

**Const. Srvs. - Stahl @ O'Connor and
Judson**



Labor Hours/Price (LS,CPFF,RL)

Lowest Tasks, All Budgets, without Budget Subtotals, without Period Subtotals,
without Estimating Frequency Subtotals

Description	Hours	Price
Top Task 13 -		
Task 13.01 - Stahl		
Accountant	44	1,070.81
Admin Assistant	185	4,410.85
Construction Manager	100	4,085.80
Program Manager	44	3,311.53
Scheduler	16	936.13
Senior Construction Specialist	32	1,864.04
Senior Consultant	36	2,598.48
Subtotal for Labor	457	18,277.64
Total Overhead		31,735.48
Subtotal for Overhead		31,735.48
Subtotal for Labor	457	50,013.12
Subtotal for Labor and Overhead	457	50,013.12
Total Other Direct Expenses		38.53
Subtotal for Other Direct Expenses		38.53
Total Subcontract		234,000.00
Subtotal for Subcontract		234,000.00
Total Travel		2,400.00
Subtotal for Travel		2,400.00
Subtotal for Costs	457	286,451.65
Markups on Subcontractors		11,700.00
Subtotal for Markups		11,700.00
Profit/Fee on Labor		6,646.35
Subtotal for Profit/Fee		6,646.35
Subtotal for Markups		18,346.35
Subtotal for 13.01 - Stahl	457	304,798.00
Subtotal for 13	457	304,798.00
Grand Total	457	304,798.00

Workplan for Construction Services – Stahl @ O'Connor and Judson

Purpose

The purpose of this task is to determine if the work being performed by the Contractor generally conforms to the contract for construction and that the integrity of the design concept as reflected in the contract for construction has been implemented and preserved by the Contractor.

Staff Requirements

Provide Field Inspection staff, as follows:

1. Senior Construction Specialist. One (1) Senior Construction Specialist (SCS) will be provided to oversee the activities of the Field Inspection Team for the Stahl @ O'Connor and Judson LAM Funded project. This individual will answer to the CIP Funding Level PM and will be responsible for managing the work performed by his field inspection staff. This individual will share his time between all on-going LAM projects.
2. Chief Inspector. One Chief Inspector will be brought on board to help support the Stahl @ O'Connor and Judson LAM project, as well as other LAM projects which are either on-going or also starting at that time. The assigned Chief Field Inspector will be expected to travel from one job to the next within his assigned list of projects and offer supervisory guidance to his team of Field Inspectors. The Chief Field Inspector will meet with the Senior Construction Specialist as often as required to communicate progress and ensure efficient work, but within budget.
3. Field Inspectors. One full-time Field Inspector will be provided and will dedicate his time to the Stahl @ O'Connor and Judson LAM project. The length of time this individual will be on the project is defined below under Schedule. The Field Inspector will receive direction and supervision from the Chief Inspector, as well as the Senior Construction Specialist. The Field Inspector's general duties will be to inspect the work being performed by the Construction Contractor to determine compliance with the Contract Documents. The Field Inspector may also attend meetings and assist the Chief Inspector and Senior Construction Specialist with any and all other duties and tasks outlined herein, as so directed by them.
4. Material Testing Technicians. *It is assumed that this effort will be performed by outside consultants answering directly to COSA. Material Testing Technicians will be required throughout the Stahl @ O'Connor and Judson LAM construction project to take samples and test the various materials being installed by the construction contractor as part of the project. In addition, the Material Testing Firms will report results to the Field Inspection Team in a time frame consistent with the time required to prepare the samples and perform tests. These tests will serve to confirm compliance with the Project Requirements.*
5. Administrative Specialists. Administrative Specialists will be needed to perform administrative functions in support of the overall LAM Program and for the field inspection team for LAM funded construction contracts. One Administrative Specialist

will be brought on board to help support the Stahl @ O'Connor and Judson project, as well as other LAM projects which are either on-going or also starting at that time. This Administrative Specialist will answer to the Senior Administrative Specialist who commenced work at the inception of the Clark: Fair to Southcross LAM project.

6. Utility Coordination Technician. *It is assumed that this effort will be performed by COSA. A Utility Coordination Technician will be required throughout the LAM Construction Program to oversee the relocation of utilities that are expected to be impacted by construction activities. In addition, when utility lines are found to be in conflict during actual construction activities, the Utility Coordination Technician will be the project's first point of contact for expedited conflict resolution to mitigate the impact to the Contractor's schedule.*

Responsibilities of each staff member to be involved on each LAM project are summarized in the attached Responsibility Matrix, which is an excerpt from the Construction Management Plan.

WORK TASKS

A. General Work Activities

Activities typical to each construction inspection team include those defined below. More detailed information is provided in the attached Responsibility Matrix, which is an excerpt from the Construction Management Plan, and the General Responsibilities document, which further explains the information contained in the Responsibility Matrix.

1. Pre-Construction Condition Survey. *This activity will be performed by the Contractor for each construction contract.*
2. Quality Control and Site Safety/Environmental Protection Inspections. *The inspection team will conduct daily on-site observations of the Contractor's work for the purposes of determining if the work generally conforms to the contract for construction and that the integrity of the design concept as presented in the construction contract documents has been implemented and preserved by the Contractor. The Senior Construction Specialist (SCS) will supervise an inspection team consisting of one full-time Field Inspector and one full-time (but shared with other LAM projects) Chief Inspector furnished by the CH2M HILL Team to help oversee the work being performed on the Stahl @ O'Connor and Judson LAM project. To document the daily activities, each inspection staff member will be required to prepare written reports, diaries or other records of their observations, including the implementation of site safety procedures, including traffic control plans, and storm water pollution prevention plans. If noncompliance with the contract documents is observed during daily inspections, the inspection team will advise the Contractor of the noncompliance and maintain vigilance over the non-compliant work until compliance is again restored.*

The inspection staff will arrange for monthly photographs of the work in progress by the Contractor, which will be made available to COSA.

