

TABLE NO.1 LONGITUDINAL STEEL

SLAB THICKNESS AND BAR SIZE	REGULAR STEEL BARS	FIRST SPACING AT EDGE CONSTRUCTION JOINT OR JOINT	ADDITIONAL STEEL BARS AT TRANSVERSE CONSTRUCTION JOINT (SECTION X-X)	LENGTH (IN.)
7.0 #5	6.5	3 TO 4	13	50
7.5 #5	6.0	3 TO 4	12	50
8.0 #6	9.0	3 TO 4	18	50
8.5 #6	8.5	3 TO 4	17	50
9.0 #6	8.0	3 TO 4	16	50
9.5 #6	7.5	3 TO 4	15	50
10.0 #6	7.0	3 TO 4	14	50
10.5 #6	6.75	3 TO 4	13.5	50
11.0 #6	6.5	3 TO 4	13	50
11.5 #6	6.25	3 TO 4	12.5	50
12.0 #6	6.0	3 TO 4	12	50
12.5 #6	5.75	3 TO 4	11.5	50
13.0 #6	5.5	3 TO 4	11	50

TABLE NO.2 TRANSVERSE STEEL AND TIE BARS

SLAB THICKNESS (IN.)	TRANSVERSE STEEL	TIE BARS AT LONGITUDINAL CONSTRUCTION JOINT (SECTION Z-Z)	TIE BARS AT LONGITUDINAL CONSTRUCTION JOINT (SECTION Y-Y)
7.0 - 7.5	#5 48	#5 48	#5 24
8.0 - 13.0	#5 48	#6 48	#6 24

GENERAL NOTES

- DETAILS FOR PAVEMENT WIDTH, PAVEMENT THICKNESS AND THE CROWN CROSS-SLOPE SHALL BE SHOWN ELSEWHERE IN THE PLANS. PAVEMENTS WIDER THAN 100 FT. WITHOUT A FREE LONGITUDINAL JOINT ARE NOT COVERED BY THIS STANDARD.
- USE COARSE AGGREGATES WITH A RATED COEFFICIENT OF THERMAL EXPANSION (CTE) OF NOT MORE THAN 5.5 x 10⁻⁶ IN/IN/°F AS LISTED IN THE CONCRETE RATED SOURCE QUALITY CATALOG (CRSDC).
- ALL THE REINFORCING STEEL AND TIE BARS SHALL BE DEFORMED STEEL BARS CONFORMING TO ASTM A 615 (GRADE 60) OR ASTM A 996 (GRADE 80) OR ABOVE. STEEL BAR SIZES AND SPACINGS SHALL CONFORM TO TABLE NO.1 AND TABLE NO.2.
- WHEN COARSE AGGREGATE WITH A RATED COTE OF NOT MORE THAN 4.2 x 10⁻⁶ IN/IN/°F IS USED, TABLE NO.1A MAY BE USED FOR LONGITUDINAL STEEL AS APPROVED BY THE ENGINEER.
- STEEL BAR PLACEMENT TOLERANCE SHALL BE +/- 1 IN. HORIZONTALLY AND +/- 0.5 IN. VERTICALLY. CALCULATED AVERAGE BAR SPACING (CONCRETE PLACEMENT WIDTH / NUMBER OF LONGITUDINAL BARS) SHALL CONFORM TO TABLE NO.1 OR TABLE NO.1A.
- PAVEMENT WIDTHS OF MORE THAN 15 FT. SHALL HAVE A LONGITUDINAL JOINT (SECTION Z-Z OR SECTION Y-Y). THESE JOINTS SHALL BE LOCATED WITHIN 6 IN. OF THE LANE LINE UNLESS THE JOINT LOCATION IS SHOWN ELSEWHERE ON THE PLANS.
- THE SAW CUT DEPTH FOR THE LONGITUDINAL CONTRACTION JOINT (SECTION Z-Z) SHALL BE ONE THIRD OF THE SLAB THICKNESS (T/3).
- WHEN TYING CONCRETE CUTTER AT A LONGITUDINAL JOINT, THE TIE BAR LENGTH OR POSITION MAY BE ADJUSTED. PROVIDE 3 IN. OF CONCRETE COVER FROM THE BACK OF CUTTER TO THE END OF TIE BAR.
- REPLACE MISSING OR DAMAGED TIE BARS WITHOUT ADDITIONAL COMPENSATION BY DRILLING MIN. 10 IN. DEEP AND GROUTING THE BARS WITH TYPE III, CLASS C EPOXY. MEET THE PULL-OUT TEST REQUIREMENTS IN ITEM 361.
- OMIT TIE BARS LOCATED WITHIN 18-IN. OF THE TRANSVERSE CONSTRUCTION JOINTS (SECTION X-X). USE HAND-OPERATED IMMERSION VIBRATORS TO CONSOLIDATE THE CONCRETE ADJACENT TO ALL FORMED JOINTS.
- LONGITUDINAL REINFORCING STEEL SPLICES SHALL BE A MINIMUM OF 25 IN. STAGGER THE LAP LOCATIONS SO THAT NO MORE THAN 1/3 OF THE LONGITUDINAL STEEL IS SPLICED IN ANY GIVEN 12-FT. WIDTH AND 2-FT. LENGTH OF THE PAVEMENT.
- THE DETAIL FOR THE JOINT SEALANT AND RESERVOIR IS SHOWN ON STANDARD SHEET "CONCRETE PAVING DETAILS, JOINT SEALS."

