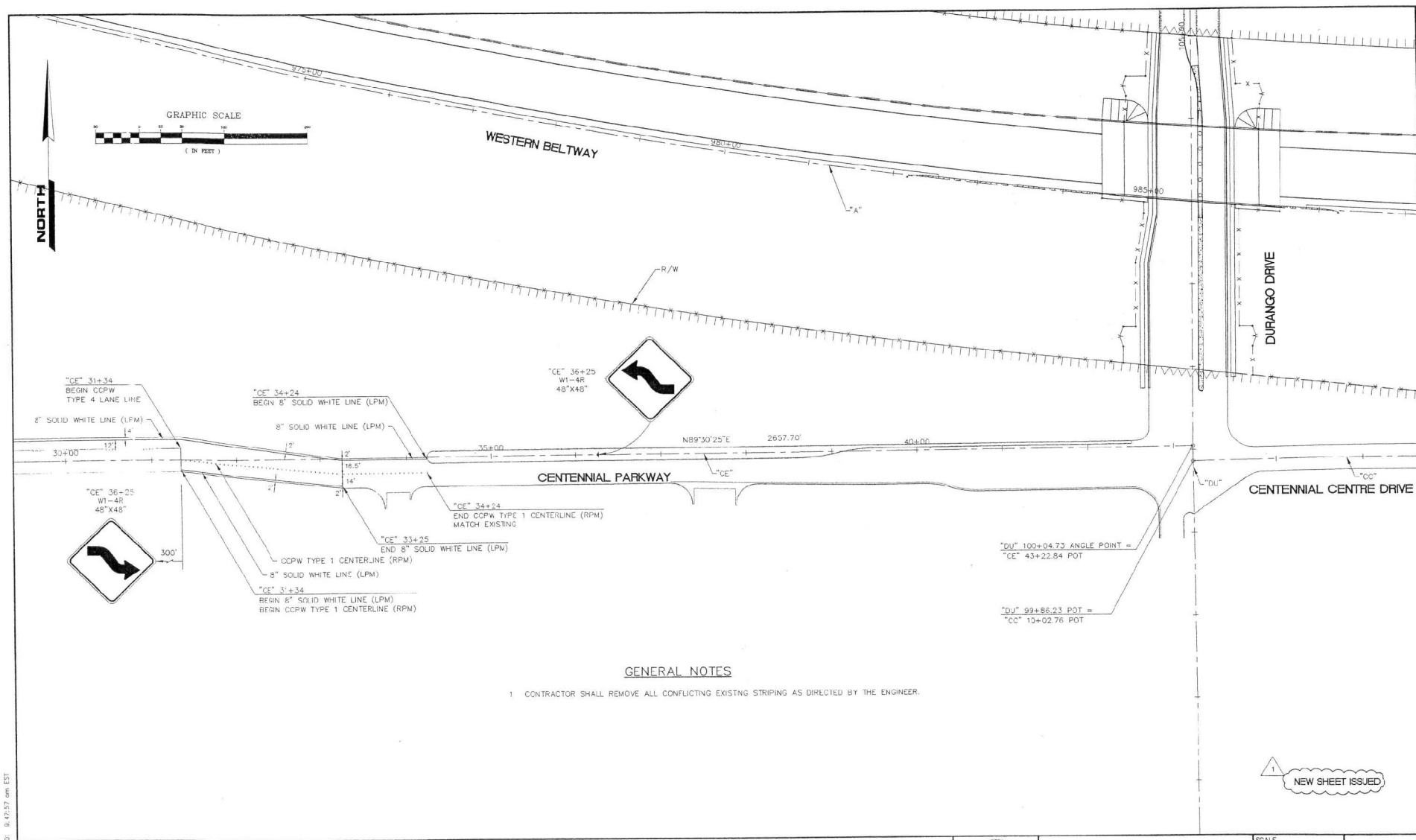


WB/NB EL CAPITAN HWY TO JONES BOULEVARD



GENERAL NOTES

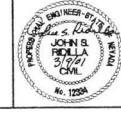
1. CONTRACTOR SHALL REMOVE ALL CONFLICTING EXISTING STRIPING AS DIRECTED BY THE ENGINEER.

25500ET-10, 2nd ed. 3-9-01 B 4/15/01 am EST

REV NO	DATE	DESCRIPTION	HAUL ROAD DETOUR	APPROVED
1	03/08/01	CENTENNIAL		JSR

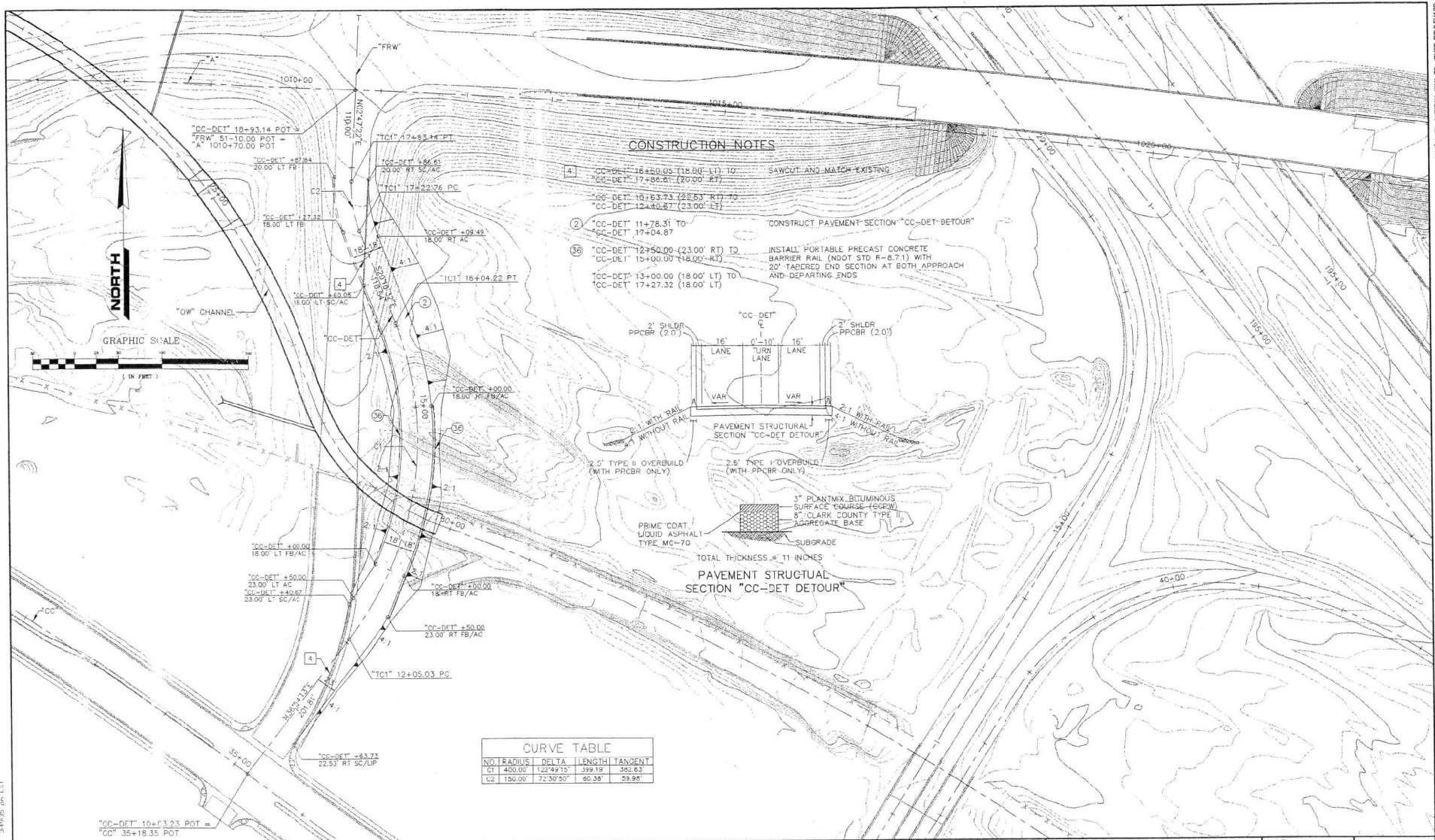


WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DETOUR STRIPING AND SIGNING PLAN
CENTENNIAL PARKWAY / HAUL ROAD
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT No: PTO 643558 DRAWN BY: JCS
DESIGNED BY: RSM CHECKED BY: MCM
APPROVED BY: JSR
PARRONS
TRANSPORTATION
GROUP
1400 GRIFFIN DRIVE, SUITE 340
LAS VEGAS, NEVADA 89119
PHONE (702) 435-2118
FAX (702) 435-8412

SCALE	L-1631
HORIZ: 1"=50'	DRAWING NO.
VERT: NONE	DET-10
FIELD BOOK	SHT. OF



CURVE TABLE

NO	RADIUS	DELTA	LENGTH	TANGENT
C1	400.00'	122°49'15"	399.19'	382.83'
C2	150.00'	72°30'50"	80.38'	59.95'

REV.	NO.	DATE	DESCRIPTION	APPROVED
1	01/15/01		CONNECTION TO CENTENNIAL CENTER/SHOE-FLY	JRP



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
CONNECTION FROM "A" TO CENTENNIAL CENTER
DETOUR PLAN
 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT NO: PTD 643058
 DESIGNED BY: RSM
 CHECKED BY: MCM
 APPROVED BY: JSR

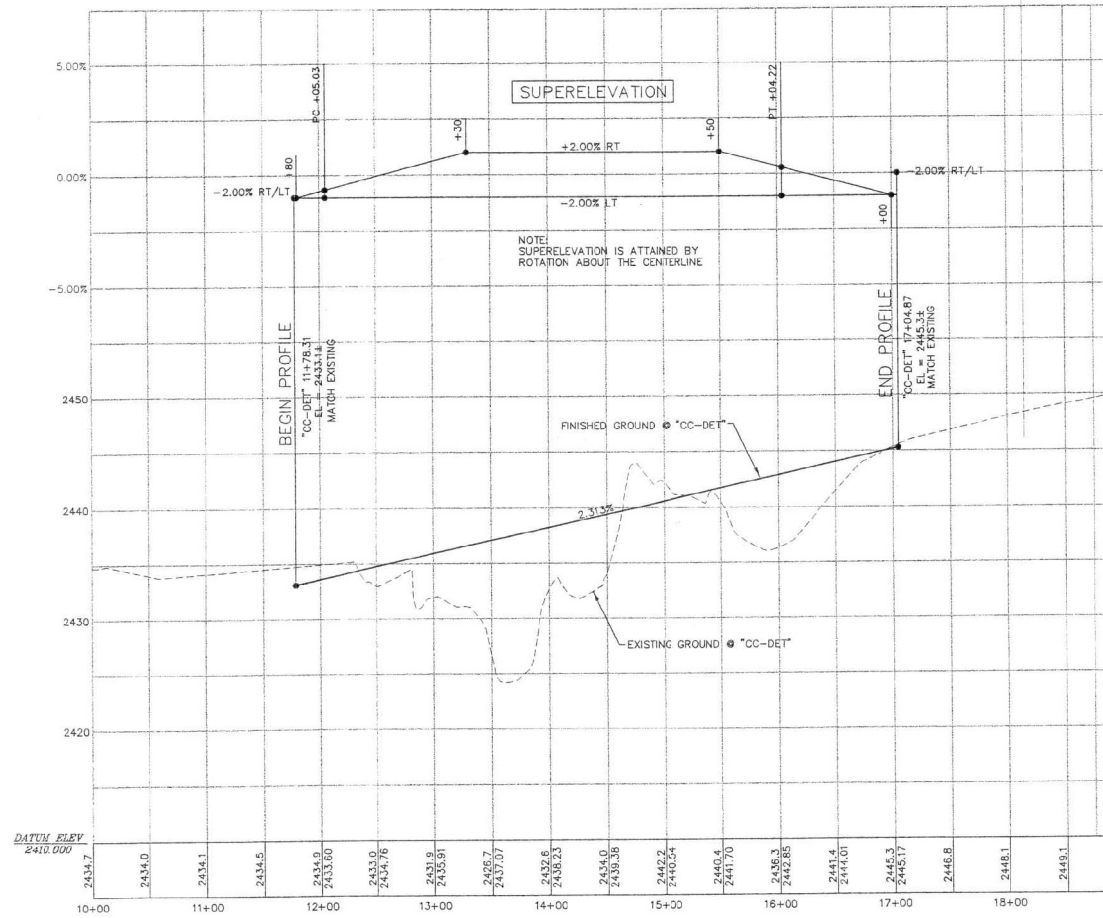
SCALE
 HORIZ: 1"=50'
 VERT: NONE

FIELD BOOK

PARSONS TRANSPORTATION GROUP
 840 GRID DRIVE, SUITE 300
 LAS VEGAS, NEVADA 89115
 PHONE (702) 430-2116
 FAX (702) 430-8412

L-1631
DRAWING NO.
DET-11
SHT. OF

255001-cc-det-jr.dwg 3-19-01 11:36:42 am EST



REV. NO.	DATE	DESCRIPTION	APPROVED
1	03/19/01	CONNECTION TO CENTENNIAL CENTER / SHOE-FLY DETOUR	JSR



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
CONNECTION FROM "A" TO CENTENNIAL CENTER
"CC-DET" PROFILE
 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

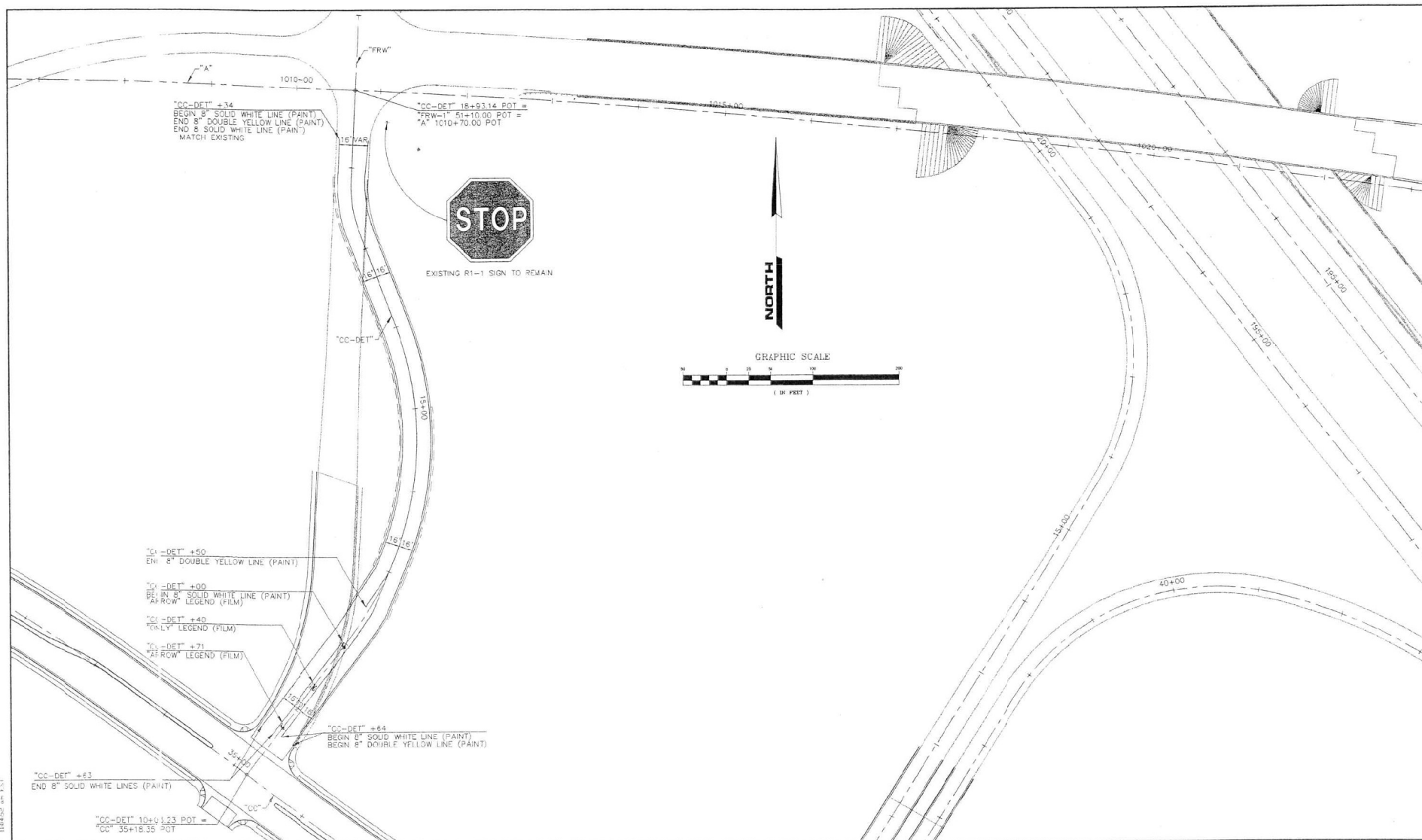


PROJECT No: PTG 643558 DRAWN BY: RSM
 DESIGNED BY: JSR CHECKED BY: MCM
 APPROVED BY: JSR

PARSONS TRANSPORTATION GROUP
 LAS VEGAS, NEVADA

810 GRID DRIVE, SUITE 300
 LAS VEGAS, NEVADA 89118
 PHONE (702) 435-2118
 FAX (702) 435-8410

SCALE	L-1631
HORIZ: 1"=50'	DRAWING NO.
VERT: 1"=10'	DET-12
FIELD BOOK	SHT. OF

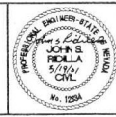


55844-13-04-04 3-10-01 116432 am EST

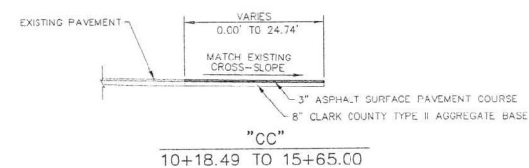
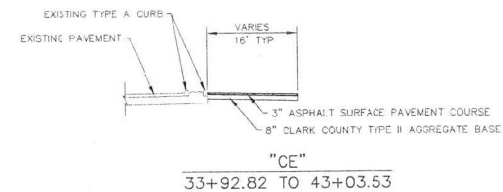
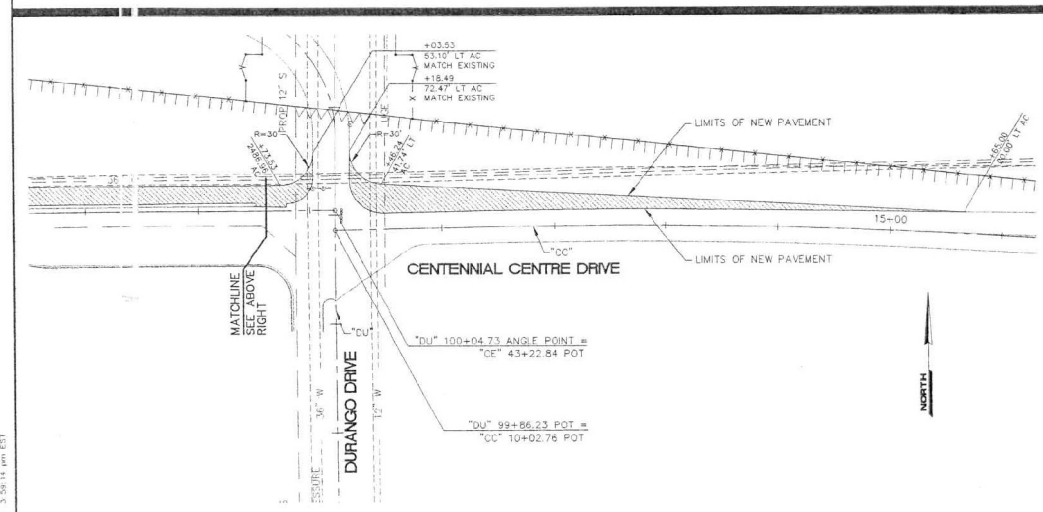
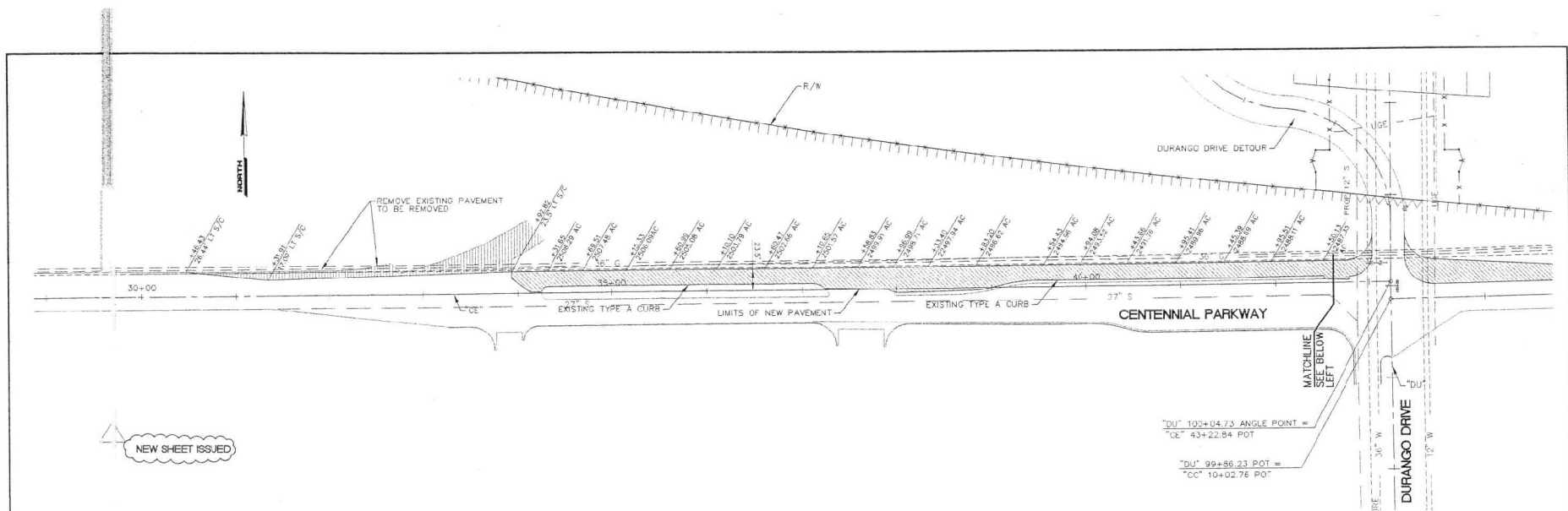
REV. NO.	DATE	DESCRIPTION	APPROVED
1	03/19/01	CONNECTION TO CENTENNIAL CENTER/SHOE-FLY	JST



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
CONNECTION FROM "A" TO CENTENNIAL CENTER
DETOUR STRIPING AND SIGNING PLANS
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT No: PTC 643558	DRAWN BY: RSM	SCALE: HORIZ 1"=50'	L-1631
DESIGNED BY: JSR	CHECKED BY: MCM	VERT: NONE	DRAWING NO. DET-13
APPROVED BY: JSR		FIELD BOOK	SHT. OF
PARSONS TRANSPORTATION GROUP 840 GRIER DRIVE, SUITE 200 LAS VEGAS, NEVADA 89119 PHONE (702) 438-2115 FAX (702) 438-8412			

ISSUE FOR
CONSTRUCTION

L-1631

DRAWING NO.

DET-14

SHT. OF



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DETOUR PLAN
LANE ADDITION NORTH OF JIM MARSH PROPERTY
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



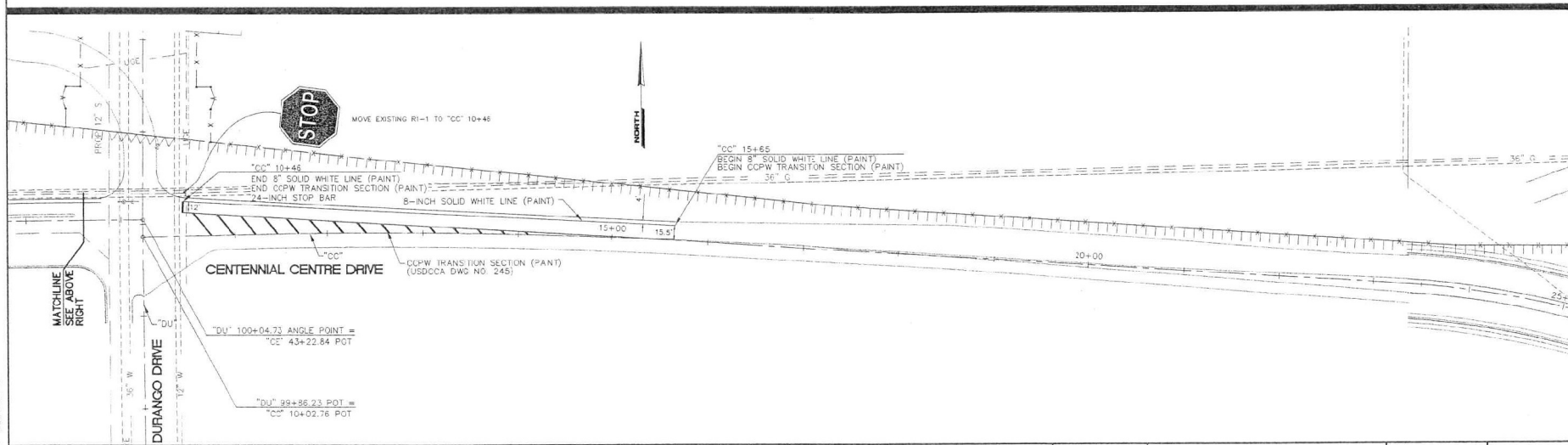
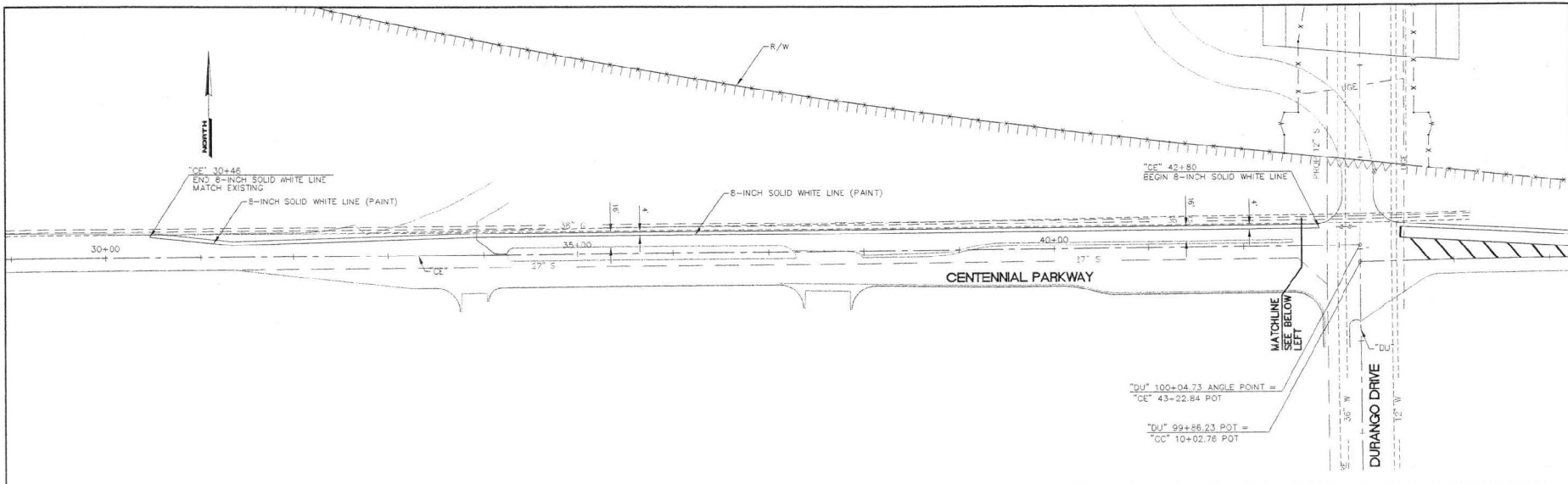
PROJECT No: PTC 843558 DRAWN BY: RSM
DESIGNED BY: RSM CHECKED BY: MZM
APPROVED BY: JSP

PARRONS
TRANSPORTATION
GROUP
LAS VEGAS, NEVADA

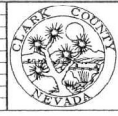
840 ORCHER DRIVE, SUITE 340
LAS VEGAS, NEVADA 89115
PHONE (702) 435-2118
FAX (702) 435-8462

SCALE
HORIZ: 1"=50'
VERT: NONE
FIELD BOOK

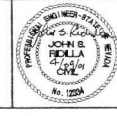
DATE: 04/03/02
DESCRIPTION: LANE ADDITION NORTH OF JIM MARSH PROPERTY
APPROVED: JSP



REV NO	DATE	DESCRIPTION	APPROVED
1	04/03/01	LANE ADDITION NORTH OF JIM MARSH PROPERTY	JSR



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DETOUR SIGNING AND STRIPING PLAN
CENTENNIAL PARKWAY / HAUL ROAD
 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

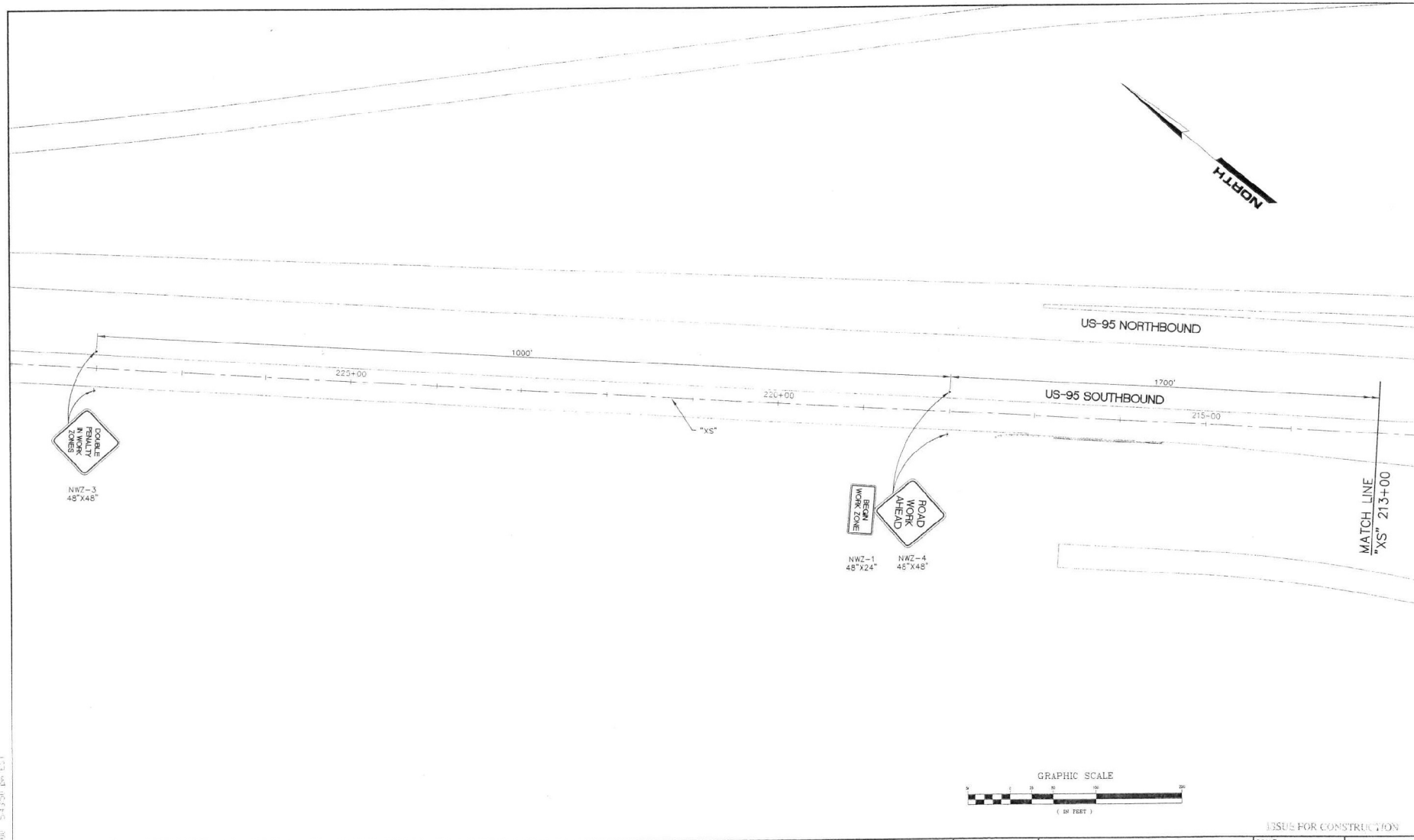


PROJECT NO: PTD 643558 DRAWN BY: RSM
 DESIGNED BY: RSM CHECKED BY: NOM
 APPROVED BY: JSR

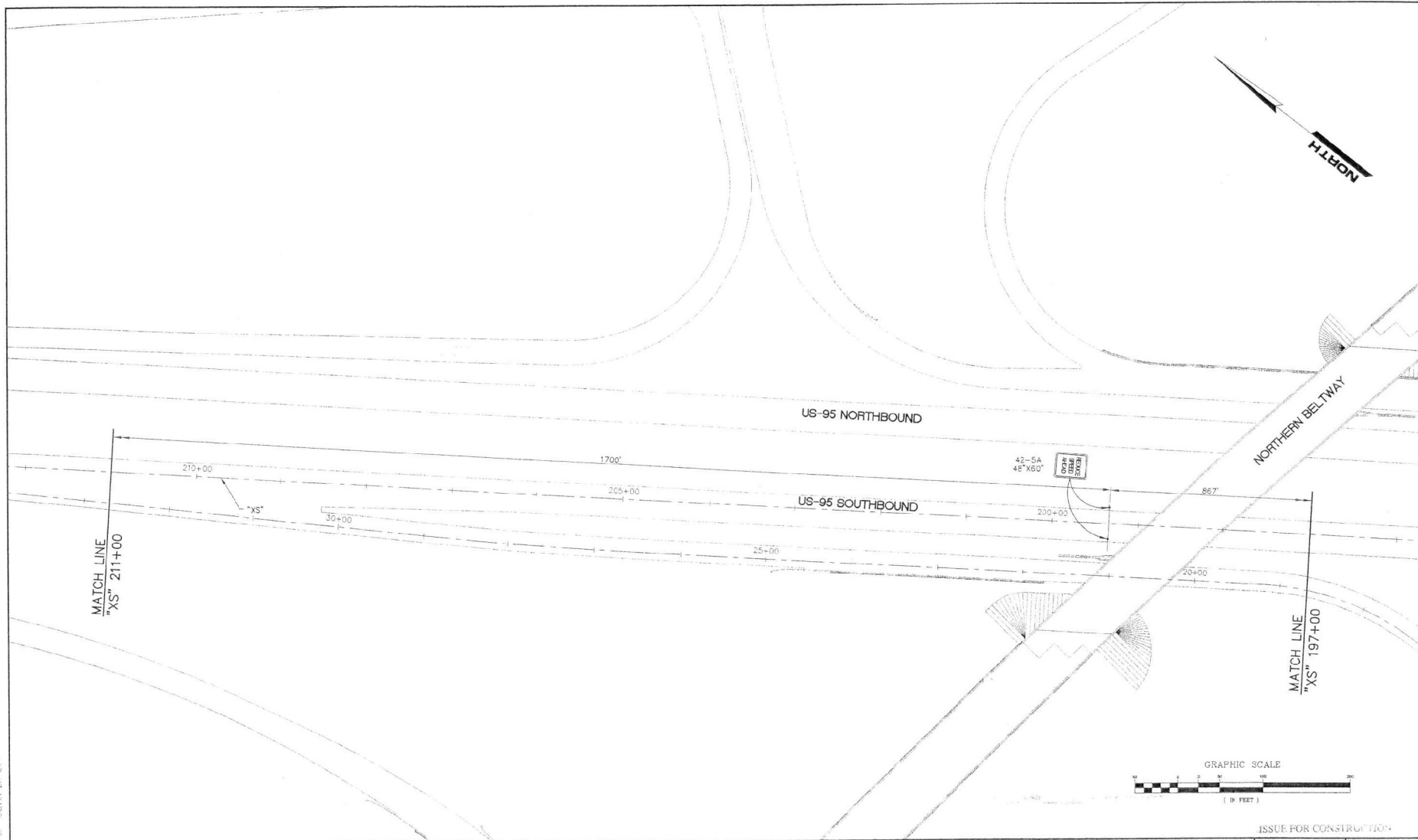
PARSONS TRANSPORTATION GROUP
 LAS VEGAS, NEVADA

643 GRIER DRIVE, SUITE 340
 LAS VEGAS, NEVADA 89113
 PHONE (702) 432-2119
 FAX (702) 432-8411

SCALE	HORIZ: 1"=50'	VERT: NONE	FIELD BOOK
L-1631	DRAWING NO.	DET-15	SFT. OF



		WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES TRAFFIC CONTROL - US-95 SOUTHBOUND "XS" 229+00 TO "XS" 213+00 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS			PROJECT No: PTD 643558 DESIGNED BY: MCM CHECKED BY: CELA APPROVED BY: JST	DRAWN BY: GPR SCALE: 1"=50' HORIZ: 1"=50' VERT: N/A FIELD BOOK:	PARSONS TRANSPORTATION GROUP 840 GRIER DRIVE, SUITE 340 LAS VEGAS, NEVADA 89119 PHONE: (702) 435-2116 FAX: (702) 435-8412	L-1631 DRAWING NO. TC-1 SHEET 01
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REV. NO.	DATE	DESCRIPTION	APPROVED



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
TRAFFIC CONTROL - US-95 SOUTHBOUND
"XS" 211+00 TO "XS" 197+00
 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



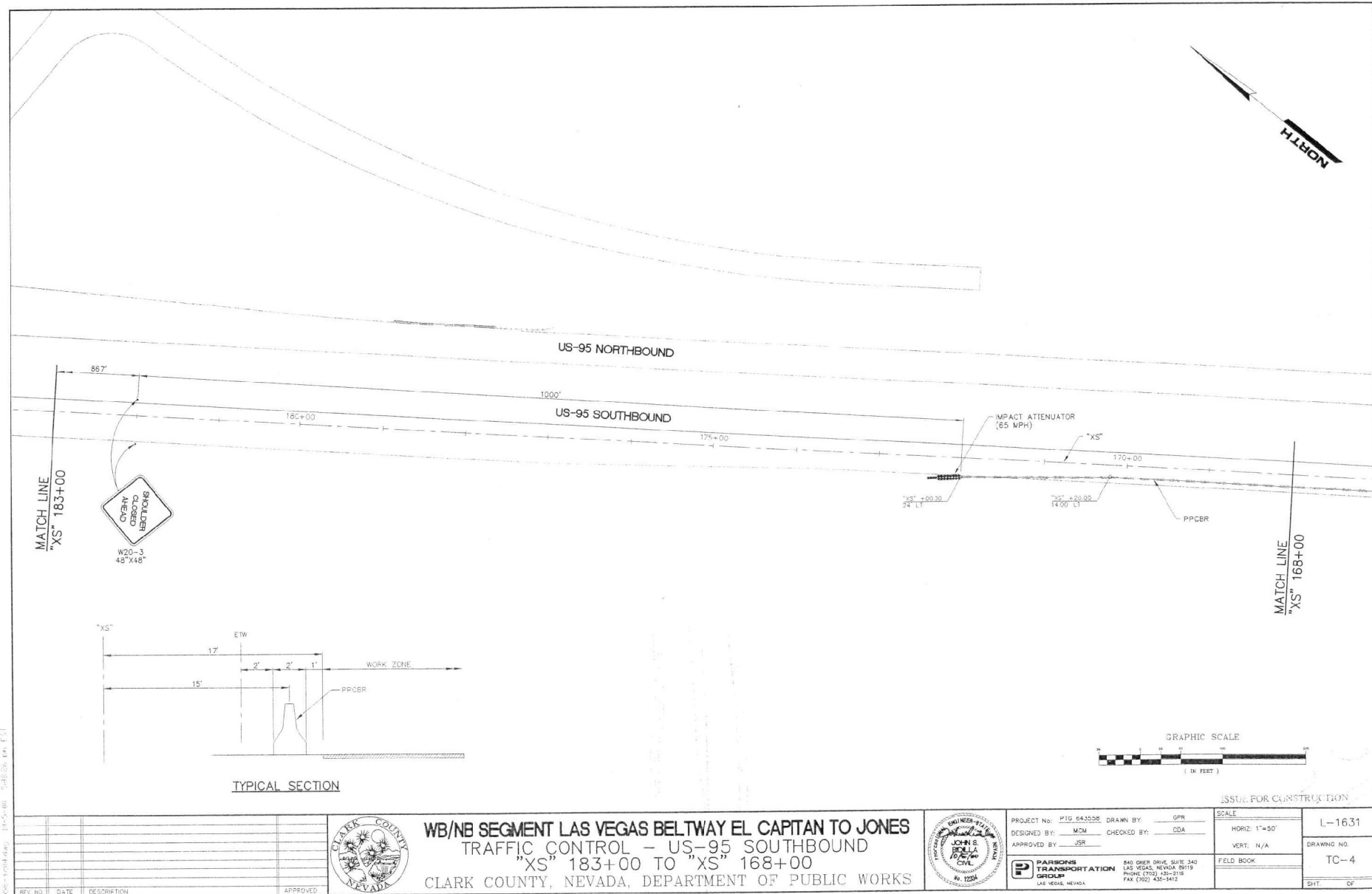
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 DESIGNED BY: MCM CHECKED BY: CDA
 APPROVED BY: JPR

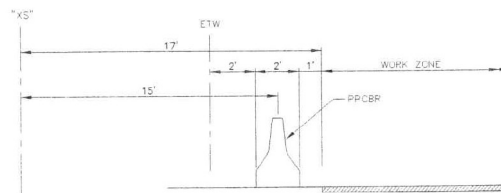
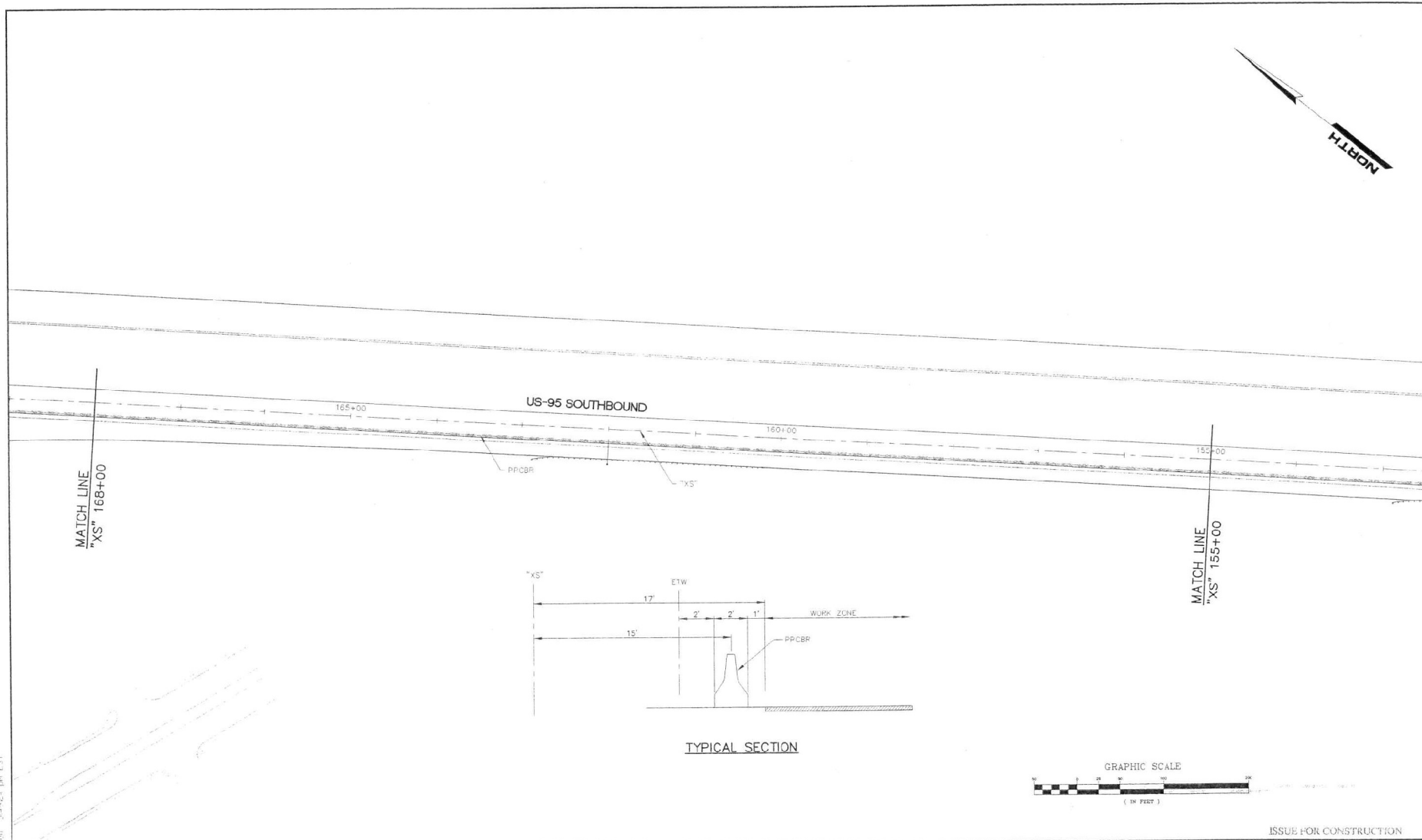
PARSONS TRANSPORTATION GROUP
 840 GRIER DRIVE, SUITE 540
 LAS VEGAS, NEVADA 89119
 PHONE (702) 435-1516
 FAX (702) 435-8412