3. Quality Assurance Testing. *Quality assurance material sampling and testing will be provided by the Material Testing Technicians to verify the quality of the Contractor's work on the Stahl @ O'Connor and Judson LAM Project.*

The Field Inspection Staff will coordinate the inspection and testing by regulatory and third party agencies that have jurisdiction over the project.

Whenever the Contractor notifies Field Inspection Staff or COSA of subsurface or physical conditions at the site which the contract for construction provides should be so notified, Field Inspection Staff will advise COSA and inspect the conditions at the site. Field Inspection Staff will advise COSA as to the appropriate action(s), and will assist COSA in responding to the Contractor.

Engineering and technical services that are required to investigate the subsurface or physical conditions shall be the responsibility of the pertinent Design Firm. Engineering and technical services that are required to mitigate unexpected environmental conditions (i.e., the discovery of contaminated soils) shall be the responsibility of COSA. Field Inspection Staff will assist COSA in responding to the Contractor.

4. Records Documentation. The Field Inspection Staff will document the work performed by the Contractor(s) at the end of each day. Documentation will be in both written and electronic form (uploaded to the electronic Document Management System on the Program Web Site) and will include the name of the project, day of the week, date of the report, contract time charge, location of work, report number, weather conditions including temperature ranges and precipitation, number and class of Contractor's personnel working on the site for that date, major equipment used on the site on that date and a description of the work performed by the Contractor. Written documentation will be kept in a bound folder at the site. COSA will have access to daily reports at any time.

B. Construction Related Tasks

Besides the general daily work activities noted above, the following specific tasks will be performed, whether by field staff or office support staff:

1. Review Schedule of Values. The SCS will review the schedule of values submitted by the Contractor to determine if the distribution of costs is balanced and that the schedule of costs looks reasonable.
2. Attend Preconstruction Conference. The SCS, Funding Level PM, and other appropriate staff will attend one (1) pre-construction conference with the Contractor to review the project communication, coordination and other procedures and discuss the Contractor's general work plan and requirements for the project and will assist the City Project Manager in the conduct of the meeting. The Senior Administrative Specialist will be responsible for taking minutes or otherwise recording the results of this conference.
3. Attend Progress Meetings. The SCS will conduct periodic meetings with the Contractor to monitor construction status. The SCS, with assistance from the Field Inspector, will also monitor the Contractor's compliance with the project schedule, permit requirements, environmental clearance requirements and technical quality. The Administrative Specialist will prepare the minutes of these meetings. Meetings will occur a maximum of once per week per contract. PM will attend these meetings, if necessary.

4. Review Requests for Payment. The SCS, with assistance from the Field Inspector, will receive and review the Contractor's requests for payment. The SCS will determine whether the amount requested reflects the progress of the Contractor's work and is in accordance with the schedule of values for each contract for construction. The SCS will provide recommendations to COSA as to the acceptability of the requests. The SCS will advise COSA as to the status of the total amounts requested, paid, and remaining to be paid under the terms of the contract for construction. The Funding Level PM will receive a copy of the Contractor's payment request for purposes of general auditing.
5. Assist with Change Requests. The SCS will review all Contractor requested changes to the contract for construction. The SCS will make recommendations to COSA regarding the acceptability of the Contractor's request and, upon COSA approval, assist COSA in negotiations of the requested change. The SCS will also review Contractor's response to COSA requested changes to the contract for construction and make recommendations to COSA for acceptance. Upon agreement and approval, the SCS will prepare final change order documents.

The Funding Level PM will audit the change request process and provide periodic reports to COSA about the status of Change Orders. The report shall include issued Change Orders, pending change orders, and change order amounts.

6. Assist with Claims Management. The SCS, along with qualified office personnel, will assist COSA in the resolution of any disputes with Contractor over contract time or cost.
7. Provide Miscellaneous Coordination with Contractors. The SCS will coordinate all written communications among the Contractor, COSA, and CIP PM (as required) during the construction. The SCS will prepare written communications to the Contractor and provide recommendations to COSA for written communications between COSA and Contractor.
8. Videos and Photographs. Photographs will be taken monthly of the work in progress on all construction contracts by the Field Inspectors and uploaded to the Program Web Site. SCS will be responsible for producing a video of such site features as are deemed necessary at the commencement and conclusion of each construction project to document the "before" and "after" conditions. Such documentation should be beneficial in the event claims need to be filed for property damage during construction.
9. Monitor Contractor Site Safety. The SCS will assist COSA in monitoring the Contractor's construction activities for safety of the public and construction personnel. If noncompliance with the contract documents is observed during daily inspections by the Field Inspector, the SCS will advise the Contractor and COSA of the noncompliance and maintain vigilance over the noncompliance activities. Safety reviews by the SCS and COSA staff will not relieve Contractors from compliance with site safety requirements.
10. Recommend Project Close-Out. The SCS will assist COSA in issuing documents for substantial completion and acceptance of the work. The SCS will advise COSA on payment, and partial release of retention.

The SCS will assist COSA in issuing documents for final completion and acceptance of the work. The SCS will advise COSA on final payment, release of retention, and release of insurance and bonds.

The SCS will assist COSA with securing occupancy and start-up permits, if required. Should the contract for construction require the Contractor to secure such permits, the SCS will monitor the Contractor's efforts and will advise COSA of the Contractor's progress. Should COSA be required to secure such permits, the SCS will assist COSA by coordinating final inspections, submitting documents to the governmental agencies and coordinating inspections by the agencies.

C. Administration Related Tasks

The following general administrative tasks, as they relate to the Stahl @ O'Connor and Judson LAM project, are to be performed.

