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Testimony before the DC Council Committee on Facilities and Procurement Performance Oversight Hearing on the DC Department of General Services (DGS) Presented by Caitlin Cocilova February 27, 2020

Good morning Councilmember White and members of the Committee on Facilities and Procurement. My name is Caitlin Cocilova, and I am a Staff Attorney at the Washington Legal Clinic for the Homeless. The Legal Clinic envisions – and since 1987 has worked towards – a just and inclusive community for all residents of the District of Columbia, where housing is a human right and where every individual and family has equal access to the resources they need to thrive. My testimony today will provide an update on our work in monitoring the 801 East shelter redevelopment and will give a heads up on some potential forthcoming changes regarding shelters along the New York Avenue corridor and CCNV that this Committee and Council should monitor.

<u>801 East</u>

Last February, Max Tipping, a former attorney in our office, testified about concerns over information on environmental hazards he had found in the RFP for the 801 East shelter redevelopment. Though supportive of the idea to replace the current 801 East building, which was never meant to be a shelter, our concerns were based on environmental hazards in the area proposed for the new shelter, including known soil contaminants and potential foundational issues due to the building being developed directly over the WMATA Green Line. Over the last year, we have continued to seek transparent information from DGS, DHS, and the selected design-build team, led by Coakley Williams. Our actions have involved:

- Conversations with residents at 801 East about the impending redevelopment
- Requesting air quality testing of the current building
- Doing a walk around of the current and proposed sites last July with the directors of DGS and DHS, members of Councilmember Robert White's and Brianne Nadeau's offices, staff from Catholic Charities, and staff from SaLUT, a company that completed air quality testing within the current building
- Attending ICH discussions around the proposed design and about jobs for residents
- Reviewing various draft plans written by Coakley Williams, Hillis-Carnes, and Blue Skye regarding the construction
- Reviewing permit documents
- Attending ANC 8C meetings at which DHS, DGS, and Coakley presented on their proposed plans



Despite continued engagement, several questions remain unanswered regarding the development process. Here are some additional questions and considerations for DGS, as well as suggestions to this Committee for continued monitoring:

Development Plans

As of now, DGS has released four out of five plans regarding the construction of the new 801 East shelter, which are attached at the end of this testimony. Below are our thoughts and questions related to the plans:

- 1. Hazardous Materials Site Survey Not yet released. Additional soil borings needed.
 - a. In June 2018, a person named Cari Finch applied for 52 borings to be taken at 2700 MLK Ave Jr SE, the address for the proposed new shelter. (That same day, Cari Finch also requested 62 borings at 2730 MLK Jr Ave SE.) Hillis-Carnes only completed 7 borings in October 2018 to conduct Phase II of the testing. Why were so many borings approved and so few conducted?
 - b. On January 27, 2020, Hillis-Carnes submitted a permit application for 19 borings at 2700 MLK Jr Ave SE, according to the <u>DCRA permitting database</u>. On January 29, 2020, David Cunningham submitted a permit application for a truck mounted drill rig to be used for 8 borings at a depth of 100 to 150 feet. These permitting applications, and a review of the test results from the borings, should be completed before a groundbreaking occurs, to ensure the viability of the project being built on the proposed site.
- 2. Environmental Management Plan (Abatement Plan) Released
 - a. When will Hillis-Carnes Capitol Services release a final Environmental Management Plan? The current version says draft.
 - b. Appendices are not included but were referenced in the Plan. Please send those separately.
 - c. The Environmental Management Plan on page 1 says the "proposed building construction also includes deeper excavation for grade beams beneath the building and a deep foundation." To our knowledge, there are not been further discussion on the location over the WMATA Green Line restricting the depth of the digging, which is critical due to the site being a former landfill. (See page 9 of the A5 Geotechnical report, which recommends additional borings directly over the tunnels and evaluations over alternative plans to ensure a secure foundation for the building.)
 - d. The Environmental Management Plan on page 7 states that daily updates will be conducted on soil contamination during excavation. This Committee should require weekly reports on progress, particularly during this initial testing phase.
 - e. In September 2019, Coakley Williams stated they have worked on a soil remediation in Long Bridge, Virginia. This Committee should request that Coakley share the plans they created and a report on the outcome of those plans for comparison purposes. The information should include proximity to residential areas during excavation, composition of the soil, and whether the project was public or private.

- 3. Dust Control Plan Released
 - a. The Dust Control Plan on page 4-1 states that daily updates will be conducted on soil contamination during excavation. This Committee should require weekly reports on progress, particularly during this initial testing phase.
 - b. This Committee should review complaints and comments from residents living close to other development projects, such as residents from <u>Buzzard Point</u>, to avoid any errors or harmful dust exposure due to the proximity of the residential men's shelter.
- 4. Rodent Control Plan Released
- 5. Safety and Security Plan Released
 - a. Will the Safety Director/Safety Manager also be tasked with communicating with Catholic Charities, DHS, DGS, and the residents at the current 801 East Men's Shelter if a safety hazard is posed?
 - b. None of the known chemicals on site (hexavalent chromium, dioxins, TPH-DRO) are noted in this Safety and Security Plan, nor are there steps mentioned to counter known toxins and contaminants that may require special consideration during removal. The precautions are somewhat discussed in the Environmental Management Plan, but these should also be included in the Safety and Security Plan for clarity and consistency.
 - c. Is the mention of "Potomac School Project Team" in error on pp. 39-40, or is that another partner in this project for the water intrusion management?
 - d. The attachments cannot be opened at the end. Please send those separately.

Site Location

Coakley Williams has indicated the proposed shelter location has been moved slightly from its original footprint. A comparison of the original and new site is critical for examining whether the borings, and any foundational testing, are being conducted in the accurate location.

- Can DGS or Coakley please provide a map overlay of the original proposed site and the new proposed site? Please include the boring locations in this overlay.
- How did the recommendations from the Historic Preservation Review Board and Fine Arts Commission impact this footprint shift, if at all?

General Considerations

• Are the standards being used in the development plans for 801 East the same standards that are used on private development projects? Please provide an example of a private project that compares to the Plans for 801 East and how the standards are the same or different.

- Seeing that three cases of Legionnaires' disease were found in less than a year within a small area (one case at St. Elizabeths Hospital and two cases in residents of 801 East), what are DGS's plans to test its building stock for the presence of or potential for the legionella bacteria?
- Is St. Elizabeths campus in an opportunity zone? Does DGS have plans to surplus or dispose of other properties in close proximity to the new shelter? Where are those spaces located, and for what development is the land being given away?

Other Shelters

New York Avenue Corridor

On December 5, 2019, Bisnow held an event entitled, "<u>Welcome to New York Avenue</u>." The event focused on projects coming to the area between Union Market and the Maryland border, including a fireside chat on Doug Jemal's "visionary" plans for a place he calls "New City" and discussions on making that corridor a flourishing gateway to the city. That same corridor currently houses hundreds of families in overflow motels and hundreds of single men at the New York Ave and Adam's Place Men's Shelters. New York Ave Men's Shelter is part of the ICH's Low Barrier Shelter Capital Improvement Plan and is set to be renovated beginning this fall or soon after (the timeline may have been pushed back). On the whole, however, shelters won't fit well into the new development picture. We recommend this Committee monitors DMPED and DGS collaborations around government-owned buildings and land in that area, particularly in areas in or near opportunity zones, to keep apprised of any potential shifts, closures, or displacement of shelter residents as a result of changes to the New York Avenue Corridor.

<u>CCNV</u>

The Federal City Shelter building near Judiciary Square is home to one of the largest homeless shelters in the country: CCNV. The Capitol Crossing development over the highway, in addition to the interests of surrounding entities, has placed pressure on the future of CCNV for years. Much effort was taken five to seven years ago through a Task Force that was meant to determine what could and should happen to the property, based on a study of covenants and deeds running with the land, input from current residents and providers, CCNV's historic roots, and the overall context of homeless services and housing opportunities in the District. Conversations now seem to be happening behind closed doors regarding the future of the space. As has been raised by residents and advocates, we are concerned the same pattern of neglect will be used to justify a quick closure and a seeming inevitability of demolition or redevelopment of CCNV as we've seen with public housing, schools like Washington Metropolitan Opportunity Academy, and residential buildings like Congress Heights that are allowed to go into disrepair in order to force closure. Please be aware of these tactics and track them through your oversight of DGS and other related agencies.

ENVIRONMENTAL MANAGEMENT PLAN

St. Elizabeth's Shelter Relocation Sycamore Street, SE, Washington, DC 20032

Prepared for:

Coakley Williams Construction 7475 Wisconsin Avenue Bethesda, Maryland 20814

Prepared by:

Hillis-Carnes Capitol Services 1414 North Capitol Street, NW Washington, DC 20002

January 21, 2020

DRAFT: NOT FOR DEVELOPMENT OR CONSTRUCTION

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1.0 INTRODUCTION

This Environmental Management Plan (EMP) has been prepared for the St. Elizabeth's Shelter Relocation located at 2700 Martin Luther King Jr. Avenue in Washington DC (the "Site"). This EMP provides protocols for the following:

- a) procedures to be undertaken if contaminated soil (defined later in this EMP) is encountered;
- b) procedures to be undertaken if subsurface features such as tanks, pits, lifts, oil/water separators, clarifiers, etc. are encountered during redevelopment;
- c) procedures to be undertaken if liquid-phase hydrocarbons in water (LPH) is encountered;
- d) procedures for the proper management of contaminated soil and/or water that is exported from the Site;
- e) procedures for the proper management of uncontaminated soil that is exported from the Site;
- f) procedures for the import of soil to the Site; and
- g) procedures for proper dewatering if groundwater is encountered.

The management, recordkeeping, reporting, characterization, transportation and disposal of soil, water and/or LPH must be done so in accordance with all applicable local, District and Federal regulations that govern such activities.

1.1 Proposed Site Development

The proposed development of the Site includes the construction of a multi-level (five stories maximum) building with a partial basement to be utilized as a housing assistance center. The proposed building construction also includes deeper excavation for grade beams beneath the building and a deep foundation system. The future on-site building will be connected to the municipal water source. This construction plan will include the excavation of soils at the Site. The depth of excavation is variable across the Site. Generally, the depth of excavation ranges from relatively shallow to 30 feet, and may include deeper depths associated with the deep

foundation system. The need for dewatering may also be necessary during development activities.

1.2 Current Site Conditions

The Site is undeveloped and no structures are currently located on the Site. The Site generally consists of undeveloped and wooded land. Historically, the site vicinity was used as a landfill that reportedly consisted of storm sewer cleanings, street sweepings, road construction debris, and incinerator fly ash. Portions of the landfill area were closed in 1983, 1987, 1988, and the remaining area closed in 1989.

1.3 Prior Environmental Assessments

Prior environmental assessments have been conducted at the Site, including Phase I Environmental Site Assessments (ESAs) in 2012 (by others) and 2018 and a Phase II Environmental Site Assessment in 2018 (by Hillis-Carnes Capitol Services). A summary of the major components of the findings is as follows:

Sampling in the vicinity of the fill area was conducted in 1984 and 1985, which resulted in the detection of Chlorinated dioxins and furans in the ash fill and PCB-1260 in the pond sediments. It is our understanding that the pond is not located within the proposed boundaries of the site redevelopment. Additionally, one composite soil sample was collected from the fill ash in 2008. The results of the 2008 sample were reportedly below the RCRA hazardous waste limits for the metals and semi-volatile organic compounds that were analyzed.

During the Phase II ESA, soil samples were collected and analyzed for various parameters including volatile organic compounds (VOCs), Semi-VOCs, total petroleum hydrocarbons for diesel and gasoline range organics (TPH-DRO and TPH-GRO), Priority Pollutant Heavy Metals, hexavalent chromium, total cyanide, Polychlorinated Biphenyls (PCBs), Dioxins and Furans, and full Toxicity Characteristic Leaching Procedure (TCLP) including VOCs, SVOCs, Chlorinated Pesticides, Chlorinated Herbicides, and Priority Pollutant Metals.

Evidence of impacted soils was not apparent during the probing activity (i.e., no odors or staining were observed). In addition, no Photoionization Detector (PID) readings above

background levels were detected in the soil intervals observed. Further, laboratory analyses of the soil samples did not reveal the presence of TPH-GRO, VOCs, PCBs, and TCLP SVOCs, TCLP VOCs, TCLP pesticides, and TCLP herbicides at concentrations exceeding the laboratory's practical quantitation limits.

Certain Priority Pollutant Metals, including Hexavalent Chromium, certain TCLP Metals, certain SVOCs, Total Cyanide, and Dioxins and Furans were detected in one or more of the soil samples analyzed. With the exception of Hexavalent Chromium, TPH-DRO, and certain Dioxins, the detected concentrations were below the applicable screening level standards. The concentrations of Hexavalent Chromium in boring P-2, TPH-DRO in borings P-3 and P-4, and certain Dioxins in borings P-3 and P-4 were above the applicable screening level standards (refer to the Sample Location Plan in Appendix B). Therefore, it is anticipated that impacted soils will be encountered during site excavation activity associated with the redevelopment project.

Saturated soils and/or groundwater were not encountered at the depths of the probes advanced during the Phase II ESA. It should be noted that boring logs from a geotechnical investigation indicate that groundwater at the Site is variable and was detected between 30 feet and 71 feet below the existing ground surface at the time of exploration. However, perched water was encountered at shallower depths.

It is anticipated that additional soil samples will be collected during the geotechnical survey for laboratory analyses to better delineate both the horizontal and vertical extents of impacted soils. At that time, a site map will be prepared to illustrate the extent of soils exceeding applicable screening level standards.

1.4 Purpose of EMP

The purpose of this EMP is to describe the procedures that Site contractors must follow if:

- a) contaminated soil is encountered during the proposed redevelopment activity;
- b) subsurface features such as tanks, pits, lifts, oil/water separators, clarifiers, etc. are encountered during the proposed redevelopment;
- c) liquid-phase hydrocarbons in water (LPH) is encountered;
- d) contaminated soil and/or water is exported from the Site;

- e) uncontaminated soil is exported from the Site;
- f) soil is to be imported to the Site; and
- g) dewatering is necessary during the proposed redevelopment activity.

The EMP has been developed to facilitate the redevelopment of the Site by outlining those specific procedures that will be used for identifying, testing, handling, and disposal of contaminated soil and water that may be encountered during the proposed redevelopment activities. Implementing the procedures in this EMP will help to ensure that contaminated soil and water at the Site is managed in a manner that is protective of human health, the environment, Owner's liability, and compliant with applicable Federal, District and local regulations.

A copy of this EMP shall be kept in the on-site construction management office for reference, and it is the responsibility of the General Contractor (Coakley Williams Construction) and applicable subcontractors to ensure it is followed.

The Owner will retain the services of an Environmental Professional (EP - Hillis-Carnes Capitol Services) to monitor the site activities as they relate to the procedures described in this EMP and to document those activities for inclusion in a Completion Report at the completion of the project. If the EP's field personnel observe deviations from the procedures described in this EMP, the EP's field personnel will inform the EP's Project Manager/Senior Project Manager. If the EP's Project Manager/Senior Project Manager determines that project activities are not being conducted in accordance with the intent of the EMP, the EP's Project Manager/Senior Project Manager/Senior Project Manager/Senior Project Manager/Senior Manager/Senior Project Manager will contact the General Contractor's Senior Superintendent and Project Managers.

Organizational charts for Coakley Williams Construction project employees and Hillis-Carnes Capitol Services project employees are included in Appendix C. The organizational chart as presented in this EMP will be utilized as a reference for determining the chain of communication and applicable project responsibilities. If any changes to or deviations from the organizational structure presented are required, Hillis-Carnes Capitol Services should be notified so that this EMP can be updated as necessary.

2.0 SOIL MANAGEMENT

This section describes the management protocols recommended for handling, moving, stockpiling, and disposing of contaminated soil on and from the Site, as well as requirements for soil to be imported to the Site. Soil that would be considered a "Characteristic Hazardous Waste" due to Toxicity, Corrosivity, Reactivity and/or Ignitability is not anticipated to be present at the Site; therefore, the Soil Management procedures and protocols presented in this EMP are intended to apply to non-hazardous soils impacted with petroleum hydrocarbons. However, Section 2.9 of the EMP does address "Hazardous Soil".

2.1 General Procedures

Construction workers may disturb the subsurface through digging, grading, trenching and/or excavation, and therefore may be potentially exposed to certain environmental constituents. Construction workers or other workers involved in activities that disrupt soil may encounter previously unknown structures or areas of affected soil. Workers who may directly contact contaminated soil or water during construction activities will be provided training specific to potential contaminant exposure (e.g., during site orientation safety meetings, during tailgate safety meetings, etc.), and will conduct the work in accordance with Occupational Safety and Health Administration (OSHA) training and worker protection rules and regulations and their company's Health & Safety procedures. At a minimum, the company Health & Safety procedures utilized must meet all the minimum requirements of all applicable OSHA requirements.

The General Contractor shall provide a competent person who has successfully completed a 30-hour OSHA Construction Training course. The on-site person(s) conducting the soil screening described in Section 2.3 of this EMP will have successfully completed a 40-hour OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) course.

The information provided in this EMP will be used to communicate the location of known contaminated soil and potential concentration of constituents of concern to workers. All Non-Hazardous Contaminated Soil that will be transported off-site must be adequately characterized and disposed at a facility that is permitted to receive such material as outlined in this EMP.

Likewise, all soil that will be imported to the Site must be either from a virgin quarry, or certified or determined by analysis to be "clean" in accordance with applicable standards prior to arriving at the Site.

2.2 Potential Soil Disturbance Activities

Activities that may cause soil disturbance include: excavation for subgrade building levels such as basements and grade beams; site grading; grubbing; removal of soil; removing/installing underground utilities and utility pipeline repair activities; planting trees/landscaping; excavating elevator shaft pits; excavating sediment basins, storm water retention ponds, etc.; installing foundations; and performing other construction activities. If these or other subsurface activities are performed, this EMP will be followed.

