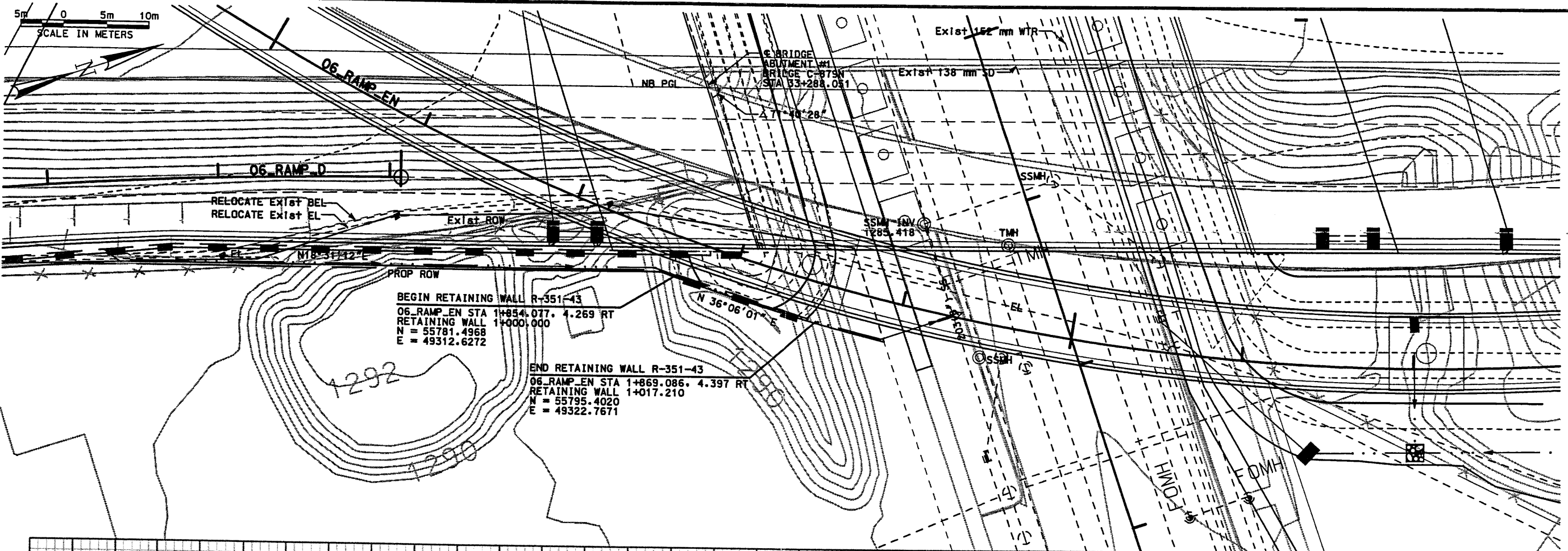
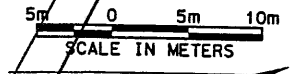
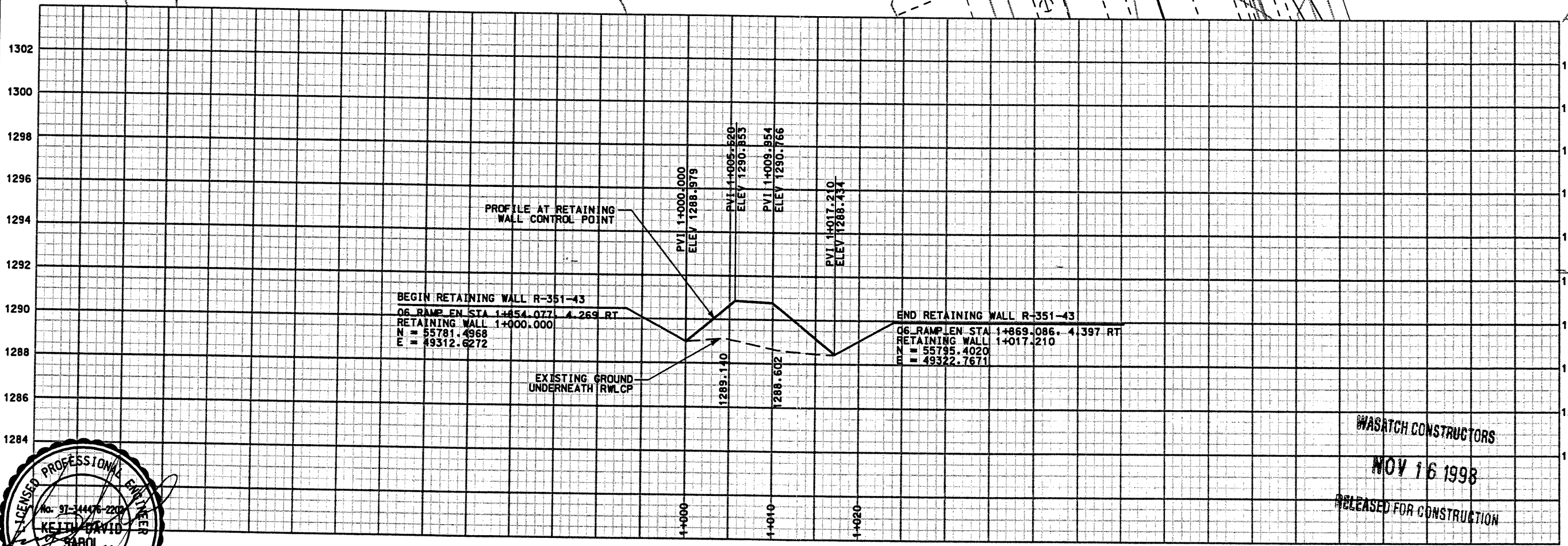


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BEGIN RETAINING WALL R-351-43
06_RAMP_EN STA 1+854.077 4.269 RT
RETAINING WALL 1+000.000
N = 55781.4968
E = 49312.6272

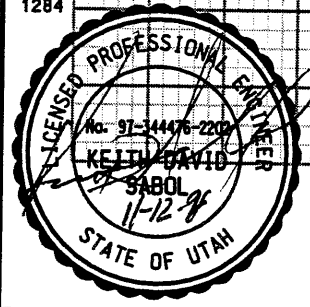
END RETAINING WALL R-351-43
06_RAMP_EN STA 1+869.086 4.397 RT
RETAINING WALL 1+017.210
N = 55795.4020
E = 49322.7671



BEGIN RETAINING WALL R-351-43
06_RAMP_EN STA 1+854.077 4.269 RT
RETAINING WALL 1+000.000
N = 55781.4968
E = 49312.6272

END RETAINING WALL R-351-43
06_RAMP_EN STA 1+869.086 4.397 RT
RETAINING WALL 1+017.210
N = 55795.4020
E = 49322.7671

WALL R-351-43
VIEW IS OF FRONT FACE OF WALL



WATCH CONSTRUCTORS
NOV 16 1998
RELEASED FOR CONSTRUCTION

APPROVED FOR CONSTRUCTION	
NO.	DATE
1	11/11/98

UTAH DEPARTMENT OF TRANSPORTATION

I-15 CORRIDOR RECONSTRUCTION
SITUATION & LAYOUT
SECTION 3.2

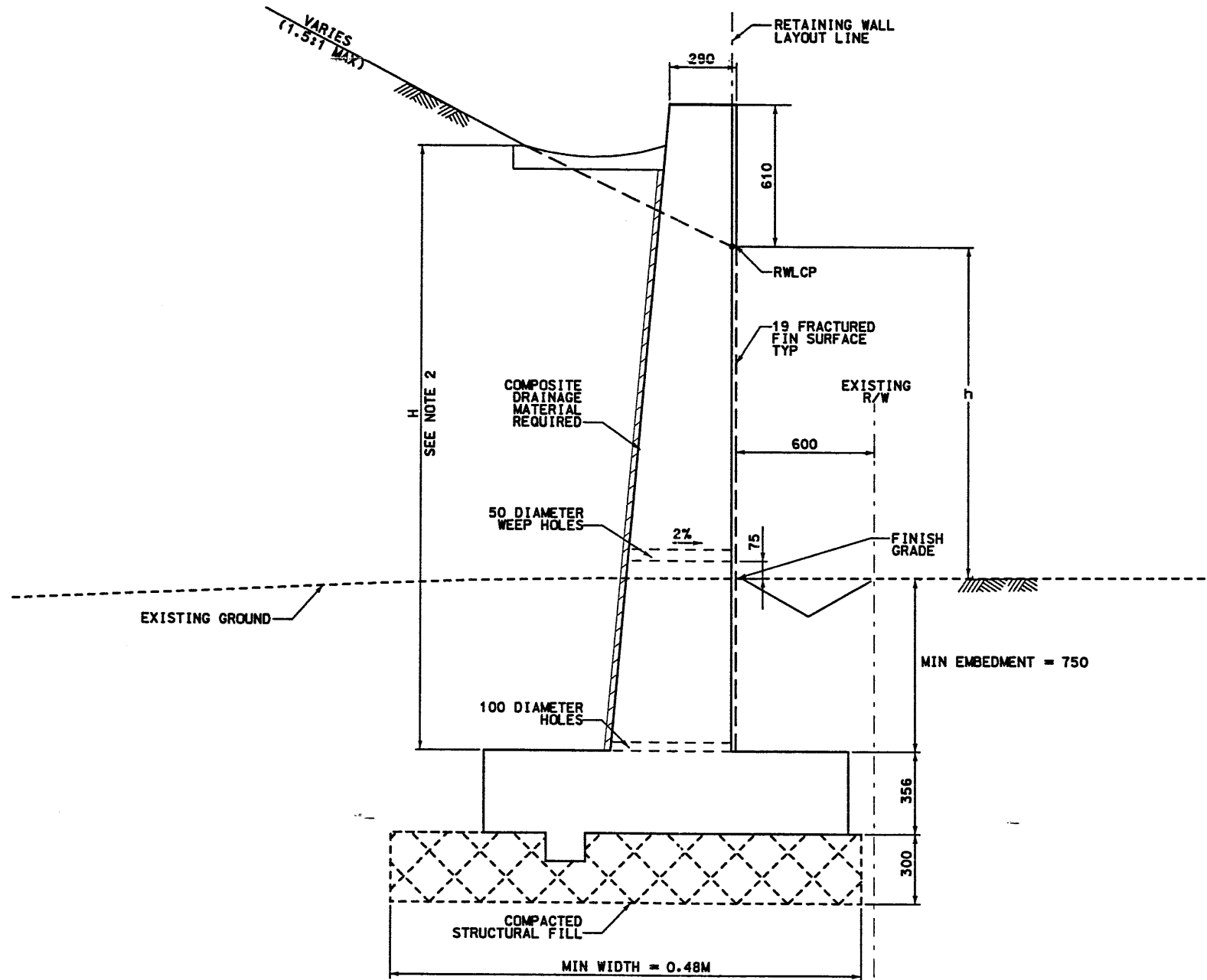
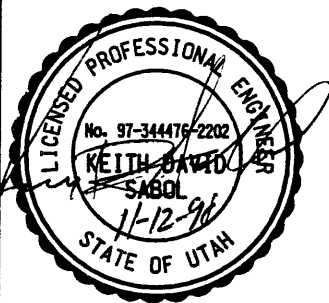
SALT LAKE COUNTY
DWG. NO.
3.2-R351-43.1

