STATE OF VERMONT
AGENCY OF TRANSPORTATION

PROPOSED GRADE CROSSING IMPROVEMENTS
TOWN OF SHARON

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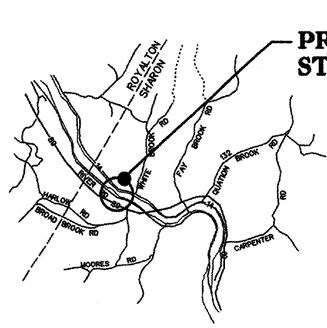
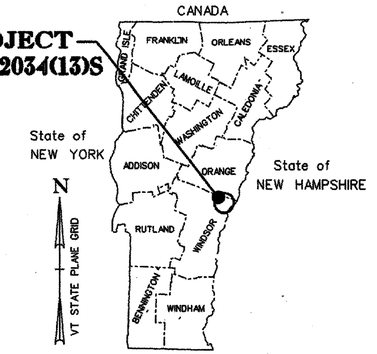
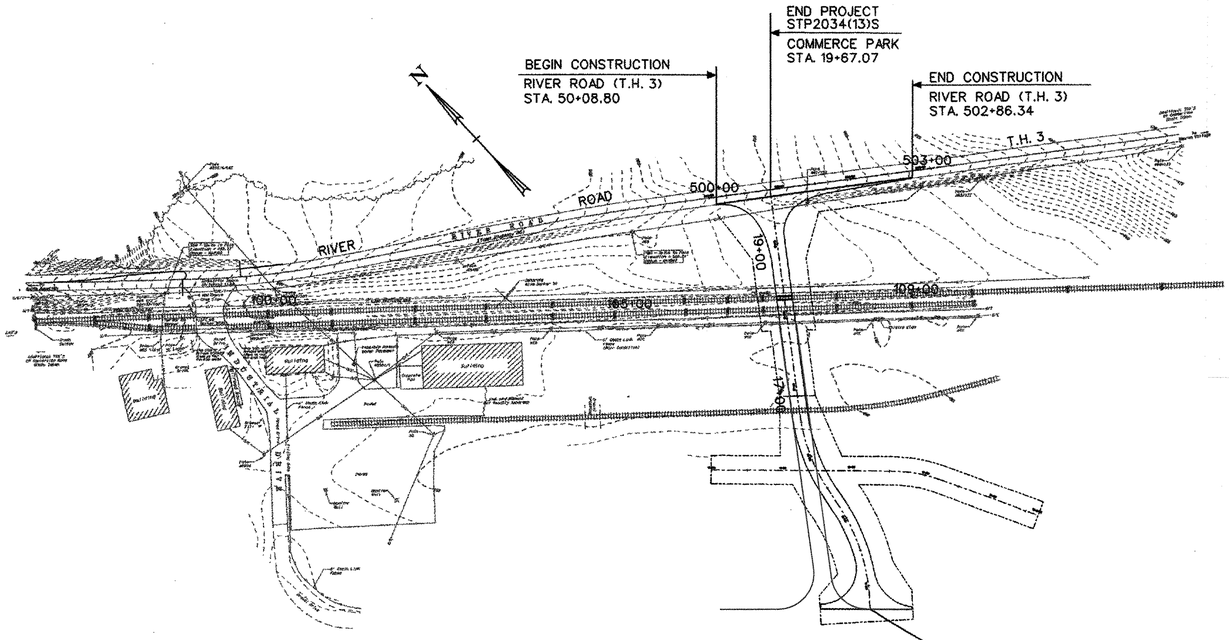






RECORD PLANS

CONTRACTOR: DON WESTON EXCAVATING – WILLISTON, VT

RESIDENT ENGINEER: W. STODDARD

CONSTRUCTION BEGAN: OCTOBER 11, 2003

CONSTRUCTION COMPLETE: MAY 20, 2004

RECORD PLANS BY: W. STODDARD

I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

BY _____ RESIDENT ENGINEER

DATE 12-8-05

NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.

TRAFFIC DATA

2002 ADT - 1630
2022 ADT - 2210
2022 ADTT - 200

CONVENTIONAL SYMBOLS

COUNTY LINE
TOWN LINE
LIMITS OF ACCESS
POINT OF ACCESS
FENCE LINE
STONE WALL
TRAVELED WAY
GUARD RAIL
RAILROAD
SURVEY LINE
CULVERT
POWER POLE
TELEPHONE POLE
TREES
CONTROL OF ACCESS
PROPERTY LINE
R.O.W. TAKING LINE
SLOPE RIGHTS
TOP OF CUT
TOE OF SLOPE

Parsons, Brinckerhoff, Quade and Douglas, Inc.
75 Arlington St. Boston, MA 02116
PH. (617)426-7330 FAX (617)482-8487

SURVEYED BY : SUMMIT ENGINEERING, INC.
SURVEYED DATE : 2000

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC1983

100 0 100 200
SCALE: 1"=100'

STATE OF VERMONT MORRIS G. LEW NO. 3848 REGISTERED PROFESSIONAL ENGINEER

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROJECT DEVELOPMENT.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2001, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JANUARY 4, 2001 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

APPROVED _____ DATE 6/30/05
DIRECTOR OF PROJECT DEVELOPMENT

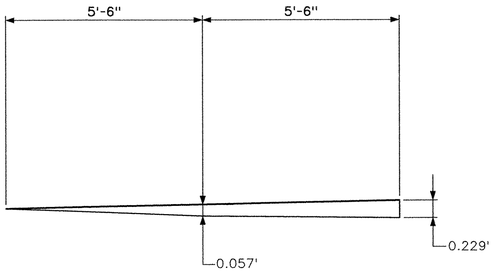
PROJECT: STP2034 (13)S

SHARON GRADE CROSSING

SHEET 1 OF 35

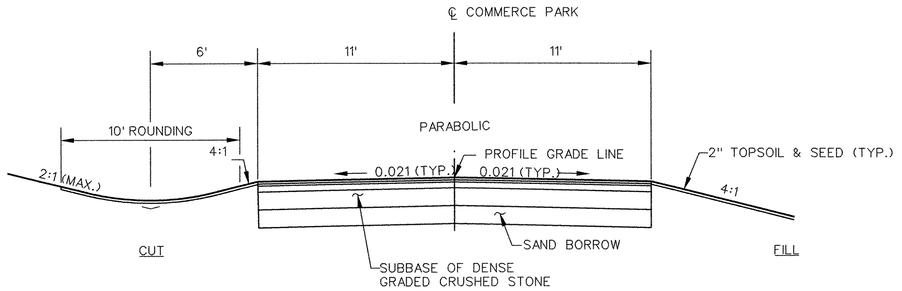
FILE: $FILE$
DATE: $DATE$

TYPICAL SECTIONS

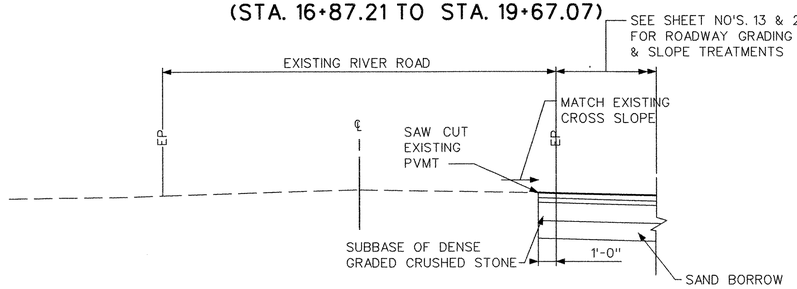


PARABOLIC DETAIL
NOT TO SCALE

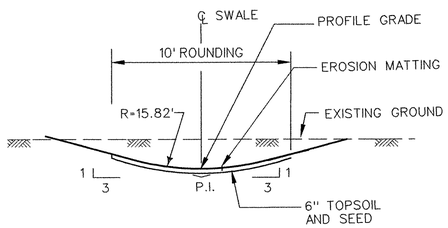
1½" BITUMINOUS CONCRETE PAVEMENT SURFACE COURSE (TYPE III)
2 " BITUMINOUS CONCRETE PAVEMENT BINDER COURSE (TYPE II)
4" BITUMINOUS CONCRETE PAVEMENT BASE COURSE (TYPE I)
12" SUBBASE OF DENSE GRADED CRUSHED STONE
12" SAND BORROW



COMMERCE PARK PAVED SECTION
(STA. 16+87.21 TO STA. 19+67.07)

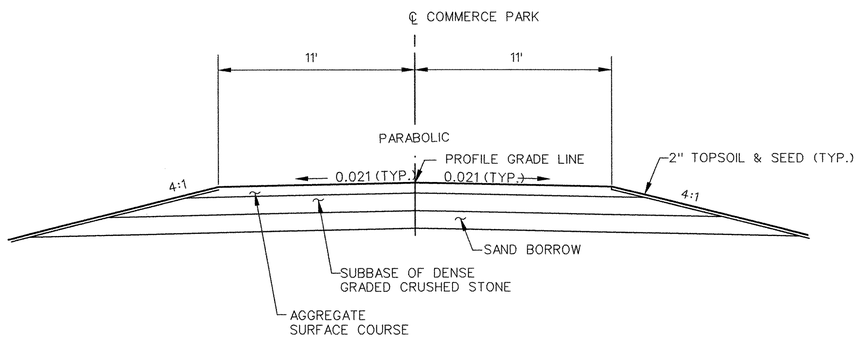


RIVER ROAD



TYPICAL GRASS LINED SWALE

7" AGGREGATE SURFACE COURSE
12" SUBBASE OF DENSE GRADED CRUSHED STONE
12" SAND BORROW



COMMERCE PARK AGGREGATE SECTION
(STA. 13+69.97 TO STA. 16+87.21)

GENERAL NOTES:

SEED MIXTURE: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.

SEED: TO BE APPLIED PER SEEDING FORMULAS OR AS DIRECTED BY THE ENGINEER.

FERTILIZER: FORMULA 10-20-10, TO BE USED WITH SEED, APPLIED AT THE RATE OF 500lb/AC (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).

AGRICULTURAL LIMESTONE: TO BE APPLIED AT THE RATE OF 2 TONS/AC OR AS DIRECTED BY THE ENGINEER.

SLOPE ROUNDING: ALL CUT SLOPES TO BE ROUNDED IN ACCORDANCE WITH STANDARD SHEET B-5.

TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED AT THE RATE OF 0.015 GAL PER SY BETWEEN SUCCESSIVE COURSES OF PAVEMENT AS DIRECTED BY THE ENGINEER.

LIMITS OF CLEARING AND GRUBBING OF UNDISTURBED AREAS SHALL BE A MIN. OF 5' OFF PROPOSED ROADWAY SLOPE LIMITS.

MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (TOTAL DEPTH)	3/16"
AGGREGATE	1 3/16"
SUBBASE	1 3/16"
SAND	1 3/16"

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:		
DATE	REVISIONS	BY

NOT TO SCALE

SHEET 1 OF 2

PROJECT NAME: **SHARON GRADE CROSSING**
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SHT2.DGN
PROJECT LEADER: R. O'BLENIS
DESIGNED BY: C. GLOVER
PLOT DATE: 06/13/03
DRAWN BY: J. DEROSIER
CHECKED BY: R. ORO
SHEET 2 OF 35

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06/13/03
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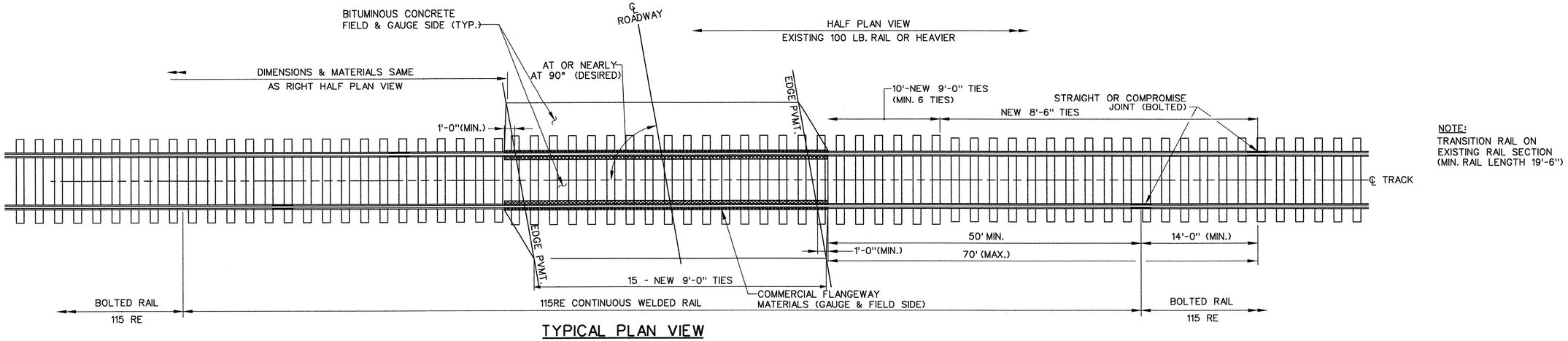
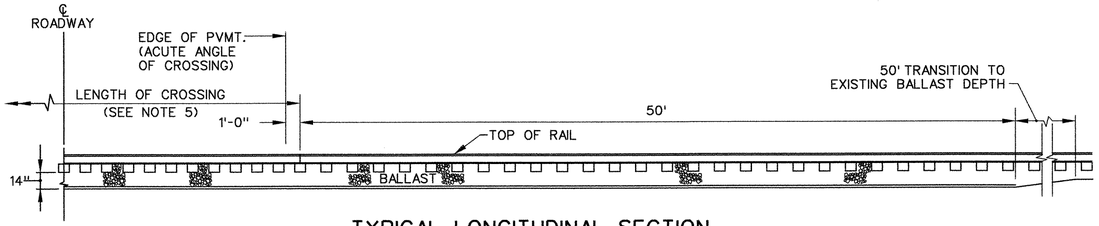
TYPICAL SECTIONS

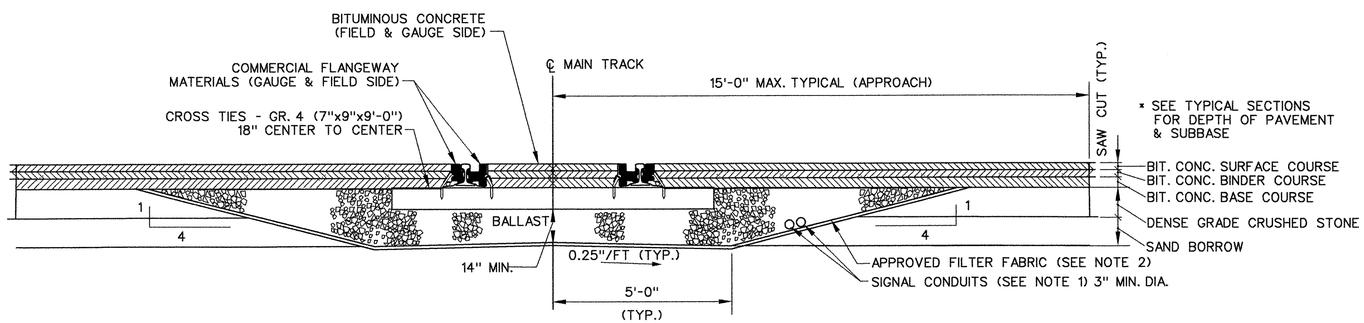


TYPICAL PLAN VIEW

NOTE:
TRANSITION RAIL ON
EXISTING RAIL SECTION
(MIN. RAIL LENGTH 19'-6")



TYPICAL LONGITUDINAL SECTION
(HALF VIEW)



TYPICAL TRANSVERSE SECTION
(HALF VIEW)

GENERAL NOTES:

1. SIGNAL CONDUIT (SCHEDULE 80 PVC) TO BE INSTALLED WITH SECURED ENDS IN LOCATIONS DIRECTED BY THE ENGINEER. PAYMENT FOR ITEM TO BE INCLUDED IN CROSSING LINEAR FOOT COST.
2. THE USE OF GEOTEXTILE FABRIC SHALL BE DETERMINED UPON INSPECTION OF FIELD CONDITIONS BY THE RAILROAD AND THE ENGINEER.
3. ALL RAIL JOINTS WITHIN THE CROSSING AREA AND 50'-0" BEYOND WILL BE CROPPED AND WELDED IN ACCORDANCE WITH THE LATEST REVISION OF A.R.E.A. SPECIFICATIONS AT AN OFF-SITE ELECTRIC WELDING PLANT. WELDING CAN BE DONE IN FIELD UTILIZING THERMITE WELDING WITH ADVANCE APPROVAL FROM THE STATE OF VERMONT AGENCY OF TRANSPORTATION. WELDED JOINTS SHALL BE GROUND TO CONFORM TO THE SHAPE OF THE RAIL ON GAUGE AND FIELD SIDES.
4. TIE SPACING UNDER CWR SHALL BE 18 INCHES ON CENTER.
5. NEW 7"x9"x9'-0" AND 7"x9"x8'-6" TIES SHALL BE USED IN CROSSING AREA AS SHOWN. TIES IN APPROACH AREAS SHALL BE REPLACED AS RECOMMENDED BY THE RAILROAD AND APPROVED BY THE ENGINEER.
6. TIE PLATES SHALL BE NEW 14 INCH PLATES MANUFACTURED FOR THE RAIL USED. PLATES SHALL BE INSPECTED AND APPROVED BY THE RAILROAD AND THE ENGINEER. RAIL FASTENERS SHALL BE EITHER CUT TRACK SPIKES OR PANDROL TYPE CLIPS AND LOCK SPIKES. SPECIFIC RAIL FASTENING SYSTEM SHALL BE RECOMMENDED BY THE RAILROAD AND APPROVED BY THE STATE OF VERMONT AGENCY OF TRANSPORTATION DURING FINAL DESIGN.
7. BALLAST IN APPROACH AREAS SHALL EXTEND 6" BEYOND END OF TIES AND SLOPED 1:2 TO THE ROADBED. (SEE DETAIL).
8. RAIL WEIGHTS SHALL BE DETERMINED BY THE RAILROAD AND APPROVED BY THE ENGINEER. MINIMUM RAIL WEIGHT SHALL BE 115 LB. RE.

