RESOLUTION No. 12/13-35
CITY OF DAYTON, OREGON

Title: A Resolution Adopting Public Works Design Standards Update No. 5

WHEREAS, on October 6, 2006, the Dayton City Council adopted Resolution #06/07-11, A Resolution Adopting City of Dayton Public Works Design Standards (hereafter called "Standards"), and amended on February 5, 2007, by Resolution #06/07-27, A Resolution Adopting Public Works Design Standards Update No. 1; and on January 7, 2008, by Resolution #07/08-17, A Resolution Adopting Public Works Design Standards Update #2; and Resolution 07/08-31, A Resolution Adopting Public Works Design Standards Update #3; and Resolution 09/10-31, A Resolution Adopting Public Works Design Standards Update #4; and

WHEREAS, the Standards are subject to change as both the City's needs change and the industry standards change, or if errors are discovered in the document; and

WHEREAS, certain information in the Standards needs to be updated or changed.

The City of Dayton resolves as follows:

1) **THAT** Update No. 5 to the City of Dayton Public Works Design Standards, (attached hereto as Exhibit A and by this reference incorporated herein) is hereby adopted; and

2) **THAT** this resolution shall become effective immediately upon adoption.

ADOPTED this 17th day of **June, 2013.**

In Favor: **Bixler, Blackburn, Frank, Utt, White, Wytoski**

Opposed: **None**

Absent: **None**

Abstained: **Collins**

Jolie White, Mayor

6/20/13
Date of Signing

ATTESTED BY:

Peggy Selberg
City Recorder

6/17/2013
Date of Enactment

Attachment - Exhibit A

TO: All Holders of Public Works Design Standards (PWDS) for the City of Dayton

DATE: Draft April 2013

SUBJECT: Public Works Design Standards Update No. 5

The following information is distributed as a public service to the development community of engineers, architects, contractors, builders, and developers to make them aware of any changes in the City Public Works Design Standards (PWDS) or the Public Works Construction Standards (PWCS) which may have an impact on their operations.

A. CLARIFICATIONS AND CORRECTIONS

1. General Construction Note numbering. Where modifications to construction notes result in new notes being added, existing and subsequent notes are renumbered as applicable by this update notice.

2. General Construction Notes. The Federal Emergency Management Agency (FEMA) has issued new Flood Insurance Rate Maps (FIRM), which are based on the NAVD 1988 datum (rather than the NVGD 1929 datum used for the old flood maps). Note 15 was modified as noted below in italics.

   "15. Elevations shown on the drawings are based from _____(City; OSHD, etc) Bench Mark ____, Elevation _____(adjusted 19__), consisting of a _____(brass cap; monument, etc.) located at _____, which is based on the *NAVD 1988* datum corresponding to the FEMA flood map elevations."

3. General Construction Notes. To clarify current requirements under the Oregon Fire Code, Note 16 was reworded as noted in italics below for reflect current standards.

   "16. Address Numbers. Per OFC 505.1, all new and existing buildings shall have approved address numbers (4" minimum number height, *color to contrast with background*) placed in a position that is plainly legible and visible from the fronting street. *For flaglots or other situations where the structure is not visible from the public street, an address sign shall be installed near the entrance to the driveway or private road.* Temporary address signs shall be mounted in a visible location prior to and during any construction, and the permanent numbers mounted prior to occupancy, *in a position that is plainly legible and visible from the street fronting the property.*"

4. General Construction Notes. In order to match current AC pavement standard specifications, Note 38 was modified as noted in italics below.

"38. A.C. Pavement shall conform to *OSSC (ODOT/APWA) 00744 (Minor Hot Mixed Asphalt Concrete (HMAC) Pavements)* for standard duty mix. AC Pavement shall be compacted to a minimum of 91% of maximum density (at all locations) as determined by the Rice standard method."

5. General Construction Notes. To clarify current requirements, Note 45 was reworded as noted in italics below for reflect current standards.

"45. Contractor shall provide a minimum two 3–inch diameter weep holes per lot in curb to provide for lot drainage. One weep hole shall be located 5 feet from the property line on the low point in the lot frontage. Weep holes shall also be provided as required for additional drainpipes shown on the drawings, *as well as on both sides of driveway aprons*. Contractor shall install drainpipe (smooth wall PVC or ABS) from each weep hole to the back of sidewalk location prior to acceptance of the curbing by the City, and shall connect to existing drain piping where such piping exists within or adjacent to the right-of-way or easement. *Weep holes installed in existing curbs shall be core drilled.*"

6. General Construction Notes. To ensure that current requirements are included on construction drawings, the following note was added.

"63. *Before mandrel testing, TV inspection or final acceptance of gravity pipelines, all trench compaction shall be completed and all sewers and storm drains flushed & cleaned to remove all mud, debris & foreign material from the pipelines, manholes and/or catch basins.*"

7. General Construction Notes. In order to clarify the conditions under which it applies and to match current OAR 333-061 requirements, Note 72 was reworded as noted below in italics.

"72. Sanitary Sewer & Waterline Crossings. Where *new waterlines* cross *below* or within 18-inches vertical separation *above a sewer main or sewer service lateral*, center one full length of waterline pipe at point of crossing the sewer line or sewer lateral. *Unless otherwise approved in writing by the Public Works Director, existing sewer mains and/or service laterals within this zone shall be replaced with a full length of new pipe (D2241 PVC-DR 32.5, C-900 PVC-DR 18 or CL 50 ductile iron), centered at the crossing in accordance with OAR 333-061 and local jurisdiction requirements.* Connect to existing sewer lines with approved rubber couplings. *Example*: For an 8-inch waterline with 36-inches cover, *4-inch*

service lateral inverts within 5.67-feet (68-inches) of finish grade must *have this pipe centered at the crossing.*"

8. General Construction Notes. In order to reiterate cleaning & testing requirements for new waterlines, the following notes were added.

"73. Pressure Testing. All waterlines, services and appurtenances shall be pressure tested for leakage. All testing shall conform to requirements as outlined on City testing forms contained in the PWDS. The hydrostatic test shall be performed with all service line corporation stops open and meter stops closed, and with all hydrant line valves open. Prior to the start of each pressure test, the position of all mainline valves, hydrant line valves and service line corporation stops in the test segment shall verified.

74. Cleaning & Flushing. After the pressure test and prior to disinfecting, the water lines shall be thoroughly flushed through hydrants, blow offs or by other approved means.

75. Disinfection & Bacteriological Testing. All water mains and service lines shall be chlorine disinfected per local jurisdiction requirements, AWWA C-651 or OAR 333-061, whichever is more stringent. Unless otherwise approved by the Public Works Superintendent, a City representative shall witness the application of the chlorine solution. Following chlorination, all treated water shall be flushed from the lines at their extremities and bacteriologically tested per local and state standards. Contractor to pay for laboratory analysis of water samples taken under the supervision of the City. Should the initial treatment prove ineffective, the chlorination shall be repeated until confirmed tests show acceptable results."

9. General Construction Notes. To ensure that current requirements are included on construction drawings, the following note was added.

"81. Manhole channels depths (sewer & storm) shall be to the heights shown on the drawings, but in no case shall be the channel depth be less than 2/3 of the pipe diameter. Channels, as well as shelves between the channels and the manhole walls, shall be sloped to drain per plan details."

Continuing with current policy, developer's engineers can request the standard construction notes (in MS Word format) from the City Engineer, and the "Minimum Required Testing and Frequency" table is available in pdf format.

10. Plan Review Procedure. Wording was added to reference the more detailed provisions contained in Appendix G. A new paragraph was added as PWDS 1.9.a, and subsequent paragraphs were renumbered as applicable.

"*a. Detailed provisions covering the review procedures and permitting requirements for street, site and utility construction are contained in*

Appendix G of these standards. The following is an overview of these requirements."

11. Franchise Utility Plan Submittal. To clarify the intent of the requirement for submittal of franchise utility plans for review by the City, PWDS 1.10.b.12 was modified as noted below in italics. The franchise utility plans are required by the City to allow review for potential conflicts with proposed City utility improvements.

"12. Proposed utility plans *from all franchise utilities* (final review)."

12. Use of City Manhole Numbers. To clarify the requirement that plans list the City's assigned manhole numbers for existing sewer manholes shown, PWDS 1.10.g.4.e was modified as noted below in italics.

"e. All manholes, cleanouts and other structures shall be numbered and stationed to facilitate checking the plan views with the profile. *Existing City manholes numbers shall be used for all existing manholes or mainline cleanouts shown.* Following acceptance by the City, each *new* sanitary sewer manhole and *new* mainline cleanout shall be identified on the as-builts with a number provided by the City."

13. To clarify requirements related to inspection of construction of public improvements, PWDS 1.13.a.1 was modified as noted below in italics.

"1) All public construction *associated with development* shall be inspected by a professional engineer licensed in the State of Oregon or a qualified individual under his supervision as required in the Developer-City Agreement. *City projects may be inspected by Public Works or the City Engineer as applicable and as determined by the City.*

14. AC Pavement. In order for the AC Pavement callouts to reflect the current paving standards, PWDS 2.10.b was modified as noted below in italics.

"b) AC Pavement.

1) *Bituminous Material: The asphalt cement shall be PG 64-22 and shall meet the requirements of OSSC (ODOT/APWA) 00744.11, Asphalt Cement & Additives.*

2) *Design Mix*:

a) *AC pavement shall meet the requirements of OSSC (ODOT/APWA) 00744, Minor Hot Mixed Asphalt Concrete (HMAC) Pavements, 3/4" dense graded mix (base course) or 1/2" dense graded mix (leveling or wearing course) as summarized below. Where noted on the drawings, Class B pavement refers to the 3/4" dense graded, mix, and Class C refers to 1/2" dense graded mix.*

b) *AC pavement for public streets shall be Level 2 Job Mix Formula (JMF).*

c) *Unless otherwise specified or shown on the drawings, AC pavement for private streets and parking lots shall be Level 2 Job Mix Formula (JMF).*

d) *Where identified on the drawings, AC pavement for collector or arterial streets shall be Level 3 Job Mix Formula (JMF).*

3) *Mix design shall be submitted to the City for review and approval prior to use."*

15. Concrete. In order for the concrete callouts to reflect the current standards, PWDS 2.10.d was modified as noted below in italics.

"b) Concrete (Cast-in-Place).

1) 1) All concrete shall conform to the requirements of OSSC (ODOT/APWA) 00440, Commercial Grade Concrete, 3300 psi.

2) *Concrete mix design shall be submitted to the City for review and approval prior to use."*

16. Street Light Style. To correct a discrepancy regarding street light lens styles required, PWDS 2.10.e.2 was modified as noted below in italics (to match requirements on Detail 230).

"2) Unless otherwise approved by the City Engineer and Public Works Superintendent, all luminaries shall be Cobrahead *flat* lens type using a 100 watt high pressure sodium light source with an acrylic lens and photoelectric control relay with a 6 foot mounting arm. The fixture shall produce a medium distribution, semi-cutoff, Type II lighting pattern."

17. AC Standard Callout. As noted above, in order for the AC Pavement callouts to reflect the current paving standards, PWDS 2.12.e was modified as noted below in italics.

"e. Unless otherwise approved by the City Engineer, pavement designs shall be based on AC pavement conforming to *OSSC (ODOT/APWA) 00744, Minor Hot Mixed Asphalt Concrete (HMAC) Pavements,* for standard duty mix and compacted to a minimum of 91% of maximum density (at all locations) as determined by the Rice Standard Method."

18. Drain Pipe Under Sidewalks. In order to clarify requirements related to drainage across sidewalks, PWDS 2.20.b was modified as noted below in italics.

Exhibit A

6/4/13 wording for city Review

"b. Drain pipe shall be installed under sidewalks *as required* to connect to all curb weep holes *or other storm drain facilities. Surface discharge of roof drains or other drain pipes across sidewalks is not allowed.*"

19. Sidewalk Width Table. In order to clarify requirements related to sidewalks in the downtown core (ie. the CBO overlay zone), the table under PWDS 2.20.e was modified as noted below in italics.

"e. Sidewalks shall be constructed of concrete, and shall be a minimum of 4-inches thick except at driveway crossings, which shall be a minimum of 6-inches thick. Sidewalks shall meet the minimum widths outlined below. The location of sidewalks within the public right-of-way shall be as approved by the City during the design process.

MINIMUM SIDEWALK WIDTHS		
Street Classification	Min. Sidewalk Width from back of curb	Location unless otherwise approved
Ferry Street & 3rd Street *(ODOT R.O.W. outside of CBO overlay zone)*	6 ft or current ODOT standard	Curbline
Within CBO overlay zone[1,2]	8 ft from property side, plus ±4' concrete planter strip to curbline[3]	Property Side to Curbline
Collector Street	5 ft	Curbline
Commercial or Industrial Str.	5 ft	Curbline
Local Street	5 ft	Curbline

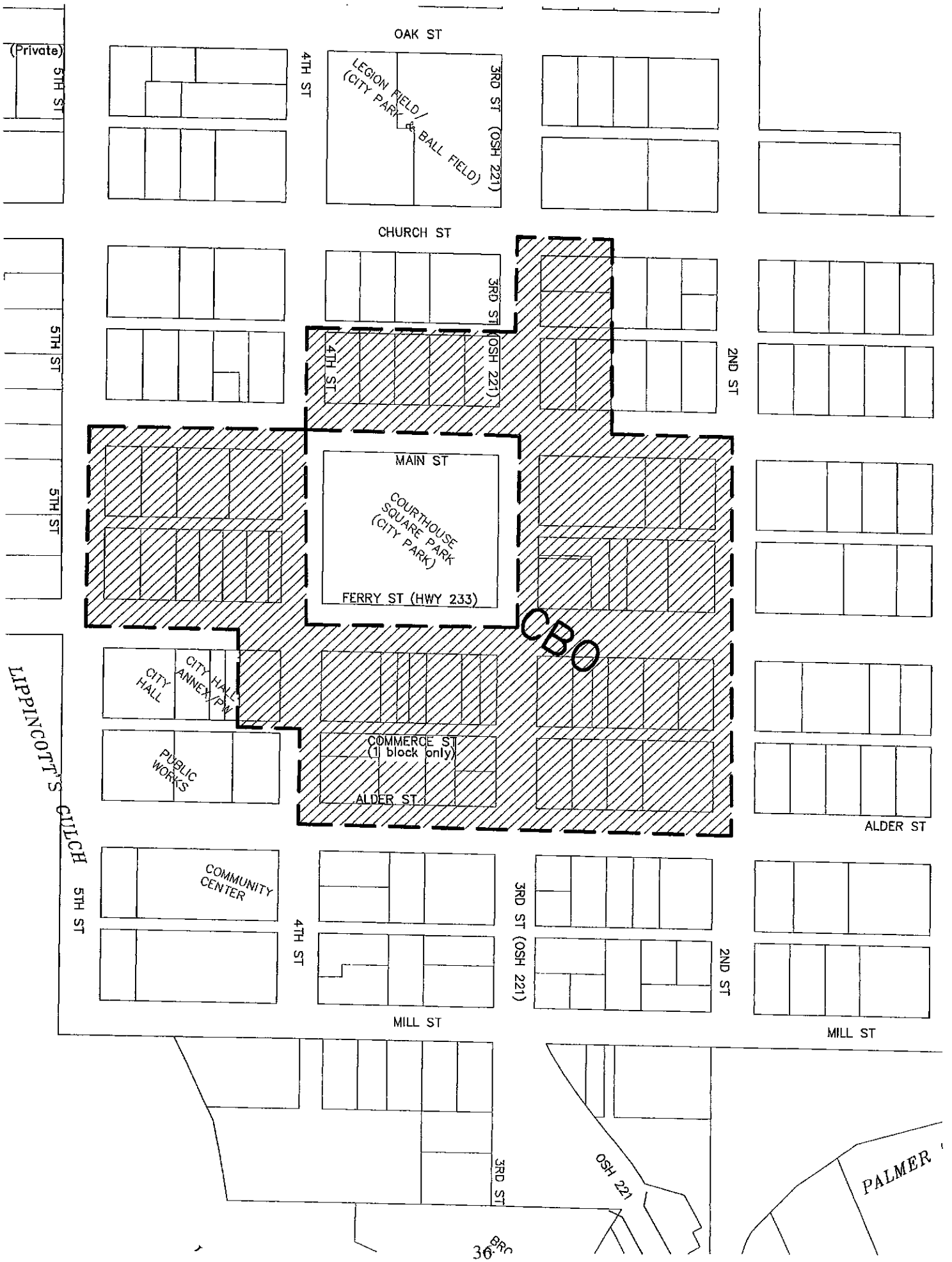
[1] This sidewalk standard applies to all properties within the CBO (Central Business Overlay) zone (except for properties along 3rd Street where existing curbs do not exist, or for properties fronting non-curbed streets where new curbs are not required as a condition of development). This does not apply to the frontage of Courthouse Square Park, as this property is outside of the CBO zone.

[2] Sidewalks meeting the CBO zone standard are not required for properties within the CBO zone which contain only single-family residential structures (until such time as the use of those properties changes to commercial, or such time as those properties are redeveloped to a commercial use).

[3] Sidewalk improvements in the CBO zone shall also include tree wells and street trees at ±30-40 foot spacing (actual spacing to be as directed by Public Works, based on property & building/door layouts, driveway locations, etc).

20. Parking Lot Access Route wording. Wording to clarify the definition of parking lot access routes (under PWDS 2.27.b was modified as noted below in italics.

"b. Access routes through parking lots which are to be used by *(1)* delivery trucks; service vehicles or fire trucks, or (2) by automobiles in excess of 500


OAK ST
(Private)
5TH ST
4TH ST
LEGION FIELD/
(CITY PARK &
BALL FIELD)
3RD ST (OSH 221)
CHURCH ST
3RD ST
4TH ST
(OSH 221)
2ND ST
5TH ST
MAIN ST
COURTHOUSE
SQUARE PARK
(CITY PARK)
FERRY ST (HWY 233)
CBO
CITY
HALL
CITY
ANNEX/PW
HALL
PUBLIC
WORKS
COMMERCE ST
(1 block only)
ALDER ST
ALDER ST
LIPPINCOTT'S GULCH
5TH ST
COMMUNITY
CENTER
4TH ST
3RD ST (OSH 221)
2ND ST
MILL ST
MILL ST
3RD ST
OSH 221
PALMER

21. Street Signs. In order to clarify the requirements for installing signs in conjunction with either new or reconstructed streets, PWDS 2.34.a was modified as noted below in italics.

"b. *All street signs (material, color, wording, etc.)* shall conform to *OSSC (ODOT/APWA) Specifications*, City Standards, *and the Manual of Uniform Traffic Control Devices (MUTCD)*. Location and type of signs shall conform with *MUTCD* and City Standards."

22. Mainline Storm Cleanout Materials. In order to clarify requirements for storm mainlines cleanouts (where approved by Public Works), PWDS 3.8.h was added as follows to match the requirements for sewer mainline cleanouts (subsequent paragraphs are renumbered as applicable).

"h. Mainline Storm Cleanouts

1) Except as modified herein, mainline storm cleanouts (where approved by the City) shall conform to the requirements outlined under Division 4, Sanitary Sewers and as shown in the standard details.

2) A 3,300 psi concrete collar is required for cleanouts located outside of paved areas. The shaft or chimney of the cleanout shall be a minimum of 8-inches in diameter."

23. Mainline Storm Cleanout Locations. In order to clarify requirements for where storm mainlines cleanouts are typically allowed, PWDS 3.17.d was added as follows (generally matches the requirements for sewer mainline cleanouts).

"*d. Mainline Storm Cleanouts*

1) Mainline storm cleanouts will not be approved as substitutes for manholes or terminal catch basins. Cleanouts shall only be allowed at the upper end of main storm lines less than 150 feet long which will be extended on the same grade and alignment during the next construction phase of a multiphase development, and which do not have any laterals.

2) All mainline cleanouts will be considered on a case-by-case basis and approved by the City Engineer and the Public Works Superintendent. In all cases, plan and profile showing the alignment and depth of the anticipated future extension from the proposed cleanout to the next manhole shall be submitted prior to approval of cleanouts."

24. Mainline Storm Connections. In order to clarify requirements for lateral connection to storm mainlines, PWDS 3.17.a.4 was modified as noted below in italics.

"4. In place of manholes or *junction boxes*, laterals draining private property

may be connected directly to the main line, provided the lateral diameter is 8-inches or less and is no more than half the diameter of the main line. *Unless otherwise approved by Public Works, the connection to the mainlines shall be with an Inserta-Tee connection so as to* provide a strong, leak-proof joint. The lateral shall not project inside the main line."

25. Mainline Sewer Cleanouts. In order to clarify requirements for sewer mainlines cleanouts (where approved by Public Works), PWDS 4.8.h was was modified as noted below in italics.

"h. Mainline Sewer Cleanouts

1) Mainline cleanouts shall consist of a lid and frame of heavy duty cast iron construction with closed lid design. A 3,300 psi concrete collar is required for cleanouts located *outside of* paved areas.

2) A 3,300 psi concrete collar is required for cleanouts located outside of paved areas. The shaft or chimney of the cleanout shall be a minimum of 8-inches in diameter."

26. Sewer Easement Width Table. To correct a typographic error, the table under PWDS 4.15.d.6 was modified as noted below in italics.

"6) Minimum Easement Widths: Unless otherwise specified or authorized by the City, minimum easements widths for sanitary sewers shall be as follows:

MINIMUM SANITARY SEWER EASEMENT WIDTHS		
Sewer Diameter	Depth to Invert	
	≤ 6 feet	> 6 feet
8 - 10 inches	15 feet	15 feet plus 2 feet for each foot (or fraction thereof) deeper than 6 feet to invert.
12 - 15 inches	20 feet	20 feet plus 2 feet for each foot (or fraction thereof) deeper than 6 feet to invert.
> 15 inches	25 feet	*25* feet plus 2 feet for each foot (or fraction thereof) deeper than 6 feet to invert.
Note: Easements shall be a constant width between manholes or other in-line structures. Easement width shall be based on the deepest portion of the line between such structures.		

27. Sewer Lateral Cleanouts. In order to avoid future confusion regarding the requirements for installing cleanouts on sewer service laterals that are proposed for continuing use by new development or construction, PWDS 4.18.d.2 was modified

as noted below in italics. Per PWDS 4.18.b.1&2, property line and intermediate cleanouts are required for all sanitary sewer service laterals that fall under the provisions of the PWDS, which includes those proposed for continuing use by new development or construction. Laterals longer than 100 feet also fall under the cleanout requirements of the Oregon Plumbing Specialty Code. Where existing laterals are newer and consist of PVC pipe, testing may be waived by Public Works.

"2) *Unless waived in writing by Public Works (for newer PVC laterals),* all existing sewer service laterals shall be air tested from the mainline to the building to verify that it is free of leaks or defects. The service laterals shall be tested at 4 to 5 psi, and a loss of 0.5 psi in 15 seconds constitutes a test failure. The service lateral shall be replaced if defective. *Cleanouts per PWDS (& plumbing code) requirements shall be installed on existing sanitary sewer service laterals which are proposed for continuing use (ie those which do not already have cleanouts).*"

28. Water System Definition Correction. The wording of a water system definition needed to be corrected (word order was incorrect). PWDS 5.7.a.14 was modified as noted below in italics.

14) Fire Protection Services: A connection to the public water main intended only for the extinguishment of fires and flushing necessary for its proper maintenance. All fire services connected to building sprinkler systems shall have a double *check detector* assembly.

29. Water Mainline Pipe. To bring callouts into conformance with wording under current AWWA standards, portions of PWDS 5.8.b was modified as noted below in italics (paragraphs not listed remain unchanged).

"b. Pipe

2) 4-inch Through 12-inch PVC (AWWA C-900).

a) PVC pressure pipe 4-inches through 12-inches in diameter shall conform to the requirements of AWWA C-900 (design stress of 4000 psi), NSF approved, with cast iron pipe equivalent (CI) outside diameter dimensions. Pipe shall be *PVC pipe with wall thickness equivalent to a standard dimension ratio (SDR) of 18, Pressure Class 235 (per C900-07).*

3) 14-inch Through 24-inch PVC (AWWA C-905).

a) PVC pressure pipe 12-inches through 24-inches in diameter shall conform to the requirements of AWWA C-905 (design stress of 4000 psi), NSF approved, with cast iron pipe equivalent (CI) outside diameter dimensions. Pipe shall be *PVC pipe with wall thickness equivalent to a standard*

dimension ratio (SDR) of 25, Pressure Class 165 (per C905-10).

30. Service Pipe & Fittings. To bring callouts into conformance with materials currently used by Public Works, portions of PWDS 5.8.f was modified as noted below in italics (paragraphs not listed remain unchanged).

"f. Service Pipe and Fittings

2) All services that are saddle tapped shall use ductile iron service saddles with stainless steel bolts and *double* strap clamps. All ductile iron service saddles shall be furnished with a fusion bonded epoxy coating conforming to the requirements of AWWA C-550, *Romac 202N, Ford FC202* or approved equal.

3) Unless otherwise *required by the City Engineer or the Public Works Superintendent*, single residential service pipe shall be a minimum of 1-inch in diameter.

4) Unless otherwise approved by the City Engineer or the Public Works Superintendent, commercial or industrial service pipe shall be a minimum of 1½-inches in diameter (reducers to be installed at meter location as applicable).

8) 3-inch & Larger Services.

b) All services 3-inch and larger shall be Class *52* ductile iron pipe, with ductile iron fittings. Provide retainer glands on all MJ joints, and field-lock type gaskets on all push-on joints.

c) 3-inch and larger services shall have a mainline tee with flanged side outlet and a flange x MJ resilient wedge gate valve conforming to the requirements specified herein."

9) Fire Sprinkler Services.

a) All fire sprinkler service lines shall be reviewed on a case-by-case basis. Pipe and fittings shall be as required by the City Engineer and the Public Works Director.

b) The portion of all fire services within the public right-of-way or within utility easements to the City shall be Class 52 ductile iron pipe, with ductile iron fittings. Provide retainer glands on all MJ joints, and field-lock type gaskets on all push-on joints.

c) All fire sprinkler service connections shall have a mainline tee with flanged side outlet and a flange x MJ resilient wedge gate valve conforming to the requirements specified herein."

31. Water Service Lines. To clarify City standards related to private pumps on the public portion of the City water system, PWDS 5.19.a.1 was revised as noted below in italics.

"1) The use of pumps on a *water* service line *(between the mainline and the meter)* to provide adequate pressure to a subdivision lot or property located above the pressure level of the supply main shall be prohibited. *Booster pumps installed on private property shall require the installation of a backflow device meeting City and state standards.*

32. Minimum Service Size Table. To clarify the requirement for typical service size for commercial developments (unless otherwise approved by Public Works), the table under PWDS 5.19.b.1 was revised as noted below in italics.

"1) Standard service line sizes are 1-inch, 1½-inch, 2-inch, 3-inch, 4-inch, 6-inch and 8-inch. Service lines will be reviewed for effects on the distribution system and shall not be greater in size than the distribution main.

MINIMUM SERVICE SIZE	
Type of Service	Minimum Service Size
Single residential service [1]	1-inch
Double residential service	1-inch
Triple residential service (triplexes only)	1½-inch
Commercial Service [2]	*1½"* minimum

Notes:
1. The next larger service size may be required for residential lots large enough to be partitioned into additional lots without a water main extension.
2. *Commercial service pipe smaller than 1½" require prior approval by the City Engineer & Public Works Superintendent (reducers to be installed at meter location as applicable).*

33. Meter Installation Requirements. To clarify the requirements for installation of water meters, PWDS 5.20.a.1 was revised as noted below in italics.

"1) All water meters within the service area of the City of Dayton will be furnished and installed by City forces at the request and expense of the customer. The service line, meter box and all piping *& fittings* within the meter box must be installed by the developer. *All meters 1½-inches and larger shall be installed by a contractor retained by the developer, under the inspection and subject to the approval of Public Works.*"

34. Meter Location Requirements. To clarify the requirements for location of water meters, PWDS 5.20.b.1 was revised as noted below in italics.

"1). General

a) Meters shall be located at the termination of the City service line. Unless otherwise approved by the Public Works Superintendent, *meters shall be located within or immediately adjacent to the right-of-way or easement containing the water mainline.*

b) A public utility and access easement *to the City* shall be provided to and around any meter boxes set on private property. The easement shall be sized to provide a minimum of five (5) foot clear around the meter box or vault on all sides."

35. Backflow Device Easement Requirements. To clarify the requirements for guaranteeing access to backflow devices for inspection by Public Works, PWDS 5.22.b.2 was revised as noted below in italics.

"2) If installed outside the building being served, it shall be placed at *or adjacent to* the property line or easement line in a vault or structure in accordance with the manufacturer's recommendations and as approved by the Public Works Superintendent. Vaults must have a sump and be watertight.

a) A public utility and access easement to the City shall be provided to and around any backflow device set on private property (ie. when installed outside of the building being served). The easement shall be sized to provide a minimum of five (5) foot clear around the box or vault on all sides."

36. Fire Hydrant Leads. To correct a typo (in the thickness class of the pipe), PWDS 5.17.d.1 was revised as noted below in italics.

"1. All hydrant leads shall be Class *52* ductile iron, 6" minimum diameter, with retainer glands at both ends."

37. Appendix D. Wording was added to clarify that easement legal descriptions and exhibit maps are to be prepared by the developer and submitted to the City for review and approval prior to recording. As noted by the previous wording, the documents in this appendix are samples only, and are subject to modification by the City to address project specific conditions (as required by Public Works, the City Engineer or the City Attorney).

38. Sample "Access Easement & Grease Interceptor Vault Maintenance Agreement" (Appendix D). Per PWDS 4.18.a.8 establishes that maintenance of grease interceptor vaults (where provided) is the responsibility of the property owner, and also requires an access easement and maintenance agreement be recorded against the

property. The attached sample of an easement & maintenance agreement form is being added to Appendix D.

39. Sample Lot Grading & Drainage Memo (Appendix D). A copy of the City's current standard memo summarizing the responsibilities of the developer, homebuilder and owner relating to lot drainage is included for reference.

40. Maintenance Bond (Appendix G). In order to clarify the City's policy regarding maintenance bond requirements, PWDS G.14.d.2 was modified as noted below in italics.

"2). Acceptable Maintenance Bond valued at a minimum of 40 percent of the estimated construction costs for *the public portion of the improvements completed under the Public Works permit*. The period of the bond shall be for the full period of the warranty period, not to be less than 1 year. The warranty period shall not commence prior to provisional acceptance of the public improvements by the City.."

B. STANDARD DETAIL REVISIONS

41. Detail 210 & 211: The callouts on the curb details were modified to correct a typographic error on the tooled radius on the back edge of the curb (3/8" rather than 1/8"). The revised detail (see attached) is dated 11/11.

42. Detail 212, 212a & 213: The sidewalk details were modified to bring the notes on the various details into agreement with each other, clarify the need for sidewalk easements at corners where applicable, and clarify the offset of driveways from property corners in order to comply with ORS 92.044(7), which requires utility improvements (including drain pipes) to be offset from property pins. Details 212 & 213 were revised to conform with state law which requires local design standards to reference current State ADA standards for clustered mail boxes (which are in the Oregon Structural Specialty Code) for those units located within public rights-of-way. The revised detail 212a (see attached) is dated 1/12, and the revised details 212 and 213 are dated 6/12.

43. Detail 213A, 213B & 213C: Details were added to reflect the City's standard configuration for tree well covers (for street trees within the CBO zone), as well as the configuration of tree wells for street trees within the public right-of-way. The new detail 213A (see attached) is dated 4/13, and the revised details 213B and 213C are dated 11/12.

44. Detail 214: The notes on the handicap ramp detail were modified to clarify the type of truncated domes specified under City standards. The revised detail (see attached) is dated 11/11.

45. Detail 216: The commercial driveway detail was modified to clarify the driveway width and reinforcing. The revised detail (see attached) is dated 11/11.

46. Detail 220: The hammerhead turnaround detail was modified to clarify requirements for the no parking/fire lane signs required by the Oregon Fire Code. The revised detail (see attached) is dated 9/12.

47. Detail 230: The street light detail was modified to add the standard fixture specified by PWDS 2.10. The revised detail (see attached) is dated 6/11.

48. Detail 232: A new detail was added to address street sign post requirements in the ODOT right-of-ways. The new detail (see attached) is dated 2/13.

49. Detail 239: A new detail was added for a standard pre-cast concrete wheelstop. The new detail (see attached) is dated 1/13.

50. Detail 302A & 302B: The bench grind detail was modified to reference pre-tacked paving fabric (18" width rather than 36" width) now specified for use. The revised details (see attached) are dated 6/12.

51. Detail 310 & 311: The detail notes were modified to clarify that the curb-inlet notch is to be eliminated at drop curb locations where approved by the City. The revised details (see attached) are dated 1/13.

52. Detail 315 & 316: The detail notes were modified to clarify that the grate is to be set square with the building or the edge of the parking lot or driveway, and pavement adjusted so that water flows to the catch basin without ponding. The revised details (see attached) are dated 7/12.

53. Detail 317: A new style of parking lot catch basin has been approved by the State Building Codes division for use where trapped catch basins are required. The new detail (see attached) is dated 1/13.

54. Detail 320: The flow control manhole detail was modified to eliminate the expense of using a 30" manhole frame & casting with custom drilled holes, and allows instead standard manhole frame & cover with a cleanout casting for access over the overflow riser. The revised detail (see attached) is dated 3/10.

55. Detail 351: A new style of 24" diameter storm manhole has been approved for use in parking lots or within City right-of-ways. The new detail (see attached) is dated 8/12.

56. Detail 401: The detail notes were modified to clarify that in addition to flat-top manholes being required for manholes less than 6 feet rim to invert, flat-top manholes are also required where there are pipe connections are within 5 feet of the rim elevation. The revised detail (see attached) is dated 4/13.

57. Detail 407: The detail notes were modified to clarify the thickness of the AC or concrete pad required around manholes in unpaved traffic areas. The revised detail (see attached) is dated 1/13.

58. Detail 411: The detail notes were modified to clarify that the riser pipe is to be 8" minimum diameter for 8" & larger mainlines. The revised detail (see attached) is dated 4/13.

59. Detail 416: The detail notes were modified to clarify that cleanout boxes in traffic areas are to be set in a concrete pad. The revised detail (see attached) is dated 4/12.

60. Detail 418: This detail was deleted from the PWDS.

61. Detail 419: The detail notes were modified to reflect the configuration of the standard InseraTee fittings currently manufactured. The revised detail (see attached) is dated 12/12.

62. Detail 501. The detail callouts to modified to clarify depth to valve nut and toner wire configuration, and to reflect riser stem requirements. The revised detail (see attached) is dated 12/11.

63. Detail 502:. The detail callouts to modified to clarify depth to valve nut and toner wire configuration, and to reflect riser stem requirements. The revised detail (see attached) is dated 12/11.

64. Detail 503: The detail notes were modified to specify yellow curb painting at hydrant locations. The revised detail (see attached) is dated 9/10.

65. Detail 505: The detail notes were modified to reflect the standard valve style and standard valve box required for use by other details. The revised detail (see attached) is dated 1/13.

