1040600, Prevention, Control and Abatement of Erosion and Water Pollution
Comments From Industry Review
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Jo Moore
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Comments:

Overall Response: The purpose of these changes was to make updates and additions which include linking Section 104 to the Erosion and Sediment Control Manual, and to create pay items that will allow the selection of appropriate Best Management Practices for projects. We welcome and consider all comments. Several comments provided address text that is not changed and beyond the purpose of these changes. These comments are helpful and will be considered in future revisions to this section.

104-6.2 states: Use approved temporary erosion and sediment control features found in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual (E&SC Manual) (NOTE: this is the manual developed by UCF, FDOT and FDEP and published in July 2007 that has been referenced in earlier proposed editions of this specification

- *Approved by whom? Response: The Engineer will approve based on 104-4. "Approved" will be deleted in 104-6.2.*
- *How can we respond in a timely manner if we have to wait for approvals? Response: See response above.*
- *Many of the controls or measures indicated or described in "the Manual" are not specific in application, but have to be determined based on job need (which may be a good thing for us) – but what we do not need is for the CEI to believe that he needs to personally know about and personally preview and pre-approve every method we propose to use, or determine is necessary to correct a condition that needs a timely response. No response needed. See above.*

104-6.2 also states: The Engineer may authorize temporary erosion and sediment control features when finished soil layer is specified in the Contract and the limited availability of that material from the grading operations will prevent scheduled progress of the work or damage the permanent erosion control features.

- *Is this condition supposed to limit the Engineer's authority to authorize temporary erosion & sediment control features? Response: No, it is understood that this extends, not limits the Engineer's authority.*
- *It was my understanding that "finish soil layer" isn't being utilized any more after the revision of "performance turf" specification calling for the contractor to "do whatever is necessary" to produce vegetative cover. Response: The finished soil layer language found in Section 162-1.1 is still relevant. This section allows the Engineer to call for a finished soil layer if necessary and is still used by the Maintenance Office for certain maintenance projects.*

104-6.4.2 states: …For areas not defined as sod, constructing temporary turf by seeding only is not an option for temporary erosion control under this Section.

- *So, what is the appropriate option? (seed & mulch?, hydromulch?) Response: There are several options as you mention, all of which can be found in the manual. If seed is used, a temporary erosion control product is required.*

104-6.4.5 Sediment Containment Systems: Construct sediment containment systems in accordance with the details shown in the plans, the E&SC Manual, or as may be approved as suitable to adequately perform the intended function. Clean out sediment basins as necessary in accordance with the plans or as directed.

- *Should also use same name (sediment containment systems) because both sediment basins and sediment traps are referenced as this type of device in "The Manual".* Response: Agree, "basins" will be changed to "containment systems." *Since the "plan" may not say when to clean them out, that should also be referenced to the E&SC Design Manual, or the FDEP Inspector Manual (50% capacity is the standard taught by the Inspector course)* Response: Specific maintenance criteria should be in the Manual. If it is not, DEP and DOT will update the Manual accordingly.

104-6.4.8.2 (Temporary Silt Fence) Materials and Installation: Use a geotextile fabric made from woven or nonwoven fabric, meeting the physical requirements of Section 985 according to those applications for erosion control.

- *the requirements in Section 985 are outdated and do not match with what is taught in the FDEP Inspector Manual (that FDOT helped author). Often the specifications indicate that FDOT will pay for replacement every 12 months. IN FACT, materials that meet the above Section will not last 12 months in the FL sun. If a contractor actually uses a product that will last longer, he will pay more than he does for "standard silt fence" and it does create a "competitive" issue.* Response: Section 985 and Index 199 is currently being reviewed and will be updated as needed. That review and subsequent changes is beyond the scope of these changes. No changes made at this time.

104-6.4.8.2 (Temporary Silt Fence) Materials and Installation:

…Install all sediment control devices in a timely manner to ensure the control of sediment and the protection of lakes, streams, gulf or ocean waters, or any wetlands associated therewith and to any adjacent property outside the right-of-way as required.