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:		
DATE	REVISIONS	BY

NOT TO SCALE

SHEET 2 OF 2

PROJECT NAME: **SHARON GRADE CROSSING**
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SHT3.DGN
PROJECT LEADER: R. O'BLENIS
DESIGNED BY: C. GLOVER
PLOT DATE: 06/13/03
DRAWN BY: J. DEROSIER
CHECKED BY: R. ORO
SHEET 3 OF 35

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06/13/03
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EARTHWORKS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATION	DIST	TOTAL EXCAVATION EARTH AND ROCK AREA	TOTAL EXCAVATION EARTH AND ROCK CU. YDS.	ROCK EXCAVATION AREA	ROCK EXCAVATION CU. YDS.	EMBANKMENT AREA	EMBANKMENT CU. YDS.		
RIVER ROAD	(TH3)								
500+08.80		0				0			
	16.2		4.1				0		
500+25		13.5				0			
	25		27.0				0		
500+50		44.9				0			
	25		44.3				0		
500+78		50.7		191	246	0			
	25		45.9				0		
501+00		48.4				0			
	25		40.4				0		
501+25		38.8				0			
	25		29.5				0.6	C	308
501+50		25.0				1.2		F	5
	25		27.1				2.6	FAC	1.15
501+75		33.5		55	47	0.9		EXC	302
	25		27.7				0.8		372
502+00		26.4				0.9			
	25		22.5				0.7		
502+25		22.2		41	30	0.6			
	25		18.7				0.3		
502+50		18.2				0			
	25		16.8				0		
502+75		18.1		21	17	0			
	11.34		3.8				0		
502+86.34		0				0			
		+ SUBGRADE TAPER EXC. =		32					
			SUB TOTAL =	372					

STATION	DIST	TOTAL EXCAVATION EARTH AND ROCK AREA	TOTAL EXCAVATION EARTH AND ROCK CU. YDS.	ROCK EXCAVATION AREA	ROCK EXCAVATION CU. YDS.	EMBANKMENT AREA	EMBANKMENT CU. YDS.		
COMMERCE	PARK	(AGGREGATE SURFACE)							
13+75		0				0			
	25		18.1		0		6.3		
14+00		39.0				13.7			
	25		22.6		102		18.0		
14+25		9.8				20.9			
	25		4.5		7		15.4		
14+50		0				12.4			
	25		0		0		18.7		
14+75		0				28.0			
	25		0		0		24.0	C	110
15+00		0				23.8		F	248
	25		0		0		31.4	FAC	1.15
15+25		0				44.0		EMB	106
	25		0		0		37.1		197
15+50		0				36.1			
	25		0		0		35.4		
15+75		0				40.4			
	25		0		0		29.9		
16+00		0				24.2			
	25		4.1		0		18.4		
16+25		8.8				15.5			
	25		17.3		0		9.1		
16+50		28.8				4.1			
		37.21		43.2	15		5.7		
16+87.21		34.1				4.1			
		SUB TOTAL =	59.4						
COMMERCE	PARK	(PAVED SURFACE)			71				
16+87.21		34.1				4.1			
		12.79		16.2			1.9	C	120
17+00		34.1				4.1		F	21
	50		54.0		61		8.2	FAC	1.15
17+50		24.2				4.8		EXC	96
	50		42.8		32		9.6		98
18+00		22.0				5.6			
	4		3.3		5		0.8		
18+04		22.0				5.6			
18+30		48.4				0			
	20		41.3		16		0		
18+50		63.1				0		C	545
	50		149.2		196		0	F	0
19+00		98.0				0		FAC	1.15
	25		186.3		255		0	EXC	646
19+25		304.5				0			837
	25		268.9		370		0		
19+50		276.4				0			
					246				
19+67			191						

STATION	DIST	TOTAL EXCAVATION EARTH AND ROCK AREA	TOTAL EXCAVATION EARTH AND ROCK CU. YDS.	ROCK EXCAVATION AREA	ROCK EXCAVATION CU. YDS.	EMBANKMENT AREA	EMBANKMENT CU. YDS.		
GRASS LINED	SWALE								
10+00		0				0			
	50		6.9				0		
10+50		7.5				0		C	45
	50		25.5	45	51		0	F	0
11+00		20.0				0		FAC	1.15
	17		12.6				0	EXC	45
11+17		20.0				0			51
		40.0				0			
11+83	17		25.2		45		0		
12+00		40.0				0			
	50		61.1		57		0		
12+50		26.0				0		C	243
	50		46.3		67		0	F	0
13+00		24.0				0		FAC	1.15
	50		44.4		66		0	EXC	243
13+50		24.0				0			314
	50		41.7		54		0		
14+00		21.0				0			
	50		23.1		25		0		
14+50		4.0				0			
	14.5		1.1		0		0		
14+64.5		0				0			

SUMMARY AND BALANCES

STATION TO STATION	TOTAL EXCAV EARTH & ROCK	ROCK EXCAV CUBIC YARDS	EMBANKMENT CUBIC YARDS	EXCESSES CUT	EXCESSES FILL	ACCUMULATIVE EXCESSES CUT	ACCUMULATIVE EXCESSES FILL
RIVER ROAD (TH 3)					FINAL		
500+08.80 — 502+86.34	308	0	5	302	372	302	+64
COMMERCE PARK							
13+75 — 16+87.21	110	0	248	197 106	196	196	+87
16+87.21 — 18+04	120	0	21	95	98	282	-22
18+30 — 19+50	648	0	0	646	837	938	+191
GRASS LINED SWALE							
10+00 — 11+17	45	0	0	45	51	983	+6
11+83 — 14+64.5	243	0	0	243	314	1226	+71
EXISTING CROSSING TO RIVER ROAD							
190 L.F.	160	0	0	160	0	1386	-160
							+237
				EXCAVATON FOR STONE FILL			+78
							315
	1632	0	289				

REMARKS

EARTH AND ROCK EXCAVATION	1632
SOLID ROCK EXCAVATION	0
EARTH EXCAVATION	1632
PLANIMETERED FILL	289
LESS FACTORED SOLID ROCK	
LESS DISPLACEMENT OF ANY LARGE STRUCTURES	
NET PLANIMETERED FILL	289
FACTOR	1.15
PLANIMETERED FILL INCLUDING FACTOR	(289x1.15) 309
MATERIALS AVAILABLE FOR FILLS	
EARTH EXCAVATION	1632
CHANNEL EXCAVATION	0
UNDERDRAIN EXCAVATION	0
STRUCTURE EXCAVATION	0
TOTAL MATERIAL AVAILABLE FOR FILL	1632
TOTAL FILL INCLUDING FACTOR	309
TOTAL MATERIAL FOR FILL	1632
BORROW	0
EXCESS EXCAVATION	1323

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:

DATE	REVISIONS	BY

PROJECT NAME: SHARON GRADE CROSSING
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SHT4.DGN
PROJECT LEADER: R. O'BLENIS
DESIGNED BY: C. GLOVER
DRAWN BY: D. LOCKS
CHECKED BY: R. ORO
PLOT DATE: 06/13/03
SHEET 4 OF 35

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06/13/03

QUANTITY SHEET

STATE OF VERMONT
AGENCY OF TRANSPORTATION

SUMMARY OF ESTIMATED QUANTITIES

ROADWAY	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING
1	1	LS	CLEARING AND GRUBBING (INCLUDING INDIVIDUAL TREES & STUMPS)	201.10	EST
1650	1650	CY	COMMON EXCAVATION	203.15	-
20	20	CY	EXCAVATION OF SURFACES AND PAVEMENTS	203.28	EST
730	730	CY	SAND BORROW	203.31	5
1900	1900	SY	FINE GRADING - SUBGRADE	203.40	20
45	45	CY	TRENCH EXCAVATION OF EARTH	204.20	2
680	680	CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.35	4
200	200	CY	AGGREGATE SURFACE COURSE	401.10	EST
1.3	1.3	CWT	EMULSIFIED ASPHALT	404.65	EST
400	400	TON	BITUMINOUS CONCRETE PAVEMENT (PG 58-34)	406.25	-
70	70	LF	18 " CPEP (SL)	601.2615	EST
66	66	LF	30" CPEP (SL)	601.2625	EST
2	2	EACH	18 " CPEPES	601.7015	-
2	2	EACH	30" CPEPES	601.7025	-
0.50	0.50	MGAL	DUST CONTROL WITH WATER	609.10	EST
75	75	CY	STONE FILL, TYPE 1	613.10	.3
1	1	EACH	RELOCATE MAIL BOX SINGLE SUPPORT	617.10	-
4	4	EACH	BRACING ASSEMBLY FOR CHAIN-LINK FENCE, 6 FEET	620.21	-
170	170	LF	REMOVAL OF EXISTING FENCE	620.55	EST
48	48	LF	PLANK RAIL	621.15	-
50	50	LF	DUCTS, DIRECT BURIAL (PVC)	624.25	EST
1	1	LS	MOBILIZATION	635.10	-
1	1	LS	TRAFFIC CONTROL	641.10	-
520	520	LF	DURABLE 4" YELLOW LINE	646.41	EST
126	126	LF	DURABLE 24" STOP BAR	646.46	EST
2	2	EACH	DURABLE RAILROAD CROSSING SYMBOL	646.52	-
690	690	SY	GEOTEXTILE FOR SILT FENCE	649.51	4
100	100	LB	SEED	651.15	EST
200	200	LB	FERTILIZER	651.18	EST
2	2	TON	AGRICULTURAL LIMESTONE	651.20	EST
260	260	CY	TOP SOIL	651.35	10
75	75	SF	TRAFFIC SIGN, TYPE A	675.20	2.67

SUMMARY OF ESTIMATED QUANTITIES

QUANTITIES	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING
	ITEMS	ITEMS	ITEMS	ITEMS	ITEMS
			BEGIN SIGN POST OPTION		
66.15	66.15	LF	FLANGED CHANNEL SIGN POST	675.301	
66.15	66.15	LF	SQUARE STEEL SIGN POSTS	675.341	EST
9	9	EACH	REMOVING SIGNS	675.50	-
			********** ITEMS LISTED OUT OF ORDER **********		
50	50	SY	GEOTEXTILE FOR FILTER CURTAIN	649.61	
25	25	LB	SEED-WINTER RYE	651.17	
2	2	TON	HAY MULCH	651.25	
45	45	EACH	HAY BALES EROSION CONTROL	651.26	
1	1	LS	EROSION AND SEDIMENT CONTROL PLAN	652.10	
35	35	HR	MONITORING EROSION CONTROL PLAN	652.20	
1	1	LU	FIELD MAINTENANCE OF EROSION AND SEDIMENT CONTROL PLAN	652.30	
800	800	SY	EROSION MATTING (EXCELSIOR)	654.10	

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		COMMON EXCAVATION
308	CY	RIVER ROAD (T.H. 3)
876	CY	COMMERCE PARK
288	CY	GRASS LINED SWALE
160	CY	EXIST. CROSSING TO RIVER ROAD
18	CY	ROUNDING
1650	CY	TOTAL
		BITUMINOUS CONCRETE PAVEMENT
		RIVER ROAD & COMMERCE PARK STA. 16+87.21 TO STA. 19+67.07
86	TON	SURFACE COURSE (TYPE III)
86	TON	BINDER COURSE (TYPE II)
227	TON	BASE COURSE (TYPE I)
1	TON	ROUNDING
400	TON	TOTAL
		AGGREGATE SURFACE COURSE
198	CY	COMMERCE PARK STA. 13+69.97 TO STA. 16+87.21
2	CY	ROUNDING
200	CY	TOTAL
		SUBBASE
676	CY	DENSE GRADED CRUSHED STONE
4	CY	ROUNDING
680	CY	TOTAL
725	CY	SAND BORROW
5	CY	ROUNDING
730	CY	TOTAL

PROJECT NAME: **SHARON GRADE CROSSING**
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SHT5.DGN
PROJECT LEADER: R. O'BLENIS
DESIGNED BY: C. GLOVER
PLOT DATE: 01/16/03
DRAWN BY: D. LOCKS
CHECKED BY: R. ORO
SHEET 5 OF 35

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08/16/03

N

480 485 490 495 500

TBM - Spike In Pole
Elevation = 493.17'
Datum - NAVD88

LOT #R03205L4
13.53 acres

REPLACE REGRADED AREA WITH 2" TOPSOIL & SEED

RIVER ROAD (TOWN HIGHWAY #3)

REMOVE EXISTING PAVEMENT & REGRADE

Industrial Drive
(Private) Sign

493 494 494 495 496 497

REMOVE AND RELOCATE MAILBOXES

Mailboxes

Stop Sign

Pole #63 1/2
29/132/100T

Pole #A/29/133

UG Marker #1613

U/I Edge Railroad Bed

U/T

495

REMOVE EXIST. PAVED CROSSING
RESTORE BALLAST TO TYPICAL SECTION & SURFACE TRACK TO EXISTING GRADE (BY OTHERS)

Telephone Manhole

EXISTING MAINLINE TRACK

EXISTING SIDING TRACK (REMOVE BY OTHERS)

Edge Railroad Bed

Sprint UG Marker

Paved

48' PLANK RAIL GUIDE POSTS

80.00'

I.R.F.

N43° 31'20.2"W
1405.44'

Pole #63 1/3-1 w/ Light

Stop sign w/ Private Crossing Cross At Your Own Risk below

Stop sign w/ Private Crossing Cross At Your Own Risk below

N43° 31'20.2"W
I.R.S. 1398.94'

(TIE LINE)

Pole #3/85

Concrete Mile Marker

CV/NECR

Pole #1A

Pole #1B

Possible Manhole Under Pavement

Pole #2904/1

Building

Concrete Pad

Gravel Drive

Railroad Boxcar

Building

Building

500

80.00'

INDUSTRIAL Paved Drive DRIVE

6' Chain Link Fence

End of Pavement Not Readily Apparent

Paved

EXISTING SPUR TRACK

Pole #2

Pole #2904

95.00'

Sliding Gate

Gravel Fill

LOT #R03205L5
KATHLEEN McQUEEN & WESTON BOARDMAN

Paved

MATCH LINE

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:

DATE	REVISIONS	BY

0 20 40
SCALE IN FEET

PLAN LAYOUT - SHEET 1 OF 3

PROJECT NAME: **SHARON GRADE CROSSING**
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SHT6.DGN
PROJECT LEADER: R. O'BLENIS
DESIGNED BY: C. GLOVER
PLOT DATE: 06/13/03
DRAWN BY: J. DEROSIER
CHECKED BY: R. ORO
SHEET 6 OF 35

09:05:45 AM
06/13/03
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END PROJECT LIMIT OF WORK STA. 19+67.07 COMMERCE PARK ℄
STA. 500+86.53 RIVER ROAD ℄ = STA. 19+76.57 COMMERCE PARK ℄
RIVER ROAD LIMIT OF WORK STA. 500+08.80
RIVER ROAD LIMIT OF WORK STA. 502+86.34
S49° 27'05.4"E
500+00
501+00
502+00
503+00
SAW CUT
R=100.00'
R=60.00'
R=45.00'
R=160.00'
Pole #67/136
Pole #68/137
RIVER ROAD (TOWN HIGHWAY #3)
RESET POLE (BY UTILITY OWNER)
N/F NATIVEVEST LOT #R03205L4
2.72 acres
18" CPEPES INV. 491.46 490.10
18" CPEPES INV. 491.11 489.70
70'-18" CPEPES
SIGNAL CONDUIT (BY OTHERS)
Pole #66
TBM - Spike In Pole Elevation = 500.21' Datum - NAVD88
N43° 31'20.2"W 1398.94'
N40° 42'30"E
6'X6' SIGNAL HOUSE (BY OTHERS)
AT & T U.G. FIBER OPTIC
EXISTING MAINLINE TRACK
ENCASE EXISTING FIBER OPTICS IN SPLIT PVC CONDUIT (BY OTHERS)
EXISTING SIDING TRACK (REMOVE BY OTHERS)
N43° 31'20.2"W 1405.44'
6' Chain Link Fence (Poor Condition)
Pole #1C
Pole #1D
REMOVE EXIST. FENCE INSTALL BRACING ASSEMBLY (40' LEFT & RIGHT OF ℄)
PROPOSED GRADE CROSSING SEE DETAILS ON SHEET NO. 3 (BY OTHERS)
Pole #1E
CV/NECR
Whistle Sign
SPRINT U.G. FIBER OPTIC
Pole #1F
N/F NATIVEVEST LOT #R03205L3
26.70± acres
LOT #R03205L3
26.70± acres
COMMERCE PARK
BIT. CONC. SURFACE
304.00'
MATCH LINE
NOTE: EXISTING RAIL IN MAINLINE TRACK IS 115 LBS.

PLAN LAYOUT - SHEET 2 OF 3

PROJECT NAME:	**SHARON GRADE CROSSING**
PROJECT NUMBER:	STP2034 (13)S

FILE NAME:	SHT7.DGN	PLOT DATE:	06/13/03
PROJECT LEADER:	R. O'BLENIS	DRAWN BY:	J. DEROSIER
DESIGNED BY:	C. GLOVER	CHECKED BY:	R. ORO
		SHEET	7 OF 35

DATUM

VERTICAL	NAVD88 ± 0.5 FT.
HORIZONTAL	SPC 1983

ORIGINAL PREPARED:

DATE	REVISIONS	BY

0 20 40
SCALE IN FEET

06/13/03
M:\18737s_vt rail king\SHARON CROSSING\dgn\sht7.dgn


MATCH LINE
REMOVE & STACK ON SITE EXISTING SPUR TRACK (25' EITHER SIDE OF ℄)
LIMIT OF COMMERCE PARK PAVED SECTION STA. 16+87.21
STA. 15+78.8' COMMERCE PARK ℄ -
STA. 11+48.16 GRASS LINED SWALE ℄
30" CPEPES INV.=489.44 489.60
℄ GRASS LINED SWALE
30" CPEPES INV.=490.21 490.50
BEGIN CONSTRUCTION GRASSED LINED SWALE ℄ STA. 10+00
S41°-16'-34.55"E 254.70
CV. NO. 3
S21°-16'-34.55"E
139.99'
66'-30" CPEP (SL)
COMMERCE
PARK
AGGREGATE SURFACE
CV. NO. 2
CV. NO. 1
RE-ALIGNMENT
END CONSTRUCTION GRASSED LINED SWALE ℄ STA. 14+64.5 14+50
STREAM
R = 60'
R = 60'
REMOVE EXISTING FENCE INSTALL BRACING ASSEMBLY 70' LEFT AND 60' RIGHT OF ℄
R=50.00'
R=50.00'
PC = 13+82.77
69.11'
58.7'
N44°57'36.01"E 15.66'
EXISTING
INDUSTRIAL
DRIVE
BEGIN PROJECT LIMIT OF WORK STA. 13+69.97 COMMERCE PARK
24" RCP
I.R.S.
SCALE IN FEET

~~CURVE DATA CV. NO. 1~~
Δ = 30°-00'-00"
R = 260.00'
T = 69.67'
L = 136.14'
E = 9.17'

~~CURVE DATA CV. NO. 2~~
Δ = 25°-44'-53.99"
R = 260.00'
T = 59.43'
L = 116.84'
E = 6.70'

CURVE DATA CV. NO. 3
Δ = 20°-00'-00"
R = 200.00'
T = 35.27'
L = 69.81'
E = 3.09'

PLAN LAYOUT - SHEET 3 OF 3

PROJECT NAME:	SHARON GRADE CROSSING
PROJECT NUMBER:	STP2034 (13)S
FILE NAME:	SHT8.DGN
PROJECT LEADER:	R. O'BLENIS
DESIGNED BY:	C. GLOVER
PLOT DATE:	06/13/03
DRAWN BY:	J. DEROSIER
CHECKED BY:	R. ORO
SHEET	8 OF 35