SHT. 1 OF 2

SVERDRUP/DE LEUW	
DESIGN	CHECK
MC 11/11/98	RT 11/11/98
SVD 11/11/98	MC 11/11/98
QUANT.	CHECK

PROJECT DESIGN ENGINEER	
DATE	SECTION MANAGER
11/11/98 MARVIN COOK	11/11/98 KEITH SABOL

Filename: P:\15_cadd\15_cadd\15_97\sheet_files\wds\06_wd_43.dgn



DESIGN WALL HEIGHT (IN METERS)		
STA	h	BOTTOM OF FOOTING ELEV
1+000.000	0	1287.873
1+005.623	1.7	1288.034
1+009.954	2.64	1287.496
1+017.210	0	1287.328

RETAINING WALL DETAILS

NTS

WALL R351-43
CAST IN PLACE

NOTES:

- 1) FOR CAST IN PLACE WALL DETAILS SEE UDOT STANDARD DWGS CONCRETE RETAINING WALL STANDARD DETAILS NO. 1 AND CONCRETE RETAINING WALL STANDARD DETAILS NO. 2.
- 2) USE 'DESIGN H' = 1.25 X H FOR PROPORTIONING WALL DIMS W. C. B. F. BATTER AND REINFORCING STEEL.
- 3) FOR TYPICAL GUTTER DETAIL SEE UDOT CONC RETAINING WALL STANDARD DETAILS NO 1

WASATCH CONSTRUCTORS

NOV 16 1998

RELEASED FOR CONSTRUCTION

APPROVED FOR CONSTRUCTION	
NO.	DATE
1	11/11/98

UTAH DEPARTMENT OF TRANSPORTATION

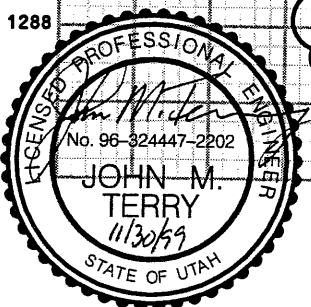
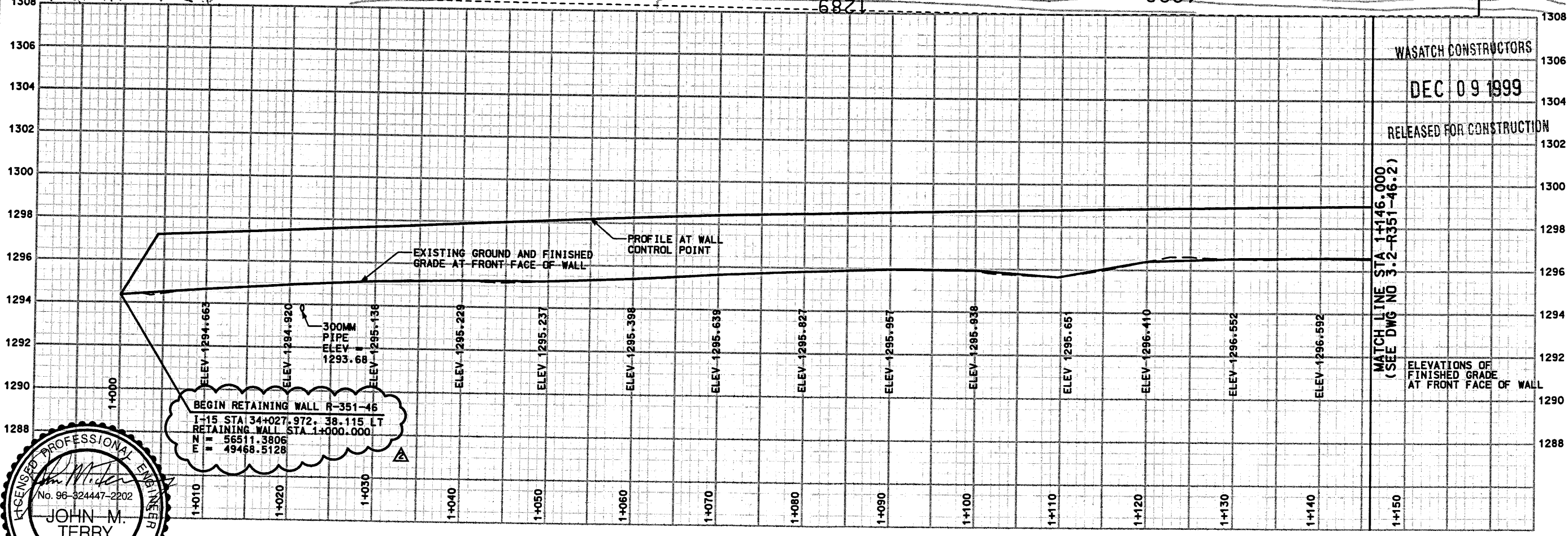
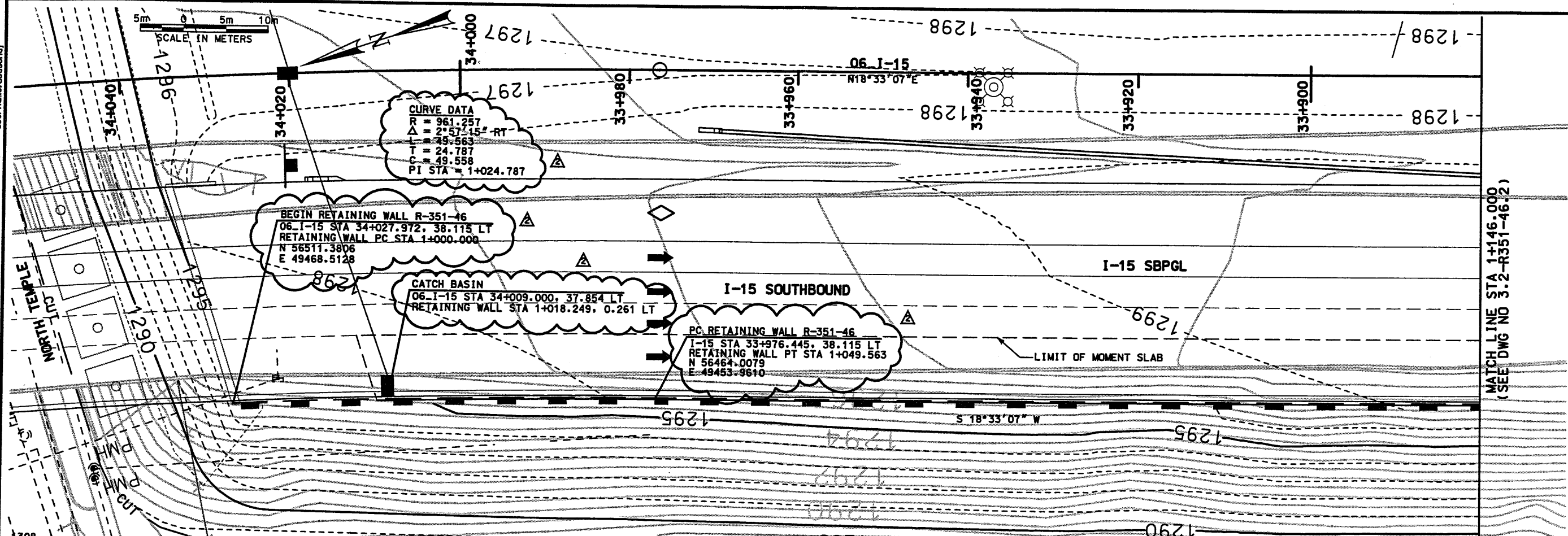
SVERDRUP/DE LEUW			
DESIGN	CHECK	MC	DATE
RT	RT	MC	11/11/98
DRAWN	CHECK	RT	DATE
SVD	RT	RT	11/11/98
SECTION MANAGER			
KEITH SABOL	CHECK	QUANT.	DATE

I-15 CORRIDOR RECONSTRUCTION

TYPICAL SECTION	
SECTION	NO.
SECTION 3.2	3.2
PROJECT NUMBER	
#SP-15-7(135)296	

SALT LAKE COUNTY	
DWG. NO.	DATE
3.2-R351-43.2	NOV 16 1998

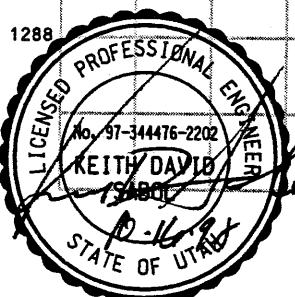
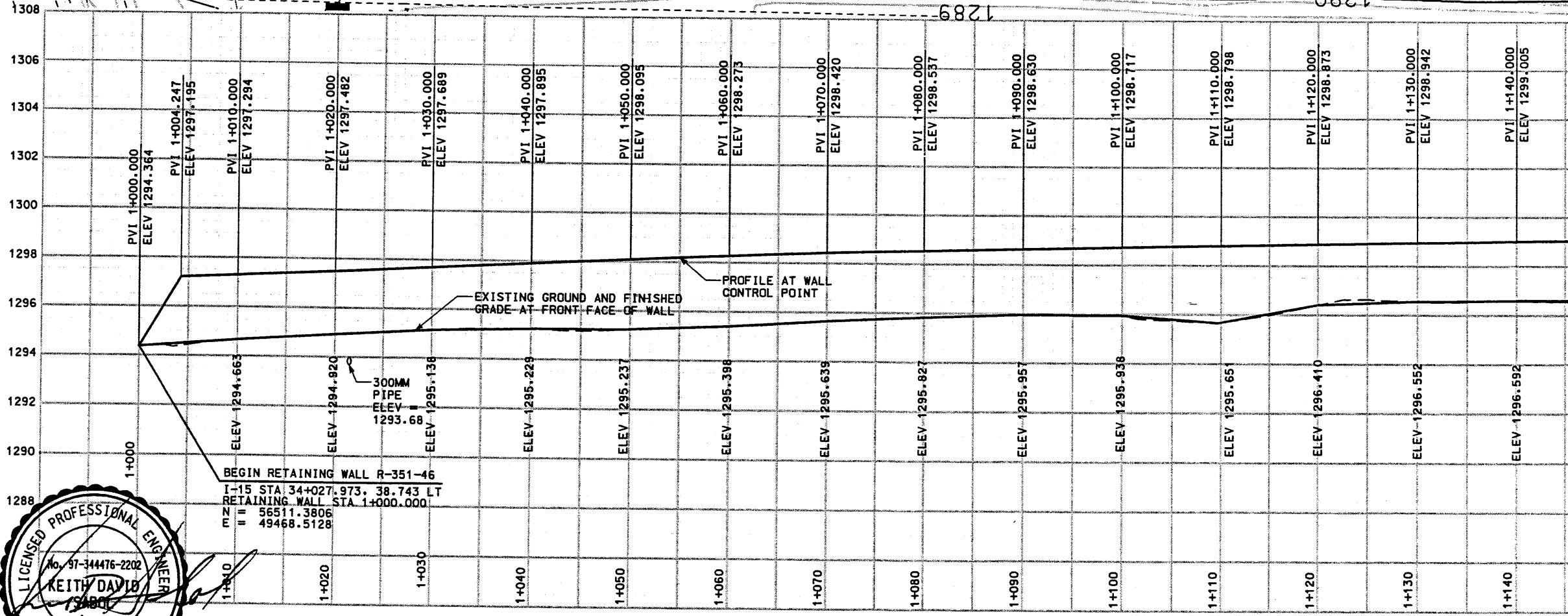
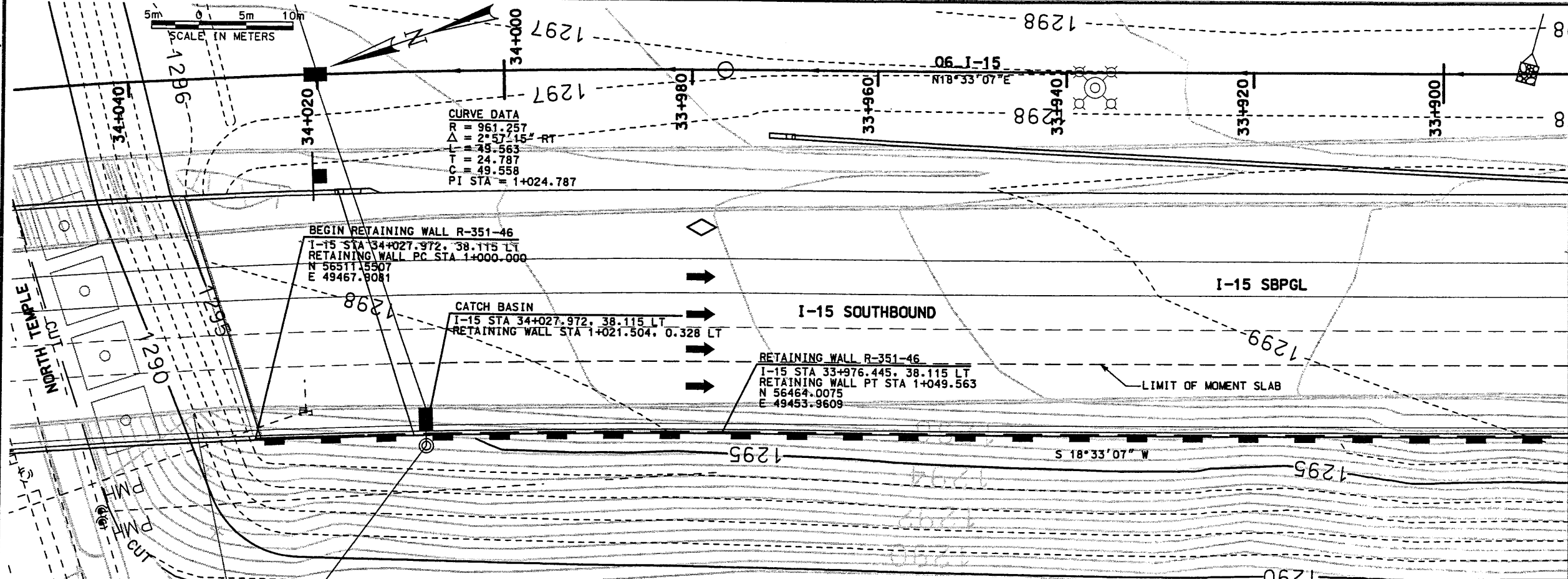
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WALL R-351-46
FRONT FACE OF WALL

