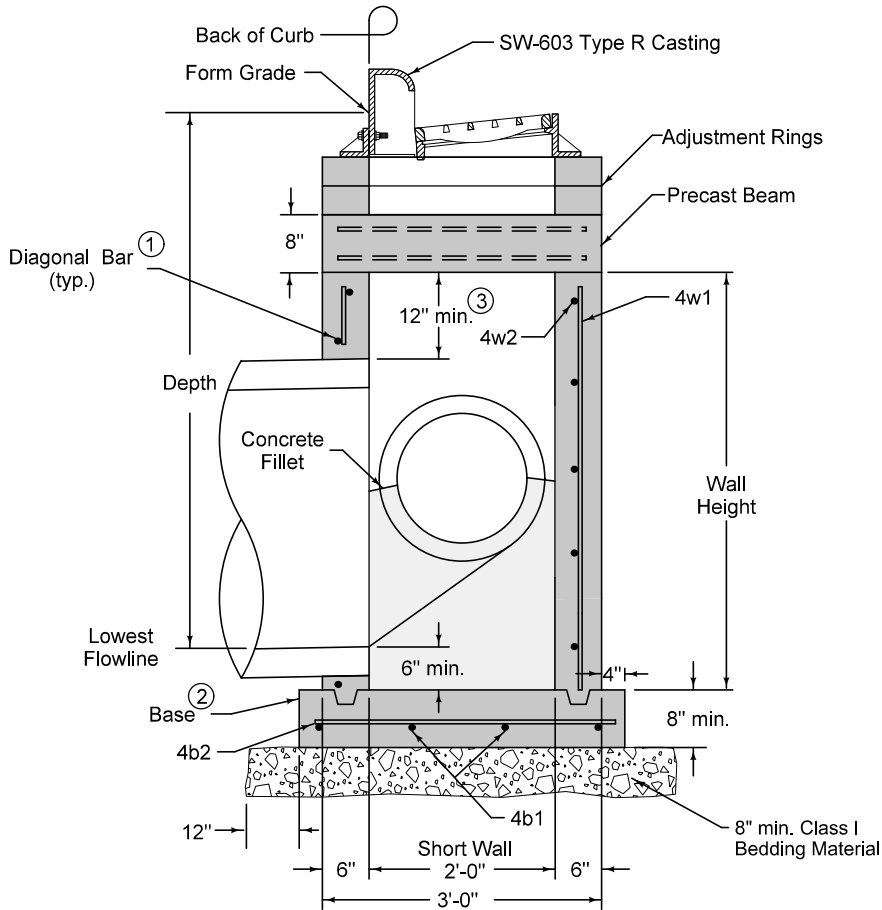
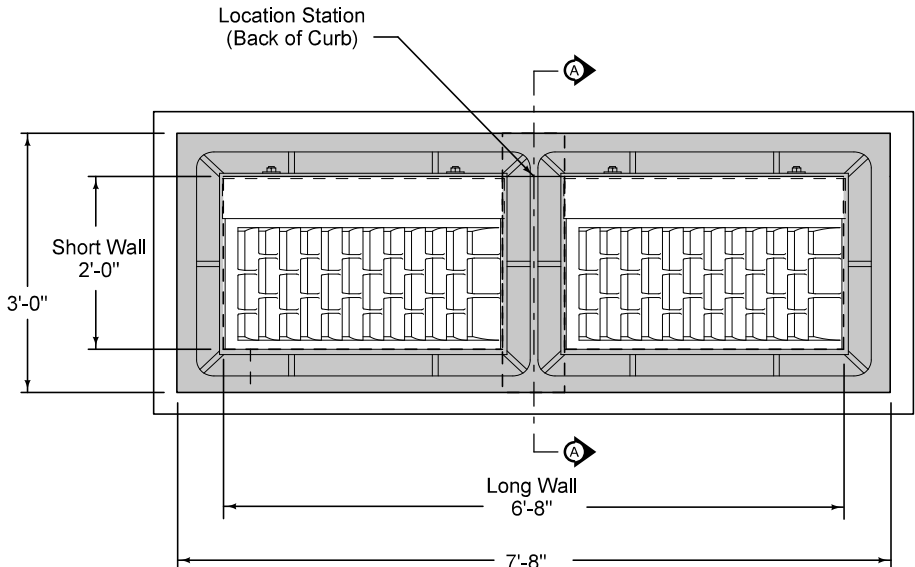


Refer to SW-514 for boxout details.

- ① Install four #4 diagonal bars at all pipe openings.
- ② Cast-in-place base shown. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.
- ③ 12 inch minimum wall height above all pipes.



