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\*\* USE FOR PROJECTS ON NON -TRIBAL LAND WITH ONE \*\*  
\*\* OR MORE ACRES OF DISTURBED AREA, AND THAT ARE \*\*  
\*\* ALSO WITHIN 1/4 MILE OF ADEQ-DESIGNATED "IMPAIRED, \*\*  
\*\* UNIQUE, OR NOT-ATTAINING WATERS", AS DETERMINED BY \*\*  
\*\* ROADSIDE DEVELOPMENT SECTION. \*\*

\*\* EDIT MONITORING PLAN REQUIREMENTS ON PAGE 5. \*\*

\*\*\* ADJUST CONTRACT TIME TO INCLUDE 7 ADDITIONAL  
WEEKS FOR ADEQ REVIEW. \*\*\*

\*\*\* ADD NOTE REGARDING 32 BUSINESS DAY REVIEW PERIOD  
TO GENERAL REQUIREMENTS. \*\*\*

\*\* ADD BID ITEM FOR FORCE ACCOUNT EROSION ITEMS IF APPROPRIATE. \*\*

\*\* FOR PROJECTS WITH "IMPAIRED WATERS," ADD \*\*  
\*\* FORCE ACCOUNT BID ITEM FOR LAB TESTS. \*\*

\*\*\* NOT SUITABLE FOR "QUICKSTART" PROJECTS. \*\*\*

**(104SWDSP, 06/17/05)**

## **SECTION 104 - SCOPE OF WORK:**

**104.09 Prevention of Landscape Defacement; Protection of Streams, Lakes and Reservoirs:** of the Standard Specifications is revised to read:

### **(A) General:**

The contractor shall give attention to the effect of the contractor's operations upon the landscape, and shall take care to maintain natural surroundings undamaged.

The contractor shall be responsible to implement the requirements of the Arizona Pollutant Discharge Elimination System (AZPDES) for erosion control as specified in the "General Permit For Discharge From Construction Activities To the Waters Of The United States" as issued by the Arizona Department of Environmental Quality (ADEQ). That document is hereinafter referred to as the AZPDES general permit.

This project may discharge runoff into watercourses designated by ADEQ as "Impaired", "Unique", or "Not-Attaining." As a consequence, the contractor's finalized SWPPP shall include sufficient erosion and sediment control Best Management Practices (BMPs) to assure that discharges will not cause or contribute to non-attainment of Surface Water Quality Standards. In addition, a monitoring plan, as specified in Subsection 104.09(B)(2), shall be provided.

Useful information related to stormwater controls and erosion control measures is presented

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in the "Fact Sheet For The Issuance Of An AZPDES Construction General Permit," available from ADEQ, and ADOT's "Erosion and Pollution Control Manual," available from Engineering Records, 1655 West Jackson, Room 112F, Phoenix, AZ 85007; Phone (602) 712-7498. Except as otherwise specified herein, the contractor's monitoring plan shall comply with ADOT's "Storm Water Monitoring Guidance Manual for Construction Activities", dated February 1, 2005, also available from Engineering Records. That document is hereinafter referred to as the Monitoring Guidance Manual.

The work shall include providing, installing, maintaining, removing and disposing of erosion control measures such as gravel filter berms, dikes, catch basin inlet protection, end-of-pipe filtering devices, silt fences, dams, sediment basins, earth berms, netting, geotextile fabrics, slope drains, seeding, stream stabilization, and other erosion control devices or methods. Erosion control measures may be temporary or permanent. The contractor shall also be responsible for the preparation and processing of all documents required in the AZPDES general permit.

The plans will include preliminary erosion control measures and additional information to be included in the project's Storm Water Pollution Prevention Plan (SWPPP), as specified in Subsection 104.09(B). The contractor, with input from the Engineer, shall finalize the SWPPP. After approval by the Engineer, the contractor shall submit the SWPPP to ADEQ for review and approval, implement the monitoring plan, file a Notice of Intent (NOI), implement the SWPPP, and file a Notice of Termination (NOT), all as described herein.

Except for the NOI, all signatures required of the contractor by the AZPDES general permit, including those required for the NOT, SWPPP, and inspection reports, shall be provided by a duly authorized representative of the contractor, as defined in Part VII.K.2 of said permit. Signature of the NOI shall be by a responsible corporate officer, as defined in Part VII.K.1 of the AZPDES general permit.

No clearing, grubbing, earthwork, or other work elements affected by the erosion control requirements in the SWPPP, shall be started until the SWPPP has been reviewed and approved by ADEQ, the NOI's completed and filed in accordance with Subsection 104.09(C), and the SWPPP implemented.

