

6-01-3

UTAH

DEPARTMENT OF TRANSPORTATION

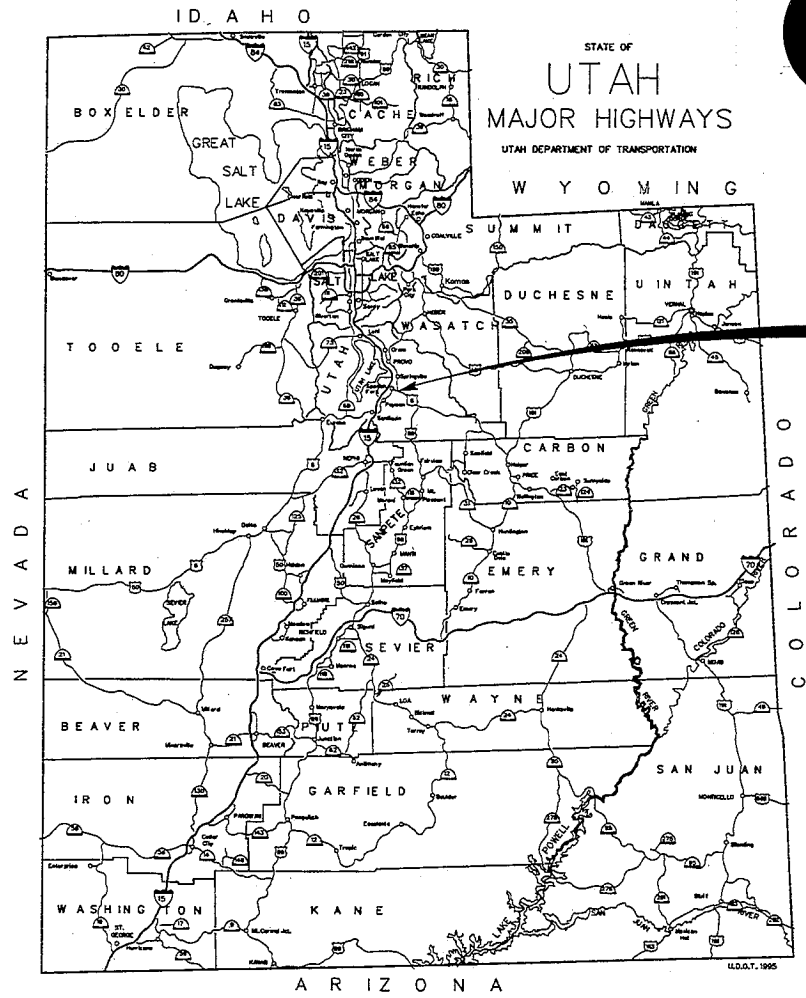
METRIC

PLANS OF PROPOSED STATE ROAD FEDERAL-AID PROJECT

NH-0006(10)178
ALSO KNOWN AS
NH-BRF-0006(10)178

RECEIVED
FEB 4 - 2004
CONST. ORG.3753

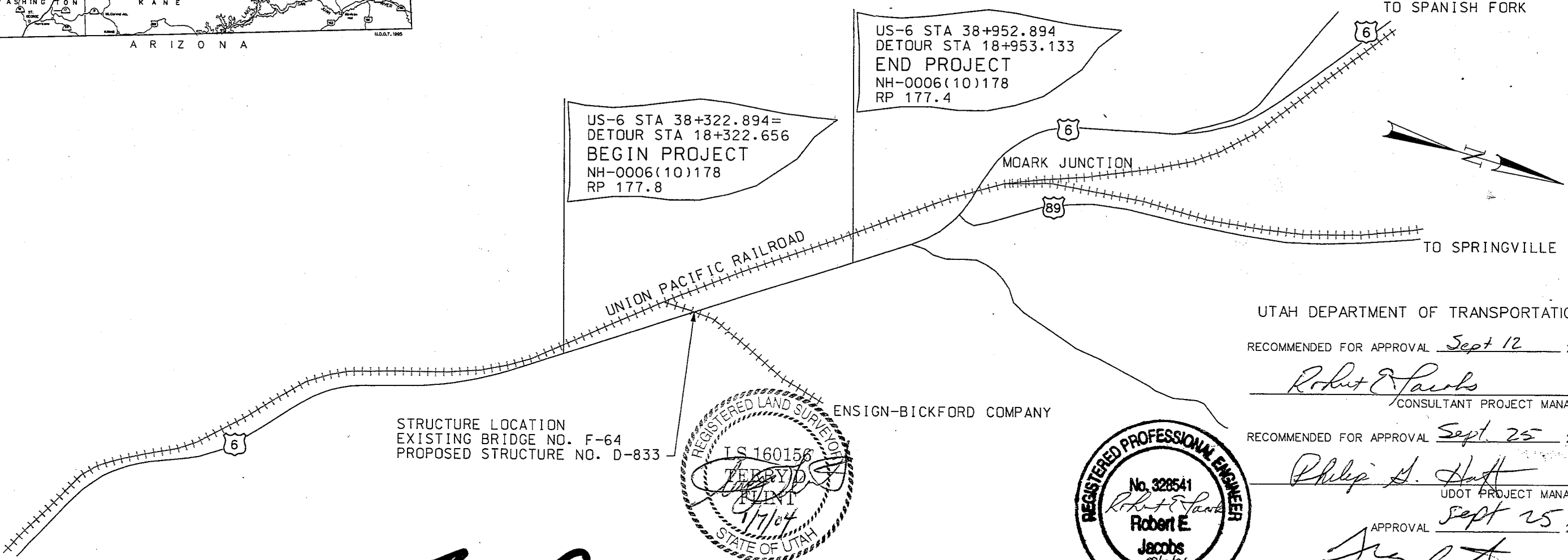
SR-6, UPRR 0.5 MILE
SOUTHEAST OF MOARK JUNCTION
BRIDGE REPLACEMENT
UTAH COUNTY
LENGTH 0.630 KILOMETERS



