Our vision of Coeur d'Alene is of a beautiful safe city that promotes a high quality of life and sound economy through excellence in government

PUBLIC WORKS COMMITTEE

with

Council Members McEvers, Miller & English

July 23, 2018, 4:00 p.m.

AGENDA

****ITEMS BELOW ARE CONSIDERED TO BE ACTION ITEMS

Item 1	Approval of Transfer of Right-of-Way to Idaho Transportation Department at Intersection of US-95 and Walnut – Chris Bosley
Item 2	Approval of Standard Drawing Updates – Chris Bosley
Item 3	Approval of Right-of-Way Easement for Avista natural gas pipeline at 685 E. Kathleen Ave. (Honeysuckle Well) – Kyle Marine
Item 4	V-18-05, Vacation of a portion of alley right-of-way adjoining the easterly boundary of Lot 1 and the N ½ of Lot 2, Block A, Sanders Addition to the City of Coeur d'Alene. – Dennis Grant

Library Community Room
702 Front Street

The City of Coeur d'Alene will make reasonable accommodations for anyone attending this meeting who requires special assistance for hearing, physical or other impairments. Please contact Amy Ferguson, Public Works Committee Liaison, at (208) 666-5754 at least 24 hours in advance of the meeting date and time.

PUBLIC WORKS COMMITTEE
STAFF REPORT

DATE: July 18, 2018
FROM: Chris Bosley – City Engineer
SUBJECT: Approval of Transfer of Right-of-Way to ITD at Intersection of US-95 and Walnut Ave.

==========

DECISION POINT: Should the City transfer right-of-way to the Idaho Transportation Department at the intersection of US-95 and Walnut Avenue?

HISTORY: As part of the US-95 reconstruction project at Walnut Avenue, the Idaho Transportation Department needs to acquire additional right-of-way. In its research, ITD found historical discrepancies in right-of-way ownership. ITD would like to clean up the discrepancies through a quitclaim deed, transferring the right-of-way ownership on US-95 from the City of Coeur d'Alene to ITD.

FINANCIAL ANALYSIS: There is no financial impact on the City for this transfer of right-of-way.

PERFORMANCE ANALYSIS: **A**pproval of this transfer will provide uniformity of the US-95 right-of-way within the project.

DECISION POINT/RECOMMENDATION: Council should approve the transfer of right-of-way to the Idaho Transportation Department at the intersection of US-95 and Walnut Avenue.

After recording return to:
Right of Way
Idaho Transportation Dept.
PO Box 7129
Boise ID 83707-1129

Project No. A019(452)
Key No. 19452
Parcel No. 101
Parcel ID No. 50750

QUITCLAIM DEED

THIS INDENTURE is made this _____ day of _____, 2018, by and between the **CITY OF COEUR D'ALENE** ("Grantor") whose address is 710 E. Mullan Avenue, Coeur d'Alene, ID 83814, and the **STATE OF IDAHO, IDAHO TRANSPORTATION BOARD, by and through the IDAHO TRANSPORTATION DEPARTMENT** ("Grantee"), whose address is 3311 West State Street, Boise, Idaho 83703,

WITNESSETH: That Grantor, for value received, does by these presents grant, bargain, sell, convey and forever quitclaim unto Grantee the following described real property situated in the County of Kootenai, State of Idaho, to-wit:

SEE LEGAL DESCRIPTION ON **EXHIBIT A** AND DEPICTION ON **EXHIBIT B** ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.

Consisting of approximately 5.684 acres.

Parcel limits extending from US 95 Federal Aid Project F-FG-5115(4) centerline station 57+36.32 to 74+86.80.

Together with all appurtenances, easements and rights of way.

PROVIDED, however, that this conveyance is made and accepted upon the express condition and in compliance with Idaho Code 58-335A that said Grantee, its successors and/or assigns, shall use said land in perpetuity exclusively for a public purpose. If such public use shall cease, the real property herein described shall revert to the ownership of Grantor. Then, and in that case, such public uses shall have terminated and the whole of the estate hereby granted and conveyed and any and all improvements thereon shall immediately revert to and become

Project No. A019(452)
Key No. 19452
Parcel No. 101
Parcel ID No. 50750

the property of Grantor, its successors and/or assigns forever. Grantor hereby expressly reserves to itself, its successors and/or assigns, the right to enter upon said land and premises and to take absolute possession thereof any and all improvements thereon, for and upon the breach of the aforesaid condition.

IN WITNESS WHEREOF, Grantor has hereunto set its hand and seal the day and year first above written.

GRANTOR:

CITY OF COEUR D'ALENE

By: _____ By: _____
STEVE WIDMYER, Mayor **RENATA MCLEOD**, City Clerk

STATE OF IDAHO)
) ss.
County of Kootenai)

On this _____ day of _____, 2018, before me, the undersigned, a Notary Public in and for said State, personally appeared STEVE WIDMYER and RENATA MCLEOD, known or identified to me to be the Mayor and City Clerk of the CITY OF COEUR D'ALENE, the persons who executed the foregoing instrument, and acknowledged to me that they execute the same on behalf of the CITY OF COEUR D'ALENE.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

_____
Notary Public for IDAHO
Residing at _____
(SEAL) My commission expires _____

May 9, 2018
Parcel No. 101
Parcel ID No. 50750
247,595 Sq. Ft. (5.684 Acres)

LEGAL DESCRIPTION

(City of Coeur d'Alene to the Idaho Transportation Department)

A parcel of land located within the Southeast 1/4 of section 11, Township 50 North, Range 4 West, Boise Meridian, City of Coeur d'Alene, Kootenai County, Idaho; more particularly described as follows:

Commencing at the South 1/4 corner of said Section 11 monumented with a 10 inch diameter concrete column and a 2-1/2 inch diameter aluminum cap marked PLS 5573 as shown on Corner Perpetuation and Filing Record instrument number 2625162000 from which the Southeast corner of said Section 11, monumented with a 5/8 inch diameter rebar with a 2 inch diameter aluminum cap marked PLS 4565 as shown on Corner Perpetuation and Filing Record instrument number 2625163000 bears South 89°03'18" East, 2662.80 feet;

Thence North 49°58'45" East, 478.36 feet to a 5/8 inch diameter rebar with a 1-1/4 inch diameter aluminum cap marked PLS 8575 at the northwesterly corner of Lot 3, Block 1, the plat of Coeur d'Alene Homes filed in Plat Book J at Page 243, on the easterly right of way line of U.S. Highway 95 as shown and described in Federal Aid Project F-FG-5115(4) at station 57+36.32, 86.60 feet right of said U.S. 95 centerline, station 7+50, 50.00 feet right of the Northwest Blvd ramp AB centerline and the **Point of Beginning;**

Thence North 19°18'09" West, 347.19 feet to a 6 inch diameter concrete post with a 3-1/4 inch diameter brass cap marked Idaho State Highway Right of Way on the westerly right of way line of said U.S. 95 at station, 57+82.73, 257.23 feet left of said U.S. 95 centerline;

Thence along said westerly right of way line the following three (3) courses:

1. North 56°14'25" East, 182.46 feet to a 6 inch diameter concrete post with a 3-1/4 inch diameter brass cap marked Idaho State Highway Right of Way;
2. Thence South 88°49'34" East, 209.61 feet to a 6 inch diameter concrete post with a 3-1/4 inch diameter brass cap marked Idaho State Highway Right of Way and a point of non- tangent curve to the right;
3. Thence along the arc of said curve right 123.52 feet with said curve having a radius of 210.00 feet and a delta angle of 33°42'06" (Chord S47°47'56"E, 121.75 feet) to a 5/8 inch diameter rebar, 30 inches long, with a 3 inch diameter zinc cap marked Idaho Trans Dept R/W Monument;

Thence South 88°47'15' East, 295.11 feet to a 5/8 inch diameter rebar, 30 inches long, with a 3 inch diameter zinc cap marked Idaho Trans Dept R/W Monument;

Thence North 86°19'01" East, 114.82 feet to a point of non-tangent curvature to the left monumented with a 5/8 inch diameter rebar, 30 inches long, with a 3 inch diameter zinc cap marked Idaho Trans Dept R/W Monument;

Thence along the arc of said curve 88.78 feet with said curve having a radius of 201.59 feet and a delta angle of 25°14'03" (chord N71°08'12"E, 88.07 feet) to a point on said westerly right of way line monumented with a 6 inch diameter broken concrete right of way monument with no cap;

Thence along said westerly right of way line the following eight (8) courses:

1. North 47°45'10" East, 97.70 feet to a 6 inch diameter concrete post with a 3-1/4 inch diameter brass cap marked Idaho State Highway Right of Way;
2. Thence North 21°03'23" East, 106.29 feet;
3. Thence North 00°34'20" East, 74.37 feet to the intersection of said U.S. 95 westerly right of way line and the southerly right of way line of Linden Avenue monumented with a 6 inch diameter concrete post with a 3-1/4 inch diameter brass cap marked Idaho State Highway Right of Way;
4. Thence North 01°21'29" East, 49.87 feet to the intersection of said U.S. 95 westerly right of way line the northerly right of way line of said Linden Avenue monumented with a 6 inch diameter concrete post with a 3-1/4 inch diameter brass cap marked Idaho State Highway Right of Way;
5. Thence North 01°16'41" East, 151.35 feet to the line between Lots 3 and 4, Block 6 of the Plat of College Addition filed in Plat Book B at Page 118 monumented with a 1/2 inch diameter rebar with no cap;
6. Thence North 01°16'41" East, 50.01 feet to the line between Lots 2 and 3, Block 6, of the Plat of College Addition filed in Plat Book B at Page 118 monumented with a 1/2 inch diameter rebar with no cap;
7. Thence North 01°16'41" East, 100.59 feet to the intersection of the southerly right of way line of Lacrosse Avenue and said U.S. 95 westerly right of way line;
8. Thence North 01°13'57" East, 60.00 feet to the intersection of the northerly right of way line of Lacrosse Avenue and said U.S. 95 westerly right of way line at station 74+86.10, 40.00 feet left of said U.S. 95 centerline;

Thence South 89°12'22" East, 80.04 feet to the intersection said Lacrosse Avenue northerly right of way line and the easterly right of way line of said U.S. 95 monumented with a 6 inch diameter concrete post with a 3-1/4 inch diameter brass cap marked Idaho State Highway Right of Way at station 74+86.80, 40.04 feet right of said U.S. 95 centerline;

Thence along said U.S. 95 easterly right of way line the following seven (7) courses:

1. South 01°16'59" West, 60.00 feet to the intersection of said Lacrosse Avenue southerly right of way line and said U.S. 95 easterly right of way line;
2. Thence South 01°16'59" West, 128.02 feet to the northerly right of way line of the alleyway between Lots 1 and 24 of Brown's Subdivision as filed in Plat Book D at Page 5;
3. Thence South 01°16'59" West, 20.00 feet to the southerly right of way line of said alleyway;
4. Thence South 01°16'59" West, 128.02 feet to the northerly right of way line said Linden Avenue;
5. Thence South 01°16'59" West, 50.19 feet to the southerly right of way line of said Linden Avenue monumented with a 3 inch diameter brass cap marked PLS 4997 set flush with the sidewalk;
6. Thence South 00°53'19" West, 139.73 feet to the line between Lot 5 of Cotman Garden Tracts as filed in Plat Book B at Page 103 and Lot 5 of Bratton Garden Tracts as filed in Plat Book B at Page 116 monumented with a 1/2 inch diameter rebar with no cap;
7. Thence South 01°44'35" West, 41.67 feet to point of non-tangent curve to the right monumented with a 5/8 inch diameter rebar, 30 inches long, with a 3 inch diameter zinc cap marked Idaho Trans Dept R/W Monument;

Thence along the arc of said curve 247.96 feet with said curve having a radius of 318.50 feet and a delta angle of 44°36'25" (chord S43°17'36"W, 241.75 feet) to a 5/8 inch diameter rebar, 30 inches long, with a 3 inch diameter zinc cap marked Idaho Trans Dept R/W Monument on said U.S. 95 easterly right of way line and the northerly line of the plat of Coeur d'Alene Homes as filed in Plat Book J at Page 243;

Thence along said U.S. 95 easterly right of way line and said Coeur d'Alene Homes northerly line the following five (5) courses:

1. South 85°40'19" West, 68.67 feet to a 5/8 inch diameter rebar with a plastic cap marked PLS 8587;
2. Thence South 82°59'02" West, 193.54 feet to a 5/8 inch diameter rebar with an unreadable plastic cap;
3. Thence South 67°21'38" West, 99.54 feet to a point of non-tangent curve to the left monumented with a 5/8 inch diameter rebar with an unreadable plastic cap;
4. Thence along the arc of said curve 485.45 feet with said curve having a radius of 2023.48 feet and a delta angle of 13°44'45" (chord S70°40'34"W, 484.29 feet) to a 6 inch diameter concrete post with a 3-1/4 inch diameter brass cap marked Idaho State Highway Right of Way;
5. Thence South 39°42'13" West, 67.06 feet to the **Point of Beginning.**

Containing: 247,595 square feet (5.684 acres) more or less.

Parcel limits extending from U.S. 95 Federal Aid Project F-FG-5115 (4) centerline station 57+36.32 to 74+86.80

SEE ATTACHED EXHIBIT.

Dusty B. Obermayer
Date: 2018.05.09 18:16:00-07'00'

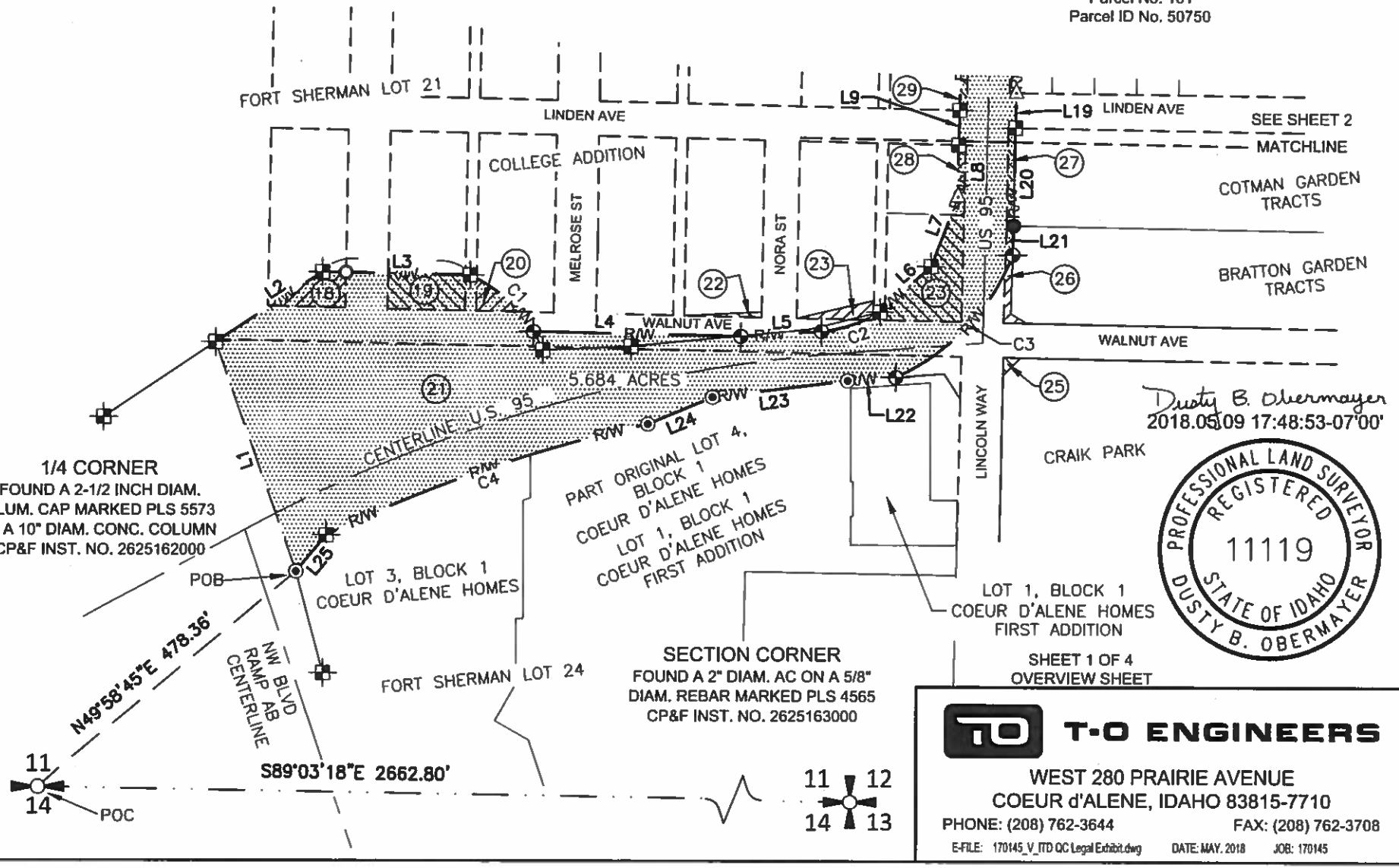
RIGHT OF WAY LEGAL DESCRIPTION
EXHIBIT PARCEL US-95

LOCATED WITHIN THE SE 1/4 OF SECTION 11,
TOWNSHIP 50 NORTH, RANGE 4 WEST, BOISE MERIDIAN,
KOOTENAI COUNTY, IDAHO
(City of Coeur d'Alene to Idaho Transportation Department)

Parcel No. 101
Parcel ID No. 50750

100 0 100 200
SCALE FEET

BASIS OF BEARING: NAD 83, IDAHO STATE PLANE COORDINATE SYSTEM, WEST ZONE



Dusty B. Obermayer
2018.05.09 17:48:53-07'00'

PROFESSIONAL LAND SURVEYOR REGISTERED 11119 STATE OF IDAHO DUSTY B. OBERMAYER

SHEET 1 OF 4
OVERVIEW SHEET

T-O ENGINEERS
WEST 280 PRAIRIE AVENUE
COEUR d'ALENE, IDAHO 83815-7710
PHONE: (208) 762-3644 FAX: (208) 762-3708

E-FILE: 170145_V_ITD QC Legal Exhibit.dwg DATE: MAY. 2018 JOB: 170145

RIGHT OF WAY LEGAL DESCRIPTION
EXHIBIT PARCEL US-95

LOCATED WITHIN THE SE 1/4 OF SECTION 11,
TOWNSHIP 50 NORTH, RANGE 4 WEST, BOISE MERIDIAN,
KOOTENAI COUNTY, IDAHO
(City of Coeur d'Alene to Idaho Transportation Department)

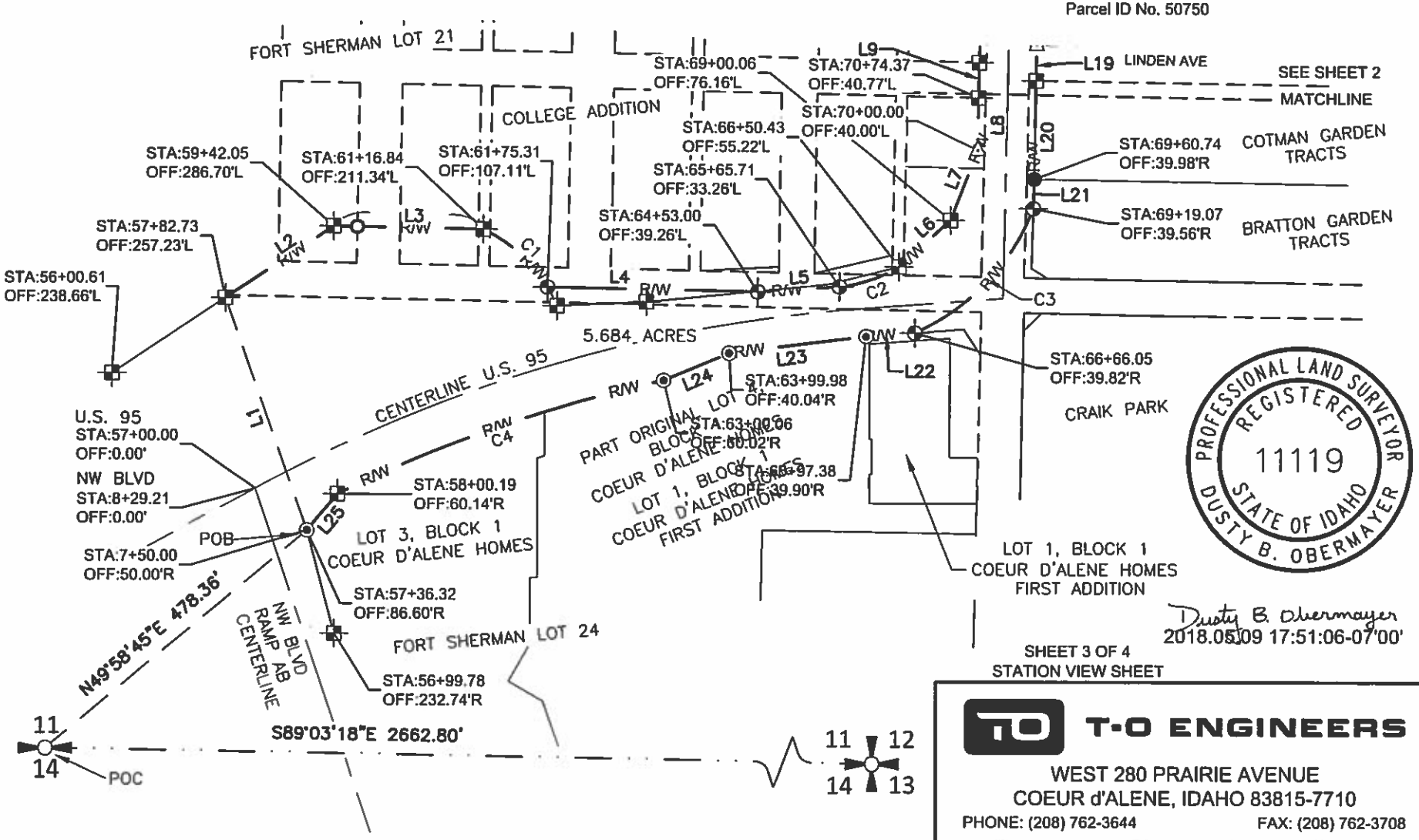
N

100 0 100 200

SCALE FEET

BASIS OF BEARING: NAD 83, IDAHO STATE
PLANE COORDINATE SYSTEM, WEST ZONE

Parcel No. 101
Parcel ID No. 50750



PROFESSIONAL LAND SURVEYOR
REGISTERED
11119
STATE OF IDAHO
DUSTY B. OBERMAYER

Dusty B. Obermayer
2018.05.09 17:51:06-07'00'

SHEET 3 OF 4
STATION VIEW SHEET

T-O ENGINEERS
WEST 280 PRAIRIE AVENUE
COEUR d'ALENE, IDAHO 83815-7710
PHONE: (208) 762-3644 FAX: (208) 762-3708

E-FILE: 170145_V_ITD QC Legal Exhibit.dwg DATE: MAY. 2018 JOB: 170145

RIGHT OF WAY LEGAL DESCRIPTION
EXHIBIT PARCEL US-95

LOCATED WITHIN THE SE 1/4 OF SECTION 11,
TOWNSHIP 50 NORTH, RANGE 4 WEST, BOISE MERIDIAN,
KOOTENAI COUNTY, IDAHO
(City of Coeur d'Alene to Idaho Transportation Department)

Parcel No. 101
Parcel ID No. 50750

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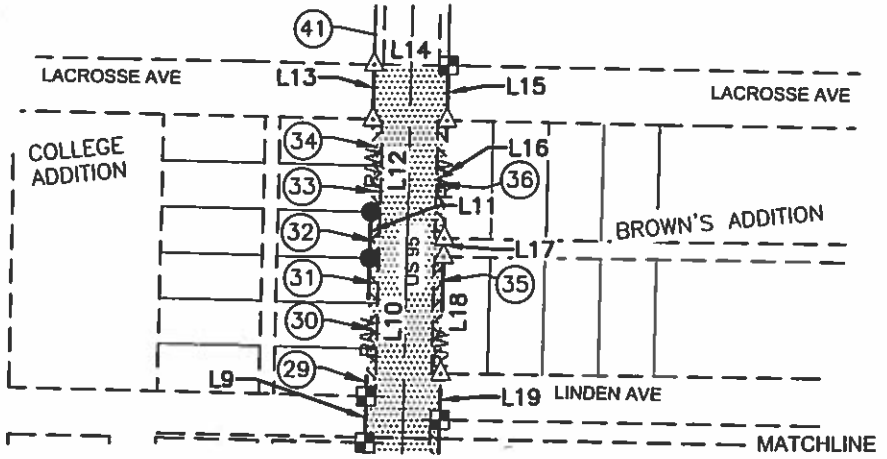
100 0 100 200

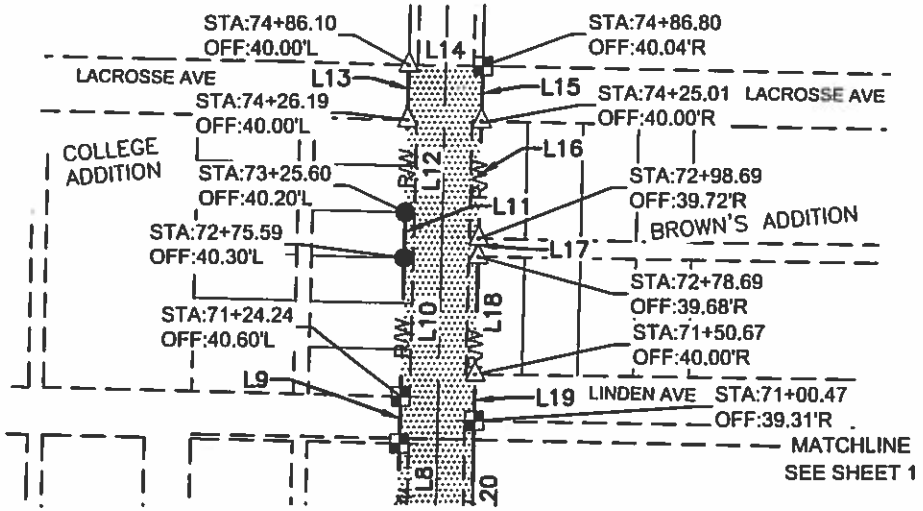
SCALE FEET

BASIS OF BEARING: NAD 83, IDAHO STATE PLANE COORDINATE SYSTEM, WEST ZONE



OVERVIEW

STATION VIEW



Dusty B. Obermayer
Date: 2018.05.09 17:49:35-07'00'

PROFESSIONAL LAND SURVEYOR
REGISTERED
11119
STATE OF IDAHO
DUSTY B. OBERMAYER

SHEET 2 OF 4

T-O ENGINEERS
WEST 280 PRAIRIE AVENUE
COEUR d'ALENE, IDAHO 83815-7710
PHONE: (208) 762-3644 FAX: (208) 762-3708

E-FILE: 170145_V_ITD QC Legal Exhibit.dwg DATE: MAY. 2018 JOB: 170145

RIGHT OF WAY LEGAL DESCRIPTION
EXHIBIT PARCEL US-95

LOCATED WITHIN THE SE 1/4 OF SECTION 11,
TOWNSHIP 50 NORTH, RANGE 4 WEST, BOISE MERIDIAN,
KOOTENAI COUNTY, IDAHO
(City of Coeur d'Alene to Idaho Transportation Department)

Parcel No. 101
Parcel ID No. 50750

BASIS OF BEARING: NAD 83, IDAHO STATE PLANE COORDINATE SYSTEM, WEST ZONE

LINE TABLE		
LINE	BEARING	DISTANCE
L1	N19°18'09"W	347.19'
L2	N56°14'25"E	182.46'
L3	S88°49'34"E	209.61'
L4	S88°47'15"E	295.11'
L5	N86°19'01"E	114.82'
L6	N47°45'10"E	97.70'
L7	N21°03'23"E	106.29'
L8	N00°34'20"E	74.37'
L9	N01°21'29"E	49.87'
L10	N01°16'41"E	151.35'
L11	N01°16'41"E	50.01'
L12	N01°16'41"E	100.59'
L13	N01°13'57"E	60.00'
L14	S89°12'22"E	80.04'
L15	S01°16'59"W	60.00'
L16	S01°16'59"W	128.02'
L17	S01°16'59"W	20.00'
L18	S01°16'59"W	128.02'
L19	S01°16'59"W	50.19'
L20	S00°53'19"W	139.73'
L21	S01°44'35"W	41.67'
L22	S85°40'19"W	68.67'
L23	S82°59'02"W	193.54'
L24	S67°21'38"W	99.54'
L25	S39°42'13"W	67.06'

LEGEND

- 5/8" X 30" LONG REBAR WITH A 3" ZINC CAP, MARKED IDAHO TRANS DEPT R/W MONUMENT
- IRON PIPE
- 1/2 INCH DIAM REBAR
- 5/8 INCH DIAM REBAR
- FOUND RIGHT OF WAY MONUMENT
- CALCULATED POINT
- POB — POINT OF BEGINNING
- POC — POINT OF COMMENCEMENT
- AREA TO BE DEEDED TO THE IDAHO TRANSPORTATION DEPARTMENT
- (21) — PARCELS ACQUIRED BY FEDERAL AID PROJECT No. F-FG-5115(4)
- (22) — ALSO PARCELS ACQUIRED BY FEDERAL AID PROJECT No. F-FG-5115(4). HATCH ROTATED FOR SEPARATION CLARITY

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	CHORD BRG
C1	123.52'	210.00'	33°42'06"	121.75'	S47°47'56"E
C2	88.78'	201.59'	25°14'03"	88.07'	N71°08'12"E
C3	247.96'	318.50'	44°36'25"	241.75'	S43°17'36"W
C4	485.45'	2023.48'	13°44'45"	484.29'	S70°40'34"W

PROFESSIONAL LAND SURVEYOR
REGISTERED
11119
STATE OF IDAHO
DUSTY B. OBERMAYER

Dusty B. Obermayer
2018.05.09 17:51:50-07'00'

SHEET 4 OF 4

T-O ENGINEERS
WEST 280 PRAIRIE AVENUE
COEUR d'ALENE, IDAHO 83815-7710
PHONE: (208) 762-3644 FAX: (208) 762-3708

E-FILE: 170145_V_ITD OC Legal Exhibit.dwg DATE: MAY, 2018 JOB: 170145

PUBLIC WORKS COMMITTEE
STAFF REPORT

DATE: July 3, 2018
FROM: Chris Bosley – City Engineer
SUBJECT: Standard Drawing Updates

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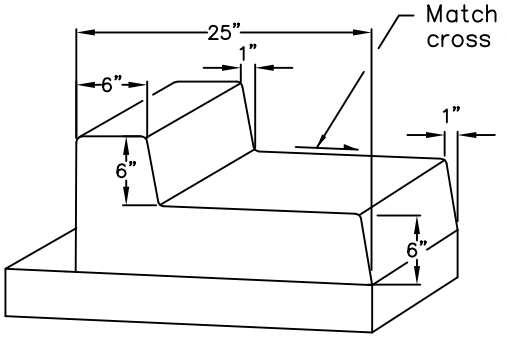
DECISION POINT: Should the City approve updated and new Standard Drawings for public works construction?

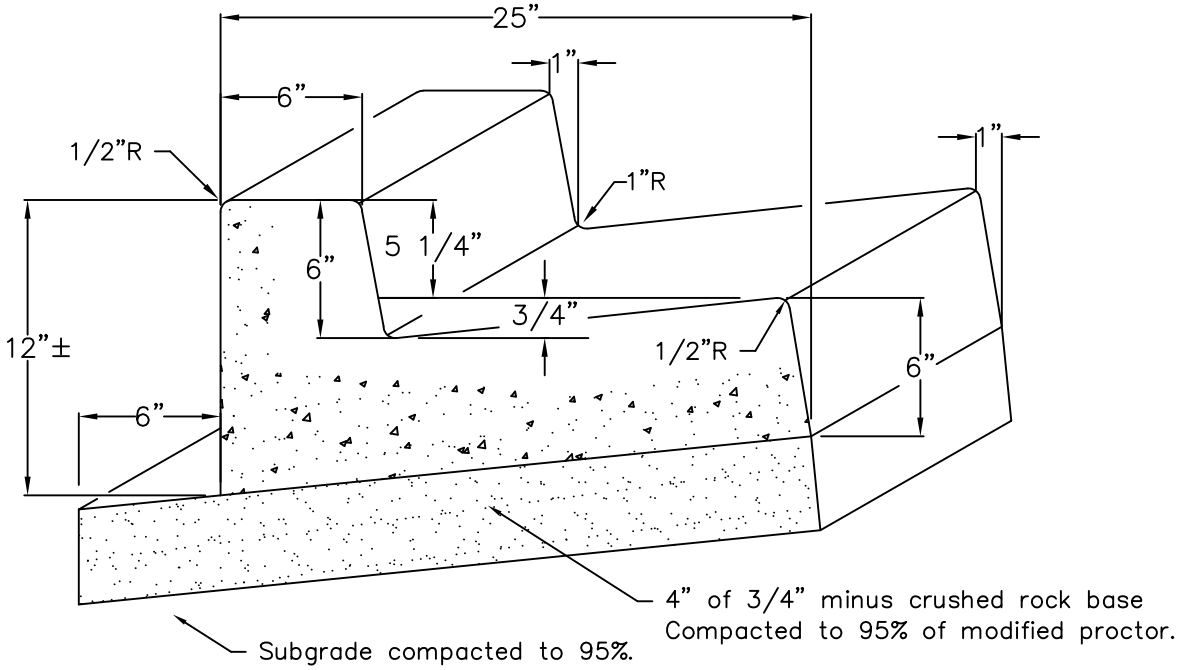
HISTORY: The City has a library of Standard Drawings to guide public works construction projects to meet its requirements. These Standard Drawings are important to ensure that construction projects are completed in a way that is satisfactory to the City, meet Federal, State, and local requirements, provide longevity, and are serviceable by our departments. The last update to the Standard Drawings was approved in 2015 by the former City Engineer, various departments, and City Council. Input for these updates and new drawings was obtained from City inspectors, various departments that deal with public works construction, and local consultants. These updates and new drawings will replace the current Standard Drawings found on our website.

FINANCIAL ANALYSIS: All work on the Standard Drawing updates was performed by City staff. There is no financial requirement from the City.

DECISION POINT/RECOMMENDATION: Council should approve the updates to the Standard Drawings and the new drawings.



"Dump" Curb Option



Not to Scale

NOTES:

1. Weakened plane joints shall be installed every ten (10) feet with expansion joint filler at curb returns and every one hundred (100) feet. per Standard Drawing C–5.
2. When existing curb is removed care shall be taken not to disturb existing asphalt pavement. Refer to Standard Drawing M–11 for asphalt street repair.
3. Joints between existing and new curb shall be sawed.
4. A light broom finish is required.
5. Compressive Strength of Concrete shall be 4000 PSI minimum.
6. Ensure that grade breaks at pedestrian ramps are less than 13%.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

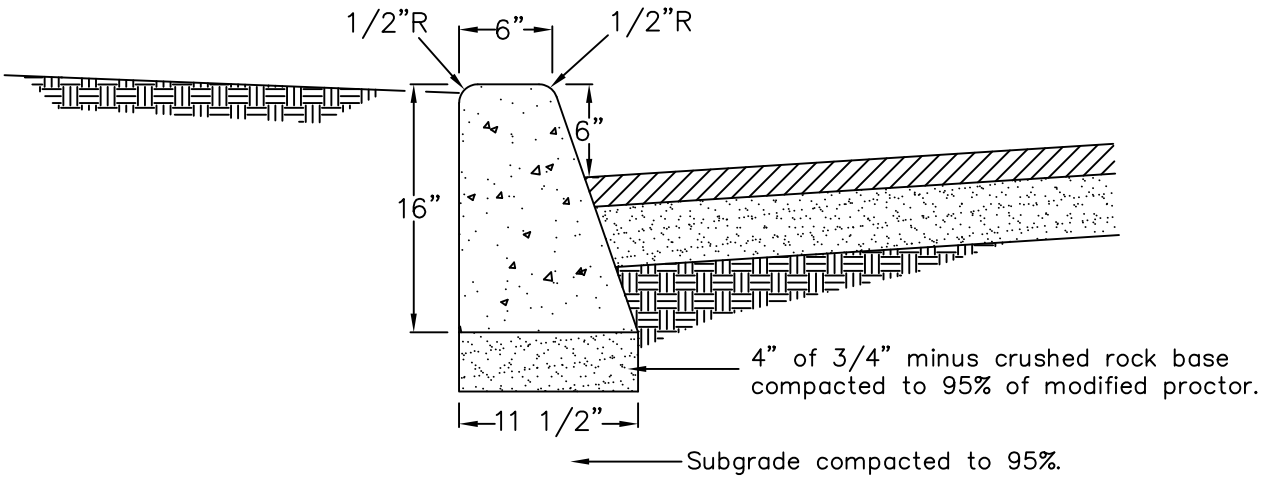
STANDARD CURB AND GUTTER

APPROVED BY:

Chris Bosley — 6/13/18

CITY ENGINEER, PE 10804 — DATE:

DWG NO. C–1



Not to Scale

NOTES:

1. Weakened plane joints shall be installed every ten (10) feet with expansion joint filler at curb returns and every one hundred (100) feet. per Standard Drawing C–5.
2. When existing curb is removed care shall be taken not to disturb existing asphalt pavement. Refer to Standard Drawing M–11 for asphalt street repair.
3. Joints between existing and new curb shall be sawed.
4. A light broom finish is required.
5. Compressive Strength of Concrete shall be 4000 PSI minimum.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

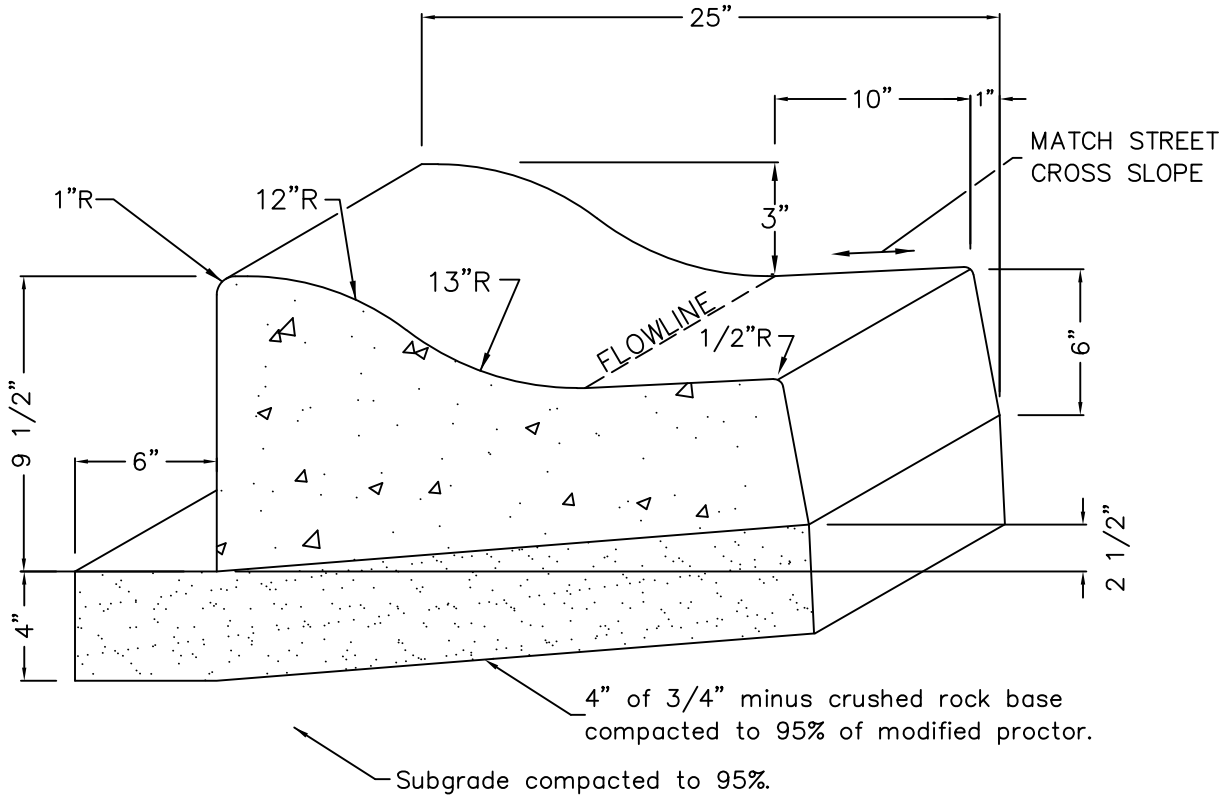
STANDARD CURB

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

6/13/18 DATE:

DWG NO. C–2



Not to Scale

NOTES:

1. Weakened plane joints shall be installed every ten (10) feet with expansion joint filler at curb returns and every one hundred (100) feet. per Standard Drawing C–5.
2. When existing curb is removed care shall be taken not to disturb existing asphalt pavement. Refer to Standard Drawing M–11 for asphalt street repair.
3. Joints between existing and new curb shall be sawed.
4. A light broom finish is required.
5. Compressive Strength of Concrete shall be 4000 PSI minimum.
6. Ensure that grade breaks at pedestrian ramps are less than 13%.
7. **Installation of rolled curb and gutter must be approved in writing by the City Engineer.**

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

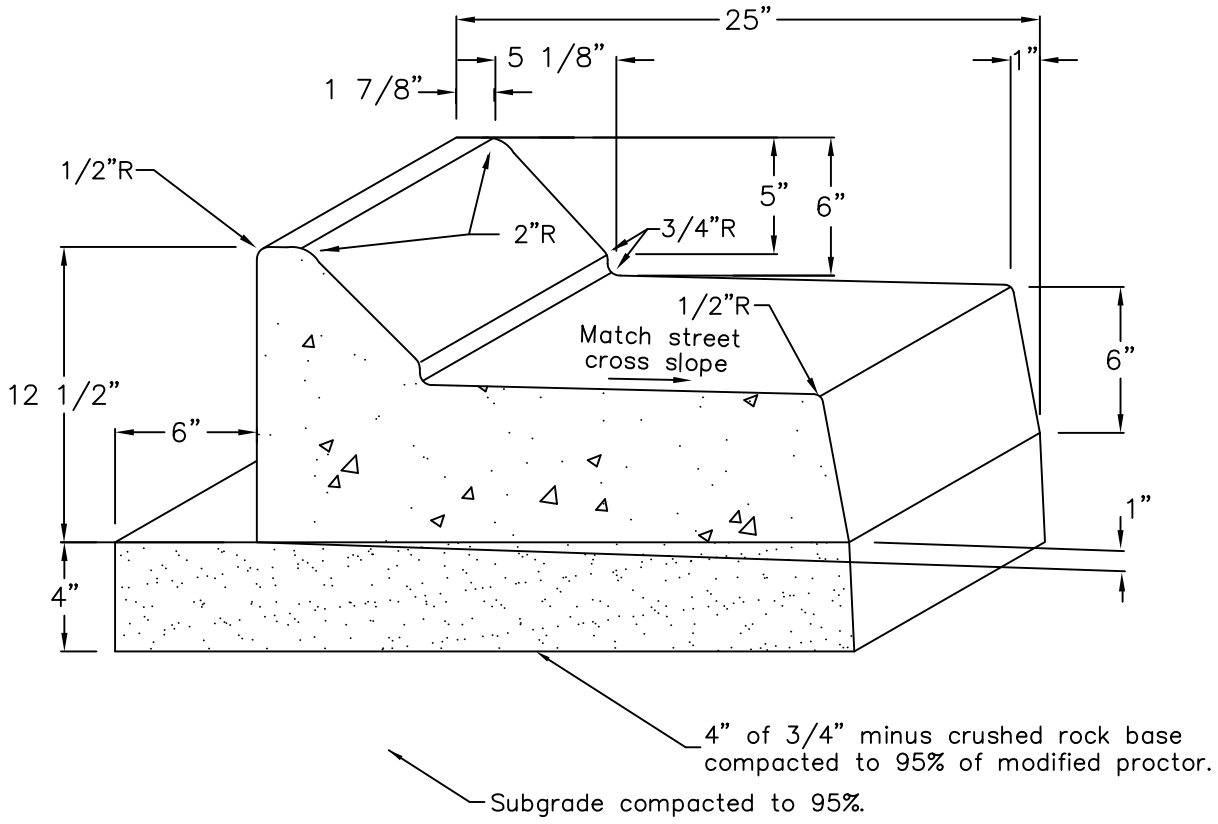
ROLLED CURB AND GUTTER

APPROVED BY:

Chris Bosley — 3/27/18

CITY ENGINEER, PE 10804 — DATE:

DWG NO. C–3



Not to Scale

NOTES:

1. Weakened plane joints shall be installed every ten (10) feet with expansion joint filler at curb returns and every one hundred (100) feet. per Standard Drawing C–5.
2. When existing curb is removed care shall be taken not to disturb existing asphalt pavement. Refer to Standard Drawing M–11 for asphalt street repair.
3. Joints between existing and new curb shall be sawed.
4. A light broom finish is required.
5. Compressive Strength of Concrete shall be 4000 PSI minimum.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

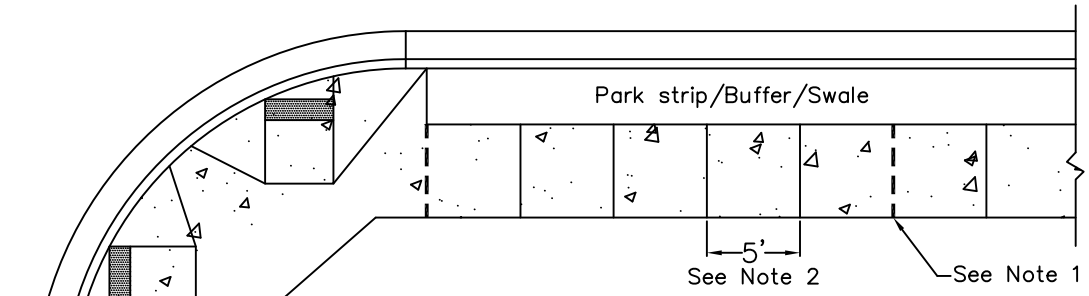
MEDIAN CURB AND GUTTER

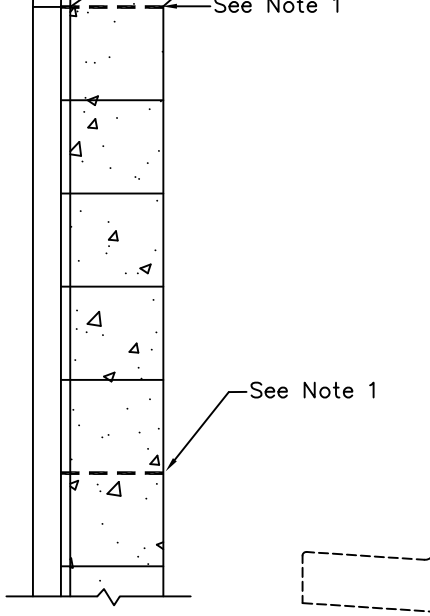
APPROVED BY:

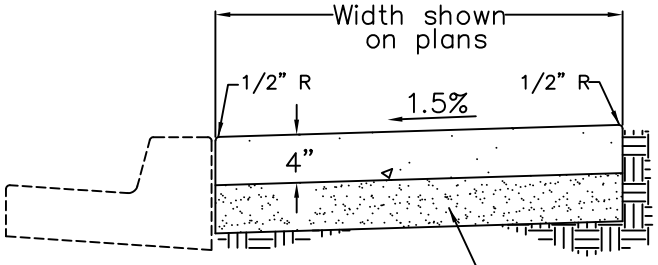
Chris Bosley — 6/13/18

CITY ENGINEER, PE 10804 — DATE:

DWG NO. C–4

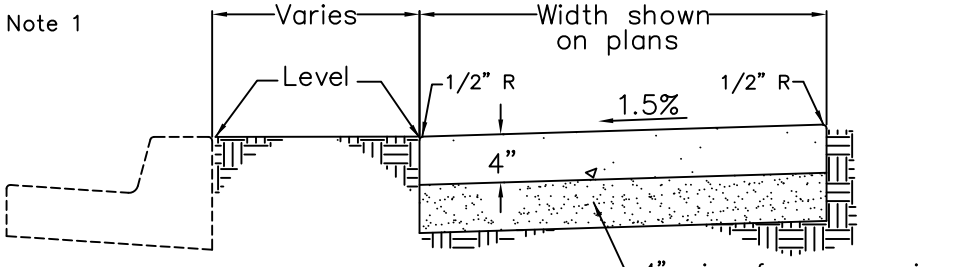






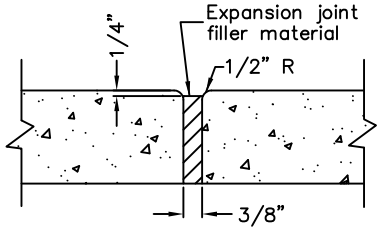
CONTIGUOUS

FOR USE IN CONSTRAINED CONDITIONS OR IN DOWNTOWN CONTEXT ONLY



NON-CONTIGUOUS

PREFERRED



EXPANSION JOINT

Not to Scale

NOTES:

1. – – – – Expansion joints at curb returns, adjacent to structures and at 25' intervals.
2. ———— 3/4" grooves with 1/2" radius edges at 5' intervals.
3. Concrete shall be Portland Concrete Cement with a minimum 28 day compressive strength of 4000 PSI.
4. Non–contiguous sidewalk shall be used where feasible to provide a buffer from the roadway and space for snow storage, drainage swales, and utilities.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

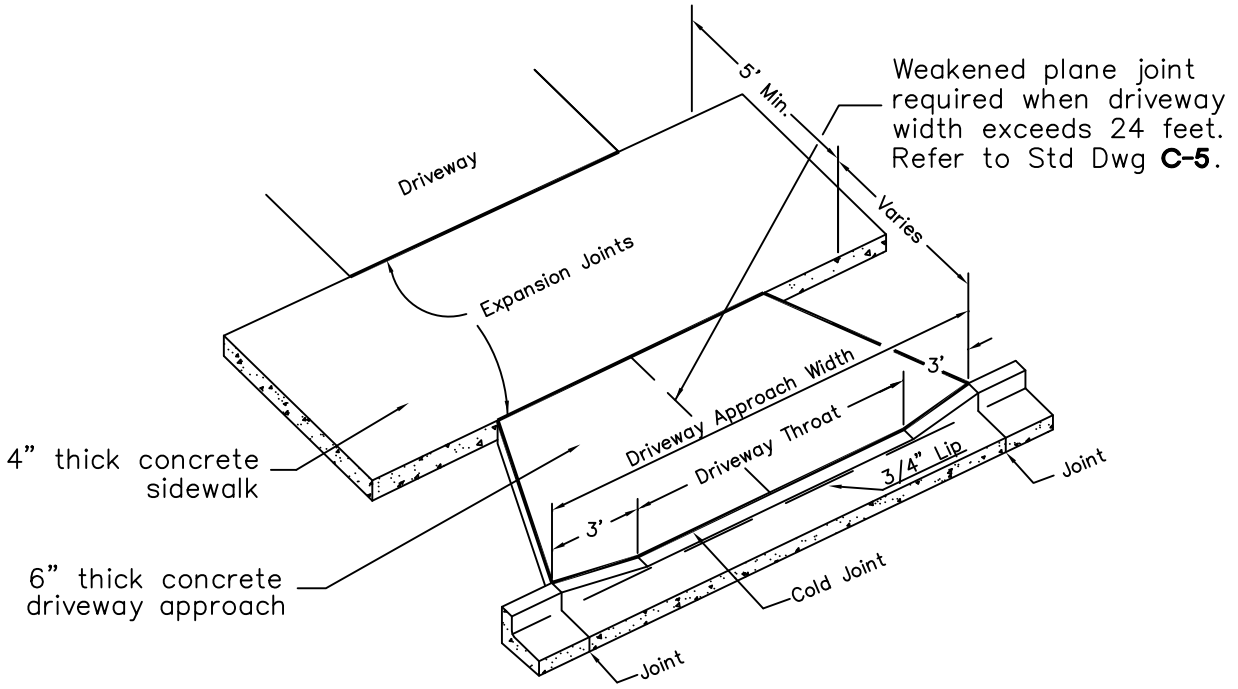
SIDEWALK JOINTS AND SECTIONS

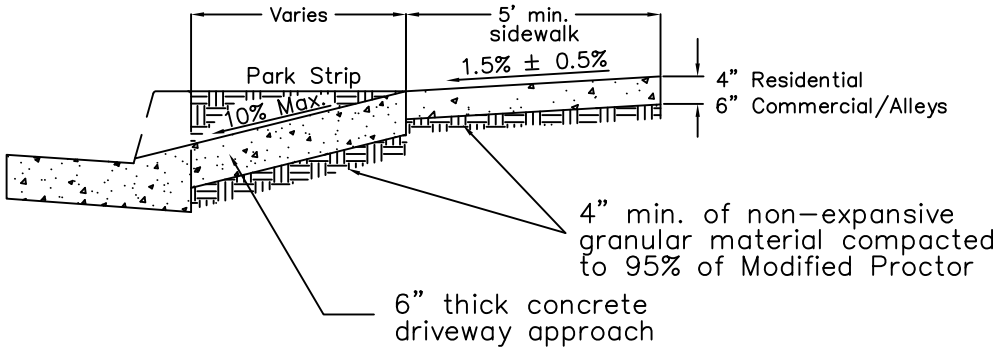
APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

3/27/18 DATE:

DWG NO. C–5





Not to Scale

NOTES

1. Residential approach width: 16' Min. – 36' Max.
2. Commercial approach width: 18' Min. – 40' Max.
3. See Std. Dwg. **C-13** for Driveway Locations.
4. Concrete shall be a minimum 28 day compressive strength of 4000 PSI.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

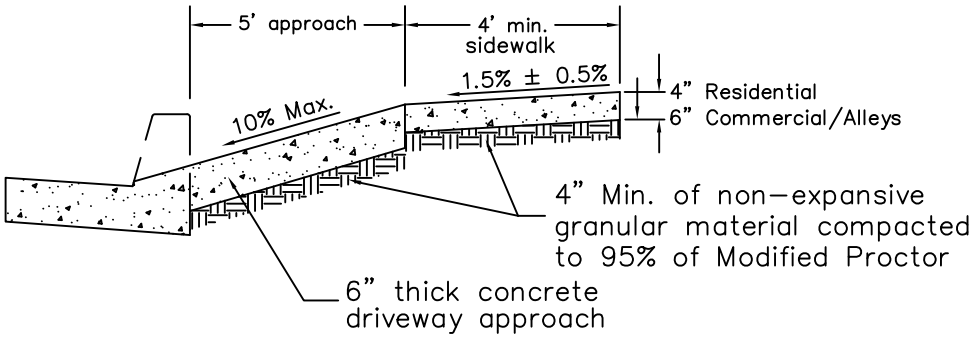
STANDARD DRIVEWAY APPROACH w/ PARK STRIP

APPROVED BY:

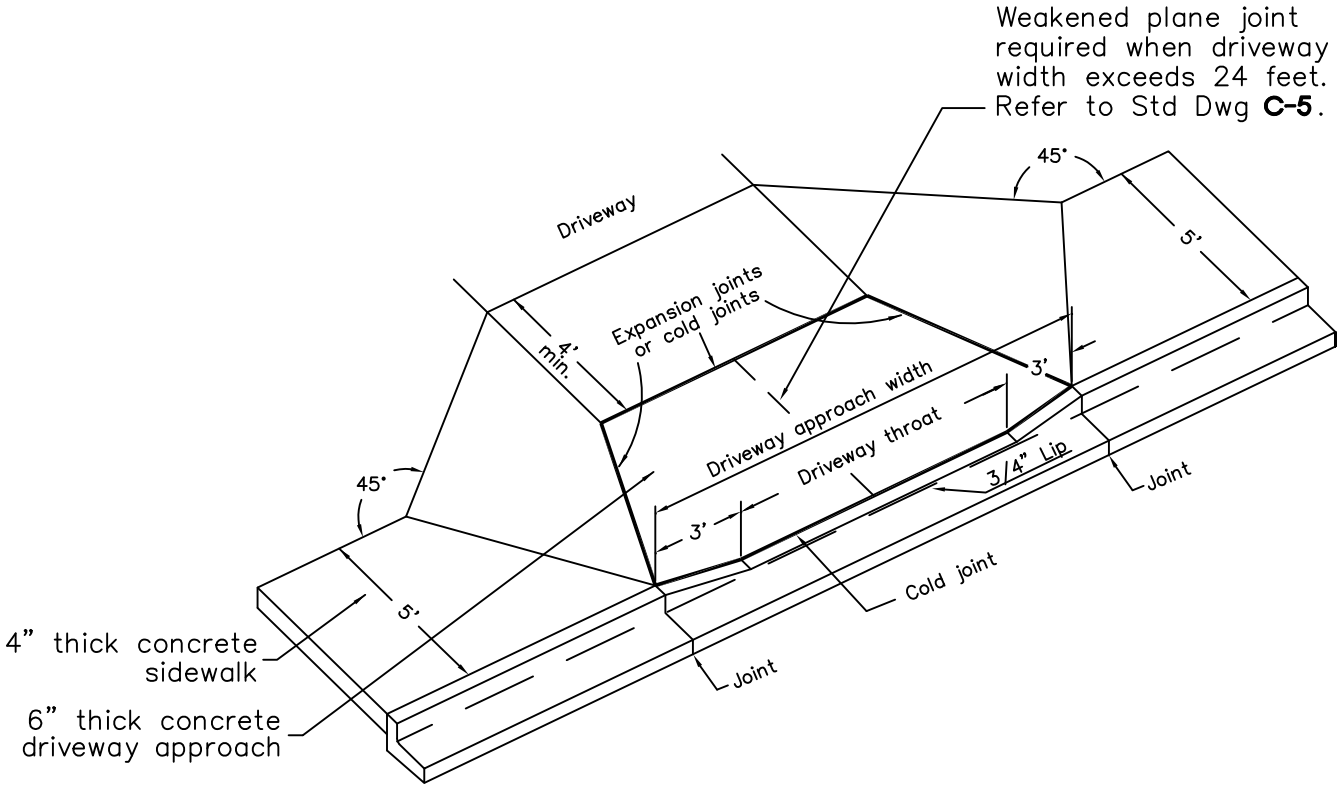
Chris Bosley — CITY ENGINEER, PE 10804

DATE: 6/13/18

DWG NO. C-6



APPROACH SECTION



Not to Scale

1. Residential approach width: 16' Min. – 36' Max.
2. Commercial approach width: 18' Min. – 40' Max.
3. See Std. Dwg. C-13 for driveway locations.
4. Concrete shall be a minimum 28 day compressive strength of 4000 PSI.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

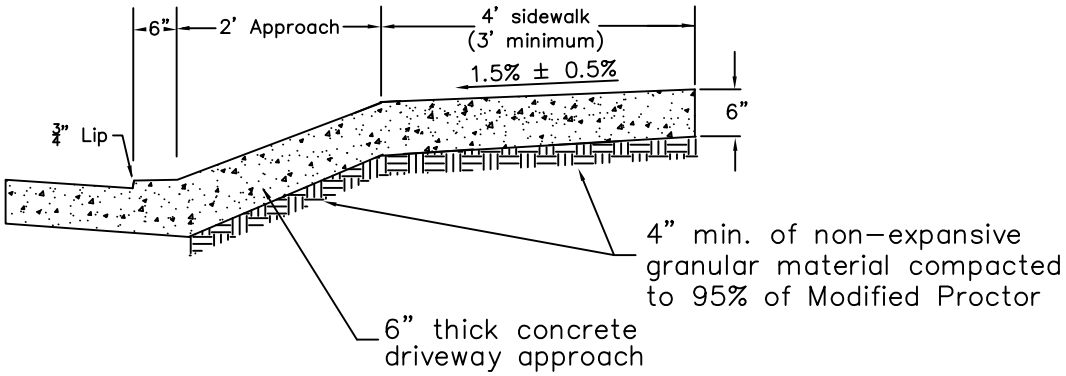
STANDARD DRIVEWAY APPROACH w/o PARK STRIP

APPROVED BY:

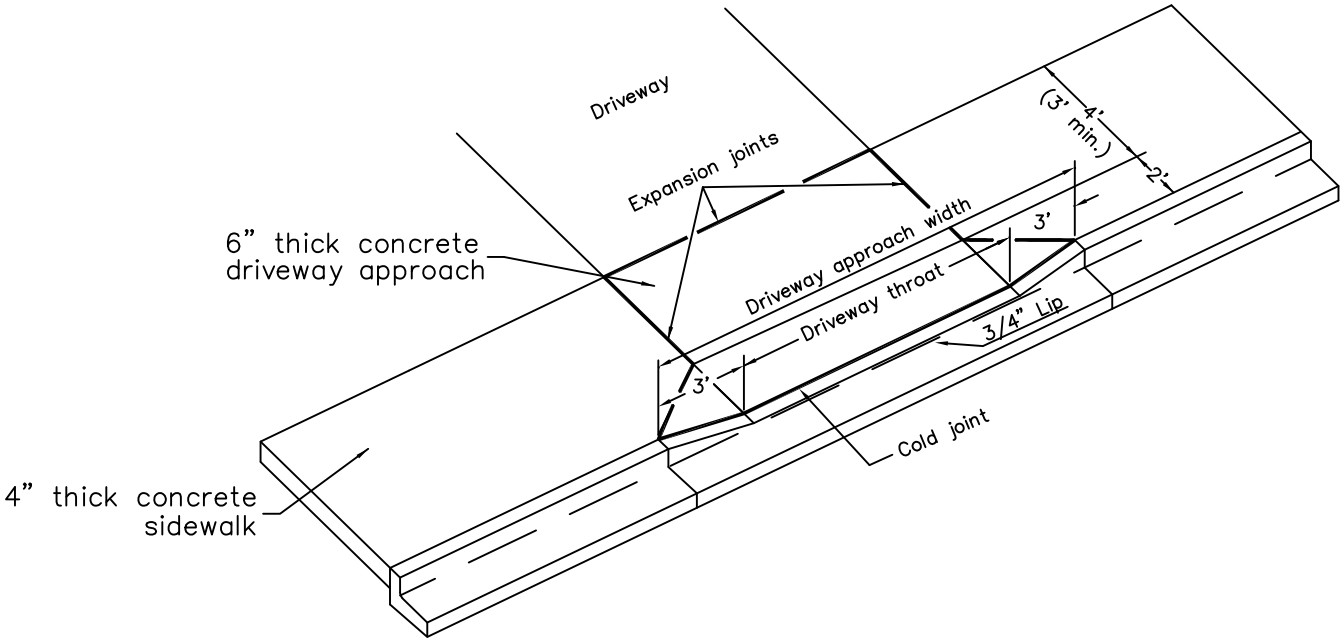
Chris Bosley — CITY ENGINEER, PE 10804

DATE: 6/13/18

DWG NO. C-7



APPROACH SECTION



Not to Scale

NOTES:

1. Maintain 5' panel joint spacing in sidewalk through approach.
2. Residential approach width: 16' Min. – 36' Max.
3. Commercial approach width: 18' Min. – 40' Max.
4. See Std. Dwg. **C-13** for driveway locations.
5. Concrete shall be a minimum 28 day compressive strength of 4000 PSI.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

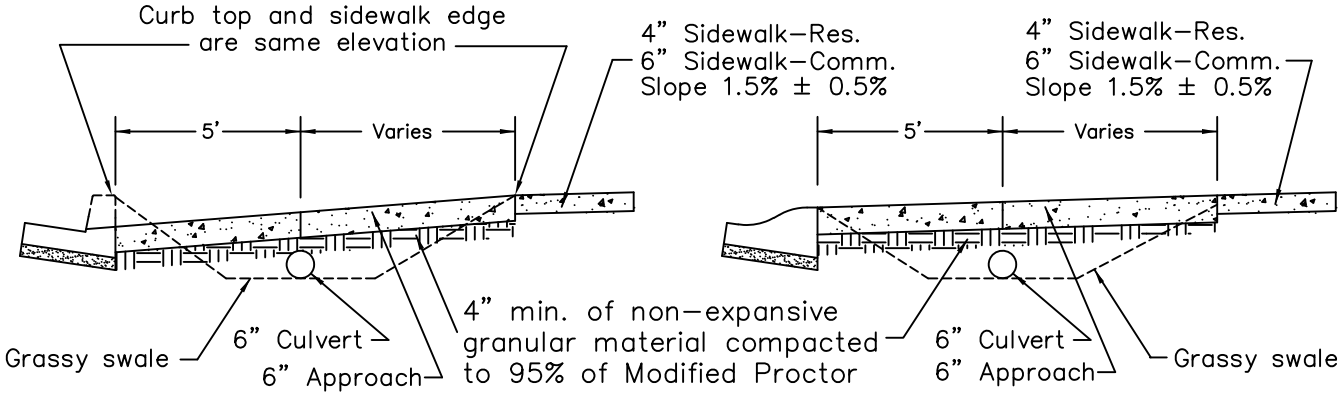
STANDARD DRIVEWAY APPROACH w/o PARK STRIP

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

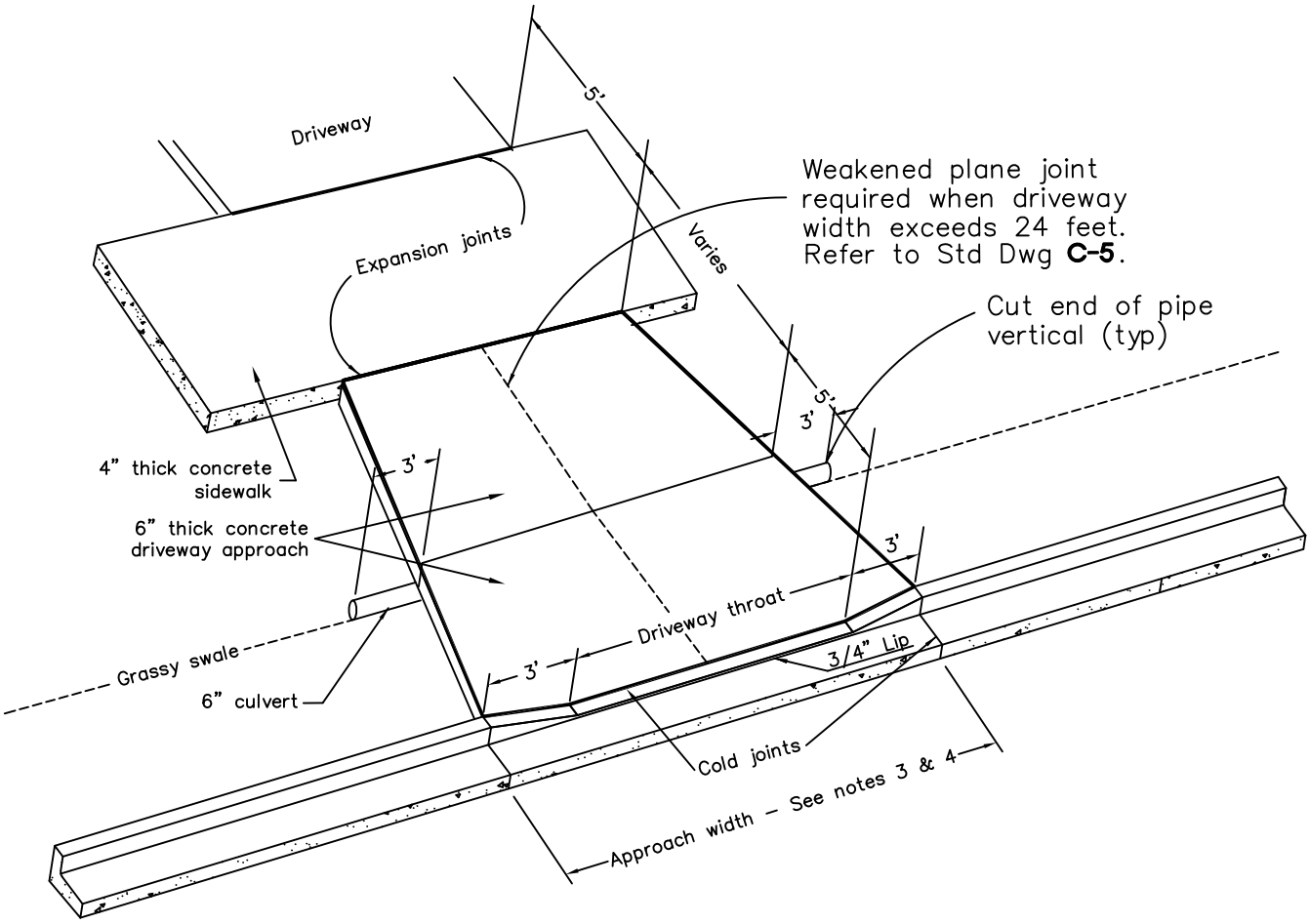
6/26/18 — DATE:

DWG NO. C-8



STANDARD CURB AND GUTTER SECTION

ROLLED CURB AND GUTTER SECTION



Not to Scale

NOTES:

1. Concrete shall be a minimum 28 day compressive strength of 4000 PSI.
2. Culvert material shall be Schedule 40 or equal, with smooth interior wall.
3. Residential approach width: 16' min – 36' max.
4. Commercial approach width: 18' min – 40' max.
5. See Standard Drawing C–13 for driveway location.
6. See Standard Drawing SD–7 for grassy swale detail.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

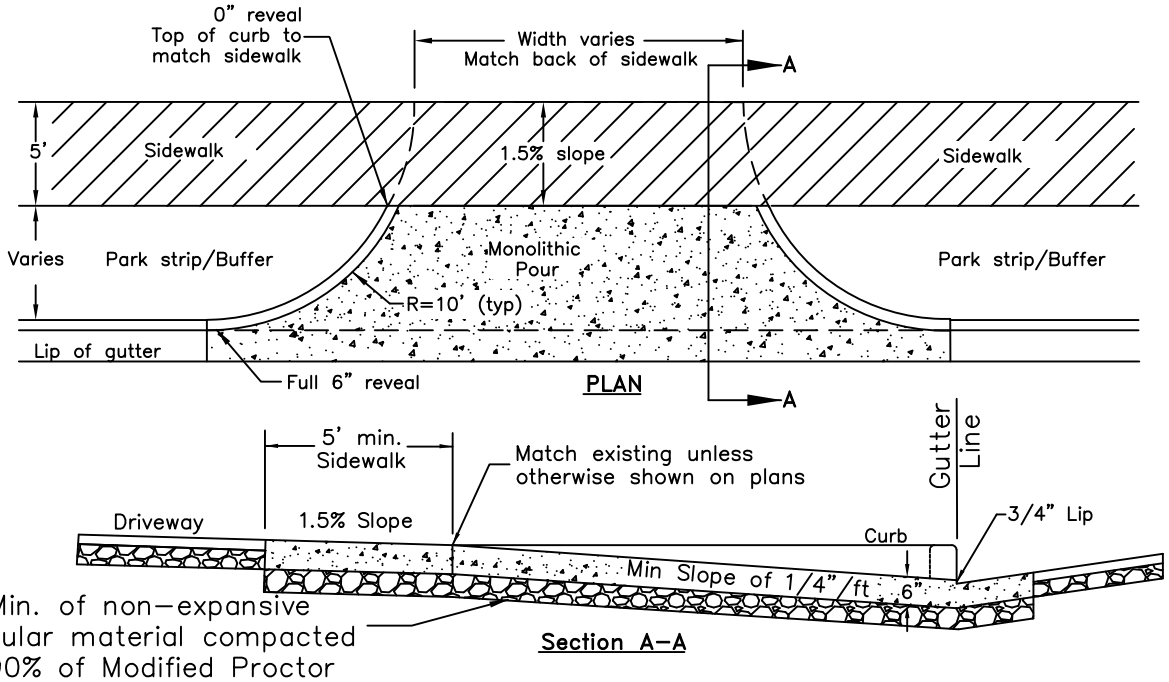
DRIVEWAY APPROACH WITH CULVERT

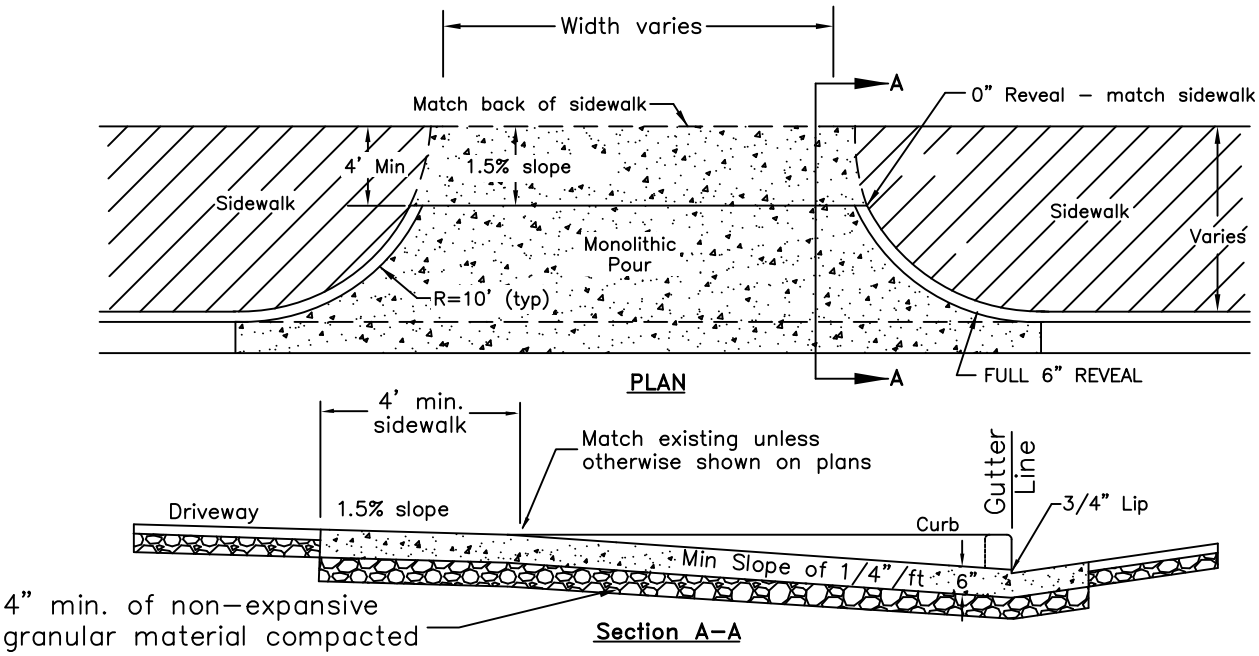
APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

6/13/18 — DATE:

DWG NO. C–9





RADIUS APPROACH

NOT TO SCALE

NOTES:

1. Truncated domes shall be installed on high volume approaches.
2. Radius shall be a minimum of 10 feet.
3. Concrete shall have a 28 day compressive strength of 4000 PSI.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

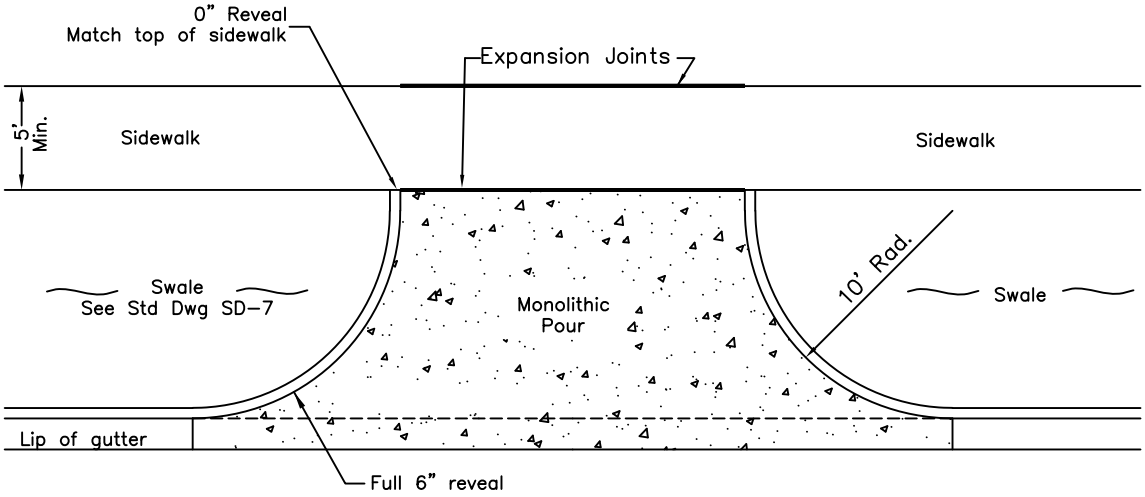
COMMERCIAL APPROACH

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

6/13/18 — DATE:

