

MEETING MINUTES FROM THE
MARICOPA ASSOCIATION OF GOVERNMENTS
STANDARD SPECIFICATIONS AND DETAILS COMMITTEE

April 2, 2014

Maricopa Association of Governments Office, Ironwood Room
302 North First Avenue
Phoenix, Arizona

AGENCY MEMBERS

Jim Badowich, Avondale, Vice Chair	Dan Nissen, Peoria
Craig Sharp, Buckeye (proxy)	* Syd Anderson, Phoenix (St. Trans.)
Warren White, Chandler	Jami Erickson, Phoenix (Water)
Antonio Hernandez, El Mirage	Rodney Ramos, Scottsdale
Wayne Costa, Florence (audio)	Dan Shaffer, Surprise (proxy)
Brian Border, Gilbert (proxy)	* Tom Wilhite, Tempe, Chair
* Mark Ivanich, Glendale	Harvey Estrada, Valley Metro
Bob Herz, MCDOT	Gregory Arrington, Youngtown
Bob Draper, Mesa	

ADVISORY MEMBERS

Jeff Benedict, ARPA	Jeff Hearne, ARPA
Arvid Veidmark, AZUCA	* Peter Kandarlis, Independent
* Mike Sanders, AZUCA	Paul R. Nebeker, Independent
Amanda McGennis, AGC (proxy)	Jacob Rodriguez, SRP
Brian Gallimore, AGC	

MAG ADMINISTRATIVE STAFF

Gordon Tyus

* Members not attending or represented by proxy.

GUESTS/VISITORS

Jim Anderson, Olson Precast
Arturo Chavarria, Hanson
Bill Davis, ADS
Bob Erdman, Cutler Repaving
Mike Hook, ACPA
Troy McGaley, New Horizon Sales
Mike Molina, Oldcastle Precast

1. Call to Order

Vice chair Jim Badowich called the meeting to order at 1:30 p.m. He announced that Wayne Costa was joining via audioconference and asked members to please use the mikes when speaking. He welcomed Dan Shaffer, who will be the new representative for the City of Surprise. The vice chair also announced that this would be Troy Tobiasson's last meeting, and thanked him for his work on the committee.

2. Call to the Audience

Vice chair Badowich opened the call to the audience. No members of the audience requested to speak.

3. Approval of Minutes

The members reviewed the March 5, 2014 meeting minutes. Dan Nissen introduced a motion to accept the minutes as written. Troy Tobiasson seconded the motion. A voice vote of all ayes and no nays was recorded.

Carry Forward 2013 Cases

4. Case 13-15: Revisions to MAG Sections 101, 601, 603, 615 and 618 for Rigid and Flexible Pipe. Updates to Details 200-1 and 200-2.

Update pipe installation requirements. Warren White discussed the large case update provided in the meeting packet by summarizing the major changes section by section. On the cover page was a trench detail outlining some of the terminology changes. The definitions in Section 101 were modified or added to make the terminology consistent with ASTM. This included the terms for foundation, bedding, haunching, initial backfill and pipe embedment zone. Jetting was also removed from the definitions because the working group thought it should be removed as a compacting method. Added definitions included those for native material and the springline. He said the new terminology was also added to Details 200-1 and 200-2, which included a revised trench cross section.

Section 601 (Rigid Pipe Trench Excavation, Backfilling and Compaction) has a new title to reflect its use for rigid pipe. The definitions and materials subsections and the table for trench widths was revised to reflect ASTM standards. Some of the standards from Sections 615 and 618 were moved to 601 and 603. Also added was a reference to Section 602 for trenchless installation. In addition, the water consolidation option was removed. Mr. White also said that there was discussion about what to use as a default backfill material. Currently 601 references granular fill, but there may be need for further discussion on options such as MAG AB and CLSM slurry.

Section 603 (Flexible Pipe) currently covers HDPE pipe and was revamped for flexible pipe installation in general. It now is fairly parallel with Section 603, although the trench widths and backfill types are different.

Section 615 (Sewer Line Construction) became more streamlined and the format was revised so that it was more consistent with the revised Section 618. The rigid and flexible pipe requirements were moved to Sections 601 and 603. Also the testing was removed and will be included in a new Section 611 that consolidates all water and sewer testing requirements.

Section 618 (Storm Drain Construction) was similarly revised. In addition, the jacking pipe specs were removed and will reference a new Section 607 to be introduced as a new case.