ISSUE FOR CONSTRUCTION

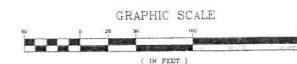
SCALE	L-1631
HORIZ: 1"=50'	DRAWING NO.
VERT: N/A	TC-2
FIELD BOOK	SH OF

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TYPICAL SECTION

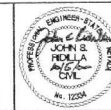


2020-10-02 (Rev. 10-5-00) 5-49224 (encl. 1)

REV. NO.	DATE	DESCRIPTION	APPROVED



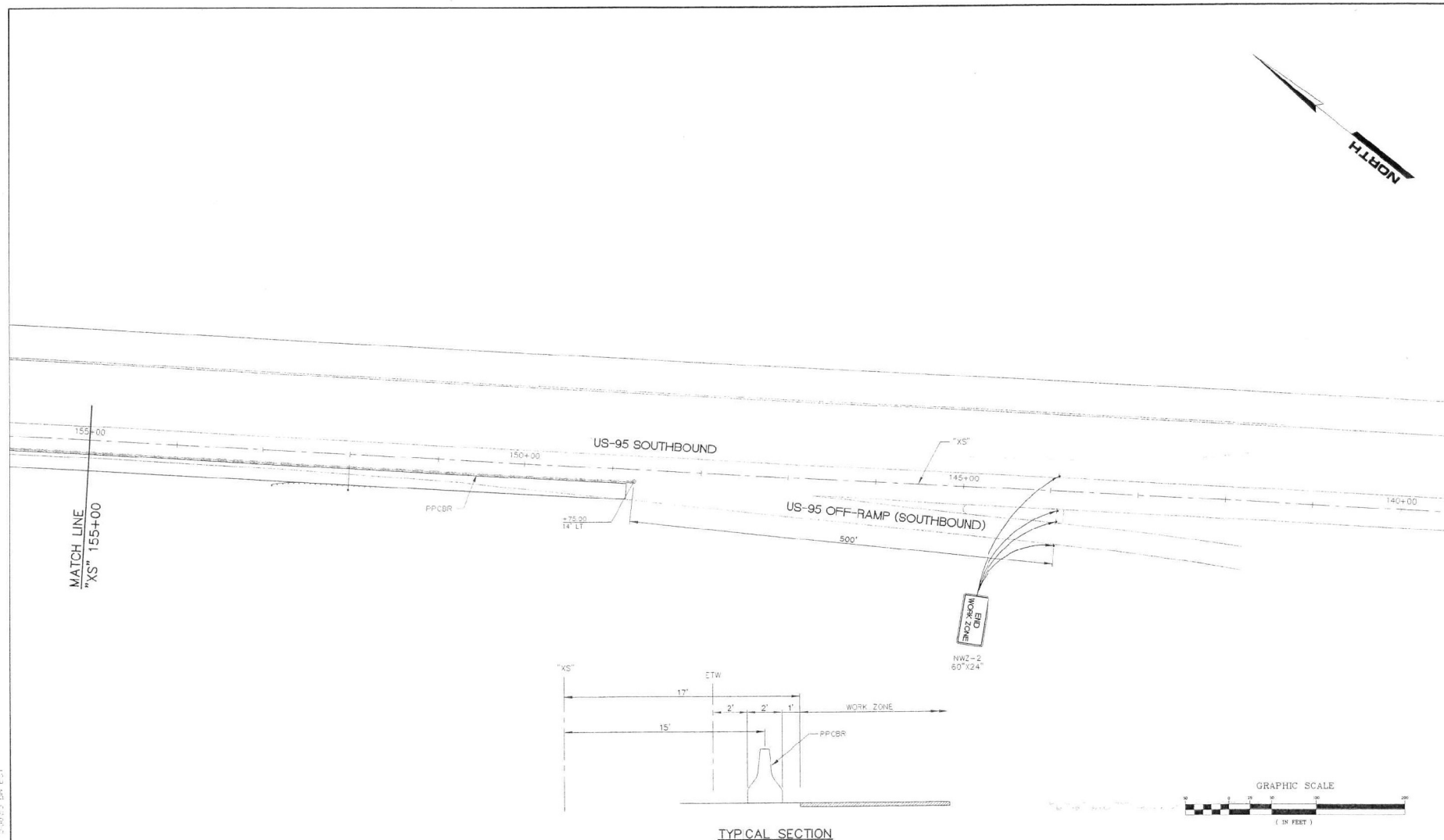
WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
TRAFFIC CONTROL - US-95 SOUTHBOUND
"XS" 168+00 TO "XS" 155+00
 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT NO: PTG 643558	DRAWN BY: OPR
DESIGNED BY: MCM	CHECKED BY: CDA
APPROVED BY: JSR	
PARSONS TRANSPORTATION GROUP 840 ORR DRIVE, SUITE 240 LAS VEGAS, NEVADA 89118 PHONE (702) 435-2116 FAX (702) 435-8112	

ISSUE FOR CONSTRUCTION	
SCALE	L-1631
HORIZ: 1"=50'	DRAWING NO:
VERT: N/A	TC-5
FIELD BOOK	SHEET OF

WB/NB EL CAPITAN WAY TO JONES BOULEVARD



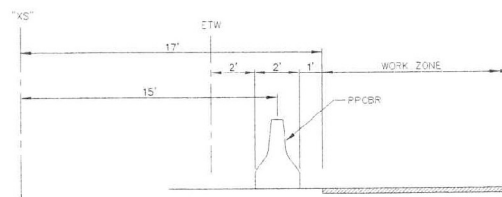
155+00
150+00
145+00
140+00

MATCH LINE
"XS" 155+00

US-95 SOUTHBOUND

US-95 OFF-RAMP (SOUTHBOUND)

END
WORK ZONE
NW2-2
60'x24'



TYPICAL SECTION

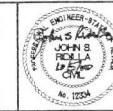
GRAPHIC SCALE

(1 IN FEET)

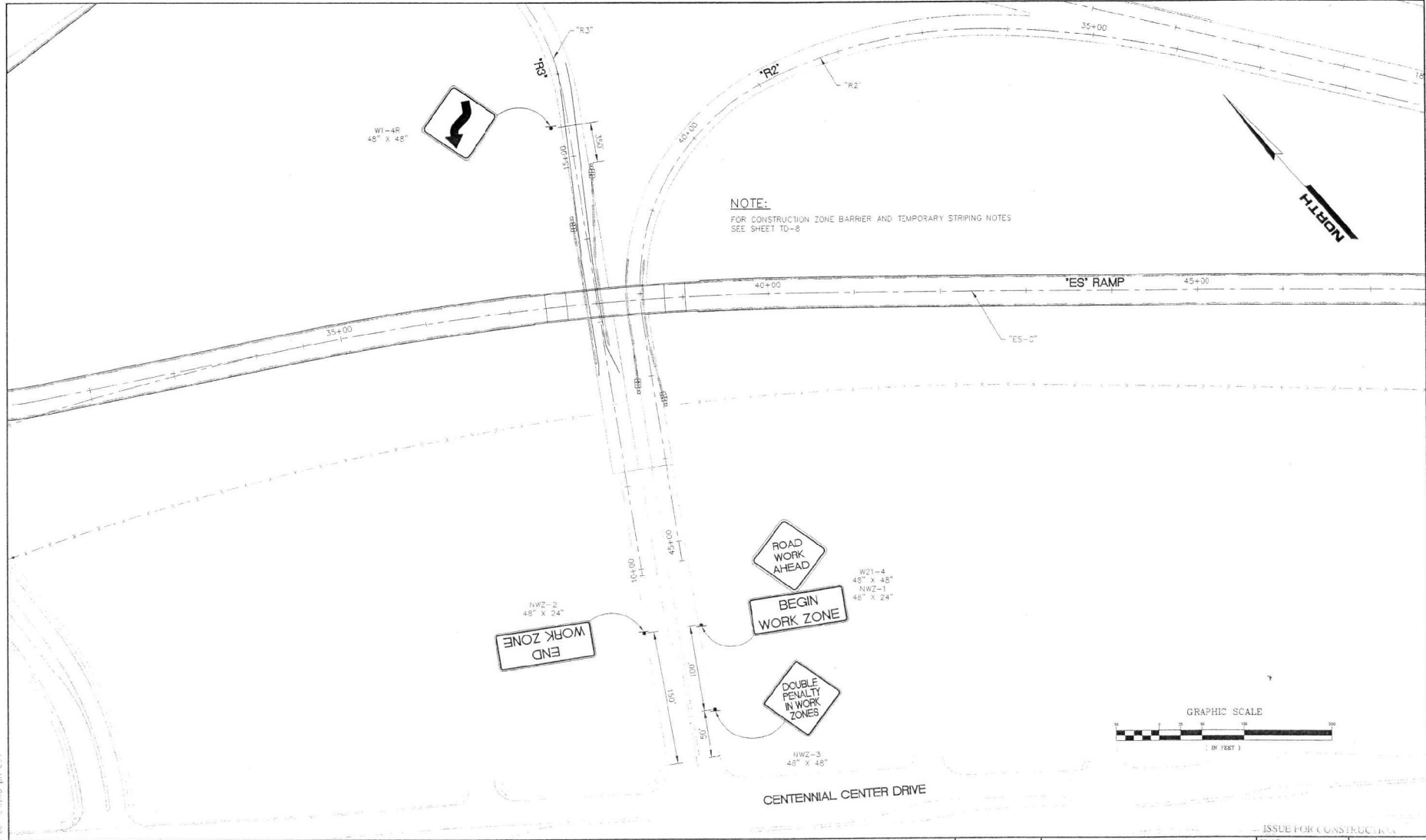
REV. NO.	DATE	DESCRIPTION	APPROVED



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
TRAFFIC CONTROL - US-95 SOUTHBOUND
"XS" 141+50 TO "XS" 155+00
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT NO. PTO 843258	DRAWN BY: DNB	SCALE	L-1631
DESIGNED BY: MCM	CHECKED BY: CDA	HORIZ: 1"=50'	DRAWING NO.
APPROVED BY: JSR		VERT: N/A	TC-6
PARSONS TRANSPORTATION GROUP LAS VEGAS, NEVADA		FIELD BOOK	SHT 26

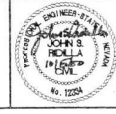


19-5-06 5:51:08 pm CDT

REV. NO.	DATE	DESCRIPTION	APPROVED

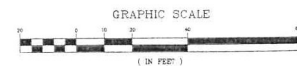


WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
TRAFFIC CONTROL - "R2" AND "R3"
 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

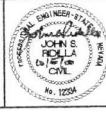


PROJECT No: PTO 843358	DRAWN BY: RSM	SCALE: 1"=50'	L-1631
DESIGNED BY: RSM	CHECKED BY: MM	HORIZ: 1"=50'	DRAWING NO: TC-7
APPROVED BY: JSR		VERT: N/A	SHT. OF
PARSONS TRANSPORTATION GROUP 840 GREEK DRIVE, SUITE 340 LAS VEGAS, NEVADA 89115 PHONE (702) 435-2115 FAX (702) 435-4412		FIELD BOOK	

WB/NB EL CAPITAN WAY TO JONES BOULEVARD

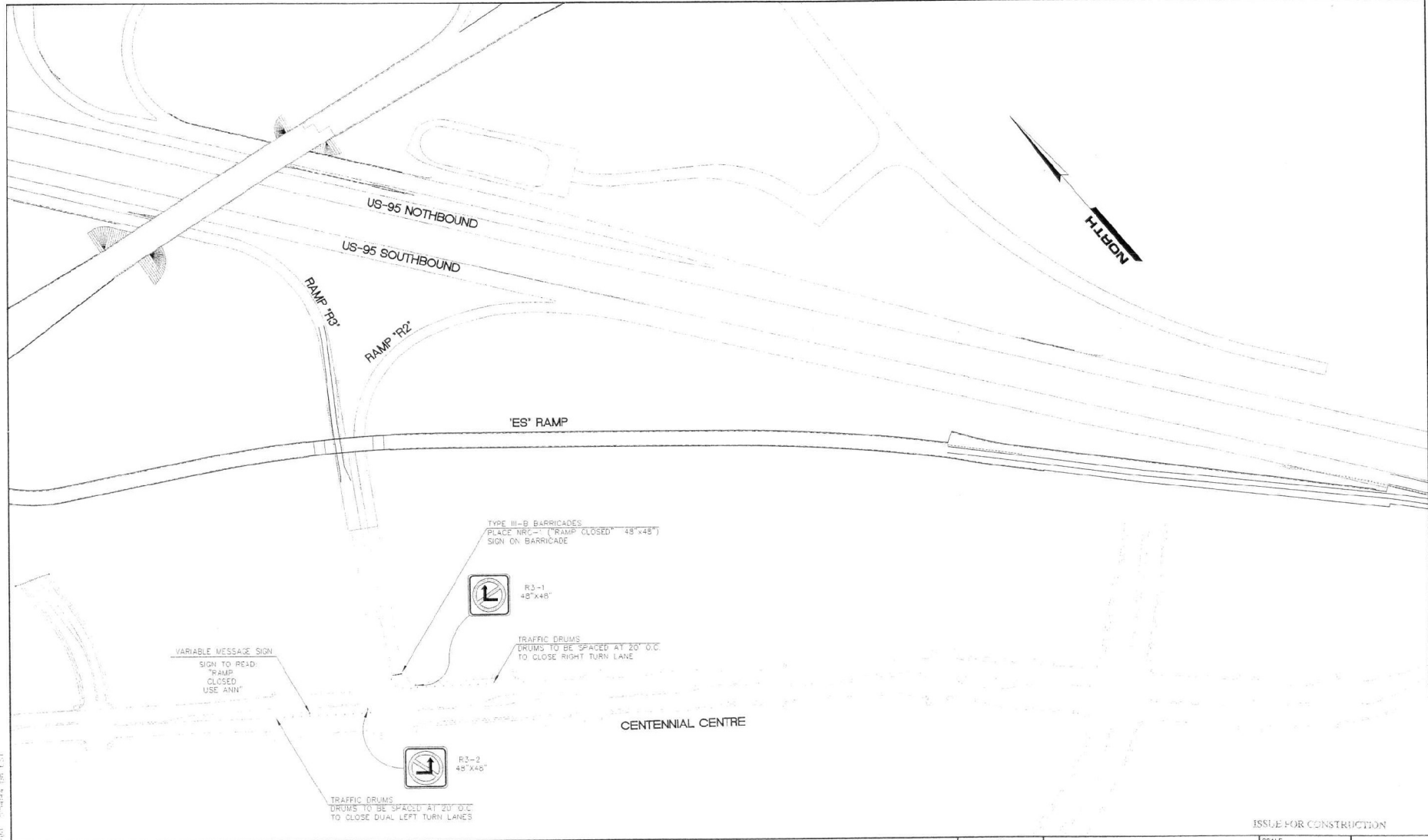


WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
TRAFFIC CONTROL - "R2" AND "R3"
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT NO: PTG 84-555	DRAWN BY: RSM	SCALE:	L-1631
DESIGNED BY: RSM	CHECKED BY: MM	HORIZ: 1"=20'	
APPROVED BY: JSR		VERT: N/A	DRAWING NO:
 PARSONS TRANSPORTATION GROUP LAS VEGAS, NEVADA	840 GHEB DRIVE, SUITE 340 LAS VEGAS, NEVADA 89119 PHONE (702) 434-2174 FAX (702) 434-4412		TC-8
	FIELD BOOK		SHT OF



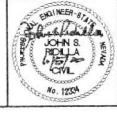


2008-12-10 10:00 AM 10-05-08 10-05-08 10-05-08

REV	NO	DATE	DESCRIPTION	APPROVED



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
TRAFFIC CONTROL
RAMP "R2" CLOSURE
 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



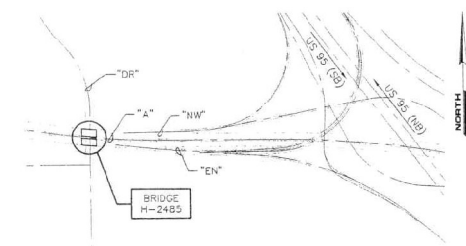
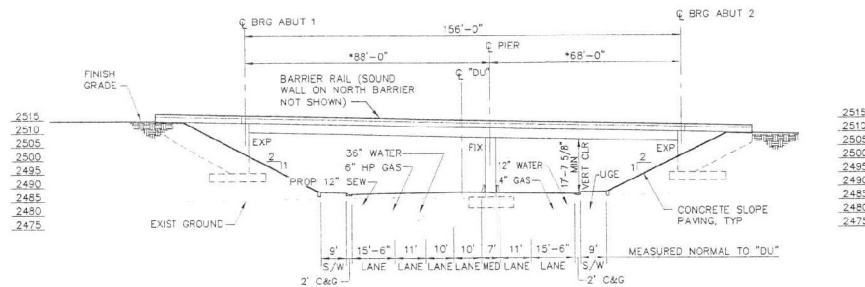
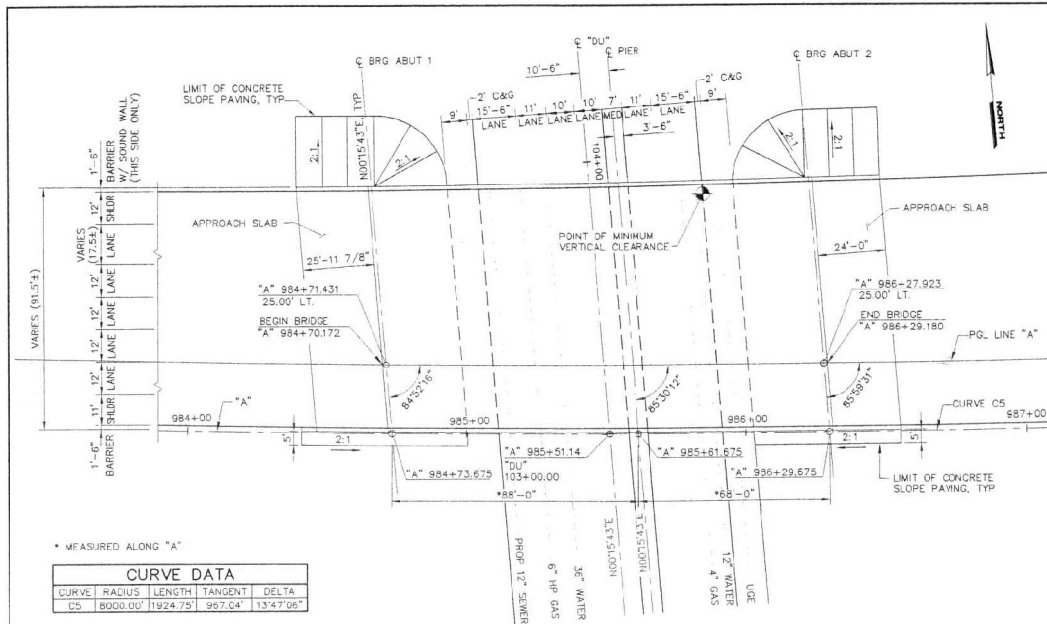
PROJECT No: PTO 043555
 DESIGNED BY: RSM
 CHECKED BY: MM
 APPROVED BY: JSR

PARSONS TRANSPORTATION GROUP
 LAS VEGAS, NEVADA

840 ORER DRIVE, SUITE 340
 LAS VEGAS, NEVADA 89119
 PHONE (702) 435-2116
 FAX (702) 435-8412

SCALE		L-1631
HORIZ: NONE	VERT: N/A	DRAWING NO.
FIELD BOOK		TC-10
SHT. OF		

WB/NB EL CAPITAN WAY TO JONES BOULEVARD



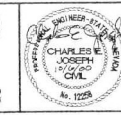
SHEET INDEX

- B-100 GENERAL PLAN
- B-101 TYPICAL SECTION AND GENERAL NOTES
- B-102 GEOMETRICS AND QUANTITIES
- B-103 ABUTMENT 1 PLAN & ELEVATION
- B-104 ABUTMENT 2 PLAN & ELEVATION
- B-105 ABUTMENT DETAILS
- B-106 WINGWALL 1 AND 2 PLAN & ELEVATION
- B-107 WINGWALL 3 AND 4 PLAN & ELEVATION
- B-108 SOUND BARRIER WALL DETAILS
- B-109 PIER CAP DETAILS
- B-110 PIER COLUMN & FOUNDATION DETAILS
- B-111 TYPICAL DECK SECTION
- B-112 GIRDER LAYOUT
- B-113 TOP SLAB REINFORCING
- B-114 BOTTOM SLAB REINFORCING
- B-115 ANCHORAGE ZONE DETAILS
- B-116 END DIAPHRAGM - ABUTMENT 1
- B-117 END DIAPHRAGM - ABUTMENT 2
- B-118 PRESTRESSING, CAMBER AND CONCRETE DETAILS
- B-119 APPROACH SLAB DETAILS
- B-120 BARRIER RAIL DETAILS
- B-121 STRIP SEAL EXPANSION JOINT DETAILS
- B-122 BAR BENDING DETAILS

REV. NO.	DATE	DESCRIPTION	APPROVED



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DURANGO DRIVE GRADE SEPARATION
GENERAL PLAN
 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

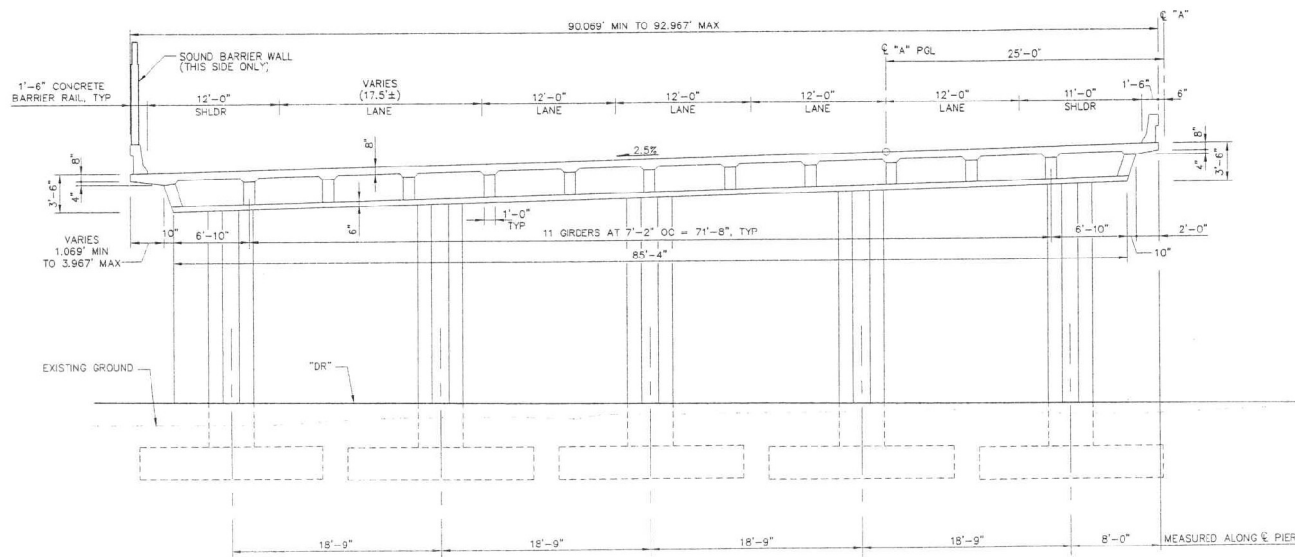


PROJECT NO. PTC 643558 DRAWN BY: KPC
 DESIGNED BY: CL CHECKED BY: MJS
 APPROVED BY: CEJ

PARSONS TRANSPORTATION GROUP
 LAS VEGAS, NEVADA

840 ORION DRIVE, SUITE 140
 LAS VEGAS, NEVADA 89119
 PHONE (702) 435-2116
 FAX (702) 435-1412

SCALE	L-1631
HORIZ: NONE	DRAWING NO.
VERT: NONE	B-100
FIELD BOOK	SHEET
	01



TYPICAL SECTION

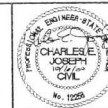
GENERAL NOTES:

1. **DESIGN SPECIFICATIONS:** AASHTO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1996" WITH INTERIMS THROUGH 1999.
2. **CONTRACT SPECIFICATIONS:** STATE OF NEVADA, DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1966" EXCEPT AS NOTED BELOW AND IN THE SPECIAL PROVISIONS FOR THIS CONTRACT.
3. **LIVE LOAD:** STANDARDS HS25-44 OR ALTERNATE FHWA MILITARY LOADING. OVERLOAD DESIGN BASED ON CALIFORNIA "STANDARD PERMIT DESIGN VEHICLES".
4. **FUTURE OVERLAY:** THE DESIGN DEAD LOAD SHALL INCLUDE A 3 INCH FUTURE OVERLAY @ 150 pcf.
5. **SEISMIC LOAD:** ACCELERATION COEFFICIENT 0.150, ATC-6 RESPONSE SPECTRA WITH TYPE II SOIL.
6. **CONCRETE:** ALL CONCRETE SHALL BE CLASS A MODIFIED (MAJOR). SEE PRESTRESSING NOTES AND CONCRETE CLASSIFICATION DIAGRAM FOR ULTIMATE COMPRESSIVE CONCRETE STRENGTHS AND PLACEMENT LOCATIONS.
7. **REINFORCING STEEL:** ALL REINFORCING STEEL SHALL BE ASTM A706 GRADE 60. DIMENSIONS RELATING TO BAR SPACING ARE CENTER TO CENTER. BENDING DIMENSIONS ARE FROM OUT TO OUT OF THE BARS. BAR SIZES THREE (3) TO NINE (9) ARE INDICATED BY THE FIRST NUMBER IN THE MARK; TEN (10) OR LARGER BY THE FIRST TWO NUMBERS. THE LENGTH OF THE BAR SIZES FOUR (4) AND FIVE (5), WHEN CONSIDERED AS BARS TO CONTROL TEMPERATURE, SHRINKAGE AND DISTRIBUTION STRESSES BY THE BRIDGE ENGINEER, MAY BE ADJUSTED BY THE CONTRACTOR UPON CONCURRENCE AND APPROVAL OF THE BRIDGE ENGINEER.
8. **CAMBER:** THE CAMBER SHALL BE AS SHOWN ON THE PLANS.
9. **FOUNDATIONS:** SPREAD FOOTINGS SHALL BE USED AT ABUTMENTS WITH A MAXIMUM ALLOWABLE BEARING PRESSURE OF 2 TONS PER SQUARE FOOT. SPREAD FOOTINGS SHALL BE USED AT PIERS WITH A MAXIMUM ALLOWABLE BEARING PRESSURE OF 3 TONS PER SQUARE FOOT. BEARING VALUES BASED ON FOUNDATION REPORTS.
10. **FINE SURFACE FINISH:** ALL EXPOSED CONCRETE SURFACES, EXCEPT PIERS, ABUTMENTS, BOTTOM SURFACE OF SOFFIT AND TOP SURFACE OF DECK SLAB, SHALL BE FINE SURFACE FINISHED. ALL SURFACES IN CONTACT WITH THE GROUND SHALL BE FINE SURFACE FINISHED TO A POINT 1'-0" BELOW THE FINISHED GROUND LINE. FINE SURFACE FINISH B SHALL BE APPLIED TO THE AREAS SPECIFIED IN THE PLANS; ALL OTHER AREAS SHALL RECEIVE FINE FINISH SURFACE FINISH A. FINE SURFACE FINISH A SHALL CONFORM TO FEDERAL COLOR NO. 37875 (TABLE IX), AND FINE SURFACE FINISH B SHALL CONFORM TO FEDERAL COLOR NO. 30219 (TABLE II) AS SHOWN IN FEDERAL STANDARD NO. 595a.
11. **CONSTRUCTION TYPE CODE:** X281

REV NO	DATE	DESCRIPTION	APPROVED

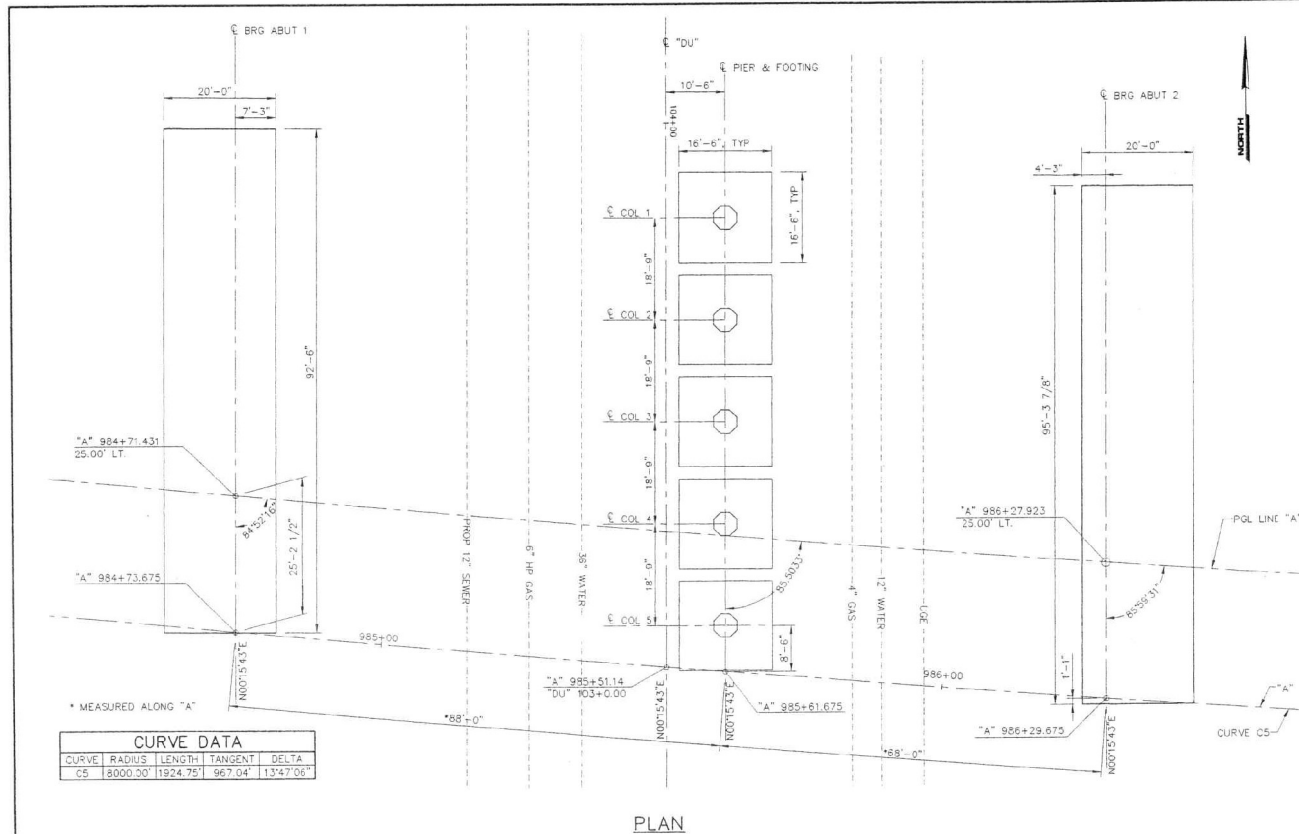


WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DURANGO DRIVE GRADE SEPARATION
TYPICAL SECTION AND GENERAL NOTES
 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT NO: PTC 843558 DRAWN BY: KPC
 DESIGNED BY: DL CHECKED BY: MJS
 APPROVED BY: CLJ
PARSONS TRANSPORTATION GROUP
 LAS VEGAS, NEVADA
 840 GREN DRIVE, SUITE 340
 LAS VEGAS, NEVADA 89119
 PHONE (702) 435-2116
 FAX (702) 435-8412

SCALE		L-1631
HORIZ:	NONE	
VERT:	NONE	
FIELD BOOK		
DRAWING NO.	B-101	
SHT.	OF	



CURVE DATA				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
C5	8000.00'	1924.75'	967.04'	13°47'06"

QUANTITIES:

QUANTITIES ARE FURNISHED FOR CONTRACTOR'S INFORMATION ONLY.

DESCRIPTION	UNIT	QUANTITY
STRUCTURE EXCAVATION	CY. YD.	3100
GRANULAR BACKFILL	CY. YD.	2450
CLASS "A" CONCRETE MODIFIED (MAJOR)	CY. YD.	2150
STRIP SEAL EXPANSION JOINT (3-IN. MOVE.)	LIN. FT.	184
GROOVE CONCRETE DECK SLAB	SO. YD.	2100
PRESTRESSING CAST-IN-PLACE CONCRETE	LUMP. SUM.	1
REINFORCING STEEL	LBS.	342880
LAMINATED ELASTOMERIC BEARING PADS	E.A.	26
FINE SURFACE FINISH TYPES A & B	SO. YD.	2145
ELASTOMERIC CONCRETE	CY. FT.	37
CLASS "A" CONCRETE SLOPE PAVING	CY. YD.	75
ACCESS HATCH	E.A.	12
BRIDGE DECK CURING COMPOUND	GAL.	126

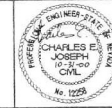
WB/NB EL CAPITAN HWY TO JONES BELTWAY

20081002.dwg 12-12-00 4:13:04 PM EJA

REV.	NO.	DATE	DESCRIPTION	APPROVED
1	10/31/00		ADDENDUM NO. 2	CEJ



**WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DURANGO DRIVE GRADE SEPARATION
GEOMETRICS AND QUANTITIES**
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

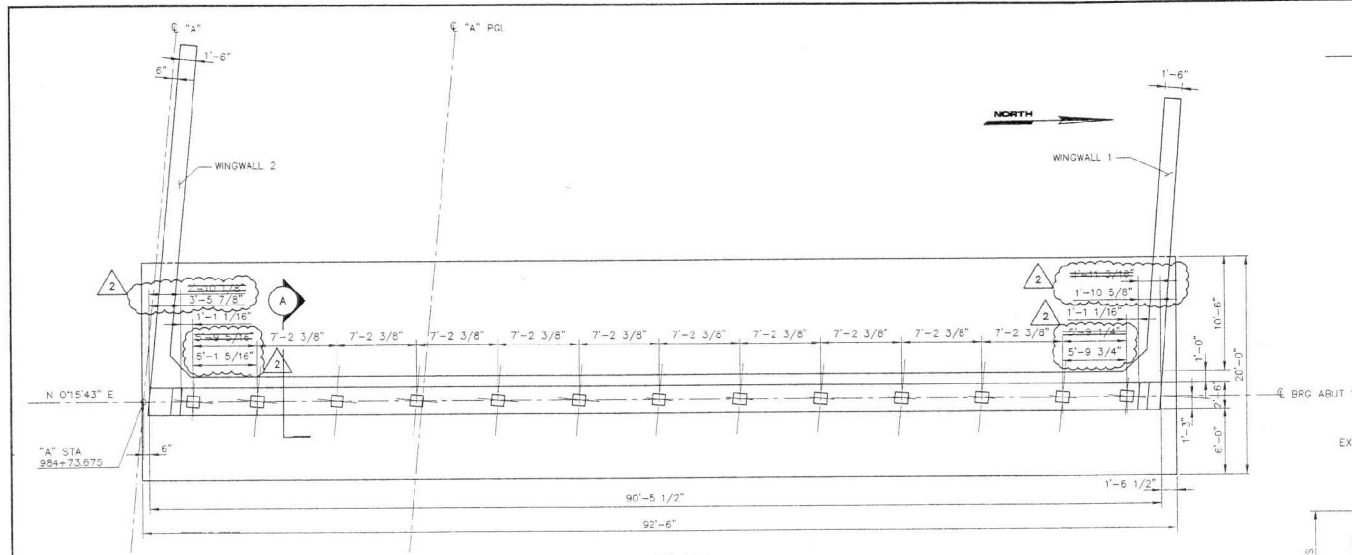


PROJECT NO: P10 643058	DRAWN BY: KPC
DESIGNED BY: DS	CHECKED BY: MJS
APPROVED BY: CEJ	
PARSONS TRANSPORTATION GROUP	840 ORION DRIVE, SUITE 340 LAS VEGAS, NEVADA 89115 PHONE (702) 432-2118 FAX (702) 432-8412

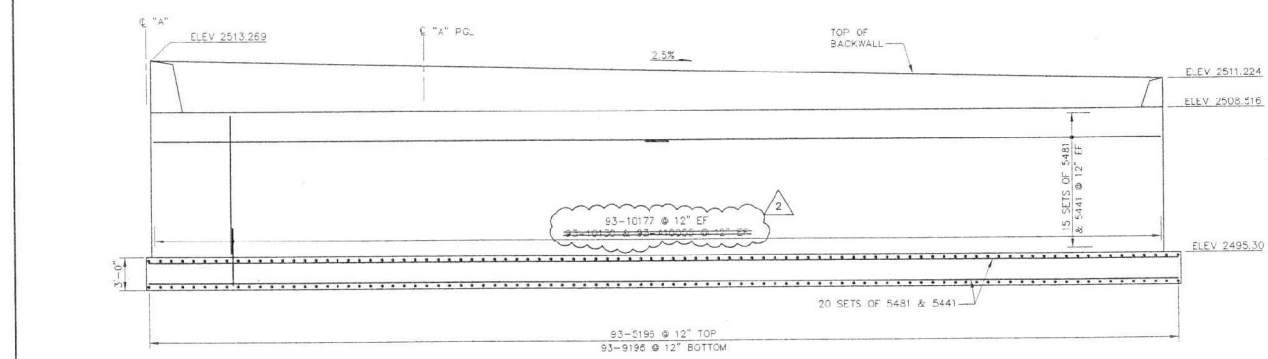
SCALE	HORIZ. NONE	VERT. NONE
FIELD BOOK		
DRAWING NO: B-102		
SHT. OF		

ISSUE FOR CONSTRUCTION H-2485

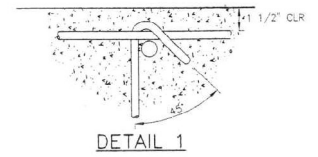
L-1631



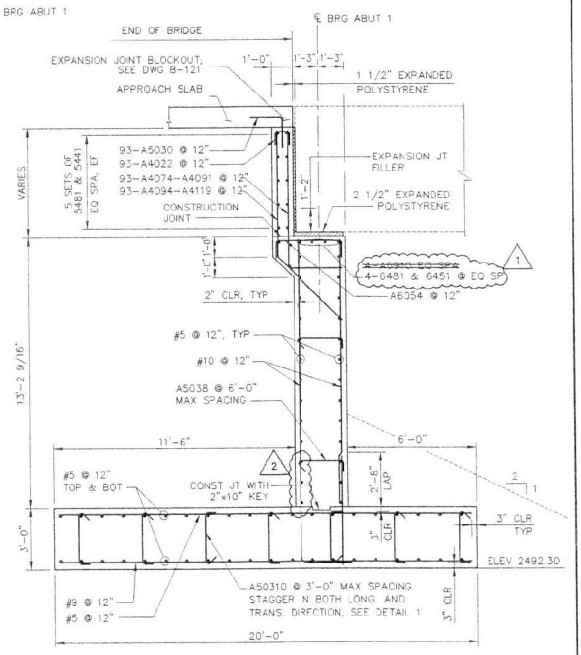
PLAN



ELEVATION



- NOTES
1. THE WINGWALL STEEL EXTENDING INTO THE ABUTMENT STEM SHALL BE PLACED PRIOR TO THE STEM POUR. WINGWALL STEEL TO BE INSTALLED AS DETAILED. NO CUTTING AND SPLICING NOR DRILLING AND GROUTING SHALL BE PERMITTED. DO NOT PLACE BACKWALL UNTIL STRESSING IS COMPLETE.
 2. ELEVATIONS ARE SHOWN AT $\pm$ BEARING.
 3. SEE SHEET B-105 FOR BEARING PAD DETAILS.
 4. FOR MINIMUM BAR LAP, SEE SHEET B-113.



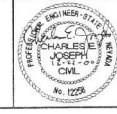
ISSUE FOR CONSTRUCTION

SECTION A

H-2485

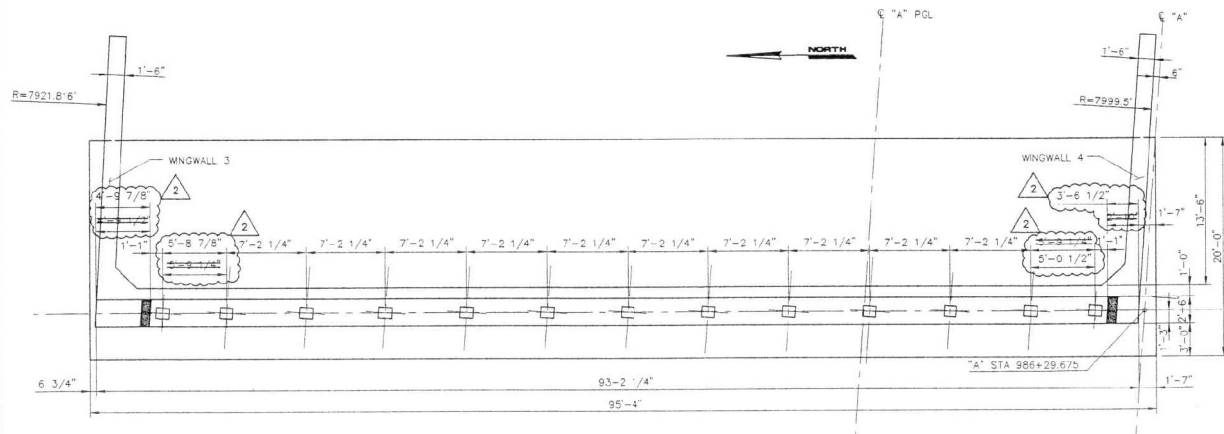
12/32/00 10/31/00 10/31/00	ISSUED FOR CONSTRUCTION ADDENDUM NO. 2 DESCRIPTION	CEJ CEJ APPROVED
----------------------------------	--	------------------------

WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
 DURANGO DRIVE GRADE SEPARATION
 ABUTMENT 1 PLAN & ELEVATION
 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

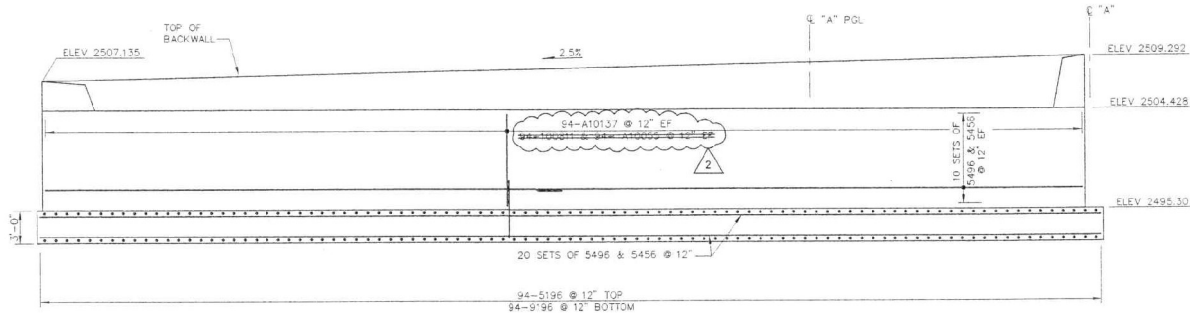


PROJECT NO. PTO 642358 DESIGNED BY: DL APPROVED BY: CEJ	DRAWN BY: xpc CHECKED BY: HJS
PARSONS TRANSPORTATION GROUP LAS VEGAS, NEVADA	840 ORRIS DRIVE, SUITE 240 LAS VEGAS, NEVADA 89115 PHONE (702) 435-2116 FAX (702) 435-2411

SCALE HORIZ: NONE VERT: NONE	FIELD BOOK
DRAWING NO. B-103	SHEET OF

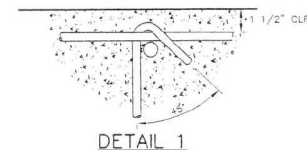


PLAN

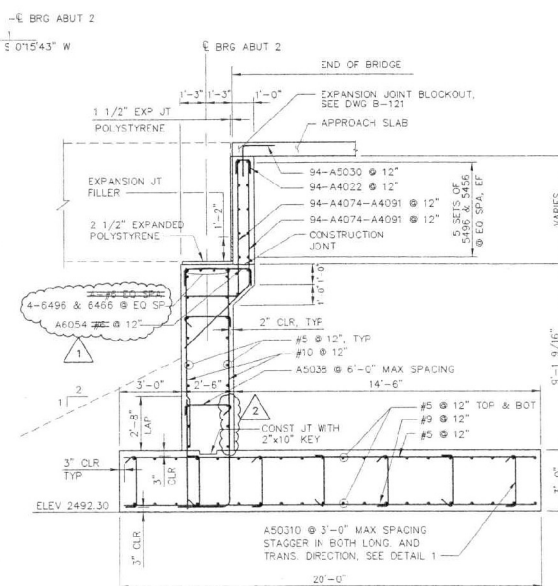


ELEVATION

- NOTES
1. THE WINGWALL STEEL EXTENDING INTO THE ABUTMENT STEM SHALL BE PLACED PRIOR TO THE STEM POUR. WINGWALL STEEL TO BE INSTALLED AS DETAIL.
 2. ELEVATIONS ARE SHOWN AT $\bar{E}$ BEARING.
 3. SEE SHEET B-105 FOR BEARING PAD DETAILS.
 4. FOR MINIMUM BAR LAP, SEE SHEET B-113.



