



Purchasing Division

ADDENDUM NO. 3

DATE: November 24, 2025
FROM: City of Grand Junction Purchasing Division
TO: All Offerors
RE: D ½ Road Capacity Improvements IFB-5755-26-DD

Offerors responding to the above referenced solicitation are hereby instructed that the requirements have been clarified, modified, superseded, and supplemented as to this date as hereinafter described.

Please make note of the following questions/answers/clarifications:

*****The inquiry deadline will be extended to November 26th.**

*****The final addendum deadline will be extended to December 1st.**

*****See Revised Bid Schedule (Reference Question #4 below) Please use this revised bid scheduled when submitting your bid.**

1. Question: Will Prinsco GoldPro Dual Wall Polypropylene be an approved equivalent to the RCP called out on the bid schedule? Attached are the specification sheets and the CDOT APL reference for your review.

Answer: Prinsco GoldPro Dual Wall Polypropylene is approved as equivalent to the RCP called out on the bid schedule. Please note that there is a quantity of owner-supplied RCP that should still be accounted for and would not change material type. All manufacturer requirements, including but not limited to cover and compaction requirements should be followed for placing the equivalent material.

2. Question: Will the Contech CS-4-DTL be an approved equivalent to the ADS Barracuda S4 Water Quality Manhole? Attached is a specification sheet for your review.

Answer: More information is needed. Special Provision 13 specifies the 2-year event (WQCV Design Event) and the 100-year event flow rates. Any approved equal needs to meet the treatment criteria for these storm events. Additionally, a Barracuda S4 is not the structure proposed by the design. ADS Bay Separator 10K was modelled by the design firm.

3. Question: Will the Contech CDS 5653-10-C be an approved equivalent to the Arcadia AR4PC Water Quality Manhole? Attached is a specification sheet for your review.

Answer: More information is needed. Special Provision 13 specifies the 2-year event (WQCV Design Event) and the 100-year event flow rates. Any approved equal needs to meet the treatment criteria for these storm events.

4. Question: Regarding bid item #69 "RESET WATER METER", what material is the contractor responsible for providing? i.e. new meter pit, meter setter, bonnet, etc.

Answer: The following bid items were erroneously included and are removed from the revised bid schedule. The bid schedule will not be renumbered. The removed items are being constructed by Ute Water.

- **Line Item 69 - Reset Water Meter**
- **Line Item 70 - Reset Fire Hydrant**

The original solicitation for the project noted above is amended as noted. All other conditions of the subject remain the same.

Respectfully,



Dolly Daniels, Senior Buyer
City of Grand Junction, Colorado

Bid Schedule: D 1/2 Road Capacity Improvement Project Revision 1

| Item No. | CDOT, City Ref. | Description | Quantity | Units | Unit Price | Total Price |
|----------|-----------------|---|----------|-------|------------|-------------|
| 1 | UU-103.8 | UNSUITABLE TRENCH BOTTOM | 225. | CY | \$ _____ | \$ _____ |
| 2 | UU-108.2 | 18" STORM DRAIN PIPE (RCP) | 2,381. | LF | \$ _____ | \$ _____ |
| 3 | UU-108.2 | 24" STORM DRAIN PIPE (RCP) | 440. | LF | \$ _____ | \$ _____ |
| 4 | UU-108.2 | 24" STORM DRAIN PIPE (RCP) (INSTALL ONLY) | 62. | LF | \$ _____ | \$ _____ |
| 5 | UU-108.2 | 48" STORM DRAIN PIPE (RCP) | 24. | LF | \$ _____ | \$ _____ |
| 6 | UU-108.2 | 10" CULVERT (PVC) | 32. | LF | \$ _____ | \$ _____ |
| 7 | UU-108.2 | 12" CULVERT (PVC) | 203. | LF | \$ _____ | \$ _____ |
| 8 | UU-108.2 | 8" CULVERT END SECTION | 1. | EA | \$ _____ | \$ _____ |
| 9 | UU-108.2 | 10" CULVERT END SECTION | 1. | EA | \$ _____ | \$ _____ |
| 10 | UU-108.2 | 12" CULVERT END SECTION | 5. | EA | \$ _____ | \$ _____ |
| 11 | UU-108.2 | 48" CULVERT END SECTION | 1. | EA | \$ _____ | \$ _____ |
| 12 | UU-108.2 | 8" IRRIGATION PIPE (PIP) | 2,699. | LF | \$ _____ | \$ _____ |
| 13 | UU-108.2 | 10" IRRIGATION PIPE (PIP) | 133. | LF | \$ _____ | \$ _____ |
| 14 | UU-108.2 | 12" IRRIGATION PIPE (PIP) | 286. | LF | \$ _____ | \$ _____ |
| 15 | UU-108.3 | IRRIGATION CLEANOUT | 2. | EA | \$ _____ | \$ _____ |
| 16 | UU-108.3 | 8" x 4" IRRIGATION TEE | 2. | EA | \$ _____ | \$ _____ |
| 17 | UU-108.3 | 8", 22.5 DEGREE BEND | 6. | EA | \$ _____ | \$ _____ |
| 18 | UU-108.3 | 8", 45 DEGREE BEND | 4. | EA | \$ _____ | \$ _____ |
| 19 | UU-108.3 | IRRIGATION LIFTER WITH BASIN | 1. | EA | \$ _____ | \$ _____ |
| 20 | UU-108.5 | STORM SEWER BASIC MANHOLE (48" I.D.) | 3. | EA | \$ _____ | \$ _____ |
| 21 | UU-108.5 | STORM SEWER BASIC MANHOLE (60" I.D.) | 6. | EA | \$ _____ | \$ _____ |
| 22 | UU-108.5 | STORM SEWER BASIC MANHOLE (72" I.D.) | 2. | EA | \$ _____ | \$ _____ |
| 23 | UU-108.5 | STORM SEWER BASIC MANHOLE (96" I.D.) | 1. | EA | \$ _____ | \$ _____ |
| 24 | UU-108.5 | STORM SEWER WATER QUALITY MANHOLE 01 | 1. | EA | \$ _____ | \$ _____ |
| 25 | UU-108.5 | STORM SEWER WATER QUALITY MANHOLE 02 | 1. | EA | \$ _____ | \$ _____ |
| 26 | UU-108.5 | STORM SEWER WATER QUALITY MANHOLE 03 | 1. | EA | \$ _____ | \$ _____ |