After Warren White summarized the changes in the packet, members asked questions and provided feedback on various aspects. Bob Herz didn't agree with changing the terminology thinking it may be confusing to people who are used to the current MAG nomenclature. He said if changes were made, to consider matching those used by ADOT. He handed out ADOT specs that showed their current terminology. Warren White said that the new terminology is consistent with what ASTM uses for both rigid and flexible pipe installations and said that he could provide Mr. Herz with the applicable ASTM specs. Mr. Herz had reviewed terminology used in various ASTM specifications and found that what appeared to be inconsistent usage related to bedding. Phoenix is currently changing their supplement for foundation and bedding terminology. Paul Nebeker said that having a clear detail drawing is important for those in the field and that it be consistent with the terms used. Antonio Hernandez said ADOT uses CLSM the springline for pipe 36" and larger, and encases plastic corrugated pipe. Jim Badowich said ADOT has a complete set of specs but he would prefer to refer to ASTM than ADOT.

There was additional discussion on backfill options. Warren White said the initial backfill is consistent with a lot of cities. Options for ABC and CLSM should be included in the spec as well as requirements for the final backfill. It was also noted that the type of initial backfill is determined in part by the type of pipe and system that it uses. Bill Davis said that the new definitions reference AASHTO Section 30 (bridge specs) and ASTM D 2321.

Brian Gallimore asked why water consolidation was removed. He said this was a common method used in permit work such as developments where there is time to allow it to cure. He felt many contractors would want to keep this option. Several agencies currently do not allow it, especially flooding the trench. Mr. Gallimore said he was referring to the use of jetting, not flooding. Mr. Badowich said Avondale has had problems with settling and that it was hard to know if you achieved proper compaction. Mr. Hernandez also didn't think it worked well. Mr. Tobiasson said jetting takes a long time to cure out. Mr. Gallimore said some developments have set six months, but such long waits are less typical today. Warren White agreed to look at it more in the working group. Members wanted to make sure that any revised specifications did not allow jetting on large lifts.

Troy Tobiasson said he liked the new trench cross section on Detail 200-2. Jim Badowich said that the new terminology helps better explain different fill options for the different pipe zones such as the haunching up to the spring line or one foot above the pipe, and different materials

were needed for different pipe systems. Warren White explained the revised Sections 601 and 603 describe what to do in each zone of the trench.

Jim Badowich said that Jami Erickson of Phoenix was working on a new Section 611 that consolidates all the testing requirements into one place since different types of construction will reference the same tests. He said these cases would need to go together. He also said that Rob Godwin of Goodyear was working on revising water testing requirements, but that additional revisions would likely need to be handled in a separate future case once the reorganization was completed. Bob Herz noted that other cases were making changes to 615 and 618.

Mr. White asked members to review the case at their agency and provide feedback. He said this would be discussed at the next water/sewer working group and asked members to attend that meeting as well. Brian Gallimore said he would provide input at the next meeting.

5. Case 13-21: Create a new Section 742 Pre Cast Manhole Bases. Add detail drawings for construction and installation. Update existing manhole details.

Update specifications and details for pre-cast manhole bases and other corrections. Craig Sharp said there were no changes to the specification, but handed out a packet of revised detail drawings, which he began reviewing. Detail 420-1 incorporated changes discussed at the previous meeting including updating the adjustment rings, removing low alkali cement and the note for the flat top.

Jim Anderson of Olson Precast provided comments on Detail 420-2. He said it should not be worded to require that it be monolithically cast because other manufacturing methods can meet the design requirements. Jeff Hearne said he still had some clarifications on note 5 – that it needed to include the 50% fractured face to be consistent with the table in 702. He said he could provide Mr. Sharp revised language. Craig Sharp asked if members wanted more specific requirements for lining the manhole. Troy Tobiasson suggested the type of lining could be specified through the cities' approved materials list. Jim Badowich agreed that with all the different methods available, it should be left to the agency.

Paul Nebeker asked what determines the depth of the concrete ring showed on Detail 422 since there were both 8" and 12" dimensions. Mr. Sharp said the 12" option was for manholes placed outside the street. It is shown flush with the grade to protect the manhole from breaking from a grader blade. Mr. Nebeker suggested labeling that option as "Out of Pavement." Jami Erickson asked about the spacers for the frame and cover adjustments, since Phoenix is currently having a discussion of revising adjustment rings for their supplements, including using other types such as fiber-reinforced or bricks. Mr. Sharp said the drawing is currently still showing steel shims, and he could add a note to reference Section 345 for the adjustment specifications. Bob Herz noted that the shims are called out on the existing drawing and believed the note should be added on the revised drawing as well. There was also discussion about how the pitch of the road can affect the shims needed. Mr. Sharp asked for additional feedback and said he would update the details.

