



Matthew G. Bevin
Governor

**COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET**
Frankfort, Kentucky 40622
www.transportation.ky.gov/

Greg Thomas
Secretary

September 11, 2019

CALL NO. 100
CONTRACT ID NO. 191239
ADDENDUM # 1

Subject: HENDERSON COUNTY, STP BRO 5053 (031)
Letting September 20, 2019

- (1) Revised - Special Notes - Page 42 of 269
- (2) Revised - Plan Sheets - R2D, S63, and S71

Proposal revisions are available at <http://transportation.ky.gov/Construction-Procurement/>.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

A handwritten signature in cursive script that reads "Rachel Mills".

Rachel Mills, P.E.
Director
Division of Construction Procurement

RM:mr
Enclosures



An Equal Opportunity Employer M/F/D

Additional borings (Holes 2001-2011) were performed in November and December 2016 to further help define the extent of the mined area surrounding the proposed end of the bridge. These borings were performed with poly-crystalline diamond bits and extended through the mine opening or coal seam. These borings were cased through the overburden soils. KYTC personnel returned to the site in April 2017 to conduct downhole videos in the borings. Videos of Borings 2002 and 2004 were not obtained because the PVC casing had collapsed.

The subsurface data sheets are included in the plans. The downhole videos are available for viewing by prospective bidders at the following link:

<https://www.youtube.com/playlist?list=PLFxn4Rhh9fBkXtXP9WjuXAh6V5StUWd4v>

The videos generally show the mine openings to be sediment and debris filled. In some instances, the videos show a small gap between the top of the sediment and the mine roof, while in other cases no gap can be seen.

During the downhole video inspection in June 2016, groundwater levels were measured in the borings that encountered the mine openings at elevations between 360.3 and 362.0 feet, which is approximately 20 feet higher than the normal pool elevation of the Green River. During the video inspection in April 2017, the groundwater levels were measured in the borings that encountered the mine openings at elevations between 362.9 and 363.3 feet. Measured groundwater elevations are shown on the subsurface data sheets.

Samples of the groundwater were obtained from borings that encountered mine voids during the April 2017 site visit. These samples were tested and met the requirements for total solids, chlorides, pH, and sulfate per ASTM C1602/C1602M-06. Please note that the samples were obtained after allowing a period of time for drilling fluids and cuttings to settle out of the groundwater. Drilling and grouting activities will likely disturb sediment and debris in the mine opening and may create different results. The table below contains the laboratory results for the groundwater samples.

Hole #	% Solids	% Chloride	pH	Sulfate (SO ₄), ppm
1004	0.0685	0.0061	6.945	0.082
1005	0.1353	0.0356	6.746	117.49
1006	0.372	0.0076	6.742	84.5
1024	0.1087	0.0167	6.84	119.34
2001	0.0815	0.0033	7.03	41.97
2009	0.1023	0.0027	7.02	125.10
2011	0.1607	0.0089	7.05	74.00

Prospective bidders are strongly encouraged to visit the project site and view the downhole videos. Grouting and backfilling mine contractors/subcontractors are required