DETAIL 1



SECTION

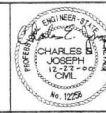
ISSUE FOR CONSTRUCTION

H-2485

REV NO	DATE	DESCRIPTION	APPROVED
1	12/22/00	ISSUED FOR CONSTRUCTION	CEJ
2	10/31/00	ADDENDUM NO. 2	CEJ



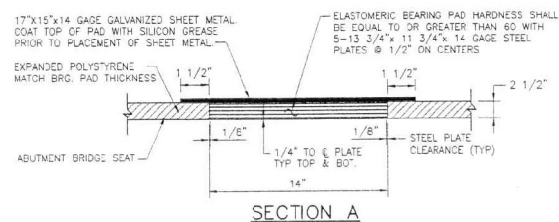
WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES DURANGO DRIVE GRADE SEPARATION ABUTMENT 2 PLAN AND ELEVATION
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



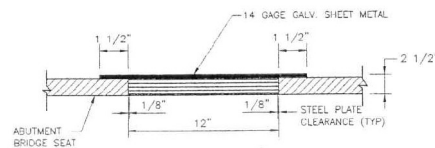
PROJECT NO: PTO 643555	DRAWN BY: KPC
DESIGNED BY: DL	CHECKED BY: MJS
APPROVED BY: CEJ	
PARSONS TRANSPORTATION GROUP 840 GRIER DRIVE, SUITE 340 LAS VEGAS, NEVADA 89169 PHONE (702) 438-0149 FAX (702) 438-9412	

SCALE	HORIZ: NONE	VERT: NONE
FIELD BOOK		
DRAWING NO: B-104		
SHT OF		

1. BEARING PADS SHALL BE ORIENTED ALONG GIRDER AXIS.
2. ELASTOMERIC BEARING PADS SHALL BE GLUED TO THE ABUTMENT USING A SINGLE COMPONENT POLYURETHANE ADHESIVE MEETING ASTM D4070 STANDARDS.
3. SILICON GREASE SHALL MEET MILITARY SPECIFICATIONS MIL-S-8860.
4. ELASTOMERIC BEARING PADS SHALL CONSIST OF 5-14GA STEEL PLATES MEETING ASTM D4014 STANDARDS.
5. SEE DRAWINGS B-103 AND B-104 FOR BEARING PAD LAYOUTS.

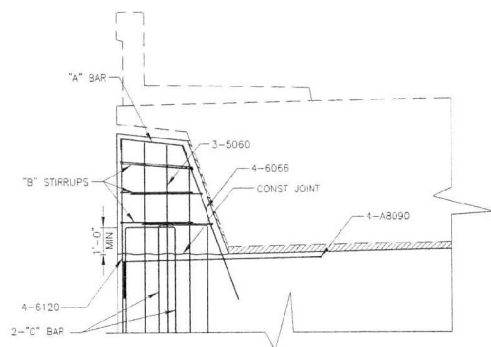


SECTION A

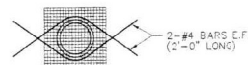


SECTION B

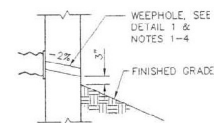
BEARING PAD DETAILS



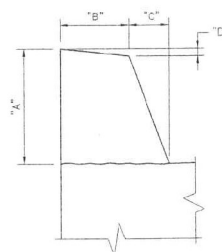
SHEAR KEY DETAIL



DETAIL 1



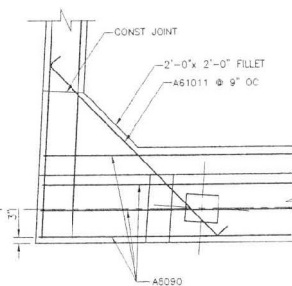
WEEP HOLE DRAINAGE DETAIL



SHEAR KEY LAYOUT

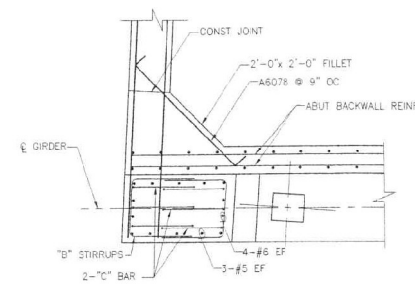
ABUT	KEY	"A"	"B"	"C"	"D"	"A" BAR	"B" STIRRUP	"C" BAR
1	1	2'-8 1/2"	1'-1"	9 5/8"	4"	A4021	A4042	A407
	2	4'-9"	2'-0 1/8"	1'-5 3/4"	4 5/8"	A4030	A4058	A408
3	2	2'-8 1/2"	3'-11 7/8"	10"	3"	A4041	A4096	A409
	4	4'-10 3/8"	2'-0 1/4"	1'-6 1/4"	4 5/8"	A4031	A4058	A408

DIMENSIONS "A" AND "D" ARE VERTICAL. DIMENSIONS "B" AND "C" ARE ALONG THE ϕ BEARING OF THE ABUTMENT.



SECTION C

ADDITIONAL ABUTMENT REINF NOT SHOWN FOR CLARITY



SECTION D

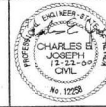
ADDITIONAL ABUTMENT REINF NOT SHOWN FOR CLARITY

ISSUE FOR CONSTRUCTION

H-2485



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DURANGO DRIVE GRADE SEPARATION
ABUTMENT DETAILS
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

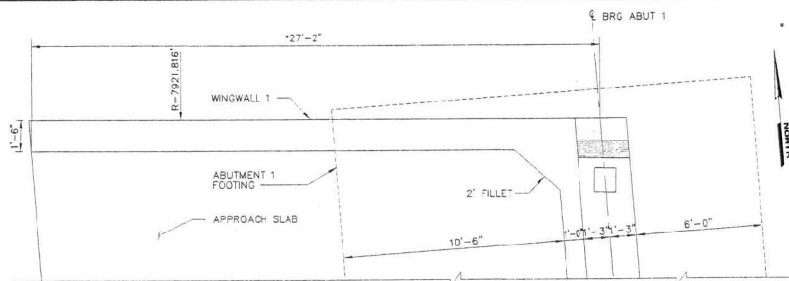


PROJECT No: PTG 643558 DRAWN BY: KPC
DESIGNED BY: DL CHECKED BY: MJS
APPROVED BY: CEJ

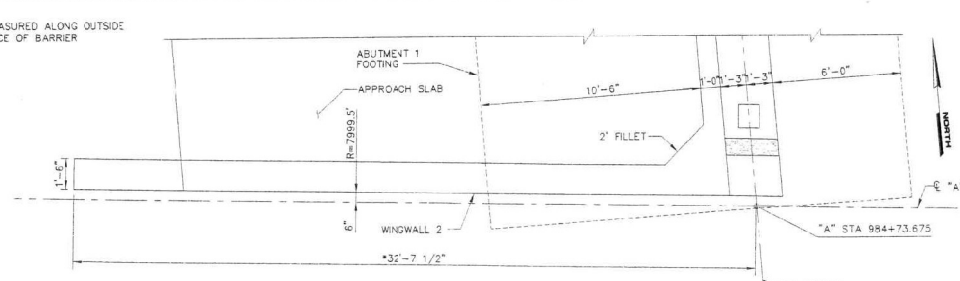
 **PARSONS
TRANSPORTATION
GROUP**
LAS VEGAS, NEVADA

840 GRIER DRIVE, SUITE 340
LAS VEGAS, NEVADA 89119
PHONE (702) 435-2516
FAX (702) 435-8472

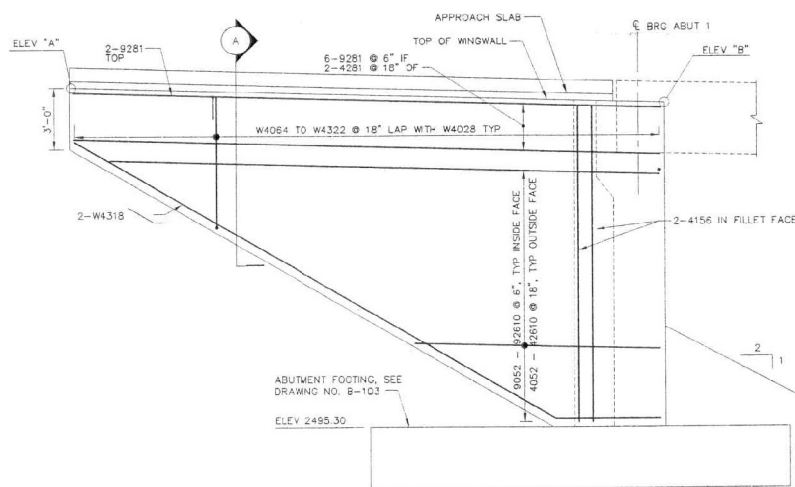
SCALE	L-1631
HORIZ: NONE	
VERT: NONE	DRAWING NO:
FIELD BOOK	B-105
	SHT OF



PLAN - WINGWALL 1

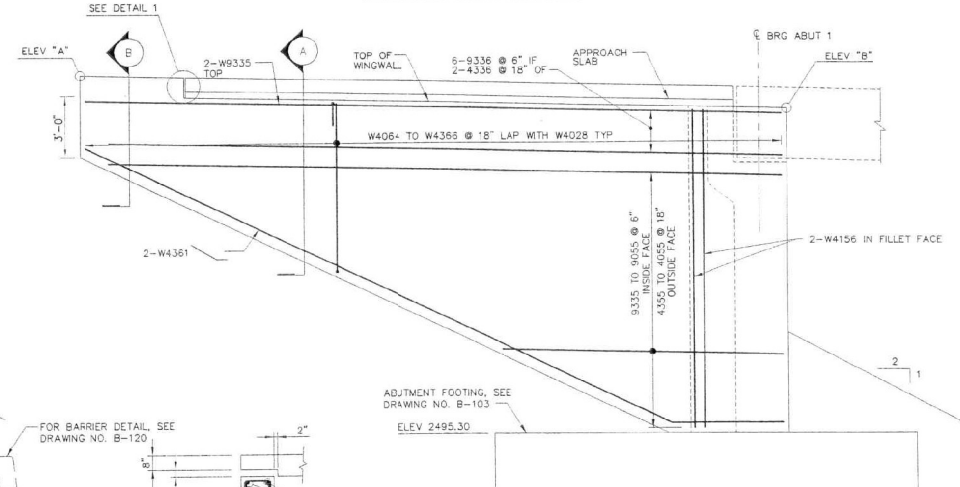


PLAN - WINGWALL 2



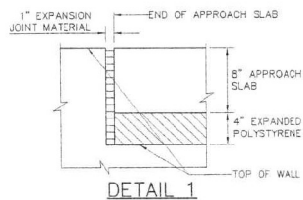
ELEVATION - WINGWALL 1

NOTE: BARRIER WITH SOUND WALL NOT SHOWN FOR CLARITY
BACKFACE OF WINGWALL SHOWN

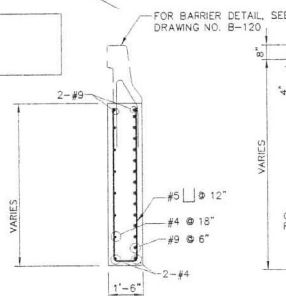


ELEVATION - WINGWALL 2

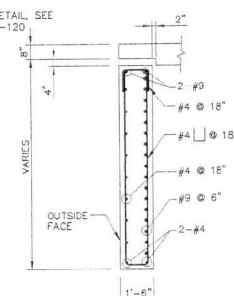
NOTE: BARRIER NOT SHOWN FOR CLARITY



DETAIL 1

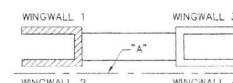


SECTION B



SECTION A

ELEVATION TABLE			
LOCATION	WINGWALL NUMBER	ELEVATION A	ELEVATION B
ABUTMENT 1	1	2511.974	2511.191
	2	2515.088	2513.237

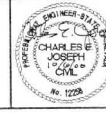


KEY MAP

REV	NO.	DATE	DESCRIPTION	APPROVED

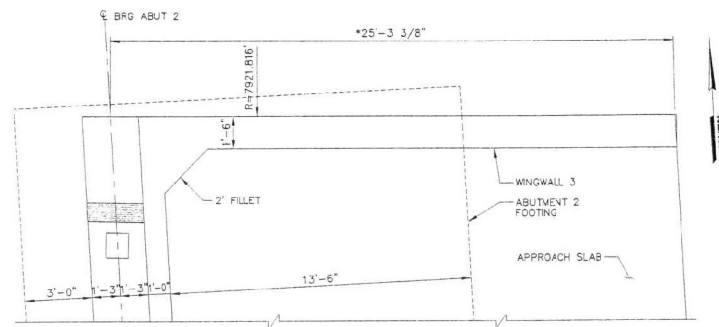


WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DURANGO DRIVE GRADE SEPARATION
WINGWALL 1 AND 2 PLAN & ELEVATION
 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

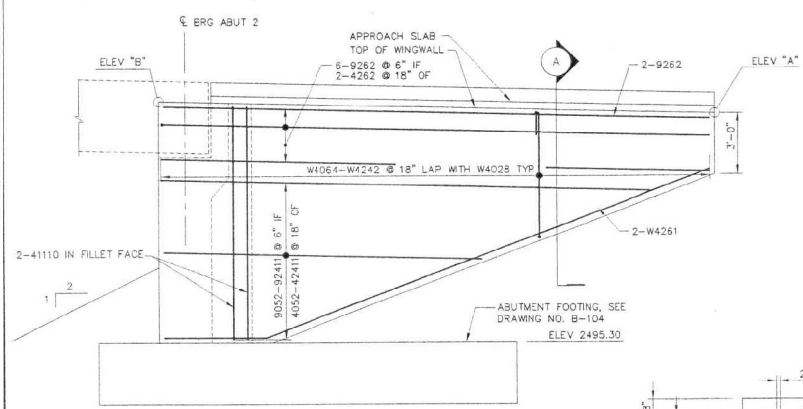


PROJECT NO: PTC 843558 DRAWN BY: KPC
 DESIGNED BY: DL CHECKED BY: MJS
 APPROVED BY: CEJ
PARSONS TRANSPORTATION GROUP
 LAS VEGAS, NEVADA
 840 GREY DRIVE, SUITE 340
 LAS VEGAS, NEVADA 89119
 PHONE (702) 435-2118
 FAX (702) 435-3412

SCALE		CONSTRUCTION	
HORIZ:	NONE	VERT:	NONE
FIELD BOOK:		SHT	
L-1631		B-106	

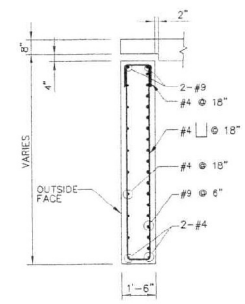


PLAN - WINGWALL 3



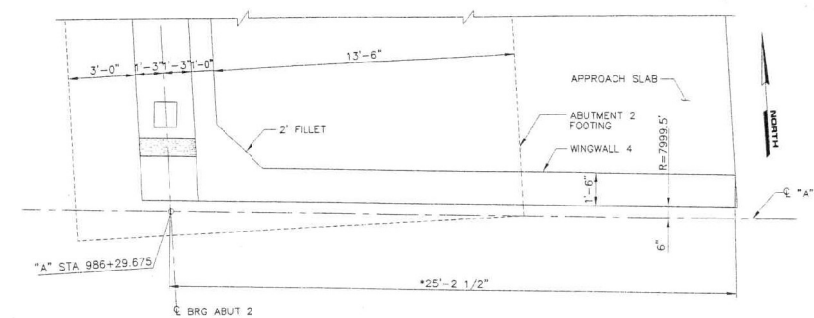
ELEVATION - WINGWALL 3

NOTE: BARRIER WITH SOUND WALL NOT SHOWN FOR CLARITY
BACK OF WINGWALL SHOWN

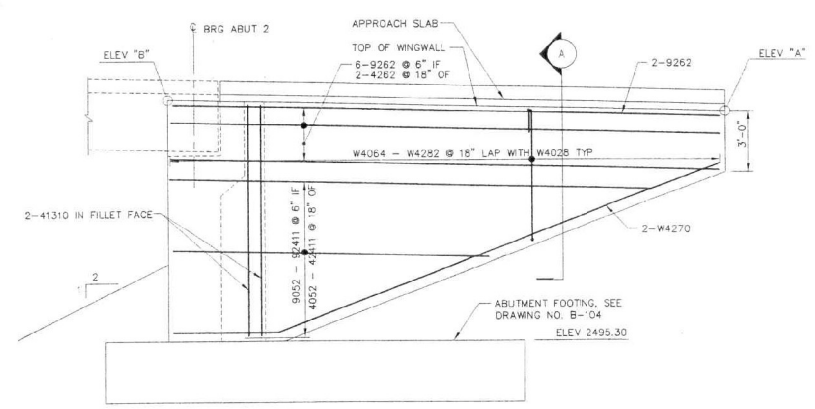


SECTION A

* MEASURED ALONG OUTSIDE
FACE OF BARRIER



PLAN - WINGWALL 4

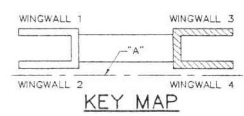


ELEVATION - WINGWALL 4

NOTE: BARRIER NOT SHOWN FOR CLARITY

ELEVATION TABLE

LOCATION	WINGWALL NUMBER	ELEVATION A	ELEVATION B
ABUTMENT 2	3	2506.540	2507.169
	4	2508.644	2509.324

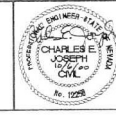


KEY MAP

REV	NO	DATE	DESCRIPTION	APPROVED



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DURANGO DRIVE GRADE SEPARATION
WINGWALL 3 AND 4 PLAN & ELEVATION
 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT NO: **PTD 843558** DRAWN BY: **KPC**
 DESIGNED BY: **DL** CHECKED BY: **MJS**
 APPROVED BY: **CEJ**

PARSONS TRANSPORTATION GROUP
 LAS VEGAS, NEVADA

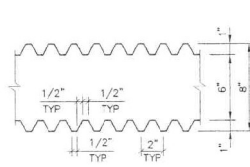
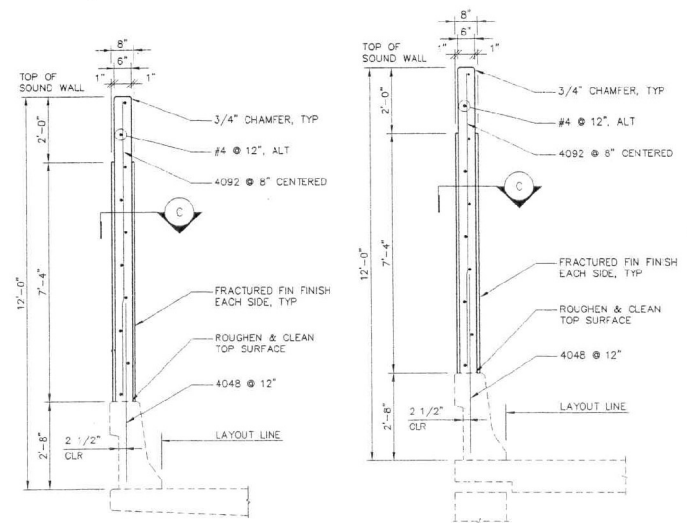
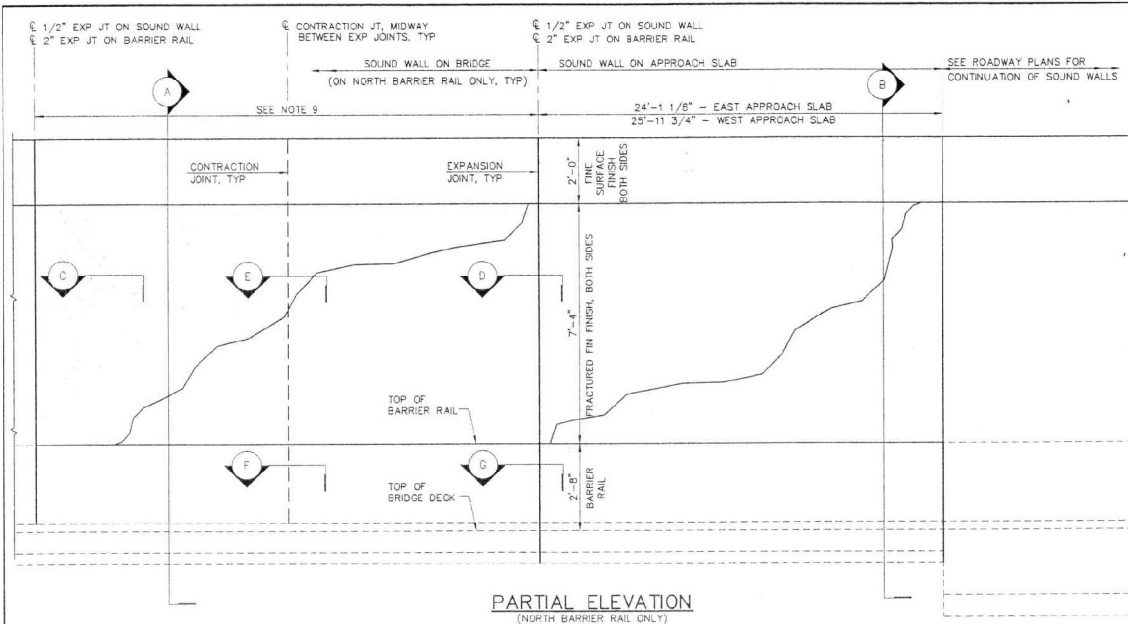
840 ORCH DRIVE, SUITE 340
 LAS VEGAS, NEVADA 89118
 PHONE (702) 431-2118
 FAX (702) 438-9415

ISSUE FOR CONSTRUCTION

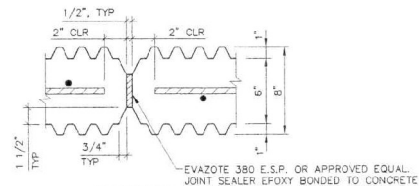
SCALE	HORIZ	VERT	FIELD BOOK
L-1631	NONE	NONE	

DRAWING NO: **B-107**

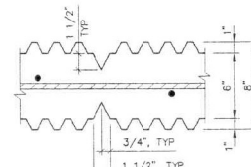
SHT. **OF**



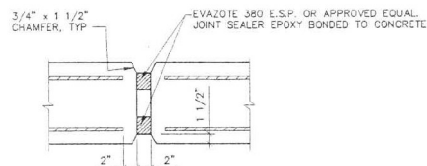
SECTION C
FRACTURED FIN



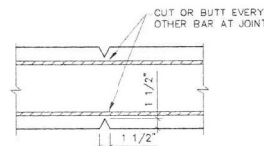
SECTION D
EXPANSION JOINT



SECTION E
CONTRACTION JOINT



SECTION G



SECTION F

GENERAL NOTES:

- DESIGN SPECIFICATIONS: AASHTO "GUIDE SPECIFICATIONS FOR STRUCTURAL DESIGN OF SOUND BARRIERS, 1989", WITH ITERIMS THRU 1992.
- CONSTRUCTION SPECIFICATIONS: STATE OF NEVADA, DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, 1988".
- LIVE LOAD: 10 KIP IMPACT TRAFFIC LOAD ACTING ON TOP OF TRAFFIC BARRIER.
- WIND LOAD: WIND VELOCITY 75 M.P.H., WIND PRESSURE 25 PSF.
- SEISMIC LOAD: 2.5 x 0.15 x DEADLOAD
- CONCRETE: ALL CONCRETE SHALL BE CLASS A MODIFIED (MAJOR) $f'_c=4000$ PSI AT 28 DAYS.
- REINFORCING STEEL: REINFORCING BARS ASTM A706 GRADE 60.
- FOR BARRIER RAIL DETAILS, SEE DRAWING NO. B-120.
- SOUND WALL EXPANSION JOINTS ON BRIDGE DECK TO COINCIDE WITH BARRIER RAIL EXPANSION JOINTS, SEE DRAWING NO. B-120.

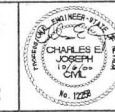
CONSTRUCTION NOTES:

- SOUND BARRIER MAY BE CONSTRUCTED CURVED OR BY A SERIES OF CHORDS. FOR CHORD CONSTRUCTION, CHORD INTERSECTION SHALL BE AT CONTRACTION OR EXPANSION JOINTS. FOR RADIUS OF 1500 FEET OR LESS, CHORD LENGTH SHALL NOT BE GREATER THAN 32 FEET, AND FOR RADIUS GREATER THAN 1500 FEET, CHORD LENGTH SHALL NOT BE GREATER THAN 96 FEET.

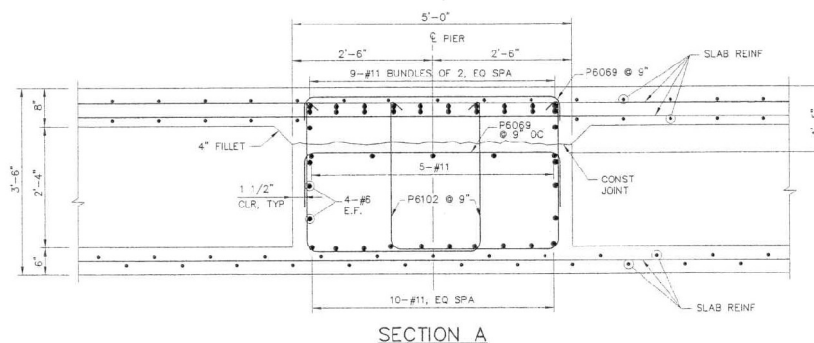
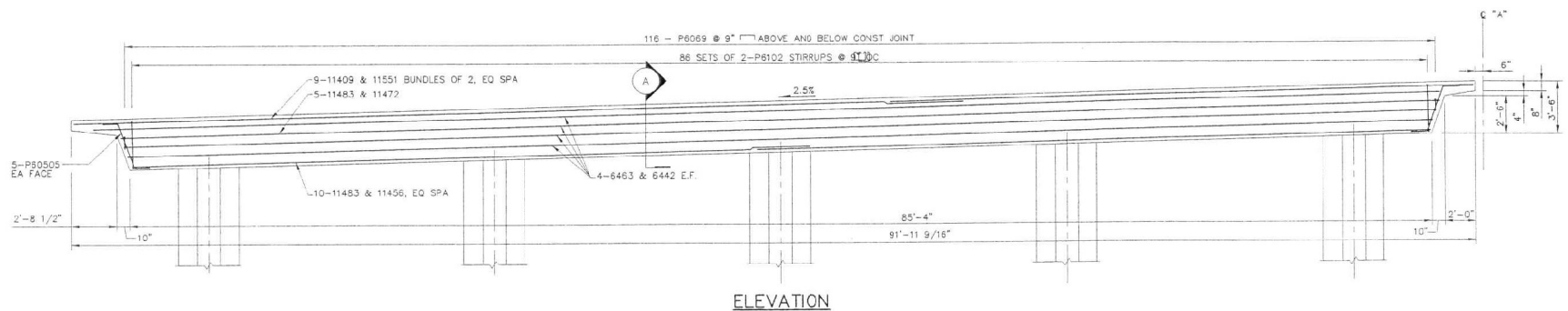
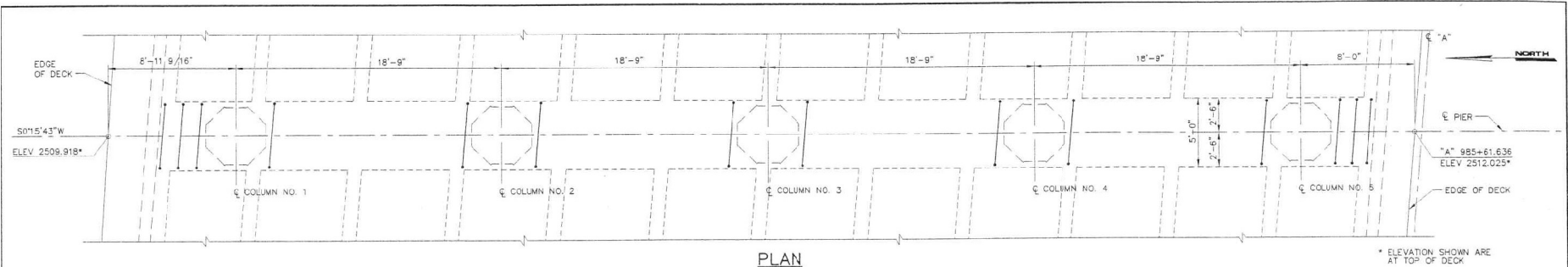
REV. NO.	DATE	DESCRIPTION	APPROVED



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DURANGO DRIVE GRADE SEPARATION
SOUND BARRIER WALL DETAILS
 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT NO: PTC 843558	DRAWN BY: KPC	SCALE: L-1631
DESIGNED BY: BS	CHECKED BY: MJS	DRAWING NO: B-108
APPROVED BY: CEJ		SHT. OF
PARSONS TRANSPORTATION GROUP	840 ORLER DRIVE, SUITE 340 LAS VEGAS, NEVADA 89119 PHONE (702) 435-5715 FAX (702) 435-5412	FIELD BOOK



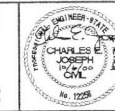
LAP SPLICE TABLE	
BAR SIZE	LAP
#5	2'-2"
#6	2'-7"
#11	8'-5"

NOTE:
STAGGER ADJACENT LAP SPLICES A MINIMUM OF 24"
CONTRACTOR MAY UTILIZE MECHANICAL SPLICES IN LIEU OF LAP SPLICES.

REV. NO.	DATE	DESCRIPTION	APPROVED

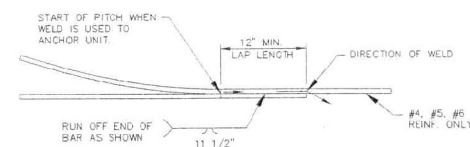


WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DURANGO DRIVE GRADE SEPARATION
PIER CAP DETAILS
 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT No: PTO 843558 DRAWN BY: KPC
 DESIGNED BY: M/S CHECKED BY: DL
 APPROVED BY: CSJ
PARSONS TRANSPORTATION GROUP
 840 ORER DRIVE, SUITE 340
 LAS VEGAS, NEVADA 89119
 PHONE (702) 435-2716
 FAX (702) 435-8412

SCALE	H-1631
HORIZ: NONE	DRAWING NO.
VERT: NONE	B-109
FIELD BOOK	SHT. UP



NOTE: FLARE WELD TO BE MADE IN DIRECTION AS SHOWN

WELDED LAP SPLICE AND ANCHOR

*COLUMN NO.	ELEV A
1	2506.624
2	2507.053
3	2507.482
4	2507.912
5	2508.342

* SEE DRAWING NO. B-109 FOR COLUMN NO.'s

NOTES:

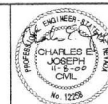
1. SPLICES ARE NOT ALLOWED FOR COLUMN VERTICAL REINFORCEMENT
2. PROVIDE 1 1/2 TURNS AT EACH ENDS OF SPIRAL AND 1/2 TURN MINIMUM FOR LAP SPLICES. ANCHOR ENDS OF SPIRAL AND SPIRE 135° MINIMUM FOR HORIZONTAL VERTICAL BARS AND A FULL LAP WELD AT PERMISSIBLE BREAK AT PIER CAP. WELD SPLICE SHALL DEVELOP AT LEAST 125% OF SPECIFIED YIELD STRENGTH OF REINFORCEMENT.
3. SPIRAL MAY BE DISCONTINUOUS AT REINFORCEMENT LAYERS NEAR BOTTOM OF CAP AND TOP OF FOOTING. NO SPIRAL LAP SPLICES ALLOWED WITHIN 4'-0" FROM TOP OR BOTTOM OF COLUMN OR WITHIN CAP OR FOOTING.

ISSUE FOR CONSTRUCTION

H-2485

[illegible]

WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DURANGO DRIVE GRADE SEPARATION
PIER COLUMN AND FOUNDATION DETAILS
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

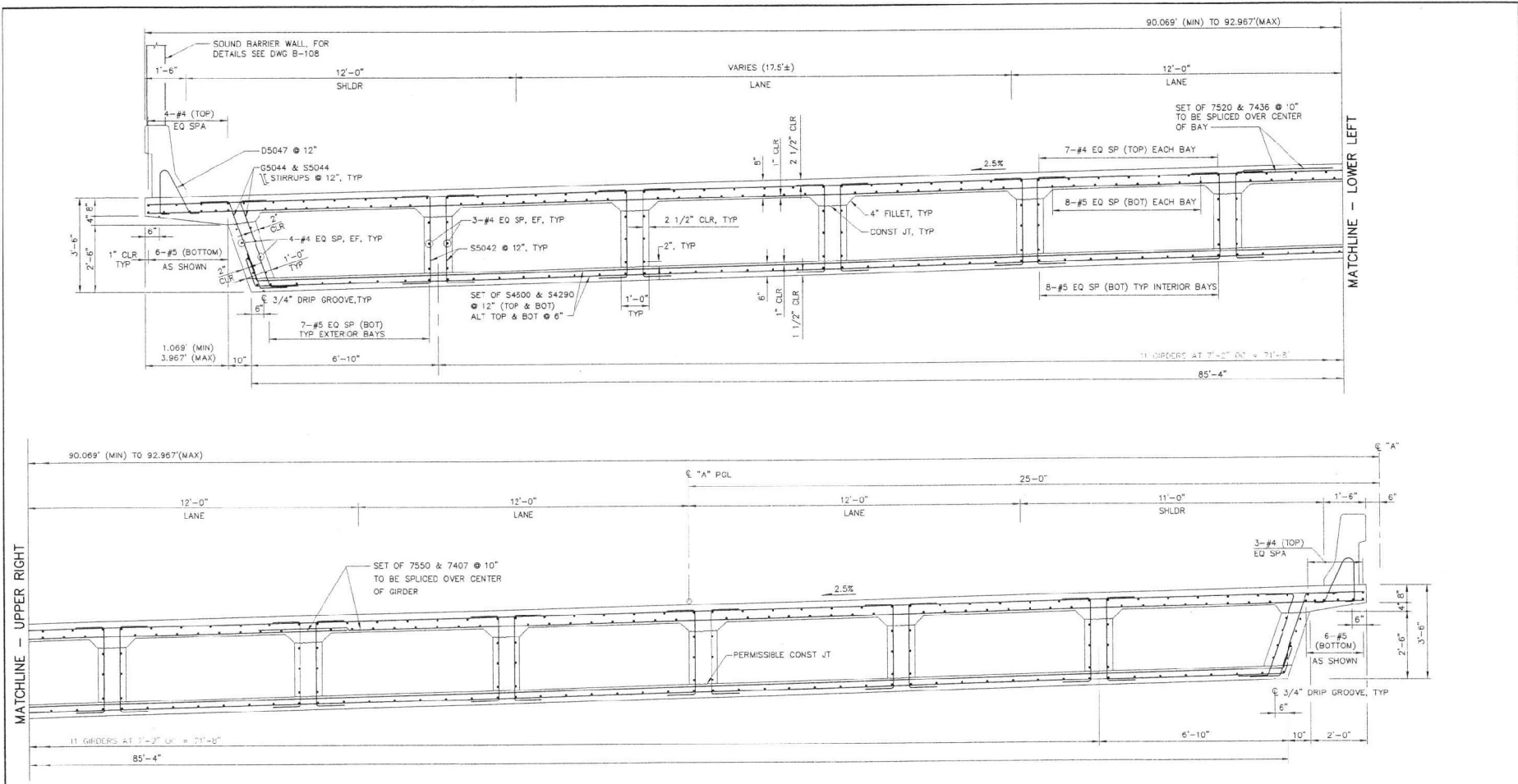


PROJECT No. PTG 643558 DRAWN BY: KPC
DESIGNED BY: MJS CHECKED BY: DL
APPROVED BY: CEJ

 **PARSONS**
TRANSPORTATION
GROUP
1845 W. 10th Avenue
Littleton, CO 80120

840 GRIER DRIVE, SUITE 340
LAS VEGAS, NEVADA 89119
PHONE (702) 425-2116
FAX (702) 435-8412

SCALE	L-1631
HORIZ: NONE VERT: NONE	
FIELD BOOK	DRAWING NO. B-110
	SHT. OF



REINFORCING LAP SPICE

#4 BARS TO #4 BARS 1'-8"
 #6 BARS TO #6 BARS 2'-7"
 #7 BARS TO #7 BARS 3'-3"
 STAGGER LAP SPICES 24" MIN.

TYPICAL DECK SECTION

N.T.S.

NOTE:
 SECTIONS ALONG RADIAL DIRECTION OFF "A" LINE CURVE. ALL
 TRANSVERSE DIMENSIONS MEASURED ALONG RADIAL DIRECTION.

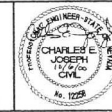
NOTES:

1. FOR BARRIER RAIL DETAILS, SEE DRAWING NO. B-120.
2. FOR LAP SPICE LOCATIONS, SEE DRAWING NO. B-113 & B-114.

REV NO.	DATE	DESCRIPTION	APPROVED



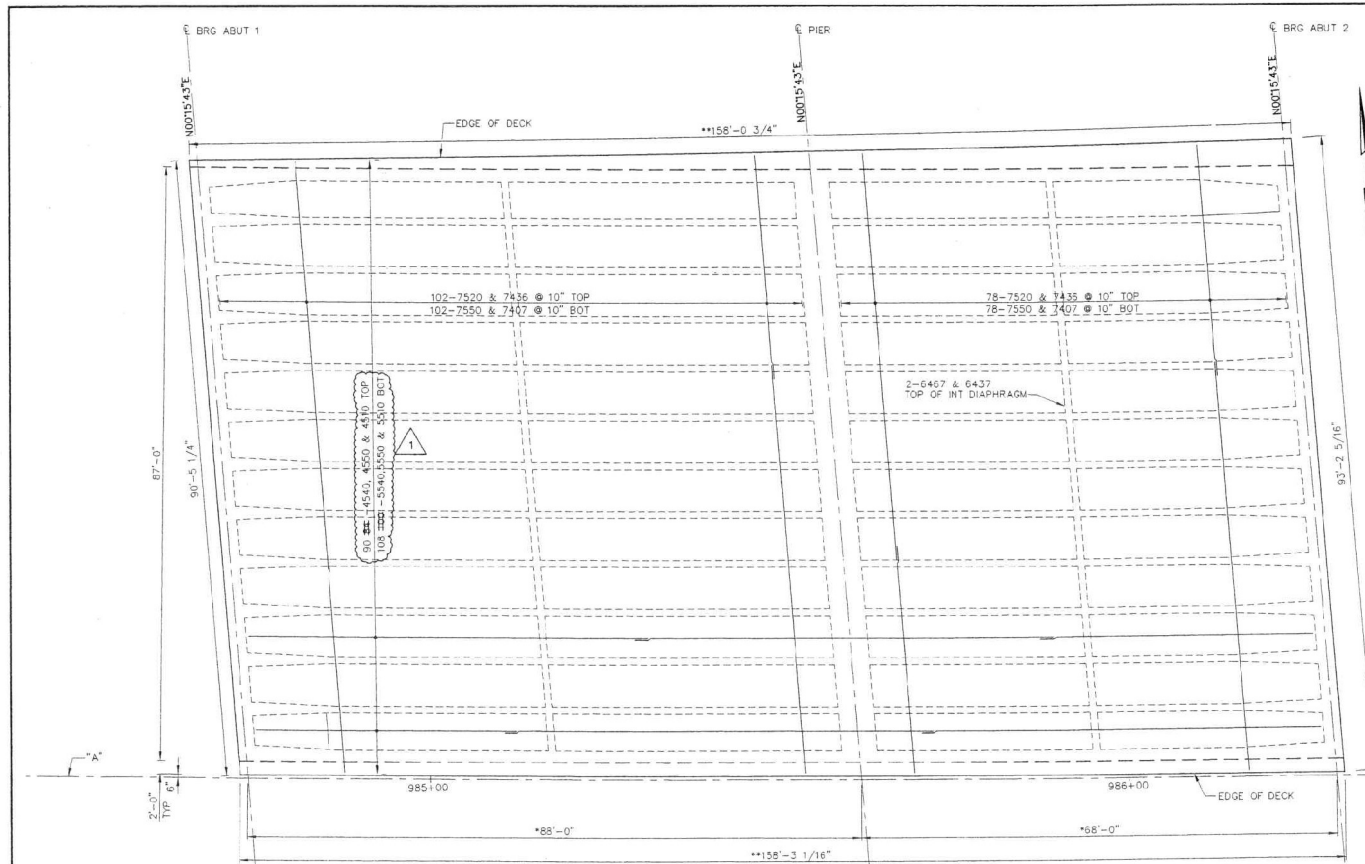
WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DURANGO DRIVE GRADE SEPARATION
TYPICAL DECK SECTION
 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT NO: PTO 843558	DRAWN BY: KPC
DESIGNED BY: EL	CHECKED BY: M.S.
APPROVED BY: C.J.	
PARSONS TRANSPORTATION GROUP	840 GREY DRIVE, SUITE 340 LAS VEGAS, NEVADA 89119 PHONE (702) 435-5118 FAX (702) 435-5412

ISSUE FOR CONSTRUCTION H-2485

SCALE	L-1631
HORIZ: NONE	DRAWING NO.
VERT: NONE	B-111
FIELD BOOK	SHT. OF

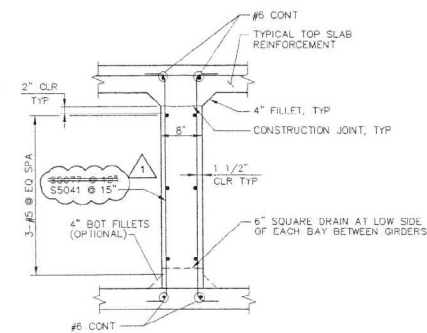


MINIMUM BAR LAP

#4 BARS TO #4 BARS = 1'-3"
 #5 BARS TO #5 BARS = 2'-2"
 #6 BARS TO #6 BARS = 2'-7"
 #7 BARS TO #7 BARS = 3'-3"
 STAGGER LAP SPLICES 24" MIN.

