

CITY OF PALM SPRINGS ENGINEERING DIVISION
SEWER IMPROVEMENT CHECK SHEET
Revised April 16, 2012
Most Recent Changes to this Document are Underlined

- I. Preparation of Plan OR Plan and Profile sheets.
 1. Mylar plan and profile sheets (3 mil min.) 24" x 36" or approved permanent equal.
 2. Drawings will be in ink and all work must be clearly reproducible.
 3. Quantity estimates to be placed on first sheet.
 4. **No applicate film** to be used on final plans.
 5. **Existing features may be greyscaled, but no less than 40% black. Lines may be solid or dashed. No dotted lines are permitted for existing features.**

- II. Vicinity Map
 1. Shown on first sheet: Scale 1" = 800'
 2. Street names shown thereon with street numbers.

- III. Research
 1. Investigate engineering records for previous designs and surveys of project area.
 2. Investigate all monuments within project area.
 3. Investigate all bench marks within project area.
 4. Field check before checking plan.
 5. Check condition of existing improvements.

- IV. Title Block
 1. City Standard Title Block shown on all sheets.
 2. Tract number of job description (if applicable).
 3. Registered Engineer's signature and R.C.E. number.
 4. Date plans prepared and checked by consulting engineer's staff.

5. Show benchmark description, as described by the City of Palm Springs Benchmark Book, on all sheets.

V. General Notes

1. General Notes shall be shown on the first sheet.

VI. Plan and Profile

1. North arrow and scale (1" = 20', 1" = 40' or as approved by City Engineer) on all sheets.
2. The sewer line stationing to be shown on plan and profile. No negative stationing. Show match lines on consecutive sheets.
3. Stationing at all manholes and cleanouts.
4. Size of sewer using the City's Master Plan of Sewers unless otherwise specified.
5. Over size of sewer to decrease grade is not permitted.

a. Design sewer to flow at 2 feet per second or a minimum slope of .0035.

b. Size sewer using the following criteria:

<u>Zoning</u>	<u>Type of Development</u>	<u>CFS/Acre</u>
R-1-C	Single Family (10,000 S.F.)	.00163
R-G-A	Multiple Residential Garden Apt.	.0051
R-3	High Density Apartments	.0119
R-TP	Residential Trailer Park	.00357

c. Design 4" dia. laterals to have a min. grade of 2% and 6" dia. laterals to have a min. grade of 1%.

6. The design of sewer mains shall be calculated on the basis of the pipe flowing 1/2 full at the time of peak flow per Sanitary Sewer Master Plan dated February, 2009.

7. Show invert elevations of all grade breaks and manholes in profile.

Include finished grade on street over sewer and elevation of rim of manhole.

8. Show alignment and location of sewer on plan.
9. Show existing and proposed underground and overhead utilities, including approximate locations of laterals and services to property line.

Desert Water Agency
Contact: Debbie Randall
(760) 323-4971 Ext. 146

Verizon
Contact: Larry Moore
(760) 778-3603

So. California Edison
Contact: Amber N. Wright
(760) 202-4250

So. California Gas Company
Contact:
1-800-427-2200

Time Warner Cable
Contact: Dale Scrivner
(760) 674-5452

Whitewater Mutual Water Co.
c/o Desert Water Agency
Contact: Debbie Randall
(760) 323-4971 Ext. 146

10. Names of all streets shown on plan and profile
11. Sewer pipe to be a minimum of 10 feet horizontally from water line to outside of sewer pipe; use cast iron pipe. If less than 10' from water main refer to the State of California, Department of Health Services - Criteria For The Separation Of Water Mains and Sanitary Sewers (See also City of Palm Springs Std. Dwg. No. 407 - Concrete Sewer Main Encasement).
12. Show minimum of 0.20 foot hike up when changing direction in manhole. Straight grade through manholes permitted.
13. Place sewer minimum 5' from street centerline and show direction of flow.
14. Match soffit when joining pipes of different sizes (from smaller to larger).
15. Sewers completed prior to street paving shall have sand traps installed until all improvements are accepted.
16. All house laterals shall be permanently located by marking with a 2-inch "S" imprinted on the curb.
17. In general, straight line design between manholes shall be required, depending upon the presence of other utilities, grades, etc. Horizontal curvilinear sewer may be approved, however, the approval shall be an exception rather than the rule

and shall have prior approval of the City Engineer. The following requirements hold in the event curvilinear sewer is approved:

<u>Pipe Diameter</u>	<u>Min. Radius</u>
8 - 12"	150'
15 - 18"	300'
21 - 30"	400'
32 - 42"	500'

Also, vertical curvilinear sewers will be acceptable with prior approval of the City Engineer.

18. Minimum sewer cover shall be 7 feet.
19. Manhole spacing to be, at maximum, 300 feet±.
20. Manholes in flood prone areas to be equipped with waterproof cover and protective metal cover at sewer line passage.
21. Show construction notes on all sheets.
22. If a sewer is private, the following note shall be placed in a prominent location under the Project Title on the Project Title Sheet : The proposed sewer main & appurtenances are private and will not be owned or maintained by the City of Palm Springs.
23. **Sewer manholes that are part of private sewer systems, shall have covers identified as "Private Sewer".**
24. The location of proposed water lines shall be included on sewer plans in the plan view (for location comparison purposes). On-site domestic water system plans are reviewed and approved by the Building Dept. The Building Dept. will inspect the entire on-site private water system.