

PUBLIC STREET IMPROVEMENT PLAN CHECKLIST

Date & Initial = OK
Blank = DEFICIENT
----- = N/A

(City Design Standard Section)

	EOW	Check	Verify
A Check to determine why improvements are going in. (i.e. site plan, CUP, etc). Make sure plan includes all conditions imposed. Make notes under remarks			
B GENERAL	-----	-----	-----
1. Initial engineers estimate of quantities and costs and initial plan checking fee paid: \$ _____ (Per current City of El Cajon Fee Schedule			
2. Final engineers estimate and final (difference in) plan checking fee paid/reimbursed: \$ _____			
3. Size – Standard "D" sheet or equal.			
4. Signature & stamp of Registered Engineer Preparing Plans on all sheets			
5. Signature of Irr/Water Engr. (HELIX WATER DISTRICT) signature block on title sheet ONLY			
6. Title Block	-----	-----	-----
a. City Engineer's space. (RCE 54786) on title sheet ONLY			
b. City Dwg. No. and Job No.			
c. Related actions.			
d. Space for As-built signature.			
e. Job Title.			
f. "Record Map # _____, Printed in lower right hand margin.			
g. Add " PRIVATE CONTRACT"			
7. Work to be done notes & symbols.			
a. Work to be done per Standard specifications and drawings and date accepted by Council.			

	EOW	Check	Verify
b. Symbols / Legends.			
c. General notes.	-----	-----	-----
8. Bench Marks			
a. Existing Bench Mark No. used with elevation on title sheet ONLY			
b. New Bench Marks located per policy.			
10. North arrows.			
11. Scales: Plan (40,20 Scale only), Profile (12,6,3 Scale only), Details			
12. Street names shown.			
13. Indicate Sheet No. for intersecting streets.			
14. Stationing, street centerline labeled and dimensions and curve info. On all sheets.			
15a. Key map – plans with 3 or more sheets.			
b. Vicinity Map.			
16. Show power pole relocation or undergrounding of utilities.			
17. Check street dedication.			
18. Check easement dedications (SD & Sewer Min. = 15')	-----	-----	-----
C. TYPICAL STREET SECTIONS			
1. R/W width.			
2. Traffic Index (T.I) shown on section.			
3. Distance between curbs.			
4. Pavement (AC & Base) thickness.			
5. PCC pavement - grade in excess of 20%. (2.C.2.bb)			
6. Elevations – crown and curbs.			

	EOW	Check	Verify
7. Curb face height – type of curb. (6” or 8”).			
8. Cross-fall max. = 3 %. (2.C.5)			
9. Cross-slope 1-5 %. (2 % standard) (2.C.5)			
10. Indicate cut and fill slopes from R/W line 2:1 max. cut and fill.	-----	-----	-----
D. <u>PUBLIC STREETS</u>			
1. 0.5% minimum grade - 0.8% desirable minimum. Check max. (2.C.2)			
2. Cross gutters (adequate width)			
3. Intersection analysis. (Curb returns provide smooth transition between street grades)			
4. Curb return radius shown on plans (1/4 delta x-sections provided? Move all drainage inlets outside curb returns)			
5. Meets existing facilities (proposed paving, etc. meets existing paving, etc.).			
6. Grade check throughout.			
7. Vertical and horizontal curve check. (standards, geometry, sight distance)			
8. Necessary Barricades, etc.			
9. Adequate transitions. (2.C.1.j)			
10. Grading of 8' shoulder.			
11. Cut-off walls at end of curbs, etc. (Downstream end only.)			
12. PCC Sidewalk (full width of 10-feet for C-2 zone)			
13. Redwood headers. (if no sidewalk) (2.B.2)			
14. Curb Ramp. (If street grade <8 %) (2.B.2)			
15. PCC Driveway. (G-26 for major street)			

	EOW	Check	Verify
16. Redwood header at edge of pavement or extra one foot paving.			
17. Furnish one (1) street name sign/intersection.			
a. "Not a Thru Street" sign on all cul-de-sacs.			
b. Locate street signs.			
18. PCC Alleys. Half width + 2'. (2.B.12)			
19. Underground Utilities.			
20. Street lights. (provide EOW procedure handout)			
21. Street light service point, pull boxes and conduit runs.			
E. <u>PUBLIC SEWERS</u> (4.1)			
1. Assign manhole #'s (City staff to provide numbers).			
2. Include distances to adjacent public sewer manholes.			
3. Type, Size and grade – PVC only, 8" minimum, 0.4% minimum grade.			
4. No curves horizontal or vertical.			
6. Minimum cover 4' for sewer mains (deep enough to serve future connections; also see minimum lateral depth)			
7. Concrete encasement & cradle. <4' and >14' (4.1.d)			
8. Manhole at end of all sewers and at all grade breaks and angle points.			
9. M.H. to M.H. maximum distance 300' unless more approved by P.W. Maintenance Manager.			
10. Lengths and grades between manholes.			
11. Trench cut-off wall – where grade of existing ground is 20% or more.			
12. 4" lateral to each lot with invert grade.			
13. Minimum lateral depth 5' below top curb elevation @ property line.			

	EOW	Check	Verify
14. Stub in M.H. for future extension - inv. elevation.			
15. Adjust existing manholes to finish grade.			
16. Extend or lower existing lateral or C.O.			
17. Location. Min. 15' from curb. (4.1.g)			
18. Sewer & water separation min. 10'. Water line to be above sewer line.	-----	-----	-----
F. <u>WATER</u>			
1. Fire hydrant flange elevation & distance from curb			
2. Fire hydrants, as per Fire Chief			
3. All water lines to District Specifications			
4. Water lateral to each lot including separate meter to each lot	-----	-----	-----
G. <u>DRAINAGE</u> (3.1)			
1. Careful drainage check throughout. (Subdiv. Entrance, exit Conditions) (Lot Protection)			
2. Drainage improvements sized in accordance with present drainage policy and design standards.			
3. Hydrology and hydraulic check made.			
4. Check streets for capacity. (3.3.b)			
5. Check type and capacity of inlets.			
6. Min. easement width. = 15'. (3.7)			
7. Type, size and grade – RCP (unless other approved by City Engineer, Min. 18", Min. Grade 0.5 %) (3.8.b)			
a. Minimum cover.			
b. R.C.P. class by "D" loading.			
c. Headwall/inlet apron at entrance.			

	EOW	Check	Verify
d. Culverts to extend far enough down slopes to avoid bank erosion. Headwall/energy dissipater at exit.			
e. Maximum length between cleanouts. 300' ($\leq 30''$ pipe) 800' ($>30''$ pipe)			
f. Cleanouts at pipe bends.			
g. Child proof barriers.			
8. Ditch Section. (If 48" pipe can carry Q, pipe must be used) (3.8.a)			
a. P.C.C. lined ditch.			
b. Lined spillways or downdrains.			
c. Fencing of ditches and gate at an access point.			
d. Easement width equal to channel plus 3' on each side.			
e. Access to easement for maintenance.			
f. Weep holes @ 10' o.c.			
g. Minimum radius.			
9. Planting of slopes to prevent erosion. (2.C.3.g) (subdivisions)			
Remarks			