TOP SLAB REINFORCING

* MEASURED ALONG "A" LINE
 ** CURVE LENGTH ALONG EDGE OF DECK



SECTION C

(TYPICAL INTERMEDIATE DIAPHRAGM SECTION)

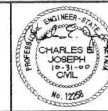
ISSUE FOR CONSTRUCTION

H-2485

REV. NO.	DATE	DESCRIPTION	APPROVED
1	10/31/00	ADDENDUM NO. 2	CEJ

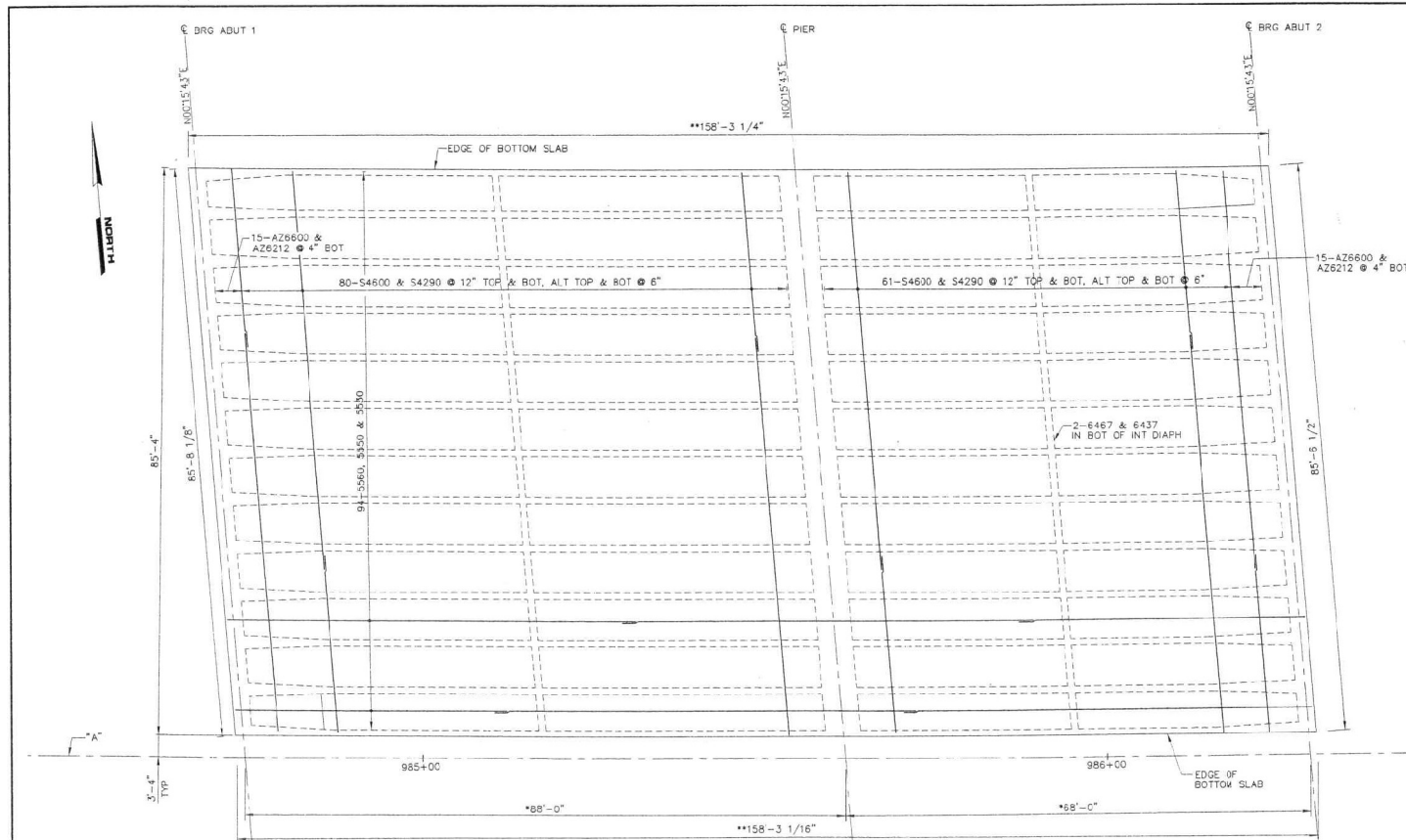


WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DURANGO DRIVE GRADE SEPARATION
TOP SLAB REINFORCING
 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT NO: P10 64558	DRAWN BY: JPC
DESIGNED BY: DL	CHECKED BY: JLS
APPROVED BY: CEJ	
PARSONS TRANSPORTATION GROUP	840 GRIFF DRIVE, SUITE 340 LAS VEGAS, NEVADA 89119 PHONE (702) 435-1116 FAX (702) 435-8412

SCALE	HORIZ NONE	DRAWING NO.
VERT: NONE		B-113
FIELD BOOK		SHT. OF



MINIMUM BAR LAP
 #4 BARS TO #4 BARS = 1'-8"
 #5 BARS TO #5 BARS = 2'-2"
 #6 BARS TO #6 BARS = 2'-7"
 #7 BARS TO #7 BARS = 3'-3"
 STAGGER LAP SPLICES 24" MIN.

BOTTOM SLAB REINFORCING

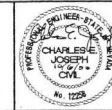
* MEASURED ALONG "A" LINE
 ** CURVE LENGTH ALONG EDGE OF BOTTOM SLAB

ISSUE FOR CONSTRUCTION H-2485

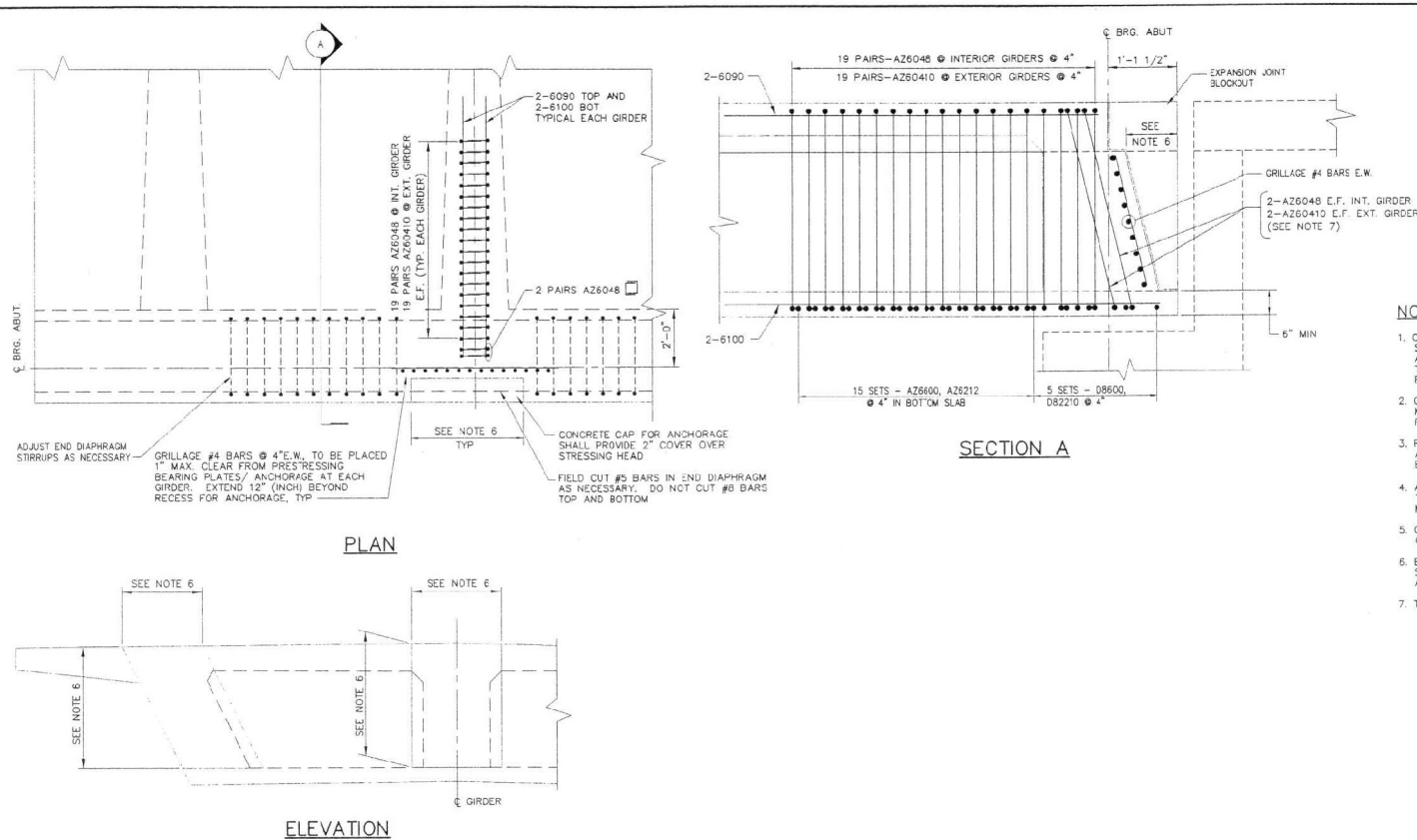
REV NO	DATE	DESCRIPTION	APPROVED
1			
2			
3			
4			
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6			
7			
8			
9			
10			



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DURANGO DRIVE GRADE SEPARATION
BOTTOM SLAB REINFORCING
 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT No: PTO 643558	DRAWN BY: KPC	SCALE	L-1631
DESIGNED BY: DL	CHECKED BY: MJS	HORIZ: NONE	DRAWING NO.
APPROVED BY: CEJ		VERT: NONE	B-114
PARSONS TRANSPORTATION GROUP	840 ORION DRIVE, SUITE 340 LAS VEGAS, NEVADA 89119 PHONE (702) 435-2116 FAX (702) 435-9412	FIELD BOOK	SHT. OF



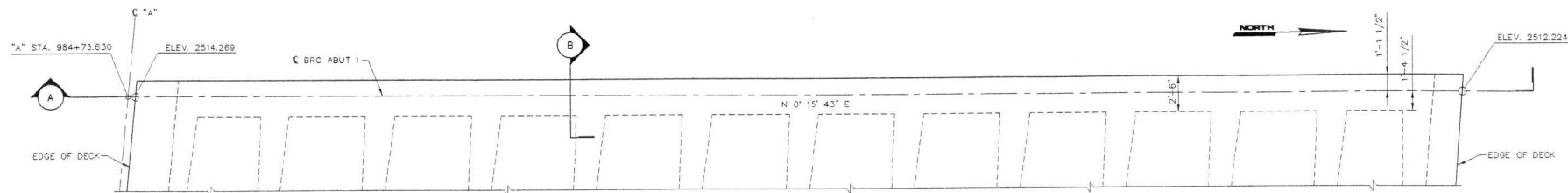
SECTION A

NOTES:

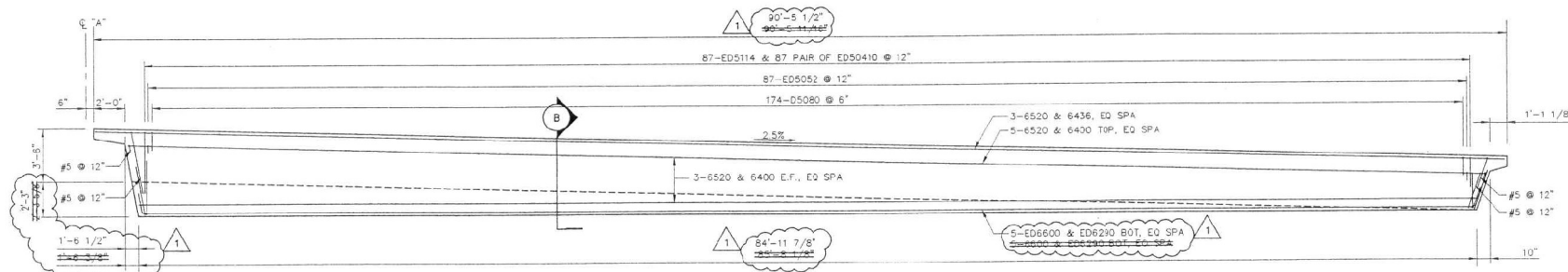
1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF PRESTRESSING SYSTEM AND ANCHORAGE BLOCK DETAILS TO THE ENGINEER FOR APPROVAL. ANCHORAGE BLOCK SIZES MAY BE ADJUSTED TO SUIT THE SELECTED PRESTRESSING SYSTEM AND SHALL BE SUBJECT TO ENGINEER'S APPROVAL.
2. ORDER STEEL SHALL BE FLARED NEAR ANCHORAGE TO PROVIDE A MINIMUM OF 1-1/2" OF CONCRETE COVERING THE REINFORCING STEEL. FLARE MAY BE ON ONE SIDE OF THE EXTERIOR ORDER ONLY.
3. REINFORCEMENT INTERFERING WITH THE PRESTRESSING TENDON ALIGNMENT OR ANCHORAGE BLOCK SHALL BE ADJUSTED AS APPROVED BY THE ENGINEER.
4. AFTER STRESSING IS COMPLETED AND PRIOR TO FALSEWORK REMOVAL, THE ANCHORAGE BLOCK RECESS SHALL BE FILLED WITH CLASS "A" MODIFIED CONCRETE ($f_c = 4,000$ psi).
5. GRILLAGE REINFORCING STEEL SHOWN ON THIS SHEET SHALL BE INCLUDED ON PRESTRESSING SHOP DRAWINGS.
6. BLOCKOUT DIMENSIONS AND RECESS ANCHORAGE REINFORCEMENT SHALL BE DETERMINED BY THE POST-TENSIONING CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
7. TURN LEFT TOWARDS EACH OTHER.

ISSUE FOR CONSTRUCTION H-2485

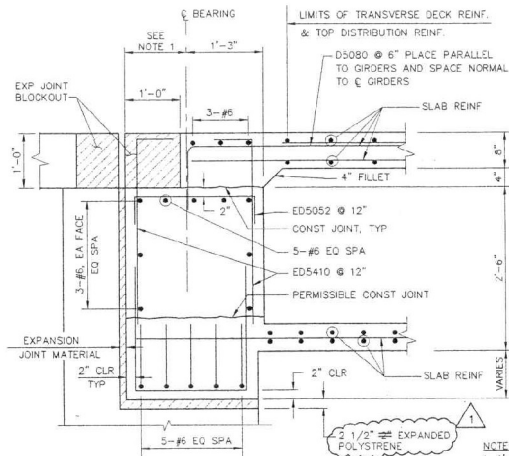
				WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES DURANGO DRIVE GRADE SEPARATION ANCHORAGE ZONE DETAILS CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS						PROJECT NO: PTD 643558 DRAWN BY: AL DESIGNED BY: DL CHECKED BY: MJS APPROVED BY: CEJ		SCALE: HORZ: NONE VERT: NONE		L-1631 DRAWING NO. B-115 SHT. OF	
REV. NO.	DATE	DESCRIPTION	APPROVED BY							840 GRIER DRIVE, SUITE 340 LAS VEGAS, NEVADA 89118 PHONE (702) 432-2116 FAX (702) 432-1472 LAS VEGAS, NEVADA		FIELD BOOK:			



PLAN - ABUTMENT 1



SECTION A



SECTION B

NOTE:
1. 1'-1 1/2" @ 70'. SEE SHEET B-121
FOR JOINT WIDTH.

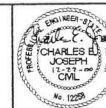
ISSUE FOR CONSTRUCTION

H-2485

REV. NO.	DATE	DESCRIPTION	APPROVED
1	12/22/00	ISSUED FOR CONSTRUCTION	CEJ

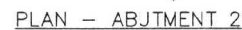


**WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DURANGO DRIVE GRADE SEPARATION
END DIAPHRAGM - ABUTMENT 1
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS**



PROJECT No. PIG 643558	DRAWN BY: KPC	SCALE	L-1631
DESIGNED BY: DL	CHECKED BY: MJS	HORIZ: NONE	DRAWING NO. B-116
APPROVED BY: CEJ		VERT: NONE	SHEET OF
PARSONS TRANSPORTATION GROUP LAS VEGAS, NEVADA		FIELD BOOK	

AND OTHER DRIVE, SUITE 240
LAS VEGAS, NEVADA 89119
PHONE (702) 435-0114
FAX (702) 435-8442



NOTE:
1. 1'-1 1/2" @ 70'. SEE SHEET B-121
FOR JOINT WIDTH.

ISSUE FOR CONSTRUCTION H-2485



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DURANGO DRIVE GRADE SEPARATION
END DIAPHRAGM — ABUTMENT 2
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

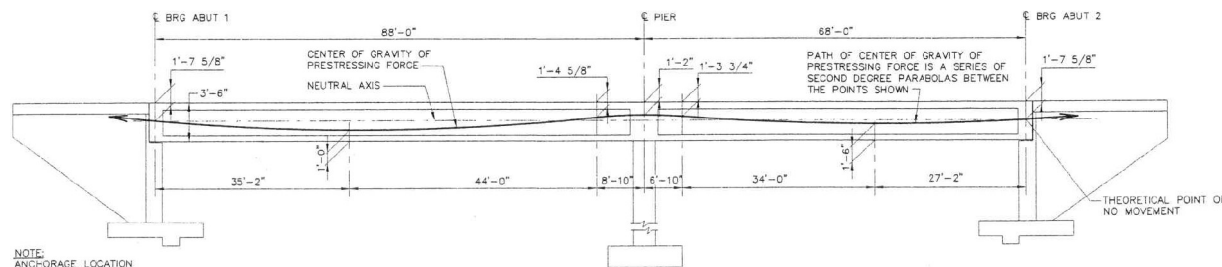


PROJECT No: PTG 643558 DRAWN BY: KPC
DESIGNED BY: DL CHECKED BY: MJS
APPROVED BY: CEJ

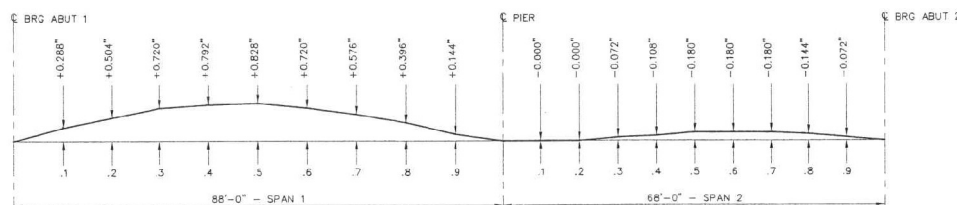
 **PARSONS
TRANSPORTATION
GROUP**
LAT VEGAS, NEVADA

840 GRIER DRIVE, SUITE 340
LAS VEGAS, NEVADA 89119
PHONE (702) 435-2116
FAX (702) 435-442 2

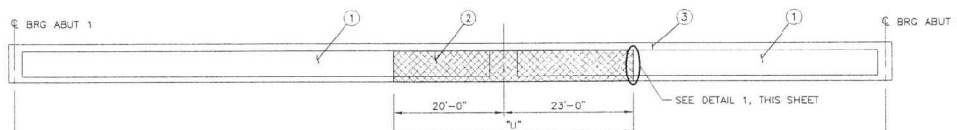
SCALE	L-1631
HORIZ: NONE	DRAWING NO.
VERT: NONE	B-117
FIELD BOOK	
	SHT OF



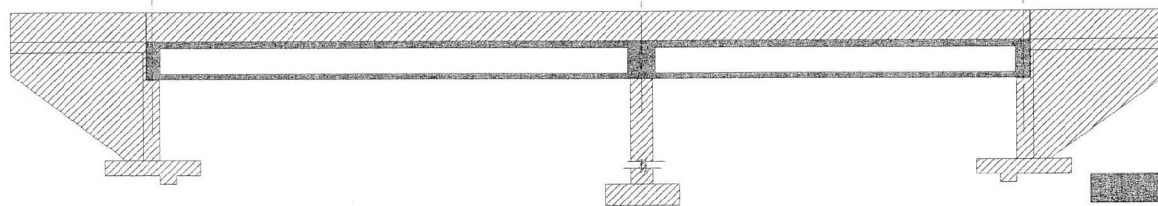
PRESTRESSING DIAGRAM



CAMBER DIAGRAM



CONCRETE POUR SCHEDULE



CONCRETE CLASSIFICATION DIAGRAM

PRESTRESSING NOTES:

- POST TENSIONING FORCES AND CONCRETE STRENGTHS FOR THE STRUCTURE ARE AS FOLLOWS:

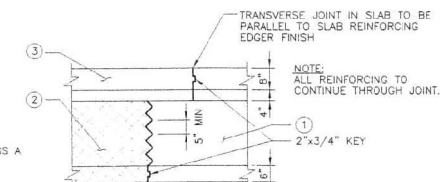
PJACK (K)	f _{ci} (psi)	f _c (psi)
19,380	3,000	4,000

WHERE PJACK IS THE JACKING FORCE, f_{ci} IS THE REQUIRED COMPRESSIVE STRENGTH OF CONCRETE AT THE TIME OF STRESSING AND f_c IS THE ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS.
- ONE-END STRESSING SHALL BE PERFORMED FROM ABUTMENT 1.
- METALLIC ENCLOSURES SHALL BE GALVANIZED RIGID DUCT. ENCLOSURES TO BE VENTED THROUGH THE DECK SLAB WITHIN 3' OF THE HIGH POINTS OF THE CABLE PATH.
- FOR DETAILS NOT SHOWN SEE SHEET B-28.1.1 (503) OF 1937 STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION.
- DESIGN IS BASED ON 1/2" Ø 7 WIRE, 270 KSI (f_{ps}) LOW-RELAXATION, PRESTRESSING STRAND JACKED TO 0.75 f_s WITH AN EQUIVALENT ANCHOR SET = 3/8".
- DESIGN IS BASED ON U=0.25 AND K=0.0002. PJACK SPECIFIED AT THE JACKING END INCLUDE FRICTION LOSSES AND PROVISIONS FOR LOSS OF STRESS IN THE PRESTRESSING STEEL DUE TO CREEP AND SHRINKAGE OF CONCRETE, ELASTIC SHORTENING AND RELAXATION OF PRESTRESSING STEEL AND STRESSING SEQUENCE. LOW RELAXATION STRAND LOSS HAS BEEN CALCULATED TO BE 28,000 psi.
- BAR REINFORCEMENT INTERFERING WITH THE PRESTRESSING TENDONS ALIGNMENT SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER.
- CONTRACTOR SHALL SUBMIT ELONGATION AND JACKING CALCULATIONS BASED UPON AN INITIAL STRESS @ ABUTMENT 1 = 0.767 TIMES JACKING STRESS.
- NO MORE THAN 1/2 OF THE PRESTRESSING FORCE IN ANY GIRDER MAY BE STRESSED BEFORE AN EQUAL FORCE IS STRESSED IN THE ADJACENT GIRDERS. THE EXTERIOR 1/4 OF THE STRUCTURE SHALL NOT BE STRESSED UNTIL AT LEAST 1/10 OF TOTAL PRESTRESSING FORCE HAS BEEN STRESSED IN THE MIDDLE 1/2 OF THE STRUCTURE. AT NO TIME WILL MORE THAN 1/6 OF THE TOTAL PRESTRESSING FORCE BE APPLIED ECCENTRICALLY ABOUT THE CENTERLINE OF THE STRUCTURE.
- DURING STRESSING OPERATIONS, THE ELONGATION SHALL BE CONTINUOUSLY COMPARED WITH GAGE PRESSURE TO CHECK AGAINST DUCT BLOCKAGE AND EXCESSIVE FRICTION.
- VERTICAL DIMENSIONS FOR DUCT LOCATION SHALL BE SHOWN AT TENTHS POINTS ON THE POST-TENSIONING SHOP DRAWINGS IN ORDER TO FACILITATE THE ACCURATE PLACEMENT OF DUCTS.

POURING SCHEDULE NOTES:

CONCRETE POURING SEQUENCE IS AS FOLLOWS:

- ① AND ② INDICATE SEQUENCE OF PLACING BOTTOM SLAB AND GIRDER WEB CONCRETE.
- BOTTOM SLAB CONCRETE MAY BE PLACED SEPARATELY.
- ① AND ② MAY BE POURED TOGETHER AT THE OPTION OF THE CONTRACTOR PROVIDED THE ENGINEER AGREES THAT FORM SETTLEMENT WILL BE SLIGHT.
- TOP SLAB CONCRETE ③ SHALL BE PLACED SEPARATELY WITH TRANSVERSE CONSTRUCTION JOINTS AS DESIRED, EXCEPT THERE SHALL BE NO CONSTRUCTION JOINTS IN AREA "U".
- DO NOT PLACE WINGWALLS AND BACKWALLS UNTIL STRESSING IS COMPLETE.
- DO NOT PLACE BARRIERS UNTIL STRESSING IS COMPLETE.



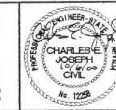
DETAIL 1

ISSUE FOR CONSTRUCTION H-2485

REV.	NO.	DATE	DESCRIPTION	APPROVED

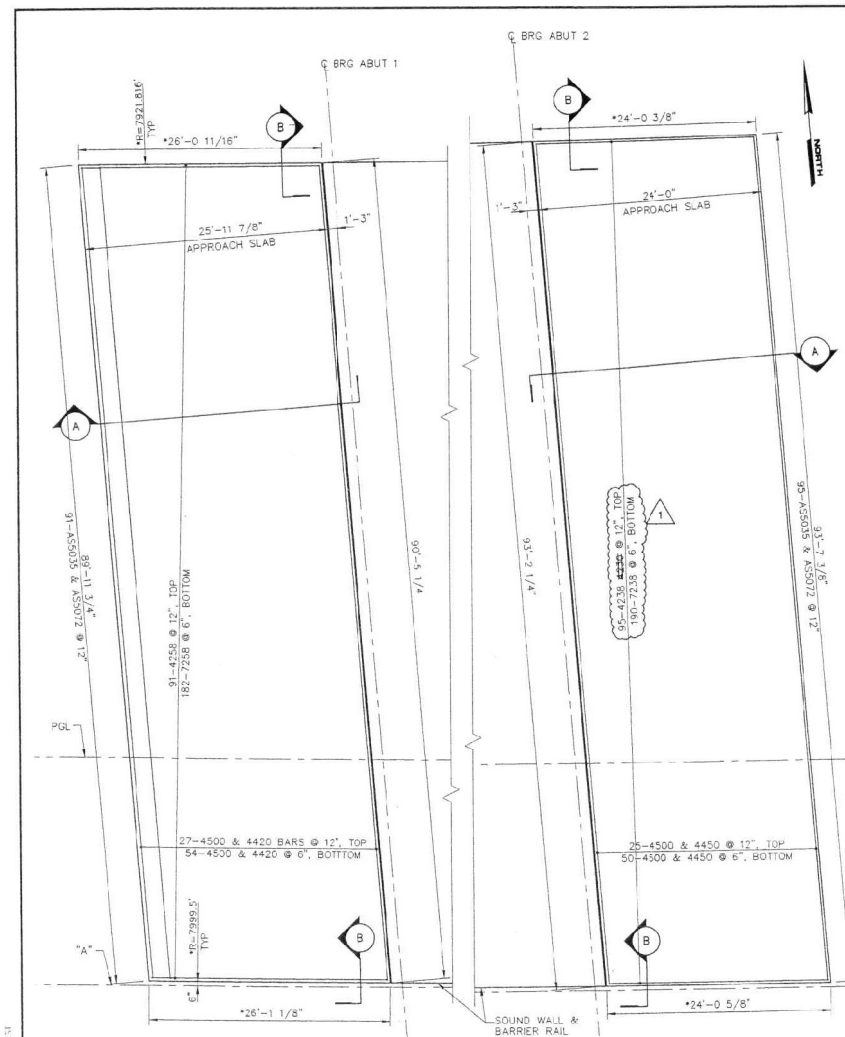


WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DURANGO DRIVE GRADE SEPARATION
PRESTRESSING, CAMBER AND CONCRETE DIAGRAMS
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



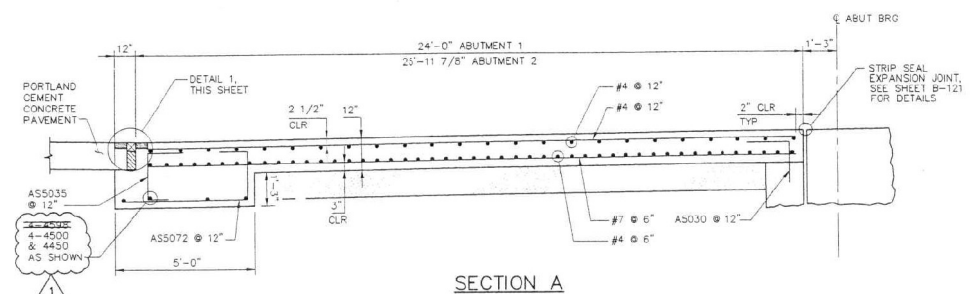
PROJECT NO: PIG 543558	DRAWN BY: KPC
DESIGNED BY: DL	CHECKED BY: MJS
APPROVED BY: CEJ	
PARSONS TRANSPORTATION GROUP	840 ORION DRIVE, SUITE 340 LAS VEGAS, NEVADA 89119 PHONE (702) 430-2116 FAX (702) 430-8412

SCALE	
HORIZ: NONE	L-1631
VERT: NONE	DRAWING NO.
FIELD BOOK	B-118
	SHT. OF

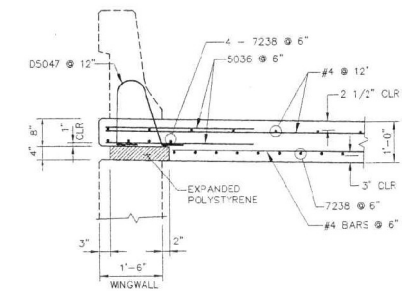


* = APPROACH SLAB ALONG THE OUTSIDE FACE OF BARRIER RAIL

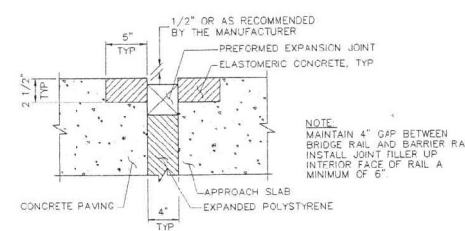
APPROACH SLAB PLAN



SECTION A



SECTION B



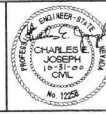
DETAIL 1

ISSUE FOR CONSTRUCTION H-2485

REV. NO.	DATE	DESCRIPTION	APPROVED
1	10/31/00	ADDENDUM NO. 2	CEJ



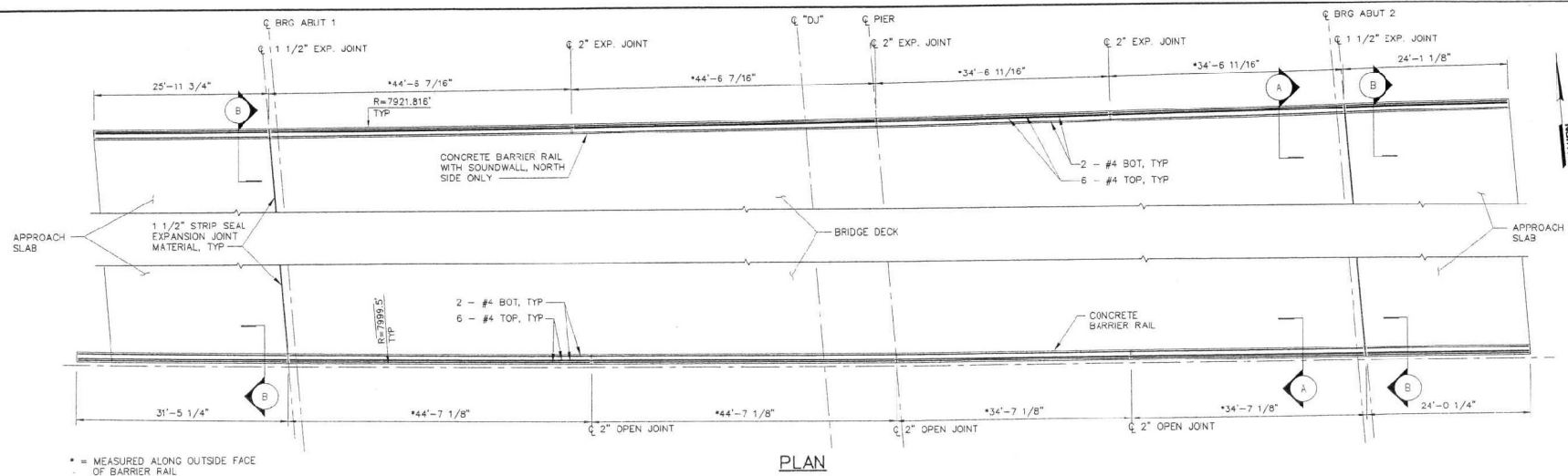
WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DURANGO DRIVE GRADE SEPARATION
APPROACH SLAB DETAILS
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT NO: PTD 643558	DRAWN BY: KPC	SCALE	L-1631
DESIGNED BY: DL	CHECKED BY: MJS	HORIZ: NONE	DRAWING NO.
APPROVED BY: CEJ		VERT: NONE	B-119
		FIELD BOOK	SHT. OF



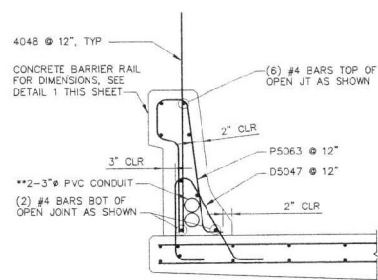
810 ORR DRIVE, SUITE 340
 LAS VEGAS, NEVADA 89119
 PHONE (702) 435-2118
 FAX (702) 435-142



* = MEASURED ALONG OUTSIDE FACE
OF BARRIER RAIL

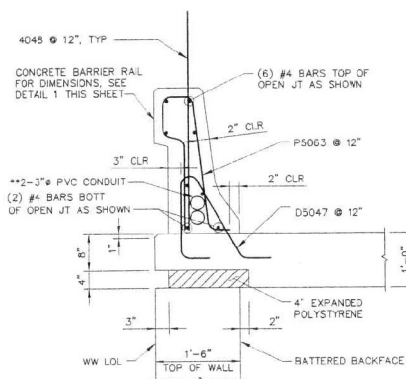
NOTES:

1. SOUND WALL ON NORTH CONCRETE BARRIER NOT SHOWN ON SECTION VIEW FOR CLARITY. SEE DRAWING NO. B-108 FOR SOUND WALL DETAILS.
2. FOR 2" EXPANSION JOINT DETAIL ON NORTH BARRIER RAIL WITH SOUND WALL, SEE SECTION G, DRAWING B-108.

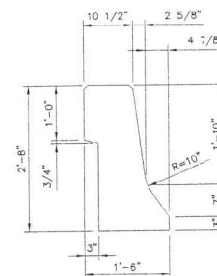


SECTION A

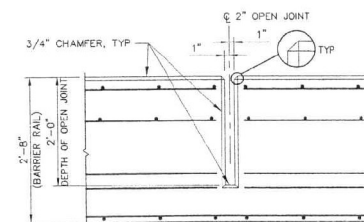
** USE EXPANSION COUPLERS AT
BRIDGE EXPANSION JOIN WITH A
MOVEMENT RATING = 2"



SECTION B



DETAIL 1

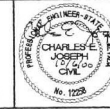


2" OPEN JOINT DETAIL

△			
△			
△			
△			
△			
REF. NO.	DATE	DESCRIPTION	APPROVED



**WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DURANGO DRIVE GRADE SEPARATION
BARRIER RAIL DETAILS
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS**



PROJECT No: PTG 643558 DRAWN BY: KPC
DESIGNED BY: DL CHECKED BY: MJS
APPROVED BY: CEJ

PARSONS
TRANSPORTATION
GROUP
LAS VEGAS, NEVADA

840 GREER DRIVE, SUITE 340
LAS VEGAS, NEVADA 89119
PHONE (702) 455-2116
FAX (702) 455-8412

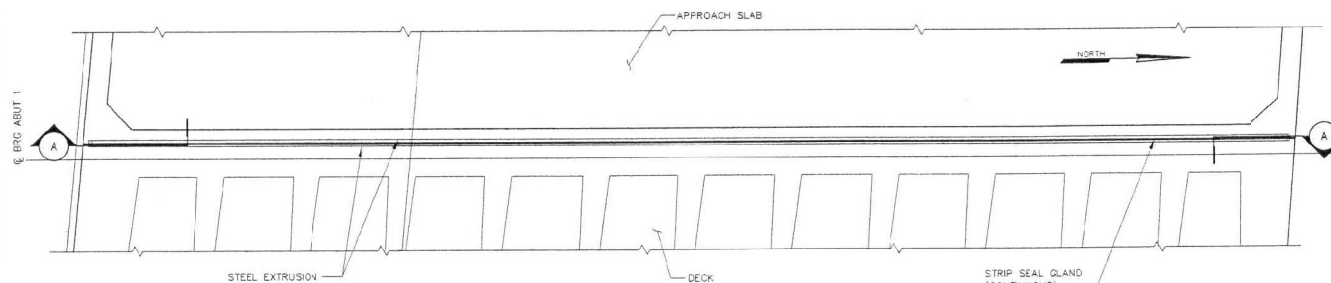
D40 OFFER DRIVE, SUITE 3
LAS VEGAS, NEVADA 89111
PHONE (702) 435-2116
FAX (702) 435-8412



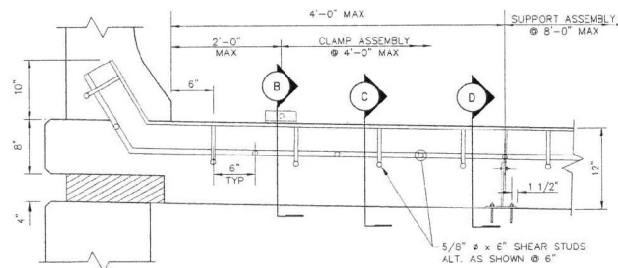
**PARSONS
TRANSPORTATION
GROUP**

ISSUE FOR CONSTRUCTION H-2485

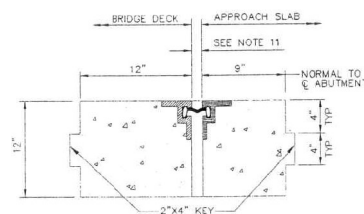
SCALE	L-1631
HORIZ: NONE VERT: NONE	
FIELD BOOK	DRAWING NO. B-120
	SHT. OF



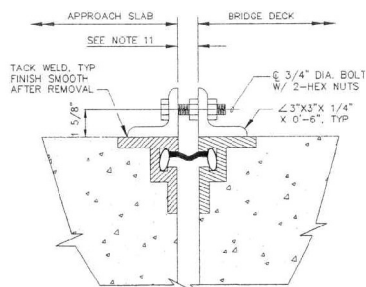
PLAN
ABUTMENT 1 SHOWN, ABUTMENT 2 SIMILAR



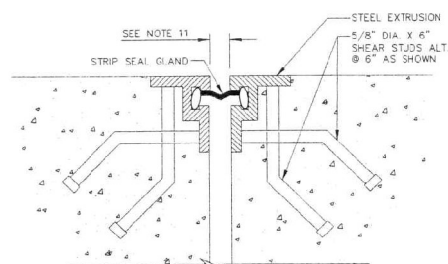
SECTION A



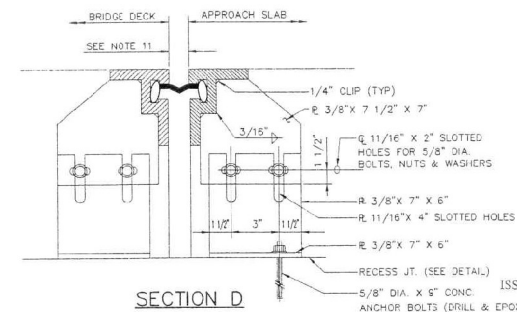
BLOCK OUT DETAIL



SECTION B
(CLAMP ASSEMBLY)



SECTION C



SECTION D

NOTES:

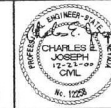
1. THE EXPANSION JOINT MOVEMENT RATING SHALL BE $\pm 3"$.
2. ALL STRUCTURAL STEEL TO BE M270 GR 36 (GALVANIZED) OR 50 W.
3. ALL BOLTS TO BE A307.
4. INSTALL THE STRIP SEAL ASSEMBLY AFTER THE DECK SLAB & APPROACH SLAB HAVE BEEN POURED AND PROFILE GRINDING HAS BEEN COMPLETED. THE STUDS TO AVAILABLE REINFORCING IN THE RECESS AREA TO ENSURE PROPER JOINT PLACEMENT. MAKE FINAL ADJUSTMENTS OF THE JOINT, WIDTH AND ELEVATION BEFORE THE RECESSED PORTION OF THE DECK SLAB AND APPROACH SLAB ARE POURED.
5. AFTER THE CONCRETE HAS HARDENED SUFFICIENTLY, THE TEMPORARY CLAMPS SHALL BE REMOVED AND SURFACE FINISHED SMOOTH.
6. THE STRIP SEAL MANUFACTURER'S INSTRUCTIONS SHALL BE FOLLOWED.
7. FULL PENETRATION BUTT WELD ON ALL STUDS.
8. THE JOINT ASSEMBLY MAY BE MANUFACTURED IN 20 FOOT MINIMUM LENGTHS AND FIELD WELDED UTILIZING FULL PENETRATION BUTT WELDS.
9. STRIP SEAL EXTRUSIONS SHALL BE AASHTO M270 GR. 36 OR 50 W. EXTRUSIONS W/ STUDS AND ALL OTHER HARDWARE TO REMAIN SHALL BE GALVANIZED AFTER FABRICATION. ANY GALVANIZING DAMAGE DURING INSTALLATION SHALL BE METALIZED IN ACCORDANCE WITH SECTION 716 OF THE STANDARD SPECIFICATIONS.
10. THE STRIP SEAL GLAND SHALL BE INSTALLED AS A SINGLE, CONTINUOUS UNIT. NO FIELD SPLICING SHALL BE PERMITTED.
11. 1 1/2" @ 70' F. MODIFY JOINT OPENING WIDTH $\pm 1/16"$ FOR EACH -10' BELOW 70' AND -1/16" FOR EACH +10' ABOVE 70'.

24586121.dwg 12-15-00 12:34:02 pm EJT

REV.	NO.	DATE	DESCRIPTION	APPROVED
1	12/22/00		ISSUED FOR CONSTRUCTION	CEJ



**WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DURANGO DRIVE GRADE SEPARATION
STRIP SEAL EXPANSION JOINT DETAILS
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS**



PROJECT NO: RTO 643558	DRAWN BY: KPC
DESIGNED BY: DL	CHECKED BY: MJS
APPROVED BY: CEJ	

SCALE	L-1631
HORIZ. NONE	DRAWING NO.
VERT. NONE	B-121
FIELD BOOK	SHT. OF



840 GRIDER DRIVE, SUITE 340
LAS VEGAS, NEVADA 89119
PHONE (702) 435-2118
FAX (702) 435-6112

A4022

A4030

A5090

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W4028

W4064 TO W4322

W4064 TO W4365

W4064 TO W4242

W4064 TO W4282

W4318

W4270

W4361

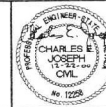
W4261

The image displays 24 technical drawings of pipe fittings, arranged in a grid. Each drawing includes dimensions and a part number:

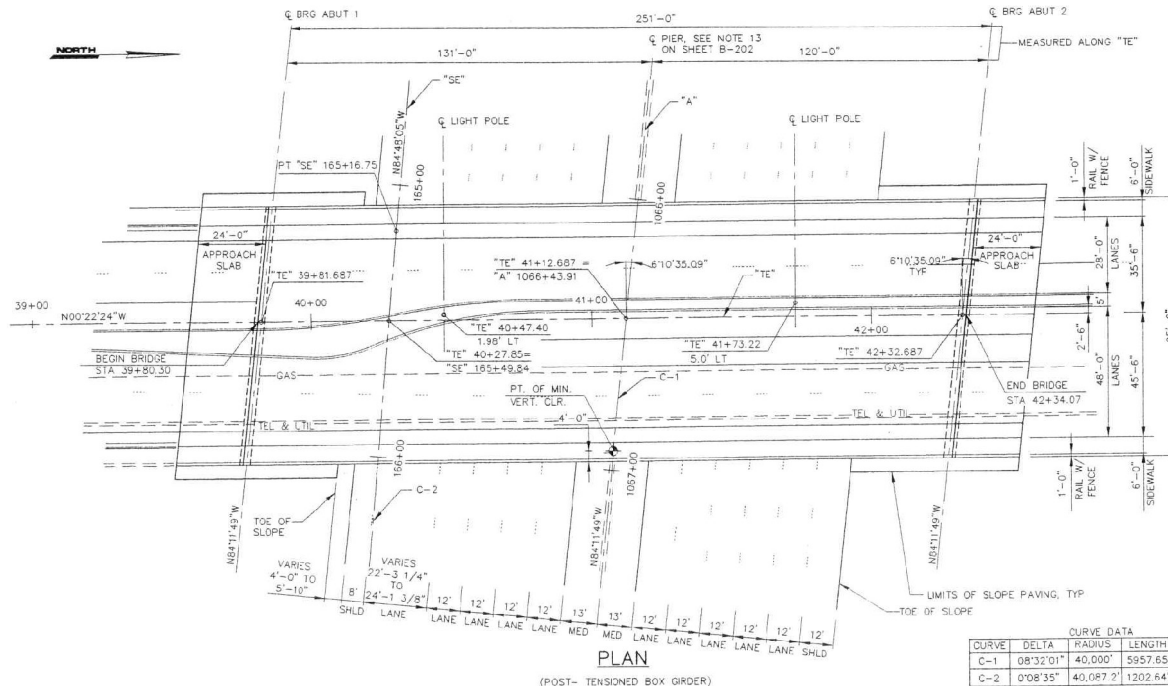
- F5063**: Elbow, 1/2" x 1/2" x 1/2", 8 1/2" length.
- D5047**: Tee, 4" x 6" x 6", 60° angle, 1" x 2" branch.
- S5410**: Tee, 10" x 3" x 2" branch.
- S5041**: Tee, 6" x 3" x 1" branch.
- S5044**: Tee, 6" x 3" x 2" branch.
- S5042**: Tee, 6" x 3" x 2" branch.
- S5044**: Tee, 6" x 3" x 2" branch.
- G5044**: Tee, 6" x 3" x 2" branch.
- S4600**: Tee, 59'-0" x 28'-0" x 1'-0" branch.
- S4290**: Tee, 20'-2" x 1'-0" branch.
- AZ6212**: Tee, 59'-0" x 1'-0" branch.
- AZ6600**: Tee, 59'-0" x 1'-0" branch.
- ED6600**: Tee, 28'-0" x 1'-0" branch.
- ED6290**: Tee, 39'-0" x 1'-0" branch.
- ED6400**: Tee, 51'-0" x 1'-0" branch.
- ED6520**: Tee, 42'-6" x 1'-0" branch.
- D5080**: Tee, 7'-0" x 1'-0" branch.
- G5044**: Tee, 6" x 3" x 2" branch.
- AZ6048**: Tee, 9" x 3" x 2" branch.
- AZ60410**: Tee, 10" x 3" x 2" branch.

