

**CITY OF DAYTON,  
WASHINGTON**

**DEVELOPMENT STANDARDS,  
SPECIFICATIONS, AND  
STANDARD PLANS**

**2008  
REVISED JUNE 2015**

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# Section 1 - Introduction/Purpose

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**CITY OF DAYTON, WASHINGTON  
PUBLIC WORKS STANDARDS  
2008**

These City of Dayton Development Standards, Specifications, and Standard Plans have been prepared by Anderson Perry & Associates, Inc., for exclusive use within the City of Dayton. The standards are intended to be general in nature and set minimum guidance for projects within the City.

The purpose of this document is to provide guidelines to establish uniform specifications and design standards for streets, water, sewer, and storm drain work. These specifications and design standards shall be used by the City's Public Works Division, developers, contractors, engineers, architects, homeowners, and others engaged in construction or repairs throughout the City of Dayton.

All users of these documents on projects within the City shall supplement these documents as needed to adapt their use for the specific project for which they will be used. Project specific plans and specifications incorporating applicable sections of these standards shall be stamped and signed by the responsible Engineer and shall be submitted to the City of Dayton for review prior to their use on a project within the City.

These 2008 City of Dayton Development Standards, Specifications, and Standard Plans are valid until modified or replaced by the City.

# Section 2 - Development Standards

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## 2.1 General

All public and private development within the City of Dayton shall conform to these Development Standards. The City of Dayton may waive any of these requirements or require additional requirements based on the specific needs of a particular project.

## 2.2 Development Requirements

Anyone interested in developing a public or private project within the City shall contact City staff at City Hall and set up a pre-application conference. A brief description of the project, a general sketch/vicinity map and desired schedule shall be presented at the meeting. City staff will then outline the process, fees, and explain which of the following items will be required.

- ☐ Site Plan Application (see appendix for application)
- ☐ SEPA Checklist (see appendix for form)
- ☐ Shorelines Permit (see appendix for application)
- ☐ Short Plat (see appendix for application)
- ☐ Preliminary Long Plat (see appendix for application)
- ☐ Boundary Line Adjustments (see appendix for application)
- ☐ Final Plat
- ☐ Engineered Plans meeting the requirements outlined in the “Design Guidelines” Checklist (required for construction of public facilities)
- ☐ Joint Aquatic Resource Permits Application (JARPA) (see appendix for JARPA)
- ☐ Flood Hazard Development Permit (see appendix for application)
- ☐ Critical Areas Permit (see appendix for application)
- ☐ Easements (see appendix for example easement)
- ☐ Developer’s Certification of Project (see appendix for form)
- ☐ Developer’s Warranty of Project (see appendix for form)

## 2.3 Design Guidelines

All site work for new development or redevelopment within the City of Dayton shall be designed by an engineer licensed in the State of Washington. A Design Guideline Checklist is provided below. All items in this checklist shall be included/addressed prior to submittal of a design to the City for review. Design submittals must be deemed complete by the City before project review and approval will be granted.

### 2.3.1 Design Guideline Checklist

- ☐ Designed to be plotted on 24" x 36" plan sheets
- ☐ Reproducible at half-size on 11" x 17" plan sheets
- ☐ Project name and owner/developer name
- ☐ Vicinity Map
- ☐ Plans drawn to a standard scale and scale indicated on each sheet. The horizontal scale for plan sheets shall be 1" = 20', unless otherwise approved by the City.
- ☐ North arrow on each sheet with plan views
- ☐ Existing topography of land indicated by contours at intervals acceptable to the City
- ☐ All existing utilities, survey monuments, and structures clearly shown on plan sheets
- ☐ Proposed improvements clearly shown and dimensioned (street widths, radii, points of curvature, tangent bearings, arc lengths, etc.)
- ☐ Mapping information (Horizontal and vertical datum, basis of station, etc.)
- ☐ Right-of-way, property, and easement lines clearly indicated
- ☐ Approval and signature block for the City of Dayton
- ☐ Stamped and signed by an engineer licensed in the State of Washington
- ☐ Designed in accordance with these City of Dayton Standard Plans, material specifications and construction requirements, and all commonly accepted design standards (Americans with Disabilities Act, Washington State Department of Ecology, Washington State Department of Transportation, etc.)
- ☐ Provisions for on-site stormwater disposal for new construction

## 2.4 Submittal and Development Fees

The following development fees apply to projects within the City of Dayton. The fees shall be paid at the time of application. Project review and approval will not be granted until all fees have been paid.

**TABLE 2.4**  
**City of Dayton Fee Schedule\***  
**Land Use Applications/Reviews/Processing**

<b>General Processing</b>	
Pre-Application Meeting	\$100 review/meeting - If a land use application is filed within 6 months of the pre-application meeting date, this fee will be credited to the land use application. (Credit <b>cannot</b> be awarded to a building permit application)
Zoning Certification Letter	\$75
Open Record Hearing	Application fee plus Hearing Examiner costs
Closed Record Appeal	\$100 plus Hearing Examiner costs
Reconsideration	\$50 for administrative decision or if applicable Hearing Examiner costs
<b>Notice</b>	
Notice Board – Posting on-site	Applicant's responsible for purchase of sign and installation
<b>State Environmental Policy Act (SEPA) &amp; Environmental Reviews</b>	
Categorical Exemption Documentation	\$50 only if written letter requested
Threshold Determination - DNS/MDNS/DS	\$400
Critical Area Review or Special Study Review (such as – flood hazard, wetland, riparian area, landslide, seismic and critical aquifer)	\$250 for each Critical Area Review or Study Review plus City consultant costs, if required
Special Studies Review: Traffic, Shoreline, Noise and other	\$250 for each Study - plus City consultant costs, if required
EIS (Environmental Impact Statement)	Cost Agreement as determined
<b>Land Use Applications</b>	
Rezone	\$500 plus \$25 per acre & Hearing Examiner costs
Minor Variances: 10% or Less for Zoning and Critical Area Ordinance (CAO)	\$150 plus CAO or special study review as needed
Variance	\$200 plus Hearing Examiner Costs
Conditional Use Permit	\$250 plus Hearing Examiner Costs
Essential Public Facility	\$250 plus Hearing Examiner Costs
Site Development Plan	\$350 non-residential
Mobile/Manufactured Home Park	\$400 plus \$25 each space, Hearing Examiner costs & City engineering consultant costs
Minor Site Plan Modification	\$100
Reasonable Use Exception	\$200 plus Hearing Examiner costs
Public Agency and Utility Exception	\$200 plus Hearing Examiner costs
Administrative Interpretations	\$100
Sign Permit – Planning/Sign Code compliance review	\$20 (each review) plus building code review fees

\* – The Mayor or his designee may waive or reduce fees, if such waiver or reduction is justified by the applicant.

**TABLE 2.4 (cont.)**  
**City of Dayton Fee Schedule\***  
**Land Use Applications/Reviews/Processing**

<b>Engineering</b>	
Permit Review	City engineering consultant costs
Surface Water Management Standards Variances	\$100 plus City engineering consultant costs
Alternative Design for Streets	\$100 plus City engineering consultant costs
Street Easements & Vacations	\$200
<b>Land Division</b>	
Subdivision Preliminary	\$400 plus \$25 for each lot, City engineering consultant costs & Hearing Examiner costs
Major Preliminary Plat Revisions	\$250 plus \$25 for each new or revised lot, City engineering consultant costs & Hearing Examiner Costs
Subdivision Final	\$250 plus City engineering consultant costs
Short Plat Preliminary	\$400 plus City engineering consultant costs
Short Plat Final	\$100 plus City engineering consultant costs
Boundary Line Adjustment/Lot Merger	\$50
Plat Vacations and Alterations	\$200 plus City engineering consultant costs & Hearing Examiner costs
<b>Shoreline Management</b>	
Shoreline Management Re-Designation	\$500 plus \$25 per acre & Hearing Examiner costs
Shoreline Exemption	\$75
Shoreline Substantial Development Permit (SSDP)	\$250
Minor revisions to SSDP	\$100
Shoreline Conditional Use Permit	\$250 plus Hearing Examiner costs
Shoreline Variance	\$250 plus Hearing Examiner costs
<b>Comprehensive Plan Amendment (CPA)</b>	
CPA Text Amendment	\$200 per policy
CPA Map	\$200 per designation & plus mapping costs
Development Code Text Amendment	\$200 per Code Section
Zoning Map Amendment (only with a CPA Map Change)	\$200 per zone plus mapping costs
Development Agreement	Cost Agreement as determined
Annexation	\$300 plus mapping and City engineering costs

\* – The Mayor or his designee may waive or reduce fees, if such waiver or reduction is justified by the applicant.

## 2.5 Conditions of Use

These standards reflect the basic requirements and intent of the City. They shall be incorporated into project specific plans. The Engineer of Record shall be responsible for supplementing the standards to meet the actual project needs.

## **2.6 City Responsibility and Authority**

The City is the primary reviewing and approving authority on infrastructure projects within the City and City infrastructure in the Urban Growth Area (UGA). All projects shall follow the applicable review and approval processes established by the City. Project plans and specifications must be prepared by a licensed engineer registered in the State of Washington and submitted to the City for review and approval prior to the start of construction. The City reserves the right to waive the requirements of the licensed engineer on small, simple, and definable projects. The City will have complete access to the project sites and perform inspections as needed to verify the City requirements have been met. The completed project must be accepted by the Public Works Department before the City will grant final approval.

## **2.7 Record Drawings (As-Built) Requirements**

The Developer shall submit an up-to-date, complete, and accurate set of record drawings upon completion of the project. The submittal shall include four full size drawings (24"x36"), five half size drawings (11"x17"), and one CD with the drawings in PDF format. Any construction photos depicting critical activities or installations shall also be labeled and included. These drawings shall include all work performed by the Contractor and shall note any changes or deviations made from the details shown on the construction drawings. Such deviations would include, but not be limited to, dimensional changes, location, grade changes, elevation changes, material type, configuration, etc. All changes shall be neatly and accurately shown on the record drawings.

The drawings shall show at least two swing tie references to all buried service line taps, valves, manholes, etc., from an above-ground reference point. Swing tie measurements shall be from some permanent reference point, i.e., house corner, fire hydrant, power pole, etc. All ties shall be provided in such a way that the buried utility can be accurately located after construction work is complete. All buried improvements shall be described in detail including location, type, size, depth, brand name, model numbers, etc. Buried improvements shall include valves, fittings, repair clamps, connections to existing lines, etc. All offsets shall be appropriately noted on the drawings.

The drawings shall also note the locations, types, size, depth, etc., of any existing utilities encountered during the performance of the work.

The record drawings must be submitted to and approved by the City prior to final acceptance or occupancy of the project.

## **2.8 Vegetation Sight Distance and Clearance Standards**

### **2.8.1 Road and Sidewalk Clearance Standards**

2.8.1.1 Vegetation that is a hazard to pedestrians or vehicular traffic by reducing visibility, obstructing travel, or posing any other safety risk shall be maintained to reduce the hazard.

#### **2.8.1.2 Sidewalk Clearance Standard**

Sidewalks and designated areas for pedestrian travel shall be cleared of overhead vegetation. The minimum height for overhead vegetation is 7-9 feet above the



sidewalk, and will be considered a trigger for management activities. Trimming may be deferred if trimming will cause a reduction in tree health.

#### 2.8.1.3 Roadway Clearance Standard

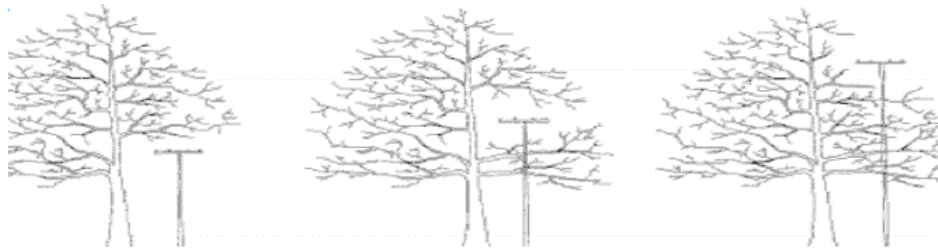
Streets and roadways for vehicular traffic shall be cleared of overhead vegetation. The minimum height for overhead vegetation is 14 feet above travel lanes and 12-14 feet above street side of the curb. These heights are the trigger for management, pruning and trimming activities. Trimming may be deferred if trimming will cause a reduction in tree health.

#### 2.8.1.4 Utility Clearance Standards

This type of pruning is generally conducted by utility companies to maintain the integrity and safety of utility lines. The general rule is to maintain vegetation at least 10 feet from utility lines.

**FIGURE 2.8.1.4**

**Typical Pruning Methods to Maintain Vegetation at Least 10 Feet from Utilities**



### 2.8.2 Proper Sight Distance Standards

#### 2.8.2.1 General Sight Distance Standards

- Provide safe sight distance for vehicles entering roadways from, side roads, driveways, parking lots, and alleys.
- Promote low-growing vegetation in areas that require adequate sight distance for safety, primarily inside corners, driveways, and intersections.
- Prune or remove vegetation that obstructs motorist or pedestrian view of traffic signs and signals, street lights and name signs, or other safety fixtures or marking placed in the public right-of-way.
- Prune for safety and visibility first, tree health and aesthetics second.
- Prune or remove vegetation that obstructs access to use of any public facility.

2.8.2.2 Intersections

- a. No vegetation obscuring sight triangle.
- b. Prune tree limbs to minimum of 10 ft. over sidewalks when practicable and does not reduce overall tree health.
- c. Prune tree limbs to minimum of 14 ft. above travel lanes and 12-14 feet above street side of the curb.
- d. No vegetation other than trees shall exceed 30" in height.
- e. Maintain safe sight distance for pedestrians and vehicle traffic by pruning or removing trees and other obstructing vegetation.

2.8.2.3 Inside Corners

- a. No vegetation obscuring an inside corner sight triangle.
- b. Prune existing tree limbs to a minimum of 10 ft. height at inside corners when practicable and does not reduce overall tree health.
- c. Trees should not be planted within inside corners to maintain safe sight distances.
- d. Maintain safe sight distance for pedestrians and vehicle traffic by pruning or removing trees and other obstructing vegetation.
- e. Inside corners shall have no vegetation exceeding 30" in height, or below 10 feet in height.

2.8.2.4 Sight Triangle provisions of this section shall not apply to

- a. Buildings which were existing prior to passage of the ordinance codified in this Code;
- b. Public utility poles;
- c. Trees, so long as they are not planted in the form of a hedge and are trimmed to the trunk to a height per Section 2.8, so as to leave, in all seasons, a clear and unobstructed cross view;
- d. Official warning signs or signals;
- e. Properties where the existing contour of the ground penetrates above the maximum two and one-half (2-1/2) feet height limitation
- f. Fences, landscaping, signage and structures on private property in compliance with Title 11 Zoning Code "Vision clearance area requirements".

2.8.2.5 Sight Triangle Definitions

- a. Intersection Types
  - 1. All-way Stop Controlled – This is the same as a 4-way Stop, except that it applies equally to intersections with three, four, five or more intersecting streets. It means that all vehicles must come to a complete stop before

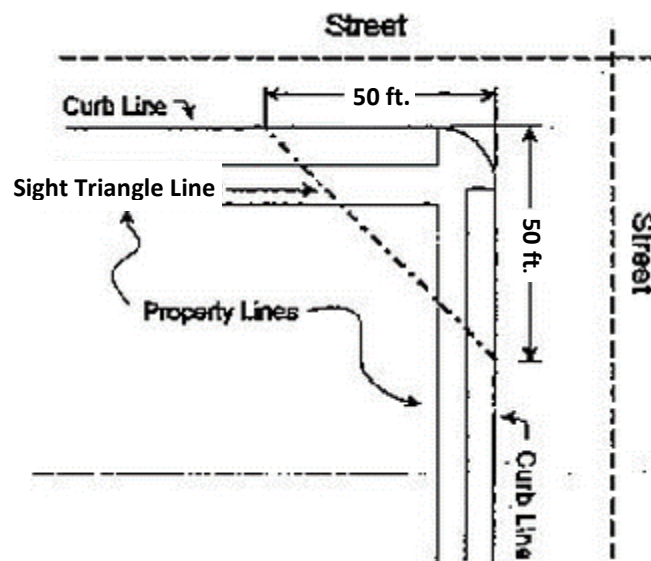
entering the intersection and that they yield to other vehicles that have the right of way.

2. Four-way Stop Controlled – This is the traditional four leg intersection where traffic on all four legs come to a complete stop before entering the intersection and that they yield to other vehicles that have the right of way.
3. Two-way Stop Controlled – This is the traditional intersection of at least two streets where the traffic on one street is required to stop while traffic on the other does not stop.
4. Uncontrolled Intersection – This is the typical neighborhood street intersection, where traffic volumes are low and traffic on neither is given the right of way over the other. The basic rule of driving governs traffic entering the intersection.

b. Sight Triangle Dimensions

1. Uncontrolled Intersections – At uncontrolled intersections, the Sight Triangle shall be formed by measuring from the intersection of the extended curb line or the traveled right-of-way (if no curbs exist) of the adjacent street to a distance of fifty (50) feet from the corner point. The third side of the triangle is the straight line connecting the two (2) fifty (50) foot sides. See Figure 2.8.2.5.b.1. below for Uncontrolled Intersection.

**FIGURE 2.8.2.5.b.1.**  
**Uncontrolled Intersection**



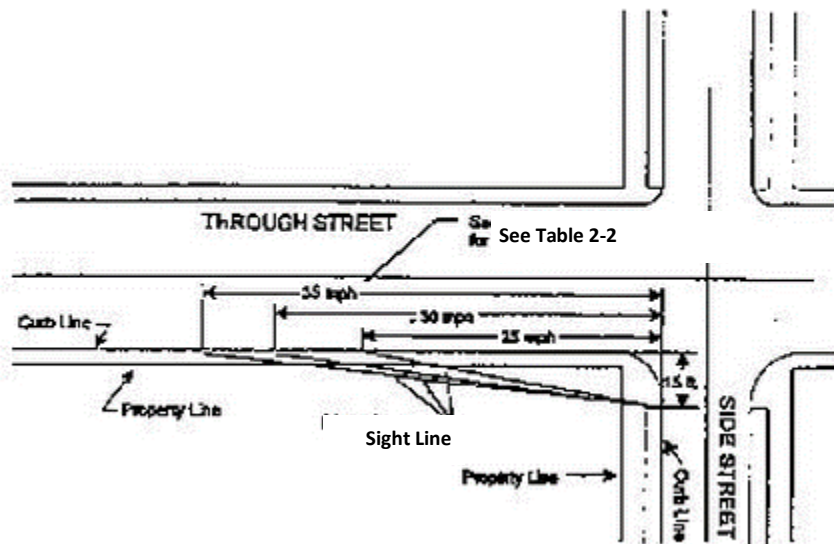
2. Two Way and Yield Controlled Intersections – At two-way stop and yield controlled right angle intersections, the stop or yield controlled street side of the Sight Triangle shall be a distance of fifteen (15) feet measured from

the intersection of the extended curb line or the traveled right-of-way (if no curb exists). The major street side of the triangle shall be a factor of the posted speed of the major street as noted in Table 2.8.2.5.b.2 measured along the extended curb line or the traveled right-of-way (if not curb exists.) The third side of the triangle is the straight line connecting the above defined lines. (Refer to Figure 2.8.2.5.B.2, Two Way and Yield Controlled Intersection.) Where the intersection of the two streets forms an angle other than a right angle, the sight distance measurement along the major street shall be determined by the City Engineer based upon a traffic study. In no case will the acute angle sight distance be less than those shown in See Figure 2.8.2.5.b.2 below for Two Way and Yield Controlled Intersections.

**TABLE 2.8.2.5.b.2**  
**Controlled Intersection Major Street Distances**

Posted Speeds (mph)	Distance Along Curbline
25	85 feet
30	110 feet
35	130 feet

**FIGURE 2.8.2.5.b.2**  
**Two Way and Yield Controlled Intersection Major Street Distances**

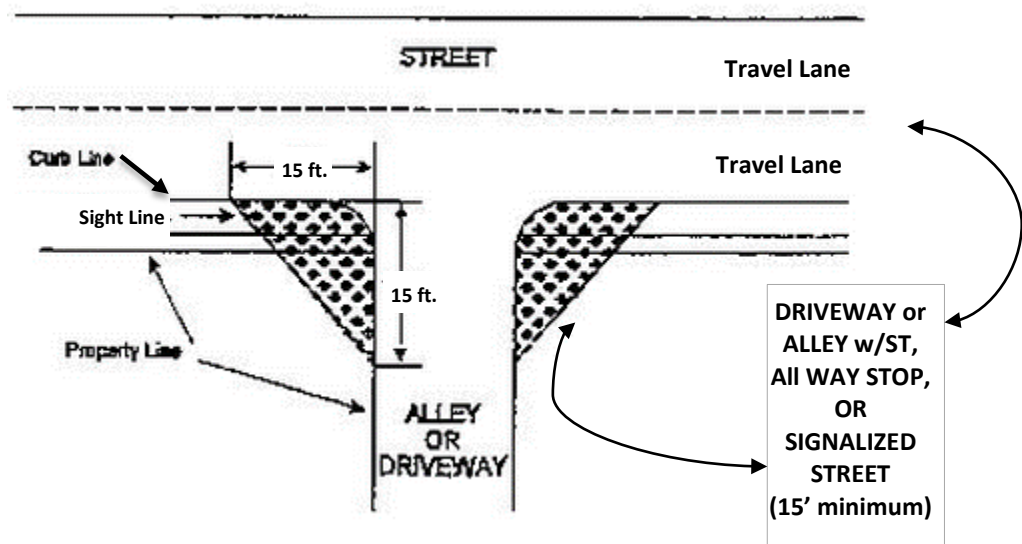


### 3. Other Intersections and Corners

- Signalized Intersections;
- All-way stop controlled Intersections;
- Alley with Public Right-of-Way Intersections; and
- Driveway with Public Right-of-Way Intersections.

- I. All such intersections shall maintain a sight triangle. The sides of the triangle forming the corner angle shall be fifteen (15) feet measured along the extended curb line (or the traveled right-of-way if no curbs exist) and along the edge of the driveway or alley. The third side of the triangle is the straight line connecting the two (2) fifteen (15) foot sides.
- II. The area between the triangle and the edge of the traveled right-of-way of the street shall also be kept clear of visual obstructions.
- III. Intersection, illustrates the requirements of this Section.

**FIGURE 2.8.2.5.b.3**  
**Other Intersections**



## 2.9 Deviation from Standards

### 2.9.1 Purpose

It is the intent of these design standards to allow the design professional maximum latitude in the design of facilities within the City while keeping within the realm of acceptable design practice. In order to provide this latitude, it is recognized that there is a certain amount of discretion inherent in implementing standards. The Mayor or his designee shall make the final determination of the adequacy of the design parameters and standards employed on a particular project.

### 2.9.2 Process

- 2.9.2.1 The Request for a Deviation from Standards shall be in writing and state the nature of the request, why the deviation is necessary and identify both adverse and beneficial impacts. The deviation shall include supporting calculations demonstrating how the request meets the intent of the City Development Standards, references for resource materials pertinent to the request and other supporting documents.

- 2.9.2.2 The City may require that an engineering analysis of alternatives be submitted prior to issuing a decision.
- 2.9.2.3 The Request for Deviation from Standards shall be signed and sealed by a professional engineer qualified in the area of expertise.
- 2.9.2.4 The Mayor or his designee shall consult with the City's Public Works Director, contracted engineering firm and Planning Director and may consult with other agencies determined to have expertise prior to completing a review and issuing a final written decision on the deviation request.

### **2.9.3 Justification**

Deviations from these Standards may be granted by the Mayor or his designee in writing upon written evidence from the Project Sponsor that:

- 2.9.3.1 Sufficient documentation has been submitted to issue a decision, and
- 2.9.3.2 The proposed deviation will not result in non-compliance with development conditions imposed upon a project by Public Works, Planning Department, Building Department, Hearing Examiner and/or City Council, and
- 2.9.3.3 The deviation will not otherwise result in non-compliance with any other applicable code.
- 2.9.3.4 Deviations are based upon sound engineering principles, and
- 2.9.3.5 Deviations meet requirements for safety, function, appearance, environmental protection, and maintainability. Public safety outweighs economic feasibility and physical constraints, and
- 2.9.3.6 The deviation will produce a compensating or comparable result that is in the public interest.

### **2.9.4 Application**

- 2.9.4.1 The Request for a Deviation from Standards shall be in writing, and state:
  - a. The nature of the request,
  - b. The proposed deviations,
  - c. Standard(s) to be varied,
  - d. Why the deviation is necessary,
  - e. Identify both adverse and beneficial impacts
- 2.9.4.2 The deviation shall include:
  - a. Supporting calculations demonstrating how the request meets the intent of the City Development Standards,

- b. References for resource materials pertinent to the request and other supporting documents.
- 2.9.4.3 The City may require that an engineering analysis of alternatives be submitted prior to issuing a decision.
- 2.9.4.4 The City shall require that the Request for Deviation from Standards be signed and sealed by a professional engineer qualified in the area of expertise.
- 2.9.4.5 Sufficient funds to cover estimated hourly review costs for the City contracted engineering firm. Unused funds will be reimbursed to the person named in the application submittal.

# Section 3 - Material Specifications and Construction Requirements

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## 3.1 Introduction

The following is a listing of general design, construction, and material requirements for facilities constructed within the City of Dayton. In addition to the requirements listed below, designers, developers, and contractors working within the City of Dayton shall follow generally accepted practices at all times. In cases where specific products are listed below, approved equals may be accepted with approval from the City. The Contractor shall be responsible for submitting, for approval, shop drawings, equipment data, material samples, or a Manufacturer's Certificate of Compliance for all materials used on City property. Materials not submitted for approval will be subject to removal at the Contractor's expense. An example material submittal form is included in the appendix.

## 3.2 General

### 3.2.1 Design/Execution

- a. The Contractor/Developer shall be responsible for locating and protecting all existing utilities within the project area. All advance exploration in order to protect existing utilities shall be made. The one call locate number for Columbia County is 811. The City of Dayton is a member of the one call system. For the City of Dayton call 509-382-2361.
- b. The contractor shall notify utility users as well as the City of Dayton a minimum of 24 hours prior to the utility being turned off. Coordinate the operation of all valves with the City ahead of time. A minimum notice of 24 hours is required. City crews will open and close main line valves.
- c. Existing control points and monuments shall be protected at all times. The contractor will be responsible for resetting any control points or monuments that are disturbed as a result of their actions.
- d. All surfaces and facilities disturbed as a result of the contractor's actions shall be restored to a condition equal to or better than they existed prior to construction.
- e. All work areas are to be kept clean, and dust shall be kept to a minimum at all times. Material stockpiles are only to be located within the right of way when approved by the City. Streets shall be kept clean at all times; all dirt tracked onto streets shall be swept off and cleaned daily.
- f. The contractor is responsible for all vehicular and pedestrian traffic control. All signs, barricades, barriers, lights, cones, etc., shall comply with the MUTCD and all traffic control operations must be acceptable to the City of Dayton.
- g. All cuts in existing pavement shall be saw cut, and the disturbed surfaces shall be patched within a timeline acceptable to the City of Dayton.



- h. Open ends of all abandoned pipes shall be capped or plugged in a manner acceptable to the City to prevent infiltration of sediment.
- i. The Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work, including excavation safety. The Contractor shall comply with all applicable laws, ordinances, rules, regulations, and orders of any public body having jurisdiction as it relates to project and work safety.
- j. The Contractor shall be responsible for providing his/her own construction testing, monitoring, and quality control program to ensure the materials used on the project and in the Contractor's operations are in compliance with the City of Dayton Material Specifications and Construction Requirements, and the City of Dayton Standard Plans. The Contractor will perform tests and use test methods as required in the Standard Specifications for Road, Bridge, and Municipal Construction - current edition, Washington State Department of Transportation. A written quality control program shall be provided to the City for review prior to any work being performed. The plan shall describe how the Contractor will monitor and ensure quality control throughout the work. Materials, equipment, or work that fails to meet the above mentioned requirements shall not be used in the Work. Test results shall be provided to the City.
- k. All bedding, select backfill, general backfill, and foundation material shall be compacted as outlined in the Standard Specifications.

