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 UPAVED AREAS WILL BE CONSTRUCTED ABOVE GRADE AND GRADED TO DRAIN AWAY FROM CONDUIT JUNCTION WELL.
NOTES: 1. TYPE 4 CONDUIT JUNCTION WELL SHALL BE PRECAST CONCRETE, AT LEAST ONE HOLE IN PRECAST WELLS WILL BE OF A 5/8" 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.

DEL. 57 STONE

SECTION B-B

FINISHED GRADE
(PAVEMENT)

FINISHED GRADE
(UNPAVED)

CONDUIT

CONCRETE WALL

GALV. CONDUIT

BUSHING FLUSH

20" (508) X 42/" (1067)

SECTION A-A

CAST IRON COVERS
NOTES:

II. TYPE S 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.

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

- Underground conduit ends shall be capped with a galvanized threaded conduit plug unless connected to an existing conduit.
- 8 Equally spaced #8 (M25) reinforcing bars
- Equally spaced #4 (M13) reinforcing bars
- Bolt circle diameter to be as directed by the engineer
- Direction of load (mastarm or span)
- 2 1/2" (64) Conduit sweeps
- Existing conduit

SQUARE BASE

- Underground conduit ends shall be capped with a galvanized threaded conduit plug unless connected to an existing conduit.
- 8 Equally spaced #8 (M25) reinforcing bars
- Equally spaced #4 (M13) reinforcing bars
- Bolt circle diameter to be as directed by the engineer
- Direction of load (mastarm or span)
- 3" (75) (Typical)
- Ground for pole to be attached to ground rods (4" "SB x 24" "60963)
- 2 1/2" (64) Conduit sweeps
- Existing conduit

NOTE: Base dependent on pole and equipment to be attached.
POLE BASE DATA CHART

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

TYPICAL SECTION (BASES 5 AND 6)

NOTE:
SEE SPECIFICATIONS AND DETAILS FROM CURRENT PURCHASING CONTRACT FOR ANCHOR BOLT DIMENSIONS.
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"ID x ½"OD B.V.G. SCHEDULE 40 (TYP) VENTS IN THE GROUT AS DIRECTED IN THE FIELD BY THE ENGINEER.
1 - #3 (M16) SPIRAL BAR, 504" (12800) LONG AT 8" (200) PITCH

8 - #5 (M6) BARS, 48" (1200) LONG

NOTES:
A. STUB POST TO BE SUPPLIED BY THE DEPARTMENTS TRAFFIC, ENGINEERING, AND MANAGEMENT SECTION.
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 1/4" x 3/8" coupling containing a steel threaded reducing bushing 1/4" x 3/8" to 3/4" x 3/8" and a 3/4" x 1/2" 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**

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**DELAWARE DEPARTMENT OF TRANSPORTATION**

**LOOPER DETECTOR TO CONDUIT JUNCTION WELL CONNECTION**

**STANDARD NO. T-8 (2006)**

**SHT. 1 OF 1**

**APPROVED**

**RECOMMENDED**

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05/09/05
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 12" DEEP BACK FROM THE POINT OF THE EXTENDED CORNER.

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

3. A MAXIMUM OF TWO LOOP DETECTORS CAN BE SPICED TO ONE LEAD-IN CABLE. THE DETAIL ILLUSTRATES THE METHOD OF SPICING 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

DELAWARE DEPARTMENT OF TRANSPORTATION

STANDARD NO. T-9 (2000) SHT. 1 OF 1

APPROVED

RECOMMENDED
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 CORNERS.
2. THE LATERAL / TRANSVERSE CUT SHALL BE STOPPED APPROXIMATELY 2" (50) FROM THE CORNER TO PREVENT THE TRAPEZOIDAL SECTION OF THE PAVEMENT FROM BREAKING.
3. A MAXIMUM OF TWO LOOP DETECTORS CAN BE PLACED 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

DELWARE
DEPARTMENT OF TRANSPORTATION

STANDARD NO. T-10 (2006) SHT. 1 OF 1

RECOMMENDED

APPROVED

01/19/2006
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".
WOOD POLES

- Service Wedge Clamp
- Messenger Wire
- Messenger Clamp
- Lashing Wire
- Cable Spacer
- Electrical Cable
- Galvanized 3/8" x 3/8" x 3" (75) Washer with 3/8" OD Hole
- Galvanized 3/4"-10 Eyebolt

METAL POLES

- Service Sleeve
- Galvanized 3-Bolt 5/8" (6)
- Guy Clamps (2 Required)
- Messenger Wire
- 1/2" Wraps Around Pole

NOTES:
1. Installation method shown for dead end messenger wire attachment to metal poles shall be used for span wire attachment between metal poles.

DELAWARE DEPARTMENT OF TRANSPORTATION

DEAD END MESSENGER WIRE ATTACHMENT

STANDARD NO. T-12 (2006) SHT. 2 OF 2 APPROVED 12/5/05 RECOMMENDED 11/9/05

09/09/2005
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 Kgs) OVER A 10" (255) SQUARE.
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 ORAN AWAY FROM THE CONDUIT JUNCTION WELL.
3. POLYMER CONCRETE COVERS SHALL BE THE HEAVY DUTY TYPE WITH A DESIGN LOAD OF 15,000 LBS (6,800 KG) OVER A 0" X 0.25" SQUARE.
SKID RESISTANT SURFACE

POLYMER CONCRETE WITH A HEAVY-WEAVE FIBERGLASS REINFORCEMENT

1/2"x133 x 141001
PULL SLOT

3/4"x18 - 16 UNC HEX BOLT W/WASHERS TO BE SECURED INTO THE WELL FRAME

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 GRADATED TO DRAIN AWAY FROM THE CONDUIT JUNCTION WELL.
3. POLYMER CONCRETE COVERS SHALL BE THE HEAVY-DUTY TYPE WITH A DESIGN LOAD OF 5,000 LBS (6000 KG) OVER A 10" (254) SQUARE.

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**DIMENSIONS**

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<th>TYPE 10</th>
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**BASE**

| I     | 58"(147)    | 46"(117) |
| J     | 46"(117)    | 34"(86)  |

**SECTION A-A**

DELWARE DEPARTMENT OF TRANSPORTATION

CONDUIT JUNCTION WELLS, TYPES 8 & 10

STANDARD NO. T-13 (2006)

SH. 3 OF 3

RECOMMENDED
TUBE SHELLS

CAP SCREW

TUBE ASSEMBLIES

BASE

WIRING ACCESS DOOR WEATHER PROOF

MOUNTING NUT

TO MAST ARM

TO CONTROLLER CABINET

4-CONDUCTOR 18 AWG SHIELDED LEAD-IN CABLE

1/4" NIPPLE HOLE (AT THE BOTTOM OF THE BASE)

CABLE ENTRY PORT

METAL CAP (SEE NOTE 4)

CABL CONNECTIONS TO TERMINAL STRIP

BLACK
GREEN
RED
WHITE

ACCESS DOOR SCREW HOLE

4-POSITION 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. TEFLOK TAPE SHALL BE APPLIED TO THREADS BEFORE MOUNTING.
NOTES:
1. INVERTED CONFIGURATION SHALL BE USED FOR SPAN MOUNT.
2. SPAN WIRE MOUNTING HARDWARE SHALL BE SUPPLIED BY THE DEPARTMENT.
3. TEFLOM 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.
NOTES:
1. SQUARE TUBES ARE TO BE FORMED FROM GALVANIZED SHEET STRUCTURAL (PHYSICAL) QUALITY, ASTM A 446, GRADE A, COATING DESIGNATION C 90, REGULAR SPANGLE, OR HOT ROLLED CARBON SHEET STRUCTURAL (PHYSICAL) QUALITY, ASTM A 57, GRADE 53.
2. NOMINAL OUTSIDE DIMENSIONS ARE AS FOLLOWS:
   All 2" (50) x 2.5" (63) +/- 0.008
   2" (50) x 2" (50) +/- 0.000
3. ALL FOUR SIDES ARE TO HAVE EVENLY SPACED 3/4" (19) DIAMETER HOLES ON 4" (100) CENTERS ALONG THE ENTIRE LENGTH OF THE TUBE.
4. STANDARD CORNER RADIUS SHALL BE 3/8" (9.5).
5. THE FASTENERS TO BE SUPPLIED UNDER THIS SPECIFICATION SHALL BE 5/16" (8), GRADE 5 UNC CORNER BOLTS WITH CADMIUM OR ZINCO PLATING, INSTALLATION OF SIGNS SHALL BE WITH 3/8" (10) x 2" (50) 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 MEDANS 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

BREKWAY SIGN POST AND PIN ASSEMBLY DETAILS

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

APPROVED SIGNATURE ON FILE 01/10/2010

RECOMMENDED SIGNATURE ON FILE 01/14/2010

04/28/2020