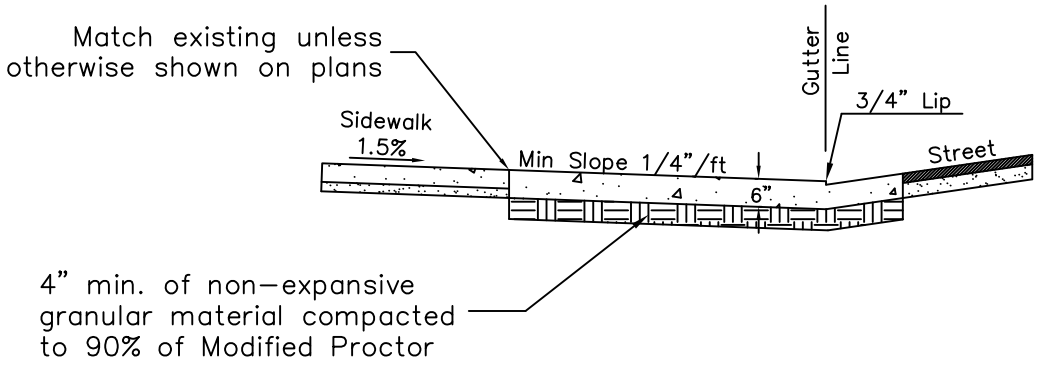
DWG NO. C-11



PLAN

RADIUS APPROACH

NOT TO SCALE



NOTES:

1. Radius shall be a minimum of 10 feet, maximum of 20 feet.
2. Concrete shall have a 28 day compressive strength of 4000 PSI.
3. Commercial/multi-family sidewalk shall be 6" thick.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

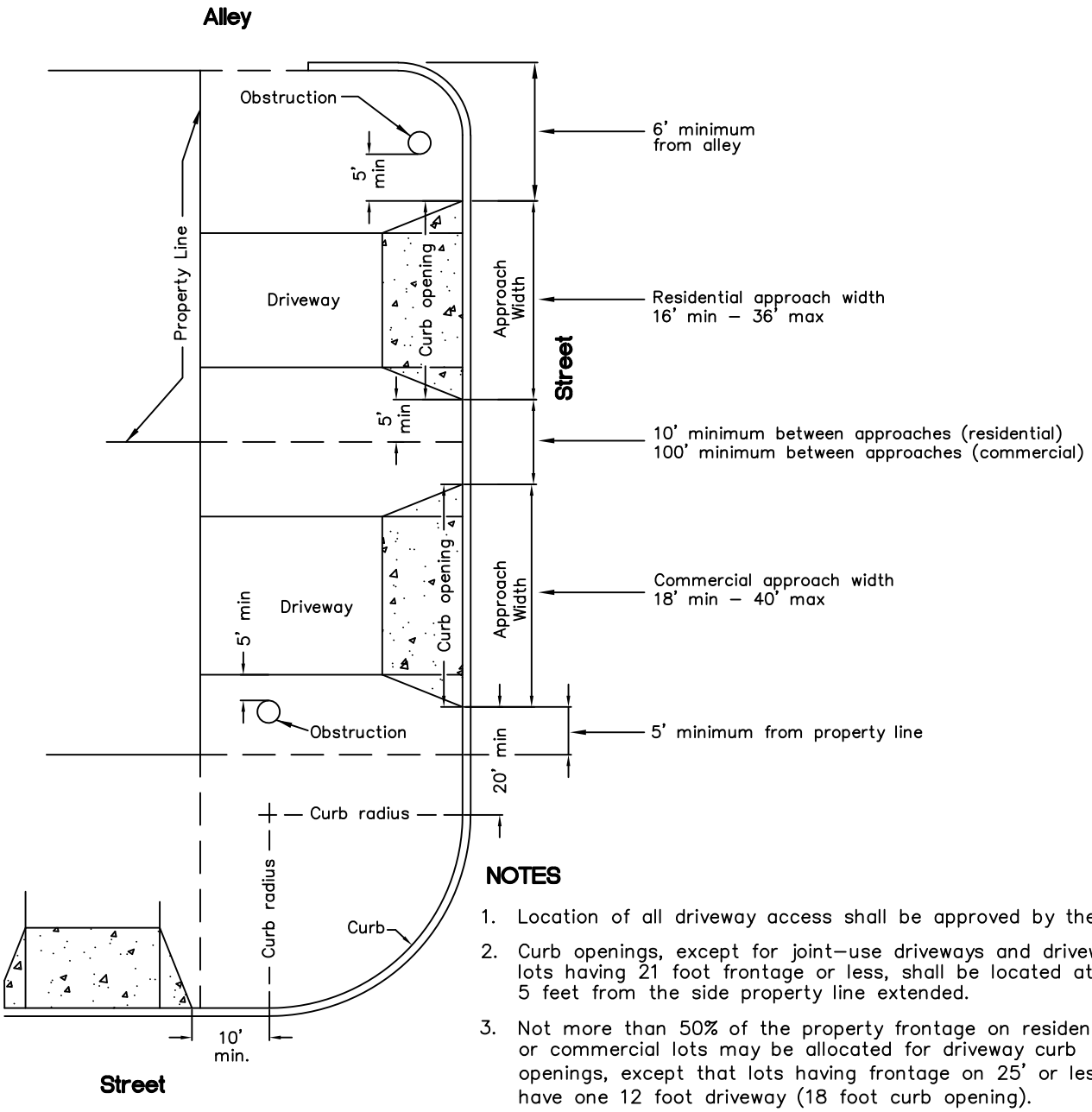
COMMERCIAL APPROACH WITH GRASSY SWALE

APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

6/13/18
DATE:

DWG NO. C-12



Not to Scale

NOTES

1. Location of all driveway access shall be approved by the City.
2. Curb openings, except for joint–use driveways and driveways on lots having 21 foot frontage or less, shall be located at least 5 feet from the side property line extended.
3. Not more than 50% of the property frontage on residential lots, or commercial lots may be allocated for driveway curb openings, except that lots having frontage on 25' or less may have one 12 foot driveway (18 foot curb opening).
4. All driveways and curb openings shall be a minimum of 5 feet from any obstruction, i.e., poles, hydrants, etc...
5. No portion of any driveway shall be allowed across a property line extended normal to the roadway from the front corner of the property, except that joint–use driveways may be permitted in special instances where written approval of both property owners is filed with the City.
6. Driveways shall not be placed within the functional area of a signalized intersection.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

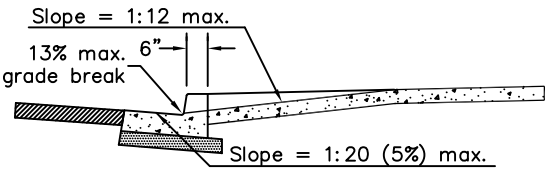
DRIVEWAY APPROACH LOCATIONS AND WIDTHS

APPROVED BY:

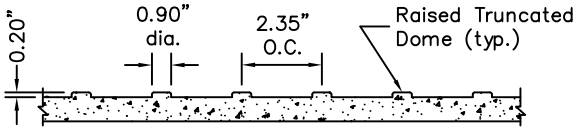
Chris Bosley — CITY ENGINEER, PE 10804

6/13/18 — DATE:

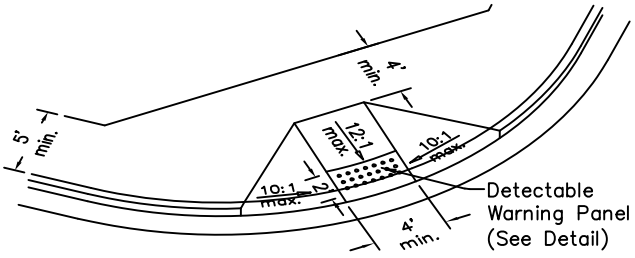
DWG NO. C–13



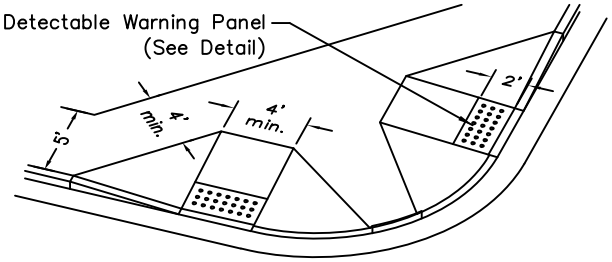
Section View



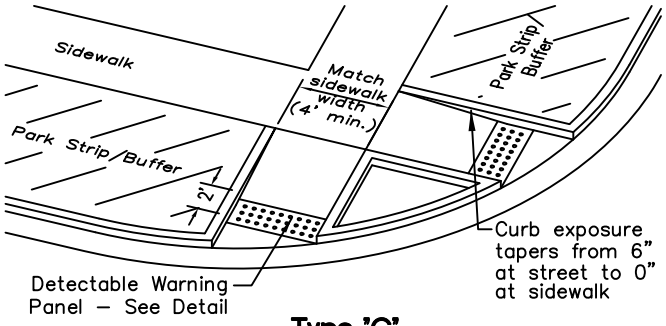
Detectable Warning Pattern
"Armour Tile" or Approved Equal



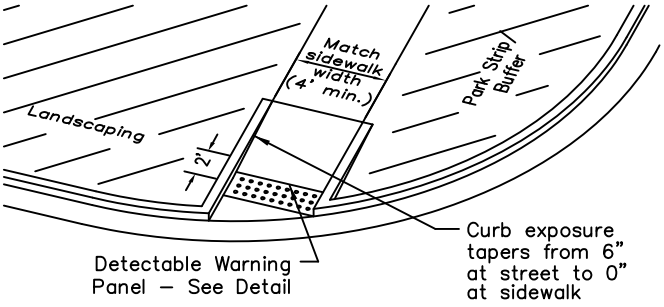
Type "A"
Single Ramp, Contiguous Sidewalk
For Constrained Conditions Only
Requires Written Approval from the City Engineer



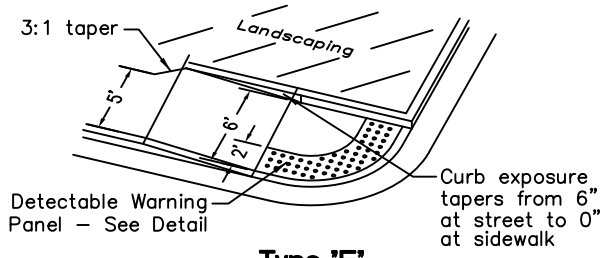
Type "B"
Double Ramp, Contiguous Sidewalk



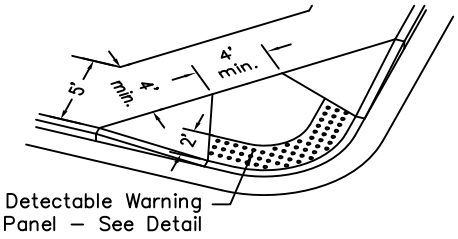
Type "C"
Double Ramp, Detached Sidewalk



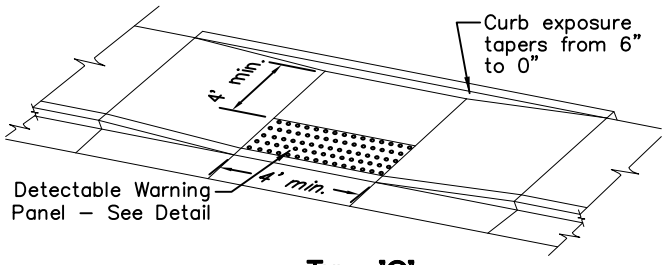
Type "D"
Single Ramp, Detached Sidewalk



Type "E"
Small Radius, Single Ramp, Sidewalk in One Direction



Type "F"
Small Radius, Single Ramp
Constrained Conditions Only



Type "G"
Parallel Type, Constrained Conditions

NOTES:

1. **Ramp types B or C are required unless approved by the City Engineer.**
2. **Ramps shall not conflict with catch basins or curb inlets.**
3. **Maximum ramp running slope = 8.3%**
4. **Maximum ramp cross slope = 2.0%**
5. **Combinations of ramp types may be required at some intersections**

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

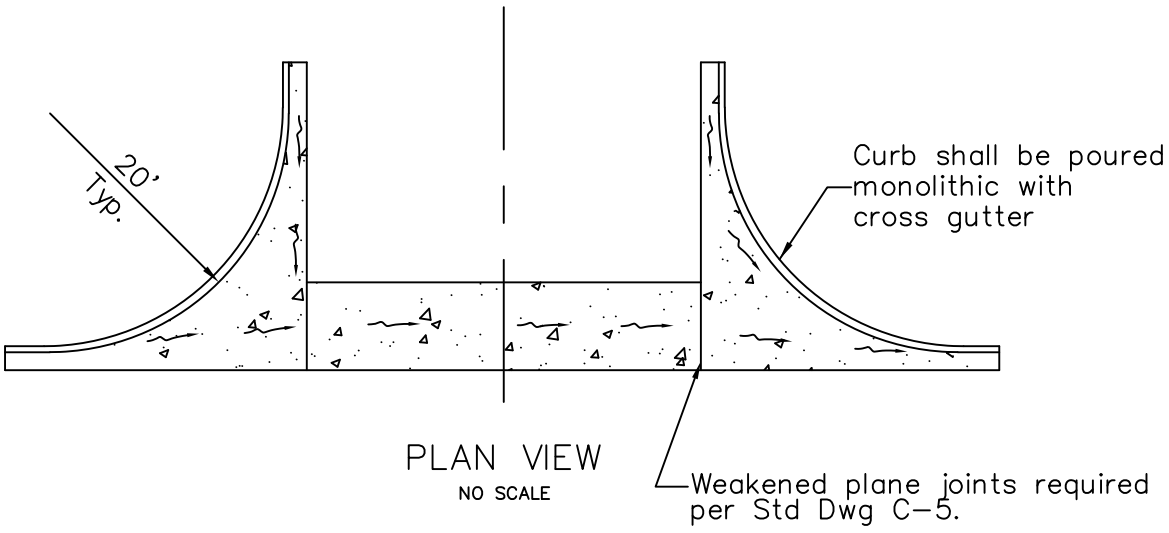
PEDESTRIAN RAMP

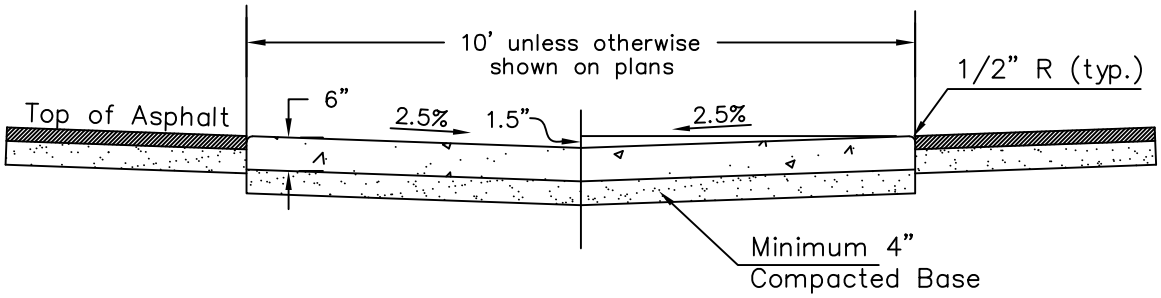
APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

6/18/18 — DATE:

DWG NO. C–14





NOTES:

1. Concrete shall be 28 day minimum compression strength of 4000 PSI.
2. ~→ Typical flowlines

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

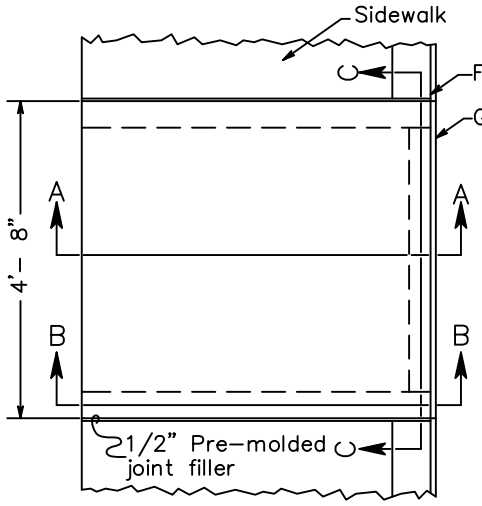
CROSS GUTTER

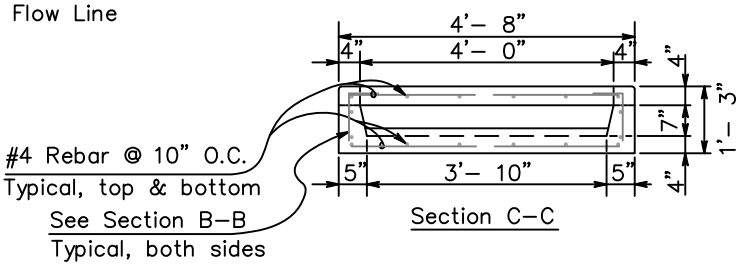
APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

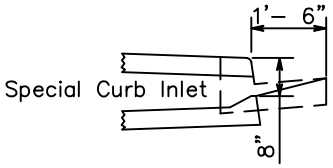
6/13/18
DATE:

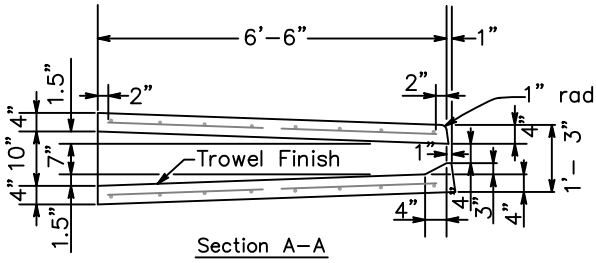
DWG NO. C-15



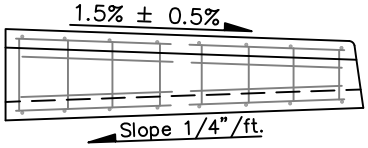


Section C–C

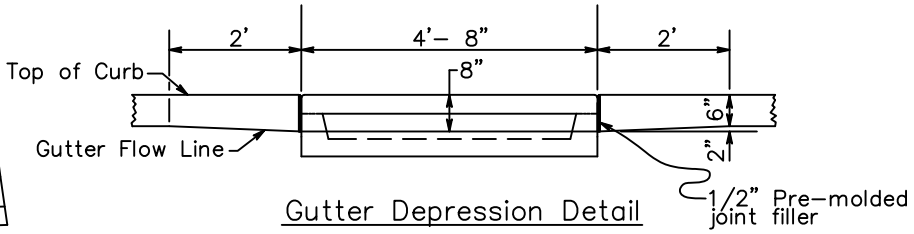




Section A–A

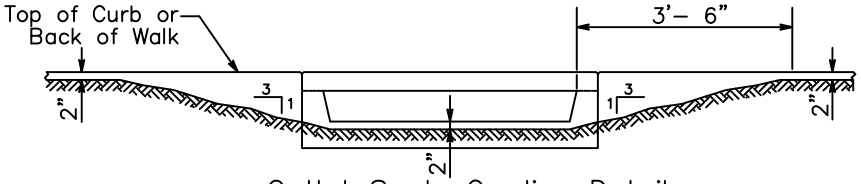


Section B–B
Rebar Placement



Gutter Depression Detail

Special Curb Inlet



Outlet Swale Grading Detail

General Notes

1. Curb inlet shall be constructed in accordance with ASTM C 478 (AASHTO M 199) & ASTM C 890 unless otherwise shown on the plans or noted in the project specifications
2. Top surface to be broom finished.
3. All external edges not labeled shall be trowelled with with 1/4" radius edger.
4. Must be used in conjunction with Inlet Apron. See Std. Dwg. C–17.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

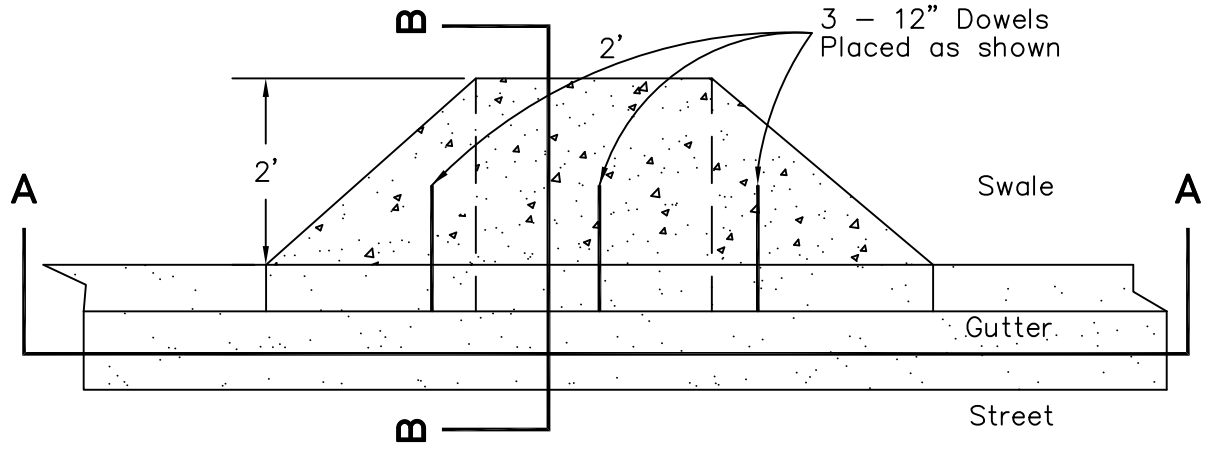
SIDEWALK UNDERDRAIN

APPROVED BY:

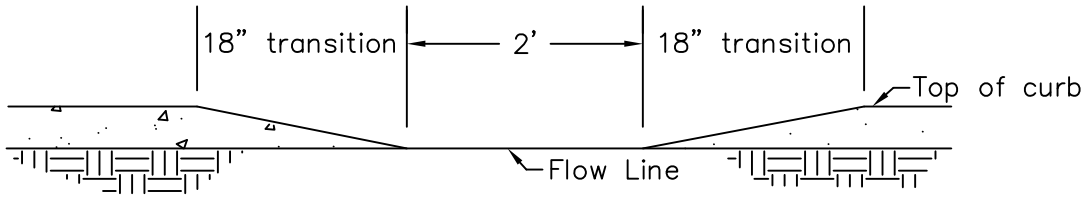
Chris Bosley — CITY ENGINEER, PE 10804

6/13/18 — DATE:

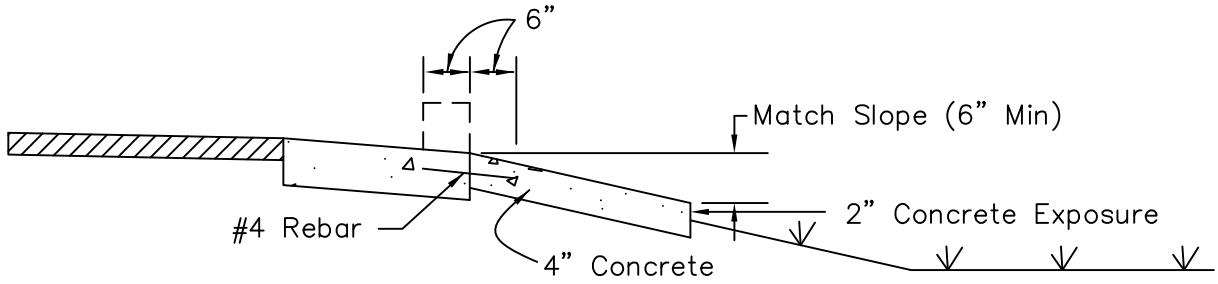
DWG NO. C–16



PLAN VIEW



SECTION A-A



SECTION B-B

Not to Scale

REVISION	APPROVED	DATE

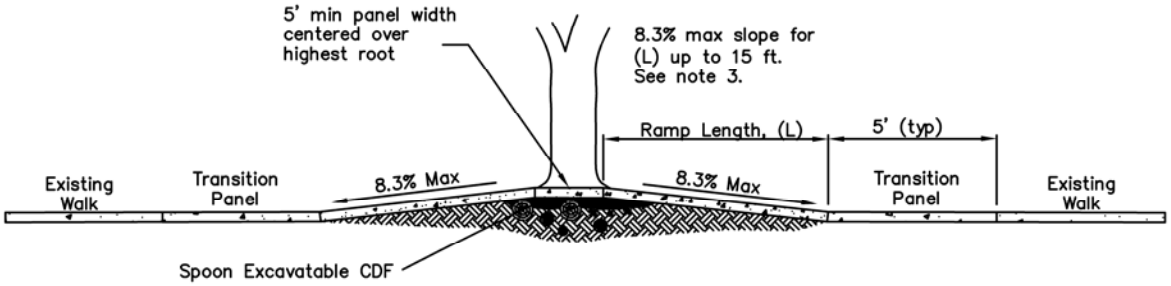
CITY OF COEUR d'ALENE STANDARD DRAWING

INLET APRON

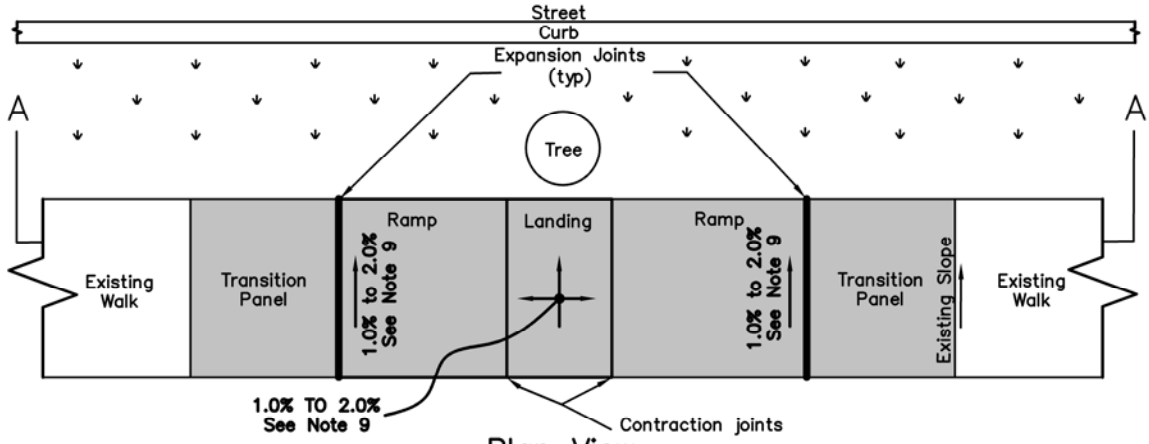
APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804 — 6/20/18 DATE:

DWG NO. C–17



Section A–A



Plan View

Notes:

1. This plan does not apply for new sidewalk construction in undeveloped areas.
2. A 5–ft transition panel is required when cross slope of adjacent existing walk exceeds 2.0%
3. The maximum ramp running slope shall not require the ramp length (L) to exceed 15 ft to avoid chasing the slope indefinitely; increase the maximum running slope as directed by the Engineer. No additional construction tolerance is allowed.
4. Root areas shall be undisturbed as much as practical. Loose soil shall be lightly hand tamped. If root trimming is necessary contact the City Urban Forestry department.
5. Fill voids around roots to provide sidewalk support w/ layer of spoon excavatable Controlled Density Fill (CDF). A 1–inch minimum cover over the highest root is required.
6. See Std Dwg C–5 for general sidewalk requirements.
7. Place topsoil and hydroseed or sod as directed by the Engineer to match existing conditions.
8. Raise, relocate, or replace existing sprinkler system as needed.
9. 1.0% minimum cross slope and 2.0% maximum cross slope. No additional construction tolerance is allowed.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

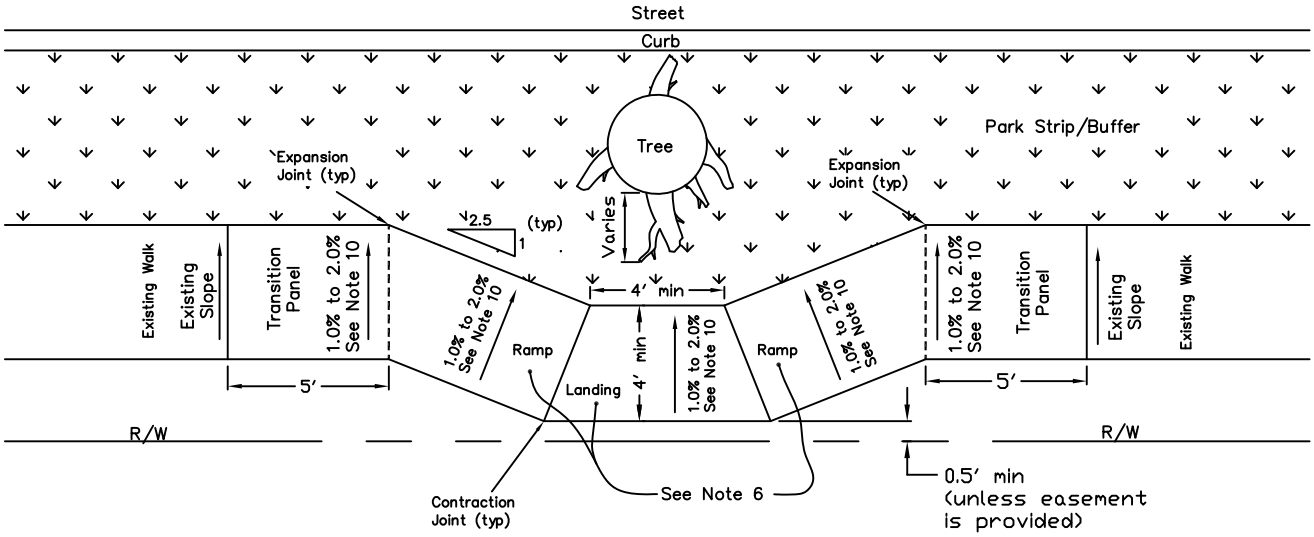
SIDEWALK REPAIR RAMPING AT TREES

APPROVED BY:

Chris Bosley — 6/20/18

CITY ENGINEER, PE 10804 — DATE:

DWG NO. C–18



NOTES:

1. This plan does not apply for new sidewalk construction in undeveloped areas.
2. 5–ft transition panels are required when cross slope of adjacent existing walk exceeds 2.0%.
3. Root areas shall be undisturbed as much as practical. Loose soil shall be lightly hand tamped. If root trimming is necessary, contact the City Urban Forestry department.
4. Typical sidewalk diversion angle shall be 2.5 to 1. The diversion angle may be increased to 1 to 1 as directed by the engineer.
5. Back of sidewalk shall be a minimum of 0.5 ft inside of the right–of–way. Sidewalk width may be decreased to 3 ft as directed by the Engineer to ensure sidewalk is within the right–of–way.
6. Use in conjunction w/ Std Dwg C–18 when ramping over and diverting around tree roots is required.
7. See Std Dwg C–5 for general sidewalk requirements. Provide additional expansion joints as shown.
8. Place topsoil and hydroseed or sod as directed by the Engineer.
9. Relocate or replace existing sprinkler systems as needed.
10. 1.0% minimum cross slope and 2.0% maximum cross slope. No additional construction tolerance is allowed.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

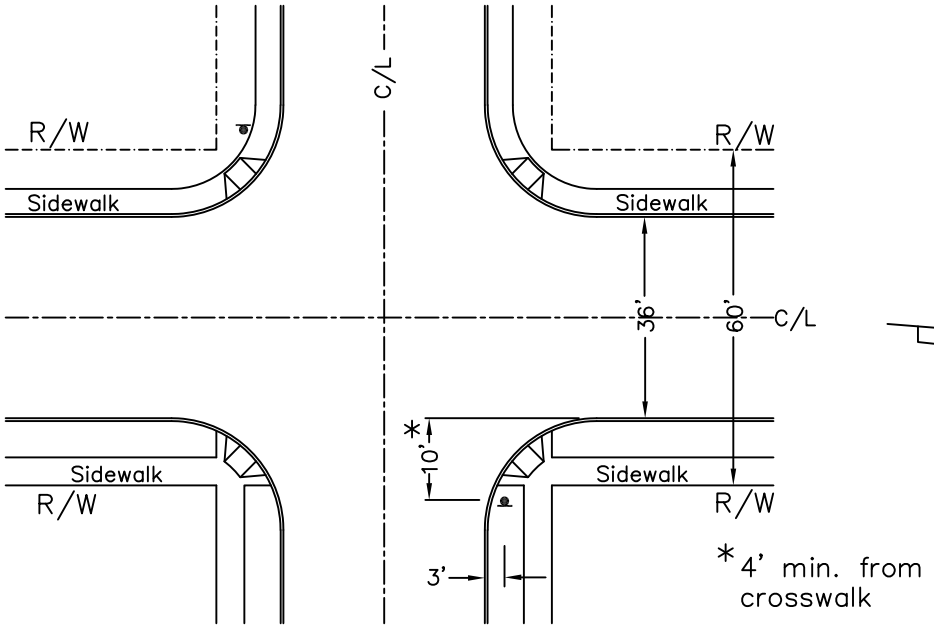
SIDEWALK REPAIR DIVERSION AT TREES

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

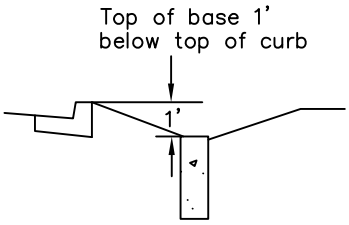
DATE: 6/20/18

DWG NO. C–19

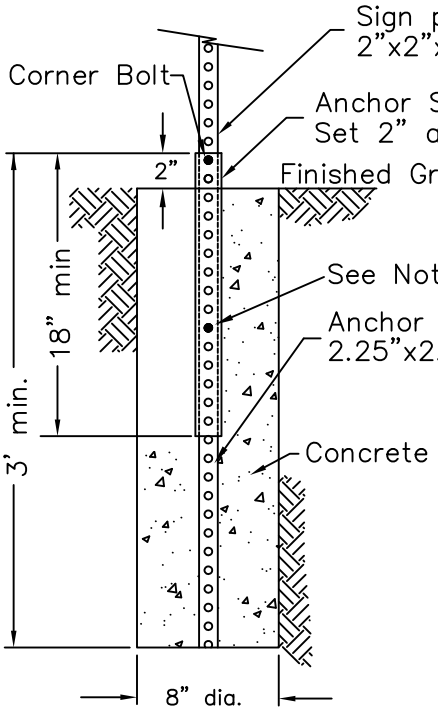


Standard Intersection Signage

Not to Scale



Swale Detail



Sign Post and
Base Installation

Not to Scale

Typical Post Size		
	Tube Size	Ga./inch
Sign post	2"x2"x10'	14(.08)
Anchor	2.25"x2.25"x36"	12(.11)
Anchor sleeve	2.50"x2.50"x18"	12(.11)

Use Telespar only

Notes:

1. Put anchor and sleeve unit together using 7/16" bolt 12" down from top.
2. Tape all four sides of base unit so concrete can not enter.
3. Assemble sign post and base unit, set base unit into the ground 3'. Leave 2 holes of base unit exposed above the finished grade (for the bolt connection).
4. Contact City of Coeur d'Alene Sign Shop when ready to pour concrete to install bases.
5. After the concrete has been poured, plumb and align post to 90° of roadway.
6. A minimum of 7' from roadway surface to bottom of sign.
7. See Standard Drawing M–2 for Sign Details.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

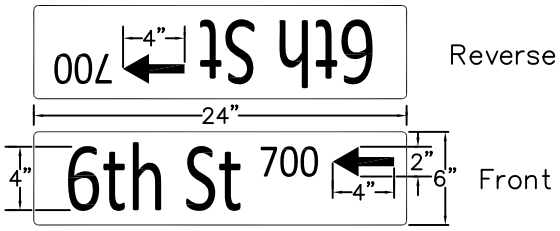
STREET NAME SIGN LOCATION

APPROVED BY:

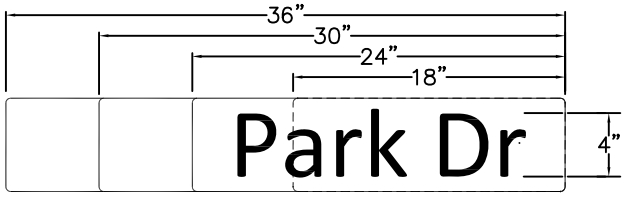
Chris Bosley — CITY ENGINEER, PE 10804

6/18/18 — DATE:

DWG NO. M–1



Numbered Streets



Named Streets

Signs and Mounting Hardware Specifications

Typical Street Name Sign Details
6" blanks to be sheeted with 3–M high–intensity white with a green translucent overlay.
Numbered streets to have 4" arrows shown pointing INTO the hundred block.
No borders are required.
6" blanks to be 0.080 Aluminum with 3/4" radius corners.
Lettering to be 4" Highway series "B" in title case.
Abbreviations such as "Av, Dr, Pl, Ct, St, Ext" to be 2" series "B."
All Aluminum sign blanks to be FHWA or State specification conversion coated.
All street names must fit the blanks they are installed on.
9" blanks (0.125 Aluminum with 1–1/4" radius corners) are required for streets with speed limit of 35 mph or greater.

Street Name Signs For Signal Mastarm Mounting
All signal mastarm mounted street name signs will be of .125 Aluminum and will be FHWA or State specification conversion coated.
All letters to be 10" series "C" 3–M High Intensity grade white reflective, on an diamond grade reflective green background with a white border.
3M 4000 Series Diamond Grade 18" blanks to be sheeted with white and green translucent overlay with a white border.

All Other Signs
All other signs to be of .080 Aluminum.
All signs to be FHWA or State specification conversion coated.
All sheeting materials to be 3–M High Intensity grade reflective.
All signs to meet MUTCD specifications.

Sign Mounting Hardware
5/16" X 2–1/2" stainless steel Hex bolts, flat washers and locking nuts.

Mastarm Mounting Hardware
Astro brackets only.
Stainless steel bolts, flat washers and locking nuts.

Post and Base Materials
Post to be 14 ga. Telespar pre–punched only.
2"x2"x10' or 12' lengths only.
Bases to be 12 ga. Telespar pre–punched only.
Anchor to be 2–1/4" square by 36" in length.
Sleeve to be 2–1/2" square by 18" in length.

Post and Base Mounting Hardware
Sleeve to anchor 7/16" x 3" bolt with locking nut.
Post to base 5/16" corner bolt with locking nut. (Only)

Street Name Sign Mounting Hardware
Style 5" SUPER–LOK PRUF 91–U–F top with staggered holes. (Only)
Style 5" SUPER–LOK PRUF 90F crosspiece with staggered holes. (Only)

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

TYPICAL STREET NAME SIGN DETAILS

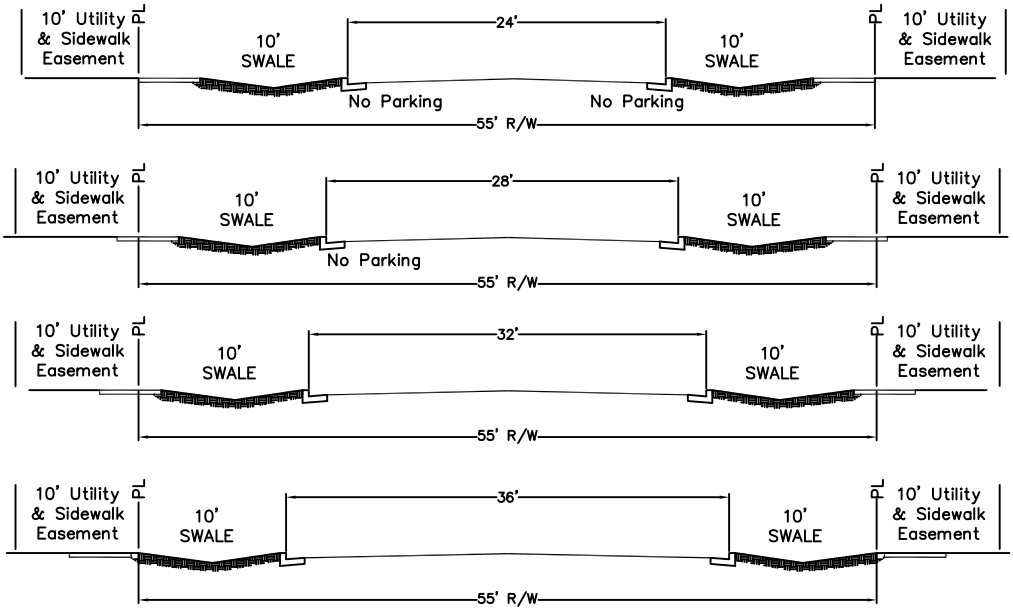
APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

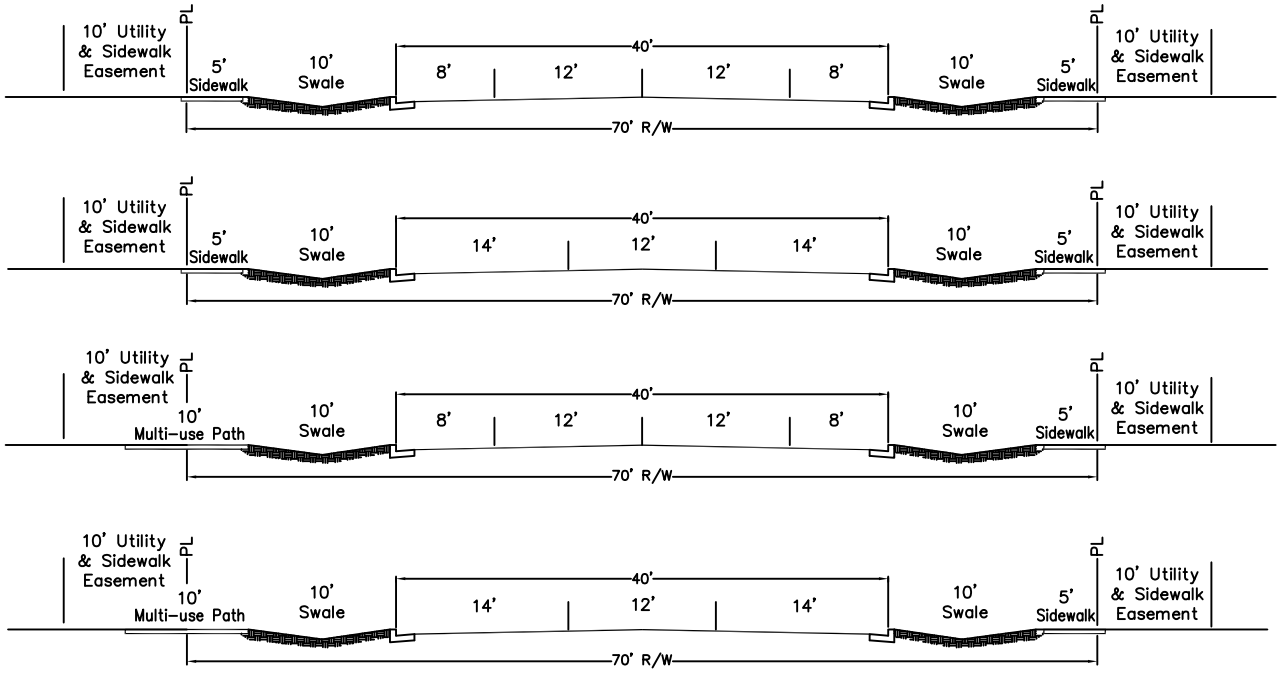
6/18/18 — DATE:

DWG NO. M–2

Residential



Collector



REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

TYPICAL STREET SECTIONS

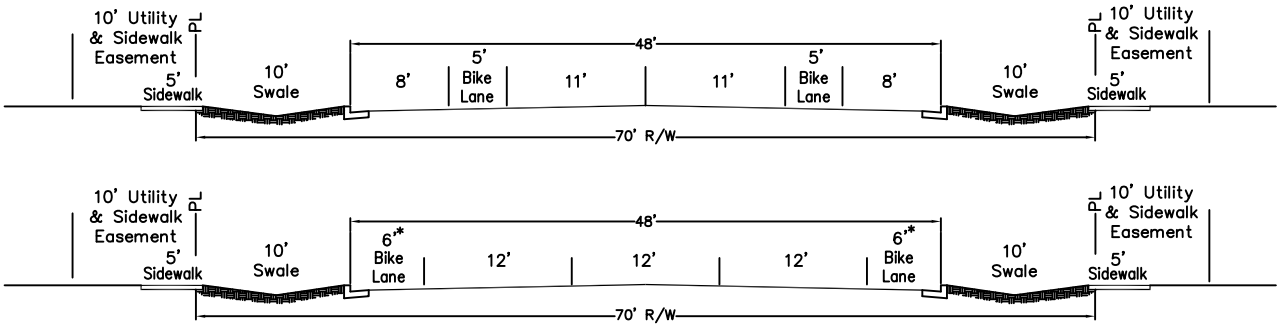
APPROVED BY:

Chris Bosley — 7/3/18

CITY ENGINEER, PE 10804 — DATE:

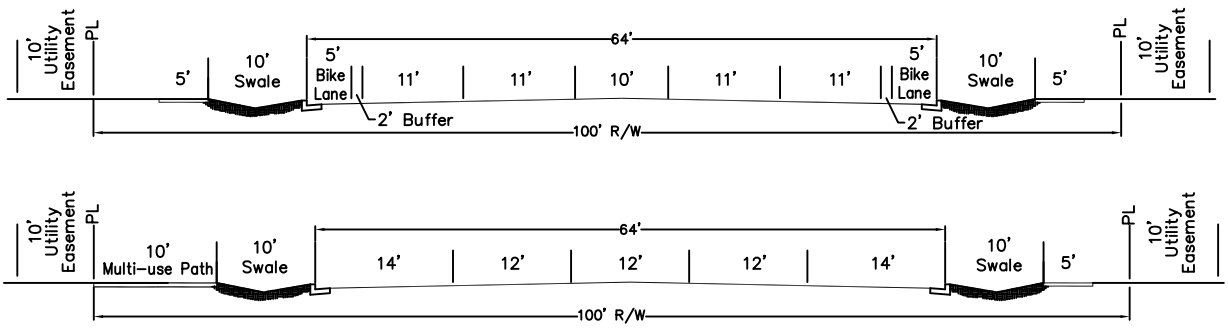
DWG NO. M-4

Collector (continued)



*A painted buffer strip may be warranted on bike lanes with high traffic speeds and volumes

Arterial



REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

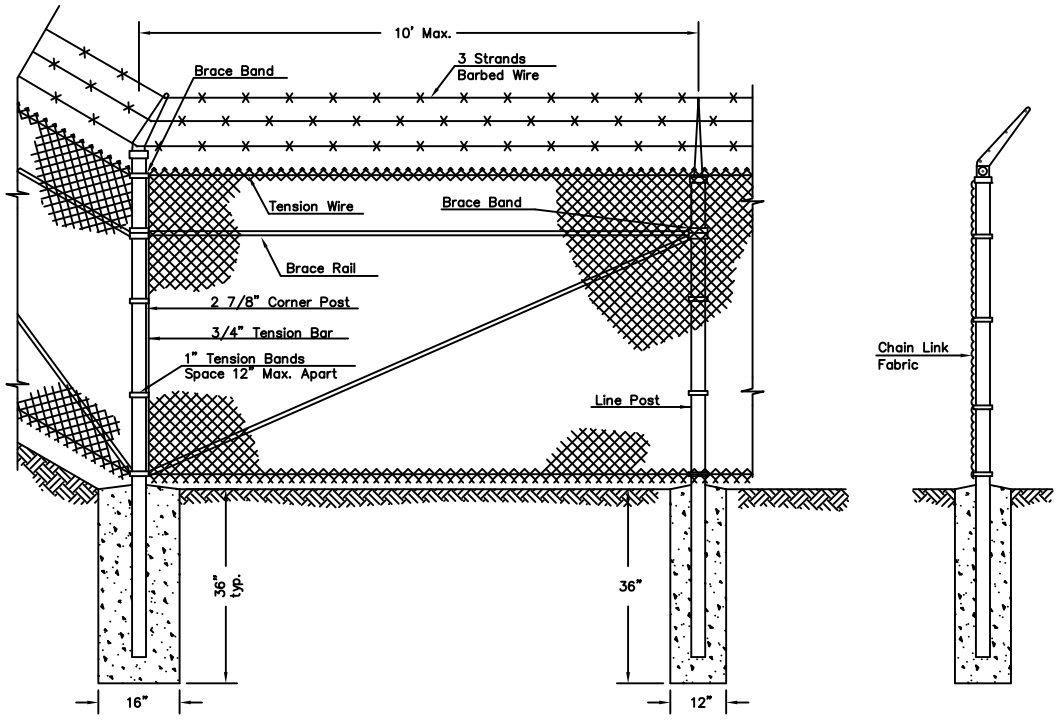
TYPICAL STREET SECTIONS

APPROVED BY:

Chris Bosley — 7/3/18

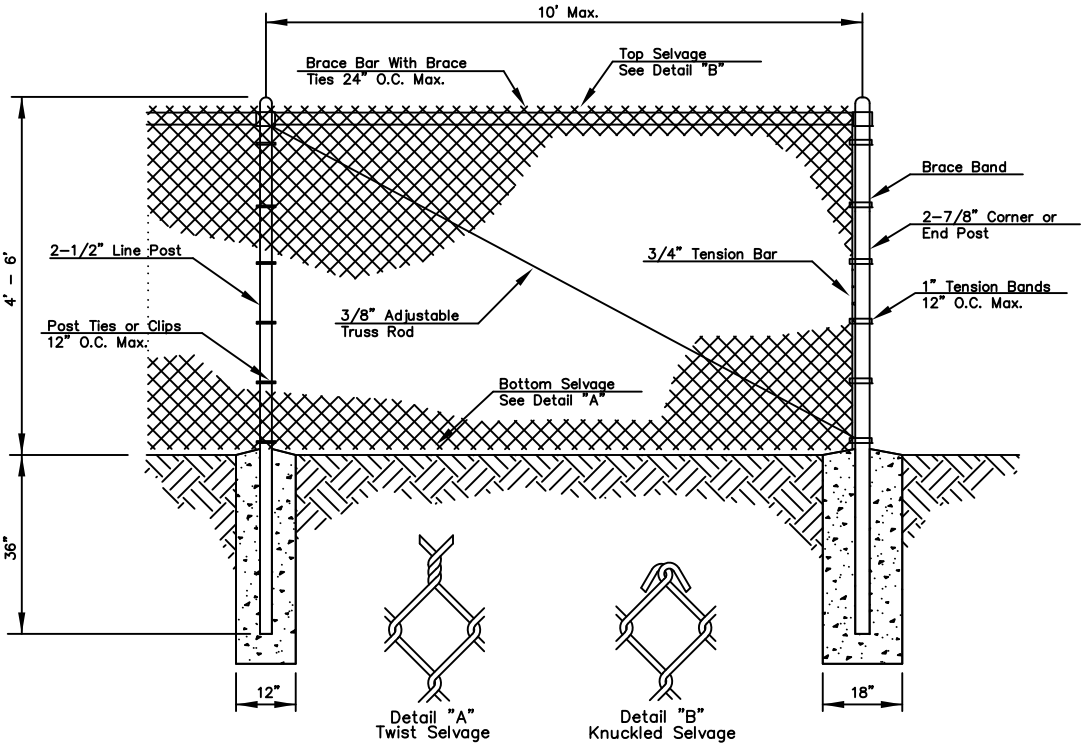
CITY ENGINEER, PE 10804 — DATE:

DWG NO. M-5



Chain Link Corner Brace

Not to Scale



REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

CHAIN LINK FENCE

APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

3/27/18
DATE:

DWG NO. M-7

4"

2"

2"

City of Coeur d'Alene Approval	SHEET
Approved By:	1
City Engineer Date	OF
Wastewater	1
Water	

NOTE: Signature Block shall be located in the lower right hand corner of the cover sheet of the Improvement plans.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

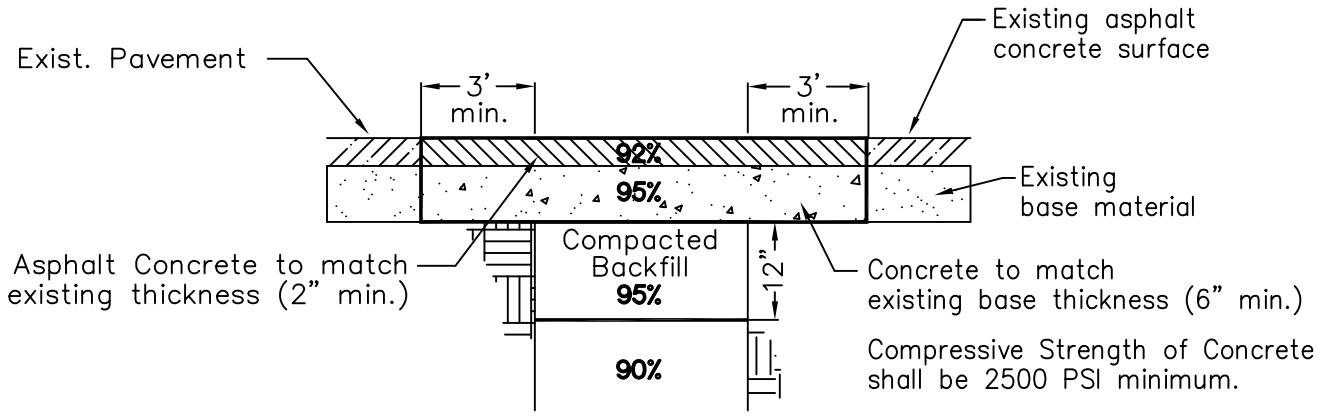
SIGNATURE BLOCK

APPROVED BY:

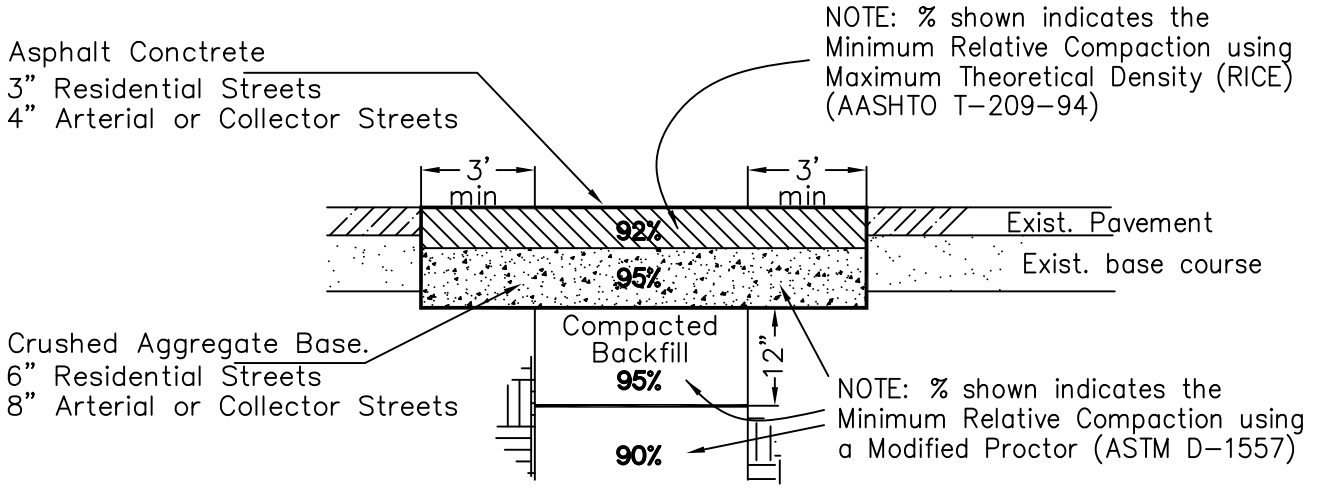
Chris Bosley — 6/13/18

CITY ENGINEER, PE 10804 — DATE:

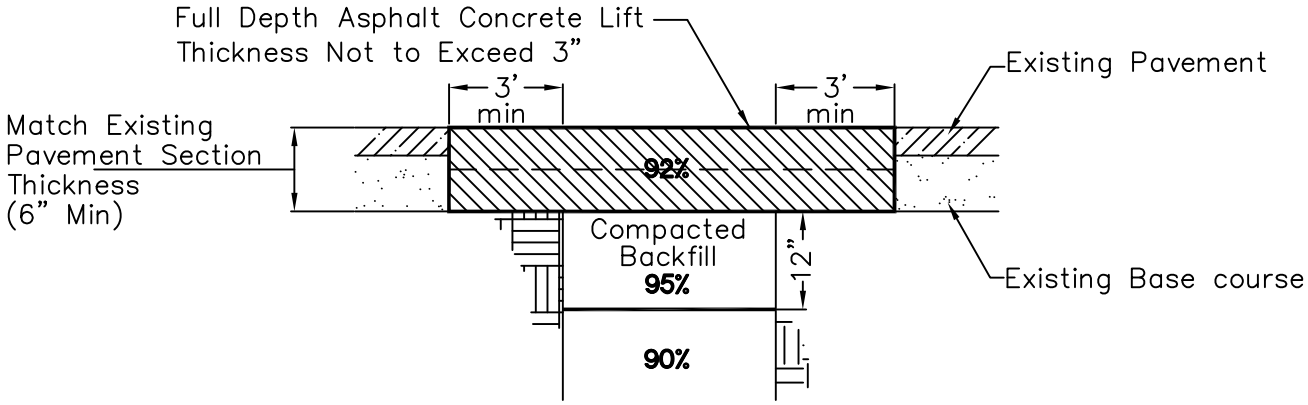
DWG NO. M–10



Type "A" Repair



Type "B" Repair



Type "C" Repair

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

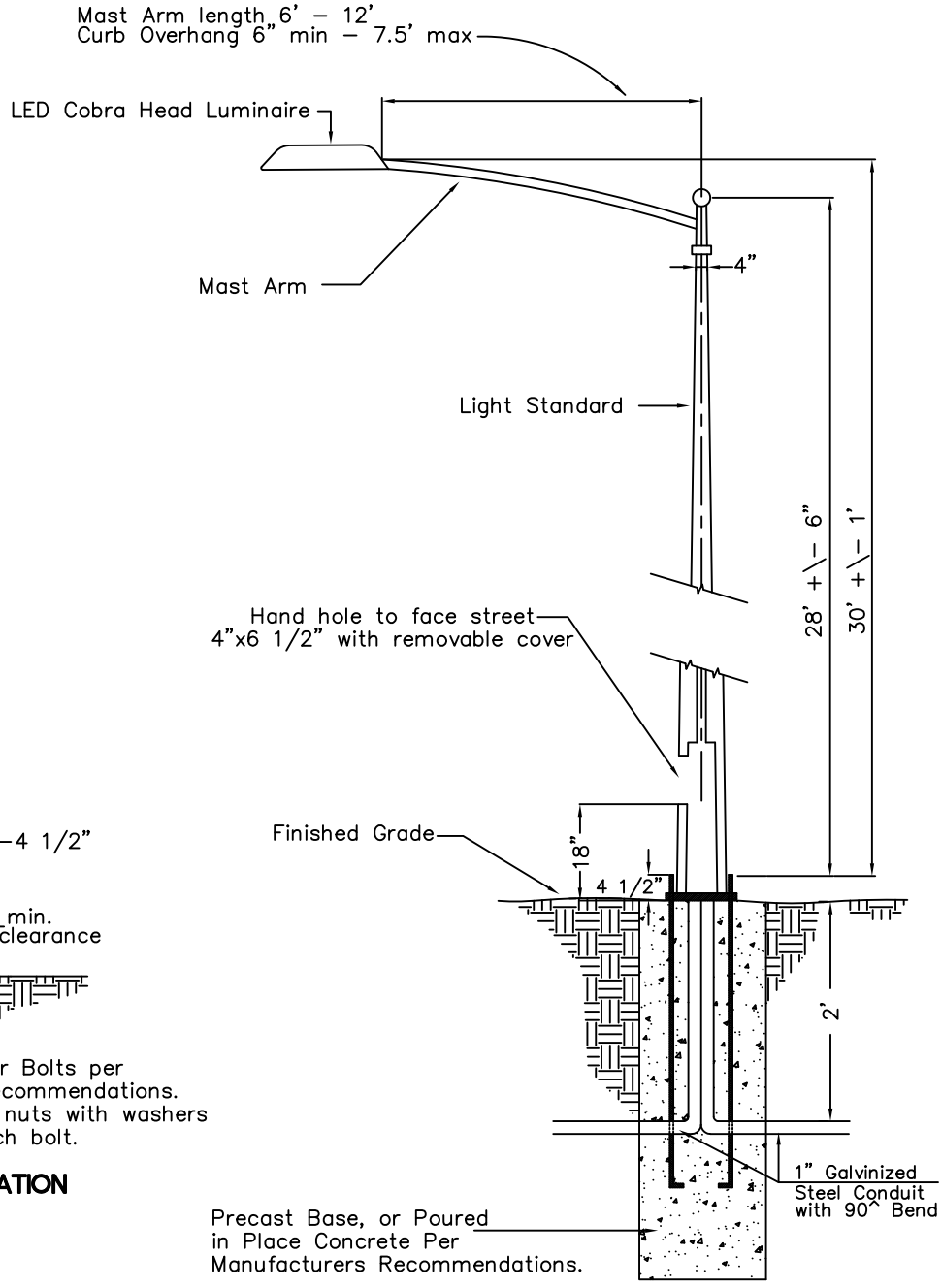
TRENCH CUT PAVEMENT REPAIR

APPROVED BY:

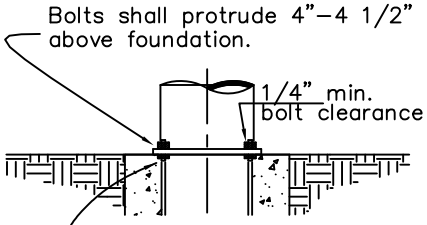
Chris Bosley — CITY ENGINEER, PE 10804

6/20/18 — DATE:

DWG NO. M-11



APPLICATION	LUMENS
Residential	9,500
Collectors	22,000
Arterials	50,000



ANCHOR BASE FOUNDATION
N.T.S.

Notes:
1. See Standard Drawing M–15 for Street Lighting Notes.
2. Luminaire type to be approved by the City Engineer.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

PEDESTAL MOUNT LIGHT STANDARD

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

6/19/18 — DATE:

DWG NO. M–13

POLE AND MASTARM:
Poles and Mastarms shall be a minimum of 10 ga. (48 kpsi) steel. They shall be galvanized inside and out per ASTM A–123.

LUMINAIRES:
Street light luminaires shall be two–way Cobra head furnished with a Light Emitting Diode (LED) lamp, internal ballast, and an external twist lock photoelectric control unit. Luminaires shall be designed for horizontal mounting with a horizontal burning lamp. They shall be cutoff type that does not allow light above the horizontal. Luminaires shall be cast aluminum with a baked gray enamel finish. They shall be marked to indicate wattage.

PHOTOCELL:
The photocell unit shall consist of a 120 Volt Photoelectric cell in a weatherproof housing which plugs into a 3 terminal twist lock NEMA receptacle integral with the luminaire. The control shall have an activation level between 1 and 2 foot–candles and a shut–off level of 3 times the activation level.

FUSES:
Fuses shall be in–line cartridge type 35 amp fuses installed in the hot leg of the conductor. The fuse shall be located in the base of the pole or in the transformer. Fuse holders shall be Bussman #516–0100 and #516–0110 (boots) or approved equal.

WIRING:
Service runs to lights shall be solid or stranded THW copper wire No. 10 minimum. Size of wire shall be selected so that the voltage drop to the farthest light does not exceed 3% and shall be indicated on the As–Built plans.

SPLICING:
Splices shall be permitted in pull boxes and lighting standard bases only. All splices shall be waterproof, with epoxy encapsulation or heatshrink tubing.

CONDUIT:
All conduit shall be 1–inch UL approved heavy wall polyvinyl chloride (PVC schedule 40). Conduit shall be laid to a depth of not less than thirty (30) inches. Conduit laid in open trench shall not be covered nor shall any trench or inspection hole be backfilled until installation has been accepted by the City Engineer or designee.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

STREET LIGHTING NOTES

APPROVED BY:

Chris Bosley — 6/19/18

CITY ENGINEER, PE 10804 — DATE:

DWG NO. M–15

EROSION / SEDIMENTATION CONTROL NOTES PAGE 1

1. Approval of this Erosion/Sedimentation Control (ESC) plan does not constitute an approval of permanent road or drainage design (e.g., size and location of roads, pipes, restrictors, channels, retention facilities, utilities, etc.).

2. The implementation of this ESC plan and the construction, maintenance, replacement, and upgrading of these ESC facilities is the responsibility of the Permittee / Contractor until all construction is approved.

3. The boundaries of the clearing limits shown on this plan shall be clearly flagged in the field by a clearing control fence prior to construction. During the construction period, no disturbance or removal of any ground cover beyond the flagged clearing limits shall be permitted. The flagging shall be maintained by the Permittee / Contractor for the duration of construction. All ground cover is to remain outside of clearing area(s).

4. The ESC facilities shown on this plan must be constructed in conjunction with all clearing and grading activities in such a manner as to ensure that sediment–laden water does not enter the drainage system, leave the site, or violate applicable water standards, and must be installed and in operation prior to any grading or land clearing. Wherever possible, maintain natural vegetation for erosion control.

5. The ESC facilities shown on this plan are the minimum requirements for anticipated site conditions. During the construction period, these ESC facilities shall be upgraded (e.g., additional sumps, relocation of ditches and silt fences, etc.) as needed for unexpected storm events. Additionally, more ESC facilities may be required to ensure complete siltation control. Therefore, during the course of construction it shall be the obligation and responsibility of the Contractor to address any new conditions that may be created by his activities and to provide additional facilities over and above the minimum requirements as may be needed.

6. The ESC facilities shall be inspected by the Permittee / Contractor daily during non–rainfall periods, every hour (daylight) during a rainfall event, and at the end of every rainfall, and maintained as necessary to ensure their continued functioning. In addition, temporary siltation ponds and all temporary siltation controls shall be maintained in a satisfactory condition until such time as clearing and/or construction is completed, permanent drainage facilities are operational, and the potential for erosion has passed.

7. The ESC facilities on inactive sites shall be inspected and maintained a minimum of once a week or within 48 hours following a storm event.

8. At no time shall more than 1 foot of sediment be allowed to accumulate within a catch basin. All catch basins and conveyance lines shall be cleaned prior to paving. The cleaning operation shall not flush sediment–laden water into the downstream system.

9. Stabilized construction entrances and wash pads shall be installed at the beginning of construction and maintained for the duration of the project. Additional measures may be required to ensure that all paved areas are kept clean for the duration of the project.

10. Any permanent retention/detention facility used as a temporary settling basin shall be modified within the necessary erosion control measures and shall provide adequate storage capacity. If the permanent facility is to function ultimately as an infiltration or dispersion system, the facility shall not be used as a temporary settling basin. No underground detention tank, detention vault, or system which backs under or into a pond shall be used as a temporary settling basin.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

EROSION/SEDIMENTATION CONTROL NOTES PAGE 1

APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

6/20/18
DATE:

DWG NO. M–16

EROSION / SEDIMENTATION CONTROL NOTES PAGE 2

11. Where straw mulch is required for temporary erosion control, it shall be applied at a minimum thickness of 2".

12. All erosion / sedimentation control ponds with a dead storage depth exceeding 12" must have a perimeter fence with a minimum height of 3 feet.

13. All work and materials shall be in accordance with the City of Coeur d'Alene Standards and Specifications.

14. The ESC facilities shall be constructed in accordance with the details on the approved plans. Locations may be moved to suit field conditions, subject to approval by the Engineer and the City of Coeur d'Alene Inspector.

15. A copy of the approved erosion control plans must be on the job site whenever construction is in progress.

16. Any catch basins or drywells collecting runoff from the site, whether they are on or off the site, shall have their grates covered with filter fabric during construction, and shall be removed upon project completion or vegetative establishment.

17. The washed gravel backfill adjacent to the filter fabric fence shall be replaced and the filter fabric cleaned if it is nonfunctional by excessive silt accumulation as determined by the City of Coeur d'Alene. All interceptor swales shall be cleaned if silt accumulation exceeds one–quarter depth.

18. Rock for erosion protection of channels and ditches, where required, must be of sound quarry rock, placed to a depth of 1 foot and must meet the following specifications:
   4"–8" rock: 40%–70% passing
   2"–4" rock: 30%–40% passing
   1"–2" rock: 10%–20% passing

19. If any part(s) of the clearing limit boundary or temporary erosion / sedimentation control plan is/are damaged, it shall be repaired immediately.

20. All properties adjacent to the project site shall be protected from sediment deposition and runoff.

21. Do not flush concrete byproducts or trucks near or into the storm drainage system.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

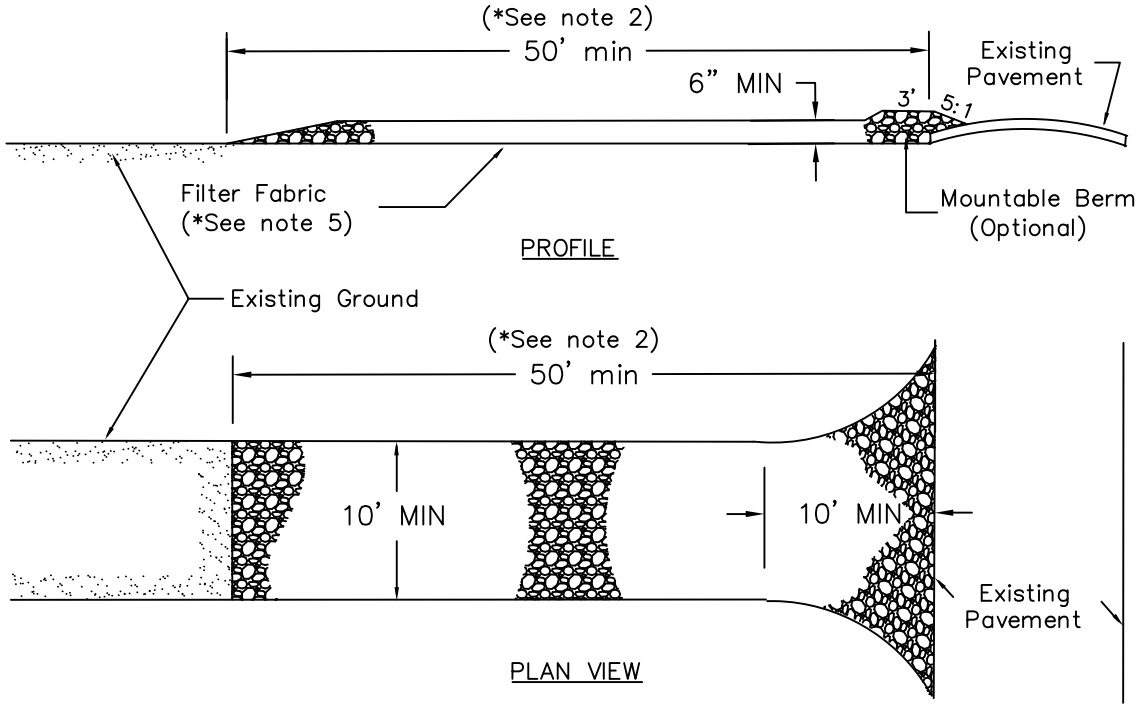
EROSION/SEDIMENTATION CONTROL NOTES PAGE 2

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

DATE: 6/20/18

DWG NO. M–17



CONSTRUCTION SPECIFICATIONS

1. Stone size: 2" stone or reclaimed or recycled concrete equivalent.
2. Length: as required, but not less than 50 feet (except 20 foot minimum on a single family residence).
3. Thickness: not less than 6 inches.
4. Width: 10 foot minimum, but not less than the full width of ingress and egress locations.
5. Filter fabric shall be placed over the entire area prior to placing of stone. Filter cloth will not be required on a single family residence lot.
6. Surface water: all surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be required.
7. Maintenance: the entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public right–of–way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public right–of–way must be removed immediately.
8. Washing: wheels shall be cleaned to remove sediment prior to entrance onto public right–of–way. When washing is required, it shall be done in an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

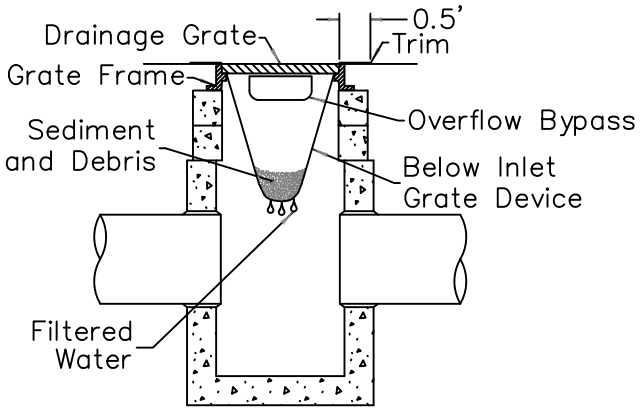
STABILIZED CONSTRUCTION ENTRANCE

APPROVED BY:

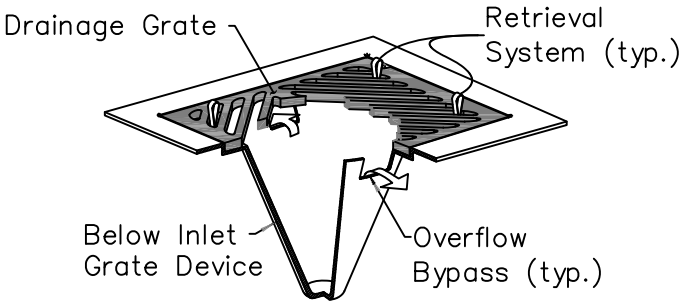
Chris Bosley — CITY ENGINEER, PE 10804

6/20/18 — DATE:

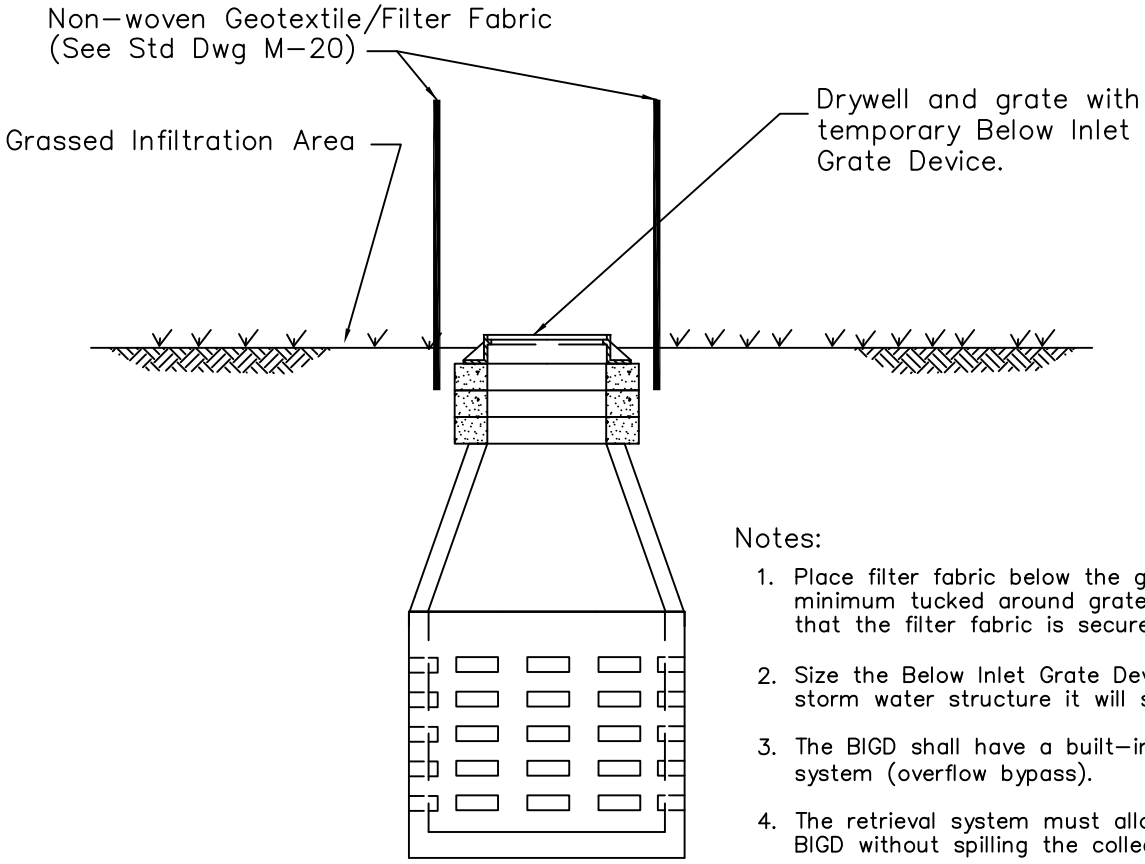
DWG NO. M–18



Catch Basin/Inlet
Not to Scale



Below Inlet Grate Device Detail
Not to Scale



Drywell
Not to Scale

Notes:

1. Place filter fabric below the grate with 0.5' minimum tucked around grate sides to ensure that the filter fabric is secure.
2. Size the Below Inlet Grate Device (BIGD) for the storm water structure it will service.
3. The BIGD shall have a built-in high-flow relief system (overflow bypass).
4. The retrieval system must allow removal of the BIGD without spilling the collected material.
5. Perform maintenance in accordance with Std Dwg M-16.

