

City of Pullman
DESIGN STANDARDS
2018 EDITION

Adopted by City Council

September 11, 2018
Ordinance No. 18-19

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A. GENERAL

1. Purpose. The purpose of these Standards is to provide developers and designers with a guideline for construction of improvements which are of adequate capacity and life span, can be reasonably maintained, and are aesthetically acceptable to the general public, while allowing freedom to use alternate or innovative materials and methods of construction.

Alternate design standards will be accepted when it can be shown to the satisfaction of the Director of Public Works (hereinafter referred to as the "Director") that the alternate design will meet the intent of these Standards. The Director will consider appearance, durability, ease of maintenance, public safety, and other appropriate factors in evaluating proposals.

In some locations, compliance with these Standards may impose a hardship due to existing development or unusual topography. In such locations, the Director may accept alternate standards.

2. Scope. These Standards shall apply to all improvements within the public right of way, to all improvements within the proposed public right of way of new subdivisions, for all improvements intended for maintenance by the City, and for all other improvements for which the City Code requires approval from the Director.
3. Standard Specifications. Standard Construction Specifications, which include Standard Drawings, have been adopted by the City of Pullman. The Standard Specifications and Standard Drawings should be used in the design and construction of improvements intended for public use and/or maintenance in the City of Pullman. Where improvements are not covered by these Design Standards nor by the Standard Specifications nor by the Standard Drawings, the Director shall establish appropriate standards.
4. Project Plans. Plans for public improvements shall be submitted on sheets not larger than 24 x 36 inches. Plan sheets larger than 11x17 inches shall be permanent, reproducible copies (ink on Mylar or similar). The use of City of Pullman Standard Symbols (see Attachment No. 8) is encouraged. Where other symbols are used, each plan sheet must include a legend defining the symbols used. In general, a minimum horizontal scale of 1 inch = 40 feet with a 10:1 profile vertical scale exaggeration is preferred for plans of proposed improvements in the public right of way.
5. Engineer Certification of Plans. Plans for major improvements in the public right of way shall bear the stamp and signature of an engineer licensed to practice in the state of Washington and qualified for the work being performed. The designer shall submit calculations or other appropriate materials supporting the design of utilities, pavements, and storm drainage. The designer shall submit calculations for structures and other designs when requested by the Director.

6. Permits. All work requiring the disruption of the City rights of way as defined in the Pullman City Code, Title 11, require a right-of-way disturbance permit prior to the start of work. This requirement will also apply to development that has received plan approval from Public Works where such development will impact existing City right of way.
7. Easements. No easements (water, sewer, storm, or other utilities) will be allowed to center on a property line without specific approval of the Director. The easement must normally be located exclusively on one side of a property line. For major utility mains, easements shall be improved to provide vehicular access capability for maintenance purposes, as required by the Director.
8. Performance and Warranty Guarantees. Warranty Guarantees will be required for all public works improvements in new subdivisions which are constructed prior to acceptance by the City. Acceptable methods of guarantees will be as follows:
 - A) Maintenance Bond.
 - B) Certificate of Deposit
 - C) Letter of Credit
 - D) Cash Deposit.
 - E) Promissory Note Secured by a Deed of Trust

Documents for carrying out these methods shall be approved by the City.

- a. Performance. Performance Guarantees will be required as detailed in Pullman City Code, Plats and Subdivisions, Section 13.80.180.
- b. Warranty. A written warranty for the public works improvements, inclusive of streets, sidewalks, curbs, gutters, storm drains, sewer and water systems, erosion control and storm water and drainage systems, constructed or installed is required at the time of final acceptance by the City. Said warranty shall provide for the repair, replacement or maintenance of all public works improvements that will ultimately be the responsibility of the City. Such repair, replacement or maintenance shall be to the City Standards under which the work was approved. For all public works improvements, the warranty shall be for a minimum of one year.

The warranty amount shall be ten percent (10%) of the documented final cost of the improvements. These funds may be used by the City in the event the owner or developer fails to make required corrections to failures or perform required maintenance as required by the City. These funds are not intended to cover the cost of major failures. Such failures will remain the responsibility of the owner or developer if they occur within the one year warranty period. At the end of the warranty period a final inspection will be made to determine if the Warranty can be released. Warranties will be released upon approval by the Director.

B. PROVIDING FOR FUTURE DEVELOPMENT

1. Meeting Regional Needs. All public improvements shall be designed as a logical part of the development of the surrounding area. Storm sewers and sanitary sewers shall be sized to

accommodate the entire drainage basin which they will ultimately serve. Water mains shall be designed and constructed to provide distribution and looping to adjoining systems. Arterial streets shall be developed to the extra widths indicated under "Streets." Utilities and street improvements shall be extended to the boundaries of the development for future extensions to the adjoining areas. The Director may require oversizing of utility lines to accommodate future growth of the City.

Where existing City utility lines do not adjoin the proposed development, the developer will be required to extend the lines to the development as necessary. Where existing roadway improvements do not extend to the proposed development, the developer may be required to improve the roadway, including sidewalks, to the development. Except as provided below, these extensions will be at no cost to the City.

2. Recovering Costs. When the improvements will also serve adjoining properties (e.g., extensions of existing utilities or improvements along the boundary of the development), a portion of the costs can be recovered from owners of the adjoining property by one of the following methods:
 - a. A private agreement between the various property owners;
 - b. A reimbursement district, requiring owners of adjoining property to pay an equitable share of the costs in the future at the time they connect to the improvements (requires City Council approval for formation of a reimbursement district);
 - c. A local improvement district, which authorizes the City to make the improvements and to distribute the costs to the benefited property owners, usually allowing up to ten years for repayment (requires City Council approval and, usually, agreement of more than 50 percent of the property owners).

3. City Participation in Cost. The City will share the cost of oversizing of improvements for public use in excess of the following, provided that the oversizing is for the purpose of meeting regional requirements exceeding the requirements of the specific project being developed:
 - a. water lines in excess of 8-inch diameter;
 - b. sanitary sewers in excess of 8-inch diameter;
 - c. storm sewers in excess of 12-inch diameter;
 - d. street widths in excess of 33 feet (curb face to curb face);
 - e. arterial street pavement structural sections in excess of minimums shown in Standard Drawings 2 and 3.

Some areas under development may be so large or so isolated that while oversizing is still appropriate, the oversizing would speak more to the needs of the overall area being developed rather than regional needs. In these cases a determination may be made by the Director that sharing in oversizing would not be appropriate.

The City's share of the cost of oversizing will be based only on the extra cost for materials caused by the oversizing. The City's share of cost for materials will be determined by the Director based on recent bids received by the City, price quotations from reputable suppliers,

and similar impartial information. Any agreement by the City to share the costs of oversizing is subject to availability of City funds, must be in writing, and must have the approval of the City Council. Any work not receiving City Council approval will not be eligible for City payment for oversizing. The City's participation in oversizing will be by one of the following methods:

- a. Method A: City constructs a portion of the improvement; developer constructs the remainder of the improvement. Apportionment of the construction to be determined in advance based on estimates by the Director.
 - b. Method B: Before start of construction, developer establishes an escrow account to cover developer's share of the costs. City constructs entire improvement using either City forces or contract, as appropriate. City uses escrow account to pay developer's share of cost. Upon completion, any funds remaining in the escrow account are returned to the developer.
 - c. Method C: Developer constructs all improvements, then bills City's share per prior agreement.
4. Deferred Construction. When projects are located remote to existing roadway improvements, portions of street work may be deferred to a later date to allow more orderly construction of a complete project. The developer will be required to provide security for the estimated cost of deferred work in an amount and form approved by the Director.

C. STREETS

1. Arterials. Arterial streets are designated and classified by the Arterial Street Plan and the Comprehensive Plan adopted by the City Council.
2. Design Speed. Streets shall be designed to the following minimum design speeds:
 - a. major arterials 40 mph
 - b. secondary arterials 35 mph
 - c. collector arterials 30 mph
 - d. all other through streets 25 mph
 - e. cul-de-sacs 20 mph
3. Street Width. All streets shall have a minimum width as shown in Pullman Standard Drawing 2 or 3, except as follows:
 - a. The width of arterial streets shall be as determined by the Director with a collector arterial minimum curb-to-curb width of 38 feet, and a minimum curb-to-curb width of 46 feet for other arterials.
 - b. Extra width may be required on arterials where necessary to provide turning lanes.
 - c. On designated bicycle routes, extra width and delineation may be required for bike lanes.

- d. It is the intent of the City to obtain full width street improvements on all newly constructed streets, regardless of the ownership of properties on each side of the street being proposed as part of a development. On proposed streets where only one side of the street is being developed, all reasonable options must be considered for obtaining a full width street. When the property not proposed for development, but adjacent to the required street, is owned by the developer of the subject project, it will be assumed that a full width street shall be installed. In cases where no practical options exist for obtaining a full width street, a phased approach to building the street may be approved, at the discretion of the Director. The first phase of development shall have a minimum of 2 inches of asphalt (thicker asphalt may be required on arterials) and a width of 24 feet. The design shall allow for widening and additional asphalt thickness at a future date if appropriate.
 - e. The Public Works Director may allow a deviation. Any deviation allowed must be consistent with good engineering practices and adopted long range plans of the City.
4. Street Cross-Section. Street cross section design shall comply with that set forth in the Standard Drawings.
- a. For all new public streets a soil profile drawing prepared by a geotechnical engineer licensed to practice in the state of Washington is required. The soil profile shall be created from either boring or test pit logs and will identify the underlying soil profile along the proposed street alignment. Based on the results of the soil profile the Director may require than an engineered street section design be provided.
 - b. Sections for all arterial streets and for streets in industrially and commercially zoned areas shall have greater pavement thickness than shown in the Standard Drawings if the projected traffic loading for such streets indicates a need for greater pavement thickness based on the pavement design methods described in the Design Manual of the Washington State Department of Transportation.
5. Curbs and Sidewalks. Plans for proposed developments shall show curbs, gutters and sidewalks for all streets as shown in the Standard Drawings. To ensure the construction of these sidewalks in new subdivisions, the developer shall provide the City, prior to City acceptance of the final subdivision plat, performance warranty in the form of a bond, a two-party certificate of deposit, a letter of credit, or cash for an amount equal to 100% of the estimated cost to construct all sidewalks in the subdivision. At the one year anniversary of the City acceptance of the final subdivision plat, all sidewalks not yet constructed shall, at that time, be constructed by the subdivision developer. Provided, however, that any sidewalks which, at that time, are scheduled to be constructed as a condition of a building permit shall be exempt from this requirement. Failure of the developer to construct required sidewalks shall be cause for the City to construct said sidewalks and recover the costs incurred from the related performance warranty.

