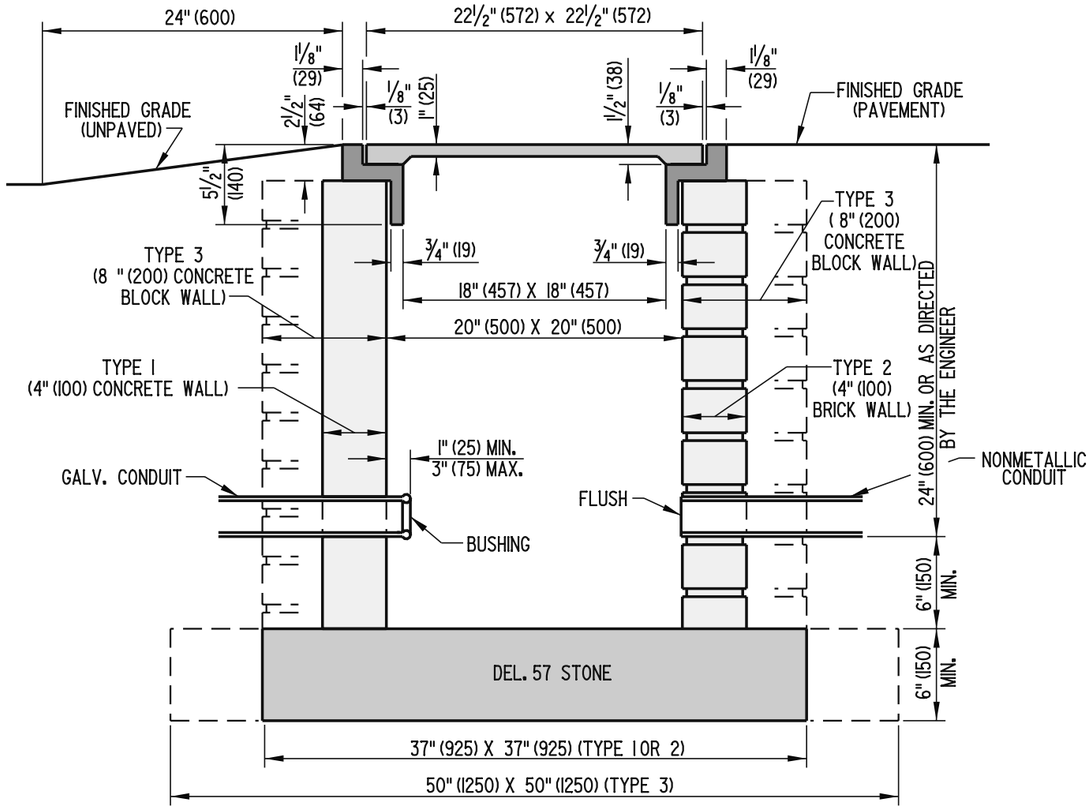
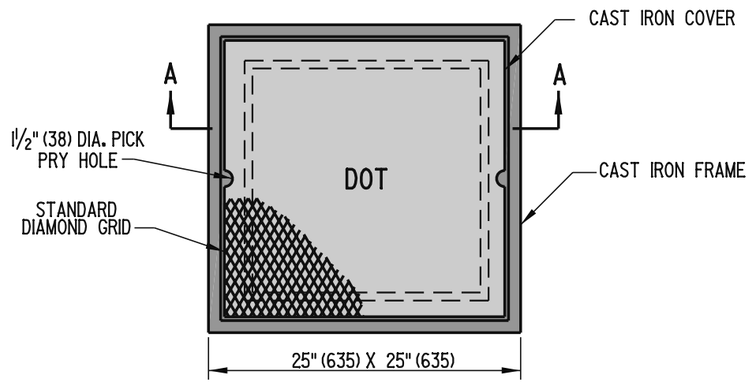
SCALE : N.T.S.



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.

DELAWARE
DEPARTMENT OF TRANSPORTATION

CONDUIT JUNCTION WELL, TYPES 1, 2, AND 3

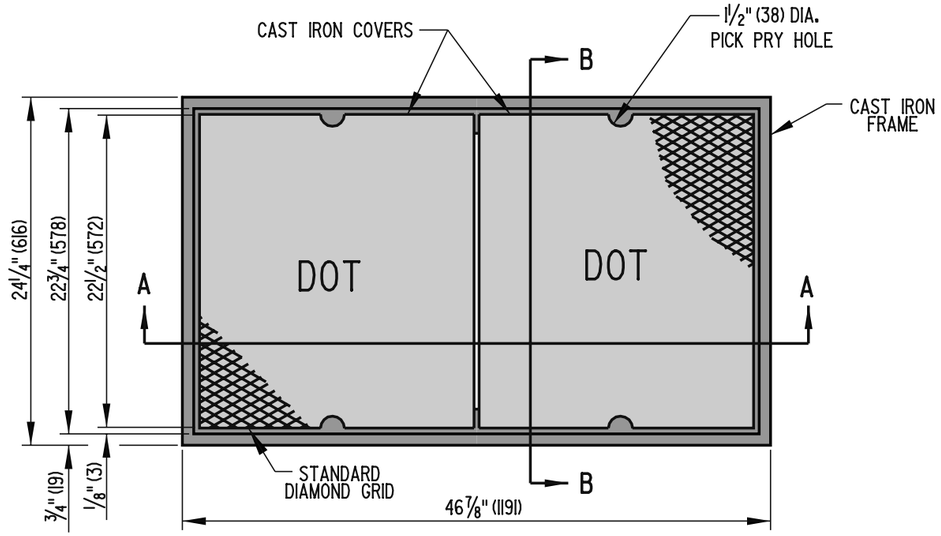
STANDARD NO. T-1 (2005) | SHT. 1 OF 1

APPROVED Carolann Wicks CHIEF ENGINEER 12/5/05 DATE

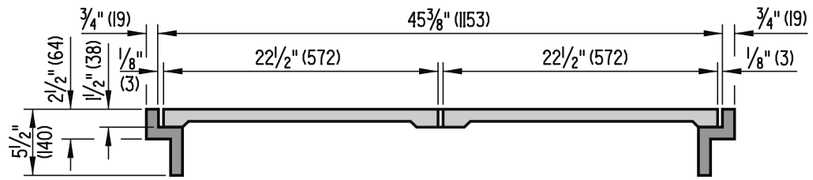
RECOMMENDED James M. Ojalvo DESIGN ENGINEER 11/29/05 DATE

09/08/2005

SCALE : N.T.S.



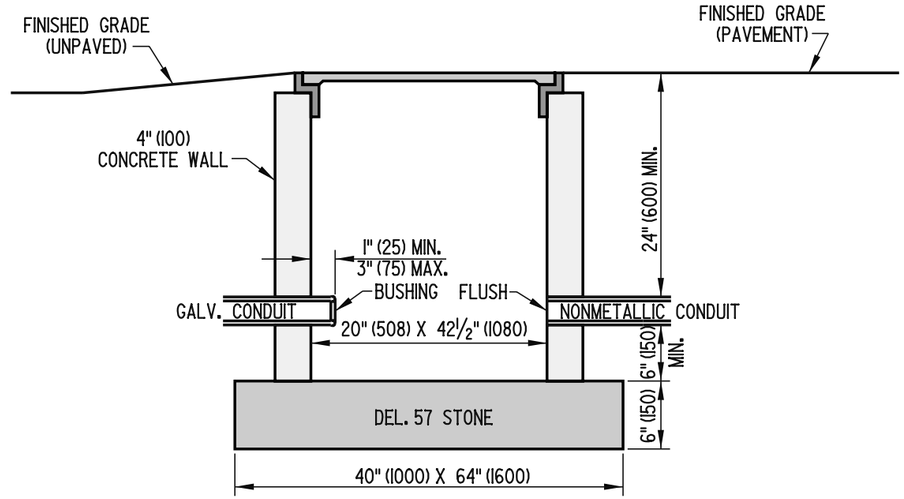
PLAN VIEW



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.

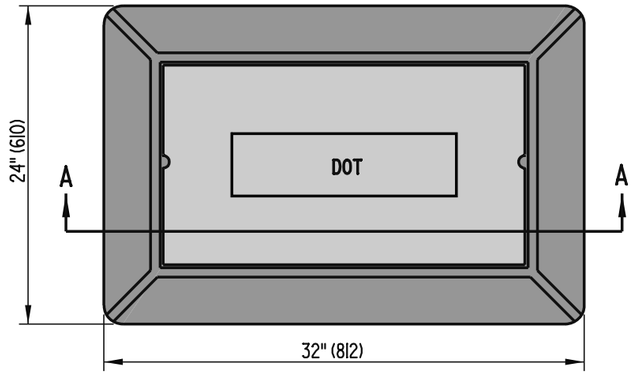


SECTION B-B

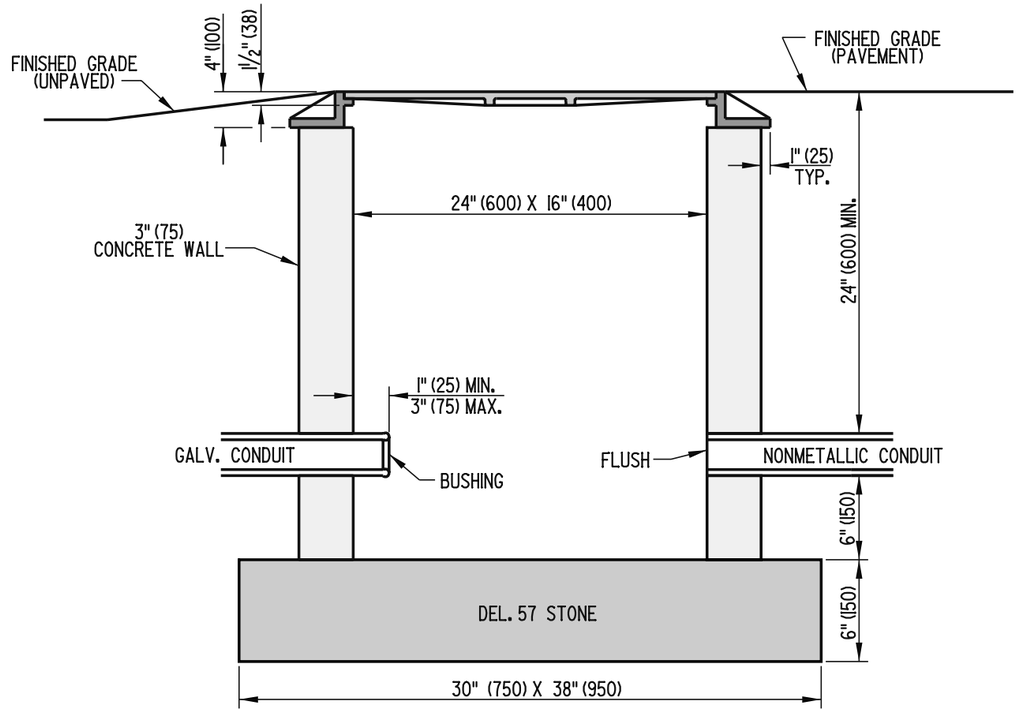
DELAWARE DEPARTMENT OF TRANSPORTATION	CONDUIT JUNCTION WELL, TYPE 4		APPROVED Carolann Wicks CHIEF ENGINEER 12/5/05 DATE
	STANDARD NO. T-2 (2005)	SHT. 1 OF 1	RECOMMENDED James M. Ojeda DESIGN ENGINEER 11/29/05 DATE

09/08/2005

SCALE : N.T.S.



PLAN VIEW



SECTION A-A

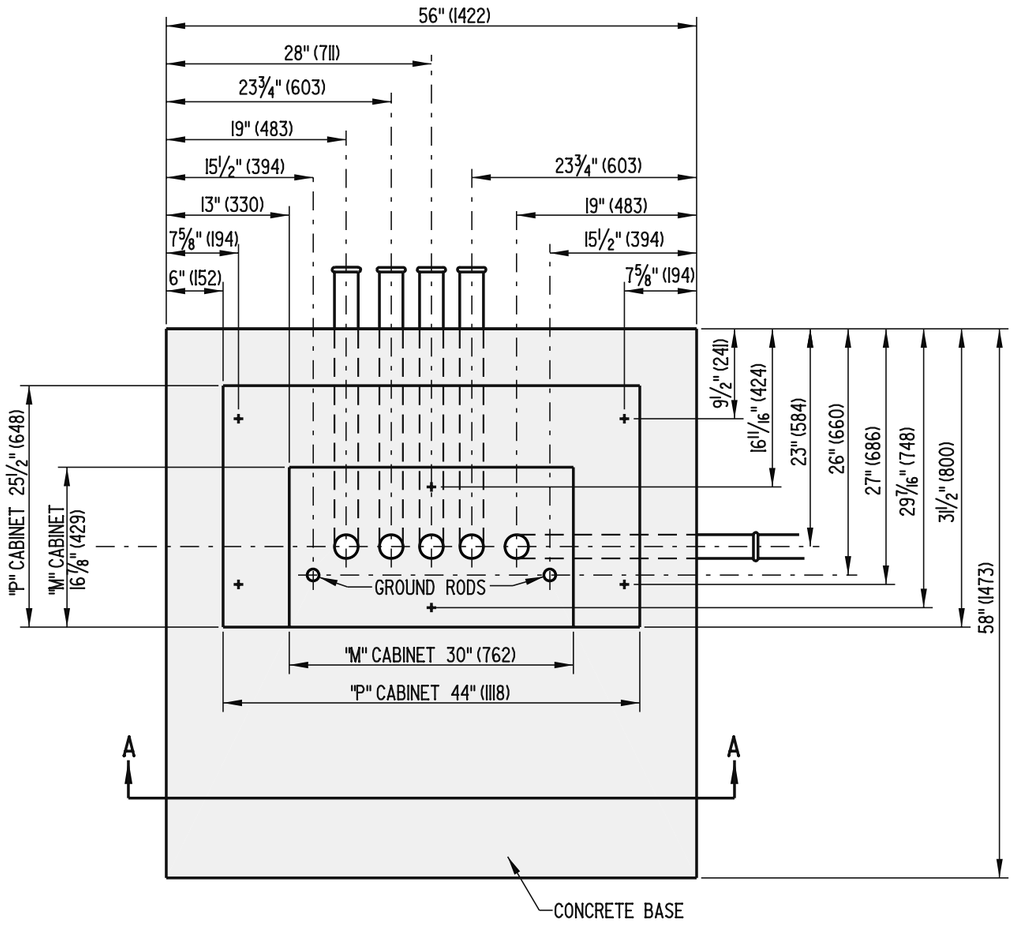
NOTES: 1). TYPE 5 CONDUIT JUNCTION WELL SHALL BE PRECAST CONCRETE. AT LEAST ONE HOLE IN PRECAST WELLS WILL BE OF A 5" (125) DIAMETER COMPLETELY THROUGH THE WALL. UNUSED HOLES SHALL BE PLUGGED.

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.

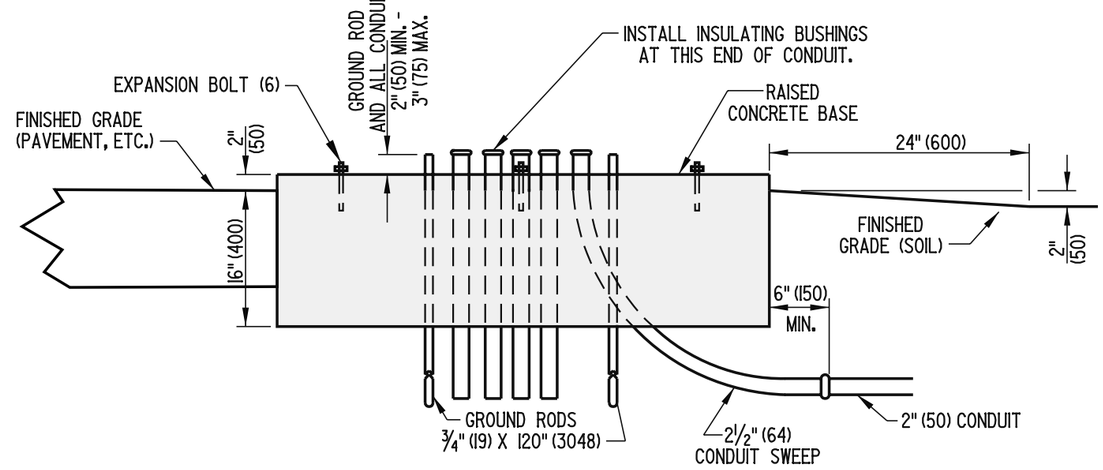
DELAWARE DEPARTMENT OF TRANSPORTATION	CONDUIT JUNCTION WELL, TYPE 5		APPROVED Carolann Wicks CHIEF ENGINEER 12/5/05 DATE
	STANDARD NO. T-3 (2005)	SHT. 1 OF 1	RECOMMENDED James M. Ojdana DESIGN ENGINEER 11/29/05 DATE

09/08/2005

SCALE : N.T.S.



