Route 3		B	CPA Survey dated 3/22/2022
	10007+85		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 3		B	CPA Survey dated 3/22/2022
	10014+90		Washington County	Storm Drainage Pipe/Culvert	15"	202.7	50	Perpendicular	HDP - Route 3		B	CPA Survey dated 3/22/2022
	10009+75		Verizon	Fiber Cable In HDPE Duct			1325	Parrallel	Approx. 10' off West edge of pavement - Route 3		B	CPA Survey dated 3/22/2022
	10014+90	10038+10	Verizon	Overhead Telecomm			2320	Parrallel	Approx. 10' off West edge of pavement - Route 3		B	CPA Survey dated 3/22/2022
	10019+25		Private	Water Line				Perpendicular	Water Service to House on West Side of Route 3		B	CPA Survey dated 3/22/2022
	10019+30		Washington County	Storm Drainage Pipe/Culvert	18"	224.9	pl	Perpendicular	HDP - Route 3		B	CPA Survey dated 3/22/2022
	10022+90		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Route 3		B	CPA Survey dated 3/22/2022
	10024+60		Washington County	Storm Drainage Pipe/Culvert	18"	228.8	50	Perpendicular	HDP - Route 3		B	CPA Survey dated 3/22/2022
	10027+00		Washington County	Storm Drainage Pipe/Culvert	36"	219.5	72	Perpendicular	HDP - Route 3		B	CPA Survey dated 3/22/2022
	10027+00		Verizon	Overhead Telecomm				Perpendicular	Route 3		B	CPA Survey dated 3/22/2022
	10029+70		Washington County	Storm Drainage Pipe/Culvert	24"	232.0	60	Perpendicular	HDP - Route 3		B	CPA Survey dated 3/22/2022
	10035+00		Verizon	Overhead Telecomm				Perpendicular	Route 3		B	CPA Survey dated 3/22/2022
	10036+00		Washington County	Storm Drainage Pipe/Culvert	18"	247.0	50	Perpendicular	HDP - Route 3		B	CPA Survey dated 3/22/2022
	10039+20		Washington County	Storm Drainage Pipe/Culvert	18"	236.3	60	Perpendicular	HDP - Route 3		B	CPA Survey dated 3/22/2022
	10067+55		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Route 3		B	CPA Survey dated 3/22/2022
	10041+80		Washington County	Storm Drainage Pipe/Culvert	18"	245.0	55	Perpendicular	HDP - Route 3		B	CPA Survey dated 3/22/2022
	10040+90		National Grid	Utility (Electric)				Perpendicular	Overhead Lines - Lake Rd			
	10044+40		Washington County	Storm Drainage Pipe/Culvert	18"	248.5	50	Perpendicular	HDP - Route 3		B	CPA Survey dated 3/22/2022
	10044+75		Verizon	Overhead Telecomm				Perpendicular	Route 3		B	CPA Survey dated 3/22/2022
	10046+10		Verizon	Fiber Cable in HDPE Duct				Perpendicular	Lake Rd		B	CPA Survey dated 3/22/2022
	10047+00	10052+50	Verizon	Overhead Telecomm			550	Parrallel	West Side of Lake Rd	Crosses at 10051+00	B	CPA Survey dated 3/22/2022
	10054+60	10061+96	Verizon	Overhead Telecomm			736	Parrallel	East Side of Lake Rd	Also Crosses at 10054+60	B	CPA Survey dated 3/22/2022
	10058+35		Verizon	Overhead Telecomm				Perpendicular	Lake Rd	Coax to House	B	CPA Survey dated 3/22/2022
	10062+55		Washington County	Storm Drainage Pipe/Culvert	12"	329.2	35	Perpendicular	CMP - Lake Rd		B	CPA Survey dated 3/22/2022

Champlain Hudson Power Express
Upland Co-Located Utility Summation Matrix

Revision Date: 04/05/2022

Segment	General Location of Utility		Owner	Utility	Size	Invert	Utility Length (feet)	Utility		Comments	Quality Level (A/B/C/D)	
	Station (Starting Point for Parallel and Crossing Point for Perpendicular)	Station (Ending Point for Parallel)						Parallel/ Perpendicular	Description (optional)			
Putnam Station to Dresden Segment 1A	10064+90		Washington County	Storm Drainage Pipe/Culvert	18"	314.3	30	Perpendicular	RCP - Lake Rd		B	CPA Survey dated 3/22/2022
	10067+55		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Lake Rd		B	CPA Survey dated 3/22/2022
	10074+00		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Lake Rd		B	CPA Survey dated 3/22/2022
	10076+05		Washington County	Storm Drainage Pipe/Culvert	15"	333.5	35	Perpendicular	HDPE - Lake Rd		B	CPA Survey dated 3/22/2022
	10077+15		Washington County	Storm Drainage Pipe/Culvert	15"	334.2	32	Perpendicular	HDPE - Lake Rd		B	CPA Survey dated 3/22/2022
	10078+15		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Lake Rd		B	CPA Survey dated 3/22/2022
	10080+45		Washington County	Storm Drainage Pipe/Culvert	24"	329.5	40	Perpendicular	HDPE - Lake Rd		B	CPA Survey dated 3/22/2022
	10080+90		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Lake Rd		B	CPA Survey dated 3/22/2022
	10081+40	10081+60	Private	Storm Drainage Pipe/Culvert	18"	328.6	20	Parallel	CMP - North Side of Lake Rd		B	CPA Survey dated 3/22/2022
	10089+75		Washington County	Storm Drainage Pipe/Culvert	18"	355.6	30	Perpendicular	RCP - Lake Rd		B	CPA Survey dated 3/22/2022
	10093+25		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Lake Rd		B	CPA Survey dated 3/22/2022
	10097+05		Washington County	Storm Drainage Pipe/Culvert	12"	371.7	40	Perpendicular	HDPE - Lake Rd		B	CPA Survey dated 3/22/2022
	10102+25		Washington County	Storm Drainage Pipe/Culvert	18"	372.9	35	Perpendicular	CMP - Lake Rd		B	CPA Survey dated 3/22/2022
	10104+95		Washington County	Storm Drainage Pipe/Culvert	12"	372.8	32	Perpendicular	HDPE - Lake Rd		B	CPA Survey dated 3/22/2022
	10105+00		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Lake Rd		B	CPA Survey dated 3/22/2022
	10106+70		Verizon	Overhead Telecomm				Perpendicular	Lake Rd	Coax to House	B	CPA Survey dated 3/22/2022
	10107+65		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Lake Rd		B	CPA Survey dated 3/22/2022
	10109+05		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Lake Rd		B	CPA Survey dated 3/22/2022
	10111+65		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Lake Rd		B	CPA Survey dated 3/22/2022
	10112+25		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Lake Rd		B	CPA Survey dated 3/22/2022
	10112+75		Washington County	Storm Drainage Pipe/Culvert	24"	374.5	32	Perpendicular	CMP - Lake Rd		B	CPA Survey dated 3/22/2022
	10116+90		Washington County	Storm Drainage Pipe/Culvert	15"	380.7	30	Perpendicular	CMP - Lake Rd		B	CPA Survey dated 3/22/2022
	10117+30		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines (3) - Lake Rd		B	CPA Survey dated 3/22/2022
	10121+00		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Lake Rd		B	CPA Survey dated 3/22/2022
	10112+10		Verizon	Overhead Telecomm				Perpendicular	Lake Rd	Coax to House	B	CPA Survey dated 3/22/2022
	10122+90		Washington County	Storm Drainage Pipe/Culvert	15"	349.6	90	Perpendicular	HDPE - Lake Rd		B	CPA Survey dated 3/22/2022
	10128+60		Washington County	Storm Drainage Pipe/Culvert	15"	333.0	40	Perpendicular	HDPE - Lake Rd		B	CPA Survey dated 3/22/2022
	10136+95		Verizon	Overhead Telecomm				Perpendicular	Lake Rd	Coax to House	B	CPA Survey dated 3/22/2022
	10137+40		Washington County	Storm Drainage Pipe/Culvert	18"	304.0	35	Perpendicular	CMP - Lake Rd		B	CPA Survey dated 3/22/2022
	10141+85	10160+40	Verizon	Overhead Telecomm			2022	Parallel	North of Lake Rd - Mostly outside Alignment	Alignment Crosses at STA 10142+00 & 10147+75	B	CPA Survey dated 3/22/2022
	10144+30	10144+50	Private	Storm Drainage Pipe/Culvert	12"	301.0	20	Parallel	CMP - North Side of Road	Outside proposed alignment	B	CPA Survey dated 3/22/2022
	10148+90		Washington County	Storm Drainage Pipe/Culvert	144", 144"	257.2, 256.8	38, 38	Perpendicular	CMP, CMP - Lake Rd	Crossing HDD	B	CPA Survey dated 3/22/2022
	10153+25		Washington County	Storm Drainage Pipe/Culvert	18"	278.3	35	Perpendicular	CMP - Lake Rd	Outside proposed alignment	B	CPA Survey dated 3/22/2022
	10162+00	10234+12	National Grid	Utility (Electric)			7212	Parrallel	Overhead Transmission Lines - West Side of Route 22		B	CPA Survey dated 3/22/2022
	10162+00	10205+33	Verizon	Overhead Telecomm			4333	Parrallel	West Side of Route 22 - Edge of Pavment		B	CPA Survey dated 3/22/2022

