APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	9-30-98	RELEASE FOR CONSTRUCTION
2	5-21-99	ISSUED AS CSP

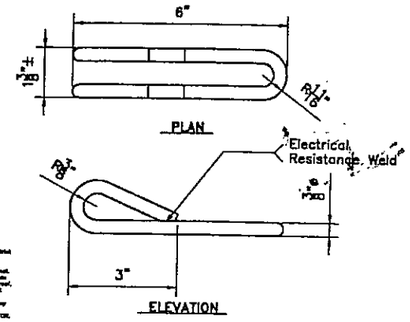
NOTES:
1. TOLERANCE: ±0.12

2. MATERIAL: COLD DRAWN STEEL WIRE MEETING THE REQUIREMENTS OF ASTM A-82 (THE LATEST REVISION).

3. FABRICATE AND WELD AS SHOWN. WELDING MUST BE PERFORMED IN SUCH A MANNER TO ENSURE THAT NO WELDS FAIL BELOW 65000 PSI TIMES THE WIRE X-SECTIONAL AREA AND THAT THE AVERAGE OF ALL WELDS MUST BE IN EXCESS OF 75000 PSI TIMES THE X-SECTIONAL AREA OF EACH WIRE.

4. TEST AND REPORT ON EACH 500 LOT BATCH.

TYPE 1 - STANDARD CLEVIS



Date 10/30/97	TYPE 1 - STANDARD CLEVIS	VSL 2840 Plaza Place, Suite 200 Raleigh, NC 27612 Telephone: (919) 781-5272 Fax: (919) 781-4869	Job No. 239-0007
Designed by			
Checked by	UTAH I-15 RECONSTRUCTION		Sht. 1 of 1

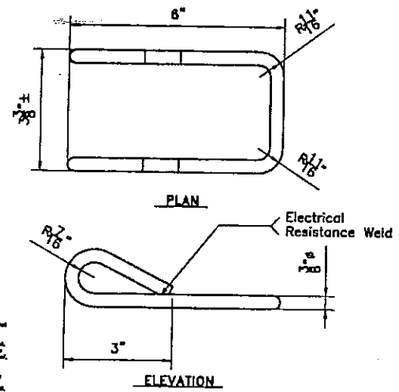
NOTES:
1. TOLERANCE: ±0.12

2. MATERIAL: COLD DRAWN STEEL WIRE MEETING THE REQUIREMENTS OF ASTM A-82 (THE LATEST REVISION).

3. FABRICATE AND WELD AS SHOWN. WELDING MUST BE PERFORMED IN SUCH A MANNER TO ENSURE THAT NO WELDS FAIL BELOW 65000 PSI TIMES THE WIRE X-SECTIONAL AREA AND THAT THE AVERAGE OF ALL WELDS MUST BE IN EXCESS OF 75000 PSI TIMES THE X-SECTIONAL AREA OF EACH WIRE.

4. TEST AND REPORT ON EACH 500 LOT BATCH.

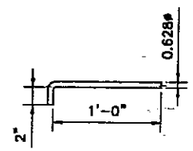
TYPE 2 - STANDARD CLEVIS



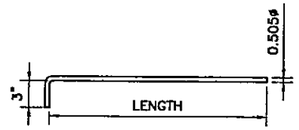
Date 10/30/97	TYPE 2 - STANDARD CLEVIS	VSL 2840 Plaza Place, Suite 200 Raleigh, NC 27612 Telephone: (919) 781-5272 Fax: (919) 781-4869	Job No. 239-0007
Designed by			
Checked by	UTAH I-15 RECONSTRUCTION		Sht. 1 of 1

NOTES:
1. TOLERANCE: ±0.12

2. MATERIAL: COLD DRAWN STEEL WIRE MEETING THE REQUIREMENTS OF ASTM A-82 (THE LATEST REVISION).



2-STAGE CONNECTOR PINS



LENGTH
24" FOR 4 EMBEDS
30" FOR 5 EMBEDS
36" FOR 6 EMBEDS
42" FOR 7 EMBEDS
48" FOR 8 EMBEDS

REINFORCING MESH CONNECTOR PINS

Date 10/30/97	CONNECTOR PINS	VSL 2840 Plaza Place, Suite 200 Raleigh, NC 27612 Telephone: (919) 781-5272 Fax: (919) 781-4869	Job No. 239-0007
Designed by			
Checked by	UTAH I-15 RECONSTRUCTION		Sht. 1 of 1

WASATCH CONSTRUCTORS

JUN 17 1999

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.

LICENSED PROFESSIONAL ENGINEER
No. 334796
JOHN A. NICHOLSON, JR.
5/20/99
STATE OF UTAH

NO.	DATE	REVISION	BY	CHK

DES. 12-19-97 MM
DRN. 12-19-97 DDO
CHK. 12-19-97 MM

RETAINED EARTH™

VSL CORPORATION
2840 Plaza Place, Suite 200
Raleigh, NC 27612
Telephone: (919) 781-5272
Fax: (919) 781-4869
ATLANTA, GA / DALLAS, TX / RALEIGH, NC (CORPORATE OFFICE)
MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA

RETAINED EARTH™ WALLS
CORRIDOR STANDARD PLAN
COMPONENT DETAILS

UTAH I-15 INTERCHANGE
SALT LAKE COUNTY, UTAH
UTAH DEPARTMENT OF TRANSP.

DWG. NO.
CS-315

JOB NO:
239-0007

SHT. NO. STD-15

FINAL PLOT 10-1-98

H:\RE_EARTH\APROJECT\239-0007\STDS\S***

ENCE (X-UTAH.DWG)

15

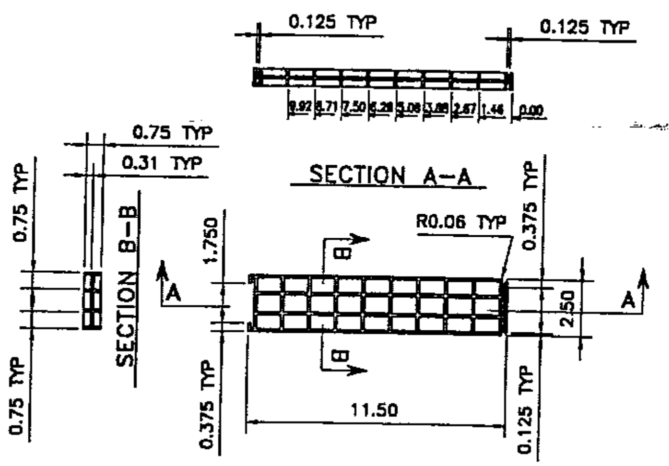
NCE (X-UTAH.DWG)

H:\RE_EARTH\APROJECT\239-0007\STDS\ST' '6

FINAL PLOT 10-1-98

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	9-30-98	RELEASE FOR CONSTRUCTION
2	5-21-99	ISSUED AS CSP

NOTES:
1. TOLERANCE: ±0.12
2. MATERIAL: BLACK HIGH DENSITY POLYETHYLENE (HDPE).
3. APPROX. VOLUMN: 9.3 CUBIC INCHES
4. APPROX. WEIGHT: 0.31 LBS
5. MATERIAL THICKNESSES ARE 0.125 THROUGHOUT WITH A SLIGHT INCREASING DRAFT ON THE VERTICAL MEMBERS AND THE 0.125 SLOTS.
6. CAST "VSL" AND "RETAINED EARTH (TM)" ONTO THE SURFACE.
7. DIMENSIONS SHOWN ARE IN INCHES.



PANEL PAD (WAFFLE)

Date	PANEL PAD (WAFFLE)	VSL	Job No.
10/30/97			239-0007
Designed by	UTAH I-15 RECONSTRUCTION		1 of 1
Checked by			

DES.	12-19-97	MM
DRN.	12-19-97	DDO
CHK.	12-19-97	MM

NO.	DATE	REVISION	BY	CHK

VSL RETAINED EARTH™

VSL CORPORATION
2840 Plaza Place, Suite 200
Raleigh, NC 27612
Telephone: (919) 781-6272
Fax: (919) 781-4969

ATLANTA, GA / DALLAS, TX / RALEIGH, NC (CORPORATE OFFICE)
MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA.

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RETAINED EARTH™ WALLS
CORRIDOR STANDARD PLAN
COMPONENT DETAILS

UTAH I-15 INTERCHANGE
SALT LAKE COUNTY, UTAH
UTAH DEPARTMENT OF TRANSP.

DWG. NO.
CS-316

JOB NO:
239-0007

SHT. NO. STD-16

WASATCH CONSTRUCTORS
JUN 17 1999
RELEASED FOR CONSTRUCTION

METRIC

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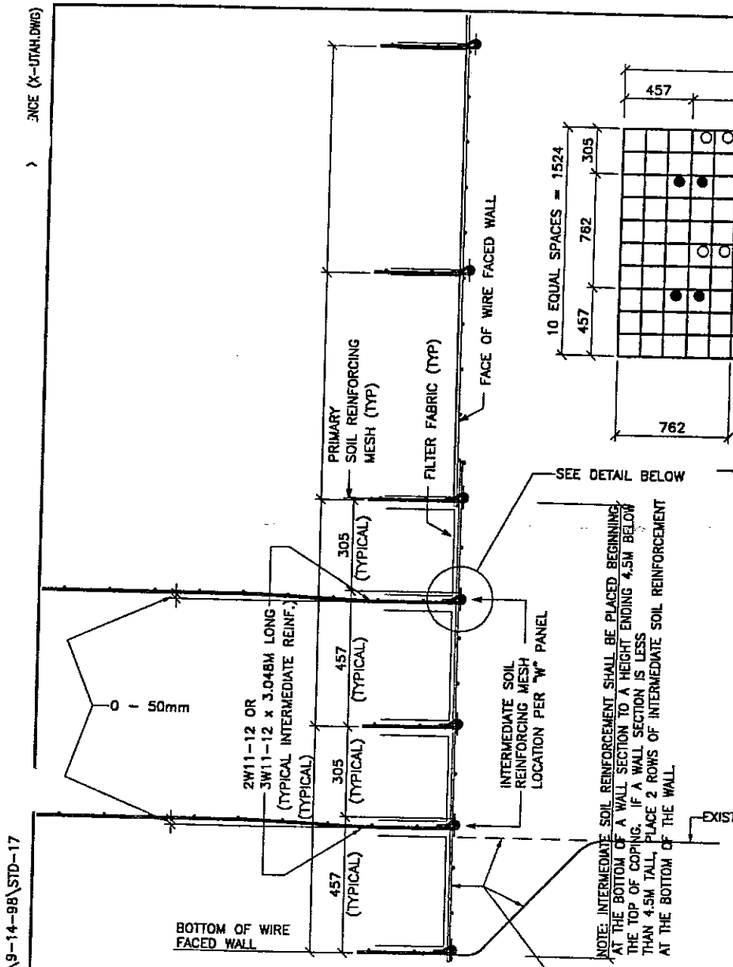
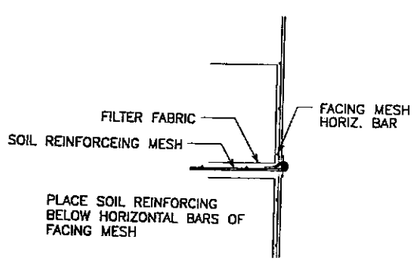
LICENSED PROFESSIONAL ENGINEER
No. 344796
JOHN A. NICHOLSON, JR.
5/20/99
STATE OF UTAH

[illegible]

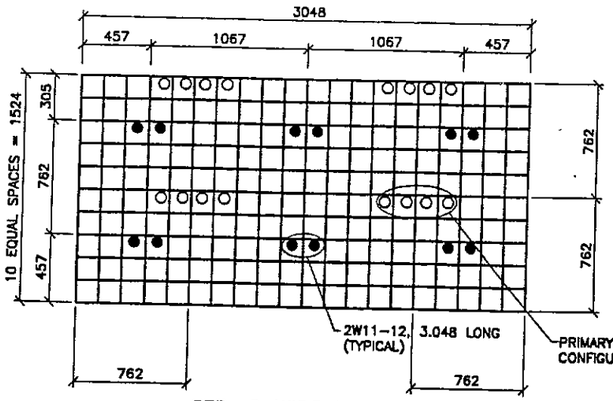


DURING PRIMARY SETTLEMENT, DO NOT FILL IN THIS ZONE WITH BACKFILL MATERIAL. THE VERY BOTTOM OF THE WIRE FACED WALL MUST BE LEFT EXPOSED DURING PRIMARY SETTLEMENT.