1. Manage Subconsultants. Because the participation by subconsultants is expected to equate to approximately one-half of the total work to be performed, it will be necessary to emphasize strong management of all subconsultants assigned to the Program. In this regard, PM will oversee each subconsultant's work product, answer questions from them regarding the Program, and generally attempt to provide a seamless network of resources that are focused on Program success.
2. Project Budget Monitoring and Reporting. Establish a cost accounting system that captures project cost and ensures that the cost reporting system provides monthly information regarding the level of incurred cost, level of cost commitment, and maintains a running total of the projected cost at project completion.
3. Progress Reporting. A brief progress report will be developed and submitted each month along with that month's invoice for services rendered. The progress report will identify work completed in the Report Month, as well as work expected to be performed in the following month. The progress report will also list all known concerns or issues that need to be addressed, if any.
4. Meeting Attendance.
 - a. Attend meetings with COSA staff to discuss current issues, progress, and other issues relevant to the CIP Program, as a whole. The PM will be responsible for tracking action items from past meetings, as well as developing an agenda for each meeting and for taking notes. Typed minutes from each meeting will be distributed to all meeting attendees within three (3) working days.
 - b. Attend meetings with other parties, such as other COSA department staff, TxDOT, utility companies, special interest groups, and permitting agencies, as may be required by COSA throughout the course of the CIP. For those meetings, the PM will be responsible for developing an agenda and for taking notes. Typed minutes from each meeting will be distributed to all meeting attendees within three (3) working days.
5. Invoice Processing. Prepare and submit invoices to COSA on a monthly basis. Invoices will be prepared based on actual work performed by the PM Team, including

subconsultants and vendors, during the report period. Invoices will be prepared in a format suitable to COSA.

Schedule

The schedule for the Stahl @ O'Connor and Judson LAM construction project assumes that construction will commence in July 2008 and conclude in May 2009, a period of 10 calendar months. If a delay is experienced that requires CH2M HILL's services, as described herein, to be extended beyond the 10 month period, or if the other LAM projects that were scheduled to be constructed concurrent with this project are delayed to a point where costs cannot be shared, as expected, then it is understood that additional funding, over and above that stated below under Budget, shall be provided by COSA either through the assessment of liquidated damages to the Contractor or by some other means. It is understood that CH2M HILL has no obligation to continue work on the Stahl @ O'Connor and Judson project if adequate funding by COSA is not provided. It is also understood that CH2M HILL has the responsibility to track the costs it is expending and to provide COSA with adequate advanced notification of its need for additional funds to allow COSA time to obtain the necessary additional funds through Council action.

Deliverables

1. Various quality testing reports
2. Daily logs
3. Records documentation
4. Preconstruction Conference Meeting Minutes
5. Progress Meeting Minutes
6. Contractor Payment Request Recommendations
7. Change Order Status Reports
8. Recommendations to COSA for Project Close-Out
9. Monthly Invoicing and Progress Reports
10. Meeting Minutes

Budget

The estimated fee requirement for performing the services stated herein is \$304,798. The derivation of this budget amount is broken down on the attached Pricer report and is further defined under Assumptions below. It is understood that should the construction schedule for the various LAM projects be delayed to a point that adversely affects the City's ability to receive funding from TxDOT, then the City will either provide an alternative means for funding the CH2M HILL team during, or as a result of the delay, or otherwise assume the duties of the CH2M HILL team with its own forces during the delay. CH2M HILL has no obligation to continue work on the Stahl @ O'Connor and Judson project if adequate funding by COSA is not provided.

Assumptions

The following assumptions apply to this LAM project:

1. Recommendations by the SCS, Chief Field Inspector, or Field Inspector regarding periodic payments to Construction Contractors will be based upon the SCS, Chief Field Inspector, and Field Inspector's knowledge, information and belief from its observations

of the work on site and selected sampling that the work has progressed to the point indicated. Such recommendations do not represent that continuous or detailed examinations have been made by the SCS, Chief Field Inspector, or Field Inspector to ascertain that the Construction Contractor has completed the work in exact accordance with the Contract Documents; that the SCS, Chief Field Inspector, or Field Inspector has made an examination to ascertain how or for what purpose the Construction Contractor has used the moneys paid; that title to any of the work, materials or equipment has passed to the Owner free and clear of liens, claims, security interests, or encumbrances.

2. Field Inspector's observation of the work should not be considered an exhaustive observation or inspection of all work performed by the Construction Contractor. The CH2M HILL Inspection Team does not guarantee the performance of the Construction Contractor. Field Inspector's observations shall not relieve the Construction Contractor from responsibility for performing the work in accordance with the contract for construction, and the CH2M HILL Inspection Team shall not assume liability in any respect for the construction of the project. The SCS shall, with the assistance of COSA, obtain written plans from the Construction Contractor for quality control of its work, and will monitor the Construction Contractor's compliance with its plan.
3. CH2M HILL and its subconsultants shall not be responsible for construction safety.
4. It is assumed that the Field Office and its furnishings are to be provided by COSA at no cost to CH2M HILL. Moreover, an adequate connection to the internet will be provided by COSA in the Field Office or, if unavailable, staff in the Field Office may purchase "air cards" for their computers as a reimbursable expense.
5. The "Budget" for this LAM project is based in part on the following positions being full-time (8 hrs per day) with time for those indicated being shared between this project and other concurrent LAM projects. The specific amount of budget time to be applied to this project is determined by a ratio and proportion of construction costs for all concurrent LAM projects:
 - a. Sr. Construction Specialist (time to be shared with all other concurrent LAM projects)
 - b. Chief Inspector (time to be shared with other assigned LAM projects)
 - c. Administrative Specialist (time to be shared with other assigned LAM projects)
 - d. Sr. Administrative Specialist (time to be shared with all other concurrent LAM projects)
 - e. Field Inspector (assigned solely to this project)

ATTACHMENT
General Responsibilities for the LAM Projects
(Responsibility Matrix)

ABBREVIATIONS:

BMP – Best Management Practices
CI – Chief Inspector
CO – Change Order
COSA – City of San Antonio
CPM – Critical Path Method
DBE – Disadvantage Business Enterprise
LGPP – Local Government Project Procedures
MOH – Material On Hand
PM – COSA Project Manager (or his representative)
SCS – Senior Construction Specialist
SW3P – Storm Water Pollution Prevention Plan
TCP – Traffic Control Plan
TxDOT – Texas Department of Transportation.