1.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

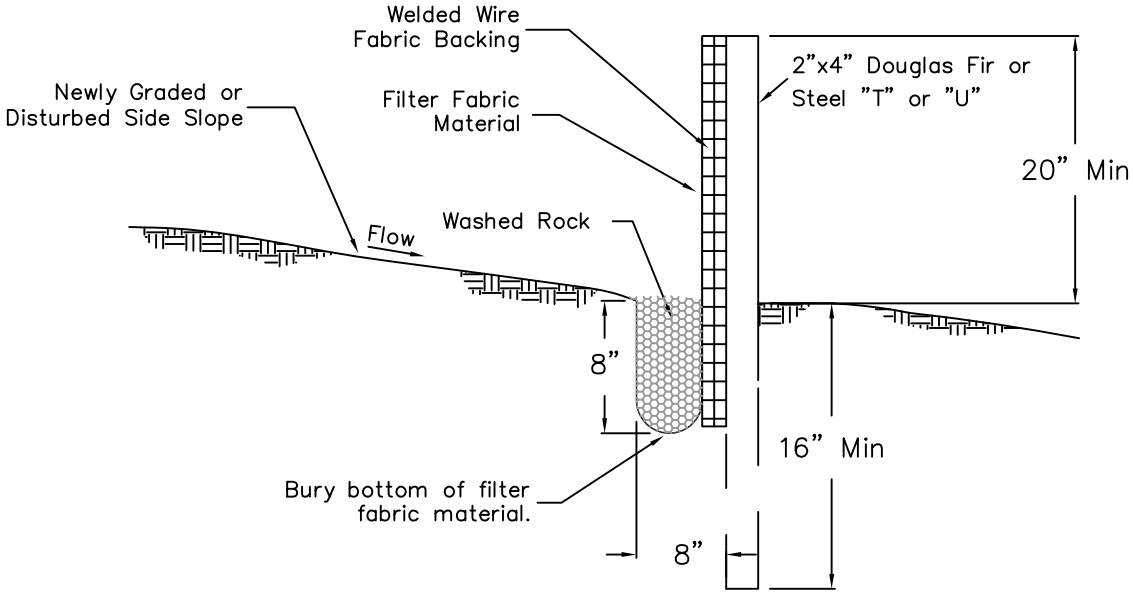
INLET PROTECTION

APPROVED BY:

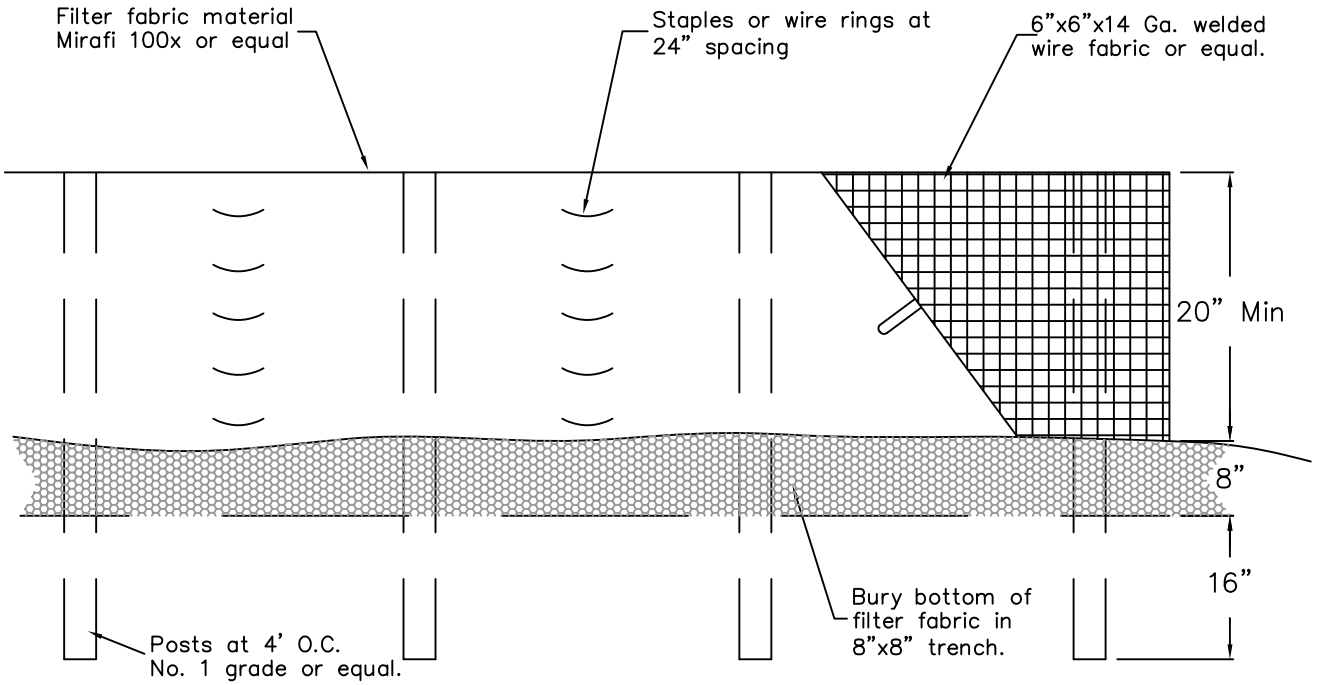
Chris Bosley — 5/30/18

CITY ENGINEER, PE 10804 — DATE:

DWG NO. M-19



Typical Cross Section
Not to Scale



Elevation
Not to Scale

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

SILT FENCE

APPROVED BY:

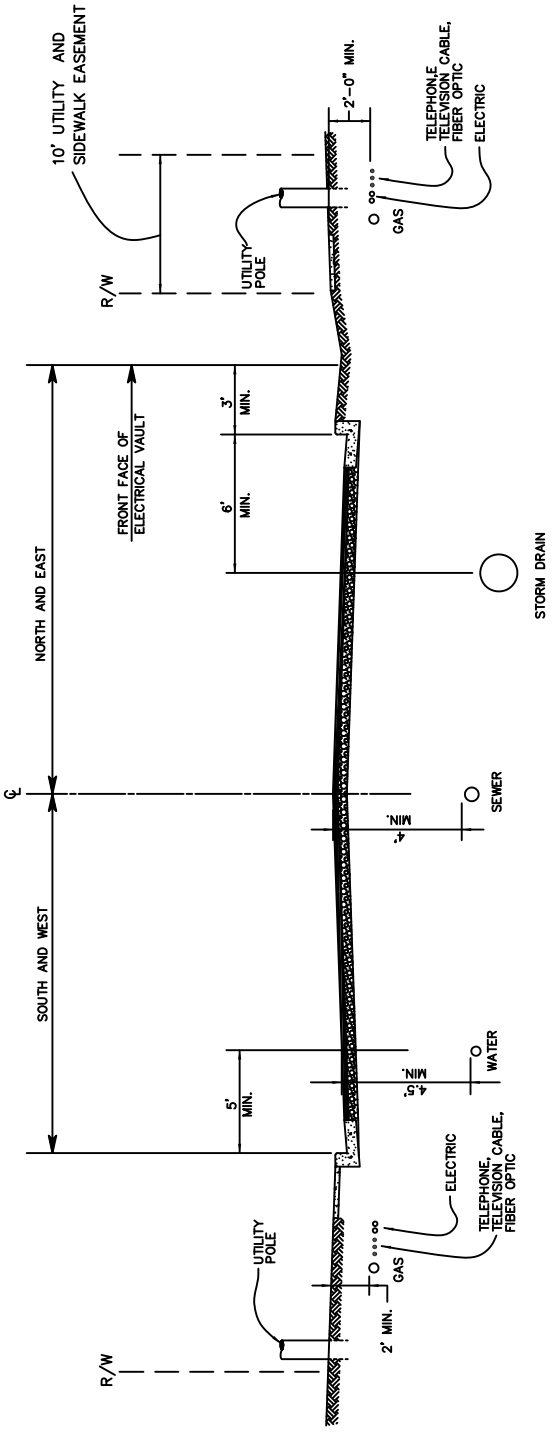
Chris Bosley — 6/20/18

CITY ENGINEER, PE 10804 — DATE:

DWG NO. M-20

GENERAL NOTES

1. THIS PLAN SHOWS TYPICAL LOCATIONS FOR ALL UTILITY INSTALLATIONS.
2. LOCATIONS OF EXISTING UTILITIES MUST BE FIELD LOCATED WITH THEIR RESPECTIVE OWNERS BEFORE MAKING NEW CONNECTIONS.



REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

UTILITY LOCATIONS

APPROVED BY:

Chris Bosley — 3/27/18

CITY ENGINEER, PE 10804 — DATE:

DWG NO. M-21

1. All work shall conform to the "Idaho Standards for Public Works Construction" and the City of Coeur d'Alene Standard Drawings and Specifications. In the case of a conflict, City of Coeur d'Alene Standards shall prevail.

2. The contractor shall notify the appropriate utility company prior to starting work near any facilities and shall coordinate his work with company representatives. All utility services shall be installed underground, for existing utility locations, contact "call before you dig" at *811 at least 48 hours prior to starting any excavations.

3. Work shall not begin until a notice to proceed is issued by the City.

4. The contractor shall notify the City of Coeur d'Alene Streets & Engineering Inspector 48 hours prior to starting work.

5. An encroachment permit shall be obtained from the City Streets & Engineering Department for work within existing City right-of-way.

6. The contractor shall have an approved set of improvement plans on the job site at all times.

7. Construction expansion joints are required in curb and gutter at returns and at driveway intersections per City Standards. Weakened plane joints are required every twentyfive (25) feet per City Standards.

8. All underground utility laterals shall be installed before construction of curbs, cross gutters, or surfacing of the streets.

9. Where trenches are within public easements, compaction test results shall be submitted to the Engineer of work and the City Engineer by a qualified engineer which certify that trench backfill was compacted as required in accordance with ISPWC and City of Coeur d'Alene Specifications.

10. All testing required by the City of Coeur d'Alene shall be at no cost to the City.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

GENERAL NOTES
PAGE 1

APPROVED BY:

Chris Bosley — 6/20/18

CITY ENGINEER, PE 10804 — DATE:

DWG NO. M-22

11. All operations conducted on the premises, including the warming up, repair, arrival, departure or running or trucks, earthmoving equipment, construction equipment and any other associated equipment shall be limited to the period between 7:00 A.M. and 5:00 P.M. everyday unless otherwise approved by the City of Coeur d'Alene.

12. All existing improvements including curb and gutter, sidewalks, asphaltic concrete or Portland Cement Concrete paving, which are being joined or matched in connection with this project shall be joined or matched in a manner satisfactory to the City Engineer, including necessary sawcutting, removal, replacement and capping.

13. No revisions shall be made to these plans without the approval of the City Engineer.

14. Compaction testing shall be performed on the following:

- Utility trench backfill
- Roadway embankment
- Curb and gutter subgrade
- Road subgrade
- Road base
- Asphalt paving

The City may require additional testing if deemed necessary.
Compaction frequency shall generally adhere to the following guidelines:

Embankment	-	**1 per 50 cy**
Trench	-	**1 per 50 cy** located in pipe zone, mid-depth, surface, and around manholes and valves.
Subgrade Road base Asphalt paving	-	**1 per 750-1000 sf**
Curb and gutter	-	**1 per 75-100 lf**

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

GENERAL NOTES PAGE 2

APPROVED BY:

Chris Bosley 6/20/18

CITY ENGINEER, PE 10804 DATE:

DWG NO. M-23

1. All work shall conform to the requirements of Division 800 of the "Idaho Standards for Public Works Construction" (ISPWC). latest edition.

2. The upper twelve inches (12") of subgrade shall be compacted to a relative compaction of 95%.

3. Prior to placing base material, the following shall be completed:

   A. Provide compaction test results for all utility trenches, subgrade, and areas under curb and gutter to the City's Engineering Inspector.

   B. Obtain authorization from the City Inspector to proceed with placement of base material. The City Engineer shall be notified at least forty-eight (48) hours prior to placement of base material.

   C. Prior to placing base, the subgrade shall be proof-rolled and observed by the City's Streets & Engineering Inspector.

4. Compaction of the crushed aggregate base shall conform to the requirements of Section 802, Part 3.4 of the ISPWC, latest edition.

5. Compaction of the aggregate base shall be tested and approved by a qualified engineer prior to placement of asphaltic concrete.

6. A tack coat shall be applied to the adjacent curbs prior to placement of asphaltic concrete.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

PAVEMENT NOTES PAGE 1

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

6/20/18 DATE:

DWG NO. M-24

7. Prior to placing of asphaltic concrete, the following shall be completed:

   A. Provide compaction test results for base material to the City's Engineering Inspector.

   B. Obtain authorization from the City Inspector to proceed with Asphalt paving. The City Inspector shall be notified at least forty-eight (48) hours prior to placement of Asphalt paving.

   C. Obtain approval of all underground utilities which will lie under the pavement.

8. Placement of Asphaltic Concrete shall be observed by a representative of the Engineer of work.

9. Asphaltic Concrete shall be compacted to at least 92% of the maximum theoretical density - AASHTO T209-94.

10. Prior to approval by the City, the pavement shall be water tested for proper drainage and approved by the City Inspector.

11. The City Engineer may require the pavement sections shown on the plans to be verified by the "R" value tests taken from the exposed subgrade.

12. The City Engineer may require coring of the asphalt pavement to verify pavement thickness or density.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

PAVEMENT NOTES PAGE 2

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

7/10/18 DATE:

DWG NO. M-25

1. No disruption of existing sanitary sewer service will be permitted without the written approval of the City's Wastewater Utility.

2. A removable plug shall be installed in the lowest sanitary sewer manhole pipe inlet(s) with no active upstream sewer laterals for all phased developments, sewer extensions and connections. Unless otherwise directed by City Inspectors , this plug is required to remain in place during construction until final acceptance of this sewer project.

3. All public sanitary sewer mains shall be PVC, ASTM D 3034, SDR 35 pipe with flexible gasketed joints constructed at the line and uniform grade indicated on the approved construction plans.

4. All sewer lateral connections to public sanitary sewer mains shall be GPK saddle taps or pre-approved equivalent for existing sewers or PVC tee branches for new sewers and constructed 45° above the spring line of the sewer main at the locations indicated on the approved construction plans.

5. All sewer laterals shall be constructed at 90° right angles to the public sewer main alignment at the locations shown on the approved construction plans, except in cul-de-sacs or street knuckles where the “90° Rule” is not practical. Cul-de-sacs or street knuckle sewer laterals may enter sanitary manholes (4 max) with the pre-approval of the City's Wastewater Utility and shall be constructed with cored-in sand collars for existing sewers and precast sand collars for new sewers with matching pipe crown elevations and individually formed channels.

6. All public pressure sewer lines shall be PVC AWWA C900 or C905 DR 25 pipe constructed with a minimum bury of 5 feet from the top of the pipe to finish grade at the line and grades indicated on the approved construction plans.

7. All thrust blocking shall be formed against undisturbed or compacted soil conforming to the City Water Department's Thrust Blocking Standard Drawings. All bolts and nuts shall be stainless steel and free of concrete and accessible by wrench. All fittings with alignment angles less than 45° require both thrust blocks and mechanical joint restraints approved by the City's Wastewater Utility.

8. All constructed sewer lines shall be installed with continuous sewer warning tape placed 24” directly over entire length of newly installed pipe. Pressure sewer lines shall also include continuous tracer wire taped securely to top of the pipe and brought to the finish grade inside all sewer valves, locating wire boxes, vaults and manhole structures.

9. All sewer laterals shall be referenced on the record “As-built” drawings with centerline stationing, off-set length and invert elevation at the end of lateral prior to the City's Wastewater Utility final approval and acceptance of sewer improvements.

REVISION	APPROVED	DATE

CITY OF COEUR d’ALENE STANDARD DRAWING

SEWER SYSTEM NOTES

APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

7/2/18
DATE:

DWG NO. M-26A

10. All existing public sanitary sewer connections, modifications and extensions require the City Wastewater Utility's inspection and approval at least 48 hours prior to backfill. Call 208.769.2213. Any scheduled requests not ready for inspection will require another 48-hour inspection notification.

11. All private sewers and sewer lateral replacement/repairs shall conform to the City's adopted Idaho State Plumbing Code and require the City Building Department's inspection and approval prior to backfill. Call 208.769.2391.

12. All new sanitary sewer construction shall require the following prior to the City Wastewater Utility's final approval and acceptance of sewer improvements:

    a. All sanitary sewer tees and laterals shall be inspected and approved by City Inspectors at least 48 hours prior to backfill. Call 208.769.2285, and;

    b. All sewer lines, lateral connections, vaults and manhole structures shall be cleaned of any debris prior to pavement. Hydrant flushing of debris into downstream sewers is not acceptable means of cleaning, and;

    c. All sanitary sewer lines shall be pressure tested in accordance with the latest edition of the Idaho Standards for Public Works Construction (ISPWC) and City Standards. All testing shall be witnessed, recorded and signed off by City Inspectors prior to pavement. Call 208.769.2285, and;

    d. All tracer wires shall be tested and locate painted for continuous continuity and witnessed and signed off by City Inspectors prior to sub grade approval. Call 208.769.2213, and;

    e. All public sanitary sewer lines shall be CCTV and submitted on DVD in a usable formatted template using "POSM" or another pre-approved equivalent program to the City Wastewater Utility's for review and approval prior to pavement. Please allow 48 hours for review. Call 208.769.2213, and;

    f. All sanitary sewer vaults and manhole structures shall be adjusted to finish grade per City Standard Drawings and inspected and approved by the City Wastewater Utility prior to pavement and immediately after pavement (2 Inspections Required) Call 208.769.2213, and;

    g. Secure authorization from the City Inspectors to clean out and dispose of all debris and remove the plug installed at the beginning of this sewer project at the lowest sanitary sewer manhole pipe inlet(s).

13. All sanitary sewer lines shall be separated at least 10 feet horizontally and a minimum 18-inch vertical separation with domestic water lines. Any anticipated separation differing from the minimum standards contained herein shall conform to IDAPA 58.01.16.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

SEWER SYSTEM NOTES

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804 — DATE: 7/2/18

DWG NO. M-26B

1. The minimum water service shall be one inch (1"). All new water service taps shall be one of the following: one inch (1"), two inch (2"), four inch (4"), six inch (6") or eight inch (8"), unless otherwise approved. Meter sizes shall range from thre quarter inch (¾") to eight inch (8").

2. Water mains shall be AWWA C900 PVC pipe (DR-18) four inch (4") to tweleve inch (12"), C905 PVC fourteen inch (14") and larger, and shall be constructed with the top of the pipe at a minimum of 54 inches below finish grade except where otherwise indicated with specific elevations and approved by the City Engineer.

3. No disruption of existing water services while making connection to existing mains shall be allowed without specific approval from the City of Coeur d'Alene Water Division. All affected properties must be notified at least 48 hours prior to shut-off. Failure to comply with noticing or other requirements could result in a stop-work notice, fines, and /or other penalties.

4. No connections for the purpose of obtaining water supply during construction shall be made without first obtaining approval from the City of Coeur d'Alene Water Division. Bulk water for construction and dust control shall be purchased through approved filling stations.

5. The existence and location of water facilities shown on the plans were obtained by a search of available City records. Location and elevation of existing water facilities shall be confirmed by field measurements and excavation exploration by the contractor prior to beginning of new work.

6. The City's Engineering Inspector shall be notified at least 48 hours prior to any inspection.

7. All fittings or appurtenances removed from the City water lines shall be returned by the contractor to the City of Coeur d'Alene Water Division unless otherwise specified by the contract documents or Superintendent.

8. All water mains, valves and valve boxes, fire hydrants, services, and appurtenances shall be installed, tested, and approved prior to paving.

9. All mains shall be tested in accordance with City requirements. Hydrostatic testing shall be witnessed by a City Inspector. Results of chlorination and bacteria tests shall be submitted to the City of Coeur d'Alene water division for approval.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

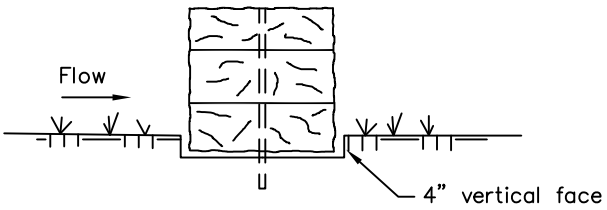
WATER SYSTEM NOTES

APPROVED BY:

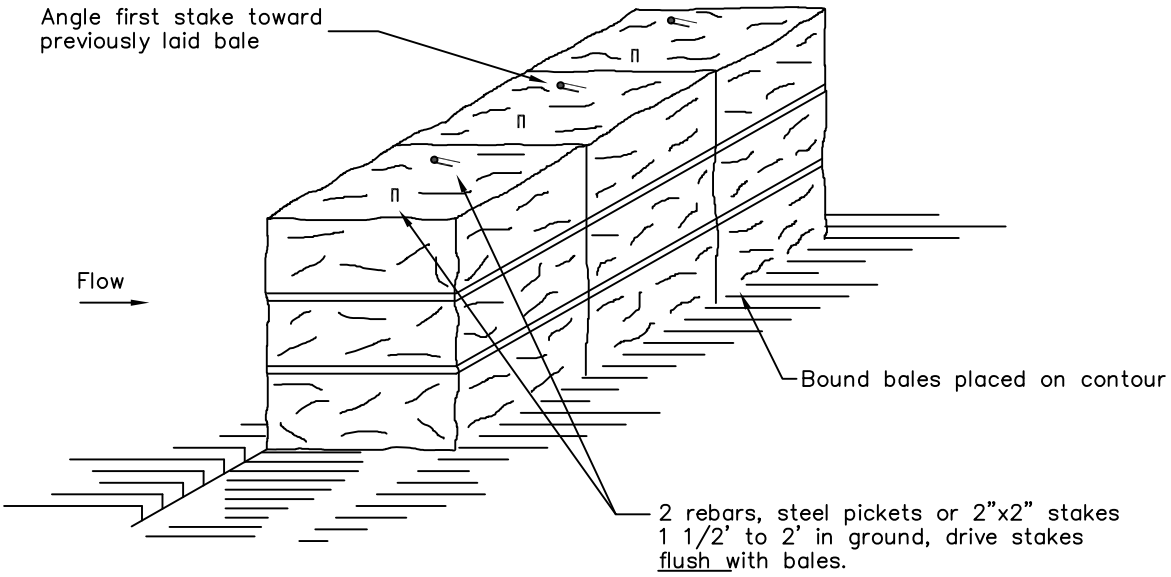
Chris Bosley — 6/20/18

CITY ENGINEER, PE 10804 — DATE:

DWG NO. M-27



BEDDING DETAIL



ANCHORING DETAIL

CONSTRUCTION SPECIFICATIONS

1. Bales shall be placed at the toe of a slope or on the contour and in a row with ends tightly abutting the adjacent bales.

2. Each bale shall be embedded in the soil a minimum of 4 inches (4") and placed so the bindings are horizontal.

3. Bales shall be securely anchored in place by either two (2) stakes or rebars driven through the bale. The first stake in each bale shall be driven toward the previously laid bale at an angle to force the bales together. Stakes shall be driven flush with the bale.

4. Inspection shall be frequent and repair replacement shall be made promptly as needed.

5. Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or damage.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

STRAW BALE DIKE

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

6/20/18 — DATE:

DWG NO. M-30

CITY OF COEUR D'ALENE

PAVEMENT DESIGN STANDARDS

STREET CLASIFICATION	MAX DESIGN ADT	TRAFFIC INDEX	"R" VALUE 30.0 - 39.9 Asphalt	30.0 - 39.9 Base	40.0 - 49.9 Asphalt	40.0 - 49.9 Base	> 50.0 Asphalt	> 50.0 Base
LOCAL RESIDENTIAL	1200	6	3.0	7.5	3.0	5	2.0	6
LOCAL RESIDENTIAL	2500	7	3.5	9	3.5	6.5	3.0	6
LOCAL INDUSTRIAL	2500	8	4.0	11	4.0	8	3.5	6
COLLECTOR RESIDENTIAL	8750	8	4.0	11	4.0	8	3.5	6
COLLECTOR	15000	9	4.5	12.5	4.5	9.5	4.0	7.5
COLLECTOR INDUSTRIAL	8750	9.5	5.0	13	5.0	10	4.5	7.5
MINOR ARTERIAL - 4 LN	22500	9.5	5.0	13	5.0	10	4.5	7.5
MINOR ARTERIAL - 4 LN+M	30000	10	5.5	13.5	5.5	10	4.5	8.5
PRINCIPAL ARTERIAL	40000	10.5	6.0	14.5	6.0	10.5	5.0	8.5

NOTES:
1. Based on 4% trucks.
2. Industrial roads are based on 6% trucks.
3. 20 yr design life.
4. Use "R" determined from site-specific tests or as recommended by City Engineer.

REVISION | APPROVED | DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

PAVEMENT DESIGN STANDARDS

APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

DATE: 6/20/18

DWG NO. M-31

Pavement Markings

General

1. Pavement markings shall be painted to the widths, lengths and locations as shown on the plans unless otherwise directed by the Engineer.

2. Pavement markings for all stenciled lettering, arrows, stop bars, cross walks, and eight (8) inch gore strips shall be thermoplastic.

3. All other pavement markings shall be yellow or white latex traffic paint or approved equal.

4. Asphalt surfaces shall be properly cured before applying any pavement markings.

5. Asphalt surfaces shall be dry, clean, and free of contaminants such as surface oils or existing road marking materials. Contaminants shall be removed by mechanical means.

6. Pressurized glass beads shall be applied at a rate of at least 7 pounds of glass beads per gallon of applied paint.

Thermoplastic pavement marking system

1. Apply pavement markings in accordance with the manufacturer's installation instructions.

2. Surface temperature shall be in a range of 30 to 105 degrees Fahrenheit.

3. Material shall be applied to a minimum thickness of 125 mils.

4. Provide a minimum retroreflectivity of 325 millicandelas per square meter per lux for white pavement markings and 200 millicandelas per square meter per lux for yellow pavement markings.

5. The material shall be free from defects and imperfections that might adversely affect the serviceability of the finished product. It shall be free from dirt and other foreign material and cure within the time specified to a tough, serviceable film.

Waterborne Traffic Paint

1. Paint shall be yellow, white, green and/or blue waterborne traffic paint or approved equal. The Contractor shall submit paint product information and application rates for the City Engineer's approval two weeks prior to paint application.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

PAVEMENT MARKING NOTES

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

6/18/18 DATE:

DWG NO. M-32

1. All work shall conform to the requirements of Section 600 of the "Idaho Standards for Public Works Construction" (ISPWC) and the City of Coeur d'Alene Standard Drawings and Specifications. In the case of conflict, City of Coeur d'Alene Standards shall prevail.

2. Location and elevation of existing facilities should be confirmed by field measurements and excavation exploration by the contractor, prior to beginning of new work.

3. Stormwater Division does not respond to "One-Call" notification. They must be called separately for locates on Storm Drain at (208)769-2235.

4. The contractor must secure approval from the City of Coeur d'Alene Streets & Engineering Inspector prior to backfill over Storm Drain mainline.

5. The City of Coeur d'Alene Streets & Engineering Inspector shall be notified at least forty-eight (48) hours prior to commencing work on Storm Drains.

6. All public storm drain lines shall be CCTV and submitted on DVD in a usable formatted template using “POSM” or another pre-approved equivalent program to the City Streets and Engineering Department for review and approval prior to pavement. Please allow 48 hours for review. Call (208)769-2285 for inspection scheduling.

7. Manholes and pipes shall be identified using City provided Asset ID numbers. Call (208)769-2285 for Asset ID numbers.

8. All manholes, drywells, and catch basins shall be inspected twice by the City of Coeur d'Alene Streets & Engineering Inspector - prior to backfill and prior to acceptance of improvements. Call (208)769-2285 for inspection scheduling.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

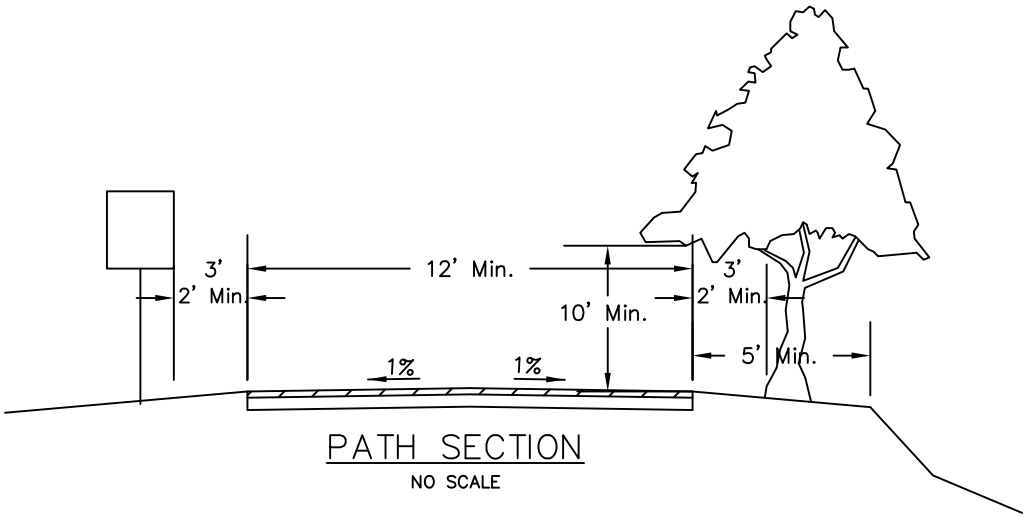
STORM SYSTEM NOTES

APPROVED BY:

Chris Bosley — 6/13/18

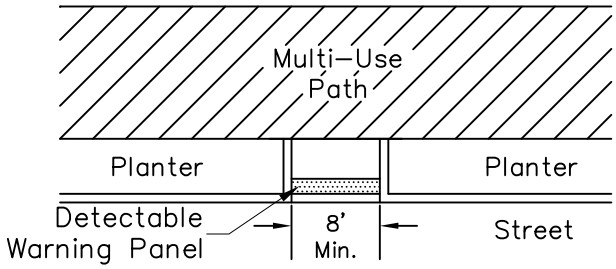
CITY ENGINEER, PE 10804 — DATE:

DWG NO. M-33



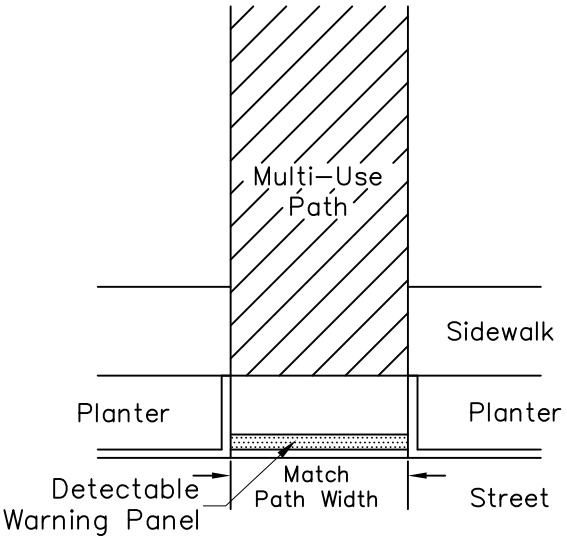
PATH SECTION

NO SCALE



PARALLEL APPROACH

Not to Scale



PERPENDICULAR APPROACH

Not to Scale

NOTES:

1. Width – 12' standard for a two–way multi–use path
   – 12' along arterials
   – 10' minimum along collectors/streets

2. Lateral Clearance – A 3ft "shy" or clear distance (2' min.) shall be included on both sides of a multi–use path for safe operation.

3. Overhead Clearance – The standard clearance to overhead obstructions is 10 ft.

4. Separation from roadway – Where a path is parallel and adjacent to a roadway, there shall be a 5 ft or greater width separating the path from the edge of roadway, or a physical barrier of sufficient height should be installed.

5. Grades & Cross–slope – Maximum grade of 5% for bicycle use, with steeper grades allowed for up to 500 ft. When the terrain dictates, up to 8% may be used for short sections (< 300ft).

6. Curb Cuts – Curb cuts for bicycle access to multi–use paths should be built so they match the road grade without a lip. The width of the curb cut is the full width of the path when the approaching path is perpendicular to the curb and a minimum of 8 ft wide when the approaching path is parallel and adjacent to the curb. Greater widths may be needed on downhill grades.

7. Horizontal curve minimum radius = 50'.

8. Crossings – Roadway striping ladder style crosswalk. Street signing per MUTCD.

9. Pathway signage – Install yield or stop signs where paths cross streets.

10. Pavement section – 2" asphaltic concrete over 4" of ¾" crushed rock base on compacted subgrade.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

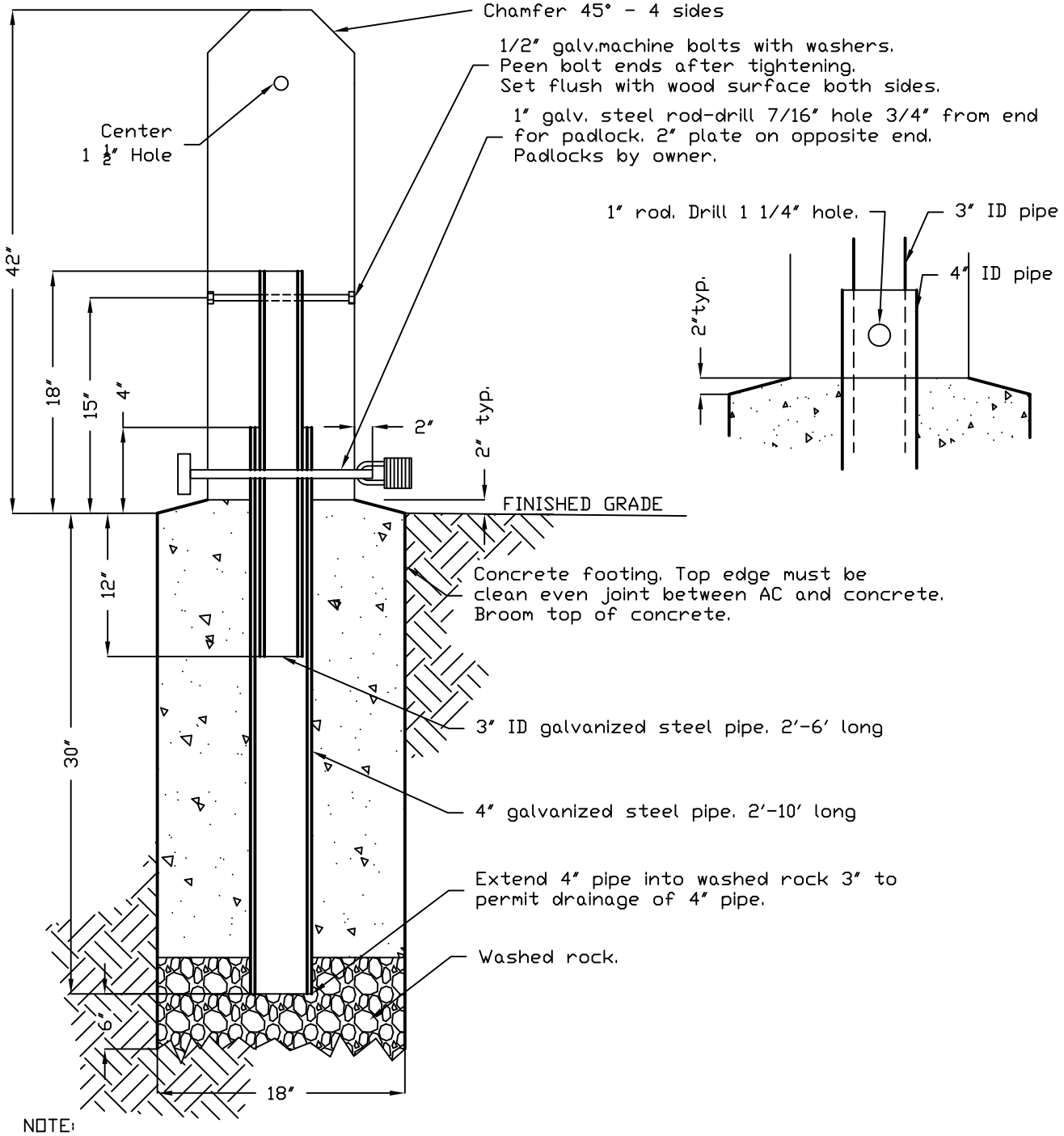
MULTI–USE PATH

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

DATE: 6/20/18

DWG NO. M–34



NOTE:
1. Timber shall be Douglas Fir, dense construction grade, pressure treated. Size to be submitted for each application.
2. Steel tube shall conform to ASTM A53 or ASTM A?# Grade A.
3. Nuts, bolts and washers shall conform to ASTM A307.
4. All steel parts shall be galvanized.
5. Concrete shall be 3000 PSI.
6. Removable bollards are required for restricted access roadways such as maintainance easements.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

REMOVABLE BOLLARD

APPROVED BY:

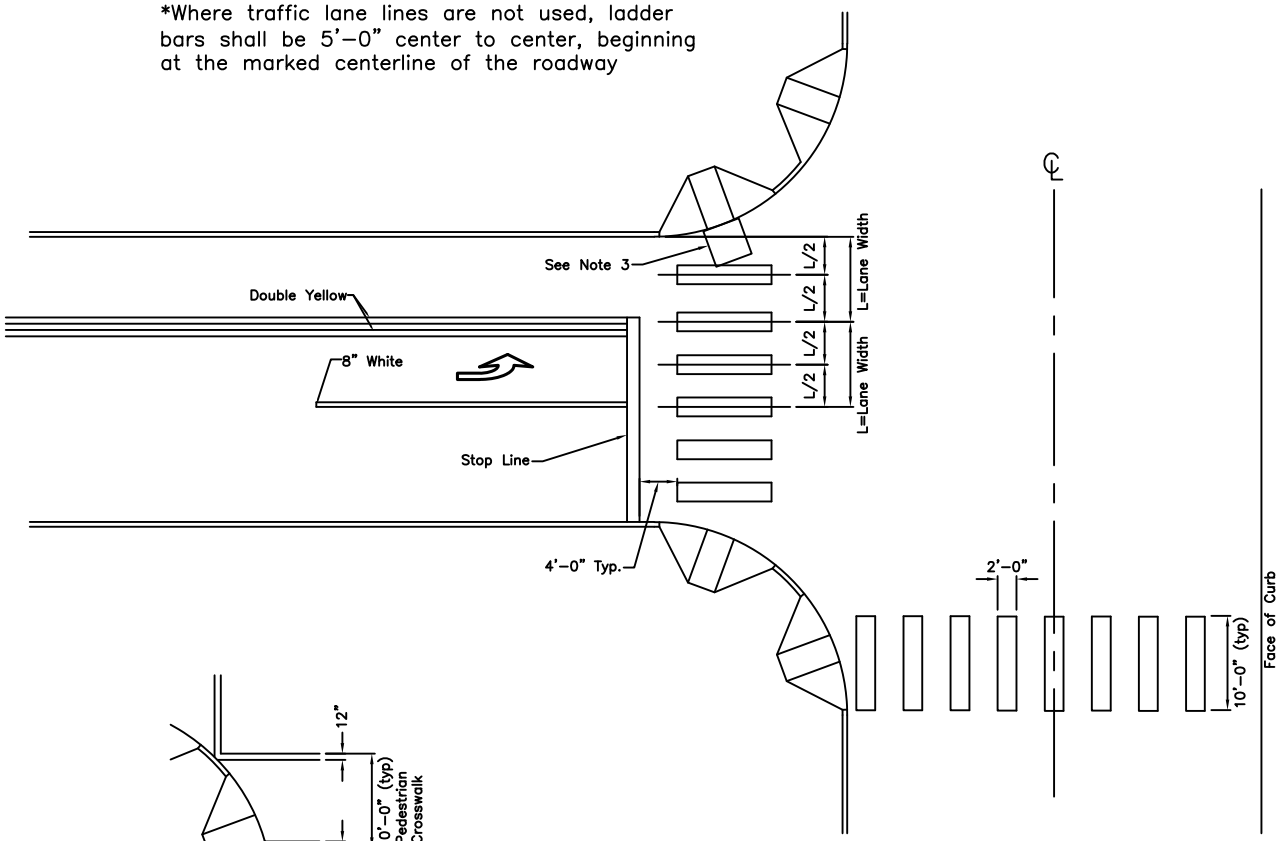
Chris Bosley — CITY ENGINEER, PE 10804 — 6/20/18 DATE:

DWG NO. M-35

Typical "Ladder Style" Pedestrian Crosswalk

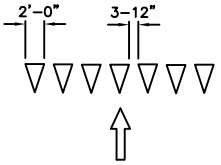
(showing curb ramps & stop line placement)

*Where traffic lane lines are not used, ladder bars shall be 5'–0" center to center, beginning at the marked centerline of the roadway



Typical Transverse Line Crosswalk

To be used only at stop controlled or signalized intersections



Advanced Yield Line

To be used 30–50' in advance of crosswalks on streets with two or more lanes in one direction

Not to Scale

NOTES:

1. "Ladder Style" crosswalks shall be used at uncontrolled crosswalk locations and where additional emphasis is needed.
2. "Transverse Line" crosswalks shall be used at stop sign or signal controlled locations.
3. The lower landing of the curb ramp shall fall wholly within crosswalk lines.
4. Uncontrolled crosswalk locations shall be approved by the City Engineer.
5. Colored or textured pavement crosswalks shall be supplemented with either "ladder style" or "transverse line" crosswalk markings.
6. Existing crosswalk markings that conflict with new crosswalk markings must be removed.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

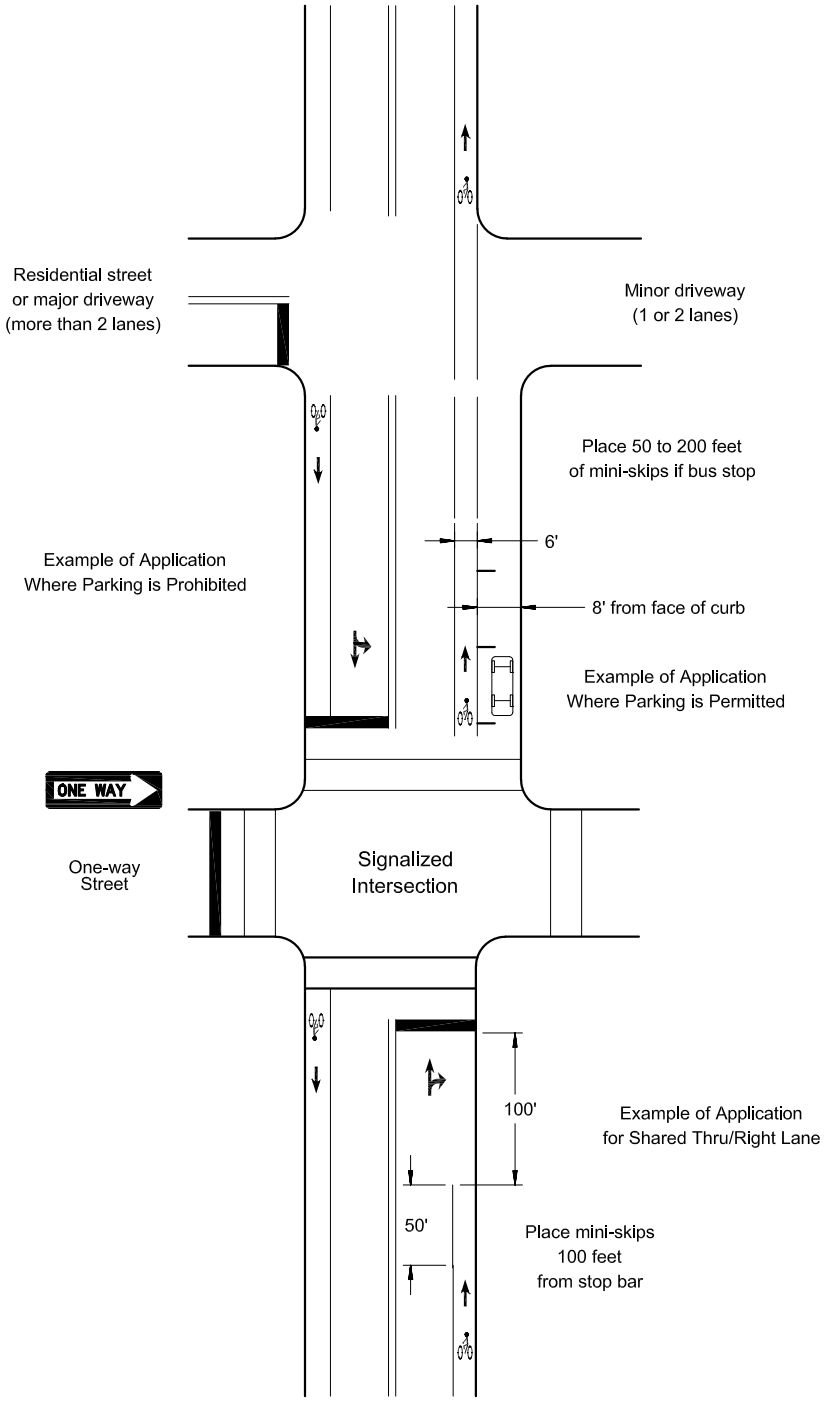
CROSSWALK STRIPING

APPROVED BY:

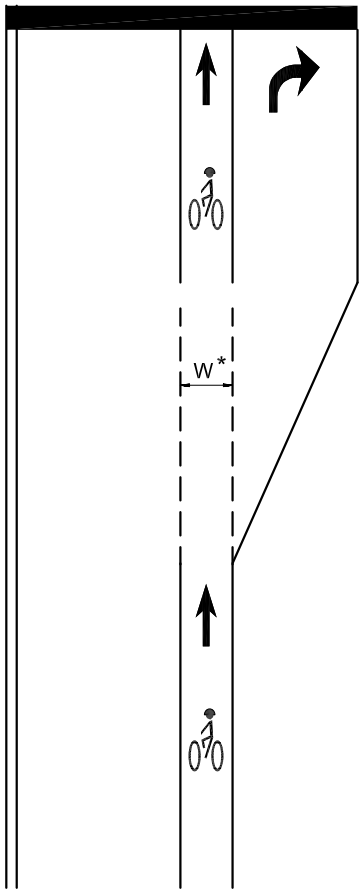
Chris Bosley — CITY ENGINEER, PE 10804 — DATE: 6/18/18

DWG NO. M–36

Example of Bicycle Lane Treatment on a Two-Way Street



Example of Bicycle Lane Treatment at a Right Turn Only Lane



* Minimum Width = 4'
Preferred Width = 6'

REVISION	APPROVED	DATE

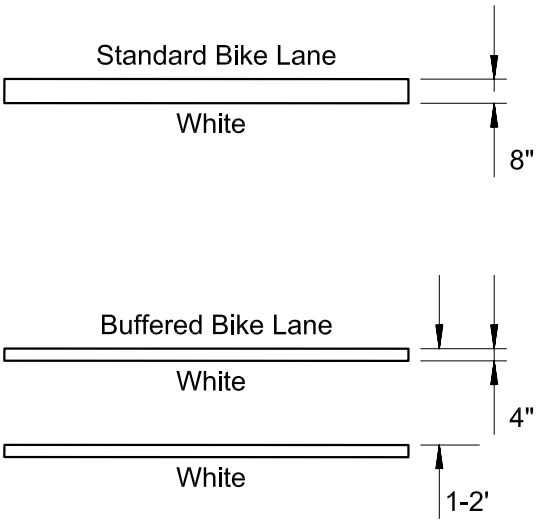
CITY OF COEUR d'ALENE STANDARD DRAWING

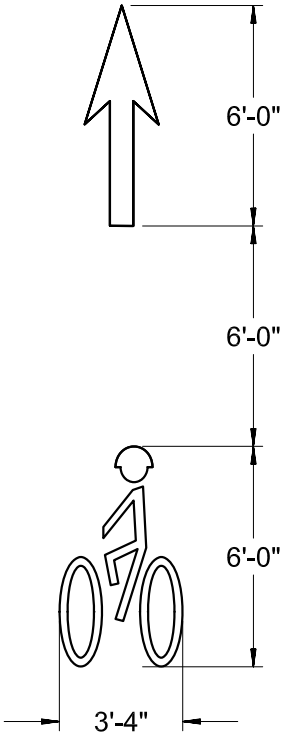
BIKE LANE STRIPING

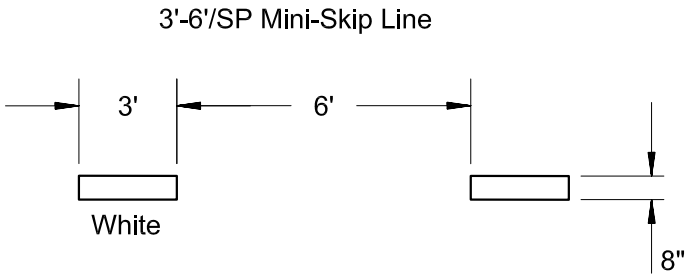
APPROVED BY:

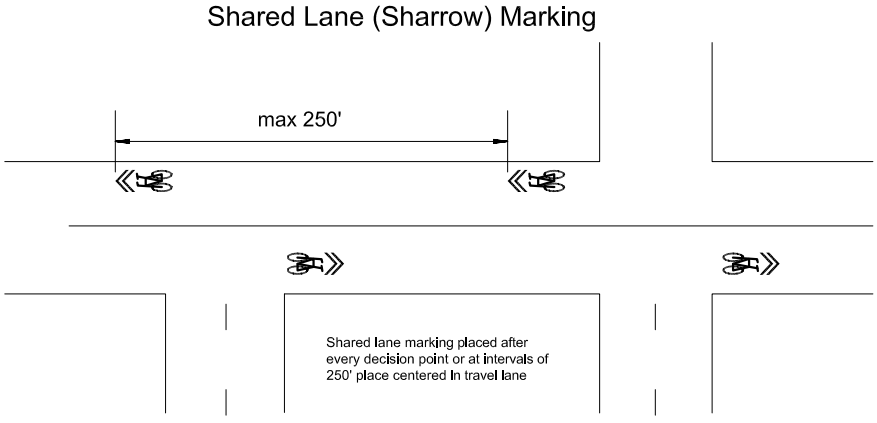
Chris Bosley — CITY ENGINEER, PE 10804 — DATE: 6/18/18

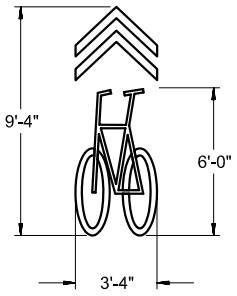
DWG NO. M–37











General Notes:

1. Shared lane markings shall not be placed on streets with speed limit above 35mph.
2. Shared lane markings shall not be used on shoulders or in designated bike lanes.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

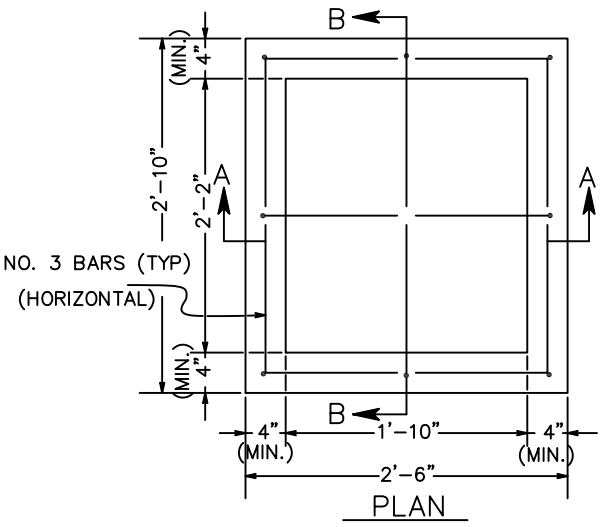
BIKE LANE MARKINGS

APPROVED BY:

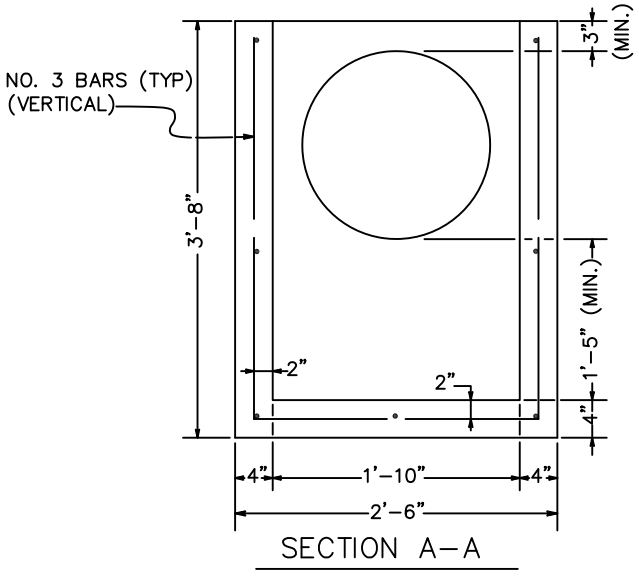
Chris Bosley — CITY ENGINEER, PE 10804

DATE: 6/18/18

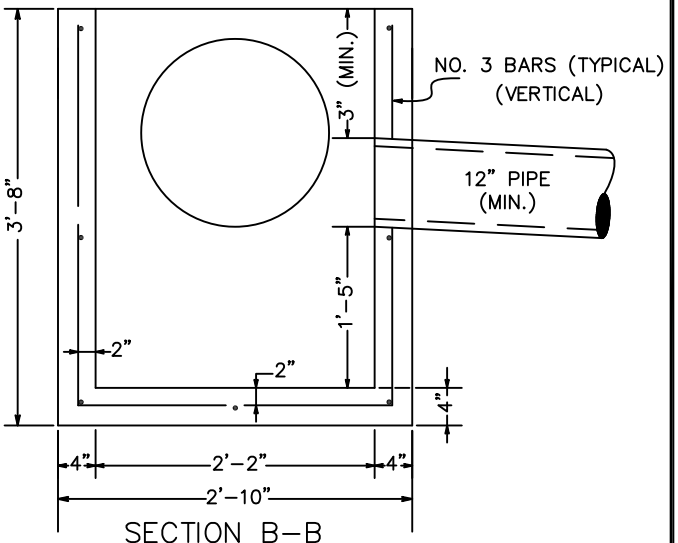
DWG NO. M-38



PLAN



SECTION A–A



SECTION B–B

GENERAL NOTES

1. CATCH BASIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C 478 (AASHTO M 199) & ASTM C 890 UNLESS OTHERWISE SHOWN ON PLANS OR NOTED IN THE PROJECT SPECIAL PROVISIONS.
2. PRECAST BASINS SHALL BE FURNISHED WITH CUTOUTS OR KNOCKOUTS. KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MINIMUM.
3. KNOCKOUTS SHALL BE ON ALL 4 SIDES WITH MAXIMUM DIAMETER OF 20". KNOCKOUTS SHALL BE ROUND. PIPE SHALL BE INSTALLED IN FACTORY SUPPLIED KNOCKOUTS.
4. KNOCKOUT OR CUTOUT HOLE SIZE IS EQUAL TO PIPE OUTER DIAMETER PLUS CATCH BASIN WALL THICKNESS.
5. WHEN PVC PIPE IS USED, A SAND COLLAR SHALL BE GROUTED INTO CATCH BASIN.
6. BASIN TO BE INSTALLED PERPENDICULAR TO CURB WHEN HOODED FRAME USED (TYPE 2).
7. GROUT FROM OUTSIDE FIRST. PACK WITH BRICK/ROCK, IF NEEDED, TO PREVENT GROUT FROM FALLING IN.

REVISION	APPROVED	DATE

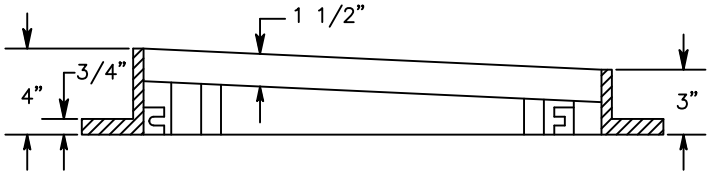
CITY OF COEUR d'ALENE STANDARD DRAWING

TYPE 1 CATCH BASIN

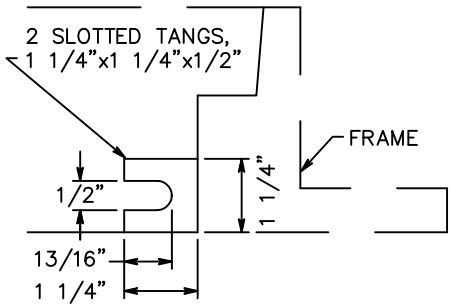
APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804 — 3/27/18 DATE:

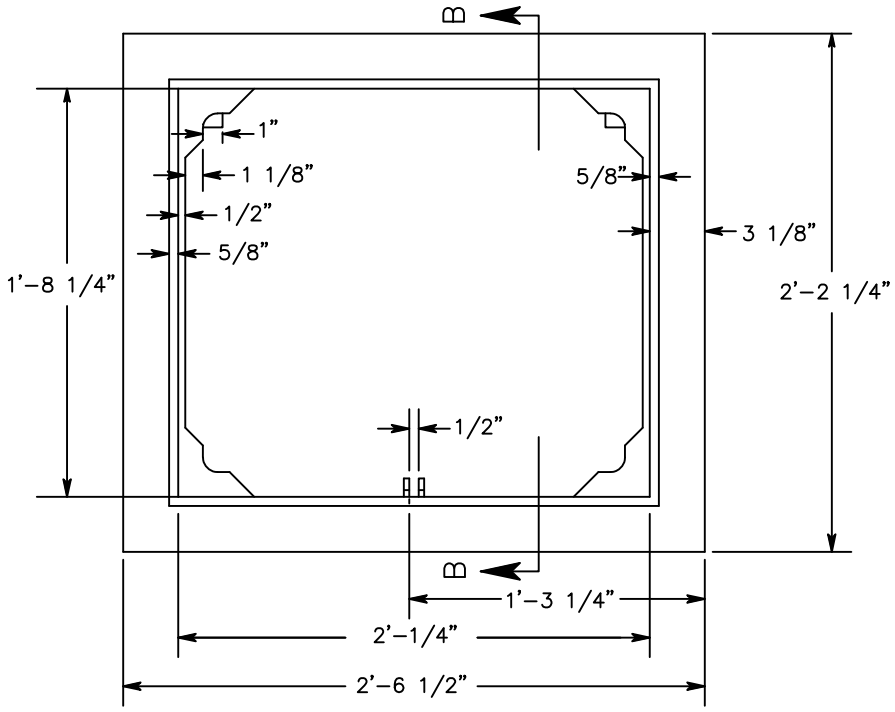
DWG NO. SD–1



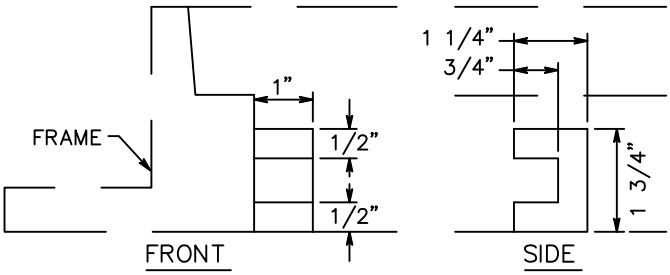
SECTION B–B



TANG DETAIL



FRAME – TYPE 1



SLOT DETAIL

GENERAL NOTES

1. FRAME SHALL BE GRAY IRON CONFORMING TO A.S.T.M. A48–90, GRADE 30. THE GRATE SHALL BE DUCTILE IRON CONFORMING TO A.S.T.M. A536–84, GRADE 80–55–06.
2. USE WITH CATCH BASIN AND CONCRETE INLET TYPE 1, SEE STD. DRAWING SD–1.
3. FIT TOLERANCE SHALL BE 1/8"±.
4. WELDING IS NOT PERMITTED.
5. FOR GRATE DETAIL SEE STD. DRAWING SD–4.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

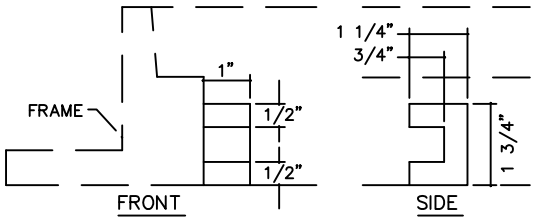
GRATE FRAME TYPE 1

APPROVED BY:

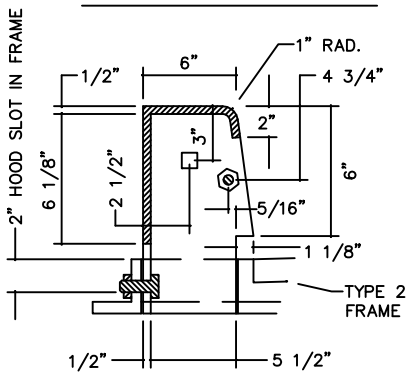
Chris Bosley — 6/20/18

CITY ENGINEER, PE 10804 — DATE:

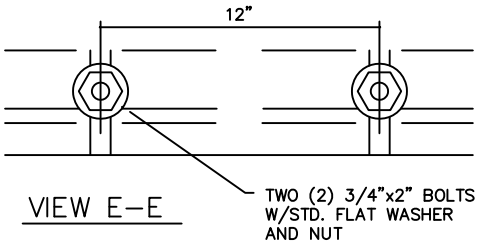
DWG NO. SD–2



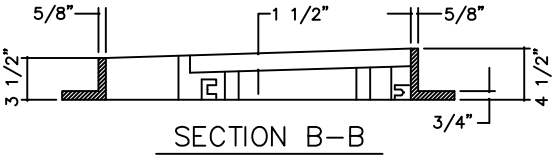
GUARD SLOT DETAIL



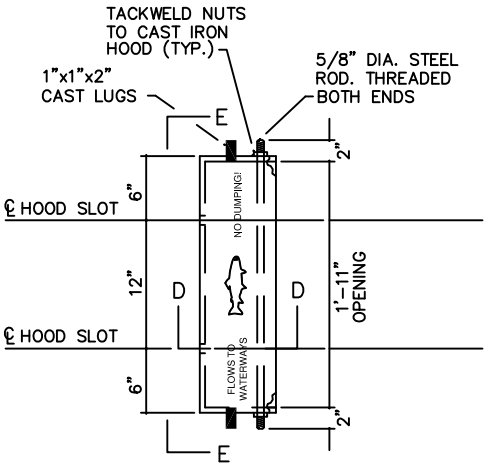
SECTION D–D



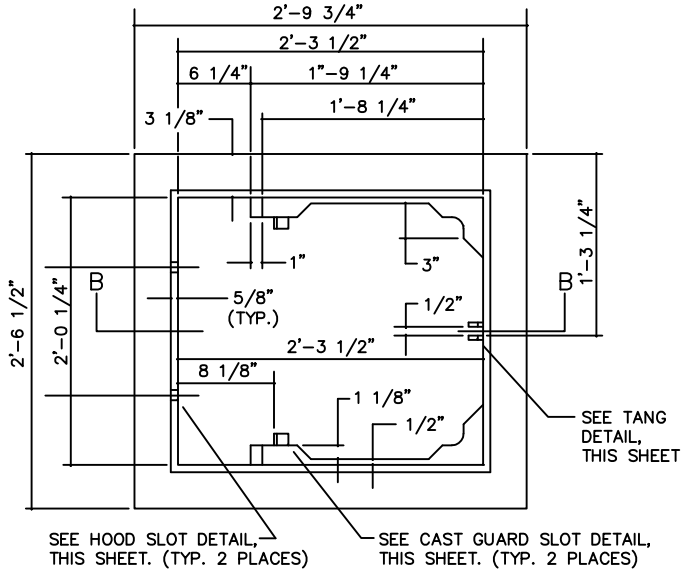
VIEW E–E



SECTION B–B



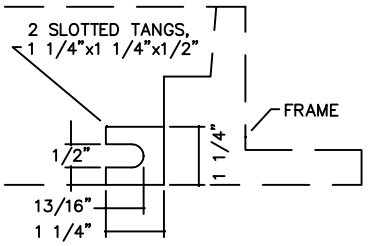
HOOD



FRAME – TYPE 2

GENERAL NOTES

1. FRAME SHALL BE GRAY IRON CONFORMING TO A.S.T.M. A48–90, GRADE 30. THE GRATE SHALL BE DUCTILE IRON CONFORMING TO A.S.T.M. A536–84, GRADE 80–55–06.
2. BOLTS AND ROD SHALL CONFORM TO A.S.T.M. DESIGNATION A307, GRADE A.
3. USE WITH CATCH BASIN AND CONCRETE INLET, SEE STD DRAWING SD–1.
4. FIT TOLERANCE SHALL BE 1/8"±.
5. FOR GRATE DETAILS SEE STD. DRAWING SD–4.



TANG DETAIL

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

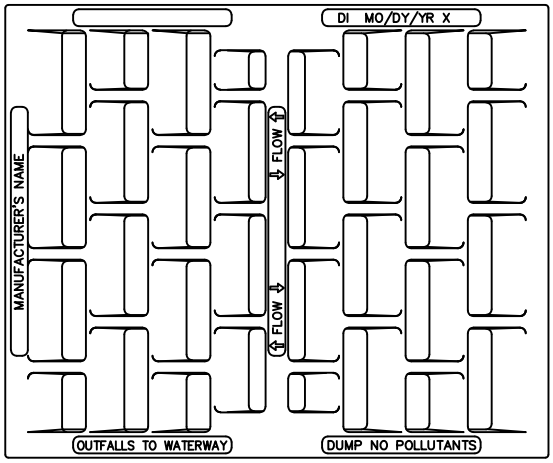
GRATE FRAME TYPE 2

APPROVED BY:

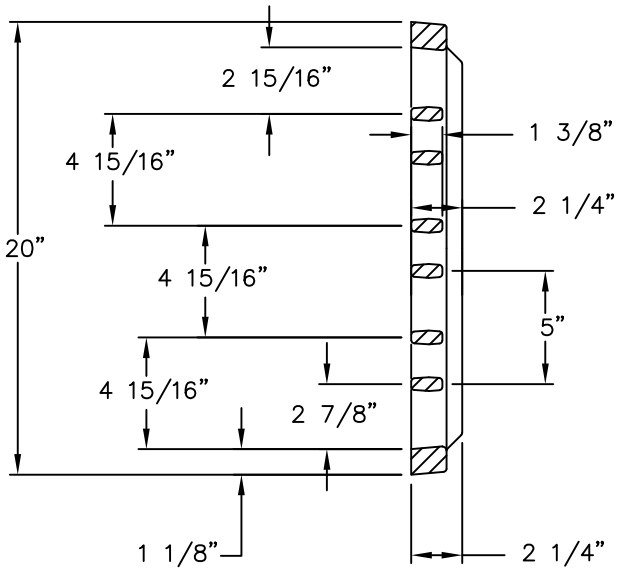
Chris Bosley — 6/20/18

CITY ENGINEER, PE 10804 — DATE:

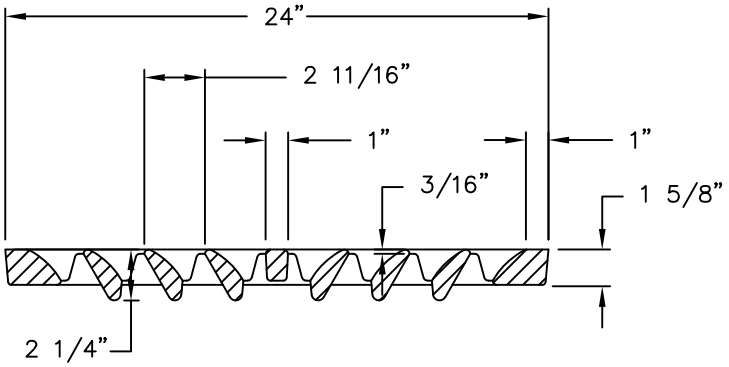
DWG NO. SD–3



PLAN VIEW



SECTION VIEW



SECTION VIEW

GENERAL NOTES

1. THE NAME OF THE MANUFACTURER AND DIRECTION OF FLOW SHALL BE EMBOSSED ON THE TOP SURFACE OF EACH GRATE. LETTERING TO BE RECESSED 1/16".
2. FRAME SHALL BE GRAY IRON CONFORMING TO A.S.T.M. A48–90, GRADE 30. THE GRATE SHALL BE DUCTILE IRON CONFORMING TO A.S.T.M. A536–84 GRADE 80–55–06.
3. DIMENSIONS SHALL HAVE ±1/16" TOLERANCE, EXCEPT AS NOTED.
4. EDGES SHALL HAVE 1/8" RADIUS, 1/8" CHAMFER OR COM–PLETE DEBURRING.
5. THE FRAME SHALL BE MANUFACTURED IN ACCORDANCE WITH STANDARD FOR TYPE 1 FRAME.
6. WELDING IS NOT PERMITTED.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

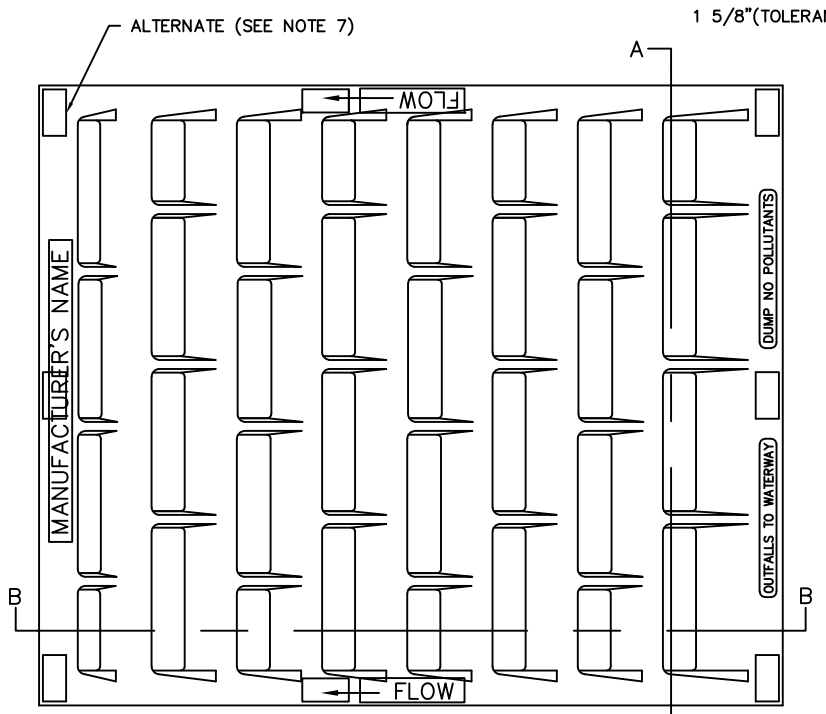
CATCH BASIN GRATE 2 – WAY

APPROVED BY:

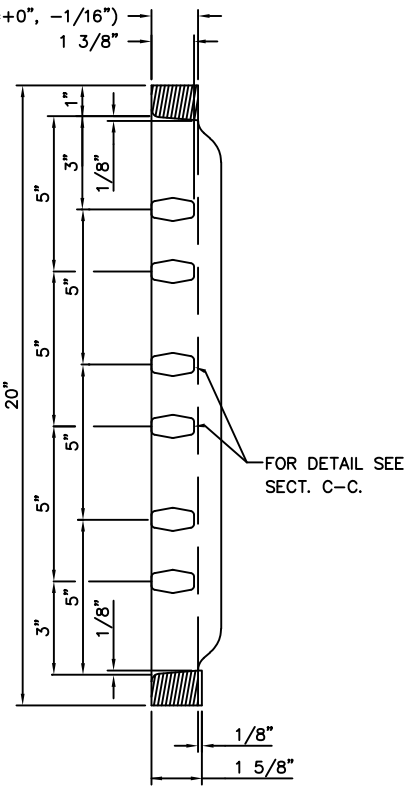
Chris Bosley — 6/20/18

CITY ENGINEER, PE 10804 — DATE:

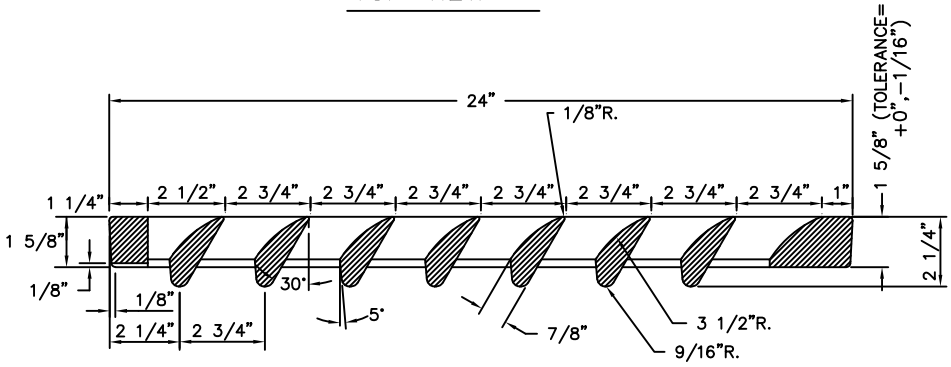
DWG NO. SD–4A



TOP VIEW



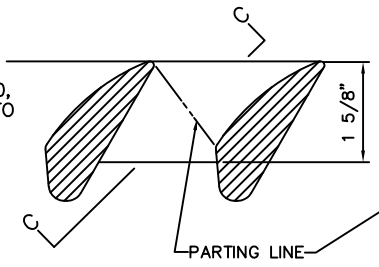
SECTION A-A



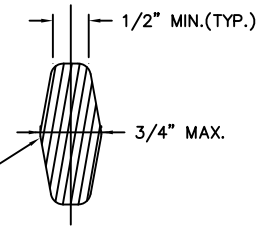
SECTION B-B

GENERAL NOTES

1. THE NAME OF THE MANUFACTURER AND DIRECTION OF FLOW SHALL BE EMBOSSED ON THE TOP SURFACE OF EACH GRATE. LETTERING TO BE RECESSED 1/16".
2. FRAME SHALL BE GRAY IRON CONFORMING TO A.S.T.M. A48-90, GRADE 30. THE GRATE SHALL BE DUCTILE IRON CONFORMING TO A.S.T.M. A536-84 GRADE 80-55-06.
3. DIMENSIONS SHALL HAVE ±1/16" TOLERANCE, EXCEPT AS NOTED.
4. EDGES SHALL HAVE 1/8" RADIUS, 1/8" CHAMFER OR COMPLETE DEBURRING.
5. THE FRAME SHALL BE MANUFACTURED IN ACCORDANCE WITH STANDARD FOR TYPE 1 FRAME.
6. WELDING IS NOT PERMITTED.
7. AS AN ALTERNATE, 8 PADS 1 1/2" X 3/4" X 1/8", INTEGRALLY CAST WITH THE GRATE, MAY BE USED.