6. Case 13-22: Update Sections 625 and 775 to remove references to the use of bricks in manholes and remove references to manhole steps.

Craig Sharp said he received no comments since the last meeting. Mr. Badowich noted that this case needed to go along with Case 13-21 since removing the bricks and steps are also reflected in the revised detail drawings.

New Cases for 2014

7. Case 14-01: Miscellaneous Corrections.

- A. *Change "transverse" to "longitudinal" in Section 321.8.2.*
- B. No new corrections cases were introduced

8. Case 14-02: Revisions to Section 405 Monuments and Detail 120.

Update specifications to match current details and requirements. Mr. Herz asked if Buckeye still wanted to leave the Type "C" monument. Mr. Sharp said they still use it for interim roads until the developer replaces it and suggested it stay on the detail. Mr. Herz said he had a couple minor drafting changes to change dimensions of 2" to 2" min. Jim Badowich said he thought there may be confusion with Note 11 requiring 6" below grade but Type "C" showing 12". He suggested clarifying that Note 11 referred to the Type "B" monument. Brian Gallimore suggested adding dimensions to show the total depth the concrete for Type "B" and also asked how it could be chamfered 6" below grade. Mr. Herz said he would make the suggested changes and proposed voting on the case at the next meeting.

9. Case 14-03: Updates to Guardrail Details.

Make revisions to Section 415 and/or include guardrail details in MAG. Bob Herz said there were no changes since the last meeting. If he gets the revised Maricopa County details finished he will bring them in, but it may be later in the year. He said that currently the case is for information on what is coming up, but depends on what changes are made on the guardrail requirements at MCDOT.

10. Case 14-04: Revision to Detail 552 Concrete Cut-off Walls.

Move cut-off walls away from roadway edge and delete design related notes. Bob Herz the revised Detail 552 was provided at the last meeting and asked for feedback. If there are no further changes, he proposed voting on the case at the next meeting.

11. Case 14-05: Revisions to Section 324 Portland Cement Concrete Pavement (PCCP).

Use compressive rather than tensile strength tests, modernize and reorganize section as needed. Jeff Hearne handed out a revised version that included comments received from Bob Herz of Maricopa County. The copies included both a marked-up version and a clean version. Areas for discussion were highlighted in yellow. Mr. Hearne said some issues were still to be determined, such as the load transfer process that does not necessarily use dowel bars, but may use other systems determined by the project designer. Mr. Herz suggested deleting the language on dowel bars since the AASHTO reference was requiring a corrosion resistant coating that is not usually need in Maricopa County. Special material requirements that may be needed for joint details should be identified on the plans. Antonio Hernandez said that ADOT doesn't discern the difference since such a coating is needed in areas like Flagstaff. Some dowels and tie bars are installed by the paving equipment, so having info about the machine used to install the support system may be needed. Mr. Herz believes the proposed requirement for an approved support system is sufficient.

Mr. Hearne discussed some of the other highlighted changes, many of which were moving sections around to make the process more clear. There was also discussion about whether a smoothness requirement was needed. Bob Herz said MCDOT has a supplement for smoothness that applies to both asphalt and concrete pavement, but isn't used on permitted roads and recommended the ADOT smoothness testing portion be deleted. Bob Draper said not all agencies have the equipment to test it.

There was also discussion on whether this section applied to mainline roadways or any concrete paving such as bus bays, turn lanes and intersections. Mr. Hearne believed that it could be used for all, although there may need to be additional requirements for roadways. Finally Mr. Hearne said there was a fix to Table 324-1 on page 10. He asked members to further review the case and provide feedback.

12. Case 14-06: Revisions to Section 718 Preservative Seal for Asphalt Concrete.

Update the specifications for the Type C preservative seal. Jeff Benedict said he was waiting to receive comments from the manufacture of the tire modified surface sealer (TRMSS) to make final corrections to the table. Warren White offered a draft of Chandler's specifications for him to review as well. He planned to review the case and the next working group and have an update for the next committee meeting.

