

# CHANGE ORDER

No. 02

DATE OF ISSUANCE 12/11/24

EFFECTIVE DATE 12/11/24

OWNER: St Charles Parish

CONTRACTOR: Kass Bros., Inc.

CONTRACT: Concrete Maintenance 2023-24

PROJECT: Concrete Maintenance 2023-24

OWNER's Contract No. P230803 ENGINEER's Contract No. P230803

ENGINEER Digital Engineering & Imaging, Inc.

You are directed to make the following changes in the Contract Documents:

**Description:**

1. Add the Following Work Items:

a. # X004: 10" PCCP

Addition of \$ 241,372.80 SY(LF). 1734 SY @ \$139.20/SY.

Total of Added Work Items = (+ \$241,372.80)

2. Revise the Following Work Item Quantities:

a. # 020: REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT

Addition of \$ 38,692.00 (SY). 2276 SY @ \$17.00/SY

b. # 030: PORTLAND CEMENT CONCRETE PAVEMENT

Addition of \$ 48,250.00 (SY). 500 SY @ \$96.50/SY.

Total of Change in Work Items Quantity = (+ \$86,942.00)

**Reason for Change Order:**

1. Add Work Items

a. Additional Concrete Roads being added to the Maintenance contract with 10" panels to increase the road strength for heavy traffic in Industrial area (Leo, Aries, and Scorpio)

2. Revise Work Item Quantities

a. The existing contract item (020) is being increased in quantities for the removal of PCCP on Post St that were not included in the original assessment and includes the removal of PCCP for Leo, Aries, and Scorpio (1,734 SY). These additional quantities were assessed and agreed upon

b. The existing contract item (030) is being increased in quantities for the additional panels on Post St that were not included in the original assessment. These additional quantities were assessed and agreed upon

**Attachments:** FC04, 10" Typical Details, & Engineer's Opinion of Probable Cost

CHANGE IN CONTRACT PRICE:
Original Contract Price \$ <u>914,593.10</u>
Net Increase (Decrease) from previous Change Orders No. <u>1</u> to <u>2</u> : \$ <u>193,430.85</u>
Contract Price prior to this Change Order: \$ <u>1,108,023.95</u>
Net increase (decrease) of this Change Order: \$ <u>328,314.80</u>
Contract Price with all approved Change Orders: \$ <u>1,436,338.75</u>

CHANGE IN CONTRACT TIMES:
Original Contract Times: Substantial Completion: <u>11/08/24</u> Ready for final payment: <u>11/08/24</u> (days or dates)
Net change from previous Change Orders No. <u>1</u> to No. <u>2</u> : Substantial Completion: <u>35</u> Ready for final payment: <u>35</u> (days)
Contract Times prior to this Change Order: Substantial Completion: <u>12/12/2024</u> Ready for final payment: <u>12/12/2024</u> (days or dates)
Net increase (decrease) this Change Order: Substantial Completion: <u>60</u> Ready for final payment: <u>02/10/24</u> (days)
Contract Times with all approved Change Orders: Substantial Completion: <u>02/10/24</u> Ready for final payment: <u>02/10/24</u> (days or dates)

RECOMMENDED:

By: 

ENGINEER (Authorized Signature)

Date: 12/12/2024

APPROVED:

By: \_\_\_\_\_

OWNER (Authorized Signature)

Date: \_\_\_\_\_

ACCEPTED:

By: 

CONTRACTOR (Authorized Signature)

