Agenda Item #5L

MARICOPA ASSOCIATION OF GOVERNMENTS INFORMATION SUMMARY... for your review

DATE:
November 30, 2010

SUBJECT:
Proposed 2011 Revisions to MAG Standard Specifications and Details for Public Works Construction

SUMMARY:
The MAG Standard Specifications and Details for Public Works Construction represent the best professional thinking of representatives of several Public Works Departments and are reviewed and refined by members of the construction industry. They were written to fulfill the need for uniform rules for public works construction performed for Maricopa County and the various cities and public agencies in the county. It further fulfills the need for adequate standards by the smaller communities and agencies who could not afford to promulgate such standards for themselves. The MAG Standard Specifications and Details Committee has completed its 2010 review of proposed revisions to the MAG Publication. A summary of cases is shown in Attachment One. A voting summary is shown in Attachment Two.

A summary of these recommendations was sent to MAG Public Works Directors for review for a period of one month ending November 24, 2010. The complete package sent to the MAG Public Works Directors, including the proposed update packets to the MAG Standard Specifications and Details for Public Works Construction book is also available online for review at the following internet address: http://www.azmag.gov/Events/Event.asp?CMSID=3570

If no objections to any of the proposed revisions have been suggested during the review time frame, then the proposed revisions will be regarded as approved and formal changes to the printed and electronic copies will be released. It is anticipated that the annual update packet will be available for purchase in early January 2011.

PUBLIC INPUT:
Development of these revisions has been achieved during open meetings of the MAG Specifications and Details Committee and has included input from working groups, several professional contractor and utility groups, private companies and private citizens.

PROS & CONS:
PROS: Approval of the latest revisions will ensure that the MAG Specifications and Details reflect the latest and best practices in public works construction appropriate for MAG agencies.

CONS: Due to the constant evolutionary change inherent in the Specifications and Details process, annual updates to the printed and electronic versions are necessary.

TECHNICAL & POLICY IMPLICATIONS:
TECHNICAL: The MAG Specifications and Details are a series of recommendations developed over many years, principally by senior inspectors and their supervisors from many MAG agencies. These recommendations are not prescriptive, but are often adopted entirely, or in part, by MAG agencies in developing public works projects.

POLICY: In prior years, action by the MAG Public Works Committee was the only review needed prior to publication of the revisions. The MAG Public Works Committee was discontinued and formal review by the Management Committee is requested.

ACTION NEEDED:
Information and discussion.

PRIOR COMMITTEE ACTIONS:
The MAG Management Committee reviewed the proposed update as part of the November 10, 2010, agenda.

MEMBERS ATTENDING

Carl Swenson, Peoria, Chair
Charlie Meyer, Tempe, Vice Chair
George Hoffman, Apache Junction
Charlie McClendon, Avondale
Stephen Cleveland, Buckeye
* Gary Neiss, Carefree
* Usama Abujbarah, Cave Creek
Patrice Kraus for Rich Dlugas, Chandler
Pat Dennis for Rick Flaaen, El Mirage
* Phil Dorchester, Fort McDowell Yavapai Nation
Rick Davis, Fountain Hills
Rick Buss, Gila Bend
* David White, Gila River Indian Community
Collin DeWitt, Gilbert
Brent Stoddard for Ed Beasley, Glendale
Mark Gaillard for John Fischbach, Goodyear
Bill Hernandez, Guadalupe
Sonny Culbreth for Darryl Crossman, Litchfield Park
Christopher Brady, Mesa
Jim Bacon, Paradise Valley
Ed Zuercher for David Cavazos, Phoenix
John Kross, Queen Creek
* Bryan Meyers, Salt River Pima-Maricopa Indian Community
David Richert, Scottsdale
Michael Celaya for Mark Coronado, Surprise
* Reyes Medrano, Tolleson
Gary Edwards, Wickenburg
* Lloyce Robinson,Youngtown
Rob Samour for John Halikowski, ADOT
* David Smith, Maricopa Co.
David Boggs, Valley Metro/RPTA

* Those members neither present nor represented by proxy.
# Participated by telephone conference call. + Participated by videoconference call.

MAG Specifications and Details Committee. Reviewed and provided recommendations for the cases submitted for consideration throughout 2010.