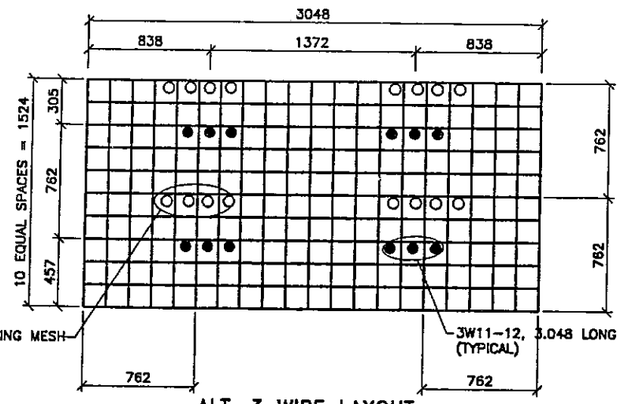
SECTION AT
WIRE FACE PANEL TYPE "W"
INTERMEDIATE SOIL REINFORCEMENT



DETAIL AT
INTERMEDIATE SOIL REINFORCEMENT



STD. 2 WIRE LAYOUT

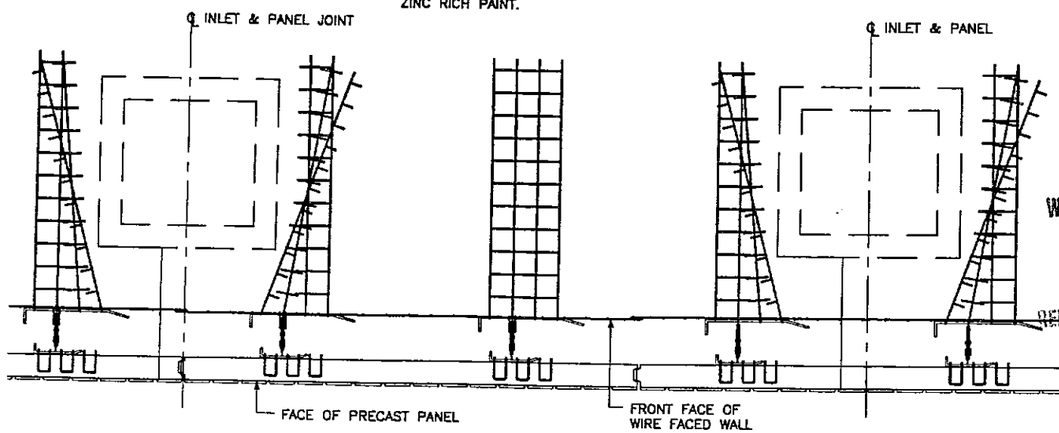


ALT. 3 WIRE LAYOUT

INLET/MANHOLE SHALL BE CENTERED ON CENTERLINE OF CLOSEST OBSTRUCTED PANEL JOINT OR CENTERLINE OF PANEL.

SEE WALL ELEVATIONS FOR LOCATION.

FIELD CUT & SKEW SOIL REINFORCING TO AVOID INLET. DAMAGED GALVANIZING SHALL BE COATED WITH ZINC RICH PAINT.

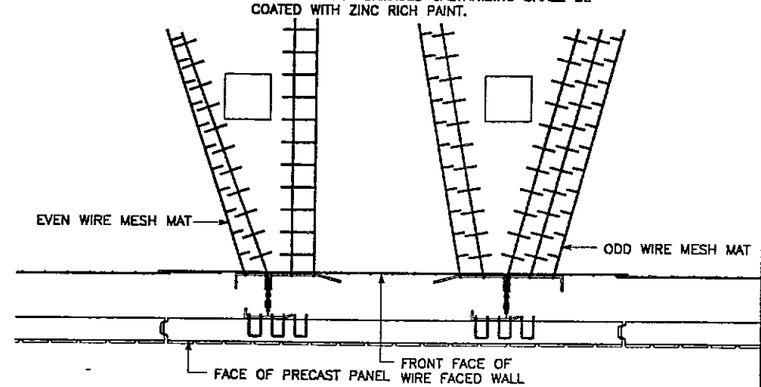


101 INLET OBSTRUCTION DETAIL
SCALE: 1:20 (FULL SIZE)
SCALE: 1:40 (HALF SIZE)

OBSTRUCTION SHALL BE CONSTRUCTED BEFORE WALL INSTALLATION OR, VOID FORMER SHALL BE INSTALLED DURING BACKFILL PLACEMENT.

VOID FORMER NOT SUPPLIED BY VSL CORPORATION.

FIELD CUT & SKEW SOIL REINFORCING AROUND OBSTRUCTION. DAMAGED GALVANIZING SHALL BE COATED WITH ZINC RICH PAINT.



60 OBSTRUCTION (VERTICAL)
SCALE: 1:20 (FULL SIZE)
SCALE: 1:40 (HALF SIZE)

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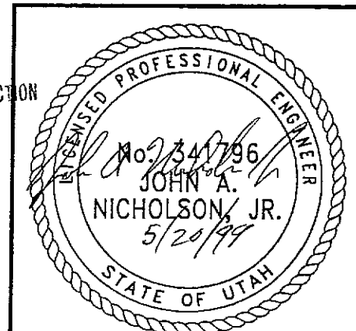
WASATCH CONSTRUCTORS
JUN 17 1999
RELEASED FOR CONSTRUCTION



APPROVED FOR CONSTRUCTION			
NO.	DATE	DESCRIPTION	BY
1	9-30-98	RELEASE FOR CONSTRUCTION	CHK
2	5-21-99	ISSUED AS CSP	

	DES.	DRN.	CHK.
	09-21-98	09-21-98	09-21-98
	xx	JHJ	xx

RETAINED EARTH™

VSL CORPORATION
2840 Plaza Place, Suite 200
Raleigh, NC 27612
Telephone: (919) 781-6272
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ATLANTA, GA / DALLAS, TX / RALEIGH, NC (CORPORATE OFFICE)
MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA

RETAINED EARTH™ WALLS
CORRIDOR STANDARD PLAN
INTERMEDIATE SOIL REINFORCEMENT

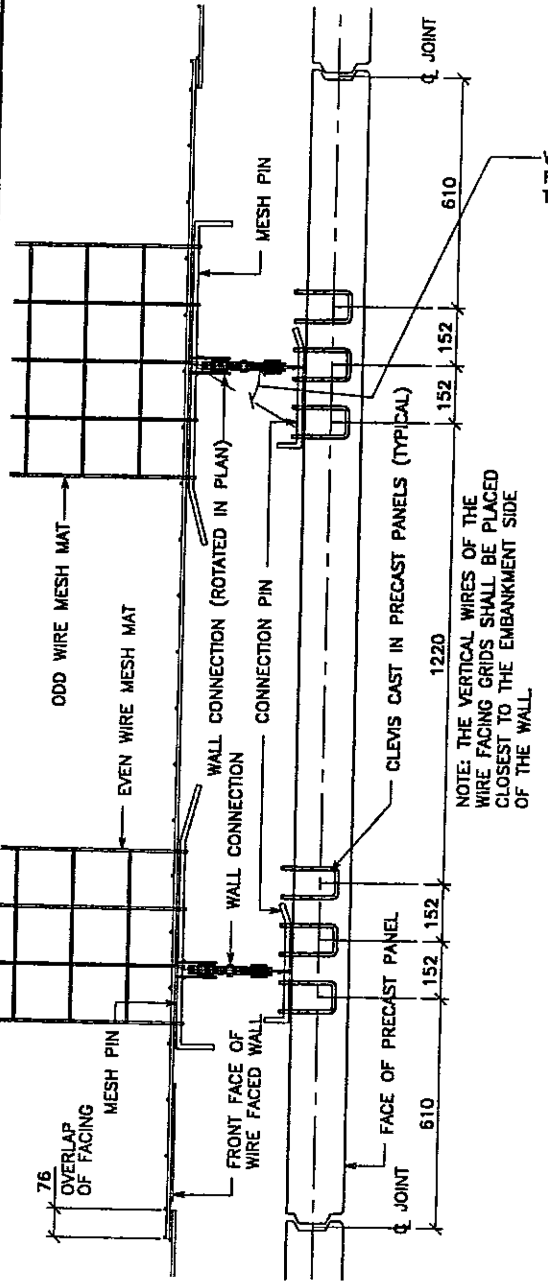
UTAH I-15 RECONSTRUCTION
SALT LAKE COUNTY, UTAH
UTAH DEPARTMENT OF TRANSP.

DWG. NO.
CS-317
JOB NO:
239-0007
SHT. NO.
STD-17

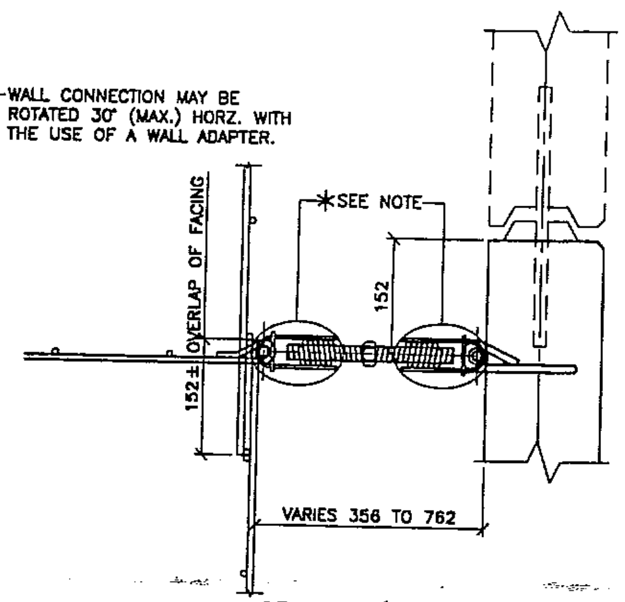
H:\RE_EARTH\APROJECT\239-0007\STDS\S... X ...NCE (X-UTAH.DWG) B

FINAL PLOT 10-1-98

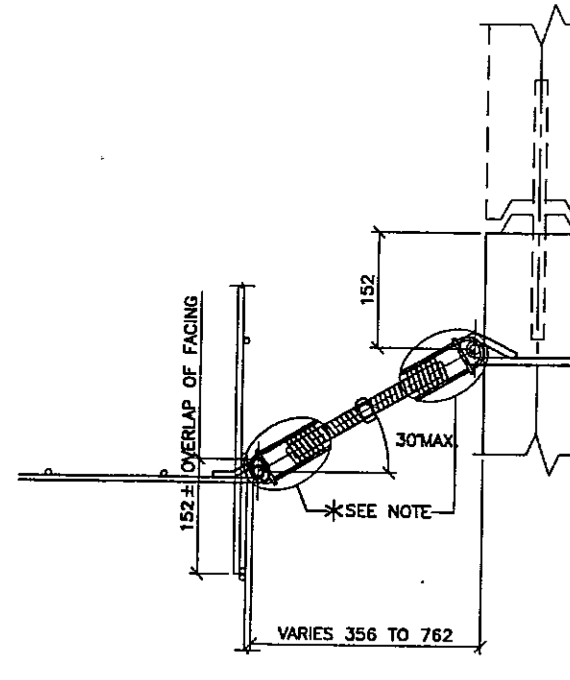
APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	9-30-98	RELEASE FOR CONST.
2	5-21-99	ISSUED AS CSP



