

**CITY OF PEORIA SUPPLEMENT**

**TO**

**MARICOPA ASSOCIATION  
OF GOVERNMENTS**

**UNIFORM STANDARD DETAILS**



**CITY OF PEORIA**

**CONSTRUCTION**

**ENGINEERING DEPARTMENT**  
**2015**  
**Mid-year Revisions effective 7/1/2015**

City of Peoria  
Summary of Updates to Standard Details 2015

DETAIL NUMBER	DETAIL NAME	DESCRIPTION OF UPDATE
PE-010-6	LOCAL STREET SECTION	Following changes made to narrative: <del>**Local streets may be have a width less than 32' to a minimum of 26' if approved by the Traffic Engineering Director, PW Utilities Director and the Fire Department. Additionally, parking restrictions will apply to one or both sides of the street, depending on the width and curb types constructed.</del> Double asterisk was removed from drawing.
PE-011-1	PAVEMENT MARKING MANUAL, PAGE 1	Added 12DTW to symbol legend and moved 6DTW under 6SW for consistent order in Legend. The following note was added to 12DTW: <b>12" Dashed white line with a 3' line segment and 2' gap</b> The following notes were added to the Legend: <b>NOTES:</b> <ol style="list-style-type: none"> <li>1. Longitudinal line markings shall be installed using water-based paint applied at a minimum of .15 mil thickness.</li> <li>2. Short-line markings, including crosswalks, stop bars, chevrons, and crosshatch markings shall be installed using alkyd thermoplastic material applied at a minimum .90 mil thickness or 3M Stamark Pavement Marking Tape.</li> </ol>
PE-011-2	PAVEMENT MARKING MANUAL, PAGE 2	Added the following to Note: <ol style="list-style-type: none"> <li>2. Longitudinal line markings shall be installed using water-based paint applied at a minimum of .15 mil thickness.</li> <li>3. Short-line markings, including crosswalks, stop bars, chevrons, and crosshatch markings shall be installed using alkyd thermoplastic material applied at a minimum .90 mil thickness or 3M Stamark Pavement Marking Tape.</li> </ol>
PE-011-4	PAVEMENT MARKING MANUAL, PAGE 4	Added the following: <b>Notes:</b> <ol style="list-style-type: none"> <li>1. Longitudinal line markings shall be installed using water-based paint</li> </ol>

DETAIL NUMBER	DETAIL NAME	DESCRIPTION OF UPDATE
		<p>applied at a minimum of .15 mil thickness.</p> <ol style="list-style-type: none"> <li>2. Short-line markings, including crosswalks, stop bars, chevrons, and crosshatch markings shall be installed using alkyd thermoplastic material applied at a minimum .90 mil thickness or 3M Stamark Pavement Marking Tape.</li> </ol>
PE-011-5	PAVEMENT MARKING MANUAL, PAGE 5	<p>Added the following:</p> <p>Notes:</p> <ol style="list-style-type: none"> <li>1. Longitudinal line markings shall be installed using water-based paint applied at a minimum of .15 mil thickness.</li> <li>2. Short-line markings, including crosswalks, stop bars, chevrons, and crosshatch markings shall be installed using alkyd thermoplastic material applied at a minimum .90 mil thickness or 3M Stamark Pavement Marking Tape.</li> </ol>
PE-013	ARROW & BIKE SYMBOLS	<p>Addition to notes and asterisks removed for reference as follows:</p> <p>NOTES:</p> <ol style="list-style-type: none"> <li>1. WORD SYMBOL AND OTHER LEGEND MARKINGS SHALL BE INSTALLED IN 3M STAMARK PAVEMENT MARKING TAPE.</li> <li>2. BIKE SYMBOL SHALL FACE THROUGH TRAVEL LANES.</li> <li>3. SCHOOL LEGENDS MAY BE INSTALLED AT SCHOOLS ABUTTING ARTERIAL STREETS IF APPROVED BY THE CITY TRAFFIC ENGINEER. IF USED, SCHOOL STENCILS SHALL BE INSTALLED IN CLOSE PROXIMITY TO SCHOOL ADVANCE WARNING SIGNS IN EACH THROUGH LANE ON THE ARTERIAL STREET, INSTALLED IN A 40' STAGGERED PATTERN.</li> </ol>
PE-021-2	TURN DIVERTERS-RIGHT IN/FULL ACCESS OUT	<p>Added pedestrian friendly access to diverter in first drawing under TYPICAL TURN DIVERTERS</p>
PE-032-1	SIGN POST SPECIFICATION	<p>Removed FIG 2 and following text: Manual installation of anchor shall be 28" in ground, wrapped in duct tape to ground level, and 2"</p>

DETAIL NUMBER	DETAIL NAME	DESCRIPTION OF UPDATE
		<p>above ground without duct tape. Hole shall be 12" (max.) in diameter, 28" deep, filled with concrete to ground level.(see fig.2)</p> <p>Added following text:  <b>NOTE: Parking restriction signs shall be set at an angle of not less than 30 degrees or more than 45 degrees with the line of traffic in order to be visible to approaching traffic.</b></p>
PE-032-2	STREET LIGHT POLE SIGN INSTALLATION	New Page of Notes
PE-101-1	ALLOWABLE MATERIALS LIST, PAGE 1	<p>The following deletions with appropriate renumbering occurred:  Fire Hydrants: The only allowable makes, models and manufactures are AVK, Clow, Jones, <b>and</b> Mueller., <del>and American Flow Control (Wet Barrel Only)</del>  Manhole Coating:  a. Epoxy coated – manhole base and coating system with a minimum wet film thickness of 125 mils. The epoxy coating system shall be one of the following:  1. RLS Raven 405  2. Joseph Painting Sewer Shield 101  3. <del>Sauereisen Sewergard No. 210</del>  4. Neopoxy NPR-5300</p>
PE-241-1	SIDEWALK RAMP NOTES	<p>The following deletions were done to note 8:  DIRECTIONAL RAMPS SHALL BE INSTALLED FOR EACH MARKED OR UNMARKED CROSSWALK AT ALL INTERSECTIONS ALONG ARTERIAL AND COLLECTOR STREETS, OR WHERE HIGH PEDESTRIAN VOLUMES ARE ANTICIPATED, UNLESS OTHERWISE APPROVED BY THE CITY TRAFFIC ENGINEER.</p>
PE-241-8	COMPACT RAMP (SLOPES)	<p>The following changes were made to the detail:  The 3" curb lip changed to <b>1.5"</b></p>
PE-241-9	COMPACT DUAL CURB RAMP (DIMENSIONS)	<p>The following changes were made to the chart and details:  Column B(ft) all radius options changed from 4' Min to <b>3' Min</b>  Minimum measurements originally reflected as 3.5' Min changed to <b>2.5' Min</b>  The 3" curb lip changed to <b>1.5"</b></p>
PE-241-10	COMPACT SINGLE CURB	<p>The following changes were made to the</p>

DETAIL NUMBER	DETAIL NAME	DESCRIPTION OF UPDATE
	RAMP (SLOPES)	detail: Minimum measurements originally reflected as 3.5' Min changed to <b>2.5' Min</b>
PE-241-11	COMPACT SINGLE CURB RAMP (DIMENSIONS)	The following changes were made to the chart and detail: Column B(ft) all radius options changed from 4' Min to <b>3' Min</b> Minimum measurements originally reflected as 3.5' Min changed to <b>2.5' Min</b>
PE-360-2	COMMERCIAL FIRE HYDRANT INSTALLATION	Grammatical changes were made to have consistency in referencing inches and feet. In addition, the following updates were made to the NOTES: 3. <del>BREAK-OFF CHECK VALVE SHALL BE LONG BEACH IRON WORKS, INC. CLOW-</del> MODEL LB400 OR <b>AVK SERIES 2488 HYDRANT AND CHECK VALVE.</b> <del>APPROVED EQUAL.</del> 10. <del>INSTALL FIRE HYDRANT MARKER PER PEORIA STANDARD DETAIL PE-362</del> <b>MAG DETAIL NO. 122.</b> 11. <del>CITY OWNED HYDRANT TO BE PAINTED CATERPILLAR</del> <b>OLD YELLOW #1.</b>
PE-363	WATER METER BOX LOCATION AND CONSTRUCTION SERVICES LESS THAN 2"	Grammatical changes were made to have consistency in referencing inches and feet. In addition, identification tag changed from <del>CLEAN AB BACKFILL</del> to <b>APPROVED TRENCH BACKFILL</b>

City of Peoria  
Summary of Updates to Standard Details Mid-year 2015

DETAIL NUMBER	DETAIL NAME	DESCRIPTION OF UPDATE
PE-146-2B	SINGLE AND DOUBLE-WIDE BIN ENCLOSURES NOTES	<p>Following changes made to narrative:</p> <ol style="list-style-type: none"> <li>1. All non-residential <del>commercial</del> properties shall be designed with bin enclosures to accommodate refuse/recycle bins, with <del>(1) refuse enclosure</del> bin for every 20,000 square feet of building space. A minimum of 2 refuse recycle bins shall be accommodated. <del>Restaurants which are designed on a single pad shall have a minimum (1) refuse.</del> The enclosures can be set up as doubles or singles to maximize the use of the property.</li> <li>2. Multi-unit residential developments shall be designed with bin enclosures and accommodate a minimum of 2 refuse/recycle bins with either single or double-wide enclosures <del>for trash.</del></li> <li>3. (No Change)</li> <li>4. The number of refuse/recycle bins <del>bin enclosures</del> needed for multi-unit residential development depends on the size of the development. <del>Typically, The minimum total volume needs can be capacity is determined from the calculation of calculated based on</del> the one-half cubic yard per living unit per week. For example, a development with 240 units x .5 yards = 120 yards per week or 10 trash bins (6 yard) serviced two times per week (10 x 6 x 2=120 yards).</li> </ol>
PE-146-4	BIN ENCLOSURE SCREEN WALL, SAFETY POST & GATE STANDARDS	<p>Following change made to narrative:</p> <ol style="list-style-type: none"> <li>1. <del>TRASH REFUSE AND RECYCLING....</del></li> </ol>
PE-241-1	SIDEWALK RAMP NOTES	<p>Following changes made to narrative:</p> <p><del>7. SIDEWALK LOCATED BETWEEN BACK OF WALK AND RAMP SHALL BE 4', MINIMUM.</del></p> <p>87. DIRECTIONAL RAMPS SHALL BE INSTALLED FOR EACH MARKED OR UNMARKED CROSSWALK AT ALL INTERSECTIONS, UNLESS OTHERWISE APPROVED BY THE CITY TRAFFIC ENGINEER.</p> <p>98. TRUNCATED DOMES SHOULD ALIGN</p>

DETAIL NUMBER	DETAIL NAME	DESCRIPTION OF UPDATE
		<p>ON BOTH SIDES OF THE CROSSING AND RAMPS MAY BE ROTATED TO ALIGN PROPERLY IF NECESSARY.</p> <p><del>409</del>. SOME MODIFICATION OF THE RAMP DETAILS WILL BE NECESSARY TO ACCOMMODATE CITY OF PEORIA SIDEWALK WIDTH REQUIREMENTS OR TO ALIGN RAMPS AND TRUNCATED DOMES.</p> <p><del>410</del>. TRUNCATED DOMES ARE TO BE StrongGo OR PREVIOUSLY APPROVED EQUAL <b>AND TERRA COTTA IN COLOR</b>.</p> <p><del>421</del>. TRAFFIC SIGNAL POLE FOUNDATIONS SHOULD BE FLUSH WITH SIDEWALK/RAMP LANDINGS WHEN POSSIBLE.</p>

CITY OF PEORIA  
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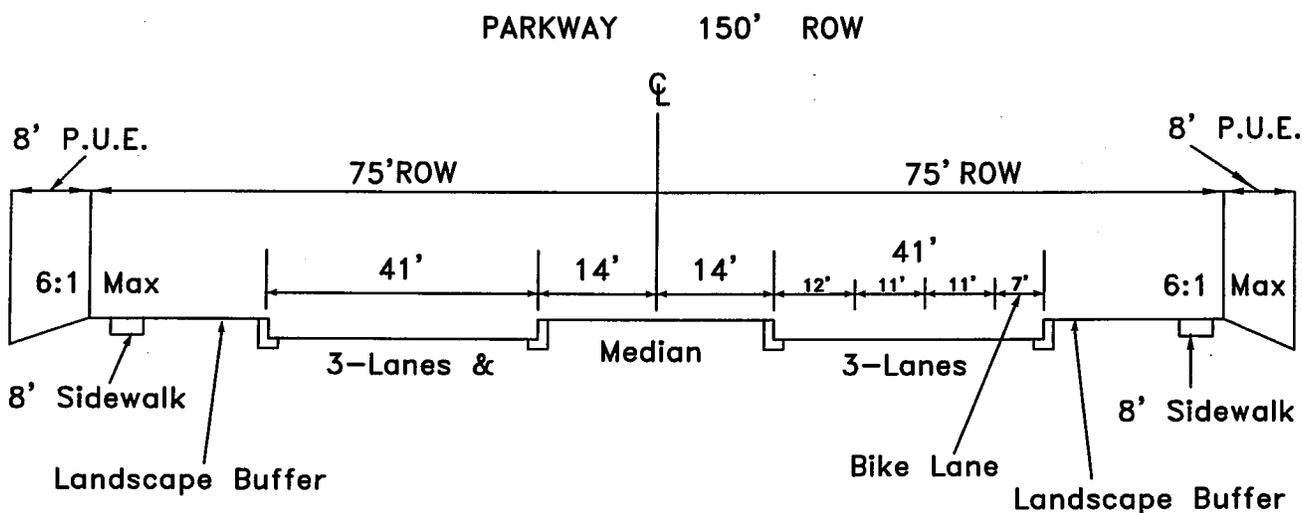
# CITY OF PEORIA STANDARD DETAIL PE-010-1 PARKWAY SECTION



APPROVALS:

*[Signature]*  
CITY ENGINEER      5/2/13      DATE

*[Signature]*  
FIRE CHIEF      3-6-12      DATE



**Notes:**

1. Additional ROW may be required where turn lanes, driveways, or
2. Sidewalk may be meandering.
3. All slopes within the ROW and PUE shall be 6:1 max.

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# CITY OF PEORIA

## STANDARD DETAIL PE-010-2

### MAJOR ARTERIAL STREET SECTION

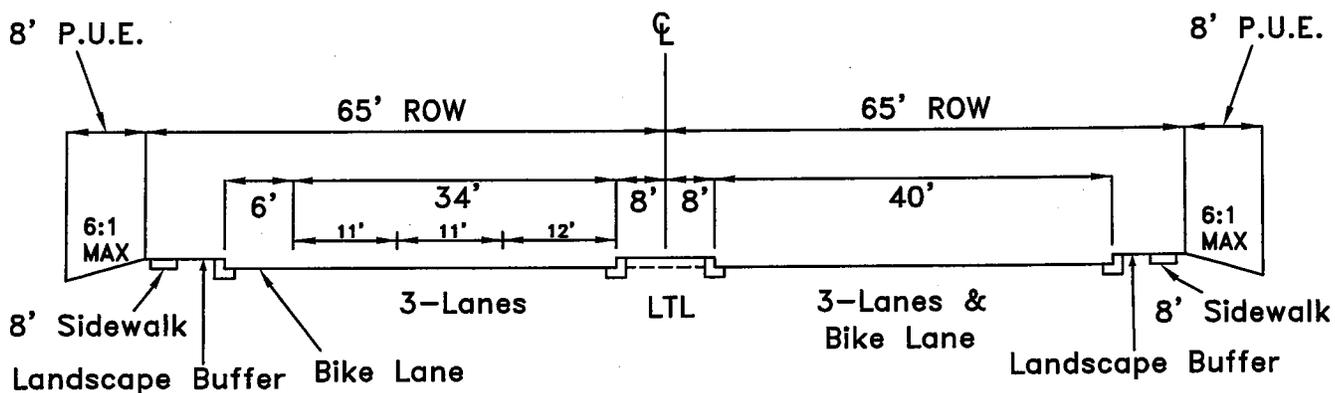


APPROVALS:

*[Signature]*  
 CITY ENGINEER      5/21/13  
 DATE

*[Signature]*  
 FIRE CHIEF      3-6-13  
 DATE

MULTI-LANE ROADWAY 130' ROW  
 Divided - 6 Travel Lanes  
 (6-Plus Right and Left Turn Lanes)



**Notes:**

1. Curb radii shall be 35' unless otherwise approved by the City Traffic Engineer.
2. At intersections, ROW shall increase to 150' for the first 500', measured from the centerline of the intersection.
3. Additional ROW may be required where additional turn lanes, driveways, or bus, bicycle, or pedestrian facilities are required.
4. Sidewalks may be meandering.
5. All slopes within the ROW and PUE shall be 6:1 max.

# CITY OF PEORIA

## STANDARD DETAIL PE-010-3

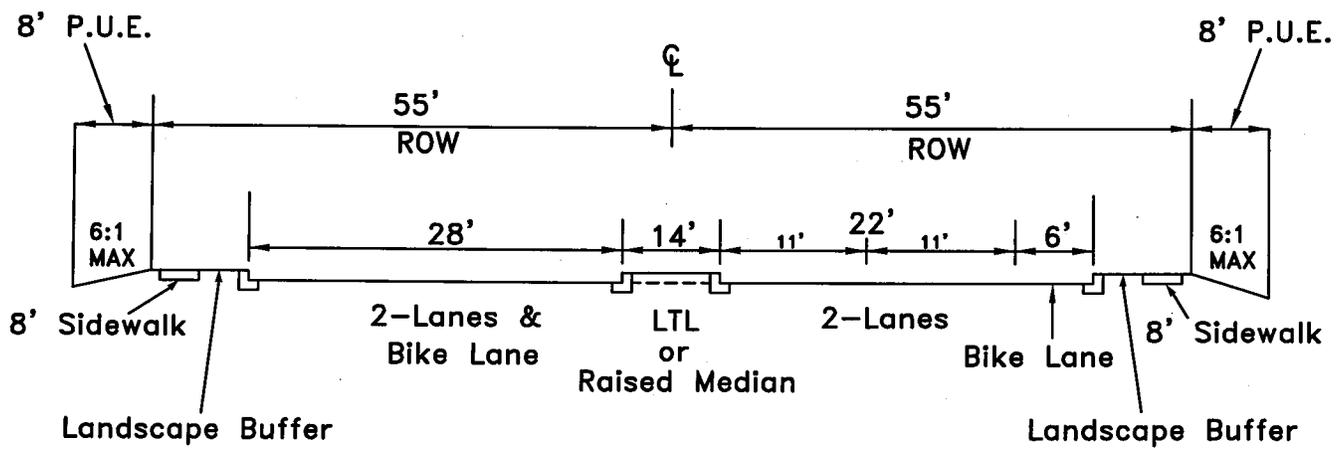
### MINOR ARTERIAL STREET SECTION



APPROVALS:

*[Signature]*  
 CITY ENGINEER      5/21/13  
 DATE

*[Signature]*  
 FIRE CHIEF      J-6-13  
 DATE



**Notes:**

1. Curb radii shall be 30' unless otherwise approved by the City Traffic Engineer.
2. At intersections, ROW increases to 130' for the first 500', measured from the centerline of the intersection.
3. Additional ROW may be required where additional turn lanes driveways or bus, bicycle, or pedestrian facilities are required.
4. Sidewalks may be meandering.
5. All slopes within the ROW and PUE shall be 6:1 max.

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# CITY OF PEORIA

## STANDARD DETAIL PE-010-4

### MAJOR COLLECTOR STREET SECTION

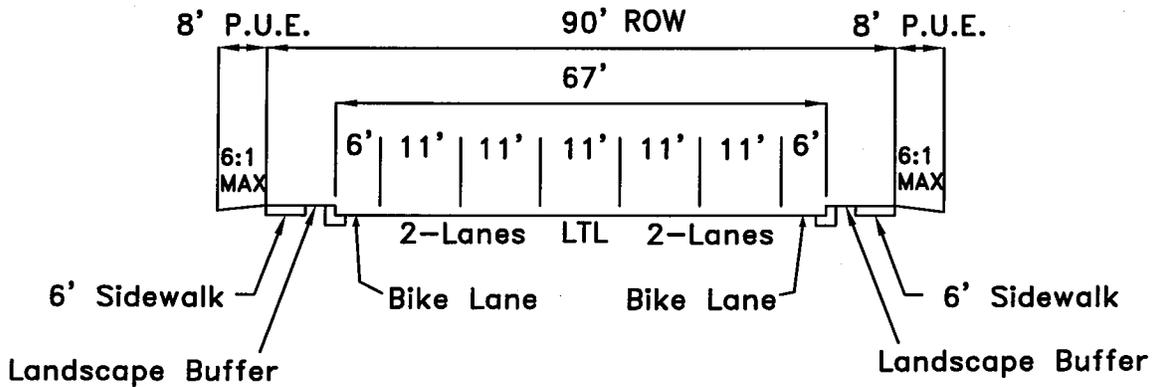


APPROVALS:

*[Signature]*  
 CITY ENGINEER      5/21/13  
 DATE

*[Signature]*  
 FIRE CHIEF      8-6-13  
 DATE

**FOUR-LANE ROADWAY**  
 Undivided  
 (Residential areas with backage and adjacent commercial and industrial areas)



**Notes:**

1. Corner radii shall be 30' unless otherwise approved by the City Traffic Engineer.
2. Additional ROW may be required where turn lanes, driveways, or bus, bicycle, or pedestrian facilities are required.
3. Sidewalks may be meandering.
4. All slopes within the ROW and PUE shall be 6:1 max.

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# CITY OF PEORIA

## STANDARD DETAIL PE-010-5

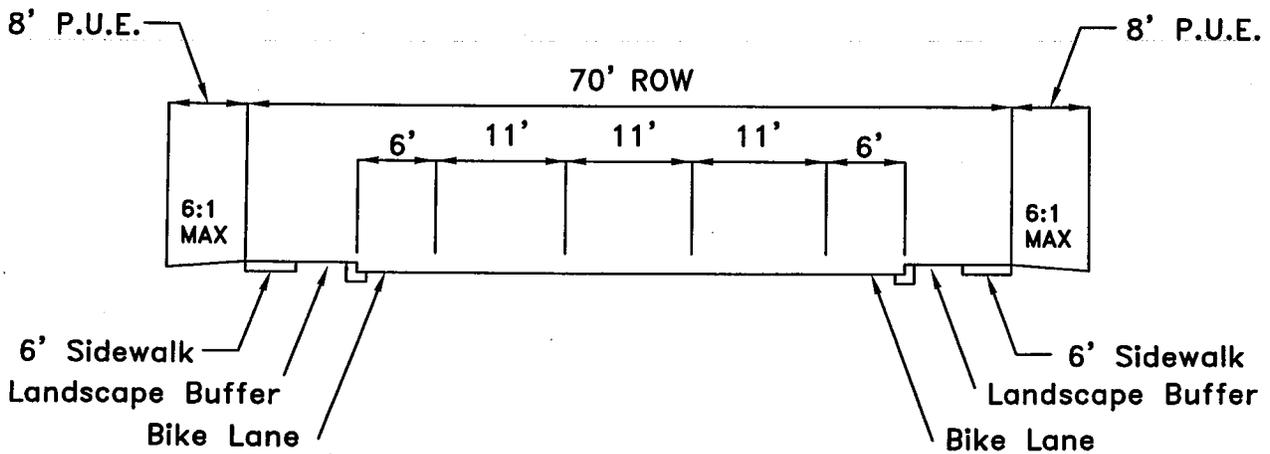
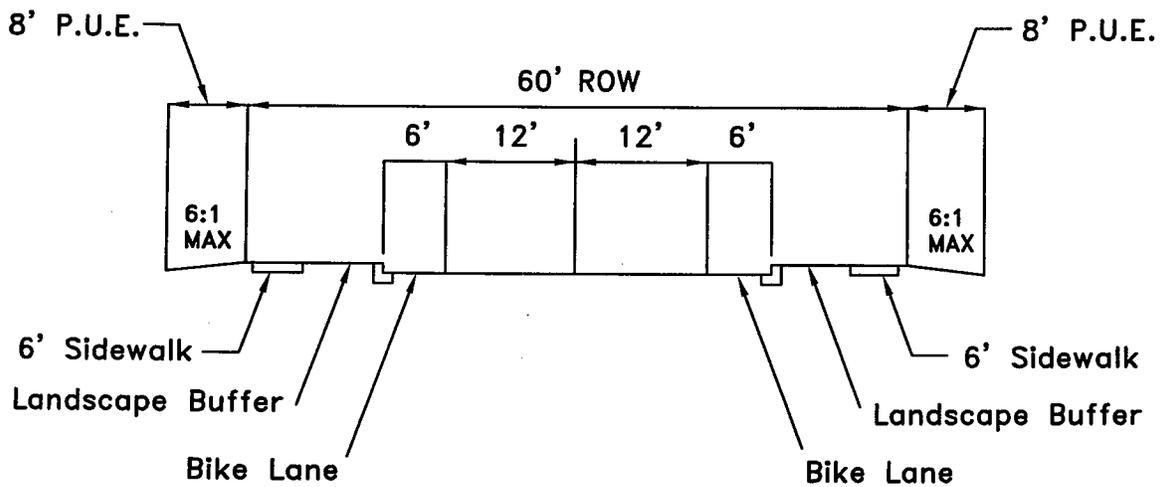
### MINOR COLLECTOR STREET SECTION



APPROVALS:

*[Signature]*  
 CITY ENGINEER      5/21/13  
 DATE

*[Signature]*  
 FIRE CHIEF      3-6-13  
 DATE



**Notes:**

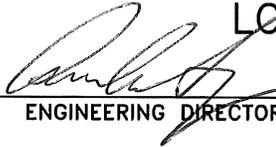
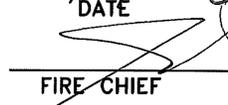
1. Corner radii shall be 25' unless otherwise approved by the City Traffic Engineer.
2. Additional ROW may be required where turn lanes, driveways, or bus, bicycle, or pedestrian facilities are required.
3. Sidewalks may be meandering.
4. All slopes within the ROW and PUE shall be 6:1 max.

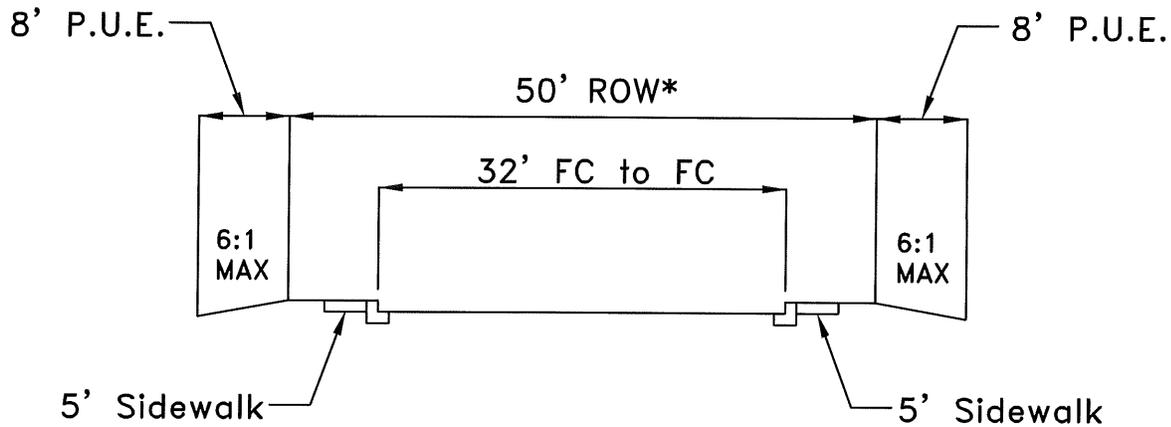
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# CITY OF PEORIA STANDARD DETAIL PE-010-6 LOCAL STREET SECTION



APPROVALS:

 ENGINEERING DIRECTOR DATE 1/26/15	 PW-UTILITIES DIRECTOR DATE 01-27-2015
 FIRE CHIEF DATE 1-27-15	



### GENERAL PLAN CIRCULATION ELEMENT

Policy B-3e:

Discourage private streets unless the Peoria City Council determines that the streets meet the adopted standards and that the benefit to the City exceeds the liability. Any private street permitted must meet all access and connectivity standards established by the City.

\*Private streets shall be dedicated as tracts.

### Notes:

1. Curb radii shall be 20' unless otherwise approved by the Engineering Director. All slopes within the ROW and PUE shall be 6:1 max.

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CITY OF PEORIA  
 STANDARD DETAIL PE-011-2  
 PAVEMENT MARKING MANUAL, PAGE 2



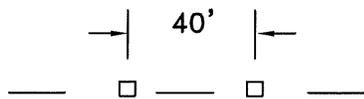
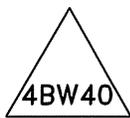
APPROVALS:

*[Signature]*  
 ENGINEERING DIRECTOR      1/14/15      DATE

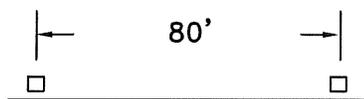
*[Signature]*  
 PW-UTILITIES DIRECTOR      01-15-2015      DATE

WHITE PAINT SYMBOLS  
WITH RAISED PAVEMENT MARKERS

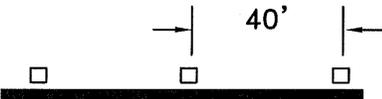
LEGEND:



4" Broken white line with a 15' line segment and a 25' gap with type 'G' rpm's @ 40' spacing



4" Solid white line with type 'G' rpm's @ 80' spacing  
 (For curved sections of roadway use 40" spacing)



8" Solid white line with type 'G' rpm's @ 40' spacing

**Note:**

1. Raised pavement markers shall be used on arterial streets with no adjacent street lighting or where otherwise approved by the City Traffic Engineer.
2. Longitudinal line markings shall be installed using water-based paint applied at a minimum of .15 mil thickness.
3. Short-line markings, including crosswalks, stop bars, chevrons, and crosshatch markings shall be installed using alkyd thermoplastic material applied at a minimum .90 mil thickness or 3M Stamark Pavement Marking Tape.

CITY OF PEORIA  
STANDARD DETAIL PE-011-3  
PAVEMENT MARKING MANUAL, PAGE 3



APPROVALS:

  
CITY ENGINEER

5/20/13  
DATE

## RAISED PAVEMENT MARKER TYPES

### LEGEND:

Type A = White (non reflective)



Type AY = Yellow (non reflective)



Type D = Yellow, two-way (reflective)



Type G = Clear, one-way (reflective)



Type H = Yellow, one-way (reflective)



Type J = White, raised domes (reflective)



TypeJR = Yellow, raised domes (reflective)



#### Notes:

1. Raised pavement markers shall be placed so that the reflective face of the marker is facing and perpendicular to traffic.
2. Raised pavement markers shall be used on arterial streets with no adjacent street lighting or where otherwise approved by the City Traffic Engineer.

CITY OF PEORIA  
 STANDARD DETAIL PE-011-4  
 PAVEMENT MARKING MANUAL, PAGE 4



APPROVALS:

*[Signature]*  
 ENGINEERING DIRECTOR  
 1/14/15  
 DATE

*[Signature]*  
 PW-UTILITIES DIRECTOR  
 01-15-2015  
 DATE

# YELLOW PAINT SYMBOLS

## LEGEND:

— — — 4" Broken yellow line with a 15' line segment and a 25' gap

————— 4" Solid yellow line

= — — — 4" Solid broken yellow, one solid, one broken with a 15' line segment and a 25' gap

= = ————— 4" Double yellow line

- - - - - 4" Dashed yellow line with a 2' line segment and 4' gap

————— 8" Solid yellow line

————— 12" Solid yellow line

Notes:

1. Longitudinal line markings shall be installed using water-based paint applied at a minimum of .15 mil thickness.
2. Short-line markings, including crosswalks, stop bars, chevrons, and crosshatch markings shall be installed using alkyd thermoplastic material applied at a minimum .90 mil thickness or 3M Stamark Pavement Marking Tape.

CITY OF PEORIA  
 STANDARD DETAIL PE-011-5  
 PAVEMENT MARKING MANUAL, PAGE 5



APPROVALS:

*[Signature]*  
 ENGINEERING DIRECTOR  
 1/14/15  
 DATE

*[Signature]*  
 PW-UTILITIES DIRECTOR  
 01-15-2015  
 DATE

YELLOW PAINT SYMBOLS  
WITH RAISED PAVEMENT MARKERS

LEGEND:

4" Broken yellow line with a 15' line segment and a 25' gap with type 'D' rpm's @ 40' spacing

4" Solid yellow line with type "D" rpm's @ 40' spacing (For curved sections of roadway use 20' spacing.)

4" Solid yellow line with type "D" rpm's @ 80' spacing (For straight sections of roadway)

4" Solid broken yellow line, one solid, one broken with a 15' line segment and a 25' gap, with type "D" rpm's @ a 40' spacing (broken) type "D" rpm's @ a 20' spacing (solid)

4" Double Yellow with type 'D' rpm's @ 40' spacing

4" Double yellow line with type 'D' rpm's @ 80' spacing

**Notes:**

1. Longitudinal line markings shall be installed using water-based paint applied at a minimum of .15 mil thickness.
2. Short-Line markings, including crosswalks, stop bars, chevrons, and crosshatch markings shall be installed using alkyl thermoplastic material applied at a minimum .90 mil thickness or 3M Stamark Pavement Marking Tape.

# CITY OF PEORIA STANDARD DETAIL PE-013

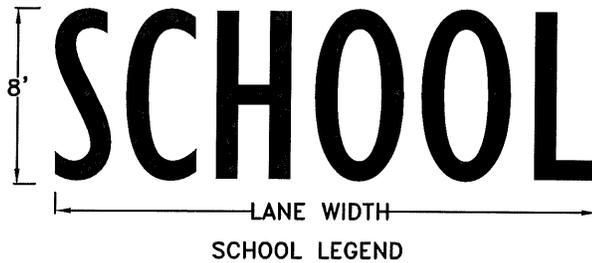
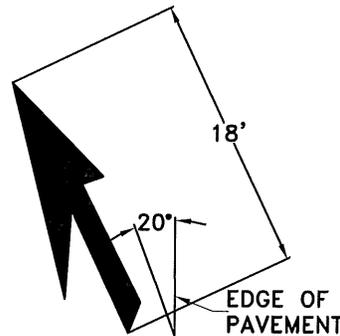
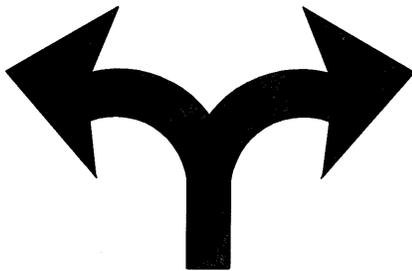
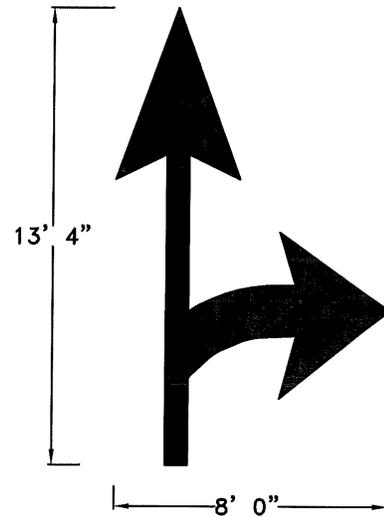
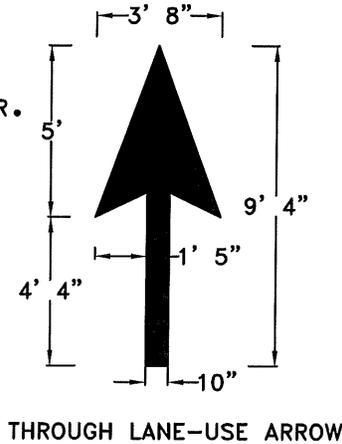
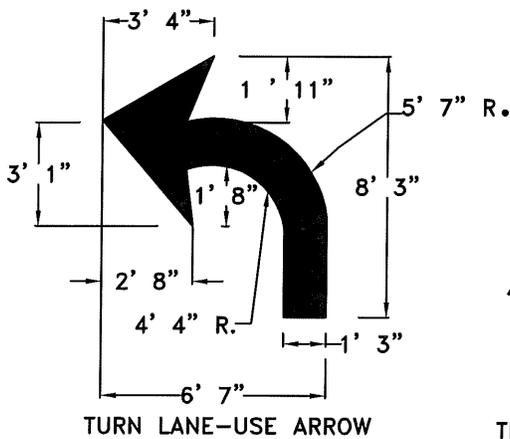


## ARROW & BIKE SYMBOLS

APPROVALS:

*[Signature]*  
ENGINEERING DIRECTOR  
DATE 1/14/15

*[Signature]*  
PW-UTILITIES DIRECTOR  
DATE 01-15-2015



**NOTES:**

1. WORD SYMBOL AND OTHER LEGEND MARKINGS SHALL BE INSTALLED IN 3M STAMARK PAVEMENT MARKING TAPE.
2. BIKE SYMBOL SHALL FACE THROUGH TRAVEL LANES.
3. SCHOOL LEGENDS MAY BE INSTALLED AT SCHOOLS ABUTTING ARTERIAL STREETS IF APPROVED BY THE CITY TRAFFIC ENGINEER. IF USED, SCHOOL STENCILS SHALL BE INSTALLED IN CLOSE PROXIMITY TO SCHOOL ADVANCE WARNING SIGNS IN EACH THROUGH LANE ON THE ARTERIAL STREET, INSTALLED IN A 40' STAGGERED PATTERN.

CITY OF PEORIA  
STANDARD DETAIL PE-014  
CROSSWALK AND STOP LINE



APPROVALS:

  
CITY ENGINEER

5/21/13  
DATE

NOTES:

1. MARKED CROSSWALKS AND STOP LINES SHALL BE INSTALLED AT SIGNALIZED INTERSECTIONS THAT INCLUDE PEDESTRIAN SIGNAL INDICATIONS.
2. CROSSWALKS AND/OR STOP LINES SHOULD NOT BE INSTALLED AT UNSIGNALIZED INTERSECTIONS UNLESS JUSTIFIED BASED UPON ENGINEERING JUDGEMENT AT THE DIRECTION OF THE CITY TRAFFIC ENGINEER.
3. MARKED CROSSWALKS SHALL BE INSTALLED IN 12" SOLID WHITE OR YELLOW (FOR 15MPH SCHOOL CROSSINGS ONLY) AT 10' WIDTH.
4. AT SIGNALIZED INTERSECTIONS, STOP LINES SHOULD BE INSTALLED 4' IN ADVANCE OF THE MARKED CROSSWALKS.
5. IF USED AT UNSIGNALIZED INTERSECTIONS WITHOUT MARKED CROSSWALKS, STOP LINES SHOULD BE PLACED AT THE DESIRED STOPPING POINT THAT AFFORDS THE BEST VISIBILITY, BUT SHOULD NOT BE PLACED MORE THAN 30 FEET OR LESS THAN FOUR FEET FROM THE NEAREST EDGE OF THE INTERSECTING TRAVELED WAY.
6. LADDER STYLE CROSSWALKS MAY BE INSTALLED AT THE DIRECTION OF THE CITY TRAFFIC ENGINEER AT CROSSINGS WHERE HIGH PEDESTRIAN VOLUMES ARE TYPICAL OR EXPECTED.

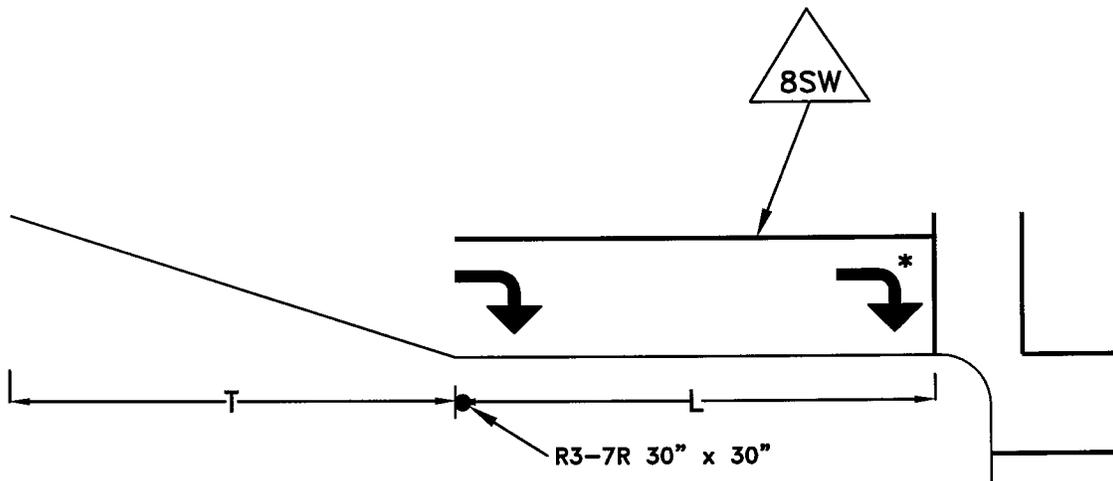
CITY OF PEORIA  
STANDARD DETAIL PE-015-1  
RIGHT TURN LANES



APPROVALS:

*[Signature]*  
CITY ENGINEER

5/21/13  
DATE



NOTES:

T = Taper shall not exceed 12:1. 100' taper is typical for a standard 12' turn lane.

L = Length to be determined by engineering judgement at the direction of the City Traffic Engineer. 100'-150' length is typical, but shall not be less than 50'.

\*If a turn lane is longer than 250', a second arrow symbol shall be installed at the end of the turn lane.

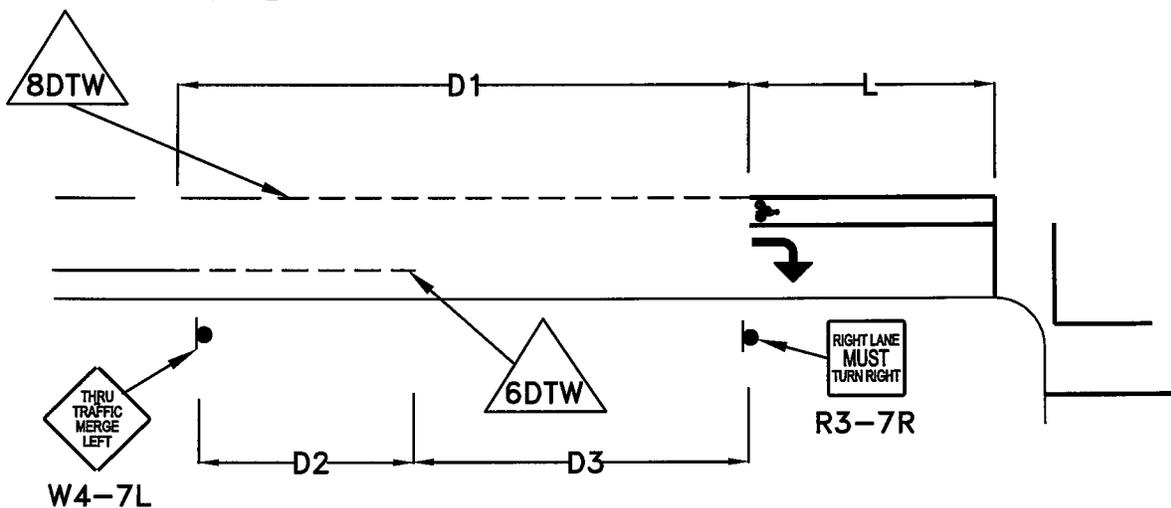
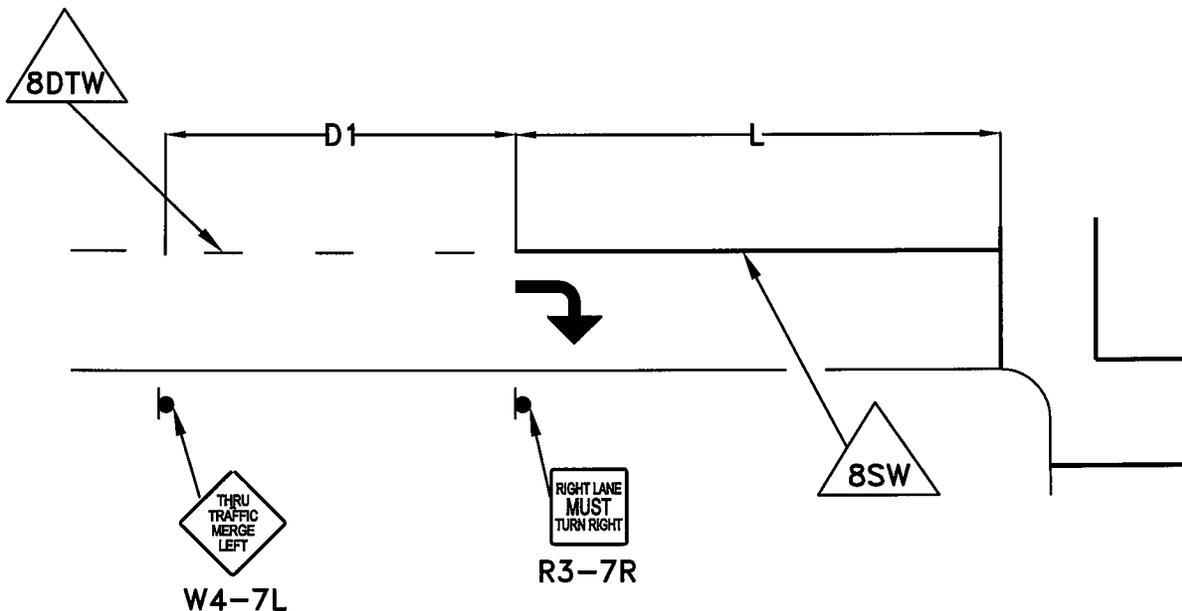
-If a turn lane is wider than 18', a carrot shall be installed.

# CITY OF PEORIA STANDARD DETAIL PE-015-2 RIGHT TURN DROP LANES



APPROVALS:

  
 CITY ENGINEER 5/21/13  
 DATE



**NOTES:**

D1 = Distance needed for motor vehicles to merge left shall not be less than a distance of seven times the posted speed limit in feet.

D2 & D3 = Distance needed for bicyclists to merge left to be determined by engineering judgement at the direction of the City Traffic Engineer.

L = Length to be determined by engineering judgement at the direction of the City Traffic Engineer. 100'-150' length is typical, but shall not be less than 50'.

-if a turn lane is longer than 250', a second arrow symbol shall be installed at the end of the turn lane.

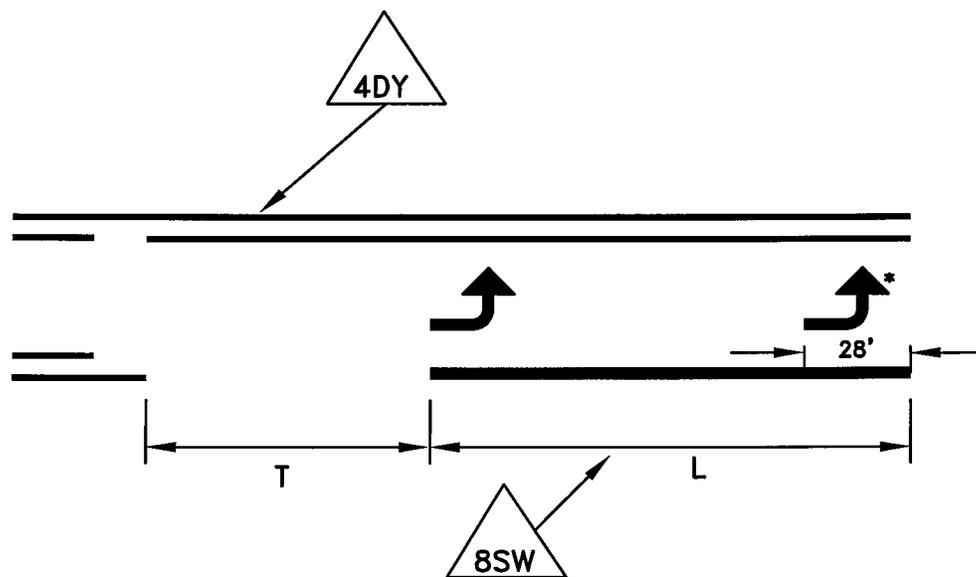
-if a turn lane is wider than 18', a carot shall be installed.

CITY OF PEORIA  
STANDARD DETAIL PE-016  
LEFT TURN LANES



APPROVALS:

*[Signature]*  
CITY ENGINEER      5/20/13  
DATE



NOTES:

T = Transition of 100' is typical, but may be increased based on engineering judgement at the direction of the City Traffic Engineer.

L = Length to be determined by engineering judgement at the direction of the City Traffic Engineer. 100' - 150' length is typical, but shall not be less than 50'.

\*If a turn lane is longer than 250', a second arrow symbol shall be installed at the end of the turn lane.

- If a turn lane is wider than 18', a carrot shall be installed.