2.3 Soil Monitoring and Screening

Soils identified and located within the boundaries of the delineated areas will be excavated and removed from the property. The on-site Environmental Professional (EP) will monitor and document the proper removal of the delineated soils. In addition, during all grading and excavation activities (e.g., for subgrade building levels, foundations and utility work) conducted outside the boundaries of the delineated areas, continuous soil screening will be performed by the on-site EP. The soil screening will consist of the following:

- a) Soils will be monitored with a calibrated PID for evidence of volatile organic compounds (VOCs). Evidence of VOCs will be considered to be sustained PID readings greater than 10 units;
- b) Soils will be inspected for visual indication of environmental impact (i.e., staining apparently due to impact);
- c) Soils will be inspected for olfactory indication of environment impact (i.e., odors apparently due to impact);
- d) Soils will be inspected for the presence of waste materials; and
- e) Soils will be inspected for evidence of free oil (i.e., oil which could potentially be drained or otherwise extracted from the soil and which is sometimes referred to as "non-aqueous phase liquids" or NAPL).

The on-site EP will conduct the soil screening activities on a daily and continuous basis when all grading or excavation activity is occurring. This soil screening will be accomplished by a variety of ways (e.g., screening exposed soil surface areas, screening soil as it becomes exposed as excavation is occurring, screening soil contained within a backhoe bucket, screening soil that may be temporarily stockpiled on-site, etc.), depending on specific site activities and safety considerations.

Based on previous environmental data and in-field screening results, soil will be segregated into one of the following categories: a) Uncontaminated Soil – soil not located within the boundaries of the delineated contaminated soil areas; and soil that does not exhibit any evidence of environmental contamination, based on the absence of all of the above-listed indicators; or b) Non-Hazardous Contaminated Soil – soil located within the boundaries of the delineated contaminated soil areas; or soil that does exhibit one or more of the above-listed indicators of environmental contamination.

Uncontaminated Soil may be re-used on-site without environmental restriction. Non-Hazardous Contaminated Soil will be stockpiled temporarily (refer to Section 2.5 – Stockpile Management) to allow for the proper sampling/characterization of the soil (refer to Section 2.6.3 – Soil Characterization – Non-Hazardous Contaminated Soil), per the requirements of an off-site disposal facility permitted to accept Non-Hazardous Contaminated Soil, and/or may be "live-loaded" for off-site disposal.

If site workers observe evidence of free oil in soils (i.e., oil which could potentially be drained or otherwise extracted from the soil) or evidence of liquid-phase hydrocarbons on water (i.e., petroleum product floating on the surface of water), work in that area will be suspended and the Environmental Professional shall be notified.

2.4 Control Measures During Soil Grading and Excavation Activities

During soil grading and excavation activities, the excavation contractor will use control measures for fugitive dust, odor and uncontrolled migration of potentially impacted soils. Dust and odor control measures will be used such that no visible dust migration or offensive odors are observed. OSHA worker safety requirements shall be followed as appropriate.

Control measures would typically include misting with water; however, other control measures such as reducing vehicle speeds, lowering "drop heights" of soil from equipment, and stabilization of exposed soil as soon as practical will be used, as necessary, to control dust emissions and odors.

If control measures typically implemented at construction sites are not effective at controlling odors, the Environmental Professional shall be notified, and the appropriate assessment protocol shall be determined with the assistance of a Certified Industrial Hygienist (CIH). Such assessment could include ambient air monitoring within the breathing zone of employees with the PID. The procedure for this ambient air monitoring is as follows. In the event control measures typically implemented at construction sites are not effective at controlling odors, realtime monitoring will be conducted and will include attaching tubing to the sample port of the PID and placing the end of the tubing near the workers' breathing zone (e.g., by the lowering of the tubing into the excavation trench where the odors have been reported, etc.). If PID readings are greater than 5 units above background in the breathing zone for a 3-minute period, personnel will suspend work, retreat from the work area, and allow time (at least 15 minutes) vapors to dissipate. If monitoring indicates that concentrations still exceed 5 units after 15 minutes, the EP will advise that work not continue without further evaluation. The procedures for further evaluation will be conducted based on the recommendations of the CIH and could include, but is not necessary limited to, the following: ambient air monitoring to include the collection of samples for laboratory analyses, or personal air monitoring of workers in trenches where odors have been identified, etc.

2.5 Stockpile Management

If stockpiles of Non-Hazardous Contaminated Soil are created during construction activities, they must be managed in accordance with the project Stormwater Pollution Prevention Plan (SWPPP) and appropriate erosion and sediment control measures prepared by others. At a minimum, (a) stockpiles will be covered with polyethylene sheeting at the end of each work day, (b) hay bales or silt fencing will be installed to prevent runoff, (c) stockpiles shall not be located near storm drains and/or surface water drainage courses and (d) stockpiles shall be kept to a manageable size. Further, Non-Hazardous Contaminated Soil, if stockpiled, shall be placed on polyethylene sheeting (6-mil minimum) in addition to being covered with polyethylene sheeting at the end of the work day.

end of each work day to prevent shifting of the sheeting from the wind. The approximate locations of the stockpiles of Non-Hazardous Contaminated Soil will be documented in the EP's field notes, as well as the approximate quantity of soil in each stockpile. Stockpiles of Non-Hazardous Contaminated Soil will be labeled with signage to identify the stockpile as contaminated.

2.6 Soil Characterization

2.6.1 Uncontaminated Soil for Re-Use On-Site

As described in this EMP, soil that is re-used on-site will have been field screened and classified as Uncontaminated Soil. Additional environmental characterization of Uncontaminated Soil that is re-used on-site is not warranted.

2.6.2 Uncontaminated Soil for Export

Soil that has been classified as Uncontaminated Soil and that is to be exported from the Site will be characterized to document the environmental conditions to the satisfaction of the receiving property/facility. The number of representative samples of Uncontaminated Soil to be exported from the Site that will be characterized via laboratory analyses will be in a manner deemed sufficient by the receiving property/facility and the EP, and will not be less than three composite soil samples. Each composite sample will be generated from a stockpile of soil that has been screened, classified as Uncontaminated Soil, and temporarily stockpiled on-site. The composite samples may also be generated from the excavation of test pits and soil screening of the encountered soils in areas of the Site at which Uncontaminated Soil are anticipated (based on the prior environmental analyses).

The composite soil samples will be generated utilizing an 8-point grab sampling methodology and will be collected utilizing gloved hands and/or a clean stainless-steel sampling device. A clean stainless-steel mixing bowl and gloved hands will be utilized to composite the grab samples. The composited soil will be promptly transferred to laboratory-provided glassware which will be placed on ice in a cooler and delivered to the analytical laboratory. All appropriate chain-of-custody procedures will be utilized from sample collection to delivery at the laboratory. The samples will be analyzed in accordance with EPA methodologies and within the applicable holding times.

The composite soil samples will be laboratory analyzed for the following parameters:

- a) Total Petroleum Hydrocarbons-Diesel Range Organics (TPH-DRO) via EPA Method 8015;
- b) Total Petroleum Hydrocarbons-Gasoline Range Organics (TPH-GRO) via EPA Method 8015;
- c) Volatile Organic Compounds (VOCs) via EPA Method 8260;
- d) Oil & Grease (O&G) via EPA Method 9071;
- e) RCRA 8 Metals via EPA Method 8260;
- f) Polychlorinated Biphenyls (PCBs) via EPA Method 8082; and
- g) Semi-Volatile Organic Compounds (SVOCs) via EPA Method 8280.

It should be noted that this sampling and analytical protocol is the minimum protocol for the characterization of Uncontaminated Soil to be exported from the Site and is subject to alteration if deemed appropriate by the EP.

2.6.3 Non-Hazardous Contaminated Soil for Off-site Disposal

Soil that has been screened and classified as Non-Hazardous Contaminated Soil will be appropriately sampled and characterized/profiled prior to being transported off-site for disposal. The District solid and hazardous waste management regulations and other applicable waste management regulations have requirements and procedures for handling Non-Hazardous Contaminated Soil.

Profiling of soil for the off-site disposal facility is necessary to determine proper disposal methods to verify that the soil meets all acceptance criteria of the proposed disposal facility, and ensure compliance with all Federal, District, and local regulations. Stockpile or in-situ soil sampling will be collected as required by the off-site, appropriately permitted disposal facility/facilities.

Generally, the characterization requirements of the off-site disposal facilities that would likely be utilized for the project (refer to Section 2.8) are as follows. For each 3,000 tons of Non-Hazardous Contaminated Soil, a composite sample will be generated from an 8-point grab sampling methodology. The composite sample will be laboratory analyzed for the following parameters:

- a) Total Petroleum Hydrocarbons-Diesel Range Organics (TPH-DRO) via EPA Method 8015;
- b) Total Petroleum Hydrocarbons-Gasoline Range Organics (TPH-GRO) via EPA Method 8015;
- c) Oil & Grease (O&G) via EPA Method 9071
- d) Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) via EPA Method 8021;
- e) Complete Toxicity Characteristic Leaching Procedures (TCLP) which includes TCLP Metals, TCLP Volatile Organic Compounds, TCLP Semi-Volatile Organic Compounds, TCLP Pesticides and TCLP Herbicides) via EPA Method 1311/1312/Various; and
- f) Polychlorinated Biphenyls (PCBs) via EPA Method 8082.

Prior to any characterization activity, representatives of the potential soil disposal facilities will be contacted by the General Contractor or their Subcontractor(s) to confirm the characterization requirements. Documentation of the characterization will be obtained (i.e., an approved Material Characterization Report, an approved Waste Profile Form; refer to Section D).

2.7 Transportation

All transport of soil will be performed by properly licensed and permitted haulers in accordance with appropriate local, District and Federal regulations. Loaded transport vehicles leaving the Site will be appropriately lined and securely covered, cleaned, manifested and placarded in accordance with appropriate local, District and Federal requirements. Truck tickets, or equivalent documentation, for loads of Non-Hazardous Contaminated Soil exported from the Site will be obtained.

2.8 Off-Site Disposal Facilities

Non-Hazardous Contaminated Soil transported for off-site disposal/recycling must be transported to facilities that are permitted by the applicable regulatory authorities to receive such material. The following is a list of potential off-site disposal facilities permitted to accept and treat Non-Hazardous Contaminated Soil.

- Clean Earth
 6250 Dower House Road
 Upper Marlboro, MD 20772
 877-455-3478
- Soil Safe
 16001 Mattawoman Drive
 Brandywine, Maryland 20613
 410-872-3990

This list is not intended to be comprehensive as they may be other potential facilities of consideration.

2.9 Hazardous Soil

As previously indicated, based on the findings of the prior environmental assessments, soil that would be considered a "Characteristic Hazardous Waste" due to Toxicity, Corrosivity, Reactivity and/or Ignitability is not anticipated to be present at the Site. However, if future soil sampling at the Site reveals the presence of soil that would be classified as a characteristic hazardous waste, the soil will be excavated, transported, and disposed of at a facility permitted to dispose of hazardous waste. As feasible, temporary on-site stockpiling of soil that has been deemed a hazardous waste would be avoided. It should be noted that the off-site hazardous waste disposal facility may require laboratory analyses. If it is determined that the soil would be classified as a non-hazardous waste, the procedures and protocols for the handling, characterization, transport and disposal of Non-Hazardous Contaminated Soil presented in this EMP will be applicable.

2.10 Imported Soil

It is the intent of the project team to minimize the import of soil to the Site by maximizing the use of on-site material as fill, to the extent practically feasible. Should it be necessary to import soil to the Site (e.g., soils for backfill, topsoil for landscaped areas), proposed fill material from an off-site source must come from a certified "virgin" mine, borrow pit or other source; or be certified as "clean" by an independent entity. Such certification can be based on the following: a) an affidavit from the facility providing the virgin material indicating that the material does not contain petroleum hydrocarbons, hazardous substances or other contaminants; or b) laboratory testing of representative soil samples to confirm that the proposed fill contains no regulated constituents at concentrations that exceed regulatory standards for residential fill, or concentrations that exceed those present at the Site. Such testing would include one (1) composite soil sample resulting from an 8-point grab sampling methodology for every 3,000 cubic yards of imported soil. The composite soil sample would be laboratory analyzed for the following parameters:

- a) Complete TCLP via EPA Methods 1311/1312/Various;
- b) Total Petroleum Hydrocarbons-Diesel Range Organics (TPH-DRO) via EPA Method 8015;
- c) Total Petroleum Hydrocarbons-Gasoline Range Organics (TPH-GRO) via EPA Method 8015; and
- d) Volatile Organic Compounds (VOCs) via EPA Method 8260).

3.0 WATER MANAGEMENT

3.1 General Procedures

All water to be removed from the Site, including excavation dewatering, storm water and vehicle wash water will be managed, transported and disposed in accordance with applicable local, District and Federal regulations.

Discharge of water generated during large-scale construction activities to surface waters (i.e., a local pond, stream or river) will be performed under a specific National Pollutant Discharge and Elimination System (NPDES) permit. Prior to any large site development (i.e., greater than 1 acre), a Stormwater Pollution Prevention Plan (SWPPP) must be developed. The SWPPP must comply with the requirements of the applicable environmental agency.

3.2 Dewatering System Monitoring Requirements

According to data collected during the geotechnical investigation, groundwater at the Site is variable and was detected between 30 feet and 71 feet below the existing ground surface at the time of exploration. However, perched water was encountered at shallower depths. Therefore, dewatering may be necessary during construction at the Site. Upon commencement of the operation of a dewatering system, a daily inspection of the dewatering system discharge will be conducted to inspect for the presence of odors indicative of contamination, sheens and LPH. If odors, sheens or LPH are detected, the discharge from the dewatering system will be containerized for proper characterization and consideration of handling (e.g., off-site disposal, on-site treatment prior to discharge, etc.).

In addition, on the first day of operation, the dewatering system discharge will be sampled and analyzed for the following parameters:

- a) pH (field meter);
- b) Total Suspended Solids (field meter);
- c) Total Petroleum Hydrocarbons (EPA Method 1664-HEM-SGT); and
- d) Total Chromium.

The sampling will be conducted at the discharge point of the dewatering system. Gloved hands will be utilized during the sampling and the samples will be collected in appropriate glassware, and preserved and transported promptly to the laboratory, as appropriate.

Lastly, the dewatering system discharge will be sampled and analyzed for the previously referenced parameters on a weekly basis for the first month of operation.

The allowable limits for the dewatering system discharge are as follows:

- a) pH Standard Units between 5.0 and 12.5 (Common Permitted Threshold, based on HCEA's experience)
- b) Total Suspended Solids (TSS) 300 parts per million or less (Common Permitted Threshold, based on HCEA's experience)
- c) Total Petroleum Hydrocarbons 100 parts per million or less (Common Permitted Threshold, based on HCEA's experience)
- d) Total Chromium shall not exceed the EPA's Maximum Contaminant Level for Total Chromium in Drinking Water (0.1 parts per million)

If the allowable limits of the dewatering system discharge are met for the first month of operation, the dewatering system discharge will be sampled and analyzed for the previously referenced parameters on a monthly basis.

If the allowable limits of the dewatering system discharge are not met, the discharge from the dewatering system will be containerized for proper characterization and consideration of handling (e.g., off-site disposal, on-site treatment prior to discharge, etc.).

3.3 Removal of Liquid-Phase Hydrocarbon

Liquid-phase hydrocarbon (LPH, or a layer of hydrocarbons floating on the surface of the groundwater and sometimes referred to as "free product") is not anticipated to be present in the groundwater at the Site. If LPH is encountered in an excavation, work in that area would be suspended and the LPH will be removed. The LPH will be removed in a manner that minimizes the spread of contamination into previously uncontaminated zones by using a containment recovery and storage system to contain and remove the LPH. The material would require

testing to obtain acceptance at an approved disposal facility prior to transport for off-site disposal. The discovery of LPH at the Site would require notification to the appropriate local or district agencies.

4.0 CONTINGENCY PROCEDURES

The following contingency procedures will be followed upon discovery of an unknown source of contamination that may require remediation (such as unknown underground storage tanks, buried drums or other chemical storage containers, LPH in water, free-liquids in soil, etc.), and the procedures for suspending excavation work, transferring any materials, and notifying applicable local, District and/or Federal agencies. The contingency procedures include the following:

- a) If an underground storage tank (UST), free liquids in soils, and/or LPH is found during grading or excavation, activities in the affected area will be suspended. In the case of a UST being discovered, the District of Columbia's Department of Energy and Environment (DOEE) would be contacted (202-535-2600) within 24 hours to coordinate the proper removal of the UST at a later date. In the case of free liquids in soils, and/or LPH, within two (2) hours of discovered, the District's Homeland Security and Emergency Management Agency (202-727-6161) and DOEE's Hazardous Waste Branch (202-671-3308) will be contacted.
- b) If buried chemical storage containers or a previously unidentified contamination source (e.g., oil/water separators, lifts, pits, clarifiers, etc.) is found during grading or excavation, activities in the affected area will be suspended until an adequate plan is implemented to address the condition. Notification to the DOEE of the discovery of such a condition would be made, if required by the applicable regulations. Sampling will be performed on the material, soil, groundwater and surrounding soils, etc., as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed by the EP consistent with the concern identified and include analyses as appropriate (e.g., disposal parameters, metals; volatiles and semi-volatiles, pesticides PCBs, etc.).

Identification of unknown or unexpected condition will be promptly communicated by telephone to the project manager(s) and the Owner's representative(s).

5.0 HEALTH AND SAFETY

All work shall be performed in accordance with all applicable Occupational Safety and Health Administration (OSHA) standards as a minimum. Based on the known contaminant concentrations, site workers will wear the appropriate level of personal protective equipment (PPE) as described in their Health & Safety Plan and in accordance with their company policies and procedures. Levels of PPE should be reconsidered and modified depending on the conditions encountered as the project progresses. The General Contractor is responsible for workers adhering to all applicable OSHA requirements as a minimum and all the Health & Safety policies and procedures.