### 3.2.2 Materials

The following materials information shall be utilized with the General (Section 1) Standard Plans.

**TABLE 3.2.2**  
**Materials to be Used with General Standard Plans**

Material	Specification
Monument Case and Cover	Gray iron castings conforming to AASHTO M36, Class 30B
Bedding	Non-groundwater Condition Crushed surfacing top course per WSDOT Standard Specification 9-03.9(3); or Gravel backfill for pipe zone bedding per WSDOT Standard Specification 9-03.12(3) Groundwater Condition Crushed screening per WSDOT Standard Specification 9-03.4(2)
Select Backfill	Non-groundwater Condition Crushed surfacing top course per WSDOT Standard Specification 9-03.9(3); or Gravel backfill for pipe zone bedding per WSDOT Standard Specification 9-03.12(3) Groundwater Condition Crushed screening per WSDOT Standard Specification 9-03.4(2)
General Backfill	Native or imported material free of vegetative matter, boulders (10-inch plus), frozen material, and any other unsuitable material, and shall have a moisture content that will allow for the required compaction.
Foundation Material	Free draining, crushed rock with a maximum size of 2.5-inch, and less than 1 percent passing the No. 200 sieve
Locating Wire	12 awg UF solid copper

**TABLE 3.2.2 (cont.)**  
**Materials to be Used with General Standard Plans**

<b>Material</b>	<b>Specification</b>
Locating Wire Silicone Splice Kit	King Technology Model 50-566
Concrete for Utility Adjustments	Air entrained, 4000 psi minimum 28 day strength per WSDOT Standard Specification 6-02
Geotextile	Geotextile for the defined application meeting the minimum requirements of WSDOT Standard Specification 9-33.2(1) Table 6
Silt Fence	Plastic or wire mesh per WSDOT Standard Specification 8-01.3(9)A and 9-33.2(1) Table 6
Silt Fence-Post	Wood-1.25-inch by 1.25-inch; or Steel-0.9 lbs/ft
Storm Drain Inlet Protection	Geotextile fabric meeting the minimum requirements of WSDOT Standard Specification 9-33.2, Table 1 for Moderate Survivability and Table 2 for Filtration Properties
Reinforcing Steel	Meet the minimum requirements of WSDOT Standard Specification 9-07

### **3.3 Street**

#### **3.3.1 Design/Execution**

- a. All Street work shall be designed and constructed per the City of Dayton Standard Plans, these Specifications, and the Washington State Department of Transportation Standard Specifications for Road, Bridge, and Municipal Construction - current edition.
- b. Minimum testing frequencies shall be as determined by the City of Dayton or the applicable funding agency.
- c. In areas containing unstable or wet silty soils, separation/support fabric shall be placed above subgrade.
- d. All signage shall be per the MUTCD.
- e. Asphalt overlays and chip seals shall be constructed as required by the City of Dayton. Minimum asphalt overlay thickness is 1.5 inches.
- f. Crushed surfacing shall be compacted to a minimum of 95 percent of WSDOT Test Method 606.
- g. HMA shall be compacted to a minimum of 91 percent of the maximum theoretical density.

#### **3.3.2 Materials**

The following materials information shall be utilized with the Street (Section 2) Standard Plans.

**TABLE 3.3.2**  
**Materials to be Used with Street Standard Plans**

<b>Material</b>	<b>Specification</b>
Crushed Surfacing	Crushed Surfacing Top Course or Crushed Surfacing Base Course per WSDOT Standard Specification 9-03.9(3).
Separation/Support Fabric	Woven Geotextile for separation per WSDOT Standard Specification 9-33.2(1) Table 3
Subgrade	Compacted to a minimum of 95 percent of WSDOT Test Method T-99. Any soft or yielding areas as exposed by a loaded dump truck shall be removed and replaced with appropriate material and recompacted.
Hot Mix Asphalt (HMA)	Commercial HMA, Cl. 1/2" PG64-28, or PG70-28 Minimum design load 0.8 million ESAL's
Cement Concrete Pavement	Air entrained, 4,000 psi minimum 28 day strength per WSDOT Standard Specification 6-02
Cement Concrete for Sidewalks, Driveways, Curb and Curb and Gutter	Sidewalks-Commercial mix air entrained, 4,000 psi minimum 28 day strength per WSDOT Standard Spec. 6-02 Driveways, Curb, and Curb and Gutter-Air entrained, commercial mix 4,000 psi minimum 28 day strength per WSDOT Standard Specification 6-02
Expansion Joint	3/8-inch expansion joint to the full concrete section per AASHTO M213 Specification for Preformed Expansion Joint Fillers for Concrete Paving and Structural Construction
Detectable Warning Pattern	Color-Safety Yellow Size-2-feet by ramp width Maximum height - 3/8 inch above ramp surface
Street Signs	Sheet Aluminum Signs - WSDOT Standard Specification 9-28.8 Reflective Sheeting - WSDOT Standard Specification 9-28.12 Posts-3 lbs/ft U - Channel painted green in color
Concrete Curing Materials	As outlined in the Standard Specifications.

## 3.4 Water

### 3.4.1 Design/Execution

- All water work shall be designed and constructed per the City of Dayton Standard Plans, these Specifications, and the American Water Works Association specifications.
- Valves shall be located as directed by the City. As a minimum requirement, valves shall be placed such that single blocks may be isolated without impacting water service to other areas of town.
- Mechanically restrained fittings, pipe joints, and/or thrust blocks are to be used at all locations deemed necessary by the City and/or the design engineer. The design engineer shall provide a detailed design of all mechanical restraints to the City.
- All trench excavation shall be done in accordance with the current provisions of the Safety and Health regulations of the Department of Labor and Industries. No trenches shall be left open at any time unless guarded with adequate barricades, warning lamps, and signs. Proper traffic and pedestrian control shall be provided at all times.

- e. All utility trench floors shall be compacted to a minimum 80 percent of the maximum density prior to the placement of bedding and pipe. If native trench bottom conditions are unstable, the native material shall be replaced with foundation material.
- f. Minimum depth of bury for water mains is 42 inches. If existing conditions prevent a bury depth of 42 inches, the bury depth may be reduced to 36 inches with approval from the City.
- g. Minimum depth of bury for water services is 36 inches unless otherwise approved.
- h. All water main sizes shall be approved by the City and shall be 8 inches or larger. Water mains smaller than 8 inches will only be allowed in isolated cases.
- i. The standard size water service line shall be 1 inch. The standard meter size shall be 5/8 inch x 3/4 inch.

### 3.4.2 Materials

The following materials information shall be utilized with the Water (Section 3) Standard Plans.

**TABLE 3.4.2**  
**Materials to be Used with Water Standard Plans**

Material	Specification
<b>Water Mains (both D.I. and PVC are allowed)</b>	
Ductile Iron (D.I.) Water Main	6 inch and smaller: AWWA C151 Class 52 8 inch and larger: AWWA C151 Class 50
PVC Water Main	Under 4 inch: ASTM D2241 4 inch to 12 inch : AWWA C900 14 inch to 30 inch : AWWA C905
<b>Service Line</b>	
Polyethylene Tubing	As per Section 9-30.6(3) B of the Standard Specifications.
Copper Pipe	Type K seamless, of annealed conforming to ASTM D88
Galvanized Pipe	2 inch and smaller-Galvanized wrought iron conforming to ASTM A120 (only allowed with written approval from the City)
<b>Fittings</b>	
Water Main Coupling	Smith-Blair or Ford, Fabricated steel couplings conforming to AWWA C219
Service Saddles	D.I. - 3/4 inch and 1 inch: Ford FS 101 Larger than 1 inch: Ford FS202
Corporation Stops	Mueller Ball Corp brass ball valve stops per AWWA C-800
Curb Stop	Mueller Series 30P brass ball valves
Curb Stop Box	Mueller Arch Pattern Curb Box with foot piece and Type PS plug style lid with pentagon bolt
Restrained Fittings	MEGALUG field installed restraint devices as manufactured by Ebaa Iron, Inc.

**TABLE 3.4.2 (cont.)**  
**Materials to be Used with Water Standard Plans**

<b>Material</b>	<b>Specification</b>
<b>Fittings (cont.)</b>	
Restrained Pipe Joints	Ductile Iron push-on joints with a field locking gasket as manufactured FIELDLOK Gasket System as manufactured by United States Pipe and Foundry Company. FIELDLOK D.I. Series is to be used for ductile iron pipe. FIELDLOK PV Series is to be used for C900 PVC pipe.
Thrust Blocks	Concrete – 2,500 psi minimum 28 day strength Anchor Rods - 3/4 inch diameter galvanized steel or epoxy coated reinforcement bar conforming to AASHTO M284
Blow off/Flush Type Hydrant	Mueller Dry Barrel Type per AWWA C502 with a 2 1/8-inch main valve and one 2 1/2-inch hose nozzle.
Fire Hydrant	Mueller Centurion M&H Model 929, or Clow 2500 per AWWA C502 with a 5 1/4-inch main valve opening, two 2 1/2 –inch NST nozzles and one 4 1/2-inch NST pumper nozzle. Operating nut shall be 1 1/2-inch pentagon.
<b>Valves</b>	
Main Line Valves Gate Valves – 2 inch to 10 inch Butterfly Valves – 12 inch and larger	All main line valves shall have a 2-inch AWWA operation nut, open counter-clockwise. Gate Valve – 2 inch to 10 inch: Iron body, resilient wedge, non-rising stem per AWWA C509 or C515, 200 psi min. Butterfly Valve – 12 inch and larger: M&H 450, rubber seated, tight closing with a sealed gear operator
Ball Valves – 2 inch and smaller	Bronze, conforming to Federal Specification WW-V-35, Type II, Class A, Style 3, rated for a minimum working pressure of 125 psi
Valve Box	Cast iron, sliding type box large enough to cover the top casting of the valve conforming to AWWA C600, Section 10.3. Valve box diameter shall not be less than 5 inch, and shall be long enough to not be fully extended when installed.
<b>Water Meter</b>	
Small Meter	Sensus SR2 reading in cubic feet
Large Meter	Invensys Metering Systems single register high-performance compound meter reading in cubic feet
Meter Resetter	1 inch and smaller-Ford 40 Series resetter
Water Meter Box (Non Traffic)	Plastic Boxes – Size, make, and model subject to approval by the Public Works Director.
Water Meter Box (Traffic Area)	Concrete Boxes – Size, make, and model subject to approval by the Public Works Director.
Backflow Prevention	As currently approved by AWWA and the U.S.C. Reports

## 3.5 Sanitary Sewer

### 3.5.1 Design/Execution

- a. All sewer work shall be designed and constructed per the City of Dayton Standard Plans, these Specifications, and Washington State Department of Ecology Criteria for Sewage Works Design.
- b. All trench excavation shall be done in accordance with the current provisions of the Safety and Health regulations of the Department of Labor and Industries. No trenches

shall be left open at any time unless guarded with adequate barricades, warning lamps, and signs. Proper traffic and pedestrian control shall be provided at all times.

- c. All utility trench floors shall be compacted to a minimum 80 percent of the maximum density prior to the placement of bedding and pipe. If native trench bottom conditions are unstable, the native material shall be replaced with foundation material.
- d. Minimum depth of bury for sewer mains is 36 inches. Bury depths less than 36 inches must be approved by the City.
- e. All sewer main sizes shall be as approved by the City and shall be 8 inches or larger. Sewer mains smaller than 8 inches will only be allowed in isolated cases. Sewer service lines shall be 4 inches or larger.
- f. Pipes shall be laid straight and with a constant slope between manholes unless otherwise approved by the City.
- g. Minimum gravity sewer slopes are as follows:

**TABLE 3.5.1.g**  
**Minimum Gravity Sewer Slopes**

Sewer Size (Inches)	Minimum Slope (Percent)
8	0.40
10	0.28
12	0.22
14	0.17
18	0.12
24	0.08

### 3.5.2 Materials

The following materials information shall be utilized with the Sanitary Sewer (Section 4) Standard Plans.

**TABLE 3.5.2**  
**Materials to be Used with Sanitary Sewer Standard Plans**

Material	Specification
Sewer Main	Solid Wall PVC up to 15 inches: ASTM D-3034 SDR 35 Solid Wall PVC 18 to 24 inches: ASTM F-679
Sewer Service	Solid Wall PVC: ASTM D3034 SDR 35
Manhole Pipe Connectors	A-Lok pipe connector as manufactured by A-Lok Products, Inc; PSX Flexible Connector as manufactured by Press Seal Gasket Corporation; or Kor-N-Seal as manufactured by Core and Seal Company

**TABLE 3.5.2 (cont.)**  
**Materials to be Used with Sanitary Sewer Standard Plans**

<b>Material</b>	<b>Specification</b>
Flexible Coupling	Flexible couplings with stainless steel shear rings as manufactured by Fernco
Manholes	Precast base manhole with eccentric cone per ASTM C-478 Kent seal joint sealant shall be placed between all sections Manholes with a depth of 5.5 feet or less from the top of the manhole cover to the pipe invert shall utilize a 2-foot tall cone section. Flat slab covers will not be allowed unless approved by the City.
Manhole Frame and Cover	Manhole frame and covers shall be per WSDOT Standard Specification 9-05.15(1) as manufactured by D&L Foundry, East Jordan Iron Works, or Olympic Foundry
Main Line Cleanouts	Inland Foundry Co. No. 240 for 8-inch riser pipe, No. 241 for 6-inch riser pipe, or similar with Cast iron ring and cover

## 3.6 Storm Sewer

### 3.6.1 Design/Execution

- a. Stormwater runoff generated as a result of newly constructed facilities shall be contained and disposed of by an on-site stormwater disposal system. All stormwater disposal systems shall be designed by an engineer licensed in the state of Washington. Stormwater disposal systems include drainfields, drywells, swales, detention ponds, or other devices used to dispose of stormwater on site. Each design shall be unique to the particular site and shall include all advance exploration necessary to design a properly functioning stormwater disposal system.
- b. Stormwater disposal systems shall be designed to meet the following minimum requirements:
  1. Store 100 percent of a 25-year, 1-hour storm event
  2. Percolate 100 percent of a 25-year, 24-hour storm event in 18 hours or less
  3. Percolate 100 percent of a 100-year, 24-hour storm event in less than 24 hours
  4. If significant damage is likely to occur to public or private facilities when the storm event exceeds the design criteria or in the event of a system failure, the design engineer shall incorporate design features to minimize damage to neighboring facilities.
- c. The minimum guidelines for injection wells outlined in the Department of Ecology's Stormwater Management Manual for Eastern Washington shall be maintained. Current regulations require that the lowest elevation of any portion of an injection well shall maintain a minimum separation of 5 feet from groundwater.
- d. Infiltration ponds shall be designed to meet the minimum requirements outlined in the Department of Ecology's Stormwater Management Manual for Eastern Washington. Ponds shall be designed with a minimum of one foot of freeboard from the rim or overflow of the infiltration pond to the maximum ponding level. The bottom of all ponds

shall be lined with free draining aggregate and planted with low growing vegetation that will not plug the aggregate.

- e. A complete design including design calculations shall be submitted to the City for approval. The design and design calculations shall be consistent with one of the methods outlined in the Washington State Department of Transportation Hydraulics Manual or the Washington State Department of Ecology Stormwater Management Manual for Eastern Washington.

### 3.6.2 Materials

The following materials information shall be utilized with the Storm Sewer (Section 5) Standard Plans.

**TABLE 3.6.2**  
**Materials to be Used with Storm Sewer Standard Plans**

Material	Specification
Storm Sewer Pipe	Solid Wall PVC up to 15 inches: ASTM D-3034 SDR 35 Solid Wall PVC 18 to 24 inches: ASTM F-679
Culverts	Corrugated Polyethylene 12 inches to 60 inches: AASHTO M 294 Type S or D Corrugated Steel: Type 2 corrugated steel pipe, minimum 14-gauge with 2-2/3 inch x 1/2 inch corrugations per AASHTO M 274 and AASHTO M 36
Catch Basins	Precast units meeting the requirements of ASTM C-139 and C-913
Drywells	Precast units meeting the requirements of AASHTO M 199. Seepage ports shall be located on the sides and bottom of the drywell. The port size may vary between 1 square inch and 7 square inches for round openings, and 1 square inch and 15 square inches for rectangular openings. The ports shall be uniformly spaced with at least one port per 8 inches of drywell height and 15 inches of drywell circumference.
Frames and Grates for Catch Basins	Frames - cast steel, gray iron, or ductile iron; designed to accommodate 20-inch x 24-inch grates Grates – 20-inch x 24-inch, cast steel or ductile iron
Drain Rock	Gravel Backfill for Drains per WSDOT Standard Specification 9-03.12(4); Gravel Backfill for Drywells per WSDOT Standard Specification 9-03.12(5); or Coarse Aggregate for Portland Cement Concrete per WSDOT Standard Specification 9-03.1(4)C NO.57
Non-Woven Construction Geotextile for Underground Drainage	Mirafi 140N Underground Drainage Geotextile per WSDOT Standard Specification 9-33.2(1)
Construction Geotextile for Separation	Mirafi 600X or HP2701 Separation Geotextile per WSDOT Standard Specification 9-33.2(1)



# Section 4 - Standard Plans

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1-4 .....	Continuous Locating Wire and Identifying Tape
1-5 .....	Manhole Frame and Cover
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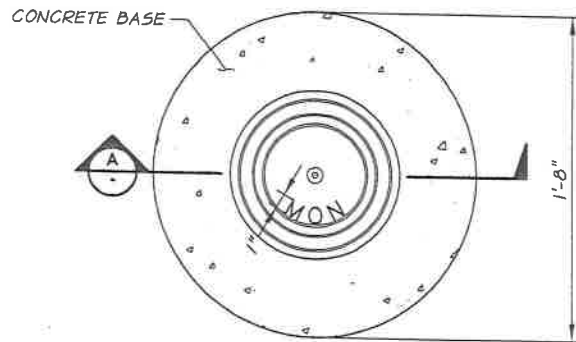
**Storm Sewer**

- 5-1 ..... Catch Basin
- 5-2 ..... Combination Inlet
- 5-3 ..... Catch Basin Grates

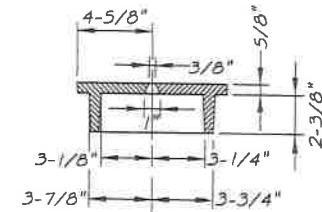
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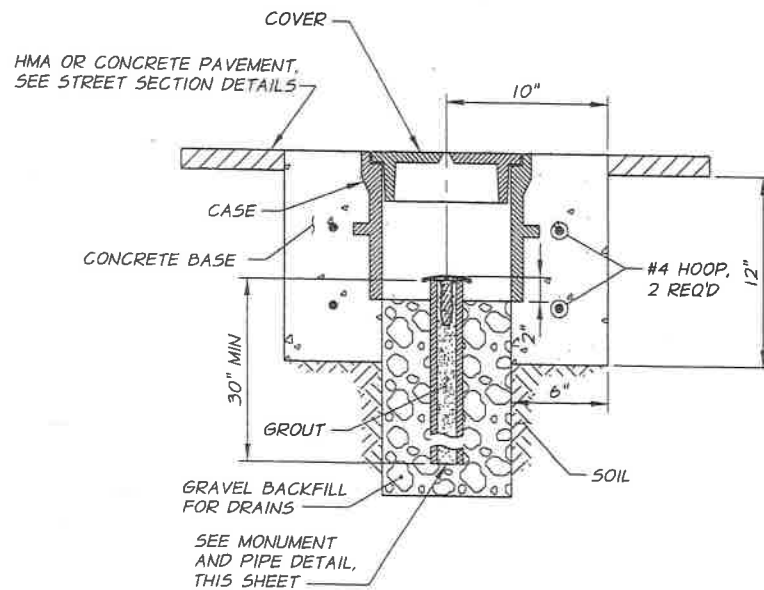
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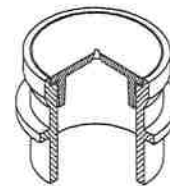
APPROXIMATE WEIGHTS	
CASE	60 LBS
COVER	19 LBS
TOTAL	79 LBS



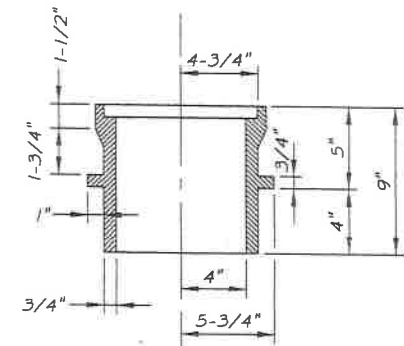
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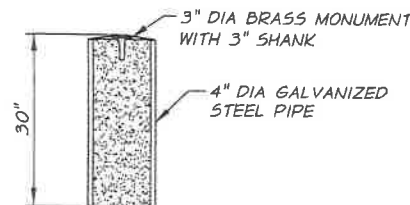
**SECTION**



**ISOMETRIC**



**CASE**



**MONUMENT AND PIPE DETAIL**

**NOTES:**

1. DIMENSIONS MAY VARY ACCORDING TO MANUFACTURER.
2. BASE TO BE PLACED ON A WELL COMPACTED FOUNDATION.
3. MONUMENT CASE TO BE INSTALLED BY CONTRACTOR.
4. MONUMENTS TO BE SET AT ALL STREET CENTERLINE CONTROL POINTS:
  - A) INTERSECTION OF ALL STREETS.
  - B) PT AND PC OF CURVES.
5. WASHINGTON LICENSED PROFESSIONAL LAND SURVEYOR OR PARTY UNDER THE LICENSED LAND SURVEYOR'S DIRECT SUPERVISION TO REFERENCE MONUMENT LOCATION FOR INSTALLATION AND PUNCH BRASS MONUMENT AFTER INSTALLATION. THE MONUMENT SHALL BE SET IN SUCH A FASHION AS TO INSURE THAT THE PUNCH MARK MAY BE SET WITHIN A MAXIMUM DISTANCE OF 1/2-INCH FROM THE CENTER OF THE MONUMENT. MONUMENT TO BE SUPPLIED AND SET BY CONTRACTOR USING SURVEY CROSS TIES.

**CITY OF  
DAYTON**

**MONUMENT CASE AND COVER**

NTS

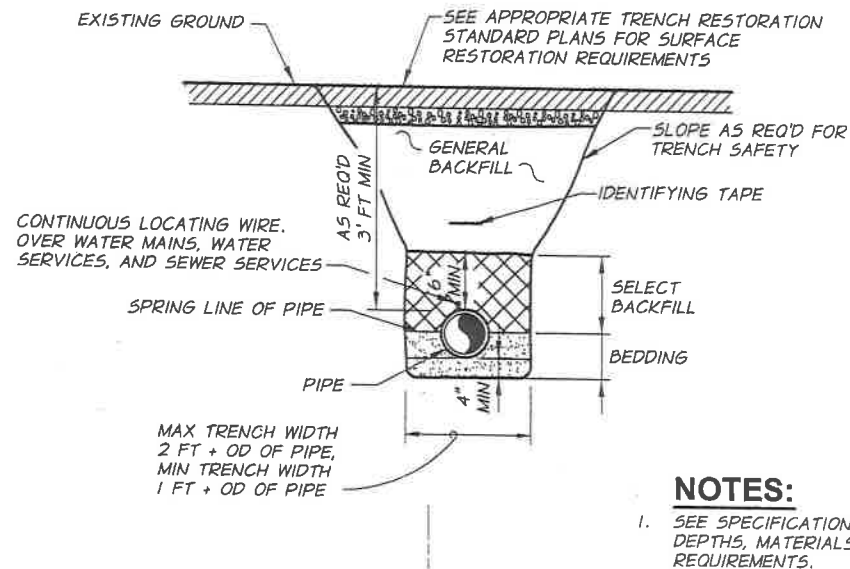
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REVISION DATE

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PUBLIC WORKS DIRECTOR

**STANDARD  
PLAN**

**1-1**

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### NOTES:

1. SEE SPECIFICATIONS FOR MINIMUM DEPTHS, MATERIALS AND COMPACTION REQUIREMENTS.
2. IF THE TRENCH BOTTOM CONDITIONS ENCOUNTERED ARE UNSTABLE OR GROUNDWATER IS ENCOUNTERED, THE TRENCH SHALL BE OVER EXCAVATED TO THE DEPTH DETERMINED BY THE CITY AND REPLACED WITH FOUNDATION MATERIAL AND CRUSHED SCREENING SHALL BE USED AS BEDDING MATERIAL.

