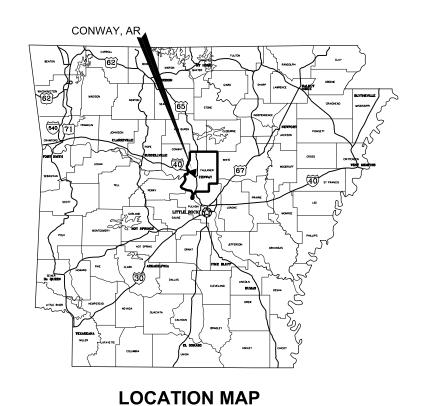
DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S) F.A.P. RTP-1302(265) ARDOT JOB 080522



CITY OF CONWAY JOB 14-118



SECURITY FOR STATE OF STATE OF

VICINITY MAP

NO SCAL

GARVER PROJECT NO. 15017432 NOVEMBER 2017



831 Parkway Suite C onway, AR 72034

BRIDGE DATA

1 STA. 17+98.94 BRIDGE END 300'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNITS AND 100'-0" PREFABRICATED STEEL TRUSS SPAN 14'-0" CLEAR WIDTH 402.13' BRIDGE LENGTH STA. 22+01.06 BRIDGE END





ΑВ		
DESCRIPTION		
DATE		
REV.		



E WARD DR. PED. OVERP IWAY) (RTP-15) (S)

OVER SHEET

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: DLT

DRAWN BY: DLT

BAR IS ONE INCH ON ORIGINAL DRAWING

IF NOT ONE INCH ON THIS SHEE ADJUST SCALES ACCORDINGLY

DRAWING NUMBER

G-001

IEET MBER

INDEX OF SHEETS						
SHEET NO.	TITLE	DRAWING NO.	DATE			
1	COVER SHEET	G-001				
2	INDEX OF SHEETS, GENERAL NOTES AND LEGEND	G-002				
3-4	TYPICAL SECTIONS	C-101 TO C-102				
5-7	MISCELLANEOUS DETAILS	C-201 TO C-203				
8-9	TEMPORARY EROSION CONTROL PLAN	C-301 TO C-302				
10	MAINTENANCE OF TRAFFIC PLAN	C-401				
11	SURVEY CONTROL DETAILS	C-501				
12-14	PLAN AND PROFILE - STONE DAM CREEK TRAIL	C-601 TO C-603				
15	PAVEMENT MARKING PLAN	C-701				
16	BRIDGE QUANTITIES	S-001				
17	BRIDGE GENERAL NOTES	S-101				
18	LAYOUT OF BRIDGE OVER DAVE WARD DRIVE	S-102				
19-22	BORING LOGS	S-103 TO S-106				
23-25	END BENT DETAILS	S-201 TO S-203				
26-27	INTERMEDIATE BENT NOS. 2 & 5 DETAILS	S-204 TO S-205				
28-30	INTERMEDIATE BENT NOS. 3 & 4 DETAILS	S-206 TO S-208				
31-34	150'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT NO. 1	S-301 TO S-304				
35-38	150'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT NO. 2	S-305 TO S-308				
39-42	150'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT COMMON DETAILS	S-309 TO S-312				
43	100'-0" PREFABRICATED TRUSS SPAN	S-401				
44	POURED SILICONE JOINT DETAILS	S-501				
45	ELASTOMERIC BEARING DETAILS	S-601				
46-49	RETAINING WALL DETAILS	S-701 TO S-704				
50	ELECTRICAL LEGEND	E-001				
51-53	LIGHTING INSTALLATION PLAN	E-201 TO E-203				
54-56	ELECTRICAL DETAILS	E-501 TO E-503				
57	ELECTRICAL ONE LINE DIAGRAM	E-601				
58	STANDARD DETAILS FOR DUMPED RIPRAP AND FILTER BLANKET AND COMPUTING	55001	2/27/14			
56	EXCAVATION FOR STRUCTURES	55001	2/2//14			
59	STANDARD DETAILS FOR PERMANENT STEEL BRIDGE DECK FORMS FOR STEEL &	55005	2/24/46			
59	CONCRETE GIRDER SPANS	55005	3/24/16			
60	STANDARD DETAILS FOR TYPE C BRIDGE NAME PLATES	55011	2/27/14			
61	STANDARD DETAILS FOR STEEL H-PILES AND PILE ENCASEMENTS	55020	3/24/16			
62	CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING	PCC-1	2/27/14			
63	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	TC-1	4/13/17			
64	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	TC-2	9/2/15			
65	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	TC-3	9/2/15			
66	TEMPORARY EROSION CONTROL DEVICES	TEC-1	12/15/11			
67	TEMPORARY EROSION CONTROL DEVICES	TEC-3	11/3/94			
CX1-CX12	CROSS SECTIONS	CX-01 TO CX-12				

LEGEND

BOREHOLE
CONTROL POINTS
SIGN
GAS METER
SANITARY MANHOLE
WATER VALVE
WATER METER
STORM DRAIN MANHOLE
TELEPHONE RISER
ELECTRIC JUNCTION BO
FIBER OPTIC MANHOLE
UTILITY POLE
GUY ANCHOR
LIGHT POLE

	— EXISTING CENTERLINE
290	 — EXISTING MAJOR CONTOUR
289	 — EXISTING MINOR CONTOUR
	EXISTING STRUCTURE
X	EXISTING FENCE
	EXISTING STORM DRAIN
	EXISTING TREE LINE
	F — EXISTING PROPERTY LINE
R/W	— — EXISTING RIGHT-OF-WAY
	— — EXISTING EASEMENT
G	— — EXISTING GAS UTILITY
ss	— — EXISTING SANITARY UTILITY
w	 — EXISTING WATER UTILITY
— — UGT — — -	 — EXISTING UNDERGROUND TELEPHONE UTILITY
——————————————————————————————————————	 — EXISTING OVERHEAD ELECTRIC UTILITY
	- · — PROPOSED TEMP. CONST. EASEMENT
·	 PROPOSED PERMANENT EASEMENT
	PROPOSED CENTERLINE
	☐ — PROPOSED STORM DRAIN
— — тов— — —	— PROPOSED TOP-OF-BANK
————TOS————	— PROPOSED TOE-OF-SLOPE
	· — PROPOSED SPECIAL DITCH

GENERAL NOTES:

- CAUTION: UNDERGROUND UTILITIES EXIST WITHIN AND ADJACENT TO THE LIMITS OF CONSTRUCTION. AN ATTEMPT HAS BEEN MADE TO LOCATE THESE UTILITIES ON THE PLANS; HOWEVER, ALL EXISTING UTILITIES MAY NOT BE SHOWN AND THE ACTUAL LOCATIONS OF THE UTILITIES MAY VARY FROM THE LOCATIONS SHOWN. SOME UTILITIES MAY HAVE BEEN RELOCATED SINCE THE TIME OF DESIGN AND THE CONTRACTOR'S NOTICE TO PROCEED. PRIOR TO BEGINNING ANY TYPE OF EXCAVATION, THE CONTRACTOR SHALL CONTACT THE UTILITIES INVOLVED AND MAKE ARRANGEMENTS FOR THE LOCATION OF THE UTILITIES ON THE GROUND. THE CONTRACTOR SHALL MAINTAIN THE UTILITY LOCATION MARKINGS UNTIL THEY ARE NO LONGER NECESSARY. ARKANSAS STATE LAW, THE UNDERGROUND FACILITIES DAMAGE PREVENTION ACT, REQUIRES TWO WORKING DAYS ADVANCE NOTIFICATION THROUGH THE ARKANSAS ONE-CALL SYSTEM CENTER BEFORE EXCAVATING USING MECHANIZED EQUIPMENT OR EXPLOSIVES (EXCEPT IN THE CASE OF EMERGENCY). THE ONE-CALL SYSTEM PHONE NUMBER IS 1-800-482-8998. THE CONTRACTOR IS ADVISED THAT THERE IS A SEVERE PENALTY FOR NOT MAKING THIS CALL. NOT ALL UTILITY COMPANIES ARE MEMBERS OF THE ARKANSAS ONE-CALL SYSTEM; THEREFORE, THE CONTRACTOR IS ADVISED TO CONTACT ALL NON-MEMBER UTILITIES AS WELL AS THE ONE-CALL SYSTEM. THE LOCATION OF THE EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE, AND ARE THE LOCATIONS AT THE TIME OF DESIGN.
- 2. GRADE LINE DENOTES FINISHED GRADE WHERE SHOWN ON PLANS.
- ALL PIPE LINES, POWER, TELEPHONE AND TELEGRAPH LINES TO BE MOVED OR LOWERED BY THE RESPECTIVE OWNERS AS PER AGREEMENT WITH SUCH OWNERS.
- . ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAY BE THE PROPERTY OF UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS OTHERWISE PROVIDED.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING U. S. MAILBOXES WITHIN THE PROJECT LIMITS IN SUCH A MANNER THAT THE PUBLIC MAY RECEIVE CONTINUED MAIL SERVICE. PAYMENT WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS BID ITEMS.
- ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
- 7. ALL TREES THAT DO NOT DIRECTLY INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE SPARED AS DIRECTED BY THE ENGINEER, CARE AND DISCRETION SHALL BE USED TO ENSURE THAT ALL TREES NOT TO BE REMOVED SHALL BE HARMED AS LITTLE AS POSSIBLE DURING THE CONSTRUCTION OPERATIONS.
- 8. THE EXISTING ASPHALT PAVEMENT TO BE REMOVED FROM THE REMAINING PAVEMENT SHALL BE SEPARATED BY SAWING ALONG A NEAT LINE. AFTER SAWING, THE PAVEMENT TO BE REMOVED SHALL BE CAREFULLY REMOVED IN A MANNER THAT WILL NOT DAMAGE THE PAVEMENT THAT IS TO REMAIN. ANY DAMAGE OF THE ASPHALT PAVEMENT THAT IS TO REMAIN IN PLACE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- ALL ASPHALTIC PAVEMENT REMOVED SHALL BE PAID FOR UNDER SECTION E2 EXCAVATION AND EMBANKMENT, UNLESS OTHERWISE NOTED.
- 10. THE CONTRACTOR SHALL PRE AND POST CONSTRUCTION INSPECT, IN COORDINATION WITH CONWAY CORPORATION, THE WASTE WATER COLLECTION MAIN AND IMMEDIATELY REPAIR ALL DAMAGE ASSOCIATED WITH CONSTRUCTION ACTIVITY WITHIN THE LIMITS OF CONSTRUCTION.





Digitally Signed 11/22/2017

AB

NOLLAND AND ADDRESS OF THE PROPERTY OF THE PR



DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

INDEX OF SHEETS, GENERAL NOTES AND LEGEND

CITY OF CONWAY CONWAY, ARKANSAS

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: DLT DRAWN BY: DLT

BAR IS ONE INCH ON ORIGINAL DRAWING

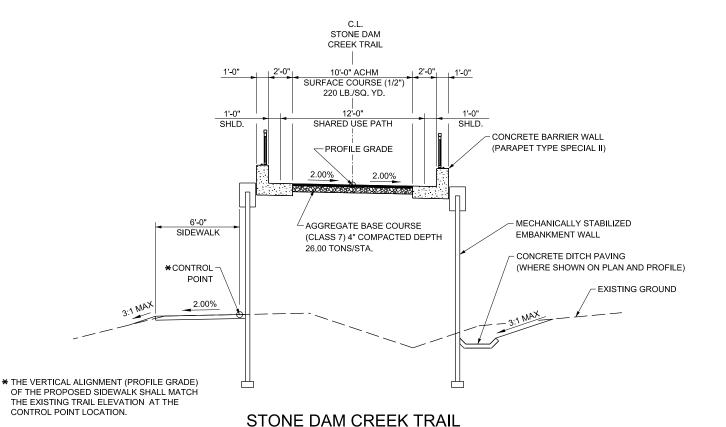
o 1"
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY
DRAWING NUMBER

G-002

STONE DAM CREEK TRAIL

STA. 13+32.04 TO STA. 14+65.00

NOTE: FROM STA. 13+32.04 TO STA. 14+07.04 A 75' LINEAR TRANSITION SHALL BE USED, ROTATED ABOUT PROFILE GRADE (C.L.).



STA. 14+80.00 TO STA. 17+98.94

TYPICAL SECTION GENERAL NOTES

STONE DAM CREEK TRAIL

STA. 14+65.00 TO STA. 14+80.00

- 1. REFER TO CROSS SECTIONS FOR DEVIATIONS FROM NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.
- 2. THE THICKNESS OF AGG. BASE COURSE SHALL BE WITHIN PLUS OR MINUS ONE INCH OF THE PLAN THICKNESS SHOWN. THE CONTRACTOR WILL CORRECT ANY DEFICIENT THICKNESS THAT DOES NOT MEET TOLERANCE INDICATED. PAYMENT WILL NOT BE MADE FOR MATERIAL PLACED IN EXCESS OF THE TOLERANCE INDICATED.
- 3. THE EXISTING ASPHALT PAVEMENT TO BE REMOVED FROM THE REMAINING PAVEMENT SHALL BE SEPARATED BY SAWING ALONG A NEAT LINE. AFTER SAWING, THE PAVEMENT TO BE REMOVED SHALL BE CAREFULLY REMOVED IN A MANNER THAT WILL NOT DAMAGE THE PAVEMENT THAT IS TO REMAIN. ANY DAMAGE TO THE ASPHALT PAVEMENT THAT IS TO REMAIN IN PLACE SHALL BE REPAIRED AT THE CONTRACTOR'S
- 4. THE TRAIL PAVEMENT SECTION SHALL CONSIST OF A MINIMUM 2" ACHM SURFACE COURSE (1/2") (PG 64-22, NMAX=115) ON 4" CLASS 7 AGGREGATE BASE COURSE PER THE CITY OF CONWAY STANDARD DETAILS, SHEET TR-1, ASPHALT TRAIL DETAIL.
- 5. FOUR INCHES OF TOPSOIL AND SOLID SODDING SHALL BE PLACED ON FINISHED SLOPES FOR ALL DISTURBED AREAS WITHIN THE LIMITS OF THE EXISTING RIGHT OF WAY, EXISTING EASEMENT, PROPOSED EASEMENT, AND/OR PROPOSED TEMPORARY CONSTRUCTION EASEMENT AS DIRECTED BY THE ENGINEER.
- 6. TRAIL SECTIONS OUTSIDE THE LIMITS OF THE PROPOSED MECHANICALLY STABILIZED EMBANKMENT WALLS AND EXISTING TRAIL SHALL BE UNDERCUT A MINIMUM OF 2'-0" AS DIRECTED BY THE ENGINEER. TRAIL UNDERCUT AND BACKFILL SHALL BE PAID FOR UNDER THE ITEM "UNDERCUT EXCAVATION AND BACKFILL". SEE TECHNICAL SPECIFICATION "SECTION E-2 - EXCAVATION AND EMBANKMENT" FOR DETAILS.





	Digitalij	oignou	11/22/20	
ВУ				
DESCRIPTION				
DATE				
REV.				



DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

TYPICAL SECTIONS (SHEET 1 OF 2)

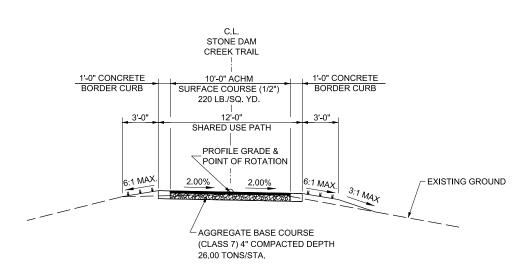
CITY OF CONWAY CONWAY, ARKANSAS

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: DLT DRAWN BY: DLT

BAR IS ONE INCH ON ORIGINAL DRAWING

C-101

DRAWING NUMBER SHEET NUMBER



STONE DAM CREEK TRAIL

STA. 24+85.00 TO STA. 25+89.05

NOTE: FROM STA. 25+14.05 TO STA. 25+89.05 A 75' LINEAR TRANSITION SHALL BE USED. ROTATED ABOUT PROFILE GRADE (C.L.).

TYPICAL SECTION GENERAL NOTES

1. REFER TO CROSS SECTIONS FOR DEVIATIONS FROM NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.

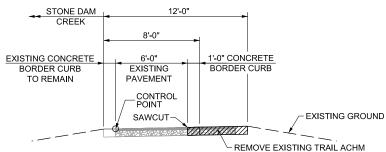
2. THE THICKNESS OF AGG. BASE COURSE SHALL BE WITHIN PLUS OR MINUS ONE INCH OF THE PLAN THICKNESS SHOWN. THE CONTRACTOR WILL CORRECT ANY DEFICIENT THICKNESS THAT DOES NOT MEET TOLERANCE INDICATED. PAYMENT WILL NOT BE MADE FOR MATERIAL PLACED IN EXCESS OF THE TOLERANCE INDICATED.

3. THE EXISTING ASPHALT PAVEMENT TO BE REMOVED FROM THE REMAINING PAVEMENT SHALL BE SEPARATED BY SAWING ALONG A NEAT LINE. AFTER SAWING, THE PAVEMENT TO BE REMOVED SHALL BE CAREFULLY REMOVED IN A MANNER THAT WILL NOT DAMAGE THE PAVEMENT THAT IS TO REMAIN. ANY DAMAGE TO THE ASPHALT PAVEMENT THAT IS TO REMAIN IN PLACE SHALL BE REPAIRED AT THE CONTRACTOR'S

4 THE TRAIL PAVEMENT SECTION SHALL CONSIST OF A MINIMUM 2" ACHM SURFACE COURSE (1/2") (PG 64-22, NMAX=115) ON 4" CLASS 7 AGGREGATE BASE COURSE PER THE CITY OF CONWAY STANDARD DETAILS, SHEET TR-1, ASPHALT TRAIL DETAIL.

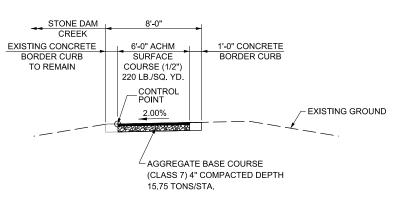
5. FOUR INCHES OF TOPSOIL AND SOLID SODDING SHALL BE PLACED ON FINISHED SLOPES FOR ALL DISTURBED AREAS WITHIN THE LIMITS OF THE EXISTING RIGHT OF WAY, EXISTING EASEMENT, PROPOSED EASEMENT, AND/OR PROPOSED TEMPORARY CONSTRUCTION EASEMENT AS DIRECTED BY THE ENGINEER

6. TRAIL SECTIONS OUTSIDE THE LIMITS OF THE PROPOSED MECHANICALLY STABILIZED EMBANKMENT WALLS AND EXISTING TRAIL SHALL BE UNDERCUT A MINIMUM OF 2'-0" AS DIRECTED BY THE ENGINEER. TRAIL UNDERCUT AND BACKFILL SHALL BE PAID FOR UNDER THE ITEM "UNDERCUT EXCAVATION AND BACKFILL". SEE TECHNICAL SPECIFICATION "SECTION E-2 - EXCAVATION AND EMBANKMENT" FOR DETAILS.



EXISTING TRAIL NARROWING DETAIL

STA. 20+41.15 TO STA. 25+05.00



EXISTING TRAIL REPLACEMENT DETAIL

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER



ARKANSA LICENSED ENGINEER No.14994 No. TAC

Digitally Signed 11/22/201



DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

TYPICAL SECTIONS (SHEET 2 OF 2)

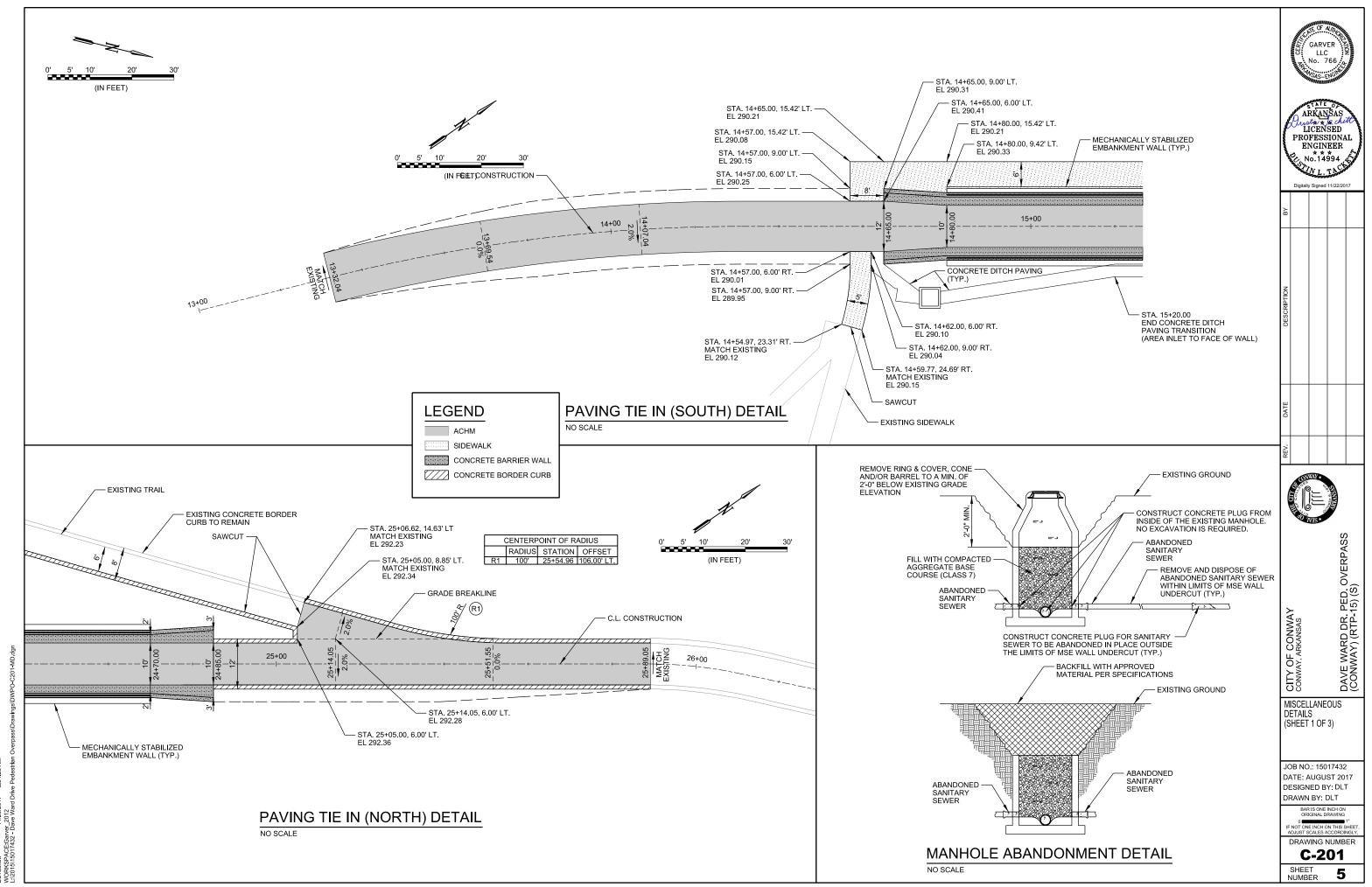
CITY OF CONWAY CONWAY, ARKANSAS

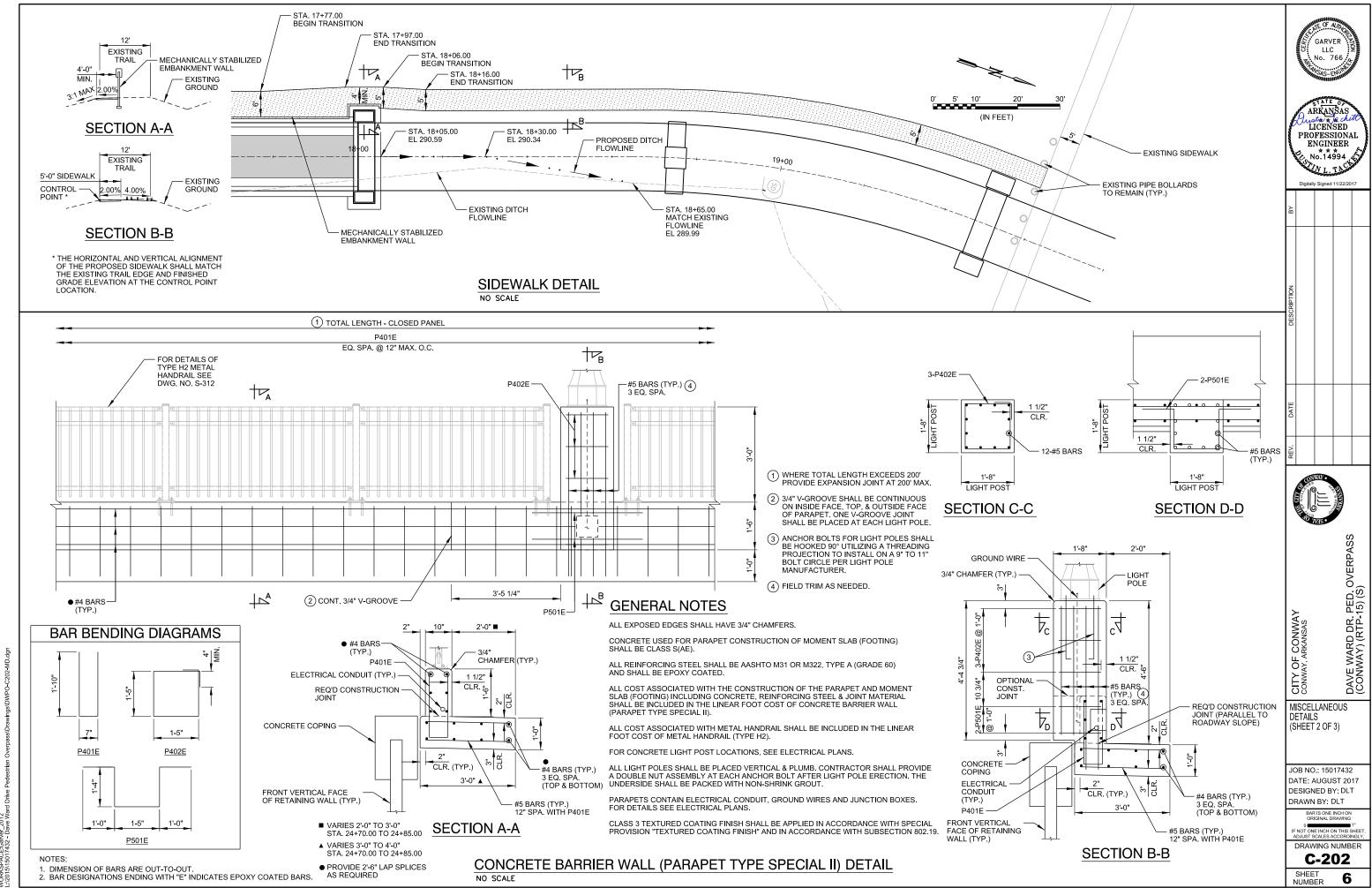
JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: DLT DRAWN BY: DLT

BAR IS ONE INCH ON ORIGINAL DRAWING

DRAWING NUMBER

C-102

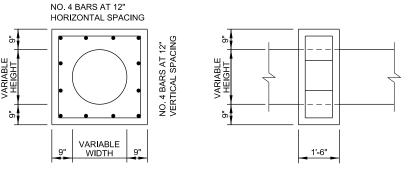




DLTackett
WORKSPACE:Garver_2017 8:34:40 AM
WORKSPACE:Garver_2019
L:2015(15017432 - Dave Ward Drive Pedestrian Overpass)Drawings)DWPO-C20

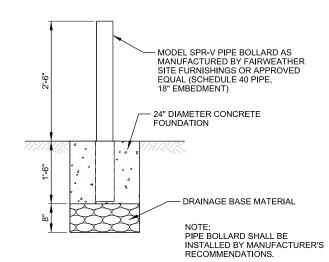
9" VARIABLE NO. 4 BARS AT 12" HORIZONTAL SPACING TOP VIEW

MIN 3" COVER



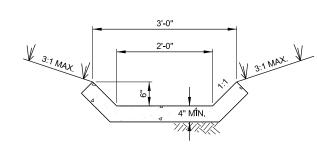
PIPE EXTENSION REINFORCED CONCRETE COLLAR DETAIL

SIDE VIEW



PIPE BOLLARD DETAIL NO SCALE

FRONT VIEW



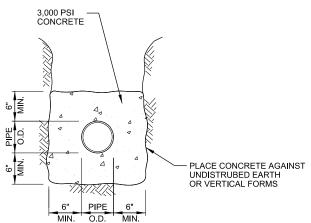
- NOTES:

 1. THE FULL WIDTH OF EACH SECTION SHALL BE POURED MONOLITHICALLY.

 2. SOLID SOD ALONG DITCH PAVING TO BE PLACED WITHIN 14 DAYS OF DITCH PAVING CONSTRUCTION.

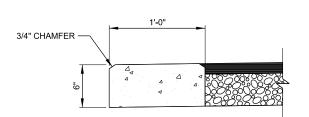
 3. 1/2" WIDE TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE DITCH PAVING AT MAX. 45' INTERVALS. THE SPACE SHALL BE FILLED WITH APPROVED JOINT FILLER COMPLYING WITH AASHTO M213.

CONCRETE DITCH PAVING NO SCALE



LENGTH OF ENCASEMENT SHALL EXTEND A MINIMUM OF 5'-0" BEYOND THE FRONT FACE OF RETAINING WALL

CONCRETE ENCASEMENT NO SCALE



CONCRETE BORDER CURB DETAIL NO SCALE



ARKANSAS LICENSED PROFESSIONAL ENGINEER
No.14994

Digitally Signed 11/22/2017



DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

CITY OF CONWAY CONWAY, ARKANSAS MISCELLANEOUS DETAILS (SHEET 3 OF 3)

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: DLT DRAWN BY: DLT

BAR IS ONE INCH ON ORIGINAL DRAWING

DRAWING NUMBER

C-203

EROSION CONTROL NOTES

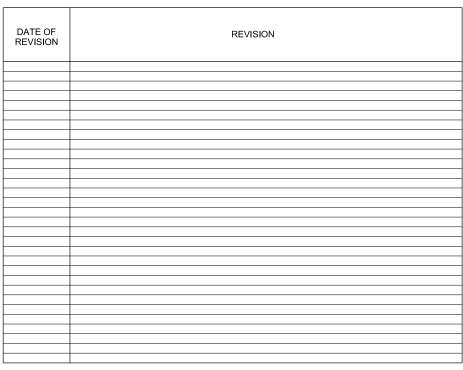
- THE SYMBOLS SHOWN IN THE SHEET REPRESENT EROSION CONTROL DEVICES AS DETAILED IN THE ARDOT STANDARD ROADWAY DRAWINGS. THE SYMBOLS ARE NOT TO SCALE AND REPRESENT THE GENERAL LOCATION TO WHICH THE DEVICES SHALL BE PLACED. NO WORK OR EROSION CONTROL DEVICES SHALL BE PLACED OUTSIDE THE PERMANENT OR TEMPORARY CONSTRUCTION EASEMENTS.
- 2. ALL DISTURBED AREAS CONTAINING EXPOSED SOIL SHALL RECEIVE TEMPORARY EROSION AND SEDIMENT CONTROL APPLICATIONS. CONTRACTOR MAY CHOOSE TO UTILIZE ALTERNATIVE EROSION CONTROL PRODUCTS SUCH AS WATTLES AS APPROVED BY THE FNGINEFR
- 8. SILT FENCE SHALL BE PLACED PRIOR TO THE CLEARING AND GRUBBING OPERATIONS.
- SEE ARDOT STANDARD DRAWINGS TEC-1 AND TEC-3 FOR TEMPORARY EROSION CONTROL DEVICES.
- 5. POST-GRADING SLOPES WILL NOT BE SIGNIFICANTLY STEEPER THAN EXISTING GRADES.
- LOCATION OF OFFSITE STORAGE OF MATERIALS IS TO BE DETERMINED BY THE CONTRACTOR. THE SWPPP WILL BE UPDATED ACCORDINGLY.
- 7. PAVED CONSTRUCTION ENTRANCES/EXITS EXIST ALONG THE PROPOSED ROUTE.

SEQUENCE OF CONSTRUCTION OF E & SC FEATURES

- I. INSTALL SILT FENCE / WATTLES.
- 2. CLEAR / GRUB ACTIVITIES.
- 3. INSTALL DITCH CHECKS.

EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.

REVISION BOX







	Digitally	y Signed	11/22/20	17
ВУ				
DESCRIPTION				
DATE				



DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

TEMPORARY EROSION CONTROL PLAN (SHEET 1 OF 2)

OF CONWAY

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: DLT

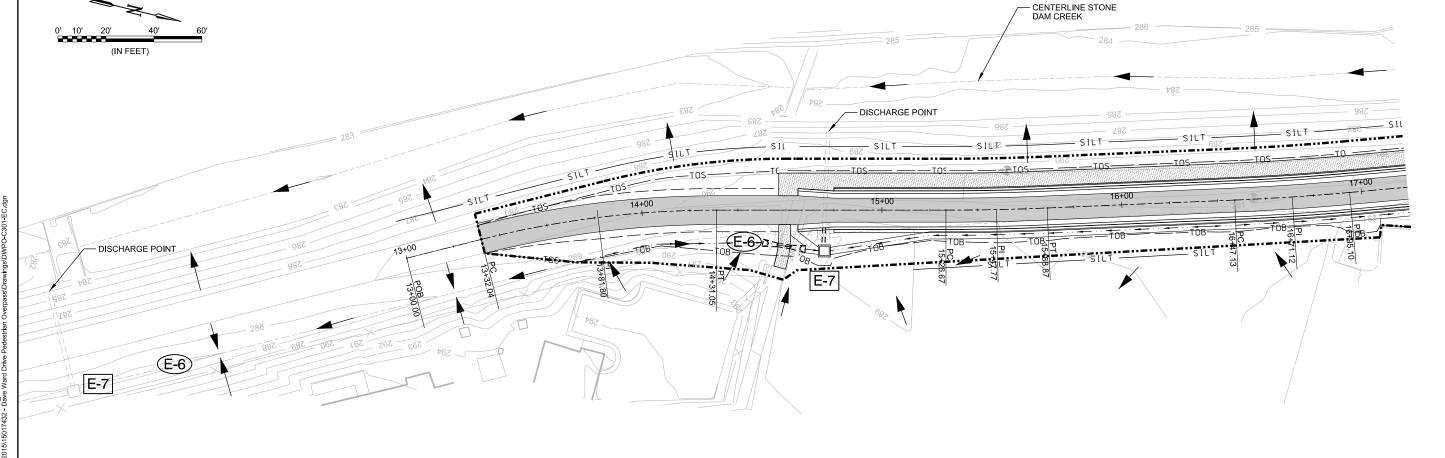
> BAR IS ONE INCH O ORIGINAL DRAWIN

o 1°

IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

DRAWING NUMBER

C-301









DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

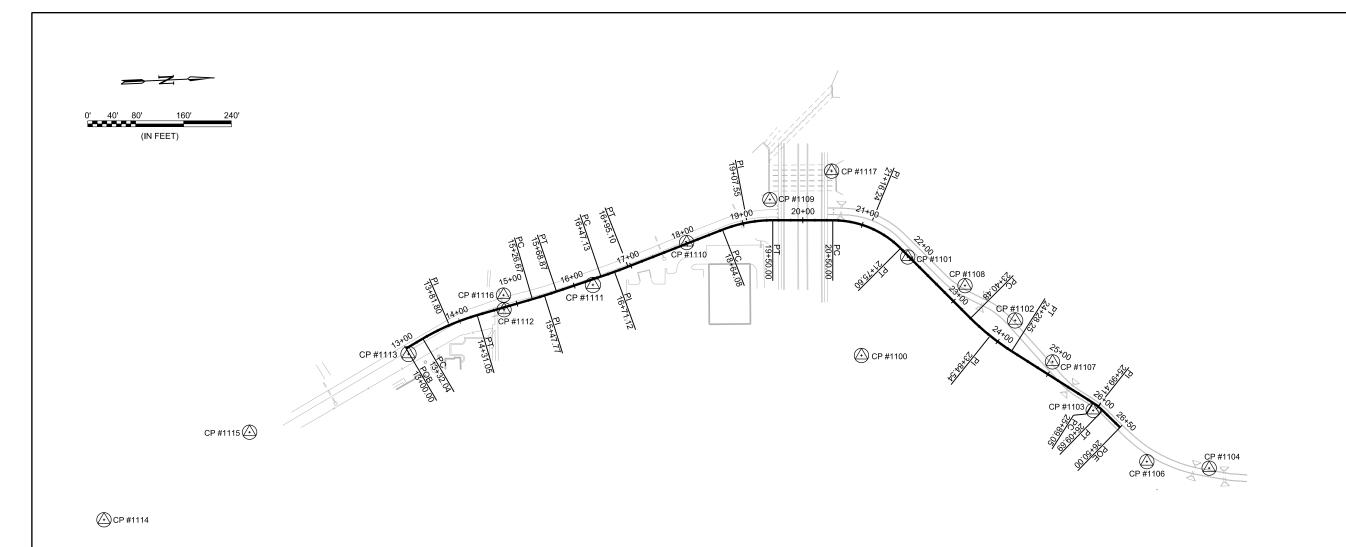
CITY OF CONWAY CONWAY, ARKANSAS

MAINTENANCE OF TRAFFIC PLAN

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: DLT DRAWN BY: DLT

DRAWING NUMBER

C-401



CP #1105

COORDINATE SYSTEM: ARKANSAS STATE PLANE - NORTH ZONE BASED ON GPS CONTROL, PROJECTED TO GROUND. UNITS: U.S. SURVEY FOOT

JN115. U.S. SURVET FOOT								
SURVEY CONTROL POINTS								
POINT No.	NORTHING	EASTING	STATION	OFFSET	ELEVATION	DESCRIPTION		
1100	268650.4944	1174652.4435	22+55.71	172.43' RT.	295.060	ALUM MON		
1101	268734.7591	1174491.8445	21+94.13	1.84' RT.	294.378	ALUM MON		
1102	268909.0261	1174605.4384	24+02.95	45.70' LT.	291.522	60D NAIL		
1103	269032.2916	1174761.0591	25+96.85	10.22' RT.	292.062	60D NAIL		
1104	269221.2482	1174865.7802	N/A	N/A	293.503	60D NAIL		
1105	269528.3674	1174934.3988	N/A	N/A	294.039	60D NAIL		
1106	269117.9184	1174850.3436	N/A	N/A	293.172	60D NAIL		
1107	268968.1439	1174677.2595	24+95.46	21.43' LT.	292.039	60D NAIL		
1108	268828.1386	1174543.7949	22+95.50	31.96' LT.	293.810	60D NAIL		
1109	268509.5281	1174386.0648	19+45.80	34.45' LT.	290.416	60D NAIL		
1110	268367.8278	1174451.4389	18+00.86	1.84' LT.	290.765	60D NAIL		
1111	268208.5777	1174515.1093	16+29.97	8.96' RT.	290.734	60D NAIL		
1112	268058.6733	1174549.7847	14+76.43	3.72' RT.	289.412	60D NAIL		
1113	267896.3548	1174616.4953	N/A	N/A	288.668	60D NAIL		
1114	267376.9694	1174870.0414	N/A	N/A	289.012	60D NAIL		
1115	267625.8914	1174734.9656	N/A	N/A	287.724	60D NAIL		
1116	268058.9108	1174525.4551	14+82.41	19.86' LT.	289.747	60D NAIL		
1117	268614.5120	1174343.2134	20+48.14	81.90' LT.	292.941	60D NAIL		

ALL DISTANCES ARE GROUND.
USE CAF = 1.0 FOR STAKEOUT FOR THIS PROJECT.
A PROJECT CAF OF 0.9999676209 HAS BEEN USED TO COMPUTE THE ABOVE GROUND COORDINATES.
THIS CAF IS INTENDED FOR USE WITHIN THE PROJECT LIMITS.
GRID DISTANCE = GROUND DISTANCE X CAF.
GRID COORDINATES ARE STORED UNDER FILE NAME.080522GI.CTL

HORIZONTAL DATUM: NAD 83 (1997) VERTICAL DATUM: NAVD 88 POSITIONAL ACCURACY THIRD ORDER, UNLESS SPECIFIED OTHERWISE AT A SPECIFIC POINT

BASIS OF BEARING:
ARKANSAS STATE PLANE GRID BEARINGS - 0301-NORTH ZONE
DETERMINED FROM GPS CONTROL POINTS: 230020 - 230026
CONVERGENCE ANGLE: 00 14 33 LET AT LT:35.032908792 LG:92.250007992
GRID AZIMUTH = ASTRONOMICAL AZIMUTH - CONVERGENCE ANGLE.