APPROVED FOR CONSTRUCTION		DESCRIPTION	
NO.	DATE	10/16/98 RELEASE FOR CONSTRUCTION USE WALL ONLY	
▲	▲	11/29/99 RFT 3-1250 <i>JMT</i>	
UTAH DEPARTMENT OF TRANSPORTATION		SYVERDRUP/DE LEUW	
I-15 CORRIDOR RECONSTRUCTION		SITUATION & LAYOUT	
SECTION 3.2		PROJECT NUMBER #SP-15-7(135)296	
APPROVAL RECORD	DESIGN RECORD	CHECK MC	CHECK MC
10/14/98	10/14/98	10/14/98	10/14/98
DATE	DATE	DATE	DATE
MARVIN COOK	MARVIN COOK	KEITH SABOL	KEITH SABOL
PROJECT DESIGN ENGINEER	PROJECT DESIGN ENGINEER	SECTION MANAGER	SECTION MANAGER
APPROVED 10/14/98	APPROVED 10/14/98	DATE	DATE
10/14/98	10/14/98		
SALT LAKE COUNTY		DWC. NO.	
3.2-R351-46.1		SHT. 1 of 10	

Date: 16-OCT-1998 Time: 10:28 Username: corbetj
 Filename: P:\15_cadd\15_cadd\106_97_sheets_files\wall\06_wall_46.dgn



MATCH LINE STA 1+146.000
 (SEE DWG NO 3.2-R351-46.2)

MATCH LINE STA 1+146.000
 (SEE DWG NO 3.2-R351-46.2)

ELEVATIONS OF FINISHED GRADE AT FRONT FACE OF WALL

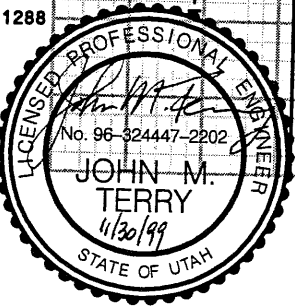
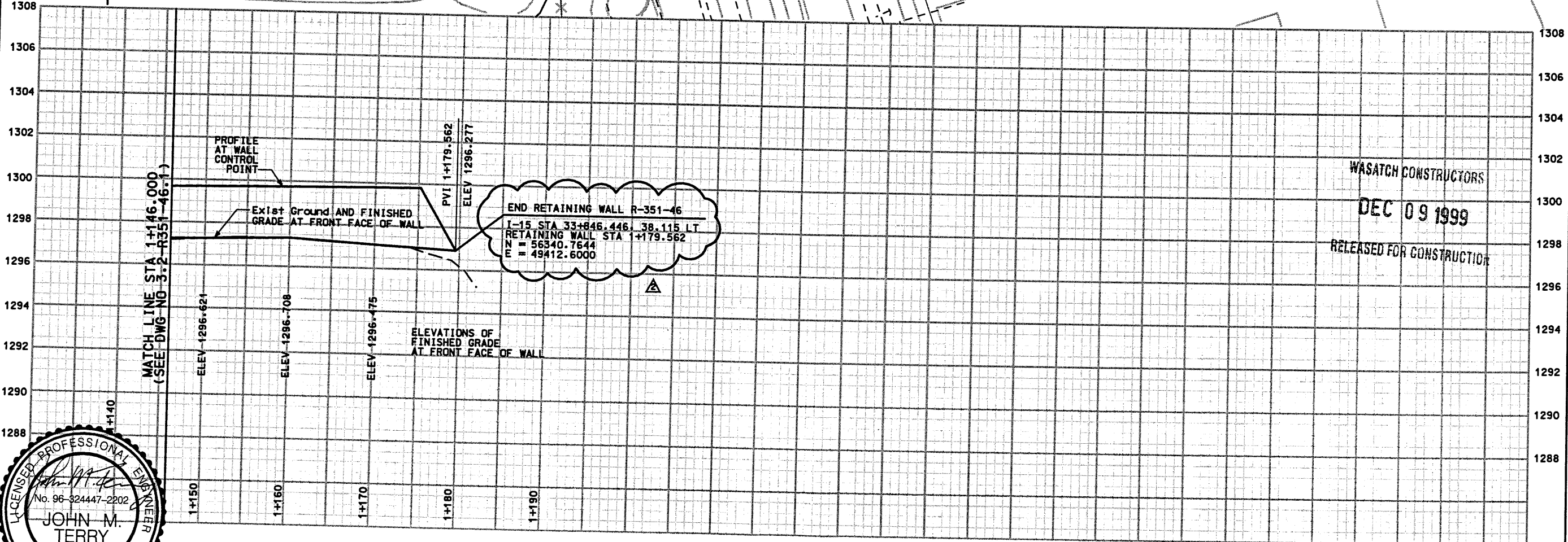
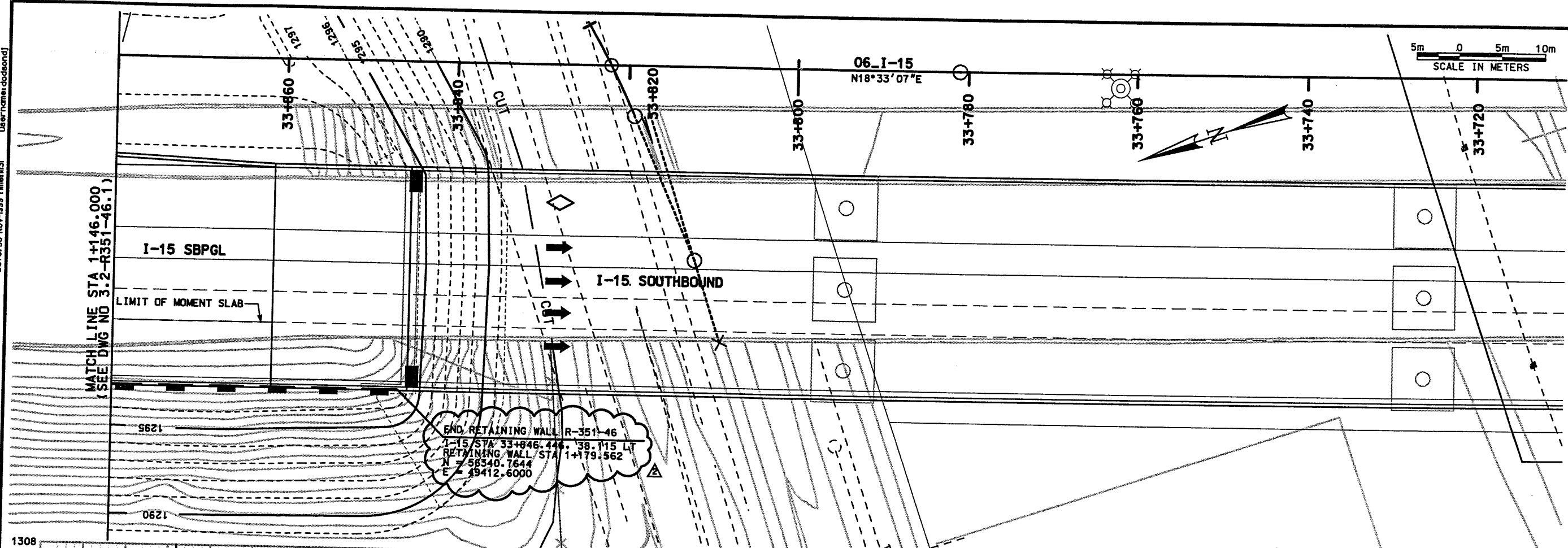
WASATCH CONSTRUCTORS
 OCT 22 1998
 RELEASED FOR CONSTRUCTION

WALL R-351-46
FRONT FACE OF WALL

APPROVED FOR CONSTRUCTION		NO.		DATE		DESCRIPTION	
		10/16/98		RELEASE FOR CONSTRUCTION		WSE WALL ONLY	
UTAH DEPARTMENT OF TRANSPORTATION				SVERDRUP/DE LEUW			
I-15 CORRIDOR RECONSTRUCTION		SITUATION & LAYOUT		SECTION 3.2		PROJECT NUMBER #SP-15-7(135)296	
RECORD		DESIGN		CHECK		MC	
10/14/98		10/14/98		10/14/98		10/14/98	
MARVIN COOK		PROJECT DESIGN ENGINEER		KEITH SABOL		SECTION MANAGER	
DATE		DATE		DATE		DATE	
10/14/98		10/14/98		10/14/98		10/14/98	
APPROVED		DATE		DATE		DATE	
10/14/98		10/14/98		10/14/98		10/14/98	
SALT LAKE COUNTY				DWG. NO. 3.2-R351-46.1			
SHT. 1				OF 10			

