



# CHILDREN'S HEALTHCARE OF ATLANTA – NORTH DRUID HILLS (CHOA-NDH) CONSTRUCTION TEAM STRATEGIC PARTNERSHIP Between

Occupational Safety and Health Administration Atlanta-East Area Office,

**Associated General Contractors of Georgia, Inc.,** 

**Brasfield & Gorrie** 

and

JE Dunn

#### I. PURPOSE/SCOPE

The Occupational Safety and Health Administration (OSHA), the Associated General Contractors (AGC) of Georgia, Brasfield & Gorrie, LLC and JE Dunn (a Joint Venture) developed this Partnership jointly. This Partnership will cover the construction of the Children's Healthcare of Atlanta - North Druid Hills (CHOA NDH) Campus located in Atlanta, Georgia, and the site team will be referenced as the CHOA NDH Construction Team. The Georgia Tech Enterprise Innovation Institute – Safety, Health and Environmental Services Group (Georgia Tech) will be invited to support this Partnership for the benefit of small employers engaged as subcontractors on the jobsite. The common objective and goals of the Partnership include the following:

- A. Reduced injuries and illnesses;
- **B.** Increased safety and health training;
- **C.** Reduced overexposure to health hazards;
- **D.** Increased number of employers with appropriate safety and health management systems;
- E. Management leadership and employee involvement; and
- **F.** Enhanced hazard prevention and control.

This Partnership is consistent with OSHA's long-range efforts to develop a contractor/government Partnership approach to safety management. It allows for better use of OSHA resources and innovation in safety management, and encourages more participation in the safety process from the construction industry.

To facilitate the goal of reducing occupational-related fatalities and serious injuries within the construction industry, OSHA, AGC of Georgia and the CHOA NDH Construction Team will implement a Partnership under the OSHA Strategic Partnership Program (OSPP). The Children's Healthcare of Atlanta - North Druid Hills Campus construction project will consists of a 1.573 million sq. ft. (458 bed) patient tower, a diagnostic and treatment facility, central utility plant and two pre-cast parking decks. The diagnostic and treatment facility will be a five (5)-story structural steel building with 20 floors and 32 elevators. The site is located on 58 acres in Atlanta, Georgia.

By combining their efforts, skills, knowledge and resources, OSHA, AGC of Georgia and the CHOA NDH Construction Team expect to reduce exposure to hazards and thereby decrease the possibility of serious injuries and fatalities at the CHOA NDH project.

#### II. IDENTIFICATION OF PARTNERS

The Partnership participants will include:

- The Occupational Safety and Health Administration;
- Brasfield & Gorrie, LLC;
- JE Dunn; and
- Associated General Contractors of Georgia

#### III. GOALS/STRATEGIES/PERFORMANCE MEASURES

The primary objective of this Partnership is to create a working relationship that focuses on preventing work-related fatalities, controlling or eliminating serious workplace hazards, and establishing a foundation for the development of an effective safety and health program. The goals employed to achieve these results will include the following:

GOALS	STRATEGIES	MEASURES
Reduce the total number of injuries and illness cases by 10 percent, thereby	a) Review the OSHA 300 log data of the Partnership participants. Review injury and illness trends and implement effective	a) This goal will be measured by the number of companies participating in the Partnership, which reduce their TCIR and
providing a safe and healthy work environment for	•	DART rates below the baseline for the Partnership.
employees and sustain DART rate under the national average established	Case Incident Rate (TCIR) and Days Away from work, Restricted, or job Transferred (DART) <sup>1</sup> Rates.	b) Baseline will be established by the 2017/18 BLS Rates for Non- Residential Construction NAICS 2362, which are 2.7 and 1.4 (TRIR
by BLS statistics.	c) Compare this data with the baseline rates for the Partnership.	and DART).
Effectively control workplace hazards by increasing the number of construction companies with	employers that receive	Compare the number of the Project's employers that develop and implement effective safety and health management systems as a result of participating in the Partnership with the baseline for
safety and health management systems.	employers that work with the Partnership to develop and implement comprehensive safety and health management systems.	the Partnership.  The baseline will be established during the initial year of the Partnership