66. Detail 515: The callout number for the box lid was corrected. The revised detail (see attached) is dated 2/11.

67. Detail 517: The meter box drawing was modified to match the configuration shown on Detail 516. The revised detail (see attached) is dated 2/11.

68. Detail 518: A new detail was prepared showing the configuration of a standard air release valve assembly. The new detail (see attached) is dated 10/12.

69. Detail 523 & 524: Updated & new details were added to address 3" & 4" water meter assemblies. The new details (see attached) are dated 2/11.

70. Detail 554, 555 & 556: Updated details were added to reflect current standards for FDC backflow vaults & hatches, and the installation of a City approved meter on the detector loop. The new details (see attached) are dated 12/12.

71. Detail 560 & 561: New details were added to show a typical configuration of a check valve or drain valve on an FDC line when the backflow device is located inside the building, and the FDC riser is required by the Fire Chief to be located away from the building. The new details (see attached) are dated 2/13.

After recording, return to:
City of Dayton
PO Box 339
Dayton, OR 97114-0339

PERMANENT ACCESS EASEMENT & GREASE INTERCEPTOR VAULT MAINTENANCE AGREEMENT

WHEREAS, _____, hereinafter called "Developer", was granted approval to develop land in accordance with the City of Dayton Development Code under Dayton Planning File No. _____, hereinafter called "Planning Action," by the City of Dayton, Yamhill County, Oregon, a municipal corporation, hereinafter called "City," for property located as follows, hereinafter called "Property,":

Street Address: _____
Tax Lot: _____
Legal Description: Tract described in Deed Reference Number _____, Yamhill County Deed Records.

WHEREAS, the owner of record of the Property is _____, hereinafter called "Owner", and said Owner shall be subject to the maintenance provisions of this agreement;

WHEREAS, the development & design standards require the Developer to construct and maintain a private exterior two-compartment grease interceptor vault, hereinafter called "Grease Interceptor";

WHEREAS, the City design standards require that the maintenance of the Grease Interceptor shall be the responsibility of the property Owner, and shall be assured through a recorded maintenance agreement;

WHEREAS, the City design standards require that the Grease Interceptor be located on private property, and as such needs to be provided with a general access easement to the City;

NOW, THEREFORE, Owner and the City agree as follows:

SECTION 1. Ownership of Grease Interceptor. The Grease Interceptor is a private facility owned and maintained by the property Owner noted above. Where there are multiple parties with ownership interest the property on which the Grease Interceptor is sited, the provisions of this agreement shall apply to all owner's jointly and severally.

SECTION 2. Grant of Access Easement. The undersigned Owner does hereby grant to City of Dayton a permanent and non-exclusive right to access the Grease Interceptor location and all necessary related facilities above, upon and under the premises, along driveways, walkways or other areas that must be crossed between the public right-of-way and the Grease Interceptor location. The access rights shall include the right of the City, its employees, agents, contractors, consultants and assigns to have ingress and egress on the property at all times for the purpose of inspecting said Grease Interceptor, or for performing any maintenance or repair work determined to be necessary by the City in order to protect public or private property, as outlined under Section 4 below. However, such right to inspect and perform maintenance or repairs does not obligate the City to perform such inspections, maintenance or repairs.

SECTION 3. Cleaning & Maintenance Responsibilities. The Owner shall be responsible for the cleaning, maintenance, repair, replacement and upkeep of the Grease Interceptor, at the Owner's sole expense. It shall be the Owner's responsibility to demonstrate to the City upon request that the system is operating properly. Maintenance responsibilities shall include, but are not limited to, the following:

3.1 Inspection. All Grease Interceptor components (vault segments, inlets, outlets, control orifices, etc.) shall be inspected for proper operations and structural stability, at a minimum, annually.

3.2 Cleaning of Grease Interceptor. All grease and/or debris shall be removed from both compartments of the Grease Interceptor vault, as well as cleaned from inlet or outlet piping as required, to maintain the design function and capacity of the system (water shall be pumped from vault as required to accomplish this cleaning). The initial cleaning & maintenance interval shall not exceed every 3 months while the building is in use (including at the end of each school year), unless the inspections above reveal a need for more frequent cleaning. After the end of the first year, if approved by Public Works based on the vault having adequate capacity, the cleaning & maintenance interval can increased as appropriate, but shall not be cleaned and maintained less frequently than twice a year (including at the end of each school year). If subsequent inspections reveal capacity problems, the Owner shall revert to the more frequent cleaning intervals.

3.3 Maintenance & Repair. Owner shall be responsible for maintenance, repair or replacement of any component that has been broken, damaged, altered, removed or other is not functioning as designed, including but limited to the vault, divider walls, inlet & outlet structures, access lids, etc. All access lids and risers shall be extended to finish grade and maintained in a watertight condition, and exclude any infiltration of groundwater or inflow of surface water.

3.4 Spill Prevention. Measures shall be exercised when cleaning the Grease Interceptor to avoid spillage of pumped grease, solids or liquids. Any spillage shall be completely cleaned up prior to the cleaning or maintenance crew leaving the site.

3.5 Prohibited Substances. No chemical, enzyme or bacterial agent shall be added to the Grease Interceptor which will cause the release of grease into the sewer system. Unless otherwise specifically required in writing by the Plumbing Official, no garbage grinders, food pulpers or toilets shall discharge to the Grease Interceptor.

3.4 Records and Reporting. The Owner shall maintain a record (in the form of a log book) of steps taken to abide by the obligation under this section. The log book shall be available for inspection by the City upon request. The log book shall catalog the action taken (cleaning, inspection and/or maintenance), who took it, date and time it was done, how it was done, and any problems encountered or follow-up action recommended. Copies of all receipts for cleaning and pumping of the Grease Interceptor must be retained by the Owner with the log book. The Owner shall send a letter to the City prior to December 15 of each year that provides proof of cleaning, inspection and maintenance, including copies of pumping contracts and/or receipts of work conducted by a hired service.

SECTION 4. Failure to Maintain.

4.1 If at any time the City determines, in the sole exercise of its discretion, that the Grease Interceptor is not properly cleaned, maintained and/or otherwise kept in good repair, the City shall give reasonable notice to the Owner that the Grease Interceptor needs to be cleaned, maintained and/or otherwise repaired (in the case of an emergency, the City may enter upon the property without notice to perform emergency maintenance or repairs in cases where the City, at its sole discretion, determines that it is necessary to protect public or private property). The notice shall provide a reasonable description of the problem with the Grease Interceptor, and the notice shall provide a reasonable time to correct the problem. Should the responsible parties fail to correct the specified problem, the City may enter upon the property to so correct the specified problem. Notice shall be effective to the Owner by the City's deposit of the notice into the regular United States mail, postage pre-paid, or delivery to the Owner's local place of business. However, this agreement does not expressly impose on the City a duty to so inspect, clean, repair or maintain the Grease Interceptor. Any surface restoration required due to access, inspection,

maintenance or repairs thus performed by the City shall remain the responsibility of the Owner, whether or not the City chooses to complete such restoration in conjunction with the City's access, inspection, maintenance or repairs.

4.2 The Owner agrees and covenants (for themselves and their respective successors and assigns) that they will reimburse the City for its costs and expenses incurred in the process of cleaning, maintaining, and/or repairing the Grease Interceptor (including cleaning of downstream sewer system resulting from failure of the Grease Interceptor) within 30 days of written request by the City. Such written request for payment shall be effective to the Owner by the City's deposit of the notice into the regular United States mail, postage pre-paid, or delivery to the Owner's local place of business. The terms actual costs and expenses shall be liberally construed in favor of the City and shall include, but shall not be limited to, labor costs, tools and equipment costs, supply costs, and engineering and design costs, regardless whether the City uses its own personnel, tools, equipment and supplies, etc. to correct the matter. If the City initiates any litigation or engages the services of legal counsel in order to enforce the provisions arising herein, the City shall be entitled to its damages and costs, including reasonable attorney's fees, regardless whether the City contracts with outside legal counsel or utilizes in-house legal counsel for the same. In the event that the costs and expenses are not timely paid, such costs and expenses shall be charged against the Property consistent with State and local regulations, and shall constitute a lien upon the Property until paid.

SECTION 5. Indemnification. The Owner agrees to indemnify and defend the City, its officers agents and employees and hold them harmless for any and all liability, claims, damages or other costs or expenses related to failure of the Grease Interceptor, including any damage or injury incurred during inspection or maintenance of the Grease Interceptor, or due to the Owner's failure to maintain the Grease Interceptor, or failure to follow proper safety procedures during such inspection or maintenance.

SECTION 6. Recording of this agreement by Developer. Developer shall cause this agreement to be recorded in the deed records of Yamhill County, and a photocopy of the recorded document returned to the City.

SECTION 7. Other Provisions.

7.1 Legal Effect, Successors and Assigns. This Agreement shall run with the land and be binding on all parties having or acquiring from the Owner, or the Owner's successors, any right, title, or interest in the property or any part thereof, as well as their title, or interest in the property or any part thereof, as well as their heirs, successors, and assigns. They shall inure to the benefit of each present or future successor in interest of said property or any part thereof, or interest therein, and to the benefit of the City.

7.2 Provision Applicable Law. This easement shall be governed by, and construed in accordance with the laws of the State of Oregon.

7.3 Nonexclusivity of Rights & Remedies. The rights and remedies authorized to the City under this agreement are cumulative and are in addition to such other remedies as may be provided by law, equity, statute, ordinance or other source.

7.4 Waiver. Failure of either party at any time to require performance of any provision of this easement shall not limit the parties' right to enforce the provision, nor shall any waiver of any breach of any provision of this easement be a waiver of any succeeding breach of the provision or a waiver of the provision itself or any other provision.

7.5 Severability. The determination that one or more provisions of this easement is invalid, void or illegal or unenforceable shall not effect or invalidate the remainder of this easement.

7.6 Modification. No amendment or modification of this easement shall be valid unless in writing and signed by all parties hereto. City may, at their sole discretion, vacate this easement in accordance with state law and local ordinance.

The individuals executing this Agreement warrant that they have full authority to execute this Agreement on behalf of the entity for whom they are acting herein.

WITNESS our hands and seals this _____ day of _____, 20___.

_____ _____

_____ _____

(Printed Name of Grantors) (Signature of Grantors)

STATE OF OREGON)
) ss.
County of _____)

On this _____ day of _____, 20___, personally appeared before me, the above named persons, _____, _____, _____, known to me to be the person(s) whose signature is above subscribed, and acknowledged to me that this is a free act and deed, for the uses and purposes therein expressed. In witness whereof, I have hereunto set my hand and affixed by official seal on the day and year last above written.

_____
(Notary Signature)
Notary Public for Oregon
My Commission Expires: _____

APPROVED:

_____ _____

Dayton City Manager Date

This instrument was acknowledged before me on the ____ day _____, 20__, by

_____
(Notary Signature)
Notary Public for Oregon
My Commission Expires: _____

City Engineer (Initial) _____ *(if modified)*

Memo

Date:

To: _____
address

cc: *Dayton land use file (_____)*
Dayton Building Official
Dayton Public Works

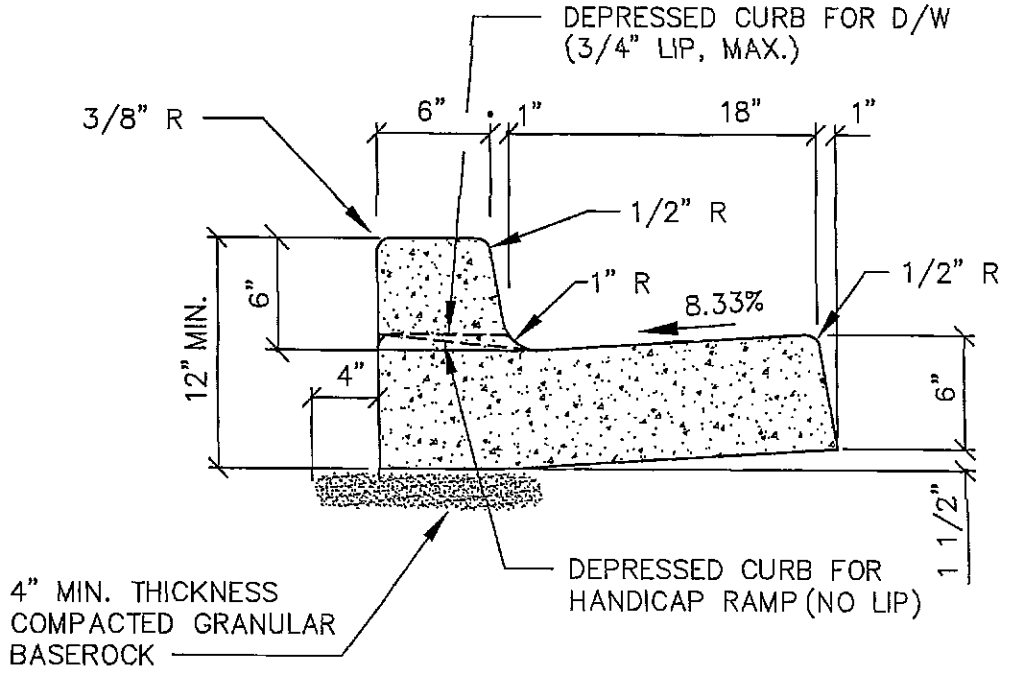
From: **Dayton City Engineer**
Subject: Lot Grading & Drainage During and After Construction of Structures

This memo is to reiterate grading requirements relative to the layout and building of homes and structures on this property, and the need to take extra care in the grading during and after building to facilitate good drainage on the lots and the surrounding area.

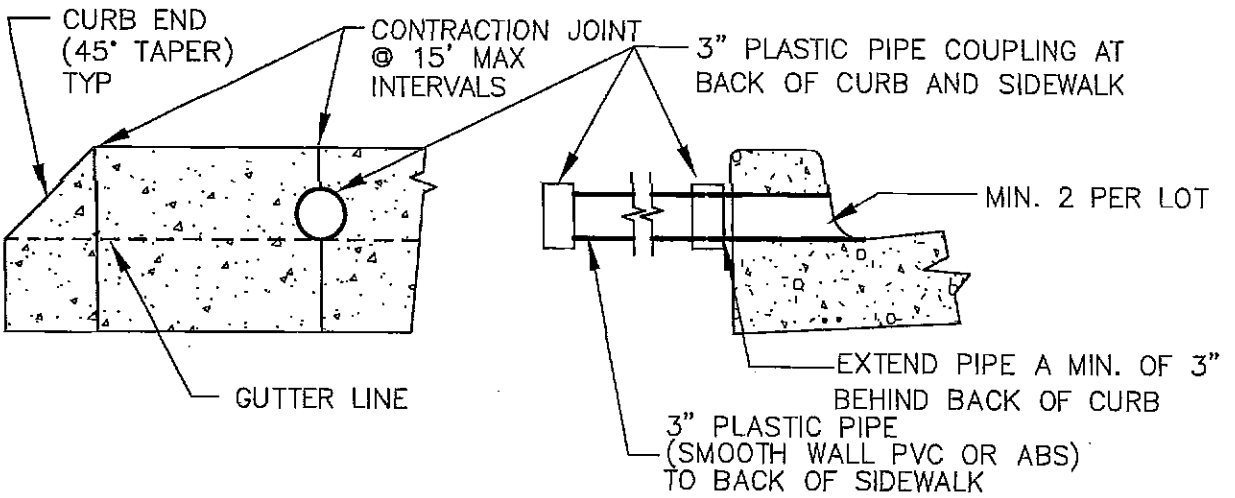
As you are no doubt aware, good grading around a house and on a lot can make all of the difference in how homes are effected by the rain (and resultant drainage concerns) in Oregon. It is important to ensure that the houses and structures are not set too low on the lots. To avoid drainage problems, it is important that the homes are kept high enough so that you can grade around the structures and the lots in a manner that will direct the surface runoff away from the homes and off the lots into the streets and drainage systems without ponding. This is particularly critical where there is drainage coming onto any lot from adjacent property, either within or outside the development. In addition, it is critical that existing drainage patterns from adjacent properties must be maintained when grading on lots, around houses or other structures so as to not pond water or block drainage.

The City design standards for new developments include provisions intended to ensure that the streets are low enough so that the lots can drain to the streets, or that drainage stubs are provided at an elevation that will provide a good positive outlet. However, in spite of this, poor grading around homes during house construction and landscaping is a common cause of problems. Depending on building location, landscaping and lot grading, in some cases it may be necessary to construct perimeter drains to collect water and direct it to another point. It may also be necessary to install area drains to prevent water from collecting and being trapped in areas around homes, particularly in the rear of the homes or on the high side of the lots. It is a good idea to ensure that the landscape contractor considers these elements when the lots are finished following house construction.

In the event that you sell all or any portion of this property to another builder or developer, please make sure that they are aware of the need for proper grading and drainage on the lots. Please be aware that under City standards, the builder is responsible for ensuring that these drainage issues are addressed.



TYPE A CURB & GUTTER

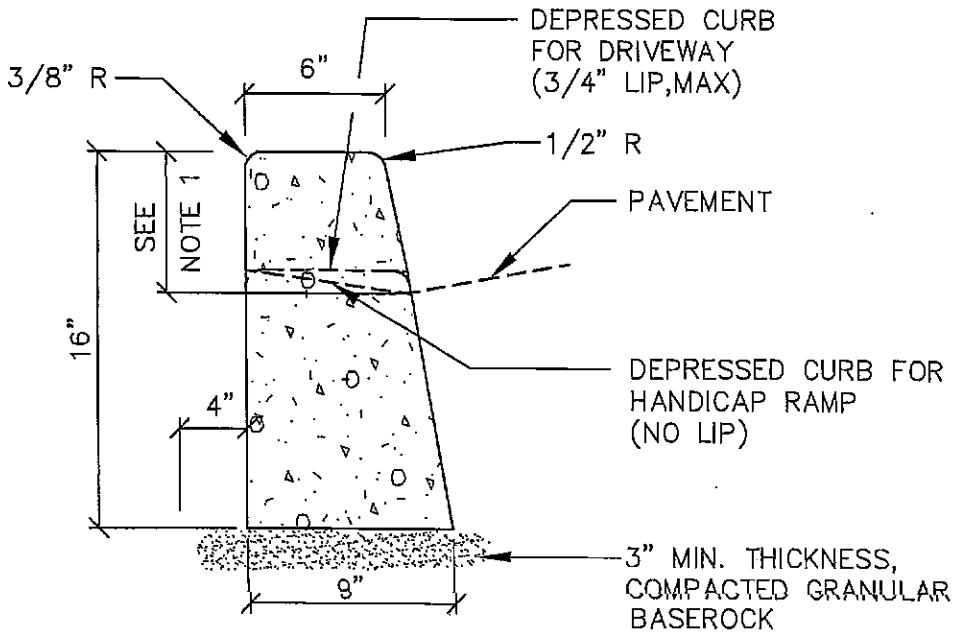


WEEP HOLE THROUGH CURB

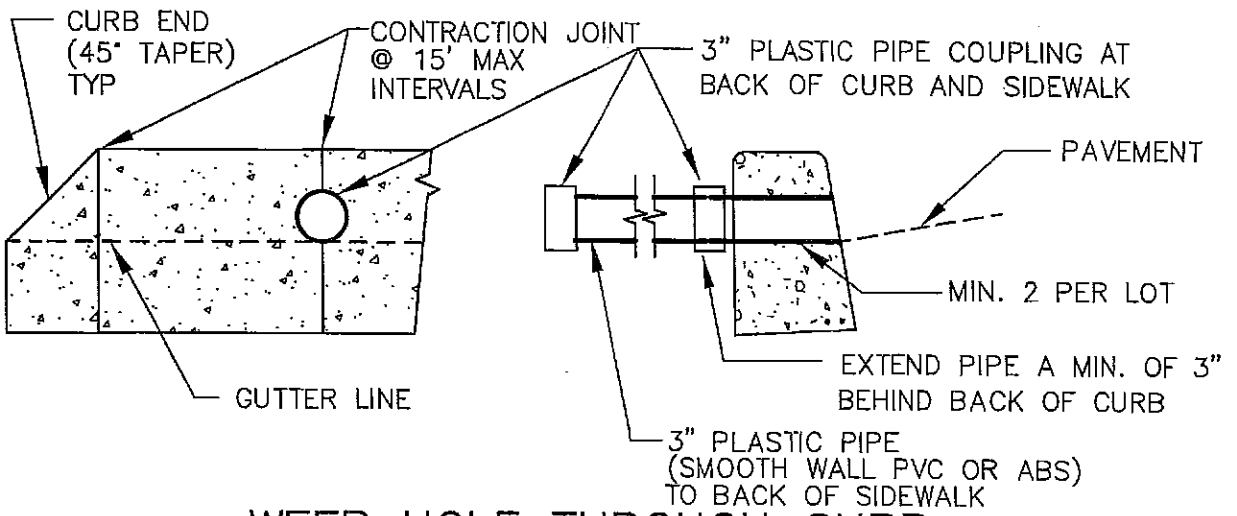
NOTES:

1. CONTRACTION JOINTS SHALL BE PLACED AT 15' MIN. INTERVALS AND SHALL EXTEND AT LEAST 50% THROUGH THE CURB OR CURB AND GUTTER.
2. A CONTRACTION JOINT SHALL BE PLACED ALONG AND OVER WEEP HOLE THROUGH THE SIDEWALK.
3. ALL CONCRETE SHALL BE 3300 PSI @ 28 DAYS.
4. WHERE SIDEWALKS ARE TO BE CONSTRUCTED, EXTEND 3" PIPE TO BACK OF SIDEWALK LOCATION & INSTALL COUPLING.
5. INSTALL MIN. 2 WEEP HOLES ON ALL LOTS. ONE WEEP HOLE TO BE AT LOW POINT OF LOT, 5' FROM P/L. WEEPHOLES IN EXISTING CURBS SHALL BE CORE DRILLED.

LAST REVISION DATE: NOV 2011	
TYPE 'A' CURB AND GUTTER AND WEEP HOLE (NTS)	
DAYTON, OR	DETAIL NO. 210



TYPE 'C' CURB

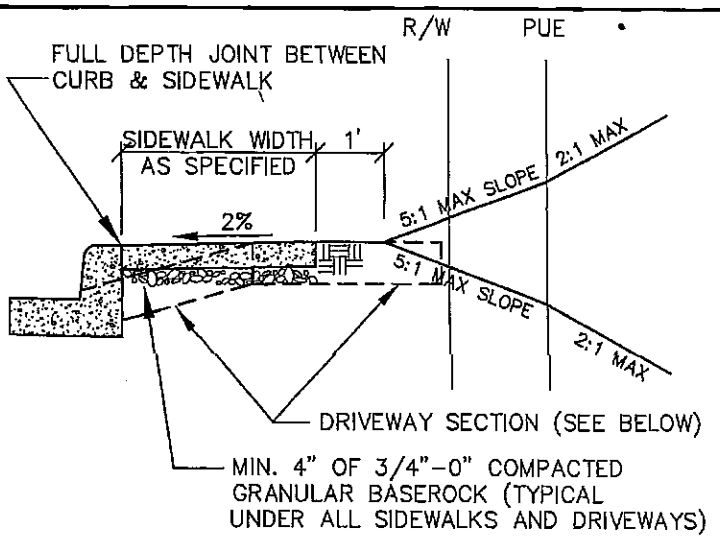


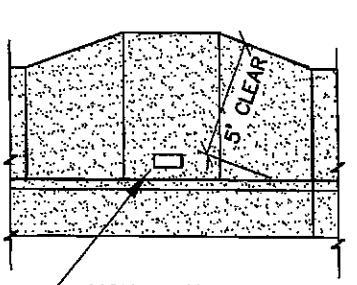
WEEP HOLE THROUGH CURB

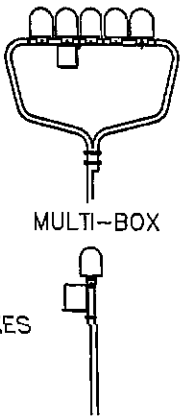
NOTES

1. 7" CURB EXPOSURE FOR ARTERIAL & COLLECTOR STREETS WHERE TYPE C CURB ALLOWED. 6" EXPOSURE ALL OTHER PUBLIC STREETS, PRIVATE STREETS & PARKING LOTS.
2. A CONTRACTION JOINT SHALL BE PLACED ALONG AND OVER WEEP HOLE THROUGH THE SIDEWALK.
3. ALL CONCRETE SHALL BE 3300 PSI @ 28 DAYS.
4. WHERE SIDEWALKS ARE TO BE CONSTRUCTED, EXTEND 3" PIPE TO BACK OF SIDEWALK LOCATION & INSTALL COUPLING.
5. INSTALL MIN. 2 WEEP HOLES ON ALL LOTS. ONE WEEP HOLE TO BE AT LOW POINT OF LOT, 5' FROM P/L. WEEP HOLES IN EXISTING CURBS SHALL BE CORE DRILLED.

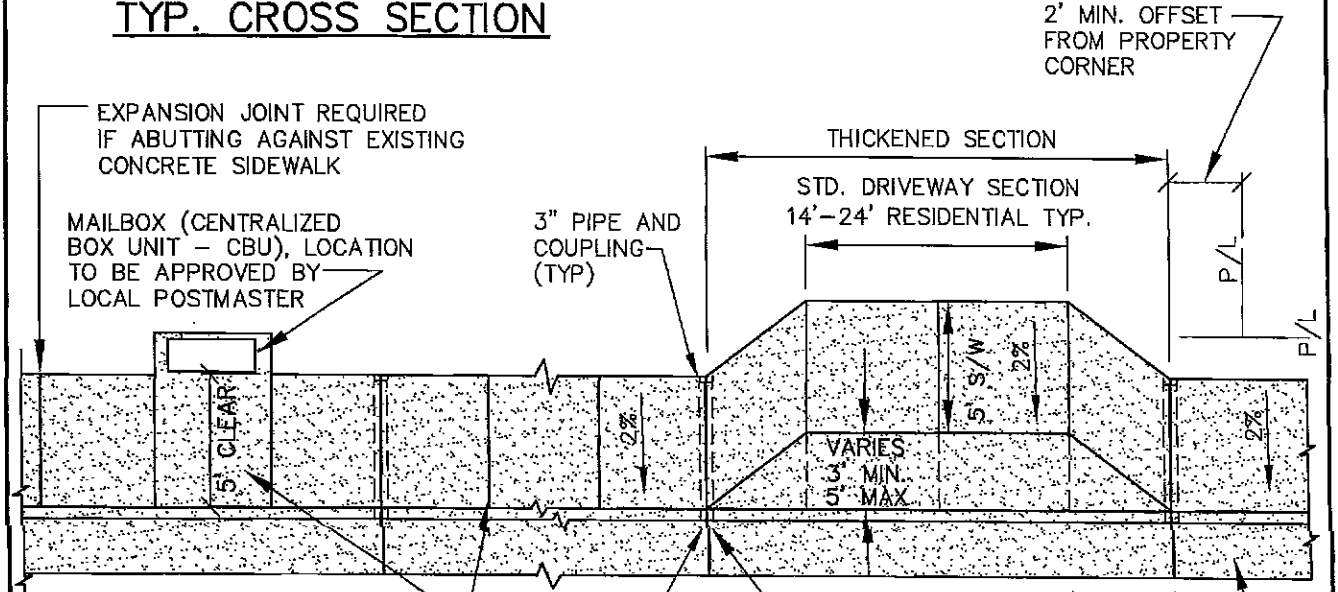
LAST REVISION DATE: NOV 2011	
TYPE 'C' CURB AND WEEPHOLE (NTS)	
DAYTON, OR	DETAIL NO. 211







TYP. CROSS SECTION



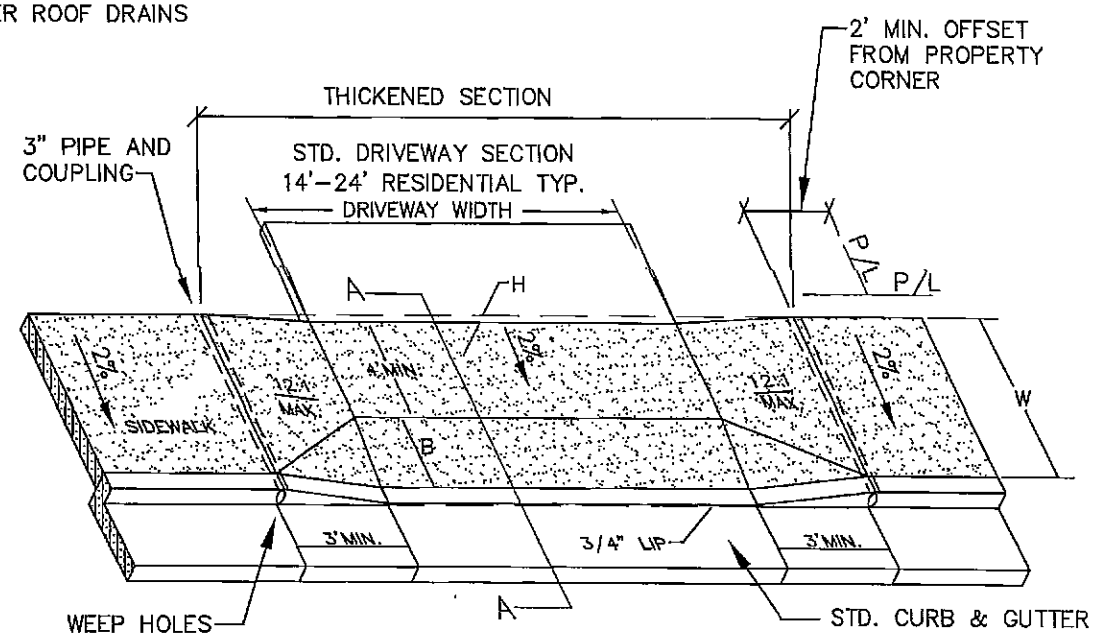
TYP. PLAN VIEW

NOTES:

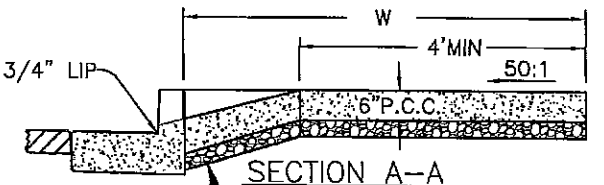
1. CONCRETE DEPTH FOR STANDARD SIDEWALKS SHALL BE 4" MIN.
2. SIDEWALKS THROUGH RESIDENTIAL DRIVEWAYS (INCLUDING WINGS) SHALL BE 6" MIN. THICKNESS. COMMERCIAL DRIVEWAYS SHALL BE 8" MIN. THICK.
3. SIDEWALKS 8' & WIDER SHALL HAVE A LONGITUDINAL CONTRACTION JOINT AT MIDPOINT.
4. CONCRETE SHALL BE 3300 PSI @ 28 DAYS.
5. PCC APRONS JOINTED TO MATCH SIDEWALK PATTERN.
6. SIDEWALKS SHALL BE LOCATED ENTIRELY WITHIN PUBLIC RIGHT-OF-WAY OR SIDEWALK EASEMENTS, INCLUDING AT DRIVEWAYS & INTERSECTIONS.
7. ADA ACCESS TO CBU MAILBOXES SHALL CONFORM WITH SECTION 1111 OF OSSC (OREGON STRUCTURAL SPECIALTY CODE).

LAST REVISION DATE: JUNE 2012	
CURBLINE SIDEWALKS AND DRIVEWAY APRONS (NTS)	
DAYTON, OR	DETAIL NO. 212

NOTE:
CONTRACTION JOINT REQUIRED
AT BOTH SIDES OF DRIVEWAY
AND OVER ROOF DRAINS



W	B	H	
5'	1'	0.27'	(3-1/4")
6'	2'	0.23'	(2-3/4")
7'	3'	0.19'	(2-1/4")



SECTION A-A

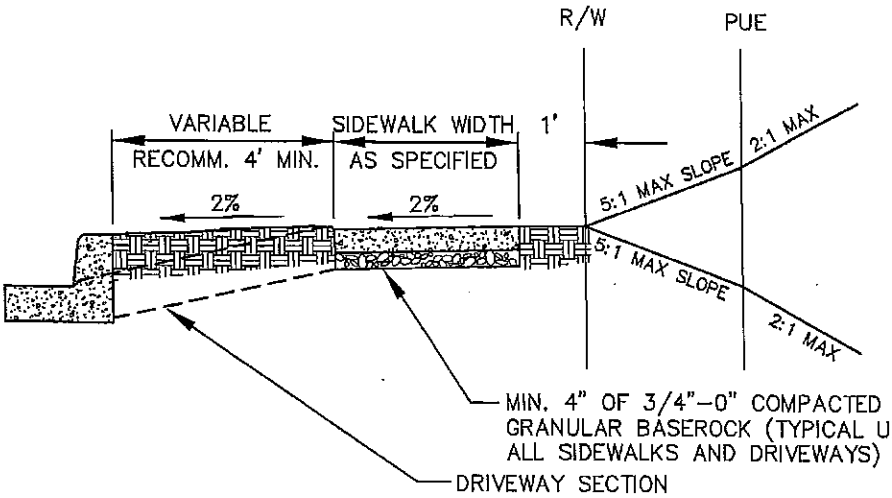
NO SCALE

MIN. 4" OF 3/4"-0" COMPACTED GRANULAR BASEROCK (TYPICAL UNDER ALL SIDEWALKS AND DRIVEWAYS)

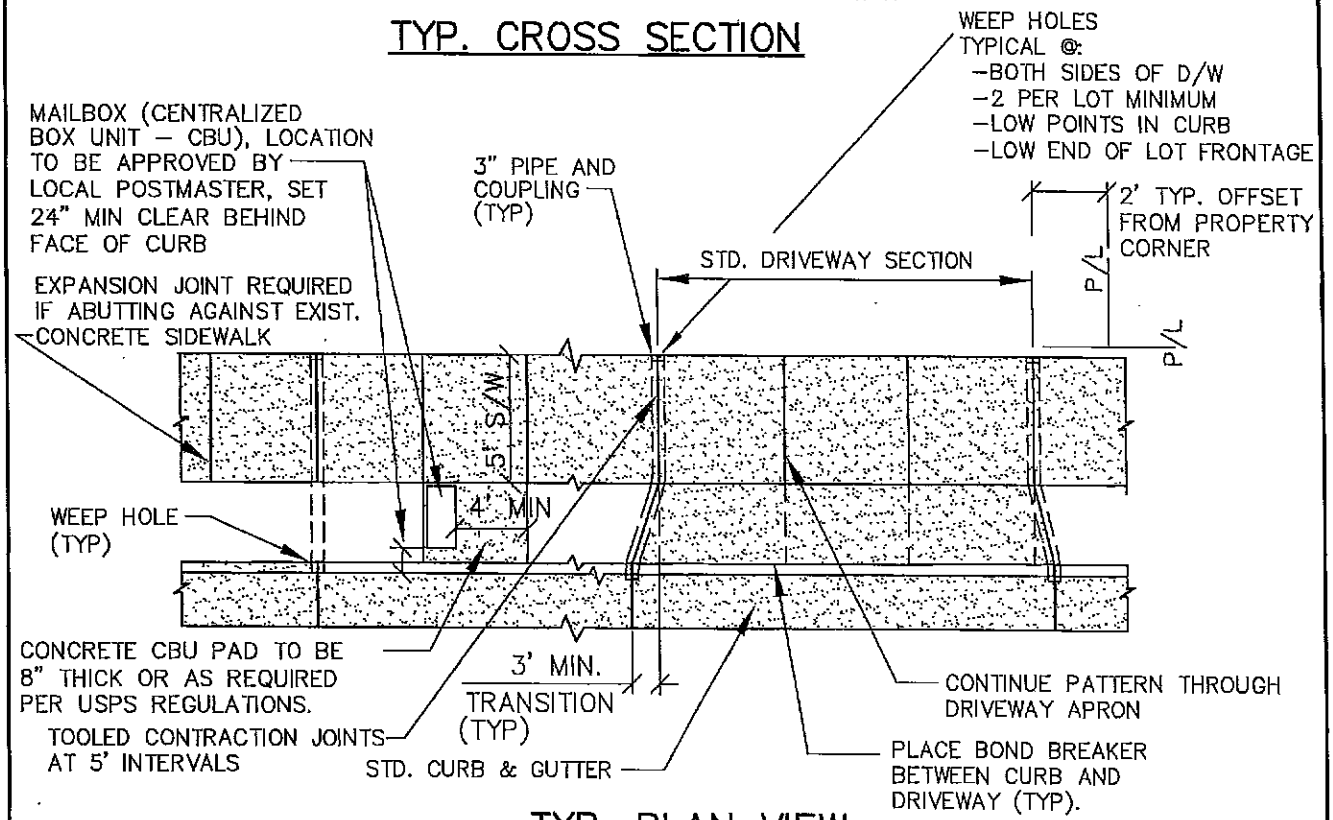
NOTES:

1. SEE DETAIL 212 FOR STANDARD APRON & SIDEWALK DETAILS. USE OF THIS DETAIL REQUIRES SPECIFIC APPROVAL BY PUBLIC WORKS PRIOR TO FORMING.
2. CONCRETE DEPTH FOR STANDARD SIDEWALKS SHALL BE 4" MIN.
3. SF & DUPLEX RESIDENTIAL DRIVEWAY SECTIONS INCLUDING SIDEWALKS THROUGH DRIVEWAYS SHALL BE 6" MIN. THICKNESS.
4. CONCRETE SHALL BE 3300 PSI @ 28 DAYS.
5. PCC APRONS SHALL BE JOINTED TO MATCH SIDEWALK PATTERN.
6. PUBLIC SIDEWALKS SHALL BE LOCATED ENTIRELY WITHIN RIGHT-OF-WAY OR SIDEWALK EASEMENTS, INCLUDING SIDEWALKS THROUGH DRIVEWAY APRONS & AT CORNERS.
7. 2% CROSS SLOPE IS MEASURED FROM HORIZONTAL. 12:1 SIDEWALK SLOPE IS RELATIVE TO THE RUNNING SLOPE OF THE SIDEWALK.