Bid Schedule: D 1/2 Road Capacity Improvement Project Revision 1

| Item No. | CDOT, City Ref. | Description | Quantity | Units | Unit Price | Total Price |
|----------|-----------------|---|----------|-------|------------|-------------|
| 27 | UU- 108.5 | MANHOLE BARREL SECTION (D>5') (48" I.D.) | 16. | LF | \$ _____ | \$ _____ |
| 28 | UU- 108.5 | MANHOLE BARREL SECTION (D>5') (60" I.D.) | 28. | LF | \$ _____ | \$ _____ |
| 29 | UU- 108.5 | MANHOLE BARREL SECTION (D>5') (72" I.D.) | 12. | LF | \$ _____ | \$ _____ |
| 30 | UU- 108.5 | MANHOLE BARREL SECTION (D>5') (96" I.D.) | 8. | LF | \$ _____ | \$ _____ |
| 31 | UU- 108.5 | CONNECT TO EXISTING MANHOLE (18" PIPE) | 2. | EA | \$ _____ | \$ _____ |
| 32 | UU- 108.6 | STORM DRAIN INLET WITH VERTICAL CURB OPENING | 6. | EA | \$ _____ | \$ _____ |
| 33 | UU- 108.6 | DOUBLE STORM DRAIN INLET WITH VERTICAL CURB OPENING | 2. | EA | \$ _____ | \$ _____ |
| 34 | UU- 108.6 | SMALL AREA INLET | 3. | EA | \$ _____ | \$ _____ |
| 35 | UU- 108.6 | INLET BOX RISER SECTION (D>5') | 34. | LF | \$ _____ | \$ _____ |
| 36 | UU- 108.13 | TRENCH DEWATERING | 30. | DAY | \$ _____ | \$ _____ |
| 37 | 201 | CLEARING AND GRUBBING | Lump Sum | | --- | \$ _____ |
| 38 | 202 | REMOVAL OF TREE | 55. | EA | \$ _____ | \$ _____ |
| 39 | 202 | REMOVAL OF PIPE | 3,628. | LF | \$ _____ | \$ _____ |
| 40 | 202 | REMOVAL OF END SECTION | 9. | EA | \$ _____ | \$ _____ |
| 41 | 202 | REMOVAL OF CONCRETE | 368. | SY | \$ _____ | \$ _____ |
| 42 | 202 | REMOVAL OF CURB | 41. | SY | \$ _____ | \$ _____ |
| 43 | 202 | REMOVAL OF GROUND SIGN | 1. | EA | \$ _____ | \$ _____ |
| 44 | 202 | REMOVAL OF MAILBOX STRUCTURE | 6. | EA | \$ _____ | \$ _____ |
| 45 | 202 | REMOVAL OF IRRIGATION STRUCTURE | 3. | EA | \$ _____ | \$ _____ |
| 46 | 202 | REMOVAL OF IRRIGATION VALVE | 2. | EA | \$ _____ | \$ _____ |
| 47 | 202 | REMOVAL OF IRRIGATION RISER | 6. | EA | \$ _____ | \$ _____ |
| 48 | 202 | REMOVAL OF DRAINAGE STRUCTURE | 1. | EA | \$ _____ | \$ _____ |
| 49 | 202 | REMOVAL OF INLET | 2. | EA | \$ _____ | \$ _____ |
| 50 | 202 | REMOVAL OF 4-FOOT WOOD SPLIT RAIL FENCE | 145. | LF | \$ _____ | \$ _____ |
| 51 | 202 | REMOVAL OF ASPHALT MAT FULL DEPTH | 16,469. | SY | \$ _____ | \$ _____ |
| 52 | 202 | REMOVAL OF ASPHALT MAT (MILLING)(2" DEPTH) | 92. | SY | \$ _____ | \$ _____ |