Prior to the Pre-Construction Meeting (42)

COSA – The PM shall coordinate any pre-construction inspections, storm sewer, utility, or underground. The results of these inspections shall be presented during the pre-construction meeting.

SCS - The SCS shall coordinate and schedule the pre-construction meeting with the COSA PM or his representative. The SCS shall notify the contractor of all necessary documentation required to be brought to the pre-construction meeting.

CI – No actions necessary.

Inspector -No action necessary.

Pre-Construction Meeting (1, 2)

COSA – The PM shall prepare and conduct pre-construction meeting.

SCS – The SCS shall participate in the pre-construction meeting by explaining the CI and inspector's roll and the required documentation from all of the participants during the project.

CI – The CI shall attend pre-construction meeting.

Inspector – The inspector shall attend pre-construction meeting.

Inspection and Measurement of Bid Items (30, 32, 35, 36, 37, 38, 39, 40)

COSA - When informed of an over or under run by the SCS, the PM shall prepare the necessary change order CO when required by the contract.

SCS – The SCS shall assist the CI and the contractor with any questions pertaining to the measurement of bid items. The COSA PM or his representative shall be notified of any over or under runs of the bid items.

CI – The CI shall assist the inspector with any questions pertaining to the measurement of bid items. The SCS shall be notified of any over or under runs of the bid items.

Inspector – The inspector shall inspect and measure all items of work performed by the contractor for the COSA funded portion of the project to ensure all work meets the contract. All other items of work shall be inspected and measured by others. The inspector shall notify the Contractor and the CI of any over or under runs of the bid items as soon as he is aware of the quantity.

Project Diary

COSA - No action necessary

SCS – The SCS shall review the project diary and assure the necessary documentation is being placed in the dairy daily by the inspector.

CI – The CI shall assist the inspector with placing data in the project dairy.

Inspector – The inspector shall maintain a project diary of all activities on the project. This should include, but not limited to:

- date
- weather conditions
- contract time charged and reasons for days credited
- work in progress, including temporary erosion control
- location of work on the project or private property and if property owner was contacted
- contractor's and subcontractor's work force
- quantity of equipment and activity at the project site
- important instructions given to the contractor
- names of official visitors and a summary of any discussions with the visitors
- unusual construction or work conditions
- decision-making discussions with the contractor
- direction provided to the contractor
- disagreements with the contractor
- detailed information that may have a connection with a probable dispute or claim against the project
- utility or other construction conflicts

- project completion and final inspection activities
- Project photos attached to daily report

Project Documents (9)

COSA – The PM shall obtain all COSA documents required by the LGPP agreement and any necessary documents from others. A copy of all documents shall be provided to the SCS for placement in the project files.

SCS – The SCS shall inform the COSA PM or his representative of any missing required documents and request assistance in obtaining the documents.

CI – The CI shall assist the inspector in obtaining the necessary project documentation and inform the SCS of any missing required documents.

Inspector – The inspector shall maintain all necessary documents as required by the TxDOT LGPP. This will require obtaining the necessary documents from the COSA PM or his representative, the contractor, and other agencies.

Contractor Submittals (27, 28, 29)

COSA – The PM shall receive and review all project required submittals. The PM shall provide a copy of the submittals to the SCS for placement in the project files. If informed by the SCS of the contractor's failure to follow all of the requirements of the submittals, the PM shall take all necessary actions to correct the situation.

SCS – The SCS shall place a copy of all submittals received into the project files. The SCS shall ensure the work is in accordance with the submittals. If the contractor fails to follow all of the requirements of the submittals, the SCS shall notify the COSA PM or his representative.

CI – The CI shall ensure the contractor follows all requirements of the submittals. If the contractor fails to follow all of the requirements of the submittals, the CI shall notify the SCS.

Inspector - The inspector shall ensure the contractor follows all requirements of the submittals. If the contractor does not follow all of the requirements of the submittals, the inspector shall notify the CI.

Material Testing (31, 33, 34, 41)

COSA – Obtain any off-site test reports not provided by the contractor. As part of the contract requirements the PM or his representative shall also obtain the material supplier/producer list from the contractor. The list shall be given to the SCS. If the PM is informed by the SCS of a supplier/producer not on the supplier/producer list, the PM shall obtain the necessary documentation from the contractor.

SCS – The SCS shall ensure all necessary on-site material tests are preformed. Inform the COSA PM or his representative of necessary off-site test reports not provided by the contractor. The SCS shall obtain the material supplier/producer list from the COSA PM or his representative. If the CI informs the SCS of a supplier/producer not on the approved list, he shall notify the COSA PM or his representative.

CI – The CI shall schedule all necessary on-site material tests. The CI shall also verify a supplier/producer is not on the approved supplier/producer list. If the supplier/producer is not on the approved list, he shall notify the SCS.

Inspector – The inspector shall ensure all material incorporated into the project has been tested and approved. This will require coordinating with the CI to ensure the required on-site tests are scheduled with the testing lab in a timely manner. The inspector will also be present during the testing of the on-site material. For all off-site material, the contractor shall provide the necessary test reports supplied by his material suppliers.