VOTING MEMBERS

Jesse Gonzales, Peoria, *Chair*
Jim Badowich, Avondale
Scott Zipprich, Buckeye
Warren White, P.E., Chandler
Dennis Teller, El Mirage
Edgar Medina, Gilbert
Tom Kaczmarowski, P.E., Glendale
Troy Tobiasson, Goodyear
Robert Herz, P.E., RLS, Maricopa County DOT
Shimin Li, Maricopa County Environ. Services
Mike Samer, Mesa
Syd Anderson, Phoenix (Street Trans.)
Jami Erickson, Phoenix (Water)
Mark Palichuk, Queen Creek
Rodney Ramos, P.E., Scottsdale
Jason Mahkovtz, P.E., Surprise
Tom Wilhite, P.E.,Tempe

ADVISORY MEMBERS

John Ashley, ACA
Brian Gallimore, AGC
Jeff Benedict, AGC
Michael Smith, ARPA
Jeff Hearne, ARPA
Paul Nebeker, Independent
Kwigs Bowen, NUCA
Anthony Braun, NUCA
Peter Kandaris, SRP Engineering

The MAG Public Works Directors reviewed the proposed updates, and submitted no comments.

CONTACT PERSON:
Gordon Tyus, MAG, (602) 452-5035

The following table lists the cases submitted and the recommendations as shown:

MARICOPA ASSOCIATION OF GOVERNMENTS
SPECIFICATIONS AND DETAILS COMMITTEE
SUMMARY OF RECOMMENDATIONS FOR 2010 CASES FOR CONSIDERATION

Case	Description	Recommended Action
09-13	New Dual Curb Ramp Details.	Withdrawn
09-14	Revise Ramps for ADA Compliance, Details 231, 232, 233 and 234 to be replaced with Details 235-1, 235-2, 235-3, 235-4 and 235-5.	Approval
09-15	Revisions to Section 610.4: Pipe Protection.	Approval
10-01	**Miscellaneous Corrections** A- Revisions to Section 317 Asphalt Milling B- Correct Table 715-1 and Section 340.2.1 C- Correct table reference in Section 321.10.2 D- Correct corrupted note on Detail 221 E- Correct typographic and spelling errors in Detail 100 and Sections 310.1, 611.11 and 741.2.1 F- Correct typographical errors in Table 702-1 G- Update Details Index 100-1 and 100-2. Delete the word "Metric" from Detail 101. H- Update ARS references in Section 109.2	Approval
10-02	Utility Pothole Repair: Add keyhole repair to Detail 212, and new Sections 355 and 708.	Approval
10-03	Modify Section 336 Pavement Matching and Surfacing Replacement.	Approval
10-04	Revise Section 109.8: Remove quotations of ARS from text located in Section 109.8 PAYMENT FOR DELAY.	Approval
10-05	Revise FOREWARD to clarify use of the MAG Specifications and Details for Public Works Construction document.	Carry Forward
10-06	Revise Controlled Low Strength Materials (CLSM) Specifications in Sections 604 and 728.	Approval

Case	Description	Recommended Action
10-07	Revise Detail 230 - SIDEWALKS to change the minimum sidewalk width from 4' to 5'.	Approval
10-08	Re-write Section 717 ASPHALT-RUBBER.	Carry Forward
10-09	Revise Detail 145 SAFETY RAIL.	Approval
10-10	New Detail 122 PAVEMENT MARKER FOR FIRE HYDRANTS.	Approval
10-11	Revise Detail 110 PLAN SYMBOLS. Update and expand graphic standards and symbols.	Approval
10-12	New Section 361 – Shallow Depth Fiber Optic Micro-Conduit Installation.	Carry Forward
10-13	Revisions to Subsection 618.2 and Section 765 – Revise RCP joint specifications.	Approval

RECOMMENDATION SUMMARY
OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
STANDARD SPECIFICATIONS AND DETAILS COMMITTEE

October 19, 2010

GENERAL INFORMATION:

Case Number:	09-13
Section/Detail:	To be determined
Title:	Dual Curb Ramp Details
Sponsor:	Peoria
Advisor:	Jesse Gonzales

DISCUSSION:

MAG currently only has single curb ramp details for street corners. Many agencies use dual curb ramps and have supplemental details for them. It was proposed to add dual curb ramp details to MAG. This would promote a uniform standard for dual curb ramps and help reduce agency supplements.

The City of Peoria submitted several schematic diagrams for dual curb ramps. The cities of Tempe and Phoenix also submitted the supplemental detail drawings they use for consideration.

Since there is still additional work needed to come to a consensus on a detail that incorporates the essential and best aspects of agency requirements, and the two year time limit on cases was approaching, this case was withdrawn with the intention of bringing forward a new case at a future date.

RECOMMENDATION:

This case was withdrawn on July 7, 2010.

Submittal Date:	July 1, 2009	Vote Summary:	Affirmative:	**0**
Vote Date:	No Vote Taken		Negative:	**0**
			Abstention:	**0**

RECOMMENDATION SUMMARY
OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
STANDARD SPECIFICATIONS AND DETAILS COMMITTEE

October 19, 2010

GENERAL INFORMATION:

Case Number:	09-14
Section/Detail:	231, 232, 233 and 234 to be replaced by Details 235-1, 235-2, 235-3, 235-4 and 235-5.
Title:	Revise Ramps for ADA Compliance
Sponsor:	Maricopa County
Advisor:	Bob Herz

DISCUSSION:

To obtain compliance with current ADA requirements, MAG sidewalk ramp details needed to be updated. Details 231 and 233 currently have undersized landing areas for turning. Details 232 and 234 are non-compliant since the path going across the ramp exceeds the allowable 2% maximum cross slope.

