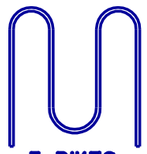
SCALE : N.T.S.

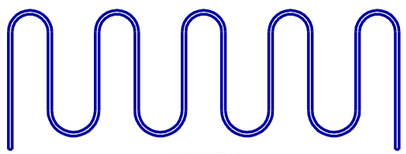


5 BIKES
W = 38" (965)

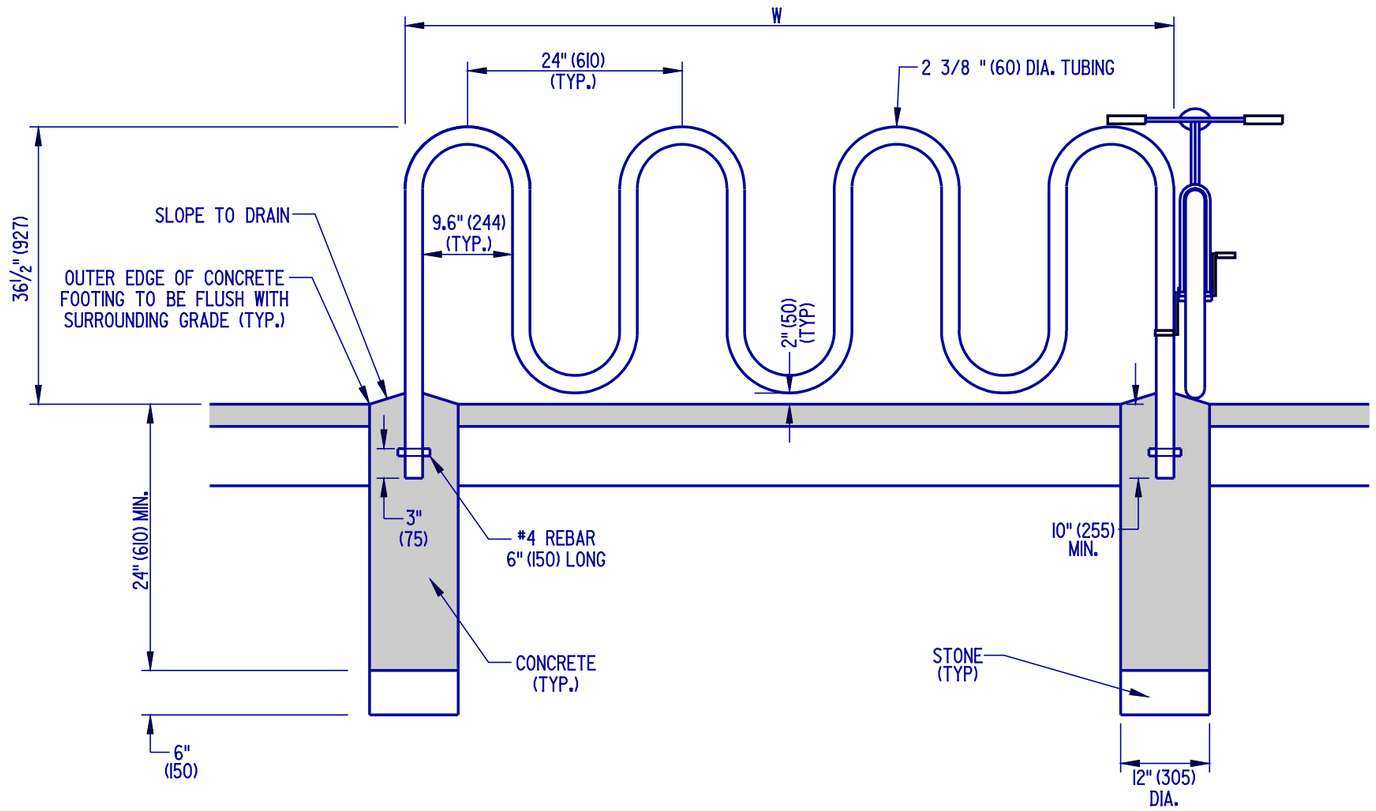


7 BIKES
W = 63" (1600)

9 BIKES
W = 87" (2210)



11 BIKES
W = 111" (2819)



BICYCLE RACK
N.T.S.

DELAWARE
DEPARTMENT OF TRANSPORTATION

BIKE RACK DETAILS

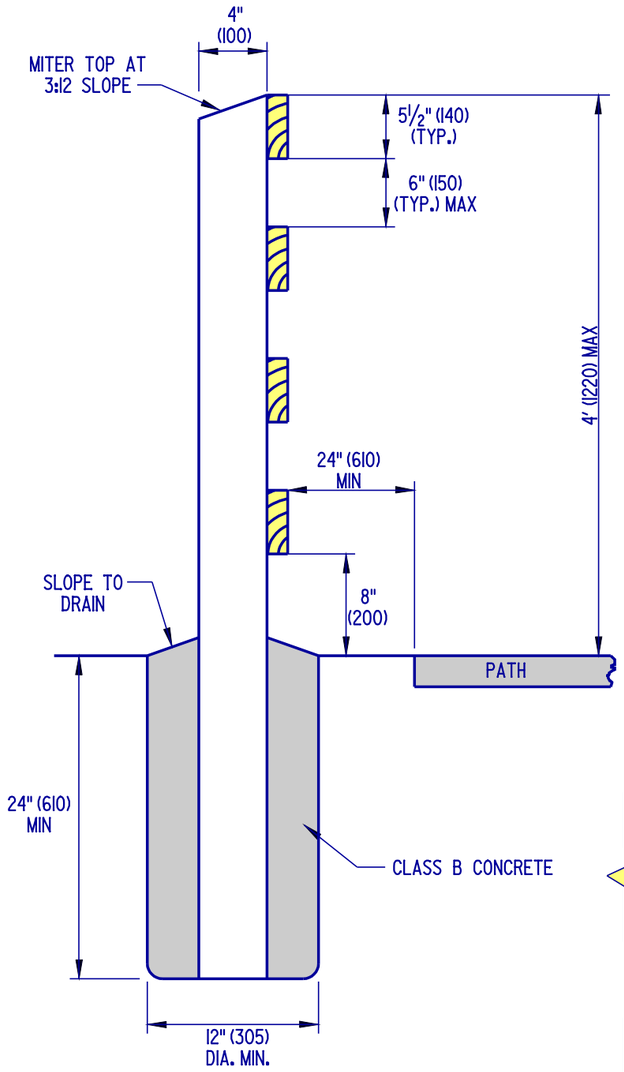
STANDARD NO. M-4 (2004) | SHT. 1 OF 1

APPROVED Carolann Wicks CHIEF ENGINEER 1/10/05 DATE

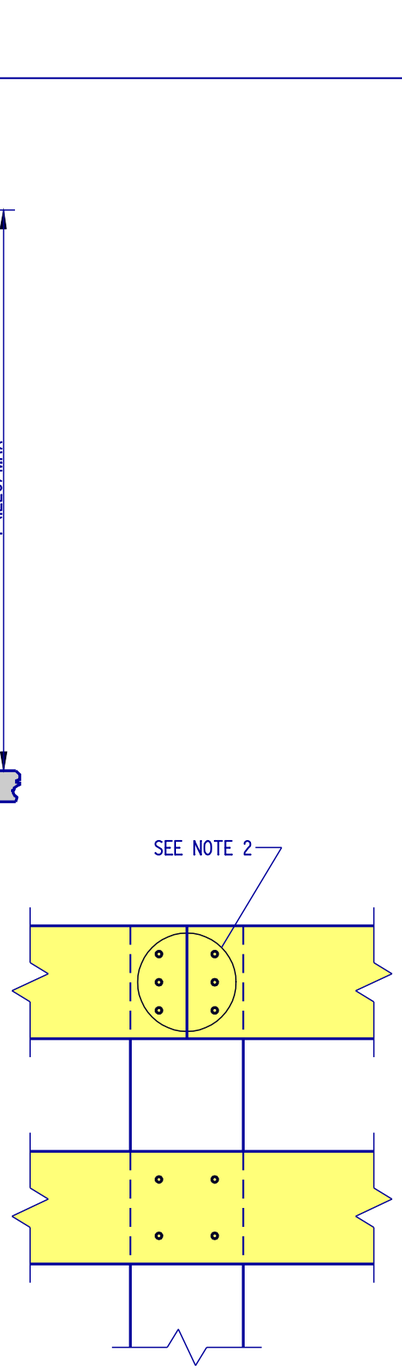
RECOMMENDED Dennis M. Office DESIGN ENGINEER 1/3/05 DATE

09/27/2004

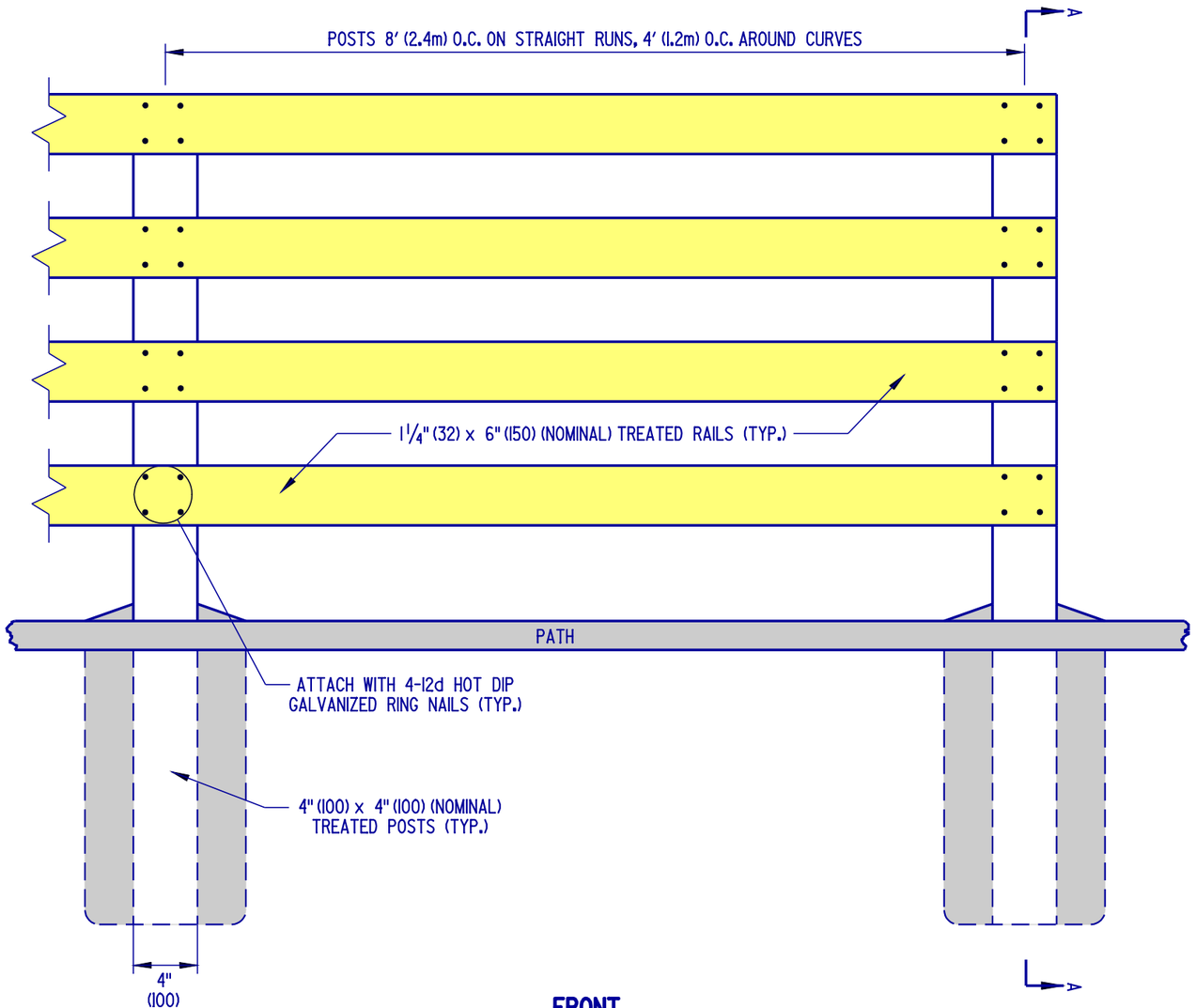
SCALE : N.T.S.



SECTION A-A



TYPICAL JOINT DETAIL



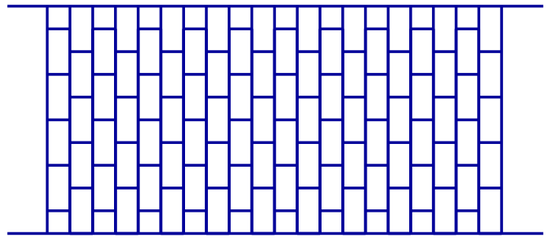
FRONT

NOTES:
1. ALL RAIL JOINTS SHALL BE CENTERED AT THE POSTS.
2. ALL JOINTS SHALL BE ATTACHED WITH 3 - 12d NAILS AND TWO ADJACENT RAILS SHALL NOT END ON THE SAME POST.
3. RAILS SHALL BE FLUSH TO THE POSTS AT THE END POSTS.

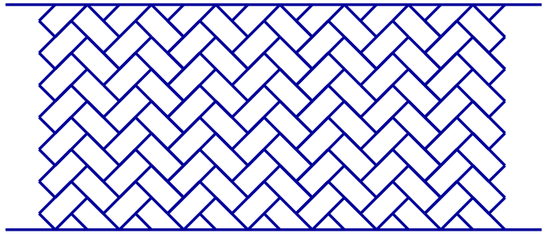
DELAWARE DEPARTMENT OF TRANSPORTATION	WOOD RAIL FENCE DETAILS		APPROVED Carolann Wicks CHIEF ENGINEER 1/10/05 DATE
	STANDARD NO. M-5 (2004)	SHT. 1 OF 1	RECOMMENDED Dennis M. O'Toole DESIGN ENGINEER 1/3/05 DATE

09/27/2004

SCALE : N.T.S.



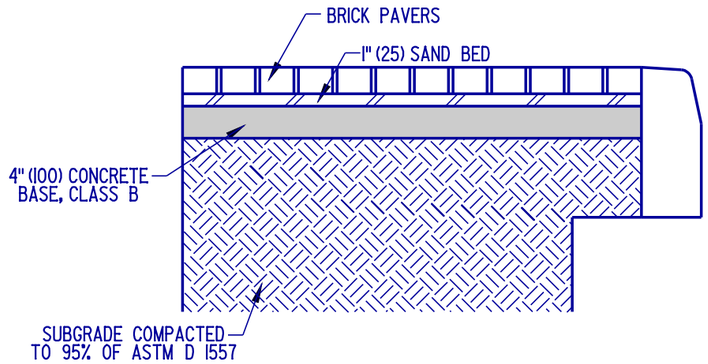
4" (100) x 8" (200) RUNNING BOND PATTERN



4" (100) x 8" (200) HERRINGBONE PATTERN

NOTES:

1. ACTUAL PATTERN TO BE USED SHALL BE SPECIFIED ON THE PLANS. COLOR IS TO BE "BRICK RED" UNLESS OTHERWISE NOTED ON THE PLANS.
2. MATERIALS AND PAVEMENT BOX VARY DEPENDING ON PLANS.
3. FOR CROSSWALK APPLICATIONS, 8" (200) WHITE LINES SHOULD BE PLACED ON BOTH SIDES.
4. THE PATTERNS ABOVE ARE THE PREFERRED PATTERNS AVAILABLE FOR SIDEWALK OR CROSSWALK APPLCATIONS.



BRICK PAVER SIDEWALK DETAIL

NOTES:

1. ALL PAVERS ARE TO BE "BRICK RED" UNLESS OTHERWISE SPECIFIED ON THE PLANS. THE PATTERN SHALL BE SPECIFIED ON THE PLANS.
2. EXPANSION JOINT MAY BE NEEDED ON NON-CURB SIDE OF BRICK PAVER SIDEWALK IF THAT SIDE IS AGAINST BUILDING OR OTHER CONFINING FEATURE.

DELAWARE
DEPARTMENT OF TRANSPORTATION

PATTERNED HOT-MIX OR CONCRETE & BRICK PAVER DETAILS

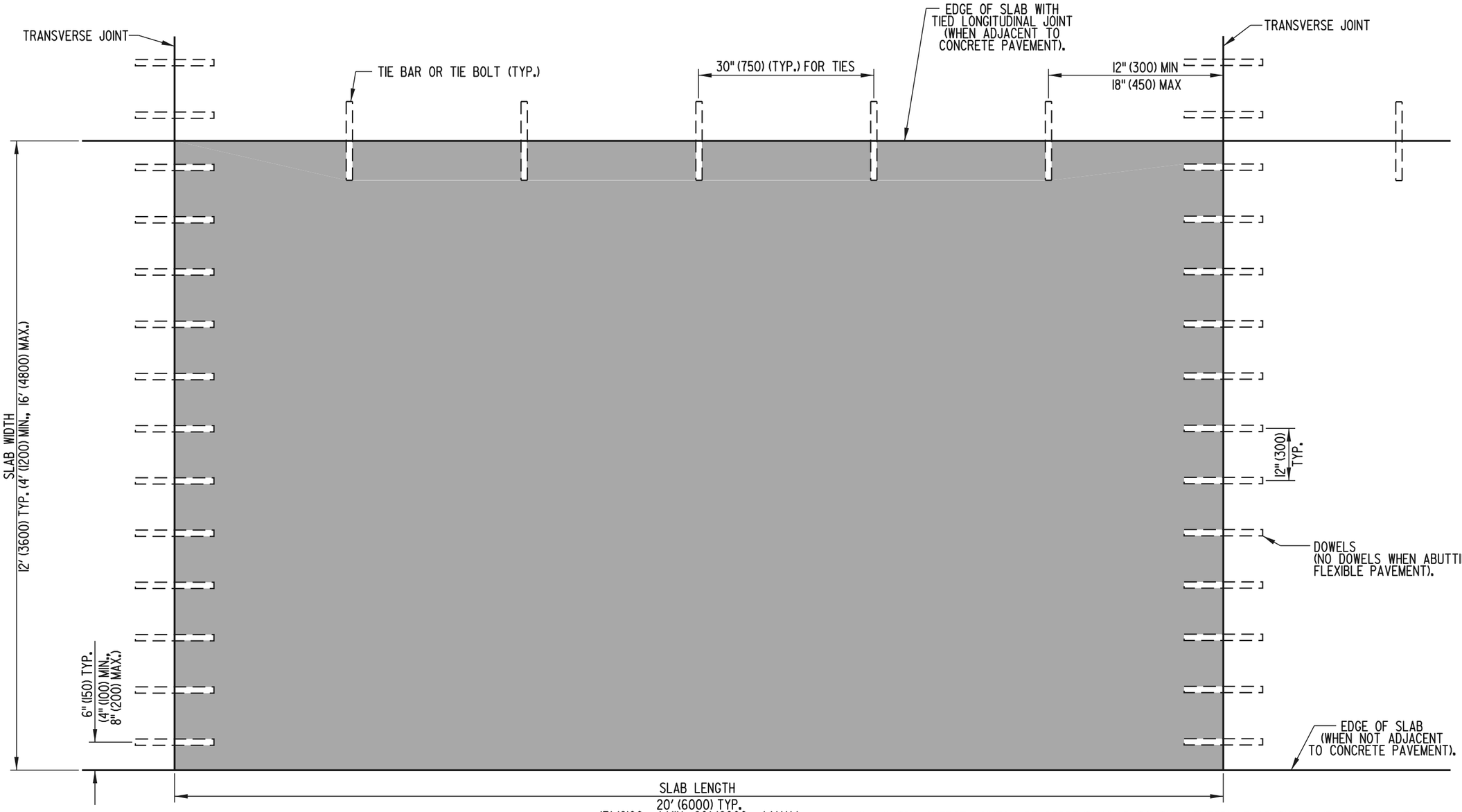
STANDARD NO. M-6 (2004) | SHT. 1 OF 1

APPROVED Carolann Wicks CHIEF ENGINEER 1/10/05 DATE

RECOMMENDED Dennis M. Office DESIGN ENGINEER 1/3/05 DATE

09/24/2004

SCALE : N.T.S.



NOTES:

1). TRANSVERSE JOINTS ARE PERPENDICULAR TO THE CENTERLINE OF THE PAVEMENT WHEN THE PAVEMENT IS STRAIGHT.

2). TRANSVERSE JOINTS ARE PERPENDICULAR TO A TANGENT LINE TO THE OUTSIDE ARC OF THE PAVEMENT WHEN THE PAVEMENT IS CURVED.

3). ALIGN THE TRANSVERSE JOINTS FOR ALL ADJACENT SLABS WITH EACH OTHER.

4). ABRUPT CHANGES IN PAVEMENT WIDTH MAY OCCUR ONLY AT THE TRANSVERSE JOINT LINE; LONGITUDINAL JOINTS SHALL BE CONTINUOUS WHENEVER POSSIBLE.

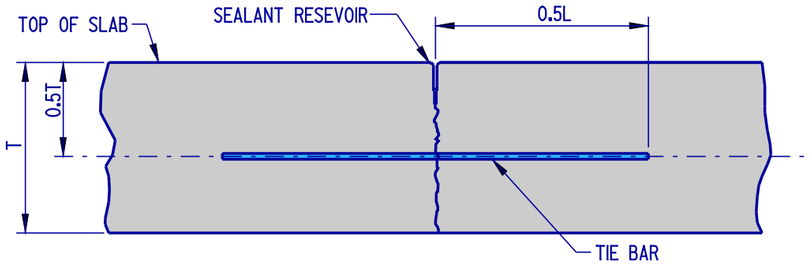
5). LONGITUDINAL JOINTS SHOULD NOT BE LOCATED WITHIN PROPOSED WHEEL PATHS. THE WHEEL PATH IS GENERALLY LOCATED 2' (600) INSIDE OF THE LANE EDGELINE OR CENTERLINE.

SLAB PLAN (WITH DOWEL AND TIE LOCATIONS)

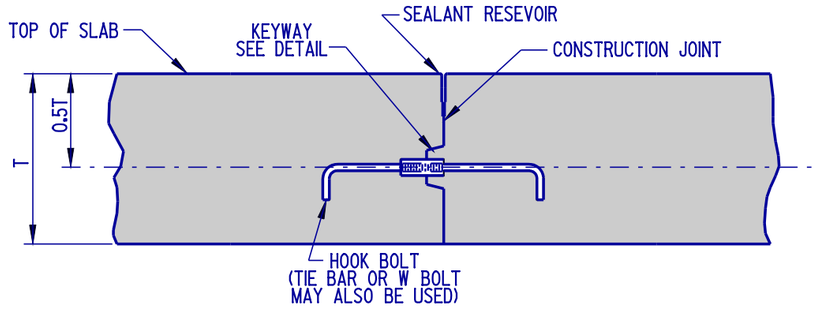
DELAWARE DEPARTMENT OF TRANSPORTATION	P.C.C. PAVEMENT		APPROVED Lynne M. Hartnett CHIEF ENGINEER 6/18/01 DATE
	STANDARD NO. P-1 (2001)	SHT. 1 OF 5	RECOMMENDED DESIGN ENGINEER 6/15/01 DATE

04/18/2001

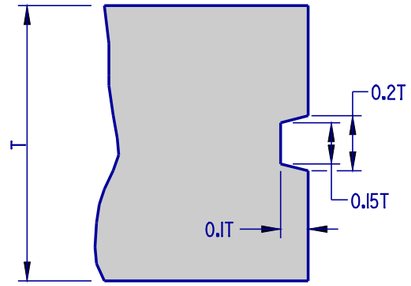
SCALE : N.T.S.



