SECTION 810

EROSION CONTROL AND POLLUTION PREVENTION

810-1 DESCRIPTION

The work under this item shall include furnishing, installing, maintaining, removing and disposing of temporary sediment and erosion control measures such as silt fences, check dams, sediment basins, netting, sediment logs/wattles, ~~straw barriers~~, and other sediment and erosion control devices or methods as shown in the Storm Water Pollution Prevention Plan and in the Special Provisions.

~~The work shall also include furnishing, installing, and maintaining permanent erosion control measures such as pipe inlet and outlet protection, cut and fill slope transitions, headwall and wingwall treatments, and other permanent erosion control devices or methods as shown in the SWPPP~~. Permanent sediment and erosion control measures will be constructed under the specific items found in the project plans and listed in the Special Provisions and bid schedule.

810-1.01 General. On projects where an Arizona Pollutant Discharge Elimination System or equivalent National Pollutant Discharge Elimination System (AZPDES/NPDES) permit is required, the contractor shall implement the requirements of the permit for sediment and erosion control due to stormwater runoff during construction, as specified under the AZPDES/NPDES Construction General Permit AZG2008-001. The Agency and the contractor shall prepare and submit separate Notices of Intent (NOI) and Notices of Termination (NOT) forms for the project. The contractor shall provide a copy of their AZPDES NOI Application and NOI Certification to the appropriate Municipal Separate Storm Sewer System (MS4). The contractor shall copy their AZPDES NOT Acknowledgement to the appropriate MS4 upon project stabilization. Copies of all NOI and NOT documentations shall be placed into the SWPPP.

The Special Provisions SPECIAL PROVISIONS PROJECT PLANS? contain a Stormwater Pollution Prevention Plan (SWPPP), which includes a narrative description of the proposed measures to be implemented, sequence of construction activities, and site-specific diagram indicating the proposed locations where sediment and erosion control devices or measures may be required during construction. A list of subcontractor and key field personnel contact numbers shall be placed into the SWPPP. Prior to the start of construction, each contractor and all subcontractors shall be requested to sign a certification that they understand all requirements of the AZPDES/NPDES permit. Signed certifications shall be placed into the SWPPP.

810-1.02 Erosion Control. Erosion controls, both temporary and permanent, shall be installed in accordance with phasing provisions in the approved SWPPP and coordinated with the related construction. Sediment and erosion controls must be provided within 14 days of completion of land disturbance. This applies to each location within a project area.

Perimeter control for all down-slope and certain side-slope boundaries is required before work commences, unless the project includes the construction of sediment basins.

Stockpiles must have sediment control, except when actively worked. Sediment controls are required during weekends and evenings. Stockpiles cannot be located in water courses, areas of surface sheet flow, curb and gutter, or streets leading to these runoff conveyances.

All work specified in this subsection will be temporary for use during construction unless designated otherwise.

SECTION 810

The contractor shall be responsible for maintaining all sediment, erosion and pollution control devices in proper functioning condition at all times.

When deficiencies in the sediment and erosion control devices or other elements of work listed herein are noted by inspection or other observation, specified corrections shall be made by the contractor by the end of the day or work shift, or as directed by the Engineer.

Work specified herein which is lost, destroyed, or deemed unacceptable by the Engineer as a result of the contractor's operations shall be replaced by the contractor at no additional cost to the Agency. Work specified herein which is lost or destroyed as a result of natural events, such as excessive rainfall, shall be replaced by the contractor and be paid for in accordance with the requirements of Subsection 109-3.

In cases of serious or willful disregard for the protection of the waters of the U.S. and/or natural surroundings by the contractor, the Engineer will immediately notify the contractor of such non-compliance. If the contractor fails to remedy the situation within 24 hours after receipt of such notice, the Engineer may immediately place the sediment or erosion and/or other pollution control features in proper condition and deduct the cost thereof from moneys due the contract.

810-1.03 Other Pollutant Controls. The work shall include implementing controls to eliminate the discharge of pollutants, such as fuels, lubricants, bitumens, dust palliatives, raw sewage, wash water, silt laden water, and other harmful materials into storm and other off-site waters. The work shall include the implementation of spill prevention and material management controls and practices to prevent the release of washoff of pollutants. These controls and practices shall be specified in the SWPPP and shall include delivery and storage procedures for chemicals and construction materials, material use, stockpile management, liquid and solid waste management, hazardous waste management, disposal and cleanup procedures, the contractor's plans for handling of potential pollutants, and other pollution prevention measures as required.

