

Public Right-of-Way Resolutions

for

Unincorporated Areas

of

Maricopa County



Maricopa County  
Department of Transportation  
2901 W. Durango Street  
Phoenix, AZ 85009  
February 1994

Revised December 1, 1995

1899.007

Property of  
Flood Control District of MC Library  
Please return to  
2901 W. Durango  
Phoenix, AZ 85009

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for  
Unincorporated Areas  
of  
Maricopa County



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**Section One**

**Resolution 93-01**

**MARICOPA COUNTY RESOLUTION  
FOR  
PERMITS TO WORK IN DEDICATED  
MARICOPA COUNTY RIGHT-OF-WAY  
(RESOLUTION 93-01)**

WHEREAS, it is necessary in the public interest that all uses within the right-of-way for public roads, streets, and alleys by individuals, corporations and political subdivisions be regulated and controlled so that said public roads, streets and alleys may be effectively utilized and maintained for their primary purposes as public ways, and

WHEREAS, the laws of the State of Arizona authorize the Board of Supervisors of Maricopa County to control and manage said public roads, streets and alleys within Maricopa County.

NOW, THEREFORE, BE IT RESOLVED that no person, corporation, association or other political subdivision shall, without obtaining a permit therefore, enter upon any public road, street, alley or way or upon the right-of-way of any public road, street, alley or way, not a State Highway, outside the corporate limits of any city or town for the purpose of performing and construction, reconstruction, removal, repair, maintenance or any other work, including, but not limited to the following:

1. Pavement, curbs, gutters, driveways, sidewalks;
2. Drainage or flood control facilities;
3. Grading, oiling, graveling or any surfacing of any road, street, alley or way;
4. Water, gas, sewer or other types of pipelines;
5. Irrigation and waste water facilities;
6. Utility lines such as electric, television, telephones, communications and other franchised facilities;
7. Structures, signs (whether temporary or permanent);
8. Plantings, landscaping, watering and/or drainage systems, and decorative placements;
9. Any of the above which may overhang the public road, street, alley or way.

BE IT FURTHER RESOLVED that the Board of Supervisors of Maricopa County hereby authorizes the Transportation Director to issue such permits.

BE IT FURTHER RESOLVED that all applications for such permits shall be in writing on such form as required by the Maricopa County Department of Transportation, unless waived in writing, by the Transportation Director. The application shall be accompanied by no less than three (3) copies of plans, or similar exhibits of a size and in the quantity prescribed by the Maricopa County Department of Transportation, sufficient to clearly illustrate the location, dimension, motive, method and purpose of the proposed work. Upon submittal, the applicant shall pay the applicable plan review fee as set forth in **Exhibit A**, herein.

Applicants for such permits may be either an owner or a contractor; however, the work may be performed only by (1) a contractor, (2) utility company, (3) governmental agency, or (4) resident owner of residential property, where the property owner proposes to do the work. If the improvement to be constructed under the permit is not to become the property of the County of Maricopa, and if the applicant is someone other than the owner, the owner shall also sign the permit form indicating that he agrees to the conditions of the permit. Permits shall be issued only to the person, corporation or political subdivision making application therefor and may not be assigned to another person, corporation or political subdivision by the permittee. If a permittee assigns his permit to another, the permit shall become void. A permit shall be valid for a maximum of one year from date of issue, or as indicated on the permit, unless sooner cancelled. If work is not completed within one year, or the allotted time period, a new permit must be obtained for such uncompleted work. If no work is performed after a permit is obtained, the permittee may apply for cancellation of the permit in writing, prior to expiration. If approved, the fee, less processing and a twenty (20) percent review charge, shall be refunded to the permittee.

BE IT FURTHER RESOLVED that if any work is undertaken prior to securing a permit therefore, the Maricopa County Department of Transportation may require the county road to be restored to its original condition prior to granting a permit, or may charge a reasonable fee not to exceed \$1,500, in addition to the normal permit fee schedule for inspection and examination of the work done prior to issuance of a permit. All work shall cease until the Maricopa County Department of Transportation determines whether the public road should be restored to its original condition or grant a permit in accordance with this resolution.

BE IT FURTHER RESOLVED that this resolution shall not prevent any person, corporation or political subdivision from maintaining any pipe or conduit lawfully on or under any public street, provided no interruption to traffic, or from making excavation as may be necessary for the preservation of life or property when an urgent necessity therefor arises during the hours the offices of the Maricopa County Department of Transportation are closed, except that those making emergency use shall apply for a permit within one (1) business day after the offices are again opened.

BE IT FURTHER RESOLVED that all work done in said public roads, streets, alleys or ways shall be done in accordance with the permit and specifications of Maricopa County for such installation.

BE IT FURTHER RESOLVED that the Maricopa County Department of Transportation shall furnish to the applicants such engineering and inspection services as will determine if the improvements constructed are in accordance with permits granted and the specifications and details mentioned in this resolution. Any persons or corporation, association, or political subdivision, doing work under any permit as set forth in this resolution **shall notify the Department of Transportation at least one full working day in advance of the time and place the work will begin.**

BE IT FURTHER RESOLVED that the applicant shall, before any permit is issued, deposit with the Maricopa County Department of Transportation a permit fee as determined from the schedule of fees as set forth in **Exhibit B**, herein.

BE IT FURTHER RESOLVED that the Maricopa County Department of Transportation shall require each applicant referred to in this resolution, before granting the permit, to deposit with this office an amount in cash or a performance bond of a sum up to 100% of the amount of the cost of work proposed in the application, as determined by the Maricopa County Department of Transportation, as a guarantee that the work will be completed in accordance with the permit and the County's adopted or approved details and specifications. He shall give the applicant his receipt for such a deposit. Work bonded to Maricopa County under the provisions of the Subdivision Regulations is not required to be bonded under the provisions of this paragraph.

The bond shall be joint and several in form and made payable to Maricopa County. The bond shall be signed by the applicant or the property owner if he is not the applicant, and a qualified surety company authorized to transact business in the State of Arizona. The condition shall be that the applicant will faithfully complete the work described in the application in accordance with the plans, specifications and conditions thereof.

The bond shall be released upon satisfactory completion and acceptance of the work, or may be cancelled after the applicant has provided other security satisfactory to the County which will cover obligations that remain.

No deposit shall be less than One Hundred Dollars (\$100.00) on work done under this article.

In instances where an applicant is issued numerous small permits throughout the year, he may post a continuing bond to cover work under more than one permit; however, this continuing bond provision is not intended for use on new subdivision type work. The continuing bond shall be of value sufficient to cover all work under construction by the permittee at any time and shall be satisfactory to the Maricopa County Department of Transportation.

The bond is subject to cancellation as noted above, or may be terminated after all obligations are fulfilled which were "permitted" prior to the Maricopa County Department of Transportation receiving cancellation notice from Surety. Surety shall not cancel, change or amend any bond without fifteen days prior written notice having been served on the Maricopa County Department of Transportation.

BE IT FURTHER RESOLVED that the permittee shall be responsible for all liability imposed by law for personal injury or property damage arising out of or related to work performed by the permittee under permit, or arising out of the claim of such liability is made against the County, its officers, agents, boards or employees. The permittee shall defend, indemnify and hold them, and each of them, harmless from such claim, including claims alleging the joint negligence of the County, its officers and employees and the permittee.

No applicant shall be entitled to a permit under this resolution unless and until he has filed and maintains on file with the Maricopa County Department of Transportation, a certificate certifying that he and /or his company or business firm carries public liability and property damage insurance issued by an insurance carrier authorized to do business in the State of Arizona, insuring the applicant and the County and its agents, against loss by reason of injuries to, or death of persons or damages to property arising out of or related to work performed by the applicant, its agents subcontractors or employees while performing any work under such permit. Such insurance shall be primary and provide coverage for all liability assumed by the applicant under this section, and shall be provided by any permittee in the following minimum amounts:

\$500,000 for death of, or injury to, any one person in any one accident;

\$1,000,000 for death of, or injuries to, more than one person in any one accident.