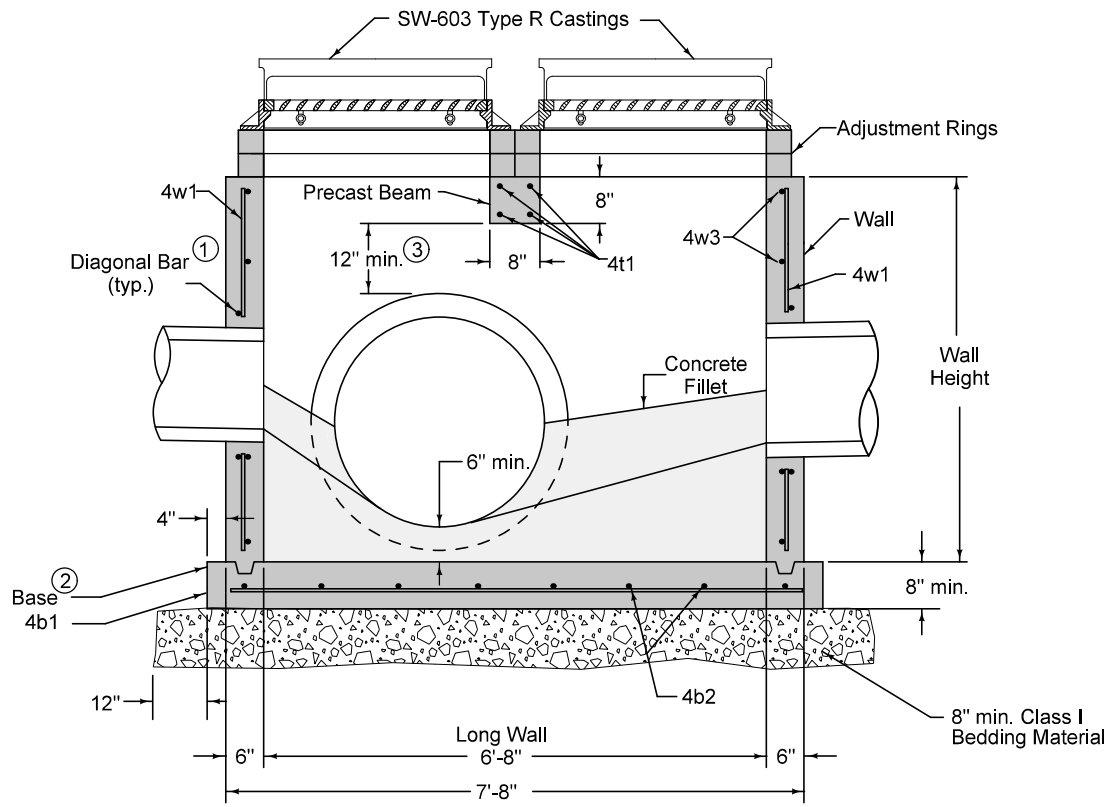
SECTION A-A



PLAN

FIGURE 6010.505 SHEET 1 OF 2

|  |                    |  |
|--|--------------------|--|
| SUDAS                                      | IOWADOT            | REVISION                                 |
|  |                    | 3 04-21-20                               |
| FIGURE 6010.505                            | STANDARD ROAD PLAN | <b>SW-505</b>                            |
| REVISIONS: Added Class I Bedding Material. |                    | SHEET 1 of 2                             |
| Paul D. Wiegand<br>SUDAS DIRECTOR          |                    | Stuart Miller<br>DESIGN METHODS ENGINEER |
| <b>DOUBLE GRATE INTAKE</b>                 |                    |  |



- ① Install four #4 diagonal bars at all pipe openings.
- ② Cast-in-place base shown. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.
- ③ 12 inch minimum wall height above all pipes.

TYPICAL SECTION

REINFORCING BAR LIST

| Mark | Size | Location    | Shape | Count  | Length               | Spacing |
|------|------|-------------|-------|--------|----------------------|---------|
| 4t1  | 4    | Beam        | —     | 4      | 2'-8"                | 4"      |
| 4b1  | 4    | Base        | —     | 4      | 7'-10"               | 10"     |
| 4b2  | 4    | Base        | —     | 8      | 3'-2"                | 12"     |
| 4w1  | 4    | Walls       | —     | 20     | Wall Height minus 4" | 12"     |
| 4w2  | 4    | Long Walls  | —     | Varies | 7'-4"                | 12"     |
| 4w3  | 4    | Short Walls | —     | Varies | 2'-8"                | 12"     |

| MAXIMUM PIPE DIAMETERS |                   |                         |
|------------------------|-------------------|-------------------------|
| Pipe Location          | Precast Structure | Cast-in-place Structure |
| Short Wall             | 15"               | 18"                     |
| Long Wall              | 60"               | 66"                     |

FIGURE 6010.505 SHEET 2 OF 2

|   |                 |  |               |
|---|-----------------|--|---------------|
| SUDAS<br>IOWADOT                                | REVISION        | 3  | 04-21-20      |
|   | FIGURE 6010.505 | STANDARD ROAD PLAN                                     | <b>SW-505</b> |
| REVISIONS: Added Class I Bedding Material.      |                 | SHEET 2 of 2   |               |
| Paul D. Wigand<br><small>SUDAS DIRECTOR</small> |                 | Scott Miller<br><small>DESIGN METHODS ENGINEER</small> |               |
| <b>DOUBLE GRATE INTAKE</b>                      |                 |  |               |