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:		
DATE	REVISIONS	BY

06/13/03
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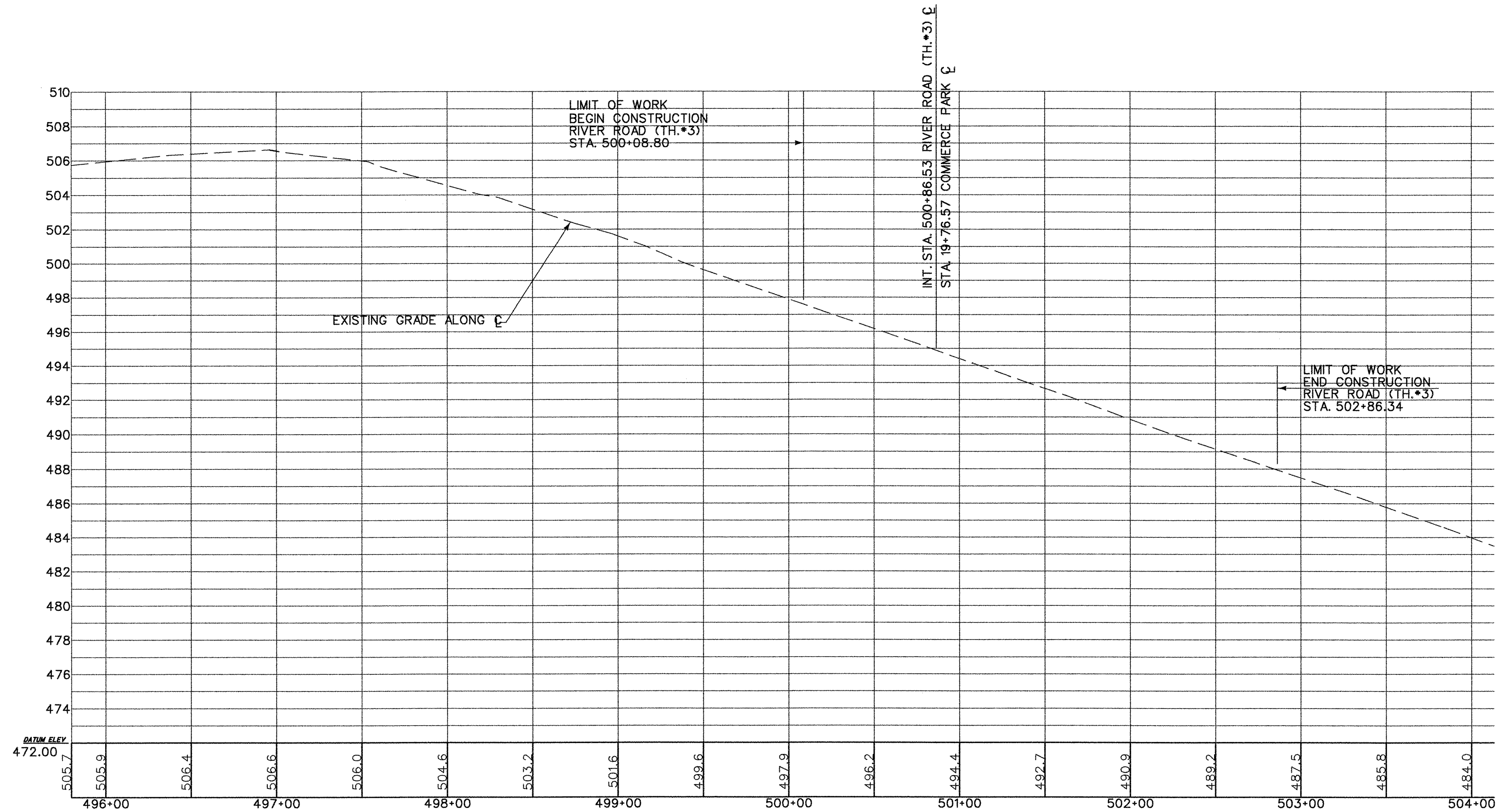

PROFILE - RIVER ROAD

DATUM	
VERTICAL	NAVD88 ± 0.5 FT.
HORIZONTAL	SPC 1983

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06/13/03
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ORIGINAL PREPARED:		
DATE	REVISIONS	BY

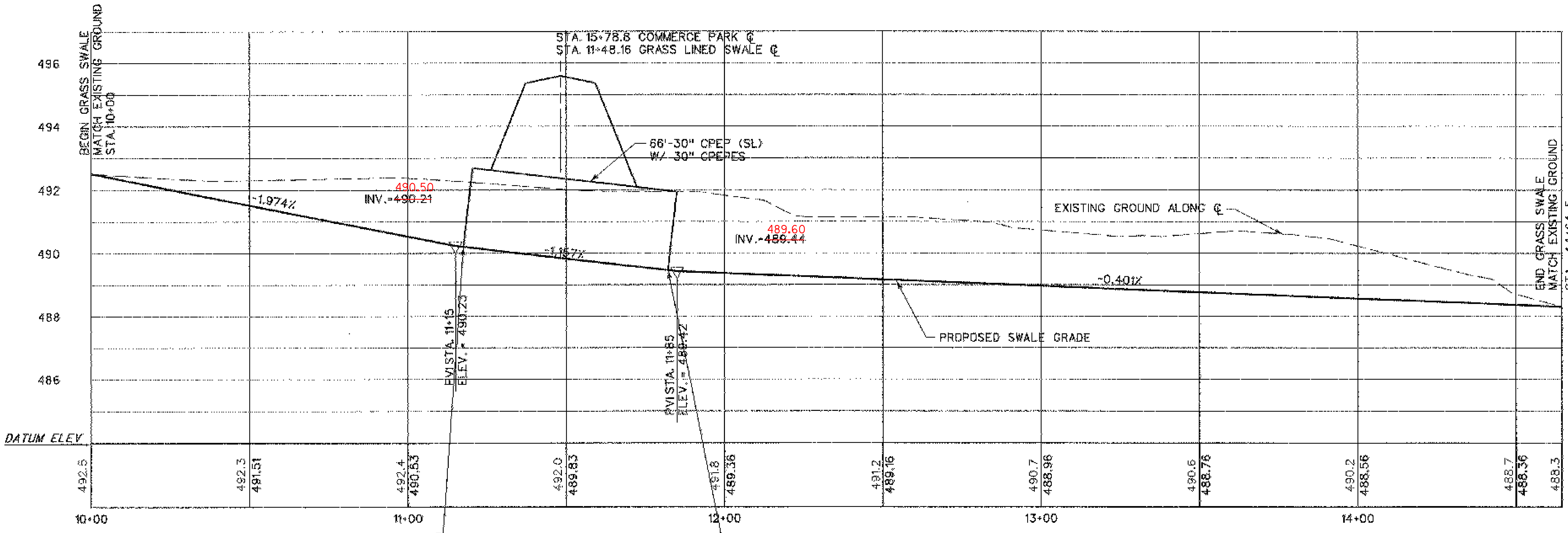
HORIZ. 0 40 80

VERT. 0 4 8

SCALE IN FEET

PROFILE - RIVER ROAD

PROJECT NAME:	**SHARON GRADE CROSSING**		
PROJECT NUMBER:	STP2034 (13)S		
FILE NAME:	SHT9.DGN	PLOT DATE:	06/13/03
PROJECT LEADER:	R. O'BLENIS	DRAWN BY:	J. DEROSIER
DESIGNED BY:	C. GLOVER	CHECKED BY:	R. ORO
		SHEET 9	OF 35



PROFILE - GRASS LINED SWALE

DATUM	
VERTICAL	NAVD88 ± 0.5 FT.
HORIZONTAL	SPC 1983

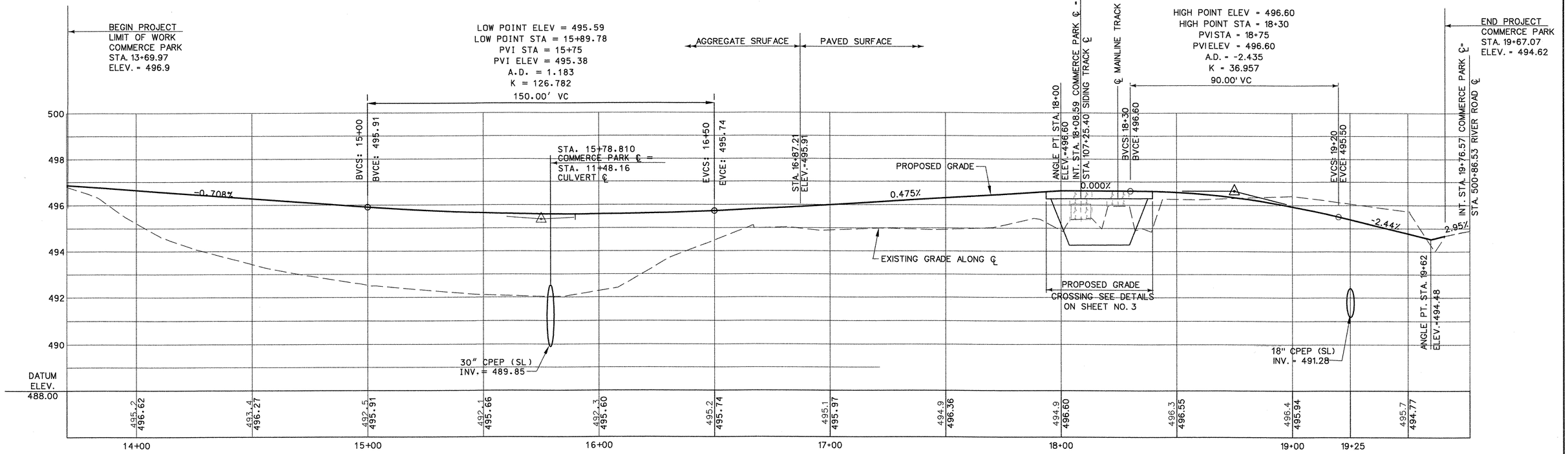
ORIGINAL PREPARED:		
DATE	REVISIONS	BY

HORIZ. 0 20 40
VERT. 0 2 4
SCALE IN FEET

PROFILE - GRASS LINED SWALE

PROJECT NAME: **SHARON GRADE CROSSING**
PROJECT NUMBER: STP2034 (13)S

FILE NAME:	SHT10.DGN	PLOT DATE:	06/13/03
PROJECT LEADER:	R. O'BLENIS	DRAWN BY:	J. DEROSIER
DESIGNED BY:	C. GLOVER	CHECKED BY:	R. ORO
		SHEET	10 OF 35



PROFILE - COMMERCE PARK

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:		
DATE	REVISIONS	BY

HORIZ. 0 20 40
VERT. 0 2 4
SCALE IN FEET

PROFILE - COMMERCE PARK

PROJECT NAME: **SHARON GRADE CROSSING**
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SHT11.DGN
PROJECT LEADER: R. O'BLENIS
DESIGNED BY: C. GLOVER
PLOT DATE: 06/13/03
DRAWN BY: J. DEROSIER
CHECKED BY: R. ORO
SHEET 11 OF 35

03:10:41 AM
06/13/03
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RIVER ROAD
(Town Highway #3)

TBM = Spike In Pole
Elevation = 493.17'
Datum - NAVD88

LOT #R03205L4
13.53 acres

N43° 31' 20.2"W
I.R.S. 1398.94'
(TIE LINE)

Pole #3/65

Concrete Mile Marker

MULCH AND SEED FOR EROSION CONTROL

Industrial Drive
(Town Highway #3)

Pole #63 1/2
29/132/100T

Mailboxes

Stop Sign

ATT UG Marker #761S

Pole #A/29/133

Edge Railroad Bed

EXISTING MAINLINE TRACK

EXISTING SIDING TRACK (REMOVE BY OTHERS)

Telephone Manhole

Sprint UG Marker

ATT UG Marker #762S

Paved Drive

Pole #63 1/3/1

Pole w/ Light

I.R.F.

N43° 31' 20.2"W
1405.44'

Stop Sign w/ Private Crossing Cross At Your Own Risk below

80.00'

CV/NECR

Pole #1A

Pole #1B

Possible Manhole Under Pavement

Pole #2904/1

Building

Concrete Pad

Gravel Drive

Railroad Boxcar

INDUSTRIAL Paved Drive

6' Chain Link Fence

End of Pavement Not Readily Apparent

Paved

Gravel Fill

Pole #2

LOT #R03205L5
KATHLEEN McQUEEN & WESTON BOARDMAN

MATCH LINE

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:

DATE	REVISIONS	BY

0 20 40
SCALE IN FEET

EROSION & SEDIMENT CONTROL PLAN
SHEET 1 OF 3

PROJECT NAME: **SHARON GRADE CROSSING**
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SHT12.DGN
PROJECT LEADER: R. O'BLENIS
DESIGNED BY: C. GLOVER
PLOT DATE: 06/13/03
DRAWN BY: J. DEROSIER
CHECKED BY: R. ORO
SHEET 12 OF 35

09:07:58 AM
06/13/03
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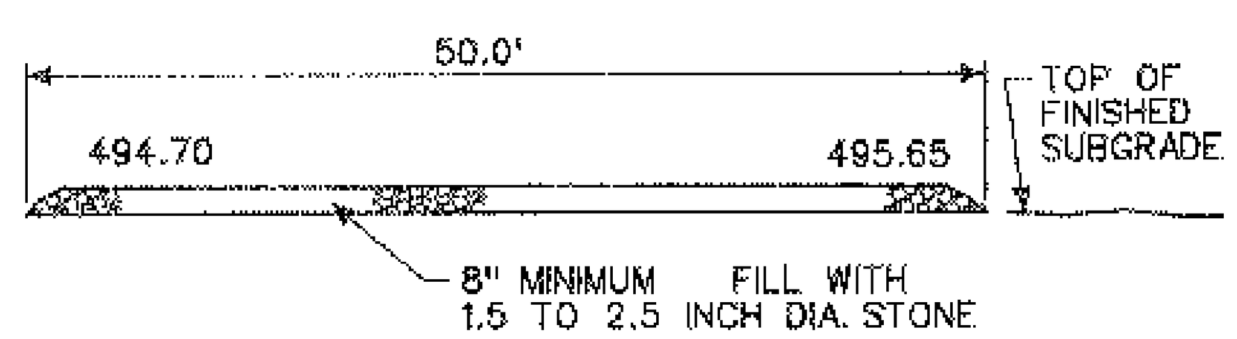
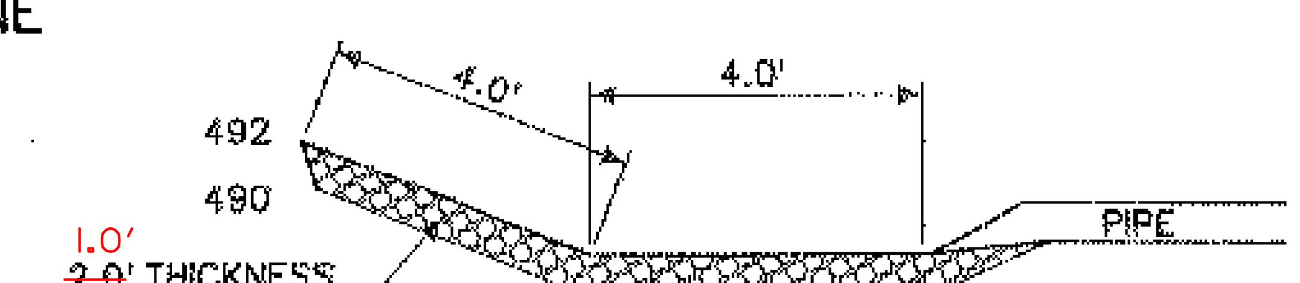
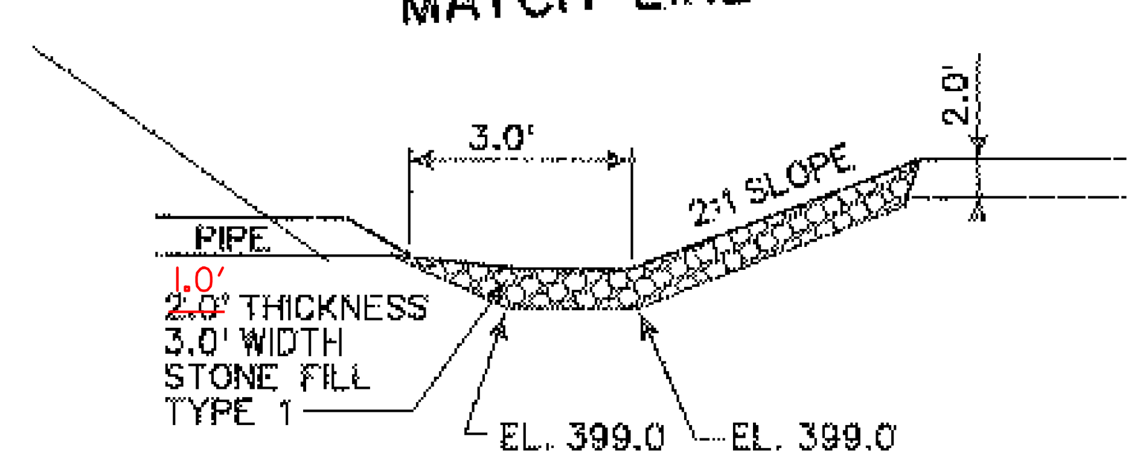
END PROJECT
LIMIT OF WORK
STA. 19+67.07
COMMERCE PARK ℄
STA. 500+86.53 RIVER ROAD ℄ =
STA. 19+76.57 COMMERCE PARK ℄
RIVER ROAD
LIMIT OF WORK
STA. 500+08.80
RIVER ROAD (TOWN HIGHWAY #3)
50.0 FT STABILIZED
CONSTRUCTION ENTRANCE
LIMITS (SEE DETAIL BELOW)
18" CPEPES
INV.=491.46
SILT FENCE 3.0 FT HIGH
2.0 FT OFFSET FROM
TOP OF SLOPE
STONE FILL
TYPE 1
(SEE DETAIL BELOW)
STONE FILL
TYPE 1
(SEE DETAIL BELOW)
18" CPEPES
INV.=491.11
N/F NATIVEVEST
LOT #R03205L4
2.72 acres
RIVER ROAD
LIMIT OF WORK
STA. 502+86.34
Pole #67/136
Pole #68/137
Pole #66
TBM - Spike In Pole
Elevation = 500.21'
Datum - NAVD88
N43° 31'20.2"W
1398.94'
N40° 42'30"E
AT & T U.G. FIBER OPTIC
EXISTING MAINLINE TRACK
EXISTING SIDING TRACK
(REMOVE BY OTHERS)
N43° 31'20.2"W
1405.44'
6' Chain Link Fence
(Poor Condition)
Pole #1C
Pole #1D
Pole #1E
Pole #1F
CV/NECR
Whistle Sign
SPRINT U.G. FIBER OPTIC
N/F NATIVEVEST
LOT #R03205L3
26.70± acres
LOT #R03205L3
26.70± acres
COMMERCE PARK
NOTE:
SILT FENCE 3.0FT HIGH
2.0 FT OFFSET FROM
BOTTOM OF SLOPE
MATCH LINE
MATCH LINE
MATCH LINE



STABILIZED CONSTRUCTION ENTRANCE



INLET DETAIL
STA. 19+25 LEFT



OUTLET DETAIL
STA. 19+25 RIGHT

0 20 40
SCALE IN FEET

DATUM	
VERTICAL	NAVD88 ± 0.5 FT.
HORIZONTAL	SPC 1983

ORIGINAL PREPARED:		
DATE	REVISIONS	BY

EROSION & SEDIMENT CONTROL PLAN
SHEET 2 OF 3

PROJECT NAME: **SHARON GRADE CROSSING**
PROJECT NUMBER: STP2034 (13)S

FILE NAME:	SHT13.DGN	PLOT DATE:	06/13/03
PROJECT LEADER:	R. O'BLENIS	DRAWN BY:	J. DEROSIER
DESIGNED BY:	C. GLOVER	CHECKED BY:	R. ORO
		SHEET 13	OF 35