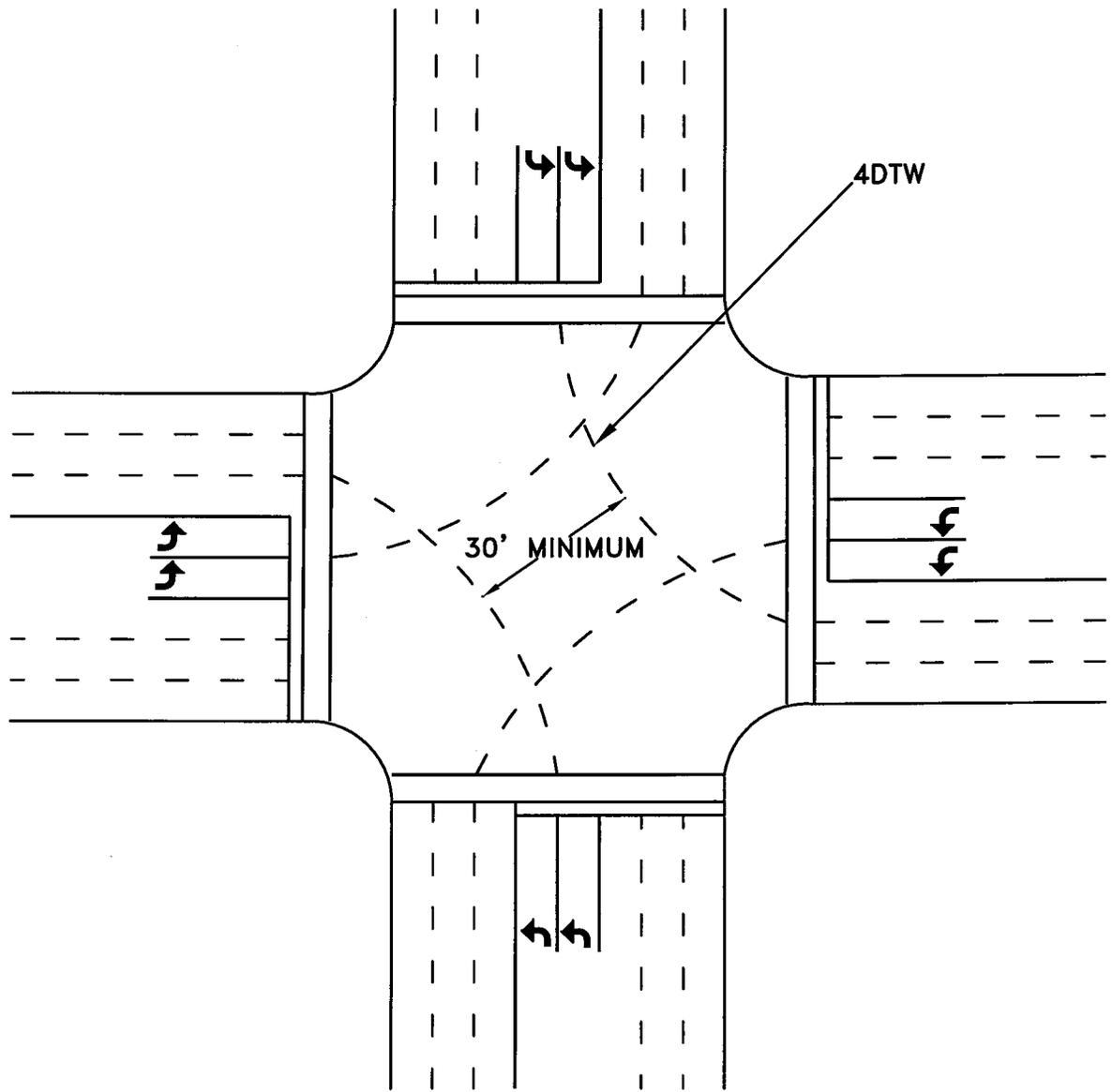
CITY OF PEORIA  
STANDARD DETAIL PE-017  
DUAL LEFT TURN LANES



APPROVALS:

*[Signature]*  
CITY ENGINEER

5/21/13  
DATE





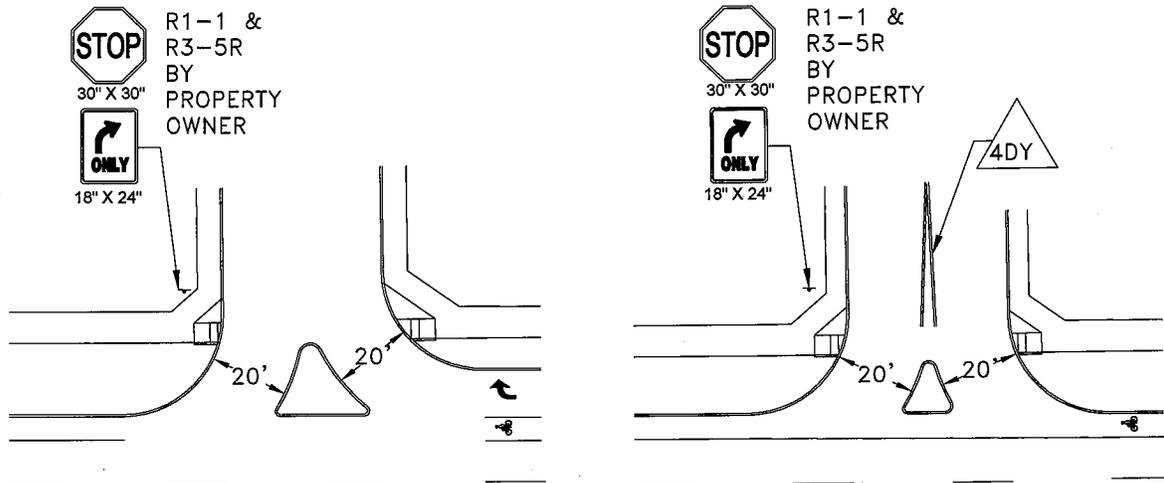
# CITY OF PEORIA STANDARD DETAIL PE-021-1 TURN DIVERTERS - RIGHT IN/RIGHT OUT



APPROVALS:

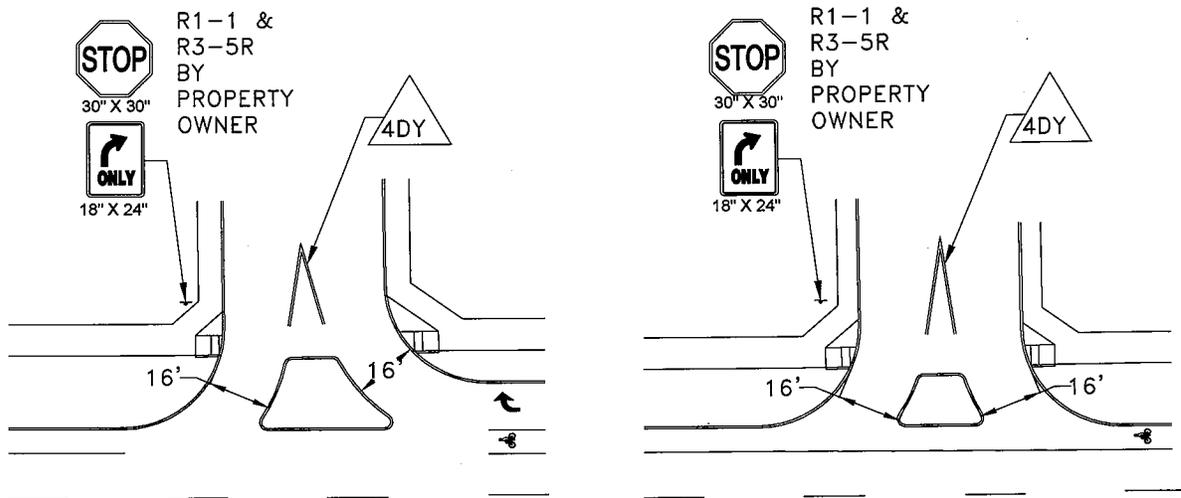
*[Signature]*  
CITY ENGINEER      5/21/13  
DATE

## TYPICAL TURN DIVERTERS



NOTE: TURN DIVERTER CURB SHALL BE MAG 220-1 TYPE A AND SHALL BE PAINTED RED.

## NARROWED ACCESS TURN DIVERTERS\*



NOTE: TURN DIVERTER CURB SHALL BE MAG 220-1 TYPE C AND SHALL BE PAINTED RED.  
MAY BE USED ON PUBLIC AND PRIVATE STREETS AND PRIVATE DRIVEWAYS, INCLUDING PE-251-1 & 2 (DELETING RAMPS).

\*REQUIRES APPROVAL FROM CITY TRAFFIC ENGINEER AND FIRE MARSHALL.

# CITY OF PEORIA STANDARD DETAIL PE-021-2 TURN DIVERTERS - RIGHT IN/FULL ACCESS OUT

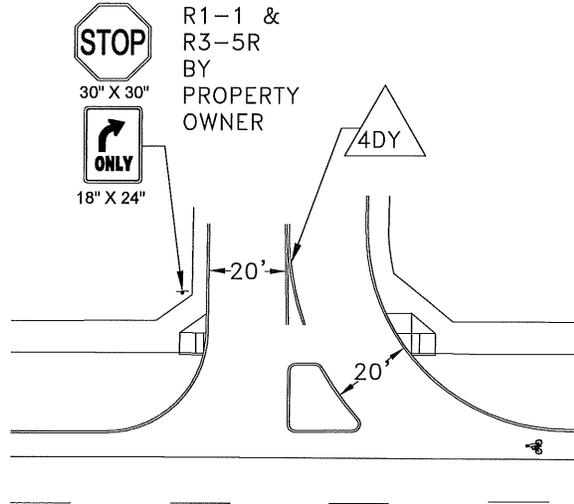
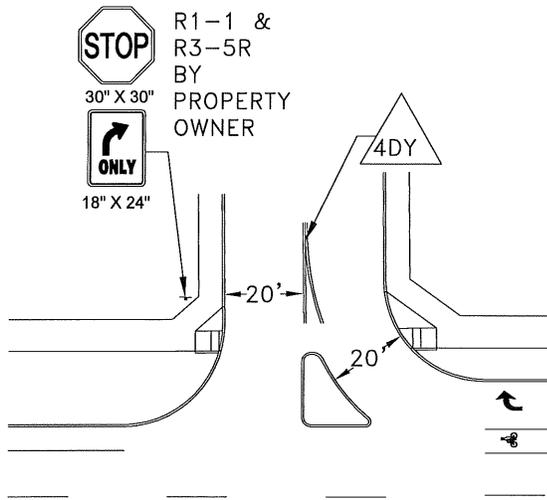


APPROVALS:

*[Signature]*  
ENGINEERING DIRECTOR      1/14/15  
DATE

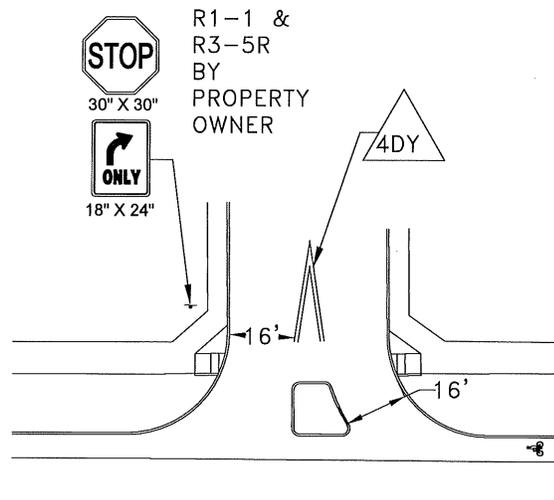
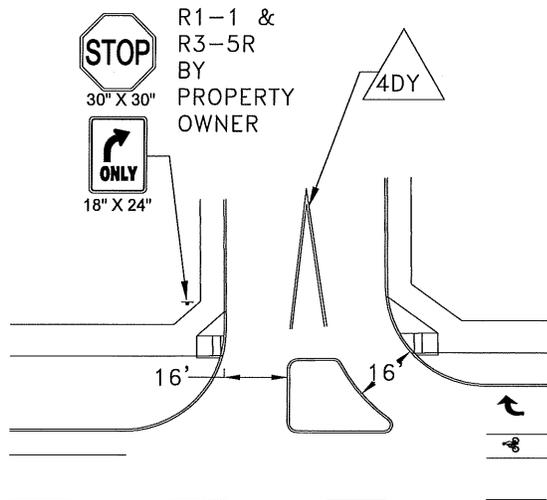
*[Signature]* 01-15-2015  
PW-UTILITIES DIRECTOR      DATE

## TYPICAL TURN DIVERTERS



NOTE: TURN DIVERTER CURB SHALL BE MAG 220-1 TYPE A AND SHALL BE PAINTED RED.

## NARROWED ACCESS TURN DIVERTERS\*



NOTE: TURN DIVERTER CURB SHALL BE MAG 220-1 TYPE C AND SHALL BE PAINTED RED.

MAY BE USED ON PUBLIC AND PRIVATE STREETS AND PRIVATE DRIVEWAYS, INCLUDING PE-251-1 & 2 (DELETING RAMPS).

\*REQUIRES APPROVAL FROM CITY TRAFFIC ENGINEER AND FIRE MARSHALL.

# CITY OF PEORIA

## STANDARD DETAIL PE-021-3

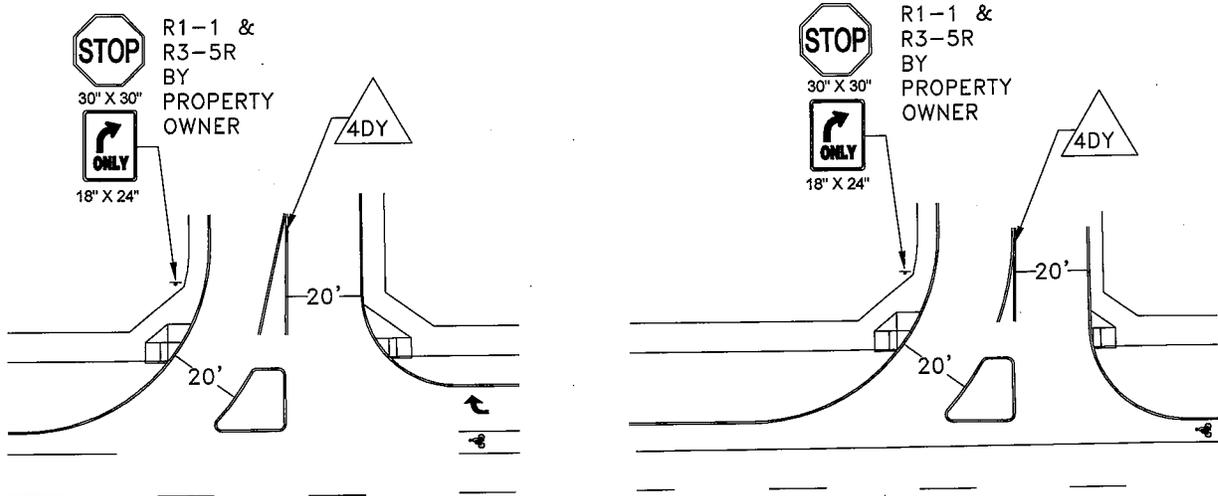
### TURN DIVERTERS - FULL ACCESS IN/RIGHT OUT



APPROVALS:

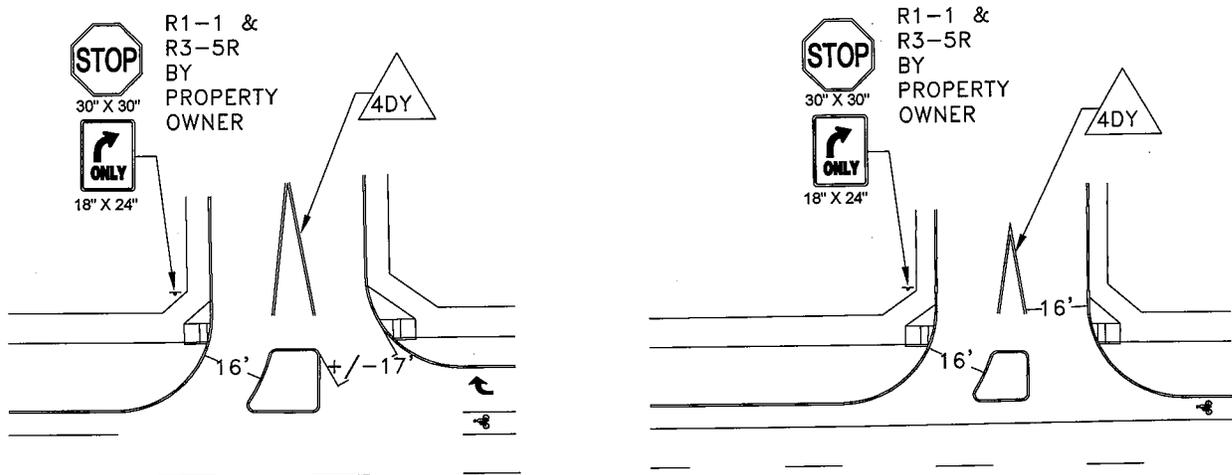
  
 CITY ENGINEER 5/21/13  
DATE

#### TYPICAL TURN DIVERTERS



NOTE: TURN DIVERTER CURB SHALL BE MAG 220-1 TYPE A AND SHALL BE PAINTED RED.

#### NARROWED ACCESS TURN DIVERTERS\*



NOTE: TURN DIVERTER CURB SHALL BE MAG 220-1 TYPE C AND SHALL BE PAINTED RED. MAY BE USED ON PUBLIC AND PRIVATE STREETS AND PRIVATE DRIVEWAYS, INCLUDING PE-251-1 & 2 (DELETING RAMPS).

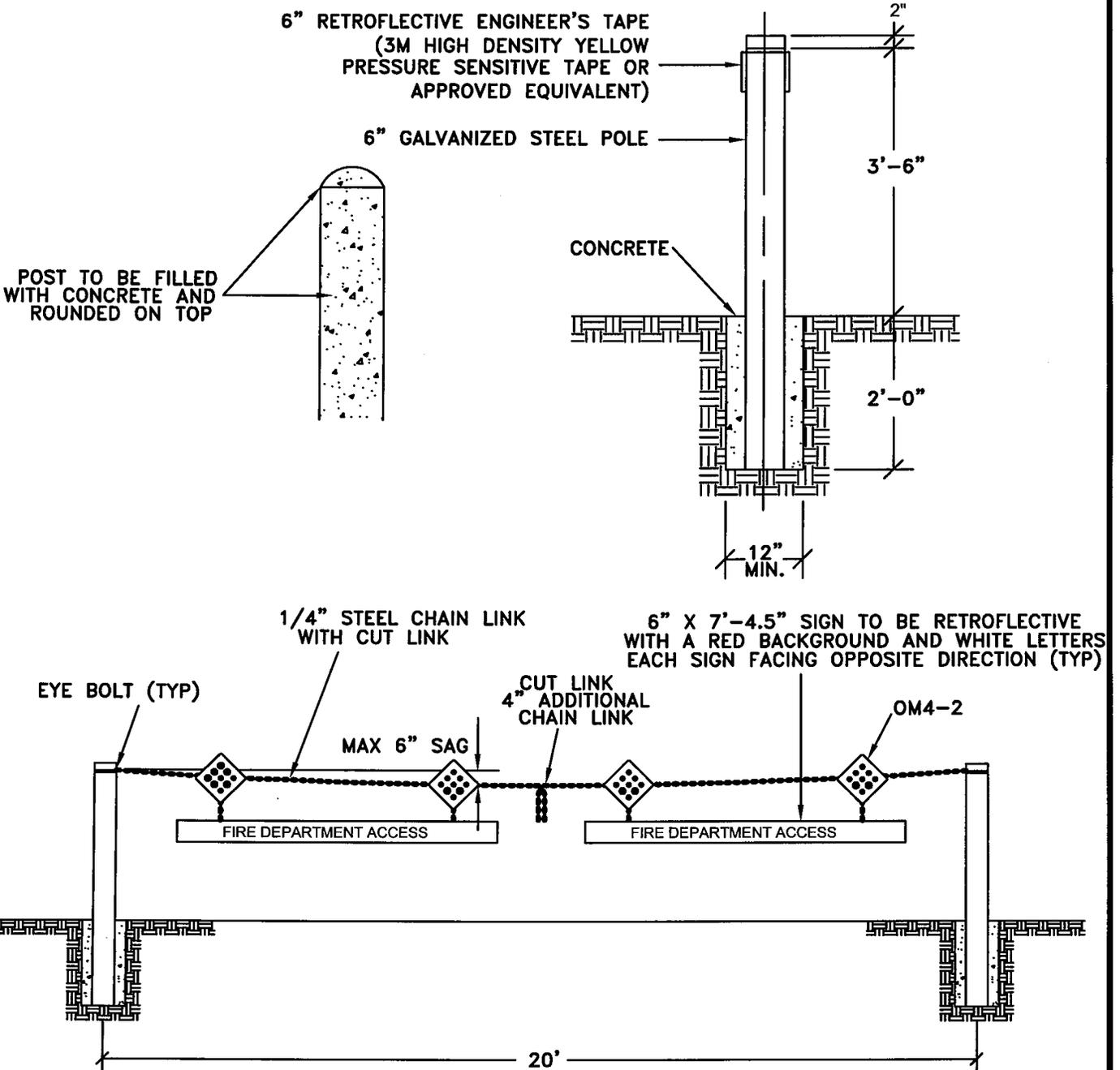
\*REQUIRES APPROVAL FROM CITY TRAFFIC ENGINEER AND FIRE MARSHALL.

# CITY OF PEORIA STANDARD DETAIL PE-024 FIRE DEPARTMENT ACCESS BARRIER



APPROVALS:

  
 CITY ENGINEER 5/21/13  
 DATE



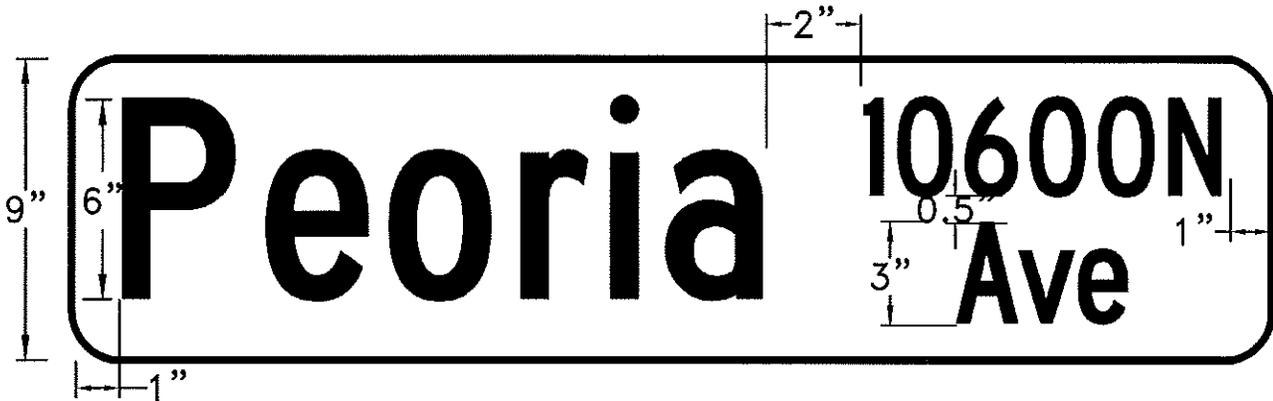
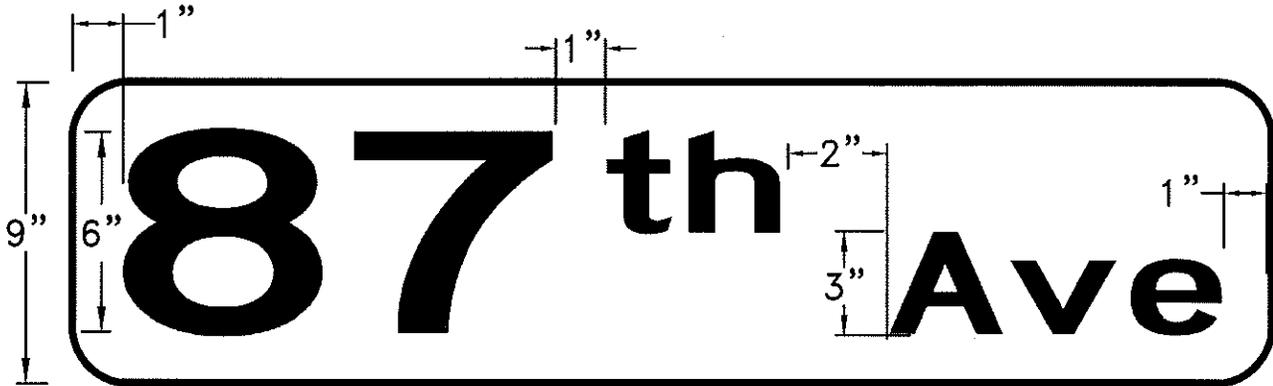
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CITY OF PEORIA  
 STANDARD DETAIL PE-030  
 ARTERIAL AND COLLECTOR STREET NAME SIGNS



APPROVALS:

*[Signature]* 2/6/14  
 CITY ENGINEER DATE



NOTES:

- Aluminum gauge - 0.080
- Reflective sheeting type:  
High Intensity Prismatic  
Series 3930 White  
ASTM Type IV
- Font Type: T 2000 HWY C
- Center entire message on blank
- For use at arterial and collector streets and local streets intersecting arterial or collector streets.
- \*Brown Standard is 3M Scotchlite "Brown" 1179 or approved equal  
\*\*with approval from City Traffic Engineer only.

PUBLIC STREETS
Black on White
**White on Brown

PRIVATE STREETS
Black on White
White on Brown

Blank Sizes
9" X 24"
9" X 30"
9" X 36"
9" X 42"
9" X 48"

I:\GUIDE\DETAILS\CAD\PE-030



# CITY OF PEORIA STANDARD DETAIL PE-032-1 SIGN POST SPECIFICATION



APPROVALS:

*[Signature]*  
ENGINEERING DIRECTOR      1/14/15  
DATE

*[Signature]* 01-15-2015  
PW-UTILITIES DIRECTOR      DATE

City of Peoria requires square tubing for post mounted installations. Tubing shall have a galvanized finish and be roll form 12 gage (.105-U.S.S. gage) cold rolled steel, be perforated, and have hole size of  $\frac{7}{16}$  Inch in diameter, and 1 inch on center on all sides. All sign heights shall conform to the Manual on Uniform Traffic Control Devices.

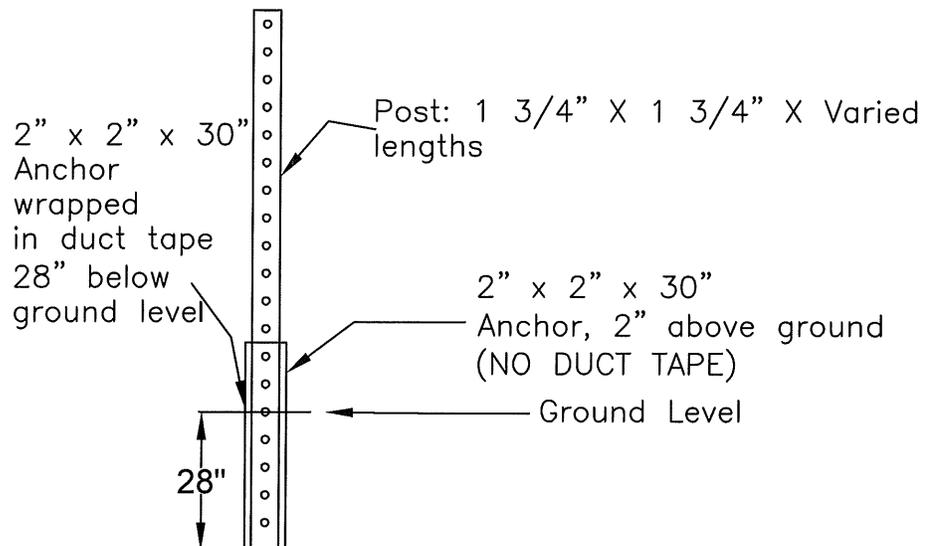


FIG. 1

Post installation requires a 2" x 2" x 30" anchor to be installed pneumatically or hydraulically and shall be 28" in the ground and 2" above ground (see fig.1)

For singular signs a 1  $\frac{3}{4}$ " x 1  $\frac{3}{4}$ " x 10' post is required with the exception of object markers and/or end of road markers. For multiple signs a 1  $\frac{3}{4}$ " x 1  $\frac{3}{4}$ " x varied length post is required per the Manual on Uniform Traffic Control Devices height specifications. For signs that exceed 42" in width, dual posts are required. Attachment of the post to the anchor requires a  $\frac{5}{16}$ " x 2  $\frac{1}{2}$ " grade 5 hex head bolt with a  $\frac{5}{16}$ " flat washer and hex nut. Attachment of the signs to the post requires a  $\frac{5}{16}$ " x 2  $\frac{1}{2}$ " grade 5 hex head bolt with a  $\frac{5}{16}$ " flat washer and hex nut.

NOTE: Parking restriction signs shall be set at an angle of not less than 30 degrees or more than 45 degrees with the line of traffic in order to be visible to approaching traffic.

CITY OF PEORIA  
STANDARD DETAIL PE-032-2  
STREET LIGHT POLE SIGN INSTALLATION



APPROVALS:

  
ENGINEERING DIRECTOR      DATE

  
PW-UTILITIES DIRECTOR      DATE

NOTES:

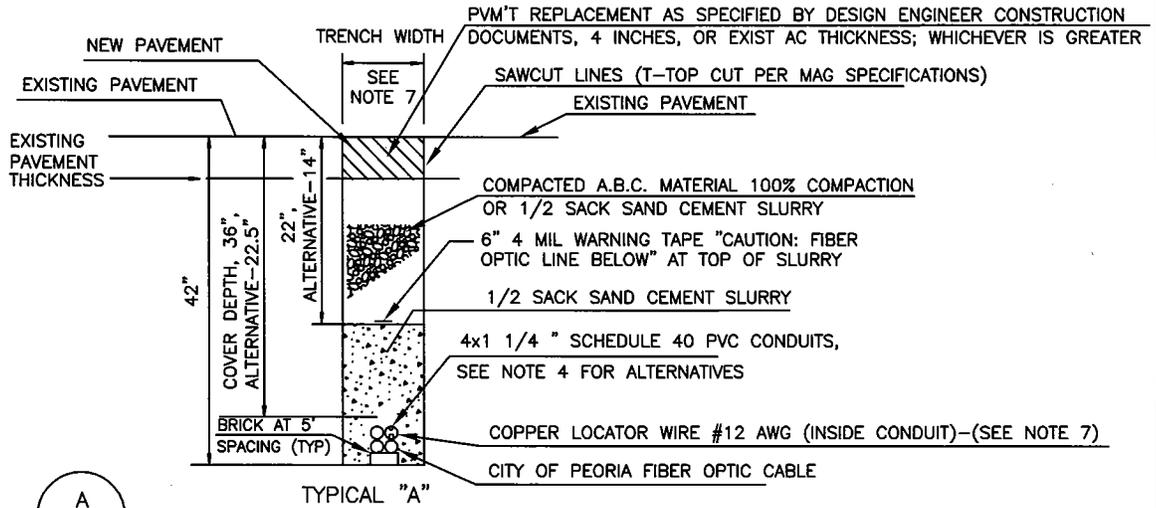
1. Signs should be installed on streetlight poles instead of ground-mounted posts, when possible.
2. Signs installed on street light poles shall be installed using a minimum  $\frac{1}{2}$ " wide stainless steel banding (C20499) with a minimum thickness of .030, a banding buckle (C25499), and a banding bracket (D02189).
3. Street name signs shall be installed using banding listed above as well as a cantilever bracket (KC250), round bracket (922SF), and a cross bracket (330SF). 6" signs shall have 6" wide brackets and 9" signs shall have 12" wide brackets.
4. 6" NO OUTLET (W1-14A) or DEAD END (W14-2A) signs shall be installed with either 6" parallel brackets or 6" cross brackets, whichever is applicable with sign orientation, and shall be installed above the street name signs, if attached at same location. If installed individually on a street light pole, the signs shall be installed using  $\frac{1}{2}$ " wide stainless steel banding with a minimum thickness of .303, a banding buckle (C25499), a cantilever bracket (KC250), and a round bracket (922SF).

# CITY OF PEORIA STANDARD DETAIL PE-033 INTERCONNECT TRENCH DETAIL



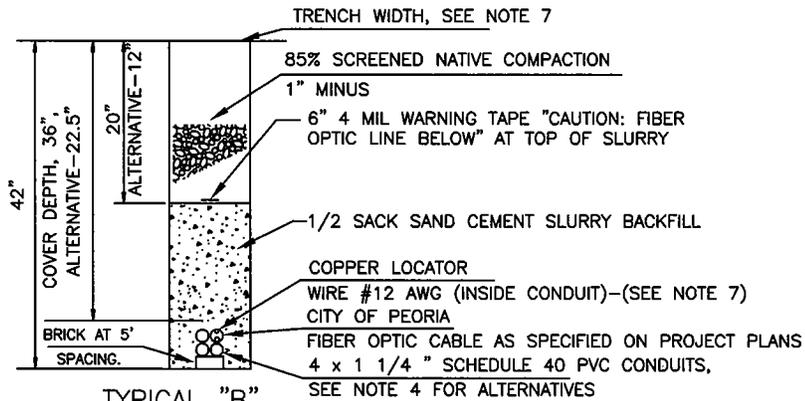
APPROVALS:

  
 CITY ENGINEER 3/27/12  
 DATE



A  
IT-121

TRENCH DETAIL FOR ASPHALT PAVEMENT



B  
IT-121

EARTH TRENCH DETAIL

**NOTES:**

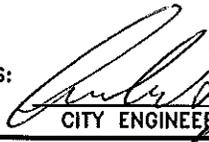
1. TRENCH DEPTH VARIES BASED ON CONFLICTS WITH EXISTING UTILITIES.
2. BID ITEM FOR PROVIDING A TRENCH THAT IS A MINIMUM OF 42 INCHES DEEP INCLUDES INSTALLING FIBER OPTIC DUCT AND PROVIDING BACKFILL, COMPLETE IN PLACE. THIS ITEM SHALL PROVIDE A MINIMUM COVER DEPTH OF 36 INCHES OVER THE CONDUIT DUCT. ALL WARNING TAPE, CONDUIT SPACERS, BRICKS, AND COMPACTION WILL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED INCIDENTAL TO THE UNIT PRICE BID OF ITEM, "TRENCHING (42") AND INSTALLATION OF FIBEROPTIC DUCT, AND BACKFILL, COMPLETE, IN PLACE"-WITH APPROVAL BY THE CITY ENGINEER. AN ALTERNATIVE TRENCH DEPTH OF 28 INCHES SHALL BE INCLUDED IN THE BID PRICE UNDER ALTERNATIVE ITEM, "TRENCHING (28") AND INSTALLATION OF FIBEROPTIC DUCTS AND BACKFILL, COMPLETE, IN PLACE." THE ALTERNATIVE BID ITEM SHALL PROVIDE A MINIMUM COVER DEPTH OF 22.5 INCHES OVER THE CONDUIT DUCTS. ALL INCIDENTALS TO THE BASIC BID ITEM SHALL ALSO BE CONSIDERED INCIDENTAL TO THE ALTERNATIVE ITEM - WITH APPROVAL BY THE CITY ENGINEER.
3. HORIZONTAL DIRECTIONAL BORING SHALL BE ALLOWED WITH ENGINEERS PRIOR APPROVAL.
4. IF THE CONDUIT ROUTING IS MODIFIED TO CROSS AN EXISTING PORTLAND CEMENT CONCRETE DRIVEWAY THE CONDUITS SHALL BE PLACED BY BORING. ALL ASPHALT DRIVEWAYS MAY BE TRENCHED.
5. A 1/2 SACK OF SAND CEMENT SLURRY BACKFILL SHALL BE USED WHEN BACKFILLING CONDUITS. CONDUITS SHALL BE SUPPORTED AND ANCHORED IN THE TRENCH PRIOR TO BACKFILLING WITH THE CEMENT SLURRY.
6. TRENCH WIDTH MAY NOMINALLY VARY FROM 6" TO 8" BUT SHALL NOT EXCEED 12 INCHES.
7. A SINGLE CONTINUOUS INSULATED COPPER LOCATOR WIRE AWG #12 SHALL BE INSTALLED INSIDE ONE OF THE CONDUITS ALONG THE ENTIRE LENGTH OF THE CONDUIT RUN. WIRE SHALL HAVE A FIVE FOOT SERVICE LOOP IN EACH PULL BOX. IF A CRIMPED SPLICE IS REQUIRED IT SHALL BE DONE IN THE PULL BOX ONLY AND "NOT" IN THE CONDUIT RUN.
8. PROVIDE 3/4 INCH WIDE 2500 LBF MULE PULL TAPE IN ALL CONDUITS FOR THE ENTIRE LENGTH OF THE CONDUIT RUN.
9. CONTRACTOR SHALL MAINTAIN A TEN TO ONE VARIANCE OF THE CONDUIT ALIGNMENT DURING INSTALLATION.
10. CONDUIT SPACERS @ 3 PER 20' AND 2' FROM ANY DIRECTION CHANGE OR JOINT.

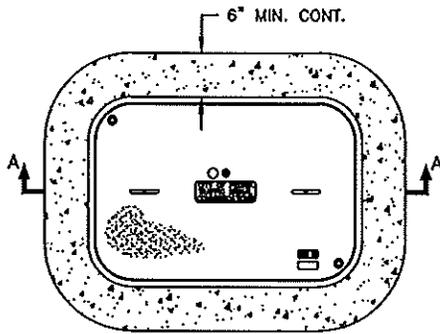
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# CITY OF PEORIA STANDARD DETAIL PE-034-1 INTERCONNECT PRECAST COMMUNICATION PULL BOX

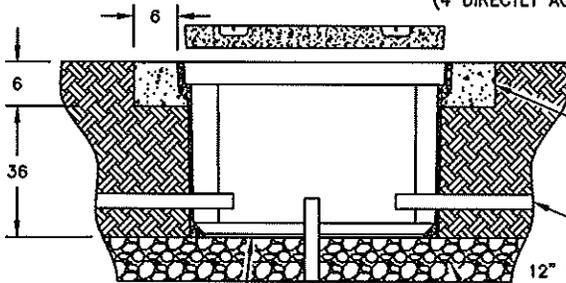
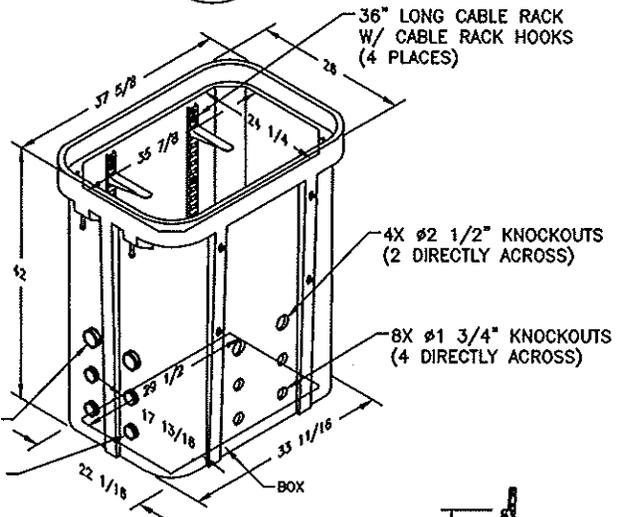
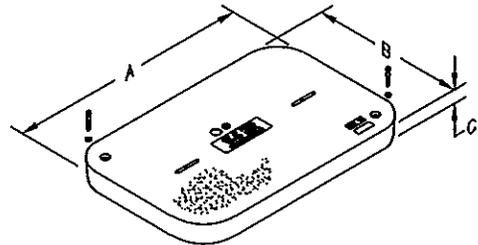


APPROVALS:

  
 CITY ENGINEER 2/6/14  
 DATE



PLAN VIEW



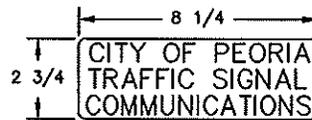
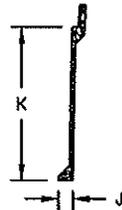
CONCRETE (CLASS B) SUPPORT RING  
(NOT REQUIRED WHEN EMBEDDED IN  
CONCRETE SIDEWALK OR OTHER  
SUITABLE CONCRETE PAD)

4 x 1 1/4" AND/OR 2 x 3" AS NEEDED

12" DEEP GRAVEL  
BED. USE CLEAN #57  
AGGREGATE SUMP

INSTALL GALVANIZED  
1 PIECE 1/4"  
WIRE MESH SQUARES  
24-GAUGE OR LARGER.  
EXTEND 1" PAST  
COM BOX WALLS.

PROVIDE & INSTALL A 8' GROUND ROD  
CONNECT TO LOCATE WIRE AND TO  
TERMINAL OF SPlice ENCLOSURE



LOGO DETAIL

SECTION A-A

TYPICAL PULL OR SPlice BOX

TABLE OF DIMENSIONS (MINIMUMS)

TYPE	DESCRIPTION	DIMENSIONS (IN.)										ADDITIONAL COILED FIBER (Feet)	# TEST POINTS	ADDITIONAL TRACER WIRE
		A	B	C	D	E	F	G	H	J	K			
COMM	PULL BOX - (24" x 36" x 42")	35 5/8	24	3	37 5/8	26	18	30 3/8	18 3/4	2	39	25	1	5 FT

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CITY OF PEORIA  
STANDARD DETAIL PE-034-2  
INTERCONNECT PRECAST  
COMMUNICATION PULL BOX NOTES



APPROVALS:

*[Signature]*  
CITY ENGINEER

*[Signature]*  
DATE

**NOTES:**

1. ALL NON-DELIBERATE TRAFFIC PULL BOX COVERS MUST COMPLY WITH ALL TEST PROVISIONS OF THE LATEST ANSI/SCTE 77 "SPECIFICATION FOR UNDERGROUND ENCLOSURE INTEGRITY", AND MUST MEET THE TIER 15 APPLICATION UNLESS SPECIFIED BY THE CITY OF PEORIA. MARKINGS SHOWING THE TIER RATING MUST BE EMBOSSED IN THE TOP SURFACE OF THE COVER.
2. PULL BOX SHALL BE PROVIDED WITH COVER AND SPECIAL CONCRETE CAP, COVER SHALL HAVE EMBOSSED NO-SKID PATTERN AND BE LABELED "CITY OF PEORIA TRAFFIC SIGNAL COMMUNICATIONS".
3. TOPS OF PULL BOXES SHALL BE FLUSH WITH SURROUNDING GRADE OR TOP OF ADJACENT CURB, EXCEPT IN UNPAVED AREAS WHERE PULL BOX IS NOT IMMEDIATELY ADJACENT TO AND PROTECTED BY A CONCRETE FOUNDATION, POLE OR OTHER PROTECTIVE CONSTRUCTION. THE BOX SHALL BE PLACED WITH ITS TOP 0.75 INCH ABOVE SURROUNDING GRADE. WHERE PRACTICAL, PULL BOXES SHOWN IN THE VICINITY OF CURBS SHALL BE PLACED ADJACENT TO THE BACK OF CURB, AND PULL BOXES SHOWN ADJACENT TO TRAFFIC SIGNAL POLE SHALL BE PLACED ON SIDE OF FOUNDATION FACING AWAY FROM TRAFFIC, UNLESS OTHERWISE NOTED.
4. CONTRACTOR SHALL MAINTAIN A 10 TO 1 VARIANCE OF THE CONDUIT ALIGNMENT DURING INSTALLATION. CONDUIT SHALL CONNECT TO THE BOX STUBOUTS WITHOUT BENDS GREATER THAN THE 10 TO 1 VARIANCE.
5. ALL NON-DELIBERATE TRAFFIC PULL BOXES MUST COMPLY WITH ALL TEST PROVISIONS OF THE LATEST ANSI/SCTE 77 "SPECIFICATION FOR UNDERGROUND ENCLOSURE INTEGRITY", AND MUST MEET THE TIER 22 APPLICATION. MARKINGS SHOWING THE TIER 22 RATING MUST BE LABELED OR STENCILED ON THE INSIDE AND OUTSIDE OF THE BOX.
6. ALL NON-DELIBERATE TRAFFIC PULL BOXES AND COVERS MUST BE MADE OF POLYMER CONCRETE WITH FIBERGLASS REINFORCEMENT. THE BOX MUST HAVE CONTINUOUS FIBERGLASS CLOTH REINFORCEMENT ON THE INSIDE AND OUTSIDE PERIMETERS. THE COVERS MUST HAVE A MINIMUM OF TWO LAYERS OF FIBERGLASS CLOTH REINFORCEMENT.
7. ALL NON-DELIBERATE PULL BOXES AND COVERS SHALL BE TESTED AND CERTIFIED, MEETING ALL TEST PROVISIONS OF THE ANSI/SCTE 77, "SPECIFICATIONS FOR UNDERGROUND ENCLOSURES INTEGRITY" BY A UNDERWRITERS LABORATORIES (UL) 66WF AND MUST HAVE A P.E. STAMP CERTIFYING ALL TEST PROVISIONS OF THE ANSI/SCTE 77 AND SUBMITTED PRIOR TO BEING APPROVED.
8. COVER SHALL BE SECURED TO PULL BOX USING 3/8-7 AUGER HEX HEAD BOLTS.
9. ALL COVERS SHALL BE COMPLETE WITH A MOLDED LOGO AND MANUFACTURES NAME AND TIER RATING LOGO (NO GLUE IN LOGOS).
10. PARTS SHALL BE QUAZITE PG2436B997 PULL BOX, AND PG2436H554 COVER OR APPROVED EQUAL.
11. A COMPLIANCE LETTER FROM THE MANUFACTURE OF THE PULL BOXES, SHALL BE SUBMITTED ALONG WITH MATERIAL SUBMITTALS. THE COMPLIANCE LETTER SHALL INDICATE THAT THE PULL BOX MANUFACTURE HAS MET OR EXCEEDED AL TEST PROVISIONS OF THE LATEST EDITION OF THE ANSI/SCTE 77 & ALL OF MCDOT REQUIREMENTS LISTED IN PLAN DETAILS.
12. ALL PULL BOX COVERS SHALL BE FURNISHED W/ 3/8(35) X 1/16(2), DEEP RECESSES IN 5 PLACES. A TOTAL OF 1 TEST POINT ALL GROUND WIRES CONNECT TO 1 TEST POINT.
13. ALL COVER PULL SLOTS SHALL BE RATED FOR A MINIMUM OF 3,000 LBS OF PULL OUT STRENGTH.
14. LABEL WILL BE 1 1/2" DIAMETER ORANGE CIRCLE (EM2005 ORANGE COLOR), WITH BLACK ARROW GRAPHIC. COLOR & GRAPHIC TO BE SUBSURFACE SIL SCREEN PRINTED ON HP12W, .075 DIAMETER POLYCARBONATE SHEET. REVERSE SIDE ADHESIVE WILL BE 300 LSE OR EQUIVALENT & FOR THE USE SPECIFICALLY WITH POLYMER CONCRETE MATERIALS.
15. THE DEEP RECESS OF THE POLYMER CONCRETE PULL BOX SHALL BE CLEANED WITH AN ALCOHOLIC CLEANER PRIOR TO APPLYING LABELS.
16. PROVIDE RACKING AND MOUNTING HARDWARE FOR FIBER OPTIC CABLE ON TWO SIDES, FOUR RACKS PER SIDE.
17. PROVIDE PLUGS FOR ALL UNUSED CONDUITS.

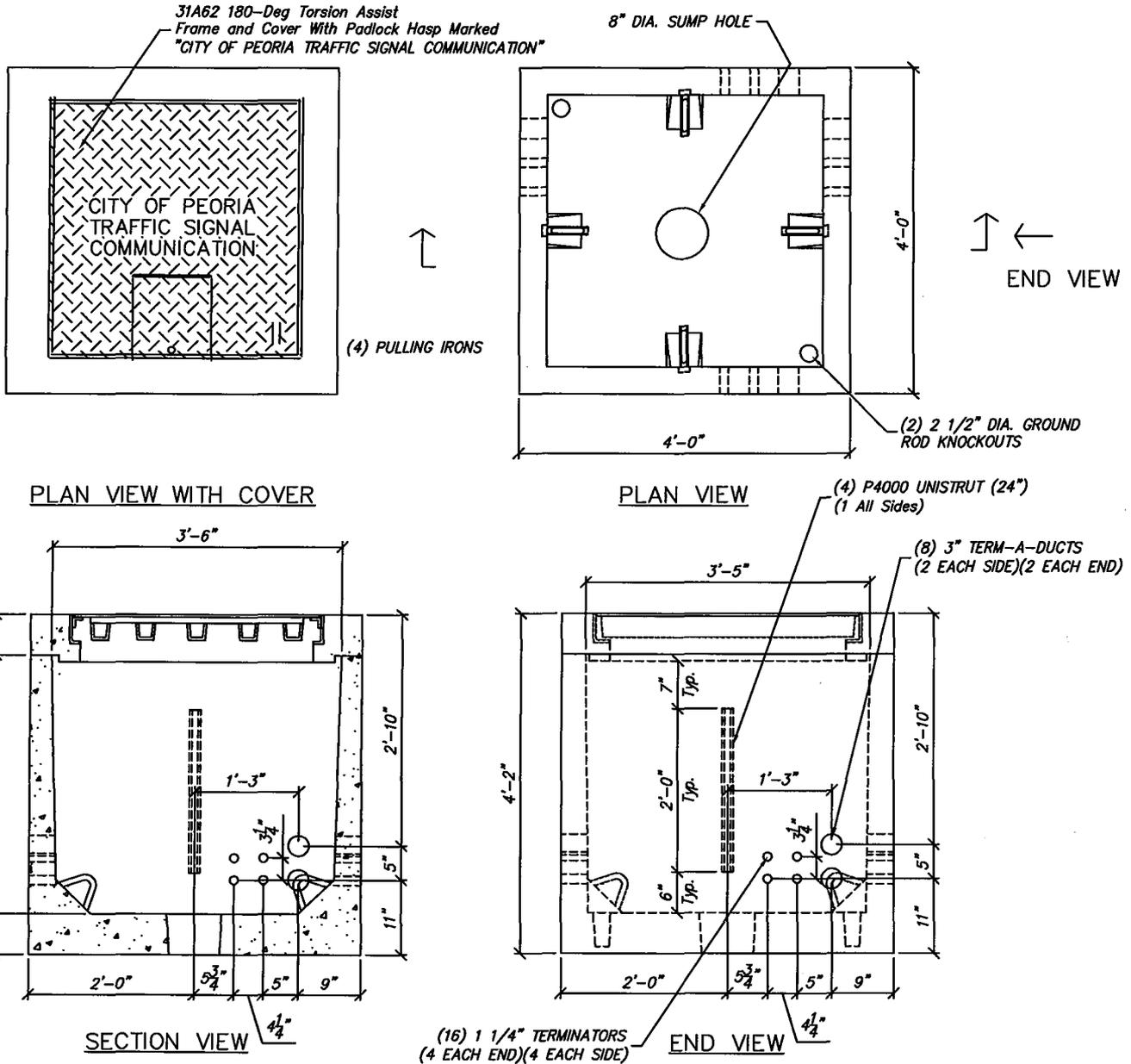


# CITY OF PEORIA STANDARD DETAIL PE-036 INTERCONNECT COMMUNICATION VAULT



APPROVALS:

*David Maciej* 2/22/07  
CITY ENGINEER DATE

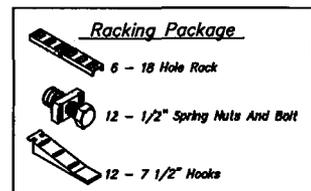


**STRUCTURAL NOTES:**

- 1.) CONCRETE: 28 DAY COMPRESSIVE STRENGTH  $F'_c = 4500$  PSI
- 2.) REBAR: ASTM A-615 GRADE 60
- 3.) MESH: ASTM A-185 GRADE 65
- 4.) DESIGN: ACI-318-99 BUILDING CODE  
ASTM C-857 "MINIMUM STRUCTURAL DESIGN LOADING FOR UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES"
- 5.) LOADS: HS20 WHEEL LOADING IN OFF-STREET LOCATIONS WHERE NOT SUBJECTED TO HIGH DENSITY TRAFFIC  
80 PCF LATERAL LIVE LOAD SURCHARGE - UP TO 8'-0" DEPTH  
SOIL: 40 PCF LATERAL SOIL PRESSURE ABOVE WATER TABLE  
80 PCF LATERAL SOIL PRESSURE BELOW WATER TABLE  
120 PCF SOIL DENSITY

**GENERAL NOTES:**

- 1.) ALL JOINTS SHALL BE SEALED USING CONSEAL CS-101 BUTYL RUBBER ROPE.
- 2.) PROVIDE RACKING AND MOUNTING HARDWARE FOR THE FIBER OPTIC CABLE.
- 3.) PROVIDE CONDUIT PLUGS IN ALL UNUSED CONDUITS
- 4.) PROVIDE AND INSTALL A 10' GROUND ROD, CONNECT TO LOCATE WIRE AND TO GROUND TERMINAL OF SPLICE ENCLOSURES



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# CITY OF PEORIA

## STANDARD DETAIL PE-037-1

### SIGNAL POLE FOUNDATION, MODIFIED "R" POLE

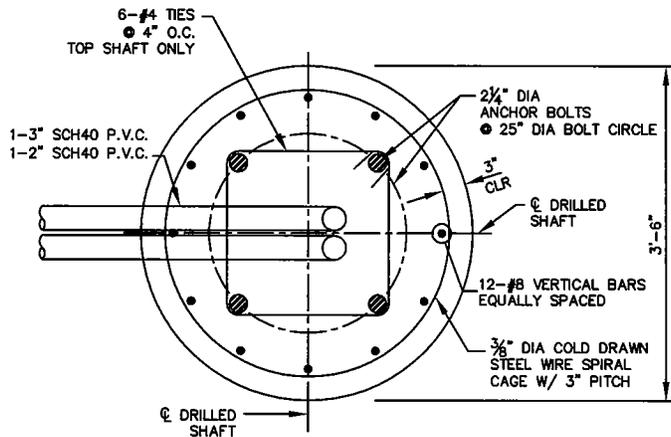


PAGE 1 OF 3

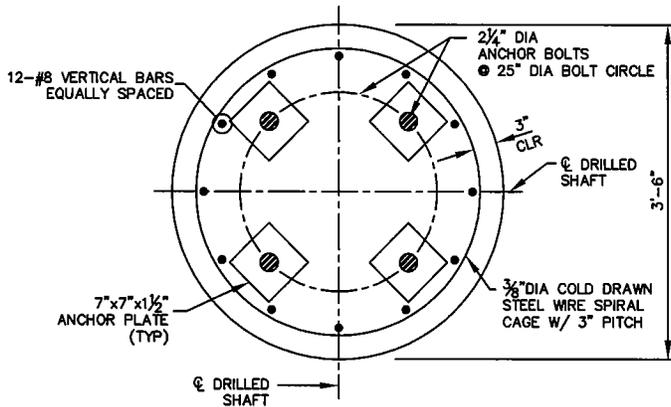
APPROVALS:

  
 CITY ENGINEER

3/27/12  
 DATE



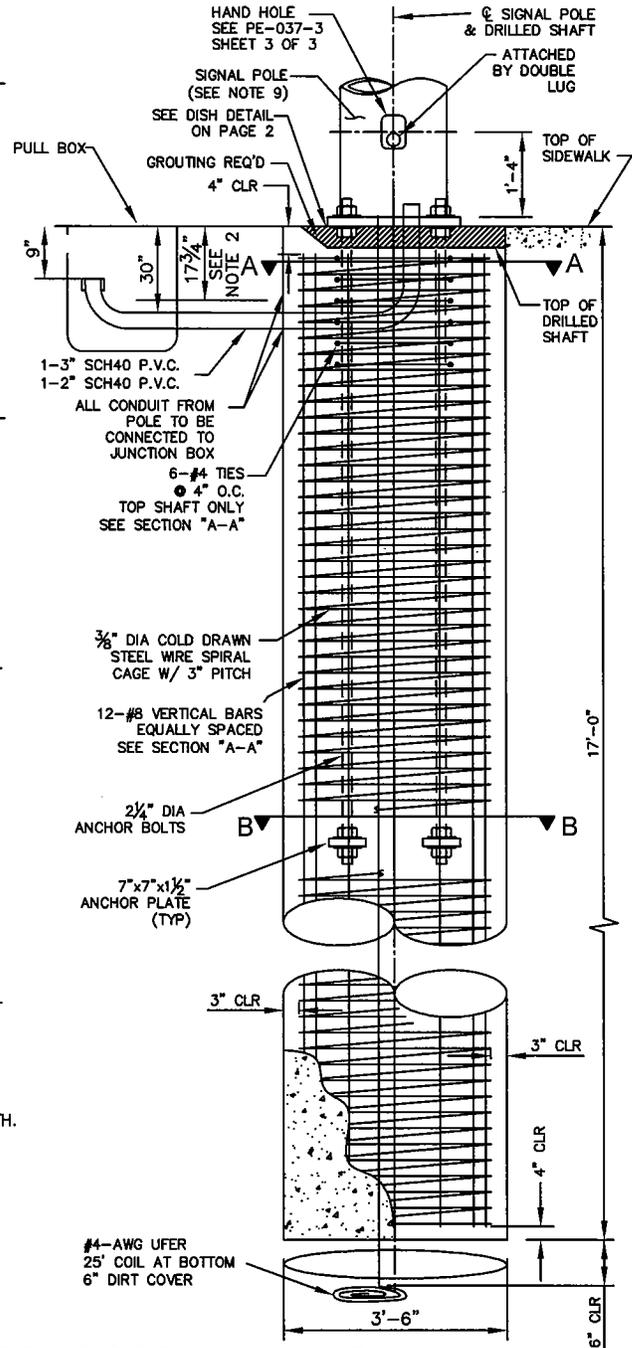
**SECTION "A-A"**



**SECTION "B-B"**

**NOTES:**

1. ALL FOUNDATIONS SHALL BE CAST IN PLACE AGAINST UNDISTURBED EARTH. WELDING OF REINFORCING STEEL PROHIBITED.
2. A CIRCULAR FORM SHALL BE USED FOR THE TOP 17 3/4" ONLY.
3. BOLTS TO BE SQUARE WITH ROADWAY OR AT ANGLE SHOWN ON PLANS.
4. PLACE ALL CONDUIT IN SAME TRENCH WHERE POSSIBLE.
5. ALL FOUNDATIONS SHALL BE 42" DIA 17'-0" FEET DEEP.
6. CONCRETE FOR FOUNDATION SHALL BE CLASS "A" (AE) F'c=3,000 PSI.
7. ANCHOR BOLTS SHALL CONFORM TO MINIMUM REQUIREMENTS OF ASTM A 307. ANCHOR BOLT SHALL NOT BE WELDED TO THE REINFORCING STEEL. THE NUTS, WASHERS, AND THE TOP 10" OF THE ANCHOR BOLTS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.
8. CAP CONDUIT ON BOTH ENDS PRIOR TO INSTALLATION.
9. FOUNDATION ACCOMMODATES MODIFIED R POLE SHOWN IN PEORIA DETAIL: PE-038
10. UFER GROUND NOT GROUND ROD
11. 2" CONDUIT FOR COMM ONLY

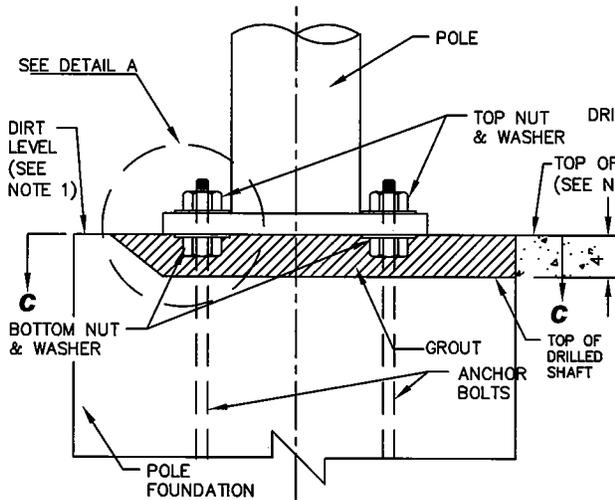


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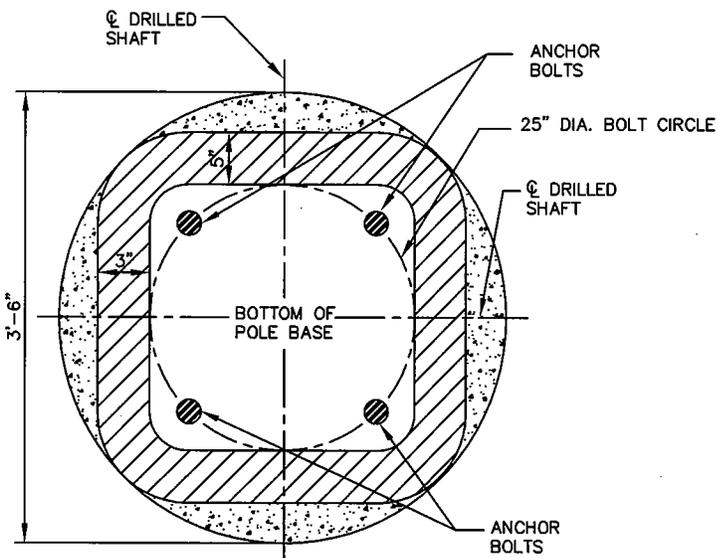
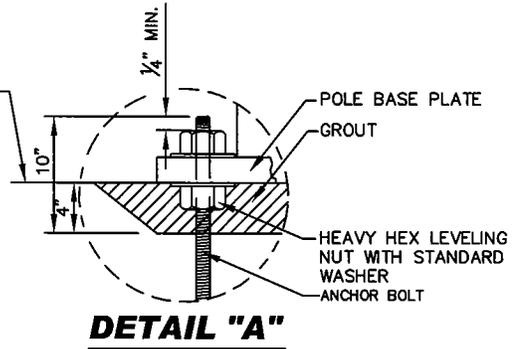
CITY OF PEORIA  
**STANDARD DETAIL PE-037-2**  
 SIGNAL POLE FOUNDATION, MODIFIED "R" POLE  
 PAGE 2 OF 3



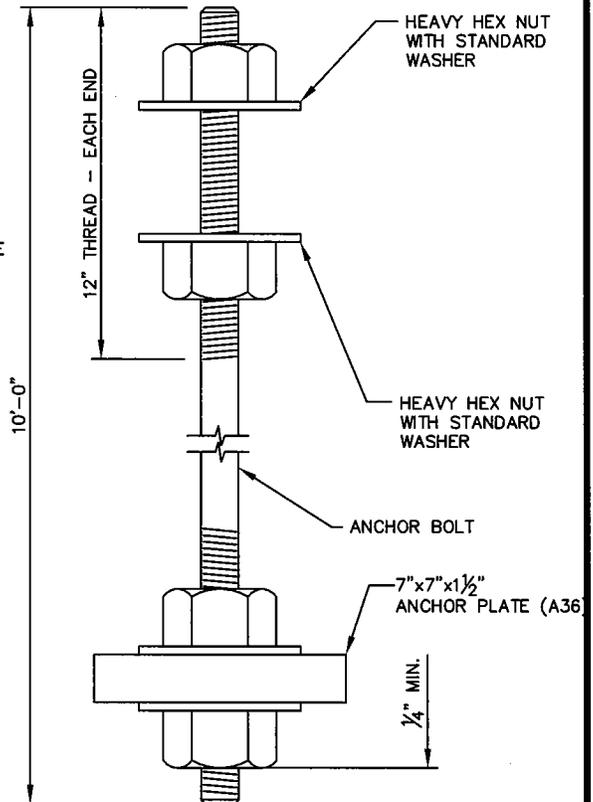
APPROVALS:  3/27/12  
 CITY ENGINEER DATE



**SIDE VIEW**  
**POLE FOUNDATION - DISH DETAIL**  
 (TYPICAL PER ALL POLES)



**SECTION C-C**  
**POLE FOUNDATION - DISH DETAIL**



**2 1/4" DIA ANCHOR BOLT**  
**ASSEMBLY (4 REQUIRED)**

1. WHEN FOUNDATION IS LOCATED IN A DIRT AREA
2. WHEN FOUNDATION IS LOCATED IN A SIDEWALK AREA.
3. BOTTOM OF POLE BASE SHALL SIT FLUSH WITH TOP OF POLE FOUNDATION OR SIDEWALK.
4. AFTER POLE IS LEVELED GROUT IS TO BE INSTALLED FLUSH WITH TOP OF FOUNDATION OR SIDEWALK.

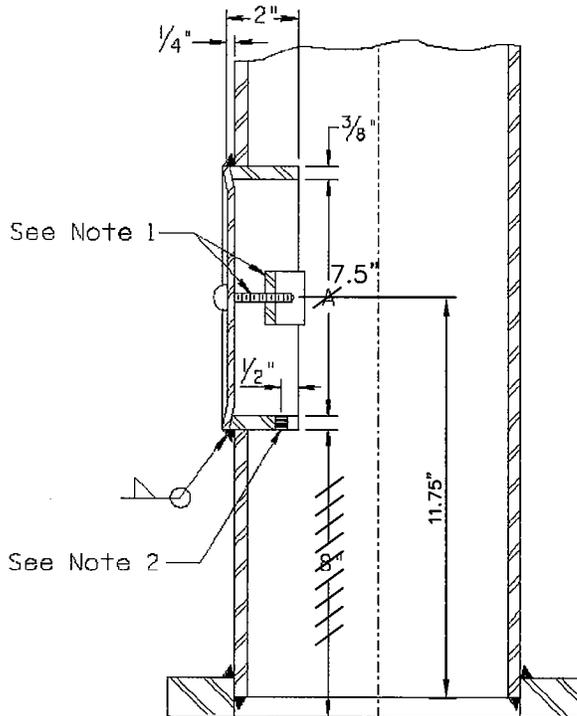
CITY OF PEORIA  
 STANDARD DETAIL PE-037-3  
 SIGNAL POLE FOUNDATION, MODIFIED "R" POLE  
 PAGE 3 OF 3



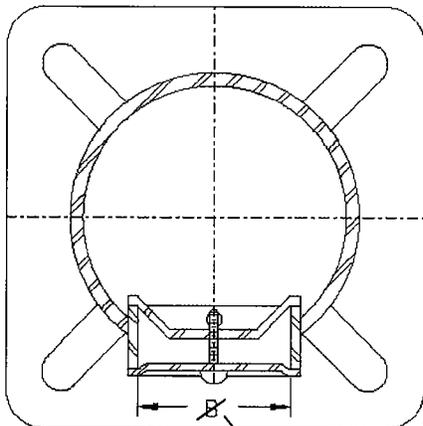
APPROVALS:  7/27/12  
 CITY ENGINEER DATE

NOTES:

1. Hand hole locking device shall be used
2. Pole ground shall be 5/16" dia NC tapped hole located as shown.
3. Hand hole shall be oriented so that it is aligned with the mast arm.
4. Handhole cover may be rectangular shape or oval shape.
5. The exact configuration of the hand hole can vary as long as the function and basic size is the same or larger.



SECTION A-A



SECTION B-B

Direction of Mast Arm,  
 See Note 3



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# CITY OF PEORIA

## STANDARD DETAIL PE-038-1

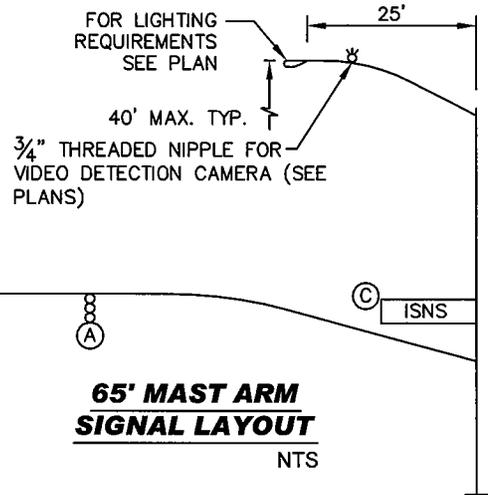
### SIGNAL POLE, MODIFIED "R" POLE

PAGE 1 OF 2

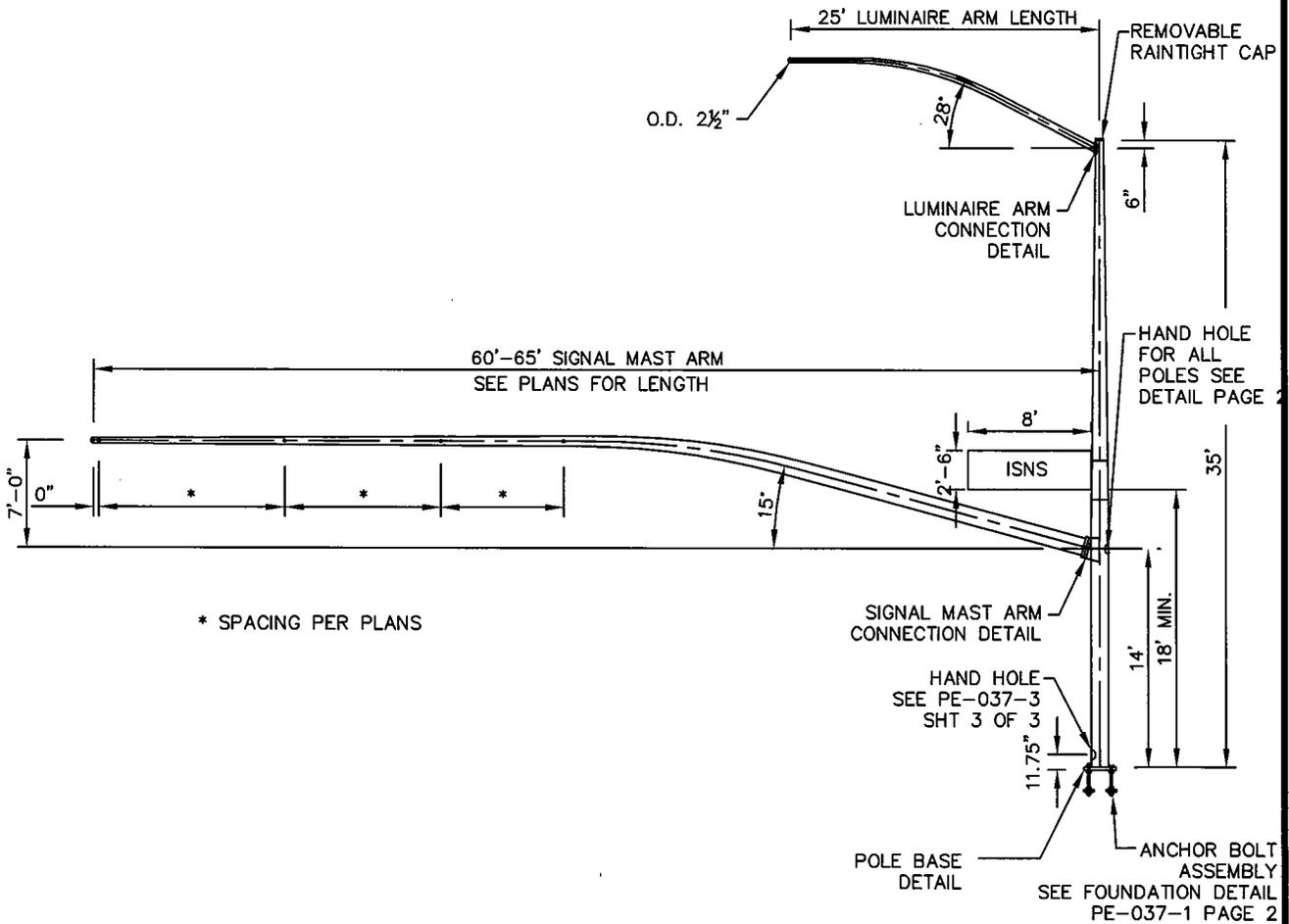


APPROVALS:  7/27/12  
 CITY ENGINEER DATE

DEVICE	DESCRIPTION
(A) SIGNAL	12' SECTION W/6" BACK PLATE
(B) SIGN	REGULATION 24" x 36"
(C) SIGN	ILLUMINATED STREET NAME SIGN



3/4" THREADED NIPPLE FOR EMERGENCY PRE-EMPTION (SEE PLANS)



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# CITY OF PEORIA

## STANDARD DETAIL PE-038-2

### SIGNAL POLE, MODIFIED "R" POLE

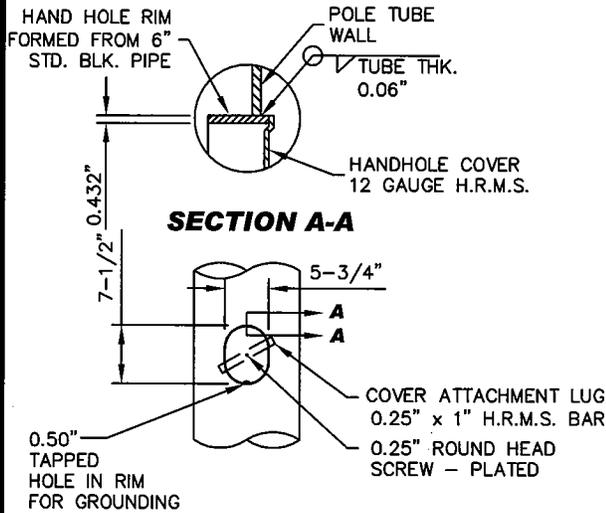
PAGE 2 OF 2



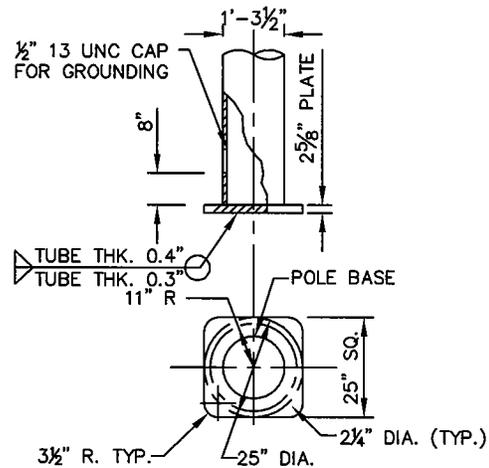
APPROVALS:

*[Signature]*  
CITY ENGINEER

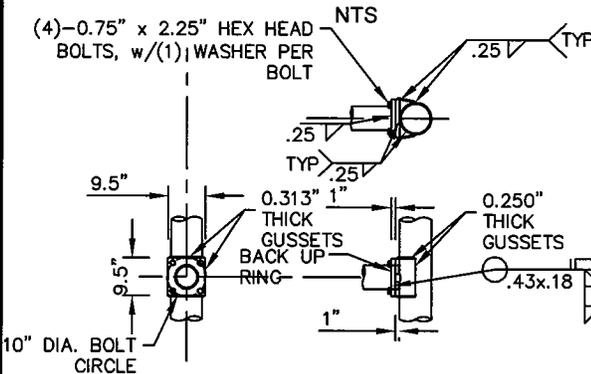
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DATE



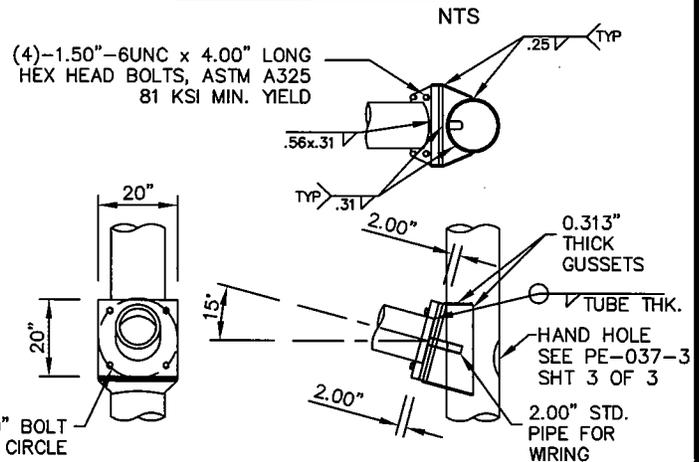
**FLUSH HAND HOLE  
CASTING DETAIL**



**POLE BASE DETAIL**



**LUMINAIRE ARM CONNECTION**



**SIGNAL ARM CONNECTION**

**NOTES:**

1. IT IS THE POLE MANUFACTURER'S RESPONSIBILITY TO ENSURE THAT THEIR EQUIPMENT IS DESIGNED TO ACCOMMODATE THE TOTAL LOAD OF ALL EQUIPMENT DEPICTED ON THE PLAN SET. IT IS ALSO THE RESPONSIBILITY OF THE POLE MANUFACTURER TO CONSTRUCT THE POLE BASE PLATE TO MATCH THE CONFIGURATION OF BOLTS AND FOUNDATION ON SHEET TS08 OF THIS PLAN SET.
2. POLES AND ARMS SHALL MEET THE DESIGN REQUIREMENTS OF AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS (CURRENT EDITION) FOR AN 80 MPH WIND WITH 100 MPH GUSTS.
3. STEEL POLE AND ARMS AND THE STRUCTURAL SECTION PROPERTIES SHALL BE DESIGNED USING A MAXIMUM ALLOWABLE STRENGTH OF 55 KSI. STEEL SHALL HAVE A MINIMUM YIELD STRENGTH OF 48.3 KSI WITH NO CREDIT ALLOWANCE FOR COLD WORKING.
4. ALL STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A 123.
5. TUBE DIAMETERS TOLERANCE OF  $\pm 0.125'$ .
6. ALL GALVANIZED STEEL THREADS SHALL BE FREE FROM DEFECTS ALLOWING NUTS TO BE FREE RUNNING BY HAND FOR THE ENTIRE LENGTH OF THE THREADS.
7. WELDING DESIGN AND FABRICATION SHALL BE IN ACCORDANCE WITH CURRENT AMERICAN WELDING SOCIETY (AWS) SPECIFICATION D1.1 ALL WELDING, REGARDLESS OF WHERE IT IS DONE (SHOP OR FIELD) OR WHAT COMPONENTS ARE WELDED (REBAR, STEEL, OR OTHER METALS), MUST BE DONE BY AN AWS CERTIFIED WELDER. THIS INCLUDES TEMPORARY STEEL STRUCTURES SUCH AS FALSEWORK AND UNDERGROUND SHORING. CONTRACTORS MUST SUBMIT COPIES OF CURRENT AWS CERTIFICATION TO THE CITY ENGINEER BEFORE ANY FIELD WELDING BEGINS.
8. DUAL MAST ARM POLE ASSEMBLY, ARMS SHALL BE AT 90 DEGREES.
9. ALL INSULATORS SHALL BE BANDED.
10. POLES AND ARMS SHALL BE CIRCULAR CROSS SECTIONS.
11. SHOP DRAWINGS ARE REQUIRED TO BE SUBMITTED TO THE CITY OF PEORIA FOR REVIEW PRIOR TO THE ORDERING OF ANY EQUIPMENT.
12. ALL BUTT OR GROOVE WELDS SHALL BE GROUND FLUSH.
13. UNLOADED - NO DEAD OR LIVE LOAD.

01/31/2012

# CITY OF PEORIA STANDARD DETAIL PE-039

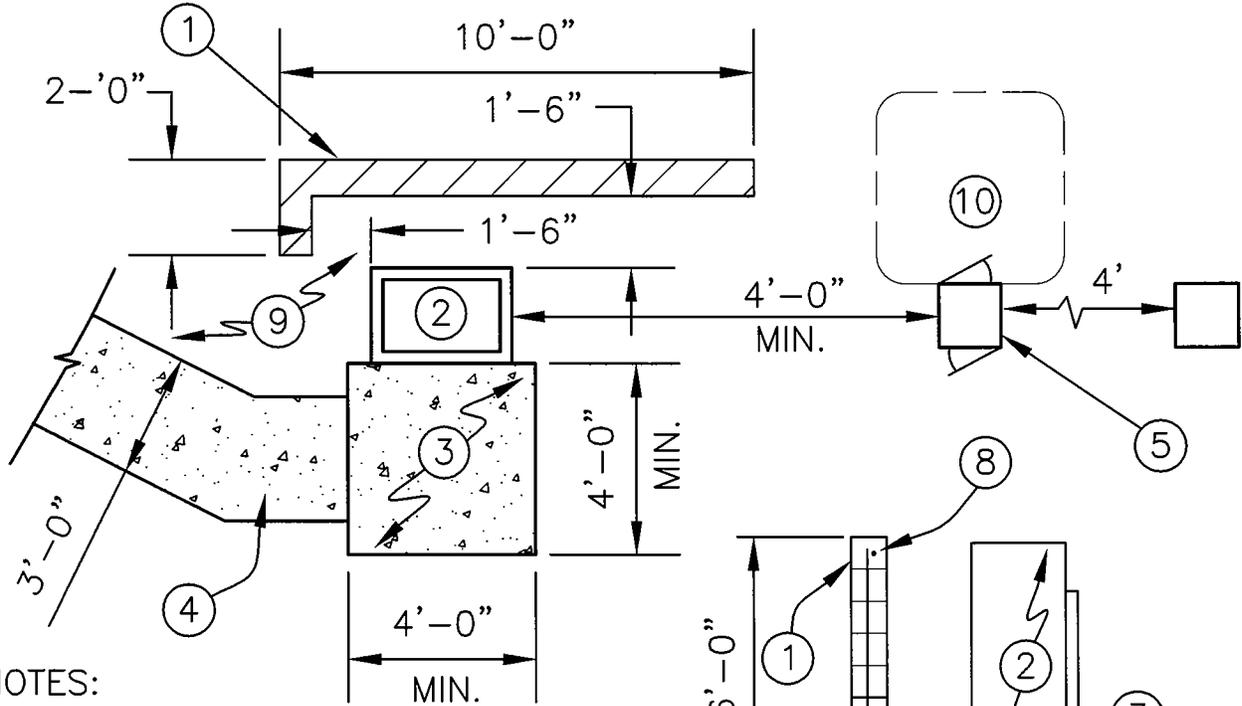


## TRAFFIC CONTROL CABINET SCREEN WALL AND COURTESY PAD DETAIL

APPROVALS:

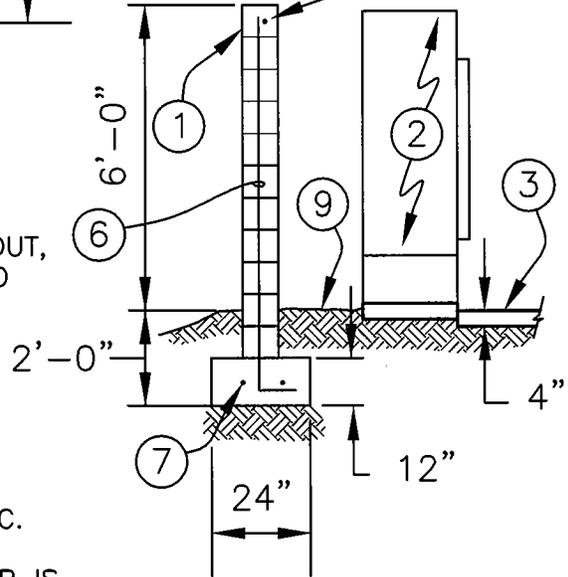
CITY ENGINEER

1-31-11  
DATE



NOTES:

- ① MASONRY SCREEN WALL—8X8X16 SPLIT FACE CMU, BROWN WITH MATCHING GROUT, STUCCO, SMOOTH, OR STONE VENIER TO MATCH ADJACENT EXISTING WALLS.
- ② SIGNAL CABINET
- ③ COURTESY PAD — CLASS C CONC.
- ④ MAINTENANCE SIDEWALK — CONNECT TO PEDESTRIAN SIDEWALK — CLASS C CONC.
- ⑤ POWER PEDESTAL — IF BATTERY BACKUP IS USED PLACE IT 4' MIN AS SHOWN, MOVE POWER PEDESTAL 4' MIN FURTHER.
- ⑥ #4 VERTS @24" O.C. IN GROUTED CELLS
- ⑦ 2 EA #4 HORZ. BARS IN MAG 2000 PSI CONC.
- ⑧ 1 EA #4 HORZ. BAR IN SOLID GROUTED CELL OR USE #9 DURAWIRE @ 16" O.C.
- ⑨ LANDSCAPE AREA OR EXTEND CONC. PAD
- ⑩ 4'X4' CLEAR ZONE SAFETY AREA IN FRONT OF EVERY DOOR OR PANEL OPENING.



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CITY OF PEORIA  
STANDARD DETAIL PE-040-1  
TRAFFIC SIGNAL ALLOWABLE  
MATERIALS LIST, PAGE 1



APPROVALS:

*[Signature]*  
CITY ENGINEER      2/6/14      DATE

*[Signature]* 02-05-2014  
PUBLIC WORKS UTILITIES DIRECTOR DATE

**Traffic Signal Pre-emption:**

- a. GTT Model 721, Detector eye
- b. GTT Model 764, Phase Selector
- c. GTT Model 138 Cable

**Video Detection:**

- a. Autoscope Solo Terra / Encore
- b. Autoscope Solo T.I.P.
- c. Autoscope Solo T.A.P.
- d. Econolite cable 1175-011
- e. Aldis Gridsmart System w/cables

**Traffic Signal Conductors:**

- a. IMSA 19-1, 90°C HI Temp
- b. 16 AWG Stranded In 25,7,5,2 Conductors
- c. Power wire shall be #8 AWG, black XHHW wire
- d. Common wire shall be #8 AWG, White XHHW wire
- e. Ground wire shall be #8 AWG, Green XHHW wire

**Traffic Signal Pull Boxes:**

- a. Fiberlyte FL36TBOX
- b. Fiberlyte FL36D Lid
- c. Fiberlyte FL36 (\*) Extensions
- d. Install 24" gauge galvanized mesh 1/4" squares

**Illuminated Street Name Signs:**

- a. Fluoresco EDGELIT LED sign
- b. IMSA 4 Conductor 14AWG Solid, Purple Tape
- c. Use Black and White wire out of 4 conductor

**Traffic Signal Street Lights:**

- a. General Electric LED Evolve
- b. Roadway Medium Cobrahead
- c. ERS2-0-HX-BX-5-40-1-GRAY-S
- d. IMSA 4 Conductor 14AWG Solid, Orange Tape
- e. Use Black and Red wire out of 4 conductor

<http://www.gtt.com>

<http://www.econolite.com/Products>

<http://www.aldiscorp.com/>

Tappan/Falcon/Belden Wire Companies

[www.oldcastleprecast.com](http://www.oldcastleprecast.com)

<http://www.fluoresco.com>

[www.gellightsolutions.com](http://www.gellightsolutions.com)

**Traffic Signal Poles & Mast Arms:**

- a. Must be ADOT approved Standard Poles (Type A-16', Q, R etc.)  
See ADOT

[www.azdot.gov/highways/traffic/SLSds.asp](http://www.azdot.gov/highways/traffic/SLSds.asp)

- b. or City of Peoria Modified "R" Pole  
See Details PE-037-1, PE-037-2,  
PE-038-1, PE-038-2 at link below:

[http://www.peoriaaz.gov/engineering/Docs/](http://www.peoriaaz.gov/engineering/Docs/Development_Guide/Appendix-)

Development\_Guide/Appendix-

Valmont, Ameron, Millerbernd, Cem-TEX

in compliance with ADOT/COP Specs.

**Traffic Signal Heads: Satin Black**

- a. McCain ADOT Spec. Type V & VII Mounts (PED)
- b. McCain ADOT Spec. Type II, III, & XI Mounts (Signal Heads)

**Traffic Signal Heads: Satin Black**

- a. McCain 3,4,5, Sectioned heads / 12" Indications & Aluminum Constructed Supplied with 12" X 12" visors & Louvered Backplate

**Vehicle LED Indications:**

- a. 12" Dialight 430 Series ITE COMPLAINT "XL" Series  
433-1210-003XL Red Tinted  
433-3230-901XL Yel Tinted  
433-2220-001XL Grn Tinted

**Vehicle LED Arrow Indications:**

- a. 12" Dialight 430 Series ITE COMPLAINT "XOD" Series  
432-1314-001XOD Red Tinted  
431-3334-901XOD Yel Tinted  
432-2324-001XOD Grn Tinted

**Pedestrian Signal Heads: Satin Black**

- a. McCain 16" Housing with Vantage Visor & Aluminum Constructed

**Pedestrian LED Indications:**

- a. Dialight 16" X 18" Hand/Man Countdown  
430-6479-001X

<http://www.mccain-inc.com/>

<http://www.dialight.com/Product/Category/traffic>

CITY OF PEORIA  
STANDARD DETAIL PE-040-2  
TRAFFIC SIGNAL ALLOWABLE  
MATERIALS LIST, PAGE 2



APPROVALS:

*[Signature]*  
CITY ENGINEER

*4/1/14*  
DATE

*[Signature]* 02-05-2014  
PUBLIC WORKS-UTILITIES DIRECTOR DATE

**ADA Pedestrian Push Button:**

- a. 2" Polara (Bulldog) with directional arrow
- b. McCain 9" x 12" Housing (SatIn Black)

**Pedestrian Push Button Sign:**

- a. MUTCD Approved R10-3e L/R

**Service Cabinet:**

- a. Myers Pedestal Mount MEUG16A-M100

**Battery Back-up:**

- a. Tesco 22-BBS Pedestal

[www.polara.com/bulldog](http://www.polara.com/bulldog)  
[www.myerspowerproducts.com](http://www.myerspowerproducts.com)  
[www.tescocontrols.com](http://www.tescocontrols.com)

**Ethernet Network Switch:**

- a. RS 900G Network Switch
- b. RSG 2100 Network Switch
- c. RSG 2200 Network Switch

**Ethernet Node Cabinet:**

- a. Safetran 343 Cabinet with 8" riser

**Fiber Optic Distribution Panel:**

- a. AFL - Lightlink Poli-MOD
- b. SC Connectors

**CCTV Camera:**

- a. SN118P ITS SurveyorHD Vicon CCTV Camera

# CITY OF PEORIA STANDARD DETAIL PE-041 HAWK WIRING DETAIL



APPROVALS:

*[Signature]*  
CITY ENGINEER      5/24/13  
DATE

*[Signature]*  
PUBLIC WORKS UTILITIES DIRECTOR DATE      05-20-2013

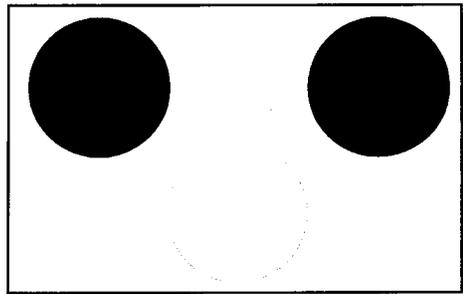
SIGNAL HEADS SIDEMOUNT, INBOARD & OUTBOARD	
4 CONDUCTOR CABLE	
BASIC COLOR	SIGNAL INTERVAL
RED	LEFT RED
GREEN	RIGHT RED
BLACK	YELLOW
WHITE	VEH. COMMON

PEDESTRIAN HEADS	
4 CONDUCTOR CABLE	
BASIC COLOR	SIGNAL INTERVAL
RED	DON'T WALK
BLACK	SPARE
GREEN	WALK
WHITE	PED COMMON

PUSH BUTTON	
4 CONDUCTOR CABLE	
BASIC COLOR	PUSH BUTTON STATION
RED	BUTTON NORMALLY OPEN
BLACK	SPARE
GREEN	SPARE
WHITE	BUTTON COMMON

IMSA CABLE 19-1 #14 AWG, 20 CONDUCTOR				
CABLE	CONDUCTOR COLOR		SIGNAL INTERVAL	CONTROL CABINET FIELD WIRE TERMINATION
	BASIC COLOR	TRACER STRIPE		
VEHICLE INDICATIONS	RED	BLACK	LEFT RED INDICATION	PHASE 1 VEHICLE GREEN
	RED	WHITE	RIGHT RED INDICATION	PHASE 1 VEHICLE YELLOW
	BLACK	WHITE	YELLOW INDICATION	PHASE 2 VEHICLE YELLOW
PEDS	BLUE	N/A	WALK INDICATION	PHASE 3 VEHICLE GREEN
	BLACK	N/A	DON'T WALK INDICATION	PHASE 3 VEHICLE RED
	WHITE	BLACK	BUTTON NORMALLY OPEN	PED CALL 2 (PC2)
	WHITE	N/A	BUTTON COMMON	AC COMMON BUSS BAR

TYPE "T" HEAD



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# CITY OF PEORIA STANDARD DETAIL PE-042-1 TRAFFIC SIGNAL WIRING DETAIL



APPROVALS:

*[Signature]*  
CITY ENGINEER

DATE

*[Signature]* 02-05-2014  
PUBLIC WORKS-UTILITIES DIRECTOR DATE

## IMSA 25 CONDUCTOR WIRING DETAIL 19-1 16 Gage High Temp Wire

CABLE 1	CONDUCTOR COLOR		SIGNAL INTERVAL	CABLE 2	CONDUCTOR COLOR		SIGNAL INTERVAL
	SOLID COLOR	TRACER COLOR			SOLID COLOR	TRACER COLOR	
PHASE 1 EBTL OVERLAP A FY ARROW	RED	WHITE	RED ARROW	PHASE 5 WBTL OVERLAP A FY ARROW	RED	WHITE	RED ARROW
	BLACK	WHITE	YELLOW ARROW		BLACK	WHITE	YELLOW ARROW
	GREEN	WHITE	GREEN ARROW		GREEN	WHITE	GREEN ARROW
	YELLOW	RED	FY ARROW		YELLOW	RED	FY ARROW
PHASE 2 WBTL OVERLAP B	RED	---	RED	PHASE 6 EBT OVERLAP B	RED	---	RED
	ORANGE	---	YELLOW		ORANGE	---	YELLOW
	GREEN	---	GREEN		GREEN	---	GREEN
PHASE 3 SBTL OVERLAP C FY ARROW	BLACK	RED	RED ARROW	PHASE 7 NBTL OVERLAP C FY ARROW	BLACK	RED	RED ARROW
	ORANGE	RED	YELLOW ARROW		ORANGE	RED	YELLOW ARROW
	BLUE	RED	GREEN ARROW		BLUE	RED	GREEN ARROW
	YELLOW	BLUE	FY ARROW		YELLOW	BLUE	FY ARROW
PHASE 4 NBT OVERLAP D	RED	BLACK	RED	PHASE 8 SBT OVERLAP D	RED	BLACK	RED
	ORANGE	BLACK	YELLOW		ORANGE	BLACK	YELLOW
	GREEN	BLACK	GREEN		GREEN	BLACK	GREEN
PHASE 2 WB PEDESTRIAN	BLUE	---	WALK	PHASE 6 EB PEDESTRIAN	BLUE	---	WALK
	BLACK	---	DON'T WALK		BLACK	---	DON'T WALK
	WHITE	BLACK	PUSH BUTTON		WHITE	BLACK	PUSH BUTTON
PHASE 4 NB PEDESTRIAN	BLUE	WHITE	WALK	PHASE 8 SB PEDESTRIAN	BLUE	WHITE	WALK
	RED	GREEN	DON'T WALK		RED	GREEN	DON'T WALK
	WHITE	RED	PUSH BUTTON		WHITE	RED	PUSH BUTTON
COMMON	WHITE	---	PB COMMON	COMMON	WHITE	---	PB COMMON
SPARE	BLUE	BLACK	SPARE	SPARE	BLUE	BLACK	SPARE
SPARE	BROWN	---	SPARE	SPARE	BROWN	---	SPARE
SPARE	BROWN	WHITE	SPARE	SPARE	BROWN	WHITE	SPARE
SPARE	ORANGE	GREEN	SPARE	SPARE	ORANGE	GREEN	SPARE

## IMSA 2,5,7 CONDUCTOR SIGNAL HEAD WIRING DETAIL

TYPE "F" SIGNAL HEAD		TYPE "G" SIGNAL HEAD		TYPE "R" SIGNAL HEAD		TYPE "Q" SIGNAL HEAD	
IMSA 5 CONDUCTOR CABLE		IMSA 7 CONDUCTOR CABLE		IMSA 7 CONDUCTOR CABLE		IMSA 7 CONDUCTOR CABLE	
WIRE COLOR	SIGNAL COLOR						
RED	RED	RED	RED ARROW	RED	RED ARROW	RED	RED
BLACK	YELLOW	BLACK	YELLOW ARROW	BLACK	YELLOW ARROW	BLACK	YELLOW
GREEN	GREEN	GREEN	GREEN ARROW	GREEN	GREEN ARROW	GREEN	GREEN
WHITE	NEUTRAL	BLUE	SPARE	BLUE	SPARE	BLUE	GREEN ARROW
ORANGE	SPARE	ORANGE	FL YEL ARROW	ORANGE	SPARE	ORANGE	YELLOW ARROW
		WHITE	NEUTRAL	WHITE	NEUTRAL	WHITE	NEUTRAL
		WHITE/BLK	SPARE	WHITE/BLK	SPARE	WHITE/BLK	SPARE

PEDESTRIAN HEAD		PEDESTRIAN BUTTON		STANDARDIZED PHASE TAPE REQUIREMENTS			
IMSA 5 CONDUCTOR CABLE		IMSA 2 CONDUCTOR CABLE		STANDARD TAPE COLORS FOR THE IMSA CABLES SHOWN BELOW SHALL BE WRAPPED AS FOLLOWS:			
WIRE COLOR	SIGNAL COLOR	WIRE COLOR	SIGNAL COLOR	PHASE	(1) 3/4" WIDE WRAP	(2) 3/4" WIDE WRAP WITH 1/2" SPACE BETWEEN	COLOR OF TAPE
RED	DON'T WALK	BLACK	NORM OPEN				
BLACK	SPARE	WHITE	COMMON	2	X		WHITE
GREEN	WALK			3	X		BLUE
WHITE	NEUTRAL			4	X		GREEN
ORANGE	SPARE			5		X	RED
ILLUMINATED STREET NAME SIGNS (ISNS)		STREET LIGHT		6		X	WHITE
				7		X	BLUE
IMSA 4 CON (14 AWG SOLID)		IMSA 4 CON (14 AWG, SOLID)		8		X	GREEN
WIRE COLOR		WIRE COLOR					
BLACK	120 VAC	RED	120 VAC				
WHITE	COM	BLACK	120 VAC				
GREEN	GND	GREEN	GND				
RED	SPARE	WHITE	SPARE				

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CITY OF PEORIA  
STANDARD DETAIL PE-042-2  
TRAFFIC SIGNAL WIRING NOTES



APPROVALS:

*[Signature]*  
CITY ENGINEER      2/6/14  
DATE

*[Signature]* 02-05-2014  
PUBLIC WORKS-UTILITIES DIRECTOR DATE

NOTES:

1. Cable #1 shall be marked with 1 tape band at each pull box location. All east/west runs shall be marked with white tape color. All north/south runs shall be marked with green tape color. Cabinet run shall be marked with yellow tape color. Individual conductors in the cable shall be marked with appropriate color to the assigned phase.
2. Cable #2 shall be marked with 2 tape bands at each pull box location with one-half inch (1/2") spacing between tape. All east/west runs shall be marked with white tape color. All north/south runs shall be marked with green tape color. Cabinet run shall be marked with yellow tape color. Individual conductors in the cable shall be marked with the appropriate color to the assigned phase.
3. Spare cable/wire shall be pulled into spare conduit run. Cable/wire shall be unspliced, phase taped appropriately, and layed neatly on bottom of pull box. Earth ground (Green #8) shall be spliced utilizing appropriate compression crimp at all pull box locations to insure locating (bluestake) capabilities.

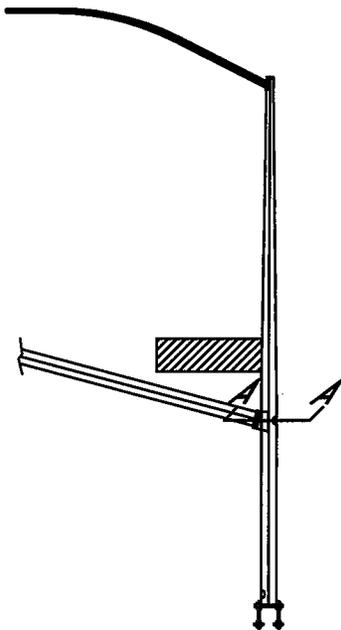
# CITY OF PEORIA STANDARD DETAIL PE-043 TRAFFIC SIGNAL POLE DRILLING



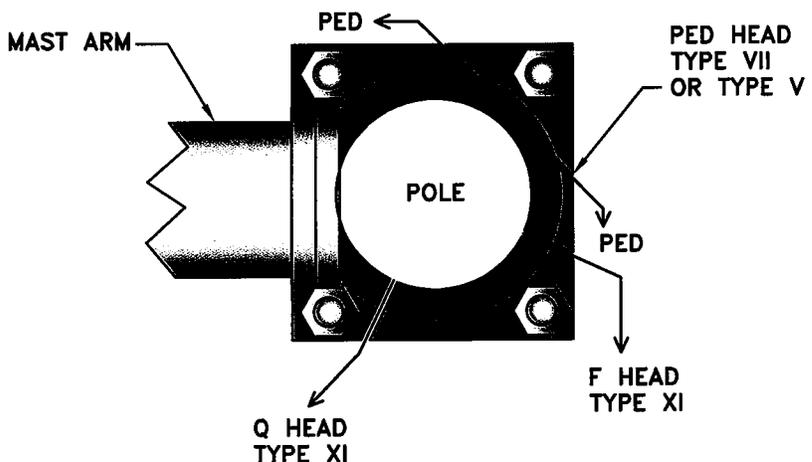
APPROVALS:

*[Signature]*  
CITY ENGINEER      5/20/13  
DATE

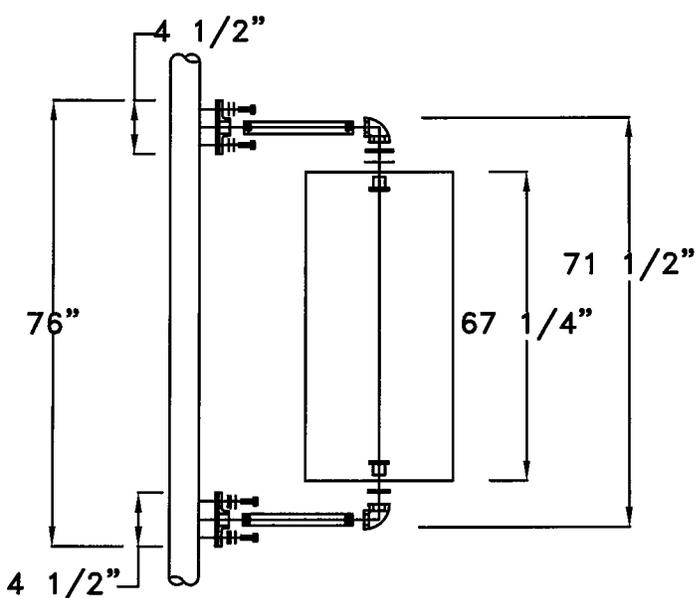
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PUBLIC WORKS-UTILITIES DIRECTOR DATE



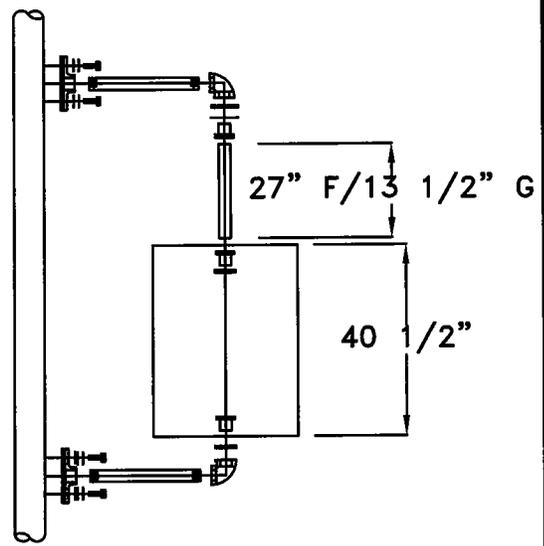
TRAFFIC SIGNAL  
(NTS)



POLE DRILLING FOR ALL Q/R POLES W/PEDS  
SECTION A-A  
(NTS)



Q HEAD MOUNT  
TYPE XI (NTS)



F/G/R HEAD MOUNT  
TYPE XI (NTS)

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# CITY OF PEORIA STANDARD DETAIL PE-044-1 TRAFFIC SIGNAL PULL BOX AND WIRE SPLICING

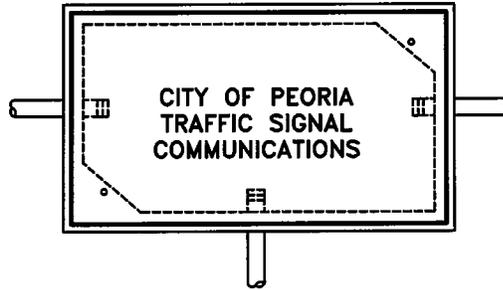


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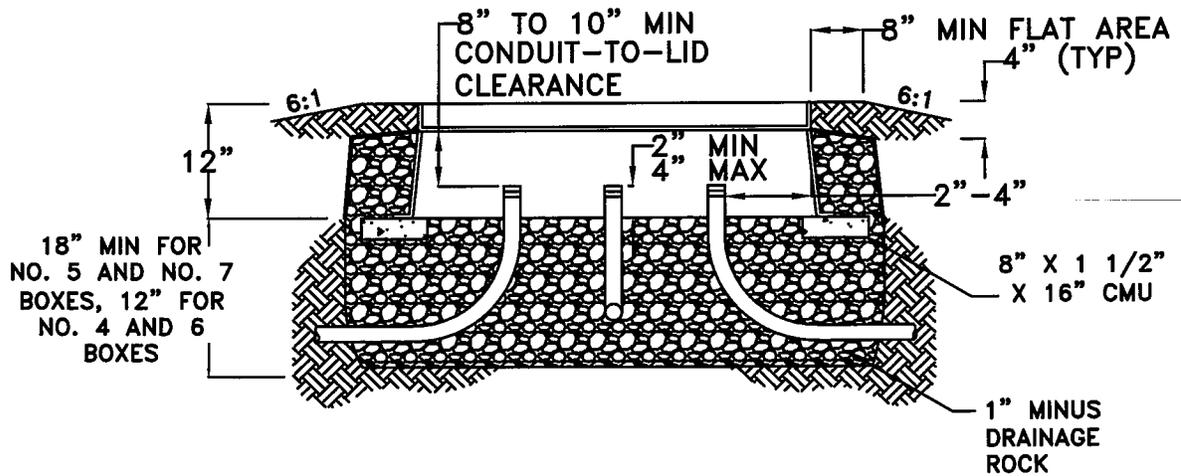
*[Signature]*  
CITY ENGINEER

*5/21/13*  
DATE

*[Signature]* 05-20-2013  
PUBLIC WORKS-UTILITIES DIRECTOR DATE



PULL BOX TOP  
(NTS)



PULL BOX  
(NTS)

CITY OF PEORIA  
STANDARD DETAIL PE-044-2



TRAFFIC SIGNAL PULL BOX  
AND WIRE SPlicing NOTES, PAGE 1

APPROVALS:

*[Signature]*  
CITY ENGINEER      2/6/14      DATE

*[Signature]* 02-05-2014  
PUBLIC WORKS-UTILITIES DIRECTOR      DATE

NOTES:

1. Conduits to be 4" above bottom and from edge of pull box in the direction pipe enter pull box.
2. All street conduit crossings shall be two each 4" with signal wire in one and communication wire in the other.
3. All conduits shall have bell ends installed to top of all conduits before installation of any wire.
4. Install two 3" conduits to all pole foundations, except "A" pole foundations which will have one.
5. Pull box shall face center of intersection when set radius behind pole back of wheel chair ramps.
6. Pull box shall face parallel to street, sidewalk when not in radius.
7. All conductor lengths in pull box are to be trimmed to min of 18" to a max of 24" extending past the top of pull box.
8. All camera, preemption & communications cables looped through pull boxes shall have 3' neatly coiled in bottom of box. Wire shall be continuous with no splicing from device to cabinet.
9. Grounding wire shall be compression crimped with copper type "C" crimp. Correct type compression tool shall be used. All wires shall be twisted together prior to insertion into crimp connector. Acorn clamp shall be used in conjunction with a ground rod measured at 3/8" X 8' drove in at center of all pull boxes. Ground rod to be no higher than 4" above bottom of pull box. Blue stake is required.
10. Street light and metro sign wire to be next with fuses on pole run side or load side.
11. Signal Neutrals shall be compression crimped with copper type "C" crimp. Correct type compression tool shall be used. All wires shall be twisted together prior to insertion into crimp connector.
12. PED push button commons (White Wire) to be spliced in each pull box utilizing one crimp connection.
13. Cable 1 and cable 2 (Active Phases) to be spliced separately. Wire shall be in a neat & organized manner upon completion. Cable outer jacketing shall be striped 4" above the conduit with all individual phases correctly phase taped (According to COP PE-042-1) approximately 12" below the splice point.
14. Active phases in the stranded 25 conductor shall be compression crimped with correct copper splice cap for gauge of wire used. Correct type compression tool shall be used per manufacturers specs. All wires shall be twisted together prior to insertion into crimp connector. All finished bare copper crimps shall be scotchkoted, dried then covered with correct rubber cap for splice used per the manufacturer's specs. Then a final scotchkoting shall be applied to rubber cap & dried. Due diligence shall be used when scotchkoting as to not have connections sticking to everything in the pull box.
15. All unused phases shall still be phase taped correctly, cut to an equal length, dipped in scotch coat taped together, dipped again, and laid neatly to the bottom of the pull box.