Champlain Hudson Power Express

Upland Co-Located Utility Summation Matrix

Revision Date: 04/05/2022

Segment	General Location of Utility		Owner	Utility	Size	Invert	Utility Length (feet)	Utility		Comments	Quality Level (A/B/C/D)	
	Station (Starting Point for Parallel and Crossing Point for Perpendicular)	Station (Ending Point for Parallel)						Parallel/ Perpendicular	Description (optional)			
	10162+00	10300+43	Verizon	Fiber Cable in HDPE Duct			13843	Parrallel	West Side of Route 22 - Edge of Pavment		B	CPA Survey dated 3/22/2022
	10168+40	10168+70	NYDOT - Region 1	Storm Drainage Pipe/Culvert	18"	298.0	30	Parallel	RCP - West Side of Route 22		B	CPA Survey dated 3/22/2022
	10169+55		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Route 22		B	CPA Survey dated 3/22/2022
	10173+30		NYDOT - Region 1	Storm Drainage Pipe/Culvert	60"	272.2	110	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	10177+10		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	275.7	120	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	10177+65	10178+10	NYDOT - Region 1	Storm Drainage Pipe/Culvert	18"	280.9	45	Parallel	CMP - West Side of Route 22		B	CPA Survey dated 3/22/2022
	10179+25		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Route 22		B	CPA Survey dated 3/22/2022
	10183+48		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	280.1	115	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	10183+90	10184+35	Private	Storm Drainage Pipe/Culvert	16"	280.6	45	Parallel	CMP - West Side of Route 22		B	CPA Survey dated 3/22/2022
	10189+45		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	287.2	90	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	10193+00	10193+52	Private	Storm Drainage Pipe/Culvert	24"	293.6	52	Parallel	CMP - West Side of Route 22		B	CPA Survey dated 3/22/2022
	10197+80		NYDOT - Region 1	Storm Drainage Pipe/Culvert	96", 96"	271.8, 271.8	118, 118	Perpendicular	CMP, CMP - Route 22		B	CPA Survey dated 3/22/2022
	10203+02		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Route 22		B	CPA Survey dated 3/22/2022
	10205+15		Verizon	Overhead Telecomm				Perpendicular	Route 22	Coax to House	B	CPA Survey dated 3/22/2022
	10205+80		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Route 22		B	CPA Survey dated 3/22/2022
	10208+25		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Route 22		B	CPA Survey dated 3/22/2022
	10210+20		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	319.7	87	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	10210+60	10210+90	Private	Storm Drainage Pipe/Culvert	14"	322.6	20	Parallel	CMP - West Side of Route 22		B	CPA Survey dated 3/22/2022
	10219+95		NYDOT - Region 1	Storm Drainage Pipe/Culvert	30"	376	100	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	10225+60		NYDOT - Region 1	Storm Drainage Pipe/Culvert	30"	404.3	110	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	10229+75		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Route 22		B	CPA Survey dated 3/22/2022
	10251+00		National Grid	Utility (Electric)				Perpendicular	Overhead Service Lines - Route 22	Not on Survey	D	Site Walk
	10252+00		NYDOT - Region 1	Storm Drainage Pipe/Culvert	30"	405.8	110	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	10259+00		National Grid	Utility (Electric)				Perpendicular	Overhead Service Lines - Route 22	Not on Surevy	D	Site Walk
	10265+25		NYDOT - Region 1	Storm Drainage Pipe/Culvert	48"	416.6	76	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	10280+75		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	501.3	76	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	10300+40		NYDOT - Region 1	Storm Drainage Pipe/Culvert	42"	517.1	88	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	10307+55		NYDOT - Region 1	Storm Drainage Pipe/Culvert	30"	468.4	100	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	10307+60	1107+30	Verizon	Fiber Cable in HDPE Duct			6970	Parallel	West Side of Route 22 - Approx. 8' off Edge of Pavement		B	CPA Survey dated 3/22/2022
	10311+70		NYDOT - Region 1	Storm Drainage Pipe/Culvert	30"	438.8	82	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	10315+00		National Grid	Utility (Electric)				Perpendicular	Overhead Service Lines - Route 22	Not on Survey	D	Site Walk
	10317+50		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	399.0	92	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	10322+45		NYDOT - Region 1	Storm Drainage Pipe/Culvert	30"	365.5	120	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	10328+30		NYDOT - Region 1	Storm Drainage Pipe/Culvert	60"	295.4	356	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022

Champlain Hudson Power Express

Upland Co-Located Utility Summation Matrix

Revision Date: 04/05/2022

Segment	General Location of Utility		Owner	Utility	Size	Invert	Utility Length (feet)	Utility		Comments	Quality Level (A/B/C/D)	
	Station (Starting Point for Parallel and Crossing Point for Perpendicular)	Station (Ending Point for Parallel)						Parallel/ Perpendicular	Description (optional)			
	10346+30		NYDOT - Region 1	Storm Drainage Pipe/Culvert	30"	192.8	115	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	10347+00	10347+20	Private	Storm Drainage Pipe/Culvert	24"	163.7	20	Parallel	CMP - South Side of Route 22		B	CPA Survey dated 3/22/2022
	10351+40	10351+73	Private	Storm Drainage Pipe/Culvert	24"	194.2	33	Parallel	CMP - South Side of Route 22		B	CPA Survey dated 3/22/2022
	10355+10		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Route 22	Not on Survey	D	Site Walk
	10359+60		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	120.1	52	Perpendicular	CMP - South Sie of Rouite 22	Outside proposed alignment	B	CPA Survey dated 3/22/2022
	10361+05		NYDOT - Region 1	Storm Drainage Pipe/Culvert	72"	105.6	202	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	10372+10		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	126.5	58	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	10373+90		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Route 22		B	CPA Survey dated 3/22/2022
	10377+50		Verizon	Fiber Cable in HDPE Duct				Perpendicular	4'x4' Handhole	Not on Survey	D	Site Walk
	10377+95		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	121.7	72	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	10378+00		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Route 22		B	CPA Survey dated 3/22/2022
	10379+95	10380+20	Private	Storm Drainage Pipe/Culvert	15"	125.00	25	Parallel	CMP - West Side of Route 22		B	CPA Survey dated 3/22/2022
	10383+25		NYDOT - Region 1	Storm Drainage Pipe/Culvert	42"	105.5	126	Perpendicular	CMP		B	CPA Survey dated 3/22/2022
	Package 1B											
	12516+60	12517+50	NYDOT - Region 1	Storm Drainage Pipe/Culvert	18"	156.9	90	Parallel	CMP - AT Dresden Rd East Side of Route 22		B	CPA Survey dated 3/22/2022
	12519+55		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22	Add Note to plans - Low Overhead Line 17'+/- to fiber	B	CPA Survey dated 3/22/2022
	12520+00		Verizon	Fiber Cable in HDPE Duct					Ave of 5' off Edge of Parvement Northwest Side of Route 22	Verizon 4'x4' Handhole	B	CPA Survey dated 3/22/2022
	12520+30		NYDOT - Region 1	Storm Drainage Pipe/Culvert	36"	135.9	188	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12530+25		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22	Add Note to plans - Low Overhead Line	B	CPA Survey dated 3/22/2022
	12533+60		NYDOT - Region 1	Storm Drainage Pipe/Culvert	72", 72"	107.2, 108.5	112, 112	Perpendicular	CMP, CMP - Route 22	Discuss with DOT - Utilizing <4' of cover	B	CPA Survey dated 3/22/2022
	12536+00		Verizon	Overhead Telecomm				Perpendicular	Overhead crossing at Southeast Side of Rout 22		B	CPA Survey dated 3/22/2022
	12538+35		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022
	12538+70		NYDOT - Region 1	Storm Drainage Pipe/Culvert	72"	133.4	72	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12542+55		NYDOT - Region 1	Storm Drainage Pipe/Culvert	36"	153.4	92	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12544+00		Verizon	Fiber Cable in HDPE Duct					Ave of 5' off Edge of Parvement Northwest Side of Route 22	Verizon 4'x4' Handhole	D	Site Walk
	12548+75		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	182.8	80	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12550+20		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022
	12551+05	12551+35	Private	Storm Drainage Pipe/Culvert	18"	194.0	30	Parallel	CMP - South Side of Route 22		B	CPA Survey dated 3/22/2022
	12554+20		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	197.1	110	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12556+75		Verizon	Overhead Fiber				Perpendicular	Overhead Fiber Crossing - Route 22		B	CPA Survey dated 3/22/2022
	12560+85		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines (3) - P.E. Across NiMo		B	CPA Survey dated 3/22/2022
	12562+40		Verizon	Overhead Fiber				Perpendicular	Overhead Fiber Crossing - Route 22		B	CPA Survey dated 3/22/2022
	12565+90		NYDOT - Region 1	Storm Drainage Pipe/Culvert	36"	286.2	94	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12567+90	12568+20	Private	Storm Drainage Pipe/Culvert	24", 12"	295.4, 292.1	30, 30	Parallel	CIP, CMP - South Side of Route 22		B	CPA Survey dated 3/22/2022
	12575+00		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022

Champlain Hudson Power Express

Upland Co-Located Utility Summation Matrix

Revision Date: 04/05/2022

Segment	General Location of Utility		Owner	Utility	Size	Invert	Utility Length (feet)	Utility		Comments	Quality Level (A/B/C/D)	
	Station (Starting Point for Parallel and Crossing Point for Perpendicular)	Station (Ending Point for Parallel)						Parallel/ Perpendicular	Description (optional)			
	12576+00		NYDOT - Region 1	Storm Drainage Pipe/Culvert	48"	338.9	115	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12579+30		NYDOT - Region 1	Storm Drainage Pipe/Culvert	36"	341.1	112	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12591+50		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022
	12592+45		NYDOT - Region 1	Storm Drainage Pipe/Culvert	42"	340.7	100	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12593+60		Private	Storm Drainage Pipe/Culvert	12"	343.1	35	Parallel	CMP - West Side of Route 22		B	CPA Survey dated 3/22/2022
	12599+25		NYDOT - Region 1	Storm Drainage Pipe/Culvert	60"	321.7	148	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12604+60		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	299.3	112	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12607+75		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022
	12610+40		NYDOT - Region 1	Storm Drainage Pipe/Culvert	60"	298.4	114	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12610+40		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022
	12610+40		National Grid	Utility (Electric)			3910	Parallel	Overhead Transmission Lines - South Side of Route 22		B	CPA Survey dated 3/22/2022
	12612+90		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	309.4	100	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12613+45		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022
	12619+52		NYDOT - Region 1	Storm Drainage Pipe/Culvert	36"	338.7	90	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12630+98		NYDOT - Region 1	Storm Drainage Pipe/Culvert	60"	381.2	102	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12639+90		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	409.1	122	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12643+50		Private	Storm Drainage Pipe/Culvert	30"	402.4	47	Parallel	CMP - South Side of Route 22 - Approx. 50' South of Alignment		B	CPA Survey dated 3/22/2022
	12649+50		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Route 22		B	CPA Survey dated 3/22/2022
	12652+00		Verizon	Overhead Telecomm				Perpendicular	Overhead Service Connection to House - Route 22		B	CPA Survey dated 3/22/2022
	12654+45		Private	Storm Drainage Pipe/Culvert	18"	439.1	38	Parallel	CMP - East Side of Route 22		B	CPA Survey dated 3/22/2022
	12655+90		Private	Storm Drainage Pipe/Culvert	15"	433.9	42	Parallel	HDPE - West Side of Route 22		B	CPA Survey dated 3/22/2022
	12659+25		Verizon	Fiber Cable In HDPE Duct				Parallel	West Side o Route 22		B	CPA Survey dated 3/22/2022
	12664+75		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24", 24"	408.3, 406.6	114, 120	Perpendicular	CMP, CMP - Route 22		B	CPA Survey dated 3/22/2022
	12666+60		NYDOT - Region 1	Storm Drainage Pipe/Culvert	60", 60"	390.8, 391.1	93, 93	Perpendicular	CMP, CMP - Route 22		B	CPA Survey dated 3/22/2022
	12668+45		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022
	12668+90	12669+30	Private	Storm Drainage Pipe/Culvert	15"	389.2	40	Parallel	CMP - West Side of Route 22		B	CPA Survey dated 3/22/2022
	12669+45		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022
	12668+90	12669+30	Private	Storm Drainage Pipe/Culvert	15"	389.2	40	Parallel	CMP - East Side of Route 22		B	CPA Survey dated 3/22/2022
	12670+75		Verizon	Overhead Telecomm				Perpendicular	Overhead Service Connection to House - Route 22		B	CPA Survey dated 3/22/2022
	12670+90	12671+65	Private	Storm Drainage Pipe/Culvert	12"	386.8	75	Parallel	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12672+40	12672+70	Private	Storm Drainage Pipe/Culvert	18"	383.8	30	Parallel	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12672+55		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022
	12672+70		NYDOT - Region 1	Storm Drainage Pipe/Culvert	36"	378.8	114	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12673+10	12673+42	NYDOT - Region 1	Storm Drainage Pipe/Culvert	18"	383.8	32	Parallel	CMP - West Side of Route 22		B	CPA Survey dated 3/22/2022
	12679+80		NYDOT - Region 1	Storm Drainage Pipe/Culvert	48"	389.2	106	Perpendicular	CMP - Route 22	Discuss with DOT about going over culvert	B	CPA Survey dated 3/22/2022