In existing developments where new construction on an empty lot or remodeling of over 30% of the structure is to occur and sidewalks are missing or damaged to the point of being unsafe, they shall be installed or repaired prior to receiving the Certificate of Occupancy. This requirement shall also apply where construction is being proposed to replace a fire

destroyed or razed building. Where curbs and gutters may be wholly or partially missing, a determination as to their need will be made on a case-by-case basis by the Director.

Rolled curbs may be constructed in a new subdivision provided that the street design includes a minimum 5-foot-wide soft planter strip between the curb and the sidewalk. "Soft" as used in the preceding sentence means pervious to water, such as grass, gravel, or landscape rock, as opposed to impervious surfaces such as asphalt, concrete, or pavers. Planter strips are not otherwise required in new developments. Vertical curb may be constructed with or without adjacent planter strips. Rolled curbs may be constructed with adjacent sidewalks on the ends of cul-de-sac streets less than 400 feet long where pedestrian traffic can be expected to be minimal, with approval of the Director. Rolled curbs are not allowed on arterial streets or on any portion of any street where the grade exceeds 10%.

Curb returns at all intersections shall have a minimum radius of 20 feet. Larger curb returns may be required by the Director where deemed appropriate. Curbs and sidewalks constructed in existing developments shall generally conform to existing improvements in terms of rolled versus vertical curb and planter strips, as approved by the Director.

6. Storm Drains. All streets shall have drainage by means of catch basins and underground pipes except that phased construction may utilize ditches for drainage in all but the final phase. Catch basins shall be placed at locations and spacings to ensure that runoff resulting from the 10-year 3-hour short duration storm will not overflow the top of curbs or the crown of the street, whichever is lower. Catch basins should be located near intersections to intercept storm water before it reaches the crosswalk. Surface drainage across a street (valley gutters, etc.) and combination catch basin manholes will not normally be allowed. Drain tile and cut-off trenches shall be incorporated with catch basin leaders and provided at other locations as necessary to facilitate street subgrade drainage.

7. Stopping Sight Distance. Stopping sight distances shall be provided for all vertical curves, horizontal curves, and intersections as follows and as modified for grade in Attachment 3:
 - a. on major arterials 305 feet
 - b. on secondary arterials 250 feet
 - c. on collector arterials 200 feet
 - d. on other streets 155 feet

Sight distances on vertical curves shall be determined in accordance with Attachment Nos. 1 and 2. Stopping sight distances for sag vertical curves may be waived where adequate street lighting is installed. Sight distances at intersections shall be measured as shown in Attachment No. 4. In addition, vision clearance areas must be maintained per 17.35.020(3) of the Pullman City Code.

8. Street Grades. Longitudinal street grades shall be not less than 0.5 percent. Wherever possible, maximum longitudinal street grades shall not exceed the following:
 - a. on major arterials 6 percent
 - b. on secondary arterials 7 percent
 - c. on collector arterials 10 percent
 - d. on all other streets 15 percent

At intersections, the street grade should be no greater than 5 percent within 20 feet of the near curb line of the intersecting street; where arterials intersect nonarterial streets, this restriction applies only to the nonarterial street. In selecting street grades, the designer should check requirements for sight distances, wheelchair ramps, and drainage.

9. Horizontal Curves. Wherever possible, minimum centerline radii for horizontal curves are as follows:
- | | | |
|----|------------------------|----------|
| a. | on major arterials | 715 feet |
| b. | on secondary arterials | 560 feet |
| c. | on collector arterials | 425 feet |
| d. | on all other streets | 200 feet |
| | except cul-de-sacs | 100 feet |

On arterial streets, there should be a tangent section at least 100 feet in length between curves.

10. Vertical Clearance. Minimum vertical clearance on all streets is 16.5 feet.
11. Rail Crossings. Railroad crossings shall meet City standards and be consistent with the requirements of the associated railroad. In general concrete tub crossings will be required.
12. Illumination. Street lights shall be provided on metal davits as approved by the Director and in general conformance with the following:
- | | |
|----|--|
| a. | On arterial streets: 200 watt, high-pressure sodium luminaires at a spacing of 150 feet and at intersections. |
| b. | On all other streets: 100 watt, high-pressure sodium luminaires at intersections and at intermittent locations where deemed necessary by the Director. |
13. Level of Service. The minimum acceptable level of service (LOS), as defined by the Transportation Research Board in the 2000 Highway Capacity manual, shall be LOS D for signalized intersections and LOS E for any individual movement of unsignalized intersections.

D. SIDEWALKS

Public sidewalks will be required on both sides of all streets, both new and existing, and in new pedestrian easements and must be placed at the time of property development or redevelopment except as required for new subdivisions in Section C.5. Sidewalks along arterial streets shall be at least 7 feet in width unless otherwise approved by the Director. Sidewalks adjacent to the curb on all other streets shall be a minimum of 6 feet in width. If a minimum 30-inch planter strip is provided between the curb and sidewalk, the sidewalk width may be reduced to a minimum of 5 feet. The width of the curb shall not be included in the width of the sidewalk. Also see Section 'C', STREETS.

Wheelchair ramps are required at all intersections and at all crosswalks, shall be designed in accordance with Standard Drawings 9, and shall meet all ADA standards in all respects. Sidewalks crossing driveways shall be designed in accordance with Standard Drawing 8.

E. EROSION/SEDIMENTATION CONTROL

This section is intended to complement Chapter 10.32 of the Pullman City Code (PCC) which regulates construction site runoff. The Washington State Department of Ecology (DOE) Stormwater Management Manual for Eastern Washington is the technical reference for best management practices (BMPs).

1. Land disturbing activity regulated. When a planned or anticipated land alteration activity, such as clearing (removal of vegetation), grubbing (removal of root vegetation), grading and stockpiling has the potential to damage off-site property or degrade water quality, an erosion and sedimentation control (ESC) plan must be submitted, approved and implemented prior to beginning any work. A stormwater permit is required for projects with 5,000 square feet or more of land-disturbing activity. Other related permit(s) may be required directly from DOE.
2. General requirements.
 - a. An ESC plan is required for all development and can be very simple for development of a single residential lot, to very complex for large subdivisions or large site development where steep slopes may be created or where the work done may impact an environmentally sensitive area (stream, wetland, etc.). The plan shall clearly indicate the construction sequence for establishment of all erosion control work, both temporary and permanent, and shall be on a separate sheet and made available to field crews responsible for implementing the control plan. The basic requirement of the plan is that sediment be retained on the site. ESC Plans shall include, at a minimum:
 - 1) Name and address of the owner or developer of the site, and of any consulting firm retained, together with the name of the principal contact at such firm.
 - 2) Name, address, and 24-hour telephone number(s) for the person(s) responsible for regular observation and repair or replacement of all erosion and sedimentation control measures.
 - 3) Schedule for regular inspection, maintenance, replacement and removal of erosion and sedimentation control measures.
 - 4) The following statement: "Any land clearing, construction, or development involving the movement of earth shall be in accordance with this ESC Plan."
 - 5) A legible site map including the applicable elements of PCC 10.32.090.
 - b. The temporary erosion control system shall be installed prior to all other construction.
 - c. Where possible, natural vegetation shall be maintained for silt control.

- d. As construction progresses and seasonal conditions dictate, the erosion control facilities shall be maintained and/or altered to ensure continuing erosion and sedimentation control through construction completion and until permanent drainage facilities are operational and required vegetation is established.
 - e. The public right-of-way shall be kept clean through the use of good construction practices, construction entrances, and frequent street cleaning.
 - f. Gravel, soil or construction equipment shall not be stored in the City right of way without permission from the Director.
 - g. Discharge from dewatering of utility trenches or foundation areas shall be to the nearest sedimentation pond, or to a specially created sump area, in a nonerosive fashion. Dewatering discharge shall not enter storm drains or streams until the discharge consistently meets the turbidity requirements of DOE.
3. Best Management Practices (BMPs). The following are BMPs that may typically be used to contain erosion and sediment transport. Related typical drawings are also available at the Public Works Department which further detail these methods.
- a. Check Dams, Rock Berms, and Wattles. Check dams and/or berms constructed of rock or straw and/or wattles shall be incorporated into erosion control facilities as appropriate.

Straw bales (staked in place) may be used as energy dissipating drop structures, flow direction control structures and/or dams to create ponding.

Rock berms may be substituted for, or used in combination with, straw bales as filtering devices.

Cut-off Trenches - Interceptor Ditches, Dikes or Berms:

These structures are constructed to channel water away from unprotected slopes or erodible soils, to convey silt laden water to sedimentation facilities or to dissipate drainage into the natural on-site vegetation.

If the location of the trench, ditch or dike may result in erosion of the structure itself, stabilization of the structure may be required. Riprap, temporary sodding, or a combination of filter fabric and riprap are methods of structure stabilization that may be required to prevent erosion.

- b. Silt Fences. Silt fences shall be installed along the perimeter of construction sites as necessary to contain sediment. Silt fences shall be designed and constructed in accordance with Standard Drawing 29 and shall generally be placed on contour and downslope of erosion areas.

