MISBALANCED BID ITEMS ?

Price Sensitivity

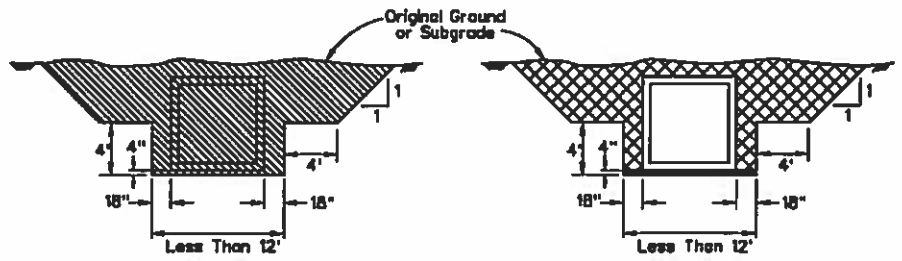
- March 15, 2018 -

Contract No.: 3711
Project No.: SPI-080-1(075)
Project Id: 73920
County: Washoe
Range: R36 $34,000,000.01 to $41,000,000.00
Working: 280

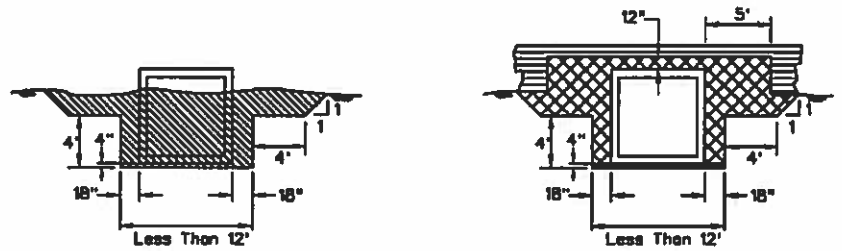
RE:
Designer: Samuel Lompa
Aaron Lobato

Engineer's Estimate	Q & D Construction	Road & Highway Builders	Diff. Between Low & 2nd	Diff Between EE & Low	Low Bid % of EE
$34,733,712.90	$42,600,000.00	$46,666,666.00	$4,066,666.00	$7,866,287.10	123%