Submission of the contractor's NOI shall certify that the contractor and its subcontractors have read and will comply with all provisions of the AZPDES general permit.

**(B) Stormwater Pollution Prevention Plan (SWPPP):**

**(1) General:**

The plans will include descriptions of temporary and permanent erosion control measures, a project description, estimated runoff coefficients for both pre-construction and post-construction conditions, inspection schedule, and site-specific diagrams indicating proposed locations where erosion and sediment control devices or pollution control measures may be required during successive construction stages. The plans may also

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include an initial schedule detailing the proposed sequence of construction and related erosion control measures.

The contractor shall review the preliminary information, including the erosion control features and phasing, evaluate all SWPPP requirements for adequacy in addressing pollution prevention during construction, and prepare a draft SWPPP, including monitoring plan, for review by the Engineer.

The contractor shall designate an erosion control coordinator, in accordance with Subsection 104.09(D), to be responsible for finalization and implementation of the SWPPP, as well as all other applicable requirements of the AZPDES general permit. The contractor's erosion control coordinator shall be approved as specified in Subsection 104.09(D) before the draft SWPPP can be finalized and submitted to the Engineer. After approval, the contractor shall designate the erosion control coordinator as an authorized representative of the contractor in accordance with Part VII.K.2 of the AZPDES General Permit.

The draft SWPPP shall include all information required in the AZPDES general permit, including a site map; identification of receiving waters and wetlands impacted by the project; a list of potential pollutant sources; inspection schedule; any onsite or off-site material storage sites; additional or modified stormwater, erosion, and sediment controls; procedures for maintaining temporary and permanent erosion control measures; a list of the contractor's "good housekeeping practices"; and other permit requirements stipulated in the AZPDES program as well as other applicable state or local programs. The contractor shall coordinate with the Engineer on all such additional information.

The draft SWPPP shall also identify any potential for discharge into a municipal separate storm sewer system, including the name of the owner/operator of the system. If requested, the contractor shall also submit a copy of the approved SWPPP to the owner/operator of the system.

Unless otherwise approved by the Engineer, the contractor shall not expose a surface area of greater than 750,000 square feet to erosion through clearing and grubbing, or excavation and filling operations within the project limits until temporary or permanent erosion control devices for that portion of the project have been installed and accepted by the Engineer.

As an example, installation of temporary silt fence concurrently with construction of an embankment area, along the toe of slope, may be appropriate to meet the above requirement until permanent erosion control measures are constructed.

The contractor shall indicate each 750,000 square-foot sub-area in the draft SWPPP, along with proposed erosion control measures for each sub-area. The draft SWPPP shall also include the sequence of construction for each sub-area, and installation of the required temporary or permanent erosion control measures.

The contractor shall give installation of permanent erosion control measures priority over reliance on temporary measures. Permanent erosion control measures and drainage

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structures shall be installed as soon as possible in the construction sequencing of the project, preferably concurrent with construction of the related sub-area or drainage device. However, except as specified in Part IV, Section D.4.b of the AZPDES general permit and approved by the Engineer, erosion control measures shall be installed no later than 14 calendar days after construction activity has temporarily or permanently ceased for the affected sub-area.

Temporary or permanent sedimentation basins may be required for reducing or eliminating sediment from stormwater runoff. When required, such basins shall be completed before any clearing and grubbing of the site is initiated. The contractor shall evaluate the need and attainability of installing sediment basins as described in the AZPDES permit and, if approved by the Engineer, include the basins into the SWPPP as appropriate. When sedimentation basins are determined to be necessary and feasible, such work will be paid in accordance with Subsection 109.04(D). The plans may also include sediment basins as part of the preliminary information. No additional payment will be made for such basins, the cost being considered as included in contract items.

The draft SWPPP shall also identify and address erosion control at on-site fueling operations, waste piles, material storage sites, and off-site dedicated asphalt and concrete plants, contractor-use areas, storage areas, and support activity locations which are used solely for the project and are covered by the AZPDES general permit. The draft SWPPP shall also accommodate all requirements for the contractor's "good housekeeping" procedures specified in Subsection 104.09(E). In addition, the SWPPP shall specifically identify the erosion control measures proposed by the contractor during any vegetation removal and salvaging phases of the project (such as during timber harvesting or native plant salvaging).

The draft SWPPP shall specify the mechanism whereby revisions may be proposed by the contractor or the Engineer throughout the project and incorporated into the plan, including review and approval procedure. Revisions may also include changes to the monitoring plan, such as number or location of samples, or required testing. The Engineer and contractor shall jointly approve and sign each revision to the SWPPP before implementation. Any subsequent submittals required by the contractor to revise or update the SWPPP will require at least 48 hours for review.