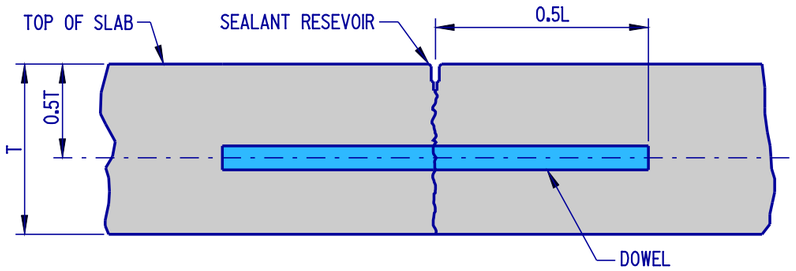
LONGITUDINAL SAW-CUT JOINT DETAIL



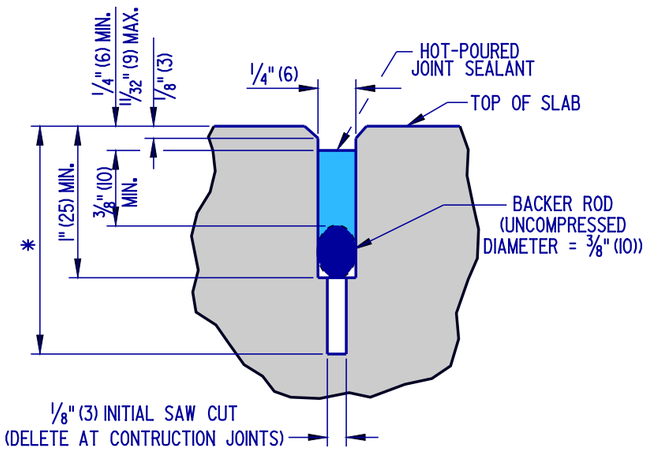
LONGITUDINAL CONSTRUCTION JOINT DETAIL



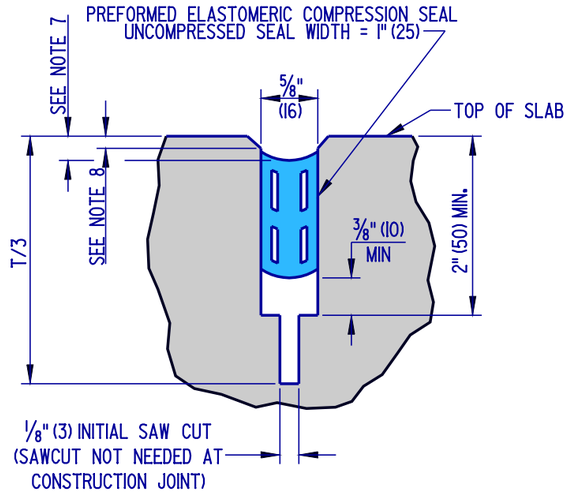
KEYWAY DETAIL



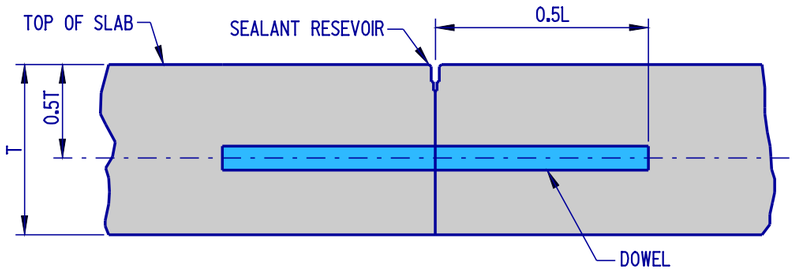
TRANSVERSE SAW-CUT JOINT DETAIL



SEALANT DETAIL- LONGITUDINAL JOINT



SEALANT DETAIL- TRANSVERSE JOINT



TRANSVERSE CONSTRUCTION JOINT DETAIL

* - 0.3T (10" (250) P.C.C. PAVEMENT)
0.4T (12" (300) P.C.C. PAVEMENT)

NOTES:

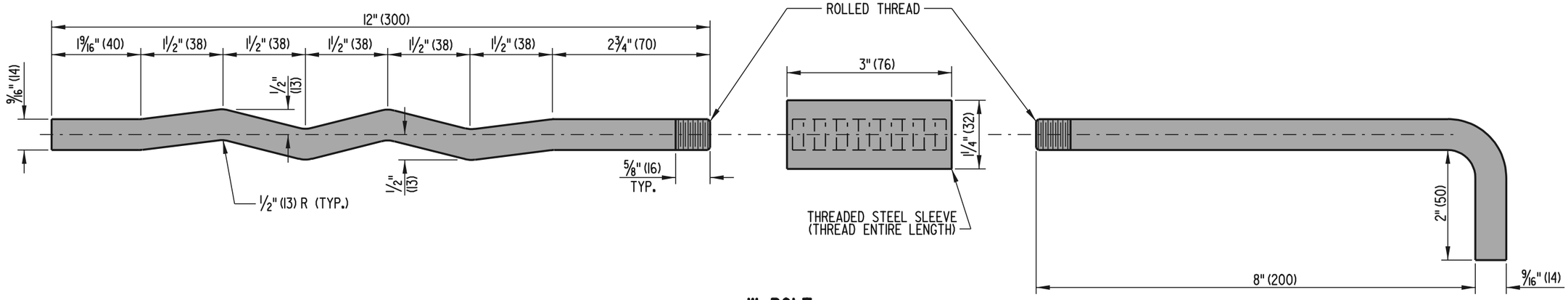
1). AS DIMENSIONED, THE WIDTH OF THE TRANSVERSE SEALANT RESERVOIR IS APPLICABLE WHEN THE TEMPERATURE OF THE PAVEMENT SURFACE IS BETWEEN 60°F (16°C) AND 80°F (27°C). WHEN THE TEMPERATURE IS BELOW 60°F (16°C), THE SEALANT RESERVOIR SHALL BE CUT 1/16" (2) WIDER. WHEN THE TEMPERATURE IS ABOVE 80°F (27°C), THE SEALANT RESERVOIR SHALL BE CUT 1/16" (2) NARROWER.
2). "T" REFERS TO THE ACTUAL CONSTRUCTED SLAB THICKNESS.
3). TOLERANCE ON ALL JOINT SEALANT DETAIL DIMENSIONS SHOWN WITHOUT RANGES SHALL BE PLUS 1/16" (2), MINUS 0" (0).
4). THE TOP EDGES OF THE CONTACT SURFACES OF THE SEALANT MATERIAL ON BOTH SIDES OF THE JOINT RESERVOIR SHALL BE AT THE SAME ELEVATION.
5). TRANSVERSE JOINT MATERIAL SHALL BE PLACED BEFORE LONGITUDINAL JOINT MATERIAL; THE TRANSVERSE JOINT MATERIAL SHALL BE CONTINUOUS FOR THE FULL WIDTH OF ALL ADJACENT P.C.C. PAVEMENT SLABS.
6). LONGITUDINAL JOINT MATERIAL SHALL BE PLACED WITHOUT GAPS WHENEVER INTERRUPTED BY THE TRANSVERSE JOINT MATERIAL.
7). TRANSVERSE JOINT SEAL TO BE RECESSED 3/16" (5) TO 5/16" (8) BELOW THE TOP OF THE SLAB.
8). A 45° CHAMFER SHALL BE CUT 1/8" (3) TO 1/4" (6) DEEP AT THE TOP OF THE SLAB ALONG BOTH SIDES OF THE TRANSVERSE SEALANT RESERVOIR.
9). THE TOP EDGES OF THE COMPRESSION SEAL SHALL BE IN FULL CONTACT WITH THE SLAB SIDES.

JOINT AND SEALANT DETAILS

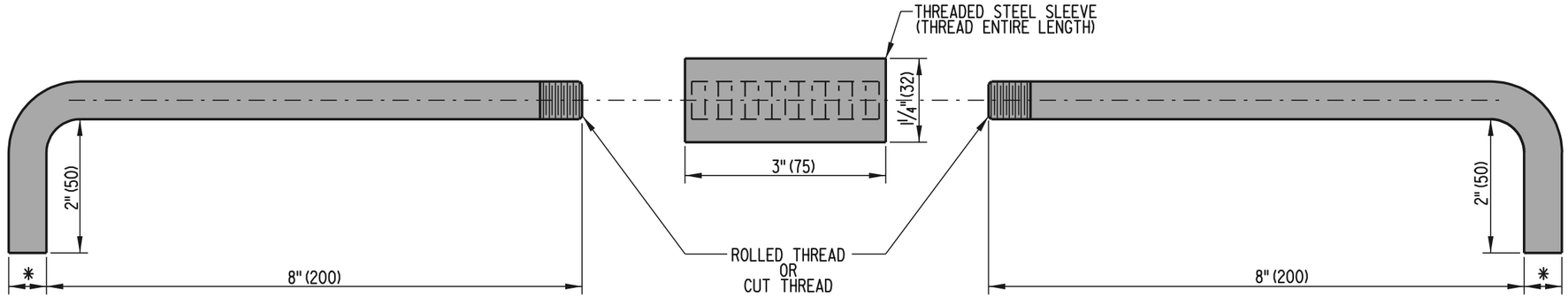
DELAWARE DEPARTMENT OF TRANSPORTATION	P.C.C. PAVEMENT	APPROVED Carolann Wicks CHIEF ENGINEER 1/10/05 DATE
	STANDARD NO. P-1 (2004) SHT. 2 OF 5	RECOMMENDED Dennis M. Office DESIGN ENGINEER 1/3/05 DATE

10/01/2004

SCALE : N.T.S.

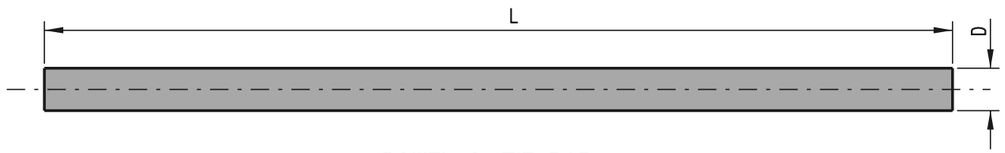


W BOLT



HOOK BOLT

* -11/16" (17) ROLLED THREADS
  3/4" (19) CUT THREADS



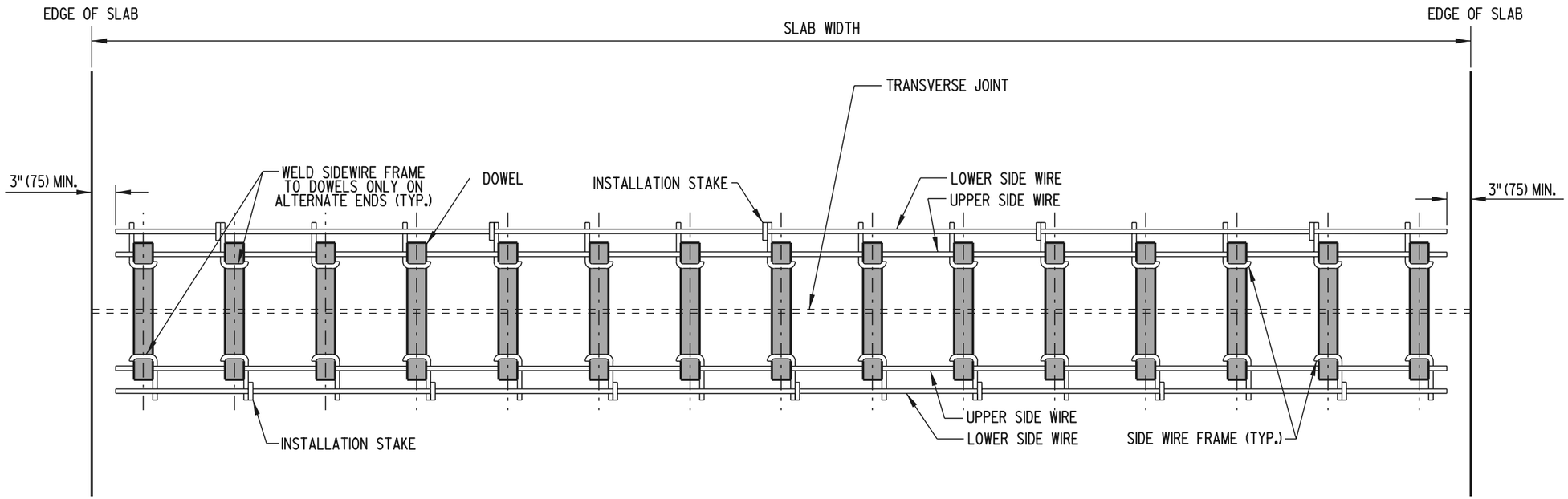
DOWEL & TIE BAR

DOWEL & TIE BAR CHART				
SLAB THICKNESS	DOWEL		TIE BAR	
	D	L	D	L
10" (250)	1 1/4" (32)	18" (450)	5/8" (16)	30" (750)
12" (300)	1 1/2" (38)	20" (500)	5/8" (16)	30" (750)

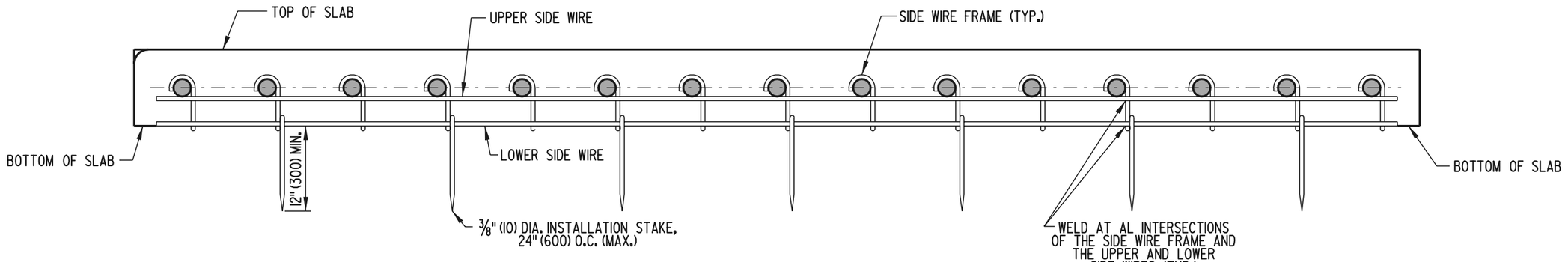
DELAWARE DEPARTMENT OF TRANSPORTATION	P.C.C. PAVEMENT		APPROVED Lynne M. Harbeson CHIEF ENGINEER 6/18/01 DATE
	STANDARD NO. P-1 (2001)	SHT. 3 OF 5	RECOMMENDED Michael A. Ayers DESIGN ENGINEER 6/15/01 DATE

05/22/2001

SCALE : N.T.S.



PLAN



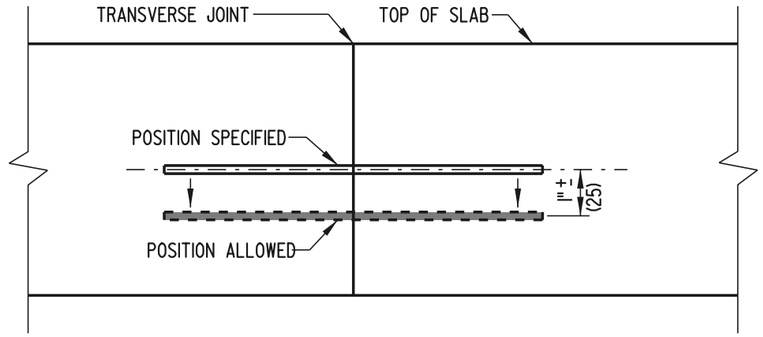
ELEVATION

DOWEL SUPPORT BASKET

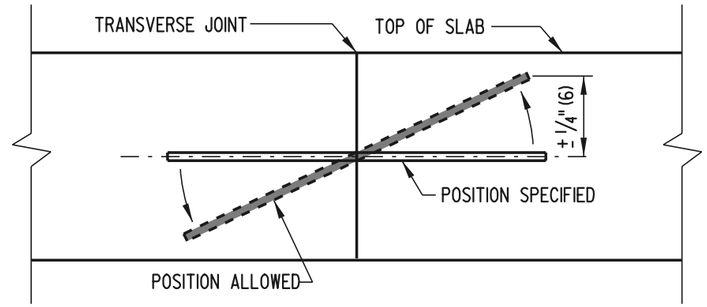
DELAWARE DEPARTMENT OF TRANSPORTATION	P.C.C. PAVEMENT		APPROVED Lynne M. Hastings CHIEF ENGINEER 6/18/01 DATE
	STANDARD NO. P-1 (2001)	SHT. 4 OF 5	RECOMMENDED [signature] DESIGN ENGINEER 6/15/01 DATE

04/18/2001

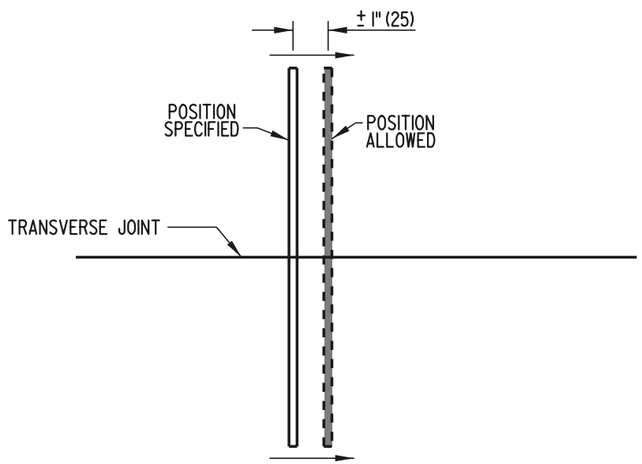
SCALE : N.T.S.



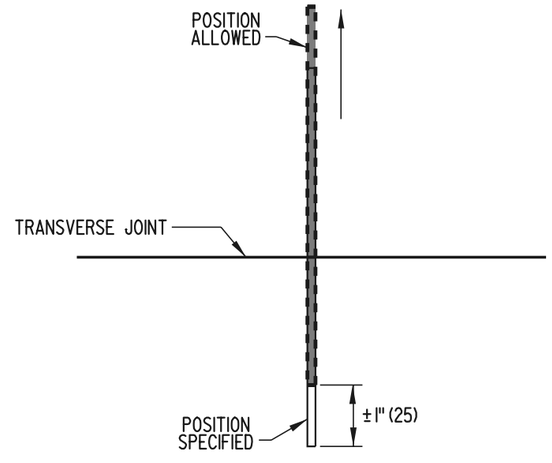
VERTICAL TRANSLATION



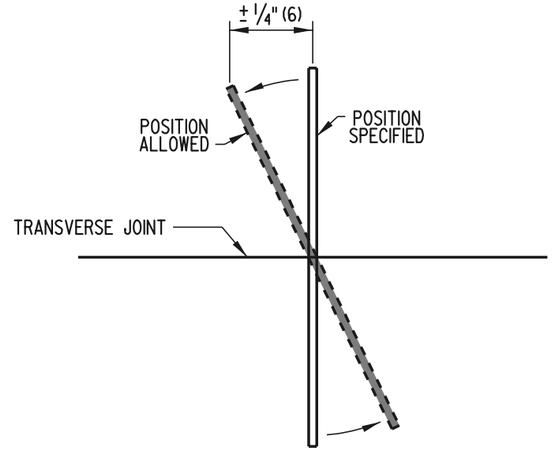
VERTICAL ROTATION



HORIZONTAL TRANSLATION



LONGITUDINAL TRANSLATION



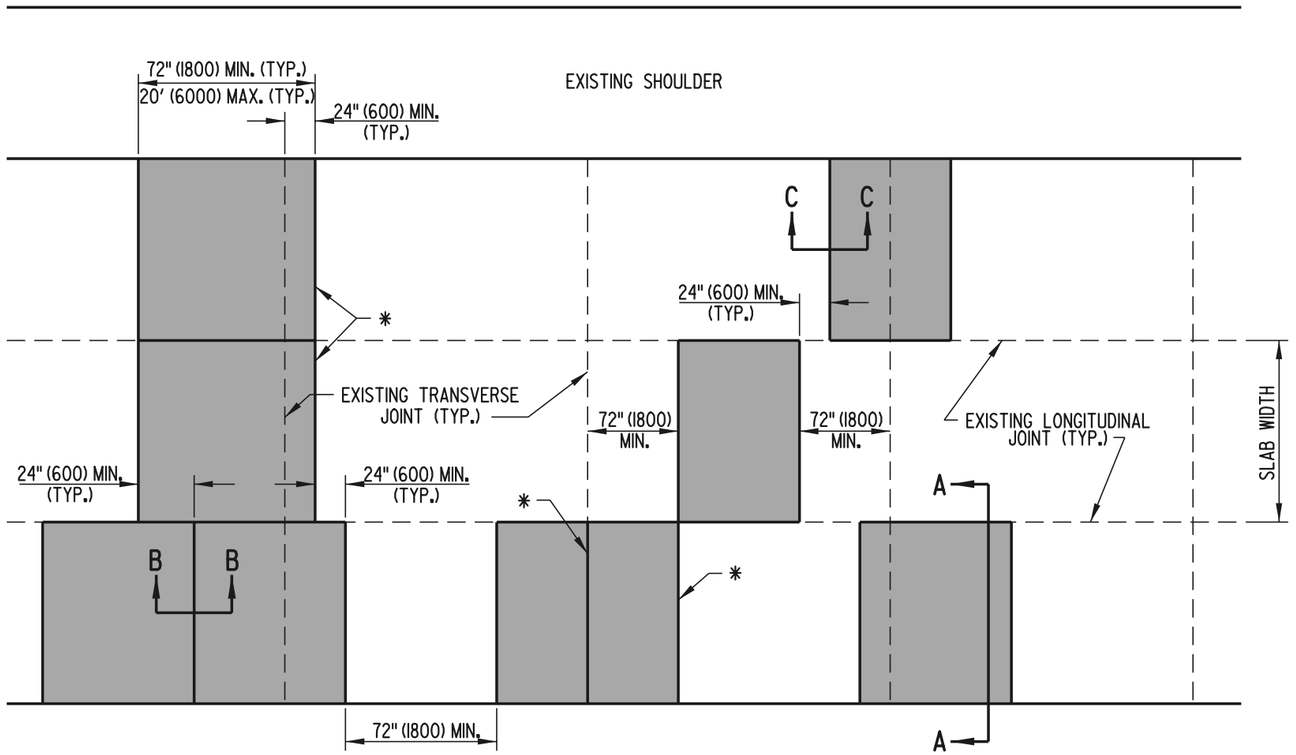
HORIZONTAL ROTATION

DOWEL & TIE BAR PLACEMENT TOLERANCES

DELAWARE DEPARTMENT OF TRANSPORTATION	P.C.C. PAVEMENT			APPROVED Lynne M. Hartnett CHIEF ENGINEER DATE 6/18/01
	STANDARD NO. P-1 (2001)	SHT. 5	OF 5	RECOMMENDED [signature] DESIGN ENGINEER DATE 6/15/01

04/18/2001

SCALE : N.T.S.



PLAN

*- PROPOSED LOCATIONS FOR TRANSVERSE JOINTS SHALL EXACTLY MATCH THE ALIGNMENT OF THE FINAL (EXISTING OR RELOCATED) TRANSVERSE JOINTS IN ALL IMMEDIATELY ADJACENT LANES.