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06/13/03
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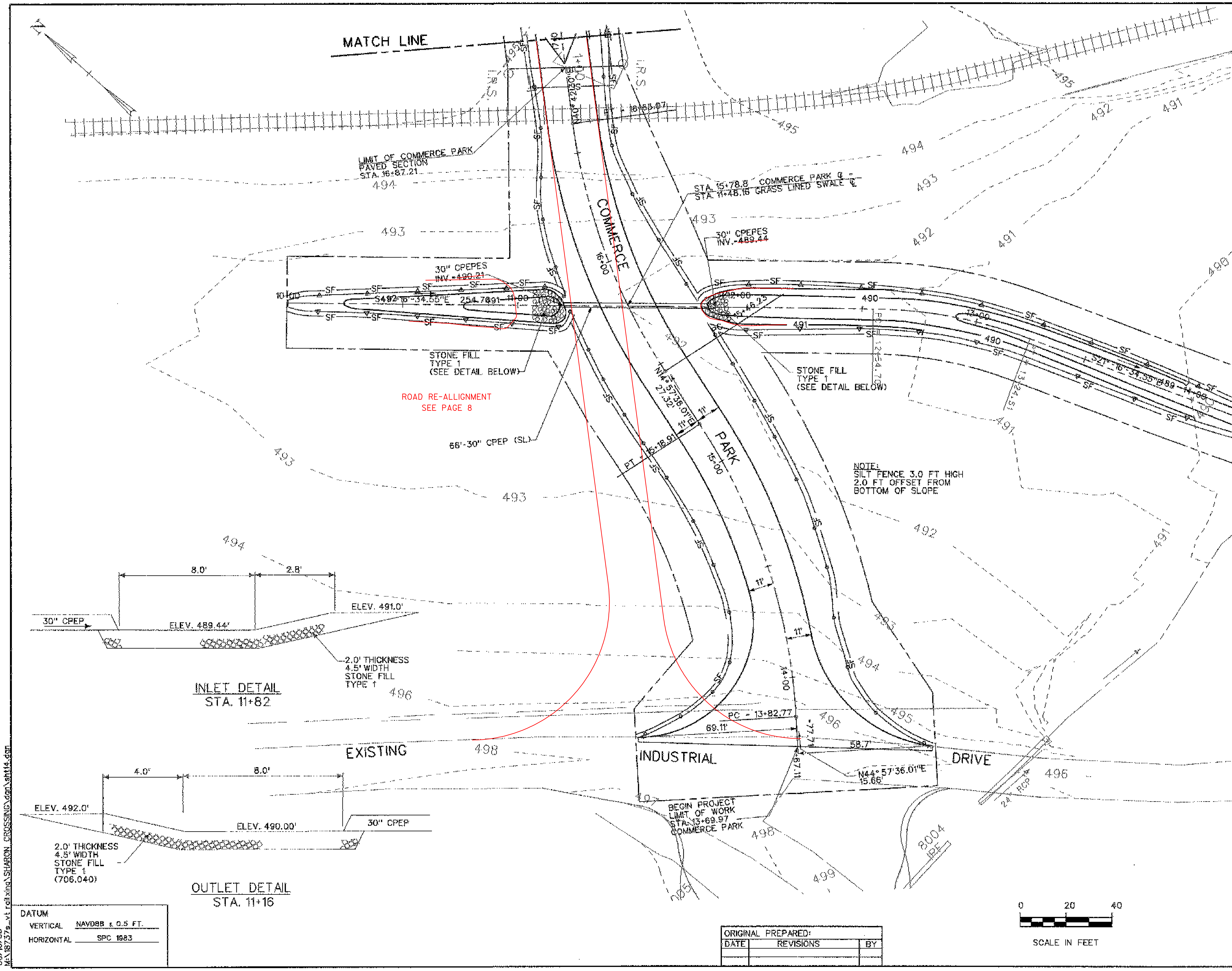

MATCH LINE
LIMIT OF COMMERCE PARK
PAVED SECTION
STA. 16+87.21
STA. 15+78.8 COMMERCE PARK ℄ =
STA. 11+48.16 GRASS LINED SWALE ℄
30" CPEPES
INV.-489.44
30" CPEPES
INV.-490.21
S49° 16' 34.55"E 254.70
STONE FILL
TYPE 1
(SEE DETAIL BELOW)
ROAD RE-ALLIGNMENT
SEE PAGE 8
66'-30" CPEP (SL)
COMMERCE
PARK
N44°57'36.01"E
PT = 15+18.91
S71° 16' 34.55"E
14+64.5
STREAM
NOTE:
SILT FENCE 3.0 FT HIGH
2.0 FT OFFSET FROM
BOTTOM OF SLOPE
PC = 13+82.77
69.11'
58.7'
N44°57'36.01"E
15.66'
EXISTING
INDUSTRIAL
DRIVE
BEGIN PROJECT
LIMIT OF WORK
STA. 13+69.97
COMMERCE PARK
24" RCP
8004
IRF
8.0'
2.8'
30" CPEP
ELEV. 489.44'
ELEV. 491.0'
2.0' THICKNESS
4.5' WIDTH
STONE FILL
TYPE 1
INLET DETAIL
STA. 11+82
4.0'
8.0'
ELEV. 492.0'
ELEV. 490.00'
30" CPEP
2.0' THICKNESS
4.5' WIDTH
STONE FILL
TYPE 1
(706.040)
OUTLET DETAIL
STA. 11+16
DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983
ORIGINAL PREPARED:
DATE REVISIONS BY
0 20 40
SCALE IN FEET

EROSION & SEDIMENT CONTROL PLAN
SHEET 3 OF 3

PROJECT NAME: **SHARON GRADE CROSSING**
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SHT14.DGN
PROJECT LEADER: R. O'BLENIS
DESIGNED BY: C. GLOVER
PLOT DATE: 06/13/03
DRAWN BY: J. DEROSIER
CHECKED BY: R. ORO
SHEET 14 OF 35

PHASE I

1) TAMP SIDING TRACK TO APPROPRIATE GRADE WITH BALLAST WITHIN THE LIMITS PROPOSED.
2) CONSTRUCT NEW MAINLINE AND SIDE TRACK CROSSING IN CONJUNCTION WITH CONSTRUCTION OF THE NEW ACCESS ROAD.
3) CONSTRUCT COMMERCE PARK TO NEW CROSSING BOTH SIDES TO TOP OF SUBGRADE
4) PLACE BITUMINOUS CONCRETE COURSES IN CONTINUOUS COURSES ALONG COMMERCE PARK AND ACROSS NEW MAINLINE AND SIDE TRACK CROSSING.
5) INSTALL SIGNING & PAVEMENT MARKINGS.
6) INSTALL TEMPORARY SIGNS R1-1, R15-1, & R15-2 ON SIGNS MOUNTED ON SINGLE POSTS ON EITHER - SIDE OF THE TRACKS.

PHASE III

1) UPON COMPLETION OF THE INSTALLATION AND ACTIVATION OF THE RAILROAD CROSSING WARNING EQUIPMENT, REMOVE THE R1-1, R15-1 & R15-2 SIGNS MOUNTED ON SINGLE POSTS ON EITHER SIDE OF THE TRACKS.

0 20 40
SCALE IN FEET

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:		
DATE	REVISIONS	BY

TRAFFIC CONTROL/SIGNING/PAVEMENT MARKINGS
SHEET 1 OF 3

PROJECT NAME: **SHARON GRADE CROSSING**
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SHT16.DGN
PROJECT LEADER: R. O'BLENIS
DESIGNED BY: C. GLOVER
PLOT DATE: 06/13/03
DRAWN BY: J. DEROSIER
CHECKED BY: R. ORO

06/13/03
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TRAFFIC CONTROL/SIGNING/PAVEMENT MARKINGS

SHEET 2 OF 3

PROJECT NAME:	SHARON GRADE CROSSING
PROJECT NUMBER:	STP2034 (13)S

FILE NAME:	SHT17.DGN	PLOT DATE:	06/13/03
PROJECT LEADER:	R. O'BLENIS	DRAWN BY:	J. DEROSIER
DESIGNED BY:	C. GLOVER	CHECKED BY:	R. ORO
		SHEET 16	OF 35

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:

DATE	REVISIONS	BY

REMOVE

REMOVE

RIVER ROAD (Town Highway #3)

RIVER ROAD (TOWN HIGHWAY #3)

TBM - Spike In Pole
Elevation = 493.17'
Datum - NAVD88

1.53 acres

350'±

500

495

O/E

O/E/T

Pole #63 1/2
29/132/100/0

REMOVE SIGN

Industrial Drive (Private) Sign

4 Mailboxes

Stop Sign

REMOVE SIGNS

ATT UG Marker #761S

Pole #A/29/133

N43° 31'20.2"W
I.R.S. 1398.94'

(TIE LINE)

Pole #3/65

Concrete Mile Marker 30

U/T

U/I

Edge Railroad Bed

EXISTING MAINLINE TRACK

EXISTING SIDING TRACK

Telephone Manhole

Sprint UG Marker

ATT UG Marker #762S

Paved Drive

Pole #63 1/3/1 w/ Light

I.R.F.

REMOVE SIGN

Stop Sign w/ Private Crossing Cross At Your Own Risk below

80.00'

INDUSTRIAL DRIVE

N43° 31'20.2"W
1405.44'

Stop Sign w/ Private Crossing Cross At Your Own Risk below

Pole #1A

Pole #1B

MATCH LINE

Possible Manhole Under Pavement

Pole #2904/1

Building

Concrete Pad

Gravel Drive

Railroad Boxcar

Building

Building

80.00'

6' Chain Link Fence

End of Pavement Not Readily Apparent

Paved

EXISTING SPUR TRACK

Gravel Fill

Paved Drive

16' Sliding Gate

80.00'

Pole #2

Pole #2904

KATHLEEN McQUEEN & WESTON BOARDMAN

PHASE II

1) OPEN NEW ACCESS ROAD FOR VEHICLES. CLOSE EXISTING INDUSTRIAL DRIVE CROSSING.
2) REMOVE EXISTING CROSSING ADDING BALLAST FOR APPROPRIATE GRADE REMOVE REMAINING EXISTING BIT. CONCRETE PAVEMENT AND REPLACE WITH LOAM AND SEED.
3) PLACE TYPE III BARRICADES ALONG NORTH SIDE OF INDUSTRIAL DRIVE.

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:

DATE	REVISIONS	BY

0 20 40
SCALE IN FEET

TRAFFIC CONTROL/SIGNING/PAVEMENT MARKINGS
SHEET 3 OF 3

PROJECT NAME: **SHARON GRADE CROSSING**
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SHT15.DGN
PROJECT LEADER: R. O'BLENIS
DESIGNED BY: C. GLOVER
PLOT DATE: 06/13/03
DRAWN BY: J. DEROSIER
CHECKED BY: R. ORO
SHEET 17 OF 35

06/13/03 09:09:21 AM
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STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (in)	HEIGHT (in)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NO. OF POSTS	NEW SIGN POSTS: FLANGED CHANNEL lb/ft 1.12	2.0	3.0	SQUARE STEEL (in) 1.75 lb/ft 1.88	2.0 lb/ft 2.16	2.5 lb/ft 3.35	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (in) 3.0 lb/ft 1.3	4.0 lb/ft 1.7	4.0 MOD lb/ft 1.7	FOUNDATION	TUBULAR STEEL Ø (in) 3.0 lb/ft 7.6	3.5 lb/ft 9.0	4.0 lb/ft 10.8	5.0 lb/ft 14.6	W-SHAPE STEEL FTG. SIZE 24"	30"	WEIGHT	POST SIZE	SIGN REQUIRED	REMARKS	SIGN DETAIL: DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
												OPTION ITEMS																										
R1-1	STOP	2 ~~1~~	30	30	12.50 ~~25.0~~ 12.50						2			12.67 X 12.50			X																		AS SHOWN ON SHEET NOS. 15 & 16		F 143
W10-1	R X R	2	36	36	9.00 ~~14.14~~ 9.00						2			13.25 X 13.17			X																		AS SHOWN ON SHEET NO. 15		E-190
W10-3R		1	36	36	9.00						~~2~~			14.75 X			X																		IN ACCORDANCE W/ MUTED 2001 LOCATED ON RIVER RD., 250' RT. NORTH OF COMMERCE PARK, C		C-154
W10-3L		1	36	36	9.00						~~2~~			14.75 X			X																		IN ACCORDANCE W/ MUTED 2001 LOCATED ON RIVER ROAD STA. 50.5+50, LT.		C-154
D3-1	COMMERCE PARK	2	42	8	4.69 4.67									10.83																					IN ACCORDANCE W/ MUTED 2001 BACK TO BACK MOUNTED ABOVE R1-1 COMMERCE PARK STA. 19+35, RT.		F 131
R15-1	FALCONER CROSS ROAD NOT INSTALLED	~~2~~			~~6.00~~						~~1~~			~~X~~			X																		~~AS SHOWN ON SHEET NO. 16 IN ACCORDANCE W/ MUTED 2001~~		E 190
R15-2	2 TRACKS NOT INSTALLED	~~1~~	~~27~~	~~18~~	~~4.50~~																														~~AS SHOWN ON SHEET NO. 16 IN ACCORDANCE W/ MUTED 2001~~		E-190
TOTALS		SF 72.33	SF	EA.	SF							FT 66.15	FT	FT	FT 66.15	FT	FT		EA.	LB	LB	LB	EA.	LB	LB	LB	LB	FA.	CA.	LB						

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."

PROJECT NAME: SHARON GRADE CROSSING
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SH118.DGN
PROJECT LEADER: R. O'BRIENS
DESIGNED BY: C. GLOVER
DRAWN BY: D. LOCKS
CHECKED BY: R. ORO
PLOT DATE: 01/14/03
SHEET 18 OF 35


TBM - Spike In Pole
Elevation = 493.17'
Datum - NAVD88
13.53 acres
RIVER ROAD TH#3
(Town Highway #3)
N43° 31'20.2"W
1398.94'
I.R.S.
(TIE LINE)
Industrial Drive
(Private) Sign
Pole
#3/65
Concrete
Mile Marker
Pole
#63-1/2
29/132/100T
4 Mailboxes
Stop Sign
ATT UG
Marker #761S
Pole
#4/29/1-33
Edge Railroad Bed
ASSUMED EXISTING
CV/NECRR 99' R.O.W.
EXISTING MAINLINE TRACK
EXISTING SIDING TRACK
Telephone
Manhole
Sprint UG
Marker
ATT UG
Marker #762S
Paved
Drive
Sprint UG
Marker
Pole
#1A
Pole
#1B
MATCH LINE
Pole
#63-1/3-1
Pole
w/ Light
I.R.F.
80.00'
Stop Sign w/
Private Crossing
Cross At Your
Own Risk below
N43° 31'20.2"W
1405.44'
Building
Possible Manhole
Under Pavement
Pole
#2904/1
Concrete
Pad
Gravel
Drive
INDUSTRIAL DRIV
Railroad Boxcar
80.00'
6' Chain Link
Fence
Paved
End of Pavement
Not Readily Apparent
I.R.F.
Gravel
Fill
Paved Drive
EXISTING SPUR TRACK
Pole
#2
KATHLEEN
McQUEEN &
WESTON
BOARDMAN
95.00'
Pole
#2904
Sliding Gate
LOT #R03205L3
26.70' + ACRES
Paved
26.70± acres
IRON ROD
CALLED FOR
UNDER PILE OF
RAILROAD TIES
495
500
0 20 40
SCALE IN FEET

RIGHT-OF-WAY
SHEET 1 OF 3

PROJECT NAME:	**SHARON GRADE CROSSING**		
PROJECT NUMBER:	STP2034 (13)S		
FILE NAME:	SHT19.DGN	PLOT DATE:	06/13/03
PROJECT LEADER:	R. O'BLENIS	DRAWN BY:	J. DEROSIER
DESIGNED BY:	C. GLOVER	CHECKED BY:	R. ORO
		SHEET 19	OF 35

DATUM	
VERTICAL	NAVD88 ± 0.5 FT.
HORIZONTAL	SPC 1983

ORIGINAL PREPARED:		
DATE	REVISIONS	BY

06/13/03
M:\18737s_vt rail xing\SHARON CROSSING\dgn\SHT19.dgn

LOT #R03205L4
13.53 acres

RIVER ROAD

STA. 500+86.53 RIVER ROAD ℄
STA. 19+76.57 COMMERCE PARK ℄

S49° 27'05.4"E

500+00 +08.80

501+00

+50.00

502+00

503+00

(T.H. 3)

+75.00

Pole #67/136

Pole #68/137

24.75'

40'

29.28'

291.20'

125.10'

N470116.8247
E1642445.7946

N470112.1602
E1642474.7049

D/E/T

N470301.4668
E1642253.4348

18" CPEPES
INV.=491.46

70'-18" CPEP (SL)

N470198.0861
E1642350.8126

18" CPEPES
INV.=491.11

N/F NATIVEVEST
LOT #R03205L4
2.72 acres

ASSUMED EXISTING 3 ROD R.O.W.

