STATE OF TEXAS §
§
COUNTY OF FORT BEND §

AGREEMENT FOR CONTINGENCY DEBRIS REMOVAL
PURSUANT TO RFP 15-033
(TERTIARY VENDOR)

THIS AGREEMENT is made and entered into by and between Fort Bend County, (hereinafter "County"), a body corporate and politic under the laws of the State of Texas, and Phillips and Jordan, Inc. (hereinafter "Contractor"), a company authorized to conduct business in the State of Texas.

W I T N E S S E T H

WHEREAS, County desires that Contractor provide contingency debris removal services pursuant to RFP 15-033; and

WHEREAS, Contractor represents that it is qualified and desires to perform such services in accordance with the advertised specifications of RFP 15-033.

NOW, THEREFORE, in consideration of the mutual covenants and conditions set forth below, the parties agree as follows:

AGREEMENT

Section 1. Scope of Services

Contractor shall render Services to County in accordance with the Proposal attached hereto as Exhibit A and incorporated herein for all purposes.

Section 2. Personnel

A. Contractor represents that it presently has, or is able to obtain, adequate qualified personnel in its employment for the timely performance of the Scope of Services required under this Agreement and that Contractor shall furnish and maintain, at its own expense, adequate and sufficient personnel, in the opinion of County, to perform the Scope of Services when and as required and without delays.

B. All employees of Contractor shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee of Contractor who, in the opinion of County, is incompetent or by his conduct becomes detrimental to the project shall, upon request of County, immediately be removed from association with the project.

hours- 75%, and 120 hours- 100%. This is a minimum response schedule and does not restrict an earlier response.

C. County by and through the Debris Management Center may issue additional Task Orders to define more precisely the work to be accomplished or to authorize additional work.

D. Contractor shall perform in accordance with each Task Order for those municipalities established by County as Joint Resolution Jurisdictions (JRJ). Each Task Order will be uniquely and sequentially numbered.

E. At each vegetative debris reduction site, Contractor is required to grind a minimum of 200-250 cubic yards per hour per grinder with a maximum of 6 hours of down time for service per 24 hours. The minimum required reduction/disposal rate shall be achieved no later than the third calendar day after receipt of the mobilization Task Order. Liquidated damages shall be assessed at $500.00 per calendar day for any day in which the minimum processing rate is not met, unless non-compliance is due to insufficient debris amounts being delivered to the site.

F. All work, including site restoration prior to close-out, shall be completed within 30 calendar days after receiving notice from the Debris Management Center that the last load of debris has been delivered, unless the Debris Manager initiates additions or deletions to the contract by written change orders. Liquidated damages shall be assessed at $1,000.00 per calendar day for any time over 30 calendar days.

G. Unless directed otherwise by the Debris Management Center, Contractor shall conduct volumetric reduction operations 24 hours per day, 7 days per week. Hauling of debris from public rights-of-way and public property will be limited to day-light hours, 7 days per week.

H. Removal of debris shall be completed within 90 calendar days of the Notice to Proceed and all disposal and recycling operations shall be completed within 180 calendar days of the Notice to Proceed. Contractor shall complete the tasks described in the Scope of Services within this time or within such additional time as may be extended by the County.

Section 6. <u>Modifications and Waivers</u>

A. The parties may not amend or waive this Agreement, except by a written agreement executed by both parties.

B. No failure or delay in exercising any right or remedy or requiring the satisfaction of any condition under this Agreement, and no course of dealing between the parties, operates as a waiver or estoppel of any right, remedy, or condition.

C. The rights and remedies of the parties set forth in this Agreement are not exclusive of, but are cumulative to, any rights or remedies now or subsequently existing at law, in equity, or by statute.

Section 7. Term and Termination

A. This Agreement is effective upon execution by County and will expire on November 30, 2016. The Agreement is renewable annually for five (5) years (through 30 November 2021) if mutually agreeable under the same terms, conditions and recertification of Contractor's capabilities.

B. Termination for Convenience: County may terminate this Agreement at any time upon thirty (30) days written notice.

C. Termination for Default

1. County may terminate the whole or any part of this Agreement for cause in the following circumstances:

    a. If Contractor fails to perform services within the time specified in the Scope of Services or any extension thereof granted by the County in writing;

    b. If Contractor materially breaches any of the covenants or terms and conditions set forth in this Agreement or fails to perform any of the other provisions of this Agreement or so fails to make progress as to endanger performance of this Agreement in accordance with its terms, and in any of these circumstances does not cure such breach or failure to County's reasonable satisfaction within a period of ten (10) calendar days after receipt of notice from County specifying such breach or failure.

2. If, after termination, it is determined for any reason whatsoever that Contractor was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the County in accordance with Section 7(B) above.

D. Upon termination of this Agreement, County shall compensate Contractor in accordance with Section 3, above, for those services which were provided under this Agreement prior to its termination and which have not been previously invoiced to County. Contractor's final invoice for said services will be presented to and paid by County in the same manner set forth in Section 3 above.

E. If County terminates this Agreement as provided in this Section, no fees of any type, other than fees due and payable at the Termination Date, shall thereafter be paid to Contractor.

Section 8. Ownership and Reuse of Documents

All documents, data, reports, research, graphic presentation materials, etc., developed by Contractor as a part of its work under this Agreement, shall become the property of County upon completion of this Agreement, or in the event of termination or cancellation thereof, at the time of payment under Section 3 for work performed. Contractor shall promptly furnish all such data and material to County on request.

Section 9. Inspection of Books and Records

Contractor will permit County, or any duly authorized agent of County, to inspect and examine the books and records of Contractor for the purpose of verifying the amount of work performed under the Scope of Services. County's right to inspect survives the termination of this Agreement for a period of four years.

Section 10. Insurance

A. Prior to commencement of the Services, Contractor shall furnish County with properly executed certificates of insurance which shall evidence all insurance required and provide that such insurance shall not be canceled, except on 30 days' prior written notice to County. Contractor shall provide certified copies of insurance endorsements and/or policies if requested by County. Contractor shall maintain such insurance coverage from the time Services commence until Services are completed and provide replacement certificates, policies and/or endorsements for any such insurance expiring prior to completion of Services. Contractor shall obtain such insurance written on an Occurrence form from such companies having Bests rating of A/VII or better, licensed or approved to transact business in the State of Texas, and shall obtain such insurance of the following types and minimum limits:

    1. Workers Compensation in accordance with the laws of the State of Texas. Substitutes to genuine Workers' Compensation Insurance will not be allowed.

    2. Employers' Liability insurance with limits of not less than $1,000,000 per injury by accident, $1,000,000 per injury by disease, and $1,000,000 per bodily injury by disease.

    3. Commercial general liability insurance with a limit of not less than $1,000,000 each occurrence and $2,000,000 in the annual aggregate. Policy shall cover liability for bodily injury, personal injury, and property

damage and products/completed operations arising our of the business operations of the policyholder.

4. Business Automobile Liability coverage applying to owned, non-owned and hired automobiles with limits not less than $1,000,000 each occurrence combined single limit for Bodily Injury and Property Damage combined.

5. Builders Risk Insurance: Contractor shall obtain and keep in full force and effect until the Transfer Date, Builders Risk Insurance, subject to policy terms and conditions, of direct physical loss or damage to property, materials, equipment and supplies which are to become an integral part of the Project, whether owned by Contractor, or subcontractors of every tier, and in which one or more of same has an insurable interest, while in transit, while at the Construction Site awaiting construction, during construction, and until the Transfer Date. Such insurance shall be maintained to cover, as nearly as practicable, the insurable value of such property, materials, equipment and supplies at risk, and shall contain a waiver of subrogation in favor of Contractor, Architect, subcontractors of any tier and Owner for loss or damage occurring during the Work and shall name Contractor as the named insured and Owner as additional insureds. All Builder's Risk Insurance proceeds shall be paid directly to the Contractor.

B. County and the members of Commissioners Court shall be named as additional insured to all required coverage except for Workers' Compensation and Professional Liability (if required). All Liability policies written on behalf of Contractor shall contain a waiver of subrogation in favor of County and members of Commissioners Court.

C. If required coverage is written on a claims-made basis, Contractor warrants that any retroactive date applicable to coverage under the policy precedes the effective date of the Contract and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of 2 years beginning from the time the work under this Contract is completed.

D. Contractor shall not commence any portion of the work under this Contract until it has obtained the insurance required herein and certificates of such insurance have been filed with and approved by Fort Bend County.

E. No cancellation of or changes to the certificates, or the policies, may be made without sixty (60) days prior, written notification to Fort Bend County.

F. Approval of the insurance by Fort Bend County shall not relieve or decrease the liability of the Contractor.

Section 11. Performance and Payment Bond

In the event this contract is activated, Contractor shall post with Fort Bend County, within thirty-six (36) hours of notice and prior to any work commencing, a performance and payment bond in the amount of one hundred percent (100%) of the total purchase order amount. These bonds shall be executed by a corporate surety company duly authorized and admitted to do business in the State of Texas and licensed to issue such a bond in the State of Texas. Each year upon renewal, Contractor shall provide an updated letter to the Purchasing Department.

Section 12. Indemnity

CONTRACTOR SHALL INDEMNIFY AND DEFEND COUNTY AGAINST ALL LOSSES, LIABILITIES, CLAIMS, CAUSES OF ACTION, AND OTHER EXPENSES, INCLUDING REASONABLE ATTORNEYS FEES, ARISING FROM ACTIVITIES OF CONTRACTOR, ITS AGENTS, SERVANTS OR EMPLOYEES, PERFORMED UNDER THIS AGREEMENT THAT RESULT FROM THE NEGLIGENT ACT, ERROR, OR OMISSION OF CONTRACTOR OR ANY OF CONTRACTOR'S AGENTS, SERVANTS OR EMPLOYEES.

Section 13. Confidential and Proprietary Information

A. Contractor acknowledges that it and its employees or agents may, in the course of performing their responsibilities under this Agreement, be exposed to or acquire information that is confidential to County. Any and all information of any form obtained by Contractor or its employees or agents from County in the performance of this Agreement shall be deemed to be confidential information of County ("Confidential Information"). Any reports or other documents or items (including software) that result from the use of the Confidential Information by Contractor shall be treated with respect to confidentiality in the same manner as the Confidential Information. Confidential Information shall be deemed not to include information that (a) is or becomes (other than by disclosure by Contractor) publicly known or is contained in a publicly available document; (b) is rightfully in Contractor's possession without the obligation of nondisclosure prior to the time of its disclosure under this Agreement; or (c) is independently developed by employees or agents of Contractor who can be shown to have had no access to the Confidential Information.

B. Contractor agrees to hold Confidential Information in strict confidence, using at least the same degree of care that Contractor uses in maintaining the confidentiality of its own confidential information, and not to copy, reproduce, sell, assign, license, market, transfer or otherwise dispose of, give, or disclose Confidential Information to third parties or use Confidential Information for any purposes whatsoever other than the provision of Services to County hereunder, and to advise each of its employees and agents of their obligations to keep Confidential Information confidential. Contractor

shall use its best efforts to assist County in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limitation of the foregoing, Contractor shall advise County immediately in the event Contractor learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of this Agreement and Contractor will at its expense cooperate with County in seeking injunctive or other equitable relief in the name of County or Contractor against any such person. Contractor agrees that, except as directed by County, Contractor will not at any time during or after the term of this Agreement disclose, directly or indirectly, any Confidential Information to any person, and that upon termination of this Agreement or at County's request, Contractor will promptly turn over to County all documents, papers, and other matter in Contractor's possession which embody Confidential Information.

C. Contractor acknowledges that a breach of this Section, including disclosure of any Confidential Information, or disclosure of other information that, at law or in equity, ought to remain confidential, will give rise to irreparable injury to County that is inadequately compensable in damages. Accordingly, County may seek and obtain injunctive relief against the breach or threatened breach of the foregoing undertakings, in addition to any other legal remedies that may be available. Contractor acknowledges and agrees that the covenants contained herein are necessary for the protection of the legitimate business interest of County and are reasonable in scope and content.

D. Contractor in providing all services hereunder agrees to abide by the provisions of any applicable Federal or State Data Privacy Act.

E. Contractor expressly acknowledges that County is subject to the Texas Public Information Act, TEX. GOV'T CODE ANN. §§ 552.001 et seq., as amended, and notwithstanding any provision in the Agreement to the contrary, County will make any information related to the Agreement, or otherwise, available to third parties in accordance with the Texas Public Information Act. Any proprietary or confidential information marked as such provided to County by Consultant shall not be disclosed to any third party, except as directed by the Texas Attorney General in response to a request for such under the Texas Public Information Act, which provides for notice to the owner of such marked information and the opportunity for the owner of such information to notify the Attorney General of the reasons why such information should not be disclosed. The terms and conditions of the Agreement are not proprietary or confidential information.

Section 14. Independent Contractor

A. In the performance of work or services hereunder, Contractor shall be deemed an independent contractor, and any of its agents, employees, officers, or volunteers performing work required hereunder shall be deemed solely as employees of contractor or, where permitted, of its subcontractors.

B. Contractor and its agents, employees, officers, or volunteers shall not, by performing work pursuant to this Agreement, be deemed to be employees, agents, or servants of County and shall not be entitled to any of the privileges or benefits of County employment.

Section 15. Notices

A. Each party giving any notice or making any request, demand, or other communication (each, a "Notice") pursuant to this Agreement shall do so in writing and shall use one of the following methods of delivery, each of which, for purposes of this Agreement, is a writing: personal delivery, registered or certified mail (in each case, return receipt requested and postage prepaid), or nationally recognized overnight courier (with all fees prepaid).

B. Each party giving a Notice shall address the Notice to the receiving party at the address listed below or to another address designated by a party in a Notice pursuant to this Section:

County:	Fort Bend County Emergency Management Attn: Emergency Management Coordinator 307 Fort Street Richmond, TX 77469-7728
With a copy to:	Fort Bend County Attn: County Judge 401 Jackson Street Richmond, Texas 77469
Contractor:	Phillips and Jordan, Inc. ATTN: J. Patrick McMullen, President 10201 Parkside Drive, Suite 300 Knoxville, TN 37922

C. Notice is effective only if the party giving or making the Notice has complied with subsections 15. A. and B. and if the addressee has received the Notice. A Notice is deemed received as follows:

1. If the Notice is delivered in person, or sent by registered or certified mail or a nationally recognized overnight courier, upon receipt as indicated by the date on the signed receipt.

2. If the addressee rejects or otherwise refuses to accept the Notice, or if the Notice cannot be delivered because of a change in address for which no Notice was given, then upon the rejection, refusal, or inability to deliver.

Section 16. Compliance with Laws

Contractor shall comply with all federal, state, and local laws, statutes, ordinances, rules and regulations, and the orders and decrees of any courts or administrative bodies or tribunals in any matter affecting the performance of this Agreement, including, without limitation, Worker's Compensation laws, minimum and maximum salary and wage statutes and regulations, licensing laws and regulations. When required by County, Contractor shall furnish County with certification of compliance with said laws, statutes, ordinances, rules, regulations, orders, and decrees above specified.

Section 17. Performance Warranty

A. Contractor warrants to County that Contractor has the skill and knowledge ordinarily possessed by well-informed members of its trade or profession practicing in the greater Houston metropolitan area and Contractor will apply that skill and knowledge with care and diligence to ensure that the Services provided hereunder will be performed and delivered in accordance with the highest professional standards.

B. Contractor warrants to County that the Services will be free from material errors and will materially conform to all requirements and specifications contained in the attached Exhibit A.

Section 18. Assignment and Delegation

A. Neither party may assign any of its rights under this Agreement, except with the prior written consent of the other party. That party shall not unreasonably withhold its consent. All assignments of rights are prohibited under this subsection, whether they are voluntarily or involuntarily, by merger, consolidation, dissolution, operation of law, or any other manner.

B. Neither party may delegate any performance under this Agreement.

C. Any purported assignment of rights or delegation of performance in violation of this Section is void.

Section 19. Applicable Law

The laws of the State of Texas govern all disputes arising out of or relating to this Agreement. The parties hereto acknowledge that venue is proper in Fort Bend County, Texas, for all legal actions or proceedings arising out of or relating to this Agreement and waive the right to sue or be sued elsewhere. Nothing in the Agreement shall be construed to waive the County's sovereign immunity.

Section 20. Successors and Assigns

County and Contractor bind themselves and their successors, executors, administrators and assigns to the other party of this Agreement and to the successors, executors, administrators and assigns of the other party, in respect to all covenants of this Agreement.

Section 21. Third Party Beneficiaries

This Agreement does not confer any enforceable rights or remedies upon any person other than the parties.

Section 22. Severability

If any provision of this Agreement is determined to be invalid, illegal, or unenforceable, the remaining provisions remain in full force, if the essential terms and conditions of this Agreement for each party remain valid, binding, and enforceable.

Section 23. Publicity

Contact with citizens of Fort Bend County, media outlets, or governmental agencies shall be the sole responsibility of County. Under no circumstances whatsoever, shall Contractor release any material or information developed or received in the performance of the Services hereunder without the express written permission of County, except where required to do so by law.

Section 24. Captions

The section captions used in this Agreement are for convenience of reference only and do not affect the interpretation or construction of this Agreement.

Section 25. Conflict

In the event there is a conflict between this Agreement and the attached exhibit(s), this Agreement controls.

IN WITNESS WHEREOF, the parties hereto have signed or have caused their respective names to be signed to multiple counterparts to be effective on the _____ day of _____, 2016.

FORT BEND COUNTY

Robert E. Hebert, County Judge

July 5, 2016
Date

PHILLIPS AND JORDAN, INC.

Dudley Orr, Vice President

6/21/16
Date

ATTEST: Laura Richard

Laura Richard, County Clerk

COMMISSIONERS COURT STATE OF TEXAS FORT BEND COUNTY, TEXAS

APPROVED:

Alan Spears for Jeff Braun, Emergency Management Coordinator
Fort Bend County Emergency Management

APPROVED AS TO LEGAL FORM:

Marcus D. Spencer, First Assistant County Attorney

AUDITOR'S CERTIFICATE

I hereby certify that funds are available in the amount of $50,000.00 to accomplish and pay the obligation of Fort Bend County under this contract.

Robert Ed Sturdivant, County Auditor

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Exhibit A: Scope of Service
Exhibit B: Pricing

EXHIBIT A

May 26, 2015

Fort Bend County, Texas
Purchasing Department
Travis Annex
301 Jackson, Suite 201
Richmond, TX 77469

RE: Request for Proposals #: RFP 15-033
Contingency Debris Clearing, Removal and Disposal and Operation of Temporary Debris Staging and Reduction Sites for Fort Bend County

Phillips & Jordan, Incorporated (Phillips & Jordan) thanks you for the opportunity to present our proposal for Contingency Debris Clearing, Removal and Disposal and Operation of Temporary Debris Staging and Reduction Sites in response to RFP 15-033 issued by Fort Bend County, Texas (County). Phillips & Jordan offers 36 years of experience as a disaster debris management contractor and can provide the management team, equipment, personnel, and other necessary resources to respond rapidly and efficiently to a future disaster in Fort Bend County. Our disaster recovery work will also include the generation and collection of Federal Emergency Management Agency (FEMA) project documentation to validate the eligibility of our work and ensure maximum reimbursement.

The financial reimbursement that Fort Bend County will ultimately receive from FEMA through its Public Assistance (PA) Grant Program for disaster debris cost will be dependent on three major factors: (1) compliance with Title 44: Code of Federal Regulations (44 CFR) Part 13, Subpart C, 13.36 Procurement; (2) eligibility of work performed; and (3) the documentation to support incurred cost. Phillips & Jordan's philosophical approach to execution of a disaster debris management project is based on these same three factors.

To ensure compliance with Super Circular 2, Phillips & Jordan provides the required bid, payment, and performance bonds along with rates that can support FEMA "reasonable cost" criteria. As a project's scope and cost expand, we provide the increased bonding capacity necessary to reduce the financial risk to Fort Bend County.

As the contractor, we bare significant financial risk for cost associated with ineligible debris as well as the associated negative ethical implications. Phillips & Jordan accepts and manages this risk willingly. If we are requested by Fort Bend County to remove ineligible debris, the County will be asked to make that request in writing. If the County's monitoring firm directs us to remove ineligible debris, we will require them to provide that request in writing, and will notify the County regarding the request. Each of our clients is assigned an experienced Project Manager that has FEMA PA experience and understands current policy and documentation recommendations to support eligibility claims.

Phillips & Jordan has the capability to document and track our work with our Automated Debris Management System (ADMS). Our ADMS is one of only two systems currently approved by the U.S. Army Corps of Engineers. This debris management documentation tool can provide a second critical source of grant supporting documents.

Critical expectations of the disaster debris management contractor selected by Fort Bend County should include demonstrated capabilities to efficiently and effectively mobilize manpower and equipment, to coordinate and control all resources deployed to the impacted area, and to implement robust quality control and safety programs. Phillips & Jordan offers these capabilities as demonstrated through our successful past performance record responding to a wide variety of natural and man-made disaster events.

Phillips & Jordan's capacity and capability to perform disaster debris management services includes a senior management team that offers more than 140 years of combined debris removal; disaster management, FEMA PA Grant Program administration, and disaster recovery experience; a fleet of over 950 individual pieces of company-owned equipment applicable to debris management activities; and a nationwide group of experienced disaster subcontractors.

The authorized representatives for Phillips & Jordan are as follows:

Primary	Alternate	Alternate
Julie Glenn Disaster Services Coordinator Phone (865) 776-8919 Fax (865) 392-3090 jglenn@pandj.com	Wayne Floyd Director of Disaster Services Phone (919) 369-4685 Fax (865) 392-3090 wfloyd@pandj.com	J. Patrick McMullen President Phone (865) 392-3053 Fax (865) 392-3090 pmcmullen@pandj.com

Sincerely,

J. Patrick McMullen
President
Phillips & Jordan, Incorporated

A. General Operations Plan

A.1 Introduction

The following Debris Management and Operations Plan addresses the minimum requirements outlined within the bid documentation published by Fort Bend County (County), and is based on standard protocols and procedures implemented for disaster debris management missions. The general mobilization and operations approach utilized by Phillips & Jordan reflects our collective past experience gained from responding to numerous natural disasters that have occurred throughout the United States over the past +30 years. Examples of relatively recent disasters for which Phillips & Jordan implemented its general mobilization and operations approach to successfully accomplish disaster debris management include Hurricane Sandy (2012 - 2013), the outbreak of multiple tornadoes in the State of Alabama (2011), the EF-5 tornado that devastated Joplin, Missouri (2011), and Hurricane Irene (2011).

A.2 Post-Award and Pre-Event Coordination

Following contract award to Phillips & Jordan, members of our senior disaster debris management team will arrange to conduct a post-award teleconference with County representatives. During this teleconference key elements of the County's disaster response preparedness will be discussed including, but not limited to, proposed equipment staging and temporary debris staging and reduction (TDSR) sites, area landfills authorized to receive debris for final disposal, identification of points of contacts for stakeholders that would participate during a disaster response (public works department, County administration offices, local power companies, etc.), and educational enhancements required by the County to increase its disaster response preparedness.

Phillips & Jordan will initiate pre-event communication with the County during teleconferences conducted at intervals of 96 hours, 48 hours, and 24 hours prior to the anticipated landfall of a hurricane (the most likely disaster event for which contract activation would be required). During these teleconferences the team will review the availability and preparation of TDSR sites for post-event operations, discuss details of Phillips & Jordan's mobilization approach based on the anticipated severity of the storm, and discuss pre-positioning of resources needed for event response. During this time period Phillips & Jordan will also activate its pre-positioned subcontractors and vendors that will support the disaster recovery effort.

In addition, Phillips & Jordan will assist with other pre-planning efforts including:

- Identification of the location to be used for check-in of personnel and equipment
- Refinement of the debris volume estimate based on anticipated storm conditions
- Development of recommended debris segregation guidelines for the general public
- Development of a sectoring plan for management of debris crews and communication with the general public regarding progress and scheduled passes

- Coordination with the Debris Monitoring Firm retained by the County
- Coordination with stakeholders and the Federal Emergency Management Agency (FEMA)

A.3 Preliminary Damage Assessment

Phillips & Jordan has found it favorable for both our clients and our operations managers to be involved and participate in preparations prior to an event, and in the initial damage assessment (IDA) immediately following an event. Phillips & Jordan has experienced staff that can assist in training County staff on how to perform an IDA that will collect and document the information that will later be required to validate the threshold of damages. Proper documentation during the IDA is critical to providing validation during the preliminary damage assessment (PDA) that will also involve FEMA and the State of Texas Emergency Management. Being aware of the relevant thresholds (2015 state threshold for Texas is $35,455,241 and the 2015 county threshold for Fort Bend County is $2,083,935) is helpful to understanding the likelihood of a Federal Disaster Declaration and to knowing when to move forward with debris management task orders. Phillips & Jordan's clear understanding of the requirements of the declaration process will be valuable to the County during this process if an event does impact the County.

A.4 Pre-Position of Resources

Approximately 24 hours prior to hurricane landfall, Phillips & Jordan will pre-position personnel near the path of the storm, but out of harm's way. At the request of the County, the Phillips & Jordan Operations Manager will be deployed within 12 hours following a notification of need to the designated Emergency Operations Center to assist with pre-planning coordination. When activated by the County to begin debris operations, the Operations Manager will remain on the jobsite until project closeout and will be on call and available to County representatives on a 24/7 basis.

Phillips & Jordan will also pre-position our own equipment and key pre-positioned subcontractors equipment as required. Phillips & Jordan has existing contracts in place with 19 key pre-positioned subcontractors that have a combined 186 years of experience working with Phillips & Jordan, and understand the importance of having personnel and equipment ready to quickly and efficiently respond to debris management work assignments. However, Phillips & Jordan's preference is to utilize as many local qualified subcontractors and vendors as possible to support the debris management mission. In order to maximize local participation, Phillips & Jordan will identify potential subcontractors and vendors based in and around the County as part of our post-award activities. Equipment from these subcontractor and vendors will also be pre-positioned so that it is ready for deployment following arrival of the storm.

A.5 Post-Event Response

Once landfall has occurred and "Notice to Proceed" (NTP) has been given, Phillips & Jordan will immediately take the following actions:

- Prepare project-specific safety work plans for all required activities
- Modify road clearance plan if needed and begin work as tasked
- Work with County representatives to provide damage assessments and actual debris estimates
- Modify sectoring plan to fit actual field conditions and degree of storm damage
- Work with County representatives to initiate communication with the general public concerning segregation of debris and other project information

Phillips & Jordan can provide sufficient resources to fulfill a 24-hour mobilization requirement, to include emergency road clearance, without reliance on subcontractors. During the following 48 hours of project execution, Phillips & Jordan and its pre-positioned subcontractors can deploy up to 30 debris load and haul crews with all necessary equipment, and establish up to 15 TDSR sites within the impacted area.