Date: 12/12/24

ITEM NO.	DESCRIPTION OF WORK	Units	QTY	Unit Prices	SCHEDULED VALUE
<b>Original Contract</b>					
10	TEMPORARY CONSTRUCTION SIGNS AND BARRICADES	LS	1	\$ 5,000.00	\$ 5,000.00
20	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT	SY	5002	\$ 17.00	\$ 85,034.00
30	PORTLAND CEMENT CONCRETE PAVEMENT	SY	5002	\$ 96.50	\$ 482,693.00
40	CLASS II BASE COURSE (6" THICK)	SY	5777.6	\$ 16.00	\$ 92,441.60
50	REMOVAL OF CURBS (CONCRETE)	LF	3490	\$ 0.30	\$ 1,047.00
60	CONCRETE CURB	LF	3490	\$ 16.00	\$ 55,840.00
70	SAW CUTTING	INLF	22600	\$ 0.10	\$ 2,260.00
80	RELOCATION OF INFRASTRUCTURE ITEMS	LS	1	\$ 5,000.00	\$ 5,000.00
90	ADJUSTMENT OF MANHOLES	EA	5	\$ 400.00	\$ 2,000.00
91	ADJUSTMENT OF DRAINAGE STRUCTURES	EA	12	\$ 500.00	\$ 6,000.00
100	EXCAVATION	CY	1429	\$ 21.00	\$ 30,009.00
101	EMBANKMENT	CY	268	\$ 50.00	\$ 13,400.00
110	SODDING	SY	776	\$ 20.00	\$ 15,520.00
120	REFLECTORIZED RAISED PAVEMENT MARKERS (BLUE)	EA	2	\$ 350.00	\$ 700.00
140	MOBILIZATION / DEMOBILIZATION	LS	1	\$ 17,000.00	\$ 17,000.00
10	TEMPORARY CONSTRUCTION SIGNS AND BARRICADES	LS	1	\$ 700.00	\$ 700.00
20	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT	SY	600	\$ 17.00	\$ 10,200.00
30	PORTLAND CEMENT CONCRETE PAVEMENT	CY	600	\$ 96.50	\$ 57,900.00
40	CLASS II BASE COURSE (6" THICK)	SY	706.7	\$ 16.00	\$ 11,307.20
50	REMOVAL OF CURBS (CONCRETE)	LF	480	\$ 0.30	\$ 144.00
60	CONCRETE CURB	LF	480	\$ 16.00	\$ 7,680.00
70	SAW CUTTING	INLF	3163	\$ 0.10	\$ 316.30
100	EXCAVATION	CY	181	\$ 21.00	\$ 3,801.00
101	EMBANKMENT	CY	36	\$ 50.00	\$ 1,800.00
110	SODDING	SY	107	\$ 20.00	\$ 2,140.00
130	PLASTIC REFLECTIVE PAVEMENT STRIPING (24" WIDTH)	LF	24	\$ 90.00	\$ 2,160.00
140	MOBILIZATION / DEMOBILIZATION	LS	1	\$ 2,500.00	\$ 2,500.00
				<b>Original Contract Total</b>	<b>\$ 914,593.10</b>
<b>Plan Change Order 01</b>					
Field Change 01	DRAINAGE PIPE REPLACEMENT	LF	55	\$ 209.25	\$ 11,508.75
Field Change 02	DRIVEWAY REPLACEMENT	SY	100	\$ 124.97	\$ 12,497.00
Field Change 03	GRADE AND COMPACT EXISTING BASE	SY	3800	\$ 2.51	\$ 9,538.00
20	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT	SY	1296.85	\$ 17.00	\$ 22,046.45
30	PORTLAND CEMENT CONCRETE PAVEMENT	SY	1296.85	\$ 96.50	\$ 125,146.03
50	REMOVAL OF CURBS (CONCRETE)	LF	747.2	\$ 0.30	\$ 224.16
60	CONCRETE CURB	LF	747.2	\$ 16.00	\$ 11,955.20
70	SAW CUTTING	INLF	5152.6	\$ 0.10	\$ 515.26
				<b>Plan Change 01 Total</b>	<b>\$ 193,430.85</b>
				<b>Revised Contract Amount</b>	<b>\$ 1,108,023.95</b>
<b>Plan Change Order 02</b>					
Field Change 01	10" PCCP	LF	1734	\$ 139.20	\$ 241,372.80
20	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT	SY	2276	\$ 17.00	\$ 38,692.00
30	PORTLAND CEMENT CONCRETE PAVEMENT	SY	500	\$ 96.50	\$ 48,250.00
				<b>Plan Change 02 Total</b>	<b>\$ 328,314.80</b>
				<b>Revised Contract Amount</b>	<b>\$ 1,436,338.75</b>

# KASS

CONSTRUCTION

Site Preparation • Utilities • Concrete Paving • Trucking • Construction Materials

12/6/24

Tony San Martin  
Digital Engineering  
527 West Esplanade Ave.  
Kenner, LA 70065

**Re: St. Charles Concrete Maintenance 2023-24-PCO#4- 10" PCCP on Aries, Scorpio, Leo**

Mr. San Martin,

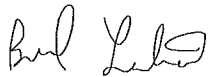
On several of the streets included in the base bid, we have been instructed to not excavate and replace the base course, instead leaving the existing base material in-place under the new concrete. Our grading cost under the new concrete paving was included in the install cost of the new base course. By eliminating the base course, we have no mechanism to get compensated for the grading required under the concrete.

Therefore, we are pleased to provide our price for work on the above referenced project. This price would include all labor, materials, equipment, and supervision necessary to complete the following work:

Item #	Description	QTY	U/M	Bid Unit	Total
1	10" PCCP	1733.3	SY	\$ 139.20	\$ 241,275.36

This cost should be added to our contract through a change order. Should you have any questions or if you need any additional information, please do not hesitate to contact me directly at 504-214-3849.

Sincerely,  
Kass Bros., Inc.



