

## Preliminary Sewer Layout Checklist

*Note: This checklist provides the minimum design requirements for typical gravity sewer projects for Tentative Plats, Development Plans and Site Plans showing the Preliminary Sewer Layout. Additional requirements by PCRWRD and the jurisdictional reviewing Agency may be required.*

Project:	
Engineer:	
Signature:	
Company:	
Date of Submittal:	

**Required References for Preliminary Sewer Layout:**

Arizona Administrative Code, Title 18, Chapters 5 and 9  
 Pima County Code of Ordinances, Title 13 - Public Services, Division II - Sewers  
 PCRWRD Engineering Standards and Specifications, Latest Edition  
 International Building/Plumbing Codes, Latest Editions

Use the Following Symbols	
√	Plan Complies with Requirement
X	Plan Does Not Comply with Requirement
N/A	Not Applicable

1 <sup>st</sup>		2 <sup>nd</sup>		3 <sup>rd</sup>	
Engineer	Reviewer	Engineer	Reviewer	Engineer	Reviewer

A. General Submittal Requirements						
						1. Complete ALTA survey sealed, signed and dated by an Arizona Registered Land Surveyor;
						2. Plans sealed, signed and dated by an Arizona Licensed Professional Registrant;
						3. Flow-through Public sewer is required by PCRWRD for this project;
						4. All Public and private sewers have been designed for gravity flow;
						5. Gravity flow is not feasible, therefore, a pump station and force main is the only available alternative;
						6. For private sewer with wastewater flows greater than 3000 gpd, design conforms to AAC R18-9;
						7. For private sewer with wastewater flows less than 3000 gpd, design conforms to International Plumbing Code;
						8. A complete title report has been provided to PCRWRD;
						9. Type II capacity letter has been provided to PCRWRD;
						10. If proposing service lateral connection to 12" or larger Public sewer, written authorization from PCRWRD has been obtained;
B. Cover Sheet						
						11. Reference to previous plan numbers and rezoning case numbers shown;
						12. Wastewater fixture unit equivalent calculations shown in Tabular Form;
						13. All required General Sewer Notes are shown on cover sheet (see Figure D below);

1 <sup>st</sup>		2 <sup>nd</sup>		3 <sup>rd</sup>	
Engineer	Reviewer	Engineer	Reviewer	Engineer	Reviewer
<b>C. Plan Sheets</b>					
					<p>14. For proposed sewers, plan shall call out pipe size, pipe material, ownership classification (Public or Private), length (feet, hundredths), slope (percent, hundredths) and directional flow arrow as shown in the following example:</p>
					<p>15. For existing sewers in the project's vicinity plan shall call out pipe size, pipe material, ownership classification (Public or Private), IMS plan number, length (feet, hundredths), slope (percent, hundredths) and directional flow arrow as shown in the following example:</p>
					16. Service laterals are shown and labeled as "HCS" or "BCS" and perpendicular to the Public sewer;
					17. Do not show existing service laterals to be abandoned;
					18. The proposed sewer conforms to the alignment requirements of the PCRWRD Engineering Standards and Specifications, latest edition (Subsection 9.1.1);
					19. Public sewer easements conform to the easement and accessibility requirements of the PCRWRD Engineering Standards and Specifications, latest edition (Section 11);
					20. The proposed landscaping near Public sewers conform to the easement and accessibility design requirements of the PCRWRD Engineering Standards and Specifications, latest edition (Subsection 11);
					21. Avoidance of proposed sewer in drainageways and stormwater basins in accordance with the PCRWRD Engineering Standards and Specifications, latest edition (Subsection 9.1.12);
					22. Public sewer is protected from storm water scour and erosion in accordance with the PCRWRD Engineering Standards and Specifications, latest edition (Appendix D);

**Figure D – Required General Sewer Notes for Preliminary Sewer Layout**

**When on-lot private individual disposal systems are to be used:**

- SEWAGE DISPOSAL WILL BE BY PRIVATE INDIVIDUAL DISPOSAL SYSTEMS. CONCEPTUAL APPROVAL BY THE PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY FOR PRIVATE INDIVIDUAL DISPOSAL SYSTEMS WILL BE OBTAINED, PRIOR TO THE APPROVAL OF THE DEVELOPMENT PLAN BY THE PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT;  
or
- SEWAGE DISPOSAL FOR LOTS \_\_\_\_ THROUGH \_\_\_\_ WILL BE BY PRIVATE INDIVIDUAL DISPOSAL SYSTEMS. CONCEPTUAL APPROVAL BY THE PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY FOR PRIVATE INDIVIDUAL DISPOSAL SYSTEMS WILL BE OBTAINED, PRIOR TO APPROVAL OF THE FINAL PLAT BY THE PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT.