Champlain Hudson Power Express
Upland Co-Located Utility Summation Matrix

Revision Date: 04/05/2022

Segment	General Location of Utility		Owner	Utility	Size	Invert	Utility Length (feet)	Utility		Comments	Quality Level (A/B/C/D)	
	Station (Starting Point for Parallel and Crossing Point for Perpendicular)	Station (Ending Point for Parallel)						Parallel/ Perpendicular	Description (optional)			
Dresden to Whitehall Segment 1B	12685+00		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		D	Site Walk
	12687+25		NYDOT - Region 1	Storm Drainage Pipe/Culvert	30"	378.4	122	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12689+95		NYDOT - Region 1	Storm Drainage Pipe/Culvert	84"	374.4	178	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12691+00		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		D	Site Walk
	12711+75		NYDOT - Region 1	Storm Drainage Pipe/Culvert	30"	358.4	122	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12714+95		NYDOT - Region 1	Storm Drainage Pipe/Culvert	30"	338.7	82	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12721+55		NYDOT - Region 1	Storm Drainage Pipe/Culvert	60"	275.8	200	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12724+00	12724+20	Private	Storm Drainage Pipe/Culvert	15"	315.3	20	Parallel	CMP - West Side of Route 22		B	CPA Survey dated 3/22/2022
	12727+75		Verizon	Overhead Telecomm				Perpendicular	Overhead Service Connection to House - Route 22	Add Note to plans - Low Overhead Line	B	CPA Survey dated 3/22/2022
	12728+85	12729+30	Private	Storm Drainage Pipe/Culvert	16"	323.8	45	Parallel	CMP - West/South Side of Route 22		B	CPA Survey dated 3/22/2022
	12730+90		NYDOT - Region 1	Storm Drainage Pipe/Culvert	30"	296.8	122	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12737+05		NYDOT - Region 1	Storm Drainage Pipe/Culvert	Unknown	343.6	Unknown	Perpendicular	Heavily Silted CMP		B	CPA Survey dated 3/22/2022
	12739+00		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022
	12744+90		NYDOT - Region 1	Storm Drainage Pipe/Culvert	78", 78"	352.4, 352.5	100, 100	Perpendicular	CMP, CMP - Route 22		B	CPA Survey dated 3/22/2022
	12748+15		NYDOT - Region 1	Storm Drainage Pipe/Culvert	42"	325.0	181	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12754+95		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	386.7	81	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12760+00		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		D	Site Walk
	12761+95		NYDOT - Region 1	Storm Drainage Pipe/Culvert	18"	373.0	152	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12764+50		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		D	Site Walk
	12764+50	12764+90	Private	Storm Drainage Pipe/Culvert	12"	404.9	40	Parallel	CMP - East Side of Route 22		B	CPA Survey dated 3/22/2022
	12776+00		NYDOT - Region 1	Storm Drainage Pipe/Culvert	48"	337.5	226	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12781+25		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022
	12785+10		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	333.6	85	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12787+00	12787+37	Private	Storm Drainage Pipe/Culvert	24"	325.5	37	Parallel	CMP - East Side of Route 22		B	CPA Survey dated 3/22/2022
	12790+50		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	299.8	152	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12791+50		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		D	Site Walk
	12796+45		NYDOT - Region 1	Storm Drainage Pipe/Culvert	48"	249.5	145	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12800+20		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022
	12802+45		NYDOT - Region 1	Storm Drainage Pipe/Culvert	18"	224.2	77	Perpendicular	CMP - West End Not Found		B	CPA Survey dated 3/22/2022
	12805+60		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022
	12805+60		NYDOT - Region 1	Storm Drainage Pipe/Culvert	48"	228.1	142	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12818+00		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	178.5	200	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12820+00		NYDOT - Region 1	Storm Drainage Pipe/Culvert	60"	177.6	210	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12822+70	12823+00	Private	Storm Drainage Pipe/Culvert	18"	213.3	30	Parallel	CMP - West Side of Route 22		B	CPA Survey dated 3/22/2022
	12823+05	12823+35	Private	Storm Drainage Pipe/Culvert	12"	213.3	40	Parallel	CMP - East Side of Route 22		B	CPA Survey dated 3/22/2022

Champlain Hudson Power Express

Upland Co-Located Utility Summation Matrix

Revision Date: 04/05/2022

Segment	General Location of Utility		Owner	Utility	Size	Invert	Utility Length (feet)	Utility		Comments	Quality Level (A/B/C/D)	
	Station (Starting Point for Parallel and Crossing Point for Perpendicular)	Station (Ending Point for Parallel)						Parallel/ Perpendicular	Description (optional)			
	12827+60		NYDOT - Region 1	Storm Drainage Pipe/Culvert	18"	208.3	120	Perpendicular	HDPE - Route 22		B	CPA Survey dated 3/22/2022
	12836+10		NYDOT - Region 1	Storm Drainage Pipe/Culvert	18"	214.3	154	Perpendicular	HDPE - Route 22		B	CPA Survey dated 3/22/2022
	12841+20		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	264.3	164	Perpendicular	HDPE - Route 22		B	CPA Survey dated 3/22/2022
	12841+50	12841+30	Private	Storm Drainage Pipe/Culvert	18"	276.0	30	Parallel	CMP - East Side of Route 22		B	CPA Survey dated 3/22/2022
	12842+15		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - Route 22		B	CPA Survey dated 3/22/2022
	12843+00	12843+40	Private	Storm Drainage Pipe/Culvert	12"	282.8	40	Parallel	CMP - East Side of Route 22		B	CPA Survey dated 3/22/2022
	12843+50		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022
	12843+90	12844+28	Private	Storm Drainage Pipe/Culvert	12"	287.7	38	Parallel	CMP - West Side of Route 22		B	CPA Survey dated 3/22/2022
	12846+10		NYDOT - Region 1	Storm Drainage Pipe/Culvert	48"	290.5	82	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12852+00		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022
	12853+45		NYDOT - Region 1	Storm Drainage Pipe/Culvert	48"	302.6	82	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12856+65		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	293.6	113	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12861+90		NYDOT - Region 1	Storm Drainage Pipe/Culvert	30"	291.9	110	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12863+25		NYDOT - Region 1	Storm Drainage Pipe/Culvert	42"	291.9	90	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12867+10		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	284.3	132	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12877+50	12877+90	Private	Storm Drainage Pipe/Culvert	18"	272.2	40	Parallel	CMP - West Side of Route 22		B	CPA Survey dated 3/22/2022
	12880+00		NYDOT - Region 1	Storm Drainage Pipe/Culvert	42"	227.5	160	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	123884+90		NYDOT - Region 1	Storm Drainage Pipe/Culvert	42"	247.3	106	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12893+45		NYDOT - Region 1	Storm Drainage Pipe/Culvert	30"	236.0	88	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12900+05		NYDOT - Region 1	Storm Drainage Pipe/Culvert	30"	194.8	107	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12902+90		NYDOT - Region 1	Storm Drainage Pipe/Culvert	30"	197.3	107	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12907+75		NYDOT - Region 1	Storm Drainage Pipe/Culvert	42"	142.4	211	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12911+05	12911+86	Private	Storm Drainage Pipe/Culvert	18"	159.0	81	Parallel	CMP - West Side of Route 22		B	CPA Survey dated 3/22/2022
	12912+50		Village of Whitehall	Water Line	12"			Perpendicular	West of Route 7		B	CPA Survey dated 3/22/2022
	12913+55		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022
	12913+95		Verizon	Overhead Telecomm				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022
	12913+95		Village of Whitehall	Water Line	12"		1440	Parallel	Northeast Side of Route 22 - West Side of South Bay		B	CPA Survey dated 3/22/2022
	12920+45		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	113.5	67	Perpendicular	CMP - Adjacent to Route 7A		B	CPA Survey dated 3/22/2022
	12921+00		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 7A		B	CPA Survey dated 3/22/2022
	12926+00		Verizon	Fiber Cable in HDPE Duct				Perpendicular	North Side of Route 22 (West side of South Bay)		B	CPA Survey dated 3/22/2022
	12926+00	12926+84	NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	99.3	84	Parallel	CMP - North Side of Route 22 and Crosses Route 7A		B	CPA Survey dated 3/22/2022
	12926+00	12930+86	Verizon	Fiber Cable in HDPE Duct			486	Parallel	Side Side of Route 22 (east side of South Bay)		B	CPA Survey dated 3/22/2022
	12946+20		Verizon	Overhead Telecomm				Perpendicular	Overhead Service Connection - Route 7A (East Side of South Bay)		B	CPA Survey dated 3/22/2022
	12946+25	12946+65	Private	Storm Drainage Pipe/Culvert	18"	105.7	40	Parrallel	North of Route 7A		B	CPA Survey dated 3/22/2022
	12949+55	12949+95	Private	Storm Drainage Pipe/Culvert	15"	107.4	40	Parallel	CMP - South Side of Route 22	Outside proposed alignment	B	CPA Survey dated 3/22/2022