NH-0006(10)178

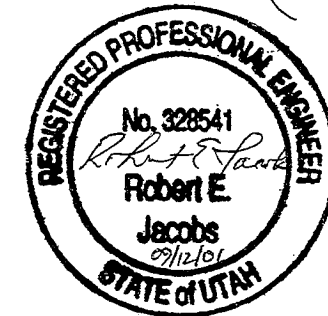
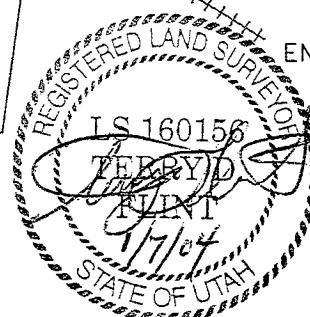
US-6 STA 38+322.894=
DETOUR STA 18+322.656
BEGIN PROJECT
NH-0006(10)178
RP 177.8

US-6 STA 38+952.894=
DETOUR STA 18+953.133
END PROJECT
NH-0006(10)178
RP 177.4



STRUCTURE LOCATION
EXISTING BRIDGE NO. F-64
PROPOSED STRUCTURE NO. D-833

ENSIGN-BICKFORD COMPANY

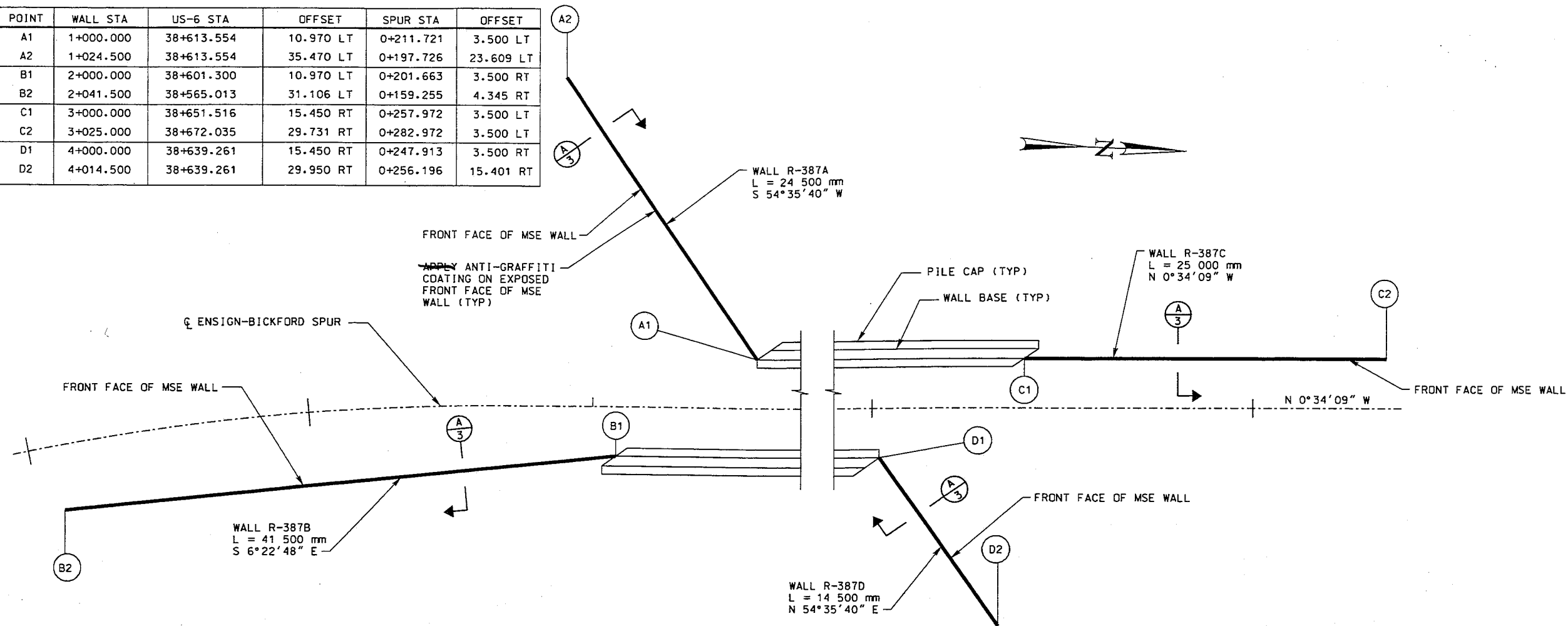


UTAH DEPARTMENT OF TRANSPORTATION
RECOMMENDED FOR APPROVAL Sept 12 2001
Robert E. Jacobs
CONSULTANT PROJECT MANAGER
RECOMMENDED FOR APPROVAL Sept 25 2001
Philip A. Huff
UDOT PROJECT MANAGER
APPROVAL Sept 25 2001
Jay A. [Signature]
REGION 3 DIRECTOR

As Constructed

09/19/01
g:\15121\2234_02\CAD_Standards\Resources\Standard_Drawing\General\2234_titlesheet.dgn

WALL	POINT	WALL STA	US-6 STA	OFFSET	SPUR STA	OFFSET
R-387A	A1	1+000.000	38+613.554	10.970 LT	0+211.721	3.500 LT
	A2	1+024.500	38+613.554	35.470 LT	0+197.726	23.609 LT
R-387B	B1	2+000.000	38+601.300	10.970 LT	0+201.663	3.500 RT
	B2	2+041.500	38+565.013	31.106 LT	0+159.255	4.345 RT
R-387C	C1	3+000.000	38+651.516	15.450 RT	0+257.972	3.500 LT
	C2	3+025.000	38+672.035	29.731 RT	0+282.972	3.500 LT
R-387D	D1	4+000.000	38+639.261	15.450 RT	0+247.913	3.500 RT
