Iowa Department of Transportation

MINUTES
OF
IOWA D.O.T. SPECIFICATION COMMITTEE MEETING

April 9, 2009

Members Present:	Eric Johnsen, Secretary	Specifications Section
	Bruce Kuehl	District 6 - Construction
	Doug McDonald	District 1 - Marshalltown RCE
	Gary Novey	Office of Bridges & Structures
	Dan Redmond	District 4 - Materials
	Tom Reis, Chair	Specifications Section
	John Smythe	Office of Construction
Members Not Present:	John Adam	Statewide Operations Bureau
	Jim Berger	Office of Materials
	Roger Bierbaum	Office of Contracts
	Donna Buchwald	Office of Local Systems
	Troy Jerman	Office of Traffic & Safety
	Mike Kennerly	Office of Design
Advisory Members Present:	Lisa Rold	FHWA
Others Present:	Hope Arthur	Document Services
	Bob Dawson	Office of Materials
	Dave Doolittle	Office of Purchasing
	Daniel Harness	Office of Design
	Ed Kasper	Office of Contracts
	Chuck Luvaas	Document Services
	Kathy Skogerboe	Document Services
	Emily Whaley	Specifications Section

Tom Reis, Specifications Engineer, opened the meeting. The following items were discussed in accordance with the agenda dated April 2, 2009:

1. Article 2601.04, L, Native Grass Seeding and Wetland Grass Seeding.

The Office of Location and Environment requested changes to the table for wetland grass seeds.

2. Article 4109.02, Aggregate Gradation Table.

The Office of Materials requested a change to allow the Modified Subbase gradation to be used for Granular Backfill.

3. Article 4123.03, Modified Subbase Material.

The Office of Materials requested changes for clarity and to correct an error in the table notes.

4. Article 4133.04, B, Backfill under Flowable Mortar.
Article 4133.05, Floodable Backfill.

The Office of Materials requested changes to the gradation requirements for floodable backfill.

5. DS-011XX, Backfilling and Compaction of Culverts by Flooding.

The Office of Materials requested a change to reference Section 4133 for Floodable Backfill.

6. Printing of 2009 Standard Specification Book.

The Specifications Engineer requested a discussion of the publishing time line, publishing frequency, and printing options for Standard Specification Book.

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Jim Rost	**Office:** Location & Environment	**Item 1**
Submittal Date: March 26, 2009	**Proposed Effective Date:** October 2009	
Article No.: 2601.04, L **Title:** Native Grass Seeding and Wetland Grass Seeding	**Other:**	

Specification Committee Action: Approved as is.

Deferred:	**Not Approved:**	**Approved Date:** 04/09/2009	**Effective Date:** 10/20/09

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: See Reason for Revision.

Specification Section Recommended Text:

2601.04, L, Native Grass Seeding and Wetland Grass Seeding.

Replace the second table:

SEEDS COMMON NAMES, SCIENTIFIC NAMES, PLS			
Common Name	**Scientific Name**	**PLS (~~lbs.~~ per acre)**	**PLS (~~kg~~ per ha)**
WETLAND GRASSES:			
Blue vervain	Verbena hastata	~~0.31~~ 1 oz.	~~0.35~~ 70 g
Boneset	Eupatorium perfoliatum	~~0.25~~ 1 oz.	~~0.28~~ 70 g
Nodding bur marigold	Bidens cernua	~~0.31~~ 8 oz.	~~0.35~~ 560 g
Swamp milkweed	Asclepias incarnata	~~0.50~~ 1 lb.	~~0.56~~ 1.1 kg
Sneezeweed	Helenium autumnale	~~0.44~~ 2 oz.	~~0.49~~ 140 g
Water plantain	Alisma plantago-aquatica	~~1.00~~ 4 oz.	~~1.12~~ 280 g
Arrowhead	Sagittaria latifolia	~~0.50~~ 4 oz.	~~0.56~~ 280 g
New England aster	~~Aster~~ Symphyotrichum novae-angliae	~~0.50~~ 2 oz.	~~0.56~~ 140 g
~~Barnyard grass~~ Virginia wild-rye	~~Echinochloa crus-galli~~ Elymus virginicus	~~1.00~~ 5 lbs.	~~1.12~~ 5.6 kg
Big bluestem	Andropogon gerardii	~~2.00~~ 1 lb.	~~2.24~~ 1.1 kg
Switchgrass	Panicum virgatum	~~1.00~~ 8 oz.	~~1.12~~ 560 g
Prairie cordgrass	Spartina pectinata	1 lb.	1.1 kg
Bluejoint grass	Calamagrostis canadensis	~~1.00~~ 1 oz.	~~1.12~~ 70 g
Rice cutgrass	Leersia oryzoides	~~1.00~~ 4 oz.	~~1.12~~ 280 g
Dark green bulrush	Scirpus atrovirens	~~0.50~~ 1 oz.	~~0.56~~ 70 g
Softstem bulrush	Schoenoplectus tabernaemontani	~~0.69~~ 8 oz.	~~0.77~~ 560 g
Spike rush	Eleocharis palustris	~~0.50~~ 4 oz.	~~0.56~~ 280 g
Fox sedge	Carex vulpinoidea	~~0.50~~ 4 oz.	~~0.56~~ 280 g
Porcupine sedge	Carex hystericina	8 oz.	560 g
Broom sedge	Carex scoparia	2 oz.	140 g
Tussock sedge	Carex stricta	2 oz.	140 g

	Seeding rate (PLS)	**12.00 pounds/acre**	**13.4438 kg/ha**

Comments:

Member's Requested Change: (Do not use '**Track Changes**', or '**Mark-Up**'. Use ~~**Strikeout**~~ and **Highlight**.)

SEEDS
COMMON NAMES, SCIENTIFIC NAMES, PLS

Common Name	Scientific Name	PLS (~~lbs.~~ per ac)	PLS (~~kg~~ per ha)
WETLAND GRASSES:			
Blue vervain	Verbena hastata	~~0.31~~ 1 oz.	~~0.35~~ 70 g
Boneset	Eupatorium perfoliatum	~~0.25~~ 1 oz.	~~0.28~~ 70 g
Nodding bur marigold	Bidens cernua	~~0.31~~ 8 oz.	~~0.35~~ 560 g
Swamp milkweed	Asclepias incarnata	~~0.50~~ 1 lb.	~~0.56~~ 1.1 kg
Sneezeweed	Helenium autumnale	~~0.44~~ 2 oz.	~~0.49~~ 140 g
Water plantain	Alisma plantago-aquatica	~~1.00~~ 4 oz.	~~1.12~~ 280 g
Arrowhead	Sagittaria latifolia	~~0.50~~ 4 oz.	~~0.56~~ 280 g
New England aster	~~Aster~~ Symphyotrichum novae-angliae	~~0.50~~ 2 oz.	~~0.56~~ 140 g
~~Barnyard grass~~ Virginia wild-rye	~~Echinochloa crus-galli~~ Elymus virginicus	~~1.00~~ 5 lbs.	~~1.12~~ 5.6 kg
Big bluestem	Andropogon gerardii	~~2.00~~ 1 lb.	~~2.24~~ 1.1 kg
Switchgrass	Panicum virgatum	~~1.00~~ 8 oz.	~~1.12~~ 560 g
Prairie cordgrass	Spartina pectinata	1 lb.	1.1 kg
Bluejoint grass	Calamagrostis canadensis	~~1.00~~ 1 oz.	~~1.12~~ 70 g
Rice cutgrass	Leersia oryzoides	~~1.00~~ 4 oz.	~~1.12~~ 280 g
Dark green bulrush	Scirpus atrovirens	~~0.50~~ 1 oz.	~~0.56~~ 70 g
Softstem bulrush	Schoenoplectus tabernaemontani	~~0.69~~ 8 oz.	~~0.77~~ 560 g
Spike rush	Eleocharis palustris	~~0.50~~ 4 oz.	~~0.56~~ 280 g
Fox sedge	Carex vulpinoidea	~~0.50~~ 4 oz.	~~0.56~~ 280 g
Porcupine sedge	Carex hystericina	8 oz.	560 g
Broom sedge	Carex scoparia	2 oz.	140 g
Tussock sedge	Carex stricta	2 oz.	140 g
Seeding rate (PLS)		**12.00 lbs./ac**	**13.44 kg/ha**