\$500,000 for damages to property.

Failure by the applicant to provide the Maricopa County Department of Transportation with such a certificate, and failure by the Maricopa County Department of Transportation to demand the filing by permittee of such a certificate before such a permit is issued, shall not be deemed to waive permittee's obligation to provide the insurance specified herein. Such insurance certificate shall remain in effect and be kept on file with the Maricopa County Department of Transportation until all work to be performed by the permittee under the permit has been completed.

Where an encroachment involves a permanent obstruction, such insurance certificate requirements and other resolution stipulations shall remain in effect until such obstruction is removed.

The insurance certificate shall provide that coverage cannot be cancelled or expire without providing fifteen days written notice of such action to the Maricopa County Department of Transportation also noting the permit number.

No evidence of liability insurance or surety bond shall be required as a condition precedent to the issuance of a permit to: (1) a federal, state, county or municipal agency or political subdivision; or (2) any public service corporation with a net worth of more than \$1,000,000 as reflected by its most current balance sheet, or (3) a resident owner of a residential property where he proposes to perform construction himself, in front of his own property which does not obstruct the public street.

No permit shall be issued for work within the right-of-way in which a contractor is engaged in a county road project without written permission from the contractor accompanying the application for permit.

FURTHERMORE, issue of permits as herein provided shall not eliminate any obligation by the application for any other permits that may be required by either federal, state, local or other county jurisdictions.

BE IT FURTHER RESOLVED that this Resolution is not intended to cancel the Resolutions of the Board of Supervisors dated October 5, 1970, October 20, 1975, and August 2, 1982, but to amend said Resolutions.

BE IT FURTHER RESOLVED that the effective date of the revised provisions of this Resolution shall be February 16, 1994.

Dated this 16th day of February, 1994.

BY: Betty Bayless  
Chairman, Board of Supervisors

ATTEST:

Sean McConell  
Clerk, Board of Supervisors

**EXHIBIT "A"**  
**SCHEDULE OF PLAN REVIEW FEES**

<u>TYPE OF REVIEW</u>	<u>FEES</u>
SUBDIVISIONS (Private & Public), COMMERCIAL OR INDUSTRIAL DEVELOPMENTS (5 Acres or larger) AND MUNICIPAL PROJECTS (X)	----- \$34 PER SHEET (First 2 Reviews) \$15 PER SHEET (Each 2 Reviews Thereafter)
(X) No charge with reciprocal agreement	
SMALL TIE-ONS, EXTENSIONS, ETC. (Less than 5 Acres)	----- \$20 PER SHEET (First 2 Reviews) \$ 8 PER SHEET (Each 2 Reviews Thereafter)
PUBLIC UTILITY COMPANY	----- NO CHARGE
HOME OWNER IMPROVING HIS/HER FRONTAGE	----- NO CHARGE

**EXHIBIT "B"**  
**SCHEDULE OF PERMIT FEES**  
PROCESSING CHARGE IS \$25.00 PLUS THE FOLLOWING:

<u>ITEM</u>	<u>UNIT</u>	<u>COST</u>
ANCHOR & DOWNGUY	----- EACH	2.50
BARRICADE (PERMANENT)	----- L.F.	2.50
BOX CULVERT, BRIDGE (SURFACE AREA)	----- S.F.	0.25
CABLE OR CONDUIT 5"DIA. OR LESS (Max. 3 ducts/row, each add'l. row reduced by \$0.02/L.F.)	----- L.F.	0.10
CABLE OR CONDUIT GREATER THAN 5" DIA. (Max. 3 ducts/row)	----- IN./L.F.	0.03
CATCH BASIN, SCUPPER, DRAINAGE STRUCTURE	----- EACH	20.00
CONCRETE CURB & GUTTER	----- L.F.	0.20
COMB. CURB, GUTTER & SIDEWALK	----- L.F.	0.31
DRIVEWAY	----- EACH	25.00
FIRE HYDRANT	----- EACH	15.00
GRADING (\$50 MIN.)	----- MILE	100.00
HEADWALL	----- EACH	20.00
IRRIGATION BOX	----- EACH	30.00
LANDSCAPING (FRONTAGE)	----- L.F.	1.00
MAINTENANCE OR EMERGENCY REPAIR (ANNUAL)	----- MONTH	25.00
MANHOLE	----- EACH	24.00
PAVING OR PVMT. REPLACEMENT	----- S.Y.	0.20
PVMT. REPLACEMENT (Exist. Surf. Treatment Less than 2 yr. old or Exist. Pvmt. Less than 5 yr. old)	----- S.Y.	5.00
PULL BOX	----- EACH	5.00
RIPRAP, CHANNEL LINING	----- S.Y.	0.50
SIDEWALKS, BIKE PATHS	----- S.F.	0.05
SPECIAL EVENT (INCLUDING TRAFFIC CONTROL)	----- EACH	100.00
SPLICE PIT	----- EACH	8.00
STOCKPILING MATERIAL (SAME LOCATION)	----- ONE DAY	35.00
	----- TWO DAY	50.00
	----- THREE DAY	100.00
SURVEY MONUMENT	----- EACH	3.00
TEST HOLE (W/O PVMT. REPL.)	----- EACH	5.00
TRANSFORMER PAD, UTILITY VAULT	----- S.F.	0.50
UTILITY METER	----- EACH	5.00
UTILITY/CATV PEDESTAL	----- EACH	3.00
UTILITY POLE	----- EACH	5.00
WATER, SEWER, GAS & IRRIGATION LINES 5" DIA. OR LESS	----- L.F.	0.10
WATER, SEWER, GAS & IRRIGATION LINES GREATER THAN 5"	----- IN./L.F.	0.03

ALL OTHERS WILL BE CHARGED AT 4% OF THE COST AS ESTIMATED BY THE  
TRANSPORTATION DIRECTOR.

ALL SUBDIVISIONS UNDER DEVELOPER'S PERMIT SHALL BE CHARGED AS FOLLOWS:  
 0-5      \$115.00 PER LOT      26-60      \$70.00 PER LOT  
 6-25      \$90.00 PER LOT      60+      \$55.00 PER LOT

THESE CHARGES INCLUDE FEE FOR UTILITY TRENCH WITHIN SUBDIVISION

**\*\* AFTER-THE-FACT PERMIT = DOUBLE NORMAL FEE \*\***

Adopted February 16, 1994

Revised March 17, 1994

**Section Two**

**Resolution 93-03**

## AS-BUILT CERTIFICATION

The improvements to the subject project have been completed. As the Engineer of Record, I certify that these improvements were built in accordance with the approved plans and specifications. Test reports and as-built plans are being submitted to your office.

I recommend approval and acceptance of these improvements as constructed.

\_\_\_\_\_  
Engineer's Signature

\_\_\_\_\_  
Date

\*\*\*\* Whoever signs the above takes full responsibility for all phases involving concrete and asphalt construction.. **A P.E. or his direct representative has to be on site during concrete and asphalt construction.**

**MARICOPA COUNTY RESOLUTION  
FOR  
STREET IMPROVEMENTS,  
INSTALLATION OF UTILITIES AND TRAFFIC CONTROL  
(RESOLUTION 93-03)**

WHEREAS, it is necessary in the interest of public health, safety, welfare and convenience that standards and specifications be adopted for the construction and improvement of streets and utilities and for the safe use of the rights-of-way in areas under the jurisdiction of the Maricopa County Board of Supervisors, and

WHEREAS, the laws of the State of Arizona authorize the Board of Supervisors to regulate the extent and conditions of these improvements.

NOW THEREFORE BE IT RESOLVED that the "Maricopa County Special Provisions for Construction of Street Improvements", the "Maricopa County Special Provisions for Installation of Underground Utilities", and the "Maricopa County Special Provisions for Traffic Control Under Permit"; attached hereto and made part hereof as though recited in their entirety, are hereby declared adopted.