Contractors and subcontractors responsible for implementing all or portions of the SWPPP shall be listed in the draft SWPPP, along with the measures for which they are responsible.

The contractor shall maintain all related erosion control elements in proper working order throughout the project. Work under this section also includes inspections, record-keeping, and implementation of "good housekeeping" practices as described in Subsection 104.09(E).

The approved SWPPP shall be updated whenever a change in design, construction method, operation, maintenance procedure, or other activity may cause a significant effect on the discharge of pollutants to surface waters, or when a change is proposed to the personnel responsible for implementing any portion of the SWPPP. The SWPPP shall also be

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amended if inspections indicate that the SWPPP is ineffective in eliminating or significantly reducing pollutants in the discharges from the construction site. All necessary modifications to the SWPPP shall be made within seven calendar days following the inspection that revealed the deficiency.

A copy of the approved SWPPP shall be kept at the site from the time construction begins until the date of final stabilization.

ADEQ may notify the contractor at any time that the SWPPP does not comply with the permit requirements. The notification will identify the provisions of the permit that are not being met and parts of the SWPPP that require modification. Within 15 business days of receipt of the notification from ADEQ the contractor shall make the required changes to the SWPPP and submit a written certification to ADEQ that the requested changes have been made.

The contractor's erosion control coordinator shall maintain the SWPPP along with completed inspection forms and other AZPDES records in a three-ring binder. The erosion control coordinator shall maintain a current copy of the SWPPP, including all associated records and forms, at the job site from the time construction begins until completion of the project. The SWPPP shall be available for public inspection and for use by the Engineer. The erosion control coordinator shall provide copies of any or all of such documents to the Engineer upon request. When requested, such copies shall be provided within three working days of the request.

The SWPPP (including inspection forms) and all data used to complete the NOI and NOT shall be provided to the Department at the completion of the project. The contractor shall retain its own records for a period of at least three years from the filing of the contractor's NOT.

No condition of the AZPDES general permit or the SWPPP shall release the contractor from any responsibilities or requirements under other environmental statutes or regulations.

**(2) Monitoring Plan:**

The contractor shall prepare a construction monitoring plan to monitor discharges into the affected receiving water.

The monitoring plan shall comply with the Monitoring Guidance Manual, and shall include a description of the pollutant of concern, the activities or materials that may generate the pollutant, the location of such activities or materials, and methods to ensure that transport of the pollutant to the waterway is minimized as much as possible. The monitoring plan shall specify the location of monitoring points, as well as the methods, equipment, and reporting processes necessary to accurately measure water quality.

Except as specified herein, the contractor's monitoring plan and related work activities shall comply with all applicable elements of the Monitoring Guidance Manual, including sample locations, monitoring schedule, documentation, and reporting requirements. ADEQ may

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specify revisions to the monitoring plan during the review process. The contractor shall make such required revisions before beginning any work involved in the SWPPP.

The minimum number and type of monitoring points will be as specified herein. The contractor shall determine the appropriate locations based on the Monitoring Guidance Manual.

\*\* CONTACT ROADSIDE DEVELOPMENT FOR SPECIFIC RESTRICTIONS FOR \*\*  
\*\* THE AFFECTED WATERWAY. INFORMATION SHOULD INCLUDE TYPE \*\*  
\*\* OF POLLUTANT AND RECEIVING WATER, AND ALLOWABLE \*\*  
\*\* NUMERIC CONCENTRATION VALUE (TMDL), IF REQUIRED. \*\*  
\*\* ALSO INCLUDE PROJECT-SPECIFIC REQUIREMENTS, SUCH AS \*\*  
\*\* NUMBER OF MONITORING POINTS AND TYPE OF MONITORING, \*\*  
\*\* AS PROVIDED BY ROADSIDE DEVELOPMENT. \*\*

Sampling and any onsite testing called for in the Monitoring Guidance Manual shall be performed by the erosion control coordinator, or other qualified personnel as approved by the Engineer.

Monitoring techniques for all locations shall include visual monitoring and photo documentation and, when specified, turbidity monitoring. When included in the special provisions, specific impairment monitoring and subsequent laboratory testing will also be required. A monitoring report shall be completed after each inspection and shall be included in the SWPPP. The monitoring plan shall include a process to evaluate of the effectiveness of the erosion control measures at controlling runoff. The contractor shall use the form provided in the Monitoring Guidance Manual.