Brad Leckert  
Vice President of Operations

P. O. Box 487 • Westwego, Louisiana 70096-0487 • Phone: 504.348.9018 • Fax: 504.340.0339  
700 River Road • Westwego, Louisiana 70094

Website: [www.kassbros.com](http://www.kassbros.com)

Approved LADOTD DBE / SBE Contractor / LA Contractor's License #14914

# KASS

## CONSTRUCTION

### COST BREAKDOWN

Description: 10" PCCP Install- 200 sy set up per day, 300 sy pour per day

Quantity: 1733.3 SY

Labor	Unit	Qty	Hourly Rate	Total
Foreman	HRS	145	\$ 45.50	\$ 6,597.50
Operator -1 ea	HRS	145	\$ 36.00	\$ 5,220.00
Carpenter /Finisher -4 EA	HRS	580	\$ 34.00	\$ 19,720.00
Laborer -4 EA	HRS	580	\$ 23.00	\$ 13,340.00
<b>Labor Cost</b>				<b>\$ 44,877.50</b>
33% Field Supervision Cost				\$ 14,809.58
<b>Subtotal</b>				<b>\$ 59,687.08</b>
Public Liability Insurance (7.86%)				\$ 3,527.37
FICA/FUTA/SUTA (10.68%)				\$ 4,792.92
Workers Comp (6.80%)				\$ 3,051.67
<b>Insurance &amp; Taxes Cost</b>				<b>\$ 11,371.96</b>

**TOTAL LABOR**

**\$71,059.03**

Materials	Quantity	Unit	Unit Price plus tax	Total
Concrete -4000 psi-3 Day	530.00	CY	\$182.05	\$ 96,486.50
Concrete Fuel Surcharge	53.00	EA	\$38.50	\$ 2,040.50
Highway Mesh	124.00	SHEET	\$77.28	\$ 9,582.72
Form Boards 2" x10" x 12'	100.00	EA	\$15.52	\$ 1,551.62
Curing Compound	156.00	gal	\$5.21	\$ 812.76
Keyway with #4 Bar and Stakes	1200.00	lf	\$2.85	\$ 3,420.00
Contraction Joints Baskets	1040.00	lf	\$9.79	\$ 10,181.60
Expansion Joint Redwood	68.00	LF	\$5.61	\$ 381.48
Grease	9.00	gal	\$36.21	\$ 325.89
Smooth Dowels 1 1/2"	150.00	ea	\$7.22	\$ 1,082.40
Epoxy	27.00	ea	\$22.00	\$ 594.00
#4 Bars -2 Ft	55.00	EA	\$1.04	\$ 57.20
Silicone Joint Sealant	75.00	ea	\$16.46	\$ 1,234.50
<b>Material Cost</b>				<b>\$ 127,751.17</b>

**TOTAL MATERIAL**

**\$127,751.17**

Equipment	Amt	HR	HR Rate	Total
				\$ -
Skid Steer	1	145.00	\$51.80	\$ 7,511.00
Service Truck	1	145.00	\$24.00	\$ 3,480.00
<b>Equipment Subtotal</b>				<b>\$ 10,991.00</b>

**TOTAL EQUIPMENT**

**\$10,991.00**

<b>Subtotal</b>	<b>\$209,801.20</b>
15% Profit Markup	\$31,470.18
<b>Grand Total</b>	<b>\$241,271.38</b>
<b>Unit Price-Per SY</b>	<b>\$139.20</b>

PORTLAND CEMENT CONCRETE  
PAVEMENT DETAILS

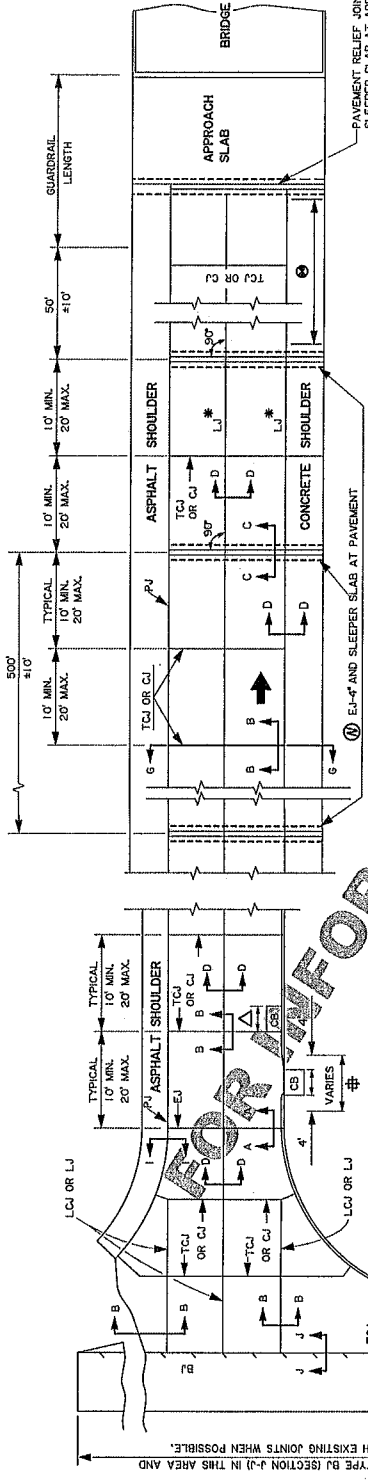


DATE: 10/13/2021  
APPROVED BY CHIEF ENGINEER  
DAVID S. SMITH  
REGISTERED PROFESSIONAL ENGINEER  
STATE OF LOUISIANA  
LICENSE NO. 10132

DESIGNER	T. LAM
CHECKER	D. SMITH
DETAILS	T. LAM
APPROVED	D. SMITH
REVISION	
CHECK	D. SMITH
SERIES	1 OF 3

- JOINT ABBREVIATIONS:**
- LJ - LONGITUDINAL JOINT
  - EJ - TRANSVERSE EXPANSION JOINT
  - TCJ - TRANSVERSE CONTRACTION JOINT
  - CJ - CONSTRUCTION JOINT
  - LCJ - LONGITUDINAL CONSTRUCTION JOINT
  - BJ - LONGITUDINAL BUTT JOINT
  - EJ - TRANSVERSE BUTT JOINT
  - PJ - PAVEMENT EDGE SEAL JOINT

PLAN VIEW  
ROADWAY SHOWING JOINTS



PAVEMENT RELIEF JOINT AND SLEEPER SLAB AT APPROACH SLABS. SEE SECTION H-H FOR APPROACH SLABS.

