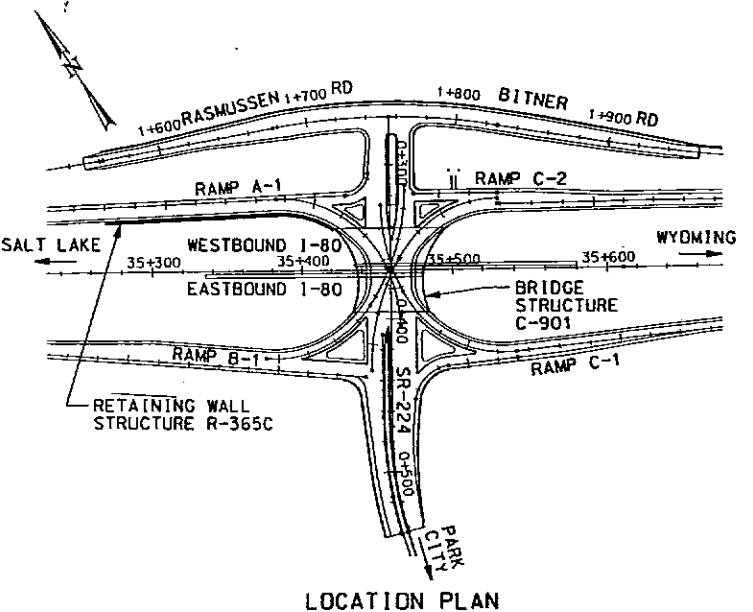


RETAINING WALL R-365C PLAN
STA 5+000.000 TO STA 5+100.000

MATCH LINE STA 5+100
SEE SHEET 2



LOCATION PLAN

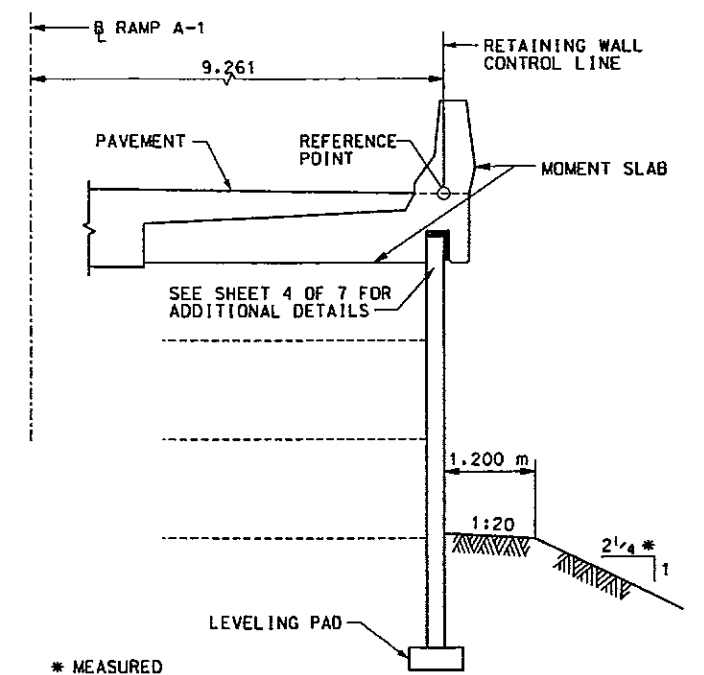
GENERAL NOTES

1. ALL REINFORCING STEEL SHALL BE COATED DEFORMED BILLET-STEEL BARS CONFORMING TO AASHTO M 284, M 111 AND M 31M GRADE 400, RESPECTIVELY.
2. EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED 19 mm EXCEPT WHERE NOTED OTHERWISE.
3. ALL CONCRETE SHALL BE CLASS AA(AE) EXCEPT WHERE NOTED OTHERWISE.
4. ALL DIMENSIONS ARE METERS UNLESS NOTED OTHERWISE.
5. SEE SHEET 4 OF 7, 5 OF 7, 6 OF 7, AND 7 OF 7 FOR ADDITIONAL DETAILS.

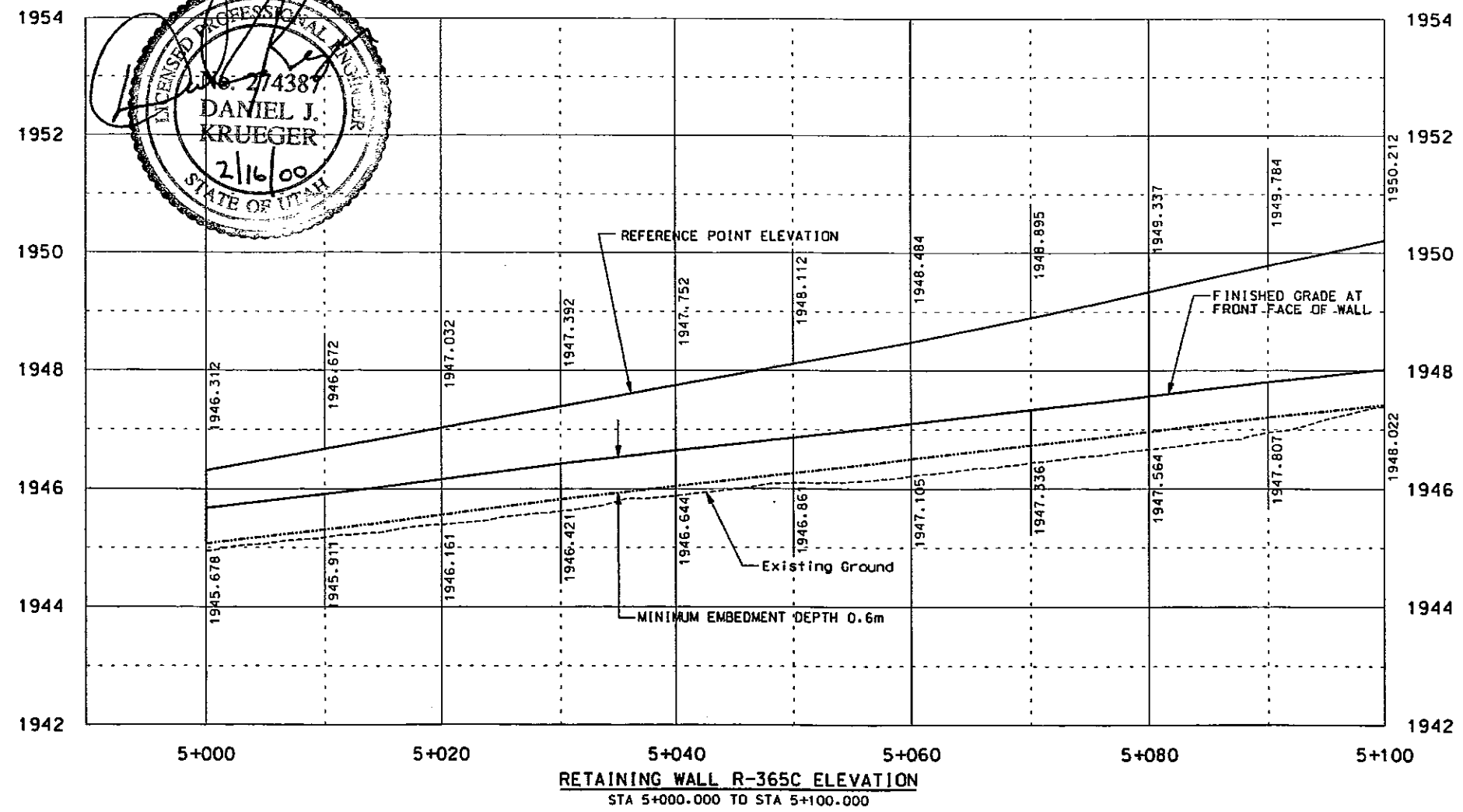
QUANTITIES		
ITEM	QUANTITY	UNIT
MSE RETAINING WALL (R-365C) (EST. QUANTITY 291 M ²)	1	LUMP

DESIGN DATA

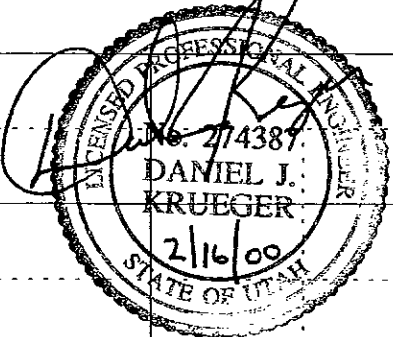
REINFORCING STEEL: $f_s = 160 \text{ MPa}$; $F_y = 400 \text{ MPa}$
CAST-IN-PLACE CONCRETE: $f_c = 25 \text{ MPa}$



RETAINING WALL R-365C SECTION

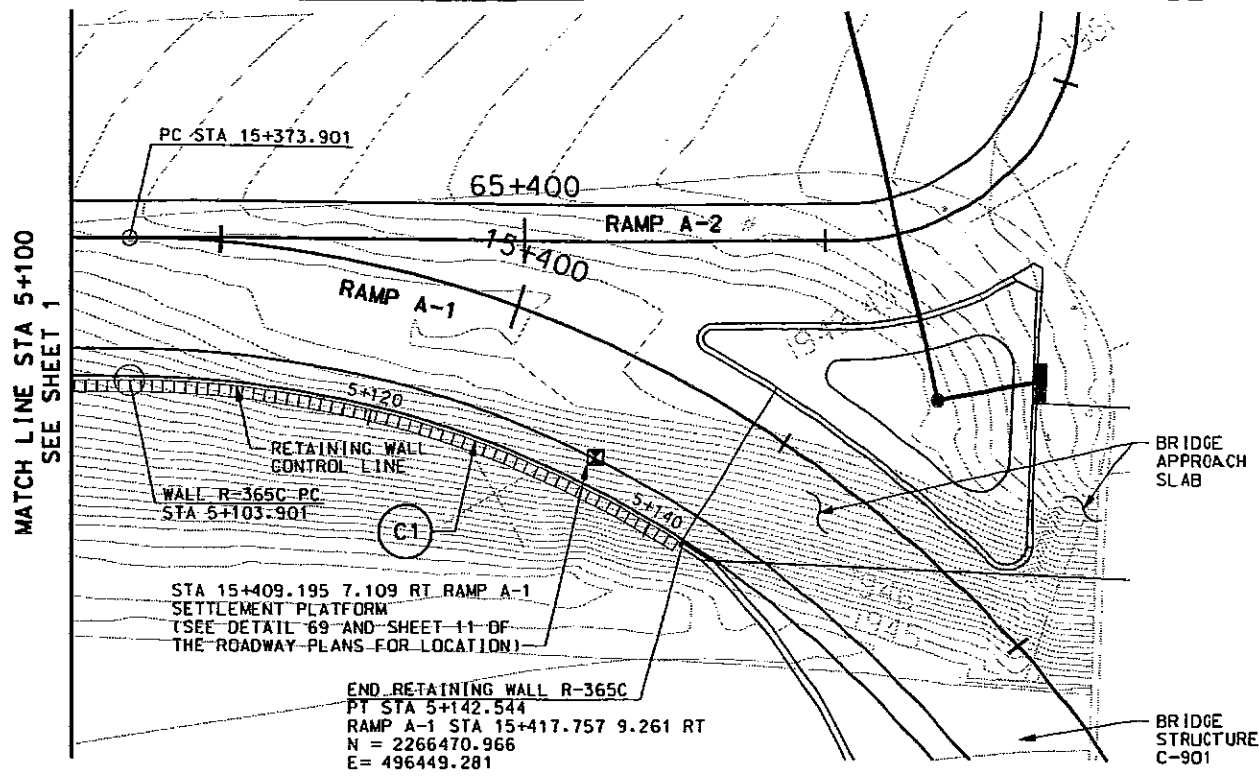


RETAINING WALL R-365C ELEVATION
STA 5+000.000 TO STA 5+100.000



19:00:05
15 FEB 100
J:\1910_00\sheet_1\files\walls\1910_wallr03a.dgn

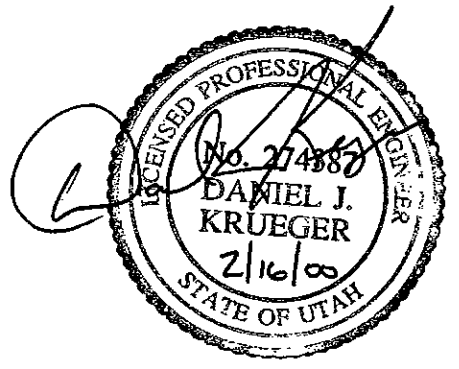
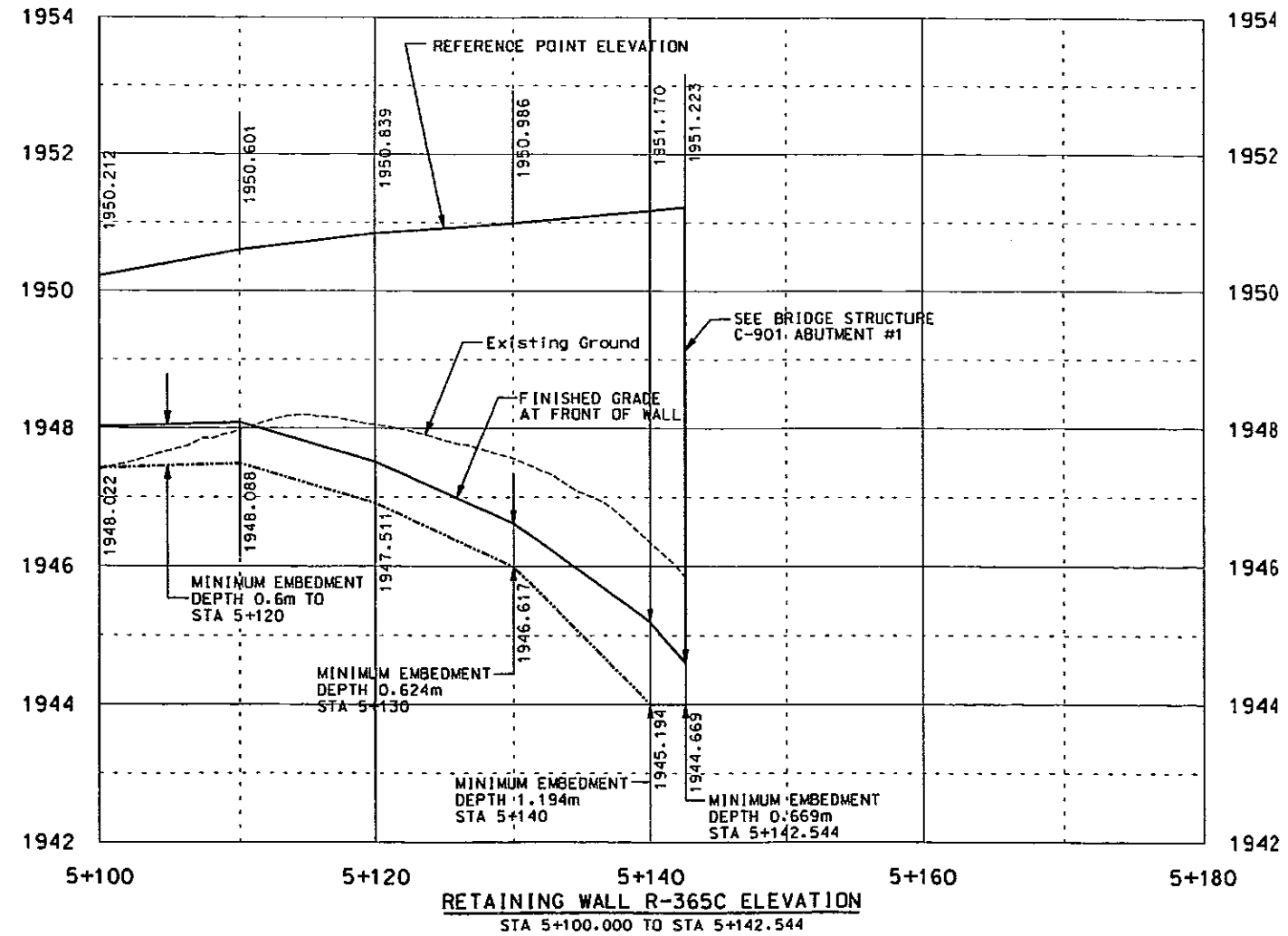
UTAH DEPARTMENT OF TRANSPORTATION		DESIGN C.J.T. 10/79		CHECK D.J.K. 01/00	REVIEW
URS Greiner Woodward Clyde		APPROVAL REGIONAL 2/00	DATE PROJECT DESIGN ENGINEER	APPROVAL PROJECT DESIGN ENGINEER	DATE
KIMBALL JUNCTION INTERCHANGE		RETAINING WALL R-365C	SITUATION & LAYOUT		
PROJECT NUMBER *IM-80-4(80)44		SUMMIT COUNTY			
R-365C		DWC. NO.			
SHEET NO. 1 OF 7		REVISIONS			
NO.	DATE	DESCRIPTION	BY	DATE	REMARKS



CURVE DATA C1
 $\Delta = 32^\circ 15' 01''$
 $R = 68.654$
 $T = 19.849$
 $L = 38.644$
 $PI = 5+123.749$
 $N = 2266488.471$
 $E = 469439.923$

RETAINING WALL R-365C PLAN
 STA 5+100.000 TO STA 5+142.544

- NOTES:
 1. SEE BRIDGE STRUCTURE C-901 FOR ADDITIONAL DETAILS.
 2. SEE SHEET 1 OF 7 FOR GENERAL NOTES.

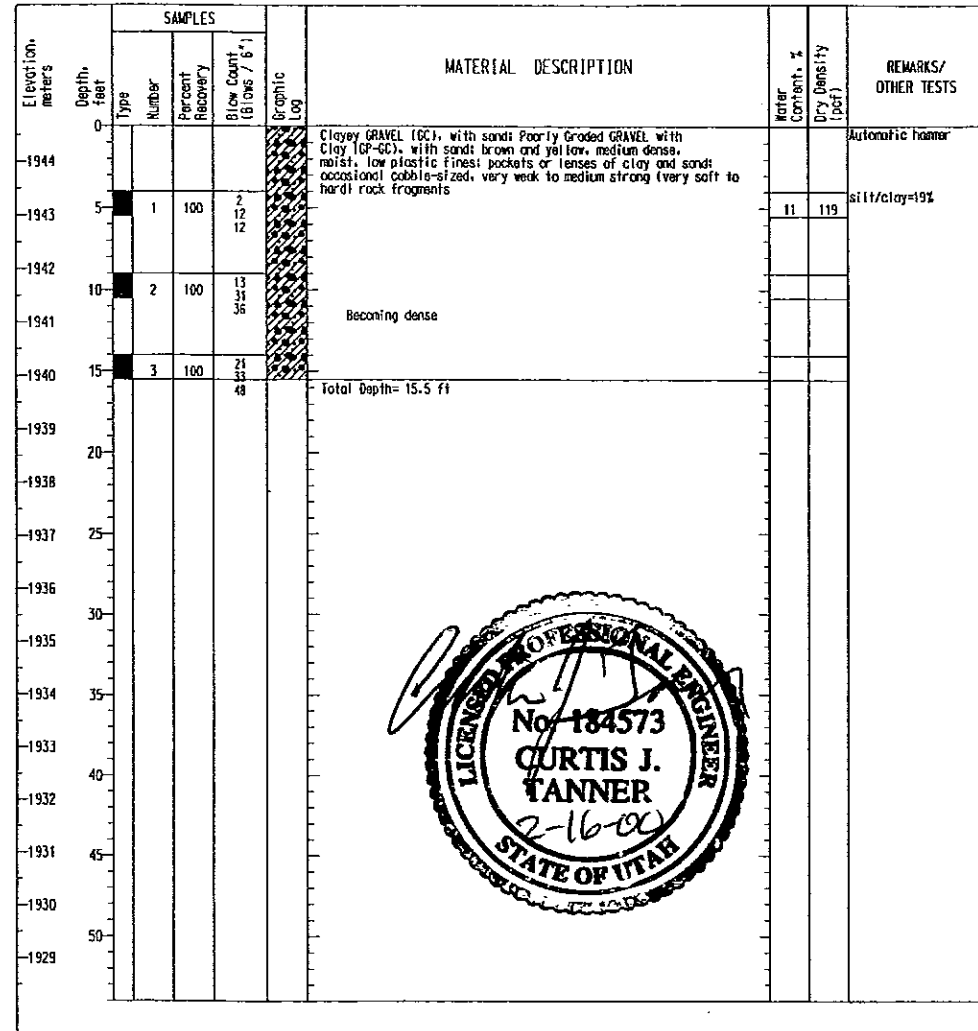


UTAH DEPARTMENT OF TRANSPORTATION		DESIGN	CJT	10/99	CHECK	DJK	01/00	REVIEW	
URS Greiner Woodward Clyde		DRAWN	PREV	10/99	CHECK	DJK	01/00	DATE	
KIMBALL JUNCTION INTERCHANGE		APPROVAL	REC'D	2/00	DATE	2/00	DATE	BY	
RETAINING WALL R-365C		APPROVED	2/00	DATE	2/00	DATE	2/00	BY	
SITUATION & LAYOUT		PROJECT DESIGN ENGINEER							
PROJECT NUMBER		ROADWAY DESIGN ENGINEER							
SUMMIT COUNTY									
R-365C									
DWG. NO.									
SHEET NO. 2 OF 7									

19:00:31
 15 FEB 00
 j:\1910_00\sheet1_files\wall_r365c.dgn

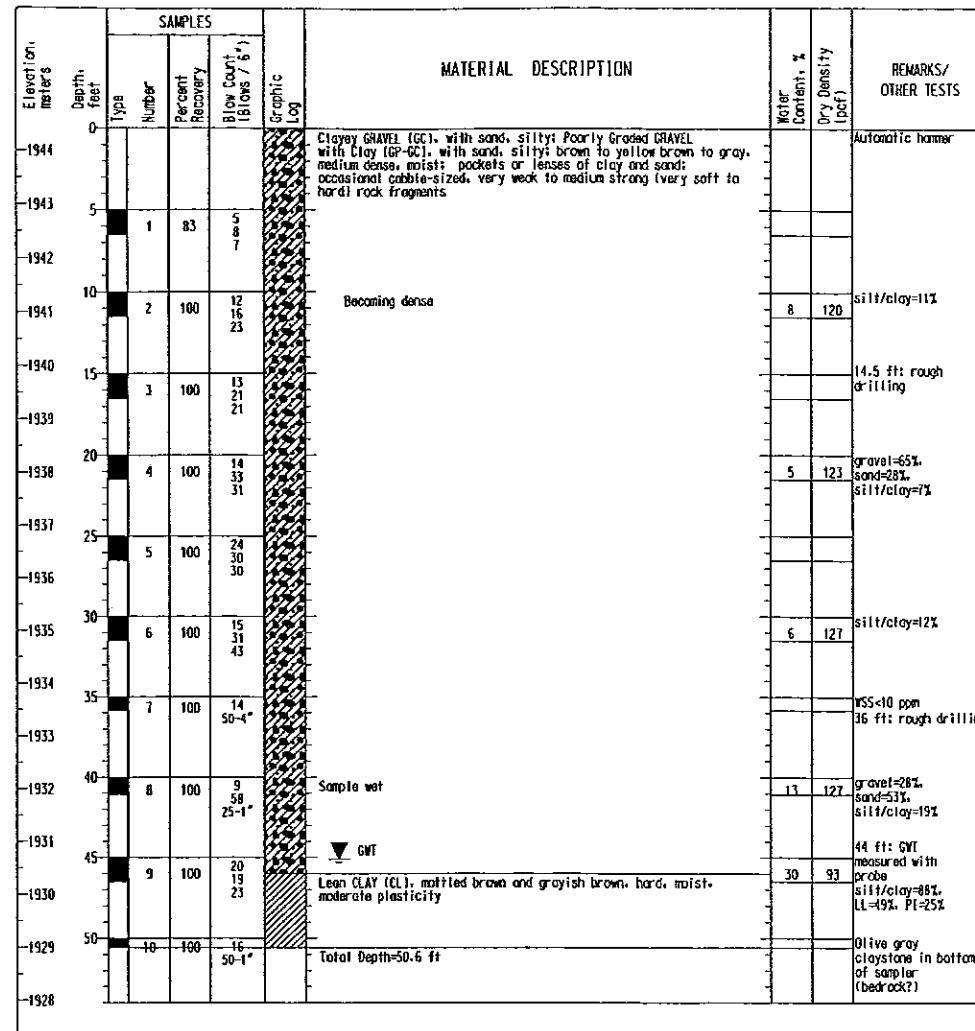
Log of Boring WB-6

Date(s) Drilled	1/26/99 - 1/26/99	Logged By	Jessica Larson	Checked By	CJT
Drilling Method	Hollow-Stem Auger	Drill Bit Size/Type	8-1/2" OD x 4-1/4" ID	Total Depth (feet)	15.5
Drill Rig Type	CME-75	Drilling Contractor	Doug Bedke	Sampler Type(s)	Col. Split (2.5" OD)
Groundwater Level and Date Measured	Not Encountered	Hammer Data	140 lbs / 30 inches	Approximate Surface Elevation	5380.1 feet 1944.7 meters
Comments	Borehole Backfill backfill with cuttings				



Log of Boring SB-5

Date(s) Drilled	2/2/99 - 2/2/99	Logged By	Jessica Larson	Checked By	CJT
Drilling Method	Hollow-Stem Auger	Drill Bit Size/Type	8-1/2" OD x 4-1/4" ID	Total Depth (feet)	50.6
Drill Rig Type	CME-75	Drilling Contractor	Doug Bedke	Sampler Type(s)	Col. Split (2.5" OD)
Groundwater Level and Date Measured	44.0 ft. 2/2/99	Hammer Data	140 lbs / 30 inches	Approximate Surface Elevation	6379.3 feet 1944.4 meters
Comments	Borehole Backfill backfill with cuttings				



KEY TO BORING LOG

GRAPHIC LOG SYMBOLS

SAMPLE TYPE AND OTHER SYMBOLS

--	--	--	--	--

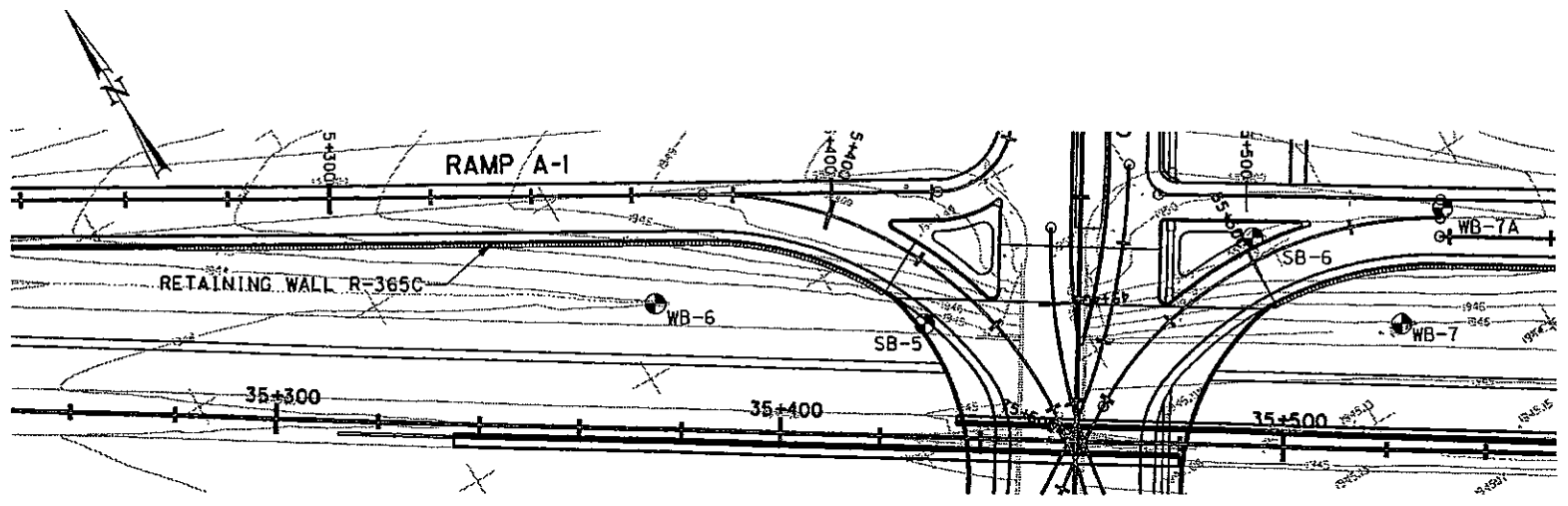
Water level measured in boring at specified date and time

NOTES

- Soil classifications are based on the Unified Soil Classification System (USCS).
- Descriptions and stratum lines are interpretive; transitions may be gradational.
- Field logs may have been modified to reflect lab test results.
- Classifications and descriptions provided apply only at the specific location of the boring and at the time the boring was advanced; they are not warranted to be representative of subsurface conditions at other locations or times.
- Refer to the Geotechnical Report containing these boring logs for addition information and explanation.

ABBREVIATIONS / DEFINITIONS

- LL = Liquid Limit (in percent)
 - PI = Plasticity Index
 - NP = Non-plastic
 - w = Natural Moisture Content (in percent)
 - DD = Dry Density (in pounds per cubic foot)
 - WSS = Water Soluble Sulfates (in parts per million)
 - Fines = Fine-grained portion of soil passing No. 200 Sieve (3-inch minus wash/gradation analysis result in percent)
 - Silt/Clay = See "Fines"
 - Sand = Rock particles passing No. 4 Sieve & retained on No. 200 Sieve (3-inch minus gradation analysis result in percent)
 - Gravel = Rock particles passing 3-inch Sieve & retained on No. 4 Sieve (3-inch minus gradation analysis test in percent)
 - Cobble = Rock particles retained on 3-inch Sieve, 12-inch maximum dimension
 - Boulder = Rock particles greater than 12-inch maximum dimension
 - ATD = At Time of Drilling
 - OD = Outside Diameter
- Blows per 6" is the number of blows required to advance sampler 6 inches, or the distance indicated (in inches); Standard penetration number, N, is the sum of the number of blows for the second and third 6-inch intervals (i.e., 6" to 18")
- Sieve sizes are USA Standard; Sieve openings are as follows: 3-inch = 75mm, No.4 = 4.75mm, No.200 = 0.075mm



WALL GEOTECH LOGS
WB-6 & SB-5

UTAH DEPARTMENT OF TRANSPORTATION
URS Greiner Woodward Clyde

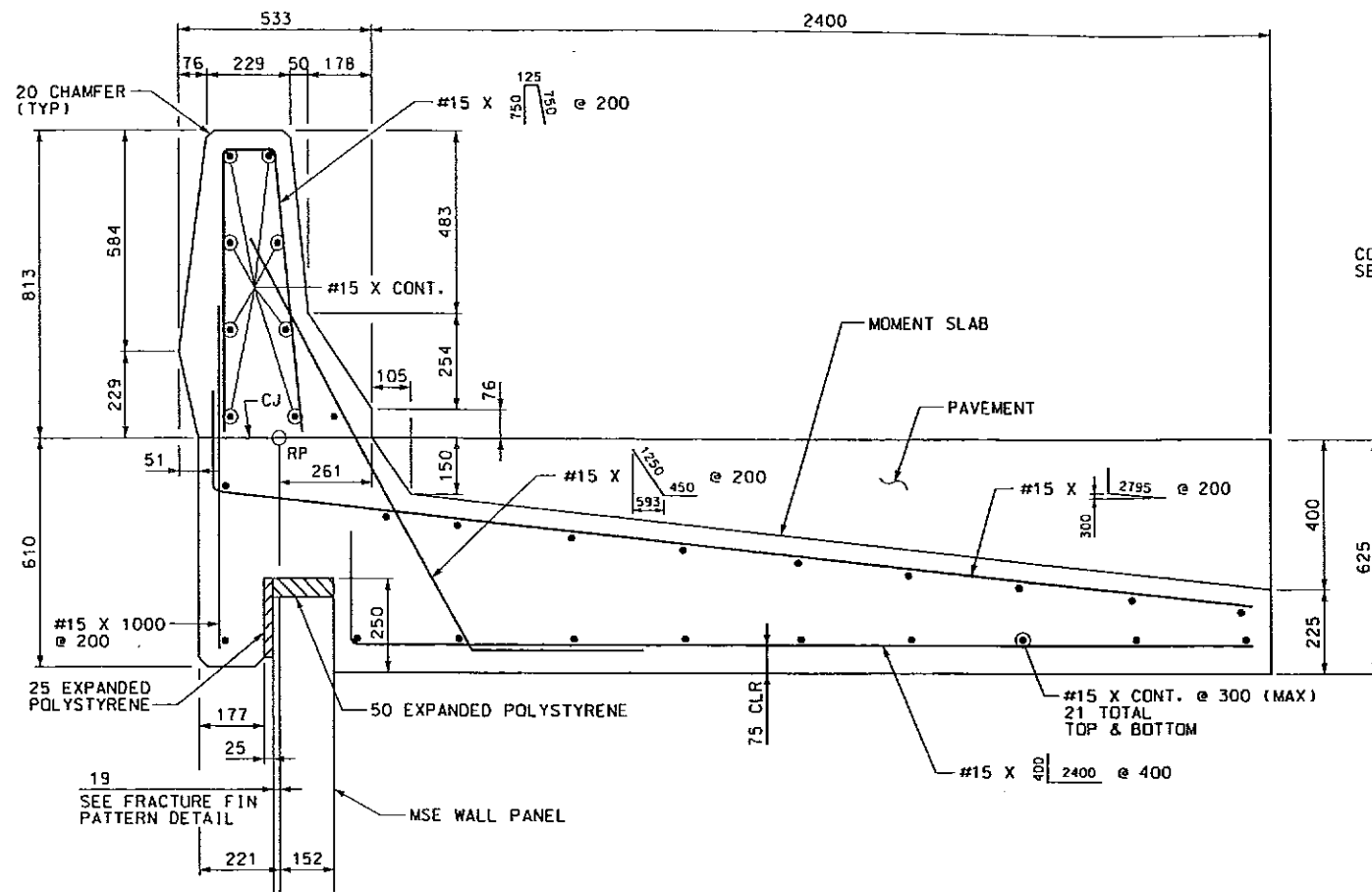
KIMBALL JUNCTION INTERCHANGE
RETAINING WALL R-365C
SOIL DATA SHEET
PROJECT NUMBER: *IM-80-4(180)144

APPROVED: [Signature] DATE: 2/16/99
DESIGN: [Signature] DATE: 11/98
CHECK: [Signature] DATE: 11/98
DRAWN: [Signature] DATE: 11/98
CHECKED: [Signature] DATE: 11/98

REVISIONS

NO.	DATE	DESIGN	REVISION

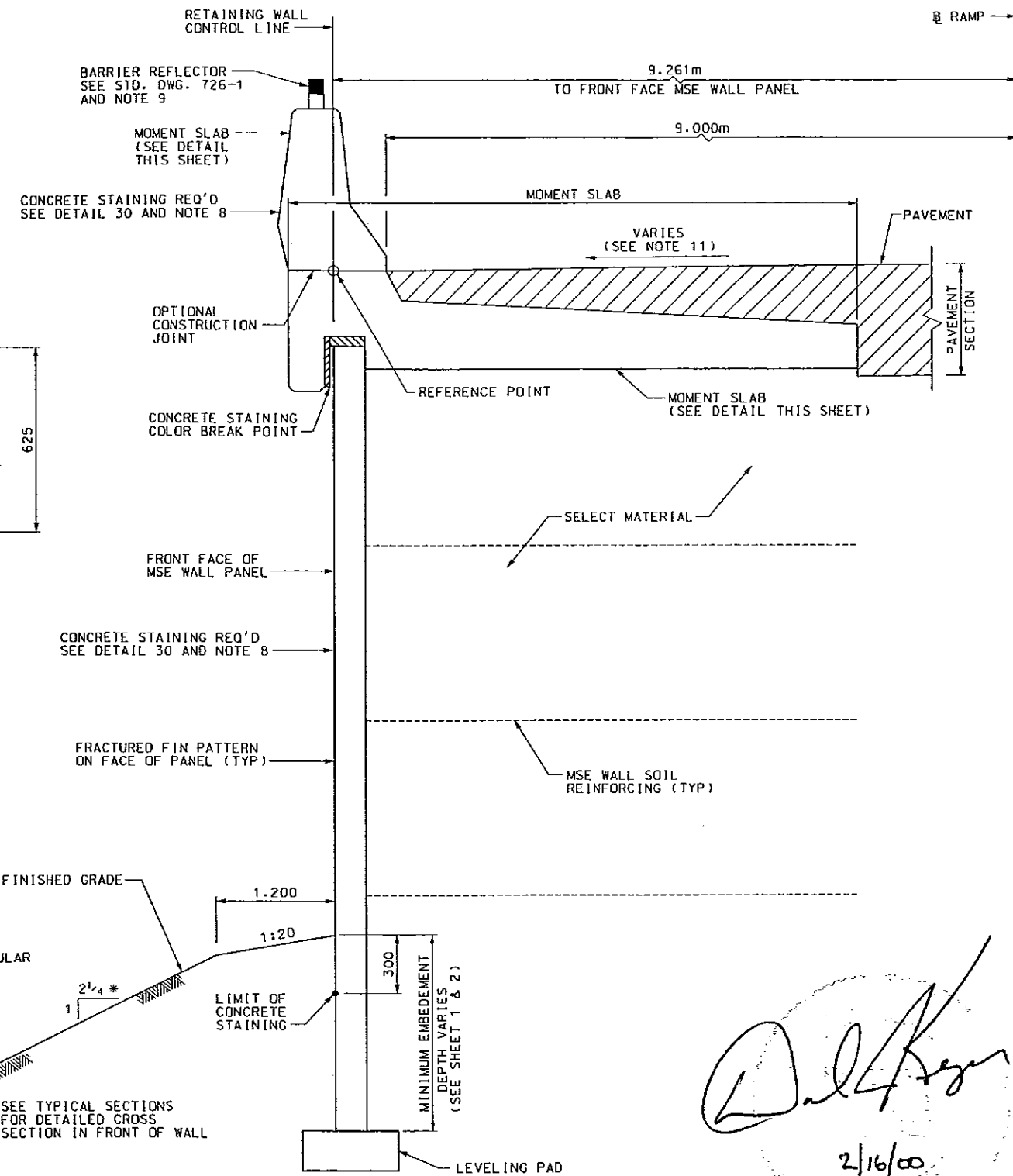
SUMMIT COUNTY
R-365C
DWG. NO.
SHEET NO. 3 OF 7



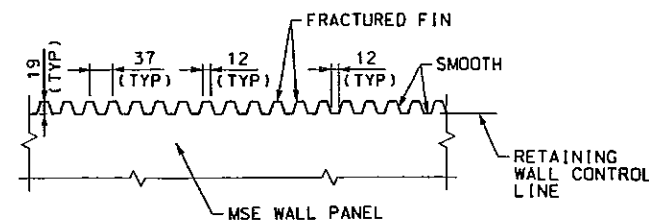
TYPICAL MOMENT SLAB SECTION

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
2. ALTERNATE ALL REINFORCING STEEL SPLICES. SPLICES IN #15 BARS SHALL BE 600 mm.
3. SEE WALL SITUATION & LAYOUT SHEET 1 & 2 FOR LOCATION OF RETAINING WALL CONTROL POINT AND ELEVATION OF REFERENCE POINT.
4. MINIMUM COVER TO REINFORCING STEEL SHALL BE 50 mm EXCEPT WHERE NOTED OTHERWISE.
5. SEE WALL SITUATION & LAYOUT FOR LIMITS OF CONSTRUCTION.
6. ALL CAST IN PLACE CONCRETE SHALL BE CLASS AA(AE) EXCEPT WHERE NOTED OTHERWISE.
7. ALL REINFORCING STEEL SHALL BE COATED DEFORMED BILLET STEEL BARS CONFORMING TO AASHTO M 284, M 111, AND M 31M GRADE 400.
8. CONCRETE STAINING IS REQUIRED ON EXPOSED SURFACES OF WALL AND MOMENT SLAB AND 300 mm BELOW FINISHED GRADE. THE STAINING REQUIREMENTS ARE AS FOLLOWS:
 MOMENT SLAB: CONCRETE STAINING REQ'D (COLOR NO. 30450)
 CONCRETE STAINING ACCENT REQ'D (COLOR NO. 30233)
 WALL FACE: CONCRETE STAINING REQ'D (COLOR NO. 30227)
9. BARRIER REFLECTORS SHALL BE MOUNTED ON THE ENTIRE BARRIER LENGTH. REFLECTOR SPACING SHALL BE 15 m. REFLECTOR COLOR SHALL BE THE SAME AS THE PAINT STRIPE. SEE STD. DWG. 726-2 FOR ADDITIONAL INFORMATION.
10. THE MOMENT SLAB SHALL NOT BE CONSTRUCTED UNTIL THE RETAINING WALL PRIMARY SETTLEMENT HAS BEEN COMPLETED.
11. SEE ROADWAY PROFILE SHEETS 19 AND 20 FOR CROSS SLOPE INFORMATION.



