

# PRELIMINARY PLAN REVIEW CHECKLIST\*

(Typically for 60% or 70% Design Submittal)

## CERTIFICATION

**I ACKNOWLEDGE THAT ALL APPLICABLE SUBMITTAL DOCUMENTS AND CHECKLIST ITEMS HAVE BEEN INCLUDED AND ADDRESSED. THE SUBMITTAL MAY NOT BE ACCEPTED IF ITEMS ARE NOT INCLUDED.**

Professional Engineer's Name: \_\_\_\_\_

Professional Engineer's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Please complete and return this checklist and the check prints with each submittal.

- \* This checklist is not intended to be all inclusive but does provide many basic items that should typically be checked and evaluated at this stage of design plan development. Some items on this checklist may not be applicable to preliminary plan stage plans, and if so, those items shall be marked "N/A" for "Not Applicable" at this stage.

Please complete and return this checklist and the check prints with each submittal. Discussion of redline comments on plans or this checklist should be directed to the plan reviewer.

Professional Engineer of record (**ENG**) must fill out all boxes in the first column as either  (Addressed) or "N/A" (Not Applicable).

The plan reviewer (**RVW**) shall check the second column as  (Required) when requirements have not been properly addressed.

## REQUIRED SUBMITTALS

**ENG**   **RVW**

- |                          |                          |  |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Electronic plan submittal in PDF format. Both full size (22" X 34") and half size (11" X 17") plans  |
| <input type="checkbox"/> | <input type="checkbox"/> | Hard copies as requested by Project Manager ___ full size (22" X 34") and ___ half size (11" X 17")  |
| <input type="checkbox"/> | <input type="checkbox"/> | Reports and/or memorandums (Draft or Final):<br><input type="checkbox"/> <input type="checkbox"/> Geotechnical Report<br><input type="checkbox"/> <input type="checkbox"/> Drainage Report/Memorandum<br><input type="checkbox"/> <input type="checkbox"/> Traffic Study/Analysis<br><input type="checkbox"/> <input type="checkbox"/> Project Assessment for Federal Aid projects (Final) |
| <input type="checkbox"/> | <input type="checkbox"/> | Opinion of Probable Cost using standard City bid item numbers, description formats, and unit measurements  |
| <input type="checkbox"/> | <input type="checkbox"/> | Previous plan review comments and resolution spreadsheet   |
| <input type="checkbox"/> | <input type="checkbox"/> | Preliminary Plan Review Checklist completed and signed by the Engineer   |

**ENG RVW**

- Pothole Request Form(s) and corresponding exhibit/plan sheet
- Draft Special Provisions (using latest boilerplate – needs to match plans)
- Real Estate Acquisition Services Request Form including Final Affected Parcel list for Real Estate to take to Council.
- Right-of-way map (if there is acquisition on the project)

**REQUIREMENTS OF THE PRELIMINARY PLAN REVIEW (60% OR 70%)**

**ENG RVW**

- All previous checklist items and plan review comments have been addressed and included on the plans
- Project is “build-able”, with all elements and construction notes essential for construction included on plans
- If right-of-way acquisition is needed, incorporate right-of-way map into the plan set
- For paving projects, typical sections for each significant change in roadway section are provided
- If storm drain mainline design is involved, a preliminary redline horizontal/vertical mainline alignment layout plan has been prepared, submitted for review, and approved prior to official Preliminary Plan submittal
- For storm drainage related projects, a complete detailed hydrology and hydraulic report for the storm drainage system, including drainage area map and all computations for storm drain main, catch basins and connector pipes, etc. has been provided in accordance with the City Storm Water Policies and Standards Manual. Also, the Storm Drain Design Checklist in the City of Phoenix Storm Water Policies and Standards Manual has been completed and submitted with the Hydrology and Hydraulic Report.
- For storm drain mainline designs, all known existing underground utility crossings are shown in the storm drain profile.
- For storm drain mainline designs, all asbestos cement pipe (ACP) waterline undercrossings (12-inch or smaller) are called out for ductile iron pipe (DIP) replacements at the crossings; and all non-DIP sanitary sewer line undercrossings are called out for permanent pipe supports or DIP with Cured In Place Pipe liner replacements at the crossings per MAG Detail 403.
- For projects with storm drain catch basin designs, all catch basin connector pipe profiles are shown, including all known existing underground utilities in each profile

**ENG RVW**

- For storm drain mainline designs, a Storm Drain Design Summary Sheet, overall Hydraulic and Energy Grade Line Profile Sheet, and an Alternate Pipe Material chart have been completed and included in the plans.
- For improvements that require a variance from Water Services Department, SRP, or other utilities all required information shall be clearly shown and dimensioned. A blowup or separate detail of this area may be required to clearly indicate the required information. Request forms, and corresponding plan exhibits have been provided showing all desired variances.
- All potential underground utility conflicts with proposed design are noted on the plans and shown in corresponding locations on profiles. Clearances to water and sewer facilities checked in reference to Design Standards Manual for Water and Wastewater Systems.
- Include a utility relocation summary schedule “by others”, show utility agent, utility type, location, and if permit is required. This summary can be added to the General Note sheet.
- All removal and installation notes are shown on plans, and all quantity take-offs are shown on each appropriate plan sheet and on a summary sheet. Bid item descriptions, item numbers, and unit measurements shall be in accordance with standard City bid item catalog lists.
- Appropriate geotechnical information (for pavement design, storm drain design, bridge, drainage channel, etc.) is shown on the plans on separate sheets. Appropriate information usually includes a soil boring location map, soil boring logs, gradation and plasticity information, field resistivity and soil pH information, and seismic refraction survey results.
- Any structural plans and corresponding special details needed (such as for bridges, culverts, headwalls and wingwalls, special drainage structures, utility vaults, etc.) are shown on the plans
- Any desired underground utility potholes have been requested (with each utility type and/or utility company — electric, telephone, cable TV, gas, etc., requested on separate forms) on standard City of Phoenix S.U.E. (Utility Pothole) Request forms, and corresponding plan exhibits have been provided showing all desired pothole locations for each utility type and/or utility company.
- If right-of-way is required for the project, a right-of-way map indicating all new right of way or easement acquisitions necessary to construct the project, including all dimensions necessary to clearly describe the takes, and corresponding right of way area calculations on standard City forms has been provided
- Any revised intersection grading worksheets required have been provided for all major, collector, and any other potentially-signalized intersections