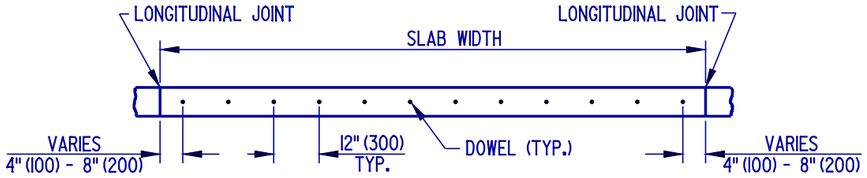
NOTES: 1). WHEN REPAIRING EXISTING TRANSVERSE JOINTS, THE PATCH SHALL EXTEND A MINIMUM OF 24" (600) THROUGH THE EXISTING JOINT, WHICH WILL RELOCATE THE JOINT.
2). PROPOSED LOCATIONS FOR TRANSVERSE JOINTS, WHEN NOT ALIGNED WITH THE FINAL EXPECTED TRANSVERSE JOINT LOCATIONS IN THE IMMEDIATELY ADJACENT LANES, SHALL BE OFFSET A MINIMUM OF 24" (600) FROM THE AFOREMENTIONED JOINTS.
3). THE LONGITUDINAL JOINT ALIGNMENT SHALL BE STRAIGHT AND CONTINUOUS THROUGH THE REPAIRED AREA.

FULL DEPTH PATCH

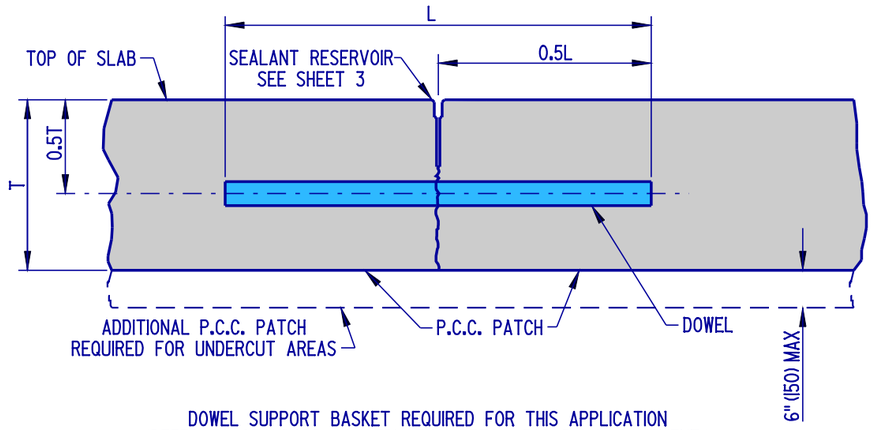
DELAWARE DEPARTMENT OF TRANSPORTATION	P.C.C. PAVEMENT PATCHING	APPROVED Lynne M. Hartnett CHIEF ENGINEER DATE 6/18/01
	STANDARD NO. P-2 (2001) SHT. 1 OF 5	RECOMMENDED Herbert A. Rigby DESIGN ENGINEER DATE 6/15/01

04/18/2001

SCALE : N.T.S.



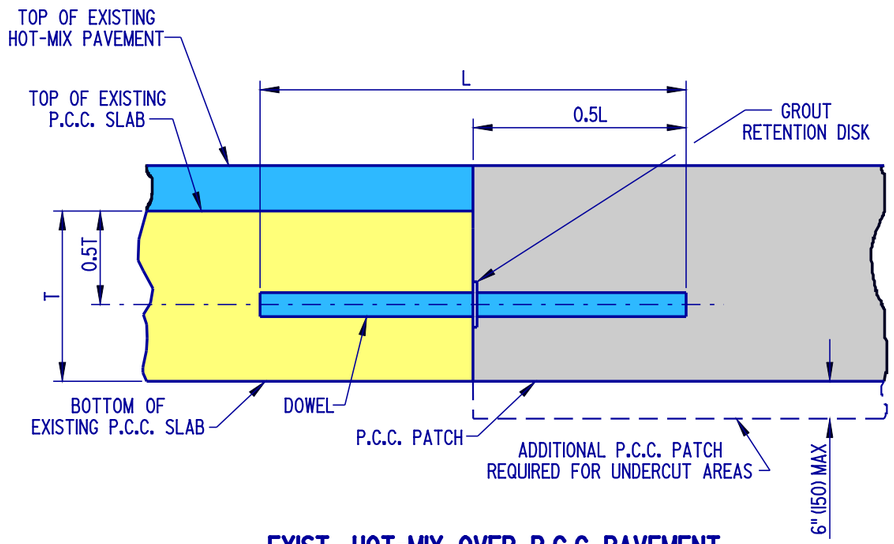
SECTION A-A



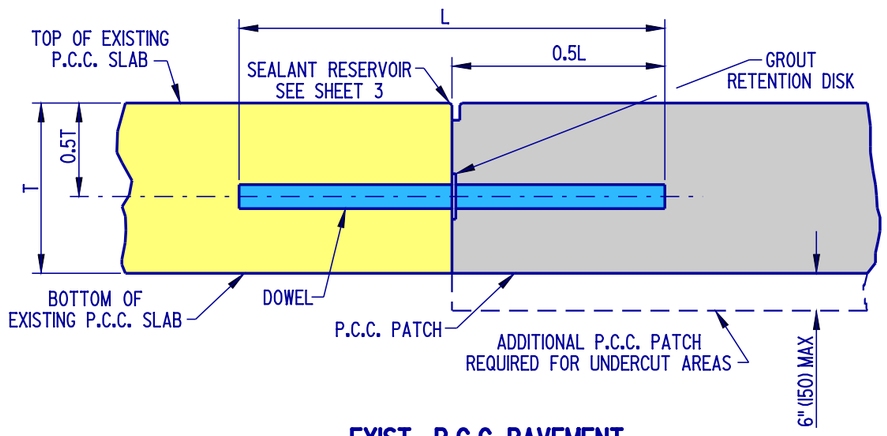
DOWEL SUPPORT BASKET REQUIRED FOR THIS APPLICATION
(REFER TO STANDARD CONSTRUCTION DETAIL FOR P.C.C. PAVEMENT.)

SECTION B-B

TRANSVERSE SAW-CUT USED FOR
JOINTS LOCATED WITHIN THE PATCH



EXIST. HOT-MIX OVER P.C.C. PAVEMENT



EXIST. P.C.C. PAVEMENT

SECTION C-C

TRANSVERSE CONSTRUCTION JOINT USED ON
JOINTS BETWEEN EXISTING PAVEMENT AND PATCH

FULL DEPTH PATCH

DELAWARE
DEPARTMENT OF TRANSPORTATION

P.C.C. PAVEMENT PATCHING

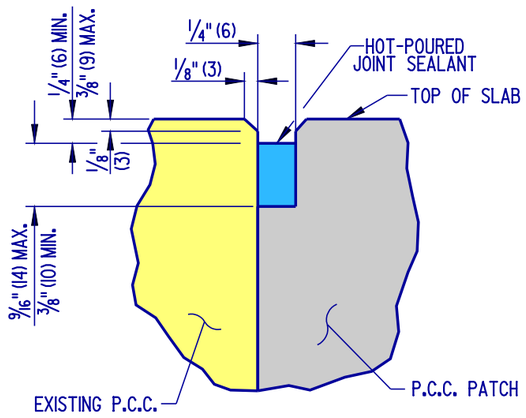
STANDARD NO. P-2 (2004) | SHT. 2 OF 5

APPROVED Carolann Wicks CHIEF ENGINEER 1/10/05 DATE

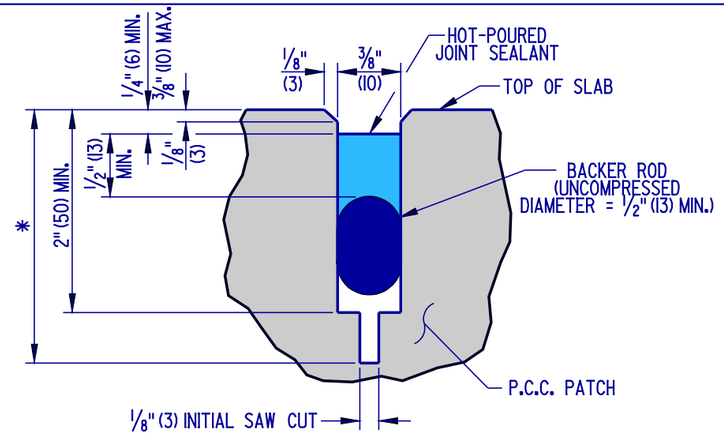
RECOMMENDED Dennis M. O'Toole DESIGN ENGINEER 1/3/05 DATE

08/25/2004

SCALE : N.T.S.

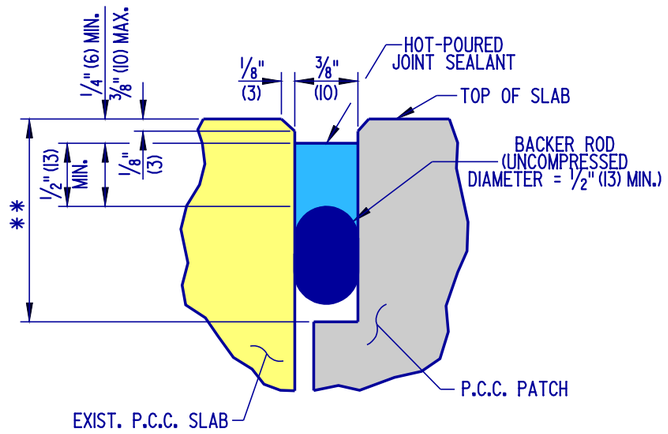


SEALANT DETAIL- LONGITUDINAL JOINT



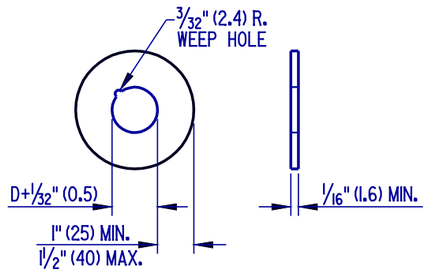
* - 0.3T (T ≤ 10" (250) P.C.C. PAVEMENT)
0.4T (T > 10" (250) P.C.C. PAVEMENT)

SEALANT DETAIL- TRANSVERSE SAW-CUT JOINT



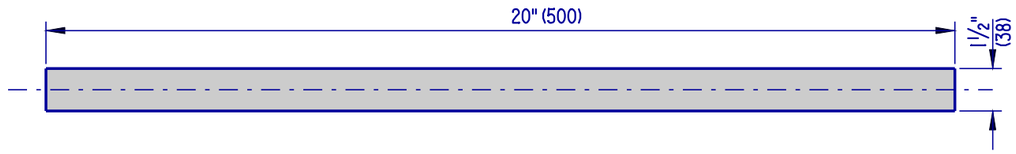
** - 2" (50) MIN. WITH BACKER ROD
5/8" (16) MIN. WITH BOND BREAKER TAPE

SEALANT DETAIL- TRANSVERSE CONSTRUCTION JOINT



D - DOWEL DIAMETER (INCLUDING PROTECTING COATINGS, IF ANY.)

GROUT RETENTION DISK



DOWEL BAR

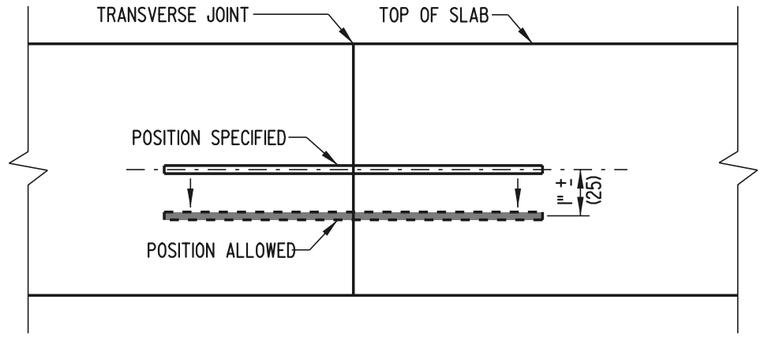
NOTES:
1). AS DIMENSIONED, THE WIDTH OF THE TRANSVERSE SEALANT RESERVOIR IS APPLICABLE WHEN THE TEMPERATURE OF THE PAVEMENT SURFACE IS BETWEEN 60°F (16°C) AND 80°F (27°C). WHEN THE TEMPERATURE IS BELOW 60°F (16°C), THE SEALANT RESERVOIR SHALL BE CUT 1/16" (2) WIDER. WHEN THE TEMPERATURE IS ABOVE 80°F (27°C), THE SEALANT RESERVOIR SHALL BE CUT 1/16" (2) NARROWER.
2). "T" REFERS TO THE EXISTING "AS-BUILT" SLAB THICKNESS.
3). TOLERANCE ON ALL JOINT SEALANT DETAIL DIMENSIONS SHOWN WITHOUT RANGES SHALL BE PLUSS1/16" (2), MINUS 0" (0).
4). THE TOP EDGES OF THE CONTACT SURFACES OF THE SEALANT MATERIAL ON BOTH SIDES OF THE JOINT RESERVOIR SHALL BE AT THE SAME ELEVATION.

FULL DEPTH PATCH

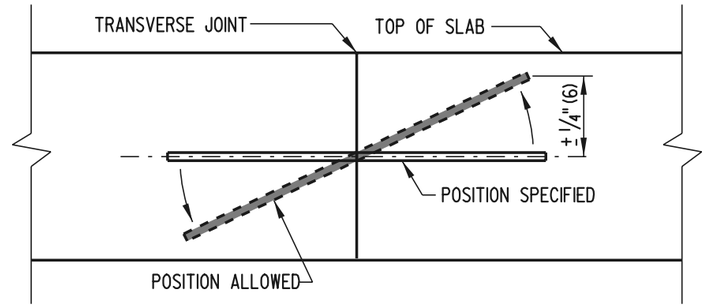
DELAWARE DEPARTMENT OF TRANSPORTATION	P.C.C. PAVEMENT PATCHING		APPROVED Carolann Wicks CHIEF ENGINEER 1/10/05 DATE
	STANDARD NO. P-2 (2004)	SHT. 3 OF 5	RECOMMENDED Dennis M. Office DESIGN ENGINEER 1/3/05 DATE

10/01/2004

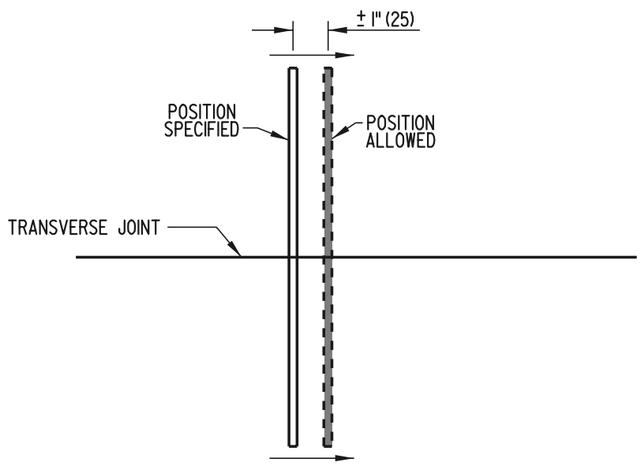
SCALE : N.T.S.



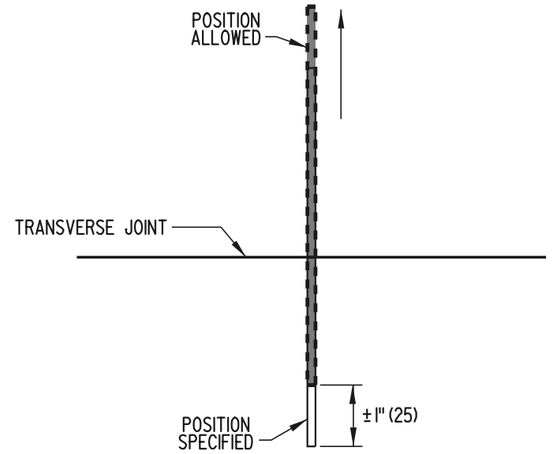
VERTICAL TRANSLATION



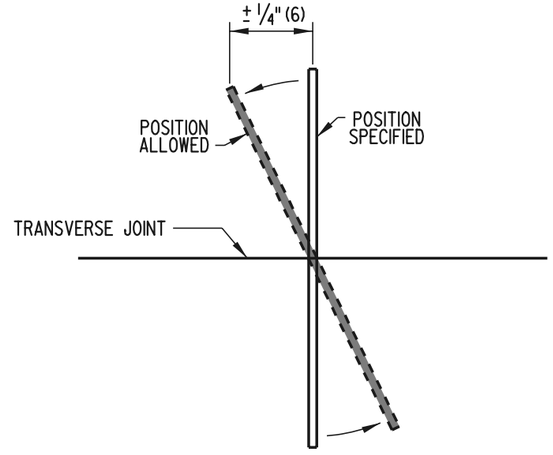
VERTICAL ROTATION



HORIZONTAL TRANSLATION



LONGITUDINAL TRANSLATION



HORIZONTAL ROTATION

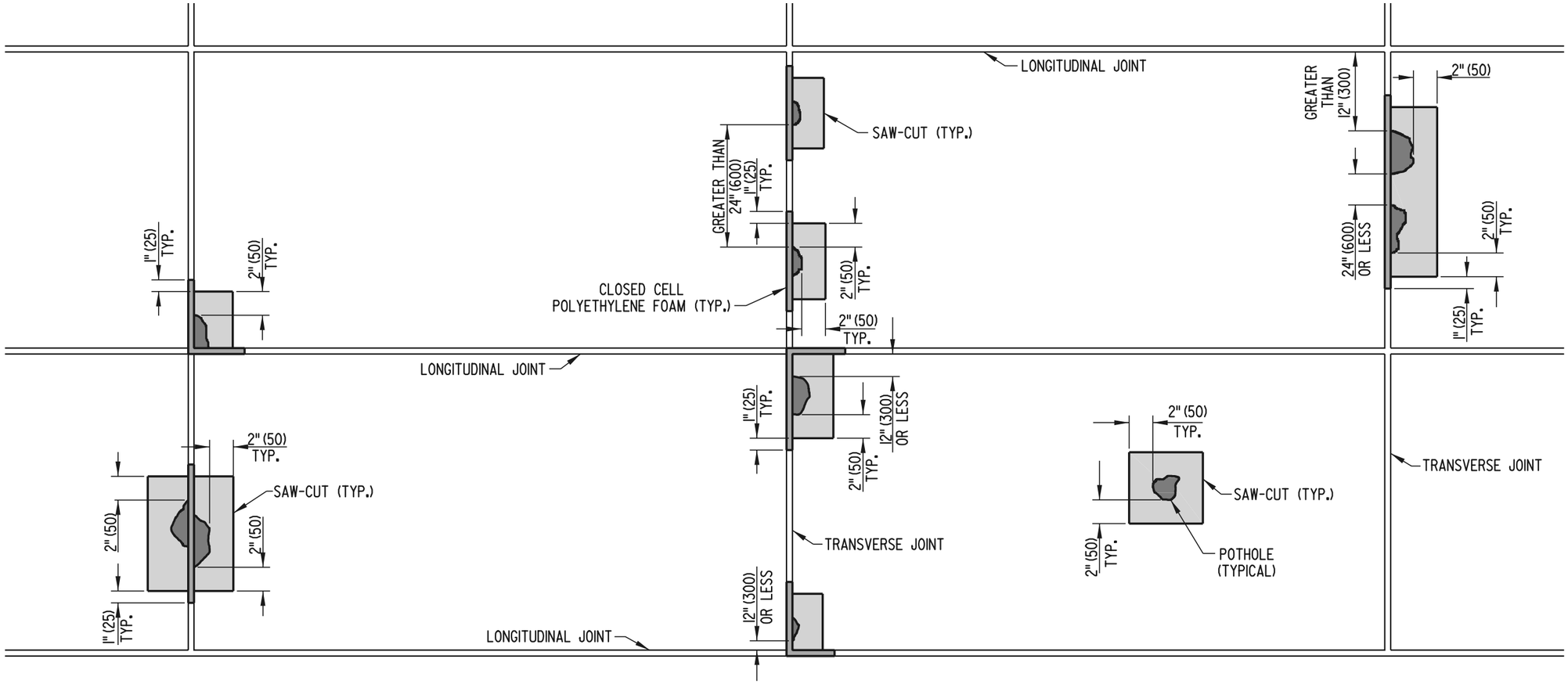
DOWEL & TIE BAR PLACEMENT TOLERANCES

FULL DEPTH PATCH

DELAWARE DEPARTMENT OF TRANSPORTATION	P.C.C. PAVEMENT PATCHING		APPROVED _____ CHIEF ENGINEER DATE 6/18/01
	STANDARD NO. P-2 (2001)	SHT. 4 OF 5	RECOMMENDED _____ DESIGN ENGINEER DATE 6/15/01

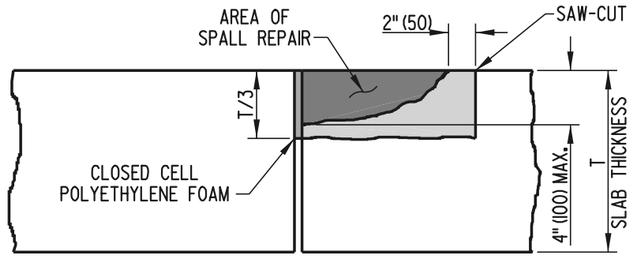
04/18/2001

SCALE : N.T.S.

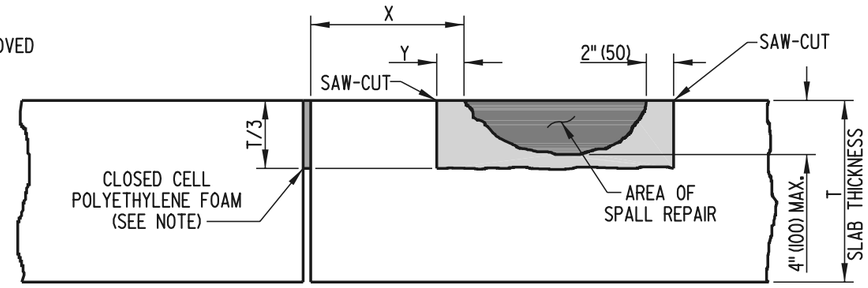


PLAN

NOTE: CLOSED CELL POLYETHYLENE FOAM SHALL BE THE SAME WIDTH AS THE JOINT AND 5" (125) IN DEPTH. AFTER THE CONCRETE IN THE REPAIR AREA HAS ACHIEVED THE SPECIFIED STRENGTH, THE FOAM SHALL BE REMOVED AND REPLACED WITH BACKER ROD AND HOT-POUR SEALANT MEETING ALL APPLICABLE STANDARD DETAILS AND SPECIFICATIONS.