13. Case 14-07: Revision to Section 735 Reinforced Concrete Pipe and Section 618 Storm Drain Construction.

Add Elliptical and Arch Reinforced Concrete Pipe. Bob Herz introduced a new case to allow elliptical and arch reinforced concrete pipe for storm drain installations. The proposed changes to Section 618 are to make it compatible with these materials. Mr. Herz provided a handout of Section 618 showing the modifications needed. Mr. White said that some of this overlaps with work he is doing on his case and he would like to coordinate the effort. Mr. Herz asked members to review the case and provide him feedback.

14. Case 14-08: New Section 607: Trenchless Installation of Smooth Wall Jacking Pipe.

Included are revisions to Section 618: Storm Drain Construction. Jim Badowich introduced a new case from the water/sewer working group to revise the specs on jacking pipe. The current specs that were in Section 618.4 have been removed and a new Section 607 was created that described jacking smooth-walled pipe for irrigation and storm drain. Mr. Veidmark, who developed the draft specification, said this was for direct jacking with hand tunneling, not for casing. Mr. Badowich added this also tied into Case 13-15. Other revisions to Section 618 were to remove pipe jacking related pay requirements as requested by Mr. Herz.

15. Case 14-09: Revision to Section 726 Concrete Curing Materials.

Replace discontinued AASHTO references with current ASTM standards. Bob Herz introduced a new case to update the references in *Section 726 Concrete Curing Materials* to reference current ASTM standards since the AASHTO ones had been deleted. He also clarified the Type 2 compound as “white pigmented” material to be consistent with other specifications. Mr. Herz asked members to review the case and provide feedback so the update could be completed in short order.

16. Working Group Reports

Jim Badowich began reports from the working group chairs.

a. **Water/Sewer Issues Working Group**

Mr. Badowich said the group met on March 18th and that notes from the meeting were included in the packet. The working group discussed negative air testing of manholes and asked the committee if this was a specification that should be added to MAG. Phoenix currently has a supplement that could be used. ASTM also has specs, but require testing before backfilling. Members suggested bringing Phoenix’s supplement forward as a possible future case.

Mr. Badowich said much of the meeting was used to provide a productive review of Case 13-15, which provided the latest case submission discussed earlier. He said he wants to get the Section 611 Testing section put together as a case this year that can be reviewed simultaneously.

In addition to the new case for Section 607, the working group is putting together a new case for a Section 608 for horizontal directional drilling. Avondale recently used the technology for an ITS project and many utility companies are also using this method. Rod Ramos said Scottsdale would like to see a spec for it quickly. Arvid Veidmark asked if the spec should include both wet and dry utilities. The members thought it should include both.

The next meeting is scheduled for April 22nd at 1:30 p.m. in the MAG office.

b. **Asphalt/Materials Working Groups**

Jeff Benedict said the group met on March 20th, and that a copy of the meeting notes was in the packet. He said they were finishing up work on a case to allow warm mix, and planned to bring it to the committee next month. They also had a good discussion on permit work, although there was still much work to do before a case was ready. Mr. Benedict said they discussed decorative asphalt stamping and may bring forward a case based on Gilbert's supplement.

Jeff Benedict said the next asphalt/materials working group meeting is planned for April 24th at the ARPA office at noon. It was scheduled for the fourth Thursday of the month to avoid conflicts with the streets and roads conference.

c. **Concrete Working Group**

The concrete working group followed the Asphalt/Materials working group meeting on March 20th and notes from the meeting were provided. Mr. Hearne said they are getting close with revisions to *Section 725 Portland Cement Concrete*. He is currently running it by the ARPA group for comments, but would like to bring a case forward this year.

Mr. Hearne said the next Concrete working group meeting would follow the Asphalt/Materials group on April 24th.

d. **Outside Right-of-Way Working Group**

Peter Kandaris was not present. Gordon Tyus said he was asked to remind members to return surveys on what specifications to include in the outside right-of-way document. The survey was posted on the MAG meeting webpage.

17. General Discussion

Vice chair Badowich asked for any general discussion items. Bob Herz asked Harvey Estrada of Valley Metro if they had any details for bus bays and stops. Mr. Estrada said they do, and many agencies also have supplements. Mr. Herz thought it would be good if these details were more standardized in MAG. Mr. Estrada said he could get the details together for review and possibly create a future case.

18. Adjournment:

Seeing no further business the meeting was adjourned at 3:32 p.m.