CITY OF  
DAYTON

## TRENCH EXCAVATION AND BACKFILL

NTS

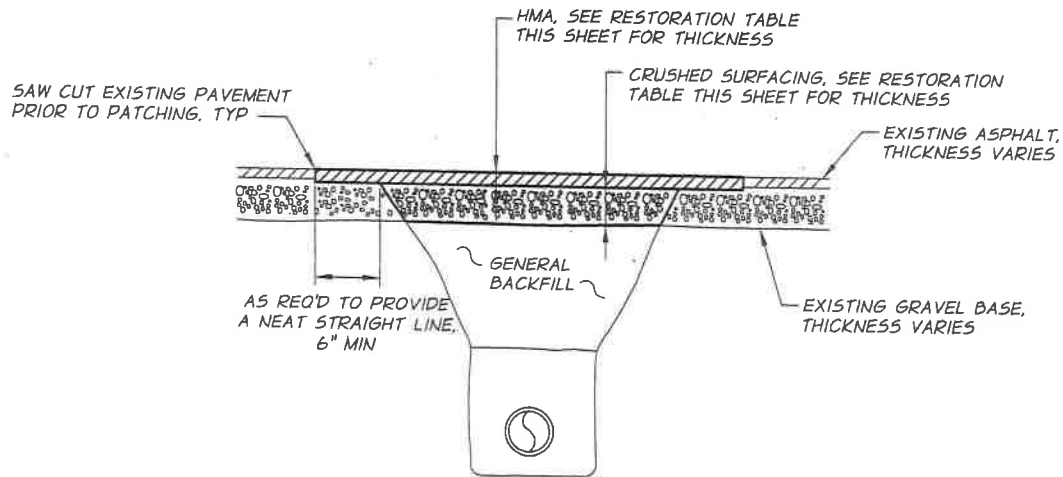
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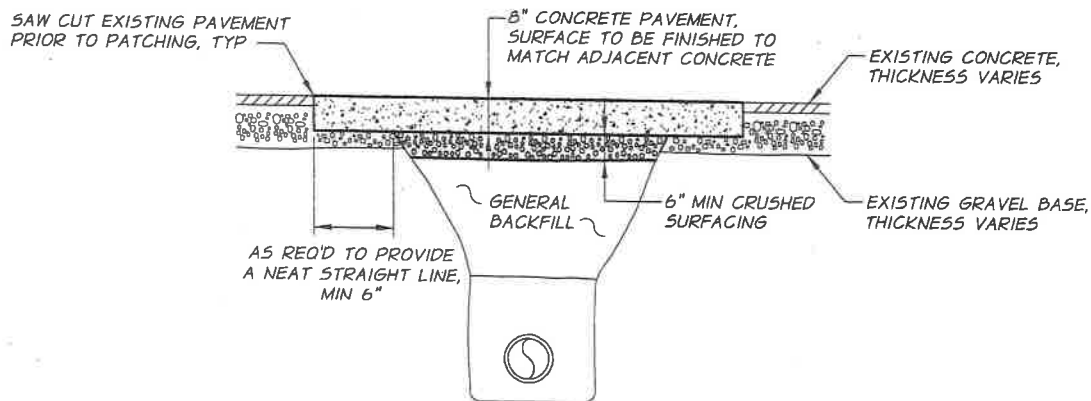
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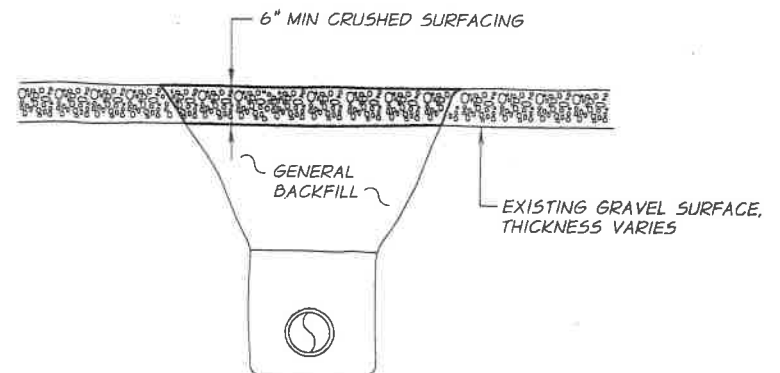
### MINIMUM HMA AND CRUSHED SURFACING RESTORATION THICKNESS

TYPE	CRUSHED SURFACING	HMA
ARTERIAL	10"	5"
COLLECTOR	8"	4"
LOCAL RESIDENTIAL	8"	3"

### ASPHALT PAVED STREETS



### CONCRETE STREETS



### GRAVEL STREETS, ALLEYS, SHOULDERS, AND PARKING AREAS

CITY OF  
DAYTON

### TRENCH SURFACE RESTORATION

NTS

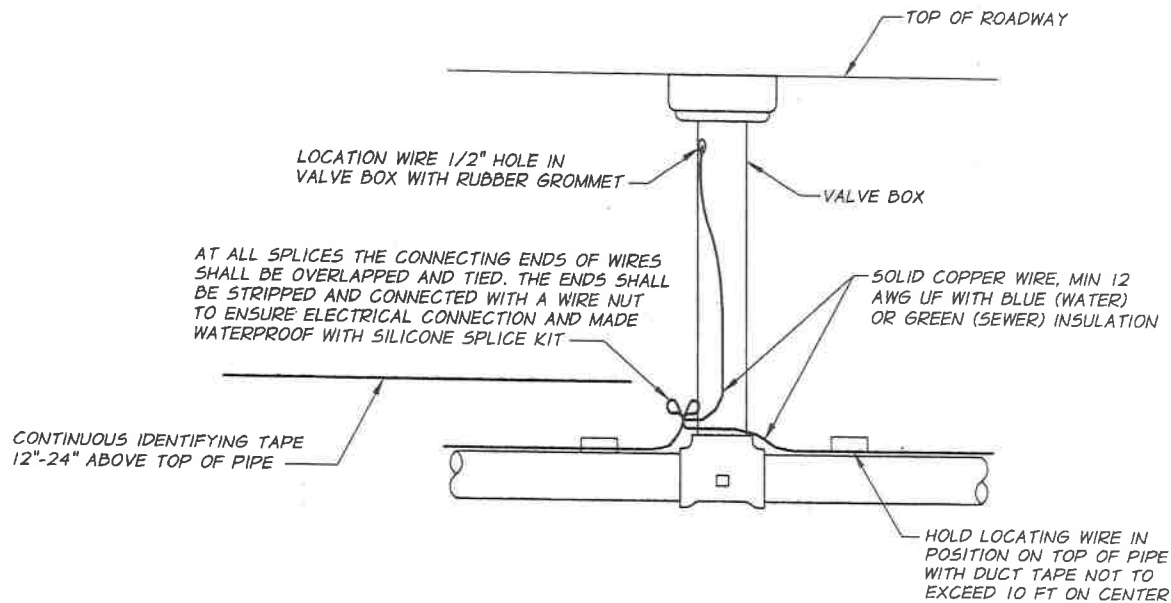
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STANDARD  
PLAN

1-3

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IDENTIFYING TAPE LEGEND				
TYPE	COLOR	SIZE	DETECTABLE	IMPRINT
STORM SEWER	GREEN	3"	YES	CAUTION BURIED SEWER LINE BELOW
SANITARY SEWER	GREEN	3"	YES	CAUTION BURIED SEWER LINE BELOW
WATER	BLUE	3"	YES	CAUTION BURIED WATER LINE BELOW

CITY OF  
DAYTON

## CONTINUOUS LOCATING WIRE AND IDENTIFYING TAPE

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REVISION DATE

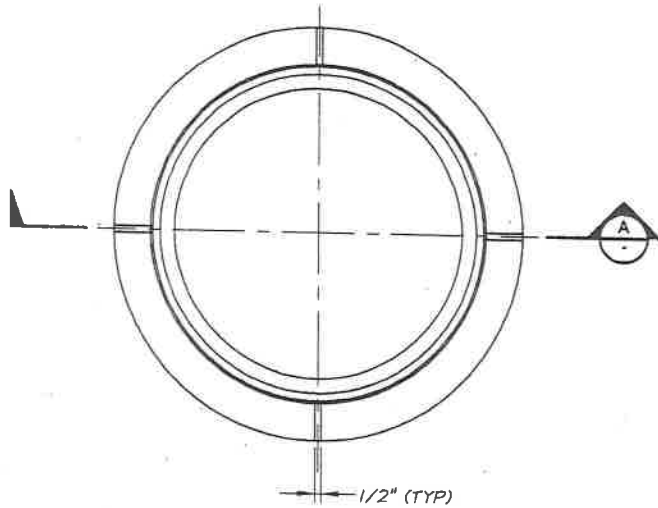
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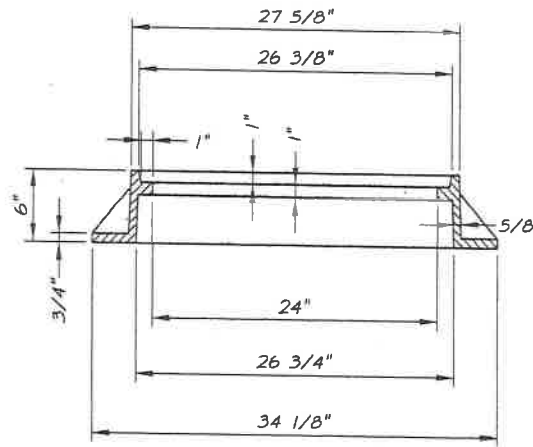
STANDARD  
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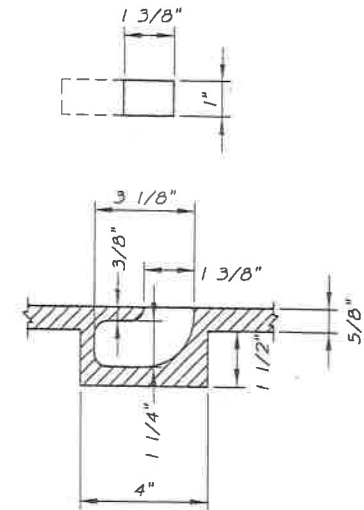
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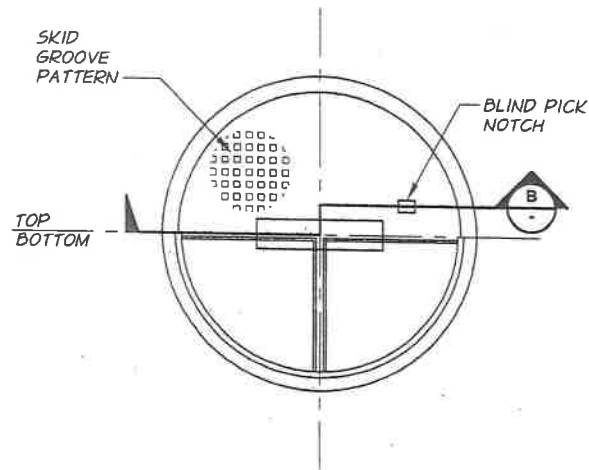
**RING PLAN**



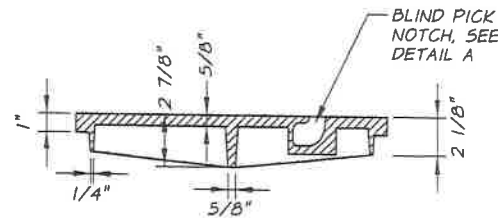
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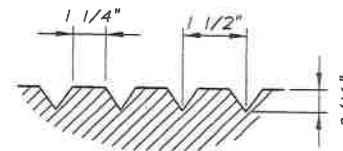
**BLIND PICK NOTCH DETAIL**



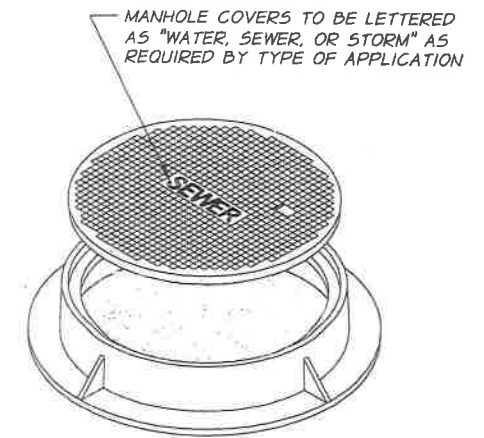
**COVER PLAN**



**SECTION B**



**SKID GROOVE PATTERN DETAIL**



**ISOMETRIC VIEW**

**CITY OF  
DAYTON**

**MANHOLE FRAME AND COVER**

NTS

03-23-09  
REVISION DATE

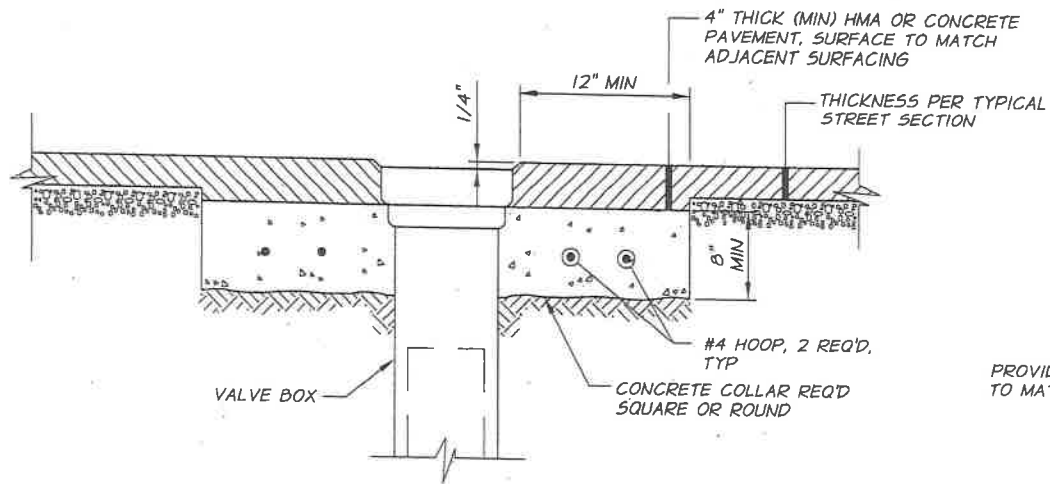
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PLAN**

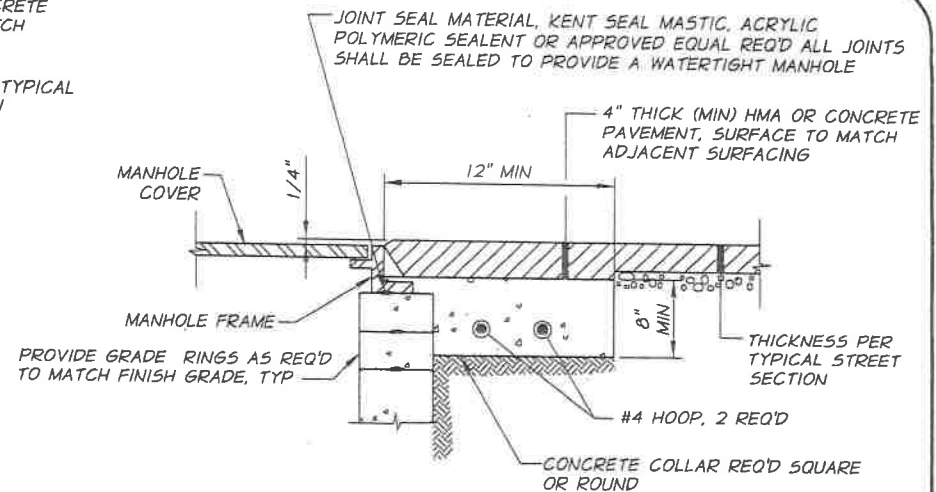
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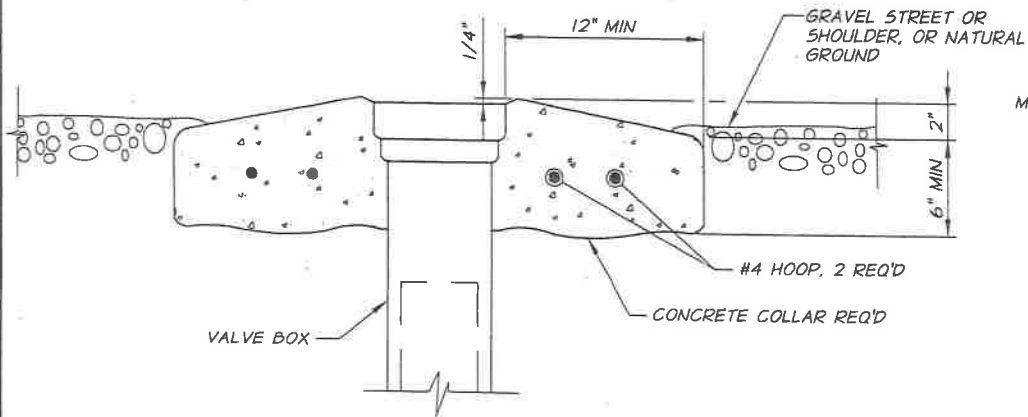




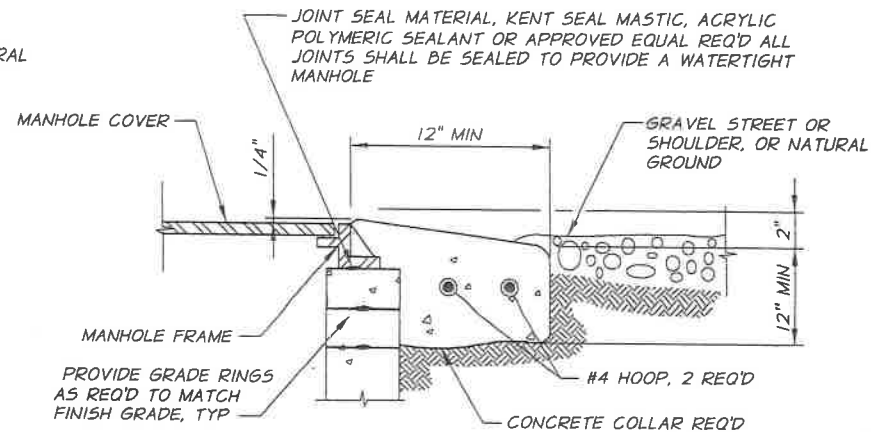
### VALVE BOX - IN ASPHALT OR CONCRETE PAVEMENT



### MANHOLE - IN ASPHALT OR CONCRETE PAVEMENT



### VALVE BOX - IN GRAVEL STREET OR NATURAL GROUND



### MANHOLE - IN GRAVEL STREET OR NATURAL GROUND

**CITY OF  
DAYTON**

## UTILITY COVER ADJUSTMENTS

NTS

03-23-09  
REVISION DATE

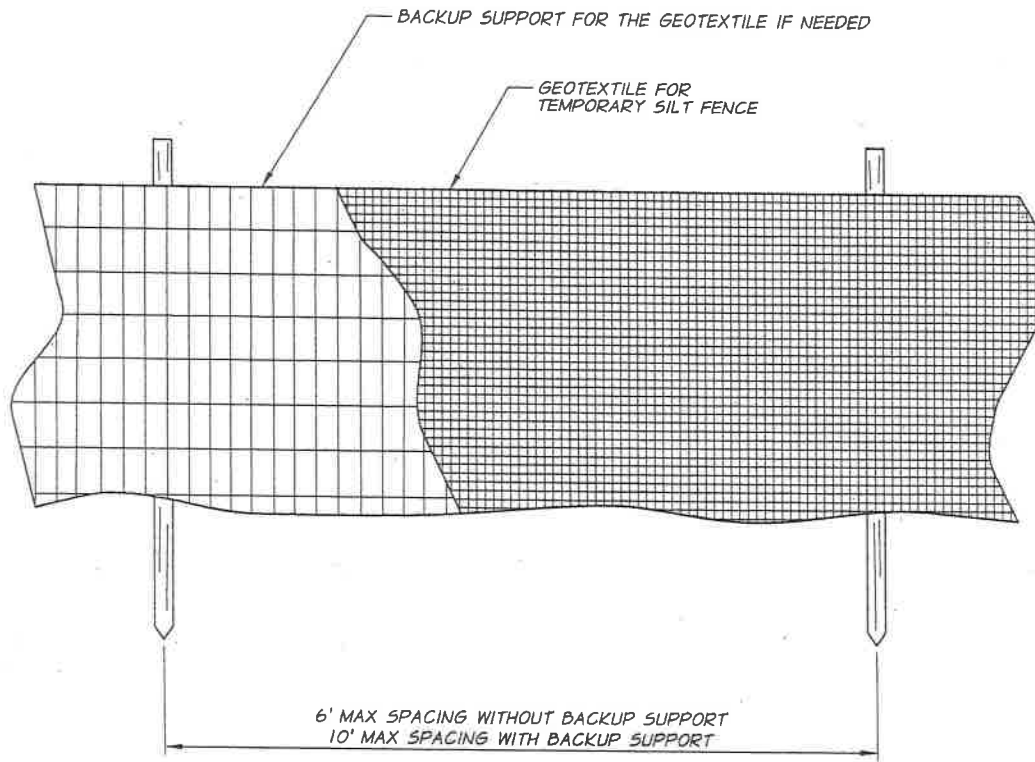
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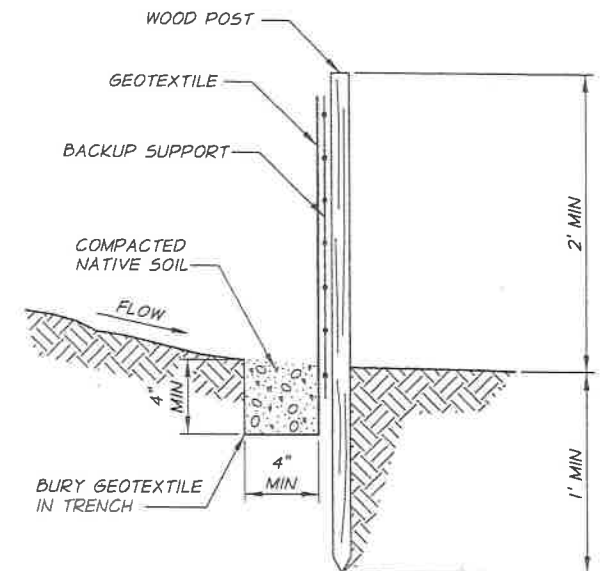
## STANDARD PLAN

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**ELEVATION**



**SECTION**

**CITY OF  
DAYTON**

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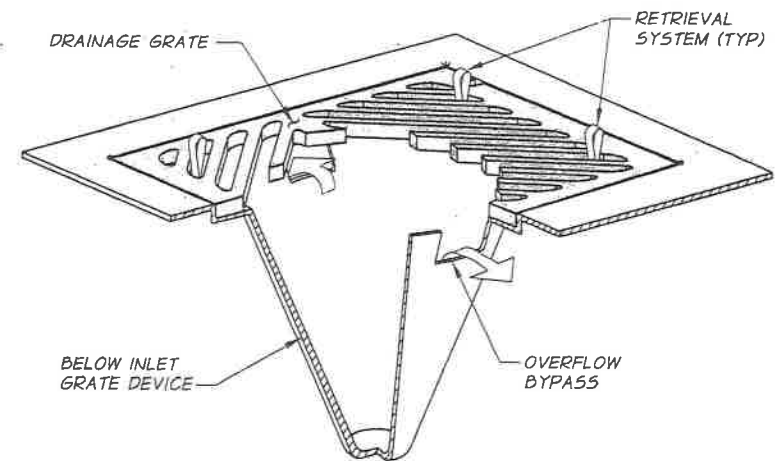
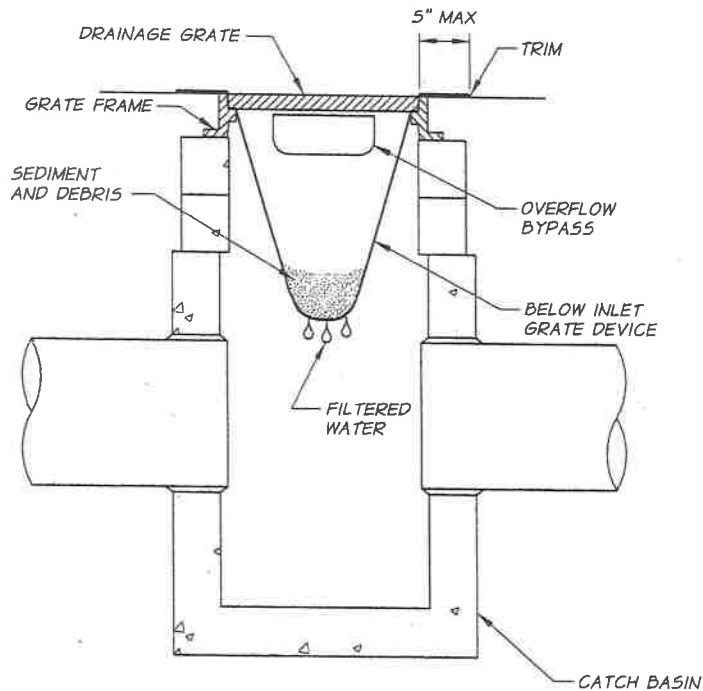
**SILT FENCE**  
NTS

  
PUBLIC WORKS DIRECTOR

**STANDARD  
PLAN**

**1-7**

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### NOTES:

1. PRIOR TO ANY CONSTRUCTION ACTIVITY, ALL EXISTING CATCH BASINS WITHIN THE DRAINAGE AREA OF THE PROJECT SHALL BE FILLED WITH A BELOW INLET GRATE DEVICE TO PROTECT THE EXISTING STORM DRAINAGE SYSTEM.
2. NEW CATCH BASINS SHALL IMMEDIATELY BE FITTED WITH BELOW INLET GRATE DEVICES FOLLOWING INSTALLATION.
3. THE BELOW INLET GRATE DEVICES SHALL NOT BE REMOVED UNTIL APPROVED BY THE PUBLIC WORKS DIRECTOR.
4. TO FURTHER PREVENT CONTAMINATION OF STORM DRAIN SYSTEMS, ALL SOIL TRACKED ONTO STREETS SHALL BE CLEANED OFF/SWEPT DAILY.
5. OTHER EROSION CONTROL METHODS MAY BE NECESSARY DURING CONSTRUCTION AND GRADING DEPENDING ON THE CONTRACTOR'S CONSTRUCTION TECHNIQUES.
6. THE CITY OF DAYTON MAY REQUIRE THE CONTRACTOR TO CLEAN OR REPLACE THE STORM DRAINAGE SYSTEM(S) IF THEY BECOME CONTAMINATED DURING CONSTRUCTION.

**CITY OF  
DAYTON**

## STORM DRAIN INLET PROTECTION

NTS

03-23-09  
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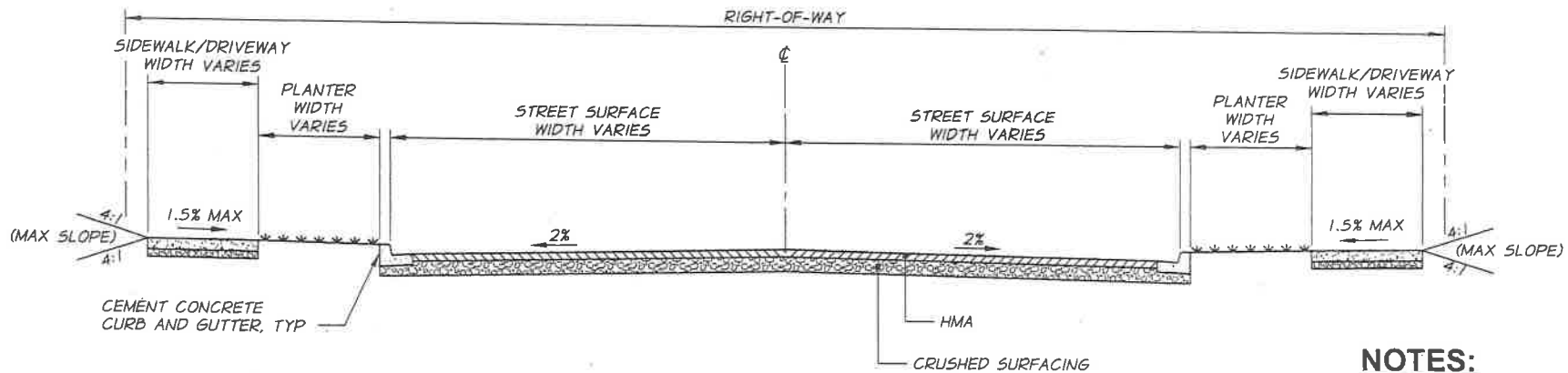
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PUBLIC WORKS DIRECTOR

**STANDARD  
PLAN**

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**STREET**



### NOTES:

1. WHEN REQUIRED BY THE CITY OF DAYTON, PLANTER STRIP(S) SHALL BE INSTALLED BETWEEN THE CURB AND SIDEWALK ON ONE OR BOTH SIDES OF THE STREET. THE MINIMUM PLANTER STRIP WIDTH SHALL BE 5 FEET.
2. HMA AND CRUSHED SURFACING THICKNESSES SHOWN ARE MINIMUMS. TRAFFIC OR SITE CONDITIONS MAY REQUIRE ADDITIONAL THICKNESSES.
3. SITE CONDITIONS MAY REQUIRE THAT GEOTEXTILE FABRIC BE PLACED BETWEEN THE CRUSHED SURFACING AND SUBGRADE.