TABLE 1 - SCHEDULE OF DIMENSIONS  
(ALL DIMENSIONS ARE IN INCHES)

SLAB THICKNESS T"	SMOOTH DOWEL BARS		DEFORMED TIE BARS		KEYWAY
	SIZE (DIA.)	LENGTH (IN.)	SIZE (DIA.)	LENGTH (IN.)	
8	1 1/4	18	1/2	24	A
9	1 1/4	18	1/2	24	B
10	1 1/2	18	1/2	24	A
11	1 1/2	18	1/2	24	B
12	1 1/2	18	1/2	30	A
13	1 1/2	18	1/2	30	B
14	1 1/2	18	1/2	30	A

- \* USE TYPE LCJ JOINT WITH SPLIT SLAB CONSTRUCTION.
- ⊕ WHEN POSSIBLE, AT CATCH BASINS NO JOINTS SHALL BE PLACED IN THE LIMITS SHOWN.
- △ TRANSVERSE JOINTS NEAR CATCH BASIN (SHEET 08 & 09) SHALL BE PLACED AT THE CENTER OF THE CATCH BASIN OR THE CENTER OF THE CATCH BASIN. SEE DETAIL SHEET 30E OF 31.
- Ⓜ SEE SECTION C-C (SHEET 2 OF 3) AND DETAIL "G" (SHEET 3 OF 3) FOR E-J JOINT, SLEEPER SLAB AND DRAINAGE DETAILS. (REQUIRED (3) PLACES.)
- Ⓝ CJ OR TCJ JOINTS AT 20' MAX. CTRS.

NOTE: MAXIMUM JOINT SPACING AT 18' WHEN PAVEMENT IS PLACED ON PERMEABLE BASE. (SEE SECTION 507)

NOTES:

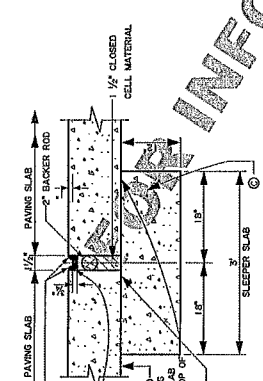
- PAVEMENT EDGES SHALL BE SLIGHTLY ROUNDED (1/4" APPROX.).
- ASPHALT CONCRETE SHOULDER: THE SHOULDER JOINTS SHALL BE SAW CUT AND CONSTRUCTED IN ACCORDANCE WITH SECTION H-H (SHEET 2 OF 3).
- FOR SECTIONS A-A THROUGH J-J (SEE SHEET 2 OF 3).
- ALL JOINTS TO BE USED WHERE SHOWN ON THIS SHEET OR AS SHOWN ELSEWHERE IN THE PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER.
- ON TYPE EJ ALTERNATE JOINTS, SPOT WELD ALTERNATE ENDS OF DOWEL BARS AND PLACE EXPANSION TUBES ON FREE ENDS OF DOWEL BARS.
- FOR DESIGN SPEEDS GREATER THAN 45MPH, SAW CUT AND CONSTRUCT THE TYPE LJ, TCJ, AND CJ JOINTS AS IN DETAILS "A", "B" OR "C" TO A DEPTH OF 1/3 INCHES. THOROUGHLY CLEAN THE JOINT FACES BY SANDBLASTING FOLLOWED BY AN OIL-FREE AIR CLEANER. APPLY SEALANT WITH A Poured OR EXTRUDED SEALANT CONFORMING TO SECTION 1000.
- FOR DESIGN SPEEDS OF 45MPH OR LESS:
  - SAW CUT AND SEAL TYPE LJ JOINTS AS DESCRIBED IN NOTE 6.
  - CONSTRUCT TYPE TCJ OR CJ JOINTS AS DESCRIBED IN NOTE 6 OR IN DETAIL "C" (SHEET 3 OF 3). THOROUGHLY CLEAN THE JOINT FACES WITH A REMOVABLE FORMING DEVICE AS SPECIFIED IN SECTION 601 AND 1000. PRIOR TO SEALING WITH A Poured OR EXTRUDED SEALANT CONFORMING TO SECTIONS 601 AND 1000.
  - CONSTRUCTION JOINTS SHALL BE CONSTRUCTED WITH A COMBINATION JOINT FORMER-SEALER AS SHOWN IN DETAIL "G" (SHEET 3 OF 3) AND BE INSTALLED IN ACCORDANCE WITH SECTION 601 AND NO ADDITIONAL SEALANT IS REQUIRED.
- EXCEPT AS NOTED BELOW, DOWEL BARS & TIE BARS SHALL BE HELD IN PLACE BY SUPPORTS SIMILAR TO THE ONES SHOWN, OR APPROVED EQUIVALENTS. APPROVED MECHANICAL PLACEMENT OF DOWEL BARS AND TIE BARS WILL BE ALLOWED WITH ALL PAVING METHODS.
  - CONSTRUCT LCJ JOINTS IN ACCORDANCE WITH TYPE LCJ DETAIL AND LJ JOINTS IN ACCORDANCE WITH TYPE LJ DETAIL. SEE SECTION D-D (SHEET 2 OF 3).
  - USE THE MAXIMUM SHOULDER THICKNESS WHEN DETERMINING DOWEL BAR AND TIE BAR SIZES IN TABLE 1.
  - WHEN SKEWED JOINTS ARE USED ON MAINLINE PAVING THE SHOULDER TCJ JOINTS MAY BE SKEWED OR CONSTRUCTED AT 90°.
  - SHOULDER JOINTS AND JOINT MATERIALS SHALL MATCH THE MAINLINE.
  - HEIGHT OF DOWEL BASKET SHALL BE BASED ON THE THINNEST SHOULDER THICKNESS. VARYING HEIGHT DOWEL BASKETS WILL BE ALLOWED TO KEEP THE DOWEL BAR LOCATED WITHIN TOLERANCE.
- TIE BARS SHALL NOT BE PLACED WITHIN 18' OF CONTRACTION OR EXPANSION JOINTS.