Reason for Revision: Barnyard grass was included in the wetland grass seed mix as a cover crop seed. Barnyard grass is considered weedy; therefore, the industry does not regularly harvest its seed for distribution. Substituting Virginia wild-rye as a cover crop seed is recommended because it has similar characteristics as barnyard grass but is not considered a weedy mix. The industry regularly harvests its seed for distribution, lowering the cost of the wetland grass seed mix.

Porcupine sedge, broom sedge and tussock sedge are being added to the wetland grass seed mix to give wetlands a more diverse population of native sedges that appear in natural Iowa wetlands.

Rates of pure live seed were changed in response to industry input, as well as an effort to lower the overall cost of the wetland seed mix.

County or City Input Needed (X one)	**Yes** X	**No**

Comments: The Suppliers will make this standard mix available to the County or City.					
Industry Input Needed (X one)			**Yes** X	**No**	
Industry Notified:	**Yes**	**No**	**Industry Concurrence:**	**Yes**	**No**
Comments: These changes were developed based on input from seed suppliers and other wetland development professionals.					

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Jim Berger	**Office: Materials**	**Item 2**
Submittal Date: 2009.03.19	**Proposed Effective Date:** October 2009	
Section No.: 4109 **Title:** Aggregate Gradation Table	**Other:**	

Specification Committee Action: Approved with changes as noted.

Deferred:	**Not Approved:**	**Approved Date:** 04/09/09	**Effective Date:** 10/20/09

Specification Committee Approved Text:

4109.02, Aggregate Gradation Table.

Replace Gradation Nos. 32, 35 & 36:

		Std. Sieve Size	1 1/2"	1.0"	3/4"	1/2"	3/8"	4	8	30	50	100	200	
Grad. No.	Section No.	Intended Use	Percent Passing											Notes
32.	4133 (Sand/Gr./Cr.St.)	Granular Backfill	100% passing the 3" screen.						~~20-100~~ 10-100				0-10	8, ~~9,~~ 12
35.	413~~3.054~~ (Natural Sand/Gr.)	Floodable Backfill	100						20-100				0-4	12
36.	413~~3.054~~ (Natural Sand)	Floodable Backfill							100				0-2	12

Replace Note 8:

8. Crushed stone shall have 100% passing the ~~1.0"~~ 1.5" sieve.

Comments: The Office of Materials commented the change to Note 8 won't affect quality. Changes to Gradation Nos. 35 & 36 are a result of changes approved in Item 4.

Specification Section Recommended Text:

4109.02, Aggregate Gradation Table.

Replace Gradation No. 32, 35 &36:

		Std. Sieve Size	1 1/2"	1.0"	3/4"	1/2"	3/8"	4	8	30	50	100	200	
Grad. No.	Section No.	Intended Use	Percent Passing											Notes
32.	4133 (Sand/Gr./Cr.St.)	Granular Backfill	100% passing the 3" screen.						~~20-100~~ 10-100				0-10	8, 9, 12

Replace Note 8:

8. Crushed stone shall have 100% passing the ~~1.0"~~ 1.5" sieve.

Comments:

Member's Requested Change (Redline/Strikeout):

Section **4109. Aggregate Gradation Table**

CHANGE: Gradation 32 and Note 8.