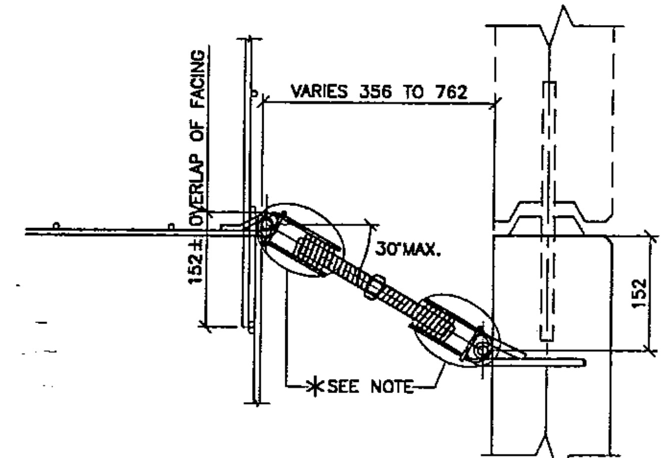
PLAN VIEW



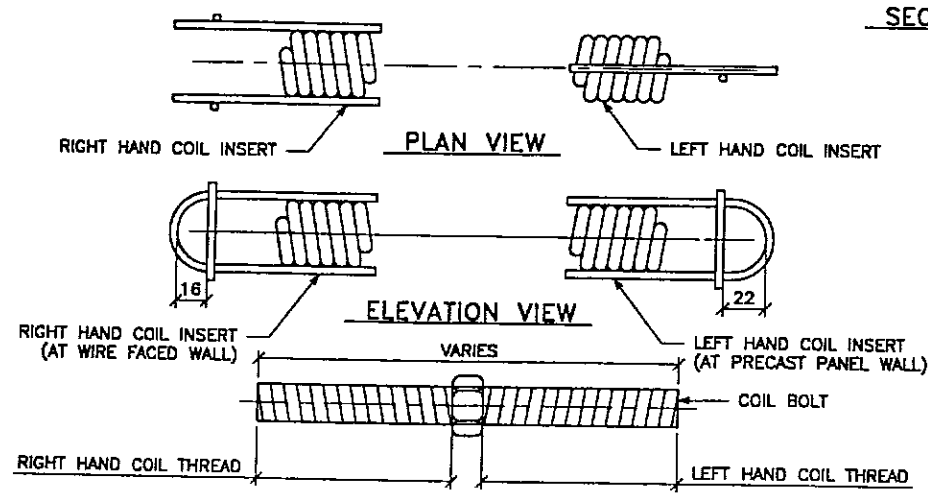
SECTION (FLAT)



SECTION (ROTATED)



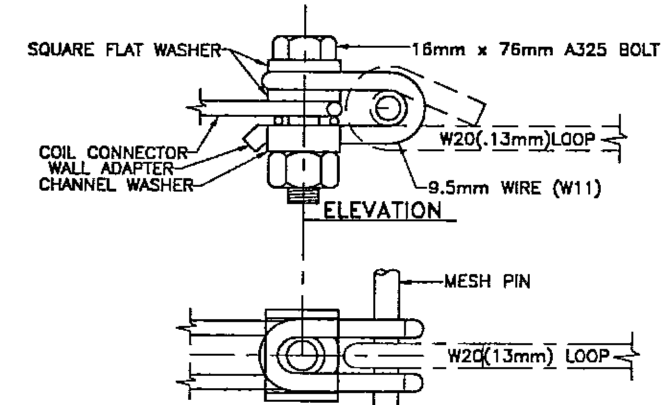
SECTION (ROTATED)



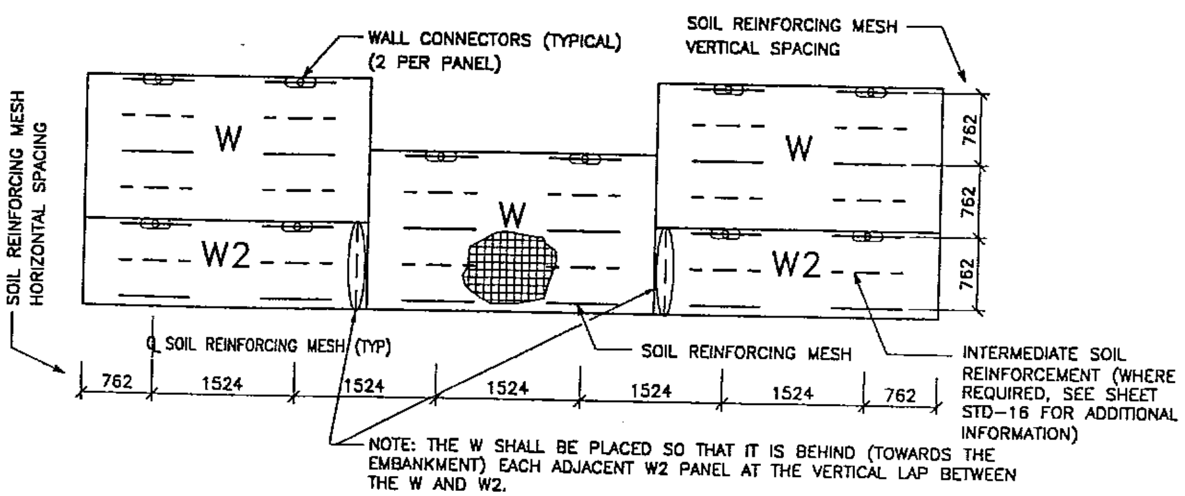
WALL CONNECTION DETAIL

* CONTRACTOR NOTES

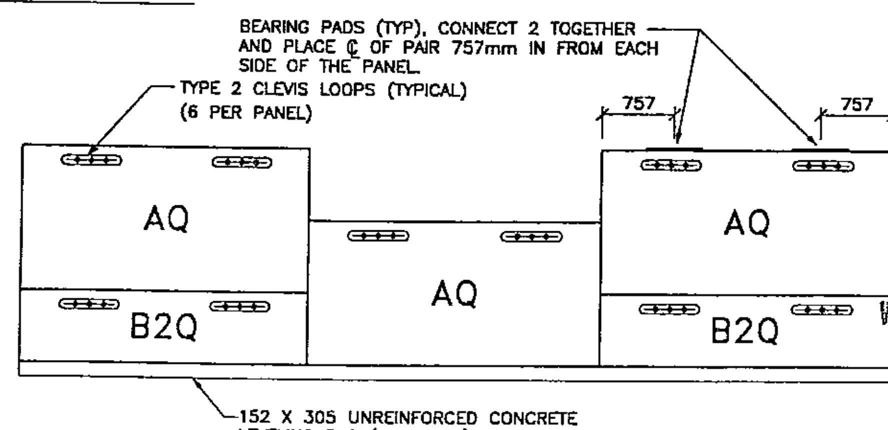
1. ENSURE FULL ENGAGEMENT BETWEEN COIL BOLT AND COIL INSERTS, THEN TIGHTEN TO ELIMINATE ANY SLACK.
2. IF THE RIGHT HAND COIL INSERT IS EITHER MISSING OR IS LOCATED OUT OF RANGE TO MAKE A CONNECTION TO THE PRECAST PANEL, CONNECT A WALL ADAPTER TO THE CLOSEST MESH LOOP SO THAT THE INCLINATION OF THE COIL BOLT IS MINIMIZED.
3. COAT THE PORTION OF THE COIL BOLT ENGAGED IN THE COIL INSERTS WITH A LIGHT FILM OF NON-DECAYING, CORROSION INHIBITING, GREASE AS SUPPLIED BY FOSTER GEOTECHNICAL.
4. 30°MAX OR AS: 1. SPECIFIED IN THE DESIGN DRAWINGS, OR 2. APPROVED BY FOSTER GEOTECHNICAL ON A CASE BY CASE BASIS.



WALL ADAPTER DETAIL



TYPICAL WIRE FACED WALL ELEVATION
(WIRE FACE PANELS)



TYPICAL PRECAST WALL ELEVATION
(PRECAST PANELS)

PANEL TYPE	NO. OF WALL CONNECTIONS REQ'D
AQ	2
B2Q	2
D2Q	2
DQ	2
EQ	2
H80Q	4
H90Q	4

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WASATCH CONSTRUCTORS
JUN 17 1999
RELEASED FOR CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER
No. 134796
JOHN A. NICHOLSON, JR.
5/20/99
STATE OF UTAH

DES.	12-19-97	MM
DRN.	12-19-97	DDO
CHK.	12-19-97	MM

RETAINED EARTH™

NO.	DATE	REVISION	BY	CHK

VSL CORPORATION
2840 Plaza Place, Suite 200
Raleigh, NC 27612
Telephone: (919) 781-6272
Fax: (919) 781-4969

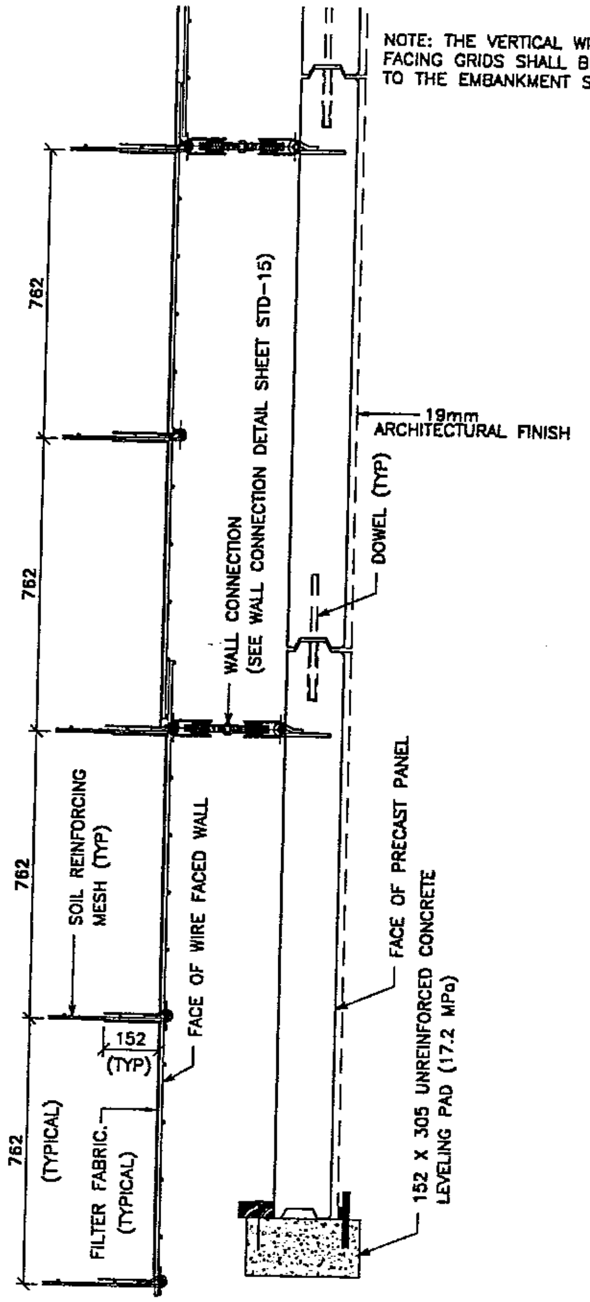
ATLANTA, GA / DALLAS, TX / RALEIGH, NC (CORPORATE OFFICE)
MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA

RETAINED EARTH™ WALLS
CORRIDOR STANDARD PLAN
WALL CONNECTION DETAILS @ STAGE CONST.

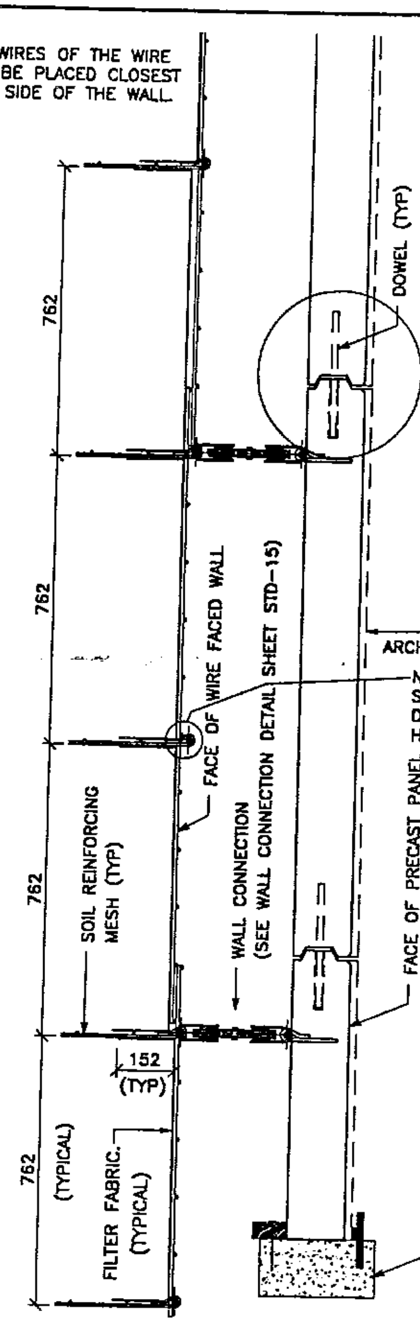
UTAH I-15 INTERCHANGE
SALT LAKE COUNTY, UTAH
UTAH DEPARTMENT OF TRANSP.