FOR INFORMATIONAL PURPOSES ONLY

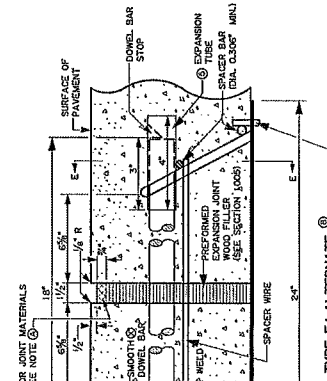
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**NOTES:**

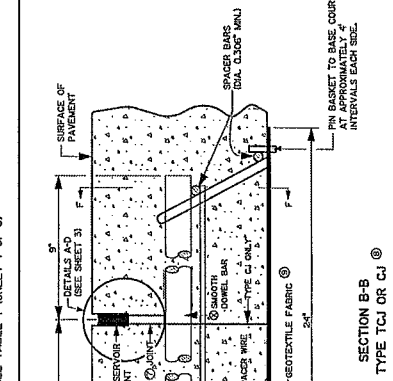
- (A) ONE OR TWO COMPONENT SILICONE CONFORMING TO SECTION 1005.
- (B) TAR PAPER EQUIVALENT TO 30 lbs./100 SF SHALL BE PLACED BETWEEN THE SLEEPER SLAB AND THE PAVING SLAB.
- (C) SLEEPER SLAB SHALL BE CONSTRUCTED OF CLASS "A1" OR PAVEMENT TYPE CONCRETE AND INCLUDED IN THE COST OF THE PAVEMENT. PROVIDE DEFORMED GRADE 60 REINFORCING STEEL.
- (D) JOINT SHALL BE FILLED WITH A PREFORMED POLYURETHANE FOAM TYPE FILLER CONFORMING TO SECTION 1005.
- (E) SEE DETAIL "G" - E1-4 BASE DRAIN OUTLET FOR UNDERDRAIN DETAILS (SHEET 3 OF 3)



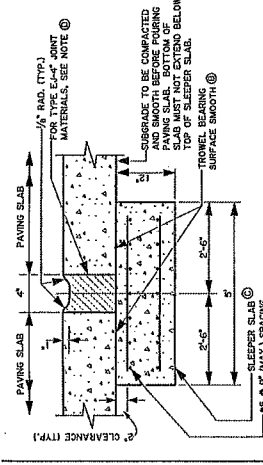
**SECTION A-A  
TYPE E1-1/2**



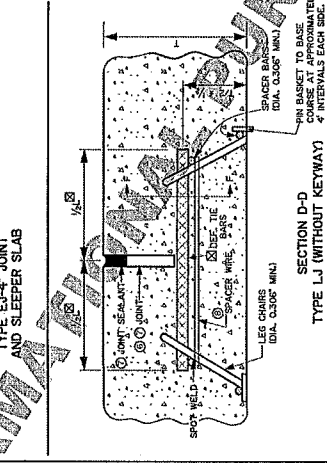
**TYPE E1 ALTERNATE**  
(TRANSVERSE EXPANSION JOINT)  
NOT ALLOWED FOR DESIGN SPEED > 45 MPH  
SEE TABLE 1 (SHEET 1 OF 3)