BE IT FURTHER RESOLVED that adoption of these aforementioned Special Provisions in no way voids the requirements of the Special Provisions originally adopted by the Board of Supervisors on February 7, 1972 and subsequently revised on July 17, 1972, October 20, 1975 and August 2, 1982, but merely revises those Special Provisions.

BE IT FURTHER RESOLVED that these Special Provisions are intended to compliment the Subdivision Regulations for Maricopa County, as well as the Maricopa Association of Governments (MAG) Uniform Standard Specifications for Public Works Construction and Maricopa County Department of Transportation Supplements as currently in effect.

BE IT FURTHER RESOLVED that these Special Provisions shall be effective immediately upon adoption.

ADOPTED by the Maricopa County Board of Supervisors in public session this 3rd day of November, 1993.

BY: \_\_\_\_\_

*Jim Bruner*  
Chairman, Board of Supervisors

ATTEST:

*John R. Powell*  
Clerk, Board of Supervisors

**MARICOPA COUNTY SPECIAL PROVISIONS  
FOR  
CONSTRUCTION OF STREET IMPROVEMENTS**

**I. STREET IMPROVEMENTS**

**A. Subdivisions**

1. a. Streets in residential subdivisions with net lot areas of 18,000 square feet or less shall be improved to urban standards according to the cross sections shown in the Maricopa County Department of Transportation Roadway Design Manual. Streets in residential subdivisions with net lot areas greater than 18,000 square feet shall be improved to rural standards according to the Roadway Design Manual. Streets in rural residential subdivisions with net lot areas of 70,000 square feet or larger shall be improved to a 28-foot wide pavement of penetration and chip seal (or 1 1/2" asphalt concrete) on a minimum 6" aggregate base course. Where grades exceed five percent (5%) or the roadway accommodates cross drainage, penetration chip seal surfaces shall not be used.
- b. Streets in Industrial Parks and Commercial Subdivisions shall be improved per the Roadway Design Manual (Procedure 5.1, Figure 5.5).
2. Access to subdivisions shall be improved as required by the Subdivision Regulations. Chip seal pavement shall not be used for access roads where the post development traffic, will exceed 300 vehicles per day.
3. All utility services in new subdivisions shall be installed prior to placement of pavement, or have provisions made to eliminate later pavement cuts.
4. Concrete curbs and gutters are required in residential subdivisions with net lot sizes of eighteen thousand square feet (18,000 sq. ft.) or less. Residential and minor collector streets may have roll curb. Others shall have vertical curb. Curb returns shall be vertical curb, (four, six or seven inches high). Transitioning between different height curbs may be done in return or in curb transition of lesser height curb.
5. Inverted crown designs are prohibited.
6. Perimeter streets shall be improved as required by the Transportation Director.

7. Sidewalk ramps shall be included on all curb returns at intersections and at locations where pedestrian traffic is invited to cross traveled ways.
8. Sidewalk shall be of the width and location specified in the Roadway Design Manual.

B. General

1. Unless covered under paragraph A.1.a. of these Special Provisions, improvements within County right-of-way shall conform to applicable Standards and Specifications of MAG and the Roadway Design Manual.
2. a. Typical sections shall conform to the Roadway Design Manual according to roadway classification. The pavement section shall be determined from laboratory soil test results using an acceptable pavement design method, with a minimum of two (2) inches of asphalt concrete (AC). However, the Transportation Director may have a predetermined design which will govern. Recommended pavement cross-slopes shall not exceed a minimum of "1.5%" or a maximum of "2.5%".

Before placing ABC material, all vegetation must be removed. If required by the Transportation Director, the soil shall be sterilized.

- b. Applicable uses of the penetration and chip seal specification shall conform to Maricopa County Department of Transportation requirements. ABC shall be determined from laboratory soil test results using an acceptable pavement design method, with a minimum depth of six (6) inches.
  - c. Street pavement in Industrial Parks and Commercial Subdivisions shall consist of a minimum of four (4) inches of compacted depth of asphalt concrete over aggregate base course (ABC) as determined from laboratory soil test results, with a minimum depth of ABC of ten (10) inches.
3. All asphalt concrete shall receive a preservative seal in accordance with Sections 334 and 718 of the MAG Uniform Standard Specifications.
  4. Channels used for surface drainage onto a paved street shall be lined with a non-erosive material or improved as required by the Transportation Director.

5. Drainage must be provided as per the approved plans. Design frequencies and street flow requirements shall conform to the Drainage Regulations of Maricopa County.
6. Irrigation and Utilities
  - a. All private irrigation facilities and other private utilities must be relocated onto private easements at no cost to the County. Unused or abandoned facilities in the right-of-way must be removed to the satisfaction of the Transportation Director.
  - b. Public utility facilities existing at the time of the improvements shall be relocated to non-conflicting locations at no cost to the County, or as required by the Transportation Director.
  - c. Attention is called to the requirements for notification to utilities before the start of excavation operations (Blue Stake).

## II. SPECIFICATIONS

All work and materials shall conform to the current Maricopa Association of Governments Uniform Standard Specifications and Details for Public Works Construction, and the Roadway Design Manual; EXCEPT as noted in these Special Provisions. In case of conflict between the Uniform Standard Specifications and the Special Provisions, these Special Provisions shall govern.

It is not the intention of the Maricopa County Department of Transportation to prohibit use of other materials, methods or designs for street improvements. Other specifications will be considered as satisfactory alternates upon written approval of the Transportation Director, based on prior submission of structural designs, tests and other supporting data.

## III. CONSTRUCTION DEFICIENCIES

### A. Asphaltic Concrete

1. Where the pavement thickness specified is the two-inch (2") minimum:
  - a. Where a two (2) inch minimum section is specified the compacted thickness is more than 1-1/2 inches but less than 2-inches, the area shall be chip sealed in accordance with MAG Section 330 for a length of one block or 660 feet, whichever is less.

- b. Where a two (2) inch minimum pavement section is specified a pavement thickness is 1-1/2 inches or less, it shall be overlaid in accordance with Section 321.6 of the MAG Uniform Standard Specifications.
- 2. Where the pavement thickness specified is more than the two-inches, penalties for deficiencies shall be in accordance with Section 321.6 of the MAG Uniform Standard Specifications.
- B. Concrete curb & gutter shall be constructed within one-half inch of the specified dimensions. Where the curb and gutter does not meet this requirement, the Transportation Director reserves the right to reject the work or specify remedial action.

#### IV. ENGINEERING

- A. All preparation of plans, staking, construction and inspection within County right-of-way shall be performed under the supervision of a civil engineer, Registered in the State of Arizona.
- B. Plans shall be submitted on a consistent sheet size not to exceed 24" x 36" and must be neat, clear, legible and complete in all respects.

Improvement plans shall be submitted on plan and profile sheets with a horizontal scale no smaller than 1" = 50' and a vertical scale no smaller than 1"=5'. The scale must be adequate to clearly show all grade breaks and details.

Pre-development and final grades must be shown either as contours or spot elevations.

Plans should be submitted for approval at least ten (10) working days prior to any submission of an application for a construction permit.

- C. Continuous field inspection shall be required during construction operations involving placement of road wearing courses, Portland Cement concrete and seal coating operations and shall be performed under the supervision of a civil engineer, registered in the State of Arizona.
- D. Upon completion of all work, the engineer shall certify in writing to the Maricopa County Department of Transportation, that such work was done in accordance with the approved plans and specifications. He shall also furnish one sealed set of prints reflecting "as-built" conditions.

## **V. PERMITS**

All work performed within County right-of-way must be under permit from the Maricopa County Department of Transportation. A minimum of three (3) sets of approved plans must be submitted with the application at least three (3) working days before work is scheduled to begin. If plans not previously approved are submitted with the permit application, additional review time may be required.

The Contractor is responsible for securing any and all necessary permits from other jurisdictions prior to commencing work. Conformance to other permit requirements and coordination of any conflicts between permits is the responsibility of the Contractor.