DWG. NO. CS-318
JOB NO: 239-0007
SHT. NO. STD-18

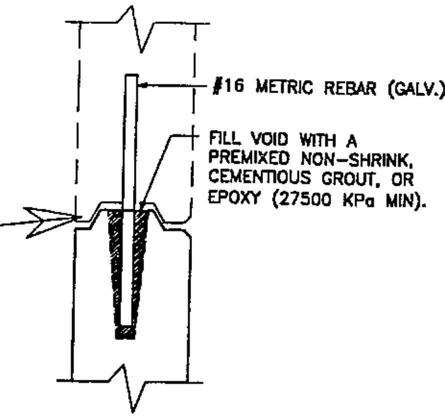
NOTE: THE VERTICAL WIRES OF THE WIRE FACING GRIDS SHALL BE PLACED CLOSEST TO THE EMBANKMENT SIDE OF THE WALL.



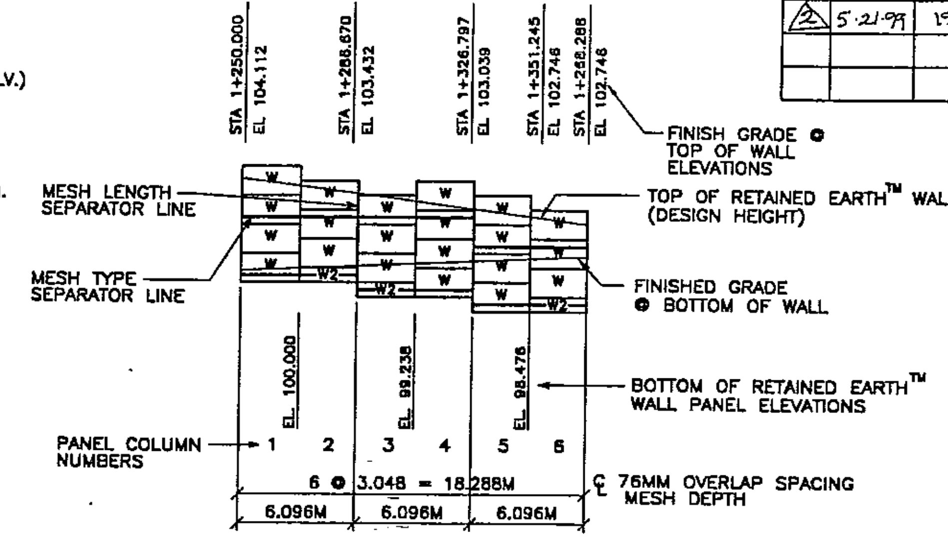
SECTION AT WIRE FACE PANEL TYPE "W"



SECTION AT WIREWFACE PANEL TYPE "W2"

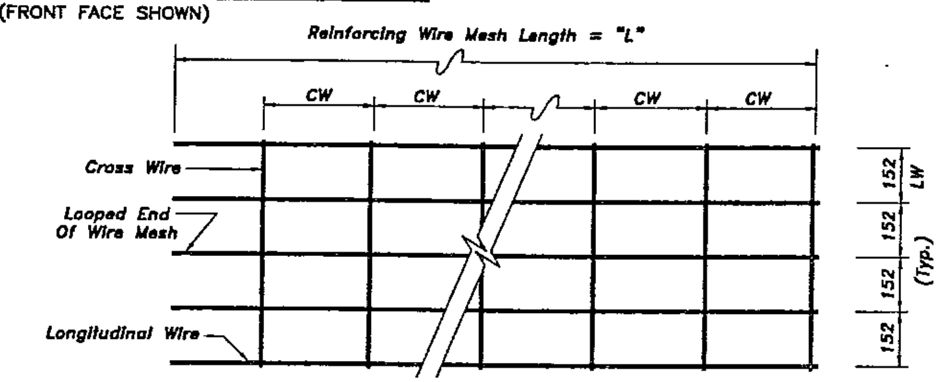


DETAIL AT DOWEL VOID



① WIRE FACED WALL ELEVATION KEY

(FRONT FACE SHOWN)



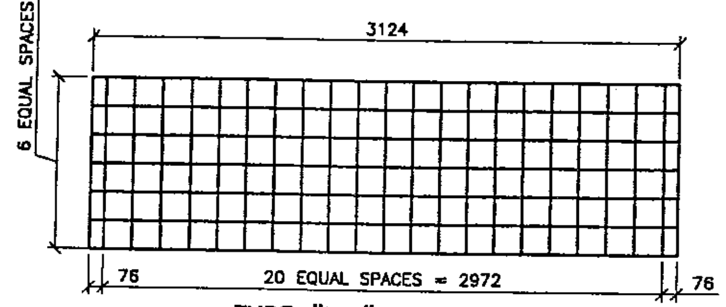
WIRE MESH DESIGNATION *5W11 + W11 x 1.0 (5W11-12)*

No. Of Longitudinal Wires
Size Of Longitudinal Wires (LS)
Size Of Cross Wires (CS)
Spacing (Ft.) Of Cross Wires (CW)

NOTE: FOR EXAMPLE ABOVE, EQUIVALENT WIRE MESH DESIGNATION =6 X 12-W11XW11-24"X "L"
(LW) (CW)(LS) (CS)
SHEET WIDTH
SHEET LENGTH

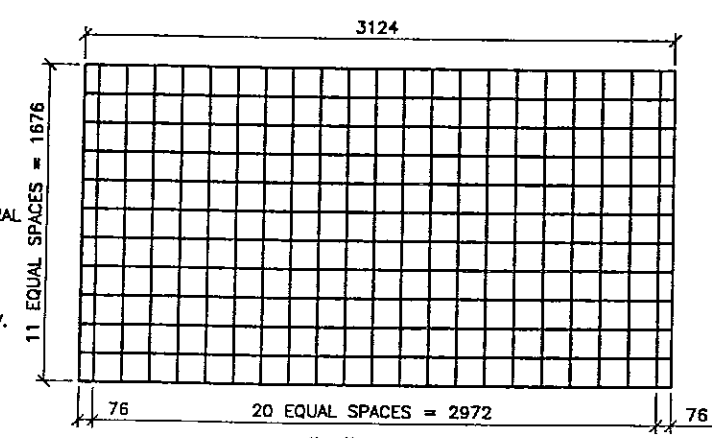
REINFORCING MESH DETAIL

NOTE : W11 (71 sq mm) And W20 (129 sq mm) Steel Wire Material And Welding Of Cross Wires And Loops Shall Conform To ASTM A82 And ASTM 185, Fy = 448 MPa. Mesh Shall Be Galvanized To ASTM A-123 To A Minimum Effective Thickness Of 0.086 mm.



TYPE "W2" WIRE FACE BAR LAYOUT

(W11 x W11)



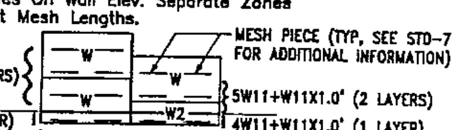
TYPE "W" WIRE FACE BAR LAYOUT

(W11 x W11)

Soil Reinforcement Key

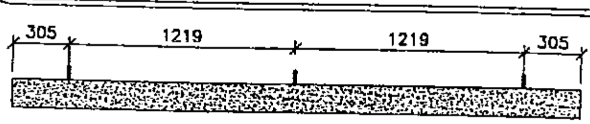
Mesh Types Are Designated Below Mesh Length Line. Heavy Horizontal Lines On Wall Elev. Separate Zones Of Different Mesh Types. Heavy Vertical Lines On Wall Elev. Separate Zones Of Different Mesh Lengths.

Example:

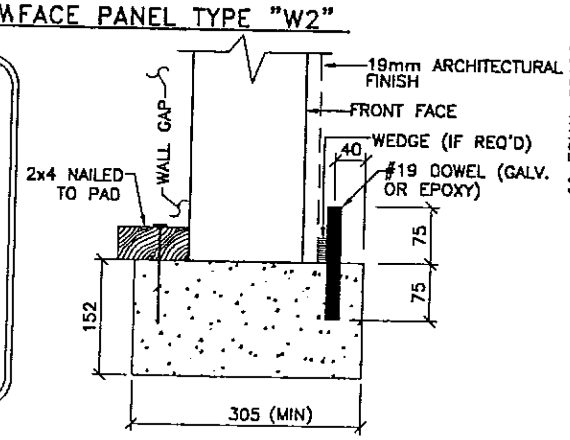


MESH LENGTH	L=3.048m	L=2.743m
MESH TYPE	(3) 5W11+W11X1.0' (1) 4W11+W11X1.0'	(2) 5W11+W11X1.0' (1) 4W11+W11X1.0'

Contact VSL Corp. For Questions Concerning Placement Of Soil Reinforcement.



LEVELING PAD DOWEL SPACING



2-STAGE LEVELING PAD DETAIL

NOTE: AT NO TIME SHALL THE ELEVATION OF THE BACKFILL IN FRONT OF THE WALL BE AT A HIGHER ELEVATION THAN THE BACKFILL IN THE WALL GAP.

WASATCH CONSTRUCTORS
JUN 17 1999
RELEASED FOR CONSTRUCTION

METRIC

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LICENSED PROFESSIONAL ENGINEER
No. 341796
JOHN A. NICHOLSON, JR.
5/20/99
STATE OF UTAH

APPROVED FOR CONSTRUCTION

NO.	DATE	DESCRIPTION
1	9-30-98	RELEASE FOR CONST.
2	5-21-99	ISSUED AS CSP

NO.	DATE	REVISION	BY	CHK

DES.	12-19-97	MM
DRN.	12-19-97	DDO
CHK.	12-19-97	MM

RETAINED EARTH™

VSL CORPORATION
2840 Plaza Place, Suite 200
Raleigh, NC 27612
Telephone: (919) 781-6272
Fax (919) 781-4969

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

RETAINED EARTH™ WALLS
CORRIDOR STANDARD PLAN
2 STAGE - TYPICAL DETAILS

UTAH I-15 INTERCHANGE
SALT LAKE COUNTY, UTAH
UTAH DEPARTMENT OF TRANSP.

DWG. NO. CS-319
JOB NO: 239-0007
SHT. NO. STD-19

H:\RE_EARTH\APROJECT\239-0007\STDS\

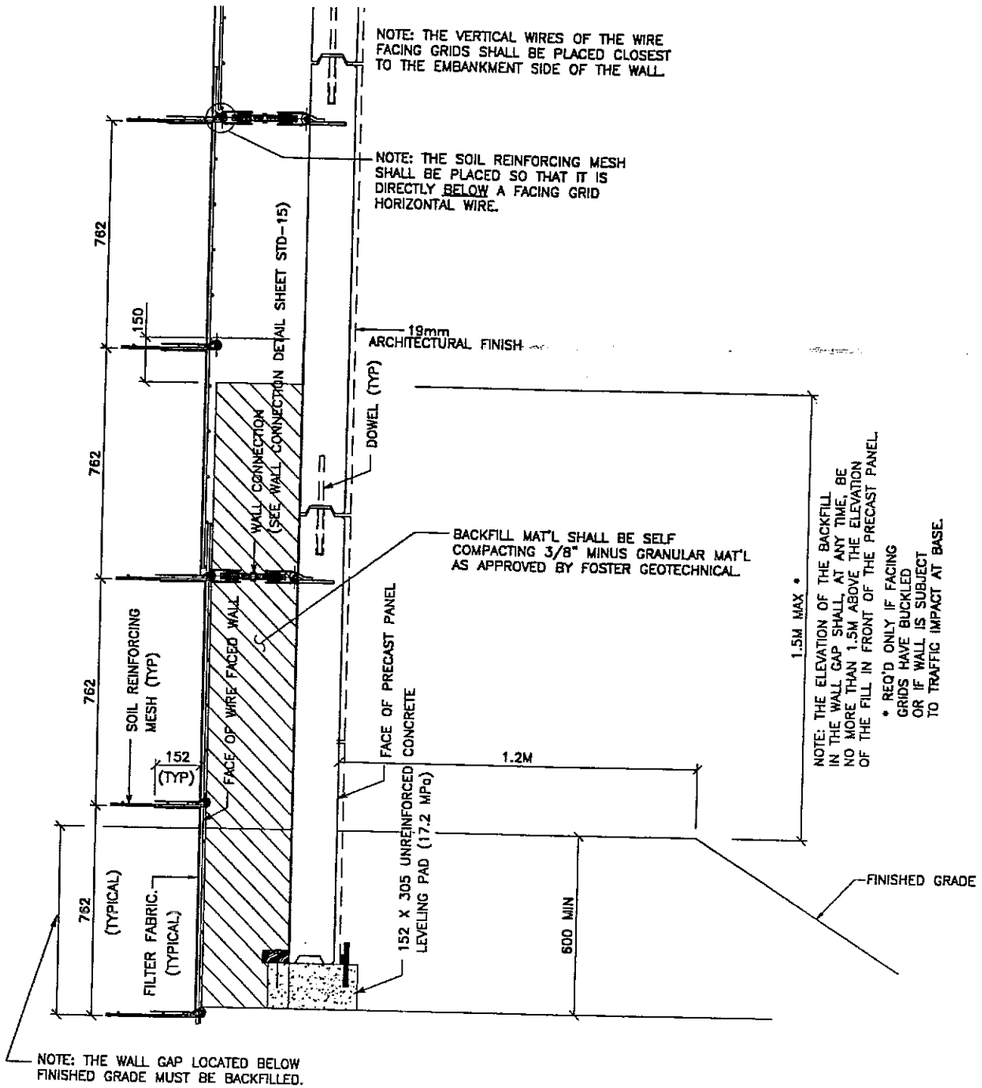
FINAL PLOT 10-1-98

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	9-30-98	RELEASE FOR CONST.
2	5-21-99	ISSUED AS CSP IV

								BY CHK
								REVISION
								NO. DATE
DES.	JN	09-21-98	RETAINED EARTH™					
DRN.	JHJ	09-21-98						
CHK.	JN	09-21-98						

VSL CORPORATION
2840 Plaza Place, Suite 200
Raleigh, NC 27612
Telephone: (919) 781-1272
Fax: (919) 781-4939

ATLANTA, GA / DALLAS, TX / RALEIGH, NC (CORPORATE OFFICE)
MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA.