PAVING AREAS

ITEM	S							TOTAL PROJECT
	US 60	KY 1078	KY 2243	KY 811 & PETERS RD	DIVERSION NO. 1	DIVERSION NO. 2	DIVERSION KY 2243	
1.50' CL3 ASPHALT SURFACE 0.50B PG64-22 (SHOULDERS WEST)	8.371							8.371
1.50' CL3 ASPHALT SURFACE 0.38D PG64-22 (SHOULDERS EAST)	1,160							1,160
3.00' CL3 ASPHALT BASE 1,00D PG64-22	8,438							8,438
3.75' CL3 ASPHALT BASE 1,00D PG64-22	5,471							5,471
4.00' CL3 ASPHALT BASE 1,00D PG64-22	2,819							2,819
3.00' CL2 ASPHALT BASE 1,00D PG64-22	3,765							3,765
4.00' CL2 ASPHALT BASE 1,00D PG64-22	399							399
4.00' CRUSHED STONE BASE	5,582							5,582
6.00' CRUSHED STONE BASE	3,174							3,174
7.75' CRUSHED STONE BASE	2,427							2,427
10.00' CRUSHED STONE BASE	717							717
FULL-DEPTH CRUSHED STONE BASE SHLDR./WEDGE (VOLUME - CU YDS)	799							799
12' CRUSHED STONE AGGREGATE SIZE NO. 2	11,005							11,005
VARIABLE DEPTH ASPH PAVE MILLING & TEXTURING (VOLUME - CU YDS)	37							37
VARIABLE DEPTH ASPH PAVE MILLING & TEXTURING (VOLUME - CU YDS)	22							22
APPROACH ROADS:								
1.50' CL2 ASPHALT SURFACE 0.38D PG64-22	1,458	803	1,264					3,525
3.00' CL2 ASPHALT BASE 1,00D PG64-22 (2 LAYERS-COMBINED AREAS)	2,972	672	2,133					5,777
4.00' CRUSHED STONE BASE	1,500	326	967					2,793
FULL-DEPTH CRUSHED STONE BASE SHLDR./WEDGE (VOLUME - CU YDS)	256	43	63					362
VARIABLE DEPTH LEVELING & WEDGING PG64-22 (VOLUME - CU YDS)	13		37					50
VARIABLE DEPTH ASPH PAVE MILLING & TEXTURING (VOLUME - CU YDS)	1		2					11
ENTRANCES:								
1.5' CL2 ASPHALT SURFACE 0.38D PG64-22	1,624	751	18					2,393
3.00' CL2 ASPHALT BASE 1,00D PG64-22	1,645	231	18					1,894
4.00' CRUSHED STONE BASE	1,683	238	18					1,939
MOT (DIVERSIONS):								
1.50' CL2 ASPHALT SURFACE 0.38D PG64-22			404	1,561	2,539	404		4,504
4.00' CL2 ASPHALT BASE 1,00 PG64-22			410	1,577	2,571	425		4,558
6.00' CRUSHED STONE BASE				1,618	2,656			4,699
PROJECT:								
ASPHALT SEAL COAT/AGGREGATE	2,476	392	230	1,632	2,649	404		3,326
ASPHALT MATERIAL FOR TACK	25,129	3,695	1,632	2,649	1,561	404		37,609

PAVING SUMMARY

ITEM CODE	ITEM	UNIT	US 60	APPROACH ROADS	ENTRANCES	DIVERSIONS / TEMP-MOT	TOTAL PROJECT
3	CRUSHED STONE BASE	TON	5,529	1,393	446	1,922*	9,290
100	ASPHALT SEAL AGGREGATE	TON	50	17		67	
103	ASPHALT SEAL COAT	TON	6	2		8	
190	LEVELING & WEDGING PG64-22	TON	74	99		173	
212	CL2 ASPHALT BASE 1,00D PG64-22	TON	710	954	313	2,980	
214	CL3 ASPHALT BASE 1,00D PG64-22	TON	3,143			3,143	
301	CL2 ASPHALT SURFACE 0.38D PG64-22	TON	309	291	198	1,170	
324	CL3 ASPHALT SURFACE 0.50B PG64-22	TON	787			787	
356	ASPHALT MATERIAL FOR TACK	TON	10	3	1	16	
2676	MOBILIZATION FOR MILLING & TEXTURING	LP SUM				1	
2677	ASPHALT PAVE MILLING & TEXTURING	TON	44	22		66	
2007EC	JOINT ADHESIVE	LF	2,862	1,010		3,872	
2286EN	HIGH STRENGTH GEOTEXTILE FABRIC TY V	SOYD	11,864			11,864	
2599	FABRIC-GEOTEXTILE TYPE IV	SOYD	10,146			10,146	
78	CRUSHED AGGREGATE SIZE NO. 2	TON	6,603			6,603	

QUANTITIES FOR ITEMS BELOW WILL BE CARRIED OVER TO GENERAL SUMMARY:

NOTES

- ① ALL ASPHALT MIXTURES SHALL BE ESTIMATED AT 110 LBS. PER SQ. YD. PER INCH OF DEPTH, UNLESS NOTED OTHERWISE.
- ② ESTIMATED AT 115 LBS. PER SQ. YD. PER INCH OF DEPTH.
- ③ ESTIMATED AT 4140 LBS. PER CU. YD. INCLUDES BASE AREA FOR LONGITUDINAL EDGE KEYS (3" LAYER, 1.5' WIDTH).
- ④ ESTIMATED AT 100 LBS. PER SQ. YD. PER INCH OF DEPTH.
- ⑤ ESTIMATED AT 20 LBS. PER SQ. YD. (TWO APPLICATIONS).
- ⑥ ESTIMATED AT 2.4 LBS. PER SQ. YD. (TWO APPLICATIONS)
- ⑦ ESTIMATED AT 3960 LBS. PER CU. YD. INCLUDES QUANTITY FOR TRANSVERSE EDGE KEYS
- ⑧ ESTIMATED AT 0.84 LBS. PER SQ. YD.
- ⑨ INCLUDES ADDITIONAL 300 TONS FOR MAINTENANCE OF ENTRANCES DURING CONSTRUCTION.
- ⑩ CARRIED OVER TO GENERAL SUMMARY.
- ⑪ CL3 ASPH SURF. 0.50B SETUP FOR US 60 SHOULDERS WEST OF BRIDGE TO ALLOW MONOLITHIC PAVING W/ TRAFFIC LANE SURFACE.

PAVING AREAS AND SUMMARY

PAVING AREAS

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1.50' CL2 ASPHALT SURFACE 0.38D PG64-22 (SHOULDERS EAST)	3,740							3,740
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3.75' CL3 ASPHALT BASE 1.00D PG64-22	5,471							5,471
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PROJECT:								
ASPHALT SEAL COAT/AGGREGATE			228					3,326
ASPHALT MATERIAL FOR TACK		2,476						37,609

PAVING SUMMARY

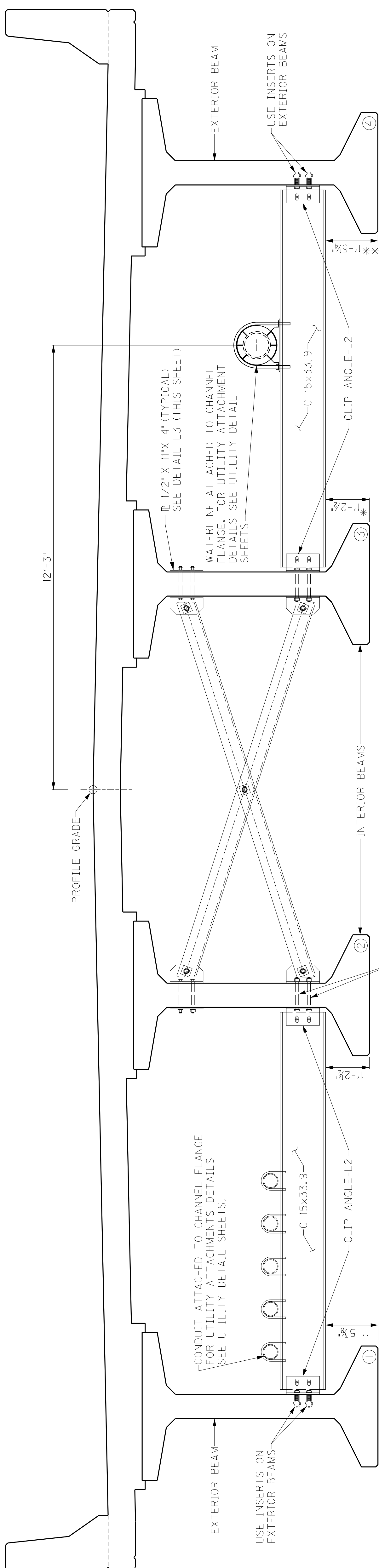
ITEM CODE	ITEM	UNIT	US 60	APPROACH ROADS	ENTRANCES	DIVERSIONS / TEMP-MOT	TOTAL PROJECT
3	CRUSHED STONE BASE	TON	5,529	1,393	446	1,922*	9,290
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2676	MOBILIZATION FOR MILLING & TEXTURING	LP SUM	44	22			66
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2286IEN	HIGH STRENGTH GEOTEXTILE FABRIC TY V	SOYD	11,864				11,864
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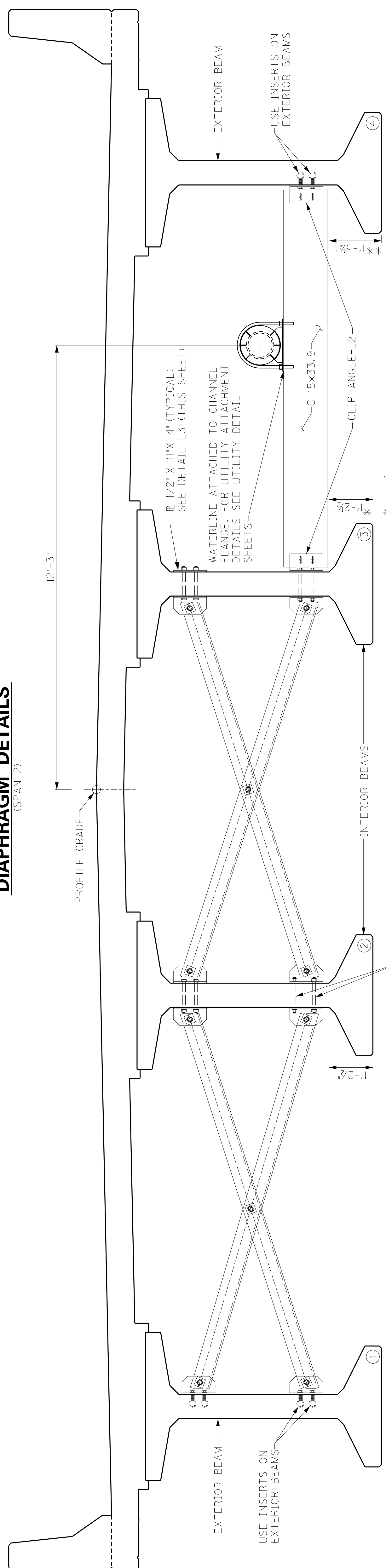
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PAVING AREAS AND SUMMARY



