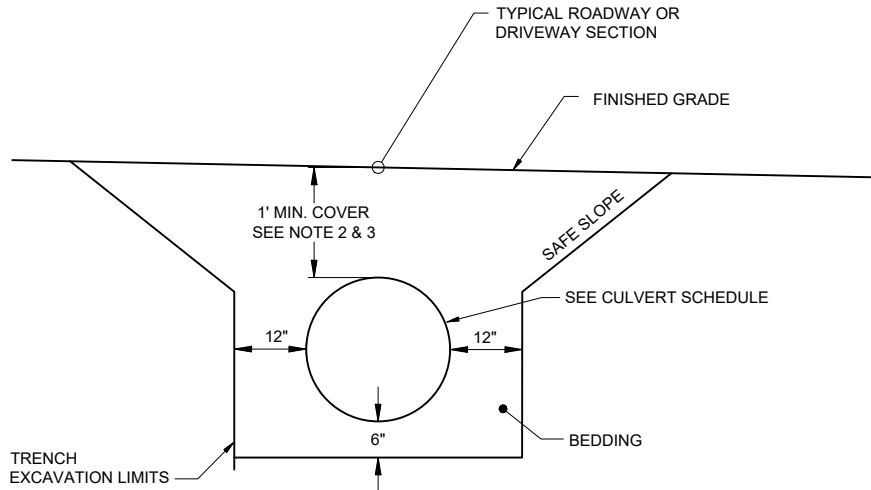




NOTES:

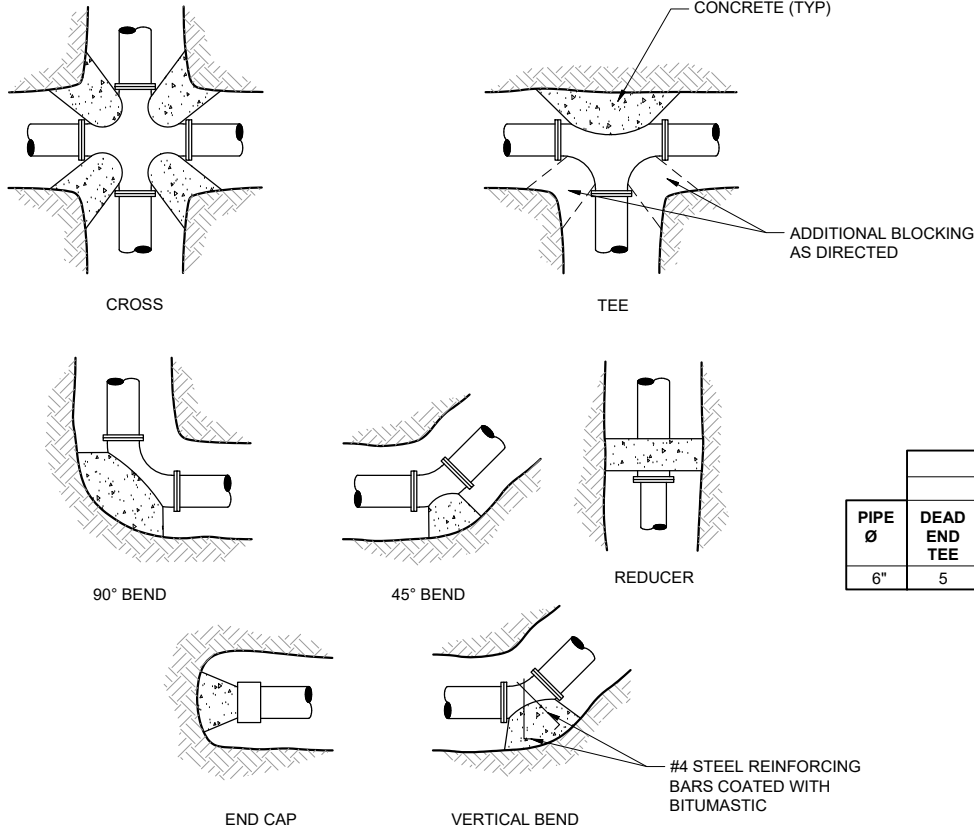
- BEFORE OPENING TO TRAFFIC, PLACE AND COMPACT MINIMUM COVER.
- SET INVERTS OF PIPE TO NEW DITCH LINE. SEE THIS SHEET FOR CULVERT SCHEDULE.
- FOR CPP CASING INVERT, SEE SCHEDULE.
- EACH CULVERT THAT IS REPLACED SHALL RECEIVE TWO END SECTIONS. IF ONLY ONE END OF THE CULVERT IS REPLACED, THEN ONE NEW END SECTION SHALL BE PROVIDED.
- FOR ANY CULVERTS WITH INCOMPLETE OR MISSING INFORMATION, CONTRACTOR SHALL RECORD AND MATCH EXISTING CULVERT SIZE AND INVERT ELEVATIONS.