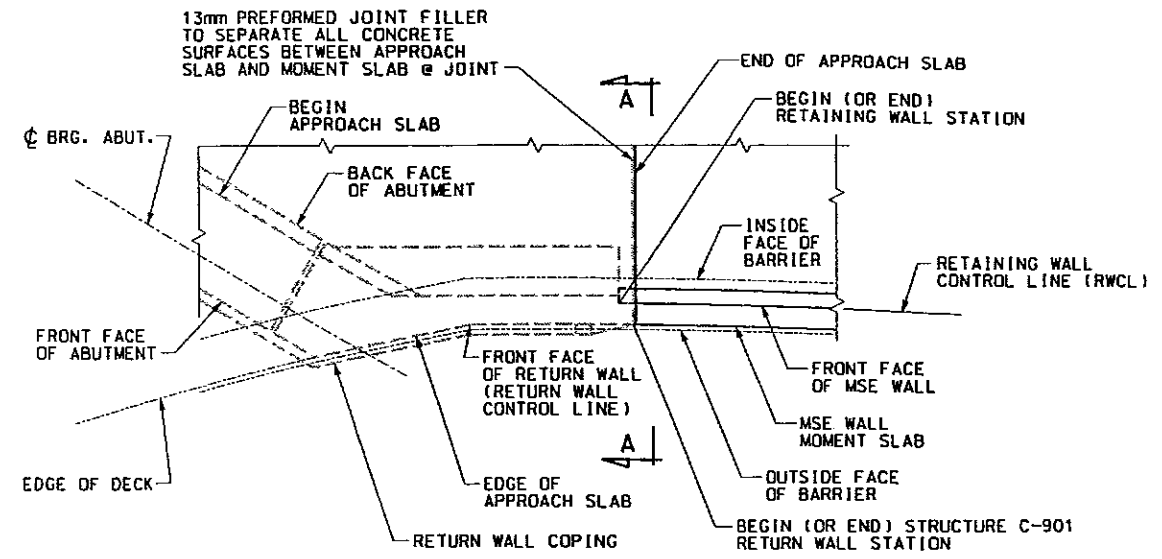
TYPICAL WALL SECTION



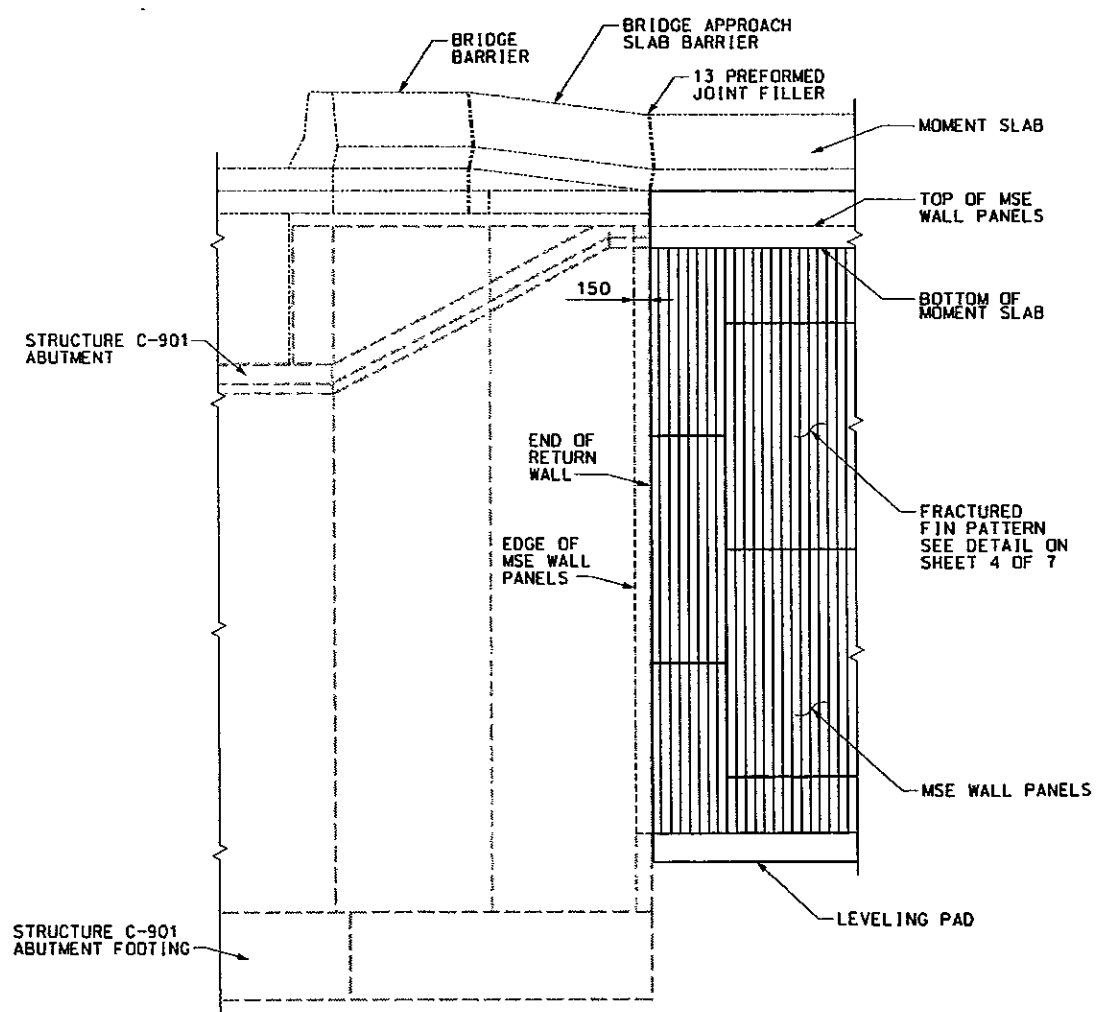
FRACTURED FIN PATTERN DETAIL

UTAH DEPARTMENT OF TRANSPORTATION		DESIGN		CHECK		REVIEW	
URS Greiner Woodward Clyde		DJK		CER		DJK	
KIMBALL JUNCTION INTERCHANGE		DATE: 2/16/00		DATE: 10/29/99		DATE: 01/20/00	
RETAINING WALL R-365C		PROJECT DESIGN ENGINEER		DRAWN		CHECK	
DETAILS		DATE: 2/16/00		DATE: 10/29/99		DATE: 01/20/00	
PROJECT NUMBER: *IM-4(180)144		APPROVED: [Signature]		QUANT.		BY	
SUMMIT COUNTY		DATE: 2/16/00		DATE: 10/29/99		DATE: 01/20/00	
R-365C		DATE: 2/16/00		DATE: 10/29/99		DATE: 01/20/00	
DWC. NO.		DATE: 2/16/00		DATE: 10/29/99		DATE: 01/20/00	
SHEET NO. 4 OF 7		DATE: 2/16/00		DATE: 10/29/99		DATE: 01/20/00	

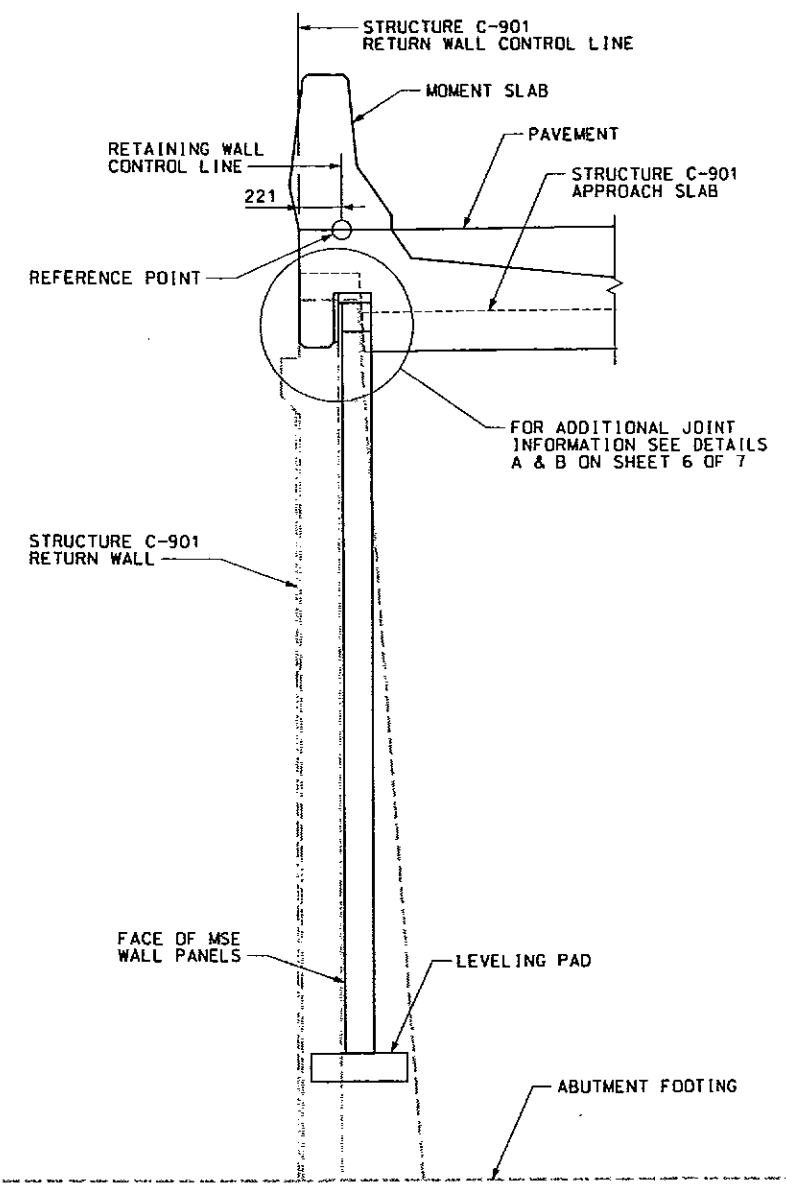
19-00-38
15 FEB 00
J:\1910_00\sheet_1_files\wallis\1910_wall_det_05.dgn



PLAN

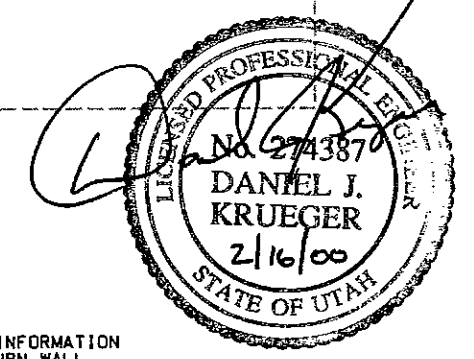


ELEVATION



SECTION A-A

- NOTES:
1. SEE STRUCTURE C-901 PLANS FOR ADDITIONAL INFORMATION CONCERNING APPROACH SLAB AND ABUTMENT RETURN WALL.
 2. THE RETAINING WALL PANELS SHALL NOT BE PLACED UNTIL AT LEAST 14 DAYS AFTER STRUCTURE C-901 ABUTMENT RETURN WALL POUR.
 3. THE STRUCTURE C-901 APPROACH SLAB SHALL NOT BE PLACED UNTIL THE RETAINING WALL PRIMARY SETTLEMENT HAS BEEN COMPLETED.
 4. THE MOMENT SLAB SHALL NOT BE CONSTRUCTED UNTIL AT LEAST 7 DAYS AFTER THE APPROACH SLAB POUR.

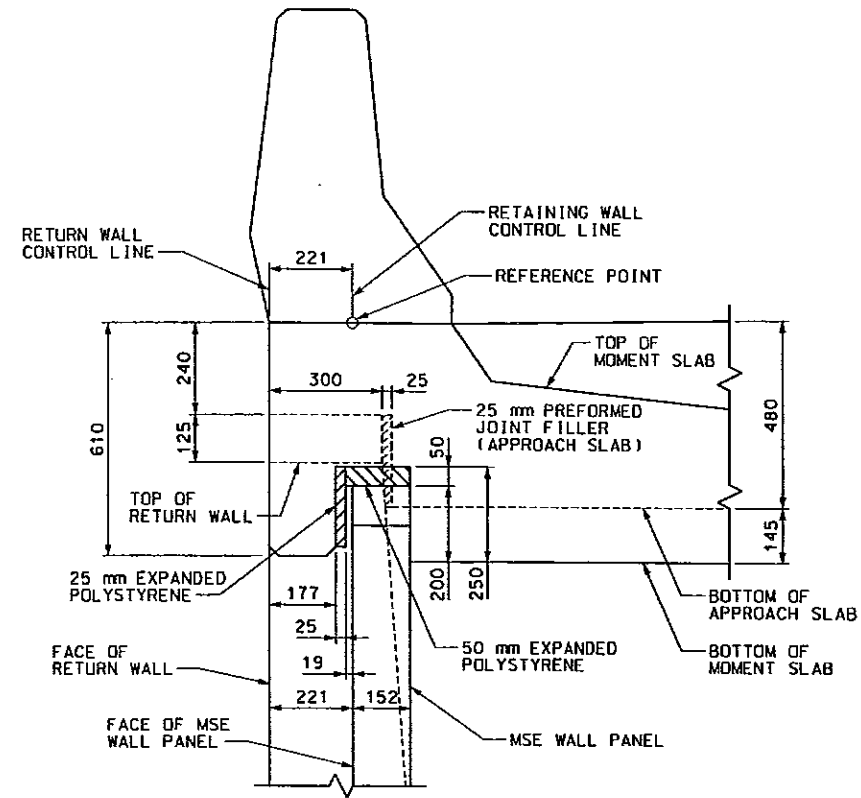


RETAINING WALL / STRUCTURE C-901 JOINT DETAILS

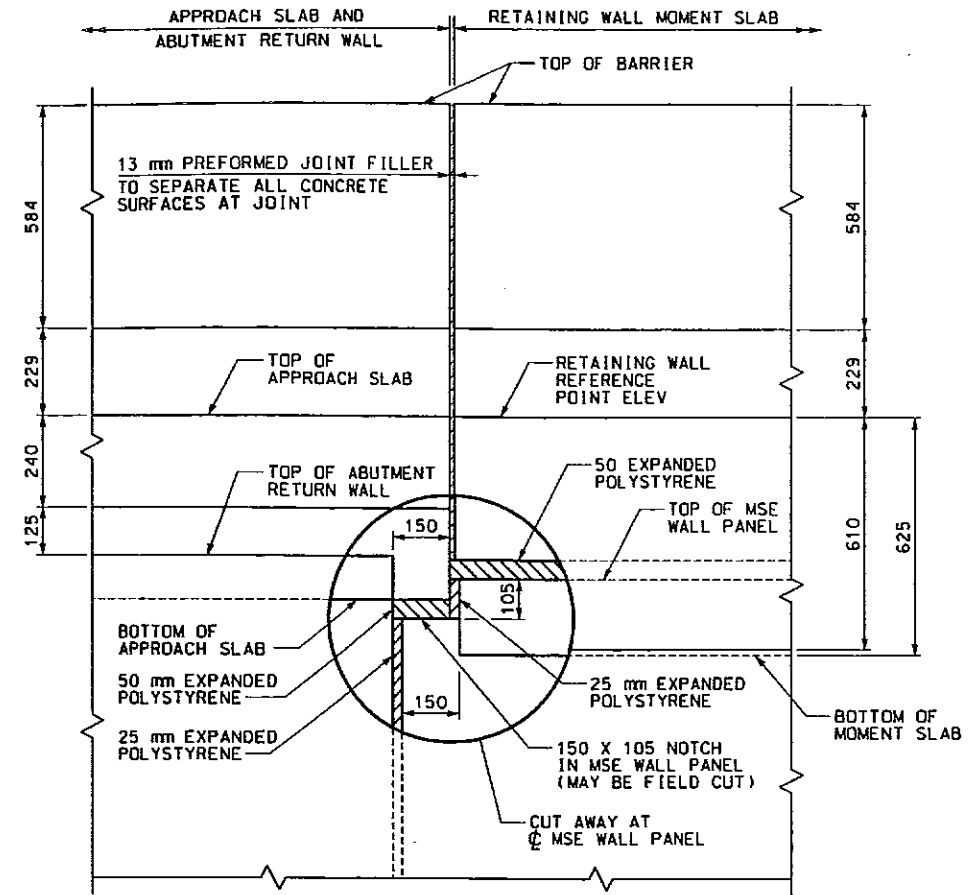
19:00:42
15 FEB 100
F:\1910_00\sheet_1\sheet_1.dwg

UTAH DEPARTMENT OF TRANSPORTATION		DESIGN		CHECK		REVIEW	
URS Greiner Woodward Clyde		DJK	DJK	DJK	DJK	DJK	DJK
KIMBALL JUNCTION INTERCHANGE		DATE	DATE	DATE	DATE	DATE	DATE
RETAINING WALL R-365C		2/10	2/10	2/10	2/10	2/10	2/10
DETAILS		PROJECT DESIGN ENGINEER	PROJECT DESIGN ENGINEER	PROJECT DESIGN ENGINEER	PROJECT DESIGN ENGINEER	PROJECT DESIGN ENGINEER	PROJECT DESIGN ENGINEER
PROJECT NUMBER		DATE	DATE	DATE	DATE	DATE	DATE
*IM-80-4(80)144		2/16/00	2/16/00	2/16/00	2/16/00	2/16/00	2/16/00
SUMMIT COUNTY		APPROVED		APPROVED		APPROVED	
R-365C		DATE		DATE		DATE	
DWG. NO.		DATE		DATE		DATE	
SHEET NO. 5 OF 7		DATE		DATE		DATE	

19:00:46
 15 FEB 00
 J:\1910_00\sheet_files\wall\1910_wall_det_15.dgn

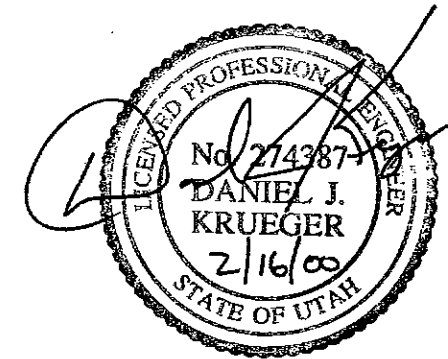


DETAIL A
 RETAINING WALL/STRUCTURE C-901 JOINT SECTION



DETAIL B
 RETAINING WALL/STRUCTURE C-901 JOINT ELEVATION LOOKING AT FACE OF WALL

NOTES:
 1. SEE STRUCTURE C-901 PLANS AND SHEET 5 OF 7 FOR ADDITIONAL INFORMATION.



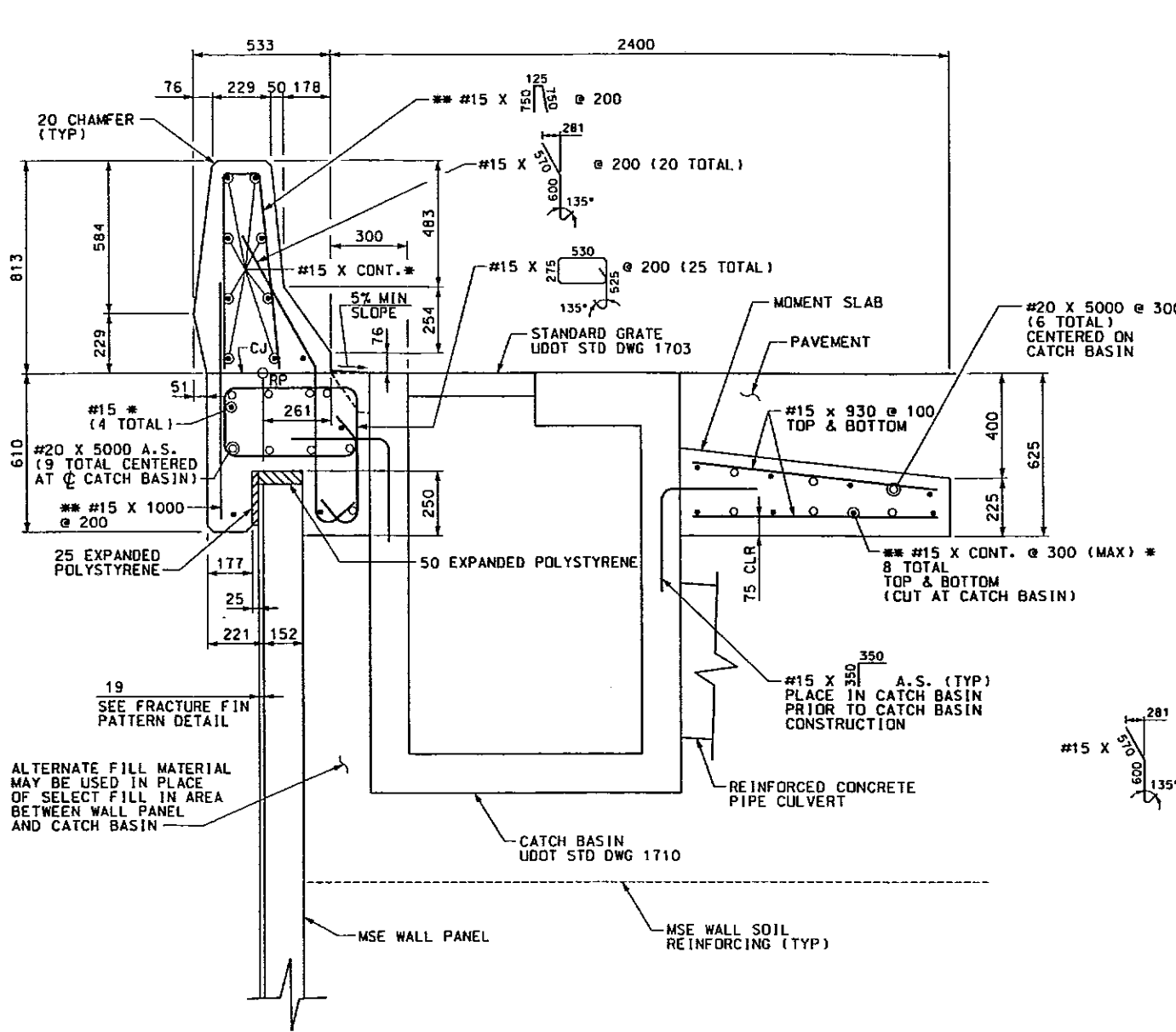
NO.	DATE	DESIGN REV. BY	MAPS CORRECTED BY	REQUEST BY	REMARKS

UTAH DEPARTMENT OF TRANSPORTATION
URS Greiner Woodward Clyde

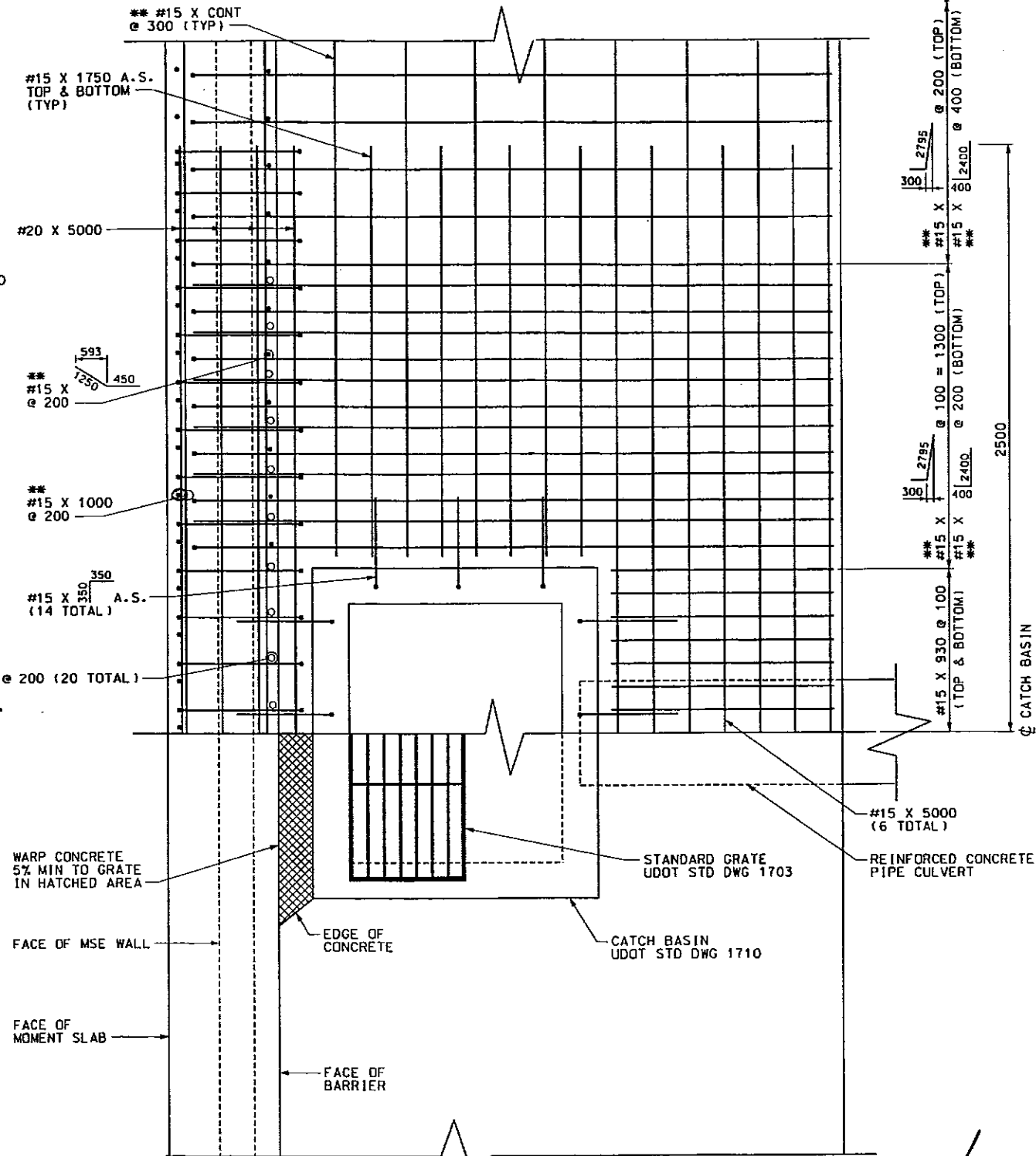
DESIGN	CHECK	DATE	REVIEW	DATE
DJK	DJK	01/00	CER	01/00
DJK	CER	01/00	DJK	01/00

KIMBALL JUNCTION INTERCHANGE	RETAINING WALL R-365C	DETAILS	PROJECT NUMBER	IM-4(80)144
------------------------------	-----------------------	---------	----------------	-------------

SUMMIT COUNTY
 R-365C
 DWG. NO.
 SHEET NO. 6 OF 7



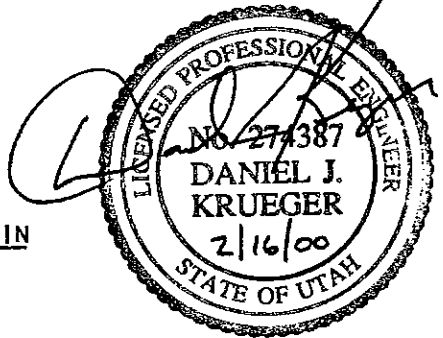
MOMENT SLAB SECTION AT CATCH BASIN



MOMENT SLAB PLAN AT CATCH BASIN

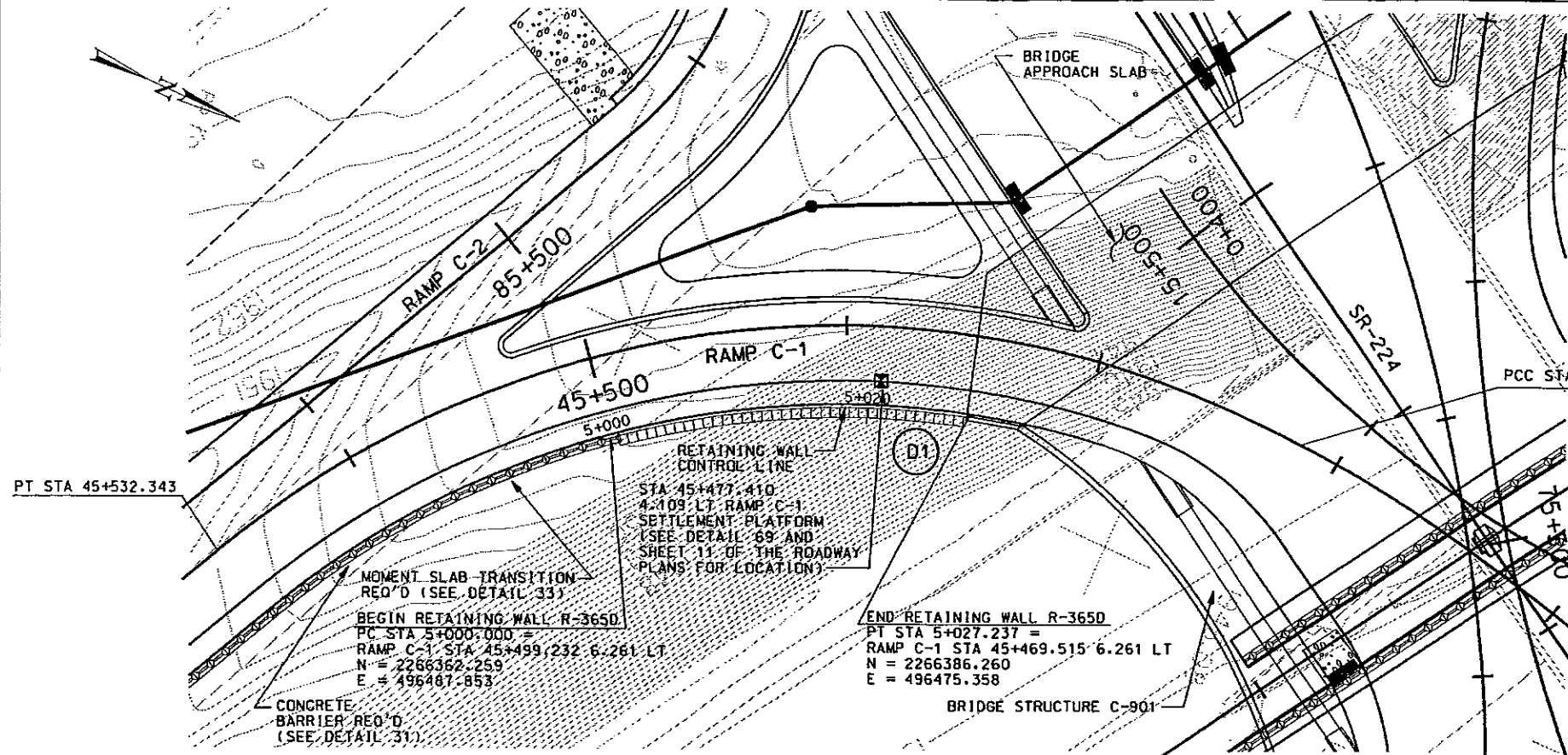
NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
2. SEE WALL SITUATION & LAYOUT SHEET 1 AND 2 FOR LOCATION OF RETAINING WALL CONTROL POINT AND ELEVATION OF REFERENCE POINT.
3. ** SEE "TYPICAL MOMENT SLAB SECTION" DETAIL ON SHEET 4 ON 7 FOR ADDITIONAL INFORMATION CONCERNING PLACEMENT OF THESE BARS.
4. MINIMUM COVER TO REINFORCING STEEL SHALL BE 50 mm EXCEPT WHERE NOTED OTHERWISE.
5. SEE WALL SITUATION & LAYOUT FOR LIMITS OF CONSTRUCTION.
6. THE CATCH BASIN AND PIPE CULVERT SHALL BE CONSTRUCTED WITH THE MSE WALL REINFORCING AND THE SELECT FILL.
7. THE MOMENT SLAB SHALL NOT BE CONSTRUCTED UNTIL THE RETAINING WALL PRIMARY SETTLEMENT HAS BEEN COMPLETED.
8. * CONTINUE TYPICAL MOMENT SLAB REINFORCING THRU CATCH BASIN AREA.
9. REINFORCING SYMMETRIC ABOUT ϕ CATCH BASIN.
10. SEE DRAINAGE AND UTILITY PLAN SHEET 40 FOR ADDITIONAL INFORMATION.