A.6 Emergency Roadway Clearance

Opening roadways in the first hours following a disaster will be a priority in order to allow emergency vehicles to gain access to critical facilities. Phillips & Jordan has substantial experience providing crews and equipment to assist local governments with emergency roadway clearance or "first-push" operations to clear debris from roadways allowing for access to hospitals, police stations, fire stations, and other critical facilities.

Within 12 hours after receipt of NTP, Phillips & Jordan will commence first-push operations, and will have debris reduction and disposal activities fully operational within 48 to 72 hours after NTP. First-push operations will be conducted on primary transportation routes pre-specified by the County, and will generally consist of moving debris from roadways to adjacent public right-of-ways. In the event that debris cannot be pushed into a right-of-way, it will be loaded and transported to a nearby off-street location for temporary storage, and will be subsequently collected during debris clearing operations.

A typical push crew configuration will include a rubber tired loader, several transport trucks, a bucket truck, a foreman, laborers equipped with chainsaws and rakes, and traffic control personnel. Crews will work 24-hour shifts with rotating personnel. The number of push crews deployed will be dictated by the County based upon the severity of the storm. Push crews will work together with local government representatives, local power companies, and regional utility companies to maximize public safety and minimize further damage to utility systems and public infrastructure (i.e. sidewalks, drainage structures, traffic signals and signage, etc.).

A.7 Temporary Debris Staging and Reduction Sites

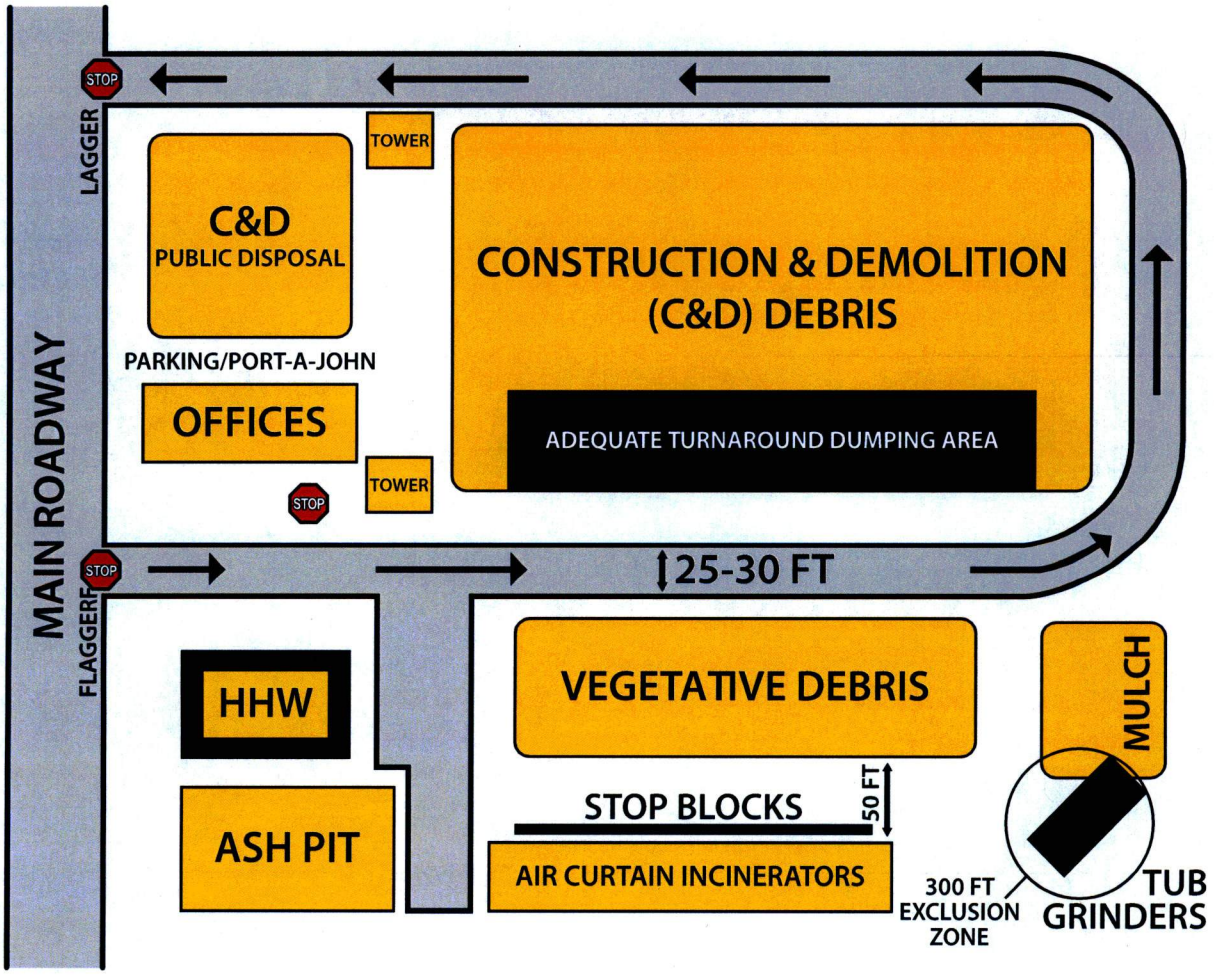
Temporary Debris Staging and Reduction Site Selection: For a successful disaster debris management mission, one must "begin with the end in mind". The disposal side of the debris equation is the most important. Having TDSR sites in place and ready to accept debris will significantly improve the efficiency of the removal process, and establishing multiple strategic sites will significantly reduce cost. Phillips & Jordan has more than 30 years of experience constructing and operating TDSR sites. In 2011 Phillips & Jordan simultaneously operated over 45 TDSR sites during debris operations in response to the tornadoes that impacted the State of Alabama and Joplin, Missouri. The first order of business for Phillips & Jordan will be to determine or verify locations, feasibility, operational limits, and environmental characteristics of TDSR sites designated by the County. Selection of an appropriate TDSR site must consider the following items:

- Presence of wetlands, endangered species, sensitive plants, etc.
- Presence of historical or archeological significant sites
- Presence of adjacent surface water bodies, storm water conveyance systems, drainage structures, retention ponds, etc.
- Relatively flat topography to minimize storm water erosion and runoff issues
- Presence of well field protection areas or use of the surficial groundwater in the vicinity for potable purposes
- Site geology as it relates to protection of potable aquifer systems
- Human population density in the downwind direction of the prevailing winds (i.e. dust and smoke nuisances)
- Ingress and egress to the property and ability to control traffic
- Sensitivity of area to noise and light nuisances that would be generated from site operations for 24 hours per day, 7 days per week
- Avoid sites near residential communities, hospitals, churches, daycares, etc.
- Consider proximity to nearby sanitary landfills for debris disposal, soils for use in daily cover, etc.
- Consider proximity to recycling options (i.e. mulch and chip disposal, steel, concrete crushing, etc.)
- Public versus private property - use of publicly-owned lands is preferable, and will avoid costly and time-consuming leases.

The typical layout for a TDSR site is illustrated on the following page.

Site Operations Plan: Following confirmation of the TDSR sites to be utilized for the temporary storage and reduction of debris, Phillips & Jordan will develop a TDSR Site Operations Plan for each site. The plan will address the following functions:

- Site management to include point-of-contact and organizational chart
- Site ingress and egress
- Environmental baseline testing
- Site preparation including clearing, erosion control, and grading
- Traffic control procedures
- Site security and safety
- Site layout/segregation plan to include: air curtain incineration areas, mechanical chipping/grinding areas, ash storage or disposal areas, hazardous waste containment area, contractor work area, inspection tower, and safety zone clearance areas (100 foot clearance area between stockpiled debris and incineration operations, and 1,000 foot clearance area from structures)
- Environmental mitigation plan including considerations for smoke, dust, noise, traffic, safety buffer zones, storm water runoff, historic preservation, wetlands, and endangered species as appropriate



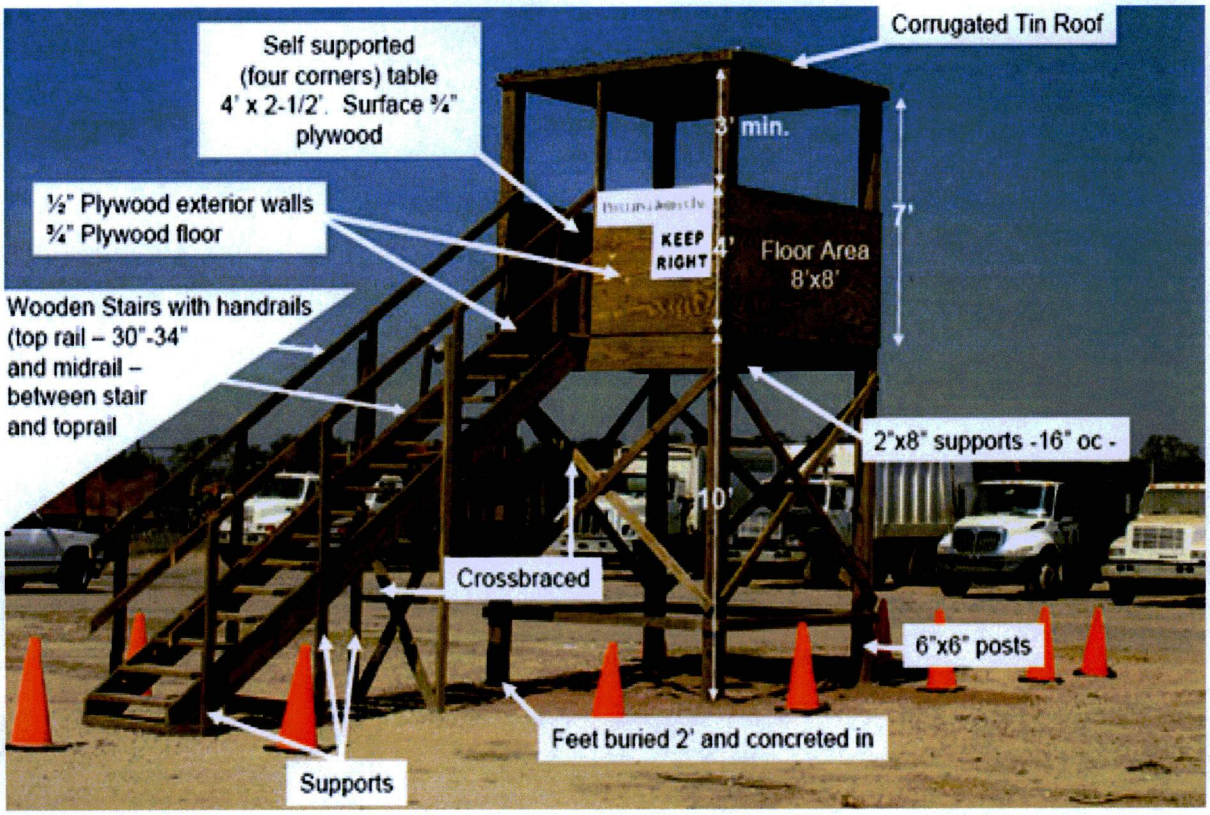
Construction of a TDSR site typically can be accomplished within a 2 day period during which inspection towers are constructed, gravel is delivered to the site to establish roadways, equipment required for debris reduction and management is installed, and site improvements (if required) are completed. However, the availability of locally procured materials required to accomplish site preparation activities will dictate the actual timeframe for completion.

Reduction and Disposal Considerations: Phillips & Jordan's philosophy is simple concerning debris reduction, recycling and disposal - "keep the debris stream that must be placed into a lined landfill to an absolute minimum". Other guiding principles include:

- Handle the debris only once
- Segregation of waste streams curbside is critical
- Do not transport Construction and Demolition (C&D) debris to a TDSR site (see first bullet)
- Balance vegetative reduction by using a combination of grinding and incineration (discussed below)

In large scale disasters the markets for wood chips are quickly overwhelmed by the volume of woody material available. This market glut often leaves disaster stricken areas with large amounts of mulch type material with no market for disposal. Large stockpiles of chips and mulch produce an undesirable leachate over time and also become a fire hazard due to fermentation. This situation in the past has forced communities to haul chips to a landfill for use as cover, or incinerate the chips, both of which are expensive options. Phillips & Jordan recommends grinding or chipping only the quantity of mulch material a community needs and then incinerate the remaining material using engineered burning systems that meet U.S. Environmental Protection Agency (EPA) air quality standards and opacity requirements.

Inspection Tower Construction: Phillips & Jordan presents below a construction drawing for Occupational Safety and Health Administration-compliant temporary inspection towers that may be constructed at TDSR sites.



TDSR Site Environmental Assessment: It is important to establish an environmental baseline either prior to use or shortly after establishment of a TDSR site before it is impacted by site operations. Since time will be of the essence, the full Phase I Environmental Site Assessment (ESA) process, as described in American Society for Testing and Materials (ASTM) E-1527-05, would likely not be practical. The Transaction Screen Process (TSP), as described in ASTM E-1528-06, would be more appropriate under time-constrained circumstances. Additionally, a National Environmental Policy Act (NEPA) checklist should be completed simultaneously with the TSP to assess for areas that may be potentially impacted by the proposed usage of the site. The checklist items should include potential impacts to natural areas including endangered species, historical areas or buildings, cultural areas, and economic conditions including changes in access and traffic patterns within the area. The TSP and NEPA checklist would be completed during TDSR site construction.

TDSR Site Closure: Upon removal of all debris at a TDSR site, Phillips & Jordan will remove equipment, inspection towers, fencing, and erosion control devices installed at the site, and will restore the property to its original condition. TDSR site closure will normally be accomplished within 30 days after receipt of the last load of disaster debris. Phillips & Jordan's Operations Manager will conduct a final closeout inspection of the site with a County representative, and will execute a final release if the site condition is determined to be acceptable. In the event

deficiencies are identified during the closeout inspection, additional site restoration will be performed.

A.8 Debris Removal from Public Property

The FEMA Public Assistance Program will provide reimbursement to local communities following a Presidential Declaration, if the debris generated is the result of a disaster event, is located within a designated disaster area, is the legal responsibility of an eligible applicant, and is eligible for reimbursement.

Debris Segregation Crew
New Orleans

Eligible debris work under the FEMA Public Assistance Program must be in the public interest, and is defined as work necessary to:

- Eliminate immediate threats to life, public health and safety
- Eliminate immediate threats to significant damage to improved public or private property
- Ensure economic recovery of the affected community
- Mitigate the risk to life and property by removing substantially damaged structures and appurtenances

Determining debris eligibility is a significant challenge and only FEMA can make the final decision. Phillips & Jordan has years of experience working with FEMA and managing debris operations in compliance with FEMA 325 Debris Management Guidelines. Every year Phillips & Jordan provides training to employees and key subcontractors on safety and the FEMA 325 guidelines.

Special Note: As of November 2012, the first pass for debris removal operations on Federal Highway Administration Federal Aid road right-of-ways, following a Presidential Declaration, will be covered by FEMA under the Public Assistance Program.

Debris Sectoring Plan: A debris sectoring plan is a critical part of organizing, controlling, and communicating information concerning all aspects of the debris management operation. Phillips & Jordan will work closely with local planners to develop a sectoring plan that best fits the community's needs, and provides a tool to expedite debris removal operations. Sector boundaries need to be easily recognizable and will logically be established based upon the following factors:

- Municipality/jurisdictional boundaries
- Roads, streams, landmarks, or other natural and manmade boundaries
- Population density
- Debris density
- Type of equipment required for each sector
- Commercial property versus residential property
- Degree of impact within the disaster area
- Number of and proximity to disposal sites (ideally one TDSR site per sector)

Sectors may be divided into individual zones and divided even further into sub-zones if required. Phillips & Jordan uses the zone concept to assign one or more subcontractors to a specific geographic area for debris removal. Once assigned, Phillips & Jordan requires each subcontractor to remain within their assigned zone until all assigned tasks are completed.

Determination of Resources: The two key factors in determining the amount of resources required for a disaster debris management mission are: (1) the total quantity of debris in cubic yards, and (2) the number of days allotted for project completion. Once these factors are determined, a removal rate in cubic yards per day can be determined and the number of crews, trucks, and support resources calculated. Once the total required amount of resources are known, the number of sectors required can be designated. In addition, resources will be allocated to operate and manage TDSR sites and if necessary manage landfill operations specific to debris disposal operations.

Other factors that can effect required resources are traffic conditions, haul distances, roadway widths, and load limitations. Debris types and density also can effect daily production rates and required types of equipment.

Debris Collection and Transportation Equipment: Debris will be transported from the streets to disposal sites. With the exception of rubber- tracked skid steer loaders, tracked equipment will be prohibited on roadways. All hauling units will be mechanically loaded and capable of dumping their load. In accordance with FEMA guidelines, hand-loading will not be permitted. All trucks will comply with applicable federal, state, and local rules and regulations, including tarping requirements. In addition, trucks will not be overloaded, and overhanging debris will be trimmed at the loading site. By implementing both of these practices, debris dislodged from trucks during transportation will be minimized.

Debris removal crew configurations will depend upon specific work site conditions (i.e. urban versus rural areas, concentrated versus scattered debris, C&D versus vegetative debris). The number of debris removal crews deployed will be dictated by the severity and localization of damage, and the removal schedule developed in coordination with the County. A typical crew will be comprised of the following:

- 1 Knuckleboom Loader or Self-Loader
- 1 Skid-steer Loader with grapple
- 4 to 6 Hauling Trucks or Trailers (20 to 60 cubic yard capacity)
- 1 Quality Control Site Foreman per crew
- 2 Laborers with chainsaws, rakes, and other collection tools
- 2 Certified Flaggers
- Global Positioning Satellite (GPS) Tracking and Navigation Aids

Traffic control devices used for operations will comply with the latest Manual of Uniform Traffic Control Devices, and will include sufficient signs/cones, barricades, and flaggers to ensure the safety of vehicular and pedestrian traffic within work zones.

All debris hauling trucks will be certified by the County before use in debris operations. The inside bed dimensions of all trucks will be accurately measured, and all safety requirements will be checked and approved. Each truck will be assigned a unique identification number. Information regarding each truck (including capacity, description, driver's name, license number, and identification number) will be recorded on a FEMA-compliant certification form. The original copy of each form will be retained by the County, and copies will be provided to the Phillips & Jordan quality control representative and the truck driver. The driver's copy will remain in the truck at all times, and a placard labeled with the truck's identification and measurement information will be displayed on both sides of the vehicle.

Prior to beginning work, all project personnel and equipment will be processed at a resource staging area. A weather-proof tent of an appropriate size will be erected, and an equipment marshaling area will be organized in a manner that allows ample storage space for incoming equipment, equipment that has passed inspection, and equipment returning from the field at the end of each work day. A job bulletin board will be constructed and used to post legal notices (Equal Employment Opportunity, sexual harassment, safety and health information, prevailing wages, etc.), contract information, and the project safety performance record.

Public Right-of-Way Removal: Phillips & Jordan will segregate the following categories of debris at the public right-of-way curbside, and transport the debris to either TDSR sites or directly to an approved landfill:

Construction and Demolition Debris - C&D debris is classified as waste primarily from residential areas that do not include household hazardous waste, electronics, appliances, or vegetative debris. C&D material will be transported directly to an approved landfill or dumpsite rather than to a TDSR site.

Trees and Limbs (Vegetative Debris) - Vegetative debris consisting of trees, limbs, and stumps that are 12 inches in diameter or smaller will be hauled to TDSR sites for reduction by chipping/ grinding or incineration. Mulch or ash generated from the reduction of vegetative debris will either be recycled or transported to a properly permitted final disposal site.

Household Hazardous Waste (HHW) - HHW waste is material comprised of household cleaners, paints, batteries, bleaches, gasoline containers, and other caustic type items. These items must be segregated out of the waste stream and removed in an organized way to keep items from comingling. These materials can become very hazardous when combined. HHW will be delivered to an approved collection center, and in some cases may be recycled. Phillips & Jordan processed more than 1,450,000 items of HHW during the Hurricane Katrina response.

Electronics - TVs, computers, and radios will be disposed of at a landfill certified to accept electronic units. If sufficient quantities of electronics debris are collected, recycling may be feasible. Phillips & Jordan recycled more than 780,000 electronic unit during the Hurricane Katrina response.

Appliances (White Goods) - White Goods are comprised of household appliances, refrigerators, microwaves, washer/dryers, stoves, air conditioning units, and freezers. White Goods containing oils or Freon will be processed by licensed and qualified personnel, and all oil and Freon will be removed prior to disposal or recycling. Phillips & Jordan collected, processed, and recycled more than 750,000 White Good units during the Hurricane Katrina response.

White Goods Staging and Recycling
New Orleans

Animal Carcasses - Dead livestock, poultry, and large animals will be removed and transported to an approved final disposition site contingent upon a determination by the site that they represent an imminent and significant threat to public health and safety.

Other Debris Streams - The following debris streams are also frequently encountered during disaster debris management operations:

- Wet Debris
- Putrescent Debris
- Soil, Mud, and Sand
- Demolished Vehicles/Vessels
- Small Motorized Equipment
- Asbestos Containing Material (ACM)

When encountered, these debris streams will be properly processed and transported for disposal at an approved final disposition site.

A.9 Work Hours

Debris removal crews will typically work 12 hour shifts, 7 days per week unless otherwise specified or restricted by contractual requirements. Crews will only work during daylight hours to ensure maximum safety of operations. TDSR site operations will typically be conducted on a 24-hour basis, 7 days per week using light plants for illumination during evening hours unless otherwise restricted by contractual requirements.

A.10 Authorized Stump Removal

If directed by the County, stump removal crews will be mobilized by Phillips & Jordan to remove stumps that are located in the public right-of-way and present a threat or danger to the general public. Stumps will be identified and marked in the field by County representatives in accordance with FEMA guidelines. Stumps will be photographed and located via GPS by the County representative before removal. The basic elements of stump removal work are as follows:

- Extract, remove, and haul stumps greater than 24 inches in diameter to the TDSR site designated stump staging area
- Reduce stumps
- Backfill stump holes
- Repair or coordinate the repair of damaged utilities as may be requested

A.11 Authorized Hazardous Trees & Limbs Removal

If directed by the County, specialized tree crews will be mobilized by Phillips & Jordan to remove hazardous trees and limbs. An eligible hazardous tree is defined as a tree that is 6 inches or greater in diameter, and leaning at an angle greater than 30%, or has more than 50% of its crown damaged, that presents a threat or danger to the general public. A hazardous limb is a limb or branch that is greater than 2" in diameter, broken or partially broken and is in danger of falling. Only hazardous limbs and trees located in the public right-of-way will be eligible for removal.

Speciality Tree Removal

Alabama

Trees will be identified and marked in the field by County representatives. Trees will be categorized based upon the diameter at breast height (DBH) applicable to a given tree. Only those trees marked by the County will be cut by Phillips & Jordan. Trees located on private property

or leaning on houses will be subject to the requirements of the Private Property Debris Removal process. A hazardous tree and limb crew will consist of the following:

- 1 Bucket Truck and Operator/Climber
- 2 Laborers/Flagmen

A.12 Authorized Private Property Debris Removal

In certain instances, FEMA public assistance will extend to Private Property Debris Removal. Right-of-entry (ROE) access must be granted by the property owner prior to entering their property. Typically, this documentation, in the form of a ROE packet, is provided by the County to Phillips & Jordan.

A central feature to the Private Property Debris Removal process is documentation of the property condition immediately preceding the work and following completion (i.e. before and after). Phillips & Jordan utilizes both digital camera and digital video recorders to accommodate these requirements. Imagery is electronically archived and can be retrieved based upon the physical address or date the work was performed. During the Hurricane Katrina response, Phillips & Jordan removed debris from over 16,000 individual private properties located throughout the greater New Orleans area.

A.13 Authorized Demolition

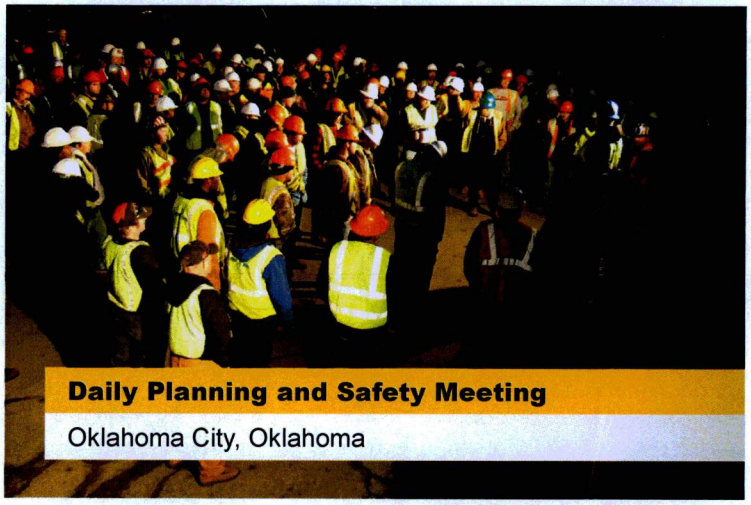
Phillips & Jordan anticipates that demolition of structures may be required as part of the disaster debris management mission if authorized by the County. Phillips & Jordan has extensive experience with both residential and commercial demolition, and was tasked to perform 1,200 demolitions during the Hurricane Katrina response. Demolition services for a typical hurricane debris response will include the following:

- ACM Survey
- Decommissioning
- Utility Disconnect and Permitting
- Structural Demolition and Debris Disposal

A.14 Daily Planning Meetings

At the inception of the project, Phillips & Jordan will establish a centralized staging area in discrete geographical area. Debris removal crew supervisors will report to this staging area for a daily debriefing which should also be attended by the designated County representative. This meeting will be conducted by the Operations Manager and will serve as a forum to identify and correct any problems encountered during recovery efforts. The general format of these meetings will be as follows:

- Collection of daily reports
- Foreman reports
- Areas covered during the work day
- Problems encountered
- Resources needed
- Environmental, safety and health issues
- Production concerns
- Establishment and tracking of benchmarks (i.e. loads hauled)
- Subcontractor announcements
- Fort Bend County issues
- Local issues and complaints
- Coordination issues with vendors including local waste haulers and tree trimming contractors
- Assignments for next day



Daily Planning and Safety Meeting
Oklahoma City, Oklahoma

The primary objective of the planning meeting will be to produce a coordinated effort among team members. Information will be exchanged between team members, priorities established, and problems resolved. These meetings have been conducted by Phillips & Jordan during previous disaster debris management missions and have resulted in extraordinary results and camaraderie among project participants.

A.15 Daily Operation Reports

A Daily Operation Report will be submitted to the County in accordance with contract requirements. The report will be organized by sector, zone, and disposal site, and will be submitted electronically to the designated County representative. Daily reports will include, but not be limited to, details regarding locations where passes for debris removal were conducted, the quantity and type of debris removed, safety mishaps and near misses, private property damage caused during debris operations or damage claims made by citizens, and other relevant information regarding Phillips & Jordan's daily conduct of operations.