The new details were revised and updated throughout the year based on feedback from the committee. This included revising details show 5-ft by 5-ft landing dimensions, revisions to the detectable warning, and other minor corrections. An additional detail (235-1) showing the sidewalk set back from the curb was added, and all new details were designed for ADA compliance.

In addition, slope tables were added to each detail to insure proper maximum cross slope.

RECOMMENDATION:

Based on the following data, the MAG Standard Specifications and Details Committee recommends approval of this case.

Submittal Date:	July 1, 2009	Vote Summary:	Affirmative:	**14**
Vote Date:	September 1, 2010		Negative:	**0**
			Abstention:	**0**

RECOMMENDATION SUMMARY
OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
STANDARD SPECIFICATIONS AND DETAILS COMMITTEE

October 19, 2010

GENERAL INFORMATION:

Case Number:	09-15
Section/Detail:	Section 610.4
Title:	Pipe Protection
Sponsor:	City of Tempe
Advisor:	Tom Wilhite

DISCUSSION:

This case proposed modifying Section 610.4 to clarify water line pipe protection measures at the job site prior to placement (during storage or staging) to help prevent contamination. Comments from pipe industry representatives and suppliers objected to the expense and difficulty in keeping the ends plugged during shipping and handling. The case was revised to focus on pipe protection on site.

The current proposed language reads:

Every precaution shall be taken to prevent foreign material from entering the pipe. When on the project site, the ends of the pipe section shall be plugged, wrapped or tarped at all times when pipe laying is not in progress, which includes storage and staging at the site. The pipe shall be stored on a pallet, blocking or other means to prevent foreign materials from entering the pipe. The pipe line shall be protected by a water-tight plug or other means approved by the Engineer when the pipe is in the trench if pipe laying is not in progress.

RECOMMENDATION:

Based on the following data, the MAG Standard Specifications and Details Committee recommends approval of this case.

Submittal Date:	July 1, 2009	Vote Summary:	Affirmative:	**14**
Vote Date:	September 1, 2010		Negative:	**0**
			Abstention:	**0**

RECOMMENDATION SUMMARY
OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
STANDARD SPECIFICATIONS AND DETAILS COMMITTEE

October 19, 2010

GENERAL INFORMATION:

Case Number:	10-01
Section/Detail:	See comments below.
Title:	Miscellaneous Corrections
Sponsors:	Maricopa County, City of Chandler
Advisors:	Bob Herz, Warren White

DISCUSSION:

This case combined all of the bloopers cases that consisted of minor changes such as typographic and drafting errors. The following sections and details were revised.

A- Revisions to Section 317 Asphalt Milling: Correct wording in Section 317.2.
B- Correct Table 715-1 and Section 340.2.1: Correct reference to Table 321-5.
C- Correct table reference in Section 321.10.2: Correct reference to Table 321-5.
D- Correct corrupted note on Detail 221 and revise for clarity.
E- Correct typographic and spelling errors in Detail 100 and Sections 310.1, 611.11 and 741.2.1.
F- Correct typographical errors in Table 702-1.
G- Update Details Index 100-1 and 100-2. Delete the word "Metric" from Detail 101.
H- Update ARS references in Section 109.2.

RECOMMENDATION:

Based on the following data, the MAG Standard Specifications and Details Committee recommends approval of this case.

Submittal Date:	January 6, 2010	Vote Summary:	Affirmative:	**14**
Vote Date:	September 1, 2010		Negative:	**0**
			Abstention:	**0**

RECOMMENDATION SUMMARY
OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
STANDARD SPECIFICATIONS AND DETAILS COMMITTEE

October 19, 2010

GENERAL INFORMATION:

Case Number:	10-02
Section/Detail:	Detail 212, and new Sections 355 and 708.
Title:	Utility Pothole Repair: Add keyhole repair.
Sponsor:	City of Chandler
Advisor:	Warren White

DISCUSSION:

This case proposed adding the option of a keyhole pothole repair. Keyhole pavement cutting technology is a cleaner, quicker way to cut city streets in order to access underground facilities. The process involves cutting an 18"-24" core, then backfilling the hole with native soil (or material determined by other agency specific requirements) and reinstating the original core by bonding it to the cut pavement. The process is complete after a few hours at which time traffic lanes can be reopened.

The case created two new sections. Section 355 Utility Potholes – Keyhole Method describes the process used, and Section 708 provides the Asphalt Bonding Materials specification used to bond the asphalt pavement core to the original asphalt pavement from which it was removed.