LAST REVISION DATE: JAN 2012	
RESIDENTIAL D/W APRON CURBLINE SIDEWALK STEEP UPHILL LOTS ONLY (NTS)	
DAYTON, OR	DETAIL NO. 212A



TYP. CROSS SECTION

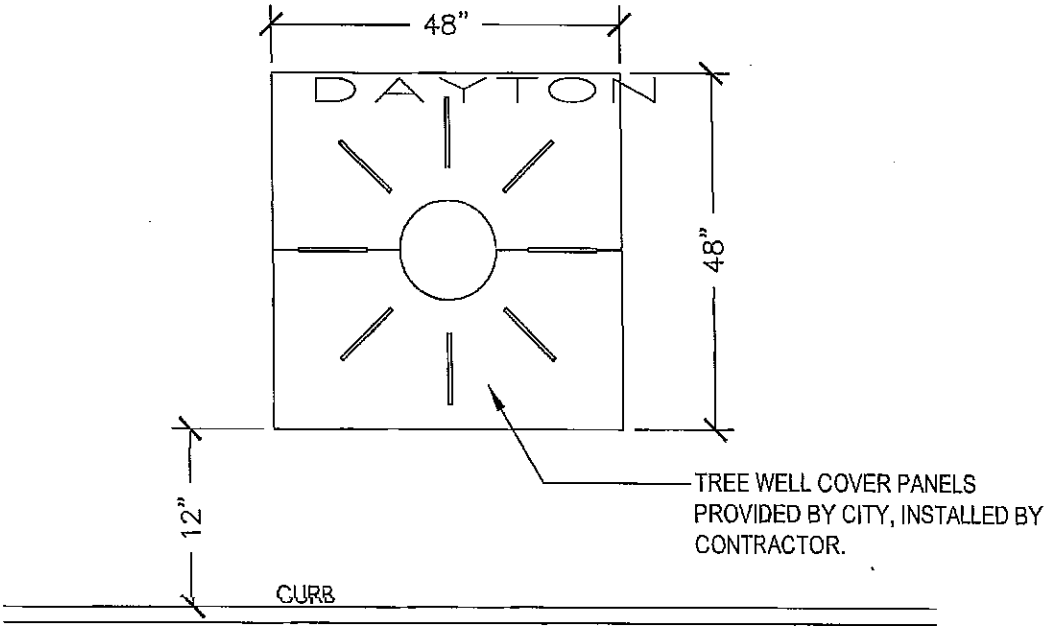


TYP. PLAN VIEW

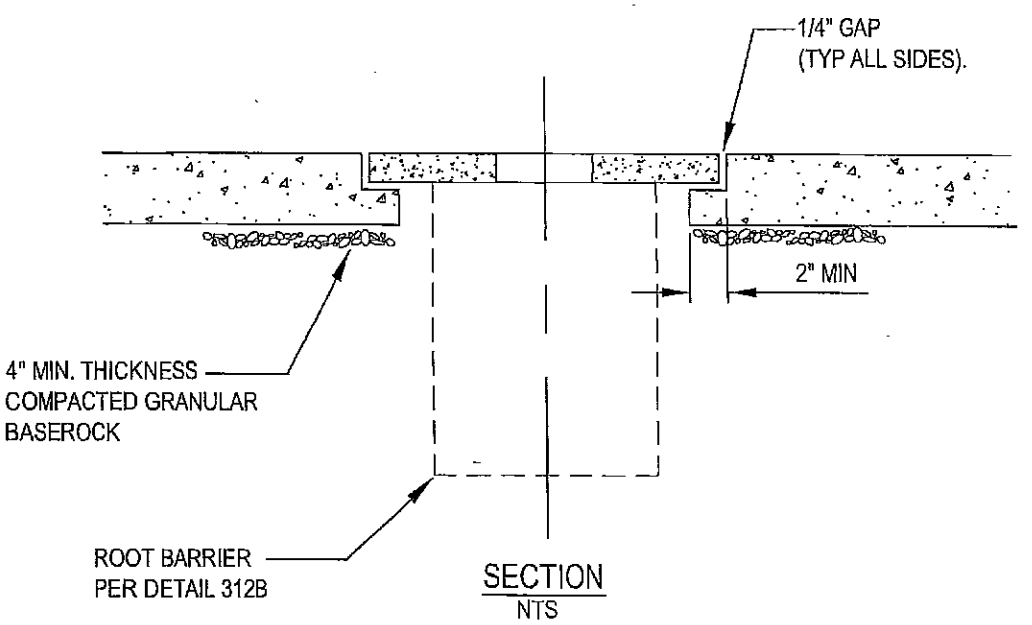
NOTES:

1. CONCRETE DEPTH FOR STANDARD SIDEWALKS SHALL BE 4" MIN.
2. RESIDENTIAL DRIVEWAY SECTIONS INCLUDING SIDEWALKS THROUGH DRIVEWAYS SHALL BE 6" MIN. THICKNESS. COMMERCIAL D/W & ALLEY APPROACHES SHALL BE 8" MIN. THICKNESS.
3. SIDEWALKS 10' & WIDER SHALL HAVE A LONGITUDINAL CONTRACTION JOINT 5' ON CENTER.
4. PCC APRONS SHALL BE JOINTED TO MATCH SIDEWALK PATTERN.
5. CONCRETE SHALL BE 3300 PSI @ 28 DAYS.
6. ADA ACCESS TO CBU MAILBOXES SHALL CONFORM WITH SECTION 1111 OF THE OSSC (OREGON STRUCTURAL SPECIALTY CODE).

LAST REVISION DATE: JUNE 2012	
PROPERTY LINE SIDEWALKS AND DRIVEWAY APRONS (NTS)	
DAYTON, OR	DETAIL NO. 213



PLAN
NTS



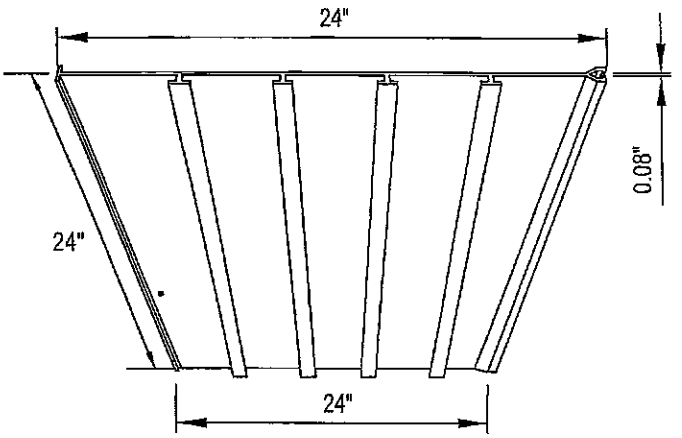
SECTION
NTS

NOTES:

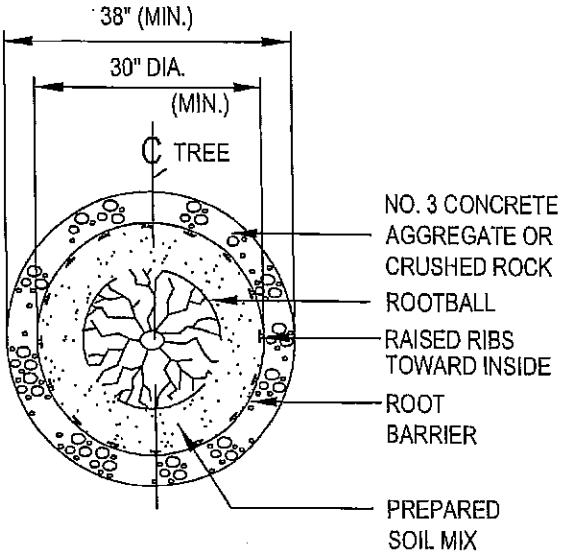
CONTRACTOR TO VERIFY INSET PANEL DIMENSIONS AND THICKNESS PRIOR TO FORMING BLOCKOUT AND LIP.

DRAWINGS NOT TO SCALE.

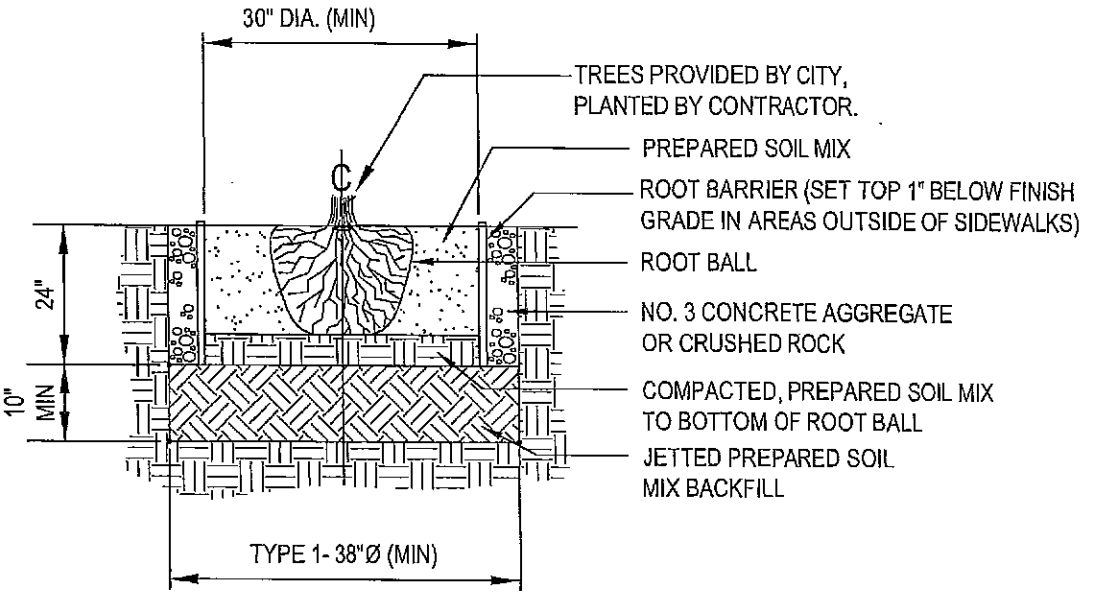
LAST REVISION DATE: APR 2013	
48" SQUARE TREE WELL COVER PANELS (NTS)	
DAYTON, OR	DETAIL NO. 213A



BARRIER PANEL
NTS (oblique view)



TYPE 1 (4 PANELS)
NTS

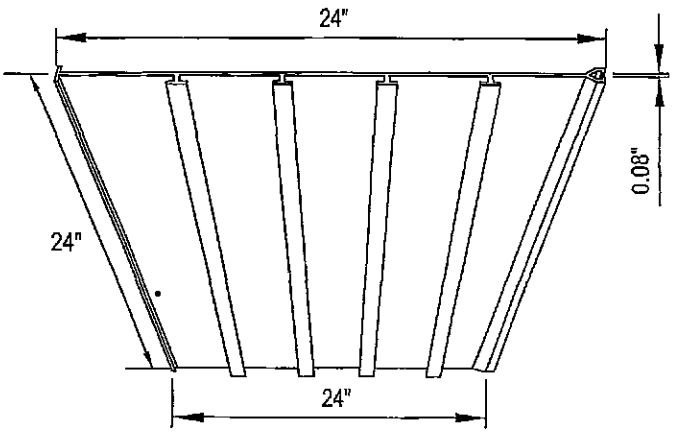


SECTION
NTS

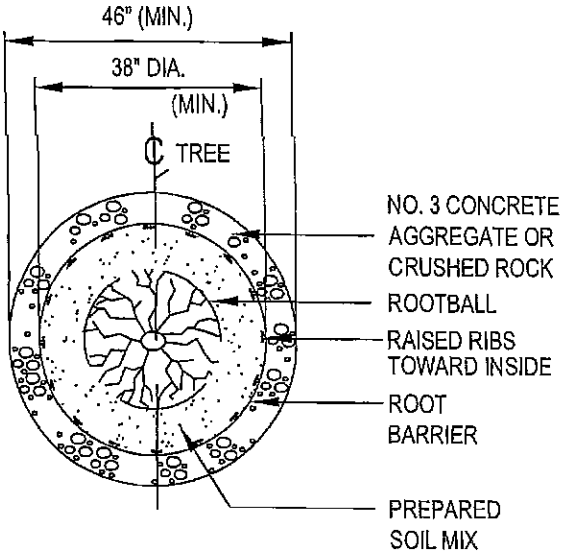
NOTES:

1. BARRIER PANEL ASSEMBLY & INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS & DRAWING/DETAIL NOTES, WHICHEVER IS MORE STRINGENT.
2. DO NOT SCALE DRAWINGS.
3. BARRIER PANELS TO BE NDS RP SERIES OR EQUAL.

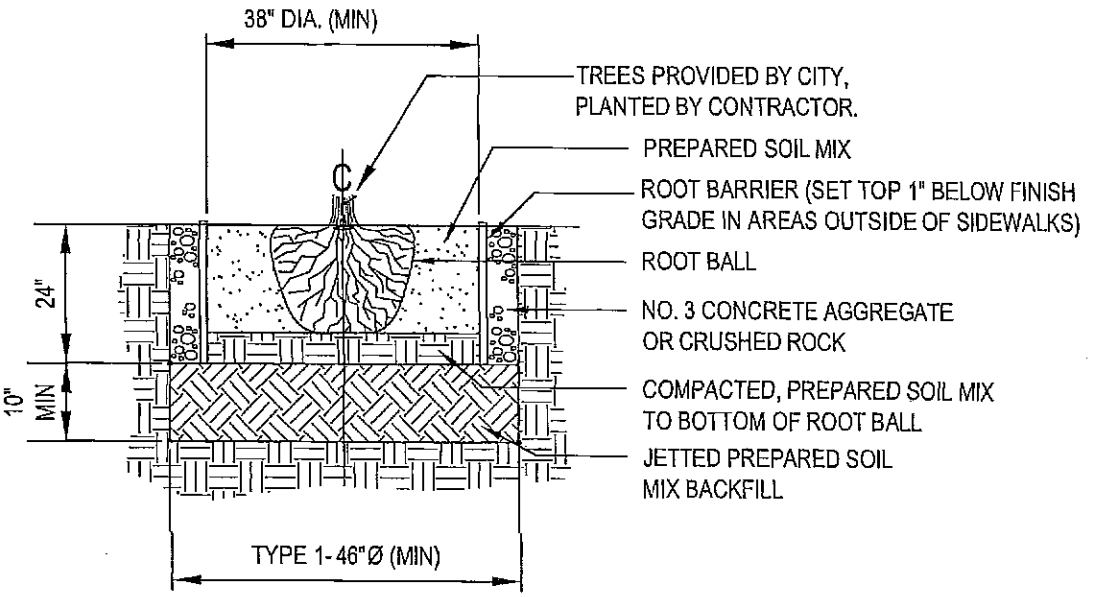
LAST REVISION DATE: NOV 2012	
24" DEEP, 30" Ø 4 PANEL ROOT BARRIER TREE WELLS (NTS)	
DAYTON, OR	DETAIL NO. 213B



BARRIER PANEL
NTS (oblique view)



TYPE 2 (5 PANELS)
NTS

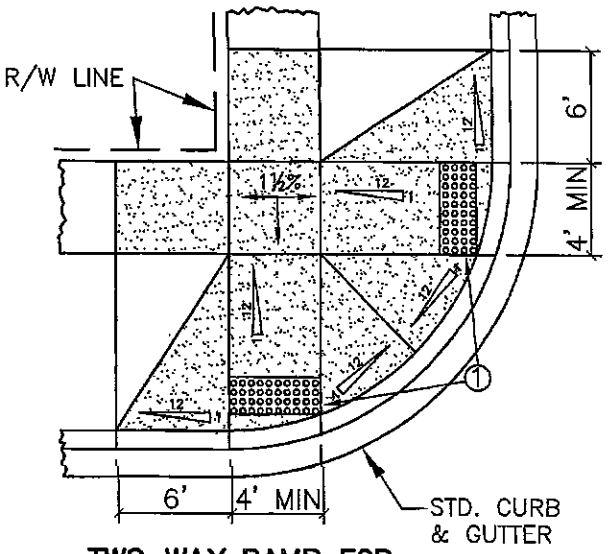


SECTION
NTS

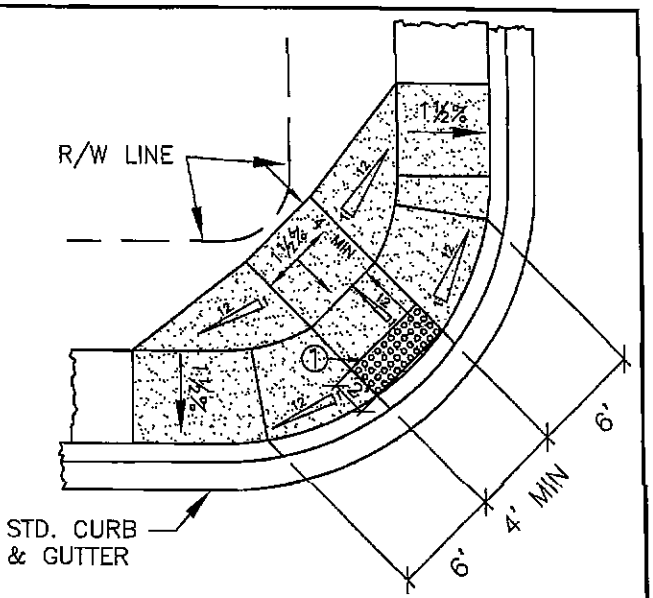
NOTES:

1. BARRIER PANEL ASSEMBLY & INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS & DRAWING/DETAIL NOTES, WHICHEVER IS MORE STRINGENT.
2. DO NOT SCALE DRAWINGS.
3. BARRIER PANELS TO BE NDS RP SERIES OR EQUAL.

LAST REVISION DATE: NOV 2012	
24" DEEP, 38" Ø 5 PANEL ROOT BARRIER TREE WELLS (NTS)	
DAYTON, OR	DETAIL NO. 213C



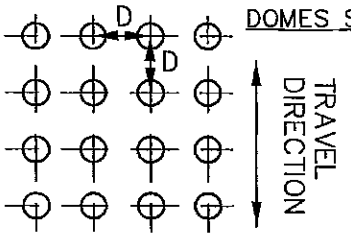
TWO WAY RAMP FOR PROPERTY LINE SIDEWALKS



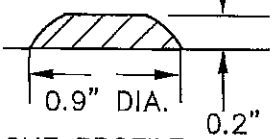
CENTER RAMP FOR CURB LINE SIDEWALK CURB GRADE >2%

① CONSTRUCT TRUNCATED DOME DETECTABLE WARNING SURFACE WITH PARALLEL ALIGNMENT

SPACING: D=1.6" MIN. TO 2.40" MAX
0.65" MIN CLEAR BETWEEN DOME BASES

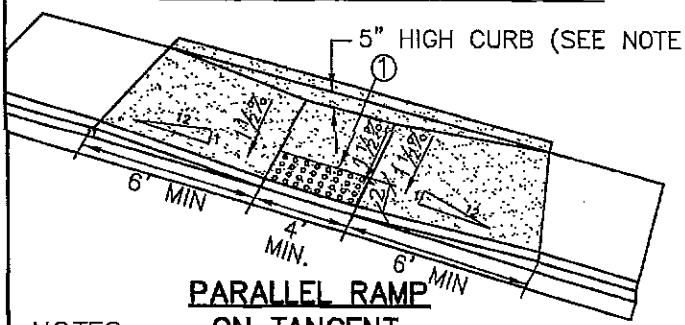


DOMES SHALL BE RED CONCRETE INSET PANELS (CASTinTACT 3 OR EQUAL)

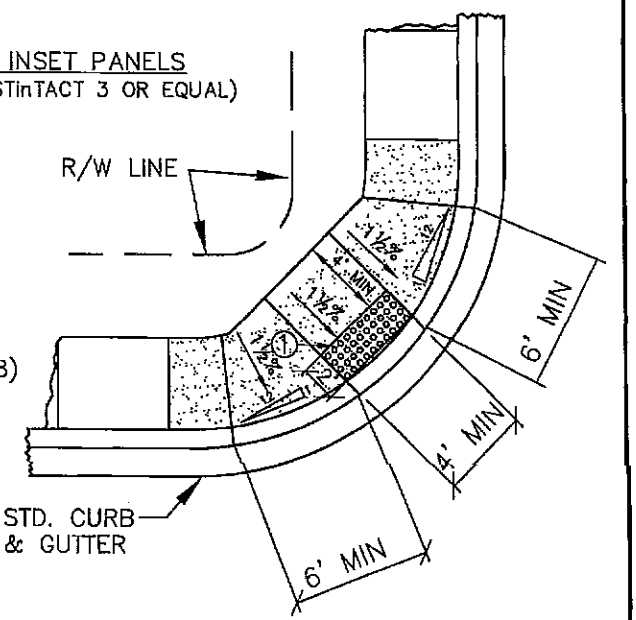


DOME PROFILE

FIGURE A: TRUNCATED DOME DETAIL



PARALLEL RAMP ON TANGENT

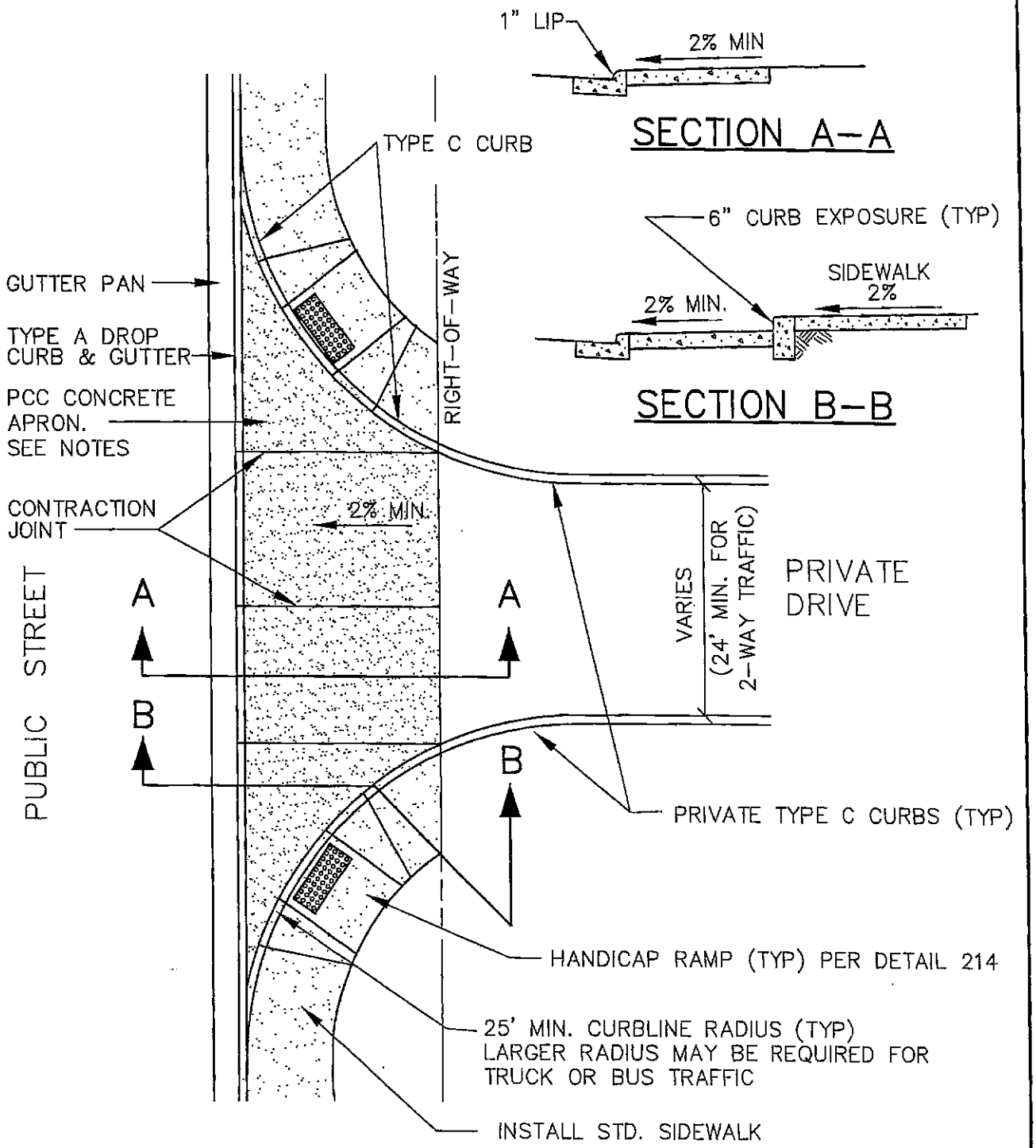


CENTER RAMP FOR CURB LINE SIDEWALK CURB GRADE 2% MAX

NOTES:

1. SEE FIGURE A FOR RAMP TEXTURE DETAIL.
2. SEE TYPICAL STREET SECTIONS FOR SIDEWALK WIDTH.
3. ALL RAMPS AND TRANSITIONS SHALL BE ADA COMPLIANT.
4. LANDINGS SHALL HAVE A MIN. WIDTH & DEPTH OF 4 FEET
5. THE 2% CROSS SLOPES (1:50) SHOWN ARE MEASURED FROM HORIZONTAL.
6. SHADED AREAS TO BE CONSTRUCTED W/STREET IMPROV.
7. DROP CURBS FOR HANDICAP RAMPS SHALL BE CONSTRUCTED WITH NO LIP AT THE GUTTER LINE.
8. PROVIDE TANGENT RAMPS ON LOW SIDE OF STREET WITH A 6–INCH WIDE CONCRETE CURB AS SHOWN UNLESS A CATCH BASIN IS PROVIDED AT UPHILL END OF RAMP.
9. DOMES PANELS TO BE MASCO CASTINTACT OR EQUAL.

LAST REVISION DATE: SEPT 2012	
HANDICAP RAMPS (NTS)	
DAYTON, OR	DETAIL NO. 214

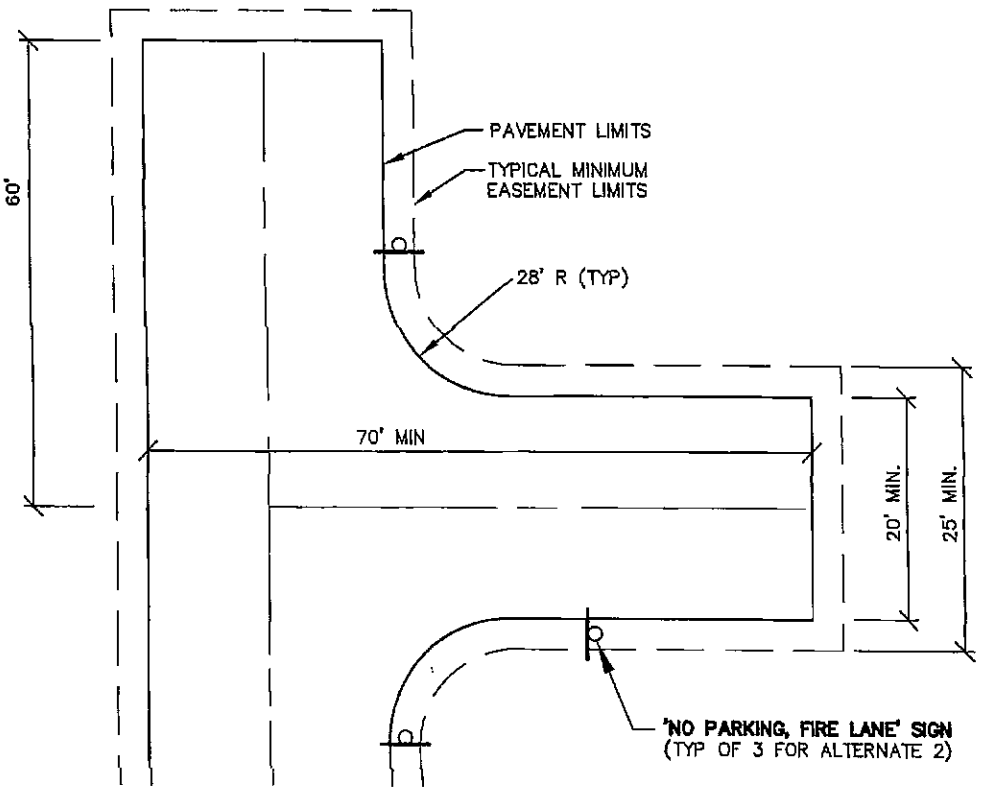


NOTES:

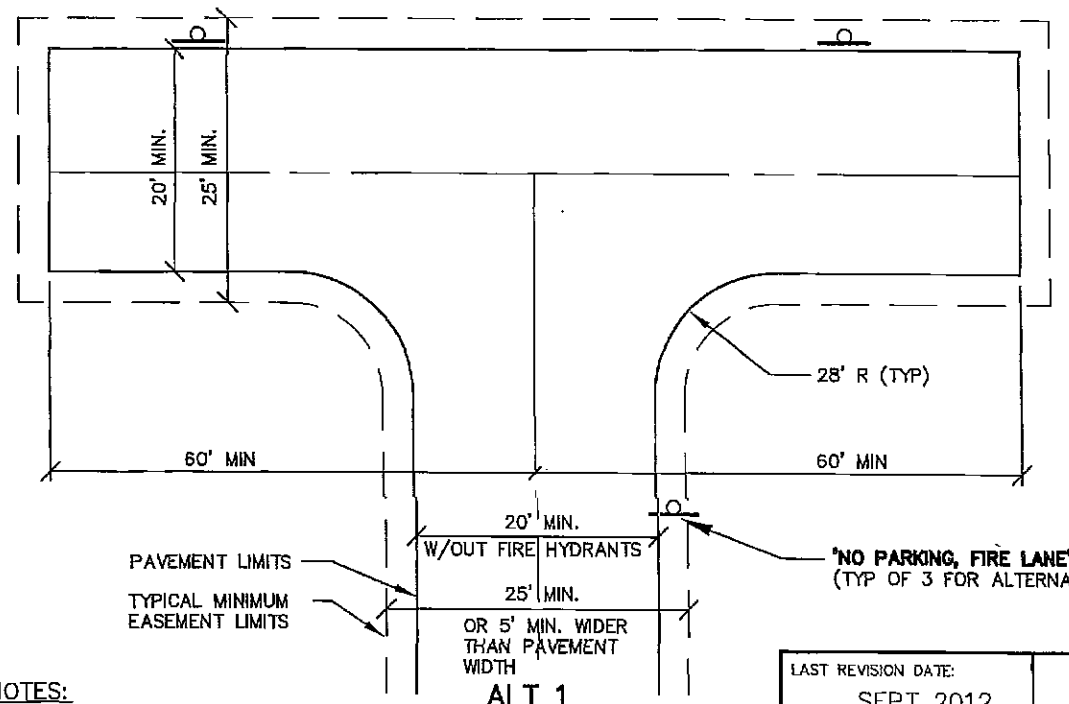
1. CONCRETE APRON TO HAVE A MIN. THICKNESS OF 8" CLASS 3300 PCC WITH #3 REBAR @ 12" O.C. EACH WAY, OR 6"X6" 10 GA. WELDED WIRE MESH, SET ON 3" DOBIES.

LAST REVISION DATE: NOV 2011	
COMMERCIAL DRIVEWAY APPROACH (NTS)	
DAYTON, OR	DETAIL NO. 216

FIRE CODE NOTE:
ALL FIRE LANES, TURNAROUNDS AND ASSOCIATED IMPROVEMENTS SHALL COMPLY WITH THE MOST CURRENT VERSION OF THE OREGON FIRE CODE (OFC).