The inspector shall also verify the supplier/producer is included on the supplier/producer list. If the supplier/producer is not included on the supplier/producer list, the inspector shall stop the work until the supplier/producer has been approved by the COSA PM or his representative. The inspector shall notify the CI of any supplier/producer not on the approved list.

Request for Information (10, 11, 42)

COSA – The PM shall respond to the contractor's RFI in a timely manner. He shall provide the information to all partners of the project.

SCS – The SCS shall track all RFIs to ensure all necessary information has been provided to the contractor. The SCS can also assist the CI and inspector with clarification of the plans and specifications when necessary.

CI – The CI may assist in responding to the contractor's RFI. He may also assist in clarifying questions pertaining to the requirements of the plans or specifications when requested by the contractor.

Inspector – The inspector shall assist the COSA PM or his representative in responding to the contractor's RFIs by providing project information. This shall include the project site conditions, the contractor's work force, any instructions given the contractor, and interpretation of the plans and specifications. The inspector shall clarify any question pertaining to the requirements of the plans or specifications when requested by the contractor.

Project Time Charges (4, 5, 6, 19, 20)

COSA – The PM shall decide all time extensions or stoppage on the project. This information shall be provided to all partners on the project. The PM shall also coordinate/notify the TxDOT when required.

The PM shall review and approve the initial project CPM schedule submitted by the contractor. If there are inaccuracies or unauthorized modifications of the monthly updated project CPM, the COSA PM or his representative shall notify the contractor and request corrections of the CPM.

SCS - When requested by the COSA PM or his representative, the SCS may assist in deciding any time extension or stoppage for the project.

The SCS shall review the updated monthly project CPM to ensure no modifications have been made by the contractor. If he or the inspector finds differences with the CPM, he shall notify the COSA PM or his representative of the items.

CI – The CI shall review all daily time charges and the monthly updated project CPM. When the updated CPM is not correct, he shall inform the SCS.

Inspector – The inspector shall charge one day of work as defined in the plan specifications and document the charge in the project diary. He shall also document any time extension or stoppage as approved by the COSA PM or his representative in the project diary.

The inspector shall review the monthly updated project CPM for accuracy and correctness.

Change Orders (12, 13, 14)

COSA – The PM shall negotiate all price modifications, time issues, and prepare all of the CO documents. He shall also coordinate, notify, and obtain approval of the CO with the TxDOT.

SCS – The SCS shall track all COs and associated documentation.

CI – The CI assist the inspector and SCS as necessary.

Inspector – The inspector may assist the COSA PM or his representative with COs by providing project site conditions and information about the contractor's work force. He may also review documentation provided by the contractor for accuracy and correctness. Once the CO has been approved, the inspector shall ensure all modified work is completed by the contractor.

Contractor's Payments (25, 26)

COSA – The PM shall review and ensure all reviewing offices process the contractor's request for payment in a timely manor. If an office has a disagreement with the request or the SCS notifies him of a delay by an office, the PM shall work to correct the disagreement/delay and complete the payment in a timely manor. The PM shall forward all necessary documents to TxDOT for payment as required in the LGPP.

SCS – The SCS can assist verifying the contractors monthly pay request. The SCS shall also track the review by other offices to ensure the timely approval of the pay request. If there is a delay, for any reason by an office, the SCS shall notify the COSA PM or his representative.

CI – The CI can assist the inspector and contractor with determining the amount of the COSA funded work completed during the month.

Inspector – The inspector shall meet with the contractor on the last day of the month to verify the amount of the COSA funded work completed during the month. Once both the inspector and contractor agree on this quantity, the contractor can submit his estimate for payment.

Material on Hand

COSA – The PM shall review and approve the contractor's request for payment of MOH each month with the contractor's regular pay request. The PM shall decide payment options, if necessary documentation is not provided by the contractor or is informed by the SCS of inaccuracies with the monthly request.

SCS – The SCS shall notify the COSA PM or his representative, when the CI informs him the MOH request is inaccurate.

CI – When informed by the inspector of inaccuracies in the MOH request, the CI shall attempt to correct the problem with the contractor. If an agreement can not be reached, he shall notify the SCS of the inaccuracies.

Inspector – The inspector shall review the contractor's MOH payment request for accuracy and correctness. If the request is not correct, the inspector shall notify the CI.

Disagreements/Claims (8)

COSA – The PM shall resolve any disagreement/claim by the contractor not resolved by the SCS. If the solution requires a CO, the PM shall follow all necessary requirements of the contract.

SCS - When notified by the CI or the contractor of a disagreement/claim, the SCS shall investigate the situation. If the disagreement/claim is resolved, he shall inform the COSA PM or his representative of the issue. If the disagreement/claim can not be resolved, he shall notify the COSA PM or his representative of the situation and assist the PM in resolving the issue.

CI – When informed by the inspector or the contractor of a disagreement/claim, he shall investigate the situation. If the disagreement/claim is resolved, he shall inform the SCS of the issue. If the disagreement/claim can not be resolved, he shall notify the SCS of the situation and assist in resolving the issue.

Inspector - If the contractor should disagree with an instruction given by the inspector or any requirements stated in the plans and specifications, the inspector shall immediately notify the CI. The inspector shall also begin documenting all equipment and contractor employees working on the project or stored within the project limits. The inspector shall also document any project site conditions pertaining to the disagreement.

Private Property (3, 4, 42)

COSA - When the plans require work to be done on private property, the PM shall prepare and obtain, with assistance from the inspector, a signed permission form from all effected property owners. These signed forms shall be provided to the SCS for placement in the project records. If the property owner is unwilling to grant permission to his property, the PM shall resolve all issues or modify the plans to allow completion of the project. If the solution requires a CO, the PM shall follow all necessary requirements of the contract.

