FEATURE LOCATION BOULDER	GENERAL PURPOSES)	COMMENTS	KEY DETAIL - Drawing number	FIXED BOULDERS (GROUTED WITH ADJACENT 2 FT. MIN. GROUTED BOULDERS OR AS SHOWN)					PLACE	XED BOULDER MENT ELEVATIONS - COMMENTS	MOVABLE BOULDERS WITH RIPRAP AND RIPRAP SPECIAL					MOVABLE BOULD PLACEMENT ELEVA - COMMENTS	TIONS	RIPRAP FOR MOVABLE BOULDER VOID FILLING, SUPPORT, AND ADJUSTMENT
CLUSTER NUMBER				2.5 FT. X 3.5 F	2.5 3. T. X B 4.0 4. FT. F	FT. 3.5 Y FT BY 5 5.5 I. FT.	4.5 SPECIAL FT. BY 6 FT.	TOTAL	LOW	INT. 1 INT. HIGH	2.5 2.5 FT. X FT. ) 3.5 4.0 FT. FT.	3. FT. X BY 4.5 FT.	3.5 4.5 SPEC FT BY FT. 5.5 BY 6 FT. FT.	IAL TC	)TAL L	LOW INT. 1 INT. 2	HIGH	CUBIC COMMENT YARDS
BC- 27 N. SIDE OF CHUTE 3	WHITEWATER FEATURE WITH SURFING WAVE UPSTREAM AND EDDY BELOW	SMALL BOULDERS TO BE PLACED AS TERRACE FOLLOWED BY LARGE ROUNDED BOULDER.	E1	6			1	7	6 EA. 570.5	1 EA. 572.0					0			
C- 28 NORTH BANK OF UPSTREAM SIDE POOL 7	SCREEN VIEW OF LOWER CHALL. ENTRY, FEATURE, ADJUSTMENT BOULDERS	BOULDERS ARE PLACED ON RIPRAP BASE, MINIMIZE VISIBILITY OF RIPRAP	E1					0				2	2 2		6 1 5	EA. 4 EA. 572.5 573.5	1 EA. 574.5	7 FILL ALL VOIDS, ADD STAB. SOIL ABOVE LOW BUT, LEAVE EXCESS BELOW WATER.
C- 29 S. BANK, SILL 4 CONSTRICTION	ON ADJUST WATER LEVELS & FLOW PATTERN, ORIENT VIEW TO MOD. WATERWAY, EDDY	OVERLAP (SHINGLE) BOULDERS TO AVOID DEBRIS.	E1					0			4 3		1		8 3 5	5 EA. 3 EA. 568.5 571.5	2 EA. 572.5	9 FILL ALL VOIDS, ADD STAB. SOIL ABOVE LOW WATER, LEAVE EXCESS RIPRAP ON BENCH BOT
C- 30 N. BANK, SILL 4 CONSTRICTION MAIN WATERWAY	ON ADJUST WATER LEVELS & FLOW PATTERN, ORIENT VIEW TO MOD. WATERWAY, EDDY	OVERLAP (SHINGLE) BOULDERS TO AVOID DEBRIS.	E1					0			4 3		1		8 3 5	5 EA. 3 EA. 568.5 571.5	2 EA. 572.5	9 FILL ALL VOIDS, ADD STAB. SOIL ABOVE LOW WATER, LEAVE EXCESS RIPRAP ON BENCH BOT
C- 31 MID-PARK STORM OUTFALL	GROUTED BOULDER TO PROVIDE RISE FOR HEADWALL	PLACE CAREFULLY AND SUPPORT PIPE, SEE DETAIL	E1	6				6	1 EA. 572.5	2 3 EA. 574.5					0			
C- 32 SOUTH BANK OF MIDDLE POOL	ADJUSTMENT BOULDERS	LOOSE BLDRS. ON POOL BOTTOM AND LOWER SLOPE, FILL ALL VOIDS FLUSH TO TOPS.	E1							J13.3	9		3			12 EA. 668.5	3 EA. 570.5	14 FILL WEDGE SOUTH OF BOULDERS WITH LARGER RIPRAP, FILL ALL VOIDS IN BOULDERS TIGHT.
C- 33 SOUTH BANK OF UPSTREAM SIDE POOL 6	POOL AND EDDY FEATURE, APPEARANCE	MAY ADD LOOSE BOULDERS FROM FBC 32 DURING TUNING OR IN FUTURE	E2		2 1	1		4										
S. BANK POOL 5 AT ENTRY T CHUTE 2	O ADJUSTMENT OF WATER LEVELS, FLOW PATTERN, AND ELEV., FRAME ENTRY VIEW	PLACE BOULDERS WITH FLAT TOPS FOR SITTING.	E2					0			5		2		7 5 5	EA. 573.5	2 EA. 574.	10 FILL ALL VOIDS, ADD STAB. SOIL ABOVE LOW WATER, LEAVE EXCESS RIPRAP ON POOL BANK BELOW BLDRS.