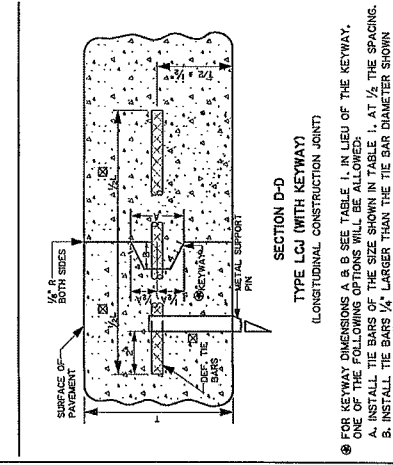
**SECTION B-B  
TYPE TCl OR C1**  
(TRANSVERSE CONTRACTION JOINT OR CONSTRUCTION JOINT)  
SEE TABLE 1 (SHEET 1 OF 3)



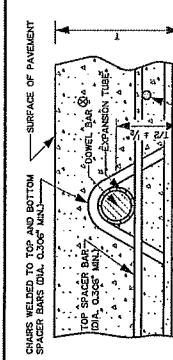
**SECTION C-C  
TYPE E1-4 JOINT  
AND SLEEPER SLAB**



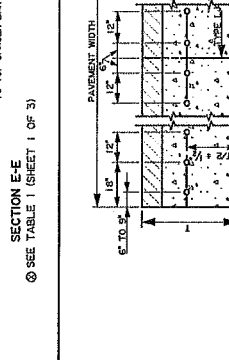
**SECTION D-D  
TYPE L1 (WITHOUT KEYWAY)  
(LONGITUDINAL JOINT)**  
REQUIRED WHEN PAVEMENT WIDTH EXCEEDS 157' (SEE NOTE 5)  
SEE TABLE 1 (SHEET 1 OF 3)



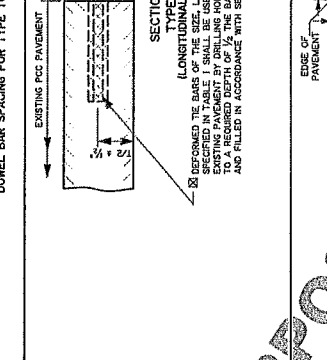
**SECTION D-D  
TYPE L1 (WITH KEYWAY)  
(LONGITUDINAL CONSTRUCTION JOINT)**  
FOR KEYWAY DIMENSIONS A, B & C SEE TABLE 1. IN LIEU OF THE KEYWAY, ONE OF THE FOLLOWING OPTIONS WILL BE ALLOWED:  
A. INSTALL TIE BARS OF THE SIZE SHOWN IN TABLE 1, AT 1/2 THE SPACING.  
B. INSTALL TIE BARS 1/2" LARGER THAN THE TIE BAR DIAMETER SHOWN SHOWN IN TABLE 1, AT THE SAME SPACING.  
SEE TABLE 1 (SHEET 1 OF 3)



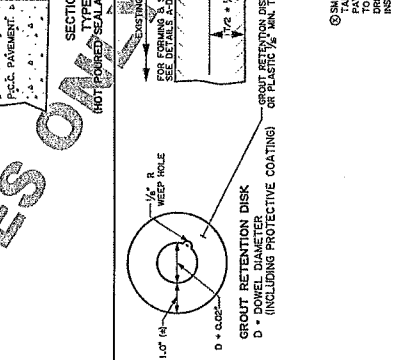
**SECTION E-E**  
SEE TABLE 1 (SHEET 1 OF 3)



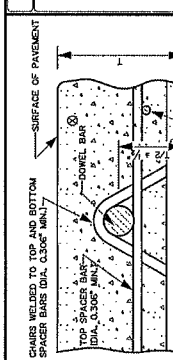
**SECTION F-F**  
SEE TABLE 1 (SHEET 1 OF 3)



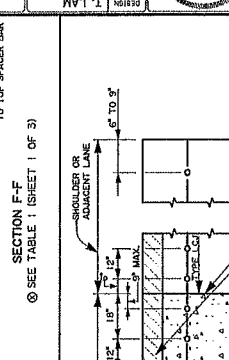
**SECTION G-G  
DOWEL BAR SPACING FOR TYPE TCl, C1, AND E1 JOINTS**



**SECTION H-H  
TYPE L1 (LONGITUDINAL JOINT)**  
REFORMED THE BARS OF THE SIZE LENGTH AND ONE HALF THE SPACING SPECIFIED IN TABLE 1 SHALL BE USED. THE BARS SHALL BE INSTALLED IN EXISTING PAVEMENT BY DRILLING HOLES 1/4" LARGER THAN THE BAR DIAMETER AND FILLED IN ACCORDANCE WITH SECTION 601 BEFORE INSERTION OF THE BARS.



**SECTION I-I**  
SEE TABLE 1 (SHEET 1 OF 3)



**SECTION J-J  
TYPE B1 (TRANSVERSE BUTT JOINT)**  
SMOOTH DOWEL BARS OF THE SIZE LENGTH AND SPACING SPECIFIED IN TABLE 1 SHALL BE USED. THE BARS SHALL BE INSTALLED IN EXISTING PAVEMENT BY DRILLING HOLES 1/4" LARGER THAN THE BAR DIAMETER AND FILLED IN ACCORDANCE WITH SECTION 601 BEFORE INSERTION OF THE DOWEL BARS.