CROSSFRAME - CF2
(BAY 2)
(SPAN 2)

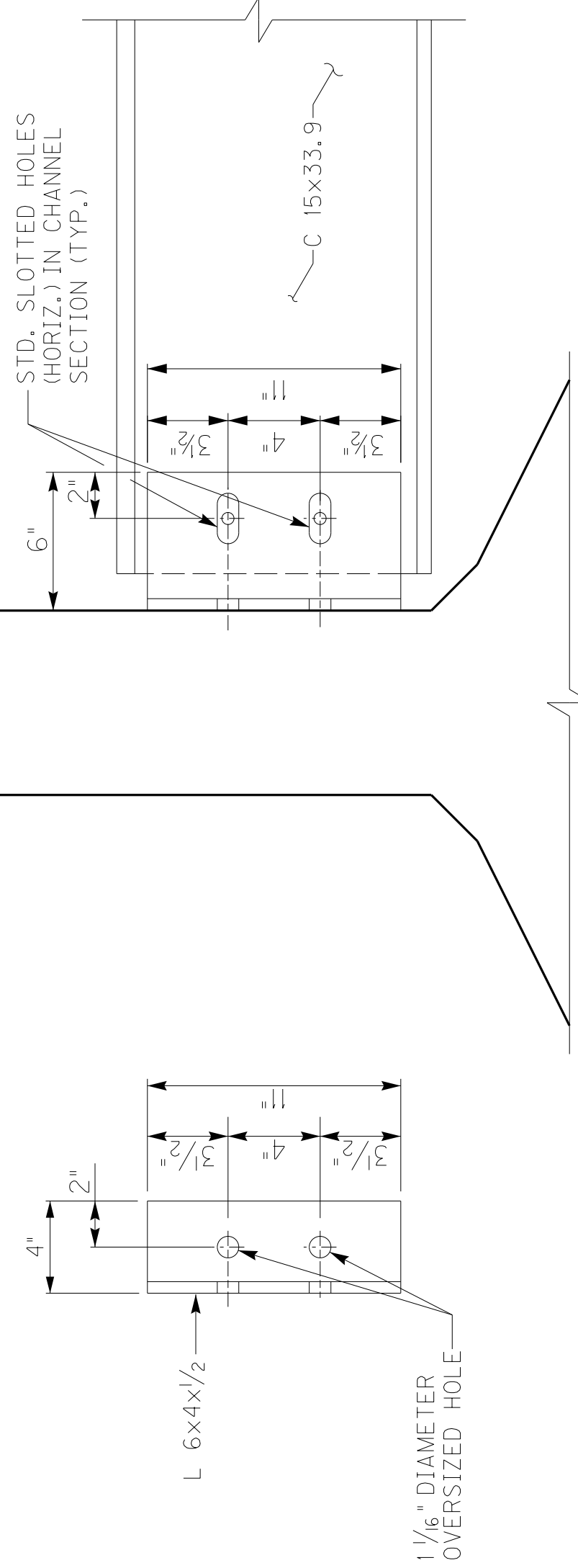
DIAPHRAGM DETAILS



CROSSFRAME - CF2

DIAPHRAGM DETAILS

(SPANS 3, 4 & 5)