As previously indicated in this EMP, the General Contractor shall provide a competent person who has successfully completed a 30-hour OSHA Construction Training course. The on-site person(s) conducting the soil screening described in Section 2.3 of this EMP will have successfully completed a 40-hour OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) course.

6.0 DOCUMENTATION

Following completion of site excavation and grading, the activities conducted in accordance with this Environmental Management Plan will be documented in an Environmental Management Completion Report. Documentation will include a narrative of activities completed (e.g., EP daily reports noting field screening findings), identification of areas excavated including appropriate figures (e.g., as-built drawings) showing aerial extent and depth of excavation and fill areas, quantity of Non-Hazardous Contaminated soil and/or water transported off-site to each disposal facility, volume of Uncontaminated Soil exported from the Site, volume of soil imported onto the Site, laboratory reports for the characterization of soil and/or water transported off-site, truck tickets (or equivalent) and waste manifests for contaminated soil and/or water disposed of off-site; and laboratory reports for samples obtained from the dewatering system discharges.



Blue Skye/Coakley & Williams Construction

Fugitive Dust Control Plan

801 Men's Shelter





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1.0 INTRODUCTION

Blue Skye/Coakley & Williams Construction (BS/CWC) has created this Fugitive Dust Control Plan (FDCP) to identify the measures that will be taken to reduce the potential for particulate emissions associated with new construction for the

801 Men's Shelter located at 2700 martin Luther King Jr. Ave SE Washington, DC 20032.

The purpose of this FDCP is to identify the steps that will be taken to reduce the potential for particulate emissions during remediation activities. The FDCP includes activity-specific dust control criteria and dust suppression procedures. Best management practices (BMPs) will be implemented throughout the project. BMPs include wetting active remediation areas, minimizing or ceasing activities during periods of high wind, sweeping or wetting paved areas, wetting unpaved areas, application of dust suppressant materials and covering stockpiles. This FDCP provides specific information about the generation and control of dust emissions during the excavation of soil material, stockpiling of these materials and other activities associated with the remediation. This plan is to be used in conjunction with the Removal Action Work Plan, Site-Specific Health and Safety Plan (HASP), and the Air Monitoring Plan developed for this project. The following section details potential dust sources and dust control methods.

1.1 Site Description and Project Overview

The project includes a 375-capacity dormitory-style housing facility based within approximately 86,500 square feet for the homeless. The facility consists of multiple programs to include work/employment housing, senior/medically frail housing, medical respite care, low barrier housing, and a Day Center program. The building consists of multipurpose space, administrative areas.

Initial activities at the Site will include the installation of temporary fencing and the removal of shrubs and vegetation. Excavation of lead-impacted soil will be completed to approximately 2-20 feet below ground surface, loaded into trucks and disposed off-site. While excavation activities are taking place, BS/CWC will be conducting air monitoring, and fugitive dust control as needed, in addition, BS/CWC will coordinate traffic and road control at the Site. Following excavation activities, geotextile will be installed as well as a clean soil cap. The clean soil cap will be seeded with grass. Winter Rye will be used to stabilize soils.

1.2 Wind Monitoring and Dust Prevention Team

The FDCP will be implemented and overseen by the BS/CWC site personnel. The BS/CWC personnel have the authority to implement additional dust control provisions and stop work provisions if an excess amount of dust is noticed. BS/CWC personnel will also maintain and revise the FDCP as needed to reduce the potential for dust emissions during any remedial activities.

1.3 Fugitive Dust Control Objectives and Approach

The objectives of the FDCP are as follows:

- Provide an early warning system to alert the BS/CWC project team when concentrations of respirable dust in ambient air are approaching Action Levels due to removal activities.
- Provide a plan for preemptively limiting and controlling respirable dust during construction activities
- Determine whether construction controls are effective in reducing the amount of dust caused by construction activity and make appropriate and necessary adjustments.
- Record daily (daily reports) the total quantity of loaded or unloaded material in cubic yards or tons, total application of water, total amount of street cleaning and sweeping, instances of work-stopping weather events, results of the real-time air monitoring, (if applicable) and instances of dust approaching or exceeding the Action Levels.

2.0 MONITORING ACTIVITIES

BS/CWC does not anticipate that there will be a need for air monitoring for the 801 Men's Shelter located at 2770 Martin Luther King Jr. Ave SE Washington, DC 20032 Should Monitoring be necessary, BS/CWC will oversee the collection, and evaluation, of the real-time air monitoring results and provide a report to the stakeholders as required.

3.0 DUST CONTROL PLAN

Control of dust will be a high priority during construction activities. The primary mechanism for dust control will be the use of water trucks with a spray bar and hose(s). Only potable water will be used for dust control purposes. Proactive controls will be instituted to reduce the amount of dust generation during Site activities, including enforcement of low speed limits for vehicular traffic.

BS/CWC will cover dust control for all site personnel during the site safety orientation. We will review the potential sources of dust, individual responsibilities, and actions for controlling dust as described in this plan. The orientation will emphasize the importance of dust control to the overall success of the construction activities and familiarize site personnel with the appropriate dust control procedures that must be adhered to in accordance with this plan to minimize dust generation.

4.0 POTENTIAL DUST GENERATION ACTIVITIES AND PROPOSED CONTROLS

Construction activities will have the potential to generate emissions in the form of fugitive dust. Dust control methods will vary based on the activities occurring at the Site. Activities to be conducted during the construction activities which have the potential to generate duct, and the respective dust control measures, are described in the summary table below.

ACTIVITY	DUST CONTROL
Truck traffic	Wet down unpaved haul roads. Keep paved roads clean or wet down if damaged and cracked and cannot be kept clean.
Soil excavation,	Wind barrier. Water spray/mist, adjust
loading activities	excavation activities, suspend work under unfavorable conditions (sustained wind speed greater than 20 miles per hour).
Stockpiling	Wind barrier. Water spray/mist. Use of airborne dust wet suppression system as required. Cover stockpiles during sustained wind greater than 20 miles per hour and at the end of each day.
Soil Loading, Hauling,	Use of airborne dust wet suppression system and
and Backfill	spray mist as required
Replacement	
Concrete cutting, mixing	Use of airborne dust wet suppression system and water
	Spray mist as required

4.1 Respirable Crystalline Silica Plan

Exposure to respirable crystalline silica can cause silicosis, lung cancer, other respiratory diseases, and kidney disease. Exposure can occur during common construction tasks such as using grinders, drills masonry saws, jackhammers and handheld powered chipping tools; operating vehicle-mounted drilling rigs; milling; operating crushing machines; and using heavy equipment for demolition or certain other tasks.

Personnel exposures must be limited to a permissible exposure limit (PEL) of 50 micrograms of respirable crystalline silica per cubic meter of air, averaged over an 8-hour day.

Regardless of exposure control method used, the following measures must be followed:

- Establish and implement a written exposure control plan that identifies tasks that involve exposure and methods used to protect workers, including procedures to restrict access to work areas where high exposures may occur.
- Designate a competent person to implement the written exposure control plan
- Restrict housekeeping practices that expose workers to silica where feasible alternatives are available.
- Offer medical exams including chest X-rays and lung function test every three years for workers who are required by the standard to wear a respirator for 30 or more days per year.
- Train workers on work operations that result in silica exposure and ways to limit exposure
- Keep records of workers' silica exposure and medical exams

Table 1 (below) matches common construction tasks with dust control methods, so employers know exactly what they need to do to limit worker exposures to silica. The dust control measures listed in the table include methods known to be effective, like using water to keep dust from getting airborne or using ventilation to capture dust. In some operations, respirators may also be needed.

Equipment/T ask	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (AP F) 5 4 > 4	
Otationa		hrs/shift	hrs/shift
Stationary masonry saws	Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	None
Handheld	Use saw equipped with integrated water delivery		
power saws (any blade diameter)	system that continuously feeds water to the blade, Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions: -vynen used outdoors	None	APF 10
	-when used indoors or in an enclosed area	APF 10	APF 10
Handheld power saws for cutting fiber-cement board (with blade diameter of 8 inches or less)	Use saw equipped with commercially available dust collection system Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency	None	None
Walk-behind saws	Use saw equipped with integrated water delivery system that continuously feeds water to the blade Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions:		
		APE 10	APE 10
Drivable saws	For tasks performed outdoors only: Use saw equipped with integrated water delivery system that continuously feeds water to the blade Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions	None	None
Rig-mounted core saws or drills	Use tool equipped with integrated water delivery system that supplies water to cutting surface Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions	None	None



Handheld	Use drill equipped with commercially available	None	None
anu stanu-	Operate and maintain tool in accordance with		
drille	manufacturar's instructions to minimize dust		
(including	amissions. Dust collector must provide the air		
(including	flow recommended by the teel manufacturer or		
inipact and	areator, and have a filter with 00% or greater		
hommor	officioner and a filter cleaning machanism		
drille)	Use a HEPA-filtered vacuum when cleaning holes		
Dowol drilling	For tasks performed outdoors only:	APF 10	APF 10
	Use shroud around drill bit with a dust collection	/	/
ngs ioi	system Dust collector must have a filter with		
concrete	99% or greater efficiency and a filter cleaning		
	mechanism Use a HEPA-filtered vacuum		
	when cleaning holes		
Vehicle-	Use dust collection system with close capture	None	None
mounted	hood or shroud around drill bit with a low-flow		
drilling rigs for	water spray to wet the dust at the discharge		
rock and	OR		
concrete	Operate from within an enclosed cab and use	None	None
	water for dust suppression on drill bit		
		Rea	uired
		Resp	iratory
Equipment/T	Engineering and Work Practice Control	Protec	tion and
ask	Methods	Mini	mum
ask	Methods	Δςς	ianed
		Protecti	on Factor
		54	-) \ \ 4
		hrs/shift	hrs/shift
Jackhammers	Use tool with water delivery system that supplies		
and handheld	a continuous stream or spray of water at the		
powered	-when used outdoors	None	APF 10
chipping tools	-When used indoors or in an enclosed area	APF 10	APF 10
	UK		
	Use tool equipped with commercially available		
	dust collection system		
	Operate and maintain tool in accordance with		
	manufacturer's instructions to minimize dust		
	emissions		
	Dust collector must provide the air flow		
	recommended by the tool manufacturer, or		
	greater, and have a filter-cleaning mechanism		
	-When used outdoors	None	APF 10
	-When used indoors or in an enclosed area	APF 10	APF 10
-			



Handheld grinders for mortar removal (<i>i.e.</i> , tuckpointing) For tasks performed outdoors only: Use grinder equipped with integrated water delivery system that continuously feeds water to the grinding surface Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism Por tasks performed outdoors only: Use grinder equipped with integrated water delivery system that continuously feeds water to the grinding surface Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or greater efficiency and a cyclonic pre-separator or greater efficiency and a cyclonic pre-separator or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism: 				
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loose dust in between passes		loose dust in between passes		



Equipment/T ask	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (AP F) 54 F) 54 F)	
Small drivable milling machines (less than half- lane)	Use a machine equipped with supplemental water sprays designed to suppress dust. Water must be combined with a surfactant Operate and maintain machine to minimize dust emissions	None	None
Large drivable milling machines (half-lane	For cuts of any depth on asphalt only: Use machine equipped with exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust Operate and maintain machine to minimize dust emissions	None	None
and larger)	For cuts of four inches in depth or less on any substrate: Use machine equipped with exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust Operate and maintain machine to minimize dust emissions	None	None
	OR		
	Use a machine equipped with supplemental water spray designed to suppress dust. Water must be combined with a surfactant Operate and maintain machine to minimize dust emissions	None	None
Crushing machines	Use equipment designed to deliver water spray or mist for dust suppression at crusher and other points where dust is generated (e.g., hoppers, conveyers, sieves/sizing or vibrating components, and discharge points) Operate and maintain machine in accordance with manufacturer's instructions to minimize dust emissions Use a ventilated booth that provides fresh, climate-controlled air to the operator, or a remote-control station	None	None
Heavy	Operate equipment from within an enclosed	None	None



equipment and utility vehicles used to abrade or fracture silica- containing materials (<i>e.g.</i> , hoe- ramming, rock ripping) or used during demolition activities involving silica- containing materials	When employees outside of the cab are engaged in the task, apply water and/or dust suppressants as necessary to minimize dust emissions	None	None
Heavy	Apply water and/or dust suppressants as necessa	ary to None	None
equipment and	minimize dust emissions	-	
utility vehicles	UN When the equipment operator is the only	None	Nono
for tasks such	employee engaged		NULLE
as grading	in the task, operate equipment from within an enclosed cab		
and excavating			
including:			
Demolishing.			
abrading, or			
fracturing			
silica-			
containing materials			

4.2 Dust Suppression Measure Details

a. Tarping

Bulk material piles will not be created other than while gathering material to load into trucks (e.g., pulling soil into a pile for the excavator to load into trucks). If any bulk material piles are left on the site overnight (e.g., due to equipment failure, transportation delays, etc.), they will be tarped as necessary to limit wind-blown dust.

All trucks being utilized for transport and disposal of excavated material at the site are required to be fitted with solid, sliding or slot-top type covers with no gaps when fully deployed. Trucks shall be covered immediately after loading and are to remain covered throughout the transportation and disposal of excavated material. The cover must not contact the excavated material and must be installed in such a way to prevent wind from entering over the leading edge of the trailer rim.
b. Geotextile Barrier

Following the soil excavation, a geotextile marker barrier will be installed prior to backfilling the excavated area with clean fill material. The geotextile barrier will cover the potential lead-containing soil currently located below 2 feet and minimize any respirable dust generation from this soil layer during backfilling activities.

c. Watering

The Remediation Contractor shall conduct operations and maintain the Site as to minimize the creation and dispersion of respirable dust. Clean water, provided by the Remediation Contractor, shall be applied to the Site as necessary to prevent dust during excavation, loading/unloading, and backfilling activities. Excavation areas and on-site

roadways will be kept damp, as necessary, without creating ponding or mists that travel beyond the Site boundaries. The watering operations shall be sufficient to control fugitive dust. BS/CWC assumes that tanker trucks will be utilized to provide and apply clean water for removal activities.

Water shall be applied in a manner to prevent runoff. As a contingency measure, BS/CWC will have erosion and sedimentation controls, such as silt fencing, sediment logs, or manhole silt screens, installed as necessary to manage runoff.

d. Transfer Points

Transfer points refer to any time material is loaded or unloaded during removal activities. For the purposes of this project, the primary transfer points of concern will be the transfer of soil material from the excavator to a waiting truck. The secondary transfer points of concern will be the unloading of the clean soil for use in backfilling the excavated areas. At all transfer points, the following guidelines will be maintained:

- During loading of impacted soil, the material must be moist during the transfer, and the transfer shall be into an overhead truck trailer only. The material drop into the trailer must not exceed 4 feet.
- All trucks entering and leaving the Site will adhere to the posted speed limit, which shall be no more than 8 miles per hour (mph).
- All trucks shall adhere to the tarping policy established in 4.1.3.

- All trucks leaving unpaved areas to paved areas of the public (i.e., sidewalk or street), whether full or empty, will be visually inspected for loose material. Stabilized construction exits (e.g., 3- to 6-inch cobblestone or rip rap placed on top of a geotextile) will be used to assist with cleaning of truck tires as the vehicles leave unpaved areas. Any loose material is to be removed and placed into the truck trailer.
- All loading of impacted soil must be completed on pavement where possible.

e. Roadways

In order to keep roadways clean and free of accumulation, BS/CWC will coordinate with the Earthwork subcontractor for routine street sweeping during removal activities. The street sweeper must be equipped with a water spray and vacuum system to prevent fugitive dust. Street sweeping must be completed at the end of every day or as needed, but at a minimum of once a day as long as there is excavation or dust producing activities on site. All trucks are to take the most efficient and direct route to the disposal facility as possible as outlined in the Traffic Control Plan.



Rodent/Pest Control Plan

1. INSPECTION AND RECOMMENDATIONS

Blue Skye/Coakley Williams Construction (BS/CWC) will inspect or have the project site 801 Men's Shelter at 2700 Martin Luther King Jr. Ave SE Washington, DC 20032 inspected for rodents and pests PRIOR to the start of construction.

If pest management is deemed necessary BS/CWC will subcontract with Pest Services who works with DGS facilities management. Pest Services Company will install exterior rodent bait stations, which will be secured to the ground or building, at all sites susceptible to harboring rodents. Pest Service will faithfully monitor all rodent bait stations, and other rodent control measures, to assure their continued full effectiveness. It is our policy to place service tickets inside each rodent bait station so that the servicing technician is required to open the station before he or she can sign the current service ticket and replace it with a new one. Pest Services will also install and service exterior bait stations at points of entry to each facility, to provide proven effective rodent protection.

BS/CWC will ensure that effective door-sweeps are installed on all exterior doors. Doorsweeps also help prevent crawling pests and mice from entering. Mice can enter a building through a crack 1/4" thick and insects need only a small crack.

An identifying tag will be affixed to all rodent control devices. Each identifying tag will contain the name of the servicing firm and a telephone number. This information will provide regulatory inspectors with needed information as well as to management and health care providers that may be needed in case there is a need to contact the appropriate organization in the event of accidental ingestion of rodent bait.

2. INTERIOR REGULATORY

The following information will be used as needed. Open bait trays insides a facility that handles human or animal food constitutes a violation of EPA approved rodenticide labeling. EPA labeling prohibits the use of rodenticides in a manner that may create a potential for contamination of food or feed.

In addition to EPA requirements, OSHA requires that information regarding all chemicals used inside a facility be included in the buildings Hazard Communication program. Ready access to all pesticide labels and material safety data sheets (MSDS) for pesticides used in and around a facility such as yours ensures compliance with the requirements of the US Hazard Communication Standard. An open bait tray, or spilled bait, is a violation of EPA labeling. Pest Services Company will place all rodenticides not introduced into a crack or crevice, in an enclosure (e.g., bait station) and will place a

clear and prominent label showing the rodenticide product that is inside the container

3. NTERIOR SANITATION AND QUALITY

The following information will be used as necessary. Glue boards will be used to detect and monitor insect and rodent populations before they develop population densities that are noticed by building inhabitants. However, the effectiveness of glue boards can be largely negated by dust, or especially cold areas. Dust reduces the tackiness of the glue, especially during the colder seasons of the year. The rodents then can run over the glue without becoming ensnared.