TYPE OF STREET	MINIMUM RIGHT-OF-WAY WIDTH	SURFACE WIDTH CURB TO CURB	MAXIMUM GRADE	HMA DEPTH	CRUSHED SURFACING DEPTH
ARTERIAL	60'	42'	12%	5"	12"
COLLECTOR	50'	32'	15%	4"	8"
LOCAL RESIDENTIAL	50'	28'	16%	3"	8"
ALLEY	20'	16'	16%	N/A	6"
PRIVATE ROAD	20'	16'	18%	3"	8"
CUL-DE-SAC	45' RADIUS	38' RADIUS	12%	3"	8"

**CITY OF  
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## TYPICAL STREET SECTIONS

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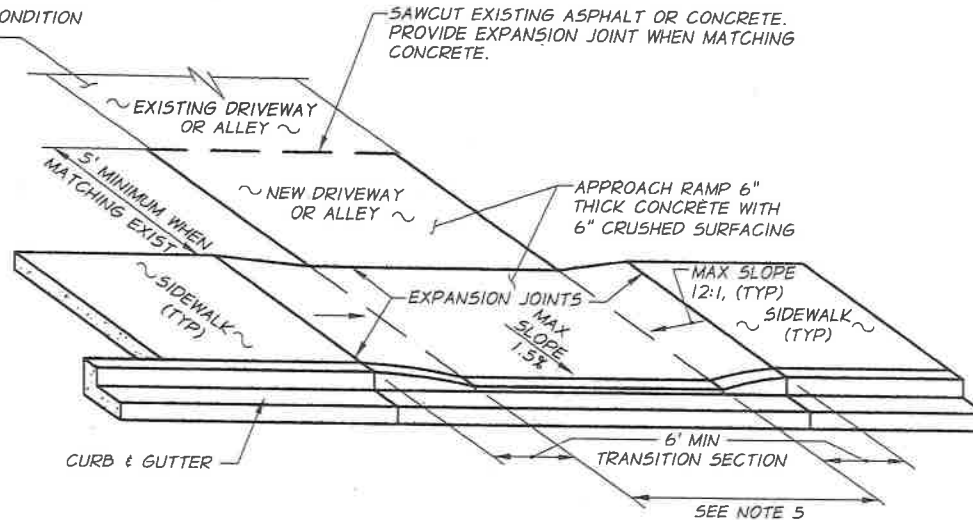
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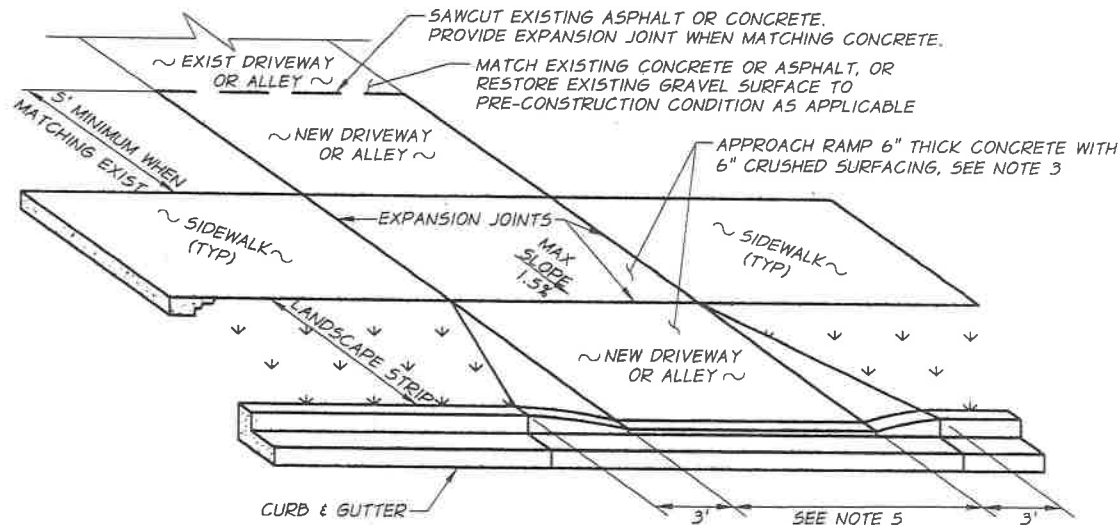
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MATCH EXISTING CONCRETE OR ASPHALT, OR RESTORE EXISTING GRAVEL SURFACE TO PRE-CONSTRUCTION CONDITION AS APPLICABLE



### DRIVEWAY/ALLEY APPROACH WITH ATTACHED SIDEWALK



### DRIVEWAY/ALLEY APPROACH WITH DETACHED SIDEWALK

#### NOTES:

1. WHERE THE DRIVEWAY EXCEEDS 12' IN WIDTH, A CONTRACTION JOINT SHALL BE PLACED LONGITUDINALLY ALONG THE CENTERLINE OF THE DRIVEWAY.
2. NO MONOLITHIC POURS ARE ALLOWED. SIDEWALKS, CURB AND GUTTER, AND DRIVEWAYS SHALL BE POURED SEPARATELY WITH EXPANSION JOINTS AS NOTED.
3. THICKNESS SHALL BE 6" FOR ALL DRIVEWAY AND ALLEY APPROACHES. 6" CRUSHED SURFACING TOP COURSE SHALL BE PLACED UNDER CONCRETE. COMMERCIAL DRIVEWAYS SHALL BE REINFORCED WITH #4 BARS PLACED AT 12" OC IN EACH DIRECTION. THE TOP OF THE BARS SHALL BE 2.5" TO 3.0" BELOW THE TOP OF THE CONCRETE.
4. FINISH SHALL BE LIGHT BROOM.
5. RESIDENTIAL DRIVEWAYS SHALL BE A MINIMUM OF 12' AND A MAXIMUM OF 24' IN WIDTH. COMMERCIAL DRIVEWAYS SHALL BE A MINIMUM OF 12' AND A MAXIMUM OF 40' IN WIDTH. ALLEY APPROACHES SHALL BE A MINIMUM OF 12' AND A MAXIMUM OF 18' IN WIDTH.

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## CONCRETE DRIVEWAY AND ALLEY APPROACHES

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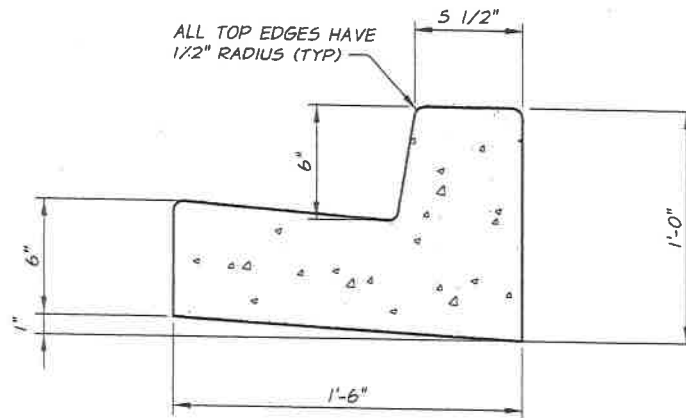
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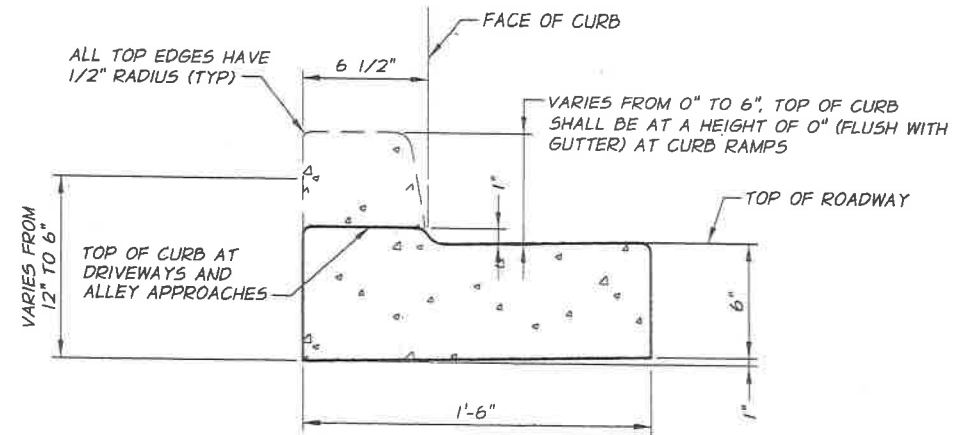
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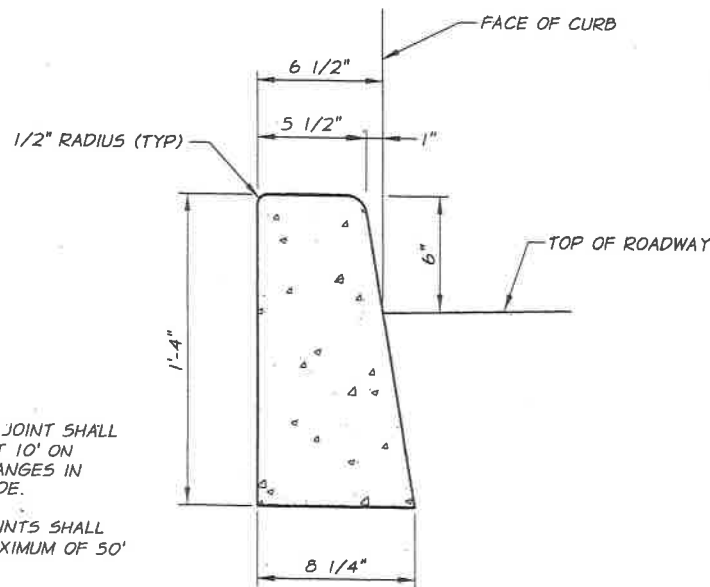
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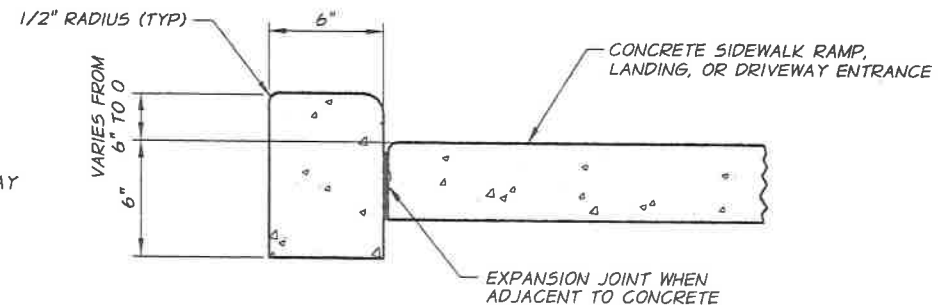
**CURB & GUTTER**



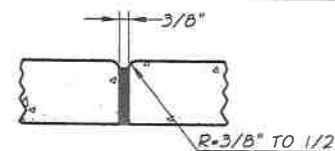
**DEPRESSED CURB SECTION  
AT DRIVEWAY AND ALLEY ENTRANCES**



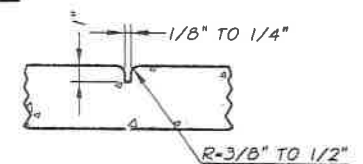
**TRAFFIC CURB**



**PEDESTRIAN CURB**



**EXPANSION JOINT**



**CONTRACTION JOINT**

**NOTES:**

1. CURB CONTRACTION JOINT SHALL BE CONSTRUCTED AT 10' ON CENTER, AND AT CHANGES IN DIRECTION AND GRADE.
2. CURB EXPANSION JOINTS SHALL BE PLACED AT A MAXIMUM OF 50' ON CENTER.
3. ALL CURBS, CURBS AND GUTTERS SHALL BE PLACED ON A MINIMUM OF 6" CRUSHED SURFACING.

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**CONCRETE CURBS, AND CURB AND GUTTER**

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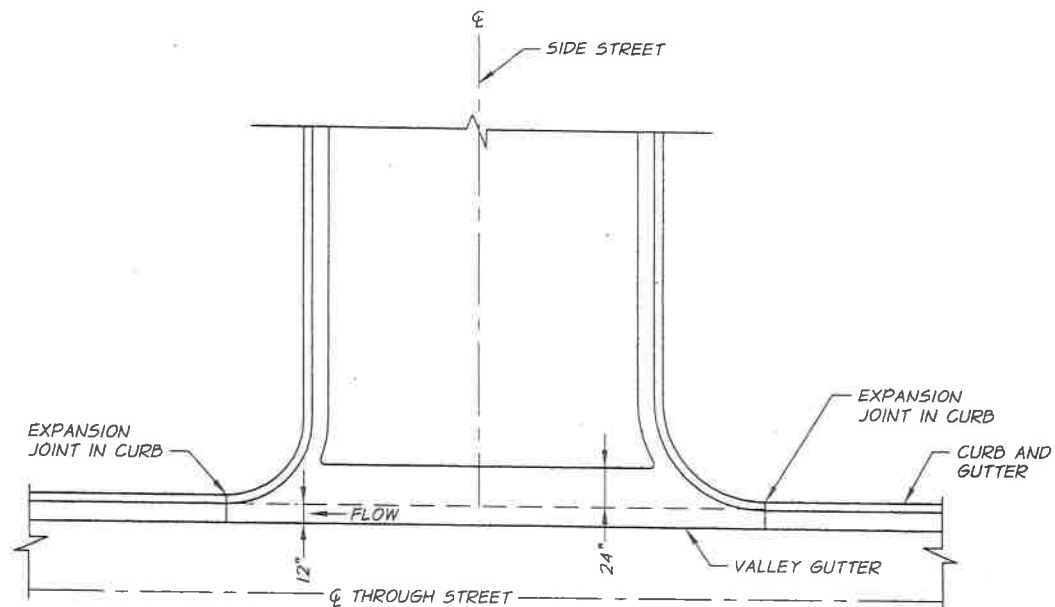
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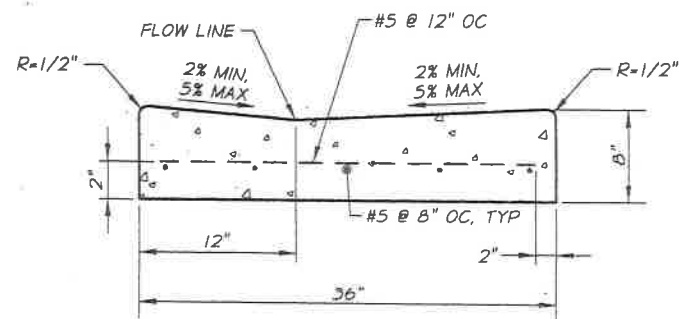
### NOTES:

1. CONCRETE VALLEY GUTTER SHALL BE PLACED ON A MINIMUM OF 6" CRUSHED SURFACING.
2. FLOW LINE OF CONCRETE VALLEY GUTTER SHALL MATCH FLOW LINE OF CURB AND GUTTER.
3. CONCRETE VALLEY GUTTER SHALL ONLY BE CONSTRUCTED AT LOCATIONS APPROVED BY THE CITY.



### PLAN

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### CROSS SECTION

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### CONCRETE VALLEY GUTTER

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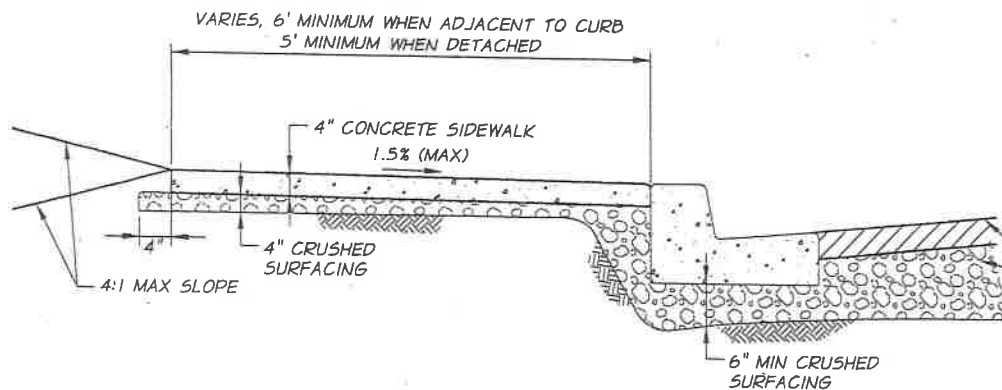
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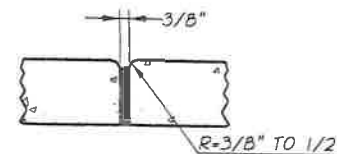
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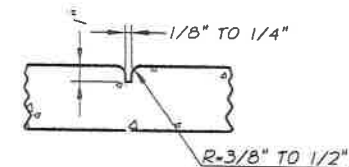




**SIDEWALK DETAIL**



**EXPANSION JOINT**

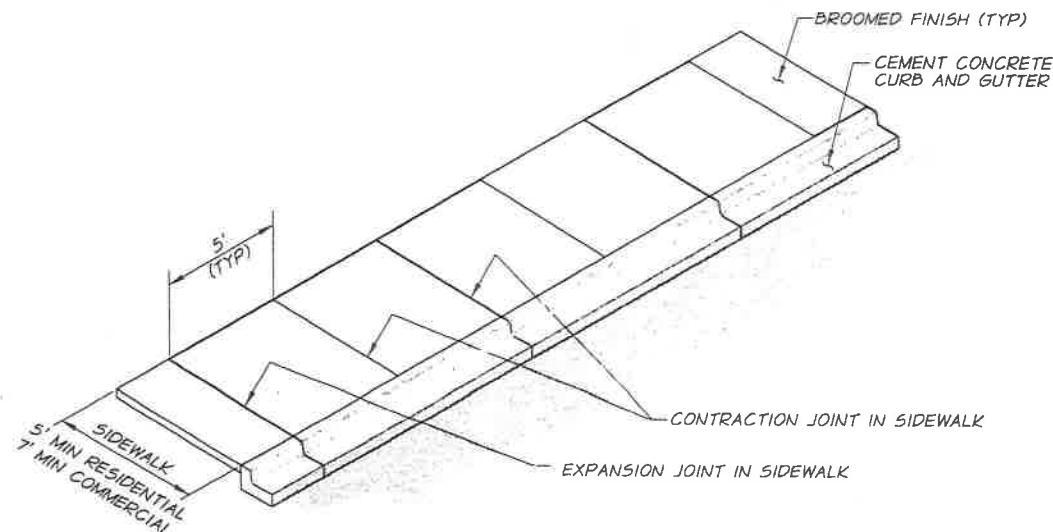


**CONTRACTION JOINT**

STREET SURFACE AND  
CRUSHED SURFACING  
BASE PER TYPICAL STREET  
SECTION STANDARD PLAN

**NOTES:**

1. FINISH SHALL BE LIGHT BROOM.
2. ALL RETRO FIT WORK SHALL BE SAWCUT SMOOTH AND EVEN AT THE CURB, SIDEWALK, AND GUTTER EDGES.
3. CURB & GUTTER, DRIVEWAY & SIDEWALK SHALL NOT BE POURED AS ONE SECTION.
4. IN AREAS WHERE SIDEWALK IS ADJACENT TO SLOPES THAT MAY CAUSE MATERIAL TO ERODE ONTO THE SIDEWALK, INSTALL A CONCRETE PEDESTRIAN CURB AT THE BACK OF THE SIDEWALK.
5. CONSTRUCTION/EXCAVATION SHOULD BE LIMITED TO 1' FROM EDGE OF SIDEWALK WHEREVER POSSIBLE TO REDUCE THE AMOUNT OF LANDSCAPE AND GENERAL SURFACE RESTORATION.
6. ATTACHED SIDEWALK DETAILS SHOWN. DETACHED SIDEWALK SHALL BE CONSTRUCTED IN SAME MANNER AS ATTACHED SIDEWALK.
7. SIDEWALK CONTRACTION JOINTS SHALL BE CONSTRUCTED AT 5' ON CENTER. EXPANSION JOINTS SHALL BE CONSTRUCTED AT A MAXIMUM OF 50' ON CENTER AND SHALL MATCH CURB CONTRACTION JOINTS WHEN SIDEWALK IS ADJACENT TO THE CURB.



**JOINT AND FINISH DETAIL**

**CITY OF  
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**CONCRETE SIDEWALK**

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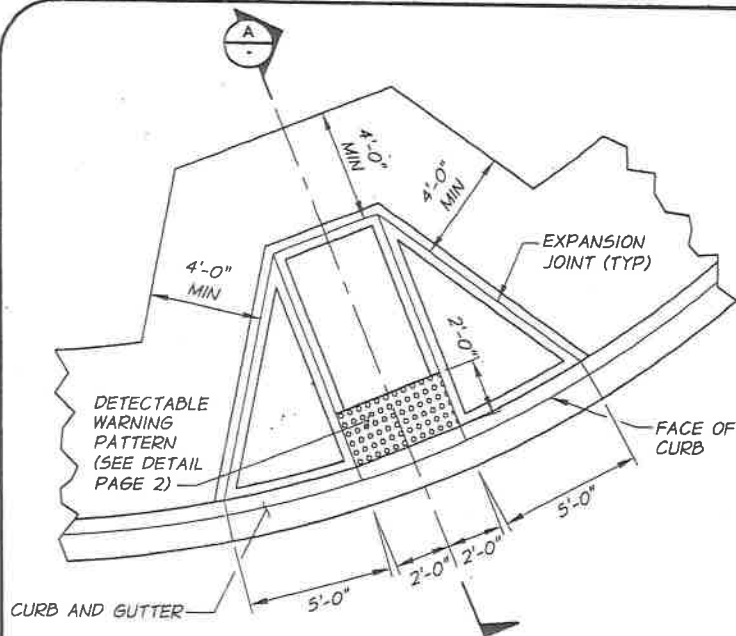
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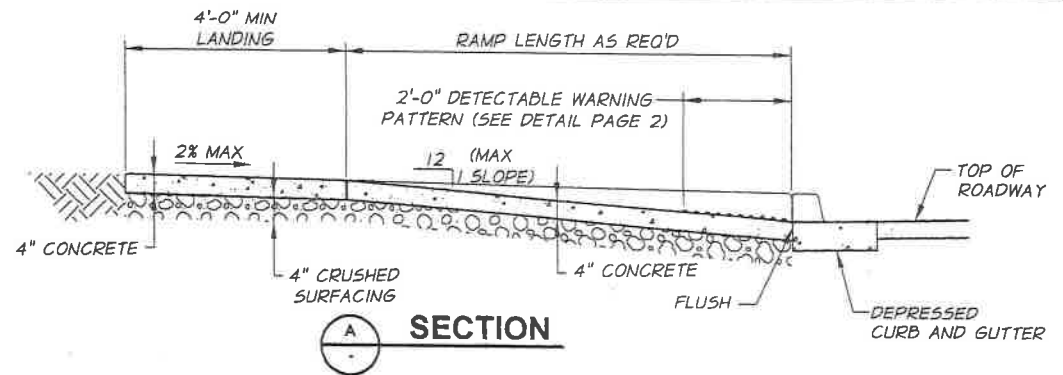
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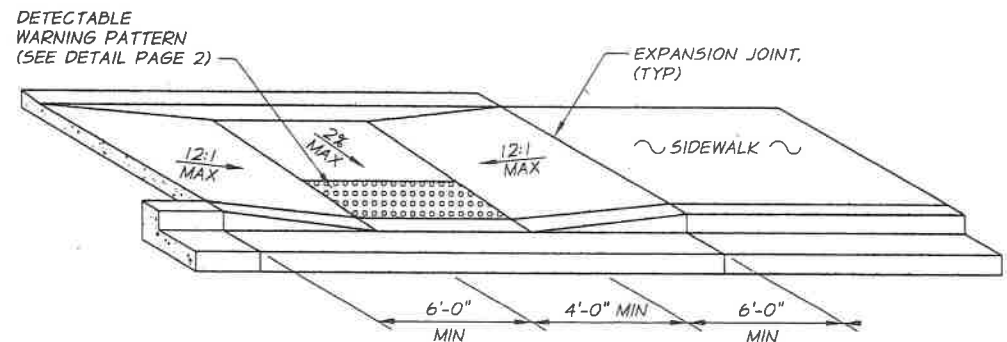
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**CURB RAMP TYPE 1**



**CURB RAMP TYPE 2**



**CURB RAMP TYPE 3**

**NOTES:**

1. THE TOP OF THE RAMP SHALL HAVE A 4'x4' LEVEL AREA (NOT IN EXCESS OF 2% IN ANY DIRECTION).
2. RAMP SLOPES ON THE ROUTE OF TRAVEL SHALL NOT BE STEEPER THAN 12H:1V.
3. RAMP CROSS SLOPES SHALL NOT EXCEED 2%.
4. AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES, OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
5. THE TYPE OF CURB RAMP SHALL BE CHOSEN TO BEST FIT THE INSTALLATION LOCATION AND SHALL BE APPROVED BY THE CITY PRIOR TO INSTALLATION.

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**CONCRETE CURB RAMPS**

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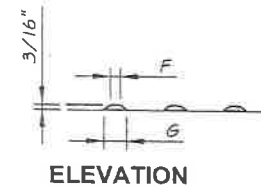
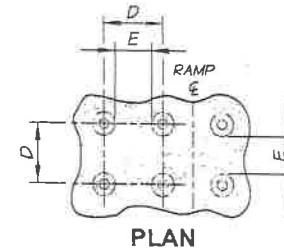
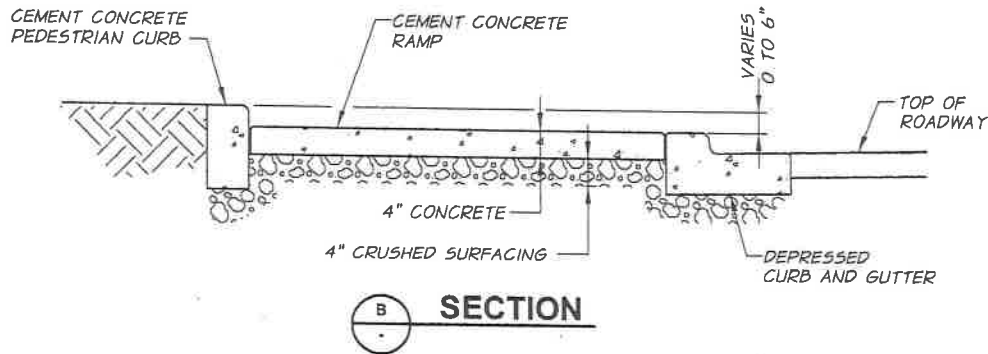
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PLAN**

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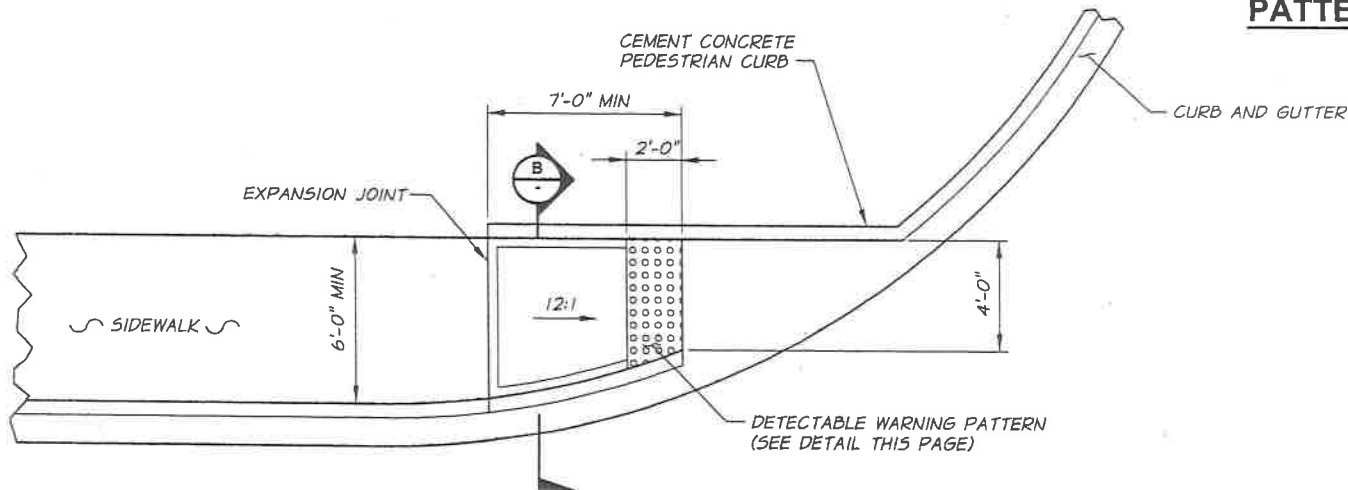


	MIN	MAX
D	1 5/8"	2 3/8"
E	5/8"	1 1/2"
F	7/16"	3/4"
G	7/8"	1 7/16"

#### NOTES:

1. TRUNCATED DOMES SHALL BE YELLOW IN COLOR.
2. DETECTABLE WARNING PATTERNS SHALL BE 2' WIDE AND COVER THE FULL HORIZONTAL WIDTH OF THE RAMP.