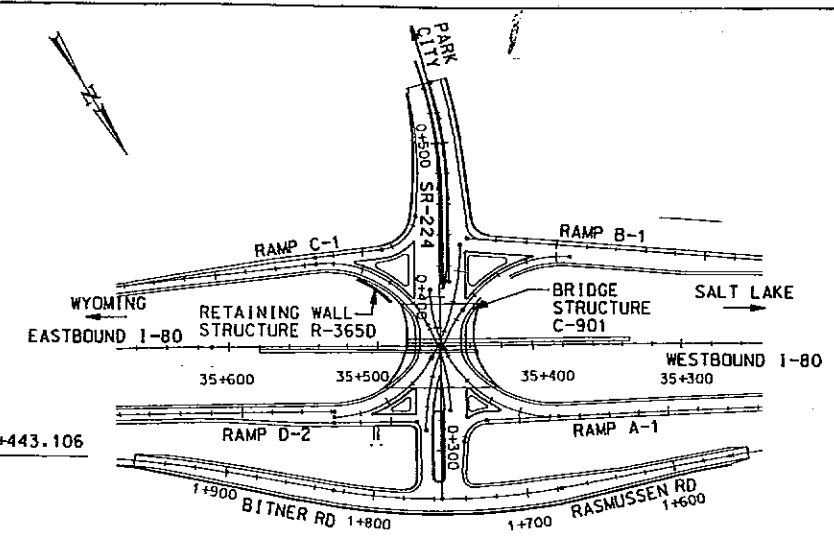


UTAH DEPARTMENT OF TRANSPORTATION		DESIGN _DJK_ 10/99		CHECK _CEL_ 01/00		REVIEW	
URS Greiner Woodward Clyde		DRAWN _CER_ 10/99		CHECK _DJK_ 01/00		DATE	
KIMBALL JUNCTION INTERCHANGE		PROJECT DESIGN ENGINEER		QUANT. N/A		BY	
RETAINING WALL R-365C		APPROVED <i>[Signature]</i>		DATE 2/16/00		ROADWAY DESIGN ENGINEER	
DETAILS		PERSONAL RECORD 2/16/00		DATE		PROJECT NUMBER	
SUMMIT COUNTY		R-365C		DWG. NO.		REVISIONS	
R-365C		DWG. NO.		DATE		REMARKS	
SHEET NO. 7 OF 7		PROJECT NUMBER *IM-80-4(80)144		ORIGINAL SUBMISSION FOR AUTHORIZATION		DATE	

10:00:50
 J:\1910_00\sheet_1_files\walls\1910_wall_drl_20.dgn



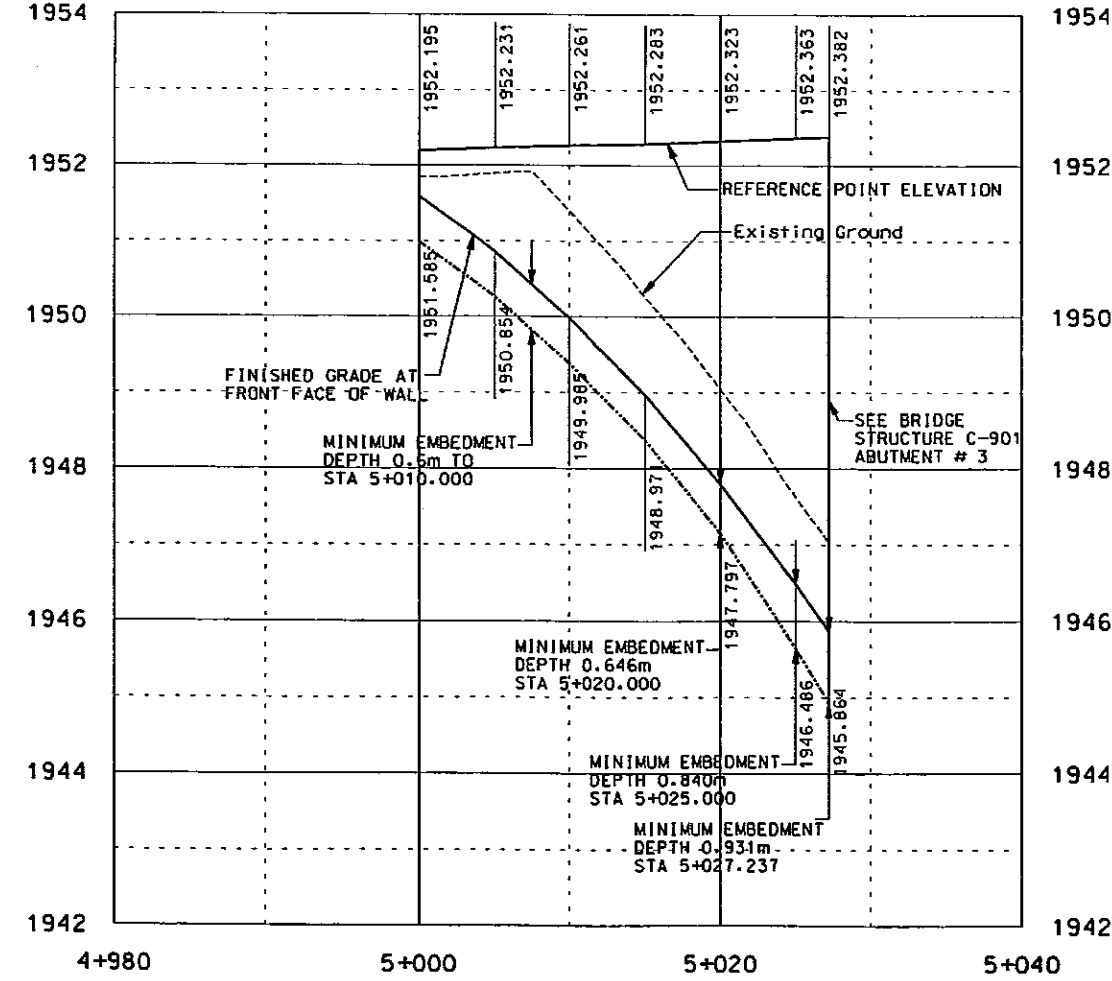
RETAINING WALL R-365D PLAN
STA 5+000.000 TO STA 5+027.237



LOCATION PLAN
GENERAL NOTES

1. ALL REINFORCING STEEL SHALL BE COATED DEFORMED BILLET-STEEL BARS CONFORMING TO AASHTO M 284, M 111 AND M 31M GRADE 400, RESPECTIVELY.
2. EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED 19 mm EXCEPT WHERE NOTED OTHERWISE.
3. ALL CONCRETE SHALL BE CLASS AA(AE) EXCEPT WHERE NOTED OTHERWISE.
4. ALL DIMENSIONS ARE METERS UNLESS NOTED OTHERWISE.
5. SEE SHEET 3 OF 5, 4 OF 5, AND 5 OF 5 FOR ADDITIONAL DETAILS.
6. SEE BRIDGE STRUCTURE C-901 SHEETS FOR ADDITIONAL DETAILS.

CURVE DATA (D1)
 $\Delta = 22^\circ 42' 08''$ R
 $R = 68.739$
 $T = 13.799$
 $L = 27.237$
 $PI = 5+013.799$
 $N = 2266373.005$
 $E = 496479.196$

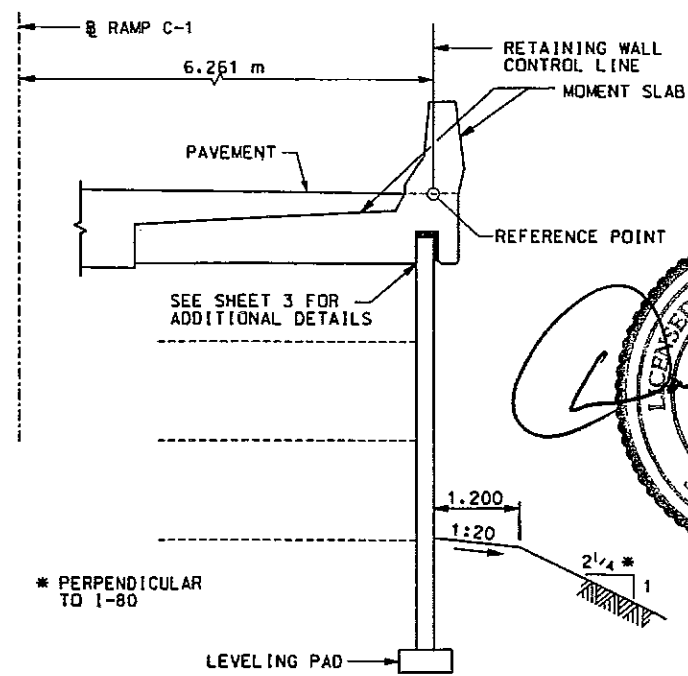


RETAINING WALL R-365D ELEVATION
STA 5+000.000 TO STA 5+027.087

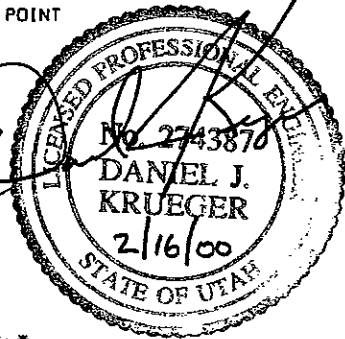
QUANTITIES		
ITEM	QUANTITY	UNIT
MSE RETAINING WALL (R-365D) (EST. QUANTITY 88 M2)	1	LUMP

DESIGN DATA

REINFORCING STEEL: $f_s = 160 \text{ MPa}$; $F_y = 400 \text{ MPa}$
 CAST-IN-PLACE CONCRETE: $f_c = 25 \text{ MPa}$



RETAINING WALL R-365D SECTION



NO.	DATE	REVISION	REMARKS

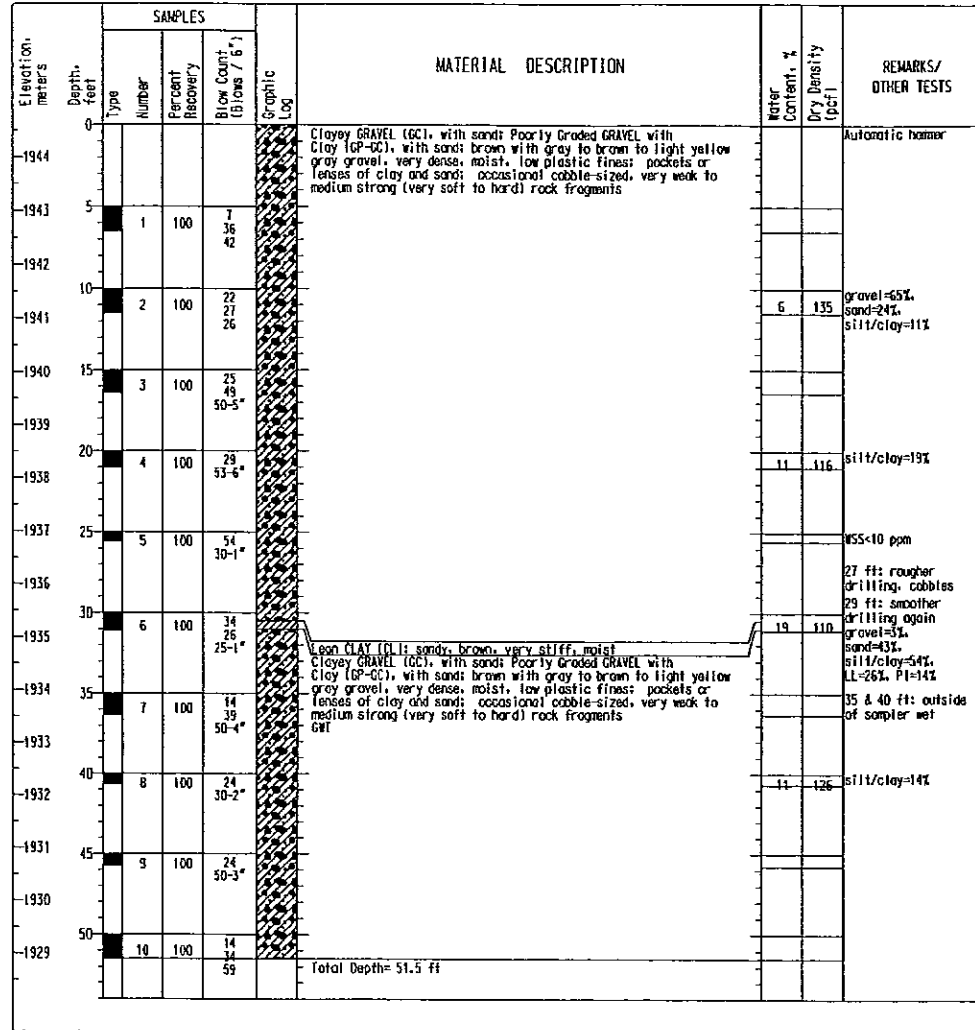
DESIGN	CUT	10/29	CHECK	DJK	01/00	REVIEW	
DRAWN	REV	11/29	CHECK	DJK	01/00	DATE	
QUANT.	M.E.	11/29	CHECK	DJK	01/00	BY	

UTAH DEPARTMENT OF TRANSPORTATION	PROJECT NUMBER	*IM-C-4(80)144
UNS Greiner Woodward Clyde	SUMMIT COUNTY	
KIMBALL JUNCTION INTERCHANGE	RETAINING WALL R-365D	
SITUATION & LAYOUT		
	DWG. NO.	
	SHEET NO.	1 OF 5

19:01:15 000 P:\1810_00\sheet_files\walls\1910_wdr05.dgn

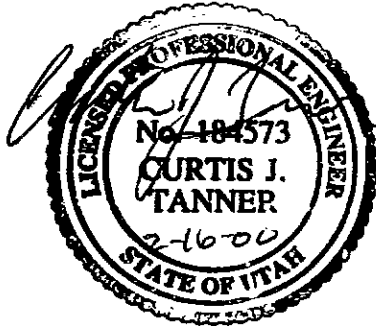
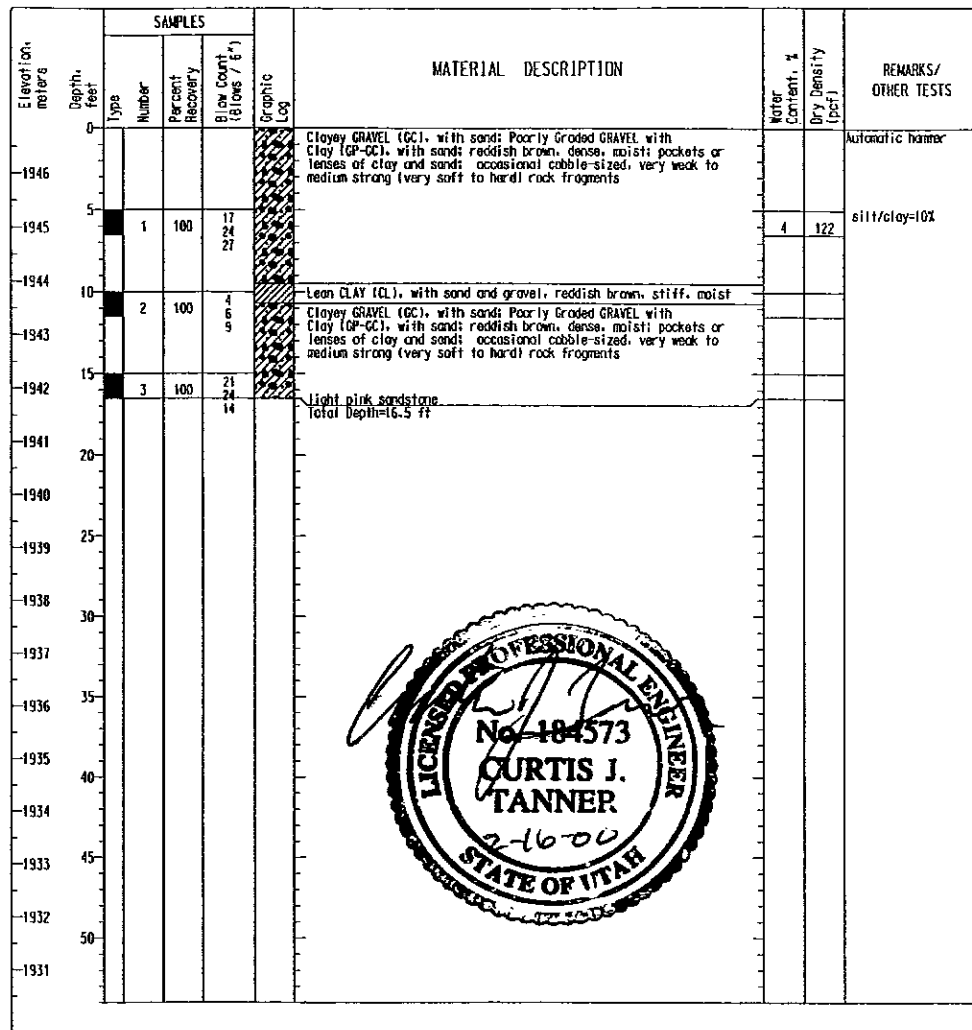
Log of Boring SB-2

Date(s) Drilled	1/22/99 - 1/22/99	Logged By	Jessica Larson	Checked By	CJT
Drilling Method	Hollow-Stem Auger	Drill Bit Size/Type	8-1/2" OD x 4-1/4" ID	Total Depth (feet)	51.5
Drill Rig Type	CME-75	Drilling Contractor	Doug Becke	Sampler Type(s)	Cal. Split (2.5" OD)
Groundwater Level and Date Measured	35.5 ft, 1/22/99	Hammer Data	140 lbs / 30 inches	Approximate Surface Elevation	6379.5 feet / 1944.6 meters
Comments	Borehole Backfill backfill with cuttings				



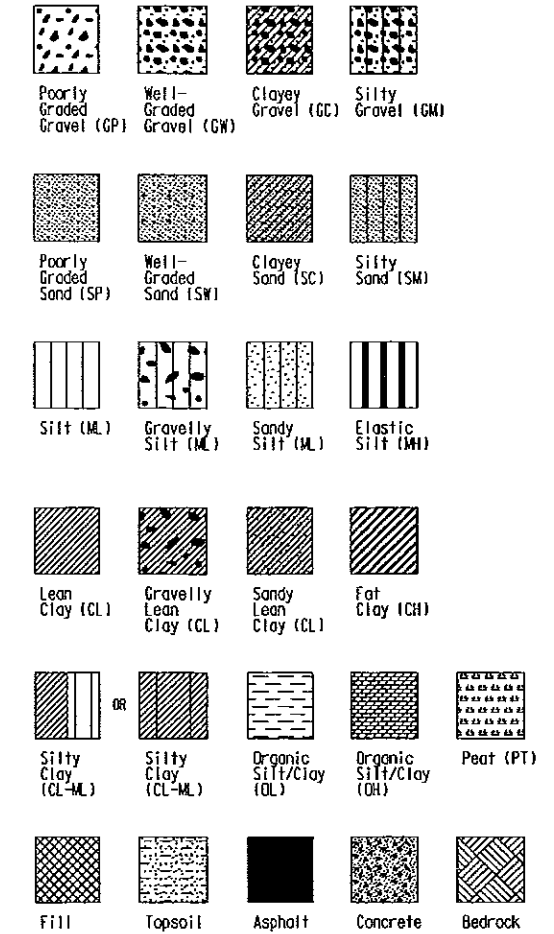
Log of Boring WB-4

Date(s) Drilled	2/2/99 - 2/2/99	Logged By	Jessica Larson	Checked By	CJT
Drilling Method	Hollow-Stem Auger	Drill Bit Size/Type	8-1/2" OD x 4-1/4" ID	Total Depth (feet)	16.5
Drill Rig Type	CME-75	Drilling Contractor	Doug Becke	Sampler Type(s)	Cal. Split (2.5" OD)
Groundwater Level and Date Measured	Not Encountered	Hammer Data	140 lbs / 30 inches	Approximate Surface Elevation	6387.3 feet / 1946.8 meters
Comments	Borehole Backfill backfill with cuttings				

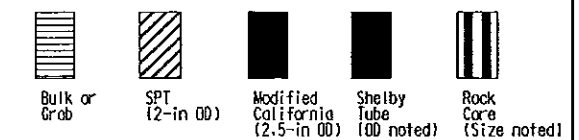


KEY TO BORING LOG

GRAPHIC LOG SYMBOLS



SAMPLE TYPE AND OTHER SYMBOLS



Water level measured in boring at specified date and time

NOTES

- Soil classifications are based on the Unified Soil Classification System (USCS).
- Descriptions and stratum lines are interpretive; Transitions may be gradational.
- Field logs may have been modified to reflect lab test results.
- Classifications and descriptions provided apply only at the specific location of the boring and at the time the boring was advanced; they are not warranted to be representative of subsurface conditions at other locations or times.
- Refer to the Geotechnical Report containing these boring logs for additional information and explanation.

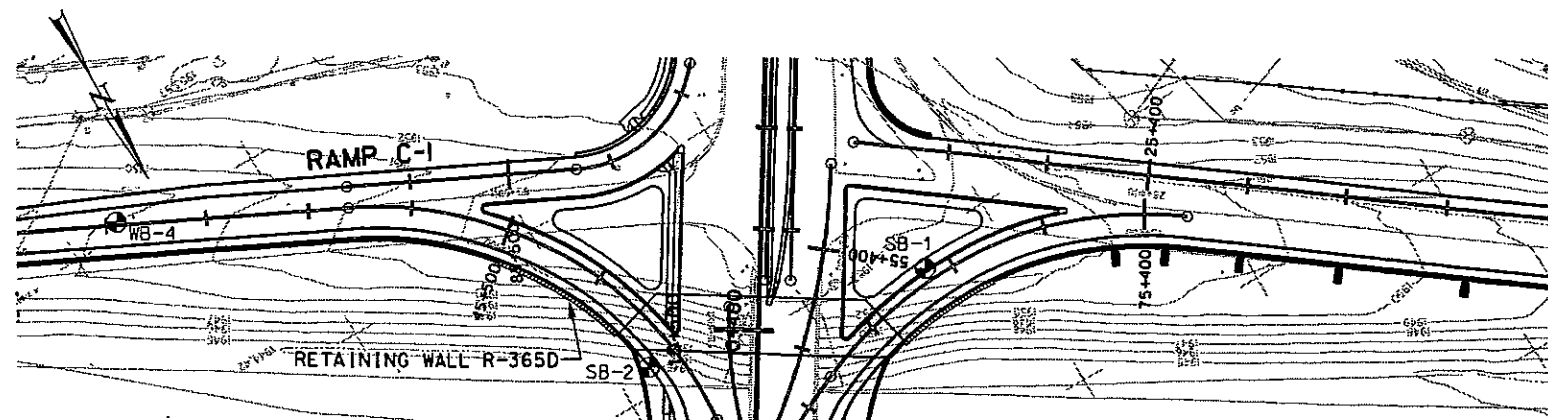
ABBREVIATIONS / DEFINITIONS

- LL = Liquid Limit (in percent)
- PI = Plasticity Index
- NP = Non-plastic
- w = Natural Moisture Content (in percent)
- DD = Dry Density (in pounds per cubic foot)
- WSS = Water Soluble Sulfates (in parts per million)
- Fines = Fine-grained portion of soil passing No. 200 Sieve (3-inch minus wash/gradation analysis result in percent)
- Silt/Clay = See "Fines"
- Sand = Rock particles passing No. 4 Sieve & retained on No. 200 Sieve (3-inch minus gradation analysis result in percent)
- Gravel = Rock particles passing 3-inch Sieve & retained on No. 4 Sieve (3-inch minus gradation analysis result in percent)
- Cobble = Rock particles retained on 3-inch Sieve, 12-inch maximum dimension
- Boulder = Rock particles greater than 12-inch maximum dimension
- ATD = At Time of Drilling
- OD = Outside Diameter

Blows per 6" is the number of blows required to advance sampler 6 inches, or the distance indicated (in inches); Standard penetration number, N, is the sum of the number of blows for the second and third 6-inch intervals (i.e., 6" to 18")

Sieve sizes are USA Standard; Sieve openings are as follows: 3-inch = 75mm, No.4 = 4.75mm, No.200 = 0.075mm

12/32/45
30 JAN 100
J:\1910_DO\sheet_L_Ries\1910_geo_05.dgn



WALL GEOTECH LOGS
SB-2 & WB-4

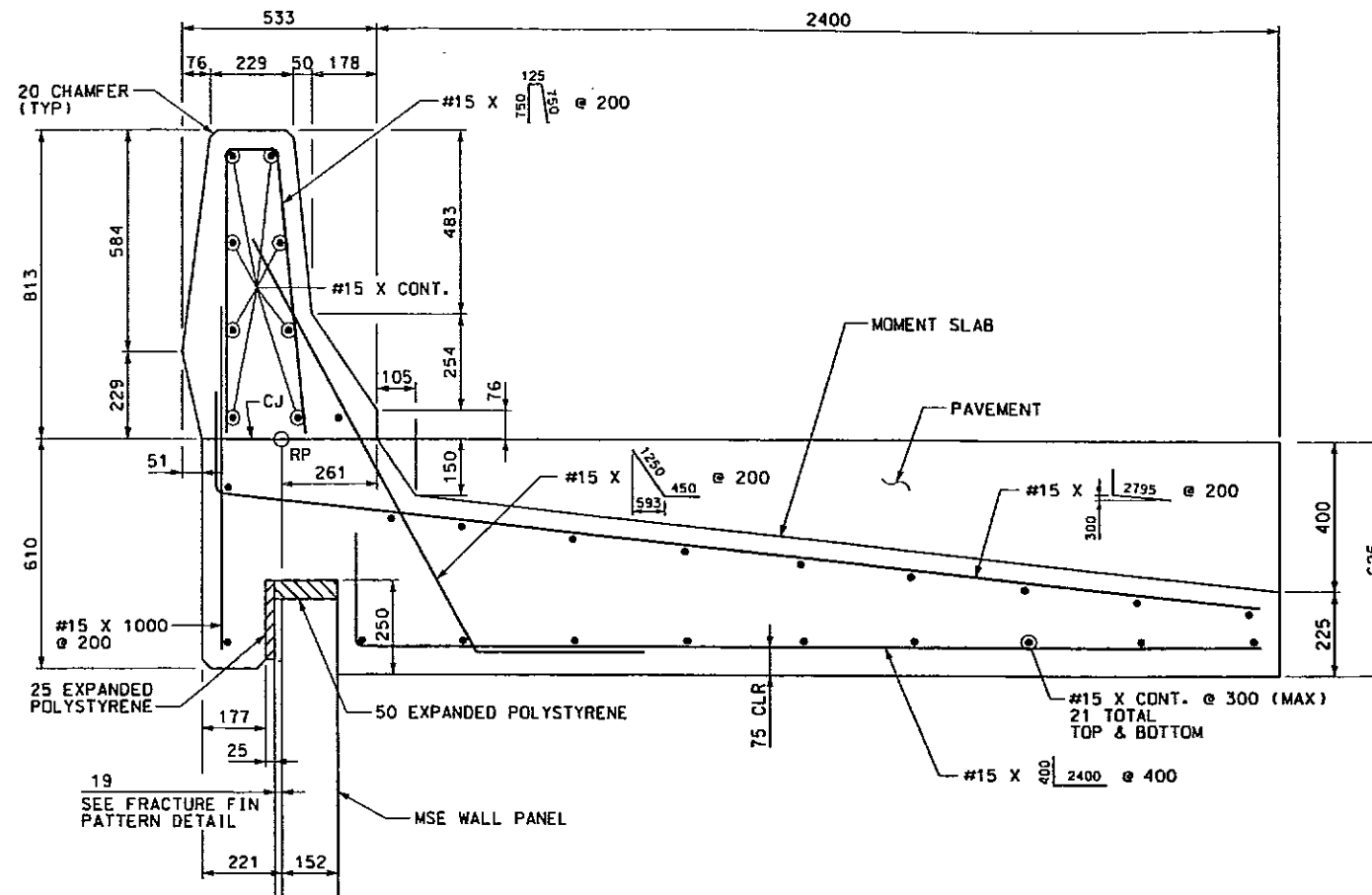
UTAH DEPARTMENT OF TRANSPORTATION
URS Greiner Woodward Clyde

KIMBALL JUNCTION INTERCHANGE
RETAINING WALL R-365D
SOIL DATA SHEET

SUMMIT COUNTY
R-365D
DWG. NO.
SHEET NO. 2 OF 5

DESIGN	DATE	NO.	DATE	REVISION	DATE
CHECK	DATE	CHECK	DATE	CHECK	DATE
APPROVED	DATE	APPROVED	DATE	APPROVED	DATE
DESIGN ENGINEER	DATE	PROJECT MANAGER	DATE	ROADWAY DESIGN ENGINEER	DATE

*IM-80-4(80)44

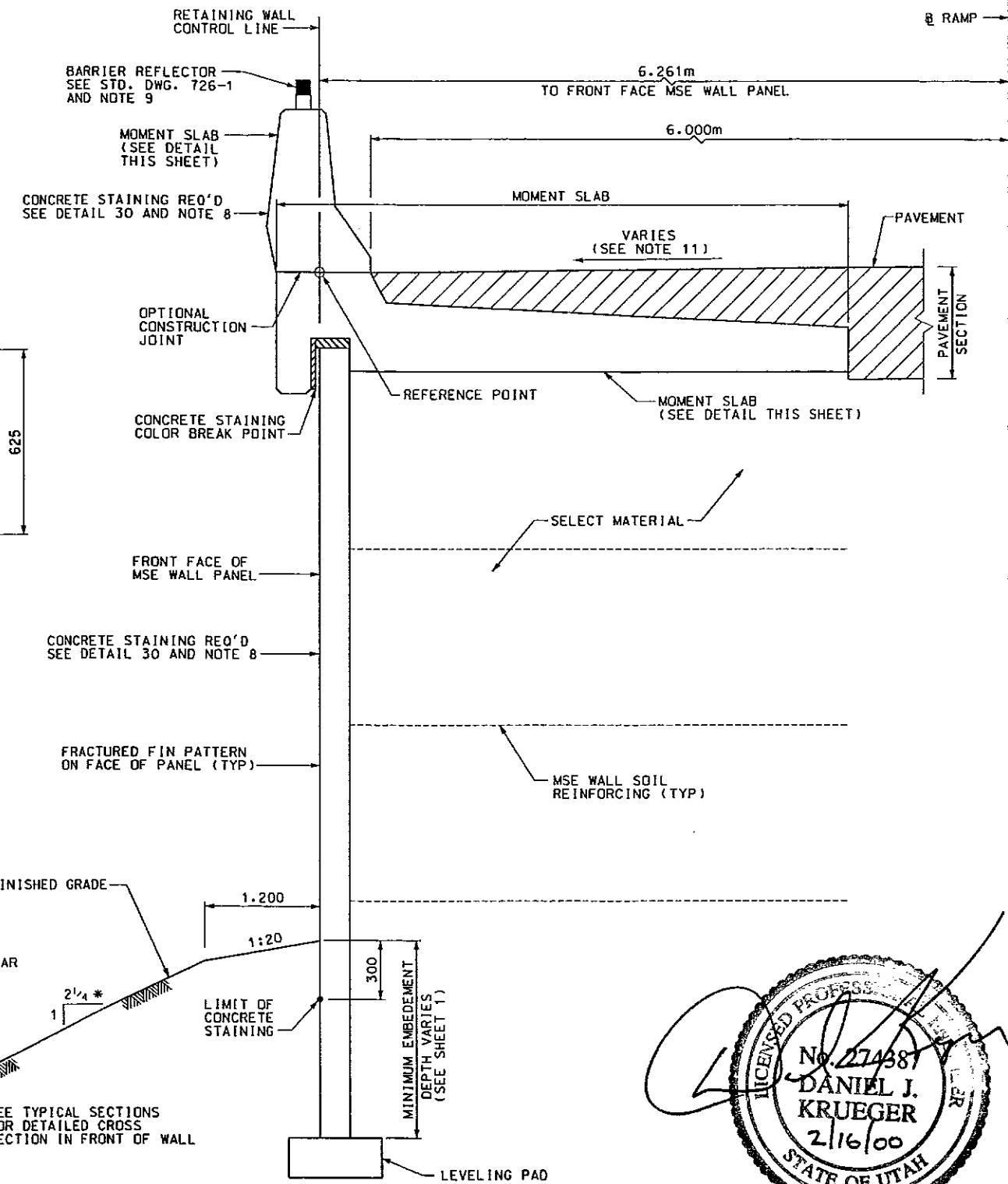


TYPICAL MOMENT SLAB SECTION

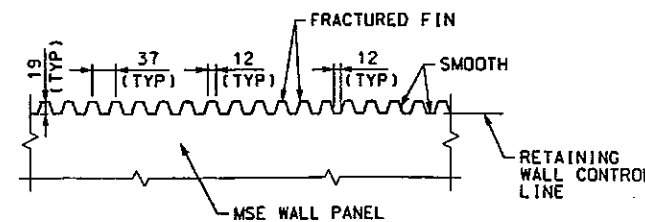
NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
2. ALTERNATE ALL REINFORCING STEEL SPLICES. SPLICES IN #15 BARS SHALL BE 600 mm.
3. SEE WALL SITUATION & LAYOUT SHEET 1 FOR LOCATION OF RETAINING WALL CONTROL POINT AND ELEVATION OF REFERENCE POINT.
4. MINIMUM COVER TO REINFORCING STEEL SHALL BE 50 mm EXCEPT WHERE NOTED OTHERWISE.
5. SEE WALL SITUATION & LAYOUT FOR LIMITS OF CONSTRUCTION.
6. ALL CAST IN PLACE CONCRETE SHALL BE CLASS AA(AE) EXCEPT WHERE NOTED OTHERWISE.
7. ALL REINFORCING STEEL SHALL BE COATED DEFORMED BILLET STEEL BARS CONFORMING TO AASHTO M 284, M 111, AND M 31M GRADE 400.
8. CONCRETE STAINING IS REQUIRED ON EXPOSED SURFACES OF WALL AND MOMENT SLAB AND 300 mm BELOW FINISHED GRADE. THE STAINING REQUIREMENTS ARE AS FOLLOWS:
 MOMENT SLAB: CONCRETE STAINING REQ'D (COLOR NO. 30450)
 CONCRETE STAINING ACCENT REQ'D (COLOR NO. 30233)
 WALL FACE: CONCRETE STAINING REQ'D (COLOR NO. 30227)
9. BARRIER REFLECTORS SHALL BE MOUNTED ON THE ENTIRE BARRIER LENGTH. REFLECTOR SPACING SHALL BE 15 m. REFLECTOR COLOR SHALL BE THE SAME AS THE PAINT STRIPE. SEE STD. DWG. 726-2 FOR ADDITIONAL INFORMATION.
10. THE MOMENT SLAB SHALL NOT BE CONSTRUCTED UNTIL THE RETAINING WALL PRIMARY SETTLEMENT HAS BEEN COMPLETED.
11. SEE ROADWAY PROFILE SHEET 25 FOR CROSS SLOPE INFORMATION.