At sites where exposure to such sensitive areas is prevalent, complete the installation of any sediment control device prior to the commencement of any earthwork.

After installation of sediment control devices, repair portions of any devices damaged at no expense to the Department.

- *These statements should not specifically be under "temporary silt fence" if it is to refer to all sediment control devices.* Response: Agree. These 3 paragraphs have been moved to 104-6.2.
- *Somewhere, "permission" should be indicated so that contractors may delete silt fence, or not place silt fence or other sediment control devices in areas where they will do not good and will only serve to "create waste pollution" – such as at*

the top of a hill or embankment (where there are NO downhill slopes)! This continues to be a source of "confusion" with CEIs who still "don't understand the program". Response: We agree sometimes this does occur; however, no change made at this time.

104-6.4.8.2 (Temporary Silt Fence) Materials and Installation:

…Erect temporary silt fence at upland locations across ditchlines and at temporary locations shown on the plans or approved by the Engineer where continuous construction activities change the natural contour and drainage runoff.

- *Should this say "at upland locations**,** across ditchlines" (insert comma)? But then, why at upland locations – isn't that at the top of a hill? At temporary locations shown on the plans (what if something needs to be deleted) - again, this can be used to force the contractor to perform unnecessary work.* Response: A comma will be added as you indicate. The term "upland" refers to any area that is not a "wetland." No other changes made at this time.

104-6.4.8.3 Inspection and Maintenance: …Inspect all temporary silt fences immediately after each rainfall and at least daily during prolonged rainfall. Immediately correct any deficiencies. In addition, make a daily review of the location of silt fences in areas where construction activities have changed the natural contour and drainage runoff to ensure that the silt fences are properly located for effectiveness. Where deficiencies exist, install additional silt fences as directed by the Engineer.

- *How does "immediately" match / square with FDEP permit for "7 calendar day" inspection and "within 24 hours of a ½" or more rain event"?* Response: In this case, the Department's requirements are more stringent than the permit. No changes made at this time.
- *Additional silt fence as directed by the Engineer … Compensation? And if the contractor is holding the permit and is responsible for compliance, he shouldn't wait until "as directed by the Engineer"* Response: The revision to Section 104 is still using pay items, which requires the Engineer to maintain control of the quantities. This will be addressed as the Department moves toward Lump Sum for erosion and sediment control. No changes made at this time.

104-6.4.9 Floating Turbidity Barriers and Staked Turbidity Barriers: Install, maintain, and remove turbidity barriers to contain turbidity that may occur as the result of dredging, filling, or other construction activities which may cause turbidity to occur in the waters of the State. The Contractor may need to deploy turbidity barriers around isolated areas of concern such as seagrass beds, coral communities, etc. both within as well as outside the right-of-way limits. The Engineer will identify such areas.

- *Better specifications should be indicated for proper selection of type of barrier (Type I, II III) – it is "wide open" and better, more appropriate selection of type will improve results and protection.* Response: No changes made at this time.
- *If Engineer adds work, not indicated in the plans, there should be compensation.* Response: No changes made at this time.

104-6.4.10 Inlet Protection: Furnish and install inlet protection devices as shown in the plans, design standards and the E&SC Manual

- *There are new devices that are developed on a regular basis these days. How are contractors to avail themselves of the use of new technology if we are limited to those in the E&SC Manual? Manual should not serve as a LIMIT, but as a criteria guide in performance and achievement of a desired result.* Response: We recognize that new devices are always being introduced; however, the devices in the E&SC Manual have been reviewed and accepted by the Department and FDEP and represent current Best Management Practices. No changes made at this time.

104-6.4.11 Rolled Erosion Control Products (RECPs):

104-6.4.11.1 General: Install RECPs in locations where temporary protection from erosion is needed. Two situations occur that require artificial coverings. The two situations have differing material requirements, which are described below.

- *Is RECP replacing artificial coverings?* Response: Yes. "Artificial coverings" was changed to "rolled erosion control products" to be consistent with the E&SC Manual.
- *What about plastic or fabric artificial covering – such can be used to prevent erosion on a very temporary basis … even turbidity barrier laid along a bank (on the ground) can serve to divert run-off or protect bare slopes from splash erosion.* Response: The current language allows the use of plastic or fabric coverings. No changes made at this time.