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 $<sup>^{1}</sup>$ Days Away from work, Restricted, or job Transferred (DART) rate: This includes cases involving days away from work, restricted work activity, and transfers to another job. It is calculated based on (N / EH) x (200,000) where N is the number of cases involving days away, and/or restricted work activity, and/or job transfer; EH is the total number of hours worked by all employees during the calendar year; and 200,000 is the base number of hours worked for 100 full-time equivalent employees. For example: Employees of an establishment including management, temporary, and leased workers worked 645,089 hours at this worksite. There were 22 injury and illness cases involving days away and/or restricted work activity and/or job transfer from the OSHA 300 Log (total of column H plus column I). The DART rate would be (22 / 645,089) x (200,000) = 6.8

Increase the number of employees, employers and supervisors who are provided effective safety and health training, such as the OSHA 10 and 30 - hour course.

- a) Evaluate the employers that establish effective safety and health training programs.
- b) Evaluate the employers that provide employees with OSHA 10-hour/ OSHA 30-hour training.
- a) Measure the number of employers with effective safety and health training programs.
- b) Compare the number of managers, supervisors and employees provided with OSHA 10-hour/ OSHA 30-hour training with the baseline for the Partnership.

The baseline will be established during the initial year of the Agreement.

Conduct effective self-inspections. sampling, monitoring, training and consultative activities in areas where employees might be exposed to health hazards such as the following: hazardous noise levels; lead; silica: asbestos: ergonomic stressors; and other healthrelated hazards.

a) Track health hazard-related program improvements, as well as training focused on the prevention of health hazards.

b) The CHOA NDH Construction Team will track the number of weekly and monthly selfinspections and site audits, as well as the number of health hazards identified during these activities of the entire worksite. A comparison will be made between the number of health hazards identified during self-inspections (including audits) conducted by management representatives and employees, with the hazards identified during the baseline.

The overall outcome of this goal should be the reduced overexposure of workers to health hazards, as well as a reduced injury and illness rate.

#### IV. MANAGEMENT AND OPERATION

#### A. The CHOA-NDH Construction Team will:

1. Establish a jobsite Safety Committee, consisting of a representative of all primary contractors on-site, in order to develop an understanding and awareness that all accidents are preventable. This action will be accomplished by implementing a comprehensive safety and health management system, which includes:

- a. Management commitment and employee involvement;
- b. Hazard analysis;
- c. Hazard prevention and control; and
- d. Safety and health training
- 2. Mentor subcontractors/trade partners in safety and health management systems. Subcontractors/trade partners shall include all multi-tiered subcontractors/trade partners that arrive for work on the site.
- 3. Where the potential for airborne silica exposure exists, require the use of wet-cutting or soft-cutting techniques and/or a dust collection system in compliance with Table 1 of 29 CFR Part 1926.1153 and, when employee exposure levels require, mandatory use of approved respiratory protection. Where the potential for airborne silica exposure exists, personal air monitoring will be conducted to assess employee exposure levels. Where the potential for other health issues exist (i.e., carbon monoxide, lead, or large-scale use of chemicals in the building interior during floor finishing), the CHOA NDH Construction Team will coordinate with the subcontractor responsible for creating the hazard and ensure that air monitoring is accomplished to assess employee exposure levels. airborne exposure results from an operation not covered by Table 1, project participants and subcontractors will adhere to applicable parts of 29 CFR 1926.1153. The CHOA NDH Construction Team's on site safety manager will gather air-sampling data to share with the Safety Committee and a request will be made to GA Tech to conduct air sampling.
- 4. Enforce safety rules and regulations. This enforcement authority will include provisions to hold contractors, subcontractors/trade partners, and employees accountable for following safety rules and regulations and the ability to remove a contractor's employees and supervisors from the job site, if necessary.
- 5. Ensure that a competent person performs a risk assessment of all fall hazards. The probability and severity of occurrence for each identified hazard will be evaluated to eliminate or reduce the risk of fall hazards through conventional protection, engineering or administrative controls to a level as low as possible. Regarding fall hazard risk assessments:
  - a. Critical risks will not be tolerated. A critical risk is defined by work that contains high probability in occurrence and high severity in consequence. No work will be performed until action is taken to reduce the level of risk to as low as reasonably feasible.
  - b. Employees performing overhand bricklaying and related

