Appendix C

Stormwater Pollution Prevention Plan

WASTE DISCHARGE REQUIREMENTS

FOR

DISCHARGES OF STORM WATER RUNOFF
ASSOCIATED WITH CONSTRUCTION ACTIVITY

RWQCB REGION 9

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND SPILL PREVENTION, CONTAINMENT, AND CONTROL PLAN (SPCCP)

Prepared for:

All Star Telecom
AT&T Corp. NEXGEN/CORE Fiber Optic Conduit Installation Project

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October 2000
Revision 0

CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Name, Title	Date of Preparation

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ABBREVIATIONS AND ACRONYMS

AT&T	AT&T, Corp.
BMP	Best Management Practice
CFR	Code of Federal Regulations
MP	Milepost
MSDS	Material Safety Data Sheet
NSF	National Sanitation Foundation
ROW	right-of-way
RWQCB	Regional Water Quality Control Board
SI	Site Inspector
SPCCP	Spill Prevention, Containment, and Control Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
SWQCB	State Water Quality Control Board
Op Amp	Optical Amplification
WL	Water and Wetland

EXECUTIVE SUMMARY

This document outlines All Star Telecom's Storm Water Pollution Prevention Plan (SWPPP) as required in the General Stormwater Discharge Permit for Construction Activities (General Permit) issued by Regional Water Quality Control Board (RWQCB) for the AT&T NEXGEN/CORE Fiber Optic Conduit Installation Project. This SWPPP is for the project section within RWQCB Region 9.

BEST MANAGEMENT PRACTICES

Proper selection and application of Best Management Practices (BMPs) must be performed to meet site-specific project conditions. BMPs are defined as any program, technology, process, siting criteria, operating method, measure, or devise, which controls, prevents, removes, or reduces pollution. Due to the linear nature of this project, and the wide variety of conditions that will be encountered during project activities, BMPs for specific project sites have not been identified within this document. Rather, BMPs have been identified for types of project related activities. Although it will be the Site Inspector's (SI) responsibility to apply and maintain BMPs during and after project related activities, all individuals who are performing on-site construction activities are required to review these portions of the document to familiarize themselves with BMP practices.

MONITORING, INSPECTION, AND MAINTENANCE PLAN

The General Permit for Construction Activities requires that the SWPPP include a monitoring, inspection, and maintenance plan, with the following objectives:

- Inspection of BMPs annually, as well as on a daily basis in areas of active construction or equipment operation
- Implement the SWPPP
- Measure the effectiveness of the BMPs

To meet these objectives, the monitoring tasks include these elements:

- Site inspection
- Certification of compliance
- BMPs monitoring
- Recordkeeping
- SWPPP review and modifications

SPILL RESPONSE

A Spill Prevention, Containment, and Control Plan (SPCCP) is provided as Appendix I to the SWPPP. Hazardous spills are not anticipated during the project activities, however, if a spill occurs, the steps outlined in the SPCCP should be taken.

1.0 INTRODUCTION AND DESCRIPTION OF CONSTRUCTION ACTIVITY

This Storm Water Pollution Prevention Plan (SWPPP) was prepared to support the All Star Telecom AT&T NEXGEN/CORE Fiber Optic Conduit Project (Conduit Project) Notice of Intent to the California State Water Quality Control Board (SWQCB) for a General Stormwater Discharge Permit for Construction Activities. This permit is issued to All Star Telecom by the SWQCB under the National Pollutant Discharge Elimination System General Permit No. CAS _____.

Construction activities that are not known or scheduled at the time of preparation of this SWPPP will be added to the SWPPP through the formal amendment process identified in Section 8.0. That section describes the procedures to be used to amend the SWPPP to incorporate construction activities that are not identified at this time.

All Star Telecom is constructing a buried set of fiber optic conduits from Los Angeles to San Diego and continuing through to Blythe, California, to increase the capacity of the AT&T, Corp., nationwide fiber optic network. This SWPPP covers a section of the route, which runs from El Toro to eastern San Diego County. The conduit will be installed using conventional trenching, bridge hanging, and directional drilling methods. The conduit route addressed in this report is in RWQCB Region 9 and consists of two links totaling 148 miles. Link 5 begins near El Toro in Orange County and runs 88.5 miles south to downtown San Diego (MP 63 to 151.5). Link 4 then runs eastward 59.5 miles through San Diego to Live Oak Springs (MP 160.5 to 220). The construction will require a temporary easement 20- to 40-feet wide. In total, six 1½ inch ducts will be installed in a trench approximately 42 inches deep. Actual trench width is between 10 and 18 inches. All Star Telecom plans either directional boring or bridge hangs for all water crossings. Appendix III of the Initial Study lists the water and wetland crossings along the route. The schedule for construction of this portion of the route would begin in January 2001.

Approach

This SWPPP has been prepared to match the linear nature of All Star Telecom's proposed installation of a fiber optic cable. Site-specific provisions normally required by the State Water Resources Control Board (SWRCB) for the SWPPP are omitted recognizing that the SWRCB guidelines for SWPPP's are not designed for linear projects. Rather, All Star Telecom prepared this SWPPP based on experience with other linear facility construction projects including pipelines and electrical transmission lines and review of industry and government guidance documents (Camp, Dresser and McKee, 1993, *California Storm Water Best Management Practice Handbook–Construction Activity*). Specific BMPs for minimizing erosion and protecting waterbodies as well as inspection and monitoring requirements adapted to meet SWQCB's requirements are included in this document.

1.1 DESCRIPTION OF CONSTRUCTION ACTIVITY

The proposed All Star Telecom Fiber Optic Conduit Installation Project consists of the construction and maintenance of a buried set of conduits and associated facilities (i.e., handholes/manholes) designed to serve a variety of fiber optic clients. Two methods will be used to install the conduit bundle: placement in an excavated trench, or directional bores. The construction process includes site preparation, conduit placement, and site restoration and maintenance.

1.1.1 Site Preparation

Site preparation for areas within the clearing limits of road rights-of-way will not be necessary. Where installation occurs with the right of way but outside the clearing limits, site preparation may include tree and brush removal, rock removal, and in some areas rock or pavement cutting.

1.1.2 Conduit Placement

Conduit will be installed by excavation with a backhoe, trencher, or rock saw. The trench will be excavated directly in advance of laying the conduit at will be backfilled immediately after the conduit is placed, except at manholes or splice box locations.

In urban areas, or where there is existing pavement, it will be necessary to open the trench area with an asphalt or cement saw. A trencher or backhoe will then be used to cut the trench for conduit placement. In locations where utilities are present, digging will be done manually.

Stream, drainage and wetland crossings along the route, which will require special construction techniques, will crossed using either directional boring or bridge hanging. Directional boring is conducted with either a trailer-mounted horizontal drilling rig or a larger self-contained horizontal drilling rig. These rigs are capable of directing the boring tip of the drill and controlling it in both horizontal and vertical planes. A sensor placed behind the drill bit controls the direction of the drill. The sensor allows manual tracking of the depth and position of the drill head. The smaller rig can drill up to 500 feet while the larger equipment can reach up to 2500 feet. Prior to drilling, the area to be avoided is delineated and the rig is placed a standard setback distance from the edge of the sensitive area. Setback may vary from a few feet for a roadway to several hundred feet for a wide watercourse. A more detailed discussion of the directional bore construction method is provided in the Directional Bore Contingency Plan included as Appendix IV of this document.

At the entrance and exit sites for directional drilling, sump pits are excavated for the containment and processing of drilling mud returns. At the conclusion of the drilling, these sump pits are drained and restored to their pre-drilling condition. The drained material is disposed of at an approved location away from watercourses.

In the event of a bridge hang, the conduit will be placed in a trench within the bridge if there is sufficient thickness in the pavement of the bridge or it will be hung in a casing beneath the bridge overhang or within the bridge structure. The attachment of fiber optic cable to bridges is accomplished by placing a steel pipe on the exterior portion of the bridge, generally at or below the level of the roadbed. The pipe is secured to the bridge by drilling holes into the concrete exterior of the bridge structure on either side of the pipe, and setting threaded bolts with epoxy grout. The pipe is then fastened to the bridge with metal pipe straps, which consist of two ear straps, chisel point studs, nuts, washers, and epoxy capsules for anchoring. Epoxy grout is used at both ends of the bridge head wall to seal the sleeve and pipe between the ground and the bridge attachment. A handhole/manhole will be installed on either end of the bridge for cable slack and to serve as assist in cable routing. The handhole/manholes will each contain a minimum of 100 feet of slack cable.

The stream and drainage crossings not requiring special construction techniques are dry washes and dry ephemeral streambeds. These crossings will be trenched and restored to pre-construction conditions upon project completion. Trenching opens an area about 18 inches wide and about 48 inches deep along the running line. Trenching is generally conducted using a backhoe or a rubber-tired or tracked excavator. While the trench is 18 inches wide, the total ground disturbance from the installation is about 10 feet wide, including the tracks of the excavating equipment.

The conduit bundle will be placed by trenching to achieve the required depth. Spoils will be placed alongside the trench within the disturbed area. Excavation will be accomplished with tracked excavators and activities and spoils will be limited to the existing right-of-way (ROW) and authorized workspace.

1.1.3 Op-Amp Facilities

To maintain integrity of signals being transmitted over the new system, signals will need to be optically amplified approximately every 50 miles at Optical Amplification facilities (Op Amp facilities). AT&T's project corridor generally parallels several other fiber optic lines that already contain Op Amp facilities for both coaxial and fiber cable. To the extent possible, AT&T's proposed project will share existing sites or place Op Amp facilities in previously disturbed sites or within developed private areas, and the facilities will be located such that new disturbance for buildings, access roads, or utility corridor will not be required.

Each unstaffed, locked facility will require commercial electric power and minimal periodic maintenance. Op Amp facilities will permanently occupy up to 2 acres. Initial ground disturbance will be confined to 2 fenced areas of approximately 100 by 150 ft each. It is anticipated that eventually the 2-acre sites will house other similar facilities. However, it is beyond the scope of this document to analyze environmental impact from that future construction. Each site will be engineered and graded to ensure surface drainage will not flood the access ways and buildings. For the most part, facility sites selected have already been cleared

so that the removal of trees is not necessary. Most often, site preparation will involve grubbing of vegetation, removal of any pre-existing structures, and grading to create a level area for building pad installation. Vegetation will be cleared to a depth of 1 ft below the original ground surface. Stumps will be removed completely, and cleared materials and/or vegetation will be disposed of at an approved off-site facility. Remaining material will be stockpiled at an approved location within the work area and re-used in the final landscaping. Six inches of topsoil and subsurface material will be stripped from those areas that will underlie gravel, pavement, and new structures. Underlying areas will be constructed using excavated subsoil. Off-site material will be used only after available excavated materials have been utilized. Fill material will be graded and compacted to uniform building code standards. Disposal of construction waste will be performed at approved disposal facilities. The Op Amp sites would contain two separately fenced areas for housing electronic equipment. Concrete pads approximately 12 in. thick will be poured on the prepared site for the foundations of the buildings. A minimum of 8 to 12 in. of gravel will be placed over the remainder of the site. One of the areas will contain a single pad 30 ft x 50 ft. A single building 48 in.-2.5 in. long by 29 ft wide by 12 ft tall would be installed on that pad of a prefabricated steel-reinforced concrete tilt-up wall design. With a "tilt-up" wall design the building's walls and roof are made of large concrete panels that are poured off site, brought in on semi-trailers, and then erected on site. The other area will contain two pads, each 30 by 50 feet. One of the pads will be used for future expansion, while the other will contain four precast concrete buildings, each 11 ft 8 in. wide, 10 ft. 8 in. tall, and 30 ft. long. Each of these buildings in both areas will house electronic amplification equipment, 48-volt wet cell batteries and DC/AC inverter equipment for emergency power, lights, and a heating and air conditioning system.