A.16 Compliance with Laws and Regulations

As a leading provider of disaster debris management services, Phillips & Jordan is knowledgeable of federal, state, and local laws and regulations within the localities and states in which we operate. Studying and understanding laws and regulations regarding our operations is an important component of the Phillips & Jordan's disaster debris management methodology. Phillips & Jordan obtains all required permits and licenses, and takes all precautions to ensure no laws are violated in the delivery of services to our customers.

A.17 Claims Management

Phillips & Jordan will make every possible effort to close out all damage claims prior to the shutdown of field operations. In support of this commitment, we will assign a Claims Manager to the County project who will address all claims of damage to property allegedly caused during our operations. Within 48 hours of receipt of a written report to the Phillips & Jordan Operations Manager regarding a damage claim, the Claims Manager will visit with the property owner to inspect the damage and discuss resolution options if it is determined that Phillips & Jordan was responsible for the claimed damage. A resolution agreement will be reached with the property owner and repairs will be completed or damages paid. Upon resolution of the claim, the Claims Manager will arrange for the property owner to sign a damage claim release.

The majority of damage claims are typically small in nature. Depending upon the magnitude of a claim, our insurance company may become involved. However, all claims will be resolved as expediently as possible. Phillips & Jordan's past experience indicates claims are much easier to settle if addressed in a timely fashion. Phillips & Jordan will distribute a list of all open, denied, and resolved claims to the County on a weekly basis, or at the frequency dictated by contractual requirements.

B. Proposed Equipment

Phillips & Jordan owns and operates an extensive fleet of over 950 production and related support equipment that would be available for use during the County's disaster debris management mission. Since Phillips & Jordan began operations over 60 years ago, one of our core competencies has been land clearing. Our current equipment fleet reflects this history and uniquely positions Phillips & Jordan to provide an equipment fleet, including specialized attachments, appropriate for debris management. All of our loaders can be equipped with rakes and grapples or buckets as necessary, and the majority of our excavators are equipped with hydraulic thumbs or grapples. Phillips & Jordan also maintains a network of regional equipment vendors underpinned by national accounts with numerous heavy equipment manufacturers that are capable of providing supplemental equipment that may be required for debris management operations.

In addition, Phillips & Jordan has existing contracts in place with 19 key pre-positioned subcontractors that have provided equipment and operators for numerous disaster debris management missions previously completed by Phillips & Jordan. A summary listing of equipment available from both Phillips & Jordan and its key pre-positioned subcontractors applicable to the performance of disaster debris management operations is provided in the table that follows. Several of these units are highly specialized in nature and demonstrate the versatility of our fleet.

EQUIPMENT TYPES	NUMBER OF UNITS	
	Phillips & Jordan	Key Pre-Positioned Subcontractors
Emergency Road Clearance and Debris Removal		
Loader	36	105
Skidsteer Loader	25	135
Backhoe Loader	6	88
Grapple/Prentice	5	174
Road Tractor	14	106
Dump Truck	25	328
Bucket Truck	2	120
Excavator	30	112
Excavator with Grapple	79	114
Telehandler / Fork Lift	2	37
Sweeper / Broom	6	35
Vacuum Truck	2	16
Mechanical Trimmer	4	11
Skidder	7	17
Debris Management and Reduction		
Chipper / Grinder	13	34
Pit Burner	16	19
Dozer	115	151
Light Plant	25	79
Water Tanker	4	16
Water Truck	12	32
Equipment Mobilization		
Lowboy	10	41
Transport Trailer	19	58

Although Phillips & Jordan and our key pre-positioned subcontractors possess more than adequate types and quantities of equipment to execute a disaster debris management mission for the County, we also recognize that local subcontractor participation is a critical component of the overall equipment deployment strategy and is required to comply with the Robert T. Stafford Disaster Relief and Emergency Assistance Act. To address the need for local participation, Phillips & Jordan has developed a database of 22,000 pre-registered subcontractors (a number of which are located in the vicinity of the County) to supplement our existing equipment resources.

Our equipment deployment strategy involves tasking subcontractors (both key pre-positioned and local) to supply loading and hauling units while Phillips & Jordan supplies corporate-owned assets to support emergency road clearance activities, disposal site management, and debris reduction activities. Our equipment deployment strategy allows Phillips & Jordan to perform both initial response and back-end debris reduction operations with corporate-owned assets while subcontractor provided assets are utilized to perform debris collection and transportation operations.

Identification of specific equipment pieces that would be deployed to a disaster event in Fort Bend County is not realistic at this time given the fact that the timing and magnitude of the disaster is not known. However, the combination of equipment that can be provided by Phillips & Jordan and our subcontractors ensures the County of our ability to pre-position and immediately deploy equipment upon receipt of Notice to Proceed in sufficient quantities regardless of the disaster size.

C. Environmental Protection Plan

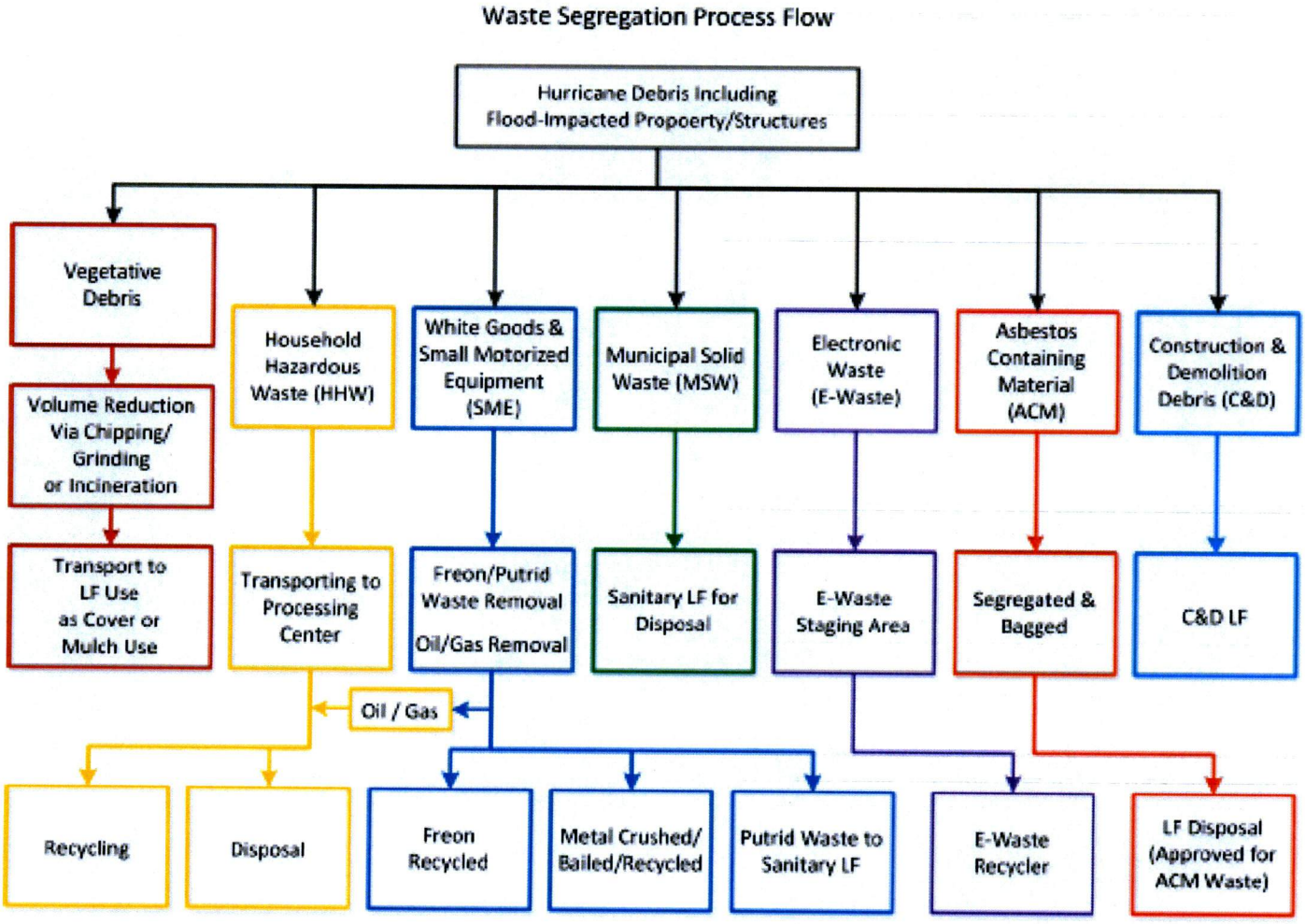
Phillips & Jordan routinely implements its mature debris segregation program to address the management of solid and hazardous wastes generated during disaster events. This program is implemented under the requirements defined in a project-specific environmental work plan and best management practices that is developed for each disaster debris management mission. A copy of this document is provided in Appendix II to this proposal. The environmental work plan and best management practices generally address topics including spill prevention, control, and countermeasures; non-hazardous solid waste disposal; recycling and solid waste minimization; air pollution control; contaminant management; and temporary sediment control.

The objective of Phillips & Jordan's debris separation program is to minimize the amount of debris requiring disposal in a lined, sanitary landfill, thus maximizing the amount of debris that can be disposed of at significantly lower tipping fees. This is accomplished by implementing a comprehensive curbside debris separation program, similar to that developed by Phillips & Jordan in concert with the Occupational Safety and Health Administration, U.S. Environmental Protection Agency, USACE and State agencies for the Hurricane Katrina response in New Orleans, and the 2011 tornado responses in Alabama and Joplin, Missouri. Curbside debris generally falls into the following major categories:

- Vegetative debris
- Household hazardous waste (HHW)
- White Goods
- Small motorized (gas powered) equipment(SME)
- Municipal solid waste (MSW)
- Electronic wastes (E-Waste)
- Asbestos Containing Material (ACM)
- Construction and Demolition (C&D) debris

- Automotive tires
- Automobiles and vessels damaged beyond repair
- Recyclables
- Silt, sand, and mud

The Waste Separation Process flow chart on the following page illustrates the typical debris segregation, separation, and disposal process. Considerations for management of the waste streams are discussed following the flow chart.



Vegetative Debris / C&D: Vegetative debris (stumps, logs, limbs, brush, leaves, etc.) may comprise the bulk of the debris stream from a hurricane if that hurricane is a Category III or less. These storms typically have minimal damage to structures and typically generate predominantly vegetative debris. In contrast, Category IV or V hurricanes, or storms with significant flooding as was the case for Hurricane Katrina, may result in significant damage to structures and will increase the percentage of C&D that will be commingled with the debris. C&D includes

waste building materials, packaging, and rubble resulting from demolition operations on houses, commercial buildings, and other structures. Such wastes include, but are not limited to, masonry materials, sheet rock, roofing waste, non-asbestos insulation, scrap metal, wood products, uncontaminated concrete, soil, brick, asphalt paving waste, and ash resulting from the combustion of untreated wood products. During the Hurricane Katrina response, Phillips & Jordan collected and processed over 13,000,000 cubic yards of vegetative and C&D debris.

HHW: Examples of HHW include, but are not limited to, cleaning products (oven cleaners, drain cleaners, wood metal cleaners and polishes, toilet cleaners, tub/tile/shower cleaners, laundry bleach); automotive products (motor oil, fuel additives, injection cleaners, a/c refrigerants, starter fluids, auto batteries, transmission/brake fluids, antifreeze); lawn and garden products (herbicides, insecticides, fungicides, wood preservatives); flammable products (propane tanks and other compressed gas cylinders, kerosene, residential heating oil, diesel, gas, oil, lighter fluids); indoor usage pesticides (ant/cockroach/flea/rodent sprays and baits); workshop/ painting supplies (adhesives, glues, furniture strippers, oil/enamel based paints, stains and finishes, paint thinners and turpentine, paint removers, photographic and hobby chemicals), mercury switches, and pool chemicals.

HHW items are removed from the debris piles, collected curbside, and then transported to a central HHW management site for processing and disposal. This type of waste is secured in plastic bins to contain spillage, and is transported utilizing either pickup trucks or specialty trailers. In general, HHW is either recycled or disposed at a permitted hazardous waste disposal facility. During the Hurricane Katrina response, Phillips & Jordan collected and processed over 1,450,000 HHW items.

White Goods: Refrigerators, freezers, stoves, air conditioning units and other large appliances are removed from the curbside and taken in dedicated trucks to a central location for processing. Once there, the putrescible wastes are removed and the refrigerant removed and recycled. These items may be crushed on site, baled, and removed to an offsite recycler when feasible. The amount of space required for processing white goods and waste material generated from their processing can be significant, as demonstrated by Phillips & Jordan's management of a White Goods processing center for the Hurricane Katrina response at which over 750,000 units were processed for disposal.

SME: Gasoline powered lawn equipment (lawnmowers, weed trimmers, chainsaws, etc.) that contain fuel, oil, and other hazardous substances are removed from the curbside and taken in dedicated trucks to a central location for processing. Once there, they are cleaned out and the fuel and oil removed and recycled or disposed of properly. During the Hurricane Katrina response, Phillips & Jordan processed over 51,000 SME items.

MSW: This waste type includes predominantly household waste (domestic waste) but can include commercial wastes collected by a municipality within a given area. In most disasters MSW is not considered eligible for reimbursement.

E-Waste: This waste type includes, but is not limited to, television sets, computers, monitors, and other electronics that contain circuit boards or vacuum tubes that contain concentrated heavy metals such as lead, cadmium, chromium, and mercury. E-wastes are segregated from curbside debris piles, and taken to a designated location using pickup trucks and trailers where they are sorted by type, placed on pallets, and shrink wrapped. The pallets may then be loaded onto trucks and taken to a recycler when feasible. During the Hurricane Katrina response, Phillips & Jordan processed over 780,000 E-Waste items.

ACM: This waste type is visually identified in curbside piles (i.e., obvious ACM such as transite shingles and vinyl floor tiles). Obvious ACM is removed from these areas by trained crews, wetted, and sealed in polyethylene bags. Sealed bags are placed in a box truck and delivered to the appropriate landfill. Large quantities of curbside ACM are generally loaded using wet methods with heavy equipment (i.e. similar to Regulated Asbestos-Containing Material demolition) and sealed in plastic sheeting within haul trucks. Segregation of ACM from curbside debris is a Best Management Practice to protect workers during both load and haul and landfilling operations, and is normally exempt from regulations such as the National Emissions Standards for Hazardous Air Pollutants (NESHAPs). During the Hurricane Katrina response, Phillips & Jordan collected and processed over 42,000 cubic yards ACM.

Animal Carcasses: Depending on the magnitude, HazMat teams may be used to collect the carcasses. Collection, transportation, and disposal will be accomplished in accordance with local, State, and Federal laws, standards, and regulations. Dependent upon the specific cause of death of the animal and as directed by the County, Phillips & Jordan will utilize air curtain refractory incinerators ("burn boxes") for animal carcass reduction and landfill disposal of the rendered burn product or disposal of the carcass directly by transporting it to the nearest landfill approved to accept the specific animal carcass to be disposed.

As demonstrated below Phillips & Jordan has documented experience working with Federal and State Agencies in addressing both contagion/pathogenic and hazard event animal waste streams in an efficient, environmentally responsible and cost effective manner.

A biological outbreak of low-pathogenicity H7N2 avian influenza virus (AIV) affected 197 farms in the Shenandoah Valley of Virginia in 2002 that required the destruction of over 4,700,000 chickens and turkeys. Phillips & Jordan worked with the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) to dispose of ~19,000 tons of the dead birds using air curtain incineration. The project was completed over a 29 day time period during which burn operations were conducted on a 24/7 schedule.

Also, following the devastation caused by Hurricane Floyd in 1999, Phillips & Jordan was contracted by the North Carolina Department of Public Safety, Division of Emergency Management, to collect, incinerate, and dispose of carcasses of livestock that perished during the storm. Activities performed for this project included transport of the carcasses to a central

processing site; preparation of the central processing site including construction of equipment decontamination areas, carcass storage areas, burn pits, and erosion/storm water runoff controls; establishment of a biohazard exclusion zone; and management and disposal of carcass ash generated from incineration operations.

D. Accounting & Documentation Management

D.1 Timely and Accurate Billing

Phillips & Jordan has developed a system of project controls specific to disaster debris management projects that will be utilized for execution of the County contract. The purpose of these controls is to accumulate FEMA-compliant documentation necessary to substantiate the locations, types, and quantities of debris collected during execution of the project. The documentation generated from the project controls system is designed to be multi-purpose and applicable to both Time and Material (T&M) and unit price type contracts, and provides the foundation for customer invoicing, subcontractor payment, and assisting our customer with recovery of reimbursable costs from appropriate federal agencies.

D.2 Customer Invoicing and Subcontractor Payment

The customer invoicing and subcontractor payment processes implemented by Phillips & Jordan begins with the initial capture of data from the field. Phillips & Jordan employs several technologies for data capture including customized scale software, radio frequency identification (RFID) tags for hauling units, and Automated Debris Management System hardware and software. A customized database and reporting system will be used when data entry is required for manually written debris load tickets. Regardless of the capture method, all FEMA and contractually required data is input, manually or automatically, into a database for processing and review along with images of the supporting documentation.

After data is reviewed and reconciled, Phillips & Jordan provides daily reports to the customer and weekly progress payment reports to subcontractors. The subcontractor reports contain captured quantities and associated earnings along with other transactional detail. Next, the subcontractor reviews the transactional detail and associated calculated payment amount for verification or adjustment. Adjustments are made, if any, and funds are transferred to subcontractors by Phillips & Jordan on a weekly basis per subcontract terms. The subcontractor review of weekly progress payments provides an independent assessment of the data captured in Phillips & Jordan project controls system and thus ensures maximum accuracy of the data used to generate customer invoices. Phillips & Jordan's strong banking relationships and access to capital enables the company to pay subcontractors on a weekly basis even in situations where Phillips & Jordan has not been paid by its customer.

For each billing cycle, Phillips & Jordan prepares and submits an invoice to the customer. The invoice submittal is inclusive of transactional detail reports, summary reports, and images of all

supporting documentation. Once all subcontractor payment and customer invoicing cycles are complete, Phillips & Jordan in coordination with the customer administrative personnel complete a reconciliation of all project data, audits (if any), and project closeout. If required, Phillips & Jordan will provide customized reports to the customer for various FEMA cost share and allocation methods, as well as any support needed for completion of FEMA Project Worksheets.

Phillips & Jordan has prepared, submitted, and received payments in excess of $100,000,000 over the past 10 years under more than 50 individual municipal FEMA-reimbursed disaster debris management contracts. Phillips & Jordan's extensive FEMA experience, thorough understanding of FEMA guidelines and procedures, and reporting and payment processes allow for successful reimbursement to our customers. The multiple layers of reconciliation and review inherent to Phillips & Jordan's sophisticated processes result in efficient and successful completion of audits and administrative project closeout.

D.3 Resource Controls

All personnel and equipment assigned to the project undergo a rigid check-in process upon arrival at the jobsite. An employee orientation is conducted for all personnel, including subcontractors, assigned to the project. Each employee is issued a unique identification number, and on projects where a higher level of security is needed, is issued a photo identification card. All equipment used for the project is inspected and photographed prior to use on the project. Trucks used for hauling debris are measured and assigned a cubic yard capacity. A unique identification number is assigned and affixed to each unit. Ownership of the equipment is also identified and documented.

D.4 Material Tracking and Quantification

A six-part pre-numbered color coded load ticket is generated at the load origination point in the field. The ticket captures the following information:

- Date and time
- Location
- Truck number
- Type of material

The load ticket is presented at the entrance to the disposal facility where the load capacity and contents are verified. A digital image of the truck contents may be taken (cross-referenced to the load ticket) if required by the County or participating federal/state agency. Our custom designed software application can readily link the images to the load tickets. Using digital still images is more cost effective than a video record of each load, and the images are easier to track, archive, and retrieve. Load ticket data is consolidated at the end of each work day and can be used to generate the following reports:

- Total cubic yards by disposal site and debris type
- Truck cycle report
- Load report by crew
- Load report by location
- Active trucks and crew assignment

Each of the above reports, including load images, can be distributed electronically to the County. All source documents, as well as custom reports and queries, can be provided on an as-needed basis.

D.5 Inspection and Approval

All personnel complete a three-part daily time card that is used to capture the following information:

- Employee name, identification number, and classification
- Equipment identification number (if applicable)
- Date and hours worked (shift start and stop)
- Down time
- Work location
- Employee signature and injury waiver
- Supervisor signature and identification number
- Inspector signature and identification number

All time cards are submitted at the end of each work shift. Time cards for employees providing services on a T&M basis are reviewed by a supervisor and inspector at the time of submission to verify that the time card information and employee identification number are correct.

D.6 Data Processing and Invoicing

All time cards are routed to a central data processing point. Each time card is keyed and scanned. Only valid active employee, equipment, supervisor, and inspector identification numbers are accepted. All rejected time cards are set aside and researched the following day. Invoices are prepared daily (or on the schedule dictated by the contract) and can be electronically generated if required by the County. Source documentation for unit price basis invoices is the associated load tickets while the source documentation for T&M basis invoices is the associated daily time cards.

E. Automated Debris Management System

Phillips & Jordan has developed and owns an Automated Debris Management System (ADMS) which can be utilized by the County, or the Debris Monitoring Firm retained by the County, if so

desired. The cost for utilization of the ADMS is not included in the pricing provided with this proposal. However, in the event that the County is interested in deploying this system as part of a future disaster debris management project, pricing would be negotiated by Phillips & Jordan with the County at the time of contract activation.

The Phillips & Jordan ADMS utilizes handheld devices to electronically capture field load data, and generates both auditable electronic and printed paper tickets that are GPS-referenced to determine eligibility of debris by location within the boundaries of the jurisdiction. The primary benefit of the ADMS to the County is that utilization of the system simplifies the effort required to audit field load data and thus substantially reduces the complexities and costs associated with post-event audits conducted by the Debris Monitoring Firm and/or FEMA. Additional benefits of the system include the following:

- Reduces errors associated with traditional paper tickets
- Eliminates need for data entry into an electronic database
- Expedites preparation of daily operations reports and reconciliation of invoices
- Provides capability to assess real-time operational performance and develop trend analyses during project execution
- Minimizes ticket fraud/tampering
- Supports FEMA grant administration

The system has the capability to share database records with contractors, subcontractors, customers, auditors, and project stakeholders via the Internet. Data contained in the system is protected with a password; allows for role-based access controls; and has viewing, printing, and reporting capabilities. Stakeholders have permission that allows them to only review and print information specific to their needs.

The Phillips & Jordan ADMS was used to augment our recovery response to the devastation caused by the 2011 Alabama tornadoes during which over 350 handheld devices were deployed to record and track 153,000 load tickets associated with the removal of approximately 4,900,000 cubic yards of debris which was processed at 50 individual debris management sites. Following the completion of the Alabama disaster debris management mission, the Defense Contract Audit Agency (Tampa office) in conjunction with an USACE internal review audited each Phillips & Jordan invoice submittal and found an error rate attributable to the ADMS of less than 0.1%.

F. FEMA Reimbursement Documentation and Assistance

Phillips & Jordan offers in-depth knowledge related to the implementation of requirements codified in the FEMA "Public Assistance Debris Management Guide" (FEMA-325) and Code of Federal Regulations (CFR) Title 44 "Emergency Management and Assistance" Part 13 "Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments", as well as the development of Memorandums of Understanding with and between local, county, state, and federal stakeholders.

Phillips & Jordan has previously assisted several customers with resolution of potential obstacles and FEMA Project Worksheet challenges associated with reimbursement. For example, as part of our disaster response to the 2011 tornadoes that impacted 24 counties in the State of Alabama, Phillips & Jordan collaborated with the State Emergency Manager of Alabama (Mr. Michael Johnson) to calculate and report cost share allocations for more than 100 individual townships requiring varying degrees of FEMA reimbursement. As part of our disaster response to Hurricanes Gustav & Ike in 2008, Phillips & Jordan provided assistance to West Feliciana Parish in Louisiana to resolve reimbursement issues resulting from inadequate documentation provided by a third-party monitoring service.

This type of FEMA reimbursement support has been provided by Phillips & Jordan for other municipal customers impacted by natural disasters, and Phillips & Jordan as a matter of practice offers its FEMA reimbursement experience and knowledge to assist impacted jurisdictions with resolution of reimbursement challenges that arise during disaster response projects.

Phillips & Jordan maintains a dedicated staff of accounting and financial management professionals that are responsible for maintaining documentation associated with a disaster debris management mission, and for providing assistance with the subsequent reporting and reimbursement process. This aspect of the comprehensive support provided by Phillips & Jordan separates us from other disaster contractors in that we provide a turnkey solution to a disaster rather than just cleanup of the debris.

Phillips & Jordan offers comprehensive knowledge of local, state, and federal government disaster mitigation, preparedness, response and recovery programs, as well as local government disaster operations issues. Our accounting and financial management team has in-depth knowledge of the Public Assistance Program and its related policies, procedures, rules, and regulations. All debris-related documentation generated by Phillips & Jordan is designed to meet current FEMA Public Assistance guidelines and includes the following:

- Certificates of Load Carrying Capacity
- Load Tickets
- Daily Reports
- Employee Check-in Forms
- Equipment Check-in Forms
- Employee Time Cards

Phillips & Jordan's invoicing procedures are designed to incorporate the above referenced documentation as applicable to contract-required criteria (i.e., hourly, cubic yards, or tons). Phillips & Jordan has developed a proprietary database designed to provide efficient and accurate customer invoicing which is provided in both summary and detailed transaction formats. All source documents are electronically scanned and linked to individual transactions. Accordingly, invoices can be delivered in electronic format via CD-ROM, email, or a secure website.

Phillips & Jordan utilizes robust internal control procedures for invoicing that have been developed from execution of numerous disaster debris management contracts, and we incorporate audit privileges for a period of three years after project completion into all subcontracts executed by Phillips & Jordan.

Phillips & Jordan can provide the County with assistance in obtaining reimbursement of eligible debris costs by:

- Providing guidance in the development of a debris management plan and debris volume estimates utilizing the Corps of Engineers Debris Estimating Model
- Preparing an Initial Damage Assessment report
- Performing a Preliminary Damage Assessment (confirmation of damages is conducted by FEMA and the State of Texas)
- Attending the kickoff meeting with the FEMA Public Assistance Coordinator assigned to the affected jurisdiction
- Attending subsequent meetings between local government representatives and FEMA/ State Public Assistance officials
- Providing copies of contracts, load tickets, time cards, field inspection reports, and daily operational summary reports
- Providing written and oral status reports as requested by County representatives
- Working closely with County representatives to ensure that debris collection and supporting data meet requirements for reimbursement eligibility

Phillips & Jordan's final FEMA reimbursement rate for disaster debris management missions conducted during 2013 and 2012 are as follows:

Event	Applicant	Final Contract Amount	Final Reimbursement Amount
2013			
Colorado Flooding	Colorado Department of Transportation	$3,559,492	$3,559,492
2012			
Hurricane Sandy	Brookhaven, NY	$5,373,892	$5,373,892
	Suffolk County, NY	$4,397,654	$4,397,654
	Avalon, NJ	$394,024	$394,024
Hurricane Isaac	Westwego, LA	$44,119	$44,119
	Terrebonne Parish, LA	$510,124	$510,124
Tornado	Chesapeake, VA	$132,626	$132,626
Tornado	Cherokee, NC	$28,172	$28,172

Event	Applicant	Final Contract Amount	Final Reimbursement Amount
Tornado	West Liberty, KY	$1,489,194	$1,489,194
Tornado	Morgan County, KY	$297,414	$297,414

Over the past 8 years, Phillips & Jordan has been contracted by 59 individual FEMA applicants to perform disaster debris management services. During this timeframe, Phillips & Jordan was awarded contracts by these applicants with a total value of $87,003,868, and the final reimbursement amounts received by the applicants totaled $85,863,836 (98.7% reimbursement rate). The primary factor responsible for non-reimbursement to an applicant involved inadequate documentation provided by third-party monitoring firms.