work above lower levels must be adequately protected from falls. No controlled access zone will be allowed. Additionally, no warning-line system or safety monitoring system will be used on-site.

- c. All personnel exposed to a fall greater than six feet shall conform to the CHOA NDH Construction Team's 100 percent tie-off policy for all employees with fall exposure at heights at six feet or greater.
- 6. To the extent feasible, serious ergonomic hazards will be identified and corrected.
- 7. Ensure that ground fault circuit interrupters (GFCI) are used to protect all electrical circuits that are used for work. All contractors will ensure that employees are protected using a GFCI at all times.
- 8. The CHOA NDH Construction Team's superintendent, project managers, and on-site safety professionals will serve as a point of contact and will monitor safety and health at the site and progress toward achievement of the Partnership goals.
- 9. The CHOA NDH Construction Team superintendents and project managers ensure that daily safety audits are conducted (since this is a multi-employer worksite and all workers are to work together on safety issues). The CHOA NDH Construction Team, upon request, will review subcontractors' daily logbooks and audits, note any hazards found, and then review them with all Project CHOA NDH Strategic Partnership Safety Committee (Safety Committee) members at the bi-weekly coordination/subcontractor meeting.
- 10. Conduct and document job site safety meetings/toolbox talks on a weekly basis.
- 11. Submit monthly accident reports to the Safety Committee, including first aid, injury, property damage and near miss reports within 24 hours.
- 12. The CHOA NDH Construction Team superintendents, project managers or safety professionals will lead coordinate and conduct a comprehensive site audit of high-risk areas on a weekly basis. Safety Committee and subcontractor/trade partner members will participate in the site safety audit. If non-compliant activity or hazards are discovered, immediate correction is required. The CHOA NDH Construction Team will document the corrective action taken and share this information with OSHA during the monthly update meetings.
- 13. Audit the Partnership and make recommendations for improvement.

- 14. Share the results of jobsite inspections and information concerning near misses with all workers. Near misses and daily safety audits will be discussed during toolbox talks.
- 15. Ensure that no employees are allowed to work directly below a suspended load except for: employees engaged in the initial connection of steel and employees necessary for hooking or unhooking the load. The following criteria must be met when employees are allowed to work under the load:
  - a. Materials being hoisted shall be rigged to prevent unintentional displacement;
  - Hooks with self-closing safety latches or their equivalent shall be used to prevent components from slipping out of the hook;
  - c. All loads shall be rigged by a qualified rigger; and
  - d. Appropriate use of tag lines will be utilized to minimize work below suspended loads.
- 16. Require the use of appropriate personal protective equipment. Hard hats are mandatory. All employees on site shall wear high-visibility reflective clothing. A 100 percent eye protection program will be implemented, and gloves must be worn when hand injuries are likely to occur.
- 17. Ensure that all signs and warnings are posted in English and Spanish (as well as any other language deemed necessary by the CHOA NDH Construction Team to ensure workers understand the training).
- 18. Implement an effective Heat Illness Prevention Program (Heat Program) to educate workers about the hazards of working outdoors in the heat and steps needed to prevent heat-related illnesses.
- 19. Provide all data to OSHA that is needed for the annual OSHA Strategic Partnership Program (OSPP) evaluation report.