STONE DAM CREEK TRAIL COORDINATES						
STATION	TYPE	NORTHING	EASTING			
13+00.00	POB	267893.0396	1174606.8990			
13+32.04	PC	267921.3670	1174591.9243			
13+81.80	PI	267965.3583	1174568.6691			
14+31.05	PT	268013.7065	1174556.9009			
15+26.67	PC	268106.6090	1174534.2880			
15+47.77	PI	268127.1149	1174529.2968			
15+68.87	PT	268147.3920	1174523.4448			
16+47.13	PC	268222.5868	1174501.7437			
16+71.12	PI	268245.6349	1174495.0921			
16+95.10	PT	268268.3375	1174487.3429			
18+64.08	PC	268428.2589	1174432.7565			
19+07.55	PI	268469.3929	1174418.7161			
19+50.00	PT	268512.8139	1174420.6545			
20+50.00	PC	268612.7150	1174425.1142			
21+16.24	PI	268678.8858	1174428.0682			
21+75.60	PT	268723.6064	1174476.9289			
23+40.48	PC	268834.9298	1174598.5583			
23+84.54	PI	268864.6771	1174631.0595			
24+28.25	PT	268900.7853	1174656.3068			
25+89.05	PC	269032.5667	1174748.4501			
25+99.41	PI	269041.0565	1174754.3863			
26+09.69	PT	269048.1492	1174761.9367			
26+50.00	POE	269075.7462	1174791.3146			

ARKANSA District to the child LICENSED PROFESSIONAL ENGINEER
No.14994

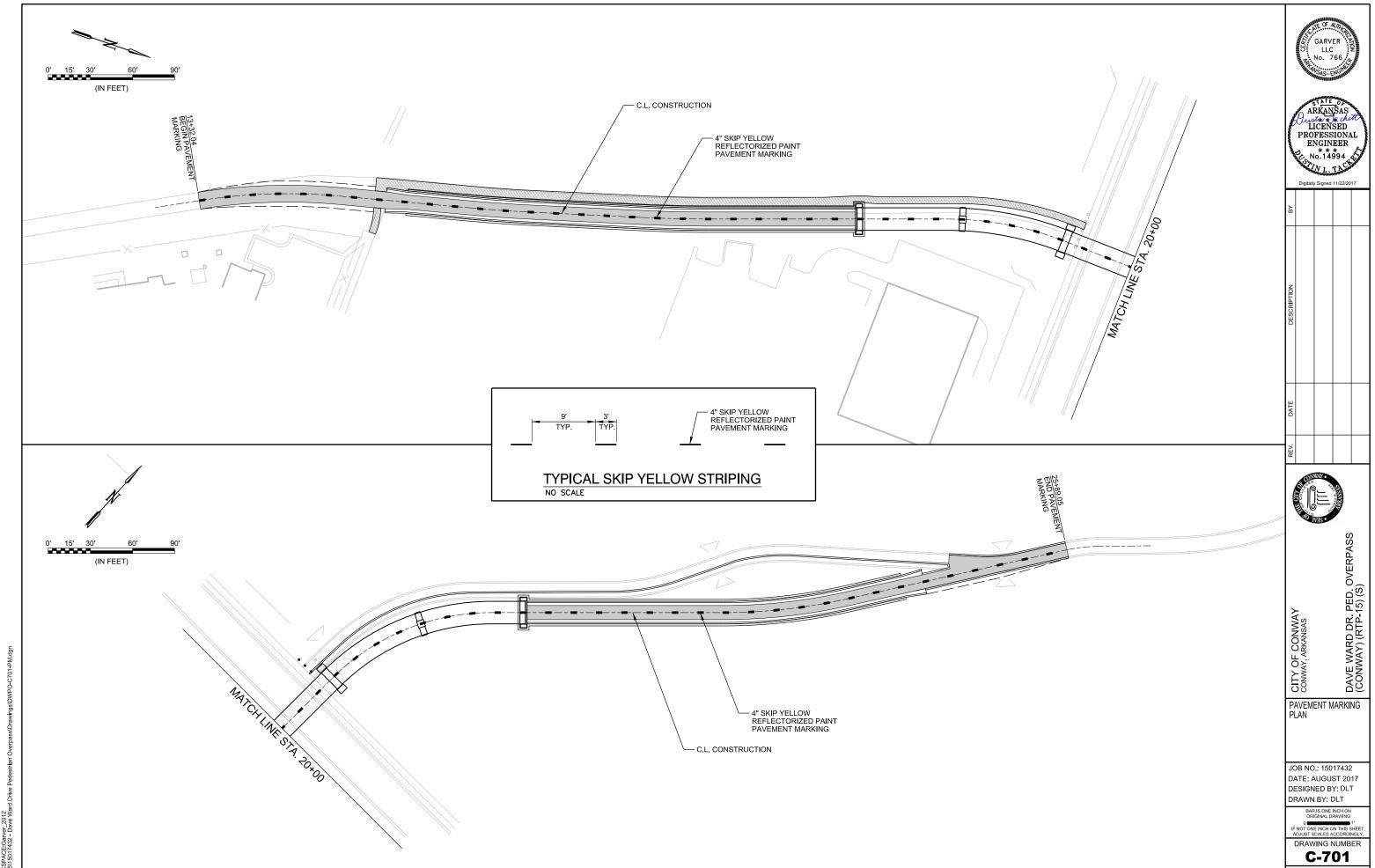
DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

CITY OF CONWAY CONWAY, ARKANSAS SURVEY CONTROL DETAILS

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: DLT DRAWN BY: DLT

DRAWING NUMBER C-501

DLTackett 11/20/2017 8:35:50 AM WORKSPACE:Garver_2012 1:3015/15017432 - Dave Ward Drive Pedestrian Overnass\Drawings\D



DLTackett
11/20/2017 8:36:09 AM
WORKPACE:Garver 2012
U-20R(S6)74352- Dave 7012

SHEET 15



DRAWING NUMBER

S-001

IEET	16
MBER	10

ш		ITEM NO.	SP2-4.2	SP2-4.3	SP2-4.4	SP2-4.5	SP2-4.6	SP2-4.7	SP2-4.8	SP2-4.9	SP2-4.10	SP3-4.1	SP3-4.2	SP4-8.1	SP5-2.1
AME PLATE TITLE	UNIT OF STRUCTURE	ITEM	UNCLASSIFIED EXCAVATION FOR STRUCTURES- BRIDGE	CLASS S CONCRETE - BRIDGE	CLASS S(AE) CONCRETE - BRIDGE	REINFORCING STEEL-BRIDGE (GRADE 60)	EPOXY COATED REINFORCING STEEL (GRADE 60)	STRUCTURAL STEEL IN PLATE GIRDER SPANS (M270-GR. 50)	ELASTOMERIC BEARINGS	SILICONE JOINT SEALANT	BRIDGE NAME PLATE (TYPE C)	STEEL PILING (HP12X53)	PREBORING	METAL HANDRAIL (TYPE H2)	PAINTING STRUCTURAL STEEL 1
		UNIT	CUBIC YARD	CUBIC YARD	CUBIC YARD	POUND	POUND	POUND	CUBIC INCH	LINEAR FOOT	EACH	LINEAR FOOT	LINEAR FOOT	LINEAR FOOT	TON
	BENT NO. 1			24.57		2,407			1424.0	16	1	100			
¥	BENT NO. 2		45	40.76		5,093			1540.0			84	78		
立	BENT NO. 3			50.72		9,284			1424.0						
낊	BENT NO. 4			53.81		9,833			1424.0						
Ο.	BENT NO. 5		46	37.54		4,631			1540.0			90	84		
DAM	BENT NO. 6			24.58		2,407			1424.0	16	1	108	20		
	150'-0" CONT. COMP. PLA	ATE GIRDER UNIT (UNIT 1)			72.75		16,390	69,442		16				295	34.7
N	100'-0" PREFABRICATED	SIMPLE TRUSS SPAN													
ST(150'-0" CONT. COMP. PLA	ATE GIRDER UNIT (UNIT 2)			72.62		16,472	77,830		16				293	38.9
	TOTALS FOR BRIDGE		91	231.98	145.37	33,655	32,862	147,272	8,776.0	64	2	382	182	588 ③	73.6

SCHEDULE OF BRIDGE QUANTITIES

- (1) PAINT SHALL CONFORM TO FEDERAL STANDARD 595B, COLOR CHIP NO. 27038, BLACK.
- ② STEEL PILES ARE REQUIRED TO BE GRADE 50 AND HAVE SPECIAL POINTS WHICH WILL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO THE ITEM "STEEL PILING (HP12x53)".
- 3 PROJECT TOTAL = 1,764 LINEAR FT. (INCLUDES 1,176 LINEAR FT. MOUNTED ON THE CONCRETE BARRIER WALLS, SEE ROADWAY PLANS FOR DETAILS)
- (4) PROJECT TOTAL = 2,922.32 SQUARE YARD (INCLUDES 531.80 SQUARE YARDS FOR CONCRETE BARRIER WALLS AND 1,444.77 SQUARE YARDS FOR RETAINING WALLS)

			SCHEDUL	E OF BRIDG	E QUANTITIES	5			
		ITEM NO.	SP6-5.1	SP6-5.2	SP7-4.1	SP7-4.2	SP8-13.1	SP10-3.1	SP11-3.2
NAME PLATE TITLE	UNIT OF STRUCTURE	ITEM	DRILLED SHAFT (60" DIAMETER)	PERMANENT STEEL CASING (66" DIAMETER)	CROSSHOLE SONIC LOGGING (60" DIAMETER)	CORING DRILLED SHAFT	100' STEEL TRUSS	TEXTURED COATING FINISH	ARCHITECTURAL FINISH
Z		UNIT	LINEAR FOOT	LINEAR FOOT	EACH	LINEAR FOOT	EACH	SQUARE YARD	SQUARE YARD
STONE DAM CREEK TRAIL	BENT NO. 1 BENT NO. 2 BENT NO. 3 BENT NO. 4 BENT NO. 5 BENT NO. 6 150'-0" CONT. COMP. PLATE GIRDER UNIT (UNIT 1) 100'-0" PREFABRICATED SIMPLE TRUSS SPAN		48 42	33 27	2 2	20 20	1	45.54 47.21 124.02 127.67 40.99 42.54 260.39	28.9 32.3 95.3 103.6 24.1 28.9
	TOTALS FOR BRIDGE		90	60	4	40	1	945.75(4)	313.1

GENERAL NOTES:

BENCH MARK: VERTICAL CONTROL DATA ARE SHOWN ON SURVEY CONTROL DETAILS

CONSTRUCTION SPECIFICATIONS: ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2014 EDITION) WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS. UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 7TH EDITION (2014) WITH CURRENT INTERIM REVISIONS AND AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES (2ND EDITION)

LIVE LOADING: PEDESTRIAN LOAD = 90 PSF VEHICLE LOAD = H-10 TRUCK

METHOD OF DESIGN: LOAD AND RESISTANCE FACTOR DESIGN

SEISMIC ZONE: 1 SD1 = 0.092, SITE CLASS = B

OPERATIONAL IMPORTANCE CATEGORY: OTHER

MATERIALS AND STRENGTHS:

CLASS S(AE) - BRIDGE CONCRETE (SUPERSTRUCTURE)

CLASS S - BRIDGE CONCRETE (SUBSTRUCTURE)

REINFORCING STEEL (AASHTO M 31 OR M 53, GR. 60)

STRUCTURAL STEEL (AASHTO M 270, GR. 50)

STRUCTURAL STEEL (AASHTO M 270, GR. 36)

FY = 36,000 PSI

STRUCTURAL STEEL (AASHTO M 270, GR. 36)

FY = 36,000 PSI

CAUTION: THERE IS A POSSIBILITY THAT UNDERGROUND UTILITIES EXIST WITHIN AND ADJACENT TO THE LIMITS OF CONSTRUCTION. AN ATTEMPT HAS BEEN MADE TO LOCATE THESE UTILITIES ON THE PLANS. ALL EXISTING UTILITIES MAY NOT BE SHOWN ON THE PLANS, AND THE LOCATION OF THE UTILITIES SHOWN MAY VARY FROM THE LOCATION SHOWN ON THE PLANS. PRIOR TO BEGINNING ANY TYPE OF EXCAVATION, THE CONTRACTOR SHALL CONTACT THE UTILITIES INVOLVED AND MAKE ARRANGEMENTS FOR THE LOCATION OF THE UTILITY ON THE GROUND. THE CONTRACTOR SHALL MAINTAIN THE UTILITY LOCATION MARKINGS UNTIL THEY ARE NO LONGER NECESSARY

ARKANSAS STATE LAW, THE UNDERGROUND FACILITIES DAMAGE PREVENTION ACT, REQUIRES TWO WORKING DAYS ADVANCE NOTIFICATION THROUGH THE ARKANSAS ONE-CALL SYSTEM CENTER BEFORE EXCAVATING USING MECHANIZED EQUIPMENT OR EXPLOSIVES (EXCEPT IN THE CASE OF AN EMERGENCY). THE ONE-CALL SYSTEM PONE NUMBER IS 1-800-482-8998. THE CONTRACTOR IS ADVISED THAT THERE IS A SEVERE PENALTY FOR NOT MAKING THIS CALL.NOT ALL UTILITY COMPANIES ARE MEMBERS OF THE ARKANSAS ONE-CALL SYSTEM: THEREFORE, THE CONTRACTOR IS ADVISED TO CONTACT ALL NON-MEMBER UTILITIES AS WELL AS THE SYSTEM.

BORING LOGS: SEE DWG. NOS. S-103 THROUGH S-106.

BRIDGE DECK: THE CONCRETE BRIDGE DECK SHALL BE GIVEN A BROOM FINISH AS SPECIFIED FOR FINAL FINISHING IN SUBSECTION 802.19 FOR CLASS 6 BROOMED

MAINTENANCE OF TRAFFIC: SEE ROADWAY PLANS

PAINT: ALL STRUCTURAL STEEL EXCEPT GALVANIZED MEMBERS, SOME SURFACES IN CONTACT WITH CONCRETE, AND AS OTHERWISE NOTED, SHALL BE PAINTED AS SPECIFIED IN SUBSECTION 807.75. THE COLOR OF THE PAINT SHALL BE BLACK AND SHALL MATCH FEDERAL STANDARD 595B, COLOR CHIP NO. 27038.

PILE FOOTING: THE TOP OF FOOTINGS SHALL BE SET A MINIMUM OF 2'-0" BELOW FINISHED GROUND, FOUNDATIONS FOR FOOTINGS SHALL BE PREPARED IN ACCORDANCE WITH SECTION 801.04 AND BACKFILLED IN ACCORDANCE WITH SECTION 801.08 OF THE STANDARD SPECIFICATIONS

DRILLED SHAFTS: ALL DRILLED SHAFTS SHALL BE FOUNDED A MINIMUM OF 11'-0'' INTO MODERATELY HARD TO HARD DARK GRAY SLIGHTLY WEATHERED SHALE AND SHALE AS IN THE BORING LEGEND. NO ADJUSTMENT IN PLAN TIP ELEVATION SHALL BE MADE WITHOUT PRIOR APPROVAL FROM THE ENGINEER. METHODS OF CONSTRUCTION OF THE DRILLED SHAFTS SHALL BE IN ACCORDANCE WITH SPECIAL PROVISION "DRILLED SHAFT FOUNDATIONS".

GENERAL NOTES (CONTINUED):

STEEL PILING: PILING AT BENT NOS. 1, 2, 5, AND 6 SHALL BE HP12X53 (GRADE 50) AND SHALL BE DRIVEN WITH AN APPROVED AIR, STEAM OR DIESEL HAMMER TO A MINIMUM SAFE BEARING RESISTANCE OF 97 TONS. ALL PILING SHALL BE DRIVEN INTO THE MATERIAL DESIGNATED AS MODERATELY HARD TO HARD MODERATELY WEATHERED SHALE OR MODERATELY HARD TO HARD SLIGHTLY WEATHERED SHALE ON THE BORING LEGEND UNLESS BEARING IS ACHIEVED AT A HIGHER ELEVATION. DRIVE ALL PILES IN BENT NOS. 1 AND 6 TO A MINIMUM PENETRATION OF 10' BELOW BOTTOM OF LEVELING PAD AND ALL PILES IN BENT NOS. 2 AND 5 TO A MINIMUM PENETRATION OF 10' BELOW BOTTOM OF FOOTING, LENGTHS SHOWN ARE FOR ESTIMATING QUANTITIES AND FOR USE IN DETERMINING PAYMENT FOR CUT-OFF AND BUILD-UP IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. PILES WILL BE MEASURED AND PAID FOR AS THE ACTUAL LINEAR FOOT OF ACCEPTED PILE LEFT IN PLACE. THE CONTRACTOR SHALL USE APPROVED STEEL H-PILE DRIVING POINTS ON ALL PILES.

THE CONTRACTOR MAY DRIVE THE PILING IN BENT NO. 1 IN ONE OF THE FOLLOWING SEQUENCES:

1) PILING MAY BE DRIVEN AFTER EXCAVATION TO BOTTOM OF LEVELING PAD OR ANY UNDERCUT IS COMPLETE AND PRIOR TO BACKFILLING.

2) PILING MAY BE DRIVEN AFTER EMBANKMENT CONSTRUCTION. PILE CASINGS SHALL BE USED FOR ALL PILING AND SHALL BE INSTALLED PRIOR TO OR DURING EMBANKMENT CONSTRUCTION EXTENDING FROM BOTTOM OF LEVELING PAD OR ANY UNDERCUT TO BOTTOM OF CAP. PILE CASING MATERIAL SHALL HAVE SUFFICIENT STRENGTH TO RETAIN ITS ORIGINAL FORM FREE FROM HARMFUL DISTORTIONS AFTER COMPACTION OF THE FILL MATERIAL SURROUNDING IT. THE MINIMUM INSIDE DIAMETER OF THE CASING SHALL BE 18". PILES SHALL BE DRIVEN THROUGH THE OPEN CASINGS AFTER EMBANKMENT TO BOTTOM OF CAP IS IN PLACE. AFTER DRIVING IS COMPLETED, THE PILE CASING SHALL BE BACKFILLED WITH PORTLAND CEMENT, APPROVED NON-SHRINK GROUT, OR OTHER APPROVED MATERIAL IN A SINGLE CONTINUOUS OPERATION TO COMPLETELY FILL VOIDS. PILE CASINGS AND BACKFILL WILL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO THE ITEM "STEEL PILING (HP12X53)".

THE CONTRACTOR SHALL DRIVE THE PILING IN BENT NO. 6 AFTER EXCAVATION TO BOTTOM OF ANY UNDERCUT IS COMPLETE, AFTER ANY REQUIRED PREBORING AND PRIOR TO BACKFILLING.

PREBORING: PREBORING IS REQUIRED FOR ALL PILING AT BENT NOS. 2 AND 5 TO A DEPTH OF 3'INTO THE MATERIAL SPECIFIED ABOVE OR TO MEET THE REQUIRED PENETRATION STATED ABOVE, WHICHEVER IS GREATER. PREBORING IS REQUIRED FOR ALL PILING AT BENT NO.6 TO A DEPTH OF 5'INTO THE MATERIAL SPECIFIED ABOVE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE PREBORED HOLES FREE FROM DEBRIS PRIOR TO BACKFILLING WHICH MAY REQUIRE THE USE OF TEMPORARY CASINGS OR OTHER METHODS. AFTER DRIVING IS COMPLETED, THE PREBORED HOLES AT BENT NOS. 2 AND 5 SHALL BE BACKFILLED WITH AN APPROVED NON-SHRINK GROUT, OR OTHER APPROVED MATERIAL TO COMPLETELY FILL VOIDS. AFTER DRIVING IS COMPLETED, THE PREBORED HOLES AT BENT NO. 6 SHALL BE BACKFILLED WITH CLASS S CONCRETE TO COMPLETELY FILL VOIDS. THE COST OF PREBORING CASINGS AND BACKFILL MATERIAL WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED SUBSIDIARY TO THE ITEM "PREBORING". QUANTITIES OF PREBORING SHOWN ARE FOR BIDDING PURPOSES ONLY. THE ACTUAL SIZE AND DEPTHS OF PREBORING ARE TO BE DETERMINED BY THE ENGINEER. PREBORING WILL BE PAID FOR IN ACCORDANCE WITH THE SPECIAL PROVISION "PILING".

SPECIAL SAFETY REQUIREMENTS: THE BRIDGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF SPECIAL PROVISION "SPECIAL SAFETY REQUIREMENTS". THE PREFABRICATED TRUSS SHALL BE DESIGNED TO SUPPORT THE SAFETY PLATFORMS AS REQUIRED BY THIS SPECIAL PROVISION.

TEXTURED COATING FINISH: CLASS 3 TEXTURED COATING FINISH SHALL BE APPLIED TO ALL AREAS AS SPECIFIED IN SPECIAL PROVISION "TEXTURED COATING FINISH" AND IN ACCORDANCE WITH SUBSECTION 802.19(B)(3).

DETAIL DRAWINGS:

DRAWING NO:

END BENTS	S-201 THRU S-203
INTERMEDIATE BENTS	S-204 THRU S-208
150' CONT. COMP. PLATE GIRDER UNIT	S-301 THRU S-312
100' PREFABRICATED TRUSS SPAN	S-401
ELASTOMERIC BEARINGS	S-501
POURED SILICONE JOINT	S-601
TYPE C NAME PLATE	55011
STEEL PILING	55020





ВУ		
DESCRIPTION		
DATE		
REV.		



DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

CONWAY, ARKANSAS
SOLOWAY, ARKANSAS
SOLOWAY, ARKANSAS
ONWAY, ARKANSAS
ONWAY, ARKANSAS
ONWAY, ARKANSAS

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: JES DRAWN BY: CWT

> BAR IS ONE INCH ON ORIGINAL DRAWING

IF NOT ONE INCH ON THIS SHEE'
ADJUST SCALES ACCORDINGLY
DRAWING NUMBER

S-101

SHEET 17

PROFESSIONAL ENGINEER No.16458

16-158

Grubbs, Hoskyn, Barton & Wyatt, Inc.

DESCRIPTION OF MATERIAL

SURF. EL: 294±

Stiff brown, tan and reddish tan silty clay w/shale and sandstone fragments and occasional ferrous stains and nodules, and trace rootlets (fill)

Low hardness dark gray, reddish tan and tan highly weathered shale wisilty clay seams and partings

Moderately hard dark gray moderately weathered shale woccasional silty clay seams and partings

Moderately hard to hard dark gray shale

Moderately hard to hard dark gray shale

255

NOTE: Water at 7 ft after 24 hours.

COMPLETION DEPTH: 30.0 ft

DATE: 11-16-16

Soft to firm brown and gray silty clay, slightly sandy w/organic stains, moist

Stiff brown, tan and reddish tan fine sandy clay, silty w/occasional ferrous stains

TYPE: Auge

LOG OF BORING NO. 3

080522: Dave Ward Pedestrian Bridge

Conway, Arkansas

DEPTH TO WATER IN BORING: Dry

LOCATION: Approx Sta 21+46, 24 ft Lt

COHESION, TON/SQ FT

CITY OF CONWAY CONWAY, ARKANSAS BORING LOGS

DATE: 11/16/2016

PLATE 5

DATE: AUGUST 2017 DESIGNED BY: JES

S-103

ARKANSAS

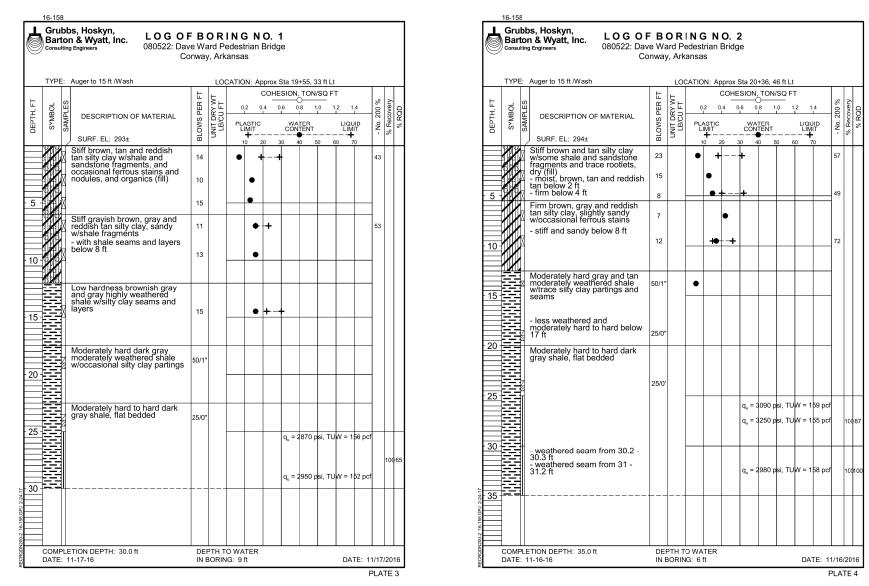
DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

(SHEET 1 OF 4)

JOB NO.: 15017432

DRAWN BY: CWT BAR IS ONE INCH ON ORIGINAL DRAWING

DRAWING NUMBER



ARKANSAS JICÉNSED PROFESSIONAL ENGINEER No.16458

DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

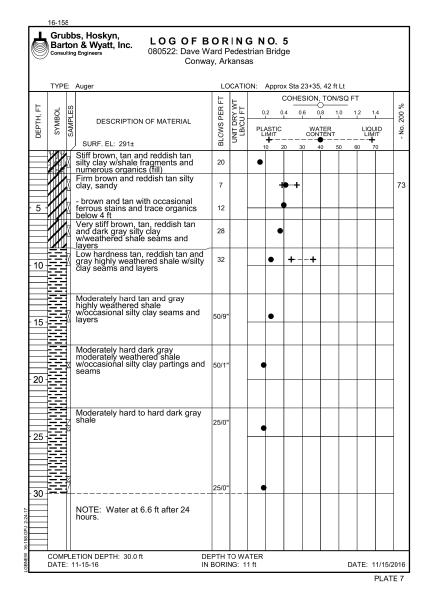
CITY OF CONWAY CONWAY, ARKANSAS BORING LOGS (SHEET 2 OF 4)

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: JES DRAWN BY: CWT

BAR IS ONE INCH ON ORIGINAL DRAWING

DRAWING NUMBER

S-104 SHEET NUMBER **20**



16-158

Grubbs, Hoskyn, Barton & Wyatt, Inc.

DESCRIPTION OF MATERIAL

SURF. EL: 292±

Stiff brown, tan and reddish tan silty clay w/shale fragments, dry (fill)

Medium dense tan fine sandy silt w/occasional ferrous nodules

with trace clay below 4 ft

Very stiff tan, reddish tan, light gray and dark gray silty clay w/weathered shale seams and

\ayers
\text{Moderately hard tan and gray moderately weathered shale w/trace silty clay partings}

- less weathered and moderately hard to hard below 12 ft

Moderately hard to hard dark gray slightly weathered shale w/trace fractures and ferrous stains

Moderately hard to hard dark gray shale

NOTE: Water at 8 ft after 24 hours.

COMPLETION DEPTH: 30.0 ft DATE: 11-15-16

TYPE: Auge

LOG OF BORING NO. 6

080522: Dave Ward Pedestrian Bridge

Conway, Arkansas

LOCATION: Approx Sta 24+48, 18 ft Lt

•

DEPTH TO WATER IN BORING: Dry

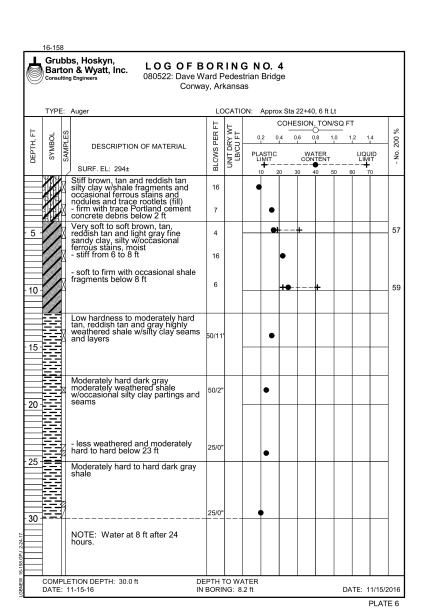
COHESION, TON/SQ FT

C.2 0.4 0.6 0.8 1.0 1.2 1.4

-NON-PLASTIC-

DATE: 11/15/2016

PLATE 8



LLC

ARKANSAS vicensed Professional ENGINEER No.16458

DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

CITY OF CONWAY CONWAY, ARKANSAS BORING LOGS (SHEET 3 OF 4)

DATE: 11/16/2016

PLATE 11

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: JES DRAWN BY: CWT

BAR IS ONE INCH ON ORIGINAL DRAWING

DRAWING NUMBER

S-105

21

SHEET NUMBER

DESCRIPTION OF MATERIAL DESCRIPTION OF MATERIAL SURF. EL: 291± SURF. EL: 291± Stiff brown, tan and reddish tan silty clay w/shale and sandstone fragments and occasional organics Firm to stiff brown, tan and dark gray silty clay, sandy w/trace shale tragments - soft, moist with ferrous nodules from 2 to 4 ft Firm brown and tan sitty clay, sandy w/trace organics, moist
Stiff brown and reddish tan fine sandy clay, sitty w/shale fragments and seams and occasional ferrous - stiff, brown, gray, reddish tan and tan with more shale fragments and ferrous stains below 4 ft --tan with more shale fragments a ferrous stains below 4 ft

Low hardness reddish tan and a highly weathered shale w/silty of seams and layers

Moderately hard gray and tan moderately weathered shale w/trace silty clay partings

Moderately hard dark gray slig weathered shale

Woderately hard to hard dark shale

Moderately hard to hard dark shale

Moderately hard to hard dark shale

20

Moderately hard to hard dark shale

25

NOTE: Water at 6 ft after 24 land seams and occasional ferrous stains and nodules Moderately hard tan and gray moderately weathered shale w/occasional silty clay seams and layers Low hardness reddish tan and gray highly weathered shale w/silty clay seams and layers - less weathered with trace silty clay partings below 13 ft Moderately hard to hard dark gray slightly weathered shale w/trace fractures and ferrous staining Moderately hard dark gray slightly weathered shale Moderately hard to hard dark gray Moderately hard to hard dark gray shale NOTE: Water at 6 ft after 24 hours. NOTE: Water at 6 ft after 24 hours. COMPLETION DEPTH: 30.0 ft DATE: 11-16-16 DEPTH TO WATER IN BORING: Dry COMPLETION DEPTH: 30.0 ft DATE: 11-16-16 DEPTH TO WATER IN BORING: Dry DATE: 11/16/2016

PLATE 10

Grubbs, Hoskyn, Barton & Wyatt, Inc.

TYPE: Auge

LOG OF BORING NO. 8

080522: Dave Ward Pedestrian Bridge

Conway, Arkansas

LOCATION: Approx Sta 17+58, 4 ft Lt

COHESION, TON/SQ FT

0,2 0,4 0,6 0,8 1,0 1,2 1,4

16-158

Grubbs, Hoskyn, Barton & Wyatt, Inc.

TYPE: Auge

LOG OF BORING NO. 9

080522: Dave Ward Pedestrian Bridge

Conway, Arkansas

LOCATION: Approx Sta 16+58, 4 ft Lt

COHESION, TON/SQ FT

C.2 0.4 0.6 0.8 1.0 1.2 1.4

Grubbs, Hoskyn, Barton & Wyatt, Inc. LOG OF BORING NO. 7 080522: Dave Ward Pedestrian Bridge Conway, Arkansas TYPE: Auger LOCATION: Approx Sta 18+58, 22 ft Lt COHESION, TON/SQ FT 0.2 0.4 0.6 0.8 1.0 1.2 1.4 DESCRIPTION OF MATERIAL SURF. EL: 290± SURF. EL: 290±
Stiff brown, tan and reddish tan silty clay wishale and sandstone fragments, numerous ferrous stains and organics (fill)
We firm brown silty clay, slightly sandy woccasional ferrous stains and nodules - soft to firm with more sand and ferrous stains below 4 ft Firm tan, gray and reddish tan fine sandy clay woccasional ferrous stains and nodules + DEPTH TO WATER IN BORING: Dry COMPLETION DEPTH: 30.0 ft DATE: 11-17-16

DATE: 11/17/2016

PLATE 9

ARKANŠAS

LICENSED

PROFESSIONAL
ENGINEER

No.16458

DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

CITY OF CONWAY CONWAY, ARKANSAS **BORING LOGS** (SHEET 4 OF 4)

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: JES DRAWN BY: CWT

BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" 1" F NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

DRAWING NUMBER S-106

SHEET NUMBER 22

Grubbs, Hoskyn, Barton & Wyatt, Inc. Consulting Engineers LOG OF BORING NO. 10 080522: Dave Ward Pedestrian Bridge Conway, Arkansas TYPE: Auger LOCATION: Approx Sta 15+55, 21 ft Lt COHESION, TON/SQ FT 0.2 0.4 0.6 0.8 1.0 1.2 1.4 DESCRIPTION OF MATERIAL SURF. EL: 290± Stiff tan and brown clayey silt
Whishale and sandstone fragments
Whrace organics, dry (fill)
Stiff tan and reddish tan fine sandy
clay who coasional ferrous stains
and nodules - with numerous ferrous stains and nodules below 4 ft 10 15 20 25 30 Low hardness reddish tan and gray highly weathered shale w/silty clay seams and layers and occasional ferrous stains

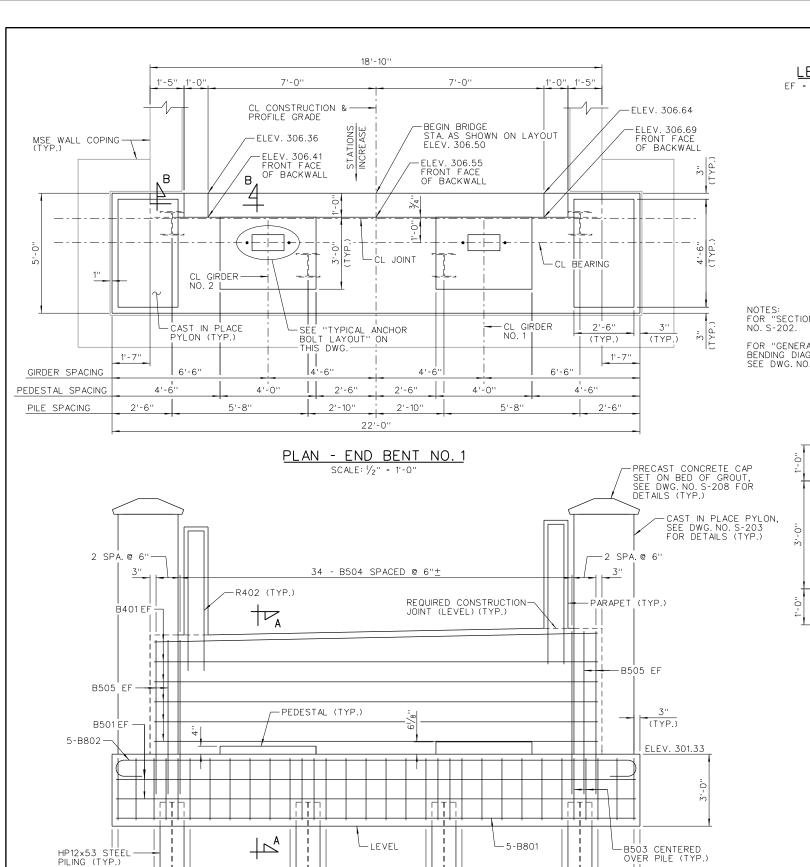
Moderately hard tan and gray moderately weathered shale witrace sitty clay partings and ferrous stains • Moderately hard to hard dark gray shale NOTE: Water at 6.6 ft after 24 hours.

DEPTH TO WATER IN BORING: Dry

COMPLETION DEPTH: 30.0 ft DATE: 11-16-16

DATE: 11/16/2016

PLATE 12



ELEVATION - END BENT NO. 1

(LOOKING BACK)

(CAST IN PLACE PYLON REINFORCEMENT NOT SHOWN FOR CLARITY)

SCALE: 1/2" = 1'-0"

5 SPA.

@ 10"

5'-8"

5 SPA.

@ 10"

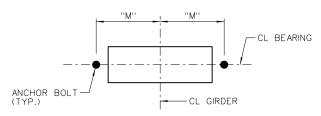
5'-8''

SPĄ.

@ 9"

2'-6"

LEGEND ef = each face

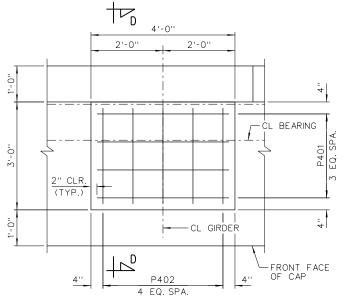


TYPICAL ANCHOR BOLT LAYOUT SCALE: 1" = 1'-0"

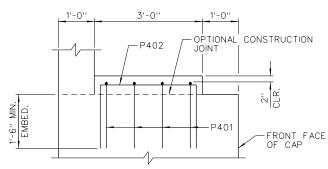
NOTE: FOR ANCHOR BOLT SIZE AND "M" DIMENSION AT END BENTS, SEE ELASTOMERIC BEARING DETAILS ON DWG. NO. S-601.

NOTES: FOR "SECTION A-A" & "SECTION B-B", SEE DWG NO. S-202.

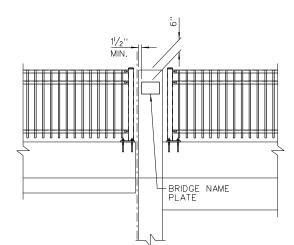
FOR "GENERAL NOTES", "BAR LIST", "BAR BENDING DIAGRAMS", & ARCHITECTURAL DETAILS, SEE DWG. NO. S-203.



PEDESTAL DETAIL - PLAN VIEW SCALE: 3/4" = 1'-0"



<u>SECTION D-D</u> SCALE: 3/4" = 1'-0"



BRIDGE NAME PLATE LOCATION DETAIL

(TYP.RIGHT PARAPET AT END BENT NO.1 AND LEFT PARAPET AT END BENT NO.2) NO SCALE GARVER LLC No. 766



Ь¥		
DESCRIPTION		
DATE		
REV.		



CITY OF CONWAY
CONWAY, ARKANSAS
DAVE WARD DR. PED. OVERPASS
(CONWAY) (RTP-15) (S)

END BENT DETAILS (SHEET 1 OF 3)

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: KMVH DRAWN BY: CWT

BAR IS ONE INCH ON ORIGINAL DRAWING

o 1"
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY
DRAWING NUMBER

S-201

SHEET 23

B502 (TIE SPACING)

PILE SPACING

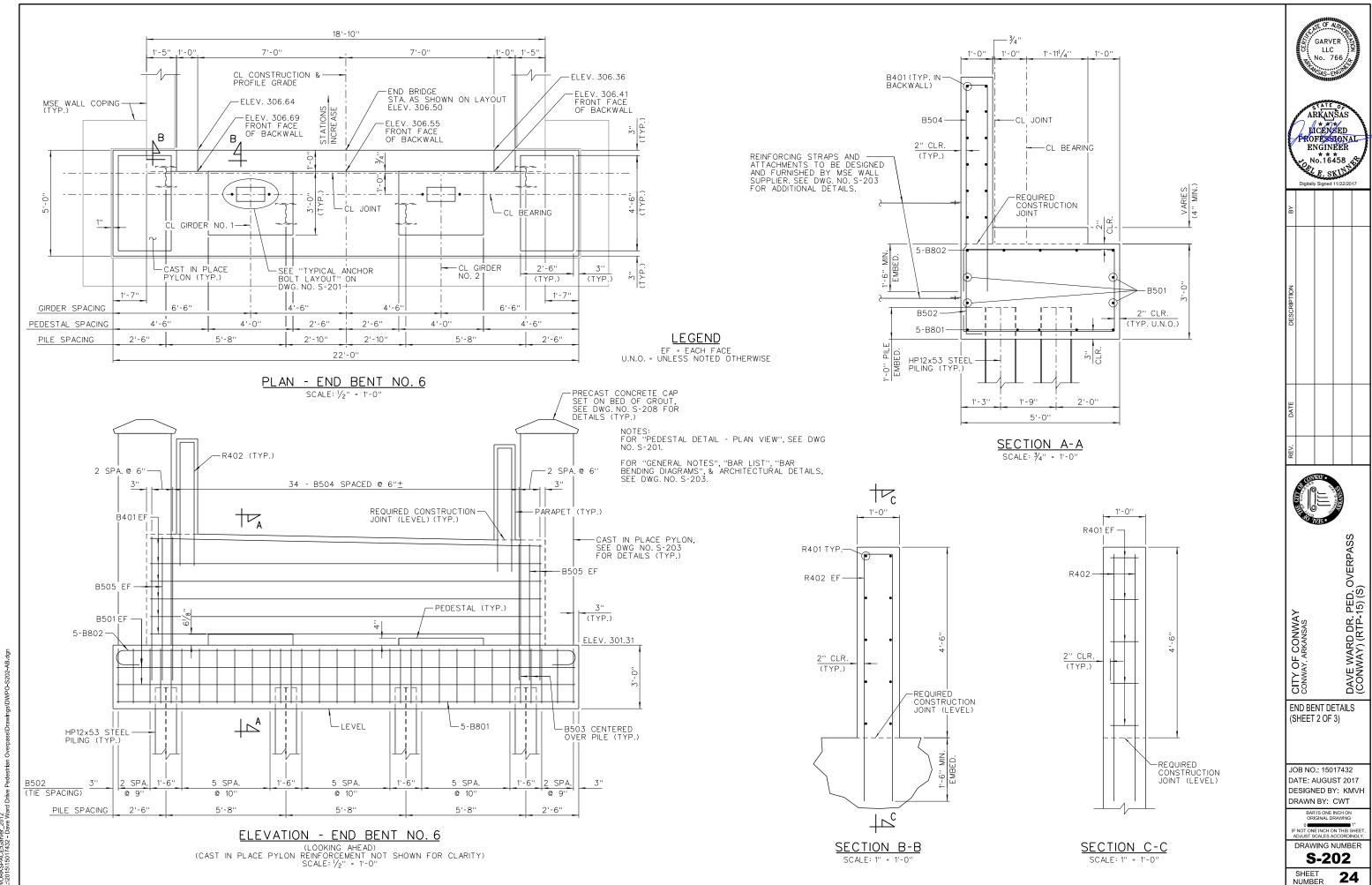
2 SPA.

