STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET

SUMMARY OF ESTIMATED QUANTITIES

APPR SLAB NO. 1	ABUT NO. 1	DECK	ABUT NO. 2	APPR SLAB NO. 2					LAND-SCAPE ITEMS	TRAINING	FULL E & D ITEMS	EROSION CONTROL	ROADWAY	BRIDGE QUANTITY	ROUND	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER
													1 ✓			1		LS	CLEARING AND GRUBBING (PLUS INDIVIDUAL TREES AND STUMPS)	201.10
												1023	9500			9500		CY	COMMON EXCAVATION	203.15
												129.3	122			122		CY	SOLID ROCK EXCAVATION	203.16
												241	1230			1230		CY	MUCK EXCAVATION	203.20
	144		336										693	480		480		CY	UNCLASSIFIED CHANNEL EXCAVATION	203.27
												1821	1387			1387		CY	EXCAVATION OF SURFACES AND PAVEMENTS	203.28
												9038	1500			1500		CY	EARTH BORROW	203.30
												5360	4400			4400		CY	SAND BORROW	203.31
												8445	1230			1230		CY	GRANULAR BORROW	203.32
												12865	12210			12210		SY	FINE GRADING-SUBGRADE	203.40
													2700	441		2750		CY	TRENCH EXCAVATION OF EARTH	204.20
												72.5	110			110		CY	TRENCH EXCAVATION OF ROCK	204.21
	1366		3283									446.2	71	4649	5443.1	4720		CY	GRANULAR BACKFILL FOR STRUCTURES	204.30
	1													1 ✓		1		LS	COFFERDAM (STA. 35+71)	208.40
			1											1 ✓		1		LS	COFFERDAM (STA. 37+17)	208.40
	1050		530										1823	1580		1580		CY	COFFERDAM EXCAVATION - EARTH	208.30
	10		10										40.3	20		20		CY	COFFERDAM EXCAVATION - ROCK	208.35
												406.7	100			100		CY	SUBBASE OF CRUSHED GRAVEL (FINE GRADED)	301.26
												55.8	260	6150	7229.2	6400		CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.35
													27	18		18		CWT	EMULSIFIED ASPHALT	404.65
												6506.73	1			1		LU	PRICE ADJUSTMENT ASPHALT CEMENT (NOT A BID ITEM)	406.50
		114										136.08	3006	114	131.45	3120		TON	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34)	490.30
		190											0	190		190		CY	CONCRETE, CLASS A	501.22
34	429		422	34								30.03	71	819	933.83	890		CY	CONCRETE, CLASS S	501.25
		44											0	44		44		CY	SILICA-FUME CONCRETE	501.60
		278750											274006	278750		278750		LB	STRUCTURAL STEEL(PLATE GIRDER)	506.55
	47693		47584											95277	97890	95277		LB	REINFORCING STEEL	507.15
3951		67919		4002								84	4308	75872	75872	80180		LB	EPOXY COATED REINFORCING STEEL (MODIFIED- MMFX)	507.17
		1												1 ✓		1		LS	SHEAR CONNECTORS (1126 studs @ 7/8" x 7")	508.15
		1												1 ✓		1		LS	STRUCTURAL PAINTING,SHOP APPLIED	513.25
		1												1 ✓		1		LS	SURFACE PREPARATION,SHOP	513.40
	9	13	8										45	30		30		GAL	WATER REPELLENT	514.10
		45												45 ✓		45		LF	BRIDGE EXPANSION JOINT (VERMONT JOINT)	516.10
		743											727.7	743		743		SY	SHEET MEMBRANE WATERPROOFING (MOD) (TORCH APPLIED)	519.20
		146											145.15	146		146		LF	BRIDGE RAILING - 3 RAIL ALUMINUM	525.22
		145											144.95	145		145		LF	BRIDGE RAILING-ALUMINUM / PEDESTRIAN	525.23
		1												1 ✓		1		LS	MAINTENANCE OF TRAFFIC FOR BRIDGE PROJECTS	527.10
		350												350 ✓		350		SY	REMOVAL OF BRIDGE PAVEMENT	529.10
		1												1 ✓		1		EACH	REMOVAL OF STRUCTURE	529.15
	5		5											10 ✓		10		EACH	BEARING DEVICE ASSEMBLY	531.10

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		COMMON EXCAVATION
8791	CY	MAINLINE
280	CY	TH #5
101	CY	TH #31
306	CY	DRIVES
12	CY	ROUND
9500	CY	TOTAL
		SUBBASE OF DENSE GRADED CRUSHED STONE
4451	CY	MAINLINE
809	CY	TH #5
542	CY	TH #31
315	CY	DRIVES
33	CY	ROUND
6150	CY	TOTAL
		SAND BORROW
3948	CY	MAINLINE
222	CY	TH #5
216	CY	TH #31
14	CY	ROUND
4400	CY	TOTAL
		FINE GRADING - SUBGRADE
8101	SY	MAINLINE
1757	SY	TH #5
1198	SY	TH #31
1153	SY	DRIVES
1	SY	ROUND
12210	SY	TOTAL
		BITUMINOUS CONCRETE PAVEMENT BREAKDOWN BY TYPE
		TYPE IS (3-1/2 ")
930	TON	MAINLINE
200	TON	TH #8
1130	TON	TOTAL TYPE IS
1157	TON	TOTAL TYPE I IS
		TYPE IVS (1-1/2")
30	TON	TH #31
35	TON	DRIVES
64	TON	BRIDGE (TOP LIFT)
772	TON	TOTAL TYPE IVS
		TYPE IVS (1-1/4")
50	TON	BRIDGE (FIRST LIFT)
50	TON	TOTAL TYPE IV
3109	TON	SUB TOTAL
11	TON	ROUND
3120	TON	GRAND TOTAL

PROJECT NAME:	DERBY
PROJECT NUMBER:	BRF 034-3(14)
FILE NAME:	REVQUANTITY.XLS
PROJECT LEADER:	C. S. KELLER
DESIGNED BY:	M. EVANS-MONGEON
QUANTITY SHEET #1	
PLOT DATE:	10/1/01
DRAWN BY:	MEM
CHECKED BY:	GRAW
SHEET	7 OF 127

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET

SUMMARY OF ESTIMATED QUANTITIES

APPR SLAB NO. 1	ABUT NO. 1	DECK	ABUT NO. 2	APPR SLAB NO. 2					LAND SCAPE ITEMS	TRAINING	FULL E & C ITEMS	EROSION CONTROL	ROADWAY	BRIDGE QUANTITY
												58	48	
												50	10	
													270	
													270	
													270	
												397	270	
													680	
													680	
													680	
												1239.5	680	
													34	
													34	
													34	
												40	34	
													526	
												560	526	
													526	
													2	
													2	
													2	
												1	2	
												3	4	
												0	1	
												3	4	
												2	2	
												2	1	
												15	10	
												4	5	
												1587	1639	
												34	128	
												6	14	
												9	80	
												0 5	25 0	
												2	26	
												14 5	26 14	
												1	25	
												15	25	
												11	25	
												11	230	
												1225	3	
												114.9 25	125 144.1	
76		370										448.9	294 446	493.5
												33.8	50	

TOTALS

ROUND	GRAND TOTAL	FINAL
	46	
	10	
	270	
	270	
	270	
	270	
	680	
	680	
	680	
	680	
	34	
	34	
	34	
	34	
	526	
	526	
	526	
	2	
	2	
	2	
	2	
	4	
	1	
	4	
	2	
	1	
	10	
	5	
1	1640	
2	130	
	14	
	80	
	30	
	25	
	30	
	25	
	25	
	25	
	230	
	3	
	150	
	740	
	50	

DESCRIPTIONS

UNIT	ITEMS	ITEM NUMBER
LF	12" CSP .064 (2-2/3 X 1/2)	601.0005
LF	15" CSP .064 (2-2/3 X 1/2)	601.0010
	BEGIN OPTION PIPES	
LF	18" CAAP .060 (2-2/3 X 1/2)	601.0216
LF	18" PCCSP .064 (2-2/3 X 1/2)	601.0415
LF	18" RCP CLASS III	601.0815
LF	18" CPEP	601.0915
LF	24" CAAP .060 (2-2/3 X 1/2)	601.0225
LF	24" PCCSP .064 (2-2/3 X 1/2)	601.0425
LF	24" RCP CLASS III	601.0825
LF	24" CPEP	601.0920
LF	30" CAAP .075 (3X1)	601.0309
LF	30" PCCSP .079 (2-2/3 X 1/2)	601.0435
LF	30" RCP CLASS III	601.0835
LF	30" CPEP	601.0925
LF	42" CAAP .075 (3X1)	601.0316
LF	42" PCCSP .109 (2-2/3 X 1/2)	601.0452
LF	42" RCP CLASS III	601.0850
EACH	24"CSPES .064 (2-2/3 X 1/2)	601.6025
EACH	24" CAAPES .060 (2-2/3X1/2)	601.6225
EACH	24"RCPES CLASS III	601.6825
EACH	24" CPEPES	601.7020
	END OPTION PIPES	
EACH	12"CSP ELBOW .064 (2-2/3X1/2) (15 DEGREES)	601.5035
EACH	15" CSP ELBOW .064 (2-2/3X1/2) (5 DEGREES)	601.5010
EACH	PRC CURB DROP INLET WITH CAST IRON GRATE (GRATE TYPE B)	604.30
EACH	CHANGING ELEV. OF SEWER MANHOLE	604.23
EACH	CAST IRON GRATE WITH FRAME, TYPE B	604.46
EACH	CAST IRON GRATE WITH FRAME, TYPE D	604.51
EACH	CAST IRON GRATE WITH FRAME, TYPE E	604.52
LF	6" UNDERDRAIN	605.10
LF	6" UNDERDRAIN CARRIER PIPE	605.20
EACH	UNDERDRAIN FLUSHING BASINS	605.95
HR	ROADWAY PATROL MAINTENANCE	607.10
HR	BULLDOZER RENTAL, TYPE I	608.10
HR	POWER GRADER RENTAL	608.16
HR	ALL PURPOSE EXCAVATOR RENTAL, TYPE I	608.25
HR	POWER BROOM RENTAL	608.30
HR	TRUCK RENTAL	608.37
HR	LOADER RENTAL, TYPE I	608.40
MGAL	DUST CONTROL WITH WATER	609.10
TON	DUST & ICE CONTROL WITH CALCIUM CHLORIDE	609.15
CY	STONE FILL, TYPE I	613.10
CY	STONE FILL, TYPE II	613.11
CY	STONE FILL, TYPE III	613.12