Handling procedures for potential pollutants shall also be included in the contractor's "good housekeeping" practices as specified in Subsection 107-15 and in the Special Provisions.

At the preconstruction conference, the contractor shall specify "good housekeeping" practices and requirements, on-site and off-site tracking control, protection of equipment storage and maintenance areas, sweeping schedule of highways and roadways related to hauling activities, a construction sequence of major activities, Spill Prevention and Response Plan, and a listing of potential pollutants for inclusion in the SWPPP.

Should concrete washout activities be anticipated or occur on sites having an AZPDES Construction General Permit (i.e., 402 Permit), Arizona Department of Environmental Quality (ADEQ) Aquifer Protection Type 1.12 General Aquifer Protection Permit (APP) shall be followed. If there is no 402 permit and concrete washout activities are anticipated or occur, a separate APP permit shall be obtained by the contractor. **OBTAINED WHEN?????**

Vehicle/equipment washing is not an allowable discharge covered under the SWPPP. The contractor shall apply for and obtain a type 3.03 General APP if vehicle washing will be conducted on-site. The contractor shall provide the Engineer with a copy of the Type 3.03 General APP Permit for vehicle/equipment wash down areas as well as placing a copy of this permit into the SWPPP.

The contractor shall identify all locations of the following activities on the SWPPP Site Map:

- Vehicle/equipment wash down area(s);
- concrete wash out area(s);
- staging yard/area;

- chemical storage area;
- equipment maintenance and repair area(s);
- stockpile area(s); and
- equipment and construction material storage area(s).

810-1.04 Off Site Staging/Storage Yard. Should the contractor enter into an agreement for the use of private property for storage and/or staging area(s), the contractor shall assume all responsibility, whatsoever, for compliance with AZPDES/NPDES regulations pertaining to such property. The contractor shall insure that their activity on private property, in no way, negatively affects the AZPDES permit held by the Agency.

The Agency shall state in its SWPPP that areas of private property being used, with permission, by the contractor, are under the sole control of the contractor.

810-2 MATERIALS

810-2.01 Silt Fence. Material requirements for silt fences, including posts, wire support fencing, and fasteners, shall conform to the requirements of Section 915. Geotextile fabric shall conform to the requirements of Subsections 1014-1 and 1014-8, except that the filter cloth shall be woven polypropylene, and the fabric Apparent Opening Size shall be between numbers 20 and 50 U.S. Standard sieve sizes, when tested in accordance with ASTM D 4751.

~~**810-2.02 Straw Bales.** Straw shall be in three-tie bales approximately 40 inches long by 24 inches wide by 14 inches high. Straw shall be well-compacted with a low seed content. Ties shall be nylon string.~~

~~Stakes shall be wooden stakes, two-by-two inches by four feet.~~

810-2.02 Riprap and Rock Mulch. Riprap for culvert inlet and outlet protection and cut and fill transitions designated on the project plans shall conform to the requirements of Section 913 and shall be in accordance with the following gradation table, unless otherwise specified. Riprap shall conform to gradation A or B as designated on the project plans.

Sieve Size		Percent Passing
Gradation A	**Gradation B**	
6 inch	12 inch	90-100
4. 5 inch	9 inch	70-85
3 inch	6 inch	30-50
2 inch	4 inch	5-15
1 inch	2 inch	0-5

Rock mulch for ~~pipe inlet and outlet protection~~, headwall and wingwall treatments and rock check dams shall be angular in shape and shall conform to the requirements of Section 803 and shall be in accordance with gradation C below, unless otherwise specified in the Special Provisions. Section 803 requirements for use of pre-emergent herbicide and for post-placement watering of rock mulch shall not apply to rock mulch applied under this Section.

Gradation C	
Sieve Size	**Percent Passing**
3 inch	100
2 inch	50-75
1 inch	10-20

810-2.03 Sand Bags and Gravel Bags. Sand and gravel bags, when filled shall measure approximately ~~24~~ 18 inches long by ~~16~~ 12 inches wide by ~~4~~ 3 inches thick, and weigh approximately 33 pounds. Bags shall be manufactured from polypropylene, polyethylene, or polyamide woven fabric with the following characteristics:

Unit Weight, Minimum, oz. Per sq. yd.	4
Mullen Burst Strength, Exceeding, psi.	300
Ultraviolet Stability, Exceeding, %	70

Material used to fill sand bags shall be clean sand or a clean sandy soil free of silt, as approved by the Engineer.