(1) Use RECPs composed of natural or synthetic fiber mats, plastic sheeting, or netting as protection against erosion, when directed by the Engineer, during temporary pauses in construction caused by inclement weather or other circumstances. Remove the material when construction resumes.

- *Only when directed by the Engineer?* Response: The revision to Section 104 is still using pay items, which requires the Engineer to maintain control of the quantities. This will be addressed as the Department moves toward Lump Sum for erosion and sediment control. No changes made at this time.

Use RECPs as erosion control blankets, at locations shown in the plans, to facilitate plant growth while permanent grassing is being established.

- Shouldn't this use be reference in the permanent turf spec? Response: No changes made at this time.

104-6.4.12 Chemical Treatment: Provide chemical treatment with polyacrylamides and alum in accordance with the E&SC Manual. Polyacrylamides and alum may be used as endpoint treatment to clarify turbid water with sediment that has not been removed with standard BMPs or as an amendment to other erosion prevention and sediment control products to aid in their performance. The contractor must provide all of the required toxicity testing information to the Engineer for review prior to using any chemical treatment on the project site.

- *Perhaps say "to clarify turbid or sediment laden water" that does not yet meet State Water Quality Standards (which is required by the NPDES / FCG Permit). Since this statement refers to "end point treatment", it is assumed that the discharge point would be very close to the project limits.* Response: Agree. The sentence has been clarified as follows, "Polyacrylamides and alum may be used to clarify turbid or sediment laden water that does not yet meet state water quality standards or as an amendment to other erosion prevention and sediment control products to aid in their performance."
- *If FDOT already knows a product has been approved and has toxicity tests (such as APS products), why would every contractor need to submit the same data over and over. Can't this burden be eased by a "pre-approval / recognition process?"* Response: We recognize the benefits of pre-approval; however, no changes made at this time.

104-7 Maintenance of Erosion and Sediment Control Features.

104-7.1 General: Provide routine maintenance of permanent and temporary erosion and sediment control features, at no expense to the Department, until the project is complete and accepted.

- *Consider deleting "maintenance specs" from other areas and putting them here – for simplification purposes (and to reduce space).* Response: We will consider this in future changes to this Section. No changes made at this time.

104-9 Method of Measurement.

When separate items for temporary erosion control features are included in the Contract, the quantities to be paid for will be: (1) the areas, in square yards, of Rolled Erosion Control Products; (2) the area, in acres, of Mowing; including litter and debris removal and disposal, equipment, labor, materials and incidentals (when not included under Sections 570 or 580);; (3) the length, in feet, of Runoff Control Structures, measured along the surface of the work constructed; (4) the number of Sediment Basins acceptably constructed; (5) the number of Sediment Basin Cleanouts acceptably accomplished; (6) the length, in feet, of Sediment Barriers; (7) the length, in feet, of Floating Turbidity Barrier; (8) the length, in feet, of Staked Turbidity Barrier; (9) the length, in feet, of Staked Silt Fence and () the (10) the number of inlet protection devices; (11) the area, in square yards, of powdered applications of polyacrylamides; (12) the number of floc logs or alum drums used for treatment systems. .

The quantity of floating turbidity barrier, relocated turbidity barrier, sediment barriers, staked turbidity barrier, inlet protection devices, and staked silt fence to be paid for will be the total length, in feet, furnished, installed, and accepted at a new location, regardless of whether materials are new or used or relocated from a previous installation on the project.

- *(1) Correct to be "the area, in square yards"* Response: Agree. Change made.
- *(4) This device is now called a "Sediment Containment System" per revised spec* Response: Agree. Change made.