TYPICAL PAVEMENT LAYOUT
PLAN VIEW (NOT TO SCALE)

TRANSVERSE CONSTRUCTION JOINT SECTION X - X

LONGITUDINAL CONSTRUCTION JOINT SECTION Y - Y

LONGITUDINAL CONTRACTION JOINT SECTION Z - Z

CONCRETE PAVING DETAILS JOINT SEALS

JS-14

TABLE NO.1A LONGITUDINAL STEEL FOR LOW COTE CONCRETE AS APPROVED BY THE ENGINEER

SLAB THICKNESS AND BAR SIZE	REGULAR STEEL BARS	FIRST SPACING AT EDGE CONSTRUCTION JOINT OR JOINT	ADDITIONAL STEEL BARS AT TRANSVERSE CONSTRUCTION JOINT (SECTION X-X)	LENGTH (IN.)
7.0 #5	7.5	3 TO 4	15	50
7.5 #5	7.0	3 TO 4	14	50
8.0 #6	10.0	3 TO 4	20	50
8.5 #6	9.5	3 TO 4	19	50
9.0 #6	9.0	3 TO 4	18	50
9.5 #6	8.5	3 TO 4	17	50
10.0 #6	8.0	3 TO 4	16	50
10.5 #6	7.5	3 TO 4	15	50
11.0 #6	7.0	3 TO 4	14	50
11.5 #6	6.75	3 TO 4	13.5	50
12.0 #6	6.50	3 TO 4	13	50
12.5 #6	6.25	3 TO 4	12.5	50
13.0 #6	6.0	3 TO 4	12	50

TRANSVERSE EXPANSION JOINT DETAIL AT BRIDGE APPROACH

FREE LONGITUDINAL JOINT DETAIL

LONGITUDINAL WIDENING JOINT DETAIL

OPTION A: DRILL AND EPOXY PLAN VIEW (NOT TO SCALE)

OPTION B: BREAKBACK AND LAP TRANSVERSE TIE JOINT DETAIL EXISTING CRCP TO NEW CRCP

CONCRETE PAVING DETAILS JOINT SEALS

CRCP (1) - 17

METHOD B: JOINT SEALING COMPOUND

METHOD A: PREFORMED COMPRESSION SEALS (PCS) (DMS-6310 CLASS 6)