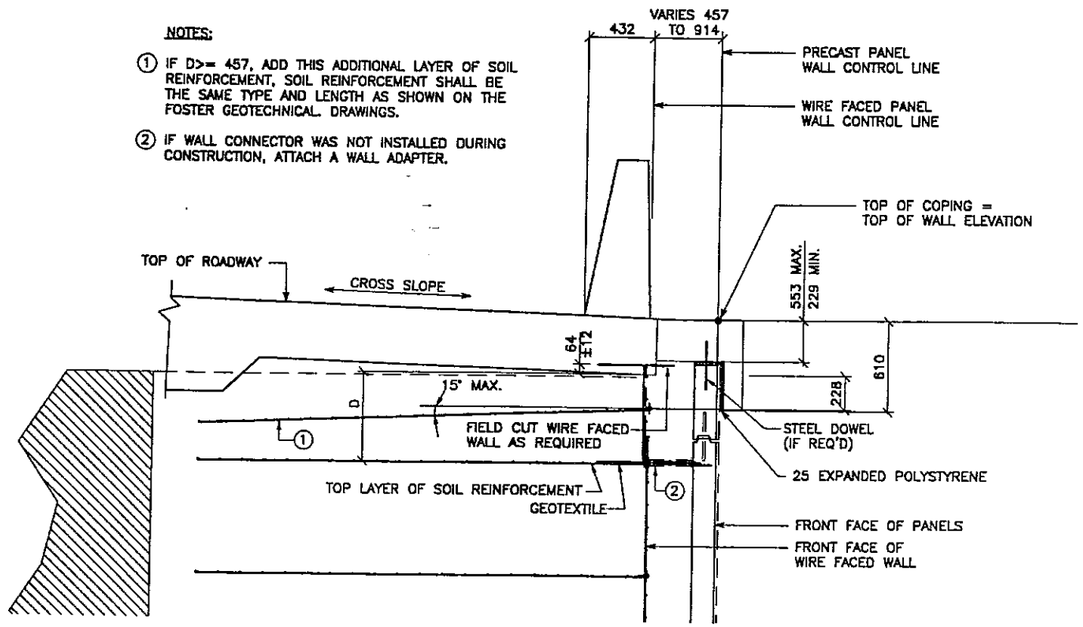


WALL GAP BACKFILL LIMITS

NOTE: PLACE FILTER FABRIC AS SUPPLIED BY FOSTER GEOTECHNICAL BEHIND ALL PRECAST PANEL JOINTS THAT ARE BACKFILLED. EXTEND THE FABRIC 150mm ABOVE THE TOP OF THE BACKFILL IN THE WALL GAP. ADHERE THE FABRIC TO THE BACK OF THE PANEL WITH ADHESIVE AS SUPPLIED BY FOSTER GEOTECHNICAL.

NOTES:

1. IF D>= 457, ADD THIS ADDITIONAL LAYER OF SOIL REINFORCEMENT. SOIL REINFORCEMENT SHALL BE THE SAME TYPE AND LENGTH AS SHOWN ON THE FOSTER GEOTECHNICAL DRAWINGS.
2. IF WALL CONNECTOR WAS NOT INSTALLED DURING CONSTRUCTION, ATTACH A WALL ADAPTER.



ADDITIONAL SOIL REINFORCEMENT AT TOP OF WALL DETAIL

WASATCH CONSTRUCTORS

JUN 17 1999

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.

LICENSED PROFESSIONAL ENGINEER
No. 344796
JOHN A. NICHOLSON, JR.
5/20/99
STATE OF UTAH

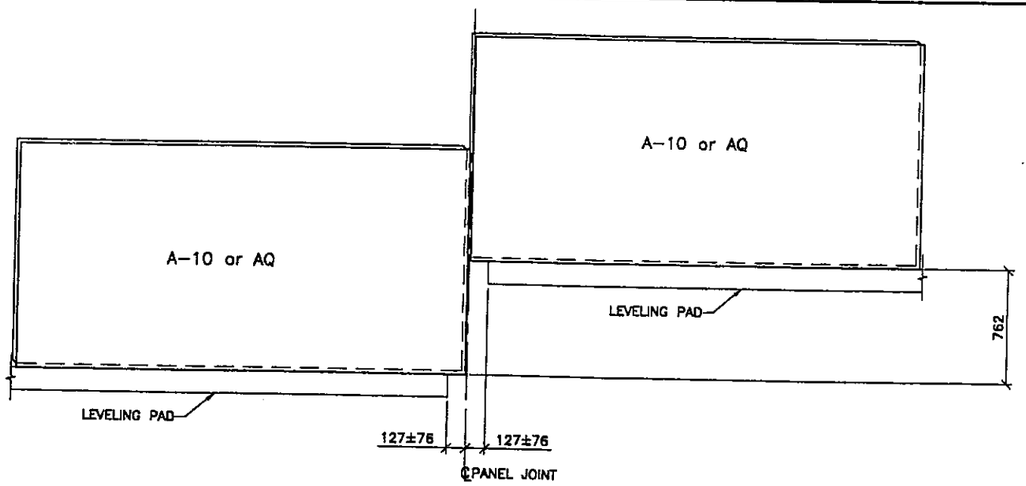
RETAINED EARTH™ WALLS
CORRIDOR STANDARD PLAN
2 STAGE - TYPICAL DETAILS

UTAH I-15 INTERCHANGE
SALT LAKE COUNTY, UTAH
UTAH DEPARTMENT OF TRANSP.

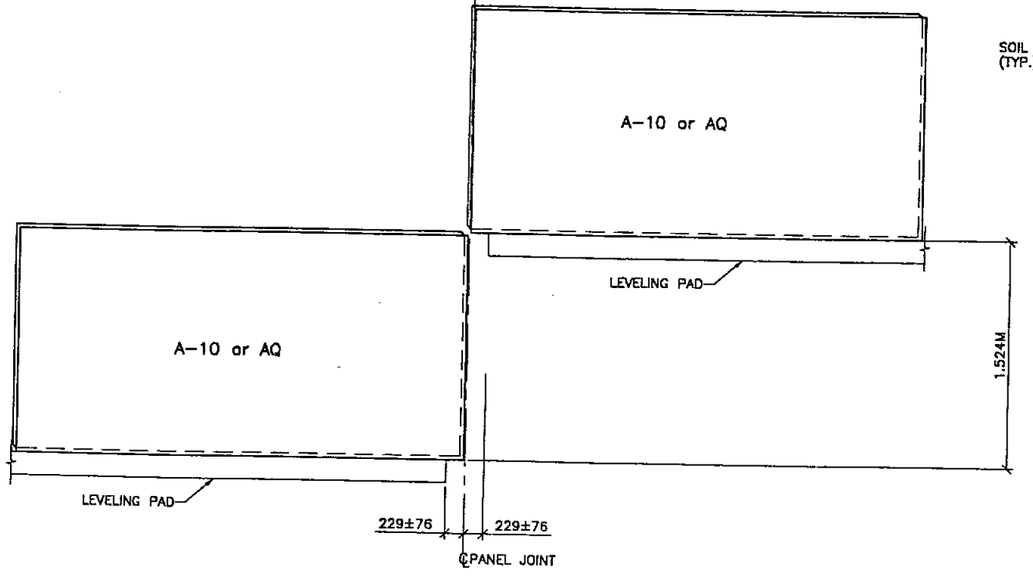
DWG. NO.
CS-320

JOB NO:
239-0007

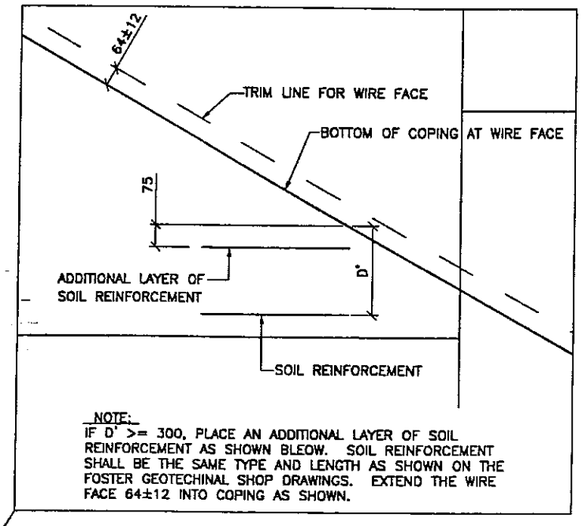
SHT. NO.
STD-20



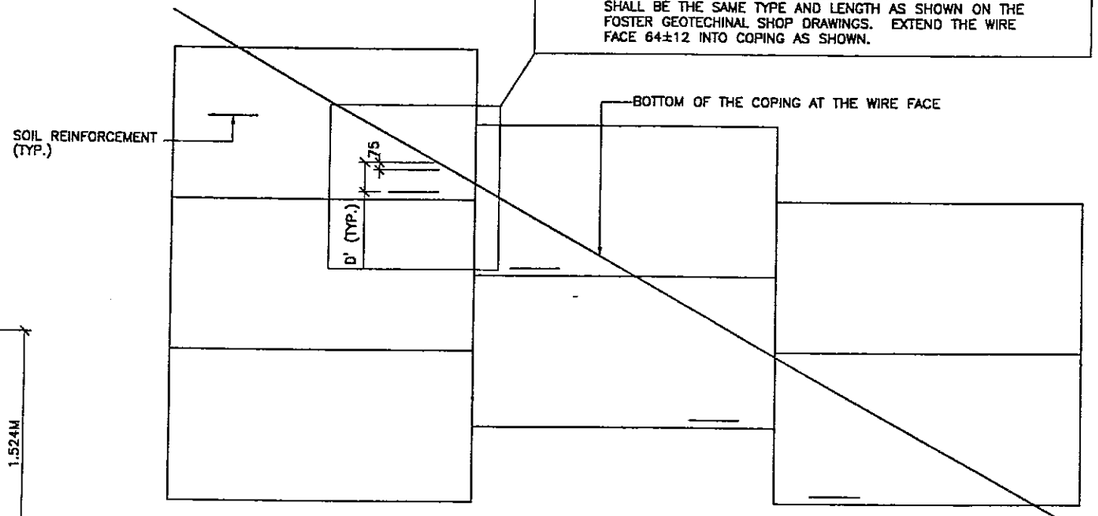
762mm LEVELING PAD STEP DETAIL



1.524M LEVELING PAD STEP DETAIL



NOTE:
IF D' >= 300, PLACE AN ADDITIONAL LAYER OF SOIL REINFORCEMENT AS SHOWN BLEOW. SOIL REINFORCEMENT SHALL BE THE SAME TYPE AND LENGTH AS SHOWN ON THE FOSTER GEOTECHINAL SHOP DRAWINGS. EXTEND THE WIRE FACE 64±12 INTO COPING AS SHOWN.



ELEVATION AT THE ABUTMENT SLOPE PAVING

WASATCH CONSTRUCTORS

JUN 17 1999

RELEASED FOR CONSTRUCTION

METRIC

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LICENSED PROFESSIONAL ENGINEER
No. 344796
JOHN A. NICHOLSON, JR.
5/20/99
STATE OF UTAH

APPROVED FOR CONSTRUCTION

NO.	DATE	DESCRIPTION
1	9-30-98	RELEASE FOR CONST.
2	5.21.99	ISSUED AS CSP

NO.	DATE	REVISION	BY	CHK.