The goal is to eliminate rodent populations as quickly possible after starting a new account. Our policy and, hence, our programs, is based on the fact that when a rodent enter a building the first time, it will experience some disorientation and as a result will be susceptible to control measures. All rodent control devices will be placed in or near all potential rodent entryways. When insufficient numbers of bait stations are installed, rodents will quickly find harborage inside the building. As a result, serious infestations may develop that will require greater effort and greater use of toxic chemicals.

A comprehensive cockroach control program consists of careful application of a residual insecticide directly to the cracks and crevices, and into voids where cockroaches habitually habitat. Insecticide formulations we shall use if awarded this contract include baits, gels, and water-soluble residual sprays. In addition to monitoring stations, thorough visual inspections accompanied at times with a flushing agent will be used in our continuing efforts to keep cockroach populations below detectable levels.

When fly entry becomes prevalent, a residual insecticide will be applied around dock doors and all entry doors in use. Before flies enter a building, they normally land on and rest on exposed surfaces around a door or other entry points. After resting a bit, they will either fly into the building or away from the building. A residual insecticide applied during this crucial time of the year can substantially reduce fly entry and problems associated with their presence inside a building.

The Spring and Fall incursion of crawling insects, which are often substantial during the months when insects emerge in the Spring and again as they seek refuge from cooler weather in the Fall. A highly effective crawling insecticide can be easily and readily combined with a fly control program.

4. EXTERIOR REGULATORY

An exterior rodent control program will be provided if needed. Our subcontractor, Pest Services Company shall provide upon request an exterior rodent control program. The rodenticide labels for all products that we anticipate using in and around the DGS facilities. We shall place all bait stations in locations not accessible to children, pets, domestic animals, or wildlife; and we shall place all rodent baits in tamper-proof boxes, which fully conforms to all current rodenticide labels.

The EPA requires all rodenticide bait placed in outside areas, such as along the exterior of building (structure), be considered accessible and, therefore, must be maintained in a tamper-proof condition such as to prevent access by larger non-target animals. In defining

the word "tamper-proof," EPA established a set of criteria that must be met whenever tamper-proof stations are required. We recommend the appropriate DGS employees should familiarize themselves with the following EPA criteria for tamper-proof bait boxes. The stations must be made of materials strong enough to keep animals larger than the target species from getting to the bait. The EPA has determined that stations. Constructed of cardboard or thin plastic do not meet the criteria. Each station must have a cover securely attached to it whenever it contains rodenticide bait.

Rodenticide containers must have small enough entrances or be constructed with an Internal "maze" to prevent animals larger than the target species from getting to the bait. If there is rodenticide in the bait box, the rodent station must be securely anchored in place to prevent the rodenticide from being displaced.

There must be a clear statement or sign on the bait box in an obvious place, which identifies the station as containing rodenticide.

Whenever bait is placed out on the premises in bait boxes, the boxes must be numbered, and the corresponding numbers noted on a map of the premises. These steps conform to state record keeping regulations, which require that records be completed on the day of treatment and that these records clearly show the exact site of each commercial pesticide application.

All effective rodent management programs are based on exterior baiting. An exterior rodent management program will nearly eliminate rodents entering a building. The basis for this is that, rodents approaching a building are usually searching for food. If they discover a suitable food source, such as an exterior bait station, they will often feed and then return from where they came and not investigate further.

Though rodents are often associated with filth and disease, it has been found they go to filthy areas because they are force to – because other food sources are absent. Rodents are, in spites of common concepts, clean animals. They are continually grooming and cleaning themselves and when given an opportunity, will always choose a clean rather than a filthy site if food is available. Thus, sanitation greatly enhances the effectiveness of both insect and rodent baits. An additional, but equally important factor is to properly service baits. Baits (food for insects and rodents) become stale and less attractive when exposed to air and moisture. To obtain the maximum effectiveness of baits, aged baits need to be periodically replaced.



Coakley & Williams Construction, Inc. 7475 Wisconsin Ave, Suite 900 Bethesda, Maryland 20814 Phone: (301) 963-5000

Transmittal #1

Project: 6|19|001 - 801 MEN'S SHELTER WASHINGTON, District of Columbia

Site Specific Safety Plan

TO:

Marcus Brummer (JDC)

4315 50th St, NW Suite #LL1 Washington, District of Columbia 20016 FROM: Justin Alfon (Coakley & Williams Construction) 7475 Wisconsin Avenue, Suite 900 Bethesda, Maryland 20814

CREATED DATE: 08/15/2019

COPIES TO:

William Simons (Coakley & Williams Construction), Pat McCrary (Coakley & Williams Construction), Justin Alfon (Coakley & Williams Construction)

TRANSMIT:	VIA:	FOR:	ACTION:
Attached	Attached	Approval	

Transmittal Items

DESCRIPTION	FORMAT	DATE	COPIES
CWC - 801 East Mens Shelter - SSSP.pdf. 801 East Men's Shelter - Site Specific Safety Plan (view)	Document	08/15/ 2019	1

Comments

Please review and return a copy for our records.

ACCIDENT/ INCIDENT PREVENTION PLAN

FOR

801 East Men's Shelter Project

Coakley & Williams Construction, Inc.

7475 Wisconsin Avenue, Suite 900 Bethesda, Maryland 20814

Blue Skye Construction 5125 MacArthur Blvd NW Ste 19 Washington, DC 20016 Revised – 2019



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1. Plan Preparation

In the tradition of Coakley & Williams Construction Inc. (CWC) and Blue Skye Construction continued interest in the safety security and well-being of their employees, the public and our client, we have prepared this Accident/ Incident Prevention Plan for the **801 East Men's Shelter Project**. This plan was carefully designed to protect all workers from suffering injury and property loss as a result of unsafe site conditions and actions.

The goal of this plan is to provide a work environment in which the possibility of an accident has been minimized through the compliance with OSHA, ANSI, NEC & NFPA Health and Safety Guidelines, Federal and State Safety & Health Regulations, and internally developed Best Practices Safety Procedures. However, no plan can be effective unless everyone takes personal responsibility for their safety and the safety of their fellow co-workers. It is essential that all employees enthusiastically support this safety plan.

- a. Plan Approver: Gabe Marks, Coakley & Williams Construction, Inc. Corp. Safety Manager
- b. Plan Approvals: Bill Simons, Coakley & Williams Construction, Inc. Senior Vice President
- c. Plan Concurrence: TBD, Coakley & Williams Construction, Inc., Project Manager TBD, Coakley & Williams Construction, Inc., Project Superintendent Justin Alfon, Coakley & Williams Construction, Inc. Project Engineer TBD, Blue Skye Construction, Project Manager TBD, Blue Skye Construction, Project Superintendent

2. Background Information

a. Contractor: Coakley & Williams Construction, Inc. 7475 Wisconsin Avenue, Suite 900 Bethesda, Maryland 20814

> Blue Skye Construction 5125 MacArthur Blvd NW Ste 19 Washington, DC 20016

b. Project Name: 801 East Men's Shelter



- c. Address: 2700 Martin Luther King Jr Ave SE Washington, DC 20032
- d. Owner: Department of General Services

e. Project Description: The project includes a 375-capacity dormitory-style housing facility based within approximately 86,500 square feet for the homeless. The facility consists of multiple programs to include work/employment housing, senior/medically frail housing, medical respite care, low barrier housing, and a Day Center program. The building consists of multipurpose space, administrative areas,

3. Statement of Safety and Health Policy

The goals of the Accident/ Incident Prevention Plan are to; (1) protect employees/ workers and visitors from potential hazards on and around the project site; (2) reduce the probability of physical loss and/or damage by mitigating risk; and (3) assure all construction operations are in compliance with OSHA, and applicable Federal and State standards.

The Coakley & Williams Construction, Inc. and Blue Skye Construction management team is fully committed to promoting and providing a healthy and safe work environment for all workers, Coakley & Williams Construction Inc. and Blue Skye Construction expects its subcontractors to support this philosophy.

The commitment to preventing losses and working safely will help assure that the project is built with quality and delivered to the client in a safe, accident free manner.

The objective of Coakley & Williams Construction Inc., Blue Skye Construction, and its subcontractors is to construct and complete the project with zero injuries.



4. Responsibilities and Lines of Authority

a. <u>Vice President and/or Project Manager</u>

- 1. The Vice President/ Project Executive and/or Project Manager are ultimately responsible for the safety performance of the Site-Specific Safety Plan for all projects under their assignment.
- 2. The Vice President/ Project Executive and/or Project Manager shall review project safety inspections to assure that corrective action has been taken to prevent reoccurrence. Review the overall project safety activity and ensure that cooperation and support for safety exists between the Safety Department, the Project Team, Subcontractors, the Client, Insurance Company Representatives, and local, state, and federal safety officials.

b. Safety Director / Safety Manager

The Safety Director/ Safety Manager will assist in:

- 1. Assist the Project Team in Implementing a Site-Specific Safety Plan that will identify construction hazards through inspections and follow through with subcontractor supervision to ensure timely corrective action.
- 2. Stop any work activities that pose an imminent danger to workers or the public.
- 3. Maintain a Safety Inspection Log.
- 4. Review Activity Hazard Analysis (AHA's) and recommend appropriate revisions.
- 5. Review the Accident / Incident Prevention Plan and to modify the APP/SSSP to reflect the scope of work being performed.
- 6. Manage the implementation of the safety-training programs on site.
- 7. Investigate all serious bodily injury and property damage occurrences.
- 8. Maintain required safety reference material on site.
- 9. Conduct Safety Orientations.
- 10. Participate in the weekly foremen 's meetings to review safety issues.
- 11. Manage all safety plans as outlined in the Site-Specific Safety Plan.

c. <u>Project Superintendent</u>

The Project Superintendents, Assistant Superintendent will be the Competent Person and completely responsible for all aspects of safety on this project. They will be responsible for supporting the implementation, administration and enforcing the safety program activities on the Potomac School Project. They are proficient in OSH Act/ General Duty Clause and have attended OSHA 10 and 30 Hour Training and the topics covered have met the requirements as the Competent Person as outlined by OSHA.

The Project Superintendents as one of the project's Competent Person will:

- 1. Plan and organize all work activities to reflect the stated goals of the Coakley & Williams Construction, Inc. and Blue Skye Construction's Safety Program.
- 2. Coordinate work of all subcontractors and suppliers to ensure a high level of safety is maintained.
- 3. Take necessary action to improve safety and health conditions by addressing the recommendations made by the Safety Director/ Manager, Insurance Company Loss-Control Representative or other competent safety personnel.
- 4. Conduct Safety Orientations to all foremen, review Daily AHA's, complete competent person sheet.
- 5. Conduct project surveys or appoint a responsible person to conduct project surveys in conjunction with work activities to enforce safety requirements.
- 6. Assist in the investigation of accidents and make corrective suggestions to prevent reoccurrence. Notify the appropriate Staff immediately of critical incidents.
- 7. Stop any work activities that pose an imminent danger to workers or the public. Take corrective action to remediate unsafe conditions and take necessary disciplinary action as required by the SSSP.
- 8. Be present at all times when work on the project is being performed or assign a competent person to oversee project work as it is being performed.
- 9. Post all required forms on the Job Safety Board OSHA 300 Log, applicable Labor Posters, Minimum Wage or Wage Requirements, FMLA.



d. <u>Subcontractor Superintendent and Foremen</u>

Each subcontractor will appoint in writing the name of the Competent Person managing their crew to carry out its safety program. Typically, this person will be the Subcontractor Superintendent and Foremen who will be expected to provide supporting safety leadership and communications to all crews and workers. They will be or become proficient in the daily Activity Hazard Analysis and the look ahead task planning. Qualifications / Certifications as defined but not limited to crane operators, riggers, equipment operators, excavations, scaffolding, fall protection, confined space, respiratory protection. Must be signed by a principal officer of their company. **(See Attachment N – Competent Person Designation Forms)**

e. <u>All Construction Workers</u>

Each construction worker has a personal responsibility for his/her own safety. Workers are responsible for understanding and following the safe methods to perform their assignments. All workers must participate on a daily safety briefing meeting before work begins.

No work will be performed unless the Competent Person is on site.

5. Subcontractors and Suppliers

- a. Attachment C Current List of Subcontractors will consist of a current list of Subcontractors and Suppliers. This list will be updated as the project progresses.
- b. Means for controlling and coordinating subcontractors and suppliers.

The work of subcontractors and suppliers will be coordinated through the Superintendent. Subcontractor safety performance will be controlled using the Daily Activity Hazard Analysis (AHA) and their safety plan. The active involvement of the subcontractor(s) supervisor will be required through the performance of safety inspections and training.

- i. Steel Erection Plan
- ii. Site Specific Fall Protection Plan/Rescue Plan
- iii. Respiratory Protection Plan
- iv. Crane(s) Lift Plan, rigging
- v. Hazardous Energy Control Plan (Lockout/ Tagout) Includes electrical, mechanical, plumbing & sprinkler
- vi. Precast Concrete Erection Plan
- vii. Formwork & Shoring Erection Removal Plan
- viii. Trenching & Excavation Plan
- ix. Scaffolding
- x. Confined Space
- xi. Equipment Operators
- xii. Powder Operated tools



- xiii. Demolition Plan
- xiv. Abatement Plan

c. <u>A definable feature of work</u>

Will be established by the Coakley & Williams Construction, Inc. and Blue Skye Construction's Project Team. Each subcontractor is required to submit their Activity Hazard Analysis (AHA) to the Coakley & Williams Construction, Inc. Project Team. (Section 10 Risk Management Process Outlines definable features of work and AHA format process)

d. <u>The Competent Person named</u>

for each subcontractor as well as the Coakley & Williams Construction, Inc. and Blue Skye Construction's Project Team has full authority to stop any unsafe condition, the responsibility to report unsafe conditions to the controlling General Contractor, take corrective measures to remediate an unsafe act or condition within his/her scope of work. Every worker has full authority to report any unsafe condition or act to their supervisor or to the controlling General Contractor without prejudice or repercussion.

e. <u>Policies & Procedures Regarding Non-Compliance</u>

Safety Inspections are of unsubstantial value if the safety infractions reviewed are not acted upon. If safety materials are required, the Project Superintendent will make arrangements for the delivery of these items (this does not include PPE for subcontractors). The Project Superintendent will make arrangements for additional manpower should there be a considerable amount of labor involved in correcting safety violations. As the General Contractor, Coakley & Williams Construction, Inc and Blue Skye Construction is responsible and liable for ensuring that the subcontractors also conform to safety regulations. Safety enforcement is crucial to the success of a project to meet the goal of zero accidents. Disciplinary action is outlined below, but is not reserved to the following.

Immediate termination to any employee who refuses to comply with this Site-Specific Safety & Health Accident/ Incident Prevention Plan will be initiated.

ZERO TOLERANCE POLICY

This project will not tolerate unsafe work practices. When an employee violates safety and health regulations, the Superintendent/ SSHO, his foreman or the Safety Specialist will carry out one or more of the following procedures.

Stop the employee and review the unsafe practice.

Stop the employee and the foreman and review the Activity Hazard Analysis (AHA).

Stop the entire crew, on the spot, and review the Activity Hazard Analysis (AHA).

Advise the employee that he/ she is dismissed from the project for the rest of the day.

Dismiss the employee from the project permanently.

Dismiss the foreman from the project permanently.

Any worker/ employee who fails to comply with a safety directive will be subject to disciplinary action resulting in termination from the project.

Should a subcontractor fail to clean up debris resulting from their scope of work and/or removes temporary safety construction fencing/ barriers and neglects to replace it when finished, a contractual back charge for the labor/ materials involved in having Coakley & Williams Construction Inc. and Blue Skye Construction remedy the situation will be issued. The Project Superintendent will consult with the Project Manager for authorization and coordination.

d. <u>Company Procedures for holding Managers and Supervisors accountable for Safety</u> Coakley & Williams Construction, Inc. Blue Skye Construction's Project Team are collectively responsible for the safety of their projects and they will be held accountable for the success of the project safety effort. Recurring safety problems on their projects will be subject to the supervisors to the same disciplinary procedures as any employee.

Each subcontractor and worker has a personal responsibility for his/ her own safety and the safety of their employees. Workers are responsible for understanding and following the safe methods to perform their assignments.

- 1. Recognize job hazards and take precautions to assure their personal safety and the safety of others.
- 2. Inform his/ her supervisor of hazards and help eliminate or minimize each hazard.
- 3. Actively participate and cooperate in the overall safety program.
- 4. Know and be aware of the Safety Emergency Action Plan.

Each subcontractor and supplier is expected to perform their work in compliance with OSHA, NFPA, NEC, State and Federal Safety Regulations and this Site-Specific Safety Plan.

Subcontractor's Superintendent and foreman are required to plan daily work activities so that they can be performed in a safe manner. Subcontractors must submit a competent person for work performed on site. Superintendents can be identified as the Competent and Qualified Person on the project for such activities as excavation and scaffolding.

Subcontractors must submit the qualifications of competent and qualified individuals before the start of work. In addition, subcontractor's supervisor will:

- 1. Provide safety orientation for all employees on the project and submit documentation the day orientation is performed. If the Safety Manager is on site he can perform all orientations for the foreman and employees.
- 2. Assist in the development of Daily Activity Hazard Analysis (AHA) for their operations.



- 3. Review Daily Activity Hazard Analysis (AHA) with employees prior to the start of work.
 - 4. Conduct daily safety inspections of their work area and submit weekly documentation.
 - 5. Provide and require the use of appropriate personal protective equipment.
 - 6. Conduct weekly Tool Box safety meetings and submit weekly documentation.
 - 7. Participate in the investigation of any accidents or incidents in which their employees are involved.
 - 8. Attend Preparatory Meetings before the phase of work begins.