- c. Flexible Down Drains. Flexible down drains may be utilized as temporary structures to protect open slopes and shall be constructed of flared end sections connected by plastic sheet tubing, heavy-duty fabric, or nonperforated corrugated plastic pipe.
- d. Gradient Terrace. A gradient terrace is an earth embankment or ridge designed so that the top of the constructed ridge is no lower at any point than the design elevation of the water surface at the outlet under design flow and is installed so as to intercept surface runoff and convey it to a stable outlet at a nonerosive velocity. Gradient terraces may be useful both as a temporary and/or a permanent erosion control measure.
- e. Inlet Protection. Inlet protection, such as Silt Sacks, are devices placed in catch basins as a last line of defense against sediment entering the storm drain system. Periodic maintenance by the contractor or developer is crucial to the proper functioning of inlet protection devices.
- f. Sediment Traps. Sediment traps are structures of limited capacity designed to create a temporary siltation pond/filter around storm drain inlets or at points where silt-laden stormwater is discharged.
- g. Temporary Construction Entrance. A temporary construction entrance is a rock-stabilized temporary entrance pad constructed at points where traffic will be entering or leaving a construction site from or onto public right of way. The pad shall be of sufficient length and width to eliminate transportation of mud and sediment *from* the construction area onto the public right of way by motor vehicles or by runoff, but under no circumstances shall it be less wide than the egress at the right of way nor less than 25 feet long for projects less than 1 acre in size or 50 feet for projects 1 acre in size or larger. The stabilized construction entrance shall be a minimum thickness of 12 inches and constructed of course rock material. When site conditions are such that the temporary entrance pad fails to perform as required, additional measures shall be employed as necessary to maintain the right-of-way free from tracked mud or sediment.
- h. Soil Stabilization Measures. Soil stabilization measures protect soil from the erosive forces of raindrop impact and flowing water. Acceptable measures include establishing vegetation by sodding or seeding, mulching with straw, plastic or other impervious covering staked to the ground or anchored with rocks or sandbags, erosion control blankets, and the early application of gravel base on areas to be paved.

The most appropriate measure should be chosen given the time of the year and the site conditions. Seeding alone is unacceptable; mulch and/or tackifier are required in conjunction with seeding. Slopes steeper than 5:1 shall also be covered with crimped straw or wood fiber mulch. Erosion control blankets, or an alternate erosion control method approved by the Director, shall be used on slopes 2:1 or greater, regardless of height. Slopes devoid of topsoil shall be augmented with a 4-inch minimum thick layer of topsoil track-walked vertically onto the slope prior to seeding.

- i. Temporary Siltation/Sedimentation Ponds. Temporary siltation/sedimentation ponds detain runoff waters and trap sediment from erodible areas, thus protecting properties, drainage ways, and streams below the land disturbing activity from damage by excessive sedimentation and debris deposition. The dam or barrier forming the pond

shall be located to provide for maximum volume capacity for trapping sediment behind the structure as well as for greatest ease of clean out.

Interior surfaces of the sedimentation pond shall be stabilized where required to prevent erosion of the pond bottom and/or sides. Interior sides of the pond shall be no steeper than 3 feet horizontal to 1 foot vertical. Siltation/sedimentation ponds shall provide a minimum of 2 feet of dead storage below the outflow elevation. The outlet structure shall be filtered with silt fence fabric, geotextile fabric, or similar material to promote the separation of the suspended sediment from the stormwater being discharged.

F. STORM AND SURFACE WATER DRAINAGE

1. General. Drainage control shall be provided on all property improvements within the City of Pullman per these Design Standards, applicable City ordinances and policies, master plans and applicable State or Federal laws. The Washington State Department of Ecology (DOE) Stormwater Management Manual for Eastern Washington is the technical reference for BMPs. Other related permit(s) may be required directly from DOE.

Surface water entering the subject property shall be received at the naturally-occurring location and surface water exiting the subject property shall be discharged at the naturally-occurring location with adequate energy dissipation. Increased surface water flows resulting from the creation of impervious surfaces must be managed so as to protect adjacent property. Proposals to modify natural drainage patterns must be reviewed and approved by the Director. Such review may include consideration of the City wetlands and sensitive areas requirements and may require approval of adjacent property owners.

In general, storm water control should be through above ground controls such as biofiltration swales and detention ponds, rather than underground treatment and detention facilities. This approach provides increased treatment of storm water, better monitoring capability and in most cases, lower long-term maintenance costs. Storm water from newly created pollutant generating impervious surfaces (PGIS) of 5,000 square feet or more shall receive Basic Treatment as required in the Stormwater Management Manual for Eastern Washington prior to discharge to a natural drainage or the City storm drain system. The most common PGIS in Pullman are parking areas with over 10 spaces. Environmentally sensitive areas shall be protected from potential impact of storm water by methods accepted by the Director. High risk land uses such as auto repair/maintenance shops, car washes, certain industrial operations, retail auto parts stores and fueling sites may require special attention to controlling storm water, as determined by the Director.

2. Design Size. Storm and surface water control facilities, including but not limited to storm drain inlets, pipes, detention ponds, biofiltration and mechanical treatment facilities or structures shall be sized to carry storm drainage runoff based on the Stormwater Management Manual for Eastern Washington for the following minimum storm recurrence frequency:

Detention ponds shall control discharge rates to not exceed pre-developed flows for 50% of the 2-year, 24-hour; the 10-year, 24-hour; and the 25-year, 24-hour SCS Type II storm. In addition, provision shall be made to convey the 100-year 24-hour SCS Type II storm without catastrophic damage to downstream structures and facilities.

For purposes of designing stormwater runoff treatment facilities, Pullman shall be considered climatic Region 4 as prescribed in the Stormwater Management Manual for Eastern Washington (SWMMEW). From a design perspective, there are two types of treatment BMPs, volume based and flow-rate based. Each type requires a different design approach.

For designing volume based treatment BMPs, use the 6-month, 24 hour, SCS type IA storm of the modified Type IA for small projects (less than 1 acre). Volume based BMPs are sized the same whether located upstream or downstream from detention facilities. Volume based BMPs include those that rely upon infiltration into the ground for treatment (generally not approved for Pullman) or those that require storage volume such as wet ponds, constructed wetlands and treatment combined with underground detention.

Flow-rate based treatment BMPs are sized differently depending on whether they are located upstream or downstream of detention facilities. For runoff treatment facilities preceding detention facilities or when detention is not required, use the 6-month, short duration (3-hour) storm. For runoff treatment facilities sited downstream of detention facilities, design for the full 2-year release rate of the detention facility. Flow-rate based treatment BMPs include bio-filtration, media filters, hydrodynamic separators and inlet filters/drain inlets.

Bio-retention has both volume and flow-based design criteria. However, because six inch diameter perforated underdrains are required in Pullman, bio-retention shall be considered primarily a flow-rate based BMP and can be designed using the 6-month, 3-hour storm.

Non-pollutant generating impervious surface (NPGIS) areas are exempt from basic treatment requirements unless the runoff from these areas is not separated from the runoff generated from pollutant generating impervious (PGIS) surface areas. All runoff treatment facilities must be sized for the entire flow that is directed to them.

Storm drain pipes and other conveyance facilities shall be designed for the 10-year 3-hour short-duration storm.

3. Discharge, Detention Design. Stormwater detention will be required for all development with 10,000 square feet or more of impervious surface, either newly created, or cumulative with existing impervious surface where detention has not been previously provided. Plans for storm drainage shall indicate where the storm water will be discharged. If the proposed development will increase the rate or velocity of storm runoff, it must be shown that the pipes and channels downstream from the discharge point can carry the proposed runoff without damage to the adjoining properties. Provisions shall be made for detention of storm water in order to decrease the rate of storm runoff and, more importantly, to decrease the peak runoff rate. The maximum size of any exposed orifice, including overflows, shall be 4 inches or they shall have trash-rack type protection as approved by the Director. Outlet structures shall be either modified catch basins or manhole structures; PVC outlet structures are not allowed. A 3'x3'x4" concrete maintenance pad shall be constructed at the bottom of the lowest outlet orifice. Detention ponds must have emergency overflow structures to protect the pond and adjacent property. Energy dissipation shall be provided on all inlets to the pond and outlet pipes exiting the pond. Detention ponds with side slopes steeper than 3 horizontal to 1 vertical or designed to maintain a pond depth greater than 1 foot when fully

drained shall be protected by a security fence at least 4 feet high. Detention ponds designed to provide dead storage of any depth shall include a valved drain line for dewatering for maintenance purposes. Only above ground systems will be allowed in the flood plain. Detention facilities shall be designed and constructed so as to facilitate equipment access for maintenance purposes. The slopes and bottoms of above-ground systems shall be stabilized with perennial grass or other approved landscaping, employing the guidelines from Section E.3.h. Soil Stabilization Measures.

All applications for new and re-development projects within Pullman, of one acre in size or greater, must do the following:

- a. At a minimum, **retain** stormwater runoff generated on-site for the 10-year, 24-hour rainfall event.

or,

- b. Determine that it is infeasible for the proposed project to meet the retention requirement.

The retention requirement is deemed “infeasible” when the project applicant satisfies one of the following Infeasibility Criteria:

- Site/Engineering-based conditions such as soils that do not allow for infiltration of the 10-year, 24-hour storm;
- Proximity to a known hazardous waste site or landfill; proximity to a drinking water well or spring; proximity to an on-site sewage system or underground storage tank; setbacks from structures; landslide hazard areas or slopes; seasonal high groundwater; incompatibility with the surrounding drainage system from elevation or location; areas prone to erosion.
- Incompatibility with uses related to concerns such as public safety, protection from spills, contaminated sites, or frequently flooded areas.
- Incompatibility with state or federal laws.

A qualified soils professional must be consulted to determine a project’s infeasibility. Qualified soils professionals include: certified soils scientists, professional engineers, geologists, hydrogeologists or engineering geologists registered in the State of Washington.