AGGREGATE GRADATION TABLE - (ENGLISH)

		Std. Sieve Size	1 1/2"	1.0"	3/4"	1/2"	3/8"	4	8	30	50	100	200	
Grad. No.	Section No.	Intended Use	Percent Passing											Notes
32.	4133 (Sand/Gr./Cr.St.)	Granular Backfill	100% passing the 3" screen.						~~20-100~~ 10-100				0-10	8, 9, 12

Notes: 8. Crushed stone shall have 100% passing the ~~1.0"~~ 1.5" sieve.

Reason for Revision:

Will allow Modified Subbase gradation to be used for Granular backfill.

County or City Input Needed (X one)			**Yes**	**No** X	
Comments:					
Industry Input Needed (X one)			**Yes**	**No** X	
Industry Notified:	**Yes** X	**No**	**Industry Concurrence:**	**Yes** X	**No**
Comments: Requested by Industry					

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Jim Berger	**Office:** Materials	**Item 3**
Submittal Date: 2009.03.19	**Proposed Effective Date:** October 2009	
Article No.: Section 4123 **Title:** Modified Subbase Material	**Other:**	

Specification Committee Action: Approved as is.

Deferred:	**Not Approved:**	**Approved Date:** 04/09/09	**Effective Date:** 10/20/09

Specification Committee Approved Text:

Comments: The Office of Materials noted this table was developed when this section was converted to the imperative mood. Part of the original specification text regarding plasticity index was omitted when this section was converted. The proposed changes are to correct the omission and to clarify that a higher abrasion loss is allowed if the aggregate meets certain qualifications.

Specification Section Recommended Text:

4123.03, Quality.

Replace Table 4123.03:

Table 4123.03

Aggregate Quality	Maximum Percent Allowed	Test Method
Abrasion [(a)]	45	AASHTO T 96
C Freeze	15	Iowa DOT Materials Laboratory Test Method 211, Method C
~~Alumina[(a)]~~	~~0.7 (Abrasion loss 46% to 55%)~~	~~Iowa DOT Materials Laboratory Test Method 222~~
~~A Freeze~~	~~10 (Abrasion loss 46% to 55%)~~	~~Iowa DOT Materials Laboratory Test Method 211, Method A~~
Alumina [(b)] (No. 40 (425 µm) material)	4.7	Iowa DOT Materials Laboratory Test Method 222

~~(a) If the Alumina value fails, determine the A Freeze value for specification compliance. Iowa DOT Materials Laboratory Test Method 222 does not apply to gravel.~~

(a) Virgin material with Al_2O_3 not exceeding 0.7 (+4) or A-freeze not exceeding 10 may have an abrasion maximum of 55.

(b) For gravel or gravel/non-gravel blend, have a plasticity index not exceeding 7 for each source.

Comments:

Member's Requested Change (Redline/Strikeout):

Change: TABLE 4123.03-1

4123.03 QUALITY.

A. The requirements of Table 4123.03-1 apply to blended and non-blended virgin materials:

Table 4123.03-1: Aggregate Quality (Blended and Non-blended Virgin Materials)

Aggregate Quality	Maximum Percent Allowed	Test Method
Abrasion [a]	45	AASHTO T 96
C Freeze	15	Iowa DOT Materials Laboratory Test Method 211, Method C
~~Alumina[a]~~	~~0.7 (Abrasion loss 46% to 55%)~~	~~Iowa DOT Materials Laboratory Test Method 222~~
~~A Freeze~~	~~10 (Abrasion loss 46% to 55%)~~	~~Iowa DOT Materials Laboratory Test Method 211, Method A~~
Alumina [b] (No. 40 (425 µm) material)	4.7	Iowa DOT Materials Laboratory Test Method 222

~~(b) If the Alumina value fails, determine the A Freeze value for specification compliance. Iowa DOT Materials Laboratory Test Method 222 does not apply to gravel.~~

(c) Virgin material with Al_2O_3 not exceeding 0.7 (+4) or A-freeze not exceeding 10 may have an abrasion maximum of 55.

(d) For gravel or gravel/non-gravel bend, have a plasticity index not exceeding 7 for each source.

