Extension unit may be used on either or both sides of intake. Details are similar when extension unit is on the opposite side. For joint details, refer to PV-101.

1. Match gutter slope. Drain to well.
2. Other lengths of opening may be constructed by varying the length of the extension and the rebar.
3. Includes 2 inches for 'ED' Joints.
4. 12 inch minimum wall height above all pipes.

== TABLE OF DIMENSIONS ==

<table>
<thead>
<tr>
<th>Length of Curb Opening</th>
<th>Typical Extension Unit</th>
<th>Typical Intake Well</th>
</tr>
</thead>
<tbody>
<tr>
<td>12'-0''</td>
<td>14'-0''</td>
<td>16'-0''</td>
</tr>
<tr>
<td>16'-0''</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Charred labeling of rebar.

== MAXIMUM PIPE DIAMETERS ==

<table>
<thead>
<tr>
<th>Structure</th>
<th>Cast-in-place Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>30''</td>
<td>36''</td>
</tr>
</tbody>
</table>

SUDAS IOWADOT
SW-545
SHEET 1 of 4

SUDAS DIRECTOR
DESIGN METHODS ENGINEER

FIGURE 6010.545
STANDARD ROAD PLAN

EXTENDED OPENING CURB INTAKE WITH SINGLE OPEN-THROAT EXTENDED OPENING
**PLAN**

- **TOP REINFORCING PLACEMENT**
  - Extension Length: 5'-0''
  - 6'' dia. Concrete Post
  - Boxout Length: 23'-0'' max

- **BOTTOM REINFORCING PLACEMENT**
  - Extension Length: 5'-0''
  - 6'' dia. Concrete Post
  - Boxout Length: 23'-0'' max

**REINFORCING BAR LIST**

<table>
<thead>
<tr>
<th>MARK</th>
<th>SIZE</th>
<th>LOCATION</th>
<th>NO.</th>
<th>LENGTH</th>
<th>SPACING</th>
</tr>
</thead>
<tbody>
<tr>
<td>4b1</td>
<td>4</td>
<td>Base</td>
<td>5</td>
<td>4'-6''</td>
<td>11''</td>
</tr>
<tr>
<td>4b2</td>
<td>4</td>
<td>Top</td>
<td>1</td>
<td>4'-6''</td>
<td>11''</td>
</tr>
<tr>
<td>4e1</td>
<td>4</td>
<td>Post</td>
<td>1</td>
<td>12''</td>
<td></td>
</tr>
<tr>
<td>4e2</td>
<td>4</td>
<td>Walls</td>
<td>15</td>
<td>Wall Height minus 4''</td>
<td>14''</td>
</tr>
<tr>
<td>4e3</td>
<td>4</td>
<td>Walls</td>
<td>9</td>
<td>4'-6''</td>
<td>12''</td>
</tr>
</tbody>
</table>

- Other lengths of opening may be constructed by varying the length of the extension and the rebar.
- Includes 2 inches for 'ED' Joints.
- 4e1 or 4e6. See Sheets 3 and 4.
- Slope of 1.5% or as specified in the contract documents.
**PLAN**

**TOP OF EXTENSION REINFORCING PLACEMENT**

- ** Extension Length**
- **8'' dia. Concrete Post**
- **B' Joint**

- **REINFORCING BAR LIST**
  - **SIZE**
  - **LOCATION**
  - **NO.**
  - **LENGTH**
  - **WEIGHT**
  - **SPACING**

- **INSERT DETAIL**
  - **4 Inch Sloped Curb**

- **MARK**
- **LOCATION**
- **NO.**
- **LENGTH**
- **WEIGHT**
- **SPACING**

**4 INCH SLOPED CURB**

**PLAN**

**BOTTOM OF EXTENSION REINFORCING PLACEMENT**

- **Extension Length**
- **8'' dia. Concrete Post**
- **B' Joint**

- **REINFORCING BAR LIST**
  - **SIZE**
  - **LOCATION**
  - **NO.**
  - **LENGTH**
  - **WEIGHT**
  - **SPACING**

- **INSERT DETAIL**
  - **4 Inch Sloped Curb**

- **MARK**
- **LOCATION**
- **NO.**
- **LENGTH**
- **WEIGHT**
- **SPACING**

**4 INCH SLOPED CURB**

**BENT BAR DETAILS**

**REINFORCING BAR LIST**

- **MARK**
- **SIZE**
- **LOCATION**
- **NO.**
- **LENGTH**
- **WEIGHT**
- **SPACING**

**DETAIL 'A'**

Use when adjacent pavement is HMA or composite.

**NOTE:** All dimensions are out to out

- **D = PIN DIAMETER**

- **Other lengths of opening may be constructed by varying the length of the extension and the rebar.***