ALT 2

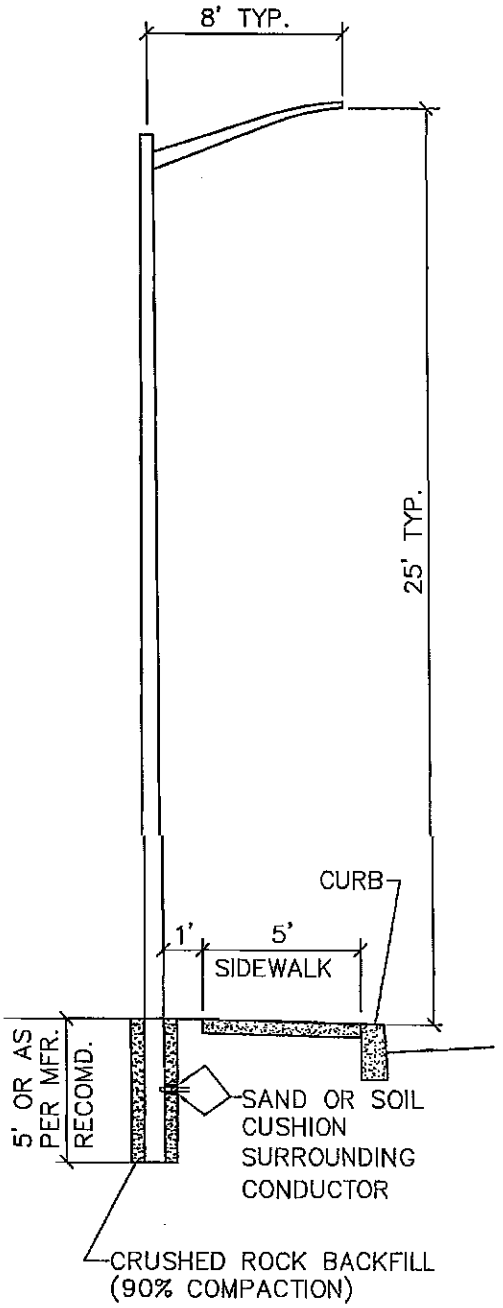


ALT 1

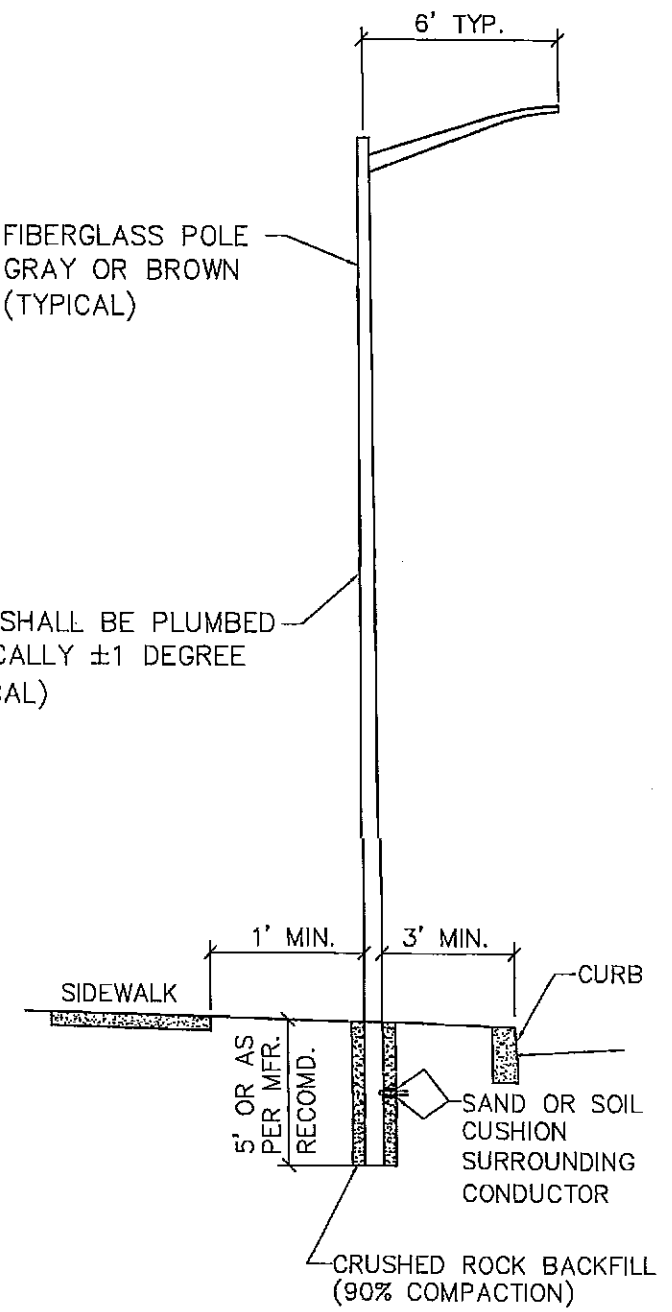
NOTES:

1. 'NO PARKING/FIRE LANE' SIGNS REQUIRED WITHIN LIMITS OF TURN-AROUND AS SHOWN, & AT TYPICAL 50 FOOT MAXIMUM INTERVALS ALONG LENGTH OF FIRE LANE OR PER OFC REQUIREMENTS.
2. THESE ARE TYPICAL MINIMUM DESIGNS AS REQUIRED BY THE 2010 OFC D103.4 & FIGURE D103.1. ALTERNATE DESIGNS SHALL MEET THE APPROVAL OF THE LOCAL FIRE MARSHALL.
3. PAVEMENT DIMENSIONS SHOWN REFERS TO TOTAL DRIVABLE WIDTH BETWEEN CURBS IF PRESENT.
4. MIN. 26' PAVEMENT WIDTH AT FIRE HYDRANTS (OFC D103.1).

LAST REVISION DATE: SEPT 2012	
HAMMERHEAD TURNAROUND (PRIVATE DRIVES ONLY) (NTS)	
DAYTON, OR	DETAIL NO. 220



TYPICAL LAMP POST
CROSS SECTION TYPE ONE



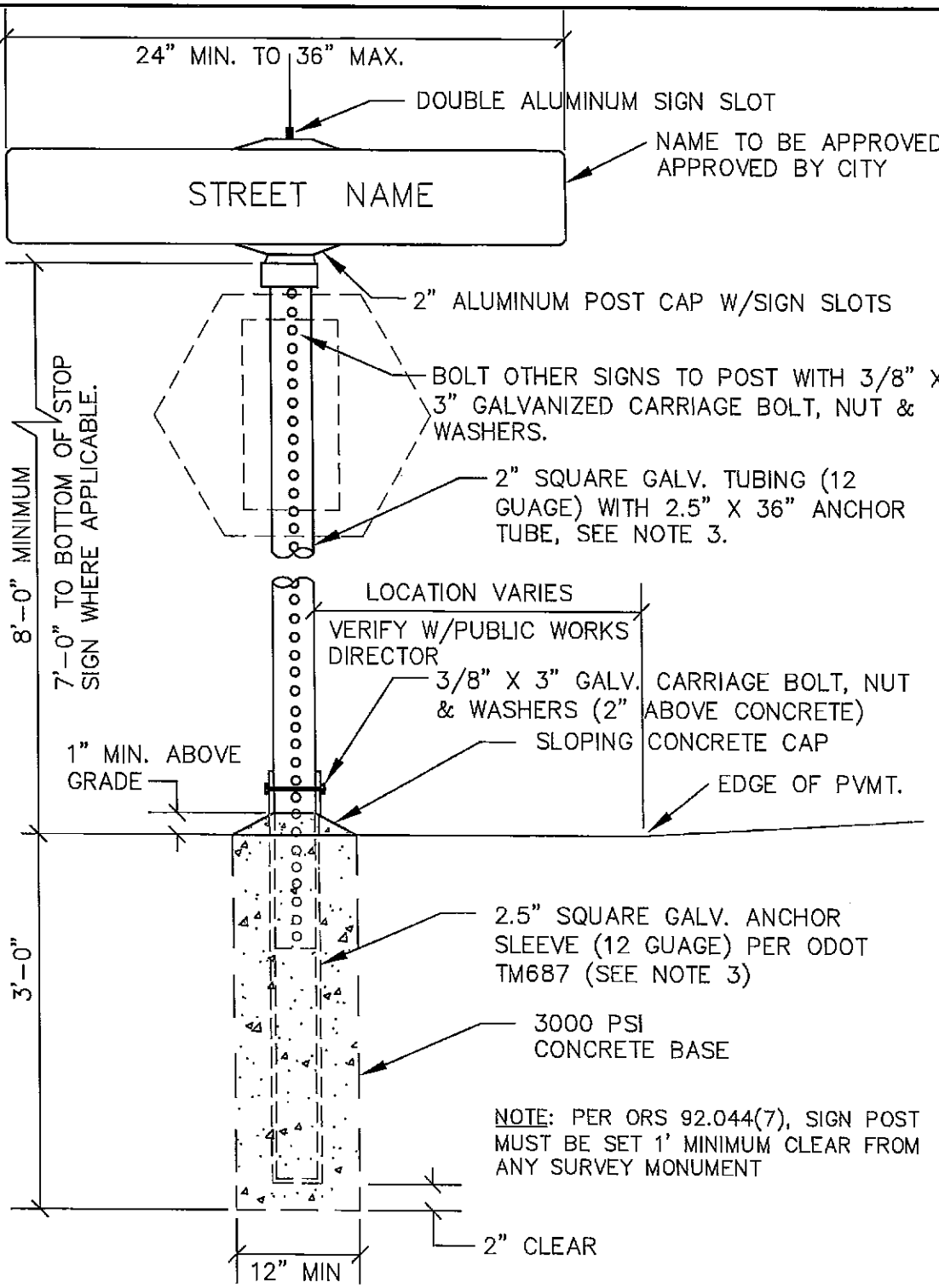
TYPICAL LAMP POST
CROSS SECTION TYPE TWO

NOTES:

1. CONTRACTOR TO COORDINATE W/LOCAL POWER COMPANY FOR MATERIALS AND WORKMANSHIP REQUIREMENTS.
2. UNLESS OTHERWISE SHOWN ON DRAWINGS, STANDARD FIXTURE IS 100 WATT FLAT LENS COBRAHEAD.

NOTE: PER ORS 92.044(7), STREET LIGHT MUST BE SET 1' MINIMUM CLEAR FROM ANY SURVEY MONUMENT

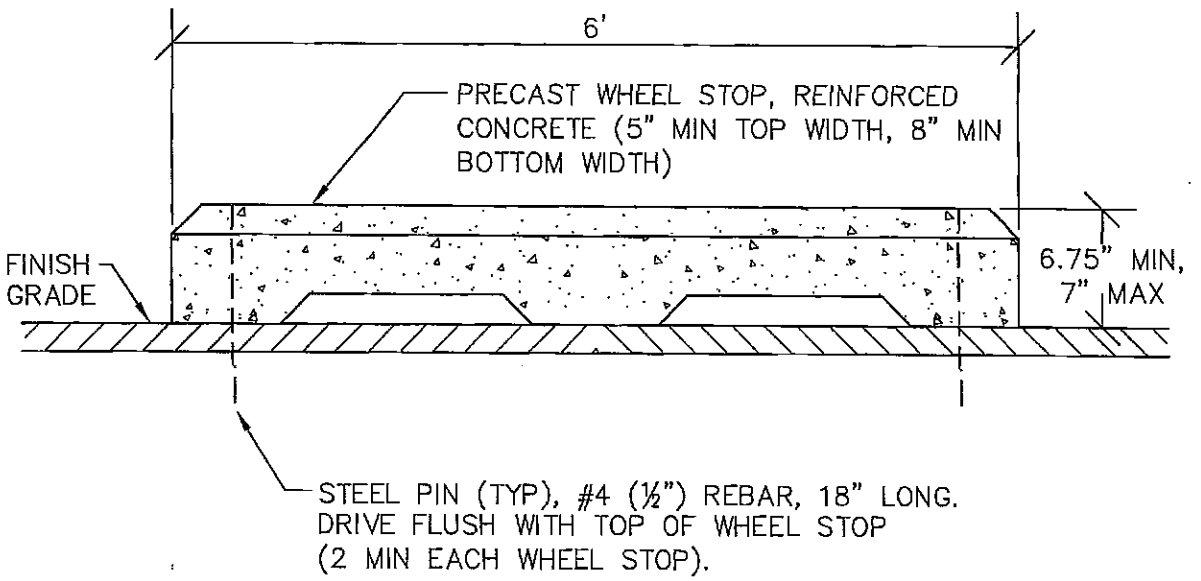
LAST REVISION DATE: JUNE 2011	
TYPICAL STREET LAMP POST (NTS)	
DAYTON, OR	DETAIL NO. 230



NOTES:

1. STREETS INTERSECTING ODOT RIGHT-OF-WAY TO BE SIGNED PER WITH ODOT STANDARDS.
2. SIGN PANEL MATERIALS TO CONFORM TO SECTION 00940 OF OSHD SPECIFICATIONS, AND ALL SIGNS SHALL CONFORM WITH OREGON MUTCD MANUAL.
3. SIGN POSTS & SLEEVES TO HAVE 7/16" DIAMETER HOLES ON 1" HOLE CENTERS.

LAST REVISION DATE: FEB 2013	
SIGN POST WITH TELESPAR BASE & ANCHOR (REQUIRED IN ODOT R.O.W) (NTS)	
DAYTON, OR	DETAIL NO. 232



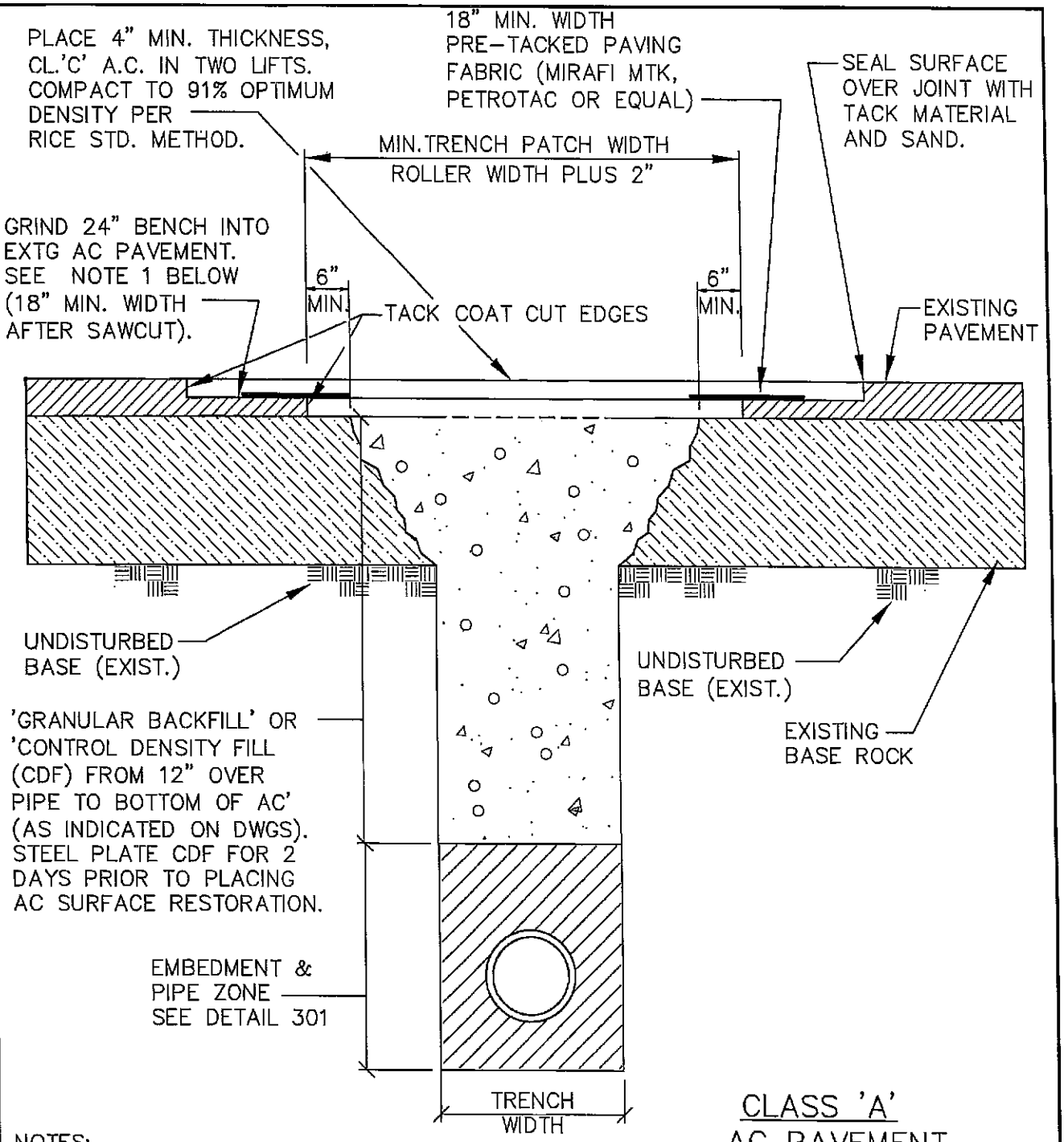
SECTION

NTS

NOTES:

1. SEE DRAWINGS FOR LOCATION & NUMBER OF WHEEL STOPS, INCLUDING DIMENSION FROM CURB, EDGE OF PAVEMENT OR BUILDING AS APPLICABLE.
2. UNLESS OTHERWISE SPECIFIED OR SHOWN ON SITE PLAN, SET WHEEL STOPS 2 FEET FROM FACE OF CURB OR EDGE OF PAVEMENT, MEASURED FROM THE FACE OF THE WHEEL STOP (VEHICLE SIDE) TO FACE OF CURB (OR EDGE OF PAVEMENT). SET BACK FROM PROPERTY LINES PER CITY STANDARDS (3' MIN). MIN SETBACK FROM BUILDINGS AS SHOWN ON DWGS.
3. FOR USE ON HEAD-IN PARKING WITHOUT FULL HEIGHT CURBS, OR WHERE A SIDEWALK ALONG HEAD-IN PARKING IS LESS THAN 6 FEET WIDE.

LAST REVISION DATE: JAN 2013	JO #
PRECAST WHEELSTOP DETAIL (NTS)	
DAYTON, OR	DETAIL NO. 239

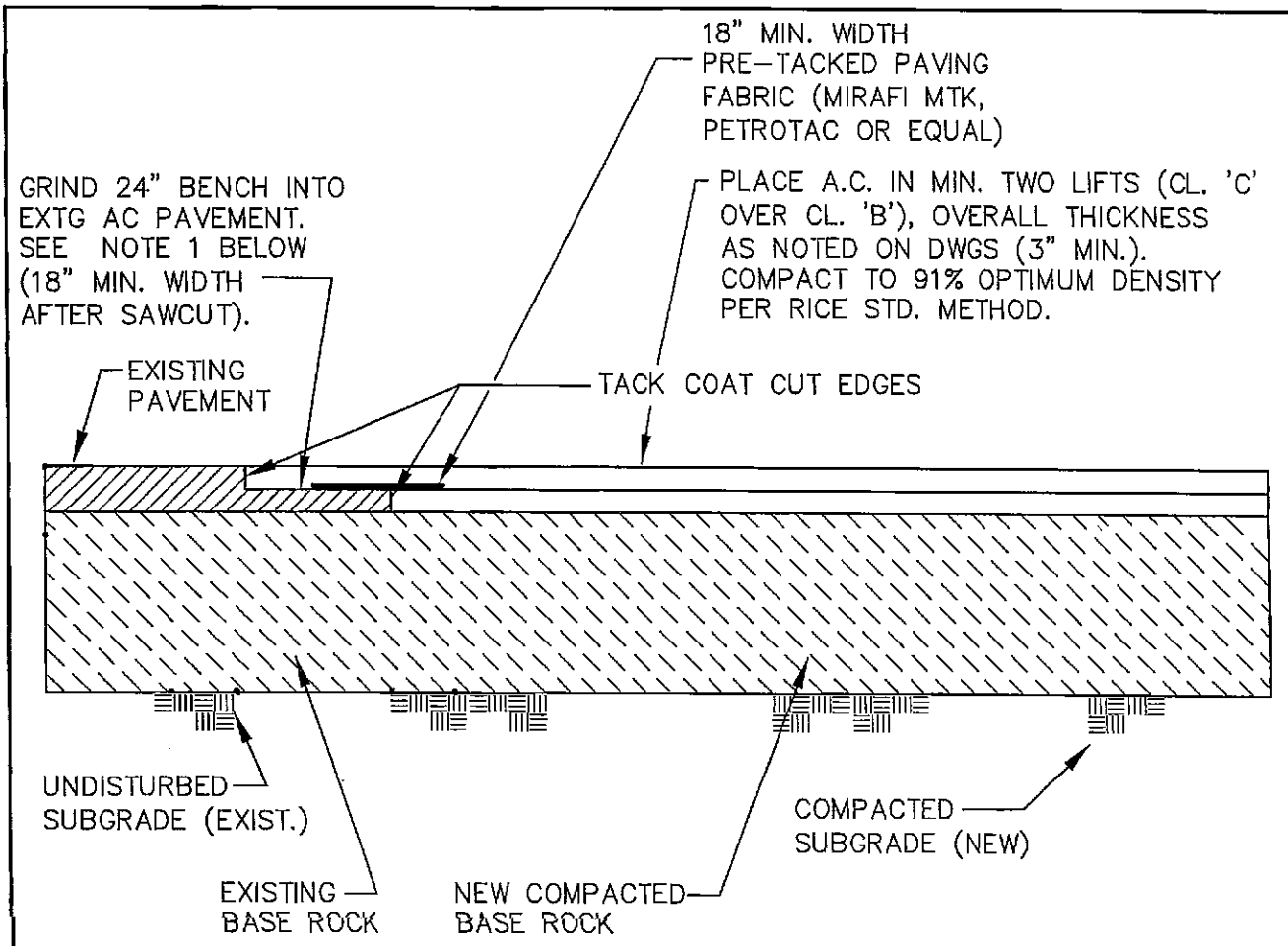


CLASS 'A' AC PAVEMENT

NOTES:

1. FOLLOWING BACKFILL COMPACTION OR CDF INSTALLATION, GRIND 24" WIDE BENCH IN EXISTING AC ON BOTH SIDES & TRENCH END, 1-1/2" DEEP OR HALF THE DEPTH OF EXISTING AC, WHICHEVER IS GREATER.
2. FOLLOWING GRINDING, SAWCUT ALL TRENCH EDGES 6" BACK FROM TRENCH EDGE.
3. TACK COAT CUT EDGES AND INSTALL BASE LIFT OF AC TO LEVEL OF BENCH GRIND.
4. INSTALL JOINT SEAL FABRIC, TACK COAT EDGES & INSTALL TOP LIFT OF AC. SAND SEAL ALL EDGES (REMOVE EXCESS SAND AFTER CURE).

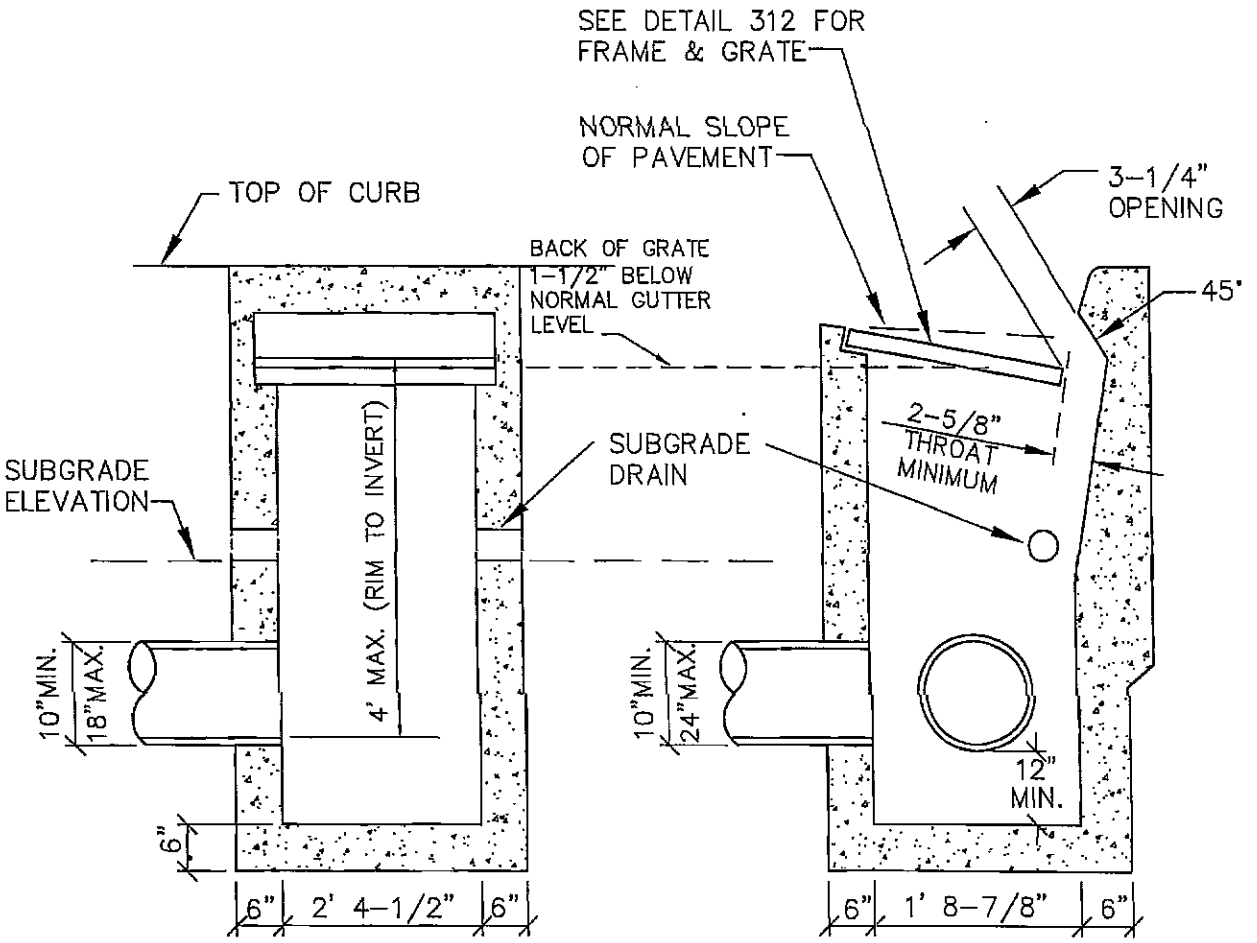
LAST REVISION DATE: JUNE 2012	
AC STREET CUT SURFACE RESTORATION W/BENCH GRIND (NTS)	
DAYTON, OR	DETAIL NO. 302A



NOTES:

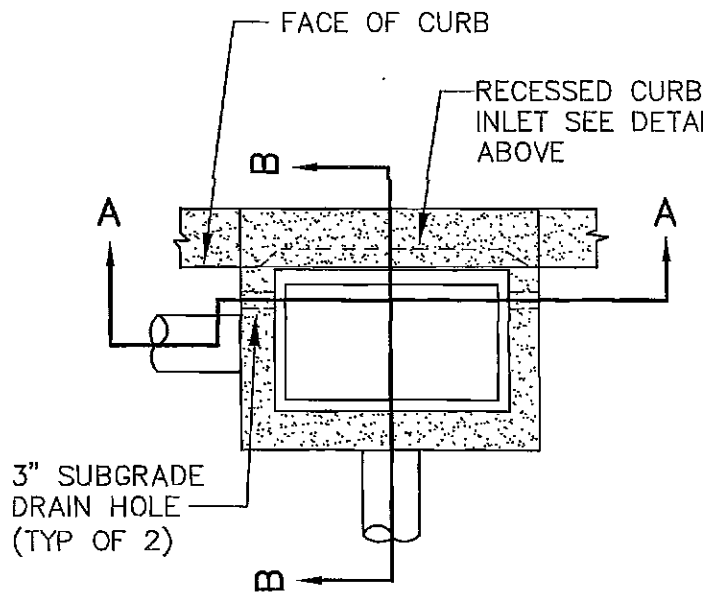
1. PRIOR TO SAWCUTTING, GRIND BENCH IN EXISTING AC 1-1/2' DEEP OR HALF THE DEPTH OF EXISTING AC, WHICHEVER IS GREATER. BENCH TO EXTEND TO A POINT 18" MINIMUM BACK FROM SAWCUT LOCATION.
2. FOLLOWING GRINDING, SAWCUT PAVEMENT EDGES.
3. TACK COAT CUT EDGES AND INSTALL BASE LIFT OF AC LEVEL WITH GROUND BENCH.
4. INSTALL JOINT SEAL FABRIC & TACK COAT EDGES & INSTALL TOP LIFT OF AC.
5. SAND SEAL ALL JOINTS (REMOVE EXCESS SAND AFTER CURE).

LAST REVISION DATE: JUNE 2012	
AC STREET CUT FOR STREET WIDENING (NTS)	
DAYTON, OR	DETAIL NO. 302B



SECTION A–A

SECTION B–B

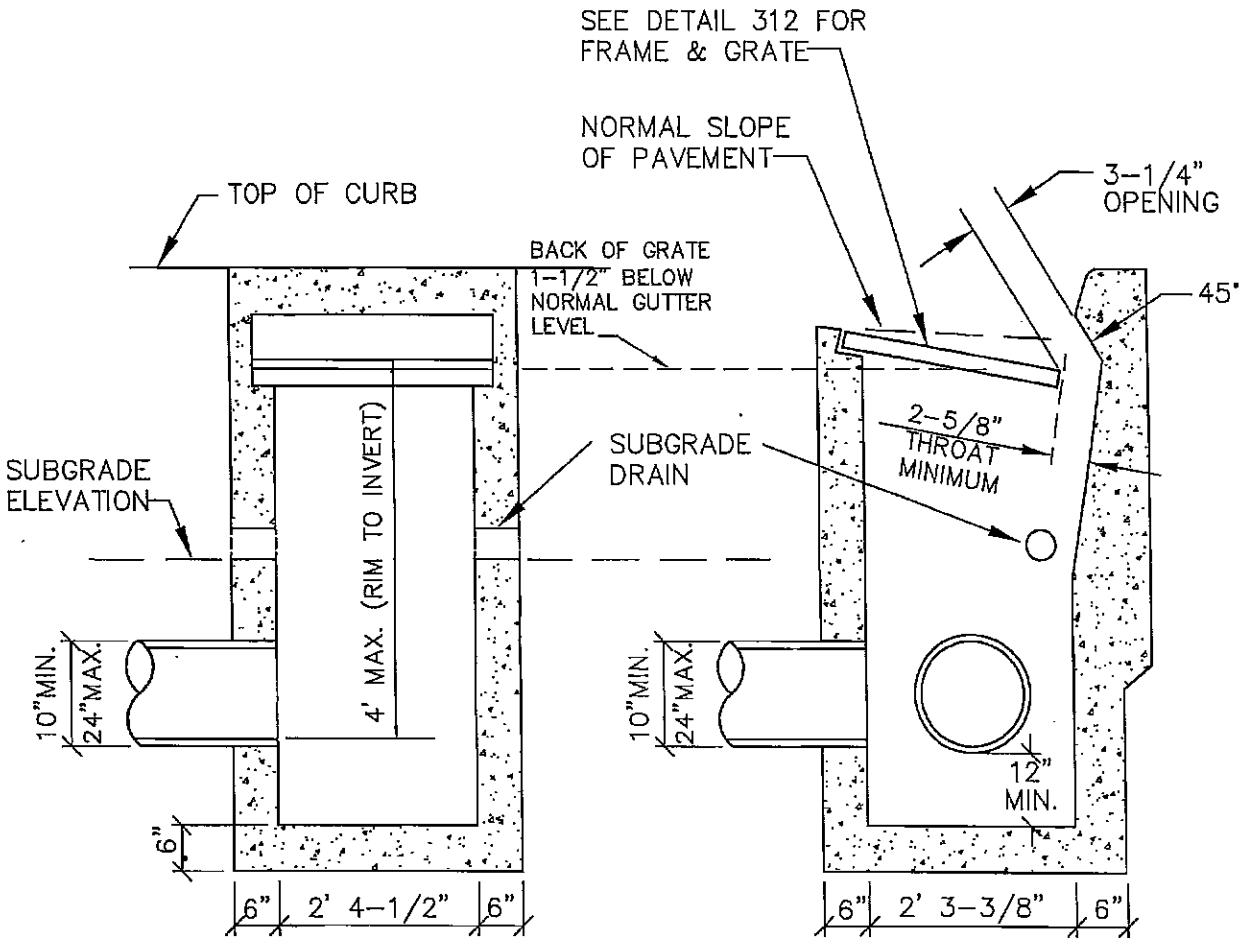


PLAN

NOTES:

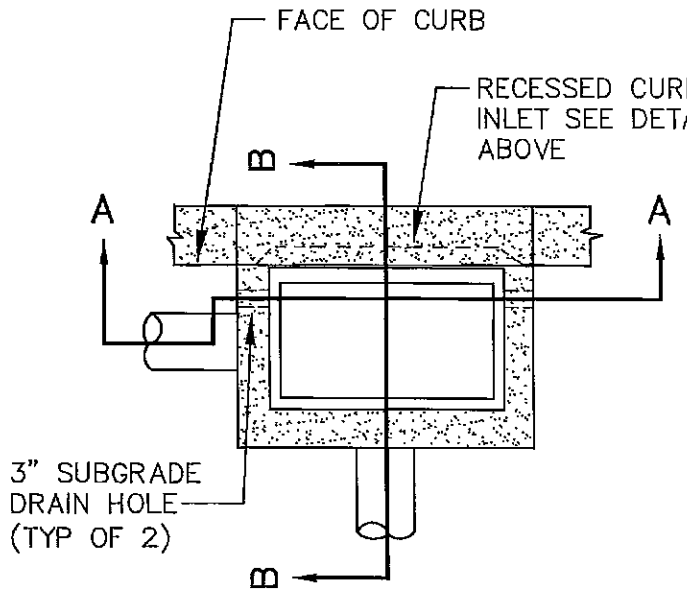
1. SEE CONSTRUCTION DRAWINGS FOR PIPE SIZE, LOCATION AND INVERT ELEVATION.
2. ALL CONCRETE TO BE 3300 PSI @ 28 DAYS.
3. MATCH EXISTING CURB UNLESS OTHERWISE NOTED.
4. CURB–INLET NOTCH TO BE ELIMINATED AT DROP CURB LOCATIONS WHERE APPROVED BY THE CITY ENGINEER.

