

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS

TO

**THE 2015 IDAHO STANDARDS FOR
PUBLIC WORKS CONSTRUCTION (ISPWC)**



REVISION: November 2015

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
For the 2015 ISPWC

FOREWORD

The standard specifications and details contained herein shall apply in their entirety to all City of Caldwell Department of Public Works construction contracts and permits.

- These supplements to the Idaho Standards for Public Works Construction (ISPWC) are intended to accompany the full edition of the ISPWC-2015, and are not a stand-alone document. They are compiled here to guide, inform and assist engineering firms, developers, contractors and all other interested parties of the construction requirements to be used on public works types of projects for the City of Caldwell. (Amended by Bill No. 4, Ordinance No. 2787, dated March 16, 2009)

- These specifications and standard details shall periodically be revised, updated and adopted by Caldwell City Council. Each such revision made will be identified by a replacement title page indicating the effective date of the revision. (Amended by Bill No. 4, Ordinance No. 2787, dated March 16, 2009)

- It shall be the responsibility of each holder or user of this document to incorporate all such revisions into his project contract and/or to verify that he has the latest revisions prior to performing any work covered by these specifications and standard drawings. Information concerning the latest revision may be obtained from the City of Caldwell Engineering Department. (Amended by Bill No. 4, Ordinance No. 2787, dated March 16, 2009)

Copies of this document are available at the office of the City of Caldwell Engineering Department, 621 Cleveland Blvd., Caldwell, Idaho, 83605.

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DIVISION 200 – EARTHWORK

SECTION 202 – EXCAVATION & EMBANKMENT, PART 3.7 – EXCAVATION OF UNSUITABLE MATERIAL

Delete paragraph D and substitute the following:

- D. The Engineer **and/or City** will identify the limits of the areas requiring subgrade repair or removal of unsuitable material.

SECTION 202 – EXCAVATION & EMBANKMENT, PART 3.8 – EMBANKMENT CONSTRUCTION

Revise the last sentence in section B – Construction Requirements, Paragraph 1 to read:

1. Submit the findings to the Engineer **and/or City** for review and approval prior to work.

SECTION 204 – STRUCTURAL EXCAVATION AND COMPACTING BACKFILL, PART 3.4 – FIELD QUALITY CONTROL

Delete paragraph B. under part 2, under section E, and substitute the following:

- B. Vertical Location: At every horizontal location, obtain one test at subgrade. Subsequent tests every 18 inches compacted depth and at top of backfill or when materials or procedures change **or as directed by the Caldwell Engineering Department.**

End Division 200 -

CITY OF CALDWELL
QUICK REFERENCE
For

DIVISION 300 – TRENCHING

This quick reference highlights some of the requirements for Public Works Construction within the jurisdiction of the City of Caldwell. This quick reference is intended for use only as a guide for the Designer and Contractor and not as a replacement to the Idaho Standards for Public Works Construction (ISPWC) or the City of Caldwell's Supplemental Specifications for the ISPWC. Please refer to those documents for more complete specifications.

1. Secure a permit to use right-of-way and/or public easements prior to any work in public right-of-way or easements. Applications are available at the City of Caldwell Engineering office or online at www.cityofcaldwell.com.
2. See Caldwell Standard Drawing T-308 for utility corridor locations.
3. Tunneling under sidewalks, driveways and curbs for utility installation are not allowed unless approved by the City.
4. Trench excavation shall conform to ISPWC Section 301.
5. Rock excavation shall conform to ISPWC Section 302.
6. Trench foundation stabilization shall conform to ISPWC Section 304. If required in the Contract Documents, or if directed by the City Engineer, trench stabilization materials shall be wrapped in geotextile fabric meeting the requirements of the City of Caldwell's Supplemental Specifications for the ISPWC Section 304.2.4.
7. Only class B-2 bedding system is allowed for pressure sewer, water and pressure irrigation pipes. Other bedding system applications shall be as specified in ISPWC Section 305.3.11.
8. Type A-2 compaction (water settling) for trench backfill is not allowed.
9. Boring and Jacking: Commercially fabricated casing spacers per Caldwell Standard Drawing T-307 or as approved by the City Engineer shall be used instead of redwood skids.

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
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DIVISION 300 – TRENCHING

SECTION 301 – TRENCH EXCAVATION, PART 1.4 – SUBMITTALS

Add paragraph D:

- D. Submit application for Right-of-Way Construction Permit to City or applicable jurisdiction.**

SECTION 301 – TRENCH EXCAVATION, PART 3.14 – TUNNELING

Delete paragraph A and substitute the following:

- A. Make crossings under sidewalks, driveways or curbs by tunneling if subgrade remains bridged and undisturbed for a depth of at least 1.2 m (4 feet) below the structure. Demonstrate to the Engineer a suitable method for re-compacting the excavated tunneling area. **Backfill shall be lean concrete per Section 703 – Cast-in-Place Concrete.****

SECTION 304 – TRENCH FOUNDATION STABILIZATION, PART 2 – MATERIALS

Add part 2.4 GEOTEXTILE:

- 2.4 Geotextile shall be manufactured from polypropylene or polyester and may be needle punched nonwoven, or woven with monofilament or fibrillated yarns. Geotextile shall meet the Class 2 survivability requirements of AASHTO M-288-96. The geotextile shall have a minimum permittivity of 0.2 sec. -1 and a maximum apparent opening size (AOS) of 0.25 mm. Geotextile shall be Mirifi 700X, Mirifi 70/20, Amoco 4551 or approved equal.**

SECTION 304 – TRENCH FOUNDATION STABILIZATION, PART 3.2 – PLACEMENT

Add paragraph C:

- C. If required by the Contract Documents or if directed by the Engineer, trench stabilization material shall be wrapped in geotextile meeting the requirements of Section 304.2.4. The geotextile shall be placed against the bottom and sides of the dewatered excavation prior to placing the foundation stabilization material in the trench. Overlap all fabric edges a minimum of 12-inches. The geotextile shall not be torn, punctured, or deformed while placing into trench. Place foundation stabilization material into trench and completely wrap with geotextile ending with an overlap of 12-inches minimum on the top of the stabilization material. Place pipe bedding over stabilization material and fabric while maintaining the 12-inch fabric overlap.**

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DIVISION 300 – TRENCHING

SECTION 304 – TRENCH FOUNDATION STABILIZATION, PART 4.1 – MEASUREMENT AND PAYMENT

Add paragraph C:

- C. Geotextile: By the square yard furnished and installed.**

SECTION 305 – PIPE BEDDING, PART 3.11 – BEDDING SYSTEM APPLICATION

Delete paragraph A, Section 3 and substitute the following:

3. Pressure Sewer Pipes: Use **Class B-2 bedding system.**

Delete paragraph A, Section 4 and substitute the following:

4. Water and Pressure Irrigation: Use **Class B-2 bedding system.**

SECTION 306 – TRENCH BACKFILL, PART 3.3 – TYPE A TRENCH BACKFILL

Delete paragraph B, Section 4 and substitute the following:

4. Method: Use A-1 or A-3 compaction technique approved by the Engineer.

Add paragraph D. and substitute the following:

- D. Type A-2 Compaction **is not allowed.**

SECTION 307 – STREET CUTS AND SURFACE REPAIRS, PART 1.4 – SUBMITTALS

Add paragraph C:

- C. Submit application for right-of-way permit to City or applicable jurisdiction.**

SECTION 308 – BORING AND JACKING, PART 2.4 – CARRIER PIPE SKIDS

Delete paragraph A and substitute the following:

- A. Commercially fabricated casing spacers per Caldwell Standard Drawing T-307 or as approved by the City.**

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
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DIVISION 300 – TRENCHING

DIVISION 300 – TRENCHING, STANDARD DRAWINGS

Delete the following Standard Drawings:

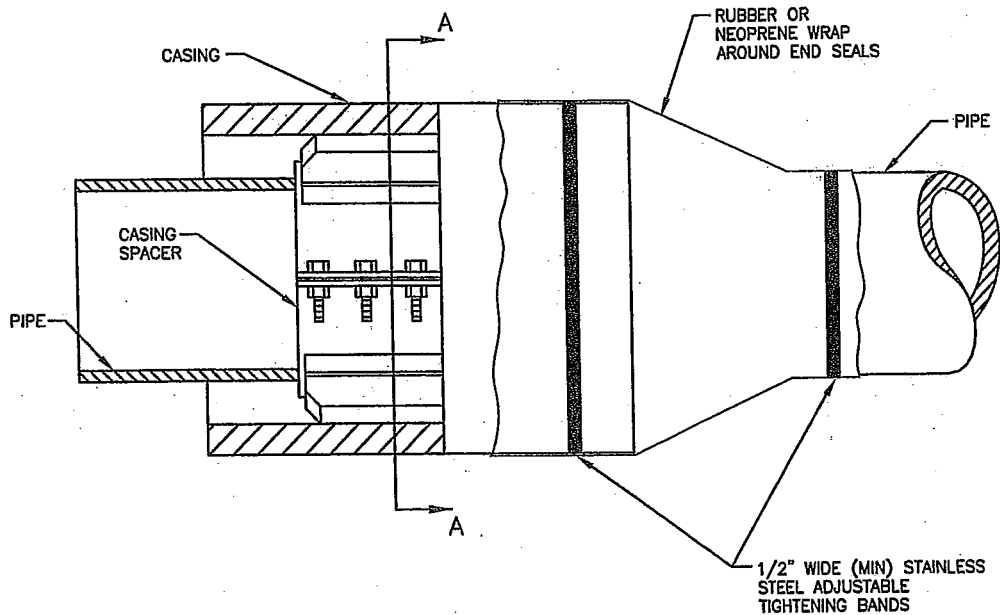
SD-307 – Boring and Jacking Details

Insert the following Caldwell Standard Drawings:

T-307 – Boring and Jacking Details

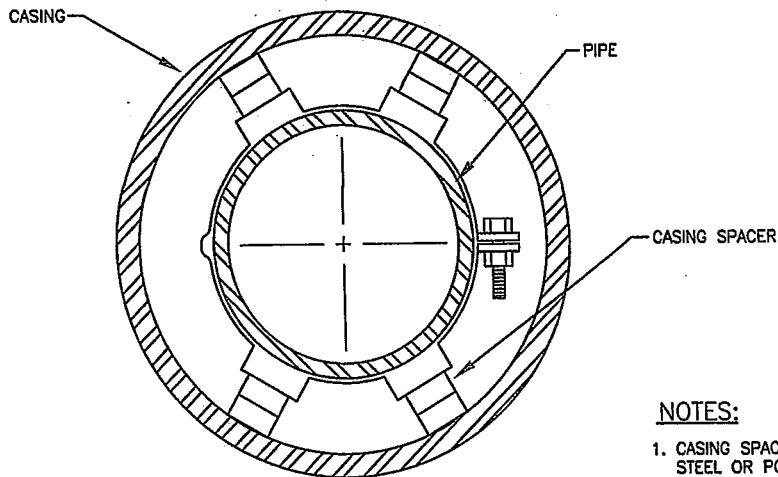
T-308 – Utility Corridor

End Division 300 -



CASING SPACER

N.T.S.



SECTION A-A

N.T.S.

NOTES:

1. CASING SPACERS SHALL BE STAINLESS STEEL OR POLYETHYLENE. CALPICO INC., PX, RACI, OR APPROVED EQUAL.
2. CASING SHALL BE SMOOTH STEEL 3/8" MIN. WALL THICKNESS.
3. MINIMUM CASING DIAMETER AS SPECIFIED BY CASING SPACER MANUFACTURER.
4. DISTANCE BETWEEN CASING SPACERS SHALL BE AS SHOWN ON THE PLANS OR AS DETERMINED BY THE ENGINEER.

03/01/04/000000/000000/000000.dwg

BORING AND JACKING
DETAILS

DATE: 03/01/04

REV. # 1

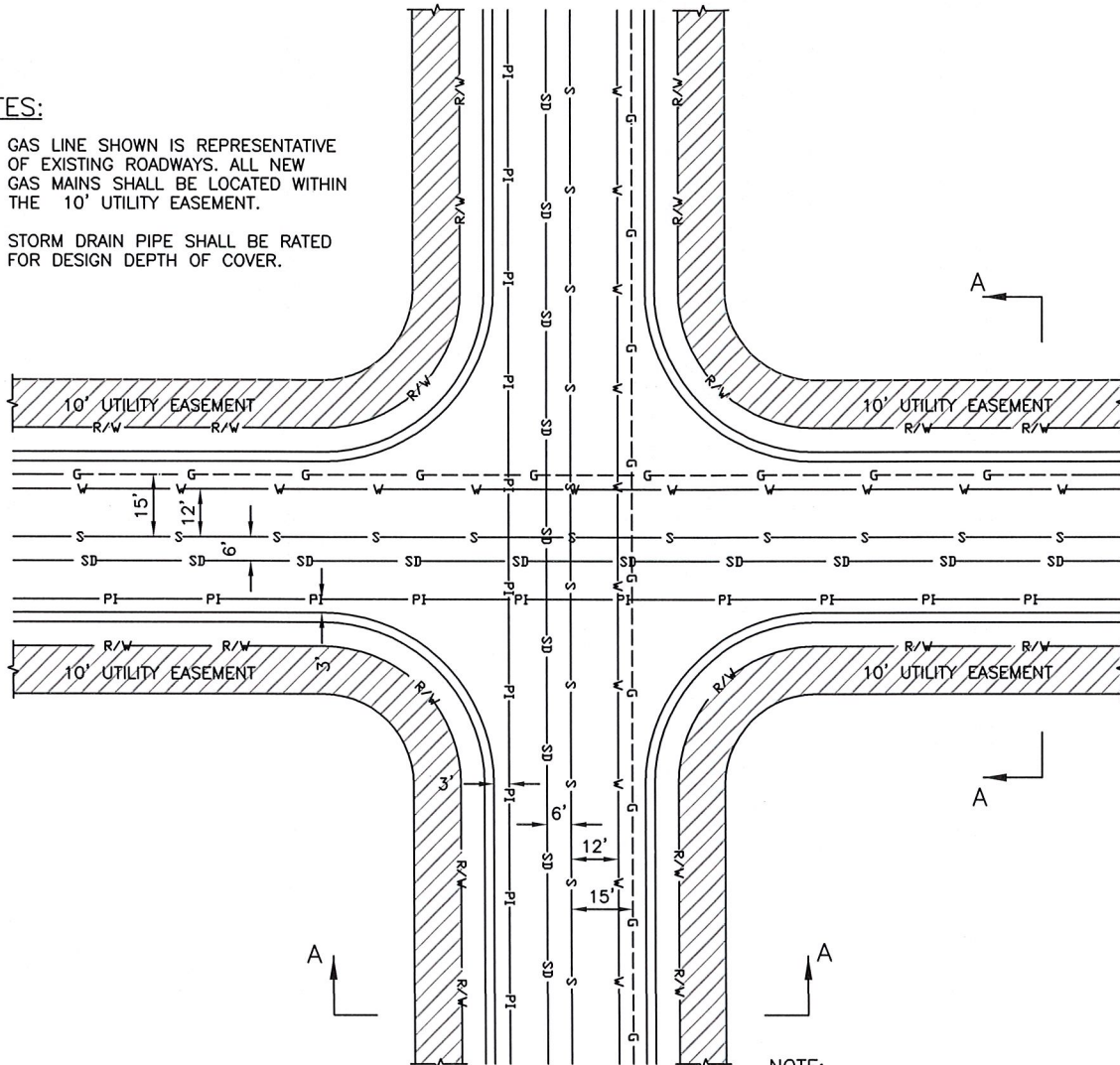
ACAD FILE: T-307.DWG

T-307

STANDARD DRAWING NO.

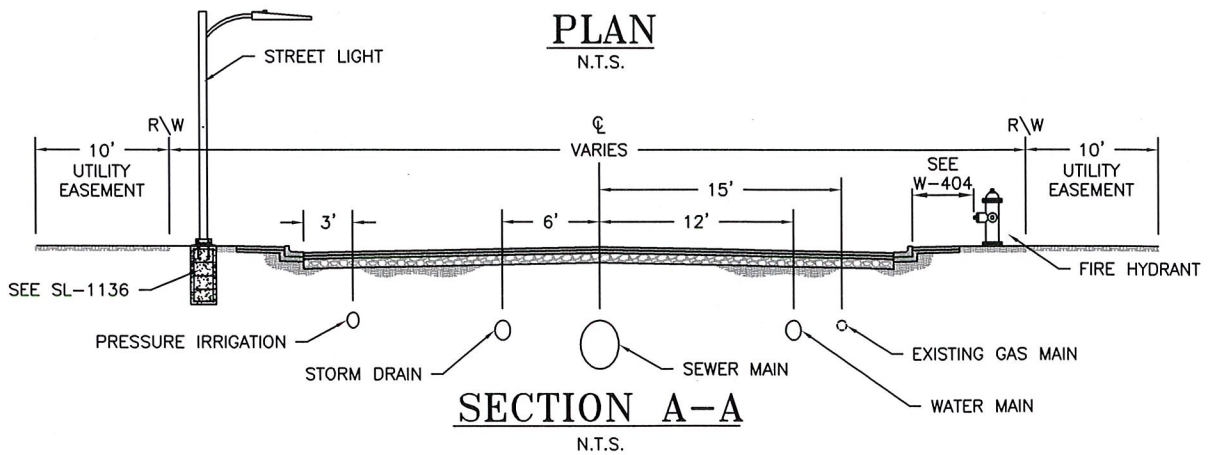
NOTES:

1. GAS LINE SHOWN IS REPRESENTATIVE OF EXISTING ROADWAYS. ALL NEW GAS MAINS SHALL BE LOCATED WITHIN THE 10' UTILITY EASEMENT.
2. STORM DRAIN PIPE SHALL BE RATED FOR DESIGN DEPTH OF COVER.



NOTE:
COMMUNICAION CONDUIT SHALL BE PLACED WITHIN 2.0' OF THE LIP OF GUTTER ON COLLECTOR AND ARTERIAL ROADWAYS

PLAN
N.T.S.



SECTION A-A
N.T.S.



UTILITY CORRIDOR
HORIZONTAL & VERTICAL

DATE:	10/7/2015
REV. #	1
ACAD FILE:	T-308 DWG

T-308
STANDARD DRAWING NO.

CITY OF CALDWELL
QUICK REFERENCE
For

DIVISION 400 – WATER

This quick reference of specifications highlights some of the requirements for Public Works Construction within the jurisdiction of the City of Caldwell. This quick reference is intended for use only as a guide for the Designer and Contractor and not as a replacement to the Idaho Standards for Public Works Construction (ISPWC) or the City of Caldwell's Supplemental Specifications for the ISPWC. Please refer to those documents for more complete specifications.

1. PVC pressure fittings (size 4-inch through 8-inch) are not acceptable.
2. Polyethylene pipe may be used on 2-inch services (SDR 7, 200 psi).
3. Water mains shall have 48-inches of cover minimum. Water mains shall have 60-inches of cover maximum without prior approval. 42-inches of cover are required on water service lines.
4. Mark mainline stub-outs with water service markers per Caldwell Standard Drawing W-409.
5. Permanent blow-off assemblies shall conform to Caldwell Standard Drawing W-405.
6. Temporary blow-off assemblies shall conform to Caldwell Standard Drawing W-405A.
7. Fire hydrant assemblies shall be constructed per Caldwell Standard Drawing W-404. Mechanical joint restraint is required on all mechanical or push-on joints in fire hydrant assemblies.
8. Pipe for water services shall be Type K copper or Type L hard copper.
9. Water meter services shall conform to W-401, W-402 or W-414. Water meters will be furnished and installed by the City. Center of meter pits shall be located 18-inches behind the sidewalk (12-inches behind mailbox widening) and 24-inches from the side lot line. See Caldwell Standard Drawing W-413.
10. Install isolation valves on all water lines to be extended in the future. Install fire hydrants or temporary blow-off at the ends of all water mains to be extended in the future.
11. Backflow devices are required for all systems with auxiliary supplies, cross connections, pressurized cooling or process piping, or facilities with toxic or hazardous materials.

Backflow devices required:

- 1) Hazardous or toxic facilities: Air gap separation or reduced pressure principle.

CITY OF CALDWELL
QUICK REFERENCE
For

DIVISION 400 – WATER

- 2) Non-potable liquids: Double check valve assembly.
- 3) Off-season irrigation, without shut off valves: Atmospheric vacuum breaker.
- 4) Off-season irrigation, with shut off valves down stream: Pressure vacuum breaker.

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DIVISION 400 – WATER

SECTION 401 – WATER PIPE AND FITTINGS, PART 2.1 – PIPE AND FITTING SIZE, TYPE AND STRENGTH

Amend paragraph A to the following:

- A. Comply with pipe and fitting size, type and strength classification indicated in the Contract Documents. **All materials shall be certified lead free to meet NSF/ANSI 61.**

SECTION 401 – WATER PIPE AND FITTINGS, PART 2.2 – POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS

Delete paragraph D, item 1.

Delete paragraph D, item 3.

SECTION 401 – WATER PIPE AND FITTINGS, PART 2.5 – POLYETHYLENE PIPE AND FITTINGS

Delete part 2.5.

SECTION 401 – WATER PIPE AND FITTINGS, PART 2.6 – COUPLINGS

Delete paragraph C.

SECTION 401 – WATER PIPE AND FITTINGS, PART 2.9 – MECHANICAL RESTRAINT

Amend paragraph B to the following:

- B. Product: **Ford or EBAA Iron series 2000 PV (PVC Pipe)** or approved substitution. **Mega-lug Series 1100 (Ductile Iron Pipe) may be used in non-corrosive soils only.**

Delete paragraph C and substitute the following:

- C. **Mechanical Joint restraints shall meet requirements of AWWA Manual of Water Supply Practices, M23, PVC Pipe-Design and Installation. Mechanical restraint design shall be approved by the City Engineer and DEQ.**

SECTION 401 – WATER PIPE AND FITTINGS, PART 2.10 – LOCATING WIRE

Delete paragraph B and substitute the following:

- B. Splicing: Waterproof splice kits.

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DIVISION 400 – WATER

SECTION 401 – WATER PIPE AND FITTINGS, PART 3.1 – EXAMINATIONS

Amend paragraph C to the following:

- C. Verify that excavation will allow a minimum pipe cover of 48 inches, unless otherwise indicated in the Contract Documents. **Pipe cover exceeding 60 inches is not permitted unless explicitly approved by the City Engineer.**

SECTION 401 – WATER PIPE AND FITTINGS, PART 3.6 – PRESSURE TESTING

Delete paragraph F

SECTION 401 – WATER PIPE AND FITTINGS, PART 3.8 – PIPE MARKERS

Delete paragraph A and substitute the following:

- A. Furnish and install pipe markers at stub-outs per Caldwell Standard Drawing W-409 – Standard Marker Water Service.

SECTION 402 – HYDRAULIC VALVES, PART 2.5 – BLOW-OFF ASSEMBLY

Delete paragraph A and substitute the following:

- A. Refer to Caldwell Standard Drawing W-405 – Permanent Blow-Off Detail.

Add paragraph B:

- B. **Refer to Caldwell Standard Drawing W-405A – Temporary Blow-Off.**

SECTION 402 – HYDRAULIC VALVES, PART 2.7 – VALVE BOXES

Delete paragraph A and substitute the following:

- A. Size: Minimum (5 ¼ inch) inside diameter. **Provide locking style where indicated on the Contract Documents.**

SECTION 403 – HYDRANTS, PART 2.3 – COLOR

Delete paragraph A and substitute the following:

- A. Prepare and paint fire hydrants as required by the Contract Documents or per manufacturer's specifications if not otherwise specified. **The color of hydrants shall be red only.**

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DIVISION 400 – WATER

SECTION 403 – HYDRANTS, PART 2.5 – PIPE AND FITTINGS

Delete paragraph A and substitute the following:

- A. Conform to Section 401 – Water Pipe and Fittings, with end connections per Caldwell Standard Drawing W-404 - Fire Hydrant Detail.

SECTION 403 – HYDRANTS, PART 2.6 – CONCRETE THRUST BLOCKS

Delete section 2.6 and substitute the following:

2.6 **JOINT RESTRAINT**

Amend substitute paragraph A to the following:

- A. **Mechanical Joint Restraint per Caldwell Supplemental Specification section 401 or Concrete Thrust Blocks per section 703.**

SECTION 403 – HYDRANTS, PART 3.2 – INSTALLATION

Delete paragraph B and substitute the following:

- B. Install in accordance with Caldwell Standard Drawing W-404 – Fire Hydrant Detail with pumper outlet nozzle facing the street. Ensure outlet nozzles are 18-inches to 21-inches above finished grade.

Delete paragraph D and substitute the following:

- D. Provide thrust restraint for fittings and the auxiliary valve per Caldwell Standard Drawing **W-404 Fire Hydrant Detail and Caldwell Supplemental Specification Section 401.**

SECTION 404 – WATER SERVICE LINES AND METERS, PART 2.1 – PIPE AND FITTINGS SIZE, TYPE AND STRENGTH

Delete paragraph A and substitute the following:

- A. Comply with pipe and fitting size, type and strength classification indicated in the Contract Documents. Unless otherwise indicated, service pipe shall be **Type K Copper or Type L Hard Copper.**

Delete paragraph B.

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DIVISION 400 – WATER

SECTION 404 – WATER SERVICE LINES AND METERS, PART 2.2 – SERVICE PIPE

Delete paragraph A.

Delete paragraph B.

SECTION 404 – WATER SERVICE LINES AND METERS, PART 2.3 – WATER METER

Amend paragraph A, item 1 to the following:

1. Product: **Certified lead free water meter furnished and installed by the City.**

SECTION 404 – WATER SERVICE LINES AND METERS, PART 2.4 – APPURTENANCES

Amend paragraph A, item 1 to the following:

1. Product: Romac Style 101B [for taps 1 inch or less] Romac Style 202B [**for 2 inch taps**] with Bronze Strap bands for C-900 water pipe or approved substitution. **All appurtenances shall be certified lead free.**

Delete paragraph A, item 2.

Delete paragraph B, item 1 and substitute the following:

1. Type: Pack joint corporation stops or compression coupling for copper pipe.

Delete paragraph B, item 3 and substitute the following:

3. Product: Ford **FB1100** Ballcorp style for **CTS (copper)** pipe, **Mueller H-15008** or approved substitution.

Delete paragraph C, item 1 and substitute the following:

1. Type: **Ford** Pack Joint or **Mueller-110 compression** couplings for **copper** pipe or approved substitution.

Delete paragraph D, item 2 and substitute the following:

2. Fittings: Iron pipe size for **copper** pipe.

Delete paragraph D, item 5 and substitute the following as amended:

5. Product: **¾” – Ford VBH92-18W-11-33B**
1” – Ford VBH94-18W-11-44B
2” – Ford VBH77-18B-11-77
For larger meters contact the city water department.

Delete paragraph F.

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 400 – WATER

Amend paragraph H, item 4 to the following:

4. Product: D & L Supply **Lid 2242 with Neptune R900 recess with cam lock or D&L B-5018 through B-5024 with Neptune R900 recess with cam lock.**

SECTION 404 – WATER SERVICE LINES AND METERS, PART 3.1 – EXAMINATIONS

Delete paragraph C and substitute the following:

- C. Verify that trench depth will allow a minimum of **42 inches** cover over service lines.

SECTION 404 – WATER SERVICE LINES AND METERS, PART 3.2 – INSTALLATION

Delete paragraph C and substitute the following:

- C. Install pipe, fittings, meters, and meter boxes in accordance with the manufacturer's recommendations and Caldwell Standard Drawings **W-401, W-402 - Water Service Connection and W-414 Double Water Meter.**

Delete paragraph K.

DIVISION 400 – WATER, STANDARD DRAWINGS

Delete the following standard drawings:

SD-401 – Water Service Connection (3/4" – 1")

SD-402 – Water Service Connection (1 1/2" – 2")

SD-404 – Fire Hydrant Detail

SD-405 – 4" Blow-off Assembly Detail

SD-406 – Valve Box and Lid Detail

Insert the following Caldwell Standard Drawings:

W-401 – Water Service Connection (3/4" – 1")

W-402 – Water Service Connection (2")

W-404 – Fire Hydrant Detail

W-405 – Permanent Blow-Off Detail

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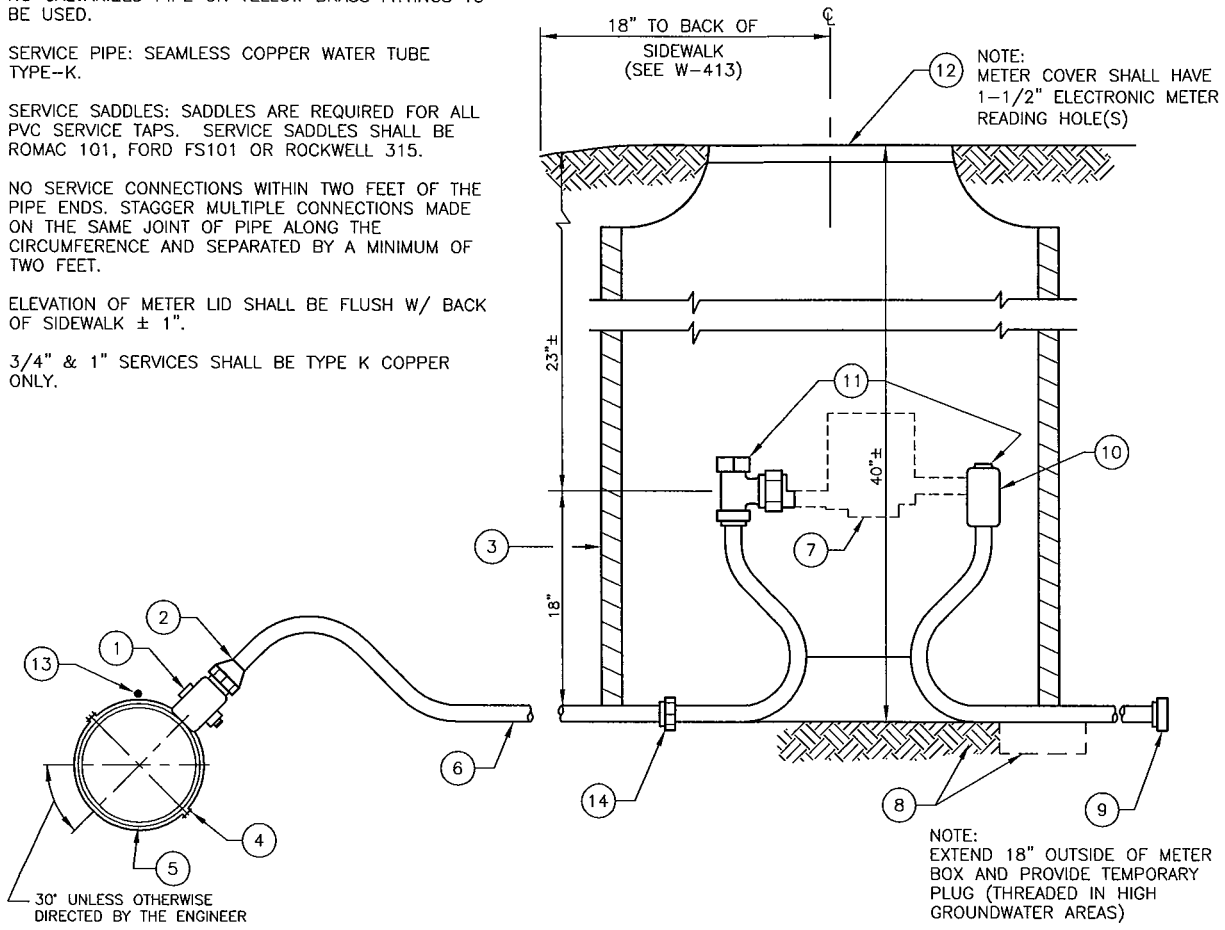
DIVISION 400 – WATER

- W-405A – Temporary Blow-Off Detail**
- W-406 – Valve Box and Lid Detail**
- W-409 – Standard Marker Water Service**
- W-410 – Water Stubs for Future Extension**
- W-411 – Fire Hydrant Guard Posts**
- W-412 – Tapping Water Main Details**
- W-413 – Water Service Locations**
- W-414 – Double Water Meter**
- W-415 – Sampling Station**

End Division 400

NOTES:

1. ALL PRODUCTS AS LISTED.
2. NO GALVANIZED PIPE OR YELLOW BRASS FITTINGS TO BE USED.
3. SERVICE PIPE: SEAMLESS COPPER WATER TUBE TYPE-K.
4. SERVICE SADDLES: SADDLES ARE REQUIRED FOR ALL PVC SERVICE TAPS. SERVICE SADDLES SHALL BE ROMAC 101, FORD FS101 OR ROCKWELL 315.
5. NO SERVICE CONNECTIONS WITHIN TWO FEET OF THE PIPE ENDS. STAGGER MULTIPLE CONNECTIONS MADE ON THE SAME JOINT OF PIPE ALONG THE CIRCUMFERENCE AND SEPARATED BY A MINIMUM OF TWO FEET.
6. ELEVATION OF METER LID SHALL BE FLUSH W/ BACK OF SIDEWALK $\pm 1"$.
7. 3/4" & 1" SERVICES SHALL BE TYPE K COPPER ONLY.



WATER SERVICE CONNECTION DETAIL

N.T.S.

LEGEND:

- | | |
|--|---|
| <ul style="list-style-type: none"> ① FORD FB-1100 OR MUELLER 15008 CORPORATION STOP FOR 3/4" OR 1" SERVICE ② PACK JOINT OUTLET FOR COPPER ③ RAVEN RMB -K-T 16"x24"x42" OR APPROVED EQUAL. IF METER BOX FALLS IN CONCRETE, USE RAVEN RMB-F-B 20"x24"x48" METER BOX AND D&L B5019 WITH R-400 RECESS WITH CAMLOCK METER LID. ④ SERVICE SADDLE ⑤ WATER MAIN ⑥ 3/4" OR 1" COPPER TYPE-"K" SERVICE LINE (TYP.) NO SPLICING IS ALLOWED ⑦ FUTURE METER INSTALLED BY CALDWELL WATER DEPT | <ul style="list-style-type: none"> ⑧ FIRM UNDISTURBED EARTH. (SET TILE ON 2" THICK PRECAST CONCRETE BLOCKS IF OVER EXCAVATION OCCURS) ⑨ PROVIDE TEMPORARY PLUG (THREADED IN HIGH WATER AREAS) ⑩ SINGLE CHECK VALVE (INTEGRAL W/ METER SETTER) ⑪ METER SETTER: 3/4" SHALL BE FORD VBH92-18W-11-33B OR MUELLER H-1404-2A, 1" SHALL BE FORD VBH94-18W-11-44B OR MUELLER H-1404-2A ⑫ METER BOX COVER D&L 2242 R-900 RECESS WITH CAMLOCK W/ 1-1/2" ELECTRONIC METER READING HOLE(S) ⑬ LOCATING WIRE ⑭ M.I.P. X C.P.S. ADAPTER |
|--|---|



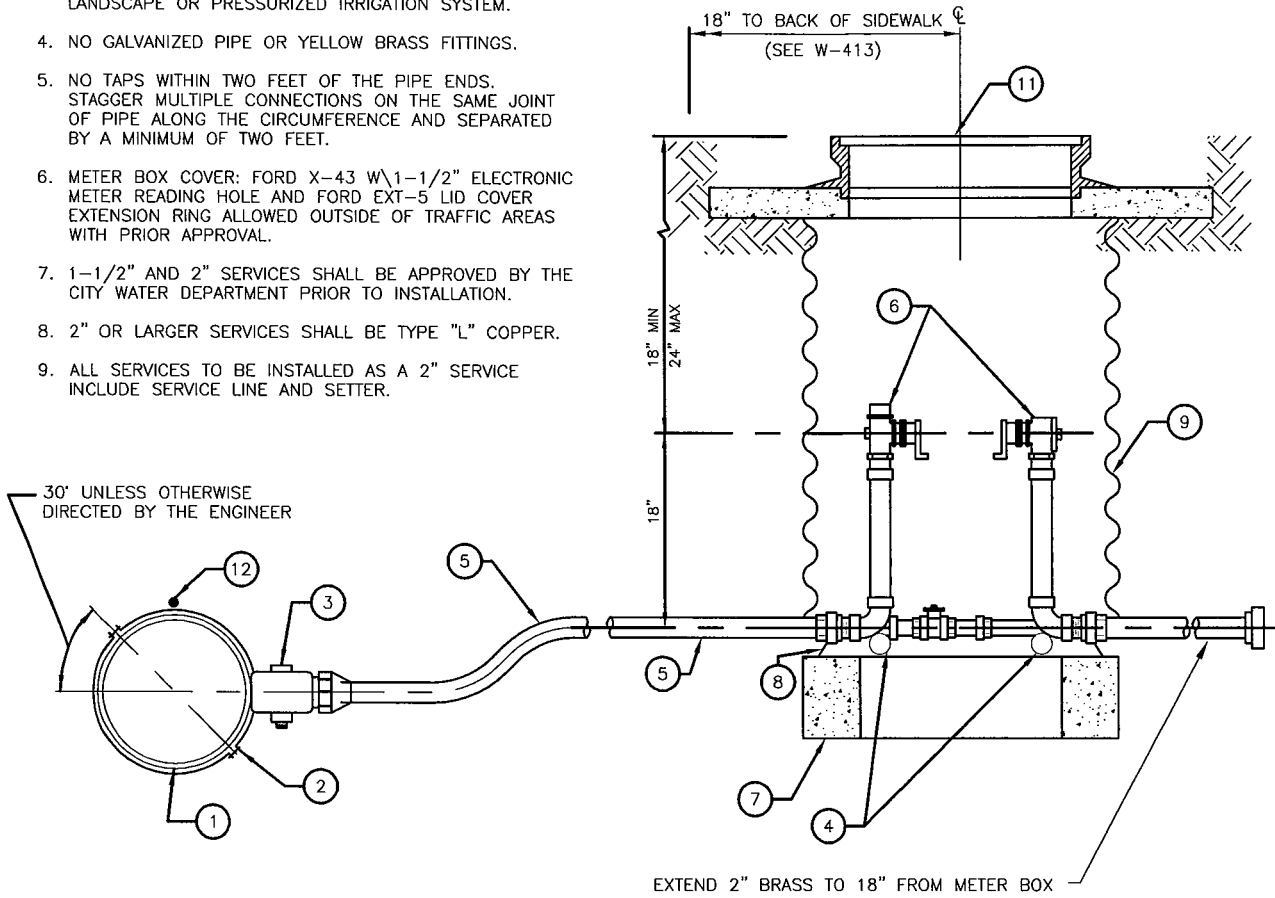
WATER SERVICE
CONNECTION (3/4" - 1")

DATE:	9/8/15
REV. #	1
ACAD FILE:	W-401.DWG

W-401
STANDARD DRAWING NO.