2'-6"

5 SPA.

@ 10"

5'-8"



DLTackett 11/20/2017 9:16:32 AM WORKSPACE:Garver 2007 Dive Pedestrian Overnass/Drawings/DWPO-S202 L:2015.015.015.01 Dive Pedestrian Overnass/Drawings/DWPO-S202

ELEVATION

(SHOWING ARCHITECTURAL FINISH) SCALE: 3/8" = 1'-0"

PRECAST CONCRETE CAP SET ON BED OF GROUT, SEE DWG. NO. S-208 FOR -BRICK FORMLINER ON CAST-IN-PLACE PYLON

END ELEVATION (SHOWING ARCHITECTURAL FINISH) SCALE: 3/8" = 1'-0"



- $\begin{tabular}{lllll} \hline \end{tabular}$ FORM LINER SHALL BE A MAXIMUM DEPTH OF $$|'_2"$$ TO PROVIDE A MINIMUM CLEARANCE OF 2"
- 3 CLASS 3 TEXTURED COATING FINISH COLOR CHIP NO. 36650.

		BAR I	LIST			BAR BENDING DIAGRAMS
MARK	NO. REQ'D	LENGTH	''A''	"B"	P.D.	"B"
B401	12	18'-6''			STR.	
						I I _
B501	4	21'-8''			STR.]
B502	24	15'-0''	2'-7''	4'-8''	21/2"] <u> </u>
B503	8	9'-71/2''	2'-7''	4'-8''	21/2"	B502
B504	34	13'-111/2''	6'-9"	8''	21/2"	
B505	8	6'-9"			STR.	- "B" -
B801	5	21'-8''			STR.]
B802	5	23'-6''			6''	
] -
C401	28	11' - 4 ''			STR.	B503. B504. C402.
C402	44	7'-7''	2'-10''	2'-1''	2''	B503, B504, C402, P401, P402 & R402
P401	8	7'-4''	1' - 11''	3'-8''	2''	21'-8''
P402	10	6'-4''	1' - 11''	2'-8''	2''	
						8" (TXP)
R401	20				STR.	(TYP.)
R402	4	12'-2"	5'-10''	8''	2''	B802

NUMBER OF BARS SHOWN IS FOR ONE END BENT ONLY. DIMENSIONS OF BARS ARE OUT-TO-OUT. TWO END BENTS REQUIRED.

GENERAL NOTES

ALL CONCRETE SHALL BE CLASS "S" CONCRETE WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH F'C = 3,500 PSI. CONCRETE SHALL BE POURED IN THE DRY, AND ALL EXPOSED CORNERS TO BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.

ALL REINFORCING STEEL SHALL CONFORM TO AASHTO M31 OR M322, TYPE A GR. 60.

ALL PILES SHALL BE HP12X53 (M270, GR. 50).

IF ANCHOR BOLTS ARE DRILLED INTO CAP, TOP REINFORCING BARS SHALL BE PROPERLY PLACED TO AVOID INTERFERENCE WITH ANCHOR BOLTS OR SHEET METAL SLEEVES.

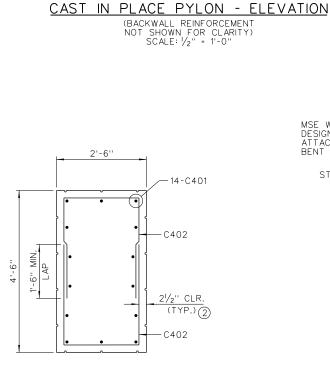
FOR ADDITIONAL INFORMATION, SEE LAYOUT.

THE BACKWALL SHALL NOT BE POURED UNTIL THE ADJACENT CONCRETE DECK IS POURED. SEE "DETAILS FOR BLOCKING EXPANSION JOINT DEVICE" ON DWG. NO. S-501 FOR ADDITIONAL INFORMATION.

FINISH TOP OF BACKWALL TO MATCH THE BRIDGE

CLASS 3 TEXTURED COATING FINISH SHALL BE APPLIED IN ACCORDANCE WITH SPECIAL PROVISION "TEXTURED COATING FINISH" AND IN ACCORDANCE WITH SUBSECTION 802.19.

MATERIALS, LABOR AND ALL COSTS TO INSTALL THE PRECAST CONCRETE CAP WILL NOT BE PAID FOR DIRECTLY BUT WILL BE INCLUDED IN THE UNIT PRICE "CLASS S CONCRETE - BRIDGE."



Įγ

2'-6"

C401

2 EQ.

SPA.

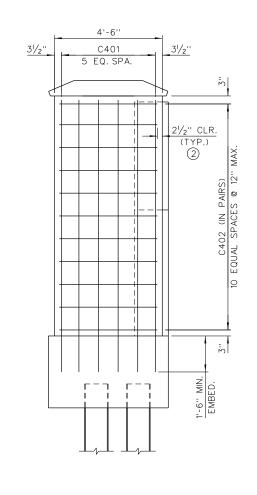
-

_31/2"

 $_{2}^{1/_{2}^{1}}$ CLR.

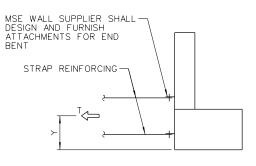
(TYP.) 2

<u>SECTION E-E</u> SCALE: 3/4" = 1'-0"



SECTION F-F

(BACKWALL REINFORCEMENT NOT SHOWN FOR CLARITY) SCALE: 1/2" = 1'-0"



END BENT STRAP DETAIL

T = RESULTANT FORCE REQUIRED TO BE RESISTED BY STRAP REINFORCING.

Y = CENTROID OF STRAP REINFORCING

LIMIT STATE	Т	Y
LIMIT STATE	KIPS/FT	FT
SERVICE	2.2	3.25'
STRENGTH	3.4	3.23

GARVER LLC No. 766



ENGINEER No.16458 E. SKUND Digitally Signed 11/22/2017									
ВУ									
DESCRIPTION									
DATE									



PED. OVERPASS -15) (S) DAVE WARD DR. F (CONWAY) (RTP-1

END BENT DETAILS (SHEET 3 OF 3)

CITY OF CONWAN CONWAY, ARKANSAS

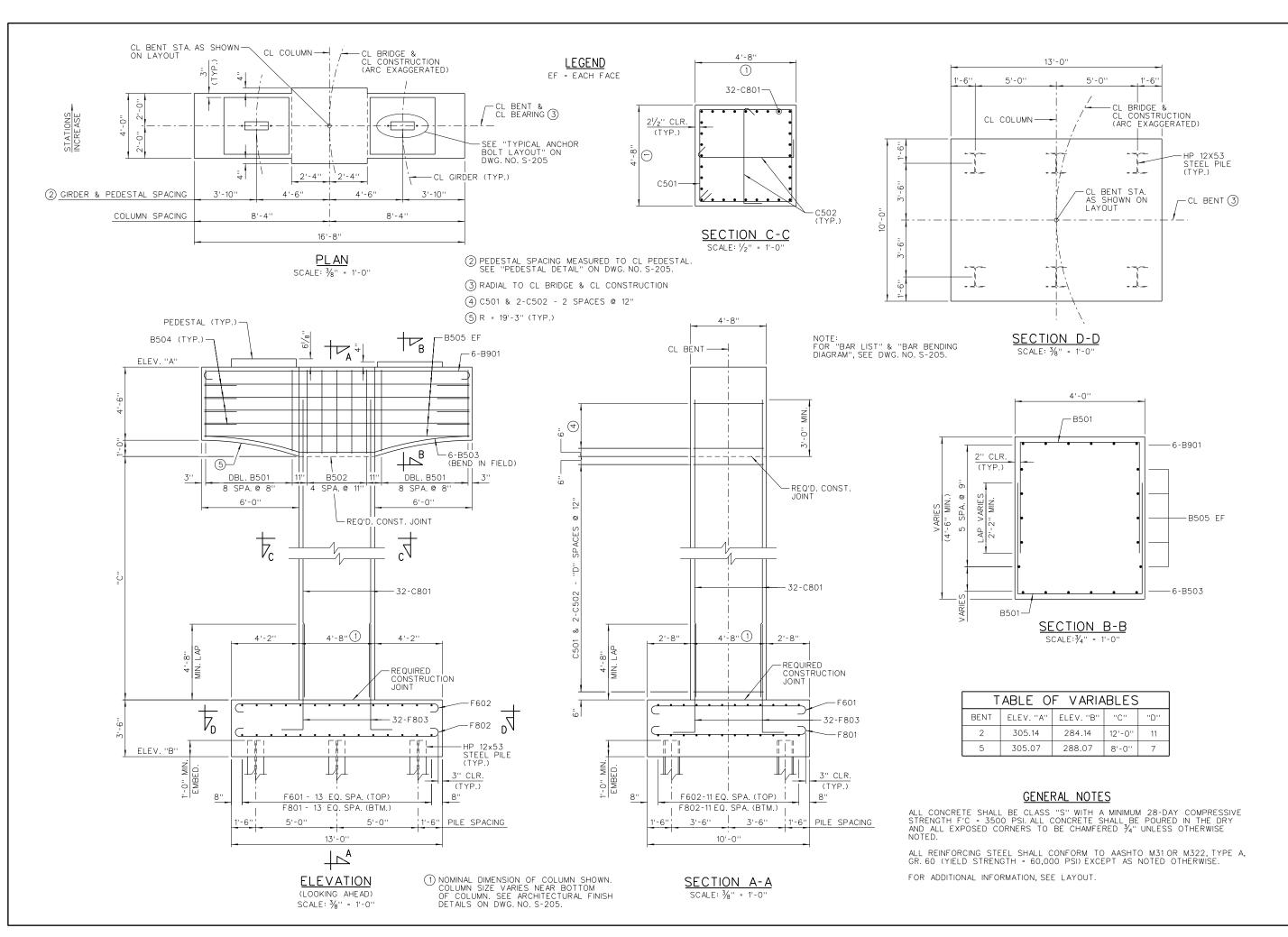
JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: KMVH DRAWN BY: CWT

BAR IS ONE INCH ON ORIGINAL DRAWING

DRAWING NUMBER

S-203

25







DESCRIPTION BY



DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

INTERMEDIATE BENT NOS. 2 & 5 DETAILS (SHEET 1 OF 2)

CITY OF CONWAY CONWAY, ARKANSAS

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: WMM DRAWN BY: CWT

BAR IS ONE INCH ON ORIGINAL DRAWING

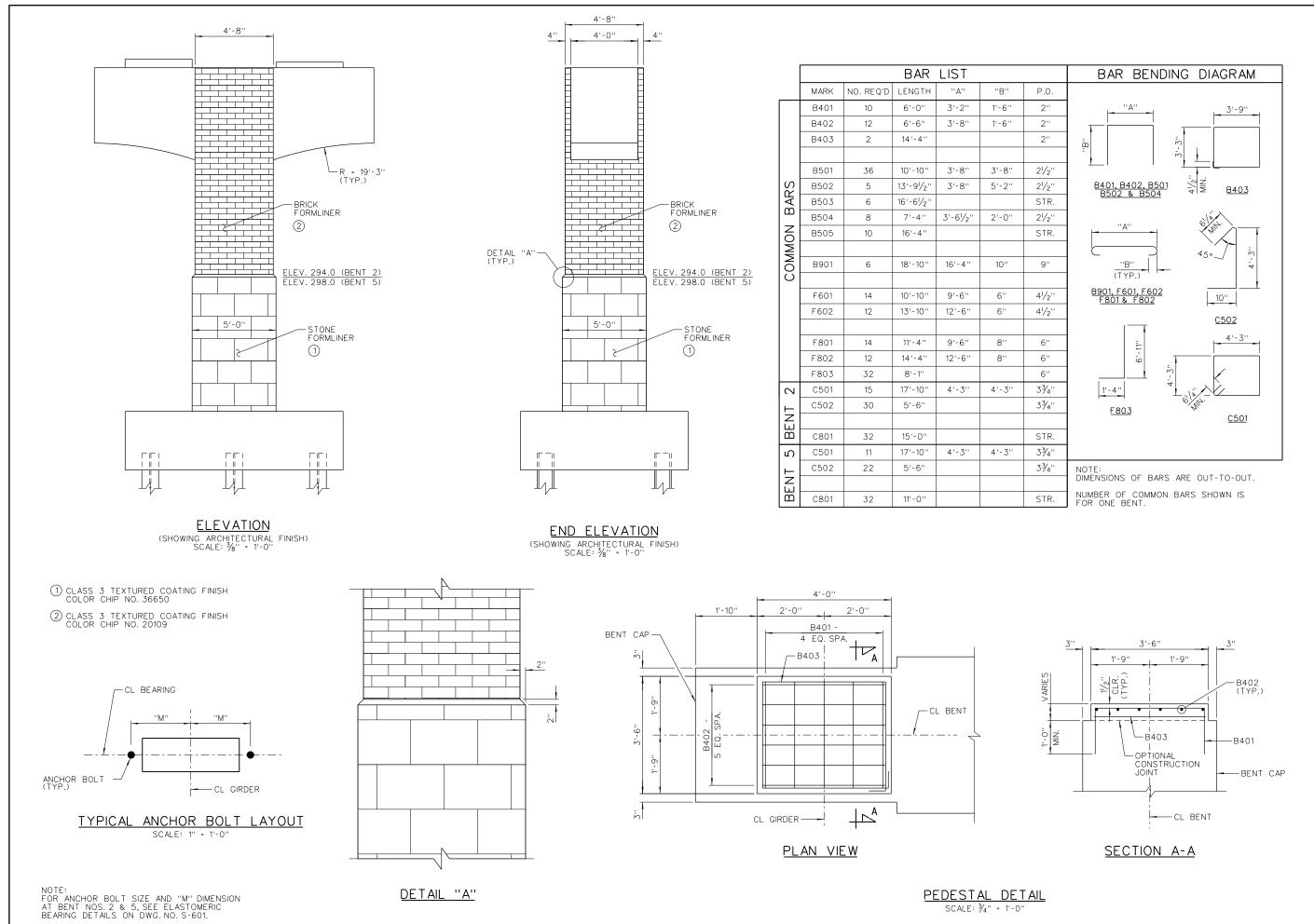
of the second of

S-204

SHEET NUMBER 2

26

DLTackett 11/20/2017 9:16:42 AM WORKSPACE:Garver_2012 L:2015/15017432 - Dave Ward Drive Pedestrian Overpass\Drawings\DWP



ARKANŠAS Mada Alectur LIČENSED PROFESSIONAL

ENGINEER NO.8658

DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

CITY OF CONWAY CONWAY, ARKANSAS

INTERMEDIATE BENT

NOS. 2 & 5 DETAILS

JOB NO.: 15017432

DATE: AUGUST 2017

DESIGNED BY: WMM DRAWN BY: CWT

BAR IS ONE INCH ON ORIGINAL DRAWING

DRAWING NUMBER **\$-205**

27

SHEET NUMBER

(SHEET 2 OF 2)





SECTION B-B SCALE: $\frac{3}{4}$ " = 1'-0"

C503

3'-8" $\frac{2\frac{1}{2}^{"} CLR.}{(TYP.)}$ -C502 28-C901

SECTION	C-C
SCALE: 3/4" =	1'-0''

TABLE OF VARIABLES							
BENT	ELEV. "A"	ELEV. "B"	"C"	D			
3	308.25	291.75	10'-6''	24			
4	308.20	289.70	12'-6''	27			

(1) NOMINAL DIMENSION OF COLUMN SHOWN. COLUMN SIZE VARIES NEAR BOTTOM OF COLUMN. SEE ARCHITECTURAL FINISH DETAILS ON DWG. NO. S-208.

GENERAL NOTES

ALL CONCRETE SHALL BE CLASS "S" WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH F'C = 3500 PSI. ALL CONCRETE SHALL BE POURED IN THE DRY AND ALL EXPOSED CORNERS TO BE CHAMFERED \(\frac{4}{4}\)" UNLESS OTHERWISE

ALL REINFORCING STEEL SHALL CONFORM TO AASHTO M31 OR M322, TYPE A, GR. 60 (YIELD STRENGTH = 60,000 PSI) EXCEPT AS NOTED OTHERWISE.

FOR ADDITIONAL INFORMATION, SEE LAYOUT.

CONCRETE AND REINFORCING STEEL IN DRILLED SHAFTS WILL NOT BE PAID FOR DIRECTLY BUT WILL BE INCLUDED IN THE UNIT PRICE OF "DRILLED SHAFT (60" DIA.)."

MATERIALS, LABOR AND ALL COSTS TO CONSTRUCT THE MUD SLAB WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE INCLUDED IN THE UNIT PRICE "DRILLED SHAFT (60" DIA.)".

MATERIALS, LABOR AND ALL COSTS TO INSTALL THE PRECAST CONCRETE CAP WILL NOT BE PAID FOR DIRECTLY BUT WILL BE INCLUDED IN THE UNIT PRICE "CLASS S CONCRETE - BRIDGE."



DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

CITY OF CONWAY CONWAY, ARKANSAS INTERMEDIATE BENT NOS. 3 & 4 DETAILS (SHEET 1 OF 3)

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: WMM DRAWN BY: CWT

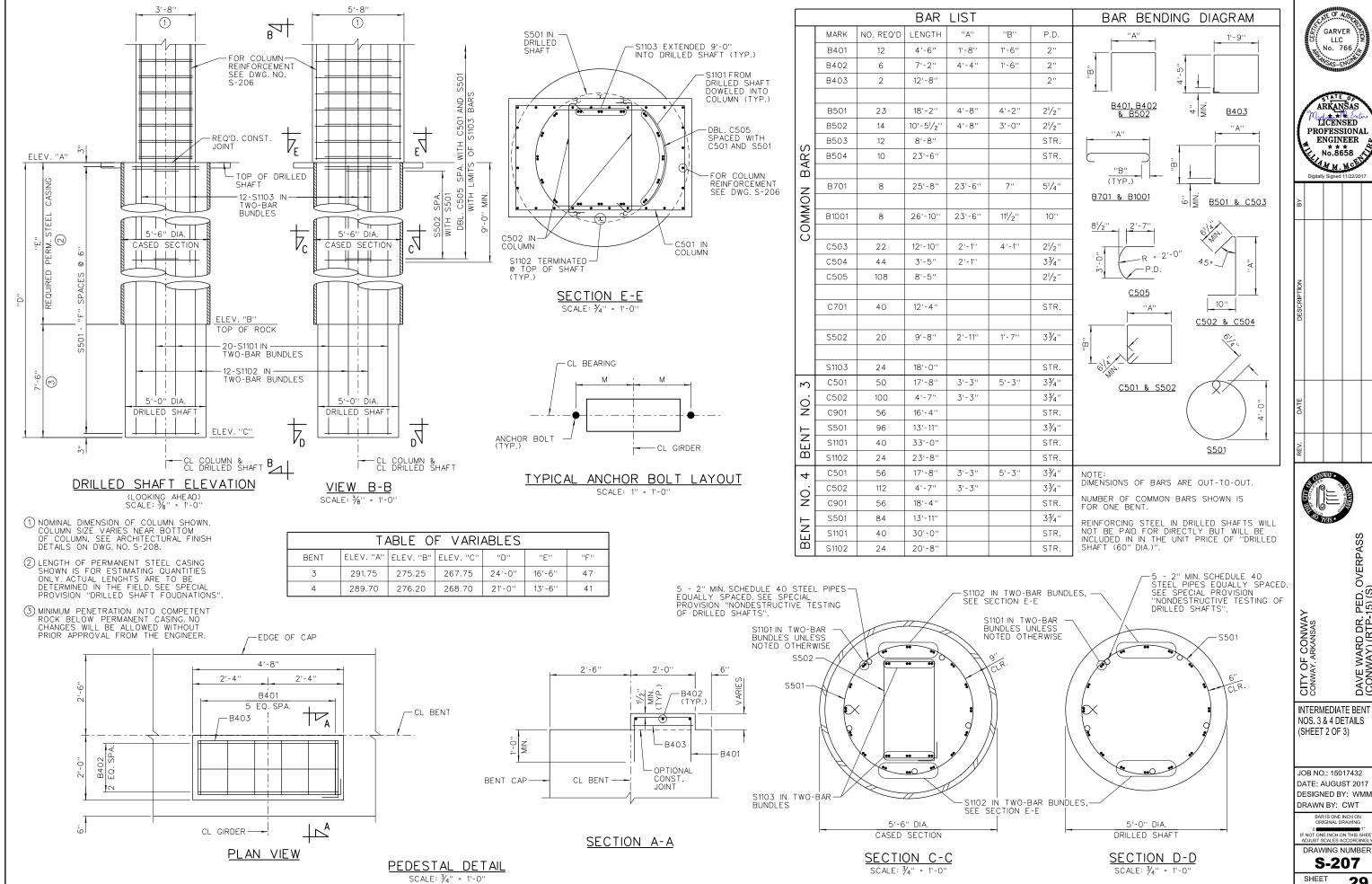
BAR IS ONE INCH ON ORIGINAL DRAWING

DRAWING NUMBER

S-206

SHEET NUMBER

28



GARVER LLC No. 766





PED. OVERPASS 15) (S) DAVE WARD DR. (CONWAY) (RTP-

INTERMEDIATE BENT NOS. 3 & 4 DETAILS (SHEET 2 OF 3)

JOB NO.: 15017432 DATE: AUGUST 2017

DRAWN BY: CWT BAR IS ONE INCH ON ORIGINAL DRAWING

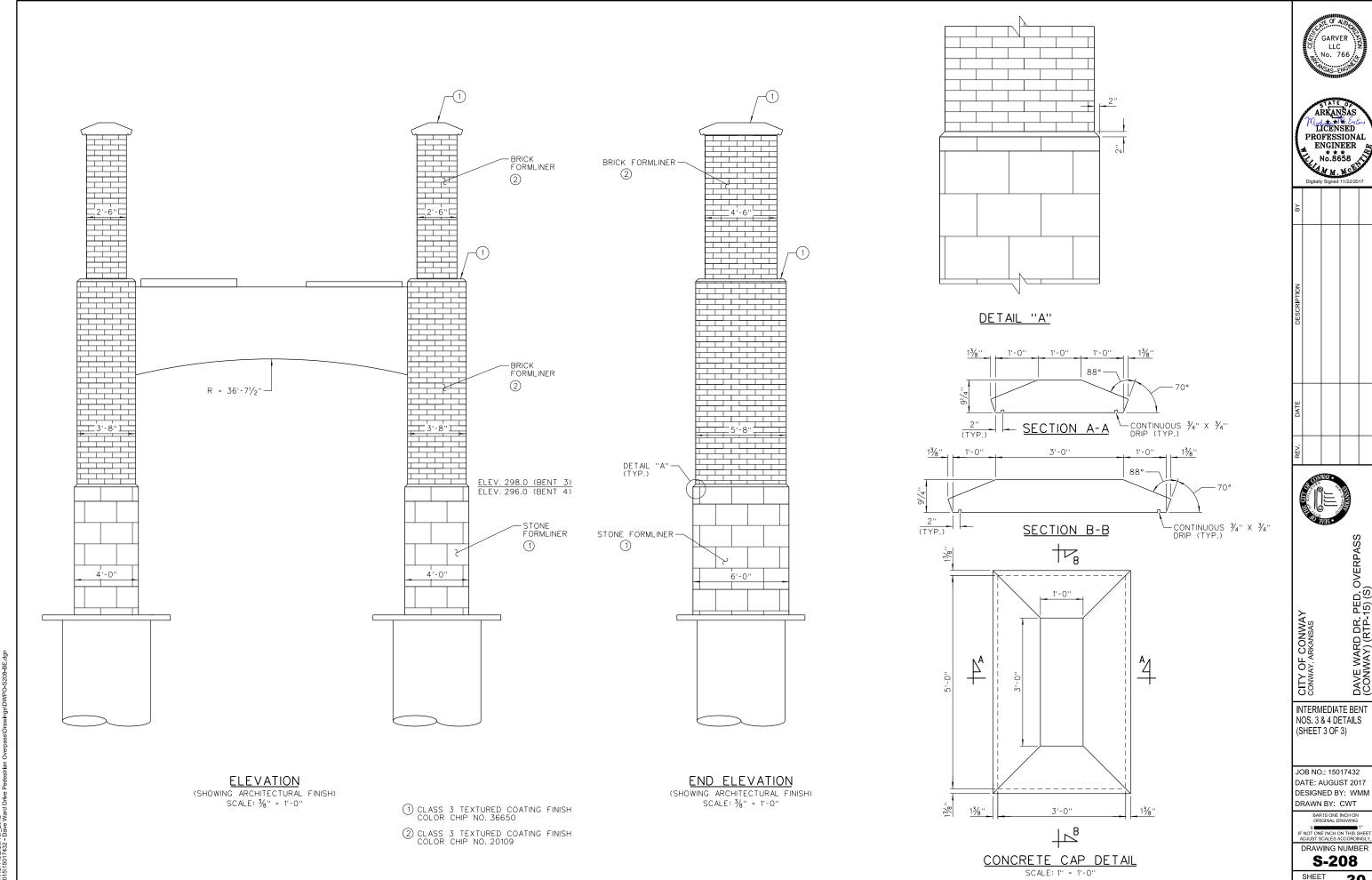
DRAWING NUMBER

S-207

SHEET NUMBER

29

DLTackett 11/20/20 WORKSPACE:Garver_2012 L:\2015\15017432 - Dave War



S-208 SHEET NUMBER

DRAWING NUMBER

30

DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

(BOTTOM) PLACED AS SHOWN (OVER INT.SUPPORTS) 14 SPACES PLACED AS SHOWN

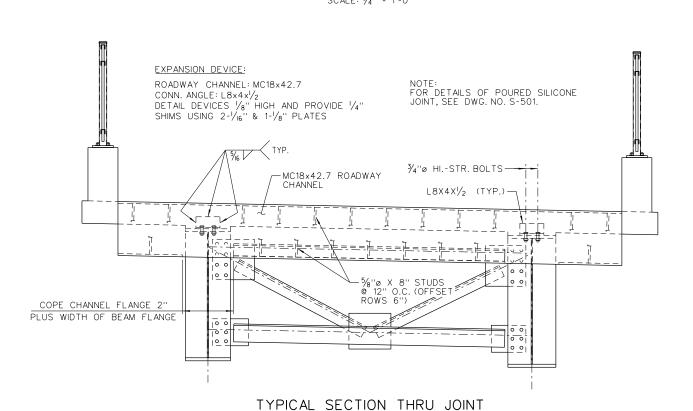
> 1) TOLERANCE: MINUS = 1/4"

MINUS = 1/4"
PLUS = AMOUNT OF SLAB THICKENING USED TO MEET SLAB THICKNESS TOLERANCE - SEE "ADJUSTMENT FOR SLAB THICKNESS TOLERANCE WHEN REMOVABLE DECK FORMING IS USED" ON DWG. NO. S-310.

(2) SEE "ADJUSTMENT FOR SLAB THICKNESS TOLERANCE WHEN REMOVABLE DECK FORMING IS USED" ON DWG. NO. S-310.

16'-0'' SLAB REINFORCING: 14'-0" TRAIL 10'' -CL BRIDGE & CL CONSTRUCTION -FOR DETAILS OF METAL TYPE H2 HANDRAIL, SEE DWG.NO.S-312 (TYP.) BAR POSITIONS OR CLEARANCES FROM THE FORMS SHALL BE MAINTAINED BY MEANS OF STAYS, TIES, HANGERS OR OTHER APPROVED DEVICES PER SUBSECTION 804.06. PROFILE FOR DETAILS OF PARAPET, SEE DWG. NO. S-311 (TYP.) GRADE -REQUIRED CONSTRUCTION JOINT, MATCH ROADWAY SLOPE (TYP.) -S401E | (~) −S502E 2% SLOPE -S501E -CL ¾" DRIP GROOVE (TYP.) (TYP.) 4'-6" 3'-6" $\langle 1 \rangle$

TYPICAL SECTION - PLATE GIRDER SPANS (LOOKING FORWARD) SCALE: 3/4" - 1'-0"



(LOOKING FORWARD)

		BAR I	LIST			BAR BENDING DIAGRAMS
MARK	NO. REQ'D	LENGTH	''A''	"B"	P.D.	
S401E	80	32'-10"			STR.	1'-0" 1'-5" 1'-0"
S501E	48	53'-5''			STR.] =
S502E	450	15'-8''			STR.	
S601E	45	32'-8''			STR.	<u>P501E</u>
						''A''
P401E	316	4'-2''	7''	1'-101/2''	2''	
P402E	42	2'-4''	7''	11 ^l /2''	2''	
P404E	18	9'-6''			STR.	
P406E	42	10'-0''			STR.	
P407E	6	10'-2''			STR.	P401E & P402E + P413E
P409E	102	10'-8''			STR.	
P413E	6	6'-0''			2''	
P501E	8	5'-9''			21/2''	
P502E	40	4'-9''			STR.	
P503E	8	2'-8''			STR.	

NOTES: DIMENSIONS OF BARS ARE OUT-TO-OUT.

BAR DESIGNATIONS ENDING WITH "E" INDICATE EPOXY COATED BARS.

GARVER DE LLC No. 766 a



REV. DATE DESCRIPTION BY



DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

150'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT NO. 1 (SHEET 1 OF 4)

CITY OF CONWAY CONWAY, ARKANSAS

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: JES DRAWN BY: CWT

BAR IS ONE INCH ON ORIGINAL DRAWING

IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

DRAWING NUMBER

S-301

SHEET 31

— CL BEARING & CL BENT NO. 2

ARKANSAS

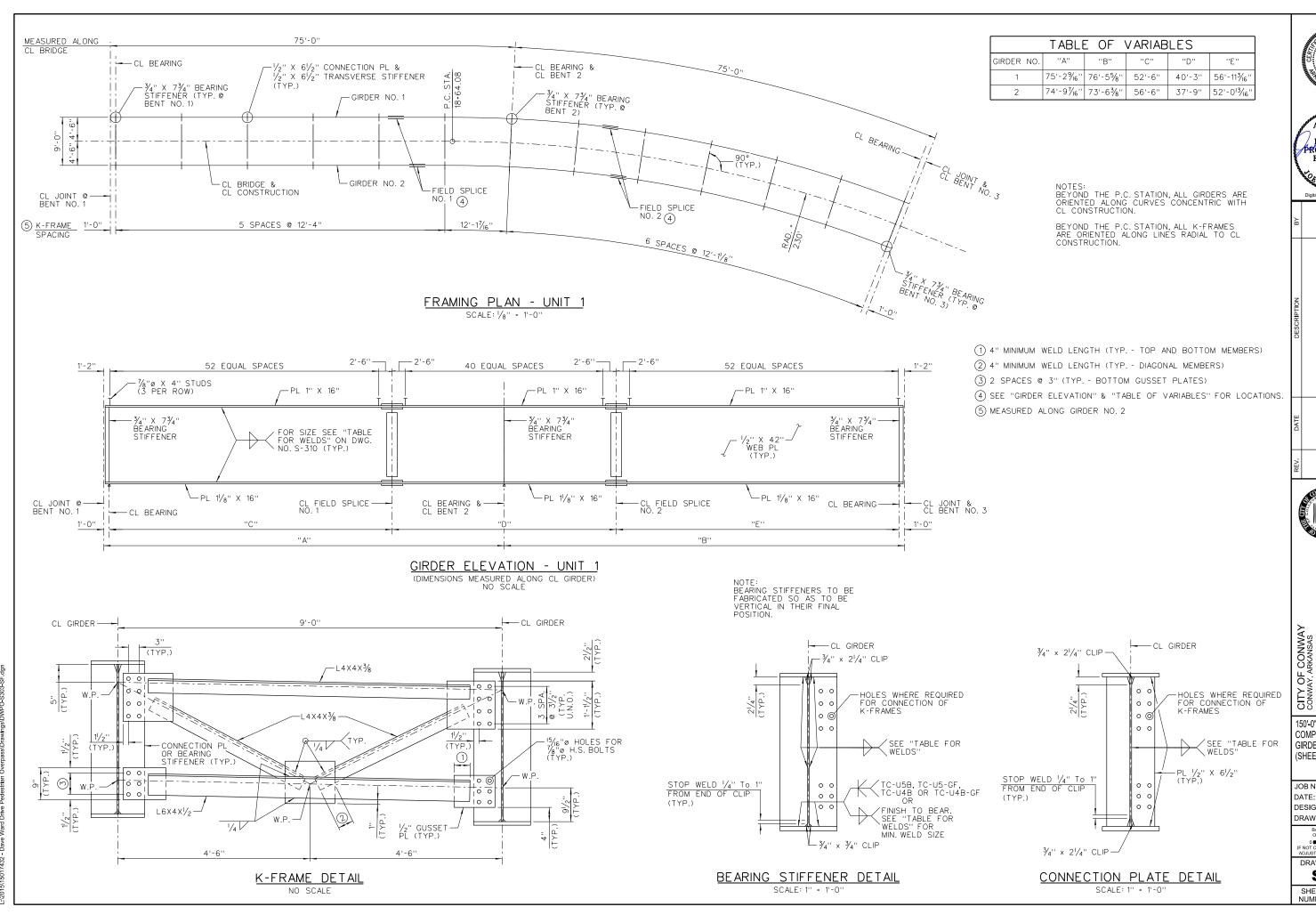
DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

BAR IS ONE INCH ON ORIGINAL DRAWING

S-302

32

- CL JOINT @ BENT NO. 1



GARVER LLC No. 766



DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

150'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT NO. 1 (SHEET 3 OF 4)

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: JES DRAWN BY: CWT

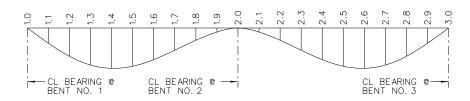
BAR IS ONE INCH ON ORIGINAL DRAWING

DRAWING NUMBER

S-303

SHEET NUMBER 33

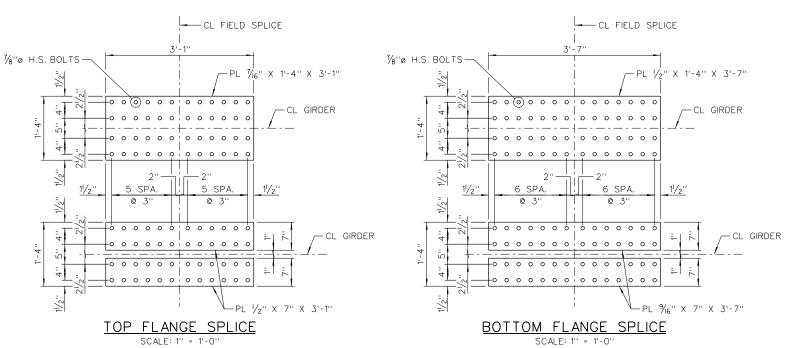
DLTackett 11/20/2017 9 WORKSPACE:Garver 2012 L:\2015\15017432 - Dave Ward Drive

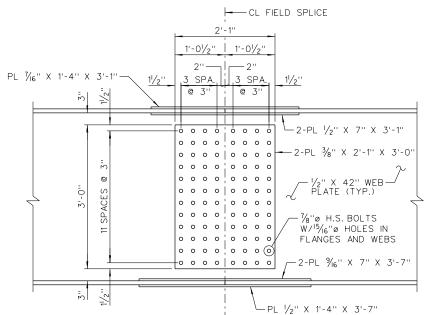


DEAD LOAD DEFLECTION

NO SCALE

NOTE:
CAMBER FOR DEAD LOAD DEFLECTION PLUS VERTICAL CURVE
+/- ¼" TOLERANCE. DEFLECTIONS SHOWN ARE FROM A CHORD
FROM CENTERLINE BEARING TO CENTERLINE BEARING. VERTICAL
CURVE CORRECTIONS ARE NOT INCLUDED. NEGATIVE SIGN (-)
INDICATES POINT ABOVE CHORD.





ELEVATION OF FIELD SPLICE

SCALE: 1" = 1'-0"

NOT

ALL FIELD SPLICE BOLTS SHALL BE $\ensuremath{\sqrt[7]{8}}\xspace^{+} \otimes$ H.S. BOLTS.

ALL HOLES FOR SPLICE BOLTS SHALL BE $^{15}\!\!/_{16}$ "ø.

ALL FIELD SPLICE PLATES SHALL BE AASHTO M270, GR. 50 STEEL.

BOLTED FIELD SPLICES SHOWN MAY BE ELIMINATED OR SHOP WELDED SPLICES MAY BE SUBSTITUTED WITH APPROVAL OF THE ENGINEER. PAYMENT WILL BE MADE ON THE BASIS OF THE PLAN QUANTITIES.

GARVER ON 766



	Digitally	/ Signed	11/22/20	17
ВУ				
DESCRIPTION				
DATE				
REV.				
	- CON	WAY		



DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

CITY OF CONWAY
CONWAY
CONWAY
ARKANSAS
AR

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: JES DRAWN BY: CWT

> BAR IS ONE INCH ON ORIGINAL DRAWING

o 1"

IF NOT ONE INCH ON THIS SHEET,
ADJUST SCALES ACCORDINGLY.

DRAWING NUMBER

S-304

SHEET 34

DLTackett 11/20/2017 9:17:23 AM WORKSPACE:Garver_2012 L:2015/15017432 - Dave Ward Drive Pedestrian Overpass\Drawings\DWF

TYPICAL SECTION - PLATE GIRDER SPANS (LOOKING FORWARD) SCALE: 3/4" = 1'-0"

-MC18x42.7 ROADWAY

CHANNEL

FOR DETAILS OF POURED SILICONE JOINT, SEE DWG. NO. S-501.

¾"ø HI.-STR. BOLTS—

-5/8" × 8" STUDS @ 12" O.C. (OFFSET ROWS 6")

TYPICAL SECTION THRU JOINT

(LOOKING FORWARD)

 $L8X4X1/_2$ (TYP.) \neg

EXPANSION DEVICE:

COPE CHANNEL FLANGE 2" PLUS WIDTH OF BEAM FLANGE

ROADWAY CHANNEL: MC18x42.7

CONN. ANGLE: $18\times4\times/2$ DETAIL DEVICES 1/8" HIGH AND PROVIDE 1/4" SHIMS USING 2-1/16" & 1-1/8" PLATES

√5/6 V TYP.

TRANSVERSE: S502E @ 8" O.C. (TOP & BOTTOM)

LONGITUDINAL: S401E (TOP) 15 SPACES PLACED AS SHOWN
S501E (BOTTOM) PLACED AS SHOWN
S601E (OVER INT. SUPPORTS) 14 SPACES PLACED AS SHOWN

-FOR DETAILS OF METAL TYPE H2 HANDRAIL, SEE DWG.NO.S-312 (TYP.)

FOR DETAILS OF PARAPET, SEE DWG. NO. S-311 (TYP.)

-REQUIRED CONSTRUCTION JOINT, MATCH ROADWAY SLOPE (TYP.)

1) TOLERANCE:

MINUS = 1/4"
PLUS = AMOUNT OF SLAB THICKENING USED TO MEET
SLAB THICKNESS TOLERANCE - SEE "ADJUSTMENT FOR
SLAB THICKNESS TOLERANCE WHEN REMOVABLE DECK FORMING IS USED" ON DWG. NO. S-310.

(2) SEE "ADJUSTMENT FOR SLAB THICKNESS TOLERANCE WHEN REMOVABLE DECK FORMING IS USED" ON DWG. NO. S-310.