Pole #66

19.29'

304.00'

19+00

66.39'

0.25 ACRES-PROPOSED
RIGHT OF WAY
COMMERCE PARK
NORTH OF NECRR

TBM - Spike In Pole
Elevation = 500.21'
Datum - NAVD88

N470223.4491
E1642239.2846

N43° 31'20.2"W
1398.94'

37.5'

73.38'

83.23'

37.5'

N470168.7892
E1642291.1953

PROPOSED CONSTRUCTION
STAGING AREA

PROPOSED CONSTRUCTION
STAGING AREA

100.51'

75'

N40° 42'30"E

75.66'

100.51'

70.5'

ASSUMED EXISTING CV/NECRR 99' ROW

0.17 ACRES-PROPOSED
EASEMENT WITHIN NECRR
RIGHT OF WAY
COMMERCE PARK

COMMERCE

5'

MATCH LINE

U/T

EXISTING MAINLINE TRACK

495

18+00

N470102.4712
E1642217.6461

+82.73
+81.46

N470148.0211
E1642174.3872

28.5'

O/E

CV/NECR
Whistle Sign

N43° 31'20.2"W
1405.44'

37.5'

12.56'

25'

+76.41
+75.15

50.26'

75.38'

25'

37.5'

12.56'

N470093.3613
E1642226.2979

Pole #1D

Pole #1E

Pole #1F

6' Chain Link Fence
(Poor Condition)

Pole #1C

N470138.9112
E1642183.0390

50'

11'

11'

LOT #R03205L3
26.70± acres

N/F NATIVEVEST
LOT #R03205L3
26.70± acres

PARK

92.73'

99.54'

49.81'

0.11 ACRES-PROPOSED
RIGHT OF WAY
COMMERCE PARK
SOUTH OF NECRR

461.46'

MATCH LINE

Gr
Crc

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:

DATE	REVISIONS	BY

0 20 40
SCALE IN FEET

RIGHT-OF-WAY
SHEET 2 OF 3

PROJECT NAME: **SHARON GRADE CROSSING**
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SHT20.DGN
PROJECT LEADER: R. O'BLENIS
DESIGNED BY: C. GLOVER

PLOT DATE: 06/13/03
DRAWN BY: M. MOORE
CHECKED BY: R. ORO
SHEET 20 OF 35

PLOTTED: 06/13/03 AM
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MATCH LINE
N470032.1772
E1642157.1659
25'-0"
25'-0"
50.26'
89.74'
N470068.6171
E1642122.6588
16+53.07
LIMIT OF COMMERCE PARK
PAVED SECTION
STA. 16+87.21
STA. 15+78.8 COMMERCE PARK ℄
STA. 11+48.16 GRASS LINED SWALE ℄
N470085.3964
E1641997.7013
N470012.7069
E1642061.5072
N469947.8559
E1642118.4327
96.72'
113.56'
293.26'
255.04'
COMMERCE
PARK
N470059.0088
E1641967.6398
N469973.6628
E1642042.5554
N469903.2405
E1642104.3712
N469693.7652
E1642257.9258
N469679.2506
E1642220.6522
RE-ALIGNMENT
1.09 ACRES - PROPOSED AREA OF CONSTRUCTION RIGHT OF WAY - TEMPORARY COMMERCE PARK & DRAINAGE SWALE
R = 60'
R = 60'
N469842.1279
E1641990.5425
N469795.4963
E1642055.5462
N469749.3642
E1642043.3225
N469841.2239
E1641951.3345
PC = 13+82.77
EXISTING
INDUSTRIAL
DRIVE
STREAM
336.59'
130.00'
BEGIN PROJECT
LIMIT OF WORK
STA. 13+69.97
COMMERCE PARK
N469721.0602
E1642015.0580
N469812.9199
E1641923.0699
24" RCP
I.R.S.
0 20 40
SCALE IN FEET

RIGHT-OF-WAY
SHEET 3 OF 3

PROJECT NAME:	**SHARON GRADE CROSSING**
PROJECT NUMBER:	STP2034 (13)S

FILE NAME:	SHT21.DGN	PLOT DATE:	06/13/03
PROJECT LEADER:	R. O'BLENIS	DRAWN BY:	J. DEROSIER
DESIGNED BY:	C. GLOVER	CHECKED BY:	R. ORO
		SHEET 21	OF 35

DATUM

VERTICAL	NAVD88 ± 0.5 FT.
HORIZONTAL	SPC 1983

ORIGINAL PREPARED:

DATE	REVISIONS	BY

06/13/03
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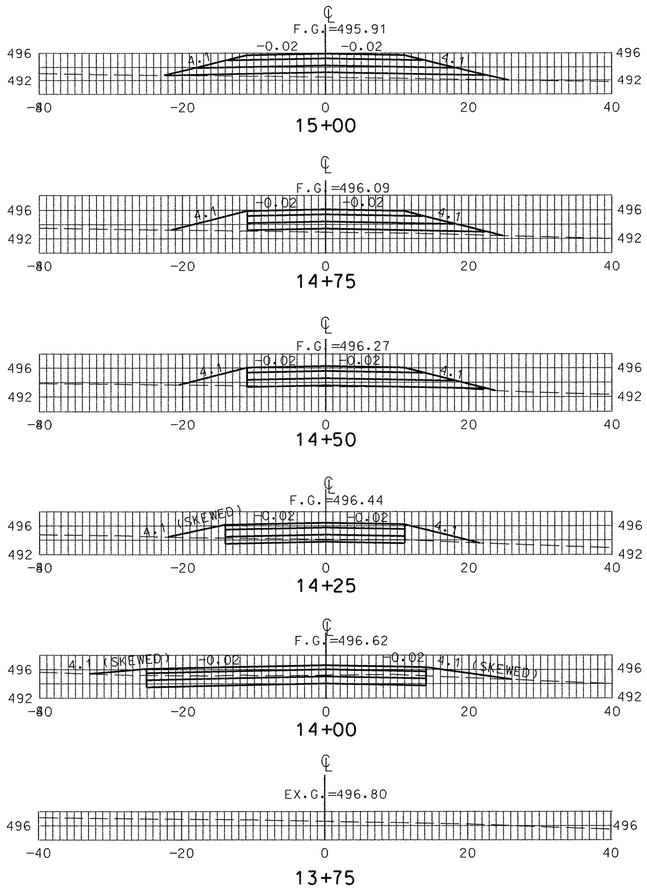
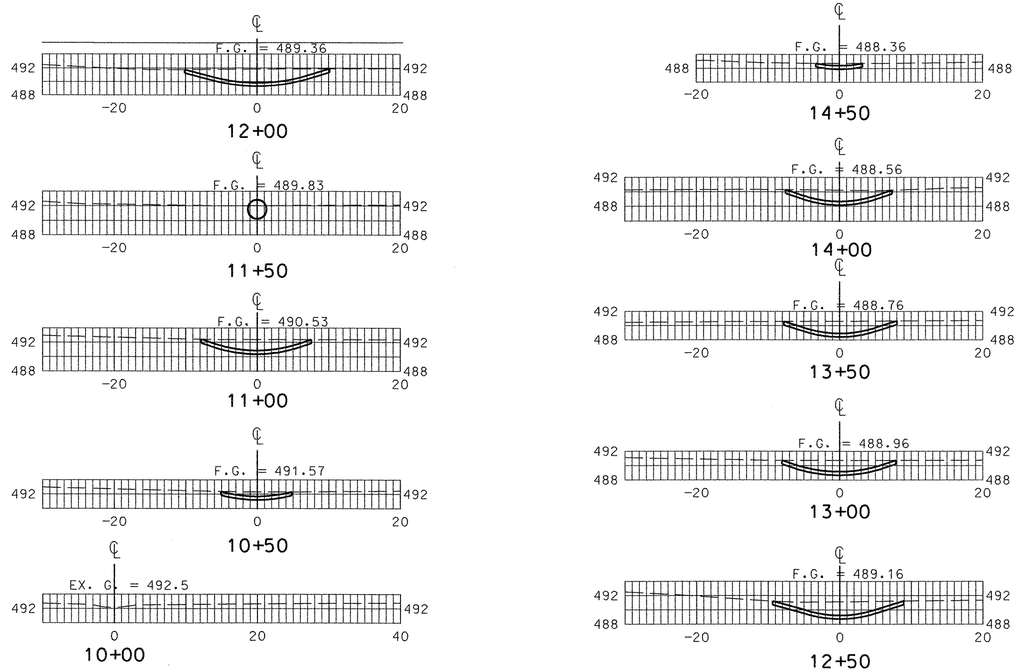


COMMERCE PARK



GRASS LINED SWALE

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:

DATE	REVISIONS	BY

0 10 20
SCALE IN FEET

CROSS SECTIONS
COMMERCE PARK / GRASS LINED SWALE
SHEET 1 OF 2

PROJECT NAME: SHARON GRADE CROSSING
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SHT22.DGN
PROJECT LEADER: R. O'BLENIS
DESIGNED BY: C. GLOVER
PLOT DATE: 06/13/03
DRAWN BY: J. DEROSIER
CHECKED BY: R. ORO
SHEET 22 OF 35

09:11:01 AM
06/13/03
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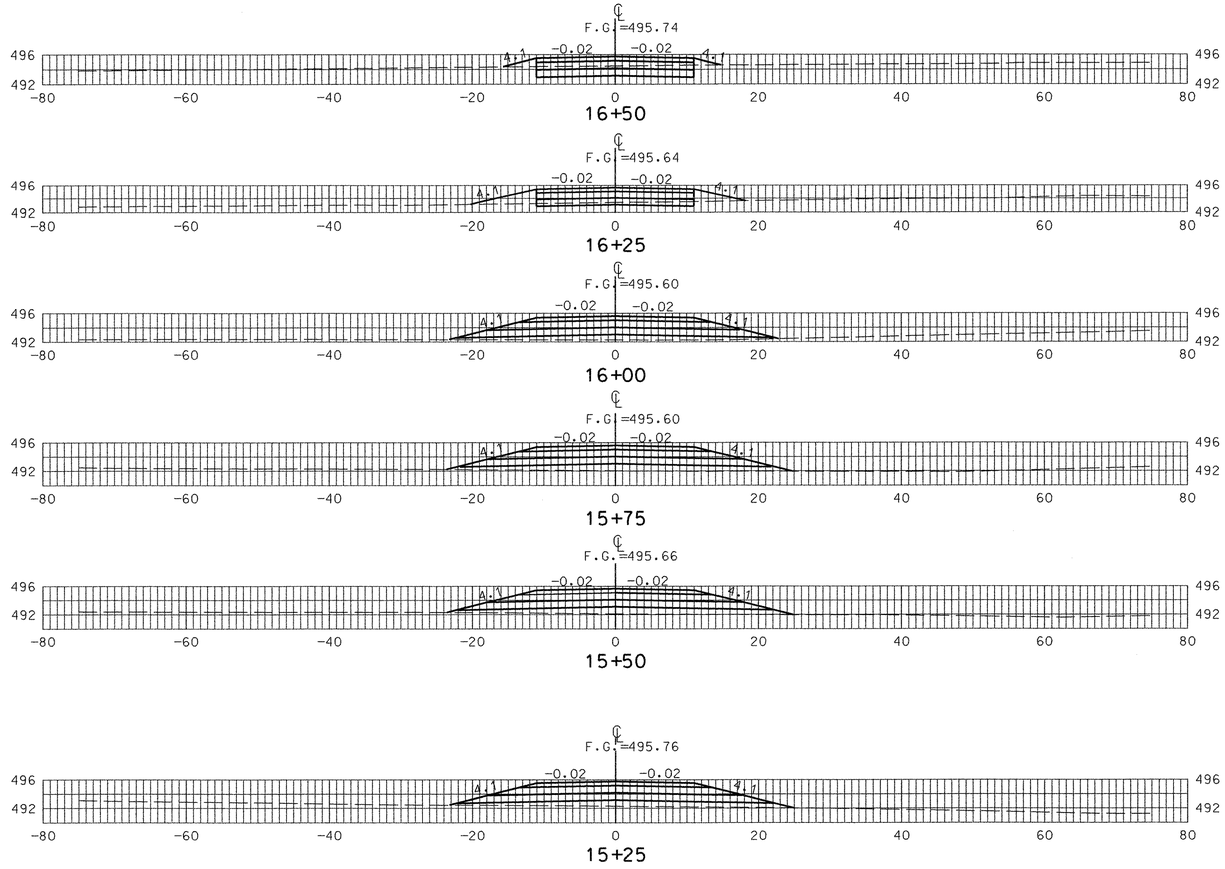

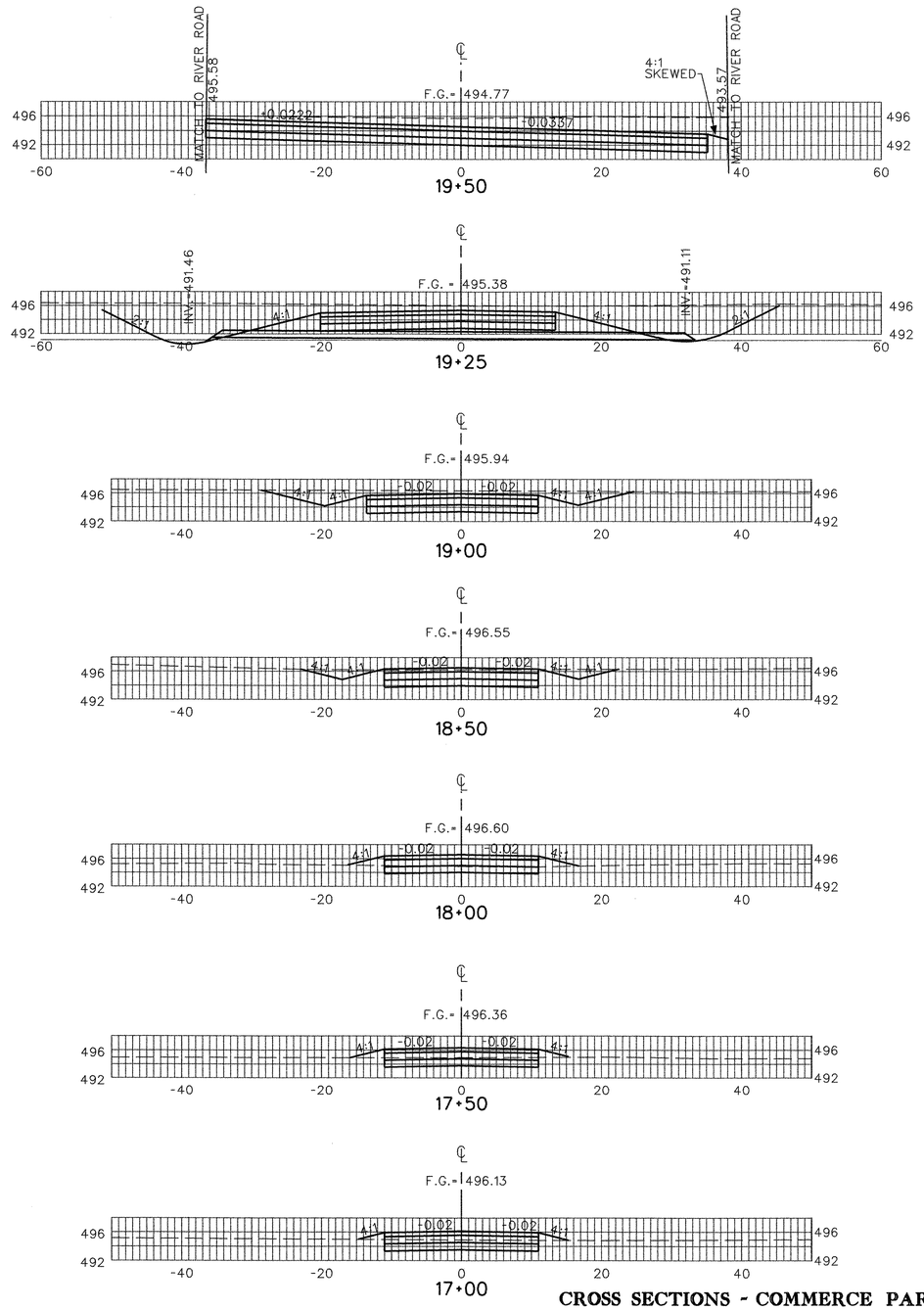

CROSS SECTIONS - COMMERCE PARK SHEET 2 OF 2

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:		
DATE	REVISIONS	BY

0 10 20
SCALE IN FEET

PROJECT NAME:	SHARON GRADE CROSSING		
PROJECT NUMBER:	STP2034 (13)S		
FILE NAME:	SHT23.DGN	PLOT DATE:	06/13/03
PROJECT LEADER:	R. O'BLENIS	DRAWN BY:	J. DEROSIER
DESIGNED BY:	C. GLOVER	CHECKED BY:	R. ORO
		SHEET	23 OF 35

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06/13/03
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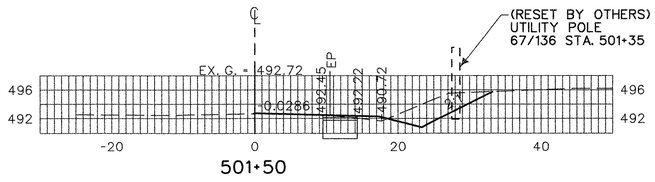
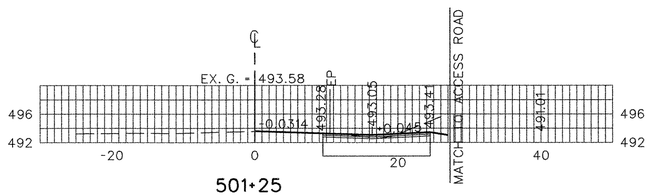


501+50



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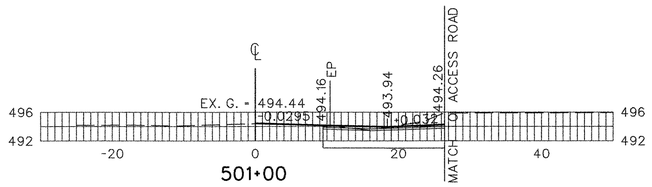

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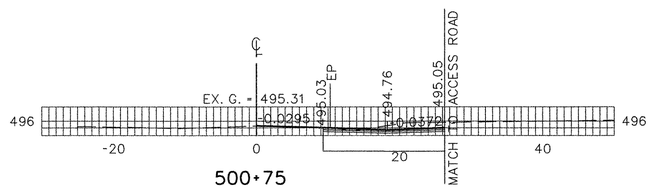

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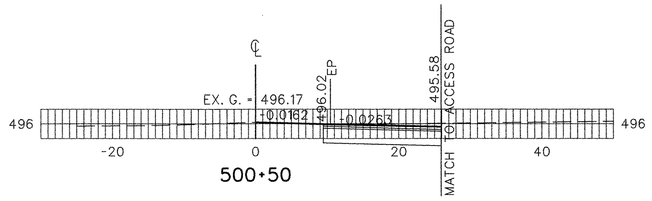

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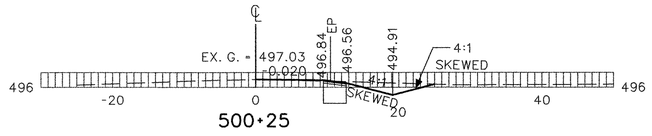
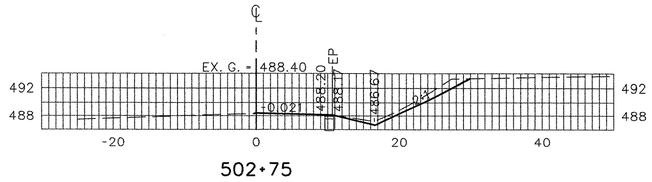


500+25



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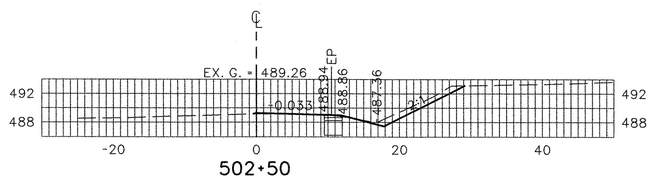

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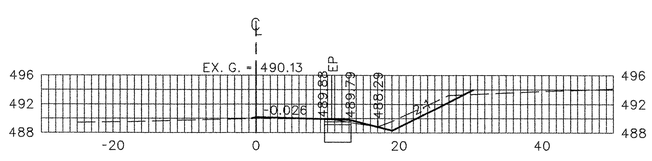

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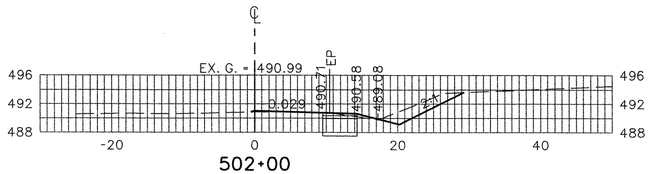
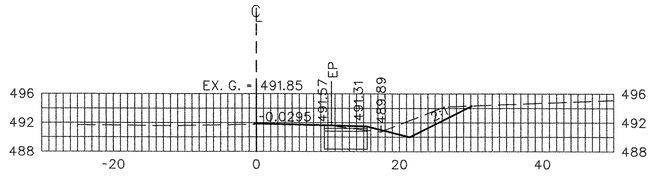


502+00



501+75

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:		
DATE	REVISIONS	BY

0 10 20
SCALE IN FEET

CROSS SECTIONS - RIVER ROAD (TH3)

PROJECT NAME: **SHARON GRADE CROSSING**
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SHT25.DGN
PROJECT LEADER: R. O'BLENIS
DESIGNED BY: C. GLOVER
PLOT DATE: 06/13/03
DRAWN BY: J. DEROSIER
CHECKED BY: R. ORO
SHEET 24 OF 35

09:11:31 AM
06/13/03
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NOTES:

⊗= TWISTED WIRES
INSULATED 1 TWIST PER FT.
ALL TRACK WIRES 2C. #6

TRANSMITTER AND RECEIVER LEADS TO BE SEPARATED BY AT LEAST 12" IN TRENCH. LENGTHS SHOULD NOT EXCEED MANUFACTURES RECOMMENDATION.