Detail 212 was also updated to show this method as an additional option, and to clarify backfill materials.

RECOMMENDATION:

Based on the following data, the MAG Standard Specifications and Details Committee recommends approval of this case.

Submittal Date:	February 3, 2010	Vote Summary:	Affirmative:	**15**
Vote Date:	September 1, 2010		Negative:	**0**
			Abstention:	**0**

RECOMMENDATION SUMMARY
OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
STANDARD SPECIFICATIONS AND DETAILS COMMITTEE

October 19, 2010

GENERAL INFORMATION:

Case Number:	10-03
Section/Detail:	Section 336
Title:	Modify Section 336 Pavement Matching and Surfacing Replacement.
Sponsor:	Salt River Project
Advisor:	Peter Kandaris

DISCUSSION:

This case updated and reorganized Section 336 to be in conformance with changes made in 2009 to Detail 200. This included modifying Section 336.1 to note trench repair types shown in Detail 200; adding a sentence to 336.2.2 to limit the time between temporary and permanent trench patch repair; and updating Sections 336.3 and 336.4 to be consistent with Detail 200.

Section 336.2.4 was reorganized to more simply describe pavement section repair, be consistent with language in Detail 200, be consistent with asphalt concrete mix type designations in Section 710, reference Section 321 for placement and compaction methods, correct typos, include surface tolerance requirements and change surface seal repair from chip seal to slurry seal.

The case was further updated based on comments received from Maricopa County and AGC to provide greater clarity and correct inconsistencies.

RECOMMENDATION:

Based on the following data, the MAG Standard Specifications and Details Committee recommends approval of this case.

Submittal Date:	March 3, 2010	Vote Summary:	Affirmative:	**12**
Vote Date:	October 6, 2010		Negative:	**0**
			Abstention:	**0**

RECOMMENDATION SUMMARY
OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
STANDARD SPECIFICATIONS AND DETAILS COMMITTEE

October 19, 2010

GENERAL INFORMATION:

Case Number:	10-04
Section/Detail:	Section 109.8.1
Title:	Remove quotations of ARS from text located in Section 109.8 PAYMENT FOR DELAY.
Sponsor:	Maricopa County
Advisor:	Bob Herz

DISCUSSION:

This case was updated due to changes in the Arizona Revised Statutes. Section 109.8.1 has revised as noted below.

The current proposed language reads:

109.8.1 Failure to Locate or Incorrect Location of Utilities: Arizona Revised Statutes 40-360.28 indicates that if a person (owner, operator, or agent) fails to locate or incorrectly marks the location of the underground facility in a timely manner, the person (owner, operator, or agent) becomes liable for resulting damages, costs and expense to the injured party. The Contracting Agency will deny any claims for damages or delays if another owner or operator is at fault.

RECOMMENDATION:

Based on the following data, the MAG Standard Specifications and Details Committee recommends approval of this case.

Submittal Date:	March 3, 2010	Vote Summary:	Affirmative:	**13**
Vote Date:	June 2, 2010		Negative:	**0**
			Abstention:	**0**

RECOMMENDATION SUMMARY
OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
STANDARD SPECIFICATIONS AND DETAILS COMMITTEE

October 19, 2010

GENERAL INFORMATION:

Case Number:	10-05
Section/Detail:	Foreward
Title:	Revise FOREWARD to clarify use of the *MAG Specifications and Details for Public Works Construction* document.
Sponsor:	City of Peoria
Advisor:	Jesse Gonzales

DISCUSSION:

This case proposed modifying the *Foreward* to the MAG Specifications and Details book, to clarify its limited use for public works construction in the right-of-way. It provided additional caveats for using the MAG specifications and details in private construction projects, and highlighted the need for review by professional engineers.

In addition, a draft *Foreward* was written for a planned separate document for Public Works Construction Not in the Right of Way. The case helped initiate the Specifications and Details Outside the Right of Way Working Group to develop standards for onsite public works projects not covered by the MAG specifications and details.

With additional review underway by the working group, and additional input requested from agencies, this case will be continued in 2011.

RECOMMENDATION:

The MAG Standard Specifications and Details Committee plans to carry forward this case for further discussion in 2011.

Submittal Date:	March 3, 2010	Vote Summary:	Affirmative:	**0**
Vote Date:	No vote taken.		Negative:	**0**
			Abstention:	**0**

RECOMMENDATION SUMMARY
OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
STANDARD SPECIFICATIONS AND DETAILS COMMITTEE

October 19, 2010

GENERAL INFORMATION:

Case Number:	10-06
Section/Detail:	Sections 604, 728
Title:	Revise Controlled Low Strength Materials (CLSM) Specifications
Sponsor:	Arizona Rock Products Association
Advisor:	Jeff Hearne

DISCUSSION:

This case completely replaces existing CLSM specifications with revisions based on the final draft prepared by the Concrete Working Group. The intention was to update and modernize the specification based on current industry standards and technology. It also was revised to refer to current national ACI and ASTM standards and to be consistent with changes made to concrete specifications in prior cases.