[illegible]

WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
DURANGO DRIVE GRADE SEPARATION
BAR BENDING DETAILS
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

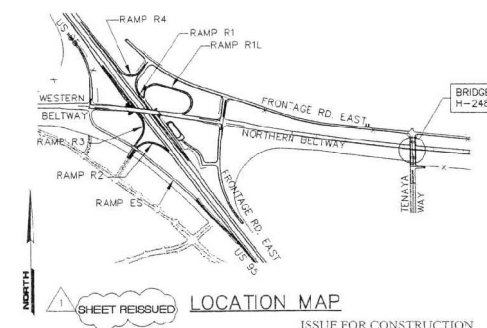
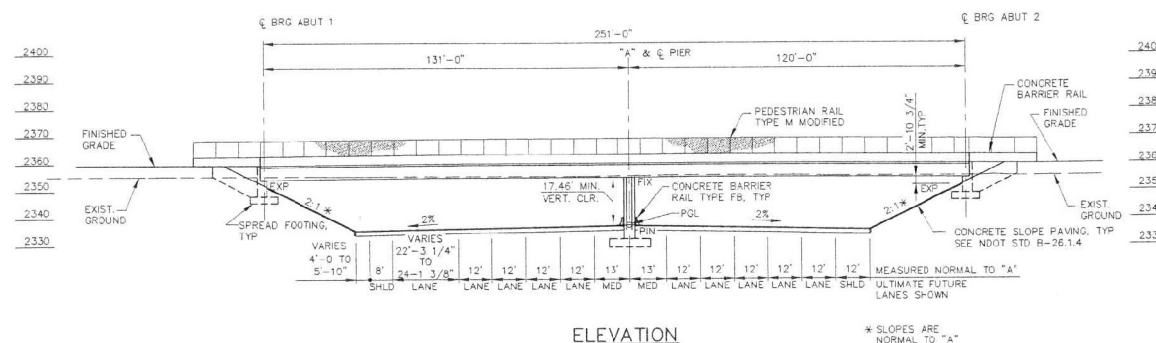


PROJECT NO: <u>PTC 843558</u> DRAWN BY: <u>CPC</u>		SCALE	L-1631
DESIGNED BY: <u>DL</u> CHECKED BY: <u>MJS</u>		HORIZ. NONE	
APPROVED BY: <u>CEJ</u>		VERT. NONE	DRAWING NO.
 PARSONS TRANSPORTATION GROUP LAS VEGAS, NEVADA	840 ORRIVER DRIVE, SUITE 340 LAS VEGAS, NEVADA 89119 PHONE: (702) 435-1116 FAX: (702) 435-8412		
	FIELD BOOK	B-122	
		Sheet	OF



SHEET INDEX

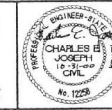
- B-200 GENERAL PLAN
- B-201 TYPICAL SECTION
- B-202 GEOMETRICS, GENERAL NOTES & QUANTITIES
- B-203 ABUTMENT PLAN & ELEVATION
- B-204 ABUTMENT DETAILS
- B-205 WINGWALL 1 & 2 PLAN & ELEVATION
- B-206 PIER CAP DETAILS
- B-207 PIER COLUMN AND FOUNDATION DETAILS
- B-208 TYPICAL DECK SECTION
- B-209 GIRDER LAYOUT
- B-210 TOP SLAB REINFORCING
- B-211 BOTTOM SLAB REINFORCING
- B-212 SUPERSTRUCTURE DETAILS
- B-213 PRESTRESSING, CAMBER AND CONCRETE DIAGRAMS
- B-214 ANCHORAGE ZONE DETAILS
- B-215 APPROACH SLAB DETAILS
- B-216 BARRIER RAIL DETAILS
- B-217 STRIP SEAL EXPANSION JOINT DETAILS
- B-218 BAR BENDING DETAILS



REV. NO.	DATE	DESCRIPTION
1	10/31/00	ADDENDUM NO. 2

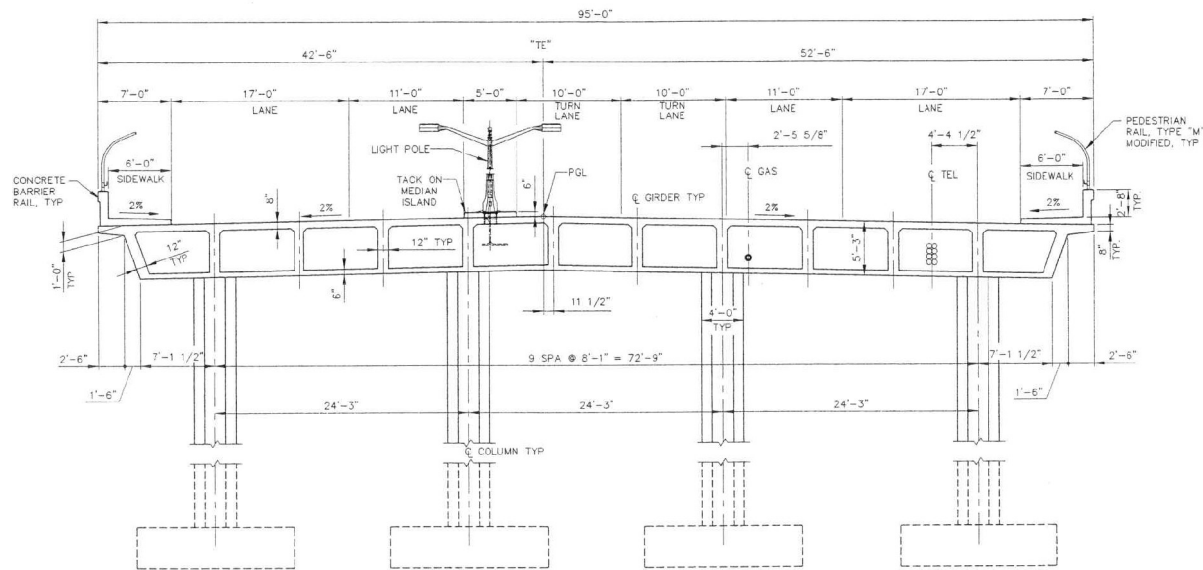


**WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
TENAYA WAY GRADE SEPARATION
GENERAL PLAN
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS**



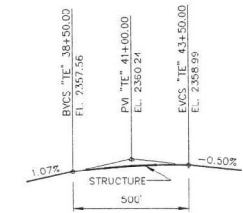
PROJECT No. PTC 643558	DRAWN BY: GPR
DESIGNED BY: MJS	CHECKED BY: MS
APPROVED BY: CEC	
PARSONS TRANSPORTATION GROUP	840 GRIFFIN DRIVE, SUITE 340 LAS VEGAS, NEVADA 89159 PHONE (702) 435-1116 FAX (702) 435-8412

SCALE	HORIZ: NONE	VERT: NONE	FIELD BOOK
L-1631			
DRAWING NO.	B-200		
SHT.	OF		

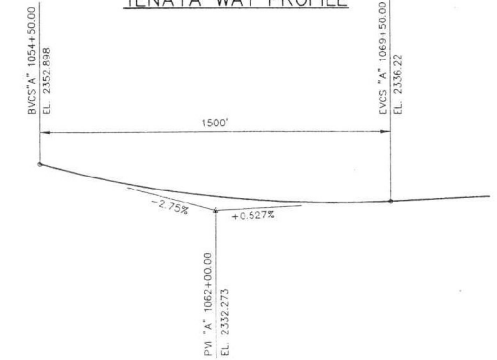


TYPICAL SECTION

- NOTE:
1. MEDIAN AND LANE WIDTHS VARY AT DOWNSTATION END OF BRIDGE, SEE ROADWAY PLANS.
 2. SECTION AT 42+00, OTHER LOCATIONS SIMILAR.
 3. SECTION IS PERPENDICULAR TO THE CENTER LINE OF "TE"



TENAYA WAY PROFILE

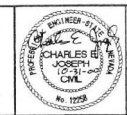


"A" LINE PROFILE

REV. NO.	DATE	DESCRIPTION	APPROVED
1	10/31/00	ADDENDUM NO. 2	CEJ

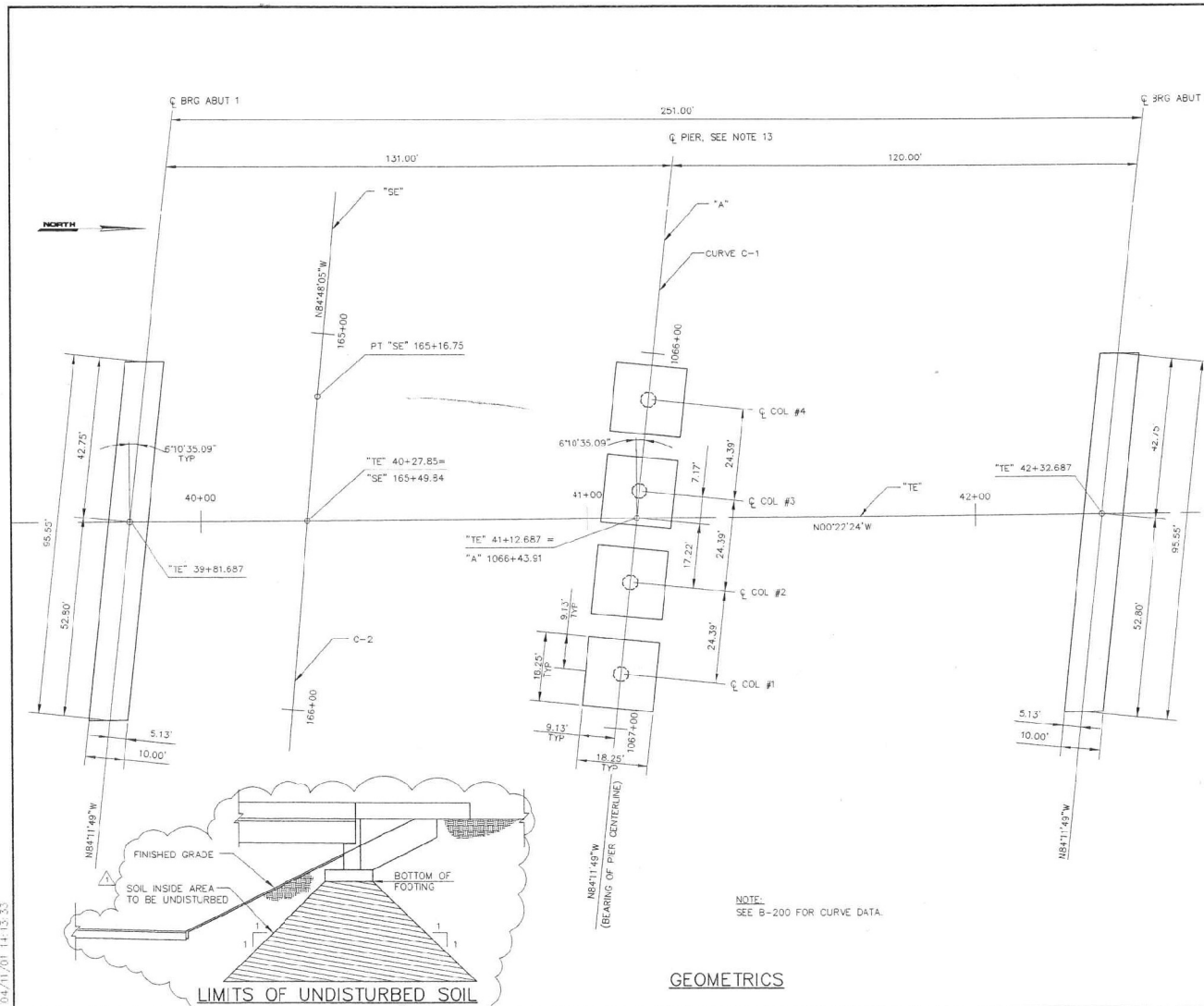


WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
TENAYA WAY GRADE SEPARATION
TYPICAL SECTION
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT NO. PTJ 643558	DRAWN BY: GPR
DESIGNED BY: MJS	CHECKED BY: MS
APPROVED BY: CEJ	
PARSONS TRANSPORTATION GROUP	840 GREEN DRIV., SUITE 340 LAS VEGAS, NEVADA 89119 PHONE (702) 435-2116 FAX (702) 435-8411

SCALE	HORIZ. NONE	VERT. NONE	FIELD BOOK
ISSUE FOR CONSTRUCTION H-2486	L-1631	DRAWING NO. B-201	SHT. OF



NOTE:
SEE B-200 FOR CURVE DATA.

GEOMETRICS

GENERAL NOTES:

- DESIGN SPECIFICATIONS: AASHTO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES," 1998, INCLUDING INTERIMS THROUGH 1999, LOAD FACTOR METHOD.
- CONTRACT SPECIFICATIONS: STATE OF NEVADA, DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 1998" EXCEPT AS NOTED BELOW AND IN THE SPECIAL PROVISIONS FOR THIS CONTRACT.
- LIVE LOAD: STANDARD HS20-44 OR ALTERNATIVE FHWA MILITARY LOADING, OVERLOAD DESIGN BASED ON CALIFORNIA "STANDARD PERMIT DESIGN VEHICLES", (MAXIMUM ALLOWABLE OVERLOAD: "F13" TRUCK).
- SEISMIC LOAD: ACCELERATION COEFFICIENT 0.15G, ATC-6 RESPONSE SPECTRA WITH TYPE II SOIL, DETAILED TO SEISMIC PERFORMANCE CATEGORY 6 REQUIREMENTS.
- FUTURE OVERLAY: OF 3" AT 150 pcf ASSUMED.
- CONCRETE: ALL CONCRETE SHALL BE CLASS A MODIFIED (MAJOR). TYPE V CEMENT SHALL BE USED FOR CONCRETE IN CONTACT WITH SOIL. SEE PRESTRESSING NOTES AND CONCRETE CLASSIFICATION DIAGRAM FOR ULTIMATE COMPRESSIVE CONCRETE STRENGTHS, AND PLACEMENT LOCATIONS AND SEQUENCE.
- REINFORCING STEEL SHALL BE ASTM A706. DIMENSIONS RELATING TO BAR SPACING ARE CENTER TO CENTER BENDING. DIMENSIONS ARE FROM OUT TO OUT OF THE BARS. THE LENGTH OF THE BAR SIZES FOUR (4) AND FIVE (5), WHEN CONSIDERED AS BARS TO CONTROL TEMPERATURE, SHRINKAGE, AND DISTRIBUTION STRESSES BY THE BRIDGE ENGINEER, MAY BE ADJUSTED BY THE CONTRACTOR UPON CONCURRENCE AND APPROVAL OF THE BRIDGE ENGINEER.
- CAMBER: THE CAMBER SHALL BE AS SHOWN ON THE PLANS.
- FOUNDATIONS:

DESIGN TYPE	ALLOWABLE BEARING CAPACITY
ABUTMENTS	6 KSF
PIERS	6 KSF

ALLOWABLE BEARING CAPACITY APPLIES TO AREAS OF UNDISTURBED SOIL AS SHOWN IN THE DETAIL "LIMITS OF UNDISTURBED SOIL" ON THIS SHEET.
- CONSTRUCTION TYPE CODE: X581
- GEOTECHNICAL REPORT IS AVAILABLE FOR CONTRACTOR'S STUDY IN THE DESIGN OFFICE OF CLARK COUNTY PUBLIC WORKS - KLEINFELDER PROJECT NO. 31-300308 DATED JULY 11, 2000.
- FINE SURFACE FINISH: ALL EXPOSED CONCRETE SURFACES EXCEPT THE TOP SURFACE OF THE DECK SLABS AND THE APPROACH SLABS SHALL BE FINE SURFACE FINISHED. ALL SURFACES IN CONTACT WITH THE GROUND SHALL BE FINISHED TO A POINT 1'-0" BELOW THE FINISHED GROUND LINE. FINE SURFACE FINISH TYPE B SHALL BE APPLIED TO THE AREAS SPECIFIED ON THE PLANS. ALL OTHER AREAS SHALL RECEIVE A TYPE A (WHITE) FINISH. TYPE A FINISH SHALL CONFORM TO FEDERAL COLOR NO. 37675 (TABLE IX) AS SHOWN IN FEDERAL STANDARD NO. 595A, AND TYPE B (BROWN) FINISH SHALL CONFORM TO COLOR NO. 35324 (TABLE II) AS SHOWN IN FEDERAL STD. NO. 595A. THE TYPE OF FINE SURFACE FINISH SHALL BE "BONDED GROUT FINISH".
- CENTERLINES: CENTERLINE OF PIER IS TANGENT TO "A" AT THE INTERSECTION OF "TE".
- UNDER DECK LIGHTING: SEE SHEET L-5.

QUANTITIES:

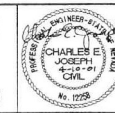
QUANTITIES ARE FURNISHED FOR CONTRACTORS INFORMATION ONLY. BRIDGE SUPERSTRUCTURE, PIER, ABUTMENTS, EXCAVATION AND BACKFILL TO BE BID AS A SINGLE LUMP SUM COST.

DESCRIPTION	UNIT	QUANTITY
STRUCTURE EXCAVATION	CU.YD.	1799
GRANULAR BACKFILL	CU.YD.	1293
CLASS "A" CONCRETE MODIFIED (MAJOR)	CU.YD.	2620
FINE SURFACE FINISH TYPES A & B	SQ.YD.	3650
STRIP SEAL EXPANSION JOINT (3-IN WAVE)	LINE FT.	192
GROOVE CONCRETE DECK SLAB	SQ.YD.	2292
PRESTRESSING CAST-IN-PLACE CONCRETE	LUMP SUM	1
REINFORCING STEEL	LBS.	485,000
LAMINATED ELASTOMERIC BEARING PADS	EA.	24
ACCESS HATCH	EA.	10
CLASS "A" CONCRETE SLOPE PAVING	CU.YD.	100
BRIDGE DECK CURING COMPOUND	GAL.	191

REV. NO.	DATE	DESCRIPTION	APPROVED
1	4/10/01	VARIOUS REVISIONS	



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
TENAYA WAY GRADE SEPARATION
GEOMETRICS, GENERAL NOTES & QUANTITIES
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT NO. PTD 643558	DESIGNED BY: MJS	CHECKED BY: ACH	APPROVED BY: CEJ
PROJECT NO. PTD 643558	DESIGNED BY: MJS	CHECKED BY: ACH	APPROVED BY: CEJ

SCALE	HORIZ. NONE	VERT. NONE
FIELD BOOK		

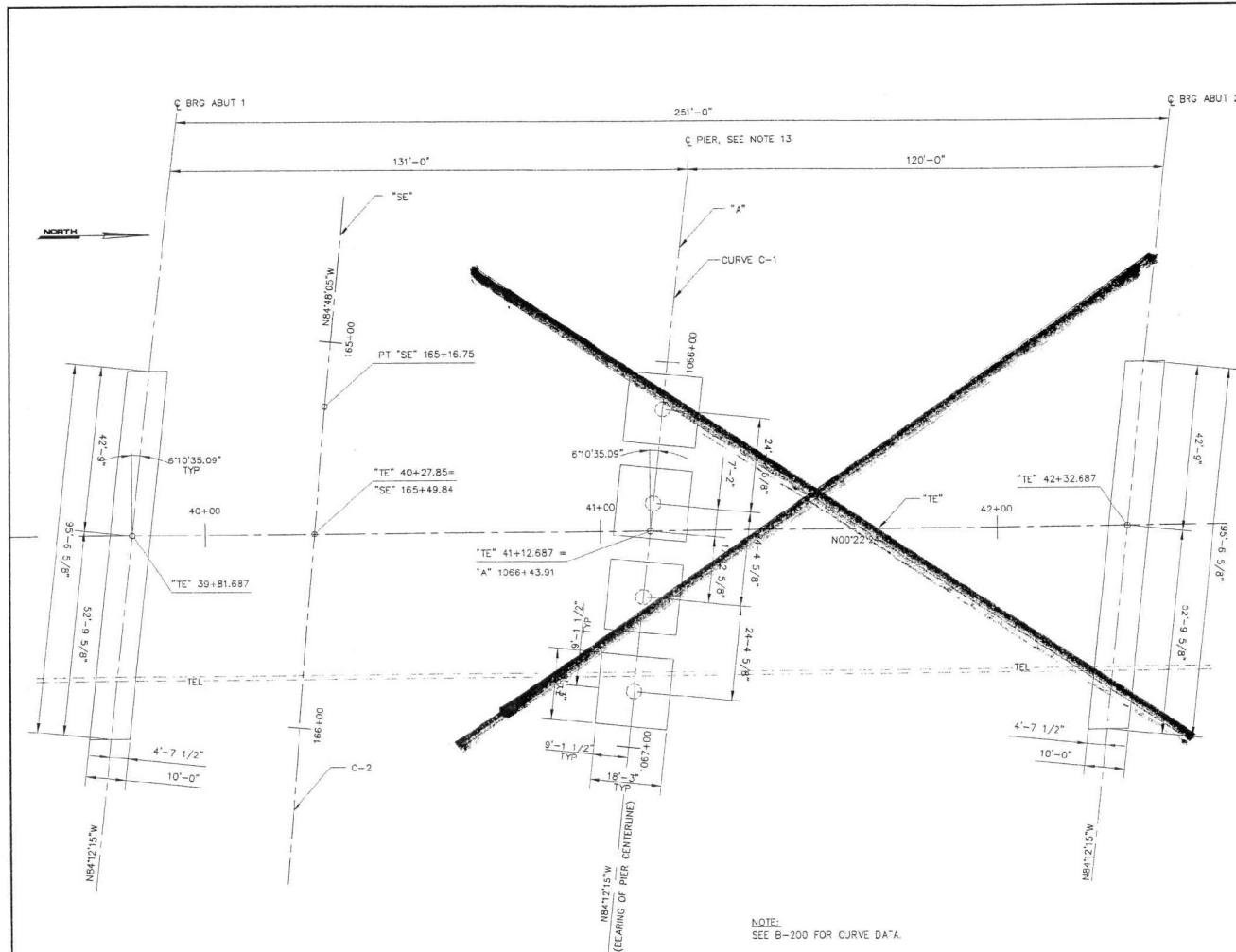
H-2486

L-1631

DRAWING NO.

B-202

SHT. OF



NOTE:
SEE B-200 FOR CURVE DATA

GEOMETRICS

GENERAL NOTES:

- DESIGN SPECIFICATIONS: AASHTO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES," 1996, INCLUDING NTERMS THROUGH 1999.
- CONTRACT SPECIFICATIONS: STATE OF NEVADA, DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 1986" EXCEPT AS NOTED BELOW AND IN THE SPECIAL PROVISIONS FOR THIS CONTRACT.
- LIVE LOAD: STANDARD HS25-44 OR ALTERNATIVE FHWA MILITARY LOADING. OVERLOAD DESIGN BASED ON CALIFORNIA "STANDARD PERMIT DESIGN VEHICLES," (MAXIMUM ALLOWABLE OVERLOAD: "P13" TRUCK).
- SEISMIC LOAD: ACCELERATION COEFFICIENT 0.150. ATC-6 RESPONSE SPECTRA WITH TYPE II SOIL. DETAILED TO SEISMIC PERFORMANCE CATEGORY 6 REQUIREMENTS.
- FUTURE OVERLAY: OF 3" AT 150 pcf ASSUMED.
- CONCRETE: ALL CONCRETE SHALL BE CLASS A MODIFIED (MAJOR). TYPE V CEMENT SHALL BE USED FOR CONCRETE IN CONTACT WITH SOIL. SEE PRESTRESSING NOTES AND CONCRETE CLASSIFICATION DIAGRAM FOR ULTIMATE COMPRESSIVE CONCRETE STRENGTHS, AND PLACEMENT LOCATIONS AND SEQUENCE.
- REINFORCING STEEL SHALL BE ASTM A706. DIMENSIONS RELATING TO BAR SPACING ARE CENTER TO CENTER. BENDING DIMENSIONS ARE FROM OUT TO OUT OF THE BARS. THE LENGTH OF THE BAR SIZES FOUR (4) AND FIVE (5), WHEN CONSIDERED AS BARS TO CONTROL TEMPERATURE, SHRINKAGE, AND DISTRIBUTION STRESSES BY THE BRIDGE ENGINEER, MAY BE ADJUSTED BY THE CONTRACTOR UPON CONCURRENCE AND APPROVAL OF THE BRIDGE ENGINEER.
- CAMBER: THE CAMBER SHALL BE AS SHOWN ON THE PLANS.
- FOUNDATIONS:

DESIGN TYPE	DESIGN CAPACITY	ULTIMATE CAPACITY
ABUTMENTS		
SPREAD FOOTING	5730 KIPS	17190 KIPS
PIERS		
SPREAD FOOTING	1998 KIPS	5994 KIPS
- CONSTRUCTION TYPE CODE: X581
- GEOTECHNICAL REPORT IS AVAILABLE FOR CONTRACTOR'S STUDY IN THE DESIGN OFFICE OF CLARK COUNTY PUBLIC WORKS. - KLEINFELDER PROJECT NO. 31-300308 DATED JULY 11, 2000.
- FINE SURFACE FINISH: ALL EXPOSED CONCRETE SURFACES EXCEPT THE TOP SURFACE OF THE DECK SLABS AND THE APPROACH SLABS SHALL BE FINE SURFACE FINISH. ALL SURFACES IN CONTACT WITH THE GROUND SHALL BE FINISHED TO A POINT 1'-0" BELOW THE FINISHED GROUND LINE. FINE SURFACE FINISH TYPE B SHALL BE APPLIED TO THE AREAS SPECIFIED ON THE PLANS. ALL OTHER AREAS SHALL RECEIVE A TYPE A (WHITE) FINISH. TYPE A FINISH SHALL CONFORM TO FEDERAL COLOR NO. 37875 (TABLE IX) AS SHOWN IN FEDERAL STANDARD NO. 595A, AND TYPE B (BROWN) FINISH SHALL CONFORM TO COLOR NO. 30324 (TABLE II) AS SHOWN IN FEDERAL STD. NO. 595A. THE TYPE OF FINE SURFACE FINISH SHALL BE "BONDED GROUT FINISH".
- CENTERLINES: CENTERLINE OF PIER IS TANGENT TO "A" AT THE INTERSECTION OF "TE".

QUANTITIES:

QUANTITIES ARE FURNISHED FOR CONTRACTORS INFORMATION ONLY. BRIDGE SUPERSTRUCTURE, PIER, ABUTMENTS, EXCAVATION AND BACKFILL TO BE BID AS A SINGLE LUMP SUM COST.

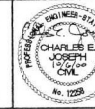
DESCRIPTION	UNIT	QUANTITY
STRUCTURE EXCAVATION	CU.YD.	1799
GRANULAR BACKFILL	CU.YD.	1293
CLASS "A" CONCRETE MODIFIED (MAJOR)	CU.YD.	2620
FINE SURFACE FINISH TYPES A & B	SQ.YD.	3680
STRIP SEAL EXPANSION JOINT (3-IN MOV.)	LINEAL FT.	192
GROOVE CONCRETE DECK SLAB	SQ.YD.	2282
PRESTRESSING CAST-IN-PLACE CONCRETE	LUMP SUM	1
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LAMINATED ELASTOMERIC BEARING PADS	EA.	24
ACCESS HATCH	EA.	10
CLASS "A" CONCRETE SLOPE PAVING	CU.YD.	100
BRIDGE DECK CURING COMPOUND	GAL.	191

ISSUE FOR CONSTRUCTION H-2486

REV. NO.	DATE	DESCRIPTION	APPROVED

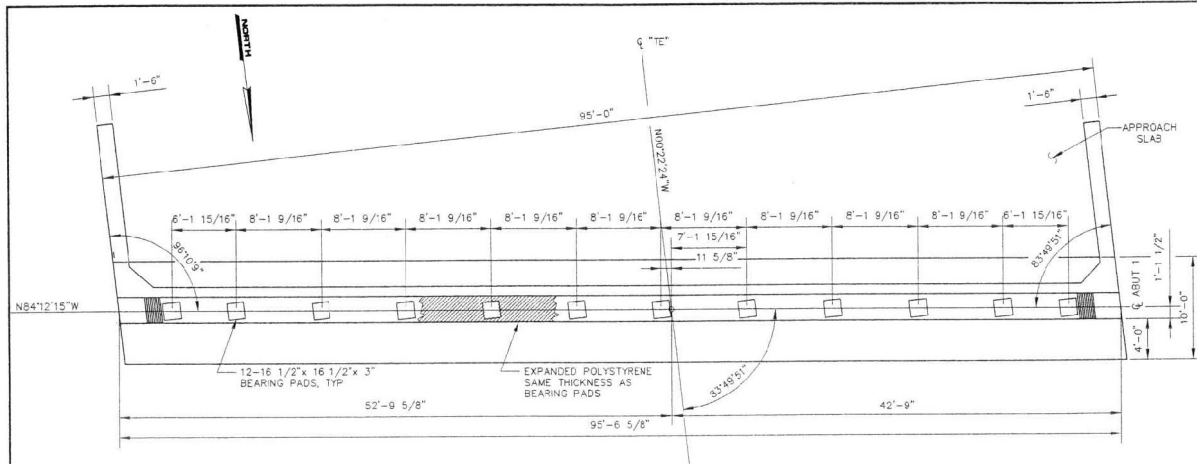


WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
TENAYA WAY GRADE SEPARATION
GEOMETRICS, GENERAL NOTES & QUANTITIES
 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

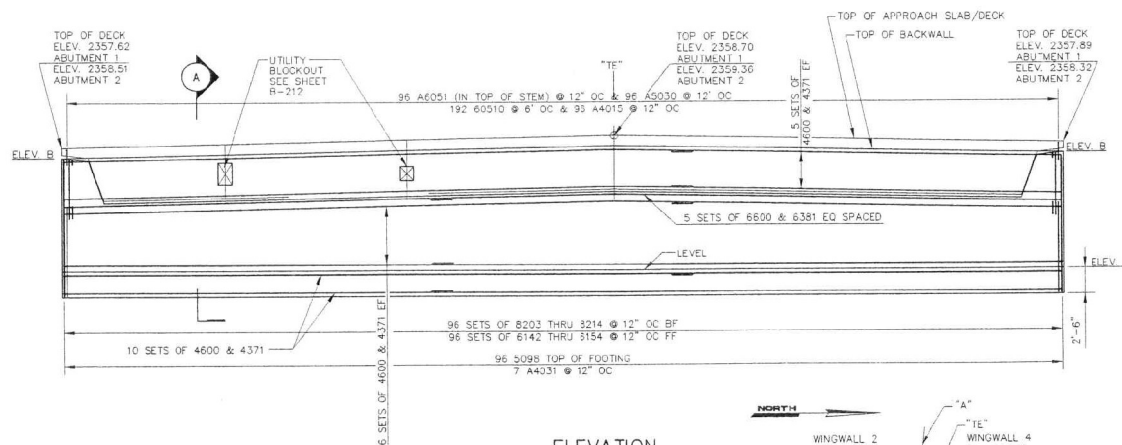


PROJECT NO: FIG 843508 DRAWN BY: ADL
 DESIGNED BY: WJS CHECKED BY: DL
 APPROVED BY: SEJ
 PARSONS TRANSPORTATION GROUP
 840 GREER DRIVE, SUITE 340
 LAS VEGAS, NEVADA 89119
 PHONE (702) 438-2118
 FAX (702) 438-8412

SCALE	DRAWING NO.
HORIZ: NONE	L-1631
VERT: NONE	B-202
FIELD BOOK	SHT. OF



PLAN
(ABUTMENT 1 SHOWN, ABUTMENT 2 SIMILAR)

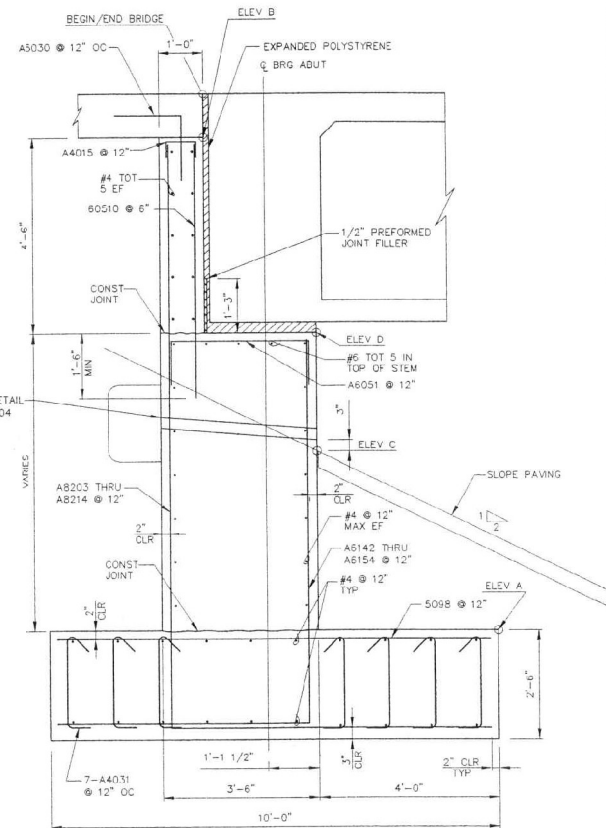


ELEVATION
(AT FRONT FACE OF BACK WALL)
(ABUTMENT 1 SHOWN)

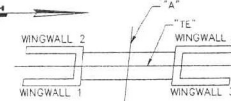
NOTES:

1. CONSTRUCTION JOINTS SHALL BE ROUGHENED TO 1/4" AMPLITUDE
2. SEE PAGE B-205 FOR ELEVATION TABLE
3. ABUTMENT BACKWALL SHALL NOT BE PLACED UNTIL ORDER STRESSING IS COMPLETE.

WEEPHOLE SEE DETAIL ON SHEET B-204



SECTION A



ELEV LOCATION PLAN

REINFORCING LAP SPLICES

- #8 TO #8 - 4'-3"
#7 TO #7 - 3'-1 1/2"
#6 TO #6 - 2'-7"
#5 TO #5 - 2'-2"
#4 TO #4 - 1'-8"

STAGGER LAP SPLICES, 24" MINIMUM

1 SHEET REISSUED

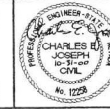
ISSUE FOR CONSTRUCTION

H-2486

REV	NO.	DATE	DESCRIPTION	APPROVED
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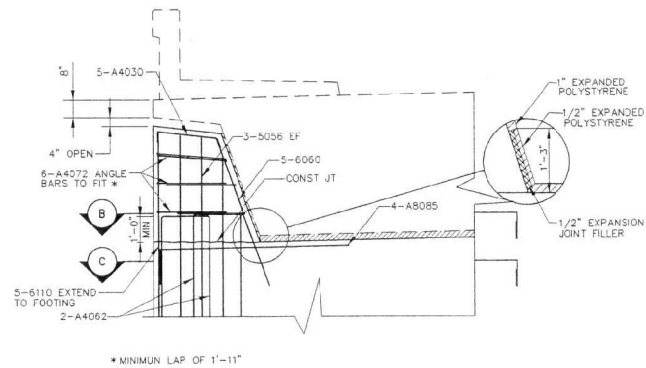


WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
TENAYA WAY GRADE SEPARATION
ABUTMENT PLAN & ELEVATION
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

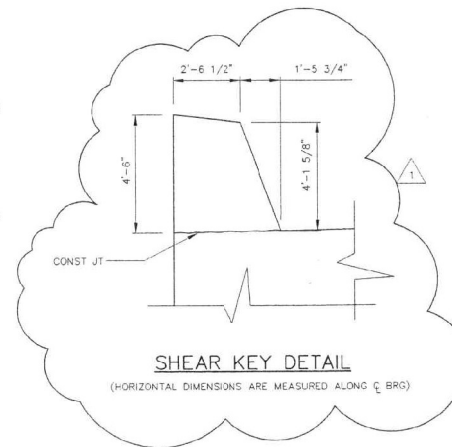


PROJECT NO. PTC 843558	DRAWN BY: ADL	SCALE
DESIGNED BY: MJS	CHECKED BY: LCH	HORIZ: NONE
APPROVED BY: CEJ		VERT: NONE
PARSONS TRANSPORTATION GROUP	840 ORR DRIVE, SUITE 340 LAS VEGAS, NEVADA 89119 PHONE (702) 433-2118 FAX (702) 433-8402	FIELD BOOK

L-1631
DRAWING NO. B-203
SHEET 1 OF 1

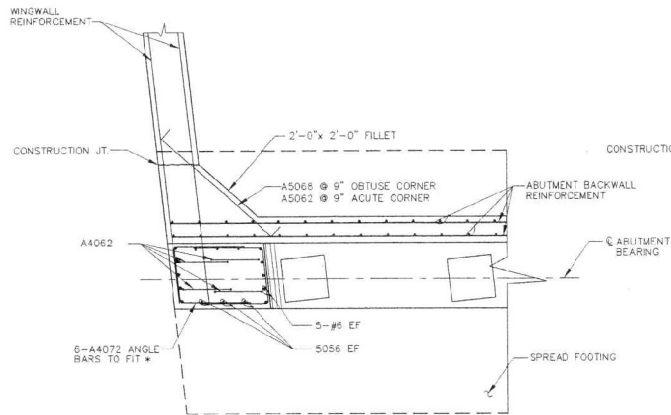


SHEAR KEY SECTION

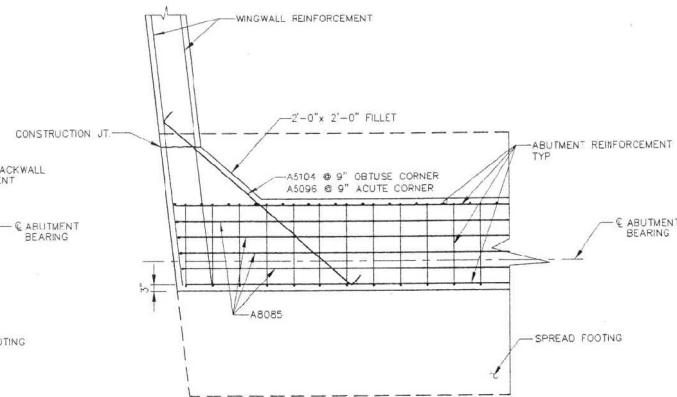


SHEAR KEY DETAIL

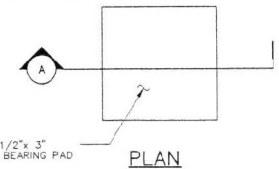
(HORIZONTAL DIMENSIONS ARE MEASURED ALONG C BRG)



SECTION B

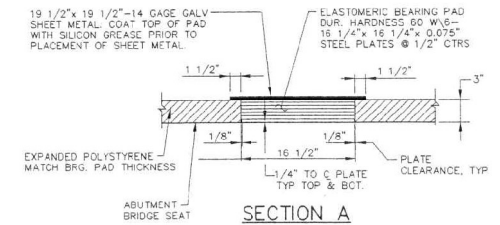


SECTION C



16 1/2" x 16 1/2" x 3"
ELASTOMERIC BEARING PAD

PLAN

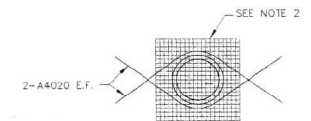


SECTION A

BEARING PAD DETAILS

BEARING PAD NOTES

1. BEARING PADS SHALL BE ORIENTED ALONG GREER AXIS.
2. ELASTOMERIC BEARING PADS SHALL BE GLUED TO THE ABUTMENT USING A SINGLE COMPONENT POLYURETHANE ADHESIVE MEETING ASTM D4070 STANDARDS.
3. SILICON GREASE SHALL MEET MILITARY SPECIFICATIONS MIL-S-8860.
4. ELASTOMERIC BEARING PADS SHALL CONSIST OF 6-14GA. STEEL PLATES MEETING ASTM D4014 STANDARDS.
5. ELASTOMERIC HARDNESS SHALL BE EQUAL TO OR GREATER THAN 60.
6. SEE DRAWINGS B-203 FOR BEARING PAD LAYOUTS.



WEEP HOLE DRAINAGE DETAIL

WEEP HOLE NOTES:

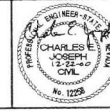
1. 4" DRAINS AT 10'± CENTERS. LOCATE 3"± ABOVE FINISHED GRADE.
2. 6" SQUARE ALUMINUM OR GALVANIZED STEEL WIRE MESH HARDWARE CLOTH WITH MINIMUM WIRE DIA. OF 0.03".
3. 2 CU FT. OF MDOT TYPE 2 DRAIN BACKFILL ENCAPSULATED IN A GEOTEXTILE FABRIC SECURELY TIED. THE GEOTEXTILE FABRIC MUST:
 - A.) MEET AT LEAST CLASS 2 STRENGTH REQUIREMENTS ACCORDING TO AASHTO M288 TEST METHOD.
 - B.) HAVE AN AOS NO GREATER THAN U.S. SIEVE NO. 40.
 - C.) HAVE A PERMITTIVITY OF AT LEAST 0.5 SEC².
4. COST OF WEEP HOLES COMPLETE AND IN PLACE SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO DIRECT PAYMENT WILL BE MADE THEREFOR.