CITY OF PEORIA  
STANDARD DETAIL PE-044-3  
TRAFFIC SIGNAL PULL BOX  
AND WIRE SPLICING NOTES PAGE 2



APPROVALS:

*[Signature]*  
CITY ENGINEER  
2/6/14  
DATE

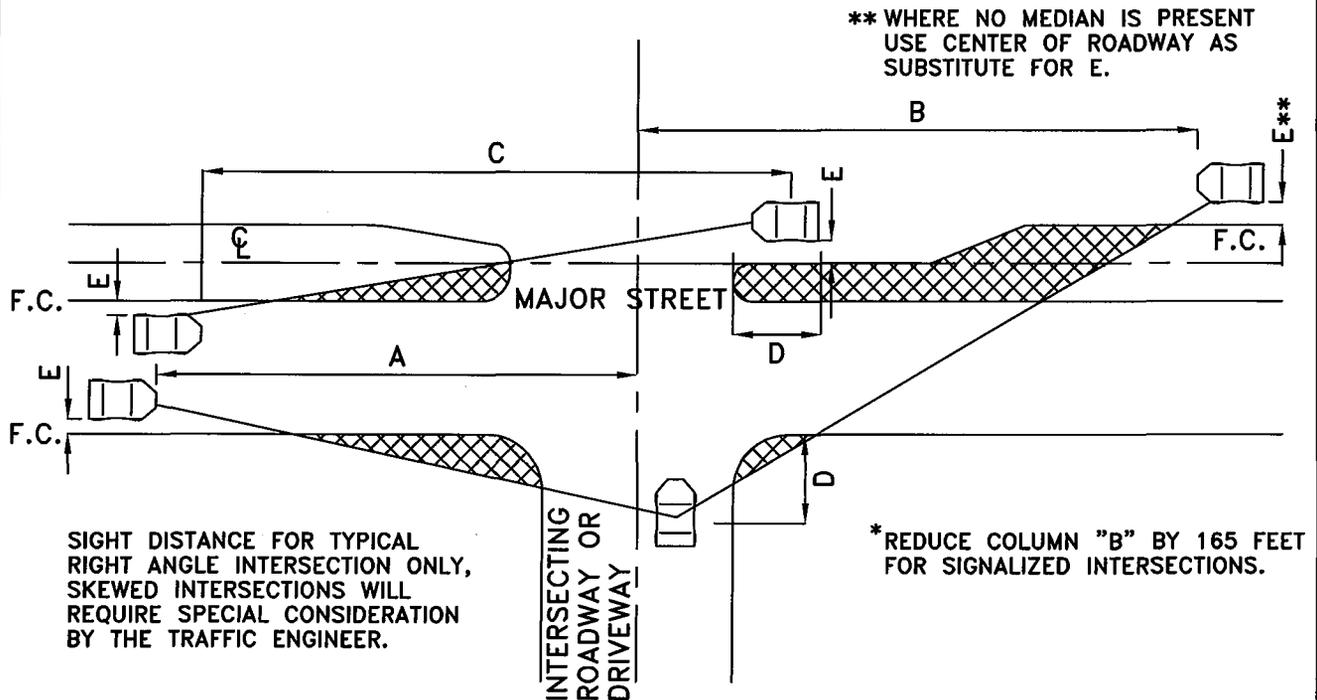
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PUBLIC WORKS-UTILITIES DIRECTOR  
DATE 02-05-2014

16. For 2, 5, and 7 conductor cables, group together spares in an organized way, cut to equal lengths, dipped in scotch coat tape ends together, dipped again in scotch coat and lay on bottom of pull box.
17. Splice only active phases needed, do not splice any wire that is not terminated to an active device.
18. Wire runs from devices to pull boxes will be continuous. No splices at TS blocks in any application.
19. Pull 18" of IMSA cable into the signal device and remove 6" of outer wire jacketing.
20. To terminate solid wire strip 3/4" of insulation and roll over into complete circle, so screw fits in center of circle. Screw touching only copper, no excess copper showing for solid wire.
21. For stranded wire use correct 16 gauge insulated stake on, and correct crimp tool is to be used.
22. For compression fitting stranded wire shall be soldered and giving sufficient time to harden.

# CITY OF PEORIA STANDARD DETAIL PE-090 SIGHT DISTANCE REQUIREMENTS FOR ARTERIAL AND COLLECTOR STREETS



APPROVALS: David M. Moeck 1/22/07  
CITY ENGINEER DATE



TABLE

STREET	A	*B	C	D	E
COLLECTOR	455'	455'	490'	16'	3'
ARTERIAL	585'	585'	630'	16'	3'

NOTES

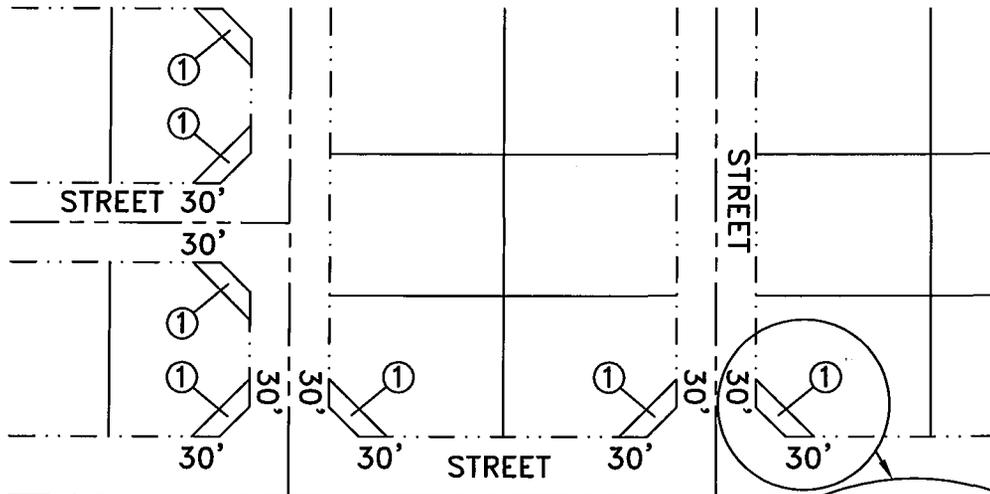
1. NO SIGNS, FENCES, WALLS, UTILITY BOXES, STRUCTURES, SHRUBS, HEDGES, OR OTHER PLANTS, (EXCLUDING TREES) OVER 30 INCHES IN HEIGHT SHALL BE PERMITTED WITHIN THE RESTRICTED AREAS, EXCEPT AS APPROVED BY THE CITY TRAFFIC ENGINEER.
2. TREES ARE PERMITTED WITHIN THE RESTRICTED AREAS PROVIDED:
  - A. NO LIMBS, LEAVES, NEEDLES OR OTHER FOLIAGE ABOVE 30 INCHES OR BELOW 84 INCHES ARE PERMITTED.
  - B. TREES ARE PLANTED SO AS NOT TO OBSTRUCT 20% OF THE VISIBILITY WHEN COMBINED WITH OTHER OBSTRUCTIONS PRESENT.

# CITY OF PEORIA STANDARD DETAIL PE-091 UNOBSTRUCTED VIEW EASEMENT REQUIREMENTS FOR STREETS



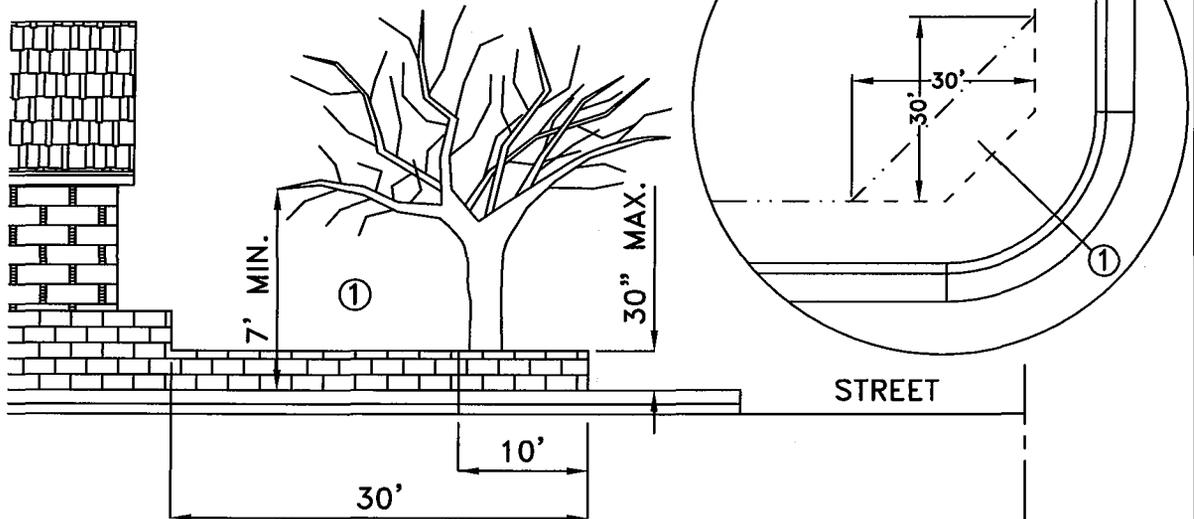
APPROVALS:

*David M. ...* 2/22/07  
CITY ENGINEER DATE



① UNOBSTRUCTED VIEW EASEMENT AREA.

PLAN VIEW



1. SIGNS, FENCES, WALLS, UTILITY BOXES, STRUCTURES, SHRUBS, HEDGES OR OTHER PLANTS, BUT EXCLUDING TREES OVER 30 INCHES IN HEIGHT SHALL NOT BE PERMITTED WITHIN THE RESTRICTED AREAS EXCEPT AS APPROVED BY CITY TRAFFIC ENGINEER.
2. TREES ARE PERMITTED WITHIN THE RESTRICTED AREAS PROVIDED:
  - A. NO LIMBS, LEAVES, NEEDLES OR OTHER FOLIAGE ABOVE 30 INCHES OR BELOW 84 INCHES ARE PERMITTED.
  - B. TREES ARE PLANTED SO AS NOT TO OBSTRUCT MORE THAN 20% OF THE VISIBILITY WHEN COMBINED WITH OTHER OBSTRUCTIONS PRESENT.

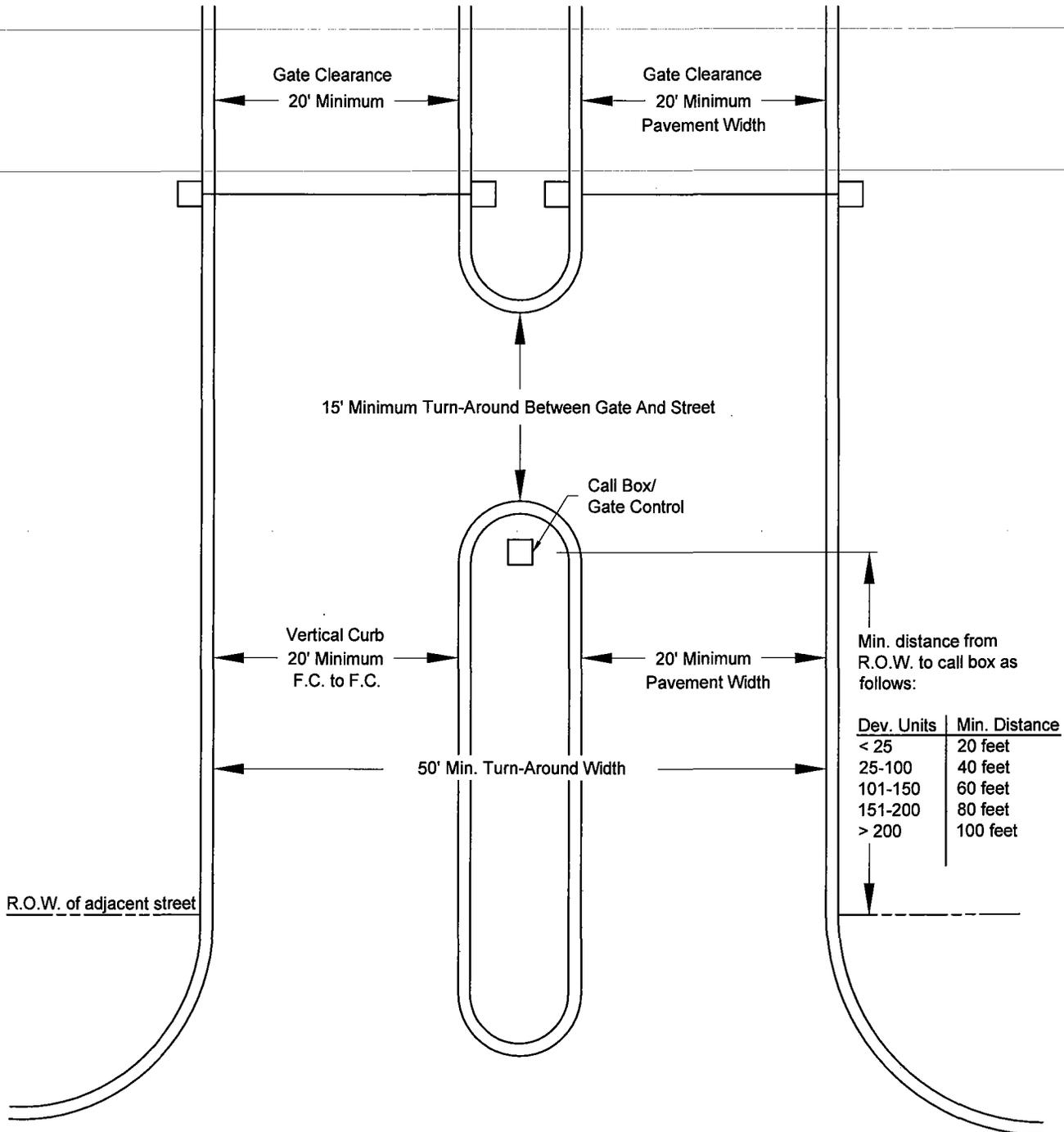
# CITY OF PEORIA STANDARD DETAIL PE-100 MINIMUM REQUIREMENTS FOR GATED ENTRANCES TO RESIDENTIAL SUBDIVISIONS



APPROVALS:

*David M. ...*  
CITY ENGINEER

*3/14/08*  
DATE



CITY OF PEORIA  
STANDARD DETAIL PE-101-1  
ALLOWABLE MATERIALS LIST, PAGE 1



APPROVALS:

*[Signature]* 6/25/15  
ENGINEERING DIRECTOR DATE

*[Signature]* 6/25/15  
PW-UTILITIES DIRECTOR DATE

Materials allowed for construction in Peoria shall be per Maricopa Association of Governments, Uniform Specifications and Details for Public Works Construction except as provided below.

**Water Line Materials:**

- a. Ductile Iron Pipe, pressure class 350, is acceptable for water lines sizes eight (8) inches and twelve (12) inches in diameter.
- b. Ductile Iron Pipe, pressure class 250 minimum, is acceptable for water lines sixteen (16) inches in diameter and larger.
- c. Polywrap for Ductile Iron Pipe shall be in conformance with Section 610.6 of the MAG Standard Specifications.

**Fire Hydrants:** The only allowable makes, models and manufacturers are: AVK, Clow, Jones, and Mueller.

**Valves:** Shall be resilient seated, solid wedge gate valves meeting AWWA standards for potable water and shall open by turning counter clockwise.

**Sewer Line Materials:**

- a. Vitrified Clay Pipe which conforms with Section 743 of the MAG Standard Specifications is acceptable for sewer line sizes eight (8) inches and larger.
- b. PVC SDR 35 Sewer Pipe which conforms with Section 745 of the MAG Standard Specifications is acceptable for sewer line sizes eight (8) inches through fifteen (15) inches in diameter.
- c. Sewer service piping shall be SCH-40 PVC.

**Sewer Force Mains:**

- a. PVC AWWA C-900, DR14 or DR18 for 12" diameter and less.
- b. Ductile Iron with approved lining. Greater than 12" diameter or greater than 10' deep.

**Reclaimed Waterline Materials:**

- a. Ductile Iron as specified for water lines.
- b. PVC AWWA C-900 DR-14 or DR-18, for 12" diameter and less.

**Utility Markers:**

Carsonite 'Curve Flex' utility markers shall be used for all manholes and valves located outside of paved areas.

**Manhole Coating:**

- a. Epoxy coated - manhole base and coating system with a minimum wet film thickness of 125 mils. The epoxy coating system shall be one of the following:
  1. RLS Raven 405
  2. Joseph Painting Sewer Shield 101
  3. Neopoxy NPR-5300
  4. Sauereisen Sewergard No. 210

CITY OF PEORIA  
STANDARD DETAIL PE-101-2  
ALLOWABLE MATERIALS LIST, PAGE 2



APPROVALS:

  
CITY ENGINEER      5/21/13  
DATE

  
PUBLIC WORKS-UTILITIES DIRECTOR      05-20-2013  
DATE

Storm Drain Pipe: Class IV or V Rubber Gasket Reinforced Concrete Pipe (RGRCP) Per MAG Standard Specification 735 and 765.

Tracer Wire: #6 Coated Copper Wire

Paint Colors:

- a. Storm Drain Facilities:
  - Metal: 603 DEC 721 Slopes.
  - Concrete: TBD by Engineering Department City Engineer
- b. Irrigation System Facilities
  - Potable: Evershield EVSH50-1 Blue
  - Non-Potable: Evershield TBD by Engineering Department City Engineer
  - Reclaimed: Pantone 512 or equal.

CITY OF PEORIA  
 STANDARD DETAIL PE-102  
 CITY FACILITY SERVICE/ACCESS GATE

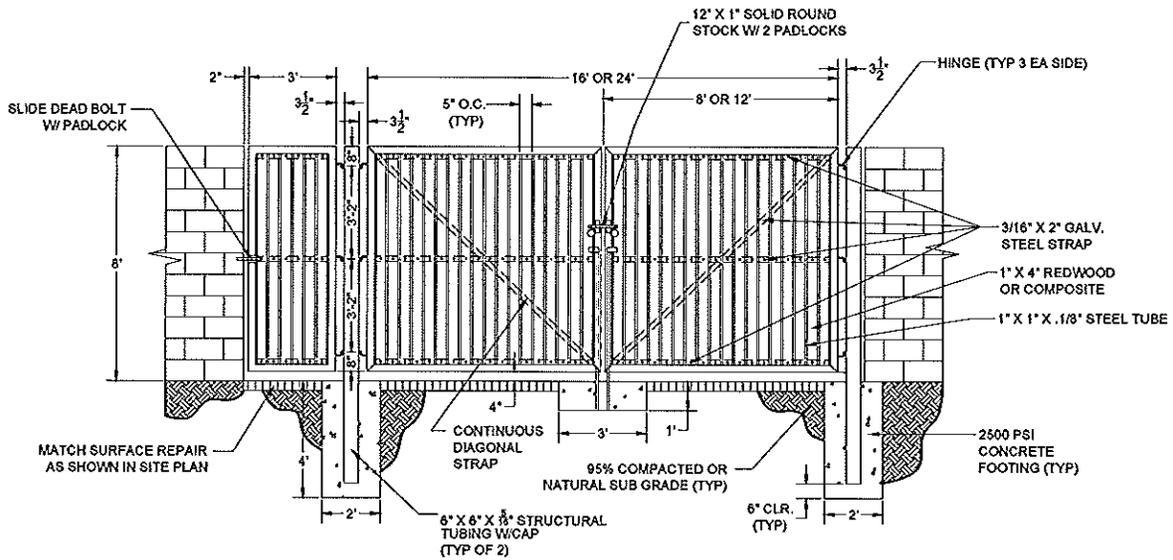


APPROVALS:

CITY ENGINEER

DATE

(PUBLIC WORKS-UTILITIES DIRECTOR DATE



NOTES:

1. FRAME OF GATES AND DOOR TO BE CONSTRUCTED FROM 3" X 3" X 1/4" STRUCTURAL TUBING WITH WELDED MITRE JOINTS (TOP, BOTTOM, AND SIDE JOINTS)
2. DIAGONAL STRAP TO BE WELDED ON BOTH SIDES OF EACH INTERSECTION WITH HORIZONTAL STRAPS.
3. BLOCK AT DOOR OPENING TO BE COVERED WITH 1/4" GALV. FACE PLATE ATTACHED WITH 1/2" ANCHOR BOLT @ 12" O.C.
4. REDWOOD SLATS TO BE ATTACHED BY 3/8" X 2" CARRAGE BOLTS, NUT, AND WASHER. NUTS ON INSIDE OF ENCLOSURE. (TYP 3 EACH SLAT)
5. COMPOSITE MATERIAL OF ACCEPTABLE APPEARANCE AND STRUCTURAL INTEGRITY WILL BE ALLOWED IN PLACE OF THE REDWOOD SLATS.

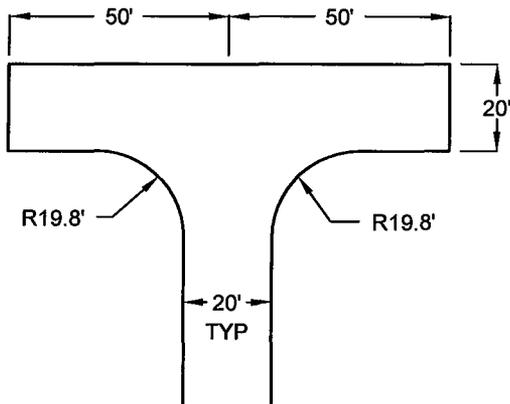
# CITY OF PEORIA STANDARD DETAIL PE-110 WB50 TURNAROUND



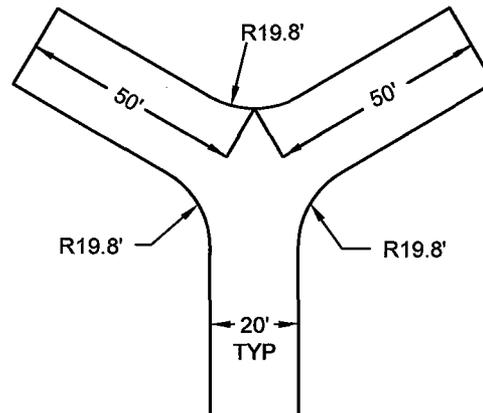
APPROVALS:

*[Signature]* 8/22/07  
CITY ENGINEER DATE

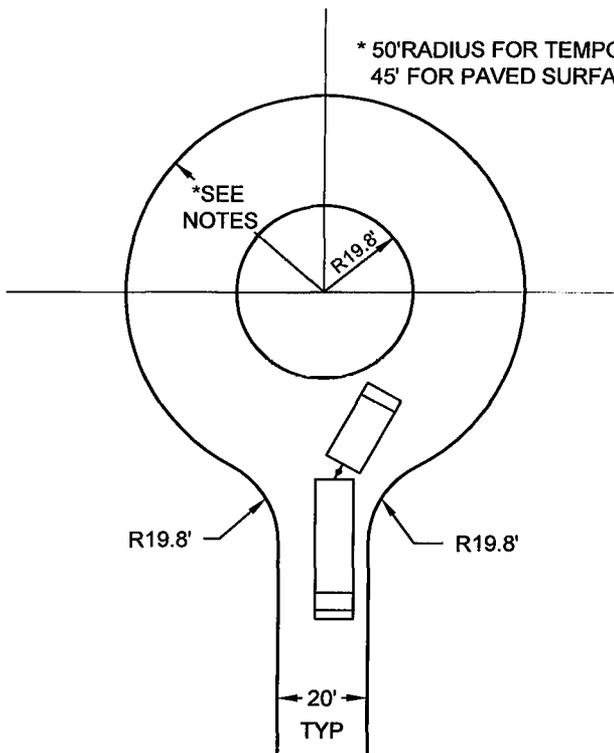
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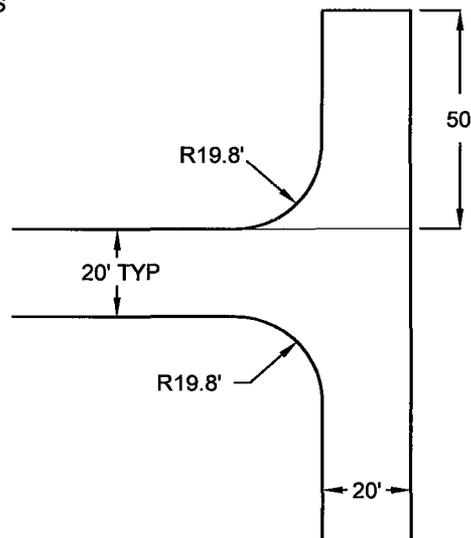
100'  
HAMMERHEAD



ACCEPTABLE ALTERNATE  
TO 100' HAMMERHEAD



90'  
CUL-DE-SAC



ACCEPTABLE ALTERNATE  
TO 90' CUL-DE-SAC

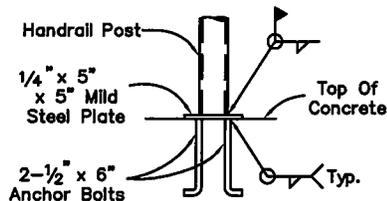
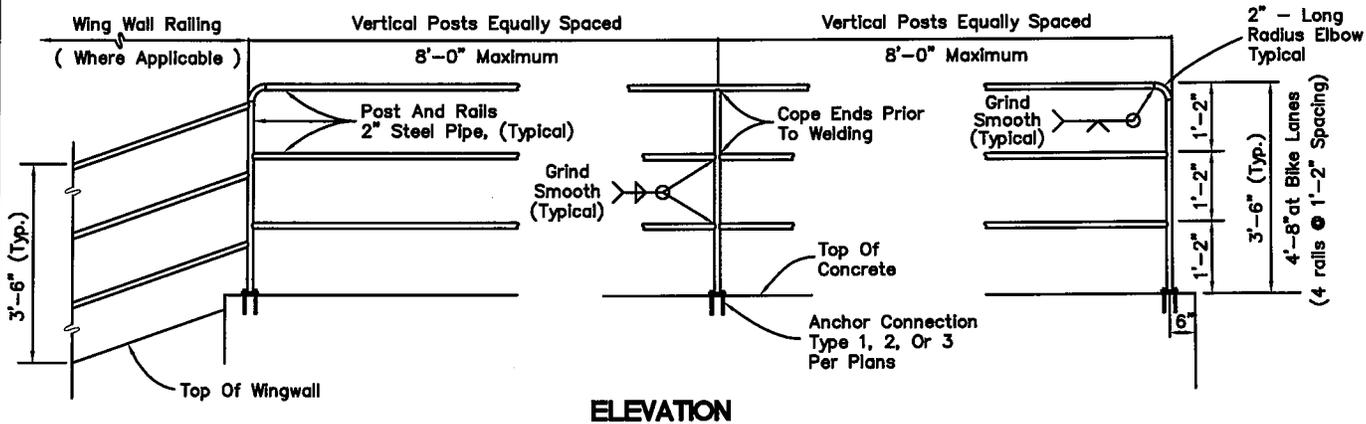
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# CITY OF PEORIA STANDARD DETAIL PE-119 HANDRAIL DETAIL

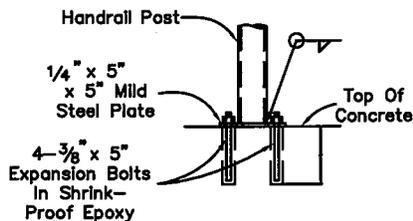


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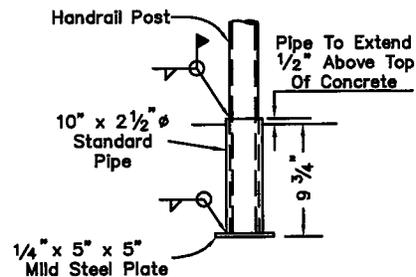
  
 CITY ENGINEER 5/21/13  
 DATE



**TYPE 1**  
**ANCHOR PLATE DETAIL**



**TYPE 2**  
**EXPANSION BOLT DETAIL**



**TYPE 3**  
**PIPE SLEEVE DETAIL**

**NOTES:**

1. Paint handrail per MAG Specifications Section 530. Per City of Peoria Standard Detail PE-101-2.
2. Vertical posts to be evenly spaced.
3. To be installed as required by plans or specifications.

CITY OF PEORIA  
STANDARD DETAIL PE-121-1  
MASONRY RETAINING WALL



APPROVALS:

  
CITY ENGINEER      DATE

Design Assumptions:

1. Soil bearing value used in design is 1000 psf. Equivalent Fluid Pressure: 35 psf. If site conditions do not meet min criteria, Please contact City Engineering Department.
2. Bottom of footing 32" below natural grade.
3. Concrete to conform to MAG Class B, 2500 psi at 28 days.
4. All Concrete Blocks shall be Grade A, medium weight units conforming to ASTM C-90.
5. Reinforcing steel shall be ASTM A615, Grade 60.
6. Minimum Lap for all reinforcing shall be 30 bar diameters or 18", whichever is greater.
7. All Cells shall be filled solid with 2500psi grout. Use Type S 1800psi mortar.
8. All Horizontal bars shall be in channel or lintel blocks.
9. Compaction of Backfill shall not be less than 95% and shall conform to MAG standard 211.
10. Provide 2" diameter drains at 4' 0" with cont. gravel pockets.
11. Refer to City of Peoria STD. General Notes & Grading Drainage Notes.



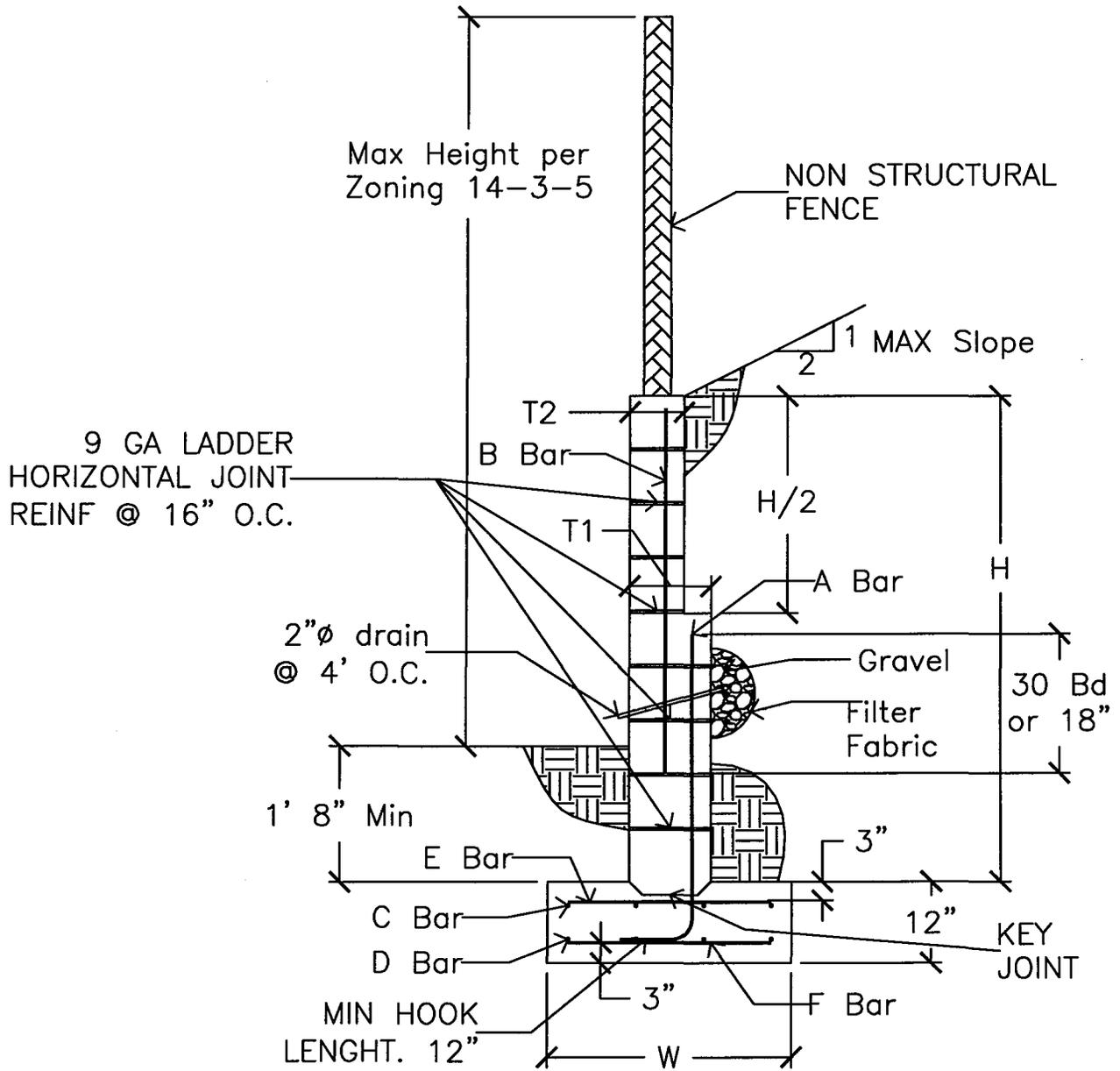
# CITY OF PEORIA STANDARD DETAIL PE-121-3 MASONRY RETAINING WALL



APPROVALS:

*David Moody*  
CITY ENGINEER

2/22/07  
DATE



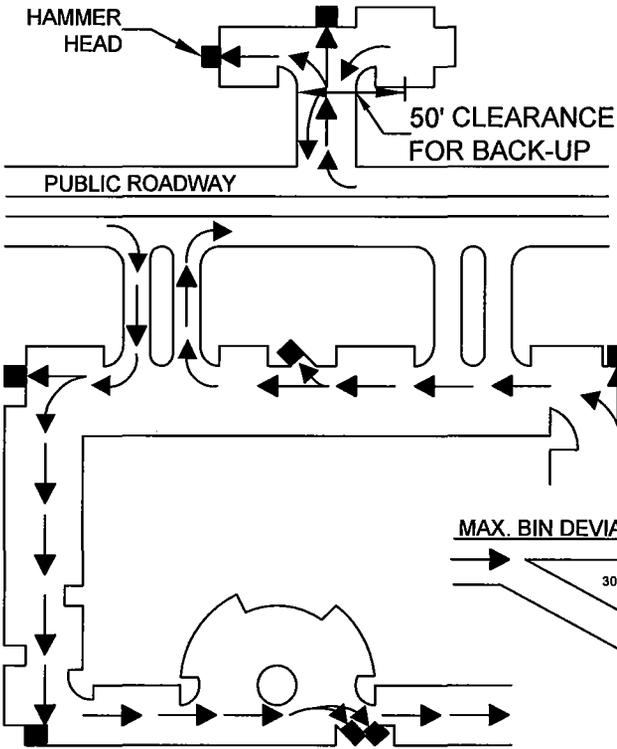
# CITY OF PEORIA STANDARD DETAIL PE-146-1 SOLID WASTE VEHICLE ACCESS



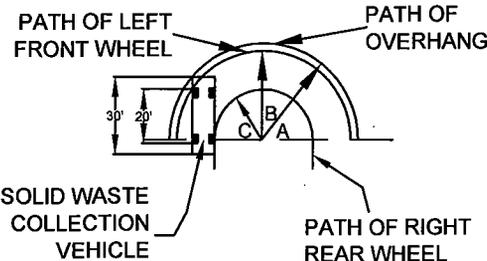
APPROVALS:

*[Signature]*  
CITY ENGINEER      1/14/09  
DATE

*[Signature]*  
PUBLIC WORKS DIRECTOR      04-06-2009  
DATE



**SAFETY NOTE:**  
BACKING UP MORE THAN 50' AFTER SERVICE TO A SOLID WASTE BIN IS PROHIBITED. THE 50' IS MEASURED FROM THE BACK OF THE SOLID WASTE COLLECTION VEHICLE. THE VEHICLE IS APPROX. 30' LONG.



**CLEARANCE REQUIREMENTS:**  
A- 43.9' MIN. TURNING RADIUS  
B- 42' TURNING RADIUS  
C- 28.4' TURNING RADIUS

**PLEASE NOTE:**  
SOLID WASTE VEHICLES WEIGH APPROX. 20 TONS WHEN FULL. DRIVEWAYS MUST BE BUILT TO SUPPORT THIS WEIGHT WITHOUT DAMAGE TO DRIVE.

**NOTES:**

1. ALL CURBS ARE TO BE ALIGNED ON THE OUTSIDE OF ENCLOSURE WALLS. THE CURBS SHALL NOT INTERFERE WITH THE ROUTE OF THE SOLID WASTE COLLECTION VEHICLE.
2. IN GENERAL TERMS, ALL SOLID WASTE COLLECTION ROUTES SHALL MEET ENGINEERING DESIGN CRITERIA (STREET WIDTHS, TURNING RADII) IN A MANNER THAT ALLOWS SOLID WASTE COLLECTION VEHICLES ACCESS TO BIN ENCLOSURES. SITES SHALL BE DESIGNED SO COLLECTION VEHICLES CAN SAFELY ACCESS AND LIFT A BIN WITHOUT OBSTRUCTIONS (GROUND LEVEL AND AERIAL OBSTRUCTIONS).
3. FOR THE SAFETY OF OTHERS, SOLID WASTE COLLECTION VEHICLES WILL NOT BACK UP MORE THAN 50 FEET AFTER SERVICING A BIN.
4. NO AWNINGS OR BUILDING PROJECTIONS ALLOWED IN SOLID WASTE COLLECTION VEHICLE ROUTES. MIN. OVERHEAD CLEARANCE OF 14' IS REQUIRED IN DRIVE AND 25' OVER BIN ENCLOSURE AREA FROM STEEL SAFETY POSTS BACK 50'.
5. ROUTES SHALL BE CLEAR OF ALL OBSTRUCTIONS (CURBS, WALLS, OVERHEAD WIRES, AND AWNINGS) TO PREVENT DAMAGE FROM THE COLLECTION VEHICLE.
6. TAKE NOTE OF THE SOLID WASTE COLLECTION ROUTE. THE COLLECTION VEHICLE SHALL TRAVEL THROUGH A SITE ONCE WITHOUT BACKTRACKING.
7. BIN ENCLOSURES ARE TO BE ANGLED NO MORE THAN 30 DEGREES FROM THE CENTER LINE OF THE SOLID WASTE COLLECTION VEHICLE ROUTE.
8. BIN ENCLOSURES SHALL BE LOCATED AWAY FROM ENTRANCED AND EXITS SO SOLID WASTE COLLECTION VEHICLE DOES NOT CREATE A SAFETY HAZARD BY BLOCKING IN-COMING OR OUT-GOING TRAFFIC.
9. STANDARDS FOR SINGLE, DOUBLE, AND TRIPLE-WIDE BIN ENCLOSURES ARE ADDRESSED IN PE-146-2 AND PE-146-3.
10. STANDARDS FOR BIN ENCLOSURE SCREEN WALLS, SAFETY POSTS, AND GATES ARE ADDRESSED IN PE-146-4.

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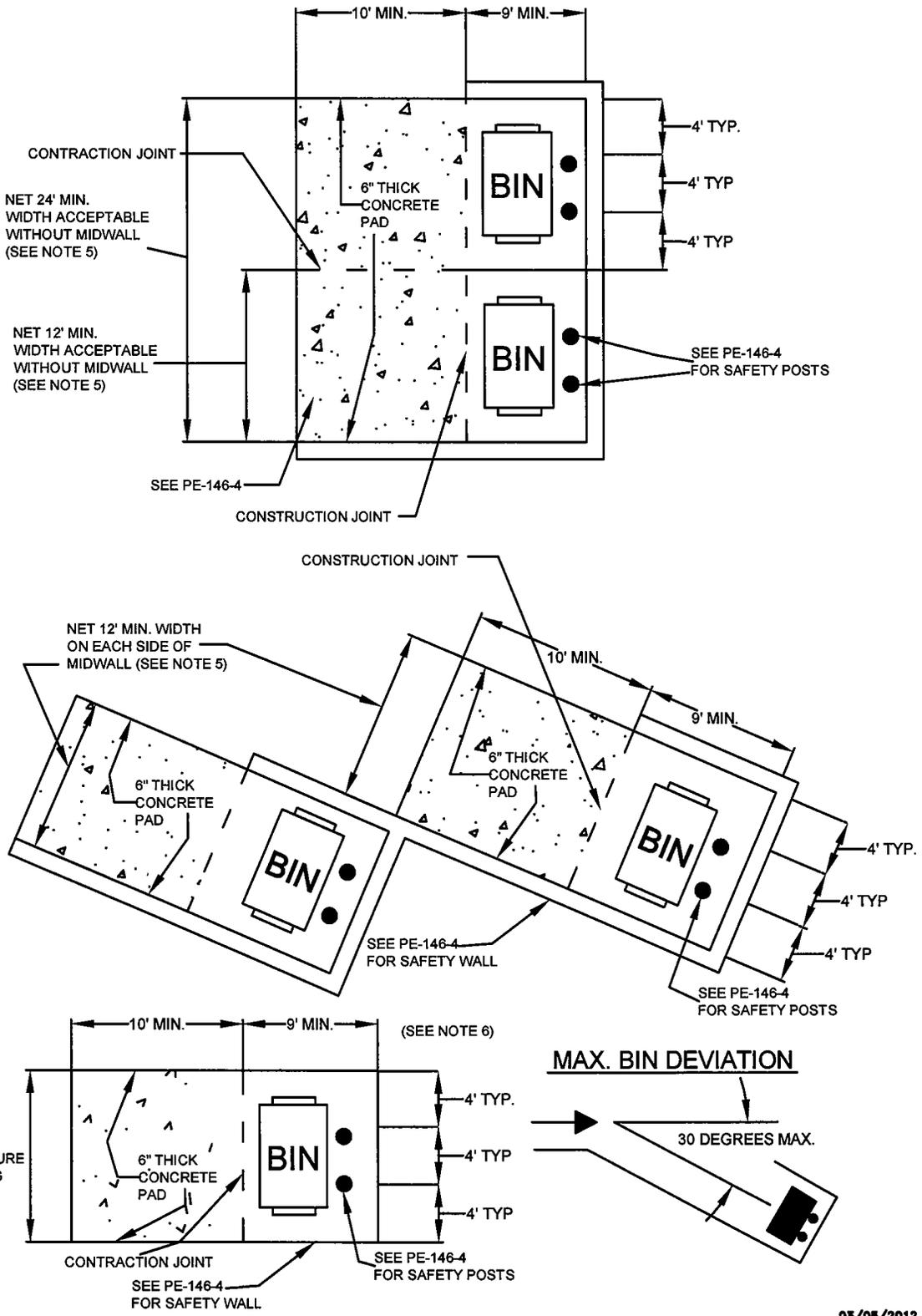
# CITY OF PEORIA STANDARD DETAIL PE-146-2A SINGLE AND DOUBLE-WIDE BIN ENCLOSURES



APPROVALS:



  
 CITY ENGINEER                      DATE                      PUBLIC WORKS DIRECTOR                      DATE



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CITY OF PEORIA  
STANDARD DETAIL PE-146-2B  
SINGLE AND DOUBLE-WIDE  
BIN ENCLOSURES NOTES



APPROVALS:

*[Signature]*  
ENGINEERING DIRECTOR

6/24/15  
DATE

*[Signature]*  
PUBLIC WORKS-UTILITIES DIRECTOR

DATE

NOTES

1. All non-residential properties shall be designed with bin enclosures to accommodate refuse/recycle bins, with 1 bin for every 20,000 square feet of building space. A minimum of 2 refuse/recycle bins shall be accommodated. The enclosures can be set up as doubles or singles to maximize the use of the property.
2. Multi-unit residential developments shall be designed with bin enclosures and accommodate a minimum of 2 refuse/recycle bins with either single or double-wide enclosures .
3. Compactors can be used in developments where the employees load and activate the compacting equipment. Developments that allow customers or residents access to the compacting equipment will not be approved. Maricopa County regulations require twice per week collection if food waste is placed into containers.
4. The number of refuse/recycle bins needed for multi-unit residential development depends on the size of the development. The minimum, total volume capacity is determined from the calculation of one-half cubic yard per living unit per week. For example, a development with 240 units x .5 yards = 120 yards per week or 10 trash bins (6 yard) serviced two times per week ( $10 \times 6 \times 2 = 120$  yards).
5. Single-wide bin enclosures shall have a net enclosure opening of 12 feet.
6. Double-wide bin enclosures shall have a net enclosure opening of 24 feet without midwalls. Although not preferred, double wide bin enclosures can be designed with midwalls with a net enclosure opening of 12 feet on each side of midwall.
7. Gates, hinges & mounting hardware shall be installed so there is a minimum 9 foot depth created within each enclosure.
8. Gates, hinges & mounting hardware shall not intrude upon minimum net enclosure opening.
9. Bin enclosures are to be angled no more than 30 degrees from the center line of the solid waste collection vehicle route.
10. All enclosures shall have gates that screen the bins from public view.
11. Bin enclosures to be a minimum of 3 feet from any non-combustible planned or existing structure at its closest point; 5 feet from any combustible planned or existing structure at its closest point.
12. Standards for solid waste vehicle access are addressed in PE-146-1.
13. Standards for triple wide enclosures are addressed in PE-146-3.
14. Standards for bin enclosure screen walls, safety posts, and gates are addressed in PE-146-4.
15. Restaurants must provide a separate enclosed area to accommodate their grease trap. This designated area must not interfere with the refuse/recycling collection.
16. Additional items such as landscaping control boxes and lighting may be positioned on the outside of the enclosure walls.
17. A connection to the water system (installation of hose bib) shall not be allowed to facilitate cleaning of the enclosure.
18. A connection to the sewer system (installation of grate/drain) shall not be allowed to facilitate the wash down and cleaning of the enclosure.

# CITY OF PEORIA STANDARD DETAIL PE-146-3 TRIPLE-WIDE BIN ENCLOSURES



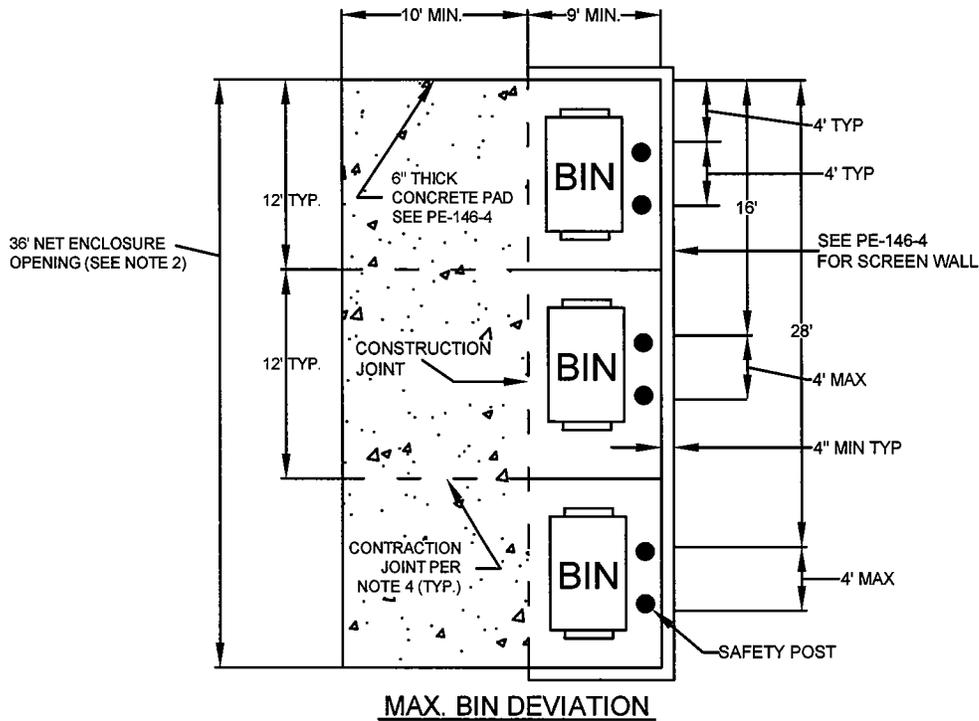
APPROVALS:

*[Signature]*  
CITY ENGINEER

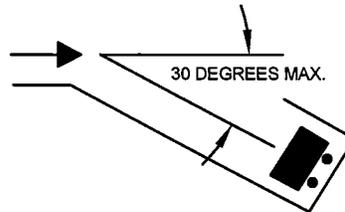
3/27/12  
DATE

*[Signature]*  
PUBLIC WORKS DIRECTOR

03-06-2012  
DATE



MAX. BIN DEVIATION



**Notes**

1. Triple-wide enclosures shall have a net enclosure opening of 36 feet and shall be designed without midwalls, gates hinges, and mounting hardware shall not intrude upon minimum net enclosure opening.
2. Gates, hinges, and mounting hardware shall be installed so there is a minimum 9 foot depth created within each enclosure.
3. Bin enclosures are to be angled no more than 30 degrees from the center line of the solid waste collection vehicle route.
4. Contraction joints may be either scored or sawcut 1-inch deep.