Bid Schedule: D 1/2 Road Capacity Improvement Project **Revision 1**

| Item No. | CDOT, City Ref. | Description | Quantity | Units | Unit Price | Total Price |
|----------|-----------------|--|----------|-------|------------|-------------|
| 53 | 203 | UNCLASSIFIED EXCAVATION (COMPLETE IN PLACE) | 13,947. | CY | \$ _____ | \$ _____ |
| 54 | 203 | POTHOLING | 40. | EA | \$ _____ | \$ _____ |
| 55 | 207 | TOPSOIL (ONSITE) | 630. | CY | \$ _____ | \$ _____ |
| 56 | 208 | EROSION LOG TYPE 1 (12 INCH) | 4,299. | LF | \$ _____ | \$ _____ |
| 57 | 208 | EROSION BALES (WEED FREE) | 23. | EA | \$ _____ | \$ _____ |
| 58 | 208 | PRE-FABRICATED CONCRETE WASHOUT STRUCTURE (TYPE 1) | 2. | EA | \$ _____ | \$ _____ |
| 59 | 208 | STORM DRAIN INLET PROTECTION (TYPE II) | 8. | EA | \$ _____ | \$ _____ |
| 60 | 208 | PRE-FABRICATED VEHICLE TRACKING PAD | 2. | EA | \$ _____ | \$ _____ |
| 61 | 208 | EROSION CONTROL MANAGEMENT | 300. | DAY | \$ _____ | \$ _____ |
| 62 | 210 | RESET LANDSCAPE ROCK | 447. | SY | \$ _____ | \$ _____ |
| 63 | 210 | RESET CHAIN LINK FENCE & GATES | 1,572. | LF | \$ _____ | \$ _____ |
| 64 | 210 | RESET 4-FOOT WOOD FENCE | 100. | LF | \$ _____ | \$ _____ |
| 65 | 210 | RESET VINYL FENCE & GATES | 352. | LF | \$ _____ | \$ _____ |
| 66 | 210 | RESET 4-FOOT HOG PANEL FENCE | 36. | LF | \$ _____ | \$ _____ |
| 67 | 210 | RESET 6-FOOT WOOD PRIVACY FENCE | 113. | LF | \$ _____ | \$ _____ |
| 68 | 210 | RESET MAILBOX STRUCTURE | 26. | EA | \$ _____ | \$ _____ |
| 71 | 210 | RESET MONUMENT BOX | 14. | EA | \$ _____ | \$ _____ |
| 72 | 210 | RESET GROUND SIGN | 11. | EA | \$ _____ | \$ _____ |
| 73 | 210 | RESET SIGN (SPECIAL) | 4. | EA | \$ _____ | \$ _____ |
| 74 | 210 | RESET IRRIGATION VALVE | 6. | EA | \$ _____ | \$ _____ |
| 75 | 210 | RESET IRRIGATION STRUCTURE | 7. | EA | \$ _____ | \$ _____ |
| 76 | 210 | RESET IRRIGATION RISER | 1. | EA | \$ _____ | \$ _____ |
| 77 | 210 | RESET SPRINKLER SYSTEMS | 17. | EA | \$ _____ | \$ _____ |
| 78 | 210 | ADJUST MANHOLE | 3. | EA | \$ _____ | \$ _____ |
| 79 | 210 | ADJUST IRRIGATION STRUCTURE | 7. | EA | \$ _____ | \$ _____ |
| 80 | 210 | ADJUST IRRIGATION RISER | 2. | EA | \$ _____ | \$ _____ |
| 81 | 210 | ADJUST WATER VALVE | 4. | EA | \$ _____ | \$ _____ |
| 82 | 210 | FURNISH AND INSTALL MAILBOX | 2. | EA | \$ _____ | \$ _____ |
| 83 | 212 | SEEDING (NATIVE) BROADCAST | 0.25 | ACRE | \$ _____ | \$ _____ |
| 84 | 212 | MULCHING (WEED FREE) | 0.25 | ACRE | \$ _____ | \$ _____ |