C- 35 N. BANK POOL 5 NEAR ENTRY TO CHUTE 2	ADJUSTMENT OF WATER LEVELS, FLOW PATTERN, AND ELEV., FRAME ENTRY VIEW	PLACE BOULDERS WITH FLAT TOPS FOR SITTING.	E2					0			5		2			EA. 573.5	2 EA. 574.	10 FILL ALL VOIDS, ADD STAB. SOIL ABOVE LOW WATER, LEAVE EXCESS RIPRAP ON POOL BANK BELOW BLDRS.
C- 36 ADJACENT TO STEPS AT UPSTREAM END OF NEW ABUTMENT WALL	DIVERT SPILLAGE AWAY FROM AREA BELOW STEPS, SUPPORT STEPS, TERRACES TO SIT, APPEARANCE.	PLACE BLDRS. SO STEP RISE CONCEALED AND FLUSH TO PAVING. MAY SUBSTITUTE 2 FT. NOMINAL BLDRS. FOR EASE OF FITTING STEPS.	E2	22	3 1			26	10 EA. 576.	9 EA. 4 EA. 1 EA. 576.5 577.0 578.5, 2 EA. 577.5					0			
C- 37 SOUTH SIDE OF SILL 3 CONSTRICTION APPROACH	CONTROL OF POOL LEVEL UPSTREAM, WHITEWATER EDDY, APPEARANCE, ADJUSTABILITY	OVERLAP (SHINGLE) BOULDERS TO AVOID DEBRIS.	E2					0	12 EA. 570.5	5 EA. 572.7 573.8, 570.9 572.8 573.2 572.5 2EA. 572.8 572.9	22	2	1	:	25 5 5	EA. 1 EA. 69.5 570.5	3 EA. 571.5	13 PLACE RIPRAP IN ALL BOULDER VOIDS AND P AS TRANSITION TO UPSTREAM AND POOL BOTT GRADES.
C- 38 NORTH SIDE OF SILL 3 CONSTRICTION APPROACH	ADJUSTMENT OF POOL LEVEL UPSTREAM, WHITEWATER EDDY, APPEARANCE, ADJUSTABILITY	OVERLAP (SHINGLE) BOULDERS TO AVOID DEBRIS.	E2					0	l EA. I	5 EA. 572.7 573.8, 570.9 572.8 573.2 572.5 2EA. 572.8 572.9		2	1				3 EA. 571.5	13 PLACE RIPRAP IN ALL BOULDER VOIDS AND F AS TRANSITION TO UPSTREAM AND POOL BOTT GRADES.
C- 39 SOUTH BANK ABOVE SILL 2 NEAR PATH JUNCTION	VIEWPOINT, APPEARANCE	PLACE BOULDERS WITH FLAT TOPS FOR SITTING.	E2					0		312.3	3	2			5 3 5	EA. 575.5	2 EA. 575.7	2 USE RIPRAP TO FILL VOIDS AND ADD SOIL F RIPRAP SPECIAL.
C- 40 SOUTH SIDE OF SILL 2 CONSTRICTION	ADJUSTMENT OF POOL LEVEL UPSTREAM, WHITEWATER EDDY, APPEARANCE, ADJUSTABILITY	OVERLAP (SHINGLE) BOULDERS TO AVOID DEBRIS.	E2		2			2	1 EA. 570.5	1 EA. 571.5	27	2				16 5 EA. 1 EA. EA. 570.9, 572.5, 70.5 1 EA. 2EA. 571.5 572.7	573.2, 573.8	AS TRANSITION TO UPSTREAM AND POOL BOTT
C- 41 NORTH SIDE OF SILL 2 CONSTRICTION	ADJUSTMENT OF POOL LEVEL UPSTREAM, WHITEWATER EDDY, APPEARANCE, ADJUSTABILITY	OVERLAP (SHINGLE) BOULDERS TO AVOID DEBRIS.	E2		2			2	1 EA. 570.5	1 EA. 571.5	20 2	2				14 5 EA. 2EA. EA. 570.9, 572.7	1 EA.	12 PLACE RIPRAP IN ALL BOULDER VOIDS AND F AS TRANSITION TO UPSTREAM AND POOL BOTT GRADES.
C- 42 NORTH BANK ABOVE SILL 2	VIEWPOINT, APPEARANCE	PLACE BOULDERS WITH FLAT TOPS FOR SITTING.	E2					0			6	2				EA. 2 EA 75.0 575.3	2 EA. 576.5	2.5 USE RIPRAP TO FILL VOIDS AND ADD SOIL F RIPRAP SPECIAL.