NOTES:

1. ALL PRODUCTS AS NOTED.
2. THE DIAMETER (1-1/2" OR 2") OF EACH APPURTENANCE SHOWN HEREON IS THE SAME AS THE METER SIZE.
3. NO BY-PASS ALLOWED ON METER SETTERS FOR LANDSCAPE OR PRESSURIZED IRRIGATION SYSTEM.
4. NO GALVANIZED PIPE OR YELLOW BRASS FITTINGS.
5. NO TAPS WITHIN TWO FEET OF THE PIPE ENDS. STAGGER MULTIPLE CONNECTIONS ON THE SAME JOINT OF PIPE ALONG THE CIRCUMFERENCE AND SEPARATED BY A MINIMUM OF TWO FEET.
6. METER BOX COVER: FORD X-43 W\1-1/2" ELECTRONIC METER READING HOLE AND FORD EXT-5 LID COVER EXTENSION RING ALLOWED OUTSIDE OF TRAFFIC AREAS WITH PRIOR APPROVAL.
7. 1-1/2" AND 2" SERVICES SHALL BE APPROVED BY THE CITY WATER DEPARTMENT PRIOR TO INSTALLATION.
8. 2" OR LARGER SERVICES SHALL BE TYPE "L" COPPER.
9. ALL SERVICES TO BE INSTALLED AS A 2" SERVICE INCLUDE SERVICE LINE AND SETTER.



WATER SERVICE CONNECTION DETAIL

N.T.S.

LEGEND:

- | | |
|--|--|
| <ul style="list-style-type: none"> ① WATER MAIN PER SECTION 401 ② SADDLE WITH IP THREAD AND STAINLESS STEEL STRAP. FORD FS202 OR ROMAC 2025 ③ FORD FB1100 OR MUELLER 15008 CORPORATION STOP FOR 2" SERVICE ④ 1" DIA. GALVANIZED BRACE PIPE, 2 REQUIRED ⑤ SERVICE LINE: 2" SEAMLESS POLY SDR 7 200 PSI I.P.S. SIZE(NO SPLICING ALLOWED) ⑥ METER SETTER: KEY VALVE INLET AND OUTLET MUELLER H-1422-2 FOR 1-1/2" AND 2", FORD VBH 77-18B-11-77 | <ul style="list-style-type: none"> ⑦ 4"x12"x12" CONCRETE BLOCKS ⑧ NOTCH METER BOX AS REQUIRED ⑨ RAVEN RMB-R-24" X 33" X 42" OR APPROVED EQUIVALENT ⑪ STANDARD 24" DIA. MANHOLE FRAME & WATER COVER, HS-25 LOAD RATED WITHIN TRAFFIC AREAS, COVER SHALL HAVE 1-1/2" ELECTRONIC METER READING HOLE (SEE NOTE 6). METER LID TO BE D&L 2242 (16-5024) WITH NEPTUNE R-900 RECESS OPENING. ⑫ LOCATOR WIRE |
|--|--|



WATER SERVICE CONNECTION (2")

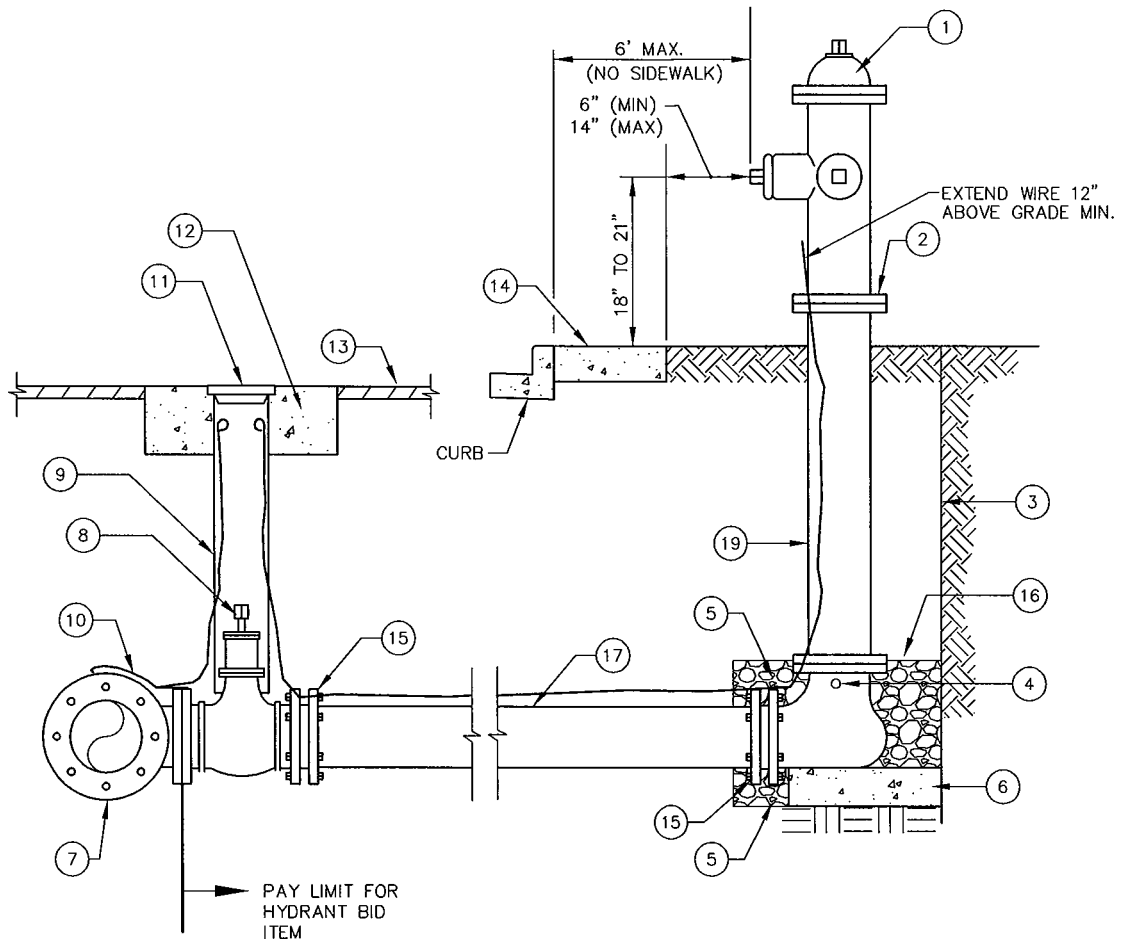
DATE: 10/7/2015

REV #: 2

ACAD FILE: W-402

W-402

STANDARD DRAWING NO.



FIRE HYDRANT DETAIL

N.T.S.

NOTES:

1. HYDRANTS THAT ARE TO BE RELOCATED AS CALLED FOR ON THE PLANS SHALL BE REINSTALLED IN ACCORDANCE WITH THIS DETAIL. LOCATION TO BE SET IN ACCORDANCE WITH LOCAL STANDARDS OR AS DIRECTED BY THE ENGINEER.
2. ALL AUXILIARY VALVES TO BE LOCATED AT THE TEE ON THE WATER MAIN AS SHOWN ON THIS DETAIL OR AS DIRECTED BY THE ENGINEER. WHERE EXISTING FITTINGS ARE NOT COMPATIBLE WITH NEW MAIN CONSTRUCTION, USE SUITABLE ADAPTERS OR NEW FITTINGS UPON APPROVAL BY THE ENGINEER.
3. ALL MECHANICAL JOINT FITTINGS SHOWN FOR PVC OR DUCTILE IRON PIPE SHALL BE INSTALLED WITH A JOINT RESTRAINT DEVICE WITH A MINIMUM WORKING WATER PRESSURE RATING OF THE PIPE ON WHICH IT IS INSTALLED. MECHANICAL JOINT RESTRAINT FOR PVC PIPE SHALL BE EBAA IRON SERIES 2000 PV OR EQUAL. MECHANICAL JOINT RESTRAINT FOR DUCTILE IRON PIPE SHALL BE EBAA IRON SERIES 1100 OR EQUAL. INTERMEDIATE PUSH-ON JOINT PVC PIPE BELLS SHALL BE RESTRAINED WITH A EBAA IRON SERIES 1600 OR APPROVED EQUAL.
4. PLACE LOCATOR WIRE DIRECTLY ABOVE PIPE. SECURE FINDER WIRE UNDER (MJ) BOLT. EXTEND FINDER WIRE INSIDE OF RISER TO (1) FOOT ABOVE FINISH GRADE, THEN SECURE TO SAME (MJ) BOLT AT MAIN. AVOID CROSS-OVER OF WIRES IN RISER.
5. THREAD-ON EXTERNAL STORZ ADAPTER WITH BLIND CAP. POLLARD HPHA5045 CAP OR RED HEAD S-37, OR APPROVED EQUAL IN 5" STORZ 4.5 NST. THREAD

LEGEND:

- ① FIRE HYDRANT (PAINT RED)
- ② BREAK AWAY BOLTS
- ③ END OF TRENCH
- ④ DRAIN - KEEP CLEAR
- ⑤ 2'x2'x2' OF 2" DRAIN ROCK, TOP OF ROCK SHALL BE 6" ABOVE HYDRANT DRAIN HOLE
- ⑥ PRECAST CONCRETE BLOCK 1' X 1' X 6" THICK
- ⑦ TEE (MJ X MJ X FLANGE) WITH MECHANICAL RESTRAINED CONNECTIONS, (SEE NOTE 3)
- ⑧ 6" C.I. AUXILIARY VALVE (MJ X FLANGE)
- ⑨ CAST IRON VALVE BOX
- ⑩ NO. 12 AWG. COPPER WIRE FINDER. (SEE NOTE 4)
- ⑪ 5 1/4" LID, (SEE W-406)
- ⑫ 24"φ X 6" CONCRETE COLLAR PER CALDWELL STANDARD DRAWING W-406
- ⑬ FINISHED GRADE
- ⑭ SIDEWALK
- ⑮ MECHANICAL JOINT CONNECTION WITH JOINT RESTRAINT DEVICE, (SEE NOTE 3)
- ⑯ WRAP DRAIN ROCK WITH FILTER FABRIC, (TOP AND SIDES)
- ⑰ 6" DIAMETER PIPE, IF LENGTH IS GREATER THAN 20 FEET, RESTRAIN INTERMEDIATE JOINTS WITH APPROVED JOINT RESTRAINT, (SEE NOTE 3)



FIRE HYDRANT DETAIL

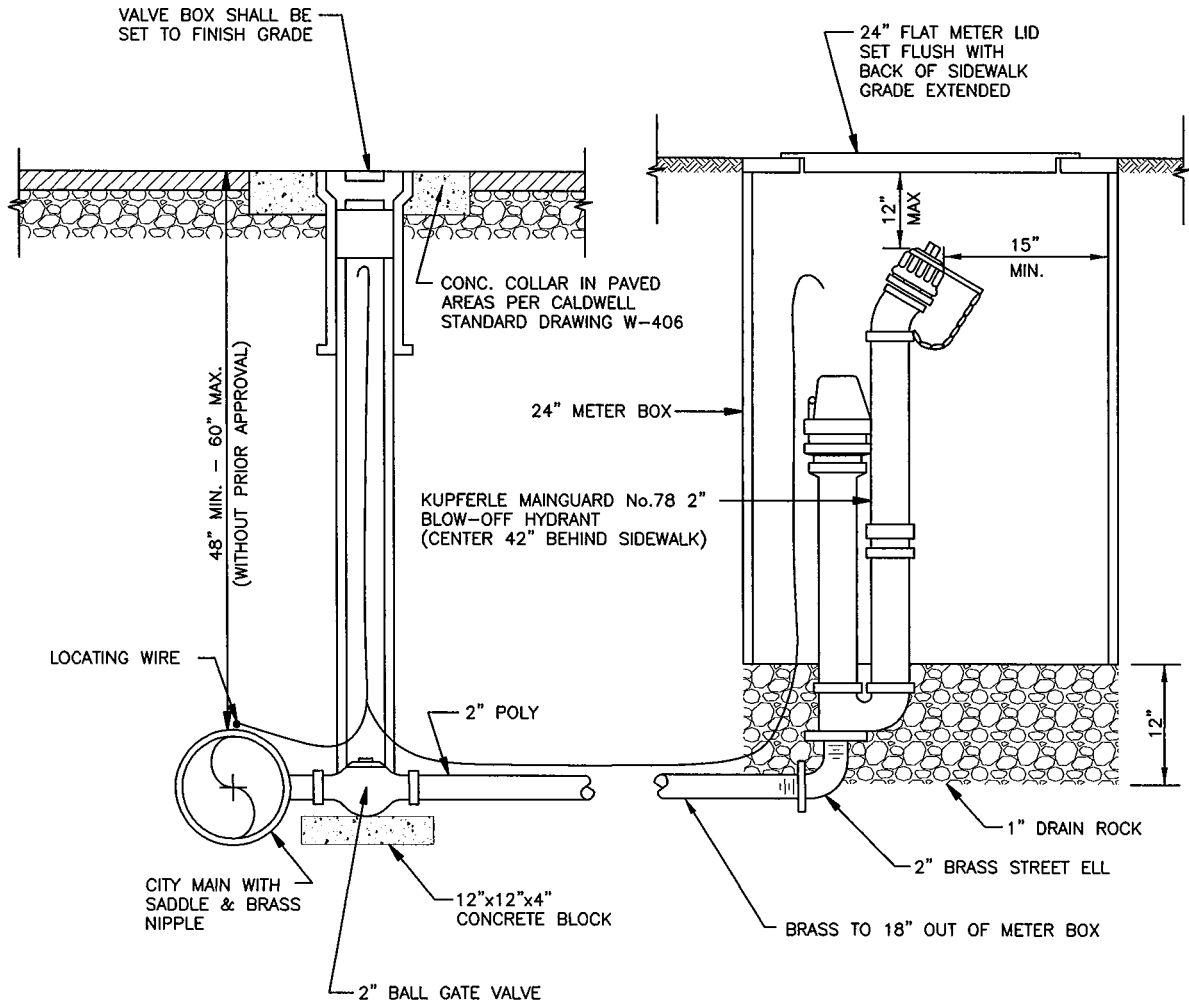
DATE: 9/8/15

REV. # 1

ACAD FILE: W-404.DWG

W-404

STANDARD DRAWING NO.



DETAIL
N.T.S.

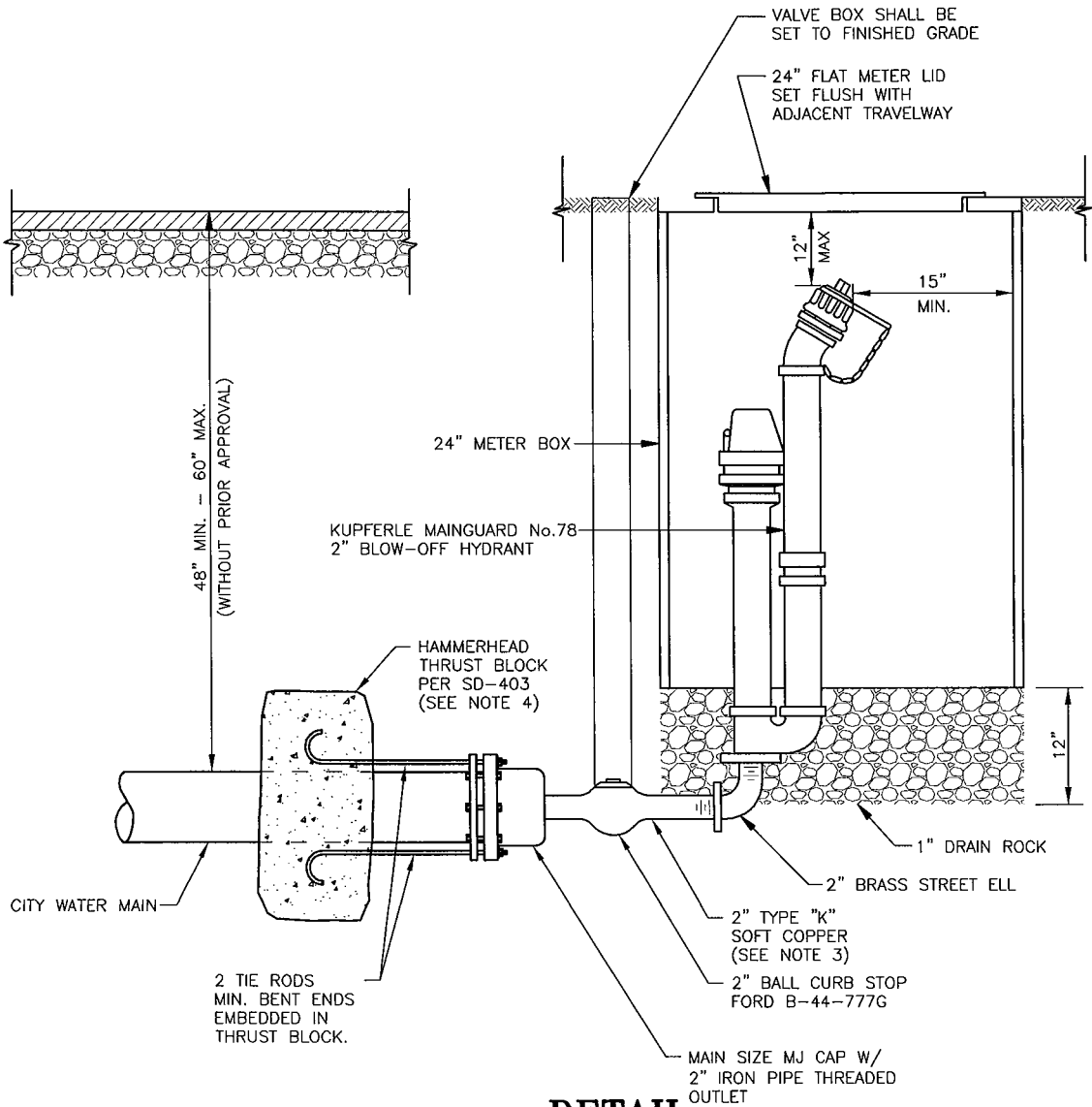


PERMANENT BLOW-OFF
DETAIL

DATE: 5/20/2015
REV #: 2
ACAD FILE: W-405

W-405

STANDARD DRAWING NO.

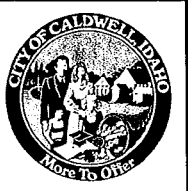


DETAIL

N.T.S.

NOTES:

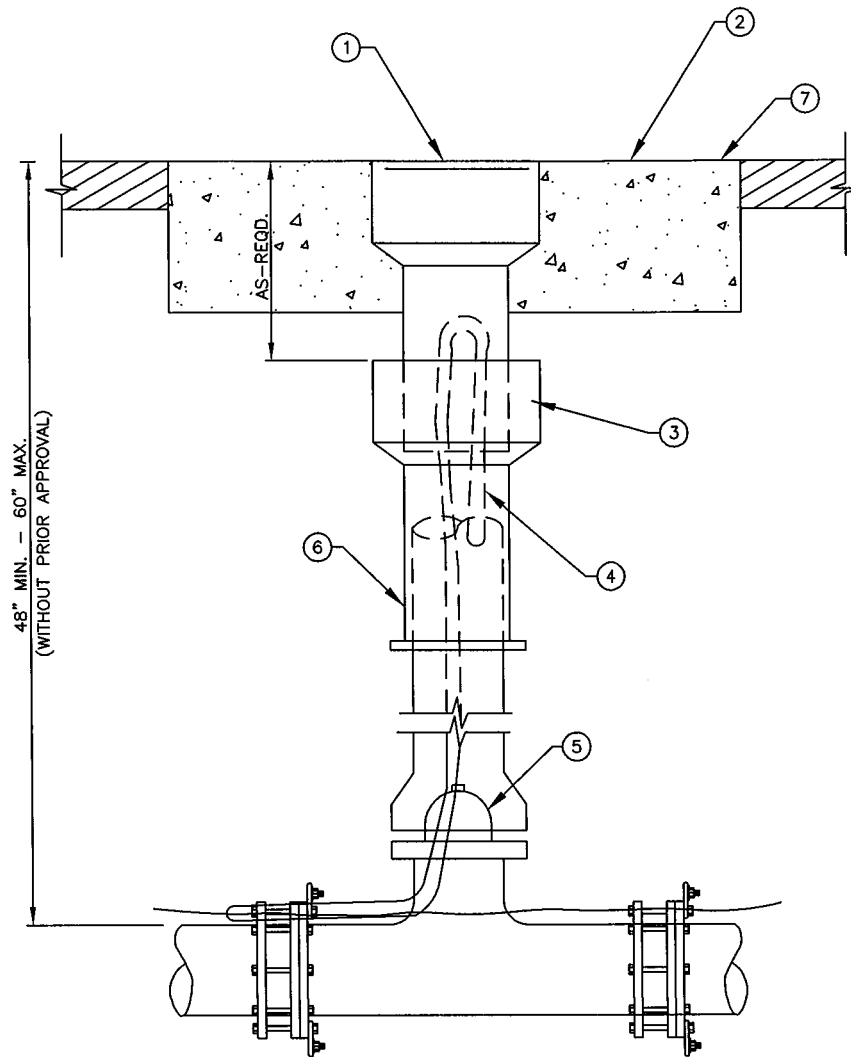
1. TEMPORARY BLOW-OFFS ARE FOR "PHASE" WATER LINES THAT ARE TO BE EXTENDED IN THE FUTURE.
2. LOCATE BLOW-OFF OUTSIDE OF TRAVEL WAY.
3. BRASS OR TYPE-"L" HARD COPPER PIPE IS ACCEPTABLE. (NO SPLICING ALLOWED).
4. WHEN TEMPORARY BLOW OFF IS REMOVED CONTRACTOR MUST REMOVE HAMMER HEAD THRUST BLOCK



TEMPORARY BLOW-OFF
DETAIL

DATE:	6/9/15
REV #:	2
ACAD FILE:	W-405A

W-405A
STANDARD DRAWING NO.



VALVE BOX AND LID

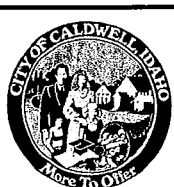
N.T.S.

LEGEND:

- ① 5 1/4" LID (IF LOCKING REQUIRED, TYLER NO. 6855)
- ② 24"Ø X 6" CONCRETE COLLAR
- ③ PACK VOID WITH RUBBER SILICONE
- ④ NO. 12 AWG. COPPER WIRE FINDER
- ⑤ VALVE
- ⑥ CAST IRON VALVE RISER
- ⑦ FINISHED GRADE

NOTE:

- 1. ALL PRODUCTS SHALL BE AS INDICATED OR APPROVED EQUAL.
- 2. VALVE BOX TO BE CENTERED OVER VALVE.

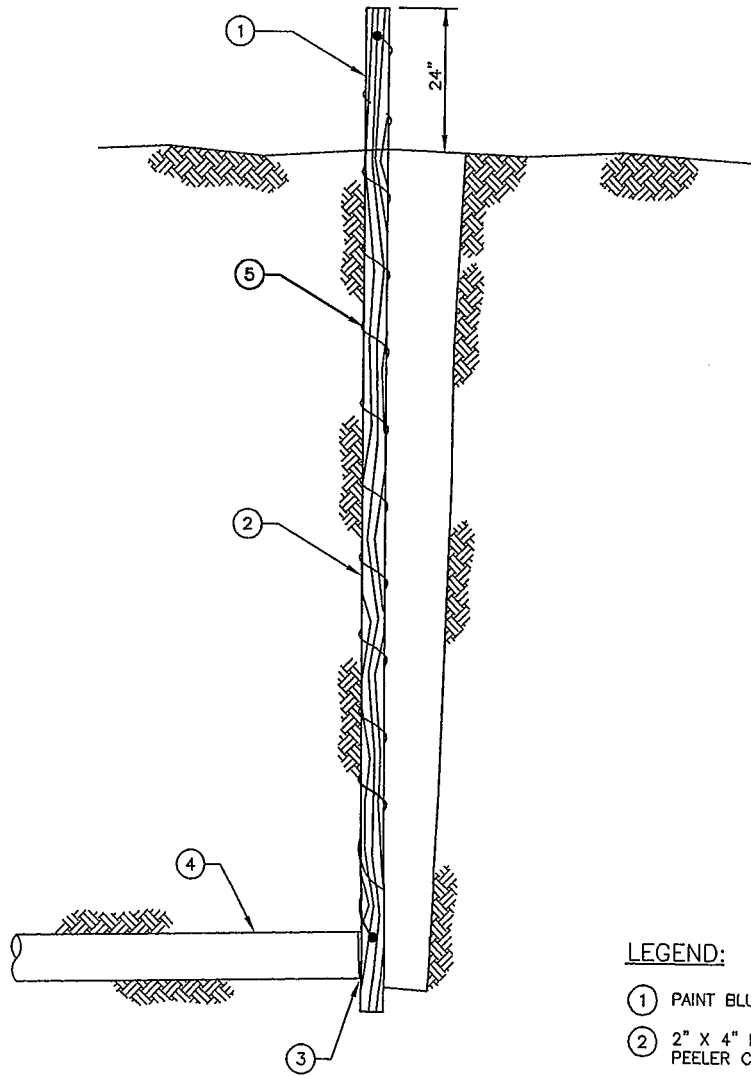


VALVE BOX AND LID

DETAIL

DATE:	9/8/15
REV. #	1
ACAD FILE:	W-406.DWG

W-406
STANDARD DRAWING NO.



LEGEND:

- ① PAINT BLUE
- ② 2" X 4" MARKER OR 4"-5" DIAMETER PEELER CORE POST
- ③ PLUG OR CAP
- ④ WATER MAIN OR SERVICE PIPE
- ⑤ NO. 12 AWG. GALVANIZED FINDER WIRE, (FASTEN TO BOTTOM AND TOP OF WOODEN MARKER AND WRAP AROUND ENTIRE LENGTH)

DETAIL

N.T.S.

0:\0210\VC\2006\03\water\1\030104.dwg

STANDARD MARKER
WATER SERVICE

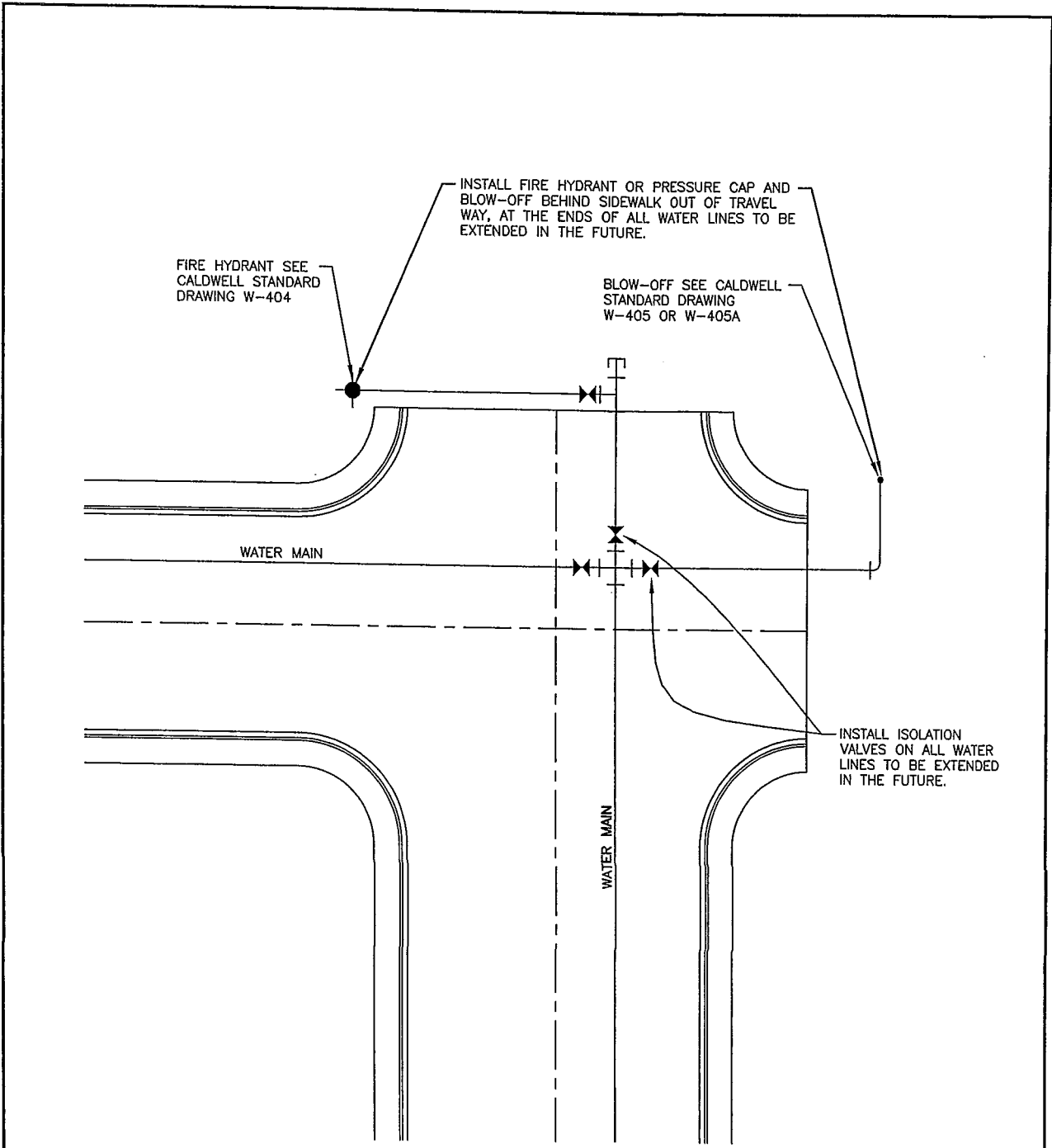
DATE: 03/01/04

REV. # 1

ACAD FILE: W-409.DWG

W-409

STANDARD DRAWING NO.



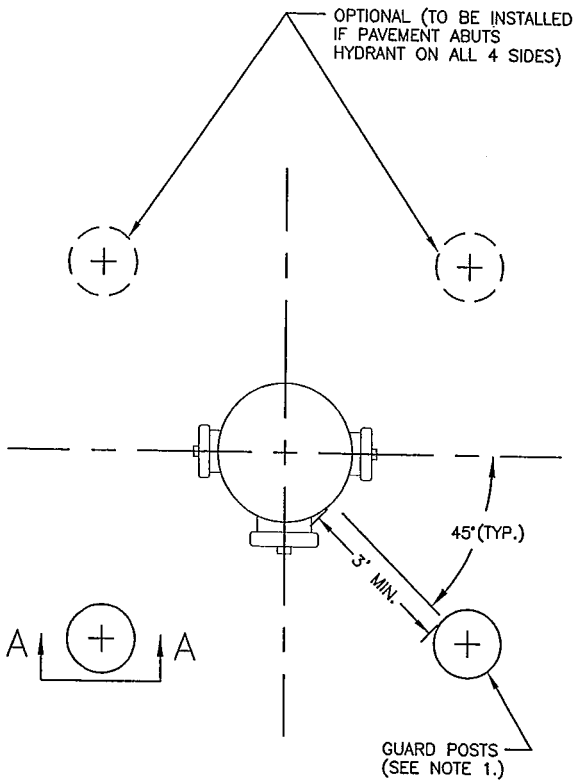
PLAN
N.T.S.

0:\21104\40400005\Water\W-410.dwg

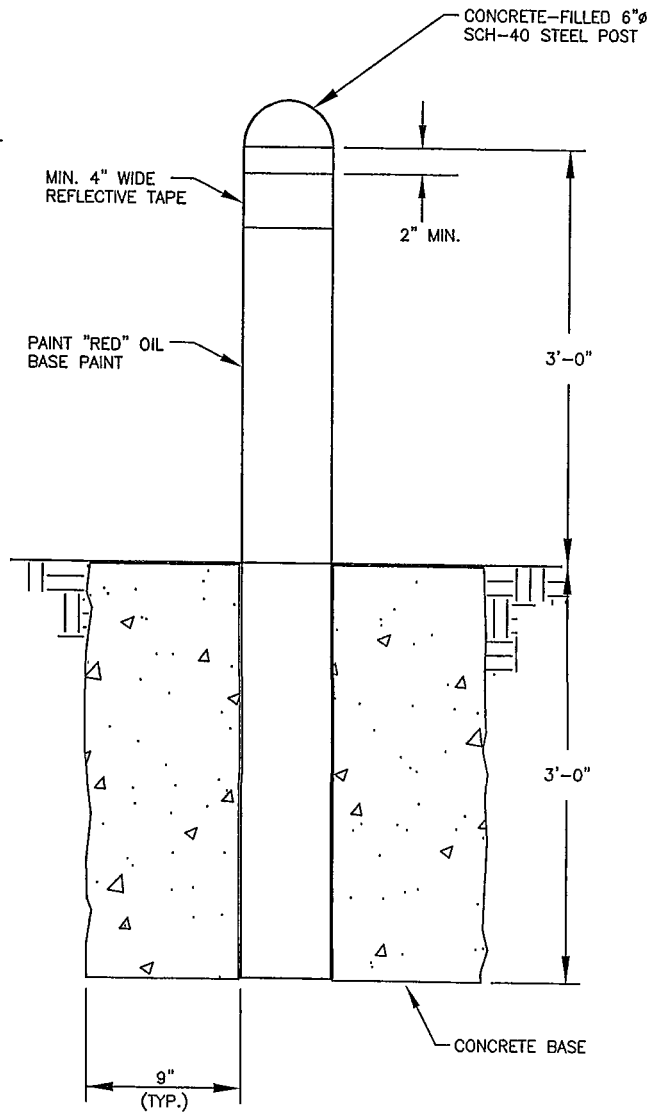
WATER STUBS
FOR FUTURE EXTENSION

DATE:	03/01/04
REV. #	1
ACAD FILE:	W-410.DWG

W-410
STANDARD DRAWING NO.



PLAN
N.T.S.



SECTION A-A
N.T.S.

NOTES:

1. WHERE CONCRETE CURBING IS NOT INSTALLED, GUARD POSTS (2 EA. MIN.) SHALL BE INSTALLED ON SIDES FACING PAVED SURFACE.
2. GUARD POSTS TO BE PAINTED SAME AS HYDRANT. (SEE STANDARD SPECS.)

03/02104/ACAD004/040104/040104.dwg

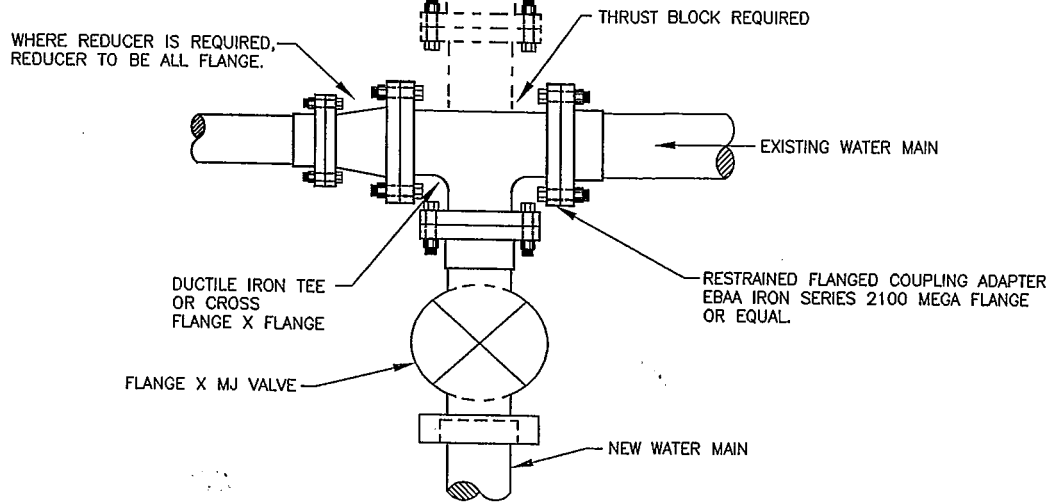
FIRE HYDRANT
GUARD POSTS

DATE:	03/01/04
REV. #	1
ACAD FILE:	W-411.DWG

W-411

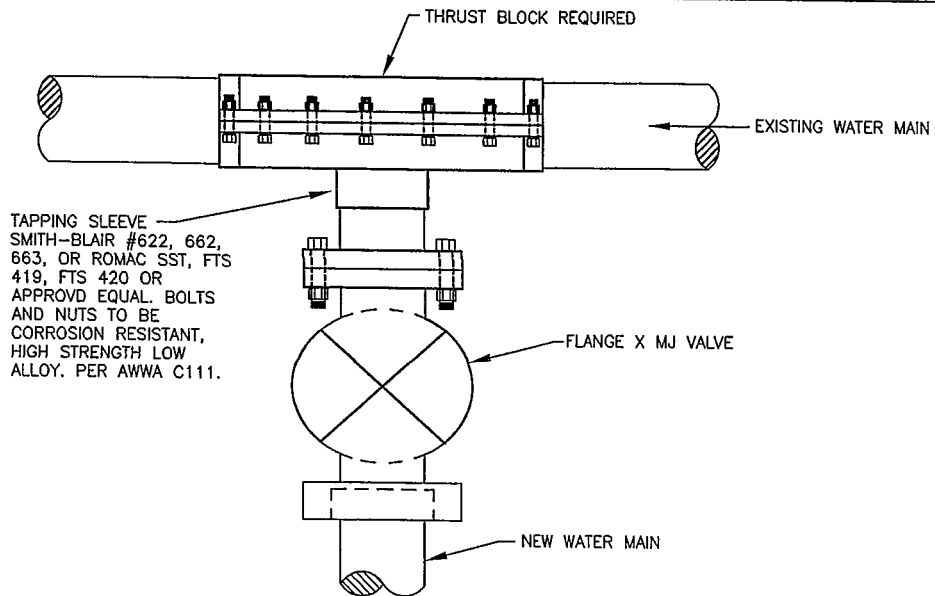
STANDARD DRAWING NO.

WHEN EXISTING WATERLINE REQUIRES THE IN-LINE INSTALLATION OF A VALVE, REDUCER OR FLANGE ADAPTER, THEN ALL CONNECTIONS TO THE TEE OR VALVE SHALL BE FLANGED.



CUT-IN TEE

N.T.S.



TAPPING SLEEVE AND VALVE

N.T.S.

- NOTES:**
1. CONTRACTOR TO DIG & VERIFY MAIN SIZE AND PIPE PRIOR TO ORDERING MATERIALS.
 2. INSTALL THRUST BLOCKS PER ISPWC STANDARD DRAWING SD-403.
 3. PROVIDE CITY WITH 48 HRS. NOTICE FOR INSPECTION AND VERIFICATION OF ALL MATERIALS PRIOR TO SCHEDULING OF WATER SHUTDOWN OR TAPPING.
 4. HOT TAP BY CITY OF CALDWELL WATER DEPT. 48 HRS. NOTICE REQUIRED.
 5. METHOD OF TIE-IN SHALL BE APPROVED BY THE CITY ENGINEER.