## **VI. PUBLIC UTILITIES**

It shall be the owner's responsibility to arrange for all necessary installation, relocation or removal of conflicting public utilities. Satisfactory test reports, as required by the "Maricopa County Special Provisions for Installation of Underground Utilities", must be received by the Maricopa County Department of Transportation prior to approval for paving or concrete operations over any utility. The Transportation Director or his designate shall give approval for paving operations only after compliance with all requirements for utility installation, grading and subgrade compaction. The latest edition of "Maricopa County Special provisions for Installation of Underground Utilities" is incorporated herein and made a part hereof.

## **VII. DUST CONTROL**

Existing regulations, (namely Regulation II, Rule 20-A-3 of the Maricopa County Health Department, Bureau of Air Pollution Control and the MAG 1991 Particulate Plan for PM-10 for the Maricopa County Area), shall be rigidly observed and enforced. Water or other approved dust palliatives in sufficient quantities shall be applied during all phases of construction involving open earth work to prevent the unnecessary discharge of dust and dirt into the air.

## **VIII. COMPACTION**

- A. Subgrade - The top six inches (6") of pavement subgrade shall be compacted to a minimum of ninety-five percent (95%) of the maximum density of the material. Sidewalk and curb subgrade shall be compacted to a minimum of ninety percent (90%) of the maximum density of the material. Uncurbed sections shall be compacted to a minimum of 95% between centerlines of roadside drainage ditches.

- B. Base Material - The base course shall not be placed on subgrade until compaction tests of the subgrade have been completed and found to meet the specifications contained herein. Base material shall be compacted, full depth, to a minimum of one hundred percent (100%) of the maximum density of the material being used.
- C. Surface Course - Asphalt concrete pavement shall be compacted to 95% of the specific gravity of test specimens compacted by the 75 blow method of ASTM D-1559 (MAG Section 321). A rolling pattern may be established for this required density only with the approval of the Transportation Director.
- D. Requests for variances from A and B will require certified material tests and designs.

#### **IX. CONTRACTION AND EXPANSION JOINTS FOR CURB, GUTTER AND SIDEWALK**

Expansion and contraction joints shall conform to Sections 340 and 729 of the MAG Uniform Standard Specifications accordingly.

#### **X. TESTING**

All testing herein required shall be performed under the supervision of a civil engineer registered in the State of Arizona. All test reports are to be submitted to the Maricopa County Department of Transportation. Each report shall indicate the location of the test, type and source of material tested, test designation being used and the name of the person performing the test.

#### **XI. PAVEMENT DESIGN**

- A. The pavement design method shall be approved by the Maricopa County Department of Transportation. Soils test required to perform the design are not provided by Maricopa County. The following soil tests are the minimum required for pavement design purposes:
  - 1. Samples shall be taken to a minimum depth of eighteen (18) inches below proposed subgrade elevation. Depths of up to three (3) feet on arterial type roads may be required in certain instances.
  - 2. One (1) test per eight hundred (800) lineal feet with at least one test per proposed street. Additional tests may be ordered by the Transportation Director at apparent visible change in soil type.
  - 3. Each sample shall have a sieve analysis per AASHTO T27 with results reported as percent passing #200 sieve, plus a plasticity index per AASHTO T90.

4. Test results shall be forwarded to the Maricopa County Department of Transportation, together with the paving plans.
- B. Additional tests may be ordered by the Transportation Director for purposes of assuring design information when the pavement design method is other than the standard.

## **XII. COMPACTION TESTS**

A. The following tests shall be performed:

1. Pavement Subgrade - 1 test per 800 lineal feet of roadway with at least 1 test per street.
2. Curb Subgrade - 1 test per 500 lineal feet of curb with at least 1 test per street, per side.
3. Base Material - 1 test per 800 lineal feet of roadway with at least 1 test per street.
4. Sidewalk Subgrade - 1 test per 500 lineal feet of sidewalk with at least 1 test per street, per side.

B. Maximum densities for the materials being compacted shall be determined in the laboratory on the same materials in accordance with AASHTO Designations T-99, Method A. Field density tests shall be performed in accordance with AASHTO Designation T-191, T-238 or T-239.

C. Test locations must be staggered within the limits of the improvements.

## **XIII. CONCRETE TESTS**

See Section 725 of the MAG Uniform Standard Specifications for required concrete tests.

## **XIV. ASPHALT CONCRETE TESTS**

A. The contractor shall furnish the asphalt mix formula to Maricopa County Department of Transportation for approval prior to placing any asphalt courses.

B. The following tests shall be taken:

1. Gradation - Expressed as % by weight passing, using AASHTO T-30.

2. Asphalt content - Expressed as % by weight of total mixed material, sampled and tested per AASHTO T-164 and T-168.
3. Compaction - As previously specified above in Section VIII.C.

A minimum of one (1) sample per 1200 tons of material, but no less than (1) sample from each source is required for each day's paving. Additional samples may be ordered by the Transportation Director or his representative whenever visual changes occur in the mix.

## **XV. MATERIALS**

- A. Base Material - Material shall meet Section 702.2 of the MAG Uniform Standard Specifications. If "Select" material is used, the upper four inches (4") of base must be Aggregate Base. The total thickness shall be determined by laboratory tests of the subgrade materials, with the minimum as specified in the Roadway Design Manual.
- B. Asphaltic Concrete - Material shall meet Section 710 of the MAG Uniform Standard Specifications, mix C-3/4 for single course construction (E-3/8 surface courses shall not be used). Single lifts shall not exceed three (3) inches.
- C. Preservative Seal Coat - Material shall meet Section 718 of the MAG Uniform Standard Specifications.
- D. Concrete - Concrete construction within the right-of-way shall be of the class specified in the MAG Uniform Standard Details and conform to the applicable requirements of Section 725 of the MAG Uniform Standard Specifications, unless otherwise required by the Transportation Director.
- E. Reinforced Concrete Pipe - Shall meet Section 621 of the MAG Uniform Standard Specifications. Rubber gaskets are required whenever pipe is under existing or proposed roadway.
- F. Corrugated Metal Pipe - Shall meet Section 621 of the MAG Uniform Standard Specifications. Pipes under existing or proposed roadways shall be bituminous coated or aluminized.
- G. Miscellaneous - Any other items shall conform to the applicable sections of the MAG Uniform Standard Specifications, unless approved otherwise.

## **XVI. CONSTRUCTION**

All construction shall conform to the applicable sections of the MAG Uniform Standard Specifications, unless modified in writing by the Transportation Director.

## **XVII. STREET SIGNS AND SURVEY MONUMENTS**

- A. The developer of a subdivision shall be responsible for purchase and erection of street name signs at all intersections within a subdivision, including intersections with perimeter streets. All street name signs shall conform to Standard Detail 2054 of the Roadway Design Manual (appendix). Signs shall be furnished and installed, at no cost to the County, at locations shown on the approved plans.
- B. Survey monuments shall conform to the applicable MAG Standard Detail 120-1 or 120-2 and shall be furnished and set by the owner at no cost to the County; monuments shall be located as shown on the approved plans or as required by the Maricopa County Department of Transportation and shall be properly punched by a registered land surveyor.
- C. No approval or acceptance of a project will be given until these items are complete in place.

## **XVIII. TRAFFIC CONTROL REQUIREMENTS**

Traffic control shall conform to the "Maricopa County Special Provisions for Traffic Control Under Permit," incorporated herein and made a part hereof.

## **XIX. SIDEWALKS, BICYCLE PATHS AND SPECIAL USES**

- A. When sidewalks are required, they shall be installed to the widths and at the locations indicated in the Roadway Design Manual, unless otherwise approved.
- B. Bicycle paths, equestrian and hiking trails are not required by Maricopa County. If constructed in County rights-of-way, such construction must be approved by the Transportation Director and under permit from the Maricopa County Department of Transportation.

## **XX. MAIL BOXES**

Individual mail boxes are permitted to be placed only in such locations that will not interfere with traffic, either vehicular or pedestrian, or create a hazard of any nature.