Item No.	Quantity	Description	Unit	Engineer's Est. Unit Price	Low Bid Unit Price	2nd Low Bid Unit Price	Qty Chg Req'd to Chg Bid Order	% Change in Qty Req'd	Low % of EE	Significantly Unbalanced	Quantity Check Comments
2010120	37.700	CLEARING AND GRUBBING	ACRE	$2,000.00	$2,500.00	$1,000.00	2,711.11	7191%	125%	No	EE price Ok. Quantity verified.
2020120	153,732.000	REMOVAL OF PORTION OF BRIDGE DECK	SQFT	$1.00	$1.50	$4.00	-1,626,666.40	-1058%	150%	No	EE price Ok. Quantity verified.
2020160	3,835.000	REMOVAL OF EXPANSION JOINTS	LINFT	$20.00	$22.00	$14.00	508,333.25	13255%	110%	No	EE price Ok. Quantity verified.
2020400	10,871.000	REMOVAL OF CONCRETE BARRIER RAIL	LINFT	$13.00	$15.00	$25.00	-406,666.60	-3741%	115%	No	EE price Ok. Quantity verified.
2020935	1,072.200	REMOVAL OF COMPOSITE SURFACE	CUYD	$40.00	$150.00	$50.00	40,666.66	3793%	375%	Yes	EE price Ok. Quantity should be 1,277 cuyd
2020990	772,415.700	REMOVAL OF BITUMINOUS SURFACE (COLD MILLING)	SQYD	$1.00	$2.50	$5.00	-1,626,666.40	-211%	250%	Yes	EE price Ok. Quantity verified.
2020995	62,881.230	REMOVAL OF BITUMINOUS SURFACE (MISCELLANEOUS COLD MILLING)	SQYD	$1.50	$0.80	$1.00	-20,333,330.00	-32336%	53%	Yes	EE price Ok. Quantity verified.
2021231	2,201.000	REMOVAL OF SLOTTED DRAIN	LINFT	$30.00	$35.00	$20.00	271,111.07	12318%	117%	No	EE price Ok. Quantity verified.
2021287	547,272.000	GRINDING FOR PAVEMENT MARKINGS	LINFT	$0.30	$0.60	$0.30	13,555,553.33	2477%	200%	Yes	EE price Ok. Quantity verified.
2030140	21,110.940	ROADWAY EXCAVATION	CUYD	$15.00	$37.00	$30.00	580,952.29	2752%	247%	Yes	EE price Ok. Quantity verified.
2030160	4,423.160	DRAINAGE EXCAVATION	CUYD	$20.00	$40.00	$24.00	254,166.83	5746%	200%	Yes	EE price Ok. Quantity verified.
2030230	10,471.230	BORROW EMBANKMENT	CUYD	$20.00	$2.50	$28.00	-159,477.10	-1523%	13%	Yes	EE price Ok. Quantity verified.
2060110	9,721.890	STRUCTURE EXCAVATION	CUYD	$25.00	$57.00	$14.00	94,573.63	973%	228%	Yes	EE price Ok. Quantity should be 10,171.89 cuyd
2070110	5,926.880	GRANULAR BACKFILL	CUYD	$40.00	$91.00	$20.00	57,276.99	966%	228%	Yes	EE price Ok. Quantity should be 6,376.88 cuyd
2090130	746.720	TYPE 2 DRAIN BACKFILL	CUYD	$90.00	$125.00	$50.00	54,222.21	7261%	139%	No	EE price Ok. Quantity verified.
2110100	1,954.320	TOPSOIL	CUYD	$45.00	$63.00	$60.00	1,355,555.33	69362%	140%	No	EE price Ok. Quantity verified.
2110530	1,670.180	ROCK MULCH	CUYD	$200.00	$68.00	$80.00	-338,888.83	-20291%	34%	Yes	EE price Ok. Quantity verified.
3020140	15,097.200	TYPE 1 CLASS B AGGREGATE BASE	CUYD	$35.00	$64.50	$50.00	280,459.72	1858%	184%	Yes	EE price Ok. Quantity verified.
4020100	7,549.320	PLANTMIXING MISCELLANEOUS AREAS	SQYD	$11.00	$10.00	$14.00	-1,016,666.50	-13467%	91%	No	EE price Ok. Quantity verified.
4020110	28,482.700	PLANTMIX PAVED DITCHES	SQYD	$5.00	$10.75	$8.00	856,140.21	3006%	215%	Yes	EE price Ok. Quantity should be 29,993 sqyd
4020190	147,782.300	PLANTMIX SURFACING (TYPE 2C) (WET)	TON	$68.00	$75.00	$90.00	-271,111.07	-183%	110%	No	EE price Ok. Quantity verified.
4030110	30,940.500	PLANTMIX OPEN-GRADED SURFACING (3/8-INCH) (WET)	TON	$90.00	$115.00	$130.00	-271,111.07	-876%	128%	No	EE price Ok. Quantity verified.
4960130	16,224.000	BRIDGE DECK PREPARATION AND CONCRETE	SQYD	$25.00	$22.00	$30.00	-508,333.25	-3133%	88%	No	EE price Ok. Quantity verified.
4960160	1,468,648.000	POLYMER CONCRETE AGGREGATE	POUND	$0.35	$0.22	$0.50	-14,523,807.14	-989%	63%	Yes	EE price Ok. Quantity verified.
4960170	205,614.000	POLYMER CONCRETE RESIN	POUND	$2.50	$2.00	$3.00	-4,066,666.00	-1978%	80%	No	EE price Ok. Quantity verified.
4970110	8,568.000	THIN BONDED MULTILAYER OVERLAY	SQYD	$26.00	$36.00	$35.00	4,066,666.00	47463%	138%	No	EE price Ok. Limited bid history at this quantity. Quantity verified.
5020130	1,308.000	SPECIAL CONCRETE BARRIER RAIL	LINFT	$225.00	$225.00	$60.00	24,646.46	1884%	100%	No	EE price Ok. Quantity verified.
5020160	416.000	CONCRETE BARRIER RAIL (TYPE A)	LINFT	$75.00	$150.00	$60.00	45,185.18	10862%	200%	Yes	EE price Ok. Quantity verified.
5020170	11,882.000	CONCRETE BARRIER RAIL (TYPE FA)	LINFT	$45.00	$52.00	$60.00	-508,333.25	-4278%	116%	No	EE price Ok. Quantity verified.
5020450	1.000	SEISMIC RETROFIT OF COLUMNS	LS	$300,000.00	$93,000.00	$200,000.00	N/A	N/A	31%	Yes	EE price Ok.
5020750	224.850	CLASS AA CONCRETE (MINOR)	CUYD	$1,200.00	$1,750.00	$2,800.00	-3,873.02	-1722%	146%	No	EE price Ok. Quantity verified.
5021700	2,055.000	EXPANSION JOINT SEALANT	LINFT	$25.00	$22.00	$70.00	-84,722.21	-4123%	88%	No	EE price Ok. Quantity verified.
5022000	1,520.000	PREFORMED JOINT FILLER, (2-INCH)	LINFT	$40.00	$41.00	$60.00	-214,035.05	-14081%	103%	No	EE price Ok. Quantity verified.
5022020	2,015.000	PREFORMED JOINT FILLER, (3-INCH)	LINFT	$40.00	$56.00	$65.00	-451,851.78	-22424%	140%	No	EE price Ok. Quantity verified.
6000100	2,035.000	TRENCH DRAIN	LINFT	$150.00	$185.00	$150.00	116,190.46	5710%	123%	No	EE price Ok. Quantity verified.
6030170	2,949.000	18-INCH REINFORCED CONCRETE PIPE, CLASS III	LINFT	$75.00	$70.00	$150.00	-50,833.33	-1724%	93%	No	EE price Ok. Quantity verified.
6040280	646.000	18-INCH CORR. METAL PIPE (16 GAGE)	LINFT	$90.00	$58.50	$140.00	-49,897.74	-7724%	65%	Yes	EE price Ok. Quantity verified.
6040545	462.500	36-INCH CORR. METAL PIPE (16 GAGE)	LINFT	$110.00	$180.00	$150.00	135,555.53	29309%	164%	Yes	EE price Ok. Quantity verified.
6090850	1.000	STORMWATER TREATMENT VAULT (TYPE B)	EACH	$90,000.00	$60,000.00	$40,000.00	203.33	20333%	67%	Yes	EE price Ok. Limited bid history.
6090860	1.000	STORMWATER TREATMENT VAULT (TYPE C)	EACH	$42,000.00	$85,000.00	$60,000.00	162.67	16267%	202%	Yes	EE price Ok. Limited bid history.
6091040	50,356.160	STRUCTURAL STEEL GRATES	POUND	$2.40	$1.95	$2.00	-81,333,320.00	-161516%	81%	No	EE price Ok. Quantity verified.
6100170	9,933.530	RIPRAP (CLASS 150)	CUYD	$65.00	$63.00	$30.00	123,232.30	1241%	97%	No	EE price Ok. Quantity verified.
6100190	3,361.070	RIPRAP (CLASS 300)	CUYD	$75.00	$73.00	$40.00	123,232.30	3666%	97%	No	EE price Ok. Quantity verified.
6100210	755.530	RIPRAP (CLASS 550)	CUYD	$90.00	$147.00	$120.00	150,617.26	19935%	163%	Yes	EE price Ok. Quantity verified.
6100400	230.000	WIRE MESH	SQYD	$150.00	$240.00	$100.00	29,047.61	12629%	160%	Yes	EE price Ok. Quantity verified.
6100460	1,078.220	RIPRAP BEDDING (CLASS 150)	CUYD	$75.00	$65.00	$60.00	813,333.20	75433%	87%	No	EE price Ok. Quantity verified.
6100470	1,652.500	RIPRAP BEDDING (CLASS 300)	CUYD	$85.00	$70.00	$80.00	-406,666.60	-24609%	108%	No	EE price Ok. Quantity verified.
6100585	309.150	ARTICULATED CONCRETE BLOCK	SQYD	$125.00	$185.00	$250.00	-62,564.09	-20237%	148%	No	EE price Ok. Limited bid history. Quantity verified.
6130770	15,276.000	CLASS AA CONCRETE CURB AND GUTTER (SPECIAL)	LINFT	$20.00	$38.00	$12.00	156,410.23	1024%	190%	Yes	EE price Ok. Quantity verified.
6170780	3.000	28-FOOT PRECAST CATTLE GUARD	EACH	$23,000.00	$23,000.00	$25,000.00	-2,033.33	-67778%	100%	No	EE price Ok. Quantity verified.
6180230	8,670.000	CABLE BARRIER	LINFT	$15.00	$22.00	$25.00	-1,355,555.33	-15635%	147%	No	EE price Ok. Quantity verified.
6180250	62,482.000	REMOVE AND RESET GUARDRAIL	LINFT	$1.00	$5.00	$5.00	N/A	N/A	500%	Yes	EE price Ok. Quantity should be 70,986 linft
6180350	55.000	GUARDRAIL TERMINAL (FLARED)	EACH	$2,500.00	$3,100.00	$3,000.00	40,666.66	73939%	124%	No	EE price Ok. Quantity verified.
6180550	9,615.000	GALVANIZED GUARDRAIL (TRIPLE CORRUGATION)	LINFT	$30.00	$36.00	$35.00	4,066,666.00	42295%	120%	No	EE price Ok. Quantity verified.
6190200	3,811.000	GUIDE POSTS (RIGID)	EACH	$35.00	$38.00	$40.00	-2,033,333.00	-53354%	109%	No	EE price Ok. Quantity verified.
6230225	142.000	NO. 3-1/2 PULL BOX	EACH	$500.00	$491.00	$800.00	-13,160.73	-9268%	98%	No	EE Good
6230268	220.000	LUMINAIRE, TYPE B	EACH	$650.00	$528.00	$1,500.00	-4,183.81	-1902%	81%	No	EE Good
6230570	45.000	STEEL POLE, TYPE 7	EACH	$4,500.00	$3,903.00	$8,000.00	-1,939.28	-4310%	87%	No	EE Good
6230575	55.000	STEEL POLE, TYPE 7 (WITH SAFETY BASE)	EACH	$5,500.00	$4,431.00	$8,000.00	-1,139.44	-2072%	81%	No	EE Good



CULVERT IN EXCAVATION



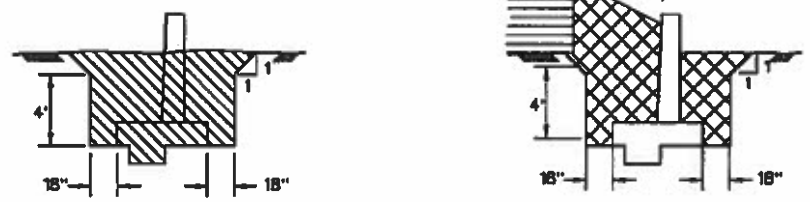
CULVERT IN EMBANKMENT

LEGEND:

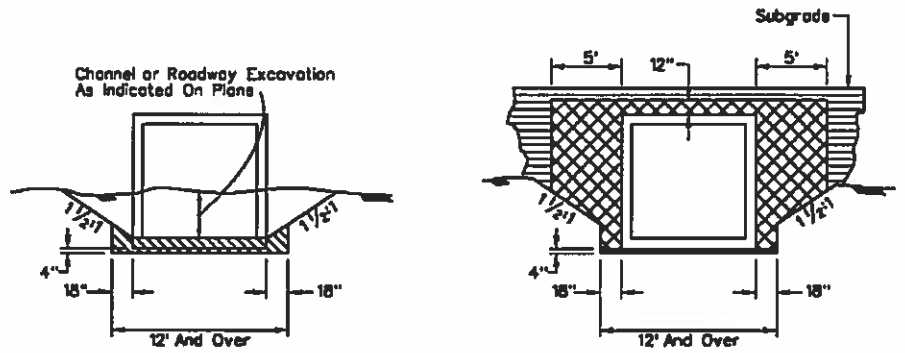
- STRUCTURE EXCAVATION
- GRANULAR BACKFILL
- EMBANKMENT
- BEDDING

NOTES:

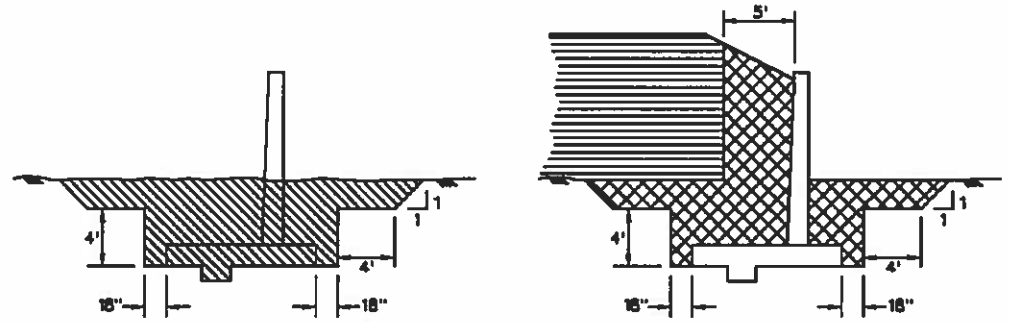
1. Trenches more than 4 feet deep shall be shored, laid back to at least the angle of repose for existing field conditions, or some other means of protection shall be provided.
2. If hazardous field conditions indicate ground movement may be expected, trenches less than 4 feet deep shall also be protected as indicated in Note 1.
3. For the purpose of payment, structure excavation and backfill quantities are based on these standard drawings and no additional payment will be made for shoring.
4. Trench excavation shoring shall conform to OSHA Regulations 29 CFR Part 1926, Subpart P, Appendix C.
5. The quantity of structure excavation and backfill measured for payment shall be the number of cubic yards calculated minus any duplication of limits which overlap.
6. The limits of structure excavation and backfill shown herein shall be used for the method of measurement and payment only. There shall be no additional compensation for any additional excavation or backfill required for excavations to meet OSHA regulations.
7. Bedding material shall be granular backfill or Type 2 Class B aggregate meeting the resistivity requirements for granular backfill. bedding material will be paid for as granular backfill.



FOOTING WIDTH IS 6' OR LESS



CULVERT IN EXCAVATION OR EMBANKMENT



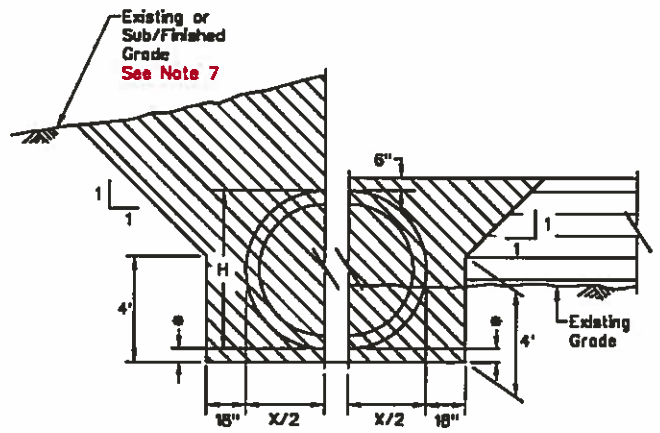
FOOTING WIDTH IS GREATER THAN 6'

RETAINING WALLS

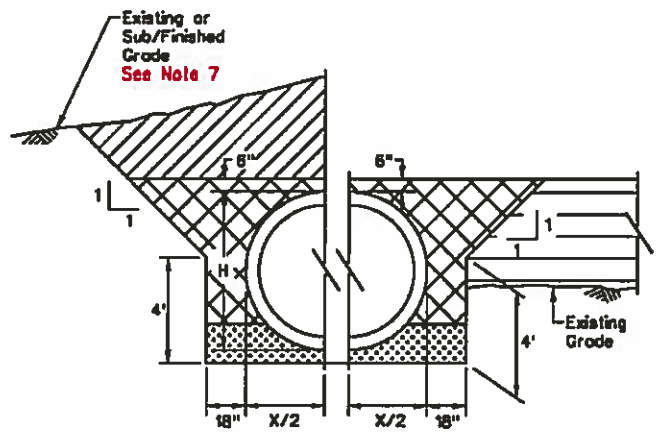
STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION

STRUCTURE EXCAVATION
AND BACKFILL
METHOD OF MEASUREMENT

R-1.1.4	(208,207)	Signed Original On File
ADOPTED 11/73	REVISED 8/09	CHIEF ROAD DESIGN ENGR.