Gravel fill shall be between 0.4 and 0.8 inches in diameter, and shall be clean and free from clay balls, organic matter and other deleterious materials.

810-2.04 Sediment Logs and Sediment Wattles.

(A) General.

Sediment logs and sediment wattles shall be manufactured or constructed rolls of fiber matrix, secured with netting, and used for the purpose of controlling erosion by slowing high flow water velocity and trapping silt sediments.

Netting for sediment wattles shall have a minimum durability of one year after installation, and shall be tightly secured at each end of the individual rolls.

The unit weight for sediment wattles shall be 0.144 pounds per inch of diameter per linear foot. Sediment log unit weight shall be 0.167 pounds per inch of diameter per linear foot. The minimum weight per linear foot for sediment logs and wattles shall be determined by multiplying the specified diameter of the element by the appropriate unit weight, in pounds per inch of diameter per linear foot, as specified above.

Netting at each end of sediment logs and wattles shall be secured with metal clips or knotted ends to assure fiber containment.

(B) Sediment Logs. Sediment logs shall be composed of weed-free, 100 percent virgin aspen wood excelsior or rice straw in a tube of non-biodegradable polyester or high-density polyethylene netting. Netting at each end of the log shall be secured with metal clips or knotted ends to assure fiber containment. The nominal diameter of the logs shall be from 9 to 20 inches as specified on the project plans. The length of the rolls shall be from 7 to 25 feet as specified on the project plans.

(C) Sediment Wattles. Sediment wattles shall be manufactured rolls composed of weed-free, 100-percent virgin aspen wood excelsior or rice straw, encased in a tube of long-term photodegradable plastic or biodegradable natural fiber netting with a maximum one-inch by one-inch grid. Netting at each end of the log shall be secured with metal clips or knotted ends to assure fiber containment. Sediment wattles shall have nominal diameters of 9, 12, or 18 inches, with lengths from 7 to 25 feet, as specified on the project plans. Fibers shall be evenly distributed throughout the wattle.

810-2.05 Curb Inlet Guard. Storm drain curb inlet guards shall be manufactured systems composed of high density polyethylene (HDPE) support brackets, an HDPE outer jacket and an integrated particle filter. Segments shall be adjusted and overlapped to fit the drain opening.

810-3 CONSTRUCTION REQUIREMENTS

The contractor shall implement the SWPPP throughout the project, as specified in Subsection 107-15 and in the Special Provisions.

Prior to the start of construction, the Engineer and contractor will jointly review the SWPPP, make any revisions needed, and approve and sign the SWPPP. The contractor shall use the signed SWPPP provided at the pre-construction meeting, and implement the SWPPP as required throughout the construction and establishment periods. The Engineer and contractor will perform a minimum of one routine inspection of disturbed areas that have not been stabilized at least once every 14 calendar days and within 24 hours of the end of a rainfall of 0.5 inch or greater. Reduced inspection frequency can occur when the site has been temporarily stabilized. The reduced inspection frequency is once every 28 days and before predicted rainfall events and after rainfall events of 0.5 inch or greater.

After each inspection, the contractor shall document the findings and revise the SWPPP as necessary. The Engineer and contractor shall jointly approve and sign each revision to the SWPPP prior to implementation.

Should ADEQ determine the SWPPP to be deficient, the contractor shall complete all required revisions to the SWPPP within 15 calendar days following notification by ADEQ.

The contractor shall amend the SWPPP, as necessary and record all inspection results in the SWPPP within 15 business days after an inspection by local, state or federal officials. Changes to the SWPPP resulting from such an inspection must be implemented in the field within 7 calendar days, or before the next rainfall event.

Maintenance of erosion and sediment control devices will comply with the schedule outlined in Part IV, I of the CGP #AZG2008-001. **NEED DEFINITION FOR "CGP"** The contractor shall maintain all related sediment and erosion control features in an adequate and functioning condition.

Neither local grading ordinances nor provisions in the SWPPP shall release the contractor from any responsibility or requirement under other environmental statutes or regulations.

Erosion control and pollution prevention work specified in the contract which is to be accomplished under other contract items will be paid for as specified under those items.

Final stabilization is met when all soil disturbing activities have been completed, temporary Best Management Practices (BMP's) have been removed and disposed of, and either a uniform perennial vegetative cover with a density of 70% of the native background has been established on all unpaved areas, or equivalent permanent stabilization measures are in place.