1

DETAIL: CULVERT AND CPP CASING

C-503

SCALE: N.T.S



2

DETAILS: THRUST BLOCK

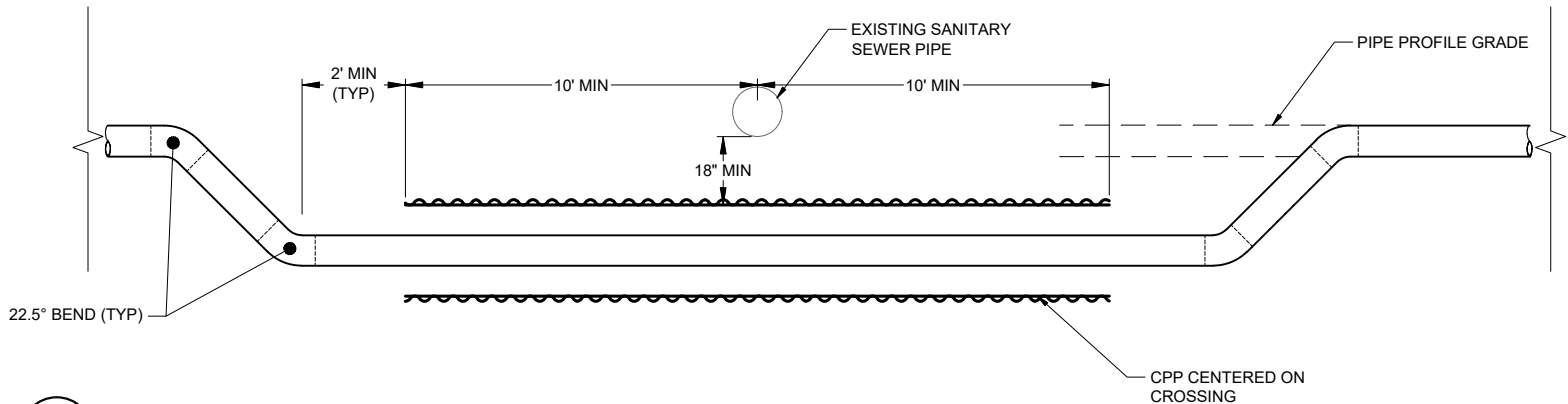
C-503

SCALE: N.T.S

NOTES:

- BASED ON PRESSURE OF 200 psi, MIN COVER OF 3' AND SOIL BEARING OF 1500 psf.
- FOR SOIL BEARING = 3000 psf, USE 0.5 AREA SHOWN  
= 1000 psf, USE 1.5 AREA SHOWN  
= 500 psf, USE 3.0 AREA SHOWN
- ALL ANCHORS AND THRUST BLOCKS SHALL BE PLACED AGAINST UNDISTURBED SOIL OR COMPACTED BEDDING.
- THRUST BLOCKS ON CROSSED SHALL BE USED WHENEVER PIPE DIAMETERS DIFFER OR WHEN ONE OR MORE OPENINGS ARE PLUGGED.
- FORM THRUST BLOCKS SO THAT BOLTS ARE NOT COVERED WITH CONCRETE AND ARE READILY ACCESSIBLE.
- ALL THRUST BLOCKS SHALL CONSIST OF A MINIMUM OF 0.5 CY CONCRETE.
- WRAP PIPE AND JOINTS WITH 6 mil POLYETHYLENE SHEETING.