If a sidewalk is constructed adjacent to the curb, the box shall be located behind the sidewalk and clear of the vertical projection of the back edge of the sidewalk by a minimum of one (1) foot. If no sidewalk is constructed, the box must clear the vertical projection of the back edge of the curb by a minimum of one (1) foot. If no curb is constructed, the box must clear the vertical projection of the edge of the pavement by a minimum of three (3) feet. Installation of individual mail boxes in the County right-of-way shall be done under permit from the Maricopa County Department of Transportation. It is the permittee's responsibility to satisfy any requirements of the local postmaster and provide uninterrupted mail service during construction.

## **XXI. PROJECT APPROVAL**

The project will not be considered ready for final inspection until all drainage items, grading, and backfill are complete and pavement, curbs and sidewalks are swept clean of all dirt and debris. The area behind curbs shall be totally backfilled to top of curb, compacted and neatly dressed to a maximum 4:1 slope. The contractor shall furnish a water truck at the time of final inspection for the purpose of testing street drainage. Any ponding in excess of ten square feet in surface area or 1/2 inch in depth shall require corrective action by the contractor. The "as-built" plans as called for in Section III.D. above must be submitted before final project approval.

## **XXII. DECLARATION**

Within one year after approval of the improvements in a subdivision, an inspection will be made by the Maricopa County Department of Transportation to determine to what extent, if any, damage may have been caused by construction operations. Any such damaged sections must be repaired or replaced at no cost to the County prior to being eligible for declaration into the County System for permanent maintenance.

## **XXIII. CHANGES**

No variation from these Special Provisions or approved plans and specifications will be permitted unless submitted to and approved in advance by the Transportation Director.

## **XXIV. GUARANTEES**

The contractor shall guarantee all work against defective workmanship or materials for a period of one (1) year from the date of acceptance, as evidenced by release of the permit, except for ordinary wear and tear or unusual abuse or neglect by parties other than the Contractor.

**MARICOPA COUNTY SPECIAL PROVISIONS  
FOR  
PERIMETER STREET IMPROVEMENTS**

The improvement of perimeter streets for new developments shall follow the guidelines shown below. The criteria for the level of improvements required is a function of the existing roadway condition prior to the improvement, whether or not Maricopa County Department of Transportation (MCDOT) has a project for improvement of the roads in the vicinity in its Capital Improvement Program (CIP) and the intensity of the proposed development. Terms used are defined as follows:

(1) Present Improvements:

None: Unopened; graded and drained; no stabilized wearing course.

BST: Bituminous Surface Treatment, usually penetration and chip seal pavement or equivalent.

Strip: Strip pavement, usually asphalt concrete, generally 28' wide over full aggregate base.

Full: Asphalt concrete pavement with curbs, to full ultimate width.

(2) Proposed Improvements:

Ultimate Section: As per MCDOT Supplement to MAG Standard Details.

Penetration and Chip Seal Pavement: 6" minimum compacted depth of aggregate base; asphalt penetration; chip seal; all in accordance with applicable specifications of MCDOT.

CIP: The approved five year road improvement program of MCDOT.

**ARTERIAL TYPE ROADS (SECTION LINES)**

General right-of-way width is 55' to 70' half-width or 75' to 90' half-width with a frontage road (not recommended but required if lots face arterial road). The frontage road, if required, shall be improved to the same specifications as the interior streets of the subdivision. The arterial roadway shall be improved as follows:

Present Improvements				CIP		
None	BS	Strip	Full	Yes	No	
x					x	28' Strip Paving (May or may not be centered on Monument Line).
x				x		Bond for 1/2 width improvement (not to exceed cost of 17' strip paving).
	x				x	Widen and improve as necessary to 24' half-width with 1 1/2" AC over 6" ABC pavement from the edge of the existing improvement to the 24' width.
	x			x		Bond for 10' widening of strip paving.
		x			x	Widen to ultimate section on side of subdivision in accordance with specification of MCDOT, complete with concrete curb, gutter and sidewalk.
		x		x		Same as above, except the developer may be required to post bond for the improvement until such time as the plans for the improvement are fully approved.
			x	N/A	N/A	No further improvements to arterial road required.

**MAJOR COLLECTOR TYPE ROADS (MIDSECTION LINE)**

General right-of-way width is a 40-foot half width. The ultimate, fully improved section consists of 48-62 feet of pavement, plus two feet (2') wide vertical concrete curb and gutter on both sides. If the subdivision borders on a midsection line or major collector type road, the improvements required are as follows:

Present Improvements				Improvement to Perimeter Road Required
None	BST	Strp	Full	
x				24-31 foot half-width pavement to full specification, plus vertical concrete curb and gutter (and sidewalk where applicable) for subdivisions with lot sizes less than 18,000 square feet; 24-foot half-width strip pavement in subdivisions with lot sizes of 18,000 sf or greater, but smaller than 70,000 sf; 24-foot half-width strip pavement of 1-1/2" AC on 6" ABC pavement in subdivisions with lot sizes of 70,000 sf or greater.
	x			Remove existing BST for half-width and improve as specified above for all subdivisions with lot sizes less than 70,000 sf. For subdivisions with lot sizes of 70,000 sf or greater, the BST is to be widened to 24 feet, if applicable, with 1-1/2" AC on 6" ABC.
		x		Regardless of lot size in the subdivision, the road is to be improved to the ultimate section of half-width pavement, plus vertical concrete curb and gutter (and sidewalk where applicable).
			x	No further improvements required.

**RESIDENTIAL COLLECTOR TYPE STREETS (QUARTER MILE)**

General right-of-way width is a 30-foot half-width. The ultimate fully improved section consists of 36 feet of pavement, plus two feet (2') wide curbs on both sides. If the subdivision borders on a quarter mile or residential collector type road, the improvements required are as follows:

Present Improvements

None	BST	Strp	Full	Improvement to Perimeter Road Required
x				If lot size is less than 18,000 sf, improve with 24 feet of pavement (18' on curb side of monument line), plus two feet (2') wide concrete curb. If lot size is 18,000 sf or greater, but smaller than 70,000 sf, improve with 24 feet of strip pavement. If lot size is 70,000 sf or greater, improve with a 24-foot width of 1-1/2" AC on 6" ABC.
	x			Remove existing BST for half-width and improve as specified above for all subdivisions with lot sizes less than 70,000 sf. For subdivisions with lot sizes of 70,000 sf or greater, the BST is to be widened, if necessary, on the subdivision side to a half-width of 20 feet.
		x		If subdivision lot size is smaller than 18,000 sf, the road shall be widened to an 18-foot half-width pavement, if applicable, plus two-feet (2') wide concrete curb (and sidewalk where applicable) on subdivision side. For lot sizes of 18,000 sf or larger, no further improvements are required.
			x	No further improvements required.

**RESIDENTIAL STREETS**

General right-of-way width is a 25-foot half-width. The ultimate, fully improved section consists of 28-feet of pavement, plus two feet (2') wide curbs on both sides. If the subdivision borders on a residential street, the improvements required are as follows:

Present Improvements

None	BST	Strp	Full	Improvement to Perimeter Road Required
x				If lot size is less than 18,000 sf, improve with a 20-foot width of full pavement, plus two feet (2') wide concrete curb (and sidewalk as applicable). If lot size is 18,000 sf or greater, but smaller than 70,000 sf, improve with a 20-foot half-width of strip pavement. If lot size is 70,000 sf or greater, improve with a 20-foot half-width of 1-1/2" AC on 6" ABC pavement.
	x			Remove existing BST for half-width and improve as specified above for all subdivisions. Widen on the subdivision side to a minimum half-width of 14 feet.
		x		If lot size is smaller than 18,000 sf, the road shall be widened to a 14-foot half-width, if applicable, plus two feet (2') wide concrete curb (and sidewalk as applicable) on the subdivision side. For lot sizes of 18,000 sf or greater, no further improvements are required, provided existing pavement is a 20-foot minimum width.
			x	No further improvements required.