	D2	4+014.500	38+639.261	29.950 RT	0+256.196	15.401 RT



MSE WALL PLAN

GENERAL NOTES

- ALL REINFORCING STEEL SHALL BE COATED, DEFORMED BILLET-STEEL BARS CONFORMING TO AASHTO M284 OR M111 AND M31M(94) GRADE 400.
- CHAMFER ALL EXPOSED CONCRETE CORNERS 20 mm UNLESS NOTED OTHERWISE.
- PROVIDE 50 mm CONCRETE COVER TO REINFORCING STEEL UNLESS NOTED OTHERWISE.
- ALL CAST-IN-PLACE CONCRETE SHALL BE CLASS 3A(AE) UNLESS NOTED OTHERWISE.
- ALL DIMENSIONS SHOWN ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
- ALL STATIONS AND ELEVATIONS SHOWN ARE IN METERS.
- REFER TO STRUCTURE D-833 DRAWINGS FOR STRUCTURE FOUNDATION LAYOUT AND ENSIGN-BICKFORD SPUR CURVE DATA.
- PROVIDE TEMPORARY SHORING AS REQUIRED TO MAINTAIN EXISTING AND NEW STRUCTURES DURING CONSTRUCTION. COST OF SHORING IS INCIDENTAL TO COST OF THE MSE WALLS.
- MSE WALLS SHALL HAVE A MINIMUM OF 600 MILLIMETERS OF FILL ABOVE TOP OF FOOTING.
- REMOVE AND REPLACE NATURAL SOILS BELOW MSE WALL SOIL STABILIZING ELEMENTS AND 1000 MILLIMETERS (MIN) BELOW MSE WALL FOOTING.
- TOP AND BOTTOM OF MSE WALLS MAY BE STEPPED BASED ON MODULAR PANEL SIZE. CONTRACTOR SHALL SUBMIT SHOP DWGS FOR APPROVAL ON CONCRETE FOOTING, CONCRETE CAP AND WALL LAYOUT, SHOWING STEP LOCATIONS.