DIAPHRAGM FACE

CLIP ANGLE - L2

CLIP ANGLE - L3

(BACKING PLATE)

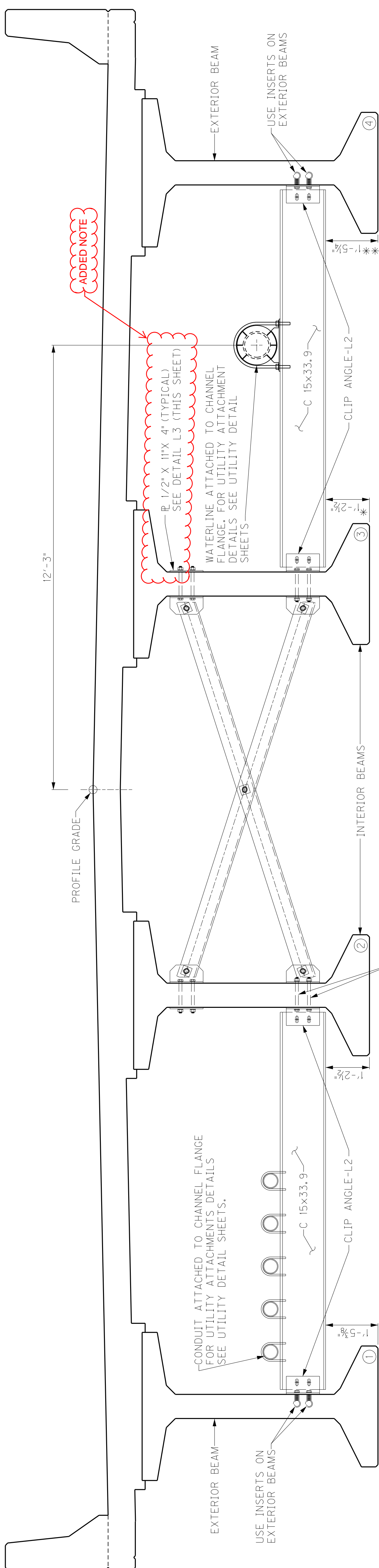
NOTE:
FOR CROSSFRAMES - CF2 SEE SHEET
INTERMEDIATE DIAPHRAGM (1)

REVISION	DATE
DESIGNED BY: E. O'DELL	CHECKED BY: M. WILLIAMS
DATE: AUGUST 1, 2019	DETAILED BY: D. WRIGHT
E-SHEET NAME: MicroStation v8.11.9.832 DATE PLOTTED: September 9, 2019 FILE NAME: M:\PROJ\1331\0057 US 60 STANTEC\PRE-BID REVISIONS\DN.0901920\257516.071.DGN	
COUNTY: HENDERSON CROSSING: GREEN RIVER ROUTE: US 60	
SHEET NO. S71 DRAWING NO. 27516 PREPARED BY: DLZ WMB 180 HAGGARD COURT LEXINGTON, KENTUCKY 40505 (859) 296-5226	

NOTE:
ANCHOR BOLTS FOR CROSSFRAMES AND UTILITY SUPPORTS
SHALL BE ADJUSTED VERTICALLY AS REQUIRED TO MISS
PRESTRESSED STRANDS.