G. Project Management

The management structure utilized by Phillips & Jordan is designed to provide superior and seamless support to the County, and is based on a simple integrated organization with clear lines of authority, communication, responsibility, and accountability designed to minimize administrative costs and maximize customer responsiveness.

Phillips & Jordan's management structure is also designed to facilitate quick decisions and rapid responses to changing customer requirements, and to assure the highest quality of service possible. The field management team is led by an Operations Manager who has the necessary control and autonomy to coordinate resources and align contract activities for the successful completion of all assigned tasking. The Operations Manager provides management staff supervision and work control for all activities assigned under the contract. This approach assures that our Operations Manager is fully accountable for all assigned work, has a direct interface with team personnel to facilitate information exchange, and has the authority to allocate resources based on the requirements and complexity of the assignment. The autonomy granted to the Operations Manager will be beneficial to the County in that all team communications and work assignments will be managed through a single point of accountability.

Upon activation of the contract by the County, Phillips & Jordan's President, in coordination with Phillips & Jordan's senior management, will select an Operations Manager for the project who will be deployed to the disaster location along with other required management and support personnel.

After being deployed to the field, the Operations Manager is responsible for coordinating project operations, ensuring compliance with contract specifications and established work plans, and has the authority to commit Phillips & Jordan resources for all assigned tasking. This individual is also responsible for oversight of field work performed by Superintendents and a Field Safety Manager, and work performed by other subordinate management staff that may be deployed in

response to a large catastrophic disaster event including the following: Area Managers, Sector Managers, Zone Managers, Resource Check-in Managers, Field Quality Control Managers, Environmental Safety Technicians, and temporary debris reduction and staging (TDRS) site Managers.

In order to facilitate effective emergency road clearance or "push" operations, and associated debris removal operations, the disaster location may be geographically divided into one or more Areas, Sectors, and Zones depending upon the severity of the disaster. The definition of these geographic divisions is as follows:

- **Area** – a region comprised of an entire city or county, or several cities and counties, impacted in a similar manner and that can be effectively managed as a discrete project.
- **Sector** – a logical portion of an Area that would be segregated based on factors including, but not limited to: (1) roads, streams, landmarks, and other natural and man-made boundaries, (2) jurisdictional boundaries, (3) population density, (4) debris density, (5) type of equipment required to accomplish assigned tasking, (6) commercial property versus residential property, (7) degree of impact within the Area, and (8) the number of established TDRS sites and their proximity to work activities.
- **Zone** – a concise portion of a Sector used to organize work crews and administer pass activities (i.e. the number of times a work crew must pass through a neighborhood or commercial district to complete collection of debris).

H. Key Personnel

H.1 Key Field Management Personnel

Phillips & Jordan currently employs over 100 management and field personnel that have supported disaster debris management missions since 1978 thus providing our organization with a uniquely qualified team to support the County during a future disaster event. This highly qualified and experienced workforce includes a core response group of 17 individuals that have previously served in the roles of Operations Manager, Superintendent, Field Quality Control Manager, and Field Safety Manager. These individuals offer an average of 9 years of disaster response experience, and have a combined total of 62 Federal Emergency Management Agency (FEMA), U.S. Army Corps of Engineers (USACE), and Occupational Safety and Health Administration certifications.

Identification of the core response group members and an overview of major disaster events supported by these individuals are provided in the table on the following page.

Upon activation of the response contract by the County, Phillips & Jordan's President, in coordination with Phillips & Jordan's senior management, will assess the scale and scope of the disaster event and will assign one individual from the core response group to serve as the Operations Manager for the management mission. The assigned Operations Manager will

subsequently select other core group personnel and disaster qualified Phillips & Jordan staff members necessary to support the various elements of the management mission. The team deployed for most typical isolated small disaster events would only consist of the Operations Manager, several Superintendents, and a Field Safety Manager. However, a larger team with additional specialized expertise would be assembled and deployed for a catastrophic disaster event.

Identification of the specific key personnel that would be deployed to a disaster event in the County is not realistic at this time given the fact that the timing and magnitude of the disaster is not known. However, for a typical response scenario the team would primarily consist of individuals selected from Phillips & Jordan's core response group.

Key Personnel & Position	Experience		Disaster Events Supported															
	Years with Phillips & Jordan	Years of Disaster Experience	'14 North Carolina Ice Storms	'14 South Carolina Ice Storm	'13 Colorado Flood	'12 Hurricane Sandy	'11 Raleigh, NC Tornado	'11 Alabama Tornadoes	'11 Joplin, MO Tornado	'11 Hurricane Irene	'09 Cherokee Co., OK Ice Storm	'08 Hurricanes Gustav & Ike	'06 Buffalo, NY Ice Storm	'05 Hurricanes Katrina & Rita	'05 Hurricane Wilma	'04 Hurricanes Frances & Jeanne	'04 Hurricane Charley	'04 Hurricane Ivan
Eric Hedrick Operations Manager	33	6						X						X				X
Edd Satterfield Operations Manager	20	17							X	X				X		X	X	X
Dudley Orr Operations Manager	19	17												X	X	X	X	
Wayne Floyd Operations Manager	6	33	X	X	X		X			X		X		X	X	X	X	X
Joseph Ledford Superintendent	4	3						X		X								
Rex Wilson Superintendent	8	8			X	X		X	X	X	X	X	X					
Ken Graham Superintendent	14	11	X	X	X	X		X		X	X	X	X	X				X
Tommy Webster Superintendent	1	15			X							X						
Heath Stone Superintendent	1	1		X														
John West Field Quality Control Manager	11	5										X		X				

Key Personnel & Position	Experience		Disaster Events Supported														
	Years with Phillips & Jordan	Years of Disaster Experience	'14 North Carolina Ice Storms	'14 South Carolina Ice Storm	'13 Colorado Flood	'12 Hurricane Sandy	'11 Raleigh, NC Tornado	'11 Alabama Tornadoes	'11 Joplin, MO Tornado	'11 Hurricane Irene	'09 Cherokee Co., OK Ice Storm	'08 Hurricanes Gustav & Ike	'06 Buffalo, NY Ice Storm	'05 Hurricanes Katrina & Rita	'05 Hurricane Wilma	'04 Hurricanes Frances & Jeanne	'04 Hurricane Charley	'04 Hurricane Ivan
Ryan Manning Field Quality Control Manager	8	4						X			X			X				
Dale Joiner Field Quality Control Manager	27	15												X	X	X	X	X
Gene Taylor Field Safety Manager	7	8						X				X						
Dustin Haunhorst Field Safety Manager	10	5						X	X		X		X	X	X			X
J.W. Culbreth Field Safety Manager	11	7						X			X			X				X
David Haney Field Safety Manager	7	2					X			X								

H.2 Corporate Resource Personnel

In addition to the core response group discussed in the previous section, Phillips & Jordan corporate resource personnel that would also support execution of a disaster debris management mission for the County are listed below.

Clint Stephens - Contract Administration Specialist

Mr. Stephens has been employed by Phillips & Jordan since 2005 and offers 7 years of disaster experience. He is responsible for the financial aspects of contract administration. Relative to disaster recovery projects, Mr. Stephens manages administrative functions including contract compliance, data processing, reporting, audit response, billing, and subcontractor payments. Notable disaster events supported by Mr. Stephens have included Hurricanes Katrina (2005), Rita (2005), Gustav & Ike (2008), the tornadoes that occurred in Alabama (2011), and Hurricane Sandy (2012).

Steve Thompson - Corporate Environmental, Safety and Health Manager

Mr. Thompson has been employed by Phillips & Jordan since 1990 and offers 17 years of disaster experience. He is responsible for the overall management of Phillips & Jordan's health and safety program, develops and administers policies and procedures regarding employee

safety, investigates project accidents and develops preventative measures, and monitors safety programs implemented by subcontractors. Mr. Thompson served as the primary safety manager for the World Trade Center Staten Island Landfill Forensic Recovery Mission, and for recovery efforts associated with Hurricanes Katrina (2005), Gustav & Ike (2008), Irene (2011), and the tornadoes that occurred in Alabama and Joplin, Missouri (2011).

Mike Teem - Corporate Quality Control Manager
Mr. Teem has been employed by Phillips & Jordan since 1997 and offers 8 years of disaster experience. He was the Quality Control Manager for all debris removal activities associated with the 2011 tornado outbreak in Alabama, and for debris removal within Sector 1 - New Orleans following Hurricane Katrina from September 2005 to September 2007. Other notable disaster events supported by Mr. Teem have included Hurricanes Bonnie (1998), Floyd (1999), Lily (2002), and Isabel (2003), as well as the removal of over 100,000 trees in Southern California infested with bark beetles (2003 - 2005).

I. Subcontracting Plan

I.1 Pre-Registered Subcontractors

In order to ensure maximum local participation during a future disaster event that impacts the County, and full compliance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Phillips & Jordan has developed a database of 22,000 pre-registered subcontractors to supplement the resources offered by Phillips & Jordan and our key pre-positioned subcontractors. The geographic distribution of our pre-registered subcontractors is illustrated in the figure below. At the present time Phillips & Jordan has pre-registration information on file for 1,512 subcontractors located in the State of Texas. The pre-registration process implemented by Phillips & Jordan allows us to:

- Confirm equipment suitability and readiness,
- Verify insurance policies are sufficient and current,
- Check references when required, and
- Execute subcontractor agreements immediately following contract activation.

Completing these tasks in advance of the initiation of disaster response operations allows Phillips & Jordan to respond in a timely and coordinated manner, and provides the County with the opportunity to approve or disprove any potential subcontractors before they commence operational work assignments.

I.2 Key Pre-Positioned Subcontractors

During our +30 year history of providing disaster debris management services, Phillips & Jordan has established long-term relationships with a highly qualified group of 19 key pre-

positioned subcontractors that have provided equipment and manpower for numerous disaster debris management missions previously completed by Phillips & Jordan. In order to ensure the readiness of these subcontractors to immediately mobilize in response to a disaster event, Phillips & Jordan has executed enforceable master subcontracts for disaster response services with each of our key pre-positioned subcontractors – rather than just letters of commitment. A listing of Phillips & Jordan's key pre-positioned subcontractors is provided in the table that follows, and copies of the current master subcontracts in place with each of these companies can be provided upon request.

	Hurricane Sandy (2012)	Raleigh, NC Tornado (2011)	Alabama Tornadoes (2011)	Joplin, MO Tornado (2011)	Hurricane Irene (2011)	Cherokee County/Tahlequah Ice Storm (2009)	Hurricanes Gustav & Ike (2008)	Buffalo, NY Ice Storm (2006)	Hurricane Katrina (2005)	Hurricane Rita (2005)	Hurricane Wilma (2005)	Hurricanes Frances & Jeanne (2004)	Hurricane Charley (2004)	Hurricane Ivan (2004)
BKW, Inc. (FL)	✓	✓	✓	✓		✓		✓	✓	✓		✓		✓
Bush Construction and Disaster Company (FL)		✓	✓				✓		✓		✓	✓	✓	
Cheoah Construction Company, Inc. (NC)			✓											
Drewery Construction Company, Inc. (TX)			✓	✓				✓	✓	✓	✓	✓	✓	✓
EE&G Disaster Response, LLC (FL)					✓				✓	✓	✓	✓		
Hensley R. Lee Construction, Inc. (MS)			✓											
H&R of Belle Glade, LLC (FL)			✓		✓		✓		✓		✓	✓		
KEU, Inc. (WA)									✓			✓	✓	
Lane Hauling & Excavating (TN)			✓									✓	✓	✓
Metro Disposal, Inc. (LA)									✓					
Metrolina Landscape Company, Inc. (NC)			✓						✓		✓			✓
MLU Services, Inc. (GA)									✓			✓	✓	✓
Optimum Services, Inc. (FL)						✓	✓		✓	✓	✓	✓		✓

	Hurricane Sandy (2012)	Raleigh, NC Tornado (2011)	Alabama Tornadoes (2011)	Joplin, MO Tornado (2011)	Hurricane Irene (2011)	Cherokee County/Tahlequah Ice Storm (2009)	Hurricanes Gustav & Ike (2008)	Buffalo, NY Ice Storm (2006)	Hurricane Katrina (2005)	Hurricane Rita (2005)	Hurricane Wilma (2005)	Hurricanes Frances & Jeanne (2004)	Hurricane Charley (2004)	Hurricane Ivan (2004)
Parkman Tree Service (SC)			✓				✓		✓	✓				
Rio-Bak Corporation (FL)			✓		✓		✓		✓		✓	✓		
Sheen & Shine, Inc. (NY)	✓		✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
Terry Tree Service South, LLC (NY)	✓		✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
Thunder Disaster Services, Inc. (NC)	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
Tiger Bayou, Inc. (LA)			✓				✓		✓	✓				

I.3 Proposed Subcontractors

Phillips & Jordan anticipates that approximately 60% of the work during a debris management mission would be subcontracted out in the event of a contract activation. The following is a list of subcontractors that are pre-registered to support Phillips & Jordan's disaster cleanup, debris removal, tree & stump removal, grinding, and environmental services that could be utilized to support Fort Bend County's response efforts. Phillips & Jordan estimates that the first 3 subcontractors listed below would be utilized for approximately 20% of the work. If circumstances require additional subcontractors, the other firms listed below could also be utilized. Please note that these percentages could change based upon the nature and scale of the event. Phillips & Jordan will provide the manpower and equipment to meet the specific needs of any debris removal contract activation.

Company Name	City, State	Work Nature	% of Contract	Designation
Drewery Construction Company, Inc.	Nacogdoches, TX	Hauling	20%	-
BKW, Inc.	Pensacola, FL	Hauling	20%	WBE

Thunder Disaster Services, Inc.	Waynesville, NC	Hauling	20%	VBE
Rio-Bak Corporation	Wellington, FL	Hauling	TBD	MBE
Tiger Bayou, Inc.	Port Allen, LA	Hauling	TBD	SBE

HUB: Historically Underutilized Business
SB: Small Business
SDB: Small Disadvantaged Business
MBE: Minority-Owned Business Enterprise
VBE: Veteran-Owned Small Business
WBE: Woman-Owned Business Enterprise

I.4 Local Participation

During the early stages of the disaster response, Phillips & Jordan will identify qualified local subcontractors to support debris management operations in accordance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act). Phillips & Jordan plans to subcontract a portion or all of the following items, as well as other support functions, in relation to execution of the County debris management project:

- Collection and transportation of debris
- General labor for miscellaneous work
- Reduction and disposal of vegetative debris
- Sorting, decommissioning, packaging, and transportation of White Goods
- Sorting, packaging, and transportation of electronic waste
- Performing traffic control
- Other functions as necessitated by the size of the disaster event

Phillips & Jordan will, when feasible, limit competition to only local subcontractors again with an emphasis on small and disadvantaged business concerns. Additionally, in order to ensure the "flow down" of this philosophy, Phillips & Jordan will obtain commitments from its large business subcontractors to identify discreet tasks or portions of acquisitions that could be set-aside for local small and disadvantaged business concerns.

Phillips & Jordan is committed to helping local communities recover economically from a disaster event. The Phillips & Jordan participation model has proven to be very effective in keeping the maximum amount of recovery dollars within the local community. Phillips & Jordan will work with local contractors, businesses, and labor pools to maximize local participation. Phillips & Jordan's unique ability to blend experienced disaster subcontractors with local contractors who may not have disaster recovery experience has proven to be a highly successful model. During the 2011 disaster response to the tornados that impacted numerous areas throughout the State of Alabama, and Joplin, Missouri, over 80% of Phillips & Jordan's first tier subcontractors were local contractors. Phillips & Jordan has the management capability, experience, and financial capacity to bring the local community together as a team and provide a successful path to recovery.

Upon activation of the contract, Phillips & Jordan will identify subcontractors needed to support debris management operations, including qualified local subcontractors in accordance with the Stafford Act. Phillips & Jordan will then issue a subcontract to each subcontractor with the appropriate flow down clauses, terms and conditions, and requirements. Phillips & Jordan will require each subcontractor to provide a single point of contact (POC) for their subcontract to ensure accountability and clear channels for communication between the companies. Subcontractor employees assigned to support activities will be directly accountable to the Phillips & Jordan Operations Manager for their overall job performance. The Operations Manager will serve as an interface between County representatives and subcontractor employees in matters related to task assignments, job performance issues, and any other concerns or issues that may arise. The Operations Manager will work closely with each subcontractor POC to ensure that all necessary support and resources are provided to the County, that all identified issues are resolved, and to conduct performance reviews as needed.

Phillips & Jordan will also recruit and hire local residents to assist in a variety of capacities and essential functions within the mission structure. The purpose of this is fourfold: local residents know the area best, they have a vested interest in a recovery mission, it puts people to work that might otherwise be jobless in the immediate aftermath of a disaster event, and it lets local people see firsthand the importance that their local officials place on the recovery of the community. Depending upon the size and scope of the disaster event, local personnel may be trained and utilized for essential functions including:

- Zone Monitoring
- Quality Control Monitoring
- Traffic Control
- Clerical and Administrative Support
- Logistical Assistance

The use of local personnel in these roles by Phillips & Jordan is a benefit to all of the involved parties. Depending on the duration of the recovery efforts, and to facilitate the performance of the necessary clerical and administrative functions, Phillips & Jordan may rent local office space as close to the impacted area as possible to promote more effective coordination with local officials and other government entities. Meeting all permitting and business licensing requirements for a local office (and for the project) heightens the awareness of Phillips & Jordan as a community member and contributes to the local tax base.

Phillips & Jordan's database of pre-registered subcontractors currently includes registration information for numerous potential subcontractors that are located in the vicinity of Fort Bend County including those listed in the table below. Upon activation of the contract, Phillips & Jordan will contact these and other local subcontractors to evaluate their capabilities and availability to support debris management operations in accordance with the Stafford Act. Particular emphasis will be placed on identifying qualified local small and disadvantaged subcontractors.

I.5 Affirmative Action Policy Statement

It is the company policy of Phillips & Jordan, regardless of the project type, to actively seek and contract with small and disadvantaged businesses including, but not limited to, Small Business (SB) concerns, certified Small Disadvantaged Business (SDB) concerns, Women-Owned Small Business (WOSB) concerns, Historically Underutilized Business Zone (HUBZone) concerns, Veteran-Owned Small Business (VOSB) concerns, and Service-Disabled Veteran-Owned (SDVOSB) concerns. Our company policy will be affirmatively enforced with respect to execution of work for the County.

Phillips & Jordan's senior managers will personally oversee the implementation of existing corporate policies to ensure that small business participation goals are achieved, and will periodically consult with Operations Managers and Contract Administrators to measure progress toward achieving established goals. Phillips & Jordan has institutionalized a buying practice that encourages identifying and contracting with local small and disadvantaged businesses for both services and supplies. In addition, the company will require all retained large business subcontractors to comply with the small business participation goals established by Phillips & Jordan.

J. Safety

A safe work environment is paramount within the structure of Phillips & Jordan's corporate mission. Our experience operating safely on debris management projects is unparalleled in the industry. We have a team of highly skilled and trained employees, subcontractors, and safety professionals who perform analysis, frequent inspection, training, and compliance review throughout the performance of a project. Our current Experience Modification Rate is 0.78 as of June 1, 2014 and our injury incident rates are well below industry averages.

Phillips & Jordan has currently worked over 4 million man-hours since our last lost-time accident. In 2011, Phillips & Jordan responded to the tornado outbreak in Alabama and worked over 1.8 million man-hours without a lost-time accident, and in 2005 responded to Hurricane Katrina and worked over 10 million man-hours while experiencing only 3 lost-time accidents (0.06 Lost-Time Injury Rate) which is a remarkable accomplishment considering the complexities of the project.

These safety accomplishments are commensurate with our past safety performance in debris management services, and should be considered a minimum expected safety performance metric for future response projects. Our goal and expectation is a Zero Incident Project. Phillips & Jordan began years ago to develop an innovative process for providing extensive training for both employees and subcontractors throughout the year specifically for emergency/disaster response so that we stand ready to respond appropriately to each new mission. Our approach to ensure the protection of our workforce, the general public, and the environment using unique

and innovative processes is a key to Phillips & Jordan being a proven solution for disaster debris management missions.

Phillips & Jordan will develop, institute, and maintain an ongoing, project-specific comprehensive safety program targeted toward the protection of the environment and the general public, and to safeguard the health and safety of employees involved in debris management activities. This program will be designed to properly recognize, evaluate, and control potential hazards (both direct and indirect) to either workers or the surrounding environment, and will provide adequate measures to protect the general public, county employees, and subcontractor personnel at all times. Phillips & Jordan has produced numerous Safety and Health Plans, Accident Prevention Plans, and Activity Hazard Analyses for past debris management projects. Phillips & Jordan will adapt these previously approved safety plans to the needs of the County debris management mission.

Phillips & Jordan recognizes there are both direct and indirect hazards with each unique work activity associated with a debris mission. To best manage these, we have identified several safety focuses in previous debris management projects that have yielded unprecedented results in the areas of accident and injury avoidance. The primary safety considerations to be addressed as part of the overall County debris management mission will include, but may not be limited to, hazard evaluation, air monitoring, utilization of personal protective equipment, development of emergency procedures, and ongoing assessment of safety policy and procedure compliance.

K. Phillips & Jordan Code of Ethical Conduct

Phillips & Jordan has established a formal policy to maintain the highest ethical standards for its employees, and to ensure compliance with all applicable laws, rules, and regulations. In order to ensure that Phillips & Jordan operates pursuant to this policy, the company has established a Code of Ethical Conduct which incorporates the following general implementation rules:

- All employees must comply with the Code and any officer, director, or employee violating the Code will be subject to discipline which may include demotion or dismissal.
- All employees have a duty to report to the Corporate Compliance Officer all suspected violations of the Code or other potentially unethical behavior by anyone including officers, directors, employees, agents, customers, prime contractors, subcontractors, and suppliers.
- Employees in management positions are personally accountable for their own conduct and for the conduct of those that report to them. Management employees are expected to inform their direct reports about the Code, and to take all necessary steps to ensure compliance with the Code.
- No employee has the authority to direct, participate in, approve, or tolerate any violation of the Code.

Environmental Workplan and Best Management Practices

Prepared By
Phillips & Jordan, Inc.

EMERGENCY REPORTING

Initial Reporting	**Phone Numbers**
Phillips & Jordan, Inc.	(800) 955-0876
(Project Manager.)	(xxx) xxx-xxxx
(ES&H Officer)	(xxx) xxx-xxxx

In Case of Fire or Explosion

Fire / Police Department	911

For Spills Outside of Secondary Containment Area

Fire Department	911
(DEHC)	(xxx) xxx-xxxx
National Response Center	(800) 424-8802
U.S. Region IV EPA	(800) 564-7577

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APPENDICES

1.0 INTRODUCTION

This Environmental Workplan is developed to address several important environmental matters such as Spill Prevention and Control (SPC), Non- Hazardous Solid Waste Disposal, Recycling and Solid Waste Minimization, Wetland Mitigation Construction, Air Pollution Control, Contaminant Management, and Wastewater Management Phillips & Jordan, Inc. (P&J) is committed to fulfill the requirements of the Clean Water Act that is enforced by the United States Environmental Protection Agency (USEPA). Construction of Wetland Mitigation areas will be in accordance with Local, State, and Federal regulations and Best Management Practices. This plan was developed in accordance with 40 CFR Part 12.7. It has been prepared with good engineering practices, and is submitted for approval.

2.0 SPILL PREVENTION, CONTROL, AND COUNTERMEASURES 40 CFR Part 112.7(a)

This Plan complies with all relevant oil pollution prevention requirements specified in 40 CFR Part 112. A discussion of each requirement and the corresponding manner in which the Project complies with the requirement is provided in the following sections.

2.1 Potential Spill Sources

The areas where a spill could potentially occur are related to equipment fueling, spills resulting from routine maintenance of equipment and vehicles, spills resulting from off-loading of bulk fuels into the fuel truck (it is anticipated this will take place off-site), and spills from five (5) gal or less fuel containers. The different types of products that are expected to be used on site are petroleum products such as diesel, motor oil, hydraulic oil, and transmission oil. Other potential spill sources could be solvents, coolant, and other common maintenance and repair products.

2.2 Spill Prevention During Petroleum Transfers

Refueling is defined on this project as either transfer of fuel from a bulk truck into a 12,000 gal storage tank, transfer of fuel from storage tank to mobile fuel truck or equipment, and/or transfer of fuels from a mobile fuel truck into the tank of heavy equipment. The refueling area may not be within any secondary containment; however, bulk fuel tank on-site will be a double-lined tank. Personnel will observe the refueling as to ensure safe transfer and respond to any potential spill. Visual inspection of fuel transfer operations will be made by maintenance personnel. Personnel involved in the operation will maintain audible communication to prevent overfilling of the tank during refueling or overfilling of the recovery tank during recovery operations.

Refueling of the tanks or vehicles will follow these guidelines:

- Flexible hoses that are attached to the tanks and are used by the petroleum delivery personnel should be stored inside the containment area when not in use.
- Extra precaution and diligence is required for fueling inclement wet weather. Fuel migration potential increases in water-filled ditches and saturated soil; thereby, decreasing the spill response time available to prevent a spill from reaching waterways or sensitive ecological areas.
- The fuel delivery personnel will carry spill kits to contain any small spills until assistance arrives. Delivery personnel will closely watch the rear of the delivery trucks to ensure that leaks or spills do not occur en route to the tanks due to faulty valves and equipment.
- Spill containment equipment (e.g., boom, skimmer, sorbent) shall be readily accessible for deployment during fueling operations.
- All spills should be immediately reported to the P&J Project Superintendent. All used absorbent material will be disposed of in accordance with current environmental regulations. The absorbent should be disposed of promptly and should not be allowed to remain on the ground or pavement where it could contaminate surface water or groundwater.
- Drums containing fuel or oil shall be stored to avoid punctures or ruptures due to falling or from collision with moving vehicles. Where feasible, drums should be placed in a centralized storage area and properly contained. The storage area should be covered to prevent displacement of product from open drums due to intrusion of rain water and should be curbed to prevent escape of any spills or leaks.