***When private sewers are involved:***

3. ON-SITE SANITARY SEWERS WILL BE PRIVATE AND WILL BE CONSTRUCTED, OPERATED AND MAINTAINED ON A PRIVATE BASIS. THE LOCATION AND METHOD OF CONNECTION TO AN EXISTING PUBLIC SANITARY SEWER IS SUBJECT TO REVIEW AND APPROVAL BY PIMA COUNTY REGIONAL WASTEWATER RECLAMATION, AT THE TIME OF SUBMITTAL OF PLUMBING/BUILDING PLANS. **or**
4. ON-SITE SANITARY SEWERS, EXCEPT PUBLIC SEWERS WITHIN PUBLIC SEWER EASEMENTS OR RIGHTS-OF-WAY, WILL BE PRIVATE AND WILL BE CONSTRUCTED, OPERATED AND MAINTAINED ON A PRIVATE BASIS. THE LOCATION AND METHOD OF CONNECTION TO AN EXISTING PUBLIC SANITARY SEWER IS SUBJECT TO REVIEW AND APPROVAL BY THE PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT.
5. THE REQUIRED OFF-SITE SANITARY SEWER LINE WILL BE CONSTRUCTED, OPERATED AND MAINTAINED ON A PRIVATE BASIS. THE LOCATION AND METHOD OF CONNECTION TO AN EXISTING PUBLIC SANITARY SEWER IS SUBJECT TO REVIEW AND APPROVAL BY THE PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT, AT THE TIME OF SUBMITTAL OF PLUMBING/BUILDING PLANS.

***When on-site and/or off-site sewers will be Public:***

6. ON-SITE SANITARY SEWERS WILL BE PUBLIC AND WILL BE DESIGNED AND CONSTRUCTED TO PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT STANDARDS.
7. THE REQUIRED OFF-SITE PUBLIC SANITARY SEWER LINE WILL BE DESIGNED AND CONSTRUCTED TO PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT STANDARDS.

***When sewer augmentation is required:***

8. THE REQUIRED OFF-SITE PUBLIC SEWER AUGMENTATION WILL BE DESIGNED AND CONSTRUCTED TO PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT STANDARDS.

***When rim and invert elevations are not shown:***

9. ALL SANITARY SEWERS WILL BE DESIGNED TO PROVIDE GRAVITY FLOW.

***When a property owners' association is to be formed and when all or a portion of the involved sewers are private:***

10. A PROPERTY OWNERS' ASSOCIATION WILL BE FORMED TO ACCEPT RESPONSIBILITY AND LIABILITY FOR CONSTRUCTION, MAINTENANCE, OPERATION AND CONTROL OF ALL PRIVATE SEWERS.

***In the case of every commercial and/or industrial development:***

11. ANY WASTEWATER DISCHARGED INTO THE PUBLIC SANITARY SEWERAGE SYSTEM SHALL MEET THE REQUIREMENTS OF PIMA COUNTY ORDINANCE NO. 1982-154, AS AMENDED BY PIMA COUNTY ORDINANCE NO. 1983-5.
12. ANY RELOCATION, MODIFICATION, ETC., OF THE EXISTING UTILITIES AND/OR PUBLIC IMPROVEMENTS REQUIRED BY THIS DEVELOPMENT WILL BE AT NO EXPENSE TO THE PUBLIC. *(Also required for projects to be served by existing or proposed on-site wastewater treatment and disposal (septic) systems)*
13. THIS PROJECT HAS \_\_\_\_\_ PROPOSED AND \_\_\_\_\_ EXISTING WASTEWATER FIXTURE UNIT EQUIVALENTS, PER TABLE 3.20.040(F)(1) IN PIMA COUNTY CODE 13.20.040(F).
14. ANY WASTEWATER DISCHARGED INTO THE PUBLIC SANITARY SEWERAGE SYSTEM SHALL MEET THE REQUIREMENTS OF THE INDUSTRIAL WASTE ORDINANCE (PIMA COUNTY ORDINANCE NO. 1991-140, AS AMENDED).