LEGEND

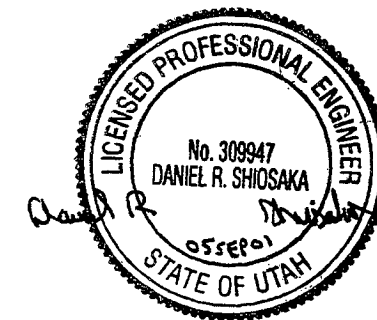
- LETTER OR NUMBER DENOTING SECTION OR DETAIL
- SHT. NO. WHERE SECTION OR DETAIL IS SHOWN OR REFERRED. WALLS R-387 ONLY. BLANK IF SHOWN ON SAME SHEET.

DESIGN DATA

CAST-IN-PLACE CONCRETE : $f'c = 27.5$ MPa
 REINFORCING STEEL : $Fy = 400$ MPa

QUANTITIES

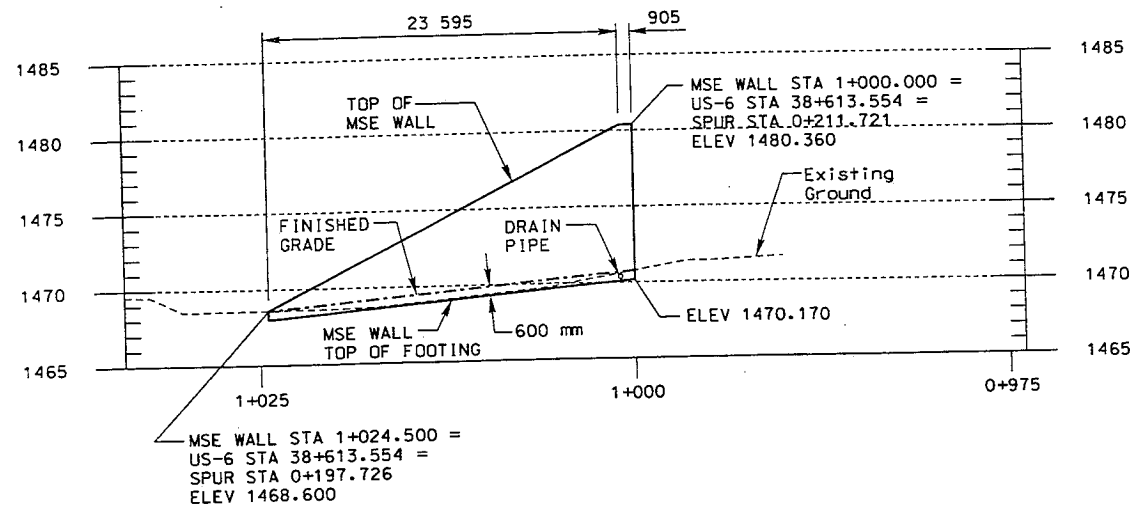
ITEM	ESTIM.	UNIT	AS CONST.
MSE WALL R-387A (EST. QTY. 137 m ² ; EXPOSED 122 m ²)	1	LUMP	
MSE WALL R-387B (EST. QTY. 235 m ² ; EXPOSED 210 m ²)	1	LUMP	
MSE WALL R-387C (EST. QTY. 135 m ² ; EXPOSED 120 m ²)	1	LUMP	
MSE WALL R-387D (EST. QTY. 79 m ² ; EXPOSED 70 m ²)	1	LUMP	
1200 mm CHAIN LINK FENCE (TYPE III)	105	LIN. m	110.7
ANTI-GRAFFITI COATING	522	m ²	