C- 43 CONSTRICTION AT END OF UPPER MODERATE WATERWAY, S. BANK	WHITEWATER WAVE, EDDY, AND TO MAINTAIN DEPTH	LOWER GROUTED BOULDER EXTENDS 2.0 FT INTO WATERWAY BANK AT ELEV. 569.5.	E2		2	4		6	1 EA. 569.5	1 EA. 1 EA. 2 EA. 570.5 571.5 572.5	9 1	2			12 6		2 EA. 573.5	5.5 FINES TO LOCK IN LOW BLDR., FILL ALL VOID STAB. SOIL ABOVE LOW WATER, LEAVE EXCESS DOWNSTREAM.
C- 44 CONSTRICTION AT END OF UPPER MODERATE WATERWAY, N. BANK.	WHITEWATER WAVE, EDDY, AND TO MAINTAIN DEPTH; MINIMIZES HYDRAULIC EFFECTS FROM CHALLENGE.	LOWER GROUTED BOULDER EXTENDS 2.0 FT INTO WATERWAY BANK AT ELEV. 569.5.	E2	3	2 4	1	1	11	569.5, 1 EA.	1 EA. 1 EA. 2 EA. 571.5 572.8 573.8 2 EA. 1 EA. 2 EA. 572.5 573.5 574.8		1			10 4 5	EA. 1 EA. 1 EA. 571.5 572.0 573.2 1 EA. 572.5	3 EA. 574.5	4.5 FINES TO LOCK IN BLDRS., FILL ALL VOIDS, A STAB. SOIL ABOVE LOW WATER, LEAVE EXCESS DOWNSTREAM.
C- 45 SOUTH SIDE OF UPPER MOD. WATERWAY ABOUT 40 FT. FRO DOWNSTREAM END.	CONSTRICTION TO MAINTAIN FLOW DEPTH, WHITEWATER WAVE AND SIDE EDDY POOL JUST DOWNSTREAM.	LOOSE BLDRS IN SIDE POOL CAN BE SET JUST UPSTREAM OF FIXED BOULDER CONSTRICTION TO CREATE WAVES AND INCREASE DEPTH.	E2	2	2	1		5	571	573 2EA. 575 573.5	6				6 2 5	2 EA. 2 EA. 70.0 570.5	2 EA. 571.8	1.5 LEAVE EXCESS RIPRAP IN. SUBMERGED ADJ. SI POOL BOTTOM.
AC- 46 ADJUSTABLE BOTTOM SILL ASSOCIATED WITH FBC45 AND 47	WHITEWATER WAVE AND TO MAINTAIN DEPTH	A FLAT, RECTANGULAR SHAPE BOULDER IS NECESSARY WHICH CAN FORM SILL +- 0.5 FT. OF UPSTREAM INVERT OF WATERWAY	E2					0			3			2.5 BY 5.5 3Y 2 FT.	5		5 EA. 571.2	2 FINES TO LOCK IN, RAISE OR LOWER AND LEVE BOULDERS. FILL ALL VOIDS.
C- 47 NORTH SIDE OF UPPER MOD. WATERWAY ABOUT 50 FT. FRO DOWNSTREAM END.	CONSTRICTION TO MAINTAIN FLOW DEPTH AND WHITEWATER WAVE.	LOOSE BLDRS CAN BE SET JUST UPSTREAM OF FIXED BOULDER CONSTRICTION TO CREATE WAVES AND INCREASE DEPTH.	E2	3	2	2 1		6		2 EA. 2 EA. 575 573.5 574.5	5			Т.	5 5	572 3 EA. 572.0	573	1.5 LEAVE EXCESS UPHILL OF BOULDERS BELOW LO WATER.
C- 48 SOUTH SIDE OF UPPER MOD. WATERWAY ABOUT 90 FT. FRO DOWNSTREAM END.	CONSTRICTION TO MAINTAIN FLOW DEPTH AND WHITEWATER FEATURE.	LOOSE BLDRS ON BANK CAN BE SET JUST UPSTREAM OF FIXED BOULDER CONSTRICTION TO CREATE WAVES AND INCREASE DEPTH.	E2	1		3		4	572	575 575 576	3 1	1			5 3 5		2 EA. 576.0	2 USE RIPRAP TO FILL VOIDS AND ADD SOIL.
C- 49 NORTH SIDE OF UPPER MOD. WATERWAY ABOUT 90 FT. FRC DOWNSTREAM END.	CONSTRICTION TO MAINTAIN FLOW DEPTH AND WHITEWATER FEATURE.	LOOSE BLDRS ON BANK CAN BE SET JUST UPSTREAM OF FIXED BOULDER CONSTRICTION TO CREATE WAVES AND INCREASE DEPTH.	E2	1	2	2	1	4	572	2 EA. 575 574.5	6	1				EA. 576 76.0	577	2 USE RIPRAP TO FILL VOIDS AND ADD SOIL.