VANE DETAIL



SECTION C-C

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

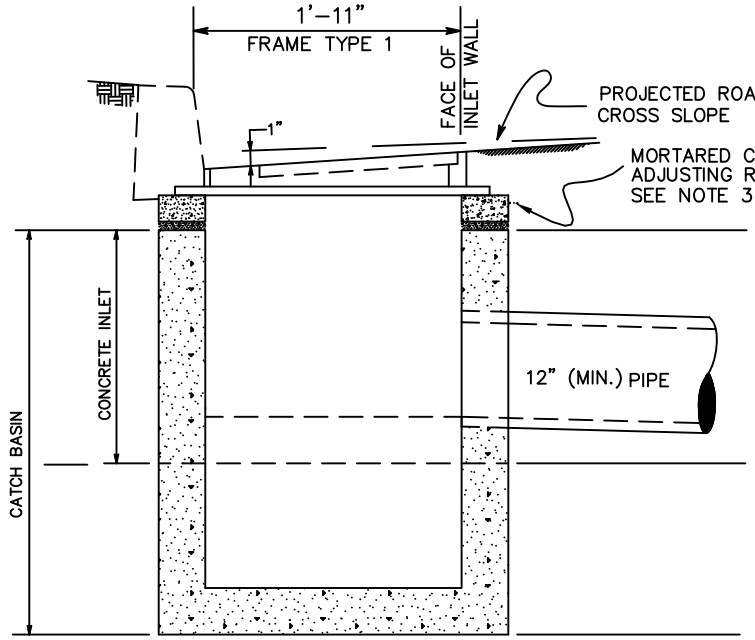
CATCH BASIN GRATE 1 - WAY

APPROVED BY:

Chris Bosley — 6/20/18

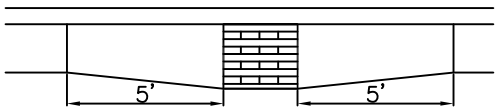
CITY ENGINEER, PE 10804 — DATE:

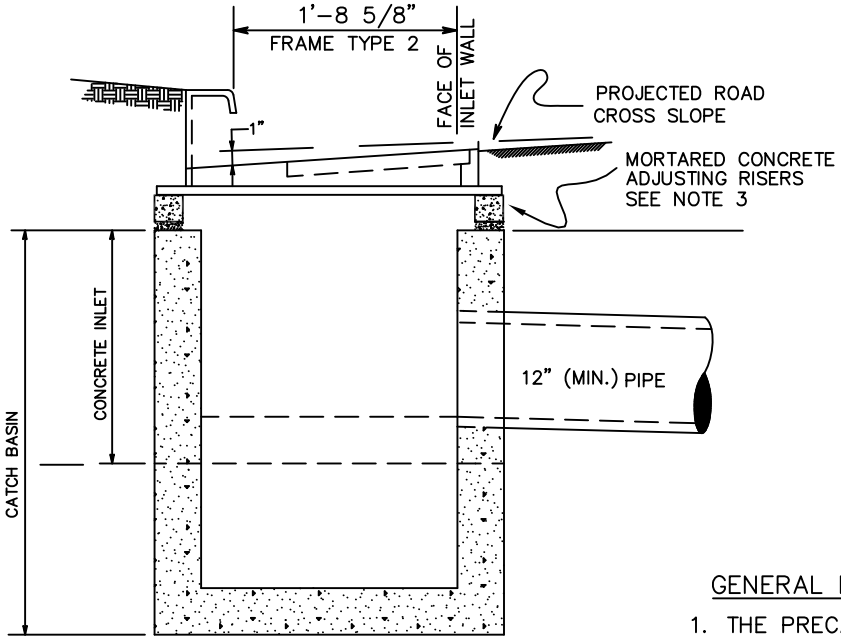
DWG NO. SD-4B



STANDARD
CATCH BASIN OR INLET

GUTTER DETAIL





CATCH BASIN OR INLET
FOR USE AT LOW POINTS

GENERAL NOTES

1. THE PRECAST CONCRETE INLET SHALL BE PLACED ON THE SAME GRADE AS THE CURB.
2. TYPE 2 FRAME TO BE USED WITH CATCH BASIN
3. A MINIMUM OF 1 RISER REQUIRED TO ADJUST HOOD OF TYPE 2 FRAME

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

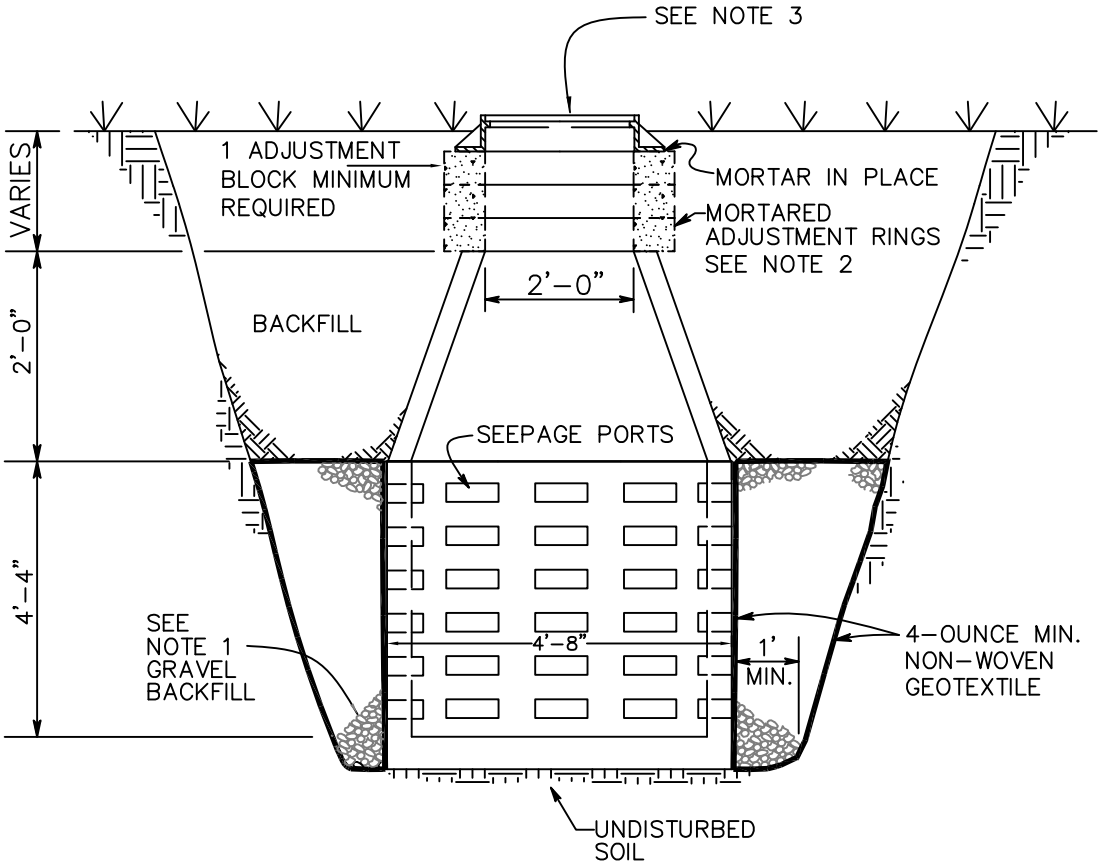
CATCH BASIN INSTALLATION DETAILS

APPROVED BY:

Chris Bosley — 6/20/18

CITY ENGINEER, PE 10804 — DATE:

DWG NO. SD–5



DRYWELL – TYPE 'A'

NOTES

1. SPECIAL BACKFILL MATERIAL FOR DRYWELLS SHALL CONSIST OF WASHED GRAVEL GRADED FROM 1" TO 3" WITH A MAXIMUM OF 5% PASSING THE U.S. No. 200 SCREEN, AS MEASURED BY WEIGHT.

   GRAVEL BACKFILL QUANTITY FOR DRYWELLS:
   TYPE "A" – 30 CUBIC YARDS MINIMUM
   TYPE "B" – 40 CUBIC YARDS MINIMUM
   OR AS SPECIFIED ON PLANS.

2. ADJUSTMENT BLOCKS SHALL BE CEMENT CONCRETE. ONE BLOCK MINIMUM REQUIRED.
3. SEE STANDARD DRAWING SS-2 FOR FRAME AND COVER DETAIL.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

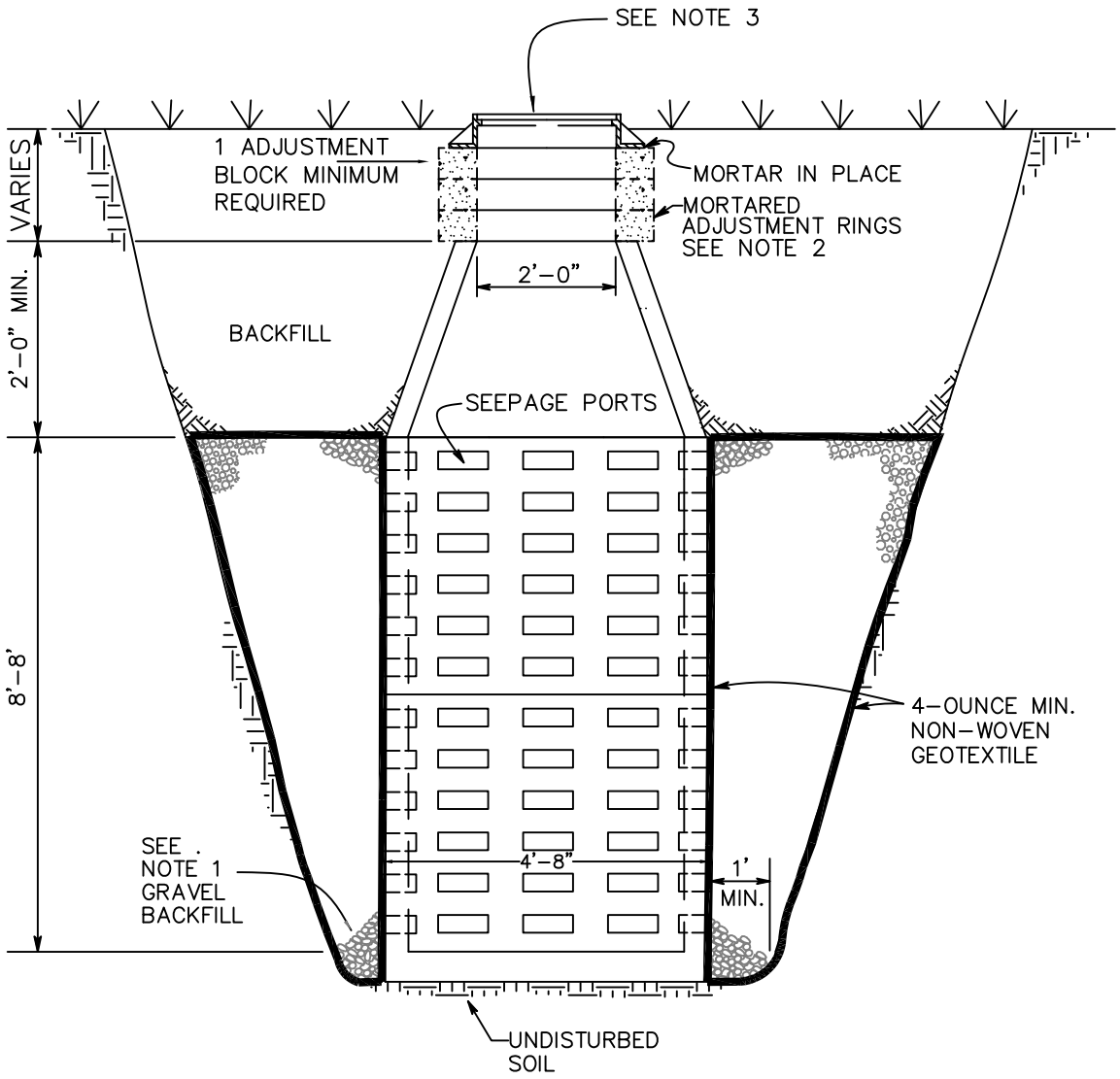
TYPE A DRYWELL

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

5/30/18 DATE:

DWG NO. SD-6A



DRYWELL – TYPE 'B'

NOTES

1. SPECIAL BACKFILL MATERIAL FOR DRYWELLS SHALL CONSIST OF WASHED GRAVEL GRADED FROM 1" TO 3" WITH A MAXIMUM OF 5% PASSING THE U.S. No. 200 SCREEN, AS MEASURED BY WEIGHT.

   GRAVEL BACKFILL QUANTITY FOR DRYWELLS:
   TYPE "A" – 30 CUBIC YARDS MINIMUM
   TYPE "B" – 40 CUBIC YARDS MINIMUM
   OR AS SPECIFIED ON PLANS.

2. ADJUSTMENT BLOCKS SHALL BE CEMENT CONCRETE. ONE BLOCK MINIMUM REQUIRED.
3. SEE STANDARD DRAWING SS-2 FOR FRAME AND COVER DETAIL.

REVISION	APPROVED	DATE

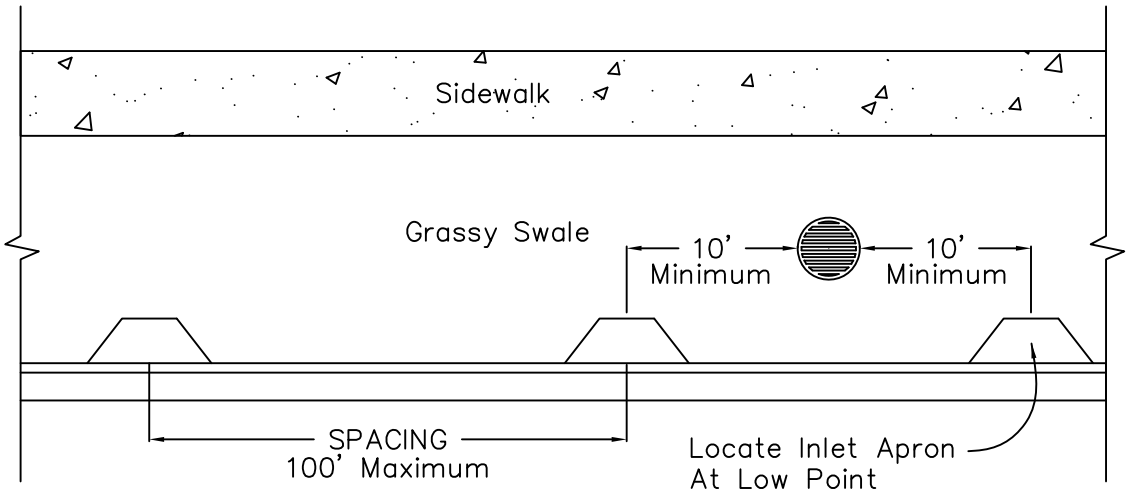
CITY OF COEUR d'ALENE STANDARD DRAWING

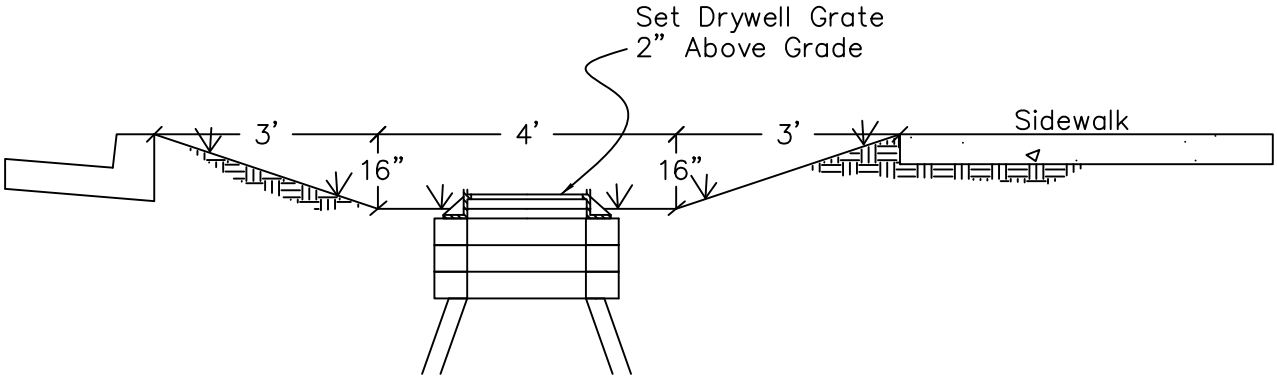
TYPE B DRYWELL

APPROVED BY:

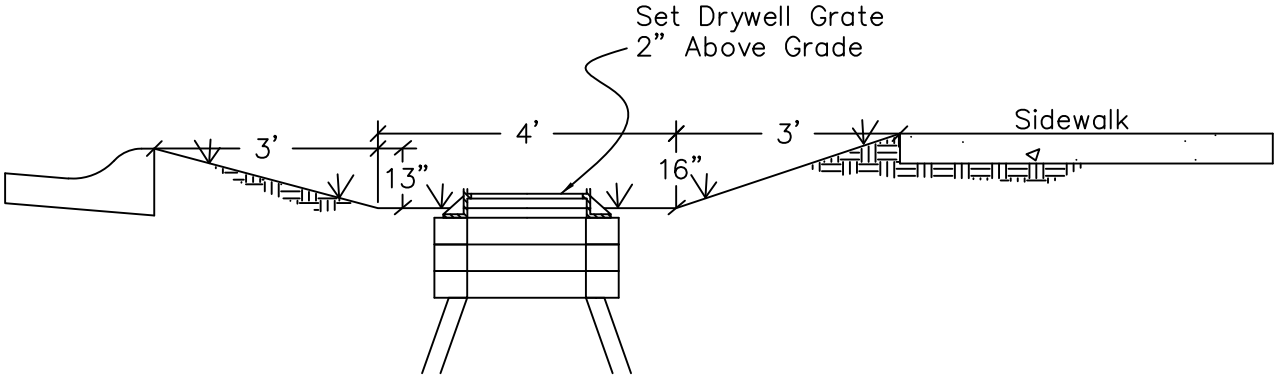
Chris Bosley — CITY ENGINEER, PE 10804 — DATE: 3/27/18

DWG NO. SD-6B





STANDARD CURB AND GUTTER SECTION



ROLLED CURB AND GUTTER SECTION

NOTES:

1. All swales shall have a minimum infiltration rate of 0.5"/hr
2. See Standard Drawing **SD-6** for drywell detail.
3. See Standard Drawing **C-17** for Inlet Apron detail.

REVISION	APPROVED	DATE
1. Depth rev–16"		

CITY OF COEUR d'ALENE STANDARD DRAWING

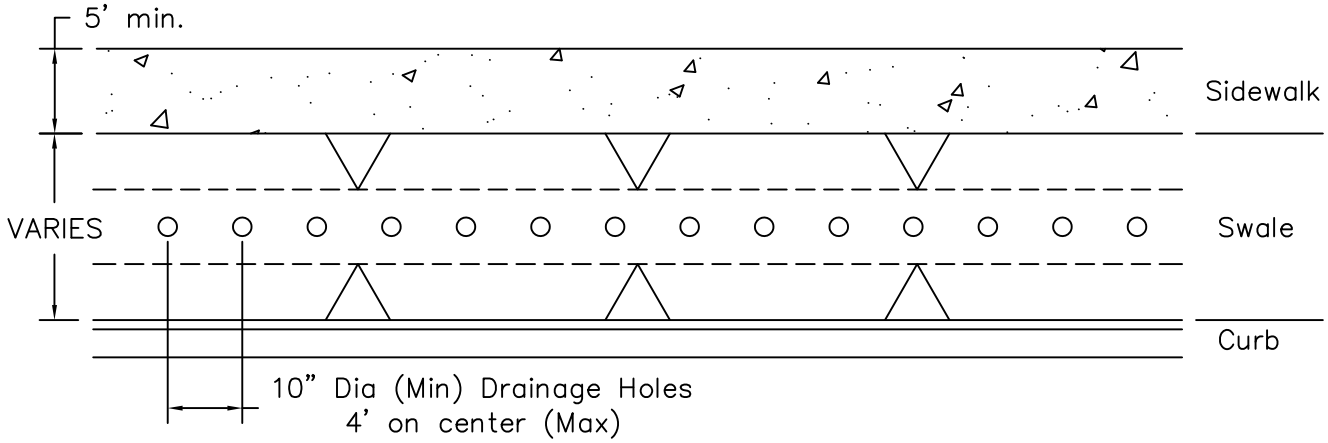
RESIDENTIAL SWALE

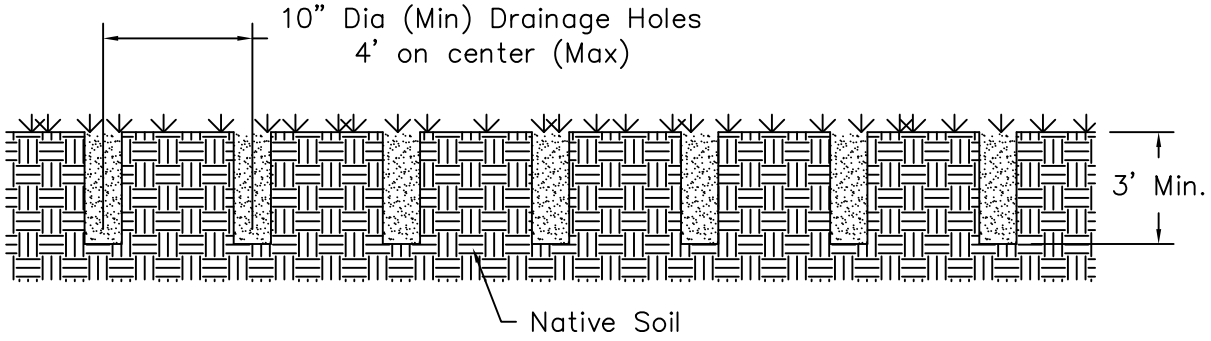
APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

6/20/18 — DATE:

DWG NO. SD–7





Not to Scale

NOTES:

1. Excavate holes, remove soil, and backfill with clean gravel – max. 1/2" aggregate.
2. Re–establish vegetation.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

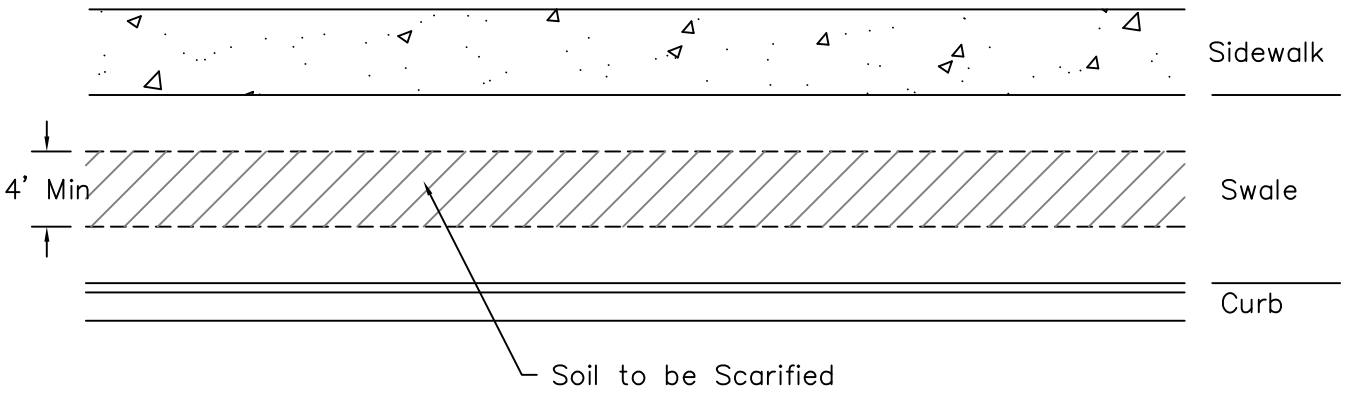
SWALE REHABILITATION TYPE "A"

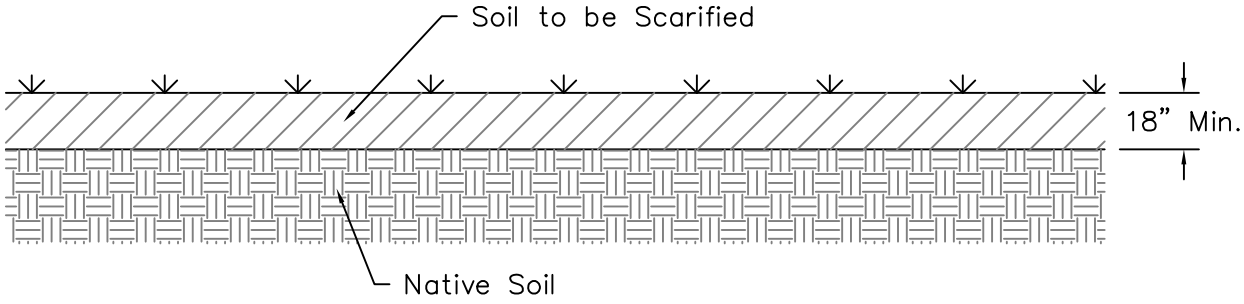
APPROVED BY:

Chris Bosley — 6/20/18

CITY ENGINEER, PE 10804 — DATE:

DWG NO. SD–7A





NOTES:

1. Scarify the top 18" of swale bottom or to native free–draining material, whichever is greater.
2. Re–establish vegetation.
3. All swales must be scarified and vegetated prior to final acceptance.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

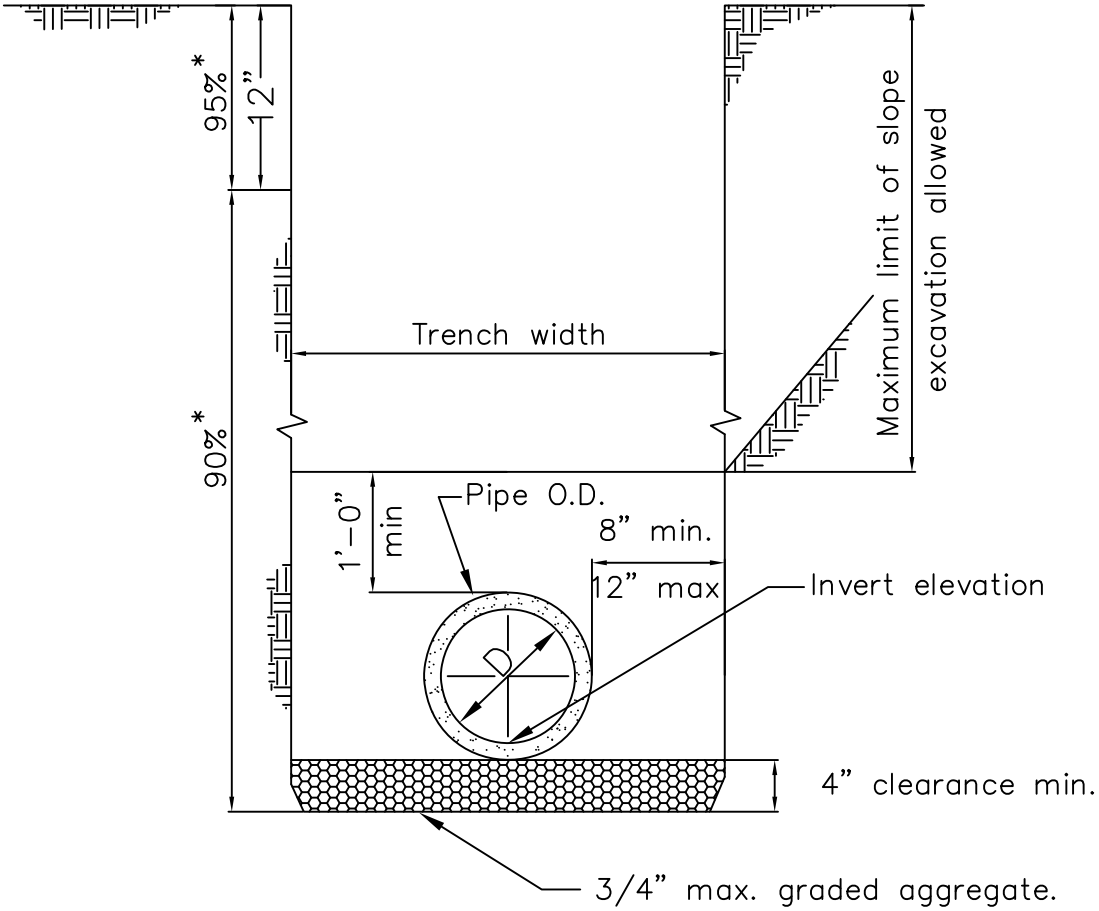
SWALE REHABILITATION TYPE "B"

APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

6/18/18
DATE:

DWG NO. SD–7B



SECTION

Not to Scale

NOTES

1. For trenching in improved streets, see Standard Drawing M–11 for trench resurfacing.
2. (*) indicates minimum relative compaction using modified proctor (ASTM D–1557).
3. Bedding Material shall be Sand, Gravel, crushed Aggregate, or Native Granular material having a sand equivalent of not less than 30.

REVISION	APPROVED	DATE

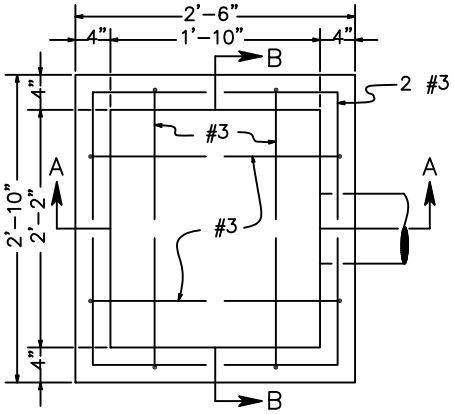
CITY OF COEUR d'ALENE STANDARD DRAWING

PIPE BEDDING AND BACKFILL FOR STORM DRAINS

APPROVED BY:

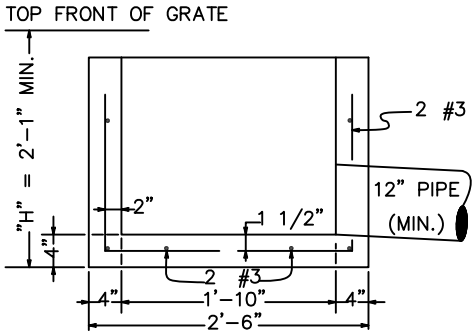
Chris Bosley — CITY ENGINEER, PE 10804 — 6/20/18 DATE:

DWG NO. SD–8

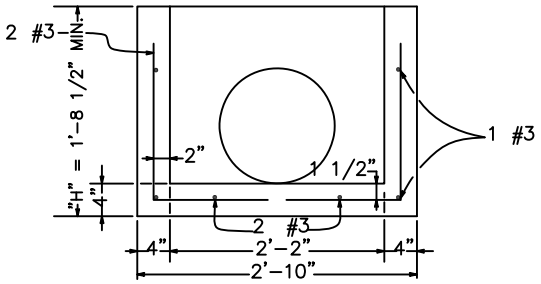


PLAN

PIPE Ø	"H"
12"	1'-8 1/2"
15"	2'-0"
18"	2'-3"
21"	2'-6"
24"	2'-9"



SECTION A-A



SECTION B-B

PRECAST UNIT

GENERAL NOTES

1. CONCRETE INLET SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C 478 (AASHTO M 199) & ASTM C 890 UNLESS OTHERWISE SHOWN ON PLANS OR NOTED IN THE PROJECT SPECIAL PROVISIONS.
2. REINFORCING STEEL SHALL BE GRADE 40 OR GRADE 60.
3. CONCRETE INLETS SHALL BE SET ON A COMPACTED OR UNDISTURBED LEVEL FOUNDATION.
4. AS AN ACCEPTABLE ALTERNATE TO REBAR, WELDED WIRE FABRIC HAVING A MINIMUM AREA OF .12 SQUARE INCHES PER FOOT MAY BE USED. WELDED WIRE FABRIC SHALL COMPLY TO ASTM A 497 (AASHTO M 221). WIRE FABRIC SHALL NOT BE PLACED IN THE KNOCKOUTS.
5. "H" SHALL BE SHOWN ON CONSTRUCTION PLANS.
6. INLET PIPE SHALL BE GROUTED INTO CONCRETE INLET.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

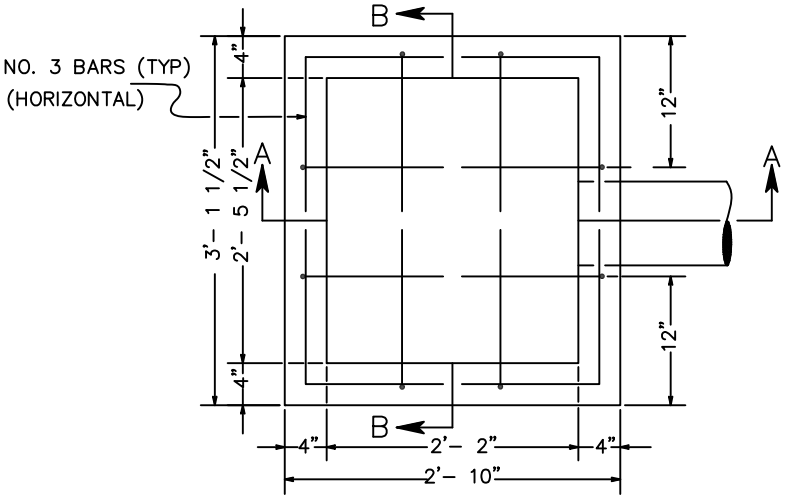
CURB INLET BOX TYPE 1

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

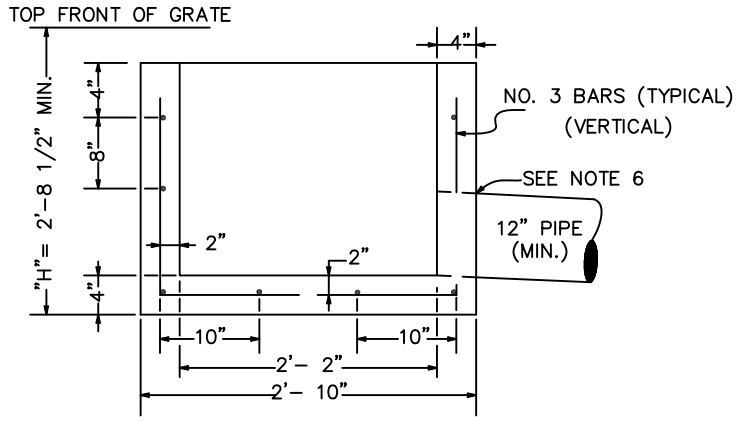
6/20/18 — DATE:

DWG NO. SD-9

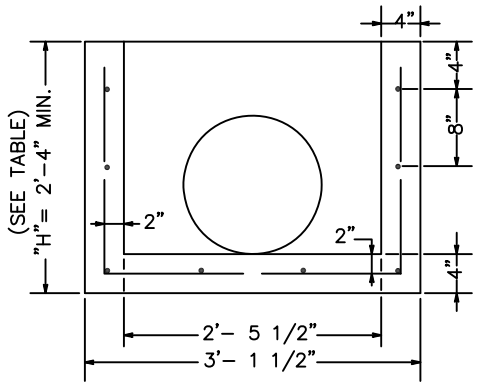


PLAN

PIPE Ø	"H"
12"	2'–5 1/2"
15"	2'–9"
18"	3'–0"
21"	3'–3"
24"	3'–6"



SECTION A–A



SECTION B–B

NOT TO SCALE

GENERAL NOTES

1. CONCRETE INLET SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C 478 (AASHTO M 199) & ASTM C 890 UNLESS OTHERWISE SHOWN ON PLANS OR NOTED IN THE PROJECT SPECIAL PROVISIONS.
2. REINFORCING STEEL SHALL BE GRADE 40 OR GRADE 60.
3. CONCRETE INLETS SHALL BE SET ON A COMPACTED OR UNDISTURBED LEVEL FOUNDATION.
4. AS AN ACCEPTABLE ALTERNATE TO REBAR, WELDED WIRE FABRIC HAVING A MINIMUM AREA OF .12 SQUARE INCHES PER FOOT MAY BE USED. WELDED WIRE FABRIC SHALL COMPLY TO ASTM A 497 (AASHTO M 221). WIRE FABRIC SHALL NOT BE PLACED IN THE KNOCKOUTS.
5. "H" SHALL BE SHOWN ON CONSTRUCTION PLANS.
6. INLET PIPE SHALL BE GROUTED INTO CONCRETE INLET.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

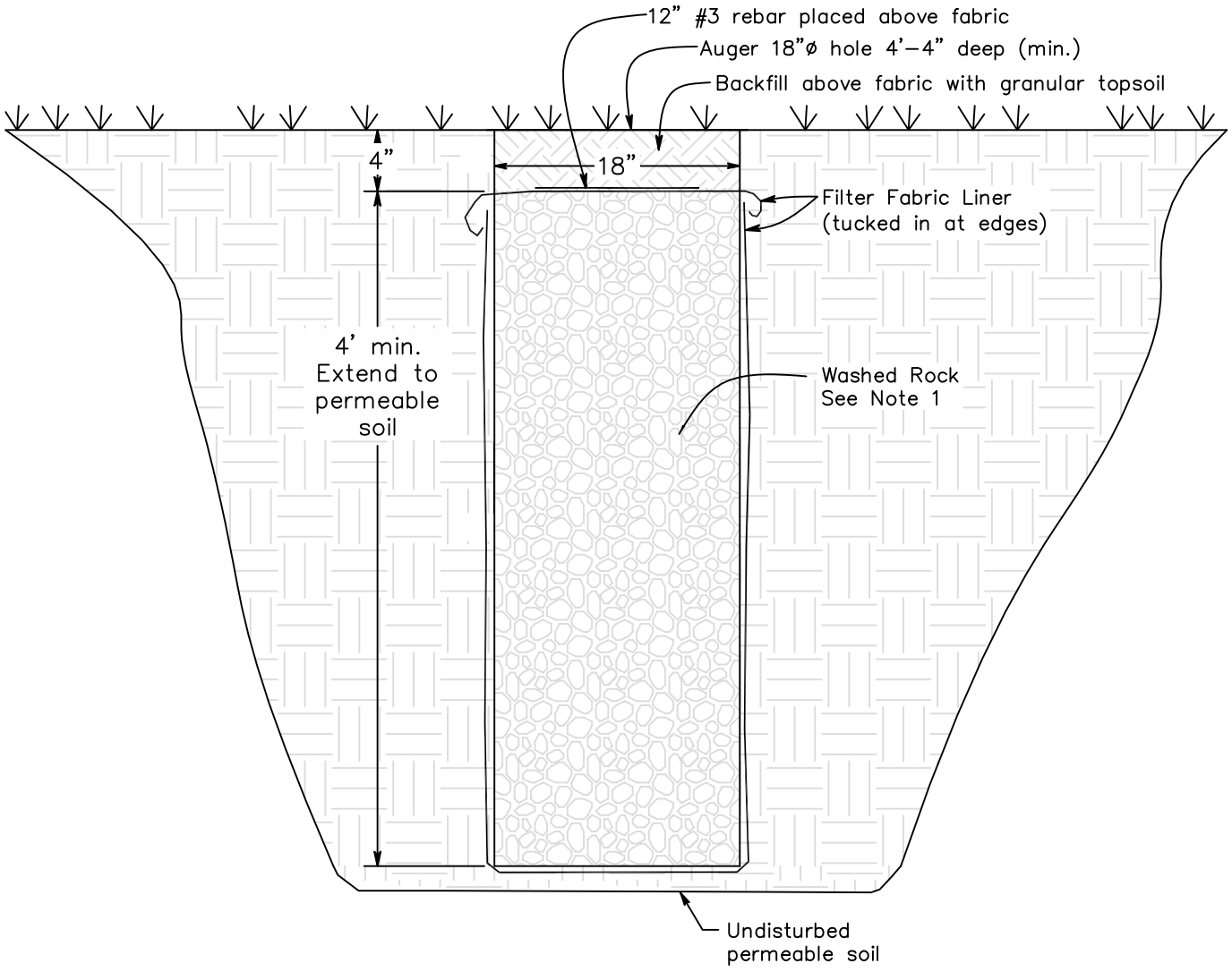
CURB INLET BOX TYPE 2

APPROVED BY:

Chris Bosley — 6/20/18

CITY ENGINEER, PE 10804 — DATE:

DWG NO. SD–10



Not to Scale

GENERAL NOTES

1. Special backfill material for wells shall consist of washed gravel graded from 1" to 3" with a maximum of 5% passing the No. 200 screen, as measured by weight.
2. Space multiple drains 10' apart and 10' from driveways and curb cuts.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

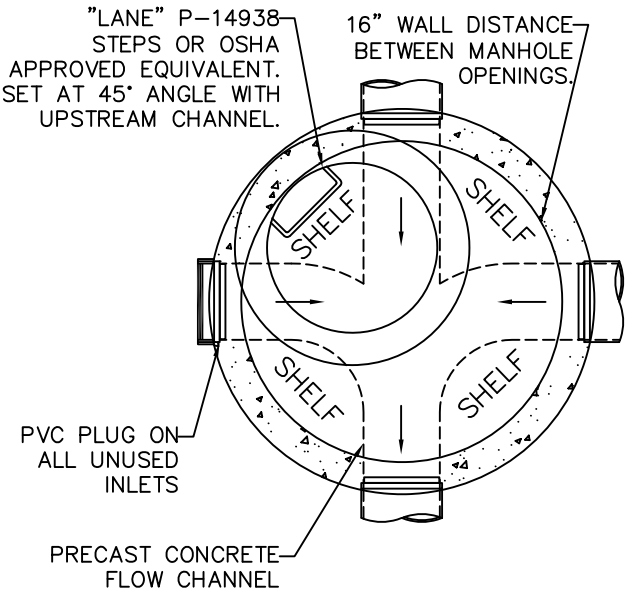
SWALE DRAIN

APPROVED BY:

Chris Bosley — 6/13/18

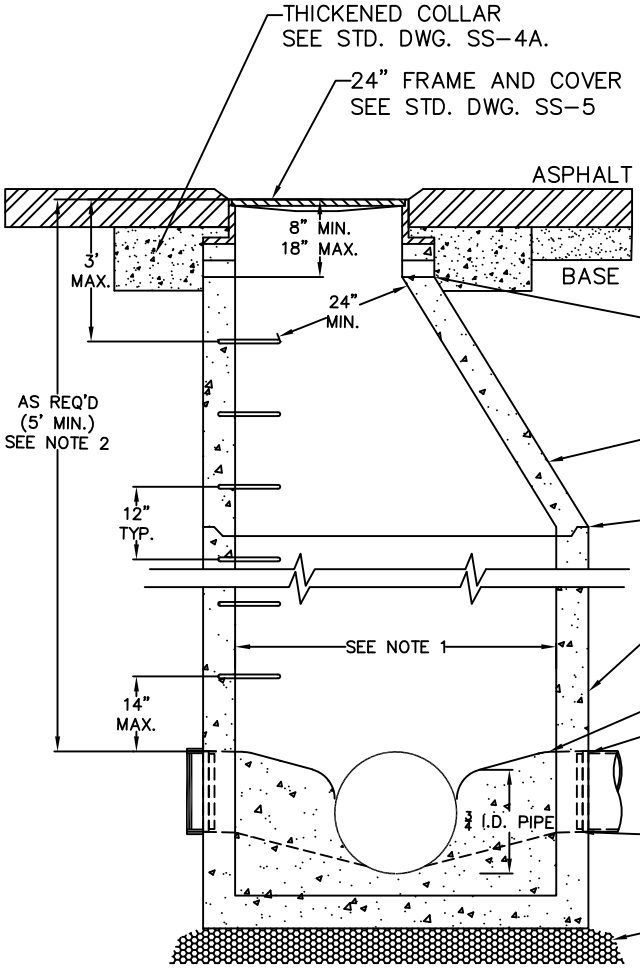
CITY ENGINEER, PE 10804 — DATE:

DWG NO. SD–11



NOTES THIS DETAIL:

1. MANHOLE INSIDE DIAMETERS SHALL BE 48" FOR PIPE DIAMETERS 24" OR LESS, 60" FOR ANY PIPE DIAMETER GREATER THAN 24" AND/OR PIPE DEPTHS GREATER THAN 25'.
2. MANHOLES WITH PIPE DEPTHS LESS THAN 5' REQUIRE PRE-APPROVAL FROM THE WASTEWATER UTILITY.
3. INVERT ELEVATIONS FOR STRAIGHT THROUGH CHANNELS SHALL HAVE 0.10' FALL FROM INLET TO OUTLET. MANHOLES WITH CHANNEL BENDS OR CHANGE IN FLOW DIRECTION SHALL HAVE 0.15' FALL BETWEEN THE INLET AND OUTLET. FIELD VERIFY PRIOR TO BACKFILLING.
4. INLET INVERT ELEVATIONS INTO MANHOLES WITH INTERCEPTOR PIPES (15" DIA.) SHALL MATCH UPSTREAM INTERCEPTOR PIPE CROWN ELEVATIONS.
5. ALL MANHOLE PIPE PENETRATIONS SHALL BE INSTALLED WITH WATERTIGHT PVC SAND COLLARS CAST-IN-PLACE FOR NEW MANHOLES OR CORE & GROUT-IN-PLACE FOR EXISTING MANHOLES. BOOTS ARE NOT ACCEPTABLE.
6. PRIOR TO PAVING, FRAME AND COVER SHALL BE ADJUSTED TO $\frac{1}{4}$" BELOW FINISH SURFACE ELEVATION & SECURED TO CONCRETE GRADE RINGS ON FULLY DEPRESSED RAMNECK OR APPROVED EQUIVALENT. BIODEGRADABLE MATERIALS ARE NOT ACCEPTABLE.
7. PRIOR TO PAVING, THICKENED COLLARS SHALL BE CONSTRUCTED & CURED. WASTEWATER UTILITY INSPECTION IS REQUIRED.



REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

STANDARD SEWER MANHOLE

APPROVED BY:

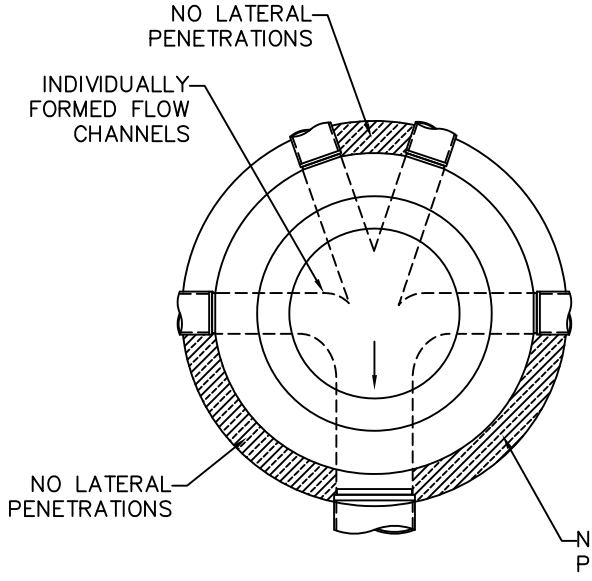
Chris Bosley — 7/2/18

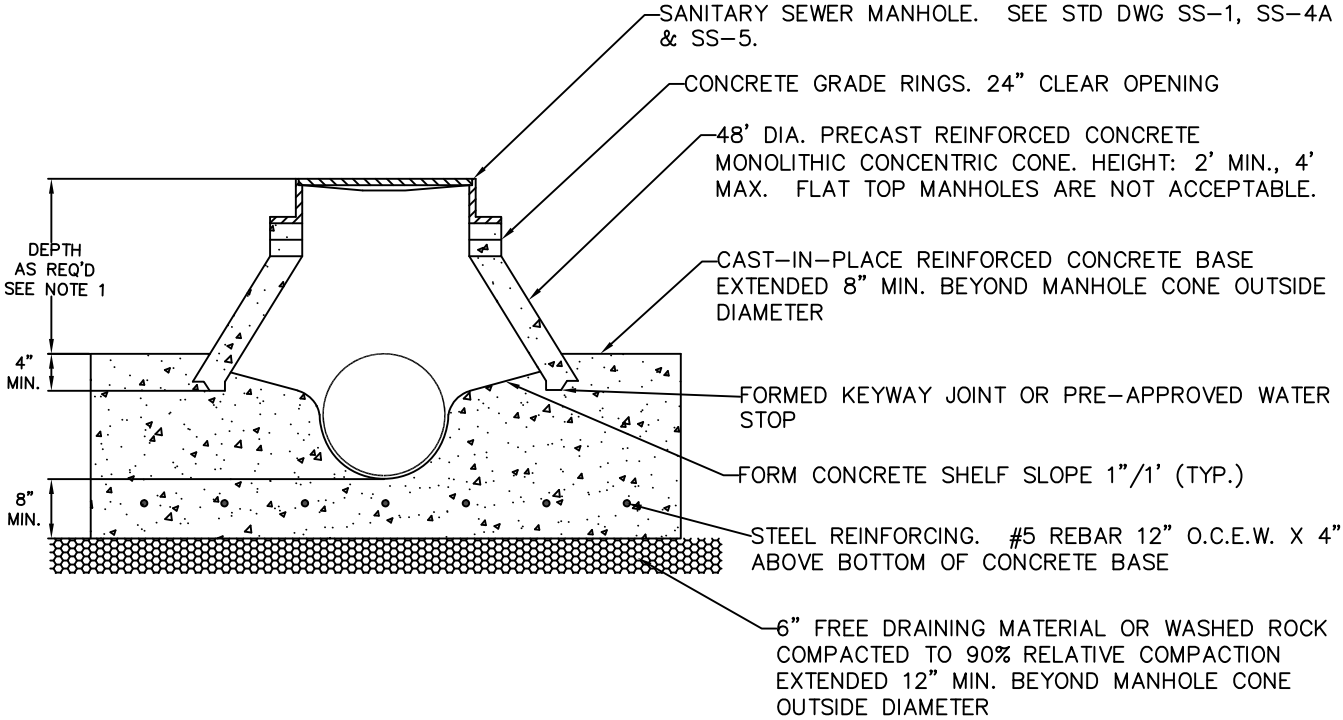
CITY ENGINEER, PE 10804 — DATE:

DWG NO. SS-1

NOTES THIS DETAIL:

1. SHALLOW MANHOLES SHALL BE USED ONLY ON PUBLIC SEWER LINES GREATER THAN 3' AND LESS THAN 5' IN DEPTH AND MUST BE PRE-APPROVED BY THE WASTEWATER UTILITY.
2. ALL MANHOLE PIPE PENETRATIONS SHALL BE INSTALLED WITH WATERTIGHT PVC SAND COLLARS; CAST-IN-PLACE FOR NEW MANHOLES OR CORE & GROUT-IN-PLACE FOR EXISTING MANHOLES. BOOTS ARE NOT ACCEPTABLE.
3. PRIOR TO BACKFILL, CAST-IN-PLACE REINFORCED CONCRETE BASE SHALL BE CONSTRUCTED & CURED. WASTEWATER UTILITY INSPECTION IS REQUIRED.
4. COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 3000 PSI MINIMUM.
5. MANHOLE STEPS ARE NOT ACCEPTABLE.
6. MANHOLES LOCATED IN CUL-DE-SACS, STREET KNUCKLES OR TERMINUS MANHOLES MAY HAVE LATERAL PENETRATIONS PRE-APPROVED BY THE WASTEWATER UTILITY AS SHOWN HEREIN.
7. ALL INLET PIPE PENETRATIONS ARE REQUIRED TO MATCH PIPE CROWN ELEVATIONS TO OUTLET PIPE CROWN ELEVATION AND HAVE INDIVIDUALLY FORMED FLOW CHANNELS.





REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

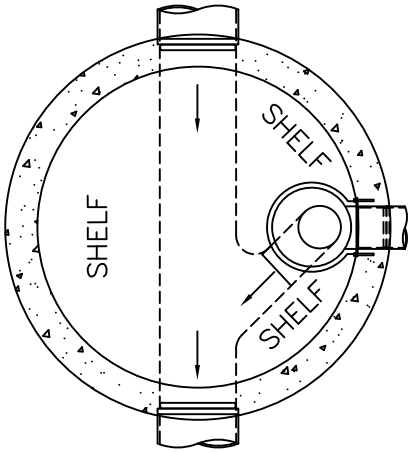
SHALLOW MANHOLE TERMINUS/LATERALS

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

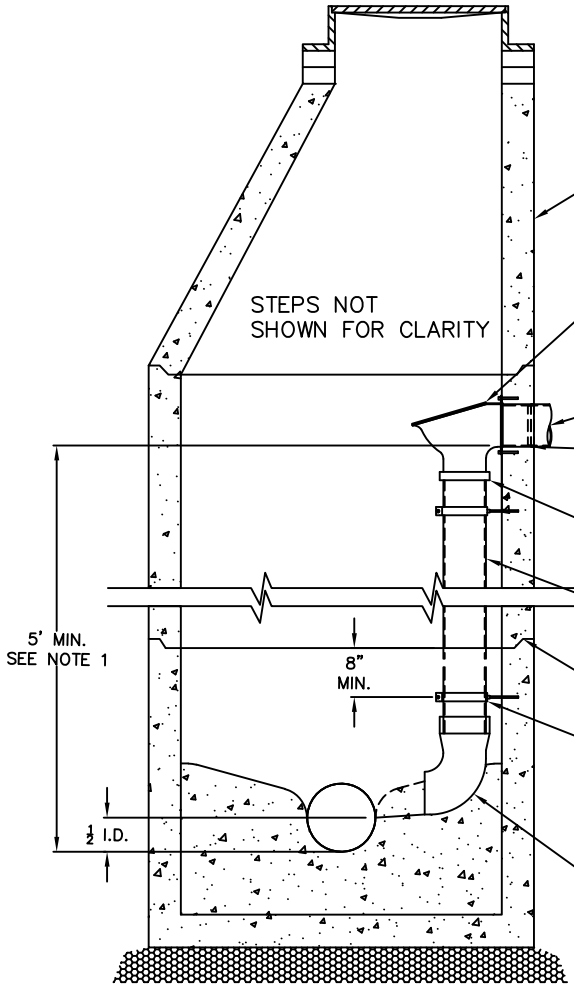
DATE: 7/2/18

DWG NO. SS-1A



NOTES THIS DETAIL:

1. INTERIOR DROP MANHOLES WILL ONLY BE ALLOWED FOR GRAVITY SEWER PIPES (NON–PRESSURIZED FLOW) REQUIRING VERTICAL DROP STRUCTURES FIVE FEET (5') OR GREATER.
2. ALL STAINLESS STEEL ADJUSTABLE BRACKETS SHALL BE PLACED 8" MINIMUM SEPARATION FROM ANY JOINT OR OTHER PIPE PENETRATIONS WITHIN MANHOLE.
3. ORIENTATE DROP BOWL AND STANDPIPE STRUCTURE PLACEMENT TO AVOID OBSTRUCTION WITH MANHOLE STEPS. ROTATE MANHOLE CONE IF NECESSARY.
4. ALL FASTENING HARDWARE SHALL BE STAINLESS STEEL 300 SERIES OR BETTER.
5. CHANNEL AT BASE OF DROP STRUCTURE SHALL BE FORMED WITH 0.15' FALL INTO CONCRETE BENCH AND MATCH NEW OUTLET CHANNEL INVERT TO SPRING LINE OF THROUGH CHANNEL.
6. EXTERNAL DROP MANHOLES ARE NOT ACCEPTABLE.



SANITARY SEWER MANHOLE. SEE STD DWG. SS–1, SS–4A AND SS–5.

RELINER® INSIDE DROP BOWL OR APPROVED EQUIVALENT SECURED TO MANHOLE INSIDE WALL WITH STAINLESS STEEL BOLTS PER THE MANUFACTURER'S SPECIFICATIONS. SIZE TO MATCH SEWER PIPE.

SEWER PIPE. TRIM PIPE TO 2" MAX. V–NOTCH BOTTOM EDGE.

PVC SAND COLLAR (GASKET) PIPE PENETRATION. CAST–IN–PLACE FOR NEW MANHOLES. CORED AND GROUTED IN PLACE FOR EXISTING MANHOLES. BOOTS ARE NOT ACCEPTABLE.

FERNCO FLEXIBLE COUPLING OR APPROVED EQUIVALENT.

PVC SCHEDULE 40 STAND PIPE. SIZED PER WASTEWATER UTILITY DIRECTIVES. USE WHOLE PIPE SECTION WHENEVER POSSIBLE; OTHERWISE GLUE PIPE SECTIONS TOGETHER WITH COUPLER FITTINGS.

CONCRETE MANHOLE JOINT

STAINLESS STEEL STRAPS WITH ADJUSTABLE SST BRACKETS SECURED TO MANHOLE INSIDE WALL WITH STAINLESS STEEL BOLTS. STRAPS AT 4' INTERVALS OR MINIMUM OF TWO (2) PER WHOLE PIPE SECTION (TYP.)

PVC SCHEDULE 40 ELBOW BELL & SPIGOT GLUED AND EMBEDDED INTO NEW CONCRETE CHANNEL. SIZED TO MATCH SEWER STAND PIPE. 0.15' FALL IN NEW DROP CHANNEL.

REVISION	APPROVED	DATE

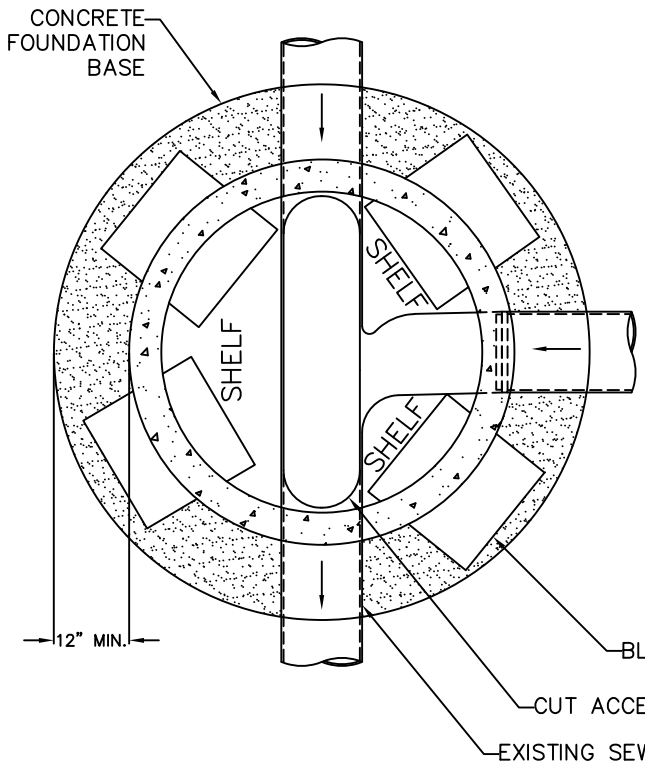
CITY OF COEUR d'ALENE STANDARD DRAWING

INTERNAL DROP SEWER MANHOLE

APPROVED BY:

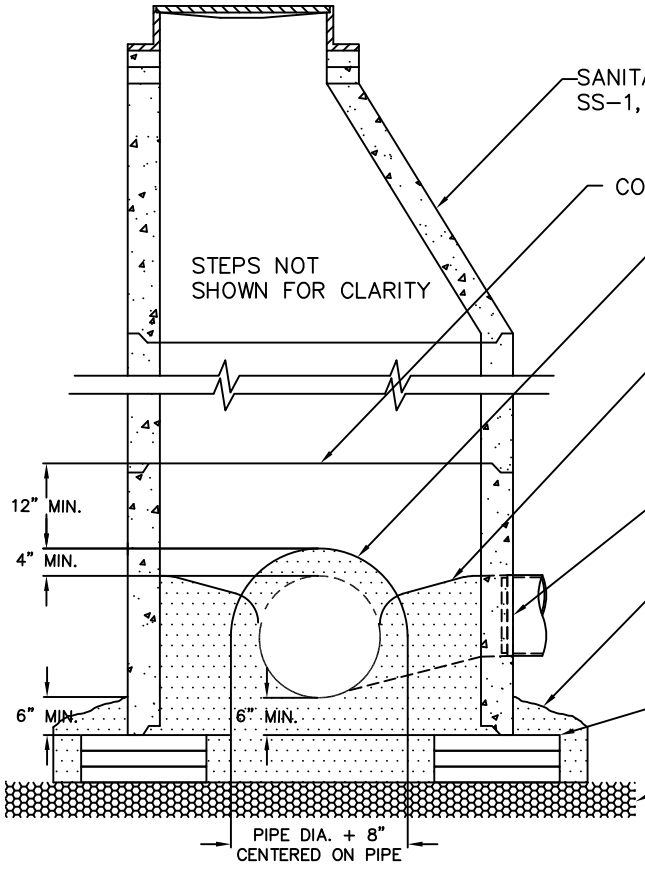
Chris Bosley — CITY ENGINEER, PE 10804 — DATE: 7/2/18

DWG NO. SS–2



NOTES THIS DETAIL:

1. DOGHOUSE MANHOLES ARE ONLY USED WHEN PLACING A NEW MANHOLE DIRECTLY OVER AN EXISTING ACTIVE SEWER PIPE AND MUST BE PRE-APPROVED BY THE WASTEWATER UTILITY.
2. DOGHOUSE MANHOLE SHALL BE CENTERED OVER EXISTING SEWER PIPE AND MUST MAINTAIN A 24" MINIMUM SEPARATION FROM THE NEAREST PIPE JOINT OR FITTING.
3. PRIOR TO CUTTING AN ACCESS OPENING INTO THE EXISTING SEWER PIPE, A PASSING HYDROSTATIC WATER TEST MUST BE APPROVED BY THE WASTEWATER UTILITY. HYDROSTATIC TEST SHALL CONFORM TO I.S.P.W.C. SPECIFICATIONS (LATEST REVISION).
4. CUT ACCESS OPENING INTO TOP OF EXISTING SEWER PIPE BOTH SIDES TO MATCH FLUSH WITH MANHOLE SHELF. REMOVE ALL SHARP OR IRREGULAR EDGES AND DISPOSE OF REMOVED SECTION OF PIPE. WASTEWATER UTILITY INSPECTION IS REQUIRED.



REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

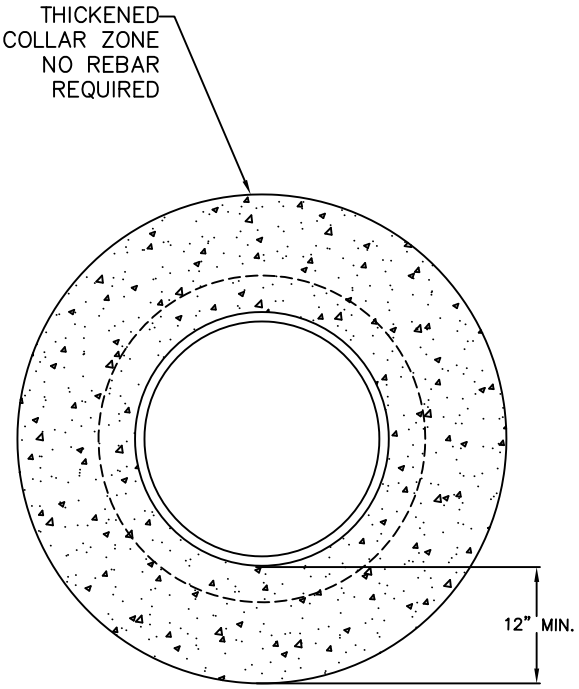
DOGHOUSE MANHOLE

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

7/2/18 — DATE:

DWG NO. SS-3



NOTES THIS DETAIL:

1. THICKENED COLLARS SHALL BE INSTALLED AROUND ALL SEWER MANHOLES, CLEANOUTS AND VALVE BOX STRUCTURES UTILIZING ANY ONE OF THE FOLLOWING MATERIALS:

   A. CONCRETE. MINIMUM 4000 PSI COMPRESSIVE STRENGTH. MONOLITHIC POUR WITH A MINIMUM 24–HOUR CURE TIME PRIOR TO PAVEMENT.

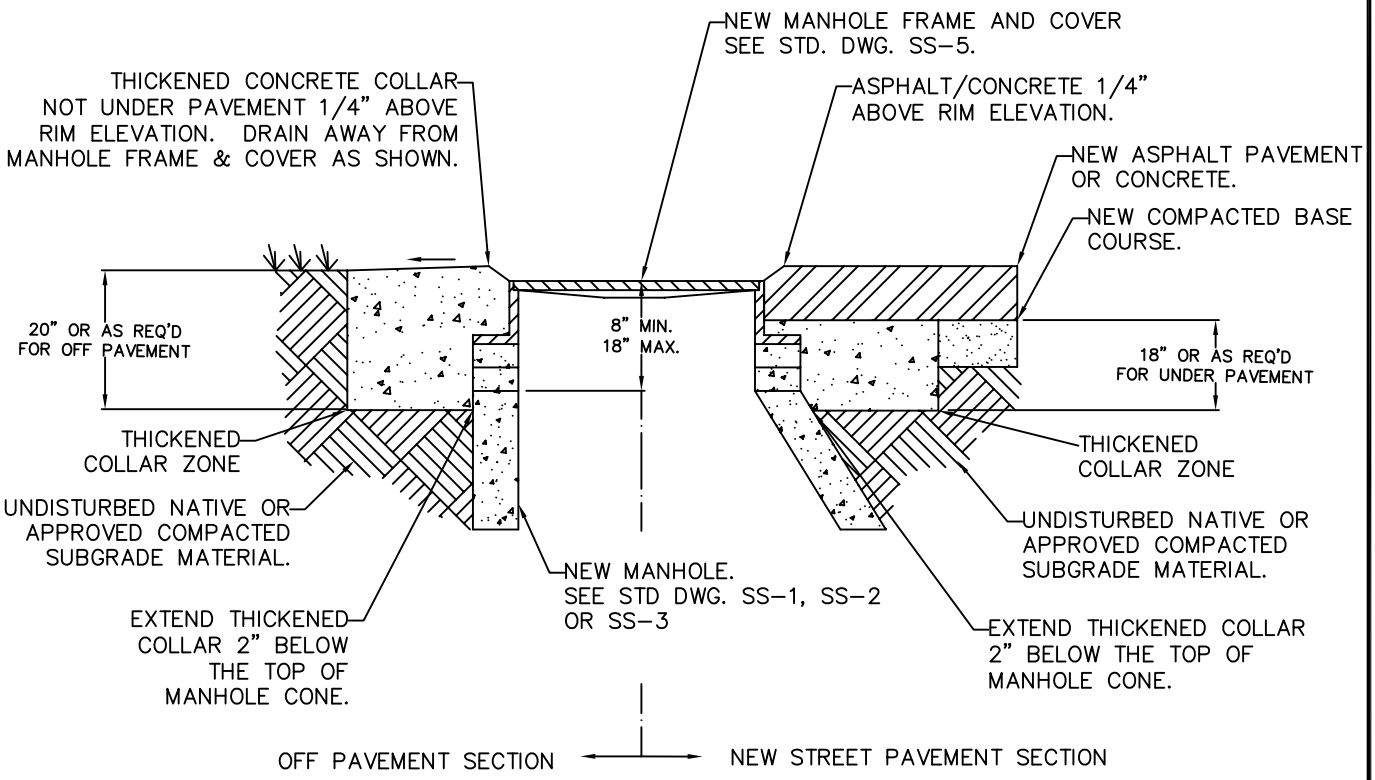
   B. CONTROL DENSITY FILL "CDF". 3 SACK MIX WITH A MINIMUM 24–HOUR CURE TIME PRIOR TO PAVEMENT.

   C. ASPHALT. SAME HOT MIX DESIGN AS ROAD PLACED IN 2" LIFTS AND COMPACTED WITH A MECHANICAL TAMPER PRIOR TO PAVEMENT.

2. NO NATIVE, SUB–GRADE OR BASE COURSE MATERIAL MAY BE BACKFILLED AND COMPACTED WITHIN EXCAVATED THICKENED COLLAR ZONE. ALL DISTURBED MATERIAL SHALL BE REMOVED, HAULED AND DISPOSED OF OFFSITE.

3. ALL THICKENED COLLARS SHALL BE COMPLETED AND INSPECTED BY THE WASTEWATER UTILITY PRIOR TO PAVING. PROVIDE 48–HOUR NOTICE.

4. SEAL SAW CUT LINE & OUTSIDE MANHOLE FRAME LINE W/ CRAFCO PAVEMENT JOINT ADHESIVE OR APPROVED EQUIVALENT.



REVISION	APPROVED	DATE

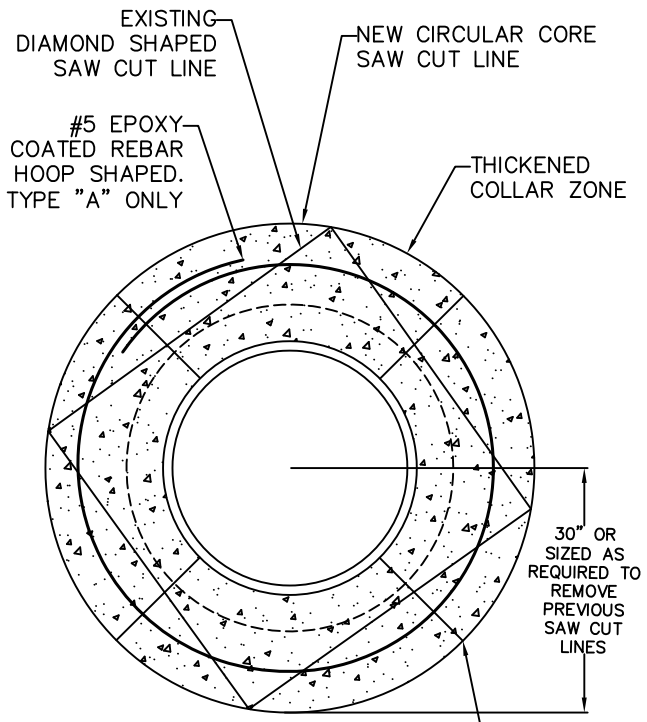
CITY OF COEUR d'ALENE STANDARD DRAWING

NEW MANHOLE THICKENED COLLAR

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804 — 5/16/18 DATE:

DWG NO. SS–4A



NOTES THIS DETAIL:

1. TYPE "A" THICKENED COLLARS SHALL BE CONSTRUCTED UTILIZING EITHER ONE OF THE FOLLOWING:

   A. MONOLITHIC POURED REINFORCED CONCRETE WITH A MINIMUM 4000 PSI COMPRESSIVE STRENGTH AND STAINED BLACK WITH BROOM FINISH AND CONTROL JOINTS. ALLOW 24–HOUR CURE TIME OR;

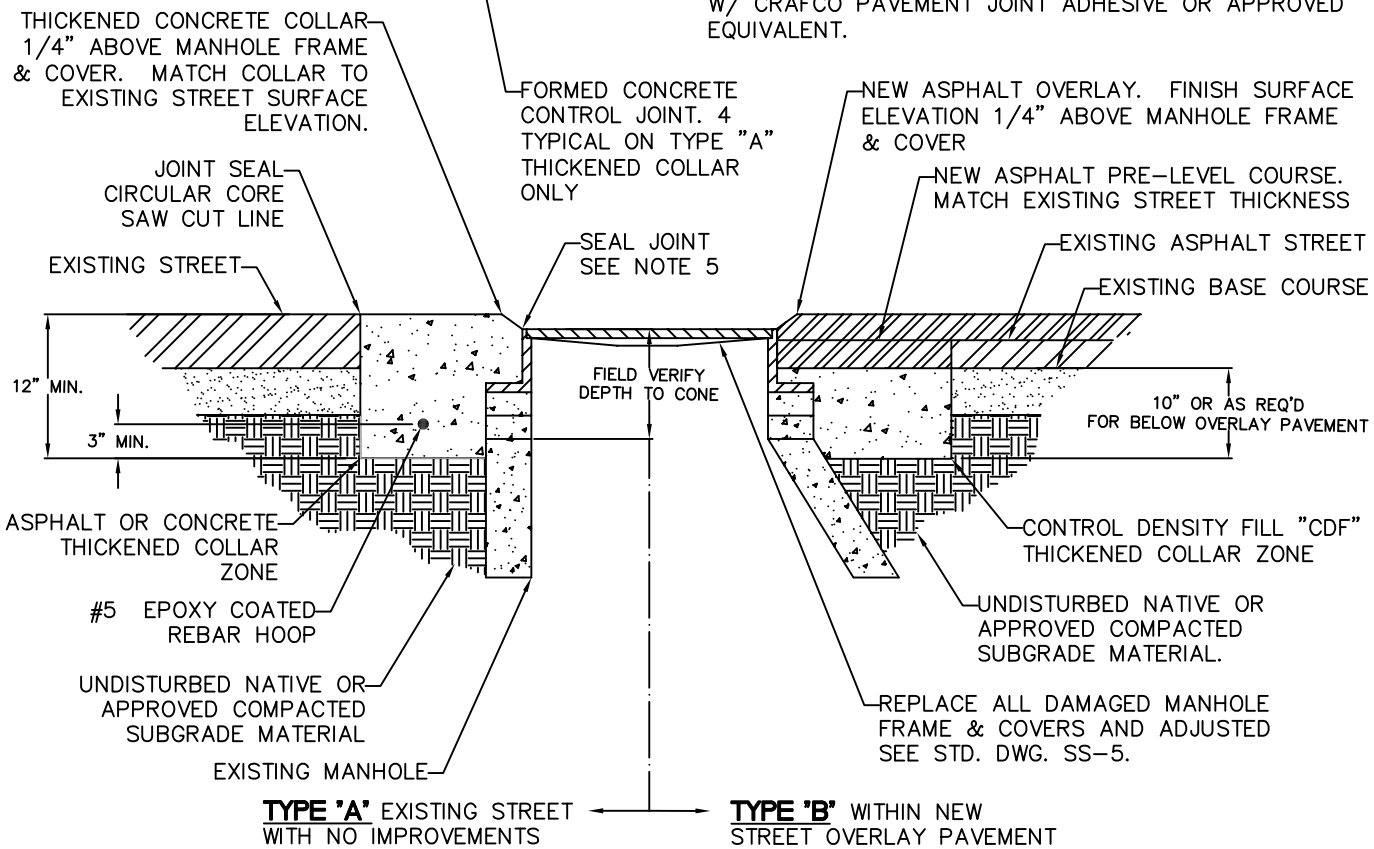
   B. PRE–APPROVED HOT ASPHALT PATCH MIX PLACED AND COMPACTED IN MINIMUM 2" LIFTS. COMPACTION TESTS ARE REQUIRED FOR CITY ACCEPTANCE.

2. TYPE "B" THICKENED COLLARS SHALL BE CONSTRUCTED WITH CONTROL DENSITY FILL "CDF". 3 SACK MIX WITH A MINIMUM 24–HOUR CURE TIME WITH CITY INSPECTION PRIOR TO STREET OVERLAY PAVEMENT.

3. NO NATIVE, SUB–GRADE OR BASE COURSE MATERIAL MAY BE BACKFILLED AND COMPACTED WITHIN EXCAVATED THICKENED COLLAR ZONE. ALL DISTURBED MATERIAL SHALL BE REMOVED, HAULED AND DISPOSED OF OFFSITE.

4. ALL THICKENED COLLARS SHALL BE COMPLETED AND INSPECTED BY THE WASTEWATER UTILITY PRIOR TO PAVING. PROVIDE 48–HOUR NOTICE.

5. SEAL SAW CUT LINE & OUTSIDE MANHOLE FRAME LINE W/ CRAFCO PAVEMENT JOINT ADHESIVE OR APPROVED EQUIVALENT.



REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

EXISTING MANHOLE THICKENED COLLAR

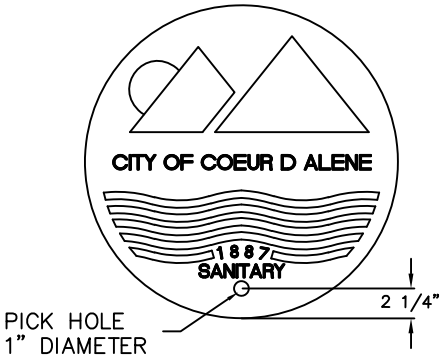
APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

7/2/18
DATE:

DWG NO. SS–4B

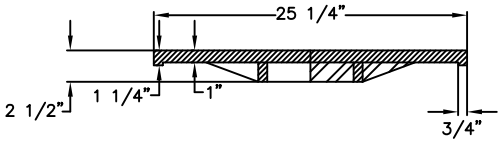
PRIVATE SEWER COVER



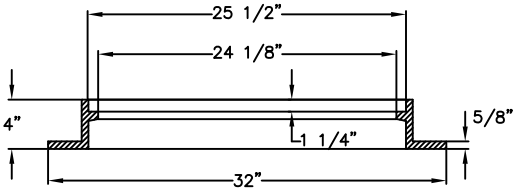
PUBLIC SEWER COVER

NOTES THIS DETAIL:

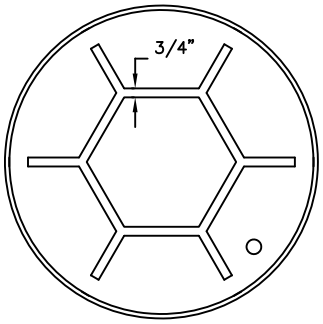
1. ALL LETTERING & ARTWORK SHALL BE FLUSH WITH FRAME RIM/LIP MOLDED INTO THE TOP OF THE COVER.
2. FRAME SHALL BE GRAY IRON CONFORMING TO A.S.T.M. A48–90, GRADE 30. COVER SHALL BE DUCTILE IRON CONFORMING TO A.S.T.M. A536–84, CLASS 80–50–06.
3. FIT TOLERANCES SHALL BE < 1/8" ±.
4. WELDED FRAME & COVERS ARE NOT ACCEPTABLE.
5. ALL FRAME & COVERS SET ON MANHOLES IN DEPRESSION AREAS SUBJECTED TO STORM WATER PONDING AND/OR RUNOFF SHALL BE WATERTIGHT AND INSTALLED WITH RAINGUARD® INFLOW PAN OR APPROVED EQUIVALENT.
6. INSTALLATION OF FRAME & COVERS WITHIN CURB & GUTTER, VALLEY GUTTERS, OR SWALES ARE NOT ACCEPTABLE.