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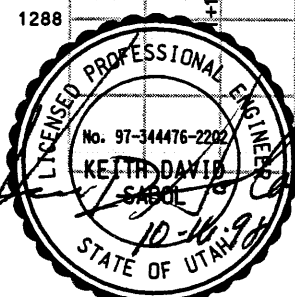
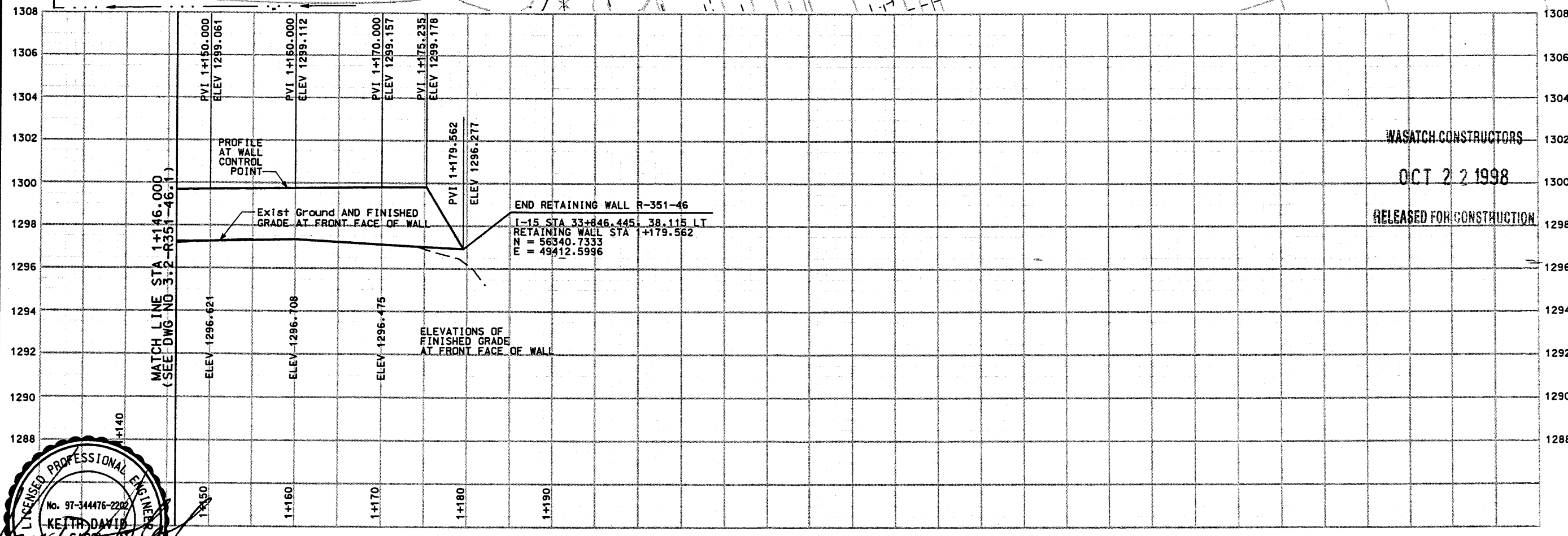
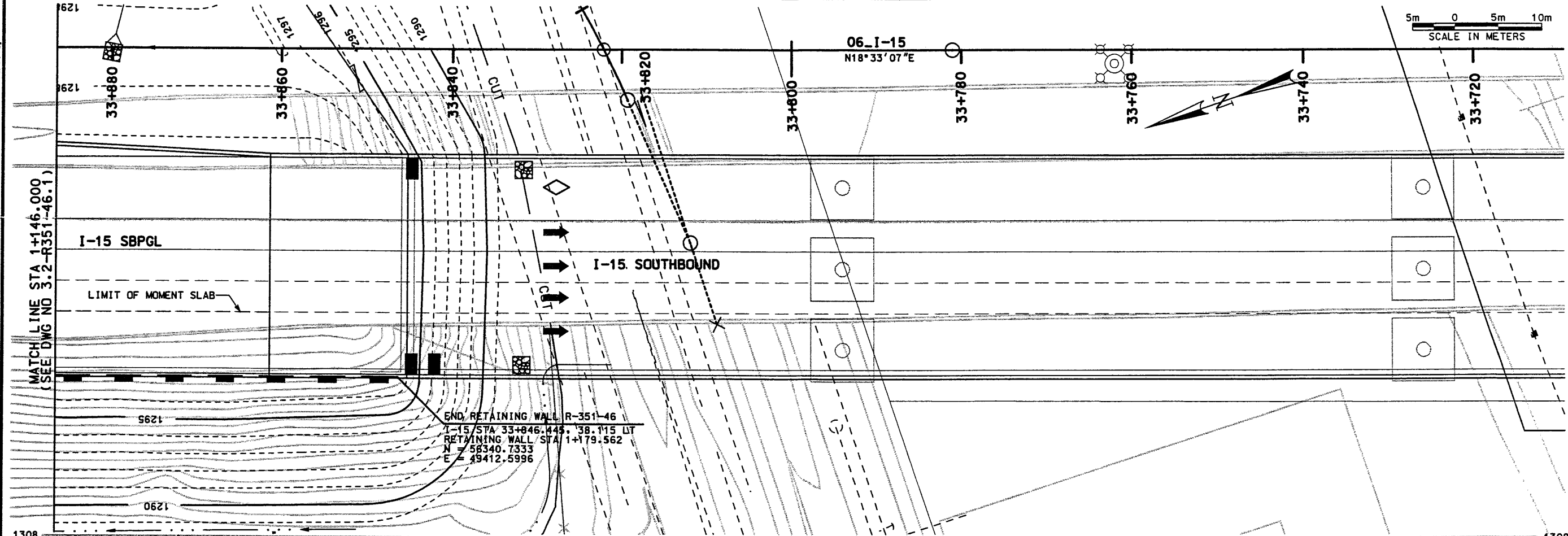
WALL R-351-46
FRONT FACE OF WALL

WASATCH CONSTRUCTORS
DEC 09 1999
RELEASED FOR CONSTRUCTION

APPROVED FOR CONSTRUCTION		DESCRIPTION	
NO.	DATE		
▲	10/14/99	RELEASE FOR CONSTRUCTION MSE WALL ONLY	
▲	11/29/99	RFI 3-1250 <i>gmt</i>	
UTAH DEPARTMENT OF TRANSPORTATION		SVERDRUP/DE LEUW	
I-15 CORRIDOR RECONSTRUCTION		SITUATION & LAYOUT	
SECTION 3.2		PROJECT NUMBER #SP-15-(135)296	
SALT LAKE COUNTY		DWG. NO. 3.2-R351-46.2	
DESIGN PLC 10/14/99		CHECK MC 10/14/99	
DRAWN SVD 10/14/99		CHECK MC 10/14/99	
MARVIN COOK PROJECT DESIGN ENGINEER		CHECK	
DATE 10/14/99		QUANT.	
KEITH SABOL SECTION MANAGER		3212412	
DATE 10/14/99			

RFC After Final Approval

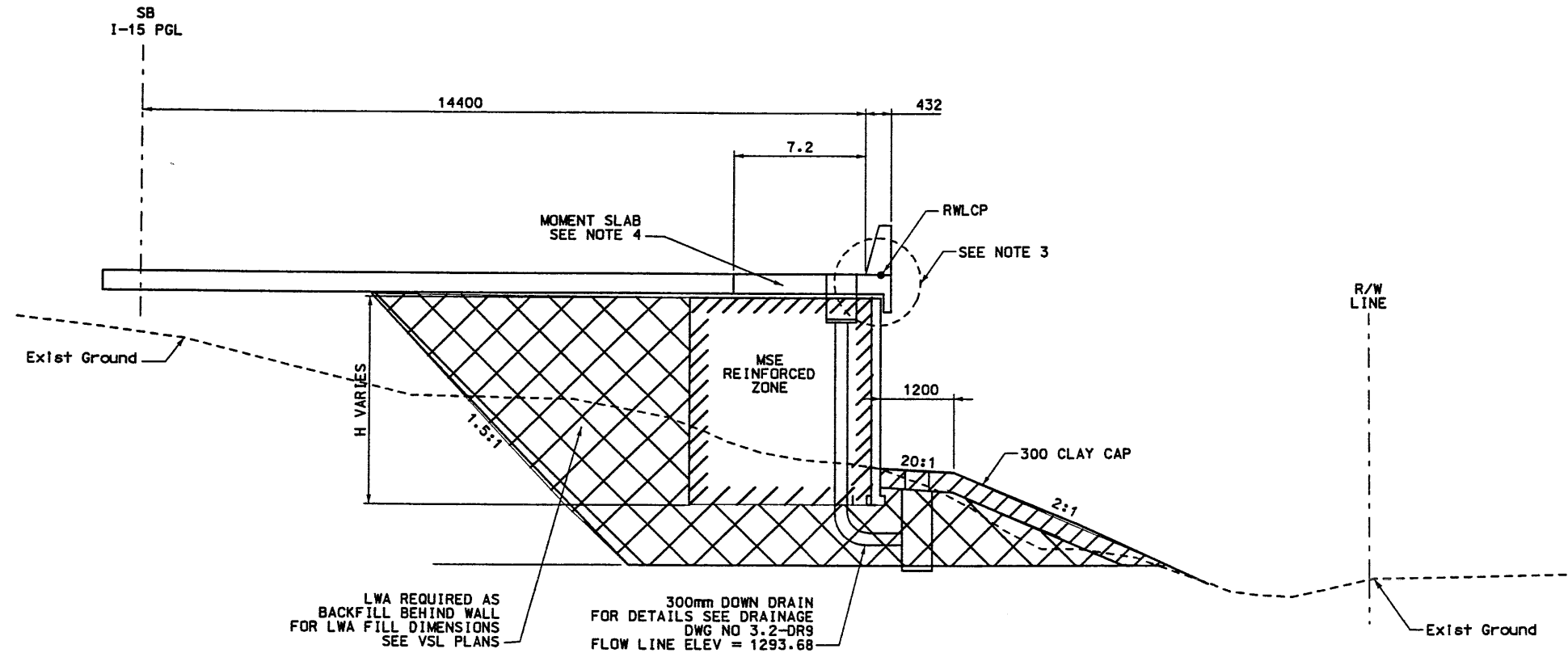
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 Date: 16-OCT-1998 Time: 10:29
 User name: corbetaj



WALL R-351-46
FRONT FACE OF WALL

WASATCH CONSTRUCTORS
 OCT 22 1998
 RELEASED FOR CONSTRUCTION

APPROVED FOR CONSTRUCTION		NO.		DATE		DESCRIPTION	
		10/14/98		10/14/98		RELEASE FOR CONSTRUCTION MSE WALL ONLY	
UTAH DEPARTMENT OF TRANSPORTATION				SVERDRUP/DE LEUW			
I-15 CORRIDOR RECONSTRUCTION		SITUATION & LAYOUT		DESIGN PLC 10/14/98		CHECK MC 10/14/98	
SECTION 3.2		PROJECT DESIGN ENGINEER		DRAWN SVD 10/14/98		CHECK MC 10/14/98	
PROJECT NUMBER #SP-15-7(135)296		DATE 10/14/98		SECTION MANAGER		QUANT.	
SALT LAKE COUNTY		DATE		KEITH SABOL		3212412	
DWG. NO. 3.2-R351-46.2		APPROVED 10/14/98		DATE			
SHT. 2 OF 10							

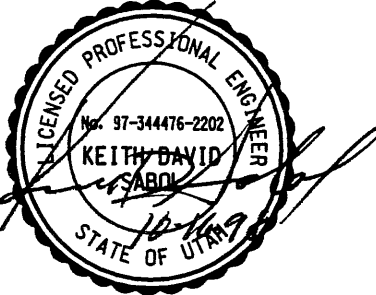


WASATCH CONSTRUCTORS
 OCT 22 1998
 RELEASED FOR CONSTRUCTION

RETAINING WALL DETAILS

NTS
 WALL R-351-46
 1 STAGE MSE
 STA 1+004.247 TO STA 1+175.232

- NOTES:
- 1) OVER EXCAVATE EXISTING SOILS AS REQUIRED. REFILL EXCAVATION WITH LWA AS PER CORRIDOR STANDARD SPECIFICATION 220A.
 - 2) CONSTRUCT 300mm CLAY CAP WITH LOW PLASTIC SILTY CLAY AS PER CORRIDOR STANDARD SPECIFICATION.
 - 3) FOR COPING DETAILS SEE CS-28-1.
 - 4) FOR MOMENT SLAB DETAILS SEE CS-28-1.
 - 5) LWA - LIGHT WEIGHT AGREGATE AS PER CORRIDOR STANDARD SPECIFICATION 220A.
 - 6) FOR COPING DETAILS STA 1+000.000 TO STA 1+004.247 AND STA 1+175.232 TO STA 1+179.562 SEE CS-54-4 SECTION E.