2.3 Spill Control

2.3.1 Secondary Containment

Spill control is provided at most locations by the presence of secondary containment structures or by a double-lined fuel storage tank.

2.3.2 Equipment

Equipment for spill control is stored on site in various locations. On-site equipment includes:

- Sorbent material (kitty litter) for minor spills
- Absorbent pads and booms for larger spills – already in place in the water

- Various spill containment kits located throughout the project and with fuel containing units.
- Empty drums to store spilled material
- Hand tools
- Shovels
- First aid station and eye wash
- Protective gloves
- Front end loaders
- Dump trucks

Heavy equipment including dozers, trucks and backhoes are also available at the site for use in constructing temporary ditches and berms for spill containment in the unexpected event of a significant release. In the event of a large spill that can not be managed by P&J's own resources, outside emergency response consultants are in place to respond upon notice.

2.3.3 Containment Procedures

The following text describes the general procedures to be followed by P&J personnel in case of a spill or fire. The employee should always attempt to first stop the source of the spill and then stop the flow of the spill, if possible. At no time should the employee put himself or others in immediate danger attempting to contain a spill.

2.3.3.1 In Case of Spill Within Containment Area

The following procedures should be followed when a spill is within a containment area:

1. Stop the flow of product, if possible.
2. Notify the Plant Manager and the Environmental Specialist whose name and phone number is provided in the front of this Plan. If you are unable to reach the Plant Manager, notify the Environmental Specialist.
3. Make sure that spilled product stays within the containment area. Check containment perimeters for leaks; and, if present, reinforce the leaky area(s) with a sorbent material.
4. If spilled fuel leaks or overflows from the containment, attempt to restrict the flow of fuel. This can be accomplished by berming or trenching around the spill.

2.3.3.2 In Case of Spill in Other Areas

The following procedures should be followed when a spill is not within a containment area:

1. Stop the flow of product, if possible. Disconnect power source to pumps and shut off discharge valves.
2. Make the appropriate notifications per plan documents.
3. Berm or trench around spill, as necessary, to prevent flow / migration of product to natural drainage ways.
4. Utilize booms or soil to contain spills to as small an area as possible.

2.3.3.3 Emergency Procedures in Case of Fire or Explosion

The following procedures should be followed in the event of a fire or explosion:

1. Use fire extinguisher(s) or soil to extinguish the fire, if possible.
2. If the fire is not controllable, call the Fire Department immediately (911), and evacuate the area.
3. Notify the P&J Project Superintendent immediately.

2.4 Spill Countermeasures

In the event that a discharge is discovered, adequate material and equipment is available at the facility to conduct any necessary cleanup and construct containment berms. Proposed countermeasures are described as follows:

2.4.1 Spills Inside the Secondary Containment Structures

For spills located inside the secondary containment structures, employees should respond in the following manner:

1. Contact the managers whose names and numbers are provided in the front of this Plan.
2. Pump spilled fuel into drums or tanks.
3. Clean residual fuel with sorbent material and containerize the material in drums pending disposal.

2.4.2 Spills Outside Containment Areas

For spills that occur outside the secondary containment areas, employees should respond as follows after the spill is contained:

1. Contact the managers whose names and numbers are provided in the front of this Plan.
2. Pump liquids into drums or tanks.
3. Excavate visually impacted soil and store in appropriate contained areas pending disposal.

2.5 Spill Material Disposal

Recovered liquids from a spill will recorded and transported for recycling or disposal.

In the event that excavated petroleum-impacted soils can not be recycled on-site, it will be temporarily stored in contained areas and covered with plastic, pending special waste approval by the Virginia Department of Environmental Quality (VDEQ) for disposal at an authorized solid waste landfill or incineration facility.

2.6 Spill Contact List

In the event of a spill, employees will contact the managers identified on the contact list in the front of this Plan. The manager will be responsible for contacting additional contractors and regulatory authorities, as necessary. In the event that on-site employees cannot contact the appropriate managers, employees should proceed with contacting any required clean-up contractors and emergency personnel identified in the front of this Plan.

2.7 Notification and Reporting Requirements for an Oil Spill

A Spill Record or Report Form will be completed according to USEPA and VDEQ regulations.

2.8 Contingency Planning - 40 CFR Part 112.7(d)

P&J has committed to provide sufficient onsite and offsite manpower, equipment, and materials to expeditiously control and remove any quantity of spill discharged that may be harmful.

2.9 Personnel, Training. And Spill Prevention Procedures - 40 CFR Part 112.7(f)

The Project Manager, or his designated representative, is responsible for instructing workers in the operation and maintenance of equipment to prevent discharges of product. Spill prevention briefings will be conducted at the beginning of the project and on a regular basis to ensure understanding of the SPC Plan. The following items will, at a minimum, be discussed at each meeting:

- Known spill events or failures
- Malfunctioning components
- SPC Plan requirements
- Response procedures
- Recently developed precautionary measures

3.0 NON-HAZARDOUS SOLID WASTE DISPOSAL

This section addresses the ultimate disposal of material generated during the project, including:

- Vegetative debris;
- Construction & Demolition (C&D) Debris
- Presumed/Suspect Category I and II Non-friable and Friable Asbestos
- Municipal solid waste (MSW)

These materials will be disposed of in a manner consistent with local, state, and federal regulations. It is expected that vegetative debris will be reduced using approved practices such as incineration or grinding/chipping. C&D debris will be staged in an approved manner and disposed of in an appropriately classified landfill. Removal and disposal of Asbestos Containing Materials (ACM) will be addressed in the structure demolition and abatement plan. MSW will be stored in approved containers in selected areas throughout the site and removed on a regular basis to ensure proper sanitation. It may also be necessary to use the resources of an MSW provider to supply MSW storage bins for bulk containment.

4.0 RECYCLING AND SOLID WASTE MINIMIZATION

Waste disposal will be conducted in accordance with a hierarchy of waste management as follows:

- Recycle
- Reduction
- Disposal

As much of the debris stream will be recycled as is economically feasible. If the waste is not recyclable, methods for reducing its volume will be conducted per the SOW. Finally, where recycling and reduction are not possible, landfill disposal will be utilized. The assessment of applicable disposal options takes into account a variety of parameters including worker health and safety, positive and negative environmental impacts, speed and execution to allow return of residents, cost of operations and availability of recycling markets and disposal facilities. Disposal options can be discussed when applicable.

5.0 AIR POLLUTION AND CONTROL

Dust and other fugitive emissions will be controlled as to avoid worker exposure and migration from the project site. The most common method of reducing visible emissions will be the use of water provided by a water truck or a similar machine. Water will be placed as needed on high traffic areas on site such as haul roads, project entrances, and/or traffic areas near the residences or public roadways. Consideration will also be given to material such as soils, mulch, or other stored materials

as to ensure emission control. In such cases the use of vegetative cover will be used. In the event water is not sufficient to control dust or if weather is not favorable for placement of water (freezing hazard) alternatives will be used to ensure control of fugitive emissions. Air pollution control as it relates to structure demolition will be specifically addressed in the demolition and abatement plans.

6.0 CONTAMINANT PREVENTION

Please refer to Section 2.0 of the SPC as it refers to potential contaminants on the project and measures that will be taken to prevent release. In addition, the APP addresses worker exposures related to contaminant releases.

7.0 TEMPORARY SEDIMENT CONTROL

7.1 Silt Fence and Silt Barriers

Silt fence and silt barriers must be installed per the SWPPP and in compliance with local, state, and federal regulations. Silt fence and silt barriers must be installed properly in order to capture sediment by ponding and filtering runoff and to allow sediment to settle out of the runoff water. There are many different kinds of silt fencing and barriers. For activities in and around wetland areas, floating silt fence/barriers or aqua dams can be used. Remember, just because the project specifications may leave out sensitive or prone areas is no excuse for not using your training and knowledge to install silt protection devices.

The following BMP's should be followed in relation to silt fence use:

- Install on a relatively level contour. Install the barrier as close as possible to a level horizontal plane near the toe of the slope or embankment. Turn the end of the barrier up to prevent ponding of water from escaping.
- Silt fence should be placed with a setback of at least 3 ft.
- Key in the bottom of the silt fence in order to prevent water from flowing underneath.
- Do not install silt fence across intermittent or permanent streams, channels, or any location where concentrated flow is anticipated.

7,1.1 Inspection and Maintenance

Perform inspections before and after rain events, every 24 hours during extended rain events, and weekly throughout the rainy season. Should silt fence fabric tear or decompose, replace immediately. Remove sediment deposits when the sediment accumulation reaches 1/3 of the barrier height.

8.0 WORK IN WETLANDS

Silt and sediment from excavation and fill activities may not enter wetlands outside the project footprint. Where practicable, fill material must be free from fine material that is subject to erosion and suspension. Site preparation, excavation, fill placement, vegetation planting, and construction activities must be conducted to prevent, minimize and contain the erosion and suspension of fine material that could be carried off-site by surface runoff. If suspended material is evident in standing or flowing water outside the project footprint, appropriate control and containment measures must be applied. These measures may include slope stabilization, revegetation, filter fabric fences, straw bales, other effective filters or barriers, fiber matting, settling ponds, drainage control, trenches and water bars, waterproof covers over material piles and exposed soils, avoiding work during heavy precipitation, and other appropriate measures. The following BMP's should be followed:

- Clearly identify project limits in the field prior to clearing and construction to ensure avoidance of environmental impacts.
- Proper installation of silt fences/barriers to include floating silt fence and turbidity barriers. These should be installed per project specifications, permit authorization, and BMP's listed in this document.
- Construction equipment should be limited to the minimum size necessary to complete the work.
- The load of heavy equipment shall be dispersed so that the bearing strength of the soil is not exceeded.
- Spoil material, debris, and other construction materials used during construction shall be removed upon project completion.
- Temporary fill in wetlands shall be placed on geotextile fabric which is laid on the existing

wetland grade.

- Store topsoil and organic surface material such as root mats separately from overburden and returned to the surface of the restored site.
- Restoration and revegetation these areas should utilize the most up-to-date bioengineering techniques available.

APPENDIX 1

SPILL EVENT RECORDS

Spill Event Record / Report

Date and time of discharge: _____

Source of discharge: _____

Contents of tank or drum: _____

Estimated total volume of spill: _____

Estimated volume reaching navigable or other waters : _____

Description of affected media(s): _____

_____

_____

Description and cause of spill: _____

_____

_____

_____

Damages and injuries resulting from the spill: _____

_____

_____

Corrective actions taken to stop, remove, and mitigate the effects of the discharge: _____

_____

_____

_____

Plans for evacuation of affected areas: _____

_____

_____

_____

Names of individuals / organizations contacted: _____

_____

_____

_____

_____

_____

APPENDIX 3

INSPECTION REPORTS

Oil Storage Tank Inspection Checklist

Instructions: This inspection record should be completed for each oil storage tank every month. Visually inspect the tank, placing a check or an X in the appropriate box for each item. If any item needs elaboration, do so in the Descriptions and Comments space provided. This sheet should be placed in Appendix 3 of the SPC Plan once completed.

DATE: _____ **INSPECTOR:** _____ **TANK NUMBER:** _____

LOCATION: _____ **TANK CONTENTS:** _____

	Yes	No	Descriptions and Comments
Exterior surfaces show signs of leakage.	☐	☐	
External coatings are bubbled, cracked, or damaged.	☐	☐	
Tanks are rusted, pitted, or deteriorated.	☐	☐	
Bolts, rivets, or seams are damaged, cracked, or rusted.	☐	☐	
Welds are cracked or non-uniform.	☐	☐	
Tank supports are deteriorated or buckled.	☐	☐	
Valves are leaking or deteriorated.	☐	☐	
Vents and pressure release devices are obstructed.	☐	☐	
Tank bottoms have accumulated rust, scale microorganisms or foreign material.	☐	☐	
Cracked or broken concrete is present within the Facility floors or sumps.	☐	☐	
Aboveground hoses and piping is cracked, deteriorated, or damaged.	☐	☐	
Tank is contacting water.	☐	☐	

General comments: _____

Spill Containment and Drainage System Inspection Checklist

Instructions: Complete this record for each monthly inspection. Place an X in the appropriate box for each item. If any item needs elaboration, do so in the Descriptions and Comments space provided. This sheet should be placed in SPC Plan once completed.

DATE: _____ **INSPECTOR:** _____ **TANK NUMBER:** _____

LOCATION: _____ **TANK CONTENTS:** _____

Further descriptions and comments should be attached on a separate sheet of paper.

	Yes	No	Descriptions and Comments
Containment area has accumulated water.	☐	☐	_____
Ramps or other structures associated with spill control are damaged or cracked.	☐	☐	_____
Dikes have holes, cracks, vegetative growth, or other breaches that could result in leaks.	☐	☐	_____
Spill response equipment is not available or not in working order.	☐	☐	_____
Personnel protective equipment is not available for use during emergencies.	☐	☐	_____
Communication equipment is inoperable.	☐	☐	_____
Drainage valves and controls have been left in the open position.	☐	☐	_____
Secondary containment valve is leaking or open.	☐	☐	_____

APPENDIX 4

TRAINING MEETING REPORTS

Employee Spill Prevention Training Meeting

(Attendance Sheet)

Instructions: The instructor should complete the top of this sheet for each annual training meeting. All attendees should sign this sheet. This sheet should be placed in the SPC Plan once the training meeting is completed.

DATE: _____

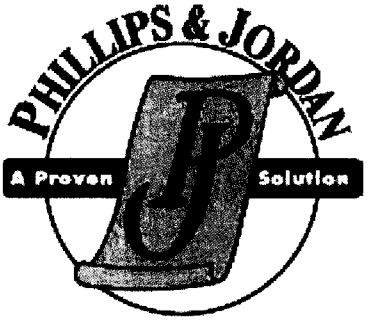
TRAINER(S): _____

SUBJECT(S): _____

LIST OF ATTENDEES

Name	Employee No.	Name	Employee No.

Appendix III:
Sample Accident Prevention Plan for Debris Management Activities



Accident Prevention Plan
For
Debris Management Activities

Prepared for
Phillips & Jordan Inc
by
Eugene Taylor, MS, CSHM
Director, EH&S Compliance

Version 1.0

PLAN APPLICABILITY

This plan is applicable to all response activities related to debris management work performed by Phillips & Jordan Inc and all subcontractors. Elements of the plan are intended to be a starting point for the identification, evaluation, and mitigation of hazards unique to each project response. Where these elements cannot be implemented, alternate controls and Best Management Practices have been identified in this plan. We believe these guidelines are helpful in the development and implementation of an effective Accident Prevention Plan and Health and Safety Plan.

This plan is considered a living document. As such, Phillips & Jordan Inc. reserves the right to amend this plan at any time, especially after a thorough risk assessment is performed relative to unique considerations of the work to be performed.

PLAN CONTENTS

SECTION 1

Accident Prevention Plan (APP) for Debris Management Activities

This Accident Prevention Plan has been written for the use of employees and subcontractors on this project. The information contained in this document is furnished pursuant to certain requirements of the Contract Specifications and may be reviewed for the sole purpose of evaluating its acceptability for use on the referenced Contract. The requirements of this plan are in addition to the requirements of the Phillips & Jordan Inc. *Safety and Accident Prevention Program Manual (June 2012).* All information contained herein and its use, disclosure or duplication by any means is prohibited without the express written permission of the author.

_____

Eugene Taylor, MS, CSHM
Director, EH&S Compliance
Preparer

_____

Site Safety & Health Officer

_____

Project Manager

EMERGENCY PHONE NUMBERS

Contact Information	Email	Direct/Cellular
Eugene Taylor, MS, CSHM Director, EH&S Compliance	etaylor@pandj.com	865.310.8767

1.0 STATEMENT OF SAFETY AND HEALTH POLICY

This Accident Prevention Plan (APP) defines general applicability and responsibilities with respect to compliance with health and safety programs associated with the recovery work as a result of natural and man-made disasters. Safety awareness combined with safe working conditions and safe work habits can in fact achieve the fulfillment of our safety commitment. Superintendents and foremen will enforce these safety rules; instruct personnel in performing duties in a safe manner; put personnel to work in places only when sure that no dangerous conditions exists, instruct new personnel in regard to these safety rules and conduct weekly safety/tool box talks.

2.0 SCOPE AND APPLICABILITY OF THE PLAN

This plan covers environmental, safety and health issues related to debris management activities. This plan will cover the debris management associated with natural and man-made disasters and associated clean-up activities. All personnel on site, contractors, and subcontractors, involved in this project shall be informed of the site emergency response procedures and any fire, explosion, safety or health hazards on the project.

During the development of this plan, consideration was given to current safety standards as defined by the Occupational Safety and Health Administration (OSHA), and the National Institute for Occupational Safety and Health (NIOSH) and the Phillips & Jordan Inc. *Safety and Accident Prevention Program Manual (June 2012)* (provided as an attachment to this plan)

3.0 SITE DESCRIPTION

The project site will be anywhere within the boundaries of Fort Bend County, Texas, as directed, within their areas of responsibility and management to include roadways, ROW's, and certain waterways.

4.0 ADMINISTRATION AND ORGANIZATION

The purpose of this document is to provide an outline of the safety policies, procedures, and corporate guidelines promulgated by Phillips & Jordan Inc. and intended to further amplify and augment the requirements set forth in the Federal, State, Local, project requirements under which the contractor is to prosecute the work.

The APP will be updated by the Project Safety Manager Designee utilizing appropriate resources. The APP will be available for employee reference at various locations on the job site and in the specific area. The APP will be available to all subcontractors upon request.

Specific hazards are highlighted which are associated with individual elements of the types of processes performed during, or are relevant to, construction. This APP endeavors to encompass all facets of the work without simply restating federal regulations. The APP also endeavors to identify the scope of the Project's operations and to correlate the hazards identified in the plan with specific operations.

4.1 Duties and Responsibilities

Phillips & Jordan Inc., hereinafter referred to as "the prime contractor", is responsible for the work and oversees all operations on the Contract. Subcontractors are specifically directed to perform all their operations in accordance with all applicable Federal, State, Local, and project requirements. In the event the prime contractor discovers operations which are not in

conformance with applicable regulations, the prime contractor will inform the subcontractor verbally and/or via written notification that they must perform the work in accordance with the regulations. If a subcontractor continues to perform the work in violation, additional measures will be taken which may include removal from the project.

As noted above, the APP will be located at the Phillips & Jordan Inc. Emergency Operations field office and any area offices for anyone to review for guidance. However, it is the responsibility of the subcontractor to ensure that the workers under their employ are aware of the hazards on the site. The prime contractor shall require all on-site P&J Inc personnel, regardless of position, and each subcontractor to attend a pre-mobilization meeting for the purpose of site-orientation, schedule coordination, and activity hazard analysis to ensure full understanding of this plan and P&J safety requirements. The prime contractor shall require, and assist in the development of, an activity hazard analysis specific to the task(s) to be performed by each subcontractor. The activity hazard analysis shall be reviewed and approved by the Project Safety Manager Designee prior to the commencement of each subcontractor's work. Subcontractor's shall be responsible for orienting their employees to the site configuration, reviewing general safety requirements as outlined in the APP and reviewing task specific safety requirements as outlined in their activity hazard analysis. Each subcontractor shall be responsible for providing employees with the appropriate training and PPE necessary to perform their intended task(s). Subcontractors, including all supervisory personnel, ground personnel, truck drivers and any other crafts, are required to attend the "tool-box" talks and encouraged to provide insight on aspects of a particular operation. The prime contractor believes that the experienced worker can provide the most relevant instruction on the dangers associated with an individual task. The Project Safety Manager Designee shall be responsible for ensuring subcontractor compliance with all state, local, Federal regulations. The prime contractor shall host a mandatory monthly subcontractor site coordination meeting to review compliance of ongoing as well as upcoming subcontractor activities. Key sub-contractor personnel, as identified by the Project Manager and/or the Project Safety Manager Designee, must attend.

For protection of both the prime contractor and the project, the prime contractor discourages visitors from entering the work site. Since the site is an ever-changing assemblage of workers, materials and equipment, the presence of anyone not intimately involved with the daily operations of the site shall not be allowed in the area for their own protection unless authorized and escorted by a project representative.

4.2 Project Personnel

Safety is the responsibility of everyone involved with the Project at all levels. However, certain key individuals have recognized specific roles. Upon award of contract, resumes and qualifications of designated safety personnel will be submitted separately. The following is a list of personnel assigned to this project:

TITLE	NAME
Project Manager	
ES&H Representative	
Site Safety & Health Officer (Project Safety Manager Designee)	

All subcontractors are subject to the safety requirements of this project.

5.0 HAZARD ASSESSMENTS

Safety inspections will be a routine and integral part of this plan and will be carried out at several different levels. The designated Project Safety Manager Designee will ensure that regular inspections are conducted.

Activity Hazard Analysis

The Prime Contractor shall utilize task specific Activity Hazard Analysis (AHA) to identify and control the hazards associated with the work to be performed. An AHA shall be completed, approved, and reviewed with employees prior to the commencement of each specific task, including subcontractor operations. All employees' shall be trained in basic hazard identification techniques and empowered to notify supervision of the existence of any hazards in the workplace. The Prime Contractor, and subcontractors employed by the Prime Contractor, shall employ administrative, engineering, and personal protective measures to eliminate and/or control workplace hazards. Supervisors shall be responsible for the continuous monitoring of work operations and individual employee activities. Supervisors shall be empowered to ensure safety compliance and to implement corrective actions and/or disciplinary measures. Completed AHA's for anticipated tasks are located in Sections 2 and 3 of this plan.

Hazards associated with these tasks are addressed under various subheadings. These hazards must be considered when planning the work and should be made known to all site personnel. Proper education on safe practices and procedures will minimize the injury and/or property damage potential of the listed hazards. It is important that supervisors review these hazards with their crews and safeguard workers, visitors, and subcontractors from them.

Pre-construction safety checklist:

- Review plans and specifications. Type of work.
- Applicable safety standards - OSHA, State, Local
- Review special safety requirements for each activity. – AHA.
- Review traffic control requirements.
- Review and accept Subcontract Safety and Health Program.

Insurance Review:

- Subcontractor's scope of work. Certificate of Insurance. Limits
- Pre-Job Planning and Safety Meeting Considerations.

Exposure to Public: Present and Future

- Proximity of operations to children and general public; schools, playgrounds, parks, churches, residential areas, hospitals, commercial or business areas, etc.
- Maintenance of protection during non-working hours and in adverse weather.
- Consider "attractive nuisances" caused by excavations, water holes, pipes, ladders, scaffolds, heavy equipment, etc.

Adjacent Property

- Proximity, type and values of adjacent property exposures. Potential for business interruption.
- Trespassing - employees, material, supplies, equipment operations, spoil disposal, parkways, fences, sidewalks driveway, etc.
- Safe procedures for installing and removing temporary support systems.
- Effects of weather on various phases of project (Snow, ice, rain, wind, floods etc.)
- Employees shall be reminded through toolbox talks of the importance of good housekeeping procedures when working so closely to adjacent properties.

Housekeeping Practices

- Material storage
- Equipment - trucks, knuckle booms, equipment yards, security, parking, etc.
- Job layout - clean up procedure, traffic patterns
- Adjacent work in progress - other contract work.
- Employees shall be reminded through toolbox talks of the importance of good housekeeping procedures when working so closely to adjacent properties.

5.1 Employee Involvement in Hazard Identification

The safety and health of P&J Inc. and our subcontractor's employees are of utmost concern to P&J Inc. It is imperative that all employees follow safe practices and procedures while at work.

Each employee shall receive an overview of the generals hazards associated with this particular project prior to working on the project in their new-hire orientation session. Task-specific hazards and recommended controls as identified in the AHA process shall be reviewed with all involved employees prior to the start of a particular operation in the forum of a toolbox safety meeting. The Prime Contractor shall encourage the active involvement of its employees in hazard identification and correction through regular participation in weekly toolbox safety meetings.

Employees will report all unsafe conditions and acts and near misses to their foreman or supervisors through verbal communication. An open line of communication will always be maintained for employees.

5.2 Personal Protective Equipment

Due to the nature of construction activities in general, personal protective equipment (PPE) is often the most feasible exposure control for employees. The following is a list of general safety rules as they relate to construction activities. Many of these topics are discussed in details in further subheadings. The following is the Personnel Protection Equipment Hazard Assessment that all employees must follow:

- All personnel, visitors, and vendors shall wear hard hats at all times to include inside the cab of equipment. Hard hats shall meet specifications contained in American National Standards Institutes Safety Requirements for Industrial Head Protection

- Safety glasses with side shields or wrap around protection shall be 100% of the time while on any work site. Additional protection including goggles and face shields may be required for operations involving flying debris, chemical splashes and welding, use of chain saws, etc. The Project Safety Manager Designee shall determine the specific protection to be worn.

- High visibility safety vests and or clothing with reflective stripes shall be worn by all personnel at all times, including during safety meetings held outdoors. Class 2 or 3 retro-reflective vests consistent with the MUTCD are the only vests permitted.

- Hearing protection in the form of ear muffs or foam earplugs shall be worn in all designated high noise locations. Other materials should never be inserted into your ear. Where hearing protection is required, these areas shall be posted.

- Safety boots with 6 inch leather uppers meeting the requirement of ANSI Z-41 (1999). Personnel using chain saws shall wear Kevlar lined boots. Tennis shoes or similar type footwear shall not be permitted. This policy applies to employees, guests, visitors, and vendors.

- Leather work gloves shall be worn when handling debris, rough and abrasive materials, concrete, and other abrasive materials that may cause injury to the hands or when the work subjects hands to lacerations, puncturing or burns. Additional hand protection may be designated by the Project Safety Manager Designee, job superintendent or foreman. Leg Protectors shall be worn while using chain saws.

- Minimum clothing requirements are long pants and a shirt with a minimum four-inch sleeve

5.3 General Safety Rules

General safety rules are outlined in the Project AHA's and further defined by the Prime Contractor's safety program.

- All accidents or injuries, no matter how minor, must be reported to the foreman or superintendent for immediate treatment or first aid care to prevent serious infection or complication. No matter how minor in nature, a written accident report is to be completed and forwarded to the Project Safety Manager Designee within 8 hours of notification of the incident. A verbal notification shall be provided to the Project Safety

Manager Designee immediately.

- Employees are cautioned about the danger of loose clothing, rings, bracelets, and jewelry around moving equipment. Loose hair and dangling jewelry must be restrained.

- Fall protection for heights greater than six feet requires proper guard rails, toe boards and proper flooring except when proper precautions such as lifelines with harnesses, barricades, etc., have otherwise been made.

- Gasoline is prohibited for cleaning of equipment or tools. Small quantities of gasoline shall be transported only in approved metal safety containers. All engines must be shut off when refueling unless provided otherwise in the original manufacturer's manual. No Smoking rules shall be observed in posted areas. Use of plastic gas cans for any purpose is prohibited.