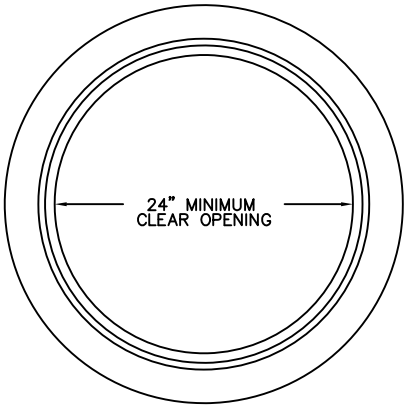
COVER SECTION VIEW



FRAME SECTION VIEW



BOTTOM OF COVER



FRAME

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

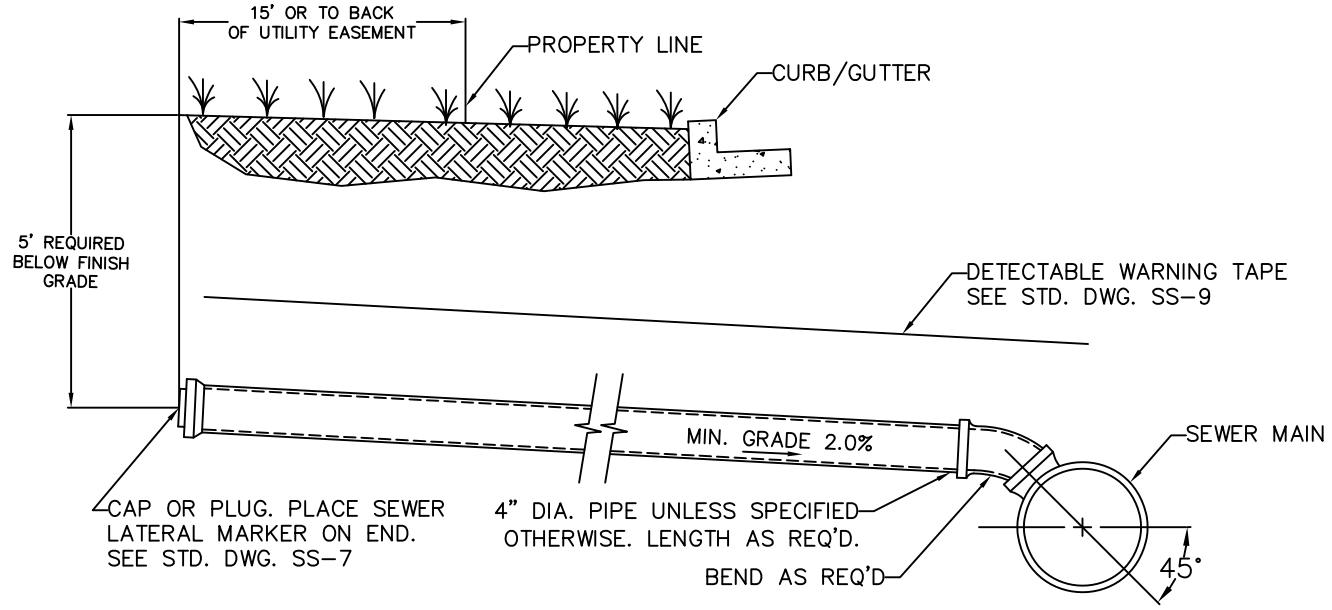
MANHOLE FRAME AND COVER

APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

6/18/18
DATE:

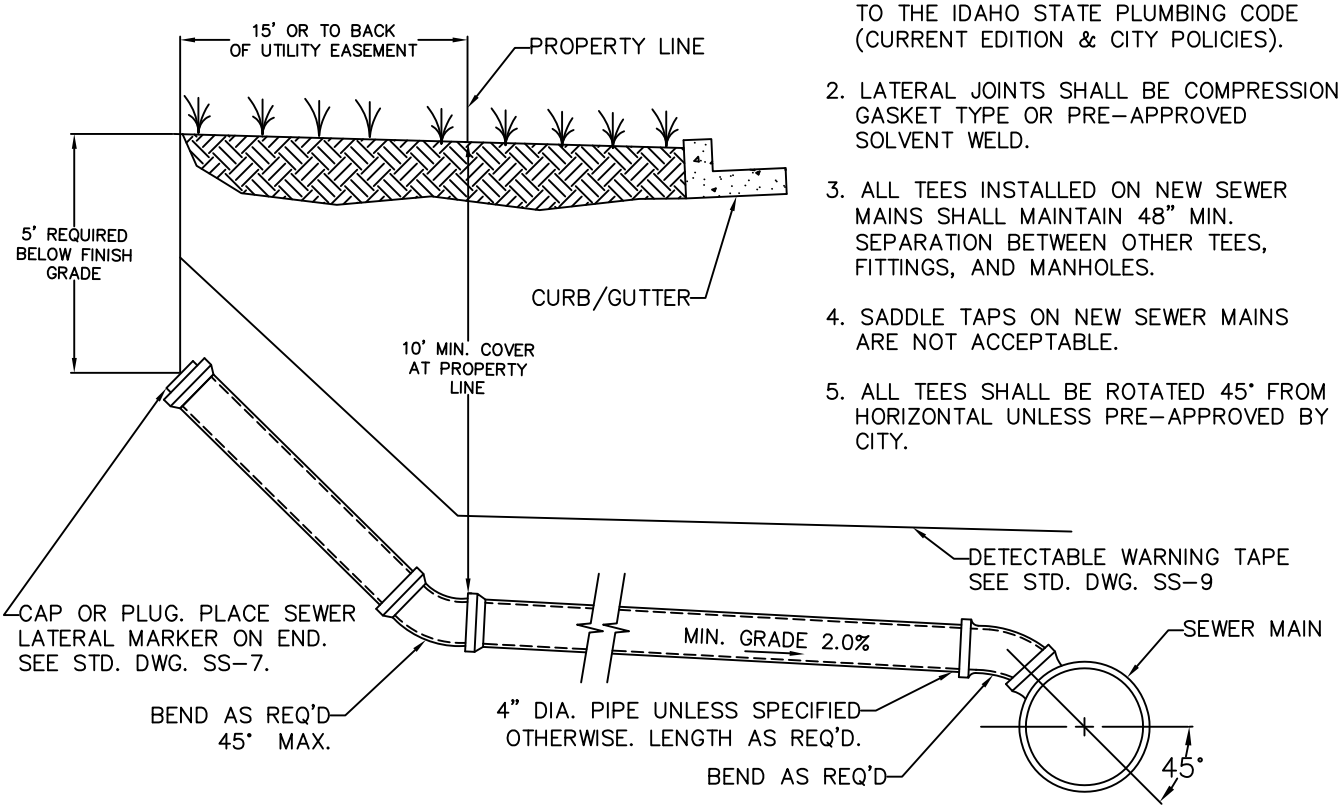
DWG NO. SS–5



TYPE "A"
STANDARD LATERAL CONNECTION

NOTES THIS DETAIL:

1. ALL SEWER LATERALS SHALL CONFORM TO THE IDAHO STATE PLUMBING CODE (CURRENT EDITION & CITY POLICIES).
2. LATERAL JOINTS SHALL BE COMPRESSION GASKET TYPE OR PRE-APPROVED SOLVENT WELD.
3. ALL TEES INSTALLED ON NEW SEWER MAINS SHALL MAINTAIN 48" MIN. SEPARATION BETWEEN OTHER TEES, FITTINGS, AND MANHOLES.
4. SADDLE TAPS ON NEW SEWER MAINS ARE NOT ACCEPTABLE.
5. ALL TEES SHALL BE ROTATED 45° FROM HORIZONTAL UNLESS PRE-APPROVED BY CITY.



TYPE "B"
DEEP LATERAL CONNECTION

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

SEWER SERVICE LATERALS

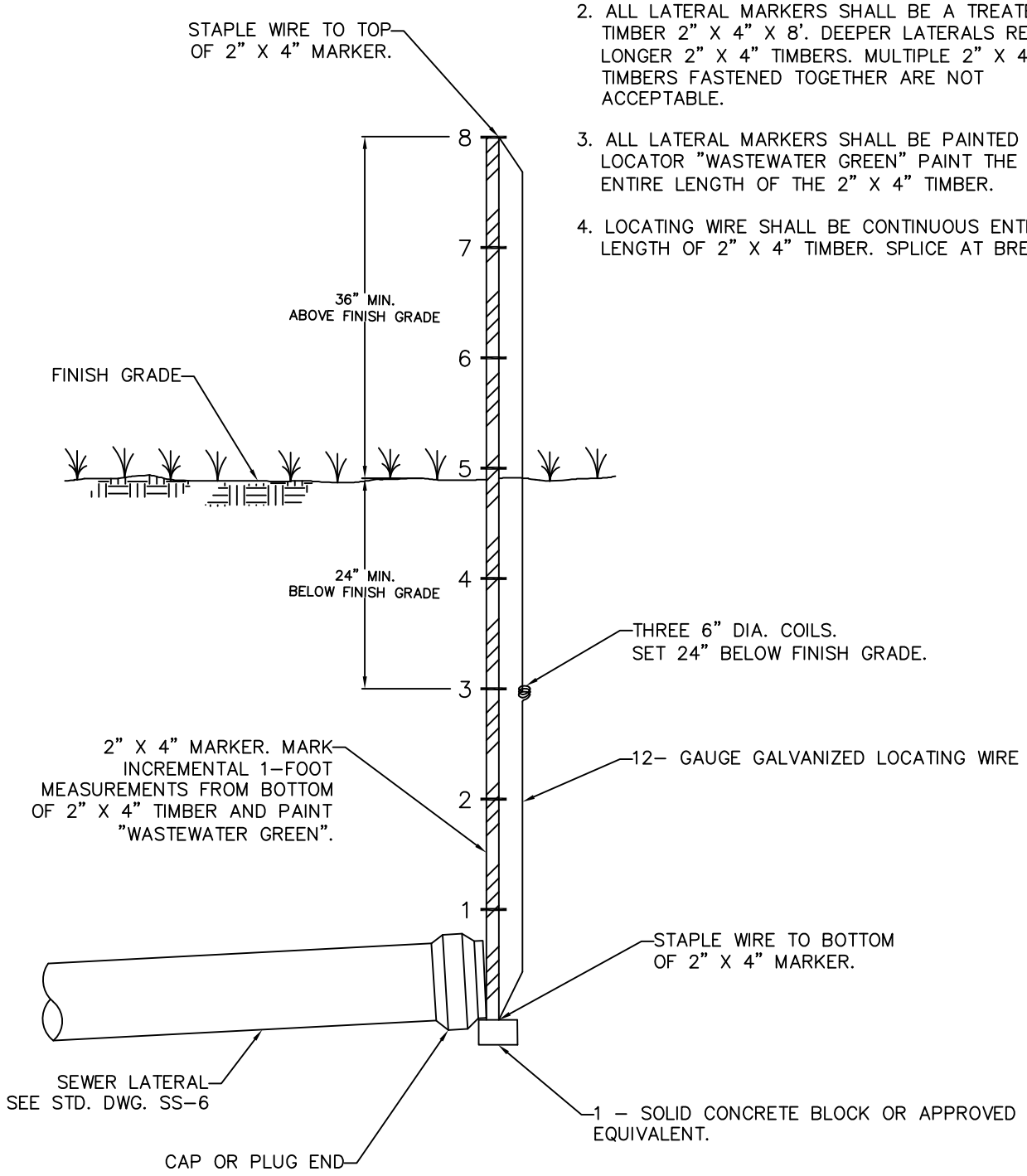
APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804 — 7/2/18 DATE:

DWG NO. SS-6

NOTES THIS DETAIL:

1. ALL LATERAL MARKERS SHALL BE SET VERTICALLY AGAINST COMPACTED BACKFILL OR UNDISTURBED NATIVE GROUND MATERIAL.
2. ALL LATERAL MARKERS SHALL BE A TREATED TIMBER 2" X 4" X 8'. DEEPER LATERALS REQUIRE LONGER 2" X 4" TIMBERS. MULTIPLE 2" X 4" TIMBERS FASTENED TOGETHER ARE NOT ACCEPTABLE.
3. ALL LATERAL MARKERS SHALL BE PAINTED WITH LOCATOR "WASTEWATER GREEN" PAINT THE ENTIRE LENGTH OF THE 2" X 4" TIMBER.
4. LOCATING WIRE SHALL BE CONTINUOUS ENTIRE LENGTH OF 2" X 4" TIMBER. SPLICE AT BREAKS.



REVISION	APPROVED	DATE

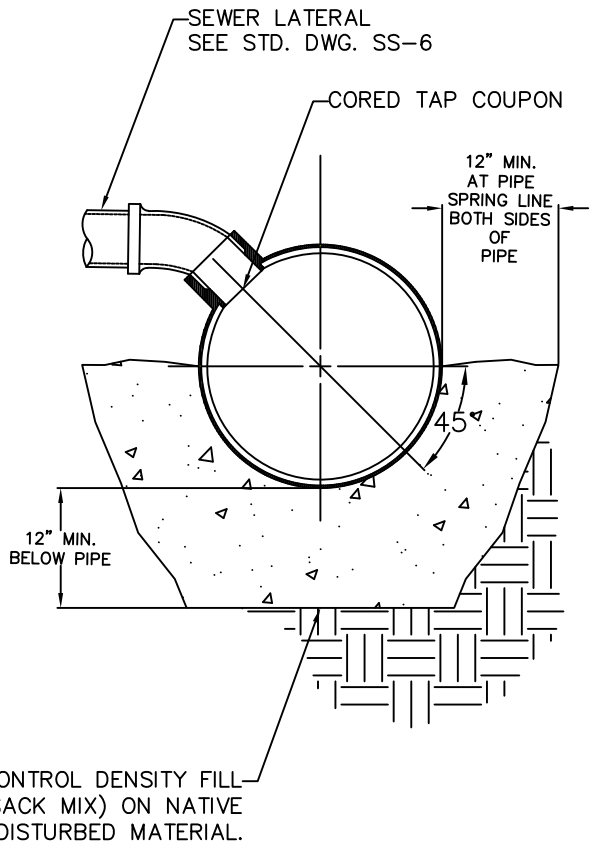
CITY OF COEUR d'ALENE STANDARD DRAWING

SEWER SERVICE LATERAL MARKERS

APPROVED BY:

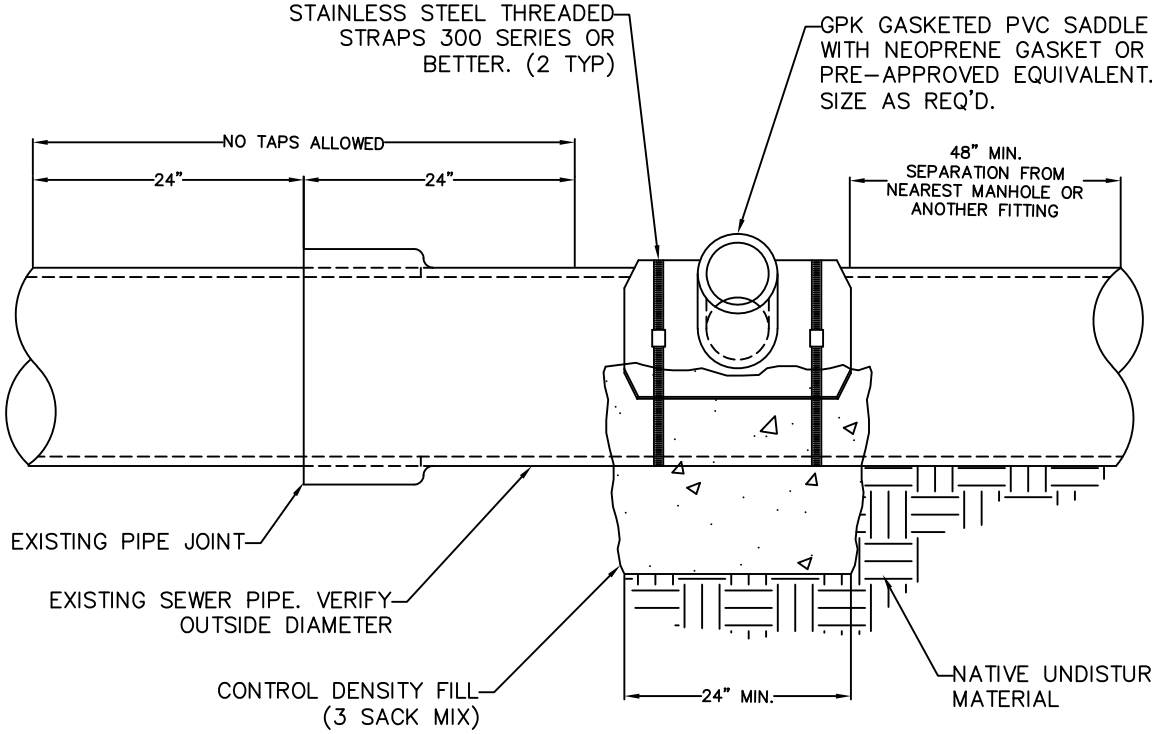
Chris Bosley — CITY ENGINEER, PE 10804 — 5/16/18 DATE:

DWG NO. SS-7



NOTES THIS DETAIL:

1. TAP SADDLES ARE ONLY USED WHEN CONNECTING A NEW SEWER LATERAL TO AN EXISTING SEWER MAIN AND MUST BE PRE-APPROVED BY THE CITY.
2. ALL SADDLES SHALL BE SIZED BASED ON THE OUTSIDE DIAMETER OF THE SEWER MAIN OR PLASTIC LINED PIPE (CIPP).
3. TWO (2) STAINLESS STEEL (SERIES 300 OR BETTER) THREADED STRAPS CAPABLE OF 60 LBS. TORQUE SHALL SECURE SADDLE TO SEWER MAIN. GLUED OR CEMENTED SADDLES ARE NOT ACCEPTABLE.
4. UNLESS PRE-APPROVED BY THE CITY, ALL TAPS SHALL BE ORIENTATED AT 45° ABOVE SEWER MAIN SPRING LINE (ABOVE HORIZONTAL). TAPS ON PIPE CROWN OR SPRING LINE ARE NOT ACCEPTABLE.
5. ALL TAPS TO EXISTING SEWER MAIN SHALL BE CLEAN CUT BY DRILLING OR CORING METHOD ONLY. NO "BREAK-IN" OR HAMMERING TAPS WILL BE ALLOWED. PRESENT CORED TAP COUPON FOR WASTEWATER UTILITY INSPECTION.
6. WRAP EXISTING SEWER MAIN AND NEWLY INSTALLED SADDLE WITH PLASTIC PRIOR TO PLACING CONTROL DENSITY FILL (CDF).
7. IF TAPPING A NEW SADDLE ONTO A CIPP LINED SEWER MAIN, GENTLY DEMO AND REMOVE CONCRETE/CLAY HOST PIPE AND ATTACH NEW SADDLE DIRECTLY ONTO THE CIPP PIPE.



REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

SEWER TAPPING SADDLE

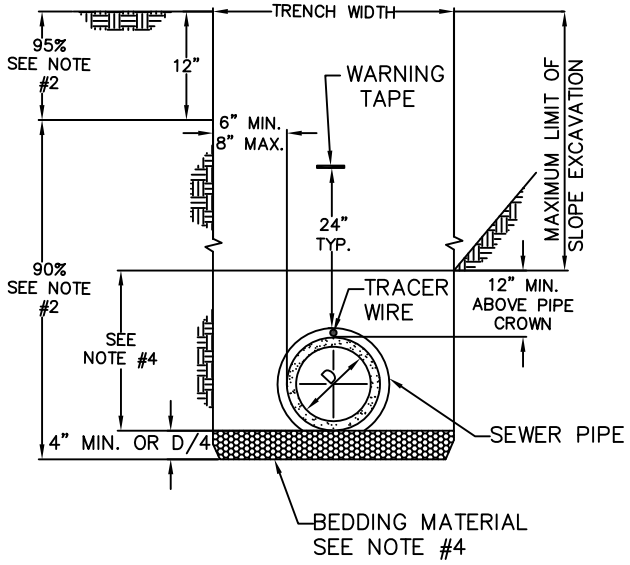
APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804 — DATE: 7/2/18

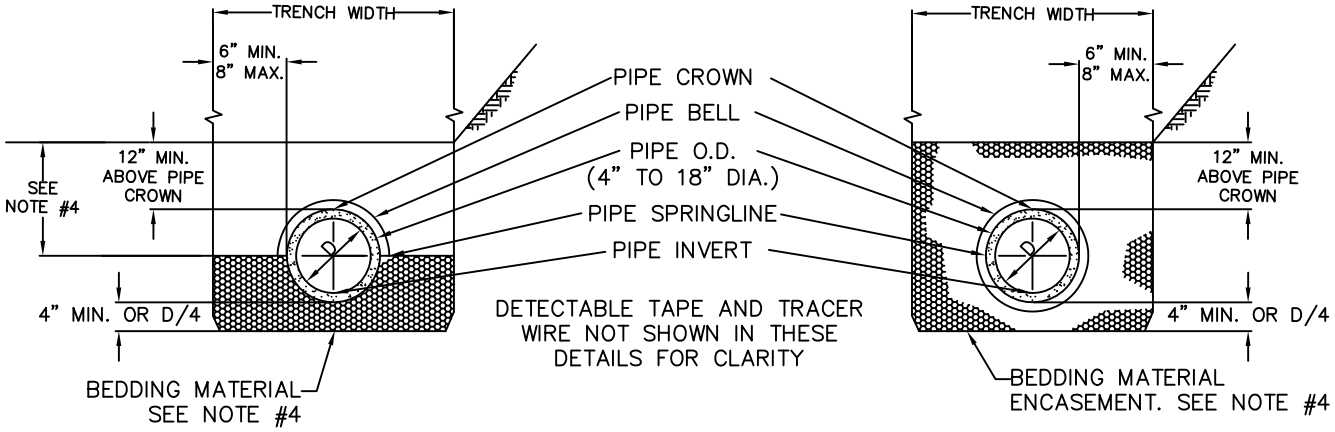
DWG NO. SS-8

NOTES THIS DETAIL:

1. FOR TRENCHING WITHIN IMPROVED STREETS, SEE STD. DWG. M–11 FOR TRENCH RESURFACING SPECIFICATIONS.
2. MINIMUM RELATIVE COMPACTION USING A MODIFIED PROCTOR (ASTM D–1557). SUBMIT ALL COMPACTION TEST REPORTS TO CITY.
3. UNLESS PRE–APPROVED BY THE CITY, MINIMUM COVER OVER THE TOP OF ALL NEWLY INSTALLED PIPE TO FINISH GRADE SHALL BE 5 FEET (MIN.).
4. BEDDING MATERIAL SHALL BE SAND, GRAVEL, CRUSHED AGGREGATE, OR NATIVE GRANULAR MATERIAL HAVING A SAND EQUIVALENT NO LESS THAN 12% BY WEIGHT PASSING A #200 SCREEN AND 100% PASSING A #4 SCREEN.
5. WHEN APPLICABLE (UNIQUE SEWERS & FORCE MAINS) CONTINUOUS #10 SOLID T.H.H.N. TRACER WIRE SHALL BE TAPED DIRECTLY TO TOP OF PIPE. ALL BREAKS SHALL BE SPLICED WITH 3M SPLICE KIT OR EQUIVALENT "WATERTIGHT" SPLICE KIT. TRACER WIRE SHALL EXTEND TO FINISH GRADE INSIDE ALL LOCATING WIRE BOXES AND SEWER STRUCTURES. SEE STD DWG SS–10.
6. DETECTABLE WARNING TAPE MARKED "SEWER LINE BELOW" SHALL EXTEND CONTINUOUSLY 24" ABOVE ALL NEWLY INSTALLED SEWER LINES INCLUDING LATERALS.



TYPE A TRENCH
STANDARD INSTALLATION FOR NATIVE INSITU SANDY MATERIAL



TYPE B TRENCH
REQUIRED WHEN HARD ROCK OR GRAVEL IS WITHIN 6" OF PIPE INVERT, BUT BELOW SPRINGLINE.

TYPE C TRENCH
ROCK ENVELOPE REQUIRED WHEN HARD ROCK OR GRAVEL IS AT AND/OR ABOVE PIPE SPRINGLINE

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

SEWER TRENCH & BACKFILL DETAIL

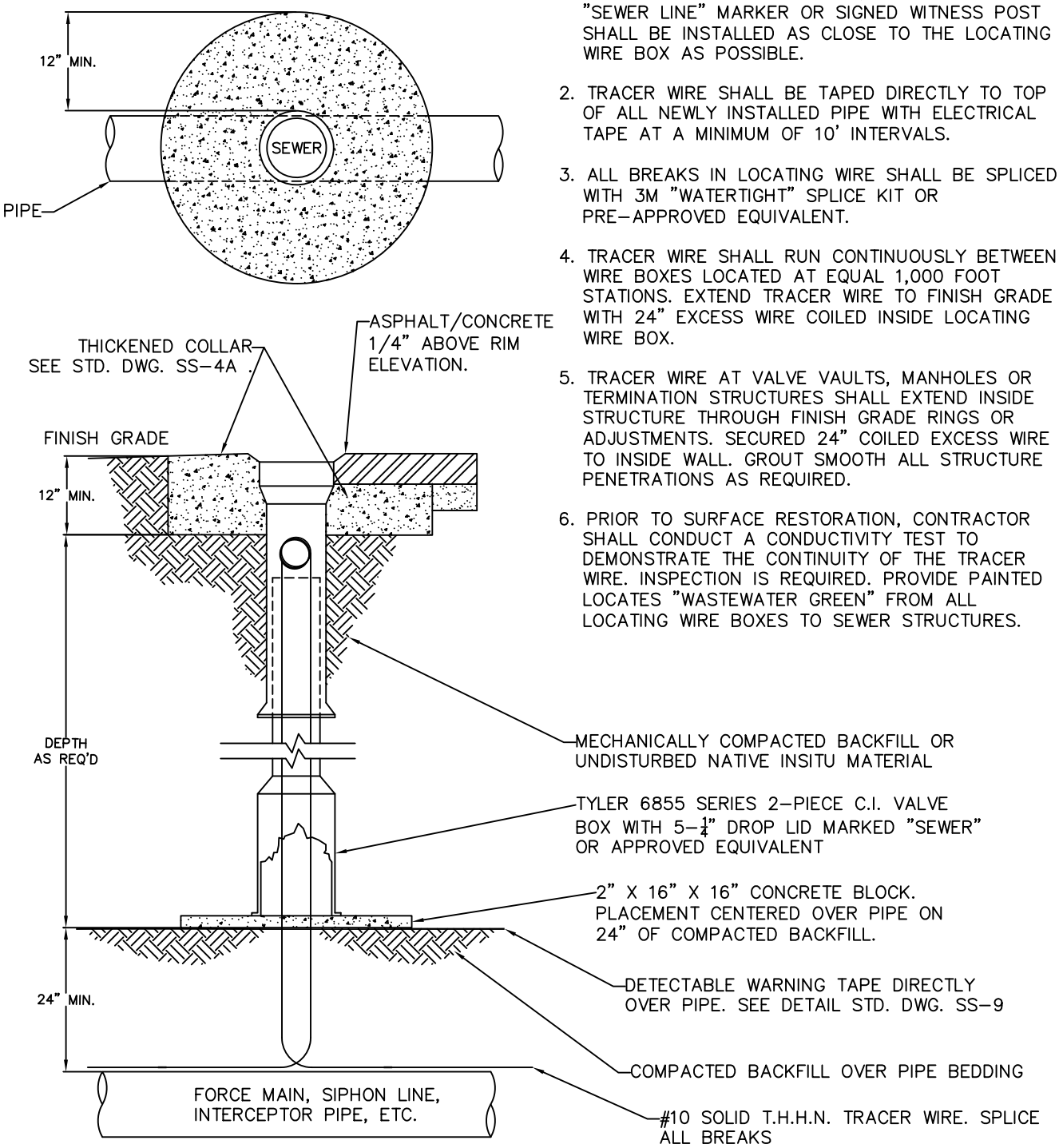
APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804 — 7/2/18 DATE:

DWG NO. SS–9

NOTES THIS DETAIL:

1. UNLESS SPECIFIED OTHERWISE, AN ABOVE GROUND "SEWER LINE" MARKER OR SIGNED WITNESS POST SHALL BE INSTALLED AS CLOSE TO THE LOCATING WIRE BOX AS POSSIBLE.
2. TRACER WIRE SHALL BE TAPED DIRECTLY TO TOP OF ALL NEWLY INSTALLED PIPE WITH ELECTRICAL TAPE AT A MINIMUM OF 10' INTERVALS.
3. ALL BREAKS IN LOCATING WIRE SHALL BE SPLICED WITH 3M "WATERTIGHT" SPLICE KIT OR PRE-APPROVED EQUIVALENT.
4. TRACER WIRE SHALL RUN CONTINUOUSLY BETWEEN WIRE BOXES LOCATED AT EQUAL 1,000 FOOT STATIONS. EXTEND TRACER WIRE TO FINISH GRADE WITH 24" EXCESS WIRE COILED INSIDE LOCATING WIRE BOX.
5. TRACER WIRE AT VALVE VAULTS, MANHOLES OR TERMINATION STRUCTURES SHALL EXTEND INSIDE STRUCTURE THROUGH FINISH GRADE RINGS OR ADJUSTMENTS. SECURED 24" COILED EXCESS WIRE TO INSIDE WALL. GROUT SMOOTH ALL STRUCTURE PENETRATIONS AS REQUIRED.
6. PRIOR TO SURFACE RESTORATION, CONTRACTOR SHALL CONDUCT A CONDUCTIVITY TEST TO DEMONSTRATE THE CONTINUITY OF THE TRACER WIRE. INSPECTION IS REQUIRED. PROVIDE PAINTED LOCATES "WASTEWATER GREEN" FROM ALL LOCATING WIRE BOXES TO SEWER STRUCTURES.



REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

FORCE MAIN LOCATING WIRE BOX

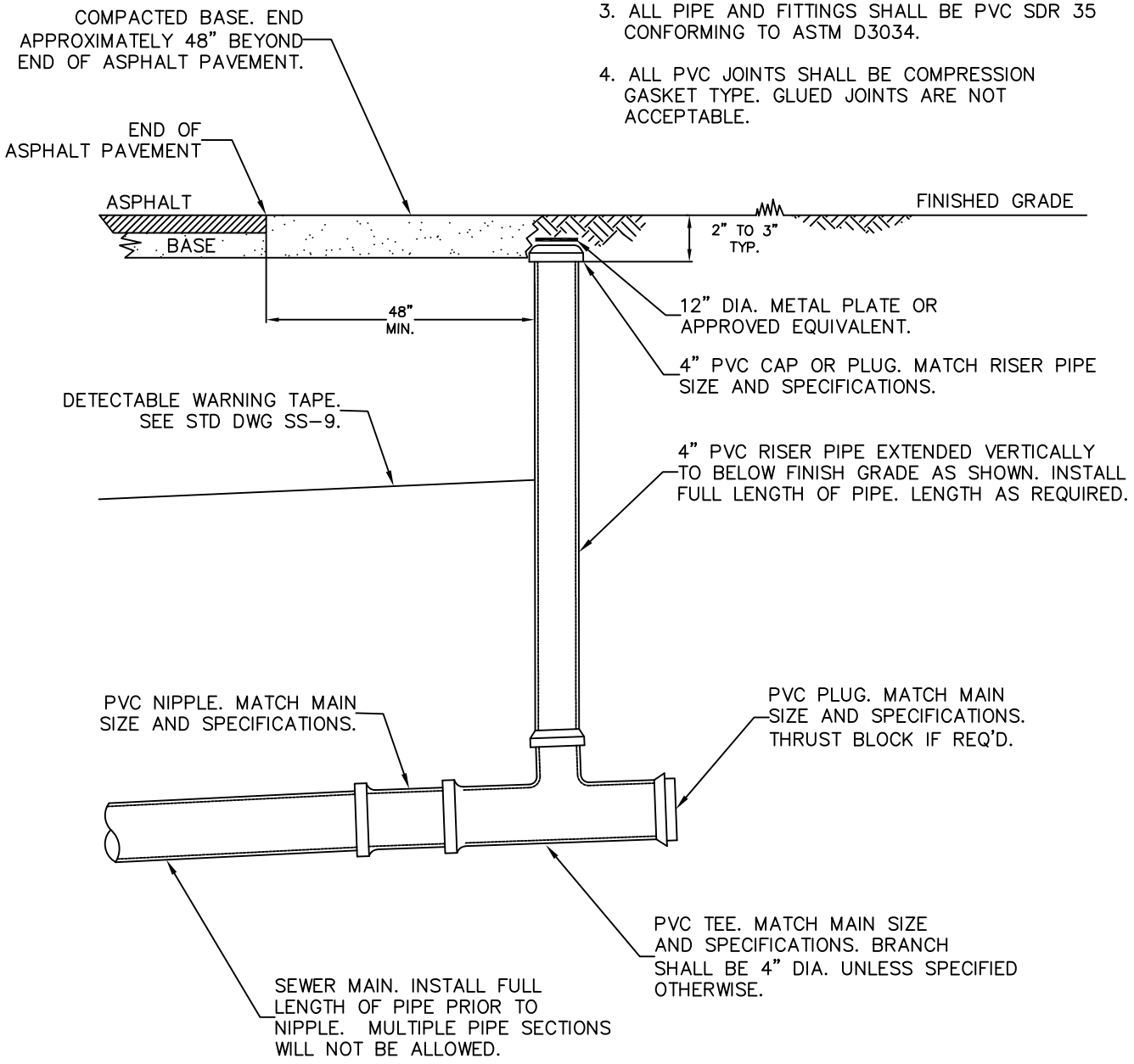
APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804 — DATE: 7/2/18

DWG NO. SS-10

NOTES THIS DETAIL:

1. TEMPORARY TEES ARE ONLY PERMITTED WHEN A FUTURE PUBLIC SEWER EXTENSION IS PLANNED WITHIN A PHASED DEVELOPMENT OR AS APPROVED BY THE CITY.
2. TEMPORARY TEES ON SEWER MAINS WITH LATERAL CONNECTIONS BETWEEN DOWNSTREAM MANHOLE AND TEMPORARY TEE ARE NOT ACCEPTABLE.
3. ALL PIPE AND FITTINGS SHALL BE PVC SDR 35 CONFORMING TO ASTM D3034.
4. ALL PVC JOINTS SHALL BE COMPRESSION GASKET TYPE. GLUED JOINTS ARE NOT ACCEPTABLE.



REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

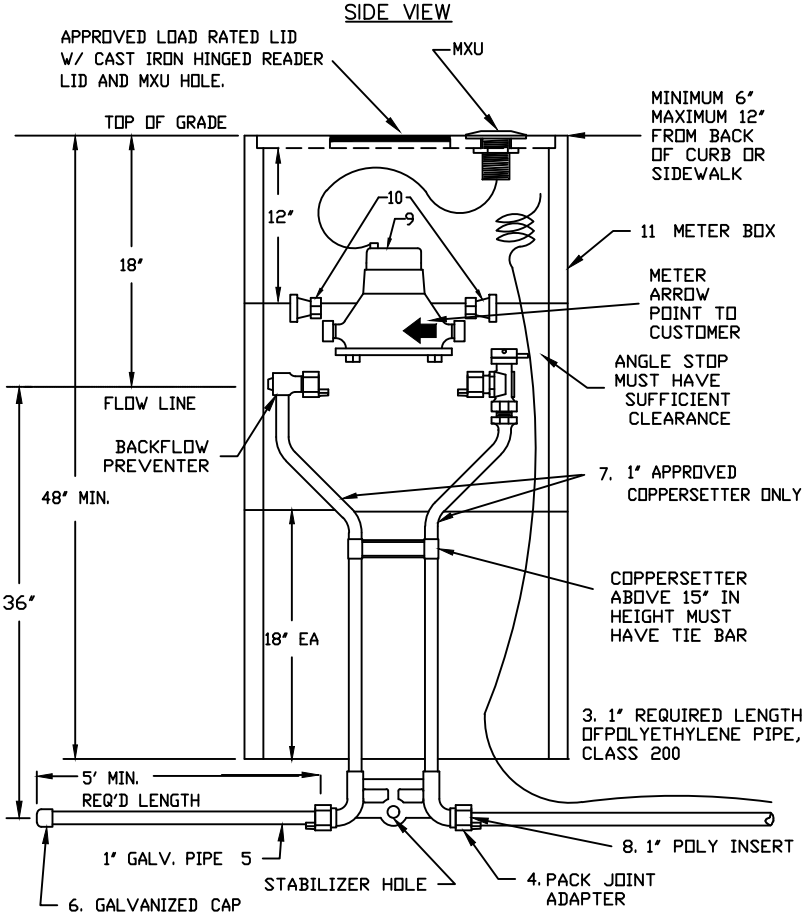
TEMPORARY TEE SEWER EXTENSION

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804 — 7/2/18 DATE:

DWG NO. SS-11

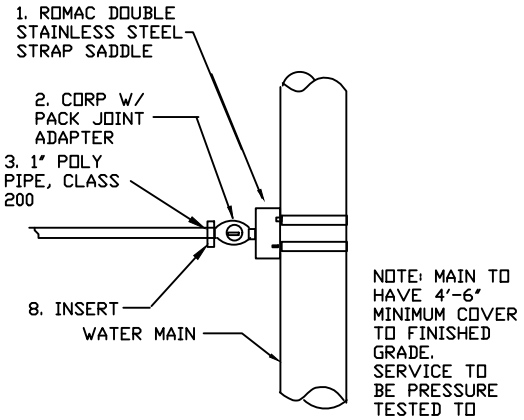
SIDE VIEW



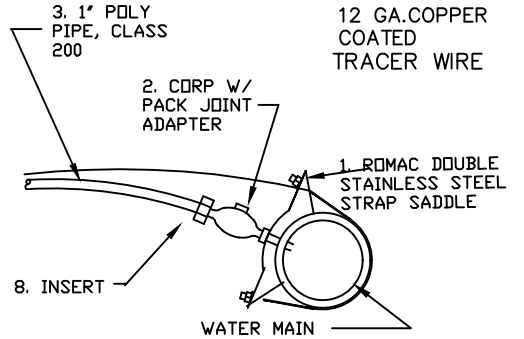
APPROVED TAPPING METHOD AND PARTS

APPROVED TAPPING METHOD

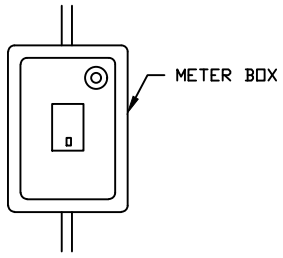
TOP VIEW



SIDE VIEW



ITEM NO.	NO. REQ'D.	DESCRIPTION
1	1	1" ROMAC DOUBLE STRAP SERVICE SADDLE
2	1	IPS x 1" POLY PACK JOINT BRONZE CORPORATION STOP.
3	1	1" x REQ. LENGTH – USE PIPE SIZE, 200 PSI POLYETHLENE SERVICE LINE
4	1	1" IPS x 1" POLY BRASS PACK JOINT ADAPTER
5	1	1" x MIN 5' LONG – GALVANIZED IRON PIPE BACK SIDE
6	1	1" GALVANIZED CAP.
7	1	1" APPROVED NSF 61 COMPLIANT COPPERSETTER, ALL COMPONENTS
8	2	1" POLY INSERTS WHERE NEEDED
9	1	3/4" BADGER RADIO READ METER (METER LAY LENGTH=7 1/2")
10	2	#24 ADAPTERS
11	3	ARMORCAST 13X24 RPM OR HUBBEL/QUASITE 1130 BOX W/ RADIO READ LID AND HINGED CAST IRON READER LID. BOX WILL CONSIST OF 18" BOTTOM AND MIDDLE SECTIONS, 12" TOP SECTION.



PLAN VIEW

NOTE: ALL MATERIALS USED IN CONTACT WITH POTABLE WATER ARE TO BE NSF-61 COMPLIANT.

NOTE: STABILIZER BAR MUST BE USED FOR SETTINGS HAVING POLYPIPE ON BOTH FRONT AND BACK SIDES.

** NOTE: NO PRIVATE CONNECTIONS OR FITTINGS ALLOWED INSIDE THE METER BOX.**

NOTE: POLY PIPE MAY BE USED WHEN CONNECTING TO AN EXISTING SERVICE WHEN A GALVANIZED CONNECTION CANNOT BE EASILY MADE.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

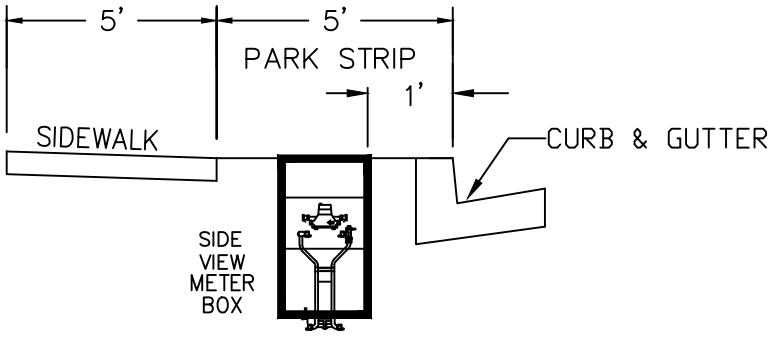
1" COPPERSETTER STANDARD PIT SETTINGS

APPROVED BY:

Chris Bosley 4/13/18

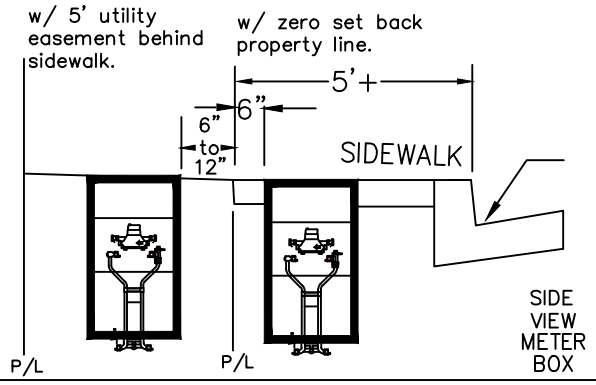
CITY ENGINEER, PE 10804 DATE:

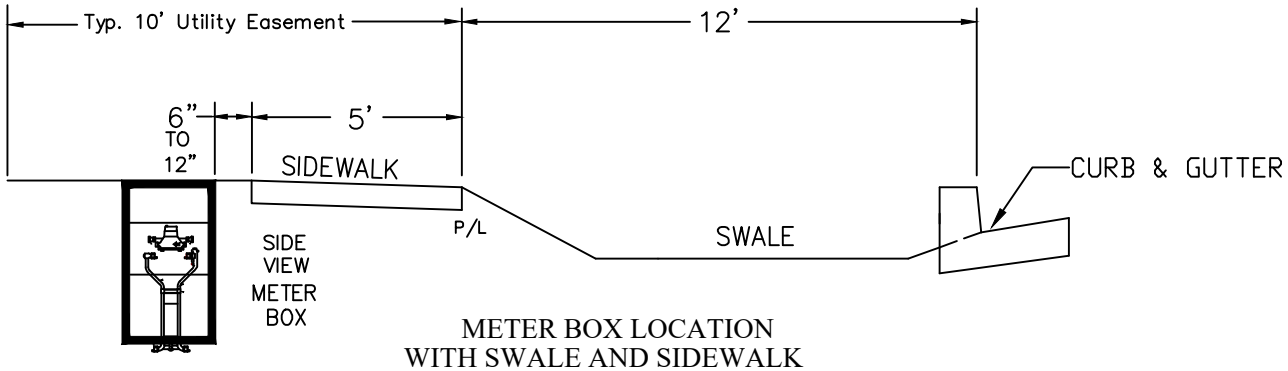
DWG NO. W-1



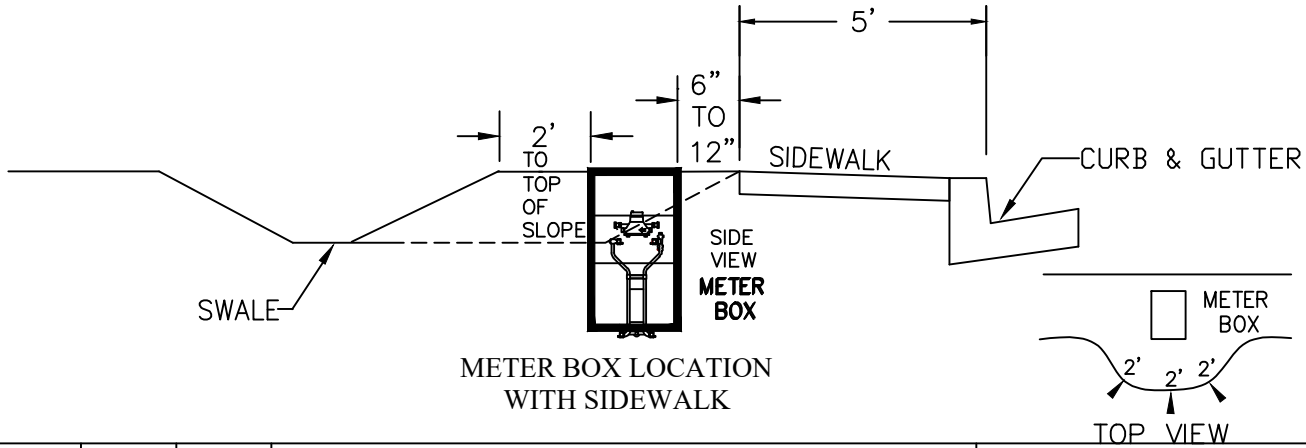
METER BOX LOCATION
WITH PARK STRIP AND SIDEWALK

METER BOX LOCATION W/
METER BOX IN SIDEWALK
AND PROPERTY LINE AT
BACK OF SIDEWALK
- OR -
METER BOX LOCATION W/
METER BOX IN 5' UTILITY
EASEMENT BEHIND THE
SIDEWALK.





METER BOX LOCATION
WITH SWALE AND SIDEWALK



METER BOX LOCATION
WITH SIDEWALK

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

WATER METER LOCATIONS

APPROVED BY:

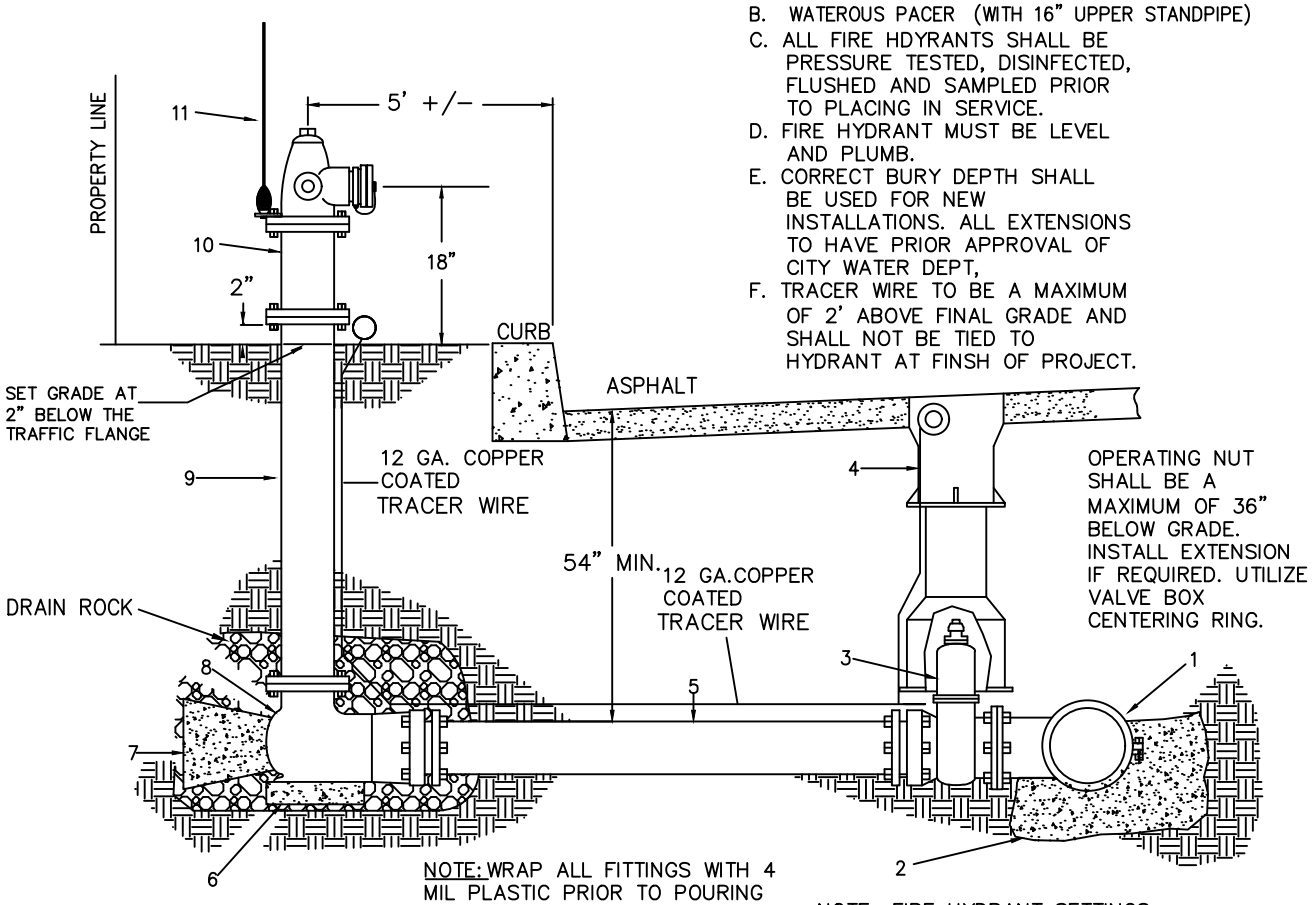
Chris Bosley
CITY ENGINEER, PE 10804

4/13/18
DATE:

DWG NO.
W–2

NOTE: CURRENT ACCEPTED FIRE HYDRANTS(ONLY)

A. MUELLER CENTURION
B. WATEROUS PACER (WITH 16" UPPER STANDPIPE)
C. ALL FIRE HDYRANTS SHALL BE PRESSURE TESTED, DISINFECTED, FLUSHED AND SAMPLED PRIOR TO PLACING IN SERVICE.
D. FIRE HYDRANT MUST BE LEVEL AND PLUMB.
E. CORRECT BURY DEPTH SHALL BE USED FOR NEW INSTALLATIONS. ALL EXTENSIONS TO HAVE PRIOR APPROVAL OF CITY WATER DEPT,
F. TRACER WIRE TO BE A MAXIMUM OF 2' ABOVE FINAL GRADE AND SHALL NOT BE TIED TO HYDRANT AT FINSH OF PROJECT.



NOTE: WRAP ALL FITTINGS WITH 4 MIL PLASTIC PRIOR TO POURING THRUST BLOCKS.

NOTE: FIRE HYDRANT SETTINGS

A. SHALL BE SQUARE TO CLOSEST CURB.
B. ALL PORT CAP CHAINS SHALL BE ATTACHED TO CAPS AND HYDRANT.
C. ALL FIRE HYDRANTS SHALL BE SAFETY CHROME YELLOW ONLY!
D. ALL FIRE HYDRANTS SHALL BE A MINIMUM OF 5' FROM DRIVEWAYS OR OTHER FIXED OBSTRUCTIONS.
E. BOLLARDS MAY BE REQUIRED FOR ADDITIONAL PROTECTION BY FIRE DEPT.
F. LIVE TAPS ONLY WHEN ATTACHING TO EXISTING WATER MAINS.

HYDRANT SPECIFICATIONS

* 6" DRYBARREL FIRE HYDRANT SUITABLE FOR A 5' TRENCH.
* 6" MECHANICAL JOINT BOTTOM CONNECTION.
* 1 1/2" PENTAGON OPERATING NUT, OPEN LEFT.
* TWO 2 1/2" HOSE NOZZLES NST.
* ONE PUMPER NOZZLE 4 1/2" STORZ PORT.
* HYDRANT COLOR-CHROME YELLOW.
* 150 IBS. W.W.P., 300 IBS. WTP.
* MODERN PROFILE TYPE.

ITEM NO.	NO. REQ'D	DESCRIPTION
1	1	MAIN SIZE MJ x 6" FLANGE CAST IRON TEE OR DIRECT TAP SADDLE.
2	1	CONCRETE BLOCKING PER STD DWG W-9, W-10
3	1	6" FLANGE x MJ GATE VALVE
4	1	TYLER CAST IRON VALVE BOX W/LID. SERIES 6855 OR APPROVED EQUAL.
5	1	6" C-900 PVC PIPE x REQ'D LENGTH OR APPROVED EQUAL
6	1	CONCRETE BLOCKING - 12" WIDE x 12" LONG x 4" THICK.
7	1	CONCRETE BLOCKING PER STD DWG W-9, W-10
8	1	BASE
9	1	EXTENSION - SIZED AS NEEDED FOR CORRECT BURY DEPTH.
10	1	FIRE HYDRANT - 5 1/4 WATEROUS PACER TRAFFIC MODEL OR MUELLER CENTURION MODEL 200.
11	1	FIRE HYDRANT FLAG - 36" YELLOW FIBERGLASS WITH SPRING LOADED BASE.
		NOTE: NUMBERS 8-10 COME PREASSEMBLED AS ONE UNIT. NOTE: ONLY NEW ASSEMBLIES WILL BE USED TO REPLACE OR RELOCATE AN EXISTING HYDRANT

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

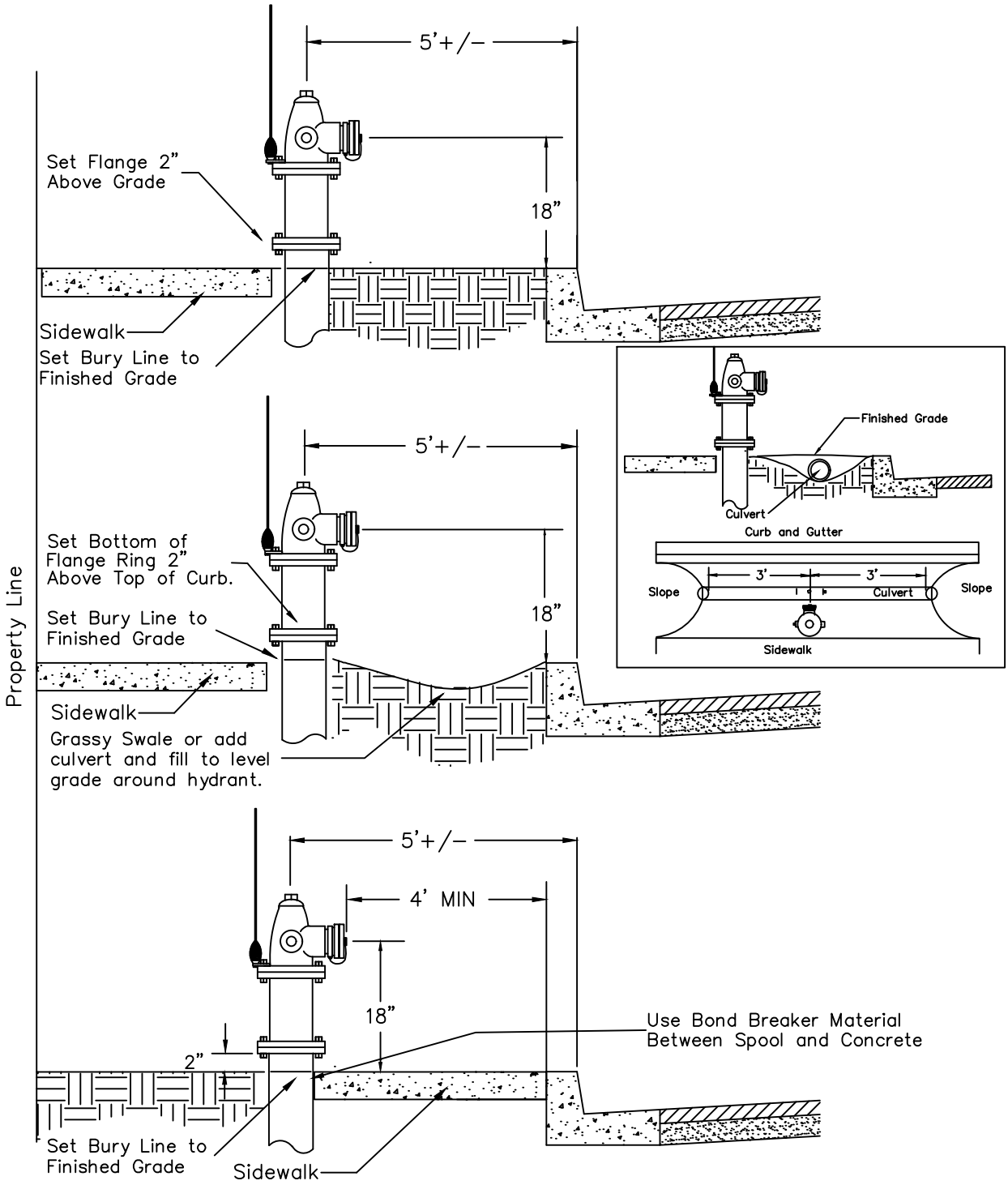
TYPICAL 6" FIRE HYDRANT SETTING

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

DATE: 4/13/18

DWG NO. W-3



NOTES

1. When distance from hydrant to the top or toe of slope is less than 2 feet special installation will be required by the City Engineer.
2. Where hydrant is not protected by a vertical face of curb protective posts are required.
3. The centerline of the hydrant shall be located 5' minimum from curb return and 5' minimum from a driveway or any fixed obstruction.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

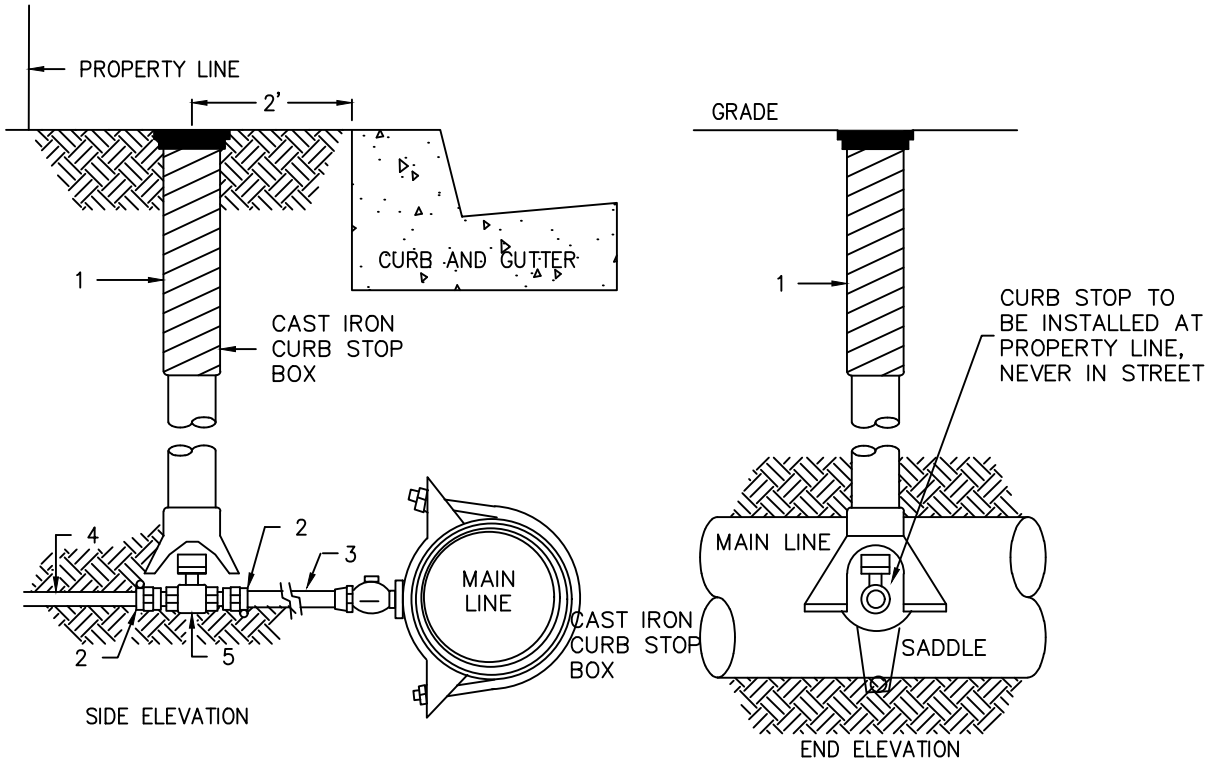
FIRE HYDRANT LOCATIONS

APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

4/13/18
DATE:

DWG NO. W-4



APPROVED TAPPING METHOD:

1. ROMAC DOUBLE STAINLESS STEEL STEEL SADDLE TAP
2. SEE STD DWG W–1 FOR TAPPING DETAILS

NOTE: CURB STOP BOX SETTINGS

A. ONLY CAST IRON CURB STOP BOXES SHALL BE USED.
B. LID SHALL BE AT FINISHED GRADE.
C. LID SHALL HAVE "WATER" IMPRINTED ON LID.

ITEM NO.	NO. REQD.	DESCRIPTION
1	1	CAST IRON CURB STOP BOX
2	3	1" BRASS PACK JOINT ASSEMBLY
3	1	1" x REQD. LENGTH -- USE IRON PIPE SIZE POLYETHYLENE HDPE (200 PSI)
4	1	1" x REQD. LENGTH (STOPPING AT PROPERTY LINE)– USE PIPE SIZE GALV. OR IRON PIPE SIZE POLYETHYLENE PIPE
5	1	1" BRASS CURB STOP WITH PACK JOINT ASSEMBLY.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

1" – 2" CURB STOP C.I. BOX ASSEMBLY

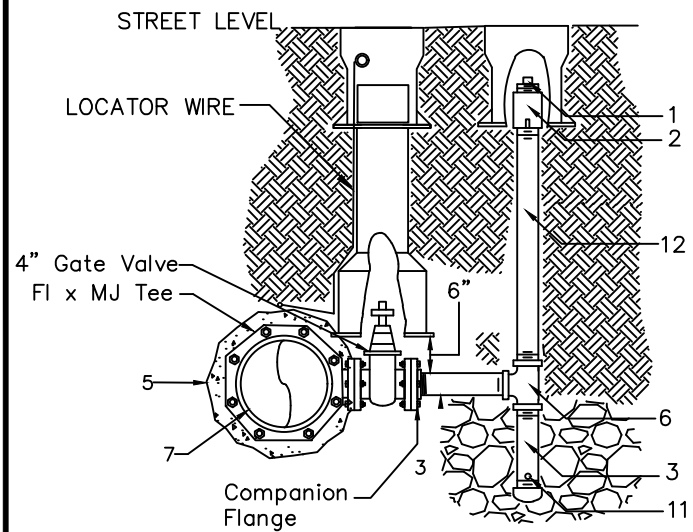
APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

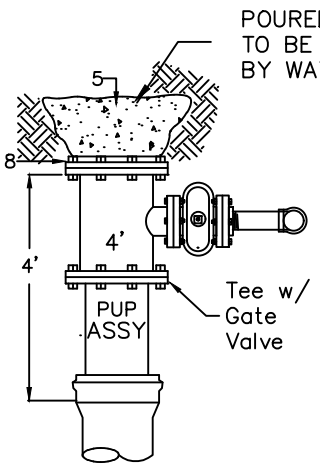
4/13/18
DATE:

DWG NO. W-5

OFFSET CONNECTION/SIDE TAP – 12" AND LARGER C905 MAIN



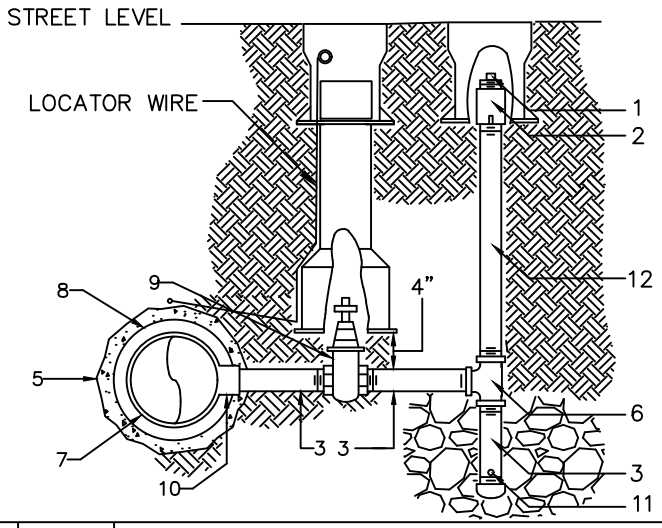
PROFILE VIEW

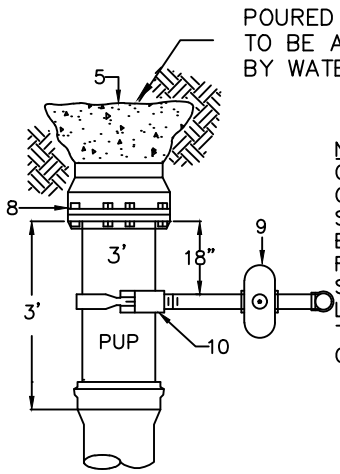


NOTE: THE OFFSET CONNECTION SHALL ALWAYS BE ON THE RIGHT HAND SIDE OF MAIN LOOKING FROM THE MAIN CONTROL VALVE.

PLAN VIEW

OFFSET CONNECTION/SIDE TAP FOR 6" & 8" C900





NOTE: THE OFFSET CONNECTION SHALL ALWAYS BE ON THE RIGHT HAND SIDE OF MAIN LOOKING FROM THE MAIN CONTROL VALVE.

PLAN VIEW

ITEM NO.	NO. REQD.	DESCRIPTION
1	2	APP. PIPE DIA THREADED PLUG AND/OR CAP AS NEEDED
2	1	THREAD IRON PIPE COUPLING
3	3	APP. PIPE DIA x 8" LONG GALVANIZED PIPE NIPPLE
4	2	TYLER CAST IRON VALVE BOX W/16" TOP SECTION & LID. SERIES 6855–HD OR APPROVED EQUAL.
5	1	CONCRETE BLOCKING – PER DRAWING W–9 & W–10
6	1	APP PIPE DIA THREADED IRON PIPE TEE –– GALVANIZED
7	1	WATER MAIN, MINIMUM 3' PUP AT END
8	1	MAIN SIZE MJ CAP (6–8") OR BLIND FLANGE/MJ PLUG.
9	1	APP DIA IPxIP THREADED GATE VALVE W/ 2" OPER. NUT
10	1	MAIN SIZE x APP. TAP SIZE DOUBLE STRAP SADDLE.
11	4	DRILL 1/8" HOLE OR CUT 1/2" SLOT WITH CHOP SAW
12	1	APP DIA X REQUIRED LENGTH GALV. PIPE NIPPLE

NOTE: STANDARD 2" BLOW OFF ASSY. IS ADEQUATE FOR 8" AND SMALLER MAINS TO ACHIEVE 2.5 FT/SEC VELOCITY. REFERENCE WATER DEPT. STANDARD DRAWING W–35 "MAIN FLUSHING CHART", TO DETERMINE PROPER SIZE OF ASSEMBLY FOR 12" AND LARGER MAINS.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

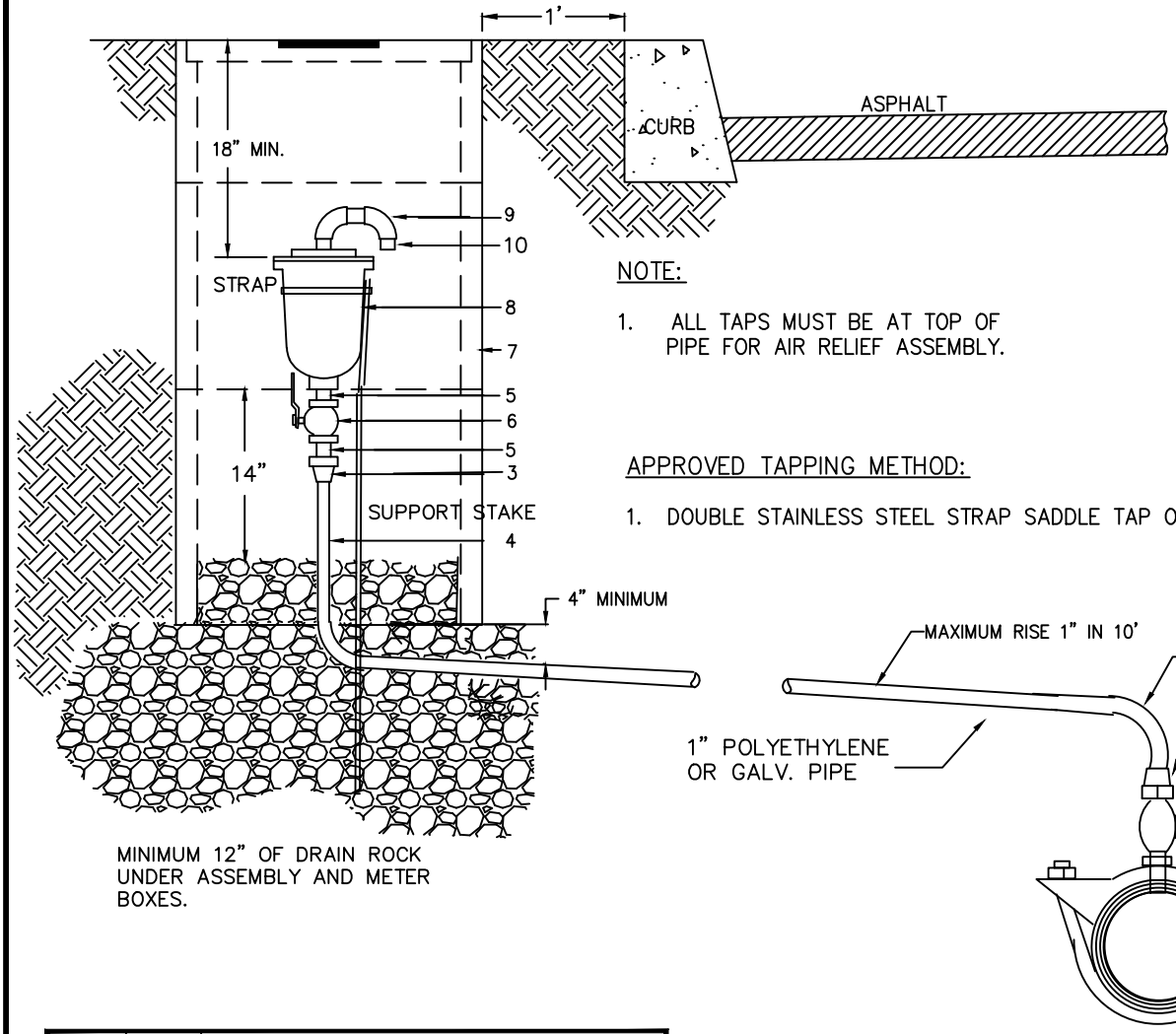
TYP. FROST FREE BLOWOFF ASSEMBLY

APPROVED BY:

Chris Bosley 4/13/18

CITY ENGINEER, PE 10804 DATE:

DWG NO. W–6



NOTE:

1. ALL TAPS MUST BE AT TOP OF PIPE FOR AIR RELIEF ASSEMBLY.

APPROVED TAPPING METHOD:

1. DOUBLE STAINLESS STEEL STRAP SADDLE TAP ONLY

ITEM NO.	NO. REQ.	DESCRIPTION
1	1	ROMAC DOUBLE STRAP TAPPING SADDLE
2	1	1" BRONZE CORPORATION STOP
3	2	1" PACK JOINT AS REQUIRED
4	1	1" IPS POLYETHELENE OR GALV. PIPE
5	4	1" x 2" GALVANIZED NIPPLES
6	1	1" APPROVED BALL VALVE
7	4	ARMORCAST 12X20 RPM – MIN 3 REQ. PLUS 1 WITH LID
8	1	APCO (REGULAR) COMBINATION AIR RELEASE VALVE (150 PSI)
9	2	1" 90 DEGREE GALVANIZED ELBOWS
10	1	INSECT SCREEN

ISPWC STANDARD # 408
AIR RELIEF VALVES

UNLESS OTHERWISE SPECIFIED, THESE APPURTENANCES SHALL BE OF THE MATERIAL SPECIFIED OR SHOWN ON THE PLANS AND SHALL MEET PRESSURE REQUIREMENTS EQUAL TO OR EXCEEDING THE MAIN INSTALLATION AND SHALL BE NSF-61 CERTIFIED.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

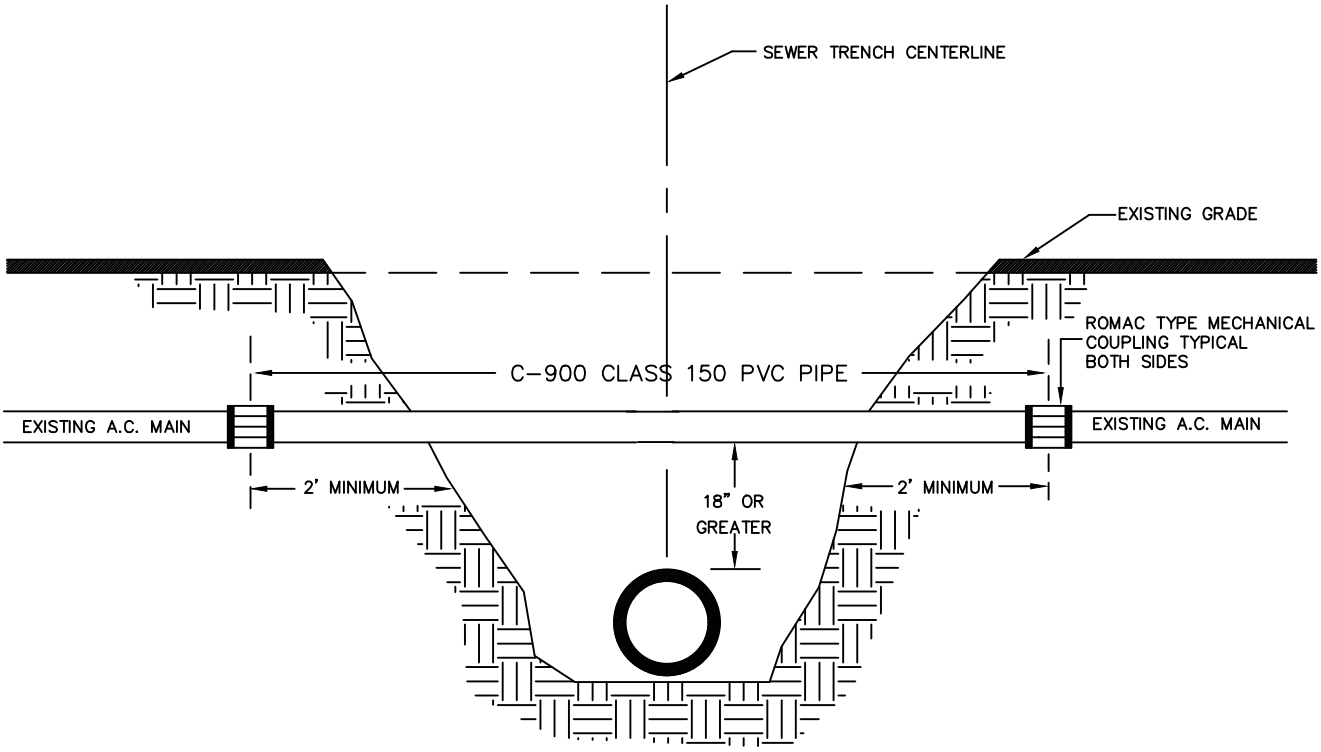
1" AIR RELIEF ASSEMBLY

APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

4/13/18
DATE:

DWG NO. W-7



NOTES:

1. COORDINATE WATER CUSTOMER NOTIFICATION AND WATER SERVICE SHUT DOWNS WITH WATER DEPT. BY CALLING 208-769-2210.
2. FOR ALL EXISTING A.C. MAINS, REPLACE WITH C900 PVC, CLASS 150 PIPE.
3. FOR ALL INSTALLATIONS WHERE SEWER MAIN IS GREATER THAN 18" BELOW EXISTING A.C. PIPE.
4. FOR INSTALLATIONS WITH LESS THAN 18" SEPARATION, COMPACT DENSITY FILL (CDF) MAY BE USED.
5. COMPLETE INSTALLATION OF PVC PIPE PRIOR TO EXCAVATION FOR SEWER MAIN.
6. IF REPAIR REQUIRES MORE THAN ONE SECTION OF PIPE, BELL AND SPIGOT OF PVC PIPE MUST BE AT LEAST 10' AWAY FROM SEWER MAIN CENTER LINE. PIPE MUST BE SUPPORTED DURING EXC. JOINT CAN BE ELIMINATED IF CROSSING CAN BE MADE WITH ONE SINGLE LENGTH OF PIPE.
7. ALL PIPE, COUPLINGS AND MISC. PARTS SHALL BE CLEANED AND DISINFECTED WITH A CHLORINE SOLUTION PRIOR TO INSTALLATION.
8. ANY MODIFICATIONS TO EXSITING MAINS SHALL BE NOTED ON RESPECTIVE AS-BUILTS.
9. ALL INSTALLATIONS MUST BE INSPECTED BY THE WATER DEPT. PRIOR TO BACKFILL.
10. COMPACTION MUST MEET ALL CITY STANDARDS.
11. REPLACEMENT WITH C900 OR C905 PVC PIPE ONLY.
12. FOR CROSSINGS LESS THAN 18" VERTICAL SEPARATION, AN APPROVED SLEEVE WILL BE REQUIRED. CDF MAY BE APPROVED AT THE SUPERINTENDENTS DISCRETION FOR CROSSINGS LESS THAN 18".