- *(5) These should be tied together (Containment System + Containment System cleanouts) – so that if one is specified, the other is automatically specified since FDOT has indicated paying for each item* Response: Agree. Change made.
- *(9) Remove () before (10)* Response. Agree. Change made.
- *(10) Inlet protection devices can vary greatly based on size of inlet to be protected. Shouldn't this be provided for in LF?* Response: There are multiple inlet protection devices and all of them cannot be measured in linear feet. No changes made.
- *(11) / (12) Since polymer can be applied in liquid or powdered form, this should say SY of area treated with …. And since polymers can also be used to enhance other devices, should other allowances be made to pay for those additions? A split pipe treatment system can be developed using pipe, rock bags, powdered polymer, floc logs, and jute fabric. Should something be added for "other devices" as determined …. (unless required due to contractor's means and methods). Baker tanks are also used with alum treatment …* Response: (11) no changes made. (12) The Department will keep this pay item as it is for now. Most of the water treatment systems found in the Manual that would typically be used by a designer can be constructed using other pay items in addition to chemical treatment item. The Department will continue to refine this measurement.

104-10 Basis of Payment. …In case of repeated failure on the part of the Contractor to control erosion, pollution, or siltation,
the Engineer reserves the right to employ outside assistance or to use the Department's own forces to provide the necessary corrective measures. Any such costs incurred, including engineering costs, will be charged to the Contractor and appropriate deductions made from the monthly progress estimate.

- *Since the contractor holds the permit and is responsible for compliance with same, FDOT should not employ this measure unless necessary to protect FDOT's MS4 obligations under their permit with FDEP, or to prevent damage to public or private lands where FDOT may be held liable.* Response: The contractor holds the NPDES permit. The Department is the property owner and permit holder for additional permits that address water quality and is still required to insure compliance with State Water Quality Standards.

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Comment:

The changes made to temporary hay bales will remove the product(s) from the QPL. Was this the intent? If this was the intent, what is the plan for the existing QPL product limitations? Response: The intent is to remove the product from the QPL. There will not be any QPL items in Section 104. The limitation would be based on the implementation date. At this time, the implementation date is anticipated to be 1/10.
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Comment:
I noticed in the Method of Measurement Section 104-9, Sediment Basins should be changed to Sediment Containment systems in (4) and (5). Response: Agree. This change has been made.
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Comment:

Pay Items cannot be modified, as shown in draft; we are unable to change the description of an item without affecting the historical descriptions. New items can be created to accomplish the proposed changes. Implementation of these changes needs to be coordinated with the pay items, design standards modifications, and specs. Response: Agree. On 6/11/09 we discussed this and made a few clarifications to the pay items and pay item structure. The following changes were made:
104-1 was expanded to include Rolled Erosion Control Products
104-6 was expanded to include Runoff Control Structures
104-7 was expanded to include Containment Systems
104-9 was expanded to include Containment System Cleanouts

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Duane Brautigam

Comment:

The reference to the E&C Manual should not be with an external link. For implementation and version control purposes, and to ensure that a contractual URL address is not deleted or changed, the document should be loaded on the DOT Specs website. As with references to other manuals, this will also ensure that subsequent

revisions to the manual have an implementation plan. Response: Agree. The manual will be posted on the Specifications website. Rudy will handle.
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Comment:

I would like to suggest changing the Type 2 RECP specification that notes 6.5 ft/s maximum velocities to read "maximum shear stress of 1.75 lbs/ft2". This would be keeping in line with ECTC and FHWA guidelines for short-term RECPs Type 2.D. The industry has adopted the use of shear stress over velocities as a better indicator of product performance. You can visit the ECTC website to read their specification and to see which products, from a variety of manufacturers meet this specification. At the least, I would choose one ECTC/FHWA category for the Florida specification performance indicator. Also with the new QDOR program being initiated by ECTC, you will have even more assurance of quality and performance by adhering to the industry standards. Response: The Department will keep this comment for review and possible inclusion in Section 104. At this time, this change is outside the scope of the proposed revisions. No changes made.