#### B. Subcontractors/Trade Partners will:

- 1. Appoint a representative to the site Safety Committee responsible for resolving job safety matters and serving as a liaison to the CHOA NDH Construction Team Superintendent and Safety Professional. Every prime subcontractor will have a person available to participate in the Safety Committee. Participation in this committee will consist of, but will not be limited to, participation in the CHOA NDH Construction Team safety walkthroughs and monthly safety update meetings.
- 2. Participate in the bi-weekly Safety Committee/subcontractor

meeting and safety audits. If non-compliant activity or hazards are discovered, immediate correction is required. Abatement methods and verification must be submitted to the respective CHOA NDH Construction Team on-site Safety Manager, who will document the correction taken and share this information during the monthly update meetings.

- 3. Conduct jobsite safety inspections for employees under their supervision. These jobsite safety inspections will be in addition to the daily general inspections. If non-compliant activity or hazards are discovered, immediate correction is required. Documentation of abatement methods and verification must be submitted to the respective CHOA NDH Construction Team on-site Safety Manager.
- 4. Share the results of jobsite inspections with all workers by posting them in the project office and notifying all workers of the location of the results.

#### C. OSHA will:

- Participate, to the extent resources permit, in the monthly Safety Committee/subcontractor meetings, but will not participate in the walk around inspection, except that the verification visits (see Section VIII. OSHA Verification below) may be scheduled as part of the weekly walk around inspection.
- 2. Serve as a resource and liaison for Partnership participants and assist with safety and health training, as resources permit.
- 3. Give priority to the construction project, as resources permit, when technical assistance is needed.
- 4. Audit the monthly reports/documents and make recommendations for improvements in meeting Partnership goals.
- 5. Conduct inspections in accordance with section VIII of this Partnership.
- Conduct the annual Partnership evaluation report in accordance with Section VI of this Partnership.

### D. Georgia Tech will:

1. Give priority consideration to requests for services to small contractors who are engaged in work at the project.

- 2. Appoint a representative to the Safety Committee and participate in meetings to the extent resources allow.
- 3. To the extent feasible, conduct quarterly safety and health surveys of the project, which may include performing personal air monitoring to assess employee exposure levels to chemicals (such as silica, carbon monoxide, heavy metals, isocyanates, hexavalent chromium and other noted chemical hazards).
- 4. To the extent feasible, conduct personal noise monitoring to assess employee exposure.
- 5. Support, perform, and monitor activities related to safety focus areas not limited to, falls, confined space, trenching, excavation, and noise generating activities.

#### E. The AGC of Georgia will:

- 1. Provide resource for safety training.
- 2. Provide support via its Safety Van to the CHOA-NDH Construction Team at no charge.
- 3. Conduct quarterly on-site safety and health inspections.
- 4. Promote and coordinate safety and health training, in an effort to prevent and reduce workplace hazards.
- 5. Provide classroom space when needed.

#### V. SAFETY AND HEALTH MANAGEMENT SYSTEM

The CHOA NDH Construction Team will use its system to collect and analyze injury and illness trends (including near-miss incidents) by all contractors performing work at the site. This data will be used as a tool to ensure continual safety and health improvement at the site. The CHOA NDH Construction Team will manage this Partnership effectively by implementing a comprehensive jobsite safety and health management system, which will include the following components:

 The CHOA NDH Construction Team will complete a risk assessment prior to exposing employees (including contractors' employees) to potential safety and health hazards. This will be accomplished by the use of a Crew Work Plan- Risk Assessment (CWP) form or Pre-Task Plan form.