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		TEMPORARY EROSION CONTROL ITEMS
50	CY	TRENCH EXCAVATION OF EARTH
250	CY	SUBBASE OF DENSE GRADED CRUSHED STONE
5	HRS	BULLDOZER RENTAL, TYPE I
5	HRS	ALL PURPOSE EXCAVATOR, TYPE I
25	CY	STONE FILL, TYPE I
200	SY	GEOTEXTILE FOR SILT FENCE
25	EA	HAY BALES FOR EROSION CONTROL
10	LBS	SEED - WINTER RYE
100	SY	EROSION MATTING
		TRENCH EARTH
356	CY	UNDERDRAIN- DESIGNED
275	CY	UNDERDRAIN- ESTIMATED
2007	CY	DRAINAGE SHEET
32	CY	ROUND
2700	CY	TOTAL

PROJECT NAME:	DERBY		
PROJECT NUMBER:	BRF 034-3(14)		
FILE NAME:	REVQUANTITY.XLS	PLOT DATE:	10/1/01
PROJECT LEADER:	C. S. KELLER	DRAWN BY:	MEM
DESIGNED BY:	M. EVANS-MONGEON	CHECKED BY:	GRAW
QUANTITY SHEET #2		SHEET	8 OF 127

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET

SUMMARY OF ESTIMATED QUANTITIES

APPR SLAB NO. 1	ABUT NO. 1	DECK	ABUT NO. 2	APPR SLAB NO. 2						LAND SCAPE ITEMS	TRAINING	FULL E & C ITEMS	EROSION CONTROL	ROADWAY	BRIDGE QUANTITY
	308		782											1329	1070
													1010.4	1080	
													375	650	
													3	20	
													2	6	
													461.6	340	
													18	11	
													1356	1600	
													2	3	
													4	5	
		100													100 ✓
													13	2	
													59.5	200	
													3988.5	2300	
												1 ✓			
												1 ✓			
												1 ✓			
											1507	1			
										530.75	520				
														1 ✓	
														1 ✓	
														2 ✓	
													4548	4350	
													4492	4220	
													38	29	
														8 ✓	
													0	6350	
													3274	7200	
													0	29	
													0	8	
													24	90	
													2286	1000	
	231		584										1097	1331	815 1585
													2508	2350	
												97	200	1150	266
												318	90		
														60 ✓	
												250	10		
														730 ✓	
												2.76	3		

TOTALS

ROUND	GRAND TOTAL	FINAL
	1070	
	1080	
	650	
	20	
	6	
	340	
	11	
	1600	
	3	
	5	
	100	
	2	
	200	
	2300	
	1	
	1	
	1	
	1	
	520	
	1	
	1	
	2	
	4350	
	4220	
	29	
	8	
	6350	
	7200	
	29	
	8	
	90	
	1000	
	2146	
	2350	
	1350	
	90	
	60	
	10	
	730	
	3	

DESCRIPTIONS

UNIT	ITEMS	ITEM NUMBER
CY	STONE FILL, TYPE IV	613.13
LF	VERTICAL GRANITE CURB	616.21
LF	TREATED TIMBER CURB	616.35
TON	BIT. CONC. GUTTERS & TRAFFIC ISLANDS	616.47
EACH	RELOCATE MAIL BOX, SINGLE SUPPORT	617.10
SY	PORTLAND CEMENT CONC. SIDEWALK, 5 INCH	618.10
EACH	STEEL MARKER POSTS	619.16
LF	STEEL BEAM GUARD RAIL	621.20
EACH	MANUFACTURED TERMINAL SECTION	621.505
EACH	ANCHOR FOR STEEL BEAM RAIL	621.60
LF	ALUMINUM APPROACH RAILING	621.74
EACH	ADJUST ELEVATION OF VALVE BOX	629.20
HR	UNIFORMED TRAFFIC OFFICERS	630.10
HR	FLAGGERS	630.15
LS	FIELD OFFICE-ENGINEERS	631.10
LS	TESTING EQUIPMENT - CONCRETE	631.16
LS	TESTING EQUIPMENT - BITUMINOUS	631.17
LU	FIELD OFFICE - TELEPHONE (NOT A BID ITEM)	631.25
HR	EMPLOYEE TRAINEESHIP	634.10
LS	MOBILIZATION	635.10
LS	TRAFFIC CONTROL (MOD.) (PUBLIC RELATIONS SPECIALIST)	641.10
EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.15
LF	DURABLE 4" WHITE LINE	646.40
LF	DURABLE 4" YELLOW LINE	646.41
LF	DURABLE 24" STOP BAR	646.46
EACH	DURABLE LETTER OR SYMBOL	646.50
LF	TEMPORARY 4" WHITE LINE	646.60
LF	TEMPORARY 4" YELLOW LINE	646.61
LF	TEMPORARY 24" STOP BAR	646.66
EACH	TEMPORARY LETTERS OR SYMBOLS	646.70
EACH	LINE STRIPING TARGETS	646.73
SY	GEOTEXTILE FOR ROADBED SUBGRADE SEPARATOR	649.11
SY	GEOTEXTILE UNDER STONE FILL	649.31
SY	GEOTEXTILE FOR UNDERDRAIN TRENCH LINING	649.41
SY	GEOTEXTILE FOR SILT FENCE	649.61
LB	SEED	651.15
LB	SEED (MOD) (RIPARIAN GRASS SEED)	651.15
LB	SEED-WINTER RYE	651.17
LB	FERTILIZER	651.16
TON	AGRICULTURAL LIMESTONE	651.20

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		4" DURABLE WHITE LINE
3286	LF	MAINLINE
220	LF	TH #31
834	LF	TH #5
10	LF	ROUND
4350	LF	TOTAL
		4" DURABLE YELLOW LINE
3290	LF	MAINLINE
776	LF	TH #5
136	LF	TH #31
18	LF	ROUND
4220	LF	TOTAL
		DURABLE 24" STOP BAR
14	LF	TH #5
15	LF	TH #31
29	LF	TOTAL
		DURABLE LETTER OR SYMBOL
8	LF	TOTAL
		4" TEMPORARY WHITE LINE
	LF	MAINLINE
834	LF	TH #5
220	LF	TH #31
24	LF	ROUND
6350	LF	TOTAL
		4" TEMPORARY YELLOW LINE
6280	LF	MAINLINE
776	LF	TH #5
136	LF	TH #31
8	LF	ROUND
7200	LF	TOTAL
		TEMPORARY 24" STOP BAR
14	LF	TH #5
15	LF	TH #31
29	LF	TOTAL
		TEMPORARY LETTER OR SYMBOL
4	LF	TH #31
8	LF	TOTAL
	ea	

PROJECT NAME:	DERBY
PROJECT NUMBER:	BRF 034-3(14)
FILE NAME:	REVQUANTITY.XLS
PROJECT LEADER:	C. S. KELLER
DESIGNED BY:	M. EVANS-NOWGEON
QUANTITY SHEET #3	
PLOT DATE:	10/1/01
DRAWN BY:	MEN
CHECKED BY:	GRAW
SHEET	3 OF 127

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET

SUMMARY OF ESTIMATED QUANTITIES

APPR SLAB NO. 1	ABUT NO. 1	DECK	ABUT NO. 2	APPR SLAB NO. 2					LAND-SCAPE ITEMS	TRAINING	FULL E & C ITEMS	EROSION CONTROL	ROADWAY	BRIDGE QUANTITY
											17.933	3		
											0	800		
									10.2 36					
											0	85		
												490.6 270		
	191		964										140.7 1155	
											0	100		
									16 ✓					
									44 ✓					
									4 ✓					
									24 ✓					
									14 17					
									35 39					
									27 ✓					
									17 18					
									12 11					
												58.25 46		
												120 91		
												ITEMS ADDED BY CHANGE ORDER/ S.A.		
												520.8 0		
												1 0		
												280 0		
												312.8 0		
												4032 0		
												4630 0		
												32.4 0		
												8 0		
												1 0		
												20 0		
												1 0		
												72 0		
												5 0		
												57.4 0		
												242.8 0		

TOTALS

ROUND	GRAND TOTAL	FINAL
	3	
	800	
	36	
	80	
	270	
	1155	
	100	
	16	
	44	
	4	
	24	
	17	
	39	
	27	
	18	
	11	
	46	
	91	

DESCRIPTIONS

UNIT	ITEMS	ITEM NUMBER
TON	HAY MULCH	651.25
EACH	HAY BALES FOR EROSION CONTROL	651.26
CY	CEDAR BARK MULCH	651.27
SY	SODDING	651.30
CY	TOPSOIL	651.35
SY	GRUBBING MATERIAL	651.40
SY	EROSION MATTING	654.10
EACH	EVERGREEN TREES (Picea glauca) (White Spruce) (7'-8') (B&B)	656.20
EACH	EVERGREEN TREES (Thuja occidentalis) (White Cedar) (8'-10') (B&B)	656.20
EACH	DECIDUOUS TREES (Larix laricina) (Larch) (2.5" cal) (container)	656.30
EACH	DECIDUOUS TREES (Fraxinus pennsylvanica) (Green Ash) (2.5" cal) (container)	656.30
EACH	DECIDUOUS SHRUBS (Sambucus canadensis) (Elderberry) (3'-4') (container)	656.35
EACH	DECIDUOUS SHRUBS (Viburnum trilobum) (High Bush Cranberry) (3'-4') (container)	656.35
EACH	DECIDUOUS SHRUBS (Cornus stolonifera) (Red Stem Dogwood) (3'-4') (container)	656.35
EACH	DECIDUOUS SHRUBS (Ilex verticillata) (Winterberry) (3'-4') (container)	656.35
EACH	DECIDUOUS SHRUBS (Cornus amomum) (Silky Dogwood) (3'-4') (container)	656.35
SF	TRAFFIC SIGNS, TYPE A	675.20
LF	FLANGED CHANNEL SIGN POST	675.301
SY	COLD PLANING - BIT CONC. PAVT.	210.10
EACH	15" CSPES (0.064)	601.6010
LF	TEMPORARY TRAFFIC BARRIER	621.90
TON	SUPERPAVE BIT. CONC. PAVT. (MOD.)	490.30
LF	4" WHITE LINE	646.20
LF	4" YELLOW LINE	646.21
LF	24" STOP BAR	646.26
EACH	LETTER OR SYMBOL	646.30
LS	EXTRA WORK ORDER NO. 6	900.06
EACH	PRC PIPE DROP INLET W/ CAST IRON GRATE	604.25
LS	STREET LIGHTING	679.15
LF	CHAIN LINK FENCE, 6 FEET	620.12
EACH	BRACING ASSEMBLY FOR CHAIN-LINK FN, 6 FEET	620.21
GAL	JOINT SEALER, HOT POURED (MOD.)	524.10
CY	CONCRETE, CLASS A (MOD.) HPC-A	501.22