4. Detention Facilities. For all development in the Hatley Basin, as detailed in the May 2000 Hatley Creek Storm Drainage Basin Study prepared by Gray & Osborne, Inc., pre-development conditions shall be the current condition as opposed to the pristine condition and the standard summer/fall climate shall be used. For post-development, a winter/spring climate shall be used by assuming 100% saturated or frozen ground providing little or no infiltration (CN=98). Detention shall be enhanced to include the 100-year, 24 hour SCS Type II Storm.
5. Easements. Where storm drains run outside an existing public right of way, easements will be required for public maintenance. Such easements shall be a minimum of 10 feet in width. Easements shall be constructed and surfaced as approved by the Director to accommodate maintenance equipment

6. Service lines. All new subdivisions and developments shall include service lines for roof, foundation, and area drains on all lots. Such service lines shall be connected to the approved storm and surface water drainage system for the subdivision.
7. Stormwater Control Facilities. All stormwater control facilities (conveyance, flow control and treatment) must be operated and maintained so as to provide the design level of performance on an ongoing basis.
8. Cover. Storm drains shall be designed to have a minimum cover of 2 feet at all locations, including at the connection of leader pipes to catch basins, and should have a maximum cover of 10 feet.

G. SANITARY SEWERS

1. Design Capacity. Sanitary sewers shall be sized to carry the design volumes when flowing full. In residential areas, the design volume shall be based on 125 gallons per capita per day (gpcd), 2.8 persons per dwelling unit, and a number of dwelling units consistent with existing development and zoning. In other areas, the design volumes shall be calculated based on the development which can be reasonably expected in the area. Sanitary sewers shall be designed in accordance with "Criteria for Sewage Works Design" published by the State of Washington Department of Ecology.
2. Easements. Where sewers run outside an existing public right of way, easements will be required for public maintenance. Such easements shall be a minimum of 10 feet in width. Easements shall be constructed and surfaced as approved by the Director to accommodate maintenance equipment.
3. Cover. Sewers should have a minimum cover of 3 feet and a maximum cover of 10 feet.
4. Side Sewers. Side sewers shall comply with Standard Drawing No. 24 and the current edition, adopted by the City, of the Uniform Plumbing Code.
5. Lift Station Design. Lift stations shall be designed in accordance with City of Pullman *Sewage Lift Station Design Standards*. Any variance from the design standards must be reviewed and approved by the Director.
6. End of Sewer Mains. A manhole must be installed on the end of sanitary sewer mains.

H. WATER LINES

1. Design Domestic Flows. Water mains shall be sized to provide a combined fire flow and peak day flow in accordance with the following design criteria.

Water mains in residential areas shall be designed to supply 1,085 gallons per day per dwelling unit (based on average usage of 124 gpcd; 3.5 persons per dwelling unit; peak day demand of 2.5 times average demand) plus fire flow. The number of dwelling units used for

design shall be consistent with existing development and the zoning of undeveloped land. Alternate design bases may be used if justified by the designer.

In nonresidential areas, water lines shall be sized to serve development which can be reasonably expected in the area based on zoning and topography.

2. Design Fire Flows. For design purposes, minimum fire flows shall be 1,500 gpm in low and medium density residential areas; 2,500 gpm in commercial and high density residential areas; and 3,500 gpm in industrial areas. The design shall be consistent with the current Fire Department Standards and should provide the maximum flows while maintaining a minimum residential pressure of 20 psi at all nodes within the pressure zone. For further details refer to the currently adopted edition of the Pullman Fire Department Fire Protection Development Standards. Where special conditions exist, greater or lesser design fire flows may be designated by the Director for new developments and by the Fire Chief for new and existing buildings pursuant to Section 10A.30.010(2) and 10A.30.010(3) of the Water Utility Code.
3. Design Pressure. Water systems shall be designed to provide a minimum pressure of 40 psi with no fire flow. Water systems shall be designed to have a maximum static pressure of 100 psi at any building connection. Pumping stations and pressure reducing valves may be required to meet these requirements. Pipes shall be specified to withstand the maximum test pressures but in no case shall pipes be classed less than 150 psi. The designer should contact the City Engineering Division for information on the pressure zones and water supply available for the area.
4. Valves. Water valves on mains 12 inches or less in diameter shall be resilient wedge gate valves which meet the latest American Water Works Association standards. Valve types and models on larger mains will be as approved by the Director. Generally, valves should be located so that a water line can be shut off without eliminating service to more than 20 homes or more than one fire hydrant.
5. Minimum Diameter. Water mains for public maintenance shall have a minimum diameter of 6 inches, except that mains not serving a fire hydrant may have a minimum diameter of 2 inches provided that the domestic and irrigation demand can be reasonably met without excessive water velocities (greater than 8 ft/sec) and friction losses as determined by the Director.
6. Hydrant Spacing. Fire hydrant spacing shall not exceed 600 feet measured along the curb line in areas zoned R-1, R-2, or RT and shall not exceed 300 feet in other areas. The Fire Chief may require additional hydrants in accordance with the Fire Development Standards.
7. Blowoff Valves. A blowoff valve must be located at the end, or a fire hydrant must be located within 20 feet of the end of any dead-end water main, including temporary dead-end mains in phased developments. Blowoff valves and their installation shall be as per standard drawing 17.
8. Air Relief Valves. An air relief valve per Standard Drawing No. 16 is required at the high point of all water mains. A blow-off valve or hydrant shall not be considered as a substitute for an air relief valve. Design pipe grades shall minimize the use of air relief valves.

9. Easements. Where water mains and/or fire hydrants are constructed outside of existing public right of way, easements will be required. The easements for maintenance of the lines, including fire hydrant lines, must have a minimum width of 10 feet.
10. Cover. Water lines shall be constructed with a minimum of four feet of cover unless otherwise approved by the Director and shall have thrust restraining as specified in the Standard Specifications. Water mains with over six feet of cover shall not be allowed without specific approval by the Director.

I. RETAINING WALLS

1. Design. No private retaining wall shall be constructed in the public right of way without prior approval of the Director. Retaining walls greater than 5 feet in height, or 3 feet in height if supporting a surcharge, as measured from the bottom of the footing, must be designed by an engineer licensed in the State of Washington and bear the signature and seal of that engineer. No private retaining walls will be allowed in the right of way where the wall may interfere with potential future private or public utility needs.
2. Sight Distance. Retaining walls constructed near intersections shall be designed to maintain the minimum sight distances for streets and shall conform to vision clearance area provisions of the City Code. Where this provision is found to be impractical, the Director may approve alternate proposals.
3. Guardrails. Where a street or sidewalk is within 5 feet horizontally from the top of a retaining wall greater than 2 feet in height, the wall must have a fence or pedestrian railing along the top. All retaining walls greater than 6 feet in height must have a fence or pedestrian railing. Standard Drawing No. 1 shows an example of an acceptable pedestrian railing. Fence designs shall be as approved by the Director

J. UTILITY LOCATIONS

The location of utilities in the public right of way shall be as approved by the Director. Franchise utilities should normally be located in a common trench with trenches parallel to City utilities trenches and located so as to provide at least eight (8) feet clear between franchise and City utilities. Public utilities located outside the public right of way are discouraged. Valves and manholes located in undeveloped terrain shall be marked with a partially buried steel post with a cleated base.

K. STREET TREES

This section is intended to interpret chapters 11.48 and 11.50 of Pullman City Code.

Owners of adjoining property may plant trees and shrubbery in the public right of way with the approval of the Parks Superintendent under the following conditions:

1. No tree, bush, or shrub may be planted in the street right of way which will now or in the foreseeable future obstruct safe vision for vehicle drivers or pedestrians or interfere with any sidewalk, driveway, or utility.
2. City water, sewer, and storm drain utilities are often located behind the curbs; planting trees over such utilities can have a negative impact on the utility and should be avoided.
3. Any vegetation planted in the street right-of-way is subject to removal without replacement to facilitate any City activity or duty or to protect any City asset.
4. No existing street or sidewalk pavement may be cut for the planting of trees or shrubs unless the Director has approved such pavement cutting.
5. Maintenance of trees and shrubs shall be the responsibility of the adjoining property owners. Trees and shrubs shall be pruned and maintained as necessary to provide the minimum sight distances for streets.

No tree growing within the public right of way shall be removed without the approval of the Parks Superintendent if the trunk of the tree is greater than 4 inches in diameter measured at a point 12 inches above the ground, or if the height of the tree exceeds 20 feet. Smaller trees and shrubs may be removed by the owner of adjoining property without approval of the Parks Superintendent.

Trees and shrubs overhanging a public street and/or sidewalk shall be pruned to maintain an unobstructed clearance the full width of the pavement or sidewalk, 7 feet above the sidewalk and 16.5 feet above the street. These requirements shall be the responsibility of the adjacent property owner.

L. SITE PLANS

This section is intended to complement chapter 17.135 of the Pullman City Code for private development requiring site plan review by the City. Site plans shall be prepared on sheets no larger than 24"x36" at an easily readable scale.

1. Vehicle Access. Private development shall have vehicular access to the street in accordance with the Standard Drawings, off-street parking in accordance with the Pullman City Code, and adequate access and egress for fire vehicles. The Director may restrict the number, location, and design of driveways where necessary to protect the safety of vehicular and pedestrian traffic in the public right of way.
2. Parking. The developer must provide evidence that parking areas will provide the minimum number of parking stalls required by the Zoning Code (Title 17 of the Pullman City Code) in accordance with the minimum standards for parking lots shown in Attachment No. 6.

Parking areas of 4 or fewer parking spaces shall be gravel surfaced or paved, including the driveways serving the parking area. Parking areas of 5 or more parking spaces must be paved. All driveways shall have a minimum 20 foot paved apron from the back of sidewalk (or from the street if no sidewalk exists). Driveways serving loading areas and fire access lanes shall have a minimum width of 20 feet and be asphalt or concrete paved surface.

"Paved" means, as a minimum, 2 inches of asphalt pavement with an 8-inch gravel base, or 5.5 inches of Portland cement concrete pavement with a 4-inch gravel base. Where necessary to control storm water or to control vehicular access, the Director may require curb along driveways and in parking areas.