ISSUE FOR CONSTRUCTION H-2486

REV. NO.	DATE	DESCRIPTION	APPROVED
1	12/22/06	ISSUE FOR CONSTRUCTION	CEJ



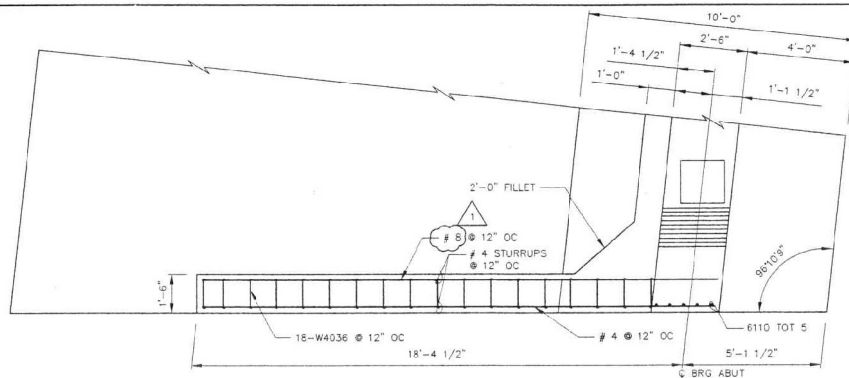
WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
TENAYA WAY GRADE SEPARATION
ABUTMENT DETAILS
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT NO. PTO 643558	DRAWN BY: ADL	SCALE	L-1631
DESIGNED BY: WJS	CHECKED BY: A.C.H.	HORIZ: NONE	DRAWING NO. B-204
APPROVED BY: CEJ		VERT: NONE	
		FIELD BOOK	
		SMT.	OF

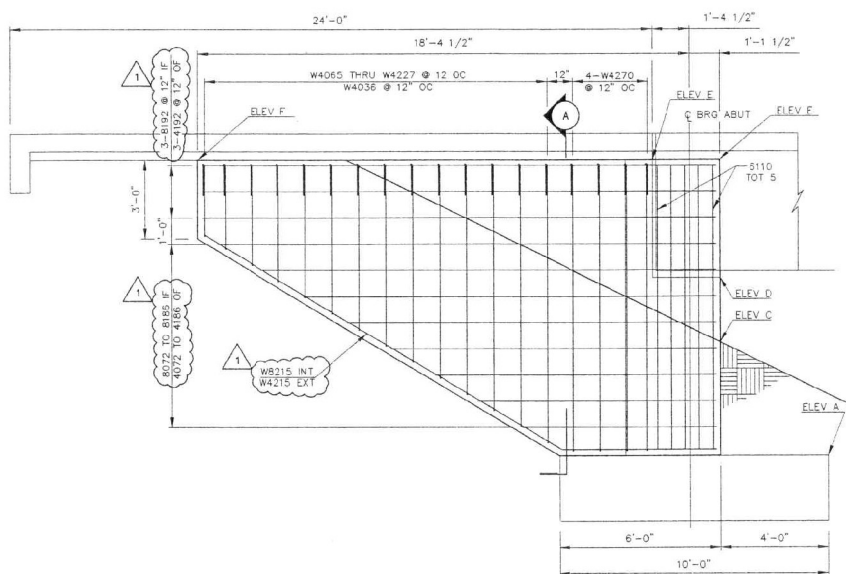


640 GREER DRIVE, SUITE 540
LAS VEGAS, NEVADA 89133
PHONE (702) 452-1118
FAX (702) 452-1442



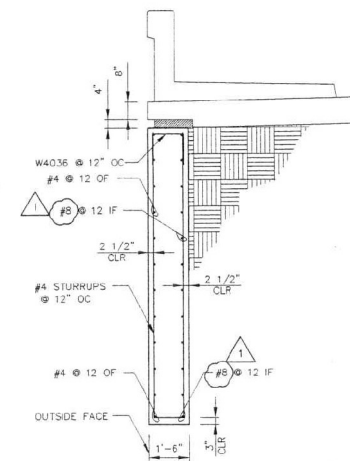
TYPICAL WINGWALL PLAN

(WINGWALL 1 SHOWN, WINGWALL 2, 3 & 4 SIMILAR)

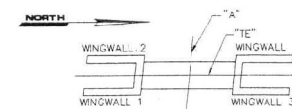


ELEVATION

(AT WINGWALL 1, WINGWALL 2, 3 & 4 SIMILAR)



SECTION A



WINGWALL LOCATION PLAN

ELEVATION TABLE

	LOCATION	ELEV A	ELEV B	ELEV C	ELEV D	ELEV E	ELEV F
ABUT 1	1	2345.56	2356.59	2349.41	2352.12	2356.62	2356.48
	2	2345.56	2356.59	2349.41	2352.12	2356.62	2356.48
ABUT 2	3	2346.22	2357.31	2350.24	2352.82	2357.32	2357.29
	4	2346.22	2357.31	2350.24	2352.82	2357.32	2357.29

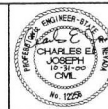
ISSUE FOR CONSTRUCTION

H-2486

REV. NO.	DATE	DESCRIPTION
1	10/31/00	ADDENDUM NO. 2
2		
3		
4		
5		
6		
7		
8		
9		
10		

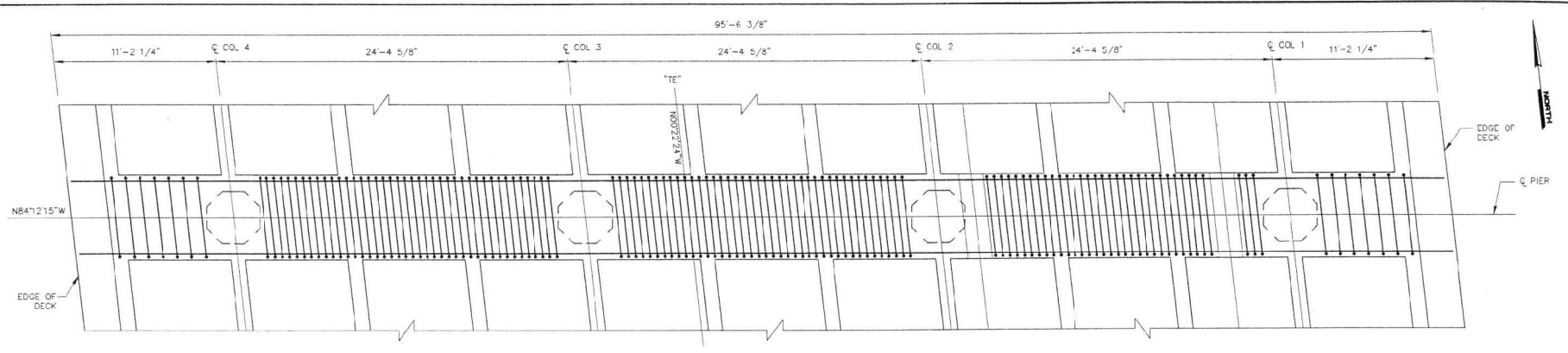


**WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
TENAYA WAY GRADE SEPARATION
WINGWALL 1 & 2 PLAN & ELEVATION
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS**

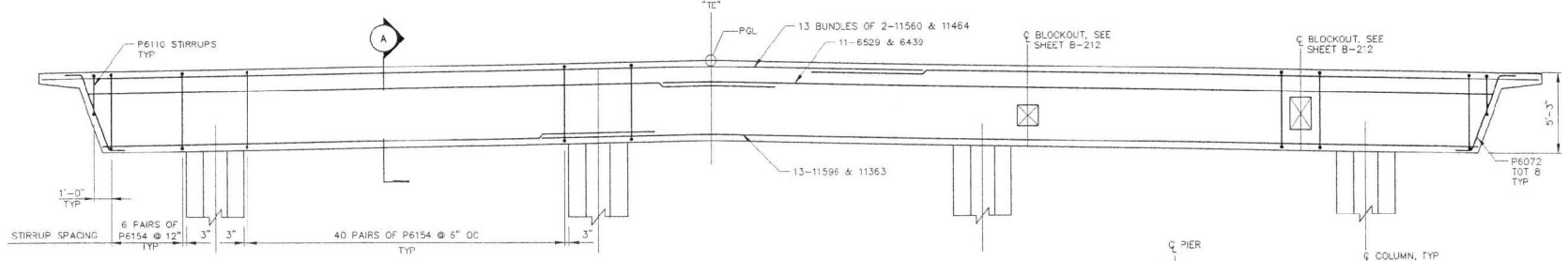


PROJECT NO:	FIG 543558	DRAWN BY:	NDL
DESIGNED BY:	MJS	CHECKED BY:	JCH
APPROVED BY:	CEL		
PARSONS TRANSPORTATION GROUP	840 GRIFF DRIVE, SUITE 340 LAS VEGAS, NEVADA 89119 PHONE (702) 438-1116 FAX (702) 438-1112		

SCALE	
HORIZ: NONE	
VERT: NONE	
FIELD BOOK	
DRAWING NO.	B-205
SHT.	OF



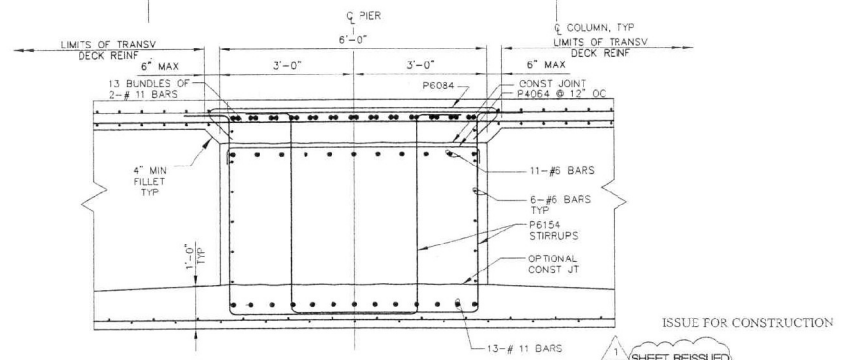
PLAN



ELEVATION

REINFORCING LAP SPICES

- #11 TO #11 - 8'-5"
 - #8 TO #8 - 4'-3"
 - #7 TO #7 - 3'-3"
 - #6 TO #6 - 2'-7"
 - #5 TO #5 - 2'-2"
 - #4 TO #4 - 1'-6"
- STAGGER LAP SPICES, 24" MINIMUM



SECTION A

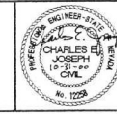
ISSUE FOR CONSTRUCTION

1 SHEET REISSUED

REV NO.	DATE	DESCRIPTION	APPROVED
1	10/31/06	ADDENDUM NO. 2	CEJ



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES TENAYA WAY GRADE SEPARATION PIER CAP DETAILS
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT NO. P10 643558	DRAWN BY: ADL
DESIGNED BY: MJS	CHECKED BY: ACH
APPROVED BY: CEJ	

SCALE	HORIZ. NONE	VERT. NONE
FIELD BOOK		
DRAWING NO. B-206		
SHT 1 OF 1		

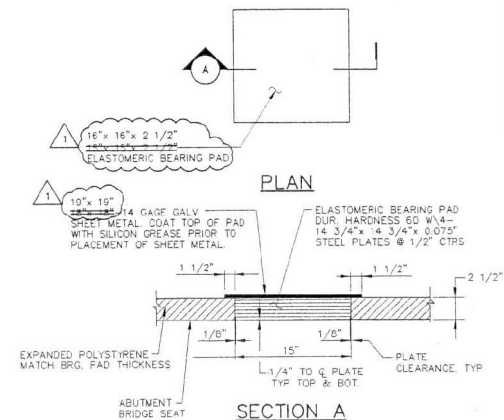
H-2486

L-1631

B-206

SHT 1 OF 1

#4 TO #4 - 1'-11"



BEARING PAD NOTES

1. BEARING PADS SHALL BE ORIENTED ALONG GIRDER AXIS.
2. ELASTOMERIC GASKET SHALL BE GUED TO THE ABUTMENT USING A SINGLE COMPONENT POLYURETHANE ADHESIVE MEETING ASTM D4070 STANDARDS.
3. SILICON GREASE SHALL MEET MILITARY SPECIFICATIONS MIL-S-8850.
4. ELASTOMERIC BEARING PADS SHALL CONSIST OF 6-14GA. STEEL PLATES MEETING ASTM D4014 STANDARDS.
5. ELASTOMERIC HARDNESS SHALL BE EQUAL TO OR GREATER THAN 60.
6. SEE DRAWINGS B-303 & B-304 FOR BEARING PAD LAYOUTS.



WEEP HOLE NOTES:

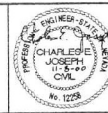
1. 4" DRAINS AT 15' CENTERS. LOCATE 3" ABOVE FINISHED GRADE.
2. 6" SQUARE ALUMINUM OR GALVANIZED STEEL WIRE MESH HARDWARE CLOTH WITH MINIMUM WIRE DIA. OF 0.03"
3. 2 CU FT OF NOOT TYPE 2 GRAIN BACKFILL ENCAPSULATED IN A GEOTEXTILE FABRIC SECURELY TIED. THE GEOTEXTILE FABRIC MUST:
- A.) MEET AT LEAST CLASS 2 STRENGTH REQUIREMENTS ACCORDING TO AASHTO M288 TEST METHOD.
 - B.) HAVE AN AOS NO GREATER THAN U.S. SIEVE NO. 40.
 - C.) HAVE A PERMITTIVITY OF AT LEAST 0.5
- 1-
- AMAD 2016, FILTERWAVE 500 AND GEOTEX 601 MEET THE ABOVE REQUIREMENTS.
4. COST OF WEEP HOLES COMPLETE AND IN PLACE SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO DIRECT PAYMENT WILL BE MADE THEREOF.

ISSUE FOR CONSTRUCTION

H-2338

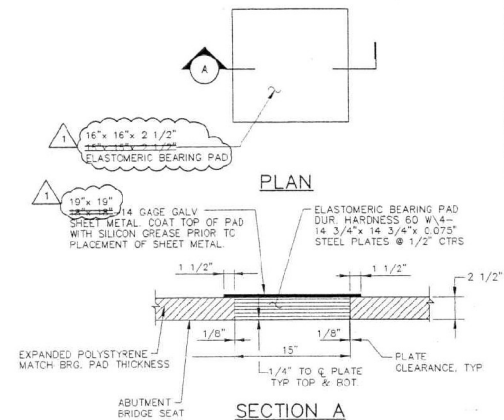
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WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
RAMP "ES" OVER RAMPS "R2" & "R3"
ABUTMENT DETAILS
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



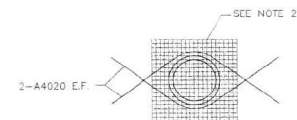
PROJECT NO: <u>PTG 642058</u>	DRAWN BY: <u>ADL</u>	SCALE	L-1631
DESIGNED BY: <u>CEJ</u>	CHECKED BY: <u>RM</u>	HORIZ: NONE	
APPROVED BY: <u>CEJ</u>		VERT: NONE	DRAWING NO
 PARSONS TRANSPORTATION GROUP LAS VEGAS, NEVADA	3400 GROSS DRIVE, SUITE 340 LAS VEGAS, NEVADA 89119 PHONE (702) 330-5714 FAX (702) 435-6412	FIELD BOOK	B-305
		SUIT. OF	

#4 TO #4 - 1'-11"



BEARING PAD NOTES

1. BEARING PADS SHALL BE ORIENTED ALONG GIRDER AXIS.
2. ELASTOMERIC BEARING PADS SHALL BE GUED TO THE ABUTMENT USING A SINGLE COMPONENT POLYURETHANE ADHESIVE MEETING ASTM D4070 STANDARDS.
3. SILICON GREASE SHALL MEET MILITARY SPECIFICATIONS MIL-S-8860.
4. ELASTOMERIC BEARING PADS SHALL CONSIST OF 6-14GA. STEEL PLATES MEETING ASTM D4014 STANDARDS.
5. ELASTOMERIC HARDNESS SHALL BE EQUAL TO OR GREATER THAN 60.
6. SEE DRAWINGS B-303 & B-304 FOR BEARING PAD LAYOUTS.



WEEP HOLE DRAINAGE DETAIL

WEEP HOLE NOTES:

1. 4" DRAINS AT 12" CENTERS. LOCATE 1/2" ABOVE FINISHED GRADE
 2. 6" SQUARE ALUMINUM OR GALVANIZED STEEL, W/RE WASH HARDWARE CLOTH WITH MINIMUM WIRE DIA. OF 0.03"
 3. 2 CU FT OF NOOT TYPE 2 DRAIN BACKFILL ENCAPSULATED IN A GEOTEXTILE FABRIC SECURELY TIED. THE GEOTEXTILE FABRIC MUST:
 - A) MEET AT LEAST CLASS 2 STRENGTH REQUIREMENTS ACCORDING TO AASHTO M288 TEST METHOD.
 - B) HAVE AN AOS NO GREATER THAN U.S. SIEVE NO. 40
- 1-
- AMACO 2016, FILTERWAVE 500 AND GEOTEXT 601 MEET THE ABOVE REQUIREMENTS.
- COST OF WEEP HOLES COMPLETE AND IN PLACE SHALL BE CONSIDERED INCIDENTAL TO THE MAIN DRAINAGE SYSTEM. EXCESS MATERIAL WILL BE MADE THEREOF.

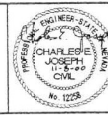
ISSUE FOR CONSTRUCTION

H-2338

A	11/08/00	ADDENDUM NO. 3		CFJ
B	10/31/00	ADDENDUM NO. 2		CEJ
REV. NO.	DATE	DESCRIPTION		APPROVED



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
RAMP "ES" OVER RAMPS "R2" & "R3"
ABUTMENT DETAILS
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT NO: <u>P10 643558</u>	DRAWN BY: <u>ADL</u>	SCALE	<u>L-1631</u>
DESIGNED BY: <u>CEJ</u>	CHECKED BY: <u>RM</u>	HORIZ. NONE	DRAWING NO. <u>B-305</u>
APPROVED BY: <u>CEJ</u>		VERT. NONE	
 PARSONS TRANSPORTATION GROUP A DIVISION OF PARSONS BRINCKERHOFF CORPORATION SAN FRANCISCO, CALIF.		840 GRUBER DRIVE, SUITE 340 LAS VEGAS, NEVADA 89119 PHONE (702) 438-0174 FAX (702) 435-8411	FIELD BOOK DATE _____ BY _____

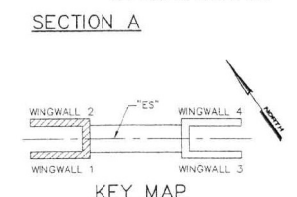
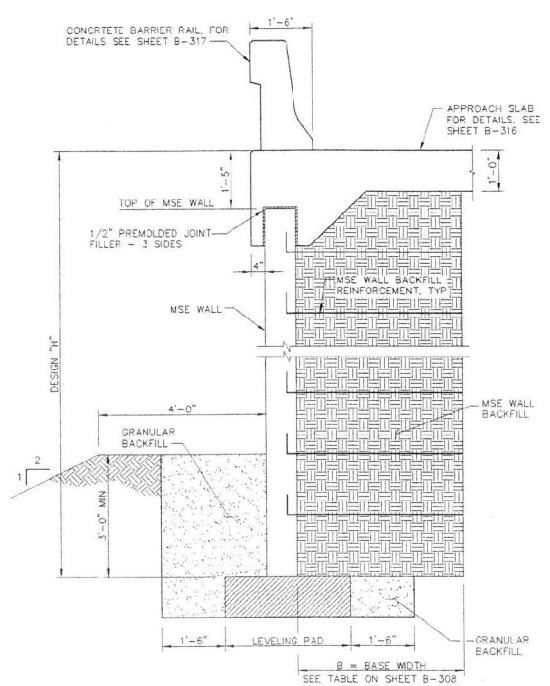
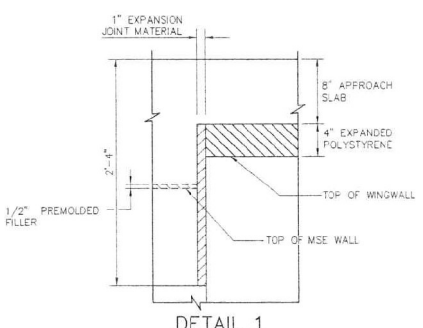
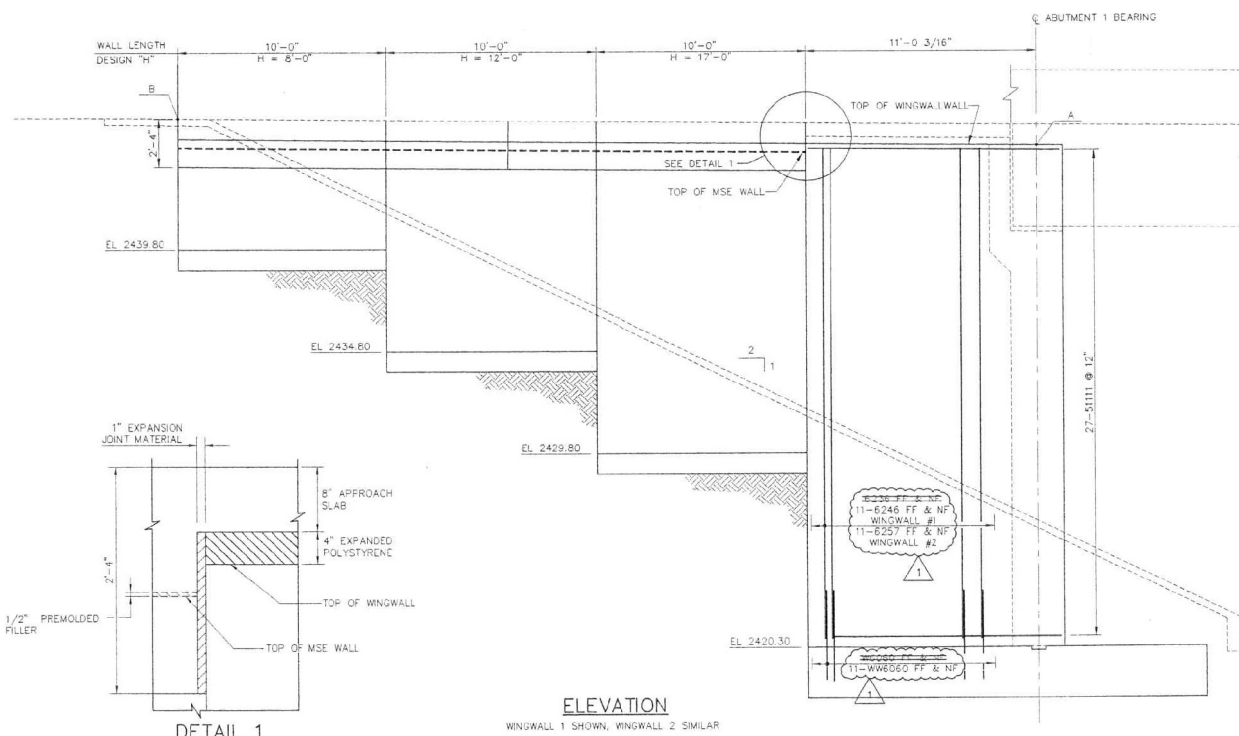
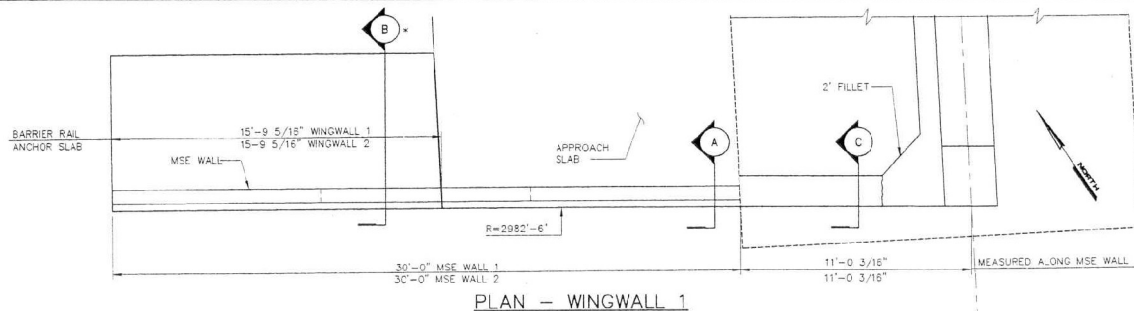


TABLE OF ELEVATIONS		
LOCATION	A	B
WINGWALL 1	2444.84	2446.23
WINGWALL 2	2445.04	2447.44

NOTE: FOR SECTIONS B & C SEE SHEET B-308
 ISSUE FOR CONSTRUCTION H-2338

REV. NO.	DATE	DESCRIPTION	APPROVED
1	10/31/00	ADDENDUM NO. 2	CEJ

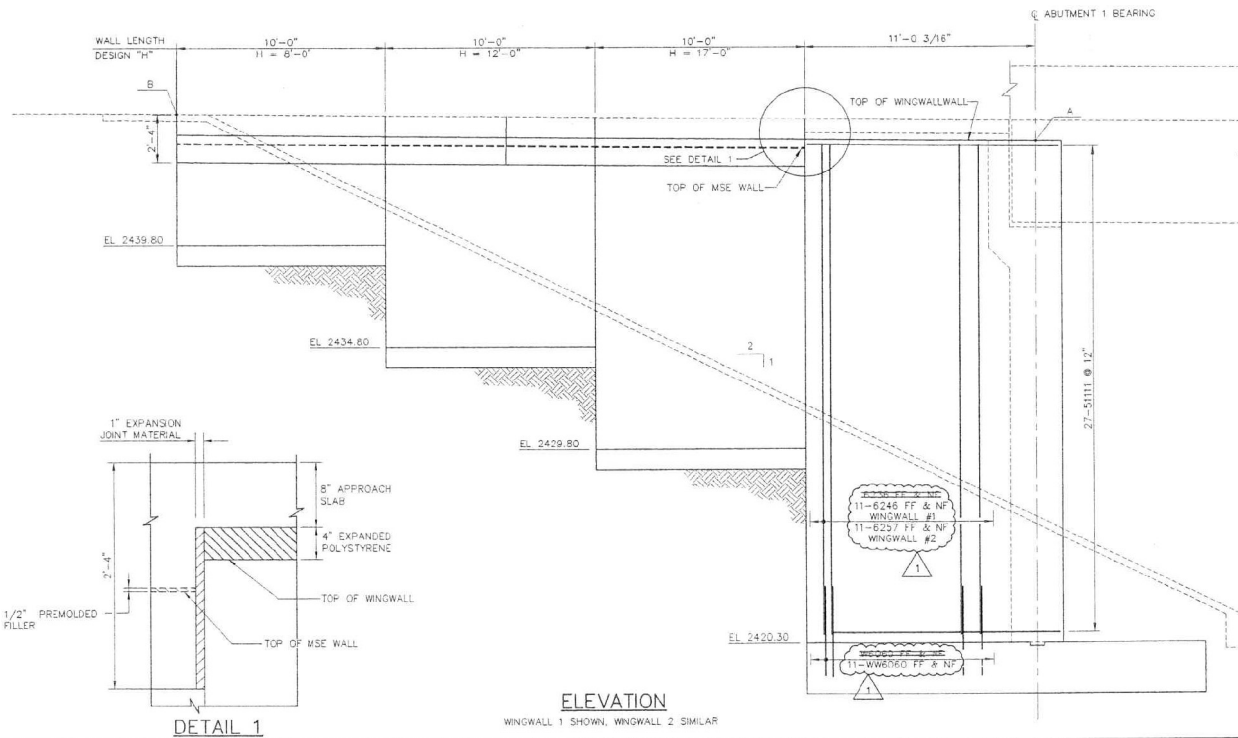
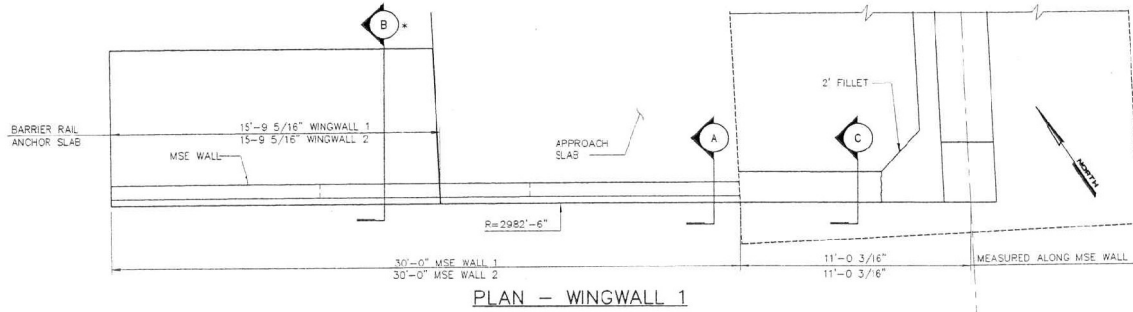


WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES RAMP "ES" OVER RAMP "R2" & "R3" WINGWALL 1 & 2 PLAN AND ELEVATION
 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



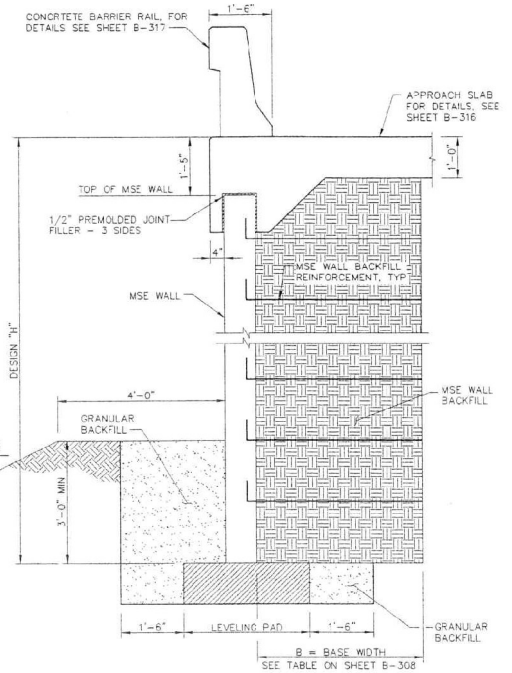
PROJECT No: PTD 843558	DRAWN BY: CPC	SCALE: L-1631
DESIGNED BY: CEJ	CHECKED BY: RM	HORIZ: NONE
APPROVED BY: CEJ		VERT: NONE
		DRAWING NO: B-306
840 ORR DRIVE, SUITE 340 LAS VEGAS, NEVADA 89119 PHONE (702) 435-2118 FAX (702) 435-842		FIELD BOOK: SHT OF

WB/NB EL CAPITAN WAY TO JONES BOULEVARD

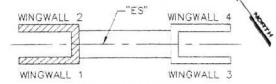


DETAIL 1

ELEVATION
WINGWALL 1 SHOWN, WINGWALL 2 SIMILAR



SECTION A



KEY MAP

TABLE OF ELEVATIONS		
LOCATION	A	B
WINGWALL 1	2444.84	2446.23
WINGWALL 2	2446.04	2447.44

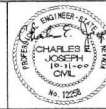
NOTE
FOR SECTIONS B & C SEE SHEET B-308

ISSUE FOR CONSTRUCTION H-2338

REV.	DATE	DESCRIPTION	APPROVED
1	10/31/00	ADDENDUM NO. 2	CEJ



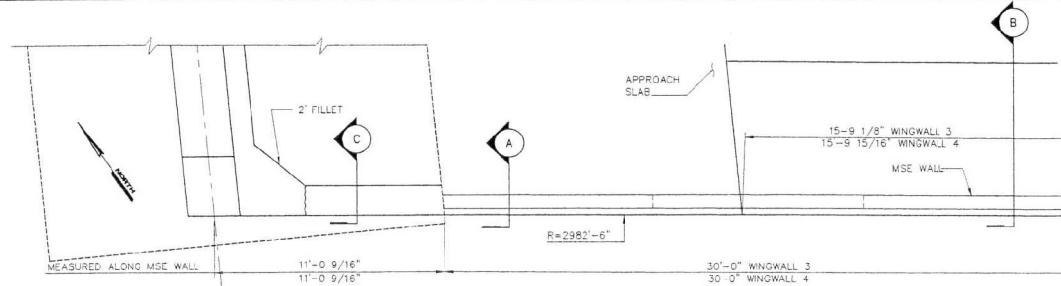
**WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
RAMP "ES" OVER RAMPS "R2" & "R3"
WINGWALL 1 & 2 PLAN AND ELEVATION
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS**



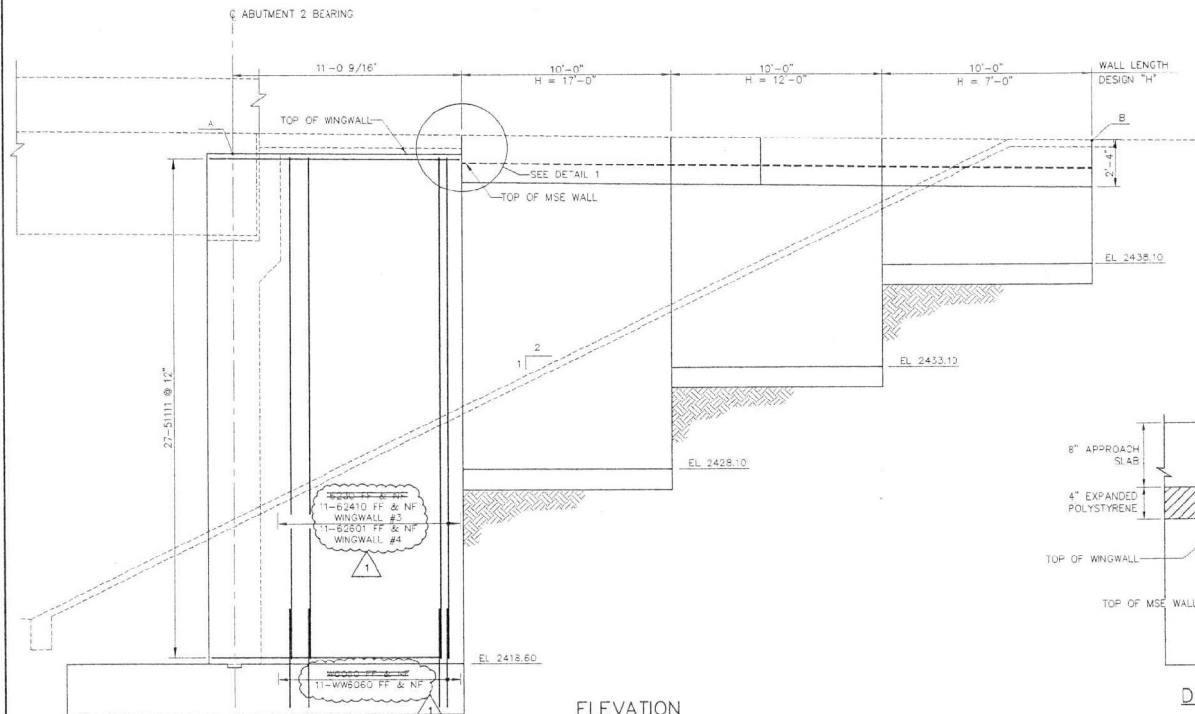
PROJECT NO.	PTG 643558	DRAWN BY	KRC
DESIGNED BY	CEJ	CHECKED BY	RM
APPROVED BY	CEJ		

SCALE	L-1631
HORIZ. NONE	DRAWING NO.
VERT. NONE	B-306
FIELD BOOK	SHT
	OF

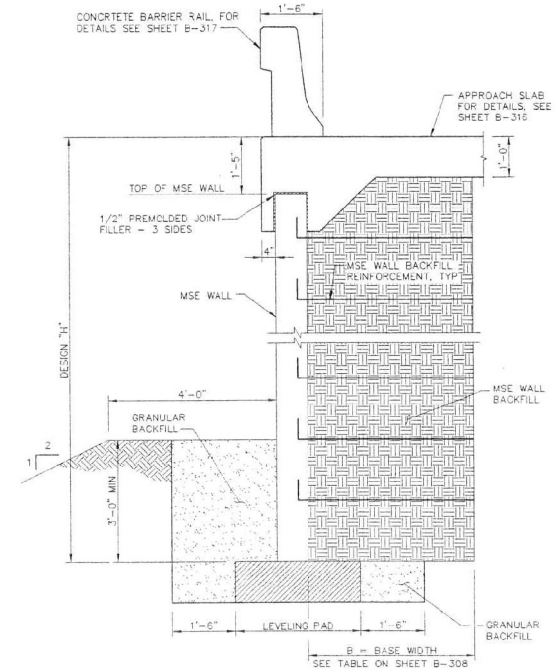
WB/NB EL CAPITAN WAY TO JONES BOULEVARD



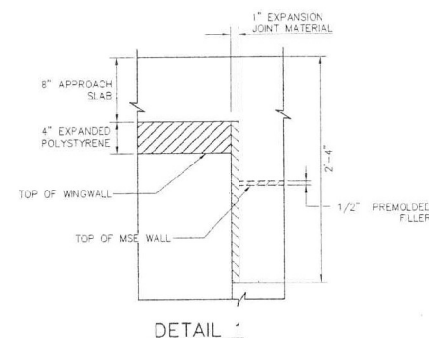
PLAN - WINGWALL 3



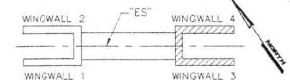
ELEVATION



SECTION A



DETAIL



KEY MAP

TABLE OF ELEVATIONS			
LOCATION	A	B	
WINGWALL 3	2443.62	2444.12	
WINGWALL 4	2444.85	2445.35	

NOTE:
FOR SECTIONS B & C, SEE SHEET B-308

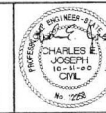
ISSUE FOR CONSTRUCTION

H-2338

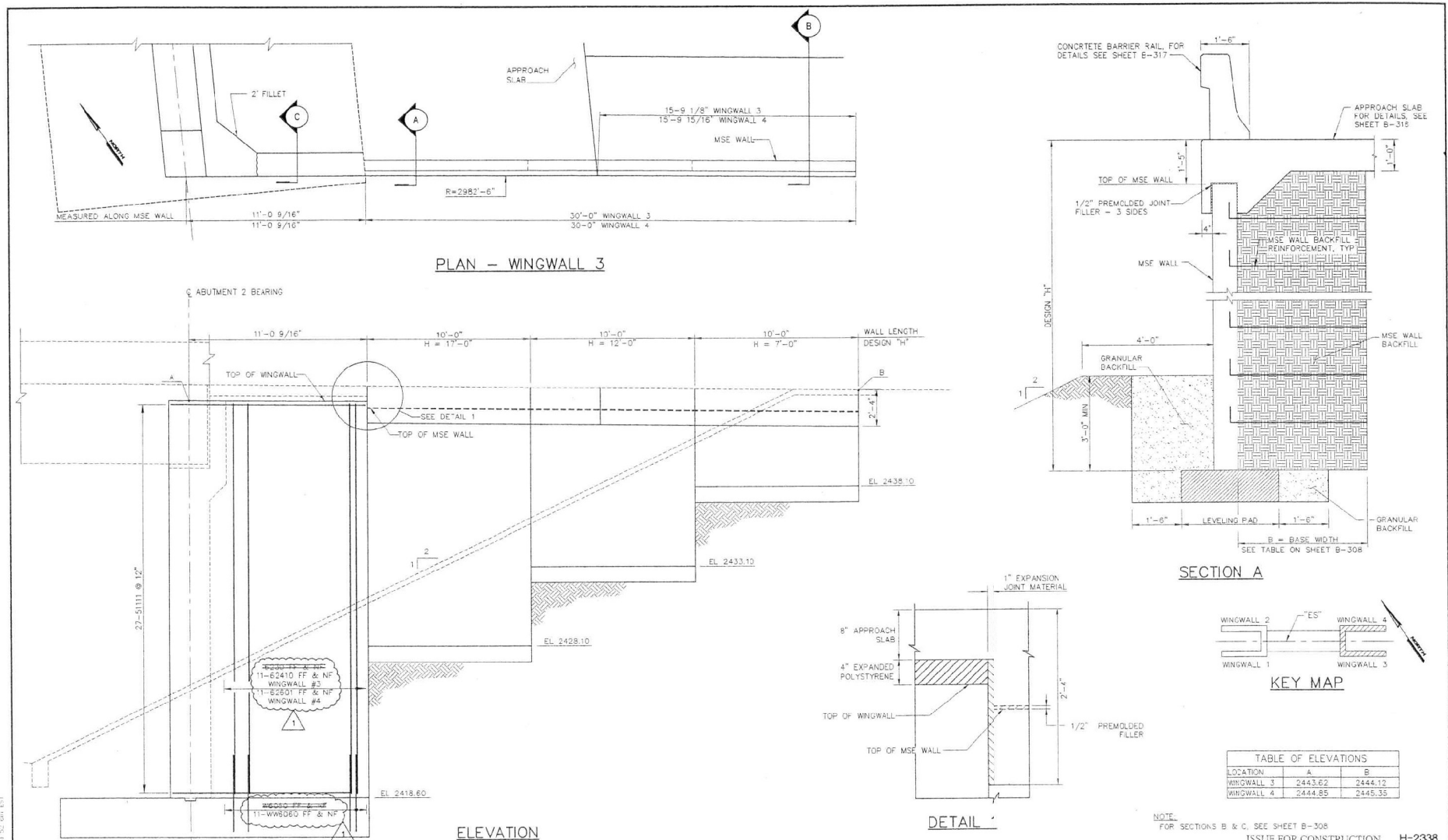
REV.	NO.	DATE	DESCRIPTION
1	10/31/00		ADDENDUM NO. 2



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
RAMP "ES" OVER RAMPS "R2" & "R3"
WINGWALLS 3 & 4 PLAN AND ELEVATION
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

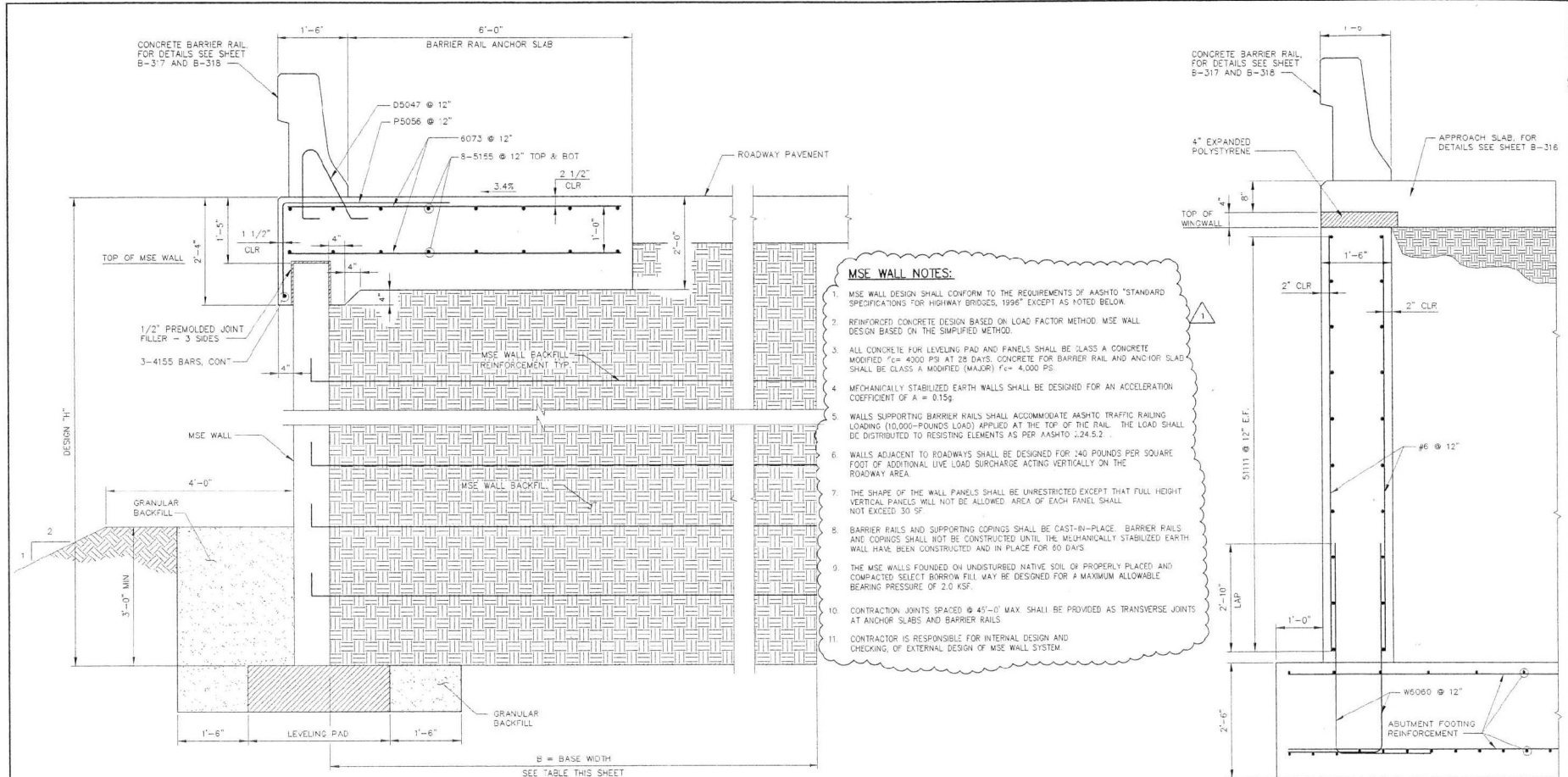


PROJECT No:	PTG 643555	DRAWN BY:	RPG
DESIGNED BY:	CEJ	CHECKED BY:	RM
APPROVED BY:	CEJ		
		840 GRIEN DRIVE, SUITE 340 LAS VEGAS, NEVADA 89115 PHONE (702) 435-2716 FAX (702) 435-9411	
SCALE:		L-1631	
HORIZ: NONE		DRAWING NO.	
VERT: NONE		B-307	
FIELD BOOK		SHT. OF	



10/31/00 REV. NO. DATE DESCRIPTION ADDENDUM NO. 2			CEJ APPROVED						WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES RAMP "ES" OVER RAMPS "R2" & "R3" WINGWALLS 3 & 4 PLAN AND ELEVATION CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS						PROJECT No: PDS 643558 DRAWN BY: KPC DESIGNED BY: CEJ CHECKED BY: RM APPROVED BY: CEJ			SCALE HORIZ: NONE VERT: NONE FIELD BOOK			L-1631 DRAWING NO. B-307 SHT. OF		
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WINGWALL 3



SECTION B

MSE WINGWALL BASE WIDTH

DESIGN "H"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"
BASE WIDTH "B"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"