Reason for Revision: Clarification of the specification. Note (b) was over-looked when changing to the imperative mood.

County or City Input Needed (X one)	**Yes**	**No** X
Comments:		

Industry Input Needed (X one)			**Yes**	**No** X	
Industry Notified:	**Yes**	**No** X	**Industry Concurrence:**	**Yes**	**No**
Comments: Not a change in specifications.					

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Jim Berger	**Office: Materials**	**Item 4**
Submittal Date: 2009.03.19	**Proposed Effective Date:**	
Article No.: 4133 **Title:** Granular Backfill Material	**Other:**	

Specification Committee Action: Approved with changes as noted.

Deferred:	**Not Approved:**	**Approved Date:** 04/09/09	**Effective Date:** 10/20/09

Specification Committee Approved Text:

4133.04, B, Backfill under Flowable Mortar.

Replace "12" with "29".

4133.04, C, Backfill under Flowable Mortar.

Replace the entire article:

C. Material complying with ~~Article~~ Section 413~~3.054~~.

4133.05, Floodable Backfill.

Delete the entire article.

4134, Floodable Backfill

Add as a new Section:

Floodable Backfill.

4134.01 DESCRIPTION.
Uncrushed natural sand and gravel or natural sand.

4134.02 GRADATION.

A. For natural sand and gravel use Gradation No. 35 of the Aggregate Gradation Table, Article 4109.02.

B. For natural sand use Gradation No. 36 of the Aggregate Gradation Table, Article 4109.02.

4134.03 QUALITY.
For crushed stone, meet the following requirements:

TABLE 4133.03

Coarse Aggregate Quality	Maximum Percent Allowed	Test Method
Abrasion	55	AASHTO T 96
C Freeze	20	Iowa DOT Materials Laboratory Test Method 211, Method C
Total of Abrasion & C Freeze	65	--
Clay lumps and friable particles	4	Materials I.M. 368

Comments: The Office of Materials explained it is undesirable for flowable mortar to flow through backfill

material. Gradation No. 29 produces a finer material than Gradation No. 12, thus Gradation No. 29 is less prone to allow flowable mortar to flow through it.

The Office of Materials noted Article 4133.05 should actually be a separate section since floodable backfill is not meant to be a crushed material. The Committee agreed floodable backfill should be moved to a new Section 4134. The Office of Materials noted the quality requirements for 4133 should be duplicated in 4134. References to Article 4133.05 in Gradation 35 and 36 should be changed to Section 4134.

Specification Section Recommended Text:

4133.04, B, Backfill under Flowable Mortar.

Replace "12" with "29".

4133.05, Floodable Backfill.

Add as first paragraph:
Use uncrushed natural sand and gravel or natural sand.

Comments:

Member's Requested Change (Redline/Strikeout):

Section **4133.04 BACKFILL UNDER FLOWABLE MORTAR and 4133.05 FLOODABLE BACKFILL.**
Change: 4133.04 B. Gradation 12 (Granular Subbase) to Gradation 29 (Porous Backfill).
Add: Description to 4133.05

4133.04 BACKFILL UNDER FLOWABLE MORTAR.
Use one of the following:

A. Natural sand complying with the requirements for Gradation No.1 of the Aggregate Gradation Table, Article 4109.02, with a maximum of 4% passing the No. 200 (75 µm) sieve.

B. Material complying with the requirements for Gradation No. ~~12~~ 29 of the Aggregate Gradation Table, Article 4109.02.

C. Material complying with Article 4133.05.

4133.05 FLOODABLE BACKFILL.
Use uncrushed natural sand and gravel or natural sand.

A. For natural sand and gravel use Gradation No. 35 of the Aggregate Gradation Table, Article 4109.02.

B. For natural sand use Gradation No. 36 of the Aggregate Gradation Table, Article 4109.02.

Reason for Revision:

Porous Backfill (gradation 29) is being used in Design plans. Granular (gradation 12) is no longer used. The addition to 4133.05 was to clarify 4133.01 that crushed stone is not to be used for floodable applications.