TOP OF FOUNDATION TO BE AT SAME ELEVATION AS THE SURFACE OF THE TRAVELED WAY & NO MORE THAN 4" ABOVE THE SURFACE OF THE GROUND.

ALL BUNGALOW WIRING TO BE #16 AWG FLEX UNLESS OTHERWISE SPECIFIED EXCEPT ALL GROUND WIRE TO BE #6 AWG FLEX OR LARGER.

ALL WIRING IN GATE MECHANISM TO BE #10 "AWG FLEX".

DISTANCES SHOWN HEREIN ARE APPROXIMATE AND ARE NOT TO BE USED FOR CROSSING CONSTRUCTION SURVEYING.

DO NOT USE 7 CELLS OF 814 BATTERY UNLESS REQUIRED TO MAINTAIN MINIMUM LAMP VOLTAGE.

= = = = = = 4" X 80 ' CONDUIT

LIGHTS: 12" LED LIGHTS

GATE A: 18'
GATE B: 18'

ALL THE FOLLOWING WORK WAS DONE BY ECI

NOT PART OF CONTRACT

S ←○→ N

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:		
DATE	REVISIONS	BY

NOT TO SCALE

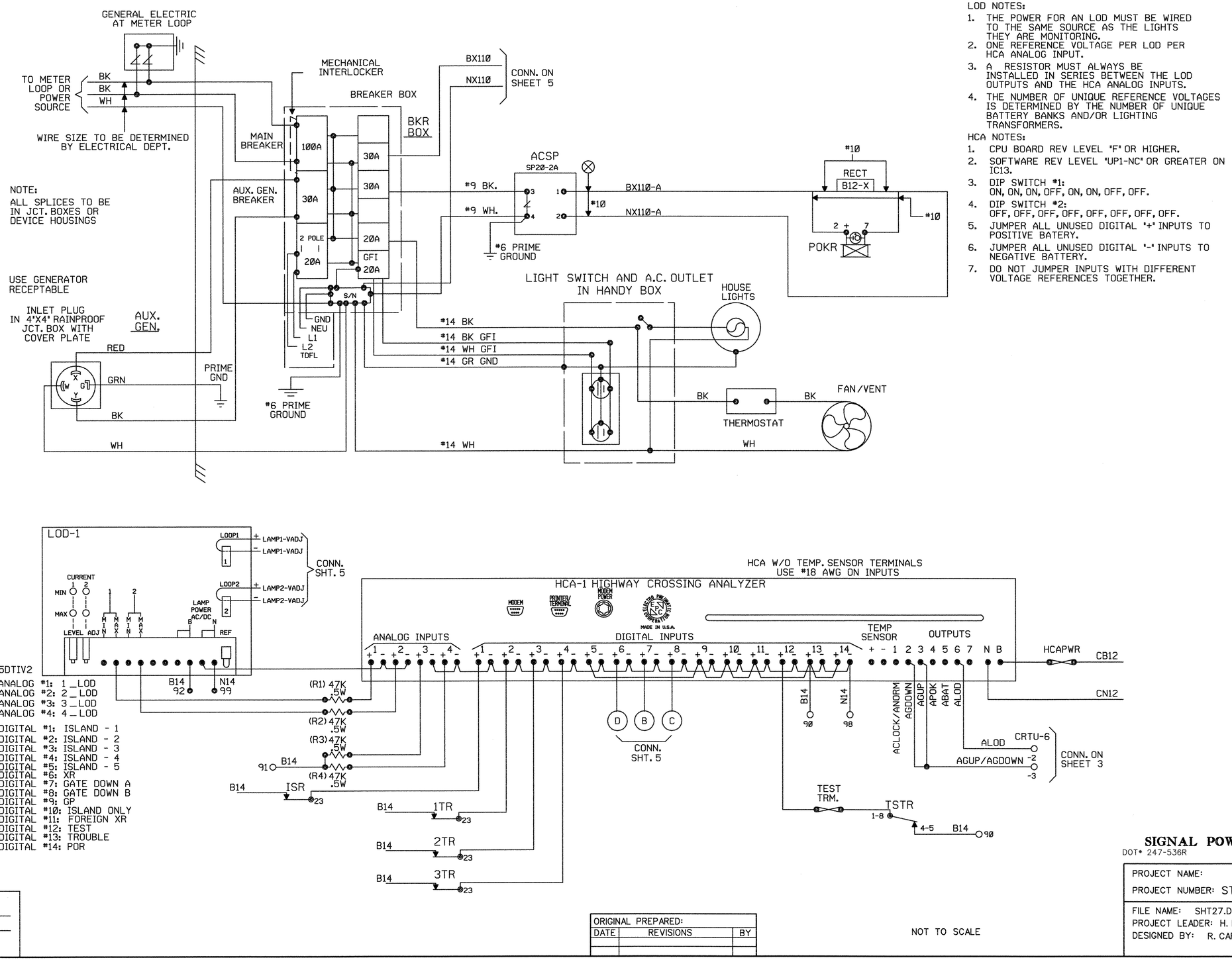
DOT# 247-536R

SIGNAL PLAN

PROJECT NAME: **SHARON GRADE CROSSING**
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SHT26.DGN
PROJECT LEADER: H. PATEL
DESIGNED BY: R. CARROLL

PLOT DATE: 06/13/03
DRAWN BY: A. BOSE
CHECKED BY: C. SERGOT
SHEET 25 OF 35



DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:		
DATE	REVISIONS	BY

NOT TO SCALE

SIGNAL POWER DISTRIBUTION DIAGRAM

DOT# 247-536R

PROJECT NAME: **SHARON GRADE CROSSING**
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SHT27.DGN
PROJECT LEADER: H. PATEL
DESIGNED BY: R. CARROLL
PLOT DATE: 06/13/03
DRAWN BY: A. BOSE
CHECKED BY: G. SERGOT
SHEET 26 OF 35

09:12:05 AM
06/13/03
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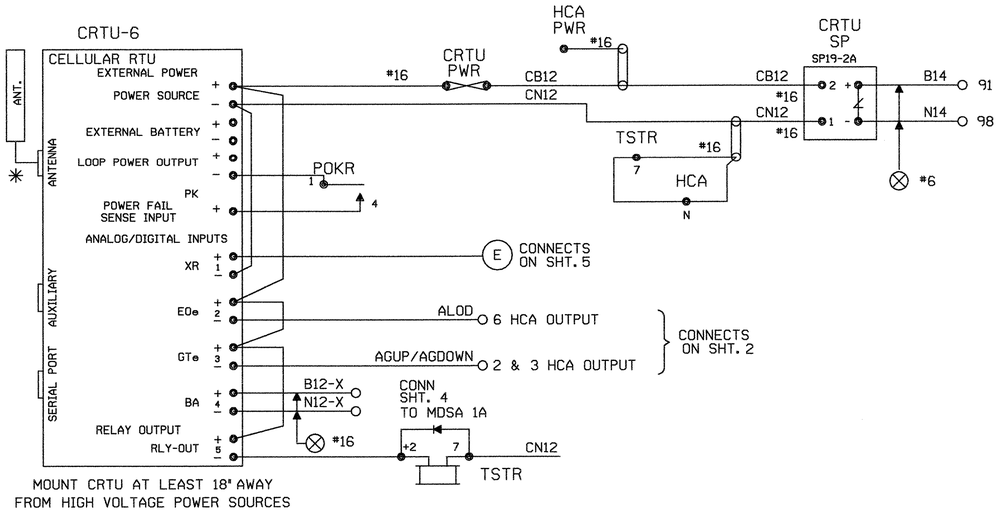

NOTES:

ALL DIODES 1N5060 OR 1N4004 UNLESS OTHERWISE NOTED.
✳ MOUNT ANTENNA ON TOP OF HOUSE.
ALL WIRES #18 UNLESS OTHERWISE NOTED.
ALL UNUSED 'NC' INPUTS MUST BE TIED HIGH TO BATTERY
ALL UNUSED ANALOG INPUTS MUST BE TIED HIGH TO BATTERY
ALL UNUSED 'NO' INPUTS MUST BE DISCONNECTED
NORMAL STATE FOR ANALOG CHANNELS IS EQUAL TO THE STORED NOMINAL VOLTAGE +120% OR -81%
CRTU FRONT PANEL DISPLAY CHART INDICATES NORMAL STATE

☐ DIGITAL INPUT HIGH, OR ☐ POWER FAIL INPUT CLOSED
☐ DIGITAL INPUT LOW, OR ☐ POWER FAIL INPUT OPEN

☐ L ← LATCH IS SET BECAUSE CRTU DETECTED AN ALARM CONDITION
12.06V L ←

'sRUN MODE' 'sRUN MODE-SILENT'
CRTU RADIO IS DISABLED. REPROGRAM CRTU WITH LAPTOP.

ANALOG AND AC INPUT MODULES MUST BE MOUNTED LESS THAN 12" FROM CRTU

UNIT INSTALLATION AND SETUP

R.R. SITE ID WHERE; SSSS = 4 CHARACTER SUBDIVISION ID. FILL WITH PRECEDING ZEROS AS REQUIRED. THE MAIN TRACK SUBDIVISION ID* IS IN THE CURRENT TIMETABLE. INDUSTRIAL LEADS, LEASED, AND LEAD TRACKS LISTED WITHIN THE SUBDIVISION MAY HAVE THEIR OWN UNIQUE SUBDIVISION ID*. ALWAYS REFER TO CURRENT PRINTED COPY OF THE TIMETABLE.
LLLLLLLL = 8 CHARACTERS USE DOT* AT CROSSINGS, AND
WDLLLLLL = USE 'WD' THEN MP* AT WAYSIDE LOCATIONS.
EXAMPLE = Ø785WD18Ø1.5UT
HBLLLLLL = USE 'HB' THEN MP* AT HBD SITES.
EXAMPLE = Ø1ØØ-HB55.62TX
THE MP* MUST USE A DECIMAL POINT TO SEPARATE NUMBERS. FILL WITH PRECEDING DASHES AS REQUIRED.
AA = 2 CHARACTER STATE NAME FOR ALL LOCATIONS.
MUST BE 14 CHARACTERS LONG, NO SPACES ALLOWED.

SITE IDENTIFIER: SSSSLLLLLLLLAA	----247-536RVT
SIGNAL STRENGTH dBm	
CARRIER ID	
FIRMWARE VERSION	2.3.
SERIAL NUMBER	
MIN ASSIGNMENT	
ESN: (MICROBURST ONLY)	
CONFIGURATION NET	CELLEMETRY MICROBURST
SIGNAL STATUS	
SCADANET STATUS	
SILENCE INTERVAL	60 MINUTES
HEALTHCHECK INTERVAL	EVERY 2 DAYS
ALARM DEFER DELAY	240 MINUTES (4 HOURS)
OPERATION TO RESUME: RUN	
CALIBRATION CONSTANT	
CH4	
POWER SOURCE	

FIELD PROVIDES: SAMPLED NOMINAL VOLTAGES, SCADANET STATUS CALIBRATION CONSTANTS, SERIAL NUMBER, AND SIGNAL STATUS.

CHANNEL SETUP - STANDARD CONFIGURATION 12:XR,EOe,GTe,BA

CHANNEL NORMAL STATE	SENSE (NO/NC)	NAME FUNCTION	RECOGNITION DELAY SECONDS ACTIVE	RECOGNITION DELAY SECONDS NORMAL	RETURN TO NORMAL	REPORTING MODE	ALARM LINKED CHANNEL	ALARM LINKED CRITERIA	EVENT LOGGING ENABLED OPTIONS
POWER FAIL (CH5) ☐	POWER FAIL DETECT NO	PF1n-PK AC POWER FAIL	7,200 ALARM	300 NORMAL	ENABLED	ALERT	DISABLED	N/A	
CH1 ☐	DIGITAL INPUT NO	CH1-XR XR DOWN TO LONG	1,800 ALARM	1 NORMAL	ENABLED	ALERT	DISABLED	N/A	ANALOG VALUE SENT
CH2 ☐	DIGITAL INPUT NO	CH2-EOe LIGHT OUT	120 ALARM	10 NORMAL	ENABLED	ALERT	DISABLED	N/A	
CH3 ☐	DIGITAL INPUT NO	CH3-GTe GATES NOT UP/DOWN	120 ALARM	10 NORMAL	ENABLED	ALERT	DISABLED	N/A	
CH4 STORED NOMINAL VOLTAGE	ANALOG INPUT N/A	CH4-BA/V BATTERY MONITOR BATTERY LOW	300 ALARM	300 NORMAL	DISABLED	ALERT W/UPDATE	DISABLED	N/A	DIGITAL EVENTS
POWER SOURCE (CH6)	ANALOG INPUT N/A	PS-BA/V BATTERY MONITOR BATTERY LOW	300 ALARM	300 NORMAL	DISABLED	ALERT W/UPDATE	DISABLED	N/A	PF1n-PK CH1-XR CH2-EOe CH3-GTe

ANALOG CHANNEL	USEFUL RANGE VOLTS LOW	USEFUL RANGE VOLTS HIGH	DISPLAYED RANGE VOLTS LOW	DISPLAYED RANGE VOLTS HIGH	RELATIVE ALARM POINT LOW	RELATIVE ALARM POINT HIGH	ABSOLUTE ALARM POINT LOW	ABSOLUTE ALARM POINT HIGH	AUTOMATIC UPDATE INTERVAL	STORED NOMINAL VOLTAGE	SAMPLED NOMINAL VOLTAGE
CH4	0.0	30.00	0.0	30.00	81%	120%	10.0	29.0	10 DAYS	12.69	
POWER SOURCE	0.0	30.00	0.0	30.00	81%	120%	10.0	29.0	10 DAYS	12.69	
RELAY OUTPUT	NAME RLY-OUT		ACTIVE SET-UP-OPEN		NORMAL CLR-DN-CLOSE		PULSE DURATION		15 SECONDS	CHARTS REV'D 2-1-02	

MAINTENANCE OPERATIONS

TO START OR ABORT ANY PROCEDURE
1. PRESS THE 'CANCEL' BUTTON FIRST

WHEN RESPONDING TO A CALL, PUT THE CRTU IN THE 'SILENCE ALARMS' MODE

1. PRESS 'SELECT' AND THEN '+ ARROW' BUTTON UNTIL
DISPLAY: ACTION?
SILENCE ALARMS
2. PRESS THE 'SELECT' BUTTON TWICE
3. CORRECT PROBLEM AND SIMULATE NORMAL TRAIN MOVEMENT THROUGH THE LOCATION
4. EXAMINE EACH CHANNEL ON THE CRTU
5. PRESS THE '+/- ARROW' BUTTON
VERIFY ALL CHANNELS INDICATE A NORMAL STATE
NORMAL STATES ARE ON THE CHANNEL SETUP CHART

CLEAR TIMERS, LATCHES AND SEND ALL NORMAL

1. DO STEPS #1 - #5 ABOVE, AND PRESS 'CANCEL'.
2. PRESS 'SELECT' AND THEN '- ARROW' BUTTON UNTIL
DISPLAY: ACTION?
SERVICE MODE
3. PRESS 'SELECT' AGAIN TO RESET TIMERS, AND IF
DISPLAY: SERVICE MODE
ALL NORMAL
4. PRESS 'SELECT' AGAIN TO CLEAR LATCHES, AND SEND ALL NORMAL. SKIP STEPS #5-#6.
5. HOWEVER, IF ALARMS ARE NOT CLEARED;
DISPLAY: SERVICE MODE
ALARMS PENDING/PRESENT
6. PRESS 'CANCEL', CORRECT PROBLEM AND REPEAT STEPS #2 THRU #5 UNTIL ALL NORMAL SENT.

TO CANCEL THE 'SILENCE ALARMS' MODE

1. PRESS 'SELECT' AND THEN '+ ARROW' BUTTON UNTIL
DISPLAY: ACTION?
CANCEL SILENCE
2. PRESS THE 'SELECT' BUTTON AGAIN

EXAMINE & SET BATTERY VOLTAGE NOMINAL VALUE

1. PRESS THE '+ ARROW' OR '- ARROW' BUTTON UNTIL THE DESIRED CHANNEL IS DISPLAYED.
DISPLAY: PS-BA:
13.83V NORMAL
2. VERIFY THE DISPLAYED READING WITH A DIGITAL VOLTMETER
3. PRESS THE 'SELECT' BUTTON, AND THE CRTU DISPLAY WILL SWITCH BETWEEN CURRENT/SAVED NOMINAL VOLTAGE VALUES.
DISPLAY: NOMINAL ON #6? (CURRENT)
13.83
DISPLAY: SAVED NOMINAL 6 (STORED)
12.69
4. PRESS THE 'SELECT' BUTTON AND THE CURRENT OR 'NOMINAL ON' VALUE WILL BE SAMPLED AND STORED AS THE 'SAVED NOMINAL' VALUE
5. VERIFY THE 'NOMINAL ON' AND 'SAVED NOMINAL' VALUES ARE EQUIVALENT, REPEAT STEPS #1 THRU #3 & PRESS THE 'CANCEL' BUTTON.