IN EXCEDATION IN EMBANKMENT



IN EXCAVATION IN EMBANKMENT

* – Varies Per Bedding Class

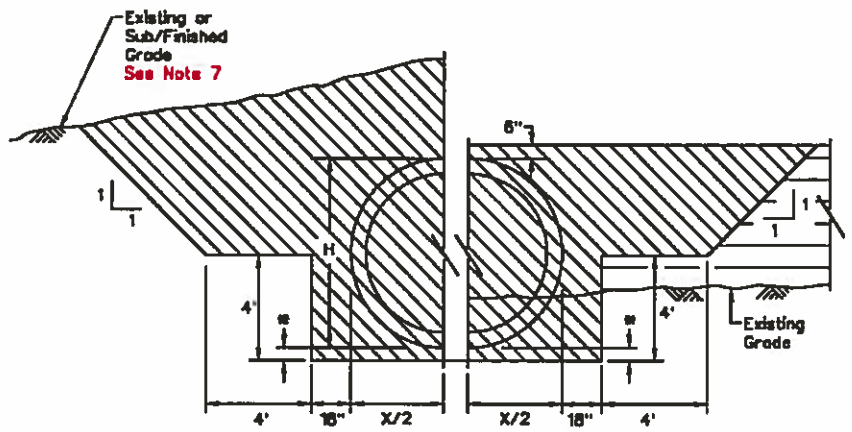
EXCAVATION

BACKFILL

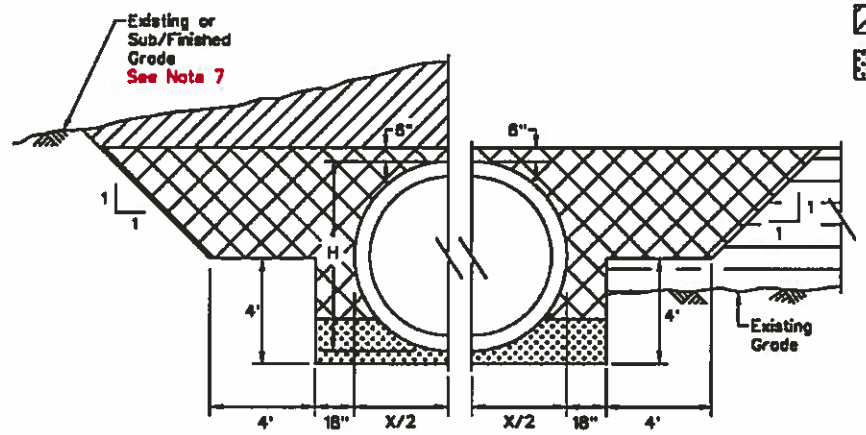
X = Diameter For CMP
X = Span For CMAP
X = Outside Dimension For RCP or HDPE

H EQUALS 6' OR LESS

R-7



IN EXCAVATION IN EMBANKMENT



IN EXCAVATION IN EMBANKMENT

* – Varies Per Bedding Class

EXCAVATION

BACKFILL

X = Diameter For CMP
X = Span For CMAP
X = Outside Dimension For RCP or HDPE

H EQUALS GREATER THAN 6'

NOTES:

1. Trenches more than 4 feet deep shall be shored, laid back to at least the angle of repose for existing field conditions, or some other means of protection shall be provided.
2. If hazardous field conditions indicate ground movement may be expected, trenches less than 4 feet deep shall be protected as indicated in Note 1.
3. For purposes of payment, structure excavation and backfill quantities are based on these standard drawings minus any duplication in quantities which overlap. If shoring is used, payment will be made for the structure excavation and backfill based on these standard drawings and no additional payment will be made for shoring.
4. Trench excavation and shoring shall conform to current OSHA regulations. Payment will be made based on these standard drawings and there will be no additional compensation for any additional excavation or backfill required for excavations to meet OSHA regulations.
5. Granular backfill shall be placed for a minimum depth of 6" above the top of pipe for the width of the trench. Complete the trench backfill with backfill, granular backfill may be used at no additional payment.
6. Provide adequate temporary cover over pipe, to protect pipe from damage during construction.
7. For installations in excavation, the quantities for excavation and backfill shall be calculated and paid from either existing grade or sub/finished grade, whichever is lower.

LEGEND:

- STRUCTURE EXCAVATION
- GRANULAR BACKFILL
- ROADWAY EMBANKMENT
- BACKFILL
- BEDDING SEE SHEET R-1.1.6

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION

STRUCTURE EXCAVATION AND BACKFILL FOR PIPES METHOD OF MEASUREMENT

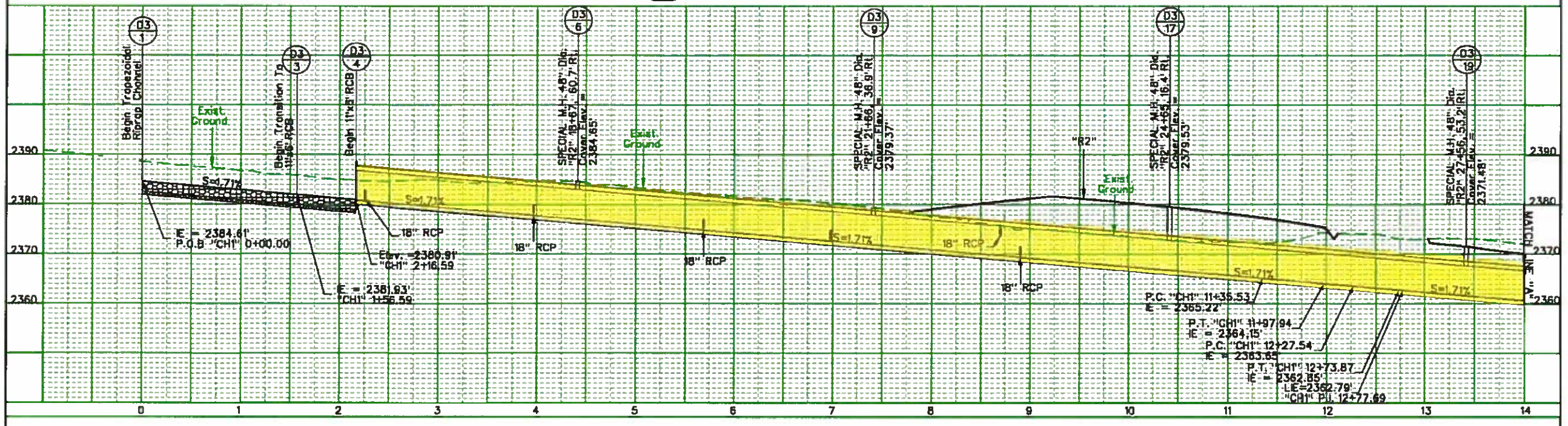
R-1.1.5 (203,208,207)	Signed Original On File
ADOPTED 10/72 REVISED 10/15	CHIEF ROAD DESIGN ENGR.

STATE	PROJECT NO.	COUNTY	SHEET NO.
NEVADA	DE-015-1(150)	CLARK	DP1

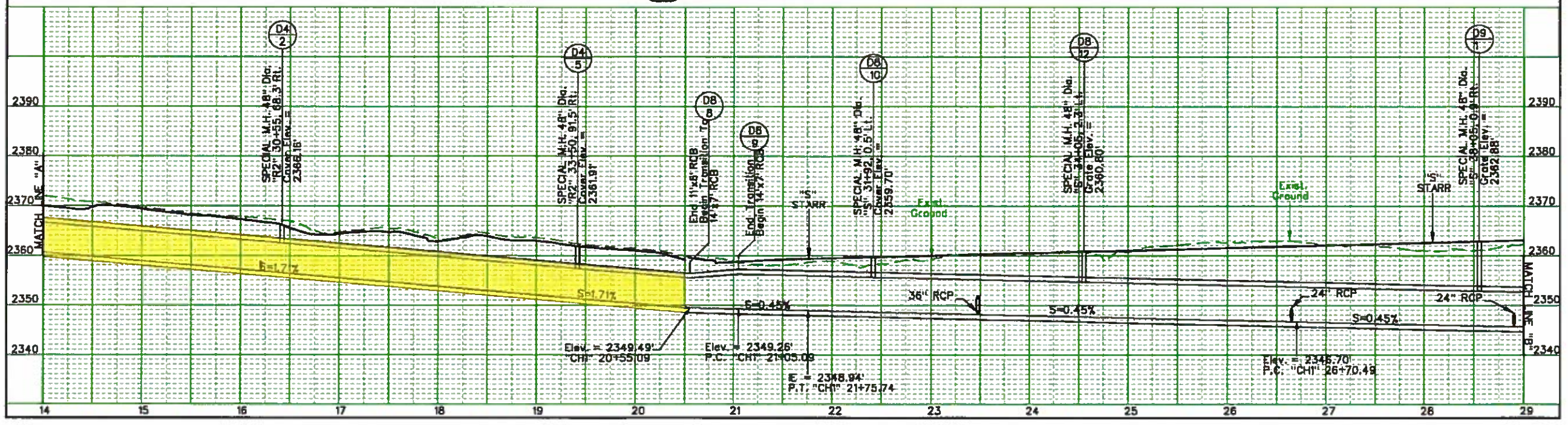
NOTE: DEPICTED UTILITY LOCATIONS ARE APPROXIMATE ONLY. CONTRACTOR TO VERIFY EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