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

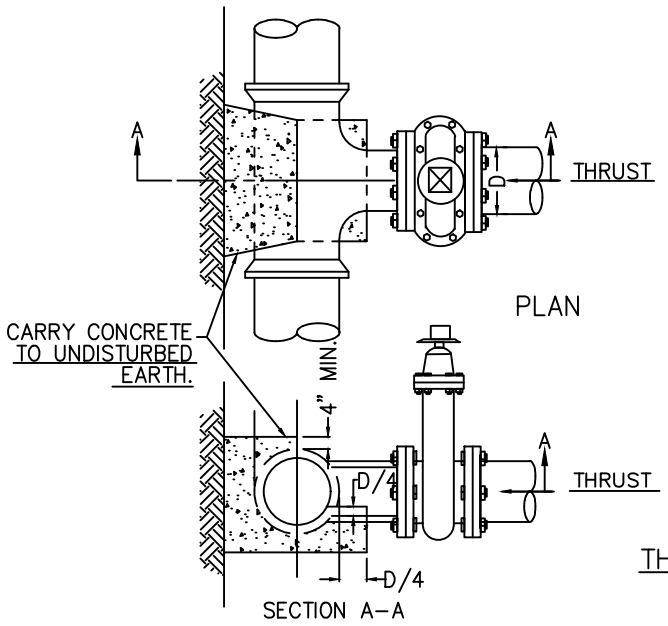
APPROVED A.C. MAIN REPLACED CROSSING

APPROVED BY:

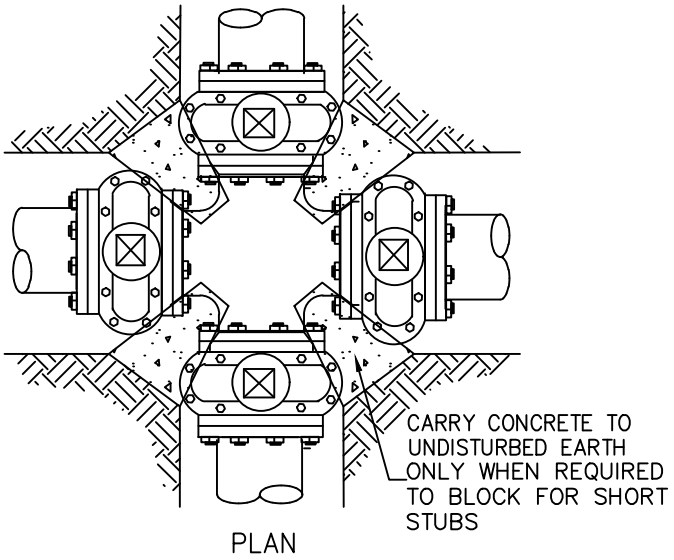
Chris Bosley
CITY ENGINEER, PE 10804

4/13/18
DATE:

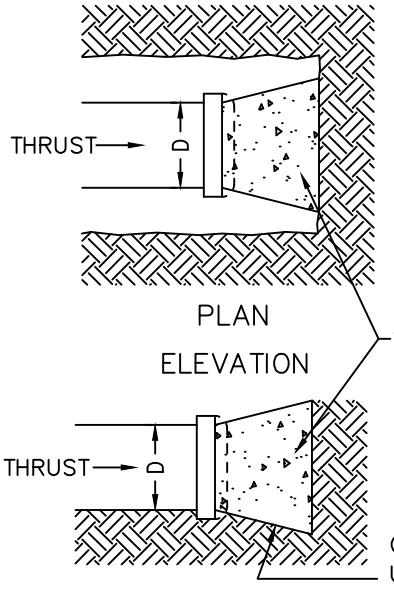
DWG NO. W-8



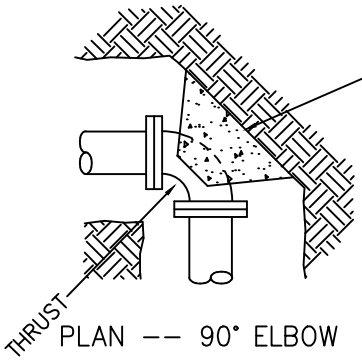
THRUST BLOCKING FOR TEES

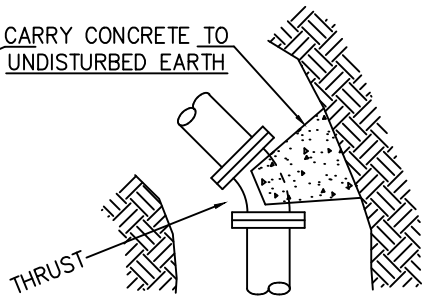


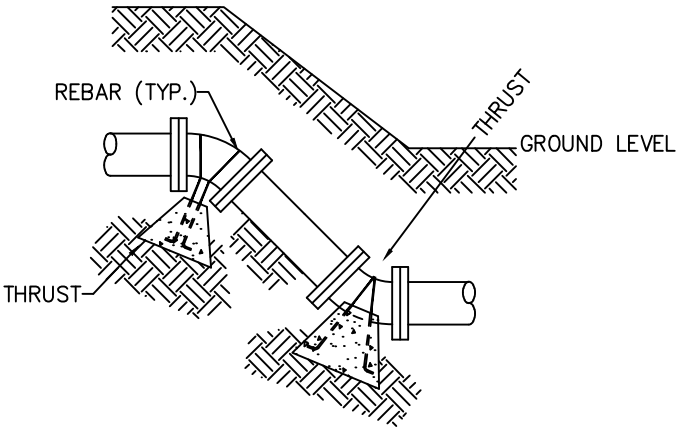
THRUST BLOCKING FOR CROSS AS DIRECTED



THRUST BLOCKING FOR CAPS







ELEVATION -- 22 1/2° & 45° ELBOWS

THRUST BLOCKING FOR ELBOWS

NOTES:
1. ALL CONCRETE TO BE MIN 2500 P.S.I.
2. KEEP CONCRETE CLEAR OF NUTS AND BOLTS WHEN USING FLANGED FITTINGS.
3. SEE STANDARD DRAWING W–10 FOR THRUST BLOCK BEARING AREAS.
4. USE MIN 4 MILL PLASTIC WRAPPED AGAINST FITTINGS TO PROTECT BOLTS.
5. ECOLOGY BLOCKS MAY BE USED IF WITH PRIOR APPROVAL FOR MAINS 12" & LESS WITH THRUST CALCS PROVIDED TO CITY.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

THRUST BLOCKING

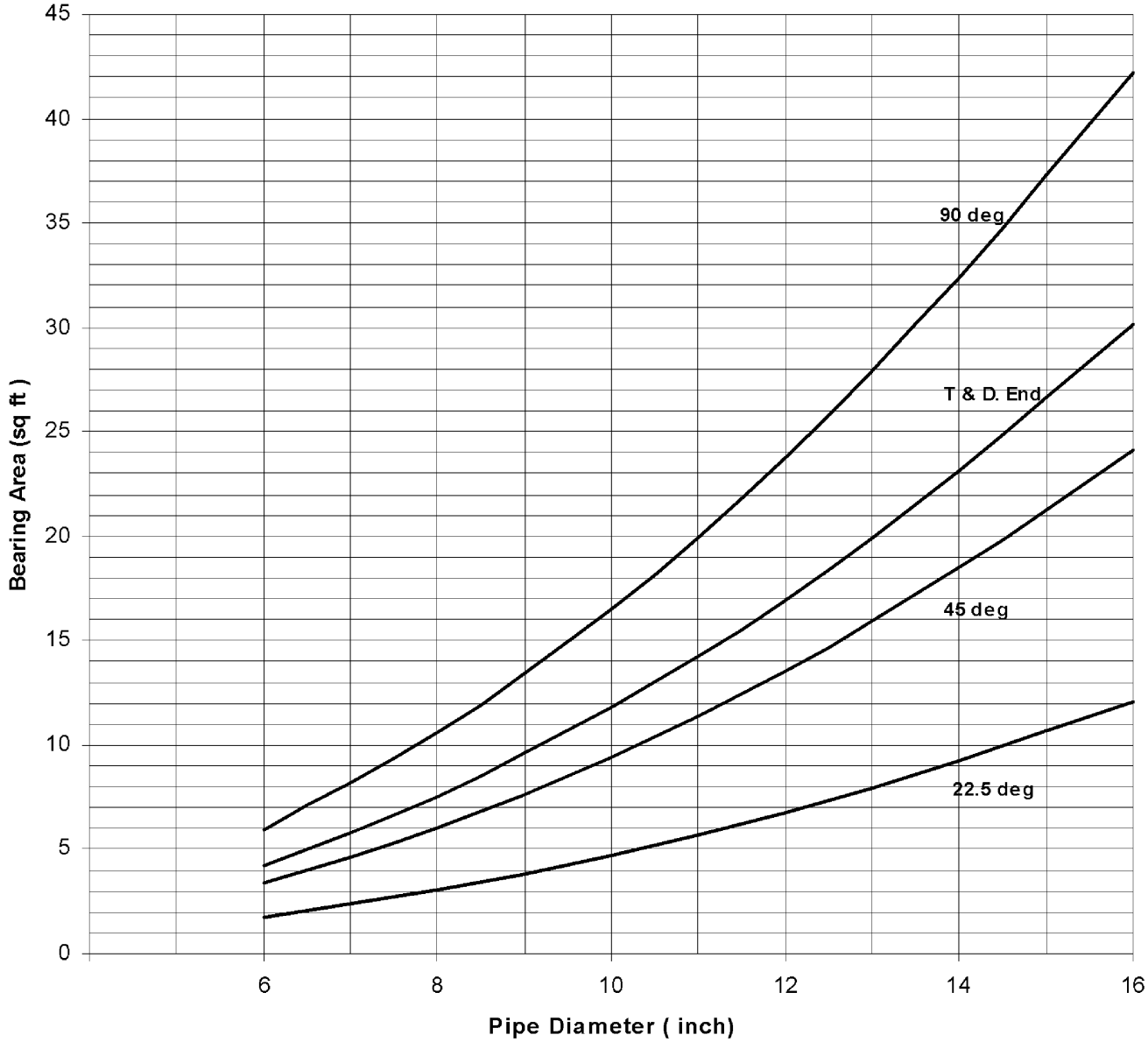
APPROVED BY:

Chris Bosley 4/13/18

CITY ENGINEER, PE 10804 DATE:

DWG NO. W-9

THRUST BLOCK BEARING AREA



NOTES

1. Based on 150 psi test pressure and a soil bearing pressure of 1500psf
2. For conditions not covered by these curves, special thrust blocks must be designed and approved.
3. **Ecology blocking may be used with prior approval from the City Engineer and/or the Superintendent for mains 12" and less in size.**
4. **The Design Engineer shall provide thrust bearing area calculations using 1500psf as the desired standard prior to block approval.**

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

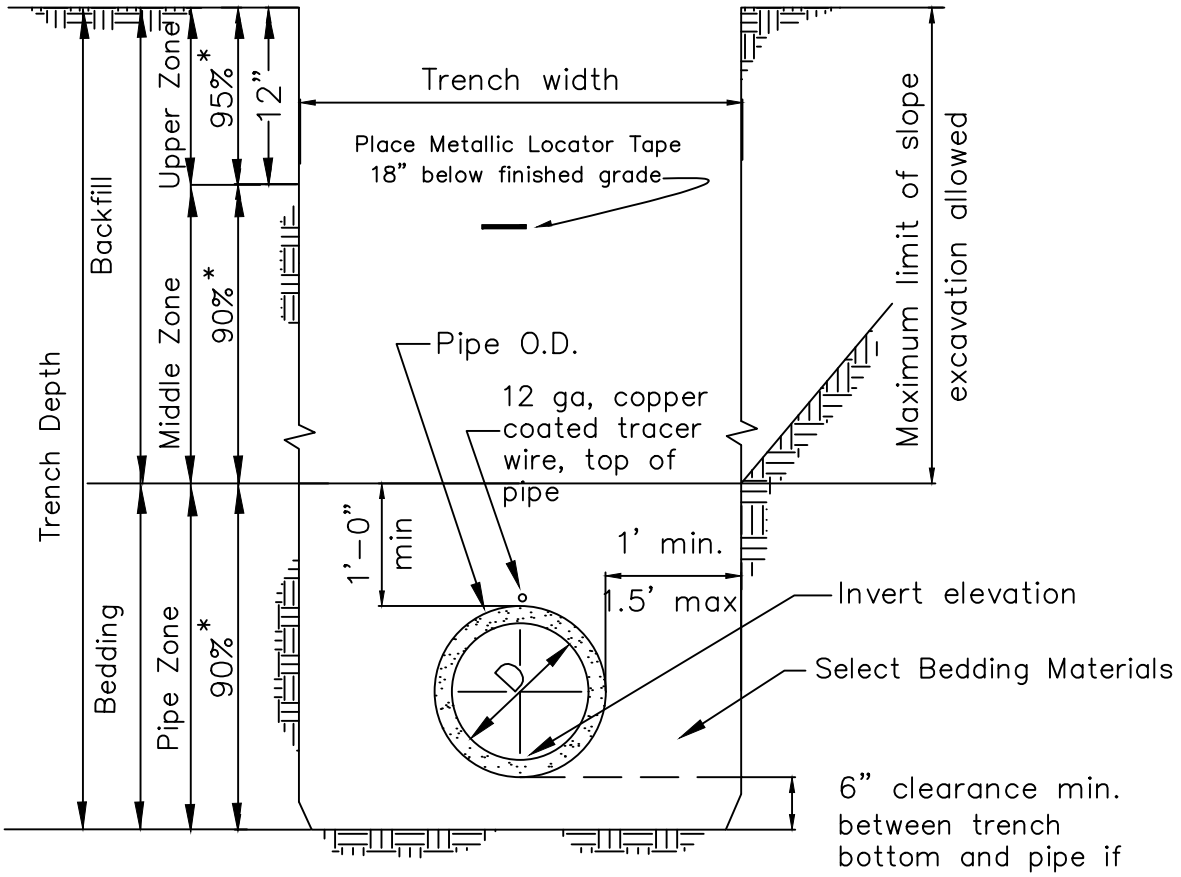
THRUST BLOCK BEARING AREA

APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

4/13/18
DATE:

DWG NO. W-10



SECTION

NOTES

1. For trenching in improved streets, see Standard Drawing M–11 for trench resurfacing.
2. (*) indicates minimum relative compaction using modified proctor (ASTM D–1557).
3. Minimum depth of cover from the top of pipe to finished grade shall be 4'6".
4. Bedding Material shall be Sand, Gravel, Crushed Aggregate, or Native material which shall be approved by the Water Dept. prior to using. Bedding shall be placed at least 6" below the pipe if the native materials are unsuitable to a minimum depth of 12" above the pipe unless the backfill is judged to be excessively course. Then the Water Dept. may require 24" or more of select bedding materials over the main.
5. Backfill with rocks in excess of 5" diameter or sharp jagged rock shall <u>not</u> be allowed in the trench at any time from bottom of trench to finished grade. <u>Only select material shall be used.</u>
6. Bedding material shall be distributed to an even grade across the width of the trench profile.
7. Compaction shall be accomplished by approved methods in maximum 12" lifts above the compacted bedding materials.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

PIPE BEDDING AND BACKFILL FOR WATER MAINS

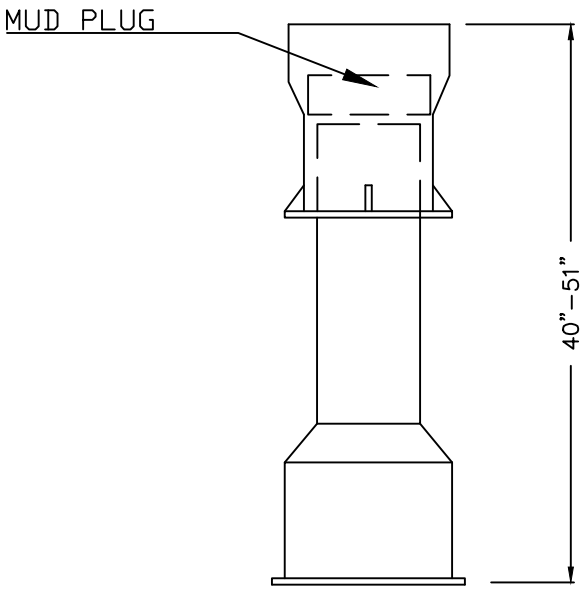
APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

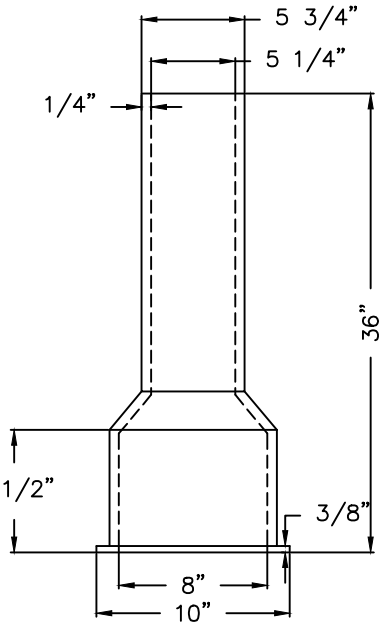
4/13/18
DATE:

DWG NO. W-11

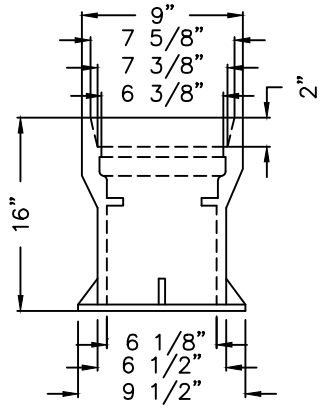
TYLER 6855 HD SERIES CAST IRON VALVE BOX



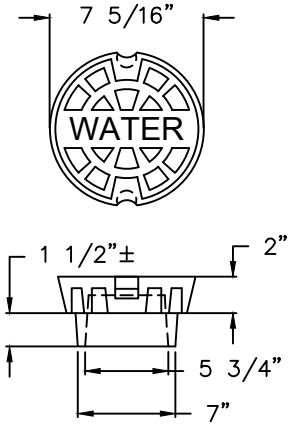
BOX COMPLETE



BOTTOM



TOP



5 1/4" DROP LID

BOX COMPLETE EXTENSION. IN INCHES	WEIGHT	TOP SECTION W/LID LENGTH	WEIGHT	BOTTOM LENGTH	WT.
40"–51"	90 LB.	16"	45 LB.	36"	45 LB.

Tyler Cast Iron Valve Box Series 6855 HD with heavy lid or approved equal
Accommodates 4" Through 12" Valves, 5 1/4" Shafts, Slip–Type

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

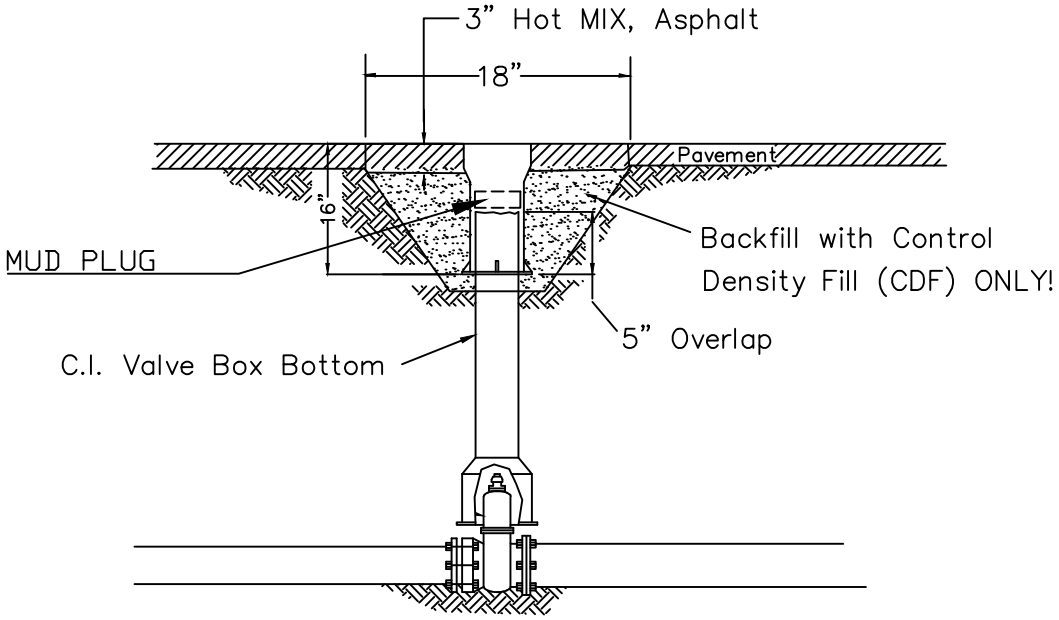
CAST IRON VALVE BOX TWO PIECE

APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

4/13/18
DATE:

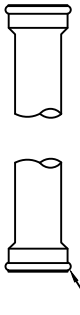
DWG NO. W-12



TYLER CAST IRON VALVE BOX 6855 HD, WITH NO FLIP "WATER" HEAVY LID, 16" x 6 1/8" ID TO SLIP OVER C.I. VALVE BOX BOTTOM SECTION.

FOR OVERLAY PROJECTS WHERE EXISTING TYLER VALVE BOXES ARE PRESENT, MAY USE 5" DOUBLE HUB SOIL PIPE AS BOTTOM BOX EXT..

Note: See Standard Drawing W–12 for Plan View Profile.



5" C.I. double hub soil pipe extension, cut to length as required. (Makes two extensions)

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

VALVE BOX ADJUSTMENT

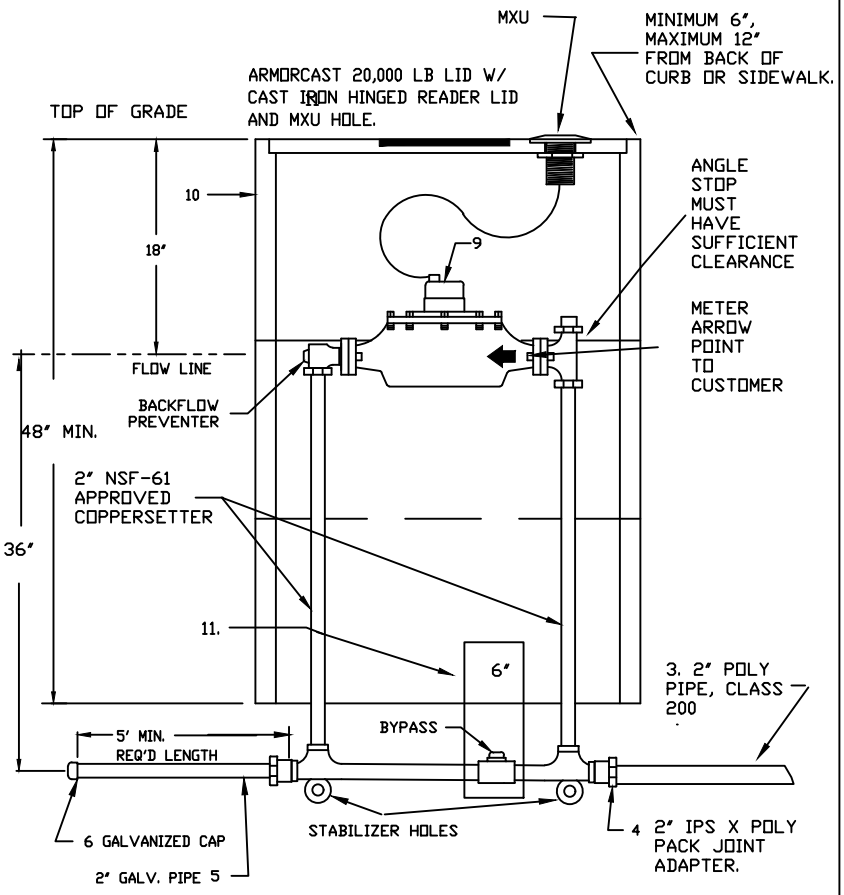
APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

4/13/18
DATE:

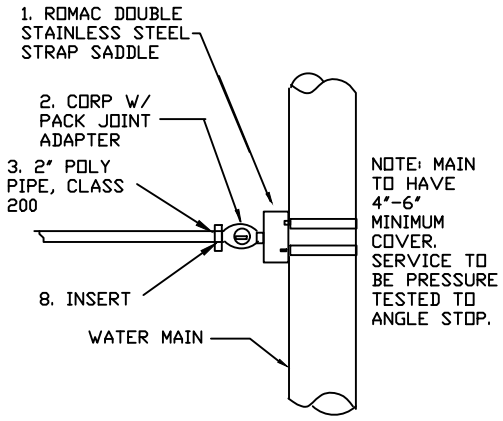
DWG NO. W-13

SIDE VIEW

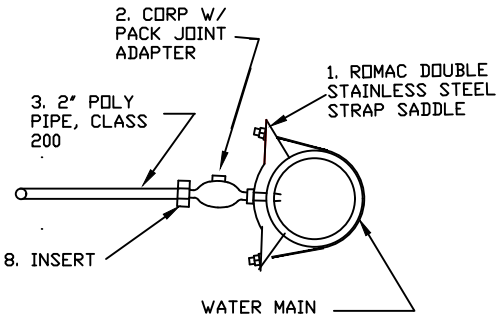


APPROVED TAPPING METHOD

TOP VIEW

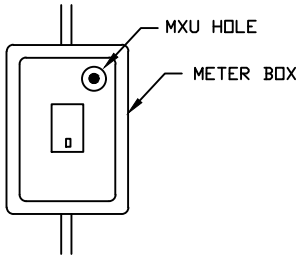


SIDE VIEW



APPROVED TAPPING METHOD AND PARTS

ITEM NO.	NO. REQ'D.	DESCRIPTION
1	1	2" ROMAC DOUBLE STRAP SERVICE SADDLE
2	1	IPS x 2" POLY PACK JOINT BRONZE CORPORATION STOP.
3	1	2" x REQ. LENGTH – USE PIPE SIZE, 200 PSI POLYETHLENE SERVICE LINE
4	1	2" IPS x 2" POLY BRASS PACK JOINT ADAPTER
5	1	2" x MIN 5' LONG – GALVANIZED IRON PIPE BACK SIDE OF BOX
6	1	2" GALVANIZED CAP.
7	1	2" NSF-61 APPROVED COPPERSETTER, ALL COMPONENTS
8	2	2" POLY INSERTS WHERE NEEDED.
9	1	2" BADGER DISC TYPE RADIO READ METER (METER LENGTH=17")
10	4	ARMORCAST OR HUBBEL METER BOX SECTIONS W/ RADIOREAD LID – 17" X 30"
11	1	6" x 8" PVC SLEEVE SADDLE NOTCHED OVER BYPASS VALVE.



PLAN VIEW

NOTE: ALL MATERIALS USED IN CONTACT WITH POTABLE WATER ARE TO BE NSF-61 COMPLIANT.

NOTE: 1. TURBINE METER MAY BE USED FOR COMMERCIAL APPLICATIONS WITH A STRAINER, USE DISK METER FOR RESIDENTIAL DOMESTIC SETTINGS ONLY.
2. STABILIZER BAR MUST BE USED FOR SETTINGS HAVING POLYPIPE ON BOTH FRONT AND BACK SIDES.
3. NO PRIVATE CONNECTIONS OR FITTINGS ALLOWED INSIDE THE METER BOX.**
4. POLY PIPE MAY BE USED WHEN CONNECTING TO AN EXISTING SERVICE IN THE EVENT THAT A GALVANIZED CONNECTION CANNOT BE EASILY MADE.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

2" COPPERSETTER STANDARD PIT SETTING

APPROVED BY:

Chris Bosley

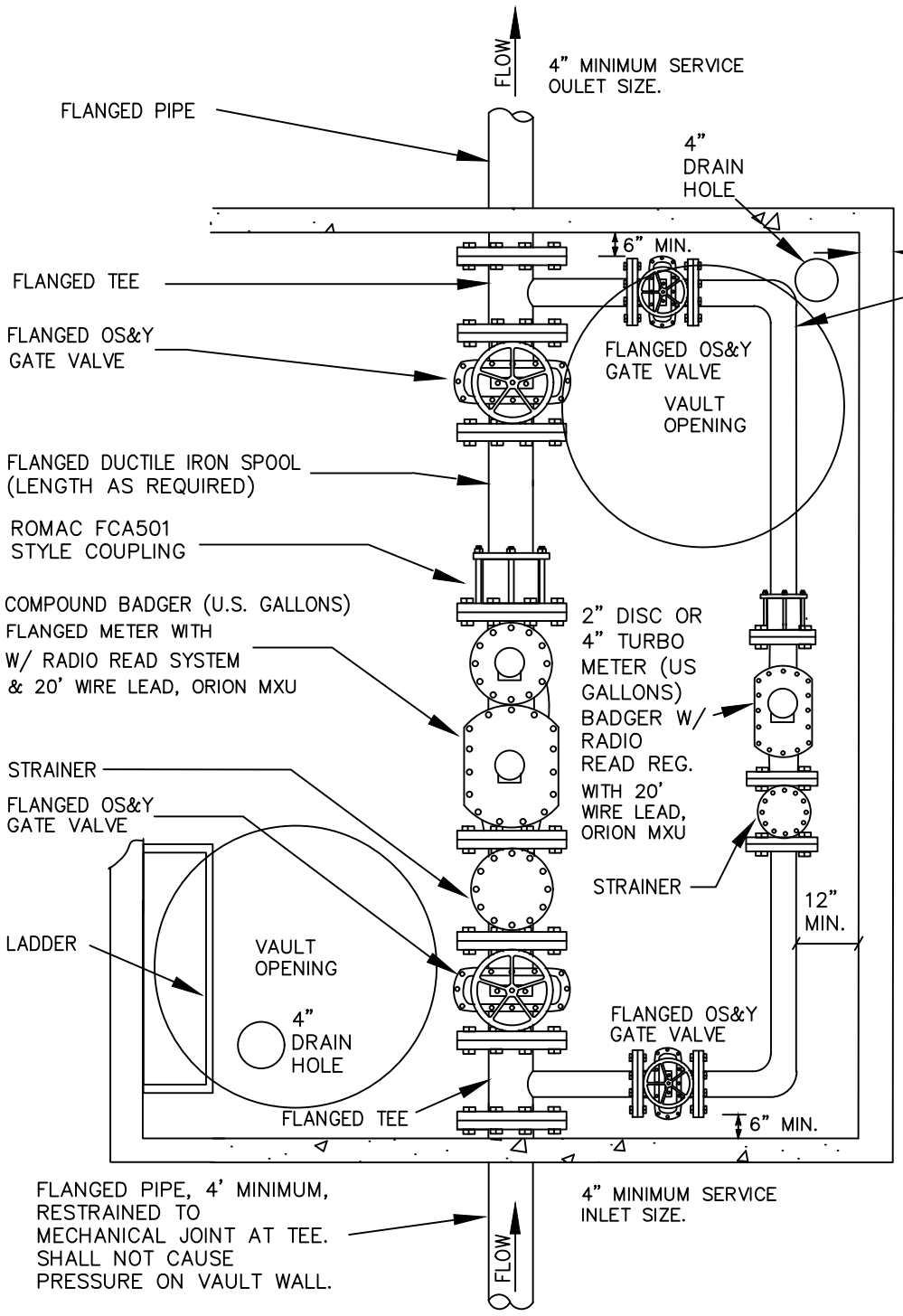
CITY ENGINEER, PE 10804

4/13/18

DATE:

DWG NO. W-14

NOTE: ALL METER VAULT INSTALLATIONS TO HAVE A PRECONSTRUCTION MEETING WITH THE WATER DEPT. SCHEDULED PRIOR TO INSTALLATION.



PLAN VIEW

METER SIZE	BYPASS SIZE
3" AND 4"	2" BYPASS
6" AND LARGER	4" BYPASS
BYPASS METER RATED FOR ½ FLOW OF MAIN METER	

METER VAULT

1. SEE STANDARD DRAWING W-17 FOR VAULT DETAIL
2. NOTE: VAULT SIZING SHALL BE ADEQUATE TO ACCOMMODATE ALL NECESSARY FITTINGS AND EQUIPMENT. NOTHING SHALL REST AGAINST OR CONTACT THE OUTER VAULT WALL.
3. METER AND PIPE SHALL BE SUPPORTED WITH APPROVED 2" PIPE SUPPORT STANDS. STANDS SHALL BE PREFAB GALVANIZED SUPPORTS WITH 2" GALVANIZED PIPE EXTENSIONS AND A 6" SQUARE BASE.
4. THE VAULT SHALL HAVE A SOLID FLOOR WITH TWO 4" DRAIN HOLES AT OPPOSITE ENDS OF THE VAULT. ALL OTHER OPENINGS SHALL BE GROUTED TIGHT.
5. INLET AND OUTLET PIPE SHALL BE SAME DIAMETER (MIN. 4") WITH REDUCTION INSIDE METER VAULT ONLY. PIPE JOINTS SHALL BE RESTRAINED FROM TAP TO VAULT BUT MUST NOT USE VAULT WALL AS THRUST BEARING SURFACE..
6. SEE STANDARD DRAWING W-30 FOR RING AND LID DETAIL.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

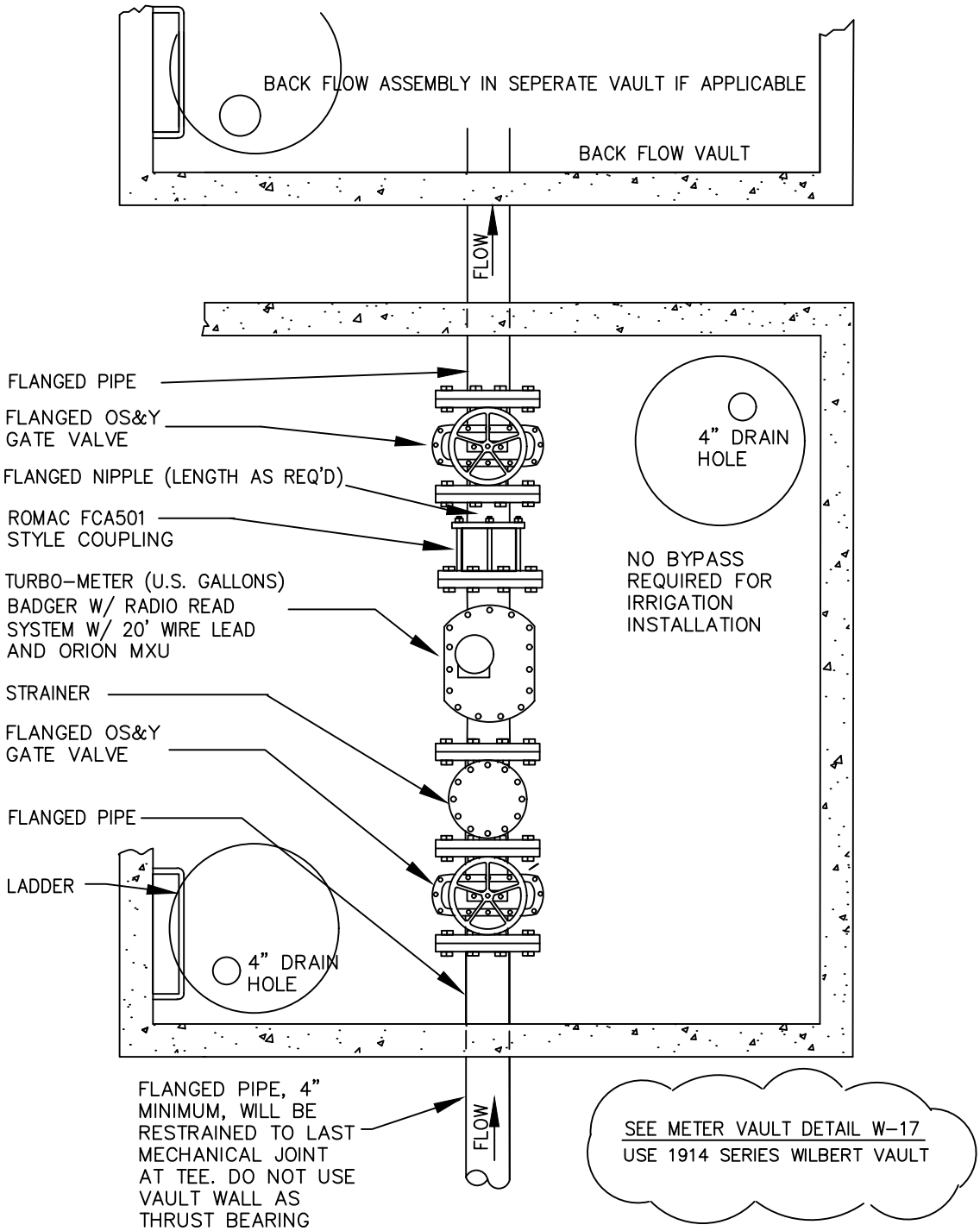
4" & LARGER DOM. METER VAULT SET

APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

4/13/18
DATE:

DWG NO. W-15



PLAN VIEW

PLAN NOTES:

GATE VALVE TO BE INSTALLED AT HOT TAP TO WATER MAIN

3" OR LARGER METER IN VAULT WILL BE RADIO READ

REVISION	APPROVED	DATE

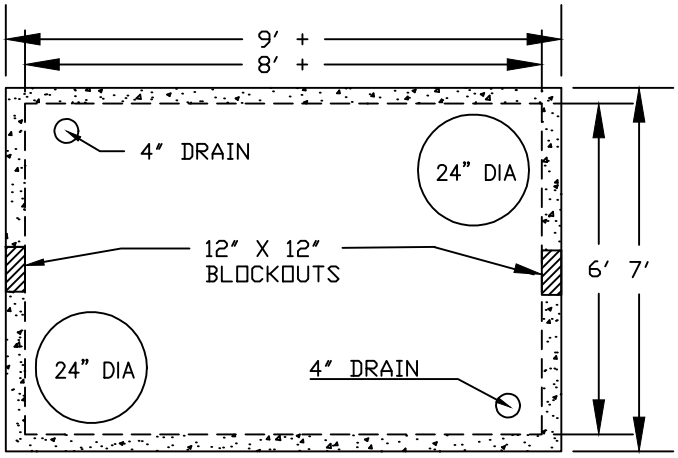
CITY OF COEUR d'ALENE STANDARD DRAWING

4" AND LARGER SERVICE SETTING IRRIGATION VAULT

APPROVED BY:

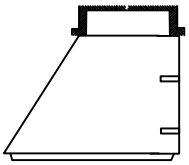
Chris Bosley — CITY ENGINEER, PE 10804 — 4/13/18 DATE:

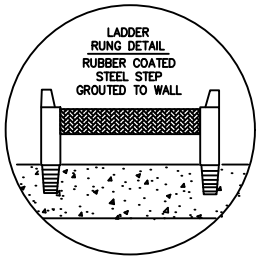
DWG NO. W-16

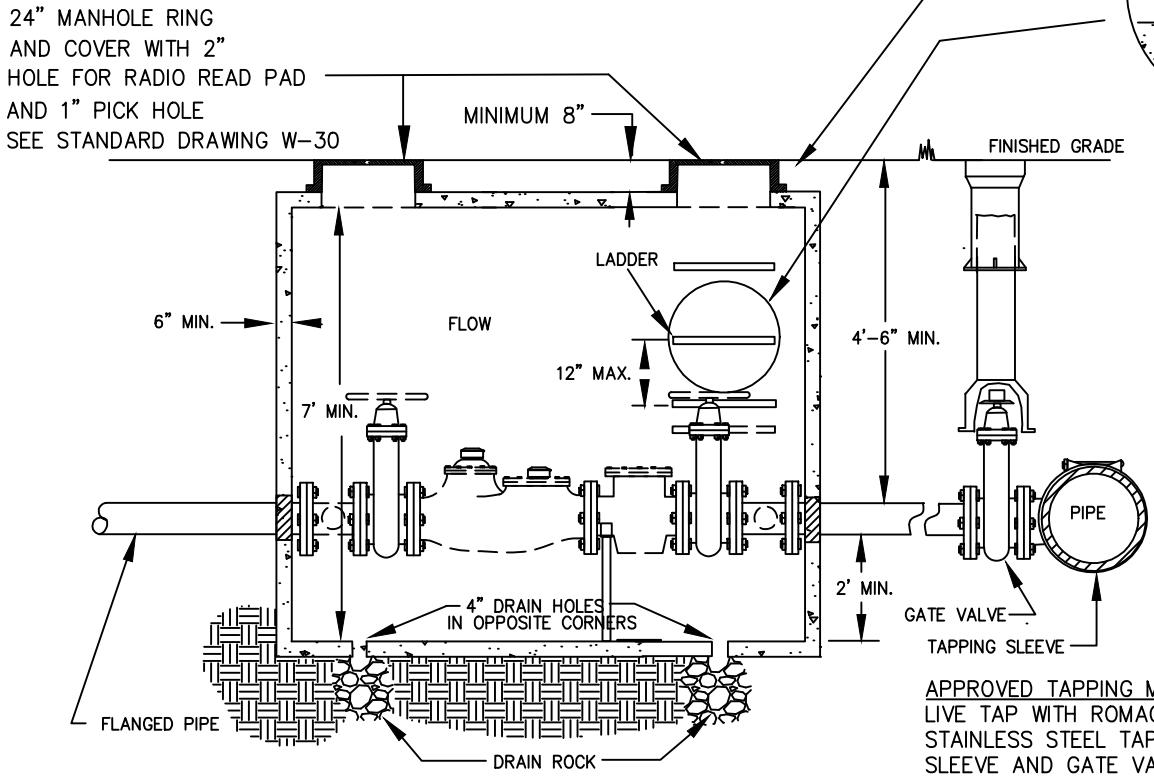


PLAN VIEW

OPTIONAL 24" HIGH OFFSET MANHOLE CONE W/ STEPS FOR BURY DEPTH OVER 30".







SECTION VIEW

APPROVED TAPPING METHOD:
LIVE TAP WITH ROMAC STAINLESS STEEL TAPPING SLEEVE AND GATE VALVE.

NOTES:

1. VAULT CONSTRUCTION TO BE DESIGNED BASED ON POTENTIAL TRAFFIC LOAD. WILBERT 1914 SERIES VAULT W/ INSIDE DIMENSIONS TO ACCOMMODATE ALL EQUIPMENT AS NOTED BELOW.
2. LENGTH AND WIDTH OF VAULT SHALL ACCOMMODATE EQUIPMENT WITH ADEQUATE CLEARANCE FROM WALLS. MUST HAVE APPROVED WALL MOUNTED LADDER RUNGS WITH RUBBER COATING AS ILLUSTRATED.
3. PIPE SHALL BE RESTRAINED TO LAST MECHANICAL JOINT AT TEE AND SHALL NOT USE THE VAULT WALL FOR THRUST BLOCKING.
4. THE VAULT SHALL HAVE A MINIMUM INTERIOR HEIGHT OF 6'.
5. CONCRETE RISER RINGS IN EXCESS OF 8" HIGH SHALL REQUIRE THE INSTALLATION OF ADDITIONAL STEP(S).
6. VAULT SHALL BE INSTALLED LEVEL AND PLUMB TO PROVIDE ADEQUATE DRAINAGE TO 4" DRAIN HOLES.
7. PIPE HOLES SHALL BE CAST MIN 4" LARGER THAN PIPE TO BE USED.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

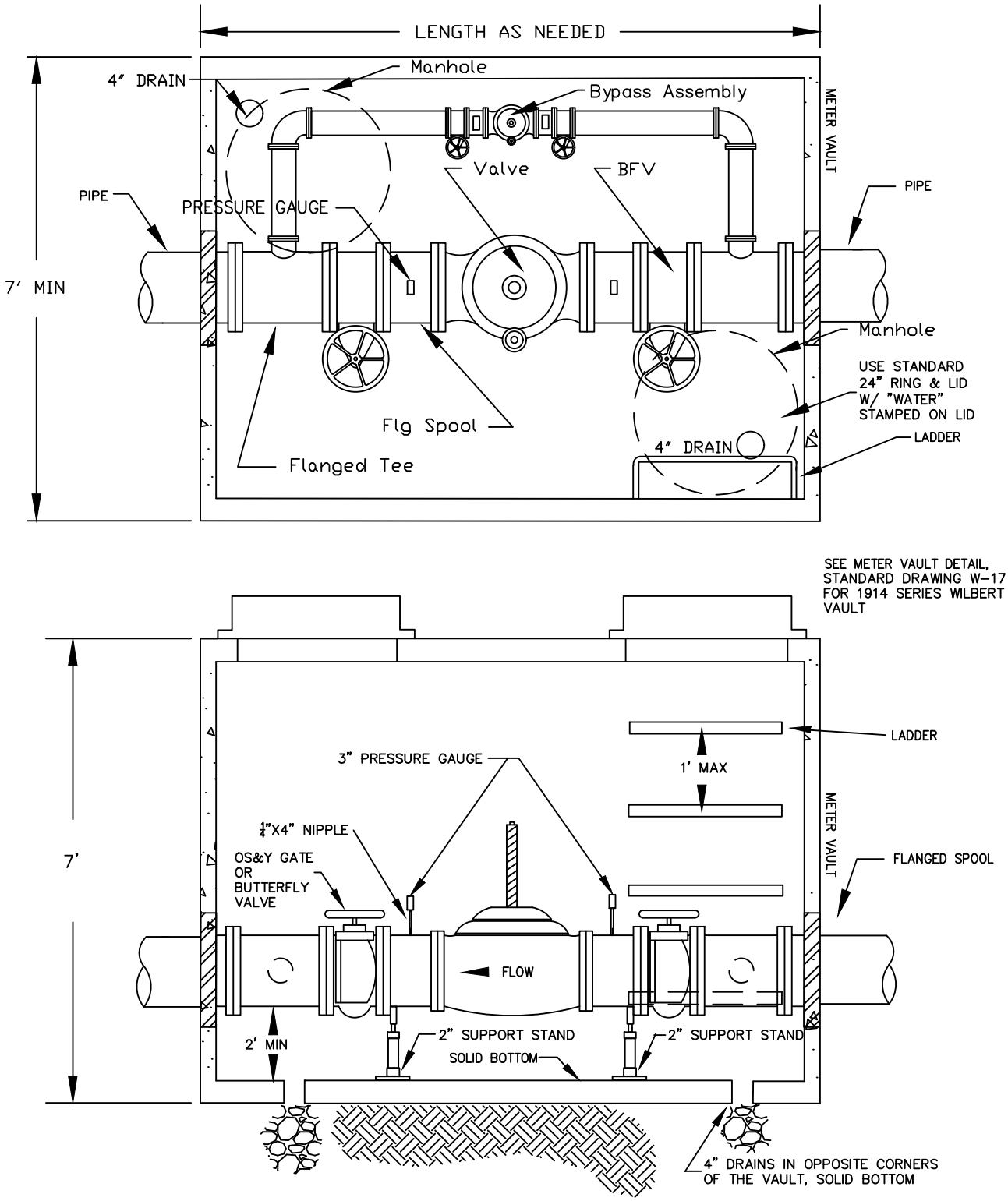
4" & LARGER DOM. SERVICE VAULT SET

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

DATE: 4/13/18

DWG NO. W-17



PLAN VIEW

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

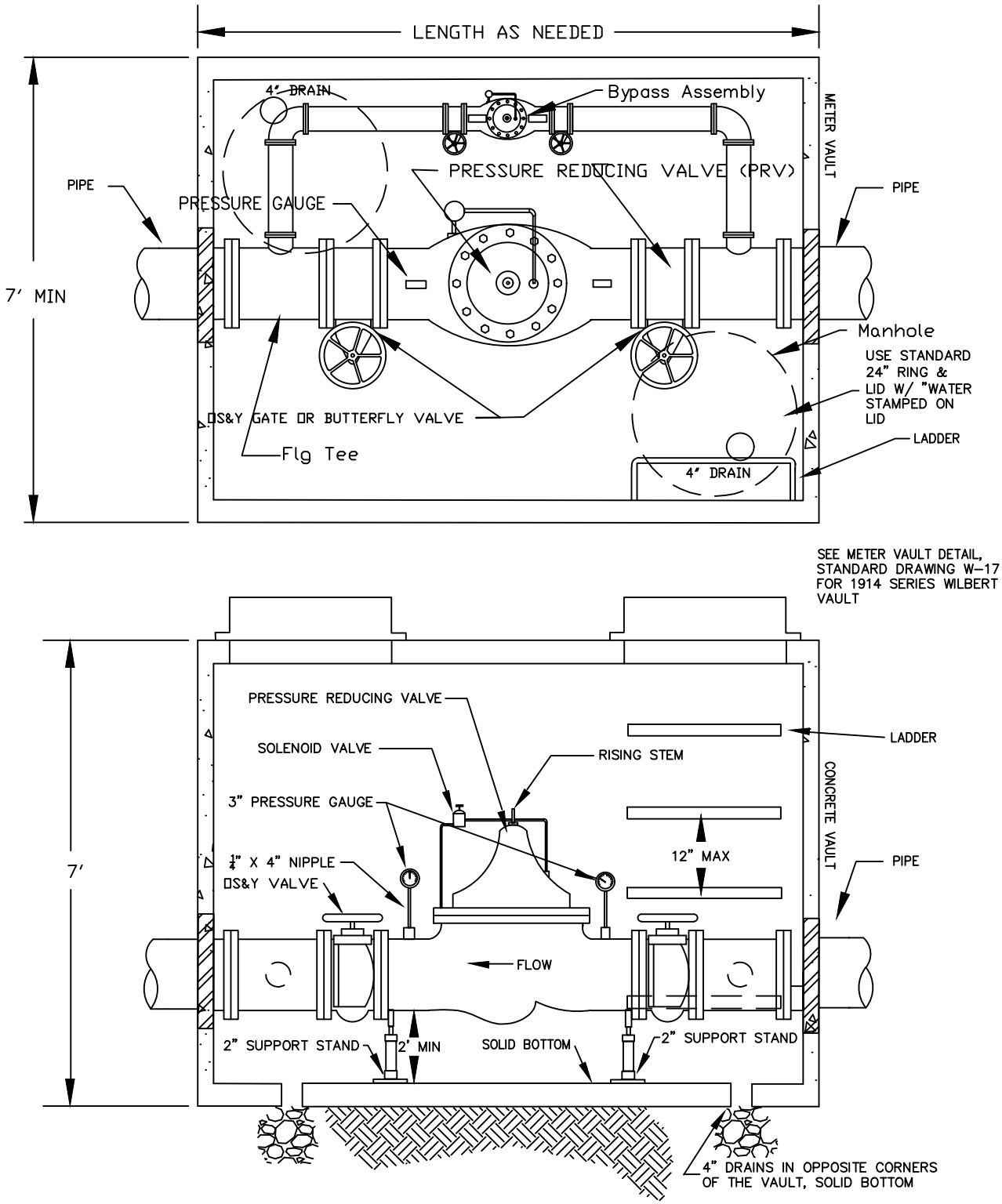
PRESSURE SUSTAINING VALVE ASSEMBLY

APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

4/13/18
DATE:

DWG NO. W-18



PLAN VIEW

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

PRESSURE REDUCING STATION ASSEMBLY

APPROVED BY:

Chris Bosley — 4/13/18

CITY ENGINEER, PE 10804 — DATE:

DWG NO. W-19

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

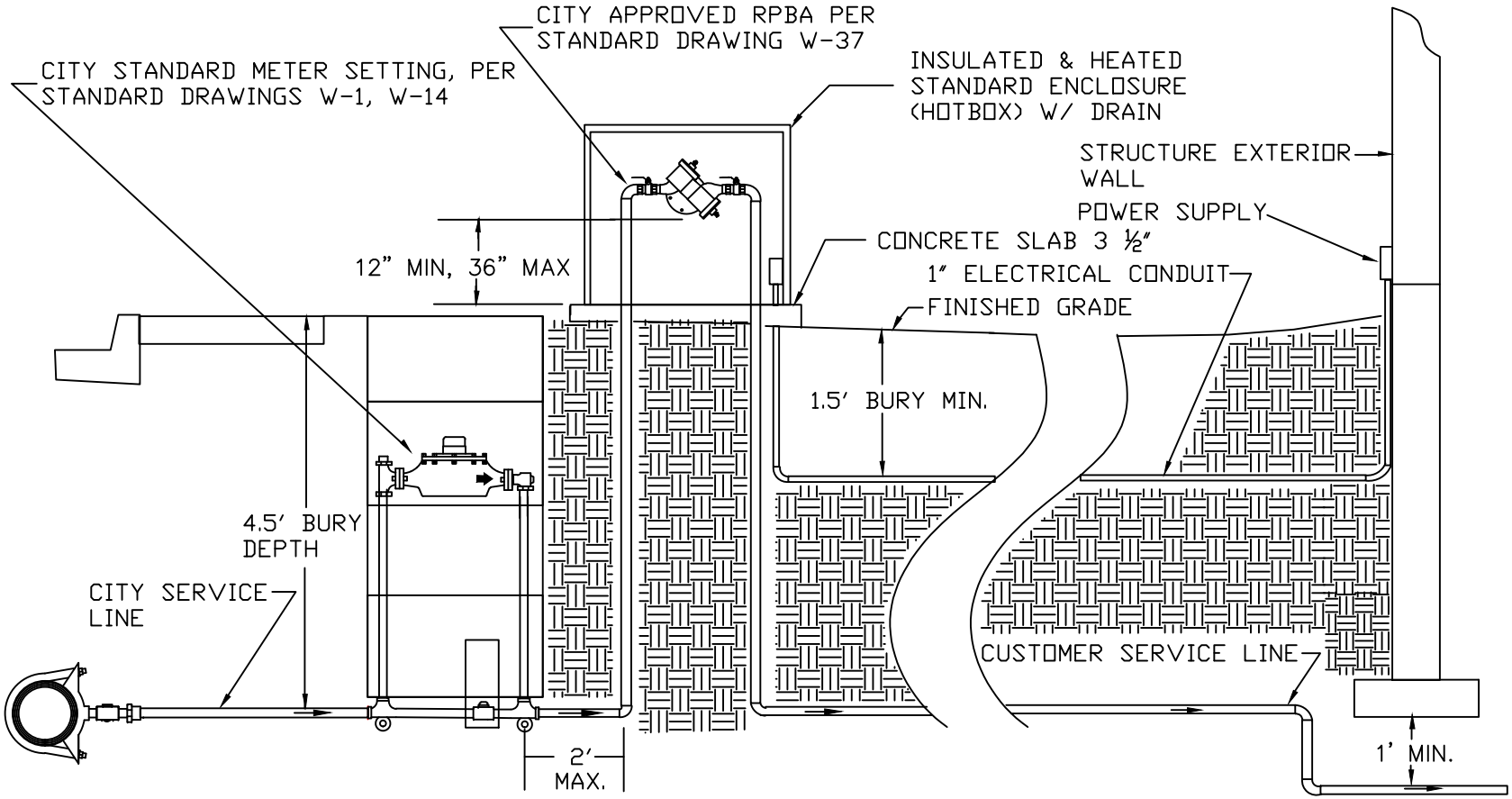
RPBA PREMISE ISOLATION STANDARD METHOD

APPROVED BY:

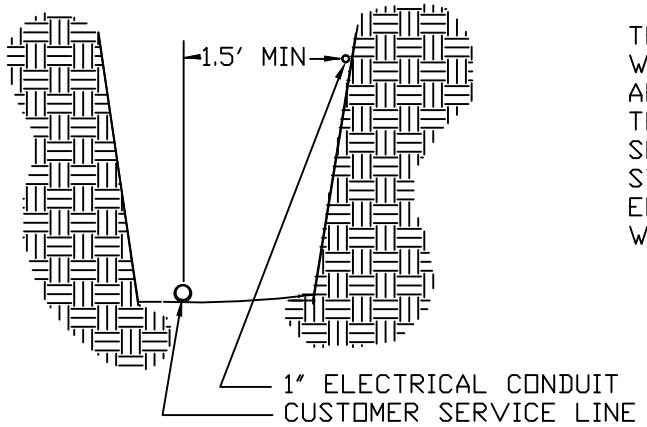
CITY ENGINEER, PE 10604

DATE: 4/19/18

DWG NO. W-20



TRENCH CROSS-SECTION



THE PROPERTY OWNER, AS A CONDITION OF GRANTING SERVICE WHERE PREMISE ISOLATION IS REQUIRED, SHALL INSTALL AN APPROVED RPBA A MAXIMUM OF 2' BEHIND THE METER OR AT THE PROPERTY LINE AS DIRECTED BY THE CITY. THE RPBA SHALL BE INSTALLED ABOVE GRADE OR FLOOD PLAIN AS PER STANDARD INSTALLATION REQUIREMENTS AND SHALL BE ENCLOSED IN AN APPROVED INSULATED AND HEATED ENCLOSURE WITH ADEQUATE DRAINS.

REVISION	APPROVED	DATE

RPBA PREMISE ISOLATION ALTERNATE METHOD

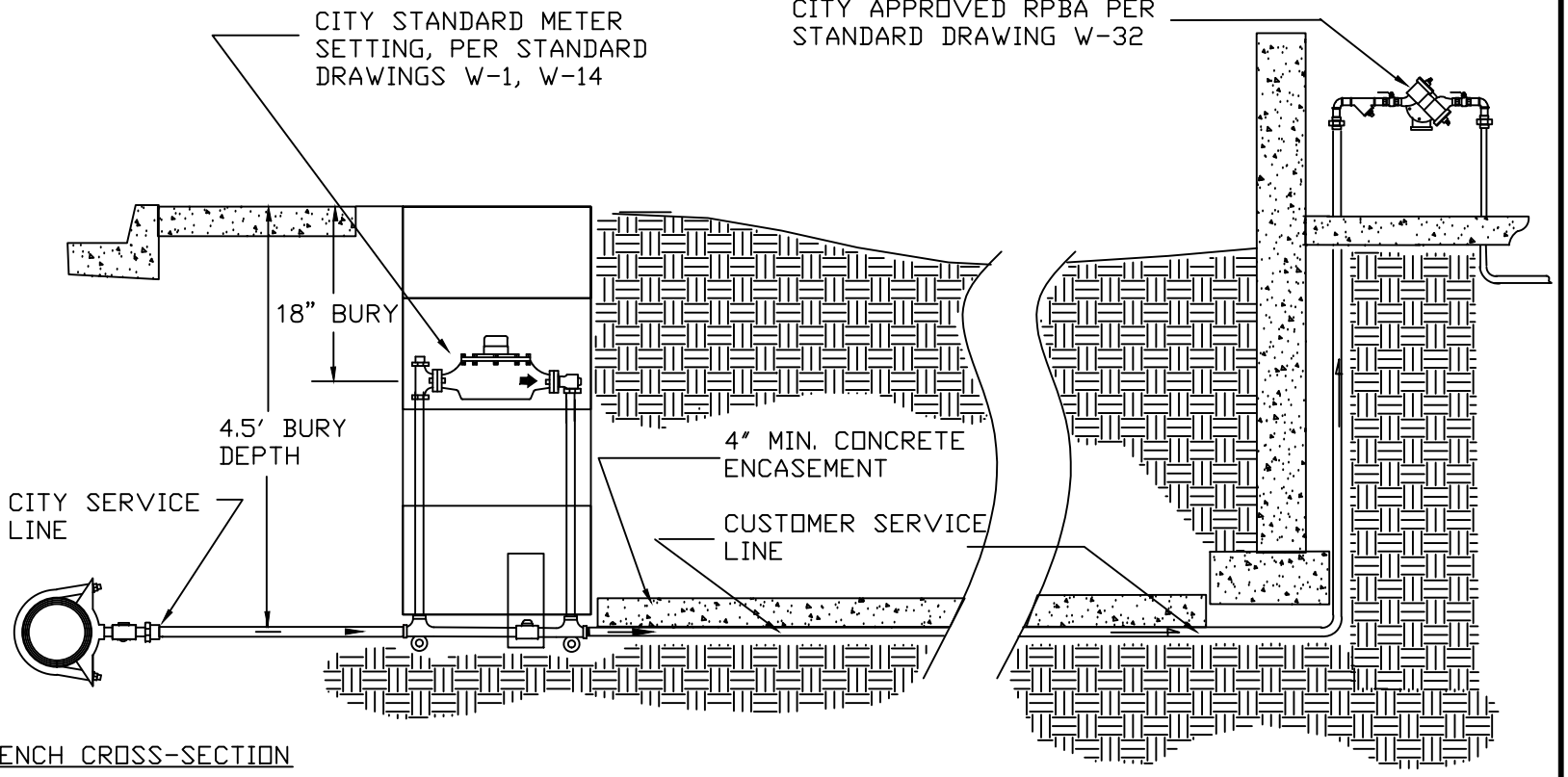
CITY OF COEUR d'ALENE STANDARD DRAWING

APPROVED BY:

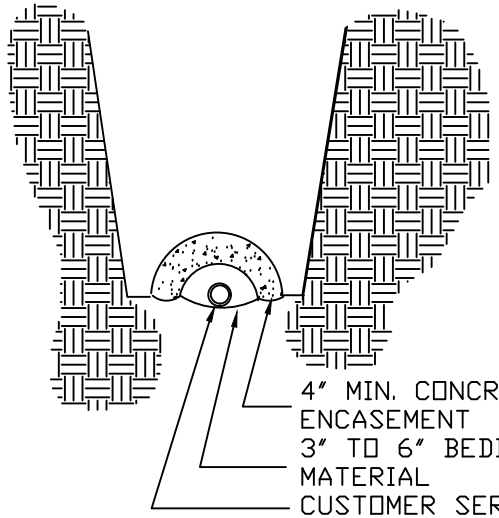
CITY ENGINEER, PE 10809

DATE: 4/13/18

DWG NO. W-21



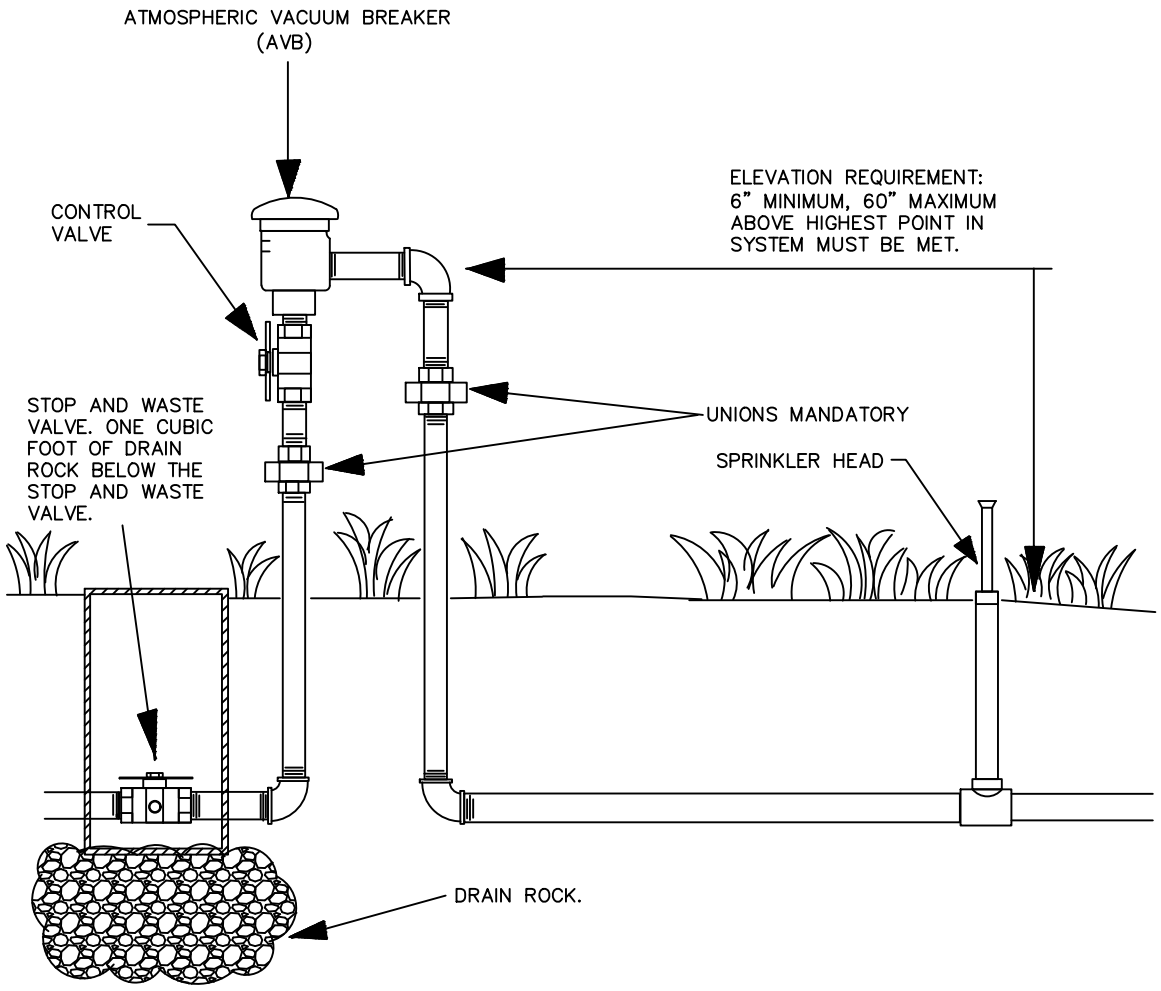
TRENCH CROSS-SECTION



1. THE PROPERTY OWNER, AS A CONDITION OF ALLOWING THE RPBA TO BE INSTALLED INSIDE THE STRUCTURE, SHALL COVER THE CUSTOMER SERVICE LINE FROM THE BASE OF THE METER BOX TO THE BASE OF THE INLET RISER AT THE RPBA WITH A MINIMUM OF 4" OF CONCRETE OVER 3 TO 6"" OF FINE BEDDING MATERIAL AS ILLUSTRATED.

2. THE PROPERTY OWNER SHALL SIGN A RECORDABLE EASEMENT PROHIBITING CONNECTIONS INTO THE SERVICE LINE BETWEEN THE METER AND THE RPBA.

3. THIS METHOD SHALL BE UTILIZED WHERE AUXILIARY SOURCES OF WATER EXIST ON THE PROPERTY TO BE SERVED PER SPECIAL APPROVAL OF THE IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY.



NOTE:

1. NO BLOW OFF PORTS ARE ALLOWED UPSTREAM OR DOWNSTREAM OF THE AVB. THE DEVICE MUST BE REMOVED FROM THE SYSTEM PRIOR TO BLOWING OUT THE IRRIGATION SYSTEM.
2. NO MANUAL OR AUTOMATIC VALVES ALLOWED DOWNSTREAM OF AVB.
3. AVB CANNOT BE PRESSURIZED MORE THAN 12 HOURS IN A 24 HOUR PERIOD.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

APPROVED ATMOSPHERIC VACUUM BREAKER INSTALL

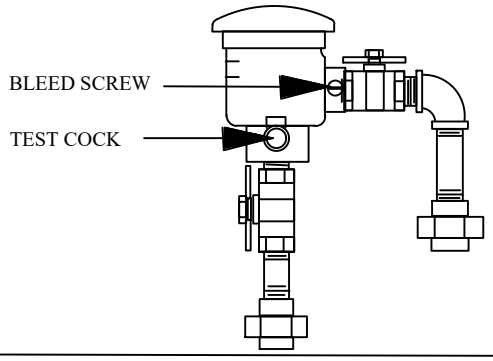
APPROVED BY:

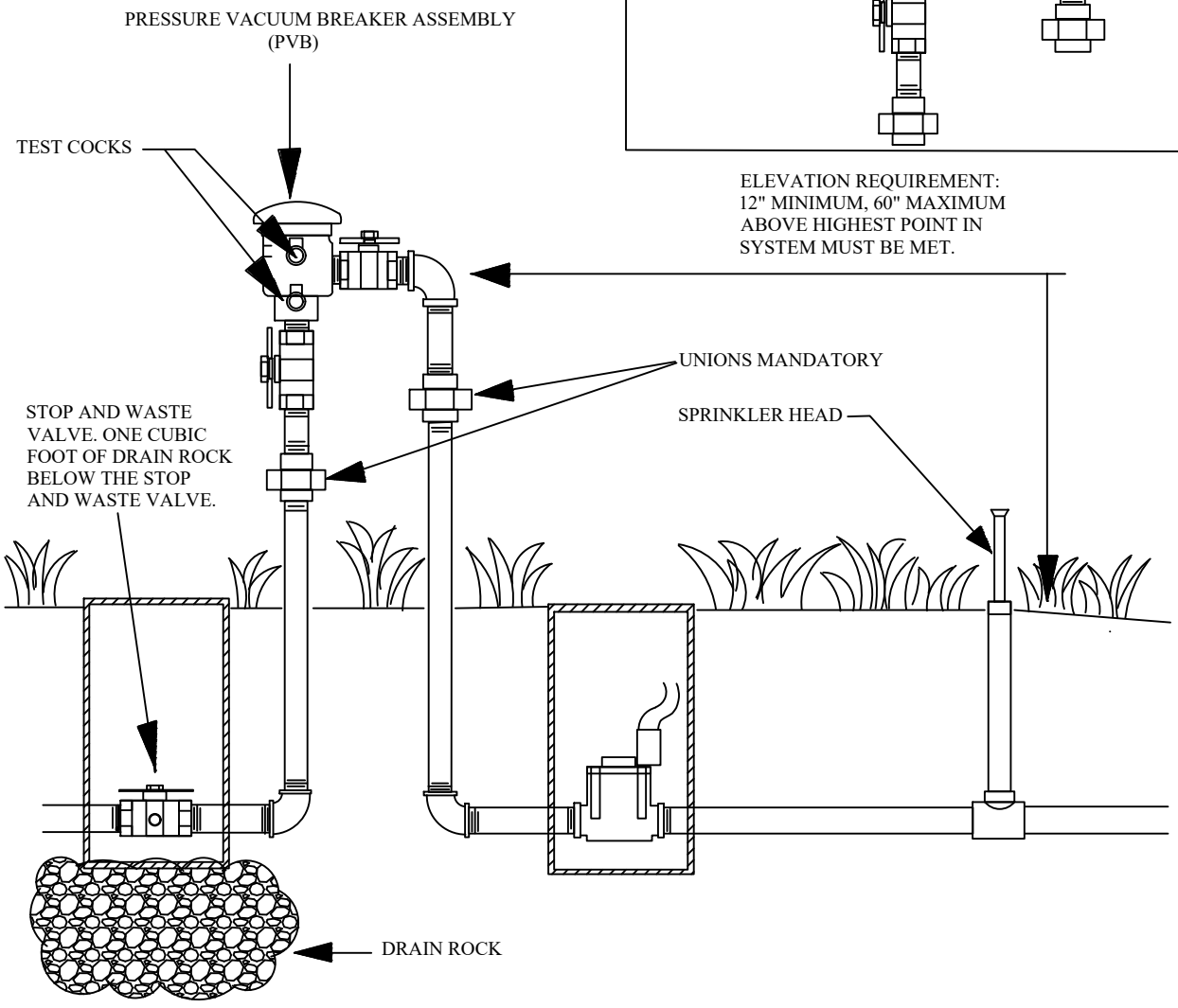
Chris Bosley
CITY ENGINEER, PE 10804

4/13/18
DATE:

DWG NO. W-22

SPILL RESISTANT VACUUM BREAKER ASSEMBLY
(SVB)





NOTE:

1. NO BLOW OFF PORTS ARE ALLOWED UPSTREAM OR DOWNSTREAM OF THE PVB ASSEMBLY. THE ASSEMBLY MUST BE REMOVED FROM THE SYSTEM PRIOR TO BLOWING OUT THE IRRIGATION SYSTEM.
2. MANUAL OR AUTOMATIC VALVES ALLOWED DOWNSTREAM OF PVB.
3. MAY BE PRESSURIZED FOR MORE THAN 12 HOURS IN A 24 HOUR PERIOD.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

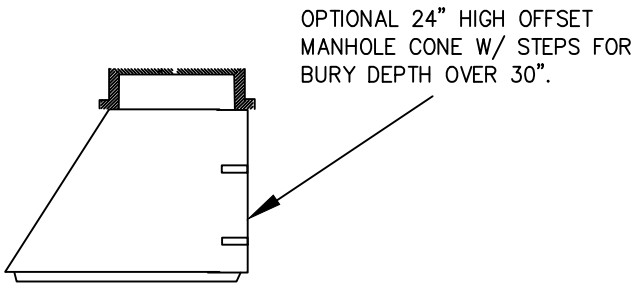
APPROVED PRESSURE VACUUM BREAKER ASSY.