- Work with OSHA, GA Tech and Safety Committee members to provide the resources to conduct initial monitoring for toxins, which are anticipated to be present during construction of this project (silica, etc.). Employee exposures (during activities, which may produce these hazards) will be assumed and respiratory protection worn until the results of the initial monitoring studies are received, which demonstrate no exposure problems (or site-based surveys show no hazard exists). CHOA NDH Construction Team will endeavor to ensure that no work with these materials will occur, thus preventing any exposure. The CHOA NDH Construction Team will request periodic evaluation visits by its insurance company's industrial hygienist and Georgia Tech.
- 3. All prime contractors on-site will perform daily audits. In addition, on a weekly basis, a comprehensive audit of the jobsite will be performed, with the participation of a representative of each prime contractor currently working onsite. Any hazards found during the audits will be corrected promptly. Items noted on the audit will be annotated on a daily log. When hazards cannot be corrected immediately, they will be tracked until abatement is completed. Employees exposed to these hazardous conditions will be informed of the hazard and effective interim control measures will be implemented. A record will be kept of all hazards found during the weekly audits and the number of hazards corrected as a result of the weekly audits.
- 4. Implement an aggressive Fall Protection Plan to include fall protection in all cases where work is being performed 6 feet or more above lower surfaces.
  - a. Ensure employees receive training as follows: CHOA NDH Construction Team workers will receive OSHA 10-hour training and all CHOA NDH Construction Team supervisors will receive OSHA 30-hour training. The CHOA NDH Team will work with all subcontractors/trade partners to provide or assist in providing their safety designee with OSHA 10hour training.
  - b. All employees will receive a site-specific construction safety orientation covering jobsite safety and health issues, procedures relative to the work being performed, as well as the requirements outlined in the Partnership. In addition, employees shall receive training on the content of the Jobsite Specific Safety Plan for operations they will encounter. This may require periodic retraining of employees on the content of the Jobsite Specific Safety Plan as specific parts of the Plan become relevant at new phases of construction. The CHOA NDH Construction Team will provide this material to the subcontractors/trade partners' designated safety representative.

- c. Safety and health training courses will be offered to workers in their native language (English and Spanish as well as any other language deemed necessary by the CHOA NDH Construction Team to ensure workers understand the training). Either effective translators or bi-lingual instructors will be utilized to perform this training.
- d. Additional hazard-specific training will be conducted on an as- needed basis.
- e. Subcontractors/trade partners utilizing other instructors for competent person, OSHA 10/30-hour, and equipment training must provide a valid certification card showing completion of the course. Subcontractors/trade partners have primary responsibility for providing the safety and health training.
- 5. Subcontractors/trade partners will be required to develop an adequate safety and health management system and must submit them to the CHOA NDH Construction Team.
- 6. Ensure the CHOA NDH Construction Team and/or the affected subcontractors/trade partners, with the assistance of OSHA as its resources permit; adequately address health-related issues, which occur during the project. All health-related issues will be discussed monthly during the Partnership update meetings.
  - a. An effective hearing conservation program, including noise monitoring and implementation of engineering controls, where possible, will be implemented by the CHOA NDH Construction Team's Safety Department.
  - b. An effective environmental monitoring program will be implemented to control airborne hazards, such as silica, and will include personal monitoring, employee training, implementation of engineering controls where possible, and the use of respiratory protection when necessary. Previous site-based data will be considered acceptable.
- 7. Ensure compliance with the NFPA 70E when working on live electrical equipment, including training and the availability and use of personal protective equipment. A permit system will be implemented whenever work around live electrical systems will be done to ensure the implementation of appropriate protective measures prior to exposure. The permit form includes requirements for pre-task review and lock out/tag out procedures to be followed.
- 8. Ensure all equipment capable of causing an amputation is

#### VI. ANNUAL EVALUATION

The Partnership will be evaluated on an annual basis using the Strategic Partnership Annual Evaluation Format as specified in Appendix C of OSHA Instruction CSP 03-02-003, OSHA Strategic Partnership Program for Worker Safety and Health.

The CHOA NDH Construction Team will be responsible for gathering required participant data to evaluate and track the overall results and success of the Partnership. This data will be shared with OSHA. OSHA will be responsible for writing and submitting the annual evaluation.