		BAR	LIST			BAR BENDING DIAGRAMS
MARK	NO. REQ'D	LENGTH	"A"	"B"	P.D.	
S401E	80	33'-6''			STR.	1'-0'' 1'-5'' 1'-0''
S501E	48	54'-5"			STR.	. 4
S502E	450	15'-8''			STR.	<u></u>
						<u> </u>
S601E	45	32'-8''			STR.	<u>P501E</u>
						1'-5''
P401E	316	4'-2''	7''	1'-101/2''	2''	- "A"
P402E	42	2'-4''	7''	111/2"	2''	
P405E	84	9'-10''			STR.	
P408E	6	10'-7''			STR.	
P410E	60	10'-10''			STR.	<u> </u>
P411E	12	10'-101/2''			STR.	P401E & P402E
P412E	6	10'-11''			STR.	
P413E	6	6'-0''			2''	
P501E	8	5'-9''			21/2"	
P502E	40	4'-9''			STR.	
P503E	8	2'-8''			STR.	

DIMENSIONS OF BARS ARE OUT-TO-OUT.

BAR DESIGNATIONS ENDING WITH "E" INDICATE EPOXY COATED BARS.

ARKANSAS

ricensed Professional Engineer No.16458



DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

150'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT NO. 2 (SHEET 1 OF 4)

CITY OF CONWAY CONWAY, ARKANSAS

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: JES DRAWN BY: CWT

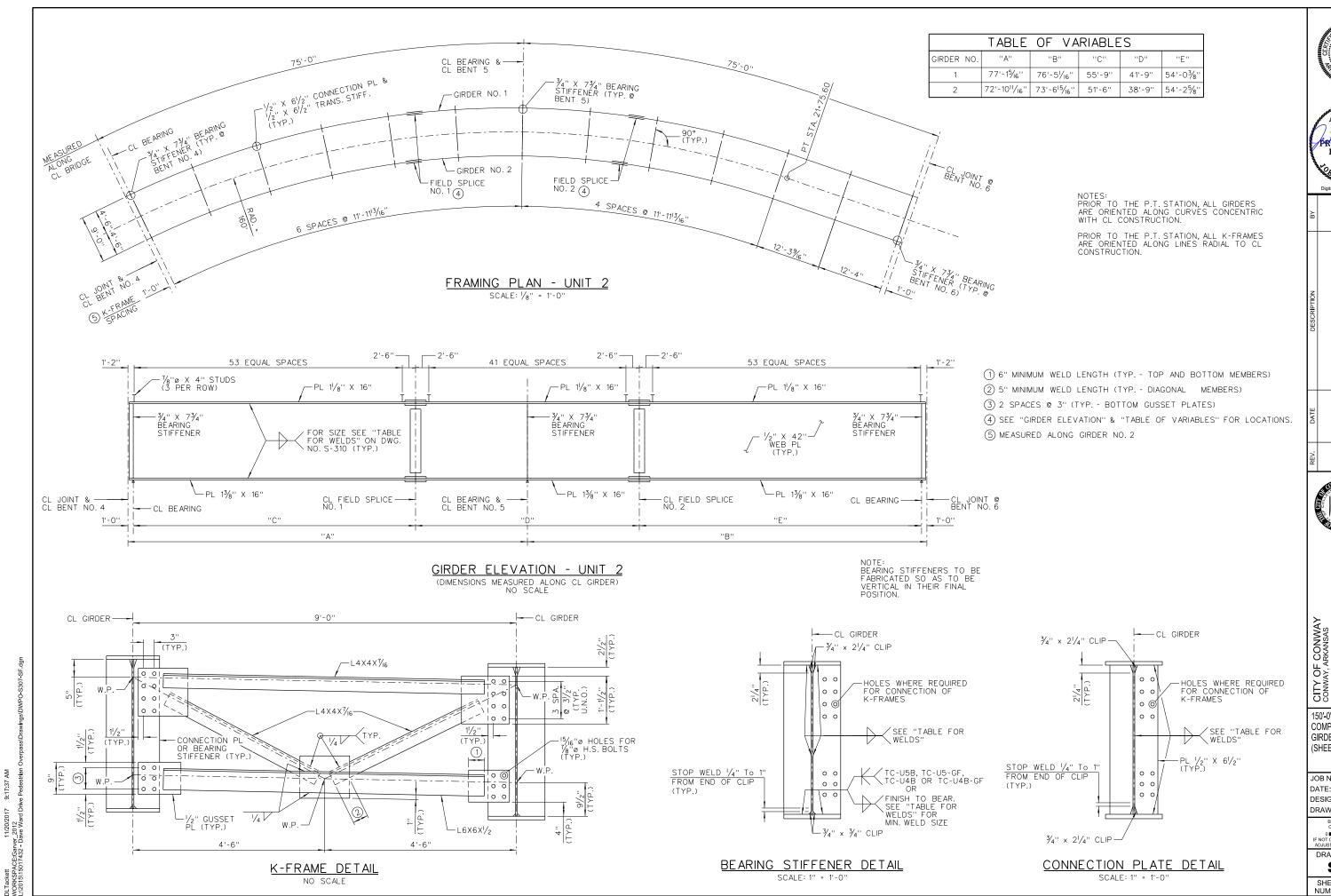
BAR IS ONE INCH ON ORIGINAL DRAWING

DRAWING NUMBER

S-305

DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

36



GARVER LLC No. 766



DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

150'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT NO. 2 (SHEET 3 OF 4)

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: JES DRAWN BY: CWT

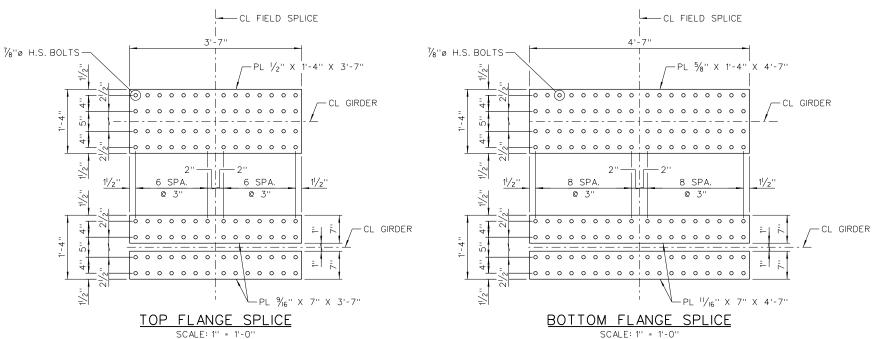
BAR IS ONE INCH ON ORIGINAL DRAWING

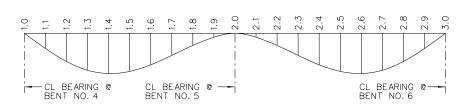
DRAWING NUMBER

S-307

SHEET NUMBER

37





0.000

0.000

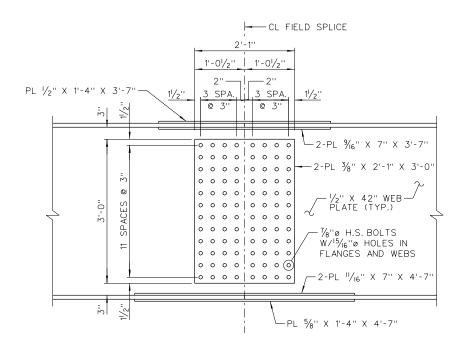
0.000

0.000

DEAD LOAD DEFLECTION

NO SCALE

CAMBER FOR DEAD LOAD DEFLECTION PLUS VERTICAL CURVE +/- ¼" TOLERANCE. DEFLECTIONS SHOWN ARE FROM A CHORD FROM CENTERLINE BEARING TO CENTERLINE BEARING. VERTICAL CURVE CORRECTIONS ARE NOT INCLUDED. NEGATIVE SIGN (-) INDICATES POINT ABOVE CHORD.



ELEVATION OF FIELD SPLICE SCALE: 1" = 1'-0"

NOTES:

ALL FIELD SPLICE BOLTS SHALL BE $\ensuremath{\ensuremath{\%}}\xspace$ H.S. BOLTS.

ALL HOLES FOR SPLICE BOLTS SHALL BE 15/6"Ø.

ALL FIELD SPLICE PLATES SHALL BE AASHTO M270, GR. 50 STEEL.

BOLTED FIELD SPLICES SHOWN MAY BE ELIMINATED OR SHOP WELDED SPLICES MAY BE SUBSTITUTED WITH APPROVAL OF THE ENGINEER, PAYMENT WILL BE MADE ON THE BASIS OF THE PLAN QUANTITIES.



•	Digitally	E. S	
ВУ			
DESCRIPTION			
DATE			
REV.			



PED. OVERPASS 15) (S) DAVE WARD DR. (CONWAY) (RTP-

CITY OF CONWAY CONWAY, ARKANSAS 150'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT NO. 2 (SHEET 4 OF 4)

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: JES DRAWN BY: CWT

BAR IS ONE INCH ON ORIGINAL DRAWING

DRAWING NUMBER

S-308

SHEET NUMBER 38

3.0

0.000

0.000

GENERAL NOTES:

CONCRETE:

ALL CONCRETE IN THE BRIDGE DECK SLABS SHALL BE CLASS S(AE) WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH F'C = 4,000 PSI. CONCRETE SHALL BE POURED IN THE DRY AND ALL EXPOSED CORNERS TO BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.

THE SUPERSTRUCTURE DETAILS ARE SHOWN FOR USE WHEN REMOVABLE DECK FORMING IS USED AND ARE THE BASIS OF MEASUREMENT OF CLASS S(AE) CONCRETE. SEE STANDARD DRAWING NO. 55005 FOR ALLOWABLE MODIFICATIONS AND FOR TOLERANCES WHEN PERMANENT STEEL DECK FORMS ARE USED.

CONCRETE IN BRIDGE SUPERSTRUCTURE SHALL BE PLACED, CONSOLIDATED AND SCREEDED OFF FOR THE ENTIRE POUR BEFORE ANY CONCRETE HAS TAKEN ITS INITIAL SET. THIS MAY REQUIRE THE USE OF A RETARDING AGENT.

THE DECK SHALL BE GIVEN A BROOMED FINISH IN ACCORDANCE WITH SUBSECTION 802.19 FOR CLASS 6 BROOMED FINSH. MOVEMENT OF THE FINISHING MACHINE ACROSS NEW CONCRETE SHALL BE ON PLANKS PLACED ON THE SURFACE AND SHALL BE PROHIBITED FOR 72 HOURS AFTER FINISHING THE POUR. SUFFICIENT CONCRETE MUST BE PLACED AHEAD OF THE STRIKE-OFF TO FULLY LOAD THE GIRDER. A MINIMUM OF 72 HOURS SHALL ELAPSE BETWEEN COMPLETION OF THE SLAB AND THE POURING OF THE PARAPET RAILING.

USE OF A LONGITUDINAL SCREED SHALL NOT BE PERMITTED.

REINFORCING STEEL:

ALL REINFORCING STEEL SHALL BE GRADE 60 (FIELD STRENGTH = 60,000 PSI)
CONFORMING TO AASHTO M31 OR M322, TYPE A, WITH MILL TEST REPORTS AND SHALL BE
EPOXY COATED. THE REINFORCING STEEL IS TO BE ACCURATELY LOCATED IN THE FORMS
AND FIRMLY HELD IN PLACE BY STEEL WIRE SUPPORTS, SUFFICIENT IN NUMBER AND SIZE
TO PREVENT DISPLACEMENT DURING THE COURSE OF CONSTRUCTION.

THE WIRE SUPPORTS WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED SUBSIDIARY TO THE ITEM "EPOXY COATED REINFORCEMENT STEEL (GRADE 60)".

STRUCTURAL STEEL:

ALL STRUCTURAL STEEL SHALL BE AASHTO M270, GR. 50 UNLESS NOTED OTHERWISE. ALL EXPOSED SURFACES SHALL BE CLEANED IN ACCORDANCE WITH SUBSECTION 807.84 UNLESS NOTED OTHERWISE. STRUCTURAL STEEL COMPLETELY EMBEDDED IN CONCRETE MAY BE AASHTO M270 GR. 36, GR. 50 OR GR 50W UNLESS NOTED OTHERWISE. SEE DRAWING NO. S-601 FOR CLEANING REQUIREMENTS OF EXTERNAL LOAD PLATES ON

REQUESTS FOR SUBSTITUTION OF STRUCTURAL STEEL SHAPES SHOWN WITH SHAPES OF GREATER SIZE MUST BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER FOR APPROVAL. STEELS OF EQUAL OR GREATER STRENGTHS WILL BE ACCEPTED ONLY WHEN SHOWN ON APPROVED SHOP DRAWINGS. SHAPES AND MATERIALS SHOWN IN THE PLANS WILL BE THE BASIS OF PAYMENT AND NO ADDITIONAL COMPENSATION WILL BE MADE FOR ANY ADJUSTMENTS DUE TO SUBSTITUTIONS.

DRAWINGS SHOW GENERAL FEATURES OF DESIGN ONLY. SHOP DRAWINGS SHALL BE PREPARED IN ACCORDANCE WITH SUBSECTION 807.04, SUBMITTED AND APPROVED BEFORE FABRICATION IS BEGUN.

BOLTED FIELD SPLICES SHOWN MAY BE ELIMINATED OR SHOP WELDED SPLICES MAY BE SUBSTITUTED WITH APPROVAL OF THE ENGINEER. PAYMENT WILL BE MADE ON THE BASIS OF PLAN QUANTITIES.

GIRDER WEBS MAY BE MADE BY SHOP SPLICING WITH A MINIMUM LENGTH OF 25'-0" FOR SECTIONS. FLANGE PLATES LONGER THAN 50'-0" MAY BE MADE BY SHOP SPLICING WITH A MINIMUM LENGTH OF 25'-0" FOR SECTIONS. MATERIAL SPECIFICATIONS AND LOCATIONS OF SHOP-WELDED SPLICES, IF ANY, SHALL BE SHOWN ON THE SHOP DRAWINGS. NO ADDITIONAL PAYMENT FOR THESE WELDED SPLICES WILL BE MADE.

ALL WELDING THAT IS TO BE DONE DURING FABRICATION OF STRUCTURAL STEEL, INCLUDING TEMPORARY WELDS, SHALL BE DETAILED ON THE SHOP DRAWINGS AND SUBMITTED FOR APPROVAL. IF ADDITIONAL WELDS ARE REQUIRED, WHETHER TEMPORARY OR PERMANENT, A FORMAL REQUEST WITH DETAILED DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL; HOWEVER, ADDITIONAL WELDS USED FOR ATTACHING FALSEWORK SUPPORT DEVICES OR SCREED RAIL SUPPORTS TO THE STRUCTURAL STEEL THAT DO NOT EXCEED THE LIMITATIONS OF SUBSECTION 802.13 WILL NOT REQUIRE APPROVAL PRIOR TO CONSTRUCTION. ALL WELDING SHALL CONFORM TO SUBSECTION 807.26.

ALL GIRDERS SHALL BE ASSEMBLED IN THE SHOP AS SPECIFIED IN SUBSECTION 807.54 (B)(2) AND BLOCKED IN THEIR TRUE POSITIONS WITH WEBS HORIZONTAL THE CAMBER, LENGTH OF SECTIONS, DISTANCE BETWEEN BEARINGS AND OPENINGS OF JOINTS SHALL BE MEASURED WITH THE GIRDERS IN THEIR TRUE POSITIONS, AND THIS INFORMATION SHALL BECOME A PART OF THE PERMANENT RECORDS OF THIS JOB. THE COMPONENT PARTS SHALL BE MATCH MARKED IN THIS ASSEMBLY, AND THESE MARKS SHALL BE SHOWN ON THE ERECTION DIAGRAM.

GROOVE WELDS IN FLANGE AND WEB PLATES SHALL BE QUALITY CONTROL (Q.C.) TESTED BY NONDESTRUCTIVE TESTING, AS REQUIRED IN SUBSECTION 807.23(B). FILLET WELDS AT FLANGE TO WEB PLATE CONNECTIONS SHALL BE QUALITY CONTROL (Q.C.) TESTED BY THE MAGNETIC PARTICLE METHOD. ALL QUALITY CONTROL (Q.C.) TESTING SHALL BE CONSIDERED SUBSIDIARY TO THE ITEM "STRUCTURAL STEEL IN PLATE GIRDER SPANS (M270, GR, 50)"

UNLESS NOTED OTHERWISE, ALL CONNECTION PLATES AND TRANSVERSE STIFFENERS SHALL BE FABRICATED NORMAL TO THE TOP FLANGE AND ON THE SIDE OF THE GIRDER WEB AS INDICATED ON THE FRAMING PLAN. ALL BEARING STIFFENERS SHALL BE FABRICATED TO BE PLUMB IN THEIR FINAL POSITIONS.

STRUCTURAL STEEL (CONTINUED):

CROSS-FRAMES SHALL BE INSTALLED AS GIRDERS ARE ERECTED. UNLESS NOTED OTHERWISE, ALL BOLTS IN DIAPHRAGMS AND FIELD SPLICES SHALL BE INSTALLED AND TIGHTENED IN ACCORDANCE WITH SUBSECTION 807.71 PRIOR TO POURING OF THE

FIELD CONNECTIONS SHALL BE BOLTED WITH HIGH-STRENGTH BOLTS AND SHALL BE $\frac{1}{6}$ ". BOLTS CONFORMING TO AASHTO M164 UNLESS OTHERWISE NOTED. OPEN HOLES SHALL BE $\frac{1}{6}$ 1" UNLESS OTHERWISE NOTED. BOLTS SHALL BE PLACED WITH HEADS ON THE OUTSIDE FACE OF THE EXTERIOR GIRDER WEBS AND ON THE BOTTOM OF THE GIRDER FLANGES.

ALL CONTACT SURFACES BETWEEN PLATES AT FIELD SPLICES SHALL BE FREE OF OIL, RUST OR SCALE BEFORE ASSEMBLY.

ALL STUD SHEAR CONNECTORS SHALL BE GRANULAR FLUX FILLED, SOLID FLUXED OR EQUAL AND SHALL BE AUTOMATICALLY END WELDED IN ACCORDANCE WITH RECOMMENDATIONS OF THE MANUFACTURER.

ANCHOR BOLTS SHALL BE AASHTO DESIGNATION M314 GR. 55, INCLUDING SUPPLEMENTAL REQUIREMENT S1, AND SHALL BE GALVANIZED TO CONFORM TO AASHTO M232, CLASS C OR ASTM B695 CLASS 50. ANCHOR BOLTS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID FOR "STRUCTURAL STEEL IN PLATE GIRDER SPANS (M270, GR. 50)".

ALL STRUCTURAL STEEL EXCEPT GALVANIZED STEEL AND STEEL COMPLETELY ENCASED IN CONCRETE SHALL BE PAINTED IN ACCORDANCE WITH SUBSECTION 807.75 AND SPECIAL PROVISION "PAINTING STRUCTURAL STEEL" THE COLOR OF PAINT SHALL BE BLACK, FEDERAL STANDARD 595B, COLOR CHIP 27038.

ALL GIRDER WEB AND FLANGE PLATES, ALL FIELD SPLICE PLATES, AND ALL CROSS-FRAMES AND CONNECTION PLATES ARE CONSIDERED MAIN LOAD CARRYING MEMBERS AND SHALL MEET THE LONGITUDINAL CHARPY V-NOTCH TEST SPECIFIED IN SUBSECTION 807.05. THIS WORK AND MATERIAL WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO THE ITEM "STRUCTURAL STEEL IN PLATE GIRDER SPANS (M270, GR. 50)".

STEEL PLATES FOR MAIN LOAD CARRYING MEMBERS (FLANGE AND WEB) AND FLANGE SPLICE PLATES SHALL BE CUT AND FABRICATED SO THAT THE PRIMARY DIRECTION OF ROLLING IS PARALLEL TO THE DIRECTION OF THE MAIN TENSILE AND/OR COMPRESSIVE

ALL GIRDER DIMENSIONS ARE BASED ON A TEMPERATURE OF 60 DEGREES F. A TOLERANCE OF I/4" +/- IS ALLOWED FOR CAMBER.

ERECTION OF STRUCTURAL STEEL:

THE ERECTION OF THE STRUCTURAL STEEL SHALL BE PERFORMED ACCORDING TO A PLAN PERMITTING THE STEEL TO BE ERECTED PLUMB WITH BOLTS TIGHTENED WHILE THE STEEL IS AS CLOSE AS POSSIBLE TO THE NO-LOAD CONDITION, SO THAT THE BOLT HOLES CAN BE ALIGNED. THIS REQUIREMENT MAY NECESSITATE THE USE OF LARGE CAPACITY CRANES, TEMPORARY SHORING OR JACKING FRAMES.

THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR INFORMATIONAL AND RECORD PURPOSES DETAILS OF FALSEWORK CONSTRUCTION IN ACCORDANCE WITH SUBSECTION

THE CONTRACTOR SHALL ENSURE THAT GIRDERS ARE STABLE THROUGHOUT THE ERECTION PROCESS. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING TEMPORARY BRACING OR STIFFENING DEVICES TO ACCOMMODATE HANDLING STRESSES IN INDIVIDUAL MEMBERS OR SEGMENTS OF THE STRUCTURE DURING ERECTION.





ЬĄ		
DESCRIPTION		
DATE		
REV.		



OVERPASS PED. (15) (S) DAVE WARD DR. (CONWAY) (RTP-

150'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT COMMON DETAILS (SHEET 1 OF 4

CITY OF CONWAY CONWAY, ARKANSAS

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: JES DRAWN BY: CWT

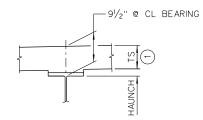
BAR IS ONE INCH ON ORIGINAL DRAWING

DRAWING NUMBER

S-309

SHEET NUMBER

39



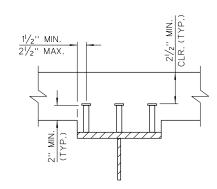
(1) TOLERANCE WHEN REMOVABLE DECK FORMING IS USED IS $^{1}/_{2}$ ", $^{-1}/_{4}$ ". HAUNCH FORMING IS REQUIRED AND SHALL BE ADJUSTED TO MAINTAIN SLAB THICKNESS TOLERANCE.

ADJUSTMENT FOR SLAB THICKNESS TOLERANCE WHEN REMOVABLE DECK FORMING IS USED

NO SCALE

HAUNCH DIMENSION MAY VARY WITHIN THE FOLLOWING LIMITS TO MAINTAIN THE GRADE AND SLAB THICKNESS TOLERANCE: MINIMUM - OCCURS WHEN THE TOP FLANGE CONTACTS THE BOTTOM REINFORCING STEEL; MAXIMUM TOP FLANGE THICKNESS PLUS 13/4". NO INCREASE IN CONCRETE AND STRUCTURAL STEEL QUANTITIES WILL BE MADE TO MAINTAIN TOLERANCES.

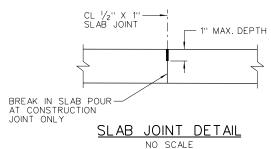
TOLERANCES SHOWN ARE APPLICABLE ONLY WHEN REMOVABLE DECK FORMING IS USED. SEE STD. DWG. NO. 55005 FOR TOLERANCES WHEN PERMANENT STEEL DECK FORMS ARE USED. PAYMENT FOR CONCRETE SHALL BE BASED ON REMOVABLE DECK FORMING.

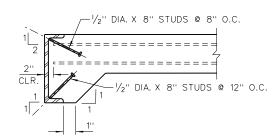


SHEAR CONNECTOR DETAIL

STUD SHEAR CONNECTORS SHOWN SHALL BE $\frac{7}{8}$ "0 X 4" LONG, GRANULAR FLUX FILLED, SOLID FLUXED OR EQUAL, AND AUTOMATICALLY END WELDED TO THE FLANGE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER. $\frac{7}{4}$ "0 STUDS MAY BE USED IN PLACE OF THE $\frac{7}{8}$ "0 STUDS SHOWN, AT THE RATIO OF 1.361 - $\frac{7}{4}$ "0 STUDS IN PLACE OF ONE $\frac{7}{8}$ "0 STUD. WILL BE USED AS BASIS FOR MEASUREMENT OF STRUCTURAL STEEL IN SHEAR CONNECTORS.

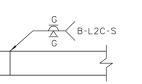
NOTE: THE V_2 " X 1" POURED JOINT SEALER (TYPE 3 OR 4) IN SLAB SHALL CONFORM TO SUBSECTIONS 501.02 (H) AND 501.05 (J). BACKER ROD FILLER WILL NOT BE REQUIRED. JOINT SEALER SHALL BE INCLUDED IN THE ITEM "BRIDGE CONSTRUCTION". SLAB JOINTS SHALL EXTEND TO THE OUTSIDE EDGE OF THE DECK SLAB. SLAB JOINTS SHALL BE INSTALLED BEFORE THE SIDEWALK IS POURED. SLAB JOINTS IN THE SIDEWALK SHALL EXTEND TO THE OUTSIDE OF THE SIDEWALK AND SHALL BE INSTALLED BEFORE THE PARAPET RAILING IS POURED. IF SLAB JOINTS ARE TO BE SAWED, THEY SHALL BE SAWED AS SOON AS THE CONCRETE HAS SUFFICIENTLY SET TO ALLOW SAWING OF THE JOINT WITHOUT DAMAGE TO THE SLAB. SLAB JOINTS SHALL BE PLACED AT ALL POURING SEQUENCE CONSTRUCTION JOINTS AND REQUIRED SLAB JOINT LOCATIONS. THE JOINT SEALER SHALL EXTEND ACROSS THE DECK SLAB. NO JOINT SEALER SHALL BE PLACED ON THE DECK SLAB UNDER PARAPET RAIL. SLAB JOINTS AND POURING SEQUENCE JOINTS SHALL ALIGN WITH PARAPET RAIL SLAB JOINTS AND POURING SEQUENCE JOINTS SHALL ALIGN WITH PARAPET OPEN JOINTS.





DETAIL OF ALTERNATE ANCHORS NO SCALE

AS AN ALTERNATE TO 56"0 STUDS, 1/2"0 X 8" STUDS SPACED AS SHOWN MAY BE USED. USE WEIGHT OF 56"0 STUD AS BASIS OF MEASUREMENT OF STRUCTURAL STEEL IN ANCHORS



DETAILS OF WELDED SPLICES

EQUAL THICKNESS (FLANGE AND WEB)

TABLE F	OR WELDS	
MATERIAL THICKNESS OF THICKER PART JOINED (INCHES)	MINIMUM SIZE OF FILLET WELD (INCHES)	SINGLE PASS WELD
TO 3/4" INCLUSIVE	1/4"	MUST BE
OVER 3/4"	5/16''	USED

NOTE: WHEN A FILLET WELD SIZE, AS SHOWN ON THE PLANS, IS LARGER THAN THE MINIMUM, THE FIRST PASS SHALL BE THAT SPECIFIED FOR MINIMUM SIZE OF FILLET WELD.





ЬĄ		
DESCRIPTION		
DATE		
REV		



DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

CITY OF CONWAY CONWAY, ARKANSAS 150'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT COMMON DETAILS (SHEET 2 OF 4

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: JES DRAWN BY: CWT

BAR IS ONE INCH ON ORIGINAL DRAWING

DRAWING NUMBER

S-310

SHEET NUMBER 40

FOR CONCRETE LIGHT POST LOCATIONS, SEE DWG. NOS. S-302 & S-306.

ALL LIGHT POLES SHALL BE PLACED VERTICAL & PLUMB. CONTRACTOR SHALL PROVIDE A DOUBLE NUT ASSEMBLY AT EACH ANCHOR BOLT AFTER LIGHT POLE ERECTION, THE UNDERSIDE SHALL BE PACKED WITH NON-SHRINK GROUT. A WEEPHOLE EXITING THE EXTERIOR SIDE OF THE POLE SHALL BE PROVIDED.

-LIGHT POLE --- CL LIGHT POST

DIMENSIONS ARE MEASURED ALONG GUTTERLINE.

3-P413E —

-P503E

0 •

LIGHT POST

SECTION E-E SCALE: 1" = 1'-0"

__ 2-P501E

• 0 •

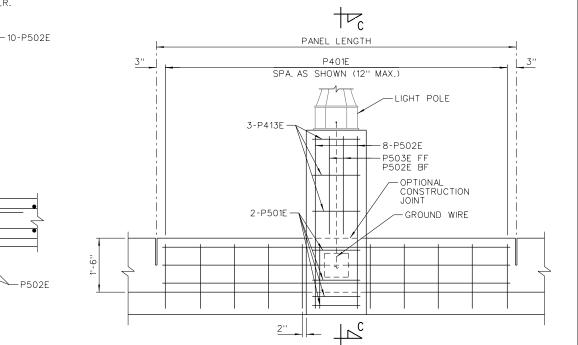
CLR.

NOTES: FOR LENGTH & LOCATION OF PARAPET PANELS, SEE SLAB PLANS ON DWG. NOS. S-302 & S-306.

PARAPETS CONTAIN ELECTRICAL CONDUIT, GROUND WIRES AND JUNCTION BOXES. FOR DETAILS SEE ELECTRICAL PLANS.

LIGHT POLE JUNCTION BOX DETAILS

(HANDRAIL NOT SHOWN FOR CLARITY)



LIGHT POST DETAILS (HANDRAIL NOT SHOWN FOR CLARITY)
SCALE: 1/2" = 1'-0"

PARAPET RAIL ELEVATION (HANDRAIL NOT SHOWN FOR CLARITY) SCALE: 1/2" = 1'-0"

GROUND WIRE

OPTIONAL CONST.

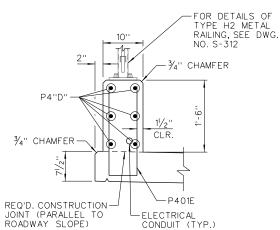
JOINT

LEGEND U.N.O. = UNLESS NOTED OTHERWISE EF = EACH FACE FF = FRONT FACE

BF = BACK FACE

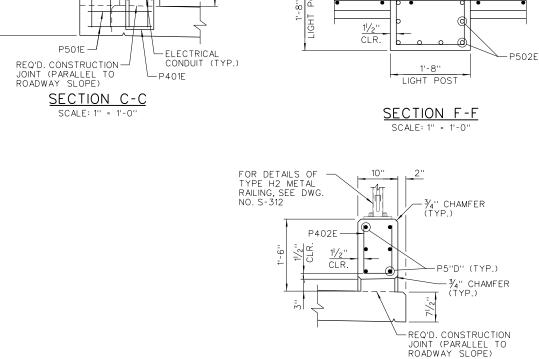
TABLE	OF PARA	PET VA	RIABLES
"A"	"B"	"C"	"D"
9'-10''	-	10	04E
10'-25/8''	-	10	05E
10'-3''	2'-71/2''	10	05E
10'-45/8''	2'-85/16''	10	06E
10'-6''	-	10	07E
10'-11''	-	11	08E
11'-0''	3'-0''	11	09E
11'-0 /2''	-	11	09E
11'-23/16''	-	11	10E
11'-25/16''	-	11	10E
11'-2"/16"	-	11	11E
11'-3''	-	11	11E
11' - 3 1/16''	-	11	12F

- 1) 3/4" V-GROOVE SHALL BE CONTINUOUS ON INSIDE FACE, TOP AND OUTSIDE FACE OF PARAPET.
- (2) ANCHOR BOLTS FOR LIGHT POLES SHALL BE HOOKED 90° UTILIZING A THREADING PROJECTION TO INSTALL ON A 9" TO 11" BOLT CIRCLE PER LIGHT POLE MANUFACTURER.



SECTION A-A

SCALE: 1" = 1'-0"



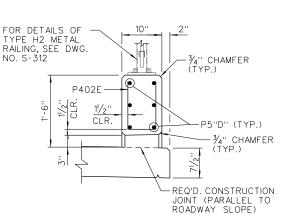
 $/-3/_4$ " CHAMFER (TYP.)

£Δ

-P503E

-P502E

CLR.



SECTION D-D SCALE: 1" = 1'-0"

DLTackett 11/20/20⁻ WORKSPACE:Garver_2012 L:\2015\15017432 - Dave Ward

S-311 SHEET NUMBER 41

No.16458

GARVER

LLC No. 766

ARKANSAS

PROFESSIONAL ENGINEER

DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

CITY OF CONWAY CONWAY, ARKANSAS

150'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT COMMON DETAILS (SHEET 3 OF

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: JES DRAWN BY: CWT

BAR IS ONE INCH ON ORIGINAL DRAWING

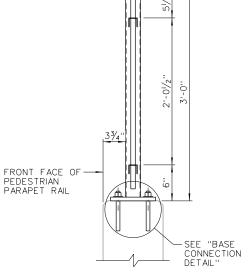
DRAWING NUMBER

BRACKET TO POST CONNECTIONS 3/4" SQUARE PICKETS -INTERIOR POST M END POST-' SQUARE TUBE MINIMUM REQUIRED FOR END & INTERIOR POST (FINAL SIZE TO BE DETERMINED BY HANDRAIL PROVIDER) 4" MAX

> POST SPACING TO BE DETERMINED BY HANDRAIL PROVIDER (6'-0" MAX. SPA.) (SEE LOADING CRITERIA ON THIS SHEET)

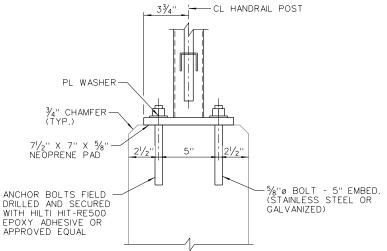
> > TYPICAL PANELS Scale: $1\frac{1}{2}$ " = 1'-0"

ALL POSTS SHALL BE SET PERPENDICULAR TO TOP OF PARAPET.



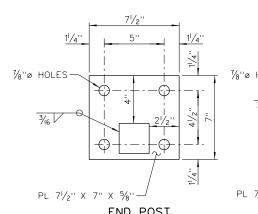
Scale: $1\frac{1}{2}$ " = 1'-0'

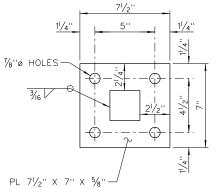
SECTION A-A



BASE CONNECTION DETAIL

Scale: 3" = 1'-0"





INTERIOR POST

END POST

BASE PLATE DETAIL Scale: 3" = 1'-0'

NOTES FOR METAL HANDRAIL

THE METAL HANDRAIL SHALL BE DESIGNED, FABRICATED, AND PAINTED IN ACCORDANCE WITH SPECIAL PROVISION "METAL HANDRAIL (TYPE

THE INTERIOR PANELS AND POSTS SHALL BE MONTAGE PLUS MAJESTIC SERIES MANUFACTURED BY AMERISTAR FENCE PRODUCTS, INC., TULSA, OKLAHOMA OR APPROVED EQUAL.

HANDRAIL LAYOUT SHALL CONFORM TO VERTICAL AND HORIZONTAL ALIGNMENT OF BRIDGE. ALL POSTS SHALL BE NORMAL TO GRADE.

MAXIMUM POST SPACING = 6'-0"

BASE PLATES SHALL NOT BE PLACED UPON AREAS THAT ARE IMPROPERLY FINISHED, DEFORMED OR IRREGULAR.

SHOP DRAWINGS SHOWING DETAILS OF THE METAL HANDRAIL, INCLUDING DESIGN CALCULATIONS AND A DETAILED POST SPACING LAYOUT IN RELATION TO THE PARAPET JOINTS AND OPENINGS, SHALL BE SUBMITTED AND APPROVAL SECURED BEFORE FABRICATION BEGINS.

MATERIALS:

TUBING, POSTS, AND ACCESSORIES: AASHTO M270, GR. 36 OR ASTM

RAILING END CAPS SHALL CONFORM TO AASHTO M270, GRADE 36 GALVANIZED.

STEEL RAIL MEMBERS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M111 AFTER FABRICATION AND SHALL RECEIVE A POWDER COATING PROCESS AFTER GALVANIZING. GALVANIZING SHALL NOT INTERFERE WITH THE POWDER COATING PROCESS. GALVANIZED SURFACES SHALL BE PREPARED IN ACCORDANCE WITH SUBSECTION 807.87 AND THE POWDER COATING MANUFACTURER'S RECOMMENDATIONS BEFORE APPLICATION OF THE POWDER COATING PROCESS. THE POWDER COATING PROCESS. THE POWDER COATING PROCESS. THE POWDER COATING PROCESS SHALL BE A TWO COAT SYSTEM APPLIED USING ELECTROSTATIC SPRAY. THE BASE COAT SHALL BE A THERMOSETITING FROYY POWDER WITH A MINIMIM IN SHALL BE A THERMOSETTING EPOXY POWDER WITH A MINIMUM THICKNESS OF 2-4 MILS. THE TOP COAT SHALL BE A TOUGH POLYESTER POWDER COAT WITH A MINIMUM THICKNESS OF 2-4 MILS.
COLOR SHALL BE BLACK EQUAL TO OR CLOSE TO FEDERAL STD.
595B, COLOR CHIP 27038. COATED GALVANIZED FRAMEWORK SHALL
HAVE A SALT SPRAY RESISTANCE OF 3,000 HOURS USING ASTM B117
WITHOUT LOSS OF ADHESION. THE POWDER COATING PROCESS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

THE CONTRACTOR SHALL SUBMIT A PAINT COLOR SAMPLE PRIOR TO FABRICATION FOR OWNER'S APPROVAL.

CAST IN PLACE ANCHOR BOLTS SHALL BE OF STAINLESS STEEL OR HIGH STRENGTH STEEL.STAINLESS STEEL ANCHOR BOLTS SHALL CONFORM TO ASTM A193 OR A320- GRADE BB WITH A MINIMUM YIELD STRENGTH OF 80,000 PSI. HIGH STRENGTH STEEL ANCHOR BOLTS SHALL CONFORM TO AASHTO M164 OR A354-GRADE BC GALVANIZED IN ACCORDANCE WITH AASHTO M232 OR CLASS C OR ASTM B695

NUTS SHALL CONFORM TO AASHTO M292, GR.8A (STAINLESS STEEL) OR GALVANIZED IN ACCORDANCE WITH AASHTO M232 OR ASTM B695

THREADS ON BOLTS, SCREWS AND NUTS SHALL CONFORM TO AMERICAN STANDARD COARSE SERIES, CLASS 2 FIT, ASA SPECIFICATION

WASHERS SHALL BE STAINLESS STEEL AND CONFORM TO THE REQUIREMENTS OF ASTM A276 OR A167-TYPE 302 WITH DIMENSIONS MEETING ASTM F436, OR HIGH STRENGTH STEEL CONFORMING TO AASHTO M293 AND GALVANIZED IN ACCORDANCE WITH AASHTO M232 OR CLASS C OR ASTM B695 CLASS 50.

PLATE WASHERS SHALL BE STAINLESS STEEL AND CONFORM TO THE REQUIREMENTS OF ASTM A167-TYPE 302 OR AASHTO M270, GR.36, GALVANIZED IN ACCORDANCE WITH AASHTO M232 OR CLASS C OR ASTM B695 CLASS 50. PLATE WASHERS SHALL HAVE DIMENSIONS MEETING THE REQUIREMENTS OF ANSI/ASME B18.22.1, TYPE A PLAIN WASHER (WIDE SERIES).

MIXING OF STAINLESS STEEL AND GALVANIZED FASTENERS WILL NOT BE PERMITTED.

METAL HANDRAIL, INCLUDING POSTS, FASTENERS, BASE PLATES METAL HANDRAIL, INCLUDING PUSIS, FASTENERS, BASE PLATES, TEMPLATE PLATES, BALUSTERS, ANCHOR BOLTS, NEOPRENE PAD, GALVANIZING AND POWDER COATINGS; FABRICATION AND ERECTION; AND ALL INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE PAID AT THE CONTRACT UNIT PRICE PER LINEAR FOOT BID FOR "METAL HANDRAIL (TYPE H2)".

LOADING CRITERIA

- 1. ALL HORIZONTAL MEMBERS SHALL BE DESIGNED FOR A UNIFORM LOADING OF 50 POUNDS PER FOOT APPLIED VERTICALLY AND HORIZONTALLY PLUS A CONCENTRATED LOAD OF 200 POUNDS APPLIED IN ANY DIRECTION AT THE TOP OF THE HORIZONTAL MEMBER. ALL LOADINGS SHALL BE APPLIED SIMULTANEOUSLY
- 2. ALL RAIL POSTS SHALL BE DESIGNED FOR A TRANSVERSE LOAD (IN KIPS) EQUAL TO 0.20 + 0.050L WHERE L IS EQUAL TO THE POST SPACING (IN FEET).