PLAN VIEW



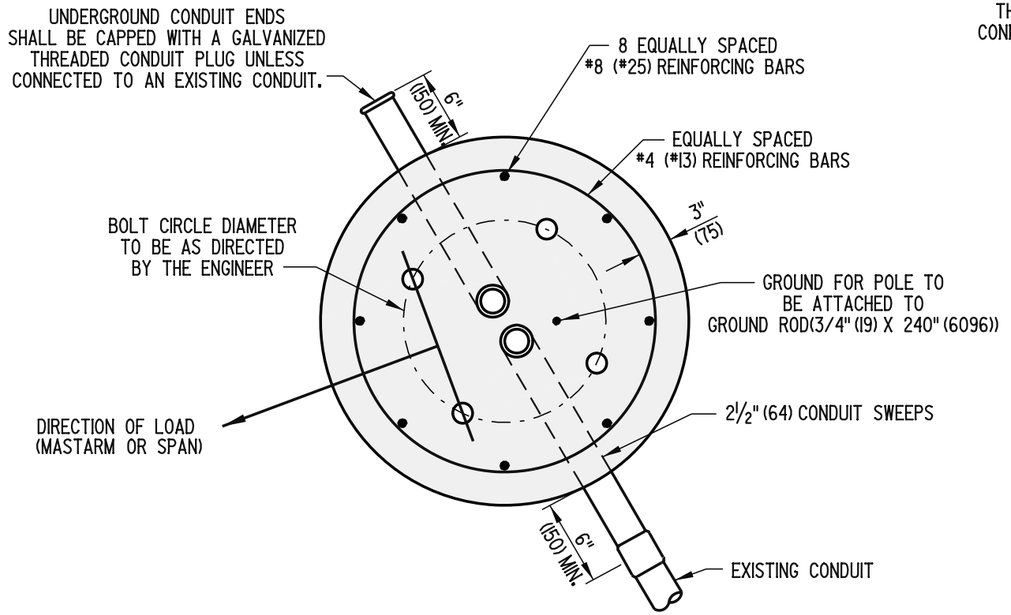
SECTION A-A

CONCRETE CABINET BASE

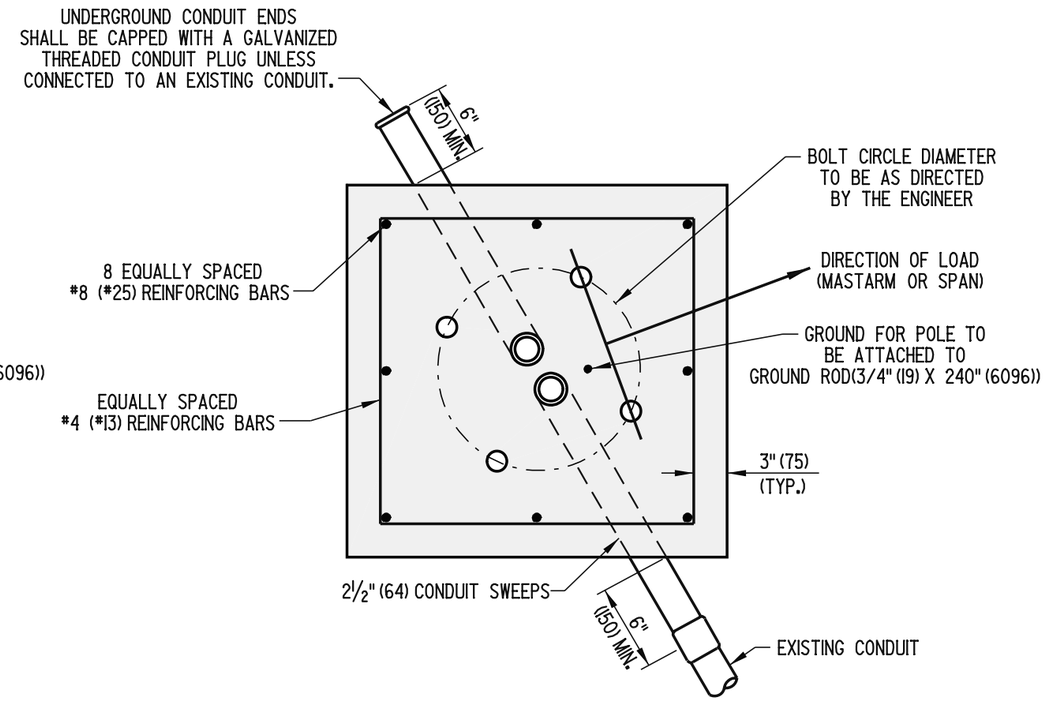
DELAWARE DEPARTMENT OF TRANSPORTATION	CABINET BASES (TYPES 'M' & 'P')		APPROVED Carolann Wicks CHIEF ENGINEER 12/5/05 DATE
	STANDARD NO. T-4 (2005)	SHT. 1 OF 1	RECOMMENDED Jennifer M. O'Mara DESIGN ENGINEER 11/29/05 DATE

09/09/2005

SCALE : N.T.S.



ROUND BASE



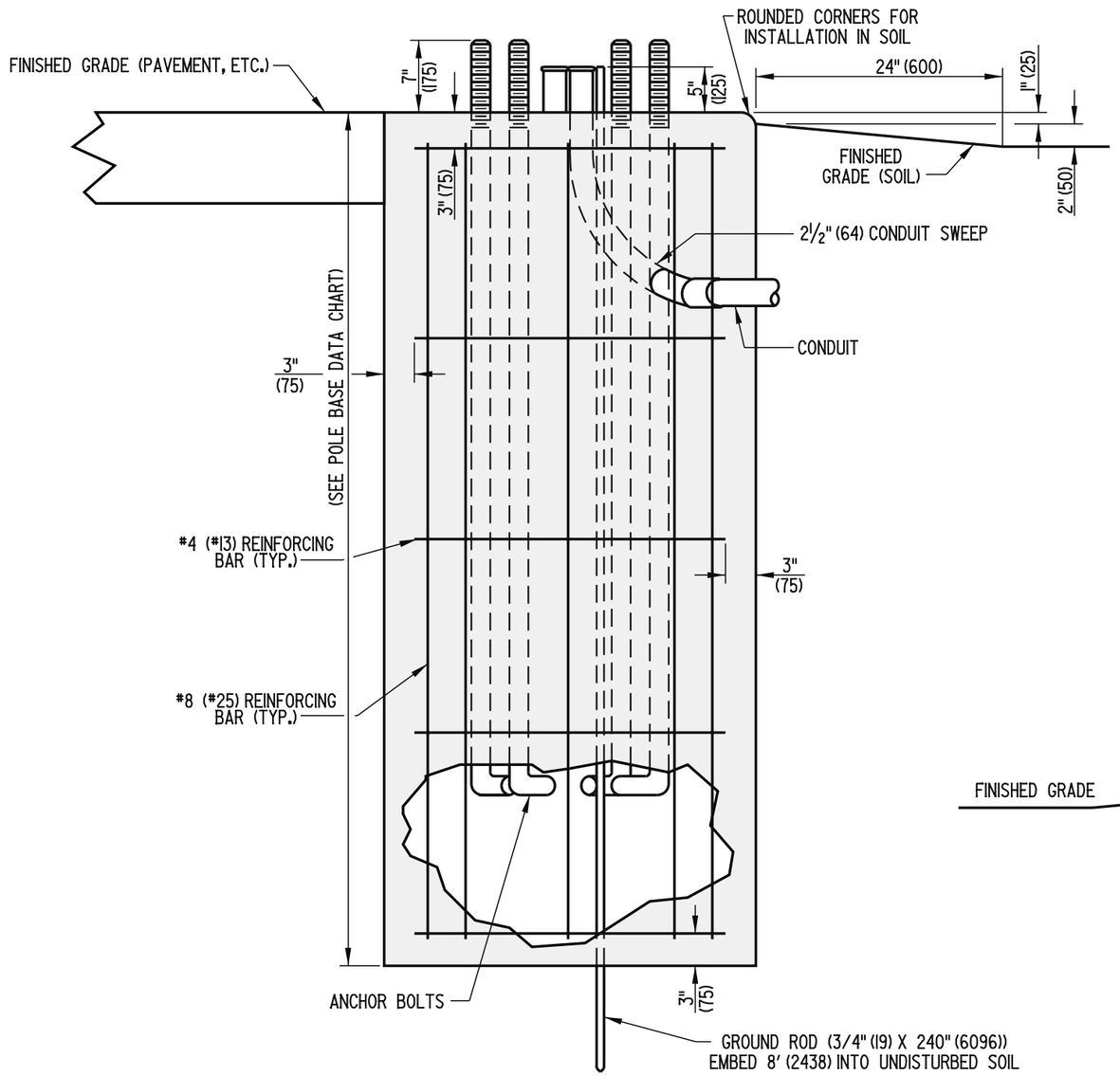
SQUARE BASE

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

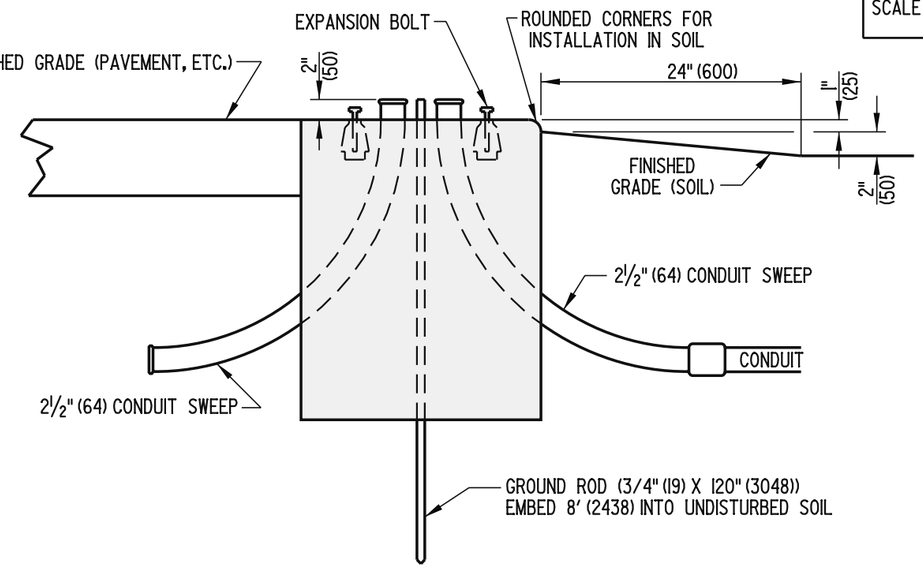
DELAWARE DEPARTMENT OF TRANSPORTATION	POLE BASES		APPROVED Carolann Wicks CHIEF ENGINEER 12/5/05 DATE
	STANDARD NO. T-5 (2005)	SHT. 1 OF 3	RECOMMENDED James M. O'Neill DESIGN ENGINEER 11/29/05 DATE

09/08/2005

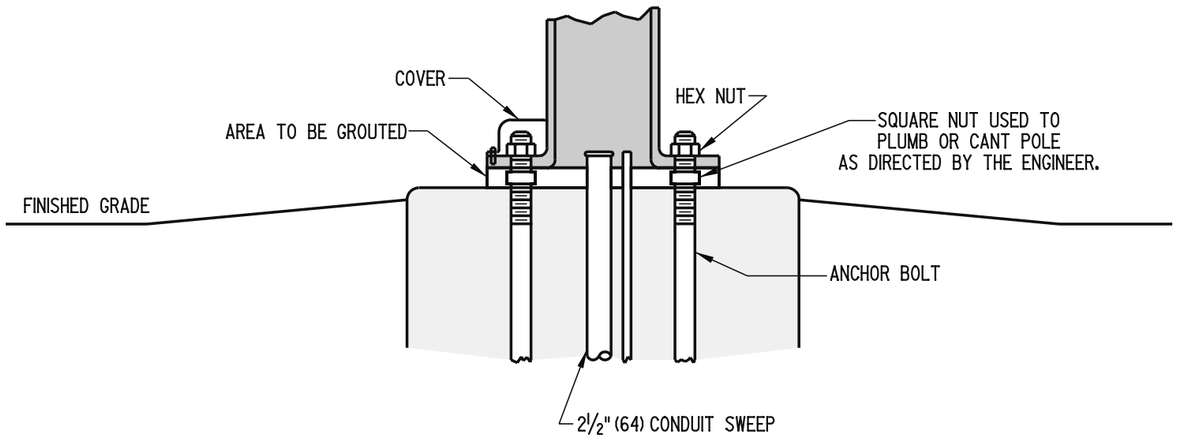
SCALE : N.T.S.



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



TYPICAL SECTION (BASE 4)



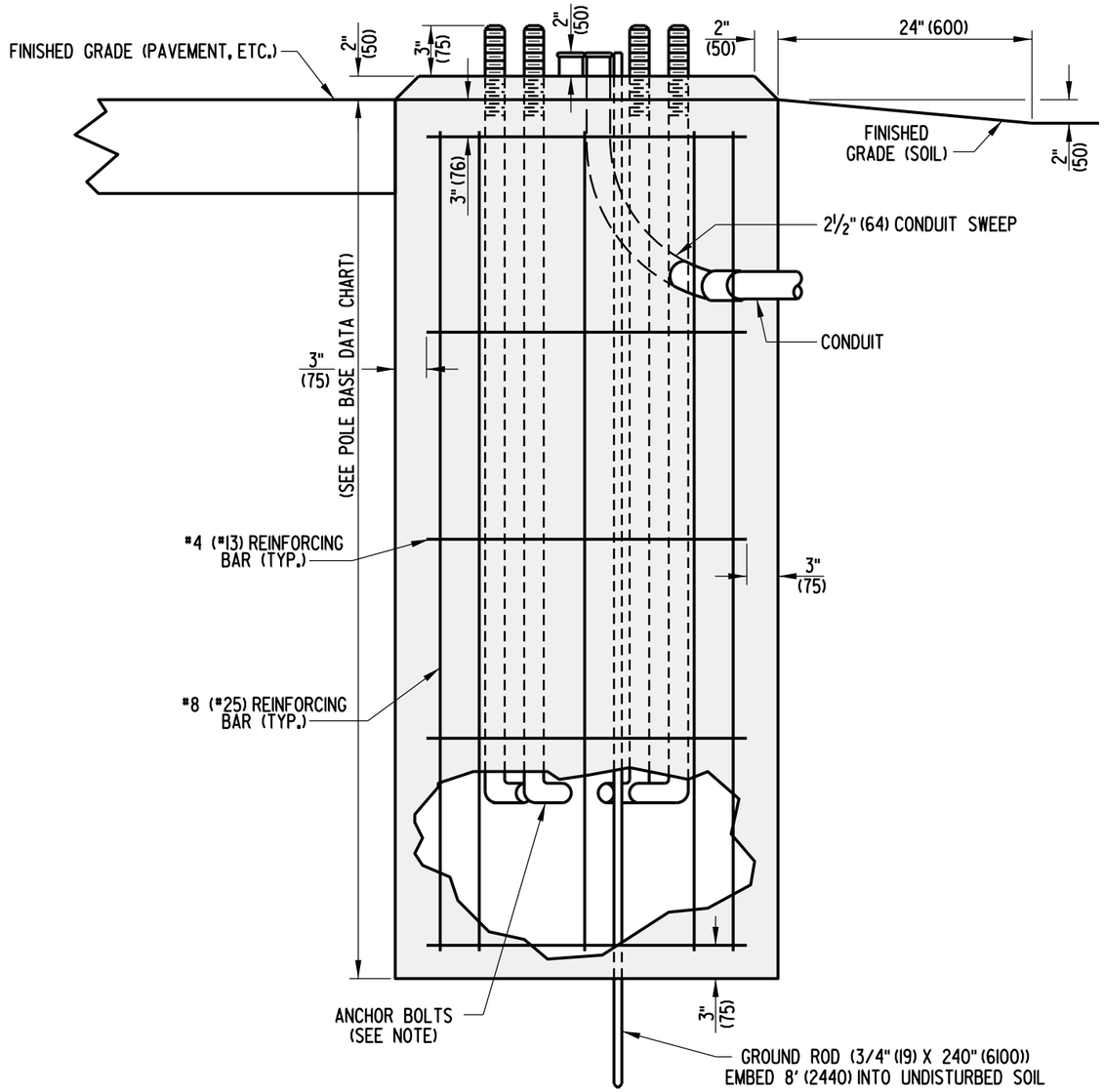
TYPICAL INSTALLATION (BASES 1,2,2A,2B,3,3A,3B,4, AND 7)

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.