#### DETECTABLE WARNING PATTERN DETAIL



#### CURB RAMP TYPE 4

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#### CONCRETE CURB RAMPS

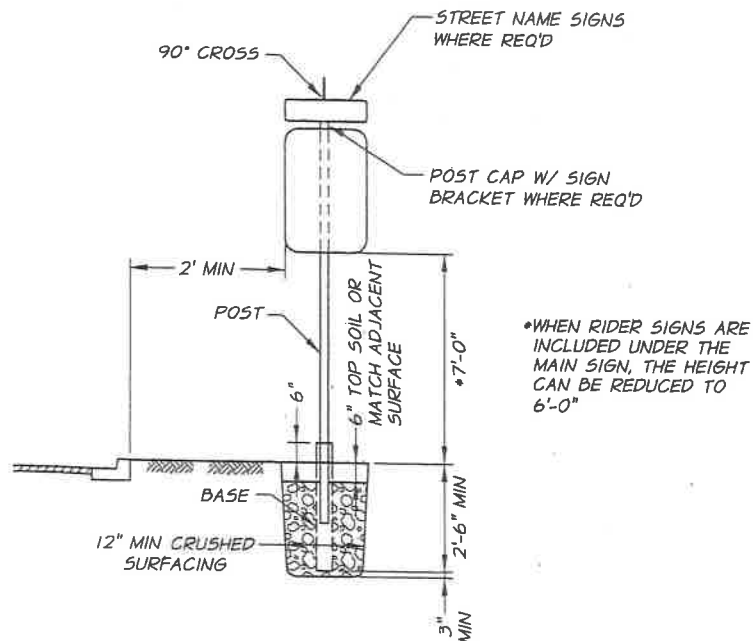
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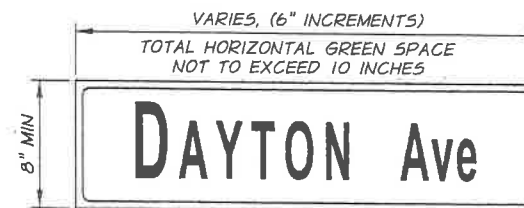
## TRAFFIC SIGN INSTALLATION

### TRAFFIC SIGN INSTALLATION NOTES:

1. ALL SIGNS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. ALL POSTS SHALL BE 3 LBS/FT U-CHANNEL SIGN POSTS INSTALLED PER THE MANUFACTURERS RECOMMENDATIONS
3. ALL POSTS SHALL BE PAINTED GREEN IN COLOR.
4. SIGNS AND POST SHALL BE INSTALLED SO THEY ARE PLUMB AND RESIST SWAYING IN THE WIND AND DISPLACEMENT BY VANDALISM.

SIGN	TYPE	SIZE
R1-1	STOP	30"x30"
R1-2	YIELD	30"x30"x30"
R2-1	SPEED	24"x30"
R8-3a	NO PARKING SYMBOL	12"x12"
D3-101	STREET NAME SIGN	8"x VARIES

## STANDARD SIGNS



## STREET NAME SIGN

### STREET NAME SIGN NOTES:

1. STREET NAME SIGN SHALL BE PER D3-101 OF THE WSDOT SIGN FABRICATION MANUAL.
2. REFLECTORIZED WHITE LETTERS, NUMBERS AND BORDER ON REFLECTIVE GREEN BACKGROUND. LETTERS ARE TO BE HIGHWAY GOTHIC, SERIES "C". LETTERS AND SPACING TO BE PER THE STATE OF WASHINGTON SIGN FABRICATION MANUAL. HIGHWAY GOTHIC, SERIES "B" SHALL BE PERMITTED WHEN SIGN LENGTH EXCEEDS 36".
3. LETTERS, NUMBERS, BORDER AND BACKGROUND ARE TO BE 3M DIAMOND GRADE D63 REFLECTIVE SHEETING SERIES 4000.
4. STREET NAME SIGNS SHALL BE INSTALLED ON THE SIGN POST OR STREET LIGHT STANDARD BY MEANS OF AN ALUMINUM SIGN BRACKET APPROPRIATE FOR THE SPECIFIC APPLICATION APPROVED BY THE CITY.

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## STREET SIGN INSTALLATION

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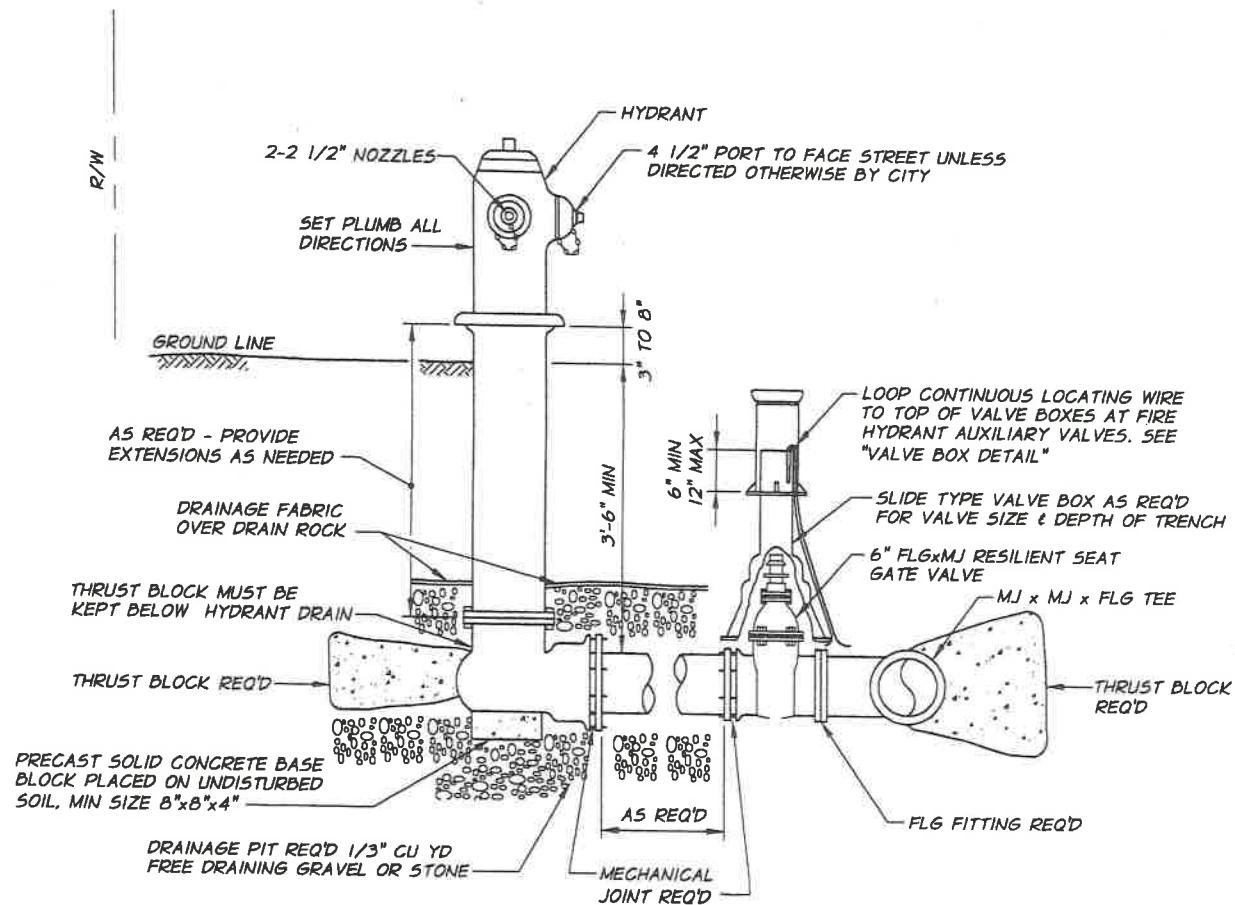
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**WATER**



### NOTES:

1. DO NOT CONNECT VALVE TO HYDRANT DIRECTLY.
2. HYDRANT FREQUENCY AND LOCATION TO BE DETERMINED BY CITY.

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## FIRE HYDRANT AND AUXILIARY VALVE

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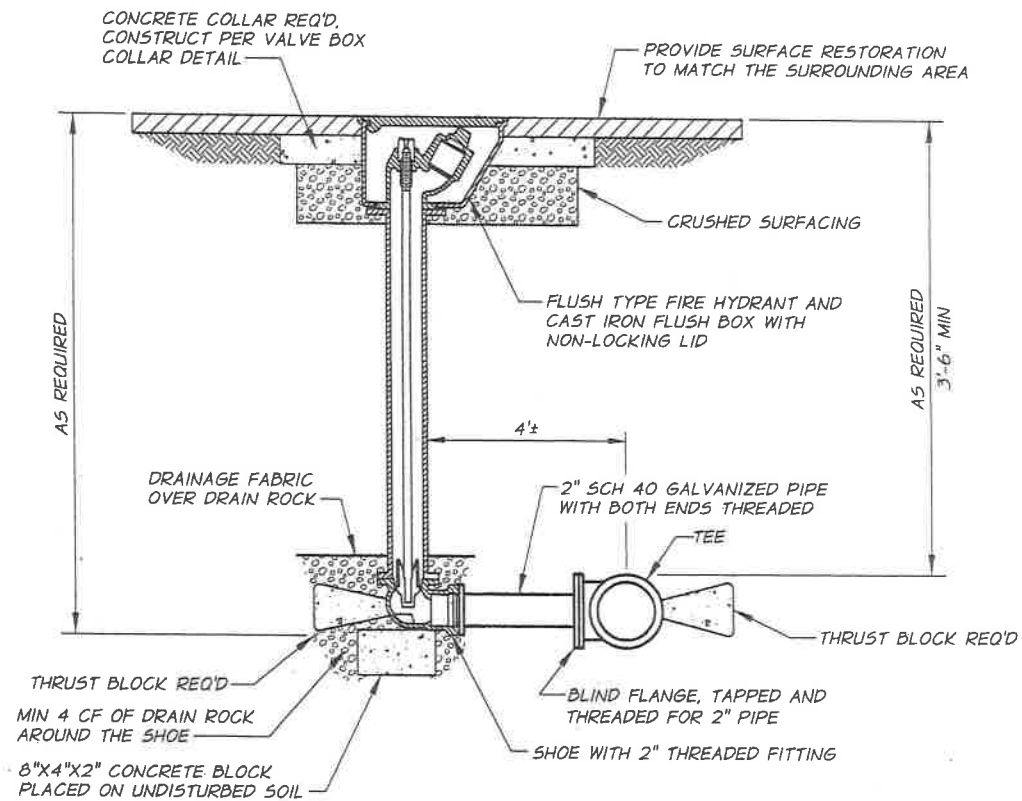
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# WATERLINE BLOW-OFF/ FLUSH TYPE FIRE HYDRANT

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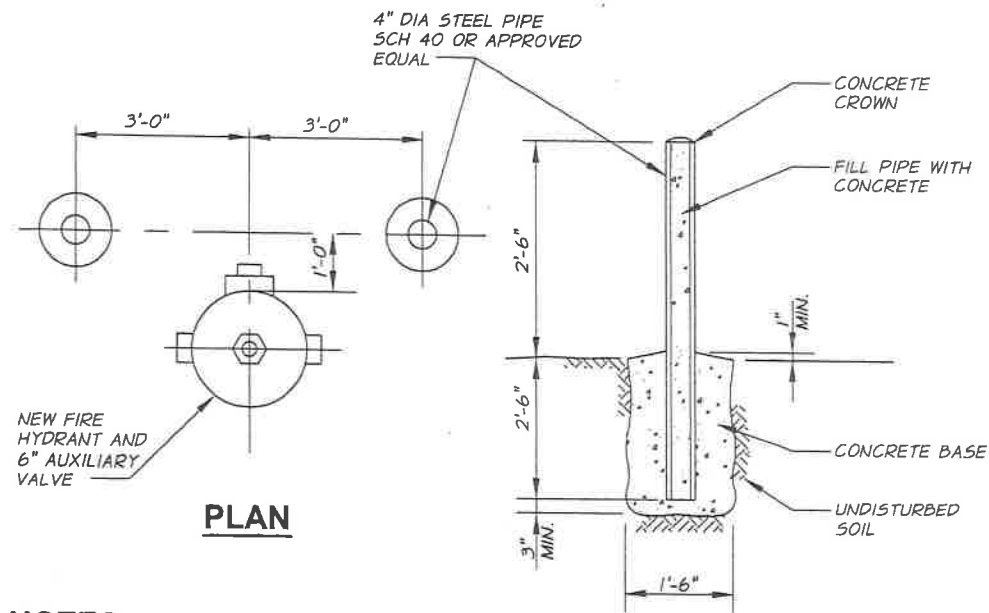
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**PLAN**

**SECTION**

**NOTES:**

1. FIRE HYDRANT BARRICADES REQUIRED WHEN HYDRANT NOT PLACED BEHIND CURB.
2. LOCATE PIPES EQUIDISTANT FROM FIRE HYDRANT.
3. PLACE BARRICADES AT ALL FOUR CORNERS OF HYDRANT IF VEHICLES ARE ALLOWED TO DRIVE BEHIND HYDRANT.

**CITY OF  
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**FIRE HYDRANT BARRICADE**

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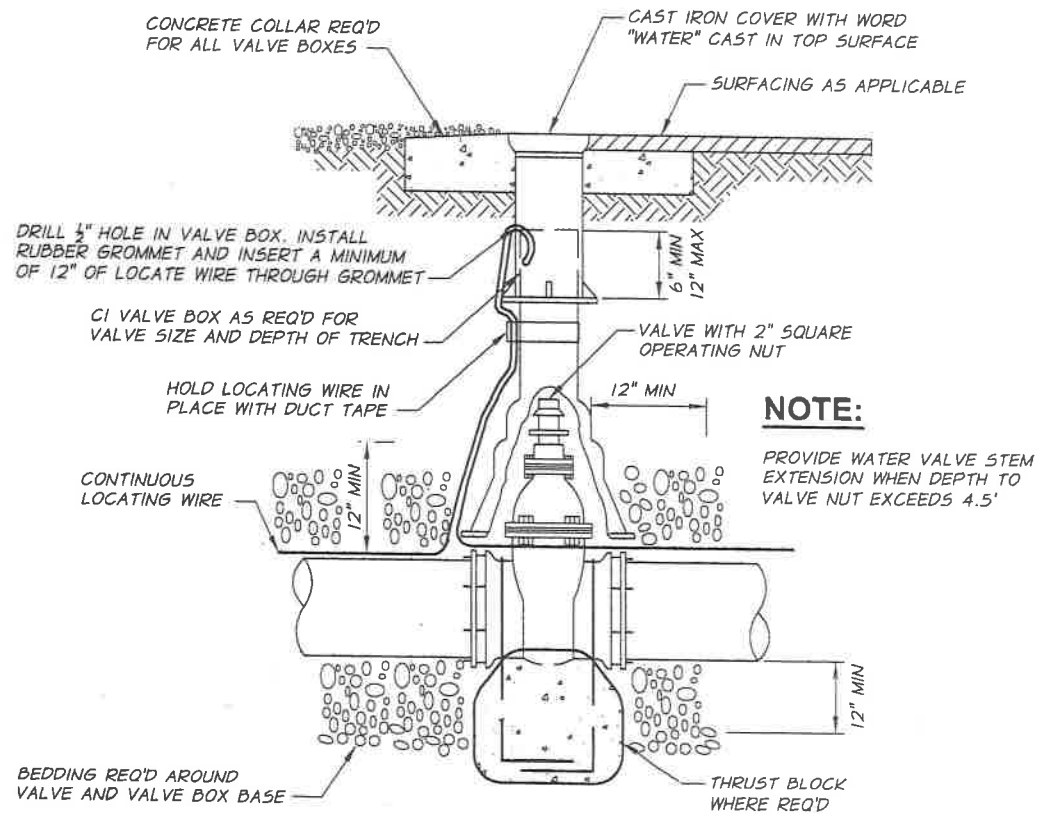
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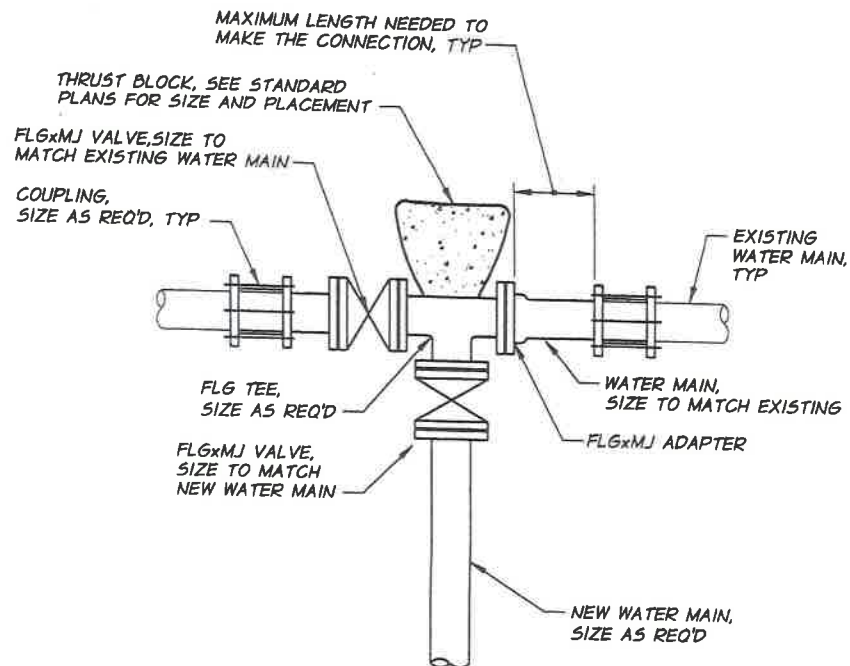
VALVE BOX  
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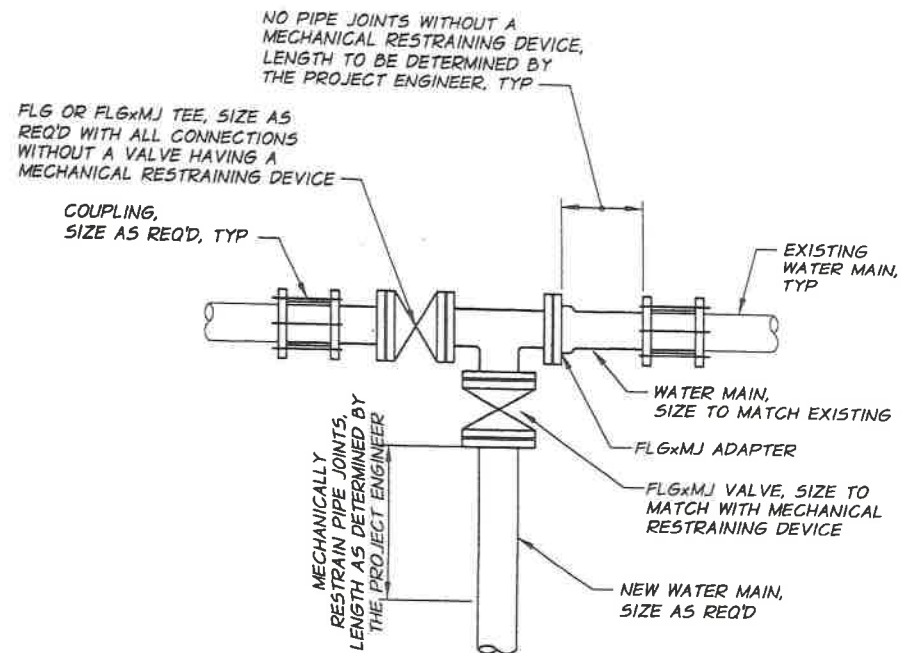
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### THRUST BLOCK ALTERNATIVE



### MECHANICAL RESTRAINT ALTERNATIVE

#### NOTES:

1. WATER MAIN CONNECTIONS SHOWN ARE GENERAL IN NATURE. CONFIGURATION SHALL BE DESIGNED TO MATCH EXISTING SITE CONDITIONS.
2. ALL CONNECTIONS TO EXISTING WATER MAINS SHALL BE FITTED WITH THRUST BLOCKS AND/OR MECHANICALLY RESTRAINED TO THE REQUIRED LENGTHS.
3. MECHANICAL RESTRAINT LENGTHS SHALL BE DESIGNED BASED ON INDIVIDUAL DESIGN AND SITE CONDITIONS BY AN ENGINEER LICENSED IN THE STATE OF WASHINGTON.

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CONNECTION TO EXISTING WATER MAIN

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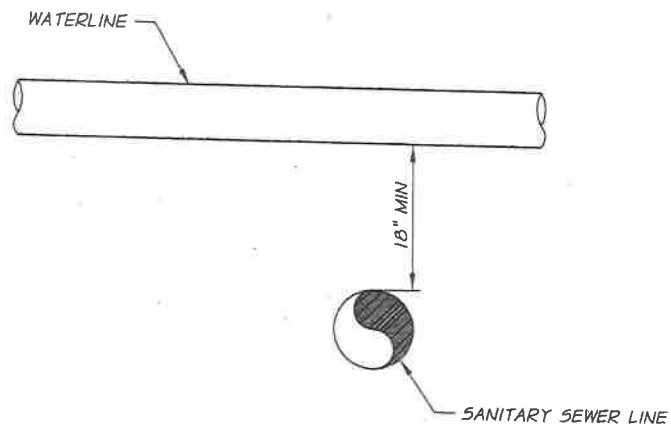
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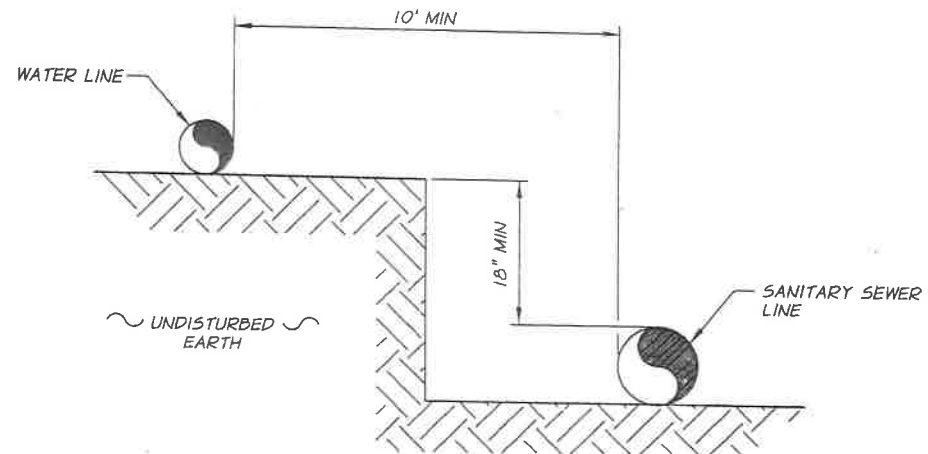
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**PERPENDICULAR CONSTRUCTION**



**PARALLEL CONSTRUCTION**

**NOTE:**

IF THE MINIMUM SEPARATIONS SHOWN ABOVE CANNOT BE ACHIEVED, THEN THE REQUIREMENTS FOR WATER/SEWER SEPERATION OUTLINED IN SECTION C1-9 OF THE WASHINGTON STATE DEPARTMENT OF ECOLOGY'S "CRITERIA FOR SEWAGE WORKS DESIGN", CURRENT EDITION SHALL BE FOLLOWED.

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**MINIMUM WATER/SEWER SEPARATION**

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## THRUST BLOCK NOTES

- CONNECTIONS SHALL BE MECHANICALLY RESTRAINED WHEN THRUST RESTRAINTS ARE REQUIRED. WHEN EXISTING CONDITIONS PREVENT THE USE OF MECHANICAL RESTRAINTS, THRUST BLOCKS MAY BE USED WITH THE APPROVAL OF THE CITY. THRUST BLOCKS OR MECHANICAL RESTRAINTS SHALL BE DESIGNED BY A LICENSED ENGINEER.
- THRUST BLOCKS SHALL BE REQUIRED AT THE FOLLOWING LOCATIONS:
  - ALL CHANGES IN DIRECTION.
  - ALL DEAD-ENDS.
  - ALL VALVES LARGER THAN 12-INCHES. THEY SHALL BE SIZED FOR CLOSED CONDITIONS. EXCEPTIONS:
    - WHEN RESTRAINED JOINT PIPE IS USED ON BOTH SIDES OF VALVE.
    - WHEN VALVE IS RESTRAINED JOINT CONNECTED TO A FITTING WHICH HAS APPROPRIATE THRUST BLOCKING.
  - AT LOCATIONS SPECIFICALLY CALLED OUT ON THE DRAWINGS.
  - AT TEMPORARY DEAD ENDS DURING PIPE INSTALLATIONS AS REQUIRED FOR TEMPORARY PRESSURE TESTING.
  - AT OTHER LOCATIONS REQUIRED BY ENGINEER.
- THRUST BLOCKS SHALL BE SIZED AS REQUIRED BY SOIL CONDITIONS AND DESIGN PRESSURE.
- PLACE CONCRETE AGAINST UNDISTURBED TRENCH WALL.
- SEE TECHNICAL SPECIFICATIONS FOR CONCRETE AND ANCHOR RODS.
- ALL CONCRETE SHALL BE PLACED SO THAT PIPE, FITTING JOINTS, BOLTS AND NUTS, ETC., WILL BE ACCESSIBLE FOR REPAIRS.
- PLACE ONE LAYER OF VISQUEEN BETWEEN FITTING AND CONCRETE TO FACILITATE FUTURE REMOVAL OF THRUST BLOCK.
- ALL THRUST BLOCKS SHALL BE SIZED FOR 150 PSI WATER PRESSURE OR 1.5 TIMES THE HIGHEST WORKING PRESSURE, WHICHEVER IS LARGER.
- IF THE REQUIRED BEARING AREA IS LESS THAN 1 SQUARE FOOT, A THRUST BLOCK SHALL NOT BE REQUIRED.

## DETERMINATION OF THRUST BLOCK BEARING AREA

- DETERMINE THRUST (T) FOR TYPE OF FITTING OR JOINT AND SIZE OF PIPE FROM TABLE NO. 1 OR TABLE NO. 3. ADJUST THE THRUST @ 100 PSI TO THE THRUST AT THE TEST PRESSURE.
- DETERMINE BEARING CAPACITY (B) OF SOIL FROM TABLE NO. 2.
- DETERMINE REQUIRED BEARING AREA (A) AS FOLLOWS:  

$$A = \frac{T \cdot F}{B}$$
 (WHERE F IS PRESSURE DESIGN FACTOR)

EXAMPLE: DESIGN PRESSURE = 150 PSI

PIPE = 12"

FITTING = TEE

SOIL = SANDY GRAVEL

FROM TABLE NO. 1: T = 15,050 LB.

PRESSURE DESIGN FACTOR F =  $\frac{150 \text{ PSI}}{100 \text{ PSI}} = 1.50$

FROM TABLE NO. 2: B = 3000 LB/SQ.FT.

$A = \frac{15,050 \times 1.50}{3000} = 7.5 \text{ SQ.FT.} = 8 \text{ SQ.FT.}$

(ROUND UP TO NEAREST WHOLE SQ.FT.)