ITEM NUMBER	2-1080.00
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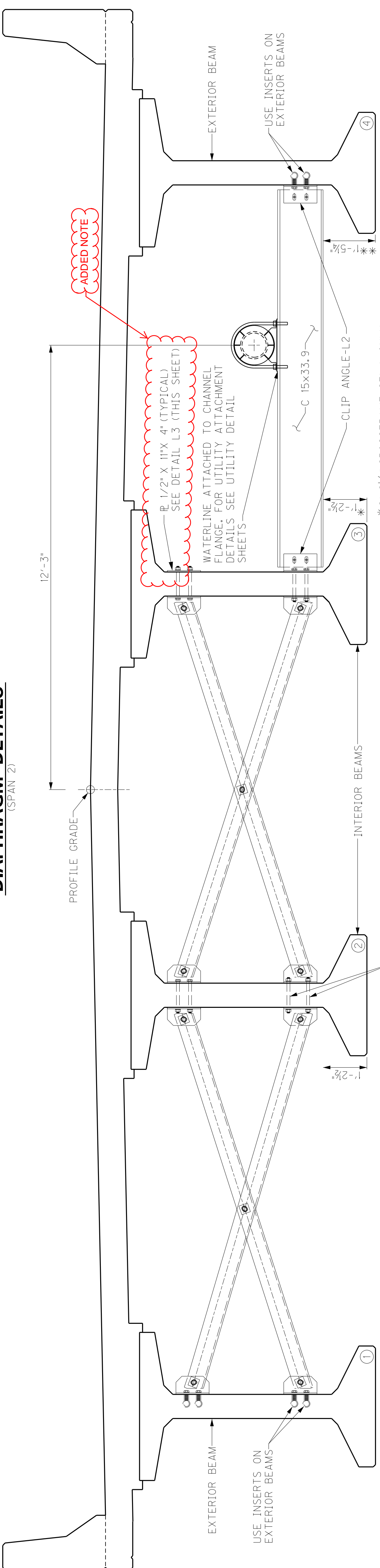
SPAN 2-5 INTERMEDIATE DIAPH. (2)



*2'-2 1/2" CROSSFRAME CF1-A ONLY
SEE FRAMING PLAN FOR LOCATION
**2'-5 1/2" CROSSFRAME CF1-A ONLY
SEE FRAMING PLAN FOR LOCATION

CROSSFRAME - CF2
(BAY 2)
DIAPHRAGM DETAILS
(SPAN 2)