#### VII. INCENTIVES

Participant incentives from OSHA may include:

- 1. Maximum penalty reductions for good faith and history, to the extent allowed by the OSHA Field Operations Manual (FOM), OSHA Instruction CPL 02-00-160 (August 2, 2016).
- 2. If a citation with penalties is issued, the Area Director has the authority to negotiate the amount of an additional penalty reduction as part of the informal conference settlement agreement, which is consistent with OSHA's current policy regarding this matter.
- 3. The OSHA enforcement verification inspections will be conducted in accordance with Section VIII, OSHA Verification Enforcement Inspections.
- 4. Priority consultation service and assistance for small employers working on the construction site from the Georgia Tech On-site Consultation Program.
- 5. An OSHA focused inspection is available where the Partnership participant has an effective safety and health management system fully compliant with 29 CFR 1926.20 and 29 CFR 1926.21 (For additional details refer to the August 22, 1994, memo signed and issued by former Deputy Assistant Secretary for OSHA James Stanley, which was revised in September 20,1995).

#### VIII. OSHA VERIFICATION

1. Verification Enforcement Inspections: OSHA will conduct the initial verification enforcement inspection no sooner than two months, but within three months after Partnership,

participants formally enter into this Agreement. During this period, participants should develop and implement the safety and health management systems required under this Agreement. After this period, OSHA will conduct an annual verification enforcement inspection. Compliance officers that are familiar with the CHOA NDH Strategic Partnership will conduct the verification inspections. Employee rights under the Occupational Safety and Health Act (OSH Act) will be afforded. If during the verification enforcement inspections, OSHA personnel identify serious hazards, the scope of the inspection may be expanded.

- Complaint/Referral Investigations: This Partnership provides for immediate response to each allegation of a safety or health hazard brought to its attention by any person. Upon a finding that an allegation is valid, the employer shall promptly abate the hazard.
- 3. **OSHA** agrees that а copy of each non-formal complaint/referral related to the work site and filed with OSHA will be delivered to the CHOA NDH Construction Team management office by an OSHA Compliance Safety and Health Officer (CSHO), forwarded by fax, or sent via email. In accordance with applicable law, the name of the complainant requesting confidentiality will not be revealed. The CHOA NDH Construction Team agrees to investigate these complaints, regardless of the employer involved, and provide OSHA with a written response within five-working days of receiving the non-formal complaint/referral.
- 4. Accident Investigations: Employers engaged in this Partnership recognize that OSHA fully-investigates accidents involving a fatality or serious physical harm. If during the investigation OSHA determines that the incident resulted from violations of OSHA standards, the Partnership may be terminated.

# IX. WORKER INVOLVEMENT/ WORKER AND EMPLOYER RIGHTS

This Partnership does not preclude employees and/or employers from exercising any right provided under the OSH Act (the Act), nor does it abrogate any responsibilities of the Partnership participants to comply with rules and regulations adopted pursuant to the Act.

The CHOA NDH Construction Team(s) will ensure employee involvement by establishing an employee Safety Committee that will meet on a monthly basis to share the results of jobsite inspections, information concerning accidents and near misses, suggestions for improvement and recommendations for training for the general workforce. The Partnership members' management and supervisors will also continue to discuss near misses and daily safety audits during toolbox talks.

#### X. TERM OF PARTNERSHIP

It is understood that this Partnership shall be in effect until completion of construction activities at the CHOA NDH site. If any signatory of this Partnership wishes to terminate their participation prior to the established termination date, a written notice of the intent to withdraw must be provided to all other party(s), which provides a 30-day notice.

If OSHA chooses to withdraw its participation in the Partnership, the entire Partnership is terminated. Any party may also propose modification or amendment of the Agreement. Changes may be implemented, if all parties are in agreement that the changes are in the best interest of the Partnership.