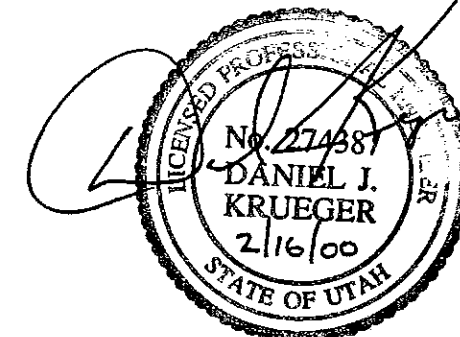
19/01/22 10:00 AM C:\Users\jg\OneDrive\Documents\1910_00\sheet_files\wall\1910_00.dwg



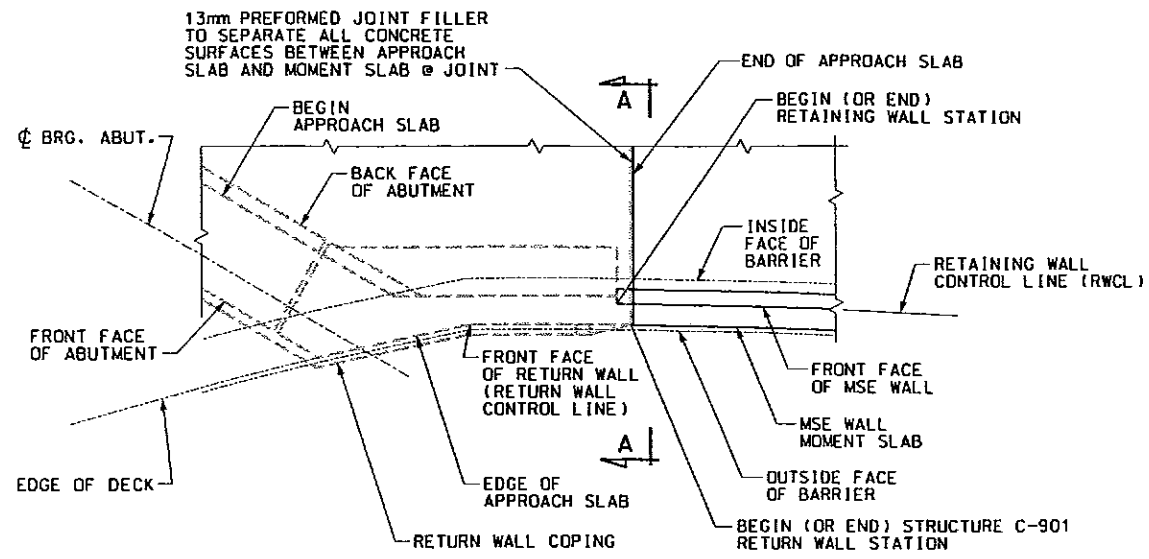
TYPICAL WALL SECTION



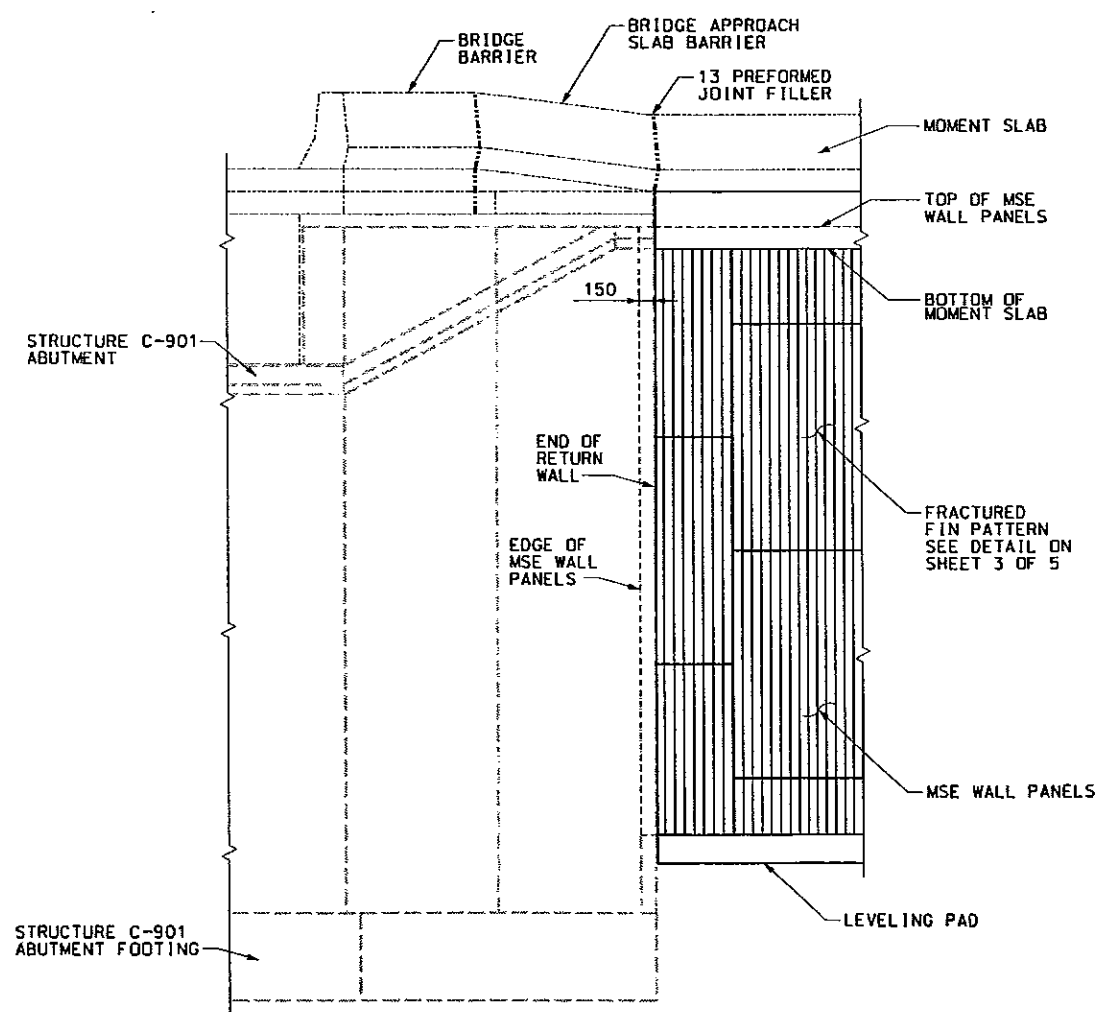
FRACTURED FIN PATTERN DETAIL



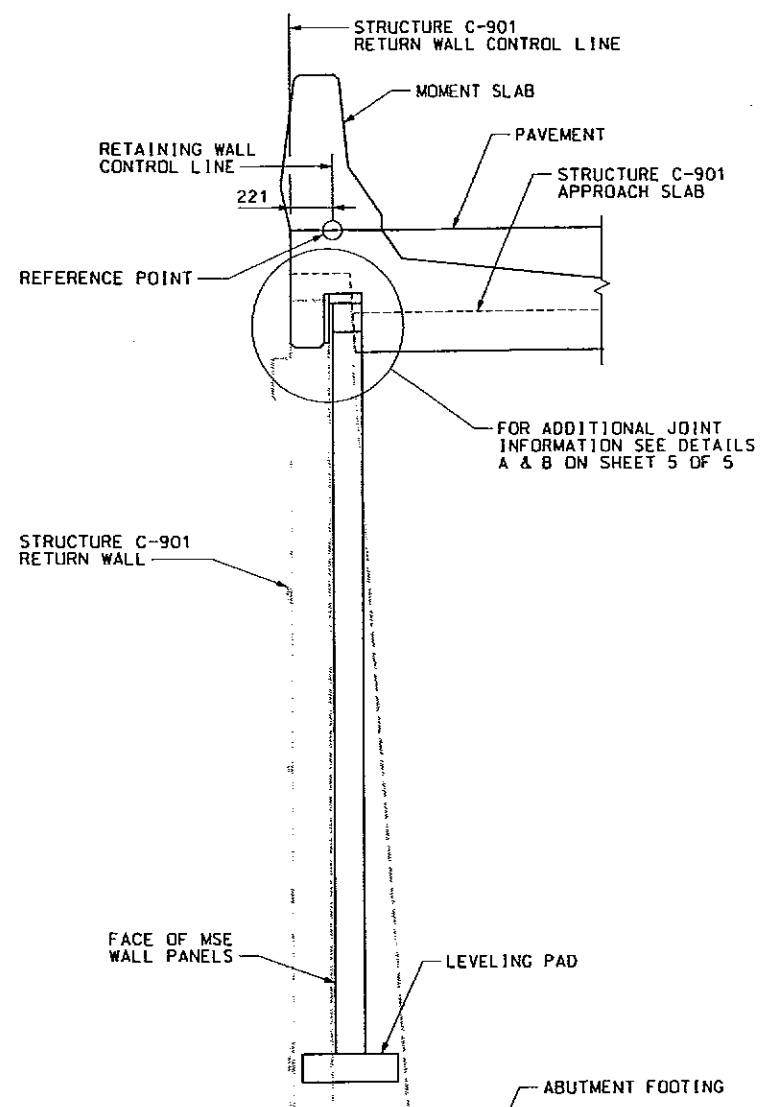
UTAH DEPARTMENT OF TRANSPORTATION		REVIEW		DATE	
URS Greiner Woodward Clyde		CHECK		DATE	
KIMBALL JUNCTION INTERCHANGE		DESIGN		DATE	
RETAINING WALL R-365D		DRAWN		DATE	
DETAILS		QUANT.		DATE	
PROJECT NUMBER		CHECK		DATE	
#IM-4(80)144		BY		DATE	
SUMMIT COUNTY		REVISIONS		DATE	
R-365D		NO.		DATE	
DWG. NO.		REVISIONS		DATE	
SHEET NO. 3 OF 5		ORIGINAL SUBMISSION FOR AUTHORIZATION		DATE	



PLAN

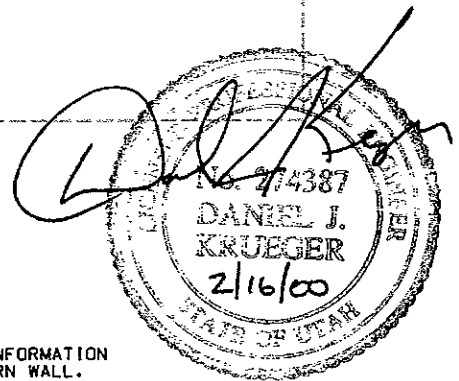


ELEVATION



SECTION A-A

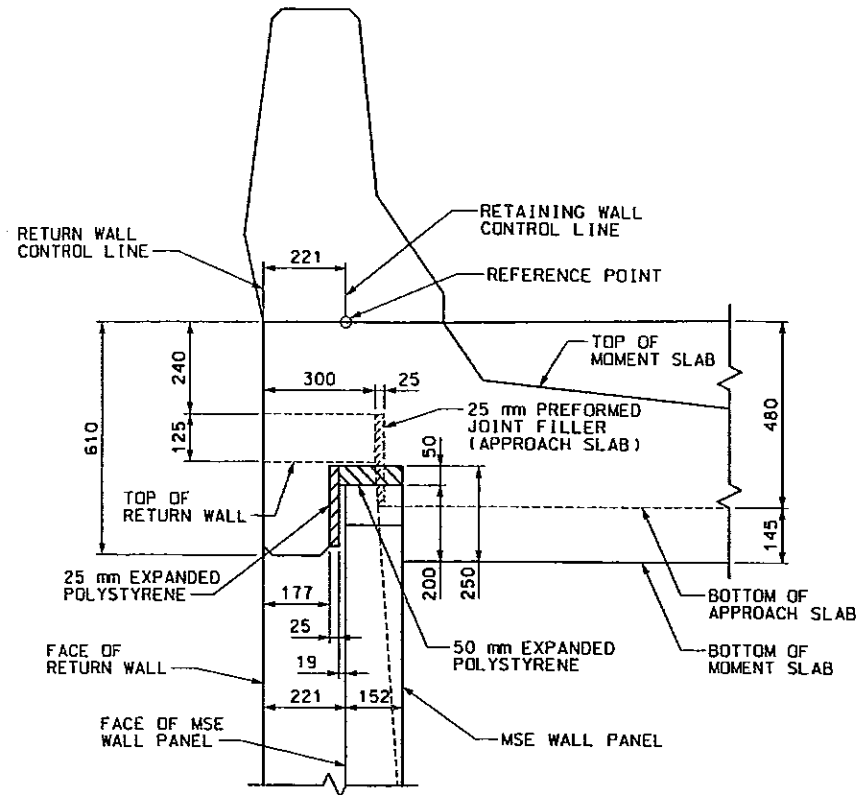
- NOTES:
1. SEE STRUCTURE C-901 PLANS FOR ADDITIONAL INFORMATION CONCERNING APPROACH SLAB AND ABUTMENT RETURN WALL.
 2. THE RETAINING WALL PANELS SHALL NOT BE PLACED UNTIL AT LEAST 14 DAYS AFTER STRUCTURE C-901 ABUTMENT RETURN WALL POUR.
 3. THE STRUCTURE C-901 APPROACH SLAB SHALL NOT BE PLACED UNTIL THE RETAINING WALL PRIMARY SETTLEMENT HAS BEEN COMPLETED.
 4. THE MOMENT SLAB SHALL NOT BE CONSTRUCTED UNTIL AT LEAST 7 DAYS AFTER THE APPROACH SLAB POUR.



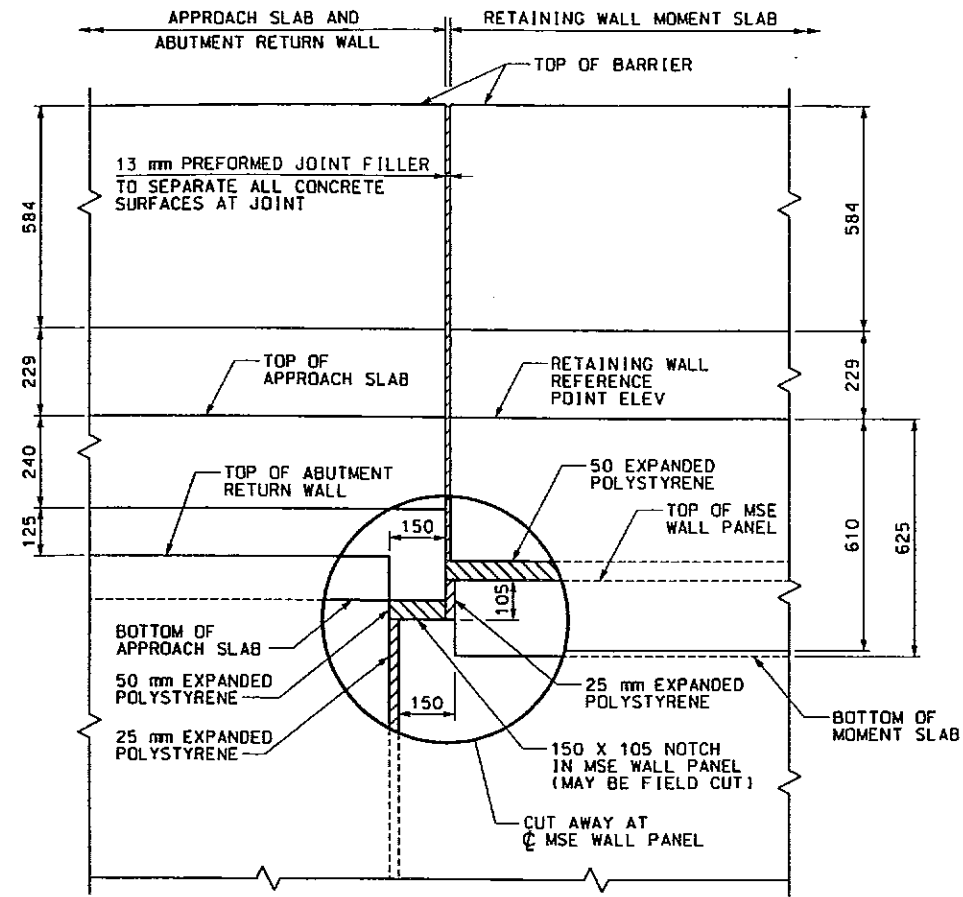
RETAINING WALL / STRUCTURE C-901 JOINT DETAILS

UTAH DEPARTMENT OF TRANSPORTATION		REVIEW		DATE	
URS Greiner Woodward Clyde		DESIGN	CHECK	CEL	DATE
		DJK	DJK	DJK	DJK
		DATE	DATE	DATE	DATE
		APPROVED	DATE	APPROVED	DATE
		2/16	2/16/00	2/16	2/16/00
		PROJECT DESIGN ENGINEER	QUANT.	BY	BY
		Daniel J. Krueger			
		ROADWAY DESIGN ENGINEER			
KIMBALL JUNCTION INTERCHANGE		REVIEW		DATE	
RETAINING WALL R-365D		DESIGN	CHECK	CEL	DATE
		DJK	DJK	DJK	DJK
		DATE	DATE	DATE	DATE
		APPROVED	DATE	APPROVED	DATE
		2/16	2/16/00	2/16	2/16/00
		PROJECT DESIGN ENGINEER	QUANT.	BY	BY
		Daniel J. Krueger			
		ROADWAY DESIGN ENGINEER			
SUMMIT COUNTY		REVIEW		DATE	
R-365D		DESIGN	CHECK	CEL	DATE
DWG. NO.		DJK	DJK	DJK	DJK
		DATE	DATE	DATE	DATE
		APPROVED	DATE	APPROVED	DATE
		2/16	2/16/00	2/16	2/16/00
		PROJECT DESIGN ENGINEER	QUANT.	BY	BY
		Daniel J. Krueger			
		ROADWAY DESIGN ENGINEER			
PROJECT NUMBER		REVIEW		DATE	
*IM-80-4(80)144		DESIGN	CHECK	CEL	DATE
		DJK	DJK	DJK	DJK
		DATE	DATE	DATE	DATE
		APPROVED	DATE	APPROVED	DATE
		2/16	2/16/00	2/16	2/16/00
		PROJECT DESIGN ENGINEER	QUANT.	BY	BY
		Daniel J. Krueger			
		ROADWAY DESIGN ENGINEER			
SHEET NO.		REVISIONS		DATE	
4 OF 5		NO.	DATE	BY	REMARKS

190126
15 FEB 100
j:\1910_00\sheet_1\files\w011\1910_w011_dtl_15.dgn



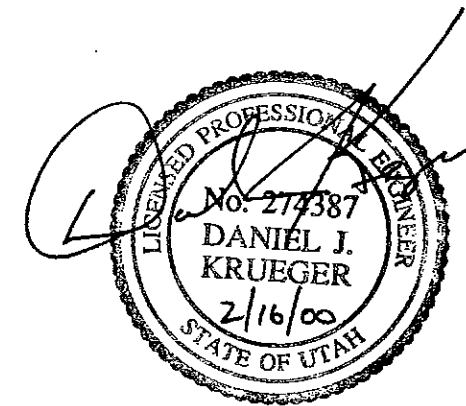
DETAIL A
RETAINING WALL/STRUCTURE C-901 JOINT SECTION



DETAIL B
RETAINING WALL/STRUCTURE C-901 JOINT ELEVATION LOOKING AT FACE OF WALL

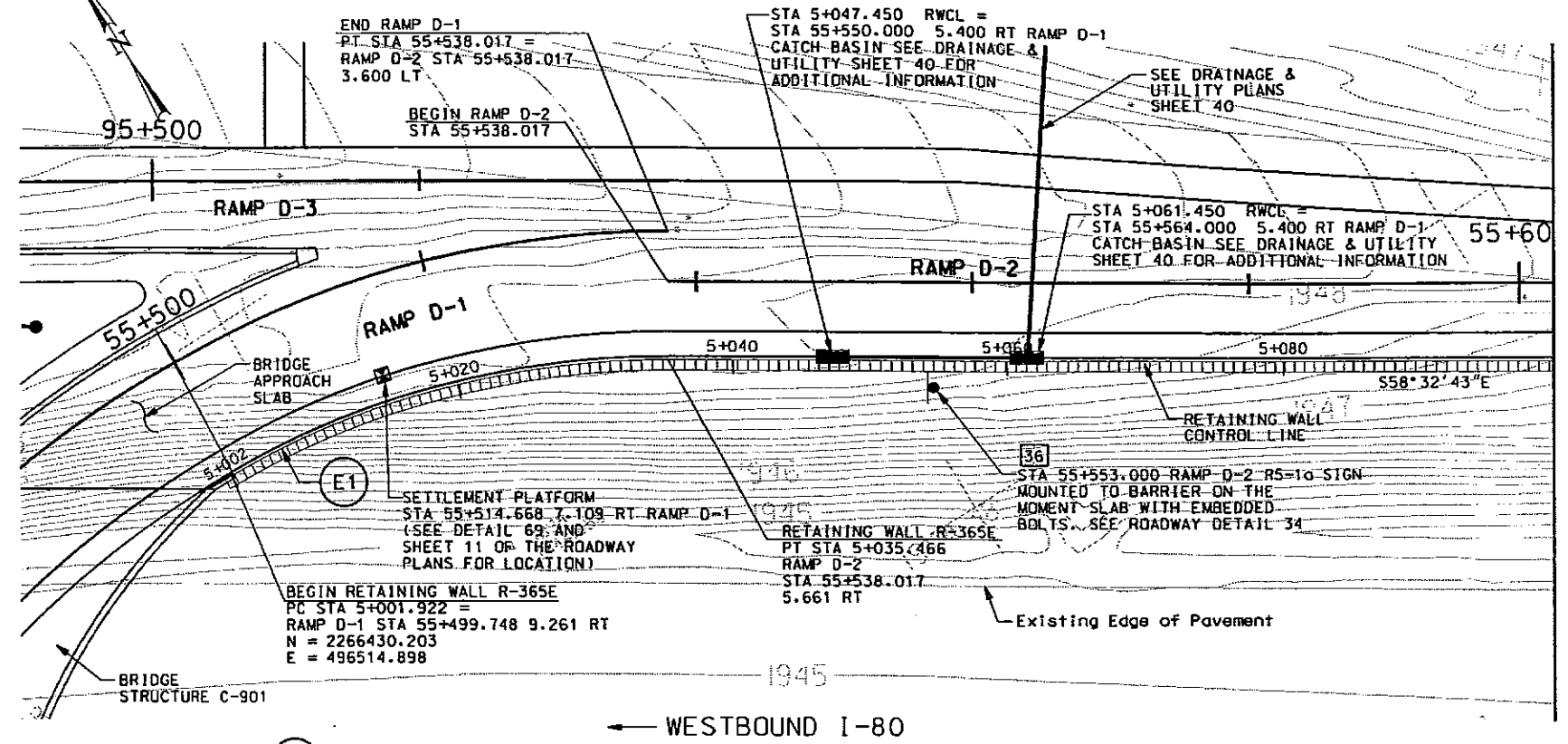
NOTES:

- SEE STRUCTURE C-901 PLANS AND SHEET 4 OF 5 FOR ADDITIONAL INFORMATION.



19:01:30
15 FEB 00
J:\1910_00\street_L_files\wallis\1910_wall_det_L17.dgn

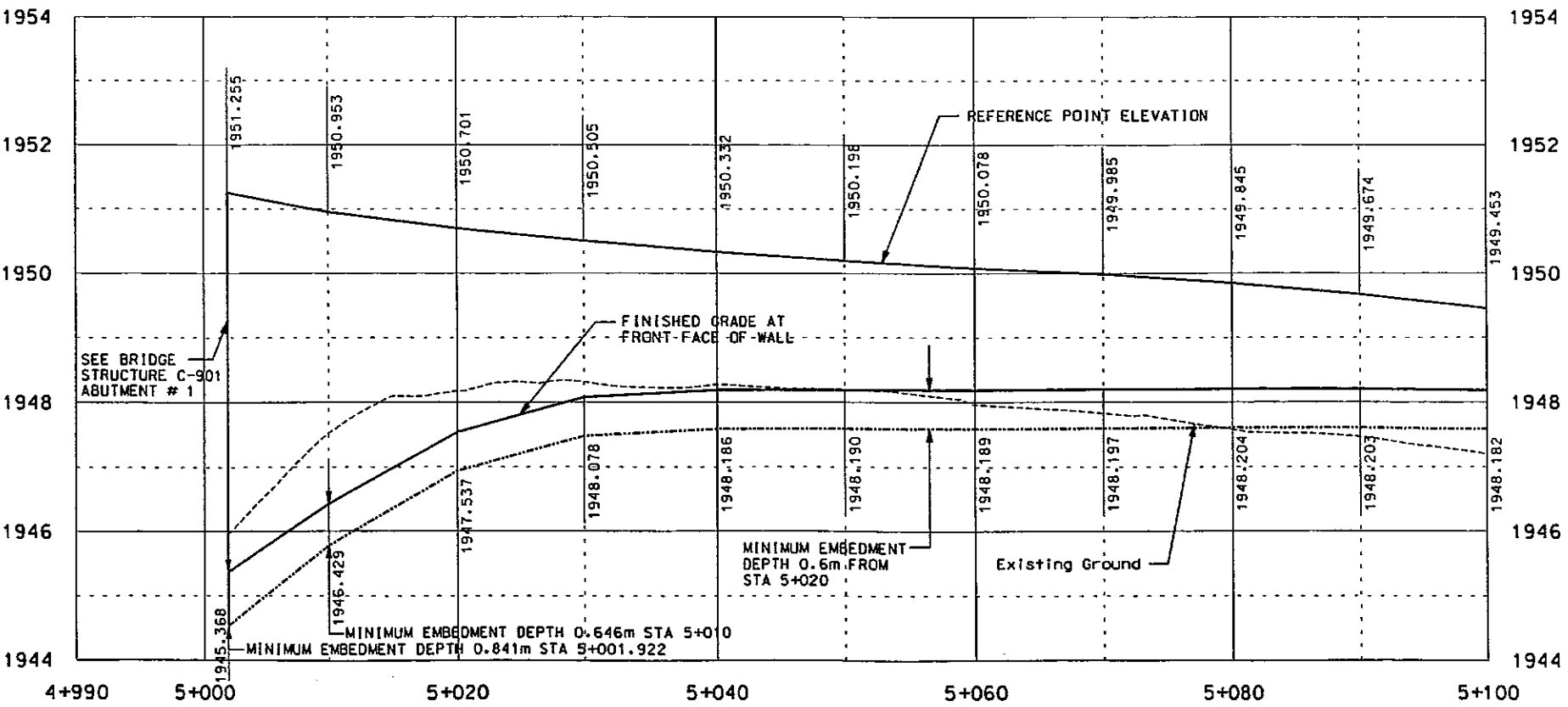
UTAH DEPARTMENT OF TRANSPORTATION		UR S Greiner Woodward Clyde	
APPROVAL RECORD	DATE	APPROVED	DATE
2/00	2/16/00	[Signature]	2/16/00
DESIGN	D.J.K.	CHECK	C.E.R.
01/00	01/00	01/00	01/00
REVIEW	DATE	BY	DATE
KIMBALL JUNCTION INTERCHANGE		RETAINING WALL R-365D	
DETAILS		*IM-4(80)14	
SUMMIT COUNTY		R-365D	
DWG. NO.		5 OF 5	
SHEET NO.		5 OF 5	



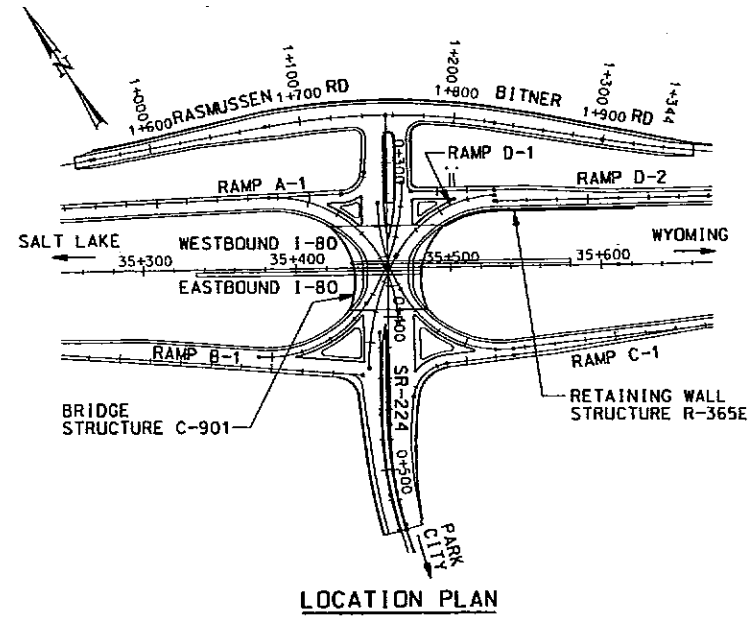
CURVE DATA (E1)

Δ	= 29°14'07" L
R	= 65.740
T	= 17.140
L	= 33.181
PI	= 5+019.068
N	= 2266429.539
E	= 496532.030

RETAINING WALL R-365E PLAN
STA 5+001.922 TO STA 5+100.000



RETAINING WALL R-365E ELEVATION
STA 5+001.922 TO STA 5+100.000



GENERAL NOTES

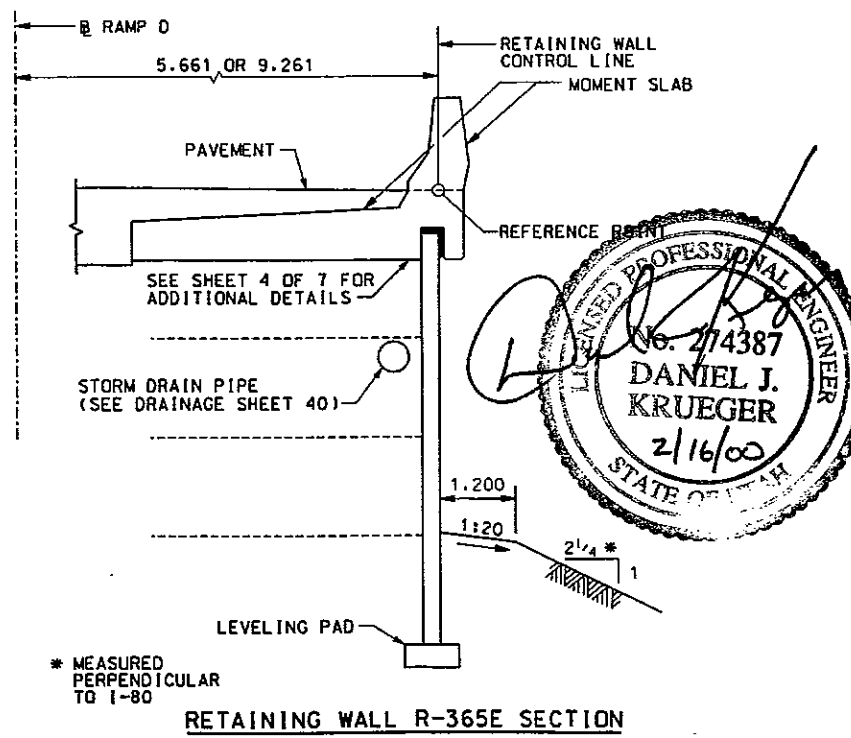
1. ALL REINFORCING STEEL SHALL BE COATED DEFORMED BILLET-STEEL BARS CONFORMING TO AASHTO M 284, M 111 AND M 31M GRADE 400, RESPECTIVELY.
2. EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED 19 mm EXCEPT WHERE NOTED OTHERWISE.
3. ALL CONCRETE SHALL BE CLASS AA(AE) EXCEPT WHERE NOTED OTHERWISE.
4. ALL DIMENSIONS ARE METERS UNLESS NOTED OTHERWISE.
5. SEE SHEET 4 OF 7, 5 OF 7, 6 OF 7 AND 7 OF 7 FOR ADDITIONAL DETAILS.
6. SEE BRIDGE STRUCTURE C-901 SHEETS FOR ADDITIONAL DETAILS.

QUANTITIES

ITEM	QUANTITY	UNIT
MSE RETAINING WALL (R-365E) (EST. QUANTITY 261 M2)	1	LUMP

DESIGN DATA

REINFORCING STEEL: $f_s = 160 \text{ MPa}$; $F_y = 400 \text{ MPa}$
 CAST-IN-PLACE CONCRETE: $f_c = 25 \text{ MPa}$



RETAINING WALL R-365E SECTION

UTAH DEPARTMENT OF TRANSPORTATION
URS Greiner Woodward Clyde

KIMBALL JUNCTION INTERCHANGE
 RETAINING WALL R-365E
 SITUATION & LAYOUT

SUMMIT COUNTY
 R-365E
 DWG. NO.