Champlain Hudson Power Express

Upland Co-Located Utility Summation Matrix

Revision Date: 04/05/2022

Segment	General Location of Utility		Owner	Utility	Size	Invert	Utility Length (feet)	Utility		Comments	Quality Level (A/B/C/D)	
	Station (Starting Point for Parallel and Crossing Point for Perpendicular)	Station (Ending Point for Parallel)						Parallel/ Perpendicular	Description (optional)			
	12950+00		Village of Whitehall	Water Line	12"			Perpendicular	North of Route 22 (East Side of Route 22)	Cross this water line twice - second crossing at 12953+00	B	CPA Survey dated 3/22/2022
	12950+00	12950+40	Private	Storm Drainage Pipe/Culvert	18"	113.5	40	Parallel	CMP - South Side of Route 22	Outside proposed alignment	B	CPA Survey dated 3/22/2022
	12954+20		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022
	12954+00	12954+42	Private	Storm Drainage Pipe/Culvert	12"	125.7	42	Parallel	CMP - North Side of Route 22		B	CPA Survey dated 3/22/2022
	12954+15	12954+71	Private	Storm Drainage Pipe/Culvert	12"	126.5	56	Parallel	CMP - South Side of Route 22	Outside proposed alignment	B	CPA Survey dated 3/22/2022
	12954+75		Village of Whitehall	Water Line				Perpendicular	Crossing Route 22		B	CPA Survey dated 3/22/2022
	12958+45		NYDOT - Region 1	Storm Drainage Pipe/Culvert	72"	123.7	53	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12961+25	12961+60	Private	Storm Drainage Pipe/Culvert	30"	130.8	35	Parallel	CMP - South Side of Route 22		B	CPA Survey dated 3/22/2022
	12962+10	12962+33	Private	Storm Drainage Pipe/Culvert	15"	136.4	23	Parallel	CMP - South Side of Route 22		B	CPA Survey dated 3/22/2022
	12962+55	12962+78	Private	Storm Drainage Pipe/Culvert	15"	139.0	23	Parallel	CMP - South Side of Route 22		B	CPA Survey dated 3/22/2022
	12966+75		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		D	
	12966+90		NYDOT - Region 1	Storm Drainage Pipe/Culvert	30"	150.9	91	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12968+15		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022
	12970+00	13023+75	Verizon	Fiber Cable in HDPE Duct			5375	Parallel	North Side of Route 22 (east side of South Bay)	Very Close to Alignment	B	CPA Survey dated 3/22/2022
	12970+60	12971+35	Private	Storm Sewer	12"	176.1	75	Parallel	HDPE - North Side of Route 22 - Outfall Not Found		B	CPA Survey dated 3/22/2022
	12972+25		Verizon	Fiber Cable in HDPE Duct				Perpendicular	Crosses Route 22		B	CPA Survey dated 3/22/2022
	12974+00		Village of Whitehall	Water Line				Perpendicular	Crosses Route 22	Paint on Pavement, but not on survey - Need to Confirm	D	Site Walk
	12975+40		National Grid	Utility (Electric)				Parallel	Overhead Transmission Lines - North Side of Route 22	Also crosses perpendicular at this location	B	CPA Survey dated 3/22/2022
	12976+00		Village of Whitehall	Water Line				Perpendicular	**Proposed Water Main**		D	**Information provided by DPW**
	12975+85	12976+29	Private	Storm Drainage Pipe/Culvert	12"	185.6	46	Parallel	Steel - North Side of Route 22		B	CPA Survey dated 3/22/2022
	12977+55		NYDOT - Region 1	Storm Drainage Pipe/Culvert	30"	169.0	247	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	12978+50		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		D	Site Walk
	12986+00		National Grid	Utility (Electric)				Perpendicular	Overhead Guy Wire Crossing - Route 22		D	Site Walk
	12988+00		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		D	Site Walk
	12997+00		NYDOT - Region 1	Storm Drainage Pipe/Culvert				Perpendicular		Not on Survey, poor condition	D	Site Walk
	13001+75		NYDOT - Region 1	Storm Drainage Pipe/Culvert	30"	111.1	196	Perpendicular	CMP - Route 22		B	CPA Survey dated 3/22/2022
	13001+80		Verizon	Overhead Telecomm				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022
	13003+25		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Route 22		D	Site Walk
	13003+50		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Line - Route 22		D	Site Walk
	13004+00		NYDOT - Region 1	Storm Drainage Pipe/Culvert				Perpendicular		Not on Survey	D	Site Walk
	13006+00	13032+25	Village of Whitehall	Sanitary Sewer	8"	122.4	3045	Parrallel	PVC - East Side of Route 22		B	CPA Survey dated 3/22/2022
	13006+00	13012+80	Village of Whitehall	Water Line				Parallel	East side of Route 22	Crosses at 13012+80	D	**Information provided by DPW**
	13008+00		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"			Perpendicular		Not on Survey	D	Site Walk
	13010+00		NYDOT - Region 1	Storm Drainage Pipe/Culvert	15"	138.1	40	Perpendicular	HDPE - West Side of Route 22		B	CPA Survey dated 3/22/2022
	13011+75		Verizon	Overhead Telecomm				Perpendicular	Overhead Service Connection - Route 22		B	CPA Survey dated 3/22/2022

Champlain Hudson Power Express

Upland Co-Located Utility Summation Matrix

Revision Date: 04/05/2022

Segment	General Location of Utility		Owner	Utility	Size	Invert	Utility Length (feet)	Utility		Comments	Quality Level (A/B/C/D)	
	Station (Starting Point for Parallel and Crossing Point for Perpendicular)	Station (Ending Point for Parallel)						Parallel/ Perpendicular	Description (optional)			
	13016+00		NYDOT - Region 1	Storm Drainage Pipe/Culvert				Perpendicular		Not on Survey	D	Site Walk
	13021+50		NYDOT - Region 1	Storm Drainage Pipe/Culvert				Perpendicular		Not on Survey - Outlet Unknown	D	Site Walk
	13022+75		Village of Whitehall	Sanitary Sewer	8"			Perpendicular	Crosses Route 22 at Neddo St		B	CPA Survey dated 3/22/2022
	13022+90		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - South Side of Route 22		B	CPA Survey dated 3/22/2022
	13028+20	13028+60	Washington County	Storm Drainage Pipe/Culvert	15"	102.8	40	Parallel	HDPE - East Side of Route 22		B	CPA Survey dated 3/22/2022
	13029+55		National Grid	Utility (Electric)				Perpendicular	Overhead Transmission Lines - South Side of Route 22		B	CPA Survey dated 3/22/2022
	13030+20		NYDOT - Region 1	Storm Drainage Pipe/Culvert	24"	100.8	95	Perpendicular	HDPE - Northeast Side of Route 22		B	CPA Survey dated 3/22/2022
	13032+25		Village of Whitehall	Sanitary Sewer				Perpendicular	(2) Sewer lines (one combined with Storm)		D	**Information provided by DPW**
	13035+40		Verizon	Overhead Telecomm				Perpendicular	Overhead Transmission Lines - Crosses Bellamy St		B	CPA Survey dated 3/22/2022
	13037+25		Verizon	Overhead Telecomm				Perpendicular	Overhead Service Connection - Crosses Bellamy St		B	CPA Survey dated 3/22/2022
	13036+55		Village of Whitehall	Storm Drainage Pipe/Culvert	24"	97.7	60	Perpendicular	CMP - Crosses Bellamy St		D	Utility Documents from Village of Whitehall
	13037+00		National Grid	Utility (Electric)				Perpendicular	Overhead Service Connection - Bellamy St	Not on Survey	D	Site Walk
	13038+00		Village of Whitehall	Sanitary Sewer	8"	98.9	165	Parallel	DIP - Bellamy St	Package 1C will cross at east end of Bellamy St	B	CPA Survey dated 3/22/2022
	13038+00		Village of Whitehall	Water Line	8"			Parallel	Bellamy St - Crosses RR to the east	Water Main was identified on North Side of Bellamy St	D	Utility Documents from Village of Whitehall
						Perpendicular		**222.0**				
						Parallel		**58.0**				

Utility quality level defined as follows:

Four separate quality levels of subsurface utility facility information are generally recognized and are as follows:

- **Quality Level A (QLA): Quality Level A is the highest degree of accuracy. The information shown on the plans has been obtained by the actual exposure (or verification of previously exposed and surveyed utility facilities) of subsurface utilities, using (typically) minimally intrusive excavation equipment to determine their precise horizontal and vertical positions, as well as their other utility facility attributes. (Shown as QLA)**
- Quality Level B (QLB): Quality Level B is the second highest degree of accuracy. The information shown on the plans has been obtained through the application of appropriate surface geophysical methods (i.e., underground cameras, radar, sonar, bore outs, etc.) to identify the existence and appropriate horizontal position of subsurface utility facilities. Quality Level B data are reproducible by surface geophysics at any point of their deviation. The information was surveyed to applicable tolerances and reduced onto the plans. No excavations were performed. (Shown as QLB)
- Quality Level C (QLC): Quality Level C is the third highest degree of accuracy. The information shown on the plans has been obtained by surveying and plotting visible above-ground utility features and by using professional judgement in correlating this information to Quality Level D information. (Shown as QLC)
- Quality Level D (QLD): Quality Level D is the lowest degree of accuracy. The information shown on the plans was derived solely from existing NYSDOT and/or utility company records or recollections. (Shown as QLD)

From: Khanh.Tran <Khanh.Tran@kiewit.com>
Sent: Thursday, January 27, 2022 11:42 AM
To: lauren.snyder@nationalgrid.com; roy.schultz@nationalgrid.com
Subject: CHPE - Utility Plates/As-builts (Electric/National Grid/Niagara Mohawk)
Importance: High

Hi Lauren/Roy;

I hope all is well.

TDI is currently working with Kiewit Engineering Group (KEG) to construct the Champlain Hudson Power Express (CHPE) high voltage transmission line to provide renewable electricity directly to New York City. We are currently advancing detailed engineering and construction plans, and we are reaching out to you to obtain utility records/data/information along the project alignment. Attached in this email is the KMZ file of the entire project alignment, broken down into packages/segments for ease in navigation.

As you know, we are working tirelessly to bring clean energy to the State of New York. Time is of the essence; we respectfully ask that you expedite the information requests so that we can all minimize the impacts to your co-located utility infrastructure.

Please kindly transmit information/data requested based on Package priority as follows:

Package 1, 2 & 5 (by 02/02/22)
Package 3 & 6 (by 02/04/22)
Package 4, 7 & 8 (by 02/09/22)

Copies of our design plans will be transmitted to your office as soon as available.

Thank you for your continued cooperation and if you have any questions, or require additional information, please contact me at (860)-559-4514 (M), and or email at Khanh.Tran@kiewit.com

Best,
Kim Tran

Kiewit

Khanh Tran (Kim), PE, ENV SP
Design Engineering

KIEWIT ENGINEERING GROUP, INC.
M: 860-559-4514

Champlain Hudson Power Express
Upland Co-Located Infrastructure
Fact Sheet

Project Background

- The Champlain Hudson Power Express (CHPE) is a 339-mile underground and underwater high voltage direct current (HVDC) electric transmission line that will import up to 1,250 MW of renewable power from Canada and send it to the New York City metro area.
- Transmission Developers Inc. (TDI) is the developer of the project.
- TDI is owned by Blackstone, a company based in New York.
- The transmission line is fully permitted at the State and Federal level and has been under development for roughly 10 years.
- The upland portion of the transmission line will be located primarily within transportation corridor (railway or highway) rights-of-way.

Construction Timing & EM&CP

- Construction is anticipated for 2022 –2025
- A map of the Project is included as Attachment A.
- Prior to construction commencing, CHPE must file an Environmental Management & Construction Plan (EM&CP) and receive approval from the State for this segment prior to installing the transmission line cables. The EM&CP will include detailed construction means and methods, and schedule. The EM&CP will be subject to public review and your organization will have the opportunity to review it before it becomes final.