Each area requires a diesel-powered generator designed to provide back-up power in case of electrical distribution outage. The back-up generator and a 336-gallon fuel storage tank are located outside each of the building areas. The generator and fuel tank are a single unit, with the double-walled fuel tank mounted below the generator in a concrete catch basin and accessible through a utility panel on the side of the generator. The generator is contained within a separate enclosure approximately 8 by 10 by 4 ft tall, with utility access panels along one side. The concrete catch basin will be inspected will be inspected regularly to detect leaks. A spill prevention control and counter measure plan is not required for this facility pursuant to CFR 40 § 112.1, because the tanks are smaller than 660 gallons individually and 1320 gallons collectively.

Simultaneous with building installation, commercial power connection and installation of Op Amp equipment for powering the fiber optic signal, the fiber optic conduit and cables will be installed or constructed. Conduit is typically installed in two separate trenches with a minimum 25-ft separation to maintain system integrity. The conduit will be connected to the existing system at new or existing handholds.

Except for a door and air-conditioning outlets, there are no other openings in the Op Amp facility buildings. Op Amp facilities will be designed and painted to blend with the natural environment as required by county planning departments. Op Amp facilities will conform to local ordinances for appearance and landscaping. Final grading will be reshaped to blend functionally and esthetically with the surrounding topography.

1.1.4 Access Vaults

Utility access vaults and manholes will be placed as necessary to assist cable installation and maintenance at intervals of approximately 2,500 feet along the project alignment. In order to install a vault, the asphalt will first be saw cut and removed to a designated area. The dirt for the access vault will then be excavated and the spoils hauled to a designated location. Lastly, the access vault or manhole (as described below) will be set into excavated area and backfilled per permitting agency specifications. For the majority of the project, buried utility access vaults would be used. The utility access vaults would measure 2.5-feet by 4-feet by 2-feet. These vaults would be buried such that their tops are 1-foot to 2-feet below the surface. In some areas, manholes would be used instead of utility access vaults. Manholes measure 4-feet by 4-feet by 6-feet and would be placed at intervals of 2,500 feet. The manholes would be buried with only their lids visible at the surface.

1.1.5 Construction Schedule

Construction is anticipated to begin in January 2001 and to be completed by January 2002 . Each construction spread would require 8 to 15 workers, including foremen, equipment operators, general laborers, compliance monitors, and construction inspectors. Each spread would require several support vehicles and construction equipment depending upon the activities performed. There may be as many as 5 spreads under construction at any one time over the entire route, accounting for approximately 40 to 75 workers, their equipment and support vehicles. Some of the duties of the construction crews may be subcontracted or combined to reduce the overall size of the construction force. Separate specialized crews build the Op Amp stations. These special crews average 5 to 7 workers. Table 1 shows a typical construction crew for each type of construction technique employed.

Table 1. Equipment Used and Typical Daily Construction Progress

Installation Technique	Equipment Used	Typical Progress Per Day
Trench	One backhoe and one compactor	½ mile per day
Pavement cutting	Pavement saw, 1 backhoe, compactor, and asphalt replacement equipment	600 - 1000 feet per day
Directional boring	Trailer-horizontal drill rig	4 drill sites per day
Directional boring	Self-propelled horizontal drill rig	1 drill site per day

1.1.6 Construction Completion and Project Life

The operational life of the conduit is expected to exceed 20 years. The conduit, associated facilities, and right of way will be maintained during the 20-year project life. Maintenance necessary to insure the reliability of the system will be designed to prevent erosion in the right of way. Corrective action will be taken immediately if significant erosion occurs to protect the conduit as well as the right of way and the surrounding lands. No mowing or other vegetation management will be initiated by All Star Telecom, though many of the areas adjacent to where the conduit will be buried are managed for vegetation control annually by the present right of way owners (county, state, and federal road administrators).

2.0 SOURCE IDENTIFICATION

2.1 TOPOGRAPHIC MAPS

No discharges to a municipal storm sewer system or other water body are anticipated along the conduit route through California (Resource Maps).

2.2 SITE MAPS

A set of U.S. Geological Society topographic quadrangle base maps is provided in AT&T NexGen/Core Project Resource Maps (August 2000) showing the route of the AT&T conduit, roads, towns, waterbodies, and general topography both before and after construction.

2.2.1 Areas of Soil Disturbances

Conduit installation along the proposed route will require pavement cutting and soil disturbance of an area approximately 12 inches wide and 42 inches deep.

2.2.2 Surface Water Locations

Due to the linear nature of the Conduit Project, an assessment of the existing hydrology includes identification of streams, rivers, and wetlands crossed by the project (displayed on the Resource Maps). Additionally, Appendix III of the Initial Study lists the streams, rivers and wetlands that would be crossed in RWQCB Region 9 covered in this SWPPP. These waterbodies will be crossed using directional boring or bridge hang techniques. However, when dry washes and dry ephemeral streambeds are crossed, the trench technique will be used. Prior to construction, wetland sites will be identified and delineated to assure impacts to high quality wetland sites will be avoided.

2.2.3 Areas of Existing Vegetation

Very little vegetation will be encountered during construction activities because conduit installation occurs within the ROW of existing roads and within the pavement of those roads in all urban areas. The conduit will be buried in the road pavement between the curbs or within 2' of the edge of pavement, except from mile 186.3 to 186.5 (Link 4), where it will be buried within a 12' of the edge of pavement. Limited clearing of weeds and shrubs may be needed outside of the construction corridor.

2.2.4 Location of Control Practices Used During Construction

Control practices are discussed in the SPCCP, Erosion and Sediment Control Plan, and Directional Bore Contingency Plan, which will be available on-site with the designated inspector responsible for this SWPPP. These plans are included as Appendices I, III, and IV, respectively, of this document.

2.2.5 Drainage Patterns and Slopes Anticipated after Construction Activities are Completed

Drainage patterns and slopes will be unchanged during conduit installation. If modified during conduit installation, slopes will be returned to pre-project contours. No rerouting of drainage around or through the construction project is anticipated. Only the runoff from rain that falls directly on the disturbed area will be allowed to cross it.

2.2.6 Areas Used to Store Soil and Wastes

General construction BMPs (Section 3.3.) will apply to areas designated for the (a) storage of soil or waste, vehicle storage, and service areas; (b) construction material loading, unloading, and access areas; and (c) equipment storage, cleaning, and maintenance areas. These areas will be clearly identified and flagged prior to construction.

Soil Storage

Soil storage requirements will be limited to temporary storage necessary at directional boring locations. Erosion and sediment control BMPs and the Erosion and Sediment Control Plan will be implemented at all temporary soil storage locations (Section 3.3.6.).

Waste Storage

At directional boring locations and streams, drilling muds will be temporarily stored during boring operations. These benitonite-rich fluids are generally recycled, and no long-term or permanent storage is anticipated. The Waterbody General Practices Section (Section 3.3.7) describes the handling and disposal of these wastes. The SPCCP (Appendix I) describes waste handling for inadvertent spill of equipment fuel and fluids. The plan identifies: the type of on-site containment and abatement materials; a list of telephone numbers for agencies required to be notified in the event of an oil or toxic/hazardous waste spill; a list of spill clean-up companies in California; and, clean-up procedures to be followed by the contractor in the event of a spill.

Materials Storage

Material storage other than equipment is not anticipated.

2.2.7 Vehicle and Equipment Storage and Service Areas

Areas designated for (a) vehicle storage and service areas; and (b) equipment storage, cleaning, and maintenance areas have been identified and are found in Table 2.

Table 2. Staging Areas

Staging Area Name	Link & Milepost	City	Type of Facility
Don Argelben	L4-MP 202.6	El Cajon	Construction and equipment yard
Construction Yard	L5- MP 105 (off ROW)	Bonsall	Construction and equipment yard

2.2.8 Existing and Planned Paved Areas and Buildings

Conduit installation will not require the addition of impervious surfaces. Existing paved areas will be repaved following installation, and no net increase of paved area is anticipated.

All Star Telecom will site Op Amp stations at intervals of 50 miles, approximately, along the route. These stations require a parcel of land approximately 2 acres in size. Buildings range in size from 30 feet long, to 29 feet wide to 12 feet in maximum height. Areas around buildings will be graveled not paved. Stations will be located in Pine Valley, and Oceanside.

2.2.9 Post-Construction Control Practices

Post-construction control practices (Sections 3.3.8, 3.3.9, and 3.3.10) including permanent erosion controls and revegetation likely will not be required for the conduit route between El Toro and Live Oak Springs since most of the construction will occur within paved portions of the road ROW. If necessary, post-construction control practices designed to restore the disturbed work areas to pre-project conditions will be implemented in the field by All Star Telecom in accordance with BLM and County specifications.