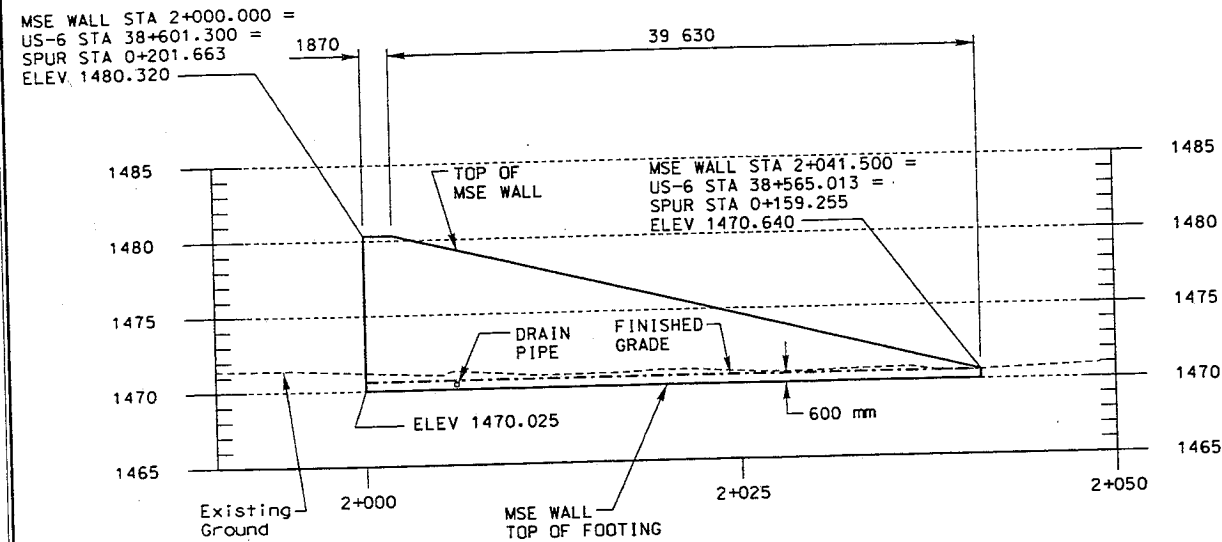
UTAH DEPARTMENT OF TRANSPORTATION SALT LAKE CITY, UTAH STRUCTURES DIVISION		APPROVAL RECORD DATE DESIGN ENGR. DATE	CHECK BPD DATE	CHECK DRS DATE	CHECK BPD DATE	REMARKS
UP RAILROAD STRUCTURE	0.5 MILE EAST OF MOARK	APPROVED DATE CHIEF STRUCTURAL ENGR.	DESIGN DATE	DRAWN DATE	QUANT. DATE	
SITUATION AND LAYOUT		PROJECT NUMBER NH-0006(10)178				
UTAH COUNTY						
R-387 DRG. NO.						
SHT. 1 OF 3						

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 08/13/01

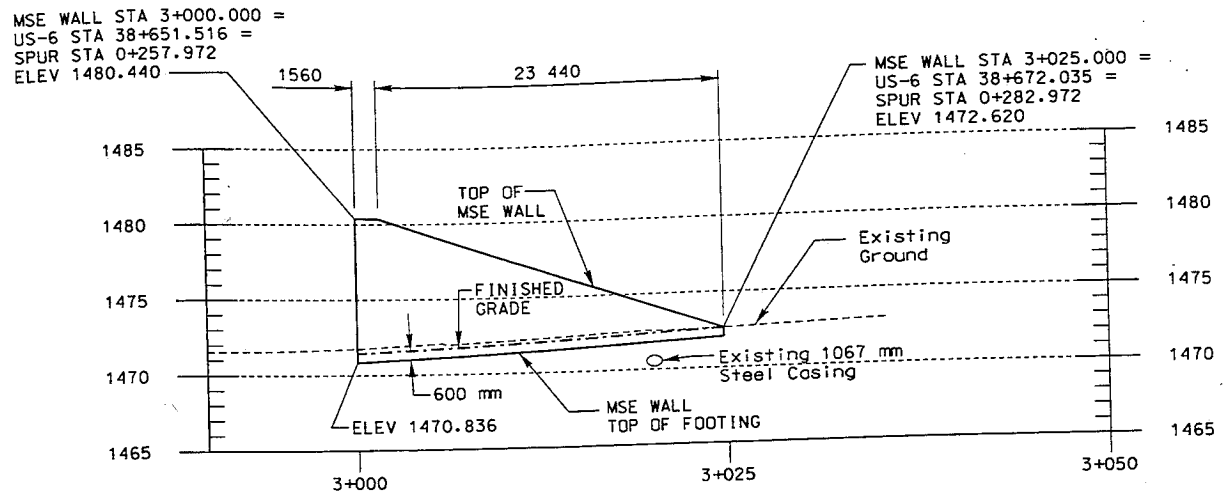
9/20/01
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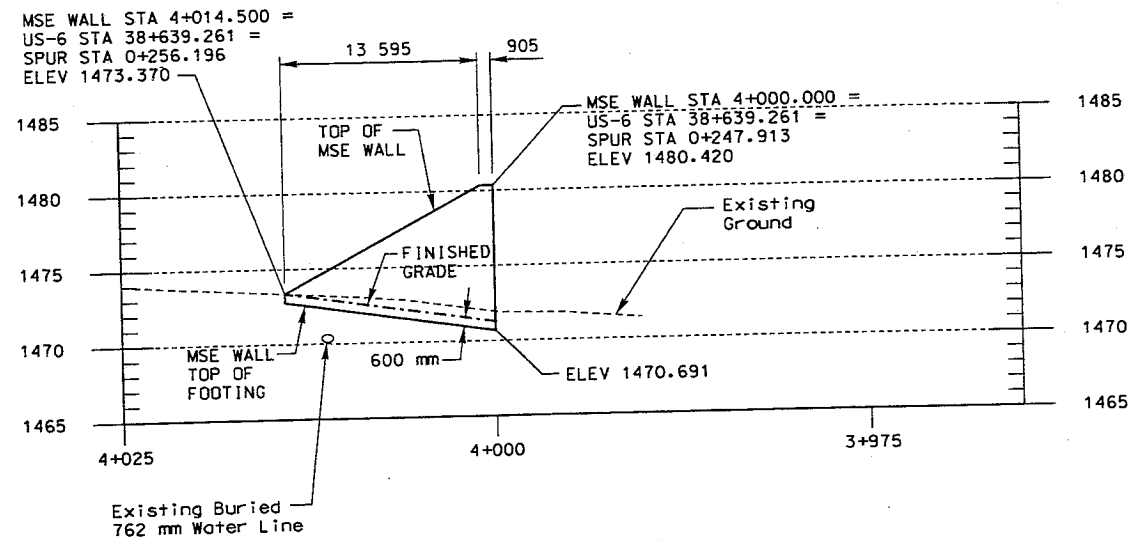
WALL R-387A
 TOTAL AREA = 137 m²
 EXPOSED SURFACE AREA = 122 m²
 (PHASE 2 CONSTRUCTION)