Until final stabilization, the contractor shall have sole responsibility for the care and protection from damage of all areas within the project limits and shall take all reasonable precautions against injury or damage to any area of the project by the action of the elements, or from non-execution of the work under the SWPPP. The contractor shall rebuild, repair and/or restore any and all damage to any portion of the work occasioned by any of the above causes before final stabilization. No reimbursement shall be made for work necessary due to the contractor's failure to comply with the requirements of the SWPPP.

The original completed SWPPP shall be returned to the Agency upon completion of the work.

Except as specifically provided under Subsection 108-4, in the case of suspension of work from any cause whatsoever the contractor shall be responsible for the project and shall take such precautions as may be necessary to prevent damage to the project, provide for normal drainage and shall erect any necessary temporary structures, signs, or other facilities. During such period of suspension of work, the contractor shall properly and continuously maintain, in an acceptable growing condition, all newly established plantings, seedlings and soddings, furnished under its contract and shall take adequate precautions to protect new tree growth and other important vegetative growth against injury.

Sediment and erosion control features shall be temporary or permanent, as designated on the project plans. All temporary sediment and erosion control features specified for removal at the end of the project shall become the property of the contractor, and shall be removed and disposed of by the contractor upon final stabilization, unless directed by the Engineer to remain in place. During removal, all sediment shall be disposed of, and the area restored to a finished condition as shown on the project plans, or as directed by the Engineer.

810-3.01 Silt Fences. Installation and maintenance requirements for silt fences shall be accordance with Section 915, unless otherwise specified in the Special Provisions.

~~**810-3.02 Straw Bales.**~~

~~**(A) General.** Straw bales shall be installed in conformance with the project plans and details or as directed by the Engineer. The bottom of all bales shall be embedded 4 to 6 inches into the ground. In locations where rows of bales are installed, joints between bales in adjacent rows shall be staggered.~~

~~Straw bales shall be staked as shown on the project plans and details. Stakes shall be driven flush with the top of the bale, skewed in directions opposite to the skew of adjacent stakes, and perpendicular to the direction of flow. In areas where straw bales may be allowed to remain in place, wood stakes must be used. In other areas, No. 4 (No. 13) steel bars may be used. A minimum of two stakes shall be used for each bale.~~

~~Straw bales shall be installed tightly together to form a cohesive unit without gaps or voids. Joints between bales shall be hand packed with straw to maintain a uniform density throughout the unit and to eliminate voids.~~

~~The contractor shall maintain all straw bales in a functional condition. Accumulated sediment shall be removed and disposed of by the contractor when approximately 75 percent of the original capacity has been filled with silt, or as directed by the Engineer.~~

~~Straw bale features shall remain in service until disturbed areas have been stabilized, as directed by the Engineer.~~

~~When the use of a straw bale feature is discontinued, all materials shall be removed and become the property of the contractor. During removal, all sediment shall be disposed of, and the area restored to a finished condition as shown on the project plans, or as directed by the Engineer.~~

~~**(B) Straw Bale Check Dams.** Check dam bales shall extend from the flow line into the cut or fill slopes. Rows of one or more bales on each side of the flow line shall overlap laterally at the flow line.~~

~~**(C) Straw Bale Barriers.** Unless otherwise shown on the project plans, there shall be a minimum distance of 6 inches between straw bale barriers and the toe of cut and fill slopes.~~

810-3.0~~3~~2 Riprap and Rock Mulch. Riprap used in culvert inlet and outlet protection and cut and fill transitions; and rock mulch treatments for ~~pipe inlets and outlets~~, headwalls, wingwalls, and rock check dams; shall be installed in conformance with the project plans and details or as directed by the Engineer.

Rock shall be installed so as to conform to and completely cover the treatment area shown on the project plans with a uniform, cohesive rock mat. The rock shall not impede flow into the treatment area and shall be feathered at the outflow.

Accumulated debris shall be removed and disposed of by the contractor after each rain storm, or as directed by the Engineer.

Pipe treatments, headwall and wingwall treatments, and cut and fill transitions are permanent project features, which shall remain in continuous service after installation and project completion.

Rock check dams shall remain in service until the seeding work commences or until they are no longer needed, as approved by the Engineer. When use of a rock check dam is discontinued, the materials shall be removed and wasted on site in a manner that will not impede design drainage flows, as approved by the Engineer.