- In preparation for that filing, TDI needs to coordinate with owners co-located infrastructure (CI) along this permitted route.
- TDI would like to (1) establish a contact with someone at your company/town who is responsible for this CI; (2) understand your process for discussing utility crossings; and (3) answer questions.

Overview of CI crossings and CHPE construction

- The underground portion of the buried transmission line will be installed in a trench approximately three (3) feet wide and five (5) feet deep and will require minimal or no maintenance during its 60+ year operational life (Typical trench detail - Attachment B).
- Within the trench, the cables will be installed in plastic conduit. There will also be a fiber optic cable installed within the trench.
- Proposed underground installation will be primarily in the shoulders of roadways, under the road's pavement or along the edge of the Canadian Pacific or CSX railroad rights-of-way.
- Once the cables are installed, the ground will be restored.
- Directly over the transmission lines, vegetation maintenance will be required to ensure deep rooted trees do not grow. Otherwise, no maintenance is needed.
- TDI has worked closely with the local towns, NYS DOT, and the Canadian Pacific and CSX railroads regarding CHPE, and it is coordinating the final design with them.
- Depending on the depth of the existing overland CI infrastructure, if within the 15 ft depth range, our preferred approach is to install our HVDC cables

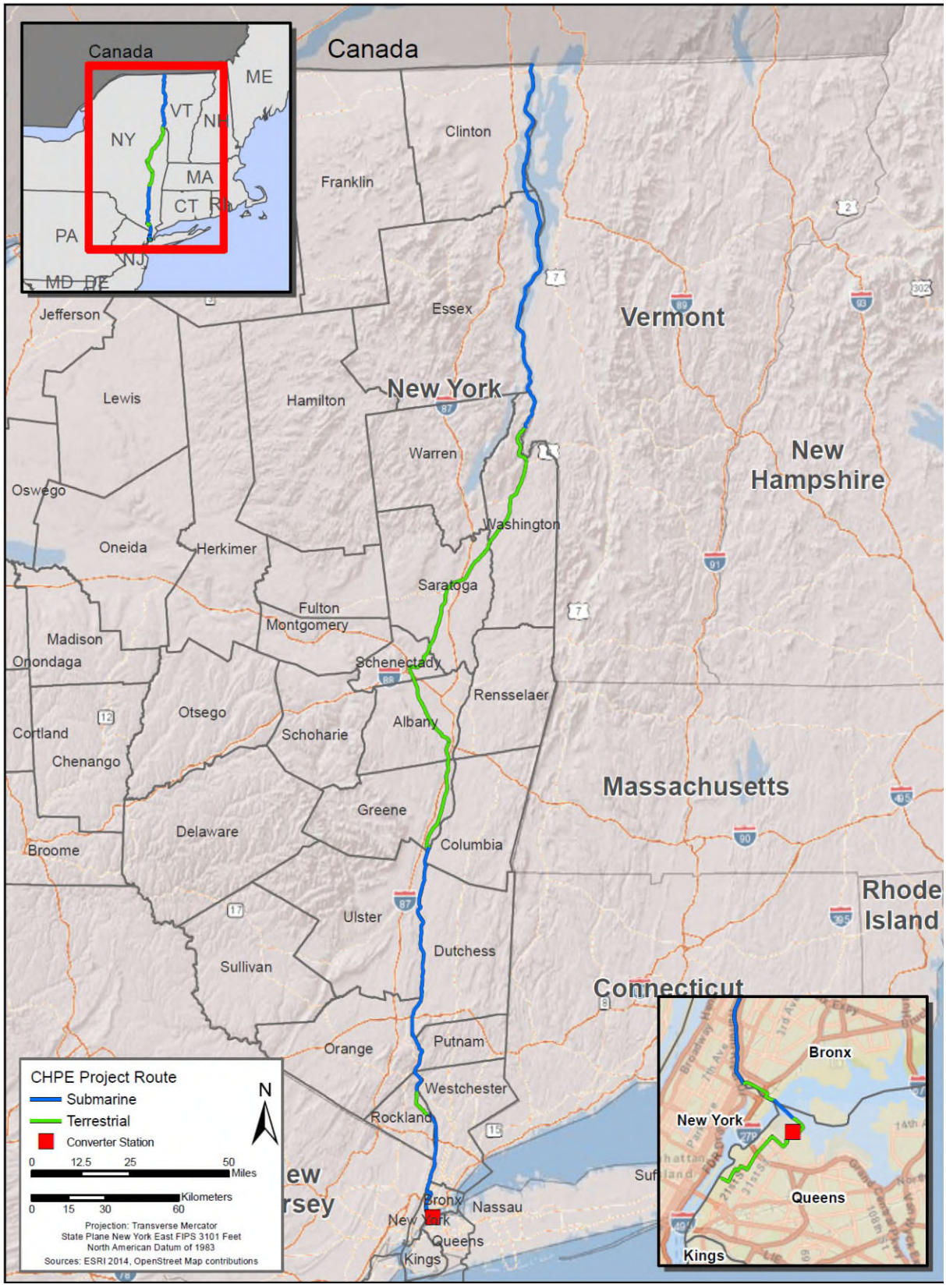
under all buried infrastructure. TDI will accomplish that by working with the CI-owners to establish the best methodology for exposing, supporting, and performing our cable installation under the existing infrastructure. (Typical crossing under CI – Attachment C)

- Our proposal for crossing under CI will follow industry standard crossing methods. Adequate temporary construction supports will be provided for the exposed co-located utilities below grade.
- For deeper CI (usually greater than 15ft) or when there is significant concentration of CI infrastructure within a particular area, horizontal directional drilling (HDD) will be employed to cross under the existing utilities.
- For proposed HDDs, two bored conduits approximately separated at a minimum distance of 15 ft will be installed following the required depth to house the HVDC cables.
- In the event TDI cannot install its cable conduit under buried infrastructure, it will cross over the existing CI utilities via open trench, provided that the minimum cover of 60 inches can be provided over the proposed HVDC cables in roadway and 30 inches of cover in roadside, other vegetated areas and within railroad right-of-way per the below detail (Typical crossing over CI - Attachment D).
- In crossing the existing co-located utilities, TDI and their contractors shall also install the proposed HVDC cables with at least the minimum clearance criteria specified by each individual utility owner.
- Regarding proposed trench installation over existing large municipal storm culverts, an underground utility bridging support structure will be

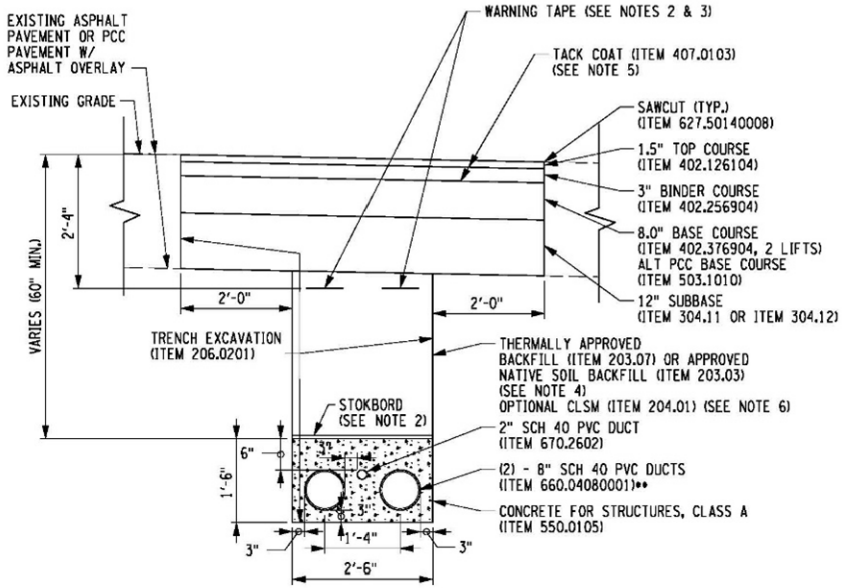
constructed to allow the proposed HVDC cables to be self-supported across the span in the event the storm culverts require future repair or replacement. (Typical CI support – Attachment E.)

- As part of development of a crossing plan for your CI, TDI will work with the respective CI owners, to:
    - Establish and conduct a subsurface utility survey to determine the precise location of the infrastructure within the limits of the proposed CHPE cable installation, including:
        - Depth from roadway and/or ground surface
        - Physical width and footprint occupied by the CI
        - Existence of CI supporting structures to be avoided
    - Confirm proposed crossing installation including the requirements for CI temporary support.
    - Eventually, based on this information, TDI will work with each CI owner to consummate a formal CI agreement as necessary.

Attachment A



Attachment B



TYPICAL FLAT CABLE ALIGNMENT IN DUCTBANK
TRENCH CROSS SECTION (ROADWAY INSTALLATION)

SCALE: 1"=2'

ITEM	DESCRIPTION
203.03	EMBANKMENT IN PLACE
203.07	SELECT GRANULAR FILL
204.01	CONTROLLED LOW STRENGTH MATERIAL
206.0201	TRENCH AND CULVERT EXCAVATION
304.11	SUBBASE COURSE, TYPE 1
304.12	SUBBASE COURSE, TYPE 2
402.126104	12.5 F1 TOP COURSE HMA, 60 SERIES COMPACTION
402.256904	25 F9 BINDER COURSE HMA, 60 SERIES COMPACTION
402.376904	37.5 F9 BASE COURSE HMA, 60 SERIES COMPACTION
407.0103	STRAIGHT TACK COAT
555.0105	CONCRETE FOR STRUCTURES, CLASS A
627.50140008•	CUTTING PAVEMENT
660.04080001••	FURNISH AND INSTALL PVC UTILITY CONDUIT - 8 INCH
670.2602	RIGID PLASTIC CONDUIT, 2"

•SPECIAL SPEC
••SPECIAL NOTE: FOLLOW SPECIAL SPECIFICATION 660.04060001. CONDUIT SIZE, FITTINGS AND CONNECTIONS TO BE REVISED TO 8" AND SCHEDULE TO BE SCH 40.

NOTES:

1. FILL MATERIAL SHALL HAVE THERMAL RESISTIVITY OF 1.0 K•m/W OR LESS.
2. FITTINGS, CONNECTIONS, WARNING TAPE, AND STOKBORD WILL BE INCLUDED UNDER ITEM 660.04080001.
3. WARNING TAPE DEPTH TO MEET THE REQUIREMENTS OF NEC SECTION 300.5(D)(3).
4. FOR INSTALLATION NOT LOCATED IN ROADWAYS, APPROVED NATIVE SOIL BACKFILL WILL EXTEND TO WITHIN FOUR (4) INCHES OF EXISTING GRADE.
5. TACK COAT SHALL BE APPLIED TO ALL EXPOSED EDGES AND BETWEEN EVERY LIFT.