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Paul Gentry
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Comment:

Section 104-6.4.7 is removing the QPL requirements for Synthetic Bales, of which had the requirement that the synthetic fibers (polypropylene, nylon, polyester) had to meet EPA TCLP standards. Is there provision through the Design standards or the E & SC manual that these "filtering " materials will still have some type of standard to meet? A word search of the E & SC manual shows no mention of RCRA or TCLP in the document. Response: No. There is no manufacturing standard listed in the E&SC Manual or Design Standards, but the manual lists materials and methods, not specific products.
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Comment:

This section could probably be worded so as to include a reference to other approved chemical treatments to accommodate new products not in use at the time this was written. Right now it only includes polyacrylimaides and alum. Response: References to polyacrylimaides and alum have been removed from article 104-6.4.10 and 104-9 paragraph (11).

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American Excelsior Company

Comment:

I would like to suggest the following recommendation:

- Performance of barriers 70% on slopes, and 50% channels.
- Minimum flow rate for velocity reduction in channel flow.
- Functional longevity.
- Reference the ASTM test methods for large-scale testing.
- Silt fence should not be installed in channel flow.

104-6.4.7 Sediment Barriers:
Install according to details shown in the plans, as directed by the Engineer, or as shown in the E&SC manual to protect against downstream accumulation of sediment. Sediment Barriers shall provide temporary channel and slope interruption by slowing the water velocity to reduce shear stress and soil erosion while enhancing revegetation. Sediment Barrier performance requirements for slope erosion is to reduce by a minimum of 70% of bare soil slopes, and a minimum of 50% of bare soil channels. Sediment barriers should have a minimum flow rate of 37.5 GPM/ft2 (ASTM D5141) for slowing water velocity in channels. Functional Longevity shall be 12-24 months. Performance capabilities must be determined by large-scale testing ASTM D7208, “Standard Test Method for Determination of Temporary Ditch Check Performance in Protecting Earthen Channels from Stormwater-Induced Erosion” for ditch check performance in channels. Silt fence should not be installed in channel flow. Sediment Barriers include, but are not limited to synthetic bales, silt fence, fiber logs and geosynthetic barriers. Reusable barriers that have had a sediment deposit removed may be reinstalled on the project as approved by the Engineer.

Response: The performance requirements you state will be considered for possible incorporation into the E&SC Manual and future revisions to Section 104. No changes made to the section.

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Comments:

1.104-6.2 2nd Paragraph - Remove line after link. Response: Agreed. Change made.

2.104-6.2 2nd Paragraph - Regarding the link to the E&SC Manual - I didn't think we would allow links in our Specs that are beyond our control. What if the link changes? Also what if changes are made to the manual during or after the Bid or after Construction begins. The Contractor could use this in a Bid or SA dispute. This one is dated June 2007, is everything in it current? Response: Agreed. The manual will be maintained on the Specifications Office website like the Materials Manual.

3.104-6.4.1 - Do some "Design Details" apply and not others. What if it's covered elsewhere in the Contract such as in our Design Standards or Specs? Response: There are not design details for every option in the Design Standards or E&SC Manual. The reference to Design Standards will be added back into the sentence.

4. 104-6.4.5 last sentence - Change "sediment basins" to "sediment containment systems". Response: Agreed. Change made.

5.104-6.4.8 - Should the section on Temporary Silt Fences be included in the previous section Sediment Barriers? Response: Agreed. Silt Fence has been added as a subsection to Sediment Barriers. Silt fences and turbidity barriers have been added to the list in 104-6.4.1.

6. 104-6.4.8.2 - Suggest changing "sediment control devices" to "sediment barriers" and moving paragraph to that section (104-6.4.7). Response: This has been addressed based on a prior comment. The 2nd, 3rd, and 4th paragraphs of 104-6.4.6 have been moved to 104-6.2 because they apply to all methods.

7. 104-6.4.8.3 - Similar wording is contained in 104-7.1. Response: Agree that the wording is similar; however, the wording in 104-6.4.6.3 is specific to silt fences and the wording in 104-7 is general and applicable to all devices. No changes made.

8. 104-6.4.10 - Capitalize "Design Standards". Response: Agree. Change made.

9. 104-6.4.12 - BMP - Suggest defining all acronyms - I didn't see this one anywhere. Response: That particular text has been deleted so no change made.