Should laboratory testing of water be required, the contractor shall select an appropriate laboratory that is licensed, accredited, and certified by the Arizona Department of Health Services. The contractor shall provide such information to the Engineer for approval at least 15 working days before submittal of any samples for analysis.

The contractor's erosion control coordinator shall be responsible for the preparation, accuracy, and completeness of all reports and readings required by the monitoring plan, and shall coordinate all submittals required in the Monitoring Guidance Manual, including the monthly discharge monitoring report, with the Engineer and ADEQ.

The monitoring plan shall be initiated immediately after the Engineer's approval of the SWPPP and, unless otherwise specified by the Engineer, shall continue throughout the contract period.

### **(3) Preliminary Submittal:**

The contractor shall submit two copies of the draft SWPPP, including all information specified herein, to the Engineer at the preconstruction conference if possible, but not later than 14 calendar days from the Department's approval of the contractor's Erosion Control Coordinator.

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The Engineer will provide the contractor with the following forms at the preconstruction conference:

- Maintenance, inspection, and site-monitoring report forms;
- Other record keeping forms and procedures, as needed; and
- Notice of Intent (NOI) and Notice of Termination (NOT) forms.

Notice of Intent and Notice of Termination blank forms are also available on the internet at <http://azdeq.gov/function/forms/appswater.html#cgp>.

Within 10 calendar days from the SWPPP submittal, the Engineer and contractor will jointly review the contractor's draft SWPPP, and include any additional revisions directed by the Engineer. The finalized SWPPP shall meet the terms and conditions of the AZDPES general permit, and be compatible with construction sequencing and maintenance of traffic plans.

When agreement has been reached, the Engineer and contractor's authorized representative will sign the finalized SWPPP. The Engineer and contractor shall each file a Notice of Intent (NOI). The contractor shall also submit the finalized SWPPP to ADEQ for review and approval as specified in Subsection 104.09(C), and immediately initiate the requirements of the monitoring plan. At this time the Engineer will also provide a copy of the Department's NOI to the contractor.

After the review and approval process specified in Subsection 104.09(C), the contractor shall implement the requirements of the SWPPP. No clearing, grubbing, earthwork, or other work elements affected by the erosion control requirements in the SWPPP, shall be started until the SWPPP has been approved, the NOI's completed and filed in accordance with Subsection 104.09(C), and the SWPPP implemented.

**(C) Notice of Intent (NOI) and SWPPP Submittal:**

After the project Storm Water Pollution Prevention Plan (SWPPP), including monitoring plan, has been approved by the Engineer, the contractor shall submit the SWPPP to ADEQ at the address shown below for review. The Engineer and contractor will also complete separate Notice-of-Intent (NOI) forms for the project and submit both forms to ADEQ at the same time. The NOI submitted by the contractor includes a certification statement which must be signed and dated by a responsible corporate officer of the contractor, as defined in Part VII.K.1 of the AZPDES General Permit, and include the name and title of that officer.

Arizona Department of Environmental Quality  
Water Permits Section/Stormwater NOI (5415B-3)  
1110 W. Washington Street  
Phoenix, Arizona 85007  
or fax to (602) 771-4674

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Within 32 business days of receipt, ADEQ will notify the Engineer whether work may proceed under the AZPDES general permit, or whether the SWPPP needs revisions. If notification is not received in this time-frame, the contractor may begin implementing the SWPPP. A business day shall be defined as a day, exclusive of Saturdays, Sundays and State-recognized holidays, during which ADEQ is open for business.

After the Engineer's approval of the SWPPP and concurrent with its submittal to ADEQ, the contractor shall also implement the monitoring plan and determine baseline measurements during the review period.

Should ADEQ determine that revisions are needed, the contractor's erosion control coordinator shall make the necessary changes and, after acceptance by the Engineer, re-submit the SWPPP to ADEQ for approval. Prior to approval, ADEQ may require that the SWPPP be modified to implement specific controls or design criteria, or may require changes to the monitoring plan. Additional erosion control measures or devices required by ADEQ but not included in the bidding schedule will be paid in accordance with Subsection 109.04(D). When re-submittal is required, the contractor shall not be authorized to begin SWPPP implementation until final approval is received from ADEQ.

No extension of contract time and, except as required for the monitoring plan, as specified in Subsection 104.09(J), no compensation will be allowed for the 32 business-day review period required by ADEQ, the cost being considered as included in contract items. The contractor shall anticipate needing a minimum of seven weeks for the ADEQ review process, during which period no clearing, grubbing, earthwork, or other work elements affected by the erosion control requirements in the SWPPP can be started. If the ADEQ approval process requires more than seven weeks, the contractor may seek, and the Engineer may grant, a non-compensable extension of time for the approval of the SWPPP in accordance with the terms of Subsection 108.08. The time extension shall not exceed 45 calendar days.