PED. OVERPASS 15) (S) DAVE WARD DR. (CONWAY) (RTP-

CITY 150'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT COMMON **DETAILS** (SHEET 4 OF 4)

OF CONWAY

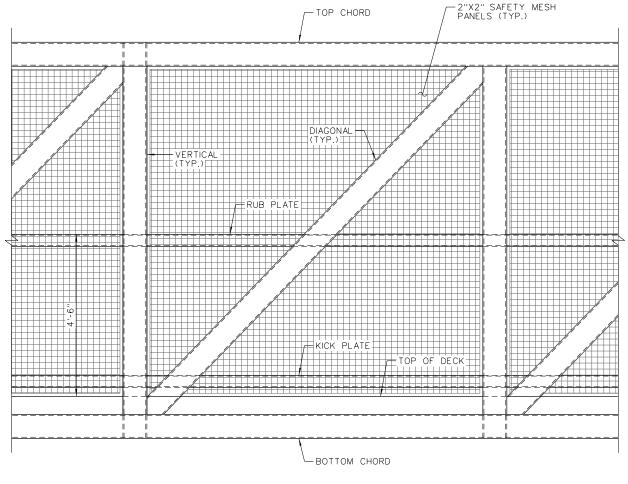
JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: JES DRAWN BY: CWT

BAR IS ONE INCH ON ORIGINAL DRAWING

DRAWING NUMBER

S-312

SHEET 42



SIDE ELEVATION SCALE: " = 1'-0"

TYPICAL SECTION - TRUSS SPAN

(LOOKING FORWARD) SCALE: " = 1'-0"

FOR DETAILS AND REQUIREMENTS OF ELECTRICAL LIGHTING ON TRUSS, SEE ELECTRICAL PLANS AND SPECIAL PROVISION "PREFABRICATED STEEL TRUSS"

THE TRUSS MANUFACTURER SHALL DESIGN THE RAILING PLATES AND THE SAFETY MESH TO ACCOMMODATE THE LOADINGS SHOWN ON THIS SHEET.

ANY REQUIRED JOINTS IN THE RAILING PLATES SHALL BE MADE AT A TRUSS VERTICAL. THE HORIZONTAL RAIL MEMBERS SHALL BE FABRICATED TO ATTACH TO A MINIMUM OF THREE TRUSS VERTICALS.

FOR DECK JOINT DETAILS, SEE DWG NO. S-501.

- $\stackrel{\textstyle \frown}{}$ concrete deck to be designed by truss supplier cost of deck shall be considered subsidiary to the truss span.
- ② APPROXIMATE DIMENSIONS. FINAL DIMENSIONS TO BE DETERMINED BY BRIDGE SUPPLIER.
- (3) VERTICAL CLEARANCE OVER DAVE WARD DRIVE HAS BEEN ESTABLISHED USING DIMENSION SHOWN. NO ADJUSTMENT IS ALLOWED WITHOUT APPROVAL FROM ENGINEER.
- $\stackrel{\textstyle \leftarrow}{4}$ the prefabricated truss shall be configured to accommodate the safety platforms over the travel lanes of dave ward drive.
- 5 5'-33%" @ BENT NO. 3 5'-315/16" @ BENT NO. 4

└─TOP OF PIER CAP

(6) IF ANY OF THESE DIMENSIONS VARY IN THE FINISHED TRUSS UNIT AND REQUIRE ADJUSTMENTS TO THE TOP OF CAP ELEVATIONS, THE CONTRACTOR SHALL SUBMIT INFORMATION SHOWING THE PROPOSED CHANGES TO THE BENT CAP.

THE CONTRACTOR SHALL SUBMIT FOR APPROVAL SHOP DRAWINGS SHOWING COORDINATION OF BENT CONSTRUCTION AND THE TRUSS DETAILS.

LOADING CRITERIA

ALL HORIZONTAL MEMBERS SHALL BE DESIGNED FOR A UNIFORM LOADING OF 50 POUNDS PER FOOT APPLIED VERTICALLY AND HORIZONTALLY. THE VERTICAL AND HORIZONTAL LOADINGS SHALL BE APPLIED SIMULTANEOUSLY.

IN ADDITION, EACH LONGITUDINAL ELEMENT SHALL BE DESIGNED FOR A CONCENTRATED LOAD OF 200 POUNDS APPLIED AT ANY POINT ALONG THE TRUSS.





DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

100'-0" PREFABRICATED TRUSS SPAN

CITY OF CONWAY CONWAY, ARKANSAS

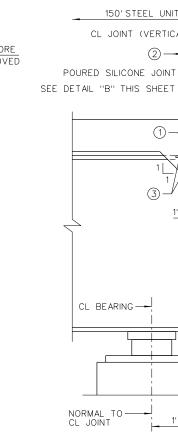
JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: JES DRAWN BY: CWT

BAR IS ONE INCH ON ORIGINAL DRAWING

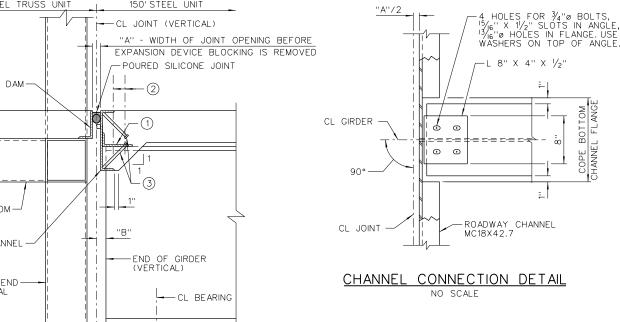
DRAWING NUMBER **S-401**

SHEET NUMBER

43



STEEL TRUSS UNIT STEEL TRUSS UNIT 150' STEEL UNIT 150' STEEL UNIT CL JOINT (VERTICAL)-(2)-"A" - WIDTH OF JOINT OPENING BEFORE EXPANSION DEVICE BLOCKING IS REMOVED POURED SILICONE JOINT - TRUSS FND DAM TRUSS END DAM -(1) 12" O.C. MAX (3)-TRUSS BOTTOM TRUSS BOTTOM-CHORD CHORD "B" "B" -ROADWAY CHANNEL ROADWAY CHANNEL -(MC18X42.7) (MC18X42.7) -END OF GIRDER (VERTICAL) -TRUSS END VERTICAL TRUSS END-VERTICAL NORMAL TO 1'-0' 1'-0"



- 1 CONN. ANGLE L 8" X 4" X 1/2". SEE "CHANNEL CONNECTION DETAIL" ON THIS SHEET.
- 2) CL HOLES FOR 3/4" Ø H.S. BOLTS
- 3 %" X 8" ANCHOR STUDS @ 12" O.C. (OFFSET SPACING)

SECTION THRU SILICONE JOINT

INTERMEDIATE BENT

(FXP.-FXP.)

(SECTION TAKEN NORMAL TO CL JOINT)

CONCRETE SHALL BE HAND PACKED UNDER THE ROADWAY CHANNEL

	SILICONE JOINT DATA									
BENT NO.	JOINT AT	I PERPENDIO 24 HOUR ERATURE (4	AVERAGE	"B" PERPENDICULAR TO JOINT AT 60°F	"D"	BUMPER PLATE SIZE				
	40° F	60° F	80° F							
1, 4 & 6	15/8''	11/2"	13/8''	2''±	4''	1'' x ¾'' x 12''				
3	23/4"	21/2''	21/4"	21/2''±	5"	1'' x 1 ¹ / ₄ '' x 12''				

−3/8" BAR

60° F

1/4

INTERMEDIATE BENT

(FIX-FXP.)

(4) THE TEMPERATURE USED TO SET THE JOINT OPENING SHALL BE THE APPROXIMATE AVERAGE AIR TEMPERATURE DURING THE 24 HOUR PERIOD IMMEDIATELY BEFORE THE BOLTS ARE TIGHTENED. THE ENGINEER SHALL ESTABLISH THE TEMPERATURE. INTERPOLATION OF THE TABLE MAY BE

THE TEMPERATURE LIMITATIONS RECOMMENDED BY THE SEALANT MANUFACTURER SHALL BE OBSERVED.

BACKER ROD:
USE AN APPROPRIATELY SIZED BACKER ROD AT THE DEPTH SHOWN IN
THE MANUFACTURER'S LITERATURE BASED ON THE JOINT WIDTH AT THE
TIME OF SEALING. EXCEPT AS NOTED, DO NOT INSTALL MORE BACKER
ROD THAN CAN BE SEALED IN THE SAME DAY. THE CONTRACTOR SHALL
VERIFY SEPARATION OF THE BACKER ROD FROM THE JOINT MATERIAL
AFTER THE JOINT MATERIAL LASS SET AFTER THE JOINT MATERIAL HAS SET.

EACH EXPANSION JOINT DEVICE SHALL BE BLOCKED IN THE SHOP BY THE FABRICATOR TO THE DIMENSION SHOWN FOR 60°F AND THE BLOCKING DETAILS SHALL BE SHOWN ON THE SHOP DRAWINGS. BLOCKING SHALL BE PLACED WITHIN 2'OF EACH END OF THE DEVICE AND WITH A MAXIMUM SPACING OF 8'

FOR LONGITUDINAL STRIKE-OFF:
BOLT AND SPACER MAY BE
ATTACHED TO CHANNEL AND ANGLE FOR BLOCKING

-FOR TRANSVERSE STRIKE-OFF: PLATE, ANGLE OR OTHER SHAPES ATTACHED TO CHANNEL AND ANGLE FOR BLOCKING.

ONE OF TWO DIFFERENT BLOCKING SYSTEMS IS REQUIRED DEPENDING ON THE TYPE OF SPAN FINISHING

DETAILS FOR BLOCKING EXPANSION JOINT DEVICE NO SCALE

EXPANSION DEVICE INSTALLATION AT ABUTMENTS:

THE CONCRETE SPAN POUR ADJACENT TO JOINT SHALL BE PLACED BEFORE THE ABUTMENT BACKWALL IS PLACED. AFTER THE ABUTMENT BACKWALL FORMS ARE IN PLACE AND THE BEAMS ERECTED, THE BLOCKED EXPANSION DEVICE SHALL BE INSTALLED AND ADJUSTED FOR GRADE. ALL CONNECTION BOLTS SHALL BE FULLY TIGHTENED PRIOR TO PLACING THE DECK CONCRETE ADJACENT TO THE ABUTMENT. IMMEDIATELY PRIOR TO POURING THE BACKWALL CONCRETE, THE BLOCKING SHALL BE REMOVED, THE OPENING ADJUSTED FOR TEMPERATURE, AND THE BACKWALL CONSTRUCTED.



GARVE LLC No. 766

ARKANSAS

IICENSED PROFESSIONAL ENGINEER ENGIN-No.16458

> PED. OVERPASS 15) (S) DAVE WARD DR. (CONWAY) (RTP-

POURED SILICONE JOINT DETAILS

OF CONWAY

CITY

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: JES DRAWN BY: CWT

BAR IS ONE INCH ON ORIGINAL DRAWING

DRAWING NUMBER

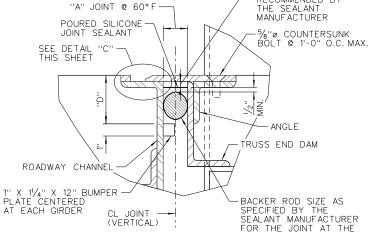
S-501 SHEET

44

POURED SILICONE JOINT -BACKER ROD SIZE AS SPECIFIED BY THE SEALANT MANUFACTURER FOR THE JOINT AT THE TIME OF SEALING 1" X 3/4" X 12" BUMPER PLATE CENTERED AT EACH GIRDER -ROADWAY CHANNEL CL JOINT ∠ A.W.S. MIN.

<u>DETAIL</u>

AT EACH GIRDER CL JOINT -(VERTICAL) DETAIL "B" (SHOWN FOR END BENT, INTERMEDIATE BENTS SIMILAR) NO SCALE



-BACKER ROD SIZE AS SPECIFIED BY THE SEALANT MANUFACTURER FOR THE JOINT AT THE TIME OF SEALING

RECESS DEPTH AS

RECOMMENDED BY

DETAIL "C" NO SCALE

- 3%'' SLID (GALV.) ' SLIDER PL

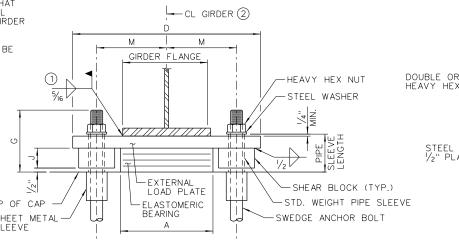
-2" MIN. EXTERNAL LOAD PL @ CL BEARING

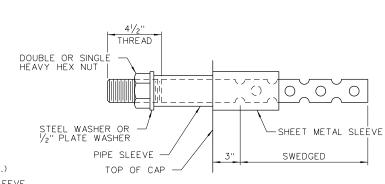
<u>''</u>

SIDE VIEW -

AT BENT NOS. 1, 3 (BACK), 4 (AHEAD) & 6

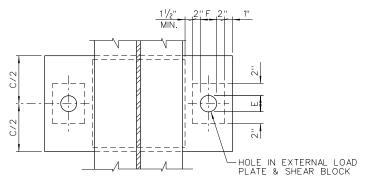
-CL BEARING





ANCHOR BOLT DETAIL

FRONT VIEW - AT BENT NOS. 2 & 5



-CL BEARING

ANCHOR BOLTS MAY BE CAST IN PLACE OR DRILLED AND GROUTED INTO PLACE. IF ANCHOR BOLTS ARE TO BE CAST IN PLACE, THE GALVANIZED SHEET METAL SLEEVES WILL NOT BE REQUIRED.

IF ANCHOR BOLTS ARE TO BE DRILLED AND GROUTED IN PLACE, THE GALVANIZED SHEET METAL SLEEVES SHALL BE CAST IN PLACE AS SHOWN. SLEEVES SHALL BE DRY PACKED WITH STYROFOAM, URETHANE FOAM OR APPROVED EQUAL PRIOR TO POURING OF CONCRETE. AFTER POURING OF THE CAP AND PRIOR TO ERECTION OF STRUCTURAL STEEL, THE DRY PACK SHALL BE REMOVED AND HOLES FOR THE ANCHOR BOLTS SHALL BE ACCURATELY DRILLED INTO THE MASONRY. BOLTS PLACED IN DRILLED HOLES SHALL BE ACCURATELY SET AND FIXED USING A QPL APPROVED EPOXY OR NON-SHRINK GROUT THAT COMPLETELY FILLS THE HOLES. GALVANIZED SHEET METAL SLEEVES WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED SUBSIDIARY TO THE ITEM "STRUCTURAL STEEL IN PLATE GIRDER SPANS (M270, GR. 50)". PLATE GIRDER SPANS (M270, GR. 50)".

GENERAL NOTES

EXTERNAL LOAD PLATES AND SHEAR BLOCKS SHALL CONFORM TO AASHTO M270, GRADE 50. PIPE SLEEVES SHALL BE ASTM A53, GRADE B, AND SHALL BE GALVANIZED TO CONFORM TO AASHTO M232, CLASS C OR ASTM B695, CLASS 50.

EXTERNAL LOAD PLATES AND SHEAR BLOCKS SHALL BE COMPLETELY FABRICATED (INCLUDING BEVEL, BOLT HOLES AND ALL SHOP WELDING) AND SHALL BE CLEANED BEFORE VULCANIZING TO THE ELASTOMERIC BEARING. THE SURFACE IN CONTACT WITH THE ELASTOMERIC BEARING SHALL BE CLEANED IN ACCORDANCE WITH SUBSECTION 808.03. OTHER SURFACES SHALL BE BLAST CLEANED IN ACCORDANCE WITH SUBSECTION 807.84(B)

ANCHOR BOLTS, WASHERS AND NUTS SHALL CONFORM TO SUBSECTION 807.07. THE ANCHOR BOLT GRADE OF STEEL SHALL BE AS SPECIFIED IN THE "TABLE OF FABRICATOR VARIABLES". INDENTATIONS SHALL BE CIRCULAR WITH ROUNDED BOTTOMS AND STAGGERED AS SHOWN IN THE

PIPE SLEEVES, ANCHOR BOLTS, WASHERS AND NUTS SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STRUCTURAL STEEL IN THE PLATE GIRDER SPANS (M270, GR. 50)".

EXTERNAL LOAD PLATES AND SHEAR BLOCKS WILL NOT BE MEASURED OR PAID FOR SEPARATELY, BUT WILL BE CONSIDERED INCIDENTAL TO THE UNIT PRICE BID FOR "ELASTOMERIC BEARINGS".

BEARINGS SHALL BE SEATED IN ACCORDANCE WITH SUBSECTION 808.08. THIS WORK AND MATERIALS ARE CONSIDERED SUBSIDIARY TO THE ITEM "ELASTOMERIC BEARINGS" AND WILL NOT BE PAID FOR DIRECTLY.

TA (EXTERNAL LOAD PLATE THICKNESS @ L AHEAD STATION EDGE)

ELASTOMERIC BEARINGS SHALL CONFORM TO SECTION 808 AND SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "ELASTOMERIC BEARINGS".

SHEAR BLOCK OMITTED FROM THIS VIEW FOR CLARITY.

TOP OF CAP

STATIONS __ INCREASE

REQUIRED, THE ENGINEER WILL PROVIDE ADJUSTMENT DATA. SIDE VIEW - AT BENT NOS. 2 & 5

TABLE OF FABRICATOR VARIABLES

								ELASTOMERIC PAD				EXTERNAL LOAD PLATE								ANCHOR BOLT							
LOCATION		BEARING	NO. OF BEARINGS	4 MAXIMUM DESIGN LOAD	G	н	Δ	В	N	Т.	Te	NO. & THICKNESS OF	Т	_	l n	F	F		T K	M	TA	To	ANCHOR	BOLT	PIPE SLEEVE SIZE	SHEET METAL SLEEVE SIZE	STEEL WASHER
BENT NO(S).	GIRDER NO.	TYPE	EACH BENT	(KIPS)		''			'`	"	, F	STEEL LAMINATE	'	~		-	'		'`	'*'	'A	, B	(DIA. X L)	GRADE	(DIA. X L)	(DIA. X L)	SIZE (O.D.:
BENT NO. 1	ALL	EXP.	2	70	95//6"	5%6"	16''	8''	5	1/2"	1/4''	6 @ 12 GA.	35/8''	9''	331/2"	31/2"	21/41	-	1/2"	125/8'	2.23''	1.78''	11/2" x 40"	55	11/2" x 513/16"	3" x 13"	(5)
BENT NO. 2	ALL	FIX.	2	215	71/8''	43/8''	16''	11''	3	1/2"	1/4''	4 @ 12 GA.	21/16"	12''	331/2"	21/4"	21/41	17/8''	1/2"	125/8'	2.30"	1.70''	1½" x 26"	55	1½" × 45/8"	3" x 13"	3''
BENT NO.3 - BACK	ALL	EXP.	2	78	95/6"	5%6"	16''	8''	5	1/2"	1/4''	6 @ 12 GA.	35/8''	9''	331/2"	31/2"	21/41	' -	1/2"	125/8'	2.10"	1.90''	11/2" x 40"	55	11/2" x 513/16"	3" x 13"	(5)
BENT NO.4 - AHEAD	ALL	EXP.	2	83	95//6"	5%6"	16''	8''	5	1/2"	1/4''	6 @ 12 GA.	35/8''	9''	331/2"	31/2"	21/41	-	1/2"	125/8'	1.90''	2.10''	11/2" x 40"	55	11/2" x 513/16"	3" x 13"	(5)
BENT NO. 5	ALL	FIX.	2	204	71/8''	43/8"	16''	11''	3	1/2"	1/4''	4 @ 12 GA.	2 1/16"	12''	331/2"	21/4"	21/41	17/8''	1/2"	125/8'	1.70"	2.30'	' 1½" × 26"	55	1½" × 45/8"	3" x 13"	3"
BENT NO.6	ALL	EXP.	2	74	95//6"	5%6"	16''	8''	5	1/2"	1/4"	6 @ 12 GA.	35/8''	9''	331/2"	31/2"	21/41	-	1/2"	125/81	1.78''	2.23'	' 1½'' x 40''	55	11/2" x 513/16"	3" x 13"	(5)
	ALL	EXP.	2 2 STATE		7½" 9½6"	1.70	16'' 16''	11'' 8''	5	1/2"	1/4"			9"				,,,	72								

TB (EXTERNAL LOAD PLATE THICKNESS @

BACK STATION EDGE)

THE DIRECTION OF THE BEVEL OF THE EXTERNAL LOAD PLATE MAY NOT BE ACCURATELY DEPICTED WITH RESPECT

3 UNLESS OTHERWISE APPROVED BY THE ENGINEER, WELDING OF THE EXTERNAL LOAD PLATE AT EXPANSION BEARINGS TO THE GIRDER WILL BE ALLOWED ONLY WHEN: 1) THE APPROXIMATE AVERAGE AIR TEMPERATURE DURING THE 24 HOUR PERIOD IMMEDIATELY PRECEDING WELDING IS BETWEEN 40°F AND 80°F; AND 2) THE SLOTS IN THE EXTERNAL LOAD PLATE ARE POSITIONED TO CENTER ON THE ANCHOR BOLTS;

AND 3) NO HORIZONTAL DEFORMATION OF THE ELASTOMERIC PAD IS EVIDENT. IF WELDING AT OTHER TEMPERATURES IS

TO TA AND TB VALUES SHOWN IN "TABLE OF FABRICATOR VARIABLES"

TA (EXTERNAL LOAD PLATE THICKNESS @

AHEAD STATION EDGE:

5 6" x 6" x 1/2" STEEL PLATE WASHER

Tackett DRKSPACE:Garver_2012 2015\15017432 - Dave Wal

STATIONS _ INCREASE

TB (EXTERNAL LOAD PLATE THICKNESS @

BACK STATION EDGE:

TOP OF CAP

S-601

= CONWAY ARKANSAS

₽ 4

CITY

FLASTOMERIC

BEARING DETAILS

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: JES DRAWN BY: CWT

BAR IS ONE INCH ON ORIGINAL DRAWING

DRAWING NUMBER

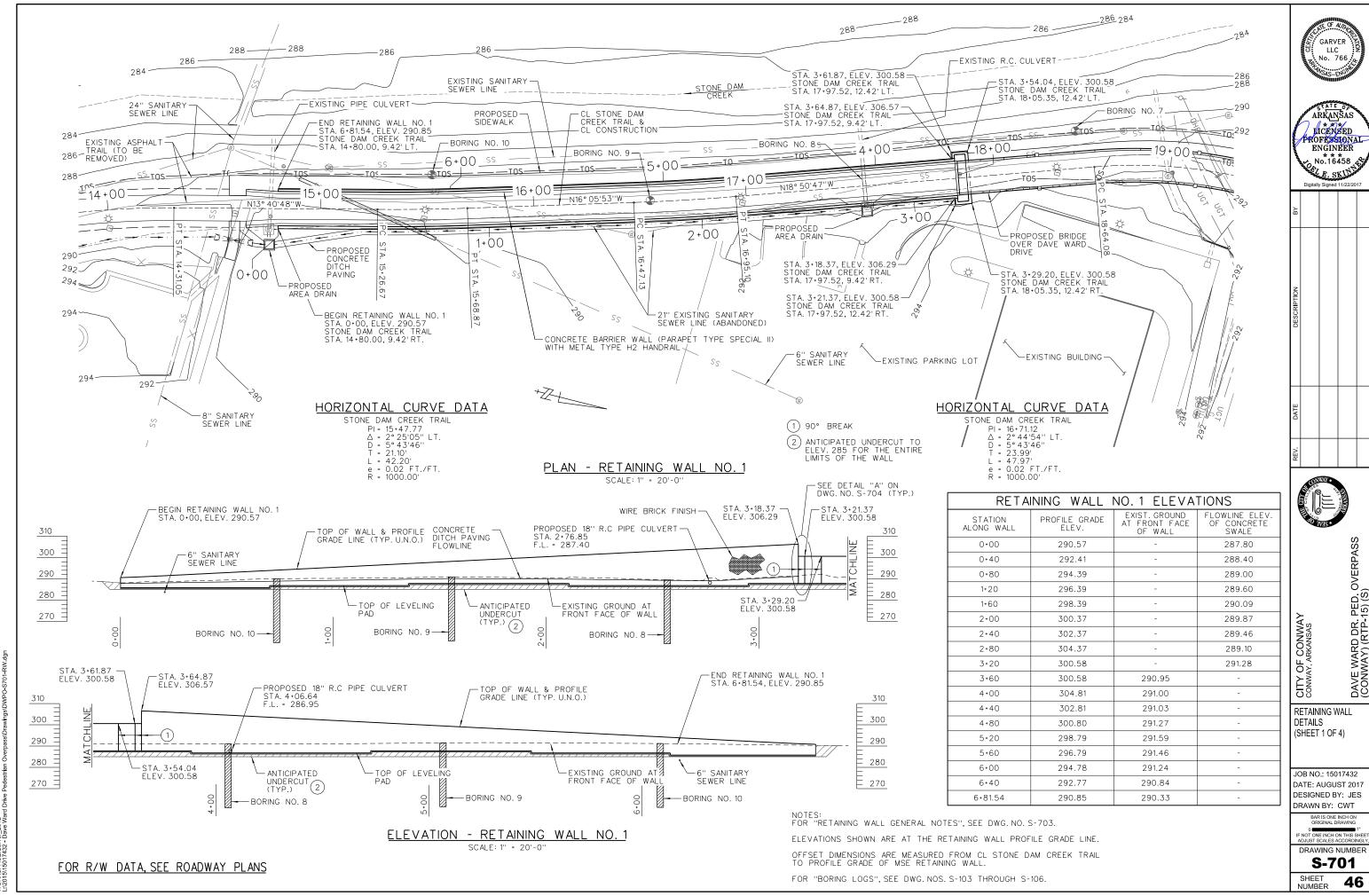
LLC No. 76

ARKANSAS

vicensed Professional ENGINEER No.16458

SHEET 45

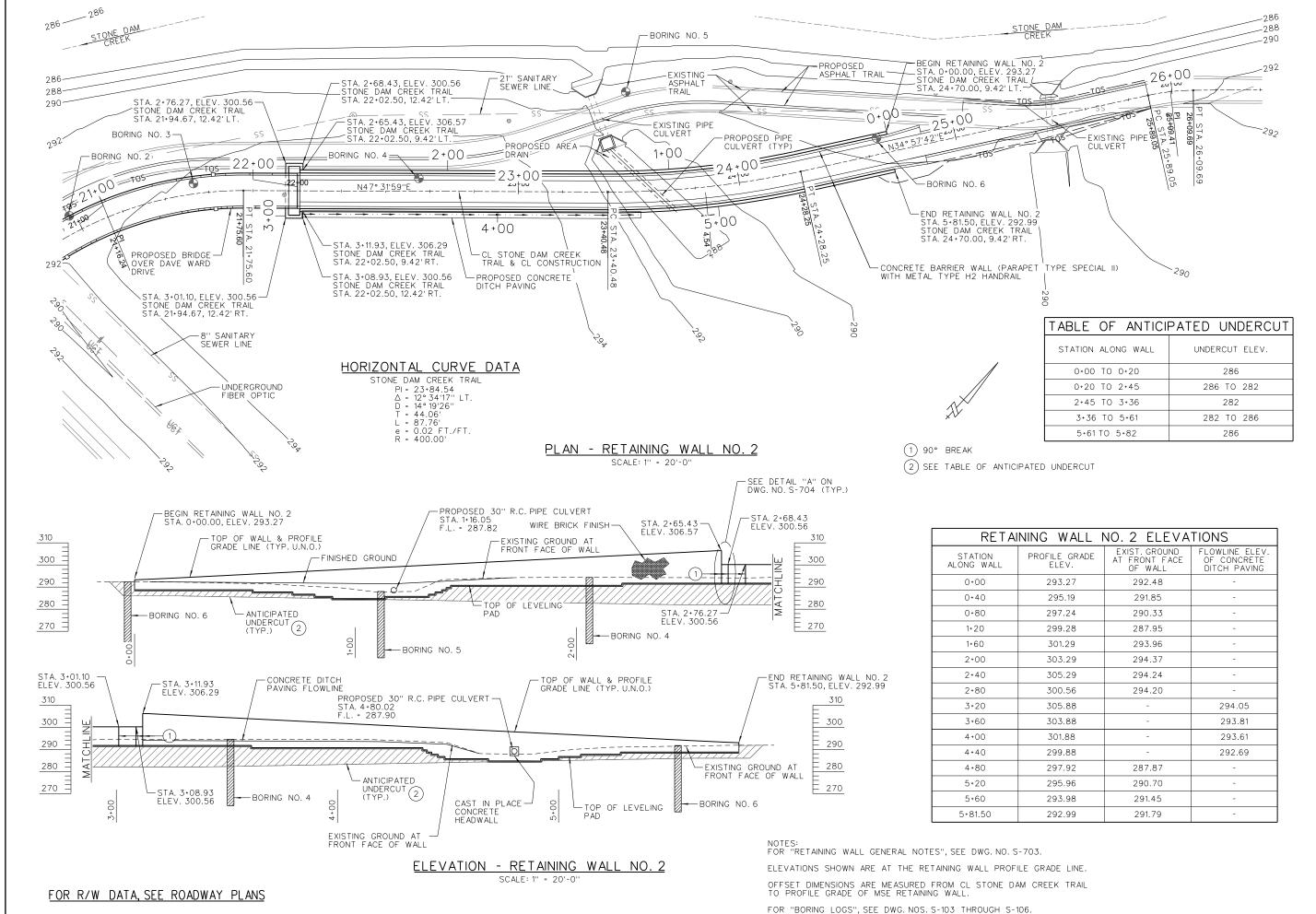
DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)



DRAWING NUMBER S-701

46

DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)



GARVER LLC No. 766

ARKANSAS

IICENSED PROFESSIONAL ENGINEER

No.16458

PED. OVERPASS 15) (S)

DAVE WARD DR. (CONWAY) (RTP-

CITY OF CONWA CONWAY, ARKANSAS

RETAINING WALL

(SHEET 2 OF 4)

JOB NO.: 15017432

DATE: AUGUST 2017

DESIGNED BY: JES DRAWN BY: CWT

BAR IS ONE INCH ON ORIGINAL DRAWING

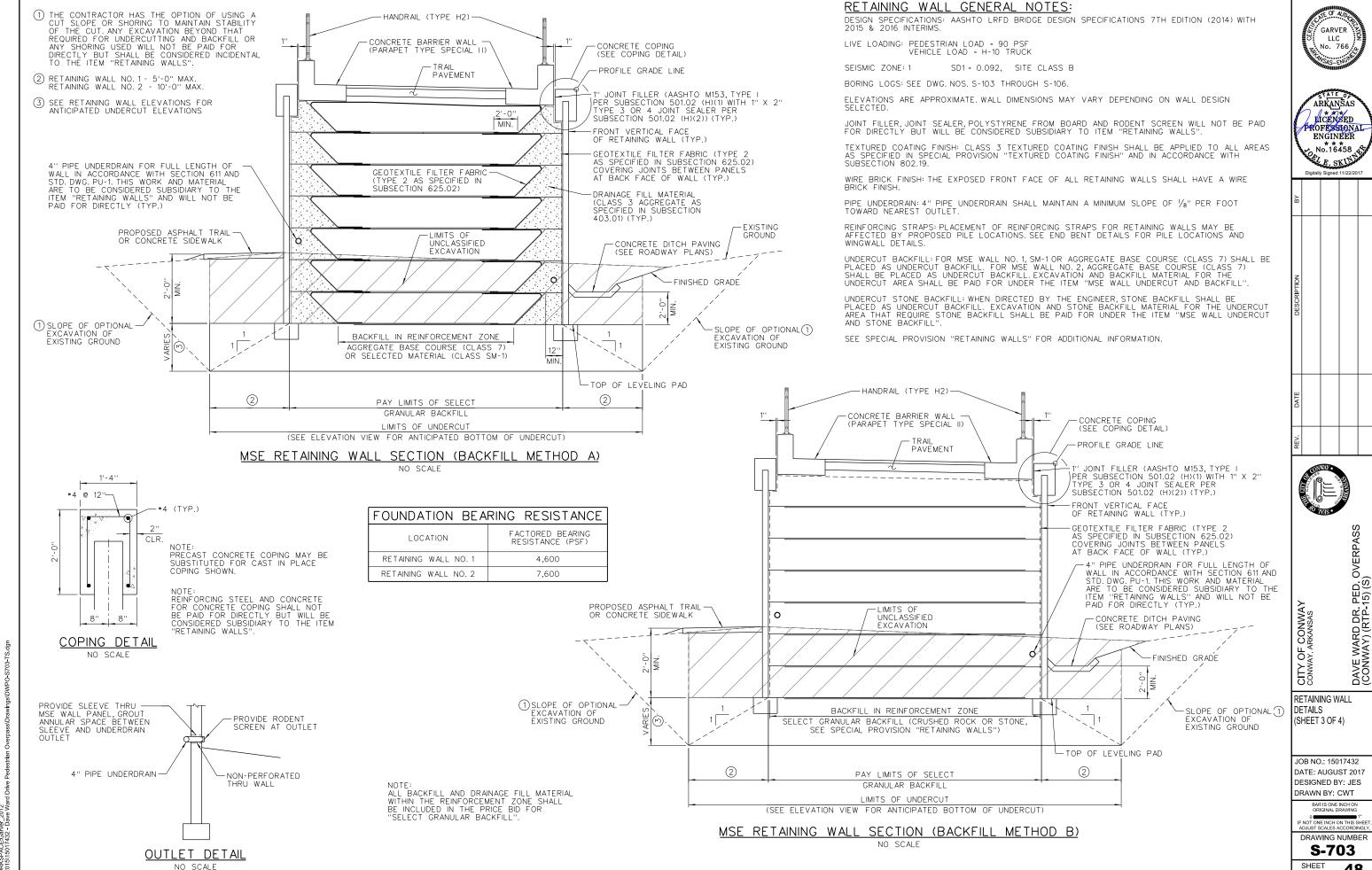
DRAWING NUMBER

S-702

47

SHEET

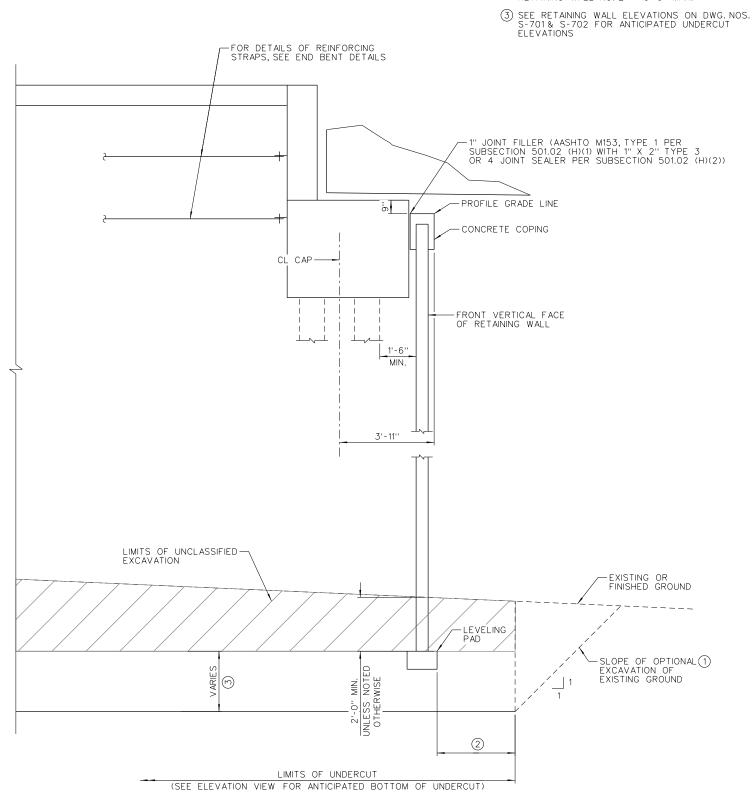
DETAILS



SHEET

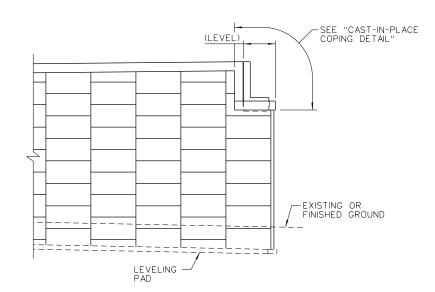
48

- 2) RETAINING WALL NO. 1 5'-0" MAX. RETAINING WALL NO. 2 10'-0" MAX.

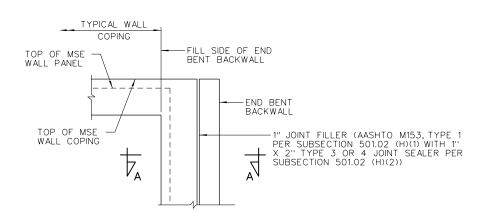


DETAIL D

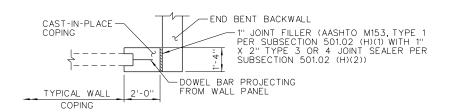
NO SCALE



DETAIL A NO SCALE



CAST-IN=PLACE COPING DETAIL



SECTION A-A NO SCALE





		, 6.5		
ВУ				
DESCRIPTION				
DATE				
	1	1	1	l .



DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

RETAINING WALL DETAILS (SHEET 4 OF 4)

CITY OF CONWAY CONWAY, ARKANSAS

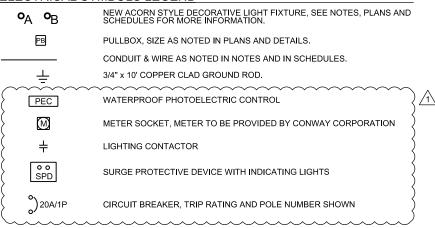
JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: JES DRAWN BY: CWT

BAR IS ONE INCH ON ORIGINAL DRAWING

DRAWING NUMBER

S-704

SHEET NUMBER 49

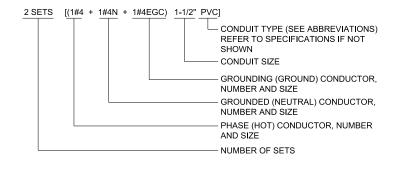


GENERAL NOTES:

- SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS SHEET BUT NOT BE UTILIZED ON THE PROJECT.
- LIGHTING LEGEND SHOWS EXAMPLE IDENTIFIERS, REFER TO LIGHT FIXTURE SCHEDULE FOR SPECIFIC REQUIREMENTS.
- ALL PARTS OF THIS INSTALLATION SHALL BE IN ACCORDANCE WITH THE ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARDS AND DETAILS, AND WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITIONS.
- CONDUIT INSTALLED UNDER ROADWAY SECTIONS SHALL BE INSTALLED BY PUSHING OR BORING METHODS. IF THE ENGINEER DETERMINEES THIS IS NOT FEASIBLE, THEN A TRENCHING METHOD MAY BE USED.
- CONTRACTOR MAY USE HDPE OR PVC FOR BORING. SECTIONAL PVC SHALL BE UL LISTED AND MARKED FOR USE IN DIRECTIONAL BORING.

