



STEEL LIST						
NO.	SIZE	MARK	BENT OR STRAIGHT	LENGTH	SPACING	WEIGHT-LBS.
158	1" φ	A7a	Bent	30'-3"	A&B bars 6"	12761
4	1" φ	A7b	"	33'-7"	"	359
6	1" φ	A7c	"	30'-11"	"	495
6	1" φ	A7d	"	28'-1"	"	450
4	1" φ	A7e	"	31'-7"	"	337
12	1" φ	A7f	"	20'-3"	"	649
94	1" φ	B6a	Straight	17'-9"	"	4455
94	3/8" φ	C6a	Bent	20'-0"	18"	3843
78	3/4" φ	D5a	Straight	9'-9"	18"	1142
8	3/4" φ	D5b	"	8'-4"	18"	100
4	3/4" φ	D5c	"	7'-0"	18"	42
4	3/4" φ	D5d	"	5'-7"	18"	34
8	3/4" φ	D5e	"	4'-4"	18"	52
8	3/4" φ	D5f	"	3'-0"	18"	36
50	3/8" φ	E4a	"	30'-6"	"	1590
8	3/8" φ	E4b	"	34'-6"	"	288
8	3/8" φ	E4c	"	38'-6"	"	321
50	3/8" φ	E4d	"	42'-6"	"	2216
36	1/2" φ	K2a	Bent	4'-3"	12"	102
TOTAL						29272

Note: Lap E bars 30"

Note:- Traffic to be maintained at all times by constructing one half of structure at a time
Vertical joint in barrel to be provided with a 4"x3" key and E bars to lap 30" beyond construction joint
Remove slab and south wall and footing of old structure
Gravel fill for foundation to new structure to be obtained from channel at outlet end of culvert and to be thoroughly compacted.
Use High-Early-Strength Portland Cement in all concrete work (Sect. 1.2)

CULVERT AT STA. 112+55

PROJECT LIMITS
Sta. 112+35 to Sta. 112+75 including Structure

SUMMARY OF QUANTITIES	
80 lin.ft.	type D-1 guard rail removed and reset
109 sq.yds.	existing pavement removed (4" brick, asphalt filler, concrete base)
406 cu.yds.	excavation unclassified
56 cu.yds.	old concrete masonry removed
60 cu.yds.	gravel fill in place for foundation to new structure (to bring channel to grade)
170 cu.yds.	concrete (1:5 1/2 mix)
29272 lbs.	reinforcing steel
215 cu.yds.	backfill (Borrow)
109 sq.yds.	7" concrete base (1:7 mix)
1046 sq.yds.	4" vit. brick pav. including 1" gran. slag cushion and F-1 asphalt filler
80 lin.ft.	6"x5" integral concrete flush curb
39.3 sq.yds.	type B waterproofing