PROJECT NUMBER: #IM-80-4(80)144

SHEET NO. 1 OF 7

NO.	DATE	DESIGN	REVISION

DESIGN: C.J.T. 10/29
 CHECK: D.J.K. 01/00
 REVIEW:

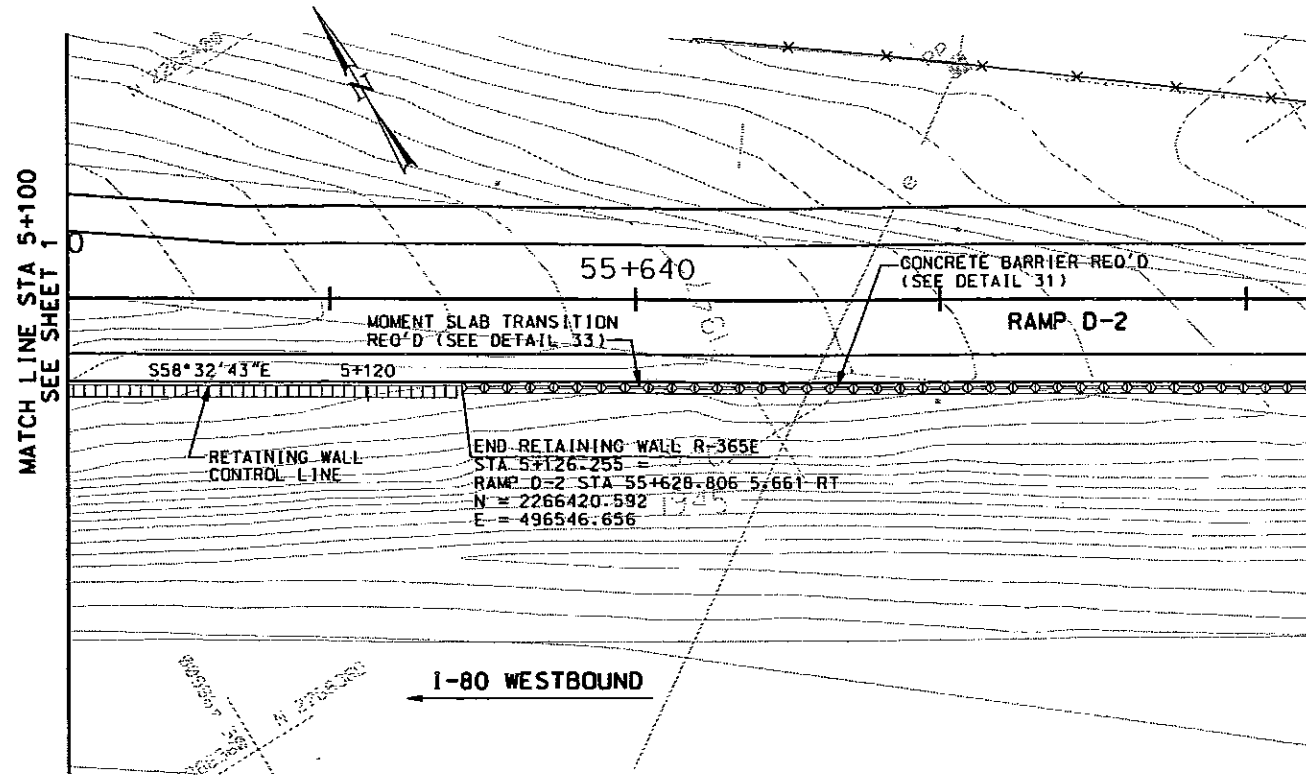
DRAWN: P.R.V. 11/29
 CHECK: D.J.K. 01/00
 DATE:

QUANT.: M.J.E. 11/29
 CHECK: D.J.K. 01/00
 BY:

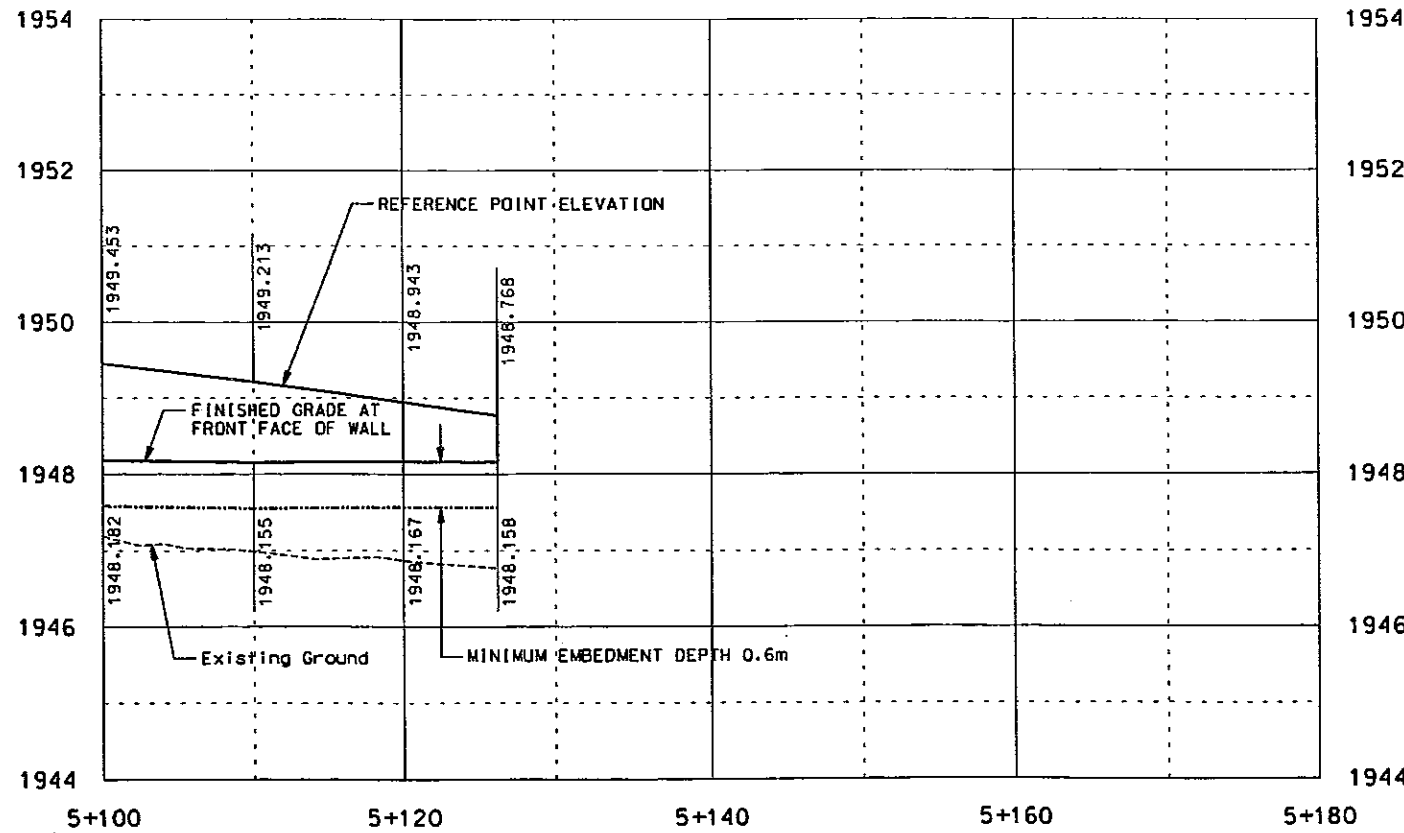
REVISIONS

ORIGINAL SUBMISSION FOR AUTHORIZATION

19:01:51
 15 FEB 2000
 J:\1910_00\sheet\wall\wall06a.dgn

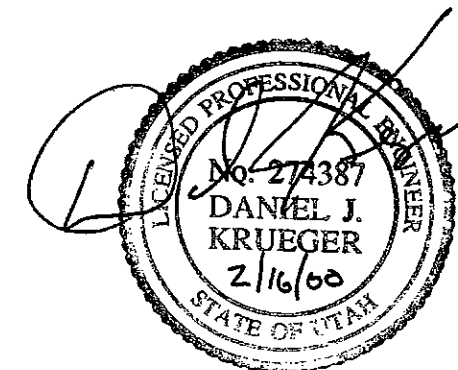


RETAINING WALL R-365E PLAN
STA 5+100.000 TO STA 5+126.255



RETAINING WALL R-365E ELEVATION
STA 5+100.000 TO STA 5+126.255

NOTES:
1. SEE SHEET 1 OF 7 FOR GENERAL NOTES.

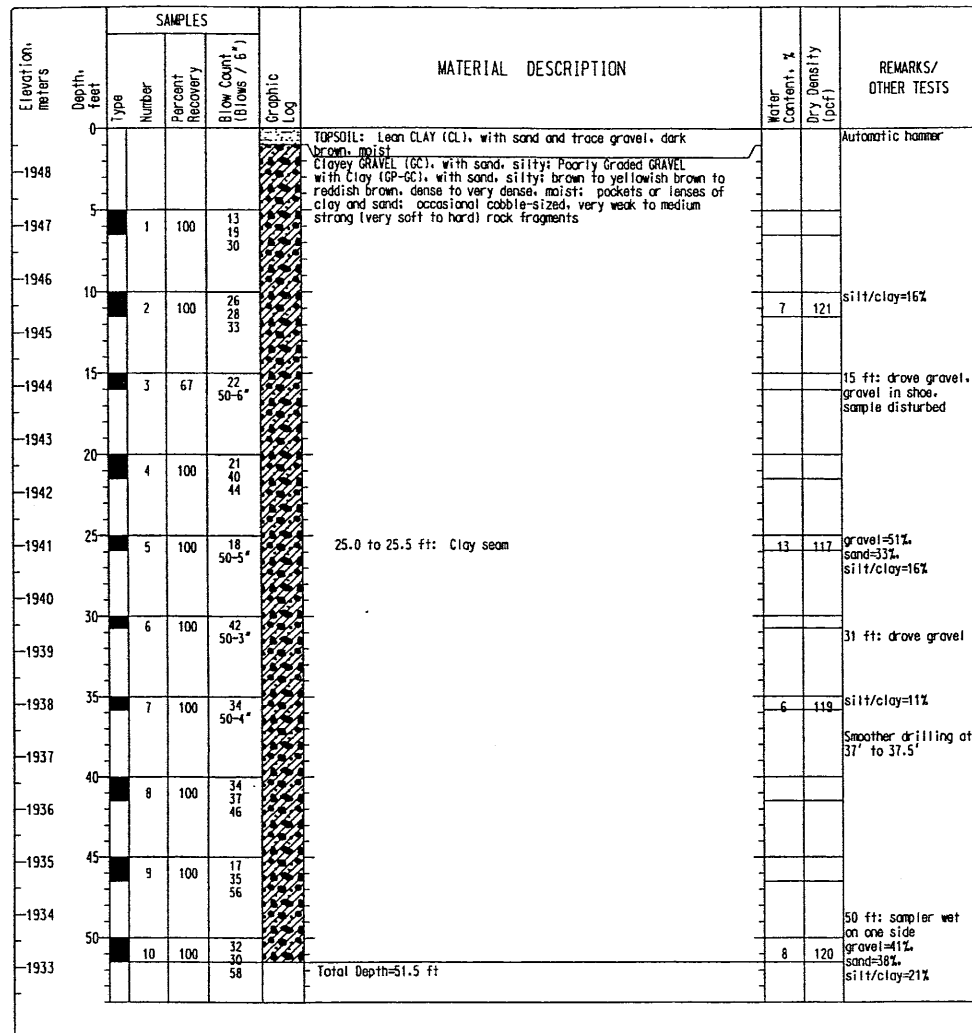


UTAH DEPARTMENT OF TRANSPORTATION		DESIGN		CHECK		REVIEW	
URS Greiner Woodward Clyde		CJT 10/99		DJK 01/00		DJK 01/00	
KIMBALL JUNCTION INTERCHANGE		DRANK 11/99		DJK 01/00		DJK 01/00	
RETAINING WALL R-365E		QUANT. MAE 01/00		DJK 01/00		DJK 01/00	
SITUATION & LAYOUT		DATE 2/16/00		DATE 2/16/00		DATE 2/16/00	
PROJECT NUMBER *IM-P-4(80)144		APPROVED [Signature]		APPROVED [Signature]		APPROVED [Signature]	
SUMMIT COUNTY		DATE 2/16/00		DATE 2/16/00		DATE 2/16/00	
R-365E		DATE 2/16/00		DATE 2/16/00		DATE 2/16/00	
DWG. NO.		DATE 2/16/00		DATE 2/16/00		DATE 2/16/00	
SHEET NO. 2 OF 7		DATE 2/16/00		DATE 2/16/00		DATE 2/16/00	

19-0219
15-118-00
F:\1810_00\sheet\files\wall\1810_wall\06b.dgn

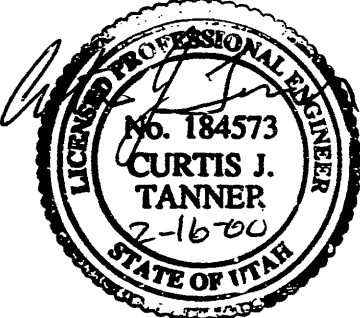
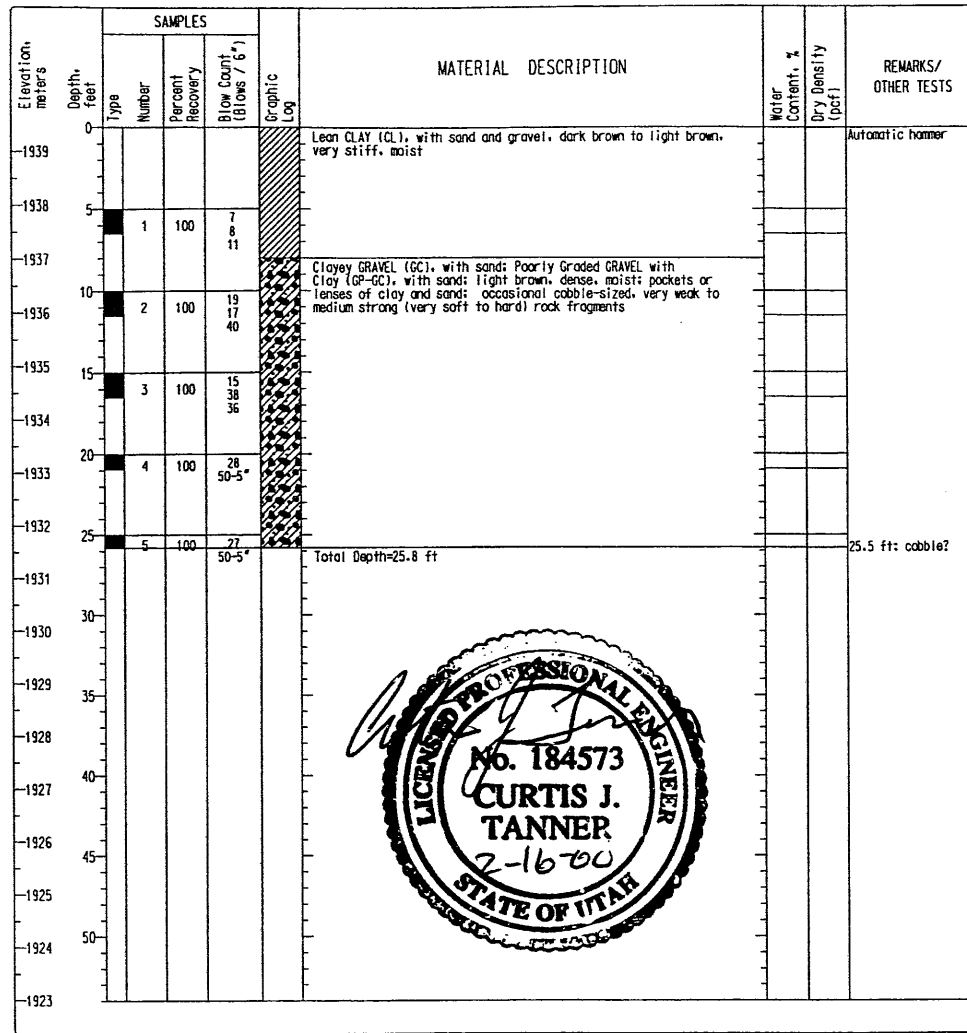
Log of Boring SB-6

Date(s) Drilled	1/14/99 - 1/14/99	Logged By	Curtis Tanner	Checked By	JUL
Drilling Method	Hollow-Stem Auger	Drill Bit Size/Type	8-1/2" OD x 4-1/4" ID	Total Depth (feet)	51.5
Drill Rig Type	CME-75	Drilling Contractor	Doug Bedke	Sampler Type(s)	Cal. Split (2.5" OD)
Groundwater Level and Date Measured	50.0 ft. sampler wet, 1/14/99	Hammer Data	140 lbs / 30 inches	Approximate Surface Elevation	6393.7 feet 1948.8 meters
Comments	Borehole Backfill: backfill with cuttings				



Log of Boring WB-7A

Date(s) Drilled	2/1/99 - 2/1/99	Logged By	Jessica Larson	Checked By	CJT
Drilling Method	Hollow-Stem Auger	Drill Bit Size/Type	8-1/2" OD x 4-1/4" ID	Total Depth (feet)	25.8
Drill Rig Type	CME-75	Drilling Contractor	Doug Bedke	Sampler Type(s)	Cal. Split (2.5" OD)
Groundwater Level and Date Measured	Not Encountered	Hammer Data	140 lbs / 30 inches	Approximate Surface Elevation	6363.0 feet 1939.4 meters
Comments	Borehole Backfill: backfill with cuttings				



KEY TO BORING LOG

GRAPHIC LOG SYMBOLS

SAMPLE TYPE AND OTHER SYMBOLS

--	--	--	--	--

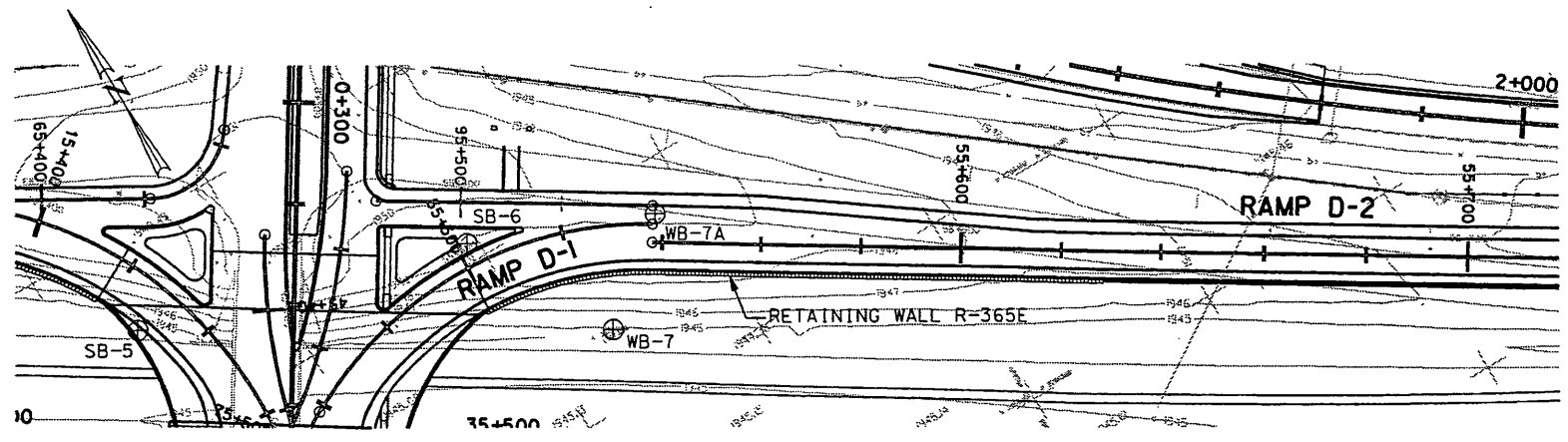
Water level measured in boring at specified date and time

NOTES

- Soil classifications are based on the Unified Soil Classification System (USCS).
- Descriptions and stratum lines are interpretive; Transitions may be gradational.
- Field logs may have been modified to reflect lab test results.
- Classifications and descriptions provided apply only at the specific location of the boring and at the time the boring was advanced; they are not warranted to be representative of subsurface conditions at other locations or times.
- Refer to the Geotechnical Report containing these boring logs for addition information and explanation.

ABBREVIATIONS / DEFINITIONS

- LL = Liquid Limit (in percent)
 - PI = Plasticity Index
 - NP = Non-plastic
 - w = Natural Moisture Content (in percent)
 - DD = Dry Density (in pounds per cubic foot)
 - WSS = Water Soluble Sulfates (in parts per million)
 - Fines = Fine-grained portion of soil passing No. 200 Sieve (3-inch minus wash/gradation analysis result in percent)
 - Silt/Clay = See "Fines"
 - Sand = Rock particles passing No. 4 Sieve & retained on No. 200 Sieve (3-inch minus gradation analysis result in percent)
 - Gravel = Rock particles passing 3-inch Sieve & retained on No. 4 Sieve (3-inch minus gradation analysis result in percent)
 - Cobble = Rock particles retained on 3-inch Sieve, 12-inch maximum dimension
 - Boulder = Rock particles greater than 12-inch maximum dimension
 - ATD = At Time of Drilling
 - OD = Outside Diameter
- Blows per 6" is the number of blows required to advance sampler 6 inches, or the distance indicated (in inches); Standard penetration number, N, is the sum of the number of blows for the second and third 6-inch intervals (i.e., 6" to 18")
- Sieve sizes are USA Standard; Sieve openings are as follows: 3-inch = 75mm, No.4 = 4.75mm, No.200 = 0.075mm



WALL GEOTECH LOGS
SB-6 & WB-7A

UTAH DEPARTMENT OF TRANSPORTATION
URS Greiner Woodward Clyde

KIMBALL JUNCTION INTERCHANGE
RETAINING WALL R-365E
SOIL DATA SHEET

APPROVED: *[Signature]* DATE: 2/16/00
RECOMMENDED: *[Signature]* DATE: 2/16/00

DESIGN: TNG 11/99
DRAWN: SVD 11/99
CHECK: CJT 11/99
REVIEW: CJT 11/99

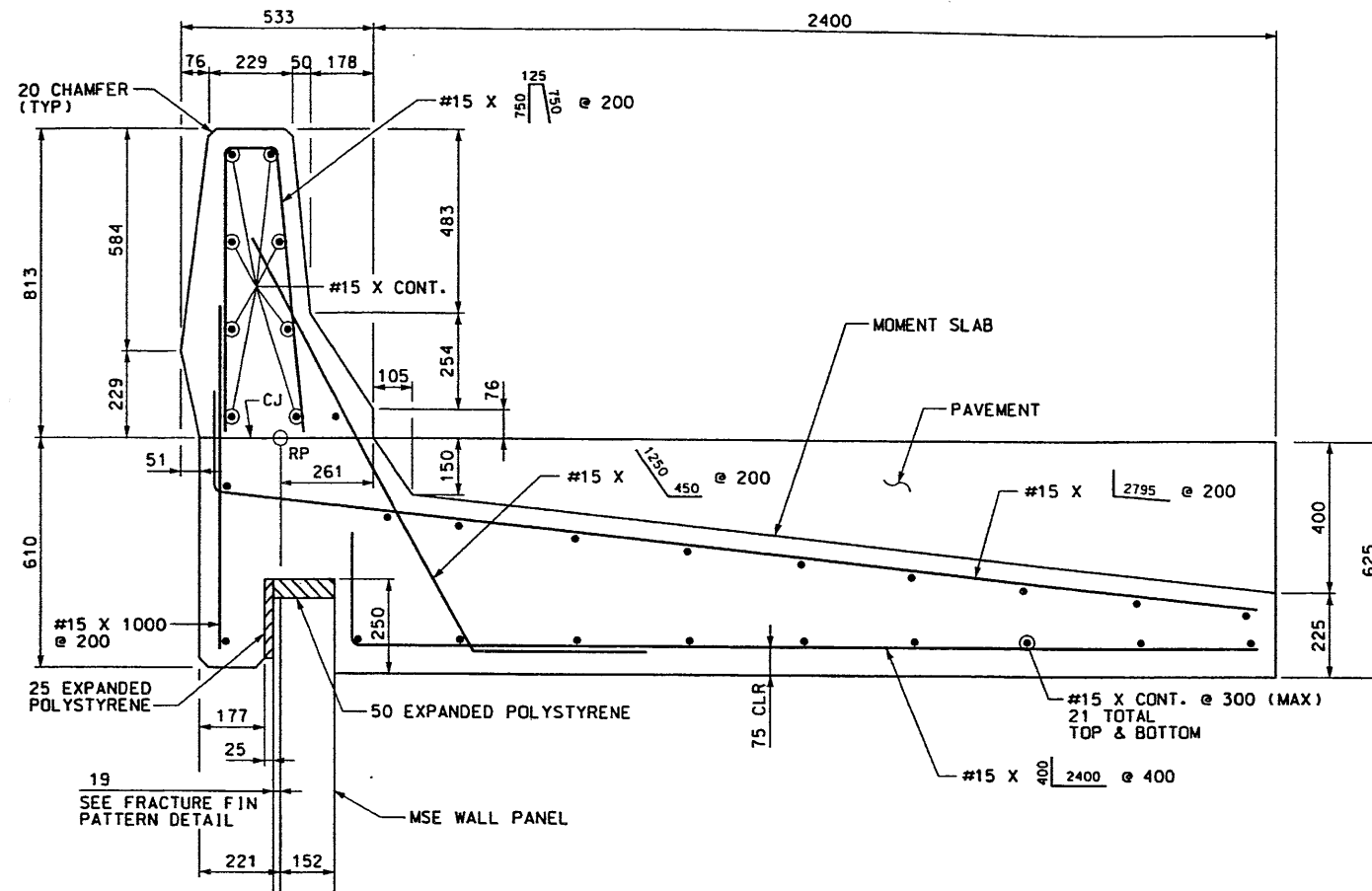
PROJECT: ROADWAY DESIGN ENGINEER
QUANT.:

NO. DATE DESIGN MAPS REQUEST PARCELS REQUEST REVISIONS
NO. DATE DESIGN MAPS REQUEST PARCELS REQUEST REVISIONS

SUMMIT COUNTY
R-365E
DWG. NO.
SHEET NO. 3 OF 7

*IM-80-4(80)144

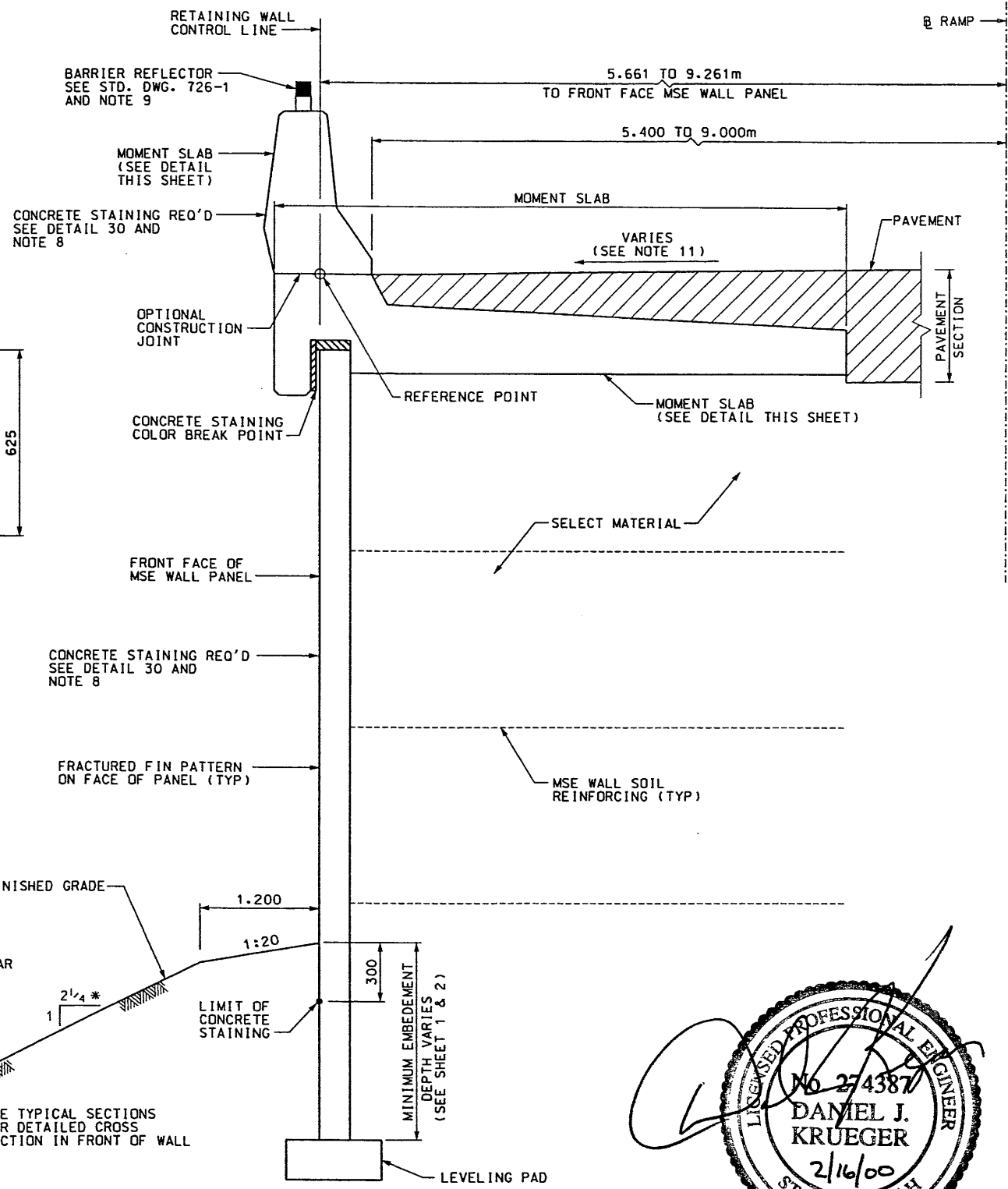
12:34:29
30 JAN 100
J:\1910_00\sheet_L_files\1910_geo_04.dgn



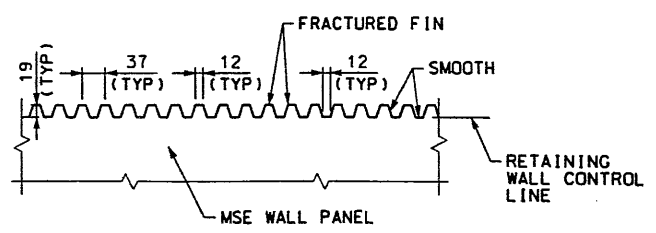
TYPICAL MOMENT SLAB SECTION

NOTES

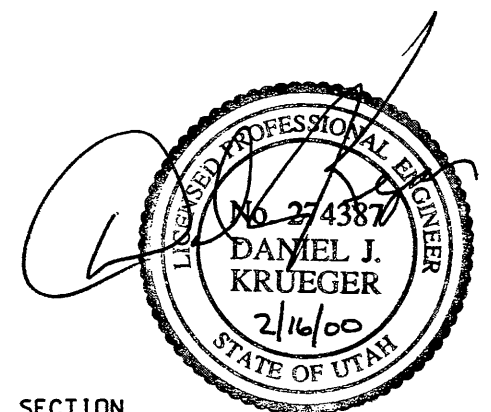
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
2. ALTERNATE ALL REINFORCING STEEL SPLICES. SPLICES IN #15 BARS SHALL BE 600 mm.
3. SEE WALL SITUATION & LAYOUT SHEET 1 AND 2 FOR LOCATION OF RETAINING WALL CONTROL POINT AND ELEVATION OF REFERENCE POINT.
4. MINIMUM COVER TO REINFORCING STEEL SHALL BE 50 mm EXCEPT WHERE NOTED OTHERWISE.
5. SEE WALL SITUATION & LAYOUT FOR LIMITS OF CONSTRUCTION.
6. ALL CAST IN PLACE CONCRETE SHALL BE CLASS AA(AE) EXCEPT WHERE NOTED OTHERWISE.
7. ALL REINFORCING STEEL SHALL BE COATED DEFORMED BILLET STEEL BARS CONFORMING TO AASHTO M 284, M 111, AND M 31M GRADE 400.
8. CONCRETE STAINING IS REQUIRED ON EXPOSED SURFACES OF WALL AND MOMENT SLAB AND 300 mm BELOW FINISHED GRADE. THE STAINING REQUIREMENTS ARE AS FOLLOWS:
 MOMENT SLAB: CONCRETE STAINING REQ'D (COLOR NO. 30450)
 CONCRETE STAINING ACCENT REQ'D (COLOR NO. 30233)
 WALL FACE: CONCRETE STAINING REQ'D (COLOR NO. 30227)
9. BARRIER REFLECTORS SHALL BE MOUNTED ON THE ENTIRE BARRIER LENGTH. REFLECTOR SPACING SHALL BE 15 m. REFLECTOR COLOR SHALL BE THE SAME AS THE PAINT STRIPE. SEE STD. DWG. 726-2 FOR ADDITIONAL INFORMATION.
10. THE MOMENT SLAB SHALL NOT BE CONSTRUCTED UNTIL THE RETAINING WALL PRIMARY SETTLEMENT HAS BEEN COMPLETED.
11. SEE ROADWAY PROFILE SHEETS 27 AND 28 FOR CROSS SLOPE INFORMATION.