County or City Input Needed (X one)	**Yes**	**No** X

Comments:

Industry Input Needed (X one)			**Yes**	**No** X	
Industry Notified:	**Yes**	**No** X	**Industry Concurrence:**	**Yes**	**No**
Comments: Requested by DMEs.					

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Jim Berger	**Office:** Materials	**Item 5**
Submittal Date: 2009.03.25	**Proposed Effective Date:** October, 2009	
Article No.: DS-01120 **Title**: BACKFILLING AND COMPACTION OF CULVERTS BY FLOODING	**Other:**	

Specification Committee Action: Approved with changes as noted.

Deferred:	**Not Approved:**	**Approved Date:** 04/09/09	**Effective Date:** 10/20/09

Specification Committee Approved Text: See attached DS-011XX.

Comments: The Office of Construction noted there is an inconsistency in how Flooded Backfill is bid. When it is used with bridge abutment construction, it is incidental to structural concrete. When used to place culvert pipe in a trench, it is bid as Flooded Backfill. They agreed that for use behind abutments, a small enough amount of material used that it makes sense for Flooded Backfill to be incidental as long as it is clearly stated in the bridge plan. They also noted bridge plans should refer to the specifications for requirements for floodable backfill material.

District 4 Materials noted that "Granular" should be removed from DS-011XX.02 to emphasize floodable backfill is a different material.

Since Article 4133.05 is being moved to Section 4134, references to Article 4133.05 should be changed to Section 4134.

Specification Section Recommended Text:

Comments:

Member's Requested Change: **(Do not use 'Track Changes', or 'Mark-Up'. Use ~~Strikeout~~ and Highlight.**

01120.02 Materials

Granular backfill material shall meet the requirements of Section 4133 for floodable backfill ~~have 4% or less passing the No. 200 (75 µm) sieve (e.g. washed concrete sand).~~

Reason for Revision: Section 4133 now includes the requirements for floodable backfill.

County or City Input Needed (X one)	**Yes**	**No** X
Comments:		

Industry Input Needed (X one)			**Yes**	**No** X	
Industry Notified:	**Yes**	**No**	**Industry Concurrence:**	**Yes**	**No**
Comments:					

DS-01XXX
(Replaces DS-01120)

Iowa Department of Transportation

DEVELOPMENTAL SPECIFICATIONS
FOR
BACKFILLING AND COMPACTION OF CULVERTS BY FLOODING

Effective Date
October 20, 2009

THE STANDARD SPECIFICATIONS, SERIES 2001, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE DEVELOPMENTAL SPECIFICATIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

01XXX.01 Description
This specification describes backfill and compaction requirements for culverts using flooding. Sections 2415, 2416 and 2417 of the Standard Specifications shall apply unless modified by this specification.

01XXX.02 Materials
~~Granular~~Floodable backfill material shall meet the requirements of Section 4134 ~~have 4% or less passing the No. 200 (75 µm) sieve (e.g. washed concrete sand)~~.

01XXX.03 Construction
When backfilling and compaction by flooding is required, ~~granular~~ floodable backfill may be placed in lifts up to 2 feet (0.6 m) thick. The Contractor shall determine if box or pipe culverts need to be restrained and take appropriate actions to prevent floating of culverts during backfilling, flooding, and compaction.

Cohesive soil plugs shall be constructed at the inlet, outlet, and sides (if needed) prior to flooding.

Surface flooding each lift shall start at the inlet end of the pipe or box culvert and progress to the outlet. To ensure uniform surface flooding and adequate compaction, water shall be fan-sprayed in successive 6 to 8 foot (1.8 to 2.4 m) increments from a 2 inch (50 mm) diameter hose for 3 minutes within each increment. The hose shall be run fully; however, the water pressure shall be low enough to avoid erosion of cohesive soil plugs.