- Traffic vests (Type 2 or 3), or other suitable garments marked with retro-reflective or high visibility material of the same rating, shall be worn by workers at all times when in work zones.

- Fire extinguishers shall have an ABC rating and shall be located in close proximity of flammable material and gases and shall be present on all transport vehicles, construction equipment and in company trucks. Daily inspection of fire extinguishers is mandatory to determine proper charge by the user. Damaged or discharged extinguishers shall be removed from service immediately and sent out for service – a replacement shall be installed immediately. Annual inspection by a competent inspector of all rechargeable units shall be performed.

- Compressed fuel gas and oxygen shall be separately secured and stored in racks twenty feet or more apart with a cover that protects them from direct sun light. All hoses and fittings shall be checked for wear and leaks. Treat all empty cylinders as if they were full and mark them "MT".

- The storage, transportation and use of flammable, combustible, or corrosive materials shall be conducted in accordance with pertinent local, state, and federal regulations. In addition, all necessary permits for such shall be obtained.

- Seat belts shall be worn when operating equipment or in vehicles. No more than one person, the operator, shall ride in or on equipment or in vehicles unless the equipment/vehicle has seats and seat belts to accommodate the riders.

- Reverse signal alarms shall be audible over surrounding noise for a distance of 25 feet. If the reverse signal alarm becomes disabled, the equipment shall be immediately shut down until repaired.

- When equipment is left unattended, is not in use and/or is subject to sudden lowering, such as backhoes, loaders, etc., all implements shall be grounded, the brake engaged and the equipment shift mechanism shall be placed in the "park" or

"neutral" position and the equipment shall be secured. Keys shall not be left in equipment that is unattended. Maintenance work on such equipment shall not begin until all movable components are secured and energy sources are locked out.

- Company vehicles and/or equipment shall not be operated by unauthorized personnel.
- Company vehicles cannot be left in idle mode or with the keys in the ignition if the driver will be farther than 5' from the vehicle.
- Passengers are not allowed to ride in the bed of pickups.
- Personal vehicles are allowed only in designated areas.
- Hand tools shall only be used for their intended purpose. All damaged tools or worn parts shall be reported to the foreman for replacement or repair. All required guards shall be affixed to hand tools during operation.
- Inoperative tools, vehicles, and safety devices shall be tagged as faulty to prevent further use and removed from service.
- Unshored trenches or excavations greater than four feet in depth shall not be entered unless a ladder is available every 25 feet for means of egress and exit. All trenches over 5 feet shall either be shored or sloped (benching is not permitted) or a trench box shall be used. All trenches shall be inspected daily by a competent person. Evidence of competency must be available.
- No employee shall remove a cover, guardrail, or barricade from any opening without an alternative plan for protection of all persons.
- Employees are not permitted to use or possess any intoxicants or drugs on this project or any property or equipment/vehicles associated with this project or to be under the influence of any intoxicants or drugs.
- Tools, equipment, machinery, and work areas shall be maintained in a clean and safe manner. Defects and unsafe conditions should be reported to your foreman.
- Nails shall be removed or bent over on disassembled lumber immediately.
- Horseplay, including reckless driving of vehicles or equipment, will not be tolerated.
- Proper lifting procedures (back as straight as possible and with knees bent) should be practiced. If the load is too heavy to lift safely, get help.
- Electric power operated tools shall be equipped with three-wire cord having the ground wire permanently connected to the tool frame and means for the grounding the other end or be of the double insulated type and permanently labeled as "Double Insulated".

- Any employee observing an unsafe practice or condition shall immediately report the unsafe practice or condition to his immediate foreman and superintendent.

- All protruding rebar or similar shall be protected to prevent employees from impalement.

- Posted safety rules and safety signs shall not be removed except under management's authorization. Only authorized personnel shall install or remove posted signage.

5.4 Respiratory Protection

Respiratory protection is not anticipated as necessary for use as defined by the Scope of Work. If the CIH determines that respiratory protection is needed for any particular aspect of work, use of respirators shall be in accordance with Section 6.0.K of the Phillips & Jordan Inc. *Safety and Accident Prevention Program Manual* (June 2012) and specific requirements specified by the CIH.

5.5 Noise Control & Hearing Protection

The Prime Contractor acknowledges the hazards associated with construction related noise to its employees and subcontractor employees. The Prime Contractor is committed to safeguarding workers from high noise levels as well as mitigating the nuisance factor to abutters.

The Prime Contractor and all subcontractors will provide noise protection for employees whenever the noise level exceeds 90 dB for an eight-hour average. Noise levels will typically be determined by measuring the noise on the A-scale of a standard sound level meter at slow response. If the instrument is not capable of logging data for a time weighted, use formula as listed in 29 CFR 1926.52(d)(2).

If employee noise exposure exceeds 90 dBA, the Prime Contractor and all subcontractors will implement engineering, administrative and/or personal protective equipment control as is appropriate. When feasible, engineering controls will be the first choice for noise reduction. Some of the options include:

- Distance equipment/source from employees
- Provide/ensure mufflers on equipment are working properly.
- Place sound barriers/curtains/blankets around equipment/source

Engineering and administrative controls may be used to limit employee exposure via equipment design, job rotation and/or limiting employee exposure to excessive noises.

Hearing protective devices include ear muffs (banded and helmet mounted) and inserts (disposable and corded). Employees exposed to noises louder than 90 dB are required to wear one of these two devices. Combining both earmuffs and inserts will typically add 3-8 dB of protection to the rating of the higher device (consult manufacturer for exact NRR). Activities that require hearing protection are (but not limited to):

- Power saws (circular, concrete, air)
- Powder activated equipment
- Open cab construction equipment

5.6 Fire Protection / Fire Prevention

Class A - Ordinary combustible materials, wood, paper, rubbish
Class B - Flammable liquids, greases, oils, paints gasoline
Class C - Electrical equipment (energized).

To use, direct at the base of the fire and sweep slowly until all the fire is contained and then put out. Continue to use and coat all areas so as to prevent the fire from starting up again.

On this project all fire extinguishers shall be of Dry Chemical Type rated ABC and sized per application.

- All construction equipment and transport vehicles shall have an ABC fire extinguisher on board.
- Smoking shall be prohibited at or in the vicinity of operations which constitutes a fire hazard and shall be conspicuously posted.
- Additional fire extinguishers shall be added in areas where welding, cutting or burning is taking place for the purpose of a fire watch. All fire extinguishers shall be conspicuously posted with proper signage.
- Users shall inspect extinguishers in their area prior to commencing work.
- Extinguishers on site shall be inspected by a competent person on a monthly basis and inspections shall be documented.
- Extinguishers on site shall be inspected, serviced and certified at least annually by a competent third party.
- Damaged or discharged extinguishers shall be tagged and removed from service immediately. A replacement shall be installed and a rotation of service will be conducted on a monthly basis.

5.7 Debris Chipping and Grinding

If applicable, grinding of vegetative debris will be by means of small to medium commercial grinders at designated points to reduce the vegetation. It is possible that smaller chip-grinders could be utilized to grind in-place vegetative debris. Where grinding operations are permitted and established, access control points and boundaries will be established to limit personnel in the area. As a minimum, only grinding operations personnel will be permitted within 200' of grinding operations while grinding is in progress.

5.7.1 Vegetation Staging

Vegetation piles staged for chipping will be limited to a height of 20' at any given point. The length of piles shall not exceed 300' and a fire control zone of 8' shall be maintained at all times. It is not anticipated piles will ever exceed this size.

5.7.2 Chip Management

Once the vegetation has been reduced to chips, chip piles shall be limited to no higher than 20' and shall be monitored while in piles to ensure that the chips do not combust through internal heat transfer

5.8 Housekeeping

Poor housekeeping on construction projects may cause unsafe working conditions such as tripping hazards and potential fire hazards. The Superintendent shall plan his housekeeping program at the start of the project and assign responsibilities for clean up and removal of debris to the foremen for his/her work area and all other parties involved in the project. The following housekeeping rules shall be enforced:

- Subcontractors are responsible under their contractual obligations for clean-up and disposal of construction debris and/or equipment servicing debris, resulting from their work activities.

- Plan and schedule the emptying of rubbish containers. Full containers will be emptied promptly.

- Hoses, extension cords, welding leads, etc., will not be laid on the ground in occupied areas outside of construction areas. If possible, such lines will be strung overhead.

- Combustible or flammable debris will be cleaned up and disposed on a regular basis. Accumulations of this type of debris are prohibited.

- Other construction debris generated from construction activities will be cleaned up and disposed on a regular basis as necessary.

- Walkways, aisles, stairways, ladder ways, ramps, doorways, entrances will be kept clear of debris at all times.

- Employee lunch areas, shanties, storerooms, field offices, and entrances will be provided with trash receptacles or other debris containers. All trash barrels shall be equipped with rodent proof covers and emptied on a regular basis to reduce the potential for rodents and fire hazards.

- Where containers for debris are not readily available, debris must be placed into isolated piles ready for disposal rather than left scattered and strewn about the work site.

- Oil and grease spills shall be cleaned up at once. All spills, regardless of size, shall be reported to the supervisor immediately. Spill containment materials shall be available in all zones for immediate containment of spills.

5.9 Fall Protection

Fall protection is required whenever a worker is 6 feet or more above a lower surface except on those vehicles and equipment exempted under the OSHA standard. Fall protection must be provided for employee exposure to unprotected sides and edges, leading edges, hoist areas, holes, form work and reinforcing steel, ramps, runways, and other walkways or excavations.

The Project Safety Manager Designee shall consult with project engineers to determine if the walking/working surfaces on which the employees are to work have strength and structural integrity to support employees safely.

If the employee is exposed to falling objects, the prime contractor and/or subcontractor will implement one of the following:

- Toeboards, screens, or guardrails to prevent objects from falling from higher levels;
- Canopy the structure and keep potential fall objects far enough from the edge of the higher level so that those objects would not go over the edge if they were accidentally displaced;
- Barricade the area to which the objects could fall, prohibit the employees from entering the barricaded area, and keep objects that may fall far enough away from the edge of a higher level so that those objects would not go over the edge if they were accidentally displaced.

Fall Protection Systems

The Prime Contractor and its subcontractors shall provide and install fall protection systems as necessary to protect workers from falls over six feet in height. **The Prime Contractor recognizes that fall hazards are extremely serious in the construction industry and has a zero tolerance policy for violations of the six-foot rule.** The following is a list of systems that may be incorporated into the Work:

Guardrails
Safety Net Systems
Personal Fall Arrest Systems
Position Device Systems
Warning Line Systems
Aerial Lifts
Personnel Baskets
Scaffolds
Ladders

The Prime Contractor and subcontractors shall strive to utilize passive fall protection systems whenever possible and revert to personal fall arrest systems only when necessary. Hazards associated with working at heights shall be addressed in a task specific manner via AHA's.

If elevating work platforms are used as observation towers, positioning lanyards shall be used with fall protection harness systems to prevent those on the platform from crawling on the top rail of falling from the platform. Double lanyards may be necessary. Lanyards shall be attached to the attachment points provided on the work platforms.

Training

Where fall protection is used, all affected employees, including subcontractor employees, shall be provided training in the requirements of the standard and proper use, care and maintenance of fall protection equipment. The employee shall also be trained to recognize those hazards of falling and the procedures to be followed in order to minimize these hazards. Employees

required to don personal fall arrest equipment shall be trained on the proper fitting, use, care, and inspection of the equipment.

The Project Superintendent and/or the Project Safety Manager Designee shall review all fall protection systems to ensure the safety of the employee. Employees shall inspect all equipment before use and report any problems/defects to their supervisor.
If elevated work platforms are used as observation points, all personnel who must occupy the platform, including subcontractors and government personnel, shall be instructed in the proper use of the platform and the use of fall protection systems applicable to the platform. Fall protection systems shall be provided to and worn by such personnel prior to accessing the work platform.

5.10 Cold Stress Monitoring Plan

Hypothermia is also considered a medical emergency and requires immediate medical attention. If workers exhibit symptoms of hypothermia, call 911 and take the following immediate first aid measures:

- Get the person indoors.
- Remove any wet clothing and dry the person off, if needed.
- Warm the person's trunk first, not hands and feet. Warming extremities first can cause shock. Warm the person by wrapping them in blankets or putting on dry clothing. Do not immerse in warm water. Rapid warming can cause heart arrhythmia.
- If using hot water bottles or chemical hot parka, wrap them in cloth first. Do not apply directly to the skin.
- Begin CPR if necessary and continue until emergency medical personnel arrive or the person begins breathing.
- If the person begins breathing and remains conscious, give them a warm drink. Avoid caffeine or alcohol.
- Once the body temperature begins to rise, keep the person dry and wrapped in a warm blanket or similar. Wrap the person's head and neck as well.
- Do not leave the person until emergency medical personnel arrive.

6.0 EMERGENCY ACTION & EVACUATION PLAN

The Emergency Action plan shall address the coordination and implementation of emergency response for all project areas. The Prime Contractor shall coordinate emergency response with the state and local fire, police, and EMS. Appropriate regulatory agencies will also be involved. Procedures shall address the handling of general evacuation of the work site, fire, and confined space rescue, personal injury, explosion, bomb threats, severe weather, public demonstrations, damage or interruption of utilities, excavation collapse, equipment incidents or other catastrophic events.

The Project Safety Manager Designee shall establish a specific response location for each of the project work areas to which emergency response personnel shall be directed. If emergency response is required and a 911 call is made, the crew leader shall post a flag person at the response location to meet the emergency personnel and escort them directly to the incident

scene. This procedure will greatly reduce confusion about where the response should be and shall expedite the arrival of the emergency personnel and equipment where they are needed.

Crews shall use radio and cellular phone communication to notify the workforce of the situation and assign response duties as well as to call for emergency response.

The crew chief of each crew shall have a copy of this emergency action & evacuation plan as well as the location of medical facilities for the area.

6.1 Work Site Evacuation

In the event that a work site evacuation is required, the Project Safety Manager Designee and/or Project Superintendent will notify all employees via cell phone, hand held radios and/or air horns. Employees will be told where to meet and a head count will be taken to account for all employees. Any subcontractors on the job will be notified to take similar actions as required. As the site configuration changes, employees will be periodically updated of any changes in the plans.

6.2 Personal Injury

In case of an emergency, the Project Safety Manager Designee and the Project Superintendent will be notified immediately. A severely injured employee should not be moved unless the danger of additional injury is imminent. Ensure the injured employee is kept as comfortable as possible until the emergency responders arrive. A foreman shall accompany the injured employee to the hospital to assist in providing necessary information to hospital staff. Follow local emergency response protocol and inquire with staff whether an emergency response plan is in place for hazardous material incidents.

6.3 Bomb Threats

Any bomb threat will be treated as genuine. The police will be called immediately and all personnel evacuated from the area. Adjacent contractors will also be notified to take appropriate action.

6.4 Severe Weather

In the event that severe weather is forecast, the Project Manager will mobilize sufficient personnel to secure the site and all unnecessary operations should be canceled/ halted. Severe weather includes: Severe thunder/lightning, hurricane, tornado, and excessive heat temperature.

6.5 Public Demonstrations

Should there be a public demonstration or protest at the site, police will be called and secure access ways in and out of the site will be established. Employees are not to have contact with the protesters and should be removed from any area where this may be likely.

6.6 Site Security

The Prime Contractor and its subcontractors shall ensure the security of the various work areas at all times.

- Access/egress points from the workzones shall be via one or two access points.
- Visitors to the site must be authorized and escorted at all times. Unescorted visitors or

unauthorized entrants to the site should be stopped and asked to leave the property.

- Signage shall be posted at all work zone access/egress points restricting access to authorized construction personnel only. This signage should direct visitors to report to the field office.
- Employees shall be instructed to be watchful of suspicious personnel attempting to enter the workzones and report these observations to a supervisor immediately.

6.7 Discovery of Human Remains, Animal Remains, Arms, Ammunition and Explosives (AA&E)

- Crew leaders shall observe debris before disturbance for the presence of human remains, animal remains, and AA&E. If any are observed before loading, the crew leader shall immediately notify the zone supervisor in their area who will contact the Project Safety Manager Designee. The debris area shall be marked with red flagging and left undisturbed. The Project Safety Manager Designee shall notify the proper response agency and the Project Manager.
- If human remains, animal remains or AA&E are discovered while loading debris, all work shall stop immediately. The crew leader shall immediately contact the zone supervisor for the area who will notify the Project Safety Manager Designee to contact the proper response agency. The Project Safety Manager Designee shall advise the Project Manager.

6.8 Confined Space Rescue

Confined space entry is not included in the scope of work for this contract and shall be avoided.

7.0 SAFETY AND HEALTH TRAINING

Training takes place at staging areas based on the following outline:

The following outline is not a complete checklist or a complete potential hazard analysis. Individuals using this data are urged to apply their initiative and personal knowledge of the industry in developing effective controls. Employees are encouraged to refer to applicable Federal, State and Local codes and regulations. Subcontractors must have an APP and/or Safety and Health plan and remain in compliance with its provisions.

The following are an example of the general and specific topics that P&J and subcontractor personnel may be trained in:

- New hire site-specific safety & health orientation
- Supervisors orientation
- Traffic and Work zone Safety
- Heavy equipment operations
- Hazards of Emergency Work – Debris Reduction
- Asbestos awareness – if applicable
- Fall protection – if applicable
- Emergency procedures
- First aid / CPR – minimum number per crew trained
- Lockout/Tag-out

7.1 Tool Box Talks (By the Project Safety Manager Designee or Designee)

- Five to fifteen minutes in length each week and documented, including attendance roster signed by all employees, including subcontractor employees.
- Work tasks and related hazards
- Past Accidents
- Worker Participation
- New Subjects provided by Project Safety Manager Designee

Regular Training Meetings for Supervisors, including Foreman (By the Project Safety Manager Designee or Designee)

- Training sessions shall be documented

7.2 Contractor Safety Planning Meetings (By the Project Manager and Project Safety Manager Designee)

- Contractor safety meetings will be conducted monthly or as necessary with the Resident Engineer. The Project Safety Manager Designee or Project Manager will conduct the meeting and management/supervisory personnel and foremen and a representative from each subcontractor will be required to attend.

7.3 Special Training for Employees When Applicable (By the Project Safety Manager Designee or designated Area Safety Manager)

- Signs and Signals
- Hand Tools and Power Tools
- Electrical Hazard Awareness
- Material Handling
- Hazardous Materials
- Personal Protective Equipment
- First Aid/Medical
- Ground Fault Circuit Interrupters (GFCI)
- Fall Protection (6' rule)
- Traffic work zone safety

As noted elsewhere in the APP, subcontractors are required to adhere to applicable regulations and attend "tool box" talks. Subcontractors shall furnish employees with training appropriate to the tasks to be performed (i.e. fall protection, Hazard Communication, material handling, etc.)

Additional safety and health instruction will be provided prior to performance of particularly hazardous or unfamiliar tasks as necessary.

The use of known hazardous products by personnel is strictly regulated. Training in the use of proper personal protective equipment (PPE), use of product and product application techniques, are provided to individuals utilizing the products. Acknowledgment of receipt of training by the individual shall be documented.

The Project Safety Manager Designee will maintain records of all safety meetings at the project office.

- All employees attending the safety meeting shall personally sign the weekly safety talk form. Subcontractor cooperation in educating your employees is essential.
- Each foreman and superintendent shall hold a weekly toolbox safety meeting in the work area and with their entire crew. Subject matter shall cover specific safety matters pertinent to the crew's on-going activity. Project Management and supervisors shall attend and participate in these meetings. The Project Safety Manager Designee and Project Manager shall attend at least one of the meetings each week. Attendance shall be recorded along with the topics discussed. Safety related concerns should be solicited from the employees. Safety concerns and hazards discussed in the tool box meetings shall be corrected as soon as possible and the corrective action shall be reported back to the employees in the next meeting. Prompt management attention and correction of such concerns is critical.

8.0 HAZARD COMMUNICATION

The purpose of this instruction is to ensure that each employee is fully aware of the hazards of the materials to be used in the workplace and knowledgeable in the controls to be utilized to safeguard themselves against these hazards.

The Project Safety Manager Designee or other technically qualified designee is the overall coordinator of the hazard communication program.

8.1 Hazardous Chemicals

The Project Safety Manager Designee will maintain a list of all hazardous chemicals used on the job site and update the list as necessary. The list is electronic and available upon request.

8.2 Material Safety Data Sheets (MSDS)

The Project Safety Manager Designee or designated Area Safety Manager is responsible for acquiring and updating MSDS/SDS's. They will review each MSDS/SDS for accuracy and completeness. All new procurement of materials, which may contain hazardous substances, for the job site must be cleared by the Project Safety Manager Designee. Whenever possible, the least hazardous substance will be procured.

MSDS/SDS/'s that meet the requirements of HCS-GHS must be fully completed and received at the job site either prior to, or at the time of receipt of the first shipment of any potentially hazardous chemical purchased from a vendor. It may be necessary to discontinue procurement from vendors failing to provide MSDS/SDS's in a timely manner.

Employees involved with the handling and use of new materials will review the MSDS/SDS with their foreman and Project Safety Manager Designee/Area Safety Manager in the forum of a toolbox meeting prior to working with the product.

A binder or electronic file of MSDS/SDS's for all chemicals on the project will be located in the field office and will be available upon request for all employees.

In most cases, MSDS/SDS's for all hazardous chemicals to be used on the job site will be received prior to the first shipment of such chemicals. In the event that MSDS/SDS's have not been received, the supplier will be contacted immediately for the document. If the MSDS/SDS can not be produced, then that chemical will not be used until such time that all hazards associated with the chemicals can be identified and the MSDS/SDS procured.

8.3 Labels and Other Forms of Warning

The Project Safety Manager Designee/Area Safety Manager or designated representative has the responsibility to ensure that all hazardous chemicals on the job site are properly labeled. Labels should list at least the chemical identity, appropriate hazard warnings, and the name and address of the manufacturer, importer, or other responsible party. The Project Superintendent will refer to the corresponding MSDS/SDS to verify label information. Immediate use containers or small containers into which materials are drained for use on a shift by the employee drawing the material from do not require labeling. To meet the labeling requirements of HCS-GHS for other in-house containers, refer to the label supplied by the manufacturer. All labels for in-house containers will be approved by the Project Safety Manager Designee or designee prior to their use.

The Project Safety Manager Designee will check on a periodic basis to ensure that all containers in the facility are labeled and that the labels are up to date.

8.4 Training

Each employee who works with or might be exposed to hazardous chemicals will receive initial training on the HCS-GHS standard and the safe use of those hazardous chemicals. Additional training will be provided for employees whenever a new hazard is introduced into their work area. Hazardous chemical training is conducted by the Area Safety Manager or designee.

Training will emphasize these elements:

- A summary of the standard and this written program, including those changes enacted under the Global Harmonization System (GHS).
- Hazardous chemical properties including visual appearance and odor and methods that can be used to detect the presence or release of hazardous chemicals.
- Physical and health hazards associated with potential exposure to workplace chemicals.
- Procedures to protect against hazards, e.g.; personal protective equipment, work practices and emergency procedures.

- Hazardous chemical spill and leak procedures; and the location of MSDS's on site, how to understand their content and how employees may obtain and use appropriate hazard information.

The Project Safety Manager Designee will monitor and maintain records of employee training and advise the Area Safety Manager on training needs.

Toolbox talks will be used to update employees from time to time on Hazard Communication.

8.5 Subcontractor's Employees

Subcontractors are required to submit copies of MSDS/SDS's for any substance to which employees are, have been, or may be exposed. Electronic MSDS/SDS's are acceptable. Subcontractors shall incorporate the use of such materials, their hazards, and the appropriate controls into their task-specific AHA's.

The Project Safety Manager Designee or designee will advise subcontractors of any chemical hazards which may be encountered in the normal course of their work on the premises as part of the pre-work orientation. He/she should make available the MSDS/SDS's for these substances and inform them of the HMIS labeling used to identify the potential exposure hazard and required PPE.

Exposure to employees from adjacent contractors is not anticipated, but in the event it occurs, coordination with adjacent work sites and contractors will take place to inform employees with new hazards associated with working on or near another employer's works site. Hazards introduced onto the work site by subcontractors (i.e. blasting/explosives) shall be communicated to all employees via toolbox meetings.

8.6 Non-Routine Tasks

Workers contemplating a non-routine task, i.e. a task which they do not typically perform, will consult with the Project Safety Manager Designee or designee who will ensure that these employees are informed of chemical hazards associated with the performance of these tasks and appropriate protective measures. This will be accomplished by a meeting of foreman and the Project Safety Manager Designee with the affected employees before such work is begun.

8.7 Washing and Sanitary Facilities

The Prime Contractor recognizes that a sound employee sanitation program is crucial to minimizing employee illnesses associated with poor hygiene practices. All workers shall be educated on sound hygiene practices and the hazards associated with poor hygiene on the worksite.

8.8 Employee Drinking Water Facilities

Proper hydration is vital to employee performance, in warm or cold weather. Potable water shall be provided to each Foreman for their use in supplying drinking water for their crew in the work area. Subcontractors are responsible for providing potable drinking water for its employees.

8.9 First Aid Facility and Staffing Requirements

The Prime Contractor will rely on the local fire department and EMS to respond to major accidents on the Project.

For emergency treatment, dial 911 from a landline or from a cellular phone. 911 services are operational in the impacted area.

Industrial First Aid Kits will be strategically located throughout the job-site, well marked and well maintained for employees use.

All Foreman and Job-site vehicles will be equipped with First Aid Kits and Emergency procedures for those employees working too far from the office to receive immediate First Aid.

If an injury ***other than cut or scrape*** occurs on the Evening/Night/Weekend shifts requiring medical attention, the injured person must be transported to a predetermined emergency medical treatment facility.

Emergency Phone Numbers: All phone numbers will be posted conspicuously in the job site office. These numbers will also be given out during safety orientations.

All employees, both field and office personnel, should be trained on the proper emergency response procedures as part of the initial indoctrination.

For accidents requiring on-site medical attention, the local **Fire Department/EMS** must be contacted as the first responder for all accidents in the area of the Job Site. Verify that 911 is functional. If not, obtain the phone number for emergency contact and post accordingly.

ALL INJURIES (REGARDLESS OF HOW SERIOUS) SHALL BE REPORTED TO THE Project Safety Manager Designee IMMEDIATELY.

9.0 ACCIDENT INVESTIGATION

Investigation of workplace incidents including injury, illness, property damage and significant near misses is critical to improving the safety and health on the job site and shall be conducted by the foreman and/or superintendent with oversight from the Project Safety Manager Designee/Area Safety Manager.

9.1 Reporting

Each worker, Superintendent and Subcontractor is responsible for reporting immediately all accidents which involve personal injury or property damage to the Project Safety Manager Designee regardless of how minor or serious the incident may be. Any serious injury or substantial property damage will also be reported immediately to SCDOT in accordance with the Emergency Notification Plan.