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TAPPING WATER MAIN

DETAILS

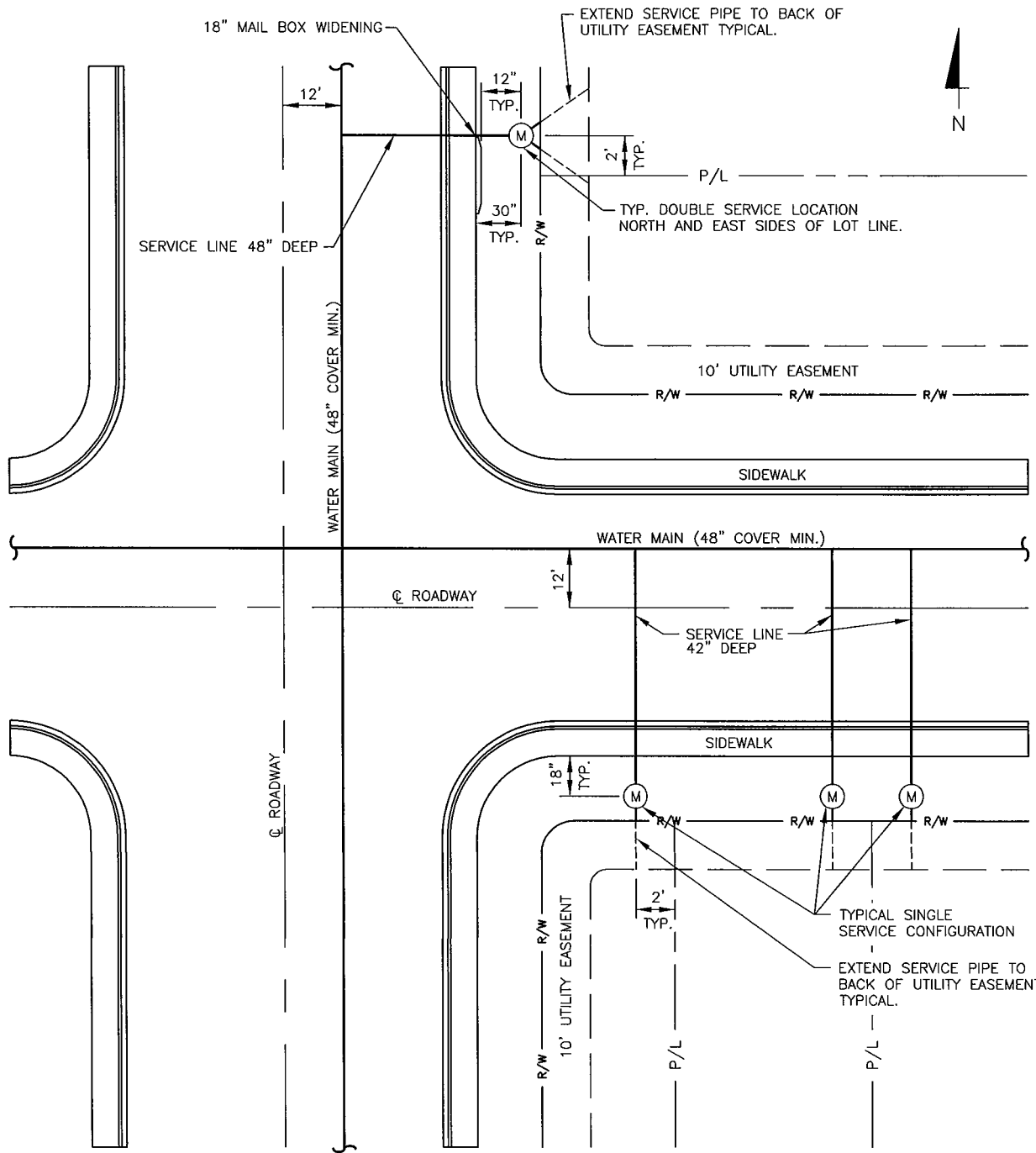
DATE: 03/01/04

REV. # 1

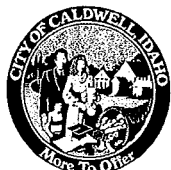
ACAD FILE: W-412.DWG

W-412

STANDARD DRAWING NO.



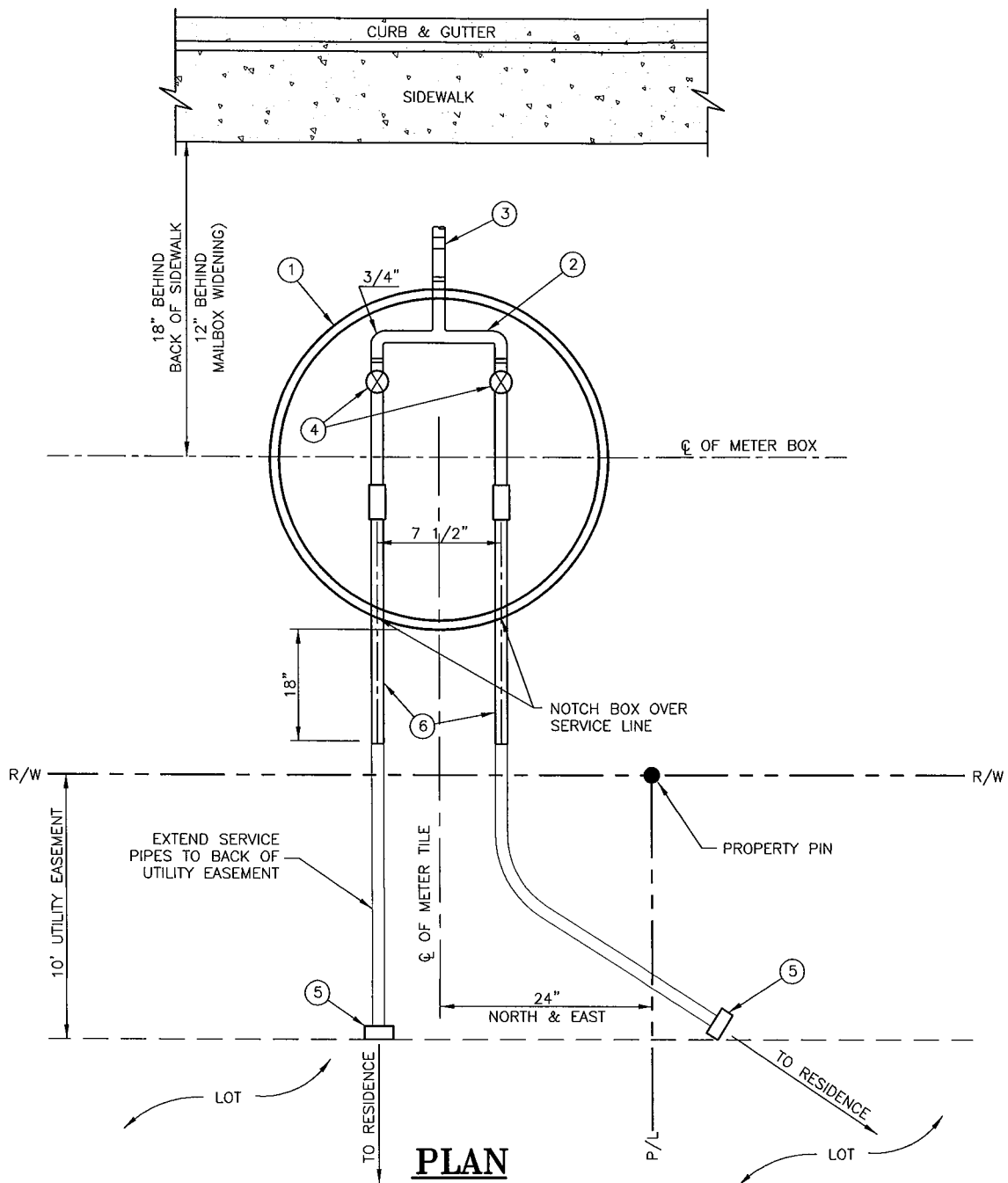
PLAN
N.T.S.



WATER SERVICE
LOCATIONS

DATE:	05/20/15
REV. #	1
ACAD FILE:	W-413.DWG

W-413
STANDARD DRAWING NO.



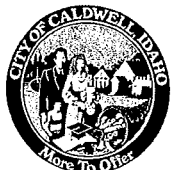
PLAN
N.T.S.

LEGEND:

- ① 20"ø x 36" METER BOX
- ② BRANCH FITTING (FORD U48-43)
- ③ 1" FORD PACK COUPLING
- ④ METER SETTER - FORD VBH92-18W-16-33B-G
- ⑤ MARKER PER W-409, PROVIDE TEMPORARY PLUG, (THREADED IN HIGH GROUNDWATER AREAS)
- ⑥ 3/4" COPPER SERVICE LINE

NOTES:

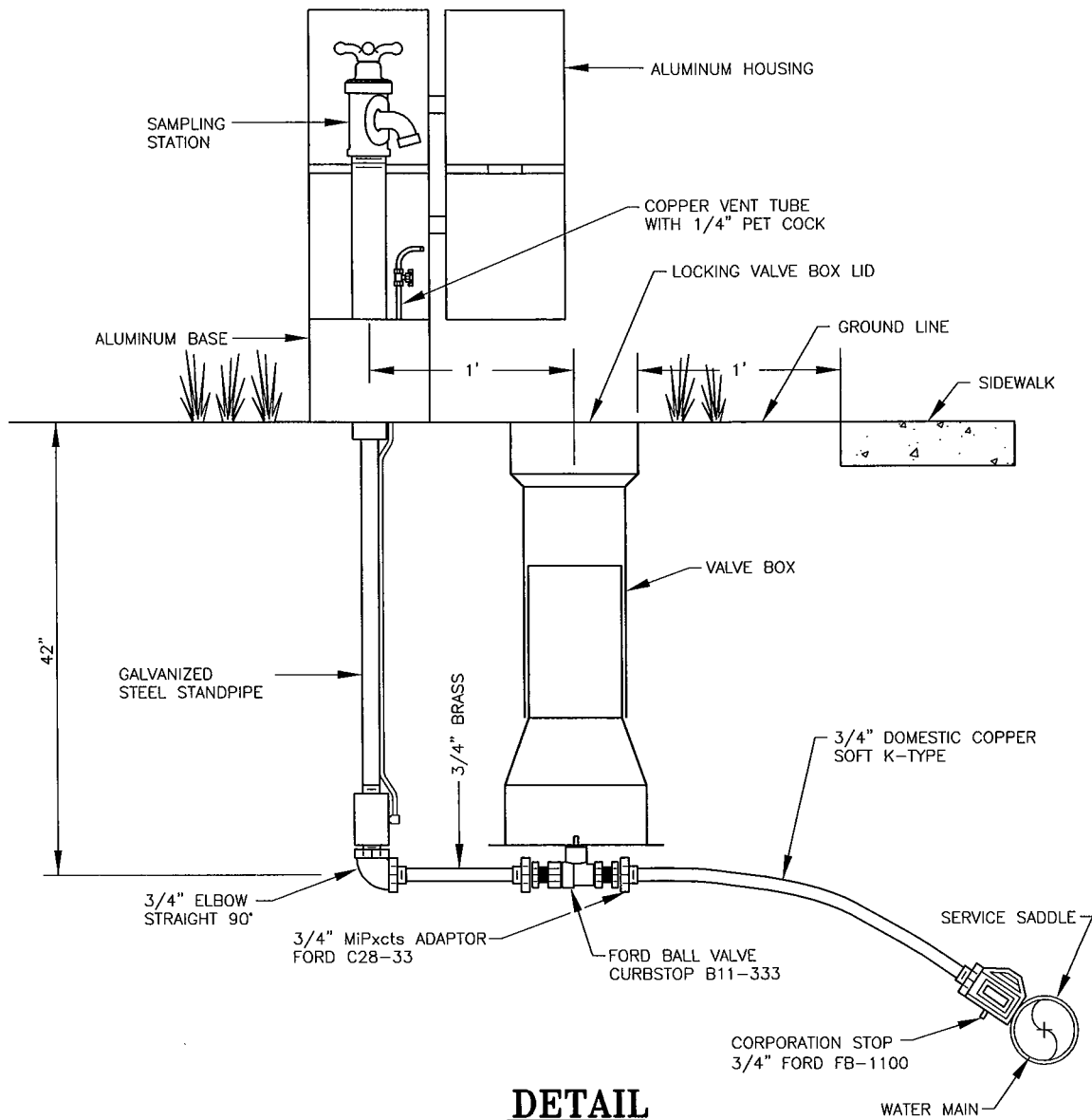
- 1. SEE STANDARD DWG. NO W-401 FOR METER SETTER ELEVATION.
- 2. SINGLE R-900 RECESS OPENING.
- 3. SEE SPECIFICATIONS FOR METER BOX REQUIREMENTS.
- 4. LOCATE METER BOX ON NORTH AND EAST SIDE OF PROPERTY PIN.
- 5. SEE SPECIFICATIONS FOR ADDITIONAL WORKMANSHIP REQUIREMENTS.



DOUBLE WATER METER
BRANCH FITTING AND LOCATION

DATE:	6/30/15
REV. #	1
ACAD FILE:	W-414.DWG

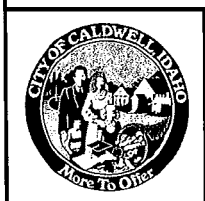
W-414
STANDARD DRAWING NO.



DETAIL
N.T.S.

NOTES:

1. SAMPLING STATIONS SHALL BE 42" BURY, WITH A 3/4" FIP INLET, AND A (3/4" HOSE OR UNTHREADED) NOZZLE.
2. ALL STATIONS SHALL BE ENCLOSED IN A LOCKABLE, NONREMOVABLE, ALUMINUM-CAST HOUSING.
3. WHEN OPENED, THE STATION SHALL REQUIRE NO KEY FOR OPERATION, AND THE WATER WILL FLOW IN AN ALL BRASS WATERWAY.
4. ALL WORKING PARTS WILL ALSO BE OF BRASS AND BE REMOVABLE FROM ABOVE GROUND WITH NO DIGGING. EXTERIOR PIPING SHALL BE GALVANIZED STEEL.
5. A COPPER VENT TUBE WILL ENABLE EACH STATION TO BE PUMPED FREE OF STANDING WATER TO PREVENT FREEZING AND TO MINIMIZE BACTERIA GROWTH.
6. SAMPLING STATION SHALL BE ECLIPSE NO. 88 AS MANUFACTURED BY KUPFERLE FOUNDRY, ST. LOUIS, MO.



SAMPLING STATION

DATE:	6/9/15	W-415
REV. #	1	
ACAD FILE:	W-415.DWG	STANDARD DRAWING NO.

CITY OF CALDWELL
QUICK REFERENCE
For

DIVISION 500 – SEWER

This quick reference of specifications highlights some of the requirements for Public Works Construction within the jurisdiction of the City of Caldwell. This quick reference is intended for use only as a guide for the Designer and Contractor and not as a replacement to the Idaho Standards for Public Works Construction (ISPWC) or the City of Caldwell's Supplemental Specifications for the ISPWC. Please refer to those documents for more complete specifications.

1. PVC sewer pipe shall conform to ASTM D 3034 for solid wall PVC SDR 35 (sizes 4 to 15-inch); ASTM F 679 (sizes 18 to 36-inch).
2. PVC pressure pipe for gravity sewers shall conform to AWWA C900 or C905, 100 psi rated or higher.
3. Reinforced concrete pipe, ductile iron pipe and high-density polyethylene pipe may be acceptable with prior approval of the City Engineer.
4. Ribbed PVC pipe is not acceptable.
5. Dual wall closed profile PVC pipe is not acceptable.
6. Polyethylene profile wall pipe is not acceptable.
7. Vitrified clay pipe is not acceptable.
8. Non-reinforced concrete pipe is not acceptable.
9. Sewer services and mainline stub-outs shall be marked per Caldwell Standard Drawing SS-512.
10. Infiltration into new or rehabilitated sewer lines shall be cause for immediate rejection.
11. Air-pressure test pipes 24-inches in diameter and smaller per ISPWC Section 501 except as follows: If ground water is above pipe invert, increase air test pressure 0.5 psi for every foot ground water is above pipe invert to a maximum test pressure of 7 psi. If ground water conditions exist such that air test pressure will exceed 7 psi, hydrostatic exfiltration testing shall be required in conformance with the ISPWC. Hydrostatic test all pipes larger than 24-inches in diameter and also pipes with live sewer services.
12. Contractor to provide closed circuit TV (CCTV) inspection for all new or rehabilitated sewer pipe.
13. Deflection testing shall be required if CCTV inspection or visual inspection reveals deflection or damage.

CITY OF CALDWELL
QUICK REFERENCE
For

DIVISION 500 – SEWER

14. More than ½-inch of standing water in pipeline caused by grade defects shall be cause for rejection.
15. Pipeline testing, including CCTV inspection, shall be considered incidental to the cost of the sewer pipe and installation.
16. Manhole steps are not allowed. Grout smooth any step holes.
17. Manhole testing is not required unless visual inspection reveals defects, cracks, or infiltration, or unless otherwise specified in the Contract Documents.
18. Connection of sewer services to new manholes is not allowed. Connection of services to existing manholes may be considered if pipe depth exceeds 15-feet or for other constructability issues as determined by the City Engineer.
19. Submit sewer bypass plans to the City for approval, 7 days prior to beginning work.
20. Sewer services for new construction shall conform to Caldwell Standard Drawing SS-511A.
21. In-line tees shall be used for service connections for *new* mains 8-inch to 15-inch in diameter. Tapping saddles shall be used for service connections to *new* mains 18-inches in diameter or greater. Tapping saddles shall be Romac “CB”, Fernco “EZ-Tap” or approved equal.
22. Tapping saddles shall be used for all service connections to *existing mains* less than 24-inches in diameter. Tapping saddles shall be Romac “CB”, Fernco “EZ-Tap” or approved equal. “Insert-A-Tee” shall be used for service connections to *existing mains* 24-inches in diameter or greater.
23. Sewer manholes are to be located on the roadway centerline.
24. Construction debris shall not be allowed to enter existing sewer system. Failure to comply will obligate the Contractor to clean downstream mainline as needed. See Section 501.3.2A of the ISPWC for additional requirements.
25. New sewer construction shall meet all testing and inspection requirements of this section prior to service or placement of any permanent asphalt, concrete, or surface repairs.

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 500 – SEWER

SECTION 501 – GRAVITY SEWERS, PART 1.4 – SUBMITTALS

Delete paragraph D and substitute the following:

- D. Close circuit television inspection tapes **and logs.**

SECTION 501 – GRAVITY SEWERS, PART 2.1 – PIPE SIZE, TYPE AND STRENGTH

Delete paragraph B.

SECTION 501 – GRAVITY SEWERS, PART 2.2 – GRAVITY SEWER PIPE AND FITTINGS

Delete paragraph C.

Delete paragraph D.

Delete paragraph E.

Delete paragraph G.

Delete paragraph H.

Add paragraph J, item 2:

- 2. **High Density Polyethylene Pipe (HDPE) classified as PE 3408 material. DR 17, 100 psi or greater with approval from the City Engineer.**

SECTION 501 – GRAVITY SEWERS, PART 3.2 – PIPE INSTALLATION

Delete paragraph A and substitute the following:

- A. On sewer line extensions, isolate hazardous gasses and prevent groundwater and other material from entering an existing sewer line by installing a temporary water-tight plug in the first new manhole that will not restrict existing flow. The plug shall remain in place until the sewer has been accepted for use.
Construction debris shall not be allowed to enter existing sewer system. Failure to comply will obligate the Contractor to clean downstream mainline as needed.

SECTION 501 – GRAVITY SEWERS, PART 3.2 – PIPE INSTALLATION

Add paragraph U:

- U. **New sewer construction shall be approved by the City prior to placement of asphalt or surface repair.**

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 500 – SEWER

SECTION 501 – GRAVITY SEWERS, PART 3.4 – TESTING

Add the following items to paragraph B - Visual Inspection:

2. **Infiltration shall be cause for rejection.**
3. **Deflection testing conforming to Section 501.3.4.G shall be required if visual or television inspection reveals damage or deflection exceeding the maximum allowable deflection as defined herein.**

SECTION 501 – GRAVITY SEWERS, PART 3.4 – TESTING

Delete paragraph D, item 1 and substitute the following:

1. **Hydrostatic exfiltration test pipes larger than 24 inches in diameter or pipes 24 inches and smaller in diameter with groundwater conditions as described in Caldwell Supplemental Specification to the ISPWC Section 501.3.4.C.4.d and in pipes with live sewer services.**

SECTION 501 – GRAVITY SEWERS, PART 3.4 – TESTING

Delete paragraph G, item 1 and substitute the following:

1. **Deflection Tests for Flexible Pipe shall be required at the City’s discretion if visual or television inspection reveals damage or deflection exceeding the maximum allowed.** Unless otherwise provided in the contract, Contractor to bear costs associated with completing surface repair or other work prior to all required testing. The maximum allowable deflection is to be 0.5%of the nominal pipe diameter.

SECTION 501 – GRAVITY SEWERS, PART 3.4 – TESTING

Delete paragraph G, item 5.

Delete paragraph H., item 1, subparagraph a. and substitute the following:

- a. **No more than ½-inch standing water in pipeline caused by grade defects. ½-inch standing water or more shall be grounds for rejection. Furthermore, any pipe shown to be crushed, buckled, cracked, sagging, damaged, or not constructed to the design lines and grades shall be replaced by the Contractor at no additional cost to the City or extension of time. The City Engineer shall make the final determination of pipeline acceptance or rejection.**

Add the following subparagraph to paragraph H. item 1:

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 500 – SEWER

- e. **Debris evident in pipe during CCTV inspection shall be cause for rejection.**

Delete paragraph H, item 6 and substitute the following:

6. Clean lines prior to CCTV inspection using hydro cleaner, flushing balls or other suitable means acceptable to Engineer. Remove debris from lines rather than washing them downstream. **Sandbag or plug downstream manholes as required to prevent debris from being flushed downstream. CCTV inspection shall occur within one (1) hour of cleaning.**

SECTION 501 – GRAVITY SEWERS, PART 4.1 – MEASUREMENT AND PAYMENT

Delete paragraph C and substitute the following:

- C. Closed Circuit Television Inspection: **CCTV inspection shall be considered incidental to the cost of the sewer pipe and installation. No additional payment shall be made for closed circuit television inspection or re-televising of failed or repaired sections.**

SECTION 502 – MANHOLES, PART 2.2 – MANHOLES

Delete paragraph A and substitute the following:

- A. Precast Manholes: ANSI/ASTM C 478 for all components except as modified herein and as shown on manhole Standard Drawings: SD-505, and SD-505A **and Caldwell Standard Drawings: SS-501, SS-501A, SS-502, SS-502A, SS-503, SS-504.**

SECTION 502 – MANHOLES, PART 2.2 – MANHOLES

Delete paragraph B and substitute the following:

- B. Cast-in-Place Manholes: ANSI/ASTM C 478 and Section 703 – Cast-in-Place Concrete for all materials and dimensions except as modified herein or as shown on manhole Standard Drawings: SD-505, and SD-505A **and Caldwell Standard Drawings: SS-501, SS-501A, SS-502, SS-502A, SS-503, SS-504.**

Add paragraph D:

- D. **Sewer manholes shall be located on the roadway centerline unless approved by City Engineer.**

SECTION 502 – MANHOLES, PART 2.3 – STEPS

Delete part 2.3.

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 500 – SEWER

SECTION 502 – MANHOLES, PART 3.3 – CONNECTIONS OF SEWER LINES TO NEW MANHOLES

Delete paragraph D and substitute the following:

- D. Pipe invert shall be flush with channel at entrance to manhole.**

SECTION 502 – MANHOLES, PART 3.4 – CONNECTIONS OF SEWER LINES TO EXISTING MANHOLES

Delete paragraph D

SECTION 502 – MANHOLES, PART 3.7 – MANHOLE BARREL AND CONE CONSTRUCTION

Delete paragraph B and substitute the following:

- B. Prior to installation of barrel sections, place non-shrink grout or a mastic (Ram-Nek or approved substitution) or pre-lubricated gasket (TYLOX Super Seal or approved substitution) to the top of the concrete base providing a watertight seal. Alternatively, embed the barrel section in the concrete base prior to the concrete curing. Any visible **infiltration** will be cause for rejection.**

SECTION 502 – MANHOLES, PART 3.9 – INSTALLATION OF STEPS

Delete part 3.9

SECTION 502 – MANHOLES, PART 3.10 – INSTALLATION OF LINER

Delete paragraph A and substitute the following:

- A. When specified in the Contract Documents and per Section 506 – Plastic Liners, **install Amer-Plate T-Lock PVC Sheet Liner or approved equal, cast into manhole per manufacturer’s recommendations and Section 506. Existing manholes may be lined using Sprayroc, Spraywall, or equal.****

SECTION 502 – MANHOLES, PART 3.12 – TESTING

Delete paragraph A and substitute the following:

- A. Unless otherwise indicated in the Contract Documents **manhole testing is not required unless, at the discretion of the City Engineer, visual inspection reveals defects, cracks, voids, damage, leaks or infiltration.****

Delete paragraph C, item 2, subparagraph b-1 and substitute the following:

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 500 – SEWER

- 1) Plug holes: Plug lift holes, **voids and step holes** with non-shrink grout and **place plugs in pipes**.

SECTION 502 – MANHOLES, PART 3.13 – PLACEMENT OF CONCRETE COLLARS

Delete paragraph D and substitute the following:

- D. Allow Engineer to inspect **final preparation** for each collar prior to placing concrete

SECTION 504 – SEWER SERVICES, PART 2.2 – PIPE AND FITTINGS

Delete paragraph C.

SECTION 504 – SEWER SERVICES, PART 2.2 – PIPE AND FITTINGS

Delete paragraph E and substitute the following:

- E. Service Connection Tee or Wyes Fittings.
 1. **Inserta-Tee allowed only for existing mains greater than or equal to 18” diameter.**
 2. **All clamps, straps, nuts, bolts, and washers to be solid stainless steel.**
 3. **Inserta-Tee or City approved substitution**

SECTION 504 – SEWER SERVICES, PART 2.2 – PIPE AND FITTINGS

Delete paragraph F and substitute the following:

- F. Service Saddle Connections.
 1. **Romac CB, Fernco EZ-Tap, or approved equal for all connections to existing mains 8”-21” and for new mains 18” in diameter or greater.**
 2. **All clamps, straps, nuts, bolts, and washers to be solid stainless steel.**

SECTION 504 – SEWER SERVICES, PART 3.2 – GENERAL

Delete paragraph A and substitute the following:

- A. Perform excavation, bedding placement, pipe installation, backfill, and surface restoration in accordance with the Contract Documents. Install service pipe and fittings Per Section 501 – Gravity Sewers and **Caldwell** Standard Drawings **SS-511** – Standard Sewer Service Lines and **SS-511A** – Standard Sewer Service Connection for New Development Projects.

Add paragraph E:

- E. **Connection of sewer services to new manholes is not allowed.**

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 500 – SEWER

SECTION 504 – SEWER SERVICES, PART 3.3 – CONNECTION TO MAIN

Delete paragraph A and substitute the following:

- A. Connection to New Mains
 - 1. **Solid Wall PVC (8 inch through 15 inch):** PVC tee
 - 2. **Solid Wall PVC (18 inch and greater):** Service saddle
- Per Section 504.2.2.F.

Delete paragraph B and substitute the following:

- B. **Tapping saddles shall be used for all service connections to existing main lines less than 18-inches in diameter. Tapping saddles shall be Romac “CB”, Fernco “EZ-Tap” or approved equal. “Insert-A-Tee” shall be used for service connections to existing main lines 18-inches in diameter or greater.**

SECTION 504 – SEWER SERVICES, PART 3.4 – CONNECTION TO EXISTING MANHOLES

Delete paragraph A and substitute the following:

- A. **Connection of sewer services to existing manholes is not allowed without prior approval of the City Engineer. Connection of sewer services to existing manholes may be considered if pipe depth exceeds 15-feet or for other constructability issues as determined by the City Engineer.**

Delete paragraph B.

Delete paragraph C.

SECTION 504 – SEWER SERVICES, PART 3.6 – INSTALLATION OF SEWER LINE MARKERS

Delete paragraph A and substitute the following:

- A. Install service line markers per **Caldwell** Standard Drawing **SS-512 – Standard Service Marker**.

Delete paragraph B.

Delete paragraph D and substitute the following:

- D. Connect the finder wire to the bottom **and top** of the wooden marker and not the pipe. **Wrap wire around the marker as shown in Caldwell Standard Drawing SS-512.**

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 500 – SEWER

Delete paragraph E.

SECTION 504 – SEWER SERVICES, PART 4.1 – MEASUREMENT AND PAYMENT

Delete paragraph C.

SECTION 507 – SANITARY SEWER OPEN CUT REPAIR/REHABILITATION, PART 2.1 – PIPE SIZE, TYPE AND STRENGTH

Delete paragraph B.

SECTION 507 – SANITARY SEWER OPEN CUT REPAIR/REHABILITATION, PART 2.2 – GRAVITY SEWER PIPE AND FITTINGS

Delete paragraph C.

Delete paragraph E.

Delete paragraph F.

SECTION 507 – SANITARY SEWER OPEN CUT REPAIR/REHABILITATION, PART 3.4 – SEWER FLOW MAINTENANCE

Delete paragraph A and substitute the following:

- A. **Submit bypass plan to owner in accordance with Section 507.1.4.D of these Specifications. Plan shall be submitted seven (7) days prior to beginning work, and shall be approved by the Engineer before commencing any work.** Prior to pipe removal, implement bypass flow procedures in accordance with approved plan.

Delete paragraph G.

SECTION 507 – SANITARY SEWER OPEN CUT REPAIR/REHABILITATION, PART 3.8 – TESTING

Delete paragraph B and substitute the following:

- B. Engineer reserves the right to require Air Testing and Deflection Testing of repairs if CCTV Inspection and or Visual Inspection indicate possibility of faulty workmanship. **Cost for Air Testing and Deflection Testing shall be incidental to the cost of the repair or rehabilitation. No additional payment shall be made for Air or Deflection testing.**

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 500 – SEWER

DIVISION 500 – SEWER, STANDARD DRAWINGS

Delete the following standard drawings:

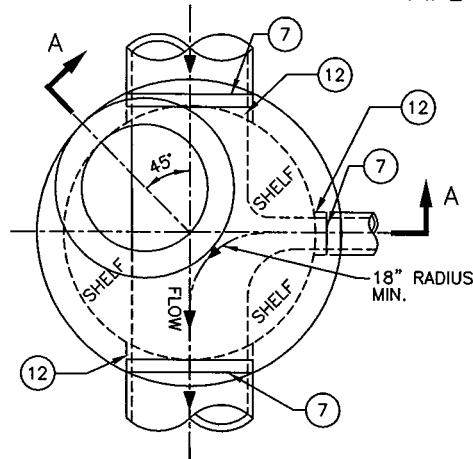
- SD-501 – Standard Manhole Type A**
- SD-501A – Standard Manhole Precast Base Type A**
- SD-502 – Standard Manhole Type B**
- SD-502A – Standard Manhole Precast Base Type B**
- SD-503 – Standard Manhole Type B, Deep**
- SD-504 – Drop Manhole**
- SD-509 – Plastic Coated Manhole Steps**
- SD-510 – Pipe Anchors**
- SD-511B – Standard Deep Sewer Service for Existing Development, Type J**
- SD-512 – Standard Service Marker**

Insert the following Caldwell Standard Drawings:

- SS-501 – Standard Manhole Type A**
- SS-501A – Standard Manhole Precast Base Type A**
- SS-502 – Standard Manhole Type B**
- SS-502A – Standard Manhole Precast Base Type B**
- SS-503 – Standard Manhole Type B, Deep**
- SS-504 – Drop Manhole**
- SS-511A – Sewer Service Connection New Development**
- SS-511B – Wye/Straight Saddle Connection**
- SS-512 – Standard Service Marker**

End Division 500 -

4 FT. OR GREATER DEPTH,
PIPE DIA. ≤ 24"

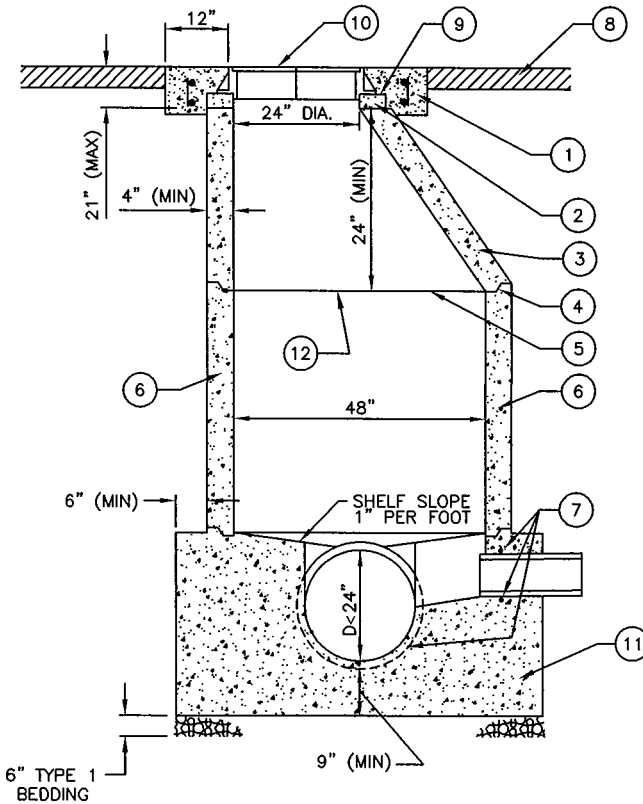


PLAN

N.T.S.

LEGEND:

- ① CONCRETE COLLAR IN PAVED STREET SECTIONS PER ISPMC SD-508
- ② GRADE RINGS GROUDED WATERTIGHT IN PLACE, NOT TO EXCEED 21" FROM FINISHED SURFACE TO TOP OF CONE
- ③ PRECAST MONOLITHIC ECCENTRIC CONE SECTION, (REBAR NOT SHOWN)
- ④ RAMNEK OR APPROVED GASKETS ALL JOINTS
- ⑤ PROPERLY ALIGN ALL INTERIOR JOINTS
- ⑥ PRECAST CONCRETE MANHOLE-BARREL SECTION, (REBAR NOT SHOWN)
- ⑦ PRECAST GASKETED HUB RING OR RUBBER GASKETED COLLAR-FLEXIBLE AND WATER TIGHT
- ⑧ REPLACEMENT SURFACING TO MATCH FLUSH WITH EXISTING SURFACING, (AC SHOWN)
- ⑨ FRAME TO BE GROUDED TO GRADE RINGS
- ⑩ FRAME AND COVER PER SD-507
- ⑪ CAST IN PLACE MANHOLE BASE, SEE SS-501A FOR PREFABRICATED BASE
- ⑫ GROUT SMOOTH ALL INTERIOR JOINTS, INCLUDING PIPES

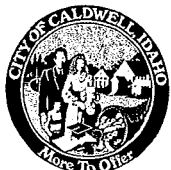


SECTION A-A

N.T.S.

NOTES:

- 1. OPTIONAL PREFABRICATED MANHOLE BASE WITH APPROVED PIPE CONNECTIONS MAY BE USED WITH ENGINEERS APPROVAL, SEE SS-501A.
- 2. PLACE VERTICAL WALL ON UPSTREAM SIDE OF MANHOLE, ROTATED 45 DEGREES.
- 3. FOR DIAMETER, D, GREATER THAN 24", SEE SS-502 OR SS-503.
- 4. MANHOLE FRAME AND COVER:
A. REFER TO DRAWING NO. SD-507.
B. FRAME AND COVER SHALL BE FLUSH WITH SLOPE OF PAVEMENT.
- 5. WHERE PVC PIPE IS UTILIZED, INSTALL A RUBBER RING OR GASKET COLLAR WHERE THE PIPE IS IN CONTACT WITH MANHOLE BASE AND/OR MANHOLE CHANNEL, IN ORDER TO INSURE A WATERTIGHT SEAL.
- 6. EITHER BASE ON SS-501 OR SS-501A MAY BE USED WITH ANY MANHOLE DESIGN.
- 7. PROVIDE MANHOLE CONCRETE REINFORCING TO ACCOMMODATE TRAFFIC LOADINGS.
- 8. MANHOLE STEPS NOT PERMITTED.
- 9. INSTALL MANHOLE JOINT EXTERIOR WRAP ON JOINTS BELOW GROUNDWATER OR AS DIRECTED BY THE CITY.



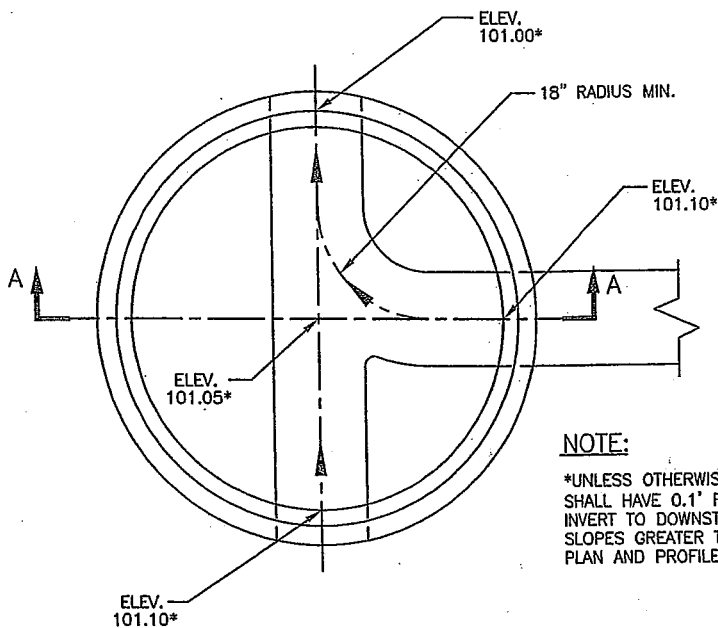
STANDARD MANHOLE

TYPE A

DATE:	9/21/2015
REV. #	1
ACAD FILE:	SS-501.DWG

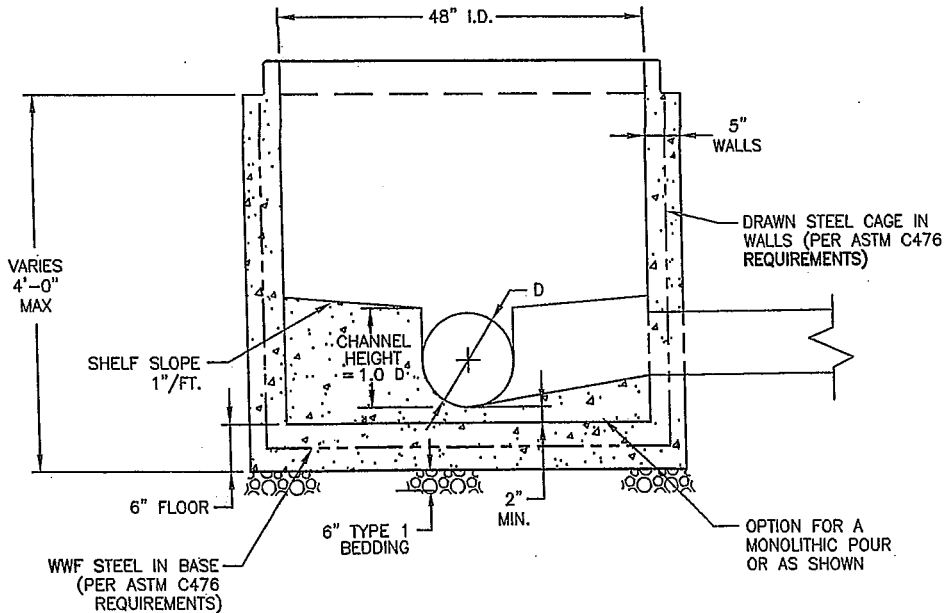
SS-501

STANDARD DRAWING NO.



NOTE:
 *UNLESS OTHERWISE SHOWN, MANHOLES SHALL HAVE 0.1' FALL FROM UPSTREAM INVERT TO DOWNSTREAM INVERT. FOR PIPE SLOPES GREATER THAN 2.5% SLOPE, SEE PLAN AND PROFILE.