ALTERED ON:	AFFIXED ON:
SIGNATURE: STAMP:	SIGNATURE: STAMP:

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REVISIONS

DATE	DESCRIPTION	BY	SYM.

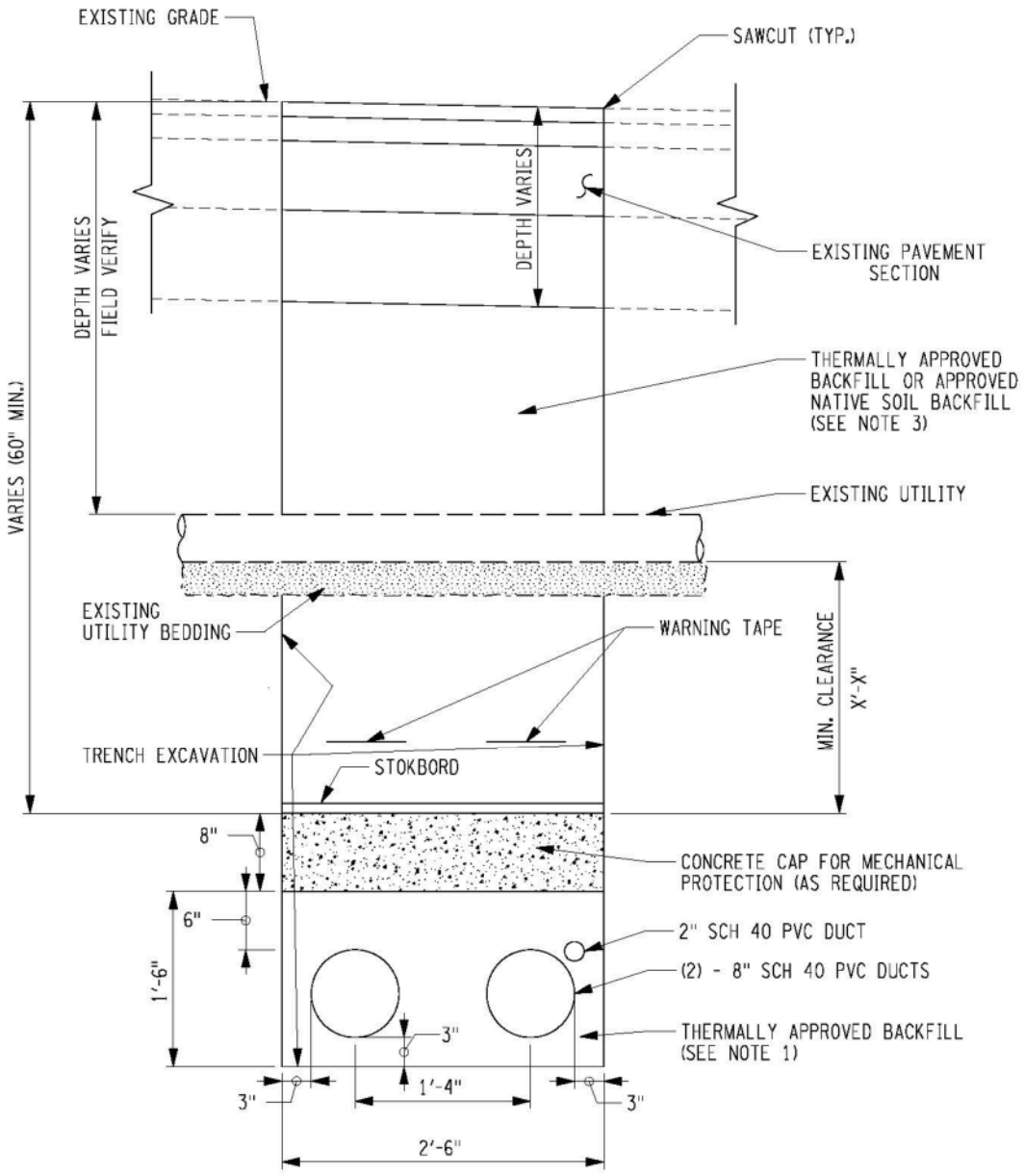
TRANSMISSION DEVELOPERS, INC.
1301 AVENUE OF THE AMERICAS
NEW YORK, NY 10019-6022

AECOM

TITLE OF PROJECT: CHAMPLAIN HUDSON POWER EXPRESS
LOCATION OF PROJECT:
TITLE OF DRAWING: TYPICAL TRENCH CROSS SECTION WITH PVC CONDUIT IN DUCTBANK

CONTRACT NUMBER: 60323056
DATE: 03/04/2021
DRAWING NUMBER:

Attachment C



TYPICAL UTILITY CROSSING DETAIL

NOT TO SCALE

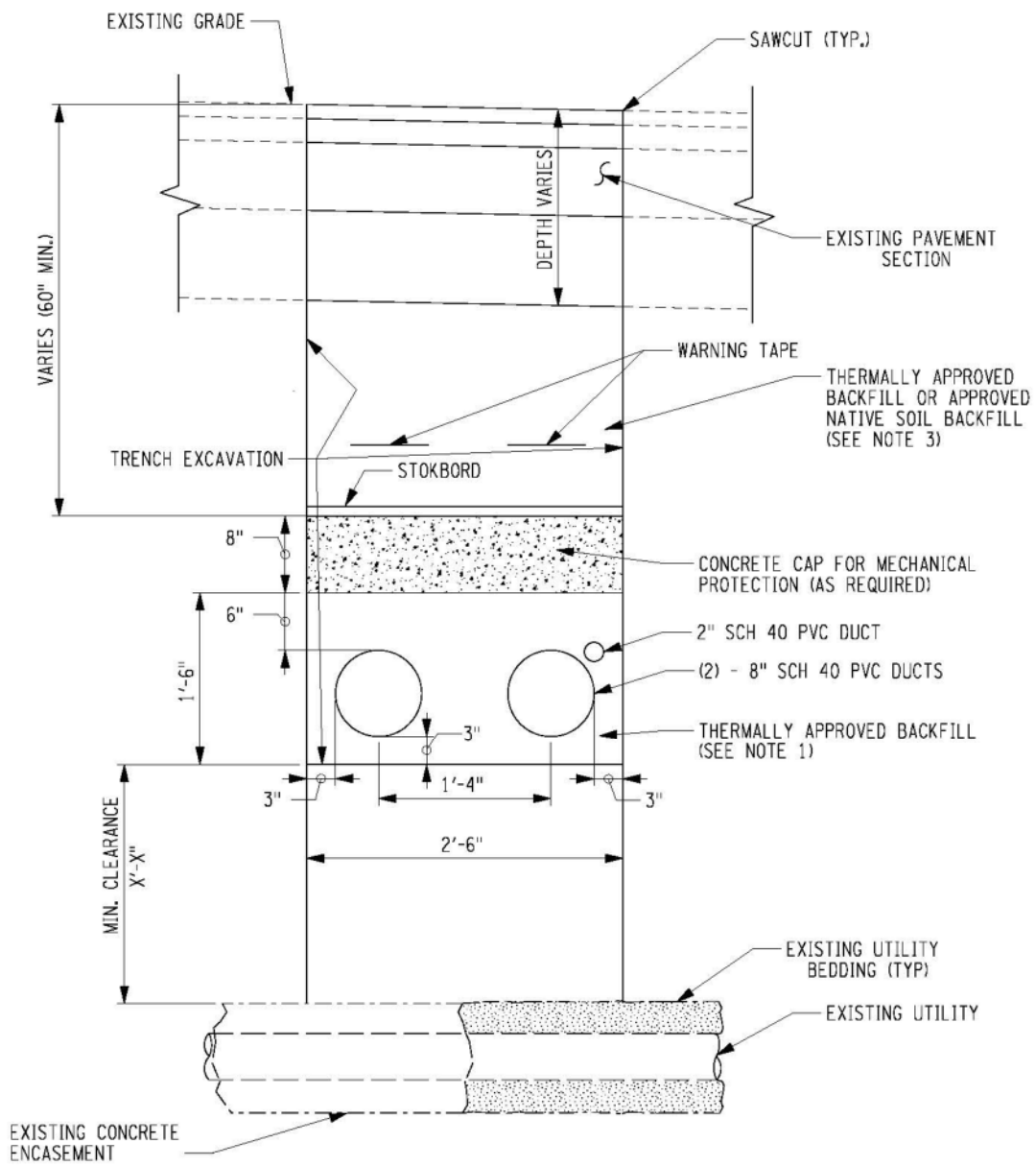
NOTES:

1. FILL MATERIAL SHALL HAVE THERMAL RESISTIVITY OF 1.0 K*m/W OR LESS.
2. WARNING TAPE DEPTH TO MEET THE REQUIREMENTS OF NEC SECTION 300.5(D)(3).
3. FOR INSTALLATION NOT LOCATED IN ROADWAYS, APPROVED NATIVE SOIL BACKFILL WILL EXTEND TO WITHIN FOUR (4) INCHES OF EXISTING GRADE.

PROJECT TITLE: CHAMPLAIN HUDSON POWER EXPRESS TRANSMISSION DEVELOPERS, INC.	LOCATIONS	
AECOM	DRAWING TITLE: TYPICAL UTILITY CROSSING DETAIL	DATE: 07/07/2020
		DRAWING NUMBER: FIG X.X

DESIGN SUPERVISOR: DESIGNED BY: CHECKED BY: DRAFTED BY: CHECKED BY:

Attachment D



TYPICAL UTILITY CROSSING OVER DETAIL

NOT TO SCALE

NOTES:

1. FILL MATERIAL SHALL HAVE THERMAL RESISTIVITY OF 1.0 K•m/W OR LESS.
2. WARNING TAPE DEPTH TO MEET THE REQUIREMENTS OF NEC SECTION 300.5(D)(3).
3. FOR INSTALLATION NOT LOCATED IN ROADWAYS, APPROVED NATIVE SOIL BACKFILL WILL EXTEND TO WITHIN FOUR (4) INCHES OF EXISTING GRADE.