6. Safety Education and Training

- a. <u>Safety Indoctrination</u> Requirement for New Hire
 - 1. Prior to each subcontractor's start of work on the project, the Safety Orientation will be reviewed with site supervisors.
 - The Superintendent will conduct a Safety Orientation for each employee before he/ she starts work on site. An executed Employee Safety Orientation form will be submitted daily as new employees are hired. (See Attachment D - Employee Safety Orientation)

b. Mandatory Training and Certifications

All subcontractors are required to submit to the Coakley & Williams Construction, Inc. and Blue Skye Construction's Project Team the following for documented training.

1. Crane Operators – Contractors shall submit evidence that each crane operator has completed a written or oral examination and a practical examination on the type of crane he/ she will be operating on site. Operators who are certified by the National Commission for the Certification of Crane Operators (NCCCO) will be deemed as meeting the requirements.

2. Powdered Actuated Fasteners – Contractors shall submit for each employee operating a Powdered Actuated Fastener evidence that a certified manufacturer's representative has trained the employee in the safe care and use of that fastener. This card MUST BE maintained by each person operating a powder activated tool and MUST BE surrendered for inspection upon the request of Coakley & Williams Construction, Inc. and Blue Skye Construction's Project Team.

3. Forklift Operators – Contractors shall submit certification of compliance with 1926.602(1)(VI)(6) for each Forklift Operator before he/ she begins work on site. The operator must maintain this certification card on his/ her person and MUST BE



surrendered for inspection upon the request of Coakley & Williams Construction, Inc.'s and Blue Skye Construction Project Team.

4. Asbestos and Lead Abatement – All personnel involved in Asbestos Control Work shall be trained in accordance with the United States Environmental Protection Agency (USEPA), Asbestos Hazard Emergency Response Act(AHERA) training criteria, whichever is more stringent. The contractor shall document the training by providing the following: dates of training, training entity, course outline, names of instructors, and qualifications of instructors. All personnel involved in lead paint removal, disposal and sampling shall be trained in accordance with 1926.62 and State & Federal regulations. Contractors shall submit a certificate for each employee, signed and dated by the approved training source, stating that the employee has received the required lead training. All subcontractors must submit appropriate state licensing if required.

5. Respiratory Protection – Subcontractor's whose workers must wear respiratory protection must show evidence of a respiratory protection program in compliance with CFR 1926.103. Contractors shall submit medical evaluations, fit testing results, and training documentation for each employee required to wear a respiratory.

6. Vehicle Operators- Contractors shall ensure that every person operating a motor vehicle shall possess, at all times while operating such a vehicle, a valid permit for the equipment being operated. 7b Operators Permit for all equipment 25 hp. or greater in the District of Columbia

7. Aerial Lift Operators- Contractors shall show evidence that every employee who operates an aerial lift (boom lift or scissors lift) has been trained in accordance with the applicable ANSI Standards. Apply fall protection measures as required by Federal, State, manufacturer, Coakley & Williams Construction Inc., and Blue Skye Construction.

8. Fall Protection- Any subcontractor involved in work above six (6) feet shall submit certification of training in compliance with CFR 1926.503 (b) for each employee required to use personal fall arrest systems on site. Establish a written Site-Specific Fall Protection Plan and Rescue Plan. CWC and Blue Skye Construction is 100% Fall Protection Best Practice

9. Excavation Competent Person Training – Contractor must submit the names of the competent person responsible for the daily operations and inspections of any excavation exceeding four (4) feet. Must comply with all the requirements of OSHA and the Coakley & Williams Construction Inc. and Blue Skye Construction Excavation Safety Plan.

10. Scaffold Erection Competent Training – Contractor must submit the name of the competent person responsible for the supervision of erecting and inspecting the scaffold. Must comply with all requirements of OSHA and the Coakley & Williams Construction Inc. and Blue Skye Construction Safety Plan.

11. CPR/ First Aid Training- Any subcontractor with two (2) or more workers on site working must submit the documentation of CPR/ First Aid Training for one (1) of the individuals on site.



12. Rigger Training – Any worker engaged in rigging for the purpose of lifting or hoisting material will be trained and certified to the level of rigging he/ she will participate in. This includes all suspended loads

c. Periodic Safety & Health Training

1. Tool Box Talks/ AHA Review – Each subcontractor is required to conduct a weekly tool box talks and submit to the Coakley & Williams Inc. and Blue Skye Construction Project Team. The topic will pertain to the scope of work that is to be accomplished by the crew or hazards associated with the project. This will include Hot/ Cold environmental hazards.

2. Re-Training - Any worker identified as not being competent in the scope of work being performed due to the failure to comply with this SSSP, and Federal and State requirements will be required to be re-trained upon notification by Coakley & Williams Construction, Inc and Blue Skye Construction.

d. <u>Emergency Response Training</u>

Project emergency response procedures will be emphasized during the "Employee Safety Orientation". **(See Attachment D – Employee Safety Orientation)** Incorporation of the Project Emergency Action Plan will be required to be implemented into the Emergency Response Plan.

A specific emergency response plan may need to be developed for the various phases of work. Each employee will be trained in the updated emergency response plan.

Emergency Response Plan will be established for the following phases or scopes of Work by the subcontractors performing this work.

- i. Fall Rescue Plan to be submitted by each subcontractor engaged in a fall hazard.
- ii. Scaffold Collapse Rescue to be submitted by each subcontractor engaged in scaffold work.
- iii. Water Intrusion Plan (See Section 10 Risk Management) Subcontractor must submit LOTO procedure for controlling HVAC, plumbing, sprinkler system
- iv. Spill Plan Any subcontractor handling or utilizing a hazardous material or liquid MUST submit.
- v. Fire Fighting Plan- MUST be submitted for any subcontractor engaged in a HOT WORK Procedure.
- vi. Confined Space Rescue- The Safety Management is responsible for identifying all confined space on the project, mark and secure the confined space



vii. Trench Collapse Rescue- The competent person for excavation must include an Emergency Rescue Plan should a collapse occur.

NOTE: All workers involved in operations requiring an ERP will review, practice, and walk through the procedure on a quarterly basis. An invitation is extended to all local authorities (Fire Department, Police) to visit the project site. All emergency numbers are posted in each trailer on the project.



7. Safety and Health Inspections

a. Inspections

Coakley & Williams Construction, Inc. and Blue Skye Construction has incorporated a safety inspection process that is conducted by the project team members and the safety department. The program is a technology based system known as Procore. This system provides the ability to notify and update the project team, subcontractors, and corporate management of site safety in real time.

The Project Superintendent/ Project Team is responsible to conduct, observe for any/all unsafe conditions, complete, and document safety inspection observations; a daily inspection form or document the inspection/findings in Procore, all observed unsafe conditions or acts will be immediately corrected and documented accordingly. A copy of the inspection log will be maintained on the jobsite and discussed with the subcontractors. Coakley & Williams Construction, Inc. and Blue Skye Construction will use Procore to document / track and maintain any open item. Procore will also serve as notification to the subcontractor management of any hazard categorized as high or critical.

Subcontractor(s) foreman will conduct safety inspections of their work areas. Their findings will be documented on the "safety Inspection Checklist". (See Attachment F-Inspection Checklist) The Inspection Checklist will be submitted to the Project Superintendent / Safety Manager.

During the weekly foremen coordination meeting Coakley & Williams Construction, Inc. and Blue Skye Construction will:

- 1. Review the inspection report.
- 2. Discuss how to remediate violations.
- 3. Recommend how to avoid future violations.
- 4. Discuss any uncertainties concerning safety issues.

It is expected that most hazards noted during the inspections will be abated immediately. The Project Superintendent will maintain a log of open items to ensure abatement of all hazards noted.

The Safety Director/ Safety Manager will conduct periodic inspections. He/ She will look at all aspects of construction safety. Coordinate with the Project Superintendent and subcontractors to abate any observed hazards or violations. Monitor daily inspections by subcontractors, for example cranes, scaffolds, excavations, and electrical inspections.



b. External Inspections / Certifications

Cranes

All cranes shall have an annual inspection performed by a Certified Crane Inspector and the operator log book. An inspection records, which includes the date of inspection, signature of the person performing the inspection, and the serial number or other identifier of the crane, shall be submitted prior to work. Certificate of Insurance naming Coakley & Williams Insurance Inc. as the additional insured A daily start up inspection must be completed. Operators certification & DOT Card, Annual Inspection, Lift plan & rigging plan, load chart must be submitted to the Safety Director for review 72 hours in advance of the lift date.

OSHA Inspections

Coakley & Williams Construction, Inc. and Blue Skye Construction has an open-door policy for safety and welcomes the assistance from any compliance officer or government official. When a compliance officer arrives on the jobsite and announces that they are on site for a compliance inspection, the following procedures must be followed:

- 1. Call the Safety Director **IMMEDIATELY**!
- 2. If an opening conference is to be conducted, all subcontractors should be notified to allow for their attendance.
- 3. Walk Through Inspection The Project Superintendent/ SSHO will accompany the compliance officer. A camera should be used to take pictures of everything the compliance officer photographs. Notes should be taken during each walk-through.
- 4. Immediate abatement of any violation noted by the compliance officer.
- 5. Closing conference will be held for all subcontractor representatives.

8. Accident Reporting / Crisis Management

a. <u>Exposure Data</u>

Man-hours worked for all Coakley & Williams Construction, Inc and subcontractor employees are tabulated as part of the Project Superintendent's daily report.

b. Accident / Incident Investigations / Reports / Logs

All accidents / incidents must be reported to the Project Team and Corporate Safety Director immediately. **(See Attachment J – Crisis Management)** Any accident involving Coakley & Williams Construction, Inc. employees, a subcontractor, members of the general public, and/or property/vehicle or damage to property must be reported, documented, and investigated. The Project Superintendent / SSHO will investigate accidents, initiate the accident investigation **(See Attachment H – Accident/ Incident Report Form)**, and acquire witness statements. The purpose of an accident investigation

is to obtain information through which recommendations for corrective action can be developed for the prevention of similar accidents.

All accident/ incident investigations shall be documented on the Accident/ Incident Report form and uploaded to Procore (See Attachment J-Crisis Management). The Project Superintendent should initiate investigation as soon as possible. Information documented shall include:

- 1. Name, address, and telephone numbers of the individual(s) having any level of information regarding the accident.
- 2. Exact date, time and location of the accident.
- 3. Name, address, and telephone numbers of any injured individual(s) as well as witnesses to the occurrence.
- 4. If any property damage (third party) occurred, provide the type of damages, description of the property and contact information of property owner.
- 5. If police involved, provide the name and contact information of the officer and the police report number.
- c. Immediate Notification of Major Accidents
 - 1. Coakley & Williams Construction, Inc. will notify the building owner immediately of any recordable injury or illness or significant accident/ incident.

The following require immediate accident notification!

- A fatal injury
- A permanent total disability
- A permanent partial disability
- The hospitalization of one or more people resulting from a single occurrence
- Property damage
- All employers are required to notify OSHA when an employee is killed on the job or suffers a work-related hospitalization, amputation, or loss of an eye.
- A fatality must be reported within 8 hours.
- An in-patient hospitalization, amputation, or eye loss must be reported within 24 hours.

9. Plans (Programs, Procedures) required by the Safety Manual

a. Layout Plans:

A site utilization plan will be submitted in conjunction with the APP to the Project Owner for approval. Emergency egress routes will be defined and posted throughout the project and construction trailers. All construction trailers set on the project will be anchored utilizing the anchor straps provided and attached to steel anchors in the ground, number of straps and anchors will be determined by the trailer leasing company and meet local



and state standards. Temporary power distribution will be defined as well as the temporary fencing around the project.

b. <u>Emergency Response Plans:</u>

b.1 Procedures and Test: A drill test of the emergency egress plan will be conducted within 90 days of the project start date and semi-annually. This test will include review of the plan, walking the egress routes, and incorporating the emergency egress alarm system to include review to assure that all workers have evacuated the building, head count performed and reported, all hot work and equipment shut down. Incorporating the local authorities into the drill will be implemented.

The following is the project specific Emergency Action Plan (See Attachment G-Emergency Evacuation Plan / Emergency Procedures). A map denoting the route to the nearest emergency care facility with emergency phone numbers will be posted on site. (See Attachment B- Emergency Route to Hospital). This map will be posted on site in conjunction with Attachment G- Emergency Evacuation Plan/ Emergency Procedures.

The Emergency Evacuation Plan / Emergency Action Plan and Emergency Procedures are to be posted in each project trailer and in selected areas of the site. A building egress plan / map is to be established and posted throughout the job site and updated as the building and/or the project progresses.

b.2 Spill Prevention Plan: The following procedure will be posted on site and reviewed with all workers during their Safety Orientation. All fuel/oil tanks more than twenty- five (25) gallons will be placed into a spill containment that is capable of containing 110% of the tanks liquid. This includes double wall tanks.

- 1. Treat any spill, leak, or vapors with caution when first encountered.
- 2. Notify workers in the immediate area of the situation. If the spill or leak is large enough or cannot be controlled, notify others of the need to evacuate the building by using one of the air horns positioned at the Superintendent's trailer or point of egress.
- 3. Call or have someone call 911. Assign a co- worker to meet the response team at the gate to direst them to the incident.
- 4. Seal off the area to ensure that other workers, employees, or visitors do not enter the affected area.
- 5. Notify the Project Superintendent of the situation.
- 6. If it can be done safety, contain the spill using appropriate materials to Keep it from spreading.
- 7. A spill containment kit will be maintained on the project and location depicted on the site utilization plan.

b.3 Fire Fighting Plan: Before the project building is enclosed, ABC rated, 10 lbs. fire extinguishers will be positioned at all hot work areas. After the building is enclosed, fire extinguishers will be positioned near exits and stairways with a travel distance of no more than seventy-five (75) feet in order to reach a fire extinguisher (common practice: one (1) ABC rated 10lbs. fire extinguisher for every 3000-sq.



ft.). Fire extinguishers will be inspected monthly and maintained records as required. Exit signs will be posted as necessary. The following procedure will be posted on site and reviewed with all workers at their Safety Orientation. Bi- Annual drills will be conducted after the first drill (which will be conducted approximately sixty (60) days into the project. Upon notification via voice and three (3) long blast of the air horn (to be posted near jobsite entrance). Air horn blast to continue as needed. The plans for evacuation will be modified and updated as the building progresses. Notify the local fire department to coordinate the evacuation and emergency plan.

- 1. Remove anyone in immediate danger to a safe area; warn others who are close to the fire.
- 2. Call or have someone call 911! Assign a co-worker to meet the fire Department at the security gate to direct them to the fire.
- 3. Use no more than three (3) fire extinguishers to extinguish the fire.
 - If this totally extinguishing the fire, wait for the fire department to arrive for further action.
 - If the fire is not extinguished, notify others of the need to evacuate the premises by using one of the air horns at the Superintendent's trailer or egress point.
- 4. Notify the Project Superintendent of the situation.
- 5. If you are not involved in removing anyone in immediate danger, calling in the alarm, or extinguishing the fire, EVACUATE to the designated area.
- 6. Report to your supervisor, who will be responsible for head count of ALL personnel. Do not return to your work area until you are authorized by the Superintendent to do so.
- 7. Return to work area ONLY after the Coakley & Williams Construction, Inc. and Blue Skye Construction Project Team announces that it is clear to do so.

b.4 Posting Emergency Numbers: The Emergency Action Plan with emergency contact numbers will be posted on the jobsite bulletin board, every subcontractor trailer and egress door of the building. (See Attachment G for Emergency Numbers, Actions, and Emergency Procedures).

b.5 Man Overboard/ Abandon Ship: Not Applicable

b.6 Medical Support: A fully equipped First Aid kit will be maintained in the Superintendent's office. The Project Superintendent is certified in First Aid and Adult CPR and Blood- Borne Pathogen Protection and will be available to provide First Aid minor injuries. Each subcontractor on site is required to submit for approval documentation of training for First Aid / CPR for one (1) of the workers on site before the start of work. For serious/ life threatening injuries, the 911 system will be implemented and employee(s) will be transported to the closest hospital determined by local authorities. For other injuries determined to be less than serious, the effected subcontractor's supervisor will determine where to send the employee.

c. <u>Prevention of Alcohol and Drug Abuse Plan</u>:

Coakley & Williams Construction, Inc. and Blue Skye Construction has formally implemented a substance abuse program. CWC and Blue Skye Construction conducts 100% pre-employment testing and quarterly random testing as permitted by law.

The possession, distribution, dispensation, manufacture, transfer, or use of a controlled substance and / or alcoholic beverages in the workplace is strictly prohibited; as it is consistent with our goal of operating safe, productive and quality projects. Accordingly, no employee, subcontractor or visitor shall use or have in his or her possession alcohol or illegal drugs. In order to enforce this policy, Coakley & Williams Construction, Inc. and Blue Skye Construction reserves the right to request persons subject to this policy to take a drug or alcohol test.

Coakley & Williams Construction, Inc. and Blue Skye Construction recognizes that drug and alcohol dependency are serious illnesses and we encourage all employees to see assistance for any such illness. Adherence to this policy is essential and therefore a condition of employment. Failure to follow the guidelines contained in this statement will result in appropriate disciplinary actions including termination of employment.

The purpose of the program is:

- 1. To protect all employees from the hazards associated with substance abuse.
- 2. To protect the property of the company, our clients, and the general public.
- 3. To protect the reputation of our company and our employees within the community and industry.
- 4. To comply with the specific contractual obligations of our clients and meet the requirements of Federal and State drug free laws.

Any worker taking prescribed narcotics MUST BE evaluated and cleared for duty by a physician.

d. <u>Site Sanitation Plan:</u>

General Requirements- Each subcontractor is required to maintain a clean and healthy work site for their employees. Coakley & Williams Construction Inc. Blue Skye Construction will oversee that each subcontractor meets these requirements.