3. Street Improvements. The Director may require the developer to improve the public streets or alleys used for access to the site as necessary to control dust and erosion and to provide for traffic safety. Improvements may include paving, curb and gutter, sidewalks, storm drainage, turn lanes, signing, street lighting, signals, and similar improvements. The improvements required shall be limited to those necessitated by the new traffic movements to be generated by the new private development.
4. Drainage. Roof drains, foundation drains, and surface drainage shall be shown on the site plan. Storm drainage shall be to a public storm drainage system, to an existing natural drainage course, or to a properly designed detention basin. Where development will increase the rate or energy of storm runoff and/or change the location of the storm runoff discharge, provisions must be made to protect downstream property from erosion and flooding. Drains may not discharge to the surface where such discharge will cause direct flow across a sidewalk.
5. Grading. A grading plan must be submitted and a grading permit must be obtained if any of the following apply:
 - a. If any fill will exceed 10 feet in height; or,
 - b. If any excavation will exceed 10 feet in depth; or,
 - c. If the total volume of cut and fill will exceed 50 cubic yards.

A grading plan must be adequate to show all new cuts and fills and changes in drainage. Grading (cut and fill) should be kept to a minimum. Grading should be designed to minimize the visual impacts from surrounding properties. Cut slopes and fill slopes steeper than 2:1 will require protection to ensure slope stability. A slope steeper than 2:1 and more than 10 feet in height will be required to have a five (5) foot high chain link fence or other approved protection at the top of the slope. A geotechnical report signed by an engineer qualified to do such work and registered in the State of Washington showing the methods that will be used to ensure stability of the fills and slopes will be required as determined by the Director. Grading plans shall include provisions for drainage and erosion and sediment control.

6. Water, Sewer, and Storm Drain. Proposed connections to the public water, sewer, and storm drain lines must be shown on the site plan. If existing public water, sewer, and storm drain lines are not adequate to accommodate the increased demand created by the proposed development, the Director may require the developer to improve or replace existing public water, sewer, and storm drain lines at no cost to the City.

Additional fire hydrants may be required along the adjoining street or within the development when determined necessary by the Fire Prevention Officer in accordance with the Fire Development Standards. All fire hydrants and all water lines serving fire hydrants shall be dedicated for City use and maintenance.

7. Public Access. Except as noted below, each building must have pedestrian access separate from vehicular driveways and at least one pedestrian access route shall be usable by persons with disabilities. EXCEPTIONS: Apartment buildings of four or fewer apartments; warehouses and other structures where the need for pedestrian access is negligible.

The Director may require the construction of a public walkway along the adjoining street if none exists. The Director may require replacement of an existing sidewalk along a public right of way if the existing walk does not meet the current City standards. The effect of a development on significant trees is regulated by section 17.45.070 of the Pullman City Code.

8. Street Addressing. The City Engineering Division will assign a street address or addresses for each development. The owner of the development will designate the various units of the development by numbers, letters, or otherwise (e.g., Apartment No. 101, Space 3-A, Unit 5, etc.). The City will not assign individual street addresses to the various units of a single structure development having more than two units.
9. Floodplain. Any development in the floodplain must meet the requirements of Chapter 17.100 of the Zoning Code.
10. Mailboxes. The location of community mailboxes shall be shown on the site plan as suggested by the Postmaster and approved by the Director.
11. Landscaping. Low water use landscaping is encouraged for all developments.

M. PLAT MAPS

Final subdivision plat maps and short plat maps shall be drawn in the format shown in Attachment No. 7. All certifications and approvals shall be signed before the map is recorded with the County Auditor.

Ink jet plots using pigmented black ink or xerographic reproductions on film (Mylar) shall be used for plat maps to assure clear reproduction on standard printing equipment. Plat maps shall be of archive quality; significantly resistant to ink smear, moisture, and erasure. Signatures shall be made with fine-tip permanent black marking pens. All plats shall be drawn on polyester film (Mylar) sheets no larger than 24 x 36 inches, at a minimum scale of one (1) inch equals 40 feet, unless otherwise approved. If the plat is on more than one sheet, each sheet shall be labeled "Sheet ___ of ___." A standard sheet size of 24 x 36 inches is preferred for all plats and short plats.

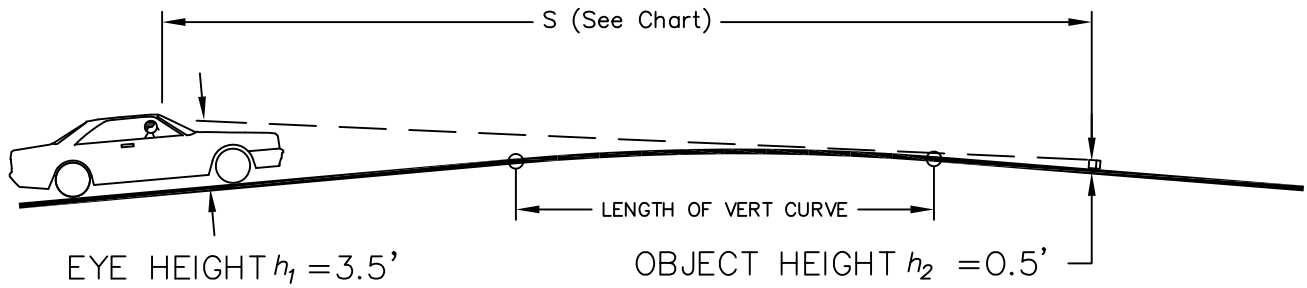
Residential subdivision plats shall include utility easements 5 feet wide along each front lot line and ten (10) feet wide along the front lot line of cul-de-sac lots.

N. BOUNDARY LINE ADJUSTMENTS

Changes to property boundary lines do not require the filing of a short plat if (1) no additional lots are created, and (2) the resulting lots meet zoning requirements for minimum lot area and dimensions. To assure compliance with these requirements and establish a record of this compliance, the following procedure should be employed.

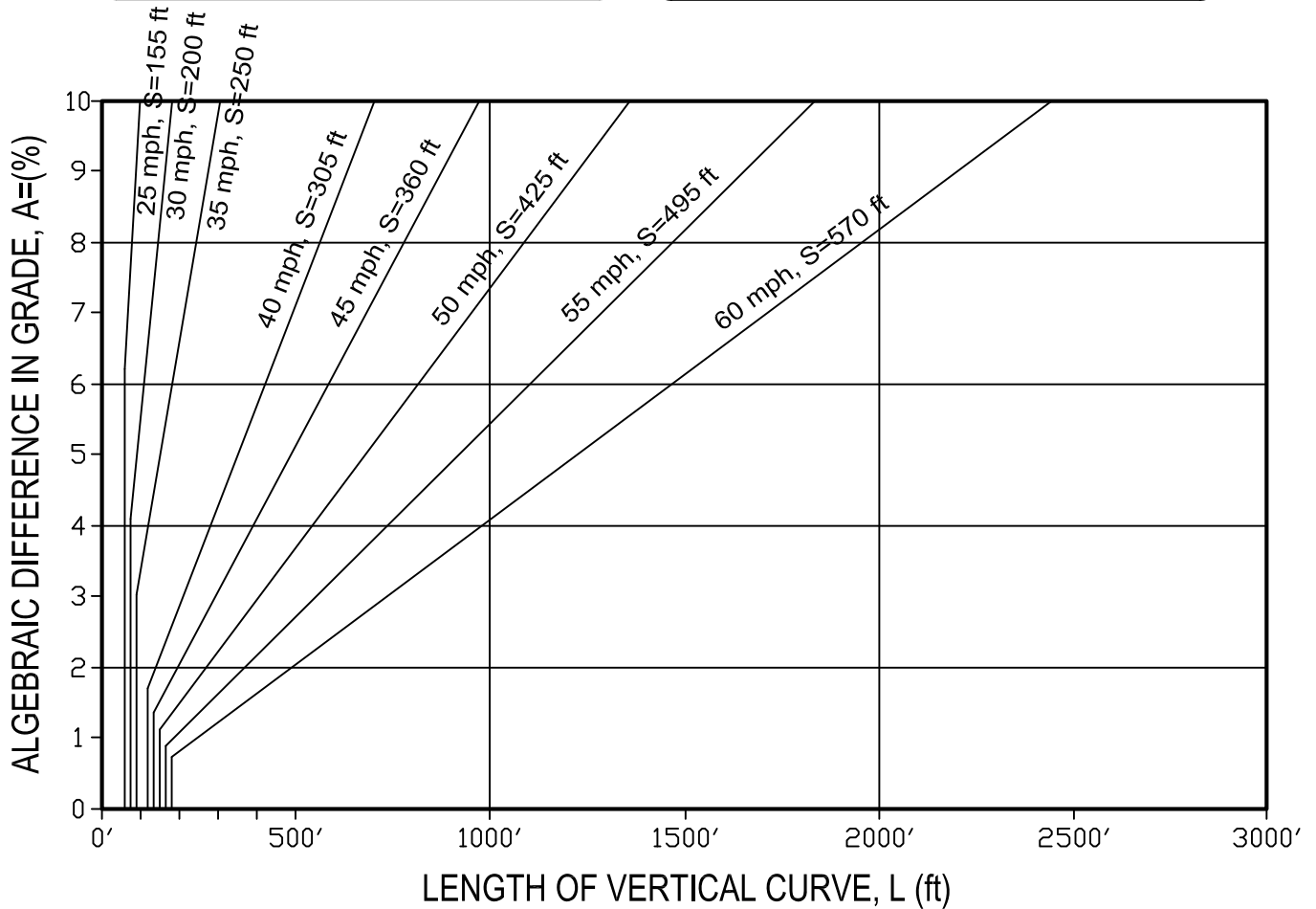
1. Any person wishing to adjust a boundary line shall submit to the Director a drawing on paper or film (Mylar) showing the proposed adjustments. Simple boundary line adjustments involving only the minor shifting of common property lines between platted lots, typically the parallel relocation of a property line 5 feet or less, do not require a drawing prepared by a surveyor. More complicated boundary line adjustments require a map prepared on film by a licensed surveyor. The drawing shall be to scale on a maximum 18 x 24 inch sheet. It shall show existing and proposed property lines; the lot numbers, block numbers, and subdivision names of the property; the setback dimensions of existing buildings from the proposed revised property boundary lines; have legal descriptions for the existing ownerships and the proposed ownerships; and include labels and areas of proposed new parcels. Proposed parcels shall be labeled as "Proposed Parcel(s)" and "Remainder Parcel(s)".
2. The Director will review the proposed boundary line adjustments. If the proposed change creates no additional lots and conforms to Pullman Zoning Code requirements for lot dimensions, lot areas, building coverage, and setbacks, the Director will attach and sign an approving affidavit. It will then be necessary for the legal owners of the properties involved to record documents (deeds, easements, etc.) with the Whitman County Auditor in order to legally transfer ownership of the affected areas. Certified copies of those documents must also be provided to the Public Works Department to complete the process.