PROJECT TITLE: CHAMPLAIN HUDSON POWER EXPRESS TRANSMISSION DEVELOPERS, INC.	LOCATIONS	
AECOM	DRAWING TITLE: TYPICAL UTILITY CROSSING OVER DETAIL	DATE: 07/07/2020
		DRAWING NUMBER: FIG X.X

DESIGNED BY: DRAFTED BY: CHECKED BY: CHECKED BY: DESIGN SUPERVISOR:

Attachment E

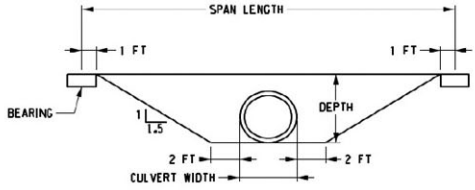
AECOM U.S.A., Inc.
40 British American Blvd.
Latham, NY 12110

PROJECT NO. 60323056
Prepared By: JMD Date 12/11/2020
Reviewed By: MWO Date 12/11/2020
Approved By: Date

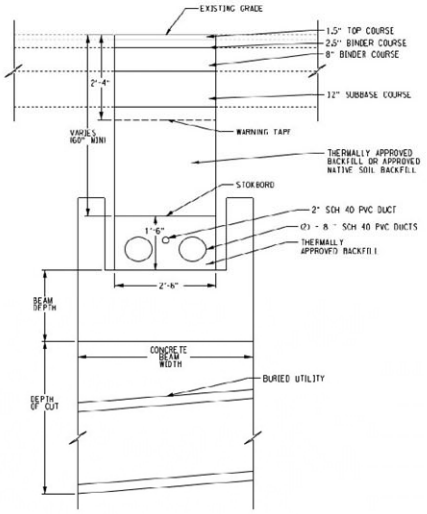
CALCULATION SHEET

Client: TDI Subject: Underground Utility Support
Project: CHPE

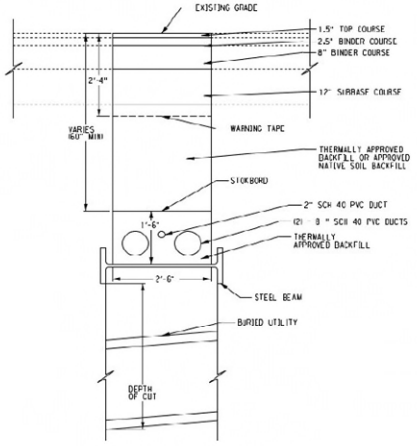
Description: Preliminary Review of Utility Support Options over culvert replacements
Details:



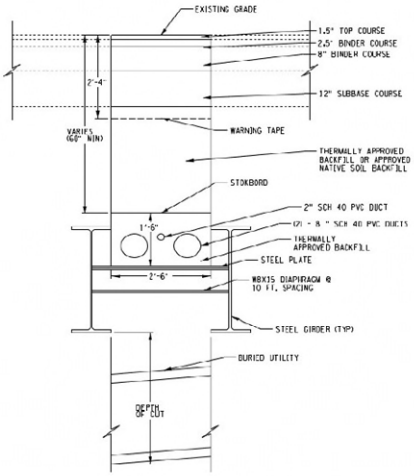
Typical Cross Section



Typical Concrete Section



Typical Weak Axis Steel Section



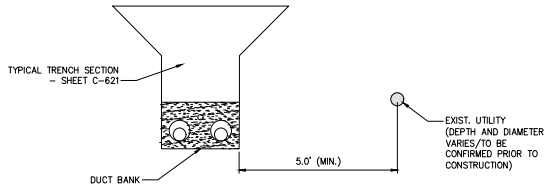
Typical Strong Axis Steel Section

Support Sizes

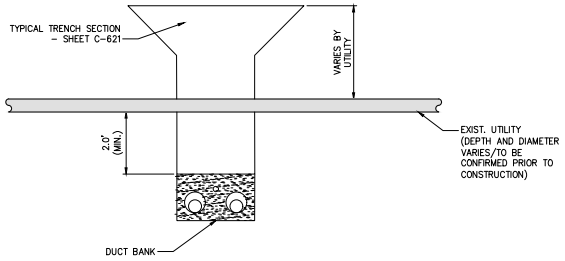
Culvert Width (ft)	Depth of Cut (ft) 5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1.38	1-A	2-A	3-C	4-D	5-E	5	5	5	5	5	6	6	6	6	6	6
1.65	1-A	2-A	3-C	4-D	5-E	5	5	5	5	5	6	6	6	6	6	6
1.92	1-A	2-A	3-C	4-D	5-E	5	5	5	5	5	6	6	6	6	6	6
2.50	1-A	3-B	3-C	4-D	5-E	5	5	5	5	5	6	6	6	6	6	6
3.08	1-A	3-B	4-D	5-D	5	5	5	5	5	5	6	6	6	6	6	6
3.67	1-A	3-B	4-D	5-D	5	5	5	5	5	5	6	6	6	6	6	6
4.00	1-A	3-B	4-D	5-D	5	5	5	5	5	5	6	6	6	6	6	6
4.50	2-A	3-C	4-D	5-F	5	5	5	5	5	6	6	6	6	6	6	6
5.00	2-A	3-C	4-D	5-E	5	5	5	5	5	6	6	6	6	6	6	6

Type	Steel Beam Size
1	W36X231 - Weak Axis Support
2	W36X247 - Weak Axis Support
3	W36X330 - Weak Axis Support
4	W36X395 - Weak Axis Support
5	(2)W36X135 - Strong Axis Support
6	(2)W36X231 - Strong Axis Support

Type	Concrete Beam Width	Beam Depth
	in	in
A	52	18
B	52	20
C	52	24
D	52	30
E	52	36



1 OPEN TRENCH – HORIZONTAL SEPARATION
NOT TO SCALE



3 OPEN TRENCH – VERTICAL SEPARATION (UNDER)
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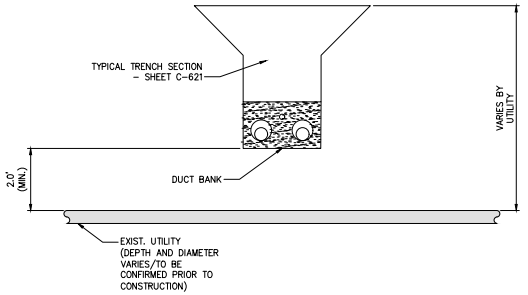

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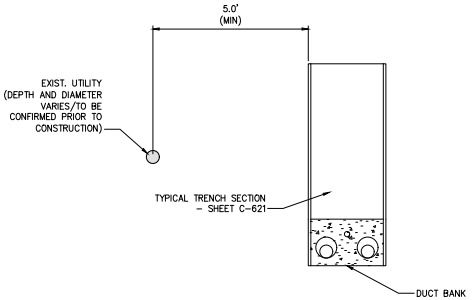
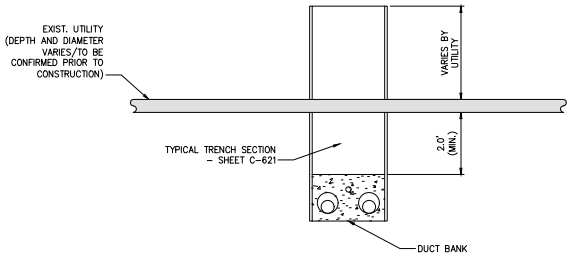
NOT TO SCALE



2 TYPICAL DUCTBANK IN ROADWAY – HORIZONTAL SEPARATION
NOT TO SCALE



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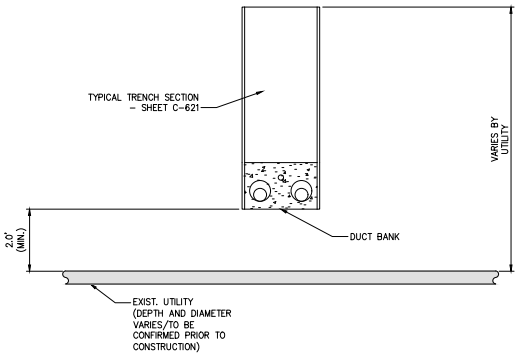
NOT TO SCALE



6 TYPICAL DUCTBANK IN ROADWAY – VERTICAL SEPARATION (OVER)
NOT TO SCALE

Transmission Developers Inc.

Kiewit

CHA
111 Winners Circle, PO Box 5269
Albany, NY 12205-0269
518.453.4500 www.chacompanies.com

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
A	4/8/22	100% FINAL SUBMISSION	WSO	

CHAMPLAIN HUDSON POWER EXPRESS
PACKAGE 1 A - PUTNAM TO DRESDEN
UTILITY TYPICAL SEPARATION DETAILS

DRAWN BY: WSO | DESIGNED BY: WSO | APPROVED BY:

KIEWIT PROJECT NO.	21162
CHA PROJECT NO.	066076
DRAWING NO.	**C-901**
SCALE	AS NOTED
DATE	11/02/2021
REV. NO.	A
SH.NO.	XXX OF XXX

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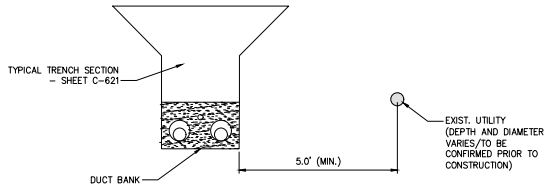

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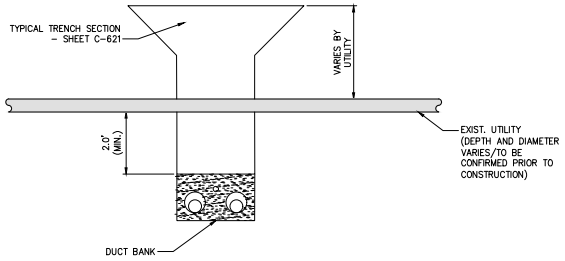

3 OPEN TRENCH – VERTICAL SEPARATION (UNDER)
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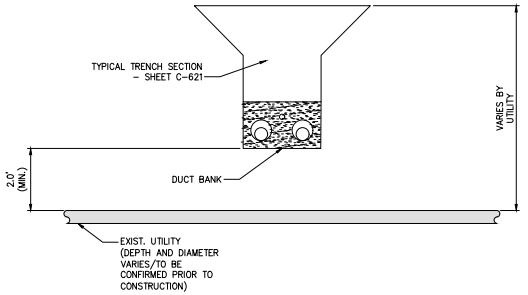

5 OPEN TRENCH – VERTICAL SEPARATION (OVER)
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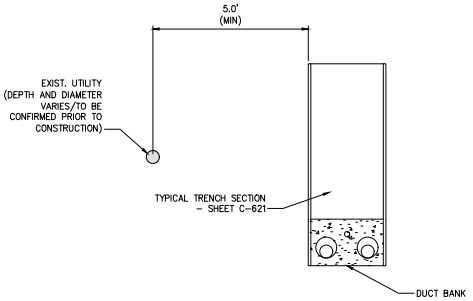
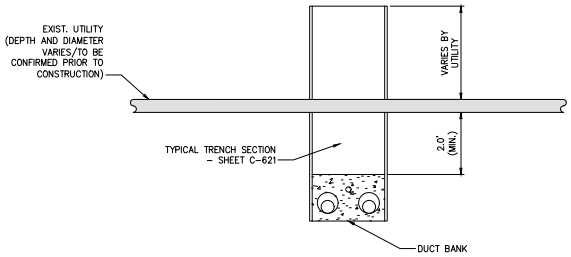


2 TYPICAL DUCTBANK IN ROADWAY – HORIZONTAL SEPARATION
NOT TO SCALE



4 TYPICAL DUCTBANK IN ROADWAY – VERTICAL SEPARATION (UNDER)
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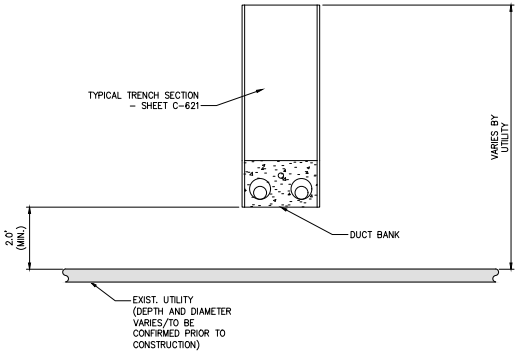

6 TYPICAL DUCTBANK IN ROADWAY – VERTICAL SEPARATION (OVER)
NOT TO SCALE

Transmission Developers Inc.