810-3.0~~4~~3 Sand Bags and Gravel Bags. The work shall include furnishing bags and sand or gravel, filling and preparing the bags, and installing filled bags where shown on the project plans or as directed by the Engineer.

Gravel bags shall be used for drain inlets surrounded by asphalt, concrete or stabilized surfaces.

Bags in the vicinity of curb opening inlets and catch basins shall be installed to 2 inches below the height of the adjacent curb to allow flow of stormwater into the drainage structure. Flow generated by a 10-year or lesser storm frequency shall not overtop the curb. When sediment depth behind the bags reaches ~~3 inches~~ one-third the height of the bag, the sediment shall be removed and disposed of in accordance with local, state, and federal laws and permit requirements.

Sand or gravel bag installations shall remain in service until disturbed areas have been stabilized, as directed by the Engineer.

When the use of a sand or gravel bag installation is discontinued, all materials shall be removed and become the property of the contractor. During removal, all sediment shall be removed and disposed of, and the area restored to a finished condition as shown on the project plans, or as directed by the Engineer.

810-3.04 Sediment Logs. Sediment logs shall be installed in channel bottoms, around catch basins, as check dams, or on slopes, in accordance with the project plans and details, or as directed by the Engineer. Installations shall be in accordance with the manufacturer's instructions. Sediment logs shall be secured with one-inch by one-inch by 46-inch hardwood stakes. Stakes shall be installed at a maximum spacing of two feet on center, or as shown on the SWPPP. Each stake shall be intertwined with the netting on the downstream side of the log and driven approximately two feet below finished grade. Unless otherwise specified, soil shall be tamped against the upstream side of the roll to assure that storm water is forced to flow through the log rather than under it. There shall be no gaps between the log and soil.

When allowed by the SWPPP, sediment logs installed in drainage channel bottoms shall be perpendicular to the flow of water, and shall continue up the channel side slope a minimum of two feet above the high water flow line indicated on the project plans or as established by the Engineer. Spacing of the logs shall be as specified in the project plans.

If the width of the ditch or channel is greater than the length of one log, the ends of adjacent logs shall be overlapped a minimum of 24 inches.

When sediment logs are used to construct check dams, the sediment logs placed on the ground shall be buried four to six inches deep or as shown on the project plans.

Logs placed on slopes shall be installed in a two-inch deep by five-inch wide anchor trench.

The ends of adjacent logs shall be abutted tightly together so that water cannot undermine the logs.

810-3.05 Sediment Wattles. Sediment wattles shall be installed on slopes as shown on the project plans, in accordance with the manufacturer's instructions, or as directed by the Engineer.

Wattles shall be installed in trenches having a depth one-third the transverse dimension of the wattle. Excavated material shall be placed along the down-gradient side of the trench. The wattle shall be in continuous contact with the bottom and sides of the trench. Sediment wattles shall be secured with wooden stakes spaced a maximum of 5 feet on center and 1 foot from the ends of the wattle. Stakes shall extend a minimum depth of 12 inches into the soil and a maximum height of 3 inches above the wattle surface. The ends of adjacent wattles shall be abutted tightly together.

810-3.06 Curb Inlet Guard. Curb inlet guards shall be used at curb inlets or as shown on the project plans. Installation shall be in accordance with manufacturer's instructions, or as directed by the Engineer. The guard shall be anchored using gravel bags conforming to the requirements of Subsection 810-2.03.

Sediment adjacent to the inlet guard, that reaches one-third the height of the guard, shall be removed and disposed of in accordance with local, state, and federal laws and permit requirements.

810-4 METHOD OF MEASUREMENT

~~Silt Fence will be measured in conformance with Subsection 915-5.~~

~~Straw Bale check dams and barriers will be measured per each bale.~~

~~Pipe Inlet/Outlet Treatment, Headwall and Wingwall Treatment, and Rock Check Dams will be measured per cubic yard of rock mulch. Cut and Fill transitions will be measured per cubic yard of riprap.~~

~~Sand bags will be measured per each filled sand bag placed into service.~~

Work required by the SWPPP that is included with the bid document or project plans, and as may be approved prior to construction, (HOW IS A CONTRACTOR TO BID THIS?) and "good-housekeeping" practices and requirements will be measured on a lump sum basis under AZPDES/NPDES (Original).