APPROVED FOR CONSTRUCTION		DESCRIPTION	
NO.	DATE	RELEASE FOR CONSTRUCTION USE WALL ONLY	
A	10/14/98		
UTAH DEPARTMENT OF TRANSPORTATION			
SVERDRUP/DE LEUW		DESIGN	MC
MARVIN COOK		PLC	10/14/98
PROJECT DESIGN ENGINEER		CHECK	MC
10/14/98		DATE	10/14/98
KEITH SABOL		DRANN	SVD
SECTION MANAGER		10/14/98	CHECK
10/14/98		DATE	10/14/98
*SP-15-7(135)296		QUANT.	CHECK
I-15 CORRIDOR RECONSTRUCTION		3212412	
TYPICAL SECTION		SECTION 3.2	
SALT LAKE COUNTY		DWG. NO.	
3.2-R351-46.3		SHT. 3 OF 10	

RETAINED EARTH INDEX	
RE-1	PLAN PRECAST FACE WALL R-351-46, NOTES & DESIGN CRITERIA
RE-2	TYPICAL CROSS SECTIONS
RE-3	ELEVATION PRECAST WALL "R-351-46"
RE-4	ELEVATION PRECAST WALL "R-351-46"
RE-5	ELEVATION PRECAST WALL "R-351-46"
RE-6	SPECIAL PANEL DETAILS
RE-7	SPECIAL PANEL DETAILS

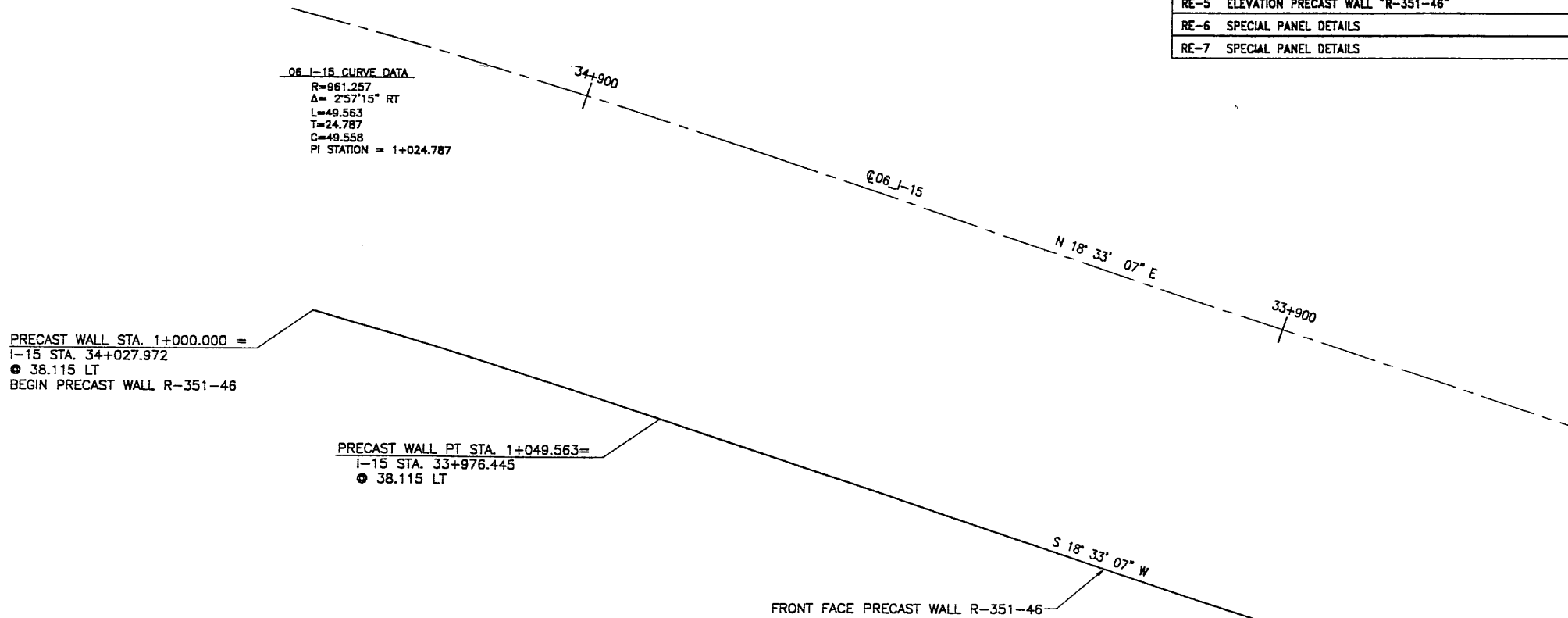
APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	10-09-98	RELEASE FOR CONSTRUCTION

DES.	DRN.	CHK.	DATE	NO.	BY	REVISION
JL	JL	JL				
JL	JL	JL				
JL	JL	JL				

VSL CORPORATION
 2040 Plaza Place, Suite 200
 Raleigh, NC 27617
 Telephone: (919) 781 6777
 Fax: (919) 781 4869



ATLANTA, GA / DALLAS, TX / HARTFORD, CT (CORPORATE OFFICE)
 MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA



PRECAST WALL STA. 1+000.000 =
 I-15 STA. 34+027.972
 ● 38.115 LT
 BEGIN PRECAST WALL R-351-46

PRECAST WALL PT STA. 1+049.563 =
 I-15 STA. 33+976.445
 ● 38.115 LT

PRECAST WALL STA. 1+179.562 =
 I-15 STA. 33+846.446
 ● 38.115 LT
 END PRECAST WALL R-351-46

PLAN VIEW WALL "R-351-46"

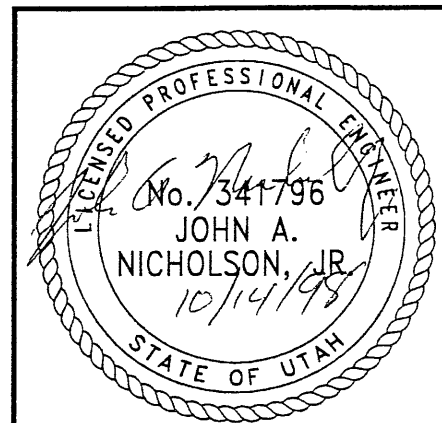
SCALE: 1=400 (FULL SIZE)
 SCALE: 1=800 (HALF SIZE)

- GENERAL NOTES**
- ALL WALLS ARE SHOWN FRONT FACE. NOTE STATIONING.
 - PANEL TYPE IS DESIGNATED ON EACH PANEL. CONNECTOR LABELS INDICATE NUMBER OF CONNECTORS PER ROW.
 EXAMPLE: 5B2-10 IS A "B2-10" PANEL WITH FIVE (5) CONNECTORS PER ROW. IF NO CONNECTORS ARE SHOWN, FOUR (4) CONNECTOR PANELS SHALL BE USED.
 - SOIL REINFORCING MESH TYPE IS DESIGNATED ON EACH PANEL. MESH LABELS INDICATE WIRE SIZE AND SPACING. LONGITUDINAL WIRE AND CROSSBAR SIZES ARE THE SAME UNLESS NOTED OTHERWISE.
 EXAMPLE: 4W11-6 MESH HAS FOUR (4) W11 LONGITUDINAL WIRES WITH W11 CROSSBARS AT 6" CENTERS.
 EXAMPLE: 4W15-6 MESH HAS FOUR (4) W15 LONGITUDINAL WIRES WITH W15 CROSSBARS AT 6" CENTERS.
 EXAMPLE: 5W15-6 MESH HAS FIVE (5) W15 LONGITUDINAL WIRES WITH W15 CROSSBARS AT 6" CENTERS.
 - SEE RETAINED EARTH INSTALLATION MANUAL FOR PROPER WALL ERECTION PROCEDURES AND GUIDELINES.
 - CONSTRUCTION PROCEDURES SHALL PREVENT BACKFILL SATURATION AND PONDING.
 - HEAVY EQUIPMENT SHALL NOT BE USED WITHIN ONE METER OF THE BACK OF THE RETAINED EARTH PANELS. HAND COMPACTORS SHALL BE USED IN THIS AREA.
 - CARE SHALL BE TAKEN TO PREVENT DAMAGE TO GALVANIZING. DAMAGED GALVANIZING SHALL BE COATED WITH ZINC RICH PAINT.
 - BEARING PADS AND FILTER FABRIC ARE NOT REQUIRED BETWEEN THE LEVELING PAD AND THE FIRST ROW OF PANELS. TEMPORARY WEDGES MAY BE USED TO PROVIDE PROPER ALIGNMENT.
 - VSL RETAINED EARTH IS PROTECTED UNDER U.S. PATENT 4,725,170.
 - ALL PANELS SHALL HAVE AN ARCHITECTURAL FINISH, SEE VSL STANDARD SHEET STD-7 FOR DETAILS.
 - GEOTECHNICAL ENGINEER TO FIELD VERIFY FOUNDATION CONDITIONS AND EXTENT OF STRUCTURAL FILL.

DESIGN PARAMETERS	
ANGLE OF INTERNAL FRICTION (SELECT) = 38°	
ANGLE OF INTERNAL FRICTION (BASE) = 38°	
ANGLE OF INTERNAL FRICTION (RANDOM) = 34°	
ANGLE OF INTERNAL FRICTION (SCORIA) = 26°	
UNIT WEIGHT BACKFILL = 82 PCF. (12.88 KN/M ³)(SLAG)	
UNIT WEIGHT BACKFILL = 55 PCF. (8.64 KN/M ³)(SCORIA)	
TRAFFIC SURCHARGE = 250 PSF (12 KPa)	
SEISMIC ACCELERATION COEFF. = 0.27g (TYP)	
SEISMIC ACCELERATION COEFF. = 0.68g (AT BRIDGE ABUTMENTS)	

DESIGN CRITERIA	
SAFETY FACTOR (OVERTURNING) = 2.0	
SAFETY FACTOR (SLIDING) = 1.5	
SAFETY FACTOR (PULLOUT) = 1.5	
DESIGN LIFE = 75 YEARS	

WASATCH CONSTRUCTORS
 OCT 22 1998
 RELEASED FOR CONSTRUCTION



METRIC

CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY. EXTERNAL STABILITY, INCLUDING BUT NOT LIMITED TO FOUNDATION AND SLOPE STABILITY, IS THE RESPONSIBILITY OF THE OWNER. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE RETAINED EARTH™ MASS, METHODS OF CONSTRUCTION, AND QUALITY OF PREFABRICATED MATERIALS CONFORM TO THE MANUFACTURER'S SPECIFICATION.

