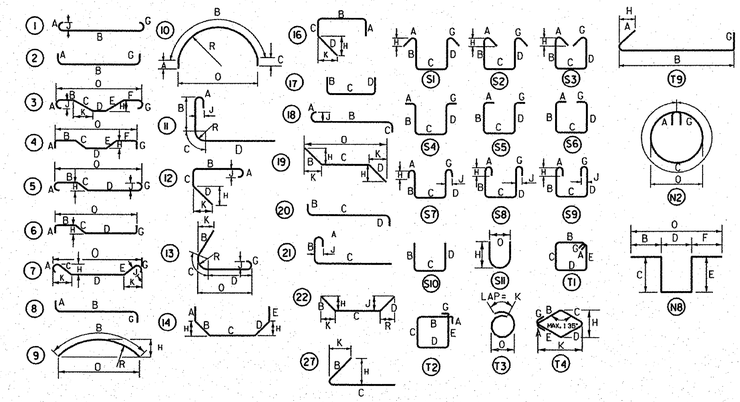
ROARING BRANCH - RAMP A

	ITEM	NO. OF PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
	1	DRILLED SHAFTS - PIER 7																
*	2	49	36	18300	7D3601	STR.												
	3	46	36	17300	7D3602	STR.												
	4																	
Δ	5	386	19	7637	7D1901	N2	300		7037				300					2240
	6																	
*	7	49	36	6210	7D3603	2	610	5600										
	8	46	36	7210	7D3604	2	610	6600										
	9																	
	10	DRILLED SHAFTS - PIER 8																
	11	48	36	18300	8D3601	STR.												
*	12	47	36	17300	8D3602	STR.												
	13																	
Δ	14	386	19	7637	8D1901	N2	300		7037				300					2240
	15																	
	16	48	36	6210	8D3603	2	610	5600										
*	17	47	36	7210	8D3604	2	610	6600										
	18																	
	19	PIER 7																
*	20	11	16	7640	7P1611	STR.												
	21	10	16	2840	7P1612	STR.												
	22																	
	23	14	13	2130	7P1301	T9	160	1840					130	110				
*	24	118	13	2240	7P1302	T9	160	1950					130	110				
*	25	79	13	3120	7P1303	T9	160	2830					130	110				
	26	78	13	3540	7P1304	T9	160	3250					130	110				
	27	102	13	5160	7P1305	10	1050	3060	1050								975	1950
	28	100	13	4540	7P1306	10	1050	2440	1050								775	1550
	29																	
*	30	12	16	8000	7P1601	1	180	7640					180		130			
	31	54	16	3200	7P1602	1	180	2840					180		130			
	32	6	16	9160	7P1603	1	180	8800					180		130			
*	33	9	16	3180	7P1604	1	180	3000							130			
▲	34	8	16	6560	7P1605	1	180	6380							130			
▲	35	120	16	4465	7P1606	S1		1500	1465	1500								
	36	68	16	4585	7P1607	S1		1560	1465	1560								
	37	12	16	6490	7P1608	3			2990	3500				1375		2650		
	38	10	16	3270	7P1609	17		660	1950	660								
	39	76	16	2200	7P1610	T9	200	1840					160	140	340			
	40																	
Δ	41	34	25	9460	7P2501	1	330	8800					330		250			
	42																	
	43	36	32	8500	7P3201	1	430	7640					430		340			
*	44	101	32	7330	7P3202	1	430	6900							340			
	45	100	32	9650	7P3203	1	430	~~9220~~							340			
	46							11220										
	47	PIER 8																
	48	10	16	7640	8P1611	STR.												
*	49	11	16	2840	8P1612	STR.												
	50																	
	51	100	32	6000	8P3201	STR.												
	52																	
	53	14	13	2130	8P1301	T9	160	1840					130	110				
*	54	148	13	2240	8P1302	T9	160	1950					130	110				
*	55	99	13	3115	8P1303	T9	160	2825					130	110				
	56	98	13	3540	8P1304	T9	160	3250					130	110				
	57	120	13	5160	8P1305	10	1050	3060	1050								975	1950
	58	118	13	4540	8P1306	10	1050	2440	1050								775	1550
	59																	
*	60	12	16	8000	8P1601	1	180	7640					180		130			
	61	54	16	3200	8P1602	1	180	2840					180		130			
	62	6	16	9160	8P1603	1	180	8800					180		130			
*	63	9	16	3180	8P1604	1	180	3000							130			
▲	64	8	16	6560	8P1605	1	180	6380							130			
▲	65	120	16	4465	8P1606	S1		1500	1465	1500								
	66	68	16	4585	8P1607	S1		1560	1465	1560								
	67	12	16	6490	8P1608	3			2990	3500				1375		2650		
	68	10	16	3270	8P1609	17		660	1950	660								
	69	76	16	2200	8P1610	T9	200	1840					160	140				
	70																	
Δ	71	34	25	9460	8P2501	1	330	8800					330		250			
	72																	
	73	36	32	8500	8P3202	1	430	7640					430		340			
	74	100	32	6430	8P3203	1	430	6000							340			
*	75	101	32	11685	8P3204	1	430	11255							340			