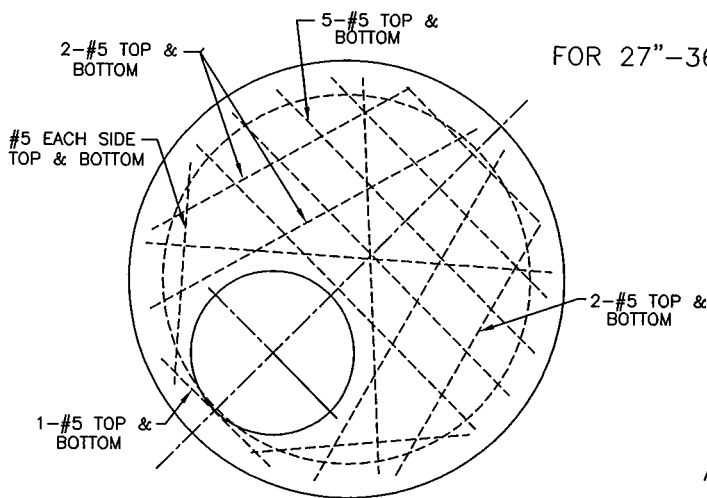
PLAN VIEW
48" ID CHanneled BASE
 N.T.S.



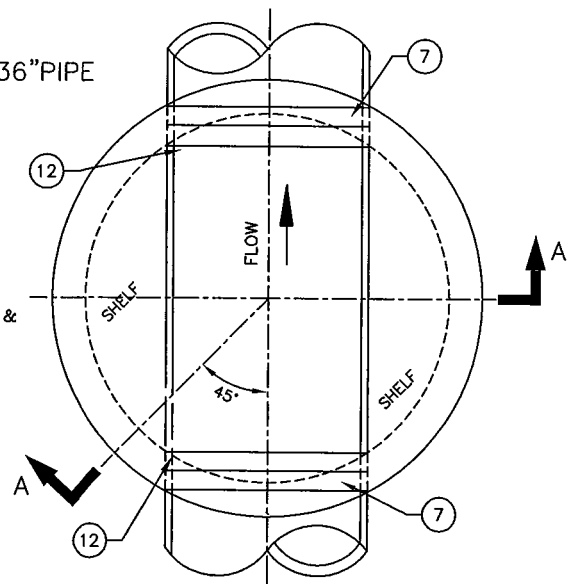
SECTION A-A
 N.T.S.

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STANDARD MANHOLE PRECAST BASE TYPE A	DATE: 03/01/04	SS-501A
	REV. # 1	
	ACAD FILE: SS-501A.DWG	STANDARD DRAWING NO.



FOR 27"-36" PIPE

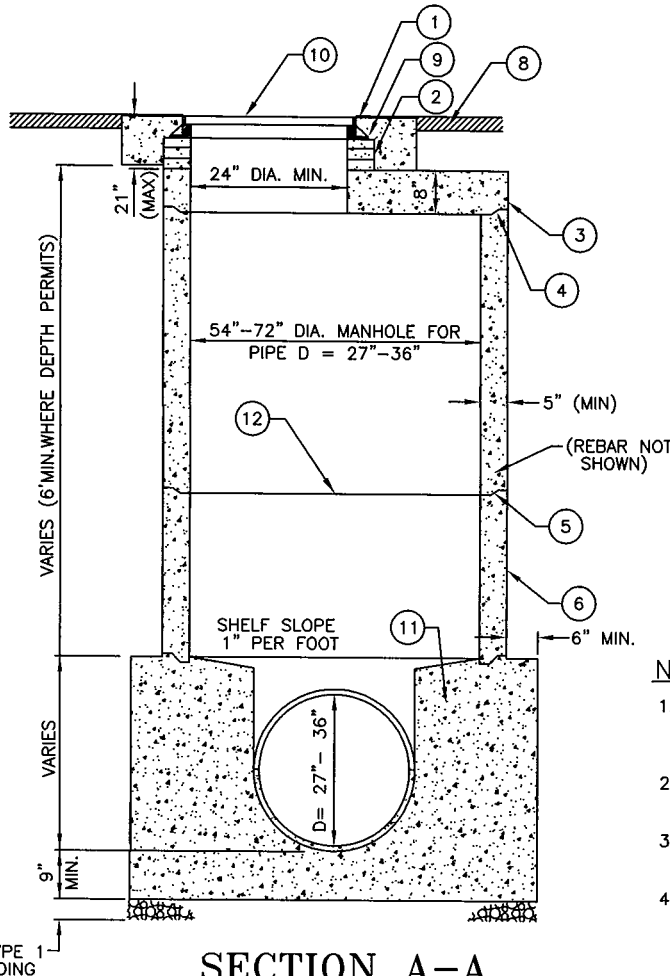


STANDARD SLAB TOP DETAILS

N.T.S.

PLAN

N.T.S.



SECTION A-A

N.T.S.

LEGEND:

- ① CONCRETE COLLAR IN PAVED AND GRAVEL AREAS PER ISPMC SD-508
- ② GRADE RINGS GROUT WATERTIGHT IN PLACE, NOT TO EXCEED 21" FROM FINISHED SURFACE TO TOP OF CONE
- ③ REINFORCED CONCRETE REDUCER SLAB
- ④ RAMNEK OR APPROVED GASKET AT ALL JOINTS
- ⑤ PROPERLY ALIGN ALL INTERIOR JOINTS
- ⑥ PRECAST CONCRETE MANHOLE BARREL SECTION (REBAR NOT SHOWN), 54"-72" RCP
- ⑦ PRECAST GASKETED HUB RING OR RUBBER GASKETED COLLAR-FLEXIBLE AND WATER TIGHT
- ⑧ REPLACEMENT SURFACING TO MATCH FLUSH WITH EXISTING SURFACING, (AC SHOWN)
- ⑨ FRAME TO BE GROUTED TO GRADE RINGS
- ⑩ FRAME AND COVER PER SD-507 OR SD-507A
- ⑪ CAST-IN-PLACE MANHOLE BASE, SEE SS-502A FOR PREFABRICATED BASE
- ⑫ GROUT SMOOTH ALL INTERIOR JOINTS INCLUDING PIPES

NOTES:

1. OPTIONAL PREFABRICATED MANHOLE BASE WITH APPROVED PIPE CONNECTIONS MAY BE USED WITH ENGINEERS APPROVAL, SEE SS-502A.
2. PLACE VERTICAL WALL ON UPSTREAM SIDE OF MANHOLE, ROTATED 45 DEGREES.
3. FOR EXTRA DEPTH MANHOLE, SEE SS-503 "STANDARD MANHOLE TYPE B, DEEP".
4. MANHOLE FRAME AND COVER:
 - A. REFER TO DRAWING NO. SD-507 (24" OPENING) OR SD-507A (32" OPENING).
 - B. FRAME AND COVER SHALL BE FLUSH WITH SLOPE OF PAVEMENT.
5. WHERE PVC PIPE IS UTILIZED, INSTALL A RUBBER RING OR GASKET COLLAR WHERE THE PIPE IS IN CONTACT WITH MANHOLE BASE AND/OR MANHOLE CHANNEL, IN ORDER TO INSURE A WATERTIGHT SEAL.
6. PROVIDE MANHOLE CONCRETE REINFORCING TO ACCOMMODATE TRAFFIC LOADINGS.

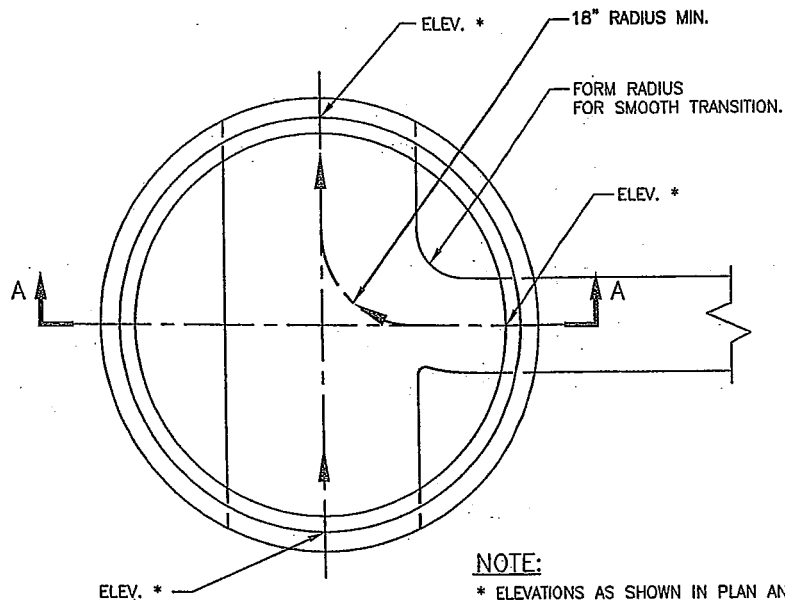
7. MANHOLE STEPS NOT PERMITTED.
8. INSTALL MANHOLE JOINT EXTERIOR WRAP ON JOINTS BELOW GROUNDWATER OR AS DIRECTED BY THE CITY.



STANDARD MANHOLE

TYPE B

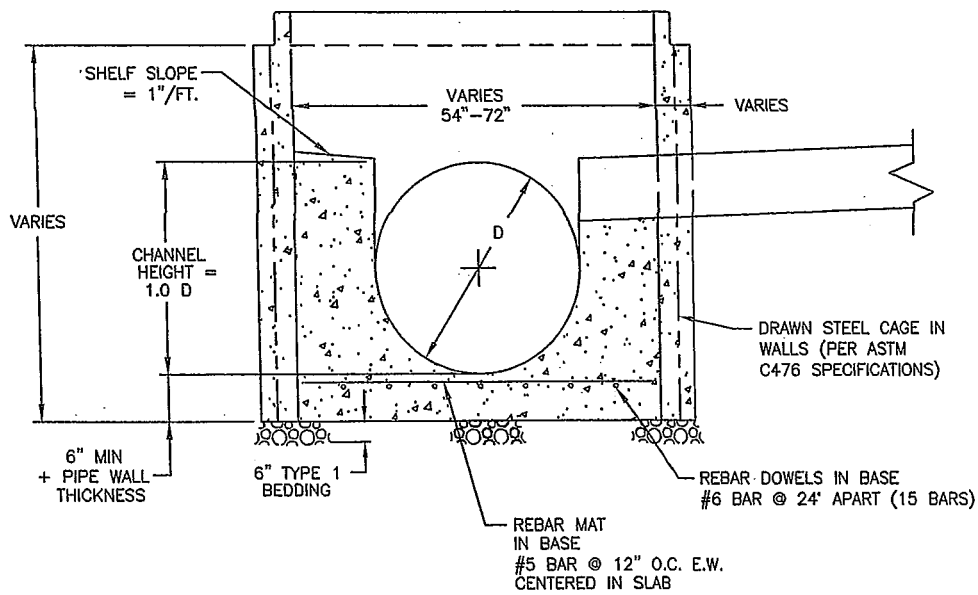
DATE:	9/21/2015	SS-502
REV. #	1	
ACAD FILE:	SS-502.DWG	STANDARD DRAWING NO.



NOTE:
* ELEVATIONS AS SHOWN IN PLAN AND PROFILE.

PLAN VIEW

N.T.S.



SECTION A-A

N.T.S.

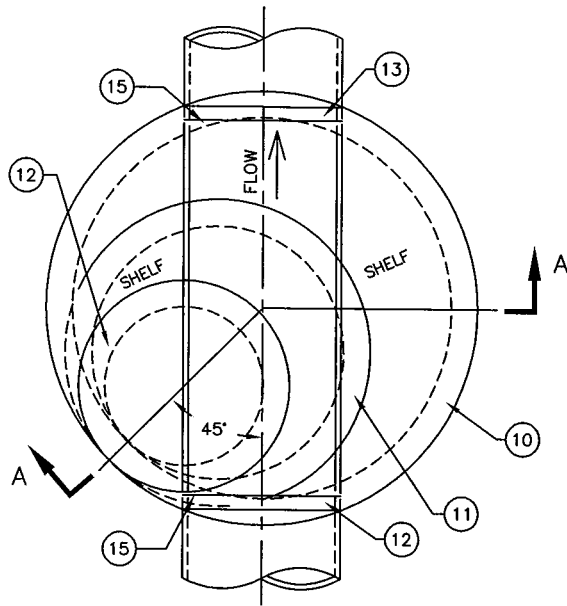
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STANDARD MANHOLE
PRECAST BASE TYPE B

DATE:	03/01/04
REV. #	1
ACAD FILE:	SS-502A.DWG

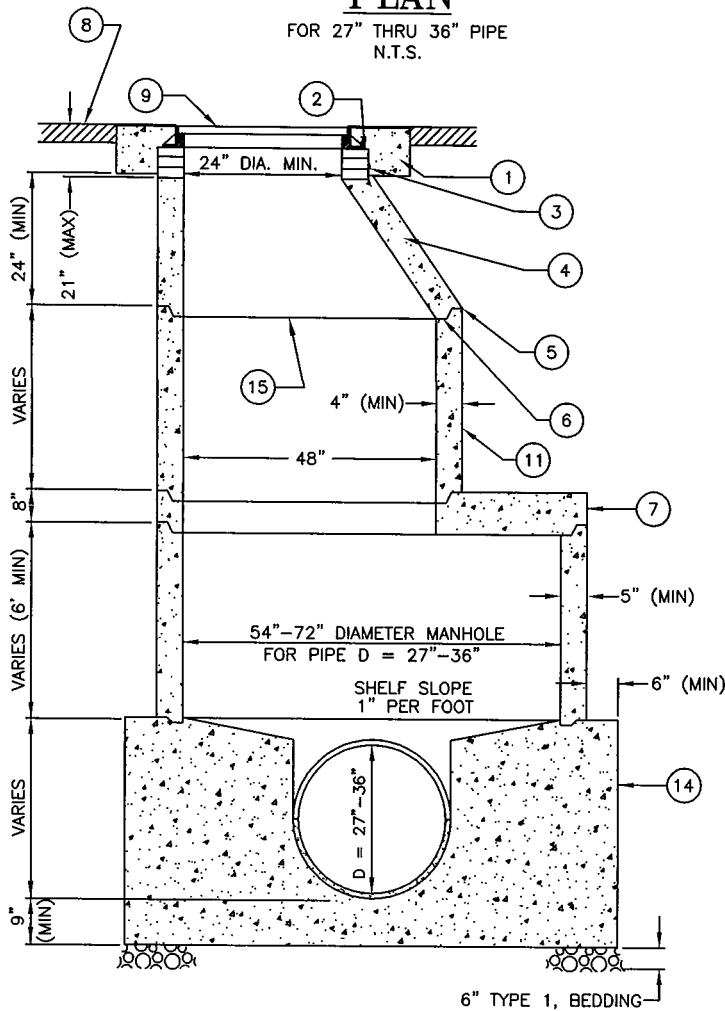
SS-502A

STANDARD DRAWING NO.



PLAN

FOR 27" THRU 36" PIPE
N.T.S.



SECTION A-A

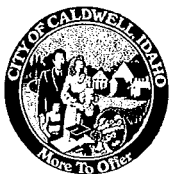
N.T.S.

LEGEND:

- ① CONCRETE COLLAR IN PAVED AND GRAVEL STREET SECTIONS PER ISPWC SD-508
- ② FRAME TO BE GROUTED TO GRADE RINGS. NOT TO EXCEED 21" FROM FINISHED SURFACE TO TOP OF CONE
- ③ GRADE RINGS GROUT WATER TIGHT IN PLACE
- ④ PRECAST MONOLITHIC ECCENTRIC CONE
- ⑤ RAMNEK OR APPROVED GASKETS ALL JOINTS
- ⑥ PROPERLY ALIGN ALL INTERIOR JOINTS
- ⑦ REINFORCED CONCRETE REDUCER SLAB AS APPROVED BY THE ENGINEER
- ⑧ REPLACEMENT SURFACING TO MATCH FLUSH WITH EXISTING SURFACING, (AC SHOWN)
- ⑨ FRAME AND COVER PER SD-507 OR 507A
- ⑩ 54" RCP THRU 72" RCP PIPE
- ⑪ 48" DIAMETER BARREL SECTION
- ⑫ 30" DIA GRADE RINGS
- ⑬ GASKETED HUB RING OR RUBBER GASKETED COLLAR-FLEXIBLE AND WATER TIGHT
- ⑭ CAST-IN-PLACE MANHOLE BASE. SEE SS-502A FOR PREFABRICATED BASE
- ⑮ GROUT SMOOTH ALL INTERIOR JOINTS INCLUDING PIPES

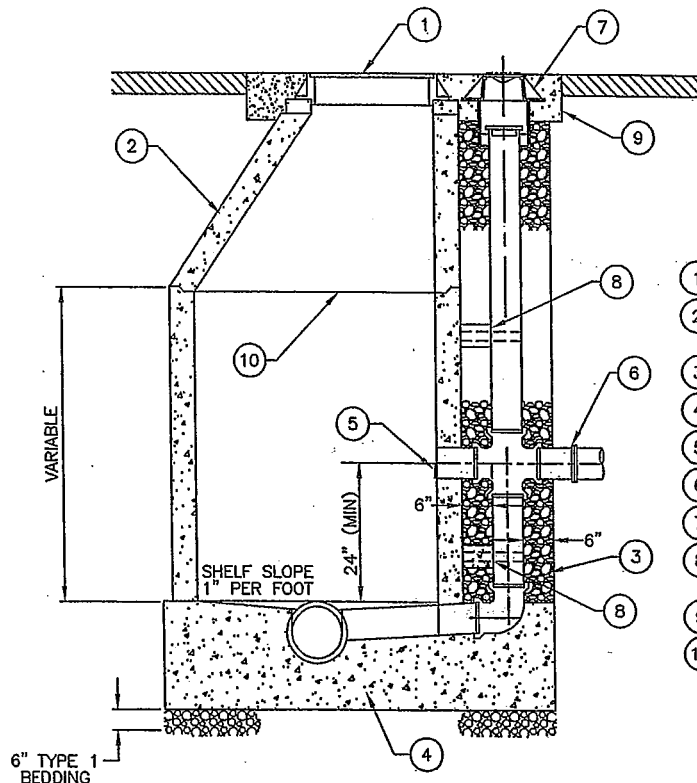
NOTES:

1. OPTIONAL PREFABRICATED MANHOLE BASE WITH APPROVED PIPE CONNECTIONS MAY BE USED WITH ENGINEERS APPROVAL, SEE SS-502A.
2. PLACE VERTICAL WALL ON UPSTREAM SIDE OF MANHOLE, ROTATED 45 DEGREES.
3. MANHOLE FRAME AND COVER:
A. REFER TO DRAWING NO. SD-507 (24" OPENING) OR SD-507A (32" OPENING).
B. FRAME AND COVER SHALL BE FLUSH WITH SLOPE OF PAVEMENT.
4. WHERE PVC PIPE IS UTILIZED, A RUBBER RING OR GASKET COLLAR IS TO BE INSTALLED WHERE THE PIPE IS IN CONTACT WITH MANHOLE BASE AND/OR MANHOLE CHANNEL, IN ORDER TO INSURE A WATERTIGHT SEAL.
5. PROVIDE MANHOLE CONCRETE REINFORCING TO ACCOMMODATE TRAFFIC LOADINGS.
6. PIPE MAIN CANNOT BE INSTALLED CONTINUOUSLY THROUGH BASE.
7. MANHOLE STEPS NOT PERMITTED.
8. INSTALL MANHOLE JOINT EXTERIOR WRAP ON JOINTS BELOW GROUNDWATER OR AS DIRECTED BY THE CITY.



STANDARD MANHOLE
TYPE B, DEEP

DATE:	9/21/2015	SS-503
REV. #	1	
ACAD FILE:	SS-503.DWG	STANDARD DRAWING NO.



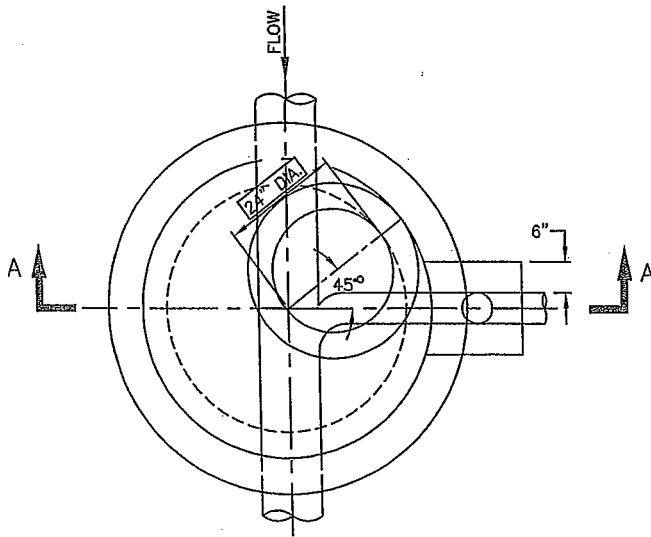
SECTION A-A
N.T.S.

LEGEND:

- ① FRAME AND COVER PER STANDARD DRAWING SD-507
- ② MANHOLE PER STANDARD DRAWING SS-501, SS-502 OR SS-503
- ③ TYPE 1 BEDDING MATERIAL
- ④ CONCRETE BASE CAST IN PLACE PER SECTION 703
- ⑤ BLIND FLANGE OR CAP, TOP 1/2 REMOVED
- ⑥ FLEXIBLE JOINT
- ⑦ CLEAN-OUT PER SD-506
- ⑧ STAINLESS STEEL BANDS WITH CONCRETE SPACER TO MANHOLE (5" MAX. SPACING, 1 MIN.)
- ⑨ EXTEND CONCRETE COLLAR AROUND CLEAN-OUT
- ⑩ GROUT SMOOTH ALL INTERIOR JOINTS, INCLUDING PIPES

NOTES:

1. PLACE VERTICAL WALL ON UPSTREAM SIDE OF MANHOLE, ROTATED 45 DEGREES.
2. MANHOLE FRAME AND COVER
A. REFER TO STANDARD DRAWING SD-507.
B. FRAME AND COVER SHALL BE FLUSH WITH SLOPE OF PAVEMENT.
3. CONSTRUCT BASIC MANHOLE PER TYPE SPECIFIED.
4. WHERE PVC PIPE IS UTILIZED, A RUBBER RING OR GASKETED COLLAR IS TO BE INSTALLED WHERE THE PIPE IS IN CONTACT WITH MANHOLE BASE AND/OR MANHOLE CHANNEL, IN ORDER TO INSURE A WATERTIGHT SEAL.
5. IF THE DROP MANHOLE IS ON THE UPSTREAM SIDE, ROTATE MANHOLE 180 DEGREES SO THE VERTICAL WALL WILL BE DOWNSTREAM.
6. OPTIONAL PREFABRICATED MANHOLE BASE WITH APPROVED PIPE CONNECTIONS MAY BE USED WITH ENGINEER'S APPROVAL. SEE SS-501A.
7. PROVIDE MANHOLE CONCRETE REINFORCING TO ACCOMMODATE TRAFFIC LOADINGS.
8. FITTINGS TO BE DUCTILE IRON.
9. MANHOLE STEPS NOT PERMITTED.



PLAN
N.T.S.

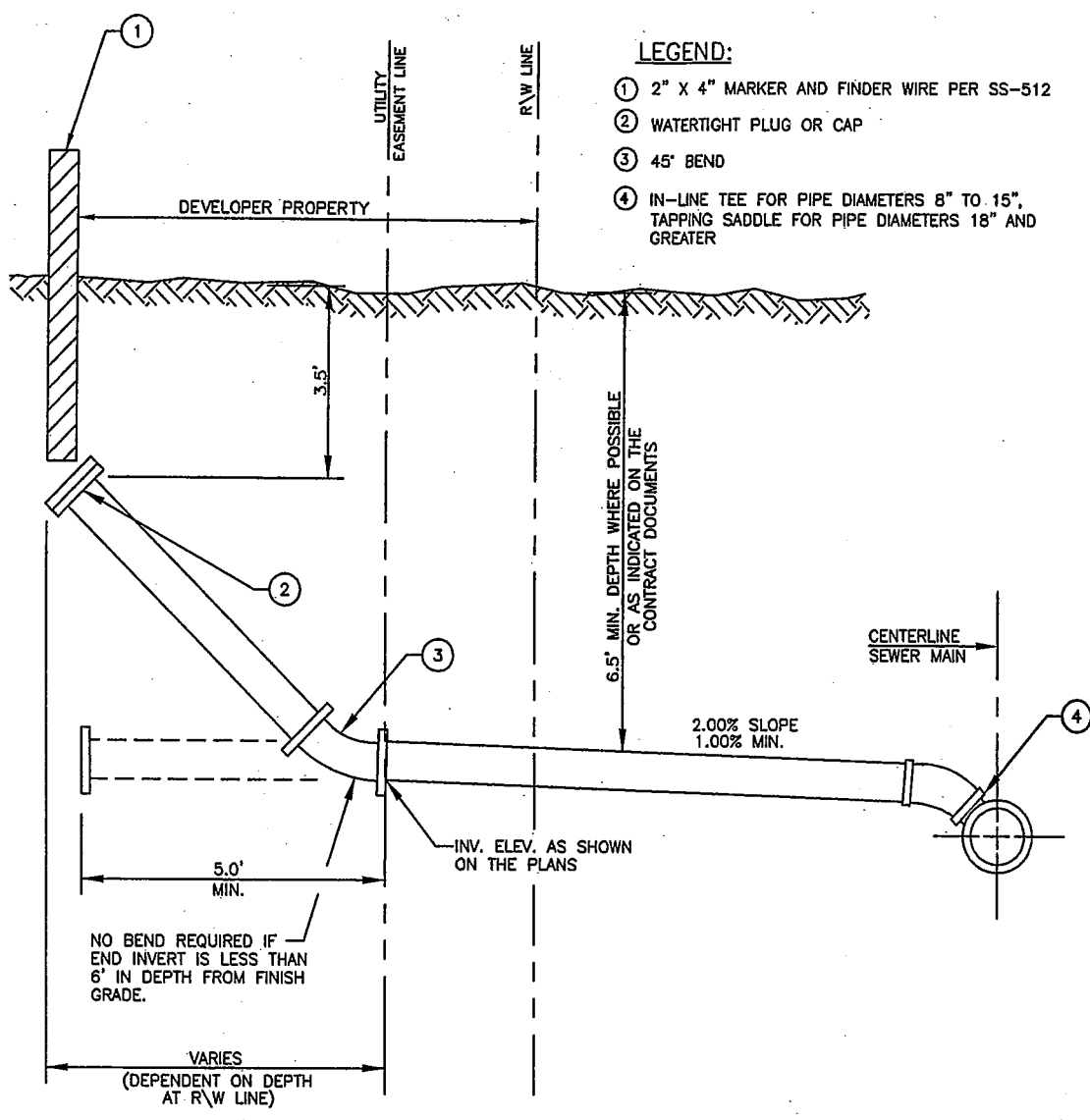
03/02/04/ACAD/0001/headers/Logo1a.jpg

DROP MANHOLE

DATE:	03/01/04
REV. #	1
ACAD FILE:	SS-504.DWG

SS-504

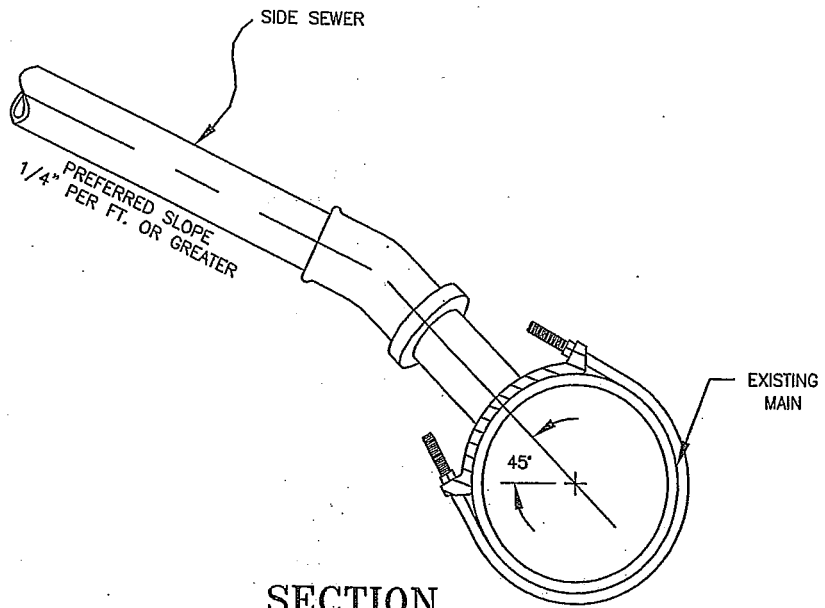
STANDARD DRAWING NO.



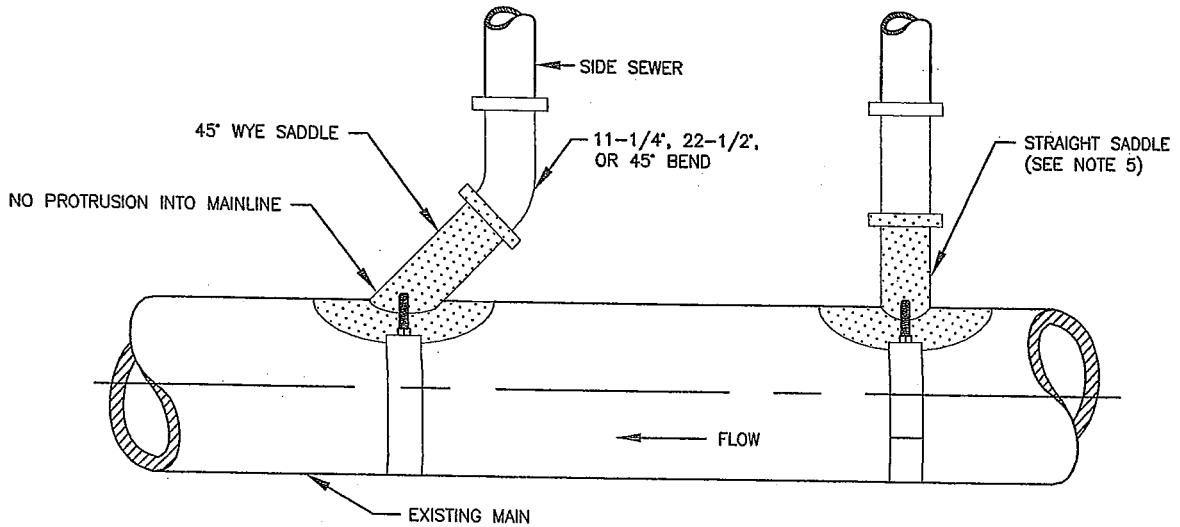
- LEGEND:**
- ① 2" X 4" MARKER AND FINDER WIRE PER SS-512
 - ② WATERTIGHT PLUG OR CAP
 - ③ 45° BEND
 - ④ IN-LINE TEE FOR PIPE DIAMETERS 8" TO 15", TAPPING SADDLE FOR PIPE DIAMETERS 18" AND GREATER

PROFILE
N.T.S.

<small>0\21104\000000\00000\000000</small>	SEWER SERVICE CONN.	DATE: 03/01/04	SS-511A
	FOR NEW DEVELOPMENT PROJECTS	REV. # 1	
			ACAD FILE: SS-511A.DWG



SECTION



PLAN

N.T.S.

NOTES:

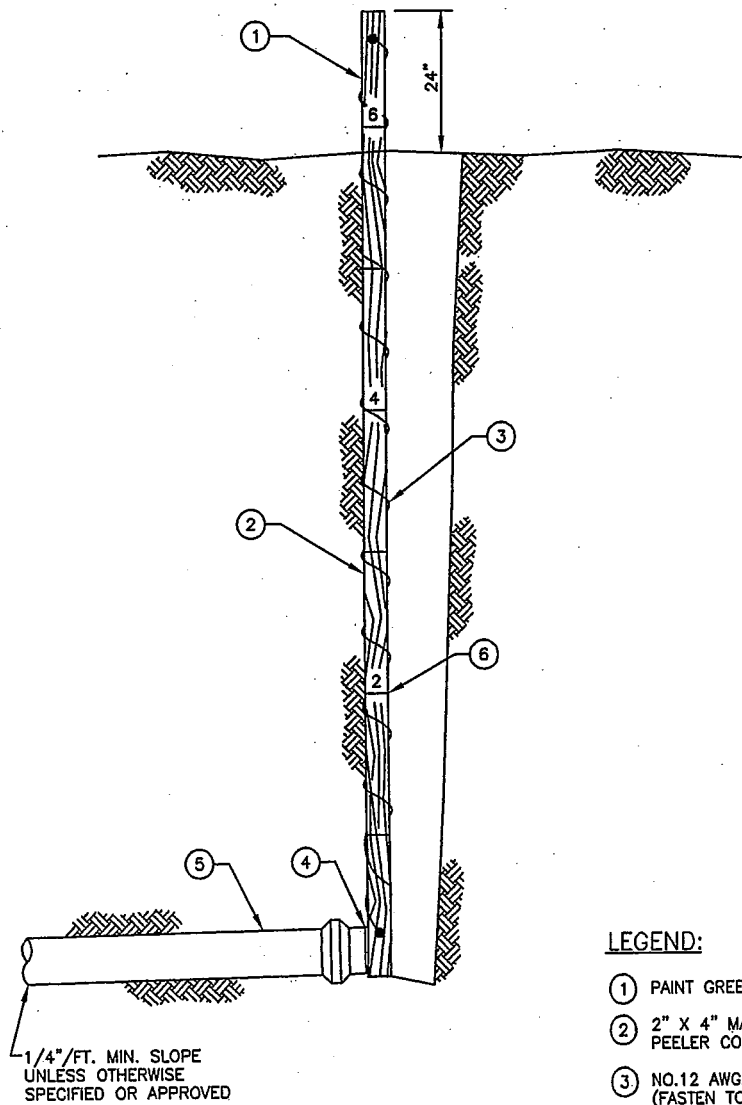
1. WYE SADDLE SHALL BE CONNECTED TO MAIN WITH A RUBBER GASKET AND STAINLESS STEEL STRAP AND BOLTS. WHEN EXISTING PIPE IS P.V.C., A P.V.C. WYE SADDLE MAY BE USED, AND SHALL BE EPOXIED INTO PLACE.
2. TAPPED HOLE IN MAIN SHALL BE THE SAME SIZE AS THE SIDE SEWER. PIPE INTERIOR AND HOLE SHALL BE FLUSH, WITH NO INTRUSION INTO MAINLINE. THE HOLE SHALL BE CUT OR DRILLED, NOT BROKEN OUT. THE CUT OR DRILLED MATERIAL SHALL NOT BE ALLOWED TO ENTER MAINLINE.
3. ALL SEWER PIPE & FITTINGS SHALL CONFORM TO THE CITY OF CALDWELL'S STANDARD SPECIFICATIONS.
4. CONTRACTOR SHALL NOT BACKFILL SADDLE CONNECTION UNTIL INSPECTED AND APPROVED BY THE CITY.
5. STRAIGHT SADDLE CAN BE USED ON 12" OR LARGER PIPE ONLY.



WYE/STRAIGHT SADDLE
CONNECTION

DATE:	03/19/15
REV. #	1
ACAD FILE:	SS-513.DWG

SS-511B
STANDARD DRAWING NO.



LEGEND:

- ① PAINT GREEN
- ② 2" X 4" MARKER OR 4"-5" DIAMETER PEELER CORE POST, SET PLUMB
- ③ NO.12 AWG. GALVANIZED FINDER WIRE, (FASTEN TO BOTTOM AND TOP OF WOODEN MARKER AND WRAP AROUND ENTIRE LENGTH)
- ④ PLUG OR CAP
- ⑤ SEWER SERVICE PIPE
- ⑥ MARK POST AT 1' INTERVALS W/PERMANENT PAINT & LABEL EVERY 2'

DETAIL

N.T.S.

<small>01/21/04/ACAD/DWG/Markers/Logo14.dwg</small>	STANDARD MARKER		DATE: 03/01/04	SS-512
	SEWER SERVICE		REV. # 1	
			ACAD FILE: SS-512.DWG	STANDARD DRAWING NO.

CITY OF CALDWELL
QUICK REFERENCE
For

DIVISION 600 – CULVERTS, STORM DRAINS AND GRAVITY IRRIGATION

This quick reference of specifications highlights some of the requirements for Public Works Construction within the jurisdiction of the City of Caldwell. This quick reference is intended for use only as a guide for the Designer and Contractor and not as a replacement to the Idaho Standards for Public Works Construction (ISPWC) or the City of Caldwell's Supplemental Specifications for the ISPWC. Please refer to those documents for more complete specifications.

1. Refer to City of Caldwell Storm Drain Policy for design parameters.
2. Ribbed PVC pipe is not acceptable.
3. Large diameter closed profile PVC pipe is not acceptable.
4. Storm drain pipelines and manholes shall be visually inspected. Should pipeline or manhole fail visual inspection, additional testing may be required at the discretion of the City Engineer or Engineer of Record.
5. All storm drain drop inlets / catch basins shall have a 1'-0" sump.
6. Manhole steps are not allowed. Grout-smooth any step holes.
7. Waterman C-10 canal gates or approved equal shall be used for gravity irrigation slide gates.
8. All pipe used shall be rated for depth of cover.

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 600 – CULVERTS, STORM DRAINS AND GRAVITY IRRIGATION

SECTION 601 – CULVERT, STORM DRAIN AND GRAVITY IRRIGATION PIPE, PART 1.1 – SECTION INCLUDES

Add paragraph B:

- B. Refer to City of Caldwell Storm Drain Policy for system design parameters.**

SECTION 601 – CULVERT, STORM DRAIN AND GRAVITY IRRIGATION PIPE, PART 1.3 – REFERENCES

Delete paragraph M.

SECTION 601 – CULVERT, STORM DRAIN AND GRAVITY IRRIGATION PIPE, PART 2.1 – PIPE SIZE, TYPE AND STRENGTH

Delete paragraph A.

SECTION 601 – CULVERT, STORM DRAIN AND GRAVITY IRRIGATION PIPE, PART 2.2 – CULVERT, STORM DRAIN AND GRAVITY IRRIGATION PIPE AND FITTINGS

Delete paragraph C.

Delete paragraph D.

Delete paragraph I.

SECTION 601 – CULVERT, STORM DRAIN AND GRAVITY IRRIGATION PIPE, PART 3.5 – TESTING

Delete paragraph A and substitute the following:

- A. Perform testing in the presence of the Engineer. Clean pipe per Section 501 of the City of Caldwell Supplemental Specifications. Visually inspect pipe per ISPWC Section 501 for alignment and grade, pipe distortions, leaks, infiltration, and that a full diameter of pipe is visible from one manhole to the next. Should pipeline fail visual inspection, low pressure air, hydrostatic, and mandrel testing will be used to confirm compliance with paragraphs B & C.**

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 600 – CULVERTS, STORM DRAINS AND GRAVITY IRRIGATION

SECTION 602 – STORM DRAIN INLETS, CATCH BASINS, MANHOLES AND GRAVITY IRRIGATION STRUCTURES, PART 2.4 – STEPS

Delete part 2.4.

SECTION 602 – STORM DRAIN INLETS, CATCH BASINS, MANHOLES AND GRAVITY IRRIGATION STRUCTURES, PART 2.10 – GRAVITY IRRIGATION SLIDE GATE AND VALVES

Delete paragraph A and substitute the following:

- A. **Waterman C-10 canal gates or approved equal shall be used. Gates shall be installed in accordance with manufacturer's requirements. Slide gates are not acceptable.**

SECTION 602 – STORM DRAIN INLETS, CATCH BASINS, MANHOLES AND GRAVITY IRRIGATION STRUCTURES, PART 2.11 – PVC DRAINAGE STRUCTURES

Delete part 2.11.