After flooding, the Contractor shall evaluate the effectiveness of the compaction with a vibratory pan compactor. If the pan compactor produces visible compaction, repeat flooding process until the pan compactor produces no visible compaction.

01XXX.04 Method of Measurement
The quantity of Flooded Backfill, in cubic yards (cubic meters), will be the quantity shown in the contract documents regardless of the compaction method. The quantity measured for payment will not be adjusted unless the quantity of pipe installed is adjusted.

01XXX.05 Basis of Payment
The Contractor will be paid the contract unit price for Flooded Backfill per cubic yard (cubic meters).

Water required for flooding, subdrains, porous backfill, restraining culverts against floating, and granular backfill will not be measured separately for payment, but will be considered incidental to the contract unit price bid for Flooded Backfill.

Item 6

6. Printing of 2009 Standard Specification Book.

The Specifications Section discussed printing of the 2009 book with the Office of Purchasing. One concern was looking for a way to reduce the number of old books that need to be disposed of when a new book is printed. The Specifications Section noted a significant number of 1995 and 1997 Specification manuals had to be disposed of when the 2001 book was published.

The Specifications Section explained the frequency of publishing a new book has a significant impact upon the number of books to order. The ability to reprint a book usually is only an available option for the first two years. Reprinting small batches can become very expensive. The more frequently a book is published, the easier it is to predict how many books need to be ordered; thus avoiding reprinting. The Specifications Section noted if the book is published more frequently, for example every year or every other year, it may be possible to eliminate the GS. This may result in a potential increase in DSs and SSs to handle updates between new books. The Office of Construction explained they have concerns with publishing yearly since some projects last two to three years. They felt publishing every two to three years would work well.

The Specifications Section explained that in the past the GS files for the ERL had to be created separately from the files for the book. This required the text be typed twice, resulting in text in the book not exactly matching text in the ERL. It is now possible to create files for the ERL directly from the word processing files used to create the book. This means the hard copy and electronic copy will be virtually the same. This is a first step in moving towards the electronic copy of the book being the official copy.

The Office of Document Services presented the option of printing a loose-leaf book to be placed in a binder. They can print updates to the book which can be placed in the book. The Office of Construction commented that often times, field personnel write notes in their books that would be lost when they remove outdated pages. The Office of Document Services explained that outdated pages with notes could be kept in the back of the binder. The Office of Contracts expressed concern with identifying on a contract which changes apply. The Specifications Section suggested using the GS as a table of contents that would contain information as to the various. The Office of Construction emphasized field personnel requested a hardbound book. The Methods Section of Design pointed out that revisions sometimes do not get placed in books.

The Office of Purchasing asked if it would be possible to print the book in-house and send it out to be bound. The Office of Document Services responded it could be done, but it would be costly and a timeline would need to be developed to get the book to a publisher for binding.

The Specification Committee decided on the following recommendations:

- Publish a soft bound book.
- Establish a two year cycle for publishing future books.
- A 6 inch by 9 inch page size is preferred if using 9 point ‘Arial’ font type.
- The page size for the GS and book should be the same size if manageable.
- Print the aggregate gradation tables as an appendix.
- If possible, include dictionary tabs; or division tabs as in the current book.

The Specifications Section passed around a sample of paper submitted by a potential publisher. They noted that various thicknesses of paper may be available ranging from approximately 400 pages per inch (PPI) to over 800 PPI.

The Office of Document Services suggested requesting a pocket in the back cover of the book to carry the GS in.

The Specifications Section noted the May Specification Committee Meeting will be the last meeting for

including material that will be included in the actual book. They commented if all changes can be included in the new book, it may be possible to eliminate the need to issue a GS with the new book.

2009 Publishing Time Line

- Effective Date for new book: October 20, 2009 Letting
- ERL distribution: ~September 8th
- Book available in warehouse for distribution
  - earliest: mid-July
  - latest: mid-August
- Book ready for publisher: mid-May to mid-June
- Electronic (.pdf) version of book available: mid-June
- Last Specification Committee meeting for items included in book: May