At any time after authorization, ADEQ may determine that the contractor's stormwater discharges may cause or contribute to non-attainment of any applicable water quality standards. If ADEQ makes that determination, the contractor will be notified in writing. The contractor shall develop a supplemental erosion control action plan describing SWPPP modifications to address the identified water quality concerns. If the written notice from ADEQ requires a response, failure to respond in a timely manner constitutes a permit violation. All responses shall be in accordance with the AZPDES general permit.

If there is a potential to discharge into a municipal separate storm sewer system (MS4), a signed copy of the NOI shall also be submitted to the owner/operator of the municipal system at the time that the NOI's are submitted to ADEQ. Also, contractor's operating under an approved local sediment and erosion plan, grading plan, or stormwater management plan shall submit a signed copy of the NOI to the local authority upon their request.



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The contractor shall post both NOI's and the information required in the AZPDES general permit on the construction-site bulletin board throughout the duration of the project. A copy of the AZPDES general permit shall also be kept at the construction site at all times.

**(D) Contractor's Erosion and Pollution Control Coordinator:**

**(1) General Requirements:**

The contractor shall designate a competent person as the contractor's erosion and pollution control coordinator (referred to elsewhere herein as erosion control coordinator) responsible for finalizing the draft SWPPP from the preliminary information included with the plans. The erosion control coordinator shall also be responsible for implementing, monitoring, and revising the approved SWPPP throughout the project, for making the required inspections, and for implementing any other permit requirements stipulated in the AZPDES general permit. The person shall be knowledgeable in the principles and practice of erosion and sediment controls, and possess the skills to assess conditions at the site that could impact stormwater quality and the effectiveness of the contractor's erosion control measures used to control the quality of the stormwater discharges.

Stormwater runoff from construction activities may contaminate adjacent bodies of water, or otherwise exceed water quality standards, and result in possible major civil and/or criminal penalties. Therefore the Engineer will closely consider the qualifications of the contractor's erosion control coordinator. The contractor shall not assume that the person proposed as erosion control coordinator will be acceptable to the Department merely because the experience and education requirements listed herein have been met.

The contractor bears all risks and liabilities for the failure of its erosion control coordinator to properly implement the requirements of the AZPDES general permit.

The person shall be capable of identifying existing and predictable effects of the contractor's operations, and shall have complete authority to direct the contractor's personnel and equipment to implement the requirements described herein, including prompt placement of corrective measures to minimize or eliminate pollution and damage to downstream watercourses. The erosion control coordinator shall also be familiar with procedures and practices identified in the SWPPP, and shall ensure that emergency procedures are up to date and available at project sites.

The erosion control coordinator shall at all times be aware of the contractor's work activities, schedule, and effect of the work on the environment, and shall, at any time, be accessible to direct the contractor's personnel to replace or repair erosion control measures as necessary. Should the erosion control coordinator not be present at the project site on a full-time basis, the contractor shall establish procedures to ensure that its erosion control coordinator is promptly notified of any damage or displacement of the required erosion control measures, whether from construction, vandalism, or other causes. In addition, the contractor shall provide the Engineer with a phone number through which the erosion control coordinator can be contacted at any time, 24 hours a day, seven days a week,

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including holidays. The erosion control coordinator must be present at the jobsite within 24 hours of such call being placed.

The erosion control coordinator shall also be aware of and comply with all requirements of the AZPDES general permit to address discharges at the site associated with the contractor's activities other than construction, including contractor staging areas, and other potential pollutant and off-site material storage and borrow areas.

Failure of the contractor to properly maintain the erosion control measures required in the approved SWPPP will be cause for the Engineer to reject the erosion control coordinator and issue a stop work order, as specified in Subsection 104.09(G).

**(2) Certification Requirements:**

The proposed erosion control coordinator shall have successfully completed the two-day (16 hour) "Erosion Control Coordinator" training class provided by the Associated General Contractors (Arizona Chapter), phone (602) 252-3926. In addition, the proposed erosion control coordinator shall have documented experience equal to a minimum of one year from either of the following two categories:

- (a) Experience in the development and implementation of Stormwater Pollution Prevention Plans (SWPPP's), as specified in the AZPDES general permit referenced herein, or the National Pollutant Discharge Elimination System (NPDES) for highway construction projects. The proposed erosion control coordinator's experience shall demonstrate full-time responsibility for directly supervising construction personnel in the installation, monitoring, and maintenance of erosion control items.
- (b) Experience in re-vegetation or restoration of disturbed areas in environments similar to those on the project. Experience in temporary or permanent stabilization of disturbed areas will also be considered. The proposed erosion control coordinator's experience shall demonstrate full-time responsibility for directly supervising personnel in temporary or permanent re-vegetation or restoration of disturbed areas.