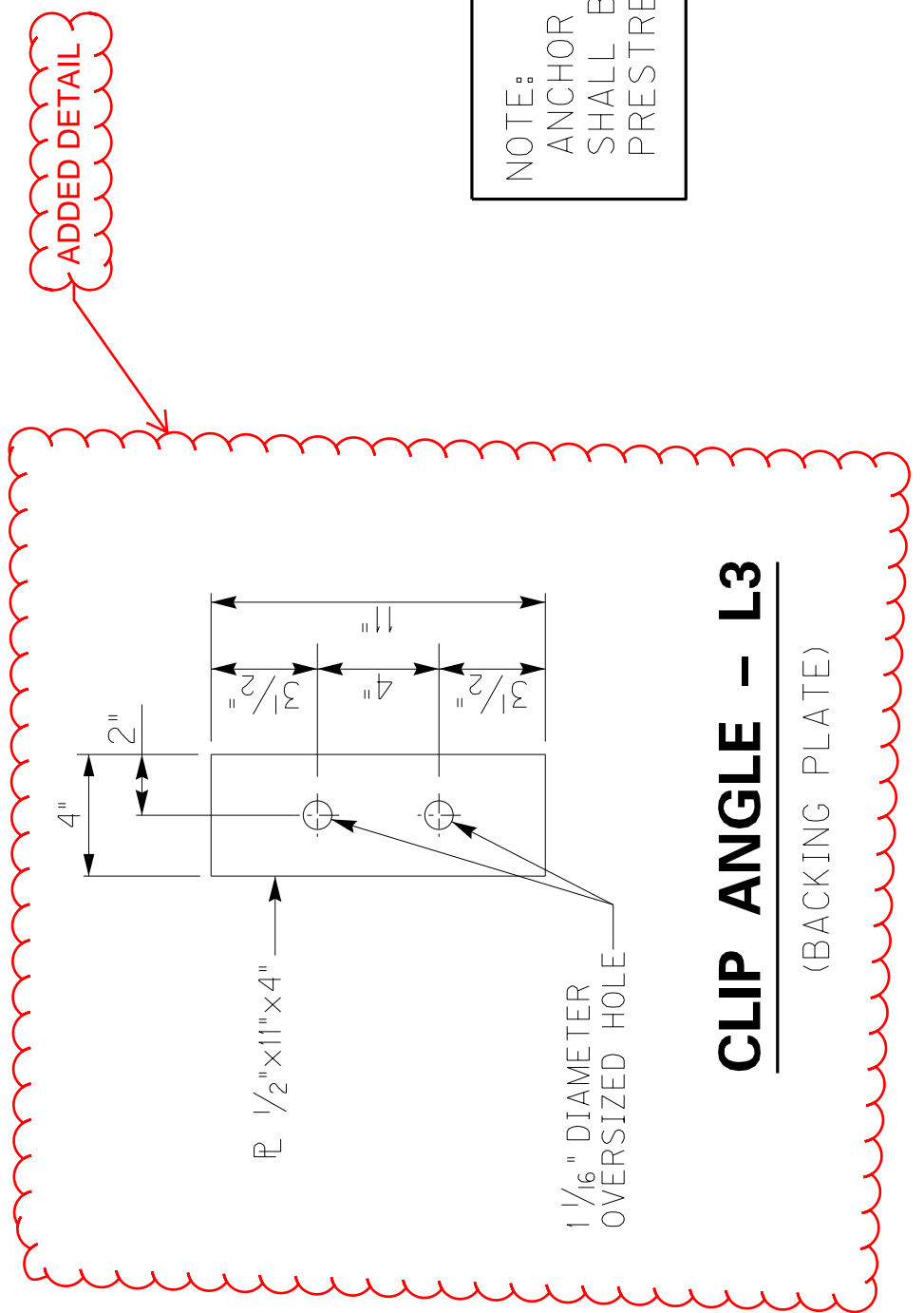
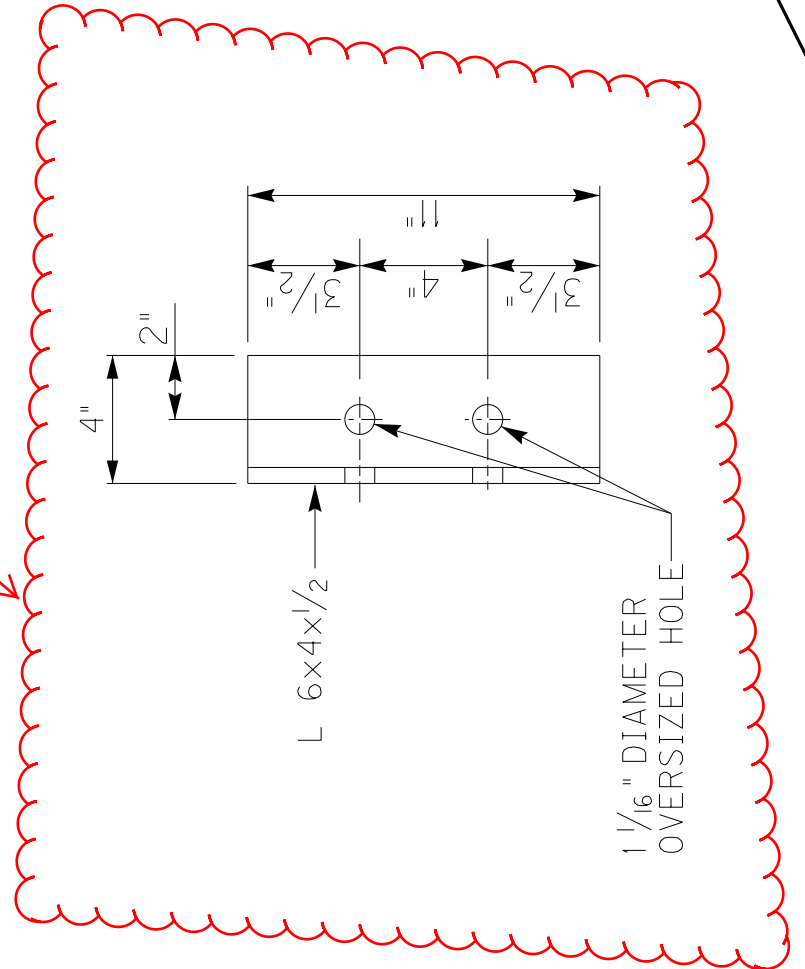
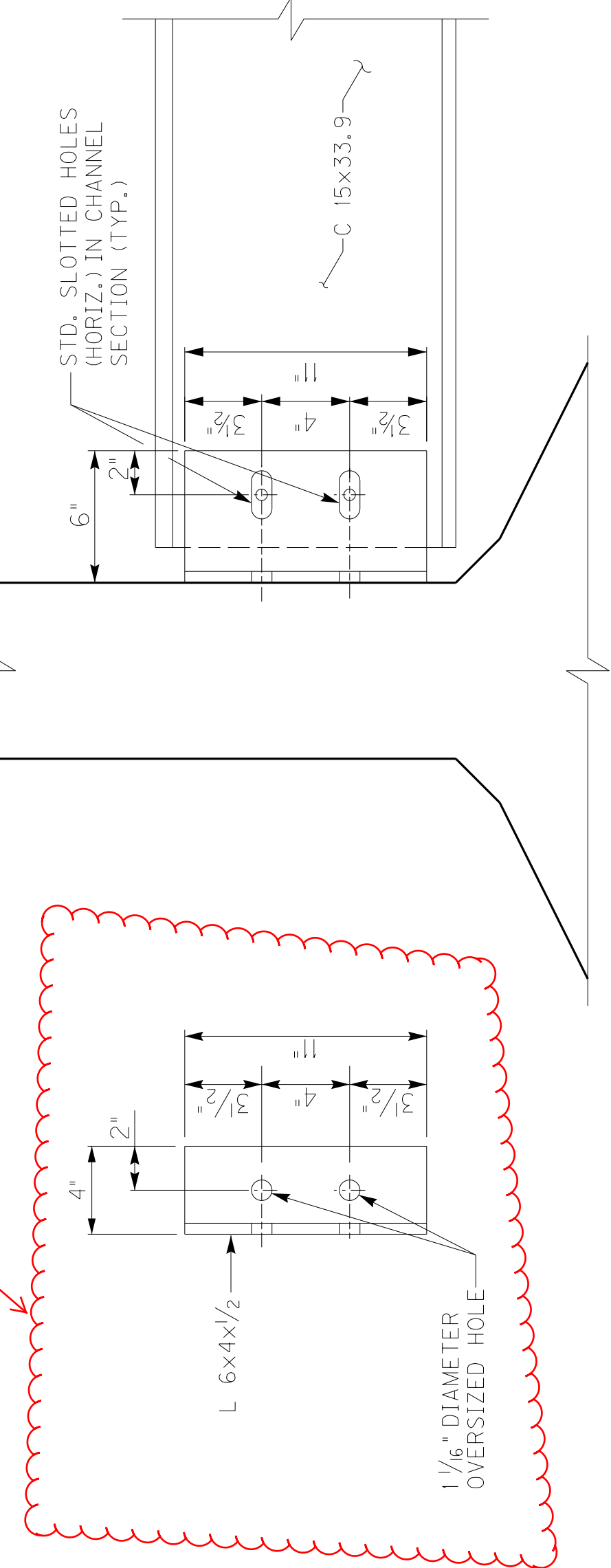
FORM HOLES USING
1" I.D. PLASTIC PIPE
OR EQUIVALENT