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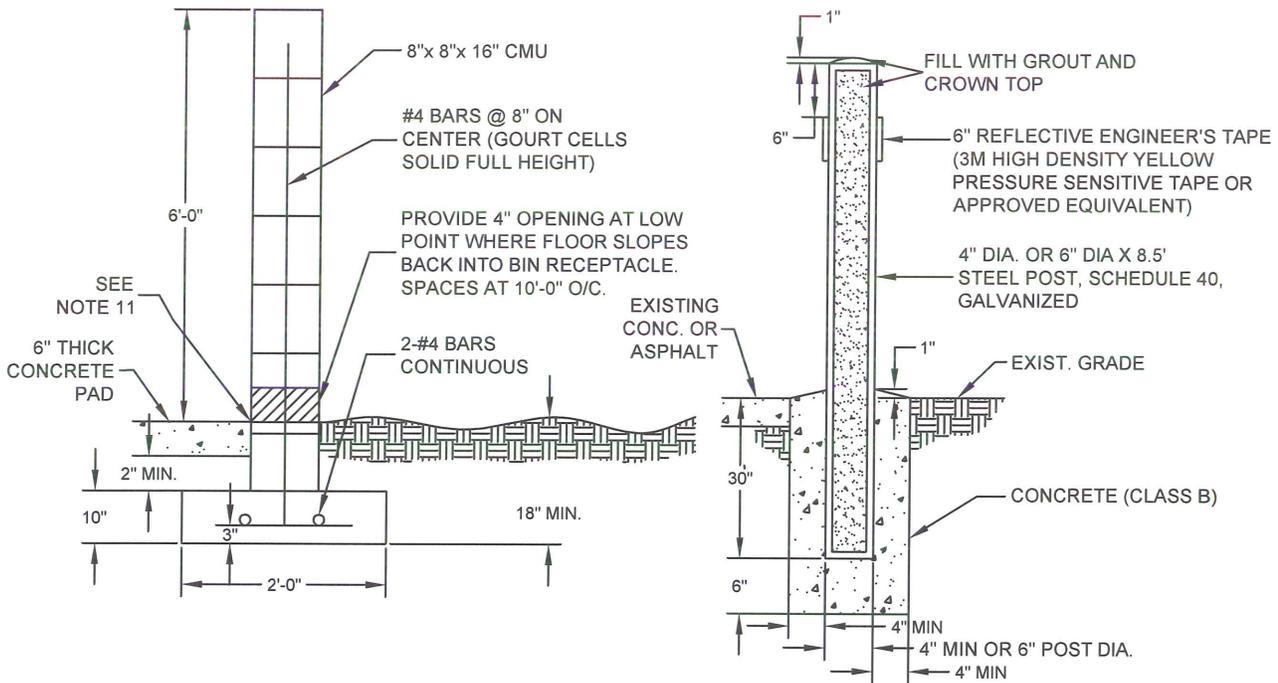
# CITY OF PEORIA STANDARD DETAIL PE-146-4 BIN ENCLOSURE SCREEN WALL, SAFETY POST & GATE STANDARDS



APPROVALS:

 6/24/15  
 ENGINEERING DIRECTOR      DATE

 6/29/15  
 PUBLIC WORKS-UTILITIES DIRECTOR      DATE



**NOTES**

1. REFUSE AND RECYCLING BIN AREA SHALL BE SCREENED WITH A SIX FOOT (6') MASONRY WALL PER DETAIL ON THIS SHEET.
2. BIN ENCLOSURE TO BE A MINIMUM OF 3 FEET FROM ANY PLANNED OR EXISTING STRUCTURE AT ITS CLOSEST POINT.
3. ALL ENCLOSURES SHALL HAVE GATES THAT SCREEN THE BINS FROM PUBLIC VIEW.
4. GATES SHALL BE INSTALLED SO THERE IS A NET BIN ENCLOSURE OPENING OF 12 FEET PER BIN. GATES, HINGES, AND MOUNTING HARDWARE SHALL NOT INTRUDE UPON MINIMUM NET ENCLOSURE OPENING.
5. GATES, HINGES, AND MOUNTING HARDWARE SHALL BE INSTALLED SO THERE IS A MINIMUM 9 FOOT DEPTH CREATED WITHIN EACH ENCLOSURE.
6. EACH ENCLOSURE GATE SHALL HAVE DROP PINS INSTALLED AND HOLES DRILLED IN THE CONCRETE AT BOTH THE OPEN AND CLOSED POSITIONS TO PREVENT GATES FROM CLOSING INTO THE COLLECTION VEHICLE.
7. BIN ENCLOSURE SHALL HAVE (2) 4" DIAMETER STEEL SAFETY POSTS INSTALLED IN THE BACK OF THE ENCLOSURE ONLY PER DETAIL ON THIS SHEET.
8. SAFETY POSTS SHALL HAVE A HEIGHT OF 6 FEET OR BE EQUAL TO THE HEIGHT OF THE BACK SCREEN WALL OF THE ENCLOSURE. SAFETY POSTS SHALL BE PLACED A MINIMUM OF 4" FROM THE WALL.
9. USE CLASS "A" CONCRETE EXCEPT AS NOTED IN SAFETY POST DETAIL ON THIS SHEET.
10. STEEL REINFORCEMENT SHALL BE GRADE 40.
11. EXPANSION JOINT FILLER SHALL BE 1/2" BITUMINOUS TYPE PREFORMED EXPANSION JOINT FILLER ASTM D-1751.
12. EXTERIOR FINISH OF 6 FOOT MASONRY SCREEN WALLS SHALL BE COORDINATED ARCHITECTURALLY WITH PRIMARY BUILDING FINISHES.
13. SOIL BELOW THE WALL FOOTER AND CONCRETE PAD SHALL BE COMPACTED TO A DEPTH OF 6 INCHES AND TO A MINIMUM DRY DENSITY OF 90% IN ACCORDANCE WITH ASTM D-2922 AND D-3017, AFTER ADJUSTMENT FOR ROCK CORRECTION.
14. STANDARDS FOR SOLID WASTE VEHICLE ACCESS ARE ADDRESSED IN PE-146-1.
15. STANDARDS FOR SINGLE, DOUBLE, AND TRIPLE-WIDE BIN ENCLOSURES ARE ADDRESSED IN PE-146-2 AND PE-146-3.

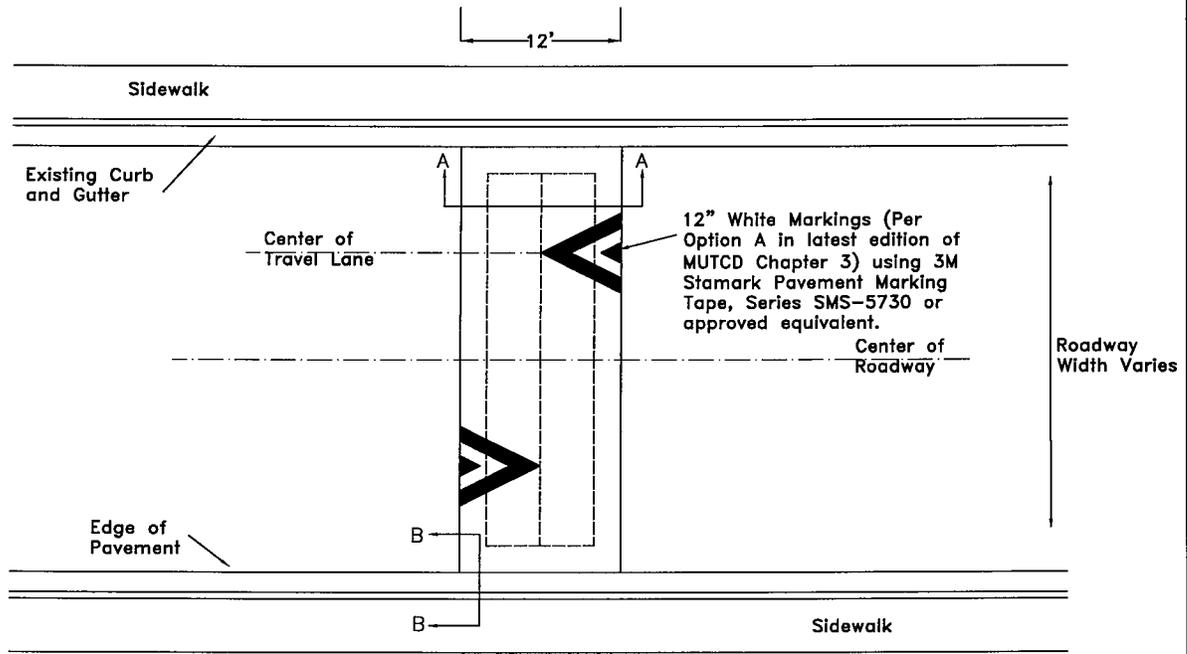
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# CITY OF PEORIA STANDARD DETAIL PE-210-1 SPEED HUMP

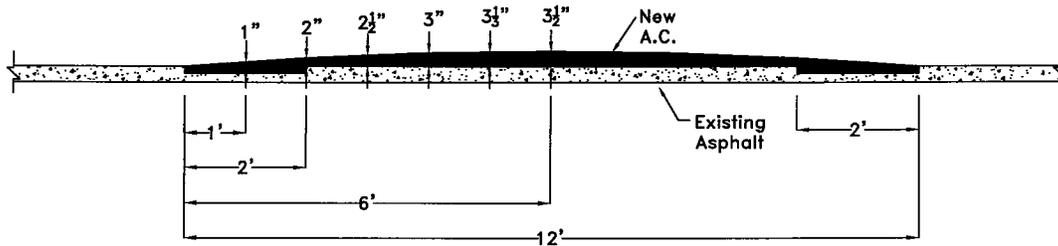


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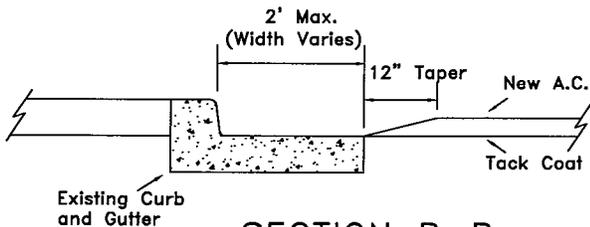
  
 CITY ENGINEER 5/24/13  
DATE



**PLAN VIEW**



**SECTION A-A**



**SECTION B-B**

**NOTES:**

1. Cross section shows approximate elevations for 3.5" speed hump.
2. Speed humps shall not be placed over manholes, water valves, survey monuments, junction chambers, in conflict with driveways, or adjacent to fire hydrants.
3. Speed humps must be placed at locations approved and specified by the Public Works/Engineering Department.
4. Speed humps shall be constructed with an approved D1/2 Coarse hot mix, per City of Peoria standards. A tack coat shall be applied prior to application of pavement.
5. Contractor must provide verification of cross-section dimensions.
6. Contractor must properly compact humps to preclude excessive settlement.
7. The contractor shall provide a two year warranty on labor and material. Contractee should request contractor to warrant height to be at least 3.25" tall after 24 months.
8. Permanent striping shall be Thermoplastic Hot Tape or 3M Sta-Mark Series SMS-5730 or approved equivalent.

**Important:**

To gain maximum effect, speed humps must be the full 3.5". Speed humps shall be 3.5" high with an allowable maximum tolerance of  $\pm 0.25"$ . Contractors must not exceed this height based on consideration for emergency and fire department vehicles. Because of this concern, any speed humps constructed over 3.75" must be corrected at the contractors expense.

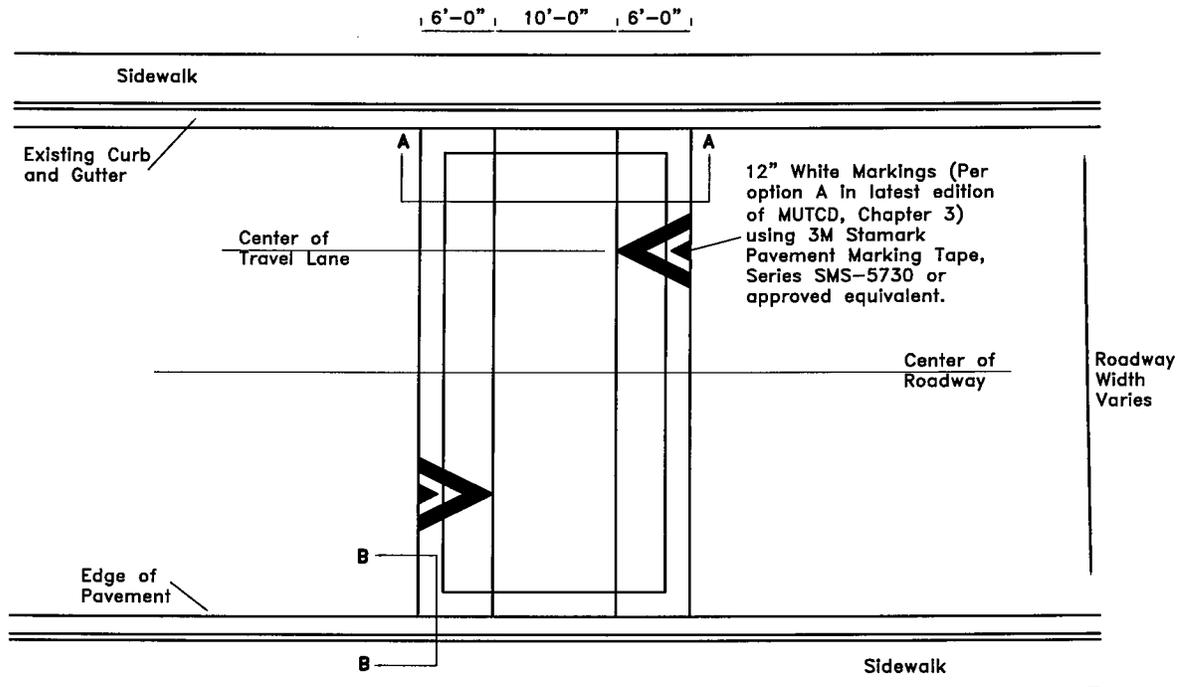
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# CITY OF PEORIA STANDARD DETAIL PE-210-2 SPEED TABLE

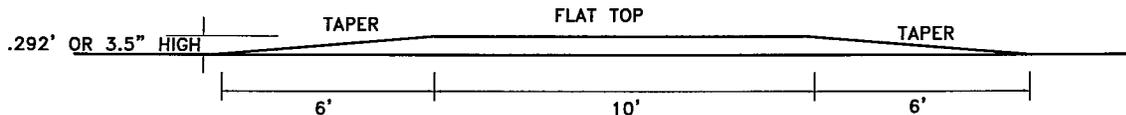


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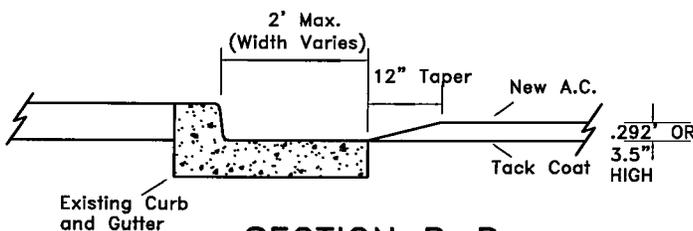
  
 CITY ENGINEER 8/21/13  
DATE



**PLAN VIEW**



**SECTION A-A**



**SECTION B-B**

**NOTES:**

1. Cross section shows approximate elevations for 3.5" speed table.
2. Speed tables shall not be placed over manholes, water valves, survey monuments, junction chambers, in conflict with driveways, or adjacent to fire hydrants.
3. Speed tables must be placed at locations approved and specified by the Public Works/Engineering Department.
4. Speed tables shall be constructed with an approved D1/2 Coarse hot mix, per City of Peoria standards. A tack coat shall be applied prior to application of pavement.
5. Contractor must provide verification of cross-section dimensions.
6. Contractor must properly compact tables to preclude excessive settlement.
7. The contractor shall provide a two year warranty on labor and material. Contractee should request contractor to warrant height to be at least 3.25" tall after 24 months.
8. Permanent striping shall be Thermoplastic Hot Tape or 3M STA-Mark Series SMS-5730 or approved equivalent.

**Important:**

To gain maximum effect, speed tables must be the full 3.5". Speed tables shall be 3.5" high with an allowable maximum tolerance of ± 0.25". Contractors must not exceed this height based on consideration for emergency and fire department vehicles. Because of this concern, any speed tables constructed over 3.75" must be corrected at the contractors expense.

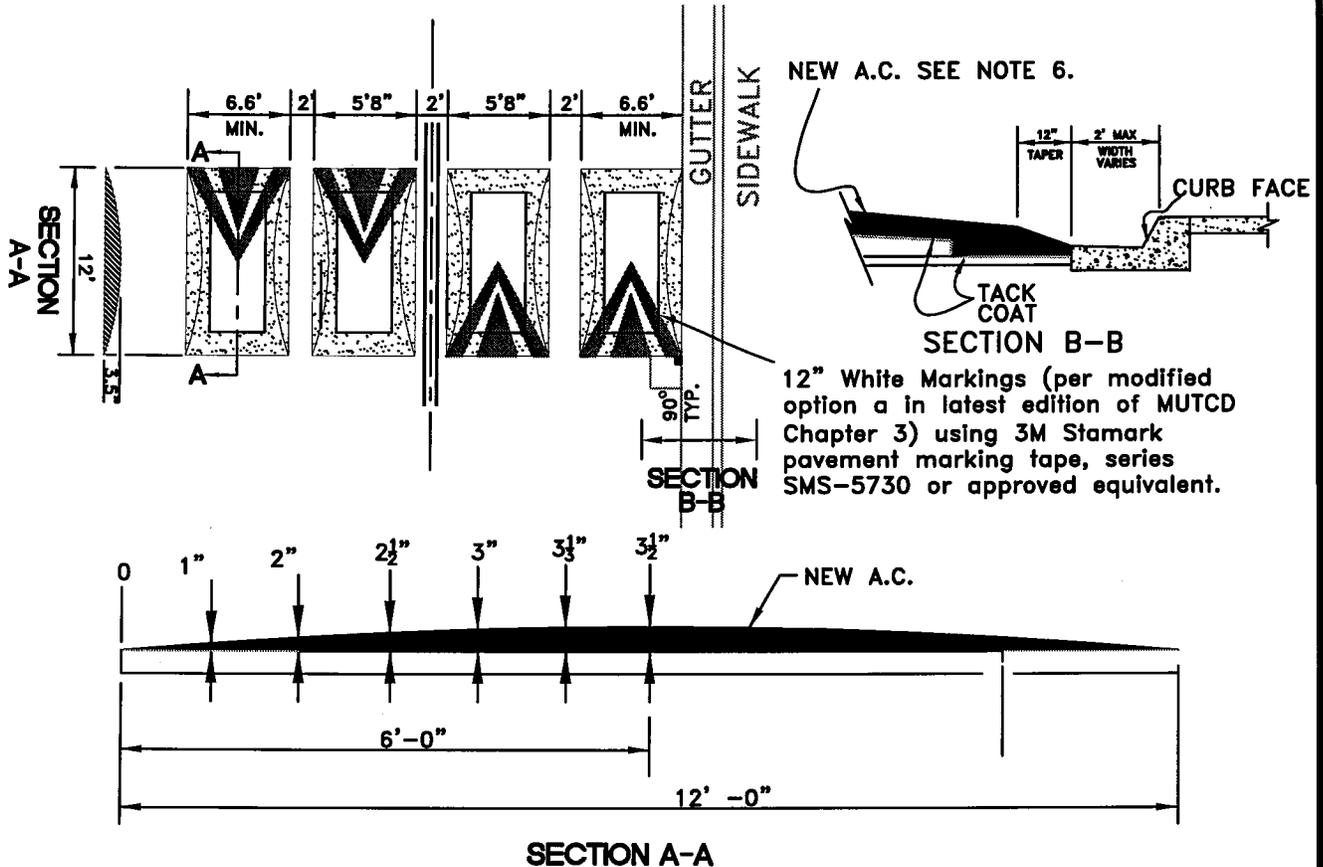
# CITY OF PEORIA STANDARD DETAIL PE-210-3A



APPROVALS:

CITY ENGINEER 5/21/13  
 DATE

## 12' SPEED CUSHION



NEW A.C. SEE NOTE 6.

12" White Markings (per modified option a in latest edition of MUTCD Chapter 3) using 3M Stamark pavement marking tape, series SMS-5730 or approved equivalent.

**NOTES:**

1. Details show approximate elevations for a speed cushion.
2. Speed cushions must be placed at locations approved and specified by the city of peoria engineering department.
3. Centerline stripe may not be in the center of the roadway, but if not striped, position cushions symmetrical to center of roadway.
4. Position speed cushions on straight sections of roadway.
5. Speed cushions shall not be placed over manholes, water valves, junction chambers, survey monuments, adjacent to fire hydrants or in conflict with driveways.
6. Cushions to be constructed with an approved  $d\frac{1}{2}$  coarse hot mix, per city of peoria standard or mag  $\frac{3}{8}$ " mix.
7. A tack coat shall be applied prior to application of asphalt.
8. Contractor shall provide verification of dimensions.
9. Contractor shall stripe the cushions as per attached pavement marking detail.

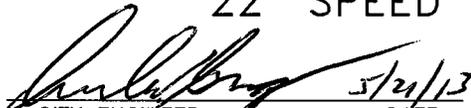
**IMPORTANT:**

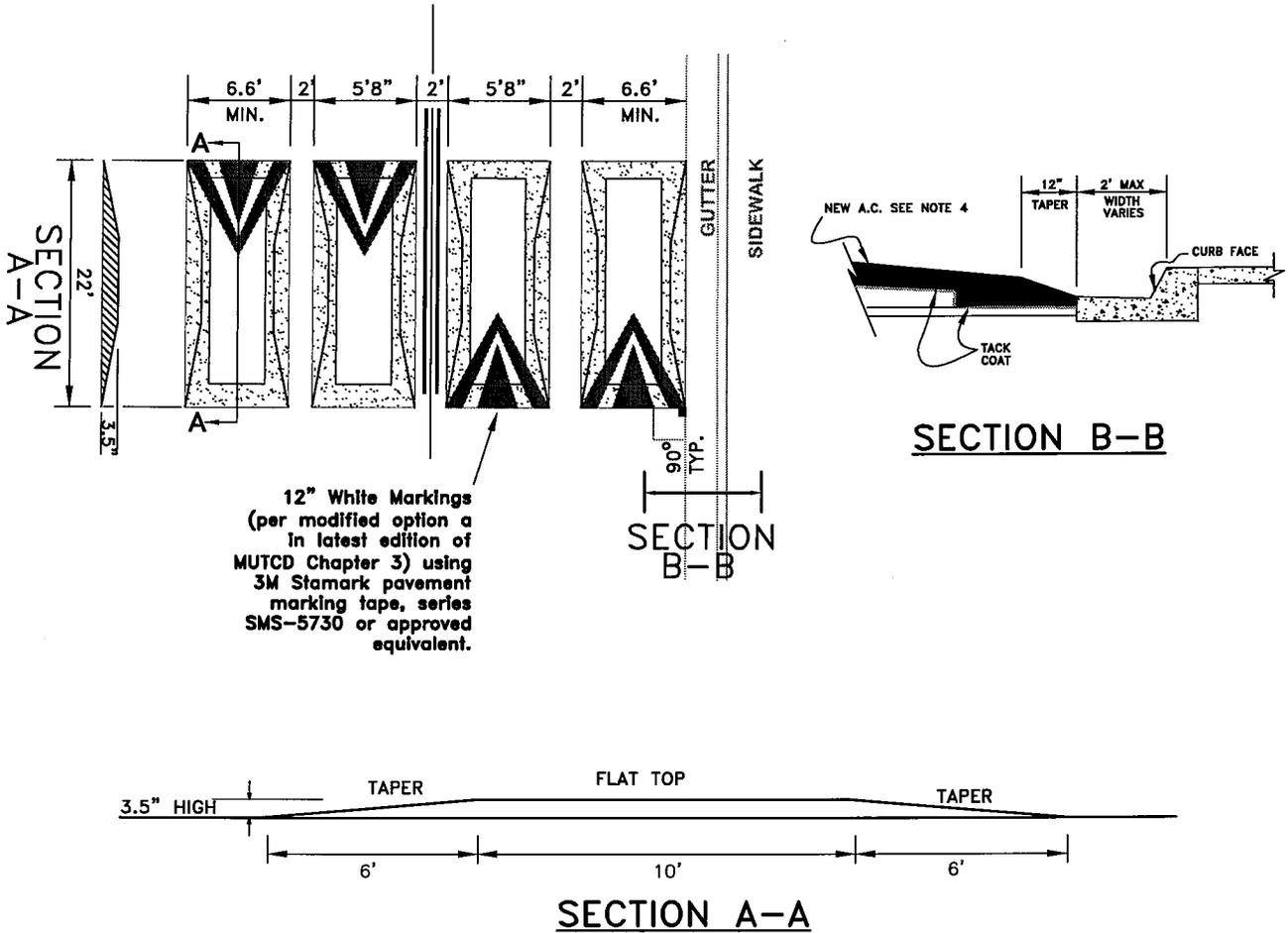
To gain maximum effect, Cushions must be constructed as per the shown details, with an allowable tolerance of + 0.25". Contractors must comply based on consideration for emergency and fire department vehicles. Because of this concern, any deviation from the shown dimensions must be corrected at the contractor's expense. The outer cushions must be extended to the edge of pavement with a minimum width being 6.6'.

# CITY OF PEORIA STANDARD DETAIL PE-210-3B 22' SPEED CUSHION



APPROVALS:

  
 CITY ENGINEER 5/21/13  
 DATE



**NOTES:**

1. Cross section shows approximate elevations for 3.5" modified speed table.
2. Modified speed tables shall not be placed over manholes, water valves, survey monuments, junction chambers, in conflict with driveways, or adjacent to fire hydrants.
3. Modified speed tables must be placed at locations approved and specified by the Public Works/Engineering Department.
4. Modified speed tables shall be constructed with an approved D $\frac{1}{2}$  Coarse hot mix, per City of Peoria standards OR MAG  $\frac{3}{8}$ " mix. A tack coat shall be applied prior to application of pavement.
5. Contractor must provide verification of cross-section dimensions.
6. Contractor must properly compact tables to preclude excessive settlement.
7. The contractor shall provide a two year warranty on labor and material. Contractee should request contractor to warrant height to be at least 3.25" tall after 24 months.
8. Permanent striping shall be Thermoplastic Hot Tape or 3M STA-Mark Series SMS-5730 or approved equivalent.

**Important:**

To gain maximum effect, modified speed tables must be the full 3.5". Modified speed tables shall be 3.5" high with an allowable maximum tolerance of  $\pm 0.25$ ". Contractors must not exceed this height based on consideration for emergency and fire department vehicles. Because of this concern, any modified speed tables constructed over 3.75" must be corrected at the contractors expense.

# CITY OF PEORIA

## STANDARD DETAIL PE-210-3C

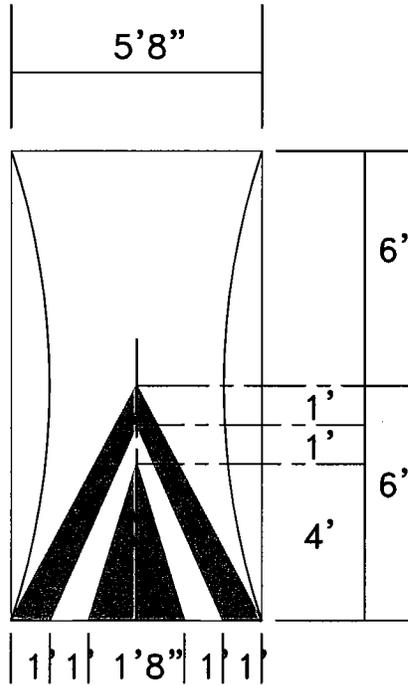
### SPEED CUSHION PAVEMENT MARKINGS



APPROVALS:

  
 CITY ENGINEER

4/14/09  
 DATE



DIRECTION OF TRAFFIC

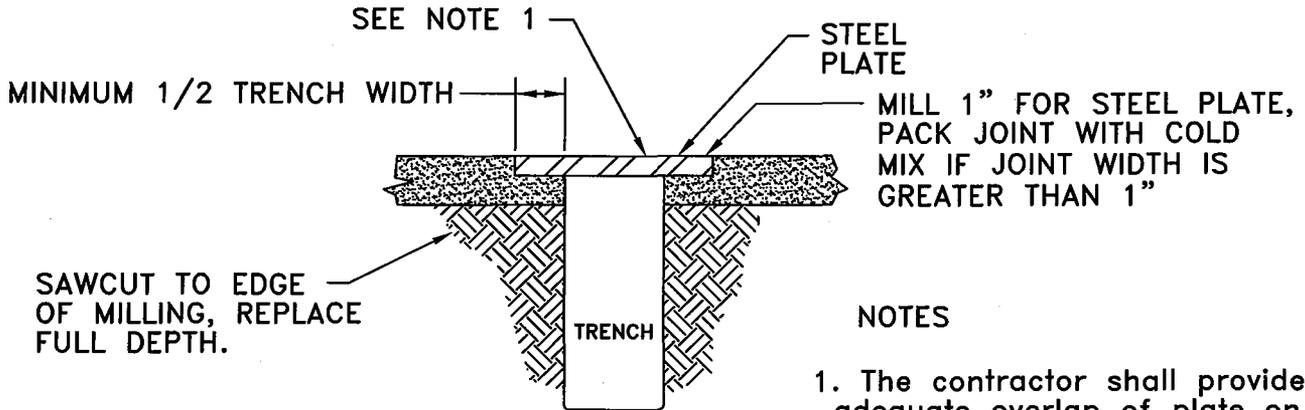
**NOTES**

1. AFTER INSTALLATION, CONTRACTOR SHALL TEMPORARILY STRIPE THE CUSHIONS WITH WATER BASED PAINT PER ADOT 7.08 SPECS.
2. CONTRACTOR SHALL PERMANENTLY STRIPE THE SPEED CUSHIONS WITH 12" WHITE MARKINGS 30 DAYS AFTER INSTALLATION.
3. PERMANENT STRIPING SHALL BE THERMOPLASTIC HOT TAPE OR 3M STA-MARK SERIES SMS-5730 OR APPROVED EQUIVALENT.
4. APPLY 3M CONTACT CEMENT, E-44 OR APPROVED EQUIVALENT TO THE ROADWAY FOR STRIPING INSTALLATION.

# CITY OF PEORIA STANDARD DETAIL PE-211 TRENCH PLATING



APPROVALS: Donald Macf 7/22/07  
CITY ENGINEER DATE

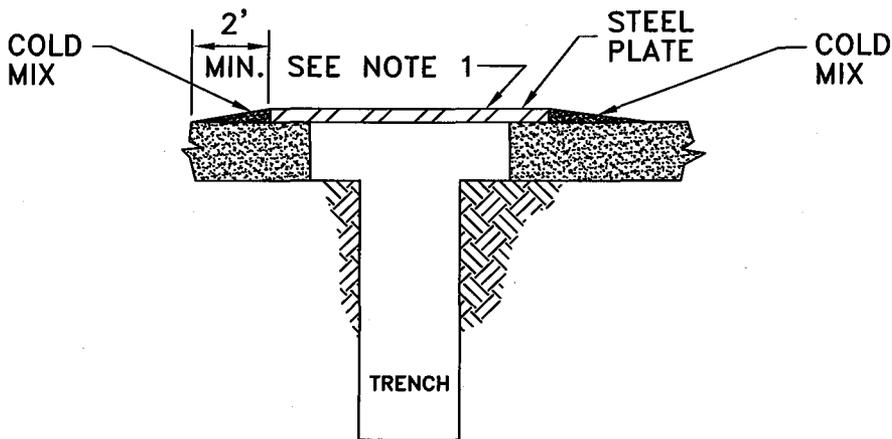


## TYPE "A" PLATING

CITY POSTED SPEEDS OF  
GREATER THAN 25 MPH  
OR BUS & TRUCK ROUTE

### NOTES

1. The contractor shall provide adequate overlap of plate on asphalt to assure no slippage of plate and no collapsing of trench.
2. "Posted Speed" does not include temporary construction signing.



## TYPE "B" PLATING

CITY POSTED SPEEDS OF  
25 MPH AND UNDER

CITY OF PEORIA  
STANDARD DETAIL PE-241-1  
SIDEWALK RAMP NOTES



APPROVALS:

  
ENGINEERING DIRECTOR

6/24/15  
DATE

  
PW-UTILITIES DIRECTOR

6/29/15  
DATE

NOTES:

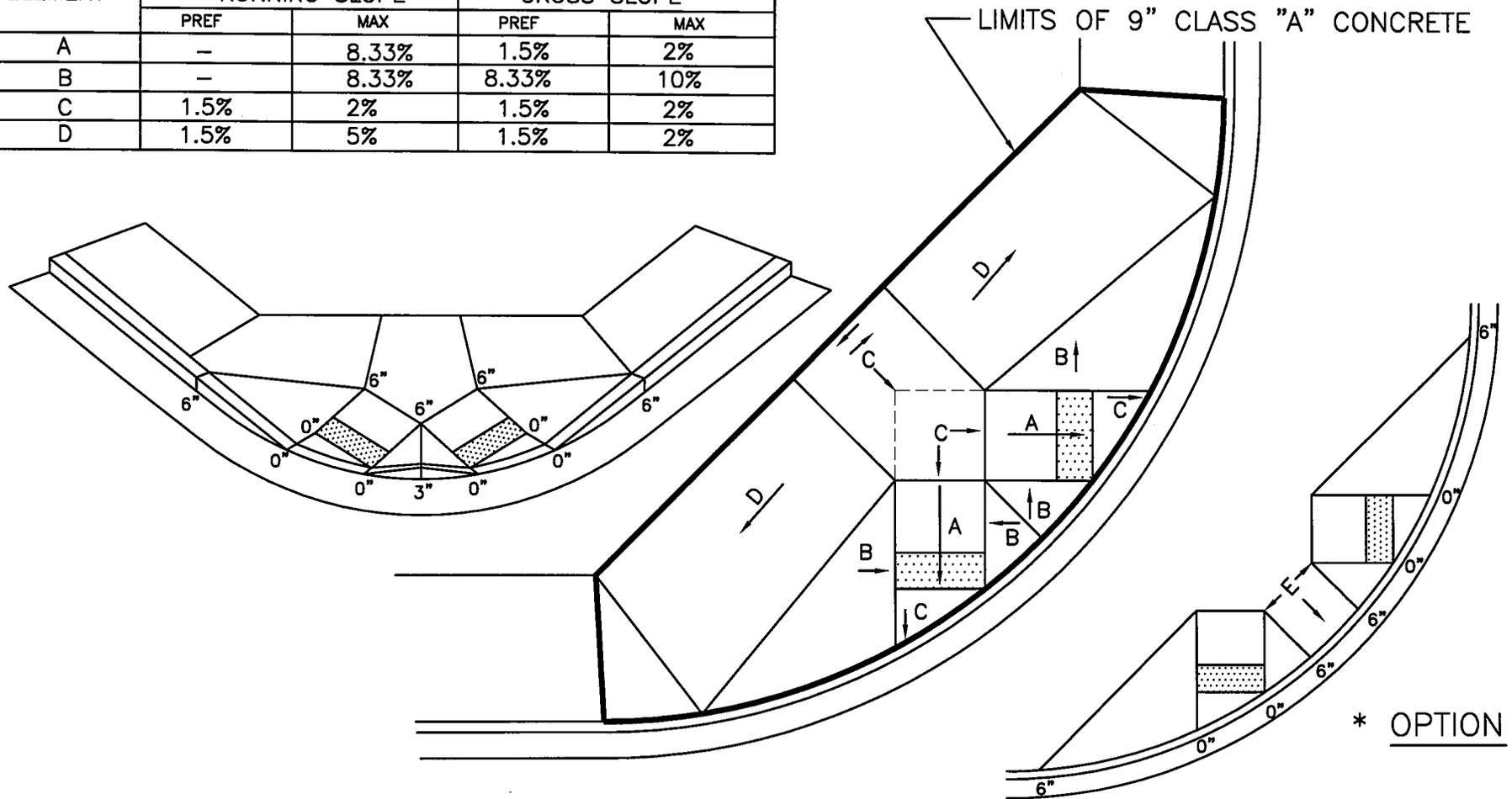
1. CONTROL ELEVATIONS SHOWN ARE IN RELATION TO THE GUTTER AND ARE LOCATED RADIALLY. GUTTER ELEVATION = 0". RAMP CURBS SHALL BE FLUSH WITH GUTTER PAN WHERE INDICATED AT 0" AS WELL.
2. CONCRETE CURB AND GUTTER AT CURB RETURNS WITH RAMPS SHALL BE M.A.G. CLASS A. CONCRETE SIDEWALK AND RAMPS AT CURB RETURNS SHALL BE M.A.G. CLASS A. SUBGRADE PREPARATION SHALL BE PER MAG SPECIFICATIONS.
3. RAMP CURBS MAY BE POURED MONOLITHIC WITH A CONSTRUCTION JOINT.
4. EXPANSION JOINT FILLER SHALL BE 1/2" BITUMINOUS TYPE PREFORMED EXPANSION JOINT FILLER A.S.T.M. D-1751, INSTALLED AS SHOWN ON MAG DETAIL 230.
5. RAMP LANDINGS SHALL BE 8'-10' FOR MULTI-USE PATH CROSSINGS.
6. CONCRETE SHALL BE 9" THICK FOR ALL RAMPS ON ONE OR MORE ARTERIAL OR COLLECTOR STREETS (OR AT OTHER LOCATIONS WHERE INDUSTRIAL/TRUCK TRAFFIC IS ANTICIPATED) AS INDICATED ON EACH RAMP DETAIL. FOR RAMPS ON LOCAL STREETS, CONCRETE SHALL BE 5" THICK.
7. DIRECTIONAL RAMPS SHALL BE INSTALLED FOR EACH MARKED OR UNMARKED CROSSWALK AT ALL INTERSECTIONS, UNLESS OTHERWISE APPROVED BY THE CITY TRAFFIC ENGINEER.
8. TRUNCATED DOMES SHOULD ALIGN ON BOTH SIDES OF THE CROSSING AND RAMPS MAY BE ROTATED TO ALIGN PROPERLY IF NECESSARY.
9. SOME MODIFICATION OF THE RAMP DETAILS WILL BE NECESSARY TO ACCOMMODATE CITY OF PEORIA SIDEWALK WIDTH REQUIREMENTS OR TO ALIGN RAMPS AND TRUNCATED DOMES.
10. TRUNCATED DOMES ARE TO BE StrongGo OR PREVIOUSLY APPROVED EQUAL AND TERRA COTTA IN COLOR.
11. TRAFFIC SIGNAL POLE FOUNDATIONS SHOULD BE FLUSH WITH SIDEWALK/RAMP LANDINGS WHEN POSSIBLE.

CITY OF PEORIA  
 STANDARD DETAIL PE-241-2  
 STANDARD CURB RAMP (SLOPES)



APPROVALS:  5/20/13  
 CITY ENGINEER DATE

ELEMENT	RUNNING SLOPE		CROSS SLOPE	
	PREF	MAX	PREF	MAX
A	—	8.33%	1.5%	2%
B	—	8.33%	8.33%	10%
C	1.5%	2%	1.5%	2%
D	1.5%	5%	1.5%	2%



\* POSITION OF EACH RAMP MAY SHIFT TO ALIGN WITH RAMP ON OPPOSITE SIDE

# CITY OF PEORIA

## STANDARD DETAIL PE-241-3

### STANDARD DUAL CURB RAMP (DIMENSIONS)

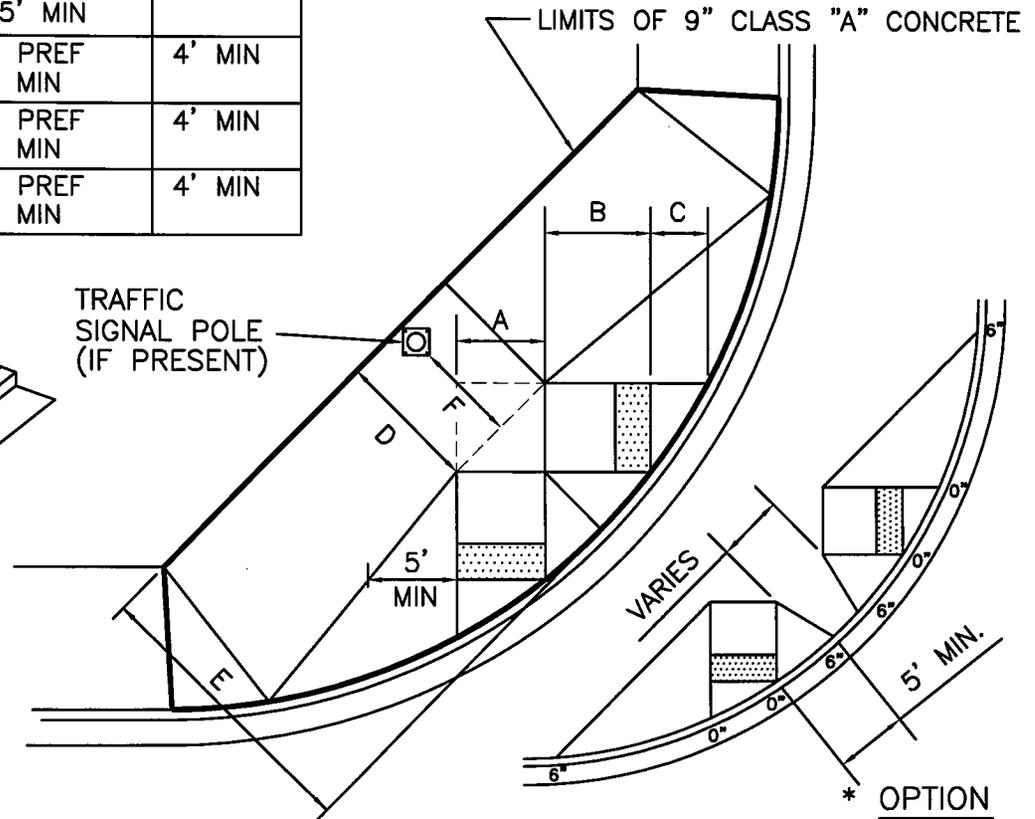
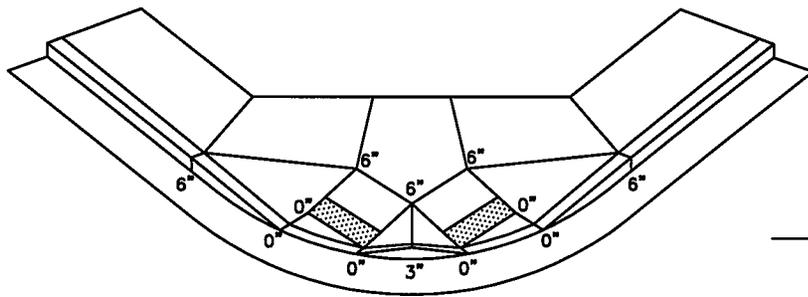


APPROVALS:

  
 CITY ENGINEER

5/21/13  
 DATE

DIMENSION TABLE						
Radius (ft)	A (ft)	B (ft)	C (ft)	D (ft)	E (ft) BC-BW (APPROX)	F (ft)
20	5' PREF 4' MIN	6' MIN	5' MAX	6' PREF 4' MIN	13.5' PREF 11.5' MIN	4' MIN
25	5' PREF 4' MIN	6' MIN	5' MAX	6' PREF 5' MIN	14' PREF 12' MIN	4' MIN
30	5' PREF 4' MIN	6' MIN	5' MAX	8' PREF 5' MIN	16' PREF 13' MIN	4' MIN
35	5' PREF 4' MIN	6' MIN	5' MAX	8' PREF 5' MIN	16' PREF 13' MIN	4' MIN



\* POSITION OF EACH RAMP MAY SHIFT TO ALIGN WITH RAMP ON OPPOSITE SIDE

CITY OF PEORIA  
 STANDARD DETAIL PE-241-4  
 STANDARD DUAL CURB RAMP (DIMENSIONS)



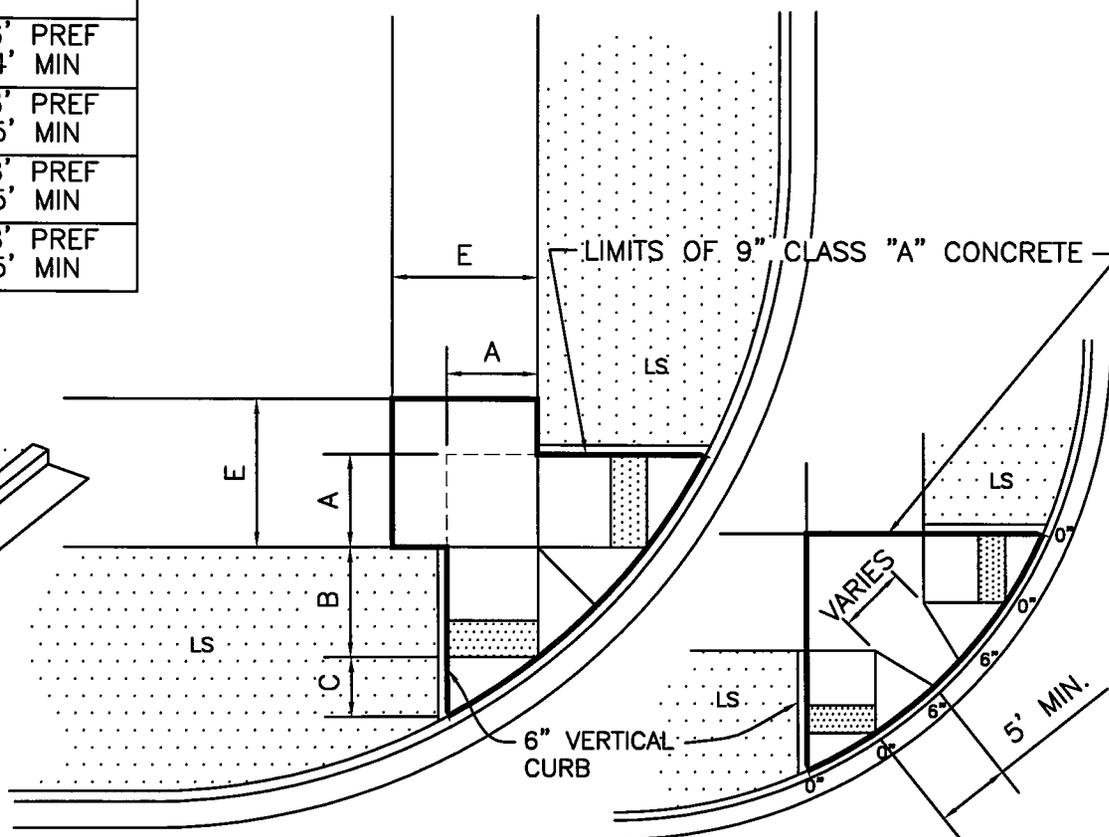
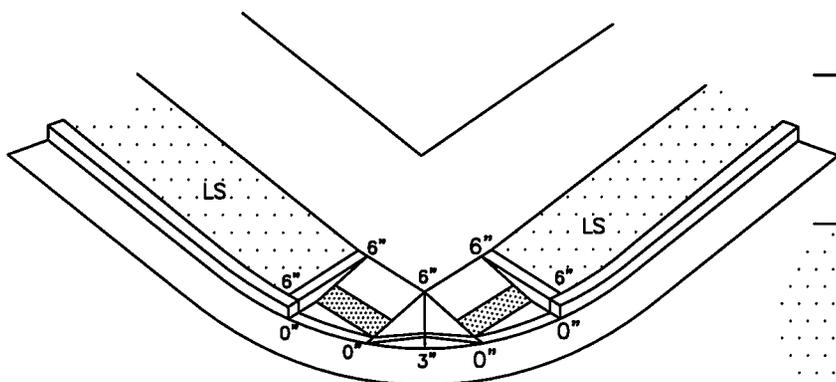
APPROVALS:

*[Signature]*  
 CITY ENGINEER

*5/24/13*  
 DATE

DIMENSION TABLE				
Radius(FC)	A(ft)	B(ft)	C(ft)	E(ft)
20	5' PREF 4' MIN	6' MIN	5' MAX	6' PREF 4' MIN
25	5' PREF 4' MIN	6' MIN	5' MAX	6' PREF 5' MIN
30	5' PREF 4' MIN	6' MIN	5' MAX	8' PREF 5' MIN
35	5' PREF 4' MIN	6' MIN	5' MAX	8' PREF 5' MIN

LS = LANDSCAPING



\* POSITION OF EACH RAMP MAY SHIFT TO ALIGN WITH RAMP ON OPPOSITE SIDE.