Bid Schedule: D 1/2 Road Capacity Improvement Project Revision 1

| Item No. | CDOT, City Ref. | Description | Quantity | Units | Unit Price | Total Price |
|----------|-----------------|--|----------|-------|------------|---------------|
| 85 | 304 | AGGREGATE BASE COURSE (CLASS 3) | 15,946. | TON | \$ _____ | \$ _____ |
| 86 | 304 | AGGREGATE BASE COURSE (CLASS 6) | 10,308. | TON | \$ _____ | \$ _____ |
| 87 | 306 | RECONDITIONING (6" DEEP) | 32,955. | SY | \$ _____ | \$ _____ |
| 88 | 401 | HOT MIX ASPHALT (4" THICK) (GRADING SX(75)) (PG 64-22) | 4,690. | TON | \$ _____ | \$ _____ |
| 89 | 401 | HOT MIX ASPHALT (2" THICK) (GRADING SX(75)) (PG 64-28) | 2,345. | TON | \$ _____ | \$ _____ |
| 90 | 420 | STABILIZATION FABRIC | 87. | SY | \$ _____ | \$ _____ |
| 91 | 509 | PEDESTRIAN RAIL (42 INCH) | 30. | LF | \$ _____ | \$ _____ |
| 92 | 607 | GATE ELECTRONIC SERVICE CONNECTION | 1. | EA | \$ _____ | \$ _____ |
| 93 | 607 | 4-FOOT WOOD SPLIT RAIL FENCE (SPECIAL) | 145. | LF | \$ _____ | \$ _____ |
| 94 | 608 | CONCRETE CURB AND GUTTER (2' WIDE) | 5,956. | LF | \$ _____ | \$ _____ |
| 95 | 608 | CONCRETE SIDEWALK (4" THICK) | 4,141. | SY | \$ _____ | \$ _____ |
| 96 | 608 | CONCRETE DRIVEWAY SECTION (6" THICK) | 1,307. | SY | \$ _____ | \$ _____ |
| 97 | 608 | CONCRETE DRAINAGE PAN (6' WIDE) (V-PAN) | 85. | SY | \$ _____ | \$ _____ |
| 98 | 608 | CONCRETE CORNER FILLET | 205. | SY | \$ _____ | \$ _____ |
| 99 | 608 | CONCRETE CURB RAMP | 215. | SY | \$ _____ | \$ _____ |
| 100 | 608 | DETECTABLE WARNINGS (WET SET) | 231. | SF | \$ _____ | \$ _____ |
| 101 | 610 | BOULEVARD TREATMENT (WEED FABRIC) | 2,046. | SY | \$ _____ | \$ _____ |
| 102 | 610 | BOULEVARD TREATMENT (1.5" TAN GRANITE ROCK) 4" THICK | 227. | CY | \$ _____ | \$ _____ |
| 103 | 614 | SIGN PANEL (CLASS 1) | 22. | SF | \$ _____ | \$ _____ |
| 104 | 614 | STEEL SIGN POST (2.5" ROUND SCH. 80) | 39. | LF | \$ _____ | \$ _____ |
| 105 | 625 | CONSTRUCTION SURVEYING | Lump Sum | | --- | \$ _____ |
| 106 | 626 | MOBILIZATION | Lump Sum | | --- | \$ _____ |
| 107 | 627 | PAVEMENT MARKING PAINT (HIGH BUILD) | 110. | GAL | \$ _____ | \$ _____ |
| 108 | 627 | PREFORMED THERMOPLASTIC PAVEMENT MARKING (WORD- SYMBOL) | 424. | SF | \$ _____ | \$ _____ |
| 109 | 627 | PREFORMED THERMOPLASTIC PAVEMENT MARKING (XWALK-STOP LINE) | 370. | SF | \$ _____ | \$ _____ |
| 110 | 630 | TRAFFIC CONTROL (COMPLETE IN PLACE) | 260. | DAY | \$ _____ | \$ _____ |
| 111 | 630 | TRAFFIC CONTROL PLAN | Lump Sum | | --- | \$ _____ |
| FA | | Asphalt Quality Incentive (Achievable per Specifications) | --- | --- | --- | \$ 35,000.00 |
| MCR | | Minor Contract Revisions | --- | --- | --- | \$ 150,000.00 |

Bid Amount: \$ _____

Bid Amount:

dollars



GOLDPRO STORM™ DUAL-WALL HP SPECIFICATION

Scope

This specification designates the requirements for 12- through 60- inch I.D. Prinsco GOLDPRO Storm High Performance (HP) polypropylene pipe for use in gravity-flow drainage applications.

Pipe Requirements

Prinsco GOLDPRO Storm pipe shall have annular exterior corrugations with a smooth interior allowing for a Manning's "n" design value of 0.012 and shall meet the following standards:

- 12- through 30- inch shall meet ASTM F2736*, Type S (Withdrawn)
- 12- through 60- inch shall meet ASTM F2881 and AASHTO M330, Type S

Materials

GOLDPRO Storm pipe and fabricated fittings shall be manufactured using virgin Polypropylene (PP) compounds meeting the requirements of ASTM F2881 and AASHTO M330. Polypropylene compounds shall be comprised of the base unfilled copolymer polypropylene virgin resin and all additives, colorants, UV inhibitors and stabilizers. Conditioning, sampling, preparation and testing of molded specimens shall be in accordance with the requirements in Specification D4101.