3.0 NARRATIVE DESCRIPTIONS AND SPECIFIC BMPS UTILIZED DURING PROJECT RELATED ACTIVITIES

Because of the linear nature of the Conduit Project, general BMPs have been developed that will be applied along the length of the project. These BMPs are generic and can be adapted to the site-specific needs of the project. Application and monitoring of the BMPs are the responsibility of the designated inspector with responsibility for implementing this SWPPP. BMPs will be implemented concurrent with the construction schedule. Construction activities requiring BMPs are identified in Table 3. Drainage and Wetland Crossings are referenced on topographic maps supplied in the Resource Maps. The inspector will take into account the local climatic conditions in applying the BMPs along the conduit route. Areas receiving greater precipitation during storm events are identified (Appendix II). The inspector will take storm events into account when implementing BMPs and the guidance of this SWPPP represents the minimum that would be applied. Description sheets of all BMPs used for this project can be found in Appendix V of this document

Table 3. Best Management Practices

BMPs	Drainage Crossings	Wetland Crossings	Op-Amp Construction
CA2 Paving Operations	√		√
CA3 Structure Construction and Painting			√
CA10 Material Delivery and Storage	√	√	√
CA11 Material Use	√	√	√
CA12 Spill Prevention and Control	√	√	√
CA20 Solid Waste Management	√	√	√
CA21 Hazardous Waste Management	√	√	√
CA22 Contaminated Soil Management	√	√	√
CA23 Concrete Waste Management	√	√	√
CA24 Sanitary/Septic Waste Management	√	√	√
CA30 Vehicle and Equipment Cleaning	√	√	√
CA31 Vehicle and Equipment Fueling	√	√	√
CA32 Vehicle and Equipment Maintenance	√	√	√
CA40 Employee/Subcontractor Training	√	√	√
ESC1 Scheduling	√	√	√
ESC2 Preservation of Existing Vegetation	√	√	√
ESC11 Mulching	√	√	√
ESC20 Geotextiles and Mats	√	√	√
ESC21 Dust Control	√	√	√
ESC22 Temporary Stream Crossing	√	√	
ESC24 Stabilized Construction Entrance	√	√	√

BMPs	Drainage Crossings	Wetland Crossings	Op-Amp Construction
ESC50 Silt Fence	√	√	√
ESC51 Straw Bale Barrier	√	√	√
ESC52 Sand Bag Barrier	√	√	√
ESC54 Storm Drain Inlet Protection	√	√	√
ESC57 Directional Bore Drilling	√	√	

As indicated in Section 1.0, the conduit route in Region 9 extends approximately 148 miles in length, and construction activities will occur within a zone generally 25 feet wide. Trench excavation is approximately inches wide. The conduit trench will be filled and compacted with material excavated from the trench. Conduit installation will primarily occur within paved road ROW. Soils beneath the pavement in the road ROW along the conduit route have been disturbed by road construction and represent a mix of disturbed native soils and fill material. Areas adjacent to the edge of pavement consist of a mix of native soil, fill and gravel. There are no known contaminated soils along the proposed conduit route.

3.1 POLLUTANTS LIKELY TO BE PRESENT IN STORM WATER DISCHARGES

Potential sources that are likely to add pollutants to storm water discharges or which may result in non-storm water discharges from the construction site are limited to minor soil erosion on the excavated soil that will be temporarily stored next to the trench. The possibility of fuel and oil spills from construction equipment exists and the SPCCP (Appendix I) describe measures proposed to prevent and mitigate such spills.

3.2 TOXIC AND NON-TOXIC MATERIALS/POLLUTANTS

Potentially hazardous material that are present on the All Star Telecom construction sites consist of fuel (diesel and gasoline) and maintenance materials (lubricating oil, hydraulic oil, antifreeze, and lead acid batteries) for construction equipment. Site activities that may involve the use of these materials include equipment refueling, equipment repair/maintenance, movement between work areas, daily storage, waste management, and incidental spill cleanup. BMPs utilized to avoid exposure of toxic material to the “natural environment” are outlined in Section 3.3.7 and Appendix I of this document.

The SPCCP (Appendix I) identifies the type of on-site containment and abatement materials, list of telephone numbers for agencies required to be notified in the event of an oil or toxic/hazardous waste spill, and clean-up procedures to be followed by the contractor in the event of a spill. A copy of the SPCCP will be retained at each construction worksite. According to the plan, the contractor will have spill control supplier, such as oil absorbent pads and booms, on-site at each construction site where stream/lake surface water is present. The contractor will also have on-site personnel properly trained in spill containment/clean-up to implement spill

control plans in the event a spill occurs. The clean up of all spills will begin as soon as it is safe to do so.

The route will be visually inspected for pre-existing sources of pollution prior to beginning construction. The construction contractor or designated inspector will perform inspections prior to daily construction. Existing site features which, as a result of past usage, may contribute pollutants to storm water, (e.g., toxic materials that are known to have been treated, stored, disposed, spilled, or leaked onto the construction site) will be identified and either the route or the construction activity will be modified to minimize the exposure of storm water to contaminated soil, or toxic materials. If route modification or construction activity will not minimize the exposure of storm water to contaminated soil, or toxic materials, then construction will be halted until BMPs are developed and implemented to minimize storm water exposure.

Directional drilling uses a mixture of bentonite, a natural clay, and water as a lubricant and sealant. Vacuum trucks will be used to collect excess drilling fluids and spoils from drilling pits to recycle the bentonite, and to transport spoils off-site for disposal in accordance with applicable local, state and federal requirements. BMPs utilized to control pollutants during boring activities are described in Section 3.3. The Directional Bore Contingency Plan is found in Appendix IV.

3.3 EROSION, POLLUTANT, AND SEDIMENT CONTROL PRACTICES

Erosion and Sedimentation Process

Soil erosion is the process by which soil particles are removed from the land surface by wind, water, or gravity. Most natural erosion occurs at slow rates; however, the rate of erosion increases when land is cleared or altered and left disturbed.

Sedimentation is defined as the settling out of soil particles transported by water. Sedimentation occurs when the velocity of water in which soil particles are suspended is slowed sufficiently to allow particles to settle out. Sedimentation occurs after erosion has taken place. Effective construction site management involves minimizing excessive soil erosion by keeping the soil stabilized as long as possible and directing runoff from remaining disturbed areas to locations where sediments are removed prior to discharge to water courses.

Sediment from erosion is the pollutant most frequently associated with construction activities. However, other pollutants of concern include nutrients, trace metals, other toxic chemicals and miscellaneous wastes. Nitrogen, phosphorous, and potassium are major plant nutrients used for fertilizing new landscape at construction sties. Heavy use of commercial fertilizers can result in discharge of nutrients to water bodies where they may cause excessive algae growth. Trace metals are found in many types of paints or artificial surfaces located on construction sites. These trace elements often become associated with on-site sediments. Miscellaneous wastes include wash water from concrete mixers, paints, and painting equipment cleaning activities, solid wastes resulting from trees and shrubs removed during land clearing. Discharge of these wastes

can lead to unsightly and polluted waterways. Additionally, pollutants from vehicle leaks or washings vehicles can contribute pollutants to waterways.

General Erosion Control Practices for Upland and Watercourse Areas

For this section of the project, the only exposed soil will be in the temporary soil stockpile placed next to the excavation trench. Erosion control measures will be utilized throughout all phases of operation where sediment runoff from the soil stockpile threatens to enter nearby waterways. Pollutants from project related activities would be controlled through BMPs outlined below and through implementation of the SPCCP (Appendix I).

Vegetation removal during construction will be limited to incidental removal of weeds, with the exception of Link 4, MP 186, where the minimum required for conduit installation will be removed. No phase of the project may be started if erosion control measures cannot be completed prior to the onset of a storm event. Prior to the onset of any storm event that may impact the project site, a sediment barrier, properly constructed of straw bales, or silt filter fabric fencing will be installed, where necessary, to prevent silt laden water from the project site from entering a stream. The sediment barrier(s) will be maintained in good operating condition throughout construction of the project. This includes removal of accumulated silt and/or replacement of damaged bales and fabric fencing. As outlined in the SPCCP, a supply of sediment control materials will be kept on hand and maintained at all times during construction.

Because this section of the project is either on or adjacent to paved roads, all sections of the ROW will be accessible during and after rain events. Erosion control inspection and maintenance crews will inspect portions of the ROW considered to be susceptible to erosion as soon as it is determined safe to do so.

During months with higher precipitation, historically December through April (Appendix II), erosion control measures will be in place at the close of business every evening.

3.3.1 Practices to Reduce Tracking Sediment onto Public and Private Roads (ESC24)

To reduce the tracking of sediment from soil stockpiles onto public or private roads, all access points used by installation equipment during directional boring will utilize sediment barriers such as gravel and fabric underliner to facilitate sediment removal. Should sediment be tracked onto roads, the roads will be mechanically removed. Accumulated sediment or silt will not be swept into the storm drain systems.

3.3.2 Wind Erosion Control Practices (ESC21, ESC1, and ESC11)

Dust Control Practices

Wind erosion is not anticipated to be a problem for the Conduit Project due to the small area of ground disturbance caused by construction activities. Should dust control be needed, mulching or wetting of wind erodible surfaces will be used for dust control until the stored soil can be placed

back in the trench. An effort will be made to disturb only small portions of the construction area at any one time and open trenches will be closed and stabilized as soon as possible.

Sweeping

Windblown material will be swept from adjacent road areas, as needed. Accumulated sediment or silt will not be swept into the storm drain system.

3.3.3 Practices to Minimize Contact with Storm Water (ESC 54)

The contractor will place and maintain silt barriers, such as sand/gravel bags, around the storm drain inlets until the threat of erosion from nearby construction ceases. The contractor will remove silt collected around the silt barriers on an as needed basis to prevent silty/turbid water from flowing around the silt barriers during storm events.

In order to minimize the risk to storm water from contact with construction vehicles and equipment and construction materials, the SPCCP prepared for this project will be followed (Appendix I).

3.3.3.1 Construction Vehicles and Equipment

Maintenance (CA32)

Construction vehicles and equipment will be maintained to prevent leaks of fuel and other fluids. Vehicles will be kept clean to prevent buildup of oil and grease. Off-site repair shops will be used. A supply of cleanup materials will be kept on-site where construction equipment operates. Vehicles and equipment will be inspected for leaks and repaired immediately. Vehicles and equipment coming onto the construction site will be inspected for leaks and not allowed on-site if leaking. During construction activities, vehicles will park in the construction corridor. Wastes for vehicles and equipment will be segregated and recycled.

Fueling (CA31)

On-site fueling will be located at least 100 feet away from drainages or waterways. On-site storage tanks will not be used during this project. Oil changes occurring on-site will use drip pans to collect waste oil for recycling and drop cloths to catch any spill or leaks.

Washing (CA30)

No equipment or vehicle wash will occur on-site. If washing is needed, commercial facilities will be used.

3.3.3.2 On-Site Materials (CA10, CA11)

All material received and stored on-site will be recorded and the list will be maintained and updated on-site by the person with responsibility for implementing this plan.

With the exception of vehicles and equipment, conduit to be installed, and spill response material, little material will be used or stored on-site. On-site materials will be kept to the minimum needed for construction. Designated areas of the construction site for material delivery and storage will be located near construction entrances, away from waterways. Conduit installation is expected to proceed at a pace of several miles a day, thus precluding long-term storage materials on-site.

The SPCCP provides procedures that will be utilized during the project to prevent spills and contain and clean up incidental spills (Appendix I).

3.3.3.3 Waste Management and Disposal (CA20)

Little construction waste will be generated during conduit installation. The following describes the waste management and disposal anticipated for the Conduit Project.

Concrete Washout (CA23 and CA20)

On concrete sections of the road ROW, the concrete may be removed for installation. In these cases, the concrete will be replaced. Concrete washouts are responsibility of the concrete subcontractor and washouts will take place off site.

Concrete/Asphalt (CA2, CA23 and CA20)

Concrete and asphalt debris resulting from conduit installation will be recycled when nearby facilities exist. Otherwise, debris will be gathered and disposed of in local landfills that accept construction wastes.