**MARICOPA COUNTY SPECIAL PROVISIONS  
FOR  
INSTALLATION OF UNDERGROUND UTILITIES**

**I. SPECIFICATIONS AND DETAILS**

All work and materials shall conform to the "Maricopa Association of Governments (MAG) Uniform Standard Specifications for Public Works Construction", with adopted Maricopa County Department of Transportation (MCDOT) supplements thereto, except as modified by these Special Provisions. In case of conflict between the Uniform Standard Specifications and the Special Provisions, these Special Provisions shall govern.

The construction site shall be in accordance with all applicable OSHA regulations.

Other agency specifications for construction material or methods which are equal to or better than the MAG Uniform Standard Specifications, may be substituted as satisfactory alternates only with prior written approval of the Transportation Director.

Engineering reports and laboratory tests may be required by the Transportation Director, at no cost to Maricopa County.

**II. PLANS, SPECIFICATIONS, ENGINEERING**

A. Preparation of plans, specifications, construction and inspection shall be performed under the supervision of a Civil Engineer, registered in the State of Arizona and employed by the owner, except that plans prepared by utility companies for distribution of gas, electric power or for communication service need not be prepared by a registered Civil Engineer.

B. Plans shall be submitted on a maximum size sheet of 22" x 36" and must be neat, clear, legible and complete in all respects. The scale shall be commensurate with the detail and in no case smaller than 1" = 200' plan, and 1" = 5' profile. Profiles will be required on projects involving installation of sewer and underground irrigation lines in dedicated right-of-way. Power facilities must also be submitted in profile where the trade size of a single conduit exceeds six inches (6") in diameter or where multiple conduits including the concrete encasements are sixty (60) square inches or greater in cross-sectional area. In addition, profiles may be required by the Transportation Director in cases of possible alignment or grade conflicts, cover problems or crossing conflicts. Plans may be submitted concurrently with the application for construction permit but at least ten (10) working days will be required for review.

The County may require submission of a set of "as-built" plans, if any field changes were affected.

### III. EXCAVATION, BACKFILL, COMPACTION, LINE DEPTH AND TESTING

- A. Excavation - All excavation shall conform to the requirements of Section 601 of the MAG Uniform Standard Specifications, except as modified in these Special Provisions. Attention is called to the necessary notification of all utilities.
- B. Backfill Materials - Backfill shall be per MAG Section 601.4.3. When "select" material or "aggregate base course (ABC)" is substituted or specified, it shall conform to the applicable sections of the MAG Uniform Standard Specification.

Cement slurry backfill, in accordance with Section 728 of the MAG Uniform Standard Specifications, may be substituted for trenches within paved areas. It shall be placed to the bottom of the existing pavement layer, or two (2) inches minimum from the surface, whichever is greater, and shall be properly plated until sufficiently set to accommodate traffic loads and allow for placement of the asphalt concrete surface. Cement slurry backfill may be used at other locations with prior approval from the Transportation Director.

#### C. Compaction

1. That portion of the backfill from the bottom of the trench to twelve inches (12") compacted depth, over the top of the pipe or conduit shall be backfilled with ABC, if the owning utility does not have their own bedding material specification. This material shall be uniformly compacted per MAG Section 601 to insure proper bedding of pipe. Backfill bedding material around underground electric and communication lines shall meet the specification of the responsible utility owner with minimum compaction as herein specified.
2. For a trench under any existing or proposed pavement, curb or gutter, paved alleys, or when any part of the trench excavation is two feet (2') or less from the edge of pavement or back of curb, the backfill shall consist of ABC or select material. Compaction shall be in accordance with Section 601 Type I of the MAG Uniform Standard specifications. Sufficient water may be added to raise the moisture content to optimum only.
3. For a trench in an unpaved road where the distance from the edge of the traveled way to any part of the trench excavation is two feet (2') or less, the backfill shall consist of ABC or select material. The material from twelve inches (12") above the top of the pipe to two feet (2) below finished grade shall be mechanically compacted to not less than 85% of the maximum density of the material.

The upper two feet (2') of the material shall be mechanically compacted to not less than 95% of the maximum density of the material. Sufficient water may be added to raise the moisture content to optimum only.

4. For a trench where the edge is more than two feet (2') from the edge of existing pavement, back of curb, or from the edge of the traveled way on an unpaved road, the material from twelve inches (12") above the top of the pipe to finished grade shall consist of sound earth material as previously specified; compacted to not less than 85% of the maximum density of the material. Water settling as defined herein is permissible.
5. For trenches in unpaved alleys and other miscellaneous unimproved traveled ways, the backfill and compaction per paragraph III.C.4. above shall be followed.
6. For trenches in utility easements, the backfill may consist of sound earth material. Water settling as defined herein is permissible.
7. Water settling as permitted herein shall be performed in lifts not exceeding eight feet (8') in depth. The backfill shall be leveled, the trench saturated and the material jetted to:
  - (a) Within one foot (1') of the pipe if the lift is eight feet (8') or less from the top of the pipe, or
  - (b) At least one foot (1') into the previous lift if multiple lifts are necessary.

Sufficient water must be used, with a pressure of at least 30 p.s.i., to insure filling of all voids with backfill material. Intervals of jetting shall be not more than six feet (6') along the trench and transversely across the trench. The water shall not be shut off until the jet has been completely withdrawn from the material.

8. Water settling is permitted in new subdivisions, but no paving will be permitted over water settled trenches until compaction test results have been approved by the Transportation Director.

#### D. Minimum Depth of Lines

<u>Type</u>	<u>Minimum Depth</u>	
1. Direct Bury Cable	36"	*
2. Water Line in Major street or >12" Diameter	48"	
3. Other Water Lines	36"	
4. Irrigation Lines or Storm Drain Lines	18"	**
5. Fiber Optic Cable	36"	#
6. Other	36"	

\* When installed a minimum of fifteen feet (15') beyond the edge of roadway.

\*\* Without protective cap.

# With warning tape, 60" depth when crossing or within fifteen feet (15') of roadway.

Cover is defined as the difference in elevation between the top of the line or pipe and the ultimate gutter grade of the roadway, unless otherwise specified.

For facilities outside the limits as defined in paragraph III.C.4. above, cover is defined as the difference in elevation between the top of the line or pipe and the natural or regraded ground surface, whichever is lesser.

If the permanent pavement section cannot be installed immediately after completion of the underground facilities, a temporary asphalt ("cold") patch may be used. All temporary patches shall be maintained by the applicant until the permanent patch is in place. The permanent patch shall be in place within thirty (30) days from completion of the underground facilities.

#### E. Testing

##### 1. Procedures

- a. AASHTO T99, Method A - Maximum Density
- b. AASHTO T191, T238 or T239 - Field Density
- c. AASHTO T27 - Sieve analysis

## 2. Frequency

The tests shall be made at the locations and depths specified by the Transportation Director or his representative. A minimum of one set of tests will be required for each four feet (4') of trench depth for trenches within two feet (2') of a paved road or back of curb. Otherwise, one set of tests will be required for each eight feet (8') of trench depth.

The minimum number of passing tests per set anticipated for specification compliance may be estimated as follows:

- a. Pavement cut crossing - one (1) set of tests per crossing.
  - b. Longitudinal pavement cuts or the edge of the trench within two feet (2') as previously explained - one set of tests per three hundred feet (300'), with one set of tests minimum per block.
  - c. All other locations - one set of tests per four hundred feet (400'), with one set of tests minimum per block.
3. Tests may be taken at four-foot (4') vertical increments in the same vertical plane at the option of the inspector. Copies of all test reports shall be identified as to project and location by the testing laboratory and forwarded to the inspector, who shall forward one set of all test results to the Maricopa County Department of Transportation.
  4. At his discretion, the Transportation Director may order load tests performed to determine the suitability and adequacy of backfill, before placement of pavement. Such tests shall be performed with a vehicle, loaded to approximately an eighteen thousand (18,000) pound axle load. Excessive movement or settlement of backfill shall be cause for rejection of the work by the County. Initial load tests shall be at the expense of the County. If the work is rejected, load retests shall be at the expense of the owner or contractor.