The case updated references to additives and provided more options. There was discussion about changes to Table 728-1 as to the intended purposes of ½ sack, 1 sack and 1 ½ sack CLSM mixes. Minimum and maximum strengths were discussed. Additional discussion proposed keeping No. 57 aggregate as the default in the specifications. It was decided to not make any changes to Section 701.

Finally changes to specify that ready-mix concrete shall not be used in lieu of CLSM without prior approval were added, along with other minor changes and updates based on committee feedback.

RECOMMENDATION:

Based on the following data, the MAG Standard Specifications and Details Committee recommends approval of this case.

Submittal Date:	April 7, 2010	Vote Summary:	Affirmative:	**12**
Vote Date:	July 7, 2010		Negative:	**0**
			Abstention:	**0**

RECOMMENDATION SUMMARY
OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
STANDARD SPECIFICATIONS AND DETAILS COMMITTEE

October 19, 2010

GENERAL INFORMATION:

Case Number:	10-07
Section/Detail:	Detail 230
Title:	Revise Detail 230 - SIDEWALKS to change the minimum sidewalk width from 4' to 5'.
Sponsor:	Maricopa County
Advisor:	Bob Herz

DISCUSSION:

This case proposed to revise minimum sidewalk width on Detail 230 from 4' to 5' to match the minimum ADA requirements that allows two wheelchairs to pass, and to allow a wheelchair to u-turn. Many cities already use 5' minimum sidewalks, and the updated detail should reduce the number of agency supplements as well as be ADA compliant.

Representatives from Phoenix and Mesa stated they intended to keep the 4' minimum sidewalk, and meet the ADA requirements by providing periodic widening to allow wheelchair passing as needed. There was some discussion about fitting the 5' sidewalk in the standard 50' right-of-way, and it was agreed that it did fit.

The sponsor noted that many jurisdictions use MAG specifications without supplements such as those used by Phoenix and Mesa, and that a 5' minimum sidewalk specification would meet ADA requirements without further modification.

RECOMMENDATION:

Based on the following data, the MAG Standard Specifications and Details Committee recommends approval of this case.

Submittal Date:	April 7, 2010	Vote Summary:	Affirmative:	**9**
Vote Date:	July 7, 2010		Negative:	**3**
			Abstention:	**0**

RECOMMENDATION SUMMARY
OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
STANDARD SPECIFICATIONS AND DETAILS COMMITTEE

October 19, 2010

GENERAL INFORMATION:

Case Number:	10-08
Section/Detail:	Section 717
Title:	Re-write Section 717 ASPHALT-RUBBER
Sponsor:	Maricopa County
Advisor:	Bob Herz

DISCUSSION:

Maricopa County presented this case to re-write the current specification on asphalt-rubber to match MCDOT's current requirements.

During the review other agencies were requested to indicate how their requirements differed so that the specification could be modified to accommodate the needs of all agencies.

It was discussed that ADOT also has asphalt-rubber specs, but that they are designed more for freeways and highways than streets and roads. It was also noted that some terminology changes were needed to make it consistent with Sections 325 and 335.

The City of Phoenix is reviewing the case and suggested some changes and additions. It was recommended that Maricopa County and the City of Phoenix continue to work together next year to create a specification meet the requirements of both agencies.

RECOMMENDATION:

The MAG Standard Specifications and Details Committee plans to carry forward this case for further discussion in 2011.

Submittal Date:	May 5, 2010	Vote Summary:	Affirmative:	**0**
Vote Date:	No vote taken.		Negative:	**0**
			Abstention:	**0**

RECOMMENDATION SUMMARY
OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
STANDARD SPECIFICATIONS AND DETAILS COMMITTEE

October 19, 2010

GENERAL INFORMATION:

Case Number:	10-09
Section/Detail:	Detail 145
Title:	Revise Detail 145 SAFETY RAIL
Sponsor:	Maricopa County
Advisor:	Bob Herz

DISCUSSION:

Initially this case was introduced to modify the spacing between posts to allow the safety rail detail to meet the loading requirements of AASHTO when used as a railing on a pedestrian bridge. After some discussion with the committee about the additional costs for closer posts, and the use of the detail on other projects that do not require higher loading (such as by scuppers and small drop-offs) it was decided instead to keep the current detail, but exclude it from use as a pedestrian railing. To do this, a new Note 7 was added stating:

SAFETY RAIL IS NOT TO BE USED AS A PEDESTRIAN BRIDGE RAIL.