DES. 09-21-98 JN
DRN. 09-21-98 JHJ
CHK. 09-21-98 JN

RETAINED EARTH™

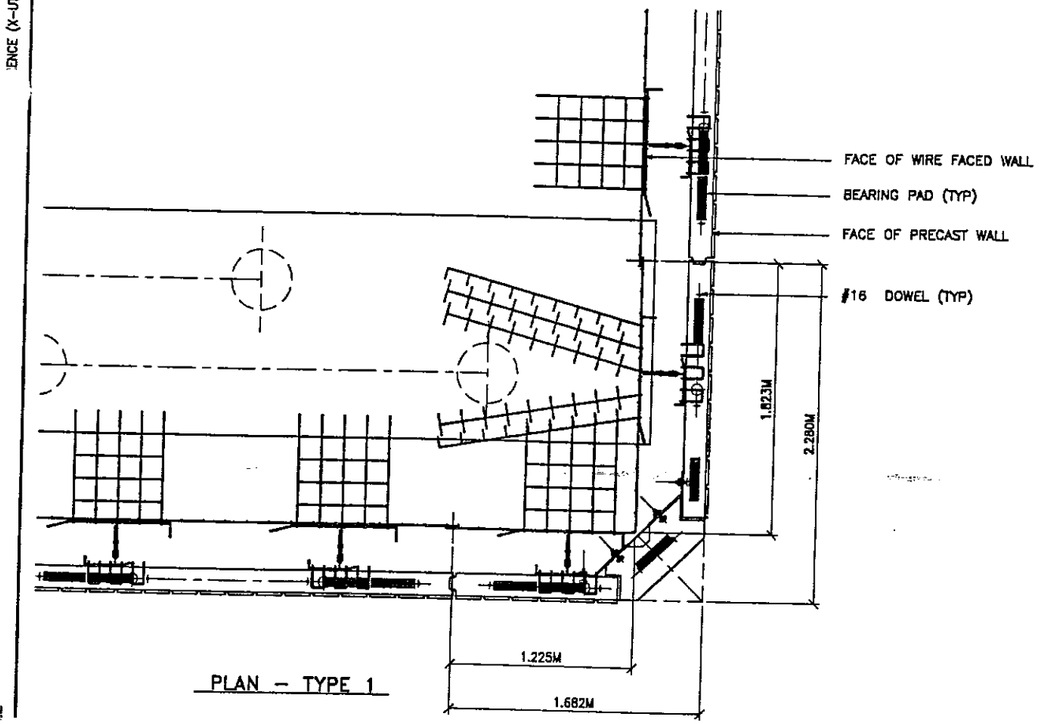
VSL CORPORATION
2943 Plaza Place, Suite 200
Raleigh, NC 27612
Telephone: (919) 781-6272
Fax: (919) 781-1989

ATLANTA, GA / DALLAS, TX / RALEIGH, NC (CORPORATE OFFICE)
MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA.

RETAINED EARTH™ WALLS
CORRIDOR STANDARD PLAN
TYPICAL DETAILS

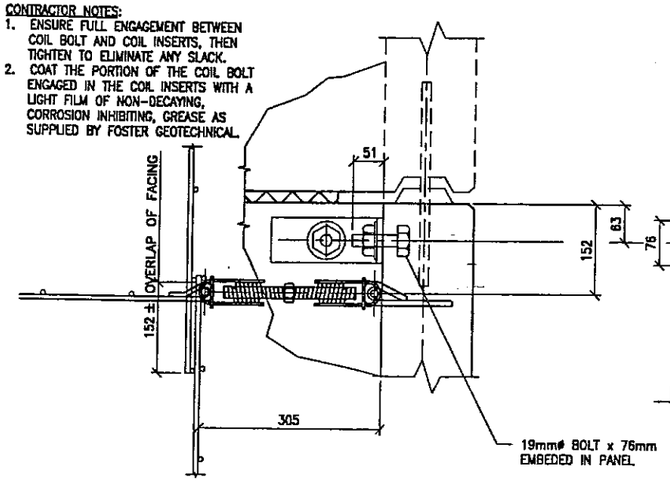
UTAH I-15 INTERCHANGE
SALT LAKE COUNTY, UTAH
UTAH DEPARTMENT OF TRANSP.

DWG. NO. CS-321
JOB NO: 239-0007
SHT. NO. STD-21

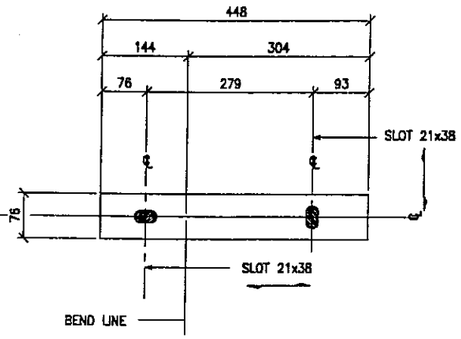


PLAN – TYPE 1

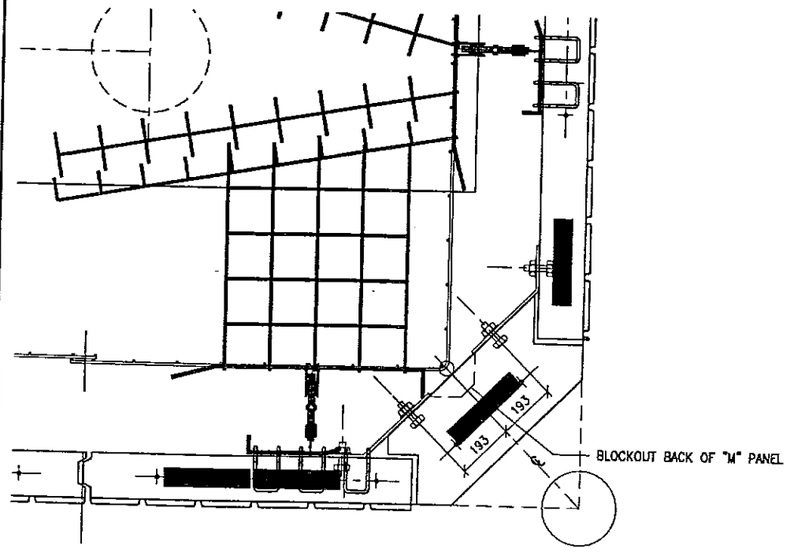
CONTRACTOR NOTES:
1. ENSURE FULL ENGAGEMENT BETWEEN COIL BOLT AND COIL INSERTS, THEN TIGHTEN TO ELIMINATE ANY SLACK.
2. COAT THE PORTION OF THE COIL BOLT ENGAGED IN THE COIL INSERTS WITH A LIGHT FILM OF NON-DECAYING, CORROSION INHIBITING, GREASE AS SUPPLIED BY FOSTER GEOTECHNICAL.



SECTION AT "M" PANEL



DEVELOPED DETAIL OF 10mm PLATE



PROPOSED CONNECTION AT CORNER – 2 STAGE WALLS

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	9-30-98	RELEASE FOR CONST.
2	5-21-99	ISSUED AS CSP

NO.	DATE	REVISION	BY	CHK

DES. 09-21-98 JN
DRN. 09-21-98 JHJ
CHK. 09-21-98 JN

RETAINED EARTH™

VSL CORPORATION
7810 Plaza Place, Suite 200
Raleigh, NC 27615
Telephone: (919) 781-4272
Fax: (919) 781-4959

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

RETAINED EARTH™ WALLS
CORRIDOR STANDARD PLAN
CONNECTION AT CORNER DETAILS ❶ STAGE CONST.

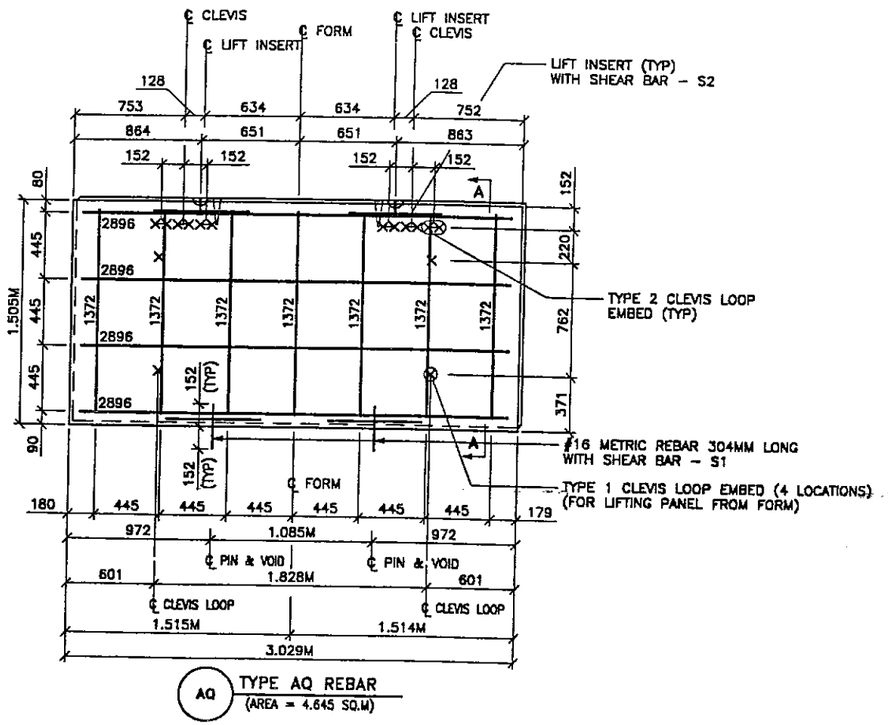
UTAH I-15 INTERCHANGE
SALT LAKE COUNTY, UTAH
UTAH DEPARTMENT OF TRANSP.

DWG. NO. CS-322
JOB NO: 239-0007
SHT. NO. STD-22

WASATCH CONSTRUCTORS
JUN 17 1999
RELEASED FOR CONSTRUCTION
METRIC

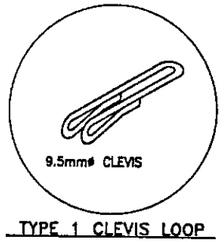
CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY. EXTERNAL STABILITY, INCLUDING BUT NOT LIMITED TO FOUNDATION AND SLOPE STABILITY, IS THE RESPONSIBILITY OF THE OWNER. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE RETAINED EARTH™ MASS, METHODS OF CONSTRUCTION, AND QUALITY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

LICENSED PROFESSIONAL ENGINEER
No. 341796
JOHN A. NICHOLSON, JR.
5/20/99
STATE OF UTAH

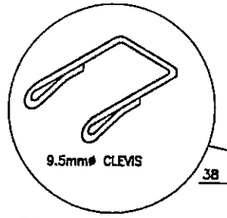


AQ TYPE AQ REBAR
(AREA = 4.645 SQ.M)

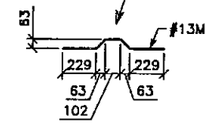
B2Q TYPE B2Q REBAR
(AREA = 2.323 SQ.M)



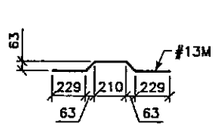
TYPE 1 CLEVIS LOOP



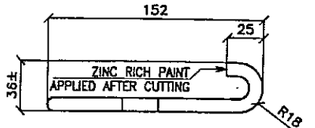
TYPE 2 CLEVIS LOOP



DETAIL OF SHEAR BAR – S1



DETAIL OF SHEAR BAR – S2



TYPE 3 CLEVIS LOOP

NOTE: 2 (TWO) TYPE 3 CLEVIS MAY BE SUBSTITUTED FOR 1 (ONE) TYPE 2 CLEVIS.
(TYPE 3 CLEVIS IS A CUT TYPE 1 CLEVIS)

PANEL REINFORCEMENT NOTES:
1. PANELS ARE SHOWN BACK FACE.
2. HORIZONTAL REINFORCEMENT SHALL HAVE 50 mm MINIMUM COVER TO THE BACK FACE.
3. ALL REINFORCEMENT SHALL HAVE 50 mm MINIMUM COVER TO THE SIDES.
4. ALL REINFORCING BARS ARE #13 METRIC. LABELS ON EACH BAR INDICATE LENGTH. EXAMPLE: 2896 IS A #13 BAR 2896 mm LONG.
5. PANEL REINFORCEMENT BARS SHALL BE DEFORMED BILLET STEEL BARS FOR CONCRETE REINFORCEMENT CONFORMING TO THE SPECIFICATIONS OF ASTM DESIGNATION A615, GRADE 60.
6. ALL REINFORCING STEEL TO BE GALVANIZED IN ACCORDANCE WITH ASTM 767 CLASS I.
7. CONCRETE PANELS TO HAVE 28 DAY COMPRESSIVE STRENGTH OF 25,200 KPa.
8. EQUIVALENT WELDED WIRE FABRIC MAY BE USED.
9. ALL PANELS TO USE 9.5mmø WIDE CLEVIS LOOPS.
10. VSL RETAINED EARTH™ IS PROTECTED UNDER PATENT 4,725,170.
11. 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.