The contractor's documentation shall provide details indicating the types of relevant experience, and shall provide the number of months of each type of experience to be considered for approval. Documentation shall also indicate that the proposed erosion control coordinator has completed the "Erosion Control Coordinator" training class prior to consideration for approval.

The erosion control coordinator shall also meet one of the following requirements:

1. Registration in the State of Arizona as a Landscape Architect, with a minimum of one year of experience in the fields of erosion control or sediment transport.
2. Registration in the State of Arizona as a Professional Engineer with a minimum of one year of experience in the fields of erosion control or sediment transport.

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3. Certification by the International Erosion Control Association (IECA) as a Certified Professional in Erosion and Sediment Control.

To be considered for approval, the contractor's documentation shall include a copy of the proposed erosion control coordinator's certification or registration. Should the proposed erosion control coordinator be a registered Landscape Architect or Professional Engineer in the State of Arizona, the contractor shall also provide documentation indicating the types of relevant experience, and the number of years of each type of experience to be considered for approval.

**(3) Acceptance:**

The contractor shall submit documentation indicating the qualifications of the proposed erosion control coordinator to the Engineer for approval within seven calendar days of the notice of award of the contract. The Engineer will review the proposed candidate's information within seven calendar days. The contractor may begin development of the draft SWPPP from the preliminary information included with the plans prior to approval of the erosion control coordinator. However no clearing, grubbing, earthwork, or other work elements that, in the opinion of the Engineer, may be subject to the requirements of the AZPDES general permit shall be started until the erosion control coordinator has been approved, the SWPPP finalized and implemented, and the NOI's completed and filed, all as specified herein.

**(E) "Good Housekeeping" Practices and Requirements:**

The SWPPP shall also specify the contractor's "good housekeeping" practices and requirements, including vehicle wash-down areas, onsite and off-site tracking control, protection of equipment storage and maintenance areas, methods to minimize generation of dust, and sweeping of highways and roadways related to hauling activities. The contractor shall show each planned location of service and refueling areas on the SWPPP's site map. Changes to the contractor's "good housekeeping" practices that are related to construction phasing shall also be shown on the SWPPP.

The contractor shall take aggressive actions, considering all conditions, to prevent pollution of streams, lakes, and reservoirs with fuels, oil, bitumens, calcium chloride, fresh Portland cement, fresh Portland cement concrete, raw sewage, muddy water, chemicals or other harmful materials. None of these materials shall be discharged into any channels leading to streams, lakes or reservoirs. The SWPPP shall include the implementation of spill prevention and material management controls and practices to prevent the release of pollutants into stormwater. The SWPPP shall also provide storage procedures for chemicals and construction materials; disposal procedures; cleanup procedures; the contractor's plans for handling such pollutants; and other pollution prevention measures as required.

Machinery service and refueling areas shall be located away from streambeds or washes, and in a manner which prevents discharges into streams or washes.

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Waste materials from blasting, including explosives containers, shall be disposed of off-site in accordance with applicable federal regulations. Other waste materials, such as used cans, oils, machine and equipment parts, paint, hazardous materials, plastic and rubber parts, discarded metals, and building materials, shall be removed from the construction site and disposed of according to applicable state and federal regulations.

Where the contractor's working area encroaches on a running or intermittent stream, barriers shall be constructed and maintained between the working areas and the stream bed adequate to prevent the discharge of any contaminants. The SWPPP shall identify the location of streams that may be affected and the specific types of barriers proposed for protecting these resources.

Unless otherwise approved in writing by the Engineer, fording of running streams with construction equipment will not be permitted; therefore, temporary bridges or other structures shall be used whenever an appreciable number of crossings is necessary.

Temporary bridges or other structures proposed by the contractor shall be designed to accommodate the ten-year storm event if to remain in place for up to a one-year period. If a structure is planned to remain in place for longer than one year, the hydraulic conveyance may be subject to more stringent requirements. The contractor shall be responsible for all permits, authorizations, and environmental clearances that may be necessary to approve the use of such structures. The contractor shall submit the design and all required documentation to the Engineer for approval. The contractor is advised that the review and approval process for such structures could be lengthy. Unless otherwise provided for in the contract, the contractor shall be responsible for all costs associated with the design and construction of such structures. Also, no extension of contract time will be allowed for any review and approval periods, or for the time required to construct temporary bridges proposed by the contractor.