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

PROJECT NAME: **DERBY**
PROJECT NUMBER: **BRF 034-3(14)**

FILE NAME: REVQUANTITY.XLS
PROJECT LEADER: C. S. KELLER
DESIGNED BY: M. EVANS-RONGEON
QUANTITY SHEET #4

PLOT DATE: 10/1/01
DRAWN BY: MEM
CHECKED BY: GRAW
SHEET 10 OF 127

28+60 - 28+64 LT
24" x 4' CPEP
STUB PIPE FOR FUTURE USE

28+65 - 30+05 LT
6" x 140' UNDERDRAIN
W/ FB @ 28+65 LT

28+66 - 30+045 LT
24" x 138.4 CPEP
W/ PROP DI+ 'D' GRATE

29+15 LT - 30+20 LT
NEW 6'-0" DIA UNDERDRAIN W/
FLUSHING BASIN @ 29+15 LT

29+46 RT - 30+20 LT
NEW 24" x 84' OPTION PIPE
W/ NEW 4'-6" RCP

30+13 LT - 30+17 LT
NEW 24" x 4' OPTION PIPE
10 GA. STUB FOR FUTURE USE

30+06.5 - 30+91 LT
24" x 84.5 CPEP
W/ PROP DI+ 'D' GRATE

30+17 LT - 30+90 LT
NEW 54" x 70' OPTION PIPE
W/ NEW 4'-6" RCP

30+52 LT - 30+90 LT
NEW 6'-0" x 70' UNDERDRAIN W/
FLUSHING BASIN @ 30+22 LT

30+91 LT - 31+57 LT
EXISTING PIPE (REMOVE) DONE

30+52 LT - 32+30 LT
NEW 6'-0" x 136' UNDERDRAIN W/
FLUSHING BASIN @ 30+92 LT

30+05 - 32+49 LT
6" x 244' UNDERDRAIN
W/ FB @ 30+05 LT

30+95 - 32+45 LT
24" x 154' CPEP
W/ PROP DI+ 'D' GRATE

32+30 LT - 32+90 LT
NEW 24" x 142' OPTION PIPE
W/ NEW RCP

32+32 LT - 33+75 LT
NEW 6'-0" x 140' UNDERDRAIN W/
FLUSHING BASIN @ 32+32 LT

31+57 LT - 34+46 RT
15" CMP - REMOVE

32+50 LT - 34+50 LT
NEW 24" x 202' OPTION PIPE
W/ NEW RCP

33+69 - 33+75 LT
REMOVE EXISTING SPRING BOX
INSTALL NEW 6'-0" x 12' UNDERDRAIN
CAPPED & PIPE FROM SPRING TO
NEW UNDERDRAIN

32+51 - 34+62 LT
24" x 211' CPEP
W/ PROP DI+ 'E' GRATE

33+66 LT
6'-0" x 16' UNDERDRAIN
TO SPRING @ 30' LT

32+50 - 34+62 LT
6" x 212' UNDERDRAIN
W/ FB @ 32+50 LT

28+17 - 28+21 RT
24" x 4' CPEP
STUB PIPE FOR FUTURE USE

28+23 - 29+42.5 RT
24" x 119.5' CPEP
W/ PROP DI+ 'D' GRATE

29+40 RT - 29+44 RT
NEW 24" x 4' OPTION PIPE
W/ NEW 4'-0" x 6' RCDI
(CAP STUB FOR FUTURE USE)

28+25 - 30+40 RT
6" x 215' UNDERDRAIN (NO FB)
CAPPED END @ 28+25
OUTLET IN DI @ 30+40 RT

29+44.5 - 30+40.5 RT
24" x 95' CPEP
W/ PROP DI+ 'D' GRATE

30+57 RT - 30+93 LT
EXISTING 15" RCP (REMOVE) DONE

30+41.5 RT - 30+93 LT
24" x 64' CPEP
W/ PROP DI+ 'D' GRATE

31+57 CL
EXISTING 12" CMP (REMOVE) DONE

31+10 RT - 32+05 RT
NEW 6'-0" x 115' UNDERDRAIN W/
FLUSHING BASIN @ 31+10 RT

32+20 RT - 32+30 LT
NEW 18" x 36' OPTION PIPE W/
NEW RCDI

32+50 LT-RT - 34+62 LT-RT
18" x 341' CPEP
W/ PROP DI+ 'D' GRATE

28+00.00
SURV PI

28+25
BEGIN APPR.
CONSTRUCTION

PAVED DRIVE

6' PAVED AREA

4' CONC. SIDEWALK

1½STY. W.F. HOUSE

GAR.

GRAVEL DRIVE

SEWER CLEAN OUT
12"ø PVC
W/ 10"ø STEEL
COVER

2" CRAB APPLE

SAVE

12" MAPLE

PC 31+09.48

10" HW

12" HW

REMOVE

WOODS & BRUSH

LAWN

S31°30' W

28+00

29+00

30+00

31+00

32+00

33+00

SURV. 34+00

PAVED MEDIAN

4' CONC. SIDEWALK

WSO

PAVED DRIVE

OAK

SAVE

45° S.B.M. (SAVE)

PLANTERS

PORCH

CRUSHED STONE DRIVE

2½STY. W.F. HO.

GRANITE CURB

SHRUBS

6' HIGH WOOD FENCE

OFFICE

1STY W.F. BLDG

DERBY HISTORICAL SOCIETY

HEDGE ROW

B. M#1
USGS DISK
ELEV=1011.80

SILT FENCE

POT 30+63.71

6" VENT PIPE

PUMP STATION W/
3' x 3' ACCESS

METER & ALARM

W.H.C.

3.5' MONITOR COUPLES

SEWER CLEAN OUTS

31+00
END APPR. CONSTR.
BEGIN PROJECT
BRF 034-3(14)

AER E&T

GUY POLE W/ ANCH

6" ASH

12" ASH

CLUMP OF CEDARS

REV TH 31
PI 12+75.19 =
12+72.90

TH 31 SURV
POT 13+18.17

MATCH LINE

12+00

REV PI 12+90.90

13+00

REV TH 31 13+50
END APPROACH

13+40 RT - 13+70 RT
EXISTING 12" ACCMP
TO NOT DISTURB

10' R

6' MAPLE

GRAV. DRIVE

PORCH

1½STY. W.F. HO.

REV TH31
POT 13+64.59

REV PI 13+41.79

SURVEY LINE

14

DILOCATIONS

28+22 RT 17
29+43.5 RT 18
30+41.5 RT 18
32+50 RT 18
28+65 LT 26
30+05.5 LT 25
30+93 LT 25
32+50 LT 18

GEOTEXTILE FOR SILT FENCE

30+42 RT - 34+00 RT
TH 31 REV12+00 LT - 12+41 LT

MANUFACTURED TERMINAL SECTION

31+50 RT - 31+87.5 RT

ANCHOR FOR STEEL BEAM GUARDRAIL

~~33+50 LT~~ 34+37.5 LT
(GUARDRAIL BURIED IN BACKSLOPE)

VERTICAL GRANITE CURB

28+63.8 - 29+50.0 RT ~~28+54 RT - 29+47 RT~~
29+83.0 - 30+85.0 RT ~~29+80 RT - 34+00 RT~~
31+03.0 - 34+00.0 RT ~~31+22 LT - 34+00 LT~~
31+38.5 LT - 34+00.0 LT

PORTLAND CEMENT CONCRETE SIDEWALK

~~28+53 RT - 34+00 RT~~ 27+96 - 28+80.5 LT
~~29+30 RT~~ 29+10 - 30+31.5 LT
~~REPLACE FIRST 4' OF EXISTING WALKWAY.~~ 30+46.5 - 31+09.5 LT
27+47.5 - 29+50.5 RT
~~30+46 LT - 31+07 LT~~ 29+83 - 30+85 RT
31+03.5 - 34+82.5 RT

STEEL BEAM GUARD RAIL

31+87.5 RT - 34+00 RT
~~33+51 LT - 34+00 LT~~ 33+25 - 34+00 LT

RELOCATE MAILBOX

~~29+74, 19' LT~~
~~30+85, 19' LT~~
~~TH 31 REV12+73, 15' LT~~
30+00 LT

CONSTRUCT DRIVE

28+93 LT (PAVED)
29+64 RT (GRAVEL)
30+35 LT (GRAVEL)
31+10 LT (PAVED)
TH 31 REV 12+63 LT (GRAVEL)

EXCAVATION OF SURFACES AND PAVEMENTS

(AREA TO BE TOPSOILED AND SEEDED)
33+84 RT - 34+00 RT

REV. TH. 31 CURVE DATA

Δ = 25°30'-01'' LT.
D = 18°-49'-14''
R = 304.43
T = 68.89
L = 135.49
E = 7.70
BANK = 0.021 FT/FT

DATUM
VERTICAL NGVD 1929
HORIZONTAL NA

SURVEYED BY BUMPS DATE 1-86
DRAWN BY STRS DATE 4-89
SQUAD LEADER C.KELLER
DESIGN FILE NO. /str3/781199/d199.dgn
FARM FILE ... DF199.LOU DATE PLOTTED 13-NOV-2001
PROJ. NAME DERBY
PROJ. NO. BRF 034-3(14)
SHEET 31 OF 121 SHEETS

LAYOUT SHEET
0 20 40
SCALE IN FEET

ML POC 35+00 = TH 31 SURV POT 10+00 △= 90° RT

Suggested location of sedimentation basin

ML CURVE DATA
△ = 63-34'-29" LT
D = 5°-30'
R = 1041.74
T = 645.59
L = 1155.91
E = 183.83
BANK = 0.050 FT/FT

POC 35+71.14 END ROADWAY BEGIN BRIDGE

POC 37+16.74 END BRIDGE RESUME ROADWAY

M.L POC 37+00.00= CHAN POT 3+50.00 △ = 118° RT (TANGENT TO POINT)

SURVM.L POC 37+50 = ~~TH 5 REV POT 50+00~~ △ = 98°15'-26" RT

CHANNEL LINE S 62° 58' 42.9" E

CHAN POT 5+00

SURV. 34+00

SURV. 40+00

MATCH LINE

34+00 - 34+62 LT 24" CPEP SEE PREVIOUS SHEET

34+63 - 34+90 LT 30" x 40' CPEP W/ PRCP DI+ 'E' GRATE

34+00 - 34+62 LT 6' x 12' UNDERDRAIN OUTLET IN DI @ 34+62 LT SEE PREVIOUS SHEET

34+63 LT - RT 18" x 36' CPEP W/ PRCP DI+ 'D' GRATE

33+97 - 34+46 RT EXISTING PIPE (REMOVE)