Housekeeping- Each subcontractor will be required to remove all debris and trash during the days of operation or as directed by the Coakley & Williams Construction, Inc. and Blue Skye Construction's Project Team. Any failure to clean will result in Coakley & Williams Construction Inc. and Blue Skye Construction to clean in behalf of the subcontractor and apply a back charge per contract. Further, if any worker fails to comply with this sanitation plan, he/she is subject to disciplinary action as described in the APP.

Drinking Water- Drinking water is to be provided in sanitized containers by EACH subcontractor. Subcontractors with five (5) or less workers on site may require their employees to bring fresh drinking water in individual containers.

Non- Portable Water- All water faucets, hose bibs, water fountains when installed must be marked with a sign "**Non-Potable Water**". Until the system has been chlorinated and tested.

Toilets- Portable toilets will be provided on the project site, the number of toilets to employee ratio will exceed table 2-1, Section 02. EM 385-11 as the number of personnel increase so will the number of facilities. The portable toilets will be individual, self-locking and sanitized and emptied two (2) times a week.

Washing Facilities- Hand sanitizer will be available where a hand washing facility is not available.

Waste Disposal- Trash cans are NOT provided for the project, trash and debris is to be removed immediately to the dumpsters that are provided by Coakley & Williams Construction, Inc. and Blue Skye Construction. Any subcontractor providing trash containers on the project site MUST meet the requirements that trash and debris is to be emptied daily. CWC and Blue Skye Construction will provide dumpsters as required.

Vermin Control- During enclosure of the building, the Superintendent will monitor for vermin infestation. Any observation of vermin infestation, CWC and Blue Skye Construction will implement a control measure to remediate the vermin by utilizing a licensed pest control company.

e. <u>Access and Haul Road Plan</u>:

Job site access and haul road will be on Lincoln Road. Should other points of access be required, an Access and Haul Road Plan, as well as a Traffic Control Plan will be developed. Provisions will be included to prevent the accumulation of mud and dirt on adjacent roadways. Any and all changes to the project site layout or utilization plan will be submitted to the Contracting Officer for approval.

f. <u>Respiratory Protection Program</u>:

Coakley & Williams Construction, Inc. and Blue Skye Construction personnel will not be involved in any phase of work that requires respiratory protection. Through the daily Activity Hazard Analysis (AHA) the Coakley & Williams Construction, Inc. and Blue Skye Construction subcontractor(s) will determine when to incorporate a Respiratory Protection Plan when occupational exposure levels exceed OSHA PEL's or TLV's and engineering controls such as wet sanding concrete or wet cutting block is not acceptable, then the subcontractor will submit a Respiratory Protection Plan for the project. Workers using any chemical that requires wearing a respirator will follow the same guidelines as required to submit their Respiratory Protection Program.

The Respiratory Protection Plan must meet the guidelines in CFR 1926 EM 385-1-1, Section 05.G and will be submitted to the Superintendent/ SSHO will review and approve



the plan prior to submittal to the Safety Director for approval. No work requiring the use of respiratory protection will commence until the Respiratory Protection Plan is approved.

g. <u>Health Hazard Control Program</u>:

The anticipated potential health hazards posed by asbestos, lead, mercury, and PCB abatement activities is anticipated on this project. Employees' exposure to other health hazards will be controlled through the administration of the project's Hazard Communications Program. When exposures above the AGGIH Threshold Limit Values (TLVs) occur, personal sampling by an Industrial Hygienist, a plan incorporated and approved by the Safety Director and remedial efforts will be required before work is allowed to continue.

h. <u>Hazard Communications Program /Global Harmonization System (GHS)</u>:

In order to comply with the GHS, the following written Hazard Communication Program has been established for Coakley & Williams Construction, Inc. and Blue Skye Construction.

Note: All hazardous materials must be submitted for approval prior to being brought onto the jobsite or prior to any other use in connection with this contract. The use of any/all hazardous material must be covered in a pre-construction meeting and specified on the definable feature of work Activity Hazard Analysis (AHA) document.

- a. Each subcontractor will submit a chemical list to the Project Superintendent
- 1. Define how the chemical is to be used on the project.
- 2. For the purpose of emergency response, the Project Superintendent will maintain the approximate quantities that will be on site at any given time.
- 3. A site map will be attached to the inventory list showing the location of the material and maintained by the Project Superintendent.
- 4. The Project Superintendent will update the list as necessary.
- b. Container Labeling

The Project Superintendent will verify that all containers received for use will:

- 1. Be clearly labeled as to the contents in the containers.
- 2. Note the approximate hazard warning.
- 3. List the name and address of the manufacturer.
- 4. Keep a current inventory list of toxic agents on site.

The Project Superintendent for the project will ensure that all secondary containers are labeled with either an extra copy of the original manufacturer's label or with the generic label, which have a block for identity and blocks for the hazard warning.

The Safety Committee will review the company labeling system every year and update as required.



c. Global Harmonization System (GHS) Safety Data Sheets (SDS) and Chemical Information Lists

The Project Superintendent will be responsible for maintaining the Chemical Information List and data sheet system for the company. Subcontractor SDS, will be reviewed by the Project Superintendent prior to the use of on the project. In addition, the Project Superintendent will review all new hazardous chemicals/ materials brought onto the site and forward a copy of the SDS to any other Subcontractor, if requested.

- 1. The Project Superintendent will review incoming data sheets and Chemical Information Lists for new and significant health/ safety information.
- 2. SDS will be incorporated into the Activity Hazard Analysis (AHA).
- 3. The information for use and storage will be followed in accordance with the SDS and documented in the Activity Hazard Analysis (AHA).
- d. Employee Training and Information

Prior to starting work, each new employee of Coakley & Williams and Blue Skye Construction will attend a Health/ Safety Orientation and will receive information and training on the following:

- 1. An overview of the requirements contained in the Hazard Communications Requirements Standard Overview.
- 2. Chemicals present in their workplace operation.
- 3. Location and availability of our written hazard program.
- 4. Physical and health effects of the hazardous chemicals.
- 5. Methods and observation techniques used to determine the presence or release of hazardous chemicals in the work area.
- 6. How to lessen or prevent exposure to these hazardous chemicals through use of controls, work practices and personal protective equipment.
- 7. Steps the company has taken to lessen or prevent exposure to these chemicals.
- 8. Emergency procedures to follow if they are exposed to these chemicals.
- 9. How to read labels and review SDS's and obtain appropriate hazard information.
- 10. Location of the SDS file and location of the hazardous chemical list.

After attending the training class, each employee will sign a form to confirm that he/ she attended the training, received our written materials and understands the company policies on Global Harmonization System.

Prior to a new chemical hazard being introduced into an employee's scope of work, that employee will be given information as outlined above. The Project Superintendent and subcontractor competent person is responsible for ensuring that an SDS on the new chemical(s) are received and reviewed. Additional information on each noted chemical can be obtained by reviewing Safety Data Sheets (SDS) located in the office and on our various projects.



e. Hazardous Non- Routine Tasks

Periodically, employees are required to perform hazardous non-routine tasks. Prior to the start of hazardous non-routine task work on the project site, each affected employee will be given information by their supervisor about hazardous chemicals to which they may be exposed during such activity.

This information will include:

- 1. Specific chemical hazards.
- 2. Protection/ safety measures that employees should exercise.
- 3. Measures the company has taken to lessen the hazards including ventilation, respirators, presence of another employee and emergency procedures.
- f. Informing Subcontractors

It is the responsibility of the Project Superintendent to provide subcontractors and employees with access to the following information:

- 1. Hazardous chemicals to which they may be exposed to while on the project site.
- 2. Precautions the employees may take to lessen the possibility of exposure by usage of appropriate protective measures.

Designate a common location in the project site office for Chemical Information Lists and SDS. Must obtain lists and SDS from all subcontractors prior to the start of their work.

The Chemical Information Lists and SDS must be made available to all employees and subcontractors on the project site.

- i. <u>Process Safety Management Plan</u>: Plan will be implemented by the contracted subcontractor prior to commencing and submitted for review & approval from Safety Director.
- j. <u>Lead Abatement</u>: Plan will be implemented by the contracted subcontractor prior to commencing and submitted for review & approval from Safety Director.
- k. <u>Asbestos Abatement</u>: Plan will be implemented by the contracted subcontractor prior to commencing and submitted for review & approval from Safety Director.
- I. <u>Radiation Safety Program</u> (RSP): **Not Anticipated on this project** The project site will be surveyed for the requirement of implementing a RSP, this include cell communications system, radar systems. CWC and Blue Skye Construction will contract a third party RSP Consultant to provide training and guidance to avoid potential of exposure.
- m. <u>Abrasive Blasting</u>: Not anticipated on this project

Blasting and respiratory protection plan must be submitted by our subcontractor and approved by Safety Director prior to the commencement of any sand blasting.

n. <u>Heat/Cold Stress Monitoring Program</u>:

The Project Superintendent will monitor the weather daily. Inclement weather will be managed in the following:

- 1. Cold Weather All foremen will be trained and deemed competent to Identify the effects of cold weather injuries, from mild to severe frostbite, to hypothermia and the treatments required. All workers are encouraged to dress accordingly to the weather predicted.
- 2. Temperature Monitoring

a. Fifteen (15) degrees- frostbite could occur in less than five (5) minutes. All exposed body parts are to be covered, by gloves, face mask, dress in layers. Do not touch metal with bare hands. Implement a work schedule to allow for warm up. Clear all ice from work areas. Air temperature and wind chill factor will be monitored every hour.

b. Twenty (20) degrees- frostbite could occur in less than twenty (20) minutes. Again, practice safe work habits by dressing accordingly. Do not touch metal with bare hands. Implement work schedule to allow for warm up. Clear all ice from work areas. Air temperature and wind chill will be monitored every two (2) hours.

c. Thirty (30) degrees- frostbite could occur in less than sixty (60) minutes. Again, practice safe work habits by dressing accordingly, do not touch metal tools with bare hands. Implement a work schedule to allow for warm up. Air temperatures and wind chill be monitored every two (2) hours.

3. Hot Weather Injuries- All foremen will be deemed training and competent in the recognition of heat related injuries. Manage water intake and rest periods as needed. Know the signs/ symptoms and treatment for heat exhaustion, heat cramps, and heat stroke. Heat stroke is a medical emergency.

a. Eighty (80) degrees- Heat related injuries can occur at any temperature. Safe work practices including loose, light colored clothing. Drink plenty of water, proper diet and monitor the temperature.

o. <u>Respirable Crystalline Silica Plan</u>:

Exposure to respirable crystalline silica can cause silicosis, lung cancer, other respiratory diseases, and kidney disease. Exposure can occur during common construction tasks such as using grinders, drills masonry saws, jackhammers and handheld powered chipping tools; operating vehicle-mounted drilling rigs; milling; operating crushing machines; and using heavy equipment for demolition or certain other tasks.

Personnel exposures must be limited to a permissible exposure limit (PEL) of 50 micrograms of respirable crystalline silica per cubic meter of air, averaged over an 8-hour day.

Regardless of exposure control method used, the following measures must be followed:

Establish and implement a written exposure control plan that identifies tasks that involve exposure and methods used to protect workers, including



procedures to restrict access to work areas where high exposures may occur.

- Designate a competent person to implement the written exposure control plan
- Restrict housekeeping practices that expose workers to silica where feasible alternatives are available.
- Offer medical exams including chest X-rays and lung function test every three years for workers who are required by the standard to wear a respirator for 30 or more days per year.
- Train workers on work operations that result in silica exposure and ways to limit exposure
- Keep records of workers' silica exposure and medical exams

Table 1 (See Attachment M – Crystalline Silica Control Measures) matches common construction tasks with dust control methods, so employers know exactly what they need to do to limit worker exposures to silica. The dust control measures listed in the table include methods known to be effective, like using water to keep dust from getting airborne or using ventilation to capture dust. In some operations, respirators may also be needed.

p. <u>Night Operations Lighting Plan</u>:

If required, a night site lighting plan will be coordinated to provide and meet the requirements OSHA for lighting on a construction site.

q. <u>Fire Prevention Plan</u>:

It is anticipated that welding, soldering, cutting and grinding will be conducted on this project. In conjunction with the Site Utilization Plan, fire protection will be accomplished by several means.

The following Coakley & Williams Construction, Inc. and Blue Skye Construction's Hot Work Permit must be adhered to. Good housekeeping and proper storage of combustibles is one of the best methods in which to reduce the risk of fire.

- 1. All fuel storage areas will be properly marked with placards and a fire extinguisher present (Must be depicted in the Site Utilization Plan).
- 2. All oxygen and acetylene bottles will not be stored together unless for the day's use.
- 3. All compressed cylinders must be properly stored and secured in the upright position.
- 4. No storage of flammable liquids in the building, i.e. gas, diesel, and propane.
- 5. Proper access for the fire trucks to get to the building.
- 6. Smoking will not be permitted on this project except in designated areas.

To prevent accidental ignition of stored materials or property, any and all work that produces a spark and/ or open flame will require a Hot Work Permit on a daily basis. This will include welding, cutting, fluxing, grinding or any other method that produces a spark and/ or open flame.

Kettle operations will be monitored at all times and will require two (2) 20 lbs. fire extinguishers, the area must be blocked off, and kettle equipment positioned no closer than twenty-five (25) feet from the building. Personal protective equipment (PPE) that is required for these operations are face shields, long sleeve shirts, long pants, and appropriate length gloves when operating kettle. The operator will act as the fire watch and must remain with the kettle during operations. No kettle is to be left burning while unattended. Operating temperatures will be monitored and documented on an hourly basis of the permit by a Coakley & Williams Construction, Inc./Blue Skye Construction staff member.

To obtain a Hot Work Permit, YOU MUST:

- 1. Develop a Daily Activity Hazard Analysis (AHA) specifically for the work being conducted. The AHA must be explained in full to the Hot Work supervisor. The subcontractor must provide and have in place, all fire preventative equipment to conduct Hot Work operations.
- 2. Develop Hot Work Procedures- for the work that will consist of the following:
 - a. Competent Person- the subcontractor must provide a "Competent Person" to conduct all operations including Hot Work.
 A competent person is defined as one who fully comprehends the work operations to be conducted and the knowledge required to conduct fire watch duties.
 - b. Identify type of spark/ flame producing equipment- Torch, welder gas, or electric powered chop saw.
 - c. Location- Area where the Hot Work is being performed.
- 3. Work Area Evaluation- Area of Hot Work will be inspected by the subcontractor's competent person, the Hot Work operator / fire watch and the Hot Work supervisor and/or Superintendent/ SSHO.
 - a. Special Precautions Determine if there are any combustibles within ten (10) feet of the work area and are unable to be relocated.
 - b. Welding blanket(s) must be used to completely cover material or move Hot Work to another location.
 - 1. Is a Welding Shield required?
 - 2. Is it a confined space?



- c. Combustibles Removal determine additional fire prevention measures to be taken relating to the amount of loose debris, combustible material, and potential fire spread.
- d. Assure a minimum of one (1) ten-pound ABC Extinguisher is positioned in the Hot Work area.
- e. The person designated as the "Fire Watch" will within visual sight of the hot work operation. Not to exceed 75 feet.
- f. Perform testing for lower explosive limit (LEL) when in presence of confined spaces; near combustibles, gases, vapors, or when conditions warrant.
- Note: If no combustible/flammable material is within thirty (30) feet, no high winds, and/ or the Hot Work is isolated to a small area with no spark or flame the Hot Work operations person can also be the Fire Watch. This must be approved by the Project Superintendent/ SSHO or Safety Director / Safety Manager.
- 4. Hot Work Operating Times- The time of Hot Work Operations must be documented and will include; start time, break time, lunch time, and completion time.

Lunch or Breaks-For Hot Work suspension during lunch or break time the fire watch must remain in place unless all requirements for final area inspection have been met. A new Hot Work Permit must then be issued for any continued work. the spark or flame producing tool will be secured and/ or lockout to prevent workers from using. Prior to the Hot Work crew resuming work, the Hot Work supervisor must be notified.

- a. Start Time Document the time Hot Work Permit and Hot Work Permit issued.
- b. Completed Time- All areas where Hot Work was performed shall be monitored for no less than sixty (60) minutes after Hot Work is completed.
- 5. Final Area Inspection- The work area will be inspected by the subcontractor's competent person, the fire watch and the Hot Work Permit supervisor/ Project Superintendent/ SSHO.

Hot Work Permit Close-Out Time- Once the Hot Work Permit is closed out, a new Hot Work Permit must be issued.

Failure to comply with this Hot Work directive will result in immediate termination from the project.

r. <u>Wild Land Fire Management Plan:</u>



Is not anticipated on this project. However, should there be any grass areas within fifty (50) feet of Hot Work Operations; the grass area will be thoroughly saturated with water to prevent a brush fire.

s. <u>Hazardous Energy Control Plan (LOTO)</u>:

Reminder! LOTO is NOT limited to electric only!

To be submitted by the Electrical, mechanical, plumber, sprinkler and elevator Subcontractor to Coakley & Williams Construction, Inc. and Blue Skye Construction for approval and submitted to the Safety Director/Manager. Before any employee or subcontractor performs any servicing or maintenance on a system where the unexpected energizing, start up or release of kinetic energy could occur and cause injury or damage, it is the responsibility of the Coakley & Williams Construction, Inc. and Blue Skye Construction management to incorporate a lockout/ tagout procedure that will meet the requirements of OSHA 1926.417 or EM 385-1-1, Section 12. Personnel and resources shall not be considered protected until hazardous energy control procedures have been implemented. Review and documentation between all responsible parties will be established.

1. Systems with energy isolating devices that are capable of being locked out shall use locking devices to control the hazardous energy.

2. If an energy isolating device is not capable of being locked out. The hazardous energy control procedure will use tagout, providing full personal protection is met through no exposure or personal protection equipment as prescribed by the National Electrical Code. All electrical work will be performed in accordance with 29 CFR 1910.147. Energized work should never be performed without prior authorization. If it is determined that equipment must be worked on in an energized condition, an energized work permit must be submitted for acceptance. All energized work will be conducted in accordance with NFPA 70E. Permits must be prepared in advance. The electrical hot work plan provides a detailed description.

