

# POLYMER CONCRETE JUNCTION BOX INSPECTION CHECKLIST



## PROJECT INFORMATION

Project Name: \_\_\_\_\_

Project Number: \_\_\_\_\_

PIN: \_\_\_\_\_

Location: \_\_\_\_\_

R.E. \_\_\_\_\_

Inspector: \_\_\_\_\_

Organization: \_\_\_\_\_

Phone: \_\_\_\_\_

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

Final Completion Date: \_\_\_\_\_

### Polymer Concrete Junction Box installation

Pass Fail N/A

- |                                                                                                         |                          |                          |                          |
|---------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|
| • Conduit holes match conduit entry and are free of damage                                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Conduit encased in flowable fill or approved hand-mix grout where the conduit enters the junction box | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Conduit and microducts sealed with grout between conduit and the junction box wall                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ○ Grout finish is smooth and flush with the interior wall                                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ○ Drilled holes in junction box are no more than ¼ inch larger than conduit diameter                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ○ Grout fills hole drilled too large                                                                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Vacant conduit and microducts sealed with a manufactured conduit plug <input type="checkbox"/>        | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| ○ Detectable pull tape attached where applicable                                                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • 1 inch diameter drain hole at low point of box                                                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • 1 inch grouted or prefabricated box floor                                                             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Top of box and collar level with grade on slopes 6:1 or flatter and graded <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| with positive drainage away from the box                                                                |                          |                          |                          |
| • Top of box and collar follow plan details for junction box placements on                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

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slopes steeper than 6:1

- Top of box flush with grade when placed in pavement ☐ ☐ ☐
- Preformed expansion joint material placed ☐ ☐ ☐
- Concrete collars installed and not cracked or damaged ☐ ☐ ☐
- At least 36 inches of clear space provided for personnel to pull lid off  
box without conflict ☐ ☐ ☐

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## Conduit in Junction Box

- |                                                                                                |                          |                          |                          |
|------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|
| • Conduit enters junction box as specified on plans                                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Conduit greater than 2 inches away from junction box corners                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Proper extensions beyond the inside wall of the junction box for:                            |                          |                          |                          |
| ○ PVC conduit – 2 inches                                                                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ○ HDPE conduit – 6 inches                                                                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ○ Microduct oversheath – 6 inches                                                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ○ Individual microducts – 2 feet                                                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Conduit enters through the sides of the box and not through the bottom of the box            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • ITS conduit ends are aligned by color at each side of the box                                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Conduit enters in the bottom half of the junction box wall at least 3 inches above the floor | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Bushings installed on conduits to contain conductors before cable installation               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

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## Junction Boxes and Lids

- |                                                                                                                                                                                 |                          |                          |                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|
| • Split lids used with Type III-PC box                                                                                                                                          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • For Fiber boxes -- “UDOT Fiber Optics” in the logo area in 1-inch cast-in-place recessed letters for boxes only containing fiber optic cable or future use multi duct conduit | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Appropriate markings in the logo area for specified application in 1 inch cast in place recessed letters, or                                                                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Appropriate name plate description using the Junction Box Logo Decision Chart for boxes other than those containing fiber optic cable or future use                           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

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multi duct conduit

- Name plate attached to removable lid in recessed area ☐ ☐ ☐
  - Name plate attached to inside wall of junction box using adhesive and non-corroding screws ☐ ☐ ☐
- Ground rod installed between 4 inches and 6 inches above bottom of junction box and 8 inches from any corner ☐ ☐ ☐
  - Inter system grounding bridge clamp used for bonding ☐ ☐ ☐
  - No more than 4 wires attached per clamp ☐ ☐ ☐
- Locate ball or disk in bottom of each junction box ☐ ☐ ☐
- Boxes or lids are not cracked or damaged ☐ ☐ ☐
- Utility Marker Posts are installed at fiber optic junction box locations ☐ ☐ ☐

Boxes with Issues:

| STATION | OFFSET | DESCRIPTION |
|---------|--------|-------------|
|         |        |             |
|         |        |             |
|         |        |             |
|         |        |             |
|         |        |             |
|         |        |             |