LAST REVISION DATE: JAN 2013	
STANDARD SIDE-INLET GRATED CATCH BASIN (NTS)	
DAYTON, OR	DETAIL NO. 310



SECTION A–A

SECTION B–B

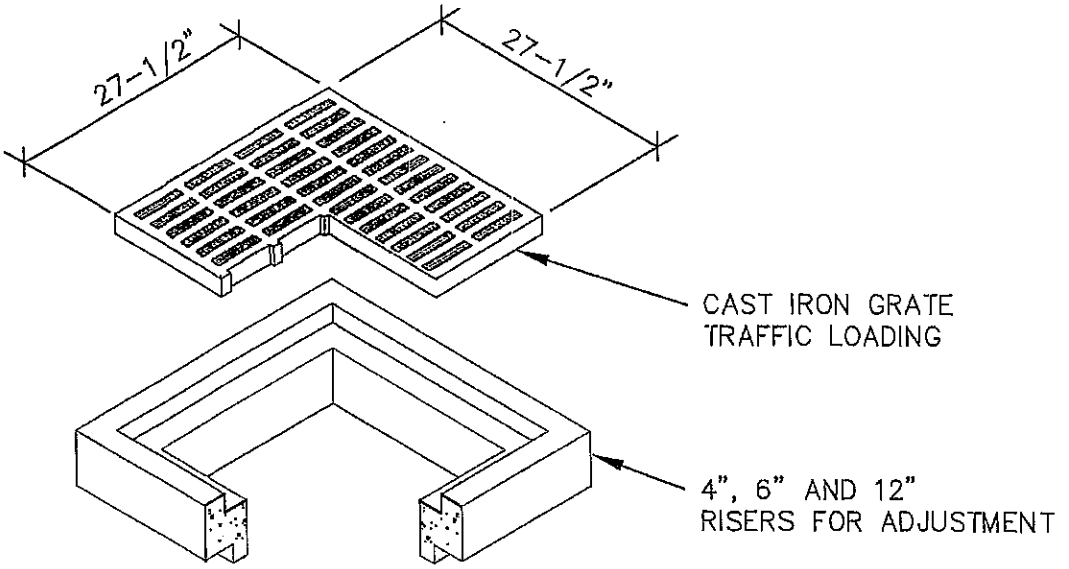


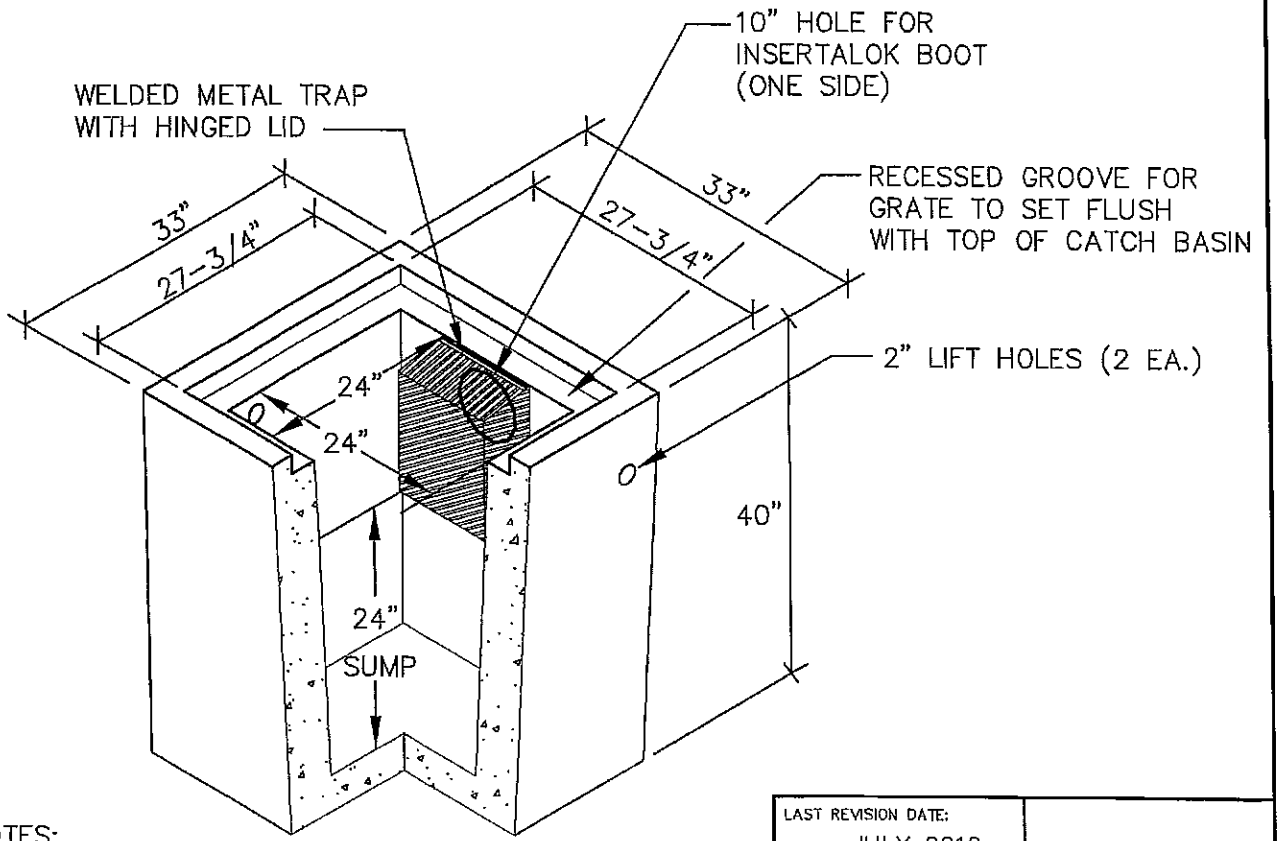
PLAN

NOTES:

1. SEE CONSTRUCTION DRAWINGS FOR PIPE SIZE, LOCATION AND INVERT ELEVATION.
2. ALL CONCRETE TO BE 3300 PSI @ 28 DAYS.
3. MATCH EXISTING CURB UNLESS OTHERWISE NOTED.
4. CURB–INLET NOTCH TO BE ELIMINATED AT DROP CURB LOCATIONS WHERE APPROVED BY THE CITY ENGINEER.

LAST REVISION DATE: JAN 2013	
OVERSIZE SIDE-INLET GRATED CATCH BASIN (NTS)	
DAYTON, OR	DETAIL NO. 311

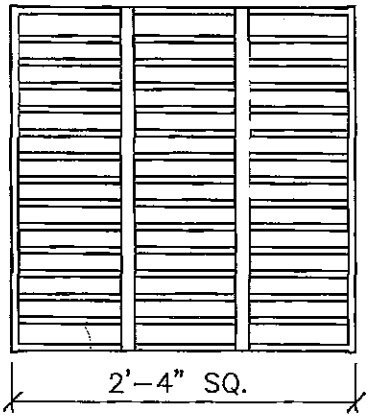




NOTES:

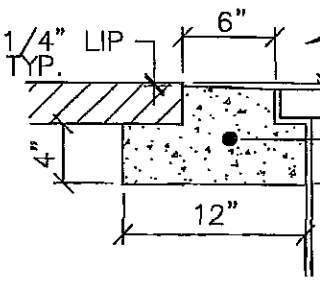
1. SEE CONSTRUCTION DRAWINGS FOR PIPE SIZE, LOCATION AND INVERT ELEVATION.
2. CONCRETE SHALL BE 4000 PSI @ 28 DAYS.
3. REBAR SHALL CONFORM TO ASTM A615 GRADE 60.
4. REBAR SHALL BE MIN. #4 BARS @ 6" C.C.
5. SET CB SQUARE WITH BUILDINGS OR WITH EDGE OF PARKING LOT OR DRIVEWAY WHEREIN IT LIES.
6. ADJUST PAVING SO WATER FLOWS TO CB WITH NO PONDING.

LAST REVISION DATE: JULY 2012	
PARKING LOT CATCH BASIN (PRECAST CONCRETE) (NTS)	
DAYTON, OR	DETAIL NO. 315

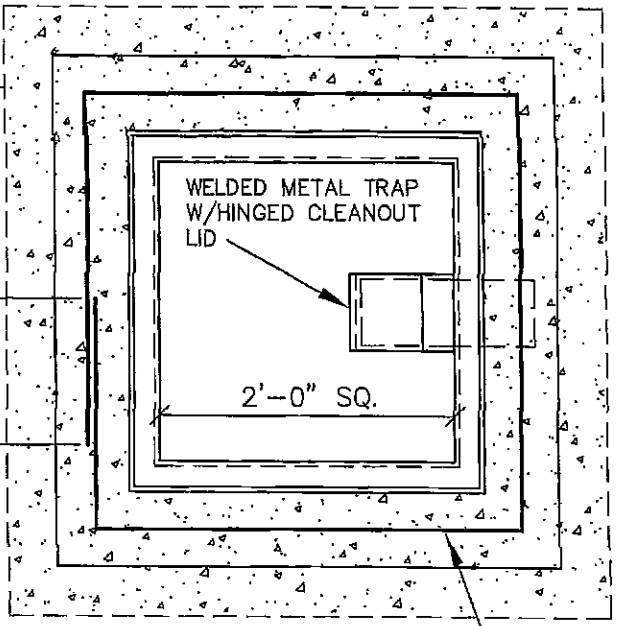


GRATE: WELDED STEEL DROP-IN BAR GRATE (ASTM A36).
END BARS: 1/2" X 2"
CROSS BARS: 1/2" X 2" @ 2" O.C.
BIKE STRAPS: 1/8" X 1" (2 REQ'D)
16,000 LB. UNIFORM LOAD CAPACITY

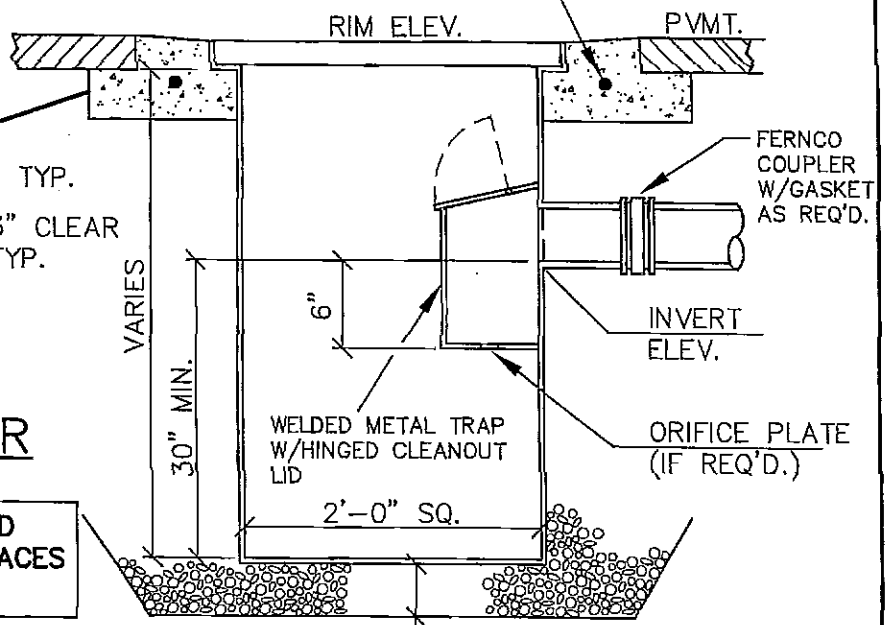
GRATE DETAIL



CONCRETE COLLAR



PLAN VIEW

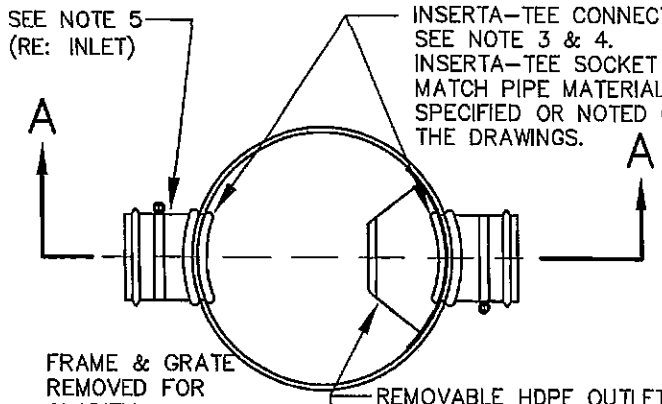


CONSTRUCT BASIN OF WELDED 1/4" STEEL. COAT ALL SURFACES WITH ASPHALTIC PAINT.

NOTES:

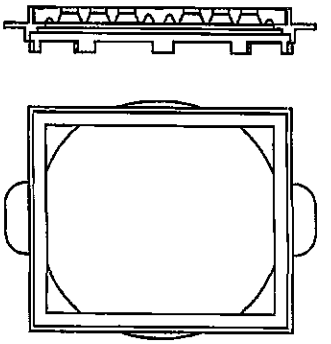
1. SEE CONSTRUCTION DRAWINGS FOR PIPE SIZE, LOCATION AND INVERT ELEVATION.
2. OUTLET: SIZE AS REQ'D. FOR INDICATED PIPE SIZE.
3. FOR JUNCTION BOX, REPLACE GRATE WITH 3/4" STEEL PLATE. DRILL ONE, 1" LIFTING HOLE, CENTERED IN ONE END OF THE PLATE. WELD SHIMS TO RIM AS *REQUIRED TO RAISE PLATE TO RIM ELEVATION.*
4. SET CB SQUARE WITH BUILDINGS OR WITH EDGE OF PARKING LOT OR DRIVEWAY WHEREIN IT LIES.
5. ADJUST PAVING SO WATER FLOWS TO CB WITH NO PONDING.

LAST REVISION DATE: JULY 2012	
PARKING LOT CATCH BASIN (LYNCH STYLE) (NTS)	
DAYTON, OR	DETAIL NO. 316



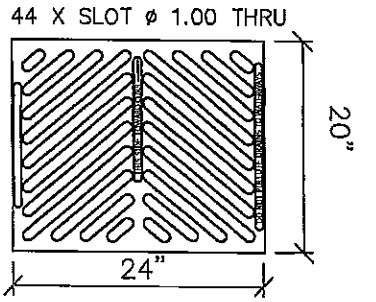
PLAN

REMOVABLE HDPE OUTLET TRAP REQUIRED ON ALL PRIVATE CATCH BASINS (OMIT FOR FLOW-THRU JUNCTION STRUCTURES). ALL CLIPS & HARDWARE TO BE STAINLESS STEEL.



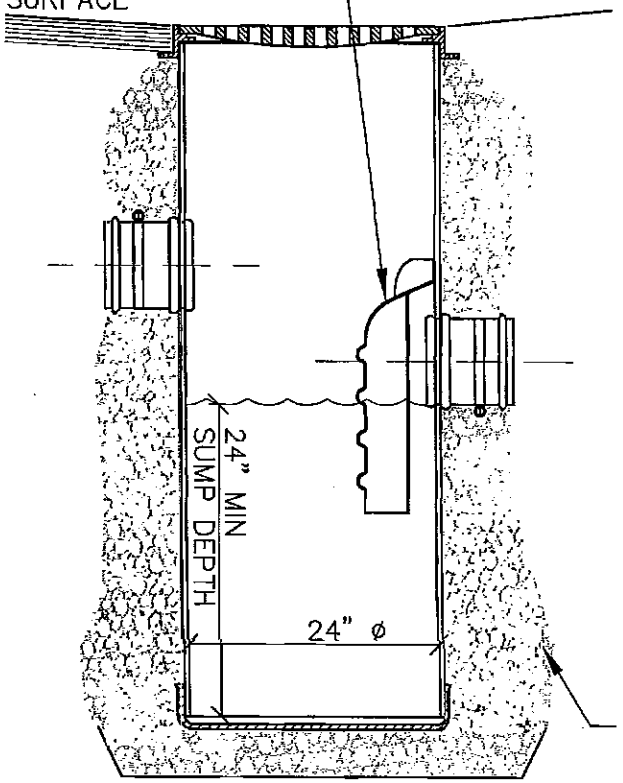
FRAME TO INCLUDE TABS THAT MATCH BASIN OD TO PREVENT DISPLACEMENT. FRAME BODY TO BEAR ON COMPACTED BASEROCK (SEE SECTION A-A)

FRAME



APPROX. DRAIN AREA = 202.48 SQ IN

GRATE



SECTION A-A

NOTES:

1. NYLOPLAST TRAFFIC RATED DRAIN BASIN OR APPROVED EQUAL W/NYLOPLAST FRAME & GRATE.
2. HERRING-BONE STYLE GRATE TO BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
3. SEE CONSTRUCTION DRAWINGS FOR PIPE SIZE, LOCATION, ORIENTATION AND INVERT ELEVATIONS.
4. CONNECTIONS TO PVC CATCH BASIN TO BE INSERTA-TEE STYLE FITTINGS (FACTORY OR FIELD INSTALLED).
5. FLOW-THRU CONFIGURATION SHOWN IS ALLOWED ONLY FOR AREA DRAINS OR JUNCTION BOXES.
6. SET CB GRATE SQUARE WITH BUILDINGS OR WITH EDGE OF PARKING LOT OR DRIVEWAY WHEREIN IT LIES.
7. ADJUST PAVING OR GRADING SO WATER FLOWS TO STRUCTURE INLET WITH NO PONDING.

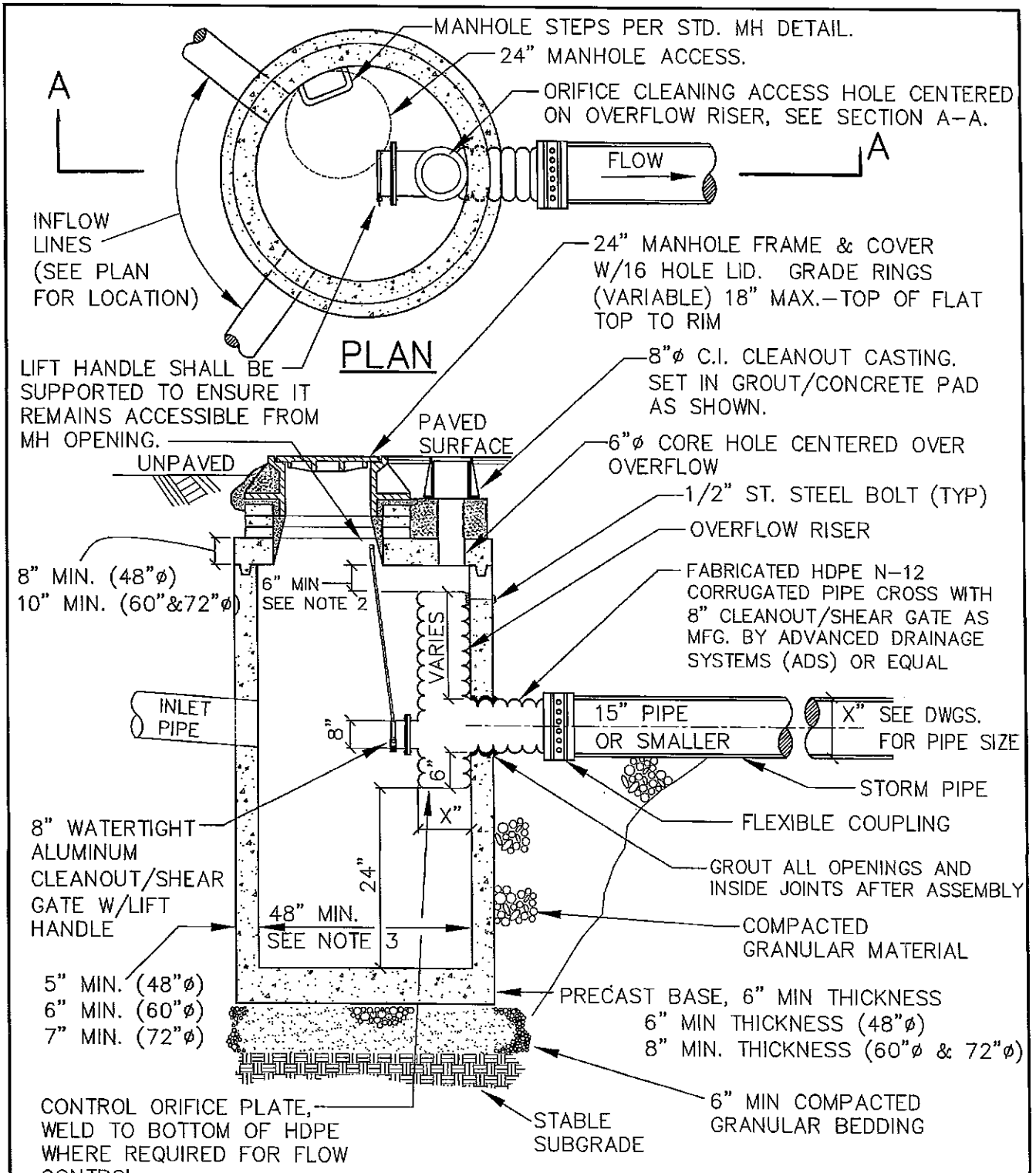
NOTE: PER ORS 92.044(7), AREA DRAIN MUST BE SET 1' MINIMUM CLEAR FROM ANY SURVEY MONUMENT

LAST REVISION DATE:	JO #
JAN 2013	

PARKING LOT CATCH BASIN (TRAFFIC RATED PVC w/TRAP, DUCTILE IRON FRAME/GRATE)

(NTS)

DAYTON, OR	DETAIL NO. 317

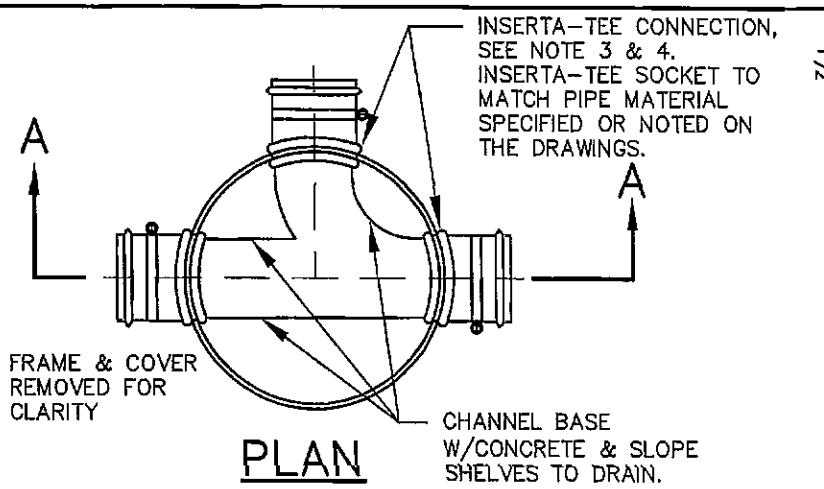


SECTION A-A

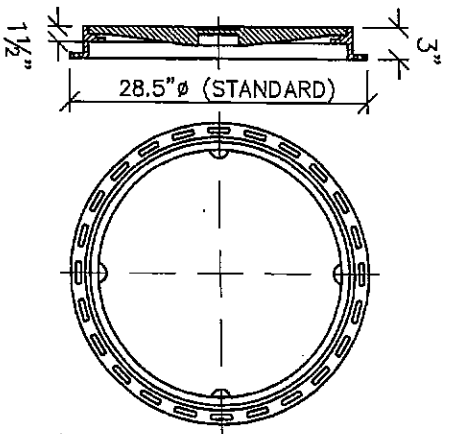
NOTES:

1. PRECAST SECTIONS SHALL CONFORM TO ASTM C-478.
2. DISTANCE FROM TOP OF OVERFLOW TO MH RIM SHALL BE BASED ON OVERFLOW CAPACITY CALC'S BY DESIGN ENGINEER (ASSUME ORIFICE CONTROL).
3. 60" MINIMUM DIA. MANHOLE REQUIRED FOR OUTLET PIPE LARGER THAN 15" OR INLET > 21".
4. ORIFICE CLEANING ACCESS TO BE 6" CORE HOLE THROUGH FLAT-TOP (CENTERED ON OVERFLOW) WITH CI CLEANOUT BOX GROUTED TO SLAB.

LAST REVISION DATE: MAR 2010	
POLLUTION/FLOW CONTROL MANHOLE W/OVERFLOW (NTS)	
DAYTON, OR	DETAIL NO. 320

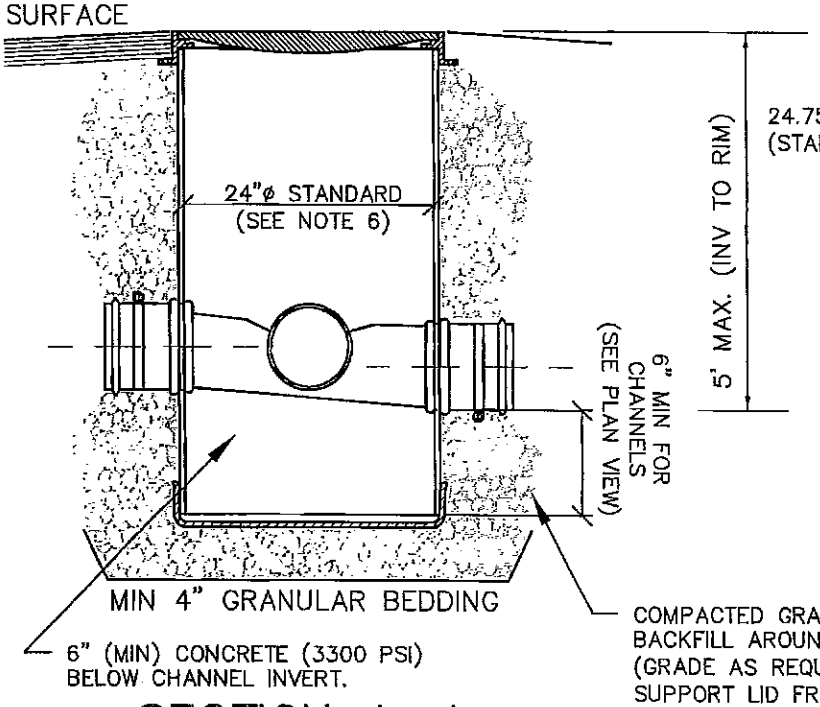


PLAN

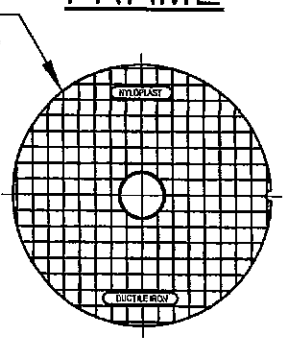


FRAME TO INCLUDE TABS THAT MATCH BASIN OD TO PREVENT DISPLACEMENT. FRAME BODY TO BEAR ON COMPACTED BASEROCK (SEE SECTION A--A)

FRAME



SECTION A-A



PROVIDE A MINIMUM OF (2) 1" DIAMETER PICK HOLES IN SOLID LID, OR PROVIDE STANDARD 16-HOLE STORM MANHOLE LID.

SOLID LID

NOTES:

1. NYLOPLAST TRAFFIC RATED DRAIN BASIN OR APPROVED EQUAL WITH NYLOPLAST FRAME & MH LID.
2. MH FRAME & COVER TO BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
3. SEE CONSTRUCTION DRAWINGS FOR PIPE SIZE, LOCATION, ORIENTATION AND INVERT ELEVATIONS.
4. CONNECTIONS TO PVC MANHOLE TO BE INSERTA-TEE STYLE FITTINGS (FACTORY OR FIELD INSTALLED).
5. FIVE (5) FOOT MAXIMUM ALLOWABLE DEPTH FROM RIM TO OUTLET INVERT (DEEPER APPLICATIONS REQUIRE 48" MANHOLE).
6. MAXIMUM NUMBER & CONFIGURATION OF PIPE CONNECTIONS TO BE BASED ON INSERTA-TEE RECOMMENDATIONS. PROVIDE 30" DIAMETER BASIN & 30" SOLID COVER IF REQUIRED DUE TO NO. OF PIPES, SPACING &/OR ANGLES (30" MH TO MEET ALL DETAIL REQUIREMENTS SHOWN EXCEPT DIAMETER).

NOTE: PER ORS 92.044(7), MANHOLE MUST BE SET 1' MINIMUM CLEAR FROM ANY SURVEY MONUMENT

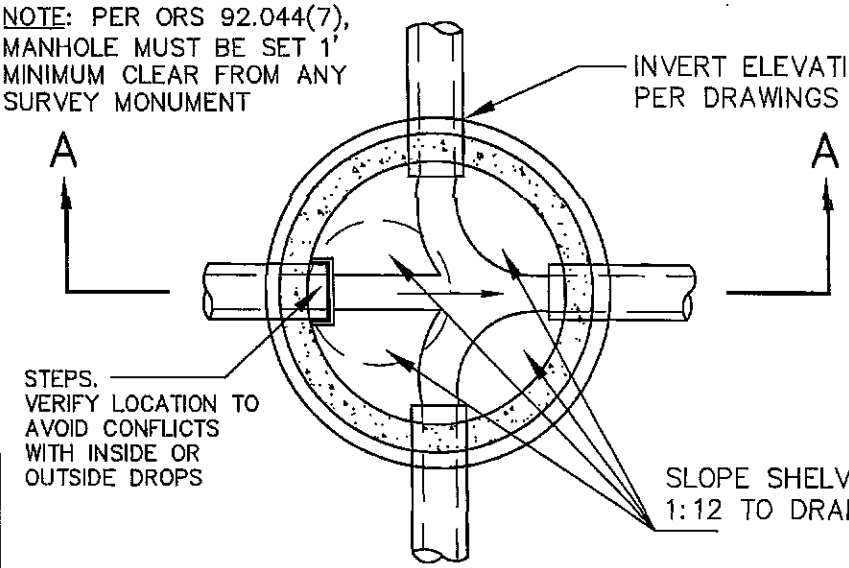
LAST REVISION DATE:	JO #
AUG 2012	

24" DIA. STORM MANHOLE (TRAFFIC RATED PVC W/SOLID DUCTILE IRON FRAME/COVER)

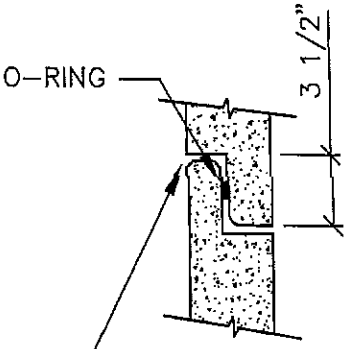
(NTS)

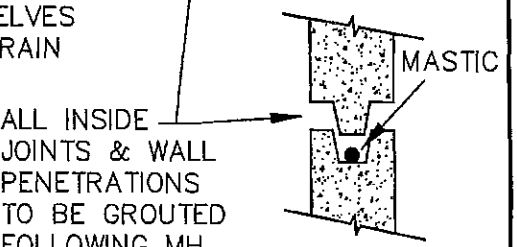
DAYTON, OR	DETAIL NO. 351

NOTE: PER ORS 92.044(7), MANHOLE MUST BE SET 1' MINIMUM CLEAR FROM ANY SURVEY MONUMENT



PLAN



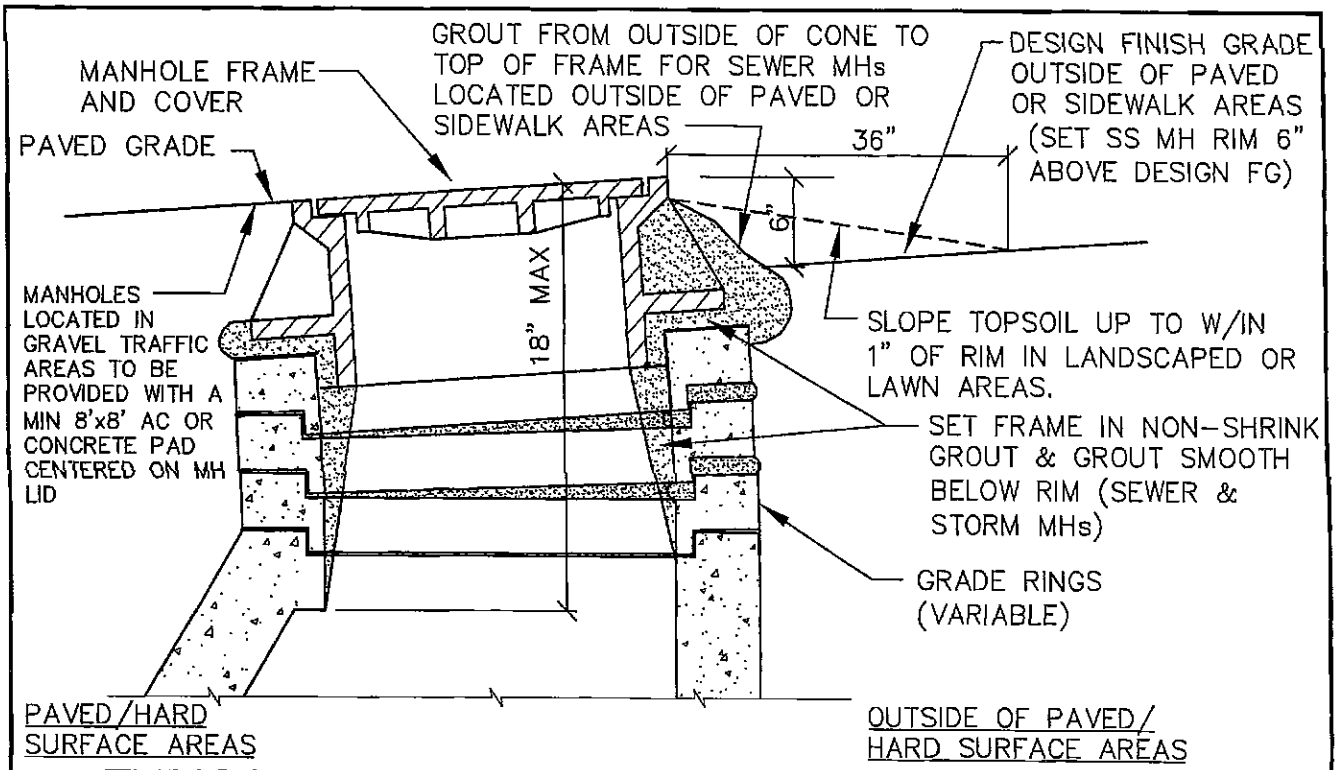


SECTION A-A

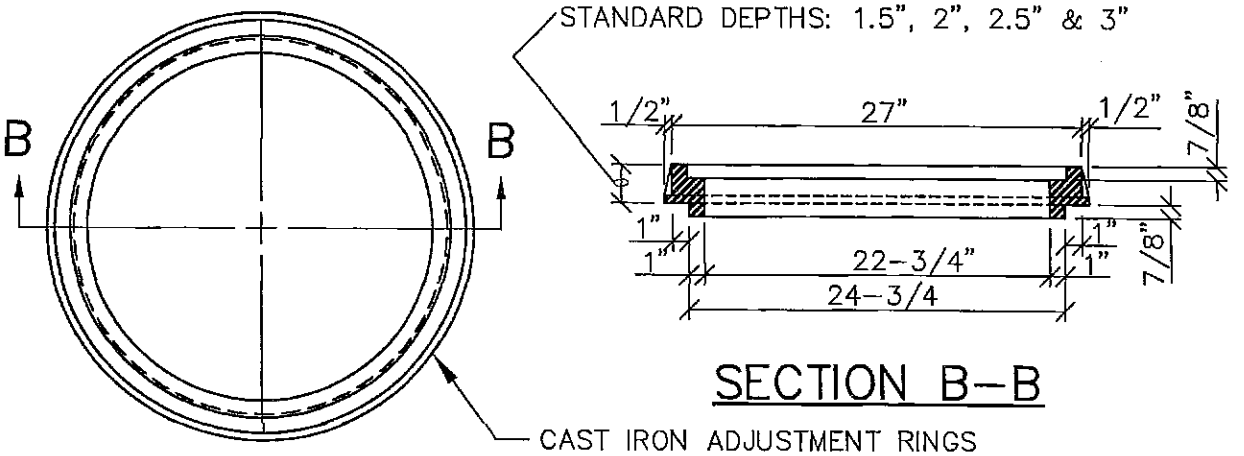
NOTES:

1. PRECAST SECTIONS SHALL MEET OR EXCEED ASTM C-478.
2. WATERTIGHT O-RING OR MASTIC KEYLOCK JOINTS REQUIRED.
3. STEPS TO BE FACTORY INSTALLED POLYPROPYLENE PLASTIC WITH GRADE 60 REINFORCING ROD.