VERTICAL TO HORIZONTAL 5:1

D3-1 "R2" 14+22 TO "R2" 26+92



D4-9 "R2" 26+92 TO "S" 31+98.53



STATE	PROJECT NO	COUNTY	SHEET NO
NEVADA	DE-015-1(150)	CLARK	HS1

HYDRAULICS STRUCTURE LIST

DESCRIPTION	STATION TO STATION	202 0285 REMOVAL OF CULVERT PIPE (LINFT)	202 1040 REMOVAL OF DROP INLET (EACH)	203 0160 DRAINAGE EXCAVATION (CUYD)	206 0110 STRUCTURE EXCAVATION (CUYD)	207 0110 GRANULAR BACKFILL (CUYD)	302 0130 TYPE 1 CLASS B AGGREGATE BASE (TON)	502 0710 CLASS A CONCRETE (MAJOR) (CUYD)	502 0720 CLASS A CONCRETE (MINOR) (CUYD)	505 0100 REINFORCING STEEL (POUND)	506 0110 STRUCTURAL STEEL (POUND)	600 0100 TRENCH DRAIN (LINFT)	603 0140 15-INCH REINFORCED CONCRETE PIPE, CLASS III (LINFT)	603 0170 18-INCH REINFORCED CONCRETE PIPE, CLASS III (LINFT)	603 0230 24-INCH REINFORCED CONCRETE PIPE, CLASS III (LINFT)	603 0290 30-INCH REINFORCED CONCRETE PIPE, CLASS III (LINFT)	603 0350 36-INCH REINFORCED CONCRETE PIPE, CLASS III (LINFT)	603 1070 30-INCH PRECAST END SECTION (EACH)	604 2115 15-INCH CORR. METAL NESTABLE PIPE (16 GAGE) (LINFT)	608 0230 ANCHOR ASSEMBLY (12-INCH) (EACH)	608 0250 ANCHOR ASSEMBLY (18-INCH) (EACH)	608 0350 12-INCH DOWNDRAIN PIPE (LINFT)	609 0360 SPECIAL MANHOLE (RCB) (EACH)	609 1030 CASTINGS (POUND)	609 1040 STRUCTURAL STEEL GRATES (POUND)	609 1160 48-INCH PRECAST REINFORCED CONCRETE MANHOLE, TYPE 1 (EACH)	609 1220 48-INCH PRECAST REINFORCED CONCRETE MANHOLE, TYPE 1 (MODIFIED) (EACH)	609 1270 60-INCH PRECAST REINFORCED CONCRETE MANHOLE, TYPE 2 (EACH)	609 1280 60-INCH PRECAST REINFORCED CONCRETE MANHOLE, TYPE 2 (MODIFIED) (EACH)	609 1310 72-INCH PRECAST REINFORCED CONCRETE MANHOLE, TYPE 2 (EACH)	609 1320 72-INCH PRECAST REINFORCED CONCRETE MANHOLE, TYPE 2 (MODIFIED) (EACH)	610 0050 GEOTEXTILE (CLASS 1) (SQYD)	610 0190 RIPRAP (CLASS 300) (CUYD)	610 0470 RIPRAP BEDDING,(CLASS 300) (CUYD)
NOTE: ALL LOCATIONS ARE APPROXIMATE AND MAY BE ADJUSTED BY THE ENGINEER																																		
REMOVE EXISTING DI LT "C" 297+25.	D1-1		1																															
REMOVE EXISTING 24" RCP LT "C" 297+25 TO LT "C" 298+22.	D1-2	135																																
CONSTRUCT TRAPEZOIDAL RIPRAP CLASS 300 CHANNEL 49.0' RT "R2" 14+22 TO 53.2' RT "R2" 15+79 (W = 10', H = 4', SS = 2). SEE SHEETS D3 AND DP1.	D3-1			1204.0																												417	139	799
CONSTRUCT TYPE 2 DI (DOUBLE GRATE, L = 4') 17.7' RT "R2" 16+36 WITH 18" RCP. DISCHARGE INTO 11 x 6 RCB. SEE SHEETS D3, DP2, AND DD8.	D3-2				7.3 24.1	4.9 12.6			1.33	57	574			33																				
CONSTRUCT RIPRAP CLASS 300 TRANSITION BETWEEN TRAPEZOIDAL RIPRAP CHANNEL AND 11 x 6 RCB FROM 53.3' RT "R2" 15+79 TO 54.2' RT "R2" 16+40. SEE SHEETS D3, DP1, AND DD1.	D3-3				157.1																											211	118	39
CONSTRUCT TYPE 1 HEADWALL 54.2' RT "R2" 16+40. CONSTRUCT 11 x 6 RCB FROM 54.2' RT "R2" 16+40 TO 95.0' RT "R2" 34+63. SEE SHEETS D3 AND DP1.	D3-4 DP1				43.0 [illegible]	72 53.19		33.24 [illegible]		3415 [illegible]																								
CONSTRUCT TYPE 2 DI (DOUBLE GRATE, L = 4') 17.5' RT "R2" 18+22 WITH 18" RCP. DISCHARGE INTO 11 x 6 RCB. SEE SHEETS D3, DP2, AND DD8.	D3-5				7.2 8.6	4.8 13.8			1.33	57	574			35																				
INSTALL 48" SPECIAL RCB MANHOLE 60.7' RT "R2" 18+67. SEE SHEETS D3, DP1, AND DD7.	D3-6																						1	270										
CONSTRUCT TYPE 2 DI (DOUBLE GRATE, L = 4') 17.4' RT "R2" 19+94 WITH 18" RCP. DISCHARGE INTO 11 x 6 RCB. SEE SHEETS D3, DP2, AND DD8.	D3-7				7.2 12.0	4.8 10.6			1.31	56	574			27																				
CONSTRUCT TYPE 2 DI (DOUBLE GRATE, L = 4') 17.3' RT "R2" 21+22 WITH 18" RCP. DISCHARGE INTO 11 x 6 RCB. SEE SHEETS D3, DP3, AND DD8.	D3-8				8.2 16.5	5.4 6.7			1.45	63	574			17																				
INSTALL 48" SPECIAL RCB MANHOLE 36.9' RT "R2" 21+66. SEE SHEETS D3, DP1, AND DD7.	D3-9																						1	270										
CONSTRUCT TYPE 5-2G EMBANKMENT PROTECTOR WITH 18" RCP 85.9' RT "C" 320+41. CONNECT TO NEW TYPE 5-2G EMBANKMENT PROTECTOR 65.8' RT "C" 320+76. SEE SHEETS D3 AND DP3.	D3-10				9.4 32.7	6.8 12.8			1.45	85				33							2				456									