SECTION 602 – STORM DRAIN INLETS, CATCH BASINS, MANHOLES AND GRAVITY IRRIGATION STRUCTURES, PART 3.6 – MANHOLE INVERT CONSTRUCTION

Delete paragraph A and substitute the following:

- A. **Construct manhole inverts to provide smooth, flow-through characteristics and in accordance with the Standard Drawings and Contract Documents. Flat bottom manholes shall be used unless channelized invert is necessary as determined by the Engineer of Record, City Engineer, or specifically called for in the Contract Documents.**

SECTION 602 – STORM DRAIN INLETS, CATCH BASINS, MANHOLES AND GRAVITY IRRIGATION STRUCTURES, PART 3.10 – INSTALLATION OF STEPS

Delete Part 3.10.

SECTION 602 – STORM DRAIN INLETS, CATCH BASINS, MANHOLES AND GRAVITY IRRIGATION STRUCTURES, PART 3.11 – TESTING

Delete paragraph A and substitute the following:

- A. **Visually inspect structures for alignment and grade, leaks and infiltration. Should structure fail visual inspection, additional testing may be required at the discretion of the Engineer of Record or City Engineer.**

Delete paragraph B.

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 600 – CULVERTS, STORM DRAINS AND GRAVITY IRRIGATION

Delete paragraph C.

Delete paragraph D.

Delete paragraph E

SECTION 602 – STORM DRAIN INLETS, CATCH BASINS, MANHOLES AND GRAVITY IRRIGATION STRUCTURES, PART 3.14 – PVC DRAINAGE STRUCTURES

Delete part 3.14.

DIVISION 600 –CULVERTS, STORM DRAINS, AND GRAVITY IRRIGATION, STANDARD DRAWINGS – METRIC UNITS

Delete all Division 600 Metric Standard Drawings.

DIVISION 600 – CULVERTS, STORM DRAINS, AND GRAVITY IRRIGATION, STANDARD DRAWINGS

Delete the following standard drawings:

SD-611 – Standard Concrete Catch Manhole

SD-612 – Standard Manhole Type A

SD-613 – Standard Manhole Type B

SD-613A – Standard Manhole Type B – Raised Invert

SD-614 – Standard Manhole Type B, Deep

SD-614A – Standard Manhole Type B, Deep – Raised Invert

SD-618 – Plastic Coated Manhole Steps

SD-623 – Storm Drain Monument

SD-625 – PVC Drain Basin Structure

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 600 – CULVERTS, STORM DRAINS AND GRAVITY IRRIGATION

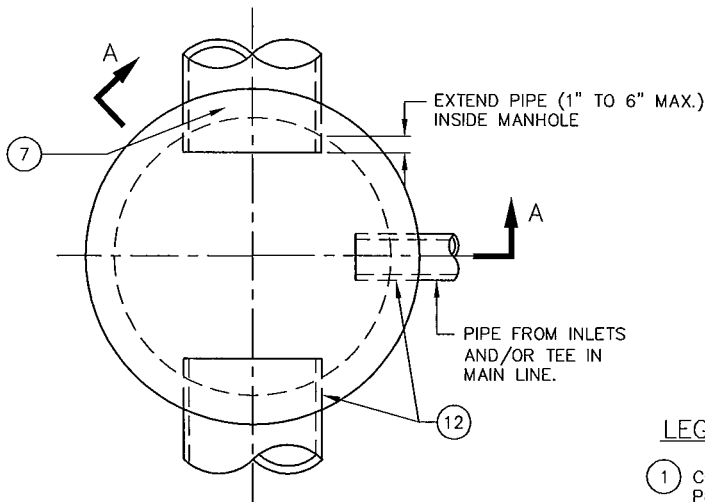
Insert the following Caldwell Standard Drawings:

D-611 – Standard Concrete Catch Manhole

D-613A – Standard Manhole Type B – Raised Invert

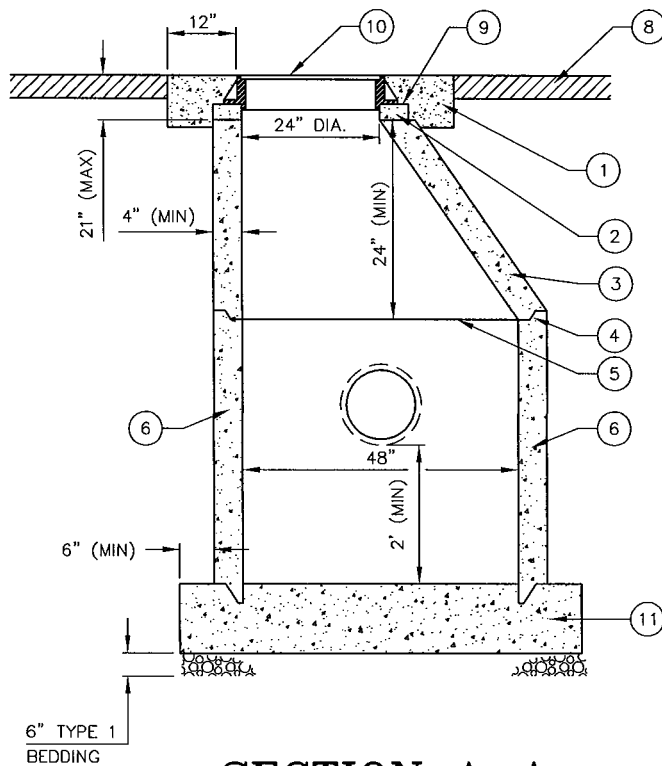
D-614A – Standard Manhole Type B, Deep – Raised Invert

End Division 600 -



PLAN

N.T.S.



SECTION A-A

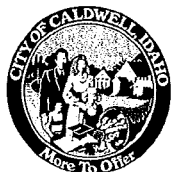
N.T.S.

LEGEND:

- ① CONCRETE COLLAR IN PAVED STREET SECTIONS PER SD-616
- ② GRADE RINGS GROUTED WATERTIGHT IN PLACE, NOT TO EXCEED 21" FROM FINISHED SURFACE TO TOP OF CONE
- ③ PRECAST MONOLITHIC ECCENTRIC CONE SECTION, (REBAR NOT SHOWN).
- ④ RAMNEK OR APPROVED GASKETS AT ALL JOINTS
- ⑤ PROPERLY ALIGN AND GROUT ALL INTERIOR JOINTS
- ⑥ PRECAST CONCRETE MANHOLE BARREL SECTION, (REBAR NOT SHOWN)
- ⑦ PRECAST GASKETED HUB RING OR RUBBER GASKETED COLLAR
- ⑧ SURFACING TO MATCH FLUSH WITH EXISTING SURFACING, (AS SHOWN)
- ⑨ FRAME TO BE GROUTED TO GRADE RINGS
- ⑩ FRAME AND COVER PER SD-617
- ⑪ SEE SS-501 FOR CAST IN PLACE MANHOLE BASE, SEE SS-501A FOR PRE-FABRICATED BASE
- ⑫ GROUT ANNULAR SPACE, (TYP.)

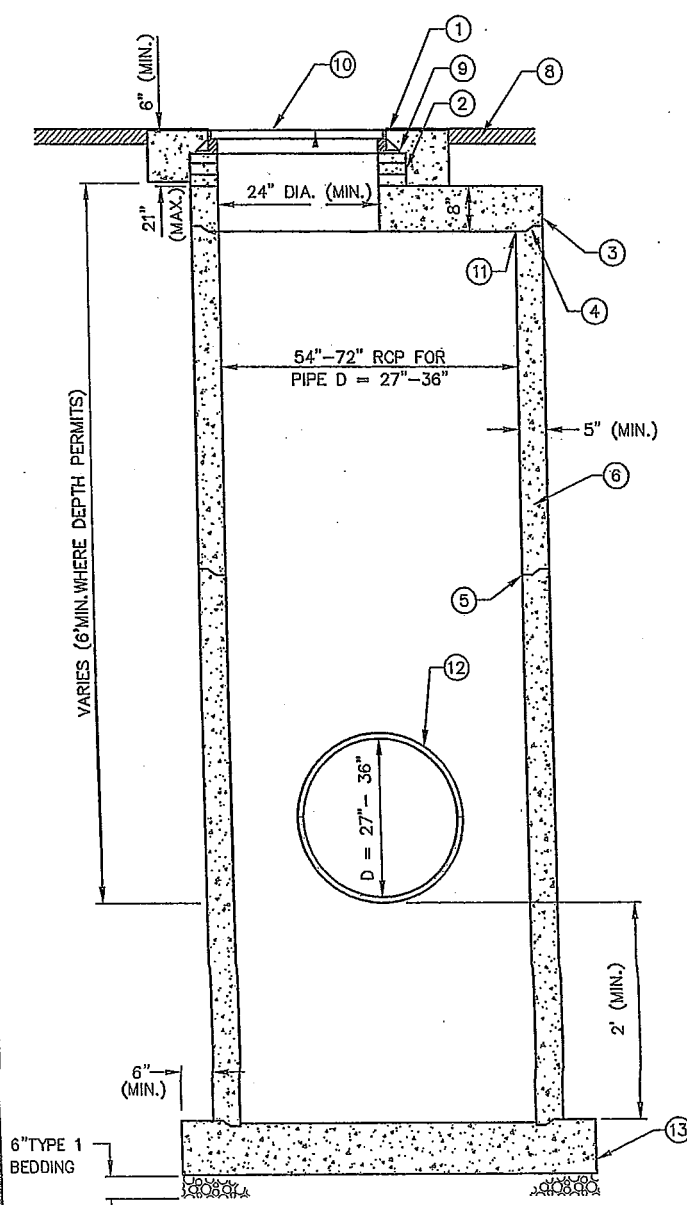
NOTES:

- 1. OPTIONAL PREFABRICATED MANHOLE BASE WITH APPROVED PIPE CONNECTIONS MAY BE USED WITH ENGINEERS APPROVAL, SEE SS-501A.
- 2. PLACE VERTICAL WALL ON UPSTREAM SIDE OF MANHOLE, ROTATED 45 DEGREES.
- 3. FOR INLET PIPE DIAMETER, D, GREATER THAN 24", SEE D-613A OR D-614A.
- 4. MANHOLE FRAME AND COVER:
 - A. REFER TO DRAWING NO. SD-617.
 - B. FRAME AND COVER SHALL BE FLUSH WITH SLOPE OF PAVEMENT.
 - C. "STORM DRAIN" ON COVER.
- 5. WHERE PVC PIPE IS UTILIZED, INSTALL A RUBBER RING OR GASKET COLLAR WHERE THE PIPE IS IN CONTACT WITH MANHOLE BASE AND/OR MANHOLE CHANNEL, IN ORDER TO INSURE A WATERTIGHT SEAL.
- 6. EITHER BASE ON SS-501 OR SS-501A MAY BE USED WITH EITHER MANHOLE DESIGN.



STANDARD CONCRETE
CATCH MANHOLE

DATE:	9/21/2015	D-611
REV. #	1	
ACAD FILE:	D-611.DWG	STANDARD DRAWING NO.



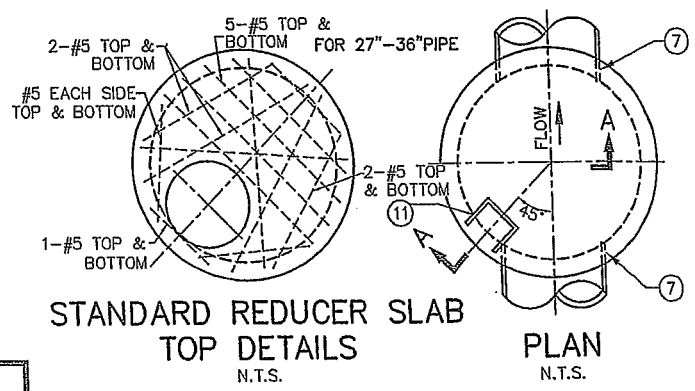
LEGEND

- ① CONCRETE COLLAR IN PAVED AND GRAVEL AREAS PER SD-616.
- ② GROUT GRADE RINGS WATERTIGHT IN PLACE, NOT TO EXCEED 21" FROM FINISHED SURFACE TO TOP OF CONE.
- ③ REINFORCED CONCRETE REDUCER SLAB.
- ④ RAMNEK OR APPROVED GASKETS AT ALL JOINTS.
- ⑤ PROPERLY ALIGN ALL INTERIOR JOINTS.
- ⑥ PRECAST CONCRETE MANHOLE BARREL SECTION (REBAR NOT SHOWN) 54"-72" RCP.
- ⑦ PRECAST GASKETED HUB RING OR RUBBER GASKETED COLLAR.
- ⑧ SURFACING TO MATCH FLUSH WITH EXISTING SURFACING (AC SHOWN).
- ⑨ FRAME TO BE GROUTED TO GRADE RINGS.
- ⑩ FRAME AND COVER PER SD-617.
- ⑪ GROUT SMOOTH ALL INTERIOR JOINTS.
- ⑫ CUT OUT RCP MANHOLE TO CONFORM TO PIPE.
- ⑬ CAST-IN-PLACE MANHOLE BASE. SEE SD-502A FOR PREFABRICATED BASE FOR SANITARY SEWER ONLY. THIS DOES NOT APPLY TO STORM DRAIN MANHOLES.

NOTES:

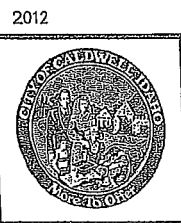
- (A) OPTIONAL PREFABRICATED MANHOLE BASE WITH APPROVED PIPE CONNECTIONS MAY BE USED WITH ENGINEERS APPROVAL, SEE SD-502A FOR SANITARY SEWER ONLY. THIS DOES NOT APPLY TO STORM DRAIN MANHOLES.
- (B) PLACE VERTICAL WALL ON UPSTREAM SIDE OF MANHOLE, ROTATED 45 DEGREES.
- (C) FOR EXTRA DEPTH MANHOLE, SEE SD-614 "STANDARD MANHOLE TYPE B, DEEP".
- (D) MANHOLE FRAME AND COVER:
 - A. REFER TO DRAWING NO. SD-617.
 - B. FRAME AND COVER SHALL BE FLUSH WITH SLOPE OF PAVEMENT.
 - C. "STORM DRAIN" ON COVER.
- (E) WHERE PVC IS UTILIZED, INSTALL A RUBBER RING OR GASKET COLLAR WHERE THE PIPE IS IN CONTACT WITH MANHOLE BASE AND/OR MANHOLE CHANNEL, IN ORDER TO INSURE A WATERTIGHT SEAL.

SECTION A-A
N.T.S.



STANDARD REDUCER SLAB
TOP DETAILS
N.T.S.

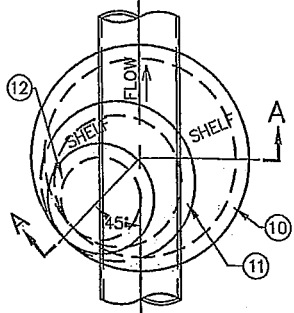
PLAN
N.T.S.



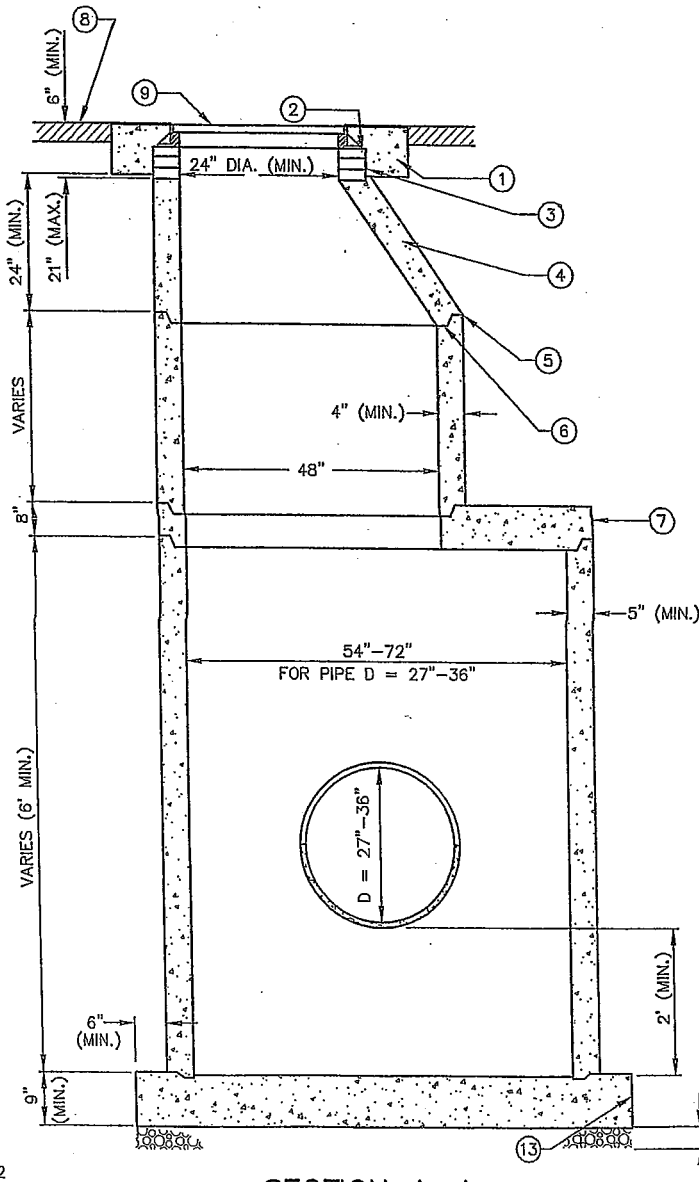
DATE: 6/26/2013
SCALE: AS SHOWN

STANDARD MANHOLE
TYPE "B" RAISED INVERT

STANDARD DRAWING NO.
D-613A



PLAN
FOR 27" THRU 36" PIPE
N.T.S.



SECTION A-A
N.T.S.

LEGEND

- ① CONCRETE COLLAR IN PAVED AND GRAVEL STREET SECTIONS PER SD-616.
- ② FRAME TO BE GROUTED TO GRADE RINGS.
- ③ GRADE RINGS GROUT WATER TIGHT IN PLACE, NOT TO EXCEED 21" FROM FINISHED SURFACE TO TOP OF CONE.
- ④ PRECAST MONOLITHIC ECCENTRIC CONE.
- ⑤ RAMNEK OR APPROVED GASKETS AT ALL JOINTS.
- ⑥ PROPERLY ALIGN ALL INTERIOR JOINTS.
- ⑦ REINFORCED CONCRETE REDUCER SLAB AS APPROVED BY THE ENGINEER.
- ⑧ SURFACING TO MATCH FLUSH WITH EXISTING SURFACING (AS SHOWN).
- ⑨ FRAME AND COVER PER SD-617.
- ⑩ 54" RCP THRU 72" PIPE.
- ⑪ 48" DIAMETER BARREL SECTION.
- ⑫ GRADE RINGS.
- ⑬ CAST-IN-PLACE MANHOLE BASE. SEE SD-502A FOR PREFABRICATED BASE FOR SANITARY SEWER ONLY. THIS DOES NOT APPLY TO STORM DRAIN MANHOLES.

NOTES:

- (A) OPTIONAL PREFABRICATED MANHOLE BASE WITH APPROVED PIPE CONNECTIONS MAY BE USED WITH ENGINEERS APPROVAL, SEE SD-502A FOR SANITARY SEWER ONLY. THIS DOES NOT APPLY TO STORM DRAIN MANHOLES.
- (B) PLACE VERTICAL WALL ON UPSTREAM SIDE OF MANHOLE, ROTATED 45 DEGREES.
- (C) MANHOLE FRAME AND COVER:
A. REFER TO DRAWING NO. SD-617.
B. FRAME AND COVER SHALL BE FLUSH WITH SLOPE OF PAVEMENT.
C. "STORM DRAIN" ON COVER.
- (D) WHERE PVC IS UTILIZED, A RUBBER RING OR GASKET COLLAR IS TO BE INSTALLED WHERE THE PIPE IS IN CONTACT WITH MANHOLE BASE AND/OR MANHOLE CHANNEL, IN ORDER TO INSURE A WATERTIGHT SEAL.

2012



DATE: 6/19/2013

SCALE: AS SHOWN

STANDARD MANHOLE TYPE "B"
DEEP - RAISED INVERT

STANDARD DRAWING NO.

D-614A

CITY OF CALDWELL
QUICK REFERENCE
For

DIVISION 700 – CONCRETE

This quick reference of specifications highlights some of the requirements for Public Works Construction within the jurisdiction of the City of Caldwell. This quick reference is intended for use only as a guide for the Designer and Contractor and not as a replacement to the Idaho Standards for Public Works Construction (ISPWC) or the City of Caldwell's Supplemental Specifications for the ISPWC. Please refer to those documents for more complete specifications.

1. Curb, gutter and sidewalk shall be constructed with Class 4000 psi concrete per ISPWC Section 703.
2. $\frac{3}{4}$ -inch minus crushed aggregate base material under concrete construction shall be compacted to a minimum of 95% of maximum laboratory density as determined by AASHTO T-99 Method C per ISPWC Section 202.
3. 6-inch vertical concrete curb and 3-inch rolled concrete curb shall have 6" of $\frac{3}{4}$ inch minus crushed aggregate base per Caldwell Standard Drawing C-701 and C-702.
4. 3-inch rolled curb is allowed on residential roadways, residential road radii, and industrial roadways only. See Caldwell Standard Drawings C-702 and R-810.
5. Concrete sidewalks shall be 4-inches thick behind vertical curb and gutter and for sidewalk separated from curb by a planter strip. Concrete sidewalks shall be 5-inches thick behind rolled curb and gutter. All concrete sidewalks shall have 4-inches of $\frac{3}{4}$ -inch minus crushed aggregate base. See Caldwell Standard Drawing C-709.
6. Concrete valley gutter shall have a minimum of 8-inches of $\frac{3}{4}$ -inch minus crushed aggregate base per Caldwell Standard Drawing C-708.
7. Concrete driveway approaches shall have 6-inches of $\frac{3}{4}$ -inch minus base as shown on Caldwell Standard Drawing C-710 (A-C).
8. Curbside mailbox flares shall be provided and installed per Caldwell Standard Drawing C-709A. Widened sidewalk section shall be poured "monolithically" with the sidewalk. No dowelling is allowed.
9. 6-inch vertical reverse flow curb and gutter shall conform to Caldwell Standard Drawing C-716.

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 700 – CONCRETE

DIVISION 700 – CONCRETE, STANDARD DRAWINGS

Delete the following standard drawings:

SD-701 – 6” Vertical Curb and Gutter

SD-702 – 3” Rolled Curb and Gutter

SD-703 – Curb and Gutter, Type I

SD-704 – Curb and Gutter, Type II

SD-705 – Curb and Gutter, Type III

SD-708 – Valley Gutter

SD-710 – Concrete Driveway Approach

SD-710A – Concrete Driveway with Sidewalk around Approach

SD-710B – Concrete Driveway with Ramped Sidewalk

SD-710C – Concrete Driveway with Detached Sidewalk

SD-715 – Curb Drain

Insert the following Caldwell Standard Drawings:

C-701 – Curb and Gutter 6” Vertical

C-702 – Curb and Gutter 3” Rolled

C-708 – Valley Gutter Detail

C-709 – Concrete Sidewalk

C-709A – Mail Box Flare 4’ Sidewalk

C-710 – Concrete Driveway Approach

C-710A – Concrete Driveway Type A

C-710B – Concrete Driveway Type B

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 700 – CONCRETE

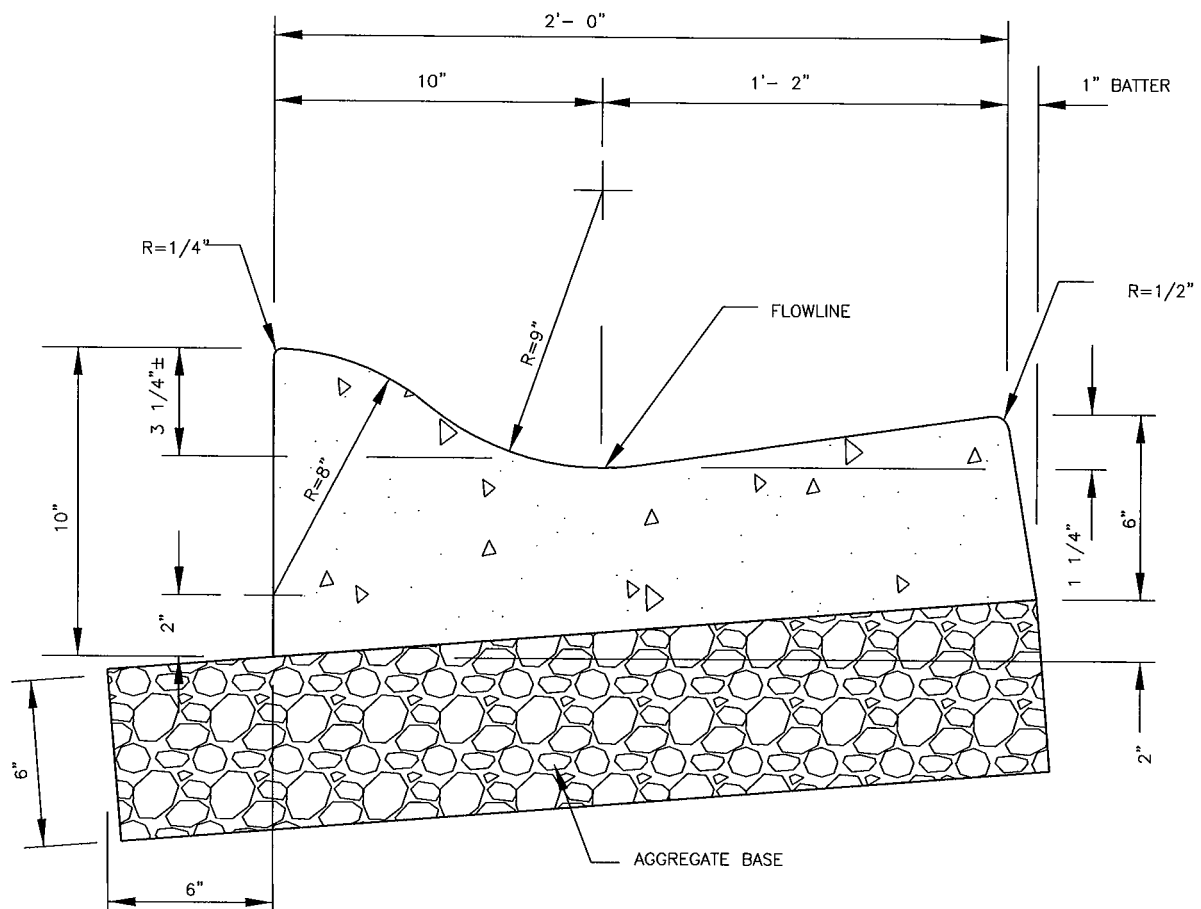
C-710C – Concrete Driveway Type C

C-715 – Curb Drain

C-716 – Curb and Gutter, 6” Vertical Reverse Flow

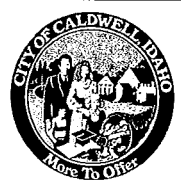
C-717 – Rolled Curb Transition for Inlet Catchbasin

End Division 700 -



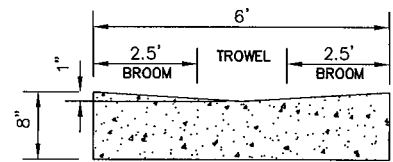
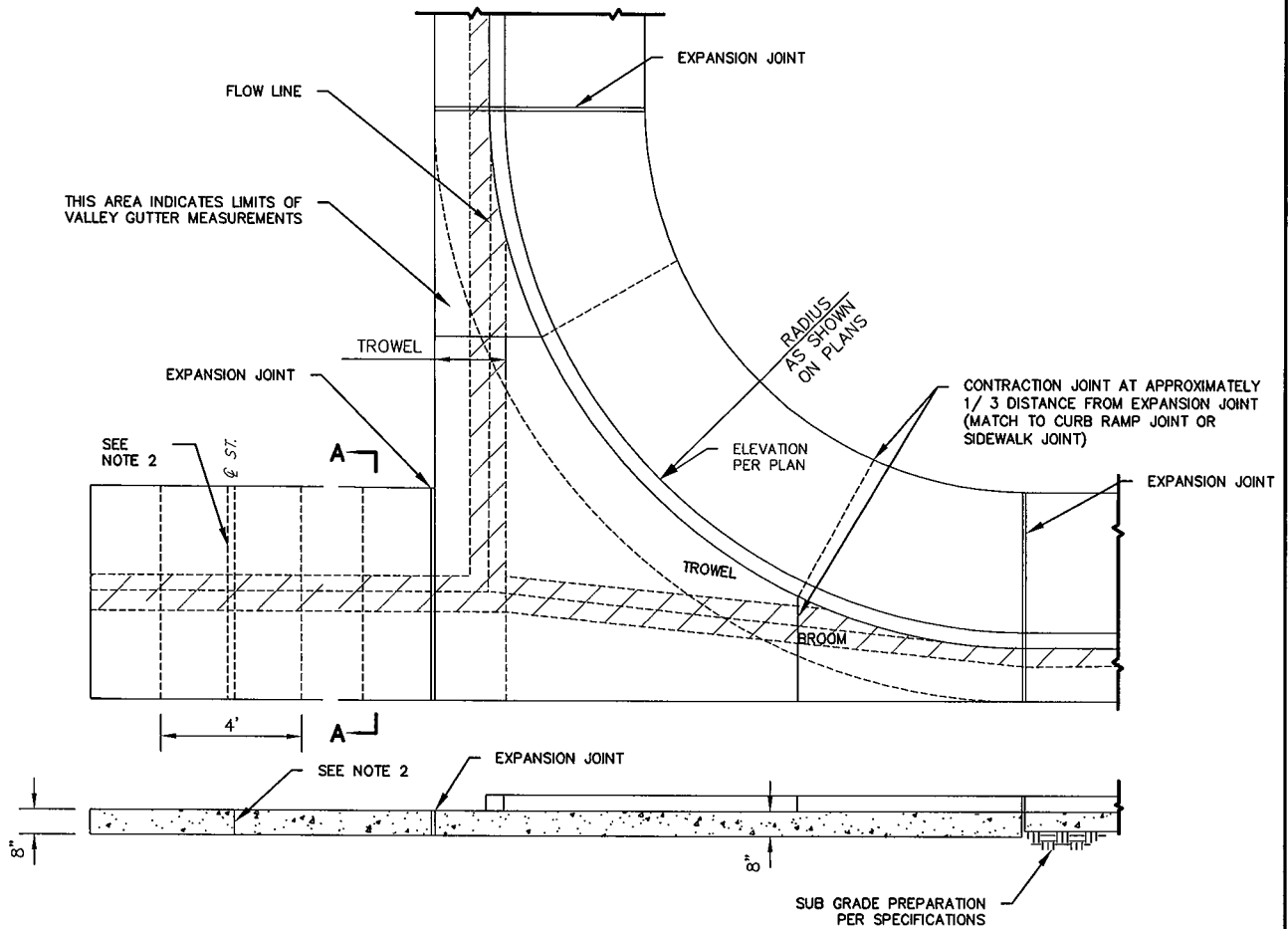
NOTES:

1. GRADE AND ALIGNMENT TO BE ESTABLISHED OR APPROVED BY THE ENGINEER.
2. AGGREGATE BASE SHALL BE 3/4" MINUS CRUSHED MATERIAL WITH A DEPTH OF 6". MATERIAL SHALL COMPLY WITH SECTION 800 ISPWC; COMPACTED MATERIAL SHALL EXCEED 95% OF MAXIMUM LABORATORY DENSITY AS DETERMINED BY AASHTO T-99 METHOD C; A MINIMUM WIDTH OF 3-FT. SHALL BE PLACED TO GRADE, PRIOR TO SETTING CURB FORMS.
3. COLD JOINTS ARE TO BE PLACED AT TERMINAL POINTS OF RADII.
4. CONTINUOUS PLACEMENT PREFERRED, WITH A SCORE INTERVAL OF 8' TO 12'.
5. MATERIALS AND CONSTRUCTION TO BE IN COMPLIANCE WITH ISPWC SPECIFICATIONS AND CITY OF CALDWELL SUPPLEMENTAL SPECIFICATIONS.
6. 3" ROLLED CURB AND GUTTER ON RESIDENTIAL AND INDUSTRIAL STREETS ONLY.
7. BACKFILL AS PER ISPWC STANDARD DRAWINGS.
8. CONCRETE SHALL BE CLASS 4000 PSI UNLESS OTHERWISE SPECIFIED.
9. ROLLED CURB & GUTTER NOT ALLOWED WHEN EXISTING CURB IS VERTICAL.
10. WHEN USED IN CONJUNCTION WITH AN ADA RAMP, GUTTER PLATE CROSS-SECTION SLOPE SHALL NOT EXCEED 5%



CURB AND GUTTER
3" ROLLED

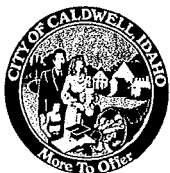
DATE:	9/21/2015	C-702
REV. #	1	
ACAD FILE:	C-702.DWG	STANDARD DRAWING NO.



**SECTION A-A
VALLEY GUTTER**

NOTES:

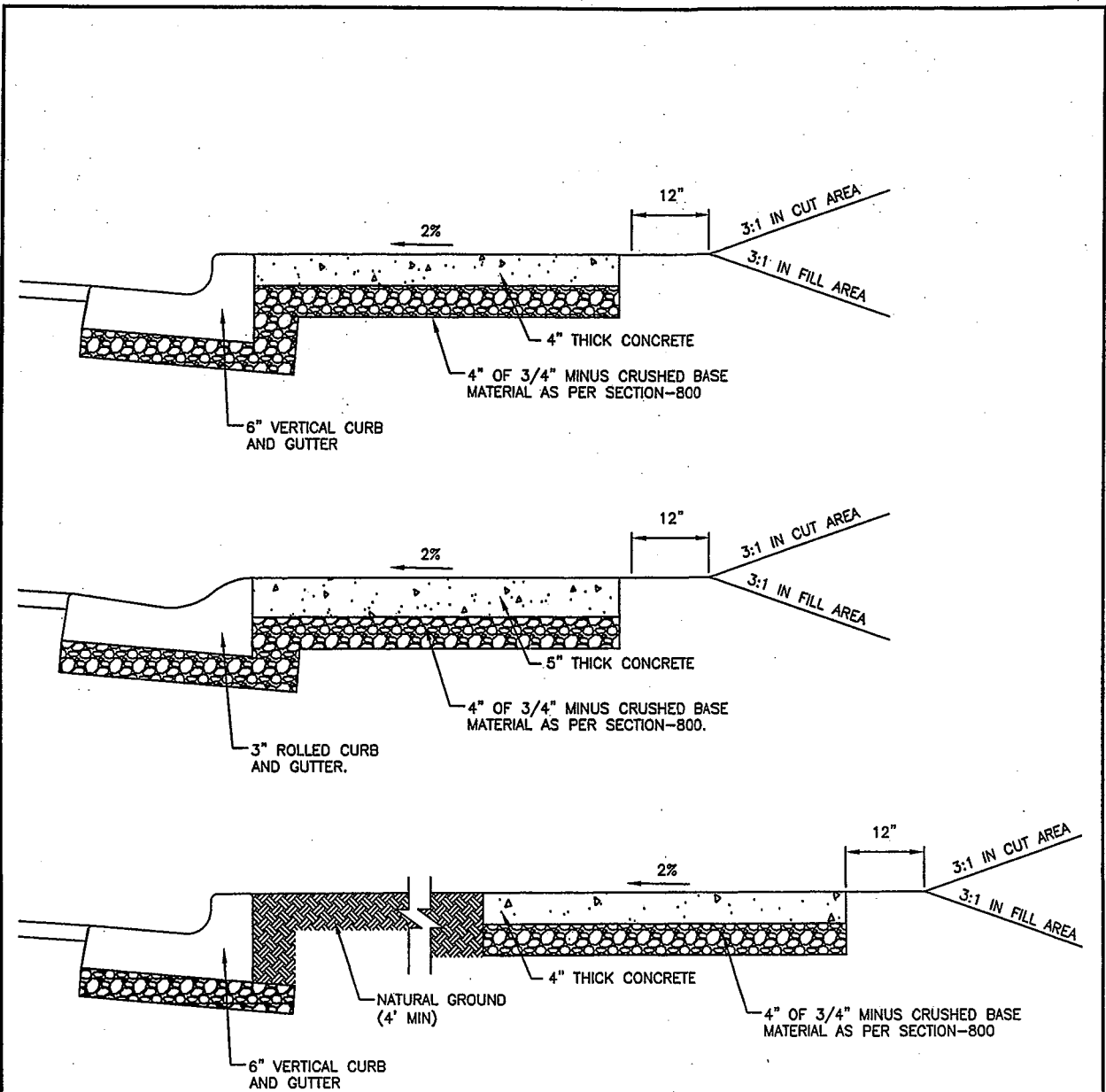
1. ALL CONCRETE TO BE CLASS 4000 PER SECTION-703 UNLESS OTHERWISE APPROVED.
2. EITHER A CONSTRUCTION JOINT OR CONTRACTION JOINT IS REQUIRED AT THE STREET CENTERLINE.
3. A SEPARATE CONCRETE PAD IS REQUIRED AT ALL EXPANSION JOINTS AND ALL CONSTRUCTION JOINTS.
4. EXPANSION JOINTS SHALL CONFORM TO PROPER JURISDICTION AND GOVERNING REGULATIONS.
5. CONTRACTION JOINTS SHALL SEPARATE LARGE AGGREGATE BY MOVING THE AGGREGATE TO EITHER SIDE OF THE JOINT FOR A MINIMUM DEPTH OF 2 1/2 INCHES. THE FINISHED JOINT SHALL HAVE 1/4 INCH MAXIMUM RADIUS AT THE TOP SURFACE AND BE A MINIMUM OF 3/4 INCHES OF DEPTH.



VALLEY GUTTER
DETAIL

DATE:	9/8/15
REV. #	2
ACAD FILE:	C-708.DWG

C-708
STANDARD DRAWING NO.