ABBREVIATIONS

<u>ABBR</u>	EVIATIONS		
A	AMP	LO	LUGS ONLY
ABC	ABOVE COUNTER	LOR	LOCAL-OFF-REMOTE
ACS	ACCESS CONTROL SYSTEM	LSI	LONG, SHORT, INSTANTANEOUS
ACU	AIR CONDITIONING UNIT	LSIG	LONG, SHORT, INSTANTANEOUS, GROUND
AHU	AIR HANDLING UNIT	LV	LOW VOLTAGE
AIC	AMPS INTERRUPTING CAPACITY	MCB	MAIN CIRCUIT BREAKER
AM	AMP-METER	MCC	MOTOR CONTROL CENTER
ANN	ANNUNCIATOR	MCP	MOTOR CIRCUIT PROTECTOR
AP	AERIAL PRIMARY	MFR	MANUFACTURER
AS	AERIAL SECONDARY	MIN	MINIMUM
ATS	AUTOMATIC TRANSFER SWITCH	MLO	MAIN LUGS ONLY
AUX	AUXILIARY	MN	MASS NOTIFICATION
BFI	BLOWN FUSE INDICATOR	MON	MONACO
Bi	BYPASS ISOLATION	MS	MOTOR STARTER
BKR	BREAKER	MTS	MANUAL TRANSFER SWITCH
C	CONDUIT	Ň	NEUTRAL
СВ	CIRCUIT BREAKER	NFDS	NON-FUSED DISCONNECT SWITCH
CCTV	CLOSED CIRCUIT TELEVISION	NL NL	NIGHT LIGHT
CGRS	PVC COATED GALVANIZED	OH	OVERHEAD
CGRS	RIGID STEEL	OHP	OVERHEAD PRIMARY
CKT	CIRCUIT	OHS	OVERHEAD SECONDARY
COM	COMMON	OL	OVERLOAD
CONT	CONTINUOUS	PB	PUSH BUTTON
CP	CONTROL PANEL	PEC	PHOTO ELECTRIC CELL
CPT	CONTROL POWER TRANSFORMER	PF	POWER FACTOR
CR	CONTROL RELAY	PFCC	POWER FACTOR CORRECTION CAPACITOR
CRI	COLOR RENDERING INDEX	PL	PILOT LIGHT
CS	CORD SET	PMR	PHASE MONITOR RELAY
CU	COEFFICIENT OF UTILIZATION	PNL	PANEL
DEB	DIRECT EARTH BURIED	PTT	PUSH-TO-TEST
EC	EMPTY OR EMBEDDED CONDUIT	PTZ	PAN-TILT-ZOOM
ĒĔ	EXHAUST FAN	PVC	SCHEDULE 40 POLYVINYL CONDUIT
EG	EQUIPMENT GROUND	RECPT	RECEPTACLE
ĒĽ	ELEVATION	RVAT	REDUCED VOLTAGE
EMT	ELECTRICAL METALLIC TUBING		AUTO-TRANSFORMER STARTER
ETM	ELASPED TIME METER	SA	SURGE ARRESTER
FC	FAN COIL	SDBC	SOFT DRAWN BARE COPPER
FDS	FUSED DISCONNECT SWITCH	SE	SERVICE ENTRANCE
FOC	FIBER OPTIC CABLE	SN	SOLID NEUTRAL
FVNR	FULL VOLTAGE	SPD	SURGE PROTECTIVE DEVICE
LAINK		SS	STAINLESS STEEL
EV.D	NON-REVERSING STARTER	STA	STATION
FVR	FULL VOLTAGE REVERSING	SW	SWITCH
050	STARTER	TC	TIME CLOCK
GFCI	GROUND FAULT CIRCUIT	TD	TIME DELAY
	INTERRUPTER	TDD	TIME DELAY ON DE-ENERGIZATION
GND	GROUND	TDE	TIME DELAY ON ENERGIZATION
GRS	GALVANIZED RIGID STEEL	TEL	TELEPHONE
HID	HIGH INTENSITY DISCHARGE	THD	TOTAL HARMONIC DISTORTION
HOA	HAND-OFF-AUTO	TMGB	TELECOMMUNICATIONS MAIN GROUND BAR
HP	HORSEPOWER OR HEAT PUMP		
IDS	INTRUSION DETECTION SYSTEM	TGB	TELECOMMUNICATIONS GROUND BAR
HR	HOUR	TR	TAMPER RESISTANT
IG	ISOLATED GROUND	UG	UNDERGROUND
ISP	INDIVIDUALLY SHIELDED PAIR	UGE	UNDERGROUND ELECTRIC
JB	JUNCTION BOX	UGP	UNDERGROUND PRIMARY
kVA	KILOVOLT-AMPERE	UGS	UNDERGROUND SECONDARY
kVAR	KILOVOLT-AMPERE, REACTIVE	UH	UNIT HEATER
kW	KILOWATT	UON	UNLESS OTHERWISE NOTED
LA	LIGHTNING ARRESTER	UTP	UNSHIELDED TWISTED PAIR
LC	LIGHTING CONTACTOR	V	VOLT
LLF	LIGHTING CONTACTOR LIGHT LOSS FACTOR	VΑ	VOLT-AMP
LLI	LIGHT LOSS FACTOR	VFD	VARIABLE FREQUENCY DRIVE
		VM	VOLT-METER
		w	WATT OR WIRE
		WAP	WIRELESS ACCESS POINT
		WH	WEATHER HEAD
		WM	WATT METER
		WP	WEATHERPROOF
		XFMR	TRANSFORMER
		VLINIK	HANOFURIMEN







АВ	NAH		
DESCRIPTION	02-09-2018 ADDENDUM #2		
DATE	02-09-2018		
REV.	\forall		



DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

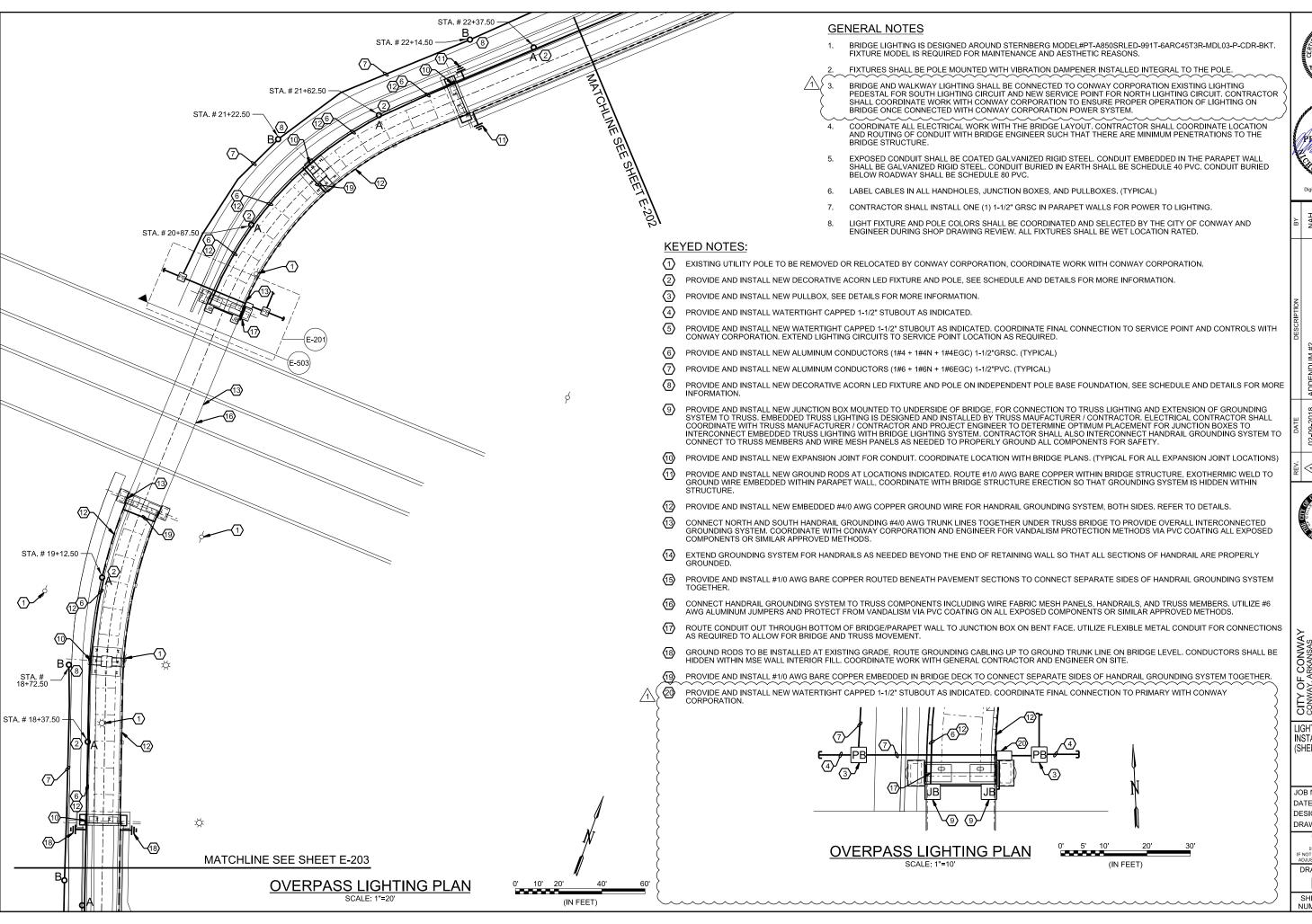
ELECTRICAL LEGEND

CITY OF CONWAY CONWAY, ARKANSAS

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: NAH DRAWN BY: CJH

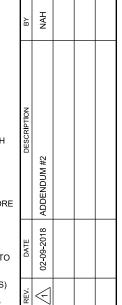
BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" 1" F NOT ONE INCH ON THIS SHEE ADJUST SCALES ACCORDINGLY

SHEET NUMBER **50**



LLC







PED. (DAVE WARD DR. (CONWAY) (RTP-

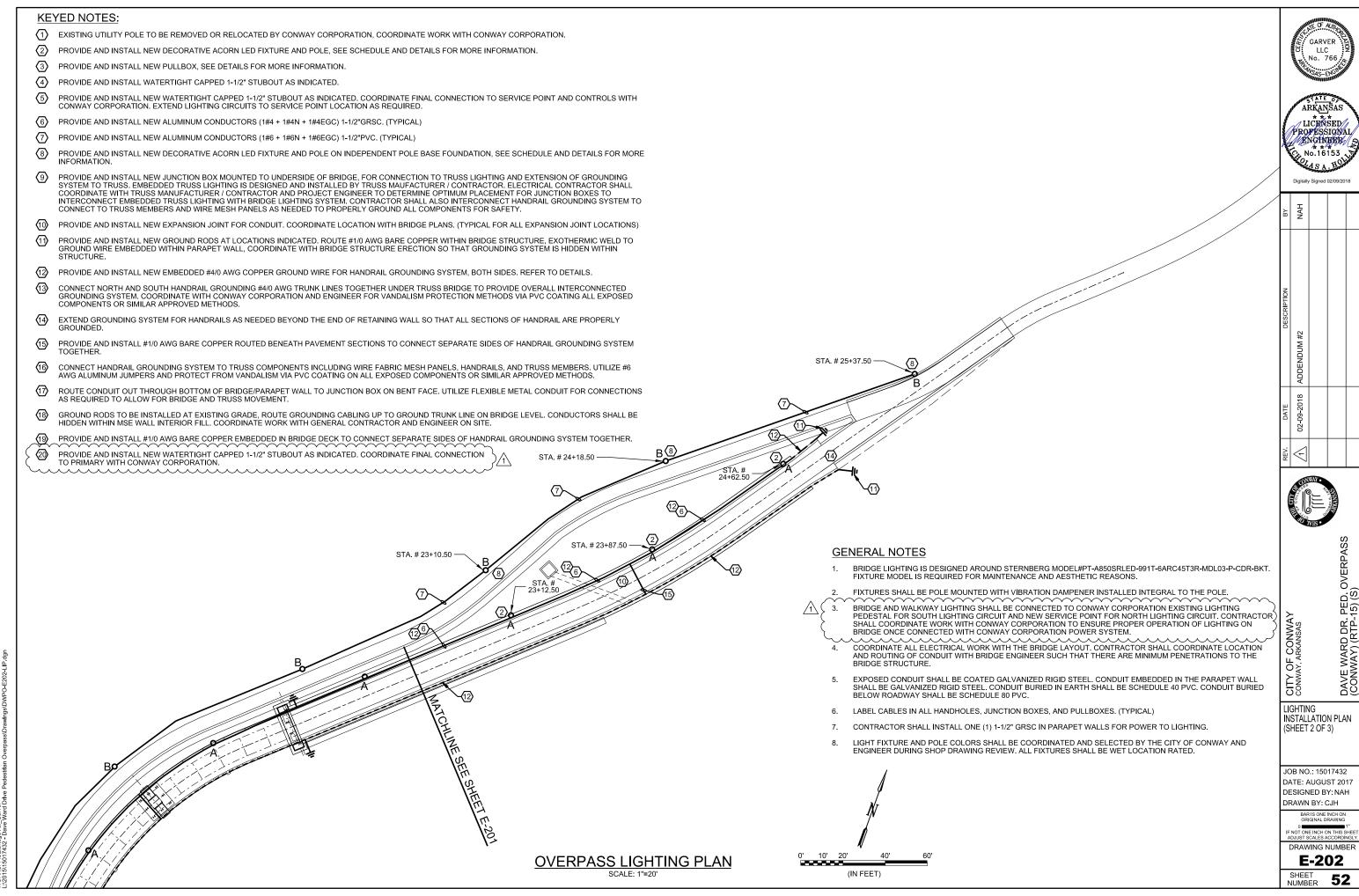
LIGHTING

INSTALLATION PLAN (SHEET 1 OF 3)

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: NAH DRAWN BY: C.IH

DRAWING NUMBER

E-201



DRAWING NUMBER





	ВУ	NAH		
	DESCRIPTION	02-09-2018 ADDENDUM #2		
	DATE	02-09-2018		
P =	1 _		1	



DAVE WARD DR. (CONWAY) (RTP-6, ZNO S

PED. (

INSTALLATION PLAN (SHEET 3 OF 3)

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: NAH DRAWN BY: C.IH

DRAWING NUMBER E-203

ELEVATION VIEW

SCALE: NONE

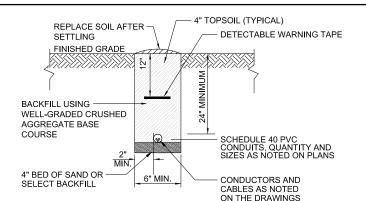
KEYED NOTES:

- (1) INSTALL NEW LIGHT FIXTURE ON POLE. SEE FIXTURE SCHEDULE AND LAYOUT PLANS FOR MORE INFORMATION.
- INSTALL NEW POLE WITH HANDHOLE FACING WALKWAY. INSTALL NEW IN-LINE WATERPROOF QUICK DISCONNECT STYLE FUSE HOLDERS WITH FUSES AND GROUNDING LUG, FUSE SIZE SHALL BE 2A, NEUTRAL AND EGC SHALL NOT BE FUSED. EQUIPMENT SHALL BE FULLY ACCESSIBLE VIA HANDHOLE.
- $\langle \overline{3} \rangle$ INSTALL NEW 1" GRSC AND CONDUCTORS FROM POLE BASE TO ADJACENT JUNCTION BOX.
- $\overline{\langle 4 \rangle}$ INSTALL NEW 1/2" GRSC FROM JUNCTION BOX TO UNDERSIDE OF BRIDGE, EXTEND 3" BELOW BRIDGE AND
- $\langle \overline{5} \rangle$ INSTALL NEW INSULATED GROUNDING BUSHING, BOND DEDICATED #6 AWG ALUMINUM GROUND WIRE TO POLES, TO BUSHING AND TO JUNCTION BOXES.
- (6) INSTALL NEW NEMA 4X STAINLESS STEEL JUNCTION BOX RECESSED IN THE PARAPET WALL WITH THE FOLLOWING ITEMS, SEE DETAIL:
 - A. 8"H x 8"W x 6"D MINIMUM SIZE. BOTTOM OF BOX SHALL BE A MINIMUM OF 3" ABOVE ROADWAY SURFACE. B. CAPTIVE TYPE TAMPER RESISTANT, FLUSH HEAD SS SCREWS FOR GASKETED COVER.
 - C. MOUNTING BACK PANEL WITH JUNCTION BOX, FULL SIZED.
 - D 2"x4"x1/4" GROUND BAR WITH MINIMUM OF 10 LUGS
 - EXTERNAL GROUND LUG, BOND TO GROUND CONDUCTOR USING #6 AWG COPPER.
- $\langle \overline{7} \rangle$ BOND GROUND CONDUCTORS TO JUNCTION BOX, GROUND BAR AND ALL OTHER GROUND CONDUCTORS. LABEL USING CABLE MARKERS AND COLOR CODE TAPE ALL CONDUCTORS WITHIN EACH JUNCTION BOX. INSTALL NEW 1-1/2" GRS ELECTRICAL CONDUIT DUCT SYSTEM ALONG ENTIRE STRUCTURE: A. LIGHTING CIRCUITS, 120V IN 1-1/2" GRSC.

SECURE ELECTRICAL CONDUIT DUCT SYSTEM AND INSTALL GROUNDING AND BONDING TYPE BUSHINGS WITHIN ALL JUNCTION BOXES, BONDED TO GROUND. INSTALL NEW EXPANSION GRSC CONDUIT FITTINGS AT ALL EXPANSION JOINTS, SEE DETAIL

- (8) INSTALL NEW GROUNDING COMPRESSION TERMINAL AND CONNECT TO EMBEDDED 4 LUG GROUNDING PLATE VIA #6 AWG ALUMINUM GROUND WIRE. TYPICAL FOR EACH SECTION OF HAND RAIL ALONG ENTIRE STRUCTURE, COORDINATE INSTALLATION METHODS WITH OWNER AND ENGINEER TO PREVENT VANDALISM.
- INSTALL NEW DEDICATED #4/0 BARE AWG COPPER GROUND WIRE ALONG ENTIRE STRUCTURE, EMBEDDED IN BRIDGE WALL, ON BOTH SIDES OF BRIDGE, BOND POLE TO GROUND WIRE AND BOND JUNCTION BOX TO
- (10) INSTALL #2 AWG BARE COPPER GROUND WIRE AND BOND EACH BIMETALLIC GROUNDING PLATE PER HAND RAIL SECTION TO GROUND WIRE SYSTEM. UTILIZE APPROVED INSTALLATION METHODS TO PREVENT
- (1) INSTALL NEW EMBEDDED 4 LUG BIMETALLIC GROUNDING PLATE. CONNECT #2 GROUND WIRE USING
- (12) ALL JUNCTION BOXES SHALL BE FLUSH WITH CONCRETE SURFACE.

- ALL HARDWARE SHALL BE CORROSION RESISTANT, GALVANIZED RIGID
- CONSTRUCT FOUNDATION IN ACCORDANCE WITH POLE MANUFACTURER'S GUIDELINES, INSTALLING BOLT TEMPLATE LEVELING UNIT, ANCHOR BOLTS, FULL BASE-PLATE BOLT COVER, AND ACCESSORIES FOR A COMPLETE INSTALLATION.
- REFER TO POLE SCHEDULE FOR CONDUIT AND CONDUCTOR SIZES. USE LONG SWEEP 90 DEGREE ELBOWS ON ALL CONDUIT BENDS.
- TIE POLE, EQUIPMENT GROUND AND ALL OTHER METAL EQUIPMENT AND GROUNDING LUGS TOGETHER USING #6 AWG SOLID BARE COPPER AND APPROVED GROUNDING CLAMPS AND CONNECT TO GROUND ROD
- MINIMUM 2'-0" CLEAR FROM EDGE OF TRAIL OR SIDEWALK TO CLOSEST EDGE OF ROADLIGHTING LIGHT POLE BASE.
- WHERE POLE FOUNDATION IS ON A SLOPED SURFACE PROVIDE 1' FLAT GRADE EARTH BEFORE RETURNING TO SLOPE. COORDINATE WITH BRIDGE



NON-ENCASED ELECTRICAL DUCT DETAILS

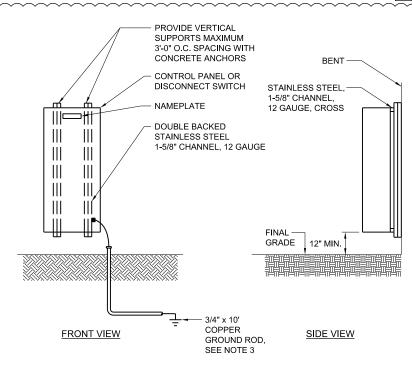
SCALE: NONE

CAUTION BURIED ELECTRIC LINE BELOW WIDTH

GENERAL NOTES:

- POWER MARKING TAPES SHALL BE DETECTABLE TYPE CONSTRUCTION WITH RED BACKGROUND AND BLACK LETTERING
- COMMUNICATION MARKING TAPES SHALL BE DETECTABLE TYPE CONSTRUCTION WITH ORANGE BACKGROUND AND BLACK LETTERING, "TELEPHONE LINE" OR "FIBER OPTIC LINE" RESPECTIVELY.
- TAPE SHALL BE DETECTABLE, DURABLE, HIGHLY VISIBLE, RESISTANT TO ELEMENTS. MEETING AND / OR EXCEEDING ALL INDUSTRY STANDARDS.

UNDERGROUND DETECTABLE WARNING TAPE



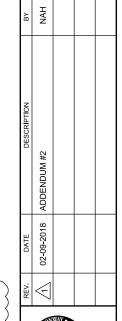
GENERAL NOTES:

- ALL BOLTS, NUTS, WASHERS, ANCHORS, PLATES, AND OTHER MOUNTING STEMS SHALL BE CORRISION RESISTANT, STAINLESS STEEL
- UTILIZE 5/16" STAINLESS STEEL WEDGE ANCHORS AS REQUIRED.
- BOND ELECTRICAL EQUIPMENT INCLUDING SUPPORT FRAME TO GROUND ROD USING (1#2) 3/4" CGRS CONDUIT AND EXOTHERMIC WELDS.

TYPICAL EQUIPMENT RACK DETAIL









PED (DAVE WARD DR. (CONWAY) (RTP-

ELECTRICAL DETAILS (SHEET 1 OF 3)

Q \ \ \

CITY

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: NAH DRAWN BY: C.IH

BAR IS ONE INCH OF ORIGINAL DRAWING

DRAWING NUMBER

E-501

54 NUMBER



JUNCTION BOX AND CONDUIT DETAIL -

24" DIAMETER

TYPICAL SECTION VIEW

CONCRETE

WHATLEY TAPERED OCTAGONAL POLE

PROVIDE PVC BELL-END FITTING TO PROTECT

CONDUCTORS FROM ABRASION PER NEC 352.46 (TYPICAL ALL CUT CONDUIT TERMINATIONS)

FINISHED GRADE

EACH POLE

FND TYPICAL

#6 AWG SOLID BARE COPPER GROUNDING CONDUCTOR

EXOTHERMIC WELDS ONLY

1/4"X2"X2" PLATE WASHER

3/4"x10'-0" DEDICATED COPPER CLAD GROUND ROD, TYPICAL FOR

TACK WELDED TO BOLT 2" FROM

6-#7 VERTICAL REINFORCING

#4 CLOSED TIES AT 12" O.C.

3500 PSI CONCRETE BASE,

DIAMETER AND LENGTH AS

(NOMINAL) WITH 1'-0" OVERLAP

BARS EQUALLY SPACED

MODEL #CF50/D16M/14/AB/BLK/30-30

REFER TO POLE MANUFACTURER'S

3/4"

INDEPENDENT LIGHT POLE BASE DETAIL -

PVC

CLEAR TO STIRRUPS

TYPICAL

DETAILS FOR BOLT SIZE AND PATTERN

SCALE: NONE

TYPICAL SECTION VIEW

NON-SHRINK GROUT -UNDER BASE WITH

3/8" WEEP HOLES ON

2-#4 CLOSED

TIES AT TOP

1" CHAMFER, TYPICAL

1-1/2

PVC

TWO SIDES

KEYED NOTES:

- INSTALL NEW NEMA 4X STAINLESS STEEL JUNCTION BOX RECESSED IN PARAPET WALL WITH TAMPER RESISTANT CAPTIVE HARDWARE. BOTTOM OF BOX SHALL BE A MINIMUM OF 3" ABOVE
- BOND EXTERNAL GROUND LUG USING #6 AWG COPPER TO #4/0 AWG GROUNDING CONDUCTOR
- 3 INSTALL NEW GROUND BAR AND CONNECT ALL GROUND CONDUCTORS. PROVIDE BIMETALLIC CONNECTIONS AS REQUIRED.
- INSTALL NEW GROUNDING AND BONDING TYPE INSULATED BUSHINGS ON ALL CONDUITS AND BOND TO GROUND BAR (TYPICAL)
- INSTALL NEW FULL-SIZE BACK PANEL FOR MOUNTING EQUIPMENT.
- $\langle 6 \rangle$ LOOP THE NEW LIGHTING CIRCUITS WITHIN EACH JUNCTION BOX, SLACK WIRE EQUAL TO ONE COMPLETE LOOP FOR FUTURE USE. NEATLY TRAIN AND LACE BRANCH CIRCUIT BUNDLES TOGETHER WITHIN THE BOX SECURED TO THE BACK PANEL WITH A SEPARATE BUNDLE FOR
- ALL CABLES, SPLICES, TERMINATIONS, ETC. SHALL BE RATED $600\ \text{VOLTS}$, WATERPROOF METHOD.
- BOND ALL BRANCH CIRCUIT GROUND WIRES TO GROUND BAR WITHIN EACH BOX (TYPICAL).
- 9 BOND LIGHT POLE GROUND TO GROUND BAR WITHIN EACH BOX (TYPICAL)

ELEVATION

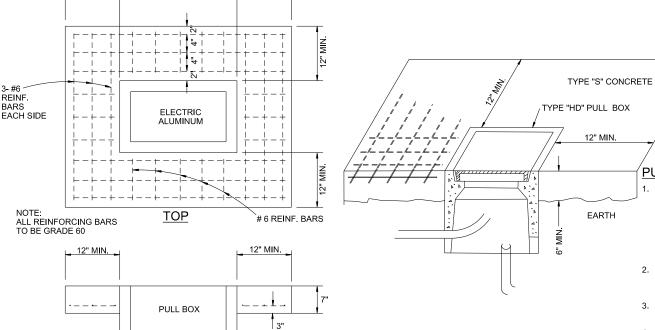
12" MIN.

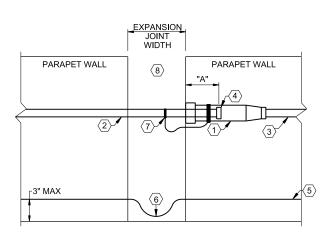
ALL CONDUCTORS SHALL BE CONTINUOUS FROM ORIGIN TO EQUIPMENT TERMINATION WITHOUT SPLICES. WHERE LIGHT FIXTURE TAPS ARE REQUIRED, TAPS SHALL BE MADD USINGA SEALED, INSULATED PRESSURE CONNECTOR PROVIDING BOTH INSULATION AND JACKET EQUAL TO THE CABLE. CONNECTORS SHALL BE 600V RATED, 150 DEGREE C TEMPERATURE RATED, (10)

INTERIOR JUNCTION BOX VIEW

12" MIN.

SCALE: NONE

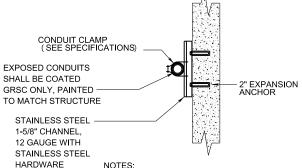




KEYED NOTES:

- INSTALL NEW EXPANSION JOINT FITTING COUPLING FOR 1 1/2" GRSC FLUSH WITH PARAPET WALL. PAINT COUPLING WITH PVC COATING FOR CORROSION PROTECTION PRIOR TO CONCRETE WORK, INSTALL AT ALL EXPANSION JOINTS
- INSTALL NEW 1 1/2" GRSC RECESSED 3-1/2" IN EXPANSION COUPLING. EXPANSION COUPLING SHALL ALLOW FOR 4" OF CONDUIT MOVEMENT, PROVIDE O-Z/GEDNEY TYPE AX OR APPROVED EQUAL. PAINT ALL EXPOSED CONDUIT WITH PVC COATING AT EXPOSED AREAS AND 12" INTO PARAPET WALL FOR CORROSION PROTECTION PRIOR TO CONCRETE WORK.
- INSTALL NEW 1 1/2" GRSC AND SECURE TO EXPANSION COUPLING. PAINT WITH PVC COATING 12" INTO PARAPET WALL FOR CORROSION PROTECTION PRIOR TO CONCRETE WORK.
- INSTALL NEW BUSHING INSULATOR (TYPICAL)
- (5) INSTALL NEW DEDICATED #4/0 AWG COPPER GROUND WIRE, BOND TO ALL POLES AND JUNCTION BOXES.
- INSTALL SLACK IN GROUND WIRE, COAT WITH PVC COATING AT EXPOSED AREA AND 12" INTO PARAPET WALL BOTH SIDES.
- INSTALL NEW GROUNDING AND BONDING JUMPERS WITH SLACK ON EACH EXPANSION JOINT FITTING. PAINT WITH PVC COATING.
- REFER TO BRIDGE AND ROADWAY DRAWINGS FOR EXPANSION JOINT LOCATIONS AND SIZES.

EXPANSION JOINT COUPLING DETAIL (TYPICAL)

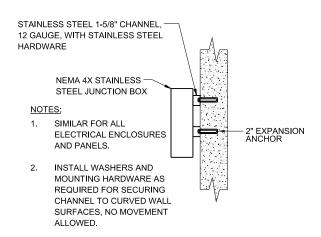


NOTES:

- SINGLE CONDUIT SHOWN, SIMILAR FOR MULTIPLE CONDUITS.
- INSTALL WASHERS AND MOUNTING HARDWARE AS REQUIRED FOR SECURING CHANNEL TO CURVED WALL SURFACES, NO MOVEMENT ALLOWED.

EXPOSED CONDUIT SUPPORT DETAIL

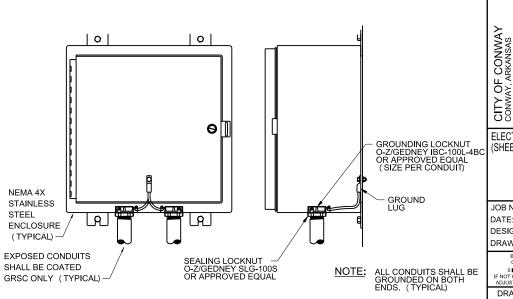
SCALE: NONE



SIMILAR FOR CEILING

EXPOSED JUNCTION BOX SUPPORT DETAIL

SCALE: NONE



CONDUIT GROUNDING DETAIL

SCALE: NONE





PED. OVERPASS 15) (S) DAVE WARD DR. (CONWAY) (RTP-

ELECTRICAL DETAILS (SHEET 2 OF 3)

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: NAH DRAWN BY: C.IH

BAR IS ONE INCH OF ORIGINAL DRAWING

DRAWING NUMBER

E-502

55

CONCRETE PULL BOX (TYPE SPECIAL HD) DETAIL

ISOMETRIC

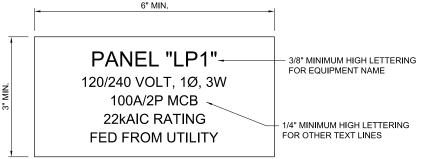
PULLBOX NOTES:

ALL TYPE HD PULL BOXES ARE INSTALLED WITH AN APRON OF CONCRETE 12" WIDE AND 6" IN DEPTH. ALL PAYMENT SHALL BE INCLUDED IN THE PRICE OF THE TYPE HD PULL BOX. PULL BOX SHALL BE INSTALLED FLUSH TO SURROUNDING GRADE UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER. THE CONCRETE SHALL BE CLASS "S." THREE #6 REINFORCING BARS IN THE APRON ON ALL SIDES OF THE PULL BOX ARE REQUIRED IN

- UL LISTED PULLBOX AND EXTRA HEAVY-DUTY COVER SHALL BE DESIGNED FOR A TEST LOAD OF $33,750~\mathrm{LBS}$ AND A DESIGN LOAD
- PULLBOX INTERIOR DIMENSIONS SHALL BE 18"L x 24"W x 18"D (OPEN BOTTOM).
- PROVIDE MINIMUM 3' SLACK CABLE LOOP FOR EACH CABLE.
- COLOR CODE, TAG AND IDENTIFY ALL CABLES IN UL LISTED
- EXACT LOCATION OF EACH UL LISTED PULLBOX SHALL BE APPROVED BY CONWAY CORPORATION AND ENGINEER PRIOR

GENERAL NOTES:

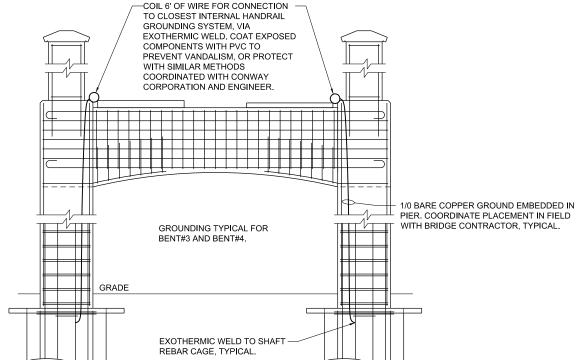
- INSTALL ALL NAMEPLATES AND WARNING SIGNS IN ACCORDANCE WITH NEC AND NFPA 70E REQUIREMENTS.
- 2. INSTALL NAMEPLATES AND WARNING SIGNS ON ALL ELECTRICAL EQUIPMENT, INCLUDING BUT NOT LIMITED TO, SWITCHBOARDS, PANELBOARDS, TRANSFORMERS, SWITCHES, CONTROL PANELS, AND MOTOR CONTROL CENTERS.
- 3. EXTERIOR EQUIPMENT SHALL HAVE WEATHER-RESISTANT, NON-FADING NAMEPLATES AND SIGNAGE.
- 4. REFER TO SPECIFICATIONS FOR ADDITIONAL NAMEPLATE AND SIGNAGE REQUIREMENTS.



EQUIPMENT NAMEPLATE NOTES:

- INSTALL 2-PLEX ACRYLIC, WHITE ON BLACK CORE, MULTIPLE LINES TEXT, CUSTOM ENGRAVED NAME PLATES.
- 2. MOUNT WITH STAINLESS STEEL SCREWS.
- 3. SEAL SCREW HOLES WITH SILICONE RUBBER.
- NAMEPLATE INFORMATION SHALL INCLUDE:
 - IDENTIFICATION NAME
 - **VOLTAGE SYSTEM** AMPACITY RATING AND TYPE
- **FOUIPMENT AIC RATING**
- FEEDER DESCRIPTION

TYPICAL ENGRAVED NAMEPLATE AND SIGNAGE DETAIL



BENT GROUNDING DETAIL

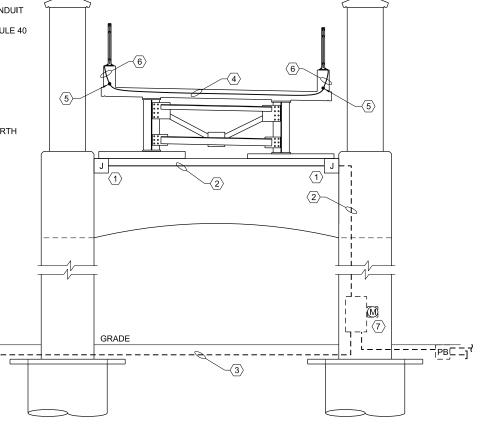
GENERAL NOTES:

- COORDINATE ALL ELECTRICAL WORK WITH THE BRIDGE LAYOUT. CONTRACTOR SHALL COORDINATE LOCATIONS AND ROUTING OF CONDUIT WITH BRIDGE ENGINEER SUCH THAT THERE ARE MINIMUM PENETRATIONS TO THE BRIDGE STRUCTURE.
- EXPOSED CONDUIT SHALL BE COATED GALVANIZED RIGID STEEL. CONDUIT EMBEDDED WITHIN CONCRETE SHALL BE GALVANIZED RIGID STEEL. CONDUIT INSTALLED BELOW GRADE SHALL BE NON-ENCASED SCHEDULE 40 PVC, CONCRETE ENCASED UNDER PAVED SURFACE ONLY.
- LABEL CABLES IN ALL HANDHOLES AND JUNCTION BOXES.
- REFER TO DETAILS ON DRAWINGS E-501 AND E-502 FOR ADDITIONAL INFORMATION FOR THE ELECTRICAL INSTALLATION.
- PAINT CONDUIT AND JUNCTION BOXES TO MATCH STRUCTURE.
- MOUNT SERVICE ENCLOSURE JUNCTION BOXES AND CONDUIT TO NORTH SIDE OF BENT FACING AWAY FROM ROADWAY.
- DASHED ITEMS INDICATE MOUNTING ON REVERSE (NORTH) SIDE OF COLUMNS

KEYED NOTES:

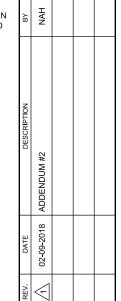
- (1) INSTALL JUNCTION BOX, NEMA 4X RATED, 12" x 12" x 4" MINIMUM, SIZED PER NEC FOR ADDITIONAL CONDUITS AS REQUIRED, PADLOCKABLE, HINGED DOOR TYPE. SEE PLANS FOR APPROXIMATE LOCATION
- (2) INSTALL (1#4 + 1#4N + 1#4EG) 1-1/2"C, FOR CONNECTION TO TYPE "A" FIXTURE AND TRUSS LIGHTING CIRCUIT.
- $\langle 3 \rangle$ INSTALL (1#6 + 1#6N + 1#6EG) 1-1/2"C, FOR CONNECTION TO YPE "B" FIXTURE CIRCUIT.
- (4) INSTALL #1/0 AWG BARE COPPER, EMBEDDED IN BRIDGE DECK TO CONNECT SEPARATE SIDES OF HANDRAIL GROUNDING TOGETHER, REFER TO LAYOUT DRAWINGS FOR PLAN VIEW LOCATIONS, UTILIZE EXOTHERMIC WELDS ONLY
- $\langle \overline{5} \rangle$ NEW #4/0 AWG BARE COPPER, FOR FULL LENGTH GROUNDING SYSTEM, BOTH SIDES, REFER TO DETAILS.
- (6) NEW #2 AWG BARE COPPER, REFER TO DETAILS.
- (7) NEW SERVICE ENCLOSURE WITH EXTERIOR VIEWABLE METER. COORDINATE PRIMARY CONNECTION AND METER WITH CONWAY CORPORATION.

ELECTRICAL ELEVATION DETAIL











CITY OF CONWAY CONWAY, ARKANSAS DAVE WARD DR. (CONWAY) (RTP-

ELECTRICAL DETAILS (SHEET 3 OF 3)

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: NAH DRAWN BY: C.IH

BAR IS ONE INCH OF ORIGINAL DRAWING

DRAWING NUMBER

E-503

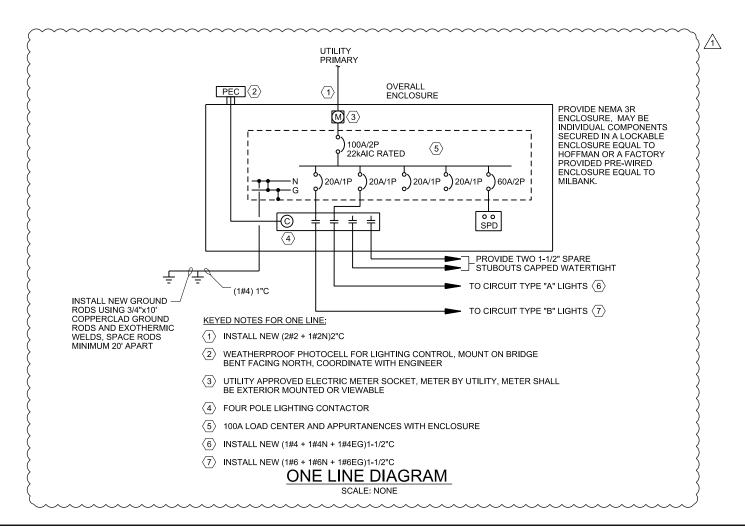
VOLTAGE DROP CALCULATIONS												
1												
!	,	146	0	<u>Line</u>	1		0	146	Carral vit	 		ļ
1	<u># of</u>	Wire	One-Way	<u>Current</u>	<u>Voltage</u>		<u>Power Factor</u>	<u>wire</u>	Conauit	<u>Impedance</u>	<u>Voltage</u>	
Location Description	<u>Sets</u>	Size	Length (ft)	(Amps)	(Line-to-Line)	<u>Phase</u>	(100% or 85%)	Type	Type	(Ω/1000 ft)	Drop (Volts)	<u>%VD</u>
North Circuit Type "A" Lights & Truss Lig	, 1	4	550	6.47	120	1	85%	Aluminum	PVC	0.46	3.27382	2.73%
North Circuit Type "B" Lights	1	6	530	4.00	120	1	85%	Aluminum	PVC	0.71	3.0104	2.51%
South Circuit Type "A" Lights	1	4	600	4.80	120	1	85%	Aluminum	PVC	0.46	2.6496	2.21%
South Circuit Type "B" Lights	1	6	555	4.80	120	1	85%	Aluminum	PVC	0.71	3.78288	3.15%

VOLTAGE DROP TABLE

					1		
	LIGHT FIXTURE SCHEDULE						
TYPE	DESCRIPTION	MANUFACTURER	LAN	IPS	VOLTAGE		
1115	DESCRIPTION	CATALOG NUMBER	WATTS	TYPE	VOLTAGE		
	ACORN STYLE BRIDGE	STERNBERG	96W	LED	120V		
A	LIGHTING FIXTURE	PT/A850SRLED/991T/6ARC45T3R/MDL03/P/CDR/BKT	3000		1200		
^	TAPERED	WHATLEY					
	OCTAGONAL POLE	CO50/D16M/10/AB/BLK/30-30					
	ACORN STYLE BRIDGE	STERNBERG	96W	LED	120V		
В	LIGHTING FIXTURE	PT/A850SRLED/991T/6ARC45T3R/MDL03/P/CDR/BKT	3077	LLD	1200		
"	TAPERED	WHATLEY					
	OCTAGONAL POLE	CO50/D16M/14/AB/BLK/30-30					

STATISTICS (BASED ON 0.85 LLF)							
DESCRIPTION	AVG	MAX	MIN	MAX/MIN	AVG/MIN		
PEDESTRIAN BRIDGE PATH	2.2 fc	3.4 fc	0.8 fc	4.3:1	2.8:1		
PEDESTRIAN GROUND PATH	2.4 fc	5.0 fc	0.1 fc	5.0:0.1	2.4:0.1		

ILLUMINATION DESIGN CRITERIA TABLE						
DESCRIPTION	AVG	MIN	AVG/MIN			
PEDESTRIAN BRIDGE PATH	1.5 fc	0.5 fc	3.0:1			
PEDESTRIAN GROUND PATH 1.0 fc 0.5 fc 3.0:1						



GENERAL NOTES

- ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE NFPA 70 (2014) NATIONAL ELECTRICAL CODE, NFPA 101 (2015) LIFE SAFETY CODE, STATE ELECTRICAL CODE, AND LOCAL ELECTRICAL CODE.
- COORDINATE ELECTRICAL POWER SUPPLY WITH EQUIPMENT SUPPLIED.
- COORDINATE ALL ELECTRICAL WORK AND POWER OUTAGES WITH CITY AND POWER UTILITY.
- WIRING SHALL BE MINIMUM TYPE THHN/THWN-2, ALUMINUM, UNLESS OTHERWISE NOTED.
- FOUIPMENT SHORT CIRCUIT CURRENT RATINGS AND AVAILABLE INTERRUPTING CURRENT RATINGS SHALL BE FULLY RATED TO INTERRUPT SYMMETRICAL SHORT CIRCUIT CURRENT AVAILABLE AT TERMINALS. SERIES RATED SYSTEMS SHALL NOT BE USED.
- PHASE AND NEUTRAL BUSES SHALL BE COPPER 100% RATED UNLESS OTHERWISE NOTED.
- GROUND BUSES SHALL BE COPPER UNLESS OTHERWISE NOTED.
- INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL FEEDER AND BRANCH CIRCUITS.
- INSTALL ALL CONDUCTORS AND CABLES IN CONDUIT UNLESS OTHERWISE NOTED.
- INSTALL LUGS AND JUNCTION BOXES AS REQUIRED TO FIT WIRING
- INSTALL NEW TYPED PANEL SCHEDULES IN ALL ELECTRICAL PANELS INDICATING WORK PERFORMED.
- THE POWER UTILITY POINT OF CONTACT IS DALE GOTTSPONER, CONWAY CORPORATION, PHONE NUMBER 501-450-6049.
- CONDUIT FILL IS PER NEC 2014 CHAPTER 9 CALCULATIONS AND TABLES.
- PROVIDE UL LISTED BIMETALLIC MECHANICAL CONNECTORS WHEN TRANSITIONING BETWEEN ALUMINUM AND COPPER
- PROVIDE FIXTURES LISTED AND LABELED FOR WET LOCATION.
- LIGHTING CALCULATIONS WERE PERFORMED USING LITHONIA LIGHTING VISUAL PROFESSIONAL EDITION VERSION 2016
- 17. LIGHTING LEVELS ARE IN FOOTCANDLE UNTIS (fc).
- DESIGN BASIS IS THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA, IESNA LIGHTING HANDBOOK 10TH EDITION AND AASHTO ROADWAY LIGHTING DESIGN GUIDE OCTOBER 2005 EDITION.
- INSTALL NEW TAPERED, OCTAGONAL, FIBERGLASS COMPOSITE CORE, ELASTOMERIC CLAD URETHANE POLE SHAFT, ACCESSIBLE GROUNDING PROVISION, BASE COVER, VIBRATION DAMPER, ALL REQUIRED MOUNTING ACCESSORIES, SEE DETAILS FOR SIZE AND GAUGE REQUIREMENTS. INSTALL HANDHOLE WITH CAPTIVE TYPE TAMPER RESISTANT SCREWS FACING THE PEDESTRIAN WALKWAY, HANDHOLE COVER SHALL HAVE SAFETY CHAIN SECURED TO POLE INTERIOR. POLE SHALL BE DESIGNED FOR THE TOTAL EFFECTIVE PROJECTED AREA OF ALL LIGHT FIXTURES AT A 90 MPH BASIC WIND SPEED WITH 3 SECOND GUST. ALL POLES SHALL BE DESIGNED TO MEET THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, CURRENT EDITION.
- LIGHT FIXTURE AND POLE COLORS SHALL BE COORDINATED AND SELECTED BY THE OWNER AND ENGINEER DURING SHOP DRAWING REVIEW. POLE SHALL INCLUDE PRE-TREATMENT PROCESSES AND POWDER COAT FINISH TO PREVENT CORROSION. ALL FIXTURES TO BE WET LOCATION RATED.
- ACCEPTANCE CRITERIA SHALL CONSIST OF THE FOLLOWING:
- SUBMIT COMPLETE SHOP DRAWING DATA FOR FIXTURE AND LAMP
- INCLUDING IES FILE AND LLF CALCULATION. SUBMIT COMPLETE POINT-BY-POINT PHOTOMETRIC LIGHTING ANALYSIS OF ALL GIVEN AREAS FOR BOTH INITIAL LUMEN AND LLF
- CALCULATIONS.
 LLF DESIGN, LIGHTING ANALYSIS VALUES SHALL MEET OR EXCEED THE ILLUMINATION DESIGN CRITERIA TABLE REQUIREMENTS, NO
- 22. FINAL ACCEPTANCE TESTING PROCEDURE SHALL CONSIST OF THE FOLLOWING: A. SUBMIT TEST PROCEDURE FOR REVIEW AND APPROVAL.