WALL R-387B
 TOTAL AREA = 235 m²
 EXPOSED SURFACE AREA = 210 m²
 (PHASE 2 CONSTRUCTION)

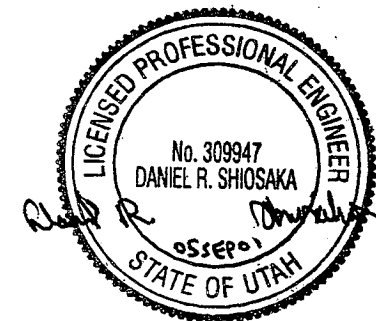


WALL R-387C
 TOTAL AREA = 135 m²
 EXPOSED SURFACE AREA = 120 m²
 (PHASE 1 CONSTRUCTION)

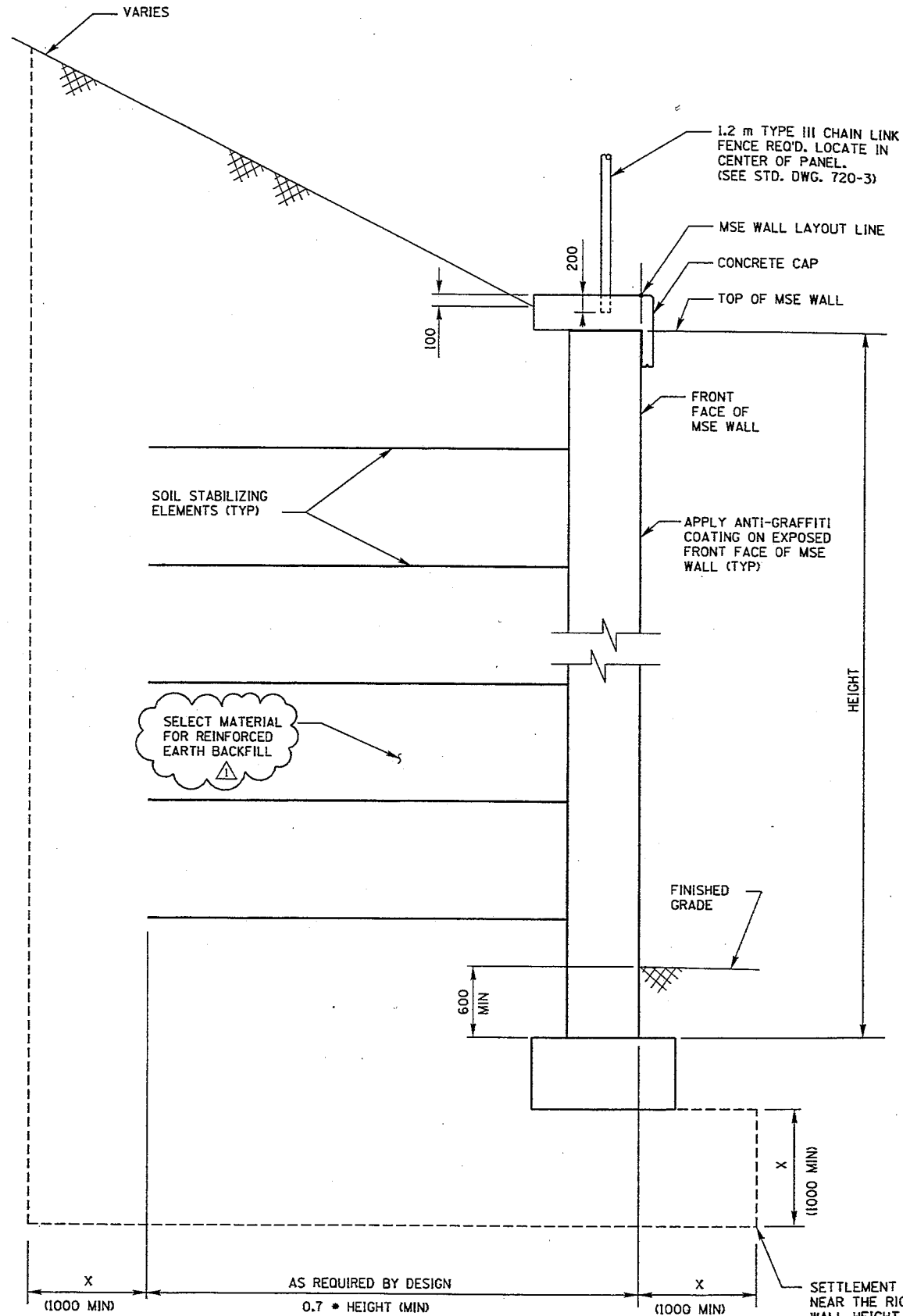


WALL R-387D
 TOTAL AREA = 79 m²
 EXPOSED SURFACE AREA = 70 m²
 (PHASE 1 CONSTRUCTION)

ELEVATIONS

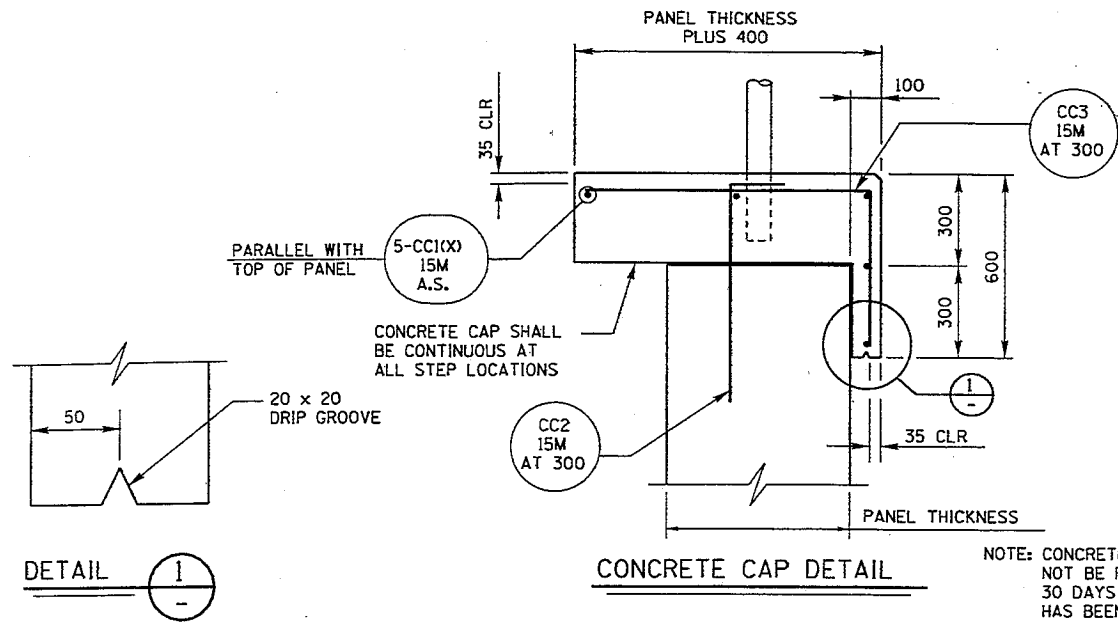
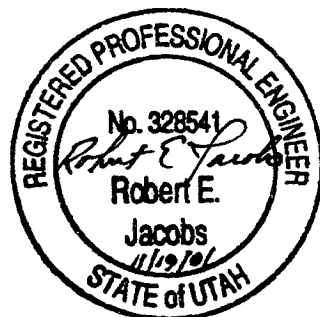