Kiewit

CHA
111 Winners Circle, PO Box 5269
Albany, NY 12205-0269
518.453.4500 www.chacompanies.com

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
A	4/8/22	100% FINAL SUBMISSION	WSO	

CHAMPLAIN HUDSON POWER EXPRESS
PACKAGE 1 B - ROUTE 22: DRESDEN - WHITEHALL
UTILITY TYPICAL SEPARATION DETAILS

DRAWN BY: WSO | DESIGNED BY: WSO | APPROVED BY:

KIEWIT PROJECT NO.	21162
CHA PROJECT NO.	066076
DRAWING NO.	**C-901**
SCALE	AS NOTED
REV. NO.	A
DATE	XX/XX/XXXX
SH.NO.	XXX OF XXX

File: P:\PROJECTS\VE-CHPE\3-DES\95 WIP\3_OTERO\066076_Ph1B - C-901.DWG Saved: 4/7/2022 11:50:36 AM Plotted: 4/7/2022 11:52:02 AM Current User: William.Otero LastSavedBy: William.Otero

Cole, Benjamin

From: Cole, Benjamin
Sent: Wednesday, April 13, 2022 4:24 PM
To: lm5215@att.com
Subject: CHPE Collocated Infrastructure Details_1A/1B_ATT
Attachments: CHPE-Package 1A-ATT Package-2022 04 13.pdf; ATT Package_1A Matrix.pdf

Dear Mr. Marello,

I'm writing on behalf of Transmission Developers Inc.("TDI"), owner of the Champlain Hudson Power Express ("CHPE" or "Project") transmission line project. The purpose of this correspondence is to provide more detailed information related to how the CHPE project is designed to cross your infrastructure and to solicit feedback from your company regarding the Project's alignment.

As you may recall from previous communications from Rick Chase at TDI, the CHPE is a fully permitted 339-mile underground and underwater high voltage direct current (HVDC) electric transmission line that will import up to 1,250 MW of renewable power from Canada and send it to the New York City metro area (see https://chpexpress.com for additional information).

Attached please find design drawings of the proposed CHPE alignment where it involves your infrastructure within the Segments 1A/1B Environmental Management and Construction Plan ("EM&CP 1A/1B").

TDI will be submitting these plans to the New York State Public Service Commission ("PSC") for portions of the Project in the Towns of Putnam, Dresden and Whitehall, and the Village of Whitehall. This information is a follow-up to previous communications to you providing general project information and typical infrastructure crossing drawings.

Please review the attached information regarding the CHPE alignment relating to your infrastructure and provide your concurrence of the Project's cables separation and alignment and any feedback to me (ben.cole@wsp.com) by April 29, 2022. It is important to TDI that the construction and operation of the CHPE does not interfere with the continued operation of your infrastructure.

To the extent that the CHPE line crosses your infrastructure within future Segment EM&CP submissions, we will provide you with similar drawings in advance of those filings. I look forward to coordinating with you as we finalize the design of the CHPE.

Sincerely,

Ben Cole
WSP USA, on behalf of TDI
(716) 289-1707
ben.cole@wsp.com

Cole, Benjamin

From: Cole, Benjamin
Sent: Wednesday, April 13, 2022 4:33 PM
To: David.Vega@lumen.com; lucas.stubbs@lumen.com
Subject: CHPE Collocated Infrastructure Details_1A/1B_Lumen
Attachments: L3 Package_1A Matrix.pdf; CHPE-Package 1A-L3 Package-2022 04 13.pdf

Dear Mr. Stubbs and Mr. Vega,

I'm writing on behalf of Transmission Developers Inc.("TDI"), owner of the Champlain Hudson Power Express ("CHPE" or "Project") transmission line project. The purpose of this correspondence is to provide more detailed information related to how the CHPE project is designed to cross your infrastructure and to solicit feedback from your company regarding the Project's alignment.

As you may recall from previous communications from Rick Chase at TDI, the CHPE is a fully permitted 339-mile underground and underwater high voltage direct current (HVDC) electric transmission line that will import up to 1,250 MW of renewable power from Canada and send it to the New York City metro area (see https://chpexpress.com for additional information).

Attached please find design drawings of the proposed CHPE alignment where it involves your infrastructure within the Segments 1A/1B Environmental Management and Construction Plan ("EM&CP 1A/1B").

TDI will be submitting these plans to the New York State Public Service Commission ("PSC") for portions of the Project in the Towns of Putnam, Dresden and Whitehall, and the Village of Whitehall. This information is a follow-up to previous communications to you providing general project information and typical infrastructure crossing drawings.

Please review the attached information regarding the CHPE alignment relating to your infrastructure and provide your concurrence of the Project's cables separation and alignment and any feedback to me (ben.cole@wsp.com) by April 29, 2022. It is important to TDI that the construction and operation of the CHPE does not interfere with the continued operation of your infrastructure.

To the extent that the CHPE line crosses your infrastructure within future Segment EM&CP submissions, we will provide you with similar drawings in advance of those filings. I look forward to coordinating with you as we finalize the design of the CHPE.

Sincerely,

Ben Cole
WSP USA, on behalf of TDI
(716) 289-1707
ben.cole@wsp.com

Cole, Benjamin

Subject: FW: CHPE Collocated Infrastructure Details_1A/1B_Verizon

From: Cole, Benjamin <Ben.Cole@wsp.com>
Sent: Thursday, April 14, 2022 9:07 AM
To: Chambers, Sandra <Sandra.Chambers@wsp.com>
Subject: CHPE Collocated Infrastructure Details_1A/1B_Verizon

To: nathaniel.hill@verizon.com
One or more files have been sent to you:
CHPE-Package 1A-Verizon Package-2022 04 11.pdf (25.07 MB)
CHPE-Package 1B-Verizon Package -2022 04 08.pdf (20.56 MB)
VZN Package_1A Matrix.pdf (432.58 KB)
VZN Package_1B Matrix.pdf (474.63 KB)
Click the link above to retrieve files.
You may be prompted to register an account if authentication is required.
These links will expire on 5/14/2022 1:07:05 PM

Dear Mr. Hill, I'm writing on behalf of Transmission Developers Inc.("TDI"), owner of the Champlain Hudson Power Express ("CHPE" or "Project") transmission line project. The purpose of this correspondence is to provide more detailed information related to how the CHPE project is designed to cross your infrastructure and to solicit feedback from your company regarding the Project's alignment. As you may recall from previous communications from Rick Chase at TDI, the CHPE is a fully permitted 339-mile underground and underwater high voltage direct current (HVDC) electric transmission line that will import up to 1,250 MW of renewable power from Canada and send it to the New York City metro area (see https://chpexpress.com for additional information). Please find design drawings for download, that depict the proposed CHPE alignment where it involves your infrastructure within the Segments 1A/1B Environmental Management and Construction Plan ("EM&CP 1A/1B"). TDI will be submitting these plans to the New York State Public Service Commission ("PSC") for portions of the Project in the Towns of Putnam, Dresden and Whitehall, and the Village of Whitehall. This information is a follow-up to previous communications to you providing general project information and typical infrastructure crossing drawings. Please review the attached information regarding the CHPE alignment relating to your infrastructure and provide your concurrence of the Project's cables separation and alignment and any feedback to me (ben.cole@wsp.com) by April 29, 2022. It is important to TDI that the construction and operation of the CHPE does not interfere with the continued operation of your infrastructure. To the extent that the CHPE line crosses your infrastructure within future Segment EM&CP submissions, we will provide you with similar drawings in advance of those filings. I look forward to coordinating with you as we finalize the design of the CHPE. Sincerely, Ben Cole WSP USA, on behalf of TDI (716) 289-1707 ben.cole@wsp.com

Cole, Benjamin

Subject: FW: CHPE Collocated Infrastructure Details_1A/1B_National Grid

From: Cole, Benjamin <Ben.Cole@wsp.com>
Sent: Thursday, April 14, 2022 9:18 AM
To: Chambers, Sandra <Sandra.Chambers@wsp.com>
Subject: CHPE Collocated Infrastructure Details_1A/1B_National Grid

To: Lauren.Snyder@nationalgrid.com, Pamela.aspinall@nationalgrid.com
One or more files have been sent to you:
CHPE-Package 1A-National Grid Package-2022 04 11.pdf (24.75 MB)
CHPE-Package 1B-National Grid Package -2022 04 08.pdf (29.15 MB)
National Grid Package_1A Matrix.pdf (426.81 KB)
National Grid Package_1B Matrix.pdf (477.48 KB)
Click the link above to retrieve files.
You may be prompted to register an account if authentication is required.
These links will expire on 5/14/2022 1:17:31 PM

Dear Ms. Aspinall and Ms. Snyder, I'm writing on behalf of Transmission Developers Inc.("TDI"), owner of the Champlain Hudson Power Express ("CHPE" or "Project") transmission line project. The purpose of this correspondence is to provide more detailed information related to how the CHPE project is designed to cross your infrastructure and to solicit feedback from your company regarding the Project's alignment. As you may recall from previous communications from Rick Chase at TDI, the CHPE is a fully permitted 339-mile underground and underwater high voltage direct current (HVDC) electric transmission line that will import up to 1,250 MW of renewable power from Canada and send it to the New York City metro area (see https://chpexpress.com for additional information). Please find design drawings for download, that depict the proposed CHPE alignment where it involves your infrastructure within the Segments 1A/1B Environmental Management and Construction Plan ("EM&CP 1A/1B"). TDI will be submitting these plans to the New York State Public Service Commission ("PSC") for portions of the Project in the Towns of Putnam, Dresden and Whitehall, and the Village of Whitehall. This information is a follow-up to previous communications to you providing general project information and typical infrastructure crossing drawings. Please review the attached information regarding the CHPE alignment relating to your infrastructure and provide your concurrence of the Project's cables separation and alignment and any feedback to me (ben.cole@wsp.com) by April 29, 2022. It is important to TDI that the construction and operation of the CHPE does not interfere with the continued operation of your infrastructure. To the extent that the CHPE line crosses your infrastructure within future Segment EM&CP submissions, we will provide you with similar drawings in advance of those filings. I look forward to coordinating with you as we finalize the design of the CHPE. Sincerely, Ben Cole WSP USA, on behalf of TDI (716) 289-1707 ben.cole@wsp.com