LAST REVISION DATE: APR 2013	
STANDARD MANHOLE FOR 21" PIPE AND SMALLER (NTS)	
DAYTON, OR	DETAIL NO. 401



TYPICAL MANHOLE GRADE ADJUSTMENT



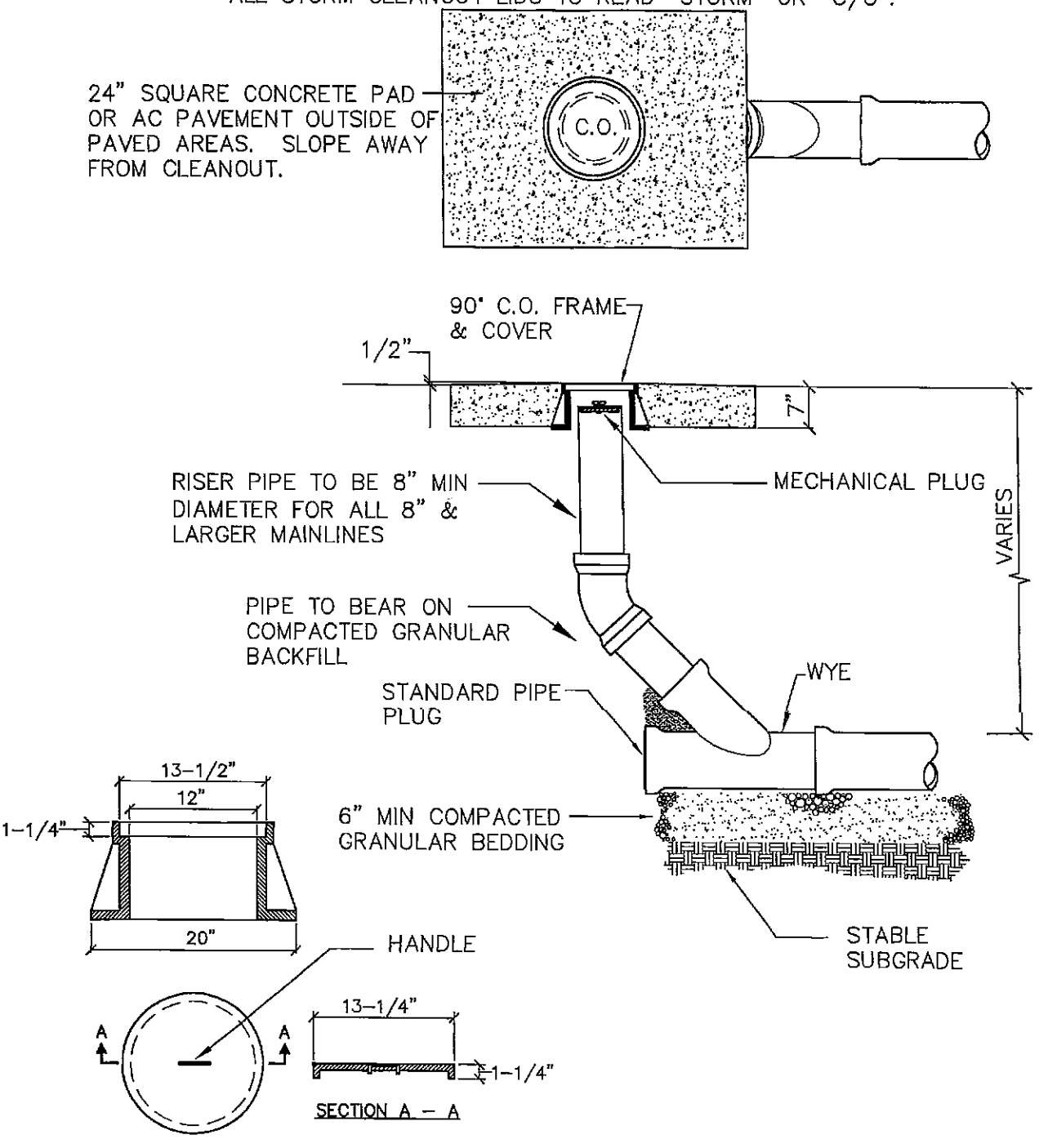
SECTION B–B

MANHOLE ADJUSTMENT RINGS FOR RESURFACING ONLY

NOTES:
1. CAST IRON ADJUSTMENT RINGS ALLOWED ONLY WITH OVERLAYS AND NOT ON NEW MANHOLES. MAXIMUM 1 ADJUSTMENT RING PER MANHOLE.
2. SANITARY SEWER – 2 HOLE LIDS
   STORM DRAINS – 16 HOLE LIDS
3. MH PADS IN UNPAVED AREAS TO BE (A) MIN OF 3" AC OVER 10" COMPACTED BASEROCK (OR PUBLIC ROAD STANDARD THICKNESS IF LOCATED IN R.O.W), OR (B) 8" CONCRETE OVER 2" BACKROCK.

LAST REVISION DATE: APR 2013	JO #
MANHOLE RIM ADJUSTMENT DETAILS (NTS)	
DAYTON, OR	DETAIL NO. 407

CLEANOUT COVERS: ALL SEWER CLEANOUT LIDS TO READ "SEWER"
ALL STORM CLEANOUT LIDS TO READ "STORM" OR "C/O".



CLEANOUT FRAME & COVER

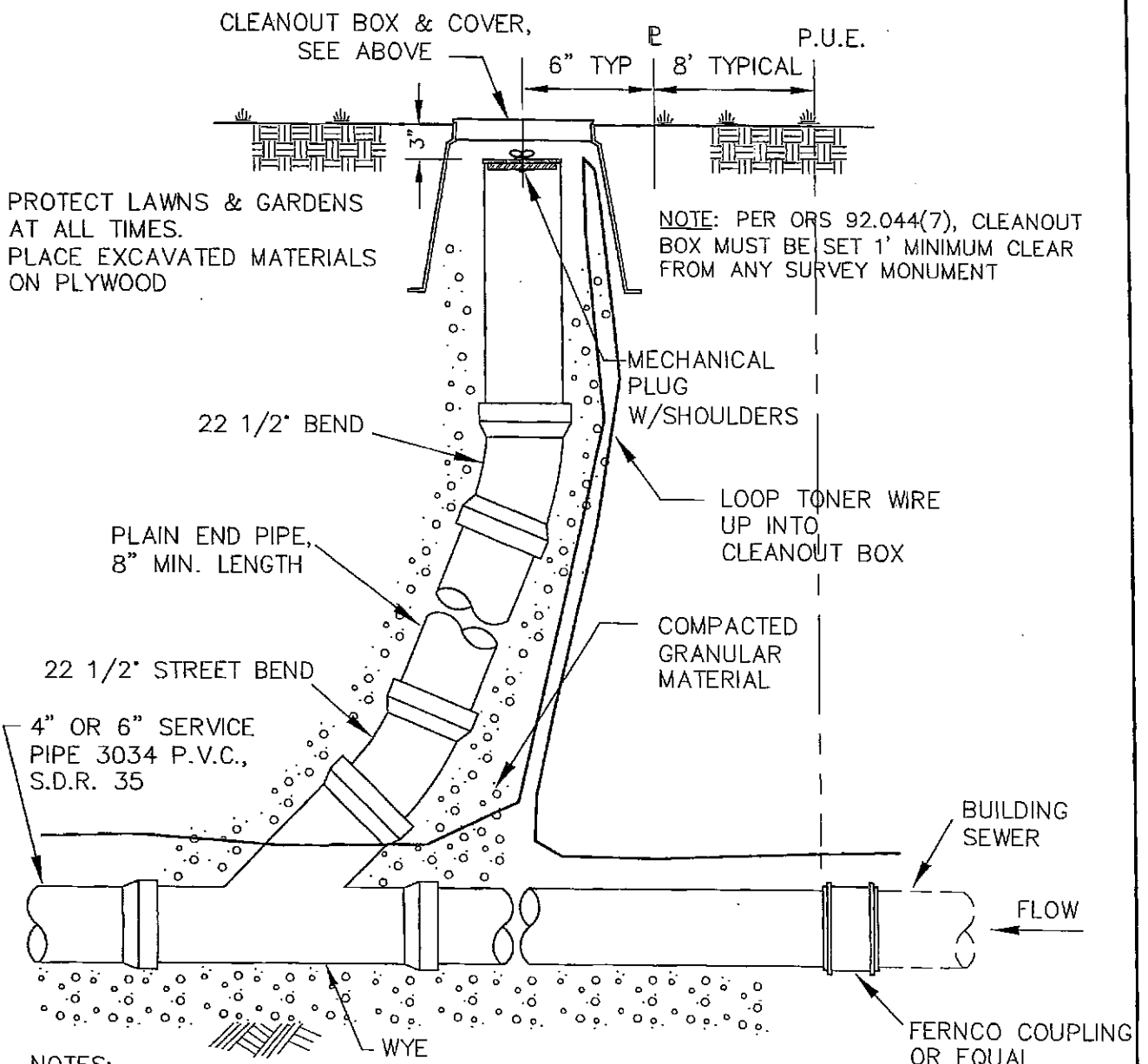
NOTES:

1. USE INLAND FOUNDRY MODEL 240 FRAME & COVER IN ALL AREAS.
2. COVER AND FRAME SHALL BE GRAY CAST IRON ASTM A-48, CLASS 30.
3. COVER AND FRAME TO BE MACHINED TO A TRUE BEARING ALL AROUND.

LAST REVISION DATE: APRIL 2013	
MAINLINE CLEANOUT (NTS)	
DAYTON, OR	DETAIL NO. 411

CLEANOUT COVERS: ALL SEWER CLEANOUT LIDS TO READ "SEWER"
ALL STORM CLEANOUT LIDS TO READ "STORM" OR "C/O".

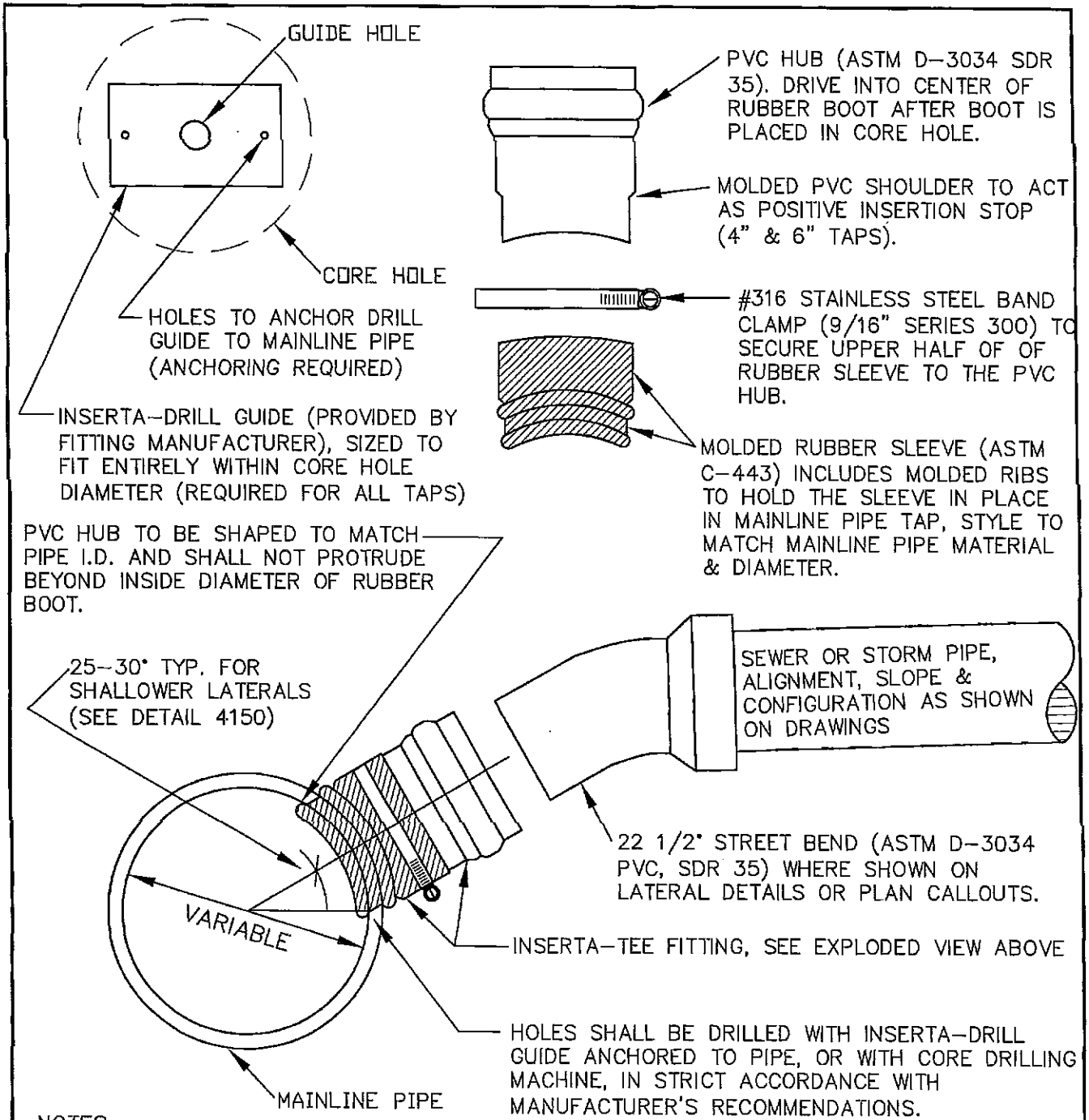
1. NON-TRAFFIC AREAS:
   CARSON MODEL 910 T-COVER OR EQUAL (GREEN FOR SEWER, GREY FOR STORM).
2. TRAFFIC AREAS, INCLUDING DRIVEWAYS:
   8" X 4" CAST IRON FRAME & COVER, OLYMPIC M1007 OR EQUAL.
   (CI CLEANOUTS IN UNPAVED AREAS, SET IN 12" CONCRETE PAD)



NOTES:

1. CLEANOUT RISER SHALL BE SAME SIZE AND MATERIAL AS LATERAL PIPE.
2. PROVIDE CASTING FOR CLEANOUTS LOCATED IN DRIVEWAYS.
3. CLEANOUT PIPE SHALL BE LEFT A MINIMUM OF 18" ABOVE EXISTING GRADE UNTIL ALL CURBING IS INSTALLED AND ALL PRIVATE UTILITY TRENCHES ARE BACKFILLED. CLEANOUTS SHALL THEN BE SET FLUSH WITH FINISH GRADE.

LAST REVISION DATE: APR 2012	
STANDARD SERVICE LATERAL CLEANOUT (NTS)	
DAYTON, OR	DETAIL NO. 416



NOTES:

1. SANITARY SEWERS – INSERTA-TEES ALLOWED ON EXISTING PVC OR DUCTILE IRON SEWER MAINS. USE ON OTHER PIPE TYPES IS SUBJECT TO CITY APPROVAL AND ACCEPTABLE PIPE CONDITION. MANUFACTURED TEE-WYE FITTINGS SHALL BE USED ON ALL NEW SEWER MAINLINES.
2. STORM DRAINS – INSERTA-TEES ALLOWED ON ALL PIPE TYPES, SUBJECT TO CITY APPROVAL AND ACCEPTABLE PIPE CONDITION.
3. THE TAP SHALL NOT BE MADE EXCEPT IN THE PRESENCE OF A CITY INSPECTOR; NOR SHALL ANY CONNECTION BE MADE WITHOUT CITY APPROVAL.
4. CENTERLINE OF TAP SHALL BE ABOVE SPRINGLINE.

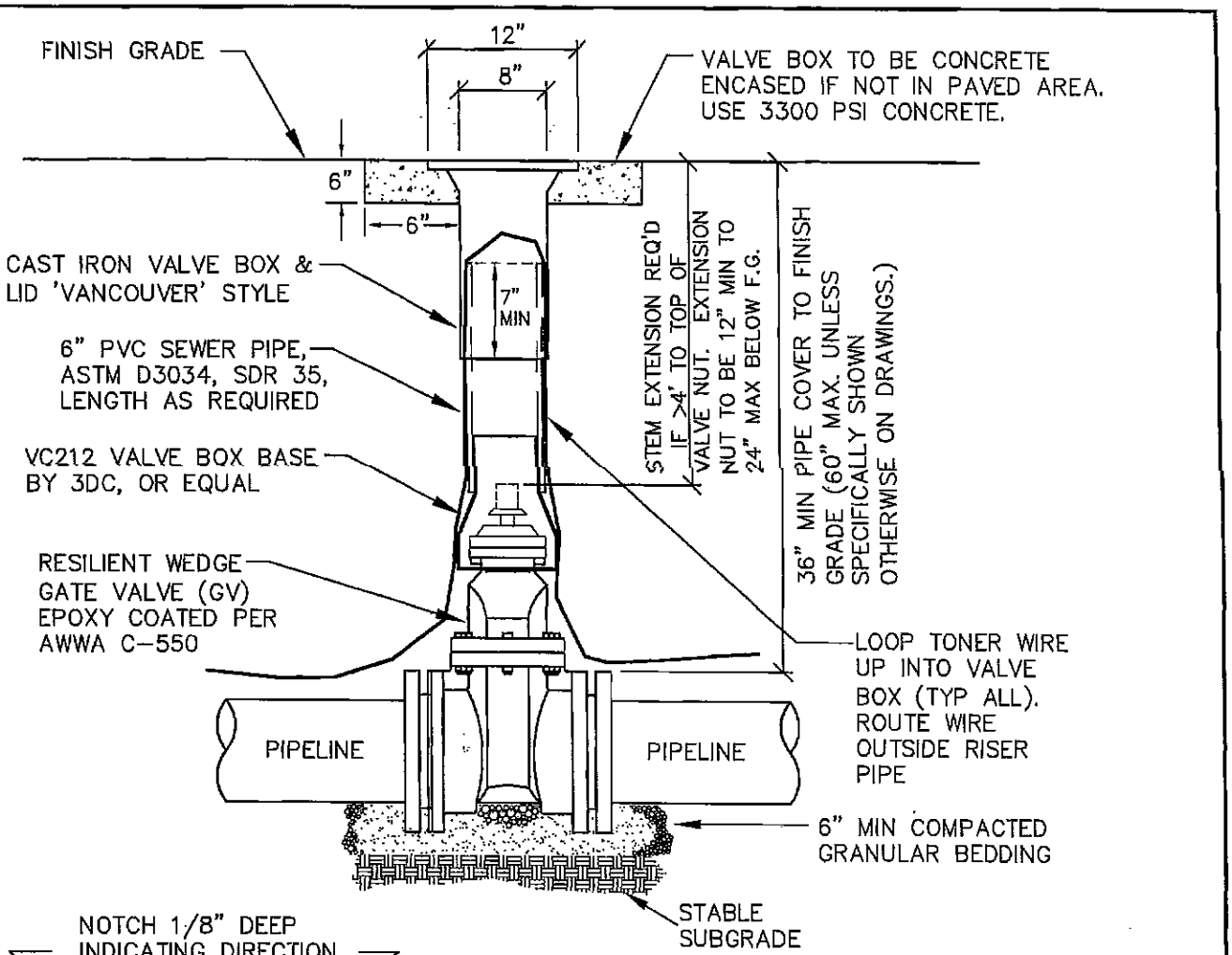
INSERTA-TEE "FATBOY" FITTING SHALL BE USED FOR ALL 4" & 6" TAPS, IN ORDER TO ALLOW 95% MANDREL TESTING OF MAINLINES.

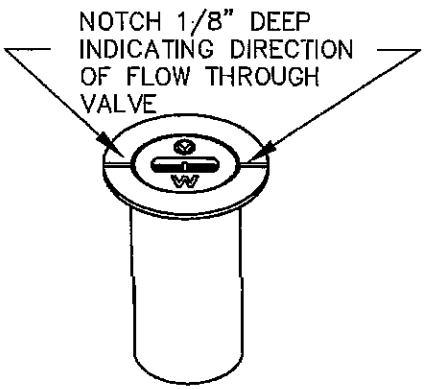
LAST REVISION DATE:	JO #
DEC 2012	STANDARD

INSERTA-TEE CONNECTION TO EXISTING SEWER OR STORM DRAIN

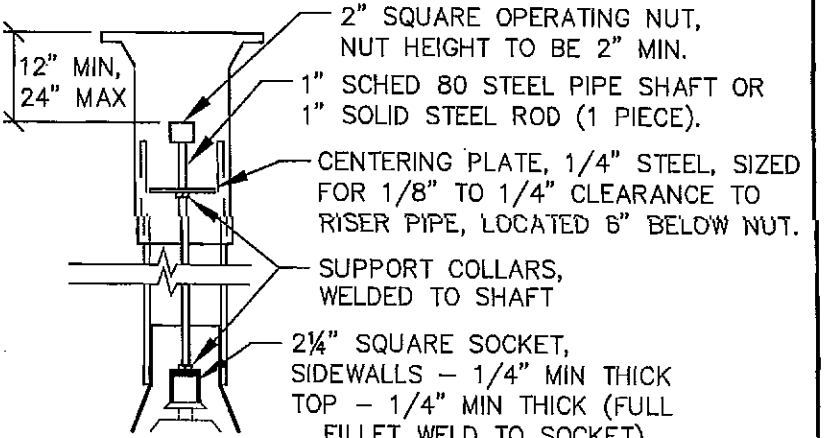
(NTS)

	DETAIL NO.
DAYTON, OR	419





'VANCOUVER'
18" TALL VALVE BOX

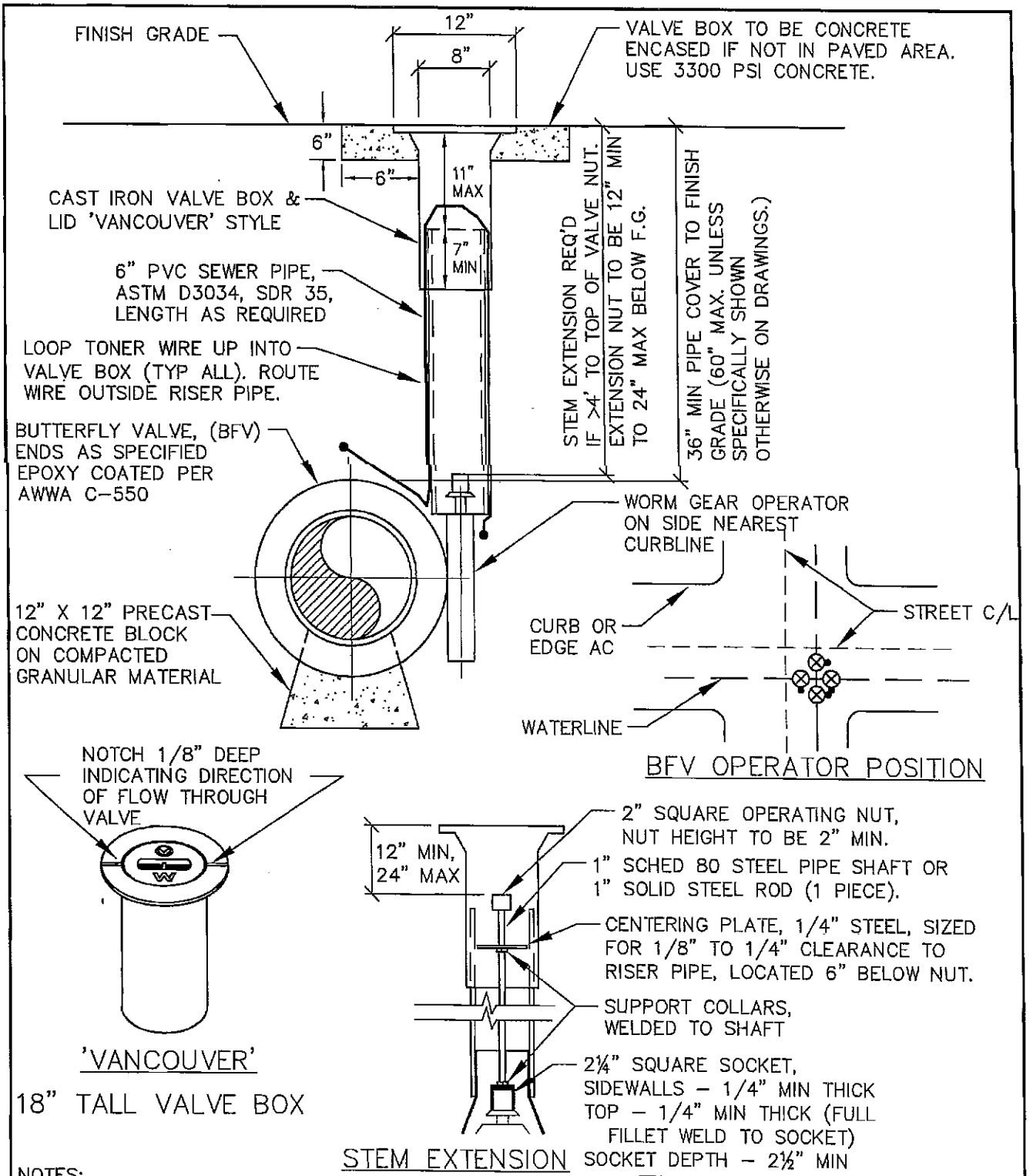


STEM EXTENSION

NOTES:

1. GV SHALL CONFORM TO AWWA C-509.
2. VALVE BOXES SHALL BE PLUMB AND CENTERED DIRECTLY OVER THE VALVE NUT.
3. VALVE BOX TOP SHALL BE ADJUSTED TO FINISHED GRADE.
4. PVC SHALL BE ONE CONTINUOUS PIECE, NO BELLS OR COUPLERS.

LAST REVISION DATE: DEC 2011	JO # STANDARD
GATE VALVE AND VALVE BOX DETAIL (NTS)	
DAYTON, OR	DETAIL NO. 501



NOTES:

1. BFV SHALL BE SHORT BODY TYPE B VALVE PER AWWA C-504.
2. VALVE BOXES SHALL BE PLUMB AND CENTERED DIRECTLY OVER THE VALVE NUT.
3. VALVE BOX TOP SHALL BE ADJUSTED TO FINISHED GRADE.
4. PVC SHALL BE ONE CONTINUOUS PIECE, NO BELLS OR COUPLERS.
5. BFV ACTUATOR TO BE LOCATED ON THE CURBLINE SIDE OF WATERLINE AS SHOWN. INSTALL DI SPOOLS OR FLEX ADAPTER IF REQUIRED FOR ACTUATOR CLEARANCE.

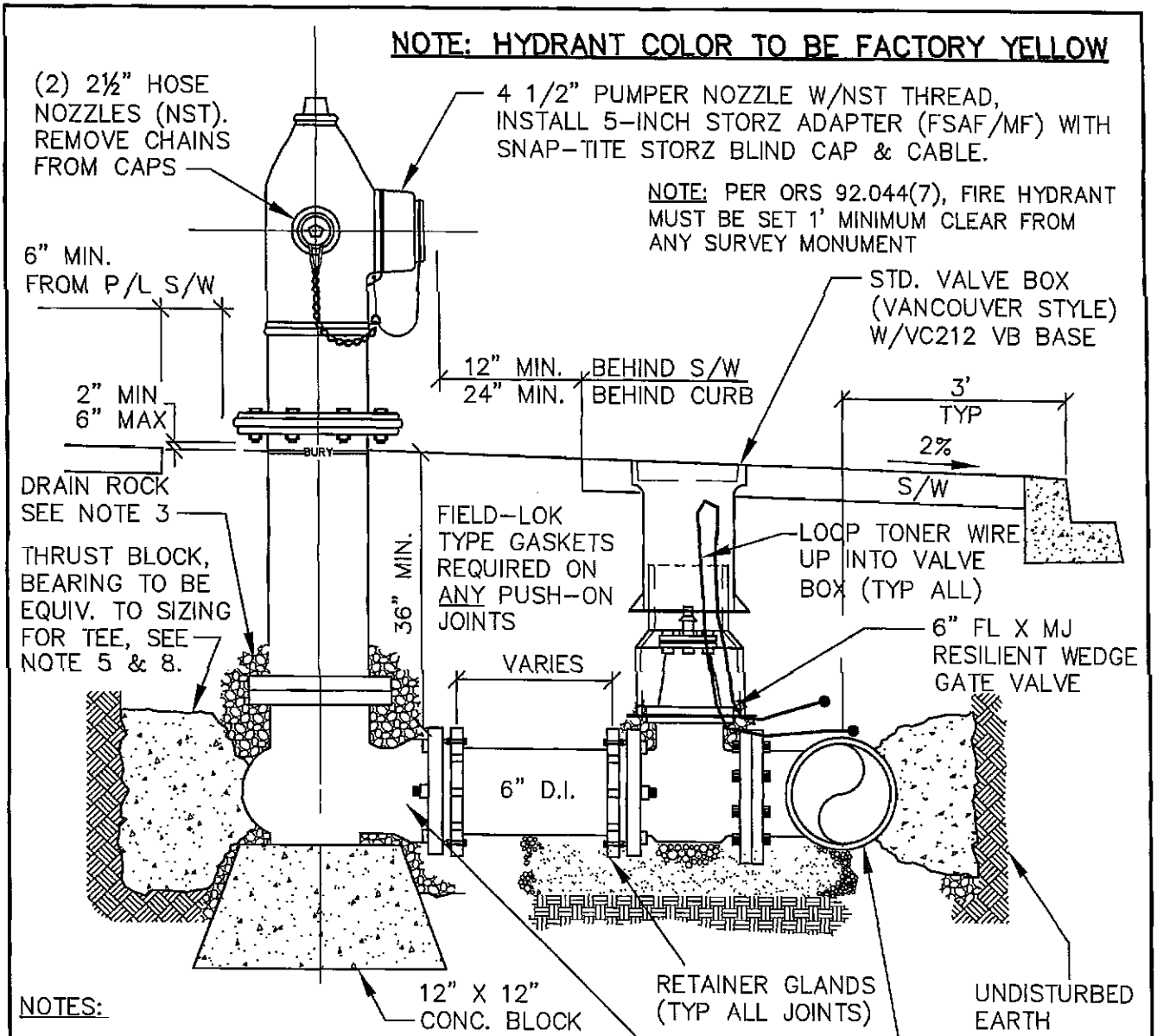
LAST REVISION DATE:	JD #
NOV 2012	STANDARD

BUTTERFLY VALVE AND VALVE BOX DETAILS

(NTS)

DAYTON, OR	DETAIL NO. 502

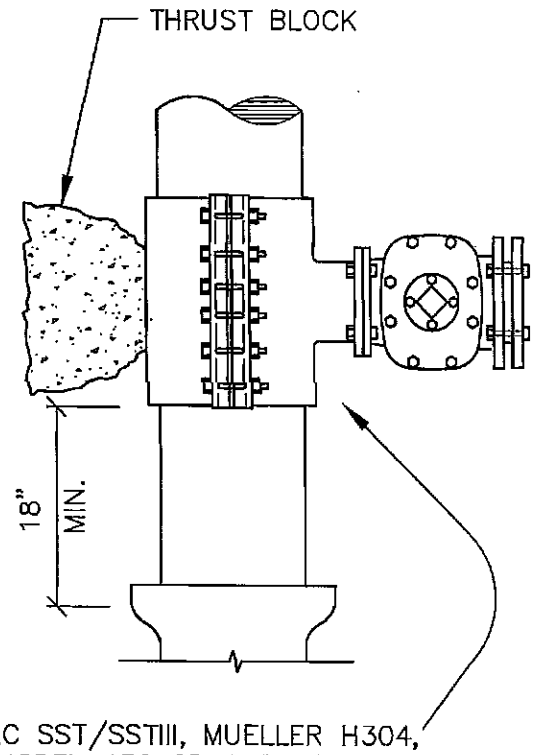
NOTE: HYDRANT COLOR TO BE FACTORY YELLOW

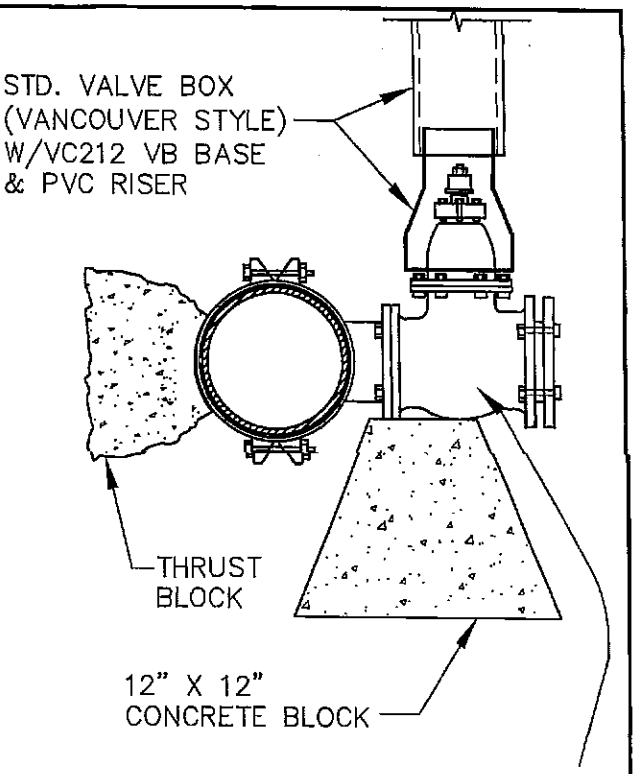


NOTES:

1. HYDRANTS TO BE KENNEDY GUARDIAN K81D WITH FULL SIZE (5¼") FOOT VALVE.
2. **ALL FITTINGS IN CONTACT WITH CONCRETE SHALL BE WRAPPED IN PLASTIC.** HYDRANT DRAIN HOLES TO REMAIN OPEN TO DRAIN ROCK AND OPERATIONAL.
3. 1-1/2" TO 3/4" CLEAN DRAIN ROCK SHALL BE PLACED A MIN. OF 6" ABOVE DRAIN OUTLET.
4. WHERE PLANTER STRIP EXISTS, HYDRANT SHALL BE PLACED SO FRONT PORT IS A MIN. OF 24" BEHIND FACE OF CURB.
5. THRUST BLOCK AT STANDARD 6" FIRE HYDRANT TEE SHALL HAVE MIN. 3.7 SQ. FT. BEARING AREA.
6. ALL HYDRANTS SHALL BE SET PLUMB.
7. FOR HYDRANT LEADS LONGER THAN 30', AN ADDITIONAL GATE VALVE SHALL BE PROVIDED WITHIN 3 FT. OF THE HYDRANT.
8. RETAINER GLANDS MAY BE USED IN LEIU OF HYDRANT THRUST BLOCK ON NEAR SIDE HYDRANTS.
9. PAINT CURB YELLOW 10 FEET EACH WAY FROM HYDRANT & INSTALL REFLECTIVE BLUE TRAFFIC MARKER @ STREET CENTERLINE.