### TABLE 1

THRUST AT FITTINGS IN POUNDS AT 100 PSI OF PRESSURE					
PIPE SIZE	TEES AND DEAD ENDS	90° ELBOW	45° ELBOW	22 1/2° ELBOW	11 1/4° ELBOW
4"	1,680	2,310	1,290	660	340
6"	3,770	5,320	2,890	1,480	750
8"	6,690	9,460	5,120	2,620	1,320
10"	10,440	14,780	8,010	4,090	2,050
12"	15,050	21,280	11,520	5,880	2,960
14"	20,490	28,960	15,680	8,000	4,020
16"	26,750	37,830	20,470	10,440	5,260
18"	33,850	47,870	25,910	13,210	6,640
20"	41,790	59,090	31,980	16,310	8,190
24"	60,170	85,100	46,060	23,490	11,800

### TABLE 2

SOIL	SAFE BEARING LOAD LB/SQ.FT.
SOFT CLAY	500
SILT	1,000
SAND	2,000
SAND AND GRAVEL	3,000
SAND AND GRAVEL CEMENT WITH CLAY	4,000
HARD CLAY	4,000

### TABLE 3

SIDE THRUST PER 100 LB/SQ.IN. PRESSURE PER DEGREE OF DEFLECTION			
PIPE SIZE	SIDE THRUST-LB	PIPE SIZE	SIDE THRUST-LB
4"	N/A	14"	360
6"	N/A	16"	470
8"	N/A	18"	600
10"	190	20"	730
12"	270	24"	1,050

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## THRUST BLOCK REQUIREMENTS AND LOCATIONS

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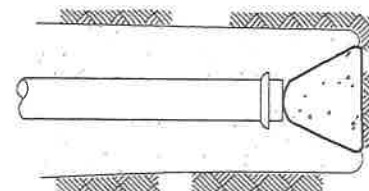
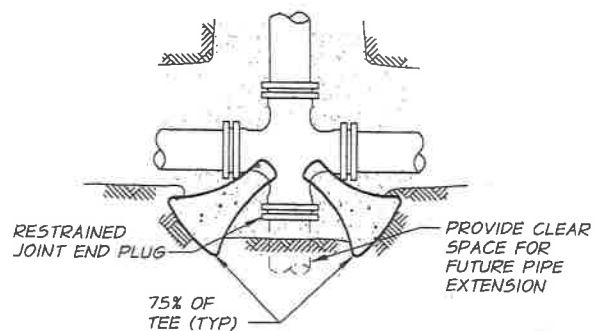
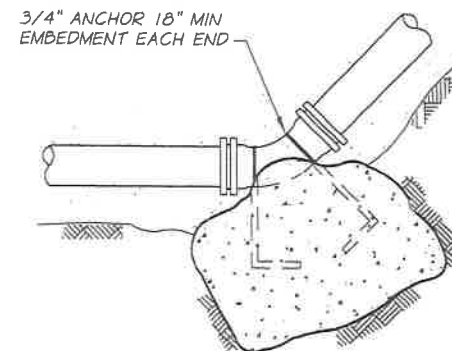
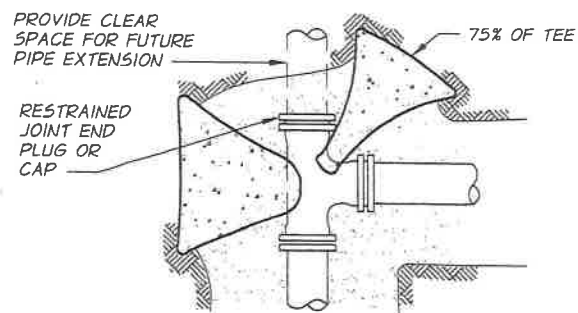
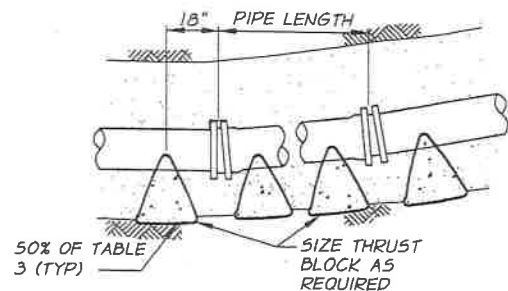
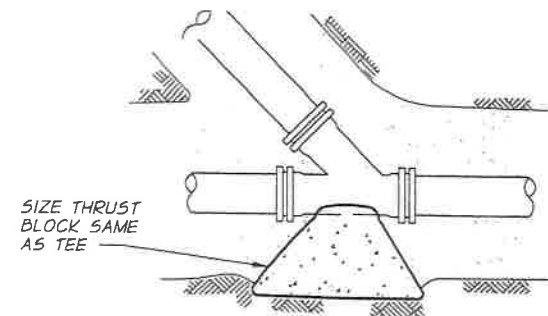
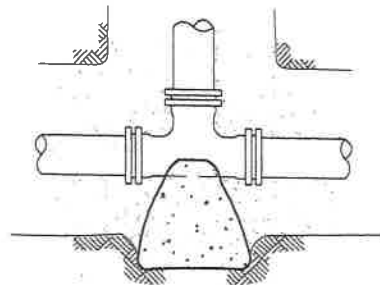
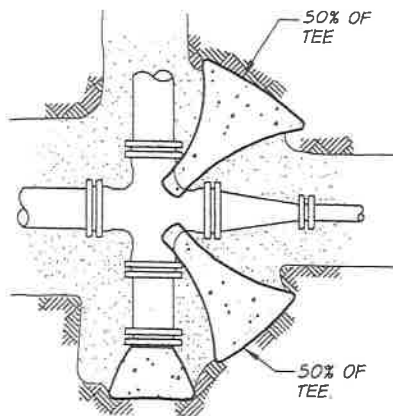
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### TYPICAL THRUST BLOCK LOCATIONS PLAN VIEWS

**CITY OF  
DAYTON**

## **THRUST BLOCK REQUIREMENTS AND LOCATIONS**

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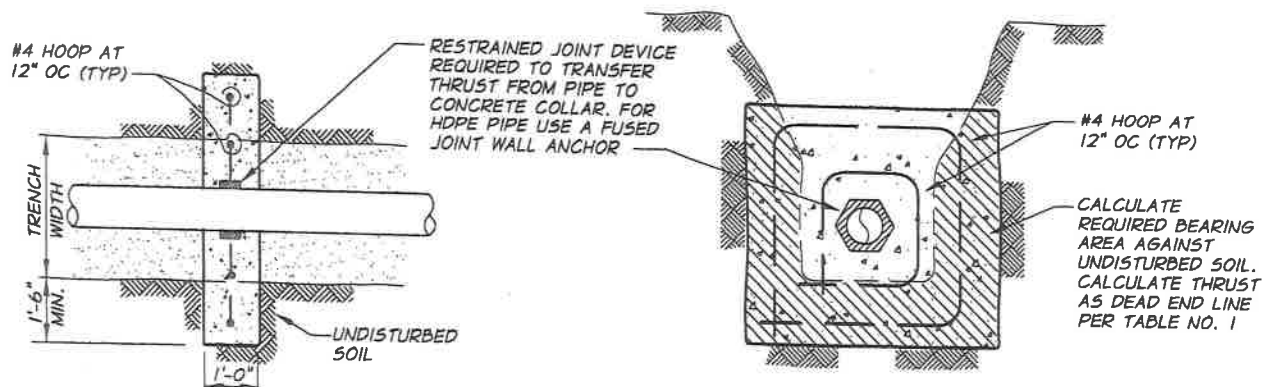
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PLAN**

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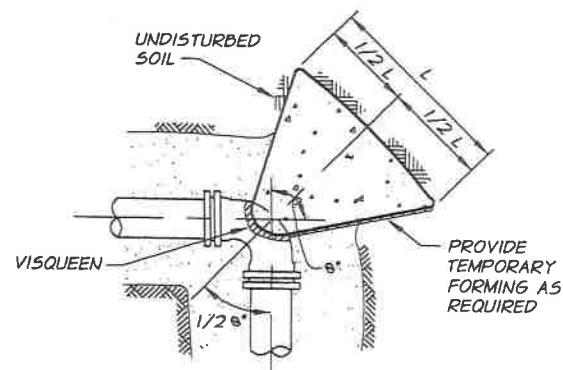
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**PLAN**

**SECTION**

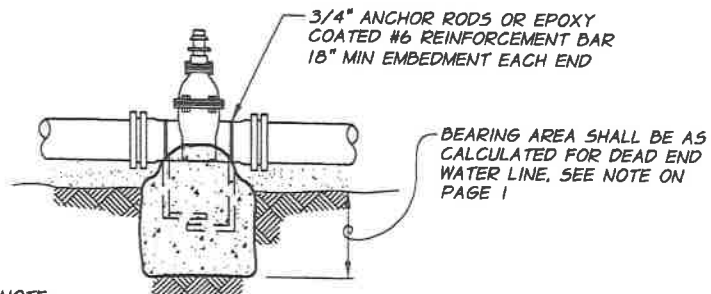
**TYPICAL THRUST BLOCK DETAILS  
FOR ANCHOR COLLARS**



BEARING AREA (A) = HEIGHT (H) x LENGTH (L)  
 $A = H \times L$

**PLAN**

**SECTION**



**NOTE:**  
SEE THRUST BLOCK NOTES THIS SHEET FOR REQ'D LOCATIONS OF THRUST BLOCKS FOR VALVES.

**TYPICAL THRUST BLOCK DETAIL  
FOR VALVES LARGER THAN 12"**

**TYPICAL THRUST BLOCK DETAILS  
FOR ELBOWS**

**CITY OF  
DAYTON**

**THRUST BLOCK REQUIREMENTS AND LOCATIONS**

NTS

4-9-12  
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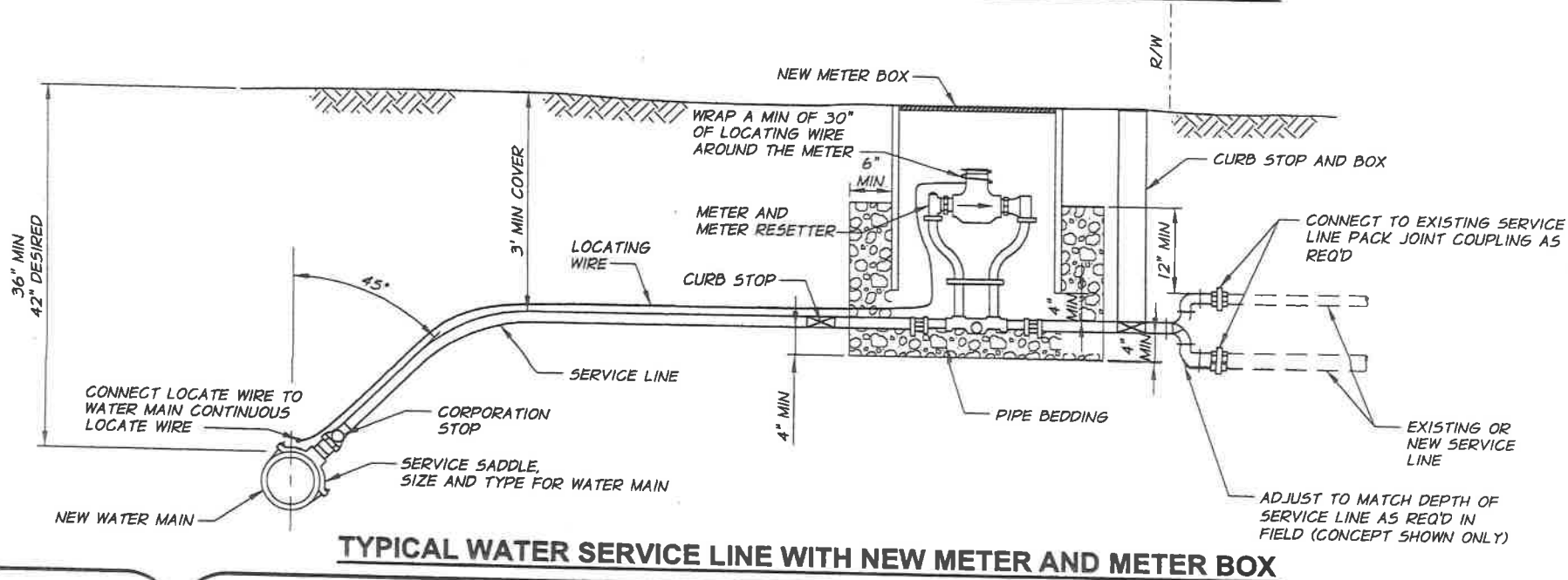
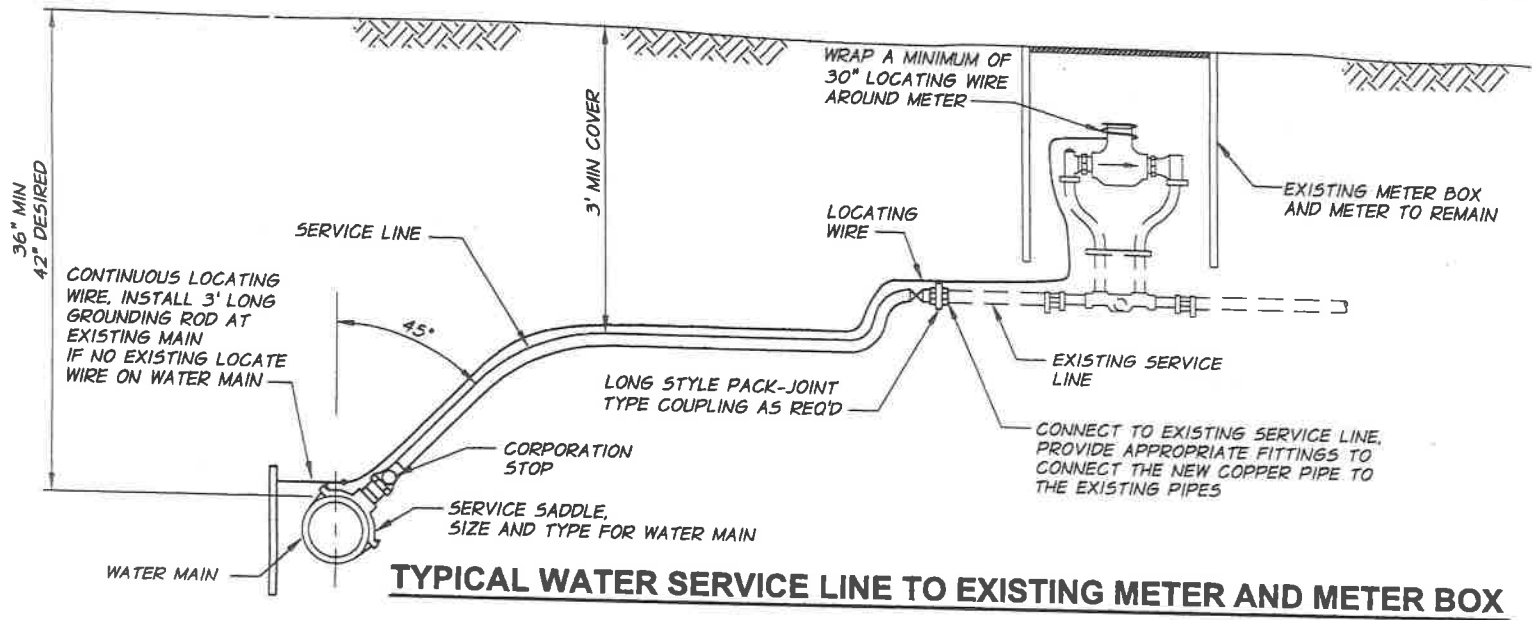
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R:\Client\Dayton\W91E-90 Dayton Standard Details-3 Water Service Connection and Meter Installation.dwg, 3-8, 2/11/2012 5:54:38 PM



CITY OF  
DAYTON

**WATER SERVICE CONNECTIONS AND METER INSTALLATION**

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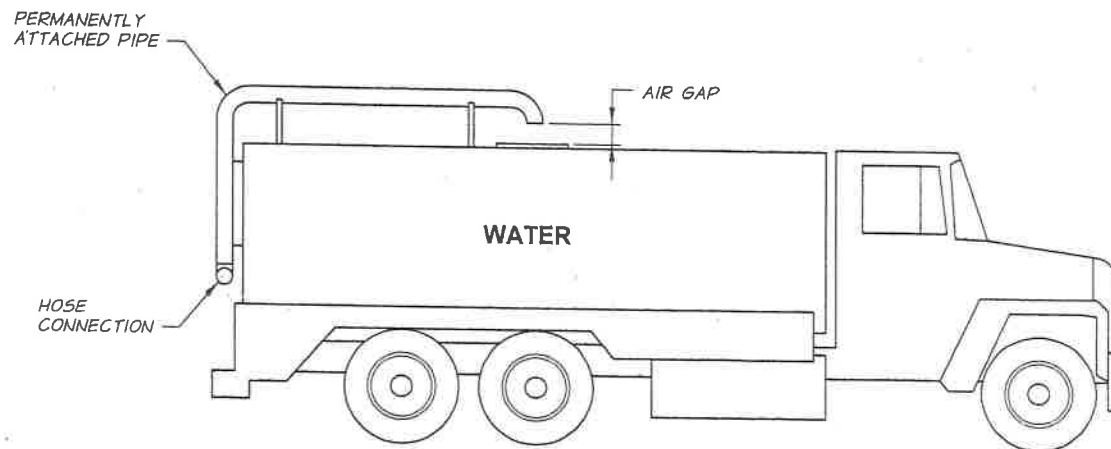
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### NOTES:

1. MINIMUM AIR GAP SHALL BE 2x PIPE INSIDE DIAMETER OR 2" WHICHEVER IS GREATER.
2. ALL INSTALLATIONS ARE SUBJECT TO APPROVAL BY THE CITY.
3. FLEXIBLE HOSES OR TUBING WHICH MAY BE BENT OR EASILY ALTERED TO REDUCE THE AIR GAP ARE NOT ALLOWED.
4. WATER TRUCKS MUST BE FILLED AT LOCATIONS APPROVED BY THE CITY THROUGH A DESIGNATED METERED ASSEMBLY. TOTAL WATER CONSUMPTION SHALL BE REPORTED TO THE CITY.

**CITY OF  
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### **MINIMUM AIR GAP**

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PLAN**

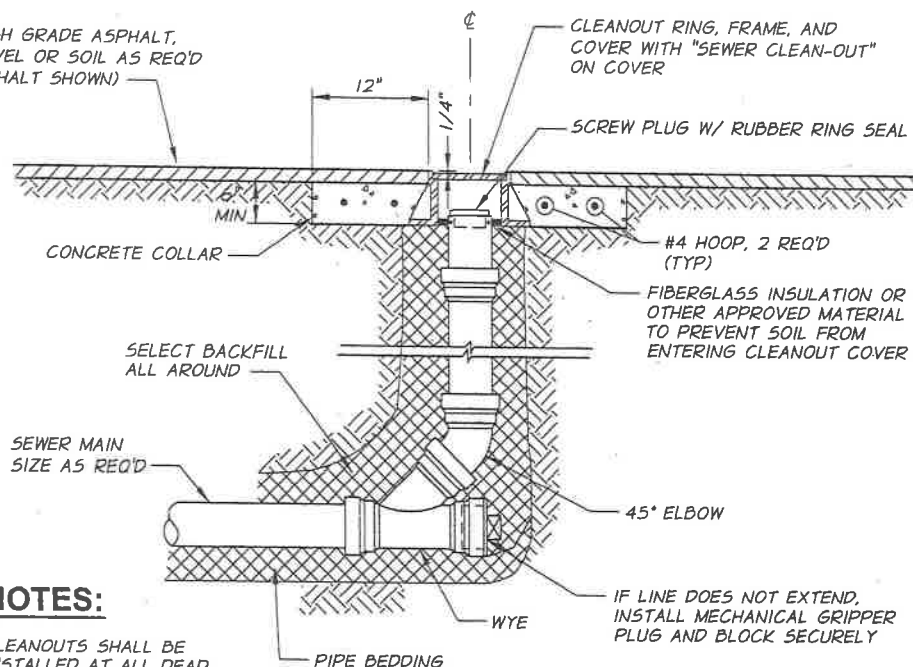
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## **SANITARY SEWER**

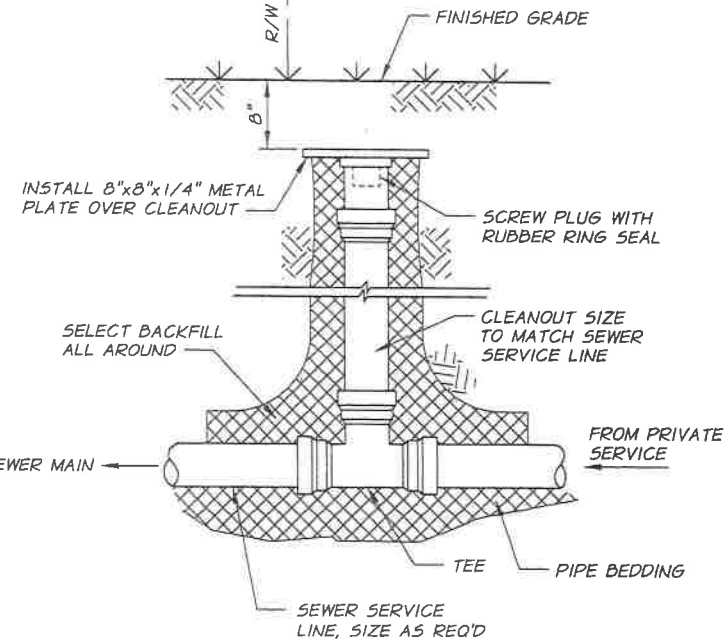
FINISH GRADE ASPHALT,  
GRAVEL OR SOIL AS REQ'D  
(ASPHALT SHOWN)



### NOTES:

1. CLEANOUTS SHALL BE INSTALLED AT ALL DEAD ENDS IN MAIN LINES.
2. SEE SERVICE LINE DETAIL FOR CLEANOUT INSTALLATION LOCATION ON SERVICE LINES.

### MAIN LINE CLEANOUT



### SERVICE LINE CLEANOUT

**CITY OF  
DAYTON**

## SANITARY SEWER CLEANOUTS

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03-23-09  
REVISION DATE

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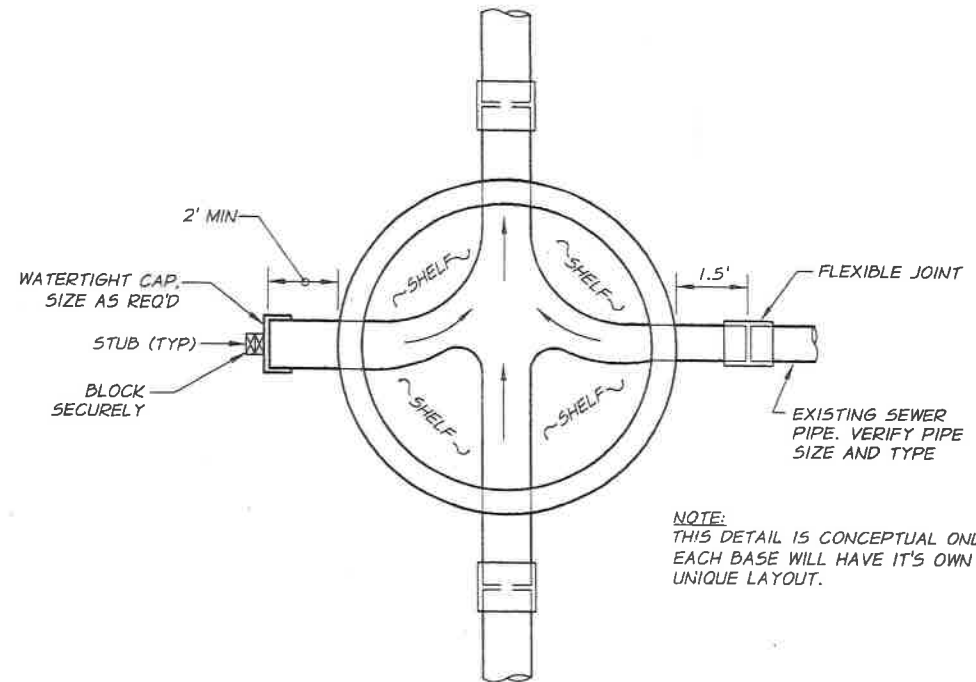
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PLAN**

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## MANHOLE CONSTRUCTION NOTES

1. ALL MANHOLES SHALL BE PRECAST MANHOLE UNITS UNLESS OTHERWISE APPROVED.
2. THE MANHOLE PIPE CONNECTORS SHALL BE CAPABLE OF A DEFLECTION IN ANY ONE DIRECTION OF 10° AND SHALL BE INSTALLED AS REQUIRED BY THE MANUFACTURER.
3. ANY GAPS, HOLES, ROUGH SPOTS, ETC., IN THE CHANNELS SHALL BE FILLED OR REPAIRED IN THE FIELD.
4. THE MANHOLES SHALL BE SET BELOW FINISH GRADE AND THEN ADJUSTED TO GRADE WITH GRADE RINGS AS REQUIRED. THE MAXIMUM DEPTH OF GRADE RINGS AND MANHOLE FRAMES SHALL BE 12".
5. CONE SECTION SHALL BE ECCENTRIC.
6. IN MANUFACTURING THE MANHOLES, THE CONTRACTOR IS ADVISED TO VERIFY FIELD CONDITIONS, PIPE INVERTS, PIPE ORIENTATION, AND MANHOLE DEPTH.
7. MANHOLES SHALL HAVE STEPS OF 1/2-INCH DIAMETER DEFORMED BARS. ORIENT VERTICALLY OVER UPSTREAM SIDE OF MAIN CHANNEL.
8. THE BEDDING UNDER THE MANHOLE SHALL MEET THE SAME REQUIREMENTS AS PIPE BEDDING.
9. WHEN PIPE DIAMETERS ARE NOT THE SAME, THE ELEVATION OF THE TOP OF THE SMALLER DIAMETER PIPE SHALL BE AT AN ELEVATION EQUAL TO OR GREATER THAN THE TOP OF THE LARGER DIAMETER PIPE. THE FLOW CHANNEL IN THE MANHOLE SHALL DROP A MINIMUM OF 0.1 FEET FROM INLET TO OUTLET.
10. ALL PICKUP HOLES SHALL BE GROUTED FULL AFTER MANHOLE HAS BEEN PLACED.