Boundary line adjustment approvals signed by the Director will be retained in the files of the Engineering Division.



WHEN $S > L$	WHEN $S < L$
$L = 2S - \frac{200(\sqrt{h_1} + \sqrt{h_2})^2}{A}$	$L = \frac{AS^2}{200(\sqrt{h_1} + \sqrt{h_2})^2}$
L=Curve Length (Feet)	
A=Algebraic Grade Difference (%)	
S = Sight Distance (Feet)	

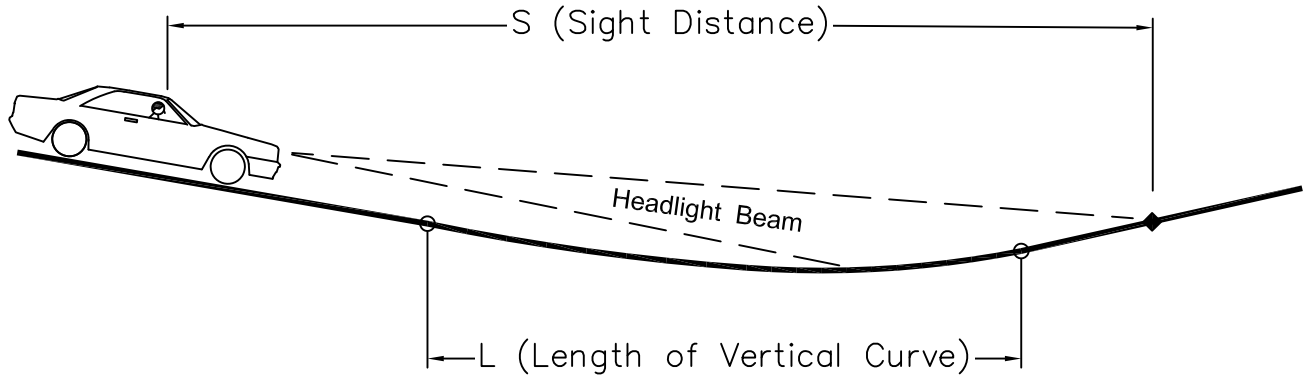
DESIGN SPEED (MPH)	STOPPING DISTANCE S (Feet)	See attachment No. 3 for grades of 3% or greater.
25	155	
30	200	
35	250	
40	305	
50	425	



STOPPING SIGHT DISTANCE FOR CREST VERTICAL CURVES

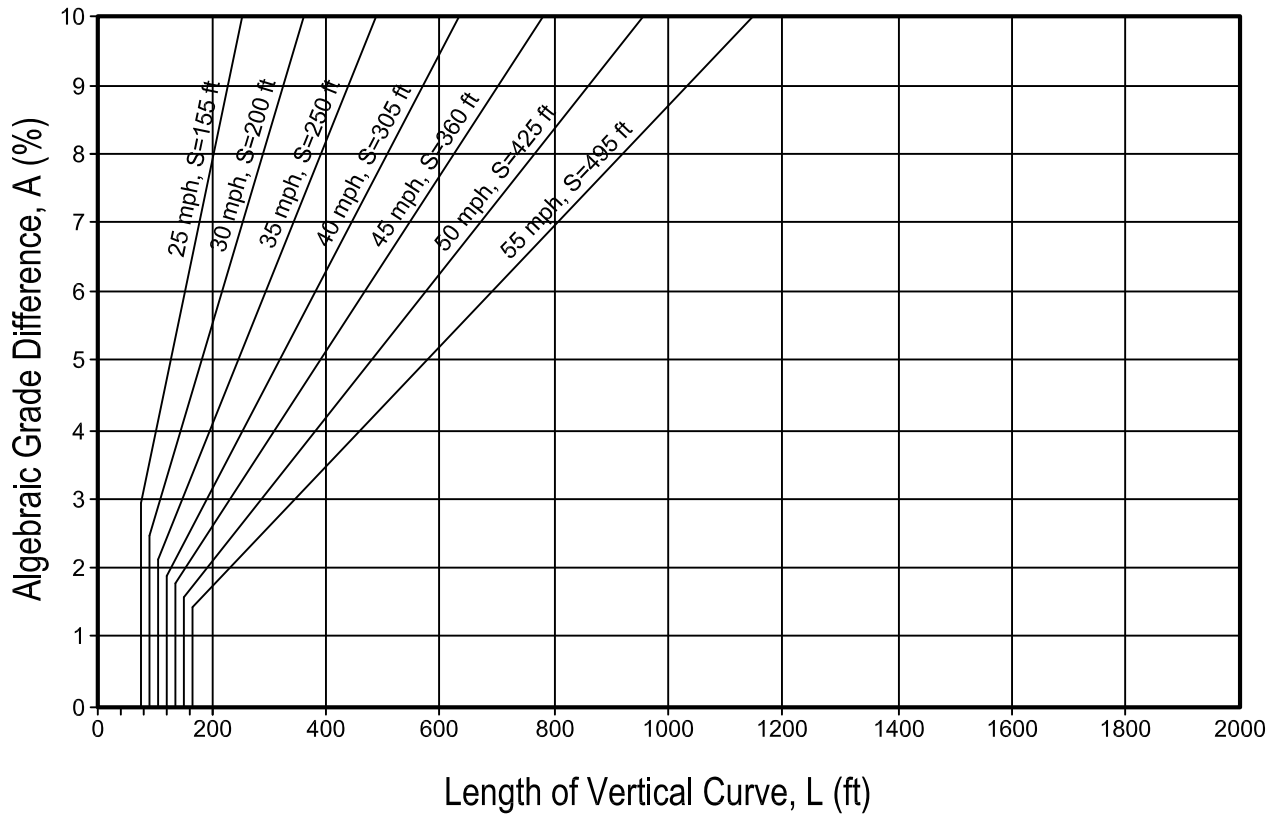
ATTACHMENT No

1



WHEN $S > L$	WHEN $S < L$
$L = 2S - \frac{400 + 3.5S}{A}$	$L = \frac{AS^2}{400 + 3.5S}$
L=Curve Length (Feet)	
A=Algebraic Grade Difference (%)	
S = Sight Distance (Feet)	

DESIGN SPEED (MPH)	STOPPING DISTANCE S (Feet)	See attachment No. 3 for grades of 3% or greater.
25	155	
30	200	
35	250	
40	305	
50	425	



STOPPING SIGHT DISTANCE FOR SAG VERTICAL CURVES (Headlight)

ATTACHMENT:

2



Design Speed (mph)	Stopping Sight Distance (ft)					
	Downgrade			Upgrade		
	-3%	-6%	-9%	3%	6%	9%
25	158	165	173	147	143	140
30	205	215	227	190	184	179
35	258	271	288	237	229	222
40	315	333	354	289	278	269
45	378	401	428	345	331	320
50	447	474	508	405	389	375

$$S = 1.47V \times t + \frac{V^2}{30 \left[\left(\frac{a}{32.2} \right) \pm \frac{G}{100} \right]}$$

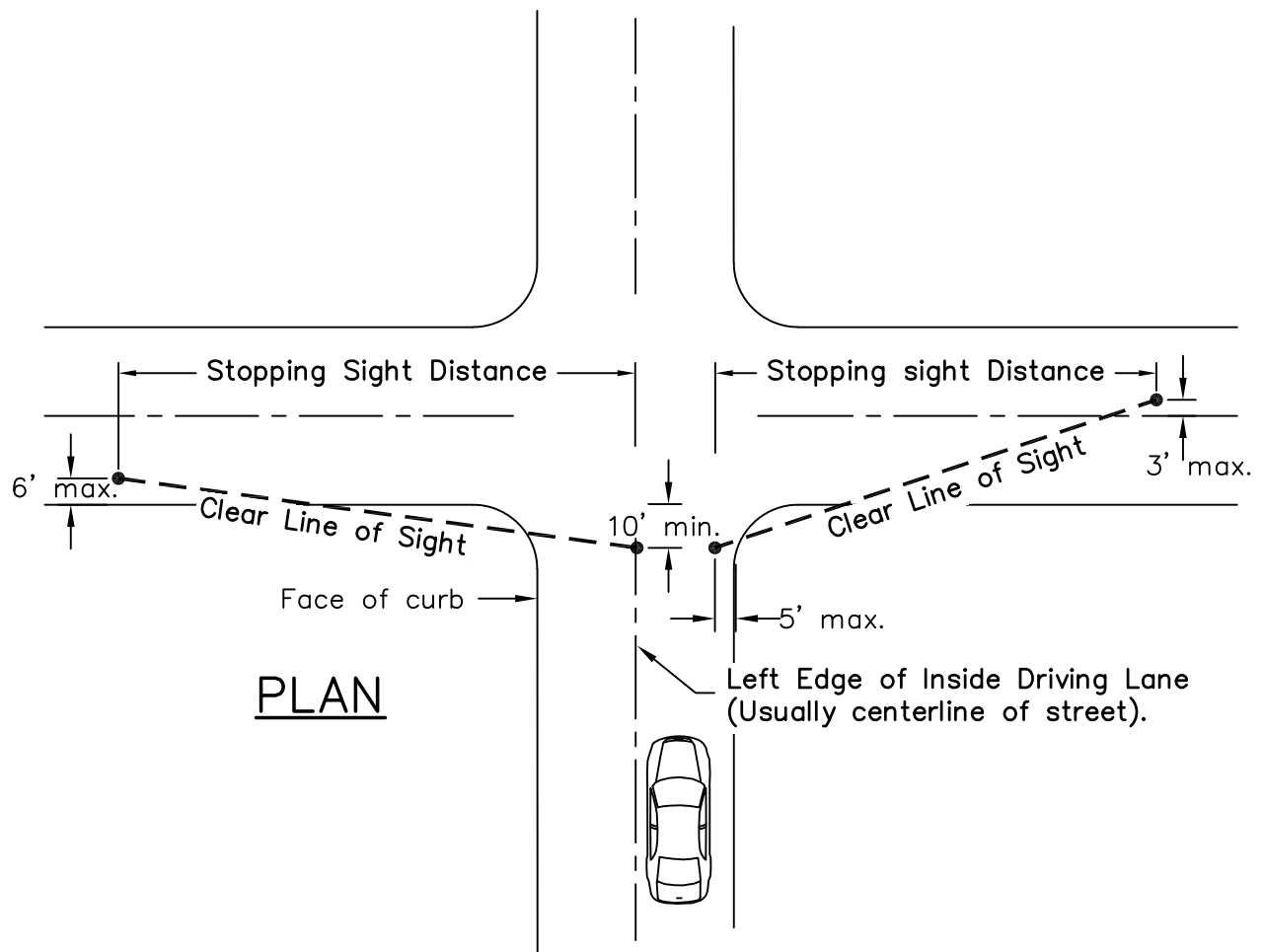
Where:

- S = Stopping sight distance on grade (ft)
- V = Design speed (mph)
- t = Perception/reaction time (2.5 sec)
- a = Deceleration rate (11.2 ft/s²)
- g = Grade (%)

DESIGN STOPPING SIGHT DISTANCE ON GRADES

ATTACHMENT:

3

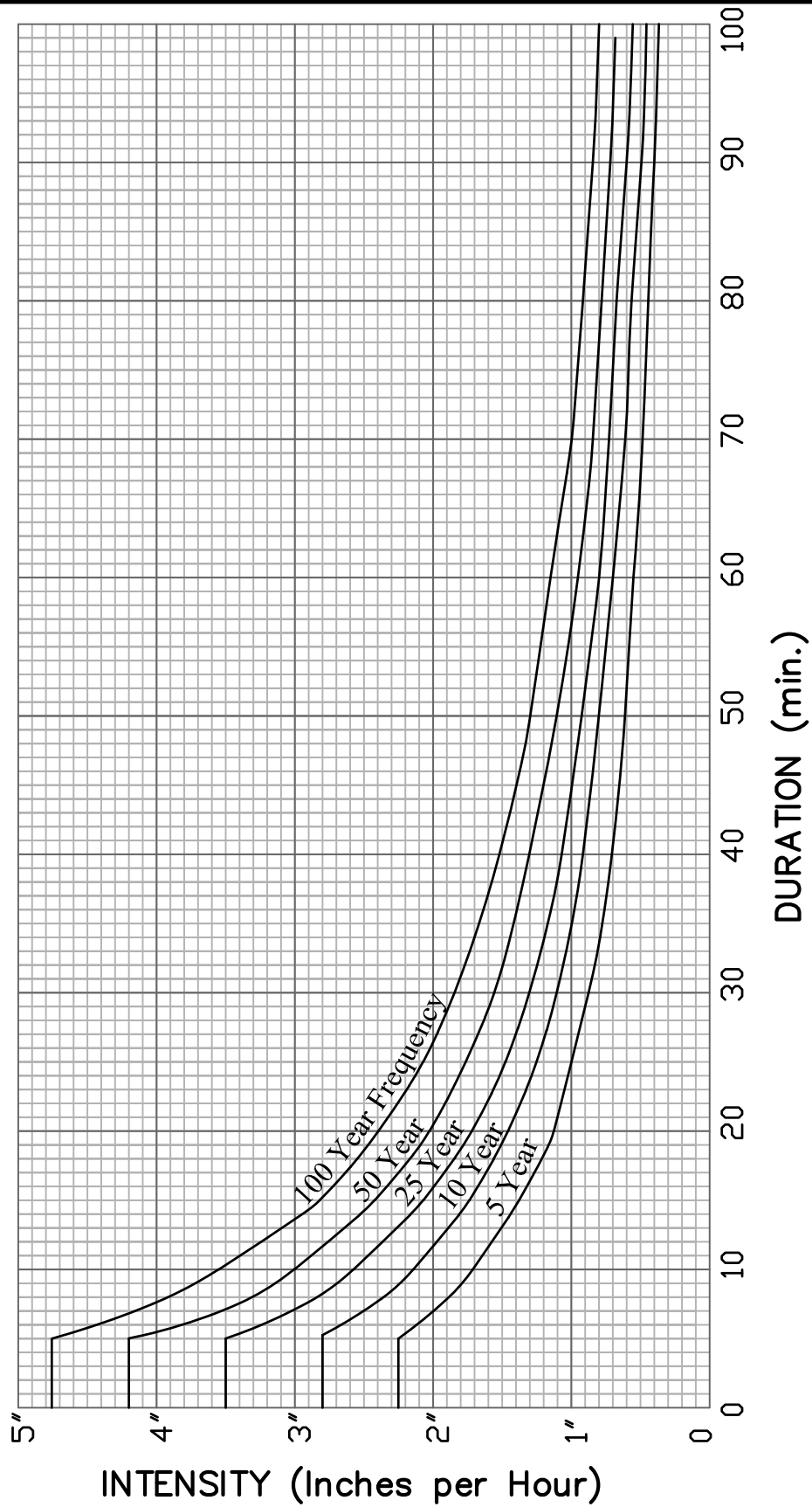


INTERSECTION SIGHT DISTANCE

ATTACHMENT:

4

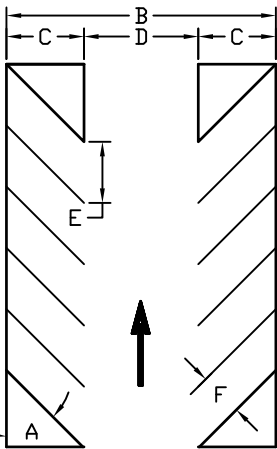
PULLMAN, WASHINGTON



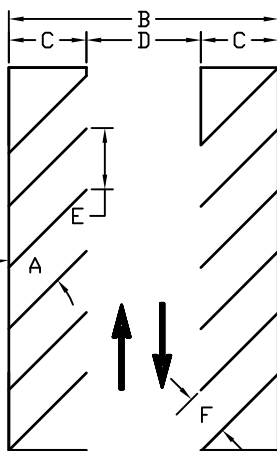
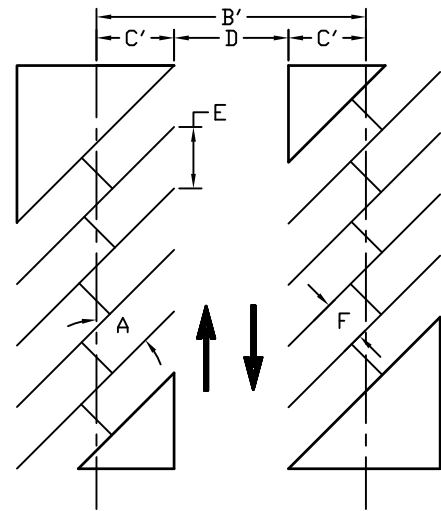
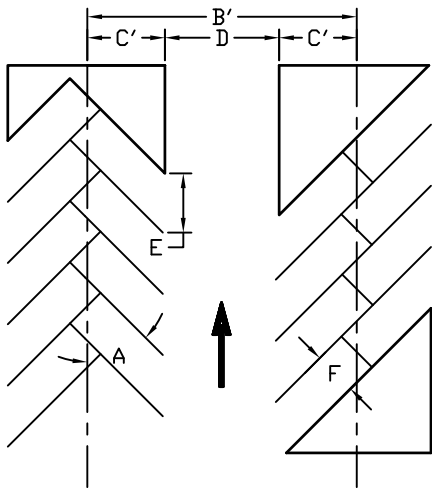
RAINFALL INTENSITY

PAGE NO:

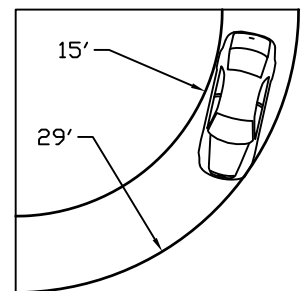
5



ONE WAY CIRCULATION							
A	B	C	D	E	F	B'	C'
Parking	Parking	Parking	Traffic	Curb	Car	Parking	Parking
Angle	Section	Bank	Aisle	Length	Stall	Section	Bank
	Width	Width	Width	Per Car	Width	Width	Width
STANDARD VEHICLES							
0°	28'	8'	12'	23'	8'		
45°	50'	19'	12'	12'	8.5'	43'	15.5'
60°	55'	20'	15'	9.8'	8.5'	50'	17.5'
COMPACT VEHICLES							
0°	27'	7.5'	12'	15'	7.5'		
45°	44'	16'	12'	11.3'	8'	39'	13.3'
60°	48.6'	16.8'	15'	9.2'	8'	45'	14.9'



TWO WAY CIRCULATION							
A	B	C	D	E	F	B'	C'
Parking	Parking	Parking	Traffic	Curb	Car	Parking	Parking
Angle	Section	Bank	Aisle	Length	Stall	Section	Bank
	Width	Width	Width	Per Car	Width	Width	Width
STANDARD VEHICLES							
0°	36'	8'	20'	23'	8'		
45°	58'	19'	20'	12'	8.5'	51'	15.5'
60°	60'	20'	20'	9.8'	8.5'	55'	17.5'
90°	64'	20'	24'	9'	9'		
COMPACT VEHICLES							
0°	35'	7.5'	20'	15'	7.5'		
45°	52'	16'	20'	11.3'	8'	47'	13.3'
60°	53.6'	16.8'	20'	9.2'	8'	50'	14.9'
90°	50'	15'	20'	8'	8'		