LAST REVISION DATE: SEPT 2010	
STANDARD FIRE HYDRANT ASSEMBLY (NTS)	
DAYTON, OR	DETAIL NO. 503



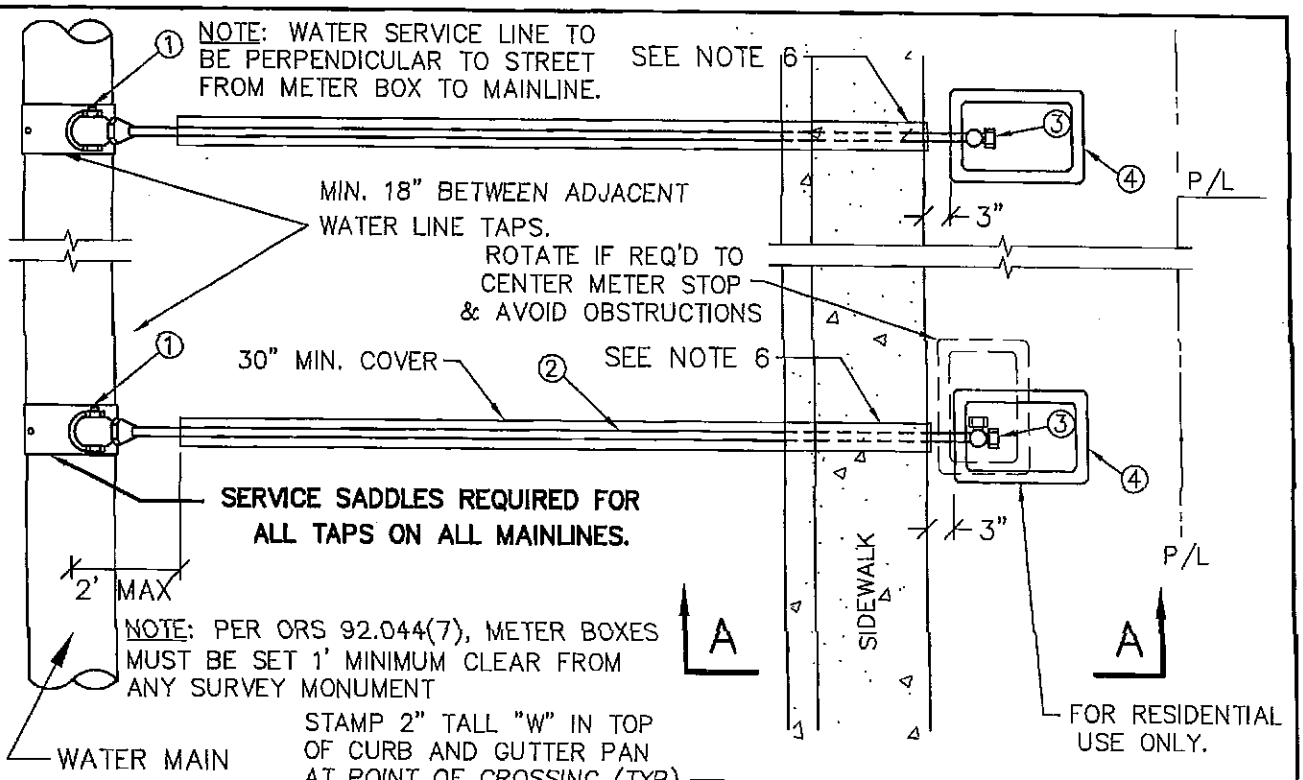


TOP VIEW | SIDE VIEW

NOTES:

1. WATER MAIN SHALL BE CLEANED & SPRAYED WITH CHLORINE SOLUTION IN TAP AREA BEFORE ATTACHING SLEEVE.
2. TAPPING SLEEVE SHALL BE ALL STAINLESS STEEL WITH FULL PERIMETER GASKET.
3. TAPPING VALVE SHALL BE EPOXY COATED PER AWWA C-550.
4. SLEEVE AND VALVE SHALL BE PRESSURE TESTED BEFORE MAKING TAP. PRESSURE TEST AND TAP SHALL BE MADE IN THE PRESENCE OF AN AUTHORIZED CITY REPRESENTATIVE.
5. APPROVED TAPPING MACHINE SHALL BE USED TO MAKE TAP.
6. 3/4" GRANULAR BACKFILL SHALL BE PLACED AND COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
7. THRUST BLOCKING REQUIREMENTS SHALL BE DETERMINED BY THE ENGINEER.
8. TAP SHALL BE MADE NO CLOSER THAN 18" FROM THE NEAREST JOINT.
9. **SLEEVE AND VALVE SHALL BE WRAPPED WITH 8 MIL PLASTIC PRIOR TO CONCRETE PLACEMENT.**
10. CONCRETE BLOCK(S) SHALL COMPLETELY SUPPORT TAPPING TEE AND VALVE.
11. CONTRACTOR SHALL COORDINATE ALL TAPS WITH CITY AND PERFORM ALL TAPS WITH PUBLIC WORKS STAFF PRESENT.
12. ALL TAPPING EQUIPMENT (AND ANY TOOL COMING IN CONTACT WITH THE PIPE THOUGH THE TAPPING SLEEVE) SHALL BE CHLORINE DISINFECTED WITH A 300 MG/L CHLORINE SOLUTION.

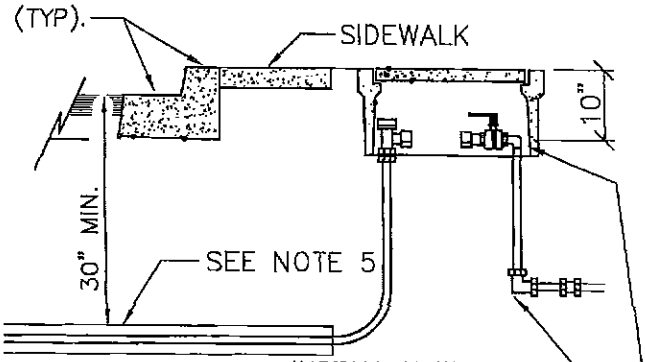
LAST REVISION DATE: JAN 2013	
TAPPING TEE AND VALVE (NTS)	
DAYTON, OR	DETAIL NO. 505



MATERIALS:

① BALL STYLE CORPORATION STOP
FORD FB-1100. SET AT 30° ANGLE UP FROM HORIZONTAL.

② SOFT TEMPER TYPE 'K' COPPER TUBING COMPLYING W/ASTM B-88.
SINGLE RESIDENTIAL SERVICE: 1" (TYP)



③ BALL STYLE 1" LOCKING ANGLE METER STOP, FORD KV43-444WQ OR EQUAL. PROVIDE ALL SERVICES WITH 1" x 3/4" METER ADAPTER

④ ARMORCAST POLYMER CONCRETE METER BOX:
A6001946PCX12 W/A6001866 LID IN TRAFFIC AREAS
A6001946PCX12 W/A6001866R LID ELSEWHERE
PROVIDE ALL METER BOXES WITH KNOCKOUTS FOR TOUCH-READ SENSORS

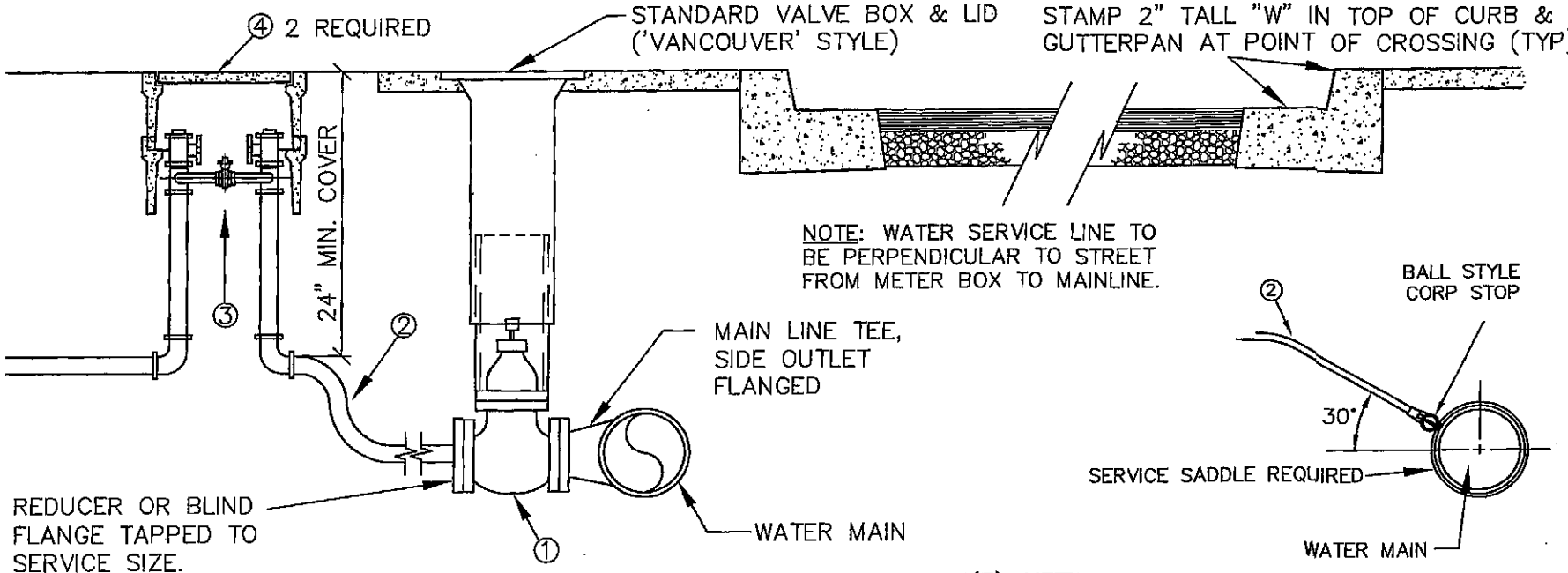
SECTION A-A

METER COUPLING (TAIL), BALL VALVE W/HANDLE & 90° ELBOW. PROVIDE PRIOR TO WATER METER INSTALLATION.

NOTES:

1. SUBSTITUTES FOR ANY MATERIALS SHOWN SHALL BE APPROVED BY THE CITY ENGINEER.
2. ALL PIPE AND BACKFILL ZONES SHALL BE BACKFILLED USING 3/4" MINUS GRANULAR MATERIAL AND COMPACTED TO 92% MAX. DENSITY DETERMINED BY AASHTO T-180.
3. SET FRONT OF METER BOX 3-INCHES BEHIND BACK OF SIDEWALK LOCATION FOR CURBLINE WALKS.
4. METER BOX SHALL BE CENTERED OVER THE COMPLETED METER ASSEMBLY.
5. MIN. SIZE COMMERCIAL SERVICES SHALL BE 1-INCH.
6. FAR SIDE COMMERCIAL SERVICES SHALL BE INSTALLED IN A 4" MIN DIA SCHED 40 PVC SLEEVE WHICH BEGINS 2' FROM MAIN AND EXTENDS TO BACK OF FAR SIDE SIDEWALK.

LAST REVISION DATE: FEB 2011	
TYPICAL 1" WATER SERVICE (NTS)	
DAYTON, OR	DETAIL NO. 515



2" & LARGER SERVICE

1-1/2" SERVICE

NOTE: PER ORS 92.044(7), METER BOXES MUST BE SET 1' MINIMUM CLEAR FROM ANY SURVEY MONUMENT

MATERIALS

① FLG X FLG RESILIENT WEDGE GATE VALVE PER AWWA C-509. 4" DIA. OR SERVICE SIZE, WHICHEVER IS LARGER. EPOXY COATED PER AWWA C-550.

② HARD COPPER (TYPE K) W/OUT JOINTS OR SCHEDULE 80 PVC PIPE & FITTINGS.

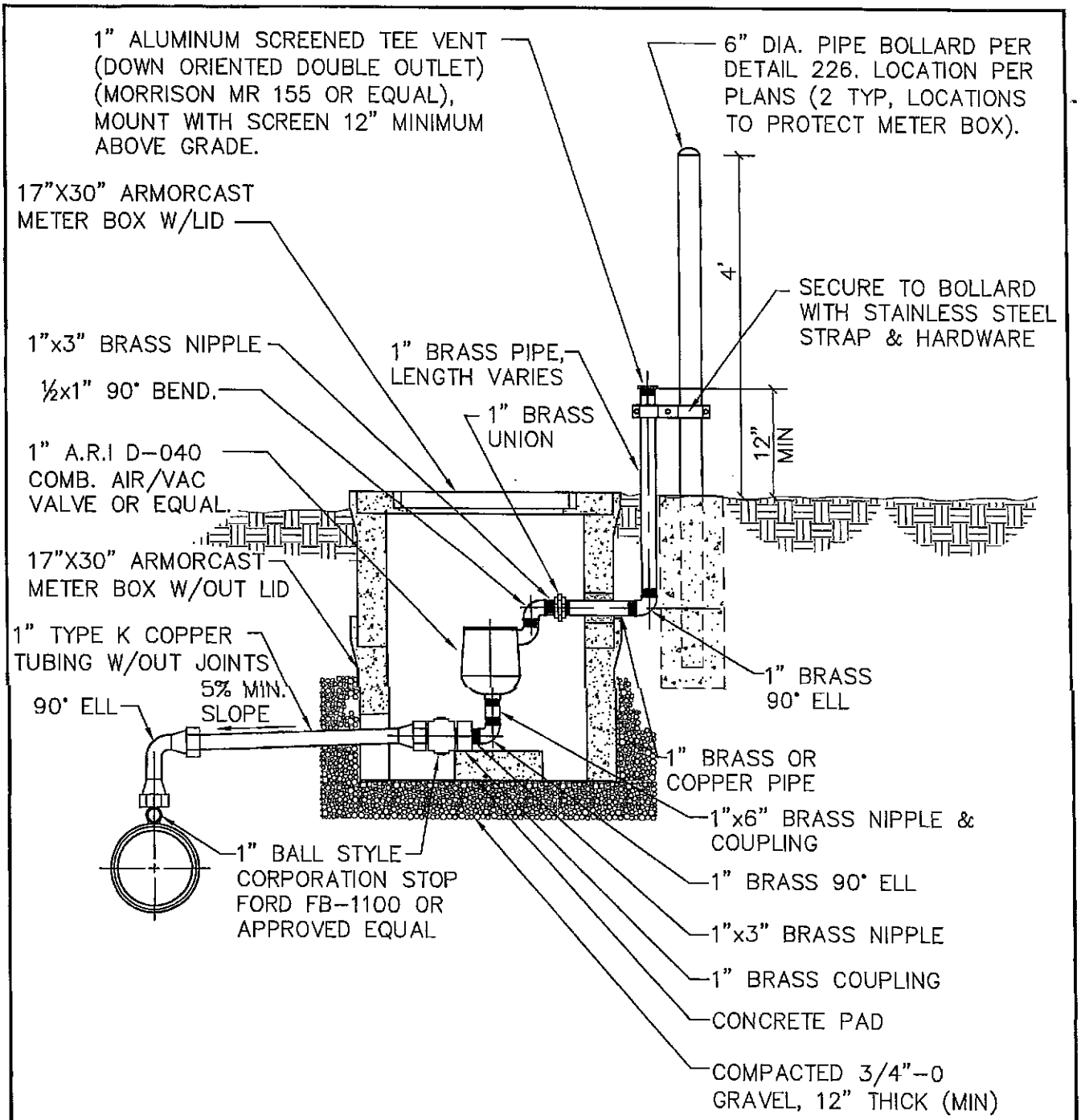
③ METER STOP ASSEMBLY W/BYPASS PER PUBLIC WORKS REQUIREMENTS. SEE DETAIL 516 FOR 1-1/2 & 2" SERVICES.

④ METER BOX FOR 1-1/2" AND 2" SHALL BE PER DETAIL 516. USE TRAFFIC RATED VERSION OF BOX/LID FOR TRAFFIC AREAS. METER VAULT FOR LARGER SERVICE PER PUBLIC WORKS REQUIREMENTS. PROVIDE W/TOUCH-READ SENSOR KNOCKOUT.

NOTES

1. SUBSTITUTES FOR ANY MATERIAL SHOWN SHALL BE APPROVED BY THE CITY ENGINEER.
2. ALL PIPE AND STRUCTURE ZONES SHALL BE BACKFILLED USING 3/4" MINUS GRANULAR MATERIAL AND COMPACTED TO 95% MAX DENSITY AS DETERMINED BY ASHTO T-180.
3. METER BOX SHALL BE CENTERED OVER THE COMPLETED METER AND FITTING ASSEMBLY.
4. CUSTOMER SHALL INSTALL AN APPROVED BACKFLOW PREVENTION DEVICE ON PRIVATE PROPERTY IMMEDIATELY DOWNSTREAM OF WATER METER.

DAYTON, OR	TAPPING REQUIREMENTS, 1-1/2" AND LARGER SERVICE	LAST REVISION DATE: MAR 2010	
	(NTS)		
	DETAIL NO. 517		



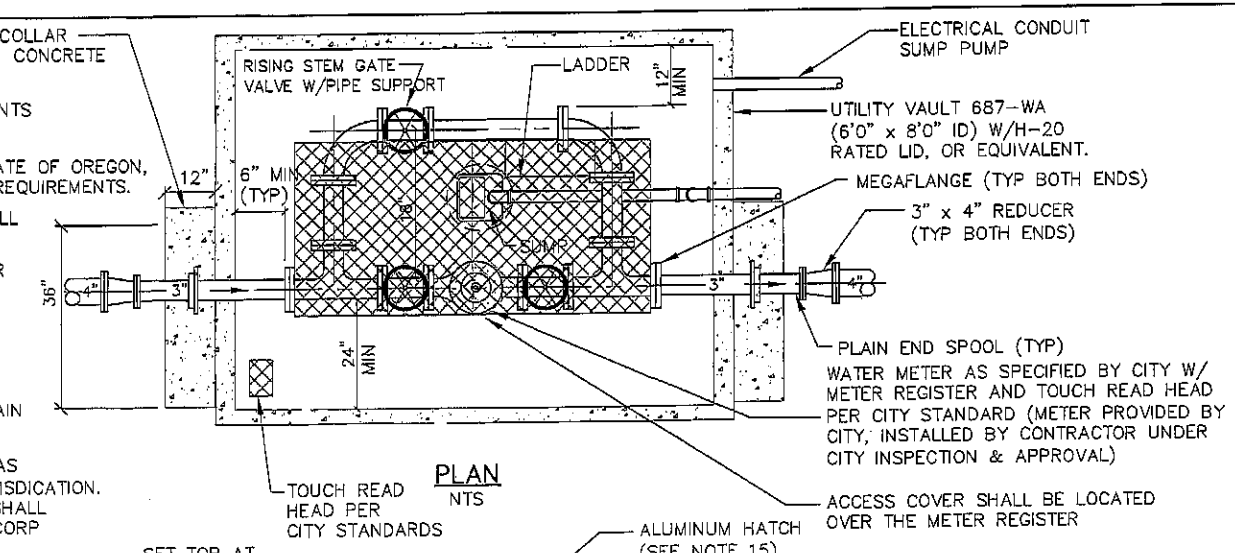
NOTES:

1. RISER SHALL BE PROTECTED FROM VEHICULAR OR PEDESTRIAN TRAFFIC AS APPROVED BY THE CITY ENGINEER.
2. PAINT BOLLARD & TOP SAFETY BLUE FOR POTABLE WATER APPLICATIONS.
3. WHERE ARV ASSEMBLIES ARE INSTALLED ADJACENT TO FENCES, BOLLARDS SHALL BE SET 3" MIN CLEAR FROM FENCE UNLESS OTHERWISE APPROVED BY PROPERTY OWNER.
4. EXACT LOCATION OF BOLLARDS TO BE VERIFIED IN FIELD BY THE CITY.

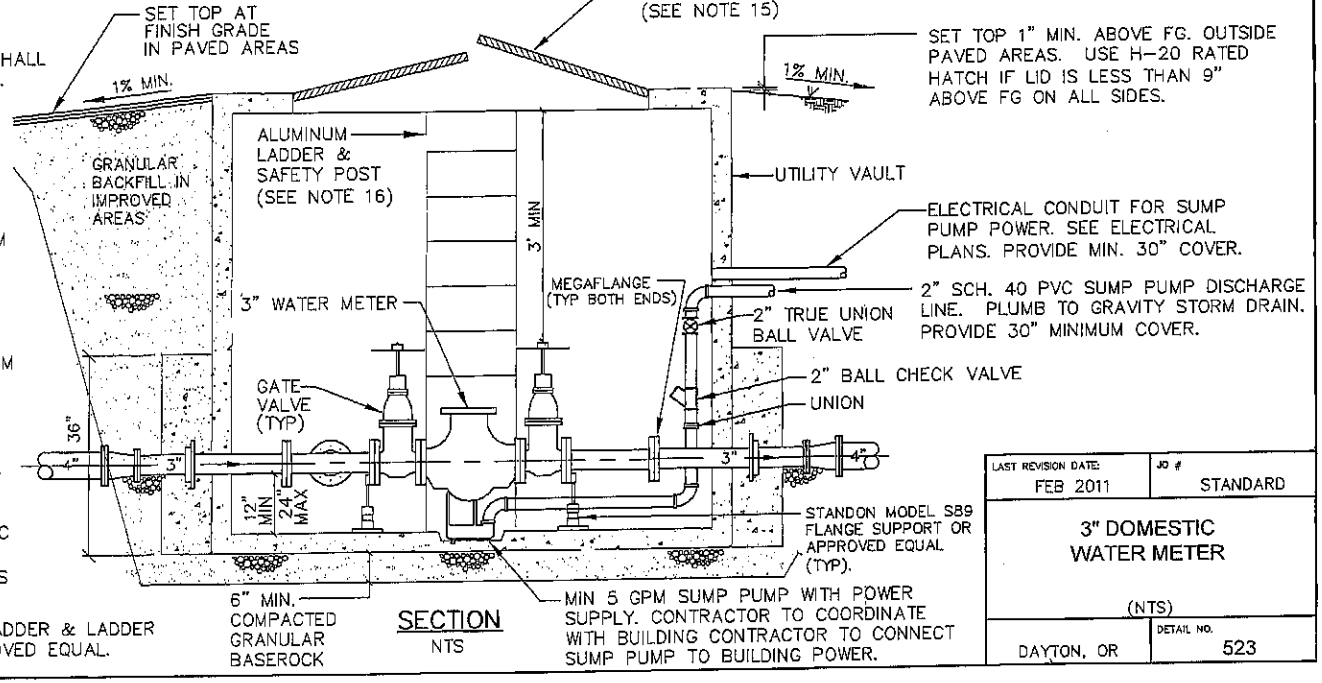
LAST REVISION DATE: OCT 2012	JO #
1" COMBINIATION AIR RELEASE VALVE (CARV) (NTS)	
DAYTON, OR	DETAIL NO. 518

NOTES:

1. METER VAULT & PIPING SHALL CONFORM TO REQUIREMENTS OF PUBLIC/PRIVATE AGENCIES HAVING JURISDICATION.
2. WATER METER & VAULT INSTALLATION SHALL MEET STATE OF OREGON, DEPARTMENT OF HUMAN RESOURCES, HEALTH DIVISION REQUIREMENTS.
3. ALL MATERIALS INCLUDING THE TEMPORARY SPOOL, SHALL BE FURNISHED & INSTALLED BY THE CONTRACTOR.
4. THE CONTRACTOR SHALL INSTALL A TEMPORARY SPACER SPOOL BETWEEN THE GATE VALVES SHOWN. THE TEMPORARY SPOOL SHALL MATCH THE LENGTH OF THE METER, INCLUDING THE STRAINER.
5. ALL M.J. CONNECTIONS SHALL BE ASSEMBLED WITH RETAINER GLANDS.
6. THE BYPASS PIPE SHALL BE THE SAME SIZE AS THE MAIN SERVICE PIPE OR A MIN OF 3", WHICHEVER IS LARGER.
7. METER INSTALLATIONS SHALL INCLUDE TEST PORTS AS AS REQUIRED BY THE PUBLIC/PRIVATE AGENCY HAVING JURISDICATION. UNLESS OTHERWISE REQUIRE BY AGENCY, TEST PORTS SHALL CONSIST OF SADDLES, I.P.xI.P. CORP STOPS & CAPS. CORP STOPS SHALL BE FORD MODEL FB500.
8. MAIN VALVES SHALL BE NON-RISING-STEM STYLE AND SHALL BE INSTALLED W/HAND WHEELS. HAND WHEELS SHALL MEET ALL REQUIREMENTS OF AWWA C509-94, SEC. 4.11.
9. ALL PIPE OPENINGS SHALL BE SEALED WITH NON-SHRINK WATERTIGHT GROUT.
10. BENDS, CROSSES AND TESS SHALL NOT BE INSTALLED WITHIN 5 FEET OF OUTSIDE OF VAULT WALL.
11. ALL VAULTS SHALL MEET OR EXCEED ASTM C-857. ALL CONC. TO BE 4500 PSI @ 28 DAYS. REBAR TO BE ASTM A-615 GRADE 60.
12. SUMP PUMP WITH POWER SUPPLY SHALL BE INSTALLED UNLESS OTHERWISE APPROVED BY ENGINEER OR GOVERNING JURISDICTION.
13. SUMP DISCHARGE SHALL BE PLUMBED TO GRAVITY STORM DRAIN PER UPC REQUIREMENTS.
14. SUMP PUMP POWER SHALL BE INSTALLED IN SCHEDULE 40 RIGID CONDUIT PER NEC REQUIREMENTS.
15. ALUMINUM ANGLE FRAME HATCH (3'0"x 5'6" MIN) SHALL BE BY SYRACUSE CASTINGS WEST OR APPROVED EQUAL (SAND BLASTED NON-SLIP).
    (1) TO BE 300 PSF PEDESTRIAN RATED EXKD-3666-RPC WHERE LID IS SET MIN. OF 9" ABOVE GRADE.
    (2) TO BE H-20 RATED ECHD-3666-RPC IF LID IS LESS THAN 9" ABOVE GRADE, OR IS IN TRAFFIC AREA.
16. OSHA APPROVED ALUMINUM SERRATED SAFETY RUNG LADDER & LADDER SAFETY POST BY SYRACUSE CASTINGS WEST, OR APPROVED EQUAL.



PLAN
NTS

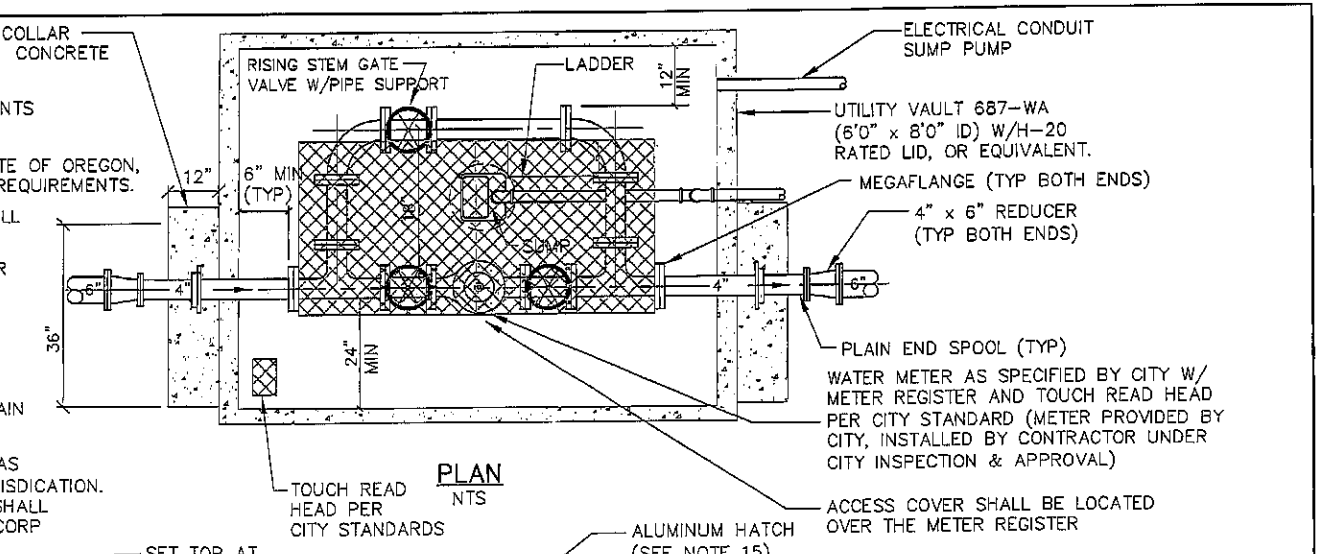


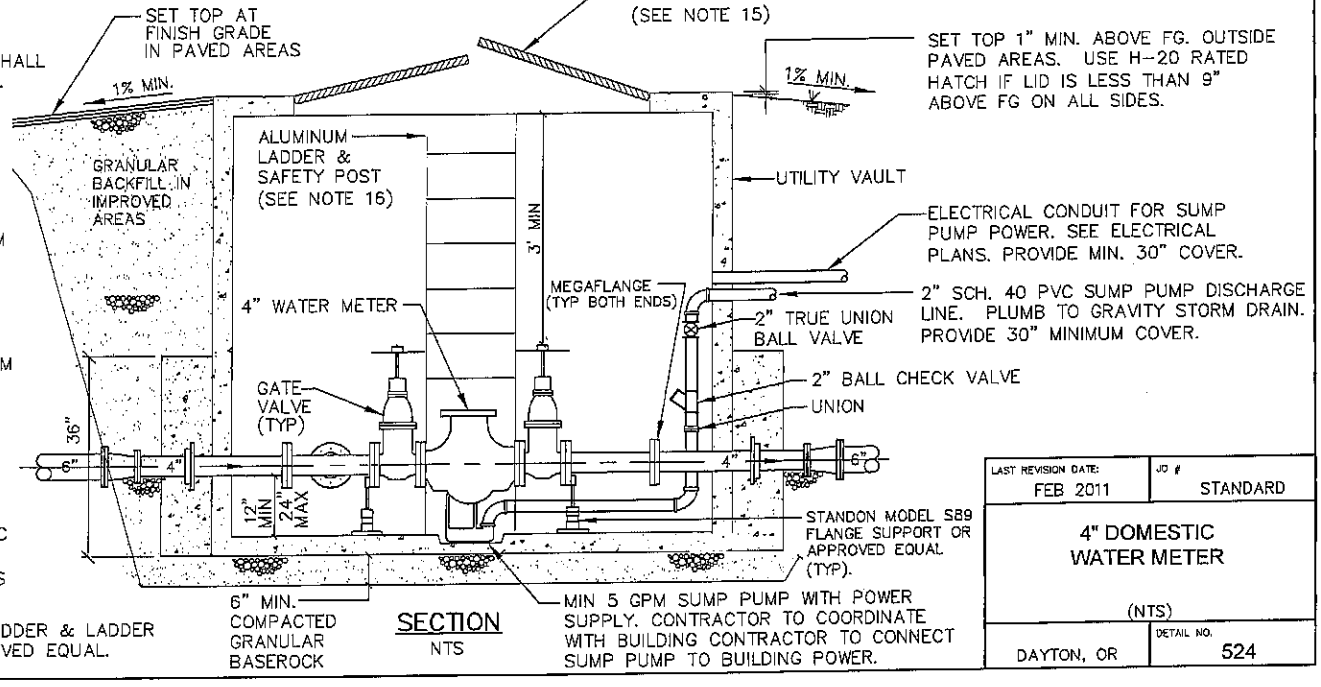
SECTION
NTS

LAST REVISION DATE: FEB 2011	JO #: STANDARD
3" DOMESTIC WATER METER (NTS)	
DAYTON, OR	DETAIL NO. 523

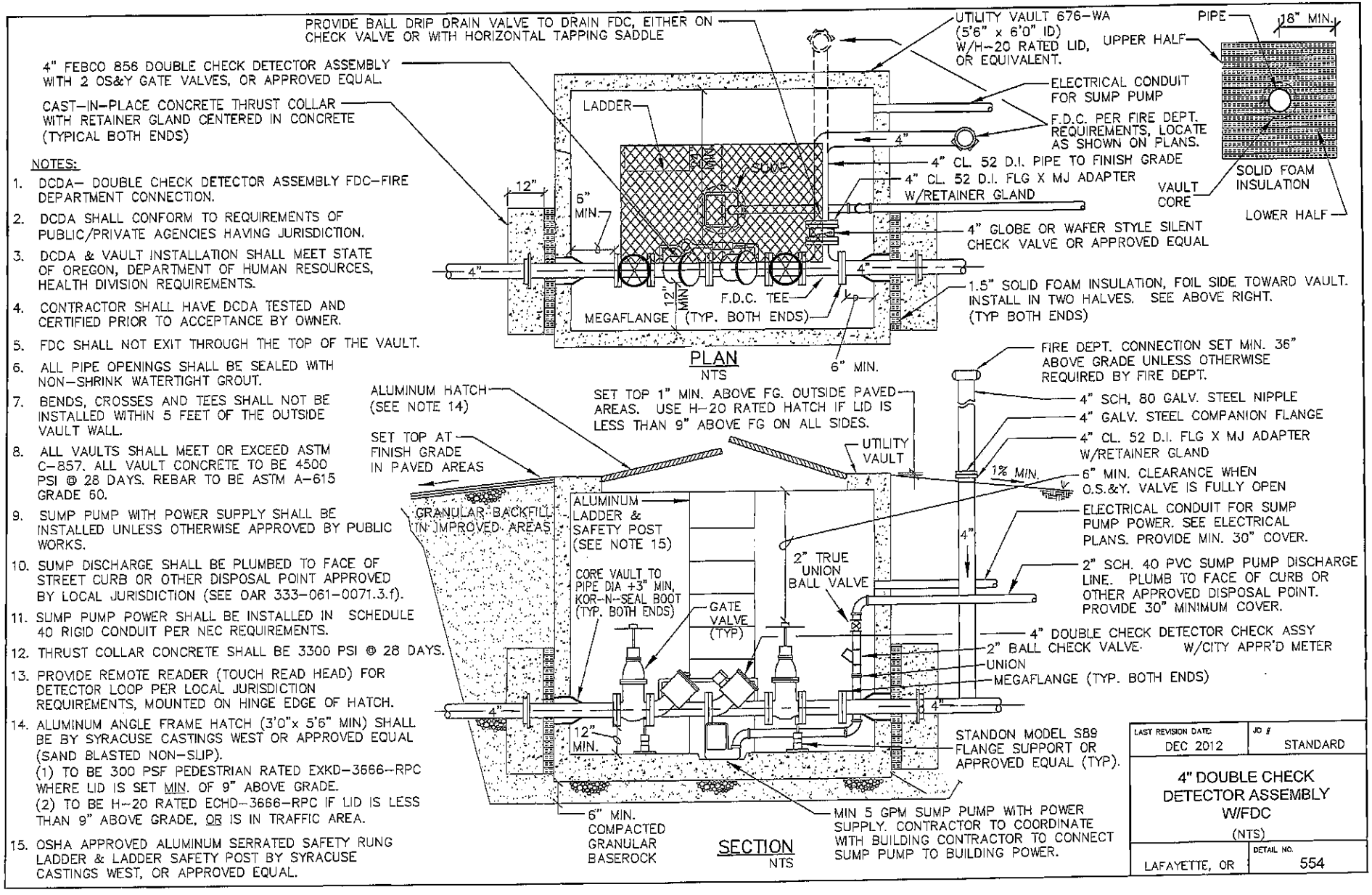
NOTES:

1. METER VAULT & PIPING SHALL CONFORM TO REQUIREMENTS OF PUBLIC/PRIVATE AGENCIES HAVING JURISDICATION.
2. WATER METER & VAULT INSTALLATION SHALL MEET STATE OF OREGON, DEPARTMENT OF HUMAN RESOURCES, HEALTH DIVISION REQUIREMENTS.
3. ALL MATERIALS INCLUDING THE TEMPORARY SPOOL, SHALL BE FURNISHED & INSTALLED BY THE CONTRACTOR.
4. THE CONTRACTOR SHALL INSTALL A TEMPORARY SPACER SPOOL BETWEEN THE GATE VALVES SHOWN. THE TEMPORARY SPOOL SHALL MATCH THE LENGTH OF THE METER, INCLUDING THE STRAINER.
5. ALL M.J. CONNECTIONS SHALL BE ASSEMBLED WITH RETAINER GLANDS.
6. THE BYPASS PIPE SHALL BE THE SAME SIZE AS THE MAIN SERVICE PIPE OR A MIN OF 3", WHICHEVER IS LARGER.
7. METER INSTALLATIONS SHALL INCLUDE TEST PORTS AS AS REQUIRED BY THE PUBLIC/PRIVATE AGENCY HAVING JURISDICATION. UNLESS OTHERWISE REQUIRE BY AGENCY, TEST PORTS SHALL CONSIST OF SADDLES, I.P.xI.P. CORP STOPS & CAPS. CORP STOPS SHALL BE FORD MODEL FB500.
8. MAIN VALVES SHALL BE NON-RISING-STEM STYLE AND SHALL BE INSTALLED W/HAND WHEELS. HAND WHEELS SHALL MEET ALL REQUIREMENTS OF AWWA C509-94, SEC. 4.11.
9. ALL PIPE OPENINGS SHALL BE SEALED WITH NON-SHRINK WATERTIGHT GROUT.
10. BENDS, CROSSES AND TESS SHALL NOT BE INSTALLED WITHIN 5 FEET OF OUTSIDE OF VAULT WALL.
11. ALL VAULTS SHALL MEET OR EXCEED ASTM C-857. ALL CONC. TO BE 4500 PSI @ 28 DAYS. REBAR TO BE ASTM A-615 GRADE 60.
12. SUMP PUMP WITH POWER SUPPLY SHALL BE INSTALLED UNLESS OTHERWISE APPROVED BY ENGINEER OR GOVERNING JURISDICTION.
13. SUMP DISCHARGE SHALL BE PLUMBED TO GRAVITY STORM DRAIN PER UPC REQUIREMENTS.
14. SUMP PUMP POWER SHALL BE INSTALLED IN SCHEDULE 40 RIGID CONDUIT PER NEC REQUIREMENTS.
15. ALUMINUM ANGLE FRAME HATCH (3'0"x 5'6" MIN) SHALL BE BY SYRACUSE CASTINGS WEST OR APPROVED EQUAL (SAND BLASTED NON-SLIP).
    (1) TO BE 300 PSF PEDESTRIAN RATED EXKD-3666-RPC WHERE LID IS SET MIN. OF 9" ABOVE GRADE.
    (2) TO BE H-20 RATED ECHD-3666-RPC IF LID IS LESS THAN 9" ABOVE GRADE, OR IS IN TRAFFIC AREA.
16. OSHA APPROVED ALUMINUM SERRATED SAFETY RUNG LADDER & LADDER SAFETY POST BY SYRACUSE CASTINGS WEST, OR APPROVED EQUAL.