## IV. PAVEMENT CUTTING, PAVEMENT RESTORATION & BORING

- A. All cuts in asphalt or concrete pavement shall have saw cut or neat and straight edges. All transverse or diagonal pavement shall extend at least one foot (1') beyond either side of the trench ("T" - Top). Excavated pavement material shall be removed from the site and properly disposed of.
- B. Pavement cut replacement: The asphaltic material used for replacement of pavement cuts shall conform to Section 710 of the MAG Uniform Standard Specification for C-3/4 mix.

The thickness of the pavement and aggregate base replaced shall be consistent with the thickness of the existing asphalt pavement and base but shall not be less than the minimums specified in the Maricopa County Roadway Design Manual for the specific road as classified by MCDOT. Minimum thickness requirements for asphalt pavement and base shall be measured compacted to 100% of maximum density for the material.

- C. Pavement cuts shall conform to Section 336, except a Type II Slurry Seal shall be applied in accordance with Section 332 on all cuts greater than 600 feet in length.

The thickness of Portland Cement concrete pavement replacement shall be consistent with the thickness of the existing section, but in no case less than six inches (6"). The concrete shall be Class A, in accordance with MAG specifications. The existing pavement shall be trimmed to a neat edge and the joint shall be sealed in accordance with Section 729 of the MAG Uniform Standard Specifications to insure a proper bond between the existing and new pavements.

It is required that all roadway crossing of lines four inches (4") in diameter or less be bored or pushed under pavement which is less than two years old (including surface treatment), unless a waiver is granted by the Transportation Director. Water boring is not permitted under a paved roadway.

#### V. SURFACE RESTORATION OF GRAVELED OR EARTH SURFACE ROADS

The surface replacement for gravel surfaced roads shall be consistent with the existing surface material in place, and may consist of Select Material or ABC as directed by the Transportation Director.

Fill placed on existing gravel surfaced roads or earth surfaced roads to obtain minimum allowable cover over the pipe or utility lines shall be placed to proper grade for the full widths of the existing roadway and shall be compacted and graded to the satisfaction of the Transportation Director. Care shall be taken to avoid altering or impeding natural drainage.

#### VI. MISCELLANEOUS

The contractor shall secure a Permit from the Maricopa County Department of Transportation prior to start of any construction operations within county right-of-way. Three (3) sets of approved plans must be submitted with the application at least three (3) working days before work is scheduled to begin.

The permittee shall notify the property owner or resident of adjoining occupied property at least twenty-four (24) hours prior to disruption of access to the property, and at no time deny access to the property longer than eight (8) hours, and shall provide adequate means for crossings, if necessary.

The permittee shall notify the inspector twenty-four (24) hours prior to beginning any work. The inspector will inform the permittee which stages of construction will require inspection.

The permittee is responsible for insuring the natural drainage is not impeded during and after construction. Stormwater management within the construction site is the responsibility of the permittee. Where required, the permittee shall obtain a National Pollution Discharge Elimination System (NPDES) General Permit and conform to all applicable requirements therein.

Traffic control shall conform to the "Maricopa County, Special Provisions for Traffic Control Under Permit," incorporated herein and made a part hereof. The permittee is responsible for maintaining the site in a safe condition for workers and the public. Should it become necessary for Maricopa County to barricade or otherwise protect the site due to a hazardous condition, the permittee shall be responsible for all incurred costs.

Only rubber-tired equipment shall be used on pavement, except that crawler equipment using street pads may be used.

Existing regulations, (namely Regulation II, Rule 20-A-3, of the Maricopa County Health Department, Bureau of Air Pollution Control), as applicable, shall be rigidly observed and enforced. Water or approved dust palliative, in sufficient quantities, shall be applied during all phases of construction involving open earth work to prevent the unnecessary discharge of dust and dirt into the air.

Compliance with the MAG 1991 Particulate Plan for PM-10, and all current revisions thereto, shall be the permittee's responsibility for construction within the designated "Non-Attainment" area. A copy of this plan is available through the Maricopa County Health Department.

During the course of work, the permittee shall maintain the work area in a clean and orderly condition. Excess excavation, debris, etc., will not be permitted to accumulate on the road surface or shoulders. Work shall progress in such a manner that no condition, such as soft trenches, drop-offs from the edge of pavement, etc., will exist. Upon completion of installation, the permittee shall clean the pavement surface, pull and dress shoulders, and otherwise put in order the entire work area to the satisfaction of the Transportation Director.

**MARICOPA COUNTY SPECIAL PROVISIONS  
FOR  
TRAFFIC CONTROL UNDER PERMIT**

**I. RESTRICTING COUNTY ROADS**

Traffic control shall comply with these special provisions and follow the guidance contained in the latest editions of the Manual on Uniform Traffic Control Devices (Federal Highway Administration) and the City of Phoenix Traffic Barricade Manual. Deviations from these specifications except during emergency conditions, must have the prior approval of the Transportation Director or his representative.

It shall be the permittee's responsibility to provide, erect and maintain and remove all necessary signs, barricades, barriers, sand berms, high level warning devices, off duty sheriff deputies, lights, delineator, traffic plates, flagmen and other devices necessary to properly mark and control the construction areas for the safe and efficient movement of traffic. The permittee shall provide other traffic control devices or measures as deemed necessary by the Transportation Director or his representative.

All persons, contractors, utilities and other agencies must notify the Traffic Construction section at phone (602) 506-4625 on all traffic restrictions of County roads and streets. The notification may be by FAX submittal, phone number (602) 506-4009, of the traffic control plans for review at least two workdays prior to start of construction. Construction is not authorized to proceed without MCDOT concurrence that construction can proceed with minimum public and traffic impact.

**II. GENERAL TRAFFIC REGULATIONS**

The following are the minimum requirements for all traffic control, unless otherwise provided for in the permit or directed by the Transportation Director or his representative.

**A. Traffic Control Plans**

A Traffic Control Plan shall be required for all projects that;

- (a) divert multi-lane traffic at signalized intersections;
- (b) divert traffic across the yellow center line;
- (c) divert traffic from a paved surface;
- (d) require roads to be closed.

Traffic Control Plans may also be required for other projects. The purpose of a traffic control plan is to encourage forethought as to the time of day, sequence of construction, degree of restriction required and traffic control needed.

Traffic Control Plans may range in complexity from use of typical illustrations in approved traffic control manual to a detailed site plan showing signing, barricading, detours, and project phasing. In all cases, the required Traffic Control Plan shall satisfactorily address all construction restrictions, the requirements of the permit and these regulations.

#### B. Restriction Times

Traffic restrictions are not normally permitted on arterial or major collector streets during peak traffic hours of 6 a.m. to 8:30 a.m. and 4 p.m. to 7 p.m. weekdays. During off peak traffic hours, the minimum number of lanes shall be two lanes (one in each direction) on streets with four lanes or less, and four lanes on streets with five or more lanes, unless otherwise approved.

In order to keep nighttime noise to acceptable levels, permittee's shall not conduct any work during the hours of 7:00 p.m. to 6:00 a.m. without the approval of the traffic engineer or his representative. Special noise abatement conditions and procedures will be required if night time work is approved.

#### C. Use of Off-Duty Officers

The permittee shall provide a uniformed off-duty sheriff deputy during peak hours to assist with traffic control at multiple lane signalized intersections whenever traffic in any one direction is restricted. A deputy may be required at other times if construction conditions dictate or by direction of the Transportation Director or his representative.

#### D. Lane Requirements

Traffic lanes shall normally be 12 feet in width and have a safe operating speed of 25 miles per hour. When the traffic control plan calls for an asphalt or oil paved detour, the contractor shall provide and maintain it in a safe driveable condition. Where traffic is diverted from the pavement, the contractor shall provide a suitable graded traveling surface with proper dust control.