TYPICAL WALL SECTION

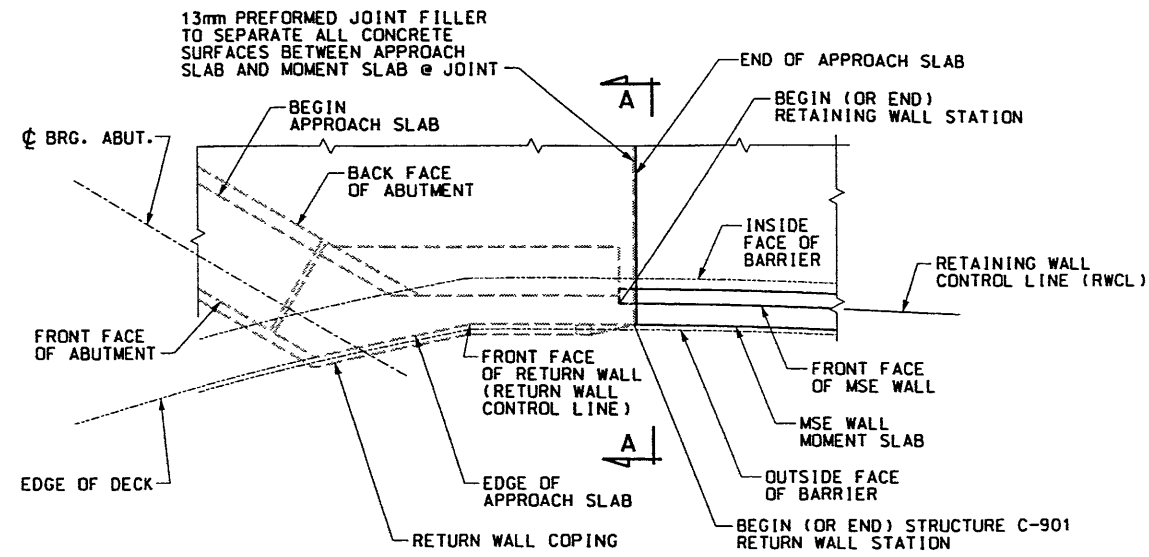


FRACTURED FIN PATTERN DETAIL

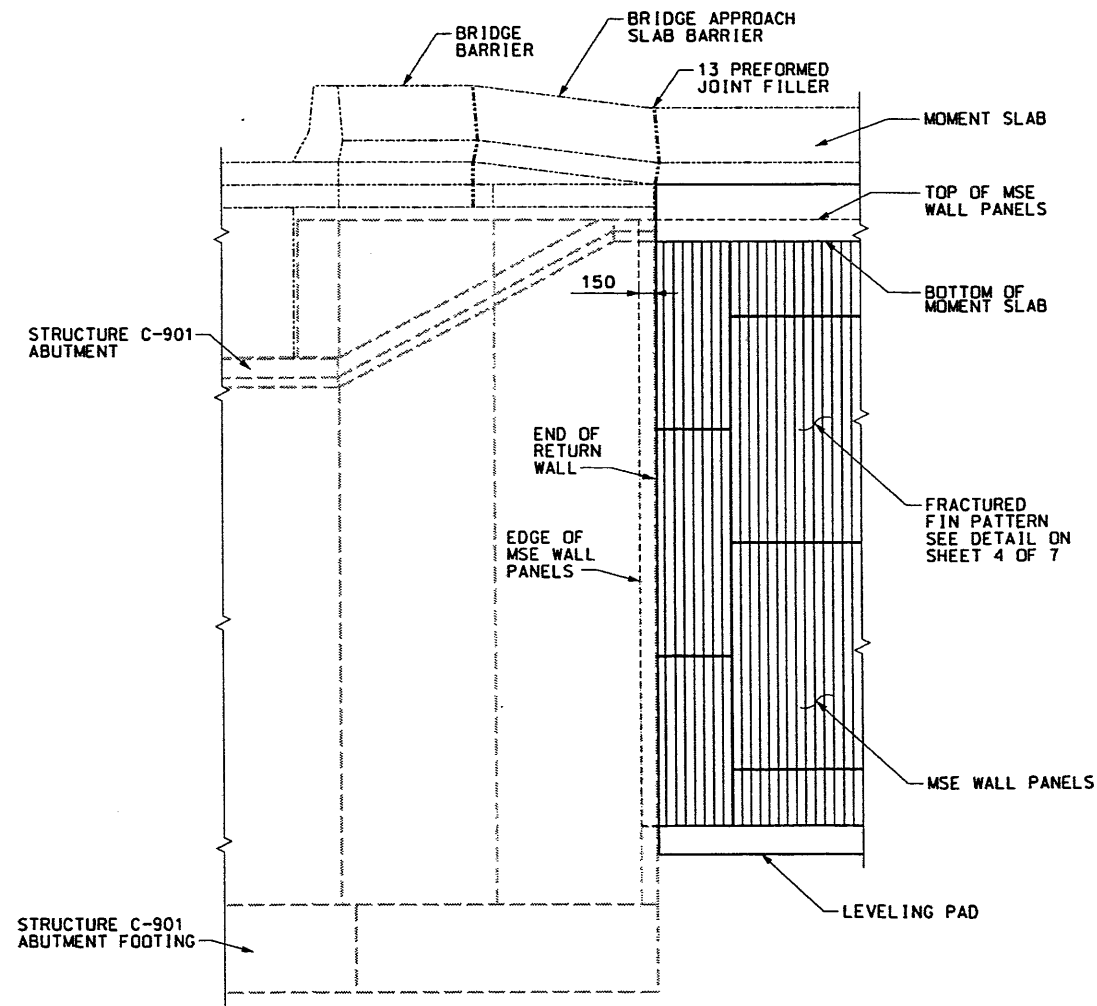


UTAH DEPARTMENT OF TRANSPORTATION		UR S Greiner Woodward Clyde	
KIMBALL JUNCTION INTERCHANGE	RETAINING WALL R-365E	DETAILS	PROJECT NUMBER IM-P-4(80)144
APPROVAL RECORD	DESIGN - C.J.T. 10/99	CHECK - D.J.K. 01/00	REVIEW
DATE 2/10	DRAWN - C.E.R. 10/99	CHECK - D.J.K. 01/00	DATE
PROJECT DESIGN ENGINEER	ROADWAY DESIGN ENGINEER	CHECK	BY
APPROVED 2/16/00		DATE	QUANT.
DANIEL J. KRUEGER		NO. 274387	ORIGINAL SUBMISSION FOR AUTHORIZATION
STATE OF UTAH		DATE	REVISIONS
SUMMIT COUNTY		R-365E	
DWG. NO.		4 OF 7	

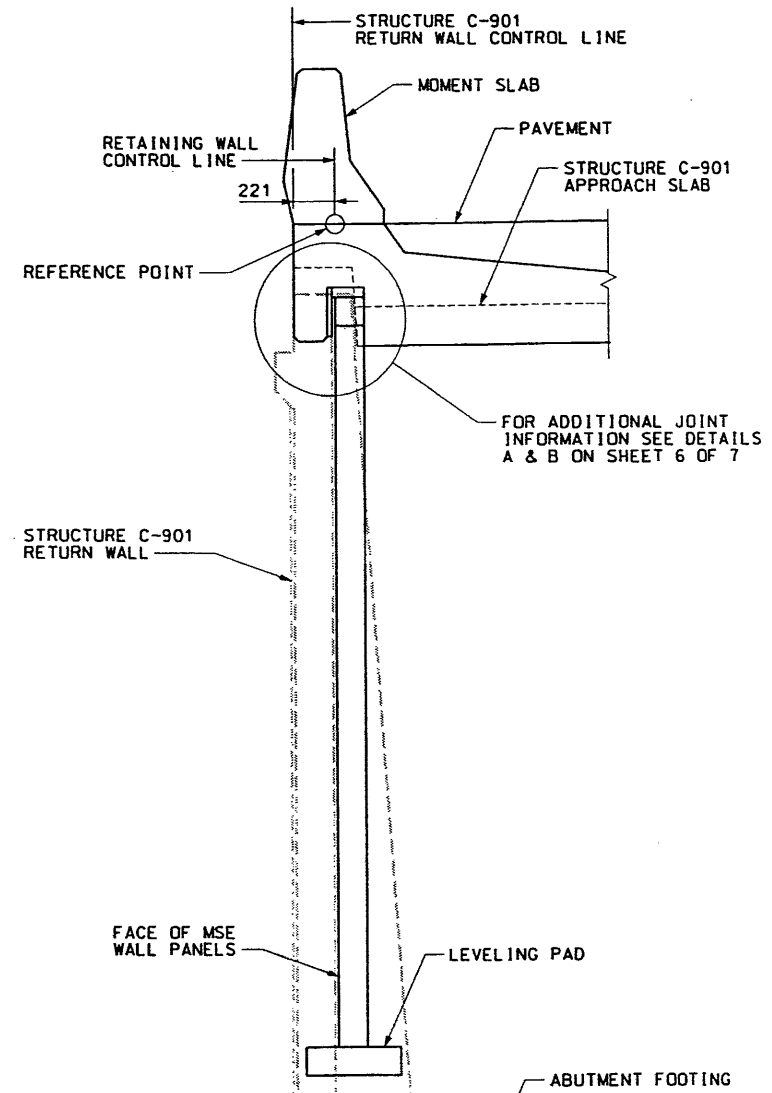
19/02/27 15 FEB 00 J:\1910_00\sheet\files\wall\1910_wall_det_L07.dgn



PLAN



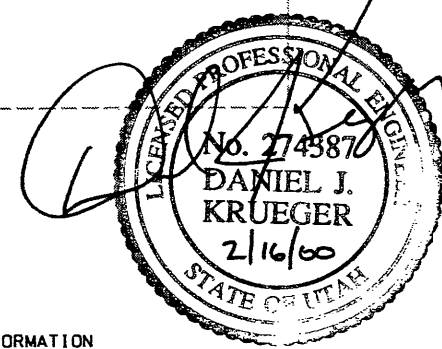
ELEVATION



SECTION A-A

NOTES:

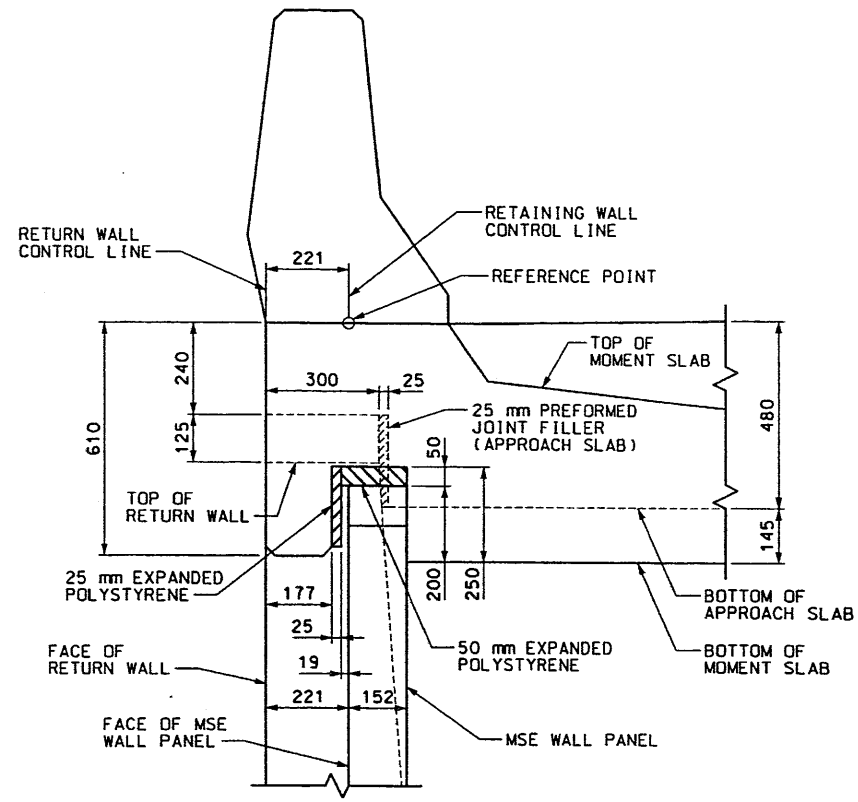
1. SEE STRUCTURE C-901 PLANS FOR ADDITIONAL INFORMATION CONCERNING APPROACH SLAB AND ABUTMENT RETURN WALL.
2. THE RETAINING WALL PANELS SHALL NOT BE PLACED UNTIL AT LEAST 14 DAYS AFTER STRUCTURE C-901 ABUTMENT RETURN WALL POUR.
3. THE STRUCTURE C-901 APPROACH SLAB SHALL NOT BE PLACED UNTIL THE RETAINING WALL PRIMARY SETTLEMENT HAS BEEN COMPLETED.
4. THE MOMENT SLAB SHALL NOT BE CONSTRUCTED UNTIL AT LEAST 7 DAYS AFTER THE APPROACH SLAB POUR.



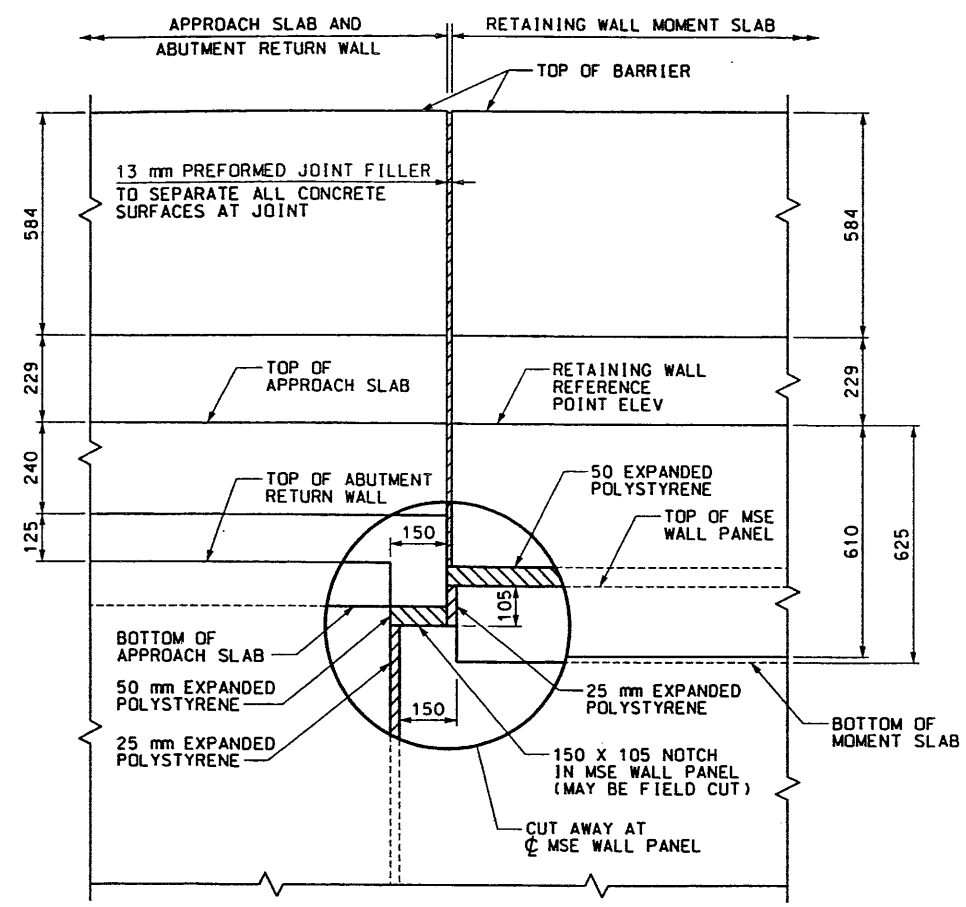
19:02:31
15 FEB 00 100
J:\1910_00\sheet_1\1910_wall_de_1_18.dgn

RETAINING WALL / STRUCTURE C-901 JOINT DETAILS

UTAH DEPARTMENT OF TRANSPORTATION		DESIGN - CEL - 01/00		REVIEW	
URS Greiner Woodward Clyde		DRAWN - DJK - 01/00		DATE	
KIMBALL JUNCTION INTERCHANGE		CHECK - CER - 01/00		DATE	
RETAINING WALL R-365E		CHECK - DJK - 01/00		DATE	
DETAILS		QUANT. - N/A		BY	
PROJECT NUMBER		APPROVAL RECORD: 2/00		DATE	
*IM-80-4(80)144		APPROVED: 2/00		DATE	
SUMMIT COUNTY		PROJECT DESIGN ENGINEER		REVISIONS	
R-365E		ROADWAY DESIGN ENGINEER		NO.	
DWG. NO.		DATE		DATE	
SHEET NO. 5 OF 7		DATE		DATE	

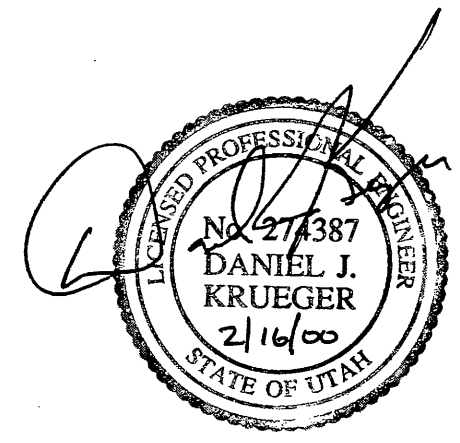


DETAIL A
RETAINING WALL/STRUCTURE C-901 JOINT SECTION



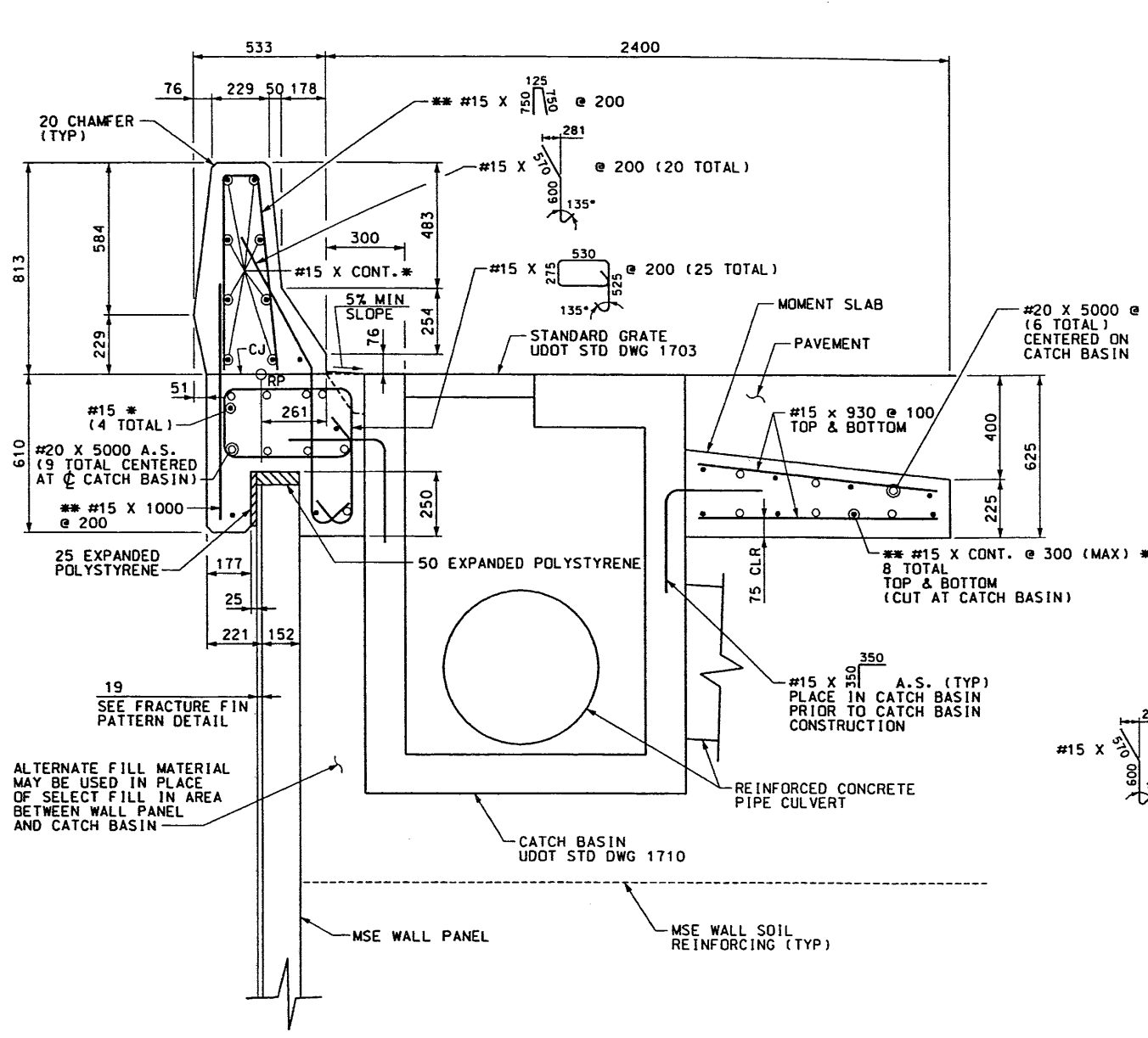
DETAIL B
RETAINING WALL/STRUCTURE C-901 JOINT ELEVATION LOOKING AT FACE OF WALL

NOTES:
1. SEE STRUCTURE C-901 PLANS AND SHEET 5 OF 7 FOR ADDITIONAL INFORMATION.



19:02:34
15 FEB '00
J:\1910_00\sheet_L_files\wall\1910_wall_det_L_19.dgn

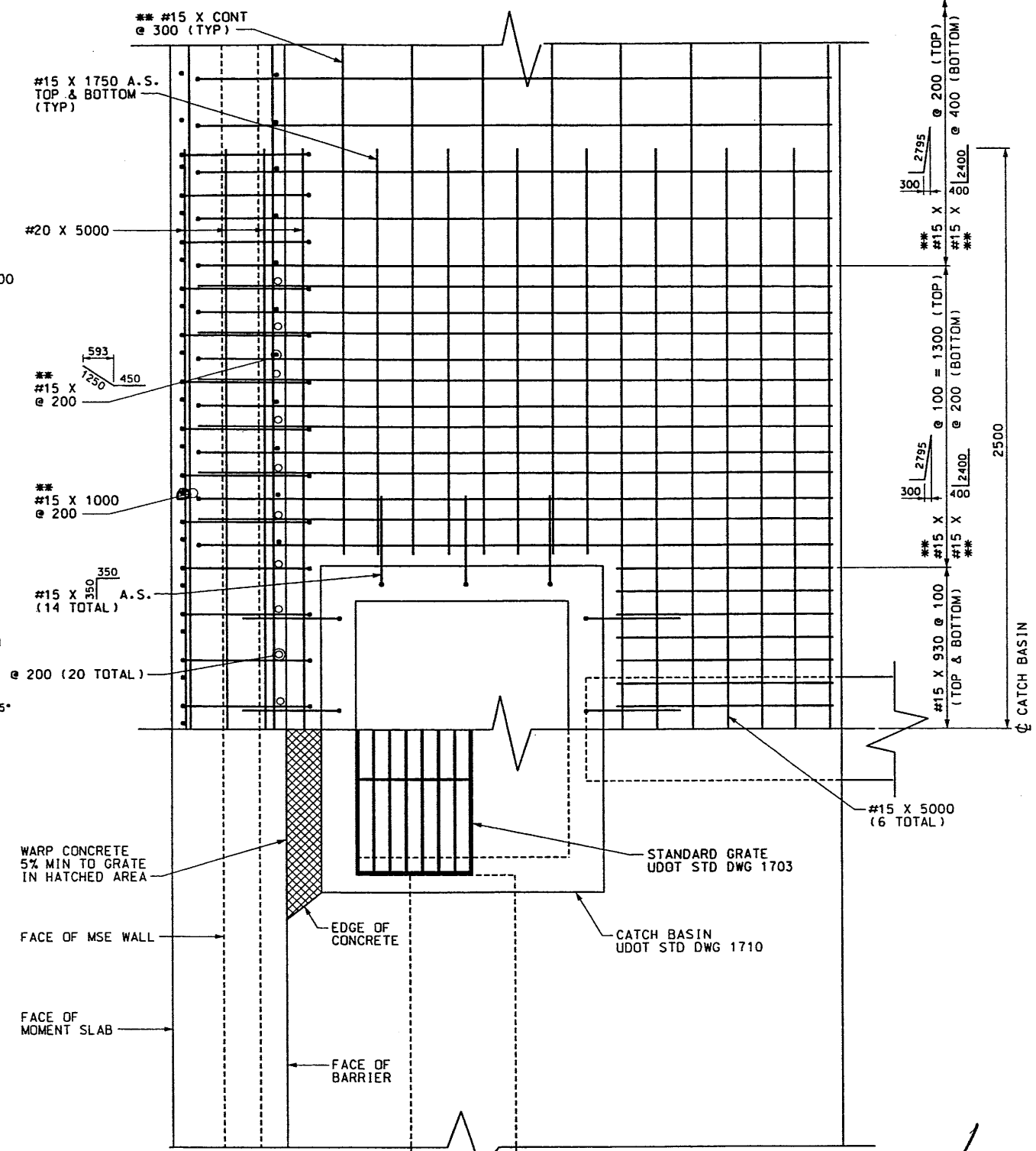
KIMBALL JUNCTION INTERCHANGE		UTAH DEPARTMENT OF TRANSPORTATION	
RETAINING WALL R-365E		URS Greiner Woodward Clyde	
APPROVAL RECORD	DESIGN	CHECK	REVIEW
DATE: 2/10	D.J.K. 01/00	CER 01/00	CEL 01/00
APPROVED: [Signature]	DRAWN: CER 01/00	CHECK: D.J.K. 01/00	DATE: []
PROJECT NUMBER: *IM-4(80)144	QUANT.	CHECK	BY
SUMMIT COUNTY	ORIGINAL SUBMISSION FOR AUTHORIZATION		
R-365E	REVISIONS		
DWG. NO.	DATE		
SHEET NO. 6 OF 7	DATE		



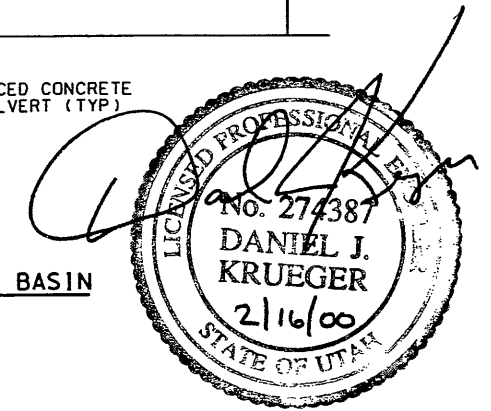
MOMENT SLAB SECTION AT CATCH BASIN

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
2. SEE WALL SITUATION & LAYOUT SHEET 1 AND 2 FOR LOCATION OF RETAINING WALL CONTROL POINT AND ELEVATION OF REFERENCE POINT.
3. ** SEE "TYPICAL MOMENT SLAB SECTION" DETAIL ON SHEET 4 ON 7 FOR ADDITIONAL INFORMATION CONCERNING PLACEMENT OF THESE BARS.
4. MINIMUM COVER TO REINFORCING STEEL SHALL BE 50 mm EXCEPT WHERE NOTED OTHERWISE.
5. SEE WALL SITUATION & LAYOUT FOR LIMITS OF CONSTRUCTION.
6. THE CATCH BASIN AND PIPE CULVERT SHALL BE CONSTRUCTED WITH THE MSE WALL REINFORCING AND THE SELECT FILL.
7. THE MOMENT SLAB SHALL NOT BE CONSTRUCTED UNTIL THE RETAINING WALL PRIMARY SETTLEMENT HAS BEEN COMPLETED.
8. * CONTINUE TYPICAL MOMENT SLAB REINFORCING THRU CATCH BASIN AREA.
9. REINFORCING SYMMETRIC ABOUT ϕ CATCH BASIN.
10. SEE DRAINAGE AND UTILITY PLAN SHEET 40 FOR ADDITIONAL INFORMATION.

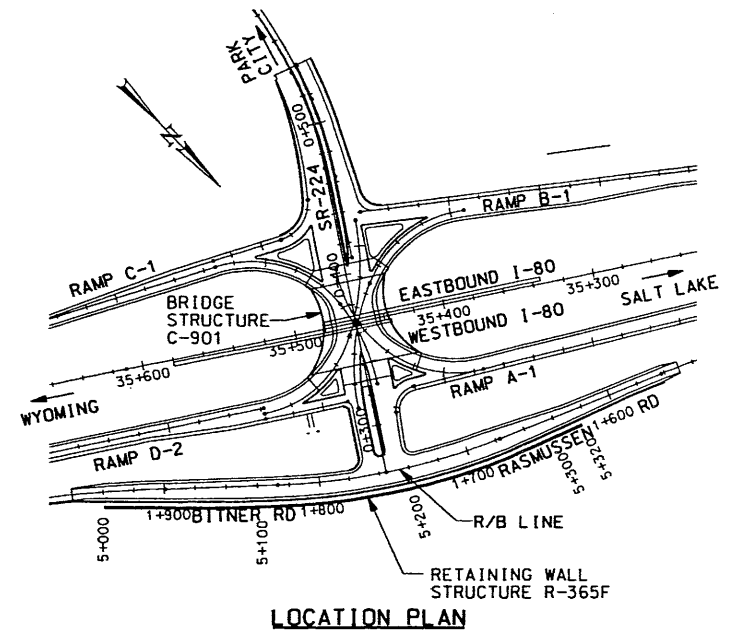
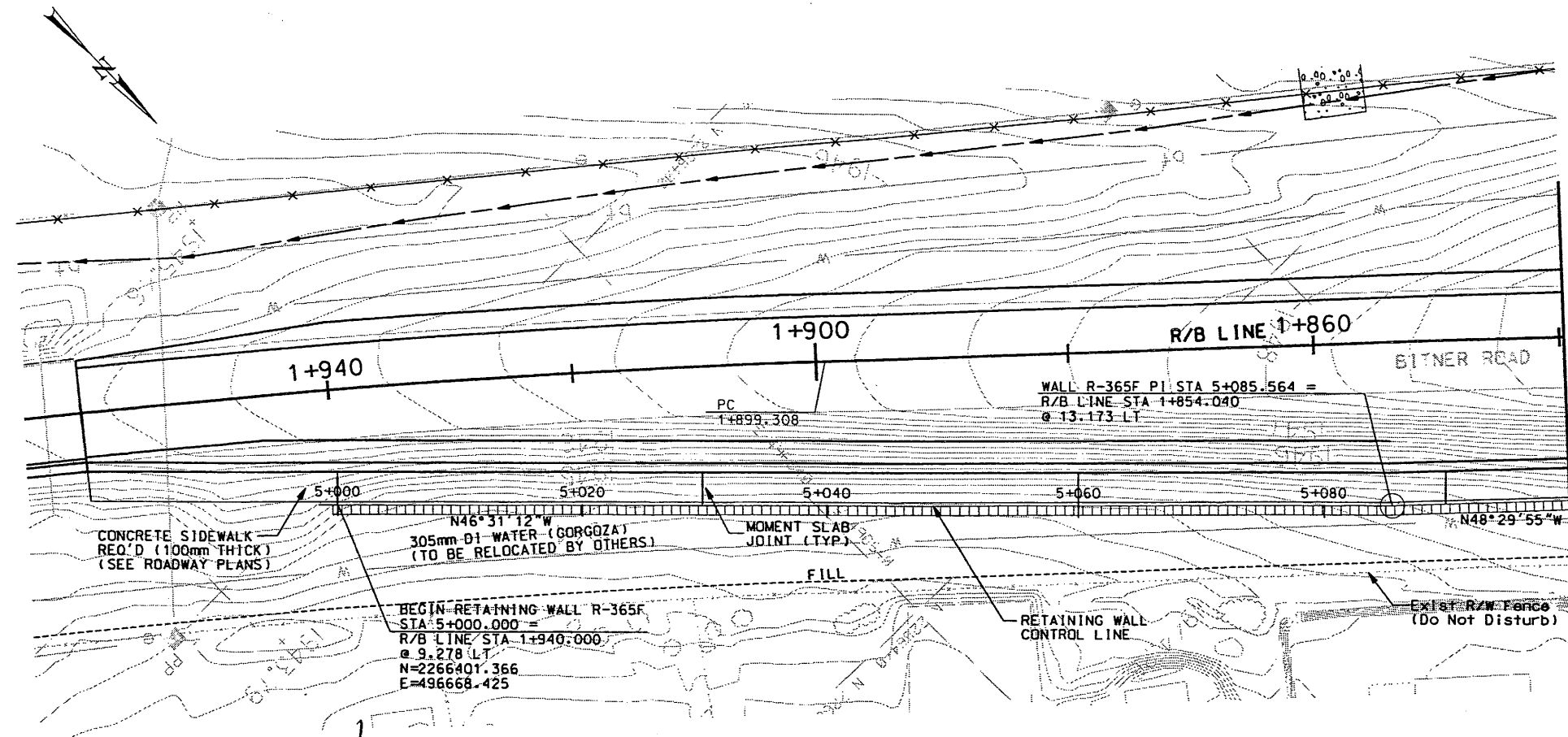


MOMENT SLAB PLAN AT CATCH BASIN



19/02/18 15:55:10 J:\1910_00\sheet...files\walls\1910_wal_det_21.dgn

UTAH DEPARTMENT OF TRANSPORTATION		REVIEW		DATE	
URS Greiner Woodward Clyde		DESIGN	DJK	10/99	CHECK
		DRANK	GER	10/99	CHECK
		QUANT.	N/A	CHECK	N/A
		DATE	2/00	APPROVED	DATE
		DATE	2/00	APPROVED	DATE
KIMBALL JUNCTION INTERCHANGE		DETAILS		PROJECT NUMBER	
RETAINING WALL R-365E				*IM-80-4(80)144	
		SUMMIT COUNTY		R-365E	
		DWG. NO.		7 OF 7	
		SHEET NO.			



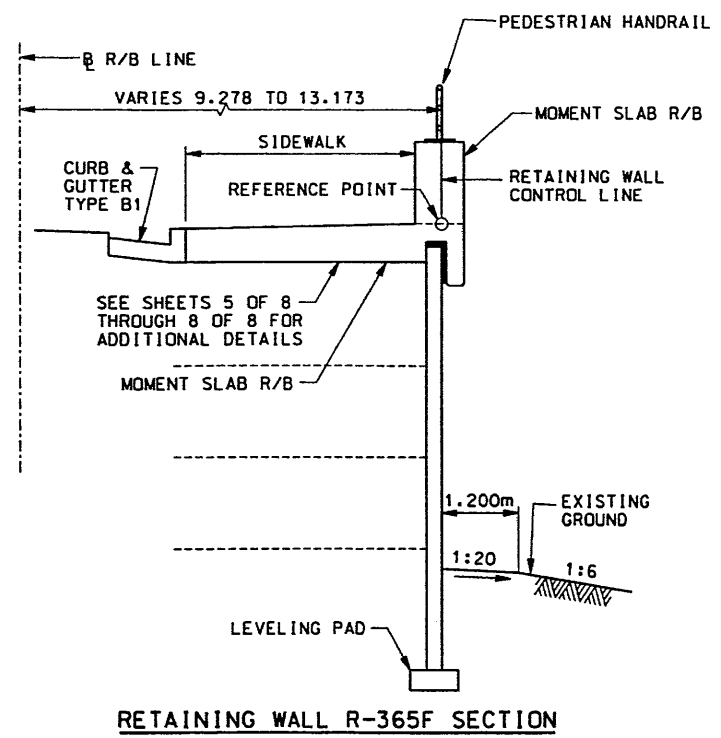
GENERAL NOTES

1. ALL REINFORCING STEEL SHALL BE COATED DEFORMED BILLET-STEEL BARS CONFORMING TO AASHTO M 284, M 111 AND M 31M GRADE 400, RESPECTIVELY.
2. EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED 19 mm EXCEPT WHERE NOTED OTHERWISE.
3. ALL CONCRETE SHALL BE CLASS AA(AE) EXCEPT WHERE NOTED OTHERWISE.
4. ALL DIMENSIONS ARE METERS UNLESS NOTED OTHERWISE.
5. SEE SHEET 5 OF 8 THROUGH 8 OF 8 FOR ADDITIONAL DETAILS.