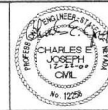
ISSUE FOR CONSTRUCTION
SECTION C

H-2338

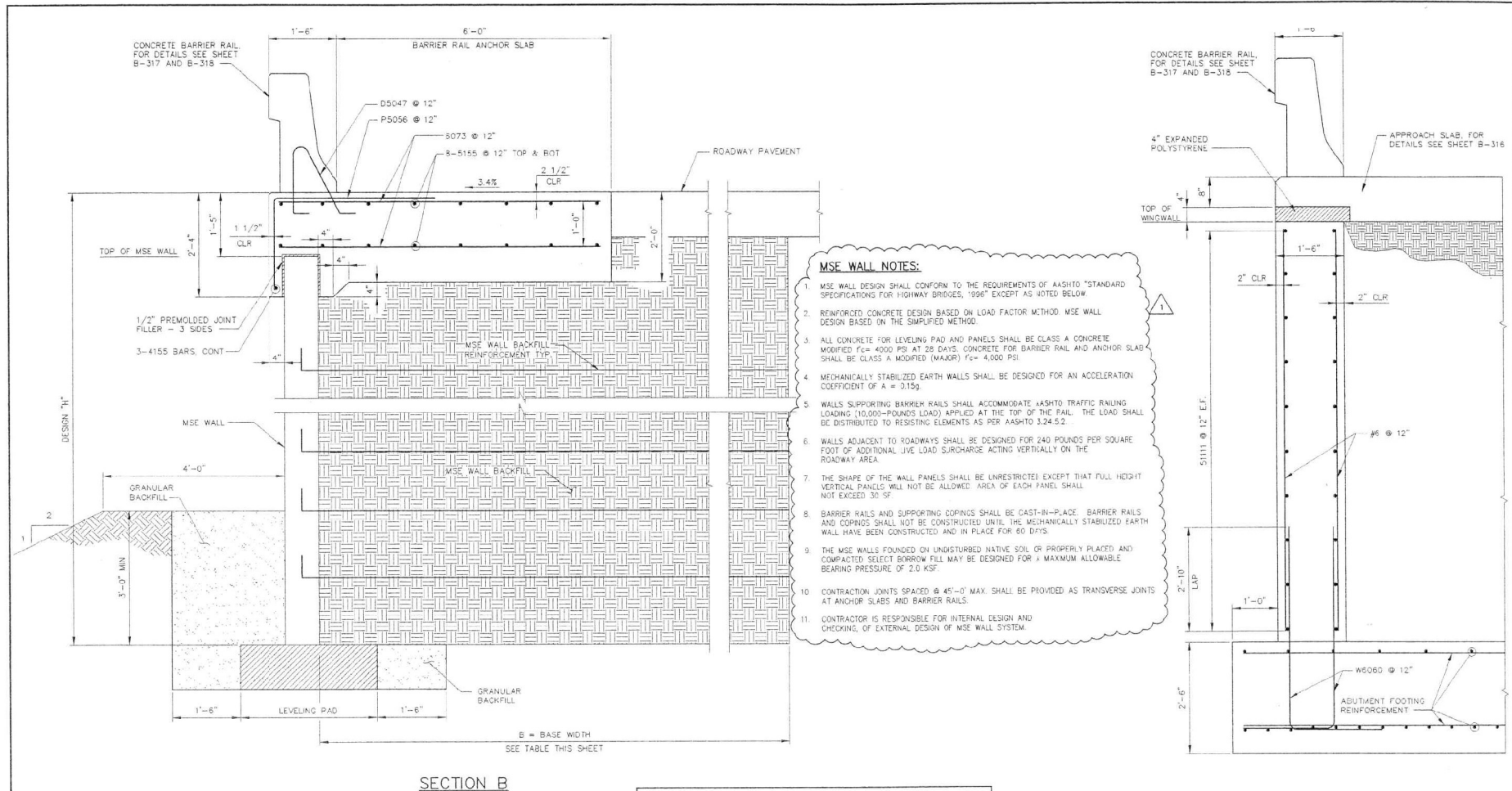
REV. NO.	DATE	DESCRIPTION	DESIGNED BY	CHECKED BY	APPROVED BY
1	12/22/00	ISSUED FOR CONSTRUCTION	CEJ		



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES RAMP "ES" OVER RAMPS "R2" & "R3"
WINGWALL DETAILS
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT No. PTO 642558	DRAWN BY: +PC	SCALE: L-16.31
DESIGNED BY: CEJ	CHECKED BY: RM	HORIZ: NONE
APPROVED BY: CEJ		VERT: NONE
PARSONS TRANSPORTATION GROUP LAS VEGAS, NEVADA		DRAWING NO. B-308 SHEET OF

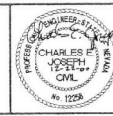


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REV NO	DATE	DESCRIPTION	CEJ
1	12/22/00	ISSUED FOR CONSTRUCTION	CEJ



**WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
RAMP "ES" OVER RAMPS "R2" & "R3"
WINGWALL DETAILS
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS**

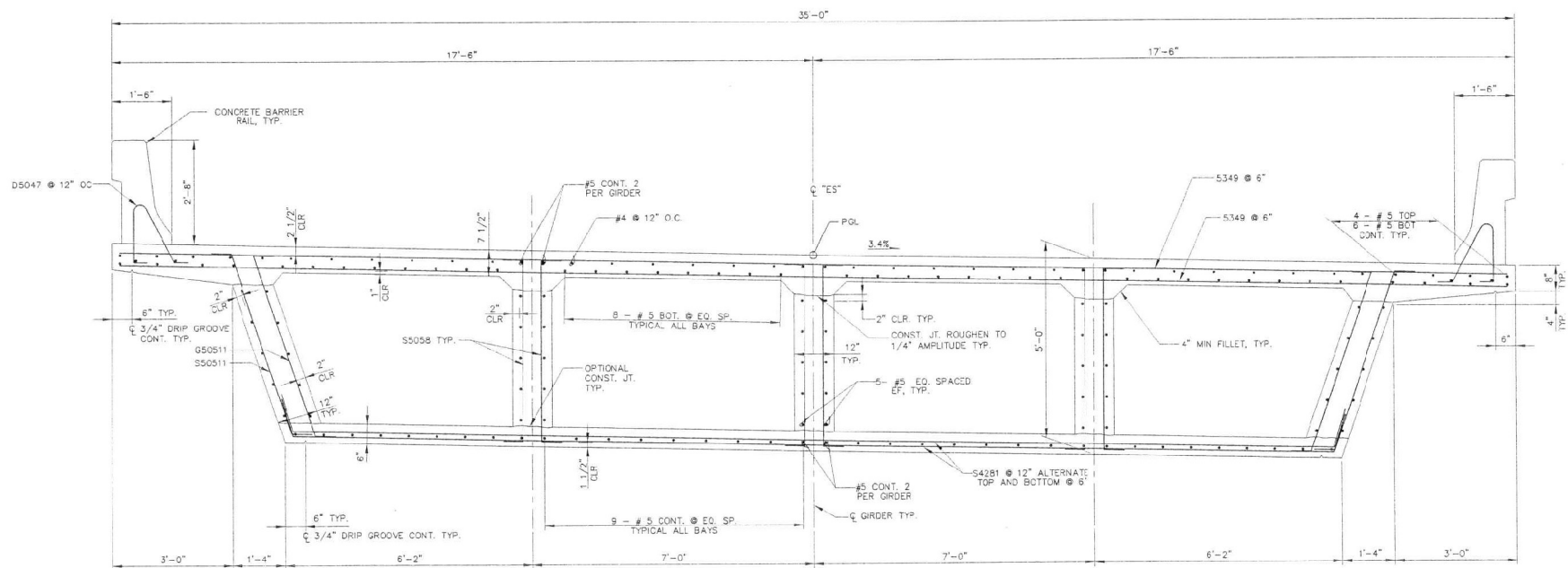


PROJECT NO: PTO 643058	DRAWN BY: CPC
DESIGNED BY: CEJ	CHECKED BY: RM
APPROVED BY: CEJ	

SCALE	DRIVING NO.
HORIZ: NONE	B-308
VERT: NONE	SHT. OF
FIELD BOOK	

ISSUE FOR CONSTRUCTION
SECTION C
H-2338

WB/NB EL CAPITAN WAY TO JONES BOULEVARD

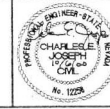


TYPICAL SECTION
(LOOKING AHEAD STATION)

REV. NO.	DATE	DESCRIPTION	APPROVED

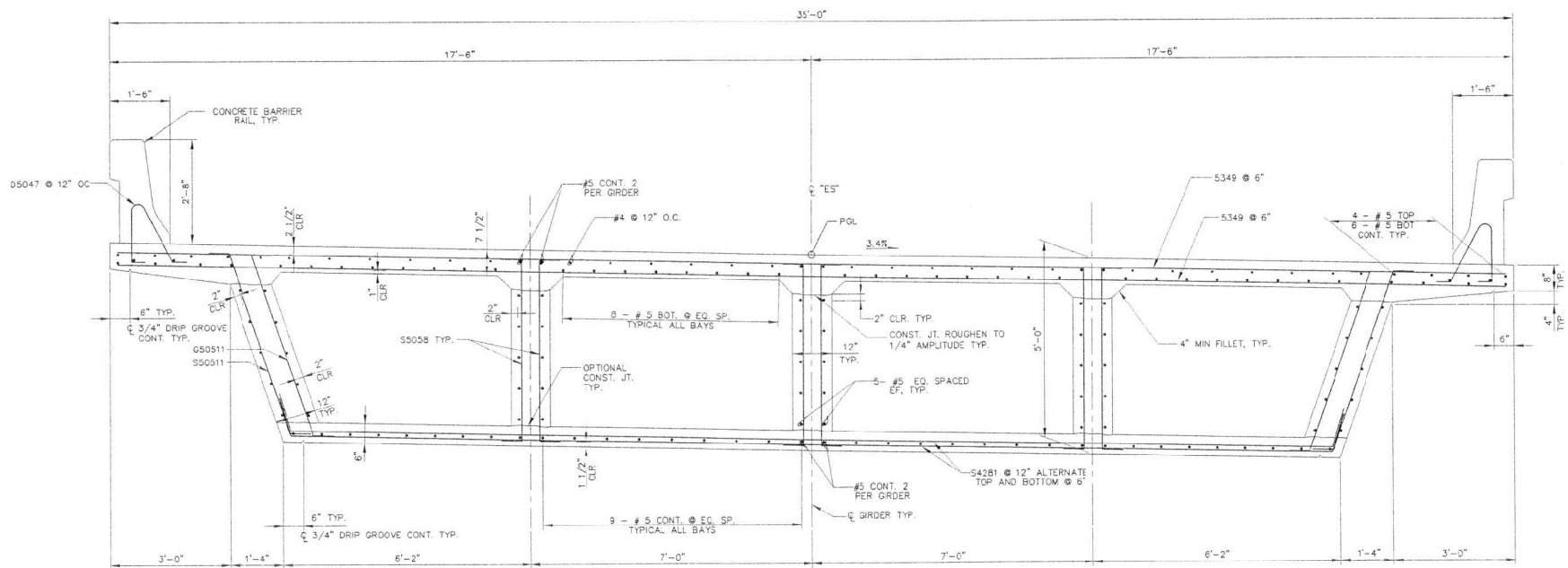


**WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
RAMP "ES" OVER RAMPS "R2" & "R3"**
TYPICAL SECTION
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT NO: P12 643558	DRAWN BY: ADL	SCALE: HORIZ: NONE	DRAWING NO: L-1631
DESIGNED BY: CEJ	CHECKED BY: RM	VERT: NONE	DRAWING NO: B-309
APPROVED BY: CEJ			SHT. OF
PARSONS TRANSPORTATION GROUP 840 GRIER DRIVE, SUITE 340 LAS VEGAS, NEVADA 89113 PHONE (702) 435-7118 FAX (702) 432-8412			

ISSUE FOR CONSTRUCTION H-2338

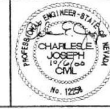


TYPICAL SECTION
(LOOKING AHEAD STATION)

REV. NO.	DATE	DESCRIPTION	APPROVED



**WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
RAMP "ES" OVER RAMPS "R2" & "R3"**
TYPICAL SECTION
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT No. PTO 643058 DRAWN BY: ADL
DESIGNED BY: CEJ CHECKED BY: RM
APPROVED BY: CEJ
PARSONS TRANSPORTATION GROUP
LAS VEGAS, NEVADA
840 DREER DRIVE, SUITE 340
LAS VEGAS, NEVADA 89115
PHONE (702) 435-2116
FAX (702) 435-2412

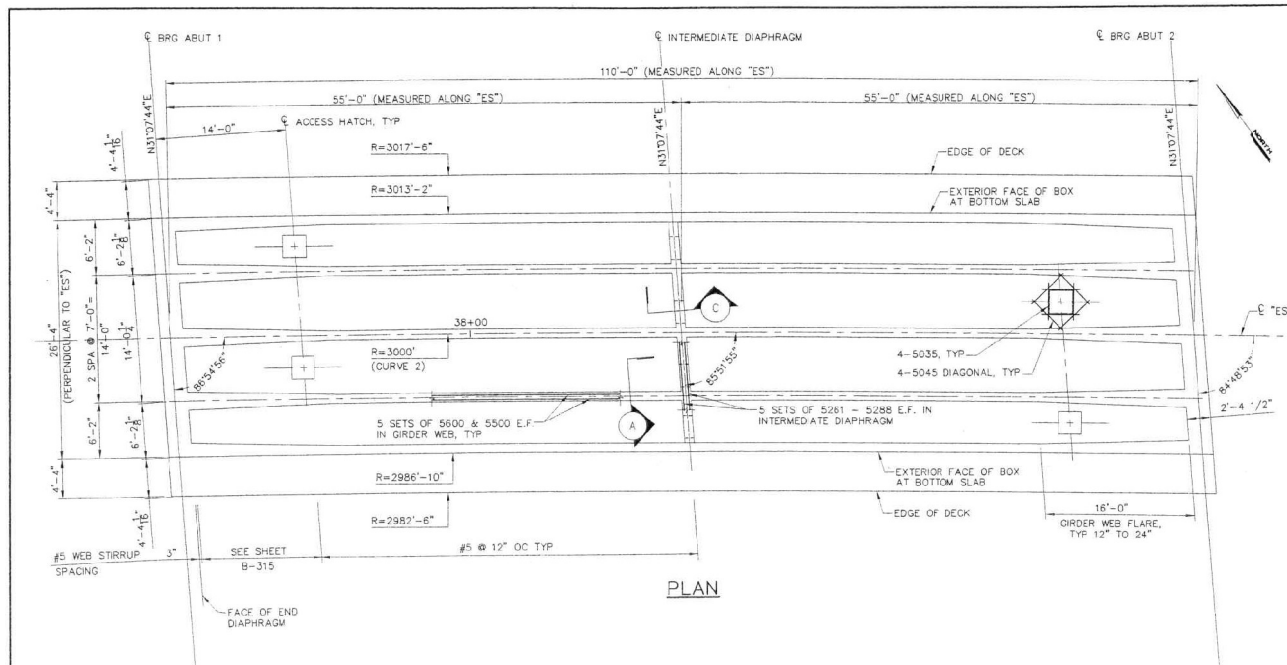
SCALE	
HORIZ: NONE	DRAWING NO.
VERT: NONE	B-309
FIELD BOOK	SHT. OF

ISSUE FOR CONSTRUCTION H-2338

L-1631

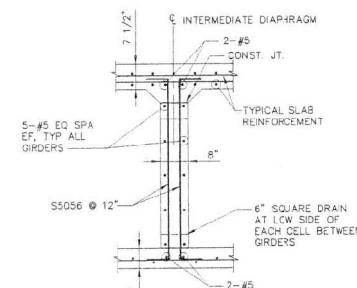
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SHT. OF

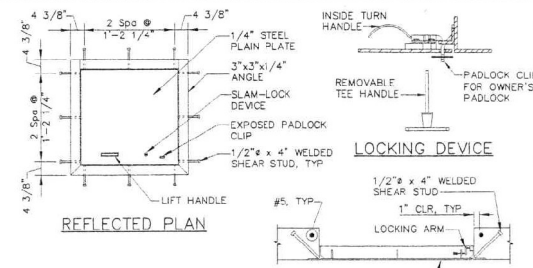


PLAN

NOTES
1. SEE SHEET B-313 FOR
DETAILS OF END DIAPHRAGM



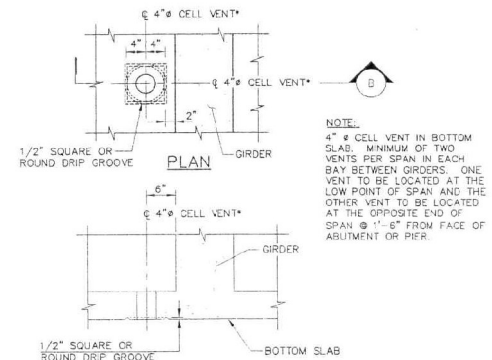
SECTION C



REFLECTED PLAN

LOCKING DEVICE

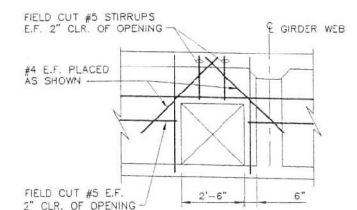
ACCESS HATCH DETAILS



NOTE:
4" x 4" CELL VENT IN BOTTOM
SLAB. MINIMUM OF TWO
VENTS PER SPAN IN EACH
BAY BETWEEN GIRDERS. ONE
VENT TO BE LOCATED AT THE
LOW POINT OF SPAN AND THE
OTHER VENT TO BE LOCATED
AT THE OPPOSITE END OF
SPAN @ 1'-6" FROM FACE OF
ABUTMENT OR PIER.

SECTION B

VENT DETAILS



SECTION A

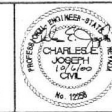
NOTE: PLACE ACCESS OPENING AT LOW SIDE
OF CELLS WITH ACCESS HATCHES

ISSUE FOR CONSTRUCTION H-2338

REV. NO.	DATE	DESCRIPTION	APPROVED



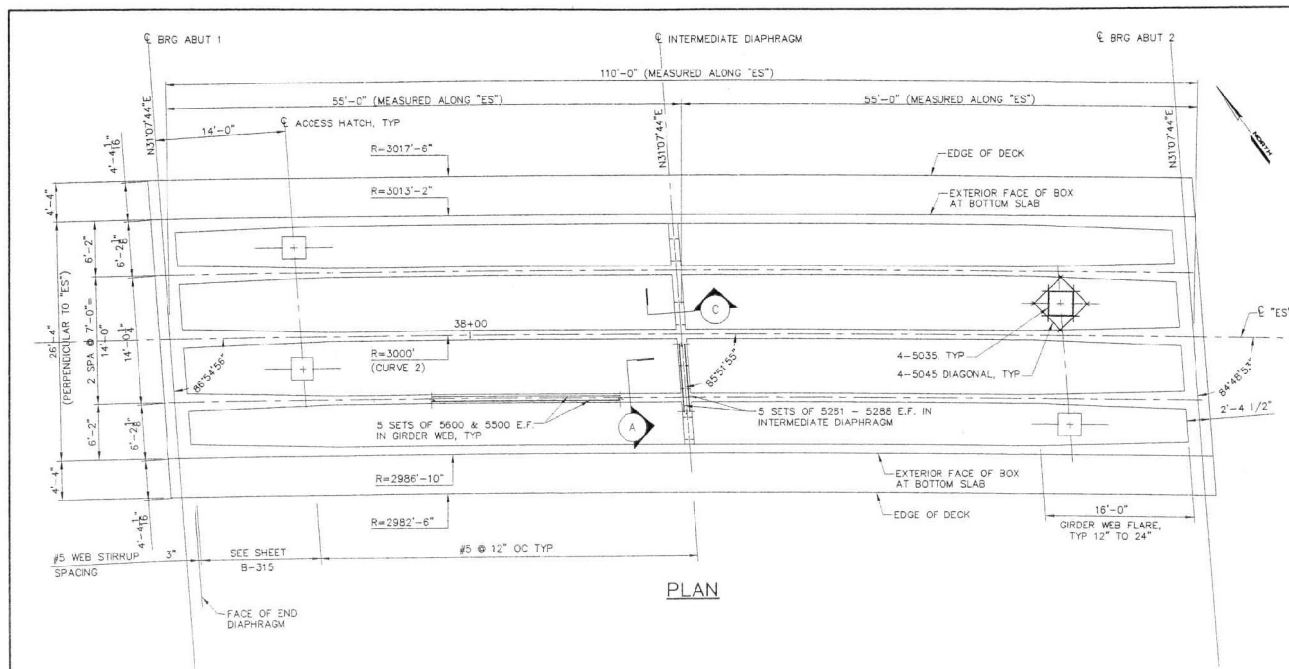
WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
RAMP "ES" OVER RAMPS "R2" & "R3"
GIRDER LAYOUT
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT No: PTO 643558	DRAWN BY: KPC	SCALE:	L-1631
DESIGNED BY: CEJ	CHECKED BY: PM	HORIZ: NONE	DRAWING NO:
APPROVED BY: CEJ		VERT: NONE	B-310
		FIELD BOOK:	SHT. OF

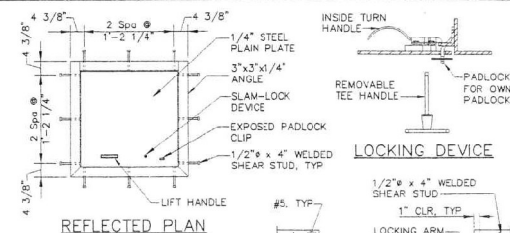
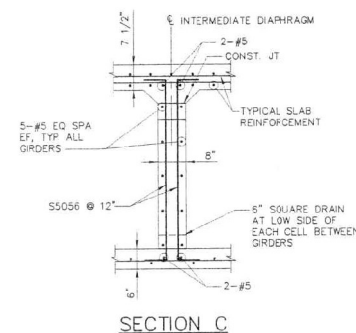


840 GRUB DR., SUITE 240
LAS VEGAS, NEVADA 89118
PHONE (702) 435-0115
FAX (702) 435-8412

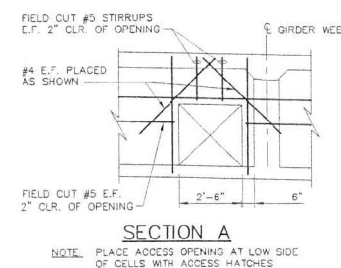
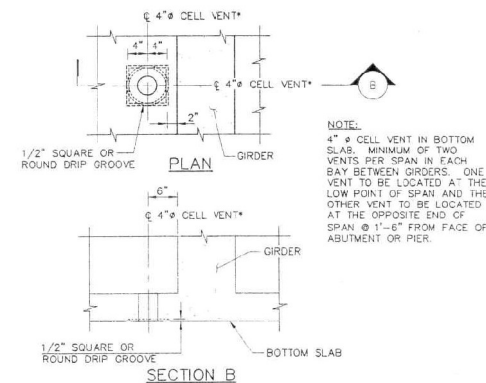


NOTES

1. SEE SHEET B-313 FOR DETAILS OF END DIAPHRAGM



ACCESS HATCH DETAILS



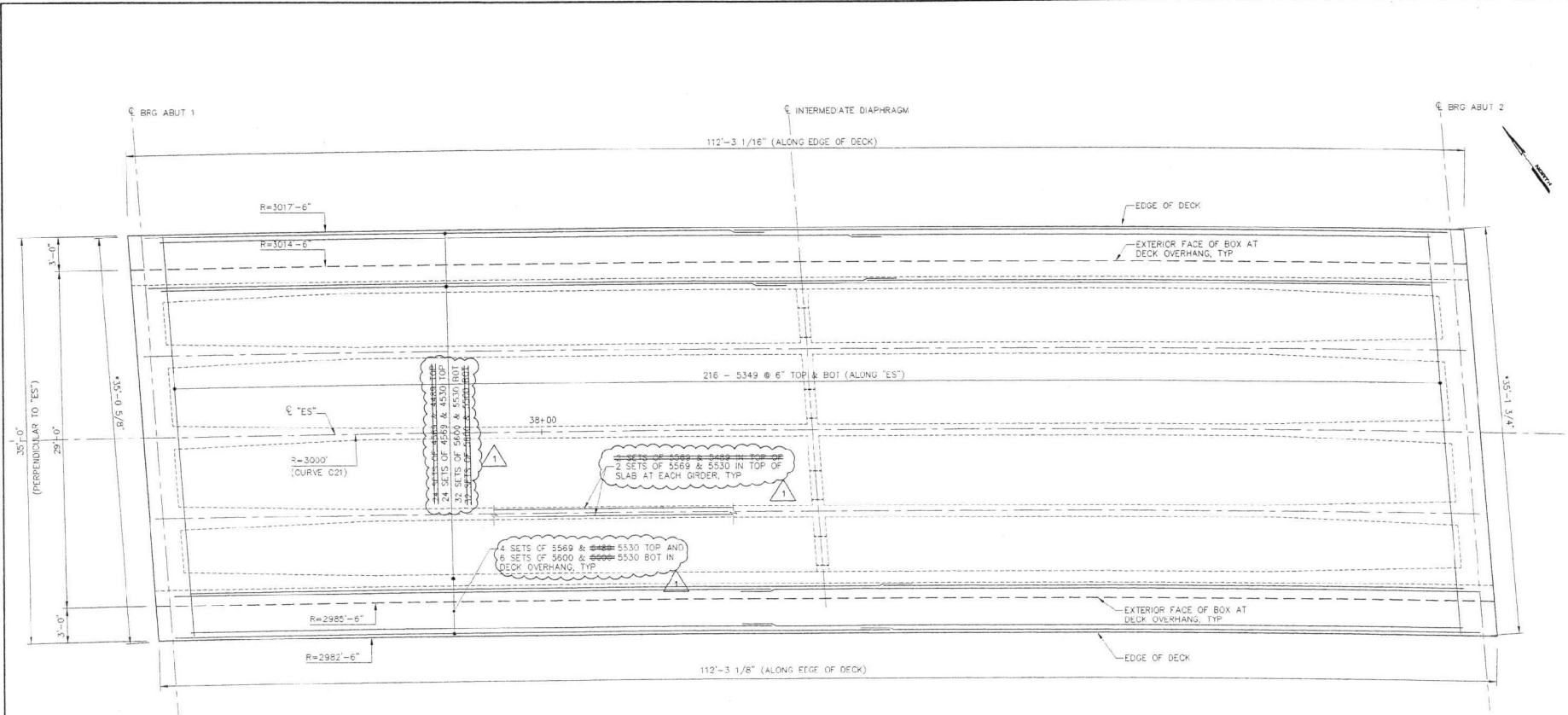
REV. NO.	DATE	DESCRIPTION	APPROVED



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
RAMP "ES" OVER RAMPS "R2" & "R3"
GIRDER LAYOUT
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT No: PTO 643558	DRAWN BY: KPC	SCALE: H-2338	L-1631
DESIGNED BY: CEJ	CHECKED BY: RM	HORIZ: NONE	DRAWING NO: B-310
APPROVED BY: CEJ		VERT: NONE	SHT. OF
PARSONS TRANSPORTATION GROUP 840 ORION DRIVE, SUITE 240 LAS VEGAS, NEVADA 89119 PHONE (702) 455-0715 FAX (702) 455-8412		FIELD BOOK	



TOP SLAB REINFORCING

NOTE:
• MEASURED ALONG C OF BRG ABUTMENT

MINIMUM BAR LAP
#4 BARS TO #4 BARS = 1'-8"
#5 BARS TO #5 BARS = 2'-2"
#6 BARS TO #6 BARS = 2'-7"
#7 BARS TO #7 BARS = 3'-3"
STAGGER LAP SPACES 24" MIN.

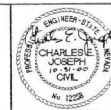
ISSUE FOR CONSTRUCTION

H-2338

REV.	DATE	DESCRIPTION	APPROVED
1	10/31/00	ADDENDUM NO. 2	CEJ



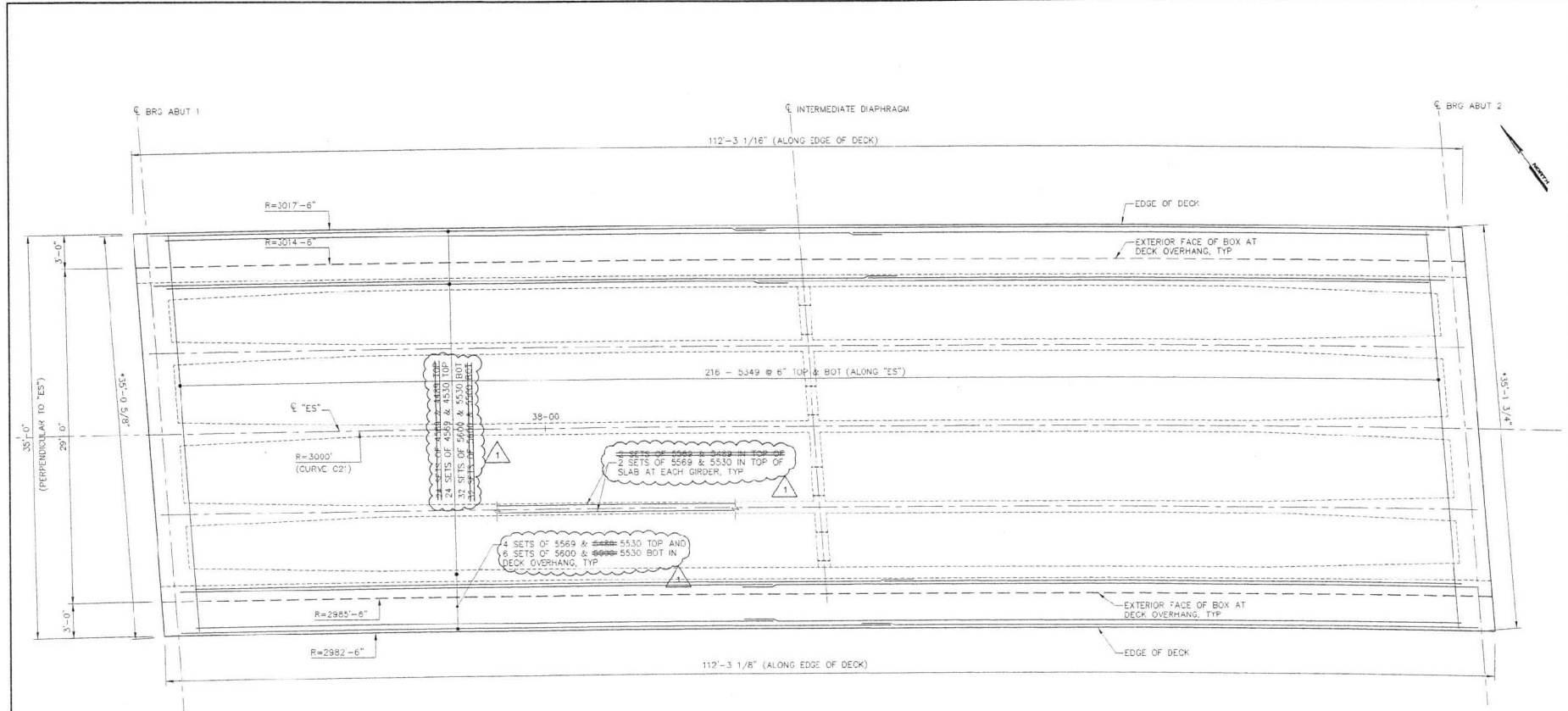
WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
RAMP "ES" OVER RAMPS "R2" & "R3"
TOP SLAB REINFORCING
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT NO: PTD 641558	DRAWN BY: KPC	SCALE:	L-1631
DESIGNED BY: CEJ	CHECKED BY: RM	HORIZ: NONE	
APPROVED BY: CEJ		VERT: NONE	DRAWING NO:
			B-311
			SHT. OF



840 DRIER DRIVE, SUITE 140
LAS VEGAS, NEVADA 89119
PHONE (702) 435-2116
FAX (702) 435-1642



TOP SLAB REINFORCING

NOTE:
• MEASURED ALONG C OF BRG ABUTMENT

MINIMUM BAR LAP
 #4 BARS TO #4 BARS = 1'-8"
 #5 BARS TO #5 BARS = 2'-2"
 #6 BARS TO #6 BARS = 2'-7"
 #7 BARS TO #7 BARS = 3'-3"
 STAGGER LAP SPICES 24" MIN.

ISSUE FOR CONSTRUCTION

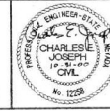
H-2338

25/08/11.dwg (L=15'-00" H=40'-24" per C1)

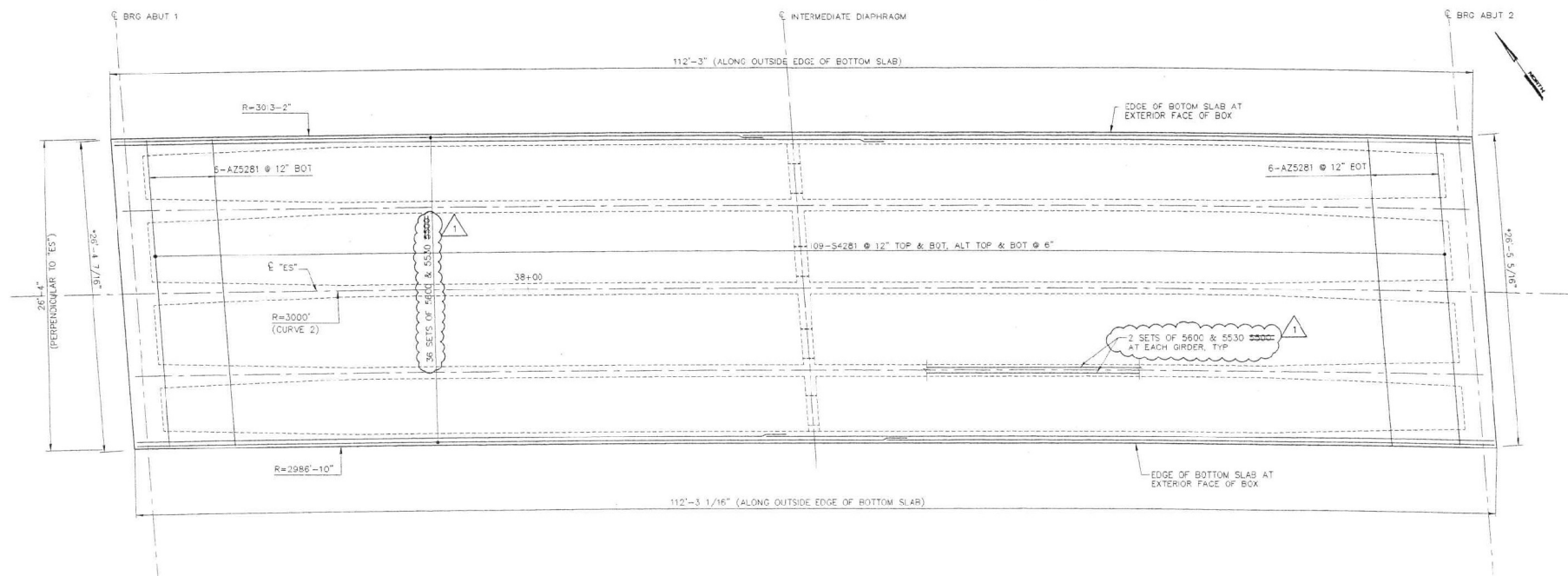
REV. NO.	DATE	DESCRIPTION	APPROVED
1	10/31/00	ADDENDUM NO. 2	CEJ



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
RAMP "ES" OVER RAMPS "R2" & "R3"
TOP SLAB REINFORCING
 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT NO. DTD 841558	DRAWN BY: KPC	SCALE	L-1631
DESIGNED BY: CEJ	CHECKED BY: RM	HORIZ: NONE	DRAWING NO.
APPROVED BY: CEJ		VERT: NONE	B-311
PARSONS TRANSPORTATION GROUP 840 ORION DRIVE, SUITE 340 LAS VEGAS, NEVADA 89115 PHONE (702) 435-1118 FAX (702) 435-1142		FIELD BOOK	SHT. OF



BOTTOM SLAB REINFORCING

NOTE:
• MEASURED ALONG ABUTMENT

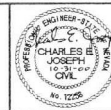
MINIMUM BAR LAP
#4 BARS TO #4 BARS = 1'-8"
#5 BARS TO #5 BARS = 2'-2"
STAGGER LAP SPLICES 24" MIN.

ISSUE FOR CONSTRUCTION H-2338

REV. NO.	DATE	DESCRIPTION	APPROVED
1	10/31/00	ADDENDUM NO. 2	CEJ

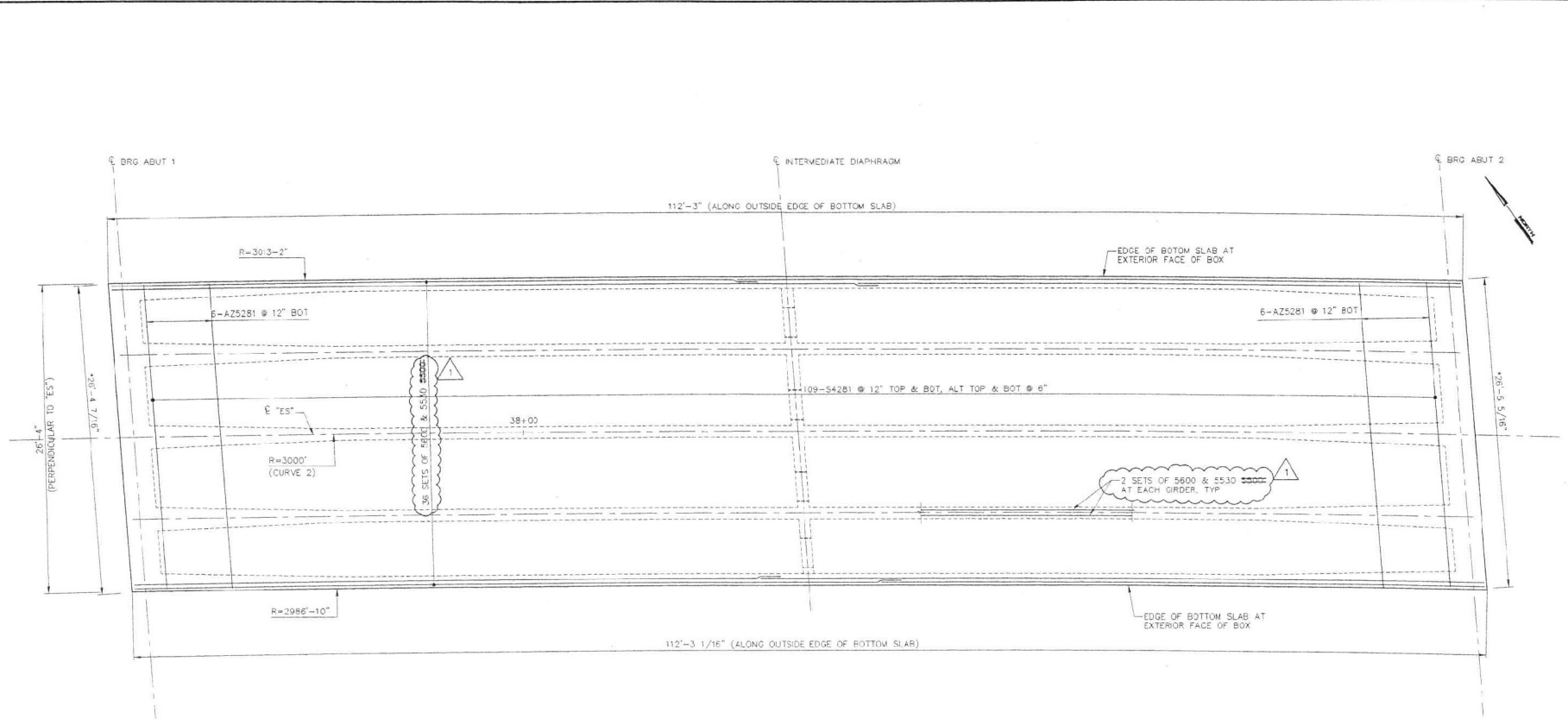


WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
RAMP "ES" OVER RAMPS "R2" & "R3"
BOTTOM SLAB REINFORCING
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT NO. PTO 643556	DRAWN BY: CPO	SCALE	L-1631
DESIGNED BY: CEJ	CHECKED BY: RM	HORIZ: NONE	DRAWING NO.
APPROVED BY: CEJ		VERT: NONE	B-312
		FIELD BOOK	SHT. OF

PARSONS
TRANSPORTATION
GROUP
LAS VEGAS, NEVADA
840 GRIFFIN DRIVE, SUITE 340
LAS VEGAS, NEVADA 89118
PHONE (702) 435-1116
FAX (702) 435-1412



BOTTOM SLAB REINFORCING

NOTE:
• MEASURED ALONG ABUTMENT

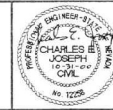
MINIMUM BAR LAP
#4 BARS TO #4 BARS = 1'-8"
#5 BARS TO #5 BARS = 2'-2"
STAGGER LAP SPLICES 24" MIN.

ISSUE FOR CONSTRUCTION H-2338

REV. NO.	DATE	DESCRIPTION	APPROVED
1	10/31/00	ADDENDUM NO. 2	CEJ



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
RAMP "ES" OVER RAMPS "R2" & "R3"
BOTTOM SLAB REINFORCING
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



PROJECT NO. PTD 645558 DRAWN BY: KPC
DESIGNED BY: CEJ CHECKED BY: RM
APPROVED BY: CEJ
PARSONS TRANSPORTATION GROUP
840 GRIER DRIVE, SUITE 340
LAS VEGAS, NEVADA 89119
PHONE (702) 433-2115
FAX (702) 433-1412

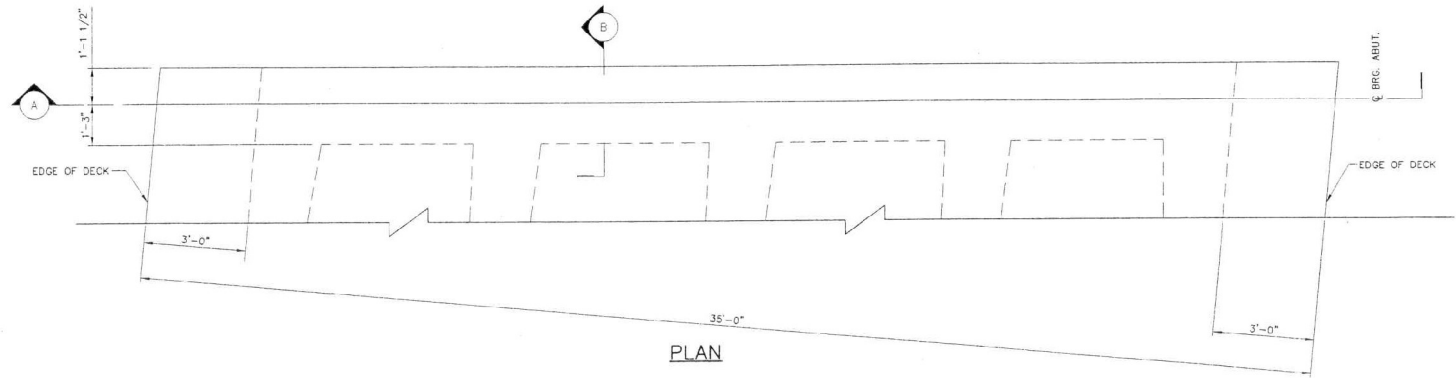
SCALE	FIELD BOOK	SHEET	OF
HORIZ: NONE VERT: NONE		L-1631	
		B-312	

25x0312.dwg 12-11-00 10:12:36 am LST

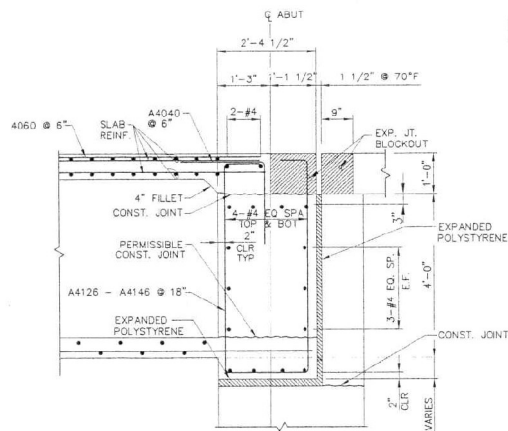
WB/NB EL CAPITAN WAY TO JONES BOULEVARD

NOTES:

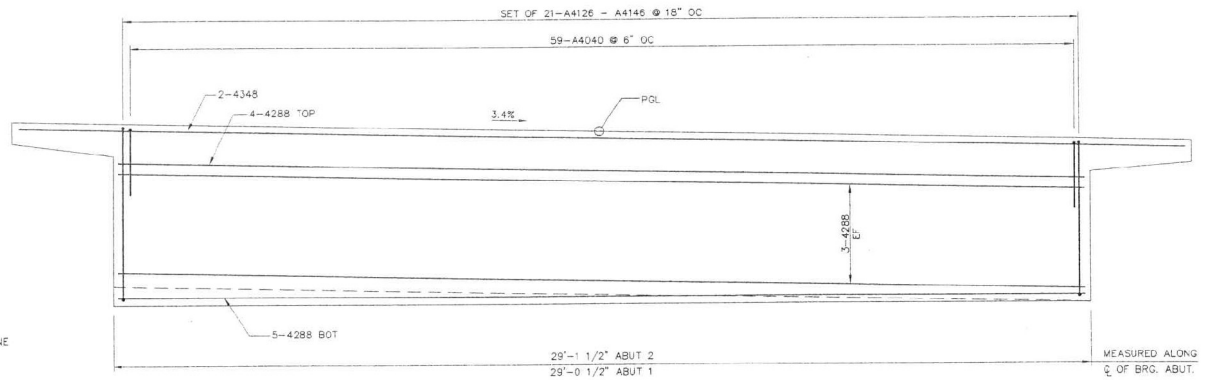
1. SEE SHEETS B-303 - B-305
FOR ADDITIONAL DETAILS.