\* OPTION

CITY OF PEORIA  
 STANDARD DETAIL PE-241-5A  
 STANDARD SINGLE CURB RAMP (DIMENSIONS)



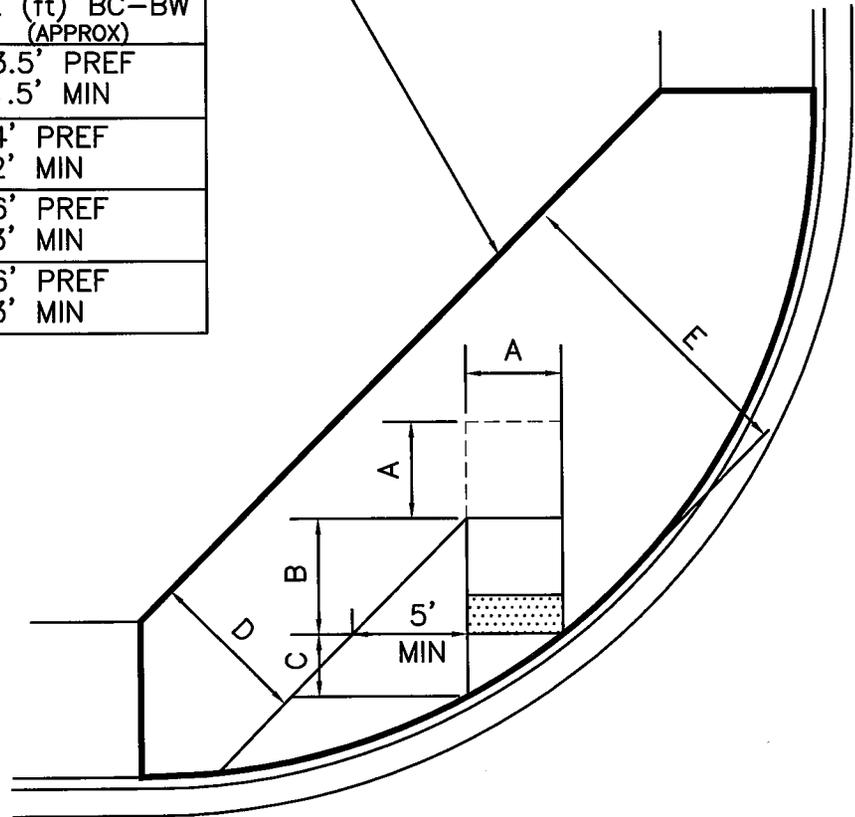
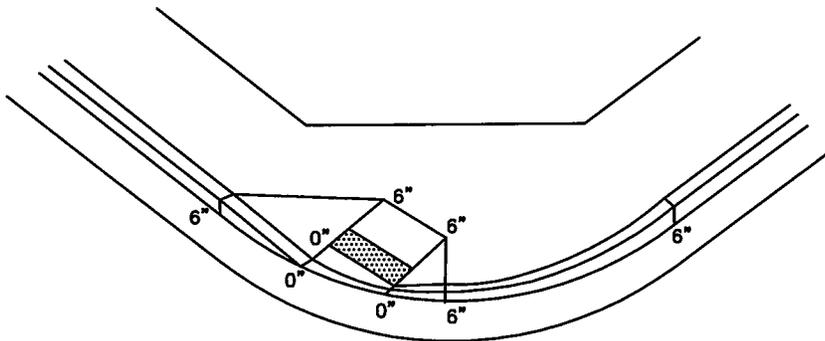
APPROVALS:

*[Signature]*  
 CITY ENGINEER

5/21/13  
 DATE

DIMENSION TABLE					
Radius (ft)	A (ft)	B (ft)	C (ft)	D (ft)	E (ft) BC-BW (APPROX)
20	5' PREF 4' MIN	6' MIN	5' MAX	6' PREF 4' MIN	13.5' PREF 11.5' MIN
25	5' PREF 4' MIN	6' MIN	5' MAX	6' PREF 5' MIN	14' PREF 12' MIN
30	5' PREF 4' MIN	6' MIN	5' MAX	8' PREF 5' MIN	16' PREF 13' MIN
35	5' PREF 4' MIN	6' MIN	5' MAX	8' PREF 5' MIN	16' PREF 13' MIN

LIMITS OF 9" CLASS "A" CONCRETE



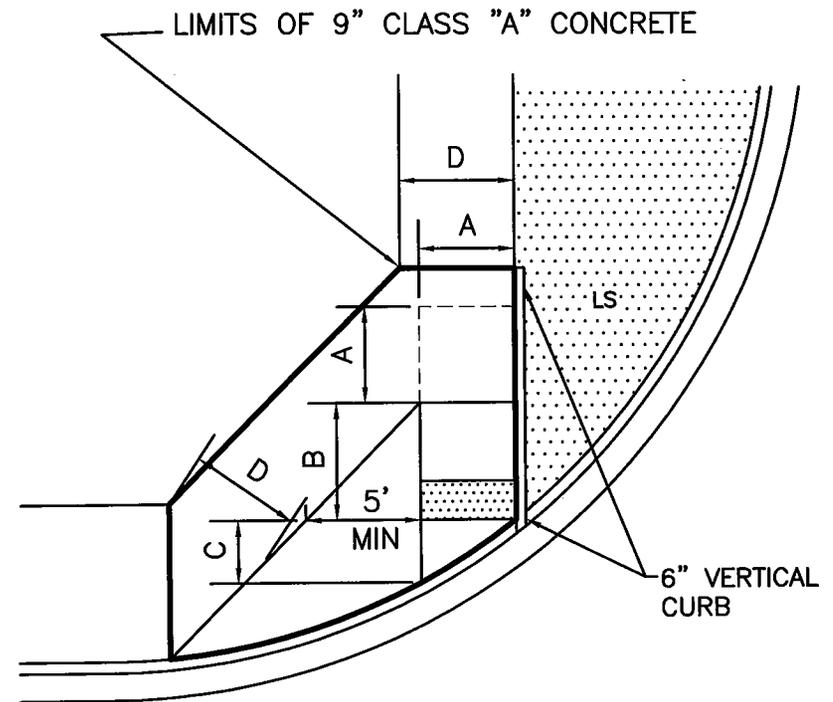
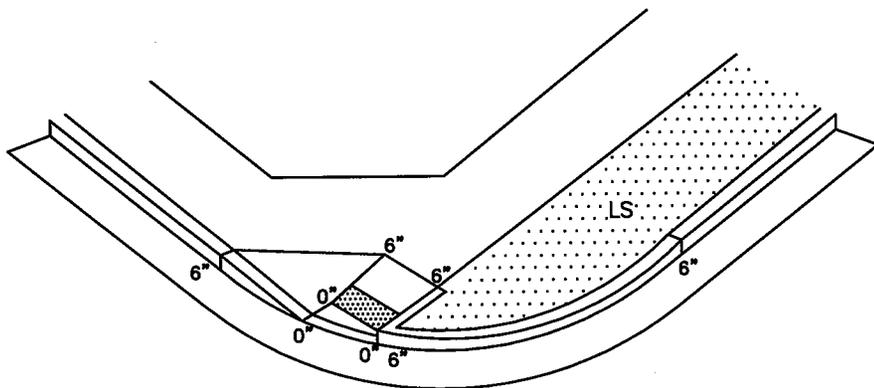
CITY OF PEORIA  
 STANDARD DETAIL PE-241-5B  
 STANDARD SINGLE CURB RAMP (DIMENSIONS)



APPROVALS:

*[Signature]* 5/21/13  
 CITY ENGINEER DATE

DIMENSION TABLE				
Radius (FC)	A (ft)	B (ft)	C (ft)	D (ft)
20	5' PREF 4' MIN	6' MIN	5' MAX	6' PREF 4' MIN
25	5' PREF 4' MIN	6' MIN	5' MAX	6' PREF 5' MIN
30	5' PREF 4' MIN	6' MIN	5' MAX	8' PREF 5' MIN
35	5' PREF 4' MIN	6' MIN	5' MAX	8' PREF 5' MIN



CITY OF PEORIA  
 STANDARD DETAIL PE-241-5C  
 STANDARD SINGLE CURB RAMP (DIMENSIONS)

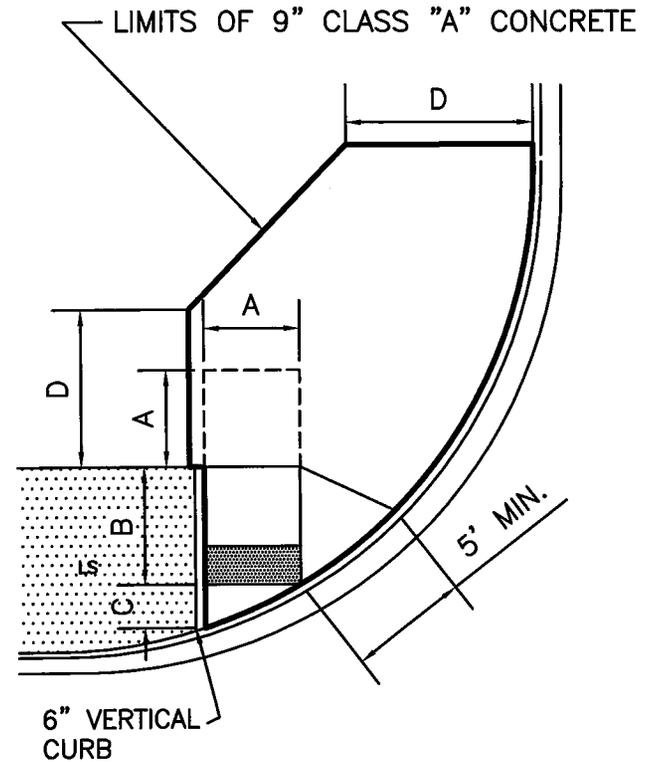
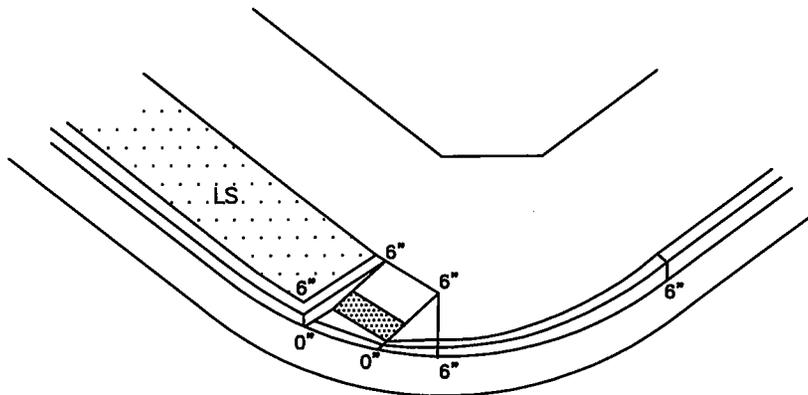


APPROVALS:

*[Signature]*  
 CITY ENGINEER

*5/21/13*  
 DATE

DIMENSION TABLE				
Radius (FC)	A (ft)	B (ft)	C (ft)	D (ft)
20	5' PREF 4' MIN	6' MIN	5' MAX	6' PREF 5' MIN
25	5' PREF 4' MIN	6' MIN	5' MAX	6' PREF 5' MIN
30	5' PREF 4' MIN	6' MIN	5' MAX	8' PREF 5' MIN
35	5' PREF 4' MIN	6' MIN	5' MAX	8' PREF 5' MIN



CITY OF PEORIA  
 STANDARD DETAIL PE-241-6  
 STANDARD SINGLE CURB RAMP (DIMENSIONS)

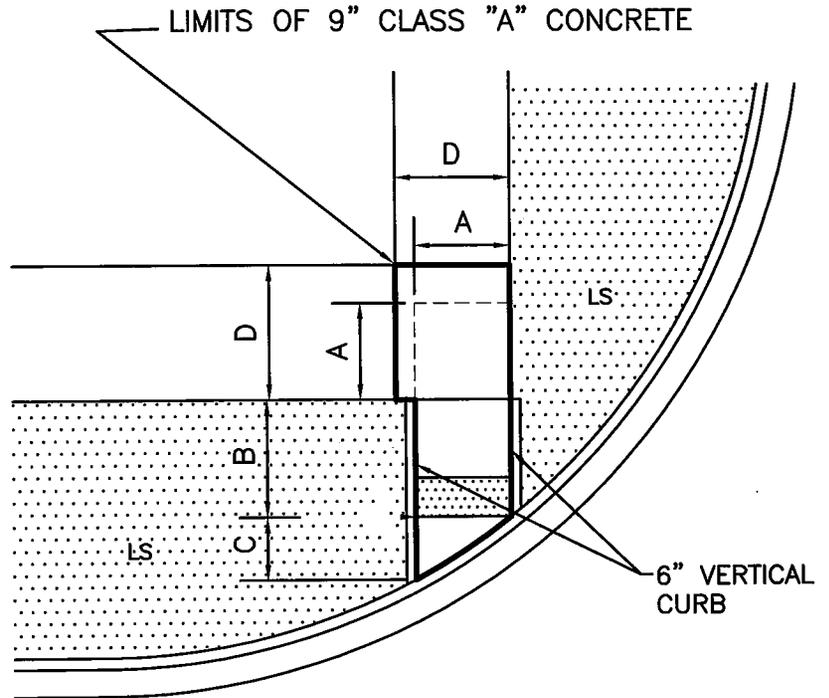
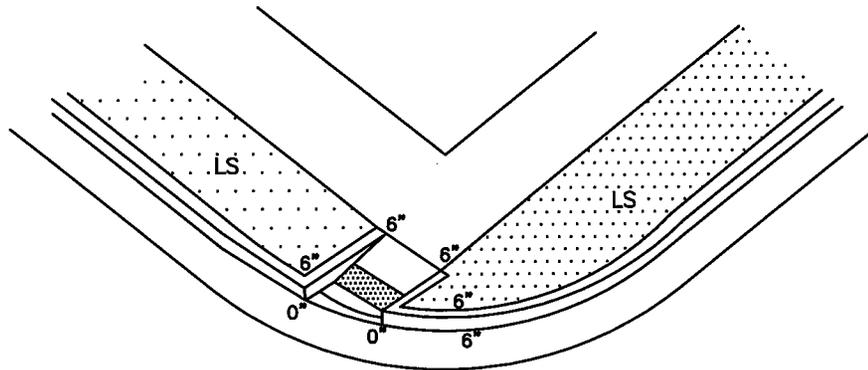


APPROVALS:

*[Signature]*  
 CITY ENGINEER

5/21/13  
 DATE

DIMENSION TABLE				
Radius (ft)	A (ft)	B (ft)	C (ft)	D (ft)
20	5' PREF 4' MIN	6' MIN	5' MAX	6' PREF 5' MIN
25	5' PREF 4' MIN	6' MIN	5' MAX	6' PREF 5' MIN
30	5' PREF 4' MIN	6' MIN	5' MAX	8' PREF 5' MIN
35	5' PREF 4' MIN	6' MIN	5' MAX	8' PREF 5' MIN



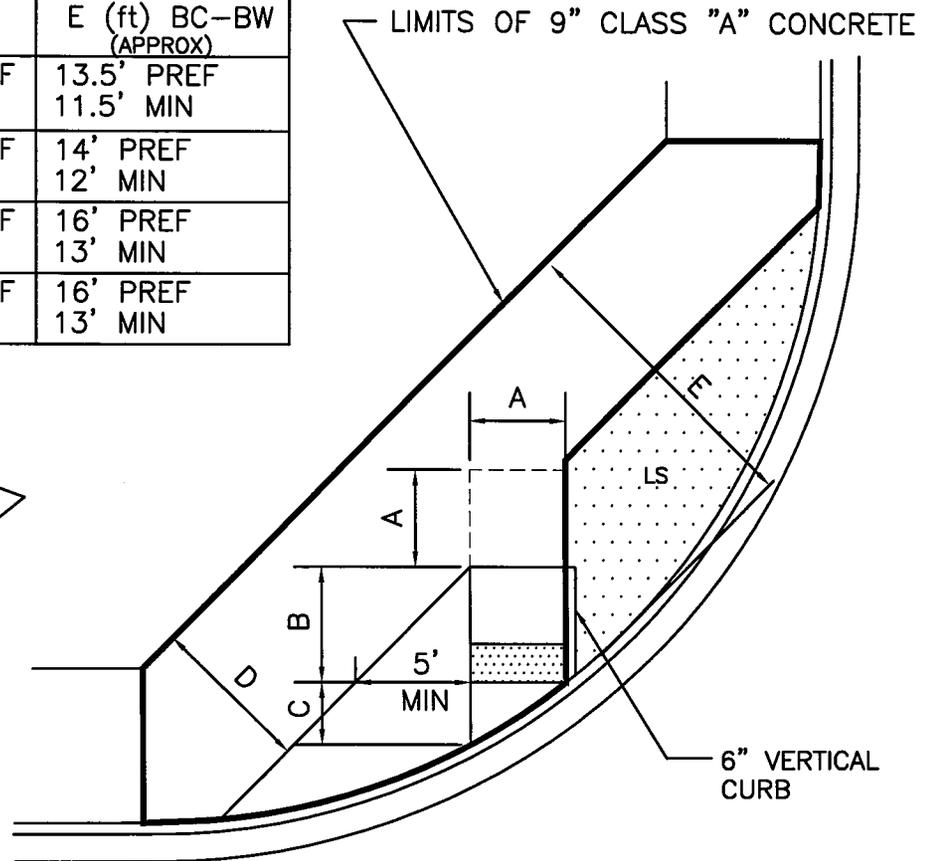
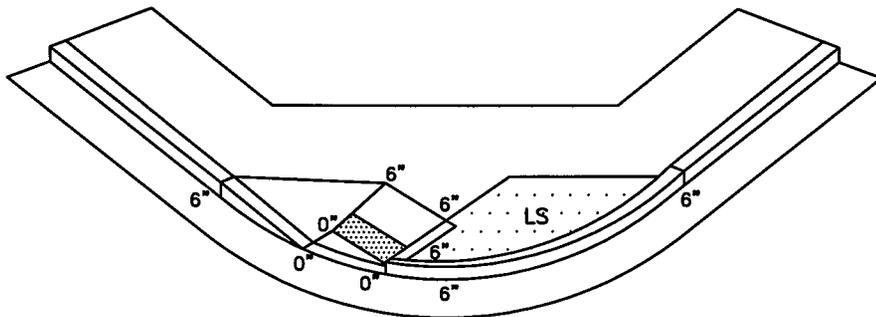
CITY OF PEORIA  
 STANDARD DETAIL PE-241-7  
 STANDARD SINGLE CURB RAMP (DIMENSIONS)



APPROVALS: *[Signature]* 5/21/13  
 CITY ENGINEER DATE

DIMENSION TABLE					
Radius (FC)	A (ft)	B (ft)	C (ft)	D (ft)	E (ft) BC-BW (APPROX)
20	5' PREF 4' MIN	6' MIN	5' MAX	6' PREF 4' MIN	13.5' PREF 11.5' MIN
25	5' PREF 4' MIN	6' MIN	5' MAX	6' PREF 5' MIN	14' PREF 12' MIN
30	5' PREF 4' MIN	6' MIN	5' MAX	8' PREF 5' MIN	16' PREF 13' MIN
35	5' PREF 4' MIN	6' MIN	5' MAX	8' PREF 5' MIN	16' PREF 13' MIN

LS = LANDSCAPING



CITY OF PEORIA  
 STANDARD DETAIL PE-241-8  
 COMPACT RAMP (SLOPES)

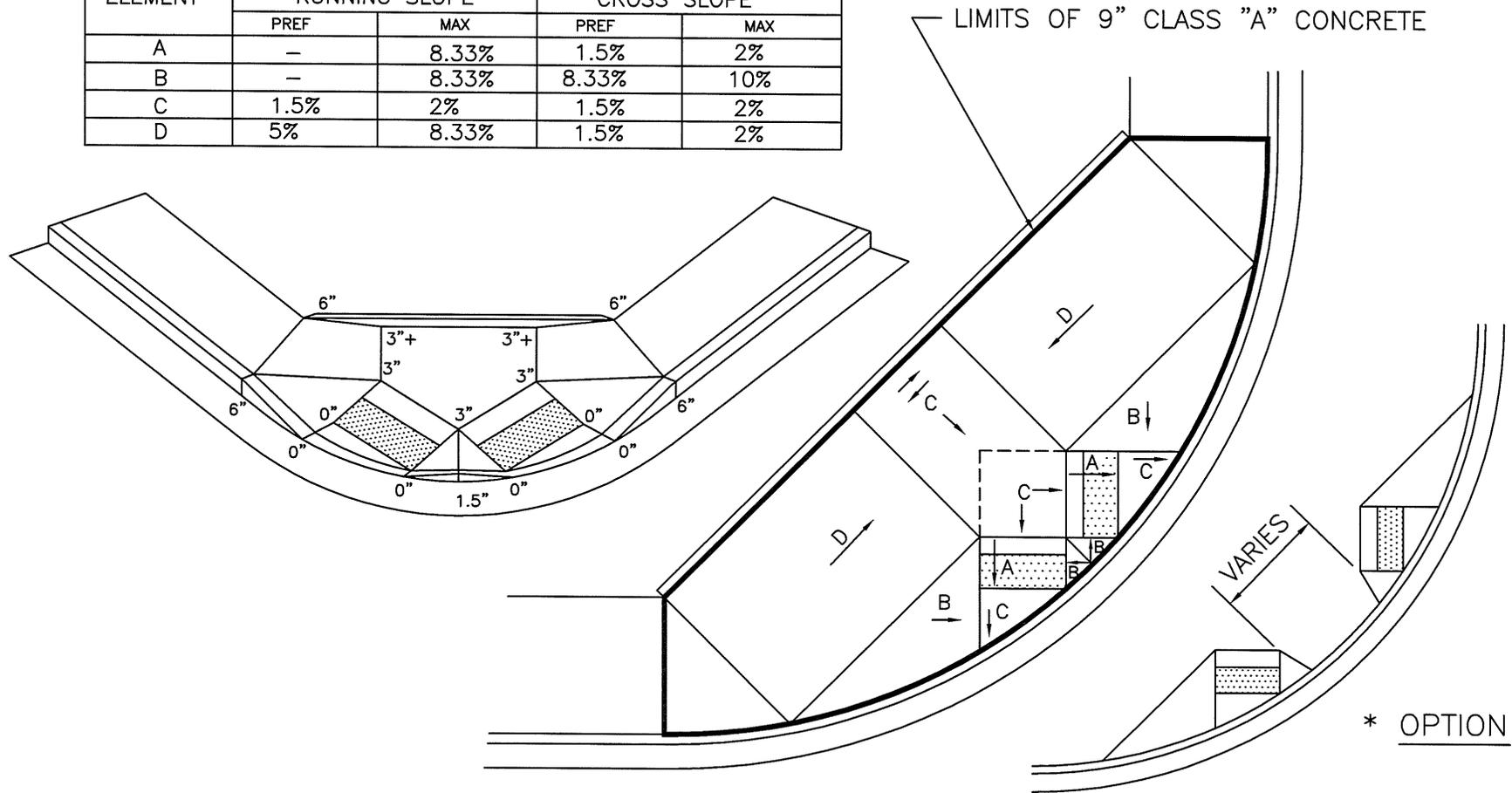


APPROVALS:

*[Signature]*  
 ENGINEERING DIRECTOR      1/14/15  
 DATE

*[Signature]* 0115-2015  
 PW-UTILITIES DIRECTOR      DATE

ELEMENT	RUNNING SLOPE		CROSS SLOPE	
	PREF	MAX	PREF	MAX
A	—	8.33%	1.5%	2%
B	—	8.33%	8.33%	10%
C	1.5%	2%	1.5%	2%
D	5%	8.33%	1.5%	2%



\* POSITION OF EACH RAMP MAY SHIFT TO ALIGN WITH RAMP ON OPPOSITE SIDE

# CITY OF PEORIA STANDARD DETAIL PE-241-9 COMPACT DUAL CURB RAMP (DIMENSIONS)

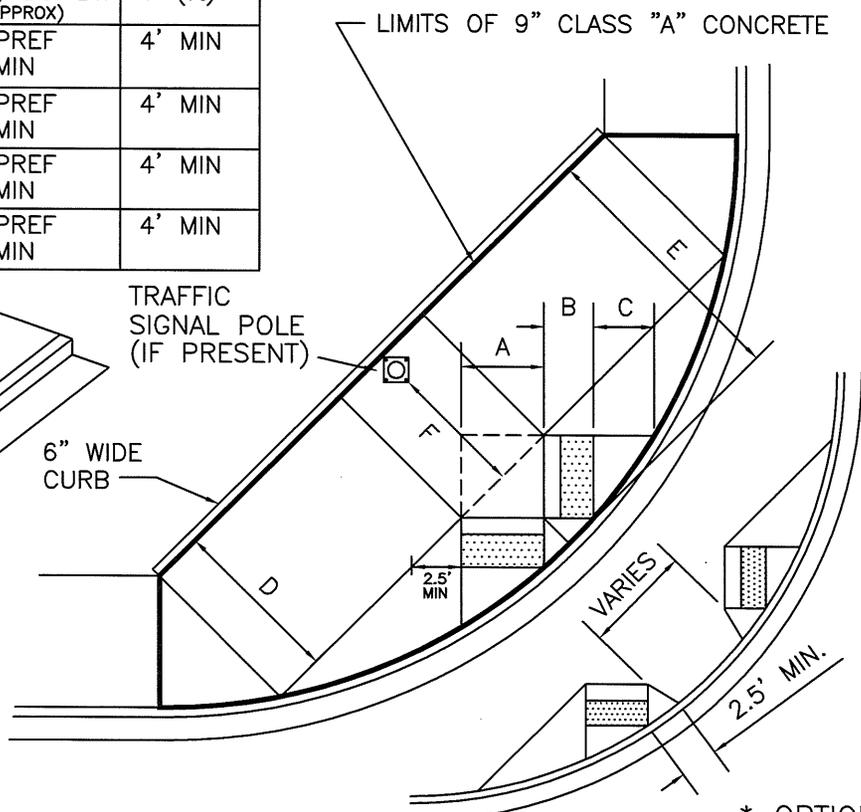
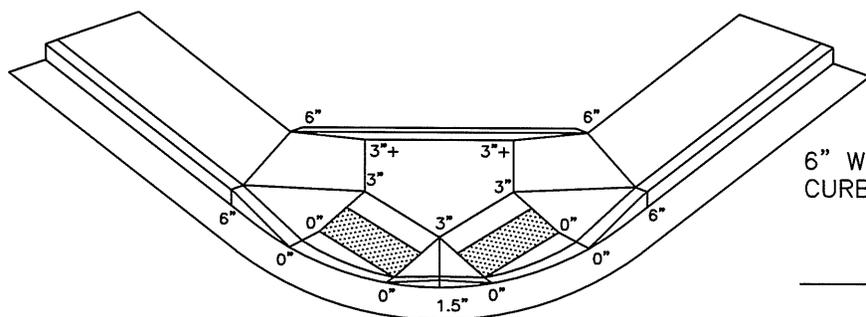


APPROVALS:

*[Signature]*  
ENGINEERING DIRECTOR  
1/14/15  
DATE

*[Signature]*  
PW-UTILITIES DIRECTOR  
01-15-2015  
DATE

DIMENSION TABLE						
Radius (ft)	A (ft)	B (ft)	C (ft)	D (ft)	E (ft) BC-BW (APPROX)	F (ft)
20	5' PREF 4' MIN	3' MIN	5' MAX	6' PREF 4' MIN	12' PREF 10' MIN	4' MIN
25	5' PREF 4' MIN	3' MIN	5' MAX	6' PREF 5' MIN	12' PREF 11' MIN	4' MIN
30	5' PREF 4' MIN	3' MIN	5' MAX	8' PREF 5' MIN	14' PREF 11' MIN	4' MIN
35	5' PREF 4' MIN	3' MIN	5' MAX	8' PREF 5' MIN	14' PREF 11' MIN	4' MIN



\* POSITION OF EACH RAMP MAY SHIFT TO ALIGN WITH RAMP ON OPPOSITE SIDE

\* OPTION

CITY OF PEORIA  
 STANDARD DETAIL PE-241-10  
 COMPACT SINGLE CURB RAMP (SLOPES)

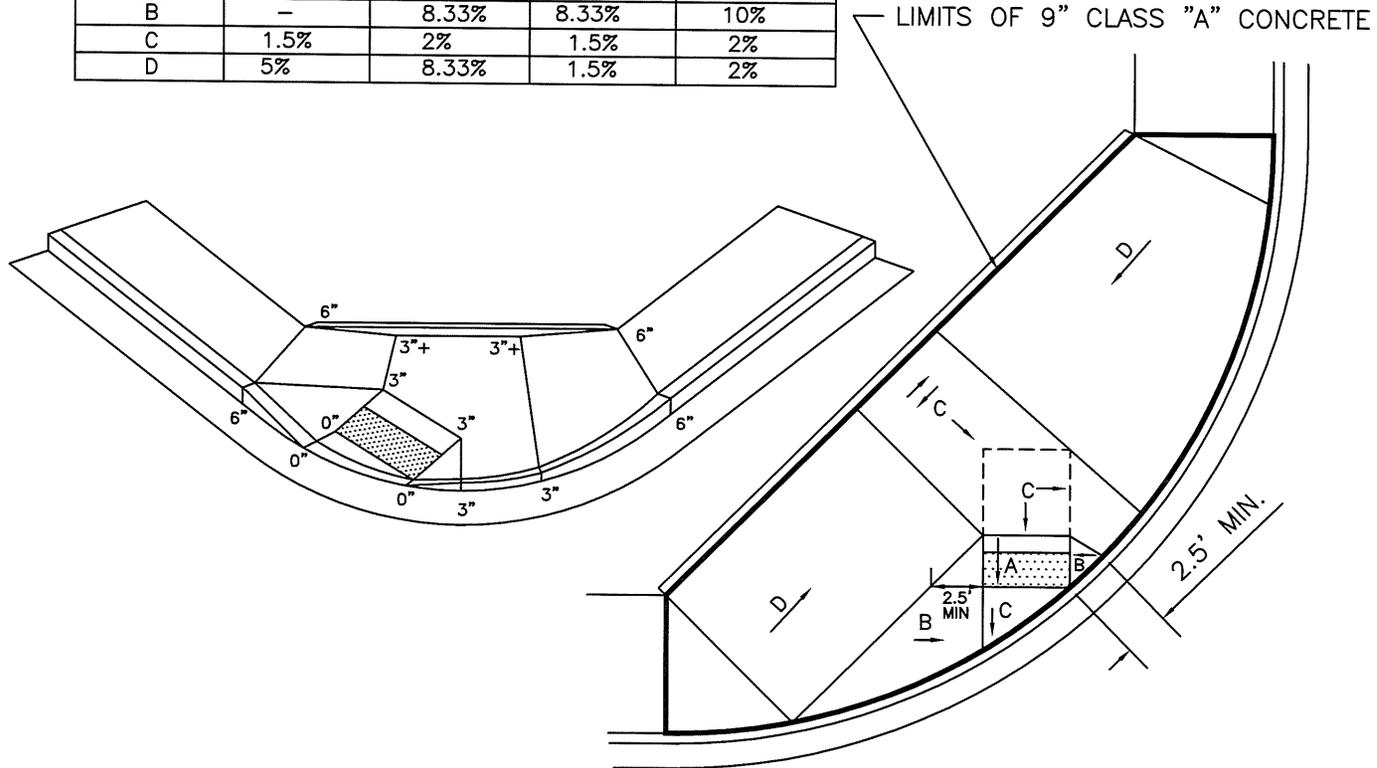


APPROVALS:

*[Signature]*  
 ENGINEERING DIRECTOR      1/14/15  
 DATE

*[Signature]*  
 PW-UTILITIES DIRECTOR      01-15-2015  
 DATE

ELEMENT	RUNNING SLOPE		CROSS SLOPE	
	PREF	MAX	PREF	MAX
A	—	8.33%	1.5%	2%
B	—	8.33%	8.33%	10%
C	1.5%	2%	1.5%	2%
D	5%	8.33%	1.5%	2%



CITY OF PEORIA  
 STANDARD DETAIL PE-241-11  
 COMPACT SINGLE CURB RAMP (DIMENSIONS)

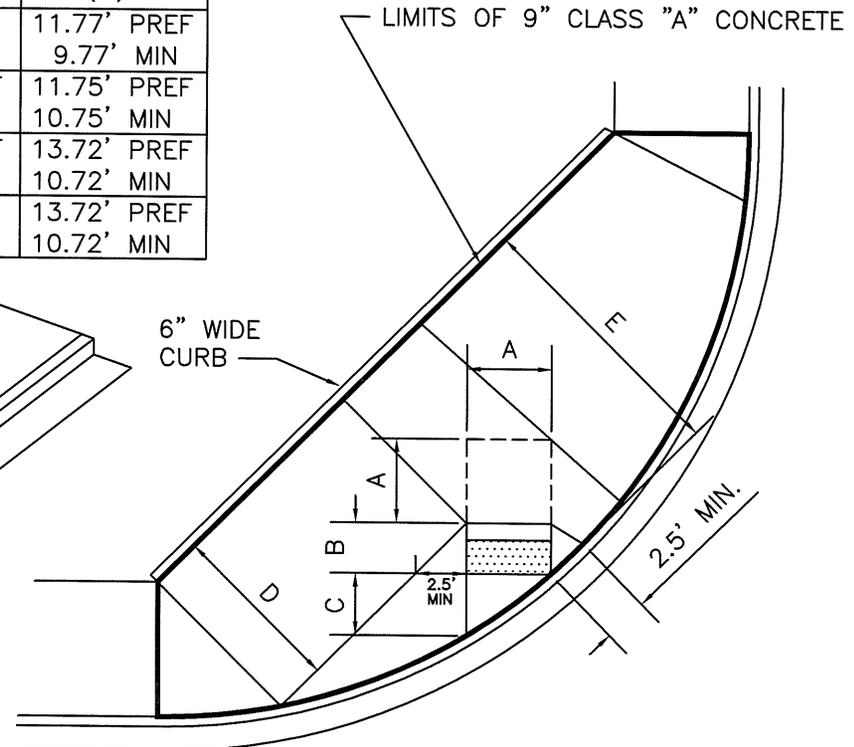
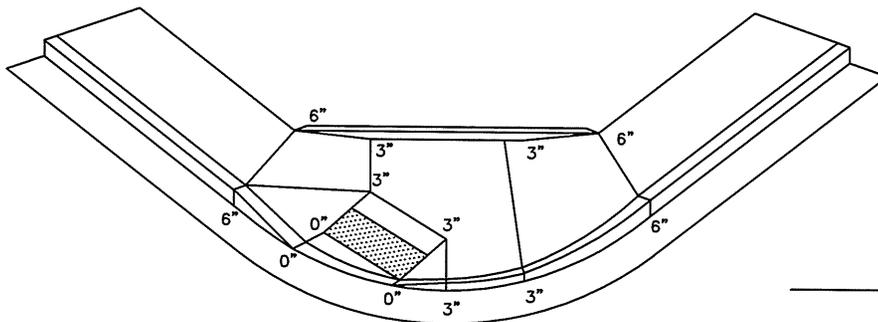


APPROVALS:

*[Signature]*  
 ENGINEERING DIRECTOR      1/14/15  
 DATE

*[Signature]*  
 PW-UTILITIES DIRECTOR      01-15-2015  
 DATE

DIMENSION TABLE					
Radius(FC)	A(ft)	B(ft)	C(ft)	D(ft)	E(ft) B.C.
20	4'	3' MIN	0' MIN 5' MAX	6' PREF 4' MIN	11.77' PREF 9.77' MIN
25	5'	3' MIN	0' MIN 5' MAX	6' PREF 5' MIN	11.75' PREF 10.75' MIN
30	5'	3' MIN	0' MIN 5' MAX	8' PREF 5' MIN	13.72' PREF 10.72' MIN
35	5'	3' MIN	0' MIN 5' MAX	8' PREF 5' MIN	13.72' PREF 10.72' MIN



CITY OF PEORIA  
 STANDARD DETAIL PE-241-12  
 COMPACT DUAL CURB RAMP (DIMENSIONS)  
 FOR STREETS WITH 4" CURB

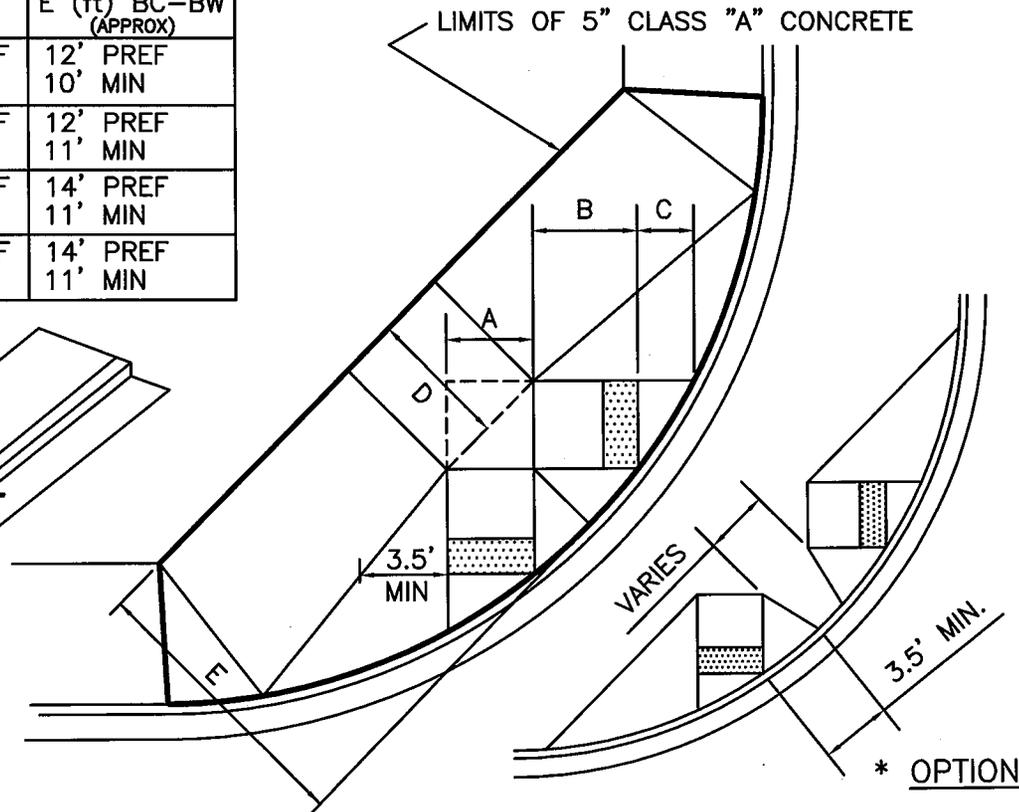
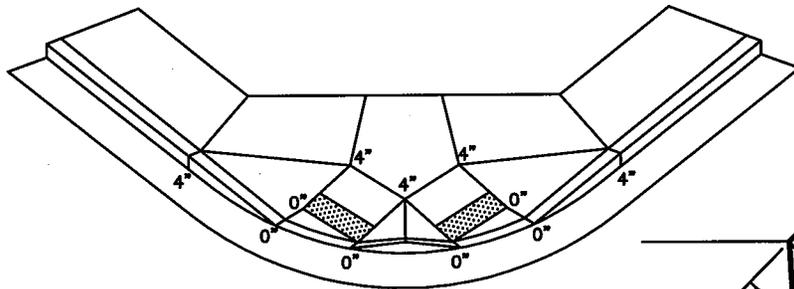


APPROVALS:

*[Signature]*  
 CITY ENGINEER

5/21/13  
 DATE

DIMENSION TABLE					
Radius (FC)	A (ft)	B (ft)	C (ft)	D (ft)	E (ft) BC-BW (APPROX)
20	5' PREF 4' MIN	4' MIN	5' MAX	6' PREF 4' MIN	12' PREF 10' MIN
25	5' PREF 4' MIN	4' MIN	5' MAX	6' PREF 5' MIN	12' PREF 11' MIN
30	5' PREF 4' MIN	4' MIN	5' MAX	8' PREF 5' MIN	14' PREF 11' MIN
35	5' PREF 4' MIN	4' MIN	5' MAX	8' PREF 5' MIN	14' PREF 11' MIN



\* POSITION OF EACH RAMP MAY SHIFT TO ALIGN WITH RAMP ON OPPOSITE SIDE

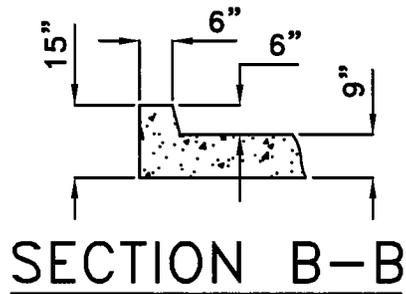
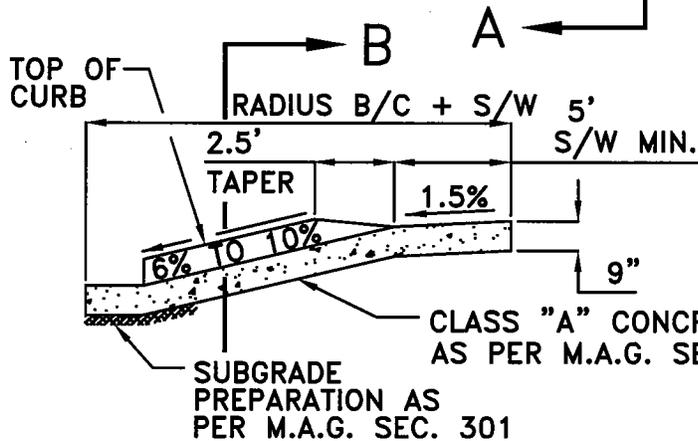
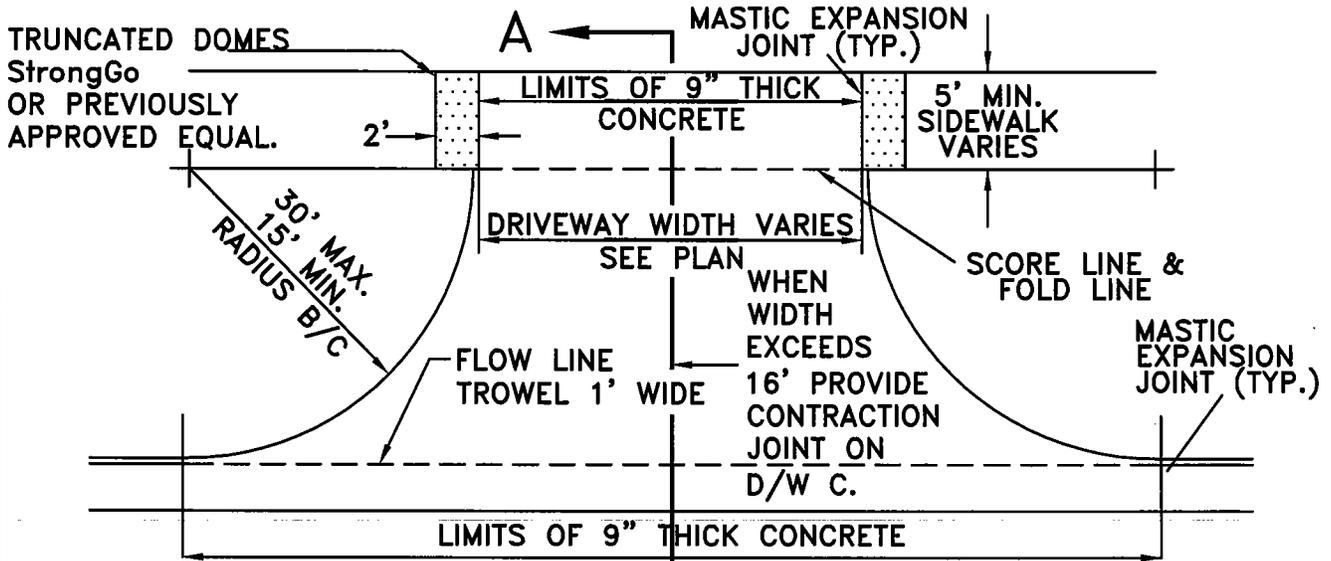


# CITY OF PEORIA STANDARD DETAIL PE-251-2 RETURN TYPE DRIVEWAYS WITH DETACHED SIDEWALK

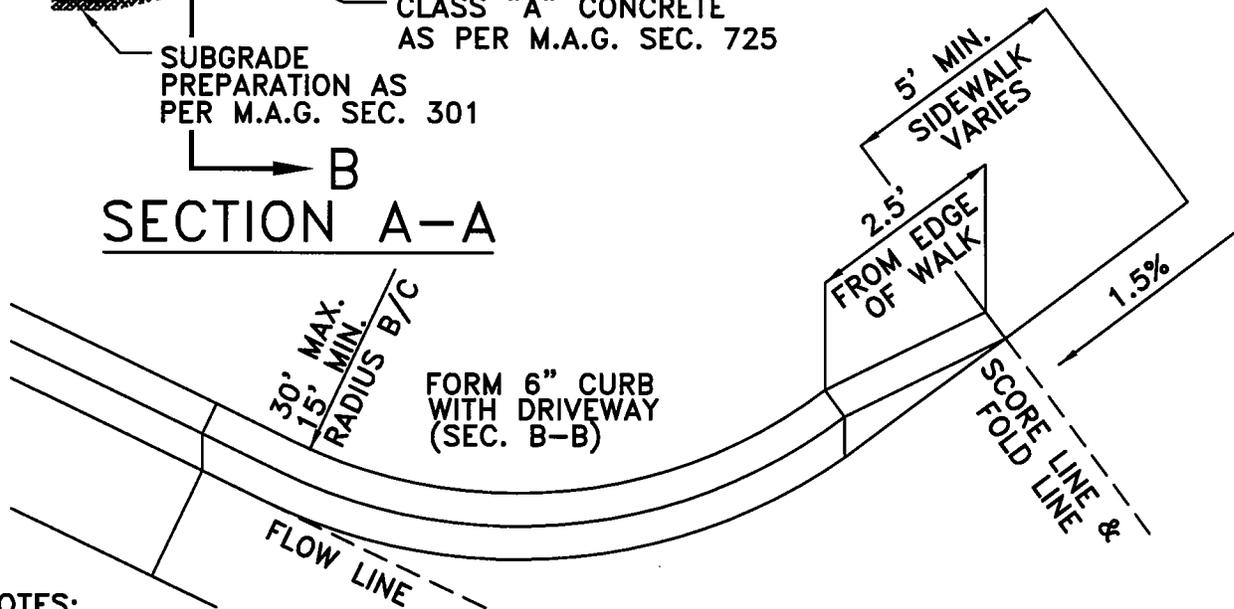


APPROVALS:

*[Signature]*  
CITY ENGINEER      3/27/12  
DATE



SECTION A-A



**NOTES:**

EXPANSION JOINT FILLER SHALL BE 1/2 INCH BITUMINUS TYPE PRE-FORMED EXPANSION JOINT FILLER, A.S.T.M. D-1751  
TRUNCATED DOMES MAY BE DELETED FOR LOW VOLUME, RESIDENTIAL, OR OTHER DRIVEWAY LOCATIONS, SUBJECT TO APPROVAL BY CITY TRAFFIC ENGINEER



# CITY OF PEORIA STANDARD DETAIL PE-270



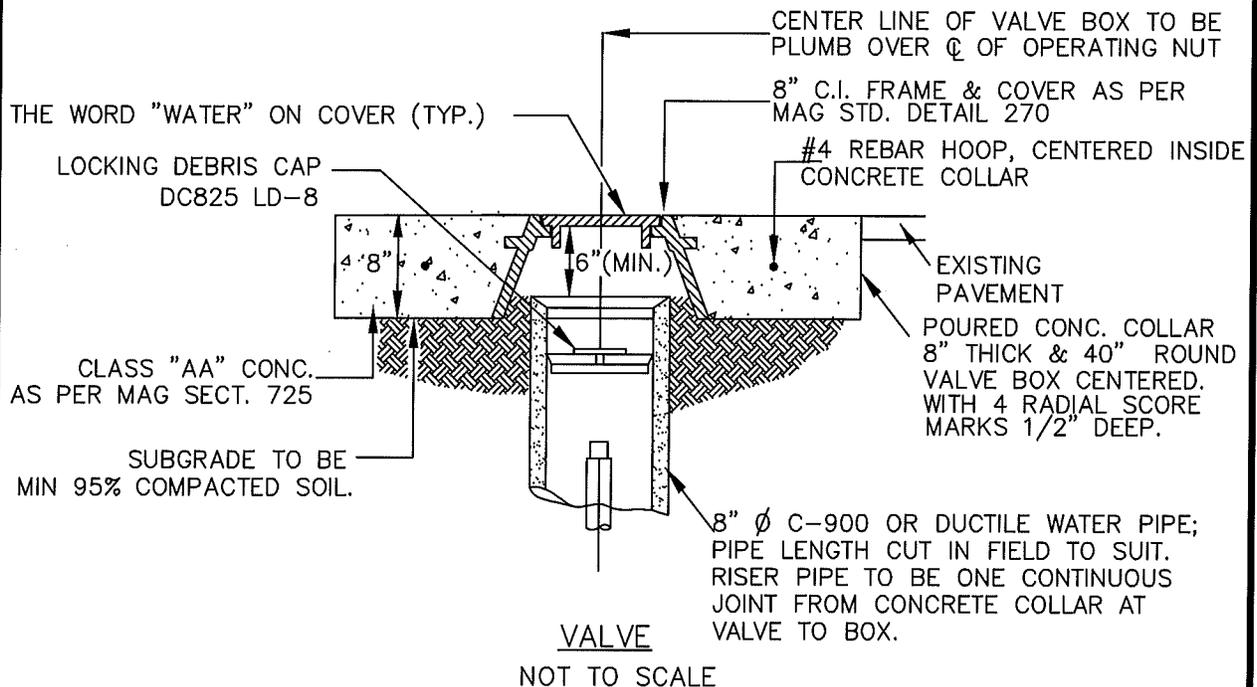
## WATER VALVE ADJUSTMENT

APPROVALS:

*[Signature]*  
CITY ENGINEER

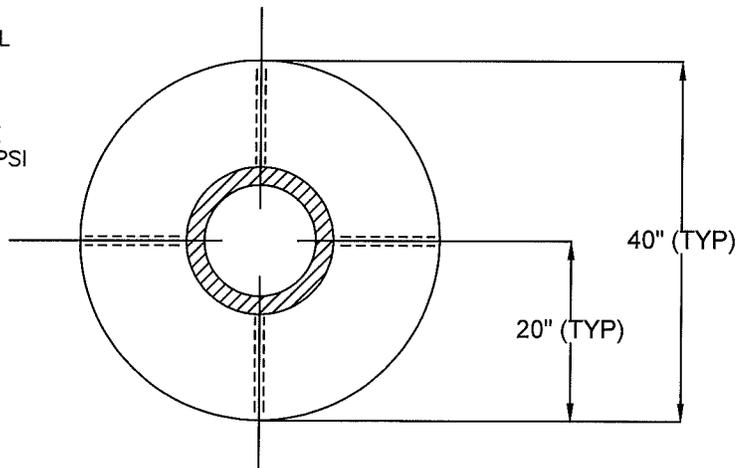
3/5/14  
DATE

*[Signature]* 03-05-2014  
PUBLIC WORKS-UTILITIES DIRECTOR DATE



1) IN PAVED MAJOR ARTERIAL STREETS, CONCRETE COLLARS SHALL BE SCORED RADIALLY AT QUARTER-CIRCLE POINTS AND SCORES SHALL BE 1/4" WIDE BY 1/2" DEEP. CONCRETE SURFACE SHALL BE ROUGH BROOM FINISHED. NO TRAFFIC SHALL BE ALLOWED ON COLLARS UNTIL CONCRETE REACHES MINIMUM 2500 PSI ON ALL STREETS.

2) LOCKING LID TO BE AMPRO LL800-WA



TOP VIEW

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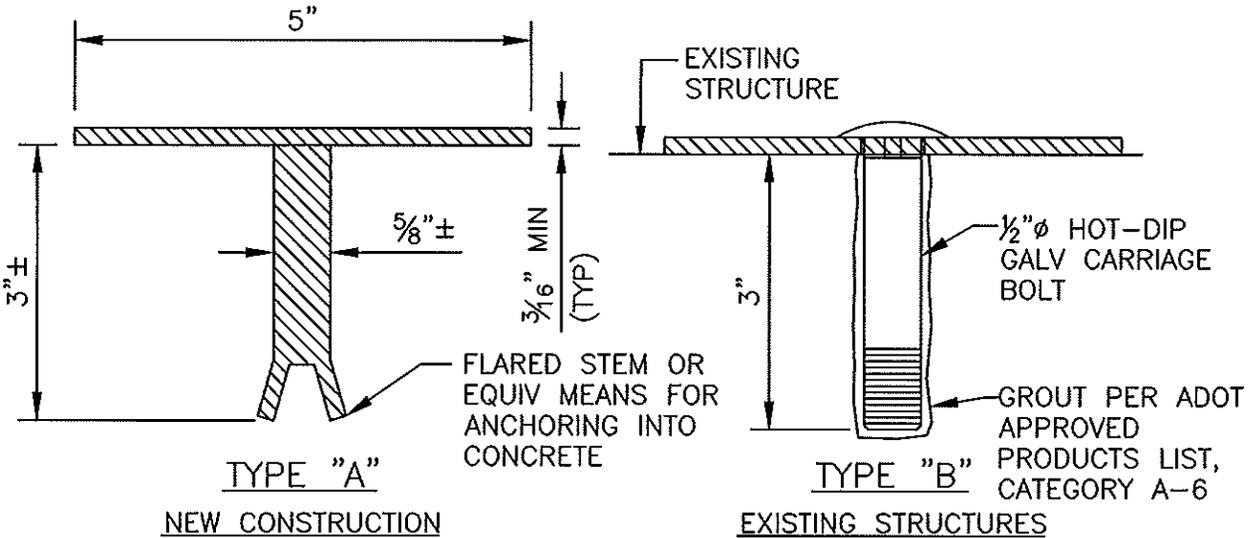


# CITY OF PEORIA STANDARD DETAIL PE-280-1 BRIDGE AND CULVERT STRUCTURE IDENTIFICATION MARKERS



APPROVALS:

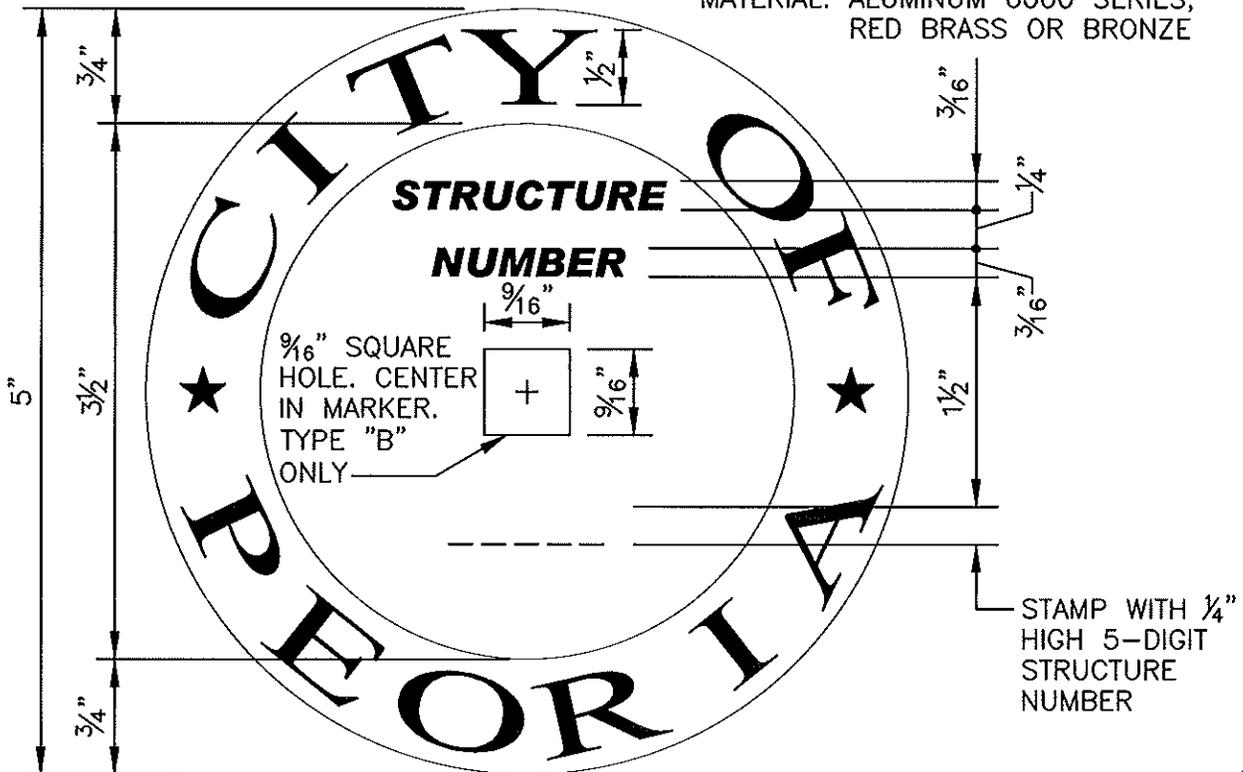
  
 CITY ENGINEER DATE



ANCHOR STEM IN TO WET CONCRETE.  
STEMS SHALL BE INSULATED FROM AND  
1" CLEAR OF REINFORCING STEEL.