10. 104-7.1 - 1st Sentence. Doesn't this contradict the establishment period for Performance Turf in 570? Response: No. The two are independent- temporary erosion control features versus permanent turf (performance turf). Refer to the last sentence of 104-6.4.2 Temporary Turf. No changes made.

11. 104-7.1 - 2nd paragraph. Similar wording is found in 104-6.4.8.3 Response: See #7 above.

12. 104-7.1 2nd paragraph - What about the ES&C Manual? Should it be referenced here? Response: No. The manual does not address maintenance. No changes made.

13. 104-7.2 As similar wording is not included in 570 & 580 can the Engineer direct mowing when pay item 104-4(mowing) is not in the contract? Response: This article and issue is being reviewed and changes are anticipated for 7/10 implementation. No changes made at this time.

14. 104-7.2 If there isn't a need to mow for 4 or 5 months there's not a requirement to pick up litter and debris "prior to mowing". Response: See #13 above.

15. 104-9 1st paragraph - Change "Sediment Basins" to "Sediment Containment Systems" - 2 places. Response: Agree. Change made.

16. 104-9 2nd paragraph. Remove "relocated turbidity barrier" this information is covered in the same sentence. Response: Agree. Change made.

17. 104-9 2nd paragraph. Similar wording is used in 104-4 2nd paragraph. Response: Agree the wording is similar, but no changes are needed.

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At the very end 104-16 should have a strikethrough on the word each. In addition, all pay items that are struck through should also be struck. Response: Agree. Changes made.

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Comments:
Two suggestions.
1. Section 104-6.2 Remove “approved” from second sentence. Response: Agree. Change made.
2. May want to specifically prohibit the use of natural hay bales in the specification. I realize it is prohibited in the manual, but I am not sure how many would be aware of this fact. Response: Agree, but this is addressed in the manual so there is no need to repeat. No changes made.

In Section 104-9. I am unclear as to where the gutter buddies are going to fit in…..this section seems a little unclear…….”rolled erosion control products” are square yards; length in feet for synthetic bales and sediment barriers; number of “inlet protection devices”. Response: Those products are considered inlet protection devices. No changes made.

The last paragraph is confusing….according to it all those items are paid for in feet, but above that “inlet protection devices” are paid for by each. Also, currently we pay for the gutter buddy once and they re-use it….according to this, we will pay for it each time it gets moved. If this is the case, then the cost should be less. I’m just not sure this is the best approach. Response: There are a wide variety of inlet protection devices that cannot be measured in square yards or linear feet so the measurement is per each inlet. Payment for the reuse of inlet protection devices will be addressed in the competitive bidding process. No changes made.

Is this the appropriate section for hydro seed if it is used for erosion control? Response: Yes. Section 104 is the appropriate section and Article 104-6.4.2 addresses the establishment of temporary turf used for erosion control. No changes made.

I do not believe we should be paying to correct an area disturbed by the contractor, especially if it is off our right-of way. That should be the contractor’s responsibility to restore all areas back to original condition at no cost to the Department. Response: This conflicts with NPDES permit requirements. No changes made.

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Chris Sweitzer
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Comments:
104-6.2 The file shown on the link is also posted on the FDOT Drainage website. Suggest using the link to this site, http://www.dot.state.fl.us/rddesign/dr/files/Erosion-and-Sediment-Control-Manual-June-2007.pdf as we have more control over the document. Response: The manual will be posted on the Specifications Office website and listed by implementation date similar to the Materials Manuals.

104-6.4.7, in line 3, why strike the reference to the Design Standards? They still contain information pertinent to this section of the specs. Response: The Design Standard has been replaced by the E&SC Manual and will be removed. Last sentence, suggest adding "are in good repair" between "Reusable barriers that..." and "...have had sediment..." to give at least a basic standard for reusability and a basis for the Engineer to reject worn devices. Response: The Engineer must use judgment. No changes made.