Existing paved areas will be repaved following conduit installation. Measures will be employed to prevent runon and runoff pollution. The asphalt subcontractor will be responsible for disposing of waste materials offsite.

Contaminated Soil (CA22)

There are no known sources of contaminated soil along the conduit route. Excavation inspections will be conducted regularly to identify potentially contaminated soil

Miscellaneous Wastes and Drilling Fluids (ESC 20, ESC 51, ESC 57)

Minor amounts of miscellaneous waste generated from conduit installation will be cleaned up and disposed of in local landfills that accept construction wastes.

Drilling muds, inert bentonite clay and water slurry, will generally be recycled for use at other directional boring locations. Excess and waste drilling fluids will be contained (straw bales). If the amount of returns exceeds that which can be suitably contained with hand placed containment barriers, then small collection sumps (less than 3.8 cubic meters) could be used. The boring contractor is responsible for removing all drilling fluids and properly transporting the

materials off-site for disposal in accordance with all applicable local, state and federal requirements. Vacuum trucks will be used to collect excess drilling fluids from drilling pits, recycle the bentonite, and to transport this material offsite for disposal. All spilled materials will be disposed of in a manner that is acceptable to local, state and federal regulatory agencies. Minor amounts of drilling fluids left behind after cleanup will be flushed with a sufficient quantity of water to disperse the clay into the local soil substrate without causing erosion or transport of clays or wash water to waterbodies or storm drains. All erosion and sediment control BMPs described in this SWPPP and the Sediment and Erosion Control Plan (Appendix III) apply to disposal of drilling fluids. These BMPs include using silt fencing and staked straw bales to protect water courses and revegetation (if necessary) of drilling fluid disposal sites. As mentioned earlier, a SPCCP has been prepared for this project (Appendix I). Prior to construction spill response material will be on-site and construction crews will be trained in spill response.

3.3.4 Non-Storm Water Management

The AT&T Fiber Optic Conduit Installation Project will not produce discharges of non-storm water. Drill fluid management and accidental spill management is addressed in Section 3.3.7.

3.3.5 Preconstruction Control Practices

Boundaries of the clearing limits and easements will be clearly flagged in the field prior to construction. All sensitive areas, including water bodies that will be crossed, will also be flagged before construction. During the construction period, no disturbance beyond the flagged clearing limits will be permitted. Flagging will be maintained by the permittee/contractor for the duration of construction.

3.3.6 General Practices – Trenching

Temporary erosion controls, as outlined below will be installed immediately after initial disturbance of the soil and properly maintained throughout construction and reinstalled as necessary until replaced by permanent erosion controls. Structural practices that will be used to limit runoff from exposed areas of the site are described in this section. Conduit installation will occur as soon after trenching as practicable to minimize exposure of soils to wind and water erosion.

Preservation of Existing Vegetation (ESC2)

An effort will be made during all upland construction activities to preserve existing vegetation in and outside of construction areas. Additionally, construction traffic routes, spoil piles, etc. will be located to avoid significant adverse impacts to existing vegetation.

Op-Amp construction sites will be cleared of vegetation to a depth of 1 foot below the original ground surface. The limits of grading will be clearly marked. Vegetation will be disposed of at an approved off-site facility.

Dust Control Measures (ESC21, ESC1, and ESC11- also refer to section 3.4.2)

To stabilize cleared soil from wind erosion and reduce dust generated by construction, construction traffic will be directed to stabilized roadways within the project site where possible. Prior to construction activities, an evaluation will be made of the direction of prevailing winds, and, where possible, excavated soils will be placed on areas where wind velocities are low. If wind erosion is observed on excavated or cleared soils, these areas will be wetted or mulched to stabilize the soils.

Temporary Sediment Barriers (ESC50 and ESC51)

Temporary sediment barriers, such as straw bales, silt fences or sand bags are intended to stop the flow of sediment and will be used to prevent sediment from upland construction from entering waterways. Silt-laden runoff water from upland road areas will be intercepted before it enters streams.

Temporary sediment barriers will be installed at the base of slopes, adjacent to road crossings. Excavated soil stockpiles will be kept at least 100 feet from the edges of streams and will be isolated with an earthen dike, silt fence, or straw bales. A silt fence and/or straw bales will contain saturated topsoil. If wind erosion is a problem during construction, the soil stockpiles will be lightly watered to reduce soil blowing.

Straw bales will be staked and placed such that the lengths of straw run perpendicular, and the strings run parallel to the slope of the ground.

Temporary sediment barriers displaced during a day's construction are to be replaced as soon as practicable. All bales are to be replaced prior to leaving the construction site at the end of the day. If weather conditions are such that rain in imminent, all bales will be replaced immediately. During construction, erosion control devices will be inspected daily and repaired as necessary. Trapped sediments will be removed when sediment barriers reach 40 percent capacity.

Structure Construction and Painting (CA3)

Op Amp facilities will be constructed in San Diego County near the towns of Oceanside and Pine Valley. Construction will be subject to the terms and conditions of building permits issued by the City of Oceanside and San Diego County.

3.3.7 General Practices – Waterbody Crossing

Construction Control Measures (ESC 22)

Wetlands and Waterbodies will be crossed using bridge hang or directional boring techniques. These techniques essentially preclude the disturbance of channels, beds, banks and associated riparian areas. Boring equipment will be set back a sufficient distance from the edge of the waterbody to permit the boring to occur 10 feet below the crossings and associated riparian

vegetation exclusion zones. Dry washes and dry ephemeral streambeds will be trenched and restored to pre-construction conditions upon project completion

Preservation of Existing Vegetation (ESC2)

No vegetation clearing will be permitted in riparian areas or dry washes.

Hazardous and Non-Hazardous Waste Management (CA21 and CA31)

Hazardous materials, chemicals, fuels, lubricating oils, or concrete coating activities will not be stored within 100 feet of any waterbody or within any designated municipal watershed area (except at locations designated for these purposes by an appropriate governmental authority). All Star Telecom will refuel all construction equipment at least 100 feet from waterbodies. All construction equipment must be refueled more than 100 feet from a waterbody.

All soil and drilling fluids will be kept outside the riparian exclusion zone. Sediment barriers will be used to prevent the flow of soil into any waterbody. Drilling fluids will be collected and disposed of in accordance with all applicable local, state, and federal requirements.

When drilling under waterways, special care must be taken to preserve water quality and prevent any chance of violating state water quality or health and safety standards. Material Safety Data Sheets (MSDSs) must be available at each drilling site to describe worker safety and environmental protection from products utilized.

Spill Prevention, Containment and Accidental Fracout Procedures (CA12 AND ESC57)

Where a bridge hang is not feasible, directional drilling will be used to avoid disturbance of wetlands, wet or dry channels, beds, banks, and associated riparian corridors. Best management practices will be utilized to prevent or reduce the discharge of drilling fluids. Prevention and reduction of pollutants involved activities will be undertaken during the design, setup and operation phases combined with sound training and spill protocols. A description of this drilling method is included in the Directional Bore Contingency Plan (Appendix IV).

Drilling fluids are composed of a water and clay bentonite mixture. The amount of bentonite used in the mixture is dependent upon the type of formation. Loose, sandy materials require a thicker mixture than clay or rock formations. Bentonite is a naturally occurring mineral and has a tan to gray in color. Bentonite has been approved as a drilling fluid additive by the National Sanitation Foundation (NSF) in accordance with NSF 60 and 40 Code of Federal Regulations (CFR), Part 141.111. MSDSs for bentonite under various trade names will be available at drilling sites.

3.3.8 Post-Construction Soil Stabilization for Both Upland and Waterbody Crossings

The ROW will be restored and permanent erosion control measures will be installed within 10 days of trench backfilling if weather and soil conditions permits.

3.3.9 Post-Construction Storm Water Management

Following conduit installation All Star Telecom will fill the trench, replace paving, and restore the ROW to its preconstruction conditions.

3.3.10 Maintenance, Inspection and Repair of Control Structures

As described above, temporary erosion controls will be installed immediately after initial disturbance of the soil and properly maintained throughout construction and reinstalled as necessary until replaced by permanent erosion controls or restoration is complete.

Responsibility for inspection, maintenance, and repair of control structures belong to the on-site All Star Telecom individual designated to implement this SWPPP. This person will be on-site during construction to ensure and document compliance with this plan. Information concerning the timing of all major construction activities will be recorded. All such information will be maintained on-site or with the permitee as required in the General Permit.

The designated person with responsibility for implementation of this SWPPP will have peer status with all other activity inspectors and have the authority to stop activities that violate the environmental conditions of the Storm Water General Permit or other authorizations and order corrective action.

The designated person with responsibility for implementation of this SWPPP will:

1) Verify that the limits of authorized construction work areas are properly marked.
2) Identify stabilization needs in all areas.
3) Locate control structures to ensure they will not direct sediment into known cultural resources sites or locations of sensitive species.
4) Ensure that temporary erosion controls are properly installed and maintained daily, if necessary.
5) Inspect temporary erosion control measures at least:
   - on a daily basis in areas of active construction or equipment operation
   - every two weeks in areas with no construction or equipment operation
   - each 24-hour period during storm events
6) Ensure the repair of all ineffective temporary erosion control measures within 24 hours of identification.
7) Keep records of compliance with the environmental conditions, and the mitigation measures proposed by All Star Telecom.

Table 4 indicates the individuals, by name and telephone number who are responsible for administering this SWPPP and inspecting stormwater controls. When site-specific contacts ate hired, their contact information will be provided.

Table 4. SWPPP Administration and Inspection Contacts

Title	Contact	Telephone Number
All Star Telecom General Manger	George Foster	
(Pending)		

4.0 SPILL PREVENTION AND CONTROL

All Star Telecom has prepared a separate SPCCP for the conduit installation in RWQCB Region 9. A copy of the SPCCP is included in Appendix I.

All spills will be reported to local authorities (see SPCCP in Appendix I for contact numbers) and major spills will be reported to the California Emergency Response Center, (916) 323-3600, which serves as the coordinator of spill response in the State of California. Spill of Federal reportable quantities will be reported to the National Response Center at (800) 424-8802.

Minor Spills

The SPCCP addresses minor spills by:

- Stopping the source and containing the spill
- Cleaning up the spill on impermeable surfaces using absorbent pads
- Cleaning up the spill on dirt or soil by containing the spill in an earthen dike then excavating and disposing of the contaminated soil at an approved facility
- Covering the spill area to avoid runoff should the spill occur during precipitation events.
- Recording all steps taken to report and clean up the spill.

Major Spills

Major spills will be reported to Governor's Office of Emergency Services Warning Center at (800) 852-7550. All Star Telecom will make its installation equipment and crews available for clean up of spills. A spill response contractor will be retained by All Star Telecom to assist in the cleanup, if needed.

5.0 PERSONNEL TRAINING (CA40)

All construction crews will receive training in spill response and BMP applications. This SWPPP, the SPCCP, and a copy of the General Permit for storm water discharge will be maintained on site at all times. Construction foremen and supervisors have copies of the SWPPP and SPCCP.