Mechanical equipment shall not be operated in running streams.

Material which is to be stockpiled or disposed of off-site shall be in accordance with Subsection 107.11.

Streams, lakes and reservoirs shall be cleared of all falsework, piling, debris or other obstructions resulting from the contractor's activities, inadvertently placed thereby or resulting from construction operations, within 24 hours from the time the obstruction was observed.

Spill prevention, containment and counter-measures shall be included in the SWPPP if the volume of project-site fuel in a single container exceeds 660 gallons, or if the total fuel storage volume at any one site exceeds 1,320 gallons.

In the event of a spill of a hazardous material, the contractor shall follow the provisions of Subsection 107.07. In addition, the erosion control coordinator shall modify the SWPPP as necessary within 14 calendar days of the discharge. The SWPPP shall be modified to

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include a description of the release, the circumstances leading to the release, and the date of the release.

The contractor shall assist in any efforts to clean up hazardous material spills, as directed by the Engineer or other authorities. Soil contaminated from spills shall be disposed of according to applicable state and federal regulations.

**(F) Inspections:**

**(1) General:**

The Engineer and the erosion control coordinator shall inspect the project at least every 14 calendar days, and also within 24 hours after any storm event of 0.50 inches or more. The inspections shall include disturbed areas that have been temporarily stabilized, areas used for storage of materials, locations where vehicles enter or exit the site, and all of the erosion and sediment controls included in the SWPPP. The contractor shall monitor rainfall on the site with a commercially manufactured rain gauge accurate to within 0.10 inches of rain. Rainfall records shall be submitted to the Engineer on a weekly basis.

For each inspection, the contractor's erosion control coordinator shall complete and sign a Compliance Evaluation Report as described in the permit. Copies of the completed reports shall be retained on-site in the SWPPP file throughout the construction period. The erosion control coordinator shall also provide a copy of the report to the Engineer following each inspection.

**(2) Adjustments:**

When deficiencies are noted during scheduled inspections, the contractor shall take immediate steps to make the required corrections as soon as practical. Deficiencies shall be fully corrected, to the satisfaction of the Engineer, within four calendar days or by the next anticipated storm event, whichever is sooner. Deficiencies noted between designated inspections shall be corrected within the time period directed by the Engineer, but not later than four calendar days after observation.

Direct inflows of sediment into a watercourse shall be corrected by the end of the same day or work shift in which the inflow as observed.

In accordance with Subsection 104.09(G), failure to implement adjustments within the specified time periods may be cause for the Engineer to reject the contractor's erosion control coordinator and issue a stop work order for the affected portions of the project.

**(G) Non-Compliance:**

The Engineer may reject the contractor's erosion control coordinator if, in the opinion of the Engineer, the conditions of the AZPDES general permit or the approved SWPPP are not being fulfilled. Rejection of the contractor's erosion control coordinator shall be for failure to complete any of the following:

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**[http://www.azdot.gov/highways/cns/CNS\\_Stored\\_specs.asp](http://www.azdot.gov/highways/cns/CNS_Stored_specs.asp)**

- (1) Should the Engineer determine that the SWPPP is not being properly implemented, the contractor will be notified in writing of such deficiencies. The contractor's erosion control coordinator shall fully implement, to the satisfaction of the Engineer, the requirements of the approved SWPPP within three working days.
- (2) Should any corrective measures required in Subsection 104.09(F)(2) not be completed within the time periods specified therein, the Engineer will notify the contractor in writing. The contractor shall complete all required corrective measures within two calendar days of such notification, except that direct inflows of sediment into a watercourse shall be corrected within 24 hours.
- (3) Should the Engineer determine that routine maintenance of the project's erosion control measures is not being adequately performed, the contractor will be notified in writing. Within three working days, the contractor's erosion control coordinator shall demonstrate, to the satisfaction of the Engineer, that such steps have been taken to correct the problem.

In the event of the erosion control coordinator's failure to comply with any of the above requirements, the Engineer will direct the contractor to stop all affected work and propose a new erosion control coordinator as soon as possible. However, all erosion and pollution control items specified in the SWPPP shall be maintained at all times. No additional work on construction items affected by the SWPPP will be allowed until a new erosion control coordinator has been approved by the Engineer. The contractor will not be allowed compensation or an extension of contract time for any delays to the work because of the failure of the contractor's erosion control coordinator to properly fulfill the requirements of the approved SWPPP.