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:		
DATE	REVISIONS	BY

NOT TO SCALE

DOT* 247-536R **SIGNAL CRTU DIAGRAM**

PROJECT NAME: **SHARON GRADE CROSSING**
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SHT28.DGN
PROJECT LEADER: H. PATEL
DESIGNED BY: R. CARROLL
PLOT DATE: 06/13/03
DRAWN BY: A. BOSE
CHECKED BY: G. SERGOT
SHEET 27 OF 35

09:12:20 AM
06/13/03
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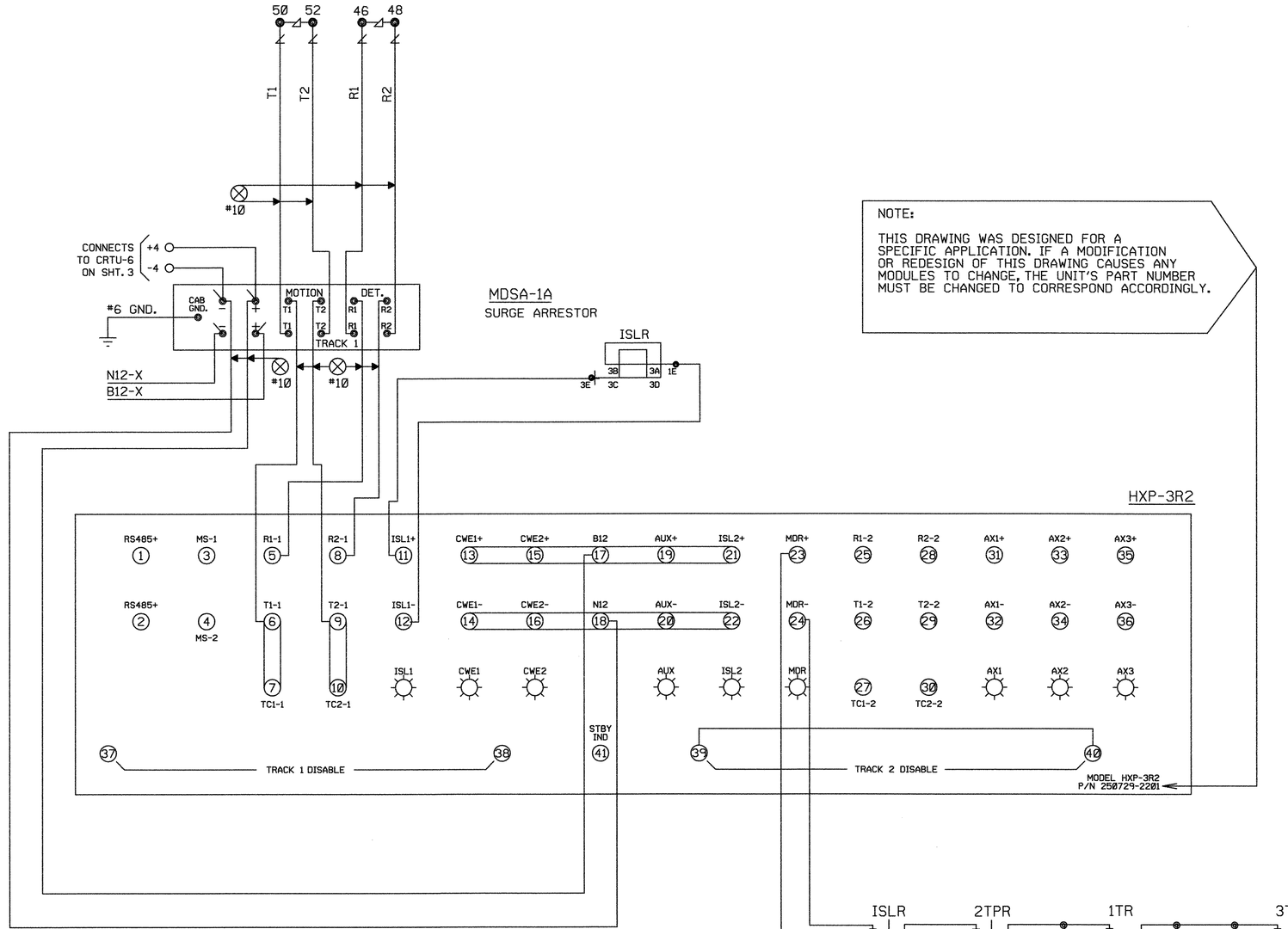
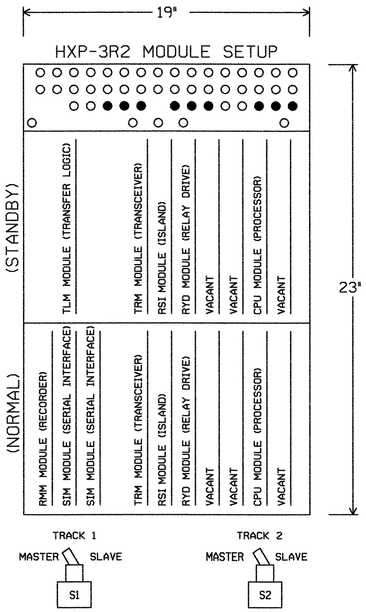
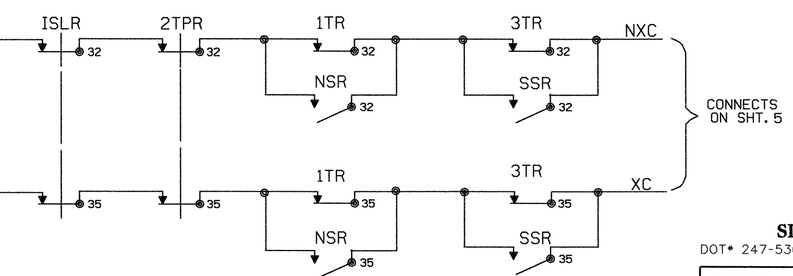
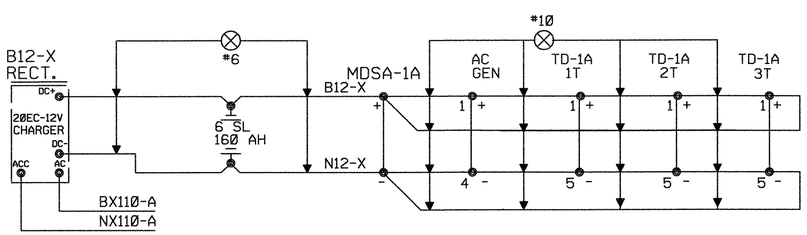


NOTE:

THIS DRAWING WAS DESIGNED FOR A SPECIFIC APPLICATION. IF A MODIFICATION OR REDESIGN OF THIS DRAWING CAUSES ANY MODULES TO CHANGE, THE UNIT'S PART NUMBER MUST BE CHANGED TO CORRESPOND ACCORDINGLY.







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ORIGINAL PREPARED:

DATE	REVISIONS	BY

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

SIGNAL CONTROL UNIT DIAGRAM

DOT* 247-536R

PROJECT NAME: **SHARON GRADE CROSSING**
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SHT29.DGN
PROJECT LEADER: H. PATEL
DESIGNED BY: R. CARROLL
PLOT DATE: 06/13/03
DRAWN BY: A. BOSE
CHECKED BY: G. SERGOT
SHEET 28 OF 35

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06/13/03
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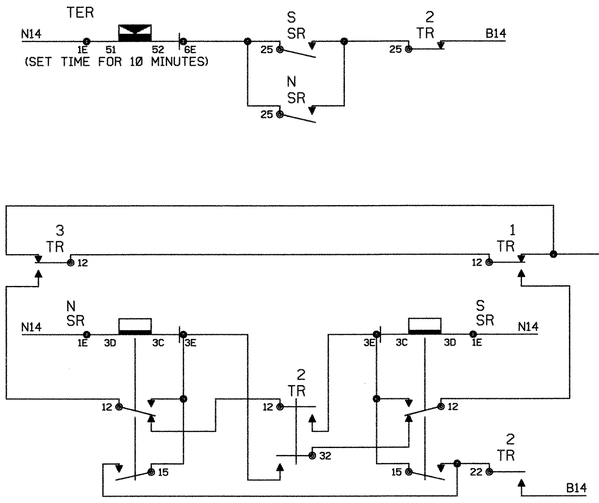

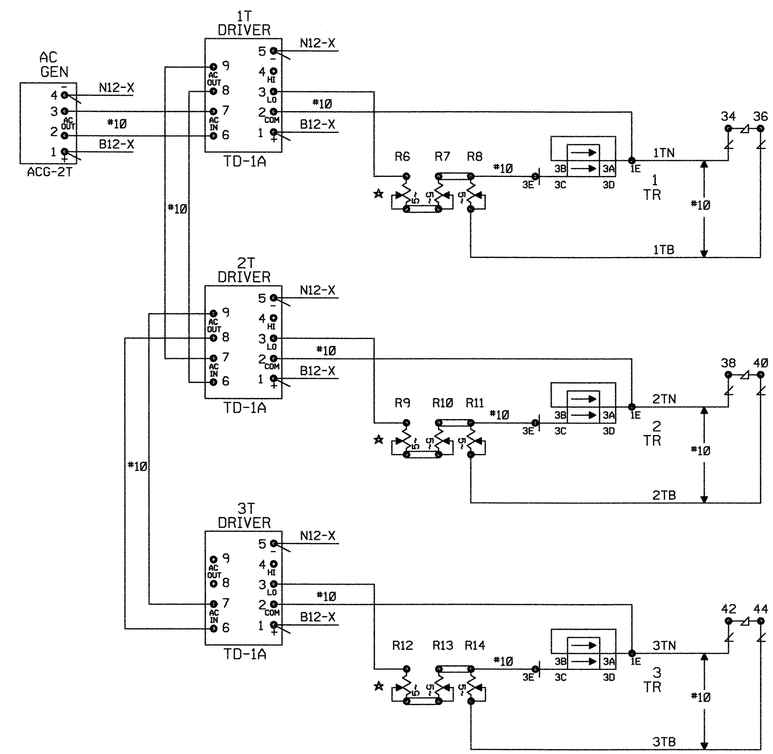

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:		
DATE	REVISIONS	BY

NOT TO SCALE

CROSSING SIGNAL CIRCUITS DIAGRAM

DOT* 247-536R

PROJECT NAME: **SHARON GRADE CROSSING**
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SHT30.DGN
PROJECT LEADER: H. PATEL
DESIGNED BY: R. CARROLL
PLOT DATE: 06/13/03
DRAWN BY: A. BOSE
CHECKED BY: G. SERGOT
SHEET 29 OF 35

06/13/03 03:12:01 AM
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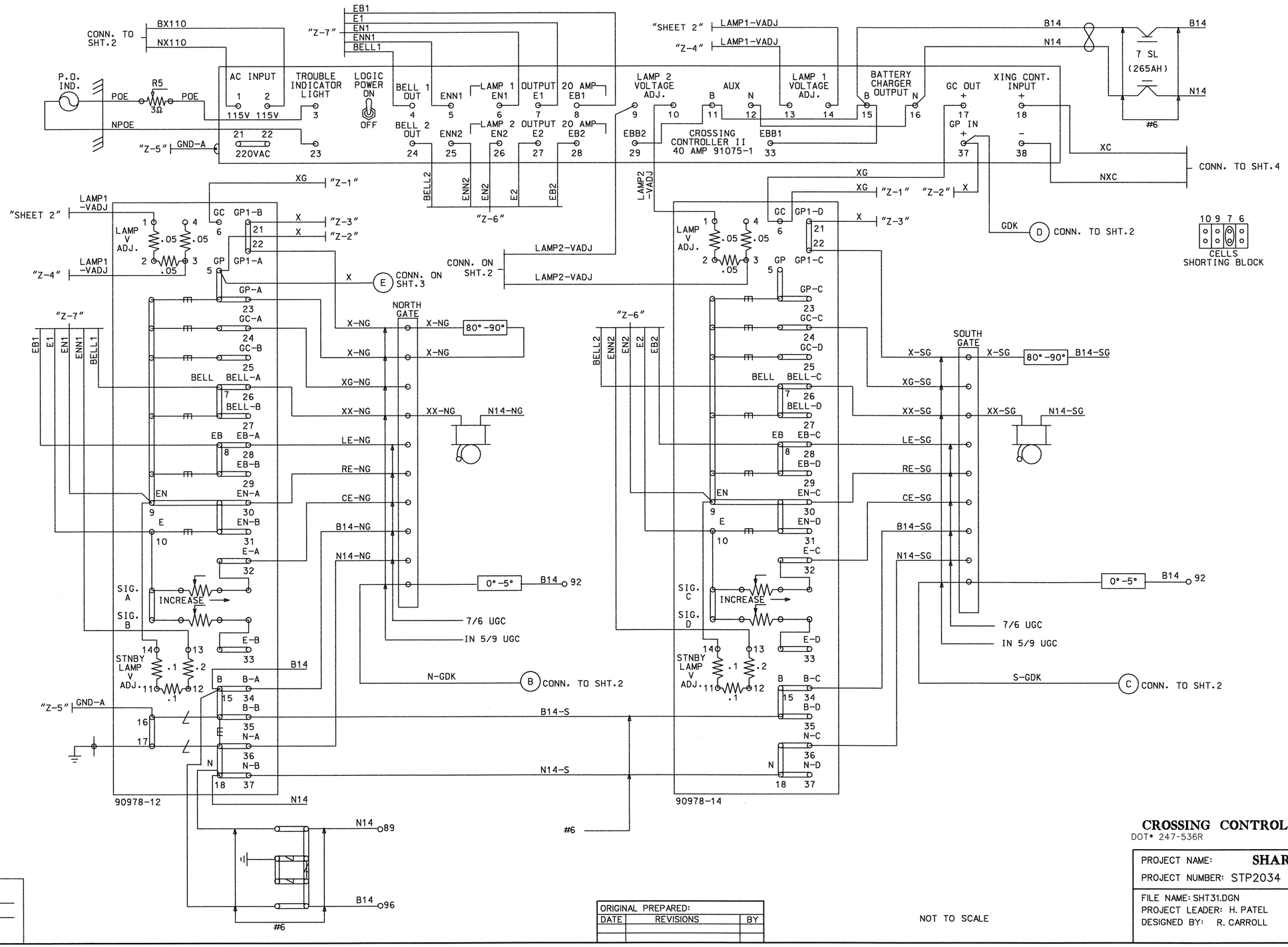

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:

DATE	REVISIONS	BY

NOT TO SCALE

CROSSING CONTROLLER CIRCUITS DIAGRAM

DOT# 247-536R

PROJECT NAME: **SHARON GRADE CROSSING**
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SHT31.DGN
PROJECT LEADER: H. PATEL
DESIGNED BY: R. CARROLL
PLOT DATE: 06/13/03
DRAWN BY: A. BOSE
CHECKED BY: G. SERGOT
SHEET 30 OF 35

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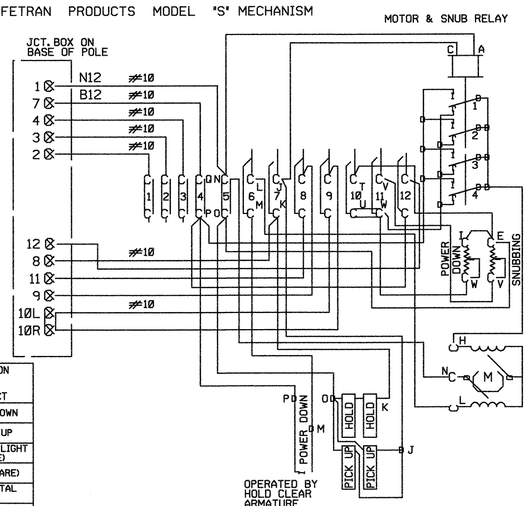
SAFETRAN PRODUCTS MODEL "S" MECHANISM



CONT. SPACE NO.	CLEARING (UP) CLOSES	CLEARING (UP) OPENS	RETURNING (DN.) CLOSES	RETURNING (DN.) OPENS	FUNCTION OF CONTACT
6	45°	–	–	45°	POWER DOWN
7	–	89°	89°	–	POWER UP
8	83°	–	–	83°	FLASHING LIGHT (SPARE)
9	5°	–	–	5°	BELL (SPARE)
10	–	5°	5°	–	HORIZONTAL SNUB
11	–	45°	45°	–	DOWN SNUB
12	–	5°	5°	–	GATE DOWN

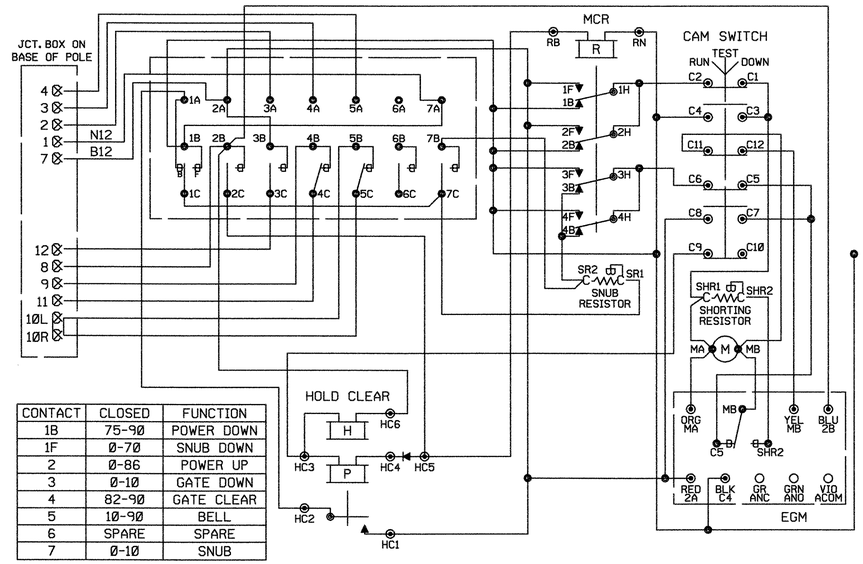
SHOW TYPE MECH. INSTALLED

ALL MECHANISMS SHOWN IN THE CLEAR POSITION

JCT. BOX ON BASE POLE

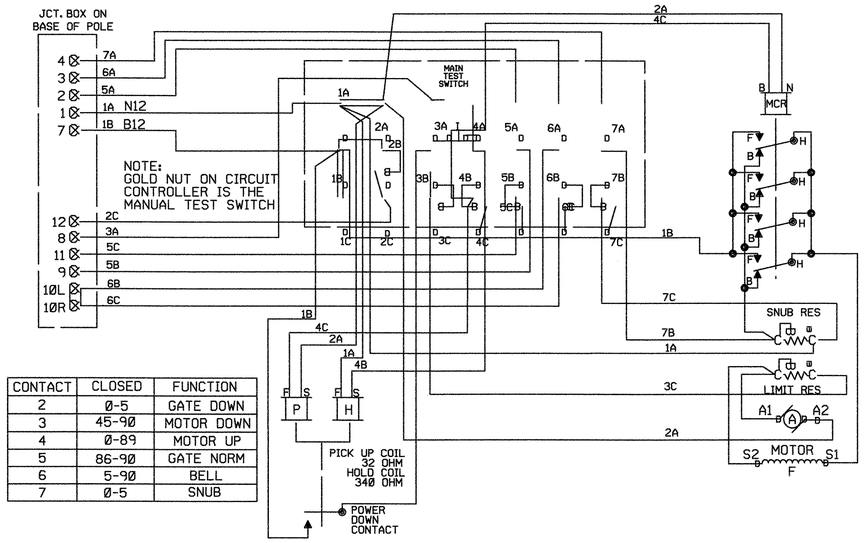
L	R	L	R
1	11	7	17
2	12	8	18
3	13	9	19
4	14	10	20
5	15	11	21
6	16	12	22

WCH 3597



CONTACT	CLOSED	FUNCTION
1B	75-90	POWER DOWN
1F	0-70	SNUB DOWN
2	0-86	POWER UP
3	0-10	GATE DOWN
4	82-90	GATE CLEAR
5	10-90	BELL
6	SPARE	SPARE
7	0-10	SNUB

WCH 3593-E



CONTACT	CLOSED	FUNCTION
2	0-5	GATE DOWN
3	45-90	MOTOR DOWN
4	0-89	MOTOR UP
5	86-90	GATE NORM
6	5-90	BELL
7	0-5	SNUB

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:		
DATE	REVISIONS	BY

NOT TO SCALE

CROSSING GATE MECHANISM DIAGRAM

DOT# 247-536R

PROJECT NAME: SHARON GRADE CROSSING
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SHT32.DGN
PROJECT LEADER: H. PATEL
DESIGNED BY: R. CARROLL