The grade of steel pipe in Note 1 was also changed from A to B.

It was suggested that an AASHTO approved railing could be created as a separate detail in a future case.

RECOMMENDATION:

Based on the following data, the MAG Standard Specifications and Details Committee recommends approval of this case.

Submittal Date:	May 5, 2010	Vote Summary:	Affirmative:	**15**
Vote Date:	September 1, 2010		Negative:	**0**
			Abstention:	**0**

RECOMMENDATION SUMMARY
OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
STANDARD SPECIFICATIONS AND DETAILS COMMITTEE

October 19, 2010

GENERAL INFORMATION:

Case Number:	10-10
Section/Detail:	New Detail 122
Title:	PAVEMENT MARKER FOR FIRE HYDRANTS.
Sponsor:	Maricopa County
Advisor:	Bob Herz

DISCUSSION:

Currently MAG does not have a detail for the placement of pavement markers for fire hydrant locations. This case would standardize placement of these markers and enhance public safety.

Maricopa County submitted a new Detail 122 showing the location of markers relative to fire hydrants in several typical types of streets including local streets, intersections, cul-de-sacs, multi-laned streets and those with turning lanes.

The sponsor explained that without any detail to locate where the markers should be placed, often replacement markers were not installed after making street improvements.

Some agencies have similar details. The City of Chandler's detail included additional markers for roads designated as state highways. The City of Surprise submitted their detail as an example, which placed the markers closer to the centerlines of the street. The sponsor explained that the markers in the proposed detail were not placed near the centerlines to avoid conflicts with striping.

Several agencies already using supplemental pavement marker details abstained during voting.

RECOMMENDATION:

Based on the following data, the MAG Standard Specifications and Details Committee recommends approval of this case.

Submittal Date:	May 5, 2010	Vote Summary:	Affirmative:	**11**
Vote Date:	September 1, 2010		Negative:	**0**
			Abstention:	**4**

RECOMMENDATION SUMMARY
OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
STANDARD SPECIFICATIONS AND DETAILS COMMITTEE

October 19, 2010

GENERAL INFORMATION:

Case Number:	10-11
Section/Detail:	Details 110-1, 110-2
Title:	Revise Detail 110 PLAN SYMBOLS. Update and expand graphic standards and symbols.
Sponsor:	Maricopa County
Advisor:	Bob Herz

DISCUSSION:

This case took the final recommendations from the CAD Symbols Working Group to revise, update and expand standard symbols and line types.

CAD experts from many agencies participated in the CAD Symbols Working Group identifying common symbols and line type standards by comparing current agency standards. Those that received consensus by the group were presented to Maricopa County for final editing. The original Detail 110 was split into two sheets 110-1 and 110-2 to accommodate the additional symbols.

The following symbols were added: utility meter, monitory well, wood, steel and concrete utility poles, pole mounted light, signal pole, double post sign, cellular tower, pull box, video detection camera, and traffic signal indicators.

In addition the following line types were added: right of way, property, easement, jurisdictional boundary, chain link fence, barbed wire fence, wood fence and block wall.

Finally some of the material hatches were updated. Discussion included the reason for two types of jurisdictional boundaries, adding notes to symbols as needed for clarity, and how to designate existing and new features using solid or shaded/dashed lines.

RECOMMENDATION:

Based on the following data, the MAG Standard Specifications and Details Committee recommends approval of this case.

Submittal Date:	May 5, 2010	Vote Summary:	Affirmative:	**12**
Vote Date:	October 6, 2010		Negative:	**0**
			Abstention:	**0**

RECOMMENDATION SUMMARY
OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
STANDARD SPECIFICATIONS AND DETAILS COMMITTEE

October 19, 2010

GENERAL INFORMATION:

Case Number:	10-12
Section/Detail:	New Section 361
Title:	Shallow Depth Fiber Optic Micro-Conduit Installation
Sponsor:	City of Scottsdale
Advisor:	Rod Ramos

DISCUSSION:

This case was introduced to add a new section specifying the process for installation of underground fiber optic micro-conduit telecommunications facilities within the public right of way. The sponsor provided sample specifications and details from a private engineering company as an example. He recognized that the specifications and details provided would need much revision, but wanted to begin the discussion of the use of this technology. He said the intent was for use in residential areas. He described Scottsdale's experience with this process on a private road in the McDowell Mountain Ranch development. The details showed a preferred location for the micro-trench, and the specifications described the process of making a saw cut, installing the conduit and filling the trench with a slurry grout, and capping with an asphalt sealant.

The committee discussed the depth requirements, and noted that most agencies currently do not allow utilities at a shallow depth. The sponsor said he also wanted to investigate this method for repairing large transverse cracks. Members questioned how the grout was applied in the cut. Mr. Ramos said it was pumped into the void. He also said Paradise Valley used this option on a project. Another member asked about splices and junctions. The sponsor said the utilities were dropped out of the street and placed in a junction structure.