33+75 - 34+50 LT NEW 6' x 74' UNDERDRAIN W/ FLUSHING BASIN @ 33+75 LT

34+50 LT - 34+76 LT NEW 30" x 34' OPTION PIPE W/ NEW RCDI #6

34+16 - 35+50 RT EXISTING PIPE (REMOVE)

34+68 - 35+00 LT CONSTRUCT SPECIAL DITCH W/ STONE TYPE III

35+00 - 35+70 LT CONSTRUCT SPECIAL DITCH W/ STONE TYPE II

34+65 RT - 34+68 LT NEW 18" x 58' OPTION PIPE W/ NEW RCDI

~~ELIMINATED PIPE 35+50 LT~~ WOODS & BRUSH

~~NEW 12" x 18' CGMP~~

~~NEW 12" x 18' DEG. ELBOW~~

CL TYDE RIVER

WOODS & BRUSH

37+55 LT NEW PRCDI W/ 26' NEW 12" x 15' CGMP NEW 12" x 15' DEG. ELBOW

~~39+00 LT ELIMINATED~~

~~NEW PRCDI W/~~

~~NEW 12" x 10' CGMP~~

~~NEW 12" x 5' DEG. ELBOW~~

38+70 LT 12" x 17' CGMP W/ PRCDI+15° ELBOW

39+50 RT - LT NEW 6' x 66' UNDERDRAIN CARRIER PIPE W/ FLUSHING BASIN @ 39+50 RT

38+70 - 39+30 LT 6" x 75' UNDERDRAIN BLEEDER (NO FBI)

39+85 LT 12" x 15' CGMP W/ PRCDI+15° ELBOW

SEE SHEET #35 FOR UNDERDRAIN NOTE

SEE SHEET #35 FOR PIPE NOTE

MAG 1986

TH 31 REV PC 11+54.84 = 11+50.73

PC 90+94.96

TH 31 REV. PI 11+54.84 = 11+50.73

TH 31 REV. PI 10+77.72 = 10+74.17

TH 31 SURV PI 11+13.77 △ 82°-41'-39" RT NO CURVE RUN

TH 31 TRAV. POT 11+39.07= DRS. L90+00.00 △ 66°34'00" LT.

REV. DR. PI 90+63.72= 90+60.49

Rev PT SurvPOT 91+09.26= 91+11.41

POT 91+50.91

DILOCATIONS
34+63 RT 20
34+63 LT 18

TH 31 REV POC 91+50= DR. POT 90+00 △= 90° RT

REV. PC 10+52.62

REV. PCC 10+99.27

B.M#2 S.I.P. ELEV 964.93

POST 35+53 △ 10°08' LT.

TH#5 11+00 END BITUMINOUS CONCRETE PAVEMENT

6" SEWER LINE

POST 36+64.84 =53°26'30"

INACCESSABLE SURVPI 37+55.07 = 36+18.78

TH 5 REV 51+20 RT. EXISTING 2'X3' CONC. BOX - PLUG WITH CONCRETE

TH 5 REV 51+06 - 52+07 RT. 51+25 - REV 52+68 RT

NEW 42" X 1/2" OPTION PIPE W/ NEW #1167 RCDI 130' PCCSP W/ PRCP DI+ 'D' GRATE + SH @ OUTLET

TH 5 REV 51+35 - 51+47 RT RETAIN EXISTING CULVERT

ELIMINATED GR FLATTENED SLOPE

Suggested location of sedimentation basin

TH 5 REV PC 50+98.42

TH 5 SURV PC 51+10.74

REV. 51+71

MATCH LINE

S 32° 04' 29.30" E

TH5 50+65 - 50+98 LT-RT 42"x140' PCCSP W/ SH @ INLET + OUTLET

TH5 51+00 - 51+95 RT-LT 18"x127' CPEP W/ PRCP DI+ 'D' GRATE + SH @ INLET + OUTLET

~~RELOCATE MAILBOX~~
~~TH 31 REV 11+50 8' RT~~
~~TH 31 REV 10+35 32' RT~~

TREATED TIMBER CURB
~~34+52 LT - 35+75 LT~~ ELIMINATED
√37+25 LT - 40+00 LT

GEOTEXTILE FOR SILT FENCE
34+00 RT - 34+30 RT
37+35 LT - 40+00 LT
TH 31 REV 10+60 LT - DR 91+60 LT
TH 31 REV 12+00 LT - DR 91+55 RT
CHAN 2+25 LT - CHAN 3+60 LT (N. SIDE OF RIV.)
CHAN 2+35 LT - CHAN 4+35 LT (S. SIDE OF RIV.)

CONSTRUCT DRIVE
TH 31 REV 11+50 LT (GRAVEL)
TH 5 REV 51+54 RT (PAVED)

VERTICAL GRANITE CURB
√34+00 LT - ~~34+52 LT~~, 34+64.3 LT
√34+00 RT - ~~34+70 RT~~, 34+80.9 RT
√35+28 RT - 35+65 RT.
√37+19 RT - TH5 50+50 RT.

MANUFACTURED TERMINAL SECTION
~~38+62.5 RT - 39+00 RT~~

CONSTRUCT APPROACH
35+00 RT. TH 31
37+50 RT. TH 5

ANCHOR FOR STEEL BEAM GUARD RAIL
√TH 31 REV 11+13 RT
TH 31 REV ~~11+30 LT~~ 11+18 LT
~~TH 5 51+00 LT~~
TH 5 ~~51+35 RT~~ 51+00 RT

PORTLAND CEMENT CONCRETE SIDEWALK (5")
√34+00 RT - 34+75 RT
√35+25 RT - 35+66 RT
√37+08 RT - TH 5 REV 50+50 RT

EXCAVATION OF SURFACES AND PAVEMENTS
(AREA TO BE TOPSOILED AND SEEDED)
34+00 RT - 34+65 RT
35+34 RT - 35+84 RT
36+50 RT - 37+00 RT
37+72 RT - 39+52 RT

ALUMINUM APPROACH RAILING
35+51 - 35+76.22 LT.
35+41 - 35+65.70 RT.
37+25.49 - 37+50 LT.
37+07.08 - TH5 Rev. 50+40 RT.

STEEL BEAM GUARD RAIL
√ML 34+00 LT - 35+51 LT
√ML 37+50 LT - 40+00 LT.
√ML 34+00 RT - TH 31 REV 11+17 RT
√TH 31 REV 11+30 LT - 35+41 RT.
√TH 5 REV 50+40 RT - REV TH 5 51+35 (97' RT.)
~~TH 5 REV 51+00 LT - ML 38+62.5 RT~~

BRIDGE RAILING - 3 RAIL ALUMINUM
√35+76.22 LT - 37+25.49 LT

BRIDGE RAILING - ALUMINUM W/ PEDESTRIAN
√35+65.70 RT - 37+07.08 RT

THE CONTRACTOR SHALL PROTECT THE NEWLY INSTALLED WATER LINE OWNED BY THE VILLAGE OF DERBY CENTER. THIS MAY REQUIRE THE BURIED WATER LINE TO BE EXPOSED BY HAND DIGGING TO DETERMINE IT'S LOCATIONS, PARTICULARLY IN THE AREA OF APPROXIMATE STATION 35+50, 40' RIGHT TO PROTECT THIS WATER LINE. THIS WORK WILL BE CONSIDERED SUBSIDIARY TO OTHER ITEMS.

NOTE: THE NEW WATER LINE IS NOT SHOWN ON THESE PLANS.

DROFF TH31 REVCURVE DATA
△ =36^01'16"RT.
D =38^11'50"
R =150.00
T =48.77
L =94.30
E =7.73

TH31 REVCURVE NO.1 CURVE DATA
△ = 52^-24'-27"RT.
D = 112^-20'-41"
R = 51.00
T = 25.10
L = 46.65
E = 5.84
BANK = 0.021 FT/FT

TH31 REVCURVE NO2 CURVE DATA
△ =37^-59'-58"RT.
D =35^-30'-13"
R =161.38
T =55.57
L =107.03
E =9.30
BANK = 0.021 FT/FT

DATUM
VERTICAL NGVD 1929
HORIZONTAL NA

0 20 40
SCALE IN FEET

LAYOUT SHEET

SURVEYED BY	GUMPS	DATE	1-86
DRAWN BY	STR5	DATE	4-89
SQUAD LEADER	C. KELLER		
DESIGN FILE NO.	/str5/758f199/df199.dgn		
IPARM FILE	DF199L021	DATE PLOTTED	13-NOV-2001
PROJ. NAME	DERBY		
PROJ. NO.	BRF 034-3(14)		
SHEET 33 OF 127 SHEETS			

STEEL BEAM GUARD RAIL
40+00 - 42+50 LT

CONSTRUCT DRIVE
40+89 RT (GRAVEL)
41+58 RT (GRAVEL)
43+08 RT (GRAVEL)
43+15 LT (GRAVEL)
44+09 RT (GRAVEL)

MANUFACTURED TERMINAL SECTION
42+50 LT - 42+87.5 LT

TREATED TIMBER CURB
40+00 - 42+50 LT

GEOTEXTILE FOR SILT FENCE
~~40+00 LT - 43+40 LT~~
40 +00 - 41+00 LT

RELOCATE MAILBOX
41+03 34' RT

DILOCATIONS
41+07 RT 32
41+89 RT 31
43+36 RT 24
44+38 RT 21
45+00 RT 23

N
MAG
1986

~~ELIMINATED 4450 LF PIPE~~
~~NEW PRECAST W/~~
~~NEW 12" X 12" CGMP~~
~~NEW 12" X 15" DEG ELBOW~~

41+00 - 41+50 LT
6" X 75' UNDERDRAIN
BLEEDER (NO FB)

40+95 CL DONE
EXISTING 18" RCP (REMOVE)

39+60 - 41+90 RT
6" X 230' UNDERDRAIN
W/ FB @ 41+90 RT
OUTLET W/ 24" PIPE

41+90 - 43+38 RT
6" X 148' UNDERDRAIN
BLEEDER (NO FB)

42+00 LT
6" X 24' UNDERDRAIN
BLEEDER (NO FB)

42+50 LT
6" X 26' UNDERDRAIN
BLEEDER (NO FB)