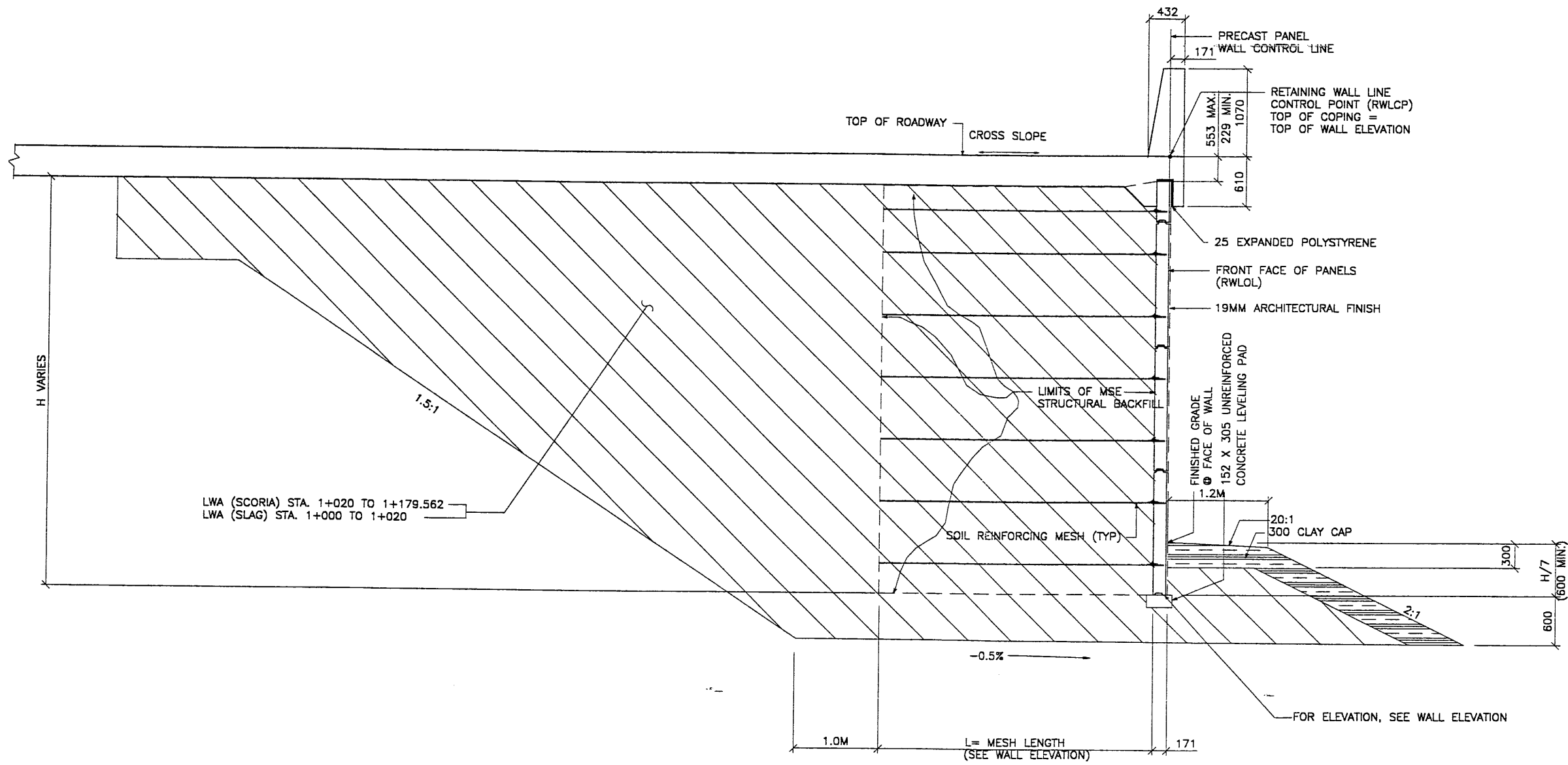
VSL Corporation (P) is a registered provider of continuing education for ASCE members. This course is worth 1.0 CEU. For more information, contact VSL Corporation at (919) 781-6777.

RETAINED EARTH™ WALLS
 PLAN VIEW PRECAST WALL "R-351-46"
 UTAH I-15 RECONSTRUCTION
 SALT LAKE COUNTY, UTAH
 UTAH DEPARTMENT OF TRANSP.

DWG. NO.	3.2R-351-46.4
JOB NO.	239-0007
SHT. NO.	RE-1

FINAL T 10-9-98 H:\RE_EARTH\PROJECT\239-0007\1998 H:\RE_EARTH\PROJECT\239-0007\RE-2 .S\65-46\SUBMIT-2\RE-2 NCE (X-UTAH.DWG)

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
▲	10-9-98	RELEASE FOR CONSTRUCTION

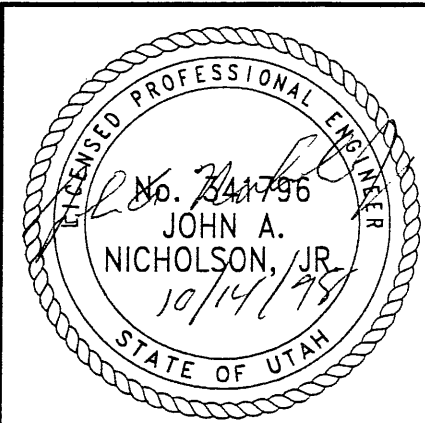


TYPICAL CROSS SECTION - STA 1+004.247 TO 1+175.562
 SCALE: 1:30 (FULL SIZE)
 SCALE: 1:60 (HALF SIZE)

METRIC

CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY. EXTERNAL STABILITY, INCLUDING BUT NOT LIMITED TO FOUNDATION AND SLOPE STABILITY, IS THE RESPONSIBILITY OF THE OWNER. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE RETAINED EARTH™ MASS, METHODS OF CONSTRUCTION, AND QUALITY OF PREFABRICATED MATERIALS CONFORM TO THE MANUFACTURER'S SPECIFICATION.

WASATCH CONSTRUCTORS
 OCT 22 1998
 RELEASED FOR CONSTRUCTION



REVISION		NO.	DATE

DLS.	JL	09-09-98	JL
DRN.	JHJ	09-09-98	JHJ
CHK.	JL	09-09-98	JL

VSL CORPORATION	
2640 Flora Place, Suite 200	
Raleigh, NC 27612	
Telephone: (919) 781-6272	
Fax: (919) 781-6865	

ALABAMA, GA / DALLAS, TX / BALTIMORE, MD (CORPORATE OFFICE)	
MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA	

RETAINED EARTH™ WALLS	
WIRE FACED WALL "R-351-46"	
TYPICAL CROSS SECTION	
UTAH I-15 RECONSTRUCTION	
SALT LAKE COUNTY, UTAH	
UTAH DEPARTMENT OF TRANSP.	

DWG. NO.	3.2R-351-46.5
JOB NO.	239-0007
Sht. NO.	RE-2

ICE (X-UTAH.DWG)

5\SUBMIT-2\65-46

H:\RE_EARTH\PROJECT\239-0007\1998

10-09-98

FINAL

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
▲	10-9-98	RELEASE FOR CONSTRUCTION

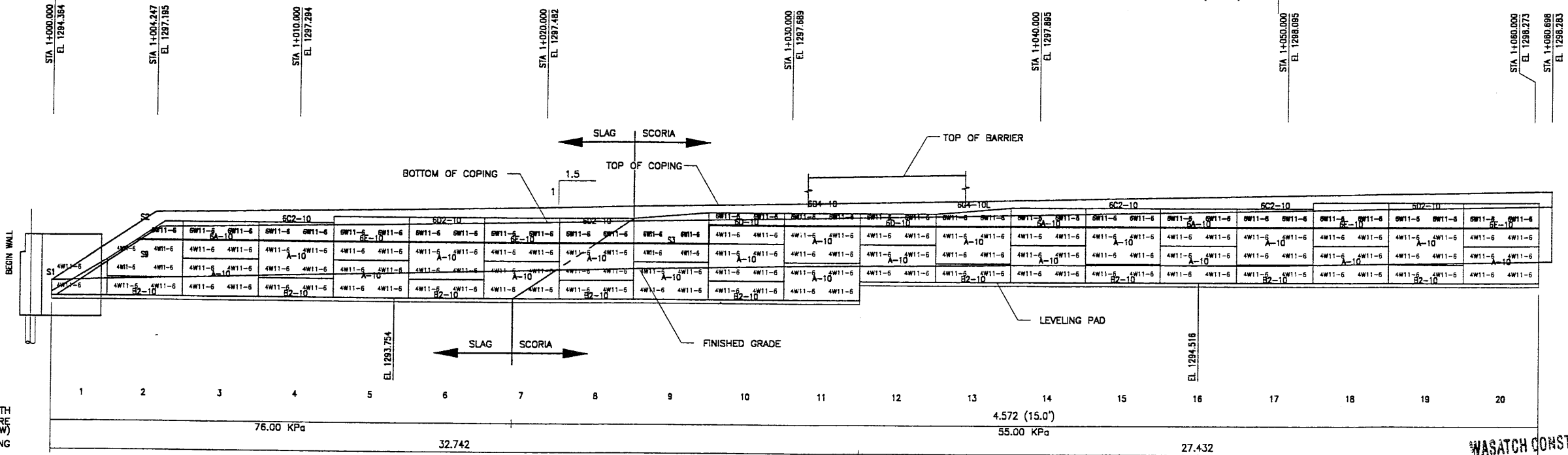
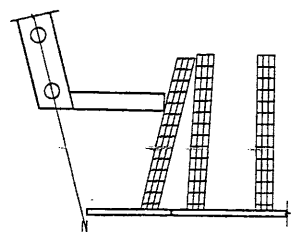
DES.	DRN.	CHK.	NO.	DATE	REVISION	BY

PRECAST WALL PC STA 0+999.874 =
 I-15 STA 34+038.142
 ● 38.115 LT

BEGIN WALL R-351-46
 PRECAST WALL PC STA 1+000.000 =
 I-15 STA 34+027.972
 ● 38.115 LT
 NOMINAL PANEL FACE (RWLOL)

PART. PLAN WALL R-351-46

PRECAST WALL PT STA 1+049.563 =
 I-15 STA 33+976.445
 ● 38.115 LT
 NOMINAL PANEL FACE (RWLOL)



ELEVATION PRECAST WALL R-351-46
 (FRONT FACE SHOWN)
 (TOTAL SURFACE AREA OF PANELS = 593.94 SM)

SCALE 1:100 (FULL SIZE)
 SCALE 1:200 (HALF SIZE)

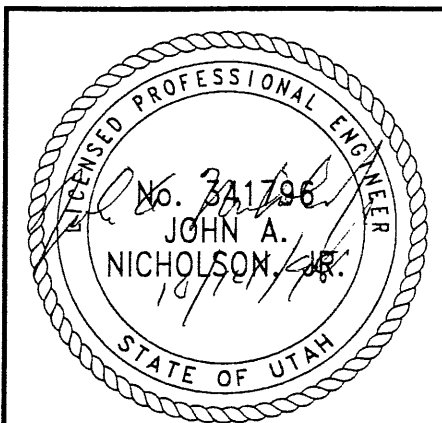
MESH DEPTH
 MAXIMUM BEARING PRESSURE
 (SEE NOTE BELOW)
 PIN SPACING

WASATCH CONSTRUCTORS
 OCT 22 1998
 RELEASED FOR CONSTRUCTION

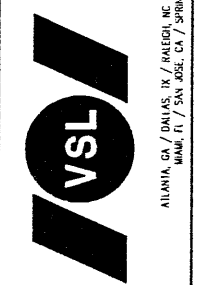
METRIC

NOTE:
 THE INDICATED MAXIMUM BEARING PRESSURE AT FINAL STAGE FOR STATIC LOAD CONDITION.

CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY. EXTERNAL STABILITY, INCLUDING BUT NOT LIMITED TO FOUNDATION AND SLOPE STABILITY, IS THE RESPONSIBILITY OF THE OWNER. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE RETAINED EARTH™ MASS, METHODS OF CONSTRUCTION, AND QUALITY OF PREFABRICATED MATERIALS CONFORM TO THE MANUFACTURER'S SPECIFICATION.