More work on this case is required, and is planned to be continued in 2011.

RECOMMENDATION:

The MAG Standard Specifications and Details Committee plans to carry forward this case for further discussion in 2011.

Submittal Date:	May 5, 2010	Vote Summary:	Affirmative:	**0**
Vote Date:	No vote taken.		Negative:	**0**
			Abstention:	**0**

RECOMMENDATION SUMMARY
OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
STANDARD SPECIFICATIONS AND DETAILS COMMITTEE

October 19, 2010

GENERAL INFORMATION:

Case Number:	10-13
Section/Detail:	Sections 618, 765
Title:	Revise RCP joint specification to be consistent between sections and with industry standards.
Sponsor:	City of Goodyear
Advisor:	Troy Tobiasson

DISCUSSION:

This case was introduced to correct inconsistencies between the 50% and 60% rubber requirements of joint gaskets. The sponsor said manufacturers do not make gaskets with 60% rubber, and suggested the specifications be modified to reference the national standards for rubber gaskets in ASTM C 443 and AASHTO M 315. References to neoprene gaskets and o-ring gaskets were removed. The revisions to subsection 618.2 are now consistent with industry standards nationwide.

Based on feedback from the committee, additional revisions to the case were made. With these changes, Section 765 was no longer necessary and was removed entirely. References to the deleted Section 765 were updated in Subsections 735.4 and 736.3.

RECOMMENDATION:

Based on the following data, the MAG Standard Specifications and Details Committee recommends approval of this case.

Submittal Date:	July 7, 2010	Vote Summary:	Affirmative:	**14**
Vote Date:	September 1, 2010		Negative:	**0**
			Abstention:	**0**

MAG Specification & Detail Committee
VOTING SUMMARY for 2010

Case No.	Title – Section/Detail	Vote Date	Avondale	Buckeye	Chandler	El Mirage	Gilbert	Glendale	Goodyear	Maricopa County	Mesa	Peoria	Phoenix	Queen Creek	Scottsdale	Surprise	Tempe	Voting Summary Y-N-A-NP
09-13	Dual Curb Ramp Details																	
09-14	Revise Ramps for ADA Compliance, Details 231, 232, 233 and 234. – Replace with Details 235-1, 235-2, 235-3, 235-4 and 235-5.	09/01/10	Y	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	**14-0-0-1**
09-15	Revisions to Section 610.4: Pipe Protection	09/01/10	Y	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	**14-0-0-1**
10-01A	Revisions to Section 317 Asphalt Milling	09/01/10	Y	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	**14-0-0-1**
10-01B	Correct Table 715-1 and Section 340.2.1	04/07/10	Y	Y	Y	Y	Y	Y	-	Y	Y	Y	Y	Y	-	Y	Y	**13-0-0-2**
10-01C	Correct table reference in Section 321.10.2	09/01/10	Y	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	**14-0-0-1**
10-01D	Correct corrupted note on Detail 221	09/01/10	Y	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	**14-0-0-1**
10-01E	Correct typographic and spelling errors in Detail 100 and Sections 410.1, 611.11 and 741.2.1	09/01/10	Y	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	**14-0-0-1**
10-01F	Update Details Index 100-1 and 100-2. Delete the word "Metric" from first note on Detail 101.	09/01/10	Y	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	**14-0-0-1**
10-01G	Update ARS references in Section 109.2.	09/01/10	Y	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	**14-0-0-1**
10-02	Utility Pothole Repair: Revise and add keyhole repair to Detail 212. New Sections 355 and 708.	09/01/10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	**15-0-0-0**
10-03	Modifications Section 336 Pavement Matching and Surfacing Replacement.	10/06/10	Y	Y	Y	Y	-	Y	Y	Y	Y	Y	Y	-	-	Y	Y	**12-0-0-3**

Voting Abbreviations: **Y**: Yes **N**: No **A**: Abstain **—** : Not Present (NP)

*: Indicates changes made to proposal prior to vote.