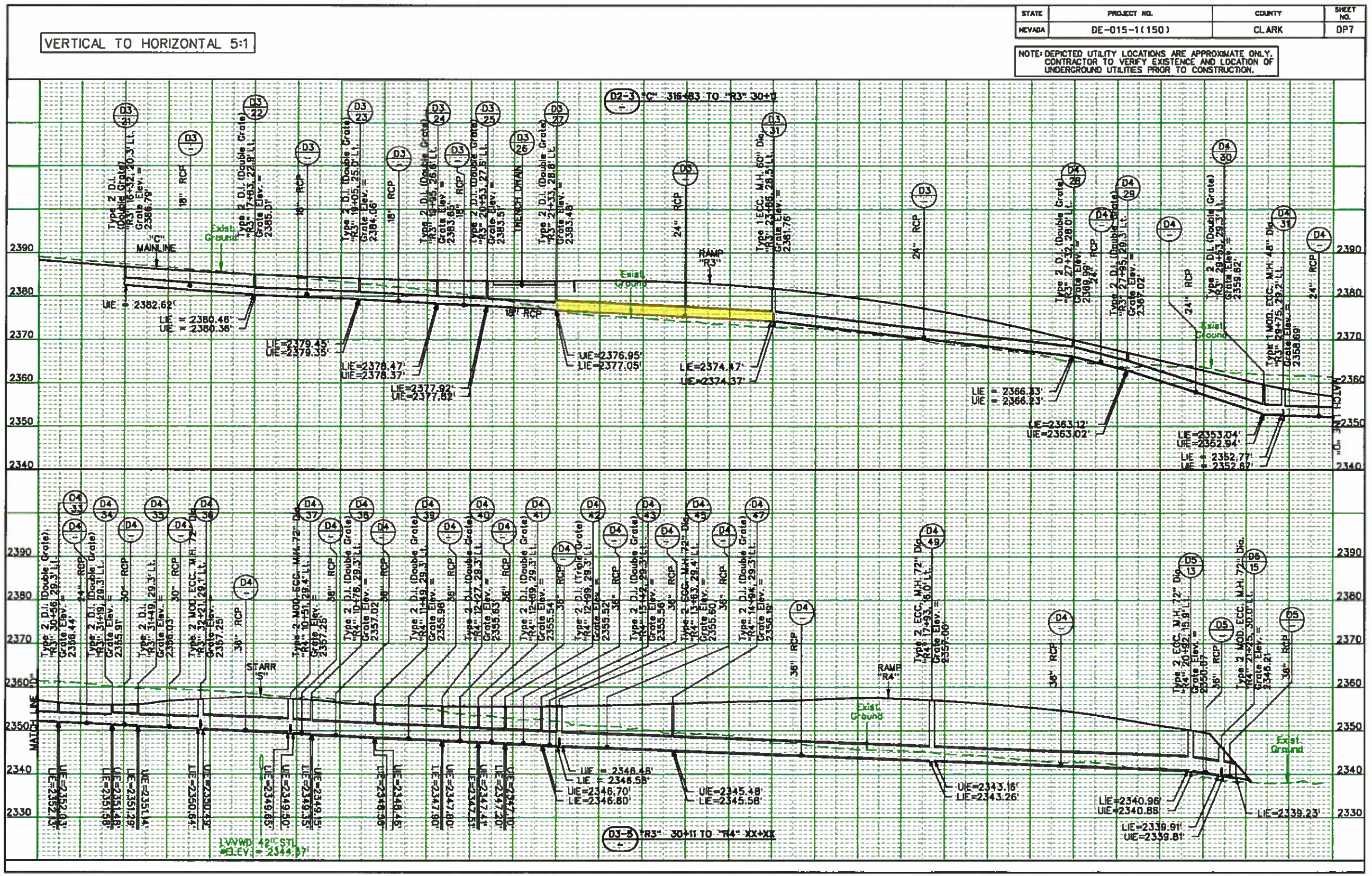
11' x 6' REINFORCED BOX CULVERT (Sht # DP1) = 1,823 LF

Item No.	Quantity	Unit	Description	Engineer's Estimate		LVP		2ND BIDDER		3RD BIDDER		4TH BIDDER	
				Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
2060110	16,107.9	CUYD	STRUCTURE EXCAVATION - *RCB*	$ 9.00	$ 144,971.10	$ 6.00	$ 96,647.40	$ 5.00	$ 80,539.50	$ 13.50	$ 217,456.65	$ 6.00	$ 96,647.40
2060110	43.0	CUYD	STRUCTURE EXCAVATION - *Headwall*	$ 9.00	$ 387.00	$ 6.00	$ 258.00	$ 5.00	$ 215.00	$ 13.50	$ 580.50	$ 6.00	$ 258.00
2070110	5,319.0	CUYD	GRANULAR BACKFILL - *RCB*	$ 17.00	$ 90,423.00	$ 16.00	$ 85,104.00	$ 30.00	$ 159,570.00	$ 33.00	$ 175,527.00	$ 6.00	$ 31,914.00
2070110	72.0	CUYD	GRANULAR BACKFILL - *Headwall*	$ 17.00	$ 1,224.00	$ 16.00	$ 1,152.00	$ 30.00	$ 2,160.00	$ 33.00	$ 2,376.00	$ 6.00	$ 432.00
5020710	2,533.28	CUYD	CLASS A CONCRETE (MAJOR) - *RCB*	$ 400.00	$ 1,013,312.00	$ 263.00	$ 666,252.64	$ 525.00	$ 1,329,972.00	$ 365.50	$ 925,913.84	$ 300.00	$ 759,984.00
5020710	33.24	CUYD	CLASS A CONCRETE (MAJOR) - *H/W*	$ 400.00	$ 13,296.00	$ 263.00	$ 8,742.12	$ 525.00	$ 17,451.00	$ 365.50	$ 12,149.22	$ 300.00	$ 9,972.00
5050100	557,391.0	POUND	REINFORCING STEEL - *RCB*	$ 0.80	$ 445,912.80	$ 0.63	$ 351,156.33	$ 0.50	$ 278,695.50	$ 0.68	$ 379,025.88	$ 0.50	$ 278,695.50
5050100	3,415.0	POUND	REINFORCING STEEL - *Headwall*	$ 0.80	$ 2,732.00	$ 0.63	$ 2,151.45	$ 0.50	$ 1,707.50	$ 0.68	$ 2,322.20	$ 0.50	$ 1,707.50
					$1,712,257.90		$1,211,463.94		$1,870,310.50		$1,715,351.29		$1,179,610.40
					$ 939.25		$ 664.54		$ 1,025.95		$ 940.95		$ 647.07

STATE	PROJECT NO.	COUNTY	SHEET NO.
NEVADA	DE-015-1(150)	CLARK	DP7

NOTE: DEPICTED UTILITY LOCATIONS ARE APPROXIMATE ONLY. CONTRACTOR TO VERIFY EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