*2'-2 1/2" CROSSFRAME CF1-A ONLY
SEE FRAMING PLAN FOR LOCATION
**2'-5 1/2" CROSSFRAME CF1-A ONLY
SEE FRAMING PLAN FOR LOCATION

CROSSFRAME - CF2
DIAPHRAGM DETAILS
(SPANS 3, 4 & 5)

FORM HOLES USING
1" I.D. PLASTIC PIPE
OR EQUIVALENT



NOTE:
ANCHOR BOLTS FOR CROSSFRAMES AND UTILITY SUPPORTS
SHALL BE ADJUSTED VERTICALLY AS REQUIRED TO MISS
PRESTRESSED STRANDS.

NOTE:
FOR CROSSFRAMES - CF2 SEE SHEET
INTERMEDIATE DIAPHRAGM (1)

REVISION	DATE
DESIGNED BY: E. O'DELL	CHECKED BY: M. WILLIAMS
DETAILED BY: D. WRIGHT	E. O'DELL
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS	
COUNTY HENDERSON	
ROUTE US 60	CROSSING GREEN RIVER
SPAN 2-5 INTERMEDIATE DIAPH. (2)	
PREPARED BY DLZ WMB	SHEET NO. S71
189 HAGGARD COURT LEXINGTON, KENTUCKY 40505 (859) 296-5226	
27516	

ITEM NUMBER
2-1080.00