The person responsible for implementing the SWPPP and SPCCP, which includes maintenance, repair, monitoring, reporting, and inspections will have experience in similar liner projects (such as pipeline construction or electrical transmission lines) or will be trained by someone experienced with these types of projects.

All Star Telecom will maintain (as an amendment to this SWPPP) ongoing training on storm water pollution prevention received by the persons responsible for creating, revising, overseeing, and implementing the SWPPP (Figure 1).

Figure 1. Stormwater Pollution Prevention Plan-California Training Form

Date: _____

Location: _____

Trainer: _____

Person(s) receiving training: _____

Training Topics Covered:	Yes	No
Review and discussion of SWPPP		
Best Management Practices including pollution control measures		
Materials management		
Good housekeeping		
Spill response		
Proper selection of pollution control measures		
Proper maintenance techniques		
Review and discussion of SWPPP inspection form		

Other Topics:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

6.0 LIST OF CONTRACTORS/SUBCONTRACTORS

All Star Telecom will employ a number of subcontractors for all phases of conduit installation in California. An initial list of contractors appears here. This list will be updated as necessary.

[Contact Information Pending]

7.0 MONITORING

7.1 GENERAL PLAN SUMMARY

The construction general permit requires that a monitoring, inspection, and maintenance plan with the following objectives be a component of the SWPPP:

- To inspect BMPs annually, as well as prior to and after a storm event
- To aid in implementation of the SWPPP
- To measure the effectiveness of the BMPs

To meet the objectives, the monitoring effort has these elements:

7.2 SITE INSPECTIONS

Prior to anticipated storm events and after actual storm events All Star Telecom will inspect the construction site(s) to identify areas contributing to storm water discharge from associated construction activity. During extended storm events, All Star Telecom will inspect the active construction route each 24-hour period. BMPs identified in the SWPPP will be evaluated for adequacy and proper implementation as well as whether additional BMPs are required in accordance with the terms of the General Permit. Non-storm water discharges are not planned with this conduit installation project.

For each inspection required above, the All Star Telecom inspector(s) will complete a Best Management Practices Inspection Checklist (Figure 2). At a minimum, an inspection checklist will include:

- Inspection date
- Name of individual performing inspection
- Weather information: best estimate of beginning of storm event, duration of event, time elapsed since last storm and approximate amount of rainfall (inches)
- Efficiency of BMPs including identification of improperly implemented and/or deficiently designed BMPs
- Observations of all BMPs: erosion controls, sediment controls, chemical and waste controls, and non-storm water controls
- Corrective actions required, including any changes to SWPPP, as necessary, and implementation dates
- Inspector's name, title, and signature

FIGURE 2 - Best Management Practices Inspection Checklist

Location _____ Date _____ Weather Conditions (24 hr) _____

Map Ref # _____

Name _____ Signature _____ Construction Supervisor _____

Contractor Activity / BMPs	Yes	No	Does Not Apply	Is BMP Effective
Reduce Sediments on Private Roads				
ESC24-Stabilize Construction Entrance				
Wind Erosion				
ESC21-Dust Control				
ESC1-Scheduling				
ESC10-Seeding and Planting				
ESC11-Mulching				
ESC23-Construction Road Stabilization				
Construction Vehicles and Equipment				
CA-32 Vehicle and Equipment Maintenance				
CA31-Fueling				
CA30-Washing				
On-site Materials				
CA10-Materials Delivery and Storage				
Waste Management				
CA20-Soils Waste Management				
General Practices-Upland Construction Activities				
ESC2-Preservation of Existing Vegetation				
Dust Control				
ESC21-Dust Control				
ESC10-Seeding and Planting				
ESC11-Mulching				
ESC23-Construction Road Stabilization				
Sediment Barriers				
ESC50-Silt Fence				
ESC51-Straw Bale Barriers				
Temporary Slope Treatment				
ESC20-Geotextiles and Mats				
Trench Plugs				
CA1-Dewatering Operations				
ESC55-Sediment Trap				
ESC41-Check Dams				
ESC51-Straw Bale Barriers				
Slope Barrier and Water Bars				
ESC51-Straw Bale Barriers				
ESC52-Sand Bag Barrier				
ESC53-Brush or Rock Filter				
General Practices Waterbody and Wetland Crossings				
ESC2-Preservation of Existing Vegetation				
Hazardous Waste Management				

FIGURE 2 - Best Management Practices Inspection Checklist

List actions taken to correct deficiencies and dates of corrective actions:

List areas where construction operations have stopped to make correction to deficiencies:

Other comments:

Signed:

Permittee or person performing inspection if duly authorized

Date

FIGURE 2 - Best Management Practices Inspection Checklist

RECORD OF SPILLS AND LEAKS

Date of Spill/Leak	Location	Type of Material	Quantity	Reason

Weather Conditions:

Response Action Taken:

Preventative Measures:

Date of Spill/Leak	Location	Type of Material	Quantity	Reason

Weather Conditions:

Response Action Taken:

Preventative Measures:

The All Star Telecom inspector(s) will prepare their inspection checklists using the inspection checklist form provided by the State Water Board or Regional Water Board or on forms that contain the equivalent information.

7.3 COMPLIANCE CERTIFICATION

All Star Telecom will certify annually that its construction activity is in compliance with the requirements of the General Permit and this SWPPP. This Certification will be based upon the site inspections required in the General Permit. The certification will be completed by July 1 of each year.

7.4 NONCOMPLIANCE REPORTING

Should All Star Telecom be unable to certify compliance in accordance with the General Permit and/or who have had other instances of noncompliance, All Star Telecom will notify the appropriate Regional Water Board within 30 days. The notifications will identify the noncompliance event, including an initial assessment of any impact caused by the event; describe the actions necessary to achieve compliance; and include a time schedule subject to the modifications by the Regional Water Board indicating when compliance will be achieved. Noncompliance notifications will be submitted within 30 days of identification of noncompliance and this SWPPP will be updated accordingly.

7.5 RECORDS

All Star Telecom will retain Records of all inspections, compliance certifications, and noncompliance reporting for a period of at least three years from the date generated.

8.0 SWPPP AVAILABILITY AND AMENDMENT PROCEDURES

Applicable regulations require that All Star Telecom maintain a copy of this SWPPP on each project location and that copies of the SWPPP be made available for review upon reasonable request.

Copies of the All Star Telecom SWPPP are maintained for review upon reasonable request at:

Foster Wheeler Environmental Corporation
1940 E. Deere Avenue, Suite 200
Santa Ana, CA 92705
Phone: 949-756-7500

or

All Star Telecom
2420 Grand Avenue, Suite G2
Vista, CA 92083
Phone: 760-597-2130

If needed, All Star Telecom will develop Certified Amendments to this manual (Figure 3). The changes that may affect the SWPPP include schedule changes, phasing changes, off-site drainage impacts, and repeated failures of designed controls. The changes will be made know and the SWPPP will be revised accordingly. During the preparation and review of the modified SWPPP, construction may continue with temporary modifications to the erosion and sediment control BMPs.

Figure 3. All Star Telecom Amendment Log

Log # _____

Project Location (Mile Post ID)	Amendment Number	Date	Reason for Amendment	Amendment Prepared by

I certify under penalty of law that this amendment was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name _____ Title _____

Signature _____ Date _____

APPENDIX I

SPILL PREVENTION, CONTAINMENT, AND CONTROL PLAN (SPCCP)

APPENDIX I

SPILL PREVENTION, CONTAINMENT, AND CONTROL PLAN (SPCCP)

AT&T, Corp. NEXGEN/CORE Fiber Optic Conduit Installation Project

Prepared for:

All Star Telecom

Prepared by:

Foster Wheeler Environmental Corporation
1940 E. Deere Avenue, Suite 200
Santa Ana, CA 92705

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ATTACHMENT

INTRODUCTION

The intent of this Spill Prevention, Containment, and Control Plan (SPCCP) is to outline practices to prevent, minimize, and/or clean-up potential spills during construction of a fiber optic conduit which runs from El Toro to eastern San Diego totaling 148 miles.. This plan establishes emergency response procedures and lines of communication and responsibilities. It also restricts the location of fuel/hazardous material storage and construction equipment maintenance along the construction right-of-way (ROW) and describes procedures and materials to contain and clean-up spills of these materials, should they occur. The goal of the plan is to:

1. Minimize the potential for a spill of these materials.
2. Contain any spillage to the smallest area possible.
3. Protect areas that are considered environmentally sensitive (streams, wetlands, etc.).

All Star Telecom will comply with all environmental and safety laws and regulations and provide the necessary training and equipment to prevent pollution during construction of the pipeline project. All Star Telecom intends to do everything practicable to minimize the potential for and consequences of a spill if one occurs.

The Environmental Inspector (EI) will assure that a copy of this plan is available (on-site) to all construction crews.

PROJECT DESCRIPTION

AT&T Communications Inc., and PF.Net (AT&T/PF.Net) is constructing a buried set of fiber optic conduits from Los Angeles to San Diego and continuing through to Blythe, California, to increase the capacity of their nationwide fiber optic network. The project will be constructed by All Star Telecom. The conduit will be installed using conventional trenching, plowing, rock sawing, and directional drilling methods. The conduit route addressed in this report is in RWQCB Region 9 and consists of two links totaling 148 miles. Link 5 begins near El Toro in Orange County and runs 88.5 miles south to downtown San Diego (MP 63 to 151.5). Link 4 then runs eastward 59.5 miles to the Imperial County border (MP 160.5 to 220) In total, six 1½ inch ducts will be installed in a trench approximately 42 inches deep. Actual trench width is between 6 and 12 inches. All Star Telecom plans either directional boring or bridge hangs for all water crossings.

SITE PREPARATION

Site preparation for areas within the clearing limits of road right of way will not be necessary. Where installation occurs within the right of way but outside the clearing limits, site preparation may include weed or brush removal, rock removal, or pavement cutting..

INSTALLATION

Facilities to be installed include conduit, regeneration stations and access vaults.

Conduit Placement

Conduit will be installed by trenching, directional boring, or by bridge hanging. After the conduit is laid in the trench, the trench will be backfilled and re-paved.

Directional boring or drilling is a process whereby a hole would be bored utilizing guidance equipment to provide continuous, accurate monitoring of the drill bit position. Duct would be placed in the drilled hole going from one side of the crossing to an exit on the other side, without disturbing the stream banks, roads or other sensitive resources or uses. The boring process would be lubricated with natural mineral clay materials that also serve to seal the walls of the borehole.