No measurement or direct payment will be made to the contractor for time spent reviewing or

revising the SWPPP or providing other required documentation, the cost being considered as included in the price for the pay item AZPDES/NPDES (Original).

Permanent sediment and erosion control will be measured and paid under the specific items found in the project plans and included in the Special Provisions and bid schedule.

810-5 BASIS OF PAYMENT

~~Silt Fence will be paid for in conformance with Subsection 915-6, except that no separate measurement and payment will be made for removal of sediment the cost being considered a part of contract items.~~

~~The accepted quantities of straw bale check dams and barriers, measured as provided above, will be paid for at the contract unit price per each bale, which price shall be full compensation for the work, complete in place, including all excavation; preparation; and furnishing, installing, maintaining, final removal, and disposal of temporary straw bale check dams and barriers, including returning the area to a natural condition, as approved by the Engineer.~~

~~The accepted quantity of rock check dams, measured as provided above, will be paid for at he contract unit price per cubic yard of rock mulch, which price shall be full compensation for the work, complete in place, including all excavation; preparation; and furnishing, installing, maintaining, final removal, and disposal or dispersion, including returning the area to a natural condition, as approved by the Engineer.~~

~~The accepted quantity of Pipe Inlet/Outlet Treatment, measured as provided above, will be paid for at the contract unit price per cubic yard of rock mulch, which price shall be full compensation for the work, complete in place, including all excavation; preparation; and furnishing, installing, and maintaining of Pipe Inlet/Outlet Treatment, as approved by the Engineer.~~

~~The accepted quantity of Headwall and Wingwall Treatment, measured as provided above, will be paid for at the contract unit price per cubic yard of rock mulch, which price shall be full compensation for the work, complete in place, including all excavation; preparation; and furnishing, installing, and maintaining of Headwall and Wingwall Treatment, as approved by the Engineer.~~

~~The accepted quantity of Cut and Fill Transitions, measured as provided above, will be paid for at the contract unit price per cubic yard of riprap, which price shall be full compensation for the work, complete in place, including all excavation; preparation; and furnishing, installing, and maintaining of Cut and Fill Transitions, as approved by the Engineer.~~

~~The accepted quantities of sand bags, measured as provided above, will be paid for at the contract unit price per each sand bag, which price shall be full compensation for the work, complete in place, including all excavation; preparation; and furnishing, installing, maintaining, final removal, and disposal of temporary sand bags, including returning the area to a natural condition, as approved by the Engineer. No separate measurement and payment will be made for removal of sediment, the cost being considered a part of contract items.~~

~~No additional measurement or payment will be made of temporary features subsequently designated by the Engineer as permanent, the cost being considered as included in the unit bid price.~~

~~No additional measurement or payment will be made for associated earthwork, ground preparation, stakes, silt and debris removal and disposal, or maintenance, the cost being considered as including the unit bid price.~~

Payment for AZPDES/NPDES (Original), measured as provided above, will be made at the contract lump sum price, which shall be full compensation for supplying and furnishing all materials, facilities, and services, performing all work involved and conducting regular inspections, as specified herein and on the SWPPP. Payment shall also be full compensation for furnishing, installing and maintaining, permanent and temporary sediment and erosion control measures as well as removing and disposing of temporary sediment and erosion control measures as shown in the SWPPP and in the Special Provisions.

Payment for furnishing and installing permanent sediment and erosion control features will be made under the specific items shown on the project plans and listed in the Special Provisions and bid schedule.

Partial payments under AZPDES/NPDES (Original) will be made in accordance with the following provisions:

When the work shown on the approved SWPPP is in place and accepted by the Engineer, 50 percent of the lump sum price for AZPDES/NPDES (Original) will be paid.

Thereafter, 40 percent of the lump sum price will be paid incrementally, on a monthly basis, over the life of the contract. Incremental payments are considered compensation for maintenance of the SWPPP features. In the event that deficiencies in materials or installation exist, the Agency will withhold payment(s) until such time as the deficiencies are corrected to the satisfaction of the Engineer.

The remaining 10 percent will be paid upon final stabilization of the project.

No additional payment will be made for AZPDES/NPDES (Original).

Should circumstances require changes to the approved SWPPP and should such changes be determined, by the Engineer, to be beyond the scope of the work performed under pay item AZPDES/NPDES (Original), the Engineer may authorize the work completed on a force account basis, in accordance with the provisions of Subsection 109-5, with payment under Item AZPDES/NPDES (Modified).