NOTES:

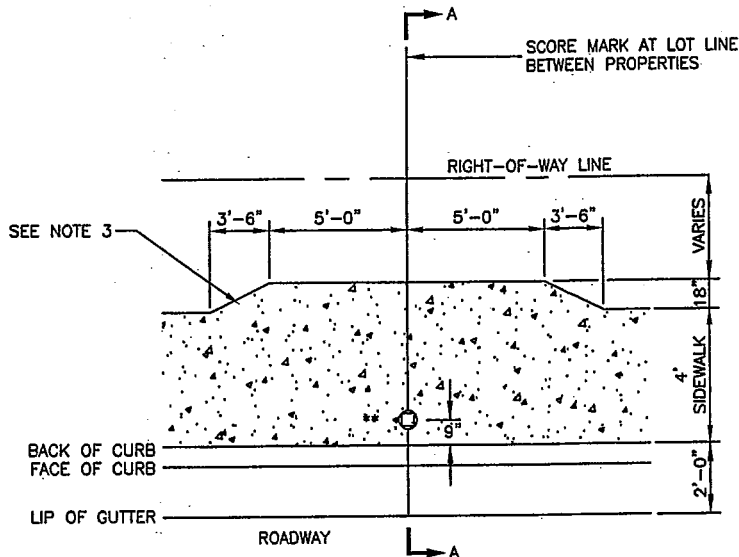
1. LOCATION, GRADE, AND WIDTH TO BE ESTABLISHED OR APPROVED BY THE CITY.
2. BASE TO BE COMPACTED TO EXCEED 95% OF MAXIMUM LABORATORY DENSITY AS DETERMINED BY AASHTO T-99 METHOD C.
3. SLOPE SIDEWALK TOWARD THE STREET NOT TO EXCEED 1/4" PER FOOT (0.02 FT/FT) UNLESS OTHERWISE SPECIFIED BY THE CITY.
4. SCORE AT INTERVALS TO MATCH WIDTH OF WALK NOT TO EXCEED 5 FEET SPACING.
5. 1/2" TRANSVERSE PREFORMED BITUMINOUS JOINTS AT THE TERMINUS POINTS FOR CURVE AND WHERE SIDEWALK IS PLACED BETWEEN TWO PERMANENT FOUNDATIONS, PLACE 1/2" EXPANSION JOINT MATERIAL ALONG THE BACK OF WALK THE FULL LENGTH.
6. CONCRETE SHALL BE CLASS 4000 PSI UNLESS OTHERWISE SPECIFIED.
7. SEE CALDWELL STANDARD DETAIL R-810 FOR SIDEWALK WIDTH.

0:\21104\ACAD\DWG\Standards\Logo14.dwg

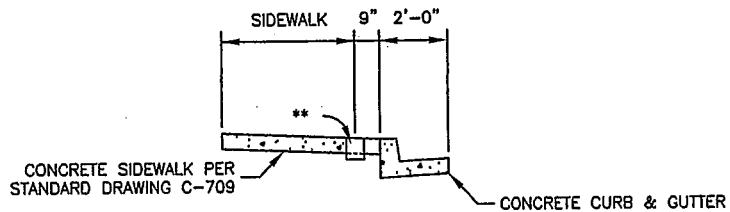
CONCRETE SIDEWALK
DETAIL

DATE: 03/01/04
REV. # 1
ACAD FILE: C-709.DWG

C-709
STANDARD DRAWING NO.



PLAN
N.T.S



SECTION A-A
N.T.S

** 8"ø x 6" PVC PIPE BLOCKOUT. BACKFILL OR COVER OPENING FOR FUTURE MAIL BOX INSTALLATION.

NOTES:

1. LOCATIONS SHOWN ON CONSTRUCTION PLANS.
2. SEE STANDARD SPECIFICATIONS SECTION 700 FOR DETAILS NOT SHOWN.
3. SIDEWALK WIDENING AT MAILBOX LOCATIONS SHALL BE POURED MONOLITHICALLY WITH THE SIDEWALK.

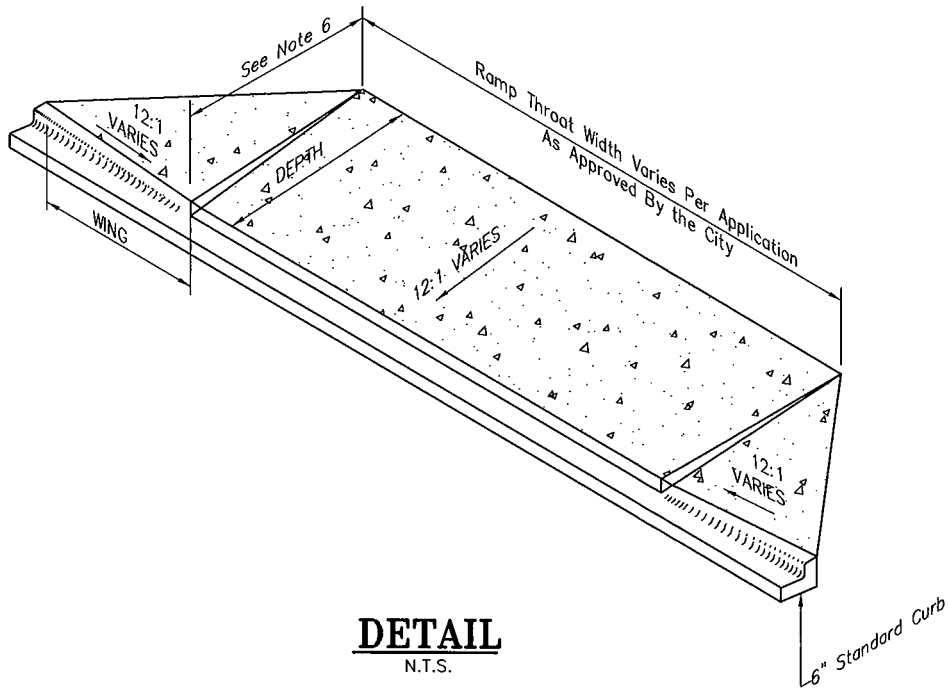
01/21/04/ACAD/DWG/Standard/Logo1.e...
PLT

MAIL BOX FLARE
4' SIDEWALK

DATE:	03/01/04
REV. #	1
ACAD FILE:	C-709A.DWG

C-709A

STANDARD DRAWING NO.



DETAIL
N.T.S.

NOTES:

1. APPROACH TO CONFORM TO THE LATEST ADA STANDARDS,
2. INSTALL EXPANSION JOINT AT TIP OF APPROACH WINGS AND WHERE SIDEWALK CHANGES THICKNESS.
3. BASE TO BE A 6" THICKNESS OF 3/4" MINUS CRUSHED AGGREGATE PER SECTION-802.
4. APPROACH THROAT WIDTHS TO BE APPROVED BY THE CITY. ALL CONCRETE TO BE 6" THICK FROM TIP OF WING TO TIP OF WING UP TO THE EXPANSION JOINT. WHEN SIDEWALK IS SEPARATE FROM CURB THE SIDEWALK IMMEDIATELY BEHIND THE APPROACH THROAT SHALL BE 6" THICK ALSO.
5. ALL CONCRETE SHALL BE CLASS 4000 PER SECTION-703.
6. APPROACH DIMENSIONS ARE BASED ON THE HEIGHT OF THE CURB. SEE TABLE BELOW.
7. COMMERCIAL DRIVEWAY THROAT WIDTHS SHALL BE A MINIMUM OF 25- FEET WIDE TO A MAXIMUM OF 40- FEET WIDE. WIDTH APPROVAL BY THE CITY IS REQUIRED.
8. CURB RADIUS MAY BE USED IN PLACE OF WING WITH SEPARATED SIDEWALK.
9. REFER TO STD DWG. C-710 - C-710 C FOR APPROACHES WITH SIDEWALK.

APPROACH DIMENSION TABLE

Curb	3"	4"	5"	6"	7"	8"
Depth	4'	5'	6'	7'	8'	9'
Wing	3.5'	4.5'	5.5'	6.5'	7.5'	8.5'
Throat	Per Construction Plans as Approved by the City.					



CONCRETE DRIVEWAY
APPROACH

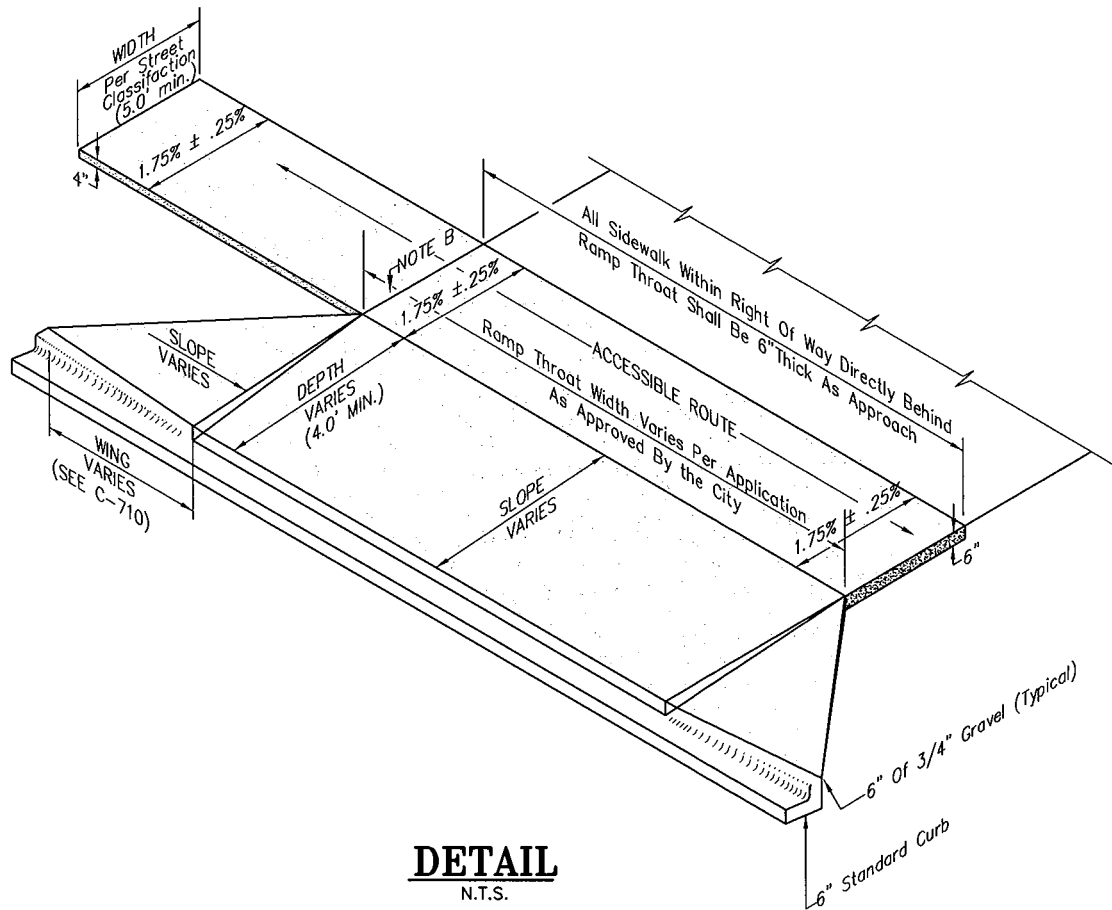
DATE: 6/30/15

REV. # 1

ACAD FILE: C-710.DWG

C-710

STANDARD DRAWING NO.



DETAIL
N.T.S.

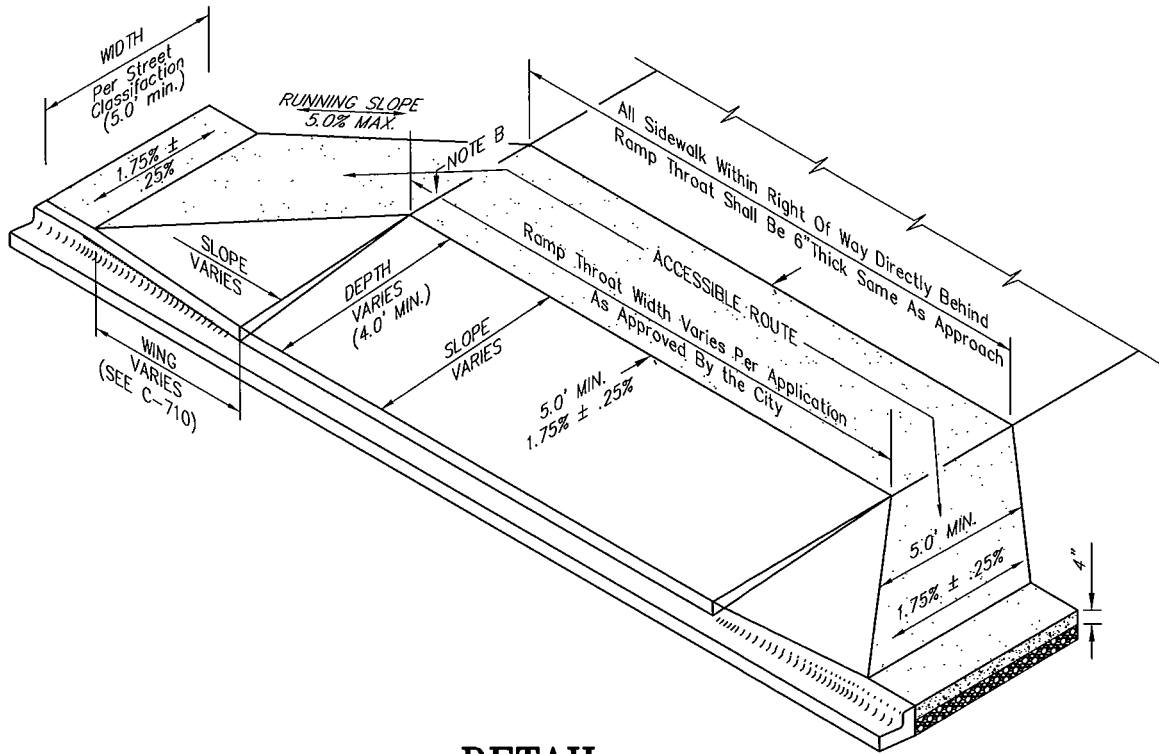
NOTES:

- (A) APPROACH TO CONFORM TO THE LATEST ADA STANDARDS.
- (B) INSTALL EXPANSION JOINT AT TIP OF APPROACH WINGS AND WHERE SIDEWALK CHANGES THICKNESS, UNLESS POUR IS MONOLITHIC.
- (C) BASE UNDER APPROACH AND CURB AND GUTTER TO BE A 6" THICKNESS OF 3/4" MINUS CRUSHED AGGREGATE PER SECTION-802.
- (D) APPROACH THROAT WIDTHS TO BE APPROVED BY THE CITY. ALL CONCRETE TO BE 6" THICK FROM TIP OF WING UP TO THE EXPANSION JOINT. AND THE SIDEWALK IMMEDIATELY BEHIND THE APPROACH THROAT.
- (E) ALL CONCRETE SHALL BE CLASS 4000 PER SECTION-703.
- (F) APPROACH DIMENSIONS ARE BASED ON THE EXISTING CONDITIONS AND EXISTING RIGHT-OF-WAY.
- (G) COMMERCIAL DRIVEWAY THROAT WIDTHS SHALL BE A MINIMUM OF 25- FEET WIDE TO A MAXIMUM OF 40- FEET WIDE. WIDTH APPROVAL BY THE CITY IS REQUIRED.
- (H) CURB RADIUS MAY BE USED IN PLACE OF WING WITH SEPARATED SIDEWALK.



CONCRETE DRIVEWAY
APPROACH TYPE "A"

DATE:	6/9/15	C-710A
REV. #	1	
ACAD FILE:	C-710A.DWG	STANDARD DRAWING NO.

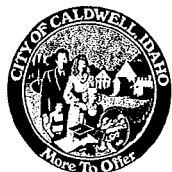


DETAIL

N.T.S.

NOTES:

- (A) APPROACH TO CONFORM TO THE LATEST ADA STANDARDS.
- (B) INSTALL EXPANSION JOINT AT TIP OF APPROACH WINGS AND WHERE SIDEWALK CHANGES THICKNESS.
- (C) BASE UNDER APPROACH, SIDEWALK DIRECTLY BEHIND APPROACH AND CURB AND GUTTER TO BE A 6" THICKNESS OF 3/4" MINUS CRUSHED AGGREGATE PER SECTION-802.
- (D) APPROACH THROAT WIDTHS TO BE APPROVED BY THE CITY. ALL CONCRETE TO BE 6" THICK FROM TIP OF WING TO TIP OF WING UP TO THE EXPANSION JOINT AND DIRECTLY BEHIND APPROACH THROAT.
- (E) ALL CONCRETE SHALL BE CLASS 4000 PER SECTION-703.
- (F) APPROACH DIMENSIONS ARE BASED ON THE EXISTING CONDITIONS AND EXISTING RIGHT-OF-WAY.
- (G) COMMERCIAL DRIVEWAY THROAT WIDTHS SHALL BE A MINIMUM OF 25- FEET WIDE TO A MAXIMUM OF 40- FEET WIDE. WIDTH APPROVAL BY THE CITY IS REQUIRED.

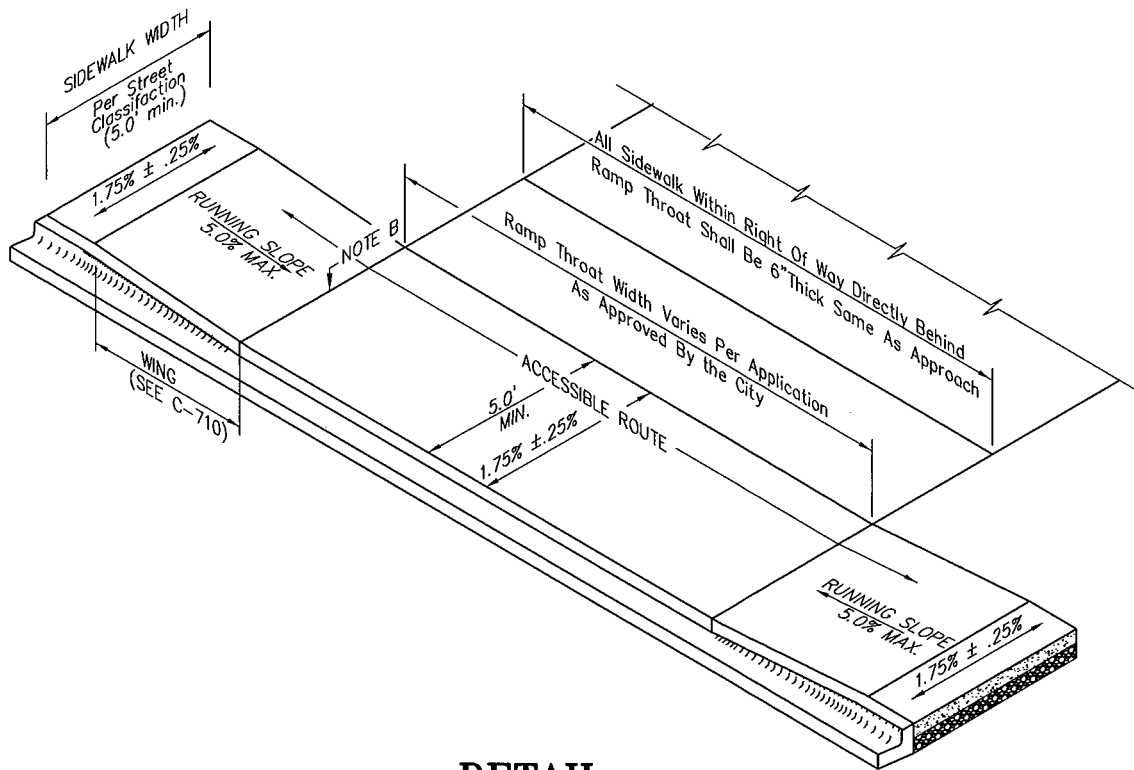


CONCRETE DRIVEWAY

APPROACH TYPE "B"

DATE:	6/9/15
REV. #	1
ACAD FILE:	C-710B.DWG

C-710B
STANDARD DRAWING NO.



DETAIL

N.T.S.

NOTES:

- (A) APPROACH TO CONFORM TO THE LATEST ADA STANDARDS.
- (B) INSTALL EXPANSION JOINT WHERE SIDEWALK CHANGES THICKNESS.
- (C) BASE UNDER APPROACH, SIDEWALK DIRECTLY BEHIND APPROACH THROAT AND CURB AND GUTTER TO BE A 6" THICKNESS OF 3/4" MINUS CRUSHED AGGREGATE PER SECTION-802.
- (D) APPROACH THROAT WIDTHS TO BE APPROVED BY THE CITY. ALL CONCRETE TO BE 6" THICK FROM LOW POINT TO LOW POINT AND AREA DIRECTLY BEHIND APPROACH WITHIN RIGHT-OF-WAY.
- (E) ALL CONCRETE SHALL BE CLASS 4000 PER SECTION-703.
- (F) APPROACH DIMENSIONS ARE BASED ON THE EXISTING CONDITIONS AND RIGHT-OF-WAY.
- (G) COMMERCIAL DRIVEWAY THROAT WIDTHS SHALL BE A MINIMUM OF 25- FEET WIDE TO A MAXIMUM OF 40- FEET WIDE. WIDTH APPROVAL BY THE CITY IS REQUIRED.



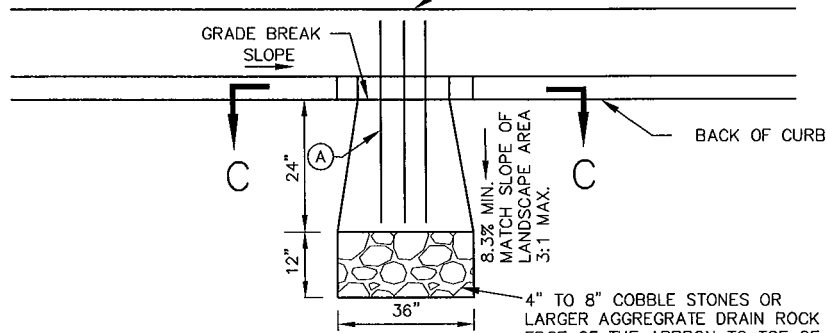
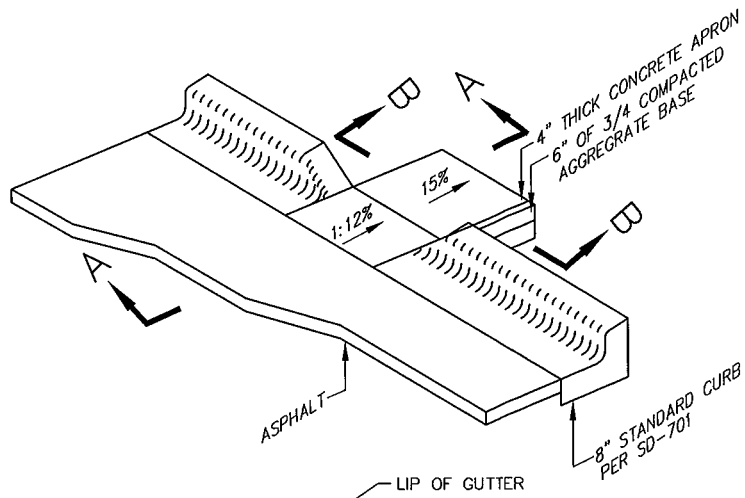
CONCRETE DRIVEWAY

APPROACH TYPE "C"

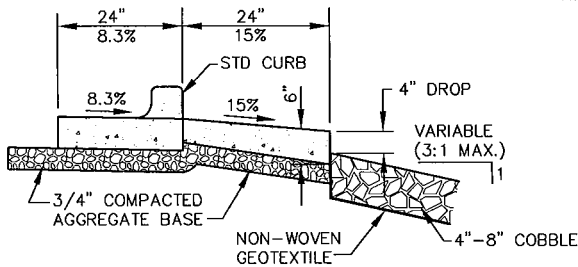
DATE:	6/9/15
REV. #	1
ACAD FILE:	C-710C.DWG

C-710C

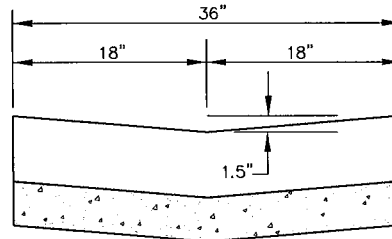
STANDARD DRAWING NO.



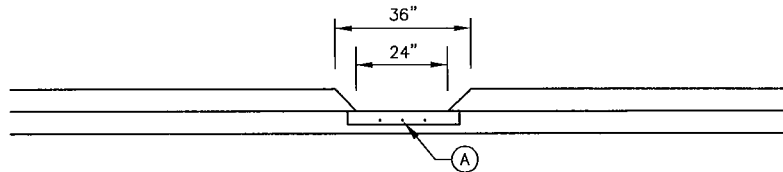
PLAN
N.T.S.



SECTION A-A
N.T.S.



SECTION B-B
(PARTIAL)
N.T.S.



SECTION C-C
N.T.S.

NOTES:

- (A) 3 # 4 BARS AT MID DEPTH OF CONCRETE SPACE EQUALLY ACROSS CURB OPENING.
- (B) REQUIRED WITH INFILTRATION SWALE DESIGN.
- (C) CONCRETE APRON SHALL REMAIN FREE OF ALL OBSTRUCTIONS INCLUDING GRASS AND OTHER VEGETATION THAT MAY BE USED IN CONJUNCTION WITH LANDSCAPING OF SWALE OR RETENTION BASIN.



DATE: 6/9/2015

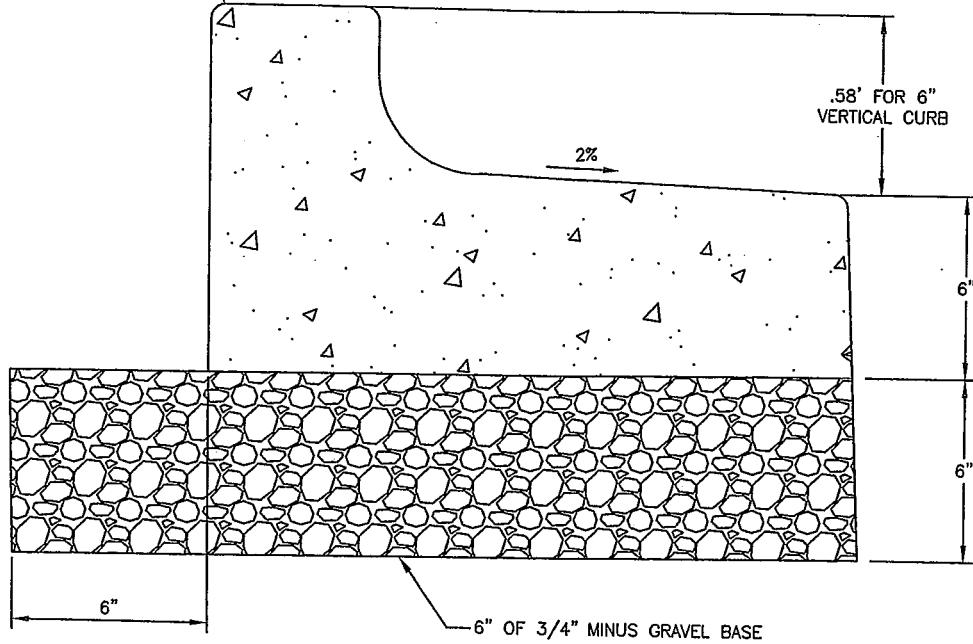
SCALE: AS SHOWN

CURB DRAIN

STANDARD DRAWING NO.

C-715

STD. 6" VERTICAL CURB
(SEE C-701)



NOTES:

1. GRADE AND ALIGNMENT TO BE ESTABLISHED OR APPROVED BY THE ENGINEER.
2. BASE SHALL BE 3/4" MINUS CRUSHED MATERIAL WITH A DEPTH OF 6". MATERIAL SHALL COMPLY WITH SECTION 800 ISPWC; COMPACTED MATERIAL SHALL EXCEED 95% OF STANDARD DENSITY; A MINIMUM WIDTH OF 3-FT. SHALL BE PLACED TO GRADE, PRIOR TO SETTING CURB FORMS.
3. COLD JOINTS ARE TO BE PLACED AT TERMINAL POINTS OF RADII.
4. CONTINUOUS PLACEMENT PREFERRED, WITH A SCORE INTERVAL OF 8' TO 12'.
5. MATERIALS AND CONSTRUCTION TO BE IN COMPLIANCE WITH ISPWC SPECIFICATIONS AND CITY OF CALDWELL SUPPLEMENTAL SPECIFICATIONS.
6. BACKFILL AS PER ISPWC STANDARD DRAWINGS.
7. CONCRETE SHALL BE CLASS 4000 PSI UNLESS OTHERWISE SPECIFIED.
8. SEE CALDWELL STANDARD DRAWING C-701 FOR OTHER TYPICAL DIMENSIONS.

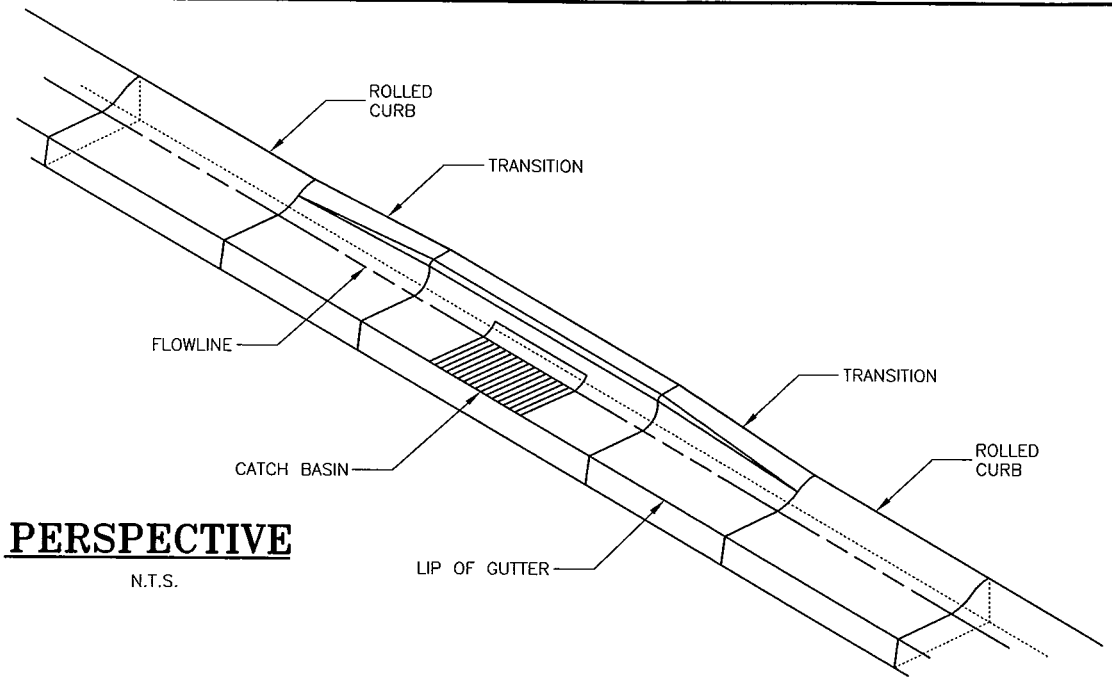


CURB AND GUTTER
6" VERTICAL REVERSE FLOW

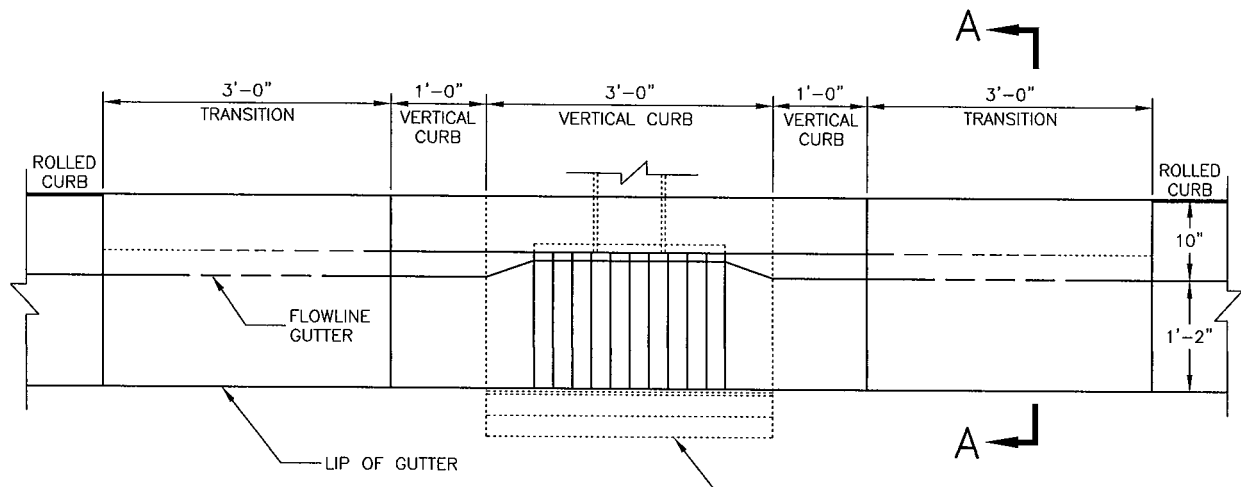
DATE:	03/20/15
REV. #	1
ACAD FILE:	C-715.dwg

C-716

STANDARD DRAWING NO.



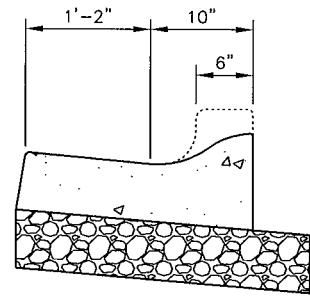
PERSPECTIVE
N.T.S.



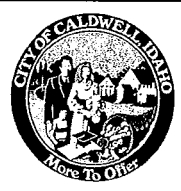
PLAN
N.T.S.

NOTES:

1. CATCH BASIN PER ISPWC DRAWING SD-602.
2. VERTICAL CURB PER CALDWELL STANDARD DRAWING C-701.
3. ROLLED CURB PER CALDWELL STANDARD DRAWING C-702.



SECTION A-A
N.T.S.



ROLLED CURB
TRANSITION FOR INLET CATCH BASIN

DATE:	9/21/2015	C-717
REV. #	1	
ACAD FILE:	C-717 DWG	STANDARD DRAWING NO.

CITY OF CALDWELL
QUICK REFERENCE
For

DIVISION 800 – AGGREGATES AND ASPHALT

This quick reference of specifications highlights some of the requirements for Public Works Construction within the jurisdiction of the City of Caldwell. This quick reference is intended for use only as a guide for the Designer and Contractor and not as a replacement to the Idaho Standards for Public Works Construction (ISPWC) or the City of Caldwell's Supplemental Specifications for the ISPWC. Please refer to those documents for more complete specifications.

1. Asphalt concrete pavement shall be Class III mix per ISPWC Section 810.
2. A roadway section design including site geotechnical information prepared by a registered professional engineer shall be submitted for review and approval by the City Engineer for all new roadway construction.
3. Residential roadways shall be 37-foot back-of-curb to back-of-curb with 5-foot wide sidewalks and 53-foot wide right-of-way minimum. Rolled curb shall be allowed on residential roadways and radii.
4. Collector roadways shall be 48-foot back-of-curb to back-of-curb with 5-foot wide sidewalks and 70-foot wide right-of-way minimum. Vertical curb is required on collector roadways and radii.
5. Minor arterial roadways shall be 49-foot back-of-curb to back-of-curb with 5-foot wide sidewalks and 80-foot wide right-of-way minimum. Vertical curb is required on minor arterial roadways and radii.
6. Principal arterial roadways shall be 70-foot back-of-curb to back-of-curb with 5-foot wide sidewalks and 96-foot wide right-of-way minimum. Vertical curb is required on principal arterial roadways and radii.
7. Industrial roadways shall be 52-foot back-of-curb to back-of-curb with 5-foot wide sidewalks and 70-foot wide right-of-way minimum. Rolled curb is allowed on industrial roadways.
8. Temporary turnarounds shall be constructed of an all-weather street section at locations required and/or approved by the City Fire Marshall and the City Engineer. See Caldwell Standard Drawing R-811.
9. All patch work shall meet surface smoothness requirements of section 810 of the 2015 ISPWC. All asphalt patch work shall carry a 12 month warranty by the contractor from the time the patch work is completed.
10. Compaction testing shall be required on trench backfill, final grade compacted base course, and asphalt. If compaction tests fail, work can be rejected by the City and required to be reconstructed at contractor's expense.

CITY OF CALDWELL
QUICK REFERENCE
For

DIVISION 800 – AGGREGATES AND ASPHALT

11. Right-of-way dedications for right hand turn lanes shall be required during development or in conjunction with the city infrastructure policy per city of Caldwell standard details R-810F, R-810G, and R-810H. The city engineer may waive this requirement only with sufficient justification to do so.

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 800 – AGGREGATES AND ASPHALT

**DIVISION 802 – CRUSHED AGGREGATES, PART 2.2 - CRUSHED AGGREGATE FOR
BASE GRADATION**

Revise paragraph B to read:

- B. Allowable percent passing No. 4 sieve may be adjusted within the range shown in the table with **no** additional compensation to the Contractor.

DIVISION 800 – AGGREGATES AND ASPHALT, STANDARD DRAWINGS

Insert the following Caldwell Standard Drawings:

R-810 – Standard Street Detail

R-810A – Principle Arterial Street Configuration

R-810B – Minor Arterial Street Configuration

R-810C – Collector Street Configuration

R-810D - Residential Street Configuration

R-810E – Industrial Street Configuration

R-810F – Principle Arterial Row Widths/6 Lane RT

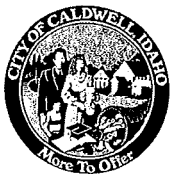
R-810G – Minor Arterial Row Widths/4 Lane RT

R-810H – Collector Row Widths/4 Lane RT

R-811 – Temporary Turn Around

R-812 – Clear Sight Triangle

End Division 800

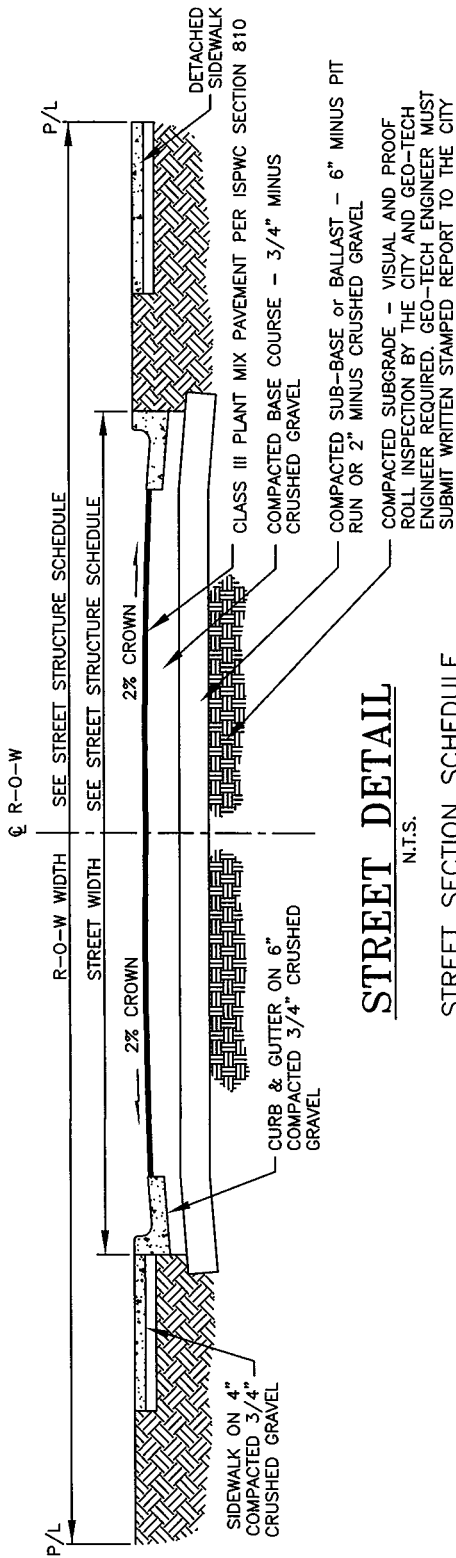


STANDARD STREET

DETAIL

DATE: 9/15/2015
 REV. # 1
 ACAD FILE: R-810.DWG

R-810
 STANDARD DRAWING NO.