SECTION WITH SPALL ADJACENT TO JOINT



SECTION WITH SPALL NOT ADJACENT TO JOINT

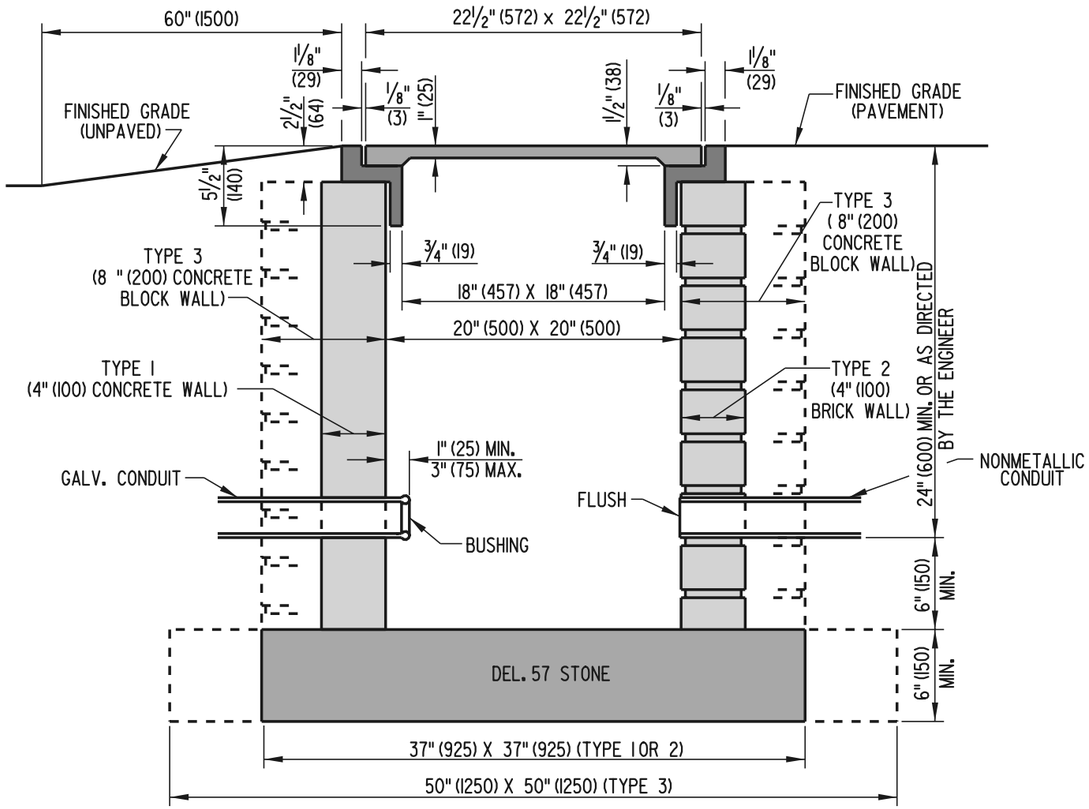
NOTE: WHEN X > 12" (300), THEN Y=1" (25) AND POLYETHYLENE FOAM IS NOT USED.
WHEN X ≤ 12" (300), THEN Y=X AND POLYETHYLENE FOAM IS USED.

PARTIAL DEPTH PATCH

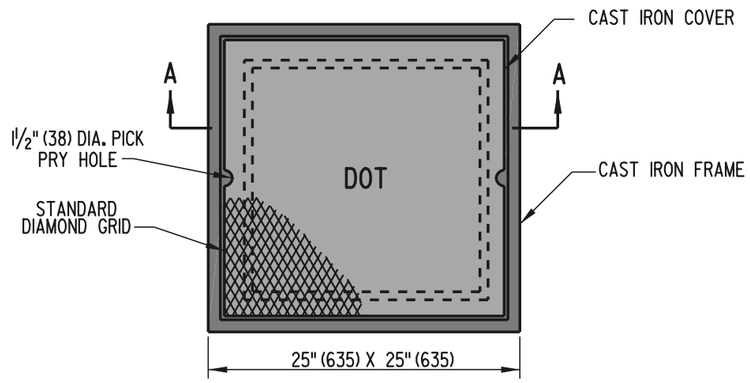
DELAWARE DEPARTMENT OF TRANSPORTATION	P.C.C. PAVEMENT PATCHING		APPROVED Lynne M. Hartnett CHIEF ENGINEER DATE 6/18/01
	STANDARD NO. P-2 (2001)	SHT. 5 OF 5	RECOMMENDED Michael A. Pepe DESIGN ENGINEER DATE 6/15/01

05/22/2001

SCALE : N.T.S.



SECTION A-A



PLAN VIEW

NOTES: 1). TYPE 1 CONDUIT JUNCTION WELL SHALL BE PRECAST CONCRETE. AT LEAST ONE HOLE IN PRECAST WELLS WILL BE OF A 5" (125) DIAMETER COMPLETELY THROUGH THE WALL. UNUSED HOLES SHALL BE PLUGGED.

2). TYPE 2 AND TYPE 3 CONDUIT JUNCTION WELLS SHALL BE BRICK AND WILL CONFORM TO STANDARD SPECIFICATIONS FOR BRICK MASONRY. JOINTS SHALL BE CONCAVE TYPE. TYPE 2 WALLS WILL BE A NOMINAL 4" (100) THICK. TYPE 3 WALL WILL BE A NOMINAL 8" (200) THICK.

3). TYPE 2 AND TYPE 3 CONDUIT JUNCTION WELLS SHALL NOT BE PLACED UNDER ANY TYPE OF PAVEMENT.

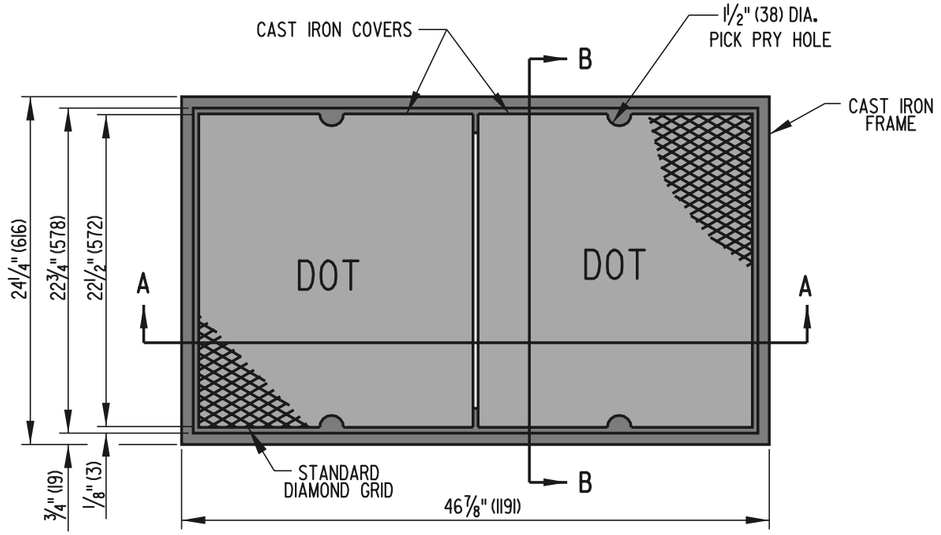
4). ALL CONDUIT JUNCTION WELLS CONSTRUCTED WITHIN PAVEMENT, SIDEWALKS, ETC. WILL BE CONSTRUCTED FLUSH WITH THE SURFACE OF THE SAME. INSTALLATION IN UNPAVED AREAS WILL BE CONSTRUCTED ABOVE GRADE AND GRADED TO DRAIN AWAY FROM CONDUIT JUNCTION WELL.

PLAN SYMBOL

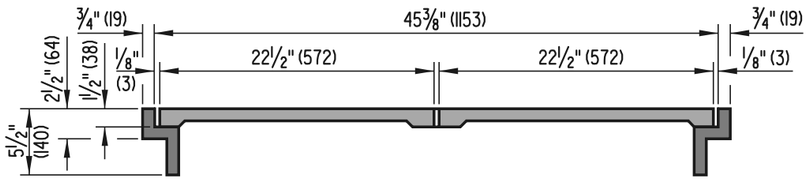
DELAWARE DEPARTMENT OF TRANSPORTATION	CONDUIT JUNCTION WELL, TYPES 1, 2, AND 3		APPROVED Carolann Wicks CHIEF ENGINEER 9/6/02 DATE
	STANDARD NO. T-1 (2002)	SHT. 1 OF 1	RECOMMENDED DESIGN ENGINEER 8/19/02 DATE

08/19/2002

SCALE : N.T.S.



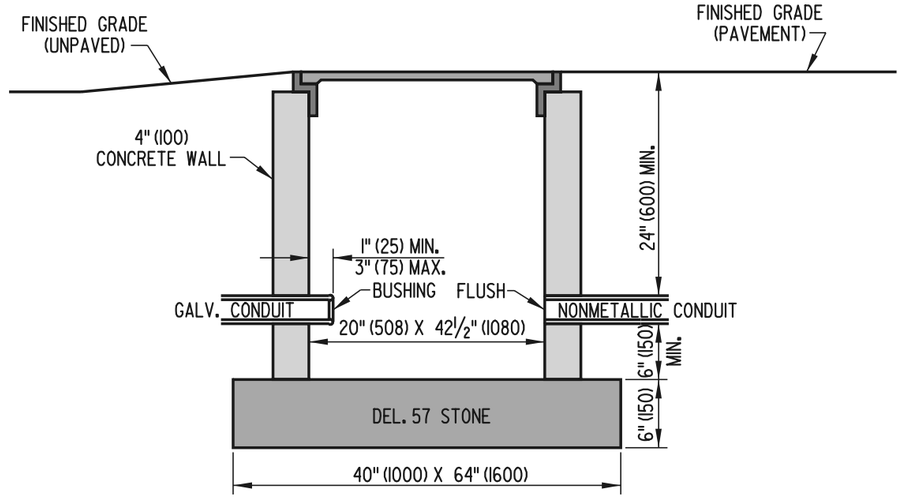
PLAN VIEW



SECTION A-A

NOTES: 1). TYPE 4 CONDUIT JUNCTION WELL SHALL BE PRECAST CONCRETE. AT LEAST ONE HOLE IN PRECAST WELLS WILL BE OF A 5" (125) DIAMETER COMPLETELY THROUGH THE WALL. UNUSED HOLES SHALL BE PLUGGED.

2). ALL CONDUIT JUNCTION WELLS CONSTRUCTED WITHIN PAVEMENT, SIDEWALKS, ETC. WILL BE CONSTRUCTED FLUSH WITH THE SURFACE OF THE SAME. INSTALLATION IN UNPAVED AREAS WILL BE CONSTRUCTED ABOVE GRADE AND GRADED TO DRAIN AWAY FROM CONDUIT JUNCTION WELL.



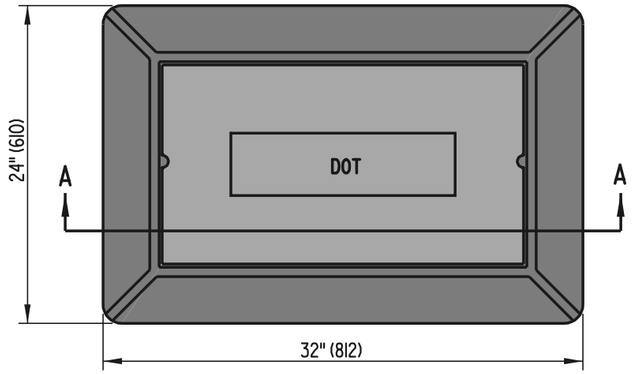
SECTION B-B

PLAN SYMBOL

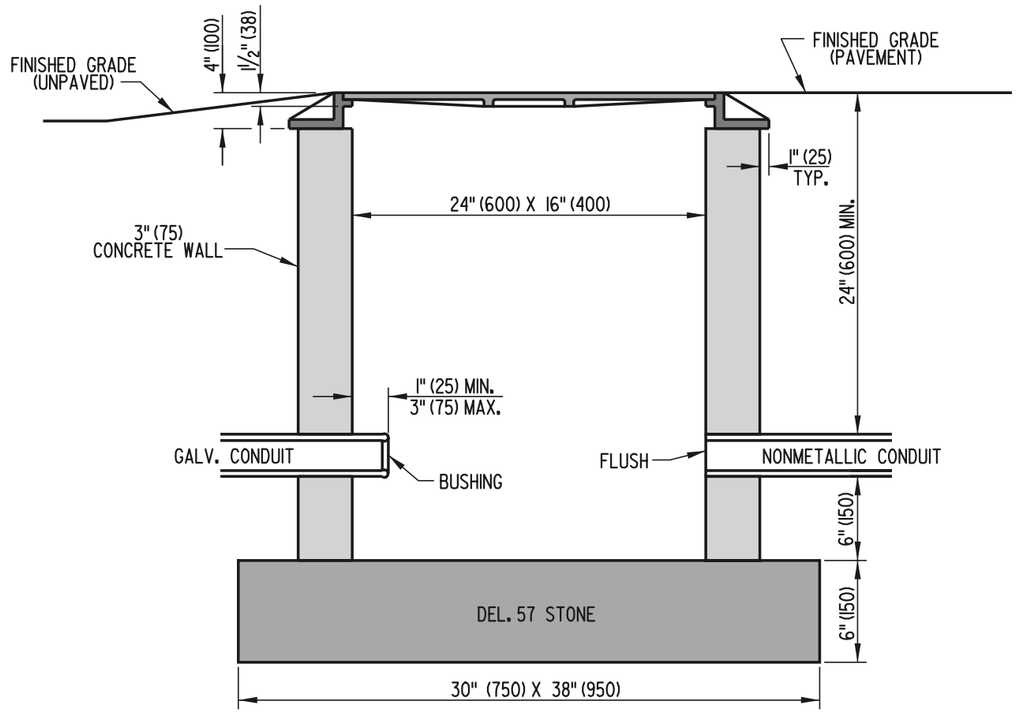
DELAWARE DEPARTMENT OF TRANSPORTATION	CONDUIT JUNCTION WELL, TYPE 4			APPROVED Carolann Wicks CHIEF ENGINEER 9/6/02 DATE
	STANDARD NO. T-2 (2002)	SHT. 1	OF 1	RECOMMENDED DESIGN ENGINEER 8/19/02 DATE

07/31/2002

SCALE : N.T.S.



PLAN VIEW

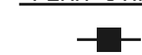


SECTION A-A

NOTES: 1). TYPE 5 CONDUIT JUNCTION WELL SHALL BE PRECAST CONCRETE. AT LEAST ONE HOLE IN PRECAST WELLS WILL BE OF A 5" (125) DIAMETER COMPLETELY THROUGH THE WALL. UNUSED HOLES SHALL BE PLUGGED.

2). ALL CONDUIT JUNCTION WELLS CONSTRUCTED WITHIN PAVEMENT, SIDEWALKS, ETC. WILL BE CONSTRUCTED FLUSH WITH THE SURFACE OF THE SAME. INSTALLATION IN UNPAVED AREAS WILL BE CONSTRUCTED ABOVE GRADE AND GRADED TO DRAIN AWAY FROM CONDUIT JUNCTION WELL.

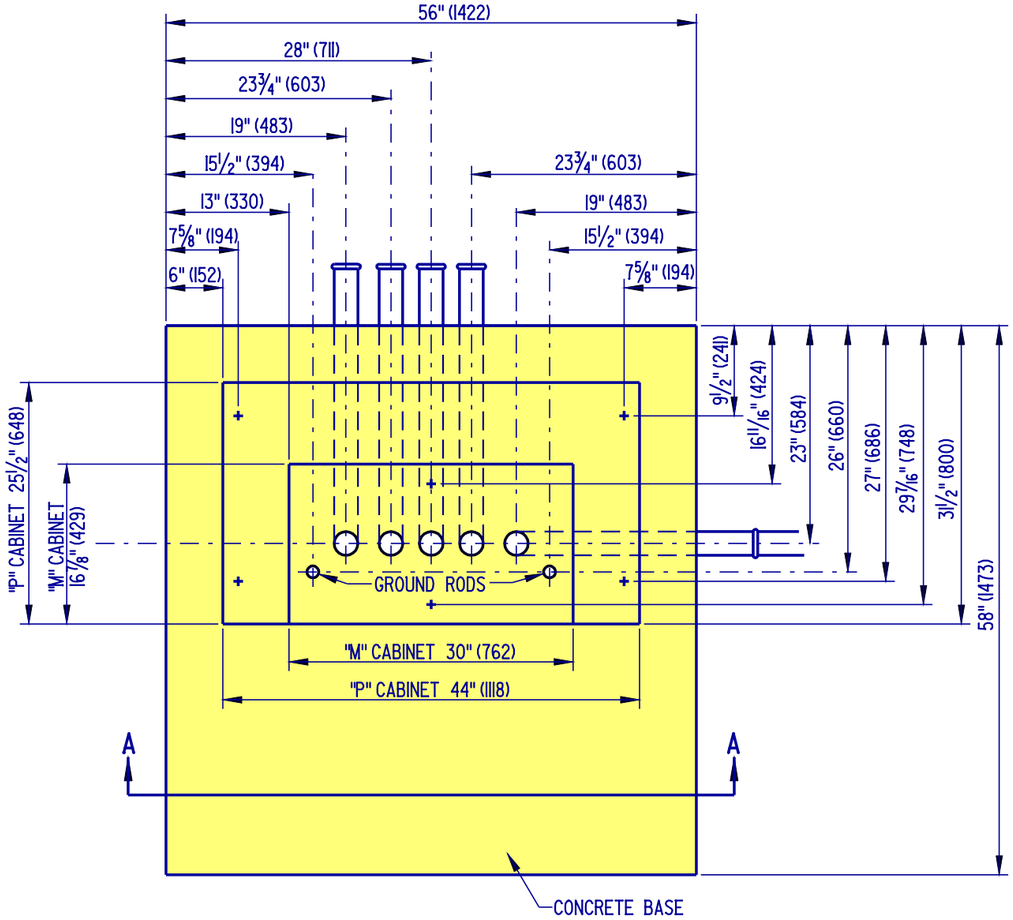
PLAN SYMBOL



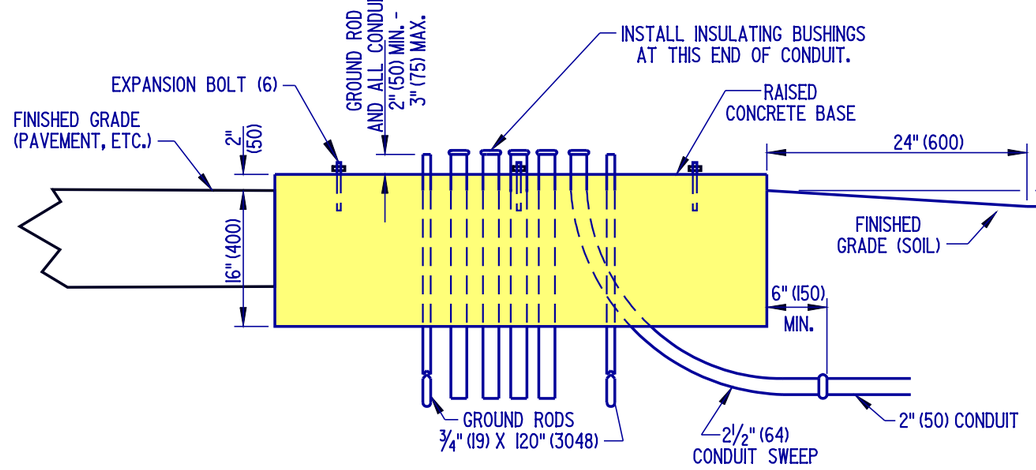
DELAWARE DEPARTMENT OF TRANSPORTATION	CONDUIT JUNCTION WELL, TYPE 5		APPROVED Carolann Wicks CHIEF ENGINEER 9/6/02 DATE
	STANDARD NO. T-3 (2002)	SHT. 1 OF 1	RECOMMENDED DESIGN ENGINEER 8/19/02 DATE

07/31/2002

SCALE : N.T.S.



PLAN VIEW



SECTION A-A

CONCRETE CABINET BASE

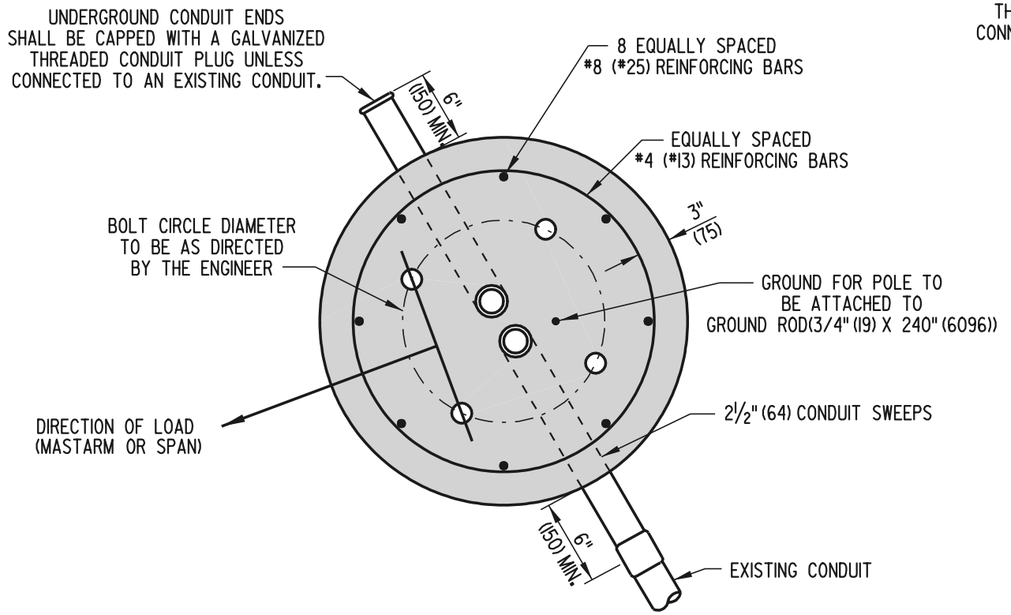
PLAN SYMBOL

CA
P

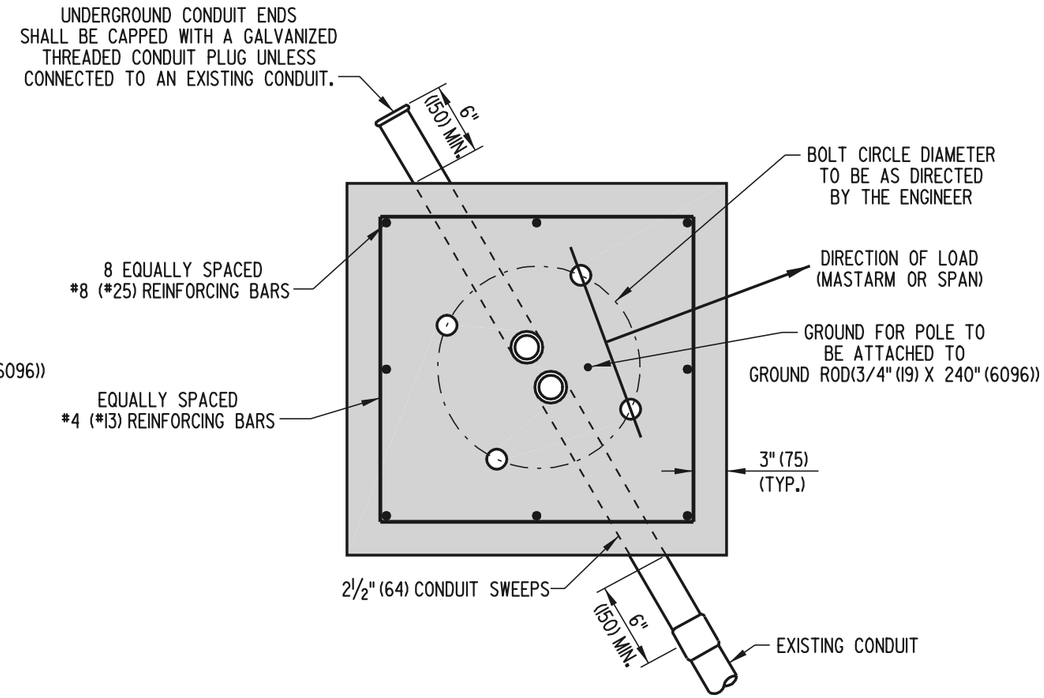
DELAWARE DEPARTMENT OF TRANSPORTATION	CABINET BASES (TYPES 'M' & 'P')			APPROVED Carolann Wicks CHIEF ENGINEER 1/10/05 DATE
	STANDARD NO. T-4 (2004)	SHT. 1	OF 1	RECOMMENDED Dennis M. O'Toole DESIGN ENGINEER 1/3/05 DATE

09/24/2004

SCALE : N.T.S.



ROUND BASE



SQUARE BASE

NOTE: BASE DEPENDENT ON POLE AND EQUIPMENT TO BE ATTACHED.