UTAH DEPARTMENT OF TRANSPORTATION SALT LAKE CITY, UTAH STRUCTURES DIVISION		DESIGN J.D.P. 08/13/01	CHECK B.P.D. 08/13/01	REVISIONS
APPROVAL REGIONAL 08/22/01	DATE 08/22/01	DESIGN J.L.K. 08/22/01	CHECK D.R.S. 08/13/01	BY
APPROVED 08/22/01	DATE 08/22/01	QUANT. J.D.P. 08/22/01	CHECK B.P.D. 08/13/01	DATE
UP RAILROAD STRUCTURE	0.5 MILE EAST OF MDRK	WALL ELEVATIONS	NH-0006(10)178	NO.
UTAH COUNTY	R-387	DRG. NO.		
SHT. 2 OF 3				



SECTION **A**
1

SETTLEMENT OF THE WALLS NEAR THE RIGID FRAME WHERE WALL HEIGHT IS GREATEST ARE ESTIMATED TO BE ON THE ORDER OF 210 TO 260 mm. ADDITIONAL REMOVAL AND REPLACEMENT OF THE MORE COMPRESSIBLE NATURAL SOILS, OR THE USE OF TWO-STAGE WALLS, MAY BE REQUIRED TO REDUCE, OR ACCOMMODATE, THE WALL SETTLEMENT DEPENDING ON THE SELECTED WALL TYPE.



REINFORCING STEEL SCHEDULE						
MARK	LOCATION	SIZE NO.	NO. BARS	LENGTH	TOTAL LENGTH	SKETCH
CC1(A)	CONCRETE CAP WALL R-387A	15M	10	12.50	125.00	
CC1(B)	CONCRETE CAP WALL R-387B	15M	20	10.80	216.00	
CC1(C)	CONCRETE CAP WALL R-387C	15M	10	12.75	127.50	
CC1(D)	CONCRETE CAP WALL R-387D	15M	5	14.40	72.00	
CC2	CONCRETE CAP	15M	351	0.95	333.45	
CC3	CONCRETE CAP	15M	351	**	**	

** TO BE DETERMINED BY MSE WALL PANEL THICKNESS.

SUMMARY OF COATED BARS
873.95* OF 15M BARS @ 1.570 Kg/m = 1,372.1 Kg*
TOTAL = 1,372.1 Kg*
*DOES NOT INCLUDE MARK CC3

REINFORCING STEEL NOTES:
BAR SIZES ARE METRIC.
REINFORCING STEEL DIMENSIONS ARE OUT-TO-OUT OF BAR UNLESS NOTED OTHERWISE.
SPLICES MAY BE OMITTED AT FABRICATORS OPTION. HOWEVER, IN SUCH CASE, FABRICATOR ASSUMES RESPONSIBILITY FOR FIT.
ALL DIMENSIONS SHOWN IN REINFORCING STEEL SCHEDULE ARE IN METERS.

UTAH DEPARTMENT OF TRANSPORTATION SALT LAKE CITY, UTAH STRUCTURES DIVISION		DESIGN_BPD_08/13/01	CHECK_BPD_08/13/01
UP RAILROAD STRUCTURE		DESIGN_JDP_06/22/01	CHECK_JDP_06/22/01
0.5 MILE EAST OF MOARK		DRAWN_JLK_05/22/01	CHECK_DRS_08/13/01
WALL DETAILS		QUANT_JDP_06/22/01	CHECK_BPD_08/13/01
PROJECT NUMBER	NH-0006(10)178	APPROVAL_DATE_11/9/01	DESIGN_ENGR_11/9/01
UTAH COUNTY		APPROVAL_DATE_11/9/01	DESIGN_ENGR_11/9/01
R-387		APPROVAL_DATE_11/9/01	DESIGN_ENGR_11/9/01
DRG. NO.		APPROVAL_DATE_11/9/01	DESIGN_ENGR_11/9/01
SHT. 3	OF 3	REVISIONS	REMARKS