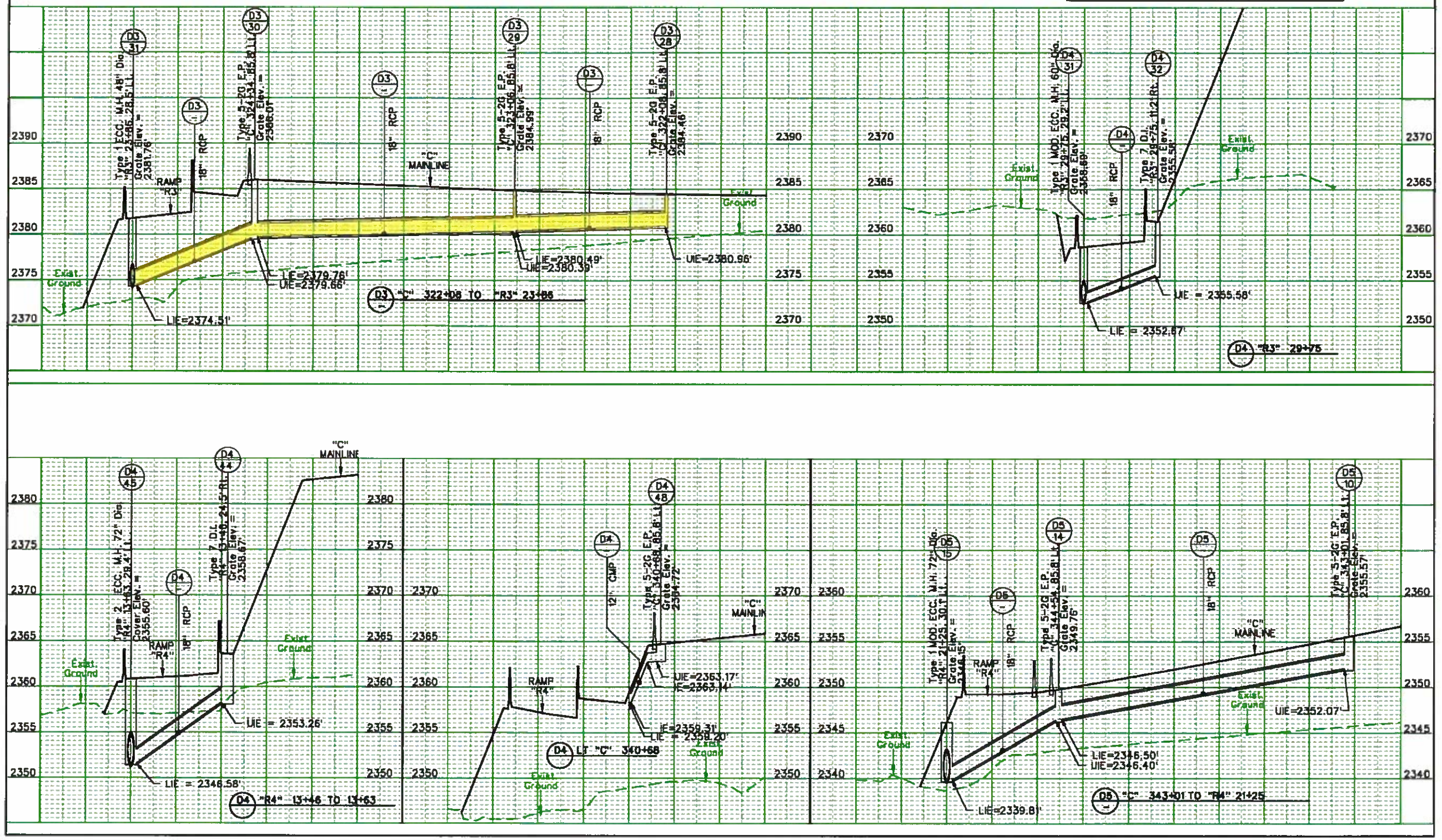
VERTICAL TO HORIZONTAL 5:1



STATE	PROJECT NO.	COUNTY	SHEET NO.
NEVADA	DE-015-1(150)	CLARK	DP8

NOTE: DEPICTED UTILITY LOCATIONS ARE APPROXIMATE ONLY. CONTRACTOR TO VERIFY EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

VERTICAL TO HORIZONTAL 5:1



STATE	PROJECT NO	COUNTY	SHEET NO
NEVADA	DE-015-1(150)	CLARK	HS3

HYDRAULICS STRUCTURE LIST

STATION TO STATION		DESCRIPTION	REMOVAL OF CULVERT PIPE 202 0285 LINFT	REMOVAL OF DROP INLET 202 1040 EACH	DRAINAGE EXCAVATION 203 0160 CUYD	STRUCTURE EXCAVATION 206 0110 CUYD	GRANULAR BACKFILL 207 0110 CUYD	TYPE 1 CLASS B AGGREGATE BASE 302 0130 TON	CLASS A CONCRETE (MAJOR) 502 0710 CUYD	CLASS A CONCRETE (MINOR) 502 0720 CUYD	REINFORCING STEEL 505 0100 POUND	STRUCTURAL STEEL 506 0110 POUND	TRENCH DRAIN 600 0100 LINFT	15-INCH REINFORCED CONCRETE PIPE, CLASS III 603 0140 LINFT	18-INCH REINFORCED CONCRETE PIPE, CLASS III 603 0170 LINFT	24-INCH REINFORCED CONCRETE PIPE, CLASS III 603 0230 LINFT	30-INCH REINFORCED CONCRETE PIPE, CLASS III 603 0290 LINFT	36-INCH REINFORCED CONCRETE PIPE, CLASS III 603 0350 LINFT	30-INCH PRECAST END SECTION 603 1070 EACH	15-INCH CORR. METAL NESTABLE PIPE (16 GAGE) 604 2115 LINFT	ANCHOR ASSEMBLY (12-INCH) 608 0230 EACH	ANCHOR ASSEMBLY (18-INCH) 608 0250 EACH	12-INCH DOWNDRAIN PIPE 608 0350 LINFT	SPECIAL MANHOLE (RCB) 609 0360 EACH	CASTINGS 609 1030 POUND	STRUCTURAL STEEL GRATES 609 1040 POUND	48-INCH PRECAST REINFORCED CONCRETE MANHOLE, TYPE 1 609 1160 EACH	48-INCH PRECAST REINFORCED CONCRETE MANHOLE, TYPE 1 (MODIFIED) 609 1220 EACH	60-INCH PRECAST REINFORCED CONCRETE MANHOLE, TYPE 2 609 1270 EACH	60-INCH PRECAST REINFORCED CONCRETE MANHOLE, TYPE 2 (MODIFIED) 609 1280 EACH	72-INCH PRECAST REINFORCED CONCRETE MANHOLE, TYPE 2 609 1310 EACH	72-INCH PRECAST REINFORCED CONCRETE MANHOLE, TYPE 2 (MODIFIED) 609 1320 EACH	GEOTEXTILE (CLASS 1) 610 0050 SQYD	RIPRAP (CLASS 300) 610 0190 CUYD	RIPRAP BEDDING,(CLASS 300) 610 0470 CUYD
D3-22		CONSTRUCT TYPE 2 DI (DOUBLE GRATE, L = 4') 22.9' LT "R3" 17+63 WITH 18" RCP. CONNECT TO TYPE 2 DI (DBL) 25.0' LT "R3" 19+05. SEE SHEETS D3 AND DP7.				6.7 / 110.0	5.8 / 46.8			1.53	66	574			119																				
D3-23		CONSTRUCT TYPE 2 DI (DOUBLE GRATE, L = 4') 25.0' LT "R3" 19+05 WITH 18" RCP. CONNECT TO TYPE 2 DI (DBL) 26.6' LT "R3" 19+95. SEE SHEETS D3 AND DP7.				10.5 / 99.7	7.0 / 34.6			1.79	78	574			88																				
D3-24		CONSTRUCT TYPE 2 DI (DOUBLE GRATE, L = 4') 26.6' LT "R3" 19+95 WITH 18" RCP. CONNECT TO TYPE 2 DI (DBL) 27.6' LT "R3" 20+63. SEE SHEETS D3 AND DP7.				11.6 / 71.4	7.7 / 21.6			1.95	86	574			55																				
D3-25		CONSTRUCT TYPE 2 DI (DOUBLE GRATE, L = 4') 27.6' LT "R3" 20+63 WITH 18" RCP. CONNECT TO TYPE 2 DI (DBL) 28.8' LT "R3" 21+33. SEE SHEETS D3 AND DP7.				12.4 / 116.2	8.2 / 30.3			2.06	91	574			77																				
D3-26		CONSTRUCT TRENCH DRAIN FROM 29.6' LT "R3" 20+60 (GRATE ELEV = 2383.44) TO 30.8' LT "R3" 21+32 (GRATE ELEV = 2383.48) (W = 6", H1 = 12", H2 = 15"). CONNECT TO NEW TYPE 2 DI (DOUBLE GRATE) 28.8' LT "R3" 21+33. EXCAVATION AND BACKFILL INCIDENTAL TO EXCAVATION AND BACKFILL FOR 18" RCP IN CALLOUT D3-27. SEE SHEETS D3 AND DP7.								6.34	230		74																						
D3-27	DP7	CONSTRUCT TYPE 2 DI (DOUBLE GRATE, L = 4') 28.8' LT "R3" 21+33 WITH 24" RCP. CONNECT TO 48" TY 1 MANHOLE 28.5' LT "R3" 23+86. SEE SHEETS D3 AND DP7.				15.1 / 535.6	9.7 / 123.1			2.16	95	574				248																			
D3-28	DP8	CONSTRUCT TYPE 5-2G EMBANKMENT PROTECTOR 85.8' LT "C" 322+08 WITH 18" RCP. CONNECT TO NEW TYPE 5-2G EMBANKMENT PROTECTOR 85.8' LT "C" 323+06. SEE SHEETS D3 AND DP8.				7.9 / 70.3	6.7 / 31.9			1.24	75				81											456									
D3-29	DP8	CONSTRUCT TYPE 5-2G EMBANKMENT PROTECTOR 85.8' LT "C" 323+06 WITH 18" RCP. CONNECT TO NEW TYPE 5-2G EMBANKMENT PROTECTOR 85.8' LT "C" 324+34. SEE SHEETS D3 AND DP8.				13.1 / 106.0	10.9 / 24.8			1.98	112				63											456									
D3-30	DP8	CONSTRUCT TYPE 5-2G EMBANKMENT PROTECTOR 85.8' LT "C" 324+34 WITH 18" RCP. CONNECT TO 48" TYPE 1 PRECAST REINFORCED CONCRETE MANHOLE 28.5' LT "R3" 23+86. SEE SHEETS D3 AND DP8.				13.1 / 106.0	10.9 / 24.8			1.98	112				63											456									
D3-31		INSTALL 48" TYPE 1 PRECAST REINFORCED CONCRETE MANHOLE 28.5' LT "R3" 23+86. CONNECT TO TYPE 2 DI (DBL) 28.0' LT "R3" 27+32. SEE SHEETS D3, DP7, AND DP8.																							270		1								
D3-32		REMOVE EXISTING DI "C" 319+35.		1																															