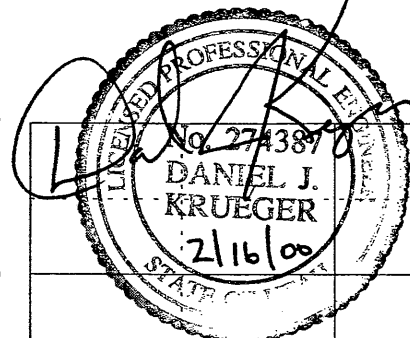
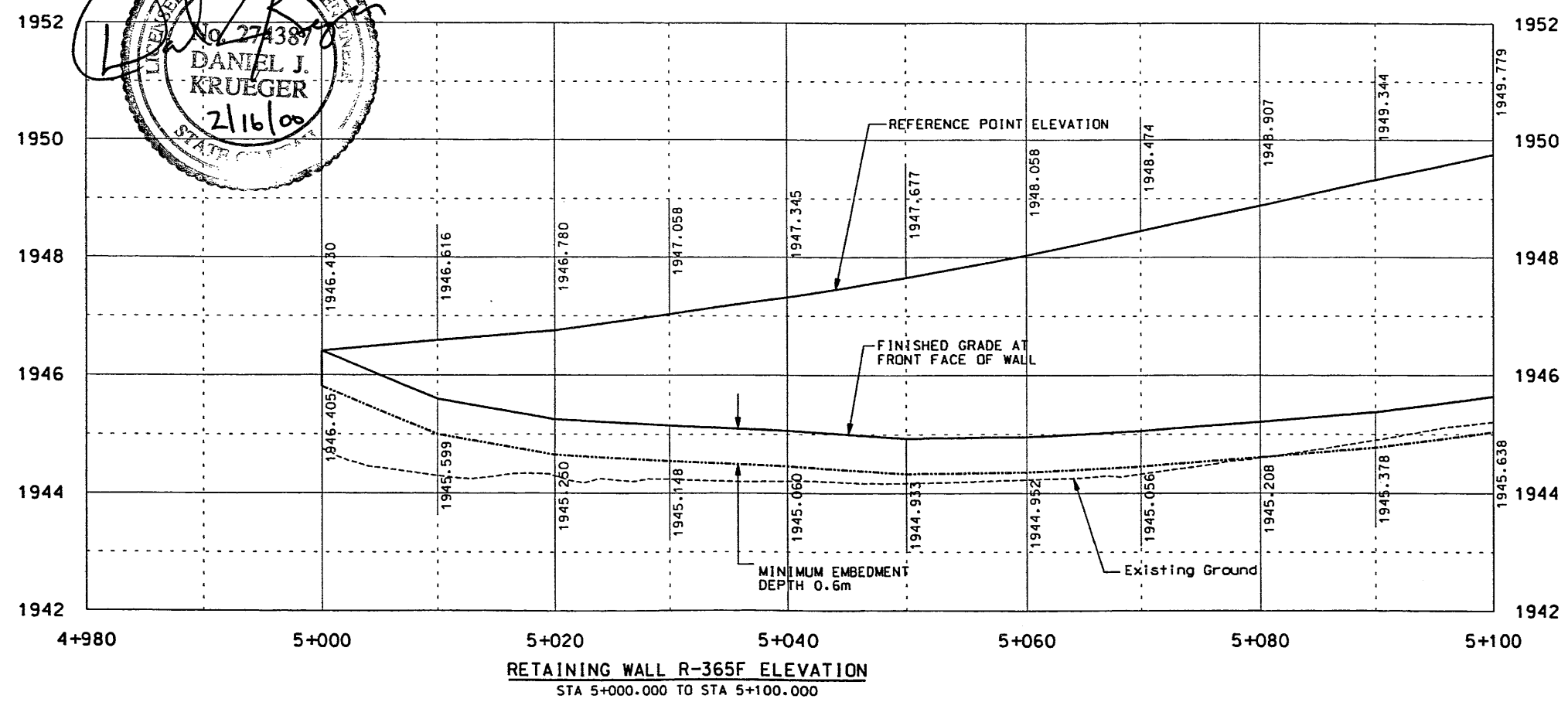
QUANTITIES		
ITEM	QUANTITY	UNIT
MSE RETAINING WALL (R-365F) (EST. QUANTITY 1228 M2)	1	LUMP

DESIGN DATA

REINFORCING STEEL: $f_s = 160 \text{ MPa}$; $F_y = 400 \text{ MPa}$
 CAST-IN-PLACE CONCRETE: $f_c = 25 \text{ MPa}$



RETAINING WALL R-365F PLAN
STA 5+000.000 TO STA 5+100.000

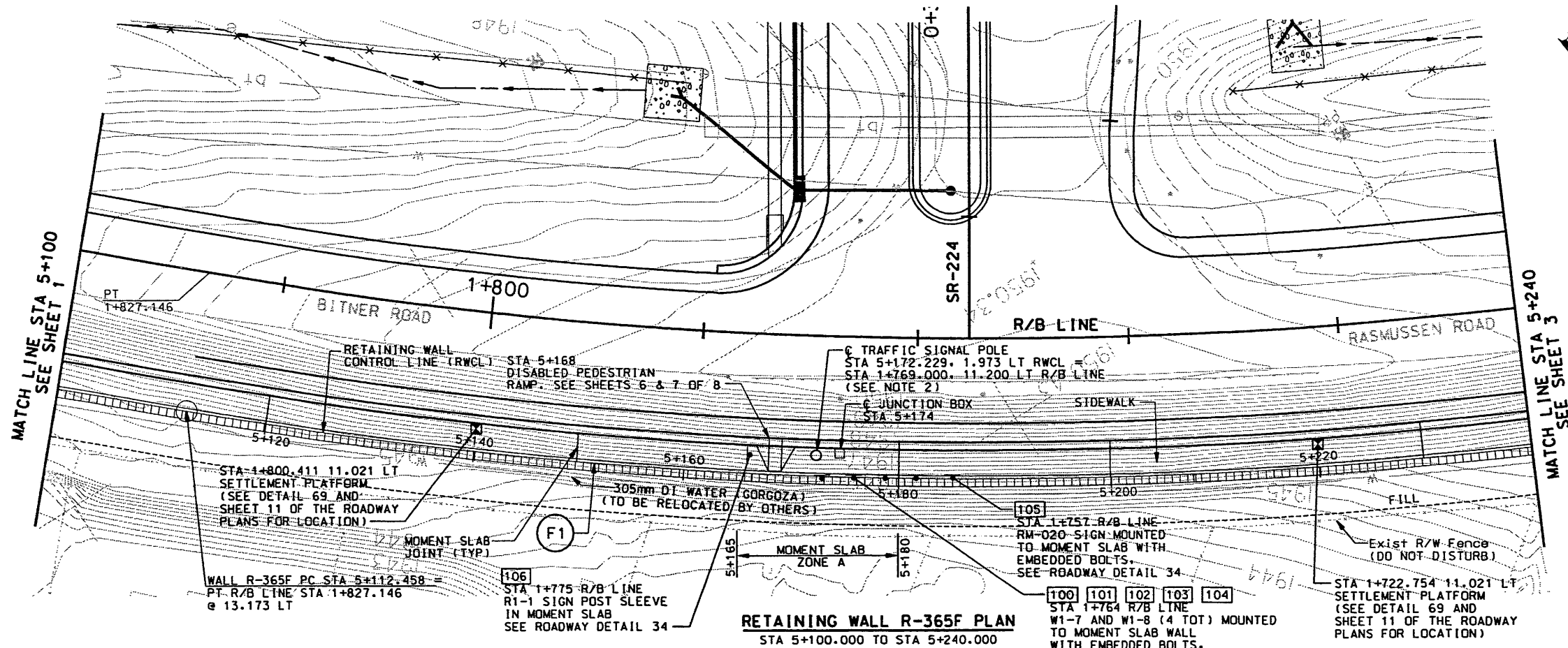


UTAH DEPARTMENT OF TRANSPORTATION
URS Greiner Woodward Clyde

KIMBALL JUNCTION INTERCHANGE
 RETAINING WALL R-365F
 SITUATION & LAYOUT

SUMMIT COUNTY
 R-365F
 DWG. NO.
 SHEET NO. 1 OF 8

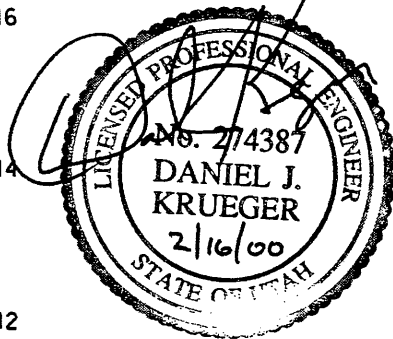
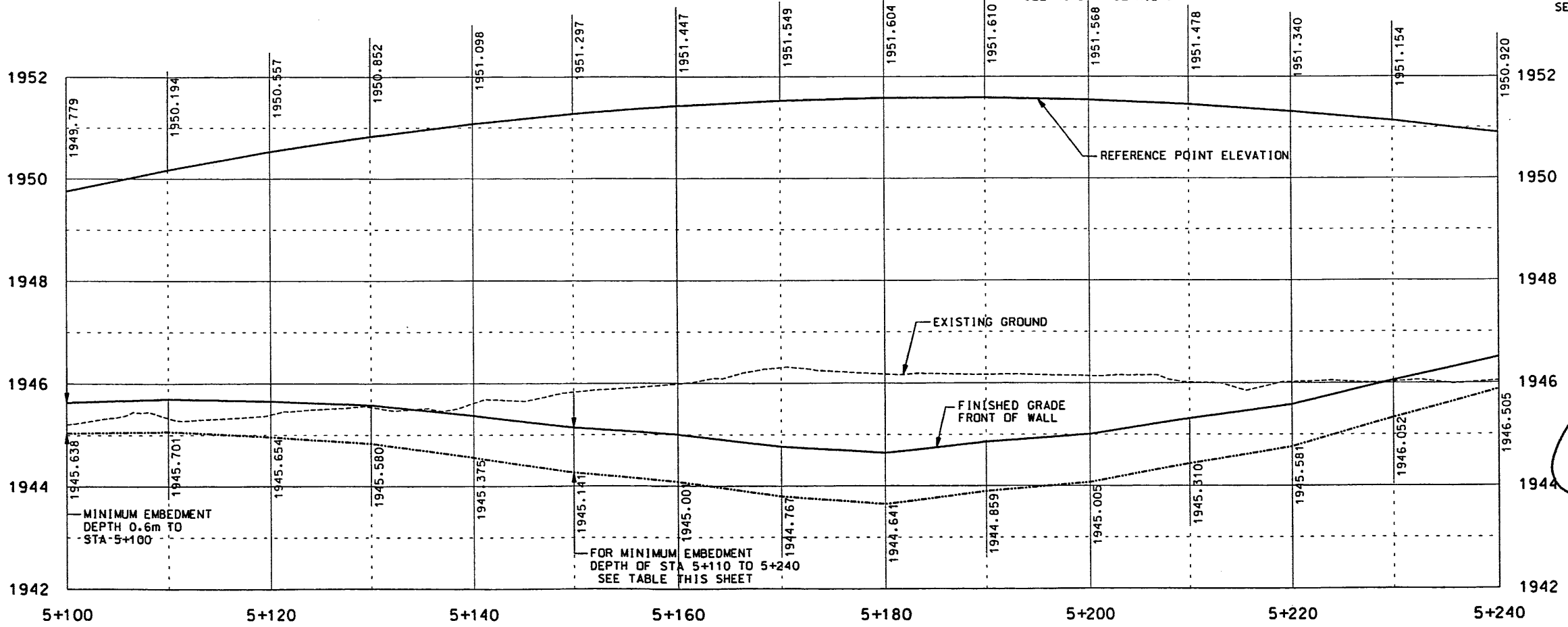
19:03:05
 15 FEB 100
 J:\1910_00\sheet_1_files\walls\1910_wallr01a.dgn



CURVE DATA (F1)

$\Delta = 19^\circ 41' 00''$ L
 $R = 449.765$
 $T = 78.025$
 $L = 154.512$
 $PI = 5+190.483$
 $N = 2266529.765$
 $E = 496527.759$

- NOTES:**
- SEE SHEETS 1 OF 8 FOR ADDITIONAL GENERAL NOTES.
 - SIGNAL/LIGHT POLE. SEE SHEET 22 AND SIGNAL AND LIGHTING SHEETS S-6A AND S-8B FOR ADDITIONAL INFORMATION.
 - FOR ADDITIONAL SIGNING INFORMATION SEE SHEET 63.



UTAH DEPARTMENT OF TRANSPORTATION
URS Greiner Woodward Clyde

KIMBALL JUNCTION INTERCHANGE
 RETAINING WALL R-365F
 SITUATION & LAYOUT

APPROVAL RECORD: 2/10/00 DATE: 2/16/00
 PROJECT DESIGN ENGINEER: [Signature]
 ROADWAY DESIGN ENGINEER: [Signature]

DESIGN: GJT, 10/29
 DRAWN: ERY, 10/29
 QUANT.: MJE, 11/29

REVIEW: [Signature]
 CHECK: DJK, 01/00
 DATE: [Signature]
 CHECK: DJK, 01/00
 BY: [Signature]
 CHECK: DJK, 01/00

REVISIONS

NO.	DATE	DESIGN REV. BY	PARCELS AFFECTED	REQUEST BY	REMARKS

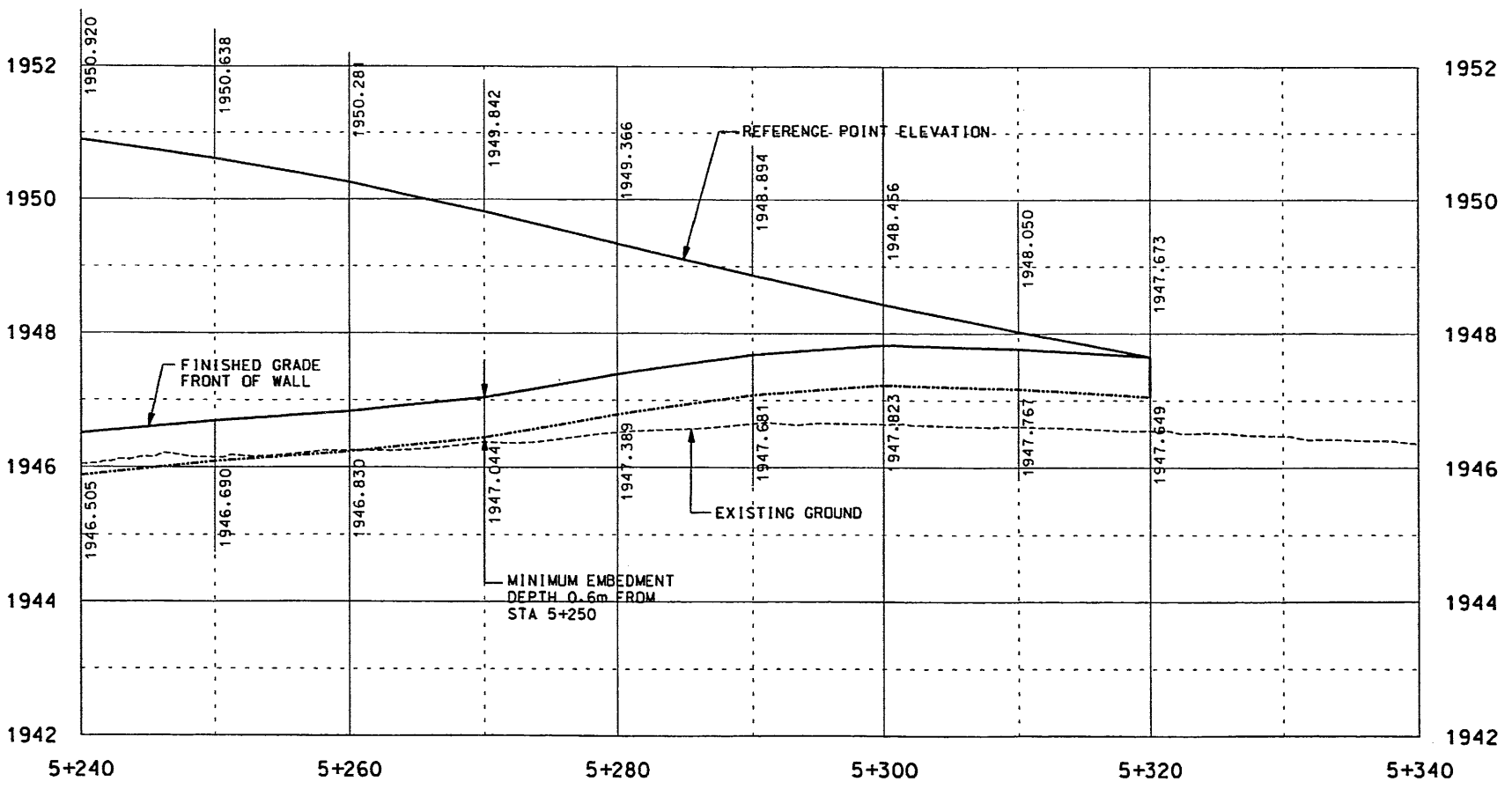
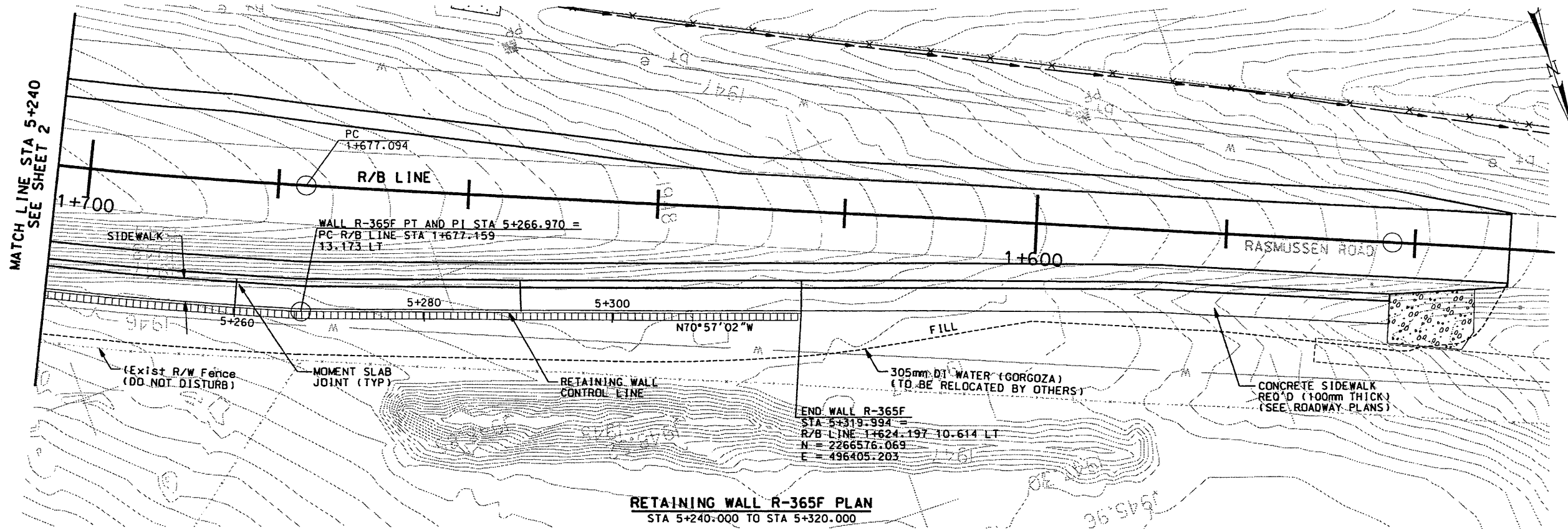
ORIGINAL SUBMISSION FOR AUTHORIZATION

PROJECT NUMBER: *IM-80-41801144

SUMMIT COUNTY
 R-365F
 DWG. NO.

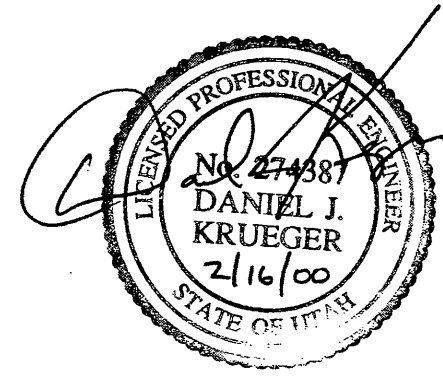
SHEET NO. 2 OF 8

19:15:42
 15 FEB 100
 J:\1910_00\sheet_1\files\wallis\1910_wallr01b.dgn



RETAINING WALL R-365F ELEVATION
STA 5+240.000 TO STA 5+320.000

NOTE:
1. SEE SHEETS 1 OF 8 FOR GENERAL NOTES.



19/04/17
15 FEB 100
j:\1910_00\sheet_files\walls\1910_wallr01c.dgn

UTAH DEPARTMENT OF TRANSPORTATION		DESIGN C/JT 10/99		CHECK DJK 01/00		REVIEW	
URS Greiner Woodward Clyde		DRAIN PRV 10/99		CHECK DJK 01/00		DATE	
KIMBALL JUNCTION INTERCHANGE		QUANT. MJE 11/99		CHECK DJK 01/00		BY	
RETAINING WALL R-365F		APPROVAL REGIONAL DATE 2/00		PROJECT DESIGN ENGINEER		DESIGN MAPS PARCELS REQUEST BY	
SITUATION & LAYOUT		APPROVED DATE 2/00		ROADWAY DESIGN ENGINEER		ORIGINAL SUBMISSION FOR AUTHORIZATION	
PROJECT NUMBER *IM-5-4(80)144		SUMMIT COUNTY		R-365F		REVISIONS	
SHEET NO. 3 OF 8		DWC NO.		DATE		REMARKS	

Log of Boring WB-10

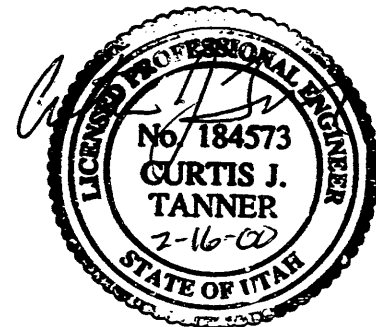
Date(s) Drilled	1/21/99 - 1/21/99	Logged By	Jessica Larson	Checked By	CJT
Drilling Method	Hollow-Stem Auger	Drill Bit Size/Type	8-1/2" OD x 4-1/4" ID	Total Depth (feet)	51.3
Drill Rig Type	CME-75	Drilling Contractor	Doug Becke	Sampler Type(s)	Cal. Split (2.5" OD)
Groundwater Level and Date Measured	Not Encountered	Hammer Data	140 lbs / 30 inches	Approximate Surface Elevation	6367.2 feet / 1940.7 meters
Comments	Borehole Backfill backfill with cuttings				

Elevation, meters	Depth, feet	SAMPLES				MATERIAL DESCRIPTION	Water Content, %	Dry Density (pcf)	REMARKS/ OTHER TESTS
		Type	Number	Percent Recovery	Blow Count (Blows / 6")				
0	0							Automatic hammer	
-1940	5	1	100	2	Lean CLAY (CL), with sand and gravel, brown to dark brown, stiff, moist, low plastic fines (fill?)				
-1938	10	2	56	5	Clayey GRAVEL (GC), with sand; Poorly Graded GRAVEL with Clay (GP-GC), with sand; brown, dense to very dense, moist, low plastic fines; pockets or lenses of clay and sand; occasional cobbles-sized, very weak to medium strong (very soft to hard) rock fragments				
-1937	15	3	67	15					
-1935	20	4	100	11		7	98	silt/clay=11%	
-1933	25	5	0	25-2"					
-1931	30	6	100	25					
-1930	35	7	100	21					
-1928	40	8	100	24					
-1927	45	9	100	22				Sample 9 disturbed	
-1925	50	10	100	21					
				25-3"				Total Depth= 51.3 ft	

Log of Boring WB-9

Date(s) Drilled	1/27/99 - 1/27/99	Logged By	Jessica Larson	Checked By	CJT
Drilling Method	Hollow-Stem Auger	Drill Bit Size/Type	8-1/2" OD x 4-1/4" ID	Total Depth (feet)	46.5
Drill Rig Type	CME-75	Drilling Contractor	Doug Becke	Sampler Type(s)	Cal. Split (2.5" OD)
Groundwater Level and Date Measured	Not Encountered	Hammer Data	140 lbs / 30 inches	Approximate Surface Elevation	6396.3 feet / 1949.6 meters
Comments	Borehole Backfill backfill with cuttings				

Elevation, meters	Depth, feet	SAMPLES				MATERIAL DESCRIPTION	Water Content, %	Dry Density (pcf)	REMARKS/ OTHER TESTS
		Type	Number	Percent Recovery	Blow Count (Blows / 6")				
0	0							Automatic hammer	
-1949	5	1	100	55	Clayey GRAVEL (GC), with sand; Poorly Graded GRAVEL with Clay (GP-GC), with sand; brown, very dense, moist; pockets or lenses of clay and sand; occasional cobbles-sized, very weak to medium strong (very soft to hard) rock fragments	3	119	silt/clay=15%	
-1947	10	2	100	25			6	127	silt/clay=15%
-1945	15	3	100	24					
-1943	20	4	100	30					
-1942	25	5	100	8		7	124	silt/clay=17%	
-1940	30	6	100	30					
-1939	35	7	100	25					
-1937	40	8	100	18					
-1936	45	9	83	18					
				23				Total Depth= 46.5 ft	



KEY TO BORING LOG

GRAPHIC LOG SYMBOLS

SAMPLE TYPE AND OTHER SYMBOLS

--	--	--	--	--

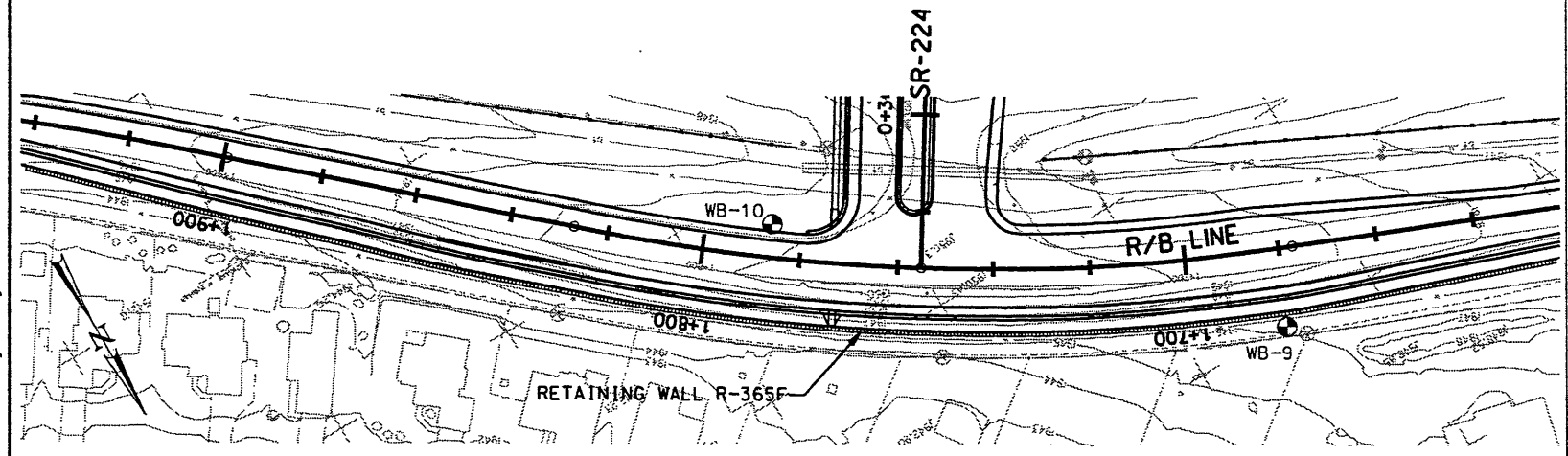
Water level measured in boring at specified date and time

NOTES

- Soil classifications are based on the Unified Soil Classification System (USCS).
- Descriptions and stratum lines are interpretive; Transitions may be gradational.
- Field logs may have been modified to reflect lab test results.
- Classifications and descriptions provided apply only at the specific location of the boring and at the time the boring was advanced; they are not warranted to be representative of subsurface conditions at other locations or times.
- Refer to the Geotechnical Report containing these boring logs for additional information and explanation.

ABBREVIATIONS / DEFINITIONS

- LL = Liquid Limit (in percent)
 - PI = Plasticity Index
 - NP = Non-plastic
 - w = Natural Moisture Content (in percent)
 - DD = Dry Density (in pounds per cubic foot)
 - WSS = Water Soluble Sulfates (in parts per million)
 - Fines = Fine-grained portion of soil passing No. 200 Sieve (3-inch minus wash/gradation analysis result in percent)
 - Silt/Clay = See "Fines"
 - Sand = Rock particles passing No. 4 Sieve & retained on No. 200 Sieve (3-inch minus gradation analysis result in percent)
 - Gravel = Rock particles passing 3-inch Sieve & retained on No. 4 Sieve (3-inch minus gradation analysis result in percent)
 - Cobble = Rock particles retained on 3-inch Sieve, 12-inch maximum dimension
 - Boulder = Rock particles greater than 12-inch maximum dimension
 - ATD = At Time of Drilling
 - OD = Outside Diameter
- Blows per 6" is the number of blows required to advance sampler 6 inches, or the distance indicated (in inches); Standard penetration number, N, is the sum of the number of blows for the second and third 6-inch intervals (i.e., 6" to 18")
- Sieve sizes are USA Standard; Sieve openings are as follows: 3-inch = 75mm, No.4 = 4.75mm, No.200 = 0.075mm



WALL GEOTECH LOGS
WB-9 & WB-10

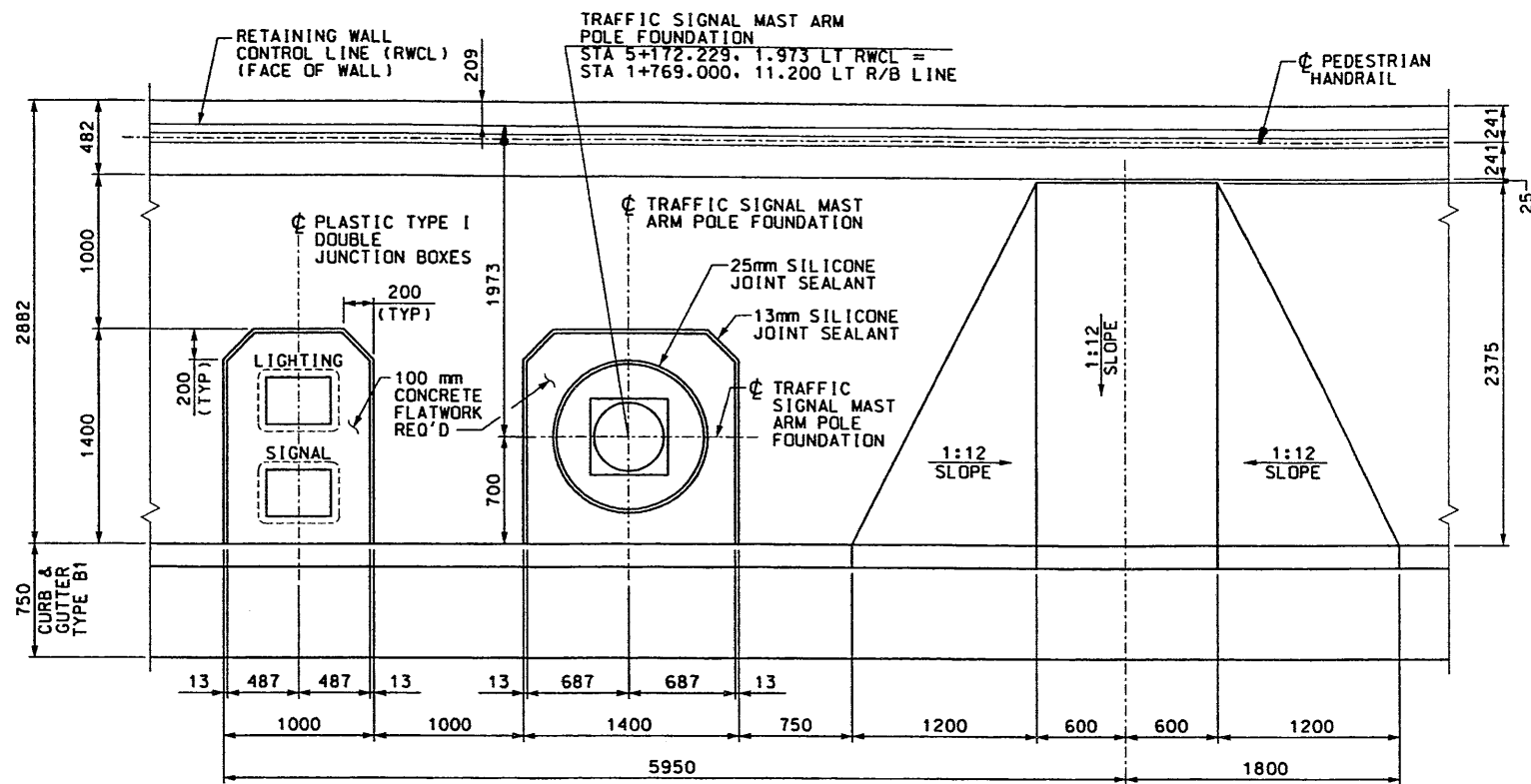
UTAH DEPARTMENT OF TRANSPORTATION
URS Greiner Woodward Clyde

KIMBALL JUNCTION INTERCHANGE
RETAINING WALL R-365F
SOIL DATA SHEET

SUMMIT COUNTY
R-365F
DWG. NO.
SHEET NO. 4 OF 8

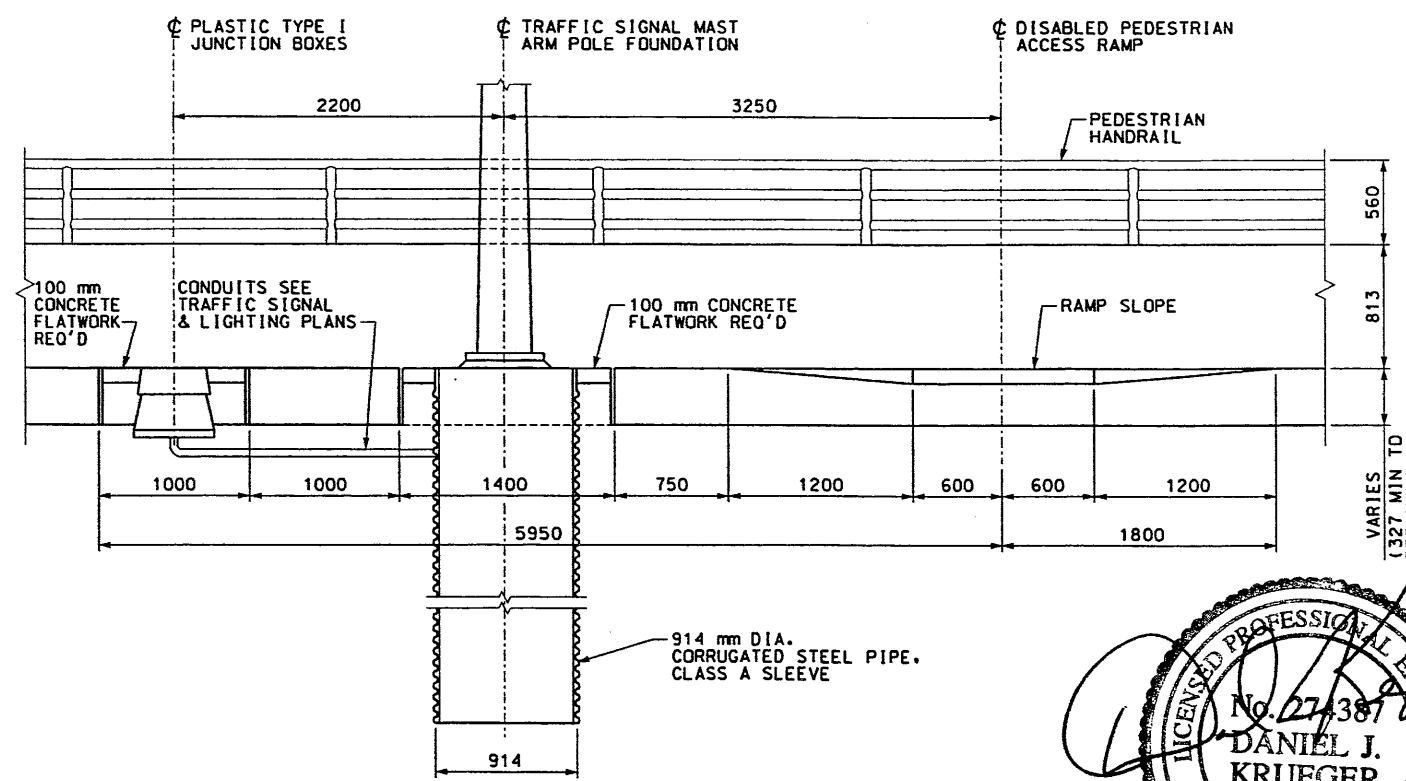
APPROVAL DATE	2-16-00	DESIGN DATE	11/99	CHECK DATE	11/99	REVIEW DATE	11/99
APPROVED BY	[Signature]	DESIGNED BY	[Signature]	CHECKED BY	[Signature]	REVIEWED BY	[Signature]
PROJECT NUMBER	IM-80-4(80)144	DATE	11/99	DATE	11/99	DATE	11/99

12:37:17 00
30 JAN 2000
J:\1910_00\sheet_files\1910_gro_06.dgn

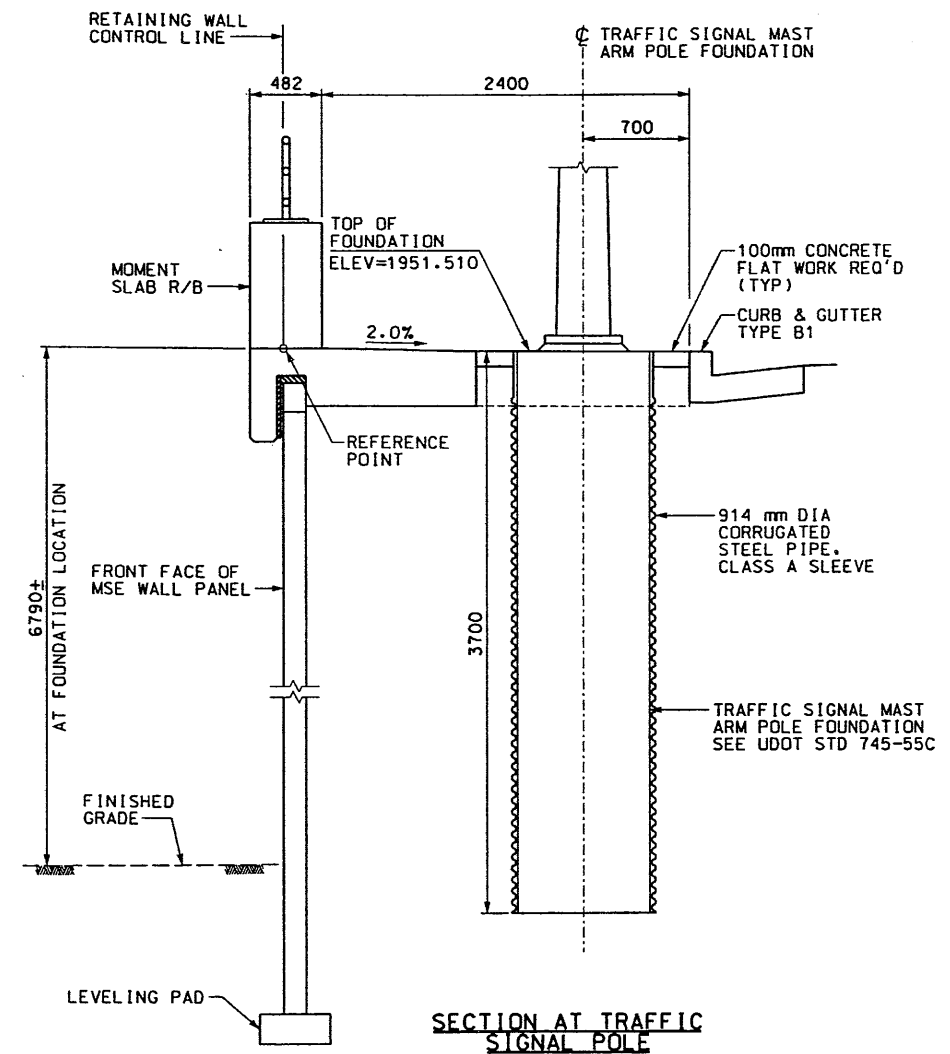


DISABLED PEDESTRIAN ACCESS RAMP
(FOR ADDITIONAL DETAILS SEE STD DWG 715-2 TYPE C)