SCS- When the plans require work to be done on private property; the SCS shall receive a signed permission form from the COSA PM or his representative for all effected properties. If a permission form can not be provided, the SCS shall inform the inspector and contractor. He shall also ensure no work is done on the property until the required permission is provided by the COSA PM or his representative.

CI – When the plans require work to be done on private property, the CI shall ensure no work is performed on the private property until a permission form is provided.

Inspector - When the plans require work to be done on private property, the inspector may assist the COSA PM or his representative in obtaining a signed permission form from for all of the effected properties. If a permission form can not be provided, the inspector shall prevent the contractor from entering of the property and no work will be performed until the signed permission is provided.

Project Permits (16, 43)

COSA - The PM shall prepare, submit, and obtain any permits required for the project. A copy of all permits shall be provided to the SCS for placement in the project files. The PM shall schedule all necessary permit inspections upon completion of the project. The PM shall also terminate any permit upon completion of the project.

SCS - The SCS shall receive a copy of all necessary permits for the project from the COSA PM or his representative. The SCS shall ensure the contractor follows all permit requires as shown in the plans and specifications or any permit issued for the project.

The SCS shall notify the COSA PM or his representative of the completion of permitted work in time to allow scheduling of any necessary inspection.

CI – The CI shall ensure the contractor follows all permit requires as shown in the plans and specifications or any permit issued for the project.

Inspector - The inspector shall receive a copy of all necessary permits. The inspector shall ensure the contractor follows all permit requires as shown in the plans and specifications or any permit issued for the project.

Contractor Permits (15)

COSA - The COSA PM or his representative shall obtain any required permits from the contractor and provide a copy to the SCS for placement in the project files. If informed by the SCS of any non-compliance by the contractor, the PM shall take necessary actions to ensure compliance by the contractor.

SCS - When a contractor permit is provided by the COSA PM or his representative, the SCS shall ensure the contractor follows all requirements of the permit. If the contractor fails to follow the requirements of the provided permit, he shall immediately notify the COSA PM or his representative.

CI – The CI shall ensure the contractor follows all requirements of the contractor permit. If the contractor fails to follow the requirements of the provided permit, he shall immediately notify the SCS.

Inspector - When the inspector receives a contractor permit from the SCS, the inspector shall ensure the contractor follows all requirements of the permit. If the contractor fails to follow the requirements of the provided permit, he shall immediately notify the CI.

Storm Water Pollution Prevention Plan (42)

COSA –The PM shall request that their Consultant inspect the SW3P BMP devices immediately after placement to determine correctness of devices. When informed by the SCS, the PM shall coordinate all necessary redesign of the BMP devices and provide the modified plan sheets to the SCS. When informed by the SCS of non-compliance by the contractor to maintain or repair the BMP devices, the PM shall take necessary actions to ensure compliance by the contractor.

SCS - The SCS may accompany the CI on the inspection of the SW3P BMP devices. The SCS may suggest modifications of the SW3P to the COSA PM or his representative.

When informed by the CI of the contractor's failure to maintain or repair the BMP devices as required, the SCS shall immediately notify the COSA PM or his representative of the non-compliance of the contractor.

CI – The CI shall perform the required monthly inspections for the SW3P BMP devices to ensure compliance with the plans and specifications. The CI may suggest modifications of the BMP devices to the SCS.

When the inspector informs the CI of the contractor's non-compliance, he shall inform the contractor of the situation and work to resolve the situation. If the contractor fails to correct the necessary BMP devices, the CI shall notify the SCS of the non-compliance of the contractor.

Inspector – The inspector will notify the COSA PM when the SW3P BMP devices are in place or when major changes to BMP devices have been made. The inspector shall

ensure the contractor follows all requirements of the SW3P as shown in the plans. The inspector shall also ensure the contractor maintains and repairs the BMP devices as necessary. If the contractor fails to maintain or repair the BMP devices as required, the inspector shall immediately notify the CI of the non-compliance of the contractor.

Traffic Control Plan (42)

COSA - When informed by the SCS, the PM shall coordinate all necessary redesign of additional devices or modification of existing devices and provide the modified plan sheets to the SCS. When informed by the SCS of the non-compliance by the contractor to maintain or repair the TCP devices, the PM shall take necessary actions to ensure compliance by the contractor.

SCS - The SCS may accompany the CI on the inspection of the TCP devices. The SCS may suggest modifications of the TCP to the COSA PM or his representative.

When informed by the CI of the contractor's fails to maintain or repair the warning devices as required, the SCS shall immediately notify the COSA PM or his representative of the non-compliance of the contractor.

CI - The CI shall inspect the TCP devices to ensure compliance with the plans and specifications. The CI may suggest modifications of the TCP devices to the SCS.

When the inspector informs the CI of the contractor's non-compliance to maintain or repair the warning devices, he shall inform the contractor of the situation and work to resolve the situation. If the contractor fails to correct the necessary failures, the CI shall notify the SCS of the non-compliance of the contractor.

Inspector - The inspector shall ensure the contractor follows all requirements of the TCP as shown in the plans. The inspector shall also ensure the contractor maintains and repairs the warning devices as required. If the contractor fails to maintain or repair the warning devices as required, the inspector shall immediately notify the CI of the non-compliance of the contractor.

Utility Conflicts (42)

COSA - When informed by the SCS of a utility conflict, the PM shall take all actions to resolve the conflict. If the solution requires a CO, the PM shall follow all necessary requirements of the contract.

SCS - When informed by the CI of a utility conflict, the SCS shall notify the COSA PM or his representative of the situation.