Joint Performance

GOLDPRO Storm pipe shall be joined using watertight bell and spigot type joints meeting ASTM F2881. The integral joints shall be watertight according to ASTM D3212. Gaskets shall be made of polyisoprene meeting the requirements of ASTM F477, shall be installed by the manufacturer, and shall be covered with a protective wrap. An approved joint lubricant, available from the manufacturer, shall be applied to the bell and gasket during installation. GOLDPRO Storm joints shall be assembled in accordance with the manufacturer's requirements to ensure installed watertight performance.

Field performance verification of installed pipe may be accomplished by testing in accordance with ASTM F2487.

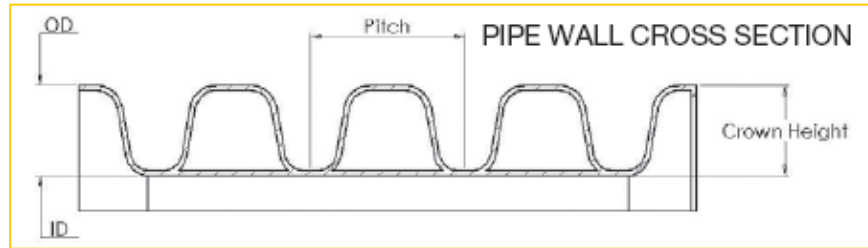
Fittings

Fittings fabricated from pipe manufactured to this specification shall meet the requirements of ASTM F2881 and AASHTO M330. Connections between fittings and pipe shall be watertight and shall meet the performance requirements of ASTM D3212.

Physical Pipe Dimensions

| Nominal ID (in) | Approximate OD (in) | Length (ft) | Corrugation Pitch (in) | Approximate Weight/foot (lb) | Min. Pipe Stiffness @ 5% Deflection (psi) |
|-----------------|---------------------|-------------|------------------------|------------------------------|---|
| 12" | 14.6 | 20 | 2.00 | 3.7 | 70 |
| 15" | 17.8 | 20 | 2.67 | 5.1 | 60 |
| 18" | 21.5 | 20 | 3.00 | 7.3 | 56 |
| 24" | 28.2 | 20 | 4.00 | 11.7 | 50 |
| 30" | 34.7 | 20 | 4.00 | 17.4 | 46 |
| 36" | 40.9 | 20 | 4.00 | 22.9 | 40 |
| 42" | 47.9 | 20 | 6.00 | 23.3 | 35 |
| 48" | 54.6 | 20 | 6.00 | 32.0 | 30 |
| 60" | 67.0 | 20 | 5.90 | 46.3 | 25 |

*ASTM F2736 has been withdrawn as an ASTM specification and is incorporated into the latest version of ASTM F2881.



Installation

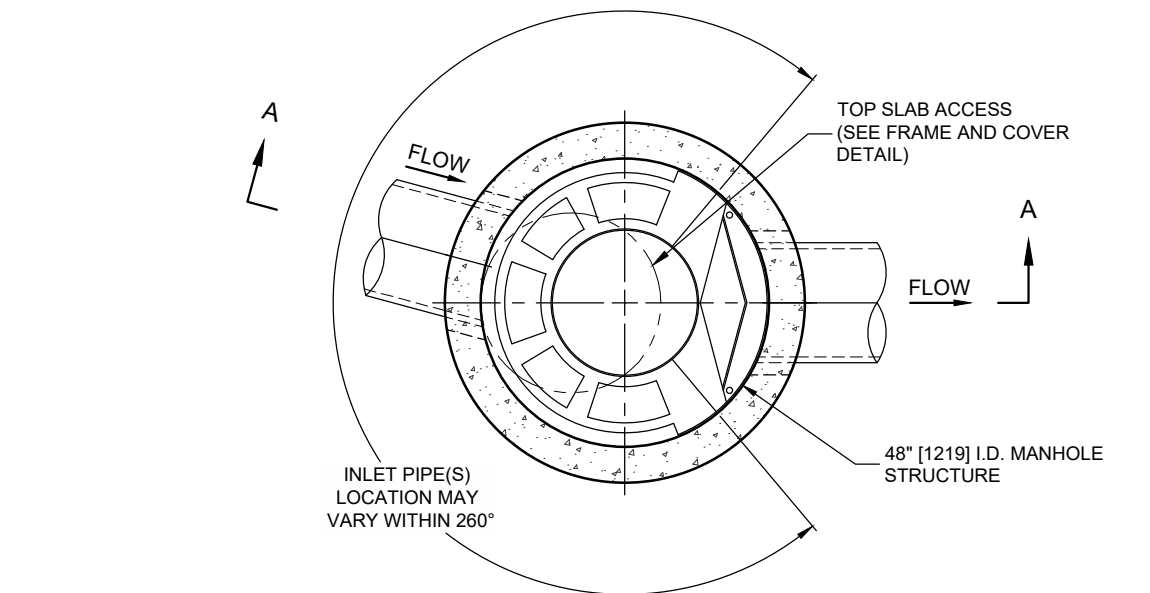
Pipe and fittings shall be installed in accordance with ASTM D2321 and Prinsco's published installation guidelines. Minimum cover for AASHTO H-25 loads shall be 12" for 4- through 48-inch diameter pipe (18" for 60-inch pipe) to sub-grade in trafficked areas where flexible pavement is installed and shall be 12" for 4- through 48-inch diameter pipe (18" for 60-inch pipe) to the surface of rigid pavement. Contact your local Prinsco representative or visit www.prinsco.com for the latest installation guidelines.