GENERAL NOTES

- UNLESS OTHERWISE SHOWN IN THE PLANS, EITHER METHOD "A" OR METHOD "B" MAY BE USED.
- THE LOCATION OF JOINTS SHALL BE AS SHOWN ELSEWHERE IN THE PLANS.
- THE JOINT RESERVOIR FOR SEALANT OR PCS SHALL BE SAWS UNLESS OTHERWISE SHOWN ON THE PLANS FOR THE LONGITUDINAL AND TRANSVERSE CONSTRUCTION JOINTS AND THE SAWS JOINTS.
- DIMENSIONS d1, d2, AND d3 SHOWN IN METHOD A SHALL BE IN ACCORDANCE WITH THE PREFORMED COMPRESSION SEAL MANUFACTURER'S RECOMMENDATION.
- REFER TO DMS-6310 "JOINT SEALANTS AND FILLERS" FOR THE CLASSIFICATIONS.
- FOR SAWS LONGITUDINAL JOINT, LONGITUDINAL OR TRANSVERSE CONSTRUCTION JOINT, USE JOINT SEALANT CLASS 5 OR 8 UNLESS OTHERWISE SHOWN ON THE PLAN OR APPROVED.
- FOR TRANSVERSE SAWS CONTRACTION, TRANSVERSE FORMED EXPANSION JOINT, AND ISOLATION JOINT USE JOINT SEALANT CLASS 5 OR 8 AT NEW JOINTS. USE JOINT SEALANT CLASS 4, 5, 7, OR 8 FOR MAINTAINING EXISTING JOINTS.
- THE JOINTS SHALL BE CLEANED IN ACCORDANCE WITH THE ITEM 436 "CLEANING AND SEALING JOINTS" OR ITEM 713 "CLEANING AND SEALING JOINTS AND CRACKS (CONCRETE PAVEMENT)".
- ISOLATION JOINTS ACCOMMODATE HORIZONTAL AND VERTICAL MOVEMENTS THAT OCCUR BETWEEN A PAVEMENT AND A STRUCTURE. ISOLATION JOINTS MAY BE USED FOR BRIDGE ABUTMENTS, INTERSECTIONS, CURB AND CUTTER, OLD AND NEW PAVEMENTS, OR AROUND DRAINAGE INLETS, MANHOLES, FOOTINGS AND LIGHTING STRUCTURES.

CONCRETE PAVING DETAILS JOINT SEALS

JS-14

TRAFFIC CONTROL PLAN LANE CLOSURES ON MULTILANE CONVENTIONAL ROADS

TCP (1-4) - 18

LEGEND

GENERAL NOTES

- Flags attached to signs when shown are REQUIRED.
- All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol which may be omitted when stored elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
- The "ROAD WORK AHEAD" sign may be replaced if the visibility of the work zone is less than 1500 feet.
- A show vehicle with a TMA should be used anytime it can be positioned 50 to 100 feet in advance of the area of work exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, type 3 Barricade or other channelizing devices may be substituted for the Show Vehicle and TMA.
- Additional Show Vehicles with TMA may be positioned off the paved roadway, next to show signs in order to protect worker spaces.

TCP (1-4) - 18

LOCATION OF SITE
1902 S. GOLIAD ST
LOTS 1 & 2, BLOCK A, BILLY PEOPLES ADDITION NO. 1
ROCKWALL, TX 75087
ROCKWALL COUNTY

BOHLER ENGINEERING

SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING PROGRAM MANAGEMENT LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN PERMITTING SERVICES TRANSPORTATION SERVICES

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DURHAM, NC
FAYETTEVILLE, NC
GREENSBORO, NC
HARRISBURG, PA
HUNTSVILLE, AL
KANSAS CITY, MO
MEMPHIS, TN
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RICHMOND, VA
ROCKFORD, IL
SAN ANTONIO, TX
SEASIDE, CA
SPRINGFIELD, MA
TAMPA, FL
THE WOODBRYS, VA
WASHINGTON, DC

REVISIONS

REV	DATE	COMMENT	BY
1	3/18/19	DOMESTIC WATER REVISION	MJH
2	4/19/19	TAS REVIEW COMMENTS	MJH

811

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ASBUILT RECORD DRAWING

PROJECT NO: TD180033
DRAWN BY: MJH
CHECKED BY: DOC
DATE: 02/25/2019
SCALE: N/A
CAD ID: SDO

CONSTRUCTION DOCUMENTS

FOR

brakes plus
CREATED BY JOHN BRIDGES

LOCATION OF SITE
1902 S. GOLIAD ST
LOTS 1 & 2, BLOCK A, BILLY PEOPLES ADDITION NO. 1
ROCKWALL, TX 75087
ROCKWALL COUNTY

BOHLER ENGINEERING

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STATE OF TEXAS
DEAN O. CARDWELL
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PROFESSIONAL ENGINEER
1.16.20

TxDOT DETAILS

SHEET NUMBER:
C-905

CASE NUMBER: SP2018-030