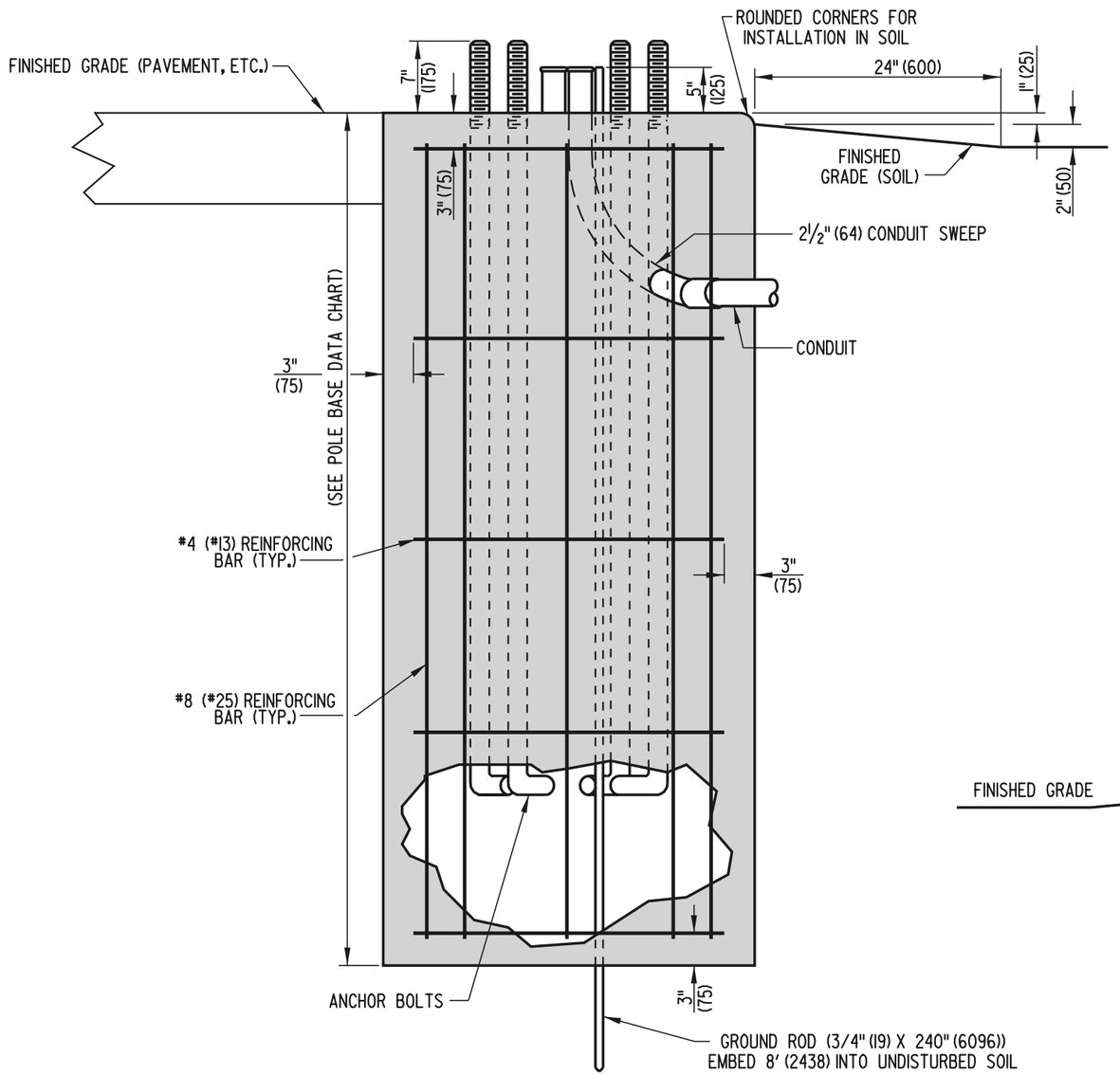
PLAN SYMBOL

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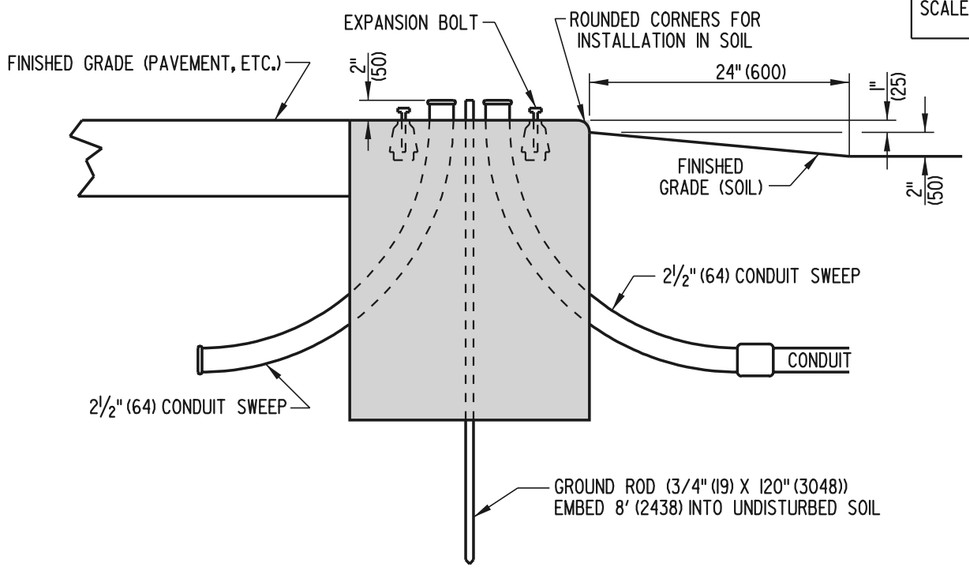
DELAWARE DEPARTMENT OF TRANSPORTATION	POLE BASES		APPROVED Carolann Wicks CHIEF ENGINEER 9/6/02 DATE
	STANDARD NO. T-5 (2002)	SHT. 1 OF 3	RECOMMENDED [signature] DESIGN ENGINEER 8/19/02 DATE

06/11/2002

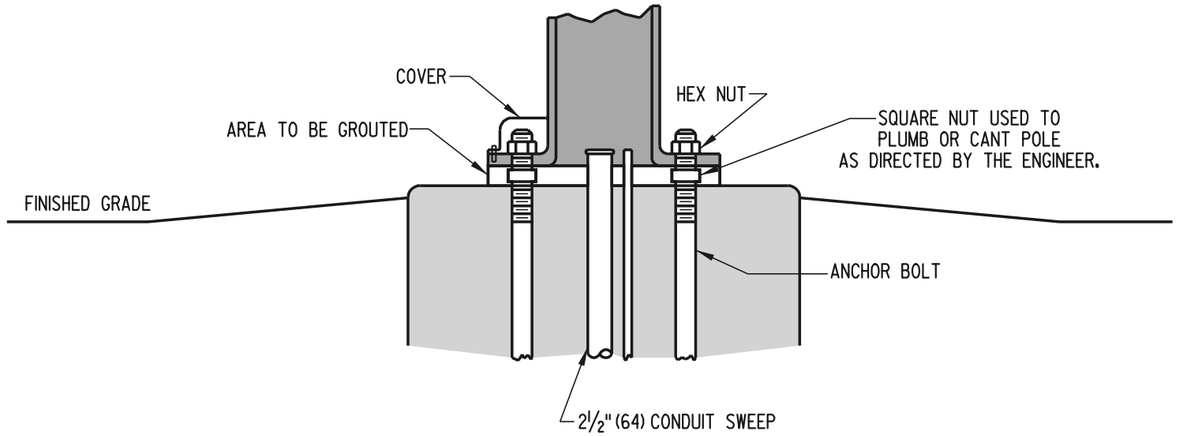
SCALE : N.T.S.



TYPICAL SECTION (BASES 1,2,2A,2B,3,3A,3B, AND 7)



TYPICAL SECTION (BASE 4)



TYPICAL INSTALLATION (BASES 1,2,2A,2B,3,3A,3B,4, AND 7)

NOTES:
1.) PLACE 2 EACH 6" (150) LONG x ½" (13) DIA. P.V.C., SCHEDULE 40 (TYP) VENTS IN THE GROUT AS DIRECTED IN THE FIELD BY ENGINEER.
2.) SEE POLE BASE DATA CHART FOR POLE BASE DIMENSIONS.

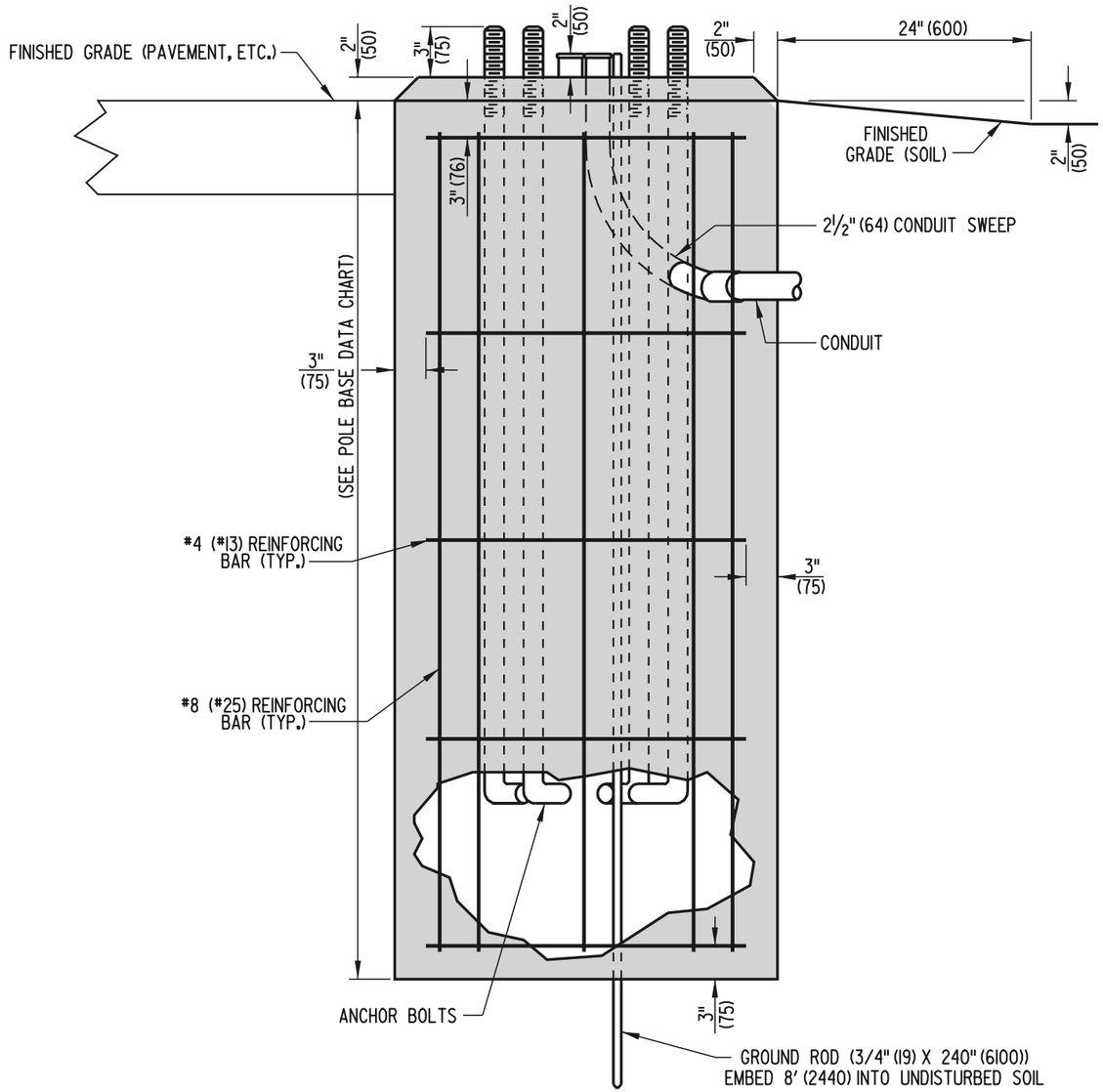
PLAN SYMBOL

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DELAWARE DEPARTMENT OF TRANSPORTATION	POLE BASES		APPROVED Carolann Wicks CHIEF ENGINEER 9/6/02 DATE
	STANDARD NO. T-5 (2002)	SHT. 2 OF 3	RECOMMENDED DESIGN ENGINEER 8/19/02 DATE

06/11/2002

SCALE : N.T.S.

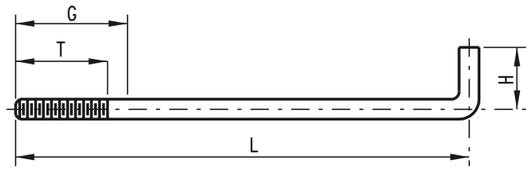


TYPICAL SECTION (BASES 5 AND 6)

POLE BASE DATA CHART

POLE BASE TYPE *	DIAMETER	DEPTH *	#4 (#13) HORIZONTAL REINFORCING BARS	#8 (#25) VERTICAL REINFORCING BARS
1	36" (915)	7' (2150)	5	8
2	36" (915)	10' (3050)	6	8
2A	48" (1220)	8' (2450)	5	8
2B	60" (1525)	7' (2150)	5	8
3	48" (1220)	10' (3050)	6	8
3A	60" (1525)	9' (2750)	6	8
3B	72" (1830)	7' (2150)	5	8
4	24" (610)	2'-4" (725)	NONE	NONE
5	36" (915)	4' (1225)	NONE	NONE
6	24" (610)	6' (1850)	4	8
7	48" (1220)	13'-4" (4000)	7	8

* - ADDITIONAL DEPTH FOR POLE BASE EXTENSION, IF REQUIRED, TO BE DETERMINED BY TRAFFIC ENGINEERING AND MANAGEMENT (TEAM) FIELD REPRESENTATIVE.



G = GALVANIZED PORTION
T = THREAD LENGTH
L = LENGTH OF ROD
H = HEIGHT OF ROD

NOMINAL BOLT SIZE	L	H	T	G
1" (25) X 40" (1025)	36" (925)	4" (100)	6" (150)	8" (200)
1¼" (32) X 48" (1225)	42" (1075)	6" (150)	8" (200)	10" (250)
1½" (38) X 60" (1525)	54" (1375)	6" (150)	10" (250)	12" (305)
1¾" (45) X 90" (2285)	84" (2135)	6" (150)	10" (250)	20" (500)
2" (51) X 90" (2285)	82" (2885)	8" (200)	8" (200)	18" (455)

ANCHOR BOLT DATA CHART AND DETAILS

NOTE: ANCHOR BOLTS FOR POLE BASE TYPE 7 SHALL CONFORM TO THE CCTV POLE MANUFACTURER'S SPECIFICATIONS.

PLAN SYMBOL

⊙

DELAWARE
DEPARTMENT OF TRANSPORTATION

POLE BASES

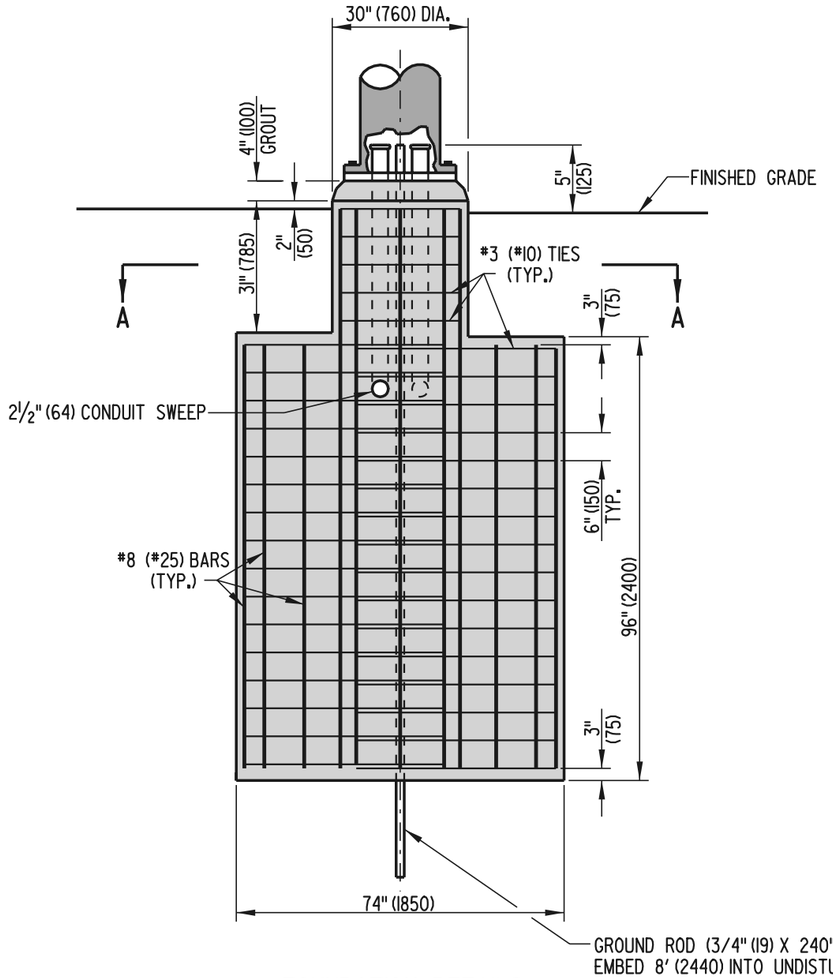
STANDARD NO. T-5 (2002) | SHT. 3 OF 3

APPROVED Carolann Wicks CHIEF ENGINEER 9/6/02 DATE

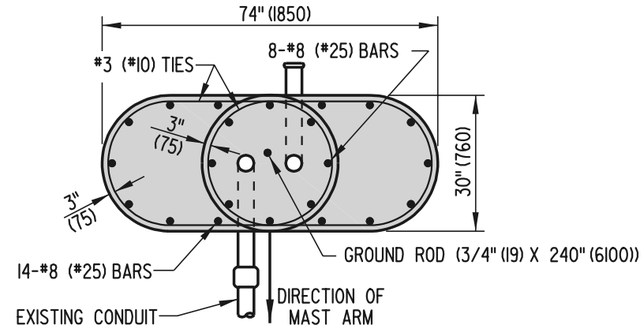
RECOMMENDED [signature] DESIGN ENGINEER 8/19/02 DATE

07/31/2002

SCALE : N.T.S.



FOUNDATION DETAILS



SECTION A-A

NOTES:

1. UNDERGROUND CONDUIT ENDS SHALL BE CAPPED WITH A GALVANIZED THREADED CONDUIT PLUG UNLESS CONNECTED TO AN EXISTING CONDUIT.
2. PLACE 2 EACH 6" (150) x ½" (13) P.V.C., SCHEDULE 40 (TYP) VENTS IN THE GROUT AS DIRECTED IN THE FIELD BY THE ENGINEER.

PLAN SYMBOL

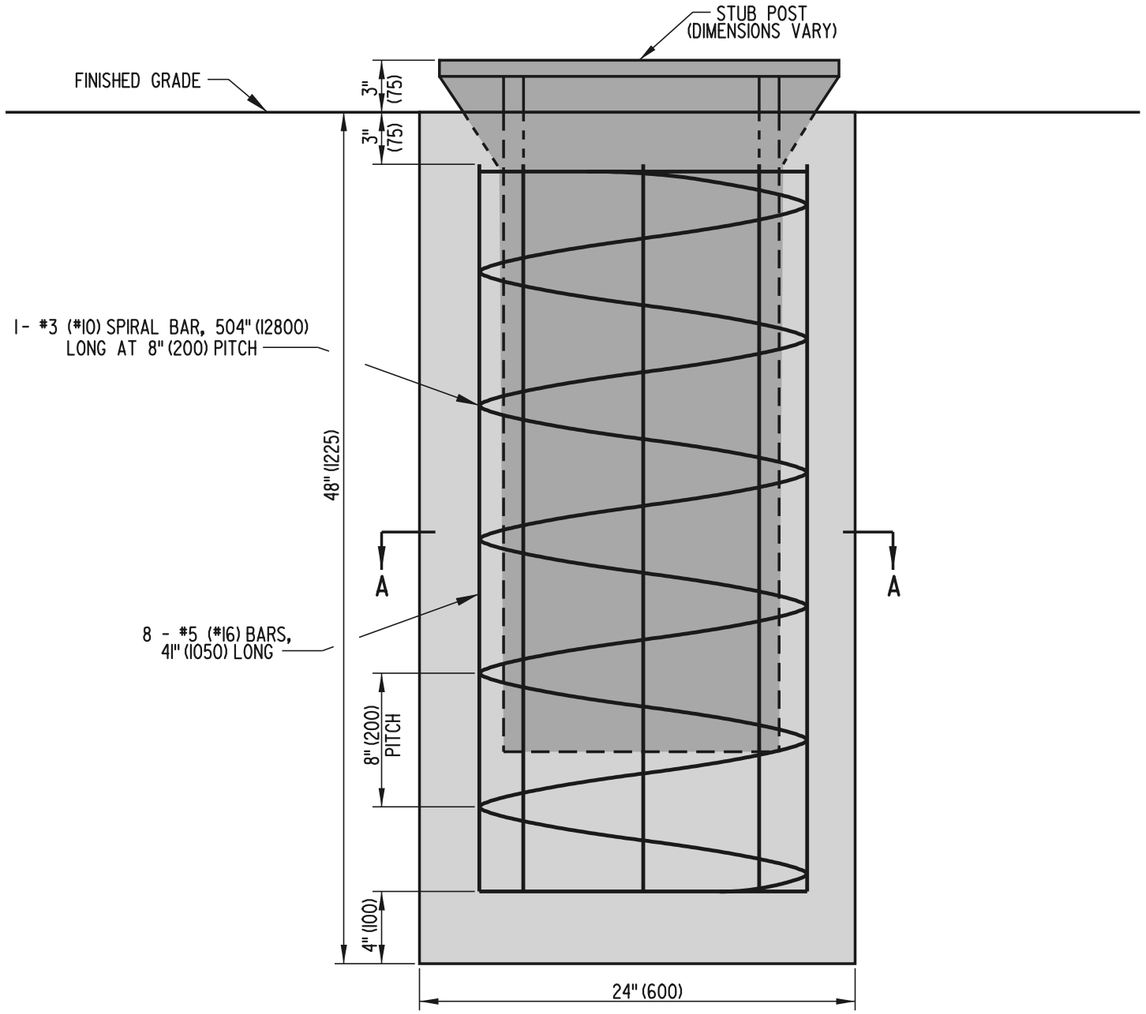
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(SAME AS NORMAL POLE BASE)

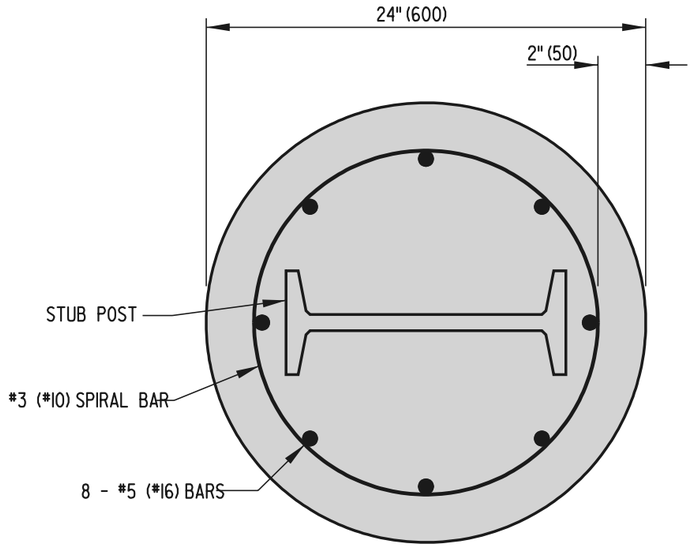
DELAWARE DEPARTMENT OF TRANSPORTATION	SPECIAL POLE BASE		APPROVED Carolann Wicks CHIEF ENGINEER 9/6/02 DATE
	STANDARD NO. T-6 (2002)	SHT. 1 OF 1	RECOMMENDED DESIGN ENGINEER 8/19/02 DATE

07/31/2002

SCALE : N.T.S.