Reference Specifications

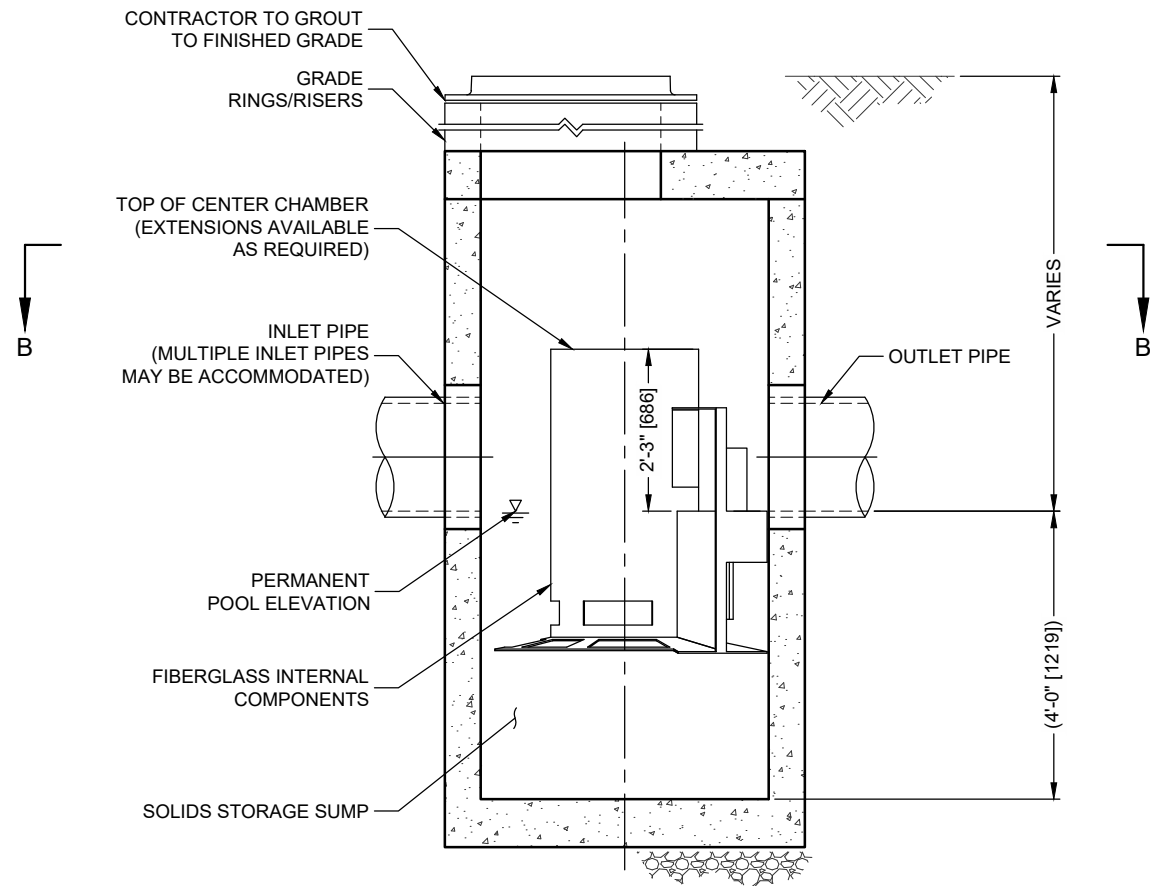
This specification references the latest edition and revisions of the following standard specifications:

- AASHTO M330 – *Standard Specification for Polypropylene Pipe, 300- to 1500-mm (12- to 60-in) Diameter*
- ASTM F2881 – *Standard Specification for 12 to 60 in. (300 to 1500 mm) Polypropylene (PP) Dual Wall Pipe and Fittings for Non-Pressure Storm Sewer Applications*
- ASTM F2736 – *Standard Specification for 6 to 30 in. (150 to 750 mm) Polypropylene (PP) Corrugated Single Wall Pipe and Double Wall Pipe*
- ASTM D4101– *Standard Specification for Polypropylene Injection and Extrusion Materials*
- ASTM F477 – *Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe*
- ASTM D3212 – *Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals*
- ASTM D2321 – *Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications*
- ASTM F2487 – *Standard Practice for Underground Infiltration and Exfiltration Acceptance Testing of Installed Corrugated High-Density Polyethylene and Polypropylene Pipelines*