42+00 - 43+20 LT
INSTALLED NEW 8" CI. WATER MAIN
REMOVED EXISTING

43+50 LT
NEW 18" X 40' CPEP

43+51 - 43+57 LT REMOVED
EXISTING 12" CGMP (REMOVE)

43+37 - 45+01 RT
6" X 164' UNDERDRAIN
W/ FB @ 45+01 RT
OUTLET IN DI @ 43+37

42+75
END PROJECT
BRF034-3(14)
BEGIN APPROACH CONSTRUCTION

45+50
END APPROACH CONSTRUCTION

SURV. 40+00
MATCH LINE
SILT FENCE
6" APP
CZ
SAVE
6" SPR
PT 42+65.38
12'
20' R
GATE VALVE
D6 HYD
GRAVEL DRIVE
MOBILE HOME
45' FT. WELL
POT 46 + 19.09
S 32° 04' 30" E
40+89 @ 90°
41+00
42+00
43+00
44+00
45+00
46+00
18' R
FB
WSU
REMOVE
AER EST
GRAVEL DRIVE
PORCH
DECK
2 STY. W.F. HO.
BM #3
S.L.P.
995.63
7" SPR
10" APP
8" APP
12" SPR
10" PINE
GRANITE STONE PLANTER
FIELD DRIVE
SHED

40+00 RT - 40+41 RT
CONSTRUCT SPECIAL DITCH W/ STONE FILL TYPE II

40+33.56 RT
EXISTING 4" CELLAR DRAIN
DO NOT DISTURB

40+00 - 41+06 RT
NEW 6" X 150' UNDERDRAIN
W/ FLUSHING BASIN @ 41+00 RT

40+62 - 41+03 RT ELIMINATED
SPECIAL DITCH W/ STONE FILL TYPE I

41+04 - 41+04 RT 39+66 - 41+06 RT
NEW 24" "H" E&H OPTION PIPE W/ NEW RCD
NEW END SECTION @ OUTLET
W PROP DI+ 'D' GRATE + 24" CPEPES @ OUTLET

41+45 - 41+79 RT - 41+79 RT ELIMINATED
SPECIAL DITCH W/ STONE FILL TYPE I

41+45 - 41+71 RT EXISTING 24" CMP (REMOVE) DONE

41+04 - 41+79 RT - 41+08 - 41+88 RT
NEW 24" X 75' OPTION PIPE
NEW 4' X 6' RCD W/ DOUBLE 80' CPEP
W PROP DI+ 'D' GRATE

41+04 - 43+20 RT ELIMINATED
NEW 6" X 216' UNDERDRAIN W/
FLUSHING BASIN @ 43+20 RT

41+79 RT - 42+70 RT
CONSTRUCT SPECIAL DITCH
W/ STONE FILL TYPE II

42+70 - 43+20 RT - 41+90 - 42+35 RT
NEW 24" X 48' OPTION PIPE W/ NEW RCD
NEW END SECTION @ OUTLET 24" X 145' CPEP
W PROP DI+ 'D' GRATE

42+96 - 43+46 RT EXISTING 18" CGMP (REMOVE) DONE

43+20 - 44+08 RT ELIMINATED
PAVED GUTTER

43+60 - 44+20 RT 43+37 - 44+37 RT
NEW 18" X 100' OPTION PIPE W/ NEW RCD
CPEP W/ PROP DI+ 'D' GRATE

43+20 - 44+50 RT
NEW 6" X 130' UNDERDRAIN W/
FLUSHING BASIN @ 44+50 RT

43+95 RT - 44+22 RT DONE
EXISTING 15" CGMP (REMOVE)

44+ELRT ELIMINATED
SPECIAL DITCH W/ STONE FILL TYPE I

44+17 RT ELIMINATED
SPECIAL DITCH W/ STONE FILL TYPE I

44+19 - 45+50 RT ELIMINATED
PAVED GUTTER

44+39 - 44+99 RT
18" X 60' CPEP W/ PROP DI+ 'D' GRATE

44+58 RT - 44+86 RT DONE
EXISTING 15" CGMP (REMOVE)

DATUM
VERTICAL NGVD 1929
HORIZONTAL NA

0 20 40
SCALE IN FEET

LAYOUT SHEET

SURVEYED BY	BUMPS	DATE	1-86
DRAWN BY	STRS	DATE	4-89
SQUAD LEADER	C.KELLER		
DESIGN FILE NO.	/str5/78f199/df199.dgn		
FARM FILE	DF199103J	DATE PLOTTED	13-NOV-2001
PROJ. NAME	DERBY		
PROJ. NO.	BRF 034-3(14)		
SHEET 35 OF 127 SHEETS			

TH5 SURV.CURVE DATA
Δ = 49°03'20" LT
D = 28°00'
R = 204.65
T = 93.38
L = 175.20
E = 20.30

TH 5 REV.CURVE DATA
Δ = 57^59'23"
D = 36^00'00"
R = 159.1550
T = 88.20
L = 161.08
E = 22.81
BANK = 0.021FT/FT

CONSTRUCT DRIVE
REV 51+98 RT (PAVED)
REV 52+92 LT (GRAVEL)

GEOTEXTILE FOR SILT FENCE
REV 51+74 RT - REV 51+88 RT

VERTICAL GRANITE CURB
~~REV 52+00 LT - REV 52+60 LT~~
53+03 - 52+62.5 LT

SEE PREVIOUS LAYOUT SHEET FOR PIPE NOTE

~~REV 51+71 ELIMINATED~~
~~CONSTRUCT SPECIAL DITCH W/ STONE FILL TYPE I~~
~~REV 51+97 LT PAVED GUTTER~~

EXISTING 4" DRAIN DO NOT DISTURB

REV 53+00 LT - 53+18 LT
EXISTING 2'X 3' CONCRETE BOX PARTIAL REMOVAL 53+05 - 53+25 OR AS DIRECTED BY THE RESIDENT ENGINEER. DONE
PLUG ABANDONED BOX W/ CONCRETE

REV 53+12 - 53+70 LT
REMOVE EXISTING 12"CSMP & RCDI @ 53+12 LT DONE

ELIMINATED REV 53+18 - 53+32 LT
CONSTRUCT GRASS SOD GUTTER

53+24 - 54+04 LT
42" x 80' PCCSP W/ PROP DI+ 'E' GRATE

REV 53+32 - SURV 55+04 LT
SPECIAL DITCH W/ STONE FILL TYPE I

REV 53+75 LT - 55+05 LT
DONE REMOVE EXISTING 2'X 3' CONCRETE BOX.EXISTING METAL DEBRIS RACK TO BE SALVAGED AND REPOSITIONED IN FRONT OF NEW 42" OPTION PIPE.

54+50 - 55+05 LT
NEW 42" X 120' OPTION PIPE
~~NEW STRAIGHT HEADWALL @ 55+05 LT~~

55+05 - 55+30 LT
SPECIAL DITCH W/ STONE FILL TYPE II

54+06 - 54+76 LT
42" x 70' PCCSP W/ S.H. @ INLET

54+76 - 55+41 LT

REV 51+71
MATCH LINE
REV TH 5 RT 52+59.50
TH5 SURV PT 52+85.94
TH 5 REVPOT 54+15.23
TH 5 SURVPOT 54+03.49 EQ = +11.74'
TH5 SURV PI 52+04.12= 51+92.56
TH.5 REV.PI 51+86.62= 51+71.30
REV 54+00
Surv55+00
Surv56+00
Surv57+00
52+00
53+00
2 STY. W.F. BLDG FORMER CHARLES MEAT MKT. VACANT STORE W/ 2ND FLOOR APTS.
1½STY. W.F. HO.
PAVED DRIVE
GRAVEL DRIVE
SHED
LANDSCAPE TIES
2' WIDE STONE WALL
SILT FENCE
WOODS & BRUSH
ASH
CHERRY
APPLE
ELM
DITCH
TANK FENCE
GRAVEL DRIVE
30" CCSMP
12" CMP
12" SPR
TBM #24
MAG
1986

REV 51+08 - 52+08 RT
SEE PREVIOUS LAYOUT SHEET FOR NOTE ON PIPE

REV 52+08 - 52+58 RT
NEW 42" X 54' OPTION PIPE W/ NEW 4'X 6' RCDI

REV 52+08 - 52+58 RT
60' PCCSP W/ PROP DI+ 12i B' GRATES

REV 52+00 - 52+44 RT
EXISTING 15' X 2' CONCRETE BOX PARTIAL REMOVAL OR AS DIRECTED BY THE RESIDENT ENGINEER.
PLUG ABANDONED BOX W/ CONCRETE

52+67 RT - 53+22 LT - RT
42" x 80' PCCSP W/ PROP DI+ 'E' GRATE

REV 52+58 RT - REV 53+17 LT
NEW 18"X 76' OPTION PIPE W/ NEW RCDI

REV 52+58 RT - REV 54+03 LT
NEW 42" X 148' OPTION PIPE W/ NEW 4'X6' RCDI

REV 52+61 RT - REV 54+00 RT
CONSTRUCT SPECIAL DITCH W/ STONE FILL TYPE I

SURV 54+02 CL ASKEW 46 RT EXISTING 15' ACCSMP
NEW 15"X 14' PCCSP 28d CONNECT EXISTING PIPE TO NEW RCDI REMOVED W/ NEW 15"15 DEG ELBOW

54+06 - 54+45 LT - RT
15" x 50' CSP W/ 15"CSPES @ INLET

TH 5 REV54+12
END APPROACH CONSTRUCTION

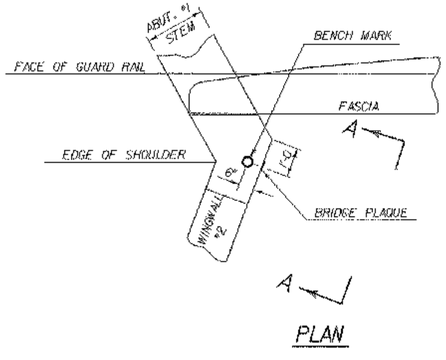
DILOCATIONS
51+95 LT 27
52+08 RT 24
52+66 RT 24
53+23 LT 20
54+05 LT 30