PLAN

## MANHOLE BASE

## MANHOLE DIMENSION TABLE

DIAMETER	WALL THICKNESS	BASE THICKNESS	MAXIMUM KNOCKOUT SIZE	MINIMUM DISTANCE BETWEEN KNOCKOUTS	BASE REINFORCING STEEL IN <sup>2</sup> /ft. IN EACH DIRECTION	
					SEPARATE BASE	INTEGRAL BASE
48"	4"	6"	36"	8"	0.23	0.15
54"	4.5"	8"	42"	8"	0.19	0.19
60"	5"	8"	48"	8"	0.25	0.25

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## MANHOLE BASE AND NOTES

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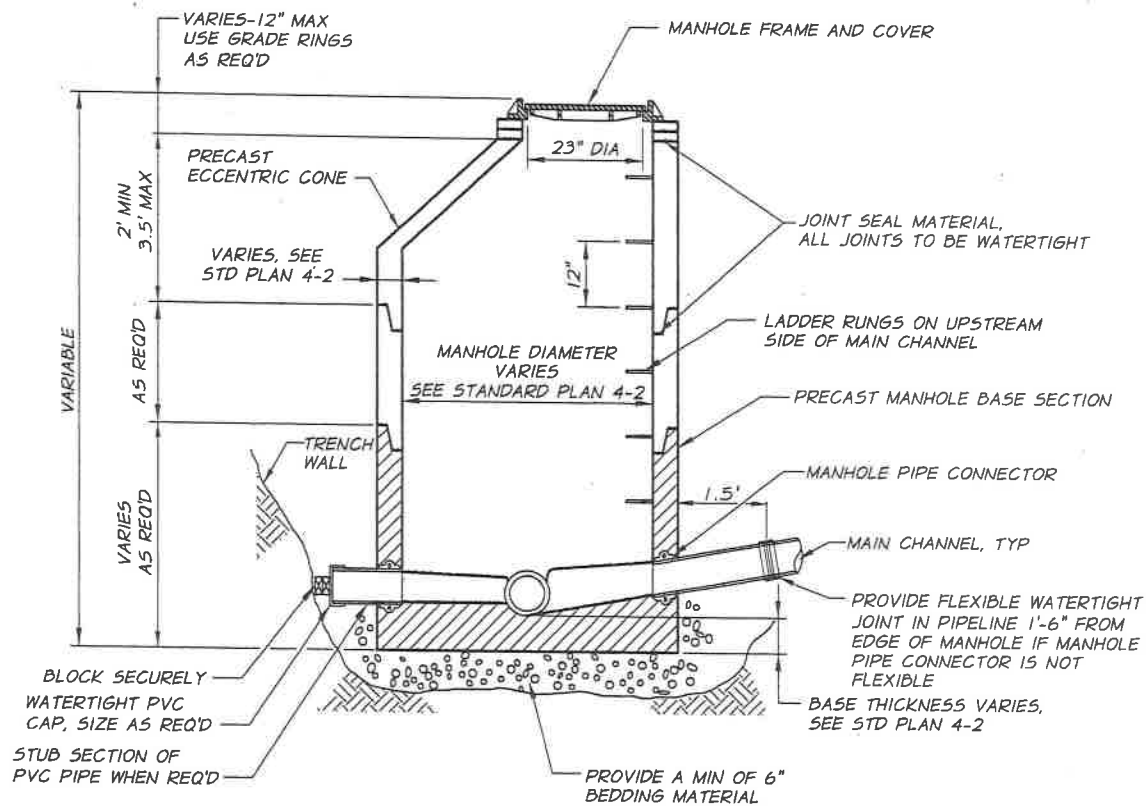
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DAYTON

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REVISION DATE

## STANDARD MANHOLE

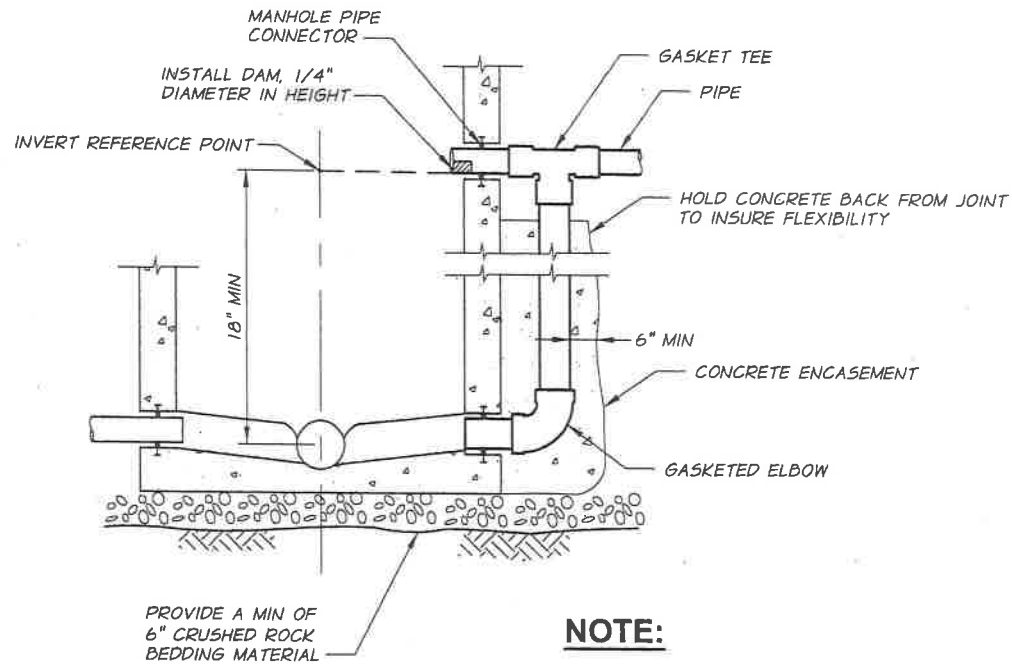
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**NOTE:**

A DROP MANHOLE SHALL BE UTILIZED WHEN THE INVERT ELEVATION BETWEEN THE UPSTREAM AND DOWNSTREAM PIPES IS 18" OR GREATER.

**CITY OF  
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**DROP PRECAST MANHOLE**

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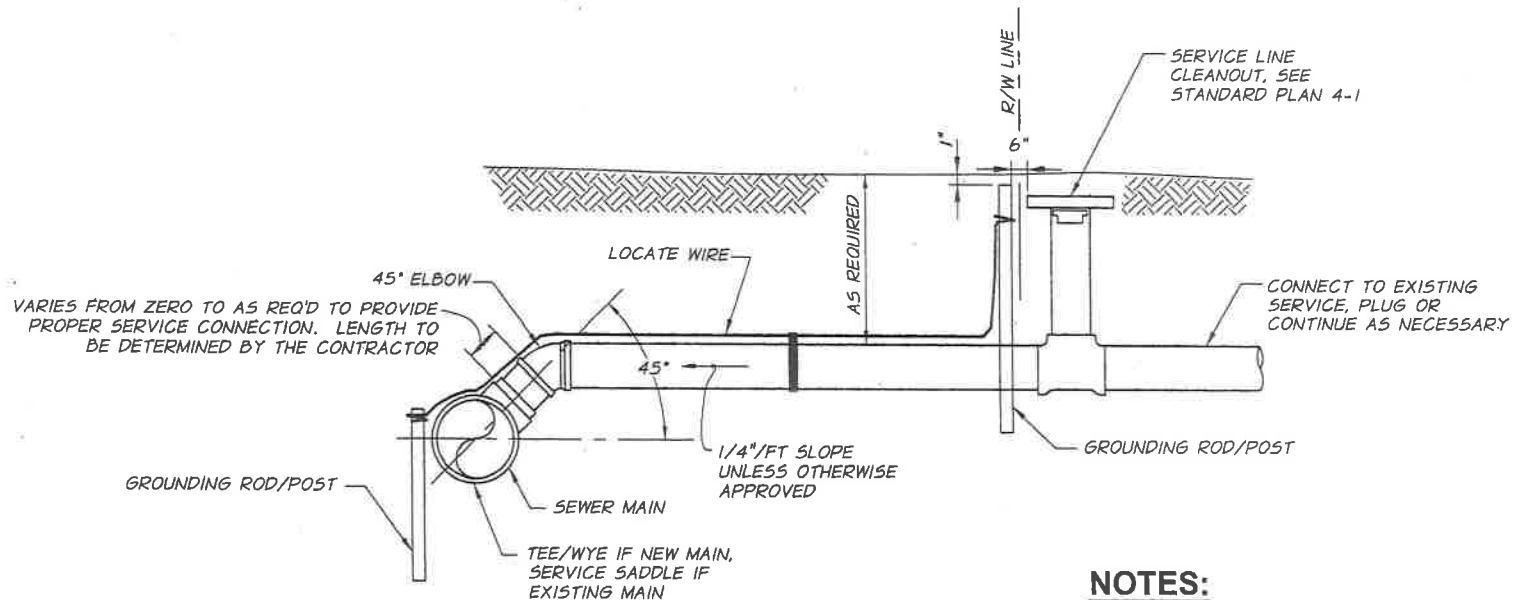
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PUBLIC WORKS DIRECTOR

**STANDARD  
PLAN**

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### NOTES:

1. THE CONTRACTOR SHALL PROVIDE TWO REFERENCES FROM PERMANENT OBJECTS TO THE SEWER SERVICE LINE CLEANOUT. THESE TIES SHALL BE SHOWN AND DIMENSIONED ON THE "RECORD" DRAWINGS PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE CITY. WHEN NEW CURBS ARE INSTALLED, THE CURB SHALL BE STAMPED WITH AN "S" AT THE POINT OF CROSSING.
2. BEDDING AND SELECT BACKFILL REQUIREMENTS FOR MATERIAL TYPE AND COMPACTION SHALL BE THE SAME AS THAT REQUIRED FOR NEW PIPELINE CONSTRUCTION. CARE SHALL BE GIVEN TO ENSURE PROPER COMPACTION UNDER SERVICE LINES.
3. IF SEWER SERVICE IS A STUB FOR FUTURE USE, THE SERVICE LINE SHALL BE EXTENDED  $\pm$  1-FOOT BEYOND THE SERVICE CLEANOUT, AND A WATERTIGHT END PLUG AND BLOCK SHALL BE INSTALLED.
4. IF THE SEWER SERVICE IS TO CONNECT TO AN EXISTING SERVICE, THEN THE NEW SERVICE SHALL CONNECT TO THE EXISTING SERVICE ON THE UPSTREAM SIDE OF THE SERVICE CLEANOUT WITH A WATERTIGHT FLEXIBLE COUPLING.
5. THE CONTRACTOR IS RESPONSIBLE FOR SEWAGE FLOW DURING INSTALLATION.

**CITY OF  
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## SEWER SERVICE LINE

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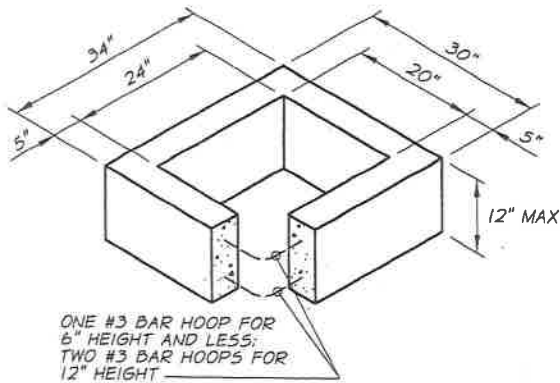
  
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PLAN**

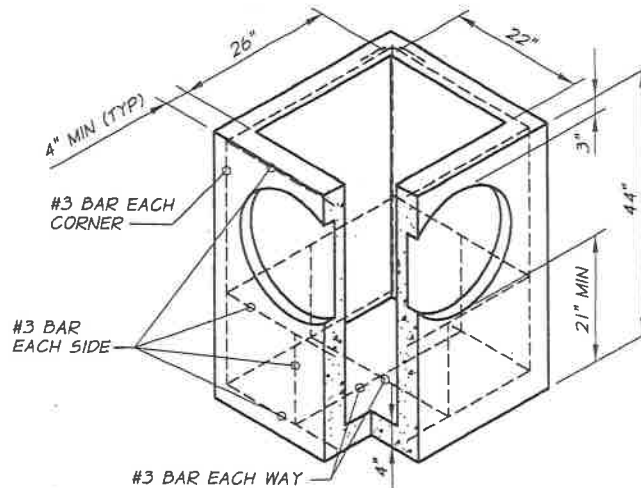
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## **STORM SEWER**



## RECTANGULAR ADJUSTMENT SECTION



## PRECAST BASE SECTION

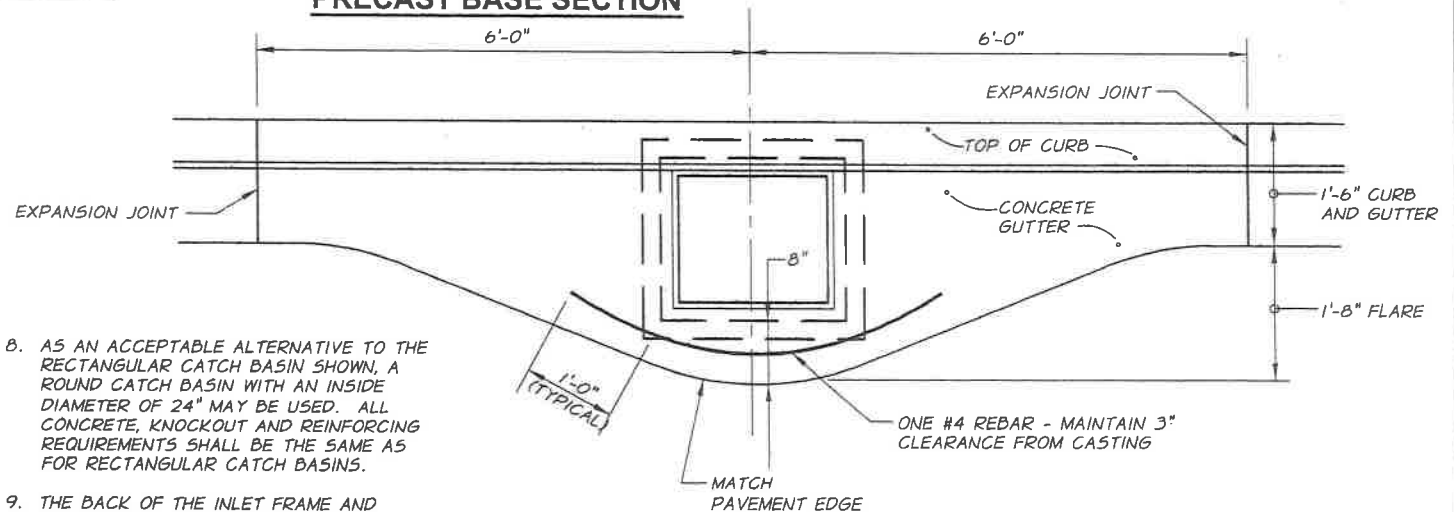
### PIPE ALLOWANCES WITH PIPE ENTERING AT 90°

PIPE MATERIAL	MAXIMUM INSIDE DIAMETER
REINFORCED OR PLAIN CONCRETE	12"
ALL METAL PIPE	15"
GPSSP* (WSDOT STD SPEC 9-05.20)	12"
SOLID WALL PVC (WSDOT STD SPEC 9-05.12(1))	15"
PROFILE WALL PVC (WSDOT STD SPEC 9-05.12(2))	15"

\* CORRUGATED POLYETHYLENE STORM SEWER PIPE

## GENERAL NOTES

1. MINIMUM CATCH BASIN REINFORCEMENT IS SHOWN. WIRE MESH REINFORCEMENT HAVING A MINIMUM AREA OF 0.12 IN<sup>2</sup>/FT MAY BE ALLOWED ON A CASE BY CASE BASIS.
2. THE KNOCKOUT DIAMETER SHALL NOT BE GREATER THAN 20". KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MINIMUM TO 2.5" MAXIMUM. PROVIDE A 1.5" MINIMUM GAP BETWEEN THE KNOCKOUT WALL AND THE OUTSIDE OF THE PIPE. AFTER THE PIPE IS INSTALLED, FILL THE GAP WITH JOINT MORTAR.
3. THE MAXIMUM DEPTH FROM THE FINISHED GRADE TO THE LOWEST PIPE INVERT SHALL BE 5'.
4. THE PRECAST BASE SECTION MAY HAVE A ROUNDED FLOOR, AND THE WALLS MAY BE SLOPED AT A RATE OF 1:24 OR STEEPER.
5. THE OPENING SHALL BE MEASURED AT THE TOP OF THE PRECAST BASE SECTION.
6. ALL PICKUP HOLES SHALL BE GROUTED FULL AFTER THE BASIN HAS BEEN PLACED.
8. AS AN ACCEPTABLE ALTERNATIVE TO THE RECTANGULAR CATCH BASIN SHOWN, A ROUND CATCH BASIN WITH AN INSIDE DIAMETER OF 24" MAY BE USED. ALL CONCRETE, KNOCKOUT AND REINFORCING REQUIREMENTS SHALL BE THE SAME AS FOR RECTANGULAR CATCH BASINS.
9. THE BACK OF THE INLET FRAME AND GRATE SHALL BE PLACED 1-INCH BELOW THE NORMAL FLOW LINE OF THE GUTTER. THE GUTTER SECTION SHALL BE FORMED AND SLOPED 2' ON THE UPSTREAM AND DOWNSTREAM SIDES OF THE CATCH BASIN TO ACCOMMODATE THE LOWERED INLET FRAME AND GRATE.



## CATCH BASIN PLACEMENT

PLAN VIEW

CITY OF  
DAYTON

CATCH BASIN

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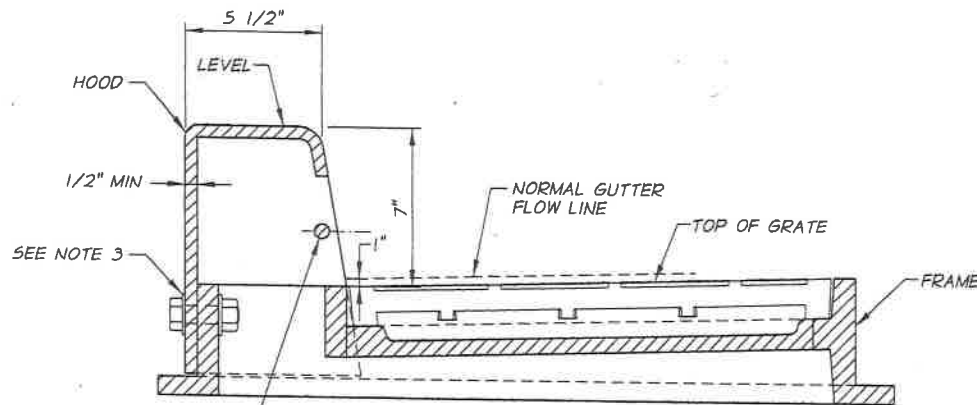
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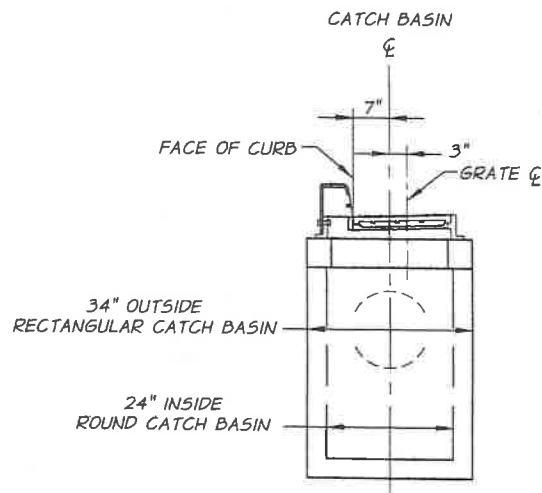




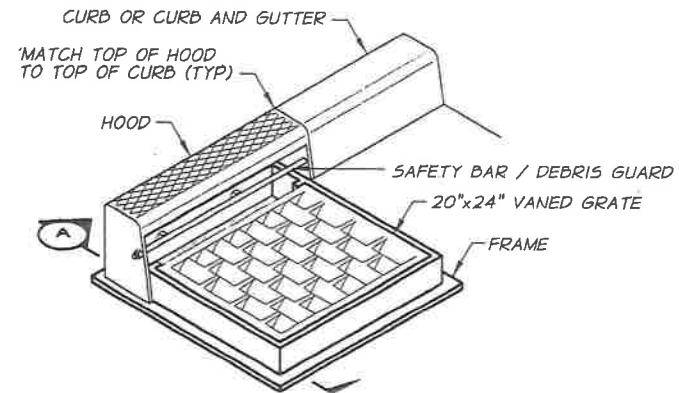
**DETAIL SECTION A**

**GENERAL NOTES**

1. THE DIMENSIONS OF THE FRAME AND HOOD MAY VARY SLIGHTLY AMONG DIFFERENT MANUFACTURERS. THE FRAME MAY HAVE CAST FEATURES INTENDED TO SUPPORT A GRATE GUARD. HOOD UNITS SHALL MOUNT OUTSIDE OF THE FRAME. THE METHODS FOR FASTENING THE SAFETY BAR / DEBRIS GUARD ROD TO THE HOOD MAY VARY. THE HOOD MAY INCLUDE CASTING LUGS. THE TOP OF THE HOOD MAY BE CAST WITH A PATTERN.
2. ATTACH THE HOOD TO THE FRAME WITH TWO 3/4"x2" HEX HEAD BOLTS, NUTS, AND OVERSIZE WASHERS. THE WASHERS SHALL HAVE DIAMETERS ADEQUATE TO ASSURE FULL BEARING ACROSS THE SLOTS.
3. ONLY DUCTILE IRON VANED GRATES SHALL BE USED. SEE STANDARD PLAN 5-3 FOR GRATE DETAILS.



**SECTION A**



**FRAME, HOOD, AND VANED GRATE**

ISOMETRIC VIEW

**CITY OF  
DAYTON**

**COMBINATION INLET**

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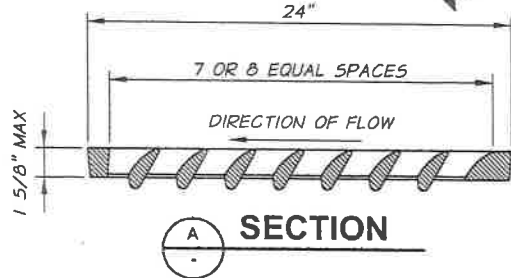
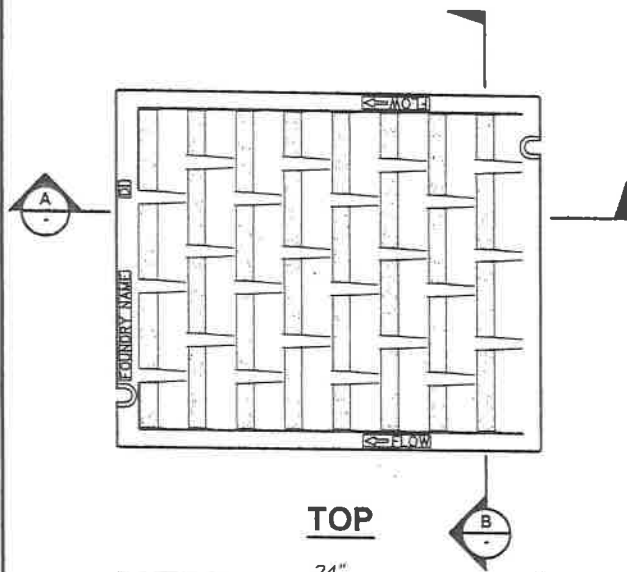
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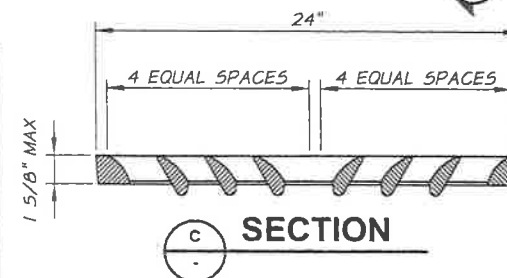
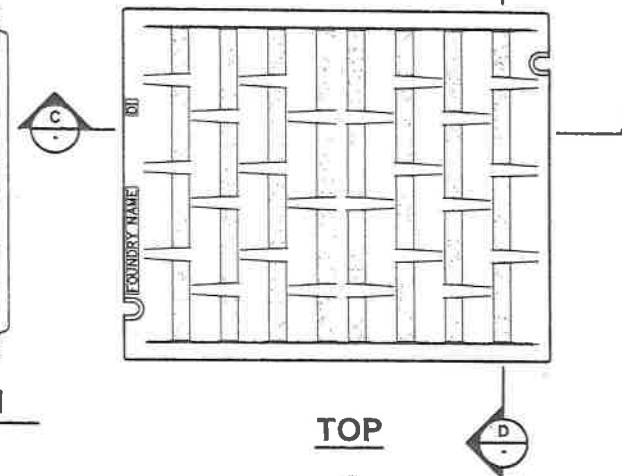
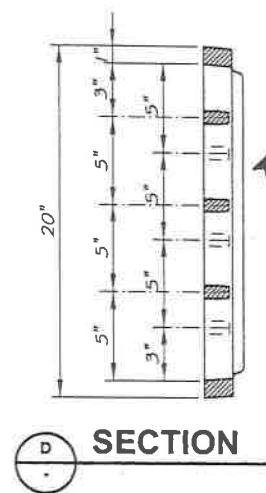
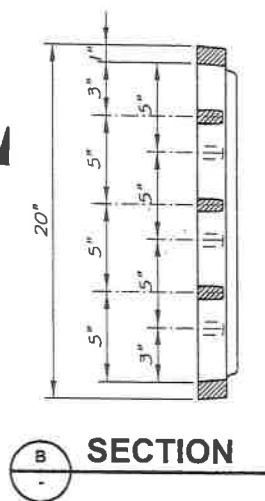
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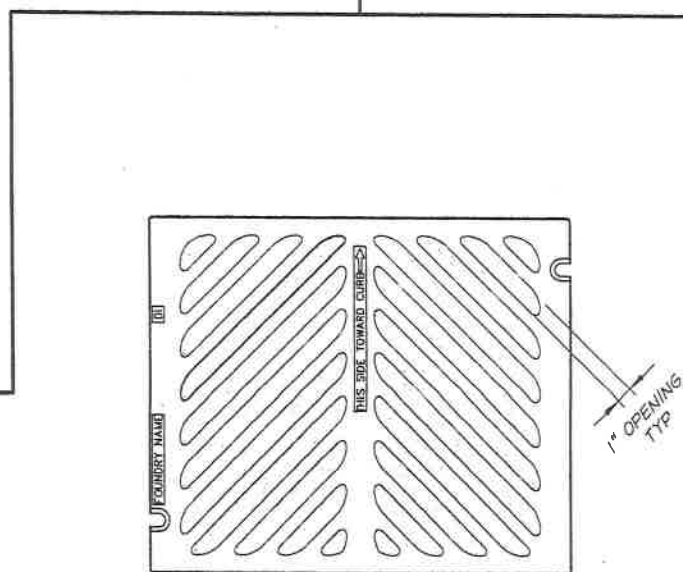
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**RECTANGULAR SINGLE  
DIRECTIONAL VANED**



**RECTANGULAR  
BI-DIRECTIONAL VANED**



**RECTANGULAR HERRINGBONE**

**NOTE:**

GRATE TYPE SHALL BE DESIGNED FOR THE PARTICULAR APPLICATION, BI-DIRECTIONAL VANED GRATE SHALL BE USED AT LOW POINTS IN CURB LINE. THE SINGLE DIRECTIONAL VANED GRATE SHALL BE USED WHERE SLOPE DIRECTION OF CURB DOES NOT CHANGE (FLOW THROUGH), HERRINGBONE GRATE SHALL BE USED WHEN CATCH BASIN IS NOT LOCATED IN CURB FLOW LINE.

**CITY OF  
DAYTON**

**CATCH BASIN GRATES**

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03-23-09  
REVISION DATE

*[Signature]*  
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## **APPENDIX**

**RESOLUTION NO. 1256**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF DAYTON, WASHINGTON, AMENDING DEVELOPMENT STANDARDS, SPECIFICATIONS AND STANDARDS PLANS FOR THE CITY OF DAYTON, ADDING TWO NEW SECTIONS "VEGETATION SIGHT DISTANCE AND CLEARANCE STANDARDS" AND "DEVIATIONS FROM STANDARDS".**

**WHEREAS**, this resolution amends the City of Dayton Development Standards, Specifications and Standards Plans adopted by Resolution 1160 and amended under Resolutions 1077, 1177, 1210 and 1236.

**WHEREAS**, the "Development Standards" Chapter of the Development Standards, Specifications and Standards Plans is amended, adding new sections "Vegetation Sight Distance and Clearance Standards" and "Deviations from Standards".

**WHEREAS**, the purpose of the amendment to the City of Dayton Development Standards, Specifications and Standards Plans is twofold:

- a. Establish vegetation clearance in right-of way, streets, sidewalks and sight triangles, and
- b. Establish a review process for deviation from Development Standards, Specifications and Standards Plans

**WHEREAS**, the adoption of "Vegetation Sight Distance and Clearance Standards" will establish measures for safety of both drivers of moving vehicles and pedestrians.

**WHEREAS**, the process to allow for deviation from City of Dayton Development Standards, Specifications and Standards Plans will provide the City with a means to consider alternative designs, new technologies and/or special circumstances when considering development which include plans for city infrastructure improvements.

**WHEREAS**, this amendment was identified as Docket Item DR14-005 as part of a series of amendments considered by the City under the umbrella of the 2014 Comprehensive Plan and Development Regulations Update. The final docket was approved by the City Council on Nov. 24, 2014 at their regularly scheduled meeting. The docketed items address Comprehensive Plan Policies, Text, Subarea Plans and Maps; Zoning Code and Maps; Critical Areas Codes and Maps; and City of Dayton Development Standards, Specifications and Standards Plans amendments.

**WHEREAS**, the City was the lead agency as defined in the State Environmental Policy Act (SEPA) and issued a threshold determination of non-significance (DNS) on Dec. 1, 2014, stating that the series of amendments with the 2014 Comprehensive Plan and Development Regulations Update would not have a probable significant impact on the environment. The comment and appeal period ended on December 18, 2014.