24" REINFORCED CONCRETE PIPE (Sht # DP7)

Item No.	Quantity	Unit	Description	Engineer's Estimate		LVP		2ND BIDDER		3RD BIDDER		4TH BIDDER	
				Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
2060110	535.6	CUYD	STRUCTURE EXCAVATION - *RCP*	$ 9.00	$ 4,820.40	$ 6.00	$ 3,213.60	$ 5.00	$ 2,678.00	$ 13.50	$ 7,230.60	$ 6.00	$ 3,213.60
2060110	15.1	CUYD	STRUCTURE EXCAVATION - *DI*	$ 9.00	$ 135.90	$ 6.00	$ 90.60	$ 5.00	$ 75.50	$ 13.50	$ 203.85	$ 6.00	$ 90.60
2070110	123.1	CUYD	GRANULAR BACKFILL - *RCP*	$ 17.00	$ 2,092.70	$ 16.00	$ 1,969.60	$ 30.00	$ 3,693.00	$ 33.00	$ 4,062.30	$ 6.00	$ 738.60
2070110	9.7	CUYD	GRANULAR BACKFILL - *DI*	$ 17.00	$ 164.90	$ 16.00	$ 155.20	$ 30.00	$ 291.00	$ 33.00	$ 320.10	$ 6.00	$ 58.20
5020720	2.16	CUYD	CLASS A CONCRETE (MINOR) - *DI*	$ 1,200.00	$ 2,592.00	$ 2,435.00	$ 5,259.60	$ 2,000.00	$ 4,320.00	$ 1,450.00	$ 3,132.00	$ 3,000.00	$ 6,480.00
5050100	95.0	POUND	REINFORCING STEEL - *DI*	$ 0.80	$ 76.00	$ 0.63	$ 59.85	$ 0.50	$ 47.50	$ 0.68	$ 64.60	$ 0.50	$ 47.50
6030230	248.0	LINFT	24-INCH REINFORCED CONCRETE PIPE, CLASS III	$ 60.00	$ 14,880.00	$ 113.00	$ 28,024.00	$ 60.00	$ 14,880.00	$ 76.65	$ 19,009.20	$ 225.00	$ 55,800.00
					$ 24,761.90		$ 38,772.45		$ 25,985.00		$ 34,022.65		$ 66,428.50
					$ 99.85		$ 156.34		$ 104.78		$ 137.19		$ 267.86

18" REINFORCED CONCRETE PIPE (Sht # DP8) W/ 3 each Drop Inlets

Item No.	Quantity	Unit	Description	Engineer's Estimate		LVP		2ND BIDDER		3RD BIDDER		4TH BIDDER	
				Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
2060110	282.3	CUYD	STRUCTURE EXCAVATION - *RCP*	$ 9.00	$ 2,540.70	$ 6.00	$ 1,693.80	$ 5.00	$ 1,411.50	$ 13.50	$ 3,811.05	$ 6.00	$ 1,693.80
2060110	34.1	CUYD	STRUCTURE EXCAVATION - *DI*	$ 9.00	$ 306.90	$ 6.00	$ 204.60	$ 5.00	$ 170.50	$ 13.50	$ 460.35	$ 6.00	$ 204.60
2070110	81.5	CUYD	GRANULAR BACKFILL - *RCP*	$ 17.00	$ 1,385.50	$ 16.00	$ 1,304.00	$ 30.00	$ 2,445.00	$ 33.00	$ 2,689.50	$ 6.00	$ 489.00
2070110	27.5	CUYD	GRANULAR BACKFILL - *DI*	$ 17.00	$ 467.50	$ 16.00	$ 440.00	$ 30.00	$ 825.00	$ 33.00	$ 907.50	$ 6.00	$ 165.00
5020720	5.20	CUYD	CLASS A CONCRETE (MINOR) - *DI*	$ 1,200.00	$ 6,240.00	$ 2,435.00	$ 12,662.00	$ 2,000.00	$ 10,400.00	$ 1,450.00	$ 7,540.00	$ 3,000.00	$ 15,600.00
5050100	299.0	POUND	REINFORCING STEEL - *DI*	$ 0.80	$ 239.20	$ 0.63	$ 188.37	$ 0.50	$ 149.50	$ 0.68	$ 203.32	$ 0.50	$ 149.50
6030230	207.0	LINFT	18-INCH REINFORCED CONCRETE PIPE, CLASS III	$ 60.00	$ 12,420.00	$ 113.00	$ 23,391.00	$ 60.00	$ 12,420.00	$ 76.65	$ 15,866.55	$ 225.00	$ 46,575.00
					$ 23,599.80		$ 39,883.77		$ 27,821.50		$ 31,478.27		$ 64,876.90
					$ 114.01		$ 192.68		$ 134.40		$ 152.07		$ 313.41