9.2 Emergency Notification Plan

For all serious incidents or accidents which are defined as follows;

- Fatalities
- Multiple Injuries
- Major utility breaks
- Major accidents in the Public Way
- Major accidents involving equipment and or property damage.
- Cave-ins or collapses of any kind.
- Fires or Explosions
- Natural Disasters
- Drownings
- Other significant incidents which may attract media attention.

The Emergency Notification procedure will be followed:

If a 911 call is made, the caller shall provide the following information in a clear and concise manner and document actions taken:

Nature of Incident: Personal Injury, Car Accident, Fire, Hazardous Spill, etc.
Location: Street Address (and cross street if available)
Number of injured persons
Nature of injuries: Heart Attack, Bleeding, Broken Bones, and are they Conscious or Unconscious

After making a 911 call, contact the Field Office and take the following actions:.

- The nearest P&J employee with a cell phone or radio will notify the project office of the incident and request all unnecessary radio communications to cease.

- The Project Safety Manager Designee and supervisory personnel will respond to the scene. The Project Safety Manager Designee will document the details of the incident with photographs and documentary.

- All supervisors in the emergency area will be notified of the emergency to request appropriate emergency assistance while awaiting arrival of emergency responders. All non-essential radio traffic will cease until the emergency is under control.

- Ensure the SCDOT Manager is notified of the injury, including the name of the injured, the extent of the injury, location and actions taken through time of notification.

10.0 SITE HAZARDS

10.1 Equipment Safety (Mechanized)

The use of construction equipment will be limited to specific activities and areas during this clean up activity. Where used, all mobile equipment, hired or owned, shall have a back-up alarm that meets project noise specifications. Any equipment without an alarm shall be reported to the Project Safety Manager Designee immediately and the equipment will not be used until repaired. For equipment owned by others, the operator will be notified to repair the unit immediately. All

equipment without a back-up alarm shall put out of service until repaired.

All operators or truck drivers shall be properly licensed and shall wear all required personal protective equipment when outside the cab.

No operator shall allow any person to ride in the bucket of a loader or excavator nor shall it carry equipment or any object that it is not specifically designed to carry.

All hired trucks must carry the proper insurance coverage.

Personnel shall not ride on machinery unless there is a seat in such equipment for this purpose.

All equipment shall be equipped with a fire extinguisher.

All equipment/vehicles shall be visually inspected by the operator prior to operation each shift and the inspection shall be documented on the P&J Inc. equipment inspection form.

All equipment shall be properly maintained per the manufacturer's recommendations.

10.2 Excavating and Trenching

Excavation and trenching is not part of this contract. If trenching or excavation becomes necessary of trenches and/or excavations are discovered, the provisions of Section 6.0.I of the P&J Inc. *Safety and Accident Prevention Program Manual* (Jan 2012) shall apply.

10.3 Electrical Requirements

Portable Generators

Portable generators will be suitably grounded as required by the manufacturer.

The placement of generators will be such to minimize the build up of fumes in work areas. When used at observation towers, generators shall be located at least 50 feet from the towers and protected against the elements. Generators will be protected with GFCI's, either internal as installed by the manufacturer or external by means of a GFCI pigtail.

Portable generators shall be shut down prior to refueling. Fuel cans (approved metal containers) will be stored away at least 10' away from portable generators while the generators are in use. Fire extinguishers shall be located adjacent to combustion engine generators at all times.

Ground Fault Protection

This construction site will use GFCI's per OSHA 29 CFR 1926.404 (ii). The workers will be instructed in their proper use and be required to attach them to all portable electric tools. Only double insulated tools may be used unless specifically approved by the Project Safety Manager Designee. Each cord set and related attachments will be inspected prior to its use.

10.4 Rigging:

- All rigging must be inspected daily by a rigging competent person. Evidence of

qualification must be provided.

- Tag lines shall be used whenever lifting materials or equipment. If tag line use cannot be accomplished, the Project Safety Manager Designee must approve alternate procedures.

- Rigging equipment will be inspected prior to each use so as to ensure that it is safe to use. Rigging equipment that is missing manufacture's tags shall not be used and shall be removed from the work area immediately.

- Rigging equipment will not be loaded in excess of its recommended safe working load.

- Rigging equipment, when not in use, will be removed from the immediate work area so as not to present a tripping hazard to employees.

- Makeshift fasteners, formed from bolts, rods, wire, etc., will not be used.

- Wire rope cables, used in hoisting, lowering or pulling loads, will consist of one continuous piece without knots, kinks or splices.

- When U-bolt wire rope clips are used to form eyes or loops in any load bearing cable, a minimum of three (3) clips may be used. Clips will be applied so that the "SADDLE" portion of the clip is not in contact with the dead end of the cable.

- Hooks used for lifting will be equipped with a positive safety latch.

- The use of job-made rigging or attachment points is prohibited unless designed by a P.E.

- Softeners shall be used to protect rigging from sharp edges.

- Weights of rigging and crane attachments shall be calculated into the weight of the load to be picked.

- All rigging shall be stored properly following use to protect it from weathering and/or damage.

- Rigging shall be of equal capacity and length on all picks.

10.4.1 Alloy Steel Chain

10.4.2 Synthetic Webbing (Nylon, Polyester and Polypropylene)

Nylon and Polyester are the most popular and best general purpose synthetic webbing slings. Polypropylene slings are intended for specific controlled applications, which require resistance to strong acids and alkalis.

Each application must be evaluated, taking into consideration the following:

- Type of acid, alkali or other chemical

- Exposure conditions
- Concentration
- Temperature

All synthetic webbing slings are subject to cutting when lifting items with sharp edges. Sharp edges in contact with the sling should be padded with material sufficient in strength to prevent damage to the sling. Wear pads give extra protection to the sling where the most wear occurs.

All defective nylon and polyester slings shall be removed from service when there are visible signs of wear, any cuts or frays, when the interior colored (red) webbing is exposed, or if it is stretched or damaged in any other way. Each foreman and superintendent shall be trained in the inspection criteria of rigging to ensure their competency in this function.

10.4.3 Wire Rope:
Safe operating practices for general use of wire rope slings shall be followed

10.5 Stairways and Ladders
Ladders may be required to provide safe access to work areas on the debris management project. As a general rule, ladders shall be used only for temporary access.

The contractor shall purchase only heavy duty construction grade extension and step ladders for use on the project. Manufactured ladders shall be used in accordance with the manufacturer's recommendations. Job-made ladders are not allowed. In general, all ladders shall be inspected prior to use and removed from service if damaged. All ladders shall be secured prior to their use and shall be used properly.

Each employee shall be trained in the safe usage of ladders during new-hire orientation and these requirements shall be re-iterated regularly via toolbox safety meetings.

10.6 Signs, Tags & Barricades
All workers shall adhere to the following standards relative to the proper use of signs, tags and barricades on the project:

- Foreman shall be responsible for erecting and maintaining barricades used to protect workers or the public from a hazard, protect materials from damage, or maintain access/clearance where appropriate.
- Barricade tape shall be used appropriately as a warning of a hazard, rather than a physical barricade to protect from a physical hazard.
- Yellow barricade or flagging tape shall be used to signify caution.
- Red barricade or flagging tape shall be used to signify danger. Persons entering areas barricaded with red tape who are not authorized to do so shall be subject to disciplinary action.
- Swing radius protection barricades shall be either red barricade tape or some other physical barrier to prevent workers from entering into the swing path of the machine.
- Physical barricades meant to provide fall protection must be able of withstanding 200 lbs. of force in the outward and downward direction.
- Wire rope guardrails/barricades shall be flagged with high visibility material every six feet.

- Signage shall be posted throughout the job to communicate information to employees and the public.
- Yellow signage shall communicate to the reader to proceed with caution.
- Red signage shall communicate to warn the reader of an area of imminent danger and restrict access to such areas to authorized personnel only.
- Orange signage shall be used to communicate to the public relative to construction zones and hazards.
- Green signage shall be used to communicate general information (i.e. first aid station locations) to the workers.
- The use, color coding, posting, wording, and size shall conform to regulatory requirements.
- Combustible, flammable, compressed gas, caustic/acidic, and other hazardous storage facilities shall be placarded on all four sides in accordance with local Fire Department (AFD) regulations.
- Equipment, tools, etc... tagged as unsafe and out-of –service shall not be used – violators shall be subject to disciplinary action.
- The location of fire extinguishers shall be conspicuously marked with red signage.
- The location of fire department standpipe hookups and fire hydrants shall be conspicuously marked and flagged. Barricades shall be erected around these to ensure a five foot diameter of space for use by AFD during emergency response.

10.7 Welding/Burning/Cutting

Welding, cutting or burning will not be permitted on this project except for burning required by the contract. If equipment requires welding or cutting to effect repairs, the equipment shall be removed from the project area before repairs are made.

10.8 Confined Space

While confined space work is not anticipated on this contract, it is important to identify confined space properties to avoid inadvertent personnel entry into such areas.

A confined space has:

1. limited or restricted means of entry or exit, AND
2. is large enough for an employee to enter and perform assigned work, AND
3. is not designed for continuous occupancy by the employee.

These spaces may include, but are not limited to, cofferdams, underground vaults, tanks, storage bins, pits and diked areas, vessels, and silos.

A permit-required confined space is one that meets the definition of a confined space and has one or more of these characteristics:
(1) contains or has the potential to contain a hazardous atmosphere,
(2) contains a material that has the potential for engulfing an entrant,
(3) has an internal configuration that might cause an entrant to be trapped or asphyxiated by inwardly covering walls or by a floor that slopes downward and tapers to a smaller cross section, and/or
(4) contains any other recognized serious safety or health hazards.

If any space is identified that meets these requirements, personnel SHALL NOT enter the space

and must contact the Project Safety Manager Designee immediately.

10.9 Work in Traffic

The Project Safety Manager Designee shall visit each area and determine what controls are necessary, define the controls and ensure those controls are implemented using the MUTCD and Texas Rules on Work Zone Safety and Mobility.

SECTION 2

Health and Safety Plan (HASP) for Debris Management Activities

HEALTH AND SAFETY PLAN
FOR
DEBRIS MANAGEMENT

VERSION 1.0

SIGNATURE PAGE

This Health and Safety Plan was developed to establish the minimal level of health and safety protection that will be implemented at the project location during any and all operations. Each entity will be responsible for the protection of the health and safety of its own employees and/or subcontractors.

Acknowledged by:

Entity	H&S Officer Name	H&S Officer Signature

ADDENDUM PAGE

The following addendums have been added to this Health and Safety Plan (HASP) in the form of authorized Position Statements. These statements will be accepted by all entities/agencies prior to final publication and inclusion as an attachment to this document.

Position Statement Number	Date Published	Date Attached to HASP

1.0 – INTRODUCTION AND SCOPE

1.1 INTRODUCTION

1.1.1 Scope and Applicability of the Plan

This Health and Safety Plan (plan) provides onsite personnel with guidance for identifying unique or significant safety and health hazards that may be associated with debris management efforts. For the purposes of this document, the work site will include four distinct yet related activities:

- Removing vegetative (veg) from ROW
- Removing debris from waterways, bridge abutments, culverts, etc.
- Transport of the debris to reduction site.

1.1.2 Plan Objectives

The primary objectives of this plan are as follows:

- Identify potential hazards at the work site.
- Establish a minimum basis for assessing that the personal protective equipment (PPE) provided is adequate to protect onsite workers within controlled areas.
- Provide a set of minimum safety and health standards to be followed by personnel onsite.

While onsite, health and safety – related practices will be governed by OSHA regulations.

1.1.3 Communication

Onsite communication flow will be accomplished utilizing a series of meetings and/or briefings. It is understood that client representatives, contractors, and supervisory employers will disseminate appropriate information to their own employees.

2.0 – SITE CONTROL

The minimum acceptable level of PPE for this project includes hard hats, safety glasses/goggles, long pants, shirts with a minimum 4" sleeve length, high-visibility, leather gloves, reflective safety vests, and sturdy leather boots. Additional activity-specific PPE requirements are listed under Section 3.0.

2.1 DEBRIS COLLECTION ACTIVITIES

Work activities will include the loading and hauling of vegetative wastes and possibly construction and demolition material. Segregation of waste is not included in the scope of this contract

2.1.2 Debris Collection from ROW

All vegetative and construction and demolition materials will be collected using loading equipment such as self-loaders, wheel loaders, or other loading type equipment. Material will be loaded in trucks and hauled to the staging area for reduction.

2.2 DEBRIS REDUCTION AND DISPOSAL SITES

Debris removed from the project ROW will be transported to approved disposal sites or landfills for final disposal as directed by the client.

3.0 - ACTIVITY HAZARD ANALYSIS

The evaluation of hazards will be based upon the knowledge of site background presented in this section and anticipated risks posed by specific operations. Activity hazard analysis specific to a task shall be developed and included in this section and shall be updated as necessary to identify potential hazards associated with tasks performed.

3.1 MATERIAL HAULING AND TRUCKING

Analyzed by: Eugene Taylor, MS, CSHM

Principal Steps	Potential Hazards	Recommended Controls
Access and egress on equipment	1) Falling off of equipment.	1) Operators and drivers must use three points of contacts at all times when getting on and off equipment. Keep access points free and clear of grease and oils. Keep these areas clean.
Loading	1) Failure of equipment. 2) Improper Loading.	1) All equipment must be inspected and documented prior to use. Equipment must also be inspected daily by the operator. 2) Laborers must pick up all debris that falls off of truck as it is being loaded. The road must be cleaned up prior to letting traffic pass.
Hauling	1) Improper Equipment. 2) Improper Loads. 3) No traffic control. 4) Improper License for vehicle. 5) Speeding.	1) All equipment must be inspected and documented prior to hauling. 2) All loads must be inspected and properly secured prior to leave the loading. 3) Any equipment in the roadway shall only work within a traffic control zone with proper Traffic control devices and flagmen. 4) All drivers must present a valid drivers license matching the class of vehicle that they will be driving. 5) Drivers must control their speeds and drive defensively.
Traffic Exposure	1) Personnel, vehicles, or equipment struck by vehicles/equipment.	1) Traffic control devices shall be set up, where appropriate as identified in the Traffic Plan. Spotters required when backing up in confined areas, in the vicinity of overhead utility lines, or where similar hazards exist. Install back-up alarms on vehicles/ equipment where required. Vehicles/ equipment equipped with hazard lights shall energize hazard lights when operating in work zones.

Equipment To be Used:

The minimum acceptable level of PPE for this project in all zones and work areas includes hard hats, safety glasses/goggles, long pants, shirts with a minimum 4" sleeve length, high-visibility, reflective safety vests, and steel-toed/thick-soled safety boots. In addition to minimum PPE required, personnel should wear hearing protection.

AHA for Material Hauling and Trucking Continued:

Inspection Requirements:

General PPE will be inspected before donning for integrity and completeness. Trailer gates must be locked or secured from two locations. Tailgates must have two permanent attachment points to preclude debris from falling from the truck.

Training Requirements:

All operators, drivers and ground personnel shall be qualified by their employer for each specific task. Drivers must have appropriate license for the vehicle which is being driven.

General Requirements:

Personnel receive project-specific safety indoctrination prior to work performed in the field.

General Safety Requirements for Hauling and Trucking:

- All trucks used to haul debris must be capable of rapidly dumping its load without the assistance of equipment, be equipped with a tailgate that will effectively contain the debris during transport and that will permit the truck to be filled to capacity. Sideboards or other extensions to the bed are allowable provided they meet all applicable rules and regulations, cover the FRONT and BOTH sides, and are constructed in a manner to withstand severe operating conditions. The sideboards are to be constructed of 2" by 6" boards or greater and not to extend more than two feet above the metal bedsides and are subject to approval by P&J and the contracting agency. It is the contractor's responsibility to report any adjustments of the sideboards to P&J for re-measurement.
- All hauling units must be in good working order.
- All lights and turn indicators shall be in a working condition
- Brake lights shall be in good working order
- Back up alarms shall be present and audible to anyone behind the truck/trailer
- Tires shall be in good condition with no gouges and plenty of tread.
- Gates must be able to close and lock in a way that will prevent debris from falling out during transport.
- Inspections will occur during the sign in process and periodically in the field by P&J management. Trucks found not to be in compliance with any of the above will be placed out of service and not allowed to resume hauling until proof is provided to P&J management that the proper repairs have been made.
- All hauling units shall be inspected daily prior to use by the operator. Drivers should conduct a pre trip and post trip inspection each day prior to starting work and at the end of each work day.

3.2 TREE TRIMMING OPERATIONS (DOWNED TREES, LEANERS AND HANGERS)

Analyzed by: Eugene Taylor, MS, CSHM

Principal Steps	Potential Hazards	Recommended Controls
Access and egress on equipment; stability of equipment.	1) Falling off of equipment. 2) Bucket truck or elevated work platform tipping over.	1) Operators and drivers must use three points of contacts at all times when getting on and off equipment. 2) Outriggers must be extended and level prior to boom or platform extension.
Work from elevated platform.	1) Falling platform or bucket. 2) Electrocution hazards. 3) Cuts and abrasions from tree limbs.	1) Fall restraint equipment must be properly used. Personnel performing elevated work must wear an approved full body harness with a D-ring and an attached lanyard equipped with double locking safety hooks. The lanyard must be secured to an approved anchorage point inside the bucket at all times. Personnel may not use shock absorbing lanyards. One point tie off is required for bucket movement and work. Fall protection equipment and anchorage points shall be manufactured with a minimum breaking strength of 5000 pounds. 2) The annual dielectric testing certification must be current. All power lines must be assumed to be "live." No elevated work shall be performed within 10 feet of power lines, excepting work performed by Qualified Line Clearance Tree Trimmers (QLCTT) or Qualified Line Clearance Tree Trimmer Trainee (under the direct supervision of qualified personnel). Only certified "Line Clearance Tree Trimmers" shall be used to remove limbs from a tree in contact with a power line. 3) Leather gloves should be worn where gloves do not create a hazard. Limbs shall only be cut outside of the bucket.
Chainsaw operations.	1) Cuts, abrasions, and other injuries from kick-backs or incidental contact with the saw. 2) Exposure to noise in excess of 85 dB (A).	1) Chain saws shall only be inspected and fueled on the ground. Saws will meet minimum safe operational requirements per manufacturer's directions prior to use. Lumberjack chaps shall be worn while performing sawing operations. Chaps are not required for personnel sawing from inside the bucket or climbing operations. 2) Inclusion in the hearing conservation program and the use of hearing protection.

Principal Steps	Potential Hazards	Recommended Controls
Climbing	1) Fall hazard. 2) Electrocution hazard. 3) Cuts and abrasions from tree limbs.	1) Fall restraint equipment must be properly used. Personnel performing tree climbing work must wear a safety belt "tree saddle" approved for tree climbing, a positioning lanyard that is equipped with double locking safety latches, synthetic fiber climbing rope, with a minimum nominal breaking strength of 5400 lb when new and approved climbing gaffs. Only qualified tree workers, and qualified line clearance tree trimmers/trainees may perform this function. 2) Personnel may not trim trees where power lines are within 10 feet of the point of operation, excepting QLCTT qualified personnel and QLCTT Trainee (under the direct supervision of qualified personnel). 3) Long pants and shirts with a minimum 4" sleeve are required dress for this project. Gloves will be worn where they do not present a hazard.
Ground operations.	1) Personnel struck by falling objects. 2) Outrigger crushing hazard.	1) Personnel performing elevated work and ground personnel must maintain frequent verbal and visual communication. 2) Operators will not move equipment without an "all clear" from ground support personnel.
Traffic Exposure	1) Personnel, vehicles, or equipment struck by vehicles/equipment.	1) Traffic control devices shall be set up, where appropriate as identified in the Traffic Plan for CDOT. Spotters required when backing up in confined areas, in the vicinity of overhead utility lines, or where similar hazards exist. Install back-up alarms on vehicles/ equipment where required. Vehicles/ equipment equipped with hazard lights shall energize hazard lights when operating in work zones.

Equipment To be Used:
The minimum acceptable level of PPE for this project in all zones and work areas includes hard hats, safety glasses/goggles, long pants, shirts with a minimum 4" sleeve length, high-visibility, reflective safety vests, and steel-toed/thick-soled or spiked safety boots (as applicable). In addition to minimum PPE required, personnel should wear hearing protection.

Inspection Requirements:
General PPE will be inspected before donning for integrity and completeness.

Training Requirements:
All operators, drivers and ground personnel shall be qualified by their employer for each specific task. Drivers must have appropriate license for the vehicle which is being driven. Climbers shall display demonstrated safe climbing practices. Tree trimming subcontractors must submit worker qualifications on company letterhead to P&J. Qualifications must be approved by a Senior Safety Technician prior to commencement of work by each qualified employee.

General Requirements:
Personnel receive project-specific safety indoctrination and special orientation prior to work performed in the field.

3.3 Loading and Hauling Material Using a Self-Loader:

Analyzed by: Eugene Taylor, MS, CSHM Date:

Principal Steps	Potential Hazards	Recommended Controls
Positioning equipment	1. Impediment to traffic flow 2. Truck tipping under load 3. Injury during postioning	1). Ensure self-loader is positioned in an established work zone with MUTCD flags and/or cones 2) Where equipped and required by manufacturer, position outriggers prior to climbing into load position. 3) No personnel allowed near equipment until outriggers are positioned and driver is ready to climb into loader seat
Access and egress on equipment	1) Falling off of equipment.	1) Operators and drivers must use three points of contact at all times when getting on and off hauling units. Keep access points free and clear of grease and oils. Keep these areas clean. Loader seats must be securely attached to load platform.
Loading	1). Failure of equipment. 2. Improper loading. 3. Struck by loading equipment. 4. Hidden Utilities 5. Overhead utility lines 6. Overhanging debris 7. Fall from equipment	1) All equipment must be inspected and documented prior to use. Equipment must also be inspected daily by the operator. 2) Hauling units must be properly loaded. The road must be cleaned up prior to letting traffic pass. 3) Workers must stay a safe distance from loading operations. Make eye contact with and receive acknowledgement from operator prior to approaching equipment. 4) Conduct pre-assessment before loading to ensure no utilities are hidden by debris or downed wires entangled. 5) Maintain minimum 10' clearance of ALL overhead lines. DO NOT set up under utility lines 6) Use loader to place ALL materials inside truck. No overhanging limbs or other debris. No debris sticking up above load. Compress with loader. 7) Remain within seat area when loading. Do not climb on truck or get outside of access area. No riders on seat when moving truck; even for short distances.
Hauling	1) Improper Equipment. 2) Improper Loads. 3) No traffic control. 4) Improper License for vehicle. 5) Speeding.	1) All equipment must be inspected and documented prior to hauling. 2) All loads must be inspected and properly secured prior to loading and leaving. 3) Any equipment in the roadway shall only work within a traffic control zone with proper traffic control devices and flagmen. 4) All drivers must present a valid driver's license matching the class of vehicle that they will be driving. 5) Drivers must control their speed and drive

Principal Steps	Potential Hazards	Recommended Controls
		defensively.
Traffic Control	1) If working near active roadways Personnel, vehicles, or equipment struck by vehicles/equipment.	1) Traffic control devices shall be set up, where appropriate per the Manual on Uniform Traffic Control. Place qualified flaggers as necessary within the work zone. Flaggers will use stop/slow paddles. Block one lane of traffic only, if possible. Place warning signs along work zone to warn oncoming traffic in both directions. Spotters required when backing up in confined areas, in the vicinity of overhead utility lines, or where similar hazards exist. Install back-up alarms on vehicles/ equipment. Vehicles/ equipment equipped with hazard lights shall energize hazard lights when operating in work zones.

Equipment To be Used:

The minimum acceptable level of PPE for this project in all zones and work areas includes hard hats, safety glasses/goggles, long pants, shirts with a minimum 4" sleeve length, high-visibility, reflective safety vests, and thick-soled safety boots. In addition to minimum PPE required, personnel should wear hearing protection when required.

Inspection Requirements:

General PPE will be inspected before donning for integrity and completeness.

Training Requirements:

All operators, drivers and ground personnel shall be qualified by their employer for each specific task. Drivers must have appropriate license for the vehicle which is being driven.

General Requirements:

Personnel receive project-specific safety indoctrination prior to work performed in the field. All work will be conducted in accordance with applicable health and safety regulations and in accordance with the existing site Health and Safety Plan.

General Safety Requirements for Hauling and Trucking:

- All hauling units must be in good working order.
- All lights and turn indicators shall be in a working condition
- Brakes shall be in good working order
- Back up/movement alarms shall be present and audible to anyone working around the equipment
- All hauling units shall be inspected daily prior to use by the operator. Drivers should conduct a pre-trip and post trip inspection each day prior to starting work and at the end of each work day.
- Any deficiencies need to be identified and supervision notified to expedite needed repairs.

3.4 Grinding Operations: Horizontal and Stump Grinding

Analyzed by: Eugene Taylor, MS, CSHM

Principal Steps	Potential Hazards	Recommended Controls
Equipment mounting and demounting	1) Exposure to noise in excess of 85 dBA. 2) Fall hazard 3) Contusion from frame of cab 4) Injury from other vehicles	1) Inclusion into hearing conservation program. Use appropriate hearing protection 2) Use of 3 point mounting techniques. Don't carry anything in hands. 3) Use of hard hat. 4) Use of reflective vests.
Equipment start up	1) Exposure to noise in excess of 85 dBA. 2) Injury by flying debris	1) Inclusion into hearing conservation program. 2) Use of safety glasses, hard hats, etc. 3) Operator shall verify that all employees are in the clear before start up.
Horizontal Grinding	1) Struck by debris 2) Amputations, death 3) Lacerations 4) Struck by equipment 5) Fire	1) Keep all personnel away from operations per manufactures specifications. Position equipment to allow debris to stay out of interstate. Trees shall not be swung into traffic at any time. Proper clearing equipment shall be used to load debris into grinder and all windows and door shall stay shut. 2) No employee shall be near the hopper or intake of the grinder. During maintenance operations machine shall be Locked out and tagged out by following P&J procedures. 3) Appropriate gloves shall be worn when changing teeth or any other maintenance. 4) Operators shall know what's going on around them at all times when loading and moving equipment. Excavator loading grinder shall have a functional horn and travel alarm which can be heard from a minimum of 25' away. 5) All equipment shall have proper ABC fire extinguishers with annual and monthly inspections.
Stump Grinding	1) Struck by debris 2) Lacerations 3) Struck by equipment 4) Fire 5) Amputation	1) Keep all personnel away from operations per manufactures specifications. Position equipment to allow debris to stay out of interstate.