NOTES:

1. UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING 57M SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M 31M(ASTM A 615-S1). ALL BARS SHALL BE GRADE 420 UNLESS OTHERWISE DESIGNATED.
2. FOR TYPICAL BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS AND HOOKS, AND OTHER STANDARD PRACTICE, SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
3. BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
4. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180 DEGREE AND 135 DEGREE HOOKS.
5. "J" DIMENSION ON 180 DEGREE HOOKS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
6. "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
7. WHERE SLOPE DIFFERS FROM 45 DEGREES, DIMENSIONS "H" AND "K" MUST BE SHOWN.

LEGEND:

- ▲ DENOTES BARS TO BE CUT IN THE FIELD.
- ✳ DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
- Δ DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.
- "E" IN PREFIX DENOTES EPOXY COATED REINFORCING STEEL.
- "S" IN PREFIX DENOTES STAINLESS REINFORCING STEEL
- "XAMXXXX" DENOTES VT279 NB ABUTMENT
- "XAFXXXX" DENOTES VT279 SB ABUTMENT
- "XAAXXXX" DENOTES RAMP A ABUTMENT
- "XADXXXX" DENOTES RAMP D ABUTMENT

ASTM STANDARD REINFORCING BARS

BAR SIZE DESIGNATION	NOMINAL MASS (Kg/m)	NOMINAL DIMENSIONS ROUND SECTION: DIAMETER (mm)	CROSS SECTIONAL AREA (mm^2)	PERIMETER (mm)
10	0.560	9.5	71	29.84
13	0.994	12.7	129	39.90
16	1.552	15.9	199	49.95
19	2.235	19.1	284	60.00
22	3.042	22.2	387	69.74
25	3.973	25.4	510	79.80
29	5.060	28.7	645	90.16
32	6.404	32.3	819	101.47
36	7.907	35.8	1006	112.47
43	11.380	43.0	1452	135.09
57	20.240	57.3	2581	180.01

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. B15S
Highway No. VT RTE 279	Log Sta. / Surv. Sta.
VT ROUTE 279 & RAMPS OVER ROARING BRANCH OF WALLOOMSAC RIVER	
REINFORCING STEEL SCHEDULE (SHEET 4 OF 6)	
Designed By M.D. BOWER	Drawn By R.C. COCOL
Checked By B.J. CARLSON Date 06/08	Bridge Design Supervisor K.M. WOJTKOWSKI Date 06/08
PROJECT BENNINGTON	PROJECT NO. AC NH 019-1(51)
TVGA CAD Drawing No. SteelSch.dgn	Date 02/02/2009
Bridge Sheet No. BR317	Sheet 304 of 367

TVGA CONSULTANTS