The attachment of fiber optic cable to bridges is accomplished by placing a steel pipe on the exterior portion of the bridge, generally at or below the level of the roadbed. The diameter of the steel pipe is determined by the number of ducts that would be attached to the bridge, the greater the number of ducts, the larger the diameter of the pipe. The pipe is secured to the bridge by drilling holes into the concrete exterior of the bridge structure on either side of the pipe, and setting threaded bolts with epoxy grout. The pipe is then fastened to the bridge with metal pipe straps, which consist of two ear straps, chisel point studs, nuts, washers, and epoxy capsules for anchoring. Epoxy grout is used at both ends of the bridge head wall to seal the sleeve and pipe between the ground and the bridge attachment. A handhole/manhole would be installed on either end of the bridge for cable slack and to serve as assist points for cable routing. The handhole/manholes would each contain a minimum of 100 feet of slack cable.

Optical Amplification Facilities

To maintain integrity of signals being transmitted over the new system, signals will need to be optically amplified approximately every 50 miles at Optical Amplification facilities Easement arrangements are made with private property owners to site these stations, which require a parcel of land approximately 2 acres in size. The building sizes are one building 48 in.-2.5 in. long by 29 ft wide by 12 ft tall and four precast concrete buildings, each 11 ft 8 in. wide, 10 ft. 8 in. tall, and 30 ft. long. Each area requires a diesel-powered generator designed to provide back-up power in case of electrical distribution outage. The back-up generator and a 336-gallon fuel storage tank are located outside each of the building areas. The generator and fuel tank are a single unit, with the double-walled fuel tank mounted below the generator in a concrete catch basin and accessible through a utility panel on the side of the generator. The generator is contained within a separate enclosure approximately 8 by 10 by 4 ft tall, with utility access panels along one side. The concrete catch basin will be inspected will be inspected regularly to detect leaks. A spill prevention control and counter measure plan is not required for this facility pursuant to CFR 40 § 112.1, because the tanks are smaller than 660 gallons individually and 1320 gallons collectively.

Access Vaults

Utility access vaults and manholes would be placed as necessary to assist in cable installation and maintenance at intervals of approximately 2,500 feet along the project alignment. For the majority of the project, buried utility access vaults would be used. The utility access vaults would measure 2.5-feet by 4-feet by 2-feet. In some areas, manholes would be used instead of utility access vaults. Manholes measure 4 by 4 by 6 feet and would be placed at intervals of 2,500 feet.

Construction Schedule

Construction is anticipated to begin in January 2001, and to be completed by January 2002. Each construction spread would require 8 to 15 workers, including foremen, equipment operators, general laborers, compliance monitors and construction inspectors. Each spread would require several support vehicles and construction equipment, depending upon the activities performed. There may be as many as 5 spreads under construction at any one time over the entire route, accounting for approximately 40 to 75 workers, their equipment and support vehicles. Separate specialized crews build the regeneration stations. These special crews average 5 to 7 workers. Some of the duties of the construction crews may be subcontracted or combined which could reduce the overall size of the construction force.

SITE RESTORATION

All roads will be restored to their pre-construction condition.

HAZARDOUS/TOXIC MATERIALS USED DURING CONSTRUCTION, OPERATION, AND SPILL PREVENTION

Potential spills from construction and operation are limited primarily to: (1) diesel used to fuel construction equipment and backup generators; and (2) lubricating oils and hydraulic fluid used in construction equipment.

Hazardous substances, chemicals, fuels and lubricating oils will not be stored within 100 feet of stream banks or wetlands to prevent them from reaching waterways. No construction equipment refueling or maintenance of equipment will be allowed within 100 feet of any stream bank or wetland or within 100 feet of sensitive plant populations or groundwater wells. At regeneration stations diesel fuel will be stored in tanks within an approved containment system.

Strategic placement of these materials will be the first step in reducing the potential impact of a spill to the environment. The location of all fuel storage and refueling areas, other material storage areas and construction equipment maintenance areas will be clearly identified and their limits staked in the field.

The second step requires the construction contractor to visually inspect equipment tanks for cracks, excessive corrosion or other flaws that may compromise their integrity. Hoses and valves will be similarly inspected. If the construction contractor determines that the equipment is in good mechanical condition, it may be moved onto the construction right of way. Otherwise, the equipment will be rejected and alternative equipment in good condition employed. Each tank will be similarly inspected as it is moved down the construction right of way.

The third step requires the construction contractor to inspect the integrity of the fuel containment area and repair the structure or replace the liner immediately if they become breached or torn. Catch basins or fuel/oil pans will be installed at each of the fueling locations to collect residual materials which may drain from hoses used to fuel the construction equipment. Draining of hoses will be occur in designated maintenance areas. Materials collected in the catch basin, fuel/oil pan, or spillage collected in the liner will be stored in 55-gallon drums and sent off-site to an approved recycling facility.

Lubricants will be drained from the construction equipment in maintenance areas. Before drainage occurs, a layer of at least 10-mil plastic liner will be placed under the equipment to collect any spilled material. Spilled material will be drained from the liner and recycled with the fluids removed from the construction equipment. Under no circumstances will the construction contractor allow material from the liner to spill onto the ground surface.

PROPOSED TRAINING PROCEDURE

All Star Telecom employees and subcontractors responsible for spill reporting, containment, and cleanup, or be involved with transporting or handling fuel or fueling and maintaining construction equipment, will be required to complete spill training prior to the start of construction. This training program will be implemented in the field.

The training program will incorporate the following:

1. Review of the provisions of the SPCCP and discussion responsibilities of each employee.
2. Location of spill control materials and operation of spill prevention and control equipment.
3. Inspection procedures for construction equipment and hazardous materials location.
4. Spill reporting procedures.
5. Phone numbers and verifications of correctness.
6. Contractor/employee responsibility in the event of a spill.
7. Maintenance and monitoring requirements for possible sources of spills.

RESPONSE TEAM CONFIGURATION AND AGENCY NOTIFICATION

The California Emergency Response Center (916-323-3600) (Response Center) serves as the coordinator of spill response in the State of California. The Response Center determines the severity of spills and contacts the appropriate local agency. Local emergency response contact numbers are also provided in the event that a spill involves injuries or fire. The Response Center also maintains an up-to-date list of approved disposal facilities to accept spill related contaminated soils and clean-up materials.

CALIFORNIA STATE SPILL/RELEASE RESPONSE CONTACTS

Contact Name	Title or Location	Phone Number
TBD	Environmental Inspector	TBD
TBD	Authorized Alternate	TBD
TBD	Construction Contractor	TBD
TBD	All Star Telecom Representative	
Orange County Highway Patrol		(949) 223-5450
San Diego County Highway Patrol		(619) 220-5492
California DTSC Emergency Response (8 am to 5 pm)		(916) 323-3600
Governor's Office of Emergency Service		(916) 262-1621 (800) 852-7550
National Spill Response Center		(800) 424-8802
Los Angles County Fire Department		(323) 881-2455
South Orange County Fire Department		(949) 770-6016
San Diego County Fire Department- Camp Pendleton		(619) 725-3375

SPILL RESPONSE CONTRACTORS

Contact Name	Title or Location	Phone Number
TBD		TBD
TBD		TBD
TBD		TBD

EMERGENCY COORDINATOR

At all times, the EI will be designated as the Emergency Coordinator, with responsibility for coordinating all emergency response measures. The EI will be thoroughly familiar with all aspects of the construction activities, the location and characteristics of all hazardous substances and wastes handled, the location of all records associated with the construction spread, the location and condition of spill control materials, and the spread layout. Furthermore, the EI has been trained and has the authority to commit the necessary resources to implement this plan.

If a spill occurs, only those persons involved in the oversight or performance of emergency operations will be allowed within the spill area.

EMERGENCY EQUIPMENT

Emergency response equipment will be kept on hand and maintained at all times during construction. While construction activities are ongoing, the construction site will have fire extinguishers and related emergency response equipment on hand. All such equipment will be inspected daily for operability and accessibility. The location of fire extinguishers and related emergency response equipment will be clearly marked with signs. Each foreman in charge of construction will be provided with and will maintain a readily accessible copy of this plan.

Prior to any construction activity, spill adsorbent material to handle a spill of diesel fuel or other hazardous materials will be stored in the project area. At a minimum, a supply of the following spill control materials will be located in the project area prior to construction activities:

- One bale of Universal absorbent pads (200 count)
- 500 Foot of 6- or 8-inch diameter absorbent skimmer boom material (Pigalog SA2010 or equivalent)
- 50 packages of heavy duty trash bags
- 10 Universal absorbent particulate pillows
- 10 straw bales

All Star Telecom will designate a single employee to be responsible for maintenance of this equipment. Also, all fuel trucks will be supplied with one bail of absorbent pads.

EMERGENCY RESPONSE PROCEDURES

This is a guideline for site personnel to follow in the event of a hazardous materials spill associated with project activities. These materials include fuel oil, gasoline, hydraulic fluid, lubricants, antifreeze, and lead-acid batteries. In cases of an imminent or actual emergency situation, the person observing the incident will implement the procedures outlined in the following sections.

INITIAL RESPONSE

- Make every effort to stop the source of the spill
- Warn all personnel at the construction site
- Immediately contact the EI and report your name, location, and the nature and extent of the incident

The first rule of response to any spill is to contain the spill to the smallest area possible and stop the spill from reaching a waterway or other sensitive area (i.e., a groundwater well). The following procedures are recommended for containment of small spills:

1. For a spill on the ground surface where it can be blocked, construct a ditch or dike to stop the flow of the spilled material and contain the spill to the smallest area possible.
2. In a moving water channel, set up a barrier as follows:
   a) Dam the channel with a bypass siphon or tube.
   b) Use a straw barrier.
   c) Install additional booms if the water is deep enough to float the boom.
   d) Excavate a side pool or holding pond to isolate the spilled material.
   e) Channel the water around the spilled material.

Use the following procedures for major spills:

1. For a spill on the ground where it can be blocked using a backhoe or other cleanup equipment, construct a ditch or dike to stop the flow of the spilled material and contain the spill to the smallest area possible.
2. Remove the spilled material into a 55-gallon drum, on-site containment structure, or a vacuum truck.
3. Provide for water removal, if it is raining.
4. In a moving water channel, set up a barrier immediately. It may be necessary to provide more than one barrier downstream. Install as many barriers as needed to contain the flow of the spill material. Side channels can be used with collecting ponds, and it will be necessary to pick up the accumulated spilled material. All fuel or oil or traces of fuel or oil must be soaked up with straw or other absorbent material.

Containment devices suitable for field application include:

- **Earth Fill Dams**—An earth fill dam, in one form or another, is commonly used for spill containment. Dams of this type may range from simple, naturally constructed fills to more elaborate controlled-flow structures designed to trap petroleum products on water. Ideally, a spill should be caught in its earliest stage close to the source, thus permitting the simplest means of containment and recovery, and with minimal damage to the environment.
- **Sand Bagging**—Sand bagging may offer the best means of controlling a spill in congested areas or on paved surfaces where dirt moving, trenching, etc. is not practicable. This type of containment dam can be rapidly constructed and requires no specialized equipment. Combining these advantages may well be the key to containing the spill close to the source, which is a prime objective.
- **Straw Barriers**—Experience with straw barriers has demonstrated effectiveness not only as an absorbent medium, but as an underflow type containment dam capable of backing up an oil film several inches in thickness. An oil layer up to four inches thick can be held for several hours before significant leakage is detected. Second and third stage barriers should be placed immediately downstream if leakage did occur.
- **Diverting booms**—When a spill occurs in a moving stream, one retrieval method to consider is diverting the product to a backwater area so skimming devices can be used. Personnel and equipment must be concentrated downstream of the leading edge of the spill so that a minimum of three or four hours of working time is available. A location along a low bank or gravel bar in the stream bed should be selected for an operational site.