CI - When informed by the inspector of a utility conflict, the CI shall investigate the situation and work with the contractor and the involved utility company to resolve the situation. If no solution can be worked out, the CI shall notify the SCS.

Inspector - When the contractor notifies the inspector of a utility conflict, the inspector shall verify the situation and notify the CI.

Third Party Funded Work (42)

COSA - The PM shall be responsible for overseeing all third party work included in the project. Third party work is defined as any work funded by someone other than the COSA/TxDOT.

SCS - The SCS shall not be responsible for any third party work included within the project.

CI - The CI shall not be responsible for any third party work included within the project.

Inspector - The inspector shall not be responsible for any third party work included within the project. The inspector shall record in the diaries contractor activities and progress related to Third Party Funded work. The inspector shall be familiar with the overall status and issues related to Third Party Funded work. Note: The Third Party Funded Agency's inspector is responsible for inspecting the Third Party Funded work.

Hazardous Materials

COSA - If informed by the contractor or the SCS of hazardous materials on the project, the PM shall take actions to remove the material from the project. The PM shall also ensure the area has been adequately barricaded to prevent anyone from entering the area. Once the material has been removed and the area is safe, the PM shall notify the SCS and the contractor may continue the work.

SCS - If informed by the contractor or CI of hazardous material on the project, the SCS shall immediately notify the COSA PM or his representative and ensure the area is adequately barricaded to prevent anyone from entering the area. The SCS shall prevent the contractor from working in the area until notified by the COSA PM or his representative that the area is safe.

CI - When informed by the inspector or contractor of hazardous materials on the project, the CI shall immediately notify the SCS and ensure the area has been adequately barricaded to prevent anyone from entering the area.

Inspector - If any type of hazardous material is found on the project, the inspector shall immediately stop the contractor's work and notify the CI. The area shall be barricaded to prevent anyone from entering the area. When the material has been removed and the area is safe, the contractor can be allowed to work in the area.

Subcontractors/DBE

COSA - The PM shall approve all subcontractors/DBEs submitted by the contractor. The approval letter and/or list shall be provided to the SCS for placement in the project records. The PM shall modify the subcontractor/DBE list when notified by the contractor of a change.

SCS - The SCS shall review and ensure all subcontractors/DBEs working on the project have been approved by the COSA PM or his representative. If a subcontractor has not been approved, the SCS shall stop all work of the subcontractor and notify the COSA PM or his representative.

CI - The CI shall notify the SCS of any subcontractor/DBE not listed on the approved subcontractor/DBE list.

Inspector - The inspector shall review and ensure all subcontractors/DBEs have been approved by the COSA PM or his representative. If a subcontractor/DBE has not been approved, the inspector shall stop all work of the subcontractor/DBE until the COSA PM or his representative has approved the subcontractor.

Survey Data (17, 18)

COSA - The PM shall provide all necessary survey data and points for the construction of the project as required in the contract. If the SCS informs the PM of the contractor's incorrect survey procedures, the PM shall investigate and take necessary actions to correct the situation.

SCS - If the CI informs the SCS of the contractor's incorrect survey procedures, the SCS shall notify the COSA PM or his representative of the situation.

CI - If the inspector informs the CI of the contractor's incorrect survey procedures, the CI shall investigate the situation. If incorrect survey procedures are being used, the CI shall discuss the incorrect procedures with the contractor. If corrections can not be achieved, the CI shall notify the SCS.

Inspector - The inspector shall observe the survey procedures of the contractor. If the inspector observes incorrect procedures, he shall inform the CI of his concerns.

Project Progress Meetings (21, 22, 23)

COSA - The PM shall attend all project progress meetings.

SCS - The SCS shall attend all project progress meetings and ensure the meeting minutes are forwarded to all project partners.

CI - The CI shall conduct the project progress meetings with coordination with the SCS and Contractor. The CI shall ensure meeting minutes are forwarded to all project partners.

Inspector - The inspector shall attend all project progress meetings.

Project Safety

COSA - The PM or his representative shall ensure the contractor follows all Federal, State, and local safety requirements as per the contract documents.

SCS - The SCS shall ensure the contractor follows all safety requirements as shown in the plans and specifications. The SCS may notify the COSA PM or his representative of possible safety issues if observed on the project.

CI - The CI shall ensure the contractor follows all safety requirements as shown in the plans and specifications. The CI may notify the SCS of possible safety issues if observed on the project.

Inspector - The inspector shall ensure the contractor follows all safety requirements as shown in the plans and specifications.

Outside Agency Inspections (43)

COSA - The PM shall schedule all necessary outside agency project inspections and notify the SCS. When informed by the SCS of an unscheduled inspection by a Federal, State, or local agency, the PM shall make every effort to attend the inspection. The PM will take all necessary actions to correct any noted deficiencies.

SCS - When informed by the COSA PM or his representative of a scheduled inspection by an outside agency, the SCS shall attend the inspection. When informed by the CI of an unscheduled inspection of the project by an outside agency, the SCS shall make every effort to attend the inspection and shall also notify the COSA PM or his representative immediately of the inspection. Any deficiencies noted by the outside agency inspector shall be forwarded to the COSA PM or his representative.

CI - When informed by the SCS of a scheduled inspection by an outside agency, the CI shall attend the inspection. When informed by the inspector of an unscheduled inspection of the project by an outside agency, the CI shall make every effort to attend

the inspection and shall also notify the SCS immediately of the inspection. Any deficiencies noted by the outside agency inspector shall be forwarded to the SCS.

Inspector - The inspector shall cooperate with any Federal, State, or local agency inspector and any other outside agency inspector when they visit the project. The inspector shall notify the CI immediately of any outside agency inspector that visits the project. Any deficiencies noted by the inspector shall be forwarded to the CI.