I:\COMMON\CAD\TREATMENT\21 CASCADE\40 STANDARD DRAWINGS\DWG\CS-4-DTL.DWG 1/22/2019 9:34 AM



PLAN VIEW B-B
NOT TO SCALE



ELEVATION A-A
NOT TO SCALE

CASCADE
separator™

CASCADE SEPARATOR DESIGN NOTES

THE STANDARD CS-4 CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

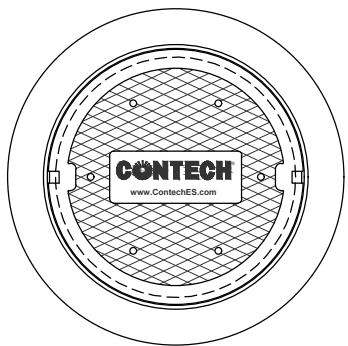
CONFIGURATION DESCRIPTION

GRATED INLET ONLY (NO INLET PIPE)

GRATED INLET WITH INLET PIPE OR PIPES

CURB INLET ONLY (NO INLET PIPE)

CURB INLET WITH INLET PIPE OR PIPES



FRAME AND COVER
(DIAMETER VARIES)
NOT TO SCALE

**SITE SPECIFIC
DATA REQUIREMENTS**

| | | | |
|-------------------------------------|--------|----------|----------|
| STRUCTURE ID | | | |
| WATER QUALITY FLOW RATE (cfs [L/s]) | | | |
| PEAK FLOW RATE (cfs [L/s]) | | | |
| RETURN PERIOD OF PEAK FLOW (yrs) | | | |
| RIM ELEVATION | | | |
| PIPE DATA: | INVERT | MATERIAL | DIAMETER |
| INLET PIPE 1 | | | |
| INLET PIPE 2 | | | |
| OUTLET PIPE | | | |

NOTES / SPECIAL REQUIREMENTS:

GENERAL NOTES

1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. CASCADE SEPARATOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. CASCADE SEPARATOR STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2' [610], AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
5. CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
6. ALTERNATE UNITS ARE SHOWN IN MILLIMETERS [mm].

INSTALLATION NOTES

- A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CASCADE SEPARATOR MANHOLE STRUCTURE.
- C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
- D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
- E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH
ENGINEERED SOLUTIONS LLC

www.contechES.com

9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069

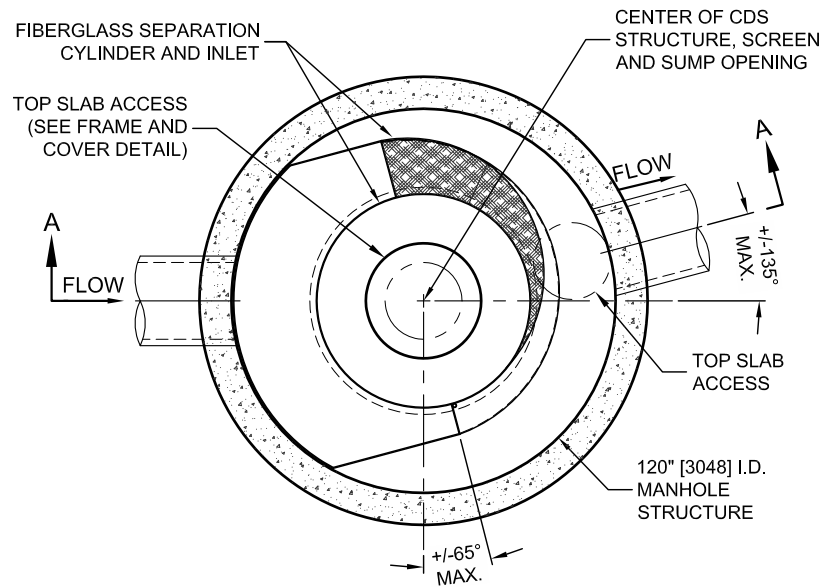
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513-645-7000