VSL CORPORATION
 2840 Plaza Place, Suite 200
 Raleigh, NC 27617
 Telephone: (919) 871 6272
 Fax: (919) 871 4869



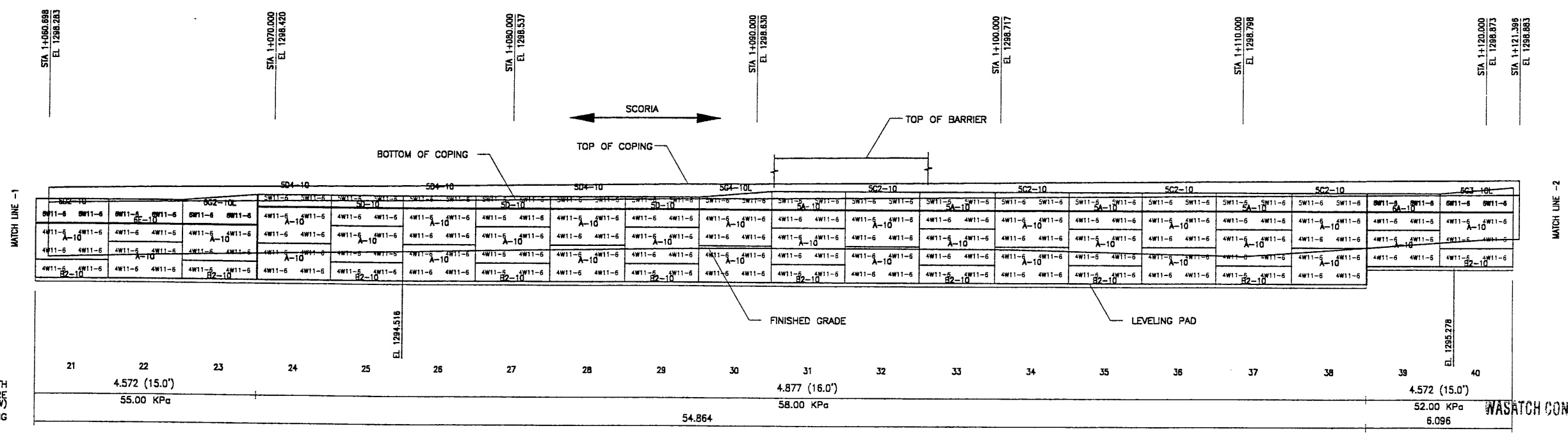
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RETAINED EARTH™ WALLS
 PRECAST WALL "R-351-46"
 UTAH I-15 RECONSTRUCTION
 SALT LAKE COUNTY, UTAH
 UTAH DEPARTMENT OF TRANSP.

DWG. NO.	3.2R-351-46.6
JOB NO.	239-0007
SHT. NO.	RE-3

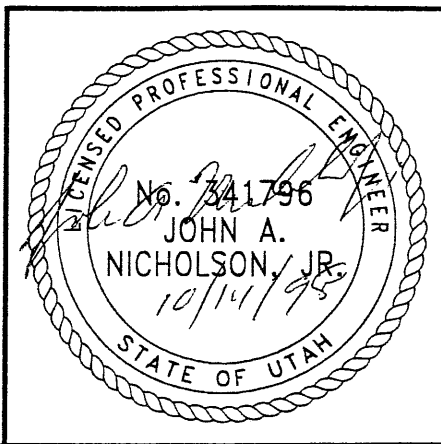
H:\RE_EARTH\PROJECT\239-0007\1998\SUBMIT-2\65-46.DWG
 T 10-9-98
 NCE (X-UTAH.DWG)

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
△	10-9-98	RELEASE FOR CONSTRUCTION



ELEVATION PRECAST WALL R-351-46
 (FRONT FACE SHOWN) SCALE 1:100 (FULL SIZE)
 (TOTAL SURFACE AREA OF PANELS = 593.94 SM) SCALE 1:200 (HALF SIZE)

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METRIC

MESH DEPTH
 MAXIMUM BEARING PRESSURE
 (SEE NOTE BELOW)
 PIN SPACING

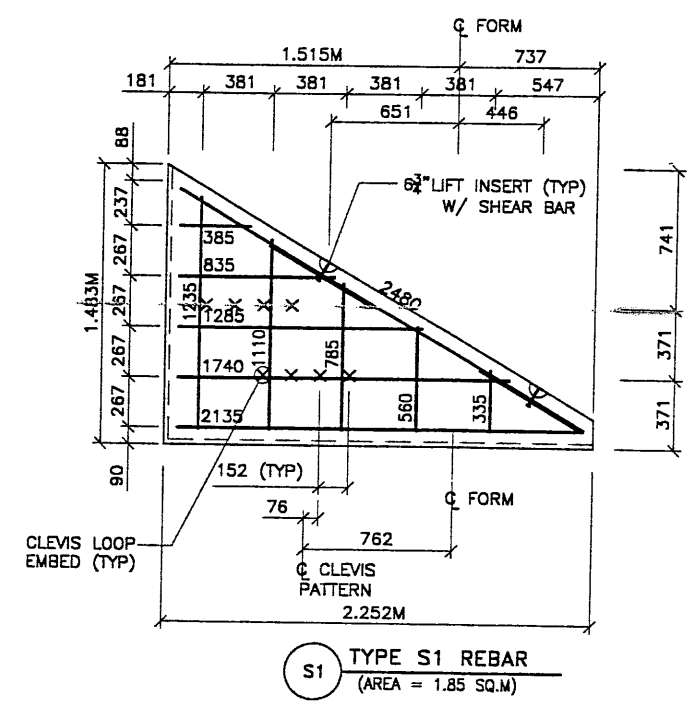
NOTE:
 THE INDICATED MAXIMUM BEARING PRESSURE AT FINAL STAGE FOR STATIC LOAD CONDITION.

		VSL CORPORATION 2840 Plaza Place, Suite 200 Raleigh, NC 27617 Telephone (919) 881 8272 Fax (919) 881 4950
DES:	JL	REL. PERM. 1 PART II
DWN:	JHU	
CHK:	JL	
NO.	DATE	REVISION

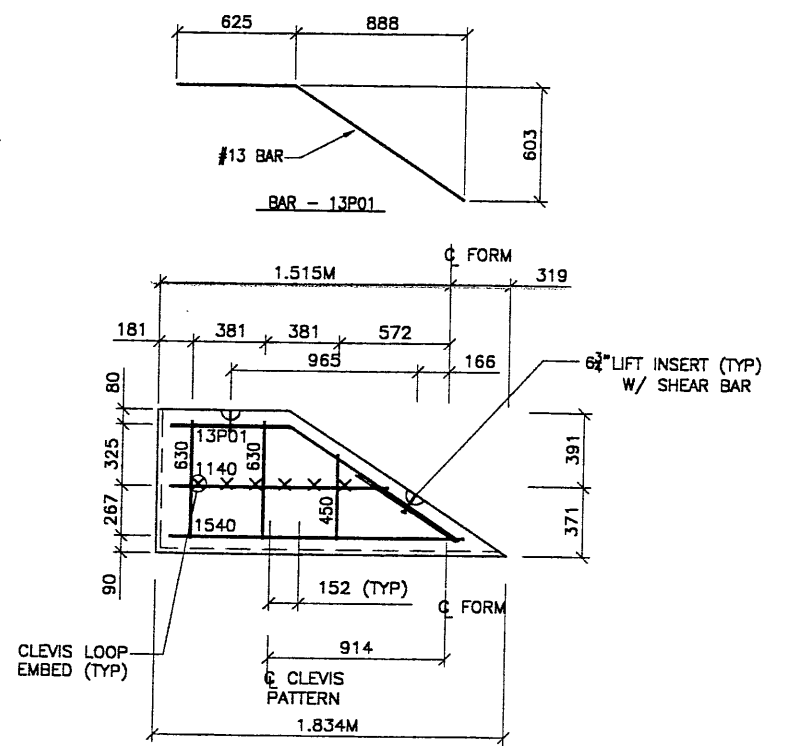
RETAINED EARTH™ WALLS
 PRECAST WALL "R-351-46"
 UTAH I-15 RECONSTRUCTION
 SALT LAKE COUNTY, UTAH
 UTAH DEPARTMENT OF TRANSP.

DWG. NO.
 3.2R-351-46.7
 JOB NO.
 239-0007
 SHT. NO.
 RE-4

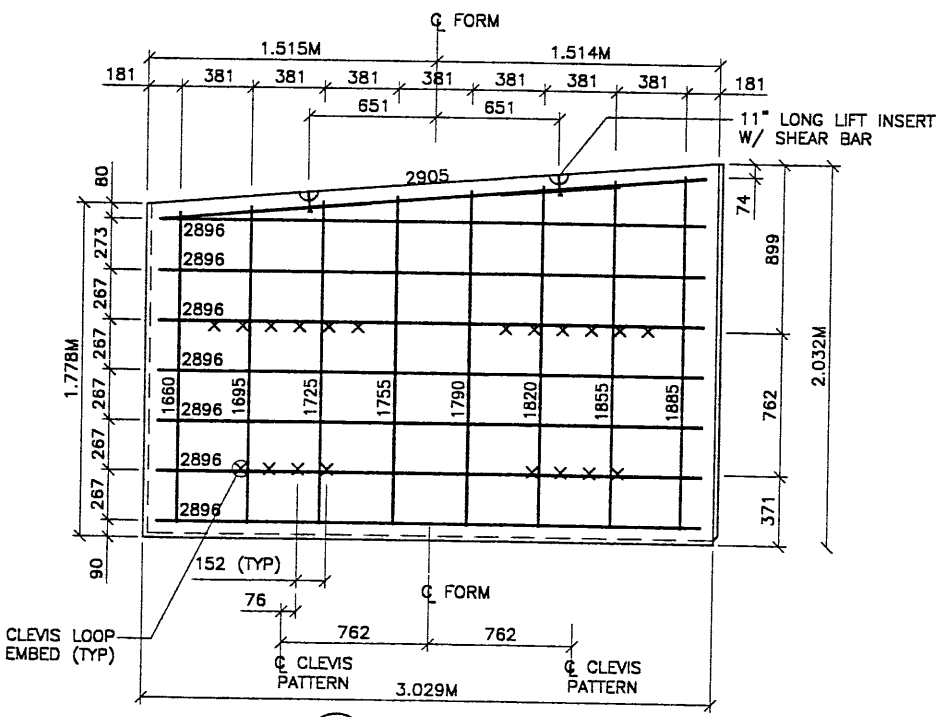
9-0007\1998\6S-WALLS\6S-47\SUBMIT-2\SPECIALS
 H:\RE_EARTH\APROJ
 10-9-98
 FINAL