TURNING CLEARANCES

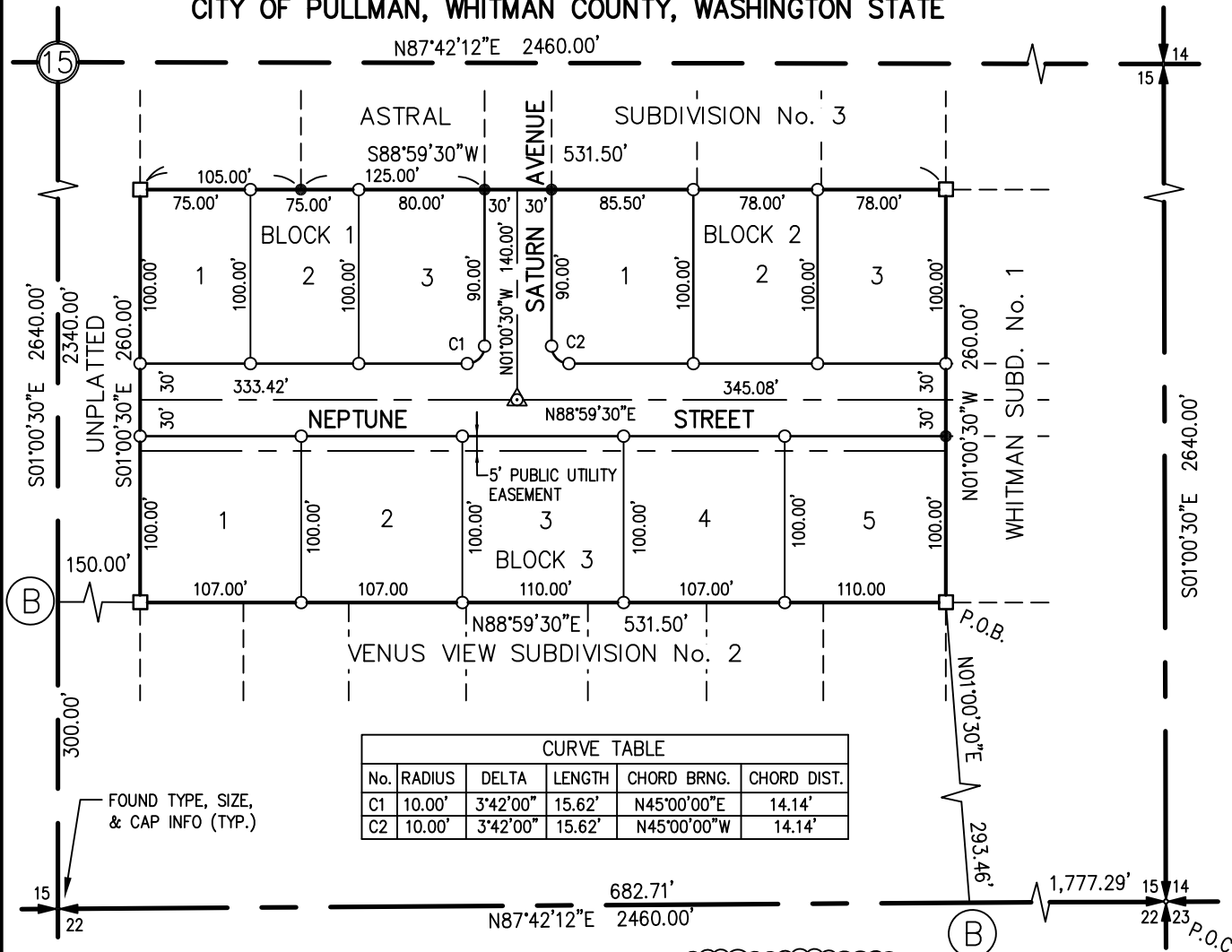
PARKING LOT DETAILS

ATTACHMENT

6

WHITMAN SUBDIVISION NO. 3 (A)

LOCATED IN THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF
SEC. 15, TOWNSHIP 14 NORTH, RANGE 44 EAST, WILLAMETTE MERIDIAN
CITY OF PULLMAN, WHITMAN COUNTY, WASHINGTON STATE



CURVE TABLE					
No.	RADIUS	DELTA	LENGTH	CHORD BRNG.	CHORD DIST.
C1	10.00'	3°42'00"	15.62'	N45°00'00"E	14.14'
C2	10.00'	3°42'00"	15.62'	N45°00'00"W	14.14'

LEGAL DESCRIPTION:

AS SHOWN ON PLAT CERTIFICATE OR
SUBDIVISION GUARANTEE.

(D)

SURVEYOR CERTIFICATE:

SEE ACCOMPANYING PAGES FOR CORRECT WORDING
ON REQUIRED CERTIFICATES AND DEDICATION.

(E)

TREASURER'S CERTIFICATE:

SEE ACCOMPANYING PAGES FOR CORRECT WORDING
ON REQUIRED CERTIFICATES AND DEDICATION.

(F)

AUDITOR'S CERTIFICATE:

SEE ACCOMPANYING PAGES FOR CORRECT WORDING
ON REQUIRED CERTIFICATES AND DEDICATION.

(G)

ASSESSOR'S CERTIFICATE:

SEE ACCOMPANYING PAGES FOR CORRECT WORDING
ON REQUIRED CERTIFICATES AND DEDICATION.

(H)

DEDICATION:

SEE ACCOMPANYING PAGES FOR CORRECT WORDING
ON REQUIRED CERTIFICATES AND DEDICATION.

(I)

ACKNOWLEDGEMENT:

SEE ACCOMPANYING PAGES FOR CORRECT WORDING
ON REQUIRED CERTIFICATES AND DEDICATION.

(J)

CITY APPROVAL:

SEE ACCOMPANYING PAGES FOR CORRECT WORDING
ON REQUIRED CERTIFICATES AND DEDICATION.

(K)

PUBLIC WORKS DIRECTOR CERTIFICATE:

SEE ACCOMPANYING PAGES FOR CORRECT WORDING
ON REQUIRED CERTIFICATES AND DEDICATION.

(L)

FINANCE DIRECTOR CERTIFICATE:

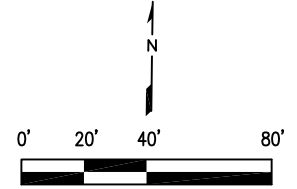
SEE ACCOMPANYING PAGES FOR CORRECT WORDING
ON REQUIRED CERTIFICATES AND DEDICATION.

LEGEND:

- FOUND TYPE, SIZE, & CAP INFO
- SET TYPE, SIZE, & CAP INFO
- SET TYPE, SIZE, & CAP INFO IN CONCRETE COLLAR
(REQUIRED ON ALL EXTERIOR ANGLE POINTS, PC'S AND PT'S)
- △ SET PULLMAN STD MONUMENT, TYPE, SIZE & CAP INFO
- P.O.B. LEGAL DESCRIPTION POINT OF BEGINNING
- P.O.C. LEGAL DESCRIPTION POINT OF COMMENCEMENT

NOTE: USE A MINIMUM
TEXT HEIGHT OF 0.08"

NOTE: RCW'S, WAC'S AND CITY OF
PULLMAN CODES ALSO APPLY.



SCALE: 1" = 40'	<i>Local Engineers</i>	SHEET 1
	jdi	of 1
	ssi	

REQUIRED NOTES INDICATED ON ATTACHMENT No. 7

NOTE “A”

The correct name of the subdivision shall be shown prominently at the top of each sheet of the plat.

NOTE “A-1”

If the subdivision is a replat of an existing subdivision, an extra line should be included in the title to show the land being replatted. For example, “. . . , A REPLAT OF LOTS 2 & 3 OF WHITMAN 2 ADDITION”.

NOTE “B”

The subdivision boundary shall be sufficiently tied to the section or sections it is located within. Section ties may be waived, at City’s discretion, when subdividing a previously platted parcel.

NOTE “C”

If desired, the firm preparing the plat may include the firm name, a logo, and such other information as the firm requires for its records. This should not be a title block, as the title of the subdivision is shown at the top of the plat.

NOTE “D”

SURVEYOR’S CERTIFICATE:

This map correctly represents a survey made by me or under my direction in conformance with the requirements of the Survey Recording Act at the request of _____ on _____, 20____.

Signature and License No.

NOTE "E"

TREASURER'S CERTIFICATE:

I hereby certify that taxes and assessments on property shown herein have been paid for 20____ and preceding years this ____ day of _____, 20____.

Whitman County Treasurer

NOTE "F"

AUDITOR'S CERTIFICATE:

Filed for record this ____ day of _____, 20____ at _____ m., in Book _____ of _____ at Page _____, Auditor's File Number _____ at the request of _____.

Whitman County Auditor

NOTE "G"

ASSESSOR'S CERTIFICATE:

I hereby certify that this property is assessed to _____, according to current tax rolls.

Whitman County Assessor Date

NOTE "H"

DEDICATION:

KNOW ALL MEN BY THESE PRESENTS: that [name] and [name] (husband and wife) (a single person) (dba _____ partnership) (a _____ corporation) (et cetera), owners in fee simple, and _____, a _____ corporation) (et cetera), as [mortgagor] [et cetera] have with their free consent and in accordance with their desires caused the land herein-described to be subdivided and platted as [subdivision name] and do hereby adopt the survey of [individual or firm name] as the official survey of [subdivision name] and do hereby dedicate and quite claim to the use of the public forever all streets, and do hereby grant all public easements shown on the plat, including easements for and the right to make necessary slopes or cuts or fills upon the lots, blocks, or tracts shown on the plat in the reasonable original grading of all streets and public easements shown thereon; and hereby waive all claims for damages against any governmental authority which may be occasioned to the adjacent land by the established construction, drainage, and maintenance of said streets and public easements; and hereby certify that they are the owners of and the only parties having any interest in the lands so divided, and that the property shown hereon is no encumbered by any delinquent taxes or assessments; and that they are authorized to sign this dedication.

In witness whereof we have set our hands this _____ day of _____, 20____.

[name]

[name]

[name of security holder]

By _____
[name] [title]

By _____
[name] [title]