PLAN



SECTION B



SECTION A

REINFORCING LAP SPLICES

#5 TO #5 - 2'-4"

REV. NO.	DATE	DESCRIPTION	APPROVED



WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
RAMP "ES" OVER RAMPS "R2" & "R3"
END DIAPHRAGM DETAILS
 CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

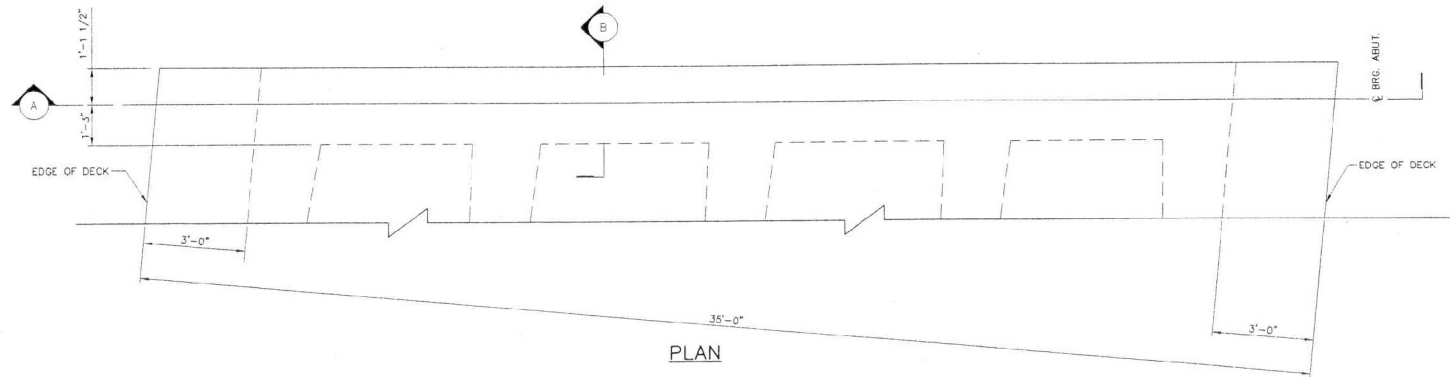


PROJECT No: PTG 643558	DRAWN BY: AD	SCALE	L-1631 DRAWING NO B-313 SHT. OF
DESIGNED BY: CEJ	CHECKED BY: RN	HORIZ: NONE	
APPROVED BY: CEJ		VERT: NONE	
		FIELD BOOK	
PARSONS TRANSPORTATION GROUP LAS VEGAS, NEVADA 840 ORER DRIVE, SUITE 340 LAS VEGAS, NEVADA 89119 PHONE (702) 438-2116 FAX (702) 438-1412			

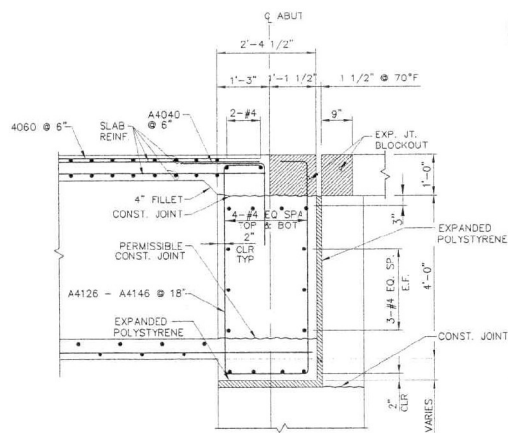
ISSUED FOR CONSTRUCTION H-2338

NOTES:

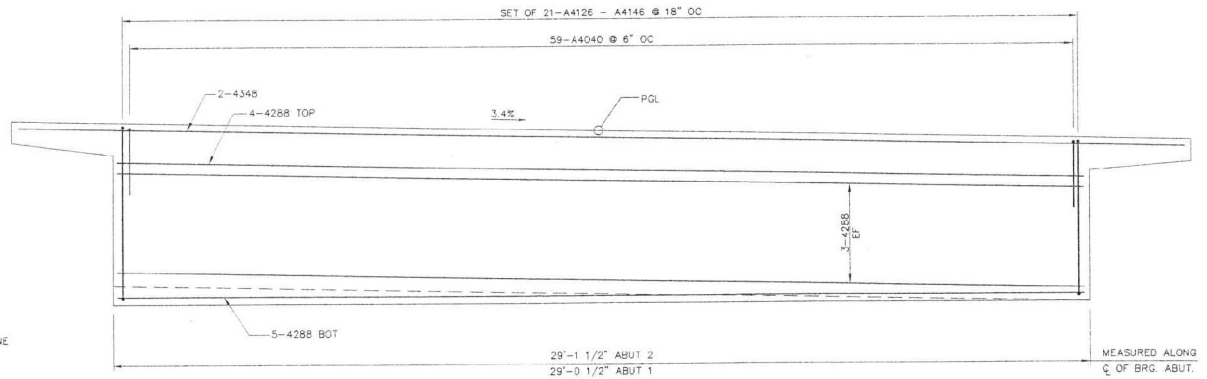
1. SEE SHEETS B-303 - B-305
FOR ADDITIONAL DETAILS.



PLAN



SECTION B



SECTION A

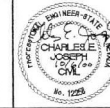
REINFORCING LAP SPLICES

#5 TO #5 - 2'-4"

REV. NO.	DATE	DESCRIPTION	APPROVED



**WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
RAMP "ES" OVER RAMPS "R2" & "R3"
END DIAPHRAGM DETAILS**
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS



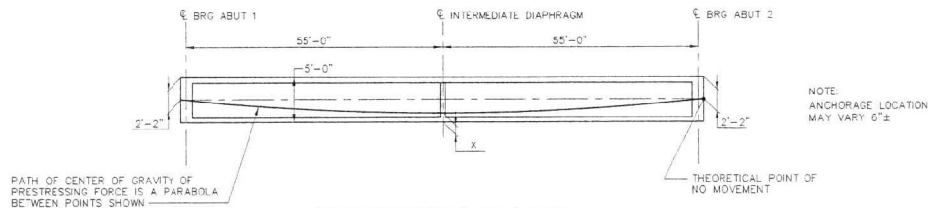
PROJECT NO: PTO 643558	DRAWN BY: AD
DESIGNED BY: CEJ	CHECKED BY: RM
APPROVED BY: CEJ	

SCALE	H-2338
HORIZ: NONE	L-1631
VERT: NONE	DRAWING NO.
FIELD BOOK	B-313
SHT. GF	

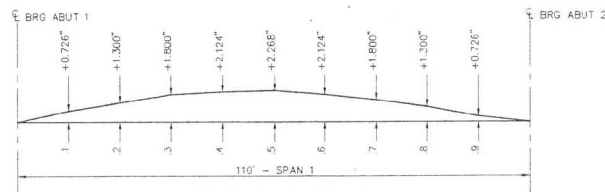
**PARSONS
TRANSPORTATION
GROUP**
LAS VEGAS, NEVADA

840 ORP DRIVE, SUITE 340
LAS VEGAS, NEVADA 89119
PHONE (702) 431-2118
FAX (702) 438-1412

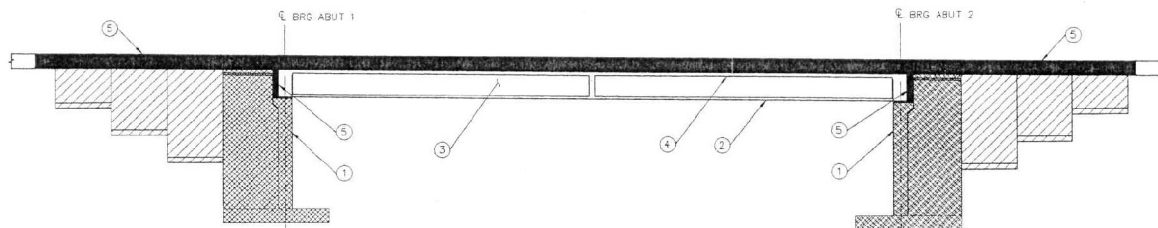
WB/NB EL CAPITAN WAY TO JONES BOULEVARD



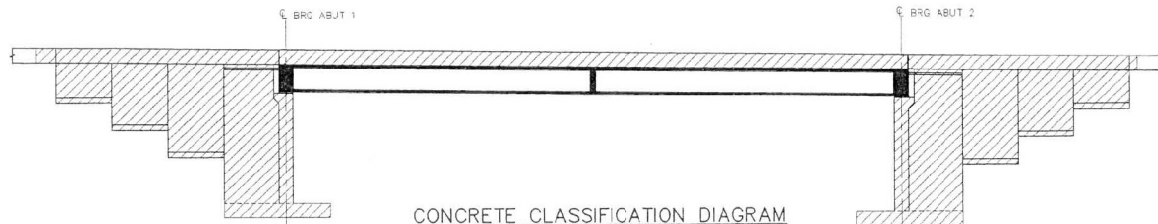
PRESTRESSING DIAGRAM



CAMBER DIAGRAM



CONCRETE POUR SCHEDULE



CONCRETE CLASSIFICATION DIAGRAM

PRESTRESSING NOTES:

- POST TENSIONING FORCES AND CONCRETE STRENGTHS FOR THE STRUCTURE ARE AS FOLLOWS:
- | W | P _i | P _{si} | P _{si} |
|-----|----------------|-----------------|-----------------|
| 10" | 5,453 | 3,500 | 4,000 |
| 12" | 5,740 | 3,500 | 4,000 |
| 15" | 6,239 | 3,500 | 4,000 |
- WHERE P_i IS THE WORKING FORCE AFTER ALL LOSSES, P_{si} IS THE REQUIRED COMPRESSIVE STRENGTH OF CONCRETE AT THE TIME OF STRESSING AND P_c IS THE ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS.
- ONE-END STRESSING SHALL BE PERMITTED PROVIDED NO MORE THAN ONE HALF OF THE TENDONS ARE STRESSED FROM EACH END.
 - METALLIC ENCLOSURES SHALL BE GALVANIZED RIGID DUCT. ENCLOSURES TO BE VENTED THROUGH THE DECK SLAB WITHIN 3' OF THE HIGH POINTS OF THE CABLE PATH.
 - FOR DETAILS NOT SHOWN SEE SHEET B-28.1.1 (503) OF 1999 STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION.
 - DESIGN IS BASED ON 1/2" Ø, 7 WIRE, 270 KSI (F_u) LOW-RELAXATION, PRESTRESSING STRAND JACKED TO 0.75 F_u WITH AN EQUIVALENT ANCHOR SET = 3/8".
 - DESIGN IS BASED ON U=0.25 AND K=0.0002. P_i SPECIFIED INCLUDES FRICTION LOSSES AND PROVISIONS FOR LOSS OF STRESS IN THE PRESTRESSING STEEL DUE TO CREEP AND SHRINKAGE OF CONCRETE, ELASTIC SHORTENING AND RELAXATION OF PRESTRESSING STEEL AND STRESSING SEQUENCE.
 - BAR REINFORCEMENT INTERFERING WITH THE PRESTRESSING TENDONS ALIGNMENT SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER.
 - CONTRACTOR SHALL SUBMIT ELONGATION AND JACKING CALCULATIONS FOR THE INTENDED POST-TENSIONING SYSTEM.
 - NO MORE THAN 1/2 OF THE PRESTRESSING FORCE IN ANY GIRDER MAY BE STRESSED BEFORE AN EQUAL FORCE IS STRESSED IN THE ADJACENT GIRDERS. THE EXTERIOR 1/4 OF THE STRUCTURE SHALL NOT BE STRESSED UNTIL AT LEAST 1/10 OF TOTAL PRESTRESSING FORCE HAS BEEN STRESSED IN THE MIDDLE 1/2 OF THE STRUCTURE. AT NO TIME WILL MORE THAN 1/6 OF THE TOTAL PRESTRESSING FORCE BE APPLIED ECCENTRICALLY ABOUT THE CENTERLINE OF THE STRUCTURE.
 - DURING STRESSING OPERATIONS, THE ELONGATION SHALL BE CONTINUOUSLY COMPARED WITH GAGE PRESSURE TO CHECK AGAINST DUCT BLOCKAGE AND EXCESSIVE FRICTION.
 - VERTICAL DIMENSIONS FOR DUCT LOCATION SHALL BE SHOWN AT TENTH POINTS ON THE POST-TENSIONING SHOP DRAWINGS IN ORDER TO FACILITATE THE ACCURATE PLACEMENT OF DUCTS.

POURING SCHEDULE NOTES:

CONCRETE POURING SEQUENCE IS AS FOLLOWS:

- ① SHALL BE PLACED AT ABUTMENTS.
- ② AND ③ INDICATE SEQUENCE OF PLACING BOTTOM SLAB AND GIRDER WEB CONCRETE.
- ③ AND ② MAY BE POURED TOGETHER AT THE OPTION OF THE CONTRACTOR PROVIDED THE ENGINEER AGREES THAT FORM SETTLEMENT WILL BE SLIGHT.
- TOP SLAB CONCRETE ④ SHALL BE PLACED SEPARATELY.
- ⑤ BACKWALLS SHALL BE PLACED AFTER STRESSING IS COMPLETE. BARRIER RAILS SHALL BE PLACED AFTER FALSEWORK IS RELEASED. WINGWALLS/RETAINING WALL POURING SCHEDULE IS AT THE OPTION OF THE CONTRACTOR.

POST-TENSIONED CLASS A CONCRETE
MODIFIED (MAJOR)
F_c = 4000 psi @ 28 DAYS

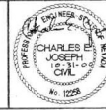
CLASS A CONCRETE MODIFIED (MAJOR)
F_c = 4000 psi @ 28 DAYS

ISSUE FOR CONSTRUCTION H-2338

REV NO.	DATE	DESCRIPTION	APPROVED
1	10/31/00	ADDENDUM NO. 2	CEJ

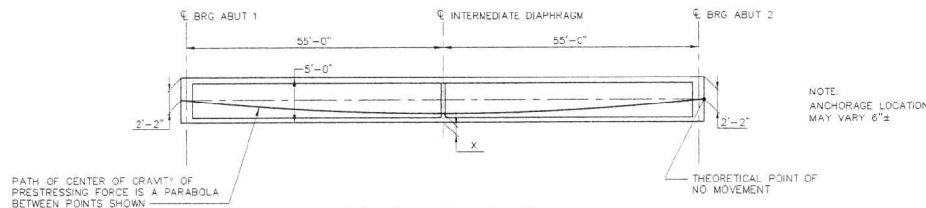


WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
RAMP "ES" OVER RAMP "R2" & "R3"
PRESTRESSING, CAMBER & CONCRETE DIAGRAMS
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

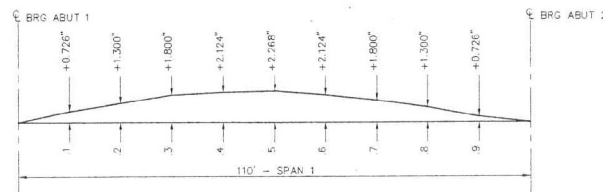


PROJECT NO:	PTD 643558	DRAWN BY:	KPC
DESIGNED BY:	CEJ	CHECKED BY:	RM
APPROVED BY:	CEJ		
840 ORION DRIVE, SUITE 340 LAS VEGAS, NEVADA 89115 PHONE (702) 435-2116 FAX (702) 435-9411			

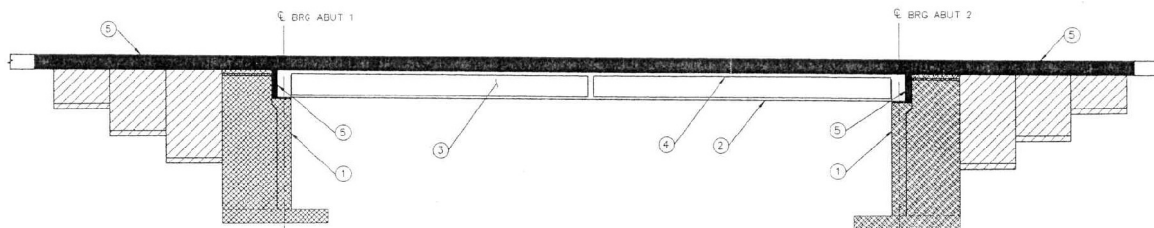
SCALES	HORIZ: NONE	VERT: NONE
FIELD BOOK		
SHT.	OF	



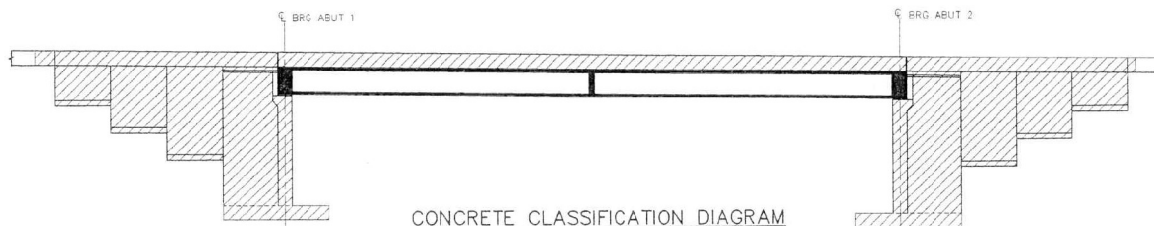
PRESTRESSING DIAGRAM



CAMBER DIAGRAM



CONCRETE POUR SCHEDULE



CONCRETE CLASSIFICATION DIAGRAM

PRESTRESSING NOTES:

- POST TENSIONING FORCES AND CONCRETE STRENGTHS FOR THE STRUCTURE ARE AS FOLLOWS:
- | X | P _i | f _{ci} | f _{cu} |
|-----|----------------|-----------------|-----------------|
| 10" | 5,453 | 3,500 | 4,000 |
| 12" | 5,740 | 3,500 | 4,000 |
| 15" | 6,239 | 3,500 | 4,000 |
- WHERE P_i IS THE WORKING FORCE AFTER ALL LOSSES, f_{ci} IS THE REQUIRED COMPRESSIVE STRENGTH OF CONCRETE AT THE TIME OF STRESSING AND f_{cu} IS THE ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS.
- ONE-END STRESSING SHALL BE PERMITTED PROVIDED NO MORE THAN ONE HALF OF THE TENDONS ARE STRESSED FROM EACH END.
 - METALLIC ENCLOSURES SHALL BE GALVANIZED RIGID DUCT. ENCLOSURES TO BE VENTED THROUGH THE DECK SLAB WITHIN 3' OF THE HIGH POINTS OF THE CABLE PATH.
 - FOR DETAILS NOT SHOWN SEE SHEET B-28.1.1 (503) OF 1999 STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION.
 - DESIGN IS BASED ON 1/2" Ø, 7 WIRE, 270 KSI (f_{ps}) LOW-RELAXATION, PRESTRESSING STRAND JACKED TO 0.75 f_{ps} WITH AN EQUIVALENT ANCHOR SET = 3/8".
 - DESIGN IS BASED ON U=0.25 AND K=0.0002. P_i SPECIFIED INCLUDES FRICTION LOSSES AND PROVISIONS FOR LOSS OF STRESS IN THE PRESTRESSING STEEL DUE TO CREEP AND SHRINKAGE OF CONCRETE, ELASTIC SHORTENING AND RELAXATION OF PRESTRESSING STEEL AND STRESSING SEQUENCE.
 - BAR REINFORCEMENT INTERFERING WITH THE PRESTRESSING TENDONS ALIGNMENT SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER.
 - CONTRACTOR SHALL SUBMIT ELONGATION AND JACKING CALCULATIONS FOR THE INTENDED POST-TENSIONING SYSTEM.
 - NO MORE THAN 1/2 OF THE PRESTRESSING FORCE IN ANY GIRDER MAY BE STRESSED BEFORE AN EQUAL FORCE IS STRESSED IN THE ADJACENT GIRDERS. THE EXTERIOR 1/4 OF THE STRUCTURE SHALL NOT BE STRESSED UNTIL AT LEAST 1/10 OF TOTAL PRESTRESSING FORCE HAS BEEN STRESSED IN THE MIDDLE 1/2 OF THE STRUCTURE. AT NO TIME WILL MORE THAN 1/6 OF THE TOTAL PRESTRESSING FORCE BE APPLIED ECCENTRICALLY ABOUT THE CENTERLINE OF THE STRUCTURE.
 - DURING STRESSING OPERATIONS, THE ELONGATION SHALL BE CONTINUOUSLY COMPARED WITH GAGE PRESSURE TO CHECK AGAINST DUCT BLOCKAGE AND EXCESSIVE FRICTION.
 - VERTICAL DIMENSIONS FOR DUCT LOCATION SHALL BE SHOWN AT TENTH POINTS ON THE POST-TENSIONING SHOP DRAWINGS IN ORDER TO FACILITATE THE ACCURATE PLACEMENT OF DUCTS.

POURING SCHEDULE NOTES:

CONCRETE POURING SEQUENCE IS AS FOLLOWS:

- (1) SHALL BE PLACED AT ABUTMENTS.
- (2) AND (3) INDICATE SEQUENCE OF PLACING BOTTOM SLAB AND GIRDER WEB CONCRETE.
- (3) AND (2) MAY BE POURED TOGETHER AT THE OPTION OF THE CONTRACTOR PROVIDED THE ENGINEER AGREES THAT FORM SETTLEMENT WILL BE SLIGHT.
- TOP SLAB CONCRETE (4) SHALL BE PLACED SEPARATELY.
- (5) BACKWALLS SHALL BE PLACED AFTER STRESSING IS COMPLETE. BARRIER RAILS SHALL BE PLACED AFTER FALSEWORK IS RELEASED. WINGWALLS/RETAINING WALL POURING SCHEDULE IS AT THE OPTION OF THE CONTRACTOR.

POST-TENSIONED CLASS A CONCRETE
MODIFIED (MAJOR)
f_c = 4000 psi @ 28 DAYS

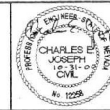
CLASS A CONCRETE MODIFIED (MAJOR)
f_c = 4000 psi @ 28 DAYS

ISSUE FOR CONSTRUCTION H-2338

REV. NO.	DATE	DESCRIPTION	APPROVED
1	10/31/00	ADDENDUM NO. 2	CEJ

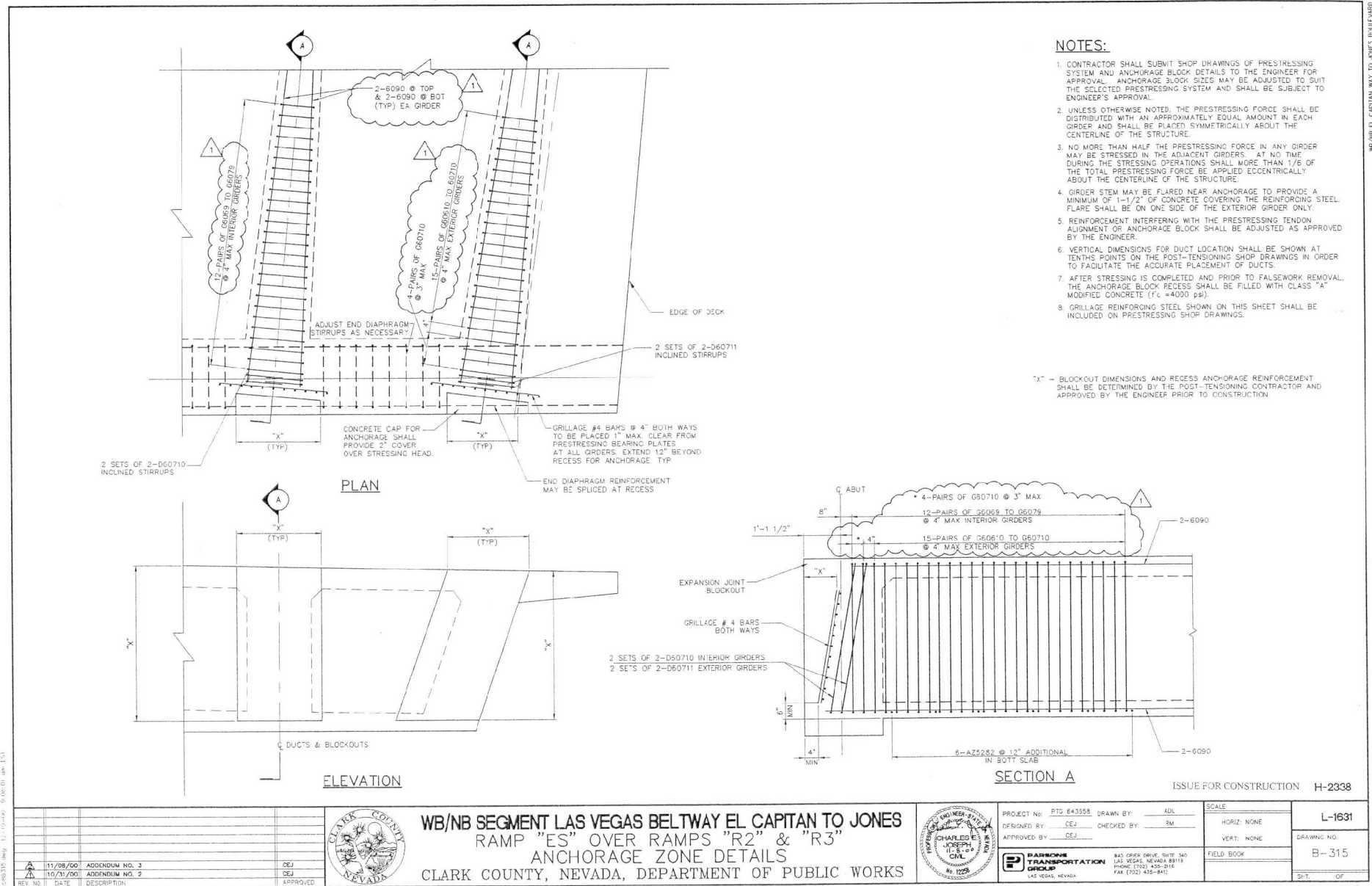


WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES
RAMP "ES" OVER RAMP "R2" & "R3"
PRESTRESSING, CAMBER & CONCRETE DIAGRAMS
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

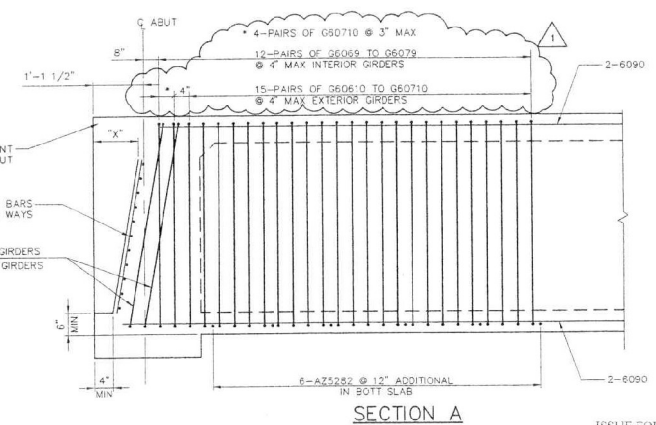
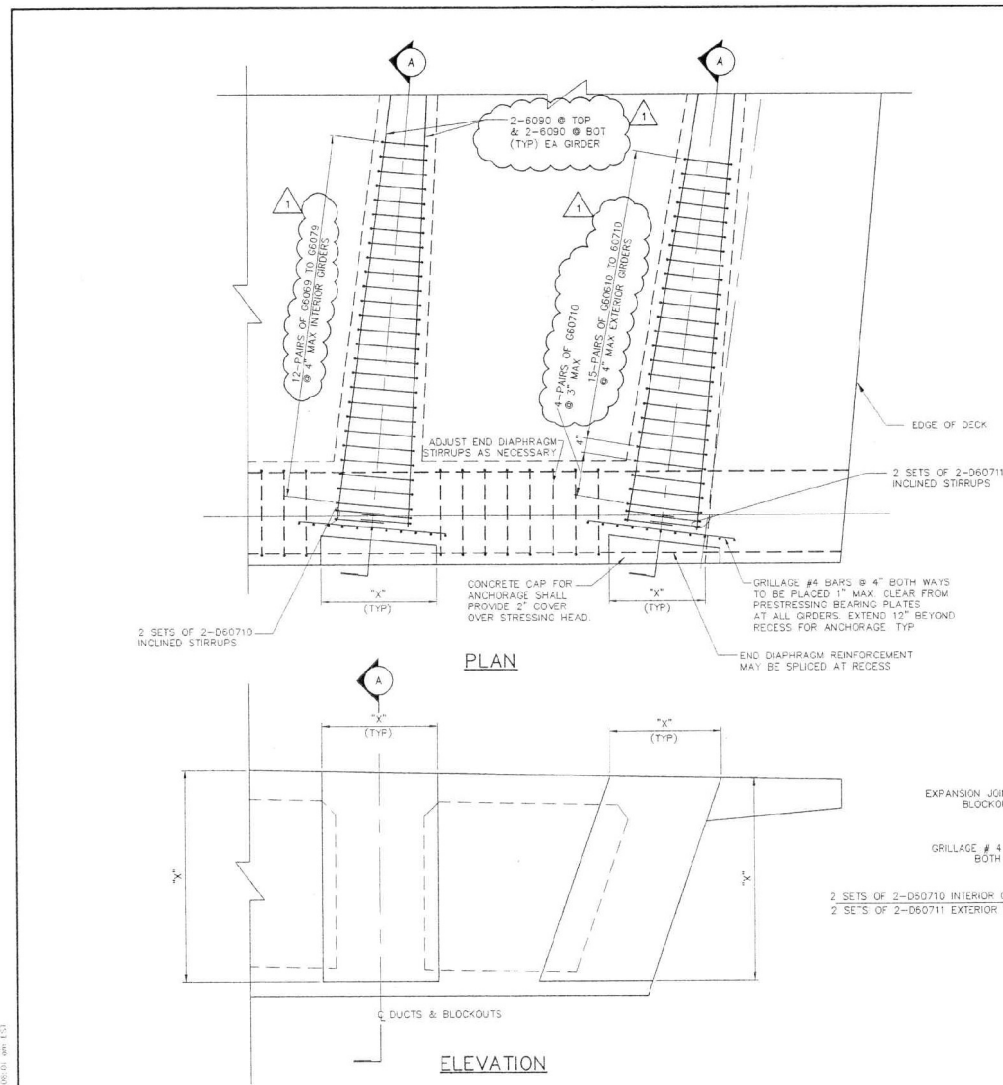


PROJECT NO. PTD 643558	DRAWN BY: KPC	SCALE:
DESIGNED BY: CEJ	CHECKED BY: RM	HORIZ: NONE
APPROVED BY: CEJ		VERT: NONE
PARSONS TRANSPORTATION GROUP LAS VEGAS, NEVADA		FIELD BOOK

L-1631
DRAWING NO. B-314
SHT. OF



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- NOTES:**
1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF PRESTRESSING SYSTEM AND ANCHORAGE BLOCK DETAILS TO THE ENGINEER FOR APPROVAL. ANCHORAGE BLOCK SIZES MAY BE ADJUSTED TO SUIT THE SELECTED PRESTRESSING SYSTEM AND SHALL BE SUBJECT TO ENGINEER'S APPROVAL.
 2. UNLESS OTHERWISE NOTED, THE PRESTRESSING FORCE SHALL BE DISTRIBUTED WITH AN APPROXIMATELY EQUAL AMOUNT IN EACH GIRDER AND SHALL BE PLACED SYMMETRICALLY ABOUT THE CENTERLINE OF THE STRUCTURE.
 3. NO MORE THAN HALF THE PRESTRESSING FORCE IN ANY GIRDER MAY BE STRESSED IN THE ADJACENT GIRDERS. AT NO TIME DURING THE STRESSING OPERATIONS SHALL MORE THAN 1/6 OF THE TOTAL PRESTRESSING FORCE BE APPLIED ECCENTRICALLY ABOUT THE CENTERLINE OF THE STRUCTURE.
 4. GIRDER STEM MAY BE FLARED NEAR ANCHORAGE TO PROVIDE A MINIMUM OF 1-1/2" OF CONCRETE COVERING THE REINFORCING STEEL. FLARE SHALL BE ON ONE SIDE OF THE EXTERIOR GIRDER ONLY.
 5. REINFORCEMENT INTERFERING WITH THE PRESTRESSING TENDON ALIGNMENT OR ANCHORAGE BLOCK SHALL BE ADJUSTED AS APPROVED BY THE ENGINEER.
 6. VERTICAL DIMENSIONS FOR DUCT LOCATION SHALL BE SHOWN AT TENTHS POINTS ON THE POST-TENSIONING SHOP DRAWINGS IN ORDER TO FACILITATE THE ACCURATE PLACEMENT OF DUCTS.
 7. AFTER STRESSING IS COMPLETED AND PRIOR TO FALSEWORK REMOVAL, THE ANCHORAGE BLOCK RECESS SHALL BE FILLED WITH CLASS "A" MODIFIED CONCRETE (FC = 4000 PSI).
 8. GRILLAGE REINFORCING STEEL SHOWN ON THIS SHEET SHALL BE INCLUDED ON PRESTRESSING SHOP DRAWINGS.
- "X" - BLOCKOUT DIMENSIONS AND RECESS ANCHORAGE REINFORCEMENT SHALL BE DETERMINED BY THE POST-TENSIONING CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.

			APPROVED
11/08/00	ADDENDUM NO. 3		
10/31/00	ADDENDUM NO. 2		DEJ
KEY NO.	DATE	DESCRIPTION	

WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES RAMP "ES" OVER RAMPS "R2" & "R3" ANCHORAGE ZONE DETAILS
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

PROJECT NO: PTD 643358
DESIGNED BY: DEJ
CHECKED BY: RM
APPROVED BY: DEJ

SCALE: HORIZ: NONE
VERT: NONE

FIELD BOOK

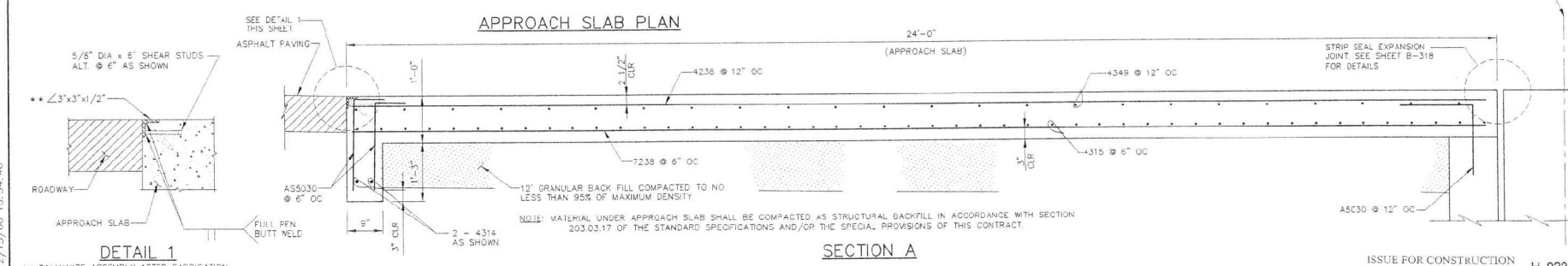
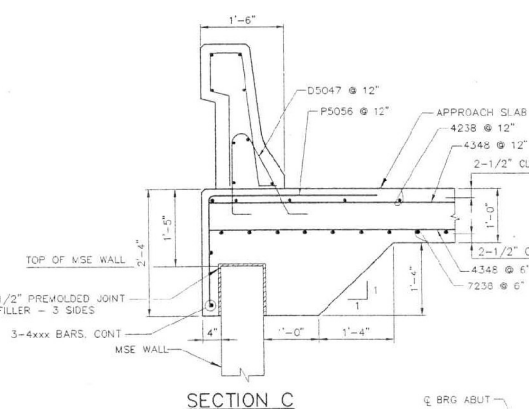
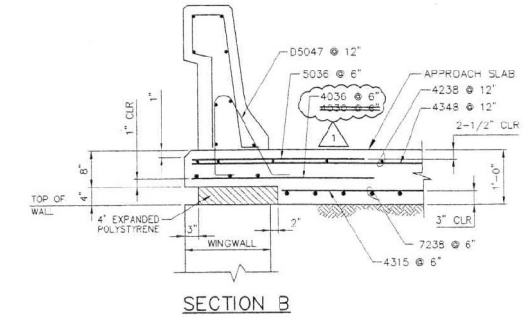
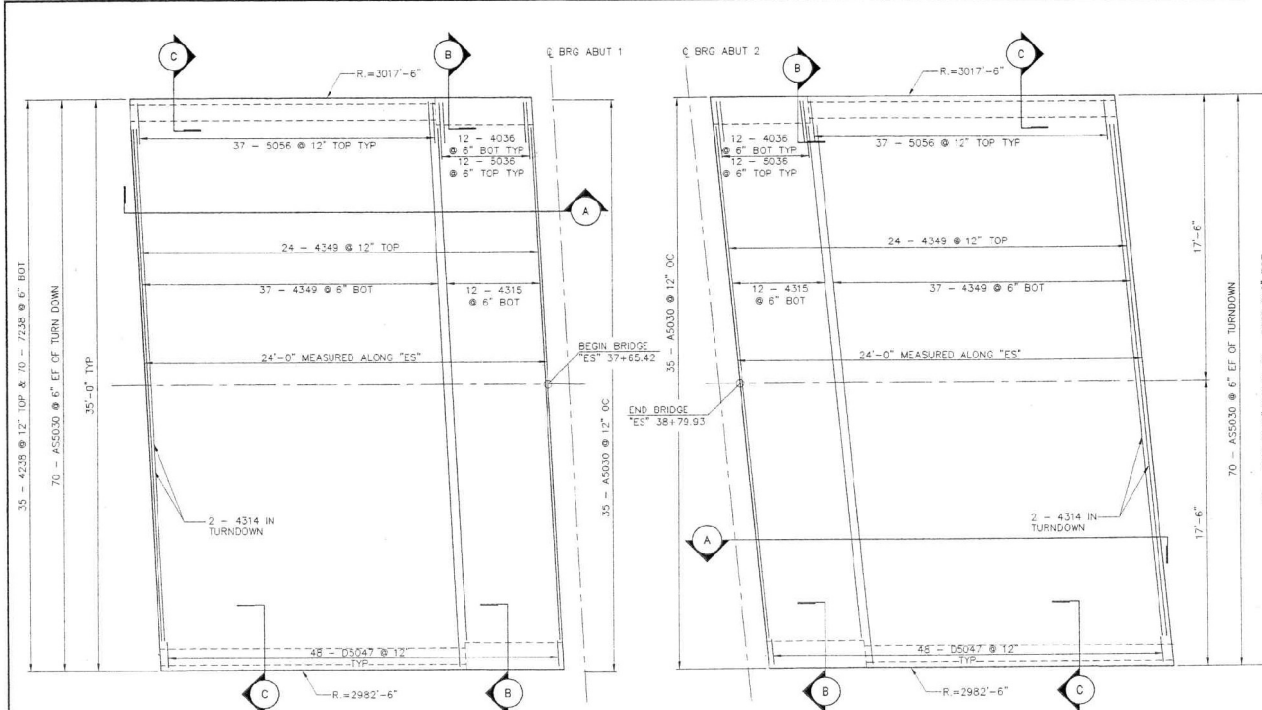
ISSUE FOR CONSTRUCTION H-2338

L-1631
DRAWING NO: B-315
SHEET: 01 OF

PARSONS TRANSPORTATION GROUP
LAS VEGAS, NEVADA

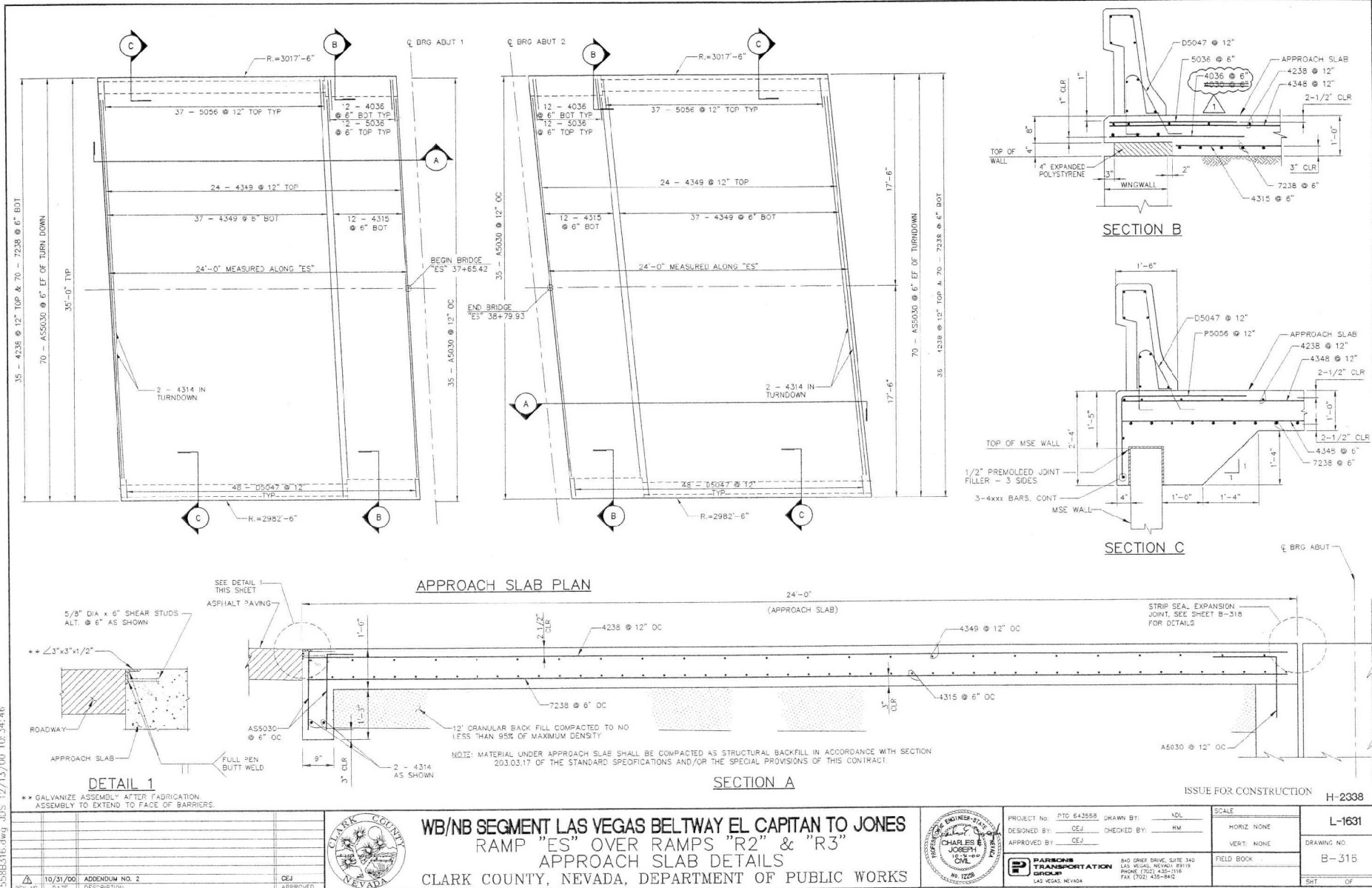
840 GREGORY DRIVE, SUITE 340
LAS VEGAS, NEVADA 89111
PHONE (702) 433-2116
FAX (702) 433-8411

WB/NB EL CAPITAN WAY TO JONES BELTWAY



DETAIL 1 ** GALVANIZE ASSEMBLY AFTER FABRICATION. ASSEMBLY TO EXTEND TO FACE OF BARRIERS.		APPROACH SLAB PLAN		SECTION A		SECTION B		SECTION C	
5/8" DIA x 6" SHEAR STUDS ALT. @ 6" AS SHOWN ** 3"x3"x1/2" ROADWAY APPROACH SLAB FULL PEN BUTT WELD SEE DETAIL 1 THIS SHEET ASPHALT PAVING 12" GRANULAR BACK FILL COMPACTED TO NO LESS THAN 95% OF MAXIMUM DENSITY 2 - 4314 AS SHOWN 3" CLR A5C30 @ 12" OC 4238 @ 12" OC 4349 @ 12" OC 7238 @ 6" OC 4315 @ 6" OC A5C30 @ 12" OC STRIP SEAL EXPANSION JOINT SEE SHEET B-318 FOR DETAILS		24'-0" (APPROACH SLAB) 2'-1/2" CLR 1'-0"		24'-0" MEASURED ALONG "ES" BEGIN BRIDGE ES 37+65.42 END BRIDGE ES 38+79.93 35 - A5030 @ 12" OC 17'-6"		24'-0" MEASURED ALONG "ES" BEGIN BRIDGE ES 37+65.42 END BRIDGE ES 38+79.93 35 - A5030 @ 12" OC 17'-6"		24'-0" MEASURED ALONG "ES" BEGIN BRIDGE ES 37+65.42 END BRIDGE ES 38+79.93 35 - A5030 @ 12" OC 17'-6"	

10/31/00 ADDENDUM NO. 2 DESCRIPTION CEJ APPROVED		CLARK COUNTY NEVADA		WB/NB SEGMENT LAS VEGAS BELTWAY EL CAPITAN TO JONES RAMP "ES" OVER RAMPS "R2" & "R3" APPROACH SLAB DETAILS CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS		PROJECT No: PT2 643558 DESIGNED BY: CEJ CHECKED BY: RM APPROVED BY: CEJ		DRAWN BY: JDL CHECKED BY: RM SCALE: HORIZ: NONE VERT: NONE FIELD BOOK		ISSUE FOR CONSTRUCTION H-2338 L-1631 DRAWING NO: B-316 SHEET OF	
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