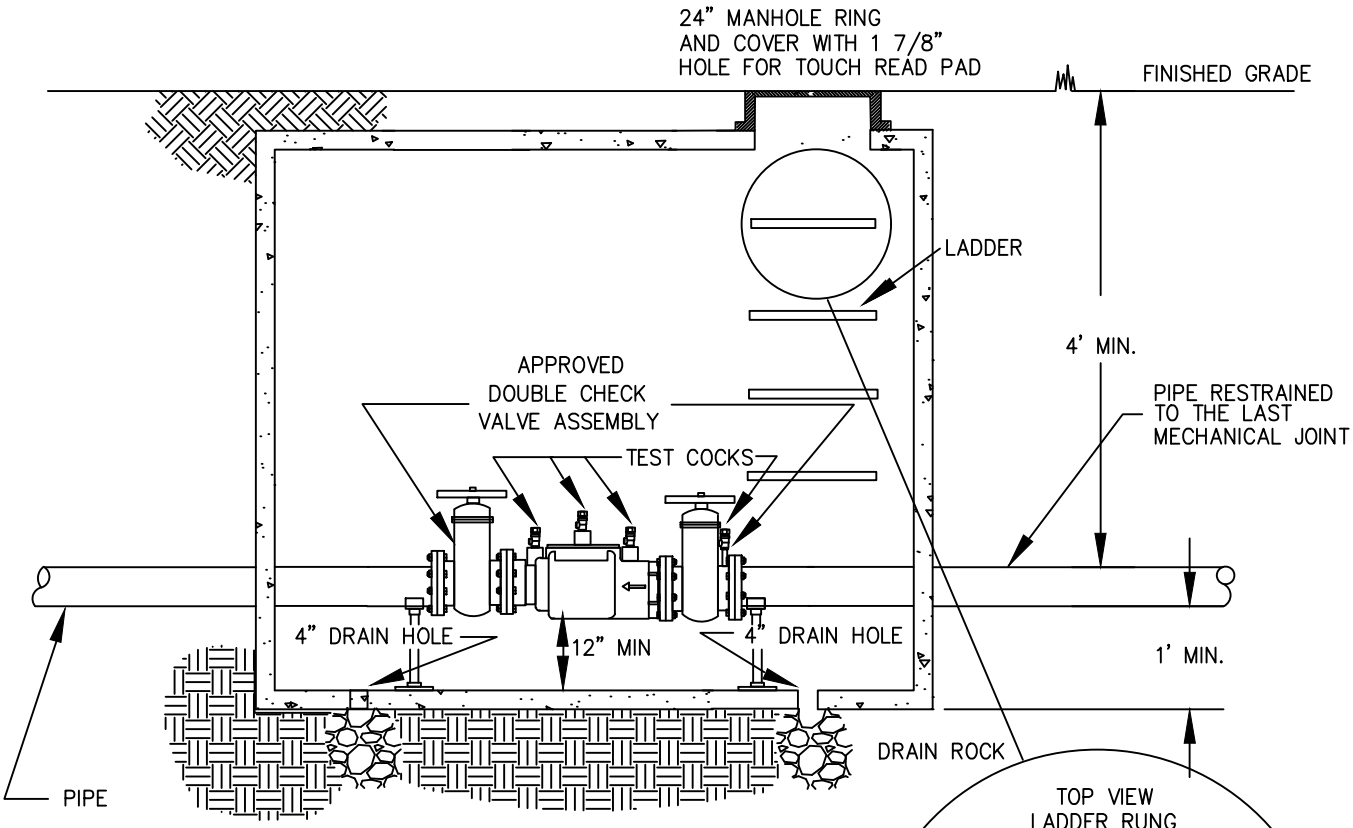
APPROVED BY:

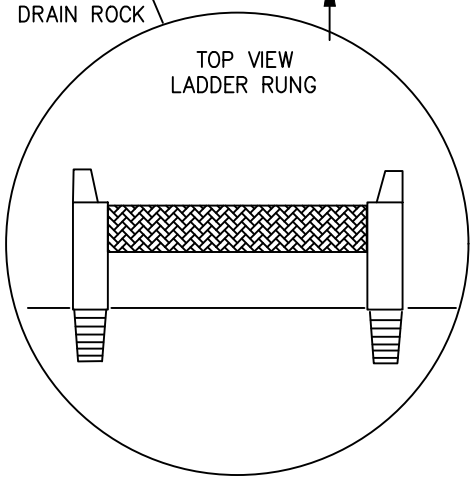
Chris Bosley
CITY ENGINEER, PE 10804

4/13/18
DATE:

DWG NO. W-23







NOTES:

1. VAULT CONSTRUCTION TO BE DESIGNED BASED ON POTENTIAL TRAFFIC LOAD. WILBERT 1900 SERIES OR APPROVED EQUAL.
2. LENGTH AND WIDTH OF VAULT SHALL ACCOMMODATE EQUIPMENT WITH ADEQUATE OR VENDORS RECOMMENDED CLEARANCE FROM WALLS TO REMOVE OR MAINTAIN EQUIPMENT. MUST HAVE ACCESS LADDER.
3. MUST PROVIDE ADEQUATE CLEARANCE FOR TESTING AND MAINTENANCE OF THE ASSEMBLY – 12" MINIMUM FOR THE NON TEST SIDE, 24" MINIMUM FOR THE TEST SIDE.
4. THERE SHALL BE NO UPSTREAM CONNECTIONS OR TEES INSTALLED BETWEEN THE METER VAULT AND THE BACKFLOW ASSEMBLY EXCEPT FOR PARALLEL ASSEMBLY INSTALLATION.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

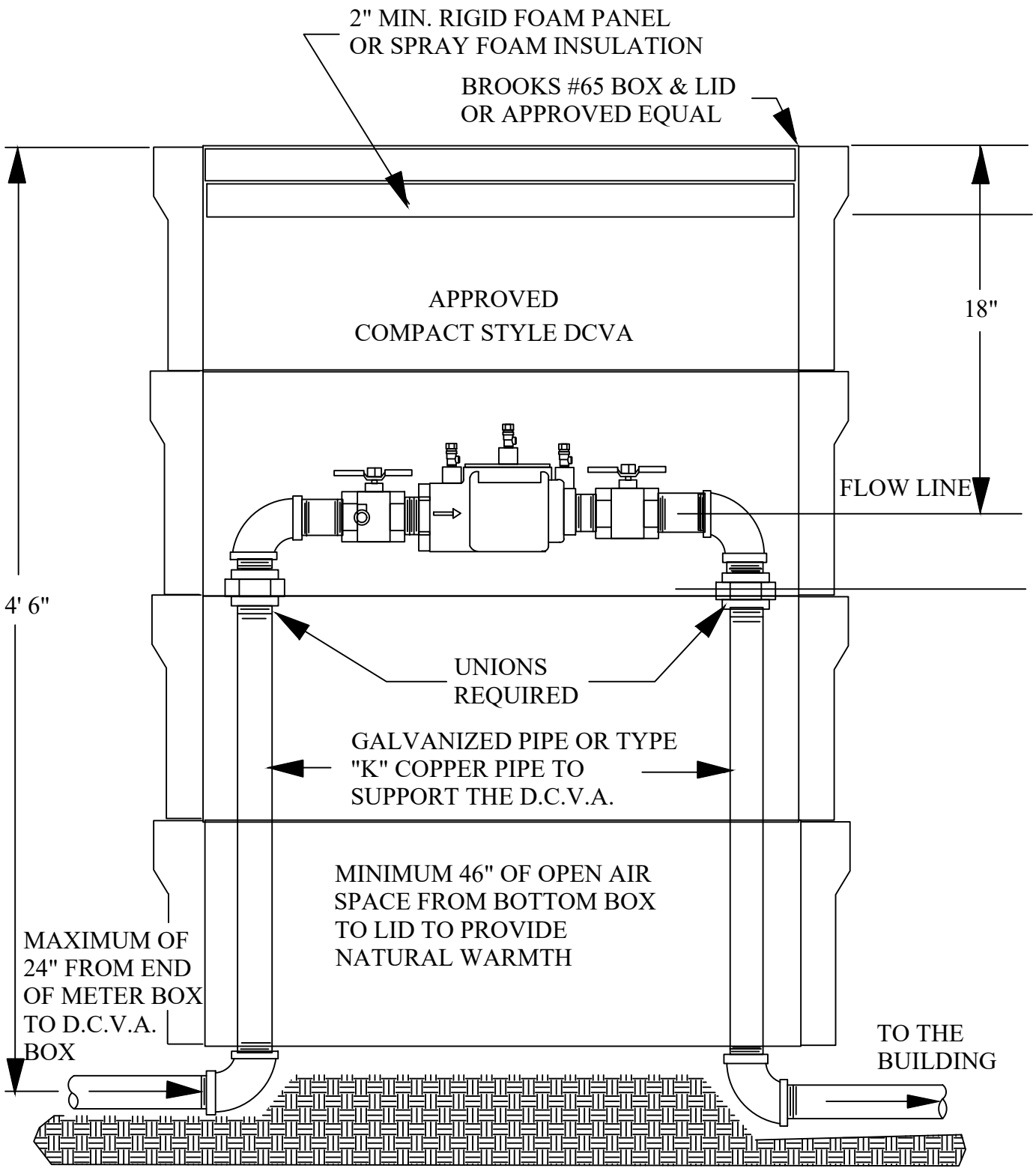
4" OR LARGER DC IN VAULT

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

DATE: 4/13/18

DWG NO. W–24



REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

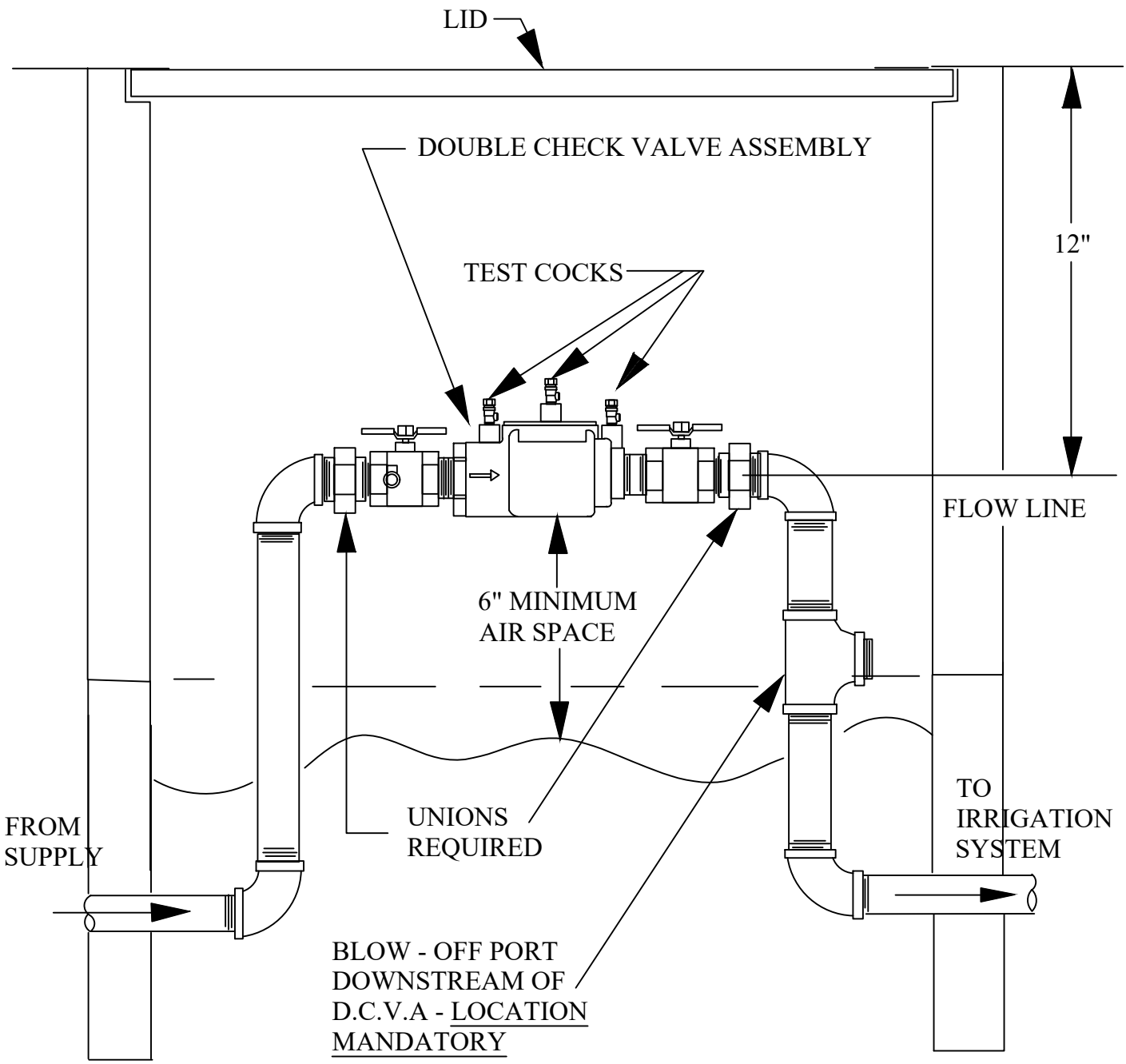
APPROVED 1" & 2" DC FOR PREMISE ISOLATION

APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

4/13/18
DATE:

DWG NO. W-25



REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

APPROVED DC FOR IRRIGATION SYSTEM

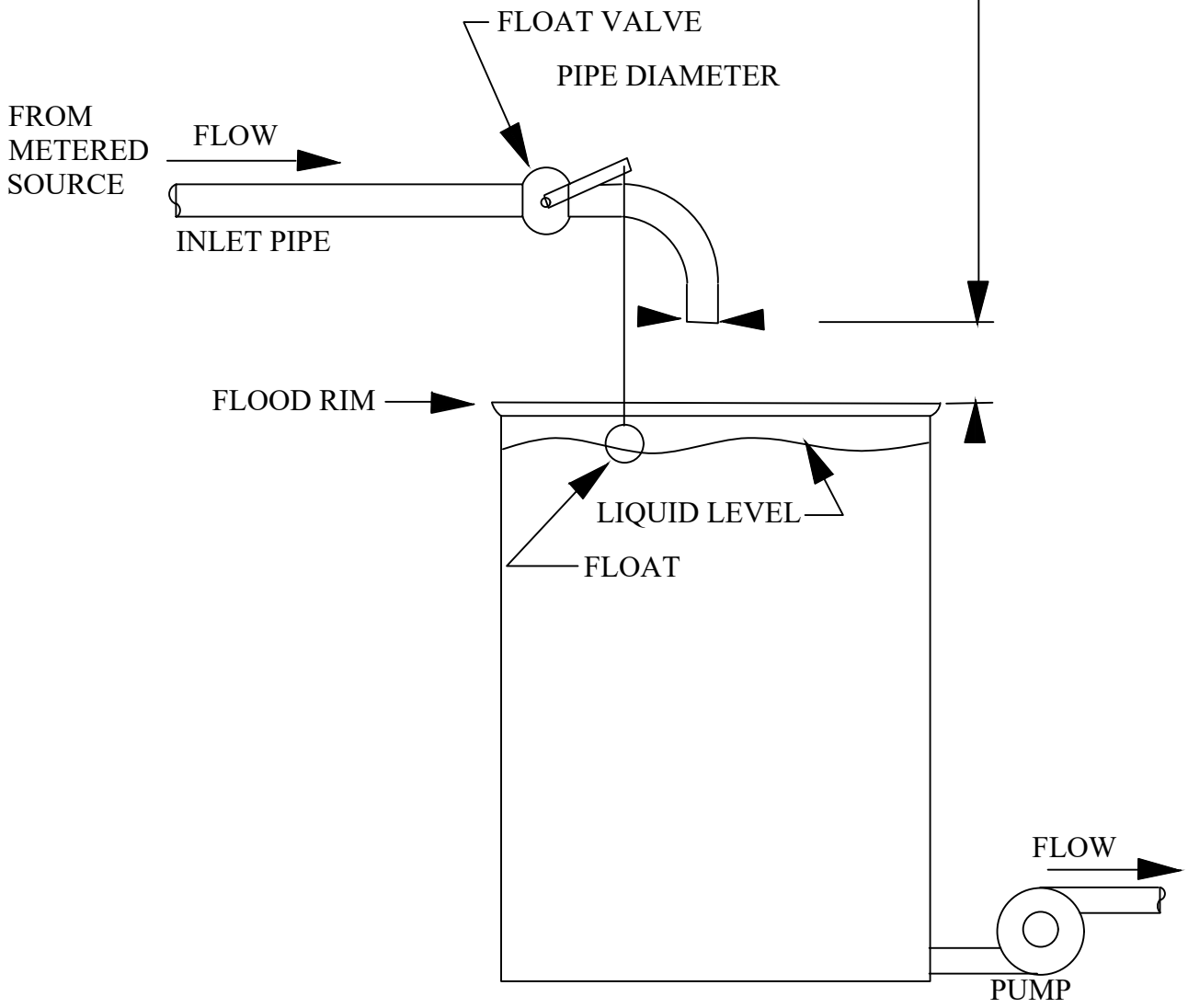
APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

4/13/18
DATE:

DWG NO. W-26

AIR GAP - MINIMUM OF TWICE THE INLET PIPE DIAMETER ABOVE THE FLOOD RIM BUT NEVER LESS THAN 1 INCH.



REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

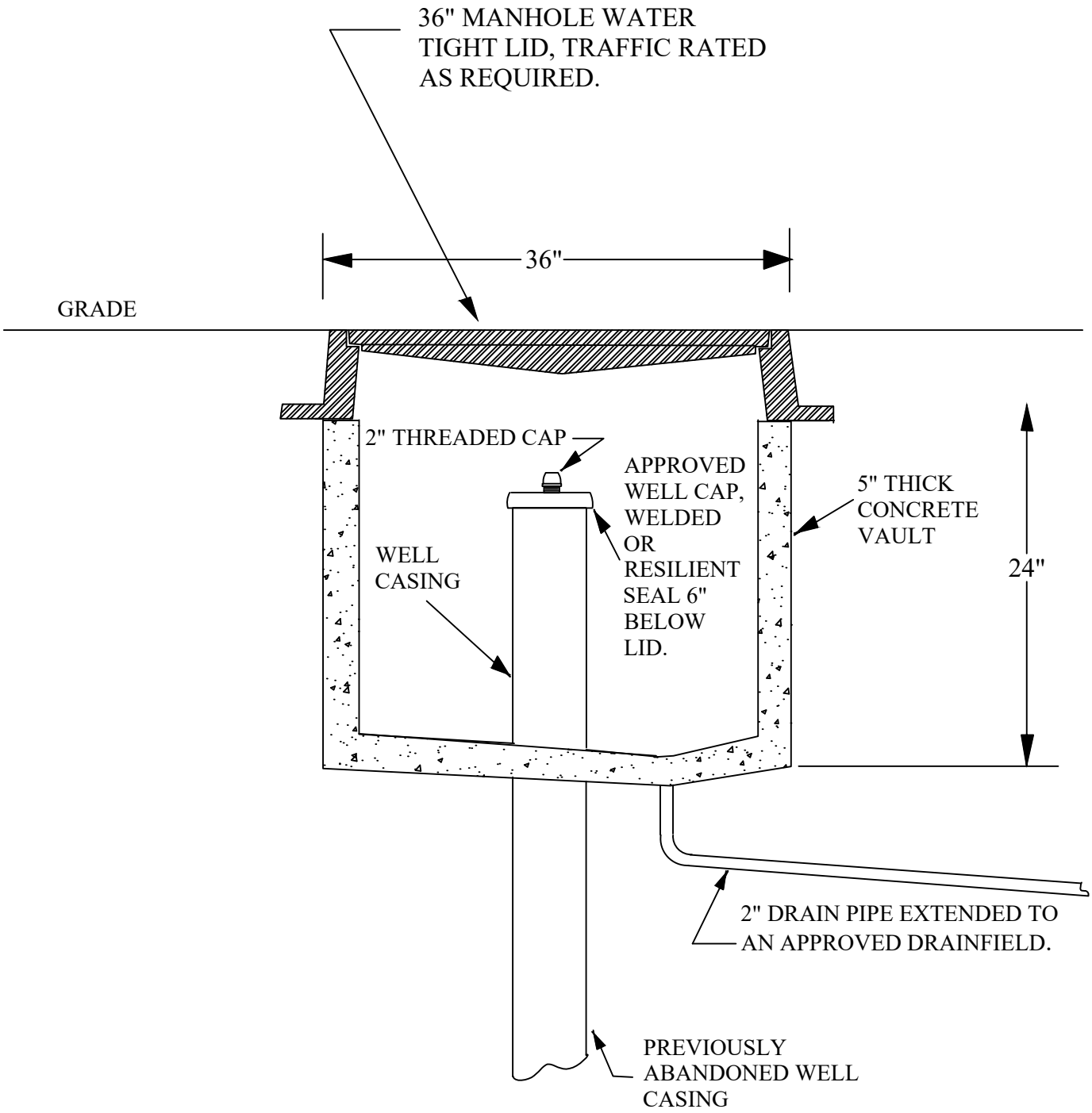
APPROVED AIR GAP

APPROVED BY:

Chris Bosley 4/13/18

CITY ENGINEER, PE 10804 DATE:

DWG NO. W-27



REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

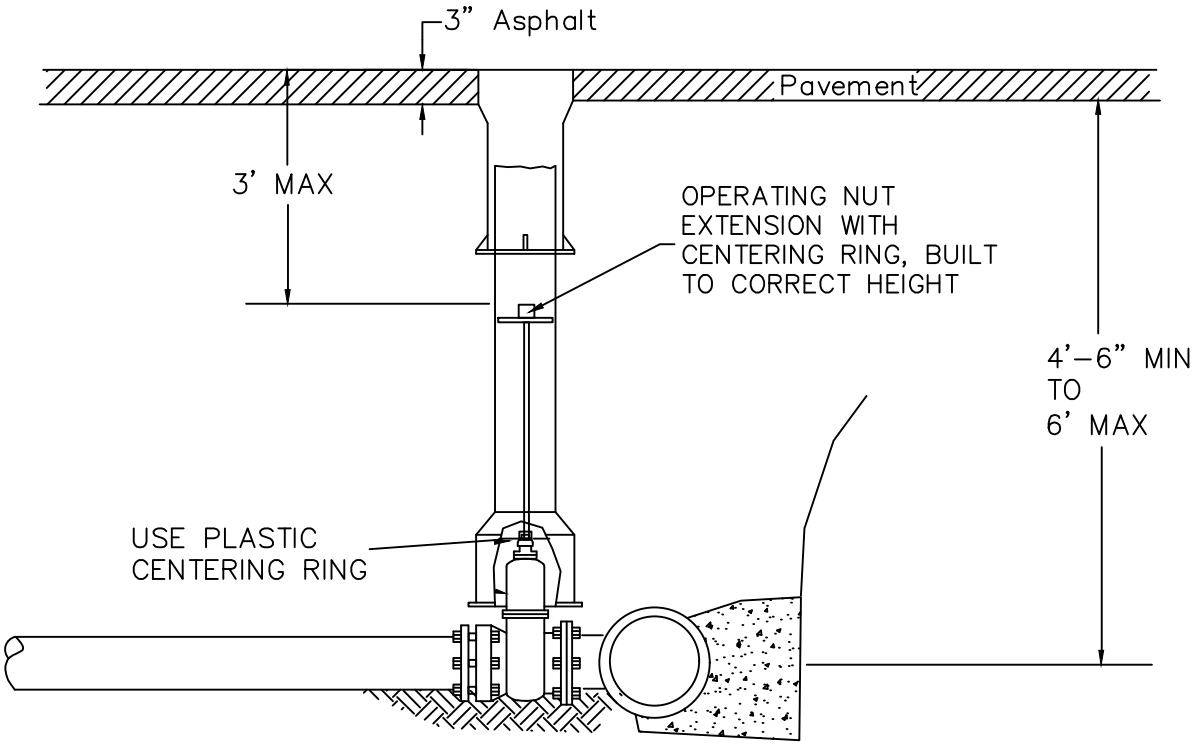
MONITORING WELL MODIFICATIONS

APPROVED BY:

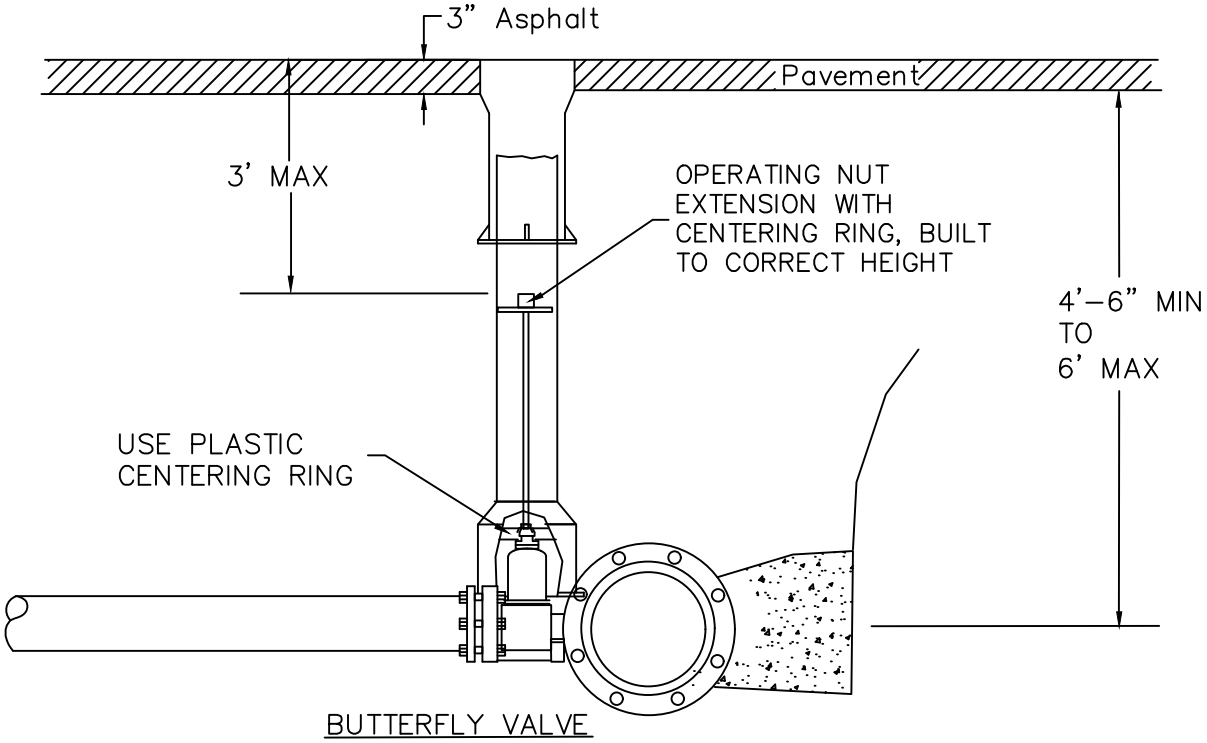
Chris Bosley
CITY ENGINEER, PE 10804

4/13/18
DATE:

DWG NO. W-28



GATE VALVE
EXTENSION



BUTTERFLY VALVE
EXTENSION

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

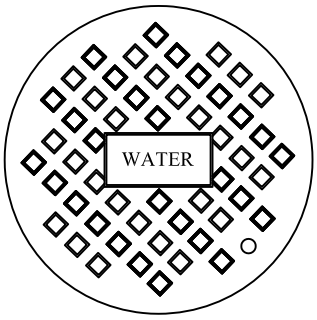
VALVE OPERATING NUT EXTENSION

APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

4/13/18
DATE:

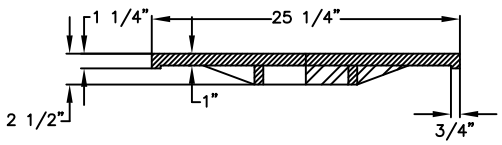
DWG NO. W-29



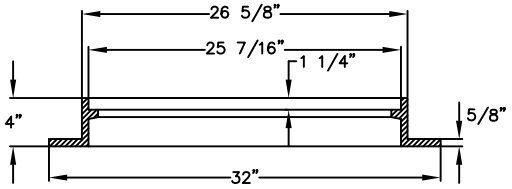
VAULT MANHOLE COVER

NOTES THIS DETAIL:

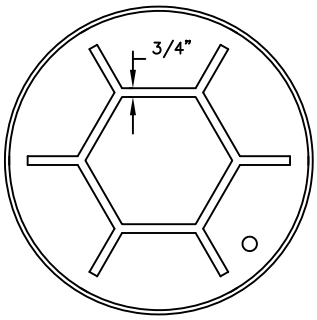
1. ALL LETTERING & ARTWORK SHALL BE FLUSH WITH FRAME RIM/LIP MOLDED INTO THE TOP OF THE COVER.
2. FRAME SHALL BE GRAY IRON CONFORMING TO A.S.T.M. A48–90, GRADE 30. COVER SHALL BE DUCTILE IRON CONFORMING TO A.S.T.M. A536–84, CLASS 80–50–06.
3. FIT TOLERANCES SHALL BE < 1/8" ±.
4. WELDED FRAME AND COVERS ARE NOT ACCEPTABLE.



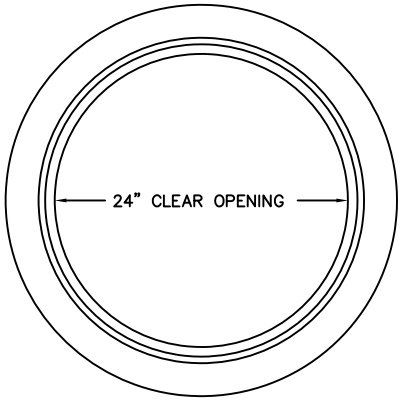
SECTION VIEW



SECTION VIEW



BOTTOM OF COVER



FRAME

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

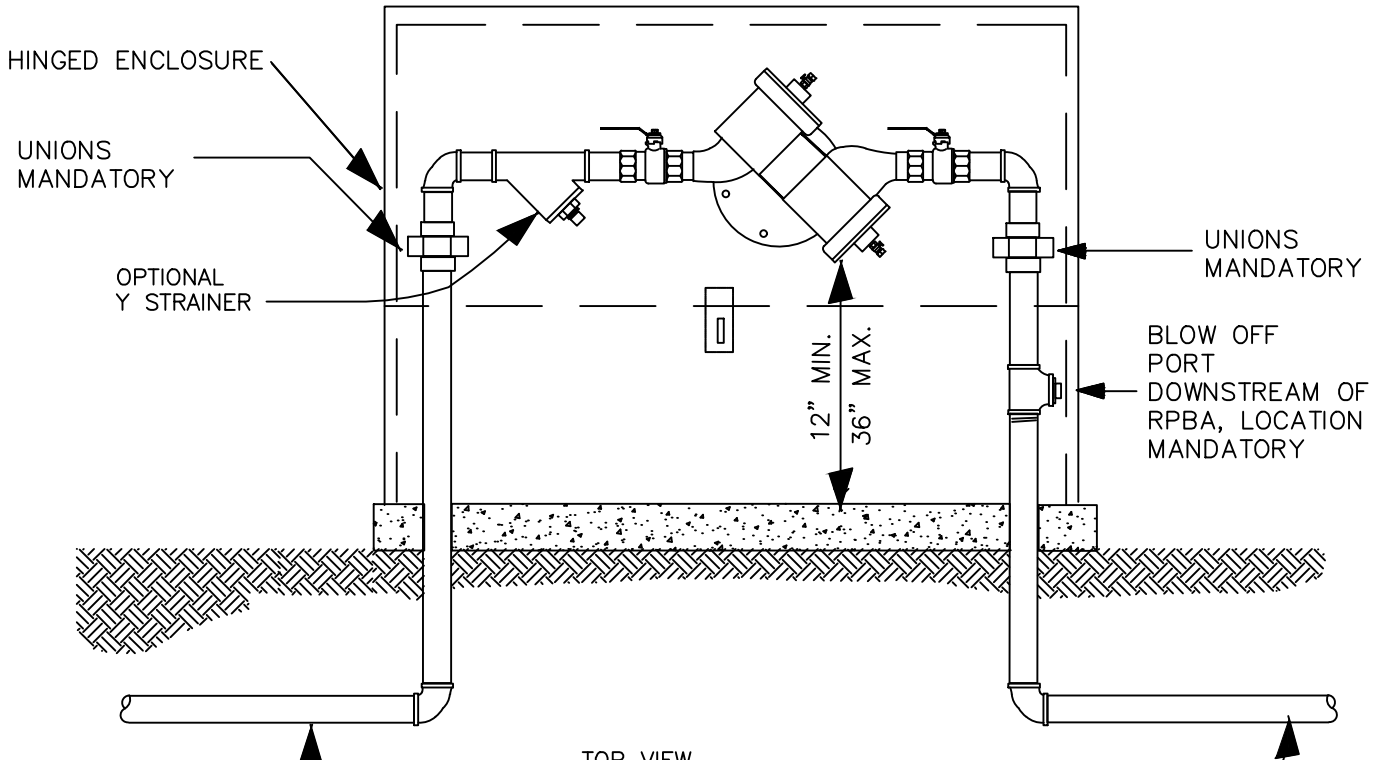
24" MANHOLE COVER FOR METER VAULT

APPROVED BY:

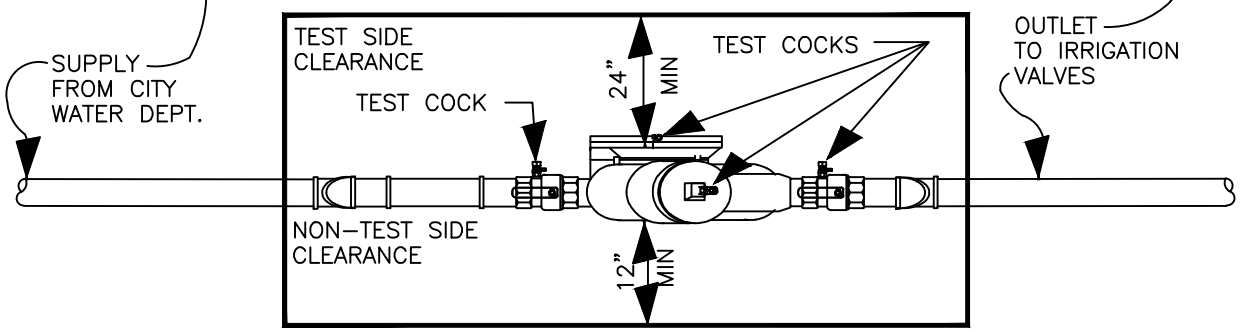
Chris Bosley — CITY ENGINEER, PE 10804 — DATE: 6/18/18

DWG NO. W-30

SIDE VIEW



TOP VIEW



NOTES:

1. BACKFLOW ASSEMBLY MUST MEET U.S.C./IDAPA STANDARDS AND SPECIFICATIONS, PLEASE CALL BEFORE ORDERING.
2. ASSEMBLIES MUST BE INSTALLED ABOVE GRADE IN A HORIZONTAL ORIENTATION ONLY.
3. ENCLOSURE FOR OUTDOOR PROTECTION OF THE ASSEMBLY IS ALLOWED, BUT MUST PROVIDE IMMEDIATE TOP ACCESS OF 12" FOR TESTING AND MAINTENANCE.
4. TEST COCKS ARE REQUIRED TO FACE AWAY FROM WALLS AND NEAREST STATIONARY OBJECT, AND AT NO TIME BE LESS THAN 24" CLEARANCE.
5. IF A DEDICATED IRRIGATION SERVICE, THERE MUST BE NO BRANCH PIPING OR TEES CONNECTED TO THE SUPPLY PIPE BETWEEN THE CITY SERVICE SUPPLY LINE AND THE ASSEMBLY.
6. ALL MEASUREMENTS ARE FROM THE LOWEST OR WIDEST PART OF THE ASSEMBLY.
7. ALL ASSEMBLIES ARE SUSCEPTIBLE TO FREEZING AND SHALL BE ADEQUATELY FREEZE PROTECTED.
8. ADEQUATE DRAINAGE FROM THE ASSEMBLY MUST BE PROVIDED.
9. NO ASSEMBLIES OR ENCLOSURES ARE TO BE INSTALLED OVER THE WATER METER VAULT.
10. BLOW OFF PORT MUST BE DOWNSTREAM OF ASSEMBLY.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

TYPICAL APPROVED RP FOR IRRIGATION SYSTEM

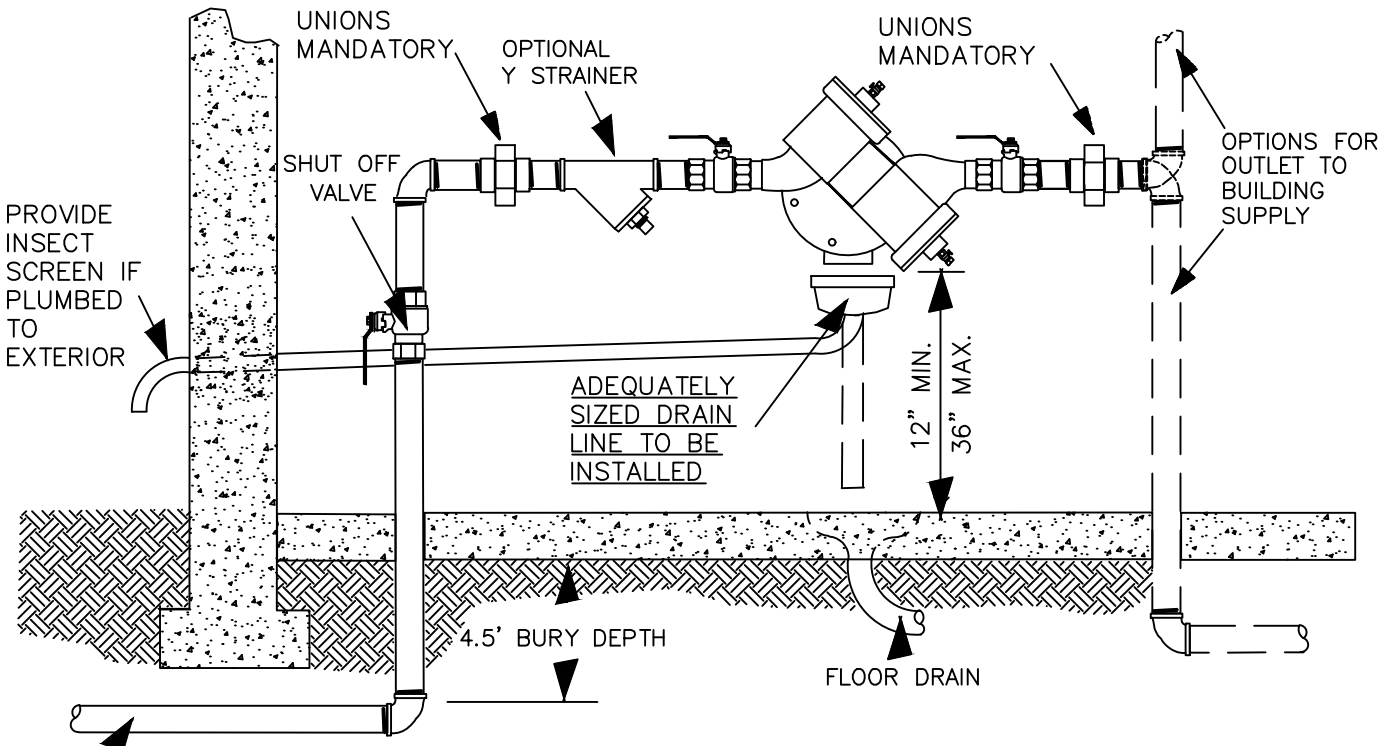
APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

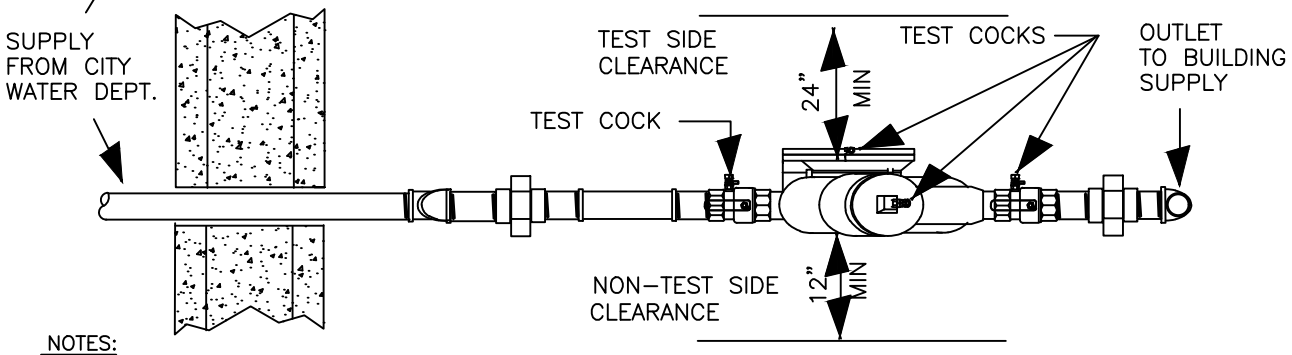
4/13/18 — DATE:

DWG NO. W-31

SIDE VIEW



TOP VIEW



NOTES:

1. BACKFLOW ASSEMBLY MUST MEET U.S.C./IDAPA STANDARDS AND SPECIFICATIONS, PLEASE CALL BEFORE ORDERING.
2. ASSEMBLIES MUST BE INSTALLED ABOVE GRADE OR HIGHEST FLOOD PLAIN IN A HORIZONTAL ORIENTATION ONLY UNLESS THE ASSEMBLY HAS BEEN APPROVED BY THE CITY FOR VERTICAL ORIENTATION.
3. ADEQUATE CLEARANCE MUST BE PROVIDED FOR TESTING AND MAINTENANCE OF ASSEMBLY, MINIMUM 12" FOR NON-TEST SIDE, MINIMUM 24" FOR THE TEST SIDE, FACING AWAY FROM WALLS AND NEAREST STATIONARY OBJECTS.
4. THERE MUST BE NO UNPROTECTED BRANCH PIPING OR TEES CONNECTED TO THE SUPPLY PIPE BETWEEN THE CITY SERVICE SUPPLY LINE AND THE ASSEMBLY.
5. IF AUXILIARY WATER SOURCE IS PRESENT AND THE RP HAS NOT BEEN INSTALLED IMMEDIATELY DOWNSTREAM OF THE METER BOX, THE ENTIRE LENGTH OF THE WATER SERVICE FROM METER BOX TO THE BACKFLOW ASSEMBLY SHALL BE ENCASED IN MINIMUM 4" OF CONCRETE PER STANDARD DRAWING W-21.
6. ALL MEASUREMENTS ARE FROM THE LOWEST OR WIDEST PART OF THE ASSEMBLY.
7. ALL ASSEMBLIES ARE SUSCEPTIBLE TO FREEZING AND SHALL BE ADEQUATELY FREEZE PROTECTED.
8. ADEQUATE DRAINAGE FROM THE ASSEMBLY MUST BE PROVIDED PER THE PNWS/AWWA RP DISCHARGE RATE CHART.
9. BACKFLOW ASSEMBLY MUST BE INSTALLED WITHIN 2' OF FLOOR OR WALL SERVICE PENETRATION.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

APPROVED RP FOR BUILDING ISOLATION

APPROVED BY:

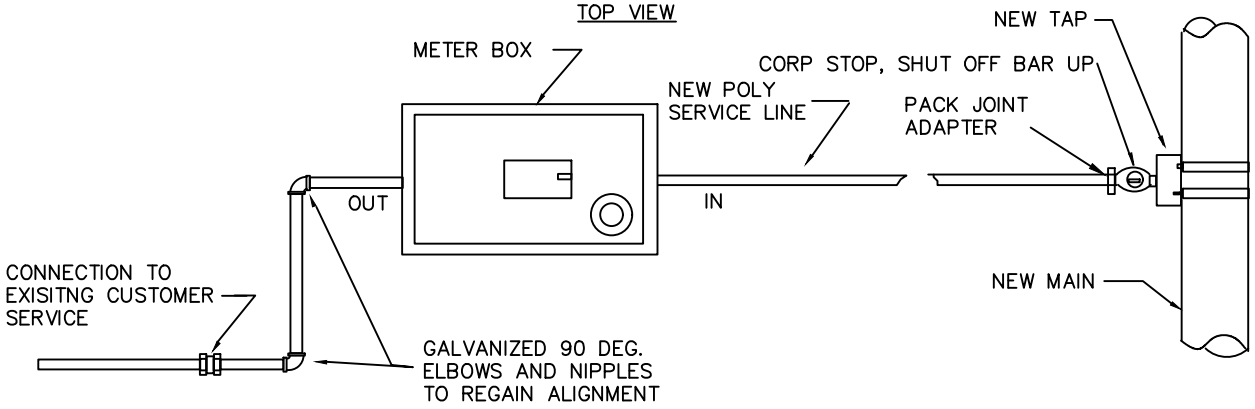
Chris Bosley — CITY ENGINEER, PE 10804

4/13/18 — DATE:

DWG NO. W-32

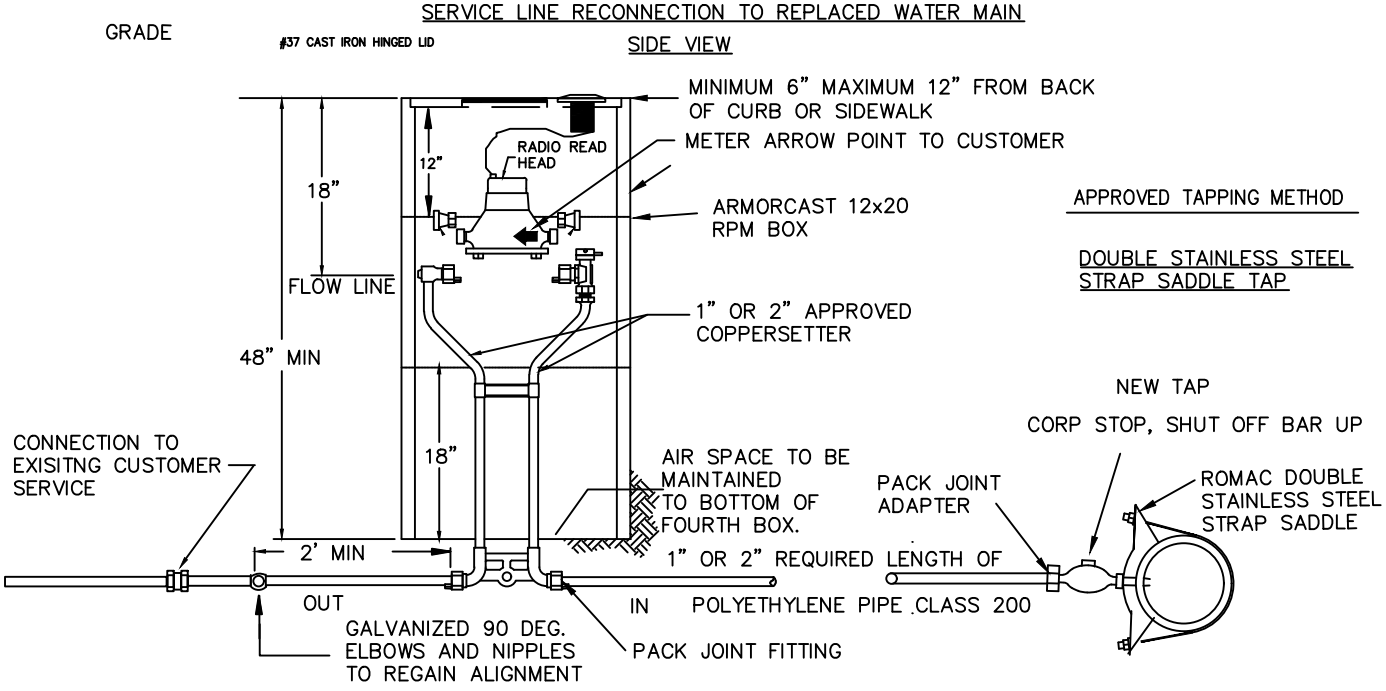
SERVICE LINE RECONNECTION TO REPLACED WATER MAIN

TOP VIEW



SERVICE LINE RECONNECTION TO REPLACED WATER MAIN

SIDE VIEW



NOTES:

1. MAIN TO HAVE 4'–6" MINIMUM OF COVER TO FINISHED GRADE.
2. SERVICE TO BE PRESSURE TESTED TO METER ANGLE STOP.
3. ALL MATERIALS TO CONFORM TO NSF–61 STANDARDS FOR LEAD FREE MATERIALS WHICH MAY COME INTO CONTACT WITH POTABLE WATER SUPPLY.
4. RECONNECTION TO EXISTING SERVICE WILL BE ACCOMPLISHED USING EITHER A GALVANIZED COMPRESSION COUPLING, A BRASS PACK JOINT COUPLING FOR GALVANIZED PIPE AND/OR COPPER PIPE, OR A PACK JOINT ADAPTER FOR POLY PIPE.
5. THE SWING JOINT FROM THE COPPERSETTER TO THE EXISTING SERVICE SHALL BE GALVANIZED PIPE TO STABILIZE THE COPPERSETTER.
6. POLYETHYLENE PIPE SHALL BE USED FOR SERVICE REPLACEMENT FROM THE MAIN TO THE COPPERSETTER.
7. NO PRIVATE CONNECTIONS OR FITTINGS ARE ALLOWED IN OR UNDER THE METER BOX.
8. ALL WORK SHALL BE INSPECTED BY THE WATER DEPT. INSPECTOR BEFORE BACKFILLING CAN TAKE PLACE.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

1" & 2" SERVICE RECONNECT

APPROVED BY:

Chris Bosley — 4/13/18

CITY ENGINEER, PE 10804 — DATE:

DWG NO. W–33

WATER MAIN FLUSHING

	FLOW REQUIRED TO PRODUCE 2.5 F.FPS (APPROX.)	SIZE OF FLUSHING TAP (INCH) (1") (1 1/2") (2")			HYDRANT OUTLETS	
PIPE DIAMETER (INCH)	VELOCITY IN MAIN, (GPM)	NUMBER OF TAPS ON PIPE (2)			NUMBER OF PORTS	SIZE IN (INCH)
4"	100	1			1	2 1/2"
6"	220		1		1	2 1/2"
8"	400		2	1	1	2 1/2"
10"	600		3	2	1	2 1/2"
12"	900			2	2	2 1/2"
16"	1600			4	2	2 1/2"
18"	2000			6	1	4 1/2"
20"	2500			8	1	4 1/2"
24"	3500			11	2	4 1/2"
(1)	WITH A 40 PSI RESIDUAL PRESSURE IN THE MAIN WITH THE FIRE HYDRANT OR FLUSH PORT FLOWING TO ATMOSPHERE, A 2 1/2" HYDRANT OUTLET WILL DISCHARGE APPROX. 1000 GPM AND A 4 1/2" HYDRANT NOZZLE WILL DISCHARGE APPROX. 2500 GPM					
(2)	NUMBER OF TAPS ON PIPE BASED ON DISCHARGE RATE THROUGH 5 FEET OF GALVANIZED IRON (GI) PIPE WITH ONE 90 DEGREE ELBOW.					

FLUSHING:

1. MAINS DO NOT NEED TO BE THOROUGHLY FLUSHED PRIOR TO PRESSURE TEST. FLUSH ONLY ENOUGH TO RELEASE ANY TRAPPED AIR. PRESSURE TEST WILL BE CONDUCTED PRIOR TO COLLECTION OF BACTERIA SAMPLES.
2. MUST USE A MINIMUM SCOURING VELOCITY OF 2.5 FEET PER SECOND (FPS).
3. IF NO FIRE HYDRANT IS PROVIDED NEAR THE END OF THE MAIN, PROVIDE A FLUSHING TAP OF THE SIZE SUFFICIENT TO PROVIDE A MINIMUM VELOCITY IN THE MAIN OF 2.5 FPS.
4. REFER TO THE TABLE ABOVE FOR THE MINIMUM VELOCITY REQUIRED THROUGH A FLUSH PORT OR FIRE HYDRANT TO ACHIEVE SCOURING VELOCITY.
5. EXERCISE EXTREME CARE AND CONDUCT A THOROUGH INSPECTION DURING WATER MAIN INSTALLATION TO PREVENT SMALL STONES, CONCRETE, WILDLIFE AND DEBRIS FROM ENTERING THE MAINS.
6. CLEAR LARGE MATERIAL BY FLUSHING AND INSPECTING ALL HYDRANTS ON THE MAINS TO ENSURE THAT ALL VALVES ARE CLEAR AND AND IN GOOD CONDITION.
7. CONTRACTOR MUST RECEIVE APPROVAL FROM THE CDA WATER DEPT. PRIOR TO FLUSHING ANY WATER MAIN.
8. THE CDA WATER DEPT. WILL NOT BE LIABLE FOR ANY DAMAGE CAUSED BY THE CONTRACTOR WHILE FLUSHING A WATER MAIN. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE WHERE TO DISPOSE OF EXCESS WATER.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

WATER MAIN FLUSHING CHART

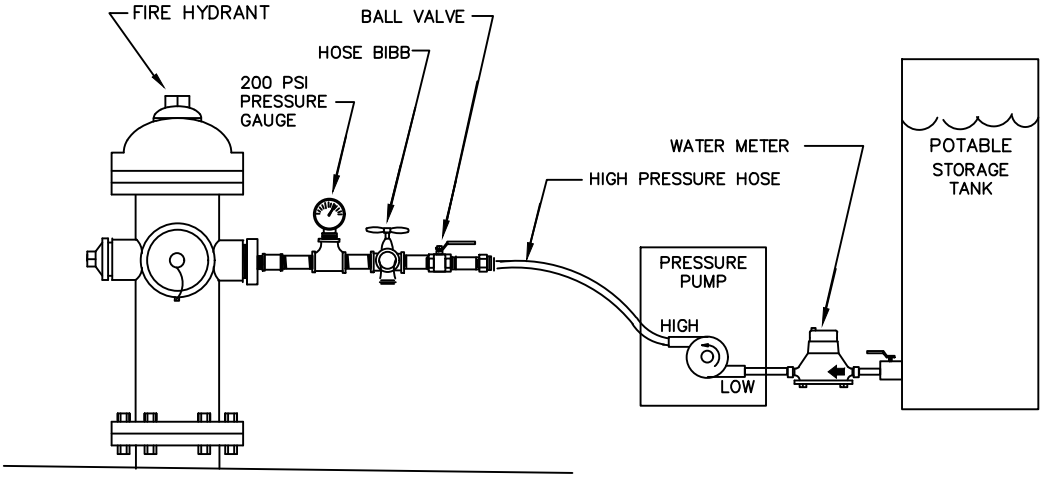
APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

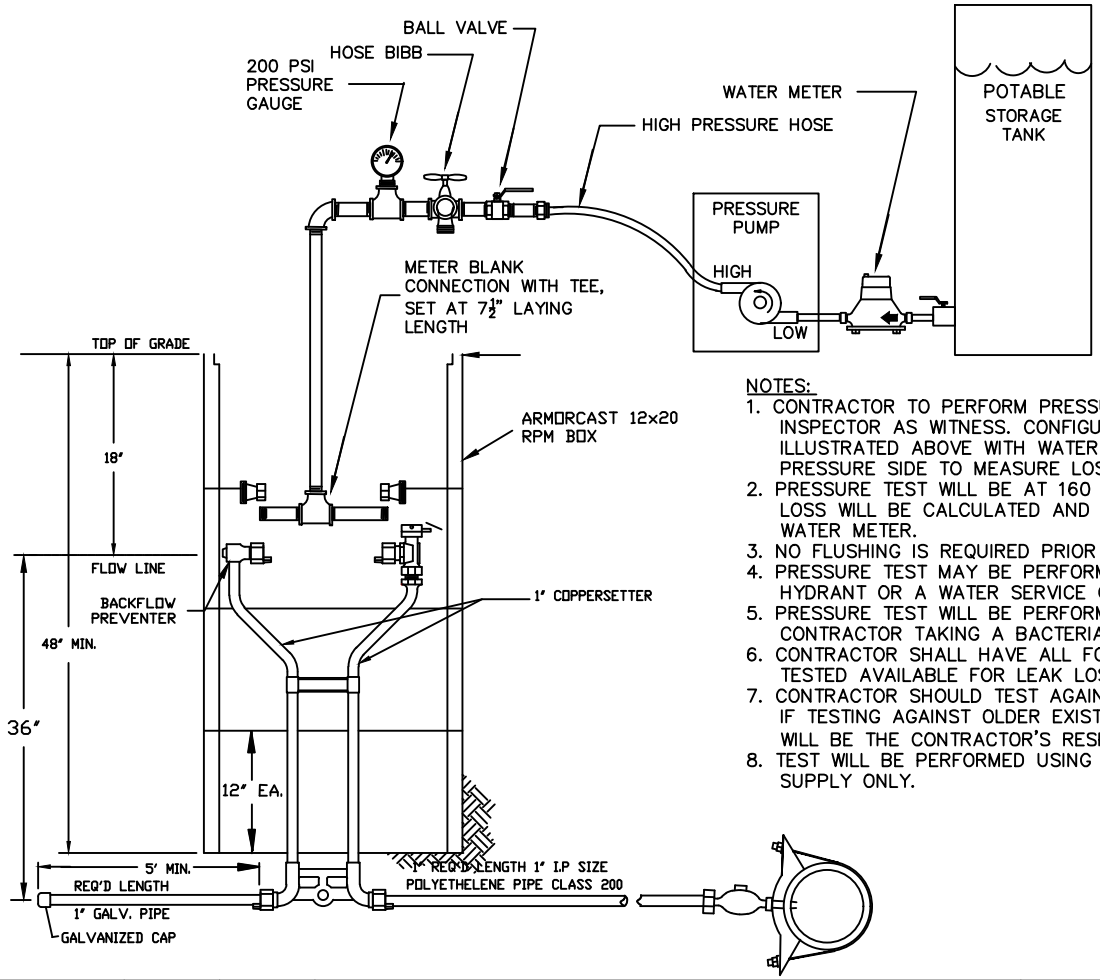
4/13/18
DATE:

DWG NO. W-34

PRESSURE TEST THROUGH FIRE HYDRANT



PRESSURE TEST THROUGH COPPERSETTER



NOTES:

1. CONTRACTOR TO PERFORM PRESSURE TEST WITH CITY INSPECTOR AS WITNESS. CONFIGURATION MUST BE AS ILLUSTRATED ABOVE WITH WATER METER ON LOW PRESSURE SIDE TO MEASURE LOSS.
2. PRESSURE TEST WILL BE AT 160 PSI FOR 2 HOURS. LOSS WILL BE CALCULATED AND MEASURED WITH A WATER METER.
3. NO FLUSHING IS REQUIRED PRIOR TO PRESSURE TEST.
4. PRESSURE TEST MAY BE PERFORMED THROUGH A FIRE HYDRANT OR A WATER SERVICE COPPERSETTER.
5. PRESSURE TEST WILL BE PERFORMED PRIOR TO CONTRACTOR TAKING A BACTERIA SAMPLE.
6. CONTRACTOR SHALL HAVE ALL FOOTAGE OF PIPE TO BE TESTED AVAILABLE FOR LEAK LOSS CALCULATIONS.
7. CONTRACTOR SHOULD TEST AGAINST NEW VALVES ONLY. IF TESTING AGAINST OLDER EXISTING VALVES, FAILURE WILL BE THE CONTRACTOR'S RESPONSIBILITY.
8. TEST WILL BE PERFORMED USING A POTABLE WATER SUPPLY ONLY.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

APPROVED PRESSURE TESTING METHOD

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804 — 4/13/18 DATE:

DWG NO. W-35

ALLOWABLE LEAKAGE FOR AWWA PVC PIPE C-900

Allowable Leakage per 1000' or 50 joints: gal/hr x 2

Average Test Pressure in Line: psi

Nominal Pipe Size (in.)	150	175	200	225	250	275	300
4	0.33	0.36	0.38	0.41	0.43	0.45	0.47
6	0.50	0.54	0.57	0.61	0.64	0.67	0.70
8	0.66	0.72	0.76	0.81	0.85	0.90	0.94
10	0.83	0.89	0.96	1.01	1.07	1.12	1.17
12	0.99	1.07	1.15	1.22	1.28	1.34	1.40
14	0.83	1.25	1.34	1.42	1.50	1.57	1.64
16	1.32	1.43	1.53	1.62	1.71	1.79	1.87
18	1.49	1.61	1.72	1.82	1.92	2.02	2.11
20	1.66	1.79	1.91	2.03	2.14	2.24	2.34
24	1.99	2.15	2.29	2.43	2.56	2.69	2.81
30	2.48	2.68	2.87	3.04	3.21	3.36	3.51
36	2.98	3.22	3.44	3.65	3.85	4.03	4.21
42	3.48	3.75	4.01	4.26	4.49	4.71	4.92
48	3.97	4.29	4.59	4.86	5.13	5.38	5.62

NOTE:

To calculate the allowable leakage for the pressure test, take the total footage of each individual size of main and divide by 1000, and then multiply results by allowable leak loss per table above. This will give the allowable loss per hour which then can be multiplied by 2 hours to give the total allowable leak loss (see example below). If several pipe sizes are installed, th calculate for each size and add total quantities if performing one test.

Testing 1,180' of 8" C900 PVC pipe: 1180/1000 = 1.180 X 0.66 = .778 X 2 hrs = 1.557 gals. total allowable leak loss.

Testing 1,244' of 12" C900 and 660' of 6" C900: 1244/1000 = 1.244 x 0.99 = 1.23 X 2 hrs = 2.46 gals. Plus, 660/1000 = 0.66 X 0.50 = 0.33 X 2 hrs = 0.66 gals. For a total 3.12 gals. Of allowable leak loss.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

ALLOWABLE LEAK LOSS TABLE

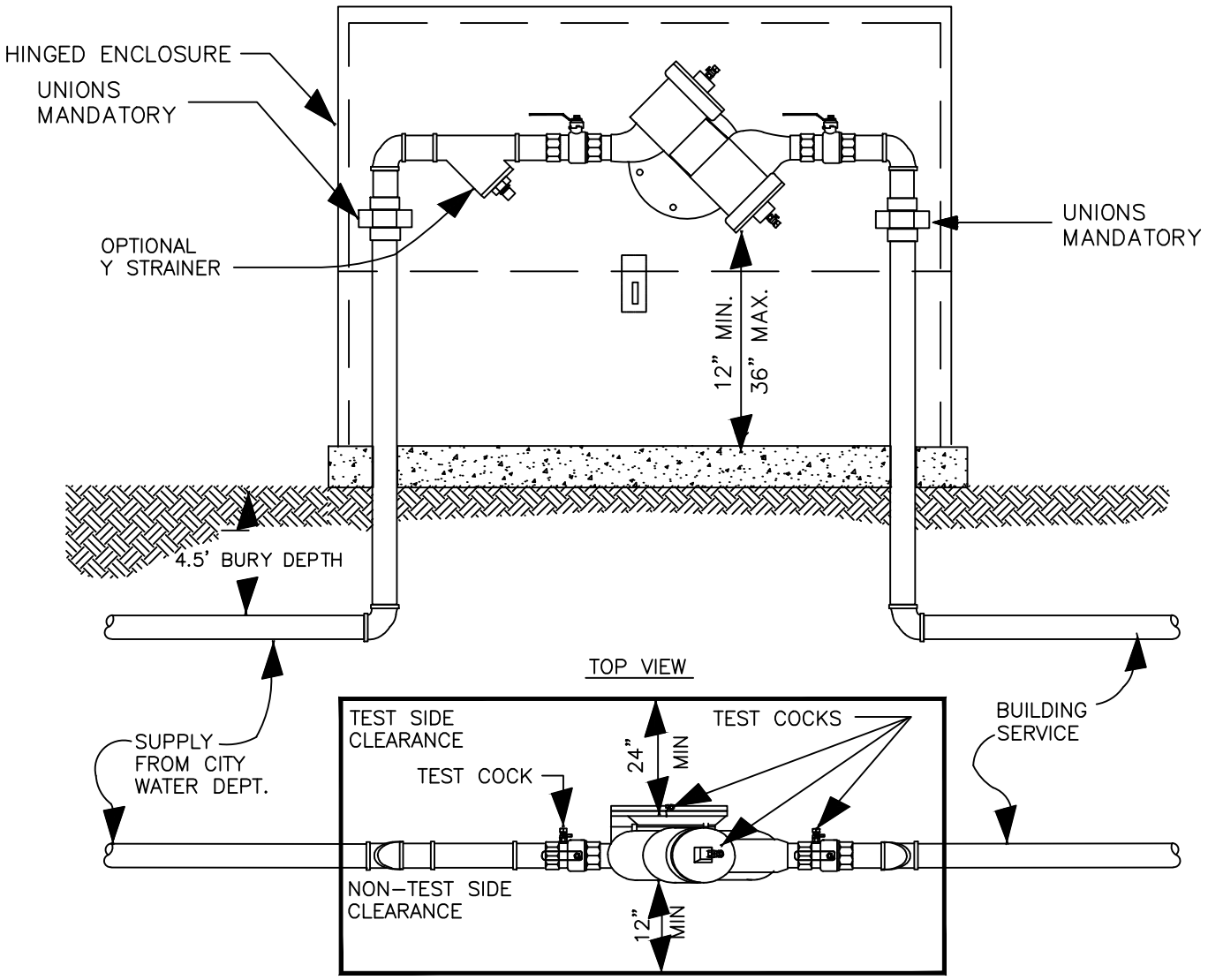
APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

4/13/18
DATE:

DWG NO. W-36

SIDE VIEW



TOP VIEW

NOTES:

1. BACKFLOW ASSEMBLY MUST MEET U.S.C./IDAPA STANDARDS AND SPECIFICATIONS, PLEASE CALL BEFORE ORDERING.
2. ASSEMBLIES MUST BE INSTALLED ABOVE GRADE IN A HORIZONTAL ORIENTATION ONLY.
3. ENCLOSURE FOR OUTDOOR PROTECTION OF THE ASSEMBLY IS ALLOWED, BUT MUST PROVIDE IMMEDIATE TOP ACCESS OF 12" FOR TESTING AND MAINTENANCE.
4. TEST COCKS ARE REQUIRED TO FACE AWAY FROM WALLS AND NEAREST STATIONARY OBJECT, AND AT NO TIME BE LESS THAN 24" CLEARANCE.
5. THERE MUST BE NO BRANCH PIPING OR TEES CONNECTED TO THE SUPPLY PIPE BETWEEN THE CITY SERVICE SUPPLY LINE AND THE ASSEMBLY.
6. IF A BACKFLOW ASSEMBLY IS REQUIRED FOR PREMISE ISOLATION DUE TO AN AUXILIARY SOURCE AND HAS NOT BEEN INSTALLED IMMEDIATELY DOWNSTREAM OF THE WATER METER BOX, THE ENTIRE LENGTH OF THE WATER SERVICE FROM THAT POINT TO THE BACKFLOW ASSEMBLY SHALL BE ENCASED IN MINIMUM 4" OF CONCRETE.
7. ALL MEASUREMENTS ARE FROM THE LOWEST OR WIDEST PART OF THE ASSEMBLY.
8. ALL ASSEMBLIES ARE SUSCEPTIBLE TO FREEZING AND SHALL BE ADEQUATELY FREEZE PROTECTED.
9. ADEQUATE DRAINAGE FROM THE ASSEMBLY MUST BE PROVIDED.
10. NO ASSEMBLIES OR ENCLOSURES ARE TO BE INSTALLED OVER THE WATER METER VAULT TO ALLOW ACCESS FOR MAINTENANCE OF WATER METER.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

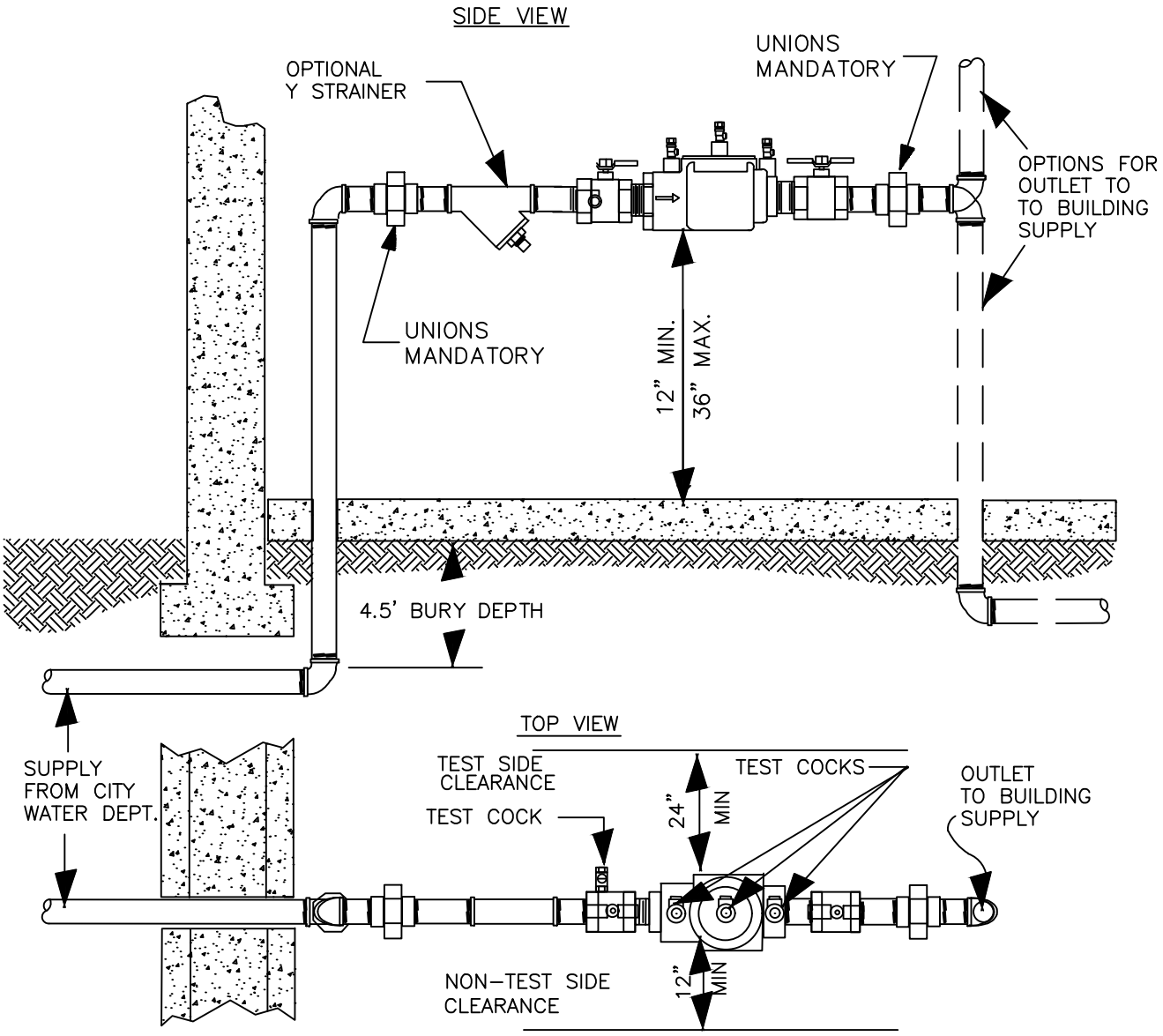
APPROVED RP FOR PREMISE ISOLATION

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804

DATE: 4/13/18

DWG NO. W-37



NOTES:

1. BACKFLOW ASSEMBLY MUST MEET U.S.C./IDAPA STANDARDS AND SPECIFICATIONS, PLEASE CALL BEFORE ORDERING.
2. ASSEMBLIES MUST BE INSTALLED IN A HORIZONTAL ORIENTATION ONLY UNLESS THE ASSEMBLY HAS BEEN APPROVED FOR VERTICAL INSTALLATION.
3. THE ASSEMBLY SHALL HAVE THE MINIMUM PERIMETER OF SPACE AROUND THE ASSEMBLY AT ALL TIMES AND MUST HAVE ADEQUATE ACCESS AT ALL TIMES FOR TESTING AND MAINTENANCE OF ASSEMBLY, MIN. 12" FOR NON TEST SIDE, 24" FOR THE TEST SIDE.
4. TEST COCKS ARE REQUIRED TO FACE AWAY FROM WALLS AND NEAREST STATIONARY OBJECT, AND AT NO TIME BE LESS THAN 24" CLEARANCE.
5. THERE MUST BE NO UNPROTECTED BRANCH PIPING OR TEES CONNECTED TO THE SUPPLY PIPE BETWEEN THE CITY SERVICE SUPPLY LINE AND THE ASSEMBLY IF USED FOR BUILDING ISOLATION.
6. ALL MEASUREMENTS ARE FROM THE LOWEST OR WIDEST PART OF THE ASSEMBLY.
7. ALL ASSEMBLIES ARE SUSCEPTIBLE TO FREEZING AND SHALL BE ADEQUATELY FREEZE PROTECTED.
8. BACKFLOW ASSEMBLY MUST BE INSTALLED WITHIN 2' OF FLOOR OR WALL SERVICE PENETRATION.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

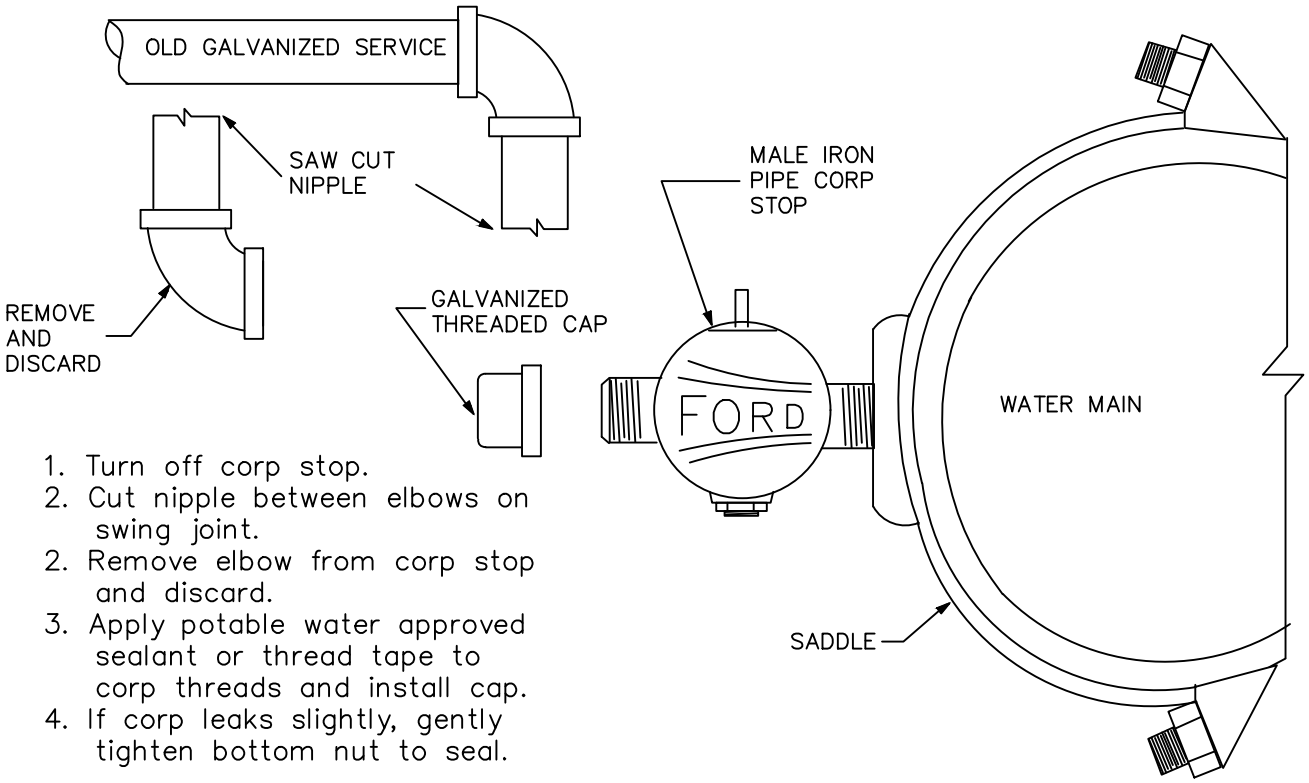
TYPICAL APPROVED DC FOR BUILDING ISOLATION

APPROVED BY:

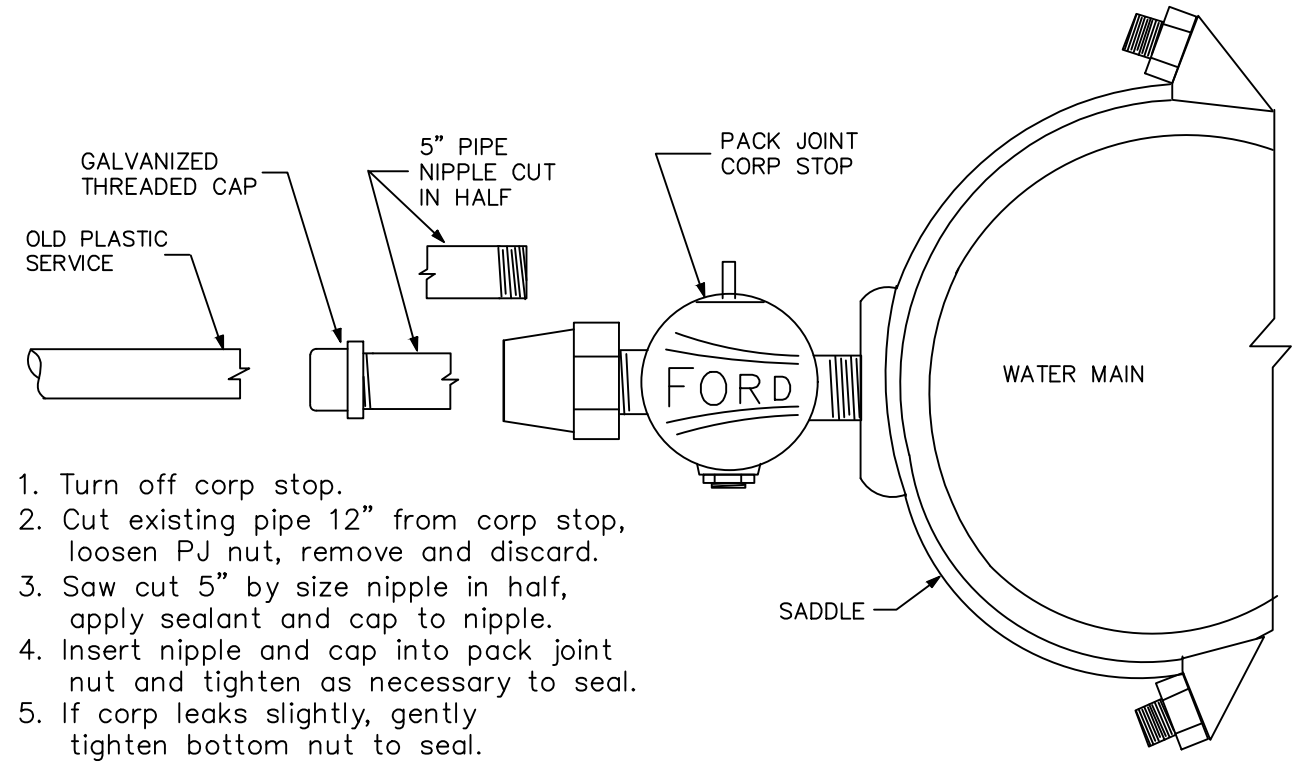
Chris Bosley — CITY ENGINEER, PE 10804

4/13/18 — DATE:

DWG NO. W-38



1. Turn off corp stop.
2. Cut nipple between elbows on swing joint.
2. Remove elbow from corp stop and discard.
3. Apply potable water approved sealant or thread tape to corp threads and install cap.
4. If corp leaks slightly, gently tighten bottom nut to seal.