DESIGN	T. LAM
CHECK	D. SMITH
DETAIL	T. LAM
CONSTRUCTION	D. SMITH
REVISION	2 OF 3
DATE	10/19/2021

APPROVED BY CHIEF ENGINEER

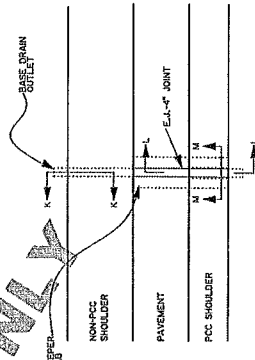
PORTLAND CEMENT CONCRETE PAVEMENT DETAILS

ROAD DESIGN

NOT TO SCALE

NOT TO SCALE

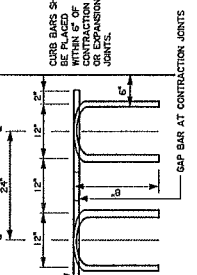
PLAN - BASE DRAIN OUTLET AT E-J JOINTS  
DETAIL "G" - E-J BASE DRAIN OUTLET



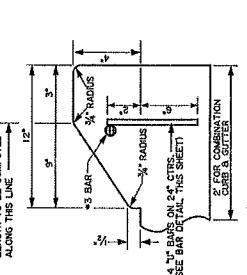
A BASE DRAIN OUTLET WILL BE REQUIRED AT E-J JOINTS UNLESS A SHOULDER UNDER DRAIN SYSTEM IS SPECIFIED ON THE PLANS, IN WHICH CASE THE SHOULDER UNDER DRAIN OR THE E-J JOINT SHALL BE CONSIDERED AS A STORM SEWER OR DISCHARGED THROUGH A HEADWALL. THE COST FOR THE BASE DRAIN OUTLET OR THE E-J JOINTS IS TO BE INCLUDED IN THE UNIT PRICE FOR THE PAVEMENT.

CURB DETAILS

FOUR CURB INTEGRAL WITH FCC PAVEMENT OR GUTTER TO INSURE MONOLITHIC CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE ENGINEER. CURB BARS ARE NOT REQUIRED WHERE CURB IS CONSTRUCTED MONOLITHIC WITH THE PAVEMENT.

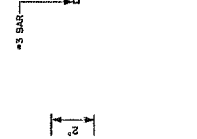


MODIFIED BARRIER OR MOUNTABLE CURB THRU DRIVEWAY

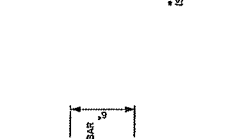


NOTES

WHEN CURB IS POURED MONOLITHICALLY WITH PAVEMENT, THE BITUMINOUS PREFORMED EXPANSION JOINT FILLER SHALL EXTEND TO THE TOP OF JOINT INSERT. WHEN TRANSVERSE JOINTS ARE USED, THE JOINT FILLER SHALL EXTEND THROUGH THE CURB AND UNDERLYING PAVEMENT. THE SUBSEQUENT WORKING OUT FOR THE JOINT SEALANT RESERVOR SHALL EXTEND INTO THE CURB FOR A DEPTH OF 3\"/>

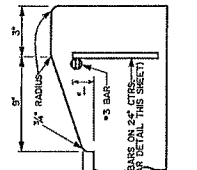


JOINT FILLER DETAIL FOR INTEGRAL CONCRETE CURB (MOUNTABLE OR BARRIER TYPE)

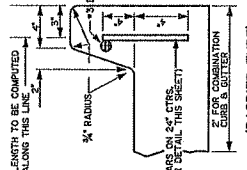


DETAILS "A-F"

NOT ALLOWED WHEN THE PAVEMENT IS PLACED ON PERMEABLE BASES NOT ALLOWED FOR DESIGN SPEEDS GREATER THAN 45 MPH.

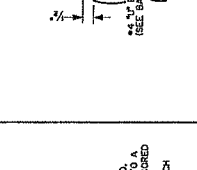


DETAIL "A"

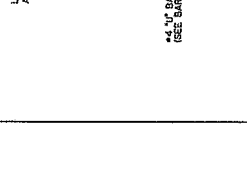


DETAILS "G-I"

NOT ALLOWED FOR DESIGN SPEEDS GREATER THAN 45 MPH.

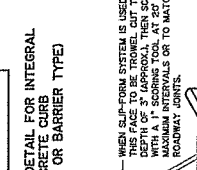


DETAIL "G"

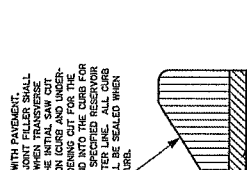


DETAILS "J-L"

NOT ALLOWED FOR DESIGN SPEEDS GREATER THAN 45 MPH.