STREET DETAIL

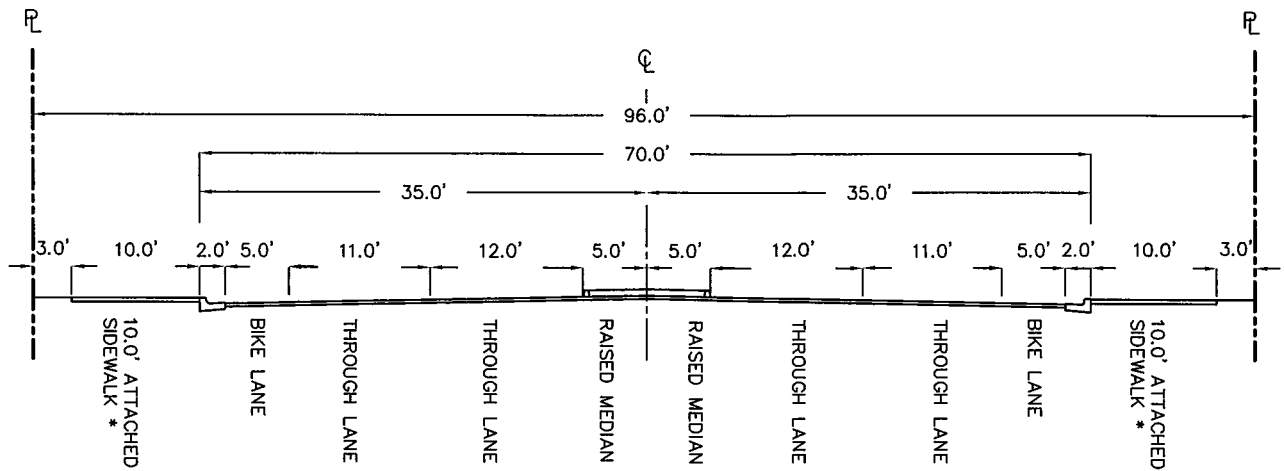
N.T.S.

STREET SECTION SCHEDULE

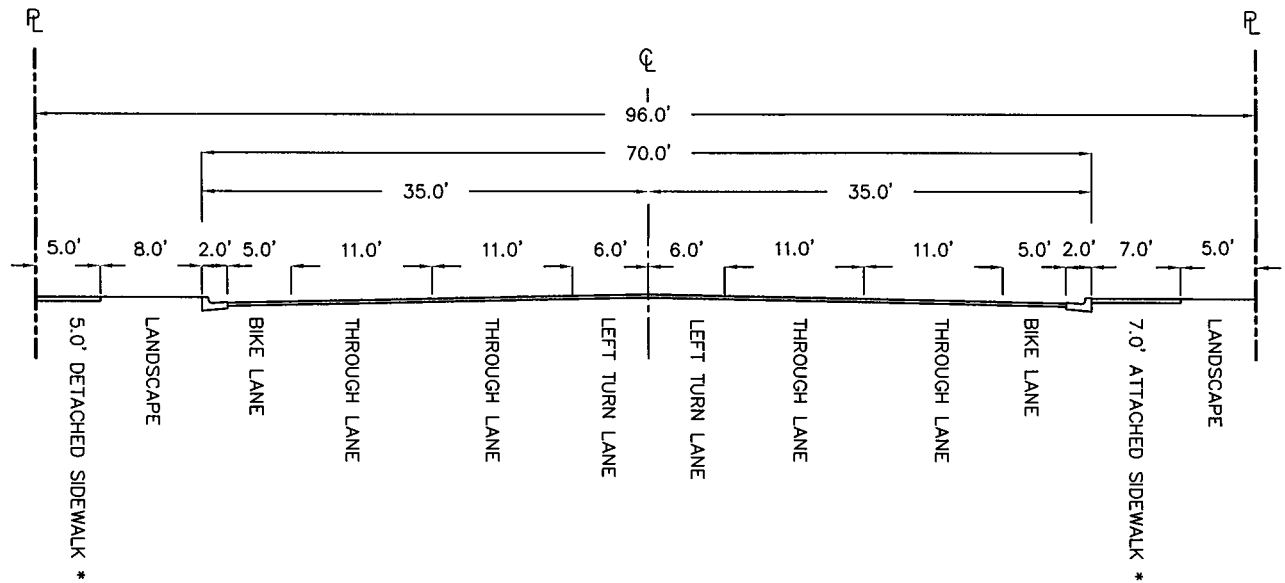
STREET DESIGNATION	SUB-BASE or BALLAST	BASE COURSE	PLANT MIX PAVEMENT	*CURB TYPE	SIDEWALK WIDTH	STREET WIDTH	RIGHT-OF-WAY WIDTH
RESIDENTIAL	8"	4"	2.5"	ROLLED	5'-0"	37'-0" TBC TO TBC	53'-0"
INDUSTRIAL	12"	4"	3"	ROLLED	7'-0" ATTACHED 5'-0" DETACHED	52'-0" TBC TO TBC	70'-0"
COLLECTOR	12"	4"	3"	VERTICAL	7'-0" ATTACHED 5'-0" DETACHED	46'-0" TBC TO TBC	70'-0"
MINOR ARTERIAL	12"	4"	3"	VERTICAL	7'-0" ATTACHED 5'-0" DETACHED	49'-0" TBC TO TBC	80'-0"
PRINCIPAL ARTERIAL	12"	4"	3"	VERTICAL	7'-0" ATTACHED 5'-0" DETACHED	70'-0" TBC TO TBC	96'-0"
ALL WEATHER STREET SECTION	8"	4"	0"	NONE	NONE	20'-0" EDGE TO EDGE	VARIES

NOTES:

- STREET STRUCTURE SECTIONS LISTED ARE MINIMUMS AND MAY VARY DEPENDING UPON SITE SPECIFIC SOIL CONDITIONS. A ROADWAY SECTION DESIGN INCLUDING SITE GEOTECHNICAL INFORMATION PREPARED BY A REGISTERED PROFESSIONAL ENGINEER, SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY THE CITY.
- STREET AND RIGHT-OF-WAY WIDTHS LISTED ARE MINIMUMS. ADDITIONAL STREET AND RIGHT-OF-WAY WIDTHS MAY BE REQUIRED BY THE CITY ENGINEER.
- ROLLED CURB & GUTTER: SHALL BE CONSTRUCTED PER CALDWELL STANDARD DRAWING C-702 WITH THE REQUIREMENT OF 6" OF COMPACTED 3/4" CRUSHED GRAVEL UNDERNEATH.
- VERTICAL CURB & GUTTER: SHALL BE CONSTRUCTED PER CALDWELL STANDARD DRAWING C-701 WITH THE REQUIREMENT OF 6" OF COMPACTED 3/4" CRUSHED GRAVEL UNDERNEATH.
- SIDEWALK: SHALL BE CONSTRUCTED PER CALDWELL STANDARD DRAWING C-709 WITH THE REQUIREMENT OF 4" OF COMPACTED 3/4" CRUSHED GRAVEL UNDERNEATH. WIDER WIDTHS MAY BE REQUIRED AS DEEMED NECESSARY BY THE CITY ENGINEER ON CLASSIFIED STREETS.
- BASE, SUB-BASE AND SUBGRADE COMPACTION SHALL COMPLY WITH ISPMC SECTION 202.



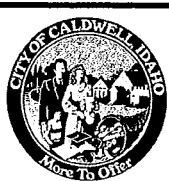
R-810A
N.T.S.
(PRINCIPAL ARTERIAL #1)



R-810A
N.T.S.
(PRINCIPAL ARTERIAL #2)

* **SIDEWALKS**

- THE DEVELOPER MAY CHOSE TO CONSTRUCT A 7.0' ATTACHED SIDEWALK OR A 5.0' DETACHED SIDEWALK (UNLESS OTHERWISE DIRECTED BY THE CITY).
- SOME PRINCIPAL ARTERIAL LOCATIONS WILL REQUIRE 10.0' SIDEWALKS PER CITY DIRECTIVE.



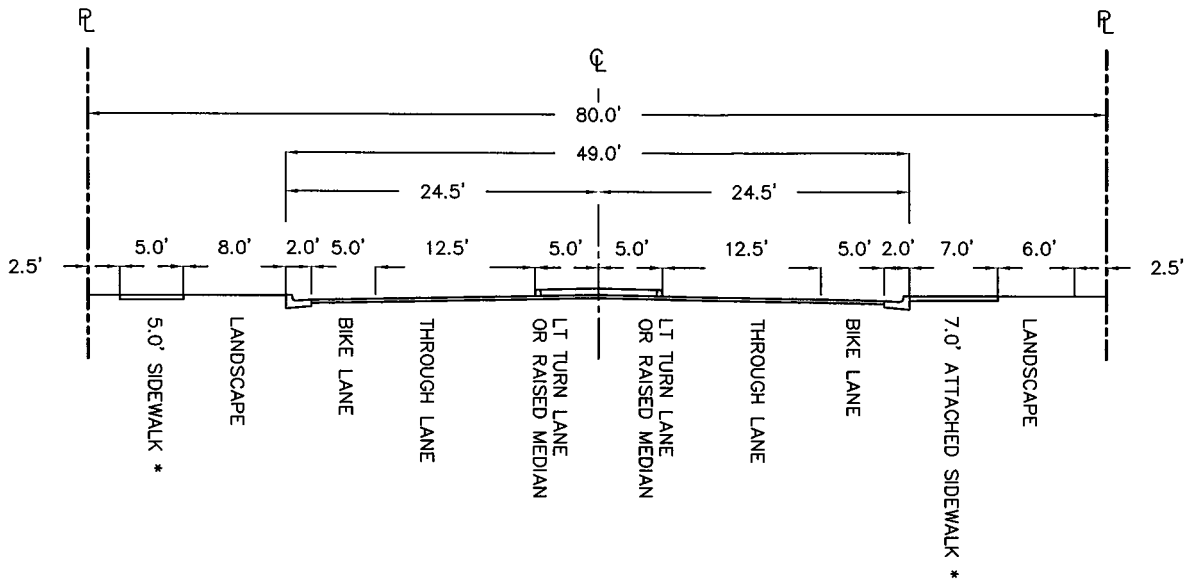
DATE: 9/10/15

SCALE: AS SHOWN

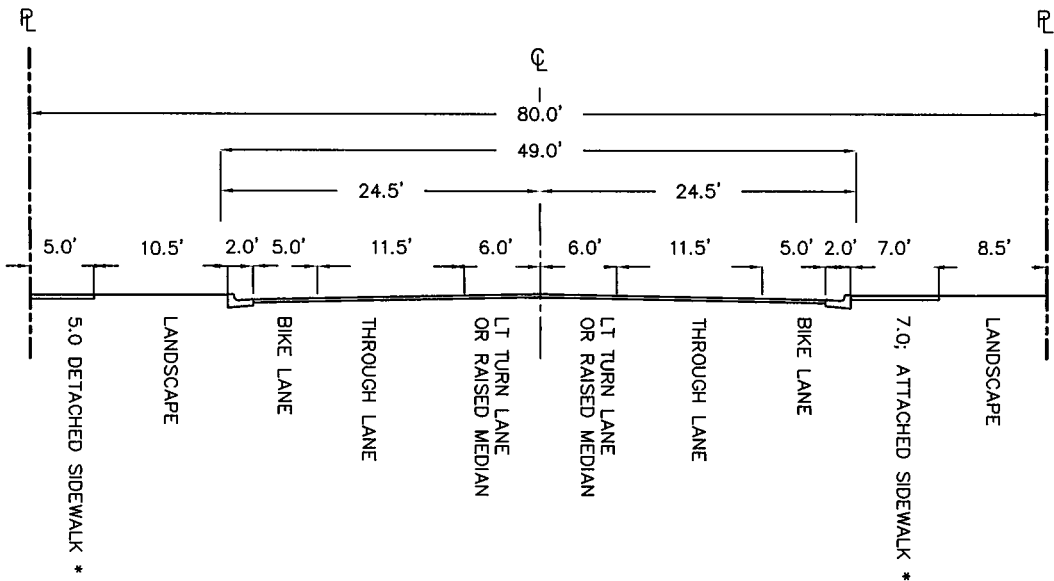
STANDARD STREET SECTION
PRINCIPAL ARTERIAL

STANDARD DRAWING NO.

R-810 A

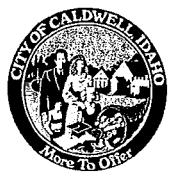


R-810B
N.T.S.
(MINOR ARTERIAL #1)

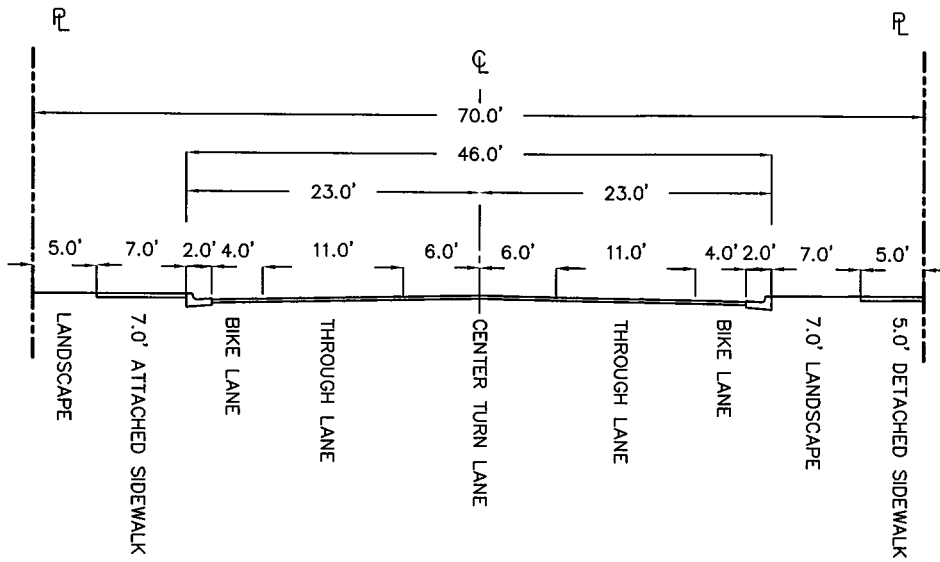


R-810B
N.T.S.
(MINOR ARTERIAL #2)

- * **SIDEWALKS**
- THE DEVELOPER MAY CHOSE TO CONSTRUCT A 7.0' ATTACHED SIDEWALK OR A 5.0' DETACHED SIDEWALK (UNLESS OTHERWISE DIRECTED BY THE CITY).
 - SOME MINOR ARTERIAL LOCATIONS WILL REQUIRE 10.0' SIDEWALKS PER CITY DIRECTIVE.



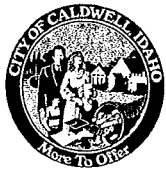
DATE: 9/15/2015	STANDARD STREET/SECTION MINOR ARTERIAL	STANDARD DRAWING NO.
SCALE: AS SHOWN		R-810 B



R-810C
 (COLLECTOR)
 N.T.S.

NOTE:

1. TURN LANE MAY BE ADDED AT INTERSECTIONS.
2. THE DEVELOPER MAY CHOSE TO CONSTRUCT A 7.0' ATTACHED SIDEWALK OR A 5.0' DETACHED SIDEWALK (UNLESS OTHERWISE DIRECTED BY THE CITY).



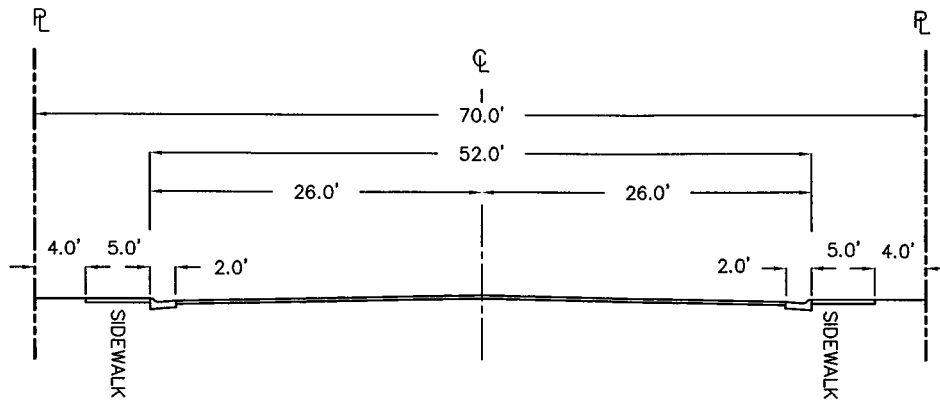
DATE: 9/15/2015

SCALE: AS SHOWN

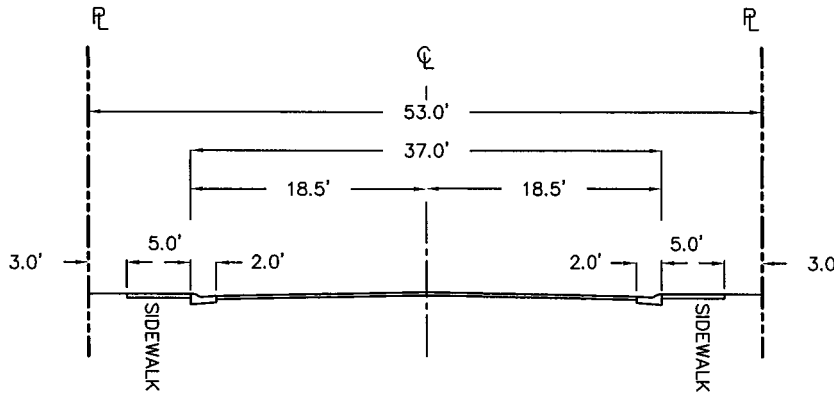
STANDARD STREET SECTION
 COLLECTOR

STANDARD DRAWING NO.

R-810 C



R-810D
N.T.S.
(INDUSTRIAL)



R-810E
N.T.S.
(RESIDENTIAL)



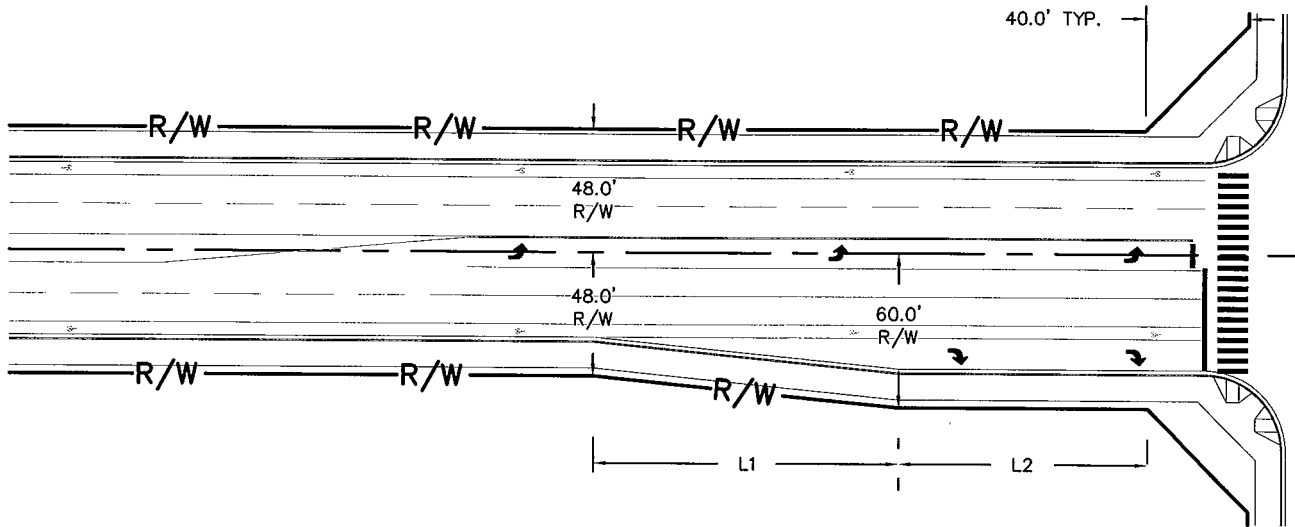
DATE: 9/11/2015

SCALE: AS SHOWN

STANDARD STREET SECTION
INDUSTRIAL/RESIDENTIAL

STANDARD DRAWING NO.

R-810 D-E

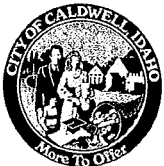


R-810F
 N.T.S.
 (PRINCIPAL ARTERIAL ROW FOR 6 LANES RT)

- NOTE:**
1. SEE TABLE BELOW FOR TAPER LENGTHS.
 2. RT LANE WIDTH = 12.0'.
 3. ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED AT THE DISCRETION OF THE CITY ENGINEER.

* TABLE TAKEN FROM POLICY ON GEOMETRICAL DESIGN OF HIGHWAYS AND STREETS (2011 EDITION TABLE 9-22) WITH ADDITIONAL INTERPOLATION

TAPER LENGTH TABLE		
SPEED (MPH)	L1 (FEET)	L2 (FEET)
20	72	48
25	72	48
30	72	48
35	96	74
40	120	115
45	120	180
50	180	205
55	180	310



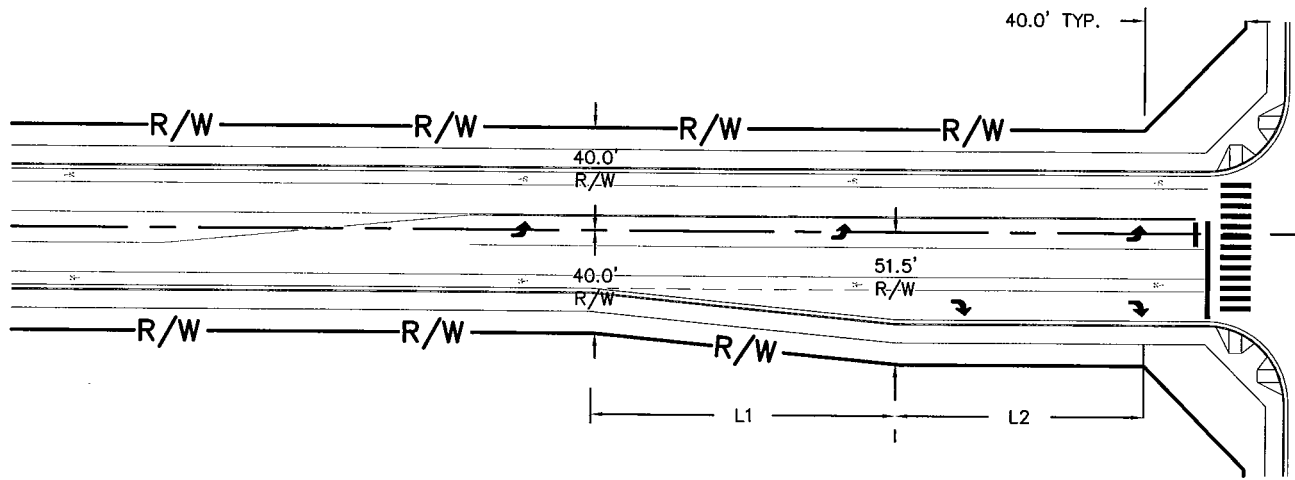
DATE: 9/16/2015

SCALE: AS SHOWN

ROW WIDTHS/6 LANE RT
 PRINCIPAL ARTERIAL

STANDARD DRAWING NO.

R-810 F



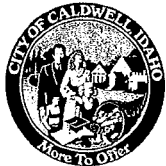
R-810G
 N.T.S.
 (MINOR ARTERIAL ROW FOR 4 LANES RT)

NOTE:

1. SEE TABLE BELOW FOR TAPER LENGTHS.
2. RT LANE WIDTH = 11.5'.
3. ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED AT THE DISCRETION OF THE CITY ENGINEER.

* TABLE TAKEN FROM POLICY ON GEOMETRICAL DESIGN OF HIGHWAYS AND STREETS (2011 EDITION TABLE 9-22) WITH ADDITIONAL INTERPOLATION

TAPER LENGTH TABLE		
SPEED (MPH)	L1 (FEET)	L2 (FEET)
20	72	48
25	72	48
30	72	48
35	96	74
40	120	115
45	120	180
50	180	205
55	180	310



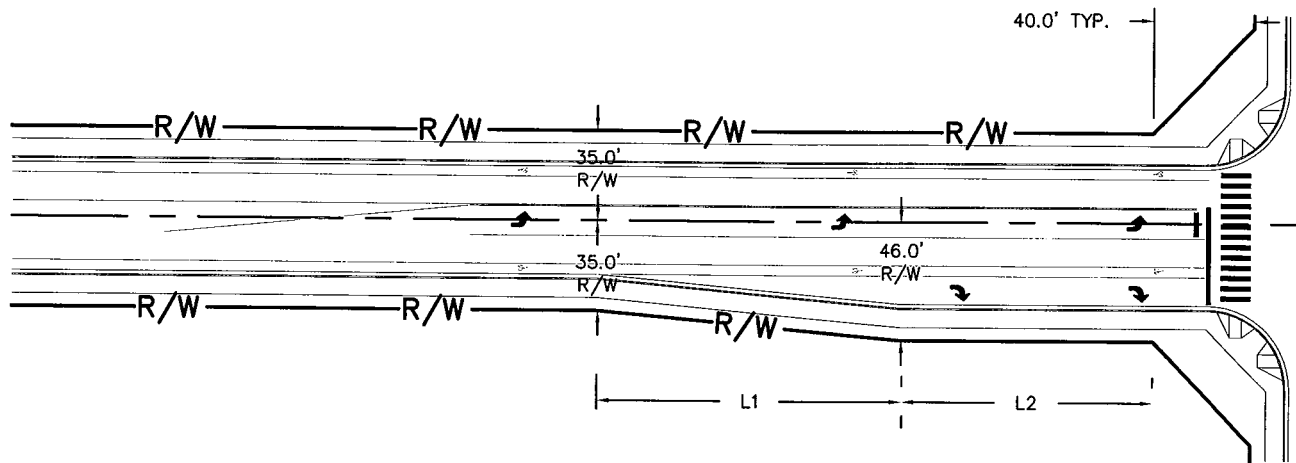
DATE: 9/16/2015

SCALE: AS SHOWN

ROW WIDTHS/4 LANE RT
 MINOR ARTERIAL

STANDARD DRAWING NO.

R-810 G



R-810H
 N.T.S.
 (COLLECTOR ROW FOR 4 LANES RT)

NOTE:

1. SEE TABLE BELOW FOR TAPER LENGTHS.
2. RT LANE WIDTH = 11.0'.
3. ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED AT THE DISCRETION OF THE CITY ENGINEER.

* TABLE TAKEN FROM POLICY ON GEOMETRICAL DESIGN OF HIGHWAYS AND STREETS (2011 EDITION TABLE 9-22) WITH ADDITIONAL INTERPOLATION

TAPER LENGTH TABLE		
SPEED (MPH)	L1 (FEET)	L2 (FEET)
20	72	48
25	72	48
30	72	48
35	96	74
40	120	115
45	120	180
50	180	205
55	180	310



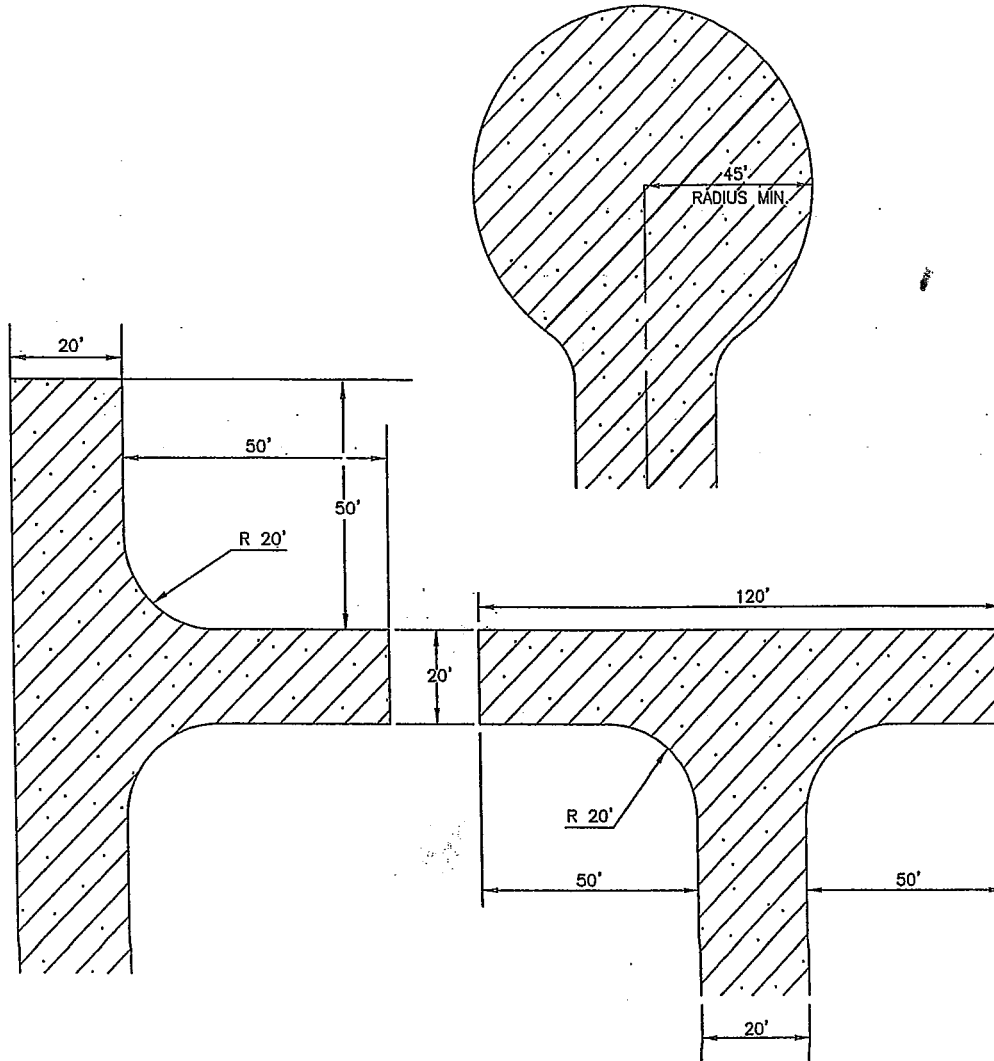
DATE: 9/16/2015

SCALE: AS SHOWN

ROW WIDTHS/4 LANE RT
COLLECTOR

STANDARD DRAWING NO.

R-810 H



NOTES:

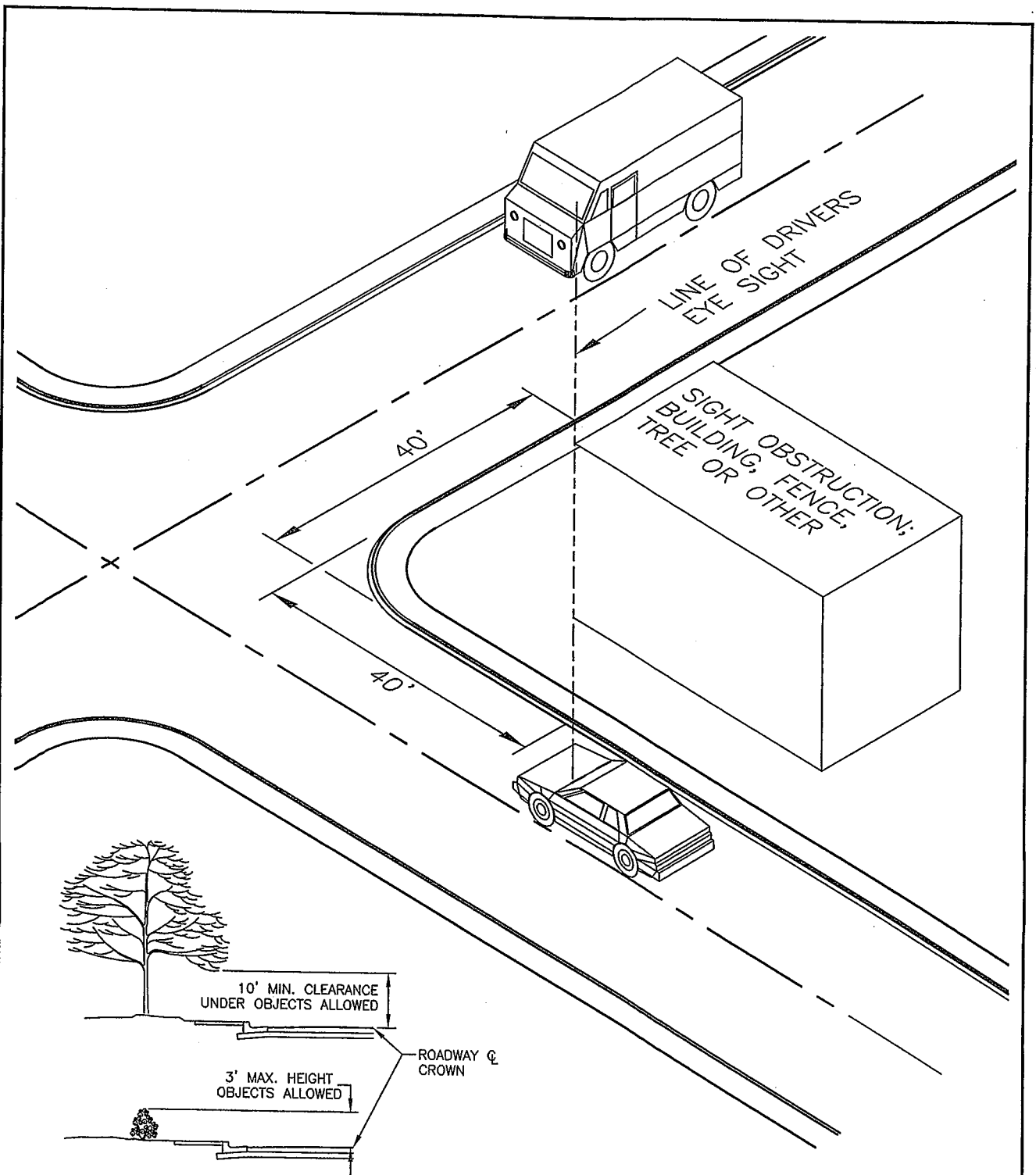
1. TEMPORARY TURN AROUND SHALL BE CONSTRUCTED ACCORDING TO CALDWELL STANDARD DRAWING R-810 USING ALL WEATHER STREET SECTION UNLESS OTHERWISE APPROVED OR DIRECTED.
2. PARKING WILL NOT BE ALLOWED WITHIN THE TURN AROUND.
3. USE OF THIS TURN AROUND AT ANY SPECIFIC SITE MUST BE APPROVED BY THE CITY FIRE MARSHALL AND THE CITY ENGINEER. DIMENSIONS MAY VARY DEPENDING ON SITE SPECIFIC USAGE.

0:\02104\000000\000000\000000.dwg

TURN AROUND
TEMPORARY

DATE:	03/01/04
REV. #	1
ACAD FILE:	R-811.DWG

R-811
STANDARD DRAWING NO.

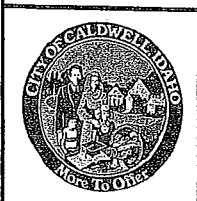


HEIGHT RESTRICTION WITHIN TRIANGLE

NOTE:

IDAHO STATE STATUTE 49-221:

"THE ABOVE SIGHT OBSTRUCTIONS SHALL NOT EXTEND MORE THAN THREE (3) FEET, OR LESS THAN TEN (10) FEET, IN HEIGHT ABOVE THE EXISTING CENTERLINE HIGHWAY ELEVATION WITHIN THE VISION TRIANGLE OF VEHICLE OPERATORS".



SIGHT VISION TRIANGLE
TRIANGLE

DATE:	03/01/04
REV. #	1
ACAD FILE:	R-812.DWG

R-812
STANDARD DRAWING NO.

CITY OF CALDWELL
QUICK REFERENCE
For

DIVISION 900 – PRESSURE IRRIGATION

This quick reference of specifications highlights some of the requirements for Public Works Construction within the jurisdiction of the City of Caldwell. This quick reference is intended for use only as a guide for the Designer and Contractor and not as a replacement to the Idaho Standards for Public Works Construction (ISPWC) or the City of Caldwell's Supplemental Specifications for the ISPWC. Please refer to those documents for more complete specifications.

1. Refer to the most recent edition of the Caldwell Municipal Irrigation District Supplemental Specifications to the ISPWC for all related sections.

CITY OF CALDWELL
QUICK REFERENCE
For

DIVISION 1100 – TRAFFIC

This quick reference of specifications highlights some of the requirements for Public Works Construction within the jurisdiction of the City of Caldwell. This quick reference is intended for use only as a guide for the Designer and Contractor and not as a replacement to the Idaho Standards for Public Works Construction (ISPWC) or the City of Caldwell's Supplemental Specifications for the ISPWC. Please refer to those documents for more complete specifications.

GENERAL

1. The contractor shall obtain an electrical permit from the City of Caldwell Building Department. All work to be performed and materials used shall be in accordance with the latest edition of the National Electric Code (N.E.C.). Contractors must furnish proof that all materials installed on the project meet this requirement at the request of the City Engineer. All street light footings must be inspected by the City prior to pouring concrete.
2. Within the City of Caldwell, Cleveland Boulevard, Blaine Street, Centennial Way, State Highway 19, and U.S. Hwy 20-26 are state rights-of-way and as such permits to work within the right-of-way shall be obtained from the Idaho Transportation Department (ITD) prior to any construction being performed therein.
3. Contractors shall obtain a Permit to Use Right-of-Way from the City of Caldwell prior to any construction within City rights-of-way.
4. Decorative streetlights are required in the downtown area delineated within the perimeter of 3rd to 10th and Cleveland to Albany. They are also required on Caldwell's "Gateway" streets: Blaine St. and Cleveland Blvd. from State Highway 19 to 21st Ave, 21st Ave. from Cleveland Blvd. to U.S. Interstate 84, and 10th Ave. from U.S. Interstate 84 to Cleveland Blvd.
5. Decorative streetlights and fixtures in subdivisions deviating from specified equipment are allowed under the conditions they provide equivalent service, are approved by the City Engineering Department, are perpetually maintained by the homeowner's association and are governed by an approved agreement binding upon the homeowner's association.
6. Outlets are required on all decorative street lights in the areas outlined in note #4 above unless otherwise specified by the City Engineering Department.
7. Record drawings for all street lights installed shall be submitted to and approved by the Engineering Department and shall comply with all requirements as outlined in City code section 11-04-06.
8. All construction traffic control shall comply with the most current addition of the Manual for Uniform Traffic Control Devices (MUTCD).

CITY OF CALDWELL
QUICK REFERENCE
For

DIVISION 1100 – TRAFFIC

STREETLIGHTS

1. All street light locations shall be approved by the Engineering Department in conjunction with the plan review process.
2. All materials such as streetlights, poles and appurtenances shall be approved by the City of Caldwell. All street light installations shall comply with City specifications and details.
3. Standard street light pole spacing shall not exceed 350 feet. Decorative pole spacing shall not exceed 60 feet. A street light shall be installed at each intersection within or adjacent to the development. The design engineer should make an effort to properly space/stagger street lights with those that may be existing, (or proposed) across the street and keep them within the maximum 350' spacing. The spacing distance requirement accounts for one side of the street only and does not take into account street lights on the other side of the street. City may comment during plan review specific street light placement if necessary to meet the intent of these spacing requirements.