NOTES: 1). STUB POST TO BE SUPPLIED BY THE DEPARTMENTS TRAFFIC, ENGINEERING, AND MANAGEMENT SECTION.



SECTION A-A

PLAN SYMBOL



DELAWARE DEPARTMENT OF TRANSPORTATION	SIGN FOUNDATION		APPROVED Carolann Wicks CHIEF ENGINEER 9/6/02 DATE
	STANDARD NO. T-7 (2002)	SHT. 1 OF 1	RECOMMENDED DESIGN ENGINEER 8/19/02 DATE

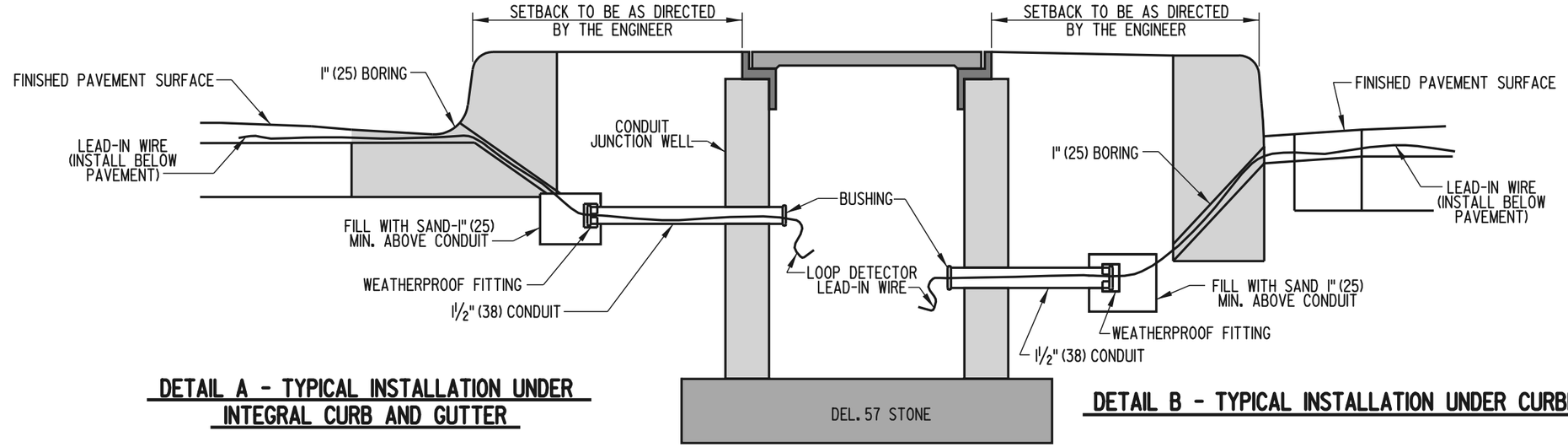
07/31/2002

SCALE : N.T.S.

NOTES: 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE CONDUIT AGAINST ANY POSSIBLE DAMAGE IN PAVING OPERATIONS.

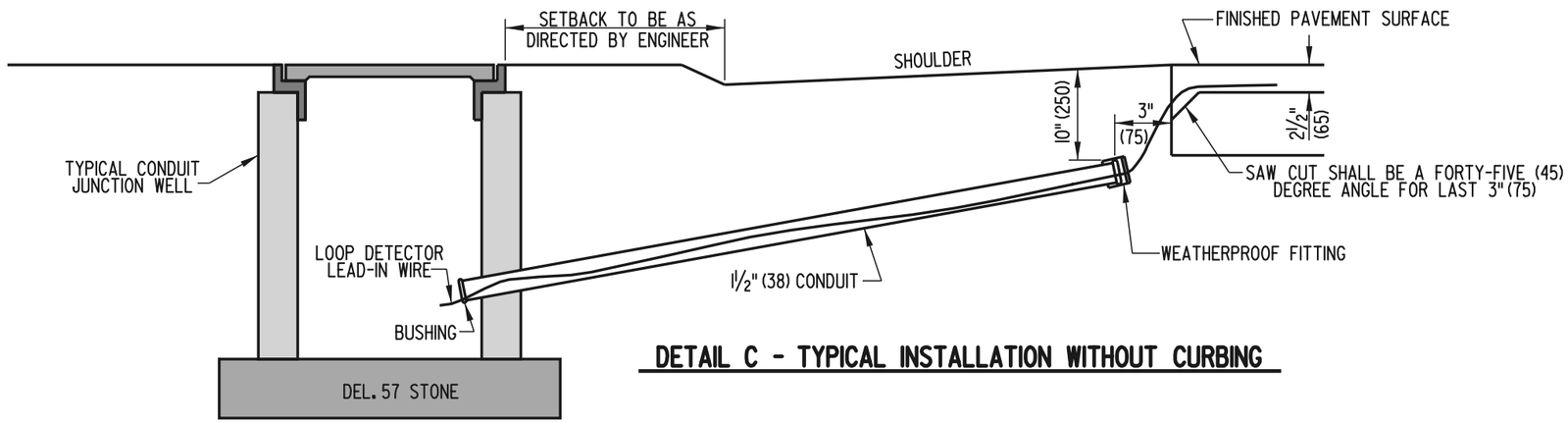
2. THE WEATHERPROOF FITTING SHALL CONSIST OF A GALVANIZED 1½" (38) COUPLING CONTAINING A STEEL THREADED REDUCING BUSHING (1½" (38) TO ¾" (19)) AND A ¾" (19) WATERTIGHT CONNECTOR FOR SERVICE ENTRANCE CABLE.

3. THE LEAD-IN WIRE SHALL BE RUN THROUGH THE RUBBER OF THE WEATHERPROOF FITTING.



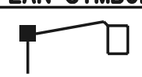
DETAIL A - TYPICAL INSTALLATION UNDER INTEGRAL CURB AND GUTTER

DETAIL B - TYPICAL INSTALLATION UNDER CURBING



DETAIL C - TYPICAL INSTALLATION WITHOUT CURBING

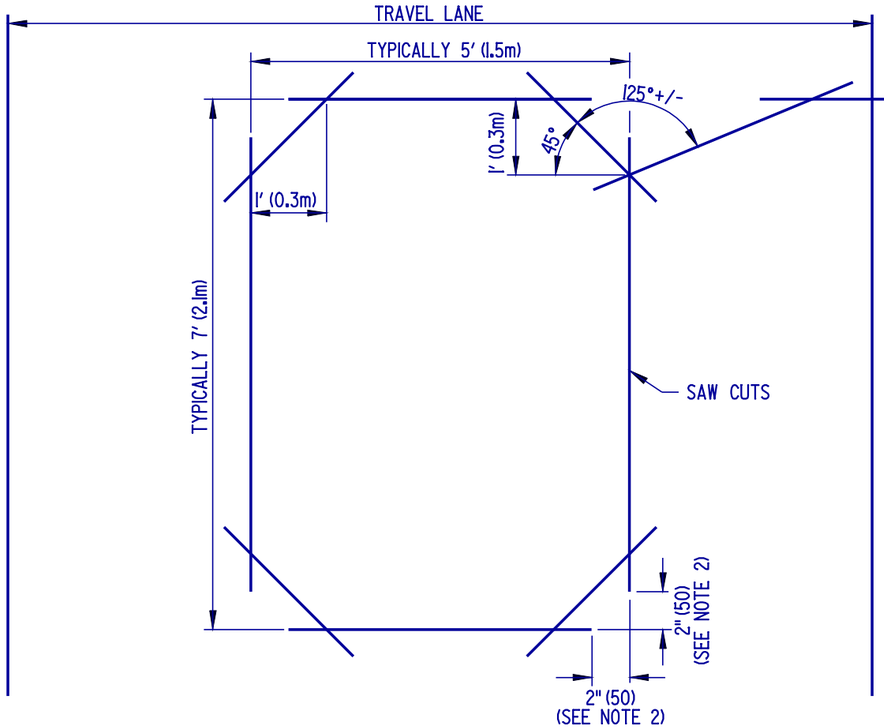
PLAN SYMBOL



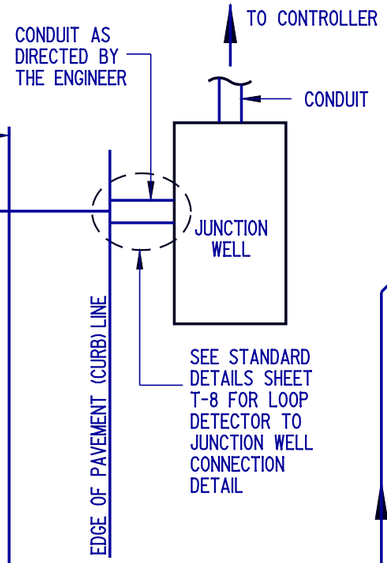
DELAWARE DEPARTMENT OF TRANSPORTATION	LOOP DETECTOR TO CONDUIT JUNCTION WELL CONNECTION		APPROVED Carolann Wicks CHIEF ENGINEER 9/6/02 DATE
	STANDARD NO. T-8 (2002)	SHT. 1 OF 1	RECOMMENDED DESIGN ENGINEER 8/19/02 DATE

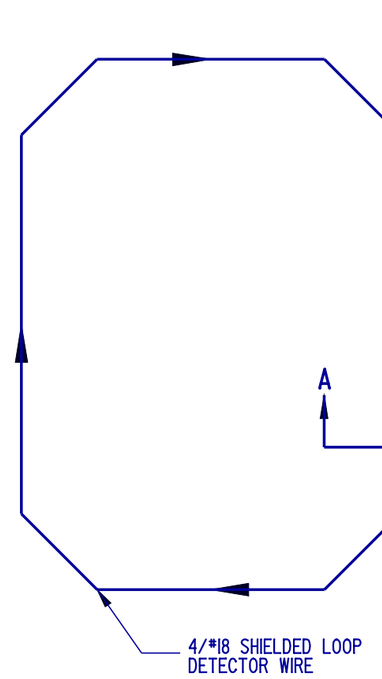
07/31/2002

SCALE : N.T.S.



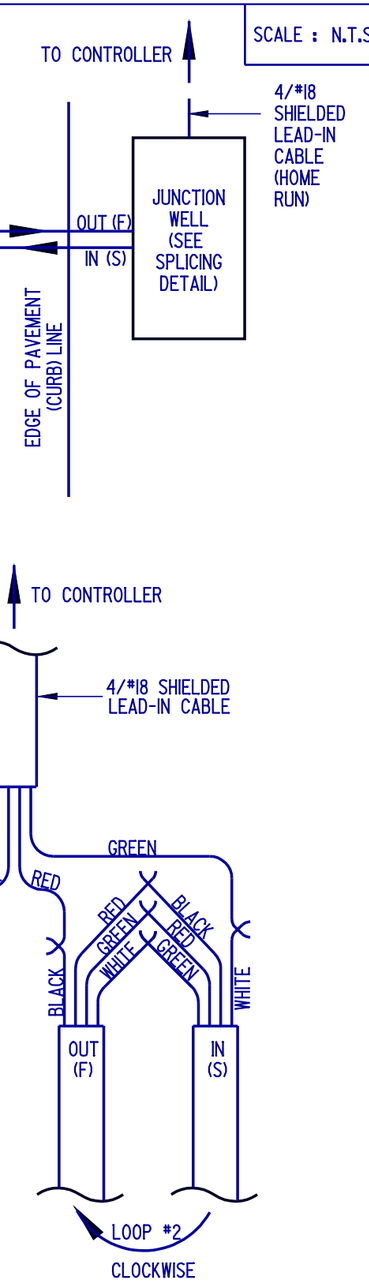
WIRE SLOT CONSTRUCTION





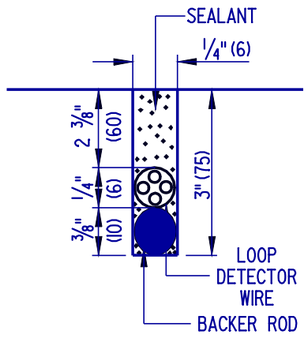
DETAILS FOR INSTALLING LOOP DETECTOR WIRE

(SINGLE WRAP)

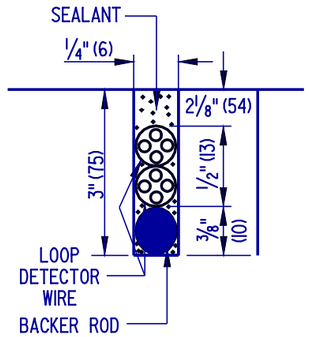


SPLICING DETAIL

(SEE NOTE 3)



SECTION A - A



SECTION B - B

NOTES:

1). SAW CUTS FOR WIRE SLOT CONSTRUCTION SHALL BE EXTENDED BEYOND THE CORNERS SO THAT THE SLOT IS FULL DEPTH AT TURN POINTS. A FORTY-FIVE (45) DEGREE ANGLE SHALL BE CUT 12" (300) BACK FROM THE POINT OF THE EXTENDED CORNER.
2). THE DIAGONAL CUT SHALL BE STOPPED APPROXIMATELY 2" (50) FROM THE CORNER TO PREVENT THE TRIANGULAR PORTION OF THE PAVEMENT FROM BREAKING.
3). A MAXIMUM OF TWO LOOP DETECTORS CAN BE SPLICED TO ONE LEAD-IN CABLE, THE DETAIL ILLUSTRATES THE METHOD OF SPLICING TWO LOOP DETECTORS (LOOP #1 AND LOOP #2) TO A LEAD-IN CABLE.
4). LOOP DETECTOR SHALL BE CENTERED IN TRAVEL LANE.

PLAN SYMBOL

DELAWARE
DEPARTMENT OF TRANSPORTATION

TYPE #1 LOOP DETECTOR

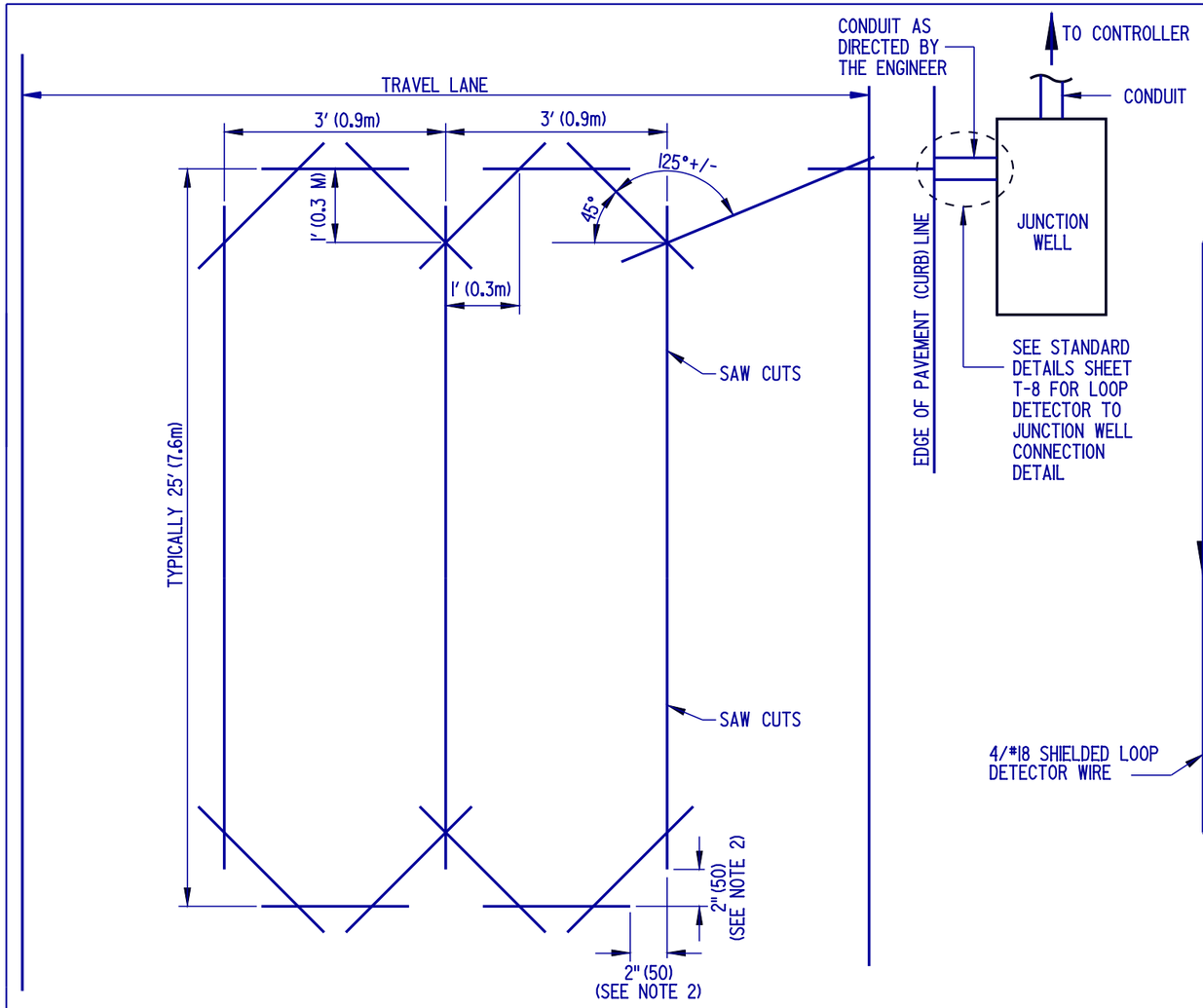
STANDARD NO. T-9 (2004) | SHT. 1 OF 1

APPROVED Carolann Wicks CHIEF ENGINEER 1/10/05 DATE

RECOMMENDED Dennis M. O'Toole DESIGN ENGINEER 1/3/05 DATE

09/27/2004

SCALE : N.T.S.



WIRE SLOT CONSTRUCTION

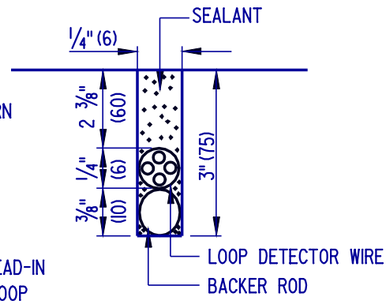
NOTES:

1). SAW CUTS FOR WIRE SLOT CONSTRUCTION SHALL BE EXTENDED BEYOND THE CORNERS SO THAT THE SLOT IS FULL DEPTH AT TURN POINTS. A FORTY-FIVE (45) DEGREE ANGLE SHALL BE CUT 1' (0.3m) BACK FROM THE POINT OF THE EXTENDED CORNER.

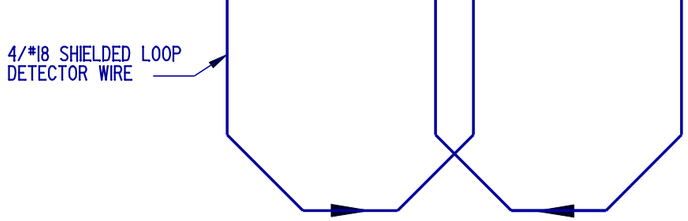
2). THE DIAGONAL CUT SHALL BE STOPPED APPROXIMATELY 2" (50) FROM THE CORNER TO PREVENT THE TRIANGULAR PORTION OF THE PAVEMENT FROM BREAKING.

3). A MAXIMUM OF TWO LOOP DETECTORS CAN BE SPLICED TO ONE LEAD-IN CABLE. THE DETAIL ILLUSTRATES THE METHOD OF SPLICING TWO LOOP DETECTORS (LOOP #1 AND LOOP #2) TO A LEAD-IN CABLE.

4). LOOP DETECTOR SHALL BE CENTERED IN TRAVEL LANE.

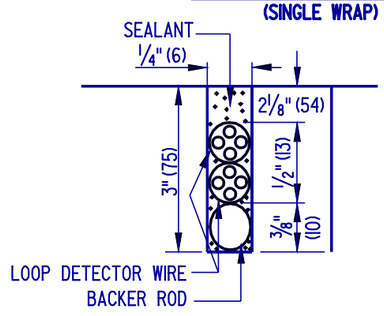


SECTION A - A

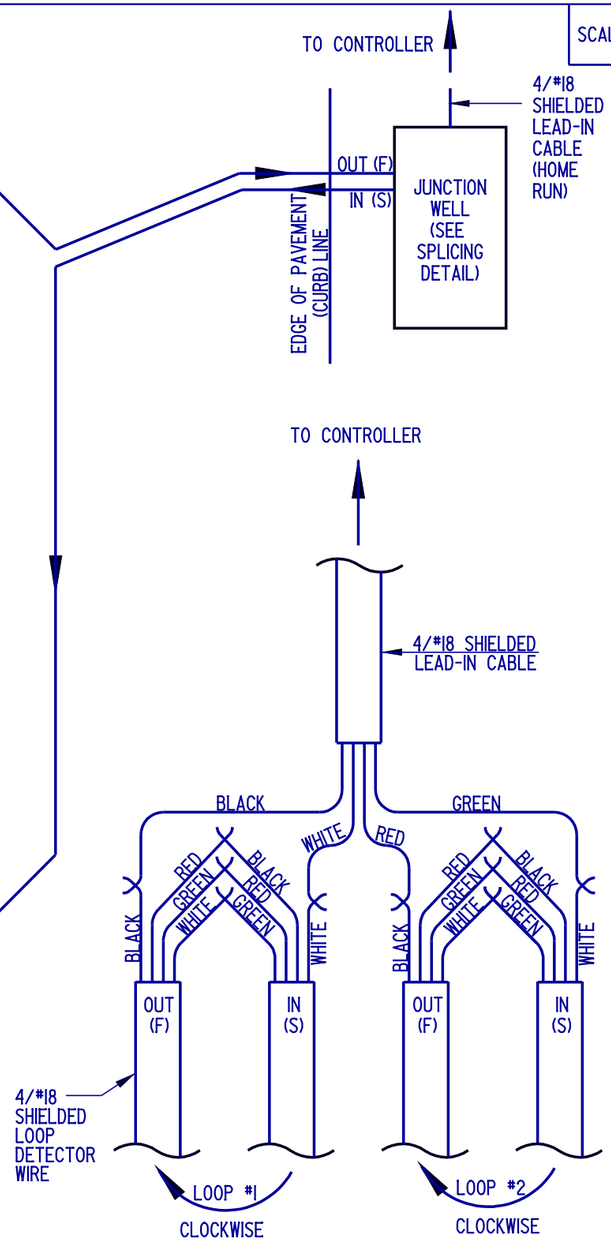


DETAILS FOR INSTALLING LOOP DETECTOR WIRE

(SINGLE WRAP)



SECTION B - B



SPLICING DETAIL

(SEE NOTE 3)

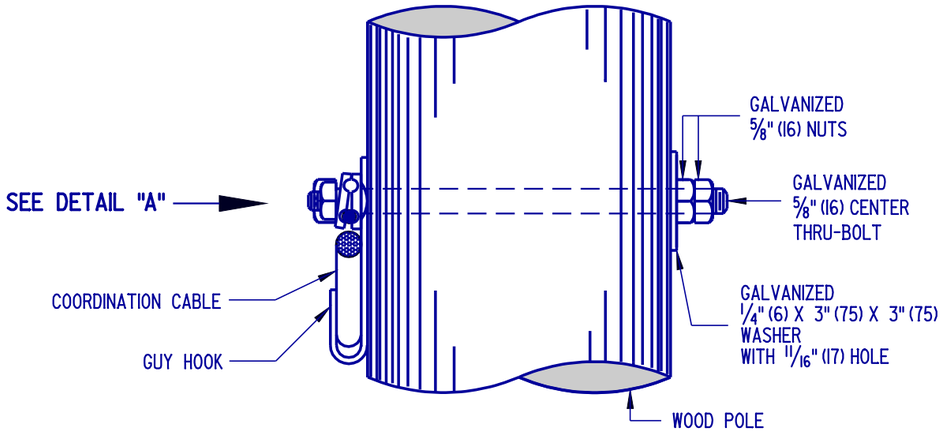
PLAN SYMBOL

DELAWARE DEPARTMENT OF TRANSPORTATION	TYPE #2 LOOP DETECTOR		APPROVED Carolann Wicks CHIEF ENGINEER 1/10/05 DATE
	STANDARD NO. T-10 (2004)	SHT. 1 OF 1	RECOMMENDED Dennis M. Office DESIGN ENGINEER 1/3/05 DATE

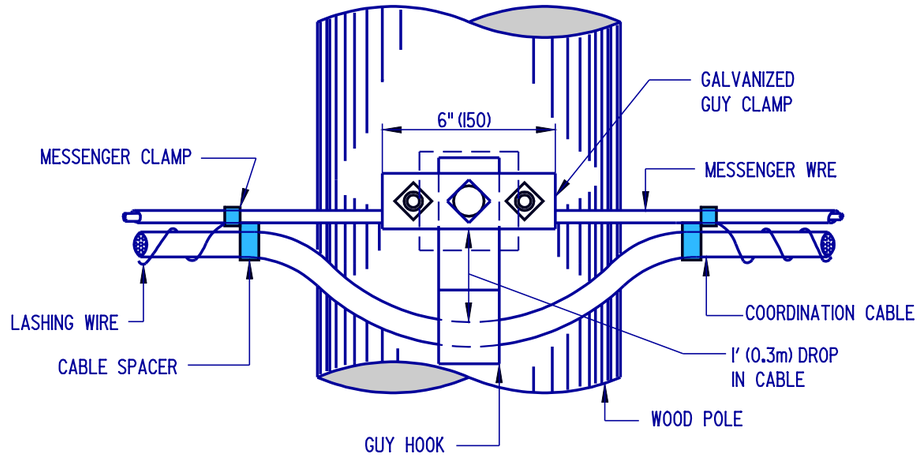
10/14/2004

SCALE : N.T.S.