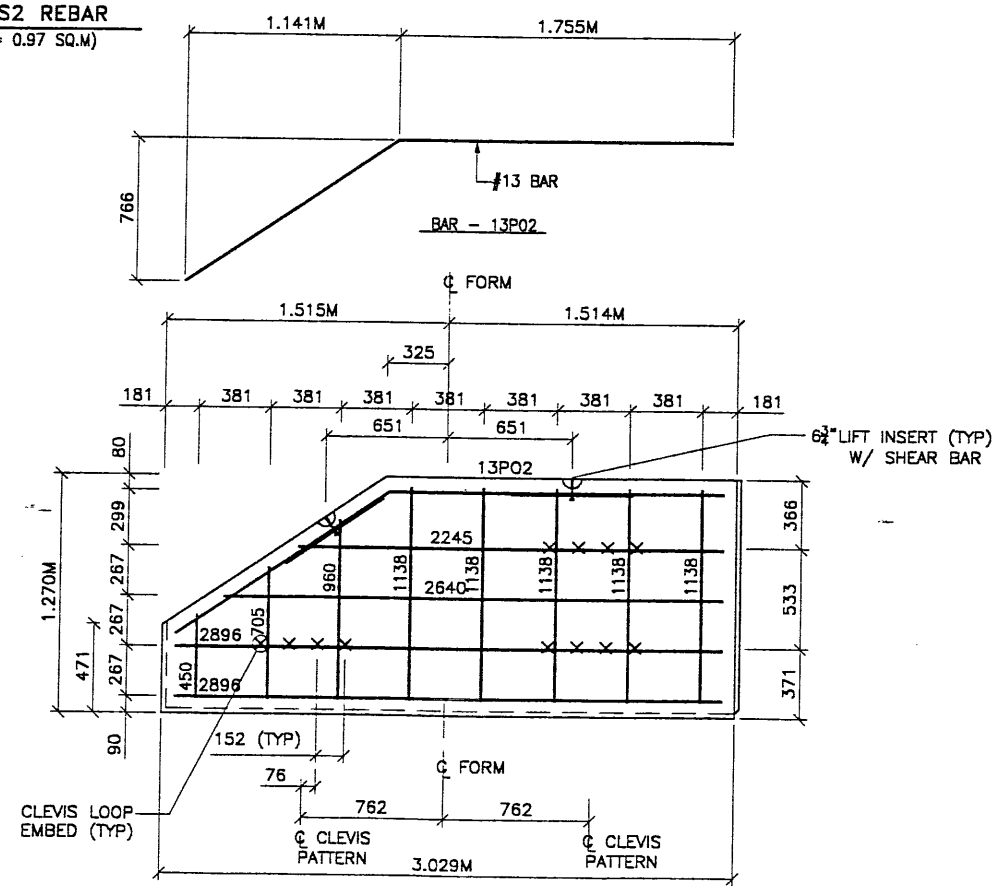
S1 TYPE S1 REBAR
 (AREA = 1.85 SQ.M)



S2 TYPE S2 REBAR
 (AREA = 0.97 SQ.M)



S3 TYPE S3 REBAR
 (AREA = 5.81 SQ.M)



S4 TYPE S4 REBAR
 (AREA = 3.39 SQ.M)

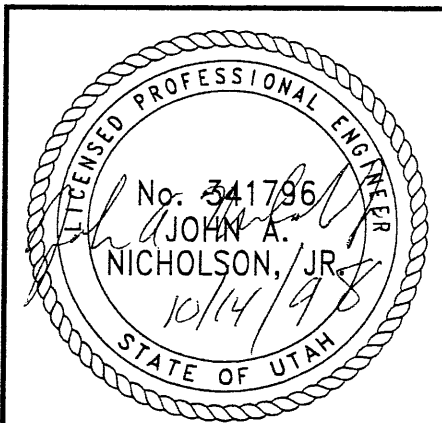
APPROVED FOR CONSTRUCTION			
NO.	DATE	DESCRIPTION	BY
1	10-9-98	RELEASE FOR CONSTRUCTION	[Signature]

- PANEL REINFORCEMENT NOTES:**
- PANELS ARE SHOWN BACK FACE.
 - HORIZONTAL REINFORCEMENT SHALL HAVE 50 mm MINIMUM COVER TO THE BACK FACE.
 - ALL REINFORCEMENT SHALL HAVE 50 mm MINIMUM COVER TO THE SIDES.
 - ALL REINFORCING BARS ARE #13 METRIC. LABELS ON EACH BAR INDICATE LENGTH. EXAMPLE: 1345 IS A #13 BAR 1345 mm LONG.
 - PANEL REINFORCEMENT BARS SHALL BE DEFORMED BILLET STEEL BARS FOR CONCRETE REINFORCEMENT CONFORMING TO THE SPECIFICATIONS OF ASTM DESIGNATION A615, GRADE 60.
 - ALL REINFORCING STEEL TO BE GALVANIZED IN ACCORDANCE WITH ASTM 767 CLASS I.
 - CONCRETE PANELS TO HAVE 28 DAY COMPRESSIVE STRENGTH OF 20,700 KPa.
 - EQUIVALENT WELDED WIRE FABRIC MAY BE USED.
 - ALL PANELS TO USE 9.5mm# CLEVIS LOOPS.
 - VSL RETAINED EARTH™ IS PROTECTED UNDER PATENT 4,725,170.
 - LIFT INSERTS ARE 6 3/4" LONG IN ALL PANELS LESS THAN 1.524M TALL. PANELS TALLER THAN 1.524M SHALL HAVE 11" LONG LIFT ANCHORS.

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WASATCH CONSTRUCTORS
 OCT 22 1998
 RELEASED FOR CONSTRUCTION

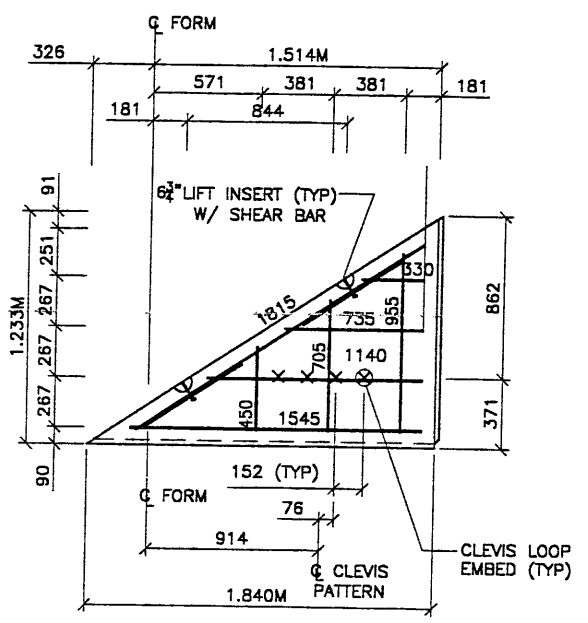


RETAINED EARTH™ WALLS
 PRECAST WALL "R-351-46"
 SPECIAL PANEL DETAILS
 UTAH I-15 RECONSTRUCTION
 SALT LAKE COUNTY, UTAH
 UTAH DEPARTMENT OF TRANSP.

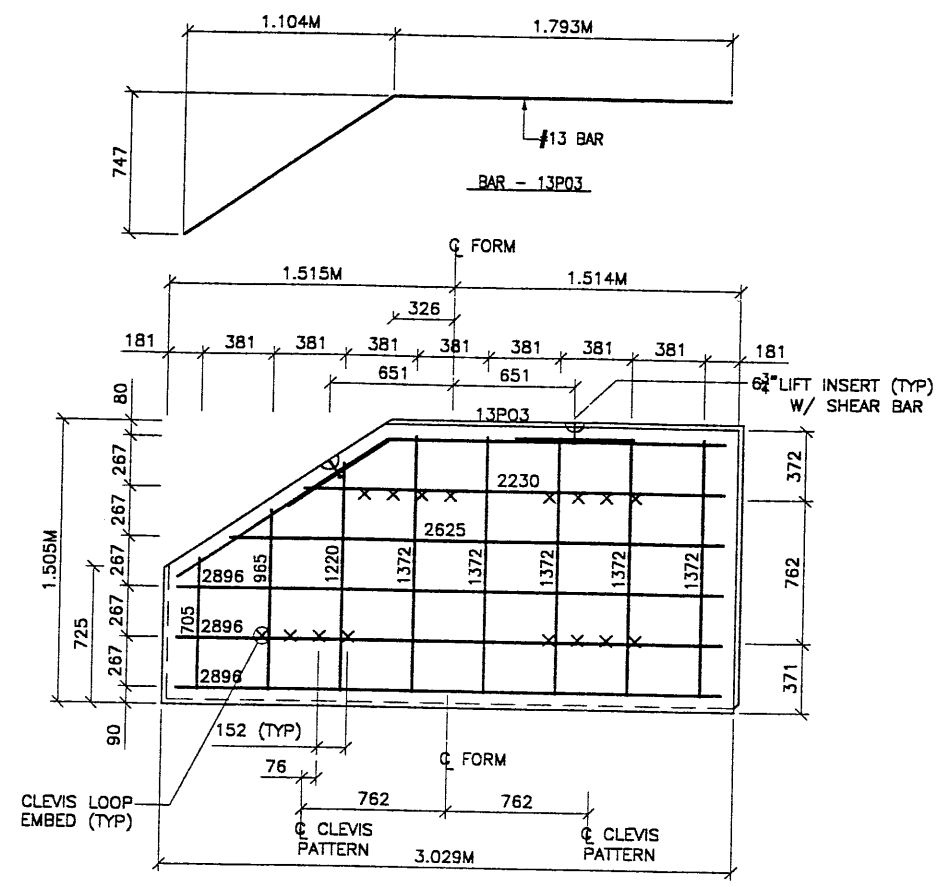
DWG. NO.	3.2-R-351-46.9
JOB NO.	239-0007
SHT. NO.	RE-6

CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY. EXTERNAL STABILITY, INCLUDING BUT NOT LIMITED TO FOUNDATION AND SLOPE STABILITY, IS THE RESPONSIBILITY OF THE OWNER. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE RETAINED EARTH™ MASS, METHODS OF CONSTRUCTION, AND QUALITY OF PREFABRICATED MATERIALS CONFORM TO THE MANUFACTURER'S SPECIFICATION.

FINA T 10-9-98 H:\RE_EARTH\APRO 79-0007\1998\6S-WALLS\6S-4\SUBMIT-2SPECIALS



S5 TYPE S5 REBAR
(AREA = 1.14 SQ.M)



S6 TYPE S6 REBAR
(AREA = 4.17 SQ.M)

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	10-9-98	RELEASE FOR CONSTRUCTION

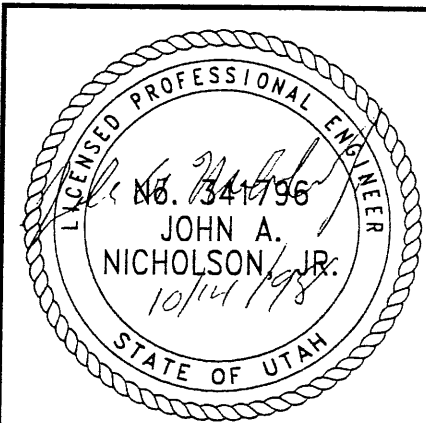
- PANEL REINFORCEMENT NOTES:
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 - VSL RETAINED EARTH™ IS PROTECTED UNDER PATENT 4,725,170.
 - LIFT INSERTS ARE 6 3/4" LONG IN ALL PANELS LESS THAN 1.524M TALL. PANELS TALLER THAN 1.524M SHALL HAVE 11" LONG LIFT ANCHORS.

NO.	DATE	REVISION	BY	CHK

VSL CORPORATION
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Raleigh, NC 27617
Telephone: (919) 781-6272
Fax: (919) 781-4869

ATLANTA, GA / DALLAS, TX / HALIGH, NC (CORPORATE OFFICE)
MADE IN / SAN JOSE, CA / SPRINGFIELD, VA

WASATCH CONSTRUCTORS
OCT 22 1998
RELEASED FOR CONSTRUCTION



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METRIC

RETAINED EARTH™ WALLS
PRECAST WALL "R-351-46"
SPECIAL PANEL DETAILS

UTAH 1-15 RECONSTRUCTION
SALT LAKE COUNTY, UTAH
UTAH DEPARTMENT OF TRANSP.

DWG. NO.	3.2-R-351-46.10
JOB NO.	239-0007
SHT. NO.	RE-7