SPILL RESPONSE

If a spill occurs, the release will be contained to the extent possible, and any hazardous material, contaminated materials, or soil will be cleaned up as soon as possible. The following general procedures will be used for rapid and safe response and control of the situation and to prevent the recurrence or spread of a release.

Hazard Assessment

If a spill is discovered, the employee will immediately report it to the EI and provide the following information:

- The material spilled or released
- The location of the release or spillage of hazardous materials
- The location in which the spill is heading
- The rate at which the spill is released
- Any threat to waterways
- Any injuries involved

This information will help the EI to assess the magnitude and potential seriousness of the spill or release. The EI will contact and deploy the necessary contract personnel. If the accident is beyond the capabilities of the on-site equipment and material to handle, the EI will contact necessary local emergency assistance (see Section 5) and, if necessary, will contact All Star Telecom's representatives and appropriate assistance personnel.

Response Coordination

The initial response to an emergency will be to protect human health and safety, and then the environment. Identification, containment, treatment, and disposal assessment will be the secondary response. Because of the potential fire hazard associated with diesel fuels used during construction, possible sources of ignition will be eliminated to prevent such an occurrence. Vehicular traffic and work in the immediate area will cease until the spill (i.e., more than one gallon) is contained. If the spilled materials are flammable, fire equipment will be made ready.

If a spill is not contained within the dike, an area of isolation will be established around the spill. The size of this area will generally depend on the size of the spill and the materials involved. The EI will be responsible for determining the extent of the isolation area. When any spill occurs, only those persons involved in the oversight or performance of emergency operations will be allowed within the designated hazardous area.

For all large spills or serious leaks in storage tanks, the following guidelines will be followed as closely as possible:

1) If a leak develops or a spill occurs, the person discovering the incident will contact the EI. The EI will obtain the following information:
   a) Person(s) injured and seriousness of the injury.
   b) Location of the spill or leak, material involved, and source.
   c) Approximate amount of spillage.

2) Next, the EI will:
   a) Initiate evacuation of the hazard area.
   b) Obtain medical attention for any injured persons and call the hospital.
   c) Dispatch emergency personnel to the site to take the appropriate action.
   d) Contact appropriate local emergency coordination centers so that any downstream water users can be notified.
   e) Contact All Star Telecom's representative, who can assist with notifications of appropriate State and Federal agencies.

3) Cleanup personnel will:
   a) Make sure all unnecessary persons are removed from the hazard area.
   b) If possible, try to stop the leak.

c) Contain, divert, and clean up the spill.

d) Properly dispose of all containment and cleanup materials, recovered waste, and contaminated soils.

Required Notification

For spills occurring in California, the California Emergency Response Center (916) 323-3600, and the National Spill Response Center (800-424-8802) will be notified immediately by the EI. Reports to these agencies must include the following:

- Name, address, and phone number of the person reporting the spill
- Date, time, and type of incident
- Quantity and type of hazardous waste or material involved in the incident
- Resource damages, if any (i.e., dead fish)
- Extent of injuries, if any
- Estimated quantity and disposition of recovered materials, if any

CLEANUP AND DISPOSAL OF SPILLS

Any soils contaminated by fuels, lubricating oils, or other hazardous materials will be cleaned up, removed from the ROW, and either treated by an approved contractor or hauled to an approved disposal site.

Cleanup of contaminated soils includes the removal of all soils that were subjected to the pollutant. If necessary, the EI may require the construction contractor to collect samples of soil strata below the spill to assure that all hydrocarbon contaminated soils have been removed from the site.

All materials used to clean up the spill will be double bagged and inspected prior to removal from the spill site. All vegetation contaminated by the spilled material will be similarly collected, bagged, and disposed at an approved disposal facility.

ATTACHMENT 1

SPILL REPORT FORM AND LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES

PROCEDURE FOR DETERMINING IF A HAZARDOUS MATERIAL SPILL IS OF A REPORTABLE QUANTITY

1. Determine the type and quantity of material that has been spilled.

2. Obtain a material safety data sheet (MSDS) for the spilled material and determine whether any of the constituents are listed in Table 302.4 in 40 CFR, Part 302. A copy of the CFR is attached.

3. If none of the constituents in the spilled material are listed in Table 302.4 (excluding ethylene glycol), the spill is not reportable.

4. If the constituents in the spilled material are listed in Table 302.4, use the following equation to determine the pounds of material spilled:

$$\text{Pounds Spilled} = (V)\ (Wt\%)\ (Sg)\ (0.0834)$$

Where:

V = Volume of the material spilled, in gallons
Wt% = The weight percent of the constituents in the spilled material (see the MSDS)
Sg = Specific gravity of spilled material (see the MSDS)

For example:

V = 7 gallons
Wt% = 3.5
Sg = 1.04
Pounds spilled = (7) (3.5) (1.04) (0.834) = 2.13 pounds

5. If, based on the calculation, the pounds spilled are greater than the final reportable quantity (RQ) value listed in Table 302.4 of 40 CFR, Part 302 or the state's reportable quantity minimum amount, the spill must be reported to the appropriate federal, state, and local agencies.

STORM WATER POLLUTION PREVENTION PLAN
SPILL REPORT FORM

Reported By: _____ _____
Name Telephone Number

Date Reported: _____ Time Reported: _____

Date of Spill: _____ Time of Spill: _____

Name of Facility: _____

Legal Description: _____ 1/4 _____ 1/4 _____ 1/4 SEC _____ TWP _____ Range _____

County: _____

Describe Spill Location and Events Leading to Spill: _____

_____

_____

_____

_____

Material Spilled: _____

Source of Spill: _____

Amount Spilled (gallons or pounds): _____

Amount Spilled to Waterway (gallons or pounds): _____

Nearest Municipality: _____

Containment or Cleanup Action: _____

_____

_____

List Environmental Damage (fish kill, etc.): _____

_____

_____

STORM WATER POLLUTION PREVENTION PLAN
SPILL REPORT FORM

List Injuries or Personal Contamination: _____

_____

_____

Date and Time Cleanup Completed or Terminated: _____

If Cleanup Delayed, Nature and Duration of Delay: _____

_____

_____

Description of Materials Contaminated: _____

_____

_____

Approximate Depth of Soil Excavation: _____

Action To Be Taken to Prevent Future Spills: _____

_____

_____

Agencies Notified:

Local: _____ Date: _____

State: _____ Date: _____

Federal: _____ Date: _____

Signed: _____

Contractor Superintendent or
Environmental Inspector

APPENDIX II

PROJECT AREA PRECIPITATION DATA BY COUNTY

APPENDIX II

PROJECT AREA PRECIPITATION DATA BY COUNTY[1]
SEPTEMBER 1999 THROUGH AUGUST 2000
(in inches)

Orange County	September	October	November	December	January	February	March	April	May	June	July	August
Irvine	0.91	1.36	0.00	0.20	0.17	0.00	0.00	0.02	0.07	0.00	0.57	3.31
San Diego County												
Oceanside	0.00	0.03	0.06	0.57	0.85	5.20	1.78	1.26	0.01	0.02	0.00	0.01
San Diego	0.04	0.00	0.04	0.24	0.20	4.21	1.26	0.87	0.00	0.00	0.00	0.12
Miramar	0.05	0.00	0.10	0.15	0.28	3.61	1.27	0.63	0.02	0.01	0.00	0.06
Escondido	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Notes:

[1] California Irrigation Management Information Systems Data

APPENDIX III

EROSION AND SEDIMENT CONTROL PLAN

APPENDIX III

EROSION AND SEDIMENT CONTROL PLAN

The entire project route from El Toro to San Diego is within or adjacent to the paved surface of roads. Temporary erosion and sediment control elements shall be placed to prevent damage to the adjacent property, and potential degradation of the downstream resources. Additional control devices will be positioned to intercept flows and eliminate the introduction of silt laden runoff from entering the rivers, creeks, wetlands, and tributaries. Erosion and sediment problems are not likely due to the small area of ground disturbance caused by the project. However, essential components of the erosion and sediment control system must be fully operational before beginning a construction phase, which may cause the introduction of sediments into a stream. In addition, dust control measures must be available before any phase of construction.

- Bare soil shall not be left uncovered for longer than seven days. In no case shall soil be left uncovered over weekends or holidays, unless personnel are on-site who can cover bare soil as needed to prevent erosion.
- No mud or dirt that has been tracked onto pavement during construction shall be left overnight. All tracked material shall be removed by broom, mechanical sweeper, or shovel and disposed of in a controlled sediment disposal area. Mud and dirt shall not be washed off pavement into drainage conveyances.
- All sensitive areas including streams, wetlands, and creeks shall be marked with pin flags, boundary markers, or other standard designation devices before work in those areas commences.
- All temporary soil stockpiles will be covered with plastic or mulch if unused for more than seven days or if there is any opportunity for eroded soil to enter drainage channels or flow onto pavement, or enter property outside of road rights-of-way.

INSTALLATION

All BMPs will be installed according to directions contained in the Storm Water Quality Task Force, *California Storm Water Best Management Practices Handbook* (Camp, Dresser, & McKee, 1993). Detailed descriptions of the BMPs are provided in Appendix V of this document (SWPPP, Appendix V). The following specific points are to be followed:

- **Filter Fence**—Fence posts shall be placed downstream of flows allowing for a maximum overland or sheet flow of 100 feet. The bottom of the fence shall be secured in a trench at least 8 inches wide and 12 inches deep, upslope of the line of the fence. The ends of the fence will be turned up-hill to prevent end-cutting. Fence material will be stretched tight and installed on a contour if possible. (Appendix V, ESC50).
- **Straw Bale Check Dams**—Straw bale check dams may be used if necessary to retain small amounts of sediment and reduce flow velocity in drainage ditches as directed by the Engineer. Enough bales will be installed to ensure that the top of the bale at the lowest

point of the ditch shall be the lowest point of the dam to prevent endcutting. (Appendix V, ESC51).