DELAWARE DEPARTMENT OF TRANSPORTATION	POLE BASES		APPROVED Carolann Wicks CHIEF ENGINEER 12/5/05 DATE
	STANDARD NO. T-5 (2005)	SHT. 2 OF 3	RECOMMENDED James M. Ojeda DESIGN ENGINEER 11/29/05 DATE

09/08/2005

SCALE : N.T.S.



TYPICAL SECTION (BASES 5 AND 6)

NOTE:
SEE SPECIFICATIONS AND DETAILS FROM CURRENT PURCHASING CONTRACT FOR ANCHOR BOLT DIMENSIONS.

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.

DELAWARE
DEPARTMENT OF TRANSPORTATION

POLE BASES

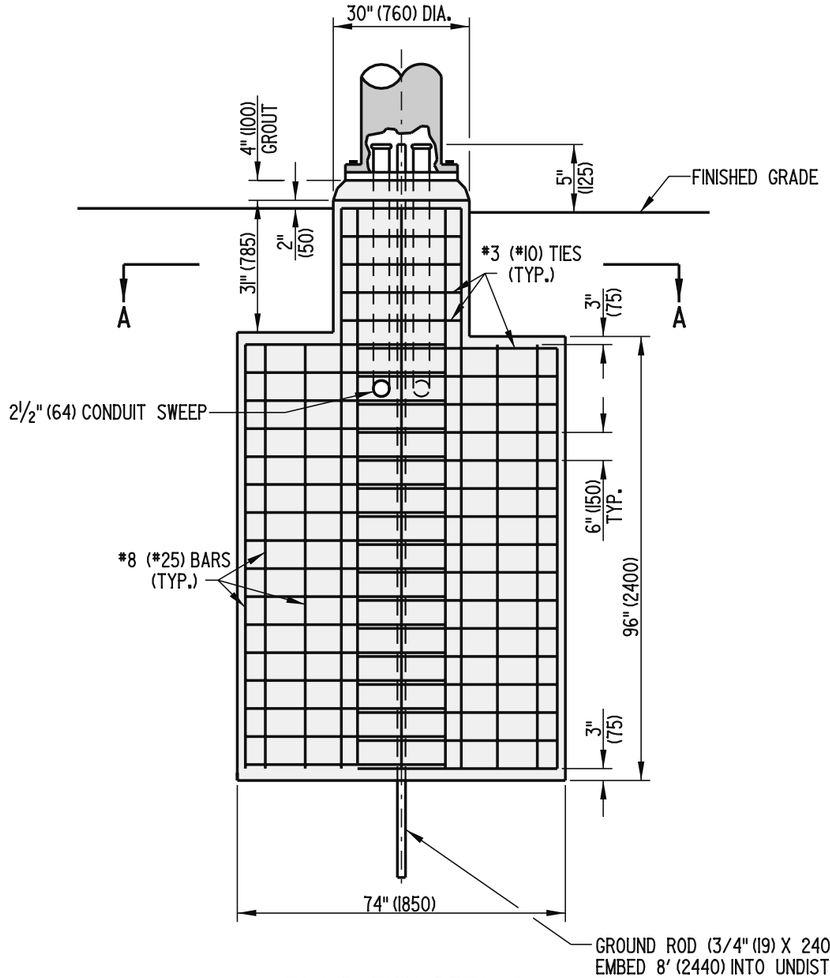
STANDARD NO. T-5 (2008) | SHT. 3 OF 3

APPROVED _____ CHIEF ENGINEER DATE 11/18/08

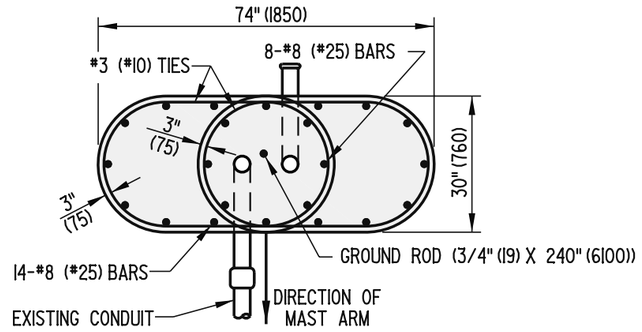
RECOMMENDED _____ DESIGN ENGINEER DATE 11/17/08

07/30/2008

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.

DELAWARE
DEPARTMENT OF TRANSPORTATION

SPECIAL POLE BASE

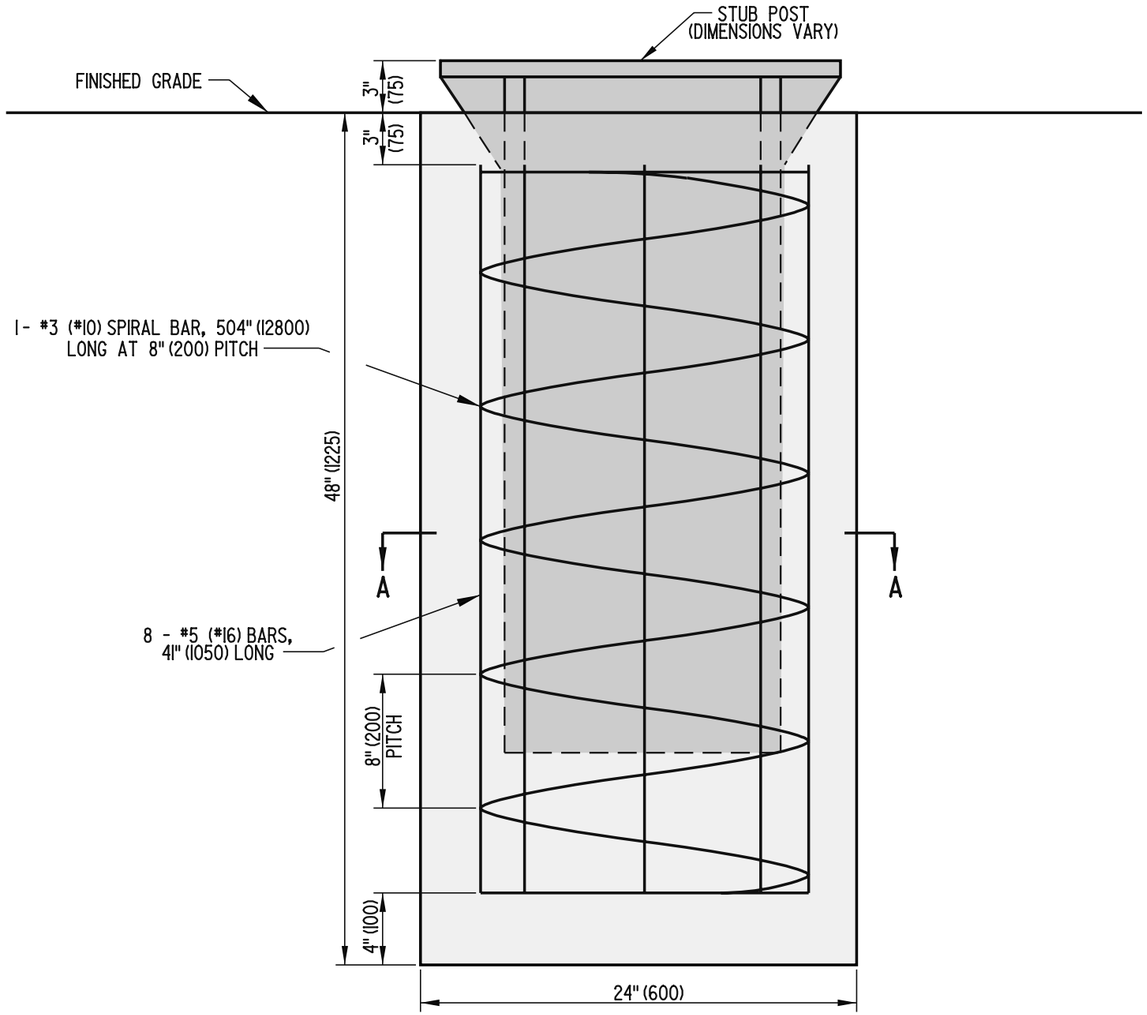
STANDARD NO. T-6 (2005) | SHT. 1 OF 1

APPROVED Carolann Wicks CHIEF ENGINEER 12/5/05 DATE

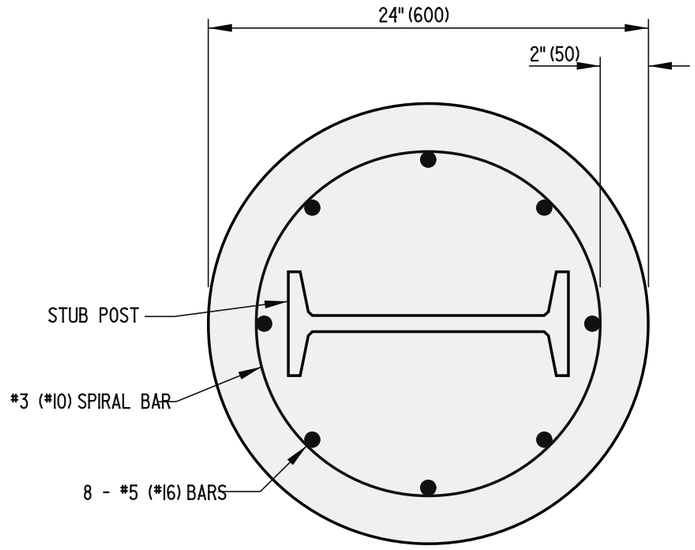
RECOMMENDED James M. Ojeda DESIGN ENGINEER 11/29/05 DATE

09/09/2005

SCALE : N.T.S.



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



SECTION A-A

DELAWARE DEPARTMENT OF TRANSPORTATION	SIGN FOUNDATION		APPROVED Carolann Wicks CHIEF ENGINEER 12/5/05 DATE
	STANDARD NO. T-7 (2005)	SHT. 1 OF 1	RECOMMENDED James M. O'Neill DESIGN ENGINEER 11/29/05 DATE

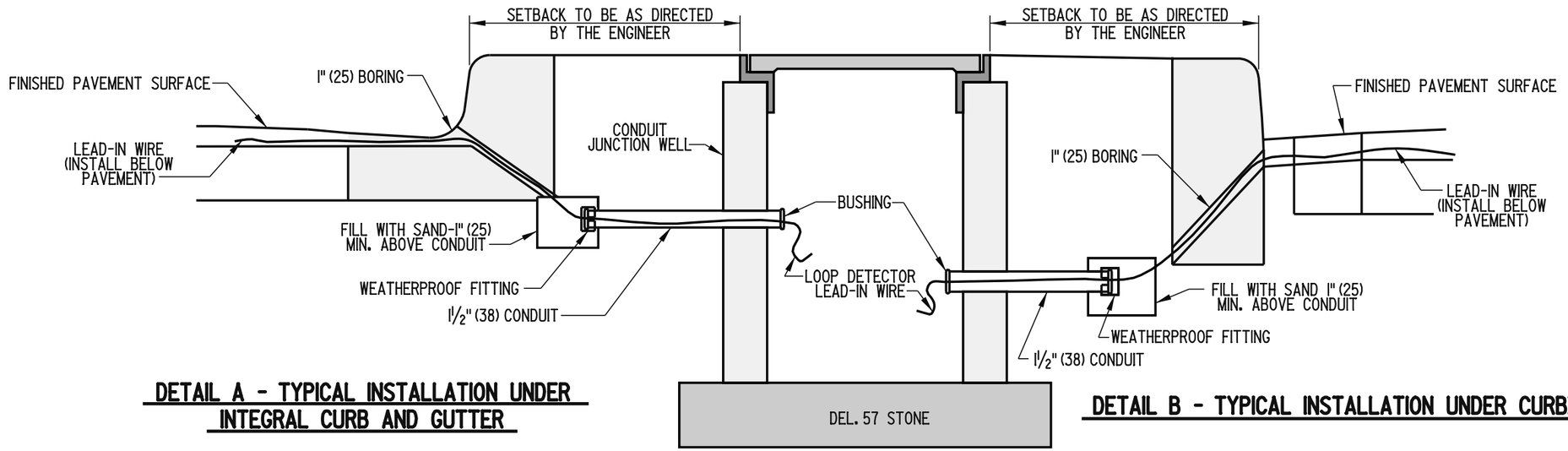
09/09/2005

SCALE : N.T.S.

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

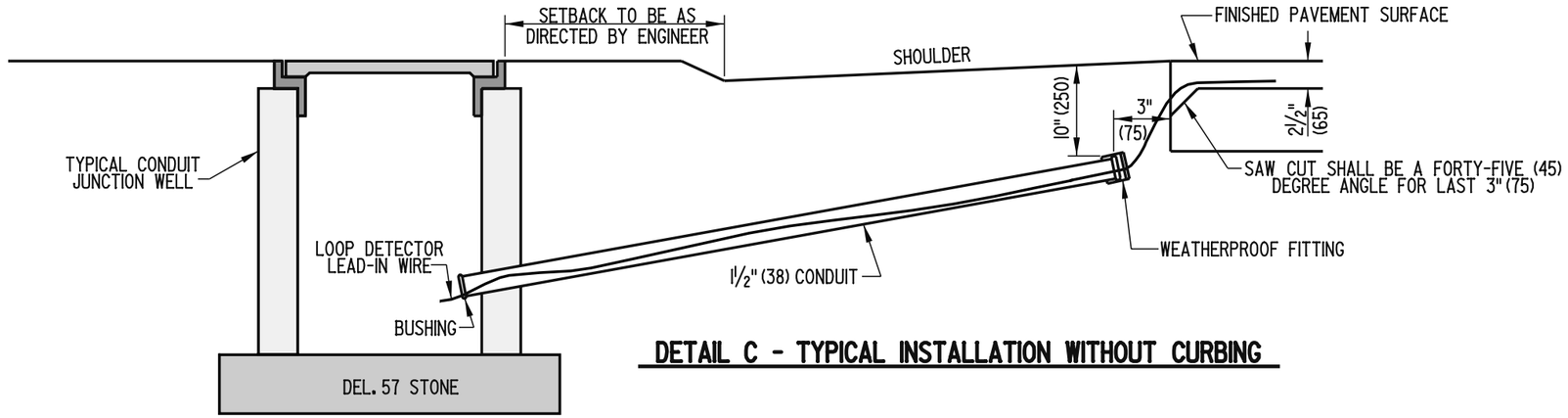
2. THE WEATHERPROOF FITTING SHALL CONSIST OF A GALVANIZED 1½" (38) COUPLING CONTAINING A STEEL THREADED REDUCING BUSHING (1½" (38) TO ¾" (19)) AND A ¾" (19) WATERTIGHT CONNECTOR FOR SERVICE ENTRANCE CABLE.

