



KIVA #: _____ **Project Name:** _____

Reviewed By: _____ **Phone:** _____ **Date:** _____

Professional Engineer: _____ **Phone:** _____

The purpose of this checklist is to offer comments on plan design for construction of Fire Hydrants from the city of Phoenix water main to the property or easement line.

The sources for the Fire Hydrant design are the city of Phoenix Design Standards Manual for Water and Wastewater Systems, M.A.G. Uniform Standard Specifications and the city of Phoenix Supplement to M.A.G. Uniform Standard Details.

This checklist serves to minimize redline comments on the check prints and to maintain consistency among plan reviewers on plans for Fire Hydrant construction in the public right-of-way and public easements. Plan approval and issuing permits depend on compliance with the comments made on the check prints and this checklist. The Professional engineer of record shall satisfy him/herself of the completeness and accuracy of the design.

A completed checklist must be attached to the Fire Hydrant plans when submitted for first review. The following Certification Statement must be signed by the Professional engineer of record certifying that all applicable requirements on this checklist have been met.

Plan review correction cycles and/or approvals are valid for 12 months. Additional review fees (see Fee Schedule – Phoenix City Code, Chapter 9, Appendix A.2) shall be charged for extensions/reinstatements to update expired plan reviews.

CERTIFICATION

I CERTIFY THAT THE REFERENCED PLANS COMPLY WITH ALL APPLICABLE CITY ORDINANCES AND STANDARDS, INCLUDING FEDERAL, STATE AND COUNTY REQUIREMENTS AND REGULATIONS. IN ADDITION, I CERTIFY THAT THIS CHECKLIST HAS BEEN COMPLETED ENSURING ALL ITEMS LISTED ARE PROPERLY ADDRESSED. I UNDERSTAND THAT IF I FAIL TO ADDRESS ALL APPLICABLE ITEMS IN THIS CHECKLIST, THE PLANS MAY BE IMMEDIATELY RETURNED TO ME WITHOUT ANY FORMAL REVIEW BEING PERFORMED.

Professional Engineer's Name: _____

Professional Engineer's Signature: _____ **Date:** _____

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

Professional engineer of record (**ENG**) must fill out all boxes in the first column as either (Addressed) or (Not Applicable).

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

Onsite fire hydrants must be reviewed and permitted under a separate plan submittal to the Planning & Development Department - Fire Plan Review. Please call 602-262-4784 regarding any questions for the onsite portion of the Fire Hydrant Plan.

This publication can be made available in alternate formats (Braille, large print or digital media) upon request. Contact Planning & Development at (602) 262-7811 voice or (602) 534-5500 TTY.

REQUIRED SUBMITTALS

ENG RVW

- Plan sheets shall be 24" X 36" for multiple hydrants OR 8 ½" X 11" sheets for a single hydrant; submit four (4) sets of Offsite Fire Hydrant plans, a sealed cost estimate, Utility Conflicts OR print the Utility Conflict Disclaimer on the cover sheet (if work is done on a local or residential street only), and a completed and signed Fire Hydrant Plan, Offsite Checklist.

Note: If submitting through the Electronic Plan Review system, multiple copies of submittal documents are not required.

GENERAL REQUIREMENTS:

- Symbols shall be per M.A.G. Specifications and Details supplemented by Water Services Department Details.
- Orientation of each plan sheet shall be shown by a north arrow and scale of drawing. (North arrow to be up or to the right)
- All sheets shall have the Civil engineer's Arizona registration seal with original signature and date prior to plan submittal. The Civil engineer's name, address, and phone number shall be provided on the cover sheet.
- Horizontal scale shall not be smaller than 1"=40'. For major streets and cases of complex situations where more detail is necessary, then the scale shall be 1"=20'.
- Original plan sheets shall be sufficiently clear to allow legible prints to be reproduced from microfilm. The size of the lettering and symbols shall be 1/8" minimum. Shading or zip tape is not permitted. Refer to the Water Services Department Design Standards Manual (P-68) for information required on record drawings (As-builts).
- Provide the appropriate processing numbers on all sheets including: KIVA#, CPWT#, and city Quarter Section Number in lower right corner.
- Provide the project name and address on each sheet.
- Provide the Blue Stake notification decal.
- Include owner, developer, and designer's information: name, address, and telephone number.
- When re-locating or abandoning a fire hydrant, add a note to the plan to remove the tap from the main per city of Phoenix Detail P1344.
- Return four (4) corrected bond copies for subsequent reviews, with the redline check prints and this checklist, to Payments and Submittals, 2nd Floor of City Hall.

PLAN NOTES:

(ALL to be included on the plan sheet)

- All construction shall be performed in compliance with all applicable uniform standard details and specifications for public works construction of Maricopa Association of Governments (M.A.G.) and the Phoenix Supplemental Standard Details and Specifications (newest edition and as modified hereon).
- The following M.A.G. Details are specifically not approved:
390 Curb Stop with flushing pipe.
391-1 Valve Box Installation.
- Planning & Development Department Field Inspection group shall be notified 48 hours before any construction begins by calling (602) 262-7811.