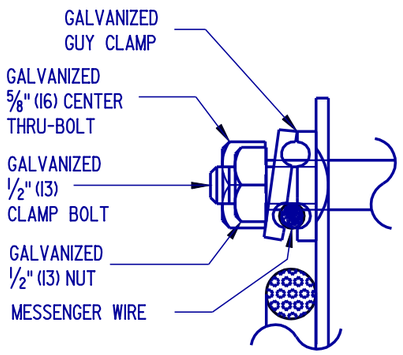
INTERMEDIATE



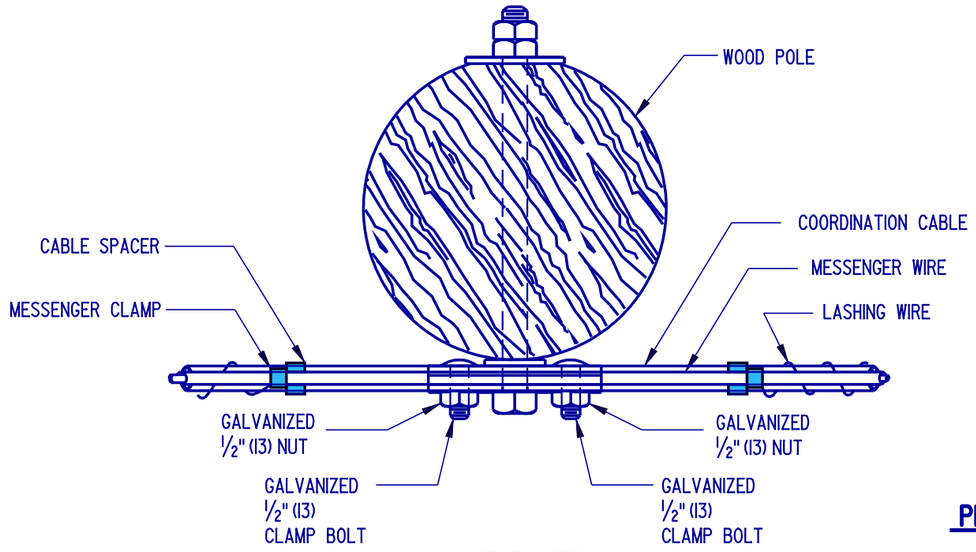
SIDE VIEW



FRONT VIEW



DETAIL "A"



TOP VIEW

PLAN SYMBOL

—C—●—C—

DELAWARE
DEPARTMENT OF TRANSPORTATION

INTERMEDIATE MESSENGER WIRE ATTACHMENT ON WOOD POLES

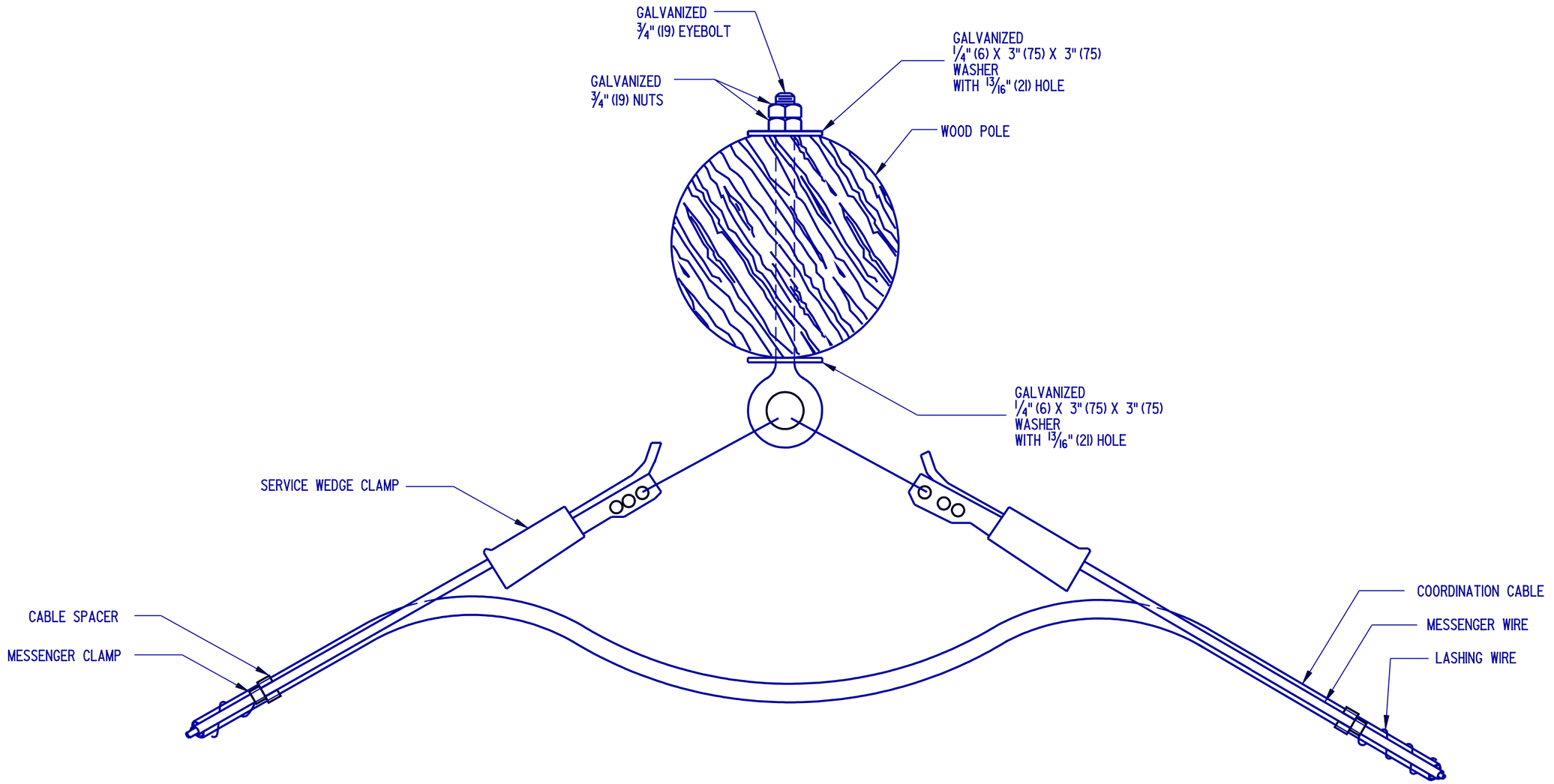
STANDARD NO. T-11 (2004) | SHT. 1 OF 2

APPROVED Carolann Wicks CHIEF ENGINEER 1/10/05 DATE

RECOMMENDED Dennis M. O'Toole DESIGN ENGINEER 1/3/05 DATE

09/27/2004

SCALE : N.T.S.



TOP VIEW

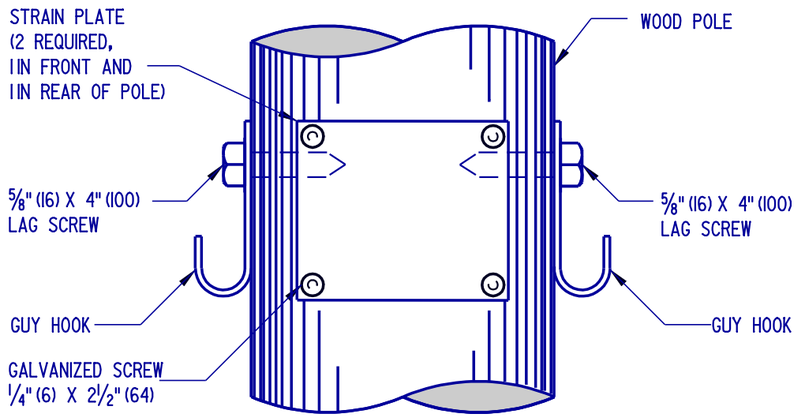
PLAN SYMBOL



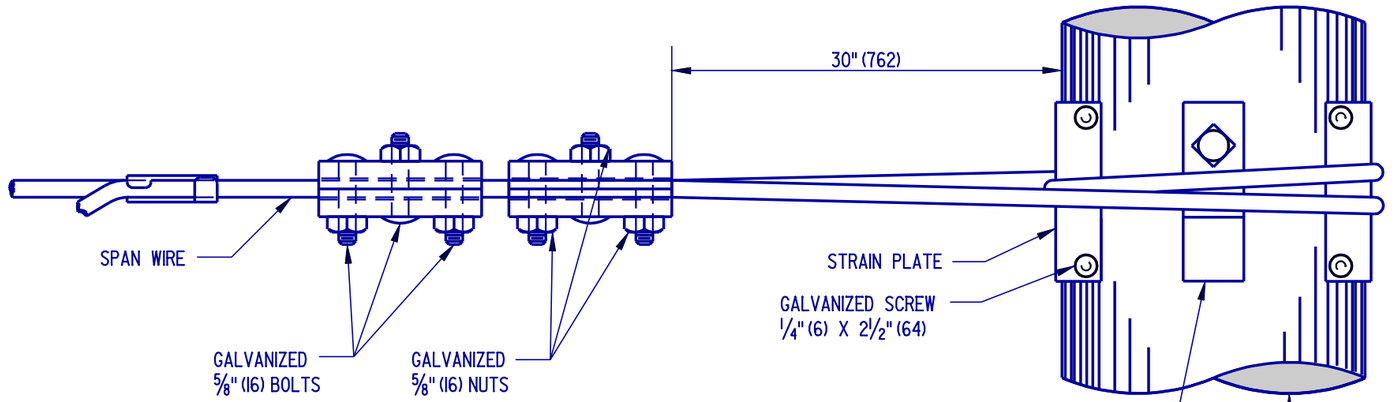
DELAWARE DEPARTMENT OF TRANSPORTATION	ANGULAR INTERMEDIATE MESSENGER WIRE ATTACHMENT		APPROVED Carolann Wicks CHIEF ENGINEER 1/10/05 DATE
	STANDARD NO. T-11 (2004)	SHT. 2 OF 2	RECOMMENDED Dennis M. O'Toole DESIGN ENGINEER 1/3/05 DATE

09/27/2004

SCALE : N.T.S.



FRONT VIEW
(SPAN WIRE NOT SHOWN)



SIDE VIEW

MATCH LINE A - A

TOP VIEW

MATCH LINE A - A

NOTE: SPAN WIRE ATTACHMENT BETWEEN METAL POLES IS THE SAME AS SHOWN FOR WOOD POLES EXCEPT THAT THE STRAIN PLATES AND GUY HOOKS ARE NOT USED. FOR DETAIL SEE T-14 SHEET 2 - "DEAD END MESSENGER WIRE ATTACHMENT, METAL POLES ".

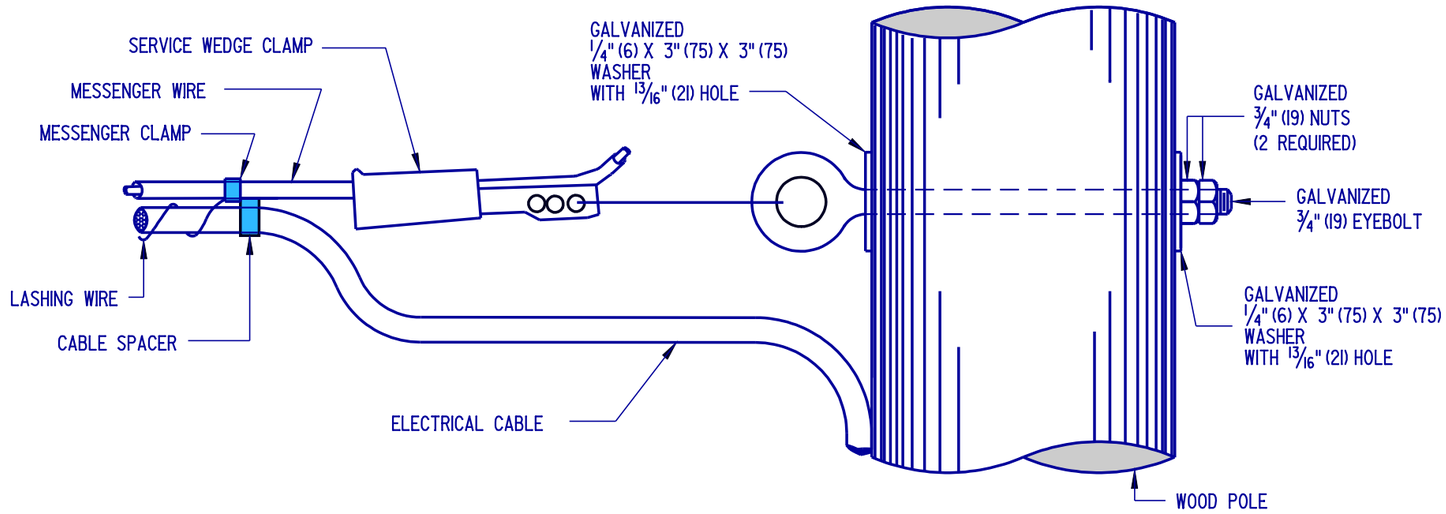
PLAN SYMBOL

—X—⊙

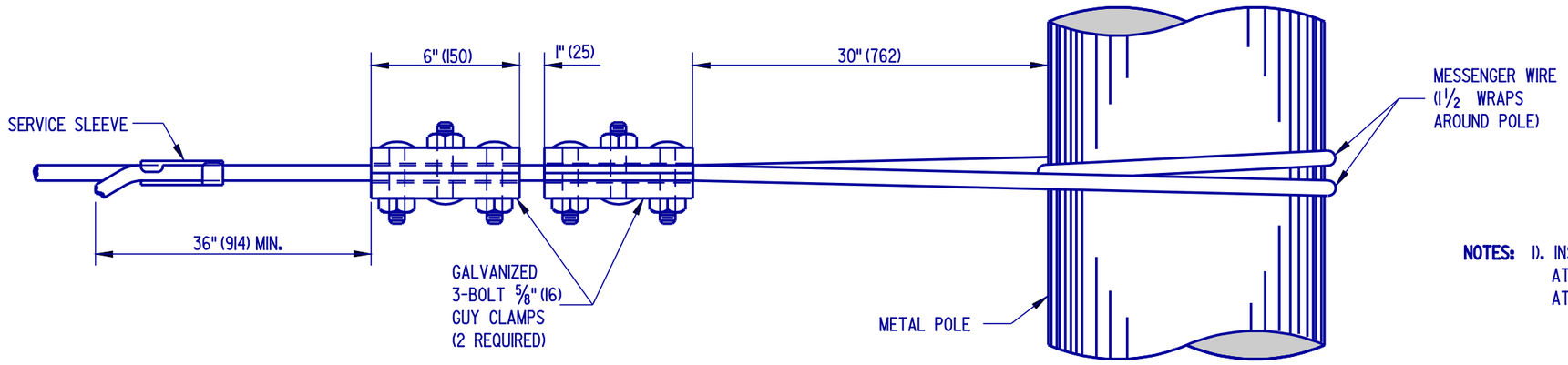
DELAWARE DEPARTMENT OF TRANSPORTATION	**SPAN WIRE ATTACHMENT BETWEEN POLES**	**APPROVED** Carolann Wicks CHIEF ENGINEER 1/10/05 DATE
	STANDARD NO. T-12 (2004) **SHT. 1 OF 2**	**RECOMMENDED** Dennis M. Office DESIGN ENGINEER 1/3/05 DATE

09/21/2004

SCALE : N.T.S.



WOOD POLES



NOTES: 1). INSTALLATION METHOD SHOWN FOR DEAD END MESSENGER WIRE ATTACHMENT TO METAL POLES SHALL BE USED FOR SPAN WIRE ATTACHMENT BETWEEN METAL POLES.

PLAN SYMBOL

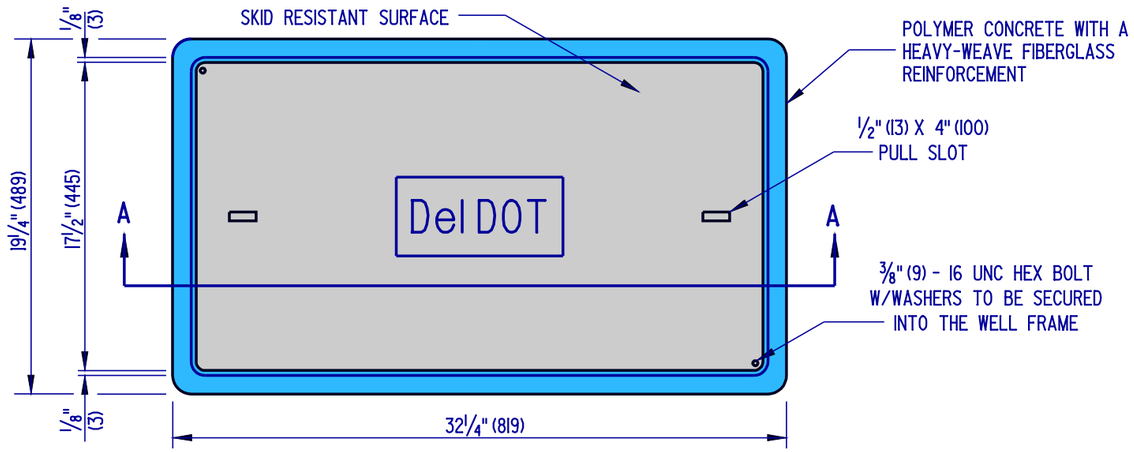
—X—⊙

METAL POLES

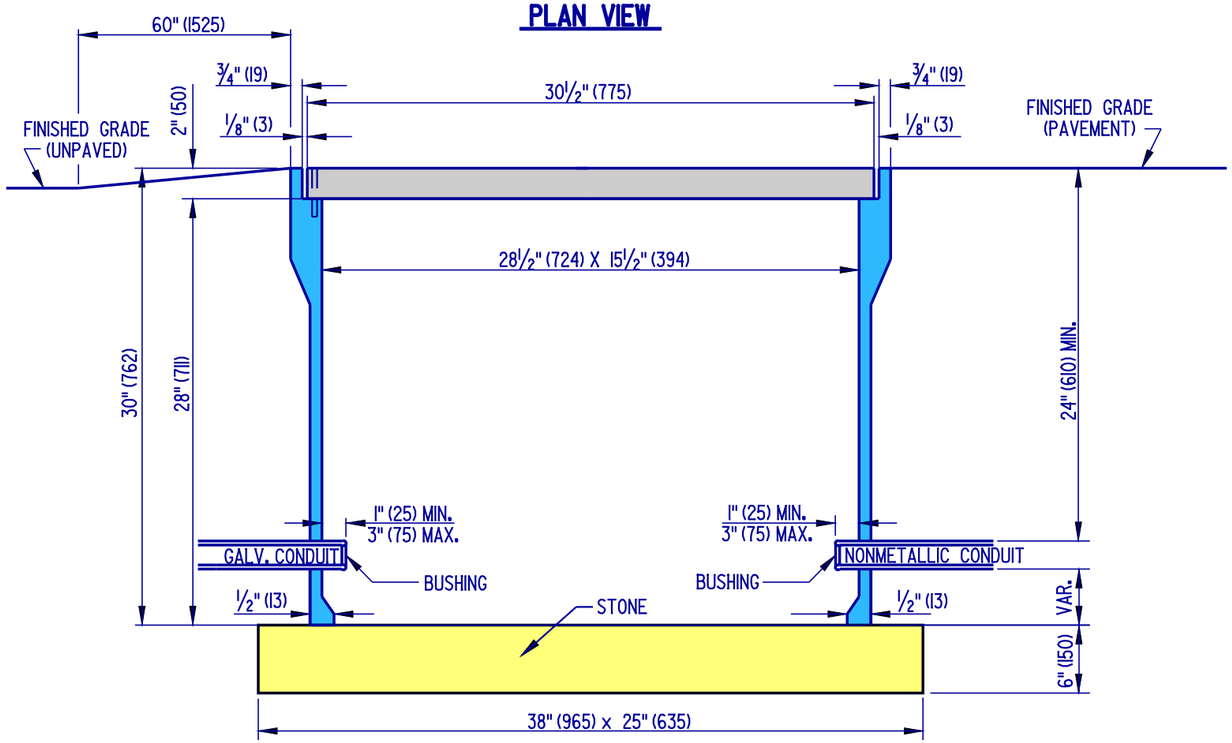
DELAWARE DEPARTMENT OF TRANSPORTATION	DEAD END MESSENGER WIRE ATTACHMENT	APPROVED Carolann Wicks CHIEF ENGINEER 1/10/05 DATE
	STANDARD NO. T-12 (2004) SHT. 2 OF 2	RECOMMENDED Dennis M. O'Toole DESIGN ENGINEER 1/3/05 DATE

09/27/2004

SCALE : N.T.S.



PLAN VIEW



SECTION A-A

NOTES:

1). TYPE 6 CONDUIT JUNCTION WELL SHALL BE PRECAST POLYMER CONCRETE.

2). ALL CONDUIT JUNCTION WELLS CONSTRUCTED WITHIN PAVEMENT, SIDEWALKS, ETC. WILL BE CONSTRUCTED FLUSH WITH THE SURFACE OF THE SAME. INSTALLATION IN UNPAVED AREAS WILL BE CONSTRUCTED ABOVE GRADE AND GRADED TO DRAIN AWAY FROM THE CONDUIT JUNCTION WELL.

3). POLYMER CONCRETE COVERS SHALL BE THE HEAVY-DUTY TYPE WITH A DESIGN LOAD OF 15,000 LBS (6800 kg) OVER A 10" (255) SQUARE.