**WHEREAS**, public outreach to the community was performed. The public was invited to submit individual docket applications. Newspaper notice, notice to agencies, tribes and community groups; and posting of notice and docket items on the City website and City Hall was accomplished. Key stakeholders identified by the jurisdiction were also invited, to review and comment on the amendments.

**WHEREAS**, the Dayton Planning Commission conducted a public meeting on Nov. 18, 2014 where they were presented the draft amendments to the City of Dayton Development Standards, Specifications and Standards Plans. On behalf of the City Council, they held public hearings on Dec. 16 2014, Jan. 6, 2015 and Jan.16, 2015 regarding the amendments; and considered alternative standards adopted by other jurisdictions, written correspondence and testimony submitted prior to the close of the public hearings.

**WHEREAS**, the Dayton Planning Commission serves the City Council making advisory recommendation to the Dayton City Council in the matters of land use, plans, policies, codes and standards. After the close of the public hearings, on January 20, 2015, the Dayton Planning Commission recommended to the Dayton City Council, the addition of these two new Development Standards, Specifications and Standards Plans sections titled, "Vegetation Sight Distance and Clearance Standards" and "Deviations from Standards".

**WHEREAS**, the Dayton City Council recognizes the Dayton Planning Commission's abilities to provide sound advice, together with providing the greatest possible benefits for the citizens of Dayton; and,

**NOW, THEREFORE**, the City Council of the City of Dayton, Washington does hereby resolve as follows:

**Section 1.** The Development Standards, Specifications and Standards Plans, adopted by Resolution 1160 and amended under Resolutions 1077, 1177, 1210 and 1236, is hereby amended adding two new sections "Vegetation Sight Distance and Clearance Standards" and "Deviations from Standards" to the Development Standards Chapter as stated in Sections 2 and 3 below..

Section 2. Development Standards New Section, "Vegetation Sight Distance and Clearance Standards":

## **2.8 Vegetation Sight Distance and Clearance Standards**

### **2.8.1. Road and Sidewalk Clearance Standards**

*2.8.1.1 Vegetation that is a hazard to pedestrians or vehicular traffic by reducing visibility, obstructing travel, or posing any other safety risk shall be maintained to reduce the hazard.*

#### **2.8.1.2 Sidewalk Clearance Standard**

*Sidewalks and designated areas for pedestrian travel shall be cleared of overhead vegetation. The minimum height for overhead vegetation is 7-9 feet above the sidewalk, and will be considered a trigger for management activities. Trimming may be deferred if trimming will cause a reduction in tree health.*

#### **2.8.1.3 Roadway Clearance Standard**

*Streets and roadways for vehicular traffic shall be cleared of overhead vegetation. The minimum height for overhead vegetation is 14 feet above travel lanes and 12-14 feet above street side of the curb. These heights are the trigger for management, pruning and trimming activities. Trimming may be deferred if trimming will cause a reduction in tree health.*

#### **2.8.1.4 Utility Clearance Standards**

*This type of pruning is generally conducted by utility companies to maintain the integrity and safety of utility lines. The general rule is to maintain vegetation at least 10 feet from utility lines.*



*Figure 2.8.1.4 Typical pruning methods to maintain vegetation at least 10 feet from utilities*

### **2.8.2 Proper Sight Distance Standards**

#### **2.8.2.1 General Sight Distance Standards:**

- a. Provide safe sight distance for vehicles entering roadways from, side roads, driveways, parking lots, and alleys.*
- b. Promote low-growing vegetation in areas that require adequate sight distance for safety, primarily inside corners, driveways, and intersections.*
- c. Prune or remove vegetation that obstructs motorist or pedestrian view of traffic signs and signals, street lights and name signs, or other safety fixtures or marking placed in the public right-of-way.*

- d. *Prune for safety and visibility first, tree health and aesthetics second.*
- e. *Prune or remove vegetation that obstructs access to use of any public facility.*

2.8.2.2 *Intersections*

- a. *No vegetation obscuring sight triangle.*
- b. *Prune tree limbs to minimum of 10 ft. over sidewalks when practicable and does not reduce overall tree health.*
- c. *Prune tree limbs to minimum of 14 ft. above travel lanes and 12-14 feet above street side of the curb.*
- d. *No vegetation other than trees shall exceed 30" in height.*
- e. *Maintain safe sight distance for pedestrians and vehicle traffic by pruning or removing trees and other obstructing vegetation.*

2.8.2.3. *Inside Corners*

- a. *No vegetation obscuring an inside corner sight triangle.*
- b. *Prune existing tree limbs to a minimum of 10 ft. height at inside corners when practicable and does not reduce overall tree health.*
- c. *Trees should not be planted within inside corners to maintain safe sight distances.*
- d. *Maintain safe sight distance for pedestrians and vehicle traffic by pruning or removing trees and other obstructing vegetation.*
- e. *Inside corners shall have no vegetation exceeding 30" in height, or below 10 feet in height.*

2.8.2.4. *Sight Triangle provisions of Section 2.8 shall not apply to:*

- a. *Buildings which were existing prior to passage of the ordinance codified in this Code;*
- b. *Public utility poles;*
- c. *Trees, so long as they are not planted in the form of a hedge and are trimmed to the trunk to a height per Section 2.8, so as to leave, in all seasons, a clear and unobstructed cross view;*
- d. *Official warning signs or signals;*
- e. *Properties where the existing contour of the ground penetrates above the maximum two and one-half (2-1/2) feet height limitation*
- f. *Fences, landscaping, signage and structures on private property in compliance with Title 11 Zoning Code "Vision clearance area requirements".*

2.8.2.5 *Sight Triangle Definitions*

a. *Intersection Types:*

- 1) *All-way Stop Controlled.* *This is the same as a 4-way Stop, except that it applies equally to intersections with three, four, five or more intersecting streets. It means that all vehicles must come to a complete stop before entering the intersection and that they yield to other vehicles that have the right of way.*

- 2) Four-way Stop controlled. This is the traditional four leg intersection where traffic on all four legs come to a complete stop before entering the intersection and that they yield to other vehicles that have the right of way.
  - 3) Two-way Stop controlled. This is the traditional intersection of at least two streets where the traffic on one street is required to stop while traffic on the other does not stop.
  - 4) Uncontrolled Intersection. This is the typical neighborhood street intersection, where traffic volumes are low and traffic on neither is given the right of way over the other. The basic rule of driving governs traffic entering the intersection.
- b. Sight Triangle Dimensions
- 1) Uncontrolled Intersections. At uncontrolled intersections, the Sight Triangle shall be formed by measuring from the intersection of the extended curb line or the traveled right-of-way (if no curbs exist) of the adjacent street to a distance of fifty (50) feet from the corner point. The third side of the triangle is the straight line connecting the two (2) fifty (50) foot sides. See Figure 2.8.2.4.b.1) below for Uncontrolled Intersection.

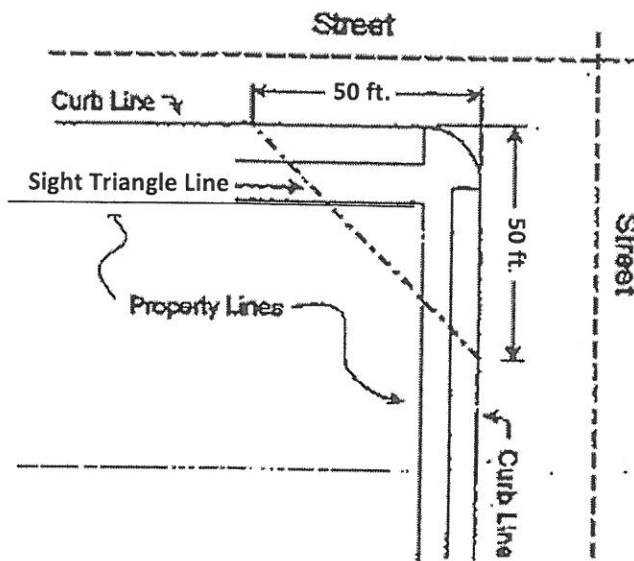
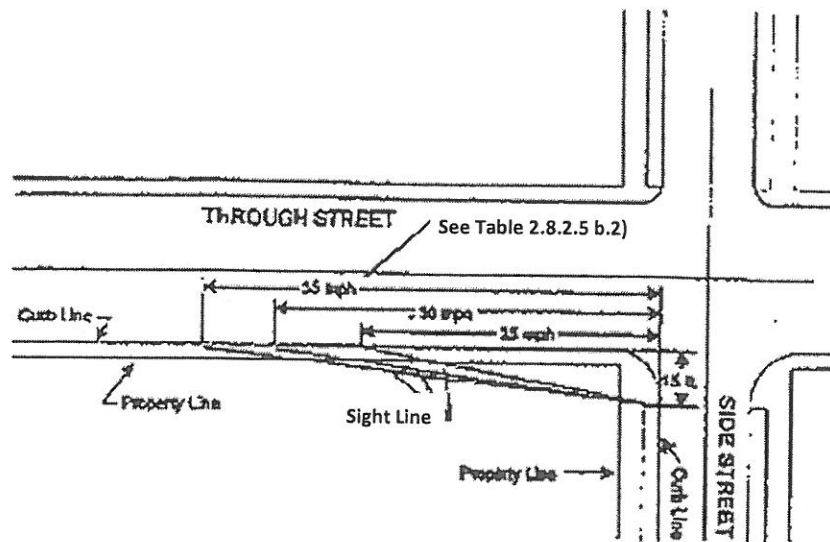


Figure 2.8.2.5.b.1) - Uncontrolled Intersection.



**Table 2.8.2.5.b.2) Controlled Intersection Major Street Distances**

Posted Speeds (MPH)	Distance along Curbline
25	85 feet
30	110 feet
35	130 feet



Resolution No. 1256 – Amending Development Standards  
02/09/2015

3) Other Intersections and Corners:

- Signalized Intersections;
- All-way stop controlled Intersections;
- Alley with Public Right-of-Way Intersections; and
- Driveway with Public Right-of-Way Intersections.

I. All such intersections shall maintain a sight triangle. The sides of the triangle forming the corner angle shall be fifteen (15) feet measured along the extended curb line (or the traveled right-of-way if no curbs exist) and along the edge of the driveway or alley. The third side of the triangle is the straight line connecting the two (2) fifteen (15) foot sides.

II. The area between the triangle and the edge of the traveled right-of-way of the street shall also be kept clear of visual obstructions.

III. Intersection, illustrates the requirements of this Section.

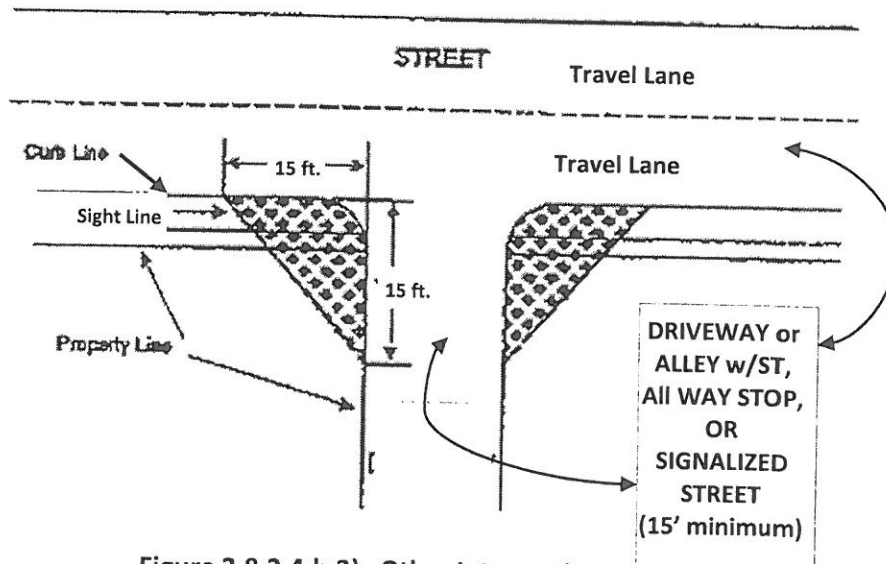


Figure 2.8.2.4.b.3) Other Intersections

### **Section 3. Development Standards New Section, "Deviation from Standards":**

#### **2.9 Deviation from Standards**

##### **2.9.1 Purpose:**

It is the intent of these design standards to allow the design professional maximum latitude in the design of facilities within the City while keeping within the realm of acceptable design practice. In order to provide this latitude, it is recognized that there is a certain amount of discretion inherent in implementing standards. The Mayor or his designee shall make the final determination of the adequacy of the design parameters and standards employed on a particular project.

##### **2.9.2 Process:**

2.9.2.1 The Request for a Deviation from Standards shall be in writing and state the nature of the request, why the deviation is necessary and identify both adverse and beneficial impacts. The deviation shall include supporting calculations demonstrating how the request meets the intent of the City Development Standards, references for resource materials pertinent to the request and other supporting documents.

2.9.2.2. The City may require that an engineering analysis of alternatives be submitted prior to issuing a decision.

2.9.2.3. The Request for Deviation from Standards shall be signed and sealed by a professional engineer qualified in the area of expertise.

2.9.2.4. The Mayor or his designee shall consult with the City's Public Works Director, contracted engineering firm and Planning Director and may consult with other agencies determined to have expertise prior to completing a review and issuing a final written decision on the deviation request.

##### **2.9.3 Justification:**

Deviations from these Standards may be granted by the Mayor or his designee in writing upon written evidence from the Project Sponsor that:

2.9.3.1 Sufficient documentation has been submitted to issue a decision, and

2.9.3.2 The proposed deviation will not result in non-compliance with development conditions imposed upon a project by Public Works, Planning Department, Building Department, Hearing Examiner and/or City Council, and

2.9.3.3 The deviation will not otherwise result in non-compliance with any other applicable code.

2.9.3.4 Deviations are based upon sound engineering principles, and

2.9.3.5 Deviations meet requirements for safety, function, appearance, environmental protection, and maintainability. Public safety outweighs economic feasibility and physical constraints, and

2.9.3.6 The deviation will produce a compensating or comparable result that is in the public interest, and

2.9.4 Application:

2.9.4.1 The Request for a Deviation from Standards shall be in writing, and state:

- a. The nature of the request,
- b. The proposed deviations,
- c. Standard(s) to be varied,
- d. Why the deviation is necessary,
- e. Identify both adverse and beneficial impacts,

2.9.4.2. The deviation shall include:

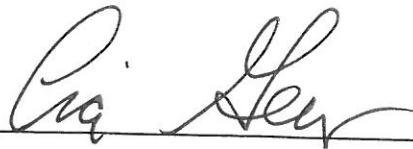
- a. Supporting calculations demonstrating how the request meets the intent of the City Development Standards,
- b. References for resource materials pertinent to the request and other supporting documents.

2.9.4.3 The City may require that an engineering analysis of alternatives be submitted prior to issuing a decision.

2.9.4.4 The City shall require that the Request for Deviation from Standards be signed and sealed by a professional engineer qualified in the area of expertise.

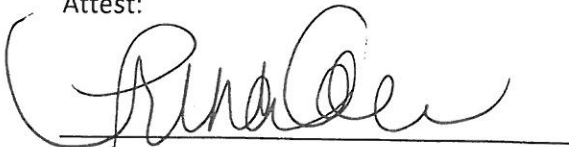
2.9.4.5 Sufficient funds to cover estimated hourly review costs for the City contracted engineering firm. Unused funds will be reimbursed to the person named in the application submittal.

**PASSED** by the City Council of the City of Dayton, Washington this <sup>9TH</sup> 1 day of February, 2015.



Craig George, Mayor

Attest:



Trina Cole, City Clerk-Treasurer

## RESOLUTION NO. 1236

### **A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF DAYTON, WASHINGTON, REPEALING THE FEE SCHEDULE ADOPTED IN RESOLUTION NO. 1177 AND ADOPTING A NEW FEE SCHEDULE FOR LAND USE APPLICATIONS, REVIEWS AND PROCESSING.**

**WHEREAS**, the City is authorized under RCW 35A.11.020 and RCW 35A.63.100 to impose fees to recoup costs of processing and/or providing services; and

**WHEREAS**, the City has established a schedule of fees for certain land use applications and/or permits processed by the City of Dayton Planning Department; and,

**WHEREAS**, the City last reviewed and updated said Fee Schedule on December 21, 2009; and,

**WHEREAS**, certain costs to the City including direct costs associated with processing individual land use project applications have increased so that the current Fee Schedule does not adequately reflect the fiscal burden of the City; and,

**NOW, THEREFORE**, the City Council of the City of Dayton, Columbia County, Washington, hereby resolves as follows:

Section 1. Repealed. The Fee Schedule attached as Exhibit "A", City of Dayton Resolution No. 1177, is hereby repealed in its entirety effective January 14, 2014.

Section 2. Fee Schedule. The City of Dayton hereby adopts the "CITY OF DAYTON, FEE SCHEDULE FOR LAND USE APPLICATIONS, REVIEWS AND PROCESSES" as attached hereto, identified as Exhibit "B", and hereby incorporated in full by this reference, for the various Land Use Related Permits and Actions.


Section 3. Severability. If any section, sentence clause or phrase of this resolution should be held to be invalid or unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any other section, sentence, clause or phrase of this resolution.

Section 4. Effective Date. The Fee Schedule adopted by this resolution shall be effective January 14, 2014. Any act consistent with the authority and prior to the effective date of the resolution is hereby ratified and confirmed.

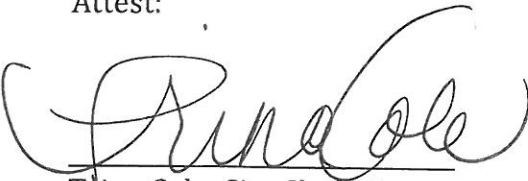
Section 5. Savings Clause. Resolution No. 1177 which is repealed by this resolution, shall remain in full force and effect until the effective date of the Resolution, and shall remain in full force and effect in the event this resolution is invalidated in its entirety.

PASSED BY THE CITY COUNCIL OF THE CITY OF DAYTON, COLUMBIA COUNTY,  
WASHINGTON, this 13<sup>th</sup> day of JANUARY, 2014.

City of Dayton

  
\_\_\_\_\_  
Craig George, Mayor

Attest:

  
\_\_\_\_\_  
Trina Cole, City Clerk-Treasurer

# CITY OF DAYTON FEE SCHEDULE\*

## LAND USE APPLICATIONS/REVIEWS/PROCESSING

GENERAL PROCESSING	
Pre-Application Meeting	\$100 review/meeting - If a land use application is filed within 6 months of the pre-application meeting date, this fee will be credited to the land use application. (Credit <u>cannot</u> be awarded to a building permit application)
Zoning Certification Letter	\$75
Open Record Hearing	Application fee plus Hearing Examiner costs
Closed Record Appeal	\$100 plus Hearing Examiner costs
Reconsideration	\$50 for administrative decision or if applicable additional Hearing Examiner costs.
NOTICE	
Notice Board - Posting on-site	Applicant's Responsible for purchase of sign and installation
STATE ENVIRONMENTAL POLICY ACT (SEPA) & ENVIRONMENTAL REVIEWS	
Categorical Exemption Documentation	\$ 50 – only if written letter requested
Threshold Determination - DNS/MDNS/DS	\$400
Critical Area Review or Special Study Review (such as – flood hazard, wetland, riparian area, landslide, seismic and critical aquifer)	\$250 for each Critical Area Review or Study Review plus City consultant costs, if required
Special Studies Review: Traffic, Shoreline, Noise and other	\$250 for each Study - plus City consultant costs, if required
EIS ( <i>Environmental Impact Statement</i> )	Cost Agreement as determined
LAND USE APPLICATIONS	
Rezone	\$500 plus \$25 per acre & hearing examiner costs
Minor Variances: 10% or Less for Zoning and Critical Area Ordinance (CAO)	\$150 plus CAO or special study review as needed
Variance	\$200 plus Hearing Examiner costs
Conditional Use Permit	\$250 plus Hearing Examiner costs
Essential Public Facility	\$250 plus Hearing Examiner costs
Site Development Plan	\$350 non-residential
Mobile / Manufactured Home Park	\$400 plus \$25 each space, Hearing Examiner costs & city engineering consultant costs
Minor Site Plan modification	\$100
Reasonable Use Exception	\$200 plus Hearing Examiner costs
Public Agency and Utility Exception	\$200 plus Hearing Examiner costs
Administrative Interpretations	\$100
Sign Permit – Planning/Sign Code compliance review	\$20 (each review) plus building code review fees

CITY OF DAYTON FEE SCHEDULE\*  
LAND USE APPLICATIONS and PERMITS Cont.

<b>ENGINEERING</b>	
Permit Review	City engineering consultant costs
Surface Water Management Standards Variances	\$100 plus City engineering consultant costs
Alternative Design for Streets	\$100 plus City engineering consultant costs
Street Easements & Vacations:	\$200
<b>LAND DIVISION</b>	
Subdivision Preliminary	\$400 plus \$ 25 for each lot, City engineering consultant costs & Hearing Examiner costs
Major Preliminary Plat Revisions	\$250 plus \$ 25 for each new or revised lot, City engineering consultant costs & Hearing Examiner costs
Subdivision Final	\$250 plus City engineering consultant costs
Short Plat Preliminary	\$400 plus City engineering consultant costs
Short Plat Final	\$100 plus City engineering consultant costs
Boundary Line Adjustment/ Lot Merger	\$50
Plat Vacations and Alterations	\$200 plus City engineering consultant costs & Hearing Examiner costs
<b>SHORELINE MANAGEMENT</b>	
Shoreline Management Re-Designation	\$500 plus \$25 per acre & Hearing Examiner costs
Shoreline Exemption	\$75
Shoreline Substantial Development Permit (SSDP)	\$250
Minor revisions to SSDP	\$100
Shoreline Conditional Use Permit	\$250 plus Hearing Examiner costs
Shoreline Variance	\$250 plus Hearing Examiner costs
<b>COMPREHENSIVE PLAN AMENDMENT (CPA)</b>	
CPA Text Amendment	\$200 per policy
CPA Map	\$200 per designation & plus mapping costs
Development Code Text Amendment	\$200 per Code Section
Zoning Map Amendment (only with a CPA Map Change)	\$200 per zone plus mapping costs
Development Agreement	Cost Agreement as determined
Annexation	\$300 plus mapping and city engineering costs

\* The Mayor or his designee may waive or reduce fees, if such waiver or reduction is justified by the applicant.



**RESOLUTION NO. 1210**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF DAYTON,  
COLUMBIA COUNTY, WASHINGTON AMENDING THE 2008 CITY OF  
DAYTON, WASHINGTON DEVELOPMENT STANDARDS, SPECIFICATIONS  
AND STANDARD PLANS**

**WHEREAS**, the City recognized the need to update the 2008 Development Standards, Specifications, and Standard Plans for development and improvements to the City's street, water, wastewater and storm water systems; and,

**WHEREAS**, Anderson Perry & Associates assisted in creating the City of Dayton, Washington Development Standards, Specifications, and Standard Plans modifications; and


**WHEREAS**, the Public Works Director has reviewed and recommends adoption of the 2008 City of Dayton, Washington Development Standards, Specifications, and Standard Plans modifications.

**NOW, THEREFORE, BE IT RESOLVED, BY THE CITY COUNCIL OF  
THE CITY OF DAYTON, COLUMBIA COUNTY, WASHINGTON:**


Section 1. The 2008 City of Dayton, Washington Development Standards, Specifications, and Standard Plans for development and/or improvements to the City's street, water, wastewater and storm water systems shall be amended as provided in Exhibit "A".

Section 2. The Public Works Director or his designee shall review and approve all plans and specifications before approval of any development or improvement project.

**PASSED** by the City Council of the City of Dayton, Washington on this 9<sup>TH</sup> day of APRIL, 2012.

  
\_\_\_\_\_  
Craig George, Mayor

Attest:

  
\_\_\_\_\_  
Trina Cole, City Clerk-Treasurer

## **Site Plan Application Placeholder**

## **SEPA Checklist Placeholder**

## **Shorelines Permit Application Placeholder**

## **Short Plat Application Placeholder**

## **Preliminary Long Plat Application Placeholder**

**Boundary Line Adjustment  
Application Placeholder**

**Flood Hazard Development Permit  
Application Placeholder**



## **Critical Area Permit Application Placeholder**

## CONSTRUCTION EASEMENT (EXAMPLE)

For and in consideration of the performances to be rendered by the City as stated herein \_\_\_\_\_ who reside at \_\_\_\_\_, as the Grantors, do hereby grant and convey unto the City of Dayton, a Municipal Corporation of the State of Washington, a construction easement on the terms and conditions stated below;

1. The portion of the Grantor's property subject to this easement is 10 feet wide along the entire portion of the property adjacent to South Third Street.
2. This easement is granted for the following purposes:
  - a. The City, its representatives, and contractors may use the easement as a work area as necessary and incidental to the construction of a new sidewalk adjacent to the easement; and
  - b. The City, its representatives, and contractors are granted the right to permanently regrade the ground surface within the easement area to match the new sidewalk elevation and to reconstruct driveways, walkways, and steps as may be necessary to match the new sidewalk elevation.
3. The rights herein granted to use the easement area as a work area for construction shall terminate on November 1, 2008.
4. Subject to the right of the City to permanently regrade the ground surface and reconstruct driveways, walkways, and steps as may be necessary to match the new sidewalk elevation, the City shall not later than November 1, 2008, repair any damage caused to the easement property caused by the City, its representatives, or contractors as a result of the use of the area as a work area in connection with the City's sidewalk reconstruction project.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 2008.

Signed: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**DEVELOPER'S**

**CERTIFICATION OF PROJECT**

**Governing  
Jurisdiction:**

**City of Dayton**

111 S. First Street  
Dayton, WA 99328

Phone: (509) 382-2361

Fax: (509) 382-2539

**Project Name:**

**Project Location:**

I was the design engineer/developer on the above-referenced project and I, or my authorized representative, did supervise and inspect the construction.

I certify that such construction was inspected and found to be in accordance with the plans and specifications, including any changes therein approved by the City of Dayton.

Supplemental inspections were made by:

\_\_\_\_\_

\_\_\_\_\_  
Developer/Engineer's Signature

\_\_\_\_\_  
Date

**Attach copies of all inspection reports.**

**DEVELOPER'S**

**WARRANTY OF PROJECT**

**Project Name:** \_\_\_\_\_

**Project Location:** \_\_\_\_\_

The Developer herein listed hereby guarantees all material and equipment furnished, and work performed in relation to the listed project, against any defect in materials or workmanship which becomes evident within **one year** after the acceptance of the work by the City

A warranty bond or cash deposit in the amount of \$\_\_\_\_\_ has been submitted to the City of an amount which equals twenty-five (25) percent of the value of the improvements as determined by the City.

Said surety shall remain in full force and effect during the one-year warranty period and correction of any faulty work or materials shall be promptly executed by the developer, or, if corrected by the City, shall be the responsibility of the surety.

**City of Dayton**

111 S. First Street  
Dayton, WA 99328  
(509) 382-2361  
(509) 382-2539

**Developer:**

\_\_\_\_\_  
Signature of City's Representative

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

\_\_\_\_\_  
Signature of Developer's Representative

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE					DATE		NO.	
SECTION 1 – REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS <i>(This section will be initiated by the Contractor)</i>								
TO ENGINEER/CITY:			FROM CONTRACTOR:		PROJECT		CHECK ONE: <input type="checkbox"/> THIS IS A NEW TRANSMITTAL <input type="checkbox"/> THIS IS A RESUBMITTAL OF TRANSMITTAL	
ITEM No.	DESCRIPTION OF ITEM SUBMITTED <i>(Type, size, model number, etc.)</i>	MRG. OR CONTR. CAT. CURVE DRAWING OR BROCHURE NO.	No. OF COPIES	CONTRACT REFERENCE DOCUMENT		COMMENTS		
				SPEC. SECTION NO.	DRAWING SHEET NO.			
REMARKS					I certify that the above-submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated.			
					_____ NAME AND SIGNATURE OF CONTRACTOR			