PLAN



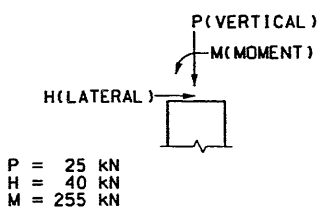
ELEVATION



SECTION AT TRAFFIC SIGNAL POLE

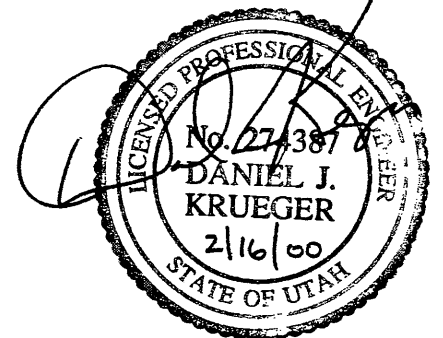
NOTES:

1. THE RETAINING WALL SYSTEM SHALL BE DESIGNED TO ACCOMMODATE AND SUPPORT THE TRAFFIC SIGNAL MAST ARM POLE FOUNDATION. DESIGN LOADS AT THE TOP OF THE TRAFFIC SIGNAL POLE FOUNDATION ARE AS FOLLOWS:



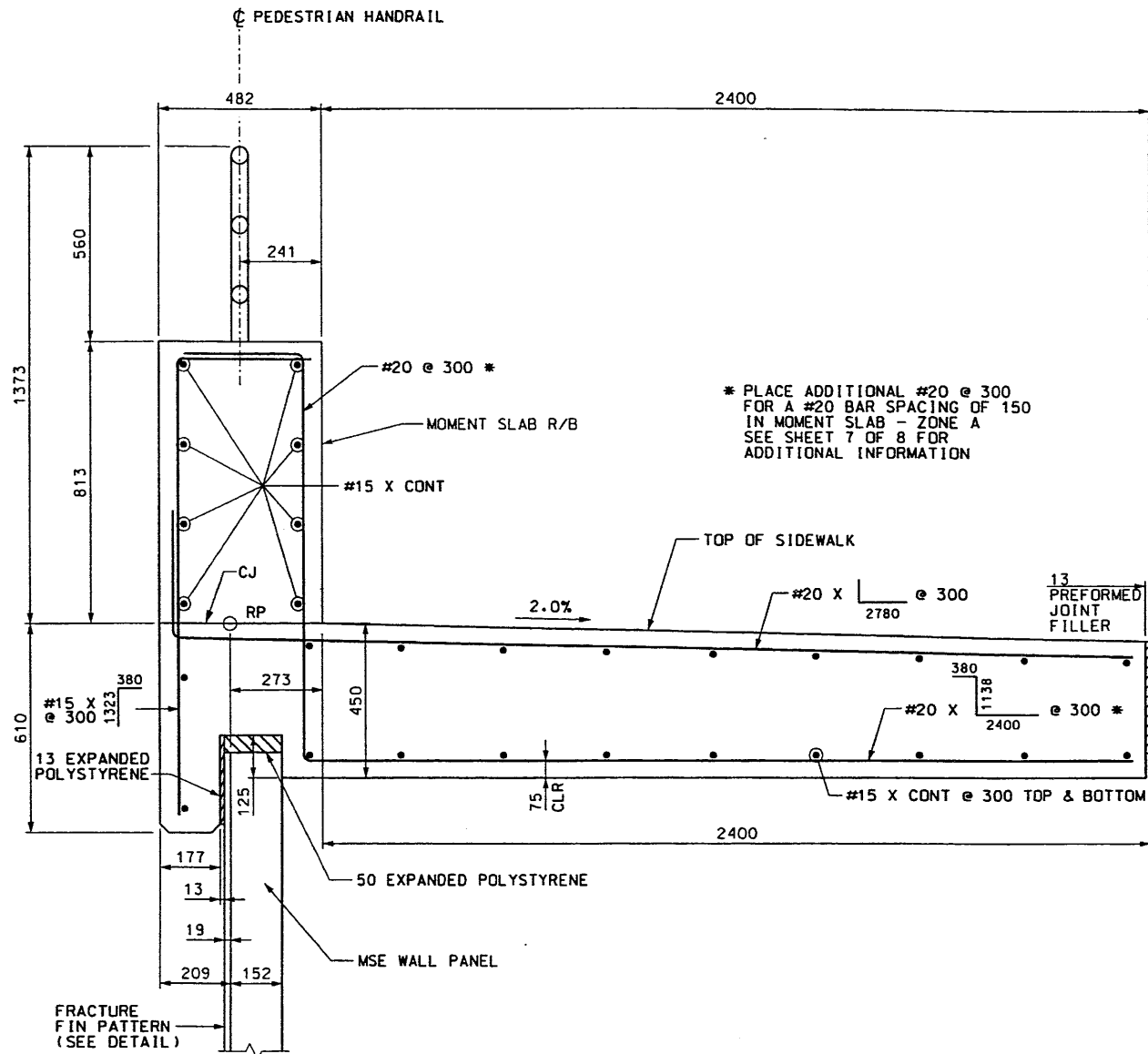
P = 25 KN
H = 40 KN
M = 255 KN

- THE 914 mm CORRUGATED STEEL PIPE, CLASS A SLEEVE, SHALL BE PLACED DURING WALL REINFORCING AND SELECT MATERIAL CONSTRUCTION.
- THE TRAFFIC SIGNAL MAST ARM FOUNDATION SHALL BE POURED AFTER CONSTRUCTION OF THE WALL REINFORCING AND SELECT MATERIAL.
- THE CONTRACTOR SHALL INSTALL THE TRAFFIC SIGNAL POLE FOUNDATION AND CONDUITS PRIOR TO CONSTRUCTION OF THE MOMENT SLAB R/B.
- THE DISABLED PEDESTRIAN ACCESS RAMP SHALL BE CONSTRUCTED AS PART OF THE MOMENT SLAB R/B. FOR ADDITIONAL DETAILS SEE STD DWG 715-2 TYPE C.
- PLACE JOINTS IN MOMENT SLAB R/B EVERY 30 METERS. JOINTS SHALL BE 13mm PREMOLDED EXPANSION JOINT FILLER. THE JOINTS SHALL BE THROUGH THE ENTIRE MOMENT SLAB SECTION. REINFORCING STEEL SHALL NOT BE CONTINUOUS THROUGH THE JOINT.
- FOR ADDITIONAL INFORMATION CONCERNING THE TRAFFIC SIGNAL MAST ARM FOUNDATION, CONDUITS AND JUNCTION BOXES, SEE THE SIGNAL PLAN SHEETS S-6A, S-6B, AND S-8B.



19:04:24
15 FEB 00
J:\1910_00\sheet_files\wallis\1910_wall_det_10.dgn

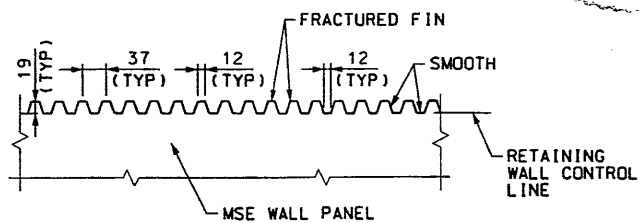
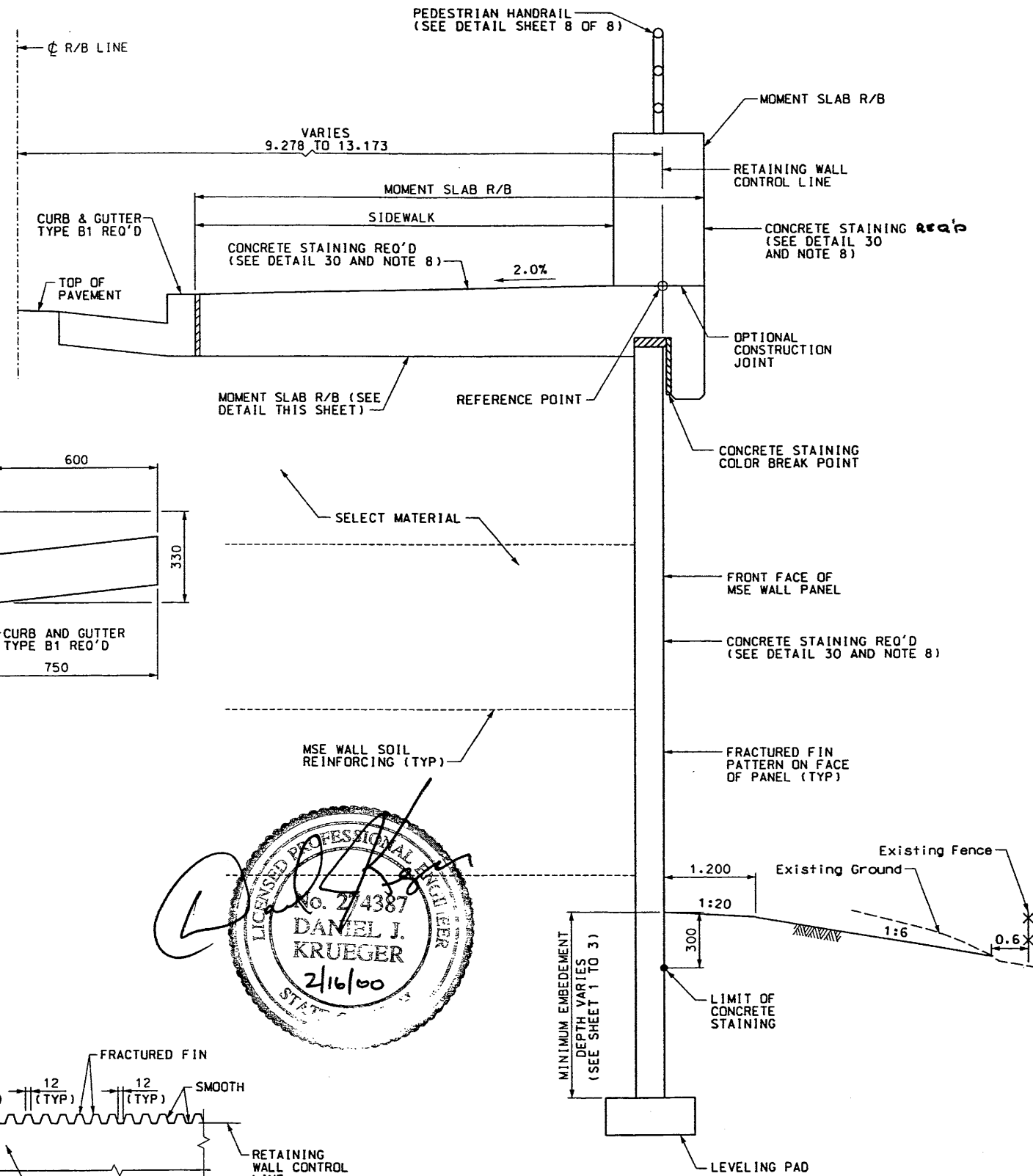
UTAH DEPARTMENT OF TRANSPORTATION		REVIEW	
URS Greiner Woodward Clyde		DESIGN D.J.K. 11/99	CHECK CEL. 01/00
KIMBALL JUNCTION INTERCHANGE		DRAWN CER. 11/99	CHECK D.J.K. 01/00
RETAINING WALL R-365F		APPROVED DATE	QUANT.
DETAILS		PROJECT DESIGN ENGINEER	ROADWAY DESIGN ENGINEER
PROJECT NUMBER		APPROVED DATE	QUANT.
SUMMIT COUNTY		REVISIONS	
R-365F		NO. DATE DESIGN MAPS PARCELS REQUEST BY	
DWC.NO.		ORIGINAL SUBMISSION FOR AUTHORIZATION	
SHEET NO. 5 OF 8		DATE	



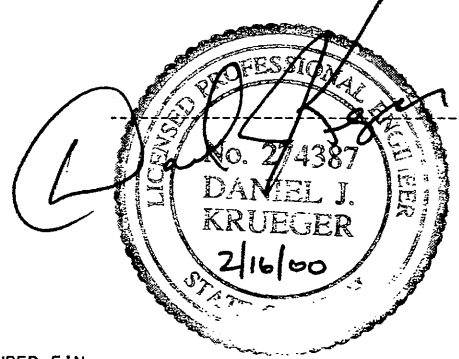
TYPICAL MOMENT SLAB R/B REINFORCEMENT DETAIL

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
2. ALTERNATE ALL REINFORCING STEEL SPLICES. SPLICES IN #15 BARS SHALL BE 600 mm.
3. SEE WALL SITUATION & LAYOUT SHEET 1 OF 8, 2 OF 8 AND 3 OF 8 FOR LOCATION OF RETAINING WALL CONTROL POINT AND ELEVATION OF REFERENCE POINT.
4. MINIMUM COVER TO REINFORCING STEEL SHALL BE 50 mm EXCEPT WHERE NOTED OTHERWISE.
5. SEE WALL SITUATION & LAYOUT FOR LIMITS OF CONSTRUCTION.
6. ALL CAST IN PLACE CONCRETE SHALL BE CLASS AA(AE) EXCEPT WHERE NOTED OTHERWISE.
7. ALL REINFORCING STEEL SHALL BE COATED DEFORMED BILLET STEEL BARS CONFORMING TO AASHTO M 284, M 111, AND M 31M GRADE 400.
8. CONCRETE STAINING IS REQUIRED ON EXPOSED SURFACES OF WALL AND MOMENT SLAB AND 300 mm BELOW FINISHED GRADE. THE STAINING REQUIREMENTS ARE AS FOLLOWS:
 MOMENT SLAB: CONCRETE STAINING REQ'D (COLOR NO. 30450)
 WALL FACE: CONCRETE STAINING REQ'D (COLOR NO. 30227)
9. THE MOMENT SLAB SHALL NOT BE CONSTRUCTED UNTIL THE RETAINING WALL PRIMARY SETTLEMENT HAS BEEN COMPLETED.



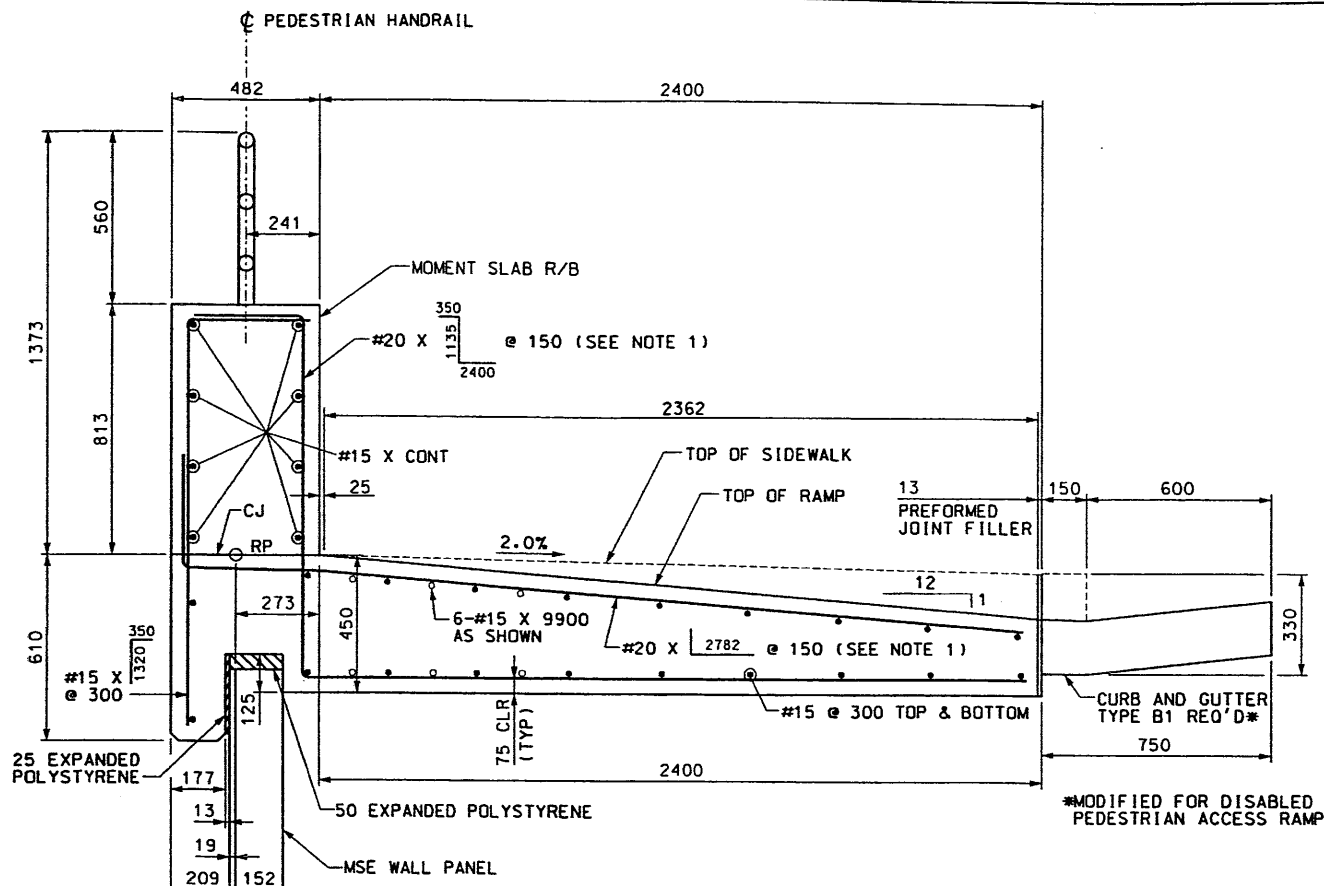
FRACTURED FIN PATTERN DETAIL



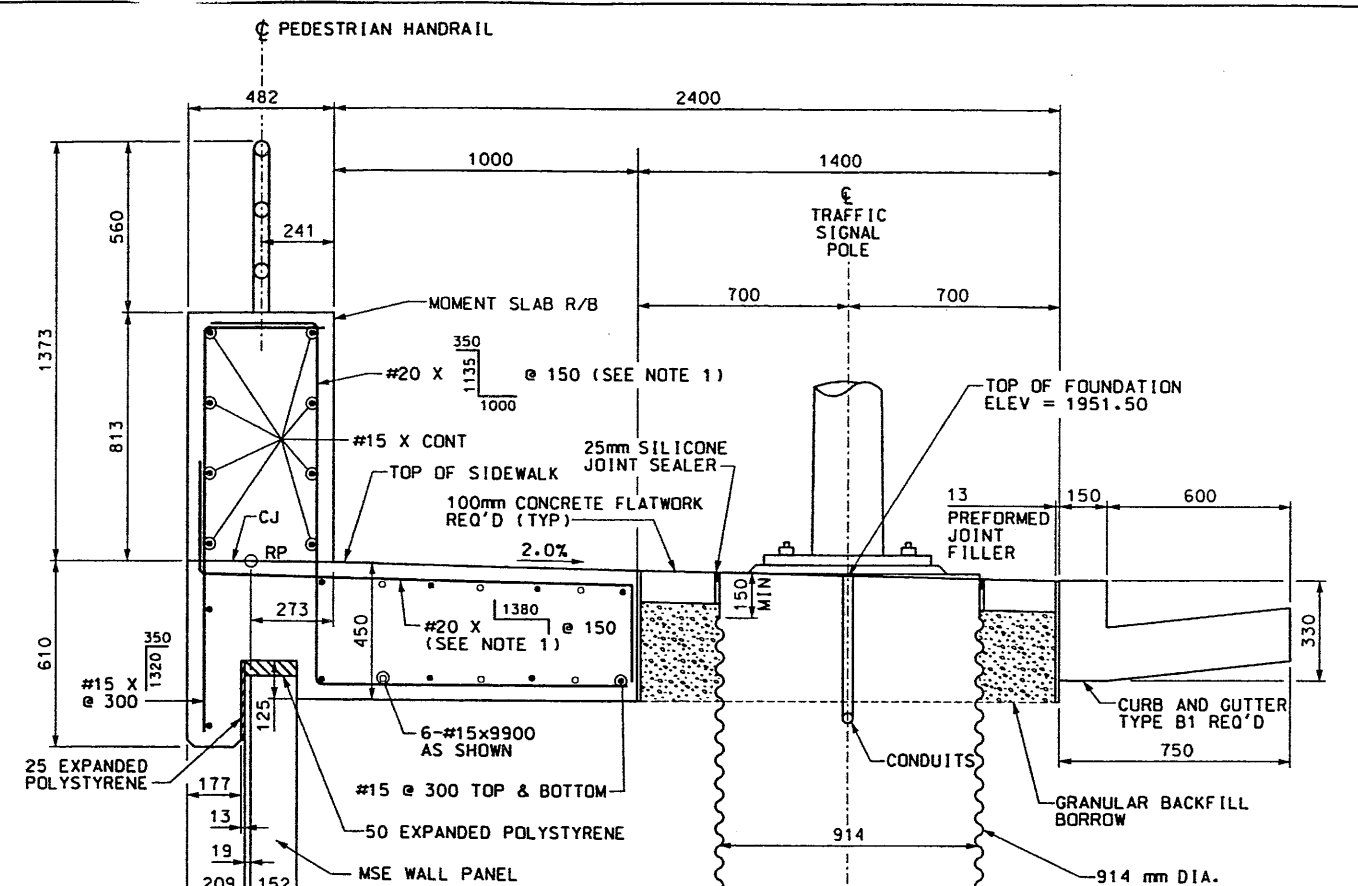
TYPICAL WALL SECTION

UTAH DEPARTMENT OF TRANSPORTATION		DESIGN		CHECK		REVIEW	
URS Greiner Woodward Clyde		DJK	DJK	DJK	DJK	DJK	DJK
KIMBALL JUNCTION INTERCHANGE		2/00	10/99	10/99	01/00	01/00	01/00
RETAINING WALL R-365F		DATE	DATE	DATE	DATE	DATE	DATE
DETAILS		APPROVAL	RECOMM.	APPROVED	QUANT.	CHECK	BY
PROJECT NUMBER		*IM-80-4(80)144					
SUMMIT COUNTY		R-365F					
DWG. NO.		6 OF 8					

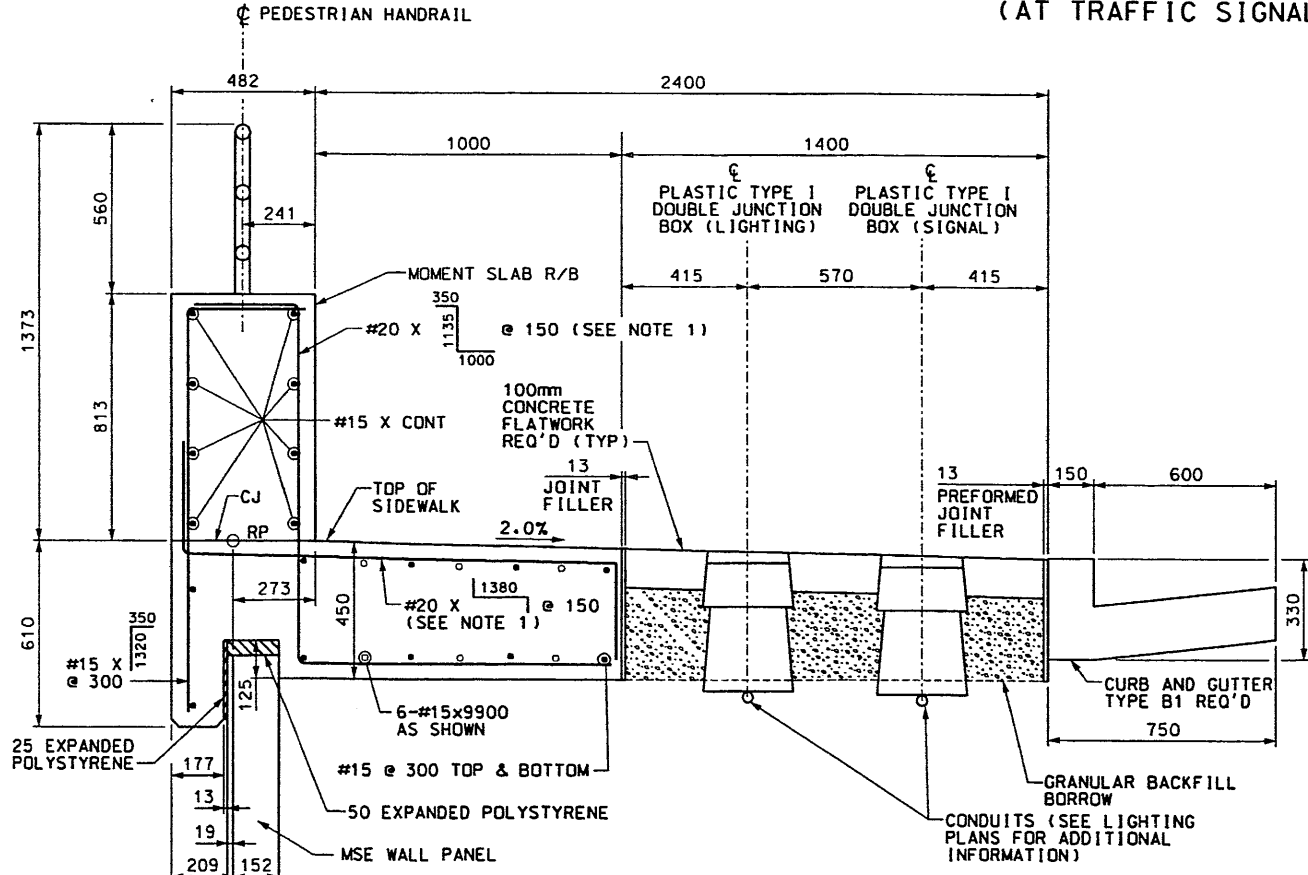
19/04/20
15:45:10
j:\1910_00\sheet_files\wall\1910_wall_det_08.dgn



MOMENT SLAB R/B REINFORCING DETAIL
(AT DISABLED PEDESTRIAN ACCESS RAMP - ZONE A)



MOMENT SLAB R/B REINFORCING DETAIL
(AT TRAFFIC SIGNAL POLE - ZONE A)



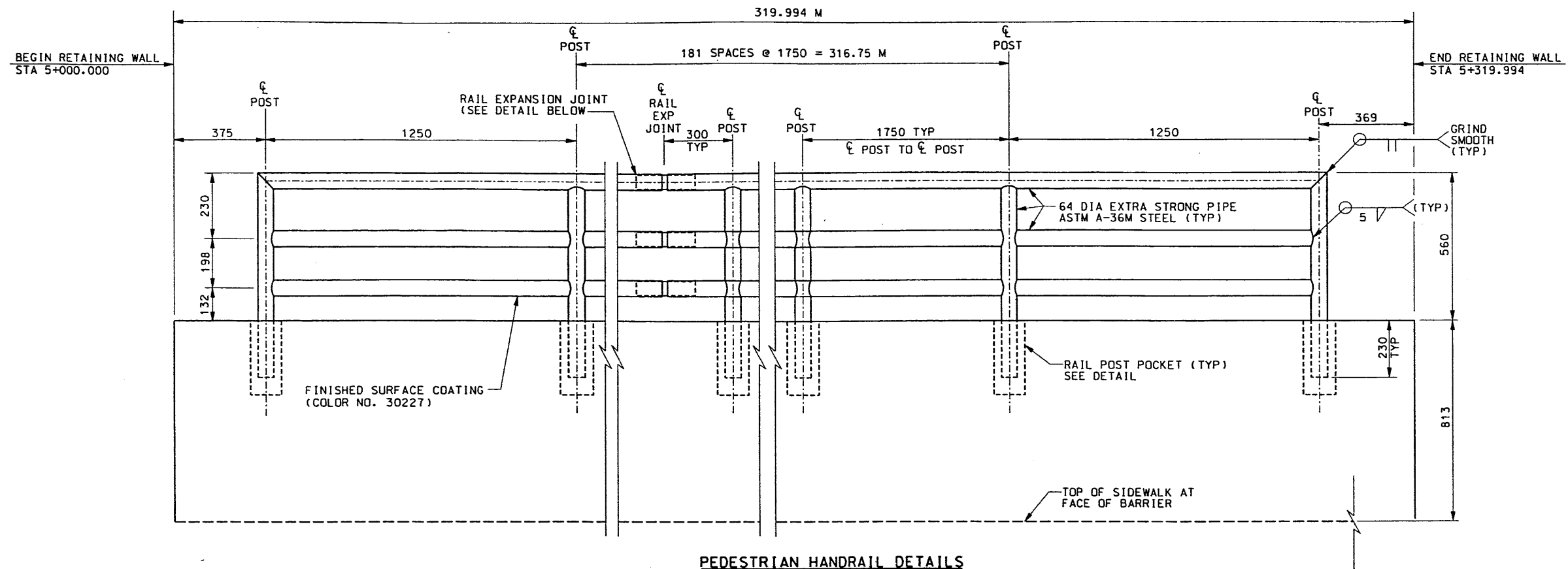
MOMENT SLAB R/B REINFORCING DETAIL
(AT JUNCTION BOXES - ZONE A)

NOTES:
 1. THE ZONE A LOCATION IS DEFINED ON SHEET 2 OF 8 BETWEEN STA 5+165 AND STA 5+180.
 2. WITHIN "ZONE A" THE #20 BAR SPACING FOR THESE BARS SHALL BE 150 mm.

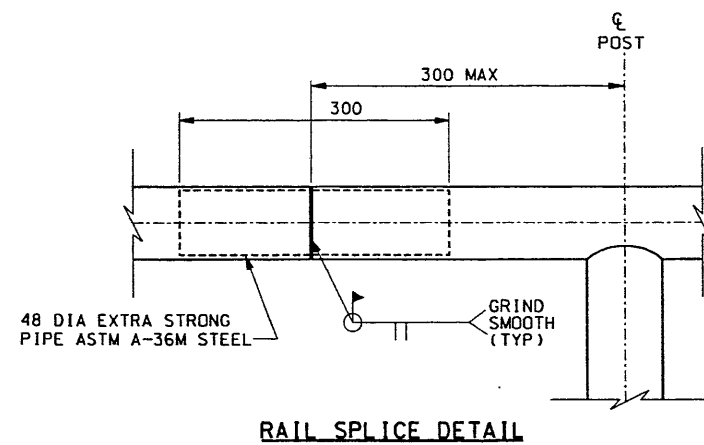


19/04/34
 15 FEB 100
 J:\1910_00\sheet_01\sheet_01\wall_det_1.dgn

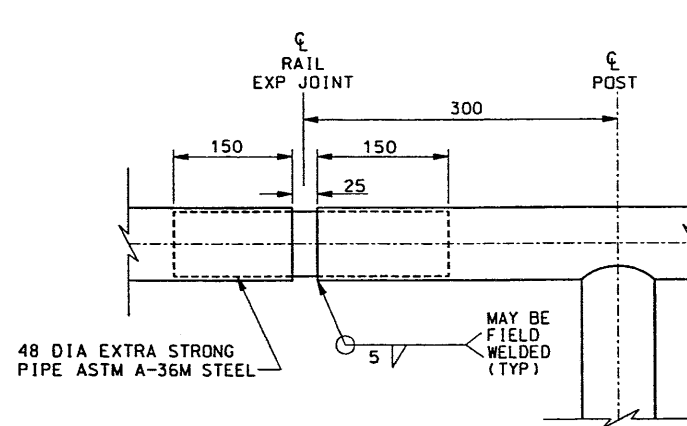
KIMBALL JUNCTION INTERCHANGE RETAINING WALL R-365F	UTAH DEPARTMENT OF TRANSPORTATION		URS Greiner Woodward Clyde		REVISIONS NO. DATE DESIGN CORRECTED BY MAPS REQUESTED BY ORIGINAL SUBMISSION FOR AUTHORIZATION DATE
	DETAILS	DATE: 2/00	DESIGN: DJK, 11/99	CHECK: CEL, 01/00	
	PROJECT NUMBER: *IM-4(80)14	APPROVED: [Signature], 2/00	DRAWN: CER, 11/99	CHECK: DJK, 01/00	
SUMMIT COUNTY	REINFORCING DETAIL				REVISIONS
R-365F	NO. 274387 DANIEL J. KRUEGER				DATE
DRG. NO.	2/16/00				BY
SHEET NO. 7 OF 8					



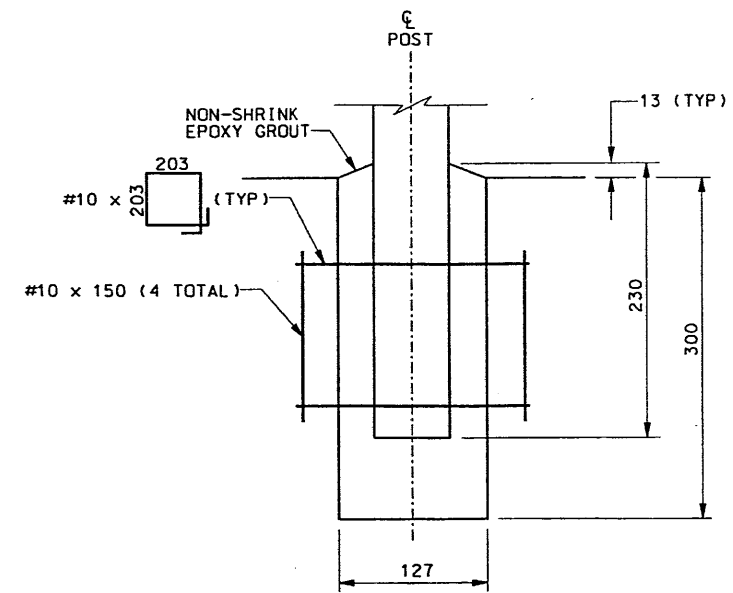
PEDESTRIAN HANDRAIL DETAILS



RAIL SPLICE DETAIL



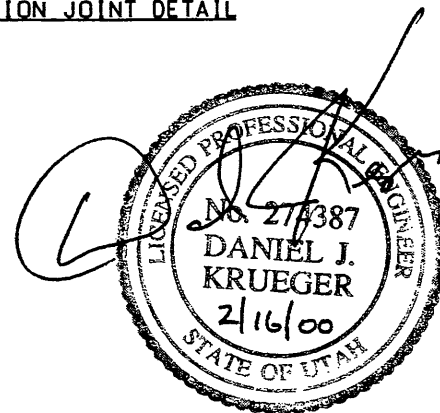
RAIL EXPANSION JOINT DETAIL



RAIL POST POCKET DETAIL

NOTES:

1. ALL UNITS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
2. RAIL EXPANSION JOINTS SHALL BE SPACED APPROXIMATELY EVERY 30 METERS. RAIL PANELS (POST TO POST) WITH RAIL EXPANSION JOINTS SHALL BE LOCATED AT MOMENT SLAB JOINTS.
3. RAIL SPLICES SHALL BE SPACED 7.300 METERS MINIMUM.
4. ALL RAIL POSTS SHALL BE VERTICAL.



190442
15 FEB 100
j:\1910_00\sheet_1\files\walls\1910_wal_det_09.dgn

UTAH DEPARTMENT OF TRANSPORTATION UNS Greiner Woodward Clyde		DESIGN D.J.K. 11/99	CHECK C.E.L. 01/00	REVIEW
KIMBALL JUNCTION INTERCHANGE RETAINING WALL R-365F		PROJECT DESIGN ENGINEER DATE 2/16/00	QUANT.	DATE
DETAILS		APPROVED DATE 2/16/00	DATE	BY
PROJECT NUMBER *M-80-4(80)144		ROADWAY DESIGN ENGINEER	DATE	BY
SUMMIT COUNTY		ORIGINAL SUBMISSION FOR AUTHORIZATION	DATE	REVISIONS
R-365F DWG. NO.		NO.	DATE	REMARKS
SHEET NO. 8 OF 8				