**(H) Record of Major Construction And Erosion Control Measures:**

In addition to the compliance evaluation report, the contractor shall keep records of the major construction activities, including the erosion control measures associated with these activities. In particular, the contractor shall keep a record of the following activities:

- The dates when major grading activities (including clearing and grubbing, excavation and embankment construction) occur in a particular area or portion of the site.
- The dates when construction activities cease in an area, temporarily or permanently.
- The dates when an area is stabilized, temporarily or permanently.

Such information shall be noted within two working days of the occurrence of any of the listed activities, and a copy of the report shall be included in the SWPPP. The contractor shall also provide one copy of such records, and any subsequent up-dated information, to the Engineer within three working days of completion or amendment of the report.

**(I) Notice of Termination (NOT):**

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Upon final acceptance by the Engineer in accordance with Subsection 105.20, and as specified herein, the contractor shall complete and mail a Notice-of-Termination (NOT) for the project to the address shown below. The NOT submitted by the contractor includes a certification statement which must be signed and dated by an authorized representative of the contractor, as defined in Part VII.K.2 of the AZPDES General Permit, and include the name and title of that authorized representative.

Arizona Department of Environmental Quality  
Water Permits Section/Stormwater NOT (5415B-3)  
1110 W. Washington Street  
Phoenix, Arizona 85007

The contractor shall also provide one copy to the Engineer.

When the approved SWPPP includes the use of Class II seeding as an erosion control measure, seeded areas shall be maintained for 45 calendar days, as specified in the special provisions, and approved by the Engineer before the contractor's NOT can be submitted. Seeding, when used in the SWPPP as an erosion control measure, will not be considered as part of any Landscape Establishment Phase that may be included with the project.

**(J) Measurement and Payment:**

Measurement and payment for work specified in the SWPPP will be made in accordance with the requirements of Section 810. Erosion control and pollution prevention work specified in the contract which is to be accomplished under any of the other various contract items will be paid for as specified under those items.

If a force account pay item for erosion control is included in the bidding schedule, the contractor may be reimbursed for such additional erosion control items proposed by the contractor but not included with the plans or specifications. Such additional erosion control items must be approved in writing by the Engineer before use. Erosion control items approved by the Engineer will be paid in accordance with Subsection 109.04(D). No measurement or payment will be made for such additional items not approved by the Engineer.

No measurement or payment will be made to the contractor for time spent in preparing, reviewing, and revising the Storm Water Pollution Prevention Plan (SWPPP), including the monitoring plan, or providing other required documentation, the cost being considered as included in the price of contract items. No measurement or payment will be made for the contractor's erosion control coordinator; for inspections; or the contractor's "good housekeeping" practices and requirements; the costs being considered as included in contract items.

The labor required for monitoring receiving waters during the time from approval of the draft SWPPP by the Engineer to approval of the final SWPPP by ADEQ will be paid for in accordance with Subsection 109.04(D). Such reimbursement of costs during the approval

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process will include preparation of the required reports, but not the equipment and materials required for monitoring. Once approval of the SWPPP, including monitoring plan, has been received from ADEQ, no subsequent measurement or payment will be made, except as specified below for external laboratory testing, for the labor, equipment, and materials required in the monitoring plan, the costs being considered as included in contract items.

If an item is included on the bidding schedule for Construction Monitoring (Laboratory Testing), the contractor will be reimbursed for those samples tested, as required in the approved monitoring plan, by an accredited laboratory approved by the Arizona Department of Health Services. The contractor will be reimbursed for the invoice amount of each required test, plus an additional markup of ten percent of the invoice amount.

Unless otherwise specified, no measurement or payment will be made for maintenance of temporary and permanent erosion control measures, the cost being considered as included in contract items.

**104.10 Contractor's Responsibility for Work:** of the Standard Specifications is revised to read:

The contractor shall implement the requirements of the Arizona Pollutant Discharge Elimination System (AZPDES) for erosion control due to storm water runoff during construction, as specified above in Subsection 104.09, Prevention of Landscape Defacement; Protection of Streams, Lakes, and Reservoirs.

Until final written acceptance of the project by the Engineer, the contractor shall have the charge and care thereof and shall take every precaution against injury or damage to any part thereof by the action of the elements, or from any other cause, whether arising from the execution or from the nonexecution of the work. The contractor shall rebuild, repair, restore and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance. No reimbursement shall be made for work necessary due to the contractor's failure to comply with the requirements of the SWPPP.

Except as specifically provided under Subsection 104.04, in case of suspension of work from any cause whatever, the contractor shall be responsible for the project and shall take such precautions as may be necessary to prevent damage to the project and provide for normal drainage. The contractor shall also 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 living material in newly established plantings, seedings and soddings, furnished under its contract and shall take adequate precautions to protect new tree growth and other important vegetative growth against injury.