# XI. The CHOA NDH CONSTRUCTION TEAM STRATEGIC PARTNERSHIP

Partnership Signing Date:	
William R. Cochran Acting Area Director Occupational Safety & Health Administration	Lisa Capicik Safety Director Brasfield & Gorrie
Dan Spinetto, VP Regional Operations Manager Brasfield & Gorrie	Marty Laskey Safety Director JE Dunn
Kyle Drake Vice President JE Dunn	Cherri Watson Dir. Of Safety, Education & Workforce Development Associated General Contractors (AGC) of Georgia
John Owen General Superintendent Brasfield & Gorrie	Dean Killen General Superintendent JE Dunn

# **Scope of Work:**

Both B&G and JE Dunn's primary workload will consist of construction management. B&G will also be self-performing the installation of all footings and initial sheer walls. For this work, B&G Construction's project team will employee carpenters and labors. In addition to self-performing the foundation concrete on this project, the employees will also assist in maintaining safety on the project. All site employees will be required to complete daily Crew Work Plan meetings and will be supervised by a site foreman. The superintendent and Safety Professional shall have the responsibility of enforcing safety daily. B&G and JE Dunn will assist Subcontractors/Trade Partners with site coordination and planning. In addition to the CHOA NDH Safety professionals, all major trades i.e. MEP, Steel, and Concrete are contractually required to provide a minimum of one full time Safety Professional. See JSSP for additional specifics

# **Public Protection:**

During non-working hours, the jobsite's gates shall be locked. No trespassing signs shall be posted in conspicuous areas on the perimeter of the project to warn the public to stay out of the site. All visitors will be required to sign-in at the CHOA NDH office trailer. B&G and JE Dunn management will be responsible for making sure all visitors are accompanied on the project and are informed of site personal protective equipment requirements.

# **Orientation:**

Site-specific orientation will be held on an as needed basis. All employees who are or will be working on site must attend this training prior to beginning work on the project. This training will encompass site safety, procedures, hazard communication, emergency planning, and basic construction safety. A site-specific orientation sticker and Badge will be issued to all employees who attend this training and complete safety acknowledgment form.

# **Site Logistics:**

All haul roads will be built and maintained by site contractor (Plateau Excavating) Laydown areas will be provided to each subcontractor as needed. Work will only take place in the daytime unless light towers are installed to provide workers with adequate visibility. Wash out areas will be provided to concrete trucks and pump trucks in areas that will not affect traffic. B&G and JE Dunn will manage concrete, steel, and trash dumpsters on the project.

# **Crane Operations:**

Only certified crane operators or those signed up for certification (delayed by COVID-19 precautions) will be allowed to operate cranes on site. Only qualified riggers/flaggers will be allowed to signal the crane and rig loads to be flown. Hand signals/radios will be used to communicate with the crane operator. Whistles will be used to alert all employees in the area that a pick is being made. All loads must have a non-conductive tag line attached. For mobile cranes, the swing radius of the crane must be barricaded at all times. Outriggers must have appropriate cribbing in place prior to any loads being flown.

If a crane's working radius encompasses active power lines, one of the following must be done:

- 1. De-energize and ground the power lines (Must be done by the appropriate utility company)
- 2. Maintain a minimum 20 feet safe approach distance
- 3. Determine the voltage of the lines and follow safe approach distances in SHEMS

# **Personal Protective Equipment:**

Hard hats, high visibility vest or shirt with reflective stripes, long pants, work boots, hand protection (Gloves) are gloves worn at all times when handling materials that may cause harm to hand and safety glasses shall be worn at all times. This practice will be enforced on a daily basis as per CHOA NDH safety policy. B&G and JE Dunn will always monitor Subcontractors/Trade Partners PPE. Failure to wear mandatory PPE will result in verbal and written warning. If problems persist, employees may be suspended or removed from the project.

#### **Fall Protection:**

All Subcontractors/Trade Partners will be required to have fall protection when exposed to a fall of 6' or greater. The CHOA NDH Team has a zero-tolerance policy on fall protection infractions. Any employee observed violating the fall protection policy will be suspended from the project for a time period to be determined by the project team. Any further infractions by that employee will result in the employee's permanent removal from the project.

Each subcontractor is required to create a plan or system to address fall protection within his or her scope of work. These plans or systems are maintained in their company's site-specific safety plans. Each company's site-specific plan is kept at the B&G and JE Dunn's office trailer.