DATUM
VERTICAL NGVD 1929
HORIZONTAL NA

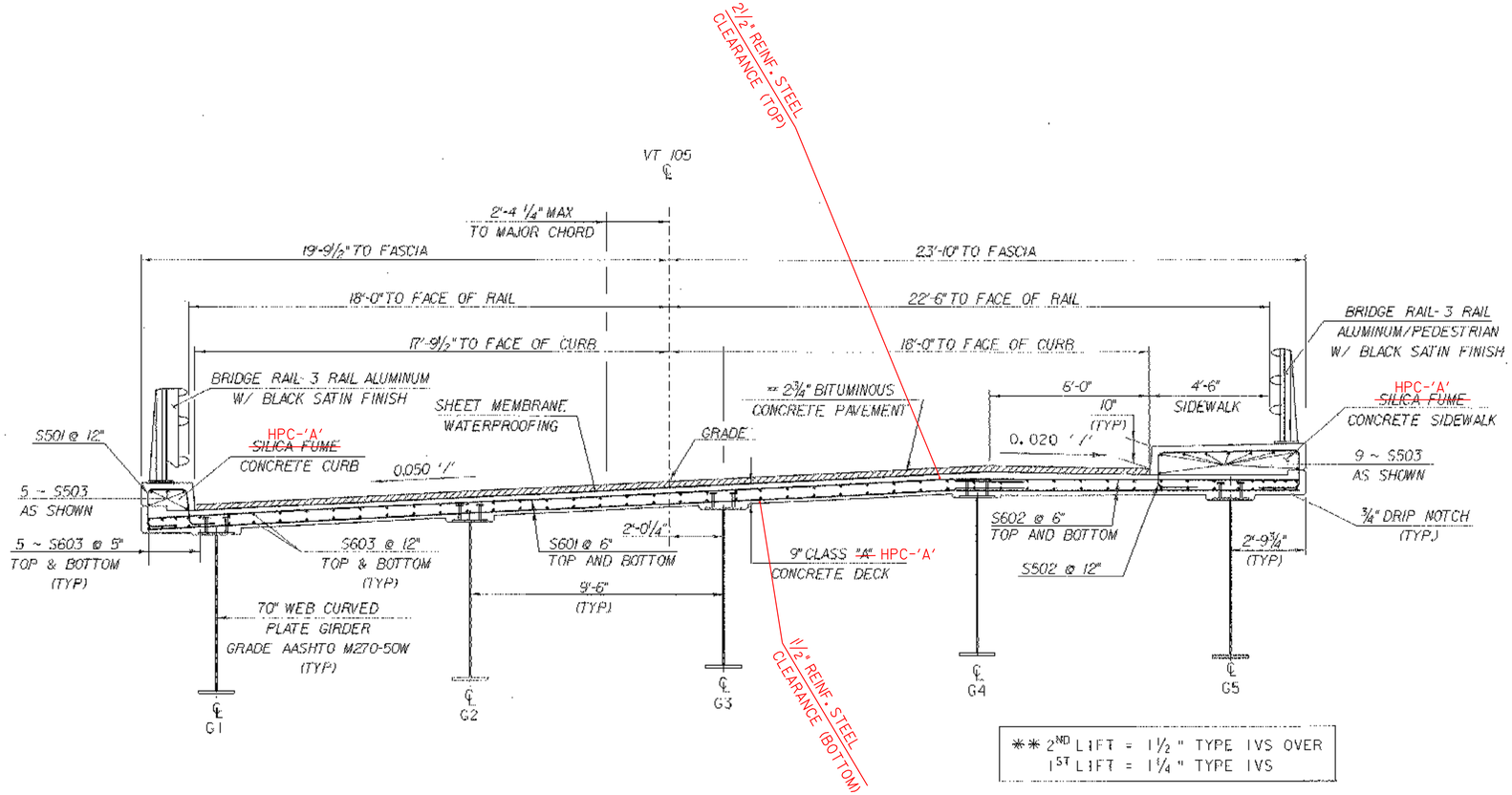
0 20 40
SCALE IN FEET

LAYOUT SHEET

SURVEYED BY	BUMPS	DATE	1-86
DRAWN BY	STR5	DATE	4-89
SQUAD LEADER	C. KELLER		
DESIGN FILE NO.	/STR5/78FJ99/DFJ99.DGN		
IPARM FILE	DFJ99L04.L	DATE PLOTTED	13-NOV-2001
PROJ. NAME	DERBY		
PROJ. NO.	BRF 034-3(14)		
SHEET 37 OF 127 SHEETS			



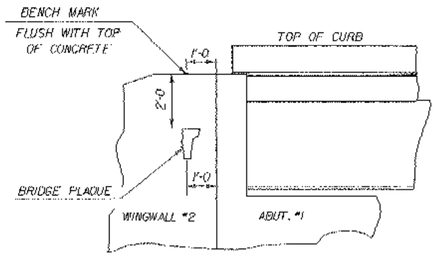
PLAN



** 2ND LIFT = 1½" TYPE IVS OVER
1ST LIFT = 1¼" TYPE IVS

TYPICAL BRIDGE SECTION

SCALE ⅜" = 1'-0



VIEW "A - A"

LOCATE BENCH MARK AND BRIDGE PLAQUE

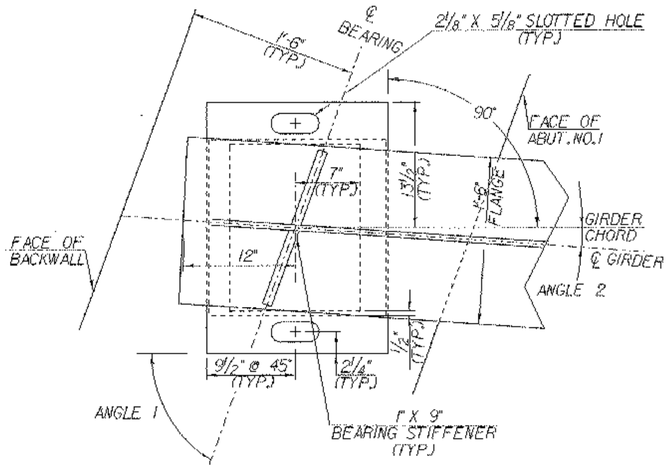
THE BENCH MARK AND BRIDGE PLAQUE WILL BE SUPPLIED BY THE AGENCY OF TRANSPORTATION AND SHALL BE INSTALLED BY THE CONTRACTOR AT ABUTMENT #1 ON THE RIGHT SIDE AS SHOWN OR AS DIRECTED BY THE ENGINEER.

TYPICAL SECTION

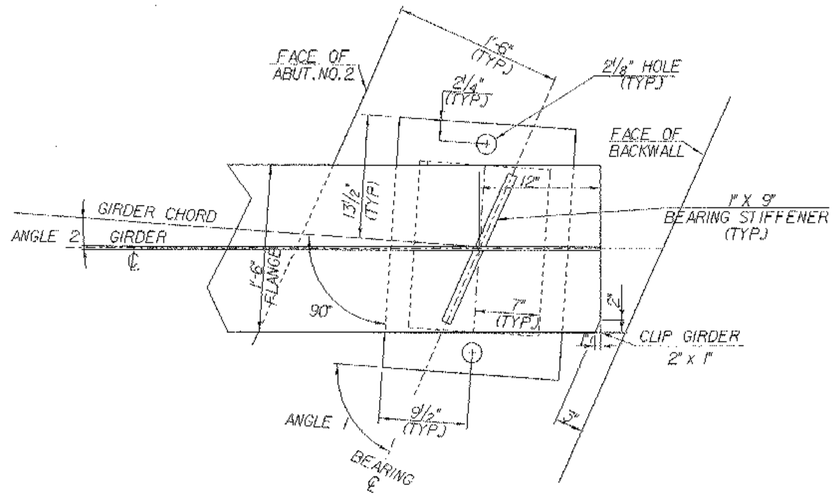
STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of	DERBY	Bridge No.	54
Highway No.	VT 105	Log Sta. / Surv. Sta.	
VT 105 OVER THE CLYDE RIVER			
TYPICAL BRIDGE SECTION			
Designed By M.EVANS-MONGEON		Drawn By M.EVANS-MONGEON	
Checked By	Date	Bridge Design Supervisor C.KELLER	Date
PROJECT	DERBY	PROJECT NO.	BRF 034-3(14)
I.G.C. Info.	/str5/78f199/sf199sup.dgn		sf199typ.sl
Bridge Sheet No.		Sheet 58 of 127	