PLAN SYMBOL

DELAWARE
DEPARTMENT OF TRANSPORTATION

CONDUIT JUNCTION WELL, TYPE 4

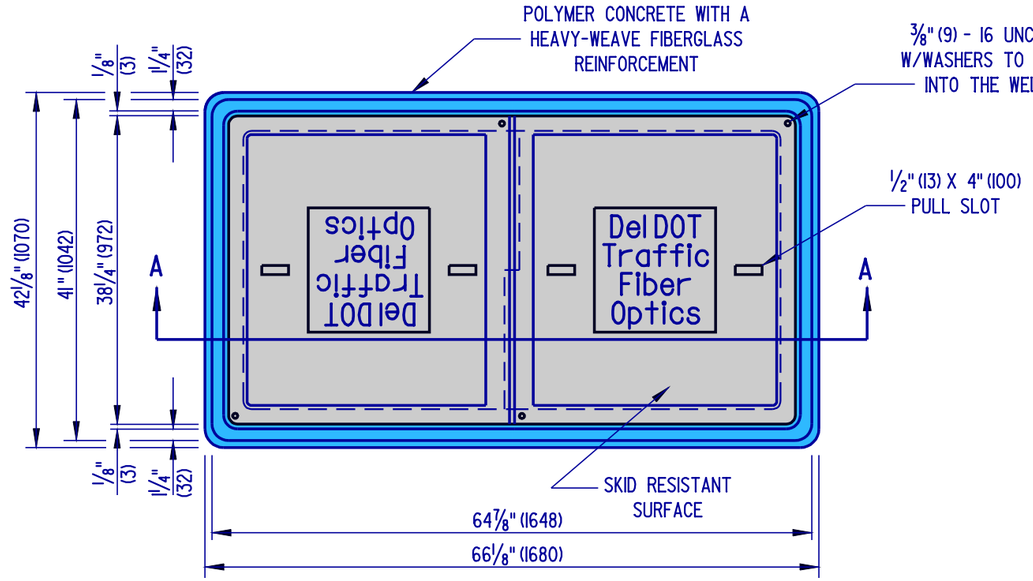
STANDARD NO. T-13 (2004) | SHT. 1 OF 3

APPROVED Carolann Wicks CHIEF ENGINEER 1/10/05 DATE

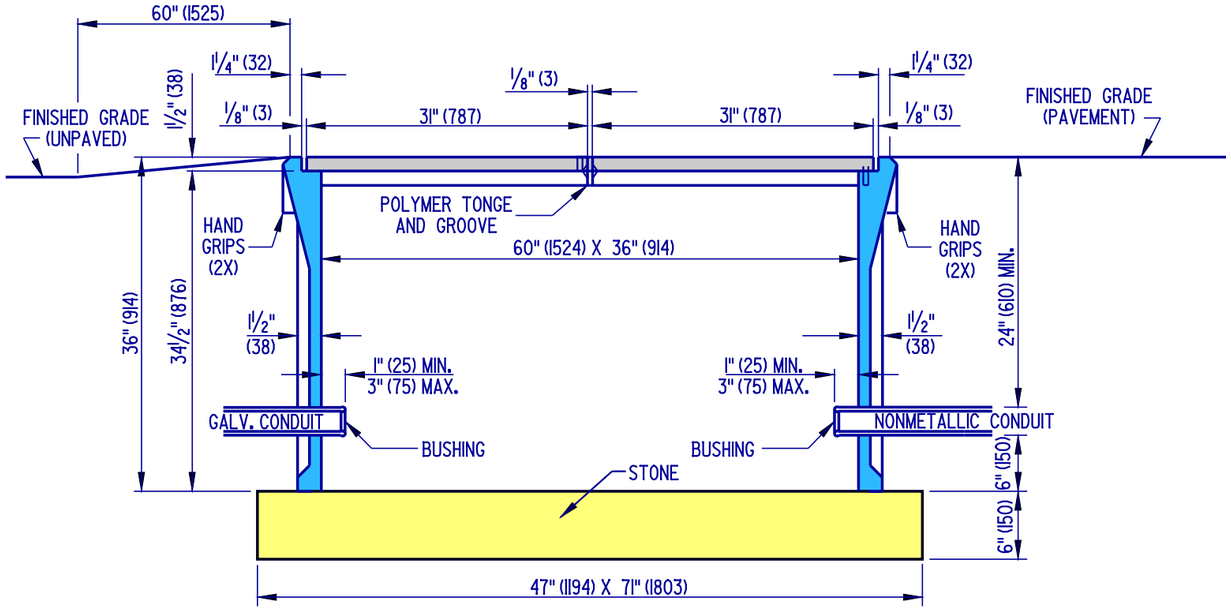
RECOMMENDED Dennis M. O'Toole DESIGN ENGINEER 1/3/05 DATE

09/27/2004

SCALE : N.T.S.



PLAN VIEW



SECTION A-A

NOTES:

1). TYPE 7 CONDUIT JUNCTION WELL SHALL BE PRECAST POLYMER CONCRETE.

2). ALL CONDUIT JUNCTION WELLS CONSTRUCTED WITHIN PAVEMENT, SIDEWALKS, ETC. WILL BE CONSTRUCTED FLUSH WITH THE SURFACE OF THE SAME. INSTALLATION IN UNPAVED AREAS WILL BE CONSTRUCTED ABOVE GRADE AND GRADED TO DRAIN AWAY FROM THE CONDUIT JUNCTION WELL.

3). POLYMER CONCRETE COVERS SHALL BE THE HEAVY DUTY TYPE WITH A DESIGN LOAD OF 15,000 LBS (6800 kg) OVER A 10" (255) SQUARE.

PLAN SYMBOL

DELAWARE
DEPARTMENT OF TRANSPORTATION

CONDUIT JUNCTION WELL, TYPE 7

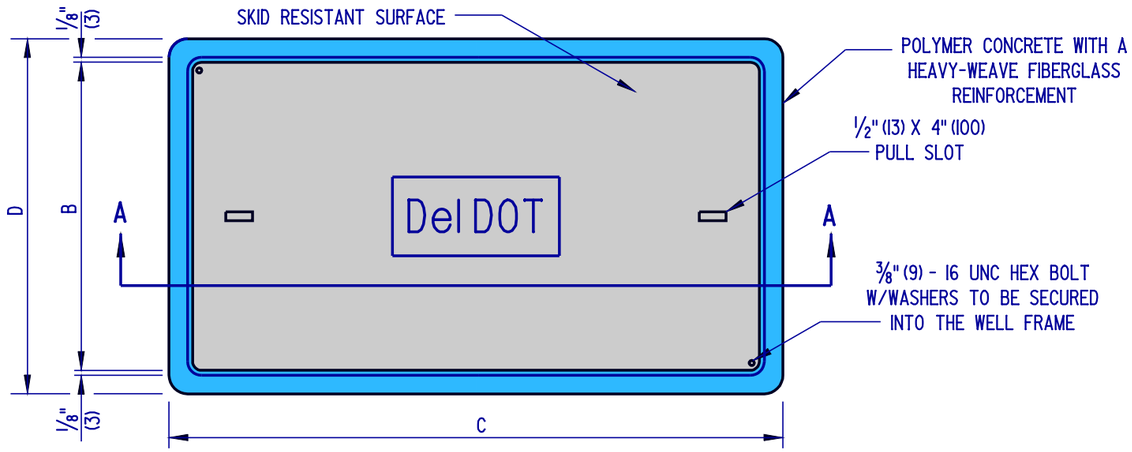
STANDARD NO. T-13 (2004) | SHT. 2 OF 3

APPROVED Carolann Wicks CHIEF ENGINEER 1/10/05 DATE

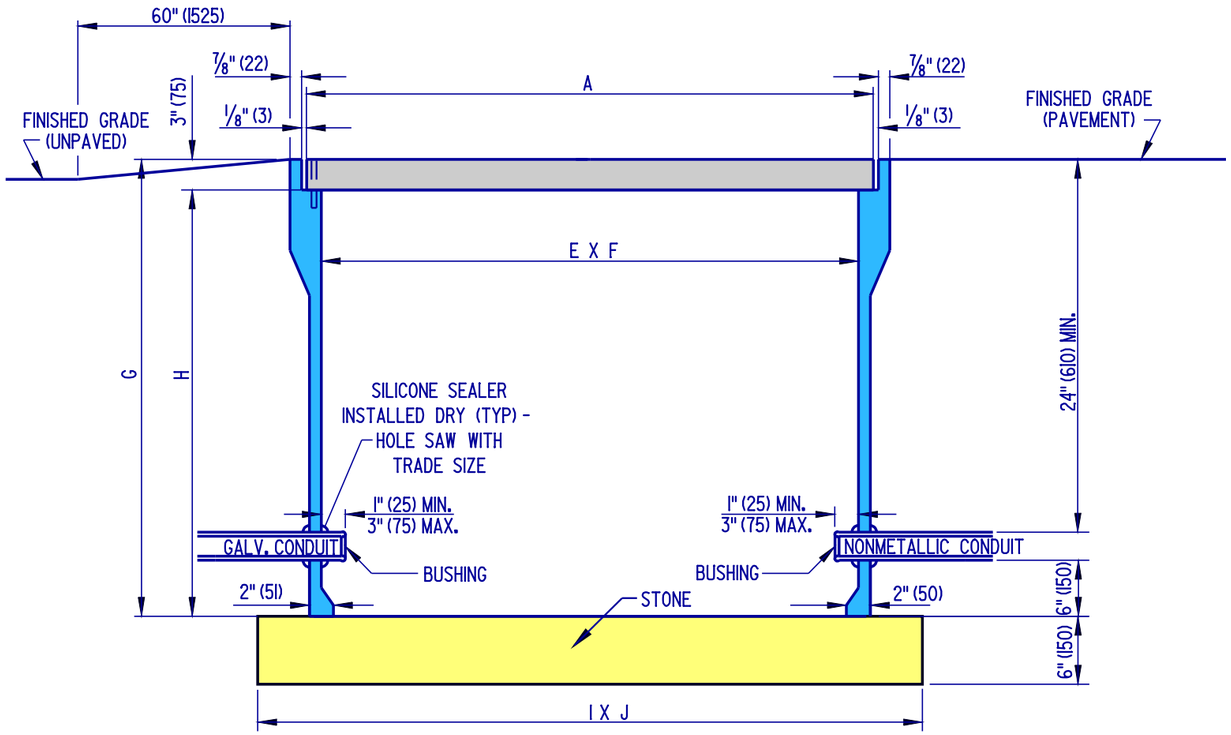
RECOMMENDED Dennis M. Office DESIGN ENGINEER 1/3/05 DATE

09/21/2004

SCALE : N.T.S.



PLAN VIEW



SECTION A-A

NOTES:

1). TYPES 8 & 10 CONDUIT JUNCTION WELLS SHALL BE PRECAST POLYMER CONCRETE.
2). ALL CONDUIT JUNCTION WELLS CONSTRUCTED WITHIN PAVEMENT, SIDEWALKS, ETC. WILL BE CONSTRUCTED FLUSH WITH THE SURFACE OF THE SAME. INSTALLATION IN UNPAVED AREAS WILL BE CONSTRUCTED ABOVE GRADE AND GRADED TO DRAIN AWAY FROM THE CONDUIT JUNCTION WELL.
3). POLYMER CONCRETE COVERS SHALL BE THE HEAVY-DUTY TYPE WITH A DESIGN LOAD OF 15,000 LBS (6800 kg) OVER A 10" (255) SQUARE.

DIMENSIONS		TYPE 8	TYPE 10
COVER	A	47 5/8" (1210)	35 5/8" (905)
	B	30 1/8" (765)	24" (610)
FRAME	C	49 5/8" (1261)	37 5/8" (956)
	D	32 1/8" (816)	26" (660)
	E	45 5/8" (1159)	33 7/8" (860)
	F	28 1/8" (714)	22 1/4" (565)
	G	36" (914)	30" (1067)
	H	33" (838)	27" (991)
BASE	I	58" (1473)	46" (1168)
	J	40" (1016)	34" (864)

PLAN SYMBOL

DELAWARE
DEPARTMENT OF TRANSPORTATION

CONDUIT JUNCTION WELLS, TYPES 8 & 10

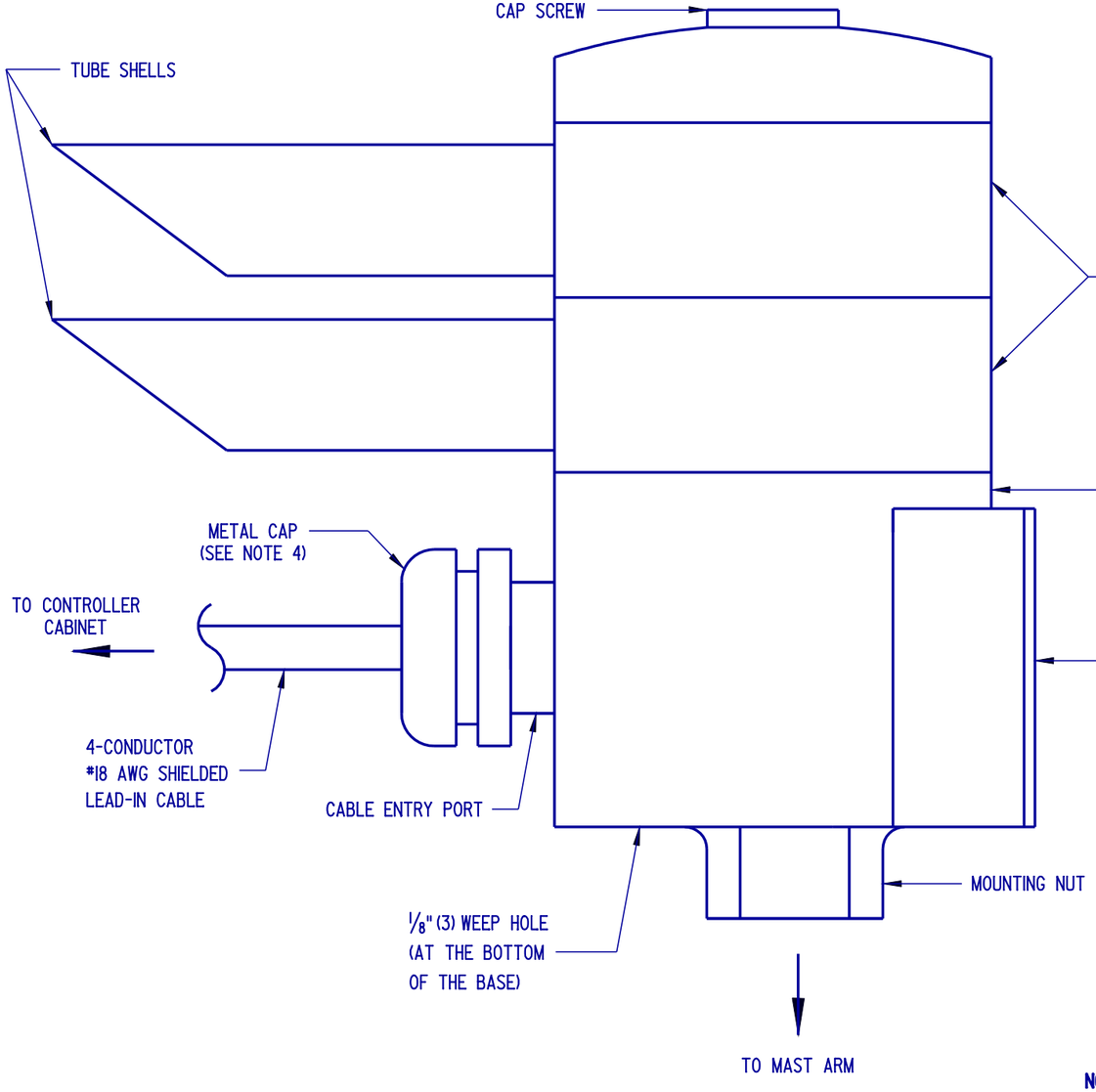
STANDARD NO. T-13 (2004) | SHT. 3 OF 3

APPROVED Carolann Wicks CHIEF ENGINEER 1/10/05 DATE

RECOMMENDED Dennis M. O'Toole DESIGN ENGINEER 1/3/05 DATE

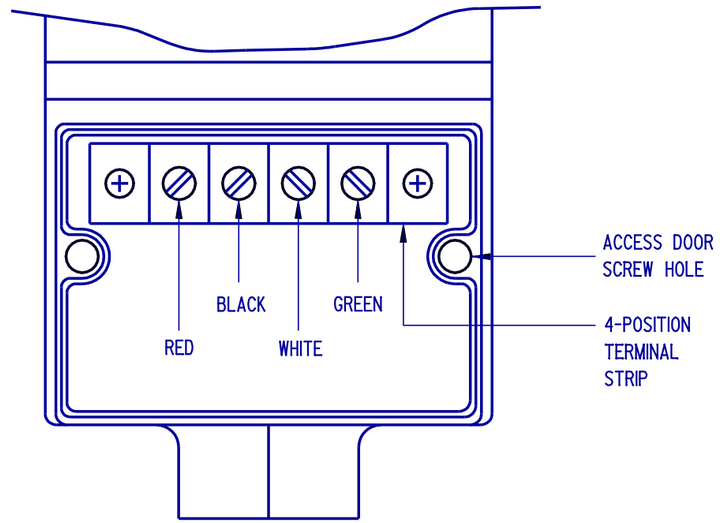
08/02/2004

SCALE : N.T.S.



SIDE VIEW

CABLE CONNECTIONS TO TERMINAL STRIP



FRONT VIEW
(CABLE IS NOT SHOWN)

NOTES:

1). UPRIGHT CONFIGURATION SHALL BE USED FOR MOUNTING ON MAST ARMS, SIGNAL HEAD FRAMEWORKS AND PEDESTALS.
2). UPRIGHT MOUNTING HARDWARE SHALL BE SUPPLIED BY THE DEPARTMENT.
3). TEFLON TAPE SHALL BE APPLIED TO THREADS BEFORE MOUNTING.
4). ROUTE THE LEAD-IN CABLE THROUGH THE METAL CAP AND THE RUBBER PLUG. REPLACE THE METAL CAP, SEALING THE CABLE ENTRY PORT. TIGHTEN THE METAL CAP SO THE CABLE WILL NOT SLIDE THROUGH THE RUBBER PLUG.

PLAN SYMBOL

DELAWARE
DEPARTMENT OF TRANSPORTATION

EMERGENCY PREEMPTION RECEIVER, UPRIGHT MOUNT

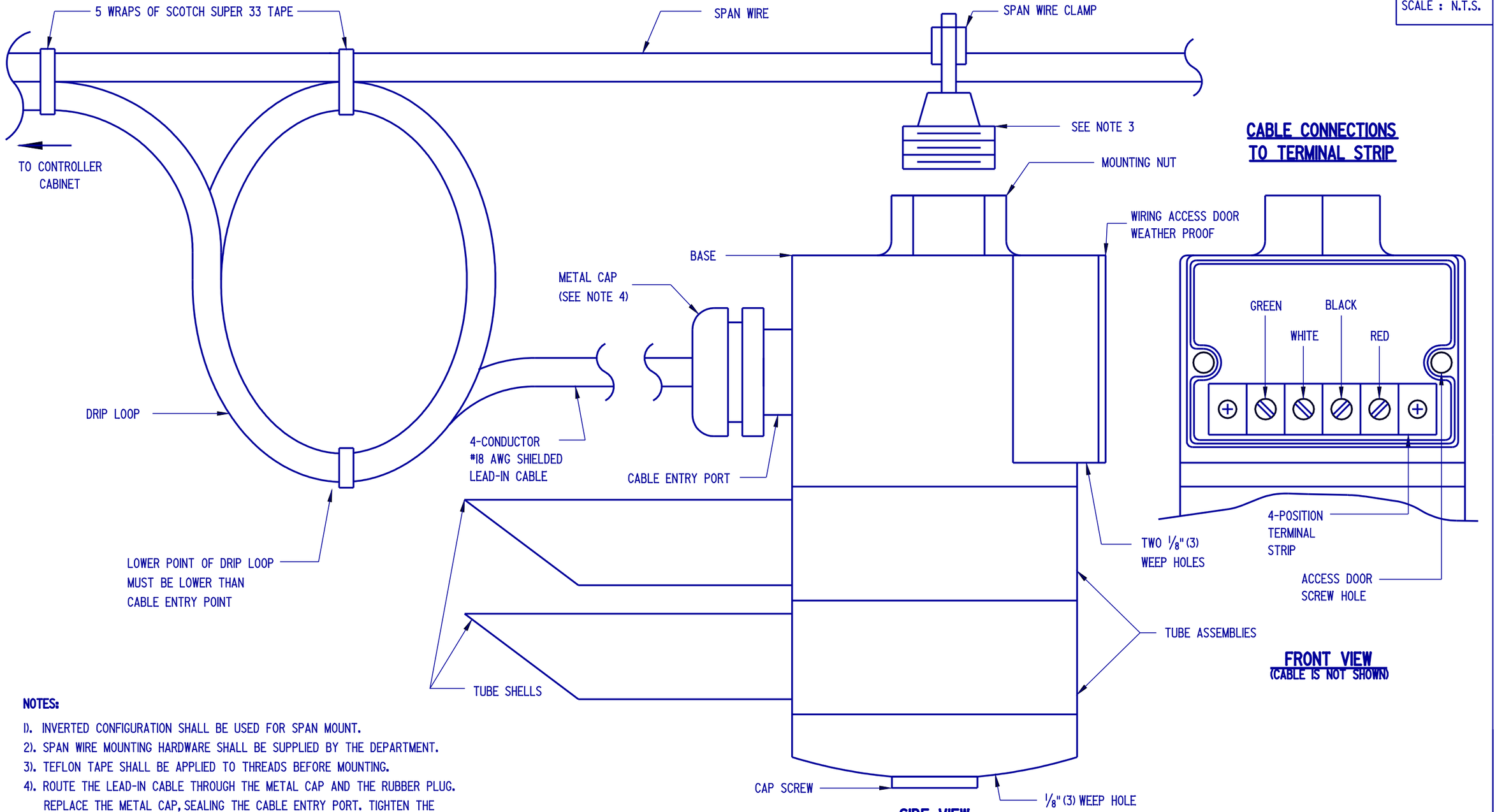
STANDARD NO. T-14 (2004) | SHT. 1 OF 2

APPROVED Carolann Wicks CHIEF ENGINEER 1/10/05 DATE

RECOMMENDED Dennis M. O'Toole DESIGN ENGINEER 1/3/05 DATE

08/02/2003

SCALE : N.T.S.



CABLE CONNECTIONS TO TERMINAL STRIP

NOTES:

1). INVERTED CONFIGURATION SHALL BE USED FOR SPAN MOUNT.
2). SPAN WIRE MOUNTING HARDWARE SHALL BE SUPPLIED BY THE DEPARTMENT.
3). TEFLON TAPE SHALL BE APPLIED TO THREADS BEFORE MOUNTING.
4). ROUTE THE LEAD-IN CABLE THROUGH THE METAL CAP AND THE RUBBER PLUG. REPLACE THE METAL CAP, SEALING THE CABLE ENTRY PORT. TIGHTEN THE METAL CAP SO THE CABLE WILL NOT SLIDE THROUGH THE RUBBER PLUG.

PLAN SYMBOL

DELAWARE
DEPARTMENT OF TRANSPORTATION

EMERGENCY PREEMPTION RECEIVER, INVERTED MOUNT

STANDARD NO. T-14 (2004) | SHT. 2 OF 2

APPROVED Carolann Wicks CHIEF ENGINEER 1/10/05 DATE

RECOMMENDED Dennis M. Oftha DESIGN ENGINEER 1/3/05 DATE

09/28/2004