SECURE MARKER WITH EPOXY  
GROUTED CARRIAGE BOLT  
(ROUND HEAD W/ SQ NECK)

MATERIAL: ALUMINUM 6000 SERIES,  
RED BRASS OR BRONZE



STAMP WITH 1/4" HIGH 5-DIGIT STRUCTURE NUMBER

E:\GUIDE\DETAILS\CAD\PE-280-1

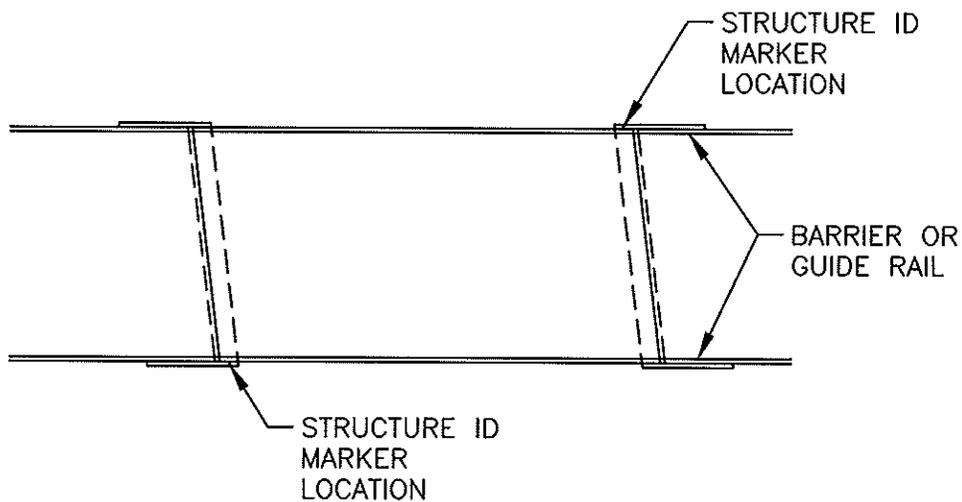
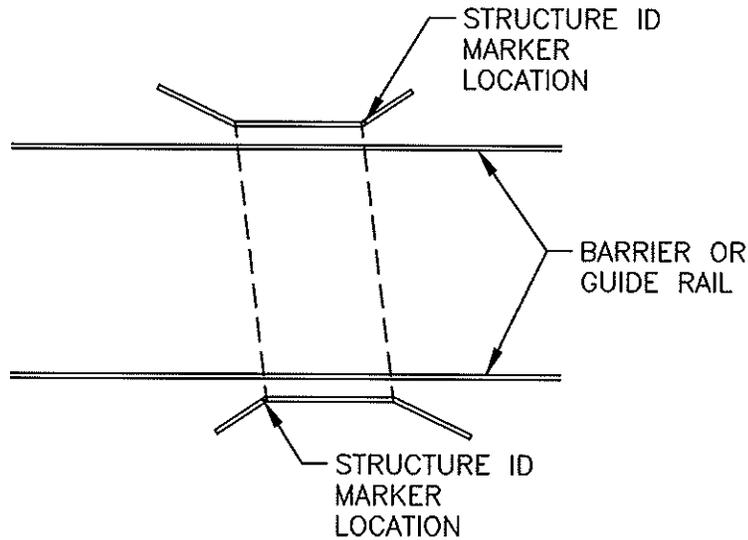
CITY OF PEORIA  
STANDARD DETAIL PE-280-2  
BRIDGE AND CULVERT  
STRUCTURE IDENTIFICATION MARKERS



APPROVALS:

*[Signature]*  
CITY ENGINEER

*[Signature]*  
DATE



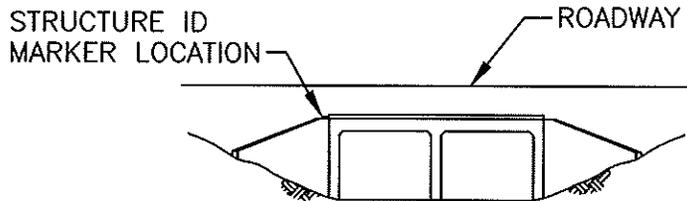
LOCATE STRUCTURE ID MARKER ON THE TOP OF THE FIRST WINGWALL, RIGHT SIDE OF THE BRIDGE APPROACH LOOKING TOWARDS THE BRIDGE.

CITY OF PEORIA  
STANDARD DETAIL PE-280-3  
BRIDGE AND CULVERT  
STRUCTURE IDENTIFICATION MARKERS

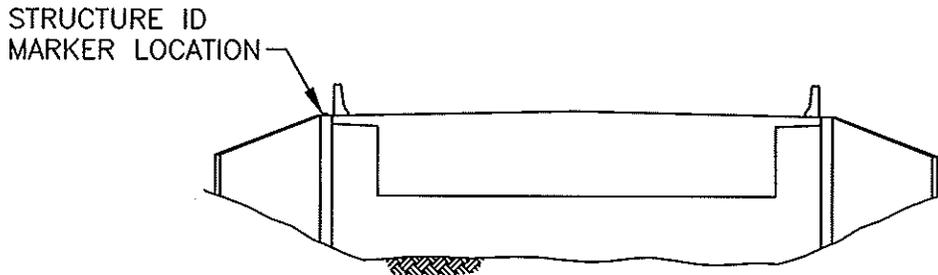
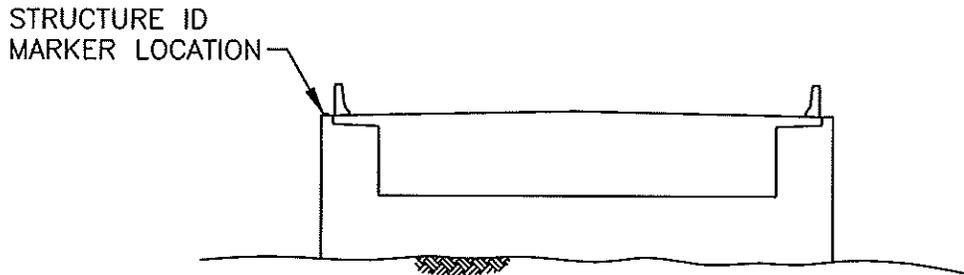


APPROVALS:

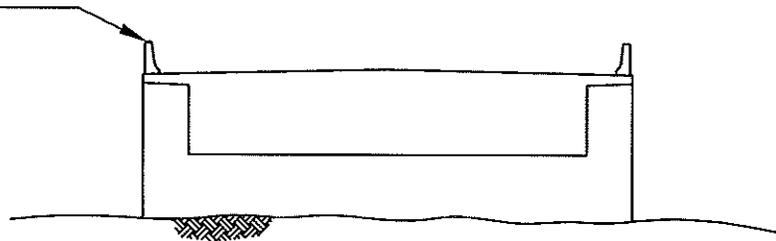
*[Signature]* 2/6/14  
CITY ENGINEER DATE



LOCATE STRUCTURE ID MARKER ON TOP OF WINGWALL,  
LEFT SIDE OF CULVERT, FACING CULVERT OPENING



ALT STRUCTURE ID  
MARKER LOCATION WHEN  
TOP OF WINGWALL IS  
NOT ACCESSIBLE



LOCATE STRUCTURE ID MARKER ON TOP OF WINGWALL,  
LEFT SIDE OF ABUTMENT, FACING ABUTMENT

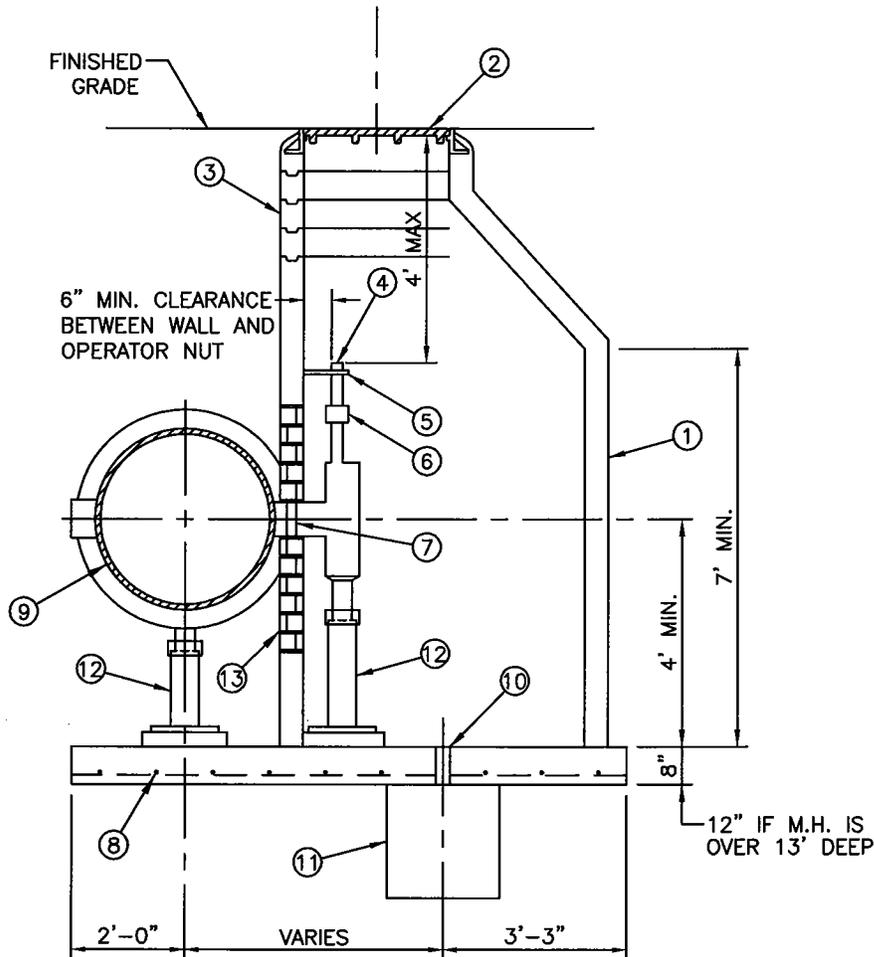
CITY OF PEORIA  
STANDARD DETAIL PE-346  
BUTTERFLY VALVE OPERATOR MANHOLE



APPROVALS:

*David M. [Signature]* 3/14/08  
CITY ENGINEER DATE

*Stephen [Signature]* 2/14/08  
UTILITIES DIRECTOR DATE



**NOTES:**

1. 60" I.D. MANHOLE SHAFT PER MAG STD. DET. 420, TYPE "A" TOP
2. 30" MANHOLE FRAME & COVER PER MAG STD. DET. 424
3. GROUTED ADJUSTING RINGS
4. OPERATOR NUT
5. WALL BRACKET
6. PACKING GLAND
7. 6" EXTENSION
8. #4 REBAR 12" ON CENTER EACH WAY 2" CLEAR TYPICAL FOR PRE-CAST BASE
9. BUTTERFLY VALVE
10. 3" DIAMETER DRAIN PVC SLEEVE REQUIRES GRATE.
11. 8 CU. FT. GRAVEL SUMP - 1" MINUS WASHED ROCK.
12. ADJUSTABLE PIPE SADDLE SUPPORT
13. RECTANGULAR CUT-OUT IN MANHOLE SHAFT, FILL SPACE BETWEEN SHAFT AND PIPE WITH 1" SHEET FOAM, BRICK AND MORTAR
14. DETAIL TO BE USED ON 24" OR ABOVE WATER LINES.

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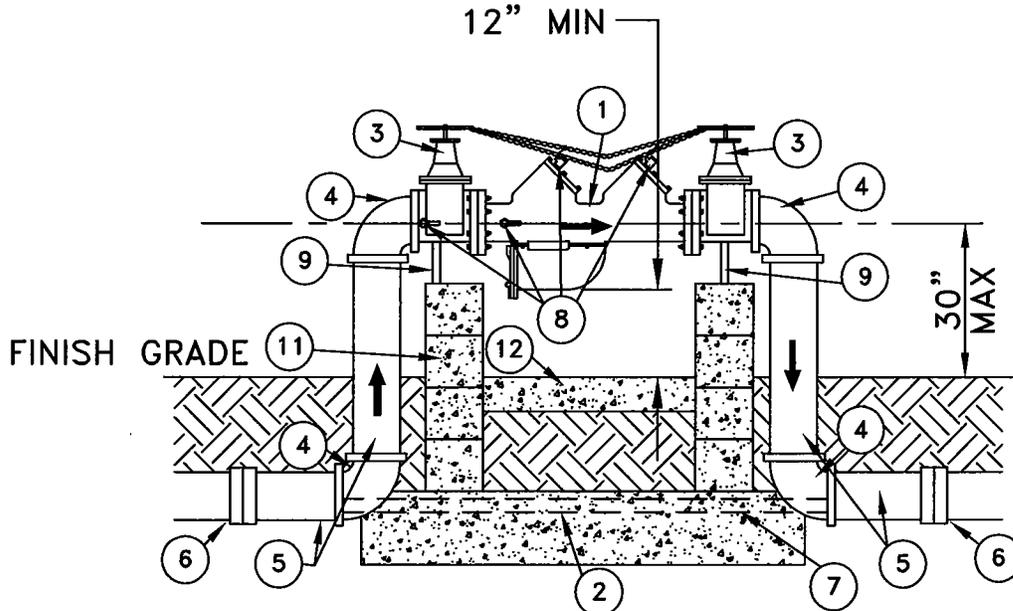
CITY OF PEORIA  
 STANDARD DETAIL PE-351-1  
 CROSS CONNECTION CONTROL 3 - INCHES &  
 LARGER REDUCED PRESSURE BACKFLOW PREVENTER



APPROVALS:

*[Signature]* 4/14/09  
 CITY ENGINEER DATE

*[Signature]* 4/9/09  
 UTILITIES DIRECTOR DATE



REDUCED PRESSURE PRINCIPLE

LIST OF MATERIALS:

1. APPROVED BACKFLOW ASSEMBLY.
2. COAT WITH COAL TAR EPOXY OR UTILIZE MANUFACTURER'S EPOXY COVERED SETTER.
3. RESILIENT SEATED GATE VALVE. (NON FIRE LINE) NON RISING STEM
4. 90° ELBOW (FLANGED D.I.P. 3-INCHES THRU 10-INCHES).
5. PIPE SPOOL (FLANGED D.I.P. 3-INCHES THRU 10-INCHES).
6. MECHANICAL JOINT
7. 3" X 3" X 1/4" STEEL ANGLE BOLT TO FLANGE AT EACH END OR UTILIZE MANUFACTURER'S SETTER (SUCH AS WILKINS, FEBCO, OR EQUIVALENT).
8. TEST COCK (4 REQUIRED).
9. ADJUSTABLE PIPE SUPPORT .
10. 8" X 8" X 16" CONCRETE BLOCK FILLED WITH MORTAR.
11. CONCRETE PAD FROM SUPPORT TO SUPPORT (4-INCHES DEEP X 12-INCHES WIDE).
12. CONSTRUCT 6" THICK CONCRETE BASE.

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CITY OF PEORIA  
STANDARD DETAIL PE-351-2  
CROSS CONNECTION CONTROL 3 - INCHES &  
LARGER REDUCED PRESSURE BACKFLOW PREVENTER



APPROVALS:

*[Signature]*  
CITY ENGINEER      4/4/09  
DATE

*[Signature]*  
UTILITIES DIRECTOR      4/9/09  
DATE

NOTES:

- A. CONTACT CITY OF PEORIA ENVIRONMENTAL/INDUSTRIAL USERS DIVISION FOR LIST OF APPROVED ASSEMBLIES.
- B. THE FOUR TEST COCKS SHALL BE FITTED WITH BRASS PLUGS OR TEST COCK ADAPTERS AND CAPS. TEST COCKS SHALL BE USED FOR TESTING ONLY.
- C. INSTALLATION SHALL BE PROTECTED BY SAFETY POSTS (BOLLARDS) IF NEAR TRAFFIC AREAS PER M.A.G. STANDARD DETAIL 140.
- D. FINISHED MATERIAL UNDER BACKFLOW ASSEMBLY SHALL BE ADEQUATE TO PREVENT SUBSIDENCE OF ASSEMBLY.
- E. ASSEMBLY SHALL BE PAINTED TAN OR COLOR TO MATCH BACKGROUND. DO NOT PAINT THE NAME PLATE OR ANY BRASS PARTS OF THE ASSEMBLY.
- F. INSPECTIONS REQUIRED FOR: PIERS, THRUSTBLOCKS, ANGLE STEEL AND/OR SETTER ASSEMBLY. (BY CITY OF PEORIA CROSS CONNECTION STAFF)
- G. BOTTOM OF LOWEST POINT ON ASSEMBLY TO BE 12-INCHES MIN. AND 30-INCHES MAX. TO ASSEMBLY CENTERLINE ABOVE CONCRETE PAD.
- H. MINIMUM CLEARANCE FROM FRONT OF TEST COCKS TO NEAREST PERMANENT SURFACE SHALL BE 12-INCHES.
- I. ASSEMBLY MUST BE INSPECTED BY CITY OF PEORIA BUILDING SAFETY DIVISION AND TESTED BY A CITY OF PEORIA RECOGNIZED TESTER.
- J. PLUMBING PERMIT REQUIRED FOR INSTALLATION.
- K. THRUST BLOCK PER MAG STANDARD DETAIL 380 IF SETTER IS NOT USED.
- L. ALL BACKFLOW PREVENTION DEVICES ARE CONSIDERED PRIVATE AND NOT MAINTAINED BY THE CITY.

# CITY OF PEORIA STANDARD DETAIL PE-352-1

CROSS CONNECTION CONTROL 2 1/2 - INCHES &  
SMALLER REDUCED PRESSURE BACKFLOW PREVENTER

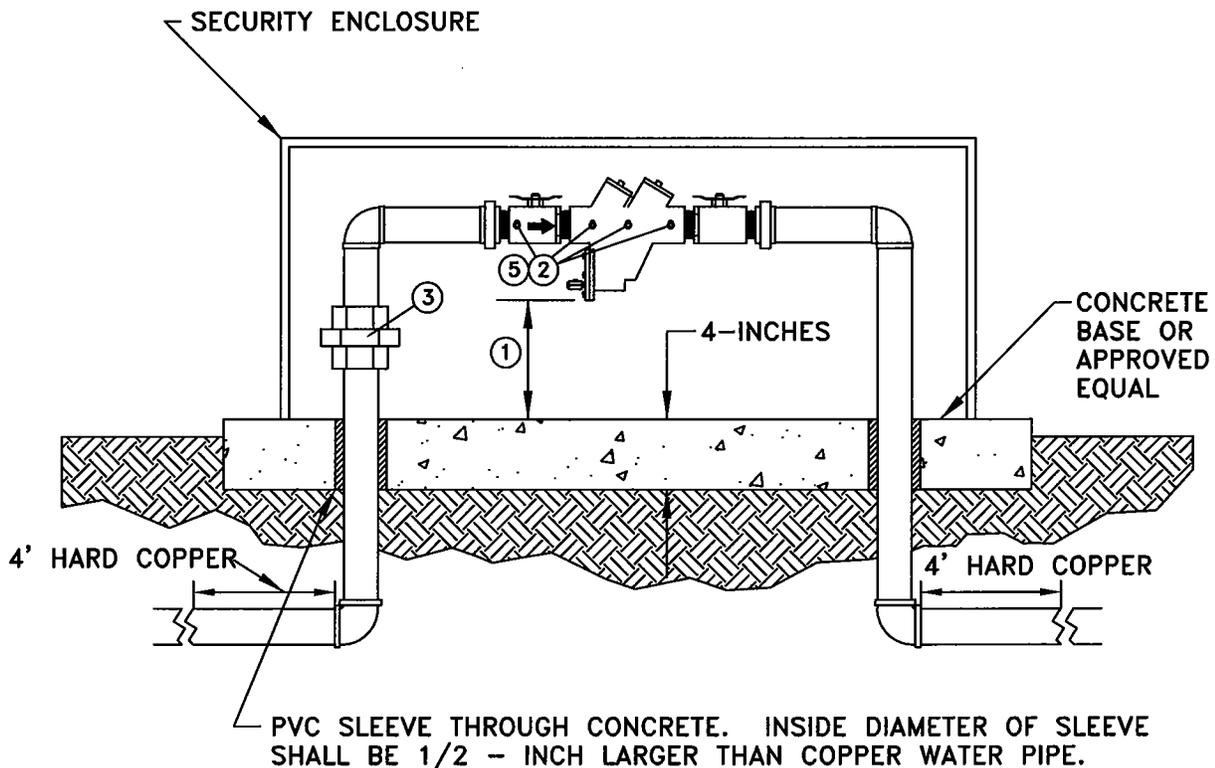


APPROVALS:

*[Signature]* 4/14/09  
CITY ENGINEER DATE

*[Signature]* 4/8/09  
UTILITIES DIRECTOR DATE

## OUTSIDE INSTALLATION



**NOTES:**

1. BOTTOM OF ASSEMBLY MUST BE AT LEAST 12 - INCHES ABOVE THE SURFACE IMMEDIATELY BELOW THE RELIEF VALVE OPENING BUT NO MORE THAN 30 - INCHES ABOVE CONCRETE PAD.
2. MINIMUM CLEARANCE IN FRONT OF TEST COCKS TO NEAREST PERMANENT SURFACE SHALL BE 12 - INCHES.
3. MINIMUM OF ONE UNION REQUIRED, TYPE "L" HARD COPPER REQUIRED.
4. ASSEMBLIES MUST BE INSPECTED BY THE CITY OF PEORIA BUILDING SAFETY DIVISION AND TESTED BY A CITY RECOGNIZED TESTER.
5. ALL TEST COCKS SHALL HAVE BRASS PLUGS OR TEST COCK ADAPTERS AND CAPS IN PLACE. TEST COCKS SHALL BE USED FOR TESTING ONLY.
6. A PLUMBING PERMIT IS REQUIRED FOR INSTALLATION.
7. ASSEMBLIES MUST BE INSTALLED TO MANUFACTURERS SPECIFICATIONS.
8. SECURITY ENCLOSURE SHALL BE GUARDSHACK ENCLOSURES - HINGED P.C. MODEL GS PAINTED TAN OR APPROVED EQUAL.

# CITY OF PEORIA STANDARD DETAIL PE-352-2

CROSS CONNECTION CONTROL 2 1/2 - INCHES &  
SMALLER REDUCED PRESSURE BACKFLOW PREVENTER

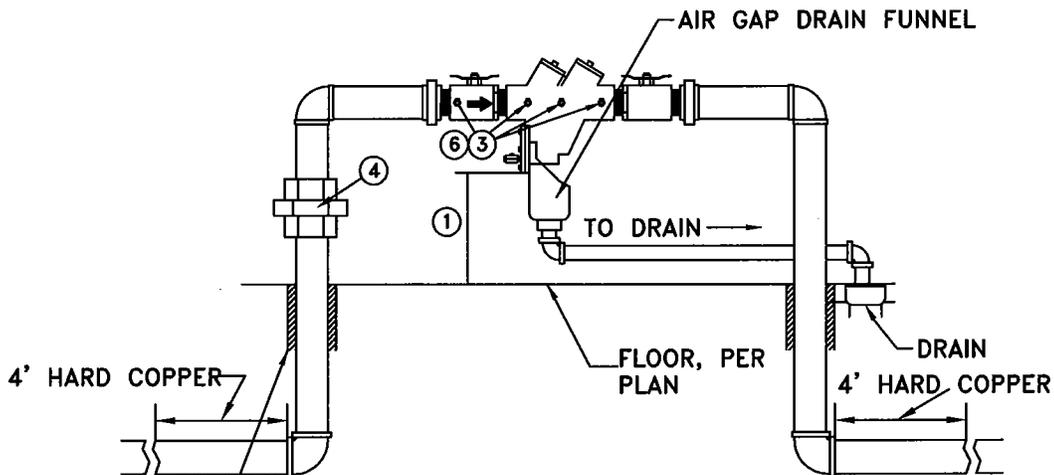


APPROVALS:

*[Signature]* 4/14/09  
CITY ENGINEER DATE

*[Signature]* 4/8/09  
UTILITIES DIRECTOR DATE

## INSIDE INSTALLATION



PVC SLEEVE THROUGH CONCRETE. INSIDE DIAMETER OF SLEEVE SHALL BE 1/2 - INCH LARGER THAN COPPER WATER PIPE.

MUST HAVE DRAIN IF INSTALLED INSIDE

### NOTES:

1. BOTTOM OF ASSEMBLY MUST BE AT LEAST 12 - INCHES ABOVE THE FINISHED FLOOR IMMEDIATELY BELOW THE RELIEF VALVE OPENING.
2. ASSEMBLIES INSTALLED ABOVE 5-FEET FROM THE FLOOR MUST BE ACCESSIBLE, NOT POSE A SAFETY HAZARD, AND BE APPROVED BY BUILDING SAFETY.
3. MINIMUM CLEARANCE IN FRONT OF TEST COCKS TO NEAREST PERMANENT SURFACE SHALL BE 12 - INCHES.
4. MINIMUM OF ONE UNION REQUIRED, TYPE "L" HARD COPPER REQUIRED.
5. ASSEMBLIES MUST BE INSPECTED BY THE CITY OF PEORIA ENVIRONMENTAL/ INDUSTRIAL USERS DIVISION AND TESTED BY A CITY RECOGNIZED TESTER.
6. ALL TEST COCKS SHALL HAVE BRASS PLUGS OR TEST COCK ADAPTORS AND CAPS IN PLACE. TEST COCKS SHALL BE USED FOR TESTING ONLY.
7. A PLUMBING PERMIT IS REQUIRED FOR INSTALLATION.
8. CONTACT CITY OF PEORIA ENVIRONMENTAL/INDUSTRIAL USERS DIVISION FOR LIST OF APPROVED ASSEMBLIES.
9. ASSEMBLIES MUST BE INSTALLED TO MANUFACTURERS SPECIFICATIONS.
10. PIPING TO COMPLY TO CURRENT COP STANDARDS.

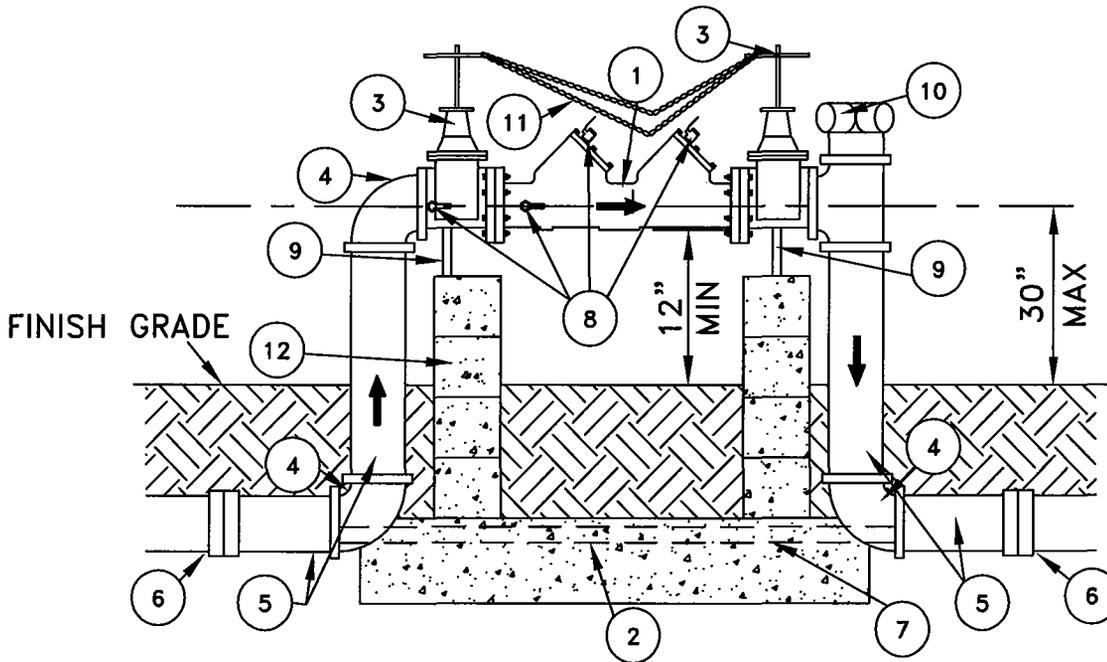
**CITY OF PEORIA**  
**STANDARD DETAIL PE-353-1**  
**CROSS CONNECTION CONTROL 3 INCHES &**  
**LARGER DOUBLE CHECK VALVE ASSEMBLY**



APPROVALS:

*[Signature]* 4/4/09  
 CITY ENGINEER DATE

*[Signature]* 4/8/09  
 UTILITIES DIRECTOR DATE



**LIST OF MATERIALS**

1. APPROVED BACKFLOW ASSEMBLY.
2. COAT WITH COAL TAR EPOXY OR UTILIZE MANUFACTURER'S EPOXY COVERED SETTER.
3. RESILIANT SEATED GATE VALVE. O.S. & Y. (FIRE LINE CONNECTION)
4. 90° ELBOW (FLANGED D.I.P. 3-INCHES THRU 10-INCHES).
5. PIPE SPOOL (FLANGED D.I.P. 3-INCHES THRU 10-INCHES).
6. MECHANICAL JOINT
7. 3" X 3" X 1/4" STEEL ANGLE BOLT TO FLANGE AT EACH END OR UTILIZE MANUFACTURER'S SETTER (SUCH AS WILKINS, FEBCO, OR EQUIVALENT).
8. TEST COCK (4 REQUIRED)
9. ADJUSTABLE PIPE SUPPORT
10. SIAMESE FIRE CONNECTION (CONTACT PEORIA F.D. FOR SPECIFIC REQUIREMENTS)
11. CHAIN & LOCK (FIRE LINE MAY BE REQUIRED TO BE ELECTRONICALLY MONITORED, SEE P.F.D. FOR DETAILS, VALVES. CONTACT PEORIA FIRE DEPARTMENT FOR SPECIFIC REQUIREMENTS.)
12. 8" X 8" X 16" CONCRETE BLOCK FILLED WITH MORTAR
13. CONSTRUCT 6" THICK CONCRETE BASE

I:\GUIDE\DETAILS\CAO\PE-353-1

04/08/2009

CITY OF PEORIA  
STANDARD DETAIL PE-353-2  
CROSS CONNECTION CONTROL 3 INCHES &  
LARGER DOUBLE CHECK VALVE ASSEMBLY



APPROVALS:

*Charles Gray*  
CITY ENGINEER  
4/14/09  
DATE

*Richard S. Onstap*  
UTILITIES DIRECTOR  
4/15/09  
DATE

NOTES:

- A. CONTACT CITY OF PEORIA ENVIRONMENTAL/INDUSTRIAL USERS DIVISION FOR LIST OF APPROVED ASSEMBLIES.
- B. THE FOUR TEST COCKS SHALL BE FITTED WITH BRASS PLUGS OR TEST COCK ADAPTERS AND CAPS. TEST COCKS SHALL BE USED FOR TESTING ONLY.
- C. INSTALLATION SHALL BE PROTECTED BY SAFETY POSTS (BOLLARDS) IN TRAFFIC AREAS PER M.A.G. STANDARD DETAIL 140.
- D. FINISHED MATERIAL UNDER BACKFLOW ASSEMBLY SHALL BE ADEQUATE TO PREVENT SUBSIDENCE OF ASSEMBLY.
- E. ASSEMBLY SHALL BE PAINTED TAN OR COLOR TO MATCH BACKGROUND. DO NOT PAINT THE NAME PLATE OR ANY BRASS PARTS OF THE ASSEMBLY.
- F. INSPECTIONS REQUIRED FOR: PIERS, THRUSTBLOCKS, ANGLE STEEL AND/OR SETTER ASSEMBLY.
- G. BOTTOM OF LOWEST POINT ON ASSEMBLY TO BE 12-INCHES MIN. AND 30-INCHES MAX. TO ASSEMBLY CENTERLINE ABOVE CONCRETE PAD.
- H. MINIMUM CLEARANCE FROM FRONT OF TEST COCKS TO NEAREST PERMANENT SURFACE SHALL BE 12-INCHES.
- I. ASSEMBLY MUST BE INSPECTED BY CITY OF PEORIA ENVIRONMENTAL/INDUSTRIAL USERS DIVISION AND TESTED BY A CITY OF PEORIA RECOGNIZED TESTER.
- J. PLUMBING PERMIT REQUIRED FOR INSTALLATION.
- K. THRUST BLOCK PER MAG STANDARD DETAIL 380 IF SETTER IS NOT USED.
- L. ALL BACKFLOW PREVENTION DEVICES ARE CONSIDERED PRIVATE AND NOT MAINTAINED BY THE CITY.

CITY OF PEORIA  
STANDARD DETAIL PE-354-1  
METER 3"



APPROVALS:

  
CITY ENGINEER      4/14/09  
DATE

  
UTILITIES DIRECTOR      4/9/09  
DATE

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CITY OF PEORIA  
STANDARD DETAIL PE-354-2  
METER 3" AND LARGER



APPROVALS:

*[Signature]* 4/9/09  
CITY ENGINEER DATE

*[Signature]* 4/9/09  
UTILITIES DIRECTOR DATE

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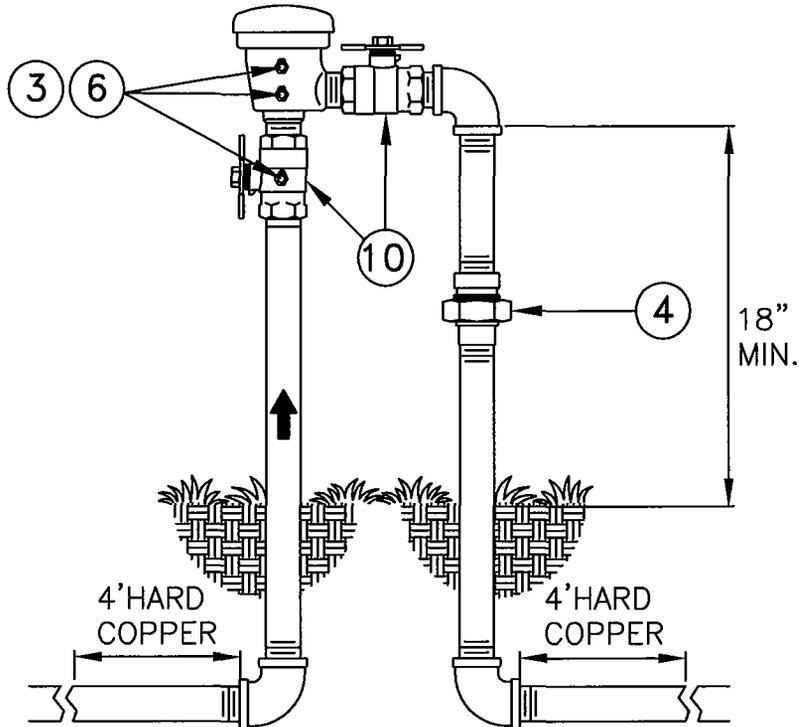
CITY OF PEORIA  
 STANDARD DETAIL PE-355  
 PRESSURE VACUUM BREAKER ASSEMBLY  
 RESIDENTIAL



APPROVALS:

*[Signature]* 4/14/09  
 CITY ENGINEER DATE

*[Signature]* 4/9/09  
 UTILITIES DIRECTOR DATE



**NOTES:**

1. BOTTOM OF ASSEMBLY MUST BE AT LEAST 12 - INCHES ABOVE ALL DOWNSTREAM PIPING .
2. ASSEMBLIES INSTALLED ABOVE 5 - FEET FROM THE FLOOR MUST BE ACCESSIBLE NOT POSE A SAFETY HAZARD, AND BE APPROVED BY BUILDING SAFETY.
3. MINIMUM CLEARANCE IN FRONT OF TEST COCKS TO NEAREST PERMANENT SURFACE SHALL BE 12 - INCHES.
4. MINIMUM OF ONE UNION REQUIRED, TYPE "L" HARD COPPER REQUIRED.
5. ASSEMBLIES MUST BE INSPECTED BY THE CITY OF PEORIA BUILDING SAFETY DIVISION AND TESTED BY A CITY RECOGNIZED TESTER.
6. ALL TEST COCKS SHALL HAVE BRASS PLUGS OR TEST COCK ADAPTERS AND CAPS IN PLACE. TEST COCKS SHALL BE USED FOR TESTING ONLY.
7. PRESSURE VACUUM BREAKERS SHALL NOT BE USED FOR COMMERCIAL IRRIGATION SYSTEMS.
8. A PLUMBING PERMIT IS REQUIRED FOR INSTALLATION.
9. ASSEMBLIES MUST BE INSTALLED AS DESIGNED AND CONSTRUCTED BY THE MANUFACTURER.
10. BALL VALVES ARE REQUIRED UPSTREAM AND DOWNSTREAM OF THE ASSEMBLY.

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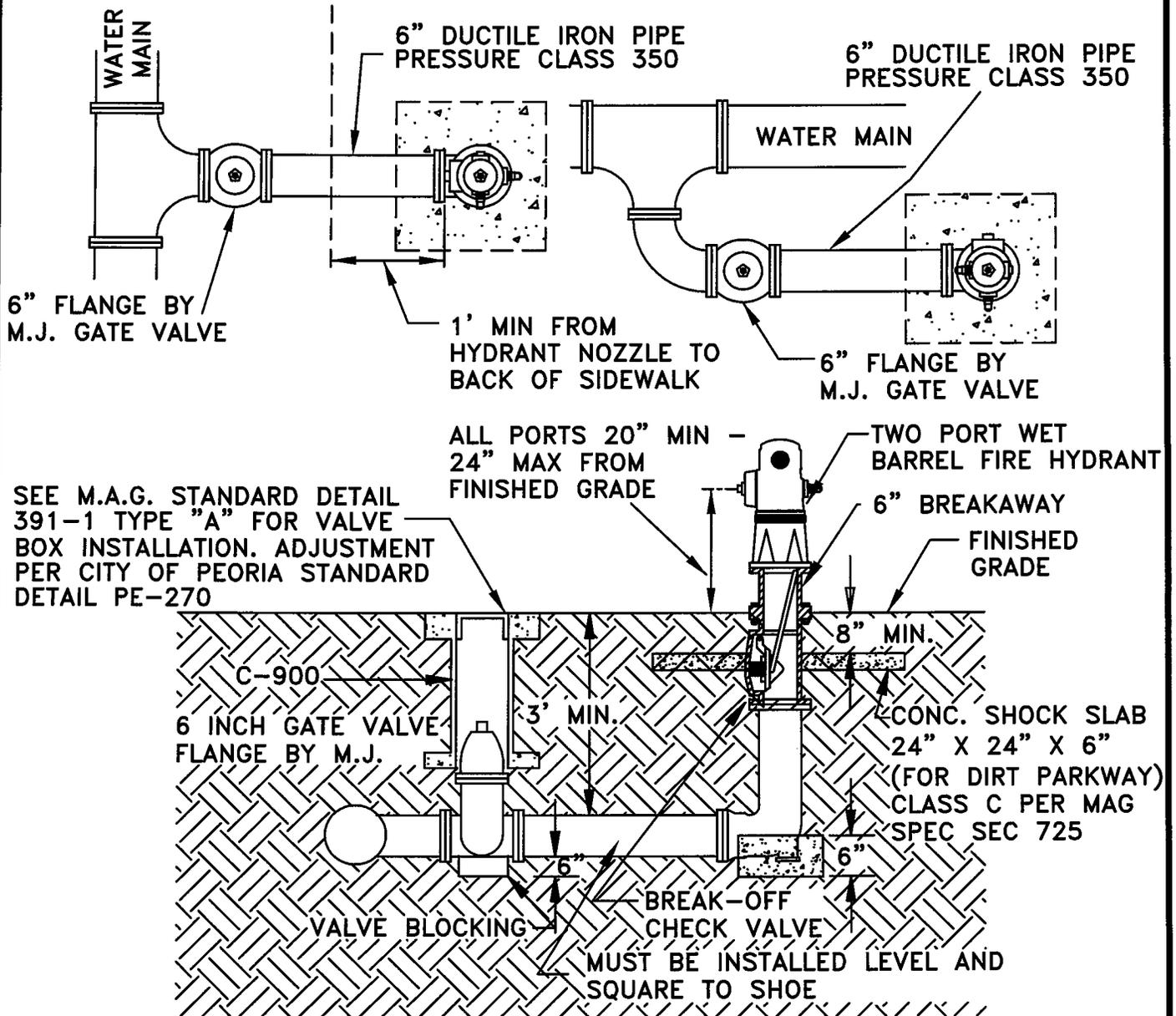
# CITY OF PEORIA STANDARD DETAIL PE-360-1 RESIDENTIAL FIRE HYDRANT INSTALLATION



APPROVALS:

*[Signature]* 5/21/13  
CITY ENGINEER DATE

*[Signature]* 05-20-2013  
PUBLIC WORKS-UTILITIES DIRECTOR DATE



1. ALL JOINTS SHALL BE RESTRAINED, INCLUDING MAIN AT TEE ENDS.
2. APPROVED HYDRANTS INCLUDE: SEE DETAIL PE-101
3. BREAK-OFF CHECK VALVE SHALL BE CLOW MODEL 400A OR APPROVED EQUAL.
4. THE 6 INCH GATE VALVE SHALL BE FLANGED BY MECHANICAL JOINT.
5. NO VALVES ARE TO BE IN THE CONCRETE.
6. THE 4 1/2" PORT ON THE HYDRANT SHALL BE INSTALLED FACING THE STREET.
7. MINIMUM 3 FOOT DIAMETER CLEARANCE AROUND HYDRANT.
8. THE HYDRANT SHALL HAVE 1 - 2 1/2" PORT, AND 1 - 4 1/2" PORT.
9. NATIONAL STANDARD THREADS REQUIRED ON ALL CONNECTIONS.
10. INSTALL FIRE HYDRANT MARKER PER PEORIA STANDARD DETAIL PE-362.
11. CITY OWNED HYDRANT SHALL BE PAINTED CATERPILLAR YELLOW.

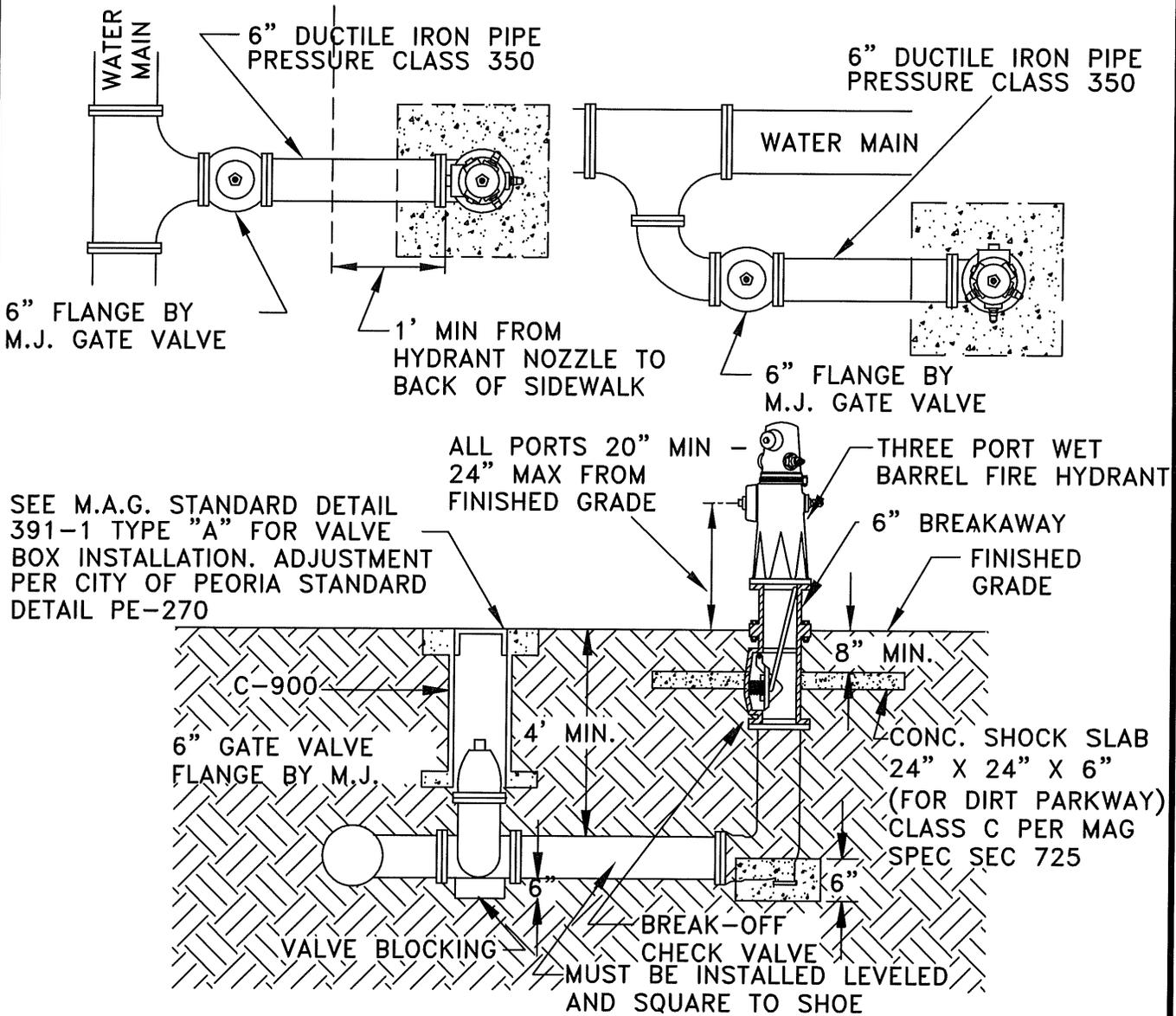
# CITY OF PEORIA STANDARD DETAIL PE-360-2 COMMERCIAL FIRE HYDRANT INSTALLATION



APPROVALS:

*[Signature]*  
ENGINEERING DIRECTOR      1/14/15      DATE

*[Signature]*  
PW-UTILITIES DIRECTOR      01-15-2015      DATE



1. ALL JOINTS SHALL BE RESTRAINED, INCLUDING MAIN AT TEE ENDS.
2. APPROVED HYDRANTS INCLUDE: SEE DETAIL PE-101
3. BREAK-OFF CHECK VALVE SHALL BE CLOW - MODEL LB400 OR AVK SERIES 2488 HYDRANT AND CHECK VALVE.
4. THE 6" GATE VALVE SHALL BE FLANGED BY MECHANICAL JOINT.
5. NO VALVES ARE TO BE IN THE CONCRETE.
6. THE 4 1/2" PORT ON THE HYDRANT SHALL BE INSTALLED FACING THE STREET.
7. MINIMUM 3' DIAMETER CLEARANCE AROUND HYDRANT.
8. THE HYDRANT SHALL HAVE 2 - 2 1/2" PORTS, AND 1 - 4 1/2" PORT.
9. NATIONAL STANDARD THREADS REQUIRED ON ALL CONNECTIONS.
10. INSTALL FIRE HYDRANT MARKER PER MAG DETAIL NO. 122.
11. CITY OWNED HYDRANT TO BE PAINTED CATERPILLAR OLD YELLOW #1.

# CITY OF PEORIA STANDARD DETAIL PE-361 HYDRANT/FDC CLEARANCES

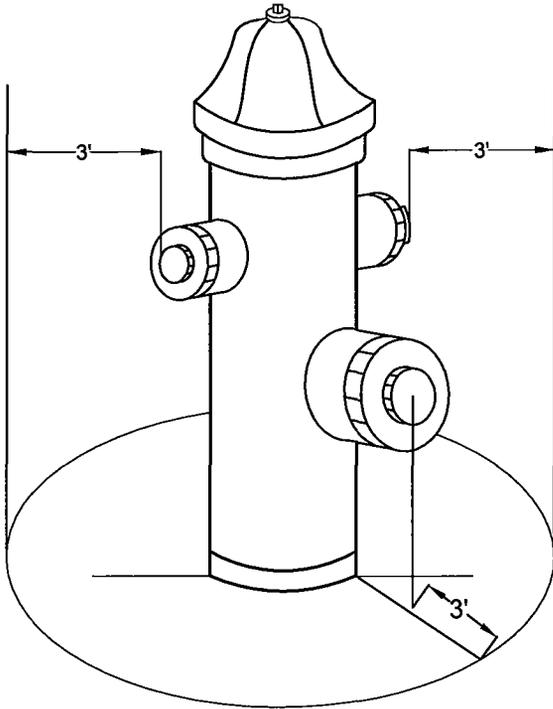


APPROVALS:

*[Signature]*  
CITY ENGINEER      4/14/09  
DATE

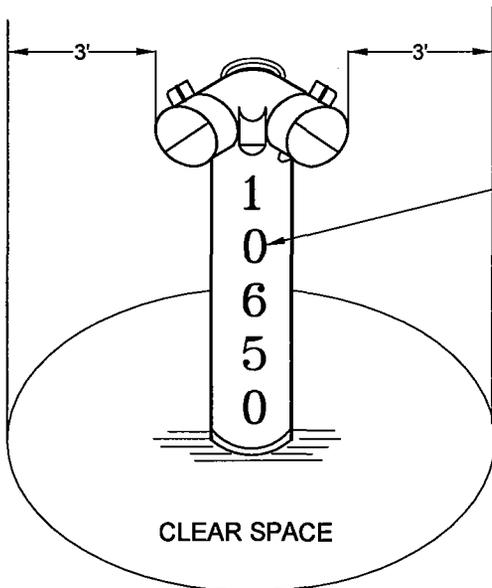
*[Signature]*  
FIRE CHIEF      4/15/09  
DATE

(DEPICTION OF DRY BARREL HYDRANT)



CITY OWNED HYDRANTS  
SHALL BE PAINTED YELLOW.

DO NOT PLANT ANY  
TREES OR SHRUBS  
THAT WILL ENCROACH  
ON THE CLEAR SPACE  
INDICATED, WHEN THE  
PLANTS OR TREES ARE  
MATURE.