# **Guardrails and Floor Opening Protection:**

All guardrails, both wire rope and wooden, will be built to comply with B&G and JE Dunn's SHEMS manual. The top railing will be at 42" +/- 3" and able to withstand a downward and outward force of 200 lbs. All railings will include a mid-rail set at 21" +/- 3" and able to withstand a force of 150 lbs. All guardrails that are in locations with work or foot traffic under them shall have toe-boards installed to prevent materials and tools from falling. This toe-board will be maintained until glass or precast concrete is set on the exterior of the building rendering them unnecessary. If wire rope is used for guardrails, the wire rope must be at a minimum 3/8" diameter and flagged every 6'. The wire rope must be kept taut so

it will be able to withstand a force of 200 lbs. and not sag below 39". Three clips must be installed at attachment points with 3" spacing between them.

All floor holes that are 2" or greater will be covered with plywood and marked with hi-vis paint. Any holes over 8" will be identified with the words "Hole or Cover" and "Hoyo". In the case of depressions/recesses, the area will be flagged off to warn of the depression or the edge will be painted with hi-vis paint. All covers will be secured to prevent accidental displacement. Hole covers must be made to withstand twice the weight of worker, materials, and tools. No materials can be stored around or on top of hole covers. Covers must be kept well maintained and swept clean. Permits will be required to be submitted to respective GC/CM by the trade contractor requesting to remove a hole cover.

# **Roof Access**

Only authorized personal will be allowed on the roof. The Roofing subcontractor will be required to tie off when building the perimeter parapet wall before roofing activities begin. Fall protection will be required unless the parapet wall meets the height requirements of a guardrail system. If the parapet wall does not meet the requirements of a guardrail system, roofers will install a warning line 6' back from the edge of the roof. This warning line is only to be used by the roofer. All other Subcontractors/Trade Partners, B&G and JE Dunn will be required to install a warning line 15' back from the roof if desired. If work is to take place beyond the warning line, a fall restraint or fall arrest system must be utilized.

#### **Trenching and Utility Lines:**

B&G and JE Dunn and all Subcontractors/Trade Partners involved in trenching activities will be required to complete an excavation inspection/permit for all excavations or trenches that are 4' or deeper. These reports will be completed daily, after rainstorms, and after an event where conditions may change the characteristics of the trench. These are to be completed by a competent person and submitted to B&G or JE Dunn respectively. Trenches of significant depth or trenches that are obstructed from view shall be flagged to prevent accidental injury. Trenches 4' or greater in depth will have a means of access and egress (ladder, ramp, stair, etc.). All trenches shall be guarded or sloped when at a depth of 5' or greater. In compliance with SHEMS, the CHOA NDH Team will assume all soils are type C until a soils engineer proves otherwise. Acceptable sloping for trenches or excavations 5' in depth or greater is 1.5:1. Any excavations or trenches 20' or greater in depth must have shoring/shielding system designed by a registered professional engineer.

All utilities will be located by a third party prior to any excavation or trenching activities. If utilities are present in the proposed excavation, soft digging methods must be utilized. Once utilities have been uncovered, they must be braced and protected from damage.

#### **Safety Meetings and Training:**

All Subcontractors/Trade Partners are required to attend the weekly project safety meeting. CHOA NDH Team will provide site-specific orientation to all new employees on site. Orientation and hazard awareness training will be administered on an as needed basis. Safety Professional safety walks will be held biweekly and a supervisory member of each subcontractor is expected to attend. All deficiencies identified will be sent to the responsible Subcontractors/Trade Partners via emails. Subcontractors/Trade Partners are required to respond to these deficiencies in writing within 48 hours. Failure to abate deficiencies or respond in writing could delay payment.

# **Emergency Action Plan:**

Emergency Action Plan (EAP) will be posted in common areas around the project site (CHOA NDH Team trailers, job boards, break areas, etc.). The plan will be included in each employee's orientation. The EAP will be reviewed periodically during site wide safety meetings and scheduling meetings. This plan is subject to change, as the site progresses, all employees will be notified and retrained if any changes are made.