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

JUN 17 1999

RELEASED FOR CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER
No. 341786
JOHN A. NICHOLSON, JR.
5/24/99
STATE OF UTAH

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	9-30-98	RELEASE FOR CONST.
2	5-21-99	ISSUED AS CSP

NO.	DATE	REVISION	BY	CHK

DES. 12-19-97 MM
DRN. 12-19-97 DDO
CHK. 12-19-97 MM

RETAINED EARTH™

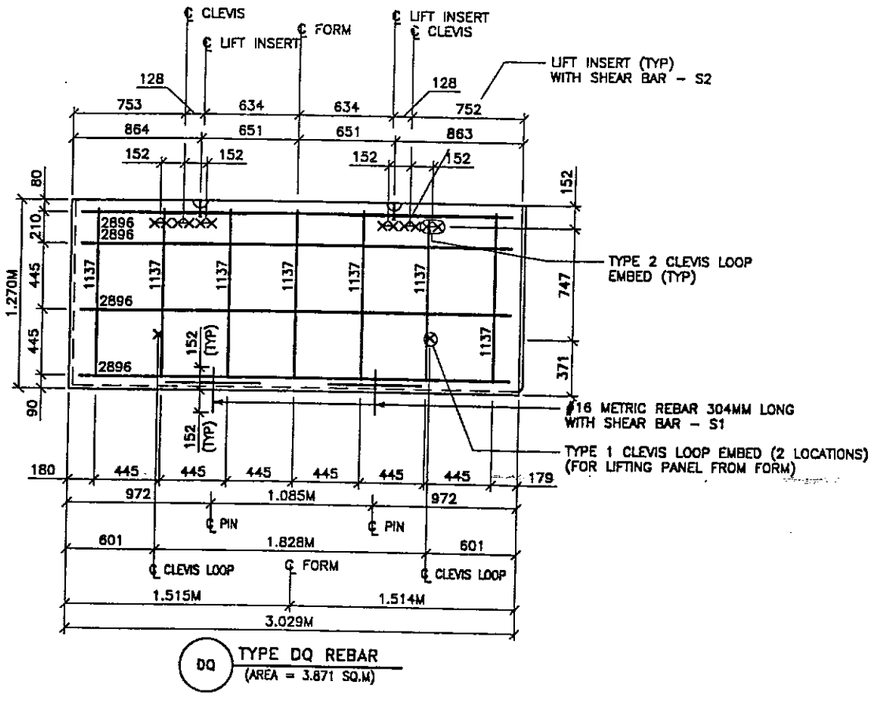
VSL CORPORATION
2840 Post Oak Blvd. Suite 220
Raleigh, NC 27612
Telephone: (919) 781-8272
Fax: (919) 781-4989

RETAINED EARTH™ WALLS
CORRIDOR STANDARD PLAN
2-STAGE PANEL REINFORCEMENT

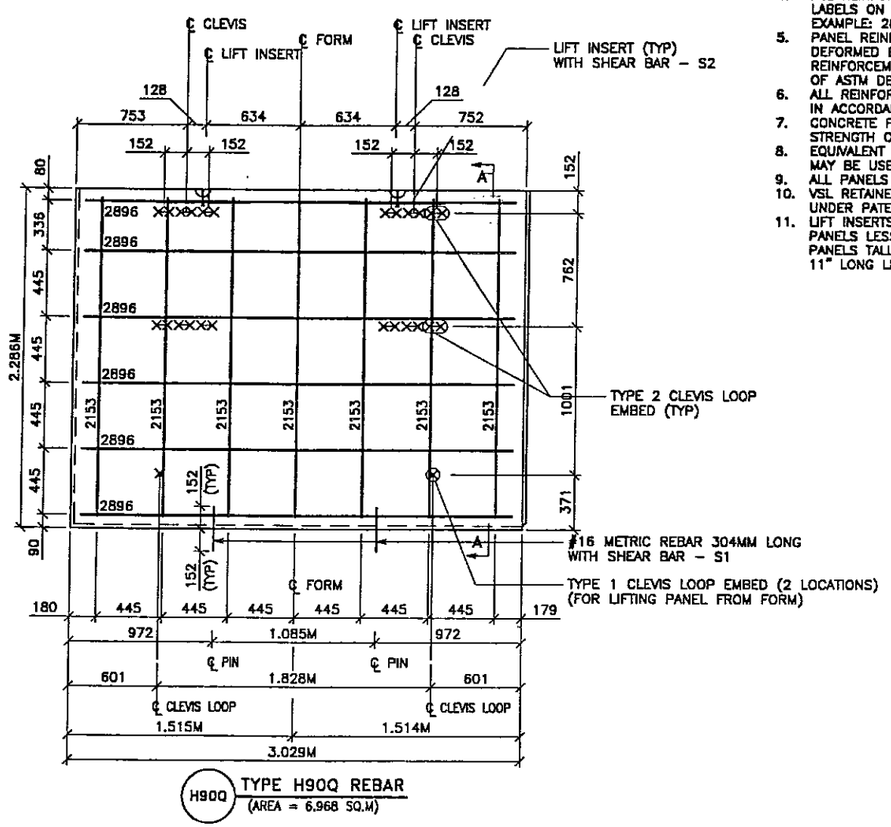
UTAH I-15 INTERCHANGE
SALT LAKE COUNTY, UTAH
UTAH DEPARTMENT OF TRANSP.

DWG. NO. CS-323
JOB NO: 239-0007
SHT. NO. STD-23

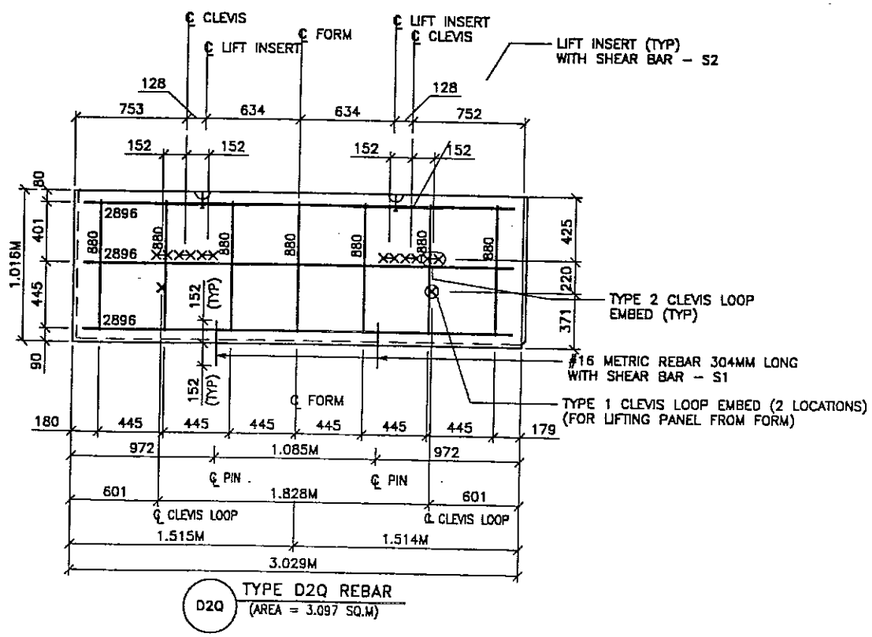
ATLANTA, GA / DALLAS, TX / NASHUA, NH (CORPORATE OFFICES)
MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA



DQ TYPE DQ REBAR
(AREA = 3.871 SQ.M)



H90Q TYPE H90Q REBAR
(AREA = 6.968 SQ.M)



D2Q TYPE D2Q REBAR
(AREA = 3.097 SQ.M)

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	9-30-98	RELEASE FOR CONST.
2	5-21-99	ISSUED AS CSP

PANEL REINFORCEMENT NOTES:
1. PANELS ARE SHOWN BACK FACE.
2. HORIZONTAL REINFORCEMENT SHALL HAVE 50 mm MINIMUM COVER TO THE BACK FACE.
3. ALL REINFORCEMENT SHALL HAVE 50 mm MINIMUM COVER TO THE SIDES.
4. ALL REINFORCING BARS ARE #13 METRIC. LABELS ON EACH BAR INDICATE LENGTH. EXAMPLE: 2896 IS A #13 BAR 2896 mm LONG.
5. PANEL REINFORCEMENT BARS SHALL BE DEFORMED BILLET STEEL BARS FOR CONCRETE REINFORCEMENT CONFORMING TO THE SPECIFICATIONS OF ASTM DESIGNATION A615, GRADE 60.
6. ALL REINFORCING STEEL TO BE GALVANIZED IN ACCORDANCE WITH ASTM 767 CLASS I.
7. CONCRETE PANELS TO HAVE 28 DAY COMPRESSIVE STRENGTH OF 25,200 KPa.
8. EQUIVALENT WELDED WIRE FABRIC MAY BE USED.
9. ALL PANELS TO USE 9.5mm# WIDE CLEVIS LOOPS.
10. VSL RETAINED EARTH™ IS PROTECTED UNDER PATENT 4,725,170.
11. 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.

WASATCH CONSTRUCTORS
JUN 17 1999
RELEASED FOR CONSTRUCTION

METRIC

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LICENSED PROFESSIONAL ENGINEER
No. 341796
JOHN A. NICHOLSON, JR.
5/20/99
STATE OF UTAH

NO.	DATE	REVISION	BY	CHK

DES. JN 09-21-98
DRN. JHJ 09-21-98
CHK. JN 09-21-98
RETAINED EARTH™

VSL CORPORATION
2840 Plaza Place, Suite 200
Raleigh, NC 27612
Telephone: (919) 781-6272
Fax: (919) 781-4669
ATLANTA, GA / DALLAS, TX / RALEIGH, NC (CORPORATE OFFICE)
MIAMI, FL / SAN JOSE, CA / SPRINGFIELD, VA

RETAINED EARTH™ WALLS
CORRIDOR STANDARD PLAN
2-STAGE PANEL REINFORCEMENT

UTAH I-15 INTERCHANGE
SALT LAKE COUNTY, UTAH
UTAH DEPARTMENT OF TRANSP.