PLOTTED 13-NOV-2001



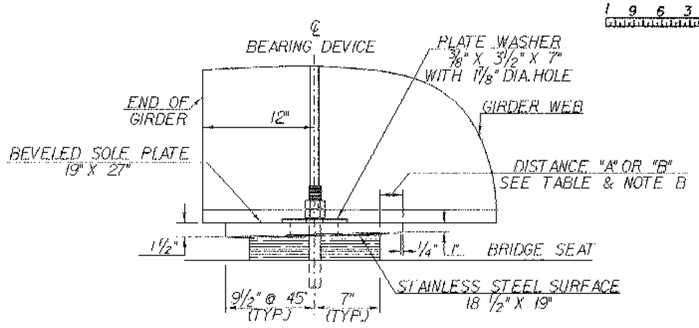
ABUTMENT #1



ABUTMENT #2

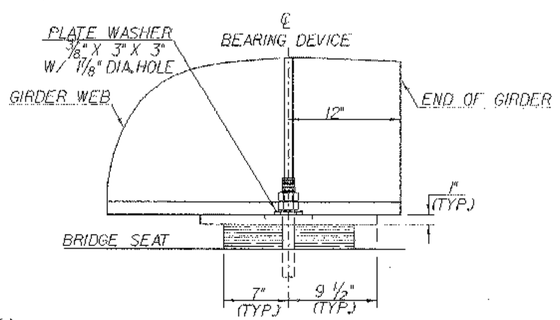
BEAM CUTOFF AND SOLE PLATE DETAILS

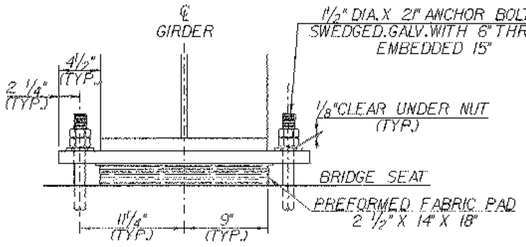
SCALE 1½" = 1'-0



SIDE ELEVATION

SCALE 1½" = 1'-0

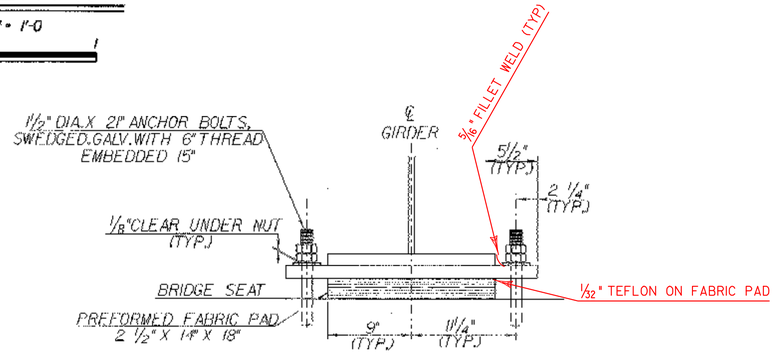




EXPANSION BEARING DETAILS

FRONT VIEW

SCALE 1½" = 1'-0



FIXED BEARING DETAILS

BEARING NOTES

1. BEARINGS SHALL CONFORM TO APPLICABLE SUBSECTIONS OF SECTIONS 531 AND 731.
2. BEARINGS SHALL BE PAID FOR UNDER THE ITEM 531.10 "BEARING DEVICE ASSEMBLY".
3. SHOP DRAWINGS CONFORMING TO SUBSECTION 531.03 SHALL BE SUBMITTED TO INCLUDE WELDING AND BONDING PROCEDURES.
4. THE CONCRETE SURFACE UNDER THE BEARINGS SHALL BE LEVEL.
5. THE FIELD WELD CONNECTING THE BOTTOM FLANGE WITH THE SOLE PLATE SHALL BE MADE WITH E 7018 RODS. AREAS OF GALVANIZING DAMAGED BY WELDING SHALL BE REPAIRED AS PER SUPPLEMENTAL SPECIFICATION 513.06(f).
6. ALTERNATE CONFIGURATIONS FOR BEARINGS MAY BE SUBMITTED FOR APPROVAL. ALTERNATE SUBMITTED SHALL BE DESIGNED AND CERTIFIED TO MEET THE DESIGN LOADS AND SHALL MAINTAIN THE ANCHORAGE SYSTEM SHOWN.
7. BRIDGE SEAT ELEVATIONS MAY BE REVISED TO ACCOMODATE AN ALTERNATE CONFIGURATION
8. THE "B" DISTANCE IS THE FINAL SETTING FOR THE BEARING PAD AFTER ALL DEAD LOAD HAS BEEN APPLIED. HOWEVER, CONTRACTORS LIKE TO ADJUST THE BEARING PAD AFTER THE STRUCTURAL STEEL HAS BEEN ERECTED AND BEFORE THE CONCRETE DECK HAS BEEN POURED. THEREFORE, THE "A" DISTANCE IS LISTED FOR CONTRACTORS WHO SET THE BEARING PADS BEFORE POURING THE DECK. THE FINAL "B" DISTANCE, AS SHOWN IN THE TABLE, MUST BE REACHED WITHIN ⅛".
9. DESIGN CRITERIA:
   - A. BEARING PAD TO CONCRETE DESIGN PRESSURE = 1000 PSI MAX.
   - B. MINIMUM ALLOWABLE DESIGN ROTATION = 0.015 RADIANS.
   - C. HORIZONTAL CAPACITY SHALL BE MINIMUM 10% OF VERITICAL LOAD.
   - D. DESIGN LOAD PER BEARING = 250 KIPS.
10. ALL STEEL IN BEARINGS SHALL BE AASHTO M270 GRADE 36 (EXCEPT THE STAINLESS STEEL AND THE ANCHOR BOLTS).
11. ANCHOR BOLTS SHALL HAVE A MINIMUM 15" OF EMBEDMENT INTO THE CONCRETE AND SHALL CONFORM TO SUBSECTION 714.08, IN THE "VERMONT SPECIFICATIONS".
12. ALL BEARING DEVICES SHALL BE GALVANIZED OR METALLIZED AS PER SUBSECTION 531.04(B) OR 506.15 OF THE GENERAL SPECIAL PROVISIONS. AREAS OF GALVANIZING OR METLIZING DAMAGED BY FIELD WELDING OR HANDLING SHALL BE PAINTED WITH A ZINC RICH PAINT IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATIONS, SECTION 513.
14. ALL THE ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED. ALL WASHERS SHALL BE ⅜" PLATE (MINIMUM). PAYMENT FOR ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR "BEARING DEVICE ASSEMBLY".

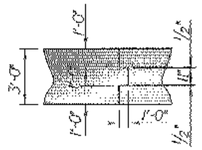
TEMP	"A" DIST	"B" DIST
0° F	2 ¼"	3 "
15° F	2 1/16"	2 13/16"
30° F	1 15/16"	2 11/16"
45° F	1 ¾"	2 ½"
60° F	1 9/16"	2 5/16"
75° F	1 7/16"	2 3/16"
90° F	1 ¼"	2 "
105° F	1 1/16"	1 13/16"

GIRDER #	ANGLE 1	ANGLE 2
1	69°-39"	3°-55"
2	69°-51"	3°-53"
3	70°-02"	3°-50"
4	70°-14"	3°-48"
5	70°-25"	3°-46"

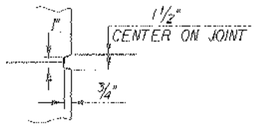
BEARING DETAIL

STATE OF VERMONT
AGENCY OF TRANSPORTATION

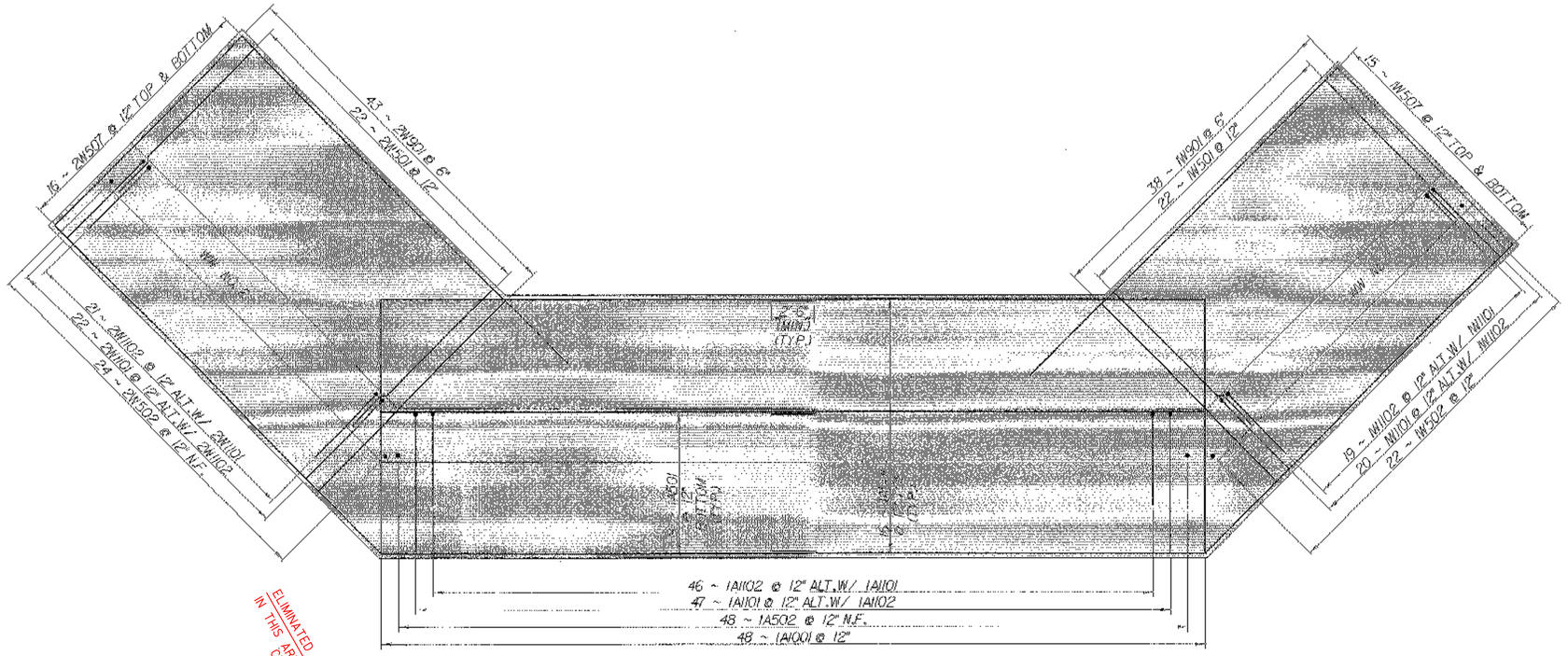
Town Of	DERBY	Bridge No.	64
Highway No.	VT 105	Log. Sta. / Surv. Sta.	
VT 105 OVER THE CLYDE RIVER			
BEARING DETAILS			
Designed By M.EVANS-MONGEON		Drawn By R.H.PELLETT	
Checked By M.EVANS-MONGEON	Date 12/99	Bridge Design Supervisor C.S.KELLER	Date 12/99
PROJECT	DERBY	PROJECT NO.	BRF 034-3 (14)
I.D.C. Info. /dfr5/78f199/sf199sup.dgn			sf199brg1
Bridge Sheet No.		Sheet 64 of 127	