PLOT DATE: 06/13/03
DRAWN BY: A. BOSE
CHECKED BY: G. SERGOT
SHEET 31 OF 35

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06/13/03
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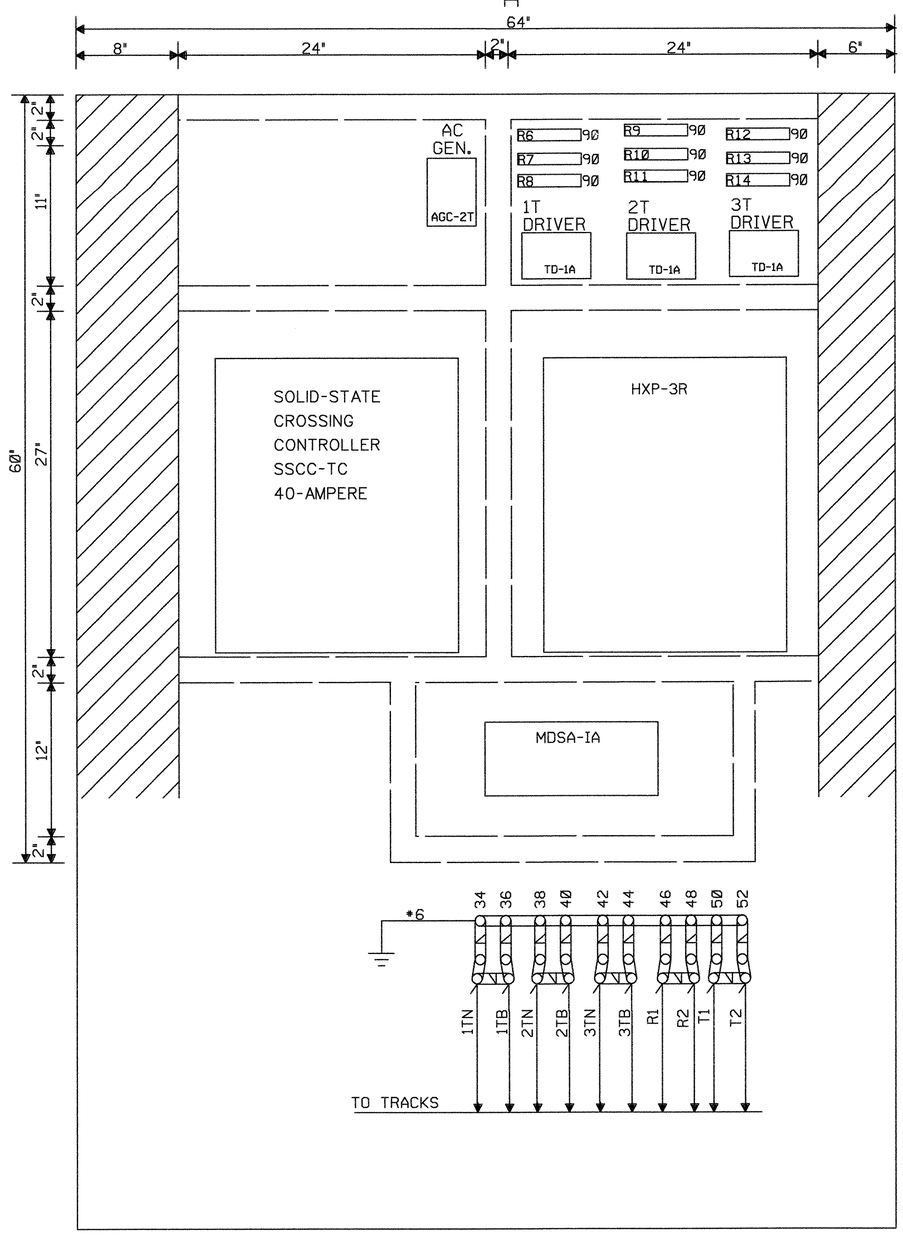
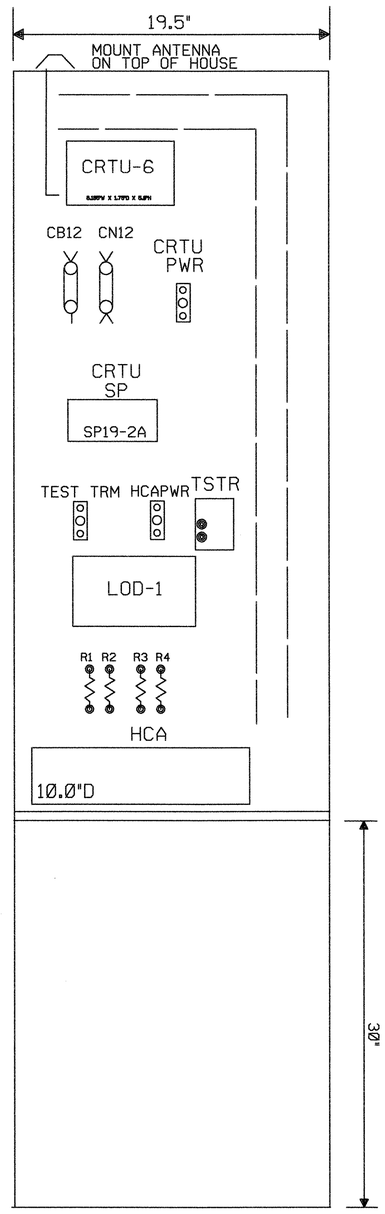
"A"



"B"



DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:		
DATE	REVISIONS	BY

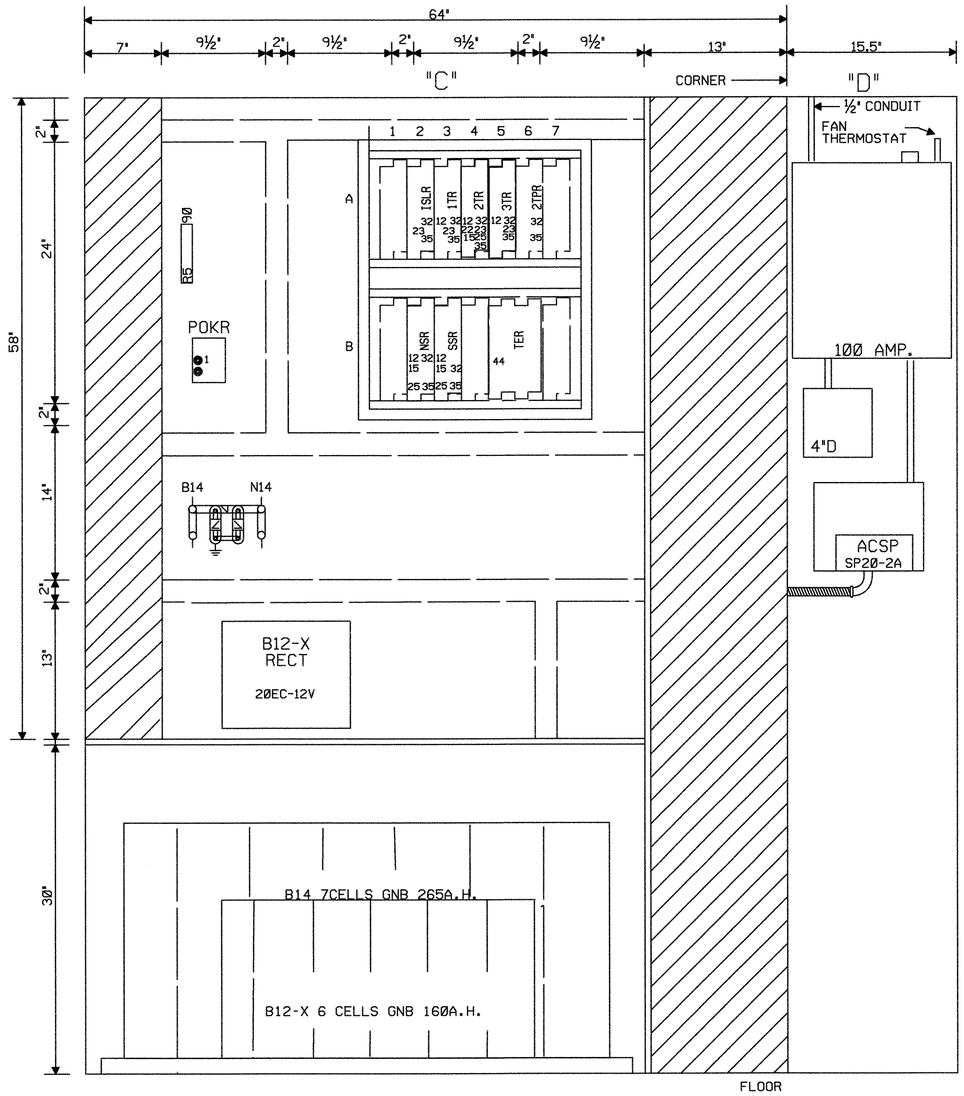
NOT TO SCALE

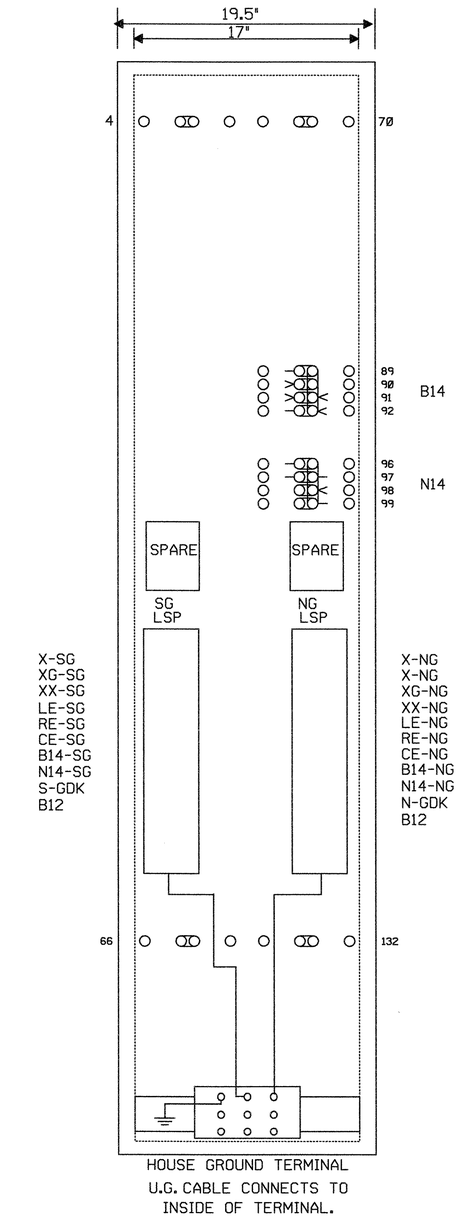
SIGNAL HOUSE LAYOUT (WALL A & B)

DOT* 247-536R

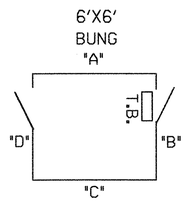
PROJECT NAME: **SHARON GRADE CROSSING**
PROJECT NUMBER: STP2034 (13)S

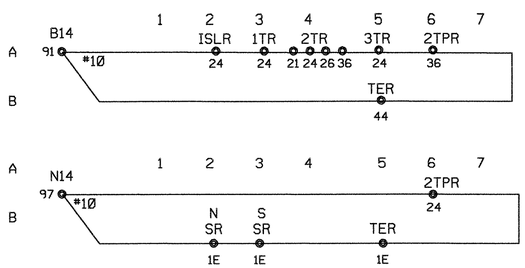
FILE NAME: SHT33.DGN
PROJECT LEADER: H. PATEL
DESIGNED BY: R. CARROLL
PLOT DATE: 06/13/03
DRAWN BY: A. BOSE
CHECKED BY: G. SERGOT
SHEET 32 OF 35





HOUSE GROUND TERMINAL
U.G. CABLE CONNECTS TO INSIDE OF TERMINAL.





DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:		
DATE	REVISIONS	BY

NOT TO SCALE

DOT# 247-536R

SIGNAL HOUSE LAYOUT (WALL C & D)

PROJECT NAME: **SHARON GRADE CROSSING**
PROJECT NUMBER: STP2034 (13)S

FILE NAME: SHT34.DGN
PROJECT LEADER: H. PATEL
DESIGNED BY: R. CARROLL
PLOT DATE: 06/13/03
DRAWN BY: A. BOSE
CHECKED BY: G. SERGOT
SHEET 33 OF 35

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06/13/03
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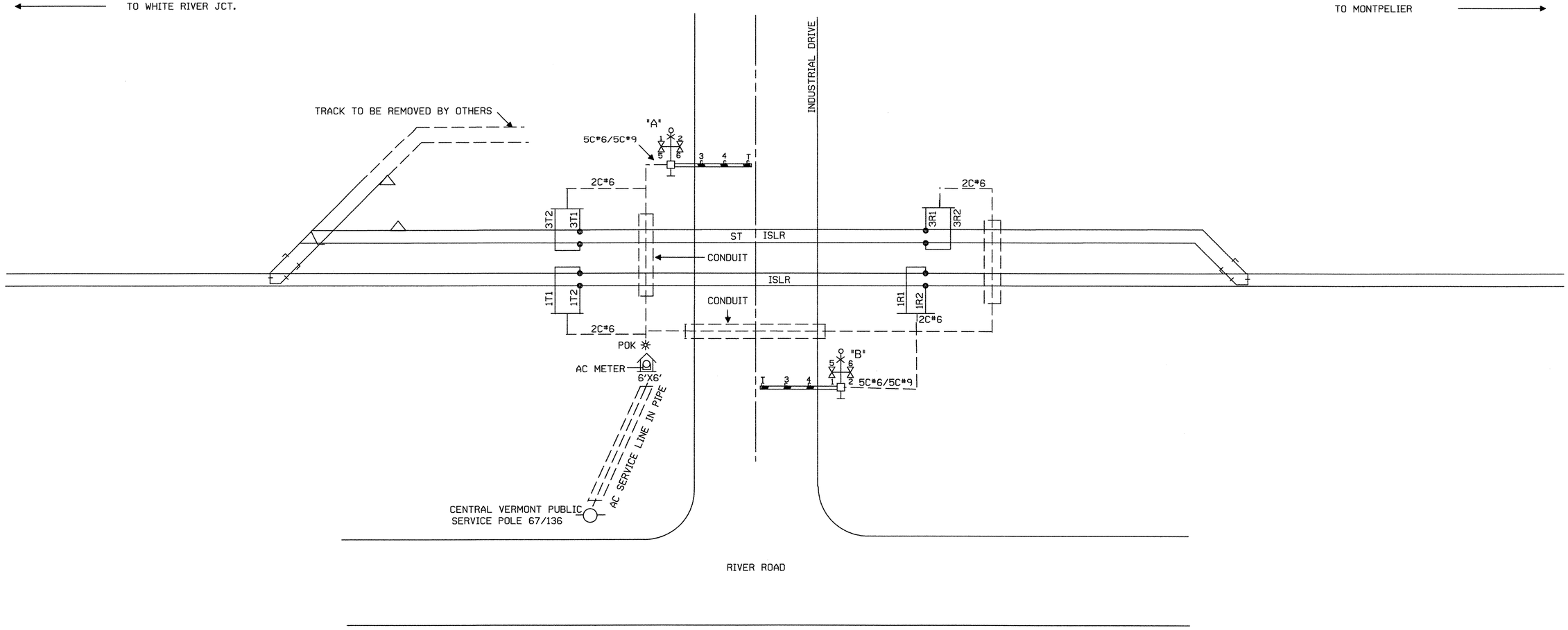

NOTES:

1. METER SERVICE WILL BE MOUNTED ON HOUSE
2. CONTRACTOR TO VERIFY WITH THE CENTRAL VERMONT PUBLIC SERVICE (CVPS) THE LOCATION OF THE POWER FEED.

S ◄——○——► N

NOT TO SCALE

SIGNAL CABLE INSTALLATION PLAN

DOT# 247-536R

PROJECT NAME:	**SHARON GRADE CROSSING**
PROJECT NUMBER:	STP2034 (13)S
FILE NAME: SHT35.DGN	PLOT DATE: 06/13/03
PROJECT LEADER: H. PATEL	DRAWN BY: A. BOSE
DESIGNED BY: R. CARROLL	CHECKED BY: G. SERGOT
	SHEET 34 OF 35

DATUM
VERTICAL NAVD88 ± 0.5 FT.
HORIZONTAL SPC 1983

ORIGINAL PREPARED:		
DATE	REVISIONS	BY

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06/13/03
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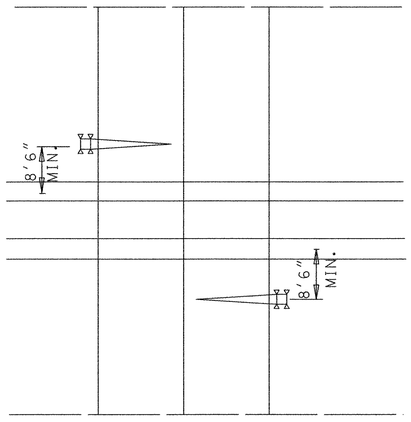

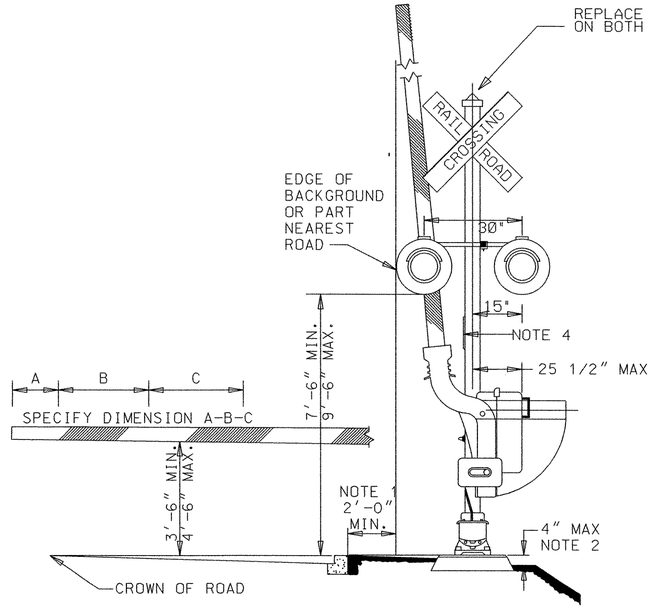

NOTES:

1. A MINIMUM CLEARANCE OF 6 FT. FROM THE EDGE OF THE TRAVELED ROADWAY.
2. TOP OF FOUNDATION TO BE AT THE SAME ELEVATION AS THE CROWN OF THE ROADWAY, WITH OR WITHOUT CURB AND NO MORE THAN 4 IN. ABOVE SURFACE OF THE GROUND. PROPER DRAINAGE SHOULD BE PROVIDED SO THAT THE ELECTRICAL CONNECTION JUNCTION BOX WILL BE FREE OF RETAINED WATER.
3. TYPICAL MINIMUM CLEARANCE IS 2 FT. FROM FACE OF VERTICAL CURB TO CLOSEST PART OF SIGNAL OR GATE ARM IN THE UPRIGHT POSITION FOR A DISTANCE OF 17 FT. ABOVE THE CROWN OF THE ROADWAY.
4. D.O.T. NUMBER OF THE NATIONAL RAILROAD-HIGHWAY CROSSING INVENTORY SHOULD BE INSTALLED ON THE SIGNAL MAST JUST ABOVE EYE LEVEL.
5. ALL HIGHWAY CROSSING EQUIPMENT TO BE INSTALLED IN ACCORDANCE WITH M.U.T.C.D.
6. GATE LIGHTS TO BE PROVIDED A, B, AND C DISTANCE FROM GATE TIP.

SIGNAL GATE & FLASHERS DETAILS

DOT# 247-536R

PROJECT NAME:	SHARON GRADE CROSSING
PROJECT NUMBER:	STP2034 (13)S
FILE NAME: SHT36.DGN	PLOT DATE: 06/13/03
PROJECT LEADER: H. PATEL	DRAWN BY: A. BOSE
DESIGNED BY: R. CARROLL	CHECKED BY: G. SERGOT
	SHEET 35 OF 35

DATUM	
VERTICAL	NAVD88 ± 0.5 FT.
HORIZONTAL	SPC 1983

ORIGINAL PREPARED:		
DATE	REVISIONS	BY

NOT TO SCALE

09:14:52 AM
06/13/03
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