STREETLIGHT POWER SUPPLY

1. Street lights intended for dedication to the City shall be powered through a dedicated meter. Connection to power source must be approved by Idaho Power Company.
2. The street light power supply shall include conduit, wiring, junction boxes and any required wall penetration and sealing.
3. The electrical service panel breaker box shall consist of a 200 amp, single phase box and shall provide sufficient circuits per the N.E.C. for the number of street lights required.
4. For decorative type poles, electrical power shall be routed through a light sensing switch, which shall be mounted on the side of the service panel.
5. All electrical conduits shall meet N.E.C. requirements for size and type of material used. Electrical conduits shall be placed parallel with and within two (2) feet of the back of sidewalk. All electrical conduits shall be installed per N.E.C. requirements with buried warning tape 12-inches above the conduit. All conduits shall have pull cords installed. All pull cords shall be "Dottie" brand 6502P, 2-ply, 6500 lb. pull-strength cords or approved equal.

CITY OF CALDWELL
QUICK REFERENCE
For

DIVISION 1100 – TRAFFIC

6. The standard wiring shall consist of a three-wire circuit plus ground. All wire shall be copper, adequately sized to handle the connected load and to meet N.E.C. requirements. Wiring for alternate phases between poles is required for load diversification.
7. Junction boxes shall be located within 5-feet of the base of the light pole. Junction boxes shall be traffic rated if located in a driveway or alley approach. The lid on the junction box shall be labeled "POWER" or "ELECTRICAL". If pull boxes are used, they shall be electrical type pull boxes and lids shall be labeled "ELECTRICAL".

TESTING

1. Prior to dedication to the City, the Contractor shall submit to the City Engineer, written approval from the City Electrical Inspector that the lighting system components that will be operated and maintained by the City of Caldwell have been installed in accordance with the requirements of all applicable state and national electrical codes. After such submittal, all new or replaced streetlights shall be energized and their operation demonstrated in the presence of the City Inspector.

STREET SIGNS

1. Wood posts are not allowed for permanent new construction. They may be used for temporary signage or traffic control signage.
2. All new sign posts shall be constructed of perforated 2-inch telespar square tube steel. All tube steel posts shall have a V-Loc base with wedge.
3. Street name signs shall be 9-inch extruded blanks. Street name letters shall be 6-inch. Street designation and street direction letters shall be 3-inch.
4. Street name signs shall not have borders.

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 1100 – TRAFFIC

SECTION 1102 – STREET LIGHTING, PART 1.4 – SUBMITTALS

Add paragraph E:

- E. All street light locations shall be approved by the City Engineer prior to installation.**

Add paragraph F:

- F. All materials such as streetlights, poles and appurtenances shall be approved by the City of Caldwell.**

SECTION 1102 – STREET LIGHTING, PART 1.7 – GENERAL RESTRICTIONS

Add paragraph C:

- C. The Contractor shall obtain an Electrical Permit from the City of Caldwell building Department. All work to be performed and materials used shall be in accordance with the latest edition of the National Electric Code (N.E.C.). Contractors must furnish proof that all materials installed on the project meet this requirement at the request of the City Engineer. All street light footings must be inspected by the City prior to pouring concrete.**

Add paragraph D:

- D. Within the City of Caldwell, Cleveland Boulevard, Blaine Street, Centennial Way, State Highway 19, and U.S. Hwy 20-26 are state rights-of-way and as such permits to work within the right-of-way shall be obtained from the Idaho Transportation Department (ITD) prior to any construction being performed therein.**

Add paragraph E:

- E. Contractors shall obtain a Permit to Use Right-of-Way from the City of Caldwell prior to any construction within City rights-of-way.**

SECTION 1102 – STREET LIGHTING, PART 2.1 – GENERAL

Add paragraph D:

- D. Street lights intended for dedication to the City shall be powered through a dedicated meter. Connection to power source must be approved by Idaho Power Company.**

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 1100 – TRAFFIC

SECTION 1102 – STREET LIGHTING, PART 2.2 – JUNCTION BOXES

Add paragraph C:

- C. Junction and pull boxes shall be traffic rated if located in a driveway or alley approach. The lid on the junction box shall be labeled “POWER” or “ELECTRICAL”.**

SECTION 1102 – STREET LIGHTING, PART 2.4 – CONDUCTOR

Add paragraph D:

- D. The standard wiring shall consist of a three-wire circuit plus ground. All wire shall be copper, adequately sized to handle the connected load and to meet N.E.C. requirements. Wiring for alternate phases between poles is required for load diversification.**

SECTION 1102 – STREET LIGHTING, PART 2.5 – CONDUIT

Add paragraph C:

- C. All electrical conduits shall meet N.E.C. requirements for size and type of material used. Electrical conduits shall be placed parallel with and within two (2) feet of the back of sidewalk. All electrical conduits shall be installed per N.E.C. requirements with buried warning tape 12-inches above the conduit. All conduits shall have pull cords installed. All pull cords shall be “Dottie” brand 6502P, 2-ply, 6500 lb. pull-strength cords or approved equal.**

SECTION 1102 – STREET LIGHTING, PART 2.6 – PHOTOCELLS

Add paragraph C:

- C. Photocontrol shall be DLL Elite as specified in Caldwell Standard Drawing SL-1135 or approved equal.**

Add paragraph D:

- D. For decorative type poles, electrical power shall be routed through a light sensing switch, which shall be mounted on the side of the service panel.**

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 1100 – TRAFFIC

SECTION 1102 – STREET LIGHTING, PART 2.10 – METAL POLES

Add paragraph F:

- F. Standard street light pole spacing shall not exceed 350 feet. Decorative pole spacing shall not exceed 60 feet. A street light shall be installed at each intersection within or adjacent to the development. See City Standard Drawings SI-1133, SL-1134, and SL-1135**

SECTION 1102 – STREET LIGHTING, PART 2.16 – SERVICE PEDESTAL

Delete paragraph I and substitute the following:

- I. The electrical service meter and panel breaker box shall consist of a 200 amp, single phase box and shall provide sufficient circuits per the N.E.C. for the number of street lights required.**

SECTION 1102 – STREET LIGHTING, PART 2.17 – LIGHT FIXTURES

Delete paragraph A and substitute the following:

- A. City Lighting shall be in accordance with City Standard Details SL-1134 and SL-1135.**

Add paragraph G:

- G. Fixtures for poles other than decorative type poles or Idaho Power poles shall be per City Standard Detail SL-1135.**

Add paragraph H:

- H. Fixtures and poles for decorative type poles shall be per City Standard Detail SL-1134.**

SECTION 1102 – STREET LIGHTING, PART 3.2 – JUNCTION BOX INSTALLATION

Delete paragraph A and substitute the following:

- A. Junctions boxes shall be located within 5-feet of the base of the light pole.**

SECTION 1105 – PERMANENT TRAFFIC SIGNING, PART 1.3 – REFERENCES

Delete paragraph B.

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 1100 – TRAFFIC

SECTION 1105 – PERMANENT TRAFFIC SIGNING, PART 1.4 – SUBMITTALS

Delete paragraph B.

SECTION 1105 – PERMANENT TRAFFIC SIGNING, PART 2.1 – SIGN POSTS

Delete section A and substitute the following:

- A. Wooden sign posts are not allowed for new construction.**

SECTION 1105 – PERMANENT TRAFFIC SIGNING, PART 2.1 – SIGN POSTS

Amend paragraph B by adding items 3 and 4:

- 3. Posts shall be perforated 2-inch square telespar posts.**
- 4. Brackets designed to fit extruded blanks are required for all street name signs. For street name signs less than 40 inches in length, the bracket shall be 5.25 inches. Street name signs 40 inches and longer require a 12 inch bracket. Street name signs shall be mounted at the top of the post using a 2-inch cap with a 5.25-inch receiver. Additional signs shall be mounted with 90-degree (or relevant angle) crosspiece brackets. All brackets shall be approved by the City Engineer.**

Amend paragraph C as follows:

- C. Anchor assembly shall be V-Loc Base with Wedge. Use #200-VS1 Concrete V-Loc for installation in sidewalk, or #200-VS3 Loose Soil V-Loc for other applications.**

SECTION 1105 – PERMANENT TRAFFIC SIGNING, PART 2.2 – SIGNS

Amend paragraph F as follows:

- F. All street name signs shall be 9-inch extruded blanks. Street name signs shall have High Intensity Prismatic green sheeting on both sides of blank, with no border. Street names shall be 6” high letters, Engineer Grade or High Intensity Prismatic white Highway Font Series B. Street designation (Ave., Blvd., Ct., etc...) and street direction (N, S, E, or W) shall be 3” high letters, Engineer Grade or High Intensity Prismatic white Highway Font Series B. Letter width and spacing may not be reduced by more than 20 percent.**

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 1100 – TRAFFIC

Add paragraph G:

- G. Standard STOP and warning sign sizes shall be 30 inch x 30 inch. Larger sizes may be required at specific locations, as approved by the City Engineer.**

Add paragraph H:

- H. All standard highway signs shall have High Intensity Prismatic sheeting.**

Add paragraph I:

- I. Street name signs shall be 9 feet – 0 inches above the sidewalk or edge of pavement, measured to the bottom of the sign. STOP signs shall be 7 feet – 0 inches above the sidewalk or edge of pavement, measured to the bottom of the sign.**

SECTION 1105 – PERMANENT TRAFFIC SIGNING, PART 3.2 – SIGN INSTALLATION

Delete paragraph A.

Delete paragraph B-2, and substitute the following:

- 2. Install sign post with V-Loc base per manufacturer’s recommendations and per City Standard Drawing SG-1130.**

Delete paragraph B-4.

Delete paragraph B-5.

SECTION 1105 – PERMANENT TRAFFIC SIGNING, PART 4.1 – MEASUREMENT AND PAYMENT

Delete paragraph B.

DIVISION 1100 – TRAFFIC, STANDARD DRAWINGS

Delete Standard Drawings.

SD-1118 – Standard 25’ Wood Pole Street Light with 6’ Mast Arm

SD-1119 – Street Light Installation 25’ Standard Direct Burial

SD-1128 – Construction Traffic Control

CITY OF CALDWELL
SUPPLEMENTAL SPECIFICATIONS
for the ISPWC

DIVISION 1100 – TRAFFIC

SD-1129 – Construction Traffic Control

SD-1130 – Sign Installation

SD-1131 – Sign Installation

DIVISION 1100 – TRAFFIC, STANDARD DRAWINGS

Insert the following Caldwell Standard Drawings:

SG-1130 – Sign Installation

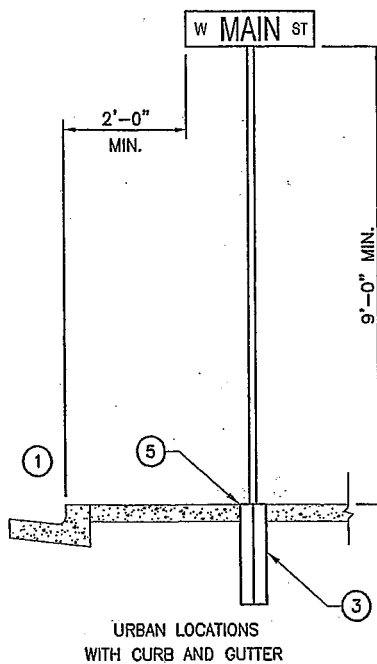
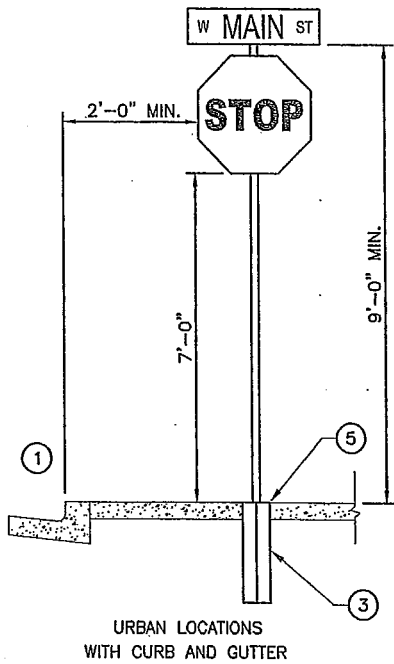
SL-1133 – Street light Spacing Schedule

SL-1134 – Decorative Streetlight and pole

SL-1135 – Standard Streetlight and Pole

SL-1136 – Streetlight Conduit

End Division 1100 -

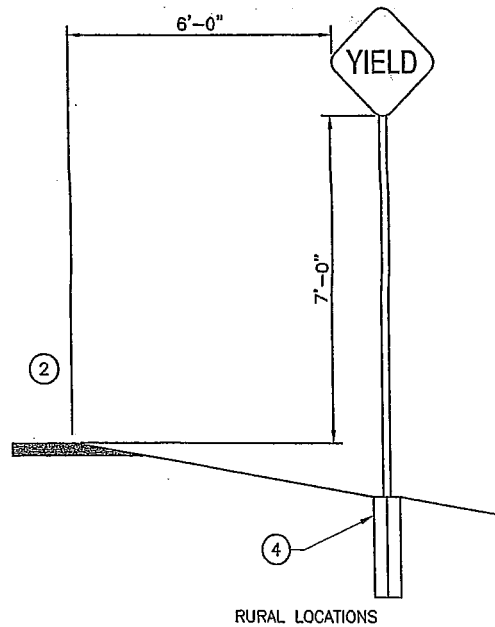


LEGEND:

- ① FACE OF CURB
- ② NORMAL SHOULDER LOCATION
- ③ V-LOC BASE #200-VS1
- ④ V-LOC BASE #200-VS3
- ⑤ BASE FLUSH WITH TOP OF SIDEWALK

NOTE:

1. STREET NAME SIGN SHALL BE A MIN. OF 9'-0" ABOVE THE SIDEWALK OR EDGE OF PAVEMENT, MEASURED TO THE BOTTOM OF THE SIGN.
2. IF SIGN POSTS ARE PLACED IN SIDEWALK, THE SIDEWALK SHALL BE WIDENED TO ALLOW FOR A 3-FOOT MINIMUM CLEAR PATHWAY AROUND THE SIGN POST IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA).



TYPICAL INSTALLATION FOR SIGNS

N.T.S.



SIGN INSTALLATION

DATE:	2/8/07	SG-1130
REV #:	2	
ACAD FILE:	SG-1130.DWG	
		STANDARD DRAWING NO.

NOTES

1. ALL STREET LIGHT LOCATIONS SHALL BE APPROVED BY THE CITY OF CALDWELL PRIOR TO INSTALLATION.
2. ALL MATERIALS SUCH AS STREETLIGHTS, POLES AND APPURTENANCES SHALL BE APPROVED BY THE CITY OF CALDWELL. ALL STREET LIGHT INSTALLATIONS (EXCEPT DECORATIVE TYPE POLES) SHALL INCLUDE BULB, BALLAST, AND LIGHT SENSING EQUIPMENT THAT MEETS IDAHO POWER COMPANY STANDARDS.
3. POLES OTHER THAN IDAHO POWER CO. POLES OR DECORATIVE TYPE POLES SHALL BE SSS4A20SF OR SSS4A25SF BY COOPER LIGHTING OR APPROVED EQUAL. POLE SPACING SHALL NOT EXCEED 350 FEET. FIXTURES SHALL BE HP-HR-AC-150-MT-PER "LUMARK", AS MANUFACTURED BY COOPER LIGHTING WITH BF SERIES, "TWIST LOCK PHOTOCELL", OR APPROVED EQUAL.
4. DECORATIVE TYPE POLES SHALL BE MARINER SERIES POLE NO. MR14F5/19-CA-RS/GFI/WPC BY ANTIQUE STREET LAMPS, INC. DECORATIVE POLE SPACING SHALL NOT EXCEED 60 FEET.
5. BULB, BALLAST AND FIXTURE SHALL BE SIZED FOR 100 WATT HIGH PRESSURE SODIUM FOR RESIDENTIAL AREAS. WATTAGE MAY BE INCREASED TO 200 WATTS FOR STREETLIGHTS FRONTING ARTERIAL AND COLLECTOR STREETS AND FOR CRITICAL INTERSECTIONS AS DETERMINED BY THE CITY ENGINEER. ANY INCREASES IN WATTAGE ABOVE 100 WATTS SHALL BE PRE-APPROVED BY THE CITY ENGINEER FOR ANY FACILITIES INTENDED FOR DEDICATION TO THE CITY. METAL HALIDE BULBS MAY BE USED ON ARTERIAL AND COLLECTOR FRONTAGES OR AT INTERSECTIONS WITH PRIOR APPROVAL OF THE CITY ENGINEER.
6. THE STREET LIGHT POWER SUPPLY SHALL INCLUDE CONDUIT, WIRING, JUNCTION BOXES AND ANY REQUIRED WALL PENETRATION AND SEALING.
7. THE ELECTRICAL SERVICE PANEL BREAKER BOX SHALL CONSIST OF A 200 AMP, SINGLE PHASE BOX AND SHALL PROVIDE SUFFICIENT CIRCUITS PER THE N.E.C. FOR THE NUMBER OF STREET LIGHTS REQUIRED.
8. FOR DECORATIVE TYPE POLES, ELECTRICAL POWER SHALL BE ROUTED THROUGH A LIGHT SENSING SWITCH, WHICH SHALL BE MOUNTED ON TOP OF THE SERVICE PANEL.
9. ALL ELECTRICAL CONDUITS SHALL MEET N.E.C. REQUIREMENTS FOR SIZE AND TYPE OF MATERIAL USED. ELECTRICAL CONDUITS SHALL BE PLACED PARALLEL WITH AND WITHIN TWO (2) FEET OF THE BACK OF SIDEWALK. ALL ELECTRICAL CONDUITS SHALL HAVE A MINIMUM BURIED DEPTH OF 32-INCHES AND SHALL BE MARKED WITH BURIED WARNING TAPE 12-INCHES ABOVE THE CONDUIT. ALL CONDUITS SHALL HAVE PULL CORDS INSTALLED. ALL PULL CORDS SHALL BE "DOTTIE" BRAND 6502P, 2-PLY, 6500 LB. PULL-STRENGTH CORDS OR APPROVED EQUAL.
10. THE STANDARD WIRING SHALL CONSIST OF A THREE-WIRE CIRCUIT PLUS GROUND. ALL WIRE SHALL BE COPPER, ADEQUATELY SIZED TO HANDLE THE CONNECTED LOAD AND TO MEET N.E.C. REQUIREMENTS. WIRING FOR ALTERNATE PHASES BETWEEN POLES IS REQUIRED FOR LOAD DIVERSIFICATION.
11. JUNCTION BOXES SHALL BE LOCATED WITHIN 5- FEET OF THE BASE OF THE LIGHT POLE. JUNCTION BOXES SHALL BE TRAFFIC RATED IF LOCATED IN A DRIVEWAY OR ALLEY APPROACH. THE LID ON THE JUNCTION BOX SHALL BE LABELED "POWER" OR "ELECTRICAL". IF PULL BOXES ARE USED, THEY SHALL BE ELECTRICAL TYPE PULL BOXES AND LIDS SHALL BE LABELED "ELECTRICAL".
12. PRIOR TO DEDICATION TO THE CITY, THE CONTRACTOR SHALL SUBMIT TO THE CITY ENGINEER, WRITTEN APPROVAL FROM THE IDAHO STATE ELECTRICAL INSPECTOR THAT THE LIGHTING SYSTEM COMPONENTS THAT WILL BE OPERATED AND MAINTAINED BY THE CITY OF CALDWELL HAVE BEEN INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF ALL APPLICABLE STATE AND NATIONAL ELECTRICAL CODES. AFTER SUCH SUBMITTAL, ALL NEW OR REPLACED STREETLIGHTS SHALL BE ENERGIZED AND THEIR OPERATION DEMONSTRATED IN THE PRESENCE OF THE CITY ENGINEER.

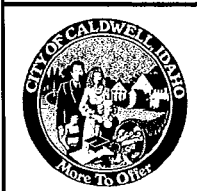
LUMAIRE REQUIREMENTS

STREET DESIGNATION	LUMINAIR MOUNTING HEIGHT	LAMP*** WATTAGE	** MAXIMUM POLE SPACING AT C OF ROADWAY	STREET WIDTH	MAST ARM LENGTH
RESIDENTIAL	20'	52	350'	37'-0" TBC TO TBC	1'
INDUSTRIAL	25'	105	350'	52'-0" TBC TO TBC	5'
COLLECTOR	25'	105	350'	46'-0" TBC TO TBC	5'
MINOR ARTERIAL	25'	105	350'	49'-0" TBC TO TBC	TBD
PRINCIPAL ARTERIAL	25'	105	350'	70'-0" TBC TO TBC	TBD
DECORATIVE* POLES	14'	100	60'	VARIES	NA

* SEE SHEET SL-1134 FOR DECORATIVE STREETLIGHT LOCATION REQUIREMENTS.

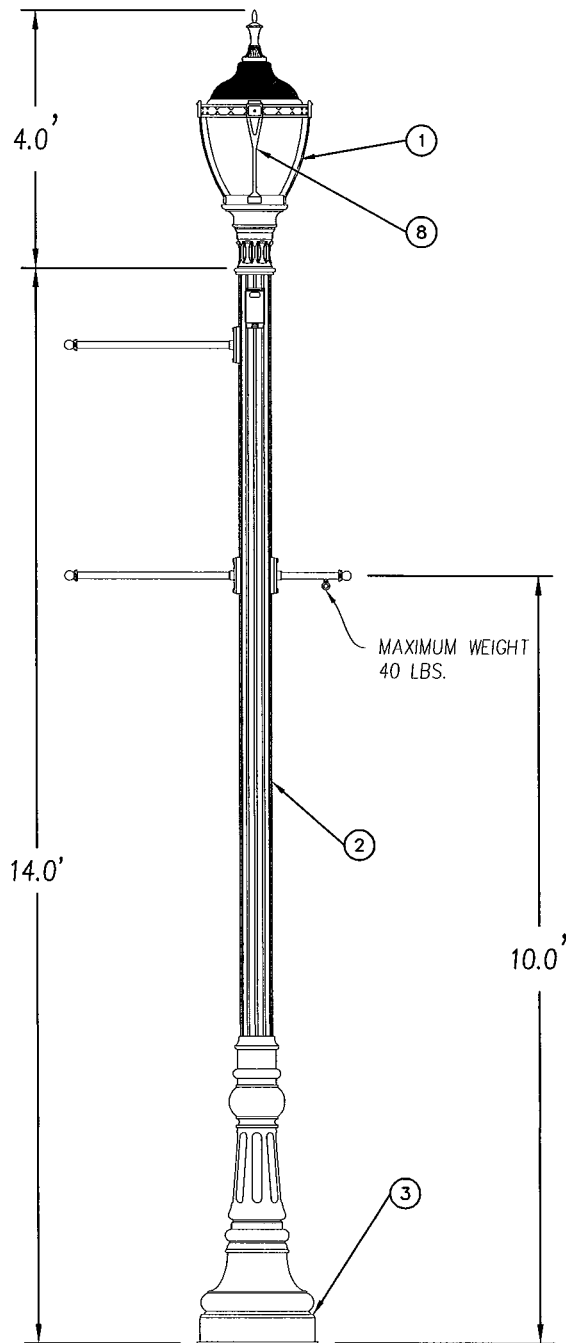
** SPACING TO BE STAGGERED ON OPPOSITE SIDE OF STREET INTERVALS, EXCEPT ON CURVES WHERE SPACING SHALL BE DETERMINED BY THE CITY ENGINEER.

*** PER CALDWELL STANDARD DETAIL SL-1134 & SL-1135



STREET LIGHT
SPACING SCHEDULE

DATE:	9/21/2015	SL-1133
REV. #	1	
ACAD FILE:	SL-1133.DWG	STANDARD DRAWING NO.

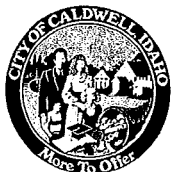
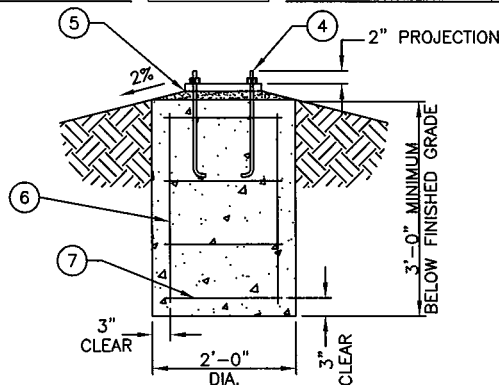


LEGEND:

- ① FIXTURE. MAM30/CS-M175/QV-PEC2-F2 BY ANTIQUE STREET LAMPS, INC. OR APPROVED EQUAL
- ② POST SHALL BE ALL ALUMINUM, TAPERED AND FLUTED WITH A CAST ALUMINUM BASE AND 5" DIA. FLUTED SHAFT WITH 3" TENON FOR FIXTURE MOUNTING. A DOOR SHALL BE LOCATED IN THE BASE FOR ANCHORAGE AND WIRING ACCESS. A GFI RECEPTACLE W/ COVER SHALL BE LOCATED NEAR THE POST TOP. POLE SHALL BE MARINER SERIES POLE NO. MR14F5/19-CA-RS/GFI/WPC BY ANTIQUE STREET LAMPS INC. OR EQUAL. 2"x4" HAND HOLE ASSEMBLY
- ③ 19" DIA. BASE
- ④ (4) ½" DIA. x 18" LONG HOT-DIPPED GALVANIZED L-TYPE ANCHOR BOLTS WITH 2" MIN. PROJECTION EACH
- ⑤ LEVEL AND GROUT PER LIGHT POLE MFG. RECOMMENDATIONS
- ⑥ (4) #4 REBAR VERTICALS
- ⑦ #4 REBAR HOOPS 18" DIA. @10" O.C.
- ⑧ BULB SHALL BE LED-8023E57 120-277VAC, NON DIMMABLE (USA) BY LIGHT EFFICIENT DESIGN OR EQUAL APPROVED BY CITY OF CALDWELL

NOTES:

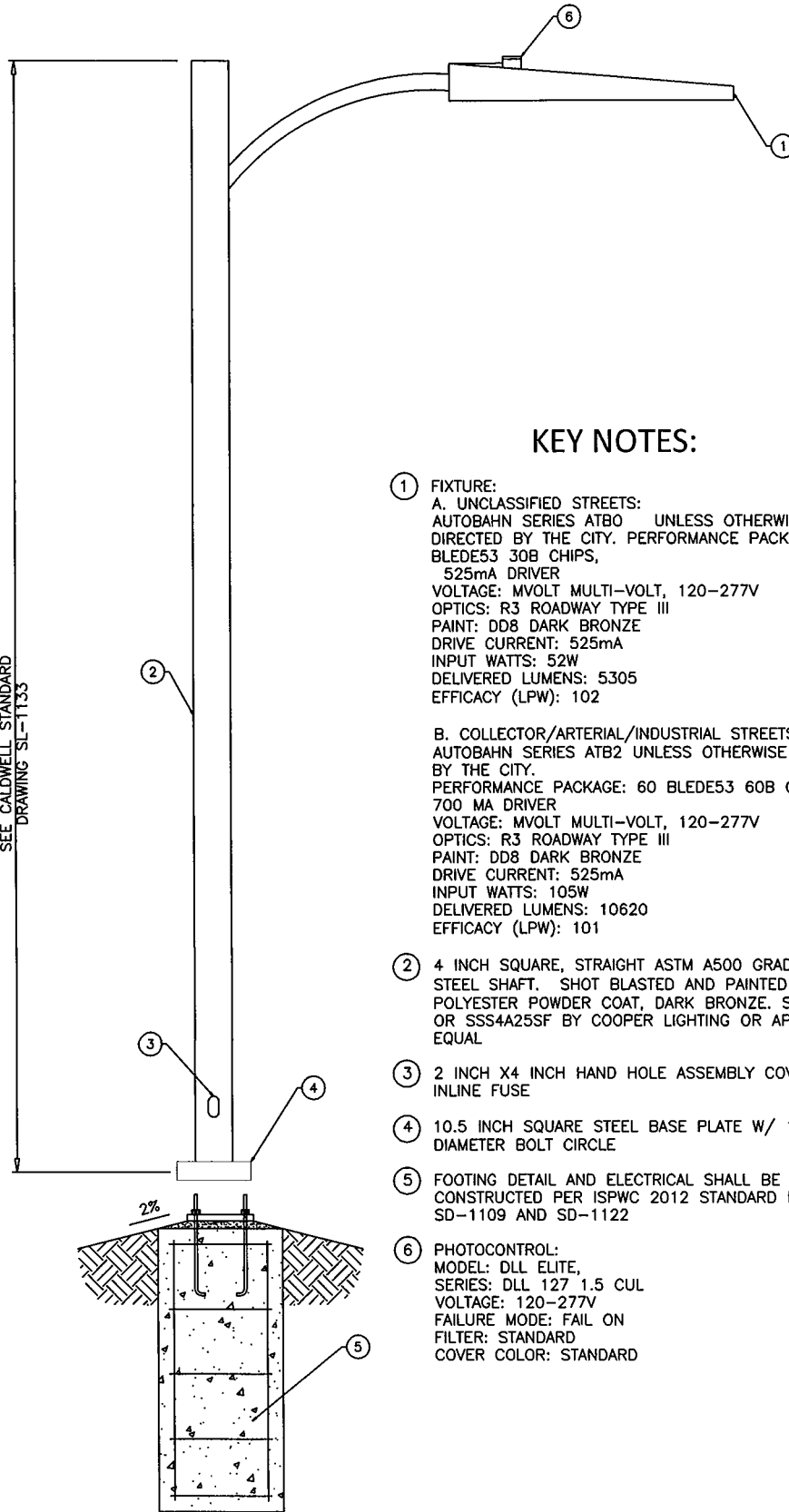
1. DECORATIVE STREETLIGHTS ARE REQUIRED IN THE DOWNTOWN AREA DELINEATED WITHIN THE PERIMETER OF 3rd TO 10th AND CLEVELAND TO ALBANY. THEY ARE ALSO REQUIRED ON CALDWELL'S "GATEWAY" STREETS: BLAINE FROM 10th TO 20th, CLEVELAND FROM SIMPLOT AVE. TO HOMEDALE, 21st AVE. BETWEEN FRANKLIN AND CLEVELAND AND 10th AVE. SOUTH OF I-84 TO KARCHER. SEE GATEWAY STREET MAP IN THE LANDSCAPE ORDINANCE FOR MORE INFORMATION.
2. POST AND FIXTURE SHALL BE FURNISHED WITH A "VERDE GREEN" POWDER COAT FINISH. ALL HARDWARE SHALL BE STAINLESS STEEL. ALL EXTERIOR HARDWARE SHALL BE TAMPER RESISTANT.
3. FOOTING DETAIL AND ELECTRICAL SHALL BE CONSTRUCTED PER ISPMC 2012 STANDARD DETAIL SD-1109, SD-1117 AND SD-1122



DECORATIVE
STREETLIGHT POLE

DATE:	9/22/14	SL-1134
REV. #	1	
ACAD FILE:	SL-1134.DWG	STANDARD DRAWING NO.

20' OR 25'
SEE CALDWELL STANDARD
DRAWING SL-1133



KEY NOTES:

- ① FIXTURE:
 A. UNCLASSIFIED STREETS:
 AUTOBAHN SERIES ATBO UNLESS OTHERWISE DIRECTED BY THE CITY. PERFORMANCE PACKAGE: 30 BLEDE53 308 CHIPS, 525mA DRIVER
 VOLTAGE: MVOLT MULTI-VOLT, 120-277V
 OPTICS: R3 ROADWAY TYPE III
 PAINT: DD8 DARK BRONZE
 DRIVE CURRENT: 525mA
 INPUT WATTS: 52W
 DELIVERED LUMENS: 5305
 EFFICACY (LPW): 102

 B. COLLECTOR/ARTERIAL/INDUSTRIAL STREETS:
 AUTOBAHN SERIES ATB2 UNLESS OTHERWISE DIRECTED BY THE CITY.
 PERFORMANCE PACKAGE: 60 BLEDE53 60B CHIPS, 700 MA DRIVER
 VOLTAGE: MVOLT MULTI-VOLT, 120-277V
 OPTICS: R3 ROADWAY TYPE III
 PAINT: DD8 DARK BRONZE
 DRIVE CURRENT: 525mA
 INPUT WATTS: 105W
 DELIVERED LUMENS: 10620
 EFFICACY (LPW): 101
- ② 4 INCH SQUARE, STRAIGHT ASTM A500 GRADE "B" STEEL SHAFT. SHOT BLASTED AND PAINTED W/ POLYESTER POWDER COAT, DARK BRONZE. SSS4A20SF OR SSS4A25SF BY COOPER LIGHTING OR APPROVED EQUAL
- ③ 2 INCH X4 INCH HAND HOLE ASSEMBLY COVERING INLINE FUSE
- ④ 10.5 INCH SQUARE STEEL BASE PLATE W/ 11 INCH DIAMETER BOLT CIRCLE
- ⑤ FOOTING DETAIL AND ELECTRICAL SHALL BE CONSTRUCTED PER ISPCW 2012 STANDARD DETAIL SD-1109 AND SD-1122
- ⑥ PHOTOCONTROL:
 MODEL: DLL ELITE,
 SERIES: DLL 127 1.5 CUL
 VOLTAGE: 120-277V
 FAILURE MODE: FAIL ON
 FILTER: STANDARD
 COVER COLOR: STANDARD

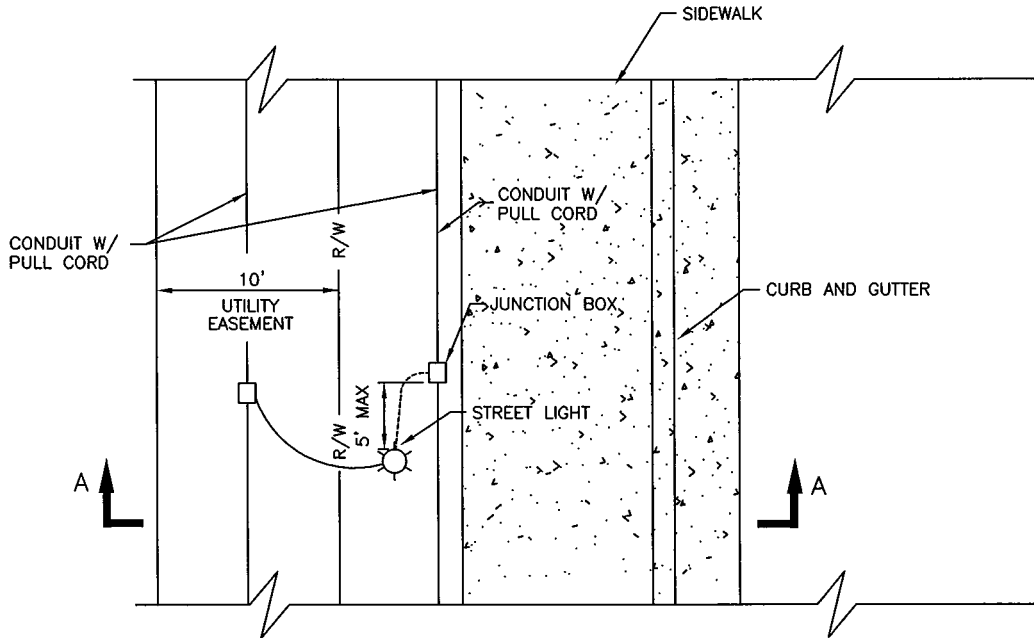


STANDARD
STREETLIGHT POLE

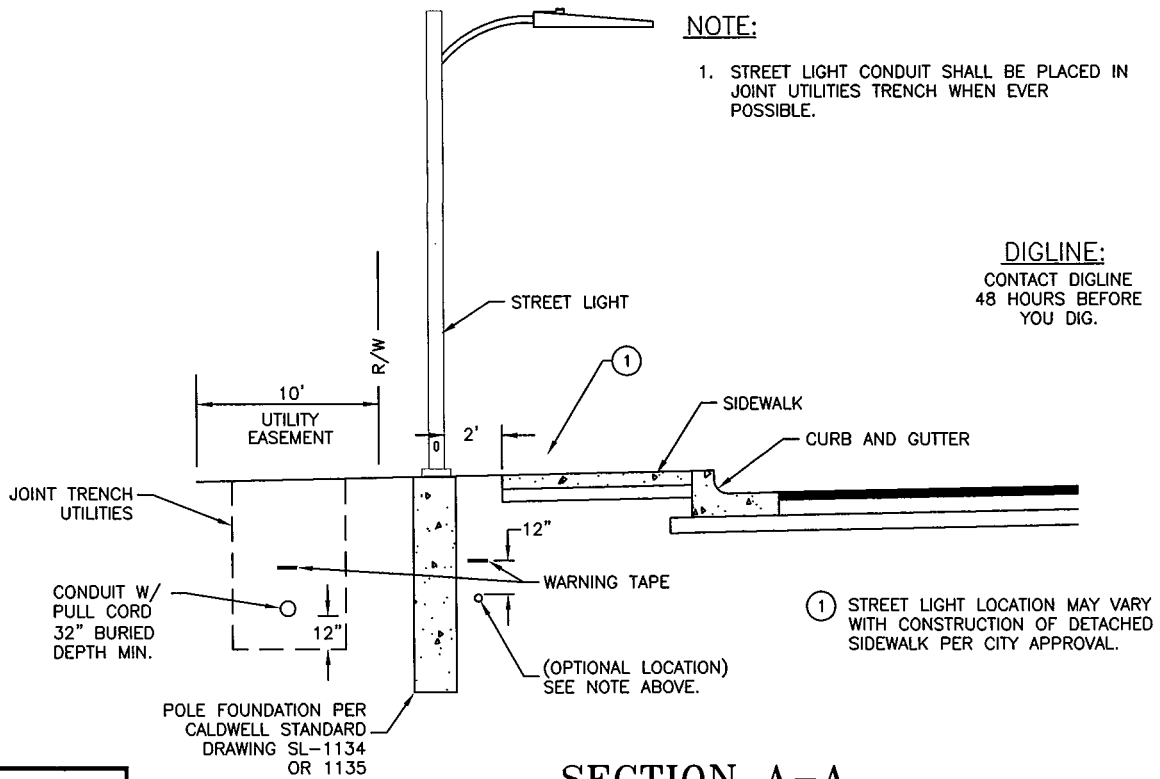
DATE:	6/9/15
REV. #	1
ACAD FILE:	SL-1135.DWG

SL-1135

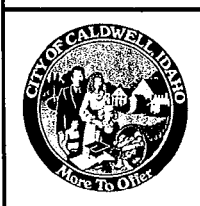
STANDARD DRAWING NO.



PLAN
N.T.S.



SECTION A-A
N.T.S.



STREETLIGHT CONDUIT

DATE:	03/19/15
REV. #	1
ACAD FILE:	SL-1136.DWG

SL-1136
STANDARD DRAWING NO.

CITY OF CALDWELL
ENGINEERING DEPARTMENT

621 CLEVELAND BLVD.
CALDWELL, IDAHO 83605
208/455-3006 - PHONE
208/455-3012 - FAX