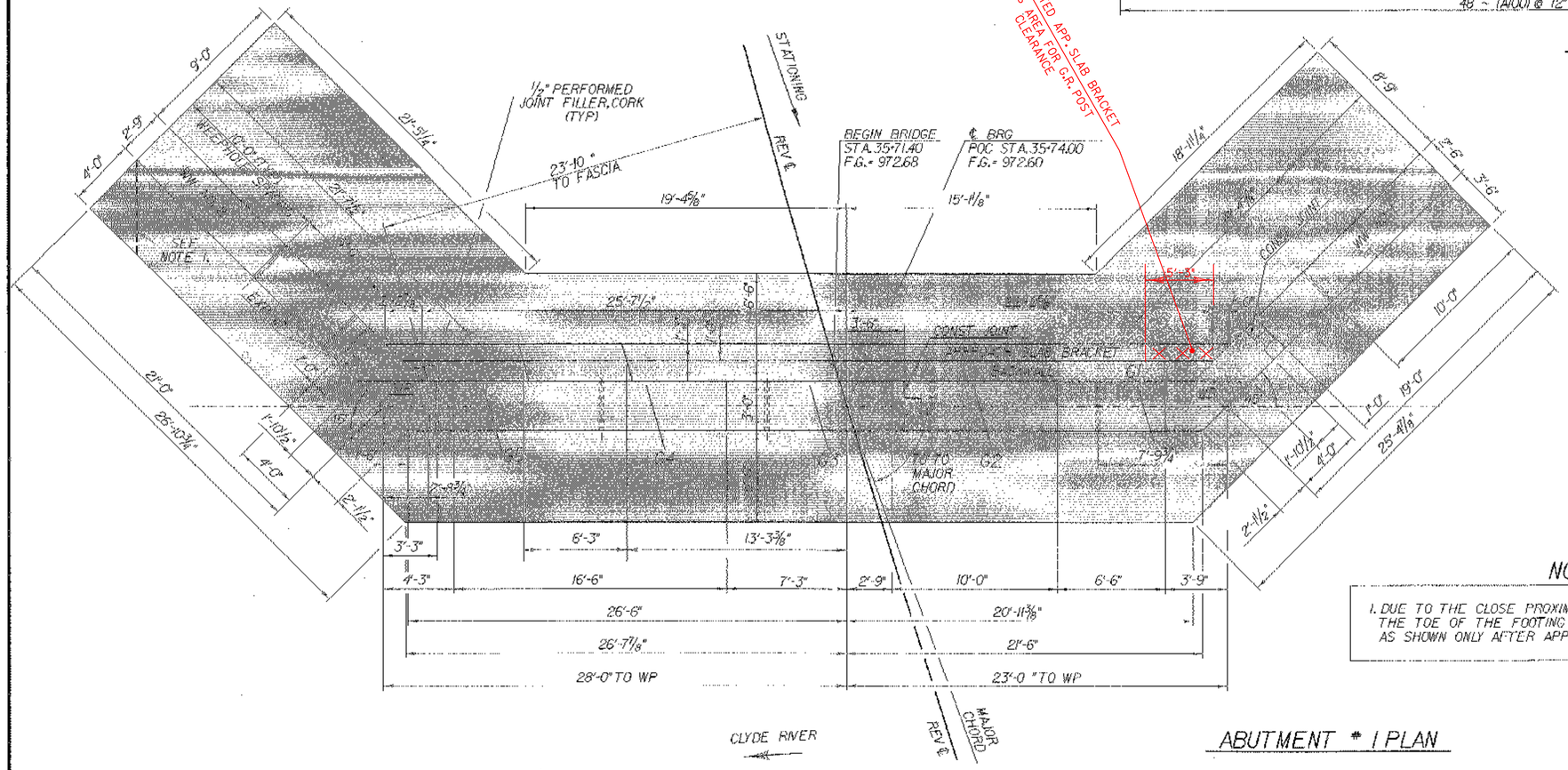
SPECIAL CONCRETE CONSTRUCTION JOINT
NTS



SCORE MARK DETAIL
NTS



ABUTMENT # 1
FOOTING REINFORCING PLAN



ABUTMENT # 1 PLAN

NOTE:
NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
3" CLR. UNLESS OTHERWISE SPECIFIED ON THE PLANS.

NOTES
1. DUE TO THE CLOSE PROXIMITY OF AN EXISTING WATERLINE, THE TOE OF THE FOOTING FOR WINGWALL #2 MAY BE CLIPPED AS SHOWN ONLY AFTER APPROVAL OF THE RESIDENT ENGINEER.

SCALE ¼" = 1'-0
0 2 4 6

ABUTMENT 1 PLANS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

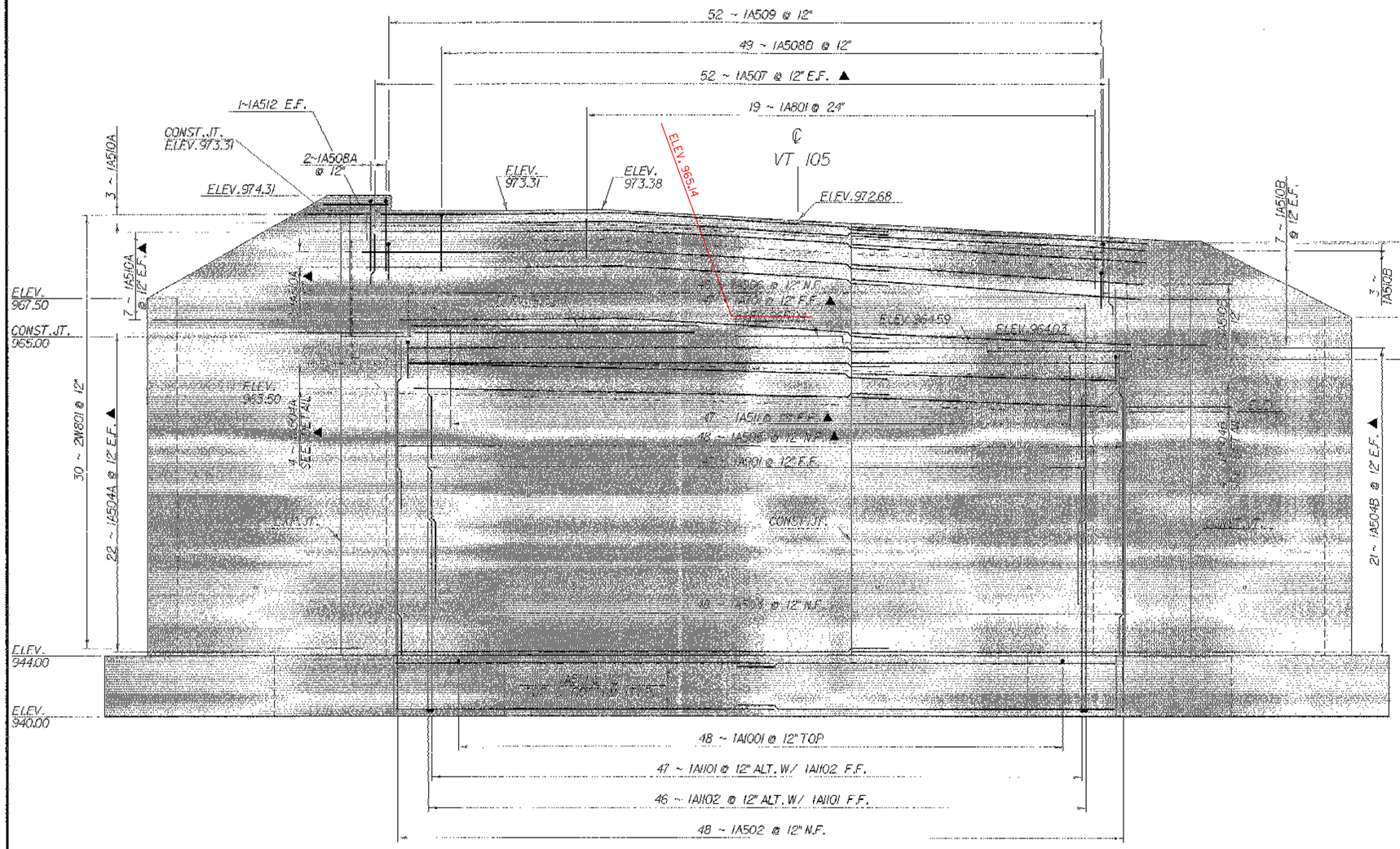
Town Of	DERBY	Bridge No.	64
Highway No.	VT 105	Log Sta.	
		Surv. Sta.	

VT 105 OVER THE CLYDE RIVER

ABUTMENT 1 PLANS

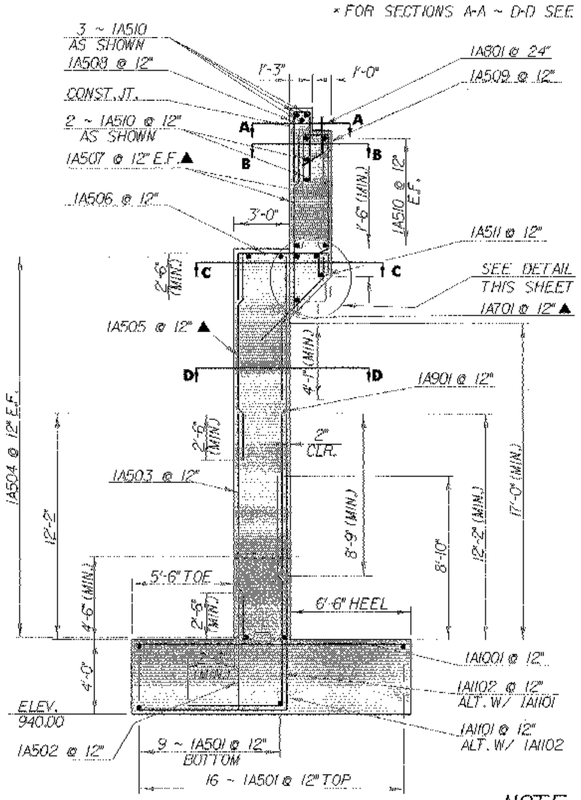
Designed By M.FOWLER	Drawn By R.PELLETT
Checked By M.EVANS-MONGEON — Date	Bridge Design Supervisor C.KELLER — Date
PROJECT DERBY	PROJECT NO. BRF 034 3(14)
I.G.C. Info. /781199/Structures/sf199subdgn	sf199f10
Bridge Sheet No.	Sheet 72 of 127

13-NOV-2009



ELEVATION

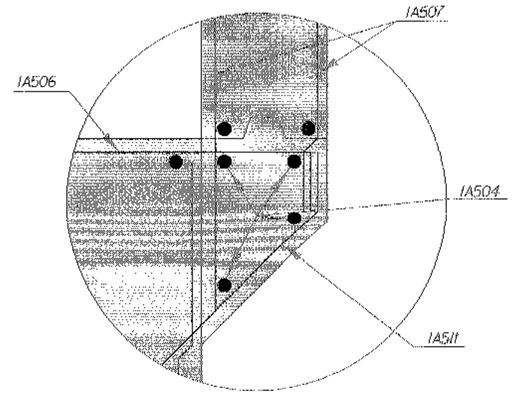
SCALE 1/4" = 1'-0"



TYPICAL SECTION

NOTE:

NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
3" CLR. UNLESS OTHERWISE SPECIFIED ON THE PLANS.



DETAIL

NOT TO SCALE

ABUTMENT 1 ELEVATION & SECTION

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of	DERBY	Bridge No.	64
		Log Sta.	
Highway No.	VT 105	Surv. Sta.	
VT 105 OVER THE CLYDE RIVER			
ABUTMENT 1 ELEVATION & SECTION			
Designed By M.FOWLER		Drawn By R.PELLETT	
Checked By M.EVANS-MONGEON	Date	Bridge Design Supervisor C.KELLER	Date
PROJECT DERBY		PROJECT NO. BRF 034 3(14)	
I.G.C. Info. /78f199/Structures/sf199subdgn			sf199abt1
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PLOTTED 13-MAY-2008