LAST REVISION DATE: FEB 2011	JO #: STANDARD
4" DOMESTIC WATER METER (NTS)	
DAYTON, OR	DETAIL NO. 524



NOTES:

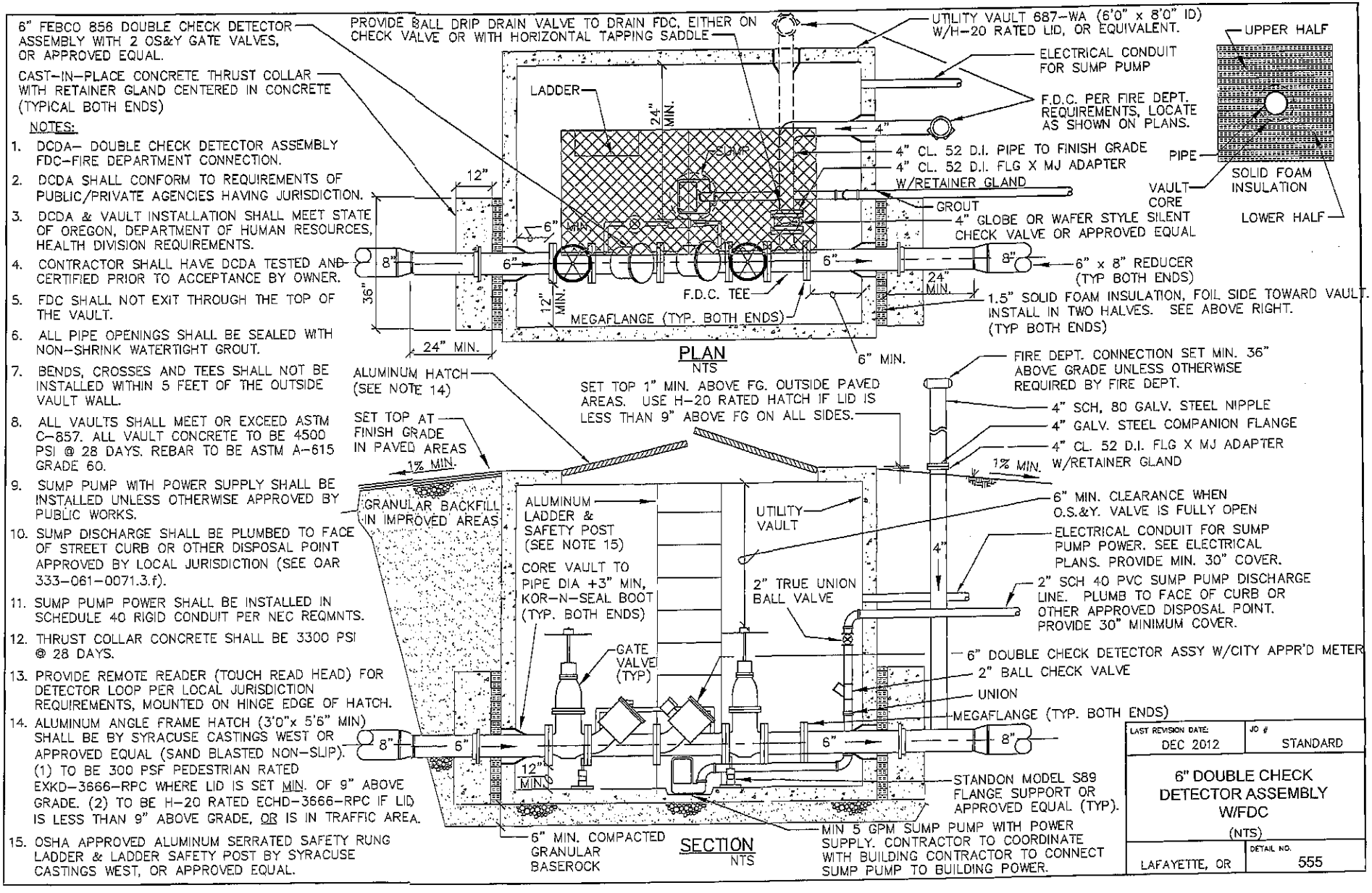
1. DCDA- DOUBLE CHECK DETECTOR ASSEMBLY FDC-FIRE DEPARTMENT CONNECTION.
2. DCDA SHALL CONFORM TO REQUIREMENTS OF PUBLIC/PRIVATE AGENCIES HAVING JURISDICTION.
3. DCDA & VAULT INSTALLATION SHALL MEET STATE OF OREGON, DEPARTMENT OF HUMAN RESOURCES, HEALTH DIVISION REQUIREMENTS.
4. CONTRACTOR SHALL HAVE DCDA TESTED AND CERTIFIED PRIOR TO ACCEPTANCE BY OWNER.
5. FDC SHALL NOT EXIT THROUGH THE TOP OF THE VAULT.
6. ALL PIPE OPENINGS SHALL BE SEALED WITH NON-SHRINK WATERTIGHT GROUT.
7. BENDS, CROSSES AND TEES SHALL NOT BE INSTALLED WITHIN 5 FEET OF THE OUTSIDE VAULT WALL.
8. ALL VAULTS SHALL MEET OR EXCEED ASTM C-857. ALL VAULT CONCRETE TO BE 4500 PSI @ 28 DAYS. REBAR TO BE ASTM A-615 GRADE 60.
9. SUMP PUMP WITH POWER SUPPLY SHALL BE INSTALLED UNLESS OTHERWISE APPROVED BY PUBLIC WORKS.
10. SUMP DISCHARGE SHALL BE PLUMBED TO FACE OF STREET CURB OR OTHER DISPOSAL POINT APPROVED BY LOCAL JURISDICTION (SEE OAR 333-061-0071.3.f).
11. SUMP PUMP POWER SHALL BE INSTALLED IN SCHEDULE 40 RIGID CONDUIT PER NEC REQUIREMENTS.
12. THRUST COLLAR CONCRETE SHALL BE 3300 PSI @ 28 DAYS.
13. PROVIDE REMOTE READER (TOUCH READ HEAD) FOR DETECTOR LOOP PER LOCAL JURISDICTION REQUIREMENTS, MOUNTED ON HINGE EDGE OF HATCH.
14. ALUMINUM ANGLE FRAME HATCH (3'0"x 5'6" MIN) SHALL BE BY SYRACUSE CASTINGS WEST OR APPROVED EQUAL (SAND BLASTED NON-SLIP).
    (1) TO BE 300 PSF PEDESTRIAN RATED EXKD-3666-RPC WHERE LID IS SET MIN. OF 9" ABOVE GRADE.
    (2) TO BE H-20 RATED ECHD-3666-RPC IF LID IS LESS THAN 9" ABOVE GRADE, OR IS IN TRAFFIC AREA.
15. OSHA APPROVED ALUMINUM SERRATED SAFETY RUNG LADDER & LADDER SAFETY POST BY SYRACUSE CASTINGS WEST, OR APPROVED EQUAL.

LAST REVISION DATE:	JD #
DEC 2012	STANDARD

4" DOUBLE CHECK DETECTOR ASSEMBLY W/FDC

(NTS)

LAFAYETTE, OR	DETAIL NO. 554

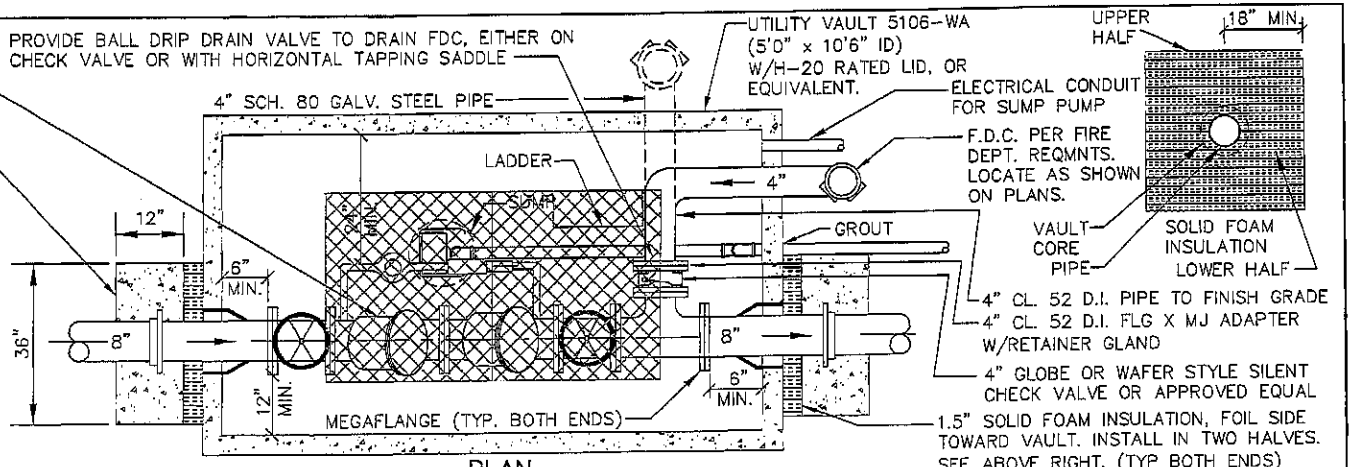

6" FEBCO 856 DOUBLE CHECK DETECTOR ASSEMBLY WITH 2 OS&Y GATE VALVES, OR APPROVED EQUAL.
CAST-IN-PLACE CONCRETE THRUST COLLAR WITH RETAINER GLAND CENTERED IN CONCRETE (TYPICAL BOTH ENDS)
NOTES:
1. DCDA- DOUBLE CHECK DETECTOR ASSEMBLY FDC-FIRE DEPARTMENT CONNECTION.
2. DCDA SHALL CONFORM TO REQUIREMENTS OF PUBLIC/PRIVATE AGENCIES HAVING JURISDICTION.
3. DCDA & VAULT INSTALLATION SHALL MEET STATE OF OREGON, DEPARTMENT OF HUMAN RESOURCES, HEALTH DIVISION REQUIREMENTS.
4. CONTRACTOR SHALL HAVE DCDA TESTED AND CERTIFIED PRIOR TO ACCEPTANCE BY OWNER.
5. FDC SHALL NOT EXIT THROUGH THE TOP OF THE VAULT.
6. ALL PIPE OPENINGS SHALL BE SEALED WITH NON-SHRINK WATERTIGHT GROUT.
7. BENDS, CROSSES AND TEES SHALL NOT BE INSTALLED WITHIN 5 FEET OF THE OUTSIDE VAULT WALL.
8. ALL VAULTS SHALL MEET OR EXCEED ASTM C-857. ALL VAULT CONCRETE TO BE 4500 PSI @ 28 DAYS. REBAR TO BE ASTM A-615 GRADE 60.
9. SUMP PUMP WITH POWER SUPPLY SHALL BE INSTALLED UNLESS OTHERWISE APPROVED BY PUBLIC WORKS.
10. SUMP DISCHARGE SHALL BE PLUMBED TO FACE OF STREET CURB OR OTHER DISPOSAL POINT APPROVED BY LOCAL JURISDICTION (SEE OAR 333-061-0071.3.f).
11. SUMP PUMP POWER SHALL BE INSTALLED IN SCHEDULE 40 RIGID CONDUIT PER NEC REQMNTS.
12. THRUST COLLAR CONCRETE SHALL BE 3300 PSI @ 28 DAYS.
13. PROVIDE REMOTE READER (TOUCH READ HEAD) FOR DETECTOR LOOP PER LOCAL JURISDICTION REQUIREMENTS, MOUNTED ON HINGE EDGE OF HATCH.
14. ALUMINUM ANGLE FRAME HATCH (3'0"x 5'6" MIN) SHALL BE BY SYRACUSE CASTINGS WEST OR APPROVED EQUAL (SAND BLASTED NON-SLIP). (1) TO BE 300 PSF PEDESTRIAN RATED EXKD-3666-RPC WHERE LID IS SET MIN. OF 9" ABOVE GRADE. (2) TO BE H-20 RATED ECHD-3666-RPC IF LID IS LESS THAN 9" ABOVE GRADE, OR IS IN TRAFFIC AREA.
15. OSHA APPROVED ALUMINUM SERRATED SAFETY RUNG LADDER & LADDER SAFETY POST BY SYRACUSE CASTINGS WEST, OR APPROVED EQUAL.
PROVIDE BALL DRIP DRAIN VALVE TO DRAIN FDC, EITHER ON CHECK VALVE OR WITH HORIZONTAL TAPPING SADDLE
UTILITY VAULT 687-WA (6'0" x 8'0" ID) W/H-20 RATED LID, OR EQUIVALENT.
ELECTRICAL CONDUIT FOR SUMP PUMP
F.D.C. PER FIRE DEPT. REQUIREMENTS, LOCATE AS SHOWN ON PLANS.
LADDER
24" MIN.
SUMP
4"
4" CL. 52 D.I. PIPE TO FINISH GRADE
4" CL. 52 D.I. FLG X MJ ADAPTER W/RETAINER GLAND
GROUT
4" GLOBE OR WAFER STYLE SILENT CHECK VALVE OR APPROVED EQUAL
6" x 8" REDUCER (TYP BOTH ENDS)
12"
6" MIN.
8"
6"
6"
8"
36"
12" MIN.
24" MIN.
F.D.C. TEE
MEGAFLANGE (TYP. BOTH ENDS)
1.5" SOLID FOAM INSULATION, FOIL SIDE TOWARD VAULT. INSTALL IN TWO HALVES. SEE ABOVE RIGHT. (TYP BOTH ENDS)
6" MIN.
PLAN
NTS
UPPER HALF
PIPE
SOLID FOAM INSULATION
VAULT CORE
LOWER HALF
ALUMINUM HATCH (SEE NOTE 14)
SET TOP AT FINISH GRADE IN PAVED AREAS
1% MIN.
SET TOP 1" MIN. ABOVE FG. OUTSIDE PAVED AREAS. USE H-20 RATED HATCH IF LID IS LESS THAN 9" ABOVE FG ON ALL SIDES.
FIRE DEPT. CONNECTION SET MIN. 36" ABOVE GRADE UNLESS OTHERWISE REQUIRED BY FIRE DEPT.
4" SCH. 80 GALV. STEEL NIPPLE
4" GALV. STEEL COMPANION FLANGE
4" CL. 52 D.I. FLG X MJ ADAPTER W/RETAINER GLAND
1% MIN.
GRANULAR BACKFILL IN IMPROVED AREAS
ALUMINUM LADDER & SAFETY POST (SEE NOTE 15)
CORE VAULT TO PIPE DIA +3" MIN, KOR-N-SEAL BOOT (TYP. BOTH ENDS)
UTILITY VAULT
6" MIN. CLEARANCE WHEN O.S.&Y. VALVE IS FULLY OPEN
ELECTRICAL CONDUIT FOR SUMP PUMP POWER. SEE ELECTRICAL PLANS. PROVIDE MIN. 30" COVER.
4"
2" TRUE UNION BALL VALVE
2" SCH 40 PVC SUMP PUMP DISCHARGE LINE. PLUMB TO FACE OF CURB OR OTHER APPROVED DISPOSAL POINT. PROVIDE 30" MINIMUM COVER.
GATE VALVE (TYP)
6" DOUBLE CHECK DETECTOR ASSY W/CITY APPR'D METER
2" BALL CHECK VALVE
UNION
MEGAFLANGE (TYP. BOTH ENDS)
8"
6"
6"
8"
12" MIN.
STANDON MODEL S89 FLANGE SUPPORT OR APPROVED EQUAL (TYP).
6" MIN. COMPACTED GRANULAR BASEROCK
SECTION
NTS
MIN 5 GPM SUMP PUMP WITH POWER SUPPLY. CONTRACTOR TO COORDINATE WITH BUILDING CONTRACTOR TO CONNECT SUMP PUMP TO BUILDING POWER.
LAST REVISION DATE: DEC 2012
JO #
STANDARD
6" DOUBLE CHECK DETECTOR ASSEMBLY W/FDC
(NTS)
LAFAYETTE, OR
DETAIL NO.
555

8" FEBCO 856 DOUBLE CHECK DETECTOR ASSEMBLY WITH 2 OS&Y GATE VALVES, OR APPROVED EQUAL.

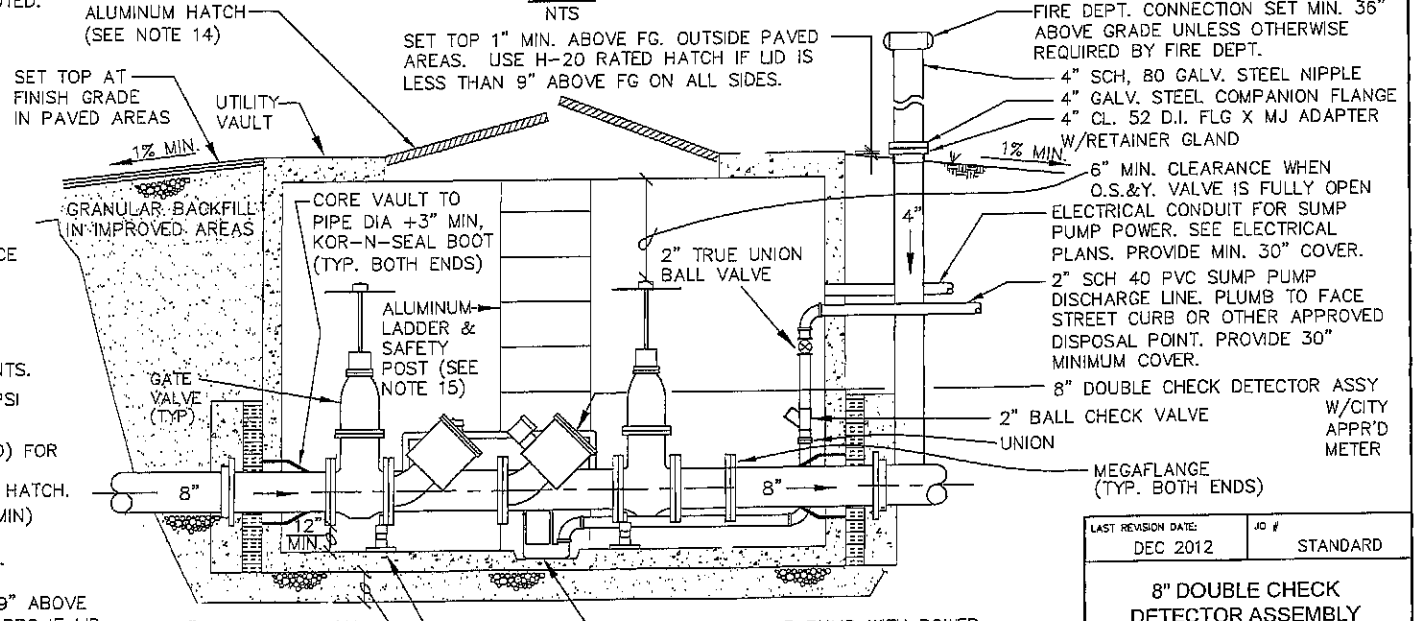
CAST-IN-PLACE CONCRETE THRUST COLLAR WITH RETAINER GLAND CENTERED IN CONCRETE (TYPICAL BOTH ENDS)

NOTES:

1. DCDA- DOUBLE CHECK DETECTOR ASSEMBLY FDC-FIRE DEPARTMENT CONNECTION.
2. DCDA SHALL CONFORM TO REQUIREMENTS OF PUBLIC/PRIVATE AGENCIES HAVING JURISDICTION.
3. DCDA & VAULT INSTALLATION SHALL MEET STATE OF OREGON, DEPARTMENT OF HUMAN RESOURCES, HEALTH DIVISION REQUIREMENTS.
4. CONTRACTOR SHALL HAVE DCDA TESTED AND CERTIFIED PRIOR TO ACCEPTANCE BY OWNER.
5. FDC SHALL NOT EXIT THROUGH THE TOP OF THE VAULT.
6. ALL PIPE OPENINGS SHALL BE SEALED WITH KOH-N-SEAL RUBBER BOOTS, EXCEPT AS NOTED.
7. BENDS, CROSSES AND TEES SHALL NOT BE INSTALLED WITHIN 5 FEET OF THE OUTSIDE VAULT WALL.
8. ALL VAULTS SHALL MEET OR EXCEED ASTM C-857. ALL VAULT CONCRETE TO BE 4500 PSI @ 28 DAYS. REBAR TO BE ASTM A-615 GRADE 60.
9. SUMP PUMP WITH POWER SUPPLY SHALL BE INSTALLED UNLESS OTHERWISE APPROVED BY PUBLIC WORKS.
10. SUMP DISCHARGE SHALL BE PLUMBED TO FACE OF STREET CURB OR OTHER DISPOSAL POINT APPROVED BY LOCAL JURISDICTION (SEE OAR 333-061-0071.3.f).
11. SUMP PUMP POWER SHALL BE INSTALLED IN SCHEDULE 40 RIGID CONDUIT PER NEC REQMNTS.
12. THRUST COLLAR CONCRETE SHALL BE 3300 PSI @ 28 DAYS.
13. PROVIDE REMOTE READER (TOUCH READ HEAD) FOR DETECTOR LOOP PER LOCAL JURISDICTION REQUIREMENTS, MOUNTED ON HINGE EDGE OF HATCH.
14. ALUMINUM ANGLE FRAME HATCH (3'0"x 5'6" MIN) SHALL BE BY SYRACUSE CASTINGS WEST OR APPROVED EQUAL (SAND BLASTED NON-SLIP). (1) TO BE 300 PSF PEDESTRIAN RATED EXKD-3666-RPC WHERE LID IS SET MIN. OF 9" ABOVE GRADE. (2) TO BE H-20 RATED ECHD-3666-RPC IF LID IS LESS THAN 9" ABOVE GRADE, OR IS IN TRAFFIC AREA.
15. OSHA APPROVED ALUMINUM SERRATED SAFETY RUNG LADDER & LADDER SAFETY POST BY SYRACUSE CASTINGS WEST, OR APPROVED EQUAL.

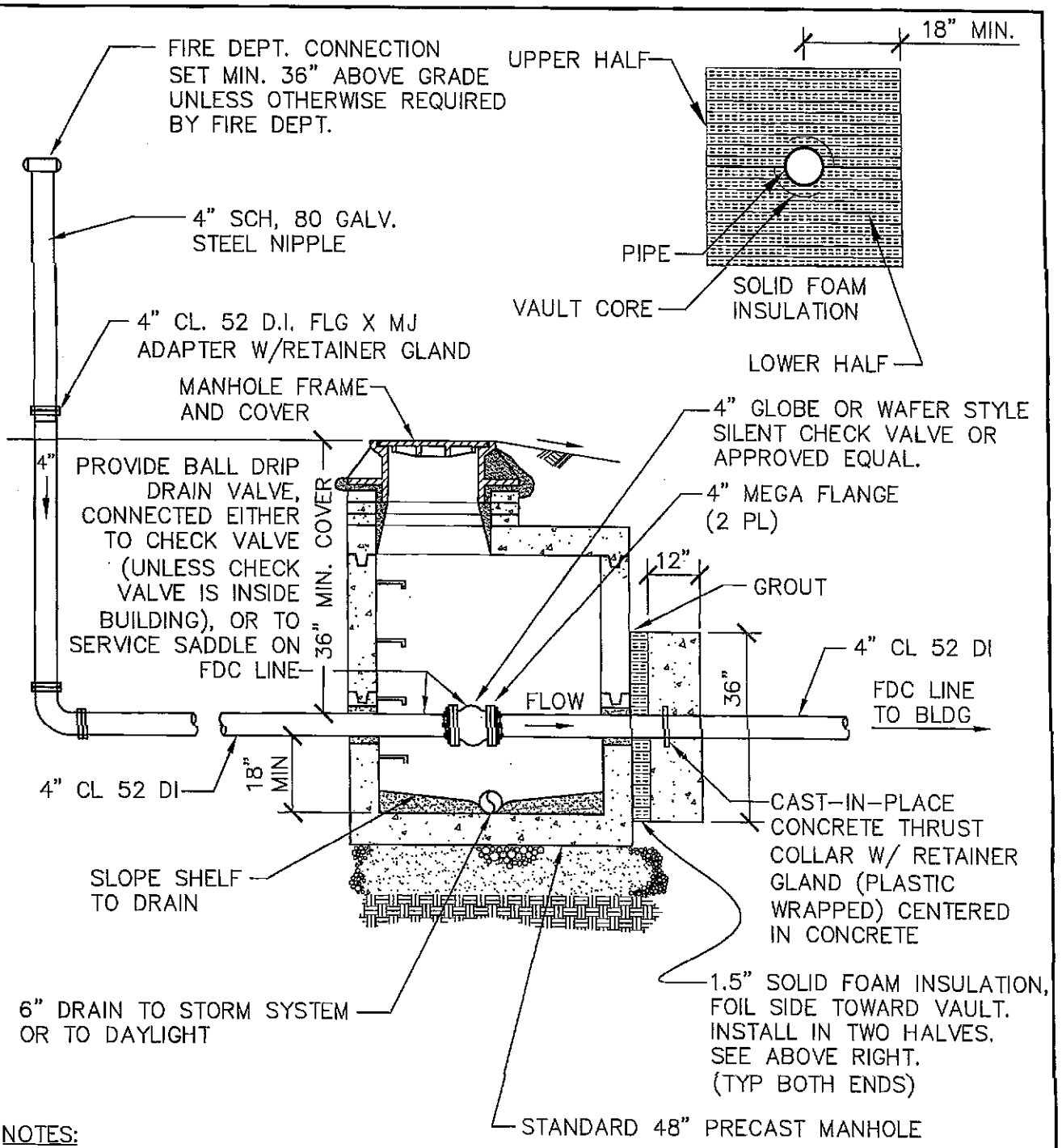


PLAN
NTS



SECTION
NTS

LAST REVISION DATE: DEC 2012	JO #: STANDARD
8" DOUBLE CHECK DETECTOR ASSEMBLY W/FDC (NTS)	
LAFAYETTE, OR	DETAIL NO. 556



NOTES:

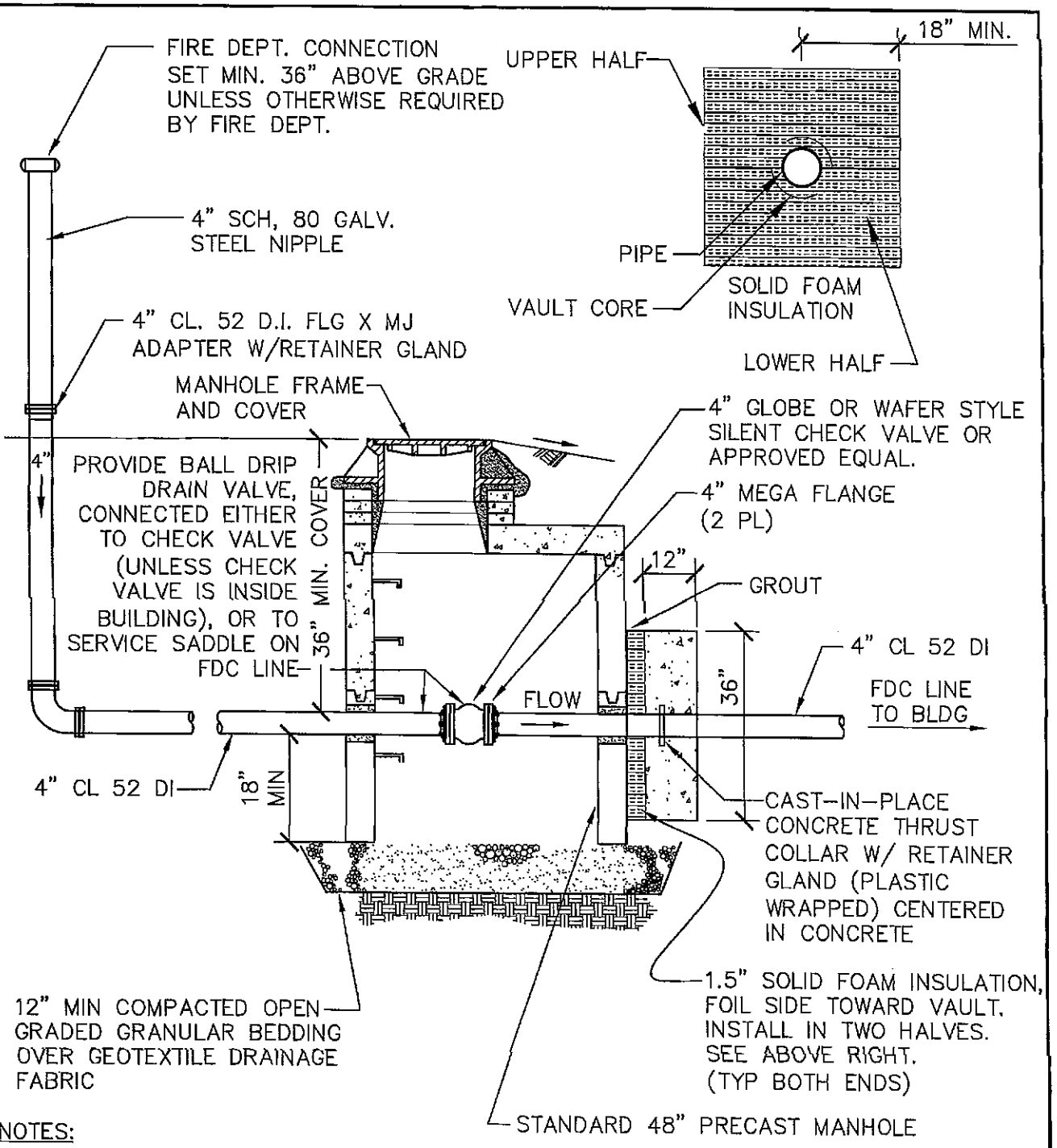
1. INSTALL 48" PRECAST MANHOLE PER DETAIL 4010.
2. ALL PIPE OPENINGS SHALL BE SEALED WITH NON-SHRINK WATERTIGHT GROUT.
3. THRUST COLLAR CONCRETE SHALL BE 3300 PSI @ 28 DAYS.
4. INSTALL DRAIN & DRAIN MH AT LOW POINT IN FDC LINE PROFILE (IE. BALL DRIP VALVE TO DRAIN PIPE BETWEEN FDC & DRAIN MH).
5. IF APPROVED IN WRITING BY FIRE CODE OFFICIAL (BASED ON CHECK VALVE INSIDE BUILDING), THE ADDITIONAL CHECK VALVE ON FDC LINE MAY BE OMITTED, AND BALL CHECK DRAIN VALVE INSTALLED ON SERVICE SADDLE INSIDE DRAIN MH SHOWN.

LAST REVISION DATE:	JO #
FEB 2013	STANDARD

4" FDC LINE, CHECK VALVE W/ BALL DRIP VALVE, AND DRAIN MANHOLE DETAIL

(NTS)

	DETAIL NO.
DAYTON, OR	560



NOTES:

1. INSTALL 48" PRECAST MANHOLE PER DETAIL 4010.
2. ALL PIPE OPENINGS SHALL BE SEALED WITH NON-SHRINK WATERTIGHT GROUT.
3. THRUST COLLAR CONCRETE SHALL BE 3300 PSI @ 28 DAYS.
4. INSTALL DRAIN & DRAIN MH AT LOW POINT IN FDC LINE PROFILE (IE. BALL DRIP VALVE TO DRAIN PIPE BETWEEN FDC & DRAIN MH).
5. IF APPROVED IN WRITING BY FIRE CODE OFFICIAL (BASED ON CHECK VALVE INSIDE BUILDING), THE ADDITIONAL CHECK VALVE ON FDC LINE MAY BE OMITTED, AND BALL CHECK DRAIN VALVE INSTALLED ON SERVICE SADDLE INSIDE DRAIN MH SHOWN.

LAST REVISION DATE:	JO #
FEB 2013	STANDARD

4" FDC LINE, CHECK VALVE W/ BALL DRIP VALVE, AND DRAIN MANHOLE DETAIL

(NTS)

	DETAIL NO.
DAYTON, OR	561