3. Hazardous Energy Control Plan and Procedures will be developed and shall clearly and specifically outline the following:

4. Scope, purpose, authorization, rules and techniques to be used for the control of the hazardous energy.

5. Means of coordinating and communicating hazardous energy control activities.

6. Training to ensure that the purpose and function of the hazardous energy control procedures are understood by employees and that employees possess the knowledge and skills required for the safe application, usage and removal of energy controls.

7. Periodic/daily inspections shall be conducted to ensure that all the requirements of the hazardous energy control procedures are being followed.

8. Lockout/Tagout Devices shall be capable of withstanding the environment that they are exposed to for the maximum period of time the exposure is expected.

Shall be substantial enough to withstand or prevent normal removal by hand without the use of excessive force such as that from bolt cutters.

9. Applying and Removal of lockout/ tagout devices shall be coordinated and attached in such a manner that each device being used to control the energy cannot be removed until the individual has accomplished all procedures and testing required before the removal and that all employees working in or near the isolated energy are free from the hazard.

10. Disciplinary Control: Any worker found to remove or tamper with any isolated piece of equipment and is not specifically identified in the lockout/ tagout procedure for this project will be terminated immediately. All workers engaged in working in or around the controlled energy will be stopped immediately until which time an inspection of the lockout/ tagout for that energy has been accomplished to ensure that the energy control is still accomplished.

11. Communication between any/all workers in or near the energy to be isolated needs to be incorporated fully to the project.

12. Safety Review by the Coakley & Williams Construction, Inc. and Blue Skye Construction Safety Team must be incorporated into the lockout/ tagout program before any phase of work begins.

t. <u>Critical Lift Plan</u>:

Notify and submit the lift plan to the Safety Director 3 days in advance for review and approval.

A critical lift is a non-routine crane lift requiring detailed planning and additional or unusual safety requirements and a well-planned Activity Hazard Analysis (AHA). Critical lifts include, but not limited to:

1. Lifts made when the load weight is 75% or greater of the rated capacity of the crane.

2. Lifts requiring loads to be lifted, swung, or place out of the operator's view.

3. Lifts made with more than one (1) working crane.

4. Lifts involving non-routine or technically difficult rigging arrangements.

5. Hoisted personnel with a crane or derrick.

6. Lifts in which the Owner, a crane operator, SSHO or Safety Manager believes should be considered critical.

Before making a critical lift, a Critical Plan shall be prepared by the crane operator, lift supervisor, rigger, and the Project Superintendent/ SSHO.

The plan shall be documented and a copy provided to the Project Superintendent / SSHO and Safety Manager for approval. The plan shall be reviewed and signed by the personnel involved with the lift.


Standard Lift Plan-Note: A minimum of 72 hours advance notice must be furnished to the Coakley & Williams Construction, Inc. and Blue Skye Construction Safety Team for all cranes arriving on site. Certifications for the crane and the operator must be submitted to the Project Superintendent/ SSHO. Notify the Coakley & Williams Construction, Inc. and Blue Skye Construction Safety Team to coordinate required inspection.

These requirements also pertain to critical lifts

Crane documentation required upon arrival:

- 1. Operating Manual and Load Chart
- 2. Log Book (record of operating hours, inspections, tests, maintenance, and repair)
- 3. Annual Inspection. Periodic inspection form completed by Supervisor
- 4. Load Performance Test within the past year
- 5. Operators qualifications (i.e. NCCCO or statement of qualifications)
- 6. Activity Hazard Analysis

Functional equipment required by contract:

- 1. Boom Angle Indicator
- 2. Anti-Two Block Device
- 3. Load indicating device or load moment indicator
- 4. FAA airport flag during daylight and/or warning light when boom cannot be lowered, when visibility is poor. FAA Permit is required.
- 5. Barrier protection at outriggers
- 6. Notify Contracting Officer and Airfield Operations

On site preparation required:

- 1. Document review by the Project Superintendent/ SSHO.
- 2. Periodic inspection completed by the operator with the Project Superintendent/ SSHO.
- 3. Rigging inspection completed by the operator with the Project Superintendent/ SSHO, all chokers must have certification flags.
- 4. Start-up inspection completed by the operator.
- 5. Complete re-inspection by supervisor, operator, Project Superintendent/ SSHO is required anytime the changes or modifications are made to the crane.



u. <u>Severe Weather Plan</u>:

As a standard work practice, loose debris will not be left unattended on the project site. The Project Superintendent/ SSHO will monitor local radio stations for the weather conditions. In the event of potential severe weather, the following precautions will be exercised:

- 1. The Project Superintendent/ SSHO will advise each craft foreman of the potential severe weather and remind them of the need to secure any loose materials or debris that could become airborne.
- 2. All window and/ or roof openings that could allow work area to become exposed must be closed to as great a degree as possible.
- 3. If lightning approaches work for the crane, scaffold, and aerial lift work will stop immediately. Booms will be lowered to the ground, whenever possible. Employees will be moved to a safe area inside a building.
- 4. Report any/all damages to the Director of Corporate Risk and/ or the Safety Director. Follow remediation procedures for water intrusion.
- 5. Snow and ice conditions must be evaluated for hazards and removed as necessary.
- v. <u>Float Plan</u>: Not Applicable
- w. Fall Hazard Protection and Prevention Program:

All subcontractors shall establish a site-specific fall protection and prevention program, for the protection of all employees exposed to fall hazards. The program shall include company policy, identify responsibilities, education and training requirements, fall hazard identification, prevention and control measures, inspection, storage, care and maintenance of fall protection equipment and rescue and evacuation procedures in accordance with 29 CFR 1926 Subpart M and ANSI/ ASSE Z359.3, and ANSI/ ASSE Z359.4 and ANSI A10.32.

Following is a list of anticipated fall hazards for this project and the fall protection and prevention methods to be implemented. Any worker required to wear/ implement fall arrest protection must submit their site-specific fall protection and rescue plan.

- 1. Training All employees using personal fall arrest systems shall be trained in the safe use, care of, and inspection of their equipment. Subcontractors shall provide documentation certifying that training has been conducted.
- 2. Excavations All excavations will be protected by barricade fencing when left unattended. Excavations 6' or deeper and are not easily seen will be covered or protected by a guardrail system or barricade fencing. Inspected IAW Coakley & Williams Construction, Inc. and Blue Skye Construction Excavation Best Practice Plan. All excavations must be protected IAW, Corp. of Engineers Health and Safety Manual, EM 385-1-1.
- 3. Scaffolds All scaffolds will be fully planked, provided with guardrail systems; which include top rail, mid rail, and toe board. Safe access will also be provided. Inspected Coakley & Williams Construction, Inc. and Blue Skye Construction Best Practice Plan.
- 4. Steel Erection Steel erection shall be performed in compliance with OSHA 1926 Subpart R, EM 385-1-1. Submit a steel erection plan, fall protection



plan (100% Fall Protection above 6ft.).

- 5. Roofing Work Fall protection controls shall be implemented based on the type of roof being constructed and work being performed. The roof area to be accessed shall be evaluated for its structural integrity including weight-bearing capabilities for the projected loading. A safety monitoring system by itself is not adequate fall protection and is not authorized. Work on steep- sloped roofs require a personal fall arrest system, guardrails with toe boards or safety nets. These requirements also include residential or housing type construction.
- 6. Aerial Lifts All workers must be trained to operate equipment. All workers in boom-supported aerial lifts shall wear full body harness, lanyards, and will tie off to manufacture provided anchorages.
- 7. Scissors Lift All workers must be trained to operate equipment. All workers must apply fall protection required by the manufacturer, Corp. of Engineers Health and Safety Manual EM-385-1-1, or site-specific safety plan.
- 8. Floor/ Wall Openings All floor openings will be covered, secured and labeled or protected with guardrail systems. This includes window openings that do not meet the 42" +/- 3 inches in height.
- 9. Rescue In the event of a fall in a body harness, self-rescue will be the first option. If self-rescue is not possible, rescue will be performed by site personnel using available aerial lifts. In the event that a lift is not available, a site-specific rescue plan must be submitted with subcontractors fall protection plan. The fire department will also be contacted immediately.

x. <u>Demolition Plan</u>:

A comprehensive engineering survey will be conducted prior to the start of any demolition Plan. Plan will be submitted and reviewed by Safety director. Plan will Include review of all structural, mechanical, electrical for requirement of

reinforcement of a load bearing structure, lockout/tagout of any electrical, mechanical or energized system(s). Bracing plan must be engineered to support any load bearing structure to be demo' d.

y. <u>Excavation / Trenching Plan</u>:

At a minimum, the following procedures must be followed when excavating on the project site.

- 1. Utility Locations- Prior to digging, the appropriate digging permit must be obtained, **(See Attached J Best Practices)** along with any existing or as built drawing. All underground utilities in the work area must be positivity identified by a private utility locating service in addition to any station locating service and coordinated with the station utility department. Any markings made during the utility investigation must be maintained throughout the contract. Locate utilities in accordance with Section 01 14 00.05 Work Restrictions for Design Build.
- Utility Location Verification The contractor must physically verify underground utility locations by hand digging using wood or fiberglass handled tools when any adjacent construction work is expected to come within three (3) feet of the underground system. Digging within 0.061m (2 ft.) of a known utility must not be performed by means of mechanical



equipment; hand digging shall be used. If construction is parallel to an existing utility, the utility shall be exposed by hand digging every 30.5m (100 ft.) if parallel within 1.5m (5 ft.) of the excavation.

- 3. Utilities Within Concrete Slabs Utilities located within concrete slabs or pier structures, bridges, and the like, are extremely difficult to identify due to the reinforcing steel used in the construction of these structures. Whenever contract work involves concrete chipping, saw cutting, or core drilling, the utility location must be coordinated with the station utility department in addition to a private locating service. Outages to isolate utility systems shall be used in circumstances where utilities are unable to be positivity identified. The use of historical drawings does not alleviate the contractor from meeting this requirement.
- 4. The competent person shall be on site when work is being performed in the excavation and shall inspect the excavation daily, submit a copy of the report to the Project Superintendent/ SSHO.
- 5. The use of trench and shoring systems must be identified in the Daily Activity Hazard Analysis (AHA).
- 6. Hand rails must be positioned around the perimeter of all excavations Greater than six (6) feet deep that impose a potential fall hazard.
- 7. Safe access to the excavation must be provided in accordance with the OSHA standards.
- 8. Air monitoring conducted if the potential for change in atmospheric conditions.
- 9. Any excavation exceeding twenty (20) feet (includes spoil pile) must be of engineer design.
- z. <u>Emergency Rescue</u> (tunneling): Not Anticipated on this project
- aa. Post Tensioning Plan: Not Anticipated on this project
- bb. <u>Underground Compressed Air Plan</u>: Not Anticipated on this project
- cc. <u>Formwork and Shoring Erection/ Removal</u>: to be submitted by subcontractor(s)
- dd. Precast Concrete Plan: Not Anticipated on this project
- ee. Lift Slab Plan: Not Anticipated on this project
- ff. <u>Steel Erection Plan</u>: to be submitted by subcontractor(s)
- gg. Blasting Safety Plan: Not Anticipated on this project
- hh. <u>Diving Plan</u>: Not Anticipated on this project
- ii. Confined Space Program/Procedures:

No confined space is anticipated for this project. A confined space is a tank, vessel, silo, vault, pit, open tank, trench or excavation more than four (4) feet deep with the potential for change in atmospheric conditions, or any other enclosed space that is not designed



for continuous employee occupancy. Coakley & Williams Inc. and Blue Skye Construction Safety will conduct ongoing inspections of the project to identify and post signage of any confined space. In addition to the requirements of Section 06. I of USACE EM 385-1-1, OSHA 29 CFR 1926.1200 and OSHA 29 CFR 1926.21 (b) (6) the subcontractor shall comply with the following. Any potential for a hazard in the confined space requires a permit system to be used.

- 1. Entry procedures prohibit entry into a confined space by personnel for any reason including Hot Work until the qualified person has conducted appropriate tests to ensure the confined or enclosed space is safe for the work intended and that all potential hazards are controlled or eliminated and documented. See Section 06.I.06 of USACE EM 385-1-1 for entry procedures. All hazards pertaining to the space shall be reviewed with each employee during review of the Activity Hazard Analysis (AHA).
- 2. Forced air ventilation is required for all confined space entry operations and the minimum air exchange requirements must be maintained to ensure exposure to any hazardous atmosphere is kept below its action level.
- 3. Sewer wet walls require continuous atmosphere monitoring with audible alarm for toxic gas detection.

There are two (2) classifications of confined space.

- 1. Non-Permit Required
- 2. Permit Required

All confined spaces will be treated as Permit Required until they are certified as Non-Permit Required.

1. Non-Permit Required

Confined spaces may be entered without the need for a written permit or attendant provided that:

- 1. The space can be maintained in a safe condition for entry by mechanical ventilation alone.
- 2. The space is not subject to the accumulation of toxic or combustible agents.
- 3. The space does not contain actual or potential health or safety hazards.

Before a non-permit confined space may be entered a qualified employee must ensure the following:

- 1. Any lines carrying harmful agents to the space are disconnected or blocked.
- 2. Any mechanical device or electrical service which may endanger or cause a hazard is locked out.
- 3. Pressurized systems shall be vented/drained.
- 4. Survey the surrounding area for potential hazards such as drifting vapors from the tanks, piping, or sewers.
- 5. The space is adequately ventilated.



Only qualified employees are permitted to make the above determination or enter the confined spaces.

2. Permit Required Confined Space: (See Attachment – J Best Practices)

Any subcontractor required to perform in any confined space work must submit a copy of their confined space entry plan accompanied with the Activity Hazard Analysis (AHA) having all activities documented for review by CWC and Blue Skye Construction's Safety Department. This plan must be submitted prior to work being performed in a confined space. The plan must include, at a minimum, the qualifications of the entry supervisor, provisions for atmospheric monitoring, plans for retrieval and rescue of entrants, and training documentation for all employees.

Coakley & Williams Construction, Inc. and Blue Skye Construction employees are NOT allowed to enter a permit required confined space.

kk. <u>Heavy/ Motorize Equipment Operations:</u>

In conjunction to being Licensed, trained or competent operator,

- 1. Each subcontractor must insure that every heavy equipment operator is deemed trained & competent, copies of Licensing, training must be submitted to CWC and Blue Skye Construction.
- 2. Must incorporate the make, model, size, daily inspection of equipment into their Daily AHA
- 3. Conduct a daily inspection as required by the manufacturer guidelines, make necessary repairs or replace defective equipment. Any hydraulic leak that impedes with operation, braking, lifting or stopping will be considered a deficiency which requires immediate attention and the unit placed/ tagged OUT OF SERVICE, until repaired.
- 4. Any defect to equipment deemed unsafe by the manufacturer, operator, CWC and Blue Skye Construction will place/tag OUT OF SERVICE, until repaired.
- 5. Parked or not used equipment with an oil leak must be provided a drip pan.
- 6. No heavy equipment will be left unattended while running.
- 7. Use of Parking Brakes or chuck block is mandatory when not in use.

10. Risk Management Process

General Information

Prior to any/all subcontractors starting work on site, the following is required:

A. <u>Activity Hazard Analysis (AHA)</u>

All definable features of work (DFOW) require a comprehensive AHA. The review process requires that the AHA be submitted to the CWC and Blue Skye Construction Project Team



two (2) weeks in advance of any/all work starting and the document be reviewed in full by the Project Superintendent/ SSHO at the scheduled project pre-construction and daily safety briefing meeting. The Activity Hazard Analysis (AHA) can be found in the contents of Attachment I – Best Practices. At the minimum, AHA's will be developed for but not limited to the following definable features of work and submitted to Safety Manager for approval.

Definable Features of work identified for this project; but not limited to:

- a. Excavations/ Shoring and Sloping/ Egress
- b. Clearing and Grubbing
- c. All work creating a fall exposure greater than six (6) feet
- d. Steel Erection/Precast concrete
- e. Roofing repair/ installation
- f. Scaffold erection
- g. Cranes/ critical lifts
- h. All work requiring lock-out/ tag-outs
- i. Hot Work, welding, burning
- j. Elevator installation
- k. Drywall installation, painting, sealing, caulking, and insulation
- I. Mechanical, electrical, and plumbing
- m. Masonry, curtain walls, and glass installation/ removal

Items to identify:

The Daily AHA is a comprehensive document that must be completed with at least but not limited to the following:

- a. Principal steps being performed
- b. Potential safety and health hazards
- c. Recommended control
- d. Equipment to be used
- e. Inspection requirements
- f. Training requirements
- B. <u>Personal Protective Equipment</u>

Subcontractors will assess the need for personal protective equipment (PPE) during the development of the Daily Activity Hazard Analysis (AHA). The Project Superintendent/ As SSHO will review this assessment. operations develop, the Project Superintendent/SSHO will routinely monitor the use of PPE. If the Project Superintendent/ SSHO believes any employee does not have the understanding and/ or skill required to conduct the respective trade work, the employee shall be retrained by the subcontractor and at the subcontractors' expense before permitted to return to work.

Subcontractors will provide evidence that employees have been trained in the selection, use and maintenance of all PPE required for use.

When workers are required to wear respirators, subcontractors shall provide evidence of a respiratory protection program, medical evaluations, fit testing, and employee training.



At a minimum, the following PPE is mandatory for all personnel working on the site. This includes hard hats, eye protection, leather grade, ankle covering, hard sole, foot protection to meet ASTM F2412 and F2413 standard (no sneakers), appropriate clothing (long trousers and shirts with three (3) inch sleeves. Reflective Vest / T-Shirt.

C. <u>On Site Communication</u>

In the event of a worker located in a remote location, two-way radios will be used for communication purposes with subcontractors' competent safety person and/or foreman. Radios will be kept fully charged by the Project Superintendent/ SSHO. Subcontractors are responsible to supply their employees with radios when needed.