DWG. NO.
CS-324
JOB NO:
239-0007
SHT. NO.
STD-24

APPROVED FOR CONSTRUCTION		
NO.	DATE	DESCRIPTION
1	9-30-98	RELEASE FOR CONST.
2	5-21-99	ISSUED AS CSP

PANEL REINFORCEMENT NOTES:
1. PANELS ARE SHOWN BACK FACE.
2. HORIZONTAL REINFORCEMENT SHALL HAVE 50 mm MINIMUM COVER TO THE BACK FACE.
3. ALL REINFORCEMENT SHALL HAVE 50 mm MINIMUM COVER TO THE SIDES.
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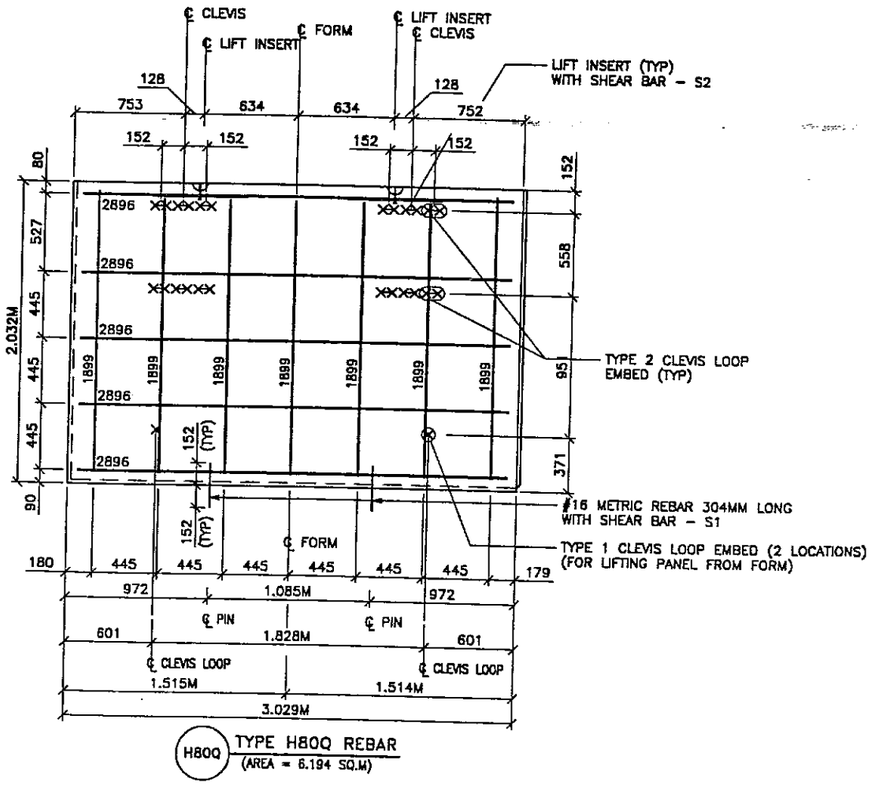
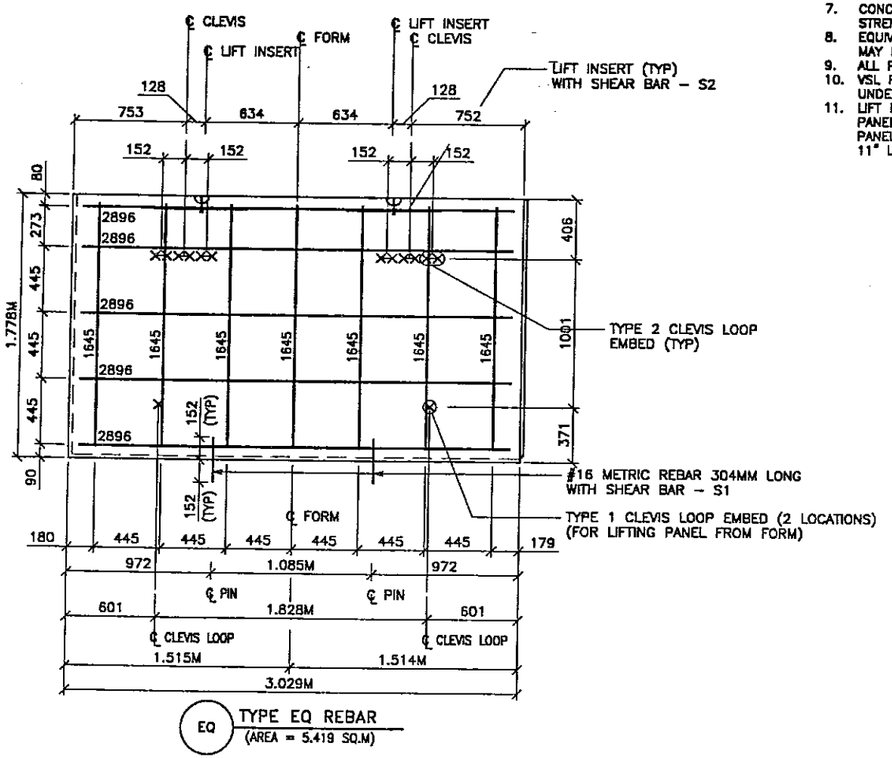
8. EQUIVALENT WELDED WIRE FABRIC MAY BE USED.
9. ALL PANELS TO USE 9.5mm# WIDE CLEVIS LOOPS.
10. VSL RETAINED EARTH™ IS PROTECTED UNDER PATENT 4,725,170.
11. LIFT INSERTS ARE 6 3/4" LONG IN ALL PANELS LESS THAN 1.524M TALL. PANELS TALLER THAN 1.524M SHALL HAVE 11" LONG LIFT ANCHORS.



H80Q TYPE H80Q REBAR (AREA = 6.194 SQ.M)



EQ TYPE EQ REBAR (AREA = 5.419 SQ.M)

WASATCH CONSTRUCTORS

JUN 17 1999

RELEASED FOR CONSTRUCTION

METRIC

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LICENSED PROFESSIONAL ENGINEER
No. 341786
JOHN A. NICHOLSON, JR.
5/20/99
STATE OF UTAH

					CHK
					BY
				REVISION	
				DATE	
				NO.	
DES.	05-21-98	JN	RETAINED EARTH™		
DRN.	05-21-98	JHJ			
CHK.	05-21-98	JN			

VSL CORPORATION
2840 Plaza Place, Suite 200
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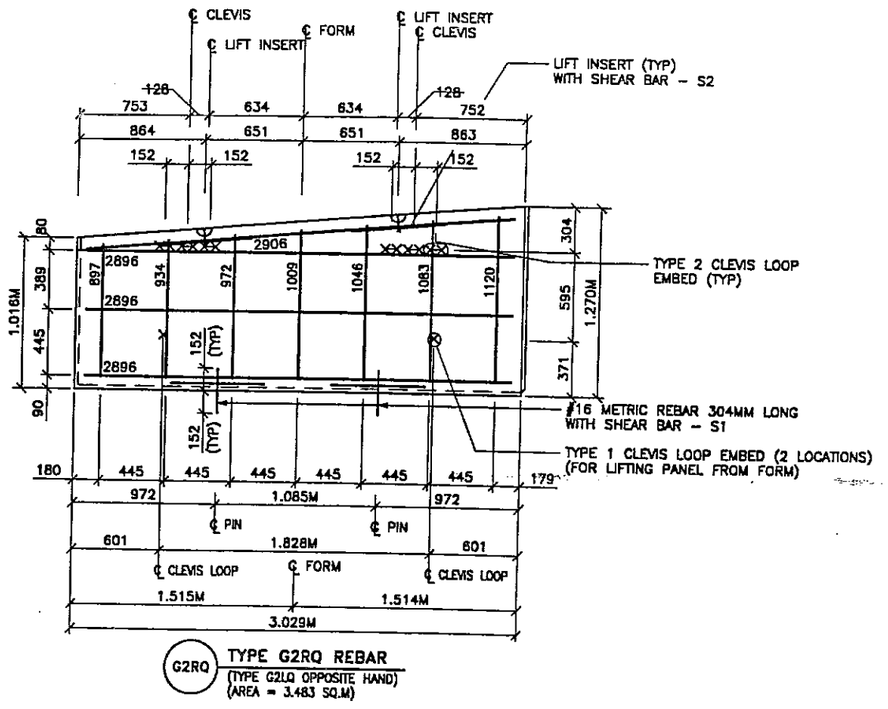
Telephone: (919) 781-8272
Fax: (919) 781-4659

ATLANTA, GA / BALTIMORE, MD / CHICAGO, IL / DALLAS, TX / DENVER, CO (CORPORATE OFFICES)
MANILA, P.I. / SAN JOSE, CA / SPRINGFIELD, VA

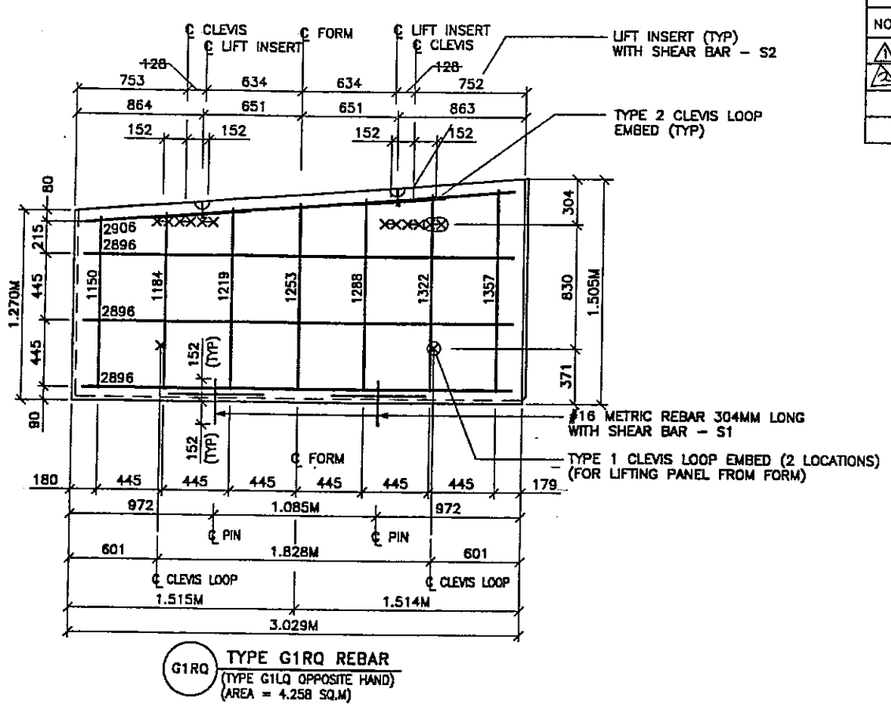
RETAINED EARTH™ WALLS
CORRIDOR STANDARD PLAN
2-STAGE PANEL REINFORCEMENT

UTAH I-15 INTERCHANGE
SALT LAKE COUNTY, UTAH
UTAH DEPARTMENT OF TRANSP.

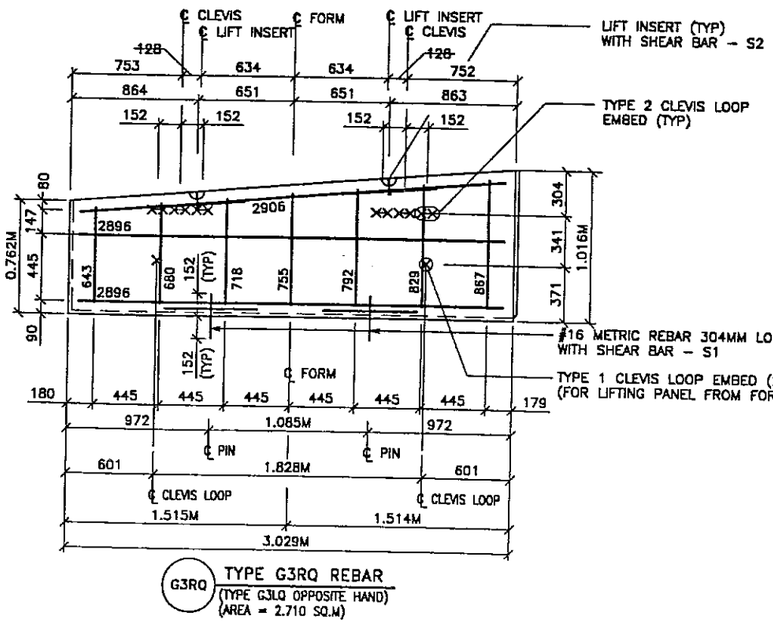
OWG. NO. CS-325
JOB NO: 239-0007
SHT. NO. STD-25



G2RQ **TYPE G2RQ REBAR**
(TYPE G2LQ OPPOSITE HAND)
(AREA = 3.483 SQ.M)



G1RQ **TYPE G1RQ REBAR**
(TYPE G1LQ OPPOSITE HAND)
(AREA = 4.258 SQ.M)



G3RQ **TYPE G3RQ REBAR**
(TYPE G3LQ OPPOSITE HAND)
(AREA = 2.710 SQ.M)

APPROVED FOR CONSTRUCTION			
NO.	DATE	DESCRIPTION	BY CHK
1	01-28-99	RELEASE FOR CONSTRUCTION	
2	5-21-99	ISSUED AS CSP	

	DES.	DRN.	CHK.
	10-09-98	RSW	RSW
	10-09-98	RSW	CB
	10-09-98	CB	

RETAINED EARTH™

VSL CORPORATION
2840 Plaza Place, Suite 200
Raleigh, NC 27612
Telephone: (919) 781-8272
Fax: (919) 781-8869

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

WASATCH CONSTRUCTORS

JUN 17 1999

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.

LICENSED PROFESSIONAL ENGINEER
No. 234796
JOHN A. NICHOLSON, JR.
5/20/99
STATE OF UTAH

RETAINED EARTH™ WALLS
CORRIDOR STANDARD PLANS
2-STAGE PANEL REINFORCEMENT

UTAH I-15 INTERCHANGE
SALT LAKE COUNTY, UTAH
UTAH DEPARTMENT OF TRANSP.

DWG. NO.
CS-326
JOB NO:
239-0007
SHT. NO. RE-26

FINAL PLOT 01-28-99
C:\MSE-WALLS\STANDARDS\STD-26.DWG