STANDPIPE TO BE  
PAINTED RED WITH  
2" HIGH WHITE  
REFLECTIVE NUMBERS

(REMOTE FDC BY FIRE MARSHALL AUTHORIZATION ONLY)

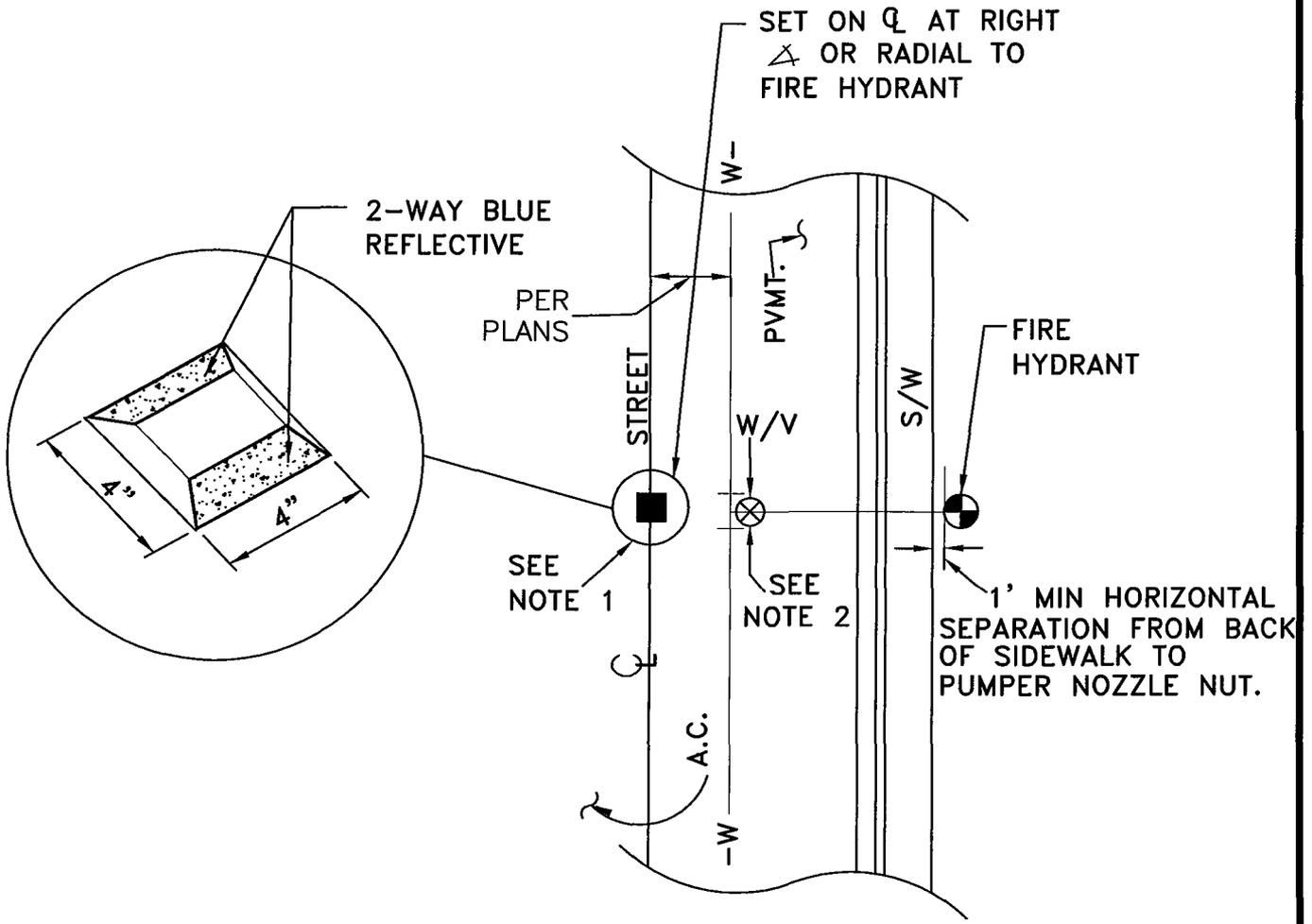
# CITY OF PEORIA STANDARD DETAIL PE-362 FIRE HYDRANT MARKER LOCATION



APPROVALS:

*David May* 8/22/07  
CITY ENGINEER DATE

*[Signature]* 8-20-07  
FIRE CHIEF DATE



## FIRE HYDRANT MARKER LOCATION

1. CENTER MARKER ON LOCAL STREETS.
2. PLACE MARKER OVER TEE ON COLLECTORS & ARTERIALS.

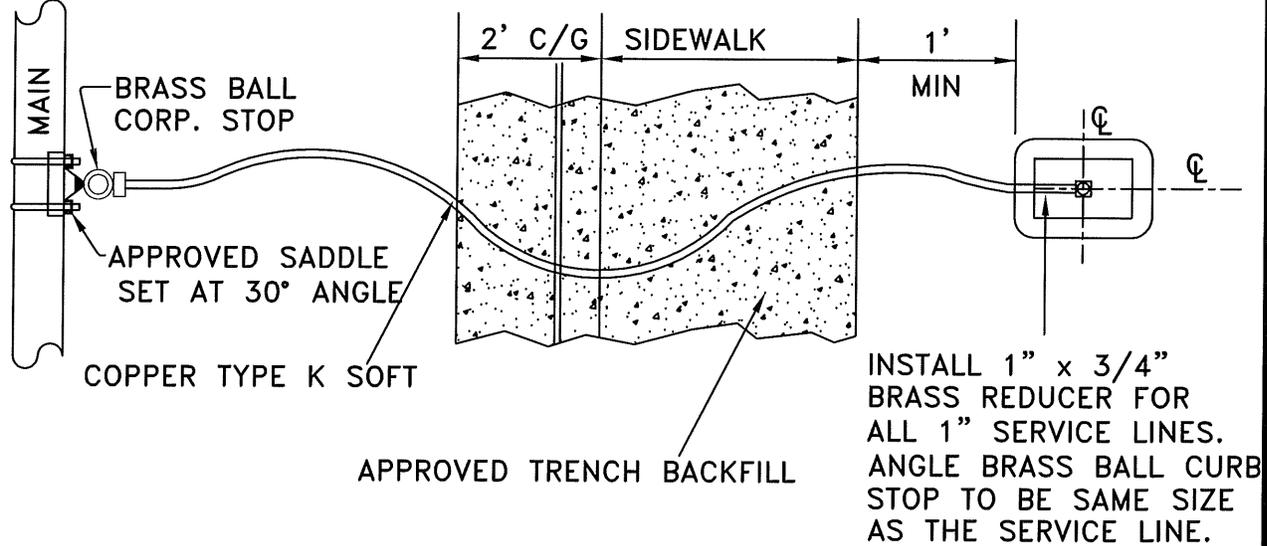
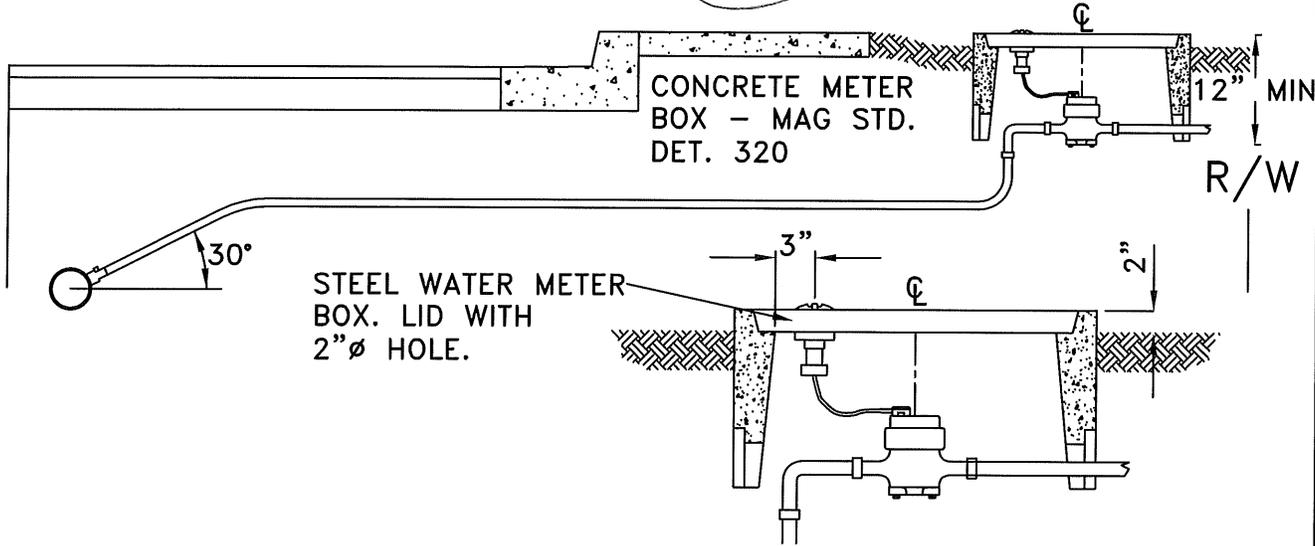
# CITY OF PEORIA STANDARD DETAIL PE-363



## WATER METER BOX LOCATION AND CONSTRUCTION SERVICES LESS THAN 2"

APPROVALS:

1/14/15
01-15-2015  
 ENGINEERING DIRECTOR      DATE      PW UTILITIES DIRECTOR      DATE



### NOTES:

1. 30" MINIMUM COVER IS REQUIRED FOR SERVICE LINES.
2. NO COUPLINGS ALLOWED ON SERVICE LINE.
3. FOR CUL-DE-SAC LOTS ONLY, THE WATER METER SHALL BE PLACED AT THE BACK OF THE SIDEWALK.
4. ALL WATER METER BOXES TO BE LEVEL WITH THE BACK OF THE SIDEWALK.
5. ALLOWABLE SERVICE LINE SIZES: 1", 1-1/2" & 2".
6. ALL MATERIAL SHALL CONFORM TO THE LATEST MAG SPECIFICATIONS.
7. ACCEPTABLE SADDLES INCLUDE:
  - MUELLER: BR2B
  - FORD: 202B BRASS
  - JONES: J979
  - A.Y. MCDONALD: 3825
8. BEDDING: SAND OR CLEAN NATIVE 3/8" MINUS.

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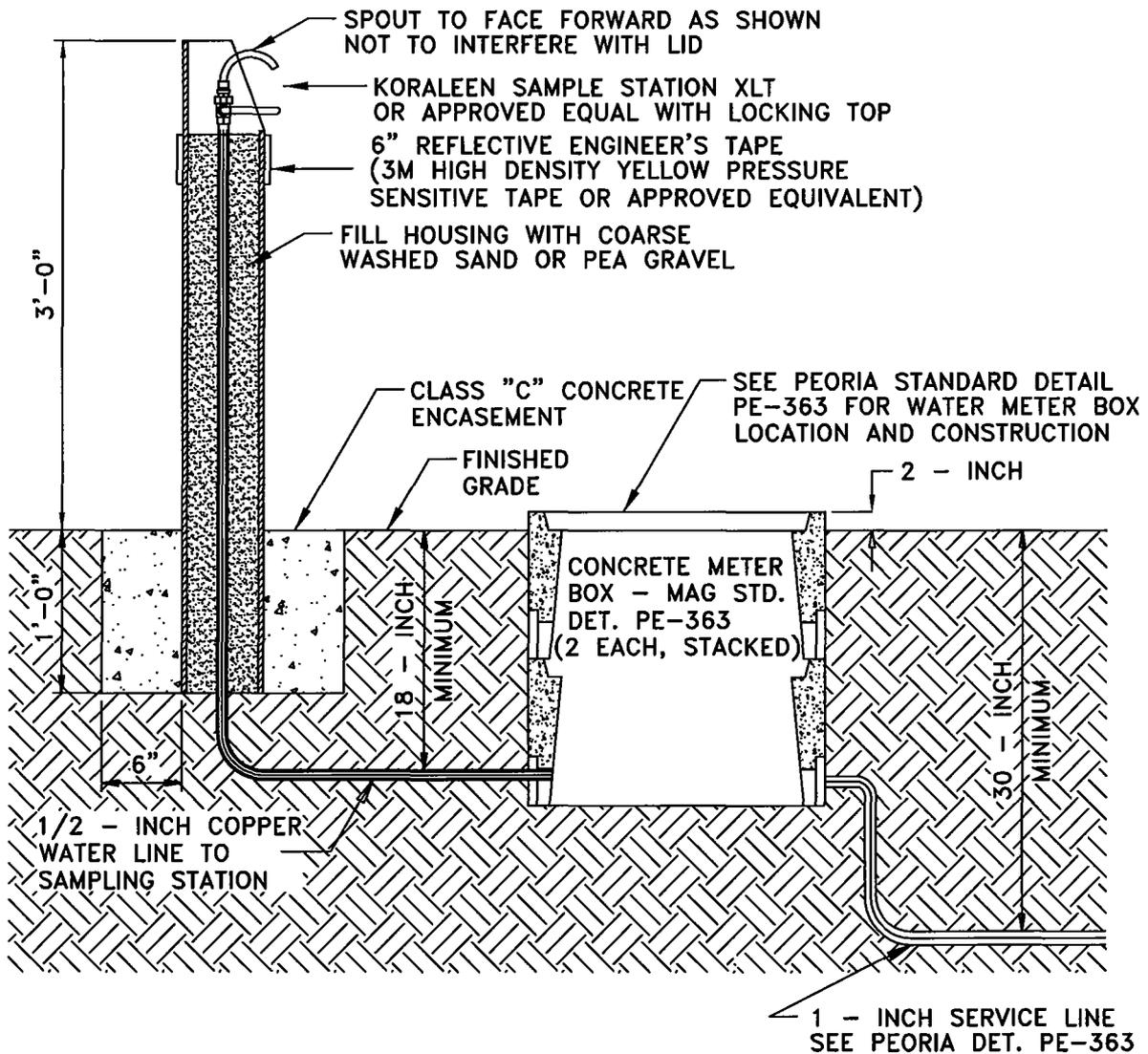
# CITY OF PEORIA STANDARD DETAIL PE-371 WATER QUALITY SAMPLING STATION



APPROVALS:

*[Signature]*  
CITY ENGINEER      4/9/09  
DATE

*[Signature]*  
UTILITIES DIRECTOR      4/9/09  
DATE



**NOTE:**

1. THE LOCATION OF THE SAMPLING STATION SHALL BE A MINIMUM OF 5 FEET BEHIND BACK OF CURB.

# CITY OF PEORIA STANDARD DETAIL PE-395 UNIVERSAL AIR-VACUUM VALVE



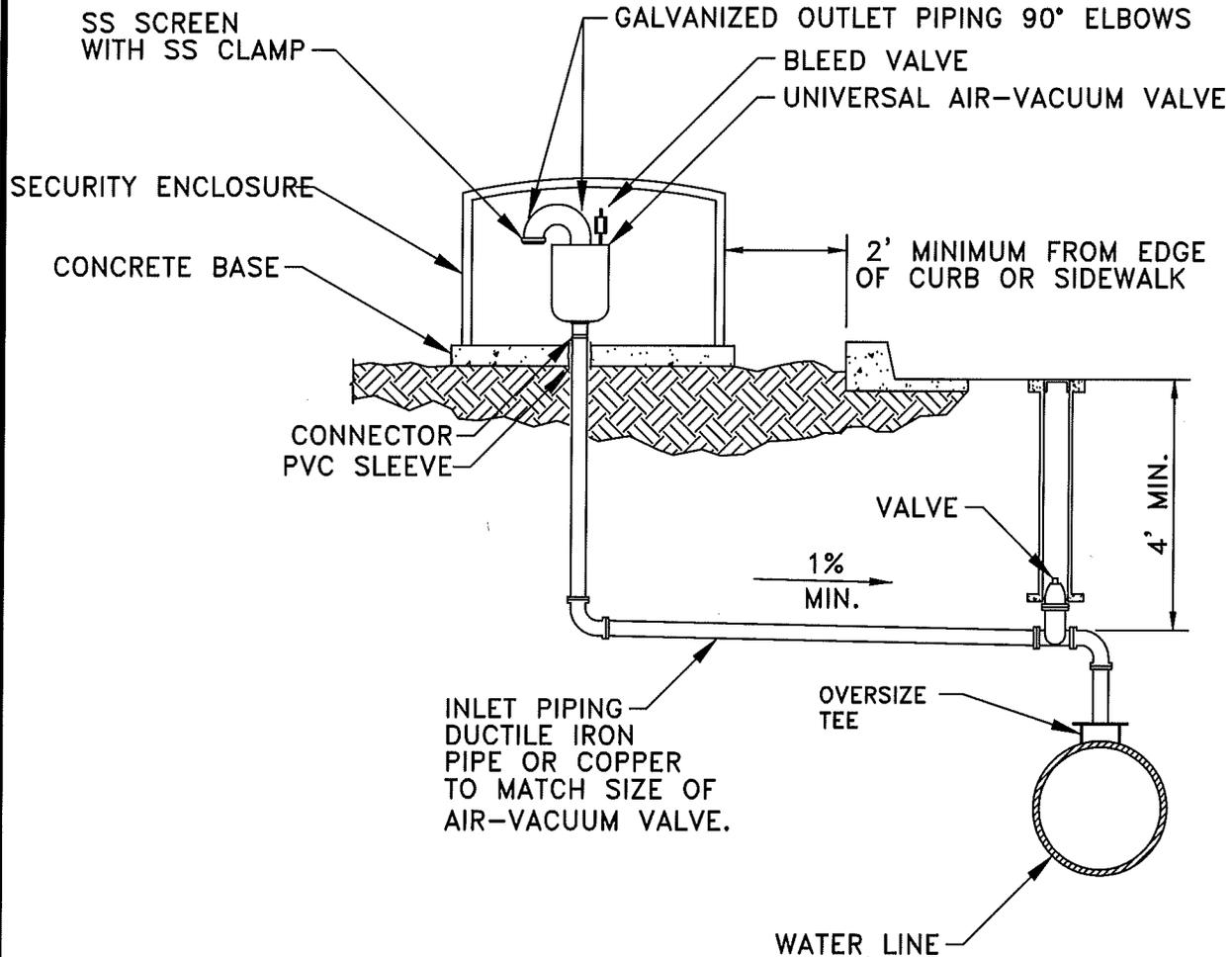
APPROVALS:

*[Signature]*  
CITY ENGINEER

3/5/14  
DATE

*[Signature]* 0365-2014  
PUBLIC WORKS-UTILITIES DIRECTOR

DATE



### NOTES:

1. SECURITY ENCLOSURE SHALL BE GUARDSHACK ENCLOSURES - GS HINGED POWDER COAT TAN OR APPROVED EQUAL WITH PADLOCK HASP.
2. LINE FROM MAIN TO AIR RELEASE VALVE TO BE INSTALLED WITH POSITIVE SLOPE TO PREVENT BLOCKAGE.
3. CONCRETE BASE - 4 - INCH THICK WITH NUMBER 4 REBAR @ 12 - INCH EACH WAY. BASE DIMENSIONS SHALL BE 12 - INCHES GREATER THAN INSIDE DIMENSIONS OF SECURITY ENCLOSURE.
4. FIELD PAINT ALL FITTINGS AND SECURITY ENCLOSURE "DESERT TAN."
5. SIZE OF UNIVERSAL AIR-VACUUM VALVE AND APPURTENANCES SHALL BE SPECIFIED BY THE DESIGN ENGINEER.

CITY OF PEORIA  
STANDARD DETAIL PE-398  
TYPICAL VALVE LOCATION



APPROVALS:

*Charles Gray* 4/4/09  
CITY ENGINEER DATE

*Stephen Conroy* 4/9/09  
UTILITIES DIRECTOR DATE

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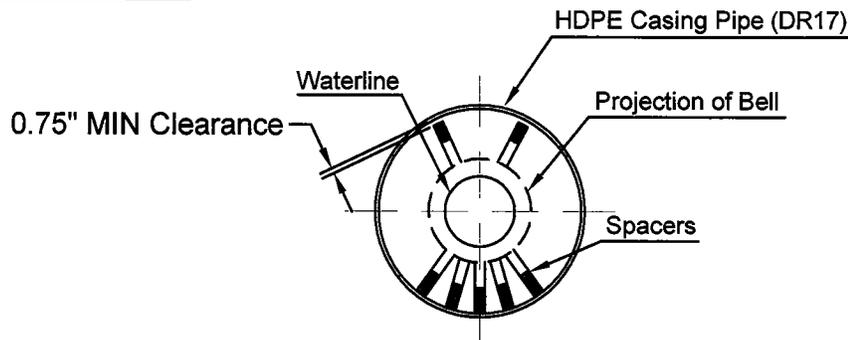
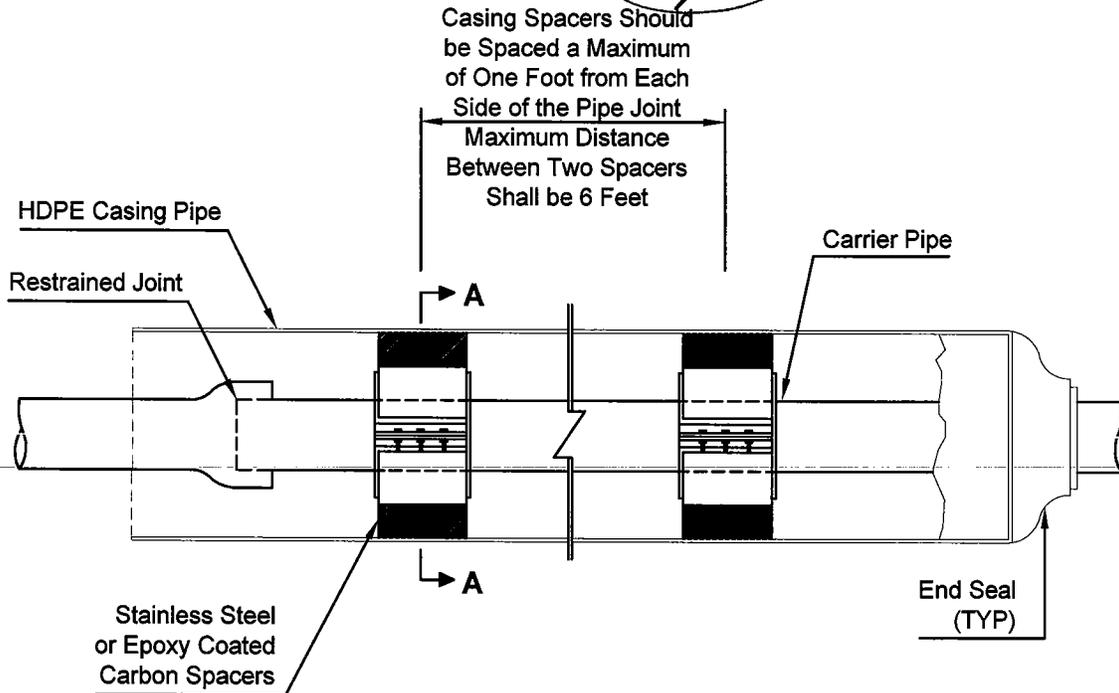
# CITY OF PEORIA STANDARD DETAIL PE-399 CASING WITH CARRIER PIPE



APPROVALS:

*[Signature]*  
CITY ENGINEER      12/15/11  
DATE

*[Signature]*  
PUBLIC WORKS-UTILITIES DIRECTOR      12-15-2011  
DATE



**NOTES:**

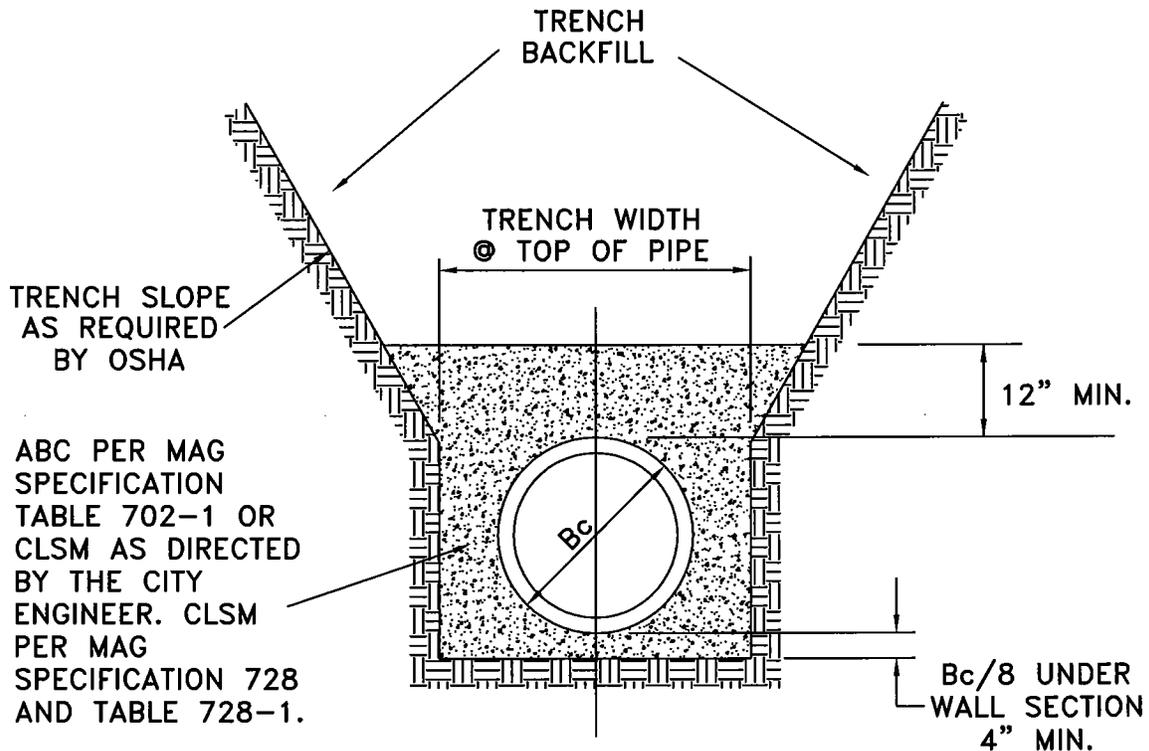
1. CASING SPACERS SHALL BE CASCADE WATERWORKS MFG, ADVANCED PRODUCTS & SYSTEMS OR EQUAL.
2. END SEALS SHALL BE PULL ON RUBBER WITH STAINLESS STEEL BANDS.
3. ALL CASINGS SHALL BE HIGH-DENSITY POLYETHYLENE PIPE (HDPE) DR 17, PE 3608/3408 DIPS. ALL HDPE CASING PIPE SHALL CONFORM TO ASTM D 3350-05 AND ANSI/AWWA C 906-2006 AND SHALL BE INSTALLED PER ASTM D 2774-04. JOINTING SHALL MEET EITHER ASTM F 2620 OR ASTM F 1290.
4. CASING PIPE DIAMETER PER MAG 602.2.

CITY OF PEORIA  
STANDARD DETAIL PE-401  
BEDDING AND BACKFILL



APPROVALS:

*Dave Moody* 3/10/08  
CITY ENGINEER DATE



BC = OUTSIDE DIAMETER OF WALL SECTION

NOTE:

1. TRENCH BACKFILL SHALL CONFORM TO MAG SPECIFICATION 601.4.3

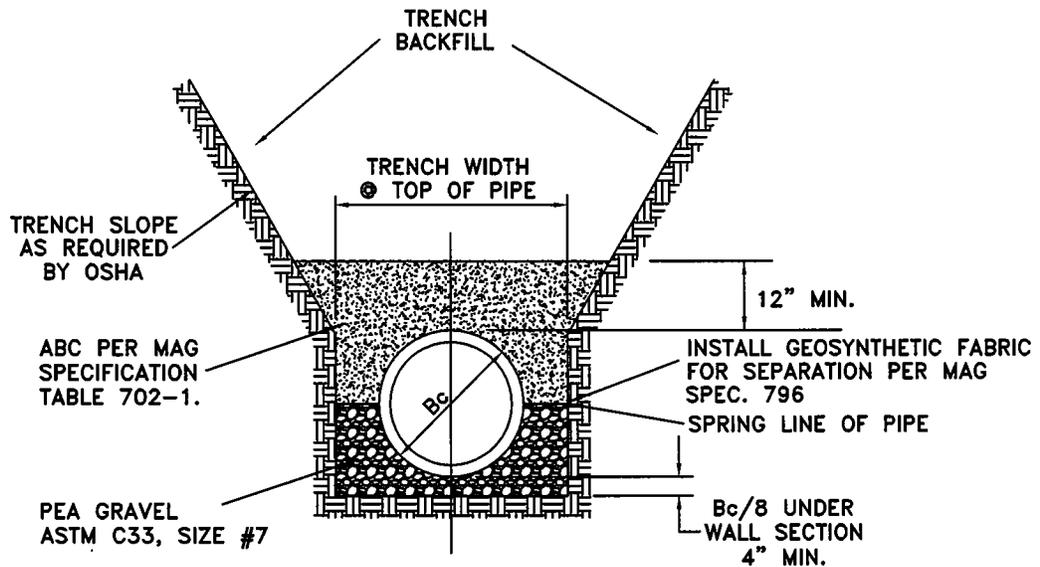
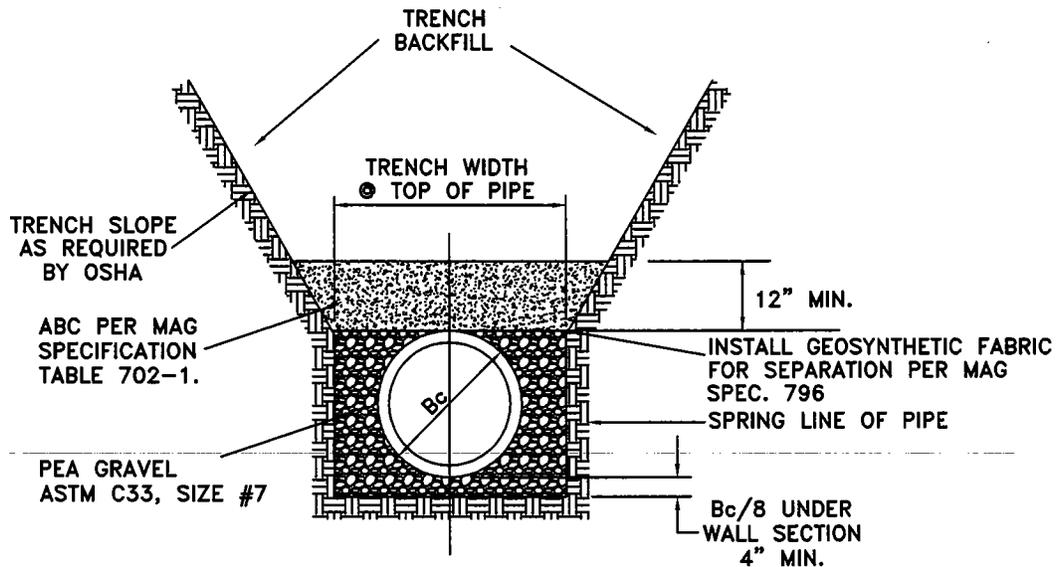
\* CMP UNDERGROUND OR CONCEALED RETENTION/DETENTION FACILITIES  
SHALL CONFORM TO CITY OF PEORIA STANDARD DETAIL PE-402.

# CITY OF PEORIA STANDARD DETAIL PE-402 BEDDING AND BACKFILL FOR CMP



APPROVALS:


5/27/12  
 CITY ENGINEER DATE



BC = OUTSIDE DIAMETER OF CMP

NOTE:

1. TRENCH BACKFILL SHALL CONFORM TO MAG SPECIFICATION 601.4.3

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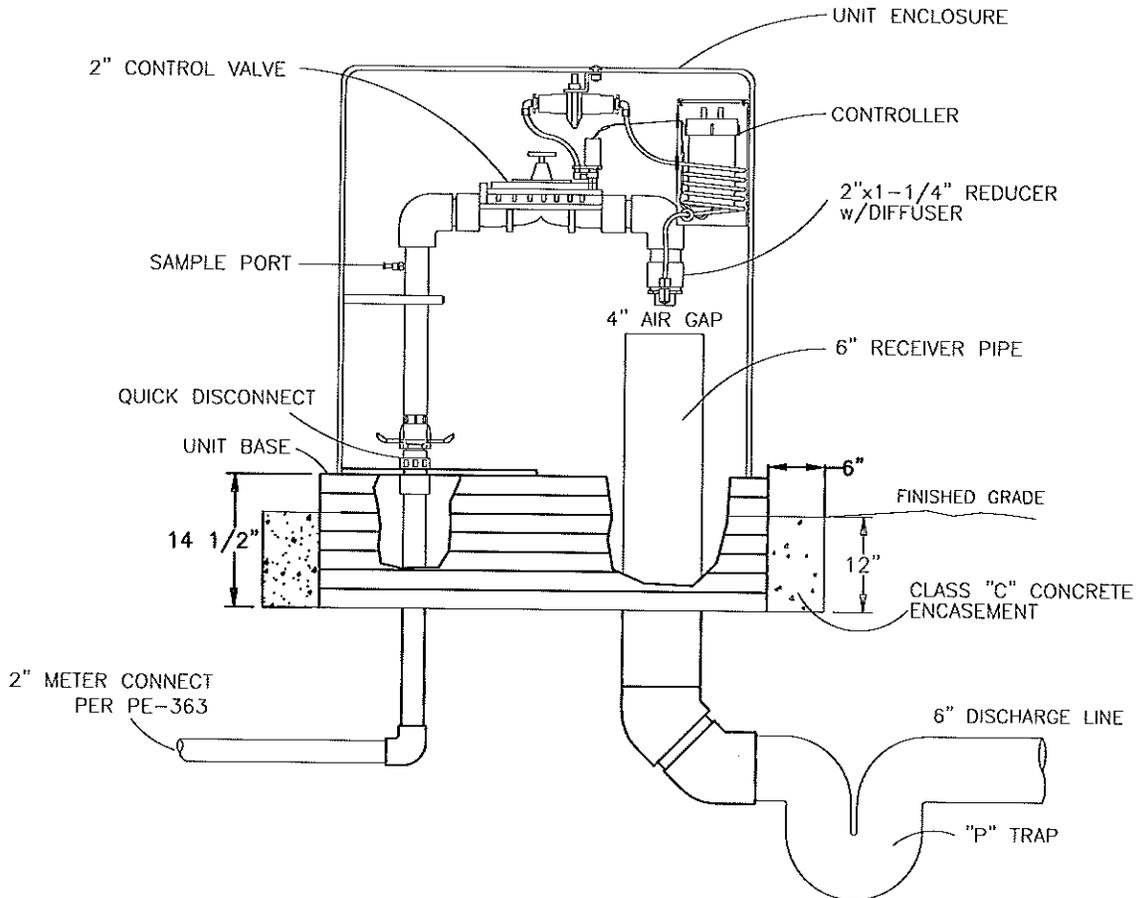
# CITY OF PEORIA STANDARD DETAIL PE-410 AUTOMATIC FLUSHER



APPROVALS:

*[Signature]*  
CITY ENGINEER      2/6/14      DATE

*[Signature]* 01-14-2014  
PUBLIC WORKS-UTILITIES DIRECTOR      DATE



TYPICAL INSTALL

N.T.S.

**NOTES:**

1. AUTOMATIC FLUSHING UNIT SHALL BE HYDROGUARD HG-2 (OR EQUIVALENT).
2. UNIT ENCLOSURE SHALL BE APPROVED BY THE ENGINEERING DEPARTMENT.
3. RECEIVER AND DISCHARGE PIPE SHALL BE SDR-35 PVC.
4. FILL INSIDE OF BASE WITH A 2 INCH LAYER OF PEA GRAVEL.

I:\GUIDE\DETAILS\CAD\PE-410

# CITY OF PEORIA STANDARD DETAIL PE-450 TYPICAL GREASE WASTE



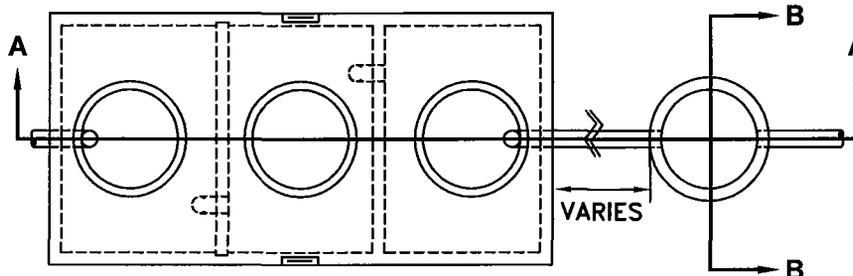
APPROVALS:

*Dana Moody*  
CITY ENGINEER

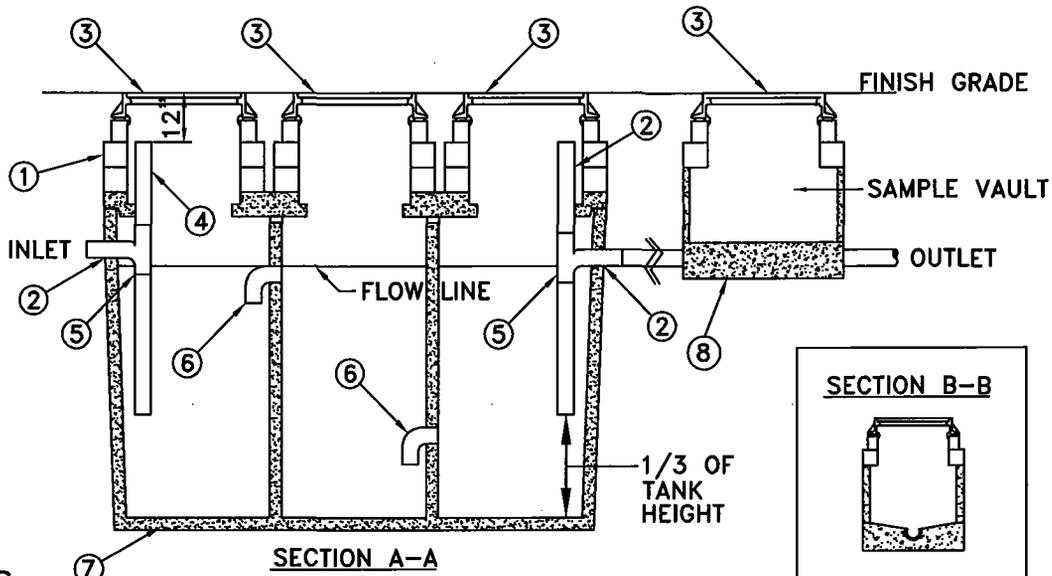
*3/28/08*  
DATE

*Stephen Santigone*  
UTILITIES DIRECTOR

*3/28/08*  
DATE



PLAN VIEW



SECTION A-A

**NOTES:**

- ① ALL GRADIENT RISERS, INCLUDING THE MANHOLE FRAME, WILL HAVE THE INTERIOR SEALED WITH NON-SHRINK GROUT.
- ② EXTERNAL INLET AND OUTLET PIPE ACCESS HOLES SHALL BE SEALED WITH NON-SHRINK GROUT.
- ③ MANHOLE, FRAME, AND COVER FOR INTERCEPTOR AND SAMPLE VAULT MUST HAVE CONCRETE COLLAR PER M.A.G. DETAIL 422. (M.A.G. DETAIL 424 IN TRAFFIC AREAS)
- ④ INTERNAL SANITARY "T"s SHALL BE EXTENDED TO 12-INCHES BELOW THE MANHOLE LID OR ACCESS LID
- ⑤ SANITARY TEE (TYPICAL) - BOTH INLET AND OUTLET DOWN DRAFT TUBES ARE TO BE 1/3 OF THE TOTAL TANK HEIGHT FROM THE BOTTOM OF THE TANK.
- ⑥ 4-INCH DIAMETER MINIMUM PVC ELBOW
- ⑦ INTERCEPTOR MUST BE SMITH PRE-CAST OR EQUIVALENT. (CAPACITY VARIES)
- ⑧ SAMPLE VAULT MUST BE SMITH PRE-CAST OR EQUIVALENT.
- ⑨ INTERCEPTOR AND VAULT MUST BE INSPECTED BY THE CITY OF PEORIA ENVIRONMENTAL/INDUSTRIAL USER DIVISION
- ⑩ A PLUMBING PERMIT IS REQUIRED FOR REPLACEMENT.

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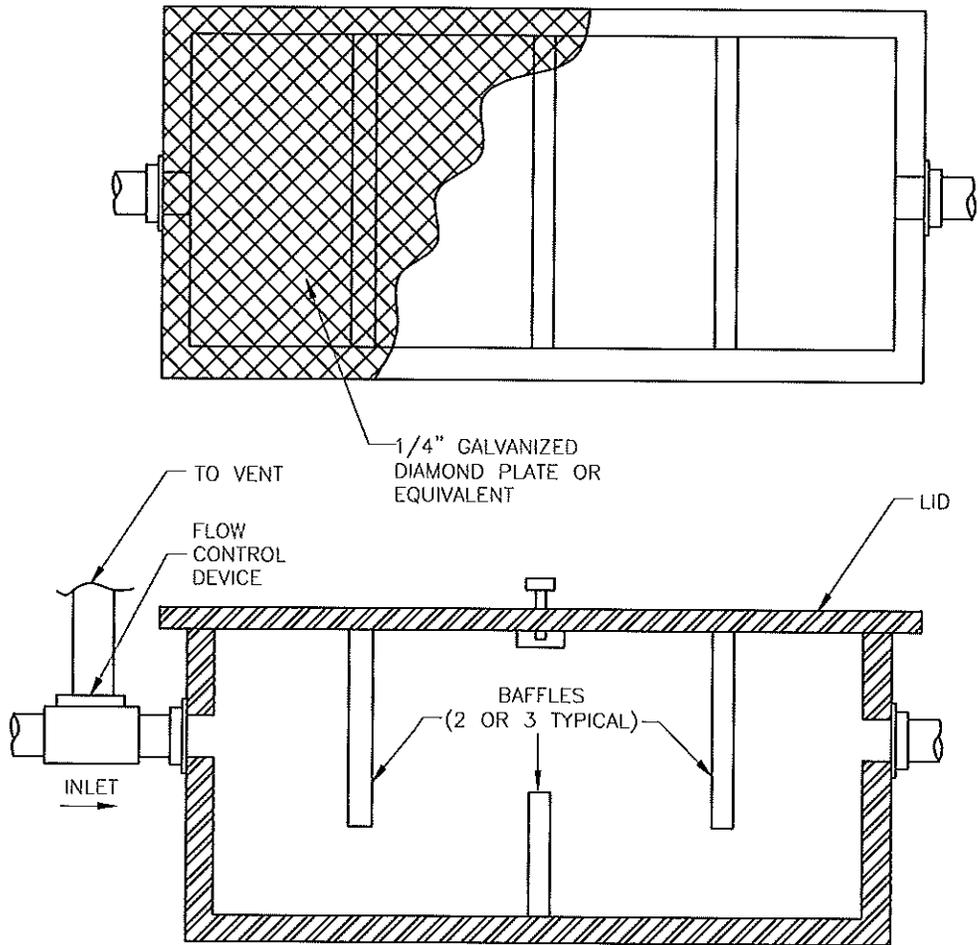
# CITY OF PEORIA STANDARD DETAIL PE-451 TYPICAL GREASE TRAP REQUIREMENTS



APPROVALS:

*[Signature]*  
CITY ENGINEER      2/6/14  
DATE

*[Signature]* 01-14-2014  
PUBLIC WORKS-UTILITIES DIRECTOR DATE



**NOTES:**

1. MUST BE METAL CONSTRUCTED – ALL OTHER MATERIALS MUST HAVE WASTEWATER ENVIRONMENTAL APPROVAL.
2. A FLOW CONTROL DEVICE MUST BE INSTALLED TO MANUFACTURER'S SPECIFICATIONS ON THE INLET PIPE PRIOR TO ENTERING THE GREASE TRAP.
3. TRAPS MAY BE INSTALLED ABOVE GROUND OR BELOW FLOOR GRADE.
4. FILL WITH CLEAN WATER PRIOR TO START UP.
5. GREASE TRAP MUST BE INSPECTED PRIOR TO BACKFILL BY WASTEWATER ENVIRONMENTAL DEPARTMENT.
6. A PLUMBING PERMIT IS REQUIRED FOR INSTALLATION.
7. GREASE TRAP SHALL BE NO SMALLER THAN A 50 GALLON PER MINUTE FLOW WITH 100 POUND GREASE CAPACITY (50/100).
8. USE AND SIZE TO BE APPROVED BY WASTEWATER ENVIRONMENTAL DEPARTMENT.

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# CITY OF PEORIA STANDARD DETAIL PE-551 TRACER WIRE TERMINATION



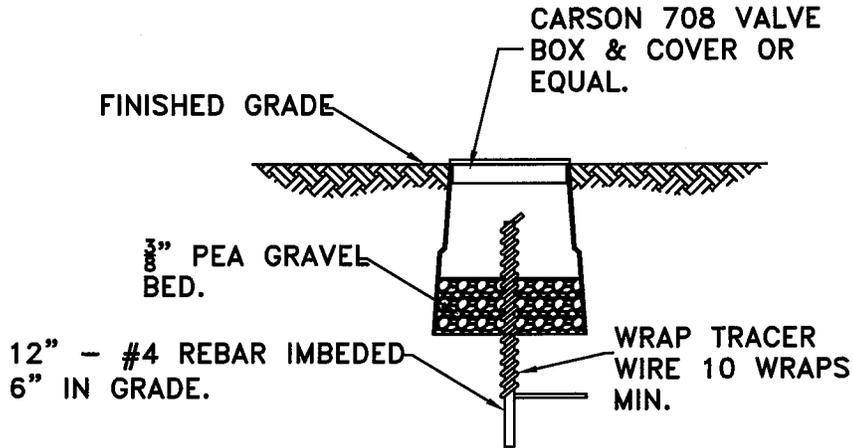
APPROVALS:

*[Signature]*  
CITY ENGINEER

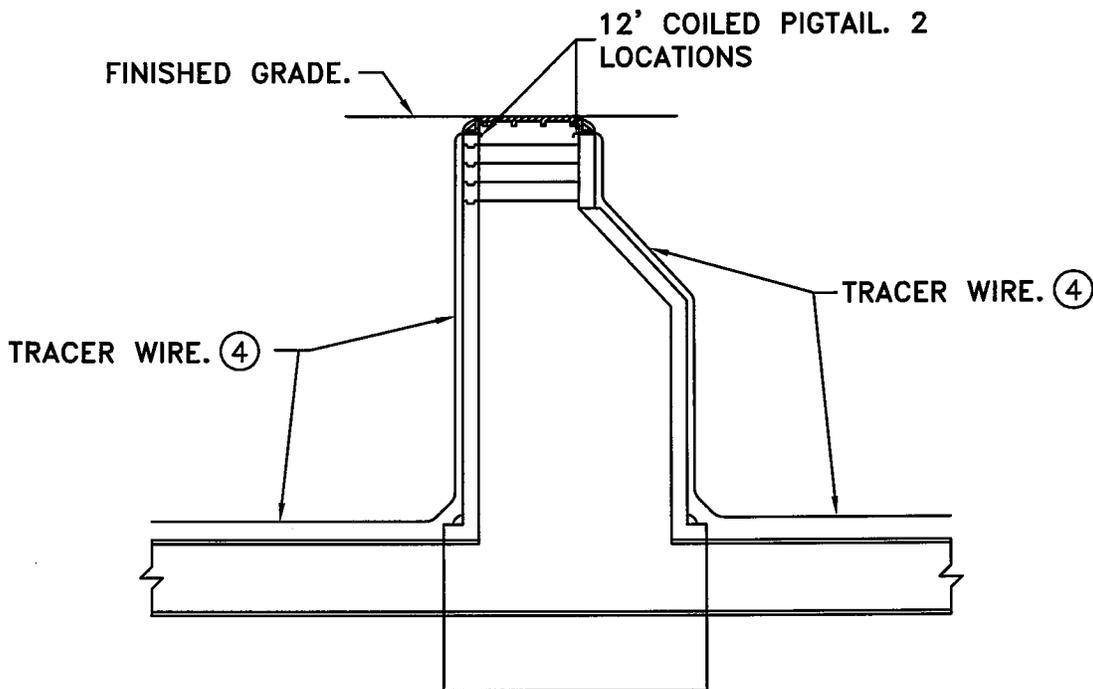
DATE

*[Signature]* 05-20-2013  
PUBLIC WORKS-UTILITIES DIRECTOR

DATE



TRACER BOX DETAIL



TRACER FOR MANHOLE

**NOTES:**

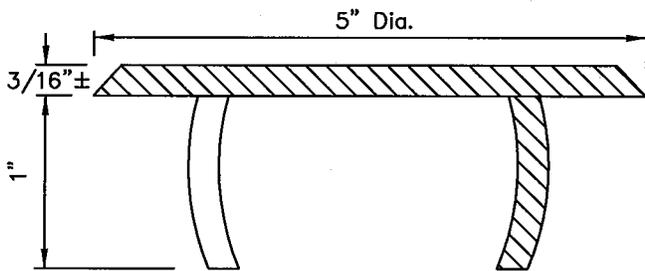
1. LOCATE TRACER BOX IN GRADE CENTERED OVER THE PIPE, IMMEDIATELY BEHIND HEADWALL, MANHOLE IN GRADE OR AREA INLET.
2. LOCATE TRACER BOX IN GRADE IMMEDIATELY ADJACENT TO CATCH BASIN OR CURB INLET.
3. RUN TRACER WIRE WITHIIN 3" OF MANHOLE TOWER AND WRAP 12" MINIMUM OVER THE FINAL ADJUSTMENT RING.
4. TRACER WIRE MATERIALS AND INSTALLATION SHALL BE PER IDG SECTION 4-2.A.4g.

CITY OF PEORIA  
STANDARD DETAIL PE-559-1  
STORM DRAIN INLET MARKER



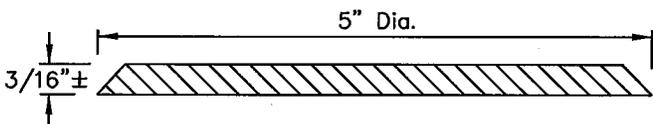
APPROVALS:

*David M. Wood*  
CITY ENGINEER      2/22/07  
DATE



TYPE "A":

TO BE INSTALLED IN WET CONCRETE  
DURING CONSTRUCTION



TYPE "B"

TO BE INSTALLED WITH ADHESIVE  
ON EXISTING STRUCTURES



NOTES

1. Material: Cast Aluminum
2. The Total Width Of Individual Letters To Be Such That Letters And Words Are Equally Spaced And Balanced.
3. Letters To Be 1/2" In Height. Type Of Letters To Be Submitted For Approval.

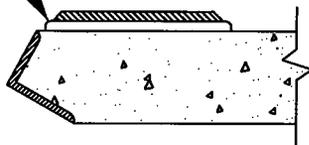
# CITY OF PEORIA STANDARD DETAIL PE-559-2 STORM DRAIN INLET MARKER ON CATCH BASIN/SCUPPER



APPROVALS:

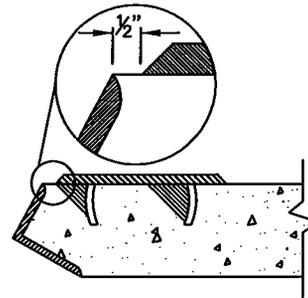
*Dan Muef*  
CITY ENGINEER      2/22/07  
DATE

Dynamix #6125-1  
Urethane Universal  
Adhesive



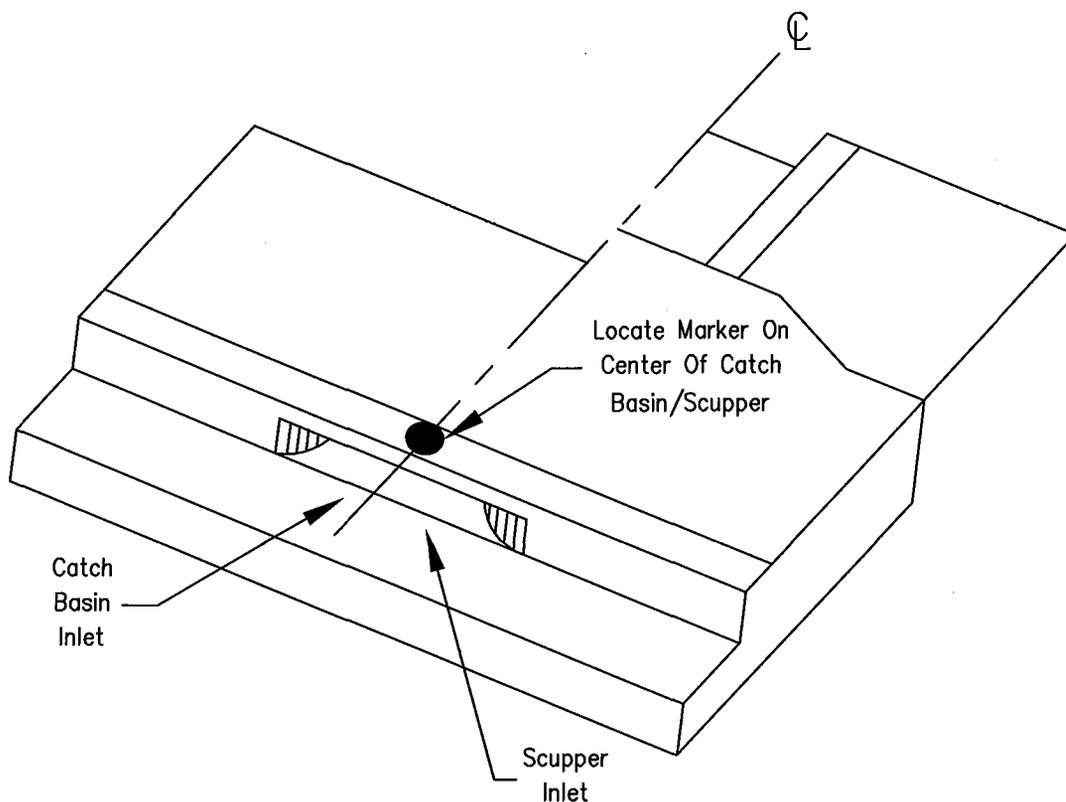
TYPE "B"

TO BE INSTALLED WITH ADHESIVE  
ON EXISTING STRUCTURES



TYPE "A"

TO BE INSTALLED IN WET CONCRETE  
DURING CONSTRUCTION

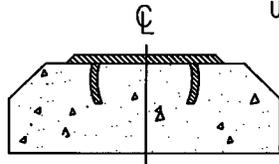


# CITY OF PEORIA STANDARD DETAIL PE-559-3 STORM DRAIN INLET MARKER ON HEADWALL



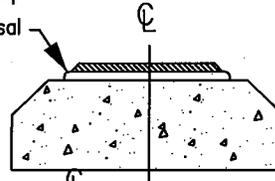
APPROVALS:

*[Signature]*  
CITY ENGINEER      2/22/07  
DATE



TYPE "A"  
TO BE INSTALLED IN WET CONCRETE  
DURING CONSTRUCTION

Dynamix #6125-1  
Urethane Universal  
Adhesive



TYPE "B"  
TO BE INSTALLED WITH ADHESIVE  
ON EXISTING STRUCTURES