ENG RVW

- Pavement replacement thickness and type are to be per M.A.G. and C.O.P. Supplement to M.A.G. Section 336 and C.O.P. Detail P1200 - Type B. Curb and gutter replacement shall be a minimum of one (1) full section, per M.A.G. Standard Detail 220. Sidewalk replacement shall be a minimum of one (1) full panel per C.O.P. Detail P1230. At the discretion of the city of Phoenix Planning & Development offsite inspector, tunneling under existing curb and gutter, in city of Phoenix R.O.W., may be allowed. Tunneling under existing sidewalk will not be allowed in the city of Phoenix R.O.W.
- Compaction shall comply with M.A.G. Section 601.
- Asphalt restoration is required for any street cut. Refer to Street Pavement Cut Policy (TRT 00167 and Ordinance G-6308).
- Per the city of Phoenix Ordinance G-4396, this plan is for official use only and may not be shared with others except as required to fulfill the obligations of your contract with the city of Phoenix.
- Plan approval is valid for 12 months. Prior to plan approval expiration, all associated permits shall be purchased, or the plans shall be resubmitted for extension of plan approval. The expiration, extension, and reinstatement of Civil Engineering plans and permits shall follow the same guidelines as those indicated in the Phoenix Building Construction Code Administrative Provisions Section 105.3 for Building permits.

PLAN SHEET REQUIREMENTS:

- A North arrow and bar scale shall be shown.
- Monument lines of all streets on the plan are to be shown and labeled.
- Elevation datum and bench marks (city datum required). Please dial (602) 495-2050, ext. 265 Voice or (602) 534-5500 TTY, to obtain city datum for existing benchmark closest to the project site. Equations cannot be used.
- Show and label the size and type, and dimension, all utilities in the right-of-way and easements from the monument line.
- Station the fire hydrant tap from nearest platted street monument (intersection) beginning with station 0+00 per Water Services Department Policy (P68).
- Provide a Material/Quantities List of materials to be used in right-of-way or easements.
- All pipes shall be Ductile Iron Pipe, Pressure Class 350 Minimum.
- Signature Block (lower right corner):

**APPROVED FOR:
THE CITY OF PHOENIX**

PLANNING & DEVELOPMENT DEPARTMENT

DATE

- Provide As-Built Certification on the plans:

AS-BUILT CERTIFICATION:

I hereby certify that the "Record Drawing" measurements as shown hereon were made under my supervision or as noted and are correct to the best of my knowledge and belief.

Registered Engineer

Date

Registration Number

ENG RVW

- Provide the dimension from hydrant to street monument line.
- Provide a dimension from monument lines of both streets if the Fire Hydrant is being installed at an intersection.
- Show and label all existing and proposed easements, dedications, right-of-way, streets, and alleys with stationing, dimensions, and offsets. Streets shall be identified by name. Streets, alleys, and easements shall be dimensioned at least once and at all breaks. Monument line of streets shall be shown. Stationing must begin at a platted intersection.
- If the proposed Fire Hydrant is adjacent to a driveway maintain five foot (5') minimum distance from the top of wing to the hydrant location.
- The following disclaimer can only be used for local or residential streets. Do not use for major or collector streets:**

I hereby certify that all utility companies with facilities in the area of this project have been contacted and the data provided is shown on this plan. I agree to indemnify, defend, save and hold harmless the city of Phoenix, its officers, officials, agents, employees and volunteers from any and all claims, demands, actions, liabilities, damages, losses, or expenses incurred for any utility conflicts that may arise.

Signature and seal if applicable

Date

- Call out M.A.G. Standard Detail 340 for tapping sleeve installation.
- Call out city of Phoenix Supplement to M.A.G. Uniform Standard Specifications P1360 for the Fire Hydrant assembly.
- All valves shall be installed using the city of Phoenix Supplement to M.A.G. Uniform Standard Specifications P1391 Type 'A'.
- . Show all valves in the area of construction and their assigned numbers as shown on the quarter section map. Include all water valves necessary to isolate the water main in the event of an emergency shut down.
- Show existing and proposed concrete work impacted by Fire Hydrant construction. Replace sidewalk, curb and gutter with sidewalk ramps to accommodate the physically disabled while the construction is taking place.
- Fire hydrant tap is to be called out as follows:
Install a/an _____" X _____" tapping sleeve and valve, box and cover. Abbreviation is acceptable: TS & V, B & C. Specify type of valve box to be used. An example: 12" X 8" TS & V, B & C per M.A.G. Detail 340 and city of Phoenix Supplement Detail P1391. When the tap size is the same as the size of main to be tapped conform to MAG Specifications Subsection 630.4.2(A) (1).
- Provide top and bottom elevations for any fire hydrant barrels crossing all utilities (water, sewer, storm drain, irrigation, electric, gas, fiber optic, telephone, etc.) in City of Phoenix R.O.W. Separation is to be maintained per M.A.G. Standard Detail 404. The fire hydrant barrel may have to be realigned per C.O.P. Detail P1370 to meet vertical separation requirements. The fire hydrant barrel must have 6' minimum horizontal clearance from all other utilities except water. Fire hydrant barrels must have a minimum of three feet (3') separation from water services.

PLANS FOR REVISION

- All original plan approvals, signatures, and seals are to remain on the revised plans.

- All plans revised after the original approval shall be resubmitted for review and approval. The nature of the revisions must be called out on the cover sheet and on the sheet(s) which have been revised. The revision number itself shall consist of a numeral within a triangle next to each revision. Δ Changes on each plan sheet shall be highlighted with "clouding".
- All revised sheets, including the cover sheet are to be re-sealed, signed and dated.

EXTENSIONS

ENG RVW

- All plans submitted for extension require a new signature block and are to be re-signed by the submitting designer. Plan extensions are to be highlighted with "clouding" as specified in the plan revision process above. The plan sealant shall note that this change is a plan extension. A new approval signature block is required to be added to the coversheet for approval of the extension. All plan extensions must have prior approval by completing the Plan Review Extension Application. The Plan Review Extension Application can be found at the following site: <http://phoenix.gov/pdd/development/sitecivil/civil/index.html>. Provide a copy of the approved application with the plan submittal.
- Plan approvals for extension are valid for a period of 180 days from the date of plan approval.