MAG Specification & Detail Committee
VOTING SUMMARY for 2010

Case No.	Title – Section/Detail	Vote Date	Avondale	Buckeye	Chandler	El Mirage	Gilbert	Glendale	Goodyear	Maricopa County	Mesa	Peoria	Phoenix	Queen Creek	Scottsdale	Surprise	Tempe	Voting Summary Y-N-A-NP
10-04	Revise Section 109.8: Remove quotations of ARS from text located in Section 109.8 PAYMENT FOR DELAY.	06/02/10	Y	Y	Y	Y	Y	Y	Y	Y	-	Y	Y	Y	-	Y	Y	**13-0-0-2**
10-05	Revise FOREWARD to clarify use of the *MAG Specifications and Details for Public Works Construction* document.																	
10-06	Revise Controlled Low Strength Material Specifications in Sections 604 and 728.	07/07/10	Y	Y	Y	-	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	**12-0-0-3**
10-07	Revise Detail 230 - SIDEWALKS to change the minimum sidewalk width from 4' to 5'.	07/07/10	Y	Y	Y	-	Y	Y	Y	Y	N	Y	N	N	-	-	N	**9-3-0-3**
10-08	Re-write Section 717 ASPHALT-RUBBER.																	
10-09	Revise Detail 145 SAFETY RAIL to comply with AASHTO pedestrian loading requirements.	09/01/10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	**15-0-0-0**
10-10	New Detail 122 PAVEMENT MARKER FOR FIRE HYDRANTS.	09/01/10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	A	Y	A	A	A	**11-0-4-0**
10-11	Revise Detail 110 PLAN SYMBOLS. Update and expand graphic standards and symbols.	10/06/10	Y	Y	Y	Y	-	Y	Y	Y	Y	Y	Y	-	-	Y	Y	**12-0-0-3**
10-12	New Section 361 – Shallow Depth Fiber Optic Micro-Conduit Installation.																	

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MAG Specification & Detail Committee
VOTING SUMMARY for 2010

Case No.	Title – Section/Detail	Vote Date	Avondale	Buckeye	Chandler	El Mirage	Gilbert	Glendale	Goodyear	Maricopa County	Mesa	Peoria	Phoenix	Queen Creek	Scottsdale	Surprise	Tempe	Voting Summary Y-N-A-NP
10-13	Revisions to Subsection 618.2 and Section 765 – Revise RCP joint specification to be consistent between sections and with industry standards.	09/01/10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	Y	Y	Y	**14-0-0-1**

Voting Abbreviations: **Y**: Yes **N**: No **A**: Abstain **—** : Not Present (NP)

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MAG Specification & Detail Committee
ATTENDANCE for 2010

Quorum - 8 Agency Representatives		January 6, 2010	February 3, 2010	March 3, 2010	April 7, 2010	May 5, 2010	June 2, 2010	July 7, 2010	August 4, 2010	Sept. 1, 2010	October 6, 2010	
Member	**Representative**											
Agency Members:												
Avondale	Jim Badowich	√	√	√	√	√	√	√	√	√	√	
Buckeye	Scott Zipprich	√	√	√	√		√	√		P	√	
Chandler	Warren White	√	√	√	√	√	√	√	√	√	√	
El Mirage	Dennis Teller	√	√	√	√		√		√	√	√	
Gilbert	Edgar Medina		√		√	√	S	√	√	S		
Glendale	Tom Kaczmarowski	√		P	√	S	√	√	√	√	√	
Goodyear	Troy Tobiasson	√	√	√		√	√	√	√	√	√	
Maricopa Co.	Bob Herz (Transportation)	√	√	√	√	√	√	√	√	√	√	
	Shimin Li (Water)					√		√	√	√		
Mesa	Mike Samer	√	√	√	√	√		√	√	√	√	
Peoria	Jesse Gonzales	√	√	√	√	√	√	√	√	√	√	
Phoenix	Syd Anderson (Street Trans)	√	√	√	√	√		√	√	√	√	
	Jami Erickson (Water)	√	√	√	√	√	√	√	√	√		
Queen Creek	Mark Palichuk	√		√	√	√	√	√	√	√		
Scottsdale	Rodney Ramos	√		√		√			√	√		
Surprise	Jason Mahkovtz	√		√	√	√	√		√	√	√	
Tempe	Thomas Wilhite	√	√	√	√	√	√	√	√	√	√	
Advisory Members:												
AZ Cement Association	John Ashley	√	√	√	√	√	√		√	√		
AZ Rock Products Association	Michael Smith	√	√	√	√	√		√	√			
	Jeff Hearne	√	√		√	√	√	√	√	√	√	
Associated General Contractors	Brian Gallimore	√	√		√	√	S		√	√	√	
	Jeff Benedict (Alternate)	√	√	√	√	√	√	S	√	√	√	
S.R.P.	Peter Kandaris	√	√	√	√	√	√	S	√	S	√	
Independent	Paul Nebeker	√	√	√	√	√	√		√		√	
National Utility Contractors Assoc	Kwigs Bowen	√	√		√		S	√	S	S	S	
	Tony Braun or Bill Davis (Alternate)	√	√	√	√	√	√	√	√	√	√	
MAG Admin.	Gordon Tyus	√	√	√	√	√	√	√	√	√	√	

Attendance: √: Attended meeting; (Blank): Not attended meeting; S: Designated substitute attended
P: Attended a portion of the meeting; A: Attended via audio conferencing.