1. Turn off corp stop.
2. Cut existing pipe 12" from corp stop, loosen PJ nut, remove and discard.
3. Saw cut 5" by size nipple in half, apply sealant and cap to nipple.
4. Insert nipple and cap into pack joint nut and tighten as necessary to seal.
5. If corp leaks slightly, gently tighten bottom nut to seal.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

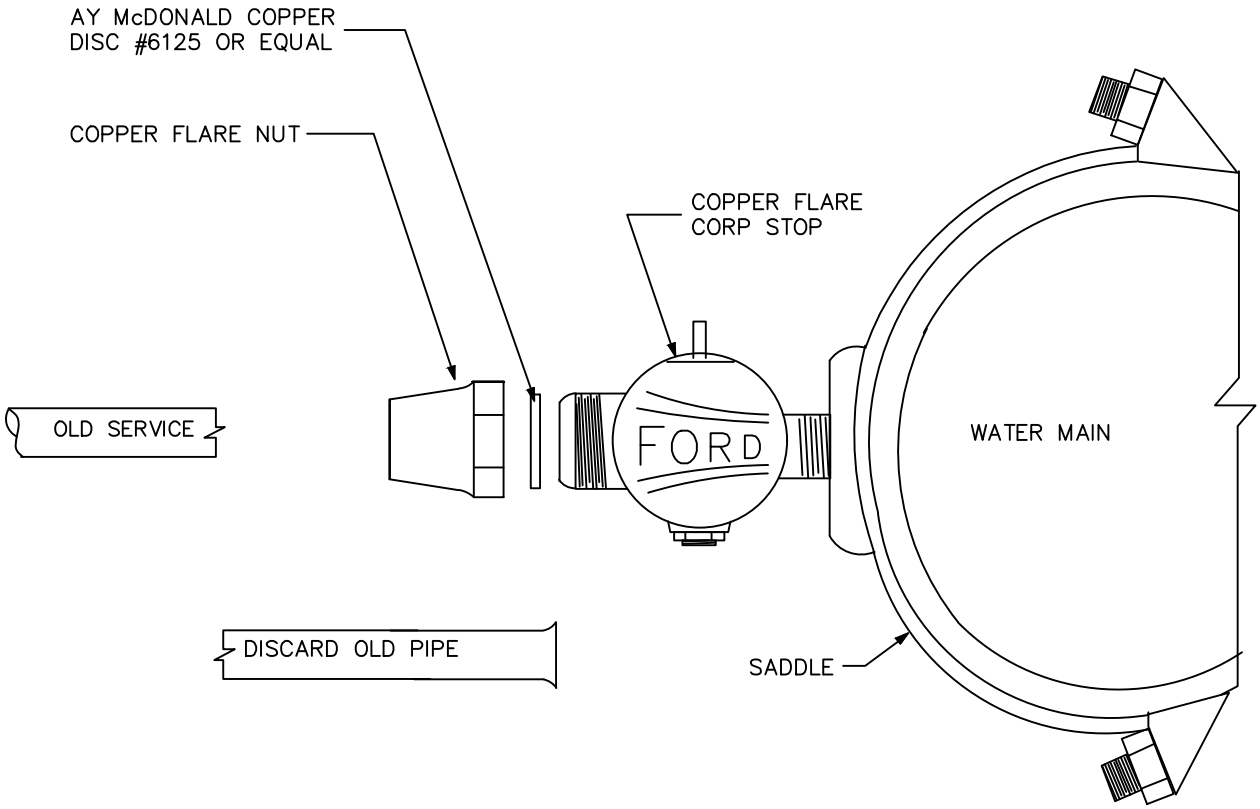
SERVICE ABANDONED AT CORP STOP – IPS & PJ

APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

4/13/18
DATE:

DWG NO. W–39



1. Turn off corp stop.
2. Cut existing copper pipe 12" from corp stop, loosen and remove flare nut, remove and discard copper pipe.
3. Insert a copper disc #6125 into flare nut, reconnect and tighten as necessary to seal.
4. If corp leaks slightly, gently tighten bottom nut to seal.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

SERVICE ABANDONED AT CORP STOP – COPPER

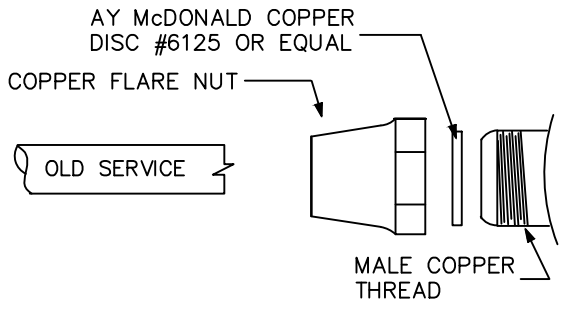
APPROVED BY:

Chris Bosley — 4/13/18

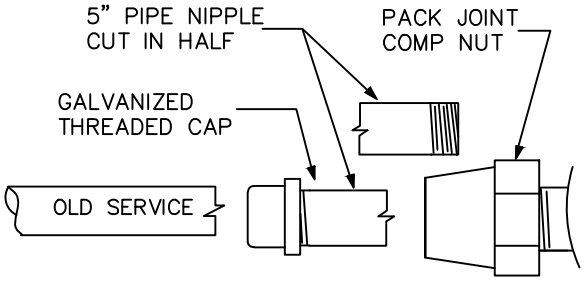
CITY ENGINEER, PE 10804 — DATE:

DWG NO. W–40

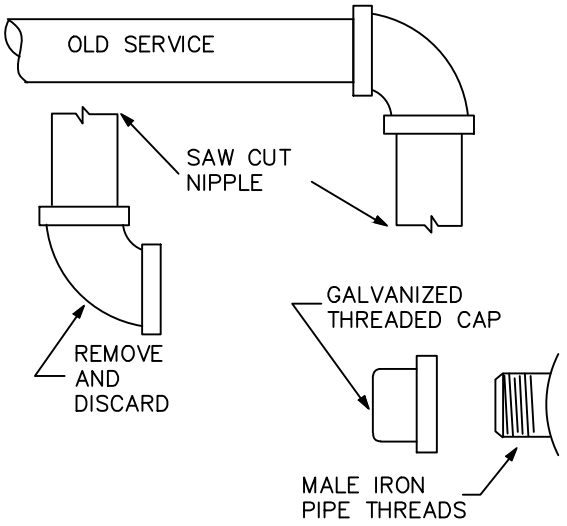
FLARED COPPER TUBE SERVICE

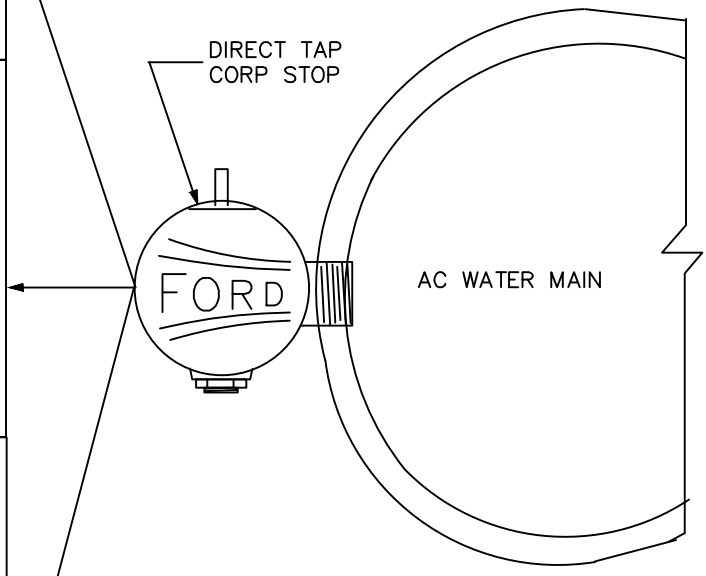


POLYEHTYLENE PIPE SERVICE



GALVANIZED PIPE SERVICE





1. Very gently turn off corp stop.
2. Cut existing service pipe the recommended distance from corp stop, loosen and remove flare nut, elbow or pack joint nut, remove and discard pipe section.
3. Insert a copper disc #6125 into flare nut, or nipple and cap into pack joint nut or threaded cap for male thread, reconnect and tighten as necessary to seal.
4. If corp leaks slightly, gently tighten bottom nut to seal.
5. If corp is leaking or blows out of AC pipe, loosely install Romac repair band, remove corp, slide band into position and tighten to specified torque.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

ABANDONING AC PIPE DIRECT TAP CORP STOP

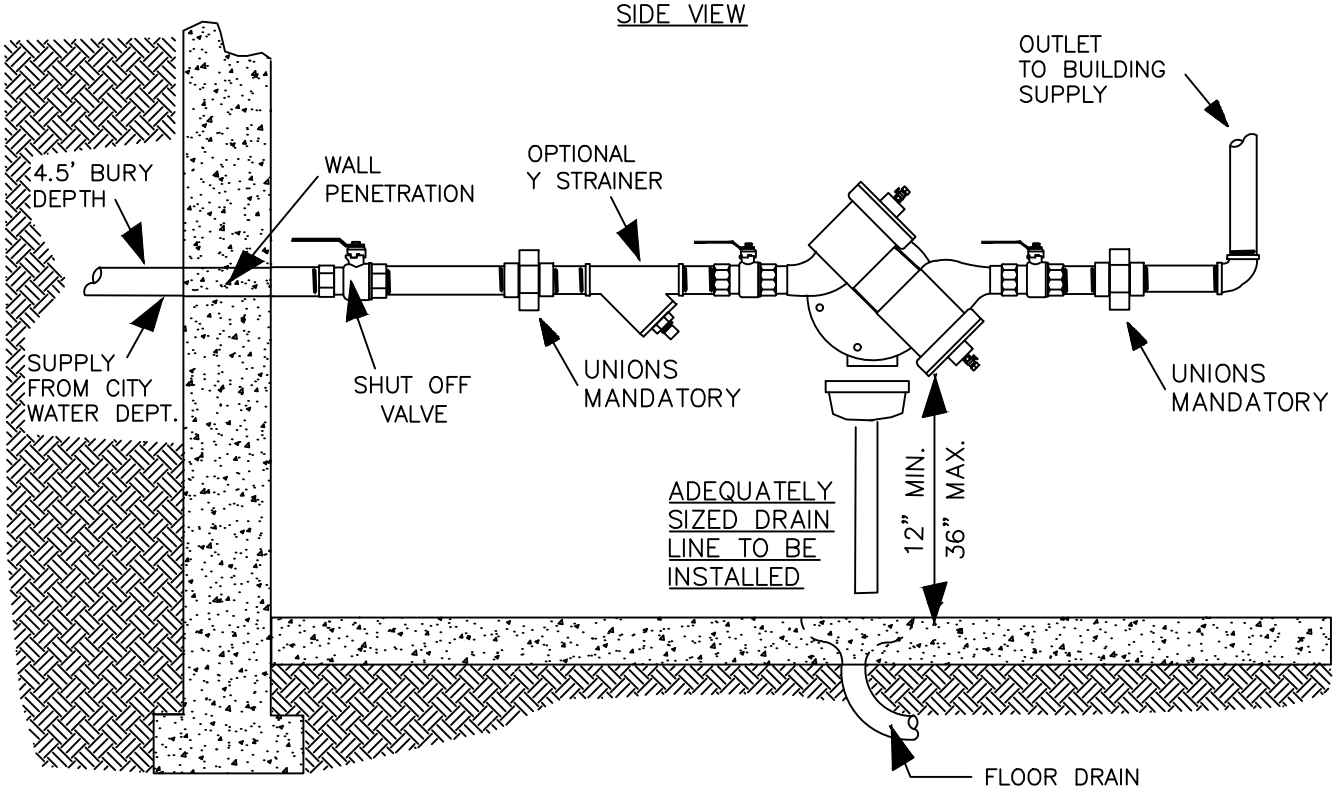
APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

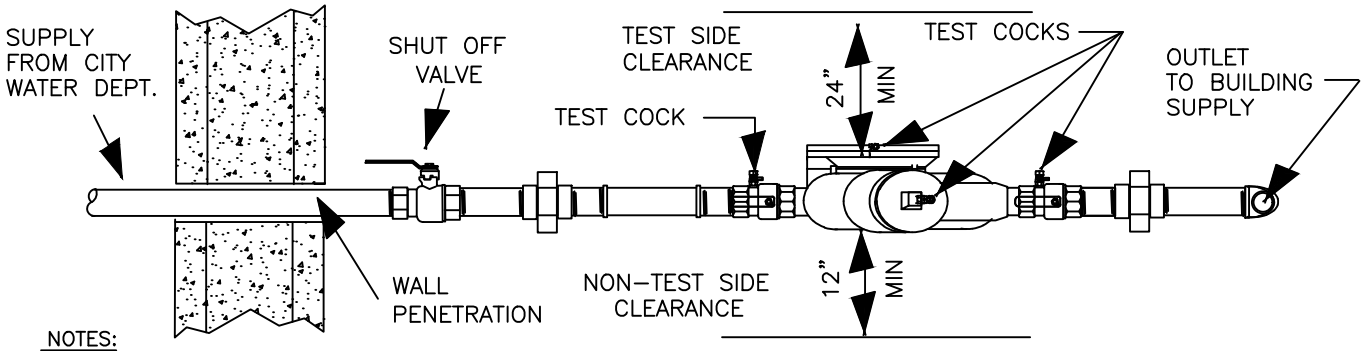
4/13/18
DATE:

DWG NO. W-41

SIDE VIEW



TOP VIEW



NOTES:

1. BACKFLOW ASSEMBLY MUST MEET U.S.C./IDAPA STANDARDS AND SPECIFICATIONS, PLEASE CALL BEFORE ORDERING.
2. ASSEMBLIES MUST BE INSTALLED IN A HORIZONTAL ORIENTATION ONLY UNLESS THE ASSEMBLY HAS BEEN APPROVED BY THE CITY FOR VERTICAL ORIENTATION.
3. ADEQUATE CLEARANCE MUST BE PROVIDED FOR TESTING AND MAINTENANCE OF ASSEMBLY, MINIMUM 12" FOR NON-TEST SIDE, MINIMUM 24" FOR THE TEST SIDE, FACING AWAY FROM WALLS AND NEAREST STATIONARY OBJECTS.
4. THERE MUST BE NO UNPROTECTED BRANCH PIPING OR TEES CONNECTED TO THE SUPPLY PIPE BETWEEN THE CITY SERVICE SUPPLY LINE AND THE ASSEMBLY.
5. IF AUXILIARY WATER SOURCE IS PRESENT AND THE RP HAS NOT BEEN INSTALLED IMMEDIATELY DOWNSTREAM OF THE METER BOX, THE ENTIRE LENGTH OF THE WATER SERVICE FROM METER BOX TO THE BACKFLOW ASSEMBLY SHALL BE ENCASED IN MINIMUM 4" OF CONCRETE PER STANDARD DRAWING W-21.
6. ALL MEASUREMENTS ARE FROM THE LOWEST OR WIDEST PART OF THE ASSEMBLY.
7. ALL ASSEMBLIES ARE SUSCEPTIBLE TO FREEZING AND SHALL BE ADEQUATELY FREEZE PROTECTED.
8. ADEQUATE DRAINAGE FROM THE ASSEMBLY MUST BE PROVIDED PER THE PNWS/AWWA RP DISCHARGE RATE CHART.
9. BACKFLOW ASSEMBLY MUST BE INSTALLED WITHIN 2' OF FLOOR OR WALL SERVICE PENETRATION.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

APPROVED RP FOR BASEMENT ISOLATION

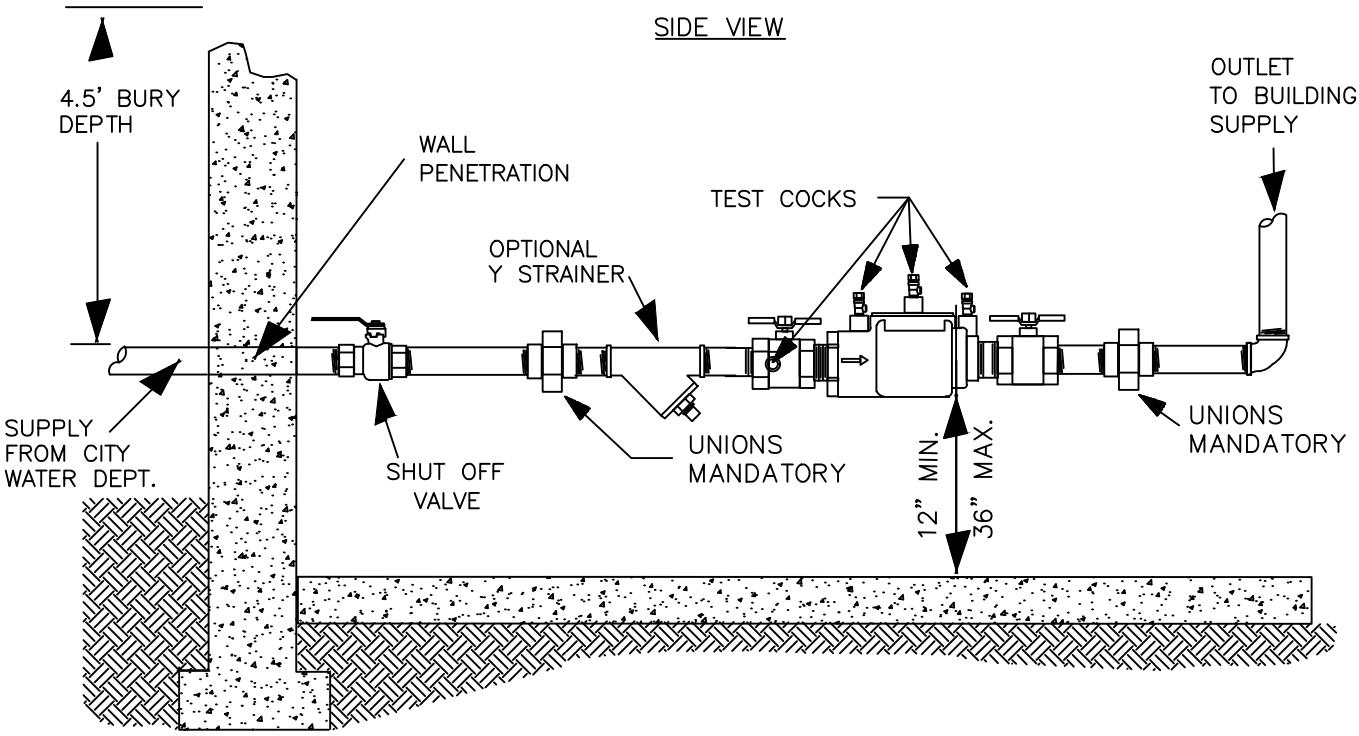
APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

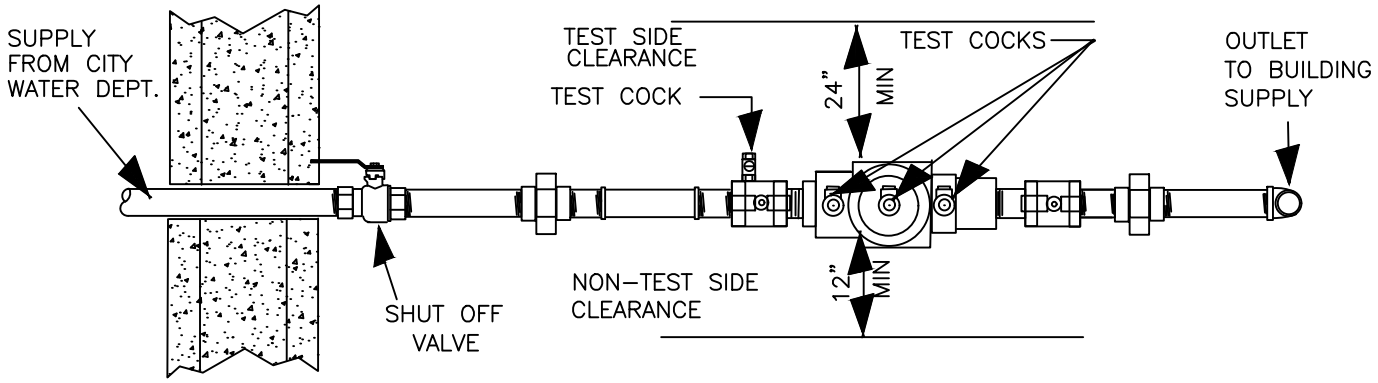
4/13/18
DATE:

DWG NO. W-42

SIDE VIEW



TOP VIEW



NOTES:

1. BACKFLOW ASSEMBLY MUST MEET U.S.C./IDAPA STANDARDS AND SPECIFICATIONS, PLEASE CALL BEFORE ORDERING.
2. ASSEMBLIES MUST BE INSTALLED IN A HORIZONTAL ORIENTATION ONLY UNLESS THE ASSEMBLY HAS BEEN APPROVED FOR VERTICAL ORIENTATION.
3. ADEQUATE CLEARANCE MUST BE PROVIDED FOR TESTING AND MAINTENANCE OF ASSEMBLY, MINIMUM 12" FOR NON-TEST SIDE, MINIMUM 24" FOR THE TEST SIDE, FACING AWAY FROM WALLS AND NEAREST STATIONARY OBJECTS.
4. TEST COCKS ARE REQUIRED TO FACE AWAY FROM WALLS AND NEAREST STATIONARY OBJECT, AND AT NO TIME BE LESS THAN 24" CLEARANCE.
5. THERE MUST BE NO UNPROTECTED BRANCH PIPING OR TEES CONNECTED TO THE SUPPLY PIPE BETWEEN THE CITY SERVICE SUPPLY LINE AND THE ASSEMBLY IF USED FOR BUILDING ISOLATION.
6. ALL MEASUREMENTS ARE FROM THE LOWEST OR WIDEST PART OF THE ASSEMBLY.
7. ALL ASSEMBLIES ARE SUSCEPTIBLE TO FREEZING AND SHALL BE ADEQUATELY FREEZE PROTECTED.
8. BACKFLOW ASSEMBLY MUST BE INSTALLED WITHIN 2' OF FLOOR OR WALL SERVICE PENETRATION.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

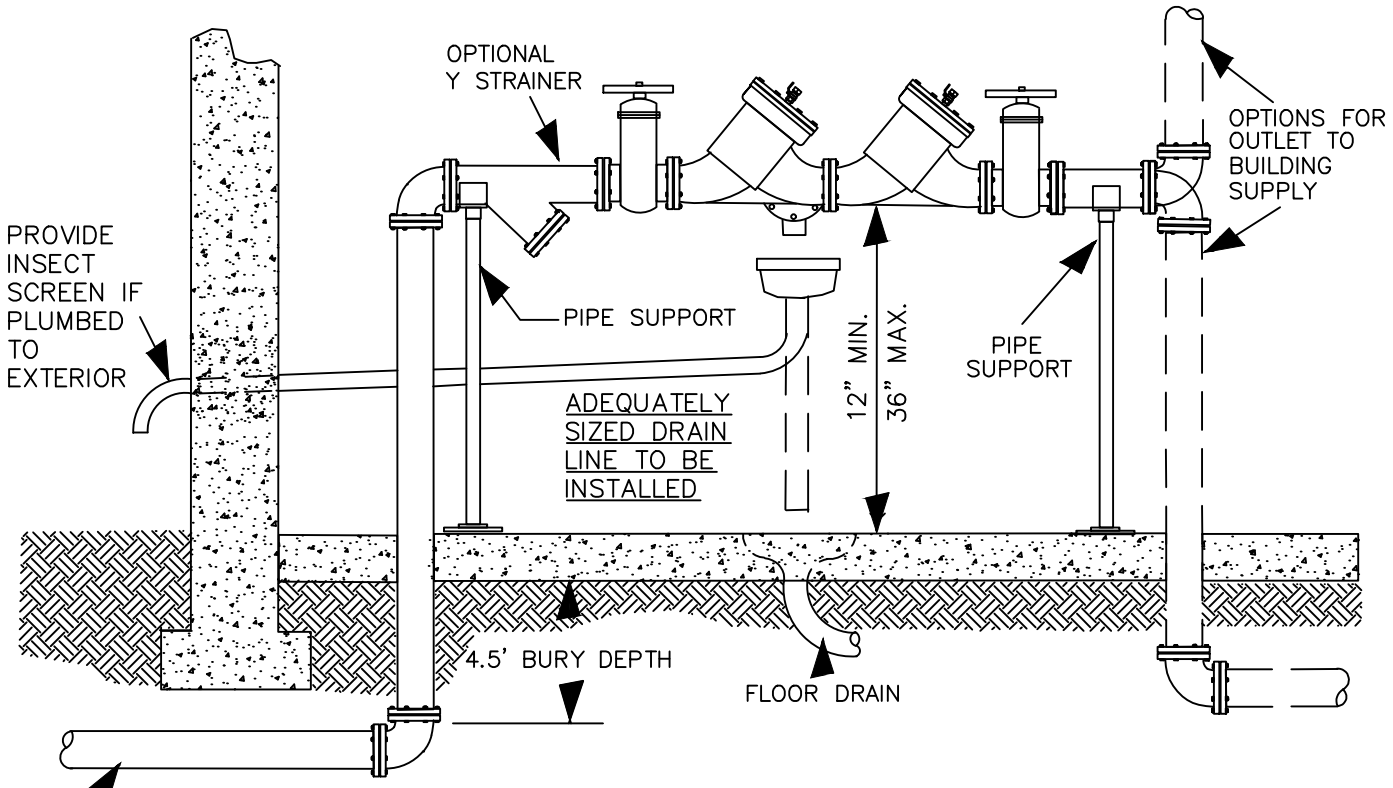
APPROVED DC FOR BASEMENT ISOLATION

APPROVED BY:

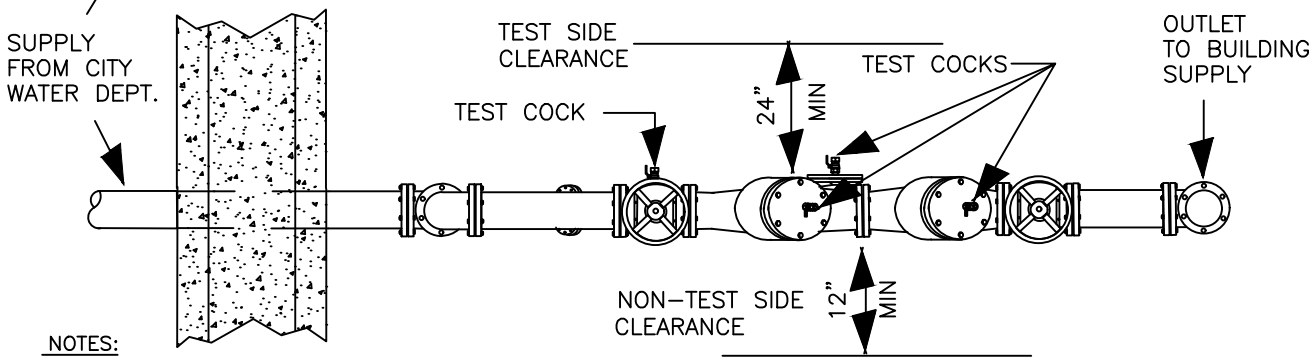
Chris Bosley — CITY ENGINEER, PE 10804 — DATE: 4/13/18

DWG NO. W-43

SIDE VIEW



TOP VIEW



NOTES:

1. BACKFLOW ASSEMBLY MUST MEET U.S.C./IDAPA STANDARDS AND SPECIFICATIONS, PLEASE CALL BEFORE ORDERING.
2. ASSEMBLIES MUST BE INSTALLED ABOVE GRADE OR HIGHEST FLOOD PLAIN IN A HORIZONTAL ORIENTATION ONLY UNLESS THE ASSEMBLY HAS BEEN APPROVED BY THE CITY FOR VERTICAL ORIENTATION.
3. ADEQUATE CLEARANCE MUST BE PROVIDED FOR TESTING AND MAINTENANCE OF ASSEMBLY, MINIMUM 12" FOR NON-TEST SIDE, MINIMUM 24" FOR THE TEST SIDE, FACING AWAY FROM WALLS AND NEAREST STATIONARY OBJECTS.
4. THERE MUST BE NO BRANCH PIPING OR TEES CONNECTED TO THE SUPPLY PIPE BETWEEN THE CITY SERVICE SUPPLY LINE AND THE ASSEMBLY.
5. IF AUXILIARY WATER SOURCE IS PRESENT AND THE RP HAS NOT BEEN INSTALLED IMMEDIATELY DOWNSTREAM OF THE METER BOX, THE ENTIRE LENGTH OF THE WATER SERVICE FROM METER BOX TO THE BACKFLOW ASSEMBLY SHALL BE ENCASED IN MINIMUM 4" OF CONCRETE PER STANDARD DRAWING W-21.
6. ALL MEASUREMENTS ARE FROM THE LOWEST OR WIDEST PART OF THE ASSEMBLY.
7. ALL ASSEMBLIES ARE SUSCEPTIBLE TO FREEZING AND SHALL BE ADEQUATELY FREEZE PROTECTED.
8. ADEQUATE DRAINAGE FROM THE ASSEMBLY MUST BE PROVIDED PER THE PNWS/AWWA RP DISCHARGE RATE CHART.
9. BACKFLOW ASSEMBLY MUST BE INSTALLED WITHIN 2' OF FLOOR OR WALL SERVICE PENETRATION.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

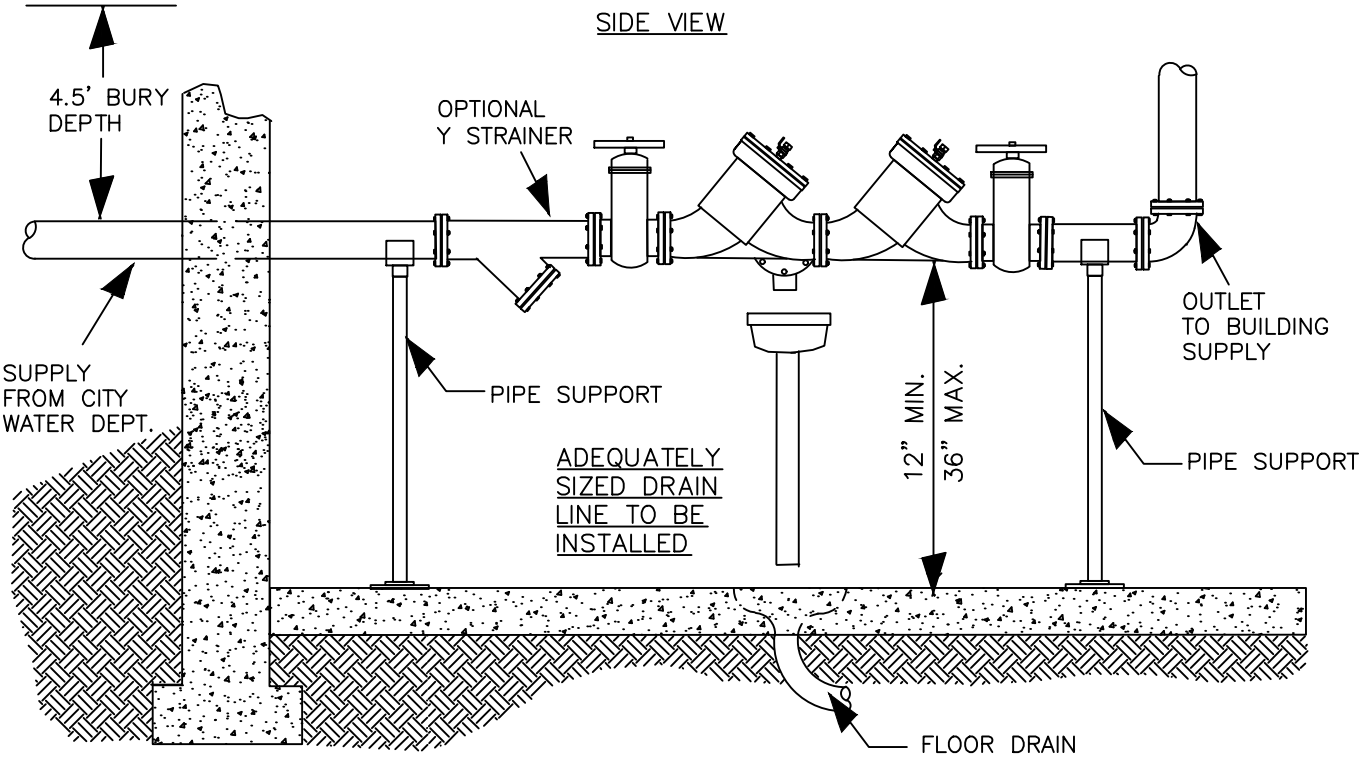
APPROVED LARGE RP FOR BUILDING ISOLATION

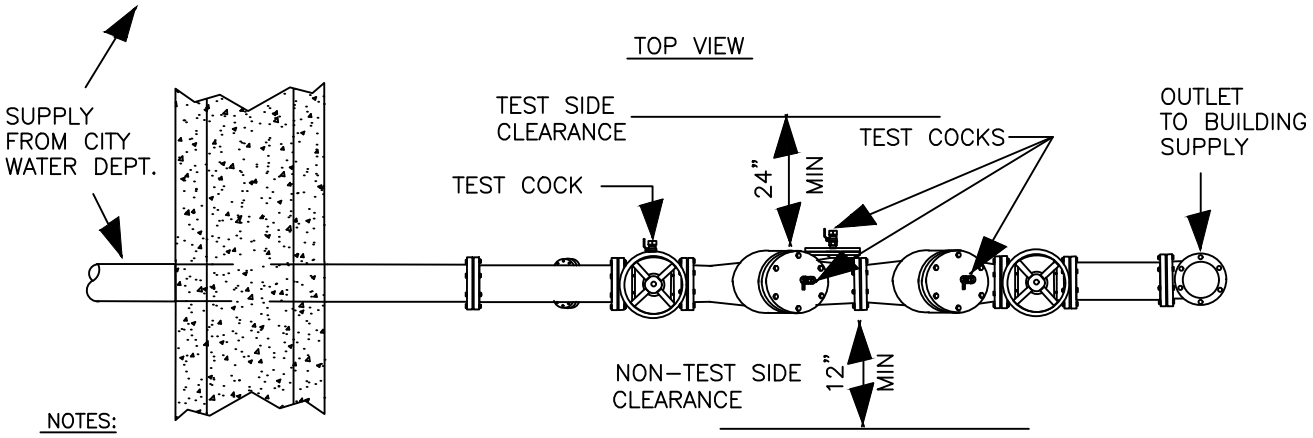
APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

4/13/18
DATE:

DWG NO. W-44





NOTES:

1. BACKFLOW ASSEMBLY MUST MEET U.S.C./IDAPA STANDARDS AND SPECIFICATIONS, PLEASE CALL BEFORE ORDERING.
2. ASSEMBLIES MUST BE INSTALLED ABOVE GRADE OR HIGHEST FLOOD PLAIN IN A HORIZONTAL ORIENTATION ONLY UNLESS THE ASSEMBLY HAS BEEN APPROVED BY THE CITY FOR VERTICAL ORIENTATION.
3. ADEQUATE CLEARANCE MUST BE PROVIDED FOR TESTING AND MAINTENANCE OF ASSEMBLY, MINIMUM 12" FOR NON-TEST SIDE, MINIMUM 24" FOR THE TEST SIDE, FACING AWAY FROM WALLS AND NEAREST STATIONARY OBJECTS.
4. THERE MUST BE NO UNPROTECTED BRANCH PIPING OR TEES CONNECTED TO THE SUPPLY PIPE BETWEEN THE CITY SERVICE SUPPLY LINE AND THE ASSEMBLY.
5. IF AUXILIARY WATER SOURCE IS PRESENT AND THE RP HAS NOT BEEN INSTALLED IMMEDIATELY DOWNSTREAM OF THE METER BOX, THE ENTIRE LENGTH OF THE WATER SERVICE FROM METER BOX TO THE BACKFLOW ASSEMBLY SHALL BE ENCASED IN MINIMUM 4" OF CONCRETE PER STANDARD DRAWING W-21.
6. ALL MEASUREMENTS ARE FROM THE LOWEST OR WIDEST PART OF THE ASSEMBLY.
7. ALL ASSEMBLIES ARE SUSCEPTIBLE TO FREEZING AND SHALL BE ADEQUATELY FREEZE PROTECTED.
8. ADEQUATE DRAINAGE FROM THE ASSEMBLY MUST BE PROVIDED PER THE PNWS/AWWA RP DISCHARGE RATE CHART.
9. BACKFLOW ASSEMBLY MUST BE INSTALLED WITHIN 2' OF FLOOR OR WALL SERVICE PENETRATION.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

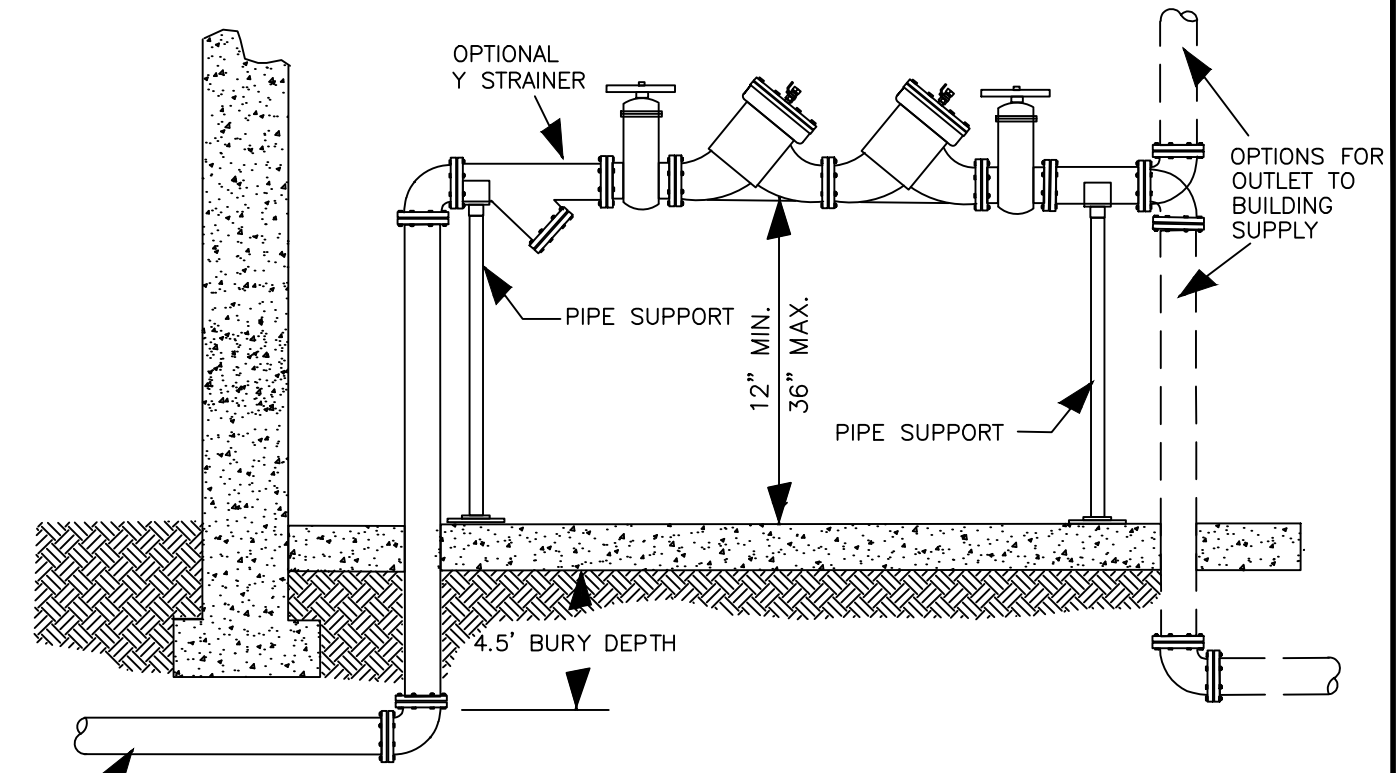
APPROVED LARGE RP FOR BASEMENT ISOLATION

APPROVED BY:

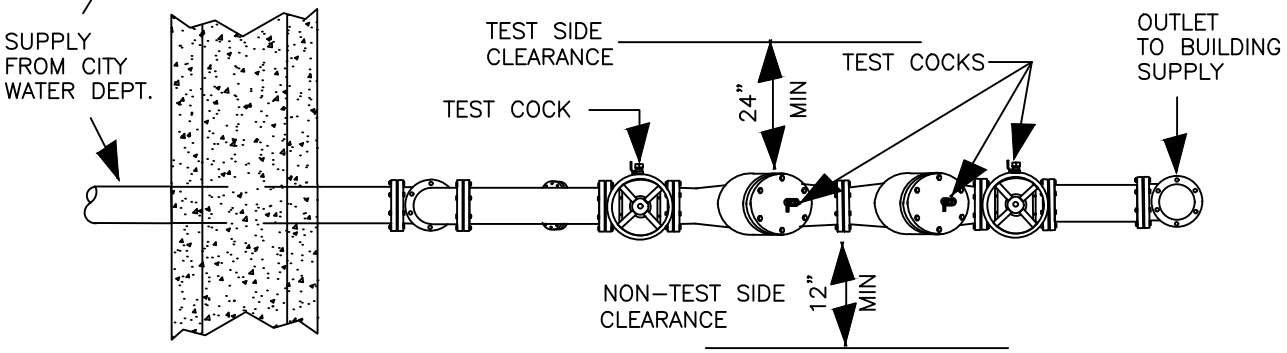
Chris Bosley — CITY ENGINEER, PE 10804 — DATE: 4/13/18

DWG NO. W-45

SIDE VIEW



TOP VIEW



NOTES:

1. BACKFLOW ASSEMBLY MUST MEET U.S.C./IDAPA STANDARDS AND SPECIFICATIONS, PLEASE CALL BEFORE ORDERING.
2. ASSEMBLIES MUST BE INSTALLED A HORIZONTAL ORIENTATION ONLY UNLESS THE ASSEMBLY HAS BEEN APPROVED BY THE CITY FOR VERTICAL ORIENTATION.
3. ADEQUATE CLEARANCE MUST BE PROVIDED FOR TESTING AND MAINTENANCE OF ASSEMBLY, MINIMUM 12" FOR NON-TEST SIDE, MINIMUM 24" FOR THE TEST SIDE, FACING AWAY FROM WALLS AND NEAREST STATIONARY OBJECTS.
4. ALL MEASUREMENTS ARE FROM THE LOWEST OR WIDEST PART OF THE ASSEMBLY.
5. THERE MUST BE NO UNPROTECTED BRANCH PIPING OR TEES CONNECTED TO THE SUPPLY PIPE BETWEEN THE CITY SERVICE SUPPLY LINE AND THE ASSEMBLY.
6. ALL ASSEMBLIES ARE SUSCEPTIBLE TO FREEZING AND SHALL BE ADEQUATELY FREEZE PROTECTED.
7. BACKFLOW ASSEMBLY MUST BE INSTALLED WITHIN 2' OF FLOOR OR WALL SERVICE PENETRATION.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

APPROVED LARGE DC FOR BUILDING ISOLATION

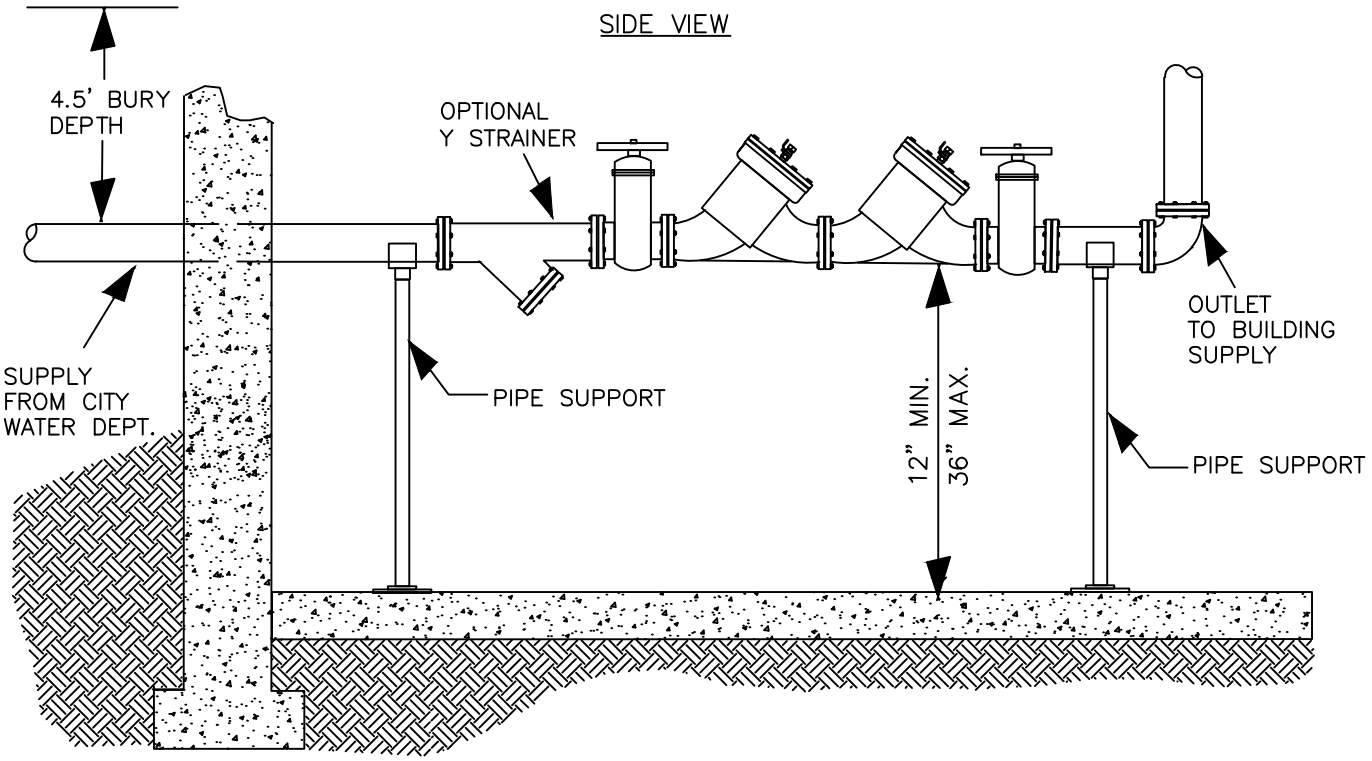
APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

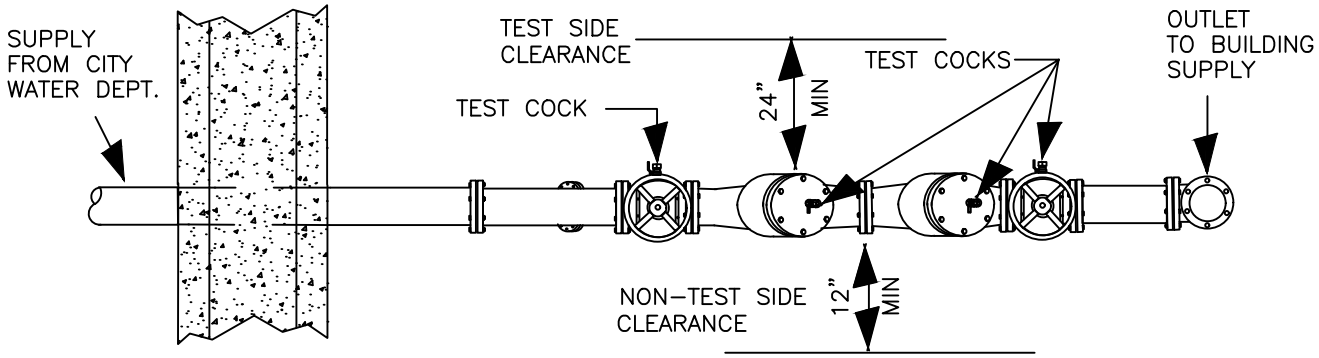
4/13/18
DATE:

DWG NO. W-46

SIDE VIEW



TOP VIEW



NOTES:

1. BACKFLOW ASSEMBLY MUST MEET U.S.C./IDAPA STANDARDS AND SPECIFICATIONS, PLEASE CALL BEFORE ORDERING.
2. ASSEMBLIES MUST BE INSTALLED A HORIZONTAL ORIENTATION ONLY UNLESS THE ASSEMBLY HAS BEEN APPROVED BY THE CITY FOR VERTICAL ORIENTATION.
3. ADEQUATE CLEARANCE MUST BE PROVIDED FOR TESTING AND MAINTENANCE OF ASSEMBLY, MINIMUM 12" FOR NON-TEST SIDE, MINIMUM 24" FOR THE TEST SIDE, FACING AWAY FROM WALLS AND NEAREST STATIONARY OBJECTS.
4. ALL MEASUREMENTS ARE FROM THE LOWEST OR WIDEST PART OF THE ASSEMBLY.
5. THERE MUST BE NO UNPROTECTED BRANCH PIPING OR TEES CONNECTED TO THE SUPPLY PIPE BETWEEN THE CITY SERVICE SUPPLY LINE AND THE ASSEMBLY.
6. ALL ASSEMBLIES ARE SUSCEPTIBLE TO FREEZING AND SHALL BE ADEQUATELY FREEZE PROTECTED.
7. BACKFLOW ASSEMBLY MUST BE INSTALLED WITHIN 2' OF FLOOR OR WALL SERVICE PENETRATION.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

APPROVED LARGE DC FOR BASEMENT ISOLATION

APPROVED BY:

Chris Bosley — CITY ENGINEER, PE 10804 — DATE: 4/13/18

DWG NO. W-47

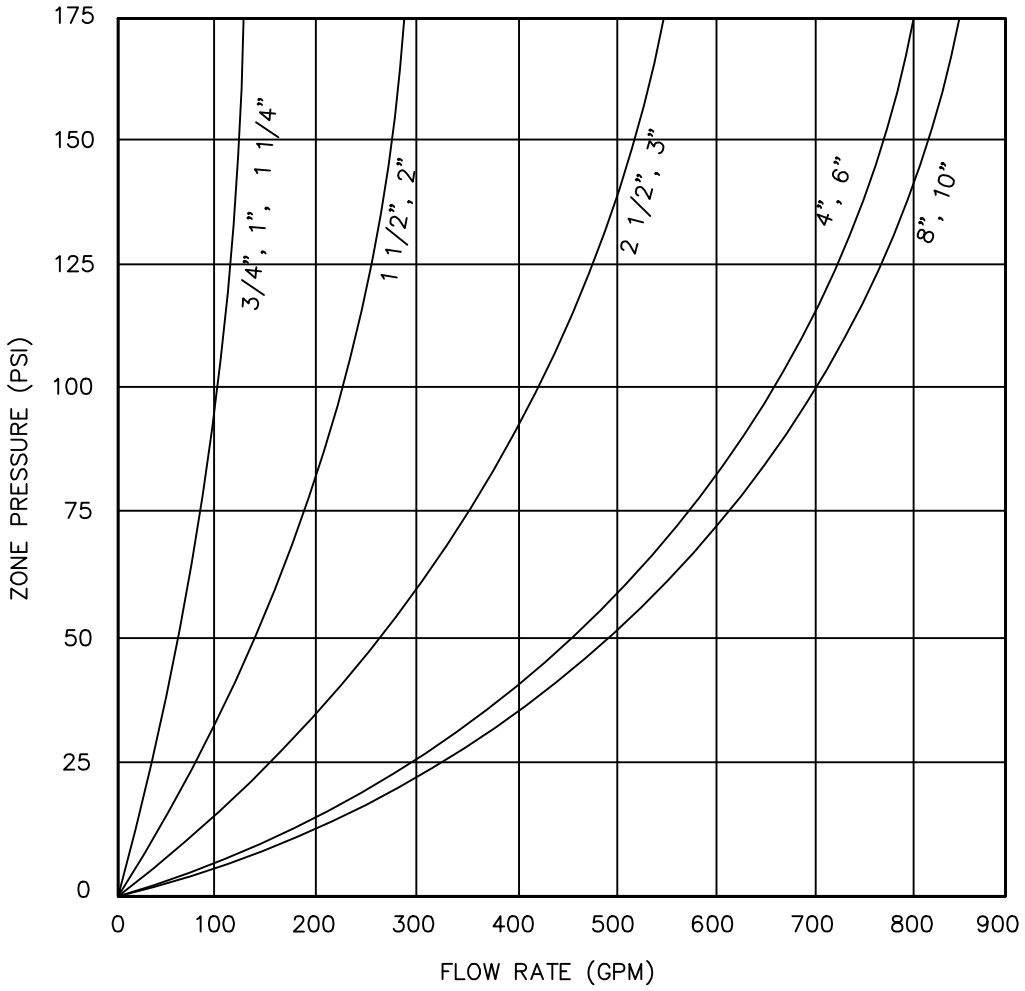


Figure 6-8

Approximate Relief Valve Discharge Rates
For Reduced Pressure Backflow Assemblies

Care should be taken to ensure that the entire drainage system has adequate capacity to carry the continuous discharge rates shown above. The following are typical flow rates as sized by one floor drain manufacturer and represent only the floor drain capacity;

Size:	2"	3"	4"	6"	8"
Capacity (gpm)	55	112	170	450	760

For parallel assemblies, the drainage system should be designed for the discharge from both assemblies.

REVISION	APPROVED	DATE

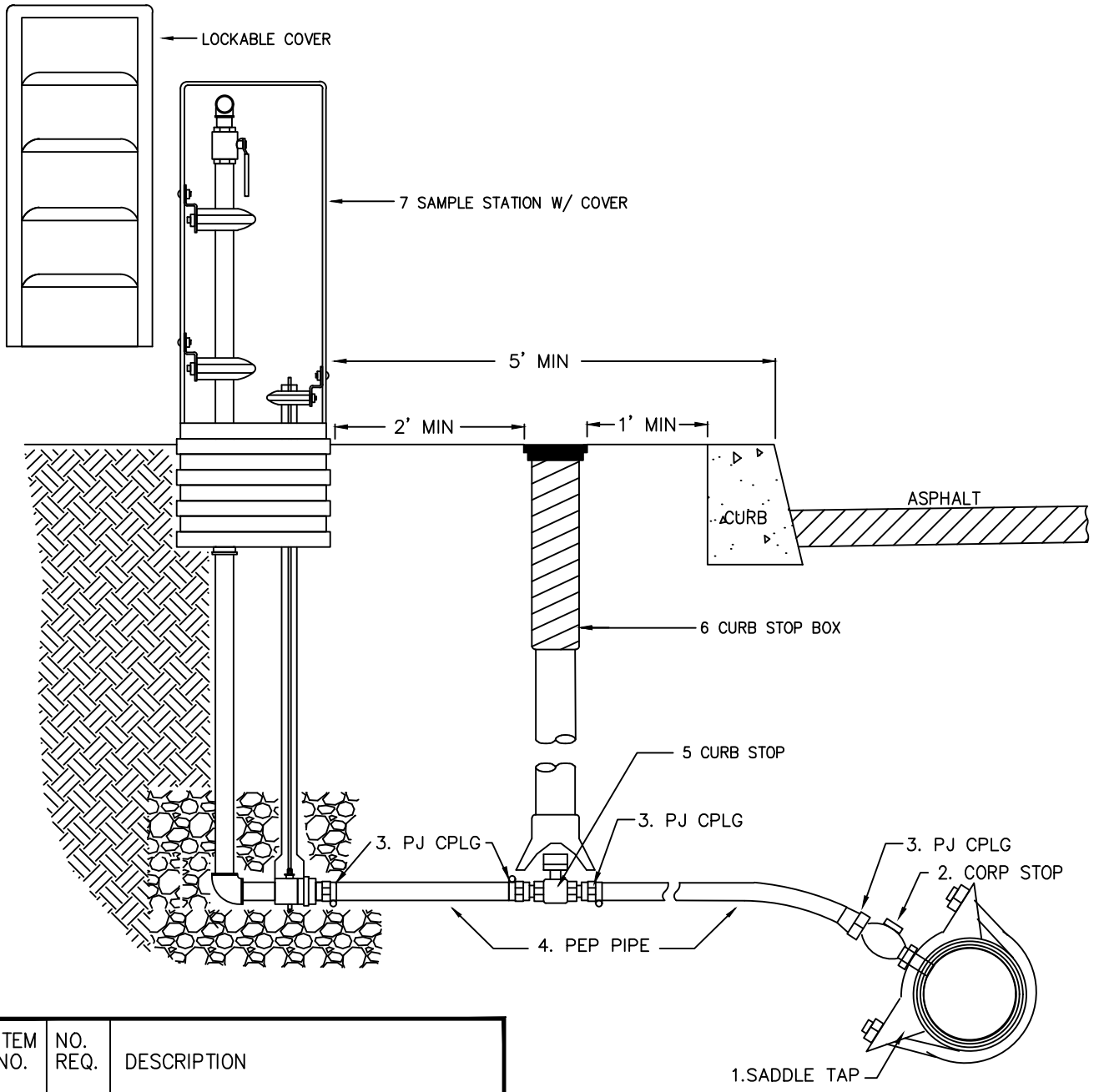
CITY OF COEUR d'ALENE STANDARD DRAWING

PNWS –AWWA
RP DISCHARGE RATES

APPROVED BY:
Chris Bosley
CITY ENGINEER, PE 10804
4/13/18
DATE:

DWG NO. W-48

APPROVED SAMPLE STATION INSTALLATION



ITEM NO.	NO. REQ.	DESCRIPTION
1	1	ROMAC DOUBLE STRAP TAPPING SADDLE
2	1	1" BRONZE CORPORATION STOP
3	4	1" PACK JOINT AS REQUIRED
4	2	1" IPS POLYETHELENE PIPE
5	1	1" CURB STOP
6	1	APPROVED CURB STOP BOX
7	1	MUELLER SAMPLE STATION OR EQUAL
8	1	WASHED DRAIN ROCK AS NEEDED

UNLESS OTHERWISE SPECIFIED, THESE APPURTENANCES SHALL BE OF THE MATERIAL SPECIFIED OR SHOWN ON THE PLANS AND SHALL MEET PRESSURE REQUIREMENTS EQUAL TO OR EXCEEDING THE MAIN INSTALLATION AND SHALL BE NSF-61 CERTIFIED.

REVISION	APPROVED	DATE

CITY OF COEUR d'ALENE STANDARD DRAWING

1" SAMPLE STATION ASSEMBLY

APPROVED BY:

Chris Bosley
CITY ENGINEER, PE 10804

4/13/18
DATE:

DWG NO. W-49

PUBLIC WORKS COMMITTEE
STAFF REPORT

DATE: **July 23, 2018**
FROM: **Kyle Marine Assistant Superintendent, Water Department**
SUBJECT: **Approval of Right of Way Easement for Avista natural gas pipeline at 685 E Kathleen Ave. (Honeysuckle Well)**

==========

DECISION POINT: Should the City grant a Right-of-Way easement to Avista Corporation on the south side of the Honeysuckle Well parcel along E. Kathleen Ave.

HISTORY: This site was originally intended to accommodate a future water reservoir, but, after further study last year, it was determine this would not be practical due to the high cost of building a reservoir at this location. Currently, Avista has a gas service that is feeding the Honeysuckle facility from N. Honeysuckle Dr. which splits the property almost in half. The purpose of the easement is to permit the gas line to be moved to the south. This is enable the City to liquidate the unused parcel in the future.

FINANCIAL ANALYSIS: There is no cost to the City for the proposed Right-of-Way easement.

PERFORMANCE ANALYSIS: With the Right-of-Way easement, the parcel will be more appealing to any potential purchasers.

DECISION POINT/RECOMMENDATION: Council should approve the Right-of-Way easement in favor of Avista Corporation at 685 E Kathleen Ave.

Return Address:
Grantee: Avista Corporation
Real Estate Department MSC-25
P.O. Box 3727
Spokane, Washington 99220-3727

Natural Gas Pipeline

RIGHT OF WAY EASEMENT

For Mutual Benefits and Good Consideration, the receipt of which is hereby acknowledged**, CITY OF COEUR D' ALENE,** a political subdivision of the State of Idaho, whose address is 710 E. Mullan Avenue, Coeur d' Alene, ID 83814,(“Grantor”) hereby grants, conveys and warrants to **AVISTA CORPORATION,** a Washington corporation (“Grantee”), a perpetual non-exclusive easement on, over, under, along and across real property identified as Assessor Parcel #C-0000-036-7100, located in SW1/4 of Section 36, Township 51 North, Range 4 West, B.M., Kootenai County, State of Idaho, legally described in **EXHIBIT “A”** ,the “Property Description”) and by this reference is incorporated into this easement.

1. **PURPOSE.** Grantee shall have the right to construct, reconstruct, operate, maintain, repair, upgrade, remove, relocate and replace an underground natural gas pipeline, together with all related appurtenances **(**“Facilities”) on, over, under, along and across the Property. The easement shall extend five feet (5’) feet on each side of the center line of the Facilities, th**e** approximate location of which is shown on the attached map marked **EXHIBIT “A”** (the “Easement Area”), and by this reference is incorporated into this easement.

2. **ACCESS.** Grantor grants to Grantee a right of ingress, egress and access over and across the Property and Grantor’s adjoining property for the purpose stated above.

3. **CLEARING AND MAINTENANCE.** Grantee shall have the right to cut, trim and remove any brush, branches and trees, including danger trees, within the Easement Area, within Property and on Grantor’s adjoining property that in the opinion of the Grantee, could interfere with the safe and reliable operation of Grantee’s Facilities or that could interfere with the exercise of Grantee’s rights as granted herein.

4. **GRANTOR’S USE OF THE PROPERTY.** Grantor reserves the right to use and enjoy the Property, to the extent that such use does not conflict or interfere with the Grantee’s rights herein.

5. **INDEMNITY.** Grantee agrees to indemnify and hold harmless Grantor, its employees, agents, guests and invitees from damage to property and personal injury to the extent caused by Grantee’s negligence or willful misconduct in the exercise of its rights herein, provided that Grantee shall not be liable for property damage or personal injury that is caused by the acts or omissions of Grantor, its employees, agents, guests and invitees or any other person.

6. **GRANTOR’S WARRANTY**. Grantor warrants and represents that Grantor has the unrestricted right to grant this easement and the rights described here.

7. **SUCCESSORS AND ASSIGNS.** The rights granted in this easement run with the Property and shall be binding upon and benefit the parties and their respective successors, heirs and assigns.

DATED this _____day of_____, 20_____.

CITY OF COEUR d' ALENE

_____

Steve Widmyer, Mayor

ATTEST:

_____

Renata McLeod, City Clerk

STATE OF IDAHO

COUNTY OF KOOTENAI

On this _____ day of _____, 20 ____, before me,
a Notary Public in and for said State, Steve Widmyer and Renata McLeod, personally appeared, known or identified to me to be the Mayor and City Clerk of the City of Coeur d' Alene, Kootenai County, Idaho, persons whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

_____
Notary Signature
Notary Public for the State of Idaho

My commission expires: _____

EXHIBIT A

Property Description

City of Coeur d' Alene Property
Gas Line Easement

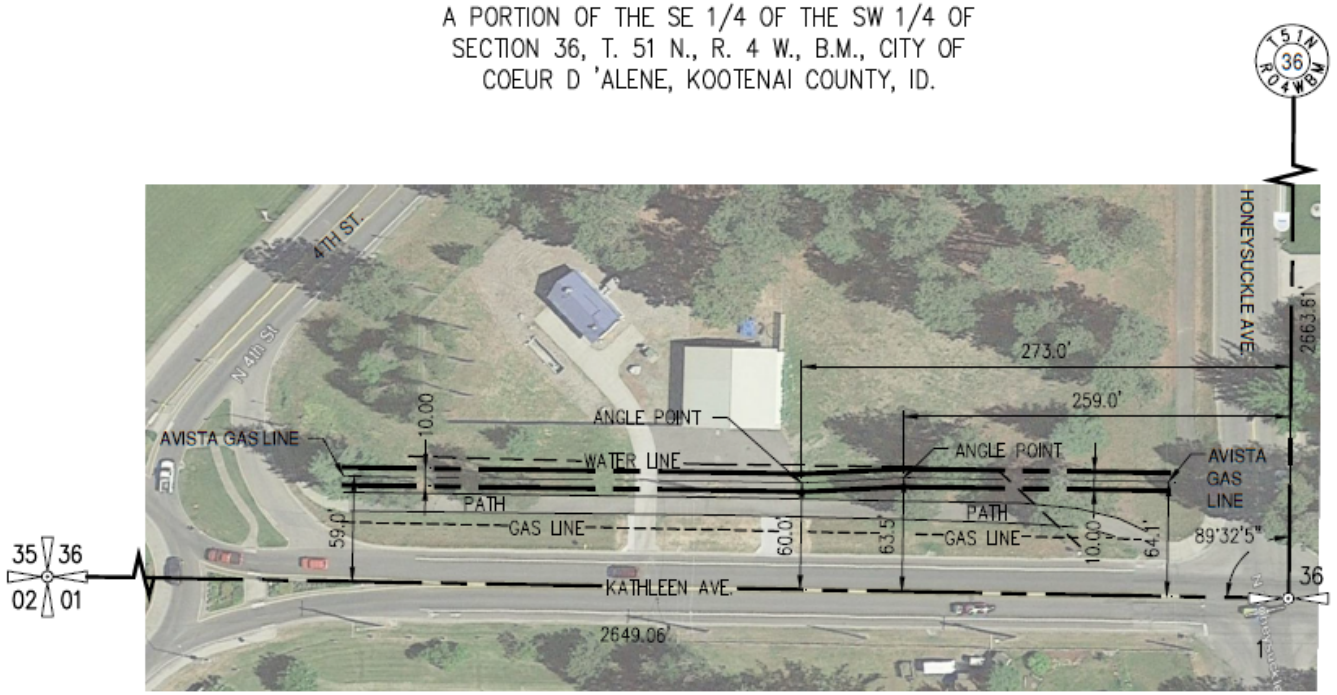
A strip of land 10 feet wide across a parcel of land located in the Southwest Quarter of Section 36, Township 51 North, Range 4 West, Boise Meridian, Kootenai County, Idaho, being 5 feet wide on each side of the center line of the facility, more particularly described as follows:

That portion of the East 800 feet of the Southwest Quarter (SW1/4), lying Southeast of the extended 4th Street, Section 36, Township 51 North, Range 4 West, B.M., Kootenai County, Idaho.

SUBJECT TO:
Existing rights-of-way and easements of record and or appearing on said above described parcel.

EXHIBIT "A"

A PORTION OF THE SE 1/4 OF THE SW 1/4 OF SECTION 36, T. 51 N., R. 4 W., B.M., CITY OF COEUR D 'ALENE, KOOTENAI COUNTY, ID.



100' 50' 0'

SCALE: 1"= 100'

UTILITY LINES, AS SHOWN, WERE LOCATED VIA ELECTRONIC LOCATE; THUS, SURFACE MARKS WERE THEN SURVEYED AND PLOTTED OUT .

AVISTA GAS EASEMENT
CITY OF COEUR D 'ALENE

AVISTA CORP
SPOKANE, WASHINGTON

AS SHOWN	6-2-18	APPROVED
SCALE	DATE	
DSN TDA	CKD	
DR TDA	NTD	SHT DATE
CKD	NTD	OF

PUBLIC WORKS COMMITTEE
STAFF REPORT

DATE: **July 23, 2018**
FROM: **Dennis J. Grant, Engineering Project Manager**
SUBJECT: **V-18-05, Vacation of a portion of alley right-of-way adjoining the easterly boundary of Lot 1 and the N ½ of Lot 2, Block A, Sanders Addition to the City of Coeur d'Alene.**

DECISION POINT

Should the City vacate the portion of an alley right-of-way that adjoins the easterly boundary of the Morris property on 11th Street (304 S. 11th Street).

HISTORY

The requested right-of-way was originally dedicated to the City of Coeur d'Alene in the Sanders Addition plat in 1890.

FINANCIAL ANALYSIS

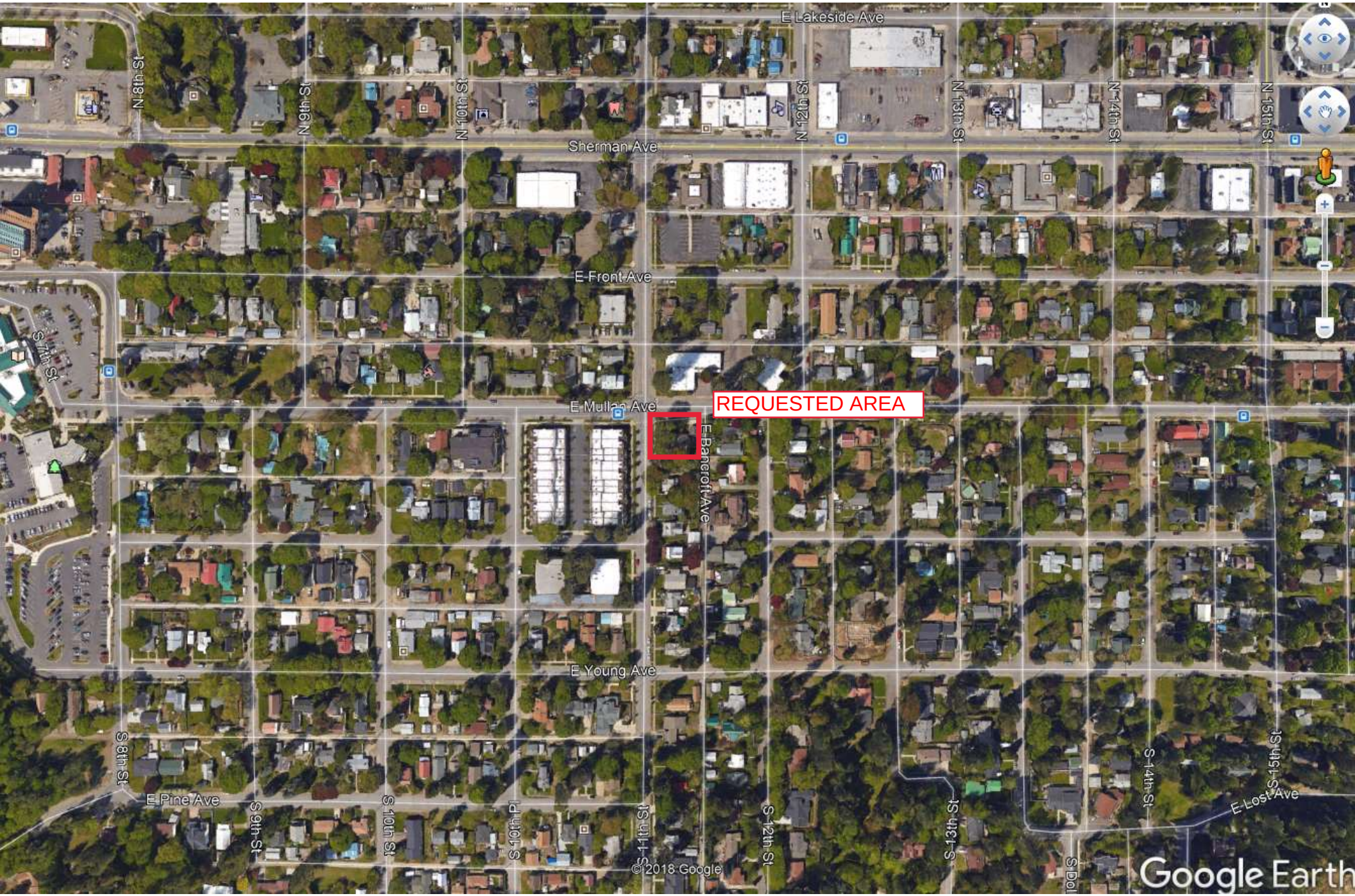
The vacation of the requested right-of-way would not have any negative financial impact on the City and would add approximately 486 square feet to the County tax roll. Although a minor amount, it would be a benefit to the municipality as tax revenue and to the land owner whose lot adjoins the strip of usable property.

PERFORMANCE ANALYSIS

The purpose of this request is to vacate a 6' foot strip of land to accommodate a garage structure and setback for the property owner. This would leave 16.37' feet of right-of-way for the alley. The Wastewater Department was contacted, regarding access to the sewer main in the alley and gave approval of the vacation. All utility easements will remain in place. The Development Review Team was informed about this vacation.

RECOMMENDATION

Council should proceed with the vacation process as outlined in Idaho Code Section 50-1306 and to recommend to the City Council the setting of a public hearing for the item on August 21, 2018.


E Lakeside Ave
N 8th St
N 9th St
N 10th St
N 12th St
N 13th St
N 14th St
N 15th St
Sherman Ave
E Front Ave
S 7th St
E Mullan Ave
REQUESTED AREA
E Bancroft Ave
E Young Ave
S 8th St
E Pine Ave
S 9th St
S 10th St
S 10th Pl
S 11th St
S 12th St
S 13th St
S 14th St
S 15th St
E Lost Ave
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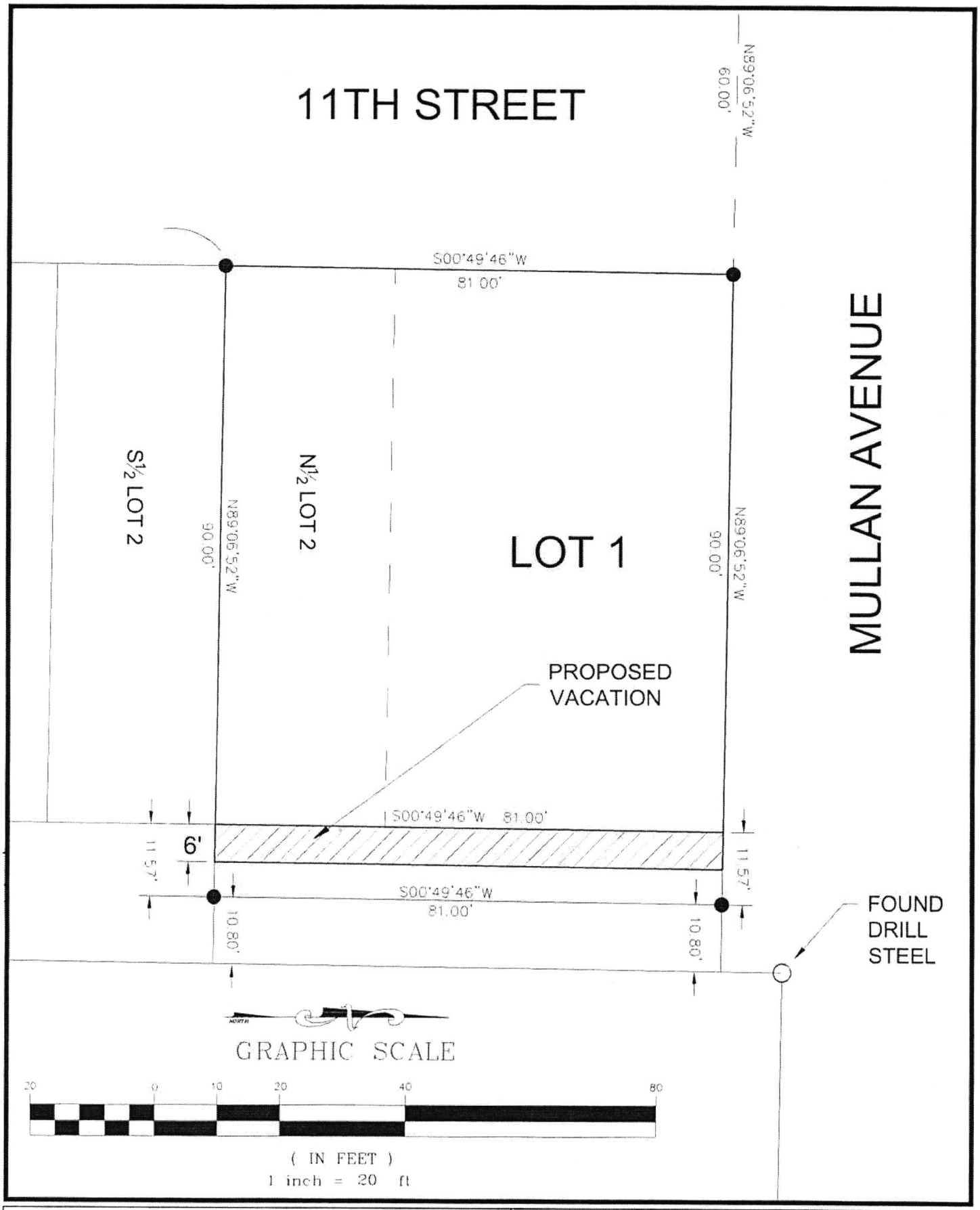

VACATION EXHIBIT			FRAME & S METANA, PA Consulting Engineers 603 North 4th Street, Coeur d'Alene, Idaho, 83814 Ph.(208)664-2121/Fax:(208)765-5502/Email:smetana@roadrunner.com	FS SHEET 1 OF 1
SCALE: 1"=20'	DATE: 07/16/2018	FILE: S406-EXHIBIT		