104-6.4.8.3, The inspection requirements listed here exceed those listed in 107-7.1 and I-7 of the E&SC Manual. Suggest harmonizing these requirements and not restating them in multiple locations. Response: Agree that the wording is similar; however, the wording in 104-6.4.6.3 is specific to silt fences and the wording in 104-7 is general and applicable to all devices. No changes made. In reference to the last sentence in this section, is this a good idea? This material is uncompacted, contains an unknown amount of fines, organics and trash and by definition would seem to be very vulnerable to erosion. Response: The material is to be prepared and seeded in accordance with Section 570. No changes made.

104-6.4.12 Last sentence: Suggest adding "in accordance with the E&SC Manual" between "...required toxicity testing information..." and "...to the Engineer for review..." as this Specification does not have any requirements for toxicity testing. Response: Agree. Change made. Also, rather than just submitting it for review, suggest that the standard be increased to "review and approval prior to using" to avoid use of materials/concentrations that the Department does not approve of. Response: Agree. "Review and acceptance" will be added.

Payment section: The descriptions for 104-5 and 104-16 are shown as being removed but the pay item numbers are not. Suggest showing them with strikethroughs as well. Response: Agree. Changes made.

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Roger Singleton, President
Silt-Saver, Inc

Comments:
Permanent Erosion and Sediment Control features in a plan like retention ponds and sediment ponds should be listed so that they are not assumed to replace temporary sediment control devices used early on in a project. Products like silt fence for perimeter sediment control or frame and filter for inlet protection. Response: This is not addressed in the specification. No changes made

Products accepted for use as sediment control should be categorized for the performance needed for a specific use and comparisons to other products should be made based on results in solving a particular problem. For instance: The performance requirements of inlet protection (concentrated flow) requires structure, flow, efficiency, height and reliable performance. Equal performance cannot be expected when comparing silt fence

and the Silt-Saver Frame & Filter Assembly. Silt fence is designed for control of sheet flow. Inlets are designed to receive concentrated flow. Using a product(silt fence) outside its design criteria only promotes failure. The Frame & Filter are designed for concentrated flow. Please excuse me if I have misunderstood the use of silt fence for inlet protection. The Erosion and Sediment Control Designer and Reviewer Manual of 2007 shows silt fence around inlets. Not one training manual supports the use of silt fence in concentrated flow. I believe that this is an incorrect use of silt fence. Response: This is not addressed in the specification. No changes made.

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Comments:
I would like to add a new section – 104-6.2 Maintain Drainage: When existing drainage systems are interrupted during each phase of construction provide for temporary drainage using impervious materials such as lined swales, temporary curbing on asphalt or concrete, temporary piping and inlets, slope drains. The intent is to keep concentrated flow of water on impervious surfaces until discharged without creating scour. I think that if this is done routinely on projects, erosion problems are reduced 90% and the need for temporary erosion control measures are also reduced to just where there is sheet flow of stormwater on exposed soils. Response: This is outside of these proposed changes. No changes made at this time. If you wish to propose this change for future implementation, contact the State Specifications Office 850-414-4280.

Under 104-6.4.12 Chemical Treatment – I would like to see more explanation of toxicity testing. Who requires the toxicity testing; what tests are required.? I have always heard that alum needs to be buffered to prevent fish kills because it can cause abrupt changes in pH. Response: "In accordance with the E&SC Manual" and "acceptance" have been added to 104-6.4.12 to read, "The contractor must provide all of the required toxicity testing information in accordance with the E&SC Manual to the Engineer for review and acceptance prior to using any chemical treatment on the project site."

While reviewing 104-6, 104-3 paragraphs 1, 3, 4, 5 have statements that could be improved. 1 - "Do not dump any residue from dust", substitute the following - Materials or debris, solid or liquid, shall not be discharged into surface waters or wetlands, except as allowed by permit. Any non-permitted materials discharged into surface waters or wetlands shall be retrieved immediately or as required by applicable federal and state laws. 2 - "Do not frequently ford live streams" - leave out "frequently" unless this is permitted. 3 - "Except as necessary for construction" - leave out this phrase. 4 - "Where pumps are used to remove highly turbid waters" - treat water to meet state water quality standards prior to discharge. Response: This is outside of these proposed changes. No changes made at this time. If you wish to propose this change for future implementation, contact the State Specifications Office 850-414-4280.

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