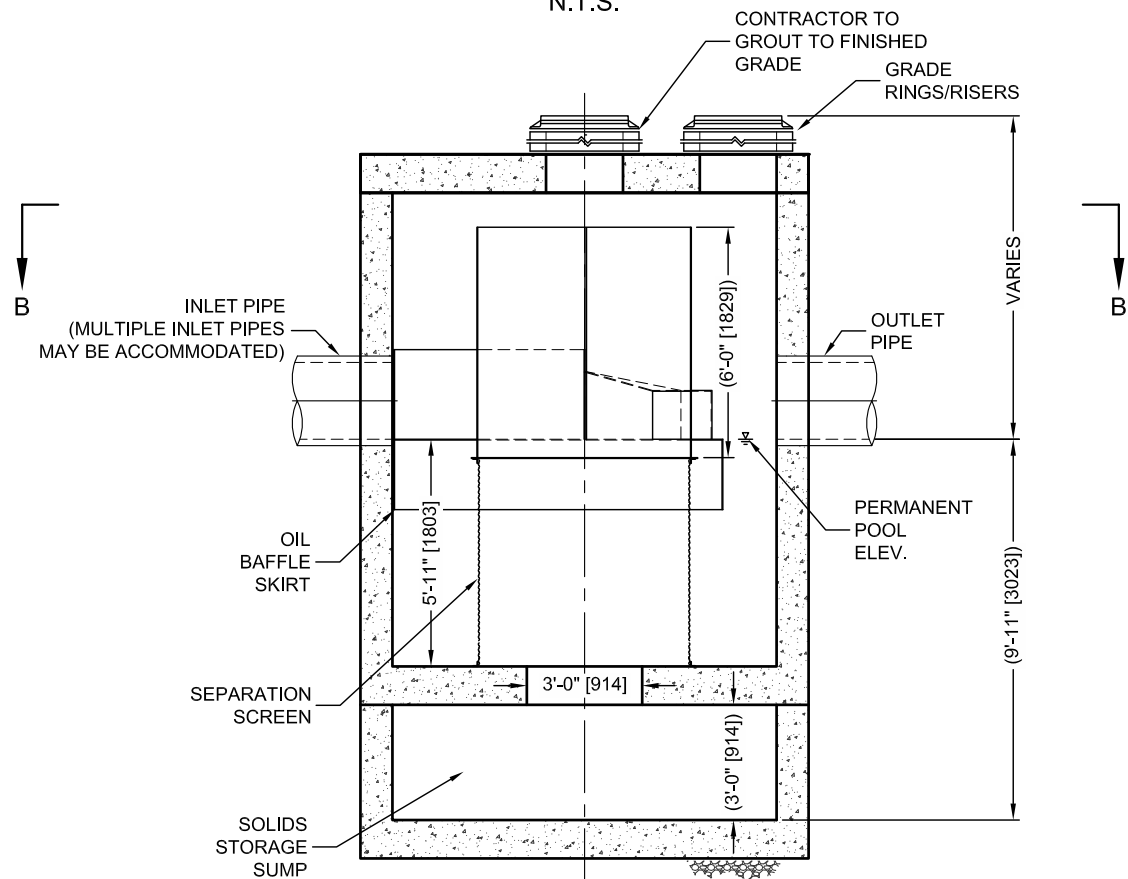
513-645-7993 FAX

CS-4
CASCADE SEPARATOR
STANDARD DETAIL

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PLAN VIEW B-B
N.T.S.



ELEVATION A-A
N.T.S.



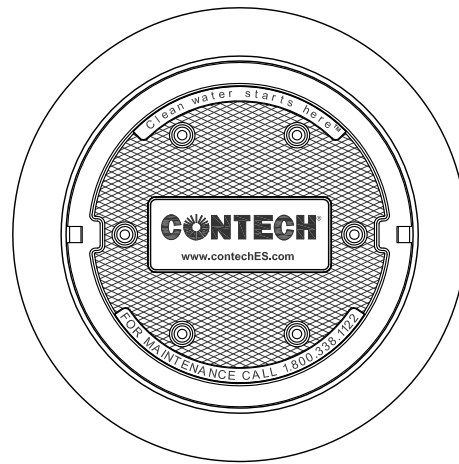
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 6,788,840; 6,841,722; 6,911,595; 6,981,763; RELATED FOREIGN PATENTS, OR OTHER PATENTS PENDING.

CDS5653-10-C DESIGN NOTES

THE STANDARD CDS5653-10-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

CONFIGURATION DESCRIPTION

- GRATED INLET ONLY (NO INLET PIPE)
- GRATED INLET WITH INLET PIPE OR PIPES
- CURB INLET ONLY (NO INLET PIPE)
- CURB INLET WITH INLET PIPE OR PIPES
- SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)
- SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

| | | | |
|--------------------------------------|------|----------|----------|
| STRUCTURE ID | | | |
| WATER QUALITY FLOW RATE (CFS OR L/s) | | | * |
| PEAK FLOW RATE (CFS OR L/s) | | | * |
| RETURN PERIOD OF PEAK FLOW (YRS) | | | * |
| SCREEN APERTURE (2400 OR 4700) | | | * |
| | | | |
| PIPE DATA: | I.E. | MATERIAL | DIAMETER |
| INLET PIPE 1 | * | * | * |
| INLET PIPE 2 | * | * | * |
| OUTLET PIPE | * | * | * |
| RIM ELEVATION | | | * |
| | | | |
| ANTI-FLOTATION BALLAST | | WIDTH | HEIGHT |
| | | * | * |
| NOTES/SPECIAL REQUIREMENTS: | | | |
| | | | |
| * PER ENGINEER OF RECORD | | | |

GENERAL NOTES

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
- FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
- CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
- STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET HS20 (AASHTO M 306) AND BE CAST WITH THE CONTECH LOGO.
- IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
- CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH
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