CITY OF PORTERVILLE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

IMPROVEMENT PLANS CHECKLIST

Subdivision:_____ Date:_____

Owner:_____ Checked By:_____

Engineer:_____

__√__ OK
__X__ Needs Correction
__O__ No Requirement
__?__ Needs Clarification
__*__ Submittal Required

A. DOCUMENTS REQUIRED;

_____ Engineer's estimate for cost of improvements.
_____ Soils report (R-value and percolation data, where applicable).
_____ Calculations for structural section of street pavement
_____ Calculations for design of gutters, storm drains and drainage reservoirs.
_____ Calculations for design of lift stations (sewer or drainage).
_____ Calculations for the design of size of water mains.
_____ Design calculation for retaining walls.
_____ Calculations for design of size of sewer mains.

B. DESIGN AND CONSTRUCTION STANDARDS:

<u>STREETS</u>

_____ Specifications for materials and construction methods.
_____ Width based on street classification and/or conditions.
_____ Name of streets and lot numbers conform with subdivision map.
_____ Minimum and maximum slopes of streets.
_____ Minimum and maximum cross slopes of streets.
_____ Minimum slope of curb and gutter. Elevations conform with slopes as shown.
_____ Structural street sections as drawn conform with design calculations.
_____ Emergency access road designed properly.
_____ Deadend streets adequately designed and barricaded.
_____ New pavement must meet grade of existing pavement properly.
_____ Centerlines of streets offset at least 150 feet from existing street if continuation is impractical.
_____ Street intersections at right angle and no less than 60 degrees.
_____ Minimum curb return radius; residential = 20 feet, commercial area, arterial or collector streets = 20 feet.

_____ Cul-de-sac's – length must not exceed 600 feet.
_____ Street center line radius; arterial streets must not be less than 600 feet, other streets not less than 200 feet.
_____ Frontage street required if lots on any major arterial street, expressway or freeway are allowed ingress to and egress from such lots.

SEWER SYSTEM

_____ Specifications for materials and construction methods.
_____ Complete drawing and specifications of sewage lift station.
_____ Size and slope of sewer mains conform with design calculations and slope complies with minimum slopes for pipe size.
_____ Type of material to be used for sewer pipes.
_____ Slope of sewer mains conforms with elevations shown.
_____ Minimum cover of 32 inches for sewer mains is provided.
_____ Maximum spanning of manholes is 550 feet.

WATER SYSTEM

_____ Specifications for materials and construction methods.
_____ Size of water mains to provide minimum fire flow of 1000 g.p.m. @ 20 p.s.i. min. residual pressure.
_____ Type of material to be used for water pipe.
_____ Spacing and proper location of water valves.
_____ Maximum spacing and proper location of fire hydrants. (Residential – 500 feet; multiple residential – 450 feet; commercial/industrial – 300 feet) or per Tentative Subdivision Map.
_____ Minimum cover of 32 inches for water mains is provided.
_____ Minimum horizontal separation of 12 feet between water mains and sewer mains and vertical separation of 12 inches is provided.
_____ Blow off assembly at deadends of water mains.

DRAINAGE SYSTEM

_____ Specifications for materials and construction methods.
_____ Grading plan of lots showing existing and finished grade elevations throughout and especially along perimeter of subdivision.
_____ Drain inlets located so that depth of flow in gutters does not exceed 0.4 foot (4.8 inches).
_____ Size and slope of storm drain based on design calculations.
_____ Minimum cover of 32 inches for storm water pipe.
_____ Type of material to be used for storm drain pipe.
_____ Capacity of drainage reservoir base on design calculations.
_____ Complete drawing and specification of storm water lift station.
_____ Cross section of retaining walls conform with design specifications.
_____ Project meets "Storm Water Management Plan" guidelines.

MISC.

_____ Specifications for materials and construction methods.
_____ Easements needed for sewer, water and storm drain pipes.
_____ Location and intensity of street lights.
_____ Railroad crossings, access allowed with improvements to be made.
_____ North Arrow, scale, signature of engineer, title of drawing, sheet numbers, and legibility.
_____ Benchmark used must be USGS NAVD88.

C. DESIGN BASED ON MASTER PLANS:

_____ Verify that sewer pipes are sized according to Sewer Master Plan.
_____ Verify that storm drain pipes are sized according to Storm Drain Master Plan.
_____ Verify that water pipes are sized according to Water Master Plan.
_____ Identify oversized facilities that need City's reimbursement for extra costs.

D. OTHER REQUIREMENTS:

_____ 1. Permit/application for the abandonment of wells, septic tanks, house demolition, etc.
_____ 2. Approval of other agency required.
_____ 3._____
_____ 4._____
_____ 5._____
_____ 6._____
_____ 7._____
_____ 8._____
_____ 9._____
_____ 10._____