- **Rock or Gravel Check Dams**—Dams shall be constructed so that the center of the dam is lower than the edges to prevent endcutting. Gravel shall be pre-washed to avoid silt deposition in live streams. Gravel shall be placed in burlap or other suitable material that allows water to flow through the bags. Check dams should be used in combination with an upstream sediment trap. (Appendix V, ESC 41).
- **Dust Control**—On graded or excavated surfaces construction traffic surfaces, wet suppression shall be sued to minimize the impact of dust. Water shall be applied at least daily or as needed to effectively minimize wind blow or vehicular dust. Construction traffic will not exceed 15 mph through unpaved areas. (Appendix V, ESC21).
- **Stabilize Construction Entrance**—To reduce the tracking of sediment onto public or private roads, all access points used by installation equipment during construction will utilize sediment barriers such as gravel and fabric underliner to facilitate sediment removal. Should sediment be tracked onto roads, the roads will be swept clean. Accumulated sediment or silt will not be swept into the storm drain systems. (Appendix V, ESC24).

INSPECTION

All on-site temporary erosion and sediment control measures shall be inspected and maintained daily. The frequency of inspections shall be recorded in the environmental inspector's field notes.

An official copy of the Erosion and Sediment Control (ESC) Plan shall be maintained in the construction project engineer's office on which changes affecting the ESC Plan are documented. Revisions to the ESC Plan are approved by the Project Engineer after consultation with the office responsible for developing the plan. The Environmental Inspector or Site Inspector shall inspect the construction site daily and after any significant rainfall or runoff event to ensure that the BMPs are functioning properly. The inspector's Daily Report shall be used to record observations and changes regarding the ESC Plan. The project inspector shall conduct the final inspection to ensure all contractor work required by the ESC Plan has been completed.

MAINTENANCE

The following is a list of BMPs and their associated maintenance:

- **Filter Fence**—Filter fence is to be inspected immediately after each rainfall, and at least daily during prolonged rainfall. Repair tears, endcutting, undercutting, and fence posts as needed. Sediment shall be removed when it reaches approximately one third the height of the fence and placed in a controlled sediment disposal site. Any sediment deposits remaining in place after the filter fence is no longer required shall be removed to a controlled sediment disposal site.
- **Straw Bale Check Dams**—Straw bale check dams shall be inspected immediately after each runoff-producing rainfall and at least daily during prolonged rainfall. Sediment shall

be removed when it reaches one half the height of the dam and after each runoff-producing rainfall and placed in a controlled sediment disposal site. Any sediment deposits remaining in place after the straw bales are no longer required shall be dressed to conform to the existing grade, prepared and seeded.

- **Rock or Gravel Check Dams**—Rock and gravel check dams shall be inspected immediately after each runoff-producing rainfall and at least daily during prolonged rainfall. Sediment shall be removed when it reaches one half the height of the dam and after each runoff-producing rainfall and placed in a controlled sediment disposal site. Any sediment deposits remaining in place after the rock and gravel check dams are no longer required shall be dressed to conform to the existing grade, prepared and seeded.
- **Dust Control**—Graded and exposed soil surface will be monitored continually. Soils will be wetted as required based on visible observation of dust emissions.
- **Stabilize Construction Entrance**—Construction perimeter will be inspected daily and following each rainfall for sediments deposited out side of the construction area. All sediment deposited on paved roads will be removed daily.

PERMANENT STABILIZATION

The trenched section of roads will be filled, compacted and the pavement will be replaced.

APPENDIX IV

DIRECTIONAL BORE CONTINGENCY PLAN

APPENDIX IV

DIRECTIONAL BORE CONTINGENCY PLAN

To prevent impacts to sensitive fish and wildlife species and habitats, All Star Telecom proposes to directionally drill under water crossings and their associated protective buffers. Through this technique, physical disturbance to the water crossings and associated buffers are avoided; the entrance and exit holes will be set back from the ordinary high water mark of associated streams, rivers, and wetlands, so that sediment will not wash into the watercourse.

The only potential effects to fish species would result from pollution or sedimentation of watercourses which support these species. Pollution sources could include drilling muds (bentonite) released to a watercourse through a subsurface fracture, spills during vehicle fueling, or transportation of surface drilling muds to watercourses during unexpected heavy rainfall events. To minimize these risks, All Star Telecom proposes to implement a strict set of protocols covering the design, installation, and monitoring phases of the project.

RISK OF DRILLING MUD RELEASES DUE TO DIRECTIONAL DRILLING

Although it is considerably less likely than traditional trenching methods to affect water quality, directional boring carries a slight risk of impacting a water resource. Leakage of the drilling fluid through fractures in a stream substrate, referred to as frac-out, is possible during boring operation. The drilling fluid, a clay-based material, could contribute to limited sediment impacts depending on the magnitude of a leak. To minimize this risk, All Star Telecom has developed a Directional Drilling Protocol (DDP) (see details below). A key component of the DDP involves assessment of each watercourse to establish the site-specific directional drilling approach given potential fish species present, habitat conditions, time of year, and subsurface conditions. For each watercourse, the approach may involve measures to reduce the potential for frac-out, such as drilling deeper, using a lower drilling pressure, or incorporating peat and mica into the drilling fluids to increase their viscosity. With implementation of the DDP, drilling mud releases will be eliminated or the volume released will be small and dilute rapidly. Therefore, the risk of impacting fisheries resources or infiltrating sediments will be small.

DIRECTIONAL DRILLING PROTOCOL (ESC 57)

The project would rely extensively on directional drill techniques to avoid the removal or damage of large trees, and to traverse waterbodies. Directional drilling can result in the release of drilling mud into a waterbody or nearby areas through previously unidentified fractures in the subsurface geology. All Star Telecom will implement the following measures as part a DDP to minimize potential impacts associated with directional drilling.

Planning and Design

- All bentonite material brought onto the project site location will be kept in closed containers compliant with the Department of Transportation packing specifications except when transferred to mixing boxes during boring activities.
- All Star Telecom will drill a minimum of 10 feet below the lowest point of the streambed when crossing stream channels.
- If the minimum depth is not possible at a specific location, All Star Telecom shall contact Department of Fish and Game (DFG) and request, in writing a site-specific variance. The variance request shall include site location information and a brief statement as to why the minimum drill depth cannot be obtained. The drilling operation may not commence until the variance has been approved by the DFG and AT&T/PF.Net has an approved copy of the variance at the drill site.
- All Star Telecom will design bores in a way to prevent frac-out. In substrates likely to frac-out, All Star Telecom will plan to use lower pressure and/or leak sealant (peat, mica, etc.).
- Prior to beginning construction, All Star Telecom inspectors and drill crews will be trained in all aspects of the DDP.

Construction Setup

The following protocol applies to all pre-planned directional bores:

- All Star Telecom will assign inspectors for upcoming bores.
- Inspectors will participate in construction meetings.
- Site visits will be conducted to identify sensitive resources and site-specific features that could be affected if a frac-out occurs.
- Any deviation from the plan will be resolved prior to construction.

Operation

- All Star Telecom will conduct on-site briefings and construction setup protocol will be followed.
- At wet crossings and sensitive resources while the drill is in operation, a designated All Star Telecom observer will be on-site at all times. The primary responsibility of the observer will be to watch for frac-outs.
- All All Star Telecom drill crews and inspectors are responsible for reporting spills. Factors indicating a possible frac-out include observed loss in drilling pressure, slow down in the volume of returned drilling muds, or visual observation of drilling material extruding into water or on land.

Spill Protocol

- If a frac-out is detected, drilling operations shall cease immediately.

- Agency personnel will be notified immediately.
- All Star Telecom drill crews will implement non-mechanized measures to contain the spread of drilling muds. Including the installation of hay bales or silt fence.
- Sump pumps will be used to pump the drilling fluids.
- All Star Telecom will prepare a resource damage assessment in the event of a frac-out which will include the estimated amount of drilling fluid released and impacts to vegetation or sensitive resources.

RISK OF SPILLS

Fuel spills during vehicle refueling or spills of drilling mud from drill site sumps could pollute watercourses. To minimize the risk of a fuel spill, All Star Telecom will prohibit fueling within 100 feet of any watercourse. Bulk fuel (diesel) will usually be transported in 50- to 100-gallon tanks mounted on the contractor's pickup truck. The contractor will be required to keep universal absorbent pads, absorbent particulate pillows, heavy-duty trash bags, and straw bales on site. The fueling rigs will be required to carry absorbent pads at all times.

At the entrance and exit sites for directional drilling, sump pumps will be excavated for the containment and processing of drilling mud returns. To accommodate an unexpected rainstorm, the sites will be sized to contain 100 percent of the possible product from the boring procedure. If the amount of inadvertent returns of drilling fluids is not great enough to allow practical collection, then the effected area is diluted with fresh water and allowed to dry and dissipate naturally back into the earth. All Star Telecom has developed a Spill Prevention, Control, and Containment Plan (SPCCP) that includes measures for preventing spills and, in the unlikely event of a spill, controlling and cleaning up a spill (SWPPP, Appendix I).

RISK OF SEDIMENTATION

In order to achieve a depth adequate to pass underneath a water body, directional drilling inherently requires a significant setback from a watercourse. The risk of sediment input will be further reduced by following the Stormwater Pollution Prevention Plan (SWPPP) protocols. Implementation of the physical and procedural controls established in the SWPPP to minimize erosion and to prevent sediment from entering water bodies will reduce this potential to negligible levels. The proposed action is not expected to significantly impact water quality or habitat for any fish species.

Directional drilling is planned to take place within riparian or wetland areas. This technique has little potential to alter riparian vegetation or riparian functions that could alter aquatic conditions. Also, because of directional drilling and the strict protocols which All Star Telecom will implement, the proposed project has little potential to affect stream channel morphology, stream bank stability, or any other elements of habitat for fish species.

APPENDIX V

BEST MANAGEMENT PRACTICES (BMPs) USED DURING PROJECT ACTIVITIES AND ADDITIONAL BMPS TO BE USED FOR AMENDMENTS

CONTRACTOR ACTIVITIES

Contractor Practices

CA2 Paving Operations
CA3 Structure Construction and Painting

Material Management

CA10 Material Delivery and Storage
CA11 Material Use
CA12 Spill Prevention and Control

Waste Management

CA20 Solid Waste Management
CA21 Hazardous Waste Management
CA22 Contaminated Soil Management
CA23 Concrete Waste Management
CA24 Sanitary/Septic Waste Management

Vehicle and Equipment Management

CA30 Vehicle and Equipment Cleaning
CA31 Vehicle and Equipment Fueling
CA32 Vehicle and Equipment Maintenance

Contractor Training

CA40 Employee/Subcontractor Training

BMPS FOR EROSION AND SEDIMENTATION CONTROL

Site Planning Considerations

ESC1 Scheduling
ESC2 Preservation of Existing Vegetation

Vegetation Stabilization

ESC11 Mulching

Physical Stabilization

ESC20 Geotextiles and Mats
ESC21 Dust Control
ESC22 Temporary Stream Crossing
ESC24 Stabilized Construction Entrance

Sediment Trapping/Filtering

ESC41 Check Dams

ESC50 Silt Fence
ESC51 Straw Bale Barrier
ESC53 Brush or Rock Filter
ESC54 Storm Drain Inlet Protection
ESC57 Directional Bore Drilling