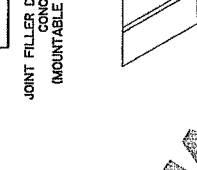


DETAIL "J"

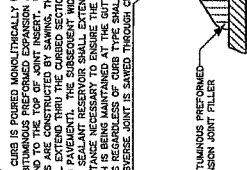


DETAILS "M-N"

NOT ALLOWED FOR DESIGN SPEEDS GREATER THAN 45 MPH.

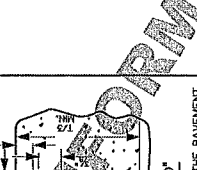


DETAIL "M"

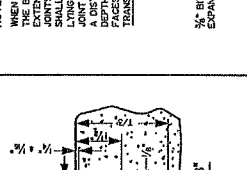


DETAILS "O-P"

NOT ALLOWED FOR DESIGN SPEEDS GREATER THAN 45 MPH.

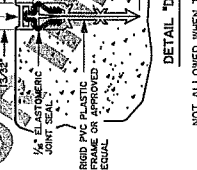


DETAIL "O"

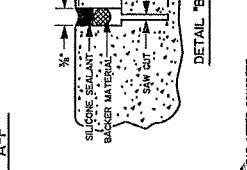


DETAILS "Q-R"

NOT ALLOWED FOR DESIGN SPEEDS GREATER THAN 45 MPH.

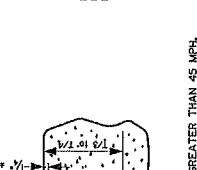


DETAIL "Q"

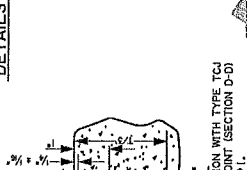


DETAILS "S-T"

NOT ALLOWED FOR DESIGN SPEEDS GREATER THAN 45 MPH.

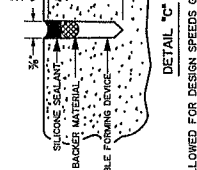


DETAIL "S"

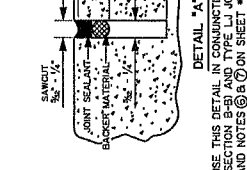


DETAILS "U-V"

NOT ALLOWED FOR DESIGN SPEEDS GREATER THAN 45 MPH.

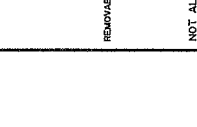


DETAIL "U"



DETAILS "W-X"

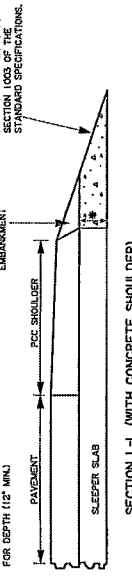
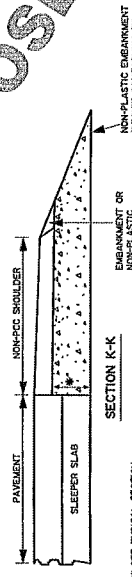
NOT ALLOWED FOR DESIGN SPEEDS GREATER THAN 45 MPH.



DETAIL "W"



FOR INFORMATIONAL PURPOSES ONLY



SECTION K-K  
SECTION L-L (WITH CONCRETE SHOULDER)  
SECTION M-M (SLEEPER SLAB NOT SHOWN)



St Charles Parish Industrial Rd

1765 530.7 1165 560.37

Location	Lane	Length Existing: LF	Width Existing: LF	Length New: LF	Width New: LF	Removal: SY	Pour: SY
Aries 1	Right	76	12	76	12	101.3	101.3
Aries 2	Left	76	12	76	12	101.3	101.3
Scorpio 1	Right	21	12	21	12	28.0	28.0
Scorpio 2	Left	21	12	21	12	28.0	28.0
Aries Radius	Right	0	0	44	4	0.0	19.6
Driveway 1	N/A	32	37	32	37	131.6	131.6
Driveway 2	N/A	21	28	21	28	65.3	65.3
Total						455.6	475.1

Scorpio

Panel numbered moving East towards Leo

Location	Lane	Length Existing: LF	Width Existing: LF	Length New: LF	Width New: LF	Removal: SY	Pour: SY
Panel 1	Right	40	12	40	12	53.3	53.3
Panel 2	Left	40	12	40	12	53.3	53.3
Panel 3	Right	42	12	42	12	56.0	56.0
Panel 4	Left	62	12	62	12	82.7	82.7
Panel 5	Right	61	12	61	12	81.3	81.3
Panel 6	Right	101	12	101	12	134.7	134.7
Panel 7	Left	121	12	121	12	161.3	161.3
Panel 8	Left	81	12	81	12	108.0	108.0
Panel 9	Left	20	12	20	12	26.7	26.7
Total						757.3	757.3

Leo Scorpio Intersection

Panels numbered moving East towards Leo

Location	Lane	Length Existing: LF	Width Existing: LF	Length New: LF	Width New: LF	Removal: SY	Pour: SY
Panel 10	Right	195	12	195	12	260.0	260.0
Panel 11	Left	154	12	154	12	205.3	205.3
Leo Radius	Right	0	0	64	5	0.0	35.6
Total						465.3	500.9

Scorpio Total

1679.2

2733.8