Final Inspection (24, 43, 44, 45, 46)

COSA - When informed by the SCS of the completion of the project, the PM shall make a final inspection and note any deficiencies. The PM shall obtain a copy of the red lined plans from the contractor. The PM shall prepare and process a CO for all final over and under run of pay items on the project. The PM shall receive all warranties available from the contractor.

SCS - The SCS shall ensure all items on the project punch list have been corrected by the contractor. Once all items are complete, the SCS shall notify the COSA PM or his representative of the completion of the project. The SCS shall notify the COSA PM or his representative of the correctness of the red lined plans and the final over and under run of pay items on the project.

CI - The CI shall ensure all items on the project punch list have been corrected by the contractor. Once all items are complete, the CI shall notify the SCS of the completion of the project. The CI shall verify the accuracy of the red lined plans and notify the SCS of the correctness of the plans. The CI shall review the inspectors list of final over and under runs of pay items on the project and notify the SCS.

Inspector - When notified by the contractor of the completion of the project, the inspector shall make a final inspection of the project. A punch list of all items needing correction shall be made and provided to the CI and the contractor. The inspector shall also review all pay items and determine the final over and under runs of items on the project.

TxDOT Final Audit (47)

COSA - Upon completion of the project, the PM shall coordinate a final audit of the project files with the TxDOT.

SCS - Upon completion of the project, the SCS shall assist the COSA PM or his representative with the final audit by the TxDOT.

CI - Upon completion of the project, the CI shall assist the SCS and the COSA PM or his representative with the final audit by the TxDOT.

Inspector - Upon completion of the project, the inspector shall assist with the final audit by the TxDOT.

References:

Construction Management Plan, Aug. 20, 2006

CMP Responsibility Matrix, May 2006

Local Agency Management Procedures, 2005

Program Management Plan, Rev. Aug. 2006

3.4 General Responsibility Matrix

Additional detail regarding the responsibilities of the Program Manager, Senior Construction Specialist, and the Field Inspectors are provided on **Table 3-1** below.

TABLE 3-1
General Responsibility Matrix for Construction Phase Operations
(P=Primary, S=Secondary, A=Audit, J = Joint Primary Responsibility, I=Input/Involved)

Line	Function	COSA PM	Senior Construction Specialist	Sr. Admin. Spec.	Chief Inspector	Field Inspector	Design Engineer
1	Develop Construction Mgmt. Plan	S	J		J		
2	Conduct Preconstruction/Chartering Meeting	J	J	I	I	I	S
3	Prepare Driveway Penetration Documentation	A	A				P
4	Obtain signatures from residents	P				I	
5	Terminate Contract	P	I		I	I	S
6	Stop/Suspend Work	P	I		I		
7	Resolve Claims	P	I		I		S
8	Maintain On-site Project Office Files		A	P	I	I	
9	Clarify Technical Issues (RFIs)	S	S		S	S	P
10	Provide Technical Clarification to the Contractor at Site		I		J	J	S
11	Prepare/Negotiate/Execute Change Order	P			I		S
12	Verify Contractor Obtained Permits	P	S				
13	Secure Owner-furnished Permits	P	A				
14	Provide Horizontal and Vertical Controls – Consultant is responsible for providing benchmarks. Contractor surveys and cut sheets.	S					P
15	Monitor Contractor Survey		A		S	P	
16	Approve Project Schedule	J	I				J
17	Ensure Schedule Compliance	A	P		I	I	
18	Conduct Scheduled Project Meetings	S	I	I	P	I	A
19	Review/Distribute Proj. Mtg. Minutes	S		P			A
20	Report Progress		P		I	I	

Line	Function	COSA PM	Senior Construction Specialist	Sr. Admin. Spec.	Chief Inspector	Field Inspector	Design Engineer
21	Verify Contractor Maintained As-built Drawings		A		P	I	
22	Review & Approve Progress Payment	P	I	A	I	I	
23	Review & Approve Contractor Submittals	S	I	A	I	I	P
24	Monitor Timely Review of Submittals			A	I		P
25	Prepare Daily Inspection Reports	A	A	A	I	P	
26	Provide Off-site Inspection / Performance, Quality, Workmanship	P	S				
27	Provide On-site Inspection / Performance, Quality, Workmanship		A		S	P	
28	Inspect Formwork				S	P	
29	Inspect & Approve Rebar Placement				S	P	
30	Authorize Concrete Placement				S	P	
31	Monitor On-site Concrete Placement				S	P	
32	Inspect Pipe Installation				S	P	
33	Accept Materials Delivered On-site or Off-site		A		S	P	
34	Review/Approve MOH Payment	P	I		I	I	
35	Arrange On-site Material Testing	A	S		S	P	
36	Resolve Resident's Issues	P	I		I	I	
37	Resolve non-design related construction issues (traffic control changes, utility conflicts, changes in phasing, access to businesses & residents)	J	J		J	J	
38	Ensure contractor compliance – environmental, SW3P, access for residents		A		S	P	
39	Coordinate removal of unknown hazardous material	P					
40	Coordinate with Storm Water Operations for televising storm drain system	P	A			I	
41	Coordinate with utility coordinator to have CPS conduct leak check survey	P	A			I	
42	Perform Substantial Completion / Final Inspection	J	J	J	J	J	J
43	Direct Consultant to request TDLR Inspection	P	A		I	S	

Line	Function	COSA PM	Senior Construction Specialist	Sr. Admin. Spec.	Chief Inspector	Field Inspector	Design Engineer
44	Obtain TDLR inspection						P
45	Ensure permits are closed – SW3P	P	A				
46	Provide Final Payment	P					
47	Review and Recommend Final Payments	P	S		S	S	S
48	Provide Services During Warranty Period	P					
49	Prepare Project Closeout	J	J	J	J	J	J
50	Review/Approve Subcontractor/DBE	P					