 - CONDUCT MINIMUM 14-DAY FINAL ACCEPTANCE TEST FOR THE COMPLETE LIGHTING SYSTEM. CORRECT MALFUNCTIONING EQUIPMENT AND RETEST, OTHERWISE REMOVE AND REPLACE WITH NEW EQUIPMENT
 - REPLACE BURNED OUT AND NOTICEABLY DIM LAMPS AND RETEST.
 DURING FINAL ACCEPTANCE TEST PERIOD, TAKE FIELD LIGHT LEVEL
 - MEASUREMENTS (ILLUMINANCE) ALONG THE ENTIRE STRUCTURE, IN A 10' GRID PATTERN COVERING ALL PAVED AREAS. FIELD LEVEL MEASUREMENTS AND CALCULATIONS SHALL MEET OR EXCEED INITIAL LUMEN DESIGN CALCULATIONS. COORDINATE FIELD WORK WITH OWNER AND ENGINEER.





ļ.	_			
	В	NAH		
	DESCRIPTION	02-09-2018 ADDENDUM #2		
	DATE	02-09-2018		
	REV.	\triangleleft		



PED. (15) (S) DAVE WARD DR. (CONWAY) (RTP-

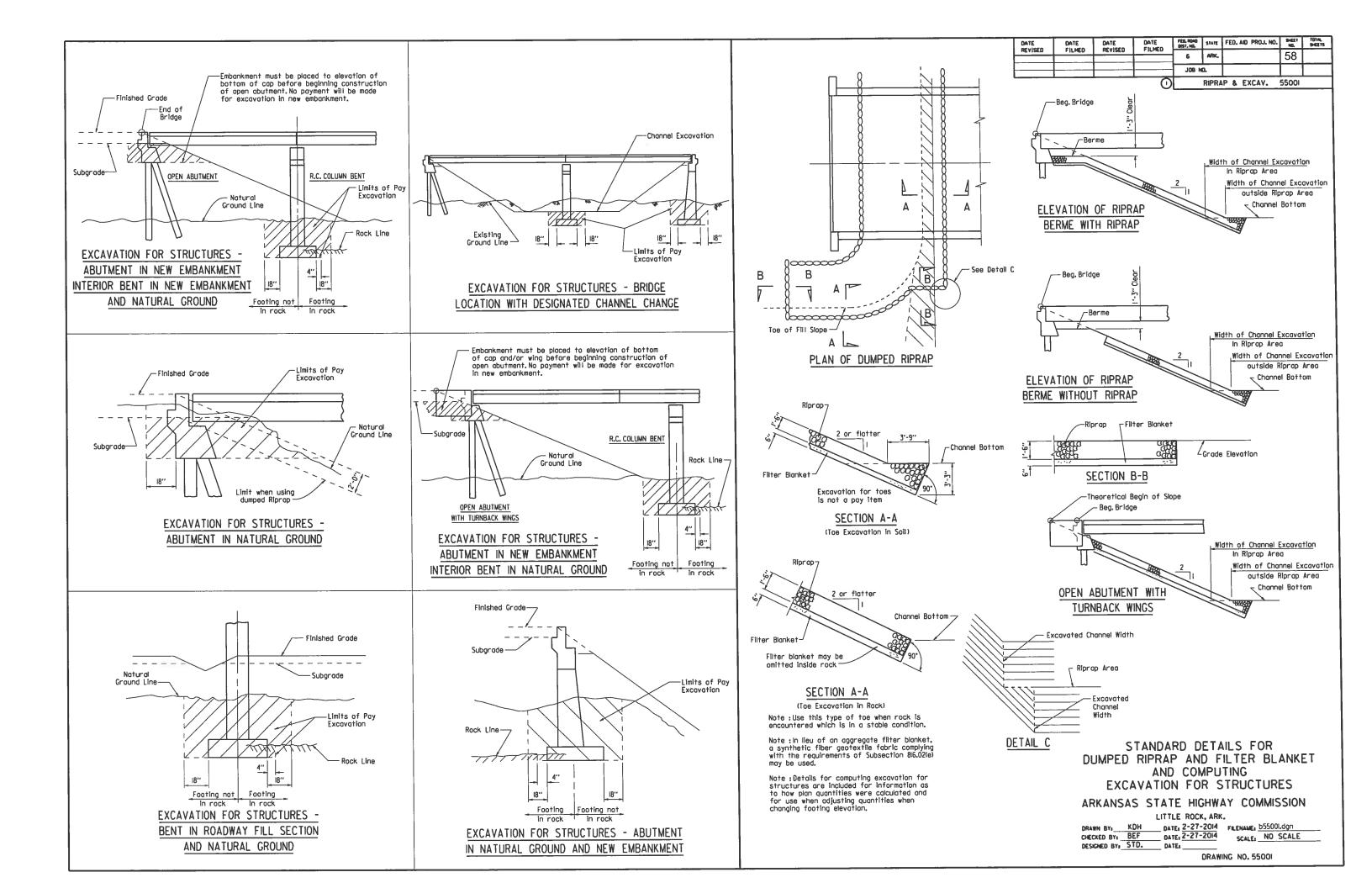
ELECTRICAL ONE-LINE DIAGRAM

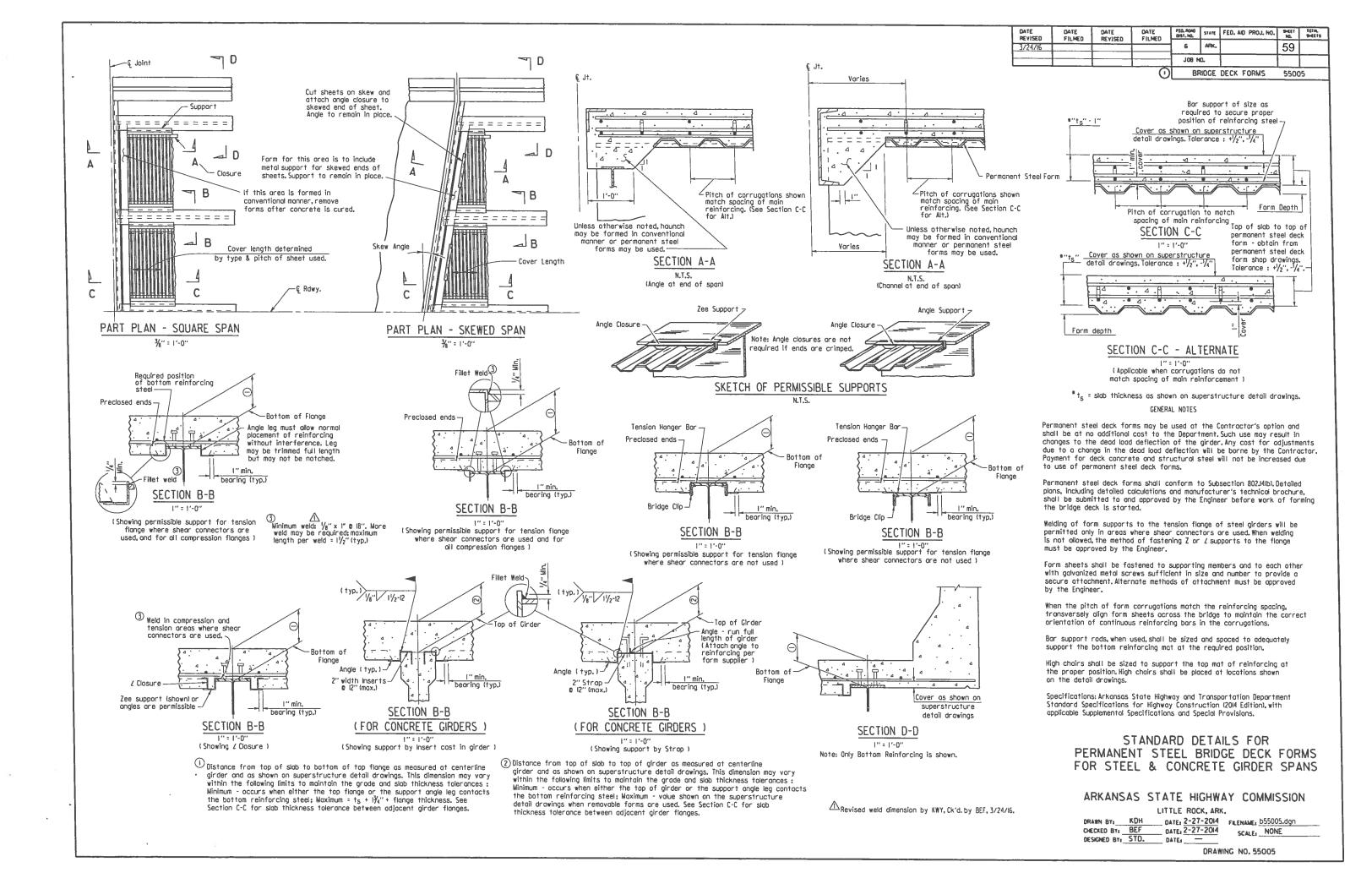
CITY OF CONWAY CONWAY, ARKANSAS

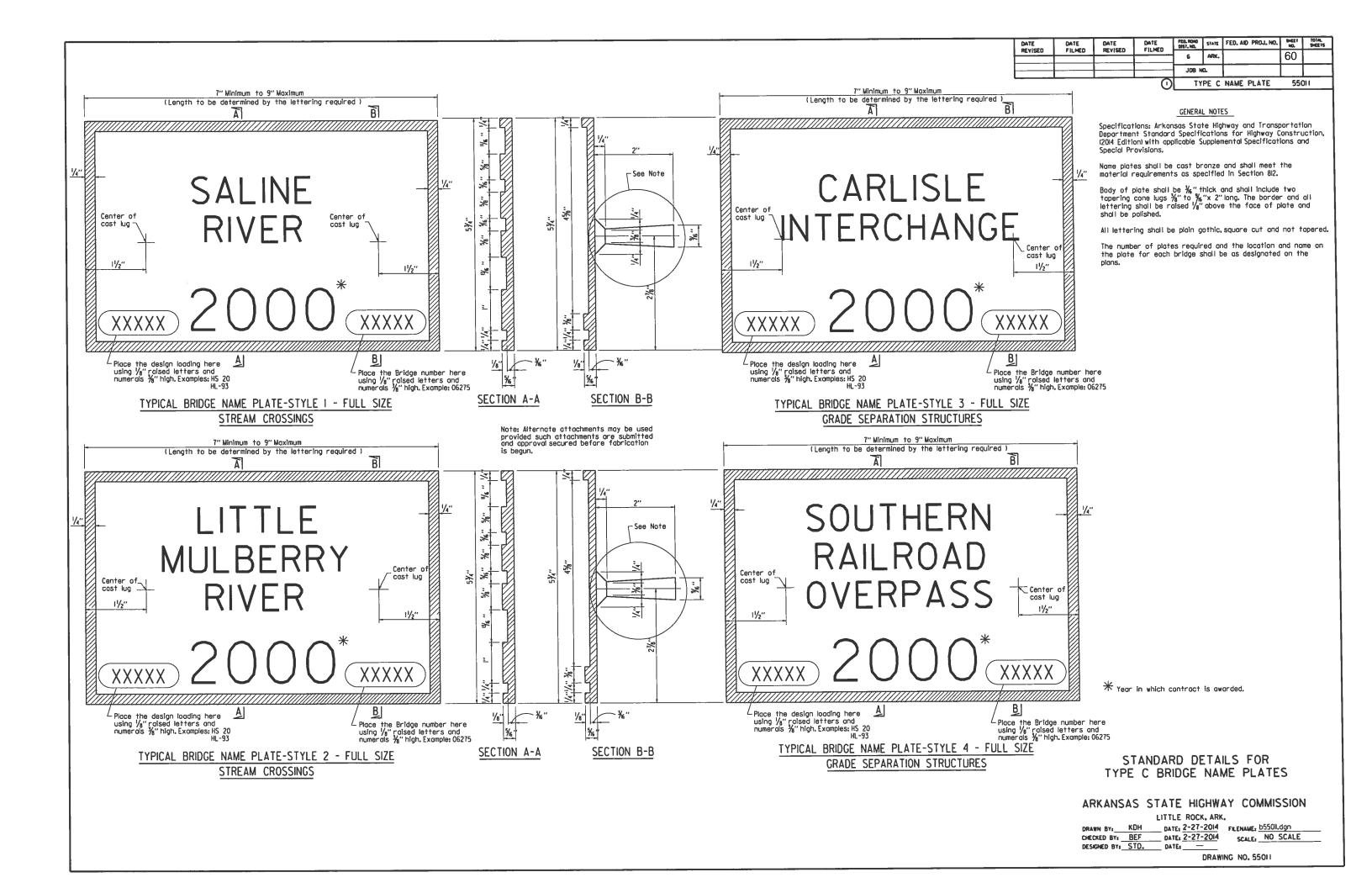
JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: NAH DRAWN BY: C.IH

DRAWING NUMBER E-601

SHEET NUMBER **57**







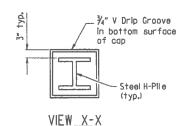
GENERAL NOTES FOR STEEL H-PILES:

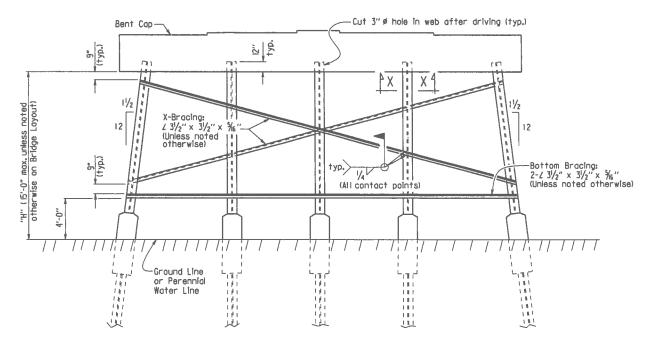
Steel H-Piles shall conform to AASHTO M 270, Grade 36 or greater.

See Bridge Layout and Bent Details for pile size, estimated length, spacing, pile anchorage (If required) and for driving information.

Steel H-Piles that extend above the ground and are not protected by pile encasement shall be painted in accordance with Subsection 805.02.

Brackets, lugs, cap plates, pile tips, driving points, pile painting, splicing and welding shall not be paid for directly, but shall be considered subsidiary to the Item "Steel Pillng".





Notes

All bracing shall be cut and welded in the field. Each brace shall be furnished in one piece. Payment shall be made under Item 807.

Unless noted otherwise, omit X-Bracing when "H" is less than 8 feet.

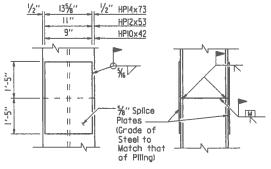
Omit X-Bracing and Bottom Bracing when "H" is 5 feet or less.

When required on the Bridge Layout sheet, pile encasements shall be constructed. See Notes and Details for H-Pile Encasements.

Omit all bracing (and V-groove in cap) when pile encasement is extended to bottom of bent cap.

,

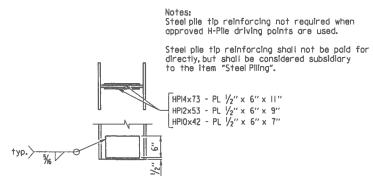
TYPICAL DETAILS OF H-PILE TRESTLE INTERMEDIATE BENT



The Contractor may for his own convenience and at his own expense provide as many as three splices per pile. Minimum spacing between splices shall be 5 feet.

TYPICAL SPLICE DETAILS

H-pile spilcers manufactured by Associated Pile and Fitting Corporation, LB Foster Piling, Skyline Steel or equivalent may be used in lieu of the "Typical Spilce Details" shown. H-pile spilcers shall match the same grade of steel specified for the piling and shall be welded to the pile with a ¾6" fillet weld around the entire perimeter of the spilce. Flanges shall be welded with a complete penetration groove weld complying with AASHTO/AWS Joint Designation B-U4a or B-U4b. All welding shall conform to Subsection 807.26 of the AHTD Standard Specifications for Highway Construction (2014 Edition).



REINFORCING DETAIL FOR STEEL H-PILE TIP

GENERAL NOTES FOR H-PILE ENCASEMENTS:

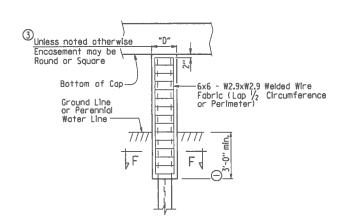
⚠ See Bridge Layout for additional notes, any pile encasement restrictions and required location of pile encasements.

All concrete shall be Class S with a minimum 28-day compressive strength, f'c = 3,500 psi. If concrete cannot be placed in the dry, Seal Concrete may be used from top to bottom of encasement.

Reinforcing steel shall be Grade 60 conforming to AASHTO M 31 or M 322, Type A.

Welded Wire Fabric shall conform to AASHTO M 55 or M 221. Galvanized Corrugated Steel Pipe shall conform to AASHTO M 36 and M 218.

Concrete, welded wire fabric or reinforcing steel and galvanized pipe shall not be paid for directly, but shall be considered subsidiary to the item "Pile Encasement".



PILE ENCASEMENT DETAIL FOR STEEL H-PILES

(Shown with Encasement to Bottom of Cap)

e	e paid		
	#3 tles @ 12" ctrs. —		
	#3 Vertical Bar	4"	
	1½" cir. (min.) Square Encasement		*:

Encasement

DATE FILMED

8

J08 NO.

PED. ROAD STATE FED. AID PROJ. NO.

STEEL H-PILES

PEET IOI

61

55020

SECTION F-F

DATE REVISED

3/24/16

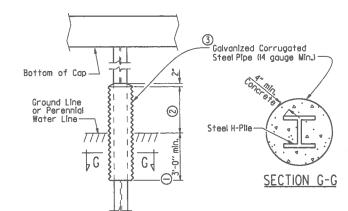
DATE FILMED DATE REVISED

*Measured out-to-out of bar.

"L"*

TABLE OF VARIABLES FOR PILE ENCASEMENT

	"[
Pîle Sîze	Square Encsmt.	Round Encsmt.	"L"*
HPI0x42	1'-7"	2'-0"	l'-4"
HPI2x53	1'-8"	2'-2"	l'-5"
HPI4x73	'- "	2′-6″	1'-8"



② 3'-0" minimum or as shown on Bridge Layout.

 \bigodot Unless otherwise noted on Bridge Layout.

- 3 Encasement dimensions shall be sized to maintain a minimum concrete cover of 4" from the H-Pile. Reinforcement shall be sized to provide a minimum concrete cover of 11/2" and a minimum clearance of 11/4" from the pile.
- Alternate pile encasement, when not extended to bottom of cap, shall have 2" concrete taper for water runoff as shown in the Partial Height Encasement detail.

ALTERNATE PILE ENCASEMENT DETAIL FOR STEEL H-PILES

(Shown with Partial Height Encasement)

Added alternate method of splicing H-piles and revised pile encasement note. 3/24/2016 AMS

This document was originally issued and sealed by Charles R. Eliis, PE No. 9235, on March 24, 2016. This copy is not a signed and sealed document.



STANDARD DETAILS FOR STEEL H-PILES AND PILE ENCASEMENTS

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWING NO. 55020

REINFORCED CONCRETE ARCH PIPE DIMENSIONS

EQUIV.	SPAN		RI	SE
DIA.	AASHTO M 206	AHTD NOMINAL	AASHTO M 206	AHTD NOMINAL
INCHES		INC	HES	
15 18	18 22	18 22	11 13½	11 14
21	26	26	151/2	16
24 30	28½ 36¼	29 36	18 22½	18 23
36	43%	44	26%	27
42 48	51½ 58½	51 59	31¾ 36	31 36
54	65	65	40	40
60 72	73 88	73 88	45 54	45 54
84 90	102 115	102	62	62 72
96	122	115 122	72 77½	77
108 120	138 154	138 154	87½ 96%	87 97
132	1683/4	169	1061/2	107

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN + 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M206.

REINFORCED CONCRETE HORIZONTAL ELLIPTICAL PIPE DIMENSIONS

11 L	DINE	14210142	
EQUIV.	AASHTO M 207		
DIA.	SPAN	RISE	
INCHES	INC	HES	
18	23	14	
24	30	19	
27	34	22	
30	38	24	
33	42	27	
36	45	29	
39	49	32	
42	53	34	
48	60	38	
54	68	43	
60	76	48	
66	83	53	
72	91	58	
78	98	63	
84	106	68	

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M207.

CONSTRUCTION SEQUENCE

- PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
- 2. INSTALL PIPE TO GRADE.

 3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.

 4. PLACE AND COMPACT THE HAUNCH AREA UP TO THE MIDDLE OF THE PIPE. 5. COMPLETE BACKFILL ACCORDING TO SUBSECTION 606.03.(f)(I).

NOTE: HAUNCH AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF CONCRETE

- LEGEND -

D1 = NORMAL INSIDE DIAMETER OF PIPE D = OUTSIDE DIAMETER OF PIPE H = FILL COVER HEIGHT OVER PIPE (FEET) MIN. = MINIMUM

= UNDISTURBED SOIL

INSTALLATION TYPE	MATERIAL REQUIREMENTS FOR HAUNCH AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 5 OR CLASS 7)
TYPE 2	SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4 OR TYPE 1 INSTALLATION MATERIAL*
TYPE 3	AASHTO CLASSIFICATION A-1 THRU A-6 SOIL OR TYPE 1 OR 2 INSTALLATION MATERIAL

- *SM-3 WILL NOT BE ALLOWED.
- ** MATERIALS SHALL NOT INCLUDE ORGANIC MATERIALS OR STONES LARGER THAN 3 INCHES.

MINIMUM HEIGHT OF FILL "H" OVER CIRCULAR R.C. PIPE CULVERTS

	CLASS OF PIPE				
	CLASS	III	CLASS IV	CLASS V	
INSTALLATION TYPE	TYPE 1 OR 2	TYPE 3	ALL	ALL	
PIPE ID (IN.)		FEE	T		
12-15	2	2.5	2	1	
18-24	2.5	3	2	1	
27-33	3	4	2	1	
36-42	3.5	5	2	1	
48	4.5	5.5	2	1	
54-60	5	7	2	1	
66-78	6	8	2	1	
84-108	7.5	8	2	1	

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

MINIMUM HEIGHT OF FILL "H" OVER R.C. ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS

	CLASS	OF PIPE
INSTALLATION TYPE	CLASS III	CLASS IV
	FE	EΤ
TYPE 2 OR TYPE 3	2.5	1.5

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT

MAXIMUM HEIGHT OF FILL "H" OVER CIRCULAR R.C. PIPE CULVERTS

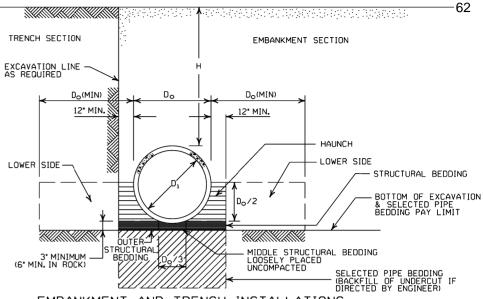
	С	LASS OF PIF	Έ		
INSTALLATION TYPE	CLASS III	CLASS IV	CLASS V		
11172	FEET				
TYPE 1	21	32	50		
TYPE 2	16	25	39		
TYPE 3	12	20	30		

NOTE: IF FILL HEIGHT EXCEEDS 50 FEET, A SPECIAL DESIGN CONCRETE PIPE WILL BE REQUIRED USING TYPE 1 INSTALLATION.

MAXIMUM HEIGHT OF FILL "H" OVER R.C. ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS

	CLASS OF PIPE			
INSTALLATION TYPF	CLASS III	CLASS IV		
1172	FEET			
TYPE 2	13	21		
TYPE 3	10	16		

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.



EMBANKMENT AND TRENCH INSTALLATIONS

- I. MATERIAL IN THE HAUNCH AND OUTER STRUCTURAL BEDDING SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.
- 2. FOR TRENCHES WITH WALLS OF NATURAL SOIL, THE DENSITY OF THE SOIL IN THE LOWER SIDE ZONE SHALL BE AS FIRM AS THE 95% DENSITY REQUIRED FOR THE HAUNCH. IF THE EXISTING SOIL DOES NOT MEET THIS CRITERIA, IT SHALL BE REMOVED AND RECOMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OF MATERIAL USED.
- 3. FOR EMBANKMENTS, THE MATERIAL IN THE LOWER SIDE ZONE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

GENERAL NOTES

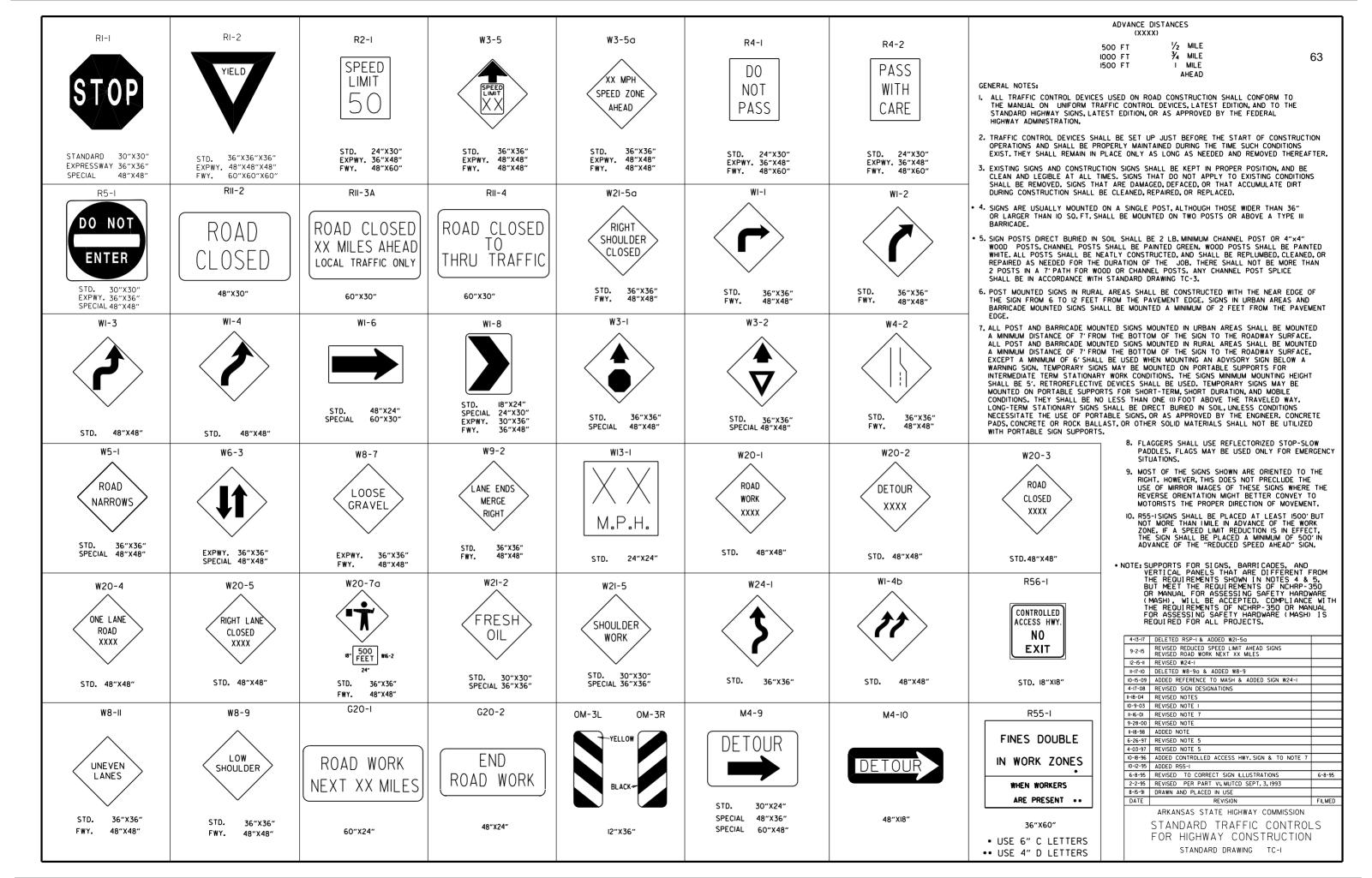
- I. CONCRETE PIPE CULVERT CONSTRUCTION SHALL CONFORM TO ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION), WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS. UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.
- 2. CONCRETE PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
- 3. ALL PIPE SHALL CONFORM TO SECTION 606.CIRCULAR R.C.PIPE CULVERTS SHALL CONFORM TO AASHTO MITO, R.C.ARCH PIPE CULVERTS SHALL CONFORM TO AASHTO M206 AND HORIZONTAL ELLIPTICAL PIPE CULVERTS SHALL CONFORM TO AASHTO M207.
- 4. ALL PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY A COVER SUFFICIENT TO PREVENT DAMAGE FROM PASSAGE OF EQUIPMENT.
- 5. THE MINIMUM TRENCH WIDTH SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 24 INCHES. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PRACTICABLE FOR
- 6. MULTIPLE PIPE CULVERTS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 24 INCHES BETWEEN STRINGS OF PIPE, REFER TO STD.DWG.FES-2 FOR MINIMUM CLEARANCE WHERE FLARED END SECTIONS ARE USED.
- 7. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
- 8. NOT MORE THAN ONE LIFTING HOLE MAY BE PROVIDED IN CONCRETE PIPE TO FACILITATE HANDLING, HOLE MAY BE CAST IN PLACE, CUT INTO THE FRESH CONCRETE AFTER FORMS ARE REMOVED, OR DRILLED. THE HOLE SHALL NOT BE MORE THAN TWO INCHES IN DIAMETER OR TWO INCHES SOUARE, CUTTING OR DISPLACEMENT OF REINFORCEMENT WILL NOT BE PERMITTED. SPALLED AREAS AROUND THE HOLE SHALL BE REPAIRED IN A WORKMANLIKE MANNER, LIFTING HOLE SHALL BE FILLED WITH MORTAR, CONCRETE, OR OTHER METHOD AS APPROVED BY THE ENGINEER.
- 9. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE OUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
- IO. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER
 TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS THE HAUNCH),
 BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE,
 IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."

2-27-14	REVISED GENERAL NOTE I.		
12-15-11	REVISED FOR LRFD DESIGN SPECIFICATIONS		
5-18-00	REVISED TYPE 3 BEDDING & ADDED NOTE		
3-30-00	REVISED INSTALLATIONS		The state of the s
II-06-97	ISSUED		
DATE	REVISION	DATE	FILMED

ARKANSAS STATE HIGHWAY COMMISSION CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING

STANDARD DRAWING PCC-1





FLAGGER

G20-I

TAPER FORMULAE:

WHFRF:

GENERAL NOTES:

L=SXW FOR SPEEDS OF 45MPH OR MORE. L= WS FOR SPEEDS OF 40MPH OR LESS.

L= MINIMUM LENGTH OF TAPER.

W= WIDTH OF OFFSET.

POSITIVE BARRIER

TYPE III BARRICADE

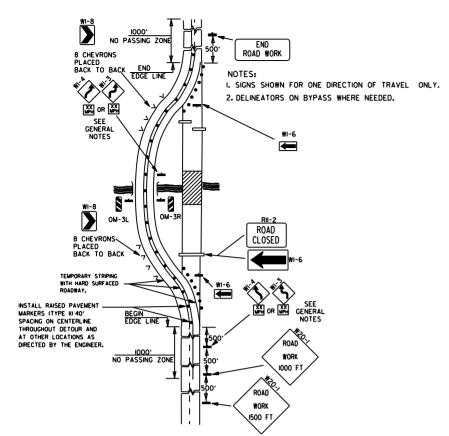
TRAFFIC DRUM RAISED PAVEMENT MARKER

CHANNELIZING DEVICE

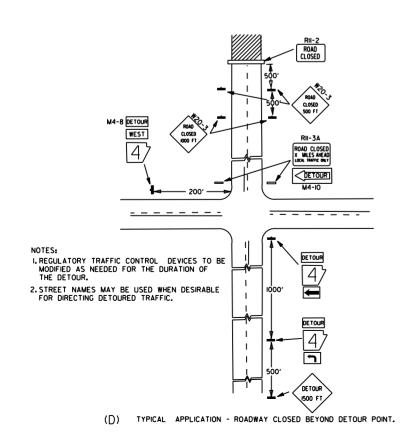
ARROW PANEL (IF REQUIRED)

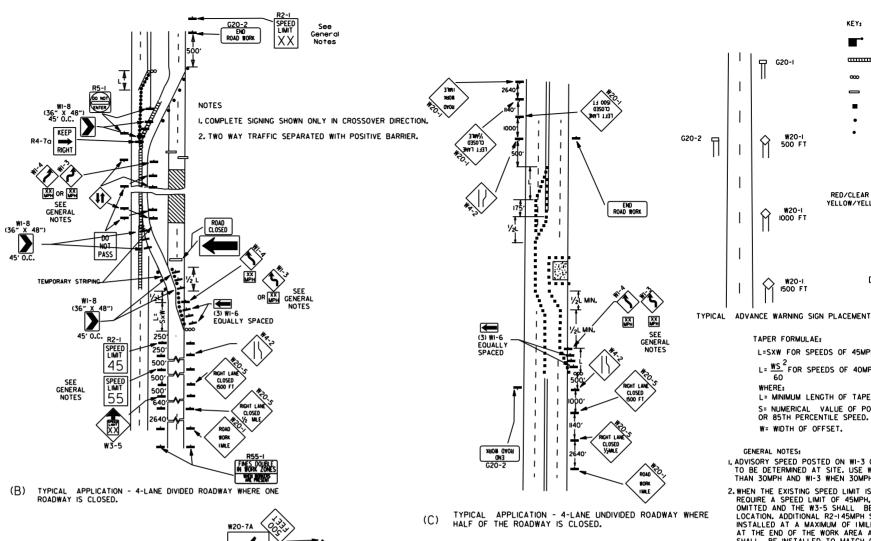
0.52"

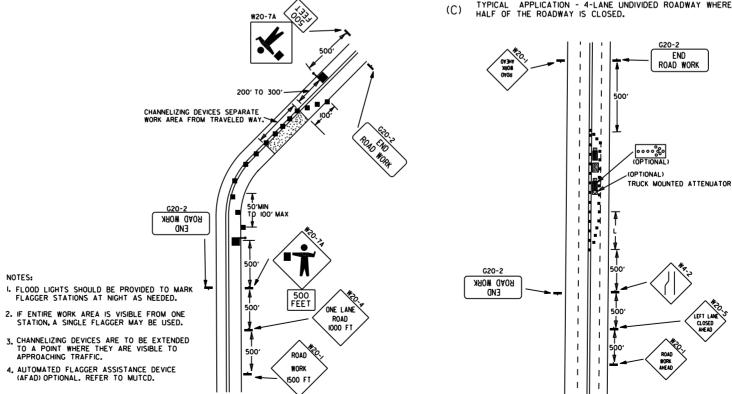
DETAIL OF RAISED PAVEMENT MARKERS



TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON A 2-LANE HIGHWAY WHERE THE ENTIRE ROADWAY IS CLOSED AND A BYPASS DETOUR IS PROVIDED.







(E) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON 2-LANE HIGHWAY WHERE ONE LANE IS CLOSED AND FLAGGING IS PROVIDED.

ARKANSAS STATE HIGHWAY COMMISSION

(F) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WITH INSIDE LANE CLOSED.

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

AT THE END OF THE WORK AREA A R2-KXX)
SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.

I ADVISORY SPEED POSTED ON WI-3 OR WI-4 CURVE WARNING SIGNS TO BE DETERMINED AT SITE. USE WI-4 WHEN SPEED IS GREATER THAN 30MPH AND WI-3 WHEN 30MPH OR LESS.

2. WHEN THE EXISTING SPEED LIMIT IS 55MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 45MPH, THE R2-I(55) SHALL BE OMITTED AND THE W3-5 SHALL BE INSTALLED AT THAT LOCATION, ADDITIONAL R2-I45MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXMUM OF IMILE INTERVALS.

SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.

3. WHEN THE EXISTING SPEED LIMIT IS 65MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 55MPH, THE R2-I(45) SHALL BE OMITTED. ADDITIONAL R2-I55MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF IMILE INTERVALS. AT THE END OF THE WORK AREA A R2-I(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.

4. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHOULD BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT. BEYOND THE TAPER, MAXIMUM SPACING SHALL BE TWO TIMES THE SPEED LIMIT, OR AS DIRECTED BY THE ENGINEER.

5. WARNING, LIGHTS AND/OR FLAGS MAY BE MOUNTED TO SIGNS OR CHANNELIZING DEVICES AT NIGHT AS NEFDED.

S= NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85TH PERCENTILE SPEED.

TO SIGNS OR CHANNELIZING DEVICES AT NIGHT AS NEEDED.

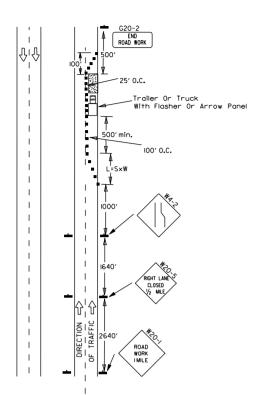
6. PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION IN THE MINDS OF VEHICLE OPERATORS SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE.

T. TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE DELINEATED BY AFFIXING CONSPICUITY MATERIAL IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER. WHEN PLACED ON OR ADJACENT TO THE SHOULDER AND NOT BEHIND A POSITIVE BARRIER, THESE DEVICES SHALL BE DELINEATED BY PLACING FIVE (5) TRAFFIC DRUMS, EQUALLY SPACED ALONG THE TRAFFIC SUPE OF THE DEVICE

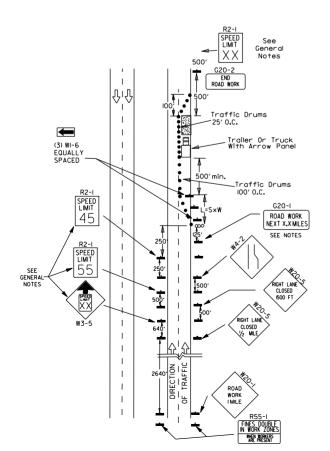
8. DIMENSIONS SHOWN FOR RAISED PAVEMENT MARKERS ARE TYPICAL THE CONTRACTOR MAY SUBSTITUTE SIMILAR MARKERS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR SIMILAR MARKERS MAY BE MADE BY REFERRING TO THE AHTD QUALIFIED PRODUCTS LIST.

9-2-15	REVISED NOTE 2, ADDED NOTE 8, REVISED DRAWING (A) & REPLACED R2-5A WITH W3-5	
9-12-13	REVISED DETAIL OF RAISED PAVEMENT MARKERS	
3-11-10	ADDED (AFAD)	
II-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED GENERAL NOTE	
10-18-96	ADDED R55-I	
4-26-96	CORRECTED (a) BEHIND G20-2	
6-8-95	CORRECTED SIGN IDENT. ON WI-4A	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	
DATE	REVISION	FILMED

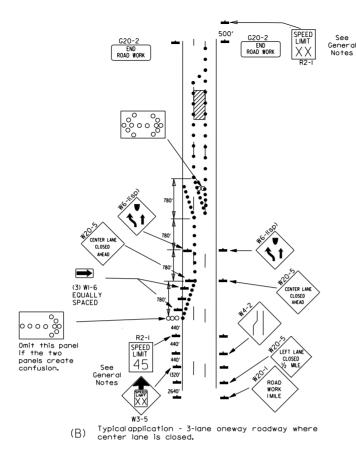
STANDARD DRAWING TC-2



(A) Typical application - daytime maintenance operations of short duration on a 4-lane divided roadway where half of the roadway is closed.



Typical application - construction operations of intermediate to long term duration on a 4-lane divided roadway where half of the roadway is closed.

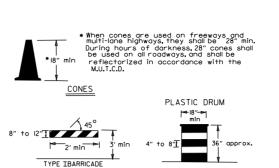


○ Arrow Panel(If Required)

- Channelizing Device
- Traffic drum

GENERAL NOTES:

- I. A speed limit reduction may be implemented ONLY when designated in the plan or when recommended by the Roadway Design Division.
- 2. When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-I(55) shall be omitted and the W3-5 shall be installed at that location. Additional R2-I 45mph speed limit signs shall be installed at a maximum of Imile intervals. At the end of the work area a R2-I(XX) shall be installed to match original speed limit.
- 3. When the existing speed limit is 65mph and the plans require a speed limit of 55mph, the R2-1(45) shall be omitted. Additional R2-155mph speed limit signs shall be installed at a maximum of I mile intervals. At the end of the work area a R2-1(XX) shall be installed to match
- 4. The maximum spacing between channelizing devices in a taper should be approximately equal in feet to the speed limit. Beyond the taper, maximum spacing shall be two times the speed limit or as directed by the Engineer.
- 5. Warning lights and/or flags may be mounted to signs or channelizing devices at night as needed.
- 6. Pavement markings no longer applicable which might create confusion in the minds of vehicle operators shall be removed or obliterated as soon as practicable.
- 7. The G20-I sign will be required on jobs of over two miles in length. When the lane closure is not at the beginning of the project, the G20-I sign shall be erected I25' in advance of the job limit. Additional W20-I (IMILE) signs are not required in advance of lane closures that begin inside the project limits.
- 8. Flaggers shall use STOP/SLOW paddles for controlling traffic through work zones. Flags may be used only for emergency situations.
- All plastic drums and cones shall meet the requirements of NCHRP-350 or Manual For Assessing Safety Hardware (MASH).
- 10. Trailer mounted devices such as arrow panels and portable changeable message signs shallbe delineated by affixing conspicuity materialin a continuous line on the face of the trailer. When placed on or adjacent to the shoulder and not behind a positive barrier, these devices shallbe delineated by placing five (5) traffic drums, equally spaced along the traffic side of the device.



VERTICAL DIFFERENTIAL I" to 3" I" to 3"

LOCATIONS TRAFFIC CONTROL Centerline, lane lines W8-II Edge of shoulder W8-9 Greater than 3" Standard lane closure required

Greater than 3" Edge of shoulder

*RSP-land vertical panels, drums or concrete barrier Edge of traveled lane Greater than 3"

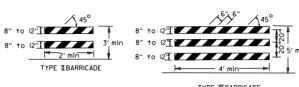
TRAFFIC CONTROL DEVICES

FOR

VERTICAL PAVEMENT DIFFERENTIALS

*Vertical panels, drums or concrete barrier · When shown on the plans concrete barrier will be used.

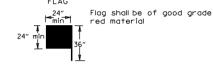
the shoulder area is used as part of the traveled lane and there is insufficient width to place drums on the remaining shoulder width, then vertical panels shall be used

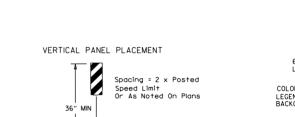


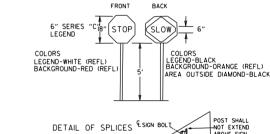
VERTICAL PANEL

TYPE IIBARRICADE NOTE:

For all road closures, the Type III barricades shall be of sufficient length to extend across entire roadway.

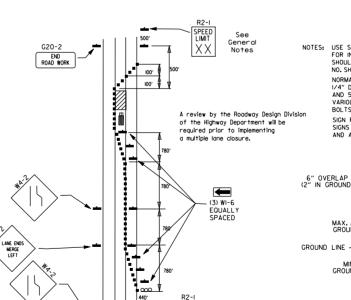






& SPLICE BOI

STOP SLOW PADDLE



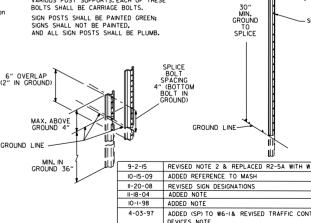
SPEED

45

Notes

ROADWAY SURFACE

NOTES: USE SPLICES ONLY WHEN NECESSARY FOR INSTALLATION. TYPICAL INSTALLATION SHOULD HAVE NO SPLICES (SEE STD. DRAWING NO. SHS-2) NORMAL INSTALLATIONS WILL REQUIRE 1/4" DIA, BOLTS TO MOUNT SIGNS TO POST AND 5/16" DIA, BOLTS TO ASSEMBLE THE VARIOUS POST SUPPORTS, FACH OF THESE BOLTS SHALL BE CARRIAGE BOLTS. SIGN POSTS SHALL BE PAINTED GREEN: SIGNS SHALL NOT BE PAINTED, AND ALL SIGN POSTS SHALL BE PLUMB.



9-2-I5 REVISED NOTE 2 & REPLACED R2-5A WITH W3-5 ADDED (SP) TO W6-1& REVISED TRAFFIC CONTRO DEVICES NOTE 10-18-96 ADDED R55-1 10-12-95 MOVED UPPER SPLICE 6-8-95 REVISED SPLICE DETAIL, TEXT 6-8-95 2-2-95 REVISED PER PART VI, MUTCD, SEPT. 3, 1993 8-15-91 DRAWN AND PLACED IN USE DATE

ARKANSAS STATE HIGHWAY COMMISSION

FOR HIGHWAY CONSTRUCTION

STANDARD DRAWING TC-3

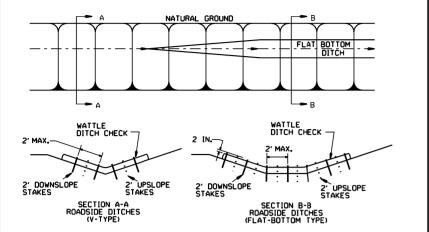
STANDARD TRAFFIC CONTROLS

(D) Typical application - closing multiple lanes of a multilane highway.

speed to be

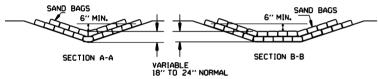
GENERAL NOTES

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.



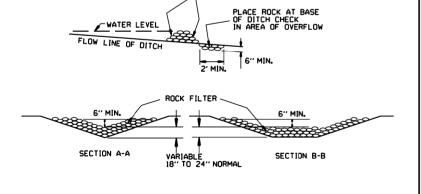
WATTLE DITCH CHECK (E-1)



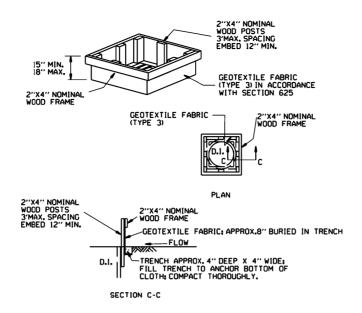


SAND BAG DITCH CHECK (E-5)

APPROX. 2:1 SLOPE



ROCK DITCH CHECK (E-6)



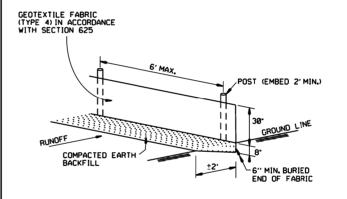
DROP INLET SILT FENCE (E-7)

R/W FENCE GEOTEXTILE FABRIC (TIE TO FENCE) 8" 12" COMPACTED EARTH BACKFILL 6" MIN. BURIED END OF FABRIC (TYPE 3) IN ACCORDANCE WITH SECTION 625 R/W FENCE LIMITS OF PAYMENT ELEVATION

SILT FENCE ON R/W FENCE (E-4)

GENERAL NOTES

CEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD, PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.



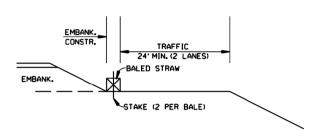
SILT FENCE (E-11)

GENERAL NOTES

CEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD, PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

GENERAL NOTE

- 1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.
- 2. NO GAPS SHALL BE LEFT BETWEEN BALES.
- 3. BALED STRAW FILTER BARRIERS COMPLETED AND ACCEPTED WILL BE MEASURED BY THE BALE IN PLACE AS AUTHORIZED BY THE ENGINEER AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER BALE FOR BALED STRAW DITCH CHECKS.



BALED STRAW FILTER BARRIER (E-2)

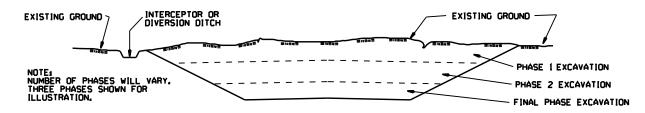
12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK	ARKANSAS STATE HIGHWAY COMMISSION			
1-18-98	ADDED NOTES	7-20-98	ADDED BALED STRAW FILTER BARRIER (E-2)		
7-20-95	REVISED SILT FENCE E-4 AND E-11	7-20-95			
7-15-94	REV. E-4 & E-11 MIN, 13" BURIED END OF FABRIC	CONTROL DEVICES			
4-1-93	REDRAWN	COMPANY	CONTROL DEVICES		
1-192	REDRAWN	COMPANY	CONTROL DEVICES		
1-192	REDRAWN	CONTROL DEVICES			
1-193	REDRAWN	COMPANY	CONTROL DEVICES		
1-194	REVISED R.D.M.	CONTROL DEVICES			
1-195	REDRAWN	COMPANY	COMPANY	COMPANY	CONTROL DEVICES
1-195	REDRAWN	COMPANY			

CLEARING AND GRUBBING

CONSTRUCTION SEQUENCE

- 1. PLACE PERIMETER CONTROLS (I.E. SILT FENCES , DIVERSION DITCHES, SEDIMENT BASINS, ETC.)
- 2. PERFORM CLEARING AND GRUBBING OPERATION.

EXCAVATION



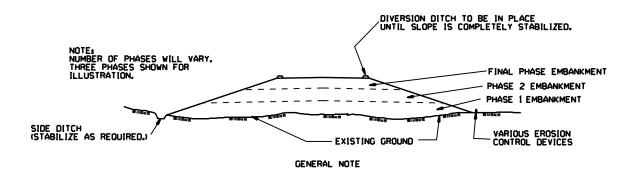
GENERAL NOTE

ALL CUT SLOPES SHALL BE DRESSED, PREPARED, SEEDED, AND MULCHED AS THE WORK PROGRESSES. SLOPES SHALL BE EXCAVATED AND STABILIZED IN EQUAL INCREMENTS NOT TO EXCEED 25 FEET, MEASURED VERTICALLY.

CONSTRUCTION SEQUENCE

- 1. EXCAVATE AND STABILIZE INTERCEPTOR AND/OR DIVERSION DITCHES.
- 2. PERFORM PHASE 1 EXCAVATION, PLACE PERMANENT OR TEMPORARY SEEDING.
- 3. PERFORM PHASE 2 EXCAVATION, PLACE PERMANENT OR TEMPORARY SEEDING.
- 4. PERFORM FINAL PHASE OF EXCAVATION, PLACE PERMANENT OR TEMPORARY SEEDING, STABILIZE DITCHES, CONSTRUCT DITCH CHECKS, DIVERSION DITCHES, SEDIMENT BASINS, OR OTHER EROSION CONTROL DEVICES AS REQUIRED.

EMBANKMENT



ALL EMBANKMENT SLOPES SHALL BE DRESSED, PREPARED, SEEDED, AND MULCHED AS THE WORK PROGRESSES. SLOPES SHALL BE CONSTRUCTED AND STABILIZED IN EQUAL INCREMENTS NOT TO EXCEED 25 FEET, MEASURED VERTICALLY.

CONSTRUCTION SEQUENCE

1. CONSTRUCT DIVERSION DITCHES, DITCH CHECKS, SEDIMENT BASINS, SILT FENCES, OR OTHER EROSION CONTROL DEVICES AS SPECIFIED.

2. PLACE PHASE 1 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PROVIDE DIVERSION DITCHES AND SLOPE DRAINS IF EMBANKMENT CONSTRUCTION IS TO BE TEMPORARILY ABANDONED FOR A PERIOD OF GREATER THAN 21 DAYS.

3. PLACE PHASE 2 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PROVIDE DIVERSION DITCHES AND SLOPE DRAINS IF EMBANKMENT CONSTRUCTION IS TO BE TEMPORARILY ABANDONED FOR A PERIOD OF GREATER THAN 21 DAYS.

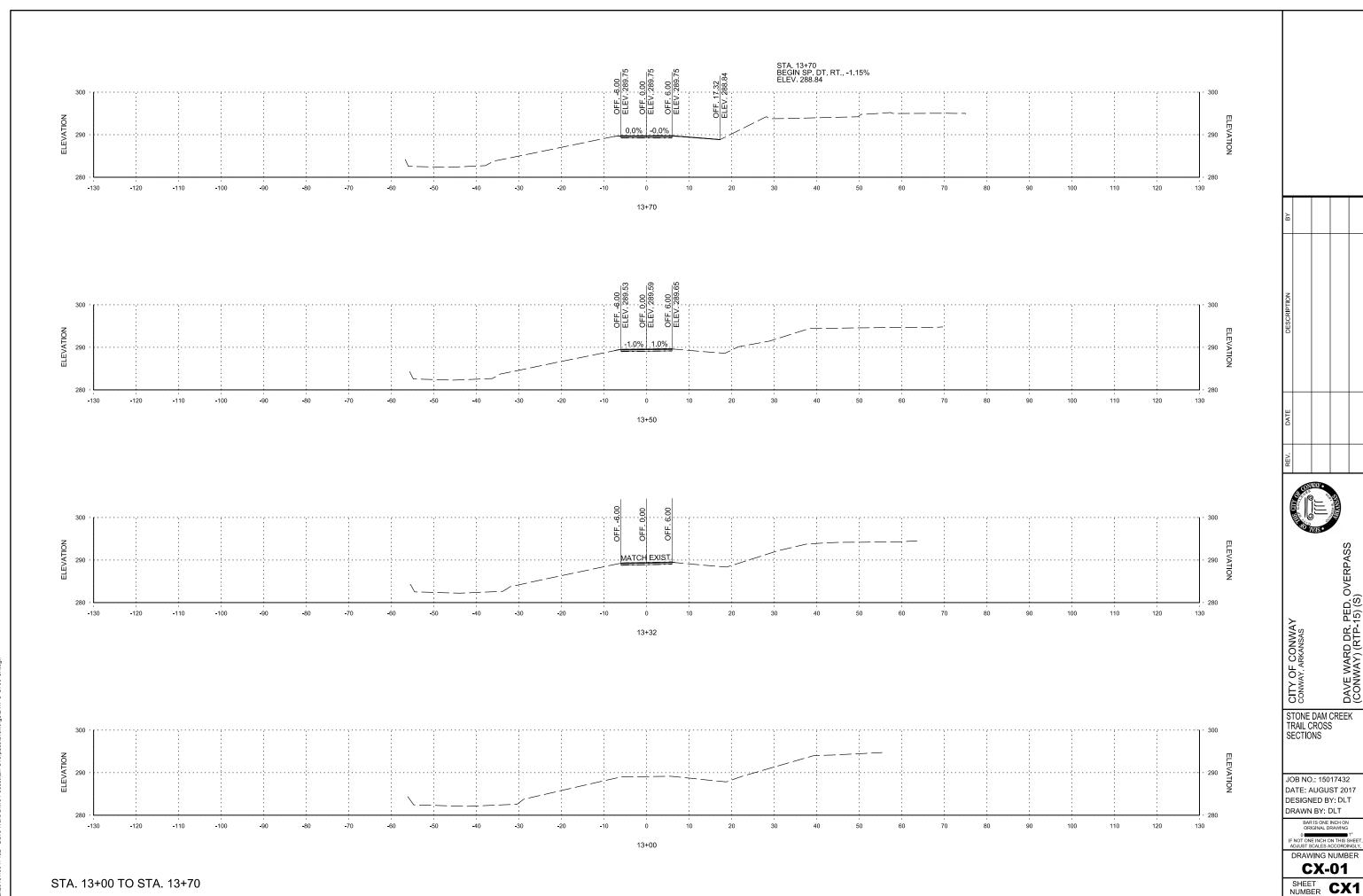
4. PLACE FINAL PHASE OF EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PLACE DIVERSION DITCHES AND SLOPE DRAINS AND MAINTAIN UNTIL ENTIRE SLOPE IS STABILIZED.

			م.م. ا
			ARK
			-
			1
			1
			1
			i
11-03-94	CORRECTED SPELLING		-
6-2-94	Drawn & Issued	6-2-94	1
DATE	REVISION	FILMED	1

KANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-3



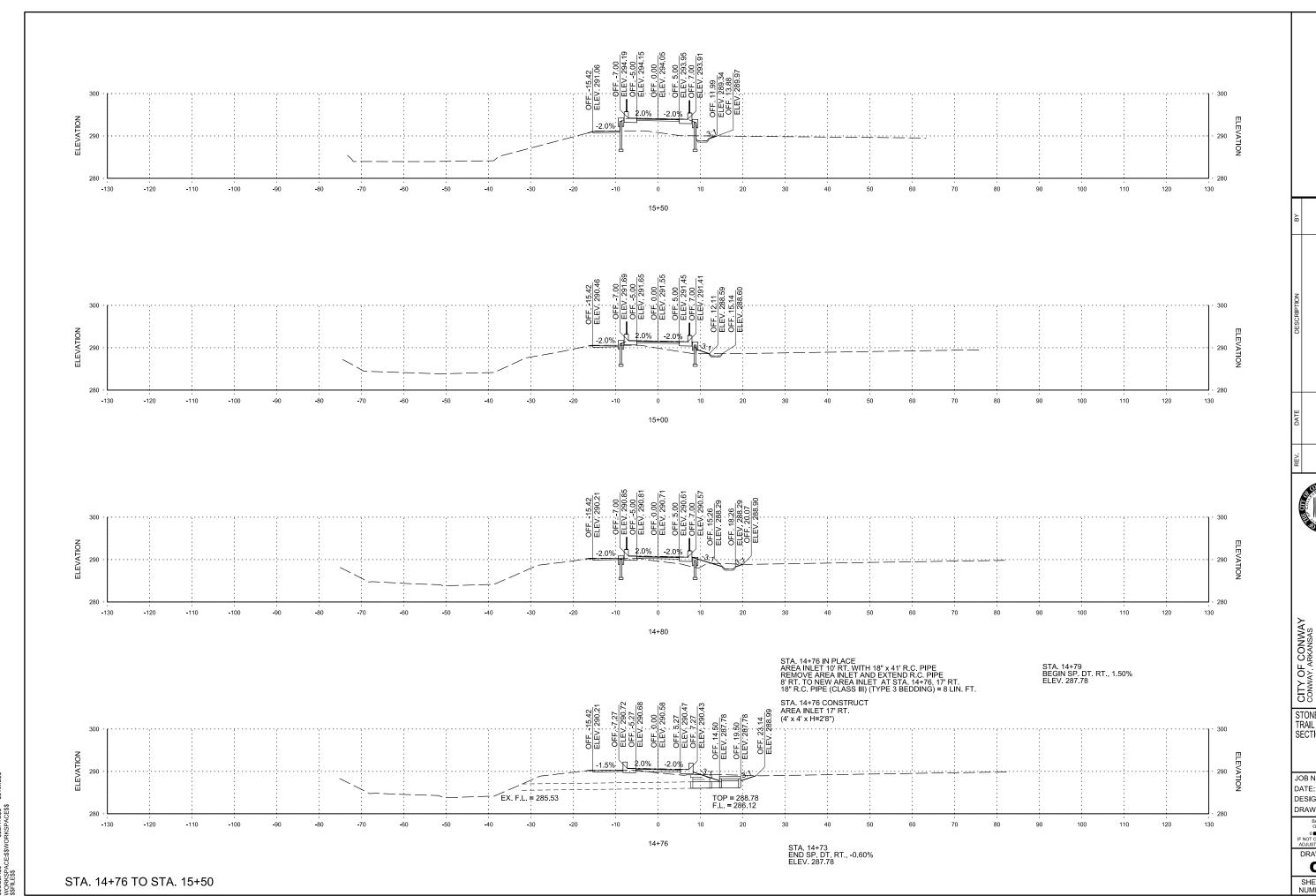
DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

CX-01

\$\$USER\$\$ \$\$DATE\$\$ WORKSPACE:\$\$WORKSPACE\$\$ \$\$FILE\$\$

DRAWING NUMBER **CX-02**

DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)



STONE DAM CREEK TRAIL CROSS SECTIONS BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" 1" F NOT ONE INCH ON THIS SHEE' ADJUST SCALES ACCORDINGLY

CX-03

DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: DLT DRAWN BY: DLT

DRAWING NUMBER

DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S) STONE DAM CREEK TRAIL CROSS SECTIONS

CITY OF CONWAY CONWAY, ARKANSAS

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: DLT

DRAWN BY: DLT

DRAWING NUMBER

CX-04

CX-05 SHEET CX5

DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

CITY OF CONWAY CONWAY, ARKANSAS

BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" 1" F NOT ONE INCH ON THIS SHEE' ADJUST SCALES ACCORDINGLY

DRAWING NUMBER

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: DLT DRAWN BY: DLT

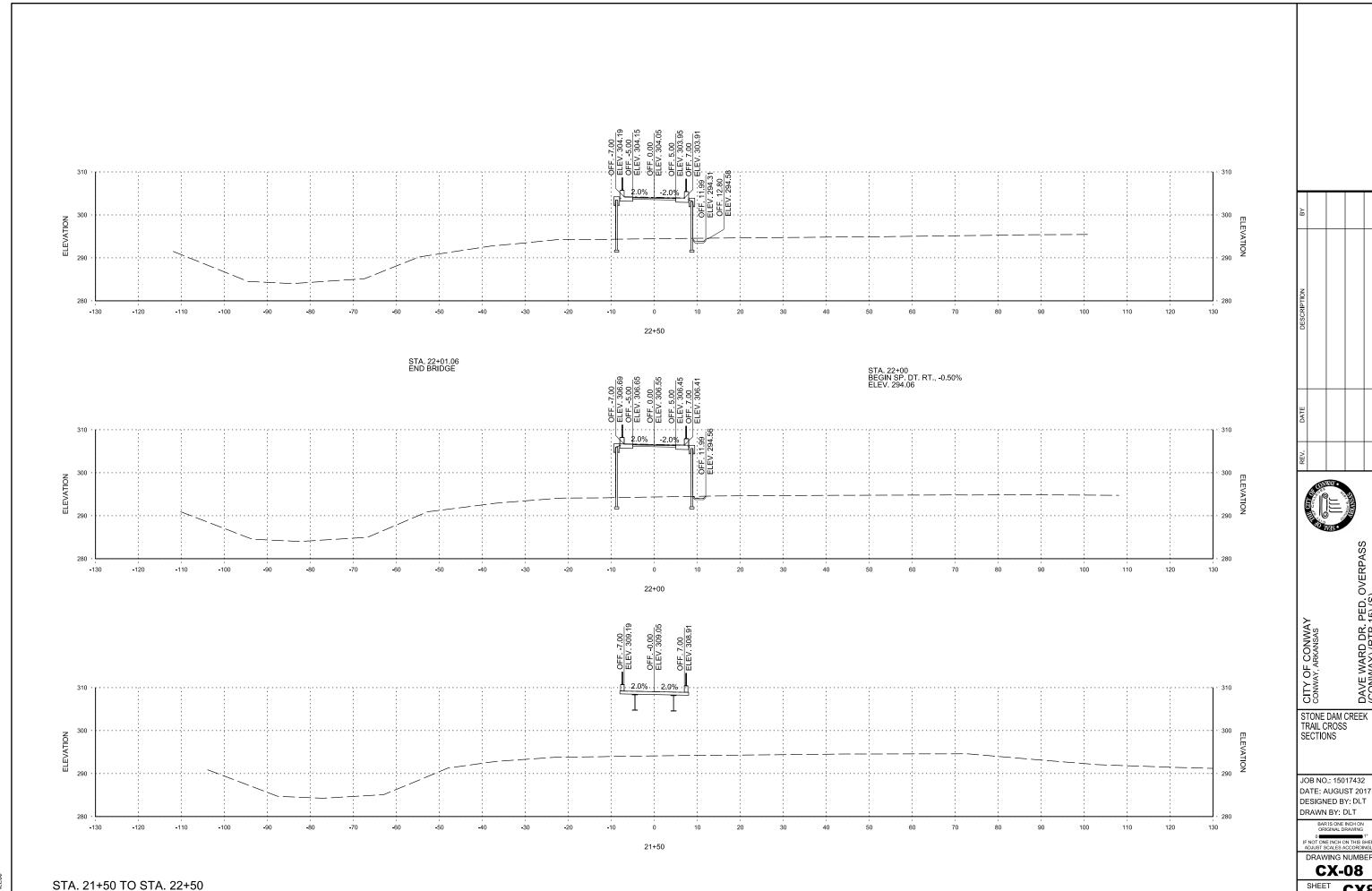
DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S) CITY OF CONWAY
CONWAY, ARKANSAS
SUOIS DAVE DAVE WARD DR. PE
CONWAY, ARKANSAS
CONWAY, ARKANSAS
CONWAY, ARKANSAS JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: DLT DRAWN BY: DLT DRAWING NUMBER **CX-06** SHEET CX6

DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S) CITY OF CONWAY
CONWAY, ARKANSAS
SECULOS
SECULO

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: DLT DRAWN BY: DLT

DRAWING NUMBER

CX-07



DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

DRAWING NUMBER **CX-08**

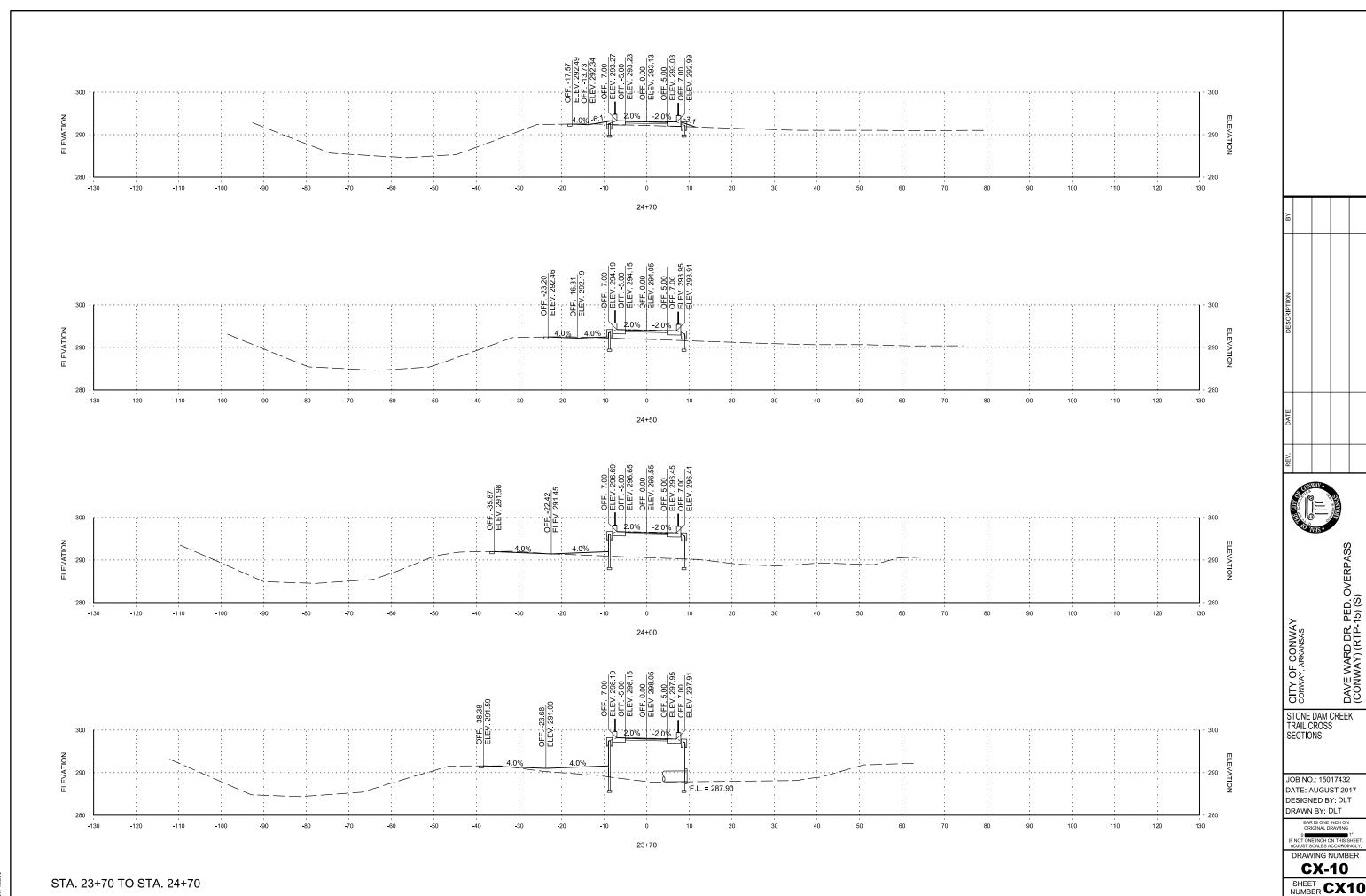
STONE DAM CREEK TRAIL CROSS SECTIONS JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: DLT DRAWN BY: DLT

DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

CITY OF CONWAY CONWAY, ARKANSAS

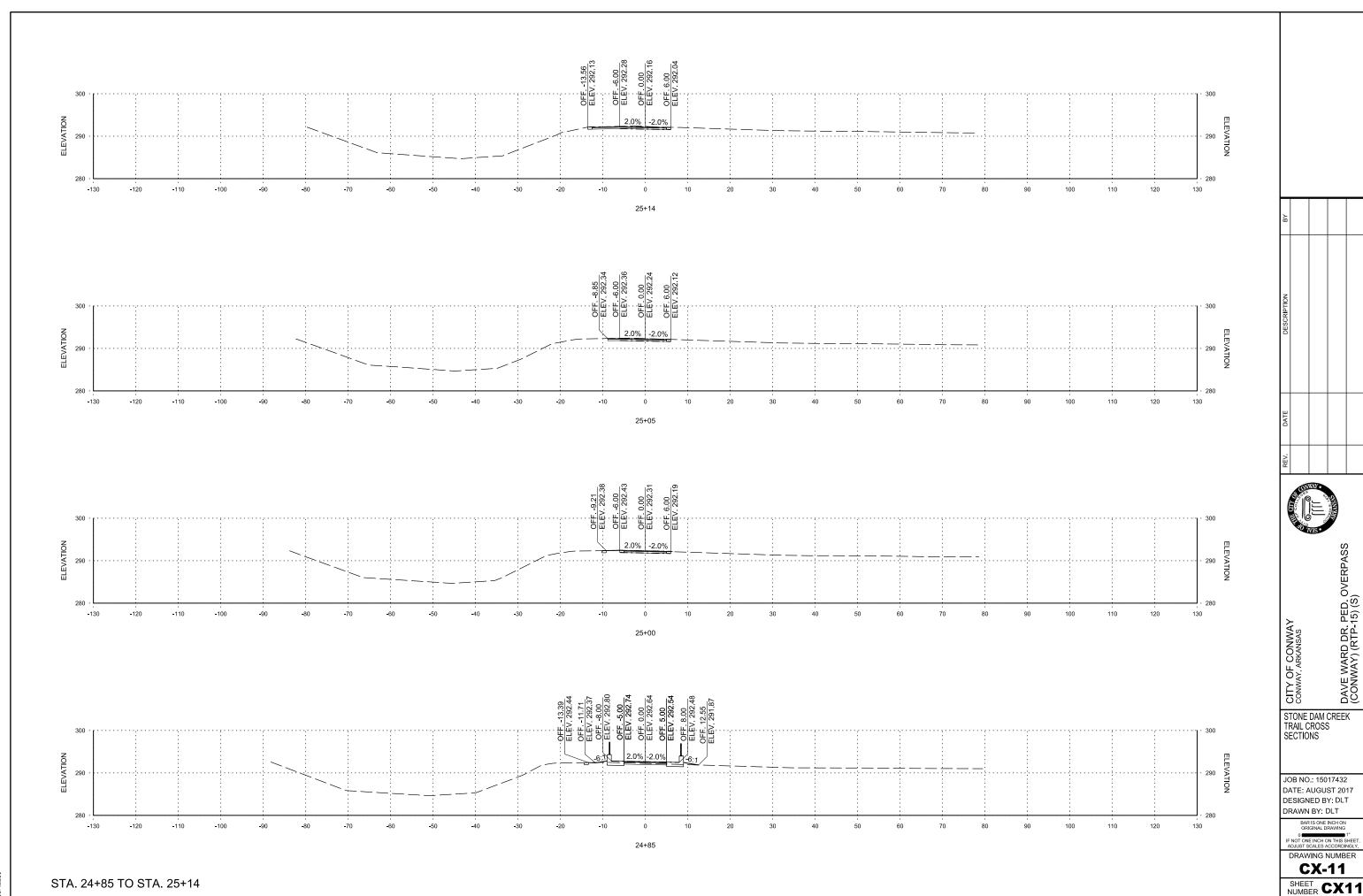
BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" 1" F NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY DRAWING NUMBER

CX-09



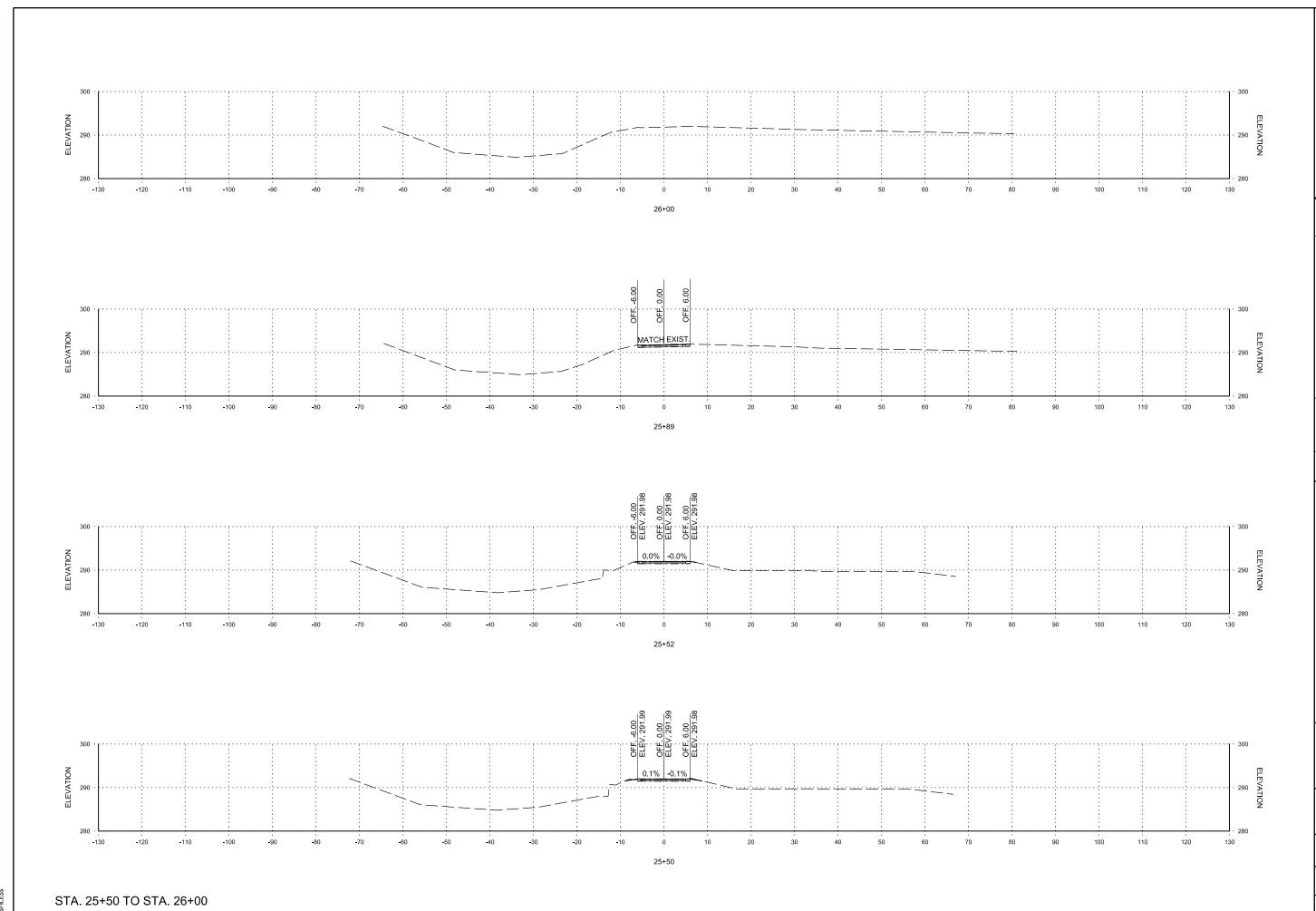
DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

CX-10



DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S)

CX-11



DAVE WARD DR. PED. OVERPASS (CONWAY) (RTP-15) (S) CITY OF CONWAY
CONWAY, ARKANSAS
SUOIS DAVE DAVE WARD DR. PE
CONWAY, ARKANSAS
CONWAY, ARKANSAS
CONWAY, ARKANSAS

JOB NO.: 15017432 DATE: AUGUST 2017 DESIGNED BY: DLT DRAWN BY: DLT

DRAWING NUMBER

CX-12 SHEET CX12