D. <u>Safety Incentive Program</u>

This project has qualified for the Coakley & Williams Construction, Inc. and Blue Skye Incentive Program. During the project, the project team and Site Safety Manager will award selected employees for their commitment to safety. This award will be issued on the spot for instant recognition and during the quarterly meetings. The awards will consist of gift certificates. (See Attachment L – Safety Incentive Program)

E. <u>Water Intrusion Management Plan</u>

- 1. Management Statement
- 2. Policy Statement
- 3. Roles and Responsibilities
- 4. Water Intrusion Management Plan
- 5. Water Intrusion Checklist
- 6. Water Remediation Form
- 7. Coakley & Williams Construction, Inc. Blue Skye Construction Water Remediation Form Instructions
- 8. Water Remediation Procedures
- 9. Water Remediation Log
- 10. Water Remediation Log Directions
- 11. Water Intrusion/ Remediation Photo Log
- 12. Example One: Coakley & Williams Construction, Inc. Blue Skye Construction Water Remediation Form (Completed after the work has been completed and signed off)



13. Example Two: Coakley & Williams Construction, Inc. Blue Skye Construction Water Remediation Form (Superintendent updates the log)

1. <u>Management Statement</u>

Modern buildings generally incorporate central heating, ventilation, and air conditioning (HVAC) systems with few, if any, operable windows or other sources of "fresh" air or air circulation. Many new building material present problems for contractors and maintenance staff because they are a nutrient source for many types of microbes and other vermin when it becomes wet or hold excessive moisture content.

Water Intrusion Management Plan for the Potomac School Project directs our project managers, project superintendents, and subcontractors in the prevention, recognition, and management of moisture control microbial growth during construction activities. The plan sets procedures for inspecting and maintaining appropriate environmental conditions specific to the project. Essential guidelines for communication, documentation, and training are detailed in the plan.

2. Policy Statement

The Project Team has implemented a site specific, comprehensive maintenance inspection, and response program designed to prevent, identify, and mitigate Water Intrusion and moisture conditions conductive to

microbial growth on building material.

The Potomac School Project Team will require all contractors to review their scope of work to determine if there is a concern for water infiltration, this includes HVAC/Mechanical, plumbing and sprinkler subcontractors. Each subcontractor will be required to submit a site-specific water intrusion plan (Lockout/Tagout LOTO) and inspect the project for water intrusion, damage, and/or evidence. The plan can be found in the contents of Attachment I – Best Practices.

The Project Team will manage the abatement and reconstruction (with the owner's permission to proceed) of any/ all areas that are affected by water, moisture, and/ or microbial matter.

The Project Team will assure that the site is well maintained, protected against the elements, and address water and moisture concerns by conducting:

- Inspecting interior and exterior work focusing on building material damage, erosion, and water pooling.
- Investigating water intrusion, microbial growth, and/or indoor air quality events.
- Conducting routine maintenance of work areas and scheduled inspections to identify and control moisture problems and microbial growth. An itemized checklist designed for water intrusion inspections will be utilized to document conditions during all scheduled inspections.
- Documenting all events related to water damage, wetting moister incidents, microbial growth, inspection findings, and remediation techniques and maintain complete reports on file having immediate access if the need arises.
- Communicating water intrusion events to project team members, and subcontractors to keep all involved up to date on the plan procedures.



The Potomac School Project Team and our Subcontractors understand that being prepared for major water intrusion events will prevent escalations of costs related to repair of damaged materials, project scheduling and microbial remediation.

The Project Team is committed to managing water intrusion risks and documenting all abatement, reconstruction, and maintenance procedures.

3. Roles and Responsibilities

The Water Intrusion Management Plan relies on the leadership of its corporate risk / project teams, and the cooperation of its specialty subcontractors. All parties must clearly know their roles and responsibilities in order for the plan to work effectively and efficiently.

The Project Team is responsible for implementing the plan, while maintaining strict communications with Coakley & Williams Construction, Inc. Blue Skye Construction Corporate Safety/Risk Department and Project Executives

The responsibilities of the Project Manager and the Risk Department are as follows:

• Project Manager

- Know potential water intrusion hazards for the project and building material specifications.
- Communicate all water release events to the Risk Department.
- Assure inspections and routine maintenance procedures are conducted to prevent water intrusion.
- Assure subcontractors, their project managers are aware of the water intrusion plan procedures.
- Communicate to all appropriate parties required by this plan.
- o Investigate, manage, and report all water intrusion or microbial growth.
- Coordinate response actions for water intrusion and/or microbial growth.
- Monitor water intrusion or microbial remediation assuring plan procedures are completed.
- Maintain all field documents per the plan.

• Corporate Risk Department

- Assist with the coordination of water intrusion or microbial growth response actions with the project team and keep the executive team posted on actions.
- Assist the project team in selecting a qualified environmental consultant and contractor to participate in the plan.
- Maintains all status and final report documents per the plan procedures.
- Provide the project team training required by the plan.

4. Water Intrusion Management Plan

The Project Team has implemented this site specific plan to manage, control, and mitigate water intrusion/ damage, microbial contamination, and ambient odors.

Plan Training

All Coakley & Williams Construction, Inc. and Blue Skye Construction project teams receive and are trained in the following

response plan topics:



- Water intrusion recognition, prevention, and response
- Operating and inspection procedures
- Emergency response
- General construction and renovation issues
- Drying equipment and procedures
- Communication and documentation
- Worker safety and health issues
- Utilization of consultants and specialty contractors

Water Intrusion/ Microbial Awareness

Superintendents are required to maintain current knowledge of new procedures, materials, and construction concepts, which consists of:

- Review of the Water Intrusion Management Plan
- Plan roles and responsibilities
- Communication protocol and procedures
- Response to water intrusion events
- General microbial remediation procedures

Inspections and Prior Procedures

- Visually inspect the project site twice on a daily basis utilizing computer based reporting.
- Identify any sources of existing or potential water sources and request immediate corrective actions to mitigate plumbing leaks, condensation problems, wet spots, and other moisture problems, as soon as possible within 48 hours.
- Identify and prevent condensation of moisture on building surfaces through control of surface temperature or moisture (water vapor) concentration in the air (relative humidity).
- Maintain proper storage of building materials prior to installation. Dry storage locations must be provided for all semi-porous building materials (i.e. lumber).
- Provide proper ventilation and exhaust from moisture generated appliances to the exterior of the building envelope and ensure vents are unobstructed.
- Check plumbing and fire suppression systems for obvious leaks.
- Control water usage/ spillage from construction operations that require water to water supply.
- Do not allow foundations or other poured concrete components stay wet beyond the time necessary for controlled curing.
- Check surrounding landscape for proper drainage, slope, and drainage of surface/ storm water.
- Inspect landscaping sprinkler and irrigating systems to ensure that the water is properly directed away from the building. Sprinklers should not direct water onto exterior walls and foundations.
- Check rain gutters, downspouts, diverters, and storm drains to ensure they are operational and free of debris/ obstructions.
- Check weather forecasts for inclement weather events and ensure that stored materials are protected from precipitation as well as all window openings, doors, roofs, vents/ access, etc. are closed or covered to prevent water intrusion.
- Ensure that water sources such as faucets are shut before leaving the project site.



Quality Control/ Assurance Installation and Inspection Procedures

Inspections are performed by designated on site personnel and the appropriate subcontractors. The Quality Assurance program includes the following:

- Check mechanical/ HVAC systems for proper operation.
- Check condensation/ drip pans and drains for evidence of excessive condensation or blocked drain lines.
- Check duct systems for gaps, breaks, and proper insulation.
- Inspect insulation for physical damage, water damage, or microbial growth.
- Inspect filters to assure proper fit and desired efficiency.
- Inspect cool surfaces such as cold water pipes, un-insulated ducts in plenum space for condensation.
- Inspect outside air intakes for intact bird screens, debris, freestanding water/ microbial growth within or proximate to the intake.
- Inspect kitchen and bathroom exhaust fans and any other exhausts utilized to remove gasses, aerosols, and water vapor from the building.
- Inspect duct chases and drain chases.
- Inspect flashing where the building envelope is penetrated such as vents on roofs.

Building Envelope Inspections

The Project Superintendent/ SSHO shall document visual inspections of exterior and interior surfaces of perimeter walls, foundations, roofs, and on-grade slabs, for evidence of water intrusion. These inspections will include the following:

- Condition of exterior chalking.
- Condition of exterior façade (cracks, water stains below windows, moss/ algal growth or other suspicious discolorations).
- Evidence of water intrusion or condensation on interior of the perimeter wall.
- Evidence of water pooling against foundation walls.
- Evidence of water intrusion through foundation of walls or slab.
- Evidence of finished floor damage such as stained carpeting, loosened floor tiles, buckled wood flooring, and/or suspicious odors.
- Pooling of water on flat roof.
- Snow or ice damming.
- Drainage of water drains from roof or gutters.
- Evidence of water intrusion around doors and windows or other penetrations of the exterior façade.
- Evidence that flashing is properly installed at roof junctions, around windows, doors, and at foundation lines; particularly for brick façade buildings.
- Evidence that exterior vapor barriers are present and installed correctly.
- Evidence that insulation was correctly installed where required- on plumbing, exterior walls, ceilings, HVAC components, etc.

Construction reviews and inspections are documented and maintained on file throughout the project and within project specific files are properly archived at the conclusion of the project.

5. <u>Water Intrusion Checklist</u>



Pre-Job Tasks

Project Management and workers are trained in the importance and methods of preventing water intrusion.

- Keep interior materials dry- prior to, during and after installation.
- Do not install wet building materials
- Report any water damage, leaks or intrusion to the Project Manager immediately.
- Dry out any water damaged materials as soon as possible.
- Build in strict accordance with designs and specifications.
- Immediately advise Architects to designs that may allow water intrusion or moisture accumulation.
- Question "conceptual only", inadequate architectural detailing or improper building plans.

During the design phase, carefully review the details with specific attention to ensuring an impermeable envelope.

Consult an envelope engineer on geometrically complex buildings for a third party opinion on the water tightness of the envelope.

On a renovation or addition, carefully survey the existing building before construction begins. Look for discoloration in finished surfaces or a musty odor. It is possible that a pre-existing microbial problem can become the subcontractor's problem once construction begins.

Develop the project schedule with envelope construction completion as a predecessor to installation of finishes. This may be impossible on some projects; if so, have a detailed weather protection plan for all areas of exposure and establish a sufficient budget to implement the plan.

Establish a partnering program with the owner and promote a peer review for the mechanical system and the building envelope designs.

Carefully document any recommended changes to the Architect of Record. On standard Owner-Architect –Contractor project delivery methods, the Architect's approval must be obtained. In the event the recommendation is rejected, reiterate the recommendation in writing, copy the owner and file the documents.

Pre-qualify potential subcontractors and ensure that the subcontractors have adequate experience in the specific application being bid.

Consult manufacturers of moisture critical products to confirm the product's application and recommend standard details and provide preferred installers.

Delivery of interior materials (e.g. dry wall, paneling, ceiling tiles, framing lumber):

- Schedule so that materials will arrive after exterior of building has been sealed.
- Provide for dry storage of materials off ground, away from moisture sources.
- Minimize storage time.
- Plastic sheeting or tarps used to cover materials are secured loosely to allow air circulation.



Prearrange for drying equipment:

- Fans
- Dehumidifiers
- Wet- Dry Vacuums
- "Super Sucker" Trucks

During Construction Checks:

All material inspected upon delivery for pre-existing water contamination.

Interior materials installed in dry condition – per manufacturer's specifications.

All water services (including fire sprinklers) and waste lines checked for:

- Proper installation
- Connections properly made and checked for leakage
- Water lines (particularly chilled water) properly insulated
- Have multiple inspectors for filling or hydro test of sprinklers

All building penetrations properly installed and checked for leakage:

- Doors
- Windows
- Balconies and decks
- Roof membranes lapping at corners and joints
- Ventilation/ exhaust ducts

All tears, openings or punctures in vapor barriers have been repaired.

All flashings and caulking checked for proper lapping and application.

All roof drains drain away from the foundation.

- Roof drains properly supported and braced for large volume storms
- All moisture- generating equipment vented outdoors
- Surrounding ground sloped away from foundation
- Proper ventilation to attics, crawl spaces and/or other enclosed areas
- HVAC system
 - Correct filters properly installed ASHRAE Dust Spot Efficiency per specifications, no filters missing or misaligned.
 - Drip pan for cooling coils drains properly
 - No insulation on interior of ventilation ducts bare, galvanized sheet metal preferred.
 - All duct joints sealed.
 - The system is cleaned and commissioned. Third party certification of HVAC (test and balance report). The American Society of Heating Refrigerating and Air Conditioning Engineers has published a good practice commissioning procedure (ASHRAE Guide No.1).



Documentation of critical installations, including photographs.

Use EIFS installers that follow performance standards, specifications, and methods of application guidelines from the EIFS Industry Members Association. (www.eima.com)

Perform interim inspections; invite the Architect, Envelope Engineer, Mechanical Engineer, manufacturer's representatives to inspect for microbial related issues.

Post – Construction Checks

Have manufacturers inspect installations for warrantee purposes.

Facility owner briefed on their responsibilities to prevent water intrusion.

Fix leaky plumbing and leaks in the building envelope as soon as possible.

Watch for condensation and wet spots. Fix source (s) of moisture problem (s) as soon as possible.

Prevent moisture due to condensation by increasing surface temperature or reducing the moisture level in air (humidity). To increase surface temperature, insulate or increase air circulation. To reduce the moisture level in air, repair leaks, increase ventilation (if outside air is cold and dry), or dehumidify (if outdoor air is warm and humid).

Keep heating, ventilation and air conditioning (HVAC) drip pans clean, flowing properly and unobstructed.

Vent moisture – generating appliances such as dryers, to the outside as soon as possible.

Maintain low indoor humidity, below 60 percent relative humidity (RH), ideally 30-50 percent if possible.

Perform regular building/ HVAC inspections and maintenance as scheduled.

Install and maintain proper air filters.

Clean and dry wet or damp spots within 48 hours.

Do not allow foundations to remain wet. Provide drainage and slope the ground away from the foundation.

Ensure new building penetrations are properly sealed.

Landscape watering system does not spray building foundation.

Final visual inspection of:

- Pipe chases
- Utility tunnels
- Area above drop ceilings that are exposed to water or waste lines or that are directly below roof.

6. <u>Water Remediation Procedures</u>



After being notified by a subcontractor or discovered by Coakley & Williams Construction, Inc. and Blue Skye Construction personnel, the following list of procedures is to be used to remediate the water or moisture conditions.

- 1. Locate and stop the water intrusion and make necessary repairs to stop further damage.
- 2. Clean up water in effected area immediately using wet vacuums, mops and/or towels.
- 3. Run portable fans, heaters, and/or dehumidifier in the area to reduce moisture and humidity levels.
- 4. Maintain proper ventilation after area is completely dry.
- 5. Clean or replace any damaged material such as drywall, insulation, carpet, etc. as required.
- 6. Use FLIR Camera and moisture probe to verify presense or lack of moisture <12% is acceptable.



WATER REMEDIATION FORM

Form No._____

ProjectName:
Area:
Location:
Affected Area:
Subcontractor:
Date Found:
Date Sub Notified:
Work Description:
Date Remediated:
Date Completed:
Coakley & Williams Insp. Requested:
Sign Off Date:
Signature:

cc: File



11. Emergency Contact Information

Project Site Information The 801 East Men's Shelter Project 2700 Martin Luther King Dr. SE Washington, DC 20032

Project Executive Bill Simons		Mobile: 301-343-3305 Home:
Project Superintendent	Home	Mobile: 240-372-9906
Project Manager	Home:	Mobile: 240-372-5346
Asst. Project Manager	Home:	Mobile: 240-372-9906
<u>Project Engineer</u> Justin Alfon		Mobile: 240-454-2885 Home:
<u>Safety Manager</u> Chris Harris		Mobile: 240-750-3666 Home:

Emergency Fire, EMS, Police

911

Occupational Health Center and/or Hospital

United Medical Center 1310 Southern Ave SE Washington, DC 20032 (202) 574-6000



12. Attachments

Attachment A - Site Map	Will be uploaded
	P C C C C C C C C C C C C C C C C C C C
Attachment B – Emergency Route to Hospital or Occupational Health Clinic	Will be uploaded
Attachment C – Current List of Subcontractors	
Attachment D – Employee Safety Orientation	Image: Second
Attachment E – Safety Survey Form	Safety Survey Form.docx
Attachment F – Inspection Checklists	Scaffold Inspection Excavation Skid Steer Checklist.docx Inspection Checklist Inspection Checklist Merial Lift Pre-Use Backhoe Loader Crane Inspection Inspection ChecklistInspection Checklist Excavator Forklift Inspection Inspection Checklist Checklist.xls
Attachment G – Emergency Evacuation Plan / Emergency Procedures	Energency Energency Execution Ran & Free certaion
Attachment H – Accident / Incident Report Form	Accident-Incident Report Form.doc



Attachment I – Best Practices	Crane Submittal Checklist.doc Hot Work Permit.docx Checklist.doc Hot Work Permit.docx Checklist.doc Hot Work Permit.docx Checklist.doc Hot Work Permit.docx Checklist.doc Permit.docx Checklist.doc Ch
Attachment J – Crisis Management	Crisis Management.docx
Attachment K – Subcontractor Submittal Control	Subcontractor Submittal Control.>
Attachment L – Safety Incentive Program	Edgewood Safety Incentive Programs
Attachment M – Table 1 Crystalline Silica Control Measures	Table 1 - Silica.pdf
Attachment N – Competent Person Designation Forms	Competent Person Rigger Level I.docx Competent Person Competent Person Competent Person Competent Person Competent Person Competent Person Master-Lead Rigger. Rigger Level II.docx Competent Person
Attachment O – Preconstruction Safety Documentation	Preconstruction 5 - Hazardous Hazard Assessment. _I Materials Survey Reg