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

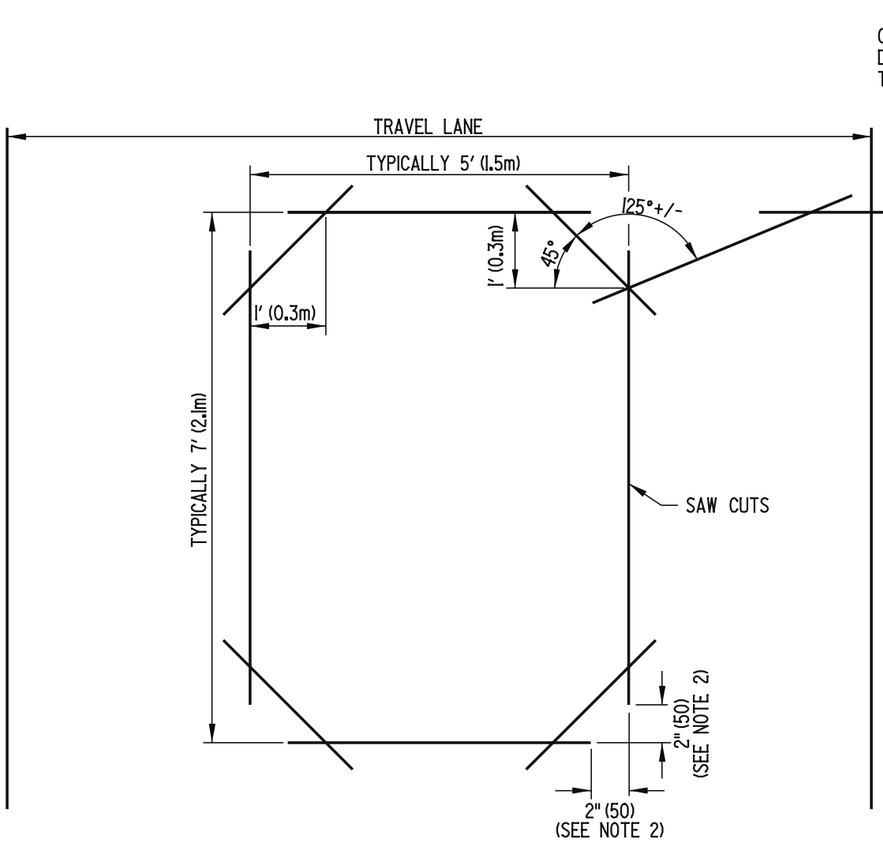


DETAIL C - TYPICAL INSTALLATION WITHOUT CURBING

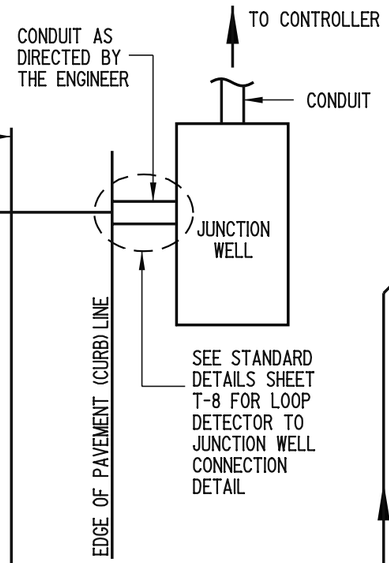
DELAWARE DEPARTMENT OF TRANSPORTATION	LOOP DETECTOR TO CONDUIT JUNCTION WELL CONNECTION		APPROVED Carolann Wicks CHIEF ENGINEER 12/5/05 DATE
	STANDARD NO. T-8 (2005)	SHT. 1 OF 1	RECOMMENDED James M. O'Neill DESIGN ENGINEER 11/29/05 DATE

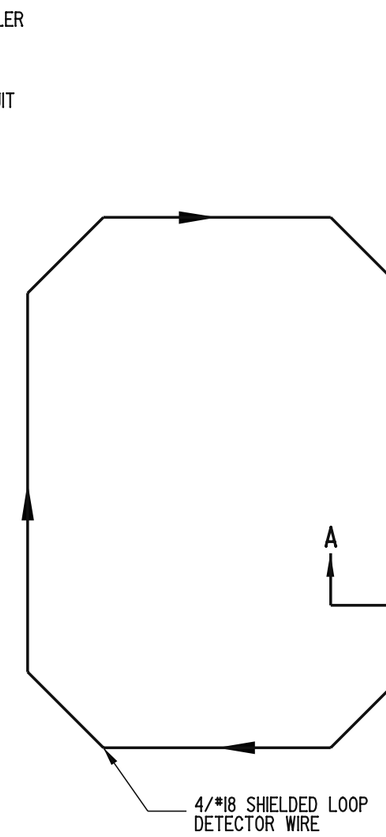
09/09/2005

SCALE : N.T.S.



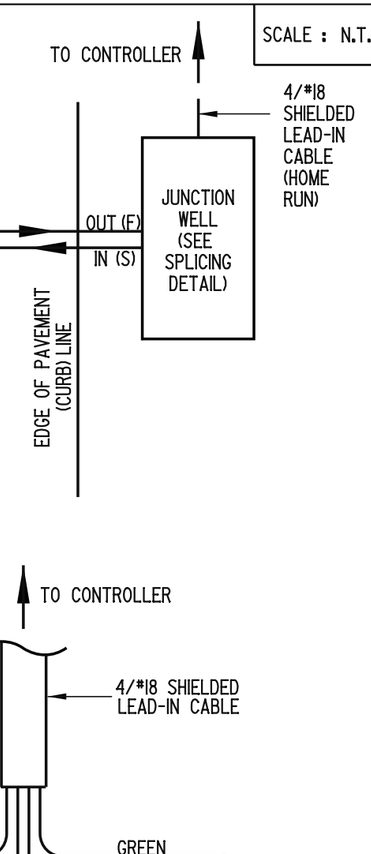
WIRE SLOT CONSTRUCTION





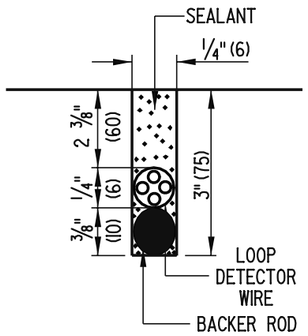
DETAILS FOR INSTALLING LOOP DETECTOR WIRE

(SINGLE WRAP)

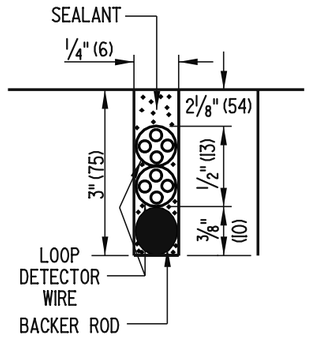


NOTES:

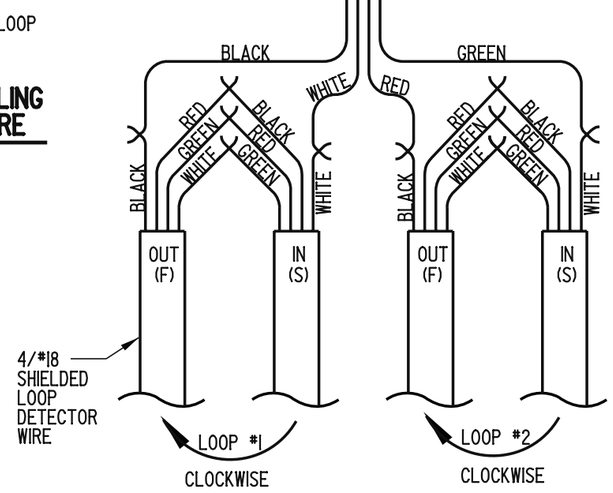
1). SAW CUTS FOR WIRE SLOT CONSTRUCTION SHALL BE EXTENDED BEYOND THE CORNERS SO THAT THE SLOT IS FULL DEPTH AT TURN POINTS. A FORTY-FIVE (45) DEGREE ANGLE SHALL BE CUT 12" (300) BACK FROM THE POINT OF THE EXTENDED CORNER.
2). THE LONGITUDINAL / TRANSVERSE CUT SHALL BE STOPPED APPROXIMATELY 2" (50) FROM 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



SECTION B - B



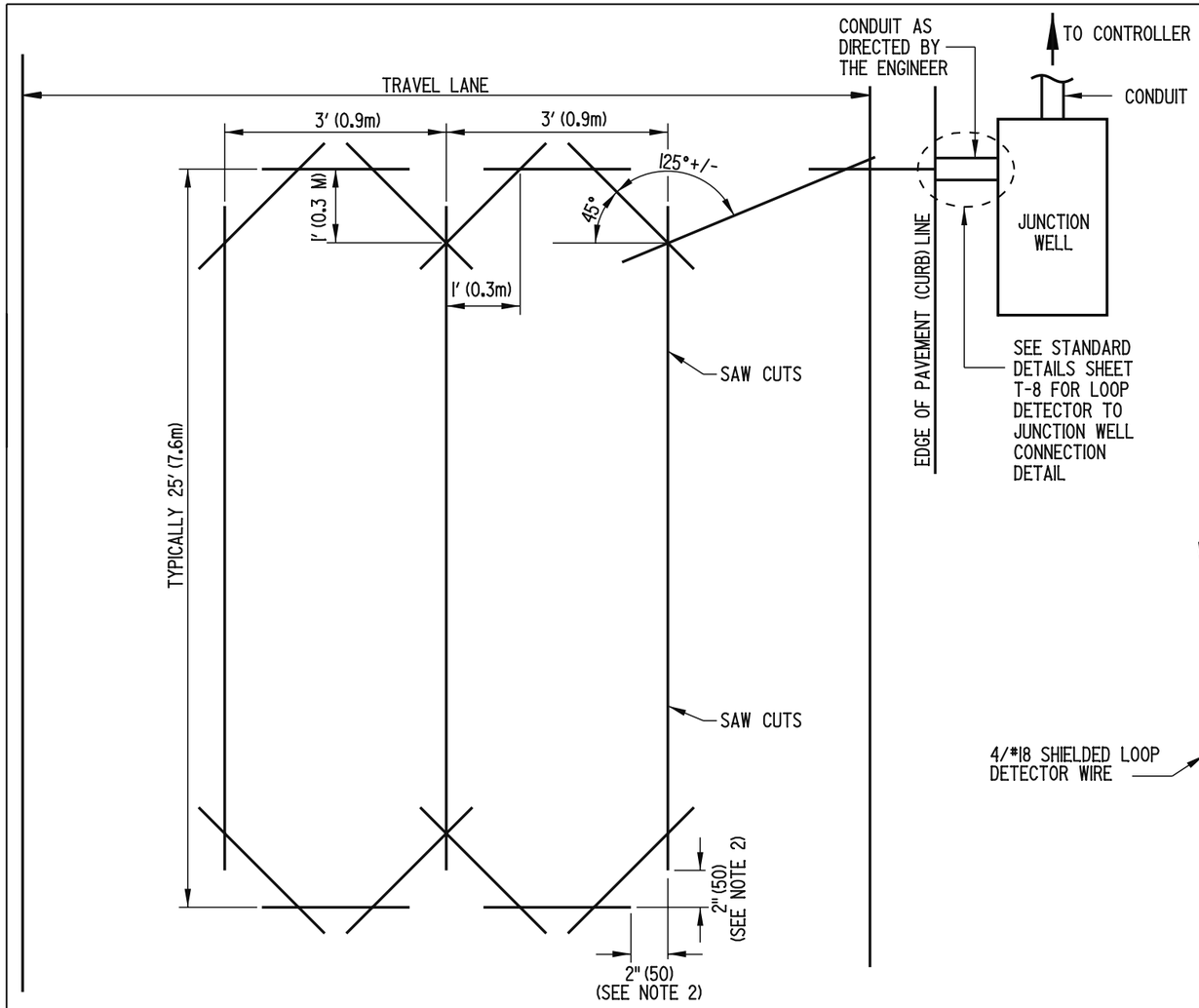
SPLICING DETAIL

(SEE NOTE 3)

DELAWARE DEPARTMENT OF TRANSPORTATION	TYPE #1 LOOP DETECTOR		APPROVED Carolann Wicks CHIEF ENGINEER 12/5/05 DATE
	STANDARD NO. T-9 (2005)	SHT. 1 OF 1	RECOMMENDED Jennifer M. O'Mara DESIGN ENGINEER 11/29/05 DATE

01/19/2006

SCALE : N.T.S.



WIRE SLOT CONSTRUCTION

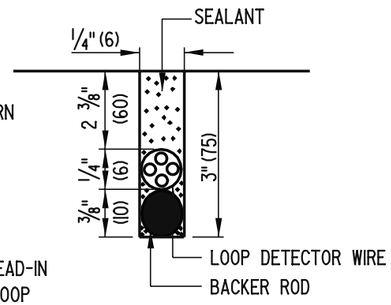
NOTES:

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.

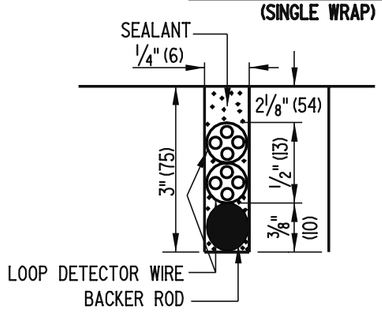
2). THE LONGITUDINAL / TRANSVERSE CUT SHALL BE STOPPED APPROXIMATELY 2" (50) FROM THE CORNER TO PREVENT THE TRIANGULAR PORTION OF THE PAVEMENT FROM BREAKING.

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.

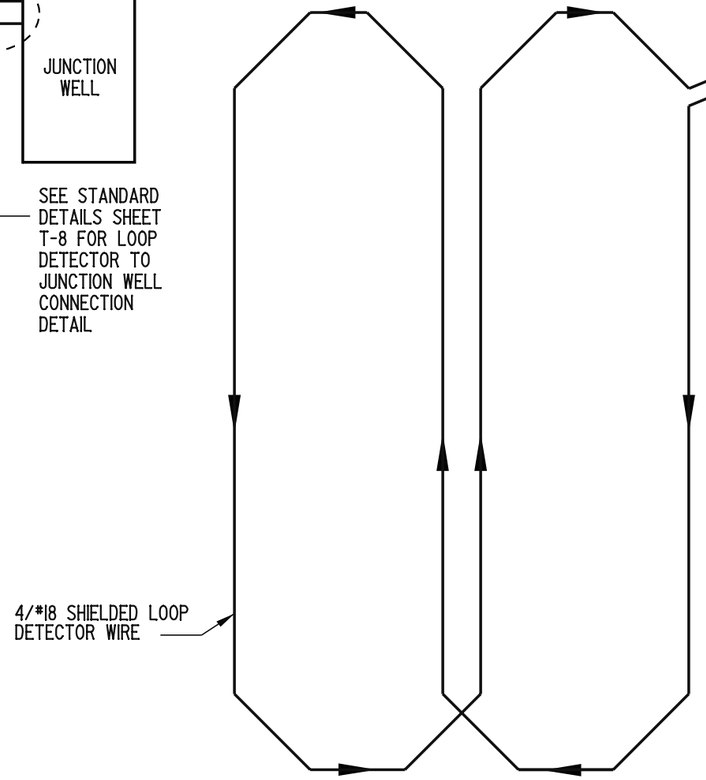
4). LOOP DETECTOR SHALL BE CENTERED IN TRAVEL LANE.



SECTION A - A

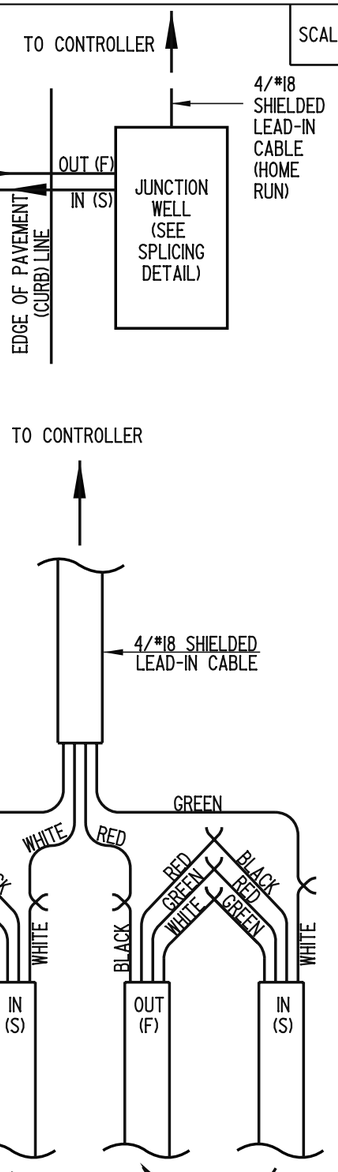


SECTION B - B



DETAILS FOR INSTALLING LOOP DETECTOR WIRE

(SINGLE WRAP)



SPLICING DETAIL

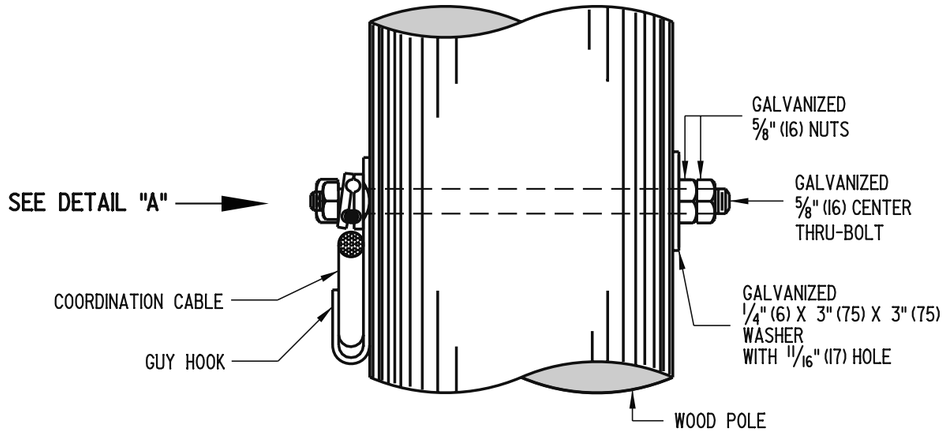
(SEE NOTE 3)

DELAWARE DEPARTMENT OF TRANSPORTATION	TYPE #2 LOOP DETECTOR		APPROVED Carolann Wicks CHIEF ENGINEER 12/5/05 DATE
	STANDARD NO. T-10 (2005)	SHT. 1 OF 1	RECOMMENDED Jennifer M. Oiller DESIGN ENGINEER 11/29/05 DATE

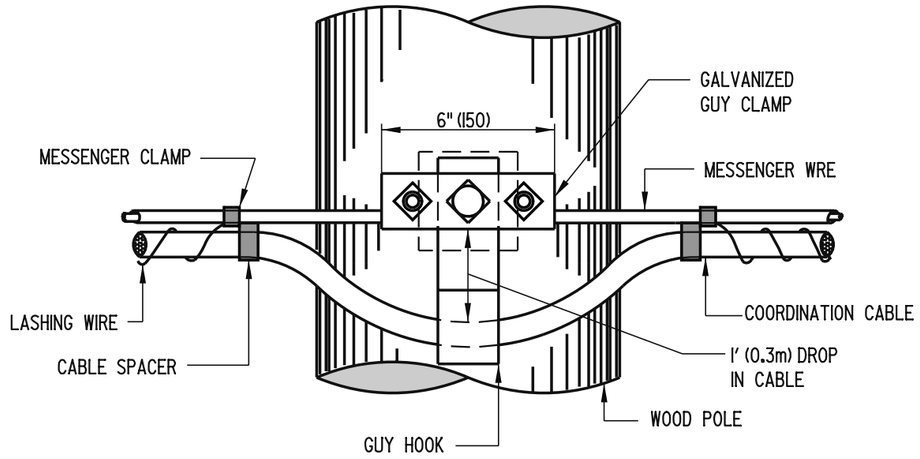
01/19/2006

SCALE : N.T.S.

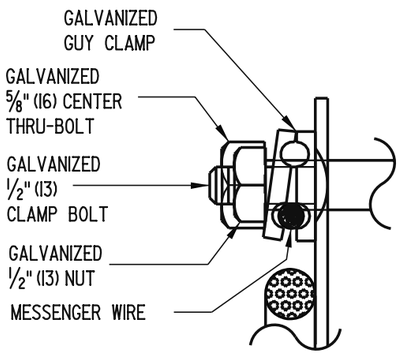
INTERMEDIATE



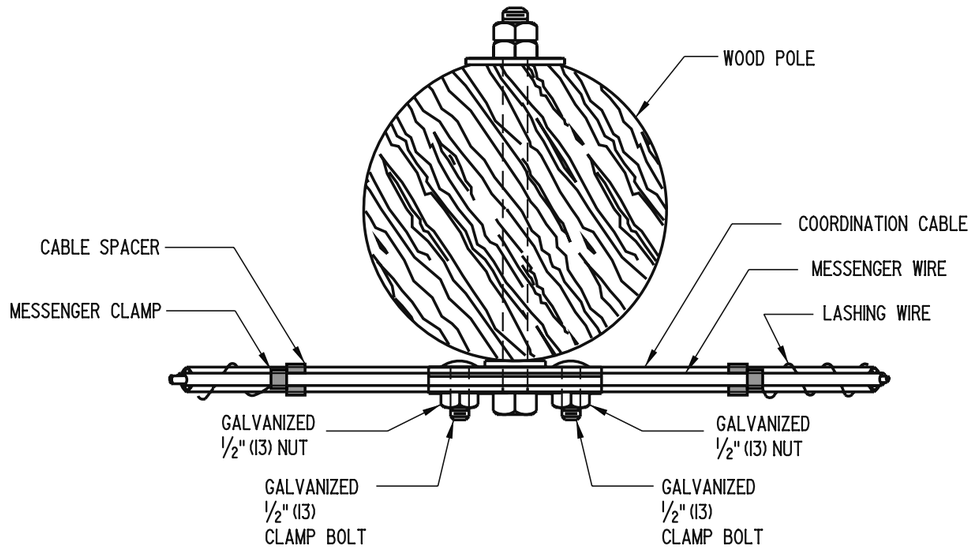
SIDE VIEW



FRONT VIEW



DETAIL "A"

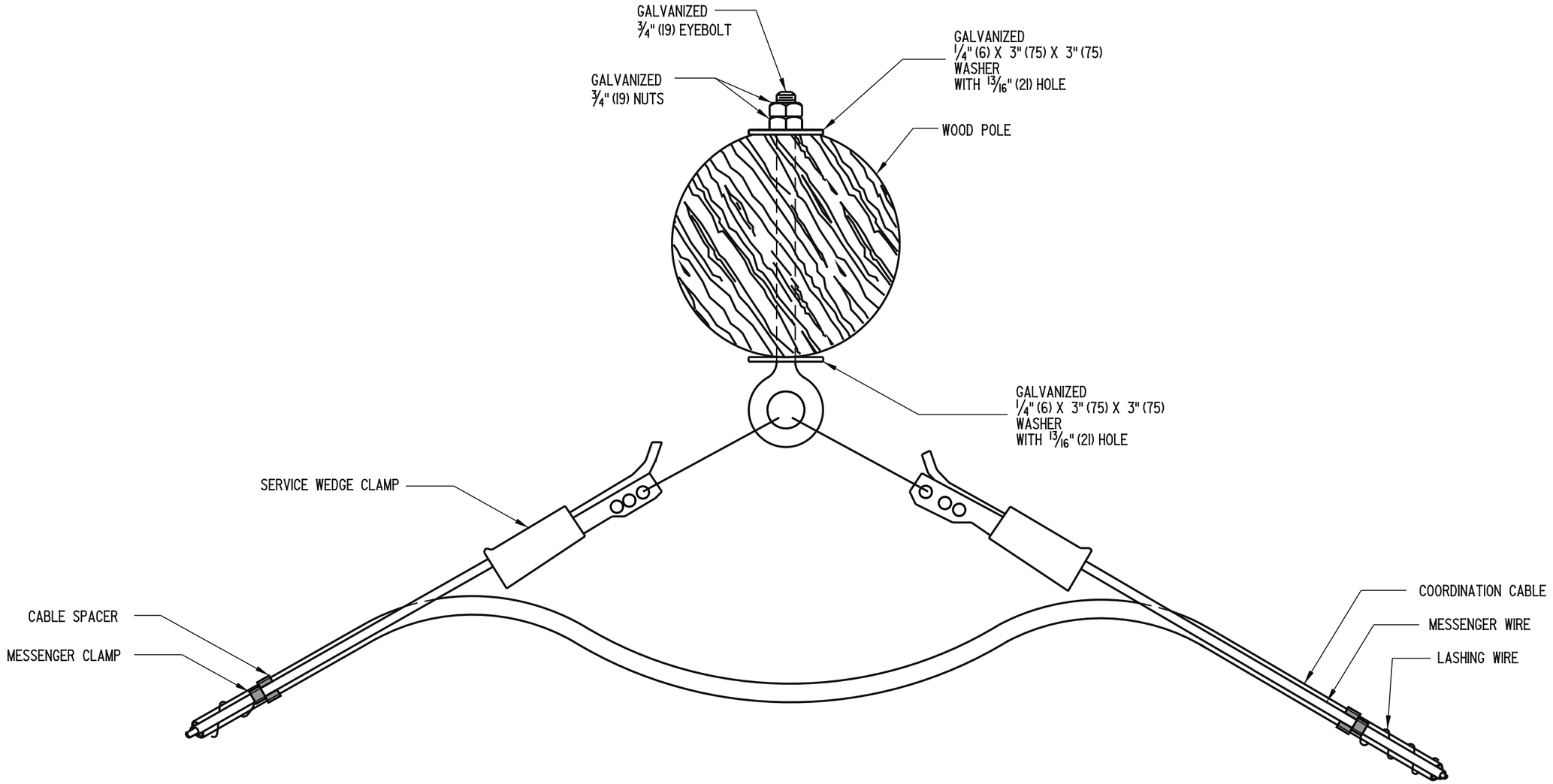


TOP VIEW

DELAWARE DEPARTMENT OF TRANSPORTATION	INTERMEDIATE MESSENGER WIRE ATTACHMENT ON WOOD POLES	APPROVED Carolann Wicks CHIEF ENGINEER 12/5/05 DATE
	STANDARD NO. T-11 (2005) SHT. 1 OF 2	RECOMMENDED James M. Ojeda DESIGN ENGINEER 11/29/05 DATE

09/09/2005

SCALE : N.T.S.

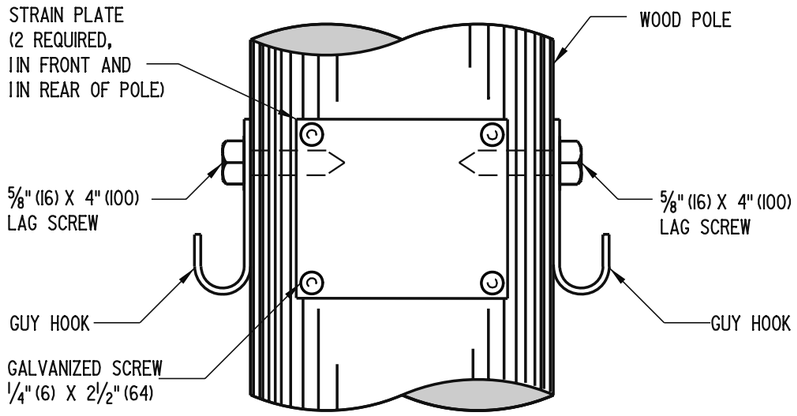


TOP VIEW

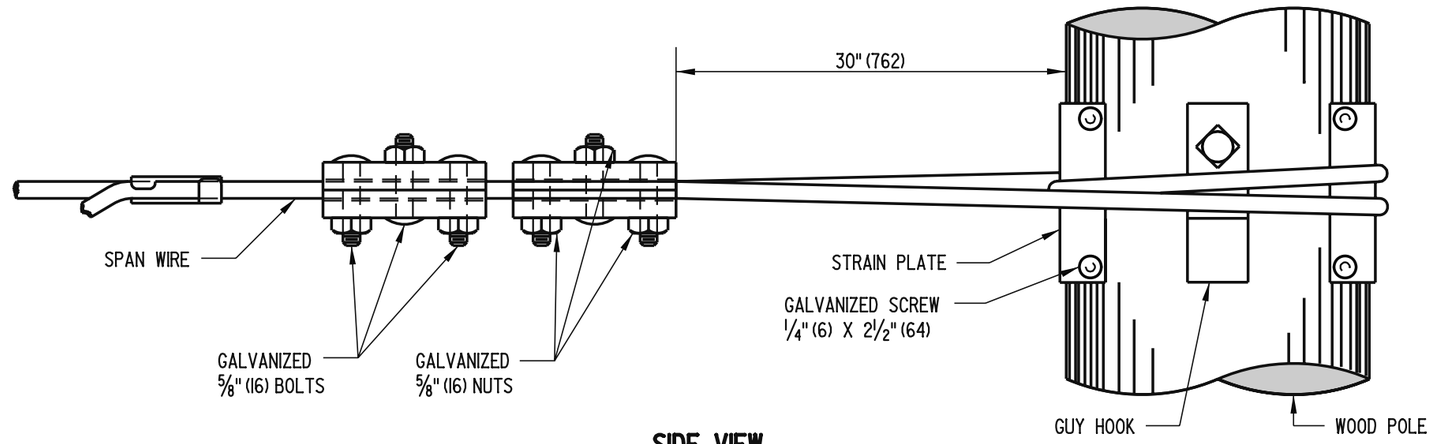
DELAWARE DEPARTMENT OF TRANSPORTATION	ANGULAR INTERMEDIATE MESSENGER WIRE ATTACHMENT		APPROVED Carolann Wicks CHIEF ENGINEER 12/5/05 DATE
	STANDARD NO. T-11 (2005)	SHT. 2 OF 2	RECOMMENDED DESIGN ENGINEER 11/29/05 DATE

09/27/2004

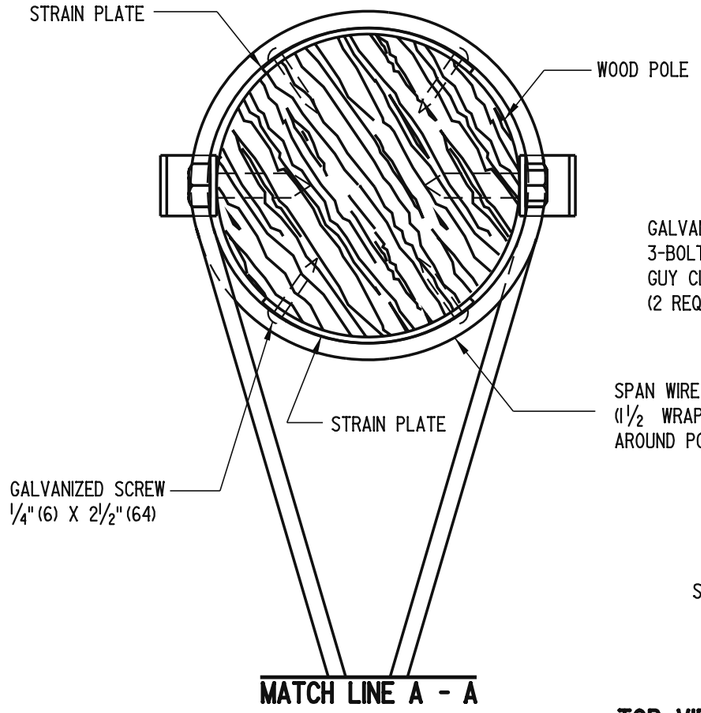
SCALE : N.T.S.



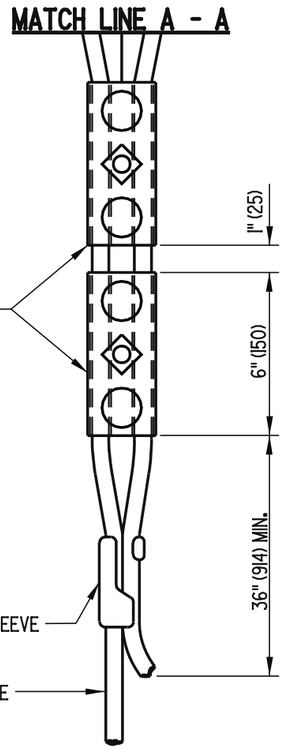
FRONT VIEW
(SPAN WIRE NOT SHOWN)



SIDE VIEW



MATCH LINE A - A



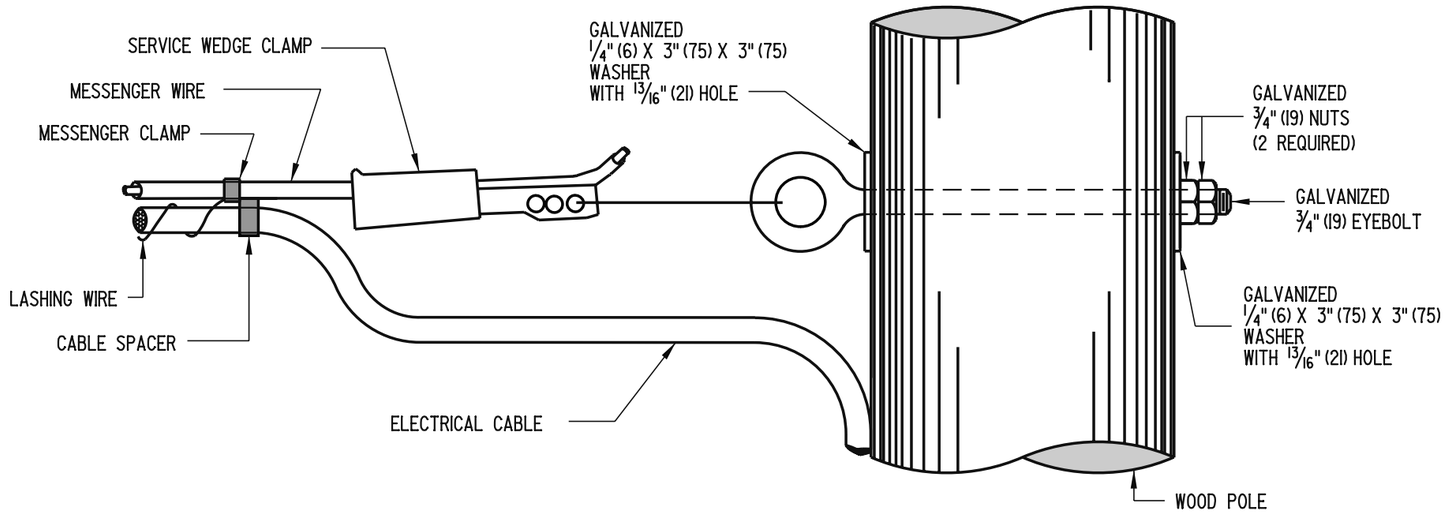
TOP VIEW

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 ".

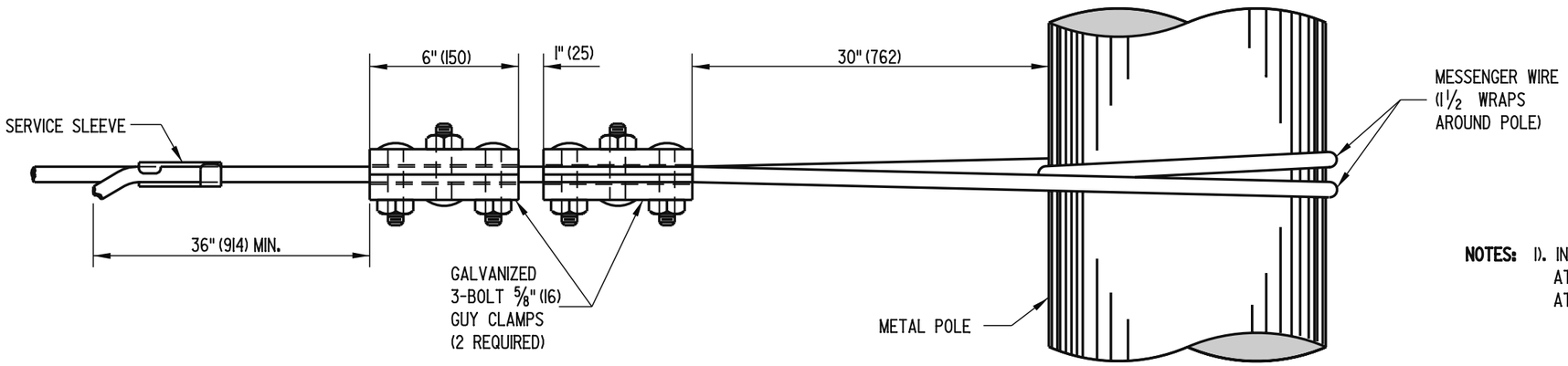
DELAWARE DEPARTMENT OF TRANSPORTATION	SPAN WIRE ATTACHMENT BETWEEN POLES	APPROVED Carolann Wicks CHIEF ENGINEER 12/5/05 DATE
	STANDARD NO. T-12 (2005) SHT. 1 OF 2	RECOMMENDED James M. O'Neill DESIGN ENGINEER 11/29/05 DATE

09/09/2005

SCALE : N.T.S.



WOOD POLES



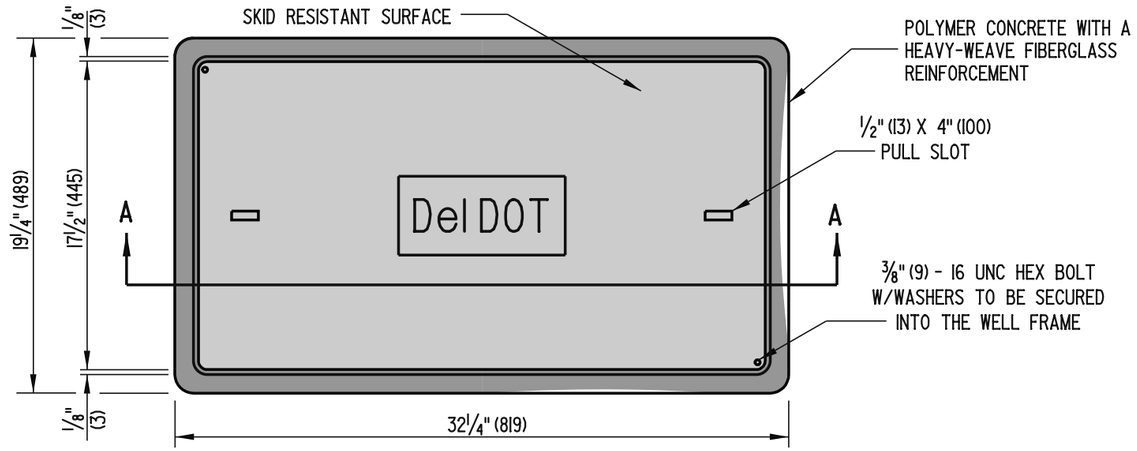
NOTES: 1). INSTALLATION METHOD SHOWN FOR DEAD END MESSENGER WIRE ATTACHMENT TO METAL POLES SHALL BE USED FOR SPAN WIRE ATTACHMENT BETWEEN METAL POLES.

METAL POLES

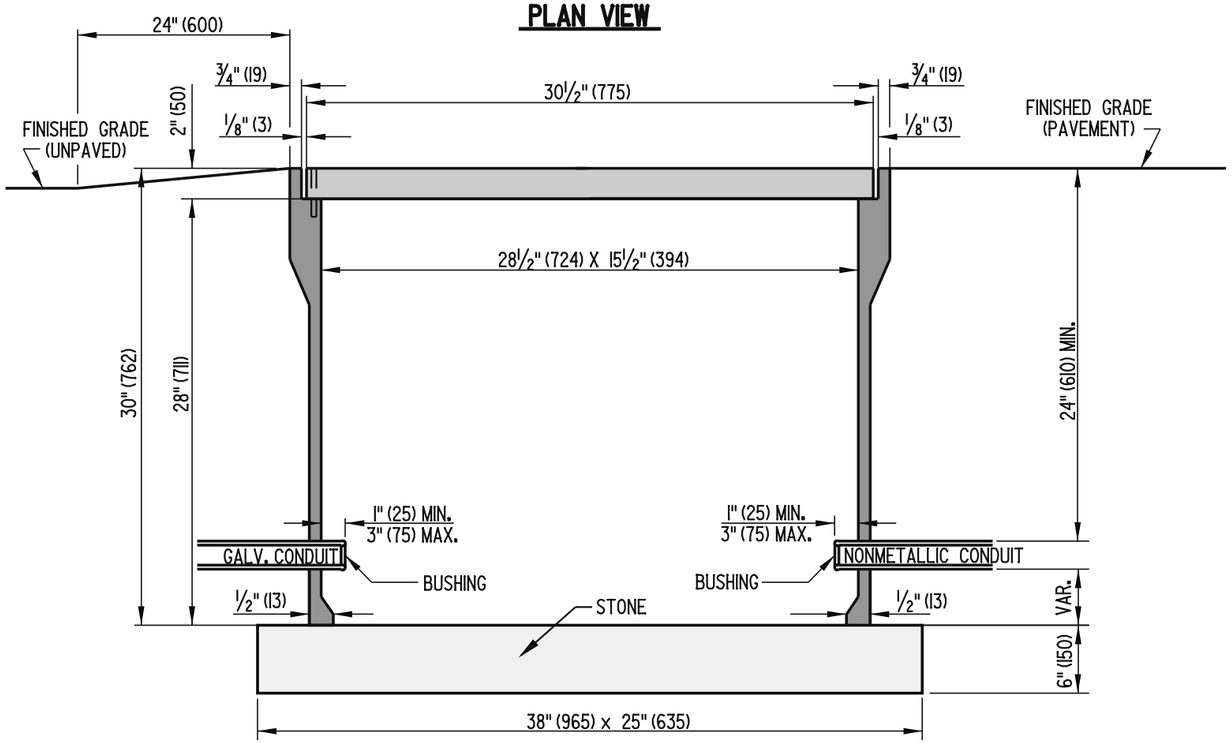
DELAWARE DEPARTMENT OF TRANSPORTATION	DEAD END MESSENGER WIRE ATTACHMENT		APPROVED Carolann Wicks CHIEF ENGINEER 12/5/05 DATE
	STANDARD NO. T-12 (2005)	SHT. 2 OF 2	RECOMMENDED James M. Ojeda DESIGN ENGINEER 11/29/05 DATE

09/09/2005

SCALE : N.T.S.



PLAN VIEW



SECTION A-A

NOTES:

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

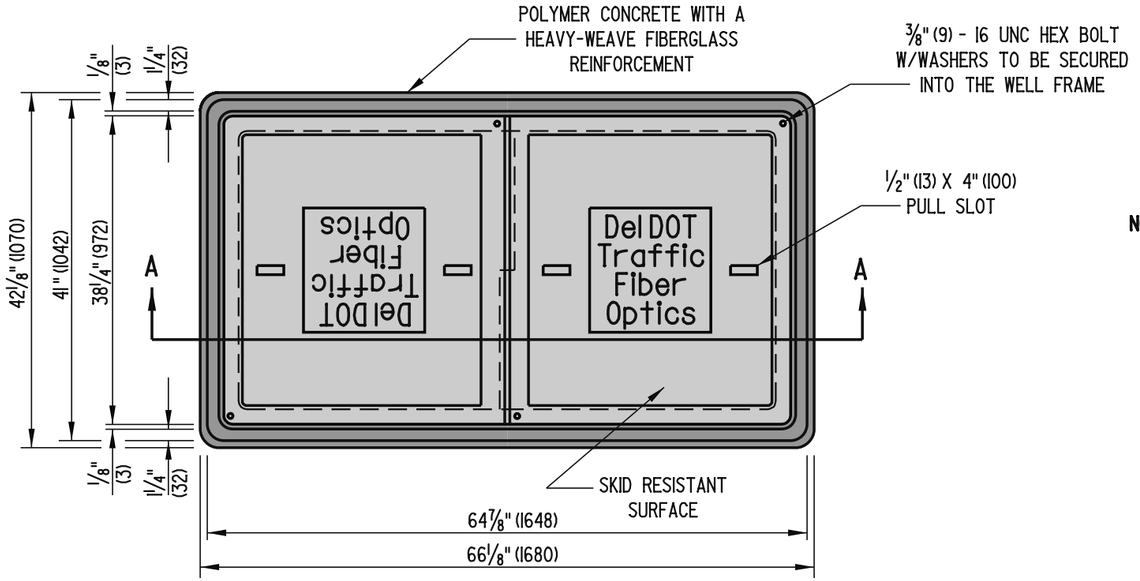
2). ALL CONDUIT JUNCTION WELLS CONSTRUCTED WITHIN PAVEMENT, SIDEWALKS, ETC. WILL BE CONSTRUCTED FLUSH WITH THE SURFACE OF THE SAME. INSTALLATION IN UNPAVED AREAS WILL BE CONSTRUCTED ABOVE GRADE AND GRADED TO DRAIN AWAY FROM THE CONDUIT JUNCTION WELL.

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.

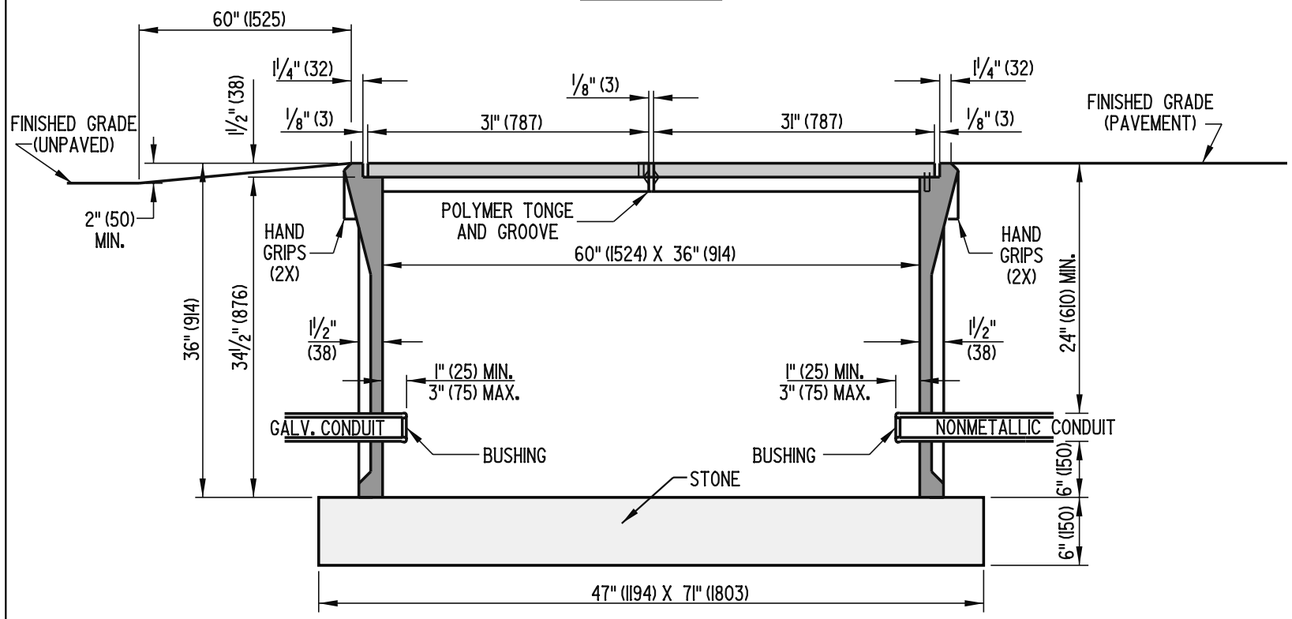
DELAWARE DEPARTMENT OF TRANSPORTATION	CONDUIT JUNCTION WELL, TYPE 6		APPROVED Carolann Wicks CHIEF ENGINEER 12/5/05 DATE
	STANDARD NO. T-13 (2005)	SHT. 1 OF 3	RECOMMENDED DESIGN ENGINEER 11/29/05 DATE

01/19/2006

SCALE : N.T.S.



PLAN VIEW



SECTION A-A

NOTES:

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

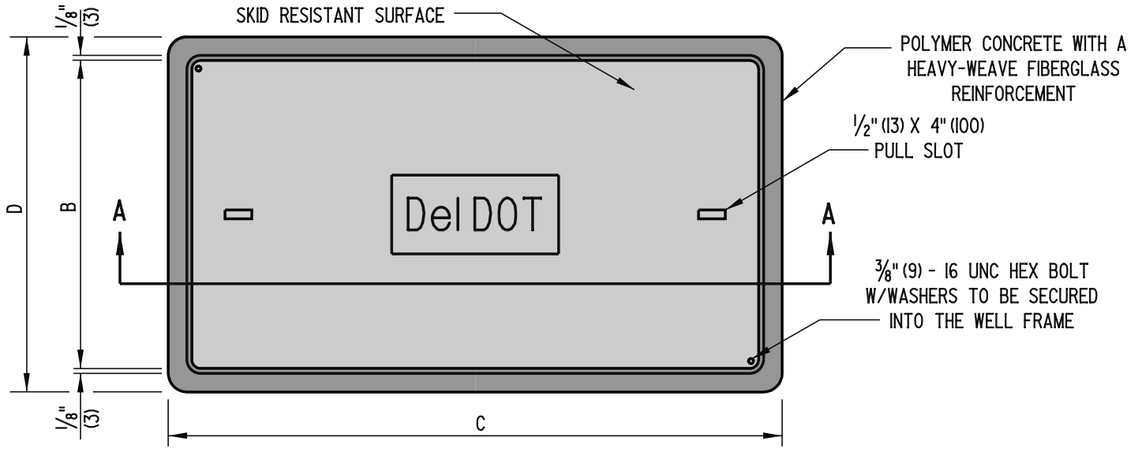
2). ALL CONDUIT JUNCTION WELLS CONSTRUCTED WITHIN PAVEMENT, SIDEWALKS, ETC. WILL BE CONSTRUCTED FLUSH WITH THE SURFACE OF THE SAME. INSTALLATION IN UNPAVED AREAS WILL BE CONSTRUCTED ABOVE GRADE AND GRADED TO DRAIN AWAY FROM THE CONDUIT JUNCTION WELL.

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.

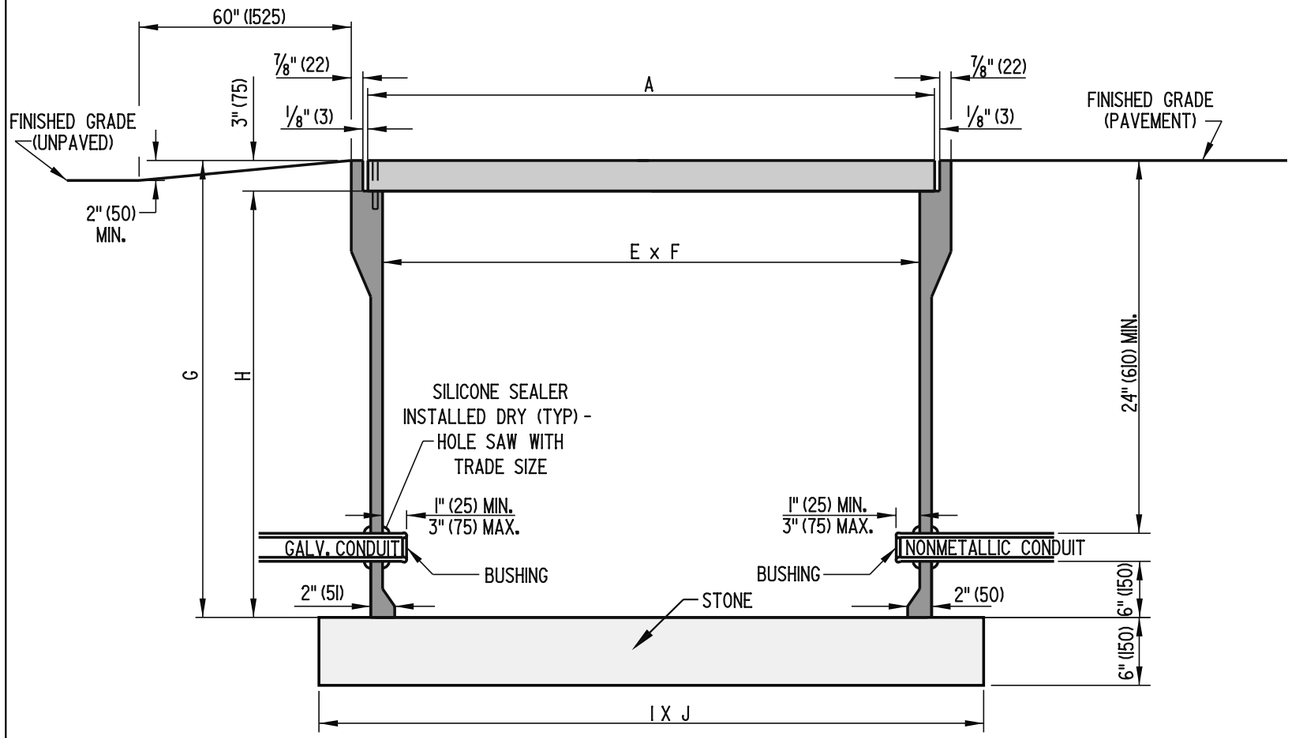
DELAWARE DEPARTMENT OF TRANSPORTATION	CONDUIT JUNCTION WELL, TYPE 7		APPROVED CHIEF ENGINEER — DATE 10/10/06
	STANDARD NO. T-13 (2006)	SHT. 2 OF 3	RECOMMENDED DESIGN ENGINEER — DATE 10/9/06

05/13/2006

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)

DELAWARE
DEPARTMENT OF TRANSPORTATION

CONDUIT JUNCTION WELLS, TYPES 8 & 10

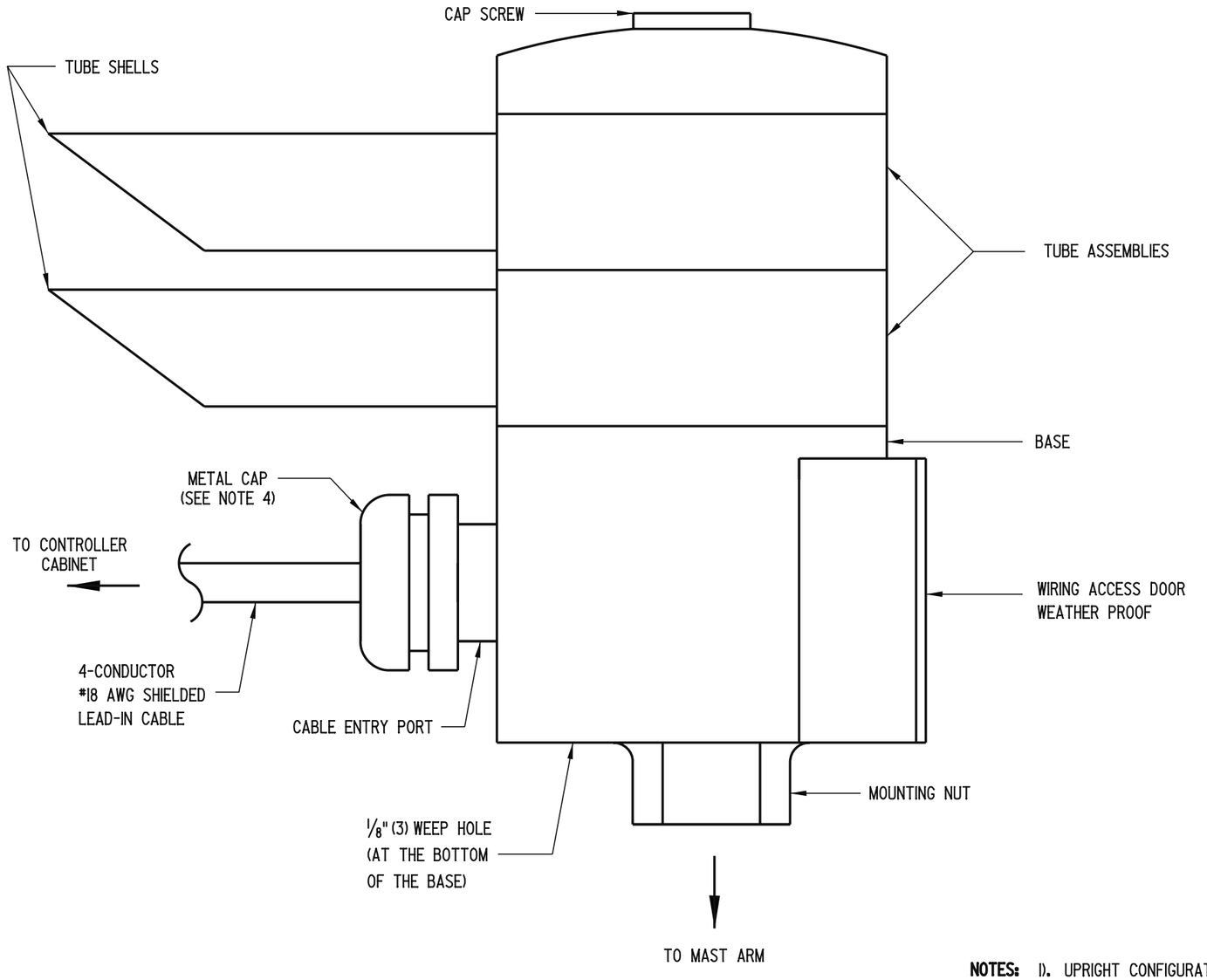
STANDARD NO. T-13 (2006) | SHT. 3 OF 3

APPROVED _____ CHIEF ENGINEER DATE 10/10/06

RECOMMENDED _____ DESIGN ENGINEER DATE 10/3/06

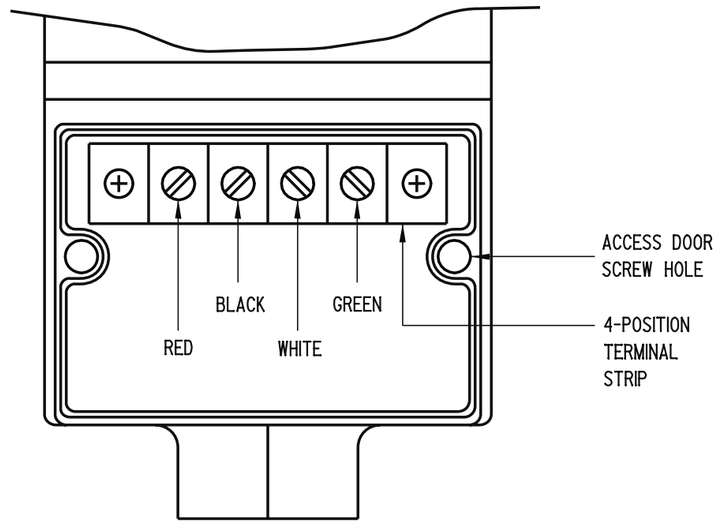
05/13/2006

SCALE : N.T.S.



SIDE VIEW

CABLE CONNECTIONS TO TERMINAL STRIP



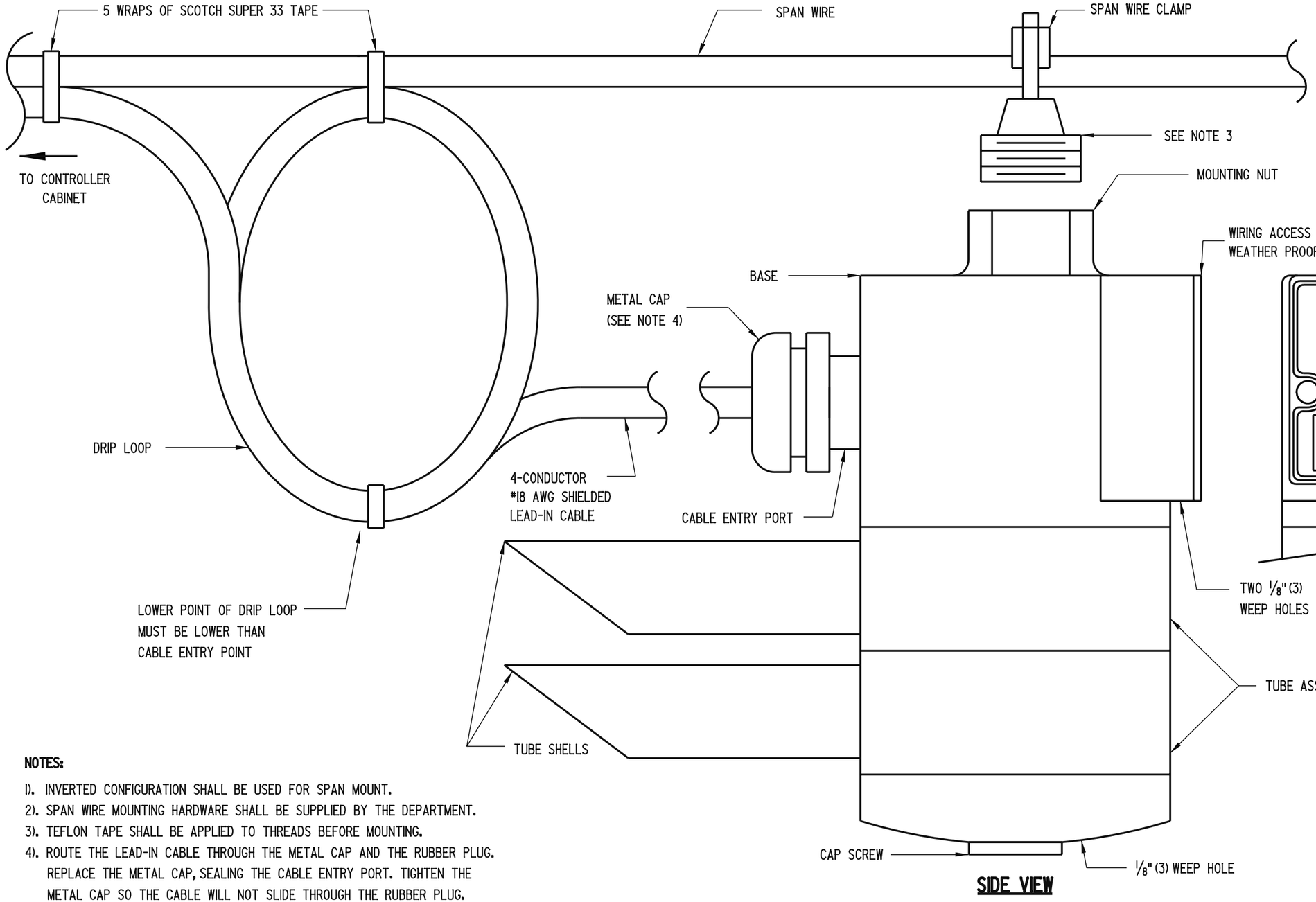
FRONT VIEW
(CABLE IS NOT SHOWN)

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.

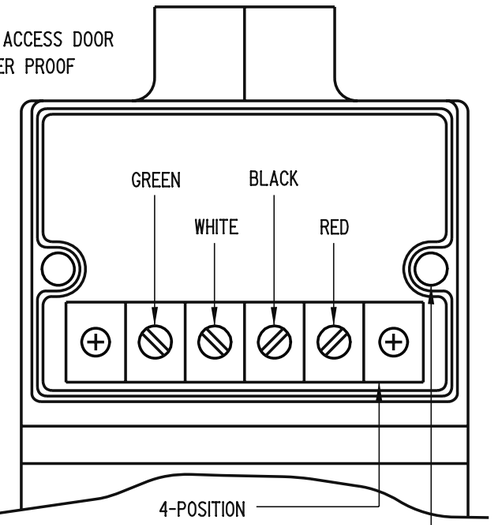
DELAWARE DEPARTMENT OF TRANSPORTATION	EMERGENCY PREEMPTION RECEIVER, UPRIGHT MOUNT		APPROVED CHIEF ENGINEER 10/10/06 DATE
	STANDARD NO. T-14 (2006)	SHT. 1 OF 2	RECOMMENDED DESIGN ENGINEER 10/3/06 DATE

06/27/2006

SCALE : N.T.S.



CABLE CONNECTIONS TO TERMINAL STRIP



FRONT VIEW
(CABLE IS NOT SHOWN)

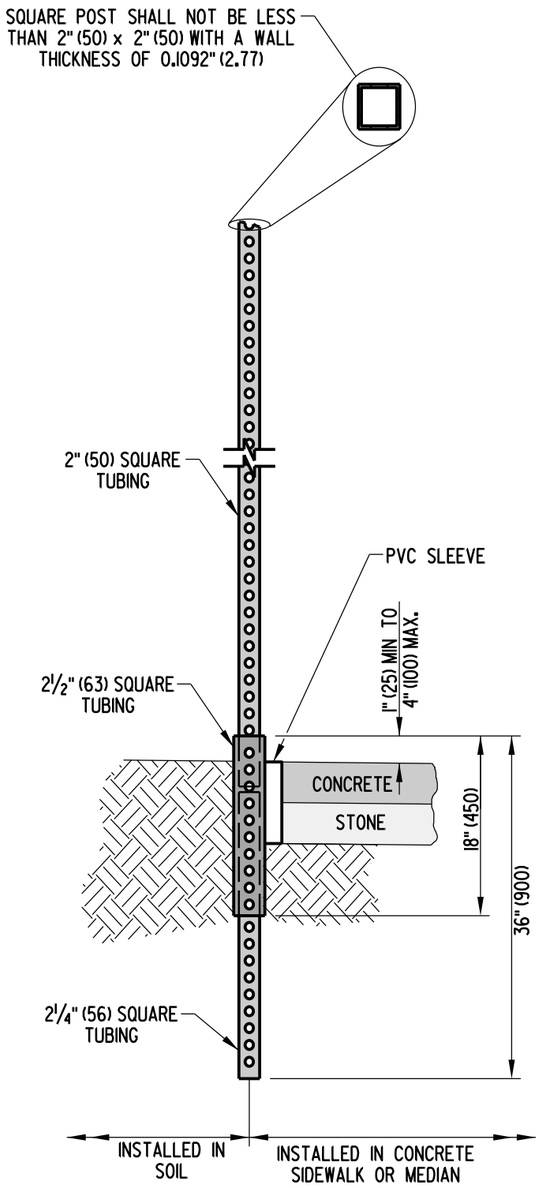
NOTES:

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.

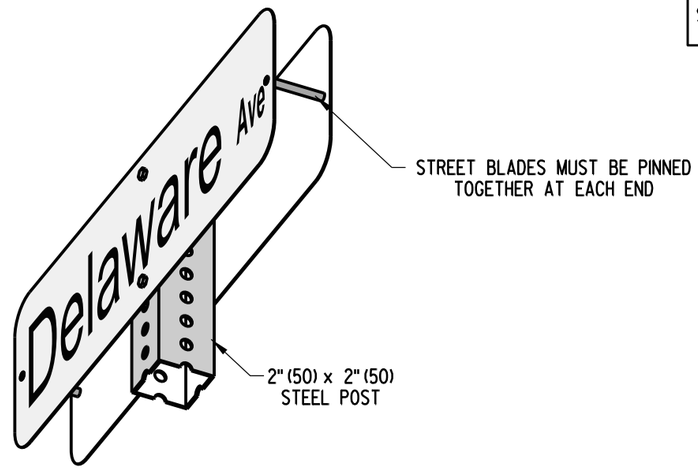
DELAWARE DEPARTMENT OF TRANSPORTATION	EMERGENCY PREEMPTION RECEIVER, INVERTED MOUNT		APPROVED Carolann Wicks CHIEF ENGINEER 12/5/05 DATE
	STANDARD NO. T-14 (2005)	SHT. 2 OF 2	RECOMMENDED James M. O'Neill DESIGN ENGINEER 11/29/05 DATE

09/09/2005

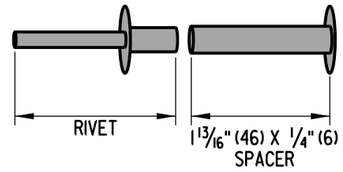
SCALE : N.T.S.



BREAK-AWAY ASSEMBLY



TYPICAL ASSEMBLY



PIN ASSEMBLY

NOTE: THE PIN ASSEMBLY IS TO BE USED WITH THE INSTALLATION OF BACK TO BACK STREET BLADE SIGNS WITH 6" (150) LETTERS.

NOTES:

1). SQUARE TUBES ARE TO BE FORMED FROM GALVANIZED SHEET STRUCTURAL (PHYSICAL) QUALITY, ASTM A 446, GRADE A, COATING DESIGNATION G 90, REGULAR SPANGLE, OR HOT ROLLED CARBON SHEET STEEL STRUCTURAL (PHYSICAL) QUALITY, ASTM A 57, GRADE 33.

2). NOMINAL OUTSIDE DIMENSIONS ARE AS FOLLOWS;
   A). 2" (50) x 2" (50) +/- 0.008
   2¼" (56) x 2¼" (56) +/- 0.010
   2½" (63) x 2½" (63) +/- 0.010

3). ALL FOUR SIDES ARE TO HAVE EVENLY SPACED 7/16" (12) DIAMETER HOLES ON 1" (25) CENTERS THE ENTIRE LENGTH OF THE TUBE.

4). STANDARD CORNER RADIUS SHALL BE 5/32" (4).

5). THE FASTENERS TO BE SUPPLIED UNDER THIS SPECIFICATION SHALL BE 5/16" (8), GRADE 5 UNC CORNER BOLTS WITH CADMIUM OR ZINC PLATING. INSTALLATION OF SIGNS SHALL BE WITH 3/8" (10) x 2½" (63) BOLT WITH LOCKNUT AND WASHER.

6). THE CONTRACTOR SHALL PROVIDE AND INSTALL PVC SLEEVES (4" (100) INSIDE DIAMETER MINIMUM, 6" (150) INSIDE DIAMETER MAXIMUM) IN PROPOSED CONCRETE SIDEWALKS, ISLANDS, AND MEDIANS FOR FUTURE TRAFFIC SIGN POSTS AS DIRECTED BY THE ENGINEER. THE LOWER END OF THE SLEEVE SHALL BE SET ON TOP OF THE SOIL.

DELAWARE
DEPARTMENT OF TRANSPORTATION

BREAKWAY SIGN POST AND PIN ASSEMBLY DETAILS

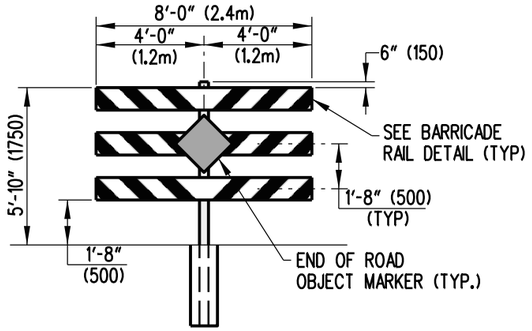
STANDARD NO. T-15 (2009) | **SHT. 1 OF 1**

APPROVED SIGNATURE ON FILE — CHIEF ENGINEER — 01/19/2010 — DATE

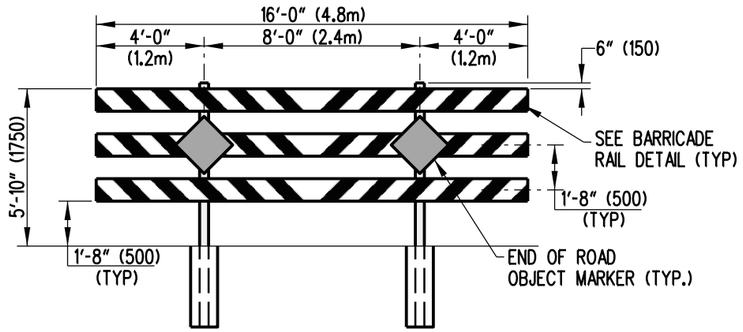
RECOMMENDED SIGNATURE ON FILE — DESIGN ENGINEER — 01/14/2010 — DATE

01/08/2010

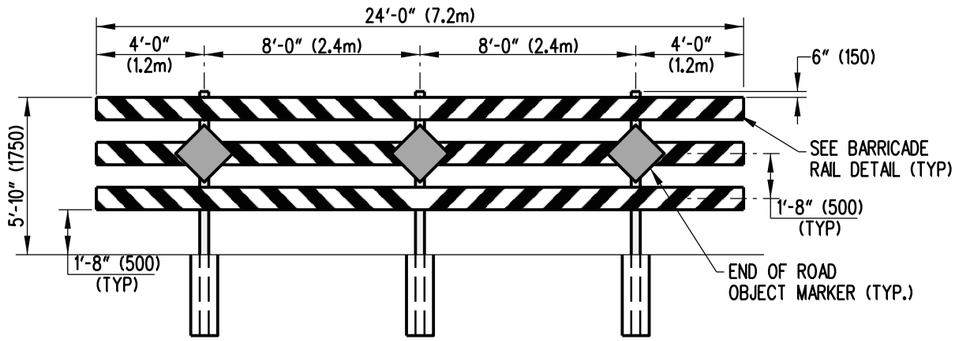
SCALE : N.T.S.



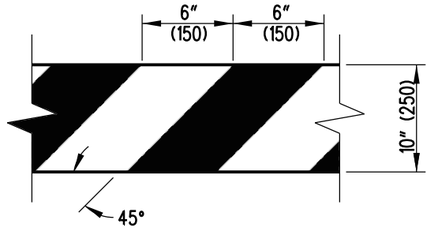
1-POST PERMANENT WOOD BARRICADE DETAIL



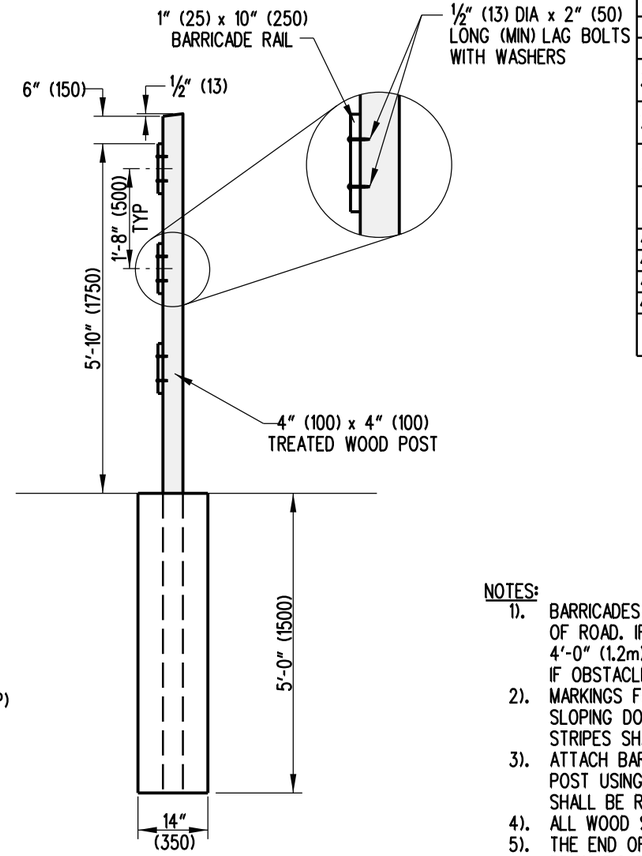
2-POST PERMANENT WOOD BARRICADE DETAIL



3-POST PERMANENT WOOD BARRICADE DETAIL



BARRICADE RAIL DETAIL



BARRICADE POST DETAIL

WOOD BARRICADE POST CHART			
ROADWAY WIDTH	NUMBER OF BARRICADES	TYPE OF POST	OUTSIDE OVERHANG
4'-0" (1.2m)	1	1-POST	2'-0" (600)
6'-0" (1.8m)	1	1-POST	3'-0" (900)
8'-0" (2.4m)	1	1-POST	4'-0" (1.2m)
10'-0" (3m)	1	2-POST	1'-0" (300)
12'-0" (3.6m)	1	2-POST	2'-0" (600)
14'-0" (4.2m)	1	2-POST	3'-0" (900)
16'-0" (4.8m)	1	2-POST	4'-0" (1.2m)
18'-0" (5.4m)	1	3-POST	1'-0" (300)
20'-0" (6m)	1	3-POST	2'-0" (600)
22'-0" (6.6m)	1	3-POST	3'-0" (900)
24'-0" (7.2m)	1	3-POST	4'-0" (1.2m)
26'-0" (7.8m)	2	2-POST	1'-0" (300)
28'-0" (8.4m)	2	2-POST	2'-0" (600)
30'-0" (9m)	2	2-POST	3'-0" (900)
32'-0" (9.6m)	2	2-POST	4'-0" (1.2m)
34'-0" (10.2m)	2	2-POST 3-POST	1'-0" (300)
36'-0" (10.8m)	2	2-POST 3-POST	2'-0" (600)
38'-0" (11.4m)	2	2-POST 3-POST	3'-0" (900)
40'-0" (12m)	2	2-POST 3-POST	4'-0" (1.2m)
42'-0" (12.6m)	2	3-POST	1'-0" (300)
44'-0" (13.2m)	2	3-POST	2'-0" (600)
46'-0" (13.8m)	2	3-POST	3'-0" (900)
48'-0" (14.4m)	2	3-POST	4'-0" (1.2m)
50'-0" (15m)	3	(2) 2-POST <ENDS> (1) 3-POST <CENTER>	1'-0" (300)

NOTES:

1). BARRICADES SHALL BE PLACED COMPLETELY ACROSS THE ROADWAY FROM EDGE OF ROAD TO EDGE OF ROAD. IF NECESSARY, THE BARRICADE OVERHANG BEYOND THE OUTSIDE POSTS (TYPICALLY 4'-0" (1.2m)) MAY BE REDUCED TO THE "OUTSIDE OVERHANG' VALUE INDICATED IN THE TABLE ABOVE IF OBSTACLES ARE PRESENT BEYOND THE ROADWAY EDGE.

2). MARKINGS FOR BARRICADE RAILS SHALL BE ALTERNATING FLUORESCENT RED AND WHITE STRIPES, SLOPING DOWNWARD AT AN ANGLE OF 45 DEGREES, USING PRISMATIC, RETROREFLECTIVE SHEETING. STRIPES SHALL SLOPE DOWNWARD TOWARDS THE CENTER OF THE CLOSURE.

3). ATTACH BARRICADE RAIL AND OBJECT MARKER TO THE 4" (100) x 4" (100) PRESSURE TREATED WOOD POST USING LAG BOLTS (2" (50) LONG, MINIMUM) WITH WASHERS. TWO BOLTS PER RAIL PER POST SHALL BE REQUIRED.

4). ALL WOOD SHALL BE PRESSURE TREATED.

5). THE END OF ROAD OBJECT MARKER (MUTCD CODE OM4-3) SHALL BE 18" (450) x 18" (450) WITH RED PRISMATIC, RETROREFLECTIVE SHEETING.

6). TREATED WOOD POST SHALL BE PLACED IN PRE-DUG HOLE, BACKFILLED USING SUITABLE MATERIAL, AND TAMPERED THOROUGHLY TO PROVIDE A RIGID SUB-SURFACE CONDITION AROUND THE POST.

7). BARRICADE RAILS MAY BE CONSTRUCTED USING PLASTIC OR WOOD AND SHOULD NOT BE METAL.

8). LONGER WIDTH CLOSERS CAN BE ACCOMODATED BY VARIOUS COMBINATIONS OF 2-POST AND 3-POST BARRICADES.

DELAWARE
DEPARTMENT OF TRANSPORTATION

WOOD BARRICADE DETAIL

STANDARD NO. T-16 (2010) | SHT. 1 OF 1

APPROVED SIGNATURE ON FILE (CHIEF ENGINEER) 12/28/2010 (DATE)

RECOMMENDED SIGNATURE ON FILE (DESIGN ENGINEER) 12/27/2010 (DATE)

10/19/2010