| PIPE Ø | HORIZONTAL TO END        |     |     |         |         |                | VERTICAL BEND |     |         |
|--------|--------------------------|-----|-----|---------|---------|----------------|---------------|-----|---------|
|        | MINIMUM BEARING AREA, SF |     |     |         |         |                | MIN VOL, CY   |     |         |
|        | DEAD END TEE             | 90° | 45° | 22 1/2° | END CAP | CROSS EACH WAY | 90°           | 45° | 22 1/2° |
| 6"     | 5                        | 7   | 4   | 2       | 5       | 2              | 2.6           | 1.4 | 0.7     |



3

DETAIL: SANITARY SEWER UTILITY CROSSING

C-503

SCALE: N.T.S

| CULVERT SCHEDULE  |                     |                         |         |        |     |     |     |                                |          |             |
|-------------------|---------------------|-------------------------|---------|--------|-----|-----|-----|--------------------------------|----------|-------------|
| CULVERT<br>NUMBER | ROAD NAME           | PLAN<br>SHEET<br>NUMBER | STATION | LENGTH |     |     |     | CROSSING<br>(X) OR<br>PARALLEL | INVERT   |             |
|                   |                     |                         |         | 18"    | 24" | 36" | 60" |                                | IN       | OUT         |
| SD-1              | OPHIR CREEK<br>ROAD | C-301                   | 10+52   | 63'    |     |     |     | X                              | 59.1 LT  | 57.1 RT     |
| SD-2              | OPHIR CREEK<br>ROAD | C-301                   | 10+67   | 50'    |     |     |     | X                              | 58.4 LT  | 56.6 RT     |
| SD-3              | AIRPORT ROAD        | C-314                   | 162+50  |        | 50' |     |     | X                              | 36.4 RT  | 35.7 LT     |
| SD-4              | AIRPORT ROAD        | C-315                   | 174+35  |        |     |     | 58' | X                              | 29.6 LT  | 29.1 RT     |
| SD-5              | ENDICOTT ROAD       | C-319                   | 219+90  |        |     | 56' |     | X                              | 23.5 LT  | 22.8 RT     |
| SD-6              | ENDICOTT ROAD       | C-319                   | 221+95  |        | 55' |     |     | X                              | 22.0 RT  | 21.9 LT     |
| SD-7              | AIRPORT ROAD        | C-304                   | 41+12   | 53'-0" |     |     |     | PARALLEL                       | 70.10 RT | 69.49<br>RT |
| SD-8              | AIRPORT ROAD        | C-304                   | 44+57   | 60'    |     |     |     | PARALLEL                       | 63.38 RT | 62.47<br>RT |

| CPP CASING SCHEDULE |                     |                   |         |        |                   |
|---------------------|---------------------|-------------------|---------|--------|-------------------|
| CPP NUMBER          | ROAD NAME           | PLAN SHEET NUMBER | STATION | LENGTH | WATER MAIN INVERT |
|                     |                     |                   |         | 18"    |                   |
| CPP-1               |                     | C-317             | 203+89  | 20'    | 23.4              |
| CPP-2               |                     | C-318             | 205+08  | 20'    | 22.7              |
| CPP-3               | ENDICOTT ROAD       | C-319             | 221+00  | 20'    | 10.3              |
| CPP-4               | AIRPORT ACCESS ROAD | C-319             | 223+99  | 20'    | 10.5              |

CONSULTANT :



Juneau, AK  
9089 Mendocino Rd. Ste. 4  
Juneau, AK 99801  
Phone: 907.586.0060  
Fax: 907.586.3771  
AECOC 63270



PROJECT :  
CITY & BOROUGH OF YAKUTAT  
WATER SYSTEM EXTENSION

YAKUTAT, ALASKA

SHEET TITLE :  
CULVERT AND THRUST BLOCK DETAILS

DESIGN AMN  
DRAWN HRB  
CHECKED KAB  
DATE 04-16-2025

PROJECT No.  
10297.24002  
SHEET NUMBER

C-503