#### E. Sheriff Department notification

On all major streets, the sheriff's local substation shall be provided with the name and phone number of the person responsible for 24-hour maintenance of traffic control devices.

#### F. Closing Roads

Except under emergency conditions, roads shall not be closed for construction activity unless prior approval is obtained from the Transportation Director or his representative.

#### G. Access to Property

Access to all properties for normal services shall be maintained at all times where possible. When local access cannot be maintained, the contractor shall notify the affected property owner/resident at least 48 hours in advance of the access closure. In no case shall the access be restricted for more than eight hours. Access shall not be closed for fire stations, hospitals, sheriff stations and schools. The contractor shall give 48 hours notification to the responsible person for all affected parties, concerning all restrictions.

#### H. Over Night Traffic Diversions

For trenching diversions that move traffic from normal lanes, Temporary bypasses shall be utilized during daylight hours only and traffic shall be restored to their normal lanes over night if possible. The use of traffic plates and temporary pavement shall be used. If conditions warrant, exceptions may be granted by the Transportation Director or his representative.

#### I. Slurry Backfill

The use of one sack cement slurry backfill under pavement areas may be required by MCDOT to expedite construction on high volume roads.

### III. EXISTING TRAFFIC SIGNAL AND SIGNING DEVICES

The permittee shall maintain or relocate all existing signal indications, warning signs, stop, yield and street name signs; erect, clean and in full view of the intended traffic at all times. Portable signs should be used to supplement blocked or removed signs.

The permittee is responsible for the cost of replacing lost signs and for the permanent repair or replacement of damaged signal equipment.

Should damage occur to existing signal equipment, the County Signal Section, phone (602) 506-8660, must be notified immediately to make the necessary temporary repairs to restore traffic signal operations.

Maricopa County will reset all disturbed signs to permanent locations when construction is completed. The contractor shall notify the Traffic Engineer when the work is complete and all necessary temporary signs shall remain in place until permanent signs are reset.

### IV. TEMPORARY TRAFFIC CONTROL

A. Signs, barricades and Channelizing devices.

Temporary traffic control warning signs and devices shall be:

- (a) installed prior to the start of any work;
- (b) properly maintained and operated when restrictions exist;
- (c) kept clean and fresh appearing at all times;
- (d) kept in place only as long as needed;
- (e) removed from the right-of-way as soon as possible.

The "SPEED LIMIT 25" sign is used where the existing pavement has been removed, traffic is being maintained on temporary detour roads, unpaved shoulders, or on traffic lanes that are severely restricted.

Channelization, including "KEEP RIGHT" signs, shall be provided whenever traffic is moved across the street center line, the existing center line is obliterated, or opposing traffic is maintained in other than the normal traffic lanes.

All temporary traffic control devices shall be ballasted with sandbags or other approved ballasts when necessary. The use of rocks, concrete or asphalt chunks, concrete blocks, etc., as ballast is prohibited.

Rope, flagging, fencing, and woven plastic tape may be required at open excavations and/or used between barricades and channelizing devices in construction areas to provide additional guidance and security.

Channelization devices are not intended to be physical barriers.

#### B. Temporary Pavement Markings

Temporary markings may be used to guide traffic on pavement in construction and maintenance areas. Painted temporary markings shall not be used on pavement that shall remain after construction. Temporary markings shall be removed and permanent markings replaced upon project completion.

Center line markings shall be two, 4-inch wide yellow lines with a 5-inch space between them. Lane line markings shall be 4 inches wide, placed with 15 lineal feet of line and 25 lineal feet of space to form the lane line pattern. Other markings for barrier lines, edge lines, crosswalks and school zones, may be necessary to complete temporary marking installations. Edge lines shall be 4-inch wide continuous white lines. Barrier lines for mandatory turn lanes, pavement edge tapers and lane transitions, shall be 10 inch wide continuous white lines. Crosswalk lines shall be 10 inches wide with 6-inch wide solid white approach lines. School zone crosswalks shall be the same, except yellow in color.

### C. Portable Barriers and sand berms

Portable jersey barriers may be required when construction hazards warrant or when directed by the Transportation Director or his representative. The traffic approach ends of all portable barriers shall be protected from vehicle impact by flaring the ends away from the traveled way or by the use of approved attenuation devices.

When a construction hazard warrants and or when required by the Transportation Director or his representative, the contractor shall install an approved impact attenuation device or a deceleration sand berm (washed sand approximately five feet high) in the blocked traffic path to prevent errant vehicles from entering the active work site.

To cover hazards and restore normal traffic flow during non-work times, the use of traffic plates may be required. Use of plates shall be for short time periods, not to exceed two (2) workdays. Extended use times may be granted with the approval of the Transportation Director or his representative.

### V. SHORT TERM RESTRICTIONS AND SERVICE VEHICLES

When service or maintenance vehicles must proceed at a slow pace or stop in the road lane or engage in slow moving work on the road shoulders for brief periods, they will not have to set up advance warning but they shall display an operating high level warning light system in conjunction with hazard warning flashers.

Striping or sweeping vehicles shall set up warning signs at the beginning and end of their work zone.

Vehicles equipped with one (1) high level rotating flashing light (8 feet above ground level) are permitted to stop in a travel lane a maximum of 15 minutes without setup of temporary traffic control devices. Vehicles equipped with the above lights and a standard arrow panels are permitted to stop in a travel lane a maximum of 30 minutes.

The above service vehicles working at signalized intersections, shall also utilize a short taper of cones (minimum 50 feet and 6 cones) in the approaching lanes.

Flashing lights and arrow panels shall be located on service vehicles so that they are visible from all directions and are not obscured by truck beds, mounted equipment or work activities.

**Section Three**

**Resolution 92-06**

**MARICOPA COUNTY RESOLUTION  
FOR  
SIDEWALK REPAIR IN  
UNINCORPORATED AREAS OF MARICOPA COUNTY  
(RESOLUTION 92-06)**

WHEREAS, the Board of Supervisors, as the governing body of Maricopa County, may lay out, maintain, control and manage public roads within the county pursuant to Title 11, Chapter 2, Article 4, Arizona Revised Statutes (as amended), and

WHEREAS, it is necessary in the public interest that all public streets and roads, open and declared into the county system be effectively utilized and maintained for their primary purpose as public ways in a safe manner, and

WHEREAS, the laws of the State of Arizona authorize the Board of Supervisors of Maricopa County to control and manage said public streets and roads within Maricopa County.

FURTHERMORE, the Board of Supervisors designates the Transportation Director to carry out such repairs, herein determined to be the responsibility of Maricopa County.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of Maricopa County, by this resolution, hereby establishes the following conditions under which Maricopa County will be responsible for the repair of sidewalk :

When sidewalk has been constructed to Maricopa County standards and accepted by the Transportation Director, and the sidewalk is not located along either the front or side of the abutting property, then Maricopa County may assume responsibility for the condition of the sidewalk and perform repairs as directed by the Transportation Director.

Repair of sidewalk at all other locations, except as herein referenced, shall be the responsibility of the abutting property owner.

FURTHERMORE, if the abutting property owner fails to repair damaged sidewalk after notification from the Transportation Director, sidewalk may be repaired by Maricopa County and the cost of such repair charged to the respective property.

FURTHERMORE, if the abutting property owner fails to repair damaged sidewalk after notification from the Transportation Director, sidewalk may be repaired by Maricopa County and the cost of such repair charged to the respective property.

BE IT FURTHER RESOLVED, that the abutting property owner shall be responsible for keeping sidewalk clear of debris, landscaping and other obstructions which may hamper the normal use of the sidewalk, for its intended purpose.

ADOPTED by the Maricopa County Board of Supervisors in public session this 3rd day of November, 1993.

By : Jim Bruner  
Chairman, Board of Supervisors

Attest : [Signature]  
Clerk, Board of Supervisors