***If no service laterals, on-site or off-site sewers are proposed and the commercial development will be served by the existing on-site private sewer:***

15. THE ON-SITE SEWERS ARE EXISTING AND PRIVATE. NO NEW SEWERS ARE PROPOSED.

***If new service laterals or private on-site sewer are proposed for the commercial development:***

16. ON-SITE SANITARY SEWERS WILL BE PRIVATE AND WILL BE CONSTRUCTED, OPERATED AND MAINTAINED ON A PRIVATE BASIS, AND IN ACCORDANCE WITH AN APPROVED OPERATION AND MAINTENANCE PLAN, IF REQUIRED. THE LOCATION AND METHOD OF CONNECTION TO AN EXISTING PUBLIC SANITARY SEWER IS SUBJECT TO REVIEW AND APPROVAL BY THE PIMA COUNTY WASTEWATER MANAGEMENT DEPARTMENT.
17. ON-SITE SANITARY SEWERS, EXCEPT PUBLIC SEWERS WITHIN PUBLIC SEWER EASEMENTS OR RIGHTS-OF-WAY, WILL BE PRIVATE AND WILL BE CONSTRUCTED, OPERATED AND MAINTAINED ON A PRIVATE BASIS, AND IN ACCORDANCE WITH AN APPROVED OPERATION AND MAINTENANCE PLAN, IF REQUIRED. THE LOCATION AND METHOD OF CONNECTION TO AN EXISTING PUBLIC SANITARY SEWER IS SUBJECT TO REVIEW AND APPROVAL BY THE PIMA COUNTY WASTEWATER MANAGEMENT DEPARTMENT.

***If Public on-site sewer is proposed for the commercial development:***

18. THE ON-SITE SANITARY SEWAGE COLLECTION LINES WILL BE PUBLIC AND DESIGNED AND CONSTRUCTED TO PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT STANDARDS. ALL BUILDING CONNECTION SEWERS WILL BE PRIVATELY MAINTAINED.

***If any off-site Public sewers are proposed for the commercial development:***

19. THE REQUIRED OFF-SITE PUBLIC SANITARY SEWER LINE WILL BE DESIGNED AND CONSTRUCTED TO PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT STANDARDS. *(This note not required when the off-site Public Sewer is not in adjacent ROW or a Public sewer easement)*

***For any commercial development showing a new or existing connection to the Public sewer:***

20. A PROJECT CONSTRUCTION PERMIT MUST BE SECURED FROM PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT BEFORE BEGINNING ANY WORK ON THIS PROJECT.

***If the proposed on-site sewer will be Public or the design flow of the proposed private sewer is equal to or greater than 3000 gpd (calculated per AAC R18-9, Table 1):***

21. CONSTRUCTION AUTHORIZATION FROM THE PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY IS REQUIRED BEFORE BEGINNING ANY WORK ON THIS PROJECT. APPROVAL OF THIS DEVELOPMENT PLAN DOES NOT CONSTITUTE CONSTRUCTION AUTHORIZATION.

***If any new or existing Public sewer easements are shown:***

22. NO PERMITS SHALL BE ISSUED FOR ANY PERMANENT STRUCTURES TO BE BUILT WITHIN THE PUBLIC SEWER EASEMENTS SHOWN HEREON WITHOUT SEPARATE WRITTEN AUTHORIZATION FROM THE PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT.
23. ALL LANDSCAPING WITHIN THE PUBLIC SEWER EASEMENTS SHOWN HEREON SHALL BE IN ACCORDANCE WITH THE PLANTING GUIDELINES CONTAINED WITHIN THE PCRWRD ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST EDITION.