		2) Gloves shall be worn at all times during maintenance operations while changing teeth. 3) Operators shall know whats going on around them at all times when loading and moving equipment. Equipment shall have a functional horn and travel/backup alarm. 4) Equipment shall have appropriate ABC fire extinguishers with annual and month inspections. 5) No employee shall be near the hopper or intake of the grinder. During maintenance operations machine shall be Locked out and tagged out by following P&J procedures

Equipment to be used:

The minimum acceptable level of PPE for this project in all zones and work areas includes hard hats, face/eye protection, safety glasses/goggles, long pants, shirts with a minimum 4" sleeve length, high-visibility reflective safety vests when required, and thick-soled leather work boots or spiked safety boots (as applicable). In addition to minimum PPE required, personnel should wear hearing protection when applicable. Lock out/Tag out procedures shall be followed. All energy sources shall be locked out or removed (i.e. keys, master switches, batteries, etc.). "Do not operate" tags shall be placed on machines.

Inspection requirements:

General PPE will be inspected before donning for integrity and completeness.

Training requirements:

All operators, drivers and ground personnel shall be qualified by their employer for each specific task. Drivers must have appropriate license for the vehicle which is being driven. Climbers shall display demonstrated safe climbing practices. Qualifications and work experience must be approved by a Phillips & Jordan, Inc. safety professional prior to commencement of work by each qualified employee. Firewatchers shall have fire extinguisher training

3.5 SITE MANAGERS AND FIELD SUPPORT STAFF

Analyzed by: Eugene Taylor, MS, CSHM

Principal Steps	Potential Hazards	Recommended Controls
Collection of air samples	1) Exposure to noise in excess of 85dBA. 2) Injury by flying debris 3) Exposure to carbon monoxide in excess of 10 ppm (only at Debris/Incineration sites) 4) Exposure to chemical and biological agents. 5) Injury by vehicles.	1) Use of hearing protection. 2) Use of safety glasses and hard hats. 3) Limit access to site or utilize Supplied air in areas of burn pits. 4) Use of respiratory protection and protective clothing, as appropriate. 5) Use of reflective vests.
Inspection of work site	1) Exposure to noise in excess of 85dBA. 2) Injury by flying debris 3) Exposure to carbon monoxide in excess of 10 ppm. 4) Injury by vehicles. 5) Exposure to asbestos, heavy metals, PAHs and VOCs	1) Use of hearing protection. 2) Use of safety glasses and hard hats. 3) Use of respiratory protection, as appropriate. 4) Use of reflective vests. 5) Same as 3 (above).
Visiting Residences Requesting Right of Entry	1) Non-construction work in a construction zone.	1) Personnel performing door-to-door visits with homeowners should wear safety vests, sturdy shoes, shirts with a minimum 4" sleeve, and long pants.

Equipment To be Used:

The minimum acceptable level of PPE for this project in all zones and work areas includes hard hats, safety glasses/goggles, long pants, shirts with a minimum 4" sleeve length, high-visibility, reflective safety vests, and steel-toed/thick-soled safety boots. Exception: Door-to-door contact with homeowners for ROE, see above. Level of protection will vary based on work zone and activities. The use of respiratory protection and protective clothing will be based on the activity being supported. Reference the AHA for the job task occurring in the work area to determine the proper use of respiratory protection and protective clothing.

Inspection Requirements:

General PPE will be inspected before donning for integrity and completeness.

General Requirements:

Personnel will receive project-specific safety indoctrination prior to work performed in the field.

3.6 CHAINSAW OPERATIONS

Analyzed by: Eugene Taylor, MS, CSHM

Principal Steps	Potential Hazards	Recommended Controls
Chainsaw operations.	1) Cuts, abrasions, and other injuries from kick-backs or incidental contact with the saw. 2) Face and eye hazards. 3) Exposure to noise in excess of 85 dB(A).	1) Saws will meet minimum safe operational requirements per manufacturer's directions prior to use. Lumberjack chaps shall be worn while performing sawing operations. Two hands will remain on the saw at all times. No cuts shall be made above shoulder height. See additional requirements below under General Safety Requirements for Chainsaw Operations. 2) Face, eye, and head protection must be worn while performing sawing operations. 3) Use of hearing protection while performing sawing operations.
Traffic Control	1) Personnel, vehicles, or equipment struck by vehicles/equipment.	1) Traffic control devices shall be set up, where appropriate per the Manual on Uniform Traffic Control. Flaggers at either end of the work zone. Flaggers will use stop/slow paddles. Block one lane of traffic only, if possible. Place warning signs along work zone to warn oncoming traffic in both directions. Spotters required when backing up in confined areas, in the vicinity of overhead utility lines, or where similar hazards exist. Install back-up alarms on vehicles/ equipment. Vehicles/ equipment equipped with hazard lights shall energize hazard lights when operating in work zones.

Equipment To be Used:

The minimum acceptable level of PPE for this project in all zones and work areas includes hard hats, safety glasses/goggles, long pants, shirts with a minimum 4" sleeve length, high-visibility, reflective safety vests, and steel-toed/thick-soled safety boots. In addition to minimum PPE required, personnel should wear hearing protection, eye and face protection, and chainsaw chaps.

Inspection Requirements:

General PPE will be inspected before donning for integrity and completeness.

Training Requirements:

All operators, drivers and ground personnel shall be qualified by their employer for each specific task. Drivers must have appropriate license for the vehicle which is being driven.

General Requirements:

Personnel receive project-specific safety indoctrination and special orientation prior to work performed in the field.

General Safety Requirements for Chainsaw Operations:

- Properly sharpen chainsaw blades and properly lubricate the blade with bar and chain oil. Additionally, the operator will periodically check and adjust the tension of the chainsaw blade to ensure good cutting action.

AHA for Chain Saw Operations Cont.

- Work in a cleared work area, i.e. clear loose debris before cutting.
- Do not smoke when handling a chainsaw.
- Choose the proper size of chainsaw to match the job, and include safety features such as a chain brake, front and rear hand guards, stop switch, chain catcher and a spark arrester.
- Wear the appropriate protective equipment, including hard hat, chainsaw face shield, hearing protection, heavy work gloves, long sleeve shirt, cut-resistant legwear (chainsaw chaps) that extend from the waist to the top of the foot, and steel-toed boots which cover the ankle.
    - An object the size of a pea traveling at six miles an hour can knock your eyes out, so flying wood chips have the potential to cause even more damage.
    - Operating a chainsaw for longer than 12 minutes without hearing protection can damage your hearing.
- Clothing should fit well (not baggy) and be free of dangling or ragged edges which can become tangled in the saw.
- Never drop start a chainsaw. Start the saw by placing it on firm ground. Make sure the guide bar and chain are clear of any obstructions.
- Always hold a running saw firmly with both hands. Whether you are right or left-handed, your right hand should be at the rear handle and trigger and your left hand should be on the front handle bar.
- Make sure your feet are firmly planted on the ground.
- Do not cut around power lines until the lines are verified as being de-energized.
- Always cut at waist level or below to ensure that you maintain secure control over the chainsaw.
- Cut to minimize kickback, the cause of many chainsaw accidents. Kickback is the reactive force that happens when the nose or tip of the guide bar comes in contact with a solid object or is pinched and recoils toward the operator. To avoid kickback:
    - Never cut with the tip of the saw.
    - Stand at an angle when cutting, so the saw will miss your head and neck.
    - Keep your left elbow stiff while cutting.
- Do not cut on old wood unless you are positive the wood is free of nails, screws, and other metal objects.
- Take frequent breaks. Many injuries occur because the operator got tired or withstood long periods of saw vibration.
- Keep bystanders or coworkers at least two tree lengths (at least 150 feet) away from anyone felling a tree and at least 30 feet from anyone operating a chainsaw to remove limbs or cut a fallen tree.
- Allow saw to cool and vent fuel dispensing container before refueling.
- If injury occurs, apply direct pressure over site(s) of heavy bleeding; this act may save lives.

3.7 Vegetative Load Trimming

Analyzed by: Eugene Taylor, MS, CSHM

Principal Steps	Potential Hazards	Recommended Controls
Extract saw from storage location	1) Pinch points, sharp edges	1) In addition to minimum required PPE, operators shall wear gloves to prevent cuts and abrasions. The saw shall be stored in a safe and secure location for ease of access and to prevent damage or injury while traveling.
Fueling of gas powered saw	1) Burns and Fires 2) Spilled fuel	1) Only fuels approved by the manufacturer shall be used. Fuel must be stored in an approved container. Funnels should be used to minimize spills. Fueling shall not take place near open flames or ignition sources. Smoking within 50 feet a fueling location is strictly prohibited. 2) In the event that fuel is spilled, appropriate measure shall be taken to ensure that the spill is cleaned up completely. It shall not be assumed that the spilled material will evaporate. When fuel is spilled on clothing, clothing shall be removed and replaced and cleaned before being worn again.
Gasoline powered saw start up	1) Muscle strains or sprains 2) Employee struck by start-up motion	1) The pole saw operator shall refer to the manufacturer's operations manual as to the proper start up position. The pole saw shall be started on a solid surface where the operator has balance and control balance. Operators shall have prior experience. 2) The operator shall start the pole saw away from other employees.
Traffic Control	1) Personnel, vehicles, or equipment struck by equipment or vehicles.	1) Traffic control devices shall be set up, where appropriate per the Manual on Uniform Traffic Control. Flaggers at either end of the work zone. Flaggers will use stop/slow paddles. Block one lane of traffic only, if possible. Place warning signs along work zone to warn oncoming traffic in both directions. Spotters required when backing up in confined areas, in the vicinity of overhead utility lines, or where similar hazards exist. Install back-up alarms on vehicles/ equipment. Vehicles/ equipment equipped with hazard lights shall energize hazard lights when operating in work zones.
Trimming loads	1) Falling debris striking operator employees or passing vehicles	1) The pole saw operator shall never cut directly overhead. The operator must cut limbs even with the side boards of the hauling unit. All employees must remain clear of the trimming area unless they are performing a spotter or flagger operation. Hauling unit driver/operators shall remain in the cabs of the vehicles. At no time shall trimming occur when the possibility exist for debris to fall on them. The traffic control zone shall be so established to allow for safe dropping of trimmed debris. The hauling unit operator shall position the unit in the optimum position to ensure the safety of employees and passing vehicles.

AHA for Trimming Vegetative Loads Continued:

Equipment to be used:

- The minimum acceptable level of PPE for this project in all zones and work areas includes hard hats, safety glasses/goggles, long pants, shirts with a minimum 4" sleeve length, high-visibility, reflective safety vests, and steel-toed/thick-soled safety boots. In addition to minimum PPE required, personnel should wear hearing protection and gloves.
- A gasoline powered or manual pole saw shall only be used for this operation. Chainsaws or other cutting instruments that require operators to climb and use the saw from elevated positions are prohibited. Chainsaws shall not be operated above shoulder level.

Inspection Requirements:

General PPE will be inspected before donning for integrity and completeness. Pole saws shall be inspected prior to use to ensure that the tool functions properly and is maintained per the manufacturer recommendations. Saw teeth or blades must be sharpened according to manufacturer's instructions and to a degree that will ensure the most efficient cut. The pole and structural apparatus must be inspected to ensure no cracks or visible damage exists. If any damage is discovered during inspection the pole saw shall be removed from service and tagged out-of-service as "damaged" or "defective". The pole saw shall not be allowed back in service until it is repaired per the manufacturer's specifications and re-inspected.

Training Requirements:

All operators shall be qualified by their employer for each specific task. Saw operators shall have experience in the use of the saw and be familiar with the manufacturer's requirements for safe use.

General Requirements:

Personnel shall receive project-specific safety indoctrination prior to work performed in the field.

General Safety Requirements for Vegetative Load Trimming:

- Whenever possible, the loading unit shall trim the load as safe as possible to reduce the amount of trimming necessary by a pole saw operator.
- Refer to the table above for trimming activity.
- All vegetative loads shall be trimmed to prevent debris from extending beyond the side boards of the hauling unit. Vegetative material shall not extend beyond two feet above the top edge of the side boards.
- Whenever possible and will not create a greater hazard, Trucks should be moved to a safe location for the pole saw operator to trim the load. Loads shall not be hauled on publicly traveled roads without trimming before moving.

APPENDIX 1

Debris Management Safety Metric Form

Debris Management Safety Metric Form

Date: _____ Time: _____ Area/Section: _____

Address (Streets):_____ Contractor:_____ Crew Number: _____

Number of Contractor Personnel on Crew: _____

Item No.	PPE Safety Requirement	RAC Code	# in Crew
a.	Personnel not wearing appropriate foot protection.	3	
b.	Workers handling materials are not wearing gloves.	3	
c.	Crew are not wearing appropriate PPE for work activities.	3	
d.	Personnel are not wearing eye protection.	3	
e.	Personnel are not wearing protective suits.	3	
f.	Personnel are not wearing shirts with a minimum 4" sleeve.	3	
g.	Personnel are not wearing long pants.	3	
h.	Personnel are not donning/doffing PPE correctly.	3	
i.	Personnel are not following requested safety corrections.	4	
j.	Personnel are not wearing respirators or wearing the proper respirator.	3	
k.	Personnel are not wearing head protection.	3	

Item No.	Equipment/Vehicle Safety Requirement	RAC Code	# in Crew
l.	Equipment operators are not wearing seatbelts or seatbelts are not installed.	3	
m.	Equipment is operated in an unsafe manner.	2	
n.	Back-up alarms are not installed or not operating.	2	
o.	Trucks are loaded with brush overhangs (not trimmed).	2	
p.	Trucks have inadequate means to prevent falling debris.	2	
q.	Equipment/vehicles are equipped with lights and windshield.	3	

Item No.	Work Practices Safety Requirement	RAC Code	# in Crew
r.	Chainsaw operators are not stopping equipment operation in the presence of unprotected pedestrians.	2	
s.	Chainsaw operators are not wearing chaps.	2	
t.	Chainsaw operators are not wearing gloves.	2	
u.	Chainsaw operators are not wearing hearing protection.	2	
v.	Chainsaw operators are not wearing eye/face protection.	2	
w.	Chainsaw operators are cutting materials inappropriately, i.e. inside equipment/vehicles.	1	
x.	Work crews are not avoiding electrical hazards.	1	
y.	Employees are riding on equipment or in the rear of pick-up trucks.	2	
z.	Area to be cleaned was not properly assessed for utilities, fencing, electrical, or other hazards.	2	
aa.	Personnel are standing under or too close to equipment or vehicles in operation/motion.	2	
bb.	Equipment is not in good repair.	2	

Item No.	Traffic Control Safety	RAC Code	# in Crew
cc.	Traffic control devices, including signage/cones are not properly placed.	4	
dd.	Flaggers are not present or not using proper signaling devices (paddle signs).	2	
ee.	Personnel are not wearing safety vests.	4	
ff.	Spotters are not present and directing equipment/ vehicle movement properly.	2	
gg.	Trucks are dumping too close to other vehicles/equipment at debris sites.	2	

Completed items denotes corrective action implemented ----------RAC Codes - Risk Assessment Codes: 1 (Critical Risk) 2 (Serious Risk), 3 (Moderate Risk), 4 (Minor or Procedural). RAC Codes 1 and 2 require additional information under comments below.

Corrective Action/Comments:

_____

_____

_____

P&J Site Safety Officer: _____

EXHIBIT B

PRICE SHEET

Debris Clearing, Removal and Disposal, and Operation of Temporary Debris Staging and Reduction Sites
RFP 15-033

PART A – Volume based pricing for 3 million cubic yard debris disaster

Item/Description	Estimated		Unit Price	Extension
	Quantity	Unit		
1.0 Pickup from Public Property or Public Rights-of-Way and hauling to a designated TDSR Site or Disposal Facility 15 or less miles away (one-way miles). (Trips with one-way miles in excess of 15 miles compensated at the rate quoted in Items 2.0, 3.0 or 4.0).	3 million	CY	$7.50	$22,500,000.00
2.0 Pickup from Public Property or Public Rights-of-Way and hauling to a designated TDSR Site or to a Disposal Facility 15 to 30 miles away (one-way miles). (Trips with one-way miles in excess of 30 miles compensated at the rate quoted in Items 3.0 or 4.0).	3 million	CY	$8.00	$24,000,000.00
3.0 Pickup from Public Property or Public Rights-of-Way and hauling to a designated TDSR Site or to a Disposal Facility 30.0 to 60.0 miles away (one-way miles). (Trips with one-way miles in excess of 60 miles compensated at the rate quoted in Item 4.0).	3 million	CY	$9.00	$27,000,000.00
4.0 Pickup from Public Property or Public Rights-of-Way and hauling to a Disposal Facility 60.0 – 120.0 miles away (one-way miles)	3 million	CY	$10.50	$31,500,000.00

5.0 Removal of hazardous stumps that are not uprooted, from trees that are greater than 24" to 36" in diameter, by grinding or digging, removal of stump grinding chips, and backfilling resulting hole with compacted topsoil.	100	Each	$250.00	$25,000.00
6.0 Removal of hazardous stumps that are not uprooted, from trees that are 37" or larger in diameter, by grinding or digging, removal of stump grinding chips, and backfilling resulting hole with compacted topsoil.	50	Each	$450.00	$22,500.00
7.0 Loading, hauling and dumping of uprooted stumps from trees that are 25 to 36 inches with root ball.	500	Each	$125.00	$62,500.00
8.0 Loading, hauling and dumping of uprooted stumps from trees that are 37-48 inches with root ball.	100	Each	$225.00	$22,500.00
9.0 Loading, hauling and dumping of uprooted stumps from trees that are 49 inches and larger with root ball.	25	Each	$325.00	$8,125.00
10.0 Removal of hazardous hanging limbs greater than 2 inches in diameter.	50,000	Each	$85.00	$4,250,000.00
11.0 Removal of hazardous standing trees greater than 6" up to 12" in diameter.	1000	Each	$60.00	$60,000.00
12.0 Removal of hazardous standing trees 13" – 24" in diameter.	500	Each	$90.00	$45,000.00
13.0 Removal of hazardous standing trees 25" – 36" in diameter.	100	Each	$250.00	$25,000.00
14.0 Removal of hazardous standing trees 37" or larger in diameter.	50	Each	$350.00	$17,500.00
15.0 TDSR Site operation as described in RFP for grinding services.	3 million	CY	$11.75	$35,250,000.00
16.0 TDSR Site operation as described in RFP for air curtain incineration services	3 million	CY	$11.75	$35,250,000.00
17.0 TDSR Site operation as described in RFP for C&D and mixed debris services	3 million	CY	$11.00	$33,000,000.00

18.0 Dead Animal Carcass hauling to a designated landfill or incinerator site (based on one-way miles) (incinerator operation and disposal compensated under Part B). Price per ton per mile.	100	Ton/Miles	$10.00	$1,000.00
19.0 Household Hazardous Waste	1000	Pounds	$20.00	$20,000.00
20.0 White Goods	500	Each	$55.00	$27,500.00
21.0 Freon Removal	250	Each	$30.00	$7,500.00
22.0 Grand Total				**$ 213,094,125.00**

Unit Prices, unless otherwise indicated, shall include all labor (operators, laborers, and supervisors), equipment and materials including but not limited to: supplies, equipment maintenance, repairs, repair parts, fuels, lubricants, cellular phones, transportation, traffic control and housing, if required, necessary to accomplish the project. The quantities and distributions are estimated for the purpose of making an award. Locations of sites, debris quantities, destinations, material densities, etc. may differ substantially in an actual disaster.

A Ton-Mile equals the weight of animal carcasses in the trailer times the one way mileage to the destination. Weight of carcasses will be determined by use of fixed or portable scales at disposal facility or incinerator site.

Items 5.0 and 6.0 relate only to the removal of stumps from the ground by digging or grinding. Loading, hauling and dumping of the stumps or chips will be paid under Items 1.0 through 4.0 or 7.0 through 9.0, as appropriate.

Items 9.0, 10.0 & 11.0 indicate ranges of stump sizes. These stump sizes shall refer to the diameter of the tree trunk measured 25 inches up from where the tree originally exited the ground. The payment unit is "each" and the estimated quantity is provided only for the purpose of obtaining price proposals. The attached root ball, regardless of shape, size or weight, is considered part of the stump. Stumps less than 25 inches in diameter, with attached root balls, will be considered to be normal debris and payment for loading, hauling, and dumping shall be provided under Items 1.0 through 4.0.

Items 10.0 through 14.0 relate only to the removal of hazardous hanging limbs or hazardous, standing trees and placement at the edge of the right-of-way. Payment for loading, hauling and dumping will be provided under Items 1.0 through 4.0. contractor is responsible to remove any and all hazardous hanging branches on any tree, with price to be determined by the largest branch removed.

Payment for Items 15.0, 16.0 and 17.0 is based on the volume brought to the TDSR Site as estimated by the TDSR Site Monitor and documented on the Load Ticket. The contractor may invoice for debris disposal as determined by the Debris Manager who shall assure adequate retainage to cover remaining debris disposal and site restoration if contractor is unable to complete the scope.

TDSR Site Set-up and Closure and Debris Clearance for Access			
PART B - Equipment and Labor Rates			
Equipment Type	Hourly Equipment Rate	Hourly Labor Rate	Total Hourly Rate
Air Curtain Pit Burner	$105.00	-	$105.00
Air Curtain Refractory Incinerator	$85.00	-	$85.00
Bobcat Loader	$85.00	-	$85.00
Bucket Truck w/Operator	$125.00	-	$125.00
Chipper/Mulcher (8" throat)	$35.00	-	$35.00
Chipper/Mulcher (12" throat)	$60.00	-	$60.00
Crash Truck w/Impact Attenuator	$150.00	-	$150.00
Crew Foreman w/Cell Phone and Pickup	-	$78.00	$78.00
Dozer, Tracked, D5 or similar	$110.00	-	$110.00
Dozer, Tracked, D6 or similar	$115.00	-	$115.00
Dozer, Tracked, D7 or similar	$125.00	-	$125.00
Dozer, Tracked, D8 or similar	$140.00	-	$140.00
Dump Truck, 18 CY-20 CY	$72.00	-	$72.00
Dump Truck, 21 CY-30 CY	$78.00	-	$78.00
Generator and Lighting	$25.00	-	$25.00
Grader w/12' Blade	$155.00	-	$155.00
Hydraulic Excavator, 1.5 CY	$125.00	-	$125.00
Hydraulic Excavator, 2.5 CY	$140.00	-	$140.00
Knuckleboom Loader	$175.00	-	$175.00
Laborer w/Chain Saw	-	$48.00	$48.00
Laborer w/small tools, traffic control, flag person	-	$36.00	$36.00
Lowboy Trailer w/Tractor	$125.00	-	$125.00
Log Skidder	$125.00	-	$125.00
Mobile Crane (Adequate for hanging limbs/leaning trees)	$360.00	-	$360.00
Operations Manager w/Cell Phone and Pickup	-	$96.00	$96.00
Pickup Truck, .5 Ton	$25.00	-	$25.00
Soil Compactor 81 HP+	$65.00	-	$65.00

TDSR Site Set-up and Closure and Debris Clearance for Access			
PART B - Equipment and Labor Rates			
Equipment Type	**Hourly Equipment Rate**	**Hourly Labor Rate**	**Total Hourly Rate**
Soil Compactor 80 HP	$50.00	-	$50.00
Soil Compactor, Towed Unit	$95.00	-	$95.00
Stump Grinder 30" diameter or less	$80.00	-	$80.00
Stump Grinder greater than 30" diameter	$110.00	-	$110.00
Traffic Control, Temporary Single Lane Closure	$300.00	-	$300.00
Traffic Control, Temporary Road Closure	$450.00	-	$450.00
Tree Climber s/Chainsaw	-	$68.00	$68.00
Truck, Flatbed	$40.00	-	$40.00
Tub Grinder, 800 to 1,000 HP	$400.00	-	$400.00
Waste Collection Rear Loader Truck	$110.00	-	$110.00
Water Truck	$80.00	-	$80.00
Wheel Loader, 2.5 CY, 950 or similar	$105.00	-	$105.00
Wheel Loader, 3.5 – 4.0 CY, 966 or similar	$115.00	-	$115.00
Wheel Loader, 4.5 CY, 980 or similar	$130.00	-	$130.00
Wheel Loader-Backhoe, 1.0 – 1.5 CY	$105.00	-	$105.00
Other – Please List			

Part B unit prices for equipment such as: air curtain burners/incinerators, chipper/mulchers and tub grinders do not pertain to TDSR site operations, which are included under Part A.

Part B unit prices for Traffic Control do not pertain to debris collection and removal operations from public property and public rights-of-way, which are included under Part A.

Percentage of funds returned to FBC resulting from any proceeds derived from the sale of recyclable debris (i.e. mulch, scrap metals, etc.) 0%

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2016-74551

Date Filed:
06/22/2016

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.
Phillips and Jordan, Incorporated
Knoxville, TN United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.
Fort Bend County

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.
RFP 15-033
Debris Removal

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary
Lawrence, John	Knoxville, TN United States	X	
Shuler, Lamar	Knoxville, TN United States	X	
Whitson, Lesa	Knoxville, TN United States	X	
McMullen, Patrick	Knoxville, TN United States	X	
Turner, Ben	Zephyrhills, FL United States	X	
Phillips, Avis	Land O'Lakes, FL United States	X	
Nichols, Connie	Knoxville, TN United States	X	
W.T. Phillips, Sr. 2005 Irrevocable Family GSTT Trust U/T/A	Land O'Lakes, FL United States	X	
Phillips, Jr., W.T.	Knoxville, TN United States	X	
Phillips, Sr., W.T.	Land O'Lakes, FL United States	X	

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Fort Bend County

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RFP 15-033
Debris Removal

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary

5 Check only if there is NO Interested Party. ☐

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

John E. West
Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said John E. West, this the 22nd day of June, 2016, to certify which, witness my hand and seal of office.

Melissa M. Graham — Melissa M. Graham — Notary Public
Signature of officer administering oath — Printed name of officer administering oath — Title of officer administering oath

My Comm. Exp. 12.21.16

MELISSA M. GRAHAM
STATE OF TENNESSEE
NOTARY PUBLIC
KNOX COUNTY

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2016-74551

Date Filed:
06/22/2016

Date Acknowledged:
07/05/2016

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Phillips and Jordan, Incorporated
Knoxville, TN United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

Fort Bend County

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

RFP 15-033
Debris Removal

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary
Lawrence, John	Knoxville, TN United States	X	
Shuler, Lamar	Knoxville, TN United States	X	
Whitson, Lesa	Knoxville, TN United States	X	
McMullen, Patrick	Knoxville, TN United States	X	
Turner, Ben	Zephyrhills, FL United States	X	
Phillips, Avis	Land O'Lakes, FL United States	X	
Nichols, Connie	Knoxville, TN United States	X	
W.T. Phillips, Sr. 2005 Irrevocable Family GSTT Trust U/T/A	Land O'Lakes, FL United States	X	
Phillips, Jr., W.T.	Knoxville, TN United States	X	
Phillips, Sr., W.T.	Land O'Lakes, FL United States	X	

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
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06/22/2016

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07/05/2016

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Knoxville, TN United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

Fort Bend County

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

RFP 15-033
Debris Removal

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary

5 Check only if there is NO Interested Party. ☐

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

_____
Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said _____, this the _____ day of _____, 20_____, to certify which, witness my hand and seal of office.

_____ _____ _____
Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath