Bradbury Stamm Superintendent leads a Safety Training from the Bradbury Stamm Safety Passport™

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The policies and procedures outlined in this document apply to Bradbury Stamm Construction, Inc. and all of its wholly owned subsidiaries.

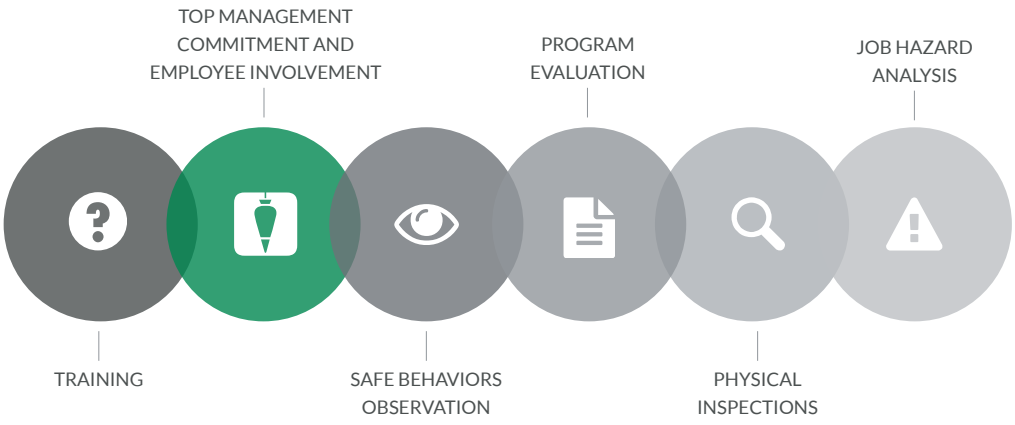
Bradbury Stamm Construction Since 1923

SAFETY PROGRAM OVERVIEW

INTRODUCTION

Bradbury Stamm's safety program incorporates a vision of safety that differs from others in the construction industry. The long-held notion of safety as policing people has been abandoned for a concept that puts safety into the hearts and minds of each employee. ***Our approach teaches safe practices and empowers our employees to create a safe work environment.*** Using this approach, we have an opportunity to progress from the employee being told about safety as interpreted by a Safety Enforcer to employees and field managers owning, practicing and being held accountable for rules they hold in their hand. With this concept, we believe we can achieve 100% coverage of safety at our job sites.

Bradbury Stamm's Safety Program is built around the six elements essential to all effective safety programs:



The above elements come together to create and maintain a safe workplace. The key feature of our safety program is the Bradbury Stamm Employee Safety Passport™. Every Bradbury Stamm employee carries the Safety Passport. All equipment operators carry the Safe Equipment Operator's Passport. Foremen of Bradbury Stamm carry the Bradbury Stamm Foreman Safety Passport. Superintendents are required to carry the Foreman's Safety Passport as well as keep readily available the Safety Directives and the Corporate Safety Plan. Project Managers conduct a quarterly Job Safety Assessment. The Safety Administrator tracks compliance with corporate policies, training and certifications, and distributes Passports. The Corporate Safety Director develops and implements policies, inspects sites, enforces the program and most importantly trains on-site managers.

BRADBURY STAMM SAFETY PASSPORTS

BRADBURY STAMM EMPLOYEE SAFETY PASSPORT

Carried by every Bradbury Stamm Employee

This small booklet, available in both English and Spanish, is carried in every employee's hard hat or safety vest. All the common safety practices are in this book, readily available for employee reference. Employees cannot violate rules in the Safety Passport. Managers cannot allow or direct an employee to violate the Safety Passport rules. Also, in the Safety Passport is the disciplinary program consisting of a violations page and an employee administered write-up page. Employees are required to follow all the rules in this booklet or are sent home for consecutively greater time periods until the fifth violation ends in termination. Employees can be terminated after five violations of any combination of rules in the Passport. In addition, employees can show the rules in the Safety Passport to the foremen or superintendent and insist on-site management create a safe workplace. Everyone has the safe work practices with him or her each workday.

SUBCONTRACTOR'S SAFETY PASSPORT

Carried by every Subcontractor

This booklet is the same as the Employee Safety Passport, but consequences differ by sending the employee to the subcontractor's office. A final consequence is that the employee is banned from Bradbury Stamm sites. The subcontract with companies performing work on Bradbury Stamm jobsites is specific and clear in regard to safety issues. All subcontractors agree to have their employees follow our safety program while working on our jobsites. As of July 1, 2001, all subcontractor employees carry the subcontractor safety passport. A provision in all subcontractor agreements provides for the Safety Passport Program.

SAFE EQUIPMENT OPERATOR SAFETY PASSPORT

Carried by every Equipment Operator

This booklet contains the basic information from the Safety Passport along with two separate sections covering:

1. Excavator Equipment Operations
2. Forklift Operations

The excavator section is for operators of loaders, backhoes, skid-steer tractors, and excavators and contains information and requirements focusing on:

- Machine operations
- Underground utility protection
- Excavation safety practices and procedures

The forklift section is for operators and contains information related to all aspects of forklift safety. Operators and Superintendents/Foremen over operators are required to attend in-house annual training to operate any piece of equipment. Violations of passport rules will be handled through provisions in the Employee Passport.

PREINSTALLATION CONFERENCES

Safety concerns can best be identified during conferences with subcontractors prior to the start of work. During these conferences, the Safety Director points out potential job hazards and negotiates with the subcontractor an agreement on how to handle hazards and minimize risk to all employees on the jobsite. These meetings typically result in a written safety plan that is specific to the work that will be performed by the subcontractor.

SAFETY DIRECTIVES

These are technical papers written and distributed to project safety personnel, managers, superintendents, and foremen by the Safety Director, which set forth safety practices and specific procedures. Failure to follow Safety Directives results in disciplinary action via the Safety Passport. Safety Directives are evaluated at least annually, modified as necessary and redistributed with current dates to reflect recent regulations, technical advances, and emerging safety issues.

EVALUATIONS OF FIELD MANAGERS

The Safety Program contributes feedback that is considered in the annual evaluation of Foremen, Superintendents, and Project Managers. Managers are evaluated on their contributions to management commitment and employee involvement, job hazard analysis, physical inspections, training, and safe behaviors observation.

PROJECT MANAGER'S SAFETY & HEALTH PROGRAM ASSESSMENT

Project Managers use this tool each quarter on Bradbury Stamm jobsites to gain valuable information on the climate of safety on the project site. This information is used to drive procedures and policies that address and correct safety concerns.

ALCOHOL AND DRUG ABUSE POLICY

Bradbury Stamm has zero tolerance for drug use on the job. The company employs drug screening for the following situations:

- Pre-Employment (including return-to work)
- Random (company-wide)
- Post-Accident
- Just Cause

Testing is currently done with urine specimens, laboratory tested with a 10-panel assay plus alcohol. Testing technologies are periodically evaluated in an effort to provide the most accurate and least intrusive testing possible.

VEHICLE SAFETY PROGRAM

Company vehicles driven by Bradbury Stamm employees are typically assigned to individuals who then have direct responsibility for their vehicle's appearance, condition, and safe operation. Newly hired employees will have a motor vehicle division check made of their Driver's Record if they will be assigned a vehicle. In addition, all employees who are designated to drive company vehicles will have periodic MVD checks performed. The company has plans to develop and train employees on defensive driving techniques in an effort to maintain driving habits that avoid accidents.

RELATIONSHIP WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

Bradbury Stamm Construction, Inc. participates in the Construction Health and Safety Excellence (CHASE) program. This program partners Associated General Contractors (AGC) members and New Mexico OSHA to provide two-way feedback regarding jobsite safety. In addition, John Brown, Safety Director came to the company from the New Mexico Occupational Health and Safety Bureau, where he gained safety experience doing inspections and consultations. Bradbury Stamm Construction makes jobsites available to OSHA for the purpose of training new inspectors. Finally, company managers are encouraged to call the local OSHA office for advice and information, strengthening the partnership our company has with their regulatory agency.

BRADBURY STAMM SAFETY DIRECTOR

John Brown, Safety Director
505.577.7930
jbrown@bradburystamm.com

SAFETY PLAN PASSPORT IMPLEMENTATION

Bradbury Stamm's top management are committed to the Bradbury Stamm Safety Passport™ System as evidenced by their support of the corporate safety director and the demands placed on Bradbury Stamm Superintendents (see Safety Directive #23 Superintendent Duties). At Bradbury Stamm, each superintendent is the on-site safety director responsible to the corporate safety director. The superintendent is the person pushing the work and is totally responsible for the creation and maintenance of a safe workplace.

When a Bradbury Stamm Superintendent starts a job, employees and subcontractor employees coming to the site will first be introduced to the Safety Passport System by being issued their personal copy of the Safety Passport. Employees are required to read it cover to cover, then the superintendent goes over the Passport's contents, answers question, and reminds employees that specific training will be required for certain work activities as the job progresses (see Safety Program Delivery Triangles).

Next, the employees' field supervisors, typically the on-site or installing foreman, go through the Pre-installation Checklist with the Bradbury Stamm Superintendent and review everything about their job coming up, including aspects regarding safety. This form is used as a document to ensure the field supervisor knows what is expected on Bradbury Stamm Sites.

The Pre-installation Checklist is a wonderful tool (basically a written JHA) to identify what special training needs are to be given at the job site and when it will be pertinent to the exposed employees.

The following work activities requires some level of safety training before employees actually work:

Scaffolds and Fall Protection – formal on-site training by Safety Director John Brown that covers scaffold awareness, tag system and daily inspection, means and methods of fall protection

Ladders – the Bradbury Stamm Superintendent trains all the foremen, they in turn train all the employees at a weekly safety meeting; certification of training is documented in the margin of each trained employee's Safety Passport

Excavations and Excavation Equipment Operation – machine operation and OSHA Subpart P, see Safe Equipment Operator Passport

Forklifts – formal on-site training; Bradbury Stamm does not recognize or accept forklift training certification from other sources; all forklift operators must go through forklift training by the Bradbury Stamm Superintendent or by Safety Director John Brown

Permit-Required Confined Space – Bradbury Stamm has performed hundreds of permit-required confined space entries over the years; Because of hazards, uniqueness and complexities of every confined space, Bradbury Stamm's policy is to have John Brown assist in

the development of a custom entry permit for each space.

Once identified, the necessary training is done on-site and the work at hand is limited. The training may be conducted by field supervision from the Safety Passport by the Bradbury Stamm Superintendent or a formal class may conducted on site by Safety Director John Brown, an OTI 500 Level Trainer.

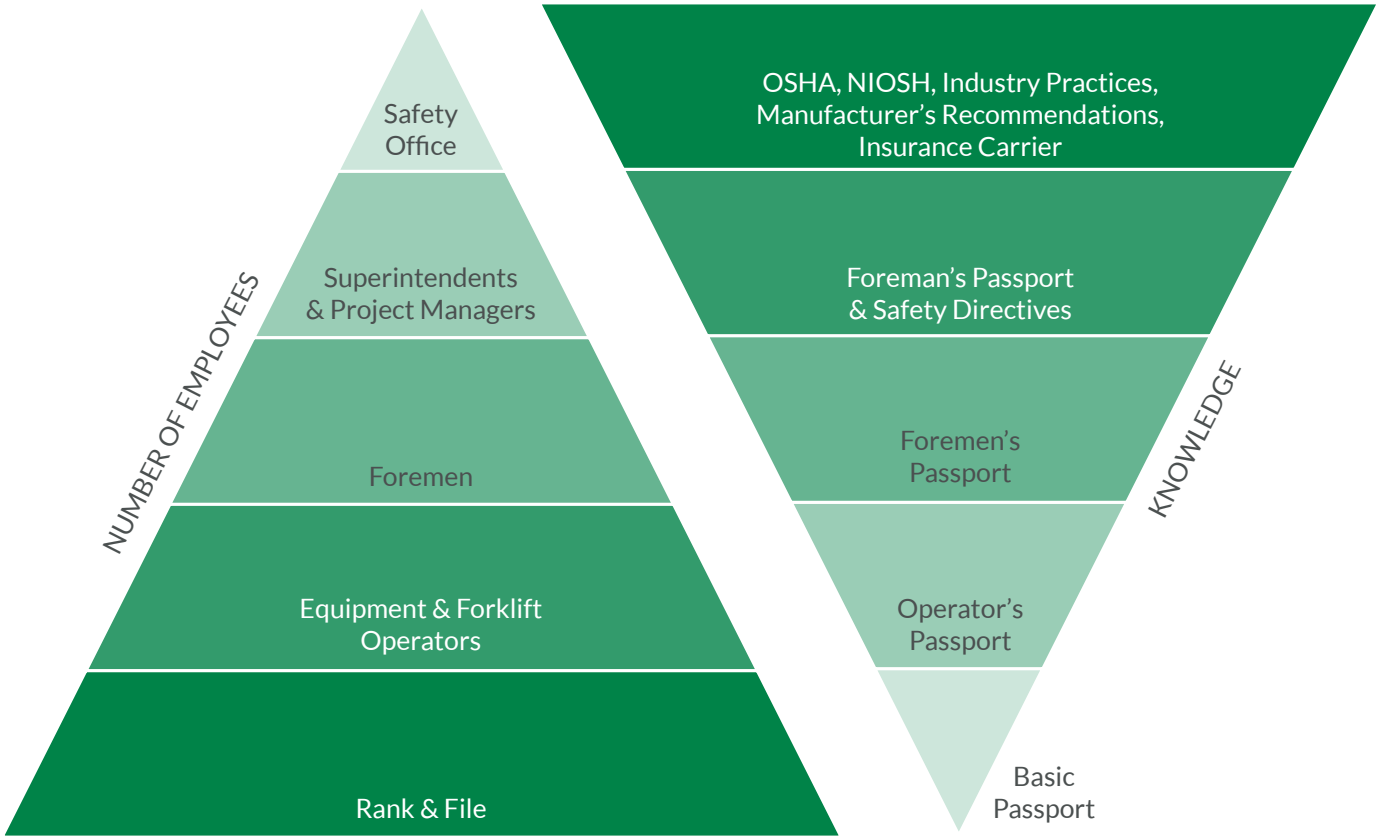
Once everyone is set to work, the Bradbury Stamm Superintendent and/or Safety Director John Brown spend part of their time on-site, watching employees' work. This is an example of safe behaviors observation, and encourages employees to follow safety practices.

The above process continues for the duration of the job for the excavation crews to the carpet layers.

SAFETY PASSPORT DELIVERY TRIANGLES

A failing of many safety programs is their size and assumption that each employee should know the entire program which is nearly impossible.

Built on the cliché "on a need to know basis", every employee needs to know the safety practices pertinent to their work and work are today. The Bradbury Stamm Safety Passport™ is split into different levels of risk and responsibility.



Notice at the bottom of the left triangle, the lower slice represents a large number of employees termed rank and file. The upside down triangle on the right side represents the amount of safety information needed and is contained in the thinnest passport booklet, the Basic Safety Passport.

The next slice up on the left triangle is equipment operators; employees using powerful machinery to dig, lift, and haul. Those employees are fewer, but need more safety information than the rank and file. In the Knowledge Triangle (on the right), is the Safe Equipment Operators' Passport which contains almost twice the information as the Basic Passport.

The next slice up are field supervisors. Although there are generally not more than a handful on-site, they need to know more and are issued the Foremen's Safety Passport with a little more safety information typically in bold print. Foremen are expected to be well versed in the information presented in the Foremen's Safety Passport.

There is only one superintendent, and he/she is the jobsite safety director. This person carries and knows the Foremen's Safety Passport as well. He/she also keeps up with and posts the Bradbury Stamm Safety Directives that cover special operation and policies.

If the necessary information cannot be found in the Basic Passport, Foremen's Passport, or the Safety Directives, there is readily available information by phone, or in person through the safety specialist and experts such as the Bradbury Stamm Safety Director

SUMMARY

The Bradbury Stamm Safety Passport™ System is analogous to an iceberg; the booklet itself is small, simple to implement and streamlined in its delivery, but out of sight is a sophisticated, comprehensive safety program. It is a system that includes workers, managers, regulations, safe practices, risk management and safety expertise. Furthermore, the Bradbury Stamm Safety Passport™ System transcends from prime contractor superintendent to remote tier subcontractor employee. It is the governing safety program on-site.

BASIC SAFETY RULES - SAFETY PASSPORT SYSTEM

BRADBURY STAMM SAFETY PASSPORTS™

1. Employee Safety Passport
2. Foreman Safety Passport
3. Subcontractor Safety Passport
4. Subcontractor Safety Passport - Spanish Version
5. Safe Equipment Operator Safety Passport
6. Safe Equipment Operator Safety Passport - Spanish Version

BRADBURY STAMM SAFETY PASSPORTS™ - EMPLOYEE SAFETY PASSPORT

Bradbury Stamm COMPANIES

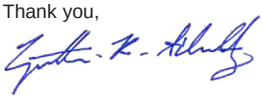
EMPLOYEE SAFETY PASSPORT

rev. 05/18

Bradbury Stamm (BSC) welcomes you to our construction project. We invite and encourage you as an employee/subcontractor to join us in making this project a safe one. We are providing you with a safe environment and proper equipment, so that you will be working in the safest conditions. However, safe conditions are not enough; safe work habits are a vital part of a successful program. This handbook is provided as a basic guide to your safe conduct on the job. Read it carefully, learn the general safety rules and keep the handbook with you at work at all times. If there is anything in here you do not understand, ask your supervisor. They will be glad to help.

Remember, our having a good safety program depends on you!

Thank you,



Cynthia K. Schultz
CEO
Bradbury Stamm Construction, Inc.

Contents

1. General Safety Rules

a. Report to work rested and physically fit to perform your job.
b. Wear clean clothing suitable for the weather and your work. Torn or loose clothing, cuffs and ties are hazardous. Minimum clothing is a full t-shirt and full-length trousers.
c. Wear good work shoes, preferably safety shoes. No tennis shoes, open-toed shoes, or shoes with high heels.
d. Use correct gloves when welding, handling chemicals, rough materials or items with sharp edges.
e. Jewelry that can get caught or snagged by work practice should NOT be worn.
f. Keep horseplay and roughhousing away from the job. Practical jokes often become painful injuries.
g. Anyone involved in verbal abuse, harassment or fighting on the job may be subject to immediate dismissal.
h. Never point an air hose at anyone or use it to clean clothing.
i. Use only designated toilets.
j. Inspect your safety equipment daily. If defective, do not use. Report it to your Foreman immediately.
k. Work with care and good judgment at all times to avoid accidents – even if a specific safety rule is not contained in this manual.
l. Soft drinks, food, etc., are not to be cooled in drinking water kegs or ice storage boxes.
m. Do not operate any vehicle or equipment unless authorized by your foreman.
n. The use of Alcoholic Beverage and/or Illegal Drugs is strictly prohibited on any BSC project, and in any BSC vehicle, and may be subject to immediate dismissal.
o. Do not violate company Safety Directives. See your Foreman to become familiar with all Safety Directives that apply to your work.

2. Reporting Injuries

In order to receive medical treatment, it is a requirement and the policy of this company that you report any injury to your Foreman or other company supervisor on the same day of the injury, whether or not you go to the doctor that day.

3. Your Foreman
a. If you do not understand any safety rule, ask your Foreman to explain it.
b. Before doing a job where you are not familiar with the hazards, ask your Foreman to show you the safe way to do the job. They'll be glad to do it.
c. Give your wholehearted support to safety activities. Preventing accidents depends mostly on you!

4. Unsafe Acts or Conditions
Report or correct any unsafe acts or unsafe conditions or equipment to your Foreman immediately.

5. Work Areas
a. Be aware of work going on around you, keep clear of suspended loads, traffic areas, etc.
b. Before entering new work areas, familiarize yourself with any unusual hazards.
c. Place barricades to warn traffic, overhead dangers, open footings, excavation, swing radius of crane cab., etc.
d. Work, eat lunch, etc. only in your work area.
e. Remove nails from crates and lumber immediately.
f. Stay in your assigned work area. Do not wander around the jobsite.
g. Do not cross or remove "Caution Tape" or flagging. Respect all warning lines.

6. Housekeeping
a. Keep materials orderly; prevent piles of materials from falling or shifting (tie down or support if necessary).
b. Clean up any oil, liquids, or other materials spilled or dropped on stairs, walkways, ladders or floors. Place your lunch sacks, paper, and soft drinks or other containers in trash barrels.
c. Have all cords, welding leads, hoses placed to avoid tripping hazards or from getting damaged.
d. Keep loose materials off stairs, walkways, ramps, platforms, scaffolds, etc.
e. Put or replace caps on rebar and grade stakes.

f. Do not work in areas with inadequate lighting. Tell your Foreman and he/she will get it corrected.
g. Keep all stored materials a minimum of 6' away from any shaft opening and 10' from building edge.
h. Secure material and equipment so it will not be blown out of the building.

7. Lifting
a. Check for a clear path first. Then have a clear view while carrying load.
b. Avoid back strains when lifting (including shoveling) by following these few simple suggestions:
(1) Take a good look at what you're going to lift. If it is too heavy or bulky for you, get help. (Another employee, chain hoist, forklift, crane, etc.)
(2) Get a firm clear footing and keep your feet about shoulder distance apart.
(3) Squat down, keep whatever you are lifting close to you and lift with your strong leg muscles keeping your back straight.
(4) While carrying whatever you have lifted, avoid twisting of the body as much as possible.
(5) When setting the object down, reverse the lifting procedure; that is, keep your back straight and lower with your leg muscles.
c. When carrying long objects with another employee, be sure you both carry the load on the same shoulder.
d. Have just one person give commands when teaming big loads.

8. Drugs and Alcohol
Possession, consumption or use of alcoholic beverages or illegal drugs (including marijuana) is not permitted. Anyone violating this policy will be subject to immediate termination. You must pass a drug screen prior to employment, after any accident, at any time that your Foreman or other Company supervisory personnel suspect that the policy is being violated. Random drug tests may also be requested.

9. Safety Meetings
Attend all safety meetings and safety training classes held at your job site. You will get the latest information on what the company is doing and what you can do to keep from getting hurt.

10. Hard Hats
a. Hard hats are to be worn whenever there is an overhead hazard, work is being performed overhead or a hazard from falling objects.
b. Employees will have a hard hat with them on all jobsites.
c. During the final stages of construction (touch-up paint, carpeting, floor waxing etc.) the wearing of hard hats may not be required as the site Superintendent sees fit.

11. Eye Protection
General-purpose safety glasses will be issued to employees and must be on their person at all times. Eye protection must be worn when:
a. Using grinders (all types), using cleaning materials, table saws, jack hammers, chipping guns, masonry saws, welding or cutting torches (under welding hood in arc welding), nailers, powder actuated tools.
b. Cleaning a weld or when the wind is such that it is blowing dust, sand, rust or other particles about.
c. Handling material in powder form such as cement or when mixing or cleaning brick with acid or other cleaning material.
d. There is danger of concrete or mortar splashing in the eye.
e. Filing or buffing any material.
f. Working near persons whose work requires them to wear eye protection.
g. There is other dangerous exposure to your eyes.
h. Sunglasses are okay for outside but clear glasses are to be with the employee for inside work.

12. Respirable Dust Protection
1a. Respirable crystalline silica is made by cutting, grinding, polishing, jackhammering and drilling materials containing sand such as concrete, asphalt, block, brick, tile, mortars and grout.

Always use water and/or vacuum systems to prevent silica from being inhaled.

1b. Have your Foreman train and sign your Silica Exposure Log whenever you alter silica (sand) containing materials by methods listed in a. above. Fill-out Silica Exposure Log every day you alter silica containing materials.

1c. Be sure to not expose other employees around you to respirable silica.

2. Dust masks should be used when spray painting, handling cement, lime, or when exposed to a steady dust hazard. Special equipment is required when sandblasting, welding, and cutting in confined spaces, on galvanized material or metal coated with red or zinc chromate - See your Foreman under these circumstances.

13. Fall Protection
Employees within 6 feet of a fall hazard greater than 6 feet in height shall be protected from falling by:
a. Guardrails - 42" high ± 3", strong enough to withstand 200 pounds in down and outward directions, a mid rail is required. If persons are working or walking beneath or next to the fall zone a toeboard will be included or the area will be restricted to:
(1) Lifelines, seat harnesses, full-body harnesses, lanyard and static lines connected to anchor points capable of supporting 3,000 pounds. Safety belts are not allowed.
(2) A lifeline and harness shall be used in all areas where materials are loaded, landed or unloaded if an employee is within 6 feet of the edge. Check your harness carefully each day. If defective, do not use, return it to your Foreman. Some alternative fall protection methods are allowed. See your Foreman.

14. Hearing Protection
a. Hearing protection must be in your procession at all times

while on the job.
b. Wear your hearing protection when around noise, even if you are not operating the equipment.

15. Hand Tools
a. Inspect tools before using to make sure they are not defective.
b. When hand tools are not in use, lay them down in a safe place where they will not fall on a fellow worker or cause him/her to trip.
c. Do not carry hand tools up or down a ladder; use a rope or tool belt.
d. Know the correct use of hand tools before using; use the right tool for the job. If you are not sure how to use any tool talk to your Foreman, they will instruct you on the proper and safe use of any tool.
e. Have tools, with burred or mushroomed heads, ground down. Keep cutting tools sharp and carry in a container or on a tool belt (not in your pocket).
f. Do not use tools with split, broken, or loose handles.
g. Be sure you have a clear area behind you before swinging a sledgehammer, axe, pick, or other tools or materials.

16. Portable Power Tools
a. Be sure the electrical tools, such as portable power saws, grinders, drills, etc. are grounded (unless they are double insulated tools). Do not stand in water or on damp ground when using tools. (Report any minor shocks to your Foreman)
b. Make sure the tool has the proper guard and never block or lock the guard in an open position.
c. Never block or lock the safety switch on a power tool so that it will operate the tool.
d. Keep extension cords and power cords out of the center of walkways and off of ladders and stairways.
e. Never point a compressed air tool or powder-actuated tool at yourself or a fellow employee.
f. Only qualified personnel should operate or service power tools.

g. Do not use defective power tools. Report condition to your Foreman.
h. Right-angle grinder MUST be equipped with half moon or 180º guard.

17. Powder Actuated Tools
a. Never use a powder actuated tool unless you are properly trained and have a VALID CERTIFICATE CARD in your possession.
b. Always wear eye protection and hearing protection.
c. Do not shoot through sheetrock or plywood without making sure no one is on the other side.

18. Machines
a. Before starting machinery, opening valves, switches, etc. check to make sure fellow employees are in the clear and have all safety guards in place.
b. Never adjust or repair machinery while it is running.
c. Operate machinery and vehicles within safe speeds and at rated capacity.
d. Never refuel an engine while it is running.
e. When using a gasoline or diesel engine in an enclosed area, be sure to vent the exhaust outside.
f. Never use an air hose for pressure to empty gasoline drums.
g. Do not start or use any machinery unless you have been authorized to do so.
h. If you are in charge of a compressed air tank, be sure to drain the tank and test the safety valve daily.

19. Ladders
a. Be sure straight or extension ladders are tied off at the top.
b. Get someone to hold ladder while you are tying off, or if you can't tie it off.
c. Make sure extension ladder locking clamps are in place before using.
d. Have ladder reach at least 36" above landing for easy access.
e. Use only sturdy ladders on firm level base at a 4 to 1 pitch and have clear access at top and bottom.

f. Do not try to get additional height from ladder by placing it on a makeshift cribbing such as boxes, boards or scaffolds.
g. Do not place a ladder in front of a door unless it is locked, barricaded, or guarded by another employee.
h. Always engage snap spreaders on stepladders.
i. Face ladder when climbing up or down; use both hands. Use hand line to lift or lower loads.
j. Portable metal ladders must not be used for electrical work or around electric lines.
k. Never work off of the top two steps of a ladder.
l. Inspect all ladders daily or before use.

20. Scaffolds and Aerial Lifts
a. Scaffolds are to be erected only by employees trained to erect scaffolds. See your Foreman.
b. Do not get on scaffolds until they have been inspected by the competent scaffold person.
c. Scaffolds are to be inspected every day before employees get on the scaffolds. Before any employee is allowed on any scaffold it must have a **GREEN** tag attached.
d. Scaffolds with a fall height greater than 10 feet must have guardrails.
e. Whenever working in any aerial lift in which the manbasket extends beyond the perimeter of the vehicle's wheels you must wear a safety harness and lanyard tied to the approved anchorage point.
f. Do not stand on the guardrails unless connected to the manbasket with full body harness and lanyard.

21. Floor Openings
a. Keep materials away from entrance or exits of stairs, hoists and elevators landings, traffic lanes and ladders.
b. Avoid shortcuts - use ramps, stairs, walkways, ladders, etc.
c. Do not work in areas with inadequate lighting. Tell your Foreman and he will get it corrected.
d. When necessary to remove guardrails around a floor opening or building perimeter, make certain they are replaced each time you leave the work area and immediately upon completion of work.

e. Keep all stored materials a minimum of 6' away from any shaft opening and 10' from building edge.
f. Secure material and equipment so it will not be blown out of the building.
g. Any floor opening greater than 1.5" in the least dimension must be covered and secured with a suitable covering marked "hole" and "oiyo."

22. Hoists
a. Ride the personnel hoist only; never ride a material hoist.
b. To prevent overloading of a personnel hoist, you must follow hoist operator's instruction for the loading of people or material.
c. When hoisting pipe or material that must stand upright, secure it to prevent ends from catching in the hoist tower. Never ride a material hoist to hold the material.
d. Be sure to close hoist way gate after unloading.
e. When loading or unloading a material hoist, never stay on it longer than necessary.
f. Be sure to replace the guard rails at the hoist landing.

23. Electrical
a. Consider all wire "live" until checked out.
b. Never remove or cut ground prong of any electrical tool or extension cord. PLUG INTO MATCHING RECEPTACLE ONLY.
c. All electrical power tools and extension cords should have RUBBER insulation. Damaged cords should be repaired or replaced immediately. Only type "S" cords are permitted.
d. All repairs to electrical tools and extension cords must be made by qualified personnel only.
e. Do not drive vehicles, aerial lifts or rolling scaffolds over extension cords.

24. Compressed Gas Cylinders
a. Always turn cylinder valves off when not in use or when unattended for an extended period of time, such as during the lunch period.
b. Always secure a cylinder, full or empty, in an upright position.

c. When cylinders are lowered or hoisted, use a skip box, net or cart. Never use a choker or hook on to the valve cap.
d. Never store oxygen cylinders near flames, flammable, or combustible liquids or materials, oil, grease, or within 20 feet of fuel gas cylinders (acetylene, propane etc.).
e. Keep oily rags and oily gloves away from oxygen cylinders. (This could cause an explosion)
f. Keep valve caps on cylinders, full or empty.

25. Fire Prevention

25.1. General

a. Know the location of and how to use fire extinguishers and fire hoses.
b. Take extra care in disposing of cigarette butts and matches. Extinguish thoroughly. When in refineries or chemical plants, or waste water plants smoke only in designated areas.
c. Flammable liquids should be transported and stored only in the original container or in an approved metal safety can with self closing lid or nozzle.
d. Store oily rags or paint rags in covered metal containers.
e. Be sure there is a fire watch before welding or cutting above combustible materials.
f. Tell your Foreman if you use a fire extinguisher so it can be refilled.

25.2. Fire Protection for Wood-Frame Construction

This section applies to all wood frame construction on BSC sites and on sites where questions of flammable or combustible material may create a fire hazard as determined by the job Superintendent and/or Safety Director.

a. Housekeeping is critical to avoid fires. Sweep up sawdust and ends of sawed materials at the end of every shift.
b. No smoking will be permitted anywhere on the jobsite with the exception of a single, posted smoking area. Ask your Foreman if you need the location of the smoking area.
c. Do not start work until fire hydrants are live and hoses and

hydrant wrenches are at the fire hydrant.
d. A fire watch shall be posted for at least one hour whenever open flame or similar source of ignition is used. The fire watch will have means with them to extinguish flame or smoldering material.
e. Plumbers using torches to sweat pipes will have a spray bottle on hand which shall be used to pre-wet and soak (douse) combustibles affected by the heat source. Plumbers must have within arm's length a functioning fire extinguisher.
f. When requested, employees will attend training on fire prevention and fire suppression.

26. Excavations

a. Never enter an excavation or trench more then 5' deep unless it is shored or sloped.
b. In any trench 4 feet or greater in depth that you cannot walk out of, place an access ladder within 25' of any workman.
c. When digging a trench, place soil (dirt from the excavation) at least 2' away from edge of excavation. Remove surface rocks, clods of dirt or other debris that could fall.
d. All employees entering excavations must have training.

27. Clearing and Grading Equipment

a. Always operate a dozer, scraper, grader, backhoe / loader etc. at a safe speed.
b. Only the operator should be on the operating platform or seat. No one else should be on the equipment.
c. Walk around your equipment before starting up to make certain no one is in a danger zone.
d. Always be aware of those persons working around your equipment.
e. Always wear your seatbelt.

28. Safe Driving

a. Do not ride on vehicle or mobile equipment except on seat or designated passenger platform.
b. Do not ride in the back of pickups unless approved by BSC

Superintendent.
c. When driving about the jobsite, never exceed 15 mph. At all times observe the rules of safe driving.
d. Every day, check the company truck you are driving to see that the brakes, turn indicator, head lights, back up alarm (if required) and stoplights are working properly. WEAR YOUR SEATBELT AT ALL TIMES.

29. Protection of Public

a. Anytime you see sightseers or children in the work area, ask them to leave so they will not be hurt.
b. If there is danger of pedestrians, automobiles, etc., being struck by falling materials that you are working with, tell your Foreman so he can arrange the necessary protection.
c. Direct any visitors without hardhats to the job office for proper job clearance.
d. Do not visit with students on schools.

30. Hazard Communication Program

This Company has a written hazard Communication program, and in accordance with OSHA Standard 1926.59, the following items are available to you at your request:

a. A copy of the Company's written Hazard Communication Program;
b. A copy of the Company's "List of Hazardous Chemicals" for your workplace; and
c. Copies of Safety Data Sheets (SDS) for any covered chemicals to which you are exposed. To obtain any of this information, contact your supervisor.

31. Health Hazard Evaluations Records

Upon written request, you may obtain a copy of any medical record or any analysis of sampling taken while on or near you with regard to your working conditions or workplace.

32. Civil Jobsites

a. Flagmen are required when equipment crosses the streets not closed off. Flagmen must have passed a flagmen

training course, ask your Foreman.
b. Hardhats will always be with employees at all times when in trucks or equipment with a protective cab.
c. Safety vests must be worn at all times when around traffic and moving equipment.
d. Eye protection should be worn at all times. Glasses should have a UV coating to protect eyes from long-term exposure to sunlight.
e. Sunscreen is encouraged as are long-sleeved shirts.
f. Seat belts are to be worn at all times.
g. Riding in the back of trucks and equipment is not allowed, unless approved by the BSC Superintendent and the BSC Safety Director.
h. Hearing protection will be worn when sawing and jack hammering. Face shields or goggles will be worn when jack hammering or sawing.
i. Excavations cannot be entered until inspected by a Bradbury Stamm Competent Person. If a trench box is used, do not leave the protection of the trench box.
j. Support all cross lines, pipes, conduits, and wires.
k. Do not get under suspended loads.
l. Back-up alarms are required on water trucks, loaders, and excavators.
m. Use taglines when setting trench boxes.

33. Confined Spaces

a. Confined spaces are not to be entered without the Foreman first checking the atmosphere.
b. If a confined space has a hazard (hazardous atmosphere, engulfment, entrapment, etc.) that cannot be eliminated before entry, do not enter until the Bradbury Stamm permit-required Confined Space Competent Person authorizes entry. Ask your Foreman.
c. Do not operate gasoline saws in deep trenches, manholes, or areas of poor air circulation without a ventilator and/or the supplied air hood.
d. Jackhammer and chipping operations in confined spaces will be done only with supplied air hoods or ventilators and respiratory protection.

34. Air Test Balls and Plugs

a. Test inflation of test balls and air plugs for leaks before use.
b. Do not inflate while you are in a manhole.
c. Face shields are to be worn when inflating and deflating.
d. Stay out of the line of fire and keep back as much as possible.

35. Safety Violations

1. The FIRST Safety Violation is a written warning and will not result in penalty.

2. The SECOND Violation will result in employee being sent home without pay for the rest of the workday.

3. The THIRD Violation will result in employee being sent home without pay for the rest of current workday AND the following day.

4. The FOURTH Violation will result in three days without pay suspension and possible termination based on the recommendation of the Superintendent.

5. The FIFTH Violation will result in automatic termination unless the Superintendent requests an interview with the Safety Director and Human Resources Manager.

36. Equipment Operator's Safety Certification
(See Equipment Operator's Safety Passport on the following pages.)

VIOLATION LOG

RULE **DATE**

1. _____

Violation_____

_____

2. _____

Violation_____

_____

3. _____

Violation_____

_____

4. _____

Violation_____

_____

5. _____

Violation_____

_____

EMPLOYEE ORIENTATION ACKNOWLEDGMENT

I have received the Bradbury Stamm Employee Safety Passport. I have read and understand the General Safety Rules and agree to abide by the Safety Program while employed by Bradbury Stamm. I understand that I must keep this book with me at all times while at work, and if for any reason I do not have my Safety Passport with me, I understand that I will not be allowed to work or be on the payroll until I can present my Safety Passport.

I have read the consequences for each safety violation that is written in my Safety Passport and understand that if I reach FIVE Safety Violations, I will be automatically terminated unless the Superintendent requests an interview.

If I lose or destroy my Safety Passport a new Safety Passport will be issued after a THREE day without pay suspension is completed.

**After a 12-month period, all violations are erased, and a new Safety Passport will be issued.*

New book Issued_____(Date)

Employee Name_____
(Please Print)

Employee Number_____

Employee Signature _____

Date_____

Silica Exposure Log

Trained by Competent Person - Name: _____ **Date:** _____

Date	Hours Worked	Tool Used	Control Method: Wet or Vacuum	Outdoors Yes/No	Work Location

Silica Exposure Log

Trained by Competent Person - Name: _____ **Date:** _____

Date	Hours Worked	Tool Used	Control Method: Wet or Vacuum	Outdoors Yes/No	Work Location

EMPLOYEE NAME

If you have questions about this document or the Bradbury Stamm Construction Safety Passport Program, contact:

Safety Director, Bradbury Stamm Construction, Inc.
505.765.1200

Bradbury Stamm Construction Since 1923

BRADBURY STAMM SAFETY PASSPORTS™ - FOREMAN SAFETY PASSPORT

Bradbury Stamm COMPANIES

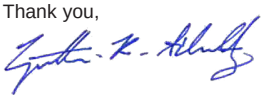
FOREMAN SAFETY PASSPORT

rev. 05/18

Bradbury Stamm (BSC) welcomes you to our construction project. We invite and encourage you as an employee/subcontractor to join us in making this project a safe one. We are providing you with a safe environment and proper equipment, so that you will be working in the safest conditions. However, safe conditions are not enough; safe work habits are a vital part of a successful program. This handbook is provided as a basic guide to your safe conduct on the job. Read it carefully, learn the general safety rules and keep the handbook with you at work at all times. If there is anything in here you do not understand, ask your supervisor. They will be glad to help.

Remember, our having a good safety program depends on you!

Thank you,



Cynthia K. Schultz
CEO
Bradbury Stamm Construction, Inc.

This Foreman Safety Passport is issued to BSC Employees engaged in supervising field employees. Safety practices and rules in this Passport are in greater detail requiring greater understanding of the hazards and practices used to protect employees. These rules affect all BSC employees and employees of subcontractors. The practices and rules contained here are to be followed by employees and management alike.

Contents

1. General Safety Rules

a. Report to work rested and physically fit to perform your job.
b. Wear clean clothing suitable for the weather and your work. Torn or loose clothing, cuffs and ties are hazardous. Minimum clothing is a full t-shirt and full-length trousers.
c. Wear good work shoes, preferably safety shoes. No tennis shoes, open-toed shoes, or shoes with high heels.
d. Use correct gloves when welding, handling chemicals, rough materials or items with sharp edges.
e. Jewelry that can get caught or snagged by work practice should NOT be worn.
f. Keep horseplay and roughhousing away from the job. Practical jokes often become painful injuries.
g. Anyone involved in verbal abuse, harassment or fighting on the job may be subject to immediate dismissal.
h. Never point an air hose at anyone or use it to clean clothing.
i. Use only designated toilets.
j. Inspect your safety equipment daily. If defective, do not use. Report it to your Foreman immediately.
k. Work with care and good judgment at all times to avoid accidents – even if a specific safety rule is not contained in this manual.
l. Soft drinks, food, etc., are not to be cooled in drinking water kegs or ice storage boxes.
m. Do not operate any vehicle or equipment unless authorized by your foreman.
n. The use of Alcoholic Beverage and/or Illegal Drugs is strictly prohibited on any BSC project, and in any BSC vehicle, and may be subject to immediate dismissal.
o. Do not violate company Safety Directives. See your Foreman to become familiar with all Safety Directives that apply to your work.

Foremen: Employees operating forklifts must have the BSC Safe Equipment Operator Passport. Employees operating backhoes, loaders, skid-steer loaders and excavators must have the BSC Safe Equipment Operator Passport. See the Supervising Superintendent for further details or call the Safety Director. Every Foreman or Superintendent who supervises excavator or forklift operators on their job site must complete classroom training and pass written tests for the equipment in use.

2. Reporting Injuries
In order to receive medical treatment, it is a requirement and the policy of this company that you report any injury to your Foreman or other company supervisor on the same day of the injury, whether or not you go to the doctor that day.
Foremen: Report to the Superintendent any employee that brings to your attention an injury or complaint of an injury. Injuries are to be treated, not ignored. As a Foreman it is your responsibility to notify the Superintendent. BSC wants to provide the best care to employees as soon as possible. If there is an event where an employee falls, trips, is struck by something, etc., and the employee says they are ok, report this to the Superintendent. Refer to and follow the BSC document, "Guidelines for Following Injured Workers" available from the Safety Office.

3. Your Foreman
a. If you do not understand any safety rule, ask your Foreman to explain it.
b. Before doing a job where you are not familiar with the hazards, ask your Foreman to show you the safe way to do the job. They'll be glad to do it.
c. Give your wholehearted support to safety activities. Preventing accidents depends mostly on you!

4. Unsafe Acts or Conditions
Report or correct any unsafe acts or unsafe conditions or equipment to your Foreman immediately.
Foremen: Unsafe conditions include uncapped rebar. Employees need to replace rebar caps as they walk by.

5. Work Areas
a. Be aware of work going on around you, keep clear of suspended loads, traffic areas, etc.
b. Before entering new work areas, familiarize yourself with any unusual hazards.
c. Place barricades to warn traffic, overhead dangers, open footings, excavation, swing radius of crane cab., etc.
d. Work, eat lunch, etc. only in your work area.
e. Remove nails from crates and lumber immediately.
f. Stay in your assigned work area. Do not wander around the

jobsite.
g. Do not cross or remove "Caution Tape" or flagging. Respect all warning lines.
Foremen:
a. Enclosed Spaces: Operation of motorized equipment, power screen, power trowels, generators, welders and propane heaters elevate carbon monoxide levels and deplete oxygen in enclosed spaces. A gas monitor may be needed to ensure the breathing air is safe. Equipment must be shut-down and/or employees removed from enclosed spaces when:
1. Oxygen level is below 19.5%;
2. Carbon monoxide is above 35 ppm. OSHA PEL is 50. NIOSH & AGIHA recommend 35 ppm.
b. Lighting: General working/walking areas require 3' candles of light to be measured at the walking surface. Task lighting for detail work is required to be 5' candles. Light meters are available from the Safety Director.

6. Housekeeping
a. Keep materials orderly; prevent piles of materials from falling or shifting (tie down or support if necessary).
b. Clean up any oil, liquids, or other materials spilled or dropped on stairs, walkways, ladders or floors. Place your lunch sacks, paper, and soft drinks or other containers in trash barrels.
c. Have all cords, welding leads, hoses placed to avoid tripping hazards or from getting damaged.
d. Keep loose materials off stairs, walkways, ramps, platforms, scaffolds, etc.
e. Put or replace caps on rebar and grade stakes.
f. Do not work in areas with inadequate lighting. Tell your Foreman and he/she will get it corrected.
g. Keep all stored materials a minimum of 6' away from any shaft opening and 10' from building edge.
h. Secure material and equipment so it will not be blown out of the building.
Foremen:
It is your responsibility to arrange for compliance of a clean-up request by Superintendent/Project Manager within

24 hours of a written notice.

7. Lifting
a. Check for a clear path first. Then have a clear view while carrying load.
b. Avoid back strains when lifting (including shoveling) by following these few simple suggestions:
(1) Take a good look at what you're going to lift. If it is too heavy or bulky for you, get help. (Another employee, chain hoist, forklift, crane, etc.)
(2) Get a firm clear footing and keep your feet about shoulder distance apart.
(3) Squat down, keep whatever you are lifting close to you and lift with your strong leg muscles keeping your back straight.
(4) While carrying whatever you have lifted, avoid twisting of the body as much as possible.
(5) When setting the object down, reverse the lifting procedure; that is, keep your back straight and lower with your leg muscles.
c. When carrying long objects with another employee, be sure you both carry the load on the same shoulder.
d. Have just one person give commands when teaming big loads.
Foremen: When employees are to move and lift materials, take the time to review the Safety Passport lifting section with them. Encourage stretching exercises and warm-up of muscles to help prevent strains and sprains, especially in cold weather.

8. Drugs and Alcohol
Possession, consumption or use of alcoholic beverages or illegal drugs (including marijuana) is not permitted. Anyone violating this policy will be subject to immediate termination. You must pass a drug screen prior to employment, after any accident, at any time that your Foreman or other Company supervisory personnel suspect that the policy is being violated. Random drug tests may also be requested.
Foremen: Employees can be sent for drug testing if their behavior or appearance suggests they may be impaired. Contact the Safety Office of HR Director if you suspect

alcohol or drug use by an employee.

9. Safety Meetings
Attend all safety meetings and safety training classes held at your job site. You will get the latest information on what the company is doing and what you can do to keep from getting hurt.
Foremen:
a. Before employees start a task, review the pertinent section in the Safety Passport. This is pre-task planning and goes a long way to preventing injuries.
b. Foremen and/or Superintendents shall hold weekly Safety Meetings if there are any employees working on the job site. Copies of Safety Meeting notes along with sign-in sheets will be maintained in the job site office.

10. Hard Hats
a. Hard hats are to be worn whenever there is an overhead hazard, work is being performed overhead or a hazard from falling objects.
b. Employees will have a hard hat with them on all jobsites.
c. During the final stages of construction (touch-up paint, carpeting, floor waxing etc.) the wearing of hard hats may not be required as the site Superintendent sees fit.

11. Eye Protection
General-purpose safety glasses will be issued to employees and must be on their person at all times. Eye protection must be worn when:
a. Using grinders (all types), using cleaning materials, table saws, jack hammers, chipping guns, masonry saws, welding or cutting torches (under welding hood in arc welding), nailers, powder actuated tools.
b. Cleaning a weld or when the wind is such that it is blowing dust, sand, rust or other particles about.
c. Handling material in powder form such as cement or when mixing or cleaning brick with acid or other cleaning material.
d. There is danger of concrete or mortar splashing in the eye.
e. Filing or buffing any material.
f. Working near persons whose work requires them to wear

eye protection.
g. There is other dangerous exposure to your eyes.
h. Sunglasses are okay for outside but clear glasses are to be with the employee for inside work.

Foremen: Be sure you have your eye protection with you; set the best possible example. Ask employees where their glasses are. Issue them clear glasses for inside work or to wear under a welding hood.

12. Respirable Dust Protection

1a. Respirable crystalline silica is made by cutting, grinding, polishing, jackhammering and drilling materials containing sand such as concrete, asphalt, block, brick, tile, mortars and grout. Always use water and/or vacuum systems to prevent silica from being inhaled.

1b. Have your Foreman train and sign your Silica Exposure Log whenever you alter silica (sand) containing materials by methods listed in a. above. Fill-out Silica Exposure Log every day you alter silica containing materials.

1c. Be sure to not expose other employees around you to respirable silica.

2. Dust masks should be used when spray painting, handling cement, lime, or when exposed to a steady dust hazard. Special equipment is required when sandblasting, welding, and cutting in confined spaces, on galvanized material or metal coated with red or zinc chromate - See your Foreman under these circumstances.

Foremen: OSHA requires a written respiratory protection program for employees wearing respirators. Many different respirators are available for different hazards. In all cases, including voluntary, a medical evaluation by a licensed health care professional must be conducted before employees can wear respirators. For more details contact your Superintendent or the Safety Director.

13. Fall Protection

Employees within 6 feet of a fall hazard greater than 6 feet in height shall be protected from falling by:

a. Guardrails - 42" high ± 3", strong enough to withstand 200 pounds in down and outward directions, a mid rail is required. If persons are working or walking beneath or next to the fall zone a toeboard will be included or the area will be restricted to:
(1) Lifelines, seat harnesses, full-body harnesses, lanyard and static lines connected to anchor points capable of supporting 3,000 pounds. Safety belts are not allowed.
(2) A lifeline and harness shall be used in all areas where materials are loaded, landed or unloaded if an employee is within 6 feet of the edge. Check your harness carefully each day. If defective, do not use, return it to your Foreman. Some alternative fall protection methods are allowed. See your Foreman.

Foremen: There are 3 conventional forms of Fall Protection:

a Guardrails - Capable of holding 200lbs in down and outward direction
- 42" high plus or minus 3"
- no more than 9" from open side
- have midrails
- any material greater than 1/4"
b. Safety Nets- Call the Safety Office
c. Personal Fall Protection Equipment – that being lanyards and harnesses in Fall Arrest or Positioning Equipment modes. Positioning equipment mode prevents falls.

Fall arrest stops an ongoing fall exposing employees to serious injury. Alternative methods of fall protection include Controlled Access Zones, Safety Monitors, wood framing practices and Warning lines. Written Site Specific Fall Protection Plans may be required. See the Safety Directive on Fall Protection.

14. Hearing Protection

a. Hearing protection must be in your procession at all times while on the job.
b. Wear your hearing protection when around noise, even if you are not operating the equipment.

Foremen: Have your hearing protection with you. Remind

employees often to wear it.

15. Hand Tools

a. Inspect tools before using to make sure they are not defective.
b. When hand tools are not in use, lay them down in a safe place where they will not fall on a fellow worker or cause him/her to trip.
c. Do not carry hand tools up or down a ladder; use a rope or tool belt.
d. Know the correct use of hand tools before using; use the right tool for the job. If you are not sure how to use any tool talk to your Foreman, they will instruct you on the proper and safe use of any tool.
e. Have tools, with burred or mushroomed heads, ground down. Keep cutting tools sharp and carry in a container or on a tool belt (not in your pocket).
f. Do not use tools with split, broken, or loose handles.
g. Be sure you have a clear area behind you before swinging a sledgehammer, axe, pick, or other tools or materials.

16. Portable Power Tools

a. Be sure the electrical tools, such as portable power saws, grinders, drills, etc. are grounded (unless they are double insulated tools). Do not stand in water or on damp ground when using tools. (Report any minor shocks to your Foreman)

Foremen: Check all GFCI's weekly. Tripping devices are available from the Safety Department or have the Electrical Contractor install them. Right angle grinders must be equipped with a half moon guard. Fatalities have occurred with right angle grinders.

b. Make sure the tool has the proper guard and never block or lock the guard in an open position.
c. Never block or lock the safety switch on a power tool so that it will operate the tool.
d. Keep extension cords and power cords out of the center of walkways and off of ladders and stairways.

Foremen: Do not let employees string extension cords where the cords will be run over by vehicles and machinery. Operators are required to assist in burying

cords if in the way of excavating equipment.

e. Never point a compressed air tool or powder-actuated tool at yourself or a fellow employee.
f. Only qualified personnel should operate or service power tools.
g. Do not use defective power tools. Report condition to your Foreman.
h. Right-angle grinder MUST be equipped with half moon or 180º guard.

Foremen: Observe employees using tools. Show them the correct methods. Have them read the operators manual or instructions. Discuss it with them. Report any injuries involving power tools to the Superintendent and the safety department. Doing so may prevent another accident.

17. Powder Actuated Tools

a. Never use a powder actuated tool unless you are properly trained and have a VALID CERTIFICATE CARD in your possession.
b. Always wear eye protection and hearing protection.
c. Do not shoot through sheetrock or plywood without making sure no one is on the other side.

Foreman: Before employees (including Subcontractor Employees) use powdered actuated tools; remind them to wear their hearing and eye protection. Make sure the material being shot will not let the projectile pass through. Remove other employees from the area.

18. Machines

a. Before starting machinery, opening valves, switches, etc. check to make sure fellow employees are in the clear and have all safety guards in place.
b. Never adjust or repair machinery while it is running.
c. Operate machinery and vehicles within safe speeds and at rated capacity.
d. Never refuel an engine while it is running.
e. When using a gasoline or diesel engine in an enclosed area, be sure to vent the exhaust outside.
f. Never use an air hose for pressure to empty gasoline drums.
g. Do not start or use any machinery unless you have been authorized to do so.

h. If you are in charge of a compressed air tank, be sure to drain the tank and test the safety valve daily.

19. Ladders

a. Be sure straight or extension ladders are tied off at the top.
b. Get someone to hold ladder while you are tying off, or if you can't tie it off.
c. Make sure extension ladder locking clamps are in place before using.
d. Have ladder reach at least 36" above landing for easy access.
e. Use only sturdy ladders on firm level base at a 4 to 1 pitch and have clear access at top and bottom.
f. Do not try to get additional height from ladder by placing it on a makeshift cribbing such as boxes, boards or scaffolds.
g. Do not place a ladder in front of a door unless it is locked, barricaded, or guarded by another employee.
h. Always engage snap spreaders on stepladders.
i. Face ladder when climbing up or down; use both hands. Use hand line to lift or lower loads.
j. Portable metal ladders must not be used for electrical work or around electric lines.
k. Never work off of the top two steps of a ladder.
l. Inspect all ladders daily or before use.

Foremen: OSHA requires all employees to be trained in the use and setup of ladders. This is your responsibility. Train employees on the ladder rules above. Be sure they understand the rule and refer to the Passport before setting up.

20. Scaffolds and Aerial Lifts

a. Scaffolds are to be erected only by employees trained to erect scaffolds. See your Foreman.
b. Do not get on scaffolds until they have been inspected by the competent scaffold person.
c. Scaffolds are to be inspected every day before employees get on the scaffolds. Before any employee is allowed on any scaffold it must have a **GREEN** tag attached.
d. Scaffolds with a fall height greater than 10 feet must have guardrails.
e. Whenever working in any aerial lift in which the manbasket

extends beyond the perimeter of the vehicle's wheels you must wear a safety harness and lanyard tied to the approved anchorage point.
f. Do not stand on the guardrails unless connected to the manbasket with full body harness and lanyard.

Foremen: All scaffolds on the job site will be checked daily by a BSC designated employee and must have a tag RED, GREEN or YELLOW attached to the scaffold. For training and any questions call the Safety Director.

21. Floor Openings

a. Keep materials away from entrance or exits of stairs, hoists and elevators landings, traffic lanes and ladders.
b. Avoid shortcuts - use ramps, stairs, walkways, ladders, etc.
c. Do not work in areas with inadequate lighting. Tell your Foreman and he will get it corrected.

Foremen: OSHA requires 3'candles of lighting to be present in all areas where employees walk through/work. Task lighting may be used for fixed work areas but is not a substitute for lighting in corridors, walkways, basements, etc.

d. When necessary to remove guardrails around a floor opening or building perimeter, make certain they are replaced each time you leave the work area and immediately upon completion of work.
e. Keep all stored materials a minimum of 6' away from any shaft opening and 10' from building edge.
f. Secure material and equipment so it will not be blown out of the building.
g. Any floor opening greater than 1.5" in the least dimension must be covered and secured with a suitable covering marked "hole" and "oiyo."

Foremen: All coverings over floor holes are to be:
- 2 times the intended load
- secured in place
- marked in Spanish "oiyo" and English "hole"
Holes greater than one and a half inches shall be covered.

22. Hoists

a. Ride the personnel hoist only; never ride a material hoist.
b. To prevent overloading of a personnel hoist, you must

follow hoist operator's instruction for the loading of people or material.
c. When hoisting pipe or material that must stand upright, secure it to prevent ends from catching in the hoist tower. Never ride a material hoist to hold the material.
d. Be sure to close hoist way gate after unloading.
e. When loading or unloading a material hoist, never stay on it longer than necessary.
f. Be sure to replace the guard rails at the hoist landing.

Foreman: Employees handling equipment near a fall hazard 6' or greater in height must be protected by a guardrail or a harness and lanyard connected to a suitable anchor point. It is your job to provide hoisting access and fall protection. Remind employees and enforce these rules. See the section on Fall Protection.

23. Electrical

a. Consider all wire "live" until checked out.
b. Never remove or cut ground prong of any electrical tool or extension cord. PLUG INTO MATCHING RECEPTACLE ONLY.
c. All electrical power tools and extension cords should have RUBBER insulation. Damaged cords should be repaired or replaced immediately. Only type "S" cords are permitted.
d. All repairs to electrical tools and extension cords must be made by qualified personnel only.
e. Do not drive vehicles, aerial lifts or rolling scaffolds over extension cords.

Foremen: Electrical safety is part of the daily inspection process. Be aware of these rules as you walk around the job site.

24. Compressed Gas Cylinders

a. Always turn cylinder valves off when not in use or when unattended for an extended period of time, such as during the lunch period.
b. Always secure a cylinder, full or empty, in an upright position.
c. When cylinders are lowered or hoisted, use a skip box, net or cart. Never use a choker or hook on to the valve cap.
d. Never store oxygen cylinders near flames, flammable, or

combustible liquids or materials, oil, grease, or within 20 feet of fuel gas cylinders (acetylene, propane etc.).
e. Keep oily rags and oily gloves away from oxygen cylinders. (This could cause an explosion)
f. Keep valve caps on cylinders, full or empty.

25. Fire Prevention

25.1. General

a. Know the location of and how to use fire extinguishers and fire hoses.
b. Take extra care in disposing of cigarette butts and matches. Extinguish thoroughly. When in refineries or chemical plants, or waste water plants smoke only in designated areas.
c. Flammable liquids should be transported and stored only in the original container or in an approved metal safety can with self closing lid or nozzle.
d. Store oily rags or paint rags in covered metal containers.
e. Be sure there is a fire watch before welding or cutting above combustible materials.
f. Tell your Foreman if you use a fire extinguisher so it can be refilled.

25.2. Fire Protection for Wood-Frame Construction

This section applies to all wood frame construction on BSC sites and on sites where questions of flammable or combustible material may create a fire hazard as determined by the job Superintendent and/or Safety Director.

a. Housekeeping is critical to avoid fires. Sweep up sawdust and ends of sawed materials at the end of every shift.
b. No smoking will be permitted anywhere on the jobsite with the exception of a single, posted smoking area. Ask your Foreman if you need the location of the smoking area.
c. Do not start work until fire hydrants are live and hoses and hydrant wrenches are at the fire hydrant.
d. A fire watch shall be posted for at least one hour whenever open flame or similar source of ignition is used. The fire watch will have means with them to extinguish flame or smoldering material.
e. Plumbers using torches to sweat pipes will have a spray

bottle on hand which shall be used to pre-wet and soak (douse) combustibles affected by the heat source. Plumbers must have within arm's length a functioning fire extinguisher.
f. When requested, employees will attend training on fire prevention and fire suppression.

26. Excavations
a. Never enter an excavation or trench more then 5' deep unless it is shored or sloped.
b. In any trench 4 feet or greater in depth that you cannot walk out of, place an access ladder within 25' of any workman.
c. When digging a trench, place soil (dirt from the excavation) at least 2' away from edge of excavation. Remove surface rocks, clods of dirt or other debris that could fall.
d. All employees entering excavations must have training.

Foremen: Refer to and enforce the Safe Operator Passport that is contained in this booklet.

27. Clearing and Grading Equipment
a. Always operate a dozer, scraper, grader, backhoe / loader etc. at a safe speed.
b. Only the operator should be on the operating platform or seat. No one else should be on the equipment.
c. Walk around your equipment before starting up to make certain no one is in a danger zone.
d. Always be aware of those persons working around your equipment.
e. Always wear your seatbelt.

Foremen: All BSC equipment operators must have the Safe Operator Passport on their person and have passed the test. It is your job to ensure the practices and rules in the Safe Operator Passport are followed.

28. Safe Driving
a. Do not ride on vehicle or mobile equipment except on seat or designated passenger platform.
b. Do not ride in the back of pickups unless approved by BSC Superintendent.
c. When driving about the jobsite, never exceed 15 mph. At all

times observe the rules of safe driving.
d. Every day, check the company truck you are driving to see that the brakes, turn indicator, head lights, back up alarm (if required) and stoplights are working properly. WEAR YOUR SEATBELT AT ALL TIMES.

29. Protection of Public
a. Anytime you see sightseers or children in the work area, ask them to leave so they will not be hurt.
b. If there is danger of pedestrians, automobiles, etc., being struck by falling materials that you are working with, tell your Foreman so he can arrange the necessary protection.
c. Direct any visitors without hardhats to the job office for proper job clearance.
d. Do not visit with students on schools.

30. Hazard Communication Program
This Company has a written hazard Communication program, and in accordance with OSHA Standard 1926.59, the following items are available to you at your request:
a. A copy of the Company's written Hazard Communication Program;
b. A copy of the Company's "List of Hazardous Chemicals" for your workplace; and
c. Copies of Safety Data Sheets (SDS) for any covered chemicals to which you are exposed. To obtain any of this information, contact your supervisor.

31. Health Hazard Evaluations Records
Upon written request, you may obtain a copy of any medical record or any analysis of sampling taken while on or near you with regard to your working conditions or workplace.

32. Civil Jobsites
a. Flagmen are required when equipment crosses the streets not closed off. Flagmen must have passed a flagmen training course, ask your Foreman.
b. Hardhats will always be with employees at all times when in trucks or equipment with a protective cab.
c. Safety vests must be worn at all times when around traffic

and moving equipment.
d. Eye protection should be worn at all times. Glasses should have a UV coating to protect eyes from long-term exposure to sunlight.
e. Sunscreen is encouraged as are long-sleeved shirts.
f. Seat belts are to be worn at all times.
g. Riding in the back of trucks and equipment is not allowed, unless approved by the BSC Superintendent and the BSC Safety Director.
h. Hearing protection will be worn when sawing and jack hammering. Face shields or goggles will be worn when jack hammering or sawing.
i. Excavations cannot be entered until inspected by a Bradbury Stamm Competent Person. If a trench box is used, do not leave the protection of the trench box.
j. Support all cross lines, pipes, conduits, and wires.
k. Do not get under suspended loads.
l. Back-up alarms are required on water trucks, loaders, and excavators.
m. Use taglines when setting trench boxes.

33. Confined Spaces
a. Confined spaces are not to be entered without the Foreman first checking the atmosphere.
b. If a confined space has a hazard (hazardous atmosphere, engulfment, entrapment, etc.) that cannot be eliminated before entry, do not enter until the Bradbury Stamm permit-required Confined Space Competent Person authorizes entry. Ask your Foreman.
c. Do not operate gasoline saws in deep trenches, manholes, or areas of poor air circulation without a ventilator and/or the supplied air hood.
d. Jackhammer and chipping operations in confined spaces will be done only with supplied air hoods or ventilators and respiratory protection.

Foremen: BSC has a Permit-Required Confined Space entry system that must be followed before entering confined spaces. Entry equipment is available from the Main Office supply yard. Entry Permits are available from the superintendent and/or the Safety Office. Training must precede all entries. Fatalities in confined spaces are

common and entirely preventable.

34. Air Test Balls and Plugs
a. Test inflation of test balls and air plugs for leaks before use.
b. Do not inflate while you are in a manhole.
c. Face shields are to be worn when inflating and deflating.
d. Stay out of the line of fire and keep back as much as possible.

35. Safety Violations
Foremen: It is your responsibility to write up each and every employee who violates provisions in BSC Safety Passport. Failure to document and discipline employees is a violation of the Safety Passport, thus, Foremen/ Superintendents are subject to being written up in their Safety Passports for failure to enforce safety rules.
1. The FIRST Safety Violation is a written warning and will not result in penalty.

2. The SECOND Violation will result in employee being sent home without pay for the rest of the workday.

3. The THIRD Violation will result in employee being sent home without pay for the rest of current workday AND the following day.

4. The FOURTH Violation will result in three days without pay suspension and possible termination based on the recommendation of the Superintendent.

5. The FIFTH Violation will result in automatic termination unless the Superintendent requests an interview with the Safety Director and Human Resources Manager.

36. Equipment Operator's Safety Certification
(See Equipment Operator's Safety Passport on the following pages.)

VIOLATION LOG

RULE **DATE**

1. _____

Violation_____

_____

2. _____

Violation_____

_____

3. _____

Violation_____

_____

4. _____

Violation_____

_____

5. _____

Violation_____

_____

EMPLOYEE ORIENTATION ACKNOWLEDGMENT

I have received the Bradbury Stamm Employee Safety Passport. I have read and understand the General Safety Rules and agree to abide by the Safety Program while employed by Bradbury Stamm. I understand that I must keep this book with me at all times while at work, and if for any reason I do not have my Safety Passport with me, I understand that I will not be allowed to work or be on the payroll until I can present my Safety Passport.

I have read the consequences for each safety violation that is written in my Safety Passport and understand that if I reach FIVE Safety Violations, I will be automatically terminated unless the Superintendent requests an interview.

If I lose or destroy my Safety Passport a new Safety Passport will be issued after a THREE day without pay suspension is completed.

**After a 12-month period, all violations are erased, and a new Safety Passport will be issued.*

New book Issued_____(Date)

Employee Name_____
(Please Print)

Employee Number_____

Employee Signature _____

Date_____

36. Safe Equipment Operators Passport EXCAVATORS
36.1 Excavating Equipment Operations

This Safe Operators Passport is for BSC employees hired to operate front loaders, backhoes, skid-steer loaders (Bobcats) and excavators. This Passport is not for forklifts, rollers and water trucks. This Passport is in addition to the Safety Passport which must be on your person when on a BSC jobsite.

General Rules

a. The Operator is directly responsible for the safe operation of the equipment. Reckless and careless driving is prohibited.
b. The Operator is required to complete a pre-shift and a post-shift operation checklist. The checklists are printed in small pocket sized books. Tear off the page and attach to your time sheet for that day.
c. Wear your seat belt when operating the tractor. This includes excavators and backhoe digging operations.
d. Hard hats are required to be with operators at all times. When not protected by the tractor cab, a hardhat will be worn.
e. Do not drive over extension cords.
f. Report broken windows on the checklist. Windows must be clean for good visibility.
g. Back-up alarms must be in working order. Horns must be in working order.
h. Flashers and hazard lights must be in working order.
i. Wheeled tractors must have a Slow Moving Vehicle triangle mounted in visible location for traveling on public right-of-way.
j. Mirrors are required. Keep mirrors clean. If mirrors are inadequate, note on the checklist.
k. Do not check for hydraulic leaks with your hand. Use a piece of cardboard or paper. High-pressure leaks can cut your fingers off.
l. Do not get under the elevated loader or bucket without securing the safety supports.
m. Set the Parking Brake whenever you get off the machine. Lower the front bucket also.
n. If a bucket must be left up to do not leave the machine unattended. OSHA says the operator must be within 25'.
o. When employees get within the swing radius of the

boom/bucket, lower and contact the ground to prevent unintentional boom/bucket movement.
p. Do not operate the boom/bucket when employees are within swing radius. This is common of laborers when digging around; you may have to get out and explain this to them.
q. Have employees operating compactors and rollers face the area your operating in. They need to see you.
r. Do not lift loads using the teeth. Connect the load to a lifting eye or around a bucket pivot pin.
s. When using backhoe or excavator for demolition, attachment operation or stressful operation close the rear or front window to protect operator. Expanded metal screen can also be used.

Specific to Excavators

a. Overhead power lines must be insulated if the excavator boom can get within 10'. Many fatalities have occurred because the operators did not take this seriously.
b. Counterweight swing radius has crushed many employees. When working in tight spaces barricade the swing radius. Have a quick safety meeting with employees working or passing through the area. Your Foreman will support this.
c. Load Charts are to be in every excavator. Know the difference between the English and Metric chart values.
d. If you run both backhoes and excavators on your job, ask your Foremen to have the excavator controls altered to match the backhoe. Many fatalities have occurred when operators have switched from one tractor to the other and the controls were opposite. Your Foreman will report this to the Superintendent who can have it corrected.

Foreman: Check the Machine Operators Manual to switch controls from excavator patter to backhoe and vice versa.

Specific to Backhoes

a. When driving a tractor equipped with left and right brakes pedals connect both pedals for driving. This way a quick stop won't let the tractor lurch to one side.
b. Engage the Boom lock for loader operations.
c. Do not lift or hoist loads with the boom lock engaged. If it breaks it can kill the operator or adjacent employees.

Specific to Scrapers

a. Stay on designated haul roads when not loading or unloading.
b. Maintain a sufficient distance between scrapers on haul roads to stop safely.
c. Slow down and check for traffic when crossing roads.
d. Obey Flag Person's directions.
e. Stay on machine unless in designated area. See your Foreman.

36.2 Operators Underground Utilities Protection
36.2.1 Purpose

Protection of underground utilities is of vital importance to BSC. Underground utilities are gas lines, electric lines, water, storm and sanitary sewer pipelines and communication lines such as telephone, fiber optic and cable television. These lines are the property of the utilities owners or the property owner. They are obstacles to be worked around or removed and replaced. Other than cable television lines, all lines are considered as safety issues.

36.2.2 Procedure

The statute governing underground utilities is clear. Contractors must call for spots and powered excavating equipment must not dig within 24"of the spotted lines.

Therefore:

a. Spots must be called for. Document in the Daily Log or other appropriate place the call time, date and name of person receiving the call.
b. Meet with them and have them place flags if on dirt in addition to paint.
c. Copy their sketch or plans of the utilities buried. Have them sign the copy clearly.
d. Using a tape measure, measure 24" on each side of their spot marks and mark with WHITE paint. Take photographs of the spots and our marks. These marks are known as "offset marks".
e. Only allow hand digging between our marks. Equipment operators and other employees who violate this hand-

digging zone may be subject to termination.

36.2.3 Operator Underground Utilities Rules

a. Do not dig or remove earth in an area that may have underground utilities without review of the area by the supervising Superintendent.
b. Roads, alleys, overhead power lines, driveways, homes, businesses and sidewalks all indicate the presence of underground utilities. Colored metal markers usually mark fields and open lots having underground utilities. Do not dig in these areas unless the utilities have been called and the locators have conducted spotting.
c. If spots for lines are on concrete and asphalt and are removed then the lines must be re-spotted. Stop and wait for re-spots. Following this rule has saved BSC tens of thousands of dollars.
d. Do not dig unless photographs have been taken of the line spots and the offset marks.
e. Do not dig within 24" of the spot marks with excavating equipment. Be sure the offset marks are not disturbed while excavating.
f. Support underground utilities and their structures (phone boxes, telephone poles) before digging beneath.
g. Operator must not violate any practice or procedure in Safety Directive 36.2 Underground Utilities Protection.

36.3.1 Excavations

Excavations account for many fatalities in construction or permanent disabling injuries. Employees may die in the excavation from inhaling dirt, being crushed and suffocated, and even if rescued suffer crippling muscular and skeletal injuries and suffer postponed death from "Crushing Syndrome," where vital organs fail over a matter days when deprived of oxygen while being buried.

Unsafe excavations are entirely preventable. All excavations are designed and constructed by employers and their employees and how safe that excavation is dependent on the employer and the employee. BSC wants all excavations to be safe for employees and in compliance with OSHA's Excavation

Standard. BSC provides excavation training, inspections, design and soil classification through its Safety Department.

Equipment Operators are the employees who construct excavations. Excavations are tricky to construct safely. Frequently employees working in excavations have little input into their design and shape. Operators have a tremendous amount of control over the excavations. Although the ultimate responsibility of safe excavations lies with the Superintendent, the Superintendents don't observe each foot of an excavation as it is constructed. In addition, compliance with OSHA Excavation regulations must be maintained on BSC job sites.

36.3.2 Excavation Rules

a. Soils must be classified by visual and manual tests (including the thumb test) or are considered Type C Soils and will be excavated to Type C soil sloping requirements.
b. Type C Soil cannot have benches greater than 2' high.
c. Vertical walls greater than 5' high in trenches, excavations or spoil piles are prohibited.
d. Unsafe excavations on BSC sites need to be corrected if any employees are exposed or will be exposed to cave- ins or collapsing spoil piles.
e. Spoil piles will be set back 2' or more from the edge of all excavations.
f. Do not let employees in an excavation unless they have a ladder or you have constructed a ramp they can walk up and down.
g. Do not let employees get under loads that are handled by lifting or digging equipment. Use taglines on suspended loads that employees will guide or direct.
h. Do not allow employees to work in the excavation above other employees unless the lower level employees are adequately protected.
i. While the excavation is open, underground installations are to be protected, supported, or removed as necessary to safeguard employees. Adjacent structures are to be supported to prevent possible collapse.
j. Operators must construct diversion ditches, dikes or other means to prevent surface water from entering an excavation

and to provide drainage to the adjacent area.
k. Do not let employees work in excavations where water has accumulated or is accumulating unless adequate precautions have been taken.
l. Operator must not violate any part of 36.3 Appendix A of Safe Equipment Operators Passport EXCAVATIONS Rules.

36.3 Appendix A

Note: This appendix is only for excavations using sloping and benching to prevent cave-ins. Shoring, shields, trench boxes or a combination of these will be designed and approved of by the Supervising Superintendent and the Safety Director.

Soil Types

Type A is composed chiefly of clay and can be sloped from 54˚ or 3/4 to 1 from horizontal (9 inches for every 1 foot of depth). Caliche is frequently Type A.

Type B is composed chiefly of silt or loam and can be sloped from 45˚ or 1 to 1 from horizontal (1 foot for every 1 foot of depth).

Type C Soils are composed chiefly of sand and gravel and must be sloped 34˚ or 1 1/2 to 1 from horizontal (1.5 feet for every 1 foot of depth).

MAXIMUM ALLOWABLE SLOPES

SOIL OR ROCK TYPE SLOPES	MAXIMUM ALLOWABLE (H:V)(*) FOR | EXCAVATIONS LESS THAN 20 FEET DEEP (**)
STABLE ROCK	VERTICAL (90 Deg.)
TYPE A	3/4:1 (53 Deg.)
TYPE B	1:1 (45 Deg.)
TYPE C	1 1/2:1 (34 Deg.)

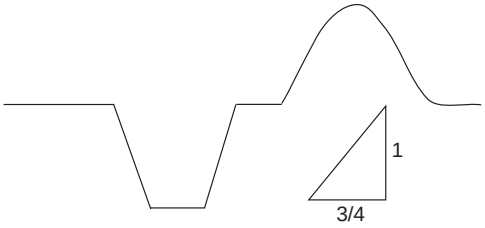
* Numbers shown in parentheses next to maximum allowable slopes are angles expressed in degrees from the horizontal. Angles have been rounded off.

** Sloping or benching for excavations greater than 20 feet deep shall be designed by a registered professional engineer.

Slope Configurations

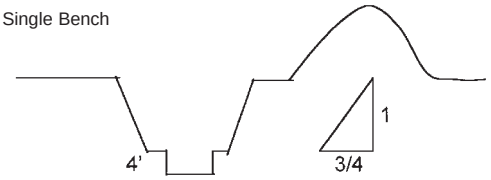
Excavations made in Type A Soil

1. All simple slope excavation 20 feet or less in depth in Type A soil shall have a maximum allowable slope or 3/4 to 1.

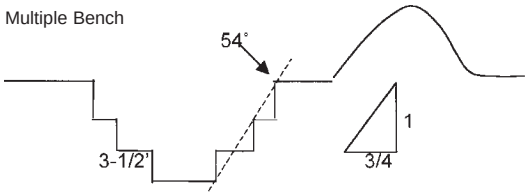


2. All benched excavations 20 feet or less in depth in Type A soil shall have a maximum allowable slope of 3/4 to 1 and maximum bench height of 4 feet:

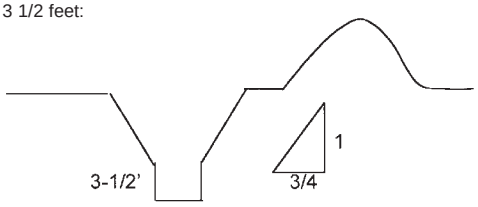
Single Bench



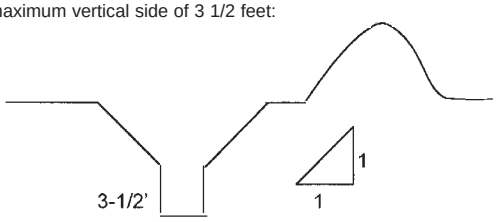
Multiple Bench



3. All excavations in Type A Soil 8 feet or less in depth which have unsupported vertically sided lower portions shall have a maximum allowable slope of 3/4:1 and a maximum vertical side of 3 1/2 feet:

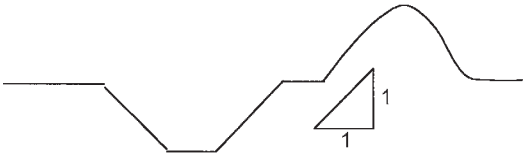


4. All excavations in Type A soil more than 8 feet but not more than 12 feet in depth with unsupported vertically sided lower portions shall have a maximum allowable slope of 1:1 and a maximum vertical side of 3 1/2 feet:



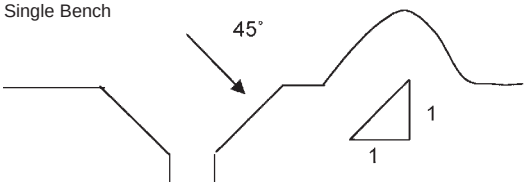
Excavations Made in Type B Soil

5. All simple slope excavations 20 feet or less in depth in Type B soil shall have a maximum allowable slope of 1:1:

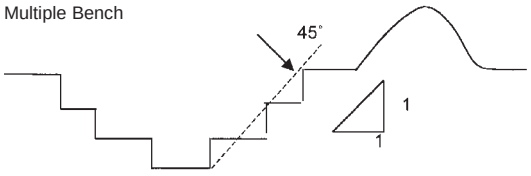


6. All benched excavations 20 feet or less in depth in Type B soil shall have a maximum allowable slope of 1:1 and maximum bench dimensions as follows:

Single Bench

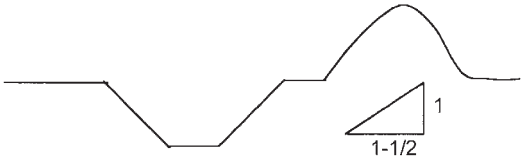


Multiple Bench



Excavations Made in Type C Soil

7. All simple slope excavations 20 feet or less in depth in Type C soil shall have a maximum allowable slope of 1 1/2:1:



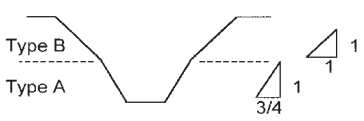
8. Benches higher than 2 feet are not allowed in Type C Soil.

9. All previously disturbed dirt is classified as Type C Soil.

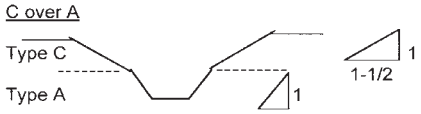
Layered Soil Sloping Configurations

10. Type A soils (clay and adobe) are frequently found on top of Type C soils (sand and gravel). Many fatalities occurred because the Type C soil beneath collapsed causing the Type A soil to crush to death an employee. Follow the sloping rules for Layered Soils:

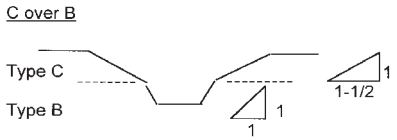
B over A



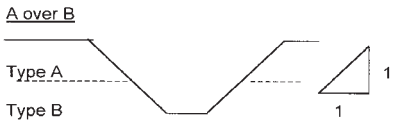
C over A



C over B



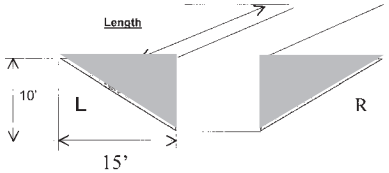
A over B



A over C and B over C

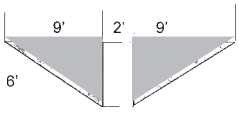
36.3 Appendix B

Formulas, Data and Useful Information



Type C Sloping Requires so much soil removal these Excavations are rarely in compliance with 1926.652

If an excavation 6 feet deep X 2 feet wide in Type C soil has to be sloped, it has to be sloped 9 feet on each side.



(9X6)+(2X6)÷27=Yards to move per foot of excavation length. 54+12÷27=2.4 yds/foot.

So, to make one foot of progress, 2.4 yards have to be removed. The Backhoe cycle time given is .40 yards per minute. By dividing 2.4 yards by .40=6 minutes per foot. If the trench is 10 feet long it is 10x6=60 minutes or about an hour to correctly dig a safe excavation. And this is only if every cycle is within 30 seconds. By the time you account for machine movement, hard digging and other variables this time should be doubled or tripled.

Bucket Fill Factor Table

Material	Fill Factor*
Moist Loam or Sandy Clay	100%
Sand and Gravel	95%
Hard Tough Clay	80%
Rock-Well Blasted	60%
Rock-Poorly Blasted	40%
Broken Concrete	30%

Cycle Times and Bucket Capacities

Front loader, backhoe buckets and excavator hold different amounts of materials depending on the material itself. Bucket capacities are typically measured two ways: struck capacity and heaped bucket capacity.

- Struck capacity refers to a bucket filled to level, whereas heaped capacity is a bucket filled with a heaping load.
- Heaped Capacity is the more useful measurement and varies depending on the material. This is called the Bucket Fill Factor. To determine the average bucket payload the Heaped Capacity is multiplied by the Bucket Fill Factor (See Table) as in the formula below:

Using a Cat standard duty 24" backhoe bucket with a heaped capacity of 7 cu feet and a bucket Fill Factor of 80%

7 cu ft X 80% = Average Bucket Payload
7 X .80 = 5.6 cubic feet of material per cycle

If a backhoe can make a complete cycle in 30 seconds every minute it can move 11 cubic feet of earth:

30 X 2 = 60 sec or 1 minute so 5.6 cubic feet X 2 = 11 cubic foot per minute

If this number is divided by 27 it gives the yards / minute: 11 ÷ 27 = .4 yards per minute.

37. Equipment Operators Passport FORKLIFTS

37.1 Inspection and Maintenance

The forklift to be operated must be inspected prior to use and can be used only if the following conditions have passed inspection:

a. The forks and backrest must be securely mounted.
b. Look under the forklift and take note of any loose hardware or excessive leaks. The steering linkage should be tight and well greased.
c. Look at the engine. Take note of loose or worn belts.
d. Make sure all covers, guards and inspection cover plates are secured properly.
e. Check the oil level, fuel level, hydraulic fluid level, radiator coolant level, battery acid level and hydraulic brake fluid level.
f. Note the tire condition and inflation. The tires should have proper inflation as recommended by the manufacturer, since the forklift's stability can be directly affected. Check owner/operator's manual for ballast filled tire maintenance.
g. Inspect the hydraulic and brake lines. These lines often show signs of excessive wear before they break.
h. Use a piece of cardboard to inspect for leaks. Never use bare hands to check for hydraulic leaks.
i. If pressurized hydraulic fluid has penetrated your skin, seek medical attention immediately. Hydraulic fluid, injected into the skin, can cause gangrene. Wear eye protection when operating and inspecting forklifts.
j. Check to make sure the overhead guard is secure.
k. Check brake lights and turn signals, if so equipped.
l. Check the back-up alarm.
m. If conditions call for use of headlights, check them.
n. You must check the operator's manual for the specific inspection procedures for your specific forklift. Many forklifts are different from each other and general inspection guidelines may not be sufficient. The operator's manual will instruct operators on proper inspection techniques and maintenance procedures.
o. Check to see if the load chart is in the forklift.

37.2 Controls and Operations

BSC Forklift Training is general in nature for telescopic boom rough terrain forklifts. Supervising Superintendents and Operators and must become familiar with each machine's capacities and limits.

a. Do not operate forklifts with known mechanical defects.
b. Do not travel on unsafe routes such as next to excavation edges, soft ground, holes, in public right-of-way, near overhead power lines, etc.
c. Do not carry unsafe loads such as loads that may swing or slide taking the forklift beyond its canter of gravity.
d. Do not use unsafe operating techniques such as starting and stopping quickly, not using horn properly, etc.
e. The Operator is responsible for the safe condition and operation of his machine.
f. Never operate a forklift from anywhere other than the operator's seat and never allow riders on the forks, frame, etc.
g. Use grab rails when mounting and dismounting machine. Don't grab levers to pull yourself up.
h. Never reach through potential pinch points.
i. Beware of loose clothing, harnesses and lanyards, long hair around moving or rotating parts (fans, pulleys, belts).
j. Keep all body parts inside the operator's compartment and WEAR YOUR SEATBELT.
k. Wear your hard hat to prevent injury from smaller objects penetrating the overhead protective structure. Hard hats may save your life in the event of a turnover.
l. Eye protection is required for windy, dusty conditions or when placing loads overhead.
m. Use extreme caution when adjusting forks. Tilt forks forward to relieve the weight. Wear gloves and keep fingers from between pinch points.
n. Space forks at their maximum width that will safely lift the load.
o. "Feather" the load when starting and stopping, raising and lowering.
p. Turnovers can be avoided by adhering to the following practices.

Forward Tipping

a. Use only two-wheel steering when traveling at higher speed to prevent turnovers.
b. Do not extend the load too far forward.
c. Do not pick up loads too heavy for the machine.
d. Anticipate changes to forward momentum: avoid sudden stopping.

Side Tipping

a. Do not raise loads while the machine is on uneven ground.
b. Machines with self level feature must be leveled prior to raising loads.
c. Control momentum (especially when turning the machine with a raised load) – it is the Number One cause of machines overturning!
d. Do not drive into holes or on soft ground.
e. Re-level the machine after adjusting for a side hill when traveling.
f. Do not travel with raised load that can swing or shift.

Outriggers

Outriggers widen the stability triangle when they are set on the ground.

a. Be very careful when reading load charts for forklifts equipped with outriggers – they can drastically affect the amount of weight that can be safely lifted.

Backward Tipping

Elevated loads place more weight on the rear axle of the forklift, especially with the mast tilted back or boom retracted. Any pivoting action of the frame tilt or rear wheels can shift that weight to the forklift's most vulnerable point. Loss of braking power or traction at the front wheels causes the machine to run out of control.

a. Do not back down a hill with a load elevated too high.

Driving on Inclines

a. Unloaded forklifts should always be driven forward down an incline.
b. Forklifts, whether they are loaded or unloaded, should not

be driven up or down very steep inclines.
c. Loaded forklifts should always keep the load on the uphill side whether driving up or down a hill for stability and traction.
- Drive forward up a hill with a load.
- Back down a hill with a loaded forklift.
- Keep load uphill when driving on steep inclines.

Stacking/Unstacking Loads

a. Make sure all loads are well centered and stable.
b. Use proper feathering techniques to ensure that the forks or the vehicle itself does not bump the stacks.

Load Capacities

Forklift capacity charts show the amount of weight that can be safely carried, how high, and how far in front of the front axle the load can be extended.

a. Extendable boom forklift load charts must contain at least the following information:
- Weights that can be lifted.
- Full range of boom extensions.
- Angles of operation.
b. Do not extend boom with load beyond chart.
c. Do not operate forklifts without readable load charts.
d. Do not operate, carry or lift loads beyond the load chart capacity. Some load charts are very complex and may be somewhat difficult to read.
e. Make sure you understand all of its information before you operate the machine.
f. Be aware of outrigger and ballast filled tire requirements for certain load charts.
g. Be sure that you are reading the right load chart for your forklift's conditions.

Forklift Attachments

Some telescopic boom machines offer attachments that effectively transform the forklift into a crane, excavator, or specialized material-handling piece of equipment. These attachments alter the machine's rated capacities as a forklift making the existing load chart inaccurate.

a. BSC Safety Director must approve job-made forklift attachments.
b. Load Chart for Attachments must be developed and used for attachments.
- Attachments can change the lifting capacities of a forklift.
- Be aware of the changes and refer to your new load chart.

Parking or Leaving the Machine

a. Park out of traffic lanes
b. Park on level ground, if possible
c. Do not park in deep mud or water, especially in freezing weather.
d. Lower the forks.
e. If the forks must be left elevated do not leave the machine unattended. OSHA says the operator must be within 25 feet.
f. Neutralize all controls.
g. Set the parking brake.
h. Turn off the engine.
i. Block the wheels if the forklift is on an incline.

EQUIPMENT OPERATOR CERTIFICATION PAGE
EXCAVATION OPERATORS

_____,

has completed Bradbury Stamm Construction's Excavator Operator Passport Training and has earned a passing score on the test over the training material.

_____ _____
Trainer Date

_____ _____
Employee Date

_____ _____
Superintendent Date

***This certificate is valid for a 1-year period from the date above.**

FORKLIFT OPERATOR – ALL BSC

_____,

has completed Bradbury Stamm Construction's Forklift Operator Passport Training and has earned a passing score on the test over the training material.

_____ _____
Trainer Date

_____ _____
Employee Date

_____ _____
Superintendent Date

***This certificate is valid for a 1-year period from the date above.**

FORKLIFT OPERATOR – JOB SPECIFIC

_____,

passed a driving skills proficiency exam given by his/her jobsite Superintendent and can operate a forklift on this jobsite.

_____ _____
Employee Date

_____ _____
Superintendent Date

_____
Jobsite

***This certificate is valid for a 1-year period from the date above.**

Silica Exposure Log

Trained by Competent Person - Name: _____ **Date:** _____

Date	Hours Worked	Tool Used	Control Method: Wet or Vacuum	Outdoors Yes/No	Work Location								

Silica Exposure Log

Trained by Competent Person - Name: _____ **Date:** _____

Date	Hours Worked	Tool Used	Control Method: Wet or Vacuum	Outdoors Yes/No	Work Location

EMPLOYEE NAME

If you have questions about this document or the Bradbury Stamm Construction Safety Passport Program, contact:

Safety Director, Bradbury Stamm Construction, Inc.
505.765.1200

Bradbury Stamm Construction Since 1923

BRADBURY STAMM SAFETY PASSPORTS™ - SUBCONTRACTOR SAFETY PASSPORT (AVAILABLE IN SPANISH)

Bradbury Stamm COMPANIES

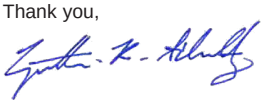
SUBCONTRACTOR SAFETY PASSPORT

rev. 05/18

Bradbury Stamm (BSC) welcomes you, as a subcontractor, to our construction project. We invite and encourage you to join us in making this project a safe one. A safe environment is not enough; safe work habits are a vital part of a successful program. This handbook is provided as a basic guide to your safe conduct on the job. Read it carefully, learn the general safety rules and keep the handbook with you at work at all times. If there is anything in here you do not understand, ask a Bradbury Stamm Foreman or Superintendent. They will be glad to help.

Remember, our having a safe wprlomg environment depends on you!

Thank you,



Cynthia K. Schultz
CEO
Bradbury Stamm Construction, Inc.

Contents

1. General Safety Rules

a. Report to work rested and physically fit to perform your job.
b. Wear clean clothing suitable for the weather and your work. Torn or loose clothing, cuffs and ties are hazardous. Minimum clothing is a full t-shirt and full-length trousers.
c. Wear good work shoes, preferably safety shoes. No tennis shoes, open-toed shoes, or shoes with high heels.
d. Use correct gloves when welding, handling chemicals, rough materials or items with sharp edges.
e. Jewelry that can get caught or snagged by work practice should NOT be worn.
f. Keep horseplay and roughhousing away from the job. Practical jokes often become painful injuries.
g. Anyone involved in verbal abuse, harassment or fighting on the job may be subject to immediate dismissal.
h. Never point an air hose at anyone or use it to clean clothing.
i. Use only designated toilets.
j. Inspect your safety equipment daily. If defective, do not use. Report it to your Foreman immediately.
k. Work with care and good judgment at all times to avoid accidents – even if a specific safety rule is not contained in this manual.
l. Soft drinks, food, etc., are not to be cooled in drinking water kegs or ice storage boxes.
m. Do not operate any vehicle or equipment unless authorized by your foreman.
n. The use of Alcoholic Beverage and/or Illegal Drugs is strictly prohibited on any BSC project, and in any BSC vehicle, and may be subject to immediate dismissal.
o. Do not violate company Safety Directives. See your Foreman to become familiar with all Safety Directives that apply to your work.

2. Reporting Injuries

In order to receive medical treatment, it is a requirement and the policy of this company that you report any injury to your Foreman or other company supervisor on the same day of the injury, whether or not you go to the doctor that day.

3. Your Foreman

a. If you do not understand any safety rule, ask your Foreman to explain it.
b. Before doing a job where you are not familiar with the hazards, ask your Foreman to show you the safe way to do the job. They'll be glad to do it.
c. Give your wholehearted support to safety activities. Preventing accidents depends mostly on you!

4. Unsafe Acts or Conditions

Report or correct any unsafe acts or unsafe conditions or equipment to your Foreman immediately.

5. Work Areas

a. Be aware of work going on around you, keep clear of suspended loads, traffic areas, etc.
b. Before entering new work areas, familiarize yourself with any unusual hazards.
c. Place barricades to warn traffic, overhead dangers, open footings, excavation, swing radius of crane cab., etc.
d. Work, eat lunch, etc. only in your work area.
e. Remove nails from crates and lumber immediately.
f. Stay in your assigned work area. Do not wander around the jobsite.
g. Do not cross or remove "Caution Tape" or flagging. Respect all warning lines.
h. Subcontractors must provide 5 foot candles of task lighting.

6. Housekeeping

a. Keep materials orderly; prevent piles of materials from falling or shifting (tie down or support if necessary).
b. Clean up any oil, liquids, or other materials spilled or dropped on stairs, walkways, ladders or floors. Place your lunch sacks, paper, and soft drinks or other containers in trash barrels.
c. Have all cords, welding leads, hoses placed to avoid tripping hazards or from getting damaged.
d. Keep loose materials off stairs, walkways, ramps, platforms, scaffolds, etc.

e. Put or replace caps on rebar and grade stakes.
f. Do not work in areas with inadequate lighting. Tell your Foreman and he/she will get it corrected.
g. Keep all stored materials a minimum of 6' away from any shaft opening and 10' from building edge.
h. Secure material and equipment so it will not be blown out of the building.

7. Lifting

a. Check for a clear path first. Then have a clear view while carrying load.
b. Avoid back strains when lifting (including shoveling) by following these few simple suggestions:
   (1) Take a good look at what you're going to lift. If it is too heavy or bulky for you, get help. (Another employee, chain hoist, forklift, crane, etc.)
   (2) Get a firm clear footing and keep your feet about shoulder distance apart.
   (3) Squat down, keep whatever you are lifting close to you and lift with your strong leg muscles keeping your back straight.
   (4) While carrying whatever you have lifted, avoid twisting of the body as much as possible.
   (5) When setting the object down, reverse the lifting procedure; that is, keep your back straight and lower with your leg muscles.
c. When carrying long objects with another employee, be sure you both carry the load on the same shoulder.
d. Have just one person give commands when teaming big loads.

8. Drugs and Alcohol

Possession, consumption or use of alcoholic beverages or illegal drugs (including marijuana) is not permitted. Anyone violating this policy will be subject to immediate termination. You must pass a drug screen prior to employment, after any accident, at any time that your Foreman or other Company supervisory personnel suspect that the policy is being violated. Random

drug tests may also be requested.

9. Safety Meetings

Attend all safety meetings and safety training classes held at your job site. You will get the latest information on what the company is doing and what you can do to keep from getting hurt.

10. Hard Hats

a. Hard hats are to be worn whenever there is an overhead hazard, work is being performed overhead or a hazard from falling objects.
b. Employees will have a hard hat with them on all jobsites.
c. During the final stages of construction (touch-up paint, carpeting, floor waxing etc.) the wearing of hard hats may not be required as the site Superintendent sees fit.

11. Eye Protection

General-purpose safety glasses will be issued to employees and must be on their person at all times. Eye protection must be worn when:

a. Using grinders (all types), using cleaning materials, table saws, jack hammers, chipping guns, masonry saws, welding or cutting torches (under welding hood in arc welding), nailers, powder actuated tools.
b. Cleaning a weld or when the wind is such that it is blowing dust, sand, rust or other particles about.
c. Handling material in powder form such as cement or when mixing or cleaning brick with acid or other cleaning material.
d. There is danger of concrete or mortar splashing in the eye.
e. Filing or buffing any material.
f. Working near persons whose work requires them to wear eye protection.
g. There is other dangerous exposure to your eyes.
h. Sunglasses are okay for outside but clear glasses are to be with the employee for inside work.

12. Respirable Dust Protection

1a. Respirable crystalline silica is made by cutting, grinding, polishing, jackhammering and drilling materials containing sand such as concrete, asphalt, block, brick, tile, mortars and grout. Always use water and/or vacuum systems to prevent silica from being inhaled.

1b. Have your Foreman train and sign your Silica Exposure Log whenever you alter silica (sand) containing materials by methods listed in a. above. Fill-out Silica Exposure Log every day you alter silica containing materials.

1c. Be sure to not expose other employees around you to respirable silica.

2. Dust masks should be used when spray painting, handling cement, lime, or when exposed to a steady dust hazard. Special equipment is required when sandblasting, welding, and cutting in confined spaces, on galvanized material or metal coated with red or zinc chromate - See your Foreman under these circumstances.

13. Fall Protection

Employees within 6 feet of a fall hazard greater than 6 feet in height shall be protected from falling by:

a. Guardrails - 42" high ± 3", strong enough to withstand 200 pounds in down and outward directions, a mid rail is required. If persons are working or walking beneath or next to the fall zone a toeboard will be included or the area will be restricted to:
   (1) Lifelines, seat harnesses, full-body harnesses, lanyard and static lines connected to anchor points capable of supporting 3,000 pounds. Safety belts are not allowed.
   (2) A lifeline and harness shall be used in all areas where materials are loaded, landed or unloaded if an employee is within 6 feet of the edge. Check your harness carefully each day. If defective, do not use, return it to your Foreman. Some alternative fall

protection methods are allowed. See your Foreman.

14. Hearing Protection
a. Hearing protection must be in your procession at all times while on the job.
b. Wear your hearing protection when around noise, even if you are not operating the equipment.

15. Hand Tools
a. Inspect tools before using to make sure they are not defective.
b. When hand tools are not in use, lay them down in a safe place where they will not fall on a fellow worker or cause him/her to trip.
c. Do not carry hand tools up or down a ladder; use a rope or tool belt.
d. Know the correct use of hand tools before using; use the right tool for the job. If you are not sure how to use any tool talk to your Foreman, they will instruct you on the proper and safe use of any tool.
e. Have tools, with burred or mushroomed heads, ground down. Keep cutting tools sharp and carry in a container or on a tool belt (not in your pocket).
f. Do not use tools with split, broken, or loose handles.
g. Be sure you have a clear area behind you before swinging a sledgehammer, axe, pick, or other tools or materials.

16. Portable Power Tools
a. Be sure the electrical tools, such as portable power saws, grinders, drills, etc. are grounded (unless they are double insulated tools). Do not stand in water or on damp ground when using tools. (Report any minor shocks to your Foreman)
b. Make sure the tool has the proper guard and never block or lock the guard in an open position.
c. Never block or lock the safety switch on a power tool so that it will operate the tool.
d. Keep extension cords and power cords out of the center of walkways and off of ladders and stairways.

e. Never point a compressed air tool or powder-actuated tool at yourself or a fellow employee.
f. Only qualified personnel should operate or service power tools.
g. Do not use defective power tools. Report condition to your Foreman.
h. Right-angle grinder MUST be equipped with half moon or 180º guard.

17. Powder Actuated Tools
a. Never use a powder actuated tool unless you are properly trained and have a VALID CERTIFICATE CARD in your possession.
b. Always wear eye protection and hearing protection.
c. Do not shoot through sheetrock or plywood without making sure no one is on the other side.

18. Machines
a. Before starting machinery, opening valves, switches, etc. check to make sure fellow employees are in the clear and have all safety guards in place.
b. Never adjust or repair machinery while it is running.
c. Operate machinery and vehicles within safe speeds and at rated capacity.
d. Never refuel an engine while it is running.
e. When using a gasoline or diesel engine in an enclosed area, be sure to vent the exhaust outside.
f. Never use an air hose for pressure to empty gasoline drums.
g. Do not start or use any machinery unless you have been authorized to do so.
h. If you are in charge of a compressed air tank, be sure to drain the tank and test the safety valve daily.

19. Ladders
a. Be sure straight or extension ladders are tied off at the top.
b. Get someone to hold ladder while you are tying off, or if you can't tie it off.
c. Make sure extension ladder locking clamps are in place before using.

d. Have ladder reach at least 36" above landing for easy access.
e. Use only sturdy ladders on firm level base at a 4 to 1 pitch and have clear access at top and bottom.
f. Do not try to get additional height from ladder by placing it on a makeshift cribbing such as boxes, boards or scaffolds.
g. Do not place a ladder in front of a door unless it is locked, barricaded, or guarded by another employee.
h. Always engage snap spreaders on stepladders.
i. Face ladder when climbing up or down; use both hands. Use hand line to lift or lower loads.
j. Portable metal ladders must not be used for electrical work or around electric lines.
k. Never work off of the top two steps of a ladder.
l. Inspect all ladders daily or before use.

20. Scaffolds and Aerial Lifts
a. Scaffolds are to be erected only by employees trained to erect scaffolds. See your Foreman.
b. Do not get on scaffolds until they have been inspected by the competent scaffold person.
c. Scaffolds are to be inspected every day before employees get on the scaffolds. Before any employee is allowed on any scaffold it must have a **GREEN** tag attached.
d. Scaffolds with a fall height greater than 10 feet must have guardrails.
e. Whenever working in any aerial lift in which the manbasket extends beyond the perimeter of the vehicle's wheels you must wear a safety harness and lanyard tied to the approved anchorage point.
f. Do not stand on the guardrails unless connected to the manbasket with full body harness and lanyard.

21. Floor Openings
a. Keep materials away from entrance or exits of stairs, hoists and elevators landings, traffic lanes and ladders.
b. Avoid shortcuts - use ramps, stairs, walkways, ladders, etc.
c. Do not work in areas with inadequate lighting. Tell your Foreman and he will get it corrected.

d. When necessary to remove guardrails around a floor opening or building perimeter, make certain they are replaced each time you leave the work area and immediately upon completion of work.
e. Keep all stored materials a minimum of 6' away from any shaft opening and 10' from building edge.
f. Secure material and equipment so it will not be blown out of the building.
g. Any floor opening greater than 1.5" in the least dimension must be covered and secured with a suitable covering marked "hole" and "oiyo."

22. Hoists
a. Ride the personnel hoist only; never ride a material hoist.
b. To prevent overloading of a personnel hoist, you must follow hoist operator's instruction for the loading of people or material.
c. When hoisting pipe or material that must stand upright, secure it to prevent ends from catching in the hoist tower. Never ride a material hoist to hold the material.
d. Be sure to close hoist way gate after unloading.
e. When loading or unloading a material hoist, never stay on it longer than necessary.
f. Be sure to replace the guard rails at the hoist landing.

23. Electrical
a. Consider all wire "live" until checked out.
b. Never remove or cut ground prong of any electrical tool or extension cord. PLUG INTO MATCHING RECEPTACLE ONLY.
c. All electrical power tools and extension cords should have RUBBER insulation. Damaged cords should be repaired or replaced immediately. Only type "S" cords are permitted.
d. All repairs to electrical tools and extension cords must be made by qualified personnel only.
e. Do not drive vehicles, aerial lifts or rolling scaffolds over extension cords.

24. Compressed Gas Cylinders
a. Always turn cylinder valves off when not in use or when

unattended for an extended period of time, such as during the lunch period.
b. Always secure a cylinder, full or empty, in an upright position.
c. When cylinders are lowered or hoisted, use a skip box, net or cart. Never use a choker or hook on to the valve cap.
d. Never store oxygen cylinders near flames, flammable, or combustible liquids or materials, oil, grease, or within 20 feet of fuel gas cylinders (acetylene, propane etc.).
e. Keep oily rags and oily gloves away from oxygen cylinders. (This could cause an explosion)
f. Keep valve caps on cylinders, full or empty.

25. Fire Prevention
25.1. General
a. Know the location of and how to use fire extinguishers and fire hoses.
b. Take extra care in disposing of cigarette butts and matches. Extinguish thoroughly. When in refineries or chemical plants, or waste water plants smoke only in designated areas.
c. Flammable liquids should be transported and stored only in the original container or in an approved metal safety can with self closing lid or nozzle.
d. Store oily rags or paint rags in covered metal containers.
e. Be sure there is a fire watch before welding or cutting above combustible materials.
f. Tell your Foreman if you use a fire extinguisher so it can be refilled.

25.2. Fire Protection for Wood-Frame Construction
This section applies to all wood frame construction on BSC sites and on sites where questions of flammable or combustible material may create a fire hazard as determined by the job Superintendent and/or Safety Director.
a. Housekeeping is critical to avoid fires. Sweep up sawdust and ends of sawed materials at the end of every shift.

b. No smoking will be permitted anywhere on the jobsite with the exception of a single, posted smoking area. Ask your Foreman if you need the location of the smoking area.
c. Do not start work until fire hydrants are live and hoses and hydrant wrenches are at the fire hydrant.
d. A fire watch shall be posted for at least one hour whenever open flame or similar source of ignition is used. The fire watch will have means with them to extinguish flame or smoldering material.
e. Plumbers using torches to sweat pipes will have a spray bottle on hand which shall be used to pre-wet and soak (douse) combustibles affected by the heat source. Plumbers must have within arm's length a functioning fire extinguisher.
f. When requested, employees will attend training on fire prevention and fire suppression.

26. Excavations
a. Never enter an excavation or trench more then 5' deep unless it is shored or sloped.
b. In any trench 4 feet or greater in depth that you cannot walk out of, place an access ladder within 25' of any workman.
c. When digging a trench, place soil (dirt from the excavation) at least 2' away from edge of excavation. Remove surface rocks, clods of dirt or other debris that could fall.
d. All employees entering excavations must have training.

27. Clearing and Grading Equipment
a. Always operate a dozer, scraper, grader, backhoe / loader etc. at a safe speed.
b. Only the operator should be on the operating platform or seat. No one else should be on the equipment.
c. Walk around your equipment before starting up to make certain no one is in a danger zone.
d. Always be aware of those persons working around your equipment.
e. Always wear your seatbelt.

28. Safe Driving
a. Do not ride on vehicle or mobile equipment except on seat or designated passenger platform.
b. Do not ride in the back of pickups unless approved by BSC Superintendent.
c. When driving about the jobsite, never exceed 15 mph. At all times observe the rules of safe driving.
d. Every day, check the company truck you are driving to see that the brakes, turn indicator, head lights, back up alarm (if required) and stoplights are working properly. WEAR YOUR SEATBELT AT ALL TIMES.

29. Protection of Public
a. Anytime you see sightseers or children in the work area, ask them to leave so they will not be hurt.
b. If there is danger of pedestrians, automobiles, etc., being struck by falling materials that you are working with, tell your Foreman so he can arrange the necessary protection.
c. Direct any visitors without hardhats to the job office for proper job clearance.
d. Do not visit with students on schools.

30. Hazard Communication Program
This Company has a written hazard Communication program, and in accordance with OSHA Standard 1926.59, the following items are available to you at your request:
a. A copy of the Company's written Hazard Communication Program;
b. A copy of the Company's "List of Hazardous Chemicals" for your workplace; and
c. Copies of Safety Data Sheets (SDS) for any covered chemicals to which you are exposed. To obtain any of this information, contact your supervisor.

31. Health Hazard Evaluations Records
Upon written request, you may obtain a copy of any medical record or any analysis of sampling taken while on or near you with regard to your working conditions or workplace.

32. Civil Jobsites
a. Flagmen are required when equipment crosses the streets not closed off. Flagmen must have passed a flagmen training course, ask your Foreman.
b. Hardhats will always be with employees at all times when in trucks or equipment with a protective cab.
c. Safety vests must be worn at all times when around traffic and moving equipment.
d. Eye protection should be worn at all times. Glasses should have a UV coating to protect eyes from long-term exposure to sunlight.
e. Sunscreen is encouraged as are long-sleeved shirts.
f. Seat belts are to be worn at all times.
g. Riding in the back of trucks and equipment is not allowed, unless approved by the BSC Superintendent and the BSC Safety Director.
h. Hearing protection will be worn when sawing and jack hammering. Face shields or goggles will be worn when jack hammering or sawing.
i. Excavations cannot be entered until inspected by a Bradbury Stamm Competent Person. If a trench box is used, do not leave the protection of the trench box.
j. Support all cross lines, pipes, conduits, and wires.
k. Do not get under suspended loads.
l. Back-up alarms are required on water trucks, loaders, and excavators.
m. Use taglines when setting trench boxes.

33. Confined Spaces
a. Confined spaces are not to be entered without the Foreman first checking the atmosphere.
b. If a confined space has a hazard (hazardous atmosphere, engulfment, entrapment, etc.) that cannot be eliminated before entry, do not enter until the Bradbury Stamm permit-required Confined Space Competent Person authorizes entry. Ask your Foreman.
c. Do not operate gasoline saws in deep trenches, manholes, or areas of poor air circulation without a ventilator and/or the supplied air hood.

d. Jackhammer and chipping operations in confined spaces will be done only with supplied air hoods or ventilators and respiratory protection.

34. Air Test Balls and Plugs

a. Test inflation of test balls and air plugs for leaks before use.
b. Do not inflate while you are in a manhole.
c. Face shields are to be worn when inflating and deflating.
d. Stay out of the line of fire and keep back as much as possible.

35. Safety Violations

1. The FIRST Safety Violation is a written warning and will not result in penalty.

2. The SECOND Violation will result in the employee being sent to their employer's office and he/she will not be allowed back on the job site for the rest of that day.

3. The THIRD Violation will result in the employee being sent to their employer's office and he/she will not be allowed back on the job site for the rest of the current workday AND the following day.

4. The FOURTH Violation will result in the employee being sent to their employer's office and he/she will not be allowed back on the job site for the rest of the current workday AND the following three days.

5. The FIFTH Violation will result in the employee being sent to their employer's office and he/she will not be allowed back on any Bradbury Stamm Construction project for one year from date of the Fifth Violation.

36. Equipment Operator's Safety Certification
(See Equipment Operator's Safety Passport.)

VIOLATION LOG

RULE **DATE**

1. _____

Violation_____

_____

2. _____

Violation_____

_____

3. _____

Violation_____

_____

4. _____

Violation_____

_____

5. _____

Violation_____

_____

SUBCONTRACTOR EMPLOYEE ACKNOWLEDGMENT

I have received the Bradbury Stamm Subcontractor Safety Passport. I have read and understand the General Safety Rules and agree to abide by the Safety Program while employed on Bradbury Stamm projects. I understand that I must keep this book with me at all times while at work, and if for any reason I do not have my Safety Passport with me, I understand that I will not be allowed to work or be on any Bradbury Stamm Construction project until I can present my Safety Passport.

I have read the consequences for each safety violation that is written in my Safety Passport and understand that if I reach FIVE Safety Violations, I will be barred from working on any Bradbury Stamm Construction project site for one year from the date of the Fifth Violation.

If I lose or destroy my Safety Passport a new Safety Passport will be issued after a THREE day without pay suspension is completed.

**After a 12-month period, all violations are erased, and a new Safety Passport will be issued.*

New book Issued_____(Date)

Employee Name_____
(Please Print)

Employee Number_____

Employee Signature _____

Date_____

Silica Exposure Log

Trained by Competent Person - Name: _____ **Date:** _____

Date	Hours Worked	Tool Used	Control Method: Wet or Vacuum	Outdoors Yes/No	Work Location								

Silica Exposure Log

Trained by Competent Person - Name: _____ **Date:** _____

Date	Hours Worked	Tool Used	Control Method: Wet or Vacuum	Outdoors Yes/No	Work Location

EMPLOYEE NAME

If you have questions about this document or the Bradbury Stamm Construction Safety Passport Program, contact:

Safety Director, Bradbury Stamm Construction, Inc.
505.765.1200

Bradbury Stamm Construction Since 1923

BRADBURY STAMM SAFETY PASSPORTS™ - SAFE EQUIPMENT OPERATOR SAFETY PASSPORT (AVAILABLE IN SPANISH)

Bradbury Stamm COMPANIES

SAFE EQUIPMENT OPERATOR PASSPORT

EXCAVATORS FORKLIFTS

rev. 05/18

Bradbury Stamm (BSC) welcomes you to our construction project. We invite and encourage you as an employee/subcontractor to join us in making this project a safe one. We are providing you with a safe environment and proper equipment, so that you will be working in the safest conditions. However, safe conditions are not enough; safe work habits are a vital part of a successful program. This handbook is provided as a basic guide to your safe conduct on the job. Read it carefully, learn the general safety rules and keep the handbook with you at work at all times. If there is anything in here you do not understand, ask your supervisor. They will be glad to help.

Remember, our having a good safety program depends on you!

Thank you,

Cynthia K. Schultz
CEO
Bradbury Stamm Construction, Inc.

Contents

1. General Safety Rules

a. Report to work rested and physically fit to perform your job.
b. Wear clean clothing suitable for the weather and your work. Torn or loose clothing, cuffs and ties are hazardous. Minimum clothing is a full t-shirt and full-length trousers.
c. Wear good work shoes, preferably safety shoes. No tennis shoes, open-toed shoes, or shoes with high heels.
d. Use correct gloves when welding, handling chemicals, rough materials or items with sharp edges.
e. Jewelry that can get caught or snagged by work practice should NOT be worn.
f. Keep horseplay and roughhousing away from the job. Practical jokes often become painful injuries.
g. Anyone involved in verbal abuse, harassment or fighting on the job may be subject to immediate dismissal.
h. Never point an air hose at anyone or use it to clean clothing.
i. Use only designated toilets.
j. Inspect your safety equipment daily. If defective, do not use. Report it to your Foreman immediately.
k. Work with care and good judgment at all times to avoid accidents – even if a specific safety rule is not contained in this manual.
l. Soft drinks, food, etc., are not to be cooled in drinking water kegs or ice storage boxes.
m. Do not operate any vehicle or equipment unless authorized by your foreman.
n. The use of Alcoholic Beverage and/or Illegal Drugs is strictly prohibited on any BSC project, and in any BSC vehicle, and may be subject to immediate dismissal.
o. Do not violate company Safety Directives. See your Foreman to become familiar with all Safety Directives that apply to your work.

2. Reporting Injuries

In order to receive medical treatment, it is a requirement and the policy of this company that you report any injury to your Foreman or other company supervisor on the same day of the injury, whether or not you go to the doctor that day.

3. Your Foreman
a. If you do not understand any safety rule, ask your Foreman to explain it.
b. Before doing a job where you are not familiar with the hazards, ask your Foreman to show you the safe way to do the job. They'll be glad to do it.
c. Give your wholehearted support to safety activities. Preventing accidents depends mostly on you!

4. Unsafe Acts or Conditions
Report or correct any unsafe acts or unsafe conditions or equipment to your Foreman immediately.

5. Work Areas
a. Be aware of work going on around you, keep clear of suspended loads, traffic areas, etc.
b. Before entering new work areas, familiarize yourself with any unusual hazards.
c. Place barricades to warn traffic, overhead dangers, open footings, excavation, swing radius of crane cab., etc.
d. Work, eat lunch, etc. only in your work area.
e. Remove nails from crates and lumber immediately.
f. Stay in your assigned work area. Do not wander around the jobsite.
g. Do not cross or remove "Caution Tape" or flagging. Respect all warning lines.

6. Housekeeping
a. Keep materials orderly; prevent piles of materials from falling or shifting (tie down or support if necessary).
b. Clean up any oil, liquids, or other materials spilled or dropped on stairs, walkways, ladders or floors. Place your lunch sacks, paper, and soft drinks or other containers in trash barrels.
c. Have all cords, welding leads, hoses placed to avoid tripping hazards or from getting damaged.
d. Keep loose materials off stairs, walkways, ramps, platforms, scaffolds, etc.
e. Put or replace caps on rebar and grade stakes.

f. Do not work in areas with inadequate lighting. Tell your Foreman and he/she will get it corrected.
g. Keep all stored materials a minimum of 6' away from any shaft opening and 10' from building edge.
h. Secure material and equipment so it will not be blown out of the building.

7. Lifting
a. Check for a clear path first. Then have a clear view while carrying load.
b. Avoid back strains when lifting (including shoveling) by following these few simple suggestions:
(1) Take a good look at what you're going to lift. If it is too heavy or bulky for you, get help. (Another employee, chain hoist, forklift, crane, etc.)
(2) Get a firm clear footing and keep your feet about shoulder distance apart.
(3) Squat down, keep whatever you are lifting close to you and lift with your strong leg muscles keeping your back straight.
(4) While carrying whatever you have lifted, avoid twisting of the body as much as possible.
(5) When setting the object down, reverse the lifting procedure; that is, keep your back straight and lower with your leg muscles.
c. When carrying long objects with another employee, be sure you both carry the load on the same shoulder.
d. Have just one person give commands when teaming big loads.

8. Drugs and Alcohol
Possession, consumption or use of alcoholic beverages or illegal drugs (including marijuana) is not permitted. Anyone violating this policy will be subject to immediate termination. You must pass a drug screen prior to employment, after any accident, at any time that your Foreman or other Company supervisory personnel suspect that the policy is being violated. Random drug tests may also be requested.

9. Safety Meetings
Attend all safety meetings and safety training classes held at your job site. You will get the latest information on what the company is doing and what you can do to keep from getting hurt.

10. Hard Hats
a. Hard hats are to be worn whenever there is an overhead hazard, work is being performed overhead or a hazard from falling objects.
b. Employees will have a hard hat with them on all jobsites.
c. During the final stages of construction (touch-up paint, carpeting, floor waxing etc.) the wearing of hard hats may not be required as the site Superintendent sees fit.

11. Eye Protection
General-purpose safety glasses will be issued to employees and must be on their person at all times. Eye protection must be worn when:
a. Using grinders (all types), using cleaning materials, table saws, jack hammers, chipping guns, masonry saws, welding or cutting torches (under welding hood in arc welding), nailers, powder actuated tools.
b. Cleaning a weld or when the wind is such that it is blowing dust, sand, rust or other particles about.
c. Handling material in powder form such as cement or when mixing or cleaning brick with acid or other cleaning material.
d. There is danger of concrete or mortar splashing in the eye.
e. Filing or buffing any material.
f. Working near persons whose work requires them to wear eye protection.
g. There is other dangerous exposure to your eyes.
h. Sunglasses are okay for outside but clear glasses are to be with the employee for inside work.

12. Respirable Dust Protection
1a. Respirable crystalline silica is made by cutting, grinding, polishing, jackhammering and drilling materials containing sand such as concrete, asphalt, block, brick, tile, mortars and grout.

Always use water and/or vacuum systems to prevent silica from being inhaled.

1b. Have your Foreman train and sign your Silica Exposure Log whenever you alter silica (sand) containing materials by methods listed in a. above. Fill-out Silica Exposure Log every day you alter silica containing materials.

1c. Be sure to not expose other employees around you to respirable silica.

2. Dust masks should be used when spray painting, handling cement, lime, or when exposed to a steady dust hazard. Special equipment is required when sandblasting, welding, and cutting in confined spaces, on galvanized material or metal coated with red or zinc chromate - See your Foreman under these circumstances.

13. Fall Protection
Employees within 6 feet of a fall hazard greater than 6 feet in height shall be protected from falling by:
a. Guardrails - 42" high ± 3", strong enough to withstand 200 pounds in down and outward directions, a mid rail is required. If persons are working or walking beneath or next to the fall zone a toeboard will be included or the area will be restricted to:
(1) Lifelines, seat harnesses, full-body harnesses, lanyard and static lines connected to anchor points capable of supporting 3,000 pounds. Safety belts are not allowed.
(2) A lifeline and harness shall be used in all areas where materials are loaded, landed or unloaded if an employee is within 6 feet of the edge. Check your harness carefully each day. If defective, do not use, return it to your Foreman. Some alternative fall protection methods are allowed. See your Foreman.

14. Hearing Protection
a. Hearing protection must be in your procession at all times

while on the job.
b. Wear your hearing protection when around noise, even if you are not operating the equipment.

15. Hand Tools
a. Inspect tools before using to make sure they are not defective.
b. When hand tools are not in use, lay them down in a safe place where they will not fall on a fellow worker or cause him/her to trip.
c. Do not carry hand tools up or down a ladder; use a rope or tool belt.
d. Know the correct use of hand tools before using; use the right tool for the job. If you are not sure how to use any tool talk to your Foreman, they will instruct you on the proper and safe use of any tool.
e. Have tools, with burred or mushroomed heads, ground down. Keep cutting tools sharp and carry in a container or on a tool belt (not in your pocket).
f. Do not use tools with split, broken, or loose handles.
g. Be sure you have a clear area behind you before swinging a sledgehammer, axe, pick, or other tools or materials.

16. Portable Power Tools
a. Be sure the electrical tools, such as portable power saws, grinders, drills, etc. are grounded (unless they are double insulated tools). Do not stand in water or on damp ground when using tools. (Report any minor shocks to your Foreman)
b. Make sure the tool has the proper guard and never block or lock the guard in an open position.
c. Never block or lock the safety switch on a power tool so that it will operate the tool.
d. Keep extension cords and power cords out of the center of walkways and off of ladders and stairways.
e. Never point a compressed air tool or powder-actuated tool at yourself or a fellow employee.
f. Only qualified personnel should operate or service power tools.

g. Do not use defective power tools. Report condition to your Foreman.
h. Right-angle grinder MUST be equipped with half moon or 180º guard.

17. Powder Actuated Tools
a. Never use a powder actuated tool unless you are properly trained and have a VALID CERTIFICATE CARD in your possession.
b. Always wear eye protection and hearing protection.
c. Do not shoot through sheetrock or plywood without making sure no one is on the other side.

18. Machines
a. Before starting machinery, opening valves, switches, etc. check to make sure fellow employees are in the clear and have all safety guards in place.
b. Never adjust or repair machinery while it is running.
c. Operate machinery and vehicles within safe speeds and at rated capacity.
d. Never refuel an engine while it is running.
e. When using a gasoline or diesel engine in an enclosed area, be sure to vent the exhaust outside.
f. Never use an air hose for pressure to empty gasoline drums.
g. Do not start or use any machinery unless you have been authorized to do so.
h. If you are in charge of a compressed air tank, be sure to drain the tank and test the safety valve daily.

19. Ladders
a. Be sure straight or extension ladders are tied off at the top.
b. Get someone to hold ladder while you are tying off, or if you can't tie it off.
c. Make sure extension ladder locking clamps are in place before using.
d. Have ladder reach at least 36" above landing for easy access.
e. Use only sturdy ladders on firm level base at a 4 to 1 pitch and have clear access at top and bottom.

f. Do not try to get additional height from ladder by placing it on a makeshift cribbing such as boxes, boards or scaffolds.
g. Do not place a ladder in front of a door unless it is locked, barricaded, or guarded by another employee.
h. Always engage snap spreaders on stepladders.
i. Face ladder when climbing up or down; use both hands. Use hand line to lift or lower loads.
j. Portable metal ladders must not be used for electrical work or around electric lines.
k. Never work off of the top two steps of a ladder.
l. Inspect all ladders daily or before use.

20. Scaffolds and Aerial Lifts
a. Scaffolds are to be erected only by employees trained to erect scaffolds. See your Foreman.
b. Do not get on scaffolds until they have been inspected by the competent scaffold person.
c. Scaffolds are to be inspected every day before employees get on the scaffolds. Before any employee is allowed on any scaffold it must have a **GREEN** tag attached.
d. Scaffolds with a fall height greater than 10 feet must have guardrails.
e. Whenever working in any aerial lift in which the manbasket extends beyond the perimeter of the vehicle's wheels you must wear a safety harness and lanyard tied to the approved anchorage point.
f. Do not stand on the guardrails unless connected to the manbasket with full body harness and lanyard.

21. Floor Openings
a. Keep materials away from entrance or exits of stairs, hoists and elevators landings, traffic lanes and ladders.
b. Avoid shortcuts - use ramps, stairs, walkways, ladders, etc.
c. Do not work in areas with inadequate lighting. Tell your Foreman and he will get it corrected.
d. When necessary to remove guardrails around a floor opening or building perimeter, make certain they are replaced each time you leave the work area and immediately upon completion of work.

e. Keep all stored materials a minimum of 6' away from any shaft opening and 10' from building edge.
f. Secure material and equipment so it will not be blown out of the building.
g. Any floor opening greater than 1.5" in the least dimension must be covered and secured with a suitable covering marked "hole" and "oiyo."

22. Hoists
a. Ride the personnel hoist only; never ride a material hoist.
b. To prevent overloading of a personnel hoist, you must follow hoist operator's instruction for the loading of people or material.
c. When hoisting pipe or material that must stand upright, secure it to prevent ends from catching in the hoist tower. Never ride a material hoist to hold the material.
d. Be sure to close hoist way gate after unloading.
e. When loading or unloading a material hoist, never stay on it longer than necessary.
f. Be sure to replace the guard rails at the hoist landing.

23. Electrical
a. Consider all wire "live" until checked out.
b. Never remove or cut ground prong of any electrical tool or extension cord. PLUG INTO MATCHING RECEPTACLE ONLY.
c. All electrical power tools and extension cords should have RUBBER insulation. Damaged cords should be repaired or replaced immediately. Only type "S" cords are permitted.
d. All repairs to electrical tools and extension cords must be made by qualified personnel only.
e. Do not drive vehicles, aerial lifts or rolling scaffolds over extension cords.

24. Compressed Gas Cylinders
a. Always turn cylinder valves off when not in use or when unattended for an extended period of time, such as during the lunch period.
b. Always secure a cylinder, full or empty, in an upright position.

c. When cylinders are lowered or hoisted, use a skip box, net or cart. Never use a choker or hook on to the valve cap.
d. Never store oxygen cylinders near flames, flammable, or combustible liquids or materials, oil, grease, or within 20 feet of fuel gas cylinders (acetylene, propane etc.).
e. Keep oily rags and oily gloves away from oxygen cylinders. (This could cause an explosion)
f. Keep valve caps on cylinders, full or empty.

25. Fire Prevention

25.1. General

a. Know the location of and how to use fire extinguishers and fire hoses.
b. Take extra care in disposing of cigarette butts and matches. Extinguish thoroughly. When in refineries or chemical plants, or waste water plants smoke only in designated areas.
c. Flammable liquids should be transported and stored only in the original container or in an approved metal safety can with self closing lid or nozzle.
d. Store oily rags or paint rags in covered metal containers.
e. Be sure there is a fire watch before welding or cutting above combustible materials.
f. Tell your Foreman if you use a fire extinguisher so it can be refilled.

25.2. Fire Protection for Wood-Frame Construction

This section applies to all wood frame construction on BSC sites and on sites where questions of flammable or combustible material may create a fire hazard as determined by the job Superintendent and/or Safety Director.

a. Housekeeping is critical to avoid fires. Sweep up sawdust and ends of sawed materials at the end of every shift.
b. No smoking will be permitted anywhere on the jobsite with the exception of a single, posted smoking area. Ask your Foreman if you need the location of the smoking area.
c. Do not start work until fire hydrants are live and hoses and

hydrant wrenches are at the fire hydrant.
d. A fire watch shall be posted for at least one hour whenever open flame or similar source of ignition is used. The fire watch will have means with them to extinguish flame or smoldering material.
e. Plumbers using torches to sweat pipes will have a spray bottle on hand which shall be used to pre-wet and soak (douse) combustibles affected by the heat source. Plumbers must have within arm's length a functioning fire extinguisher.
f. When requested, employees will attend training on fire prevention and fire suppression.

26. Excavations

a. Never enter an excavation or trench more then 5' deep unless it is shored or sloped.
b. In any trench 4 feet or greater in depth that you cannot walk out of, place an access ladder within 25' of any workman.
c. When digging a trench, place soil (dirt from the excavation) at least 2' away from edge of excavation. Remove surface rocks, clods of dirt or other debris that could fall.
d. All employees entering excavations must have training.

27. Clearing and Grading Equipment

a. Always operate a dozer, scraper, grader, backhoe / loader etc. at a safe speed.
b. Only the operator should be on the operating platform or seat. No one else should be on the equipment.
c. Walk around your equipment before starting up to make certain no one is in a danger zone.
d. Always be aware of those persons working around your equipment.
e. Always wear your seatbelt.

28. Safe Driving

a. Do not ride on vehicle or mobile equipment except on seat or designated passenger platform.
b. Do not ride in the back of pickups unless approved by BSC

Superintendent.
c. When driving about the jobsite, never exceed 15 mph. At all times observe the rules of safe driving.
d. Every day, check the company truck you are driving to see that the brakes, turn indicator, head lights, back up alarm (if required) and stoplights are working properly. WEAR YOUR SEATBELT AT ALL TIMES.

29. Protection of Public

a. Anytime you see sightseers or children in the work area, ask them to leave so they will not be hurt.
b. If there is danger of pedestrians, automobiles, etc., being struck by falling materials that you are working with, tell your Foreman so he can arrange the necessary protection.
c. Direct any visitors without hardhats to the job office for proper job clearance.
d. Do not visit with students on schools.

30. Hazard Communication Program

This Company has a written hazard Communication program, and in accordance with OSHA Standard 1926.59, the following items are available to you at your request:

a. A copy of the Company's written Hazard Communication Program;
b. A copy of the Company's "List of Hazardous Chemicals" for your workplace; and
c. Copies of Safety Data Sheets (SDS) for any covered chemicals to which you are exposed. To obtain any of this information, contact your supervisor.

31. Health Hazard Evaluations Records

Upon written request, you may obtain a copy of any medical record or any analysis of sampling taken while on or near you with regard to your working conditions or workplace.

32. Civil Jobsites

a. Flagmen are required when equipment crosses the streets not closed off. Flagmen must have passed a flagmen

training course, ask your Foreman.
b. Hardhats will always be with employees at all times when in trucks or equipment with a protective cab.
c. Safety vests must be worn at all times when around traffic and moving equipment.
d. Eye protection should be worn at all times. Glasses should have a UV coating to protect eyes from long-term exposure to sunlight.
e. Sunscreen is encouraged as are long-sleeved shirts.
f. Seat belts are to be worn at all times.
g. Riding in the back of trucks and equipment is not allowed, unless approved by the BSC Superintendent and the BSC Safety Director.
h. Hearing protection will be worn when sawing and jack hammering. Face shields or goggles will be worn when jack hammering or sawing.
i. Excavations cannot be entered until inspected by a Bradbury Stamm Competent Person. If a trench box is used, do not leave the protection of the trench box.
j. Support all cross lines, pipes, conduits, and wires.
k. Do not get under suspended loads.
l. Back-up alarms are required on water trucks, loaders, and excavators.
m. Use taglines when setting trench boxes.

33. Confined Spaces

a. Confined spaces are not to be entered without the Foreman first checking the atmosphere.
b. If a confined space has a hazard (hazardous atmosphere, engulfment, entrapment, etc.) that cannot be eliminated before entry, do not enter until the Bradbury Stamm permit-required Confined Space Competent Person authorizes entry. Ask your Foreman.
c. Do not operate gasoline saws in deep trenches, manholes, or areas of poor air circulation without a ventilator and/or the supplied air hood.
d. Jackhammer and chipping operations in confined spaces will be done only with supplied air hoods or ventilators and respiratory protection.

34. Air Test Balls and Plugs

a. Test inflation of test balls and air plugs for leaks before use.
b. Do not inflate while you are in a manhole.
c. Face shields are to be worn when inflating and deflating.
d. Stay out of the line of fire and keep back as much as possible.

35. Safety Violations

1. The FIRST Safety Violation is a written warning and will not result in penalty.
2. The SECOND Violation will result in employee being sent home without pay for the rest of the workday.
3. The THIRD Violation will result in employee being sent home without pay for the rest of current workday AND the following day.
4. The FOURTH Violation will result in three days without pay suspension and possible termination based on the recommendation of the Superintendent.
5. The FIFTH Violation will result in automatic termination unless the Superintendent requests an interview with the Safety Director and Human Resources Manager.

36. Equipment Operator's Safety Certification

(See Equipment Operator's Safety Passport on the following pages.)

VIOLATION LOG

RULE **DATE**

1. _____

Violation_____

_____

2. _____

Violation_____

_____

3. _____

Violation_____

_____

4. _____

Violation_____

_____

5. _____

Violation_____

_____

EMPLOYEE ORIENTATION ACKNOWLEDGMENT

I have received the Bradbury Stamm Employee Safety Passport. I have read and understand the General Safety Rules and agree to abide by the Safety Program while employed by Bradbury Stamm. I understand that I must keep this book with me at all times while at work, and if for any reason I do not have my Safety Passport with me, I understand that I will not be allowed to work or be on the payroll until I can present my Safety Passport.

I have read the consequences for each safety violation that is written in my Safety Passport and understand that if I reach FIVE Safety Violations, I will be automatically terminated unless the Superintendent requests an interview.

If I lose or destroy my Safety Passport a new Safety Passport will be issued after a THREE day without pay suspension is completed.

**After a 12-month period, all violations are erased, and a new Safety Passport will be issued.*

New book Issued_____(Date)

Employee Name_____
(Please Print)

Employee Number_____

Employee Signature _____

Date_____

36. Safe Equipment Operators Passport EXCAVATORS
36.1 Excavating Equipment Operations

This Safe Operators Passport is for BSC employees hired to operate front loaders, backhoes, skid-steer loaders (Bobcats) and excavators. This Passport is not for forklifts, rollers and water trucks. This Passport is in addition to the Safety Passport which must be on your person when on a BSC jobsite.

General Rules

a. The Operator is directly responsible for the safe operation of the equipment. Reckless and careless driving is prohibited.
b. The Operator is required to complete a pre-shift and a post-shift operation checklist. The checklists are printed in small pocket sized books. Tear off the page and attach to your time sheet for that day.
c. Wear your seat belt when operating the tractor. This includes excavators and backhoe digging operations.
d. Hard hats are required to be with operators at all times. When not protected by the tractor cab, a hardhat will be worn.
e. Do not drive over extension cords.
f. Report broken windows on the checklist. Windows must be clean for good visibility.
g. Back-up alarms must be in working order. Horns must be in working order.
h. Flashers and hazard lights must be in working order.
i. Wheeled tractors must have a Slow Moving Vehicle triangle mounted in visible location for traveling on public right-of-way.
j. Mirrors are required. Keep mirrors clean. If mirrors are inadequate, note on the checklist.
k. Do not check for hydraulic leaks with your hand. Use a piece of cardboard or paper. High-pressure leaks can cut your fingers off.
l. Do not get under the elevated loader or bucket without securing the safety supports.
m. Set the Parking Brake whenever you get off the machine. Lower the front bucket also.
n. If a bucket must be left up to do not leave the machine

unattended. OSHA says the operator must be within 25'.

o. When employees get within the swing radius of the boom/bucket, lower and contact the ground to prevent unintentional boom/bucket movement.
p. Do not operate the boom/bucket when employees are within swing radius. This is common of laborers when digging around; you may have to get out and explain this to them.
q. Have employees operating compactors and rollers face the area your operating in. They need to see you.
r. Do not lift loads using the teeth. Connect the load to a lifting eye or around a bucket pivot pin.
s. When using backhoe or excavator for demolition, attachment operation or stressful operation close the rear or front window to protect operator. Expanded metal screen can also be used

Specific to Excavators

a. Overhead power lines must be insulated if the excavator boom can get within 10'. Many fatalities have occurred because the operators did not take this seriously.
b. Counterweight swing radius has crushed many employees. When working in tight spaces barricade the swing radius. Have a quick safety meeting with employees working or passing through the area. Your Foreman will support this.
c. Load Charts are to be in every excavator. Know the difference between the English and Metric chart values.
d. If you run both backhoes and excavators on your job, ask your Foremen to have the excavator controls altered to match the backhoe. Many fatalities have occurred when operators have switched from one tractor to the other and the controls were opposite. Your Foreman will report this to the Superintendent who can have it corrected.

Specific to Backhoes

a. When driving a tractor equipped with left and right brakes pedals connect both pedals for driving. This way a quick stop won't let the tractor lurch to one side.
b. Engage the Boom lock for loader operations.
c. Do not lift or hoist loads with the boom lock engaged. If it

breaks it can kill the operator or adjacent employees.

Specific to Scrapers

a. Stay on designated haul roads when not loading or unloading.
b. Maintain a sufficient distance between scrapers on haul roads to stop safely.
c. Slow down and check for traffic when crossing roads.
d. Obey Flag Person's directions.
e. Stay on machine unless in designated area. See your Foreman.

36.2 Operators Underground Utilities Protection

36.2.1 Purpose

Protection of underground utilities is of vital importance to BSC. Underground utilities are gas lines, electric lines, water, storm and sanitary sewer pipelines and communication lines such as telephone, fiber optic and cable television. These lines are the property of the utilities owners or the property owner. They are obstacles to be worked around or removed and replaced. Other than cable television lines, all lines are considered as safety issues.

36.2.2 Procedure

The statute governing underground utilities is clear. Contractors must call for spots and powered excavating equipment must not dig within 24"of the spotted lines.

Therefore:

a. Spots must be called for. Document in the Daily Log or other appropriate place the call time, date and name of person receiving the call.
b. Meet with them and have them place flags if on dirt in addition to paint.
c. Copy their sketch or plans of the utilities buried. Have them sign the copy clearly.
d. Using a tape measure, measure 24" on each side of their spot marks and mark with WHITE paint. Take photographs

of the spots and our marks. These marks are known as "offset marks".
e. Only allow hand digging between our marks. Equipment operators and other employees who violate this hand-digging zone may be subject to termination.

36.2.3 Operator Underground Utilities Rules

a. Do not dig or remove earth in an area that may have underground utilities without review of the area by the supervising Superintendent.
b. Roads, alleys, overhead power lines, driveways, homes, businesses and sidewalks all indicate the presence of underground utilities. Colored metal markers usually mark fields and open lots having underground utilities. Do not dig in these areas unless the utilities have been called and the locators have conducted spotting.
c. If spots for lines are on concrete and asphalt and are removed then the lines must be re-spotted. Stop and wait for re-spots. Following this rule has saved BSC tens of thousands of dollars.
d. Do not dig unless photographs have been taken of the line spots and the offset marks.
e. Do not dig within 24" of the spot marks with excavating equipment. Be sure the offset marks are not disturbed while excavating.
f. Support underground utilities and their structures (phone boxes, telephone poles) before digging beneath.
g. Operator must not violate any practice or procedure in Safety Directive 36.2 Underground Utilities Protection.

36.3.1 Excavations

Excavations account for many fatalities in construction or permanent disabling injuries. Employees may die in the excavation from inhaling dirt, being crushed and suffocated, and even if rescued suffer crippling muscular and skeletal injuries and suffer postponed death from "Crushing Syndrome," where vital organs fail over a matter days when deprived of oxygen while being buried.

Unsafe excavations are entirely preventable. All excavations are designed and constructed by employers and their employees and how safe that excavation is dependent on the employer and the employee. BSC wants all excavations to be safe for employees and in compliance with OSHA's Excavation Standard. BSC provides excavation training, inspections, design and soil classification through its Safety Department.

Equipment Operators are the employees who construct excavations. Excavations are tricky to construct safely. Frequently employees working in excavations have little input into their design and shape. Operators have a tremendous amount of control over the excavations. Although the ultimate responsibility of safe excavations lies with the Superintendent, the Superintendents don't observe each foot of an excavation as it is constructed. In addition, compliance with OSHA Excavation regulations must be maintained on BSC job sites.

36.3.2 Excavation Rules

a. Soils must be classified by visual and manual tests (including the thumb test) or are considered Type C Soils and will be excavated to Type C soil sloping requirements.
b. Type C Soil cannot have benches greater than 2' high.
c. Vertical walls greater than 5' high in trenches, excavations or spoil piles are prohibited.
d. Unsafe excavations on BSC sites need to be corrected if any employees are exposed or will be exposed to cave- ins or collapsing spoil piles.
e. Spoil piles will be set back 2' or more from the edge of all excavations.
f. Do not let employees in an excavation unless they have a ladder or you have constructed a ramp they can walk up and down.
g. Do not let employees get under loads that are handled by lifting or digging equipment. Use taglines on suspended loads that employees will guide or direct.
h. Do not allow employees to work in the excavation above other employees unless the lower level employees are

adequately protected.

i. While the excavation is open, underground installations are to be protected, supported, or removed as necessary to safeguard employees. Adjacent structures are to be supported to prevent possible collapse.

j. Operators must construct diversion ditches, dikes or other means to prevent surface water from entering an excavation and to provide drainage to the adjacent area.

k. Do not let employees work in excavations where water has accumulated or is accumulating unless adequate precautions have been taken.

l. Operator must not violate any part of 36.3 Appendix A of Safe Equipment Operators Passport EXCAVATIONS Rules.

36.3 Appendix A

Note: This appendix is only for excavations using sloping and benching to prevent cave-ins. Shoring, shields, trench boxes or a combination of these will be designed and approved of by the Supervising Superintendent and the Safety Director.

Soil Types

Type A is composed chiefly of clay and can be sloped from 54˚ or 3/4 to 1 from horizontal (9 inches for every 1 foot of depth). Caliche is frequently Type A.

Type B is composed chiefly of silt or loam and can be sloped from 45˚ or 1 to 1 from horizontal (1 foot for every 1 foot of depth).

Type C Soils are composed chiefly of sand and gravel and must be sloped 34˚ or 1 1/2 to 1 from horizontal (1.5 feet for every 1 foot of depth).

MAXIMUM ALLOWABLE SLOPES

SOIL OR ROCK TYPE SLOPES	MAXIMUM ALLOWABLE (H:V)(*) FOR | EXCAVATIONS LESS THAN 20 FEET DEEP (**)
STABLE ROCK	VERTICAL (90 Deg.)
TYPE A	3/4:1 (53 Deg.)
TYPE B	1:1 (45 Deg.)
TYPE C	1 1/2:1 (34 Deg.)

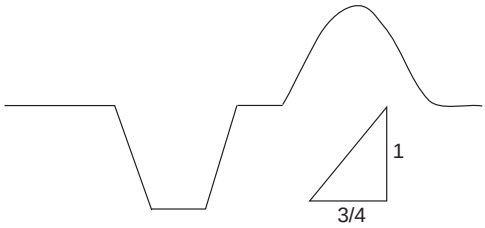
* Numbers shown in parentheses next to maximum allowable slopes are angles expressed in degrees from the horizontal. Angles have been rounded off.

** Sloping or benching for excavations greater than 20 feet deep shall be designed by a registered professional engineer.

Slope Configurations

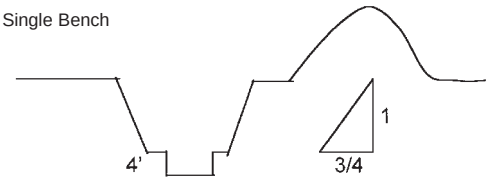
Excavations made in Type A Soil

1. All simple slope excavation 20 feet or less in depth in Type A soil shall have a maximum allowable slope or 3/4 to 1.

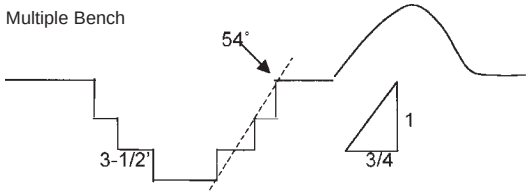


2. All benched excavations 20 feet or less in depth in Type A soil shall have a maximum allowable slope of 3/4 to 1 and maximum bench height of 4 feet:

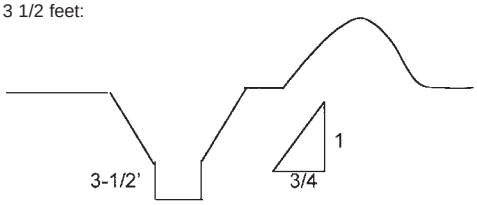
Single Bench



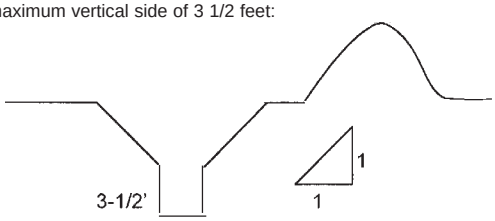
Multiple Bench



3. All excavations in Type A Soil 8 feet or less in depth which have unsupported vertically sided lower portions shall have a maximum allowable slope of 3/4:1 and a maximum vertical side of 3 1/2 feet:

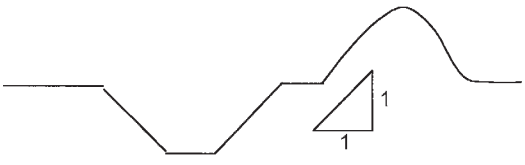


4. All excavations in Type A soil more than 8 feet but not more than 12 feet in depth with unsupported vertically sided lower portions shall have a maximum allowable slope of 1:1 and a maximum vertical side of 3 1/2 feet:



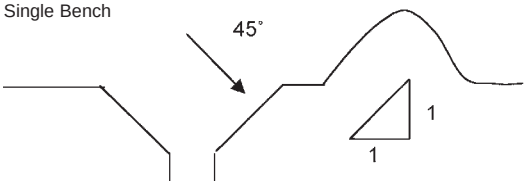
Excavations Made in Type B Soil

5. All simple slope excavations 20 feet or less in depth in Type B soil shall have a maximum allowable slope of 1:1:

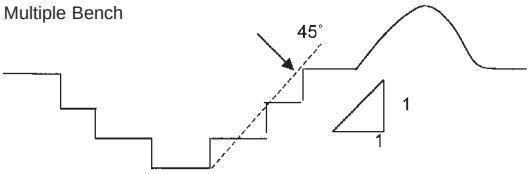


6. All benched excavations 20 feet or less in depth in Type B soil shall have a maximum allowable slope of 1:1 and maximum bench dimensions as follows:

Single Bench

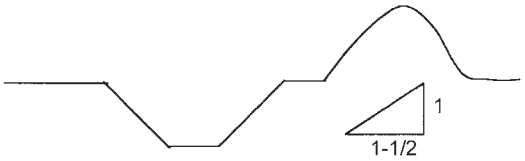


Multiple Bench



Excavations Made in Type C Soil

7. All simple slope excavations 20 feet or less in depth in Type C soil shall have a maximum allowable slope of 1 1/2:1:



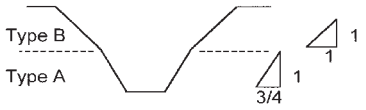
8. Benches higher than 2 feet are not allowed in Type C Soil.

9. All previously disturbed dirt is classified as Type C Soil.

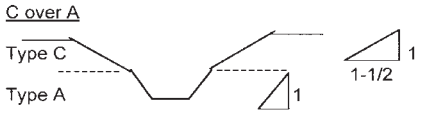
Layered Soil Sloping Configurations

10. Type A soils (clay and adobe) are frequently found on top of Type C soils (sand and gravel). Many fatalities occurred because the Type C soil beneath collapsed causing the Type A soil to crush to death an employee. Follow the sloping rules for Layered Soils:

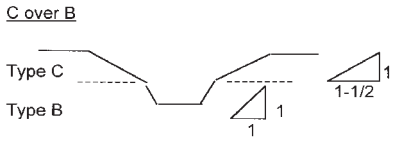
B over A



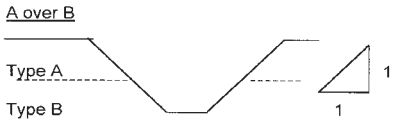
C over A



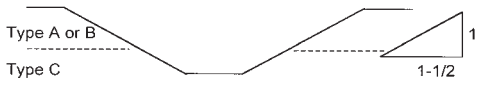
C over B



A over B

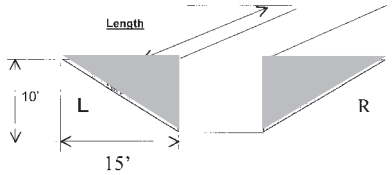


A over C and B over C



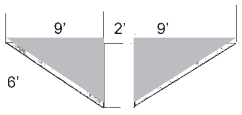
36.3 Appendix B

Formulas, Data and Useful Information



Type C Sloping Requires so much soil removal these Excavations are rarely in compliance with 1926.652

If an excavation 6 feet deep X 2 feet wide in Type C soil has to be sloped, it has to be sloped 9 feet on each side.



(9X6)+(2X6)÷27=Yards to move per foot of excavation length. 54+12÷27=2.4 yds/foot.

So, to make one foot of progress, 2.4 yards have to be removed. The Backhoe cycle time given is .40 yards per minute. By dividing 2.4 yards by .40=6 minutes per foot. If the trench is 10 feet long it is 10x6=60 minutes or about an hour to correctly dig a safe excavation. And this is only if every cycle is within 30 seconds. By the time you account for machine movement, hard digging and other variables this time should be doubled or tripled.

Bucket Fill Factor Table

Material	Fill Factor*
Moist Loam or Sandy Clay	100%
Sand and Gravel	95%
Hard Tough Clay	80%
Rock-Well Blasted	60%
Rock-Poorly Blasted	40%
Broken Concrete	30%

Cycle Times and Bucket Capacities

Front loader, backhoe buckets and excavator hold different amounts of materials depending on the material itself. Bucket capacities are typically measured two ways: struck capacity and heaped bucket capacity.

- Struck capacity refers to a bucket filled to level, whereas heaped capacity is a bucket filled with a heaping load.
- Heaped Capacity is the more useful measurement and varies depending on the material. This is called the Bucket Fill Factor. To determine the average bucket payload the Heaped Capacity is multiplied by the Bucket Fill Factor (See Table) as in the formula below:

Using a Cat standard duty 24" backhoe bucket with a heaped capacity of 7 cu feet and a bucket Fill Factor of 80%

7 cu ft X 80% = Average Bucket Payload
7 X .80 = 5.6 cubic feet of material per cycle

If a backhoe can make a complete cycle in 30 seconds every minute it can move 11 cubic feet of earth:

30 X 2 = 60 sec or 1 minute so 5.6 cubic feet X 2 = 11 cubic foot per minute

If this number is divided by 27 it gives the yards / minute: 11 ÷ 27 = .4 yards per minute.

37. Equipment Operators Passport FORKLIFTS

37.1 Inspection and Maintenance

The forklift to be operated must be inspected prior to use and can be used only if the following conditions have passed inspection:

a. The forks and backrest must be securely mounted.
b. Look under the forklift and take note of any loose hardware or excessive leaks. The steering linkage should be tight and well greased.
c. Look at the engine. Take note of loose or worn belts.
d. Make sure all covers, guards and inspection cover plates are secured properly.
e. Check the oil level, fuel level, hydraulic fluid level, radiator coolant level, battery acid level and hydraulic brake fluid level.
f. Note the tire condition and inflation. The tires should have proper inflation as recommended by the manufacturer, since the forklift's stability can be directly affected. Check owner/operator's manual for ballast filled tire maintenance.
g. Inspect the hydraulic and brake lines. These lines often show signs of excessive wear before they break.
h. Use a piece of cardboard to inspect for leaks. Never use bare hands to check for hydraulic leaks.
i. If pressurized hydraulic fluid has penetrated your skin, seek medical attention immediately. Hydraulic fluid, injected into the skin, can cause gangrene. Wear eye protection when operating and inspecting forklifts.
j. Check to make sure the overhead guard is secure.
k. Check brake lights and turn signals, if so equipped.
l. Check the back-up alarm.
m. If conditions call for use of headlights, check them.
n. You must check the operator's manual for the specific inspection procedures for your specific forklift. Many forklifts are different from each other and general inspection guidelines may not be sufficient. The operator's manual will instruct operators on proper inspection techniques and maintenance procedures.
o. Check to see if the load chart is in the forklift.

37.2 Controls and Operations

BSC Forklift Training is general in nature for telescopic boom rough terrain forklifts. Supervising Superintendents and Operators and must become familiar with each machine's capacities and limits.

a. Do not operate forklifts with known mechanical defects.
b. Do not travel on unsafe routes such as next to excavation edges, soft ground, holes, in public right-of-way, near overhead power lines, etc.
c. Do not carry unsafe loads such as loads that may swing or slide taking the forklift beyond its canter of gravity.
d. Do not use unsafe operating techniques such as starting and stopping quickly, not using horn properly, etc.
e. The Operator is responsible for the safe condition and operation of his machine.
f. Never operate a forklift from anywhere other than the operator's seat and never allow riders on the forks, frame, etc.
g. Use grab rails when mounting and dismounting machine. Don't grab levers to pull yourself up.
h. Never reach through potential pinch points.
i. Beware of loose clothing, harnesses and lanyards, long hair around moving or rotating parts (fans, pulleys, belts).
j. Keep all body parts inside the operator's compartment and WEAR YOUR SEATBELT.
k. Wear your hard hat to prevent injury from smaller objects penetrating the overhead protective structure. Hard hats may save your life in the event of a turnover.
l. Eye protection is required for windy, dusty conditions or when placing loads overhead.
m. Use extreme caution when adjusting forks. Tilt forks forward to relieve the weight. Wear gloves and keep fingers from between pinch points.
n. Space forks at their maximum width that will safely lift the load.
o. "Feather" the load when starting and stopping, raising and lowering.
p. Turnovers can be avoided by adhering to the following

practices.

Forward Tipping

a. Use only two-wheel steering when traveling at higher speed to prevent turnovers.
b. Do not extend the load too far forward.
c. Do not pick up loads too heavy for the machine.
d. Anticipate changes to forward momentum: avoid sudden stopping.

Side Tipping

a. Do not raise loads while the machine is on uneven ground.
b. Machines with self level feature must be leveled prior to raising loads.
c. Control momentum (especially when turning the machine with a raised load) – it is the Number One cause of machines overturning!
d. Do not drive into holes or on soft ground.
e. Re-level the machine after adjusting for a side hill when traveling.
f. Do not travel with raised load that can swing or shift.

Outriggers

Outriggers widen the stability triangle when they are set on the ground.

a. Be very careful when reading load charts for forklifts equipped with outriggers – they can drastically affect the amount of weight that can be safely lifted.

Backward Tipping

Elevated loads place more weight on the rear axle of the forklift, especially with the mast tilted back or boom retracted. Any pivoting action of the frame tilt or rear wheels can shift that weight to the forklift's most vulnerable point. Loss of braking power or traction at the front wheels causes the machine to run out of control.

a. Do not back down a hill with a load elevated too high.

Driving on Inclines

a. Unloaded forklifts should always be driven forward down an incline.
b. Forklifts, whether they are loaded or unloaded, should not be driven up or down very steep inclines.
c. Loaded forklifts should always keep the load on the uphill side whether driving up or down a hill for stability and traction.
   - Drive forward up a hill with a load.
   - Back down a hill with a loaded forklift.
   - Keep load uphill when driving on steep inclines.

Stacking/Unstacking Loads

a. Make sure all loads are well centered and stable.
b. Use proper feathering techniques to ensure that the forks or the vehicle itself does not bump the stacks.

Load Capacities

Forklift capacity charts show the amount of weight that can be safely carried, how high, and how far in front of the front axle the load can be extended.

a. Extendable boom forklift load charts must contain at least the following information:
   - Weights that can be lifted.
   - Full range of boom extensions.
   - Angles of operation.
b. Do not extend boom with load beyond chart.
c. Do not operate forklifts without readable load charts.
d. Do not operate, carry or lift loads beyond the load chart capacity. Some load charts are very complex and may be somewhat difficult to read.
e. Make sure you understand all of its information before you operate the machine.
f. Be aware of outrigger and ballast filled tire requirements for certain load charts.
g. Be sure that you are reading the right load chart for your forklift's conditions.

Forklift Attachments

Some telescopic boom machines offer attachments that effectively transform the forklift into a crane, excavator, or specialized material-handling piece of equipment. These attachments alter the machine's rated capacities as a forklift making the existing load chart inaccurate.

a. BSC Safety Director must approve job-made forklift attachments.
b. Load Chart for Attachments must be developed and used for attachments.
   - Attachments can change the lifting capacities of a forklift.
   - Be aware of the changes and refer to your new load chart.

Parking or Leaving the Machine

a. Park out of traffic lanes
b. Park on level ground, if possible
c. Do not park in deep mud or water, especially in freezing weather.
d. Lower the forks.
e. If the forks must be left elevated do not leave the machine unattended. OSHA says the operator must be within 25 feet.
f. Neutralize all controls.
g. Set the parking brake.
h. Turn off the engine.
i. Block the wheels if the forklift is on an incline.

EQUIPMENT OPERATOR CERTIFICATION PAGE
EXCAVATION OPERATORS

_____,

has completed Bradbury Stamm Construction's Excavator Operator Passport Training and has earned a passing score on the test over the training material.

_____ _____
Trainer Date

_____ _____
Employee Date

_____ _____
Superintendent Date

***This certificate is valid for a 1-year period from the date above.**

FORKLIFT OPERATOR – ALL BSC

_____,

has completed Bradbury Stamm Construction's Forklift Operator Passport Training and has earned a passing score on the test over the training material.

_____ _____
Trainer Date

_____ _____
Employee Date

_____ _____
Superintendent Date

***This certificate is valid for a 1-year period from the date above.**

FORKLIFT OPERATOR – JOB SPECIFIC

_____,

passed a driving skills proficiency exam given by his/her jobsite Superintendent and can operate a forklift on this jobsite.

_____ _____
Employee Date

_____ _____
Superintendent Date

_____
Jobsite

***This certificate is valid for a 1-year period from the date above.**

Silica Exposure Log

Trained by Competent Person - Name: _____ **Date:** _____

Date	Hours Worked	Tool Used	Control Method: Wet or Vacuum	Outdoors Yes/No	Work Location

Silica Exposure Log

Trained by Competent Person - Name: _____ **Date:** _____

Date	Hours Worked	Tool Used	Control Method: Wet or Vacuum	Outdoors Yes/No	Work Location

EMPLOYEE NAME

If you have questions about this document or the Bradbury Stamm Construction Safety Passport Program, contact:

Safety Director, Bradbury Stamm Construction, Inc.
505.765.1200

Bradbury Stamm Construction

BRADBURY STAMM SAFETY DIRECTIVES

Directive Number	Title	Original Issue Date	Current Revision Date
#001-00	Crane Matting Boards	10/20/2000	04/02/2008
#002-00	Underground Utilities Protection Program	10/20/2000	10/25/2015
#003-00	OSHA Inspectors	03/05/2000	01/10/2008
#004-00	Forklift Operators	10/20/2000	07/01/2008
#005-00	Subcontractor Safety Agreement (Exhibit A)	10/20/2000	07/01/2008
#006-00	Safety Passport™ Policy	07/26/2000	04/03/2003
#007-00	Tile and Block Saw Grounding	11/27/2000	07/01/2008
#008-00	Steel Erection Safety Practices	12/05/2000	07/01/2008
#009-01	Backhoe Operator Certification Program	03/15/2001	07/01/2008
#010-01	RESERVED	RESERVED	RESERVED
#011-01	Subcontractor Training Certification and Curriculum	10/17/2001	07/01/2008
#012-01	Employee Identification Program	11/19/2001	07/01/2008
#013-02	Insurance Claims	04/04/2002	04/07/2003
#014-02	Use of Forklifts by Non-Employees	07/31/2002	07/01/2008
#015-02	Masonry Block Cutting	11/08/2002	07/01/2008
#016-02	Chemical Hazard Communication	12/10/2002	07/01/2008
#017-03	Critical Lifts	02/11/2003	07/01/2008
#018-07	Scaffold Platform Access	01/15/2007	07/01/2008
#019-03	Dust Control (Control of Visible Fugitive Particles) ***Work Performed in Bernalillo County, NM***	09/15/2003	07/01/2008
#020-03	Authorized Drivers	09/15/2003	07/01/2008
#021-03	Pre-Installation Meeting & Checklist	07/01/2008	N/A
#022-03	RESERVED	RESERVED	RESERVED
#023-03	Superintendent's Duties	04/01/2009	N/A
#024-03	Microbial Control	04/28/2012	N/A
#025-00	RESERVED	RESERVED	RESERVED
#026-00	Respirable Crystalline Silica Protection Program	08/01/2017	N/A
#027-00	Infectious Disease Preparedness Program	03/16/2020	04/07/2020

Bradbury Stamm Construction – Safety Directive
Safety Directive # 001-00
Original Issue Date: 10/20/2000 **Revision Date: 04/02/2008**

CRANE MATTING BOARDS

Purpose
To prevent crane accidents resulting in damage to cranes, operators, employees and property.

Hazard
Hazards are twofold:

1. Collapse or deformation of soil beneath the outrigger pad (float)
2. Structural stress to metal pads potentially failing during a critical pick (lift)

It has been widely documented that many crane turnovers and near turnovers were attributed to failure to use matting boards underneath the metal outrigger pad.

The construction industry has many documented instances of cranes that turned over because matting was not used underneath the outrigger pad. It requires as little as 4 inches of compressed soil under the pad to cause a crane to lean out, which makes the suspended load swing out even further. The non-load side outriggers will then leave the ground before the load swings back, often striking structures in the process. This type of incident can easily result in loss of life.

Policy
All cranes used on Bradbury Stamm sites will be set-up with matting underneath the outriggers at all times, including when on concrete and asphalt.

Equipment
Matting boards can be made of:

- 4x4 set tightly together and bolted or held together by a top and bottom layer of ¾ plywood or
- Two layers of Douglas Fir 2x8's with a top and bottom of ¾ plywood
- The ends of reels for electrical wire are suitable if they are of 1x4 and two reel ends are used per outrigger

Matting Boards are to be 3 times the area of the metal pad.
When practical, construct round mats that can be picked up and rolled into place.
18" pad requires a mat of at least 30" in diameter.
24" pad requires a mat of at least 42" in diameter.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 002-00
Original Issue Date: 10/20/2000 **Revision Date: 10/25/2015**

UNDERGROUND UTILITIES PROTECTION PROGRAM

Purpose

Protection of underground utilities or facility (UF) is of vital importance to Bradbury Stamm Construction and its clients. Underground utilities are gas lines, electric lines, water, storm and sanitary sewer pipelines and communication lines for telephone, fiber optic and cable television. These lines are the property of the utilities owners or the property owner –Underground Facility Owner (UFO). They are obstacles to be worked around or removed and replaced.

The Pipeline Safety Bureau is able to assess administrative fines for failing to call NM 811* for UFO spots, failing to report damage to UF(s) within 5 days, for damage to the underground facility if mechanical equipment was used within 24 inches of the line and for failure to take “reasonable care”. Second offense of either can be a $25,000 fine and the cost of repair and losses incurred by entities affected by the utility interruption.

Procedure

The statute governing underground utilities is clear. Contractors must call for spots and powered excavating equipment must not dig within 24 inches of the spotted lines. Therefore:

1. Mark area where excavating or grading occur with WHITE paint or flags for the next TWO weeks. Walk route with BSC superintendent.
2. NM 811* call for spots must be called for two days prior to digging. Document in the Daily Log or other appropriate place the call - time, date, and name of person receiving the call get an 811 Ticket #.
3. Meet with them and have them place flags if on dirt in addition to paint.
4. Copy or photograph their sketch or plans of the utilities buried.
5. If on Private Property and NM 811* UFO’s will not spot, notify the BSC Superintendent to arrange for private locating services.
6. Using a tape measure, measure 24” on each side of their spot marks and mark with WHITE paint. DO NOT use orange paint, which signifies buried telecommunications lines. Take photographs of the spots and our marks.
7. Only allow hand digging or vacuum excavation between white paint marks.
8. **Superintendents, Foremen, Equipment operators and other employees who violate this hand digging zone may be subject to suspension and/or termination.**
9. If a utility cannot be found call BSC Safety Director John Brown at (505) 577-7930.

If a line is miss-spotted and broken be sure all documentation including photographs are secure and made available to **the BSC Safety Director**. The Pipeline Safety Bureau will hold a hearing. We need the evidence that our procedures were followed.

Be sure Subcontractors follow this procedure. It is for everyone’s protection.

*For work outside of New Mexico, contract the applicable State resource for UFO spots.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 003-00
Original Issue Date: 03/05/2000 **Revision Date: 01/10/2008**

OSHA INSPECTIONS

Purpose

OSHA will be inspecting our jobsites sooner or later. It is our obligation to have a safe workplace. It is OSHA's role to ensure we have a safe workplace.

Procedure

If OSHA staff show up, welcome them to our jobsite. Extend every courtesy (do not smoke indoors in their presence).

Normally they will ask the general contractor to get a representative from each subcontractor for an opening conference. It is important for a subcontractor's representative to be accommodating during the conference or inspection. Please instruct about this and keep these representatives calm and courteous. If the subcontractor's representative boycotts the opening conference, let the BSC Safety Director know about it immediately.

Inspectors are looking for:

- Harzard recognition
- Decisive and immediate corrective action
- Violations of the OSHA regulations
- Evidence of work preplanning to control hazards

Relates to Safety Elements:

- Physical Inspections
- Mgmt. Commitment
- Passport Rules
- Job Hazard Analysis Training

Once the walk-through inspection starts, have a foreman or assistant superintendent with a radio tag along. Anything the inspector photographs, writes down or comments on, have the foreman direct corrective action. Have the foreman monitor and ask the inspector to look at the corrected conditions.

Inspectors have the right to apply the focused inspection protocol, which means they can limit citation issuance to serious hazards if there is evidence of an effective safety program. If the inspector perceives a cavalier or lackadaisical attitude toward safety he may conduct a "wall to wall" inspection.

Superintendents and Project Managers of jobsites who receive OSHA citations are subject to disciplinary action, including, but not limited to Safety Passport™ write-ups. If citations are issued and the Safety Director decides to contest the citations, at the discretion of the Safety Director, the Project Manager and Superintendent(s) may be required to attend any informal conference.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 004-00
Original Issue Date: 10/20/2000 **Revision Date: 07/01/2008**

BSC FORKLIFT OPERATORS

Forklifts are to be operated only by persons certified under the **Bradbury Stamm Construction Forklift Operators Certification Program** or other equivalent means. OSHA 1910.178 applies by reference to construction and requires all operators to be certified as of December 1, 2000. BSC forklift operators will be required to attend initial as well as annual forklift safety training.

At a minimum all certifications for BSC employed forklift operators must document successful passage of a written and field driving (skills) test rough terrain extended reach forklifts.

Superintendents are authorized to **certify Forklift Operators for their jobsite only.** When operators transfer to another jobsite the Superintendent at that jobsite must re-certify the operator for the make and model the operator will be using. Only a designated trainer from the BSC Safety Office can certify forklift operators to work company wide.

If superintendents want to operate forklifts they need to have a designated trainer from the BSC Safety Office certify their ability to operate forklifts. Superintendents cannot certify themselves.

Subcontractor employees will attend forklift training class and be issued a BSC Safety Passport at the jobsite provided by BSC. BSC does not conduct driving tests for subcontractor employees.

PROCEDURE

1. A designated trainer from the BSC Safety Office will perform the training.

2. The Safety Office trainer will administer test to class participants.

3. The superintendent where the employee works will observe driving behaviors and certify that the operator is qualified for the specific machine to be used.

4. The Safety Office will issue a Forklift Operators Passport that is good anywhere in the company.

5. In lieu of items 1-4 (above), a Supervising Superintendent can conduct forklift operator training, administer written tests and test each driver to qualify them for a Forklift Operators Passport good for the Superintendent's jobsite only.

6. Superintendents and Foremen shall take annual classroom forklift training and pass the written test if BSC employees or subcontractor employees are to operate forklifts on their jobsites.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 005-00
Original Issue Date: 10/20/2000 **Revision Date: 07/01/2008**

SUBCONTRACTOR SAFETY AGREEMENT (EXHIBIT A)

Bradbury Stamm Construction Company, Inc., and its subcontractors are obligated to provide a safe workplace. Subcontractors will be responsible for the safety of **their own** employees.

1. Compliance of the rules and regulations contained in **29 CFR 1926** by all subcontractors is required. Personnel will wear **proper work clothing and proper footwear**. **No shorts, no sleeveless shirts, and no radios** will be allowed on any Bradbury Stamm construction site.

2. **COMPETENT PERSON:** Each Subcontractor who will be doing any excavation/trenching, erecting, working from or disassembling scaffolds will be required to have a competent person on-site at all times.

3. **FALL PROTECTION:** Bradbury Stamm has a detailed fall protection policy for its employees and the employees of subcontractors exposed to fall hazards greater than 6 feet. For subcontractor employees engaged in steel erection, refer to Safety Directive #008 – 00 for full details. All employees must be protected from fall hazards by guardrails, personal protective equipment, nets, or acceptable alternative protection procedures as specified in the subcontractors site-specific fall protection plan. If any assistance is needed to meet the above requirements please contact the BSC Safety Director at **(505) 577-7930**.

4. **FIRE PREVENTION:** Bradbury Stamm will provide necessary fire-fighting equipment. Maintaining equipment to ensure that it is operational at all times is a joint responsibility. If fire-fighting equipment is used, the job superintendent must be notified so he can have it replaced.

5. **HARD HATS AND EYE PROTECTION:** Subcontractor shall comply with the requirements of the Subcontractor Passport.

6. **HEALTH AND SANITATION:** Bradbury Stamm will provide toilets. Each subcontractor shall provide potable water for workmen. Bradbury Stamm may provide potable water by mutual agreement only.

7. **INSPECTIONS:** Subcontractor may be subject to unannounced inspections by Bradbury Stamm Safety Team members, other Bradbury Stamm staff members, Bradbury Stamm insurance carrier loss control representatives, OSHA or other entities associated with safety. Subcontractor shall cooperate with all such inspections and shall also immediately correct any hazards identified during such inspections.

8. **RESPONSIBILITY:** Each subcontractor **is completely responsible for their own employees,** including assuring that they are not exposed to hazards even if the hazards are the result of the operations of another subcontractor. Bradbury Stamm reserves the right to take whatever action they deem necessary to remove employees from hazards or eliminate hazards. The subcontractor agrees to take prompt corrective action at their own expense.

SUBCONTRACTOR SAFETY AGREEMENT (EXHIBIT A)

9. **MEETINGS:** Subcontractor shall attend all Bradbury Stamm safety meetings in accordance with the Subcontractor Passport.

10. **FIRST AID:** Each subcontractor must ensure adequate first aid supplies are available.

11. **COMMUNICATION. OSHA STANDARD 1926.59:** Subcontractors will comply with the provisions of this standard. Material Safety Data Sheets (MSDS's) for each hazardous chemical/substance the subcontractor will bring to the job and to which any employee on the job may be exposed will be in the subcontractor foreman's or leadsman's possession. **Subcontractors are required to have a Hazard Communication Program in place and have all of their personnel trained.** If assistance is needed in establishing a program please contact the BSC Safety Director at **(505) 577-7930**.

12. **SUBCONTRACTOR SAFETY PASSPORT™ AND PROGRESSIVE DISCIPLINARY PROCESS CONTAINED THEREIN:** Subcontractor agrees that each of its employees will carry a Subcontractor Safety Passport™ on his or her person at all times on the jobsite and that Bradbury Stamm personnel will have the authority to enforce all provisions of the Subcontractor Safety Passport and the Progressive Disciplinary Process contained therein. Subcontractor shall at all times support and take all action necessary to enable Bradbury Stamm to enforce these provisions.

13. **SAFETY DIRECTIVES:** Subcontractor shall comply with all applicable Bradbury Stamm Safety Directives.

14. **ASBESTOS:** BSC makes every effort to have all remediation completed by a qualified asbestos abatement entity before occupying a jobsite. Subcontractor agrees to stop work and notify BSC if asbestos or asbestos containing materials are encountered. Subcontractor further agrees not bring any asbestos or asbestos containing materials to BSC jobsites.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 006-00
Original Issue Date: 07/26/2000 **Revision Date: 04/07/2003**

SAFETY PASSPORT™ POLICY

Introduction

The Bradbury Stamm Construction Safety Passport™ Program is the company safety program. Every year new **Safety Passports** will be issued to all BSC field staff as well as anyone performing work on BSC jobsites.

Policy

1. The **Safety Passport™** will be issued to all Bradbury Stamm Construction field employees including foremen, superintendents, project managers, yard and warehouse employees.

2. Superintendents will issue the **Subcontractor Safety Passport™** to every subcontractor employee working on BSC jobsites at the time these employees first arrive on the job, in accordance with Safety Directive #005-00 Subcontractor Safety Agreement (Exhibit A).

3. Project Managers will ensure that the Safety Passport Program and its subparts are executed on all BSC jobsites.

4. The **Safety Passport** is the basic training manual. All safety training will come from the **Safety Passport**. Keep records of your meetings and which topics/page(s) training was conducted from. Be prepared to present training records to the BSC Safety Director, insurance company representatives, Worker's Compensation and OSHA officials.

5. Special safety training (confined space, excavations, scaffolds) not covered in the **Safety Passport** will be covered as needed by the superintendent or the BSC Safety Director.

6. Employees are to have the **Safety Passport** with them in order to work. Employees without their **Safety Passport** are not allowed to work until they can present their **Safety Passport.**

7. BSC Superintendents, Assistant Superintendents, Project Managers, Foremen, BSC Human Resources Manager, BSC Safety Director and BSC Safety Administrator are expected and obligated to enter violations in an employee's **Safety Passport**.

8. Foremen who allow employees to work without their **Safety Passport** may be suspended for three (3) days without pay.

9. If an employee loses or destroys or is unable to produce his/her **Safety Passport** the Superintendent will issue a new **Safety Passport** after a three (3) day suspension without pay. If the same employee loses or destroys or is unable to produce his/her **Safety Passport** twice in one year the Safety Director or Human Resources Director will interview the employee and decide whether to:

a. To issue a new Safety Passport;

b. To issue a new Safety passport after the employee serves a three (3) day suspension without pay; or

c. To terminate the employee.

10. The superintendent will replace damaged, worn tattered and mutilated **Safety Passports** as necessary if the old **Safety Passport** is turned in. The superintendent will transcribe violations in the old Safety Passport to the new **Safety Passport**.

11. Every August the superintendent will issue a new **Safety Passport**. Violations will not be carried forward in the new Safety Passport.

12. Violations shall be handled in the following manner:
    - First Violation: employee will be written up and no penalty assessed;
    - Second Violation: employee will be written up and sent home for the rest of the working day without pay;
    - Third: employee will be written up and sent home for the rest of the working day and the following day without pay;
    - Fourth: employee will be written up and sent home for the rest of the working day and three (3) days without pay; and
    - Fifth: employee will be automatically terminated unless the superintendent requests an interview for the employee with the BSC Human Resources Manager or the BSC Safety Director.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 007-00
Original Issue Date: 11/27/2000 **Revision Date: 07/01/2008**

TILE AND BLOCK SAW GROUNDING

Purpose
This directive is intended to prevent electric current contact **(electric shock)** resulting in electrocution and secondary accidents.

Hazard
Many tile and block saws are 120/240 volt capable. Many are 240 volt only. Most have a 120 volt outlet to operate a water pump for cooling, dust control, lubricant and flushing of cuttings. While in the wet mode employee health and comfort is enhanced since the employees do not have to wear respirators.

240v saws typically have three (3) wires from the factory; Red (120V), Black (120v), White (Neutral or Ground) **OR** Black (120v), White (used as 120v) and Green (Ground). Two of the wires are the current carrying conductors and the third serves a “safety” ground. This is fine when used without a water pump.

When a water pump is used the white wire is tapped and becomes a neutral, and no longer a “safety” ground. As we know, all the 120v power tools that are not double insulated and so labeled or must have three (3) wires: Black (120v), White (Neutral) and Green (Safety Ground). So when using a 240v saw in the wet mode the white wire is a ground for the saw and a neutral for the pump, thus exposing employees to potential contact with electric current.

Solution
The solution can be:

1. Install four wires all the way to the panel and have an argument with the Subcontractor.

   OR

2. Have the pump hooked to an independent and separate three-wire extension cord. (This choice is probably, pun intended, the path of least resistance.)

Policy
All 240v block and tile saws using water pumps will have the water pump powered by separate extension cord.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 008-00
Original Issue Date: 12/5/2000 **Revision Date: 07/01/2008**

STEEL ERECTION SAFETY PRACTICES

Purpose

1. To prevent injury to employees, damage to property, equipment and structures during steel erection activities, structural steel work and steel decking installation.

2. To comply with the Subpart R Steel Erection Standard.

Hazards

This policy is designed to:

- prevent collapse of steel structures on concrete of insufficient strength;
- protect all jobsite employees from falling objects; and
- provide fall protection for all employees in engaged in steel erection activities

Policy

1. During steel erection activities, employees must be provided with and wear fall protection equipment and be provided with a means of fall protection when working at or anticipating working at elevations greater than 6 feet above the next lower surface.

2. Employees using personal fall arrest equipment engaged in the initial connection of beams and girders to columns shall be tied-off when the fall hazard is greater than 12 feet.

3. During miscellaneous steel erection operations an appropriate means of fall protection shall be provided at all roof, floor, and wall openings 6 feet above the next lower surface. Fall protection may consist of guardrails, nets, scaffolds, control lines or harnesses and lanyards connected to suitable anchorage points.

4. When using personal fall protection equipment employees shall always be protected from falling. (Employees are not allowed to disconnect from an anchor point before connecting to another anchor point.)

5. Employees connecting beams and girders to columns shall install a minimum of two (2) bolts at each connection and spud wrench tighten before moving to the next connection.

6. During leading edge deck operations, an appropriate means of fall protection shall be provided at elevations exceeding 6 feet above the next lower surface. Decking will be installed in a manner such that all holes and gaps are covered by continuous decking or temporary covers marked “hole” as the leading edge proceeds or stanchions and guardrails will be erected before the decking continues. Control lines shall be installed a minimum of 6 feet from the leading edge.

7. In combination, lifeline, harness and lanyard shall provide for a maximum fall distance of no more than 6 feet.

8. Lifelines, static lines and other means of tying off rigged to arrest a fall shall be capable of supporting a minimum dead load of 5000 pounds.

9. Taglines will be connected on all hoisted loads where employees are required to guide, direct or receive a hoisted load and when employees are exposed to the swing of the load. If the steel erector supervisor can demonstrate the use taglines cause a greater hazard or the employee(s) can safely receive and control the load without taglines, then taglines are not required.

10. Employees will tie off to the basket of aerial lifts having the employee platform outside the wheels.

11. As of January 18, 2002 all Bradbury Stamm Construction field managers, subcontractors and employees engaged in steel erection activities shall comply with OSHA Subpart R Steel Erection Standard.

Enforcement

It is the role of Bradbury Stamm superintendents and foremen to ensure the subcontractor and his/her employees follow this policy. In the event that subcontractor refuses to comply, document in your Daily Log and notify your project manager and the BSC Safety Director at (505) 577-7930. Failure of BSC superintendents and foremen to enforce this policy may result in disciplinary action as stipulated in the violations section of the BSC Safety Passport™.

Violations will be logged in each employees Bradbury Stamm Subcontractor Safety Passport™ and appropriate penalties enforced.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 009-01
Original Issue Date: 03/15/2001 **Revision Date: 07/01/2008**

BACKHOE OPERATOR CERTIFICATION PROGRAM

Purpose

Backhoe operators, loader operators, skid-steer loader (Bobcat) operators and excavator operators run dangerous machinery everyday on Bradbury Stamm Jobsite. The hazards are threefold:

Hazards

1. These employees frequently drive around employees on foot digging, moving dirt, grading and generally reducing the amount of hand labor performed. Although Bradbury Stamm Construction has not had any accidents in the recent past involving these machines, several near misses have been observed on job sites

2. Operators also are the employees who construct excavations. Excavations are difficult to construct safely. Frequently employees working in excavations have little input into their design and shape. Operators have a tremendous amount of control over the excavations. Although the ultimate responsibility of safe excavations lies with the superintendent, the superintendents don't observe each foot of an excavation as it is constructed. OSHA inspections have strong focus on excavation regulations.

3. Underground Utilities are a big safety issue for Bradbury Stamm Construction. See Safety Directive #002. Operators of excavating equipment are typically held responsible for all damage to underground lines that have been correctly spotted unless laborers have cut a utility with a digging bar, pick or by driving a grade stake.

Solution

To control these hazards, the Safety Department and the supervising superintendent will issue the Equipment Operator Safety Passport to every employee who successfully completes training.

Policy

- All operators of excavation equipment will be trained through the Safety Department on safe excavator equipment operation.
- No operator may use excavation equipment until he/she has received an Equipment Operator Safety Passport.
- All superintendents and foremen supervising excavation equipment operators on their job sites are required to take the equipment operator training class.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 011-01
Original Issue Date: 10/17/2001 **Revision Date: 07/01/2008**

SUBCONTRACTOR TRAINING CERTIFICATION AND CURRICULUM

Purpose

To ensure subcontractor employees are trained to an established curriculum pertinent to the hazards on-site. As the general contractor having work stoppage authority and responsibility, Bradbury Stamm Construction can be cited for not ensuring the subcontractor employees have been properly trained in the following areas:

- Fall Protection
- Confined Spaces
- Scaffolds
- Forklifts
- Excavations

Hazard

Hazards are twofold:

1. Employees have not been trained before sent to the job;

2. Training was not appropriate to the hazards and conditions of the job.

Policy

Subcontractors shall submit to the Bradbury Stamm Construction project manager the training curriculum the subcontractor uses to train his employees as well as the list of employees to be used at the jobsite who received certification for the hazards they may encounter. These submittals need to be sent before the employees engage in the work involving the hazards.

Definitions

- Curriculum: Training objectives and materials used to train employees.
- Certification: Process whereby subcontractor's qualified person verifies the Employee has been instructed and understands the employer's safety curriculum.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 012-01
Original Issue Date: 11/19/2001 **Revision Date: 07/01/2008**

EMPLOYEE IDENTIFICATION PROGRAM (NON-MANDATORY)

Purpose

To promote consistent safety practices on Bradbury Stamm Construction jobsites preventing injury to employees and subcontractor employees.

Background

Many Bradbury Stamm Construction jobsites have numerous employees and subcontractor employees. On all jobs it is beneficial to have the ability to readily distinguish among field management, equipment operators, subcontractor employees and new hires.

New hires typically cannot identify field management staff for several weeks and field management sometimes cannot readily identify newly-hired employees.

Hazard

Statistics indicate that employees tend to get injured during the first year of their employment, and of those hurt in the first year, most of those employees are injured within the first month of their employment.

New employees learn safety and their jobs by working. They learn from lead workers, foremen and other employees. Experienced employees and field managers need to know and readily identify new employees.

Policy

In order to improve supervision, safety and augment the Safety Passport™ Program the following Hard Hat program is established on jobs having a Bradbury Stamm Construction superintendent, foreman, and more than one laborer:

- Field Management: Superintendents, Foremen, Project Engineers, Project Managers, and autonomous employees will wear white hard hats with a Bradbury Stamm logo.
- All other employees will wear green hard hats with a Bradbury Stamm logo.
- Equipment operators will wear green hard hats with a white stripe indicating a greater level of safety training.
- New hires will wear green hard hats with a yellow stripe for the first 90 days of employment.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 013-02
Original Issue Date: 04/04/2002 **Revision Date: 04/07/2003**

INSURANCE CLAIMS

Purpose

- To create a process to handle company insurance claims
- To establish a central filing system for all company insurance claims and correspondence

Rationale

Construction companies have many types of insurance coverage and thus, many potential types of claims may be filed. A central repository for copies of all communication will be established so that copies of any claim-related activity or communication can be maintained, simplifying access to this information as well as information related to the status of all insurance claims.

Policy

All Workers Compensation claims and related communication will be sent to the BSC Safety Administrator. All other insurance claims will be handled in the following manner:

1. Superintendents or Managers shall initiate claims.

2. Notification of a claim shall be made by the following:
   - Contact BSC President Dennis Towne at (505) 250-2174 and BSC Safety Director John Brown at (505) 577-7930.
3. Bradbury Stamm's Insurance Broker will send claim acknowledgment to the Safety Director as well as to the person initiating the claim.

4. Copies of any and all claims documents and correspondence sent to Bradbury Stamm's Insurance Broker or the insurance carrier for Bradbury Stamm Construction will be sent to the Safety Director.

5. Information related to the status of any and all claims will be sent to the Safety Administrator. The Safety Director shall share information related to new claims and the status of ongoing claims with the Operations Manager through weekly status reports or in person when necessary.

6. Requests for information related to insurance claims from BSC personnel, our carrier or outside counsel hired by our carrier can be made through the Safety Director.

7. Copies of all routine communication, including notes of telephone conversations, related to claims will be sent to the Safety Director.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 014-02
Original Issue Date: 07/31/2002 **Revision Date: 07/01/2008**

USE OF FORKLIFTS BY NON-EMPLOYEES

Introduction

Bradbury Stamm Construction recognizes no other agreements that may provide for use of company-owned forklifts by non-employees. This safety directive spells out conditions under which employees of subcontractors performing work on BSC jobsites may use forklifts.

Policy

A Bradbury Stamm Construction Superintendent may, at his or her discretion, allow employees of subcontractors to borrow and operate forklifts owned by BSC for specified uses and for specified periods of time, if such use is deemed to be in the interest of Bradbury Stamm Construction. The following requirements must be strictly in adherence:

1. The company requesting use of a forklift shall identify the person or persons who will be designated operators of the borrowed equipment. Only those persons will be allowed to operate the equipment.

2. The designated operators shall attend the Bradbury Stamm Construction Safe Forklift Operation class, taught by the BSC Safety Director, and shall pass the written as well as driving (skills) test prior to using the forklift.

3. The designated operators, once certified, shall carry the BSC Equipment Operators Passport on their person when operating company-owned forklifts. These persons shall be subject to all rules in the Safety Passport™. The operator's passport must have the certification page completed for that operator and signed by the BSC Safety Director in order to operate the equipment.

Bradbury Stamm Construction Superintendents may decide not to allow others to use company forklifts on their jobs, may set strict time limits of allowed use, and may revoke use of forklifts at any time and for any reason. In addition, the BSC Safety Director may suspend the use of company forklifts by employees of subcontractors.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 015-02
Original Issue Date: 11/08/2002 **Revision Date: 07/01/2008**

MASONRY BLOCK CUTTING

Hazard

Employees using stationary masonry saws to cut concrete, pumice and scoria block are exposed to silica dust. Silica when inhaled over time causes a fatal respiratory disease known as silicosis.

OSHA requires, first, an engineering control such cutting the block wet or, second, personal protective equipment meaning the employees must be fitted with and wear an approved respirator, and complete respiratory protection program per OSHA 1910.134.

Policy

Therefore, masonry block shall be cut using the wet method on all Bradbury Stamm jobsites unless the job specifications prohibit cutting wet. If so prohibited by job specifications, then the masonry employee cutting the block shall be provided appropriate respiratory protection.

Procedure

Read the job specifications. If wet cutting is allowed, the BSC superintendent shall instruct the mason to provide means to and will cut wet.

If the job specifications prohibit the cutting of block wet, the superintendent shall contact the architect and determine if the block can be cut wet. If not, then the mason shall provide respiratory protection.

If there are any questions or needed assistance, call the Bradbury Stamm Safety Director at (505) 577-7930.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 016-02
Original Issue Date: 12/10/2002 **Revision Date: 07/01/2008**

CHEMICAL HAZARD COMMUNICATION

Purpose

To inform employees of the hazards associated with chemicals they use and handle, health risks attributed to those chemicals, proper protective measures to be taken, and to arrange contact with health professionals with medical information in case of exposure.

Policy

Bradbury Stamm Construction **superintendents** will:

1. Have an up-to-date inventory list of chemicals requiring Material Safety Data Sheets on their jobsites.

2. Maintain an up-to-date file of Material Safety Data Sheets on the job, readily accessible to Bradbury Stamm and subcontractor employees, medical professionals and regulators.[1]

3. Ensure chemicals or their containers are clearly labeled.[2]

4. Train employees from the health and personal protective equipment sections of the Material Safety Data Sheet before allowing employees to handle or use these chemicals.

Subcontractors are required to have a similar program meeting the minimum above for their employees for the chemicals they physically have on BSC jobsites. Subcontractors need to keep their Chemical Hazard Communication Program readily available for their employees. [3]

Superintendents will ensure that subcontractors have their program intact and on-site.

Note 1. BSC will only maintain MSDS's and an inventory list for BSC employees. BSC does not need to assume this risk for the subcontractors.

Note 2: Most chemicals coming to BSC jobsites are labeled. However, when a chemical is transferred from a labeled container or package to unlabeled container or is "loose" it must remain under the immediate control of the employee with knowledge of the chemical. This is rarely a problem except when painters us a bucket for a solvent such as acetone, lacquer thinner or mineral spirits.

Note 3. Subcontractors need to keep their own program especially their own MSDS sheets where their employees meet i.e., tool box, foreman's pick-up, subcontractor's office trailer. If subs send BSC MSDS's they need to be turned over to the subcontractor's field management.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 017-03
Original Issue Date: 02/11/2003 **Revision Date: 07/01/2008**

CRITICAL LIFTS

Purpose

To prevent structural failure to and the tipping-over of cranes and hoisting equipment on Bradbury Stamm Construction jobsites.

Hazard

Modern cranes, boom trucks, and telescoping forklifts are high performance hoisting machines engineered with ever decreasing safety margins. These machines will lift the rated weights only within a specific configuration, dead level, on a solid surface with no wind and a precise load centering. Obviously this is not the practice on construction sites.

Several states, provinces, local governments, and the construction industry in general consider any lift exceeding 75% of the load charts capacity for a particular configuration to be a CRITICAL LIFT.

A Critical Lift is a lift that is close to the structural limitations of the crane or may cause the crane to turn over.

Policy

Whenever a crane, boom truck or other hoisting equipment is used on a Bradbury Stamm Construction jobsite the BSC Superintendents and Foremen are required to check that the equipment will not be used for a critical lift.

If the hoisting equipment is to be used in a critical lift the BSC Superintendent is directed to require a written lift plan from the subcontractor, crane operator and riggers. The superintendent is to review the lift plan with the actual crane set-up and rigging before the lift proceeds to ensure the plan has not been compromised. These plans are to be saved with the project log.

During the required Pre-Installation meetings inform the subcontractors of these requirements.

If assistance is needed in developing or reviewing a lift plan call BSC Safety Director John Brown (505) 577-7930.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 018-07
Original Issue Date: 01/15/2007 **Revision Date: 07/01/2008**

SCAFFOLD PLATFORM ACCESS

Purpose

1. This directive is intended to prevent exposure to falls from elevation when employees move between scaffold platforms (walking/working surfaces) and fixed scaffold ladders.

2. Maintain compliance with OSHA regulations.

Hazard

Employees accessing scaffolds platforms from ladders are exposed to falls when crossing over, under or through crossbraces and guardrails. Employees may have tools, tool belts or clothing catch causing them to lose their balance and/or grip and fall. Employees must be able to step from the ladder to the scaffold or from the scaffold to the ladder with out trip hazards or obstructions.

Ladders fixed to scaffolds should be located where employees can make this unimpeded transition. Typically, ladders are located at the end of walkthrough frames. To avoid exposure to falls at the end of the frames, the ladder access will closed by swing gates, chains or other device in compliance with OSHA's Subpart L - Scaffolds and Subpart M-Fall Protection guardrail system specifications. *See note below.*

Policy

1. **All ladder-to-scaffold access points will be free of fixed crossbraces and fixed guardrails.**

2. **All openings in the scaffold's guardrail system will equipped with a swing gate or other movable device to allow unobstructed movement from the ladder to the scaffold platform and from the scaffold platform to the ladder.**

Note: Although NM OHSB and the Scaffold Training Institute allow passing through crossbraces and guardrails, by doing so employees are exposed to falls. OSHA has two interpretations in response to employers' letters concerning first, climbing through crossbraces and guardrails and second, openings in the guardrail system.

In the first interpretation dated 2000, OSHA acknowledges climbing through, over, or under crossbraces and/or guardrails is not specifically prohibited by Subpart L – Scaffolds. OSHA does state that if employees are exposed to hazard not covered by Subpart L it may issue General Duty Clause citations.

In the second interpretation, OSHA upholds the continuity of the guardrail system thus mandating "swing gates or similar devices." In this interpretation OSHA also warns that the toeboard is part of the guardrail system and if objects on the platform can become falling objects then a movable toeboard must be installed with guardrail system.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 019-03
Original Issue Date: 09/15/2003 **Revision Date: 07/01/2008**

DUST CONTROL (CONTROL OF VISIBLE FUGITIVE PARTICLES)

This safety directive applies to all construction performed within Bernalillo County NM.

Introduction

Bernalillo County has adopted a strict ordinance to aid in the control of visible fugitive particles, known as dust, emanating from construction sites within the county. The ordinance is part of the New Mexico Administrative Codes (NMAC) and can be found under NMAC 20.11.20. The Bernalillo Air Quality Bureau responds to complaint calls when dust is observed blowing off construction sites and their investigation of complaints can lead to expensive fines against contractors. Since General Contractors are responsible for the operations on their jobsites, they are the entities that will receive citations and fines. In addition to the expense of paying fines, citations affect the General Contractor's reputation in the community. It takes years to repair a poor reputation.

Policy

All Bradbury Stamm Construction Superintendents, Foremen, and Equipment Operators are directed to take the following measures if wind conditions are such that blowing dust may ensue:

1. Begin dust control immediately by watering down all disturbed soil on the jobsite.

2. Other operations may have to be delayed until watering operations have been completed.

3. Operators and/or Foremen will begin watering operations without being told by the Superintendent under these conditions.

4. Failure to water down disturbed soil under windy conditions is subject to a write-up per the Bradbury Stamm Construction Safety Passport™ program.

For more information about NMAC 20.11.20 contact the BSC Government Liaison at (505) 577-7930.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 020-03
Original Issue Date: 09/15/2003 **Revision Date: 07/01/2008**

AUTHORIZED DRIVERS

Introduction

Jobsite superintendents and project managers who drive company vehicles may wish to select specific BSC employees to use their assigned vehicle to run job-related errands. Any such employee asked to drive a field manager's vehicle must be identified as an approved driver for BSC and must also receive a minimal safety orientation for the vehicle to be used.

Policy

1. Only BSC employees can be approved to drive company-owned vehicles.

2. No BSC employees are allowed to drive company vehicles until the Safety/Risk Management Office has approved them as authorized drivers.

3. Superintendents and Project Managers wishing to select certain employees to drive their assigned vehicles shall notify the Safety/Risk Management office and identify the employee(s) to be considered as approved drivers.

4. Employees to be considered shall agree to submit to a motor vehicle department background check. Employees' drivers' records must meet the criterion spelled out in the BSC Associate Handbook before being approved as authorized drivers.

5. The BSC field manager whose vehicle will be used must orient each authorized driver on basic safety issues related to the vehicle. This orientation will include, as minimum, the following information:

    - Seat belts shall be worn at all times while the vehicle is in use.
    - Allow adequate room between your vehicle and the vehicle in front. This is a major cause of accidents. At no times should the driver attempt to get in a hurry or otherwise "make up time" by taking any kind of safety short cut.
    - All loads shall be correctly secured. Loose materials that can blow away or fall from vehicle must be covered. Keep bumpers and other surfaces free of gravel or other particulate matter that can fall onto roadway.
    - A vehicle carrying a load requires more stopping and following distance and the driver must make allowances for the load.
    - Driver shall observe all posted laws at all times.
    - In the event of an accident, driver shall stay on the scene of the accident until all information is exchanged between drivers involved. Use the booklets provided for each vehicle to record all information related to the accident. The driver shall contact his/her supervisor as soon as safely

possible to explain the situation. Even if uninjured, the driver of a BSC vehicle involved in an incident shall report for drug and alcohol testing on the same day as the accident, unless the BSC Human Resources director, the Safety Administrator or Safety Director allow otherwise.

6. Superintendent shall make a brief note in the employee's Safety Passport under Section 28 (Safe Driving) indicating "Reviewed Safety Directive #018 with employee." Superintendent and employee shall both initial this statement and include the date.

7. The BSC Safety Administrator shall notify the field supervisor when the selected driver(s) have been authorized to drive.

8. The BSC Safety Administrator shall periodically run motor vehicle background checks on all company designated and authorized drivers. If a driver's background includes information that makes him or her ineligible to drive company vehicles, that driver shall be removed from the list of drivers and the employee's supervisor shall be apprised that the employee can no longer drive BSC vehicles.

Definitions

- Designated Driver: BSC employee who has been assigned a specific vehicle for company use.
- Authorized Driver: BSC employee who has been approved to use a specific vehicle that is assigned to a designated driver.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 021-03
Original Issue Date: 07/01/2008 **Revision Date: N/A**

PRE-INSTALLATION MEETING AND CHECKLIST

Purpose

To ensure installing subcontractor field supervision understands the work, the safety and quality control programs, schedule, plans and specifications.

Risks

Subcontractor field supervision need to know how BSC operates and what is expected by BSC and what BSC needs to provide the sub to perform a timely, safe and quality job. By assisting the subcontractor via this checklist, BSC avoids problems and misunderstandings that slow the project and may create costly problems. The Pre-install Checklist is simple yet thorough document designed to remind, bring up for discussion and document the meeting before the subcontractor's field supervision starts work.

Policy

All superintendents are required to have a pre-installation meeting with the installing subcontractor superintendent or foremen. The meeting shall be guided by the Pre-installation Checklist and filled out during the meeting.

Contact BSC Safety Director John Brown at (505) 577-7930 to attend the Pre-installation meeting if the subcontractor will be using cranes or forklifts, scaffolding over three sections high, entering confined spaces or excavating.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 023-00
Original Issue Date: 04/01/2009 **Revision Date: N/A**

SUPERINTENDENT'S DUTIES

Purpose

In order to create and maintain a *safe workplace* as required by law and protect employees*, each Bradbury Stamm superintendent is the key person to promote jobsite safety and implement the Safety Passport™ System. The following are the minimum duties to be performed by BSC's superintendents on all Bradbury Stamm jobsites. Bradbury Stamm superintendents will:

- Ensure a Safety Passport is issued to each employee on the job;
- Ensure each employee and subcontractor employee will have their Safety Passport booklet on his/her physical person while on the jobsite;
- Ensure every foreman and subcontractor foreman carries a Foremen's Safety Passport;
- Ensure operators of excavating equipment and forklifts carry an Equipment Operator's Passport with current training;
- Arrange for daily checks to verify employees are carrying their Safety Passport;
- Preside over daily pre-task meetings before the start of work each day with BSC employees, and conduct stretching exercises;
- Arrange to have daily inspections performed by a competent person before employees use scaffolds, fall protection lifelines, safety harnesses and lanyards, guardrails, stairways and ladders, and enter excavations;
- Preside over post task planning at the end of each day to re-cap safety issues and the day's activities with BSC employees.
- Preside over weekly safety meetings where pertinent parts of the Safety Passport will be read aloud to all employees on the jobsite. Ensure arrangements are made to have the Safety Passport read aloud in Spanish if needed;
- Arrange to have or self perform forklift and excavating equipment training before operators begin operating equipment.
- Read and have a working knowledge of the Safety Passport and Safety Directives;
- Conduct Pre-installation meetings in accordance with the Pre-install Safety Directive;
- Ensure subcontractor employees do not work at a BSC site without supervision**;
- Ensure subcontractors follow the Utility Protection Program;
- Enforce the Safety Passport.
- Walk the job daily looking for safety hazards and observe employees working.
- If it is not in the Safety Passport or Safety Directives call BSC Safety Director John Brown (505) 577-7930.

*the term employee includes Bradbury Stamm and Bradbury Stamm subcontractor employees.

**It is the policy of BSC to have BSC supervisors on site when employees are working. This does not mean the superintendent cannot attend a meeting or get materials, but means a BSC employee able to contact the superintendent or project manager is on-site. In rare cases a subcontractor may work on their own, but they must inform the BSC superintendent of the work to be performed, hazards to be controlled and safety practices to be implemented and agree to consult the Safety Passport before starting work.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 024-00
Original Issue Date: 04/28/2012 **Revision Date: N/A**

MICROBIAL CONTROL: REPAIR, CONTROL AND ABATEMENT OF MOLDS, FUNGI AND MICROBES FOLLOWING A WATER INTRUSION EVENT

Safety Procedures for repairing/eliminating the water intrusion source, containment of suspect microbial colonies, remove or decontaminate surfaces, substrates and building components that may be host media, selection and use of PPE, and remediation.

Purpose

Water intrusion events such as a leaking pipe behind a wall or under a floor, leaks and collection of moisture from roofing failures, over time create conditions to host colonies of bacteria, molds, mildew, fungi and other microbes feeding on these colonies to grow and spread. Many of theses microbial are common and while generally non-toxic produce staining and odors. Others, many imported world-wide, can cause health problems for humans and make a building unsafe to occupy.

Hazards

- Exposure to microbes that may cause disease or illness to employees.
- Spread of microbes to other environments such as employees' cars, home and family members.
- Spread of microbial contamination to areas not affected by water intrusion such as ductwork, adjacent rooms and food preparation areas.
- Reduce building damage and contamination from persons engaged in repair.

Action Levels

1. **Notification –** BSC employee will be notified and assigned to coordinated repair and clean-up.

2. **Physical inspection and Hazard Identification –** Assigned BSC employee will get to the location ASAP and determine the extent of the water intrusion event and:
   - Inspect without disturbing surfaces for wet areas, discoloration, odors and musty smells. Look for mold colonies and fungi growth and note color.
   - Note affected building materials- wet and expanded sheetrock, wood cabinets, concrete, tile counter tops, metal studs or wood studs.
   - Schedule appropriate subcontractor repair. DO NOT TURN ON FANS TO DRY OUT AREAS THUS SENDING SPORES AIRBORNE UNTIL DETERMINED OTHERWISE.
   - Notify BSC Safety Director John Brown to describe conditions and observations at (505) 577-7930 or jbrown@bradburystamm.com

3. **Hazard Assessment Control Plan –**This can be verbal or written or managed by on-site by John Brown. It may entail at a minimum

a. restricting the area to employees protected by PPE.
b. shoe covers, plastic sheeting on floors, gloves and trash bag for disposal,
c. use of fungicides and removal of porous surfaces that may serve as host media.
d. clean-up and wipe down of other surfaces
e. replacement of sheetrock, paint etc.

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4. **Sampling and Laboratory Analysis –** After consultation with John Brown, the assigned BSC employee may need to collect microbial colonies and deliver them to a analytical laboratory to determine the toxicity, PPE protocols and decontamination procedures.

Bradbury Stamm Construction – Safety Directive
Safety Directive # 026-00
Original Issue Date: 08/01/2017 **Revision Date: N/A**

RESPIRABLE CRYSTALLINE SILICA PROTECTION PROGRAM

Purpose

Modern carbide and diamond tipped cutting, grinding, drilling breaking equipment has led to an increase of silicosis in construction workers. Unlike asbestos, silicosis can cause serious physical harm or death fairly quickly. Construction workers are exposed to crystalline silica whenever tools are used to alter materials such as concrete, asphalt, and masonry units containing sand. Controls measures in most cases are simply the use of water and or vacuum systems.

The purpose of this Safety Directive is to:

1. Protect employees from the hazards of airborne crystalline silica and to set-up acceptable controls.

2. Comply with OSHA 1926.1153 Respirable Crystalline Silica Standard.

Procedure

Employees and Subcontractor employees on Bradbury Stamm Construction sites will use Table 1 (attached on the following pages) from OSHA's Respirable Crystalline Silica Standard to determine what control method is required.

Foremen will be considered to be the employer's competent person by default. Foreman having or intending to have employees exposed to respirable silica will be responsible to have a written exposure control plan. If you are not your employer's competent person it is your obligation to arrange for your competent person to submit to Bradbury Stamm Construction Superintendent the written exposure control plan, means of compliance with Table 1 and Respiratory Protection in compliance with 1910.134.

Foremen will ensure the employees to be exposed to Respirable Silica will be provided with protective measures per Table 1, be trained, carry a Safety Passport with training documented, fill in log documenting dates of exposure, daily duration by hour, tools used, control measures used and location of work in Safety Passport Silica Exposure Log.

Table 1.

For each employee engaged in a task identified on Table 1, the employer shall fully and properly implement the engineering controls, work practices, and respiratory protection specified for the task on Table 1, unless the employer assesses and limits the exposure of the employee to respirable crystalline silica in accordance with paragraph (d) of this section.
1926.1153(c)(2)

TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA			
Equipment / Task	**Engineering and Work Practice Control Methods**	**Required Respiratory Protection and Minimum Assigned Protection Factor (APF)**	
		≤ 4 hours /shift	**> 4 hours /shift**
(i) 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
(ii) Handheld power saws (any blade diameter)	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. – When used outdoors. – When used indoors or in an enclosed area.	None APF 10	APF 10 APF 10
(iii) Handheld power saws for cutting fiber-cement board (with blade diameter of 8 inches or less)	For tasks performed outdoors only: 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

TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA			
Equipment / Task	**Engineering and Work Practice Control Methods**	**Required Respiratory Protection and Minimum Assigned Protection Factor (APF)**	
		≤ 4 hours /shift	**> 4 hours /shift**
(iv) 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. – When used outdoors. – When used indoors or in an enclosed area.	None APF 10	None APF 10
(v) 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
(vi) 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

TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA			
Equipment / Task	**Engineering and Work Practice Control Methods**	**Required Respiratory Protection and Minimum Assigned Protection Factor (APF)**	
		≤ 4 hours /shift	**> 4 hours /shift**
(vii) Handheld and stand-mounted drills (including impact and rotary hammer drills)	Use drill equipped with commercially available shroud or cowling with 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 and a filter-cleaning mechanism. Use a HEPA-filtered vacuum when cleaning holes.	None	None
(viii) Dowel drilling rigs for concrete	For tasks performed outdoors only: Use shroud around drill bit with a dust collection system. Dust collector must have a filter with 99% or greater efficiency and a filter-cleaning mechanism. Use a HEPA-filtered vacuum when cleaning holes.	APF 10	APF 10

TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA			
Equipment / Task	**Engineering and Work Practice Control Methods**	**Required Respiratory Protection and Minimum Assigned Protection Factor (APF)**	
		≤ 4 hours /shift	**> 4 hours /shift**
(ix) Vehicle-mounted drilling rigs for rock and concrete	Use dust collection system with close capture hood or shroud around drill bit with a low-flow water spray to wet the dust at the discharge point from the dust collector. OR Operate from within an enclosed cab and use water for dust suppression on drill bit.	None None	None None

TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA			
Equipment / Task	**Engineering and Work Practice Control Methods**	**Required Respiratory Protection and Minimum Assigned Protection Factor (APF)**	
		≤ 4 hours /shift	**> 4 hours /shift**
(x) Jackhammers and handheld powered chipping tools	Use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact. – When used outdoors. – When used indoors or in an enclosed area. OR Use tool equipped with commercially available shroud and 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 and a filter-cleaning mechanism. – When used outdoors. – When used indoors or in an enclosed area.	None APF 10 None APF 10	APF 10 APF 10 APF 10 APF 10

TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA			
Equipment / Task	**Engineering and Work Practice Control Methods**	**Required Respiratory Protection and Minimum Assigned Protection Factor (APF)**	
		≤ 4 hours /shift	**> 4 hours /shift**
(xi) Handheld grinders for mortar removal (i.e., tuckpointing)	Use grinder equipped with commercially available shroud and dust collection system. 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.	APF 10	APF 25
(xii) Handheld grinders for uses other than mortar removal	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. OR	None	None

TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA			
Equipment / Task	**Engineering and Work Practice Control Methods**	**Required Respiratory Protection and Minimum Assigned Protection Factor (APF)**	
		≤ 4 hours /shift	**> 4 hours /shift**
	Use grinder equipped with commercially available shroud and dust collection system. 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.		
	– When used outdoors.	None	None
	– When used indoors or in an enclosed area.	None	APF 10

TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA			
Equipment / Task	**Engineering and Work Practice Control Methods**	**Required Respiratory Protection and Minimum Assigned Protection Factor (APF)**	
		≤ 4 hours /shift	**> 4 hours /shift**
(xiii) Walk-behind milling machines and floor grinders	Use machine equipped with integrated water delivery system that continuously feeds water to the cutting surface. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. OR	None	None
	Use machine equipped with dust collection system recommended by the manufacturer. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. Dust collector must provide the air flow recommended by the manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism. When used indoors or in an enclosed area, use a HEPA-filtered vacuum to remove loose dust in between passes.	None	None

TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA			
Equipment / Task	**Engineering and Work Practice Control Methods**	**Required Respiratory Protection and Minimum Assigned Protection Factor (APF)**	
		≤ 4 hours /shift	**> 4 hours /shift**
(xiv) 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

TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA			
Equipment / Task	**Engineering and Work Practice Control Methods**	**Required Respiratory Protection and Minimum Assigned Protection Factor (APF)**	
		≤ 4 hours /shift	**> 4 hours /shift**
(xv) Large drivable milling machines (half-lane and larger)	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
	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. 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	None None

TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA			
Equipment / Task	**Engineering and Work Practice Control Methods**	**Required Respiratory Protection and Minimum Assigned Protection Factor (APF)**	
		≤ 4 hours /shift	**> 4 hours /shift**
(xvi) 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
(xvii) Heavy equipment and utility vehicles used to abrade or fracture silica-containing materials (e.g., hoe-ramming, rock ripping) or used during demolition activities involving silica-containing materials	Operate equipment from within an enclosed cab. 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	None None

TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA			
Equipment / Task	**Engineering and Work Practice Control Methods**	**Required Respiratory Protection and Minimum Assigned Protection Factor (APF)**	
		≤ 4 hours /shift	**> 4 hours /shift**
(xviii) Heavy equipment and utility vehicles for tasks such as grading and excavating but not including: demolishing, abrading, or fracturing silica-containing materials	Apply water and/or dust suppressants as necessary to minimize dust emissions. OR When the equipment operator is the only employee engaged in the task, operate equipment from within an enclosed cab.	None None	None None

Bradbury Stamm Construction – Safety Directive
Safety Directive # 027-00
Original Issue Date: 03/16/2020 **Revision Date: 04/07/2020**

INFECTIOUS DISEASE PREPAREDNESS PROGRAM - (INITIATIVE RELATED TO SEASONAL FLU ANDCOVID-19 OUTBREAK 2020)

Purpose

To provide guidance and direction on the best practices during times of heightened virus risk at construction jobsites and to comply with NM DOH Public Heath orders mandating “Social Distancing”. NMOHSB may consider issuing General Duty Citations for violations of COVID-19 DOH-4-6 Public Health Order and this Safety Directive.

It is critical to following guidelines as may be issued by the CDC in order to protect our Employees, Owners, Subcontractors and the Public during times of heightened risk from Infectious Diseases including but not limited to the COVID-19 Virus and seasonal flu. The CDC website should always be viewed as a primary source of information (www.cdc.gov).

Sick employees/workers

Any workers that appear to have symptoms of acute respiratory illness should be sent home. Employees should notify their supervisor and stay home if they are sick. Employees who have symptoms of acute respiratory illness should stay home and not come to work until they are free of fever (100.4° F [37.8° C] or greater using an oral thermometer), signs of a fever, and any other symptoms for at least 24 hours, without the use of fever-reducing or other symptom-altering medicines (e.g. cough suppressants).

Recommendations

The basis of protection is to reinforce good hygiene and infection control practices:

- Educate and post recommended CDC posters at entrance and at locations of water stations regarding washing hands, not touching face, covering cough/sneeze using elbow (even if wearing gloves), maintain distance from each other (ideally minimum of 6 Feet), other recommendations that may be relevant with current outbreak.
- Provide readily available hand wash stations
- Before starting work all workers will be required to wash their hands following posted CDC recommendations and posters with soap and water for at least 20 seconds.
- Utilize Alcohol-based hand sanitizers, containing at least 60-95% alcohol, if soap and water is not immediately available.

Limit Site gatherings

- Limit meetings held in the jobsite trailer and conduct safety meetings with small groups that can sit/ stand apart from each other.
- Before and after meeting disinfect surfaces with cleaner or wipes.

- Discourage access to jobsite trailer as reasonable.
- Review hygiene and CDC recommendations at all safety meetings.
- Limit outside visits through technology.
- Stagger work breaks and lunch by trade if required to maintain safe distancing.
- Minimize interaction with offsite vendors.
- No outside vendors allowed on projects – Food, Product Sales, etc.

Employee Behavior

- Use of gloves is *required* while on-site.
- If employees have recently traveled outside of NM, they must inform their immediate supervisor and request permission to be allowed back on the jobsite.
- Face coverings are required, when working inside a building.
- Avoid using other employees' equipment if possible (phones, pens, gloves, safety glasses, other tools/ equipment)
- When someone is done using equipment, wipe down with disinfecting wipes those areas that were touched. (Maintain wipes at tool storage locations and in all large equipment)
- Clearly define work areas and separation from public, client or others.
- Develop work plan for access to owner-controlled areas:
- Example: Before entering occupied area, any worker will inform Bradbury Stamm Supervisory personnel, wash hands and be escorted. Areas touched to be cleaned before returning to the worker-controlled area.
- If in high traffic areas try and create as much separation as possible and consider double fencing or other options – goal six feet.
- Have workers mark gloves as theirs. Do not touch face with gloves and do not use teeth to remove gloves, etc.
- Include discussion of infection control in pre-activity and task planning and scheduling of activities. • If employees have recently traveled outside of NM, they must inform their immediate supervisor and request permission to be allowed back on the jobsite.
- Vehicles, offices, shipping containers and hotel/motel rooms are easy areas to exchange germs.
    - Maintain hand sanitizing wipes in Bradbury Stamm vehicles and limit drivers and access.
    - Carpooling and or ridesharing to and from the jobsite is not allowed.
    - Do not sit in vehicles with others during breaks / lunch.
    - Do not share hotel/motel rooms.
- Active Campus Sites must maintain a site-specific plan that addresses clear separation of worker-controlled areas from public, client or other areas.

- The project team should check with the owner prior to starting the job to review protocols for work taking place in occupied areas.
- Any Project Specific Workplans must be coordinated and communicated to Owners as needed.
- Parking routes, entrance lunch areas, walking routes, trash and contamination control to be addressed.

All plans should include mitigating controls for dust, cleanliness, etc.

Examples of controls that may be relevant to your project.

- Minimize dust where possible using HEPA filters, barriers, etc.
- Seal unused doors with tape or a hard barrier if long term
- Seal air vents leading into occupied areas
- Place dust mats at entrances
- Wear dust masks as needed

CONFINED SPACE ENTRY

PERMIT-REQUIRED CONFINED SPACE PROGRAM
All Superintendents and Project Mangers

DETERMINATION
All confined spaces that employees may enter need to be identified before entry. Some confined spaces may have inherent hazards or introduced hazards by the work performed. Confined spaces may be regulated by 29CFR1926 Rules for Construction or 29CFR 1910 General Industry.

Confined spaces with hazards defined under OSHA's 1910.146 are Permit-required Confined Spaces requiring evaluation, development of entry procedures, development and issuance of a custom permit and employee training.

Below are examples of confined spaces that will require compliance with 1910.146 Permit-required Confined Spaces.

HAZARDS
Hazards present or potential may come from the following:

Atmospheric - inherent to the space - such as Hydrogen Sulfide, Methane, chlorine and sodium dioxide and oxygen deficiency

Engulfment - from sewage depth, storm flow, diversion or plug failure.

Introduced by work (task) performed - welding, sawing grinding, use of internal combustion power tools, etc.

POLICY
Many confined spaces will not contain a hazard as mentioned above and may or may not be considered a Permit-required Confined Space. Nevertheless, any employees including subcontractor employees are required to notify the Bradbury Stamm Safety Director for determination. It is Bradbury Stamm's policy to develop specific permits for each space. In order to do so, the Project Manager or Superintendent will contact the Safety Director to develop and write a custom entry permit, perform training and ensure proper equipment will be used.

EQUIPMENT
Typically, entry into permit –required confined spaces will require:

- 4 channel air monitor testing for oxygen, flammable gases, carbon monoxide and hydrogen sulfide gases,

- ventilators

- means of rescue.

Some spaces after initial entry and modification maybe declared “Non permit-required confined spaces”. If so, this designation will be at the discretion of Bradbury Stamm Safety Director and will still require daily or more frequently air monitoring and documentation.

For assistance with confined spaces call Bradbury Stamm Safety Director John Brown at (505) 577-7930.

Bradbury Stamm Construction Since 1923

Sample

Permit-required Confined Space Program for Lift Stations

John Smith, Superintendent
Joe Smith, Project Manger
John Brown, Safety Director

Determination

The excavation for the repair to the fire main at the ABC Project is consider a permit required confined space due the following potential hazards:

Hazards

Hazards present or potential may come from the following:

Atmospheric- introduced by work activities such as cutting, grinding or welding.

Engulfment- from water supply to the main opened in case of fire or from water in line released during line breaking.

Lock-out/tag-out of the water supply line and control of the water key will retained by Valley Fire Protection and supervised by a Bradbury Stamm representative.

Hazard Control Methods

Before entry, the fire main excavation will be equipped with a ventilator, air monitor and retrieval equipment, entrant equipped with body harness and attendant whose sole duty is to monitor the entrant.

Additionally, before the space is entered the Entry Superintendent (BSC) must fill out this permit.

Date _____ Time of Entry _____ Time Permit is canceled _____

Entrants Name _____

Attendants Name _____

Entry Superintendent: John Smith or John Brown

Purpose of entry _____ Describe work to be done and process (Example: remove elbow, by disconnecting bolts, weld bracket, use of cutting torch or Quickie Saw, any electrical tools including lights)

_____
_____
_____
_____
_____

Bradbury Stamm Construction Since 1923

Sample

Hazard Control

Is retrieval set-up? _____ Is ventilation fan set-up? _____ Clean source of air? _____ If ventilation gas powered fan must have inlet tube.

	Record Meter Readings Below			
Time	**Oxygen %**	**H2S ppm**	**LEL %**	**CO ppm**

Bradbury Stamm Construction Since 1923

Sample

Non Permit-required Confined Space determination and Procedures for Water Tanks at ABC

John Smith, BSC Project Manger
John Brown, BSC Safety Director
Joe Smith, BSC Superintendent

Work Process

BSC subcontractor employees will be working in the water tank to repair and resurface the existing water tank. The tank is a enclosed space with a hatch at the top. After draining the tank, BSC's Sally Sample will be responsible for implementing lock-out/tag-out controls to assure the tank cannot refill or flood. This maybe accomplished by locking out valves or blind flanges.

After sampling the air with a air monitor to ensure there are no flammable gases D&R tank employees will cut a large opening into the tank. Oce this opening is created the natural air flow will convert the tank into a "Non Permit-required Confined Space". Employees will enter and drive hoisting and aerial platform equipment into the space to perform their work.
The space is confined per OSHA1926.6(ii) and in compliance with1926.6(i). Bradbury Stamm will comply with OSHA's 1910.146 Permit-required Confined Space Standard. Employees entering the water tank will be called entrants.

Hazards

1. It is possible that organic matter within in the sludge basin when disturbed and watered will create an oxygen depleting atmosphere.
2. Although unlikely demolition equipment (saws, grinders, torches) may introduce a hazardous atmospheric conditions to the basins.

Hazard Control Methods

Atmospheric

1. Before entry, the atmosphere will be sampled with an air monitor and recorded on this document by the Superintendent. If the presence of flammable gases, oxygen deficiency, or carbon monoxide are detected the space will not be entered. If the monitors sound the alarm, evacuate the basins. If carbon monoxide or oxygen deficiency is detected notify John Brown at 681-4307.
2. The entrant employees will check and record the air monitor readings every hour.

Date _____ Time of Entry _____ Time Permit is cancelled _____

Entrants Name(s) _____, _____, _____, _____.

Bradbury Stamm Construction Since 1923

Sample

Record Meter Readings Below

Time **Oxygen %** **H2S ppm** **LEL %**

CO ppm **Initials**

Bradbury Stamm Construction Since 1923

Sample

Non Permit-required Confined Space for ABC Aeration Basins and Clarifiers
John Smith, BSC Project Manger
John Brown, BSC Safety Director
Joe Smith, BSC Superintendent

Work Process

BSC employees and subcontractor employees will be working in the aeration basins and clarifiers. The an enclosed without a top, roof or cover. After draining the basin or clarifier, BSC's Joe Smith and Sally Sample will be responsible for implementing lock-out/tag-out controls to assure the basin and clarifiers cannot refill or flood. This maybe accomplished by locking out valves, blind flanges, closing gates or constructing bulkheads.

After draining and cleaning, the basin or clarifier atmosphere will be tested to assure carbon monoxide <35ppm, hydrogen sulfide <10 ppm, oxygen levels at 19.5% and flammable gases at less then 10% of the LEL. If so, the space will be declared a "Non Permit-required Confined Space". Employees will enter and drive hoisting and aerial platform equipment into the space to perform their work.
The space is confined per OSHA1926.6(ii) and in compliance with1926.6(i). Bradbury Stamm will comply with OSHA's 1910.146 Permit-required Confined Space Standard. Employees entering the water tank will be called entrants.

Hazards

1. It is possible that organic matter within in the sludge basin when disturbed and watered will create an oxygen depleting atmosphere.
2. Although unlikely demolition equipment (saws, grinders, torches) may introduce a hazardous atmospheric conditions to the basins.

Hazard Control Methods

Atmospheric

1. Before entry, the atmosphere will be sampled with an air monitor and recorded on this document by the Superintendent. If the presence of flammable gases, oxygen deficiency, or carbon monoxide are detected the space will not be entered. If the monitors sound the alarm, evacuate the basins. If carbon monoxide or oxygen deficiency is detected notify John Brown at 681-4307.
2. The entrant employees will check and record the air monitor readings every hour.

Date _____ Time of Entry _____ Time Permit is cancelled _____

Entrants Name(s) _____, _____, _____, _____.

Bradbury Stamm Construction Since 1923

Sample

Record Meter Readings Below

Time **Oxygen %** **H2S ppm** **LEL %**
CO ppm **Initials**

Bradbury Stamm Construction Since 1923

Sample

Non Permit-required Confined Space for ABC Southside Reclamation Facility Digester
Joe Smith, BSC Project Manger
John Brown, BSC Safety Director
John Smith, BSC Superintendent

Work Process

BSC employees will be working in Digester #4 to support the floating lid, erect and disassemble scaffolding, demolishing concrete and casting concrete in place. "Hot Work" is not anticipated. If "Hot Work" become necessary a "Hot Work" permit will be filled out before and those protocols followed.

After each draining of the digester, BSC's John Smith will be responsible for implementing lock-out/tag-out controls with the COA to assure the digester cannot refill or flood. This maybe accomplished by locking out valves, blind flanges, closing gates or constructing bulkheads.

After draining and cleaning, the digester atmosphere will be tested to assure carbon monoxide <35ppm, hydrogen sulfide <10 ppm, oxygen levels at 19.5% and flammable gases at less then 10% of the LEL. If so, the space will be declared a "Non Permit-required Confined Space". Employees will enter and drive hoisting and aerial platform equipment into the space to perform their work. Two (2) air monitors will be used: 1 near the top and another near the bottom. Both monitors will be check and their readings recorded every 30 minutes during entry on the Non Permit-required confined space permit. If the monitors alarm sound the employees will immediately evacuate the space.

The space is confined per OSHA1926.6(ii) and in compliance with1926.6(i). Bradbury Stamm will comply with OSHA's 1910.146 Permit-required Confined Space Standard. Employees entering the water tank will be called entrants.

Hazards

1. It is possible that organic matter within in the sludge basin when disturbed and watered will create an oxygen depleting atmosphere.
2. Although unlikely demolition equipment (saws, grinders, torches) may introduce a hazardous atmospheric conditions to the basins.
3. Explosive cases may collect in the digester from adjacent digesters or leaks in valves and piping systems. The lower manway at the southwest side of the digester must be removed during all entries.

Hazard Control Methods

Atmospheric

1. Before entry, the atmosphere will be sampled with an air monitor and recorded on this document by the Superintendent. If the presence of flammable gases, oxygen deficiency, or carbon monoxide are detected the space will not be entered. If the monitors sound the alarm, evacuate the basins. If carbon monoxide or oxygen deficiency is detected notify John Brown at 577-7930.
2. The entrant employees will check and record the air monitor readings every hour.

Bradbury Stamm Construction Since 1923

Sample

3. A safety meeting will be held each day with the entrants to remind them of the hazards and controls set forth above.

Date _____ Time of Entry _____ Time Permit is cancelled _____

Entrants Name(s) _____, _____, _____, _____.

Time	Oxygen %	Record Meter Readings Below H2S ppm	LEL %	CO ppm	Initials

Bradbury Stamm Construction Since 1923

Sample

Non Permit-required Confined Space determination and Procedures for Water Tanks at ABC
John Smith, BSC Project Manger
John Brown, BSC Safety Director
Joe Smith, BSC Superintendent

Work Process

BSC subcontractor employees will be working in the water tank to repair and resurface the existing water tank. The tank is a enclosed space with a hatch at the top. After draining the tank, BSC's Joe Smith will be responsible for implementing lock-out/tag-out controls to assure the tank cannot refill or flood. This maybe accomplished by locking out valves or blind flanges.

After sampling the air with a air monitor to ensure there are no flammable gases D&R tank employees will cut a large opening into the tank. Oce this opening is created the natural air flow will convert the tank into a "Non Permit-required Confined Space". Employees will enter and drive hoisting and aerial platform equipment into the space to perform their work.
The space is confined per OSHA1926.6(ii) and in compliance with1926.6(i). Bradbury Stamm will comply with OSHA's 1910.146 Permit-required Confined Space Standard. Employees entering the water tank will be called entrants.

Hazards

Most hazards, existing or potential, in this tank earning the Permit-required Confined Space designation will be atmospheric.

1. It is unlikely the tank will have any hazardous gas other than a low oxygen levels if there is lots of rust or standing water with microorganisms.
2. After the entry door is cut the other source of atmospheric hazards will all be introduced from equipment exhaust, welding and oxyacetylene cutting and vapors from coating materials.

Hazard Control Methods

Atmospheric

1. Before entry, the atmosphere will be sampled with an air monitor and recorded on this document by the Superintendent. If the presence of flammable gases, oxygen deficiency, or carbon monoxide are detected the space will be ventilated before cutting the door.
2. Once the door is cut and removed, post air monitors in areas where entrants can see and hear the alarm.
3. If air monitors will be sound the alarm, evacuate the space until atmospheric hazards subside.
4. The entrant employees will check and record the air monitor readings every hour on this document.

Date _____ Time of Entry _____ Time Permit is cancelled _____

Bradbury Stamm Construction Since 1923

Sample

Entrants Name(s) _____, _____, _____, _____.

Record Meter Readings Below

Time	Oxygen %	H2S ppm	LEL %	CO ppm	Initials

Bradbury Stamm Construction Since 1923

Sample

Non permit-required Confined Space determination and Procedures for Aeration Basins at the ABC Wastewater Treatment Plant

John Smith, Foreman
John Brown, BSC Safety Director
Joe Smith, BSC Superintendent

Work Process

BSC employees and subcontractor employees will be working in the shored bore pits welding steel casing section together. The basins are open top structures with natural air flow. The space is confined per OSHA1926.6(ii) and in compliance with1926.6(i). Bradbury Stamm will comply with OSHA's 1910.146 Permit-required Confined Space Standard. Employees entering the pipeline will be called entrants.

Hazards

1. It is possible that organic matter within in the sludge basin when disturbed and watered will create an oxygen depleting atmosphere.
2. Although unlikely demolition equipment (saws, grinders, torches) may introduce a hazardous atmospheric conditions to the basins.

Hazard Control Methods

Atmospheric

1. Before entry, the atmosphere will be sampled with an air monitor and recorded on this document by the Superintendent. If the presence of flammable gases, oxygen deficiency, or carbon monoxide are detected the space will not be entered. If the monitors sound the alarm, evacuate the basins. If carbon monoxide or oxygen deficiency is detected notify John Brown at 681-4307.
2. The entrant employees will check and record the air monitor readings every hour.

Date _____ Time of Entry _____ Time Permit is cancelled _____

Entrants Name(s) _____, _____, _____, _____.

Bradbury Stamm Construction Since 1923

Sample

Record Meter Readings Below

Time	Oxygen %	H2S ppm	LEL %	CO ppm	Initials

Bradbury Stamm Construction Since 1923

Sample

Non Permit-required Confined Space determination and Procedures for Water Tanks at ABC
John Smith, BSC Project Manger
John Brown, BSC Safety Director
Joe Smith, BSC Superintendent

Work Process

BSC subcontractor employees will be working in the water tank to repair and resurface the existing water tank. The tank is a enclosed space with a hatch at the top. After draining the tank, BSC's Joe Smith will be responsible for implementing lock-out/tag-out controls to assure the tank cannot refill or flood. This maybe accomplished by locking out valves or blind flanges.

After sampling the air with a air monitor to ensure there are no flammable gases D&R tank employees will cut a large opening into the tank. Oce this opening is created the natural air flow will convert the tank into a "Non Permit-required Confined Space". Employees will enter and drive hoisting and aerial platform equipment into the space to perform their work.
The space is confined per OSHA1926.6(ii) and in compliance with1926.6(i). Bradbury Stamm will comply with OSHA's 1910.146 Permit-required Confined Space Standard. Employees entering the water tank will be called entrants.

Hazards

1. It is possible that organic matter within in the sludge basin when disturbed and watered will create an oxygen depleting atmosphere.
2. Although unlikely demolition equipment (saws, grinders, torches) may introduce a hazardous atmospheric conditions to the basins.

Hazard Control Methods

Atmospheric

1. Before entry, the atmosphere will be sampled with an air monitor and recorded on this document by the Superintendent. If the presence of flammable gases, oxygen deficiency, or carbon monoxide are detected the space will not be entered. If the monitors sound the alarm, evacuate the basins. If carbon monoxide or oxygen deficiency is detected notify John Brown at 681-4307.
2. The entrant employees will check and record the air monitor readings every hour.

Date _____ Time of Entry _____ Time Permit is cancelled _____

Entrants Name(s) _____, _____, _____, _____.

Bradbury Stamm Construction Since 1923

Sample

Record Meter Readings Below

Time	Oxygen %	CO ppm	H2S ppm	Initials	LEL %

Bradbury Stamm Construction Since 1923

Sample

Permit-required Confined Space Program for The Pre-Treatment Facility (PTF) at ABC Water Reclamation Facility
Joe Smith, Superintendent
John Brown, Safety Director

Determination
All confined spaces located at or in the PTF building are Permit-required Confined Spaces.
Hazards
Hazards present or potential may come from the following:
Atmospheric- inherent to the space- such as Hydrogen Sulfide, Methane, chlorine and sodium dioxide and oxygen deficiency;
Engulfment- from sewage depth, storm flow, diversion or plug failure, or leaky gates;
Introduced by work (task) performed- welding, sawing grinding, use of internal combustion power tools, etc.

Hazard Control Methods

Before entry each space will be vented, monitored, retrieval equipment set-up, entrant equipped with body harness and attendant whose sole duty is to monitor the entrant.

Additionally, before the space is entered the Entry Superintendent must fill out this permit.

Date _____ Time of Entry _____ Time Permit is canceled _____

Entrants Name _____

Attendants Name _____

Entry Superintendent: Joe Smith

Purpose of entry _____ Describe work to be done and process (Example: remove pumps, by disconnecting bolts, use of cutting torch or Quickie Saw, any electrical tools including lights)
_____
_____
_____
_____
_____

Hazard Control
Is tripod set-up? _____ Is ventilation fan set-up? _____ Clean source of air? _____ If ventilation gas powered fan must have inlet tube.
Are 2 (two) air monitors available? _____ Are both reading the same or close? _____

Bradbury Stamm Construction Since 1923

Sample

Record Meter Readings Below

Time	Oxygen %	H2S ppm	LEL %	CO ppm	

Bradbury Stamm Construction Since 1923

Sample

Permit-required Confined Space determination and Procedures for Water Tanks at ABC
Joe Smith, BSC Project Manger
John Brown, BSC Safety Director
John Smith, BSC Superintendent

Work Process
BSC subcontractor employees will be working in the water tank to vacuum out filter media in a aqueous state containing sand, gravel and anthracite. The tank is a enclosed space with a hatchway at the side near the top. John Smith will be responsible for implementing lock-out/ tag-out of computer actuated controls as well as physically closing the valves to assure the tank cannot refill or flood:

Hazards
1. Engulfment from water entering the tank.
2. Media placement may create dust hazard atmospheric conditions in the tank.

Hazard Control Methods

Lock-out at the following points:
1. At the well building
2. Close valve at treatment building from well to tanks.
3. Close valves from backwash tanks.
4. Use computer to actuate valves to closed position. Log out and secure computer.

During media extraction the ventilation will be provided by vacuum truck.
During media placement, a manhole blower, dust masks and supplied air will be provided the entrant.

Lock-out/tag-out has been completed ELIMINATING engulfment hazards. COA
_____

John Smith, BSC Superintendent
_____

John Brown, BSC Safety Director
_____

Date _____ Time of Entry _____ Time Permit is cancelled
_____

Entrants Name(s) _____, _____, _____,
_____.

Bradbury Stamm Construction Since 1923

Sample

Permit-required Confined Space Program for the Pre-Treatment Facility (PTF) at ABC Water Reclamation Facility
John Smith, Superintendent
John Brown, Safety Director

Determination
All confined spaces located at or in the PTF building are Permit-required Confined Spaces.
Hazards
Hazards present or potential may come from the following:
Atmospheric- inherent to the space- such as Hydrogen Sulfide, Methane, chlorine and sodium dioxide and oxygen deficiency;
Engulfment- from sewage depth, storm flow, diversion or plug failure, or leaky gates;
Introduced by work (task) performed- welding, sawing grinding, use of internal combustion power tools, etc.

Hazard Control Methods

Before entry each space will be vented, monitored, retrieval equipment set-up, entrant equipped with body harness and attendant whose sole duty is to monitor the entrant.

Additionally, before the space is entered the Entry Superintendent must fill out this permit.

Date _____ Time of Entry _____ Time Permit is canceled _____

Entrants Name _____

Attendants Name _____

Entry Superintendent: John Smith

Purpose of entry _____ Describe work to be done and process (Example: remove pumps, by disconnecting bolts, use of cutting torch or Quickie Saw, any electrical tools including lights)
_____
_____
_____
_____
_____

Hazard Control
Is tripod set-up? _____ Is ventilation fan set-up? _____ Clean source of air? _____ If ventilation gas powered fan must have inlet tube.
Are 2 (two) air monitors available? _____ Are both reading the same or close? _____

Bradbury Stamm Construction Since 1923

Sample

Record Meter Readings Below

Time	Oxygen %	H2S ppm	LEL %	CO ppm

Bradbury Stamm Construction Since 1923

Sample

Permit-required Confined Space Program for Lift Stations
John Smith, Superintendent
Joe Smith, Project Manger
John Brown, Safety Director

Determination
The Sludge Digester is a Confined Space with an atmospheric and engulfment hazard and has bee determined to be a Permit-required Confined Space per 1910.146.

Hazards
Hazards present or potential may come from the following:

Atmospheric- inherent to the space- such as Hydrogen Sulfide, Methane and oxygen deficiency

Engulfment- from sewage process piping and remote control valve operation.

Introduced by work (task) performed- welding, sawing grinding, sand blasting and coating.

Hazard Control Methods

Before entry each this space will be vented, monitored, retrieval equipment set-up, entrant equipped with body harness and attendant whose sole duty is to monitor the entrant.

Additionally, before the space is entered the Entry Superintendent must fill out this permit.

Date _____ Time of Entry _____ Time Permit is cancelled _____

Entrants Name _____

Attendants Name _____

Entry Superintendent: John Smith

Purpose of entry _____ Describe work to be done and process (Example: remove pumps, by disconnecting bolts, use of cutting torch or Quickie Saw, any electrical tools including lights)

_____
_____
_____
_____
_____

Hazard Control

Bradbury Stamm Construction Since 1923

Sample

Lock-out/tag-out of the COA's controlled piping and valves? _____ Where? _____. Verified by? _____

Is tripod set-up? _____ Is ventilation fan set-up? _____ Clean source of air? _____ If ventilation gas powered fan must have inlet tube.

Are 2 (two) air monitors available? _____ Are both reading the same or close? _____

Record Meter Readings Below

Time	Oxygen %	H2S ppm	LEL %	CO ppm

DRUG AND ALCOHOL-FREE WORKPLACE POLICY

Associate Handbook Published January 1, 2020

Alcohol and drug abuse pose a threat to the health and safety of associates and to the security of our equipment and facilities. For these reasons, BSCI is committed to the elimination of drug and/or alcohol use and abuse in the workplace. This policy outlines the practice and procedure designed to correct instances of identified alcohol and/or drug use in the workplace. This policy applies to all associates and all applicants for employment of BSCI. The CEO and President are responsible for policy administration.

WORK RULES

Associates should report to work fit for duty and free of any adverse effects of drugs or alcohol.

The following work rules apply to all associates:

- Whenever associates are working, are operating any company vehicle or equipment, are present on company premises or a Job Site, or are conducting related work off-site, they are prohibited from:
    - Using, possessing, buying, selling, manufacturing or dispensing an illegal drug or drug paraphernalia.
    - Being under the influence of alcohol, illegal drugs or prescribed drugs which adversely affect the associate's ability to safely and effectively perform their job duties as defined in this policy.

The presence of any detectable amount of any illegal drug or illegal controlled substance in an associate's body while performing company business or while in a company facility is prohibited.

If taking prescribed drugs, associates must consult with their doctors about any medications' effect on their fitness for duty and ability to work safely and promptly disclose any work restrictions to their supervisor. Associates should not, however, disclose underlying medical conditions unless directed to do so by their doctor. BSCI will not allow any associate to perform their duties while taking prescribed drugs that adversely affect the associate's ability to safely and effectively perform their job duties. Associates taking a prescribed medication must carry it in the container labeled by a licensed pharmacist or be prepared to produce it if asked.

REQUIRED TESTING

The Company retains the right to require the following tests:

Pre-Employment	All applicants must pass a drug test before beginning work. Refusal to submit to testing will result in disqualification of further employment consideration.
Random	All associates are subject to random drug screenings.
Reasonable Suspicion	Associates are subject to testing based on observations by a supervisor of apparent workplace use, possession or impairment.
Post-Accident	Associates may be subject to testing that may have caused or contributed to accidents that damage a company vehicle, machinery, equipment or property and/or result in an injury to themselves or others. In any of these instances, where testing is requested, the investigation and subsequent testing must take place within two (2) hours following the accident.
Follow-Up	Associates who have tested positive, or otherwise violated this policy, are subject to discipline, up to and including termination.

NOTE: Associates will be paid for time spent in alcohol/drug testing.

CONSEQUENCES

Applicants who refuse to cooperate in a drug test or who test positive will not be hired. Associates who refuse to cooperate in required tests or who use, possess, buy, sell, manufacture or dispense an illegal drug in violation of this policy will be terminated. The first time an associate tests positive for alcohol or illegal drug use under this policy, the result will be discipline, up to and including termination.

ASSOCIATE ASSISTANCE AND DRUG-FREE AWARENESS

BSCI will reasonably accommodate associates as required by law.

CONFIDENTIALITY

Information and records relating to positive test results, drug and alcohol dependencies shall be kept confidential to the extent required by law.

INSPECTIONS

BSCI reserves the right to inspect all portions of its premises, job sites or work areas not owned by BSCI for drugs, alcohol or other contraband. Any illegal drugs or drug paraphernalia will be turned over to an appropriate law enforcement agency and may result in criminal prosecution. Associates who possess such contraband or refuse to cooperate in such inspections are subject to appropriate discipline, up to and including termination.

CRIMES INVOLVING DRUGS

BSCI prohibits all associates from manufacturing, distributing, dispensing, possessing or using an illegal drug in or on company premises, job sites or while conducting company business. Associates are also prohibited from misusing legally prescribed or over-the-counter (OTC) drugs. Law enforcement personnel shall be notified, as appropriate, when criminal activity is suspected.

PRE-INSTALLATION CONFERENCES

Safety concerns can best be identified during conferences with the subcontractor's onsite supervision i.e., the installing foreman, prior to starting the work. Although part of the safety plan, many construction issues are addressed and documented during these meetings on the Pre-Installation Meeting Checklist (see attached).

During these conferences the Safety Director and Superintendent point out potential job hazards and negotiate with the subcontractor an agreement on how to handle hazards and minimize risk to all employees on the jobsite. These meetings typically result in a written safety plan that is specific to the work that will be performed by the subcontractor.

These conferences promote job hazard analysis, training and safe behavior observation on the job.

PRE-INSTALLATION MEETING CHECKLIST

Job Name: (CONTINUED ON SECOND PAGE)	SPEC SECTION	DATE
CONTRACT NO / DEFINABLE FEATURE OF WORK	SCHEDULE ACT NO.	DRWNG # / INDEX #

PERSONNEL PRESENT

OWNER'S REP NOTIFIED ____ HOURS IN ADVANCE: YES ☐ NO ☐

NAME	POSITION	COMPANY/GOVERNMENT

SUBMITTALS

REVIEW SUBMITTALS AND/OR SUBMITTAL REGISTER. HAVE ALL SUBMITTALS BEEN APPROVED? YES ☐ NO ☐

IF NO, WHAT ITEMS HAVE NOT BEEN SUBMITTED?

ARE ALL MATERIALS ON HAND? YES ☐ NO ☐

IF NO, WHAT ITEMS ARE MISSING?

CHECK APPROVED SUBMITTALS AGAINST DELIVERED MATERIAL. (THIS SHOULD BE DONE AS MATERIAL ARRIVES.)

COMMENTS:

MATERIAL STORAGE

ARE MATERIALS STORED PROPERLY? YES ☐ NO ☐

IF NO, WHAT ACTION IS TAKEN?

SPECIFICATIONS

REVIEW EACH PARAGRAPH OF SPECIFICATIONS AND DISCUSS SPECIFIED TOLERANCES.

IS A MOCK-UP REQUIRED? YES ☐ NO ☐

DISCUSS PROCEDURE FOR ACCOMPLISHING THE WORK.

CLARIFY ANY DIFFERENCES.

PRELIMINARY WORK & PERMITS

ENSURE PRELIMINARY WORK IS CORRECT AND PERMITS ARE ON FILE.

IF NOT, WHAT ACTION IS TAKEN?

PRE-INSTALLATION MEETING CHECKLIST

Job Name:

(CONTINUED FROM FIRST PAGE)

SPEC SECTION	DATE

CONTRACT NO	DEFINABLE FEATURE OF WORK	SCHEDULE ACT NO.	DRWNG #	INDEX #

TESTING

IDENTIFY TESTING AGENCY AND PROCEDURE.

FREQUENCY?

WHERE REQUIRED?

REVIEW TESTING PLAN.

HAS TEST FACILITIES BEEN APPROVED? YES ☐ NO ☐

SAFETY

HAS SAFETY DIRECTOR BEEN NOTIFIED? YES ☐ NO ☐

ACTIVITY HAZARD ANALYSIS APPROVED? YES ☐ NO ☐

REVIEW APPLICABLE PORTION OF BSC SAFETY PASSPORT

SUPERVISION, MANPOWER and EQUIP.

IS THERE COMPETENT SUPERVISION? IS THE JOB PROPERLY MANNED?

OTHER ITEMS OR REMARKS

OTHER ITEMS OR REMARKS:

Project Signature:

SUPERINTENDENT and/or QC Manager DATE

Reviewed By:

PROJECT MANAGER DATE

EXCAVATIONS

Please refer to Safety Plan Implementation in Section One and the Safe Equipment Operator Safety Passport in Section Two.

FALL PROTECTION AND SCAFFOLDS

Please refer to Safety Plan Implementation in Section One.

Bradbury Stamm follows OSHA's Scaffold Standard Subpart L.

QUALITY PROGRAM

QUALITY PROGRAM

The entire Bradbury Stamm work force shares in the responsibility of assuring quality in a project. However, the true success of assuring quality is a direct reflection of those individuals directly involved. The duties assigned to project personnel inherently ensure that work is performed to provide our clients with a product and service of the quality expected. Although Bradbury Stamm's Quality Assurance Representative functions as the team quality control representative, all team members have a role in quality. They include:

PROJECT MANAGER:

The project manager is responsible for the success of the project and is responsible for assuring that the goal of providing the client with a quality product is attained. In initial phases of the project, the project manager works in concert with the estimating staff to ensure that subcontracts and purchase orders are issued in conformance with Contract Documents and that procurement is timely in regard to meeting the project schedule. The Bradbury Stamm project manager supervises all office personnel associated with the particular project.

The project manager closely interfaces with the project superintendent on a daily basis and has the final authority to make decisions for the company in regards to the particular project. The project manager's duties affecting quality assurance include:

- Preparation of the Project Schedule and monthly updates.
- Administration of the agreement/contract for construction with the Owner.
- Issuance and administration of all agreements/contracts and material orders with Bradbury Stamm's subcontractors and suppliers.
- Processing of submittals and change orders, if any.
- Preparation and submission of monthly pay requests. Approval of subcontractors' and material suppliers' requests and expediting payment to subcontractors and suppliers within one week of our receiving payment.
- Convey to project superintendent and subcontractors that proper workmanship and materials are mandatory and in the best interest of all parties - "Do it right the first time" philosophy.

SUPERINTENDENT:

The superintendent is responsible for the coordination of field operations on the project. The superintendent has the immediate responsibility for all work to be performed under the contract at the project site and assumes a pro-active role in assuring quality performance on a day-to-day basis. One of the superintendent's major assigned responsibilities is that of maintaining as a standard the highest quality workmanship with Bradbury Stamm's field crews and subcontractors. The Bradbury Stamm superintendent is full-time in the field and is assigned to the particular project.

Our superintendent's duties affecting quality assurance include:

- Coordination and field management of all work performed under our contract, to maintain ample crews and keep project on schedule, including work done directly by Bradbury Stamm's own forces and the work done by our subcontractors.
- Conducts coordination meetings as the Bradbury Stamm representative with the other team members.
- Conduct and document pre-installation conferences with each trade.
- Constant awareness of the necessity to properly protect work-in-place, stored materials and work-in-progress.
- Inspection of all work on site as it progresses. Constant surveillance to be sure materials and workmanship are in accordance with the contract documents.
- Providing information to the Quality Assurance Representative of all field changes that must be included in the project record documents.
- Ensuring that material is received, checked, and properly stored prior to installation.
- Authorization to call for additional inspections as required and alert the proper persons and our project manager on possible conflicts, ambiguities, omissions or other potential problems.
- Obligation to call for all testing as required or to see that subcontractors have proper tests performed.
- Ensuring that the job is kept clean.
- Providing "check-off" system for concrete pours and "cover-up" operations to ensure that all inspection are conducted and that all built-in items are in place.
- Ensuring that craft supervisors and subcontractors are using current contract documents and are aware of approved changes.

PROJECT TECHNICIAN:
The project technician assists the project manager and is primarily responsible for processing submittals. Specific duties include the following:

- Performs a comprehensive study of the Contract Documents in conjunction with checking submittals made by subcontractors and suppliers to make certain that all design, dimensions, quantities, and quality of work represented in the submittal conform to the plans and specifications.
- Maintains Plan Distribution Log to keep track of the most current revisions and to ensure that all concerned parties are copied.
- Maintains Change Order Request Log and file to monitor all modifications to the Contract.
- Maintains Clarification Log (RFI) and files to monitor the disposition of all interpretations to the Contract Documents.
- Updates plans and specifications to reflect clarifications and changes implemented by the Architect and ensures that any modifications to the contract documents are properly communicated to all contractor team members.

QUALITY ASSURANCE REPRESENTATIVE (QAR):
The project manager shall designate the Quality Assurance Representative for the project. The QAR may be the superintendent, project technician, project engineer or project manager or a combination of these individuals. On certain jobs a QAR may be assigned QA/QC responsibilities solely. The QAR has specific areas of responsibility that are established to maintain control of the quality of the work and is supplemented by the testing laboratories, inspectors, and various specialty subcontractor personnel. The QAR's duties concerning quality are as listed below, but not limited to:

- Schedules and coordinates off-site quality control inspections at fabrication facilities to monitor quality of prefabricated items.
- Schedules and conducts Preparatory and Initial Inspections with subcontractors and suppliers to ensure compliance with Contract Documents.
- Conducts thorough study of the Contract Documents to identify all quality assurance, testing, and equipment commissioning requirements and prepares a log that identifies scheduled and actual dates that such requirements are fulfilled.
- Maintains Field Order Log and files to track the disposition all field orders issued by the Architect.
- Assists superintendent in the receipt and checking of delivered materials for condition, compliance with specifications, and proper storage.

- Maintains the central file of assurance records to provide a basis for managing the quality assurance program for the project.

- Maintains ongoing deficiency identification and correction system to ensure that noted deficiencies do not go uncorrected.

- Conducts punchlist inspections and prepares reports to aid the superintendent in the final close-out phase of the job with the goal to identify and correct all deficiencies prior to final completion if the project.

NETWORK ANALYSIS SCHEDULING

Bradbury Stamm routinely utilizes Primavera Project Planner scheduling software, principally the Precedence Diagram Method. The inherent demands of a large project require detailed schedule breakdowns, with particular emphasis on tracking of submittal "paperwork" and material deliveries. In order to assure that no item is overlooked, separate schedules are developed and incorporated into the overall project schedule. Separate schedules are created for receipt of submittals from subcontractors and suppliers, submittal review, fabrication and delivery of critical materials, and operations and maintenance close-out documentation. Weekly updates are created to identify critical paths, and each of the Owner's schedule reports include a narrative description of critical issues and corrective action to be taken.

SUBMITTALS

In the initial phases of work, the QAR shall conduct a careful study of all contract documents including plans, specifications, and any addenda that have been issued. All addenda will be physically posted on the contract documents (plans & specifications). The recommended method is to "cut & paste" addendum items rather than transcribing them.. Plans and specifications will be crossed checked in order to make a complete list of all material items and equipment. This list is categorized by specification section and further identified within each section among subcontractors and suppliers. All material and equipment provided by each subcontractor or supplier will be entered into the Submittal Log which is interfaced with the project schedule.

I. The submittal approval and control process generally follows the outline below:

A. Determine number of submittal copies (as outlined in contract) received from sub/ supplier by Bradbury Stamm - reviewed by Bradbury Stamm for correctness

B. Prior to submitting to the architect, all submittals will be checked by Bradbury Stamm personnel designated by the project manager for conformance to contract documents and will be checked for quantity, accuracy of dimensions, omissions, and coordination with other trades. **EVERY SUBMITTAL NOTED "BY OTHERS" BY THE ORIGINATOR IS TO BE NOTED BY BRADBURY STAMM AS TO THE IDENTITY OF "OTHERS".**

C. Either field or office personnel-review stamp applied to submittal with initials of reviewer and submittal #

D. Submittal log - created - (example included)

E. Submittals are numbered sequentially 001, 002, 003, etc. as submitted. If owner or architect requires different system, this shall be noted in addition to sequential system. Letter of Transmittal (include example) and distributed to architect/engineer for approval (depending on manager / superintendent)

1. One copy remains in master submittal file for field and office - until returned by architect (appropriate two week review process)
2. Bradbury Stamm is sometimes requested to maintain or distribute final approved owner copy (record on submittal log or separate log - the architect is sometimes required to do this). Check specifications for responsibility.

F. Submittal is returned from architect/engineer if approved - cc Office, Field, Owner - if required (pull preliminaries from submittal file bind-file in subs file. Note on transmittal)

1. submittals/*supplier required for coordination*
2. *copy transmitt*al to sub file
3. On return transmittal - addressed to submitting sub/supplier - important to include all documentation sent with returned submittal note accordingly - good legal documentation (application, rejection, resubmitted, clarification) if needed

Acquire all required submittals in a timely manner.

Pursue color selection early

G. If submittal is rejected or requires corrections and a re-submittal, item is noted on transmittal number as ##/R-1 for resubmitted item or as ##/S-1 for supplemental information not previously submitted as part of initial submittal (supplemental is discretionary by manager).

H. Repeat return or resubmit process.

1. Coordination of material deliveries and sub start dates needs to be scheduled by superintendent.

Submittal approval process is critical: *without approved product, there is no material, and therefore no project...*

DRAWING DISTRIBUTION AND DESIGN CONTROL

I. The QAR is responsible to Bradbury Stamm regarding all architect generated drawings for any errors and discrepancies and for reporting these to the project manager for resolution. When drawings are revised due to clarifications or changes, the project technician will record them on a Current Plan Log as soon as the drawings are approved and the contractor has been directed to proceed.

II. The project technician is responsible for distributing plans, specifications, addenda, and revisions to the superintendent, QAR, field supervisors, and subcontractors. All drawings distributed to subcontractors are sent with transmittal letters indicating the plan numbers and current revision date. Distribution will be recorded on a Plan Distribution Log to ensure that the appropriate personnel have all current documents that affect their area of work.

III. The superintendent or QAR is responsible to check all field supervisors and subcontractors on a regular basis to ascertain that they have been and are using current plans in the performance of their work and that no confusion exists about recent changes, clarifications, etc.

IV. When discrepancies are identified or further clarification of the contract documents are required, the project coordinator through the project technician will initiate a Request for Information (RFI) to the Architect. All RFI's are given a distinct number and logged on the RFI Log. The out-going RFI copied to the Bradbury Stamm project team to ensure that all staff members are fully advised of the subject clarification. Likewise, upon receipt of response from the Architect, the reply is distributed to all affected subcontractors and suppliers as well as the Bradbury Stamm staff.

V. When a proposal request, change directive, field order, or similar document that identifies a contract change is received, the project technician distributes copies to Bradbury Stamm staff and affected subcontractors and suppliers to advise all parties of pending changes. These documents are issued on an informational, advisory basis until cost and time impact are identified. The disposition of all proposal requests and field orders are tracked by the project technician on Change Order Requests. Upon acceptance of change proposals, all staff and affected subcontractors and suppliers are notified of acceptance and that changes will be incorporated into their contracts upon receipt of a change order from the Owner. If revised drawings are involved with the proposal request, additional revised drawings will be issued by the project technician for field use. Contract modifications generally follow the procedures below.

VI. Processing Contract Modifications:

A. Create a log to track a contract modification as soon as it is identified.

B. Assign it an identification number.

C. Cross reference to A/E RFP/RFI when applicable.

D. Describe change.

1. Note date of receipt.

2. Note latest quotation amount.

3. Note the date of the latest quotation.
4. Note proceed status.
5. Note approval status
6. Note change order number.
7. Note sub contractor's written (optional).
8. Note budget adjustment (optional).
9. Note billing adjustment (optional).
10. Note time extension.

VII. Set up a separate file for each proposed change (RFP). This could also be a binder with tabs depending on the anticipated volume of changes.

VIII. All correspondence, drawing transmittals, quotations and estimates are part of this file. Duplicate copies in Correspondence File are optional.

IX. Immediately upon receipt, distribute change document to affected subcontractors and suppliers and specify date when response is due. Determine the status of proceeding and advise affected parties accordingly. Be sure superintendent is kept advised.

X. Assemble quotes, price Bradbury Stamm work and prepare and submit proposal.

XI. Follow up on change proposal until it is incorporated into the contract by change order.

XII. Issue subcontract/material contract change orders and follow up on their return. Execute after return.

XIII. Prepare and submit budget revision using job cost breakdown.

XIV. Revise billing document to agree with revised contract amount.

AS-BUILTS

The QAR is responsible for maintaining project record (as-built) drawings for civil, architectural, and structural disciplines and for ensuring that the mechanical and electrical subcontractors are maintaining their respective as-built information. As a minimum, record drawings will be reviewed monthly to ensure that they are up to date. As-built information includes clarifications, field orders, and contract modifications. The project coordinator is responsible for collecting and submitting through the project technician as-built information at the close of the project.

INSPECTIONS

The QAR is responsible for review of the Contract Documents with all subcontractors and suppliers to generally discuss the means in which they will prosecute their work and to discuss the quality assurance requirements that Bradbury Stamm and the Architect will expect them to follow. This is conducted in two phases - Preparatory Inspection (PI) and Initial Construction Inspection (II).

I. PREPARATORY INSPECTIONS - conducted after award of subcontract or purchase order and prior to construction. The QAR will prepare an agenda and will chair the meeting. The following format will generally be followed to ensure compliance with quality assurance specifications:

A. Notification at least twenty-four hours in advance will be given by the QAR to the affected contractor and subcontractor personnel and to the Architect, as may be required, of an impending preliminary inspection for a particular phase of work to be performed.

B. Each section in the specifications will be subject to a PI, although a number of sections may be combined in one PI if phasing of the work lends itself to combining.

C. Attending personnel will be instructed to review their particular responsibility in the specifications, including any control testing requirements prior to attending the inspection meeting.

The PI meetings will be held with the following agenda:

1. Review of safety program with respect to subcontractor operations.
2. Review of materials for proper submittals, approvals, testing, and quantities.
3. Review of salient points in specifications.
4. Review specific QA requirements in technical specification section.
5. Physical inspection of site, materials, and equipment.

D. PI meeting results will be recorded on PI form and copies will be distributed as follows:

1. Architect	2 copies
2. Bradbury Stamm project manager	1 copy
3. Bradbury Stamm superintendent	1 copy
4. Bradbury Stamm QC file	1 copy
5. Subcontractor office	1 copy
6. Subcontractor field representative	1 copy

II. INITIAL CONSTRUCTION INSPECTION (II) - conducted generally at the start of each subcontractor's phase of work. The following format will generally be followed to ensure compliance with quality assurance specifications:

A. Items 1 and 2 of the PI format will be followed.

B. The meeting with the affected personnel will be held at the site where the representative

portion of the work has been accomplished. The following items will be noted:

C. Review of control testing.

D. Condition of materials.

E. Conformance of construction to design and specification QA check items.

F. Dimensional spot checks.

G. Quality of workmanship.

H. Safety.

I. A record of the meeting on II form (see Appendix) will be distributed as follows:

Architect	2 copies
Bradbury Stamm project manager	1 copy
Bradbury Stamm superintendent	1 copy
Bradbury Stamm QC files	1 copy
Subcontractor office	1 copy
Subcontractor field representative	1 copy

III. FOLLOW-UP INSPECTIONS: Daily inspections will be conducted of work items noted in PI and II where applicable and results will recorded on the daily report.

IV. AUTHORITY: The QAR, as quality control representative has the complete authority to inspect, reject, or accept the work and to direct the contractor operations with respect to quality. The Architect may inspect the work as deemed necessary to assure contract compliance.

A. Items determined to be deficiencies to contract requirements shall be corrected as quickly as practical. In cases where contract documents are not clear, resolution will be determined utilizing the RFI process.

B. Equipment and material purchased from suppliers must conform to the drawings and specifications. All purchase orders shall be routed to the project manager to ensure that quality specifications and degree of quality control are clearly defined. Suppliers will be required to submit all specified test results and certification of material used in the manufacture of the product. These records will be maintained on file by the project coordinator.

INSPECTION AND TEST CONTROL

I. The superintendent or QAR shall monitor the overall conduct of inspections and testing required by contract documents and this quality assurance manual to ensure that they are properly executed.

II. Documentation of the inspections and testing will be maintained on record by the QAR for review by the Owner and Architect. III. The project coordinator is responsible for thoroughly reviewing the contract specifications to identify all quality assurance measures and testing requirements. The coordinator will then prepare a log which lists all QA measures and testing

along with the scheduled and actual dates (as they occur) of the testing. This list will be distributed to the superintendent and responsible subcontractors for their information and management of testing.

IV. Prior to all testing, written test procedures will be prepared by the subcontractor responsible for the testing and submitted for review and approval by the Architect. One copy of procedures will be maintained in the QA files.

V. Off-site Testing/Inspections:

A. The QAR shall notify the Architect of operations requiring off-site fabrication or batching in sufficient time for the arrangement of inspections.

B. The project coordinator will follow up on correction of any noted deficiencies prior to shipping.

VI. On-site Testing:

A. The superintendent will notify the testing lab of operations requiring on-site test as required by specifications.

B. The superintendent will arrange for concrete inspections utilizing a pour checklist.

C. The superintendent will verify that materials used conform to specifications.

D. The superintendent will arrange for inspection of concrete reinforcing steel.

E. The superintendent will ensure that subcontractors are making proper notifications for inspections prior to cover up.

F. The superintendent will document any deficiency in the work.

G. The QAR will follow up to ensure that noted deficiencies are corrected.

VII. Upon completion of testing, test results will be distributed in written reports as required by specification and submitted to the Architect for record. One copy of the test reports will be maintained in the QA files.

A. Files will maintained for quality control purposes and will initially include the following:

1. Submittal data.
2. Shop drawings.
3. Written test procedures
4. Field test reports
5. PI and II reports
6. Laboratory test reports
7. Specifications and amendments
8. Modifications

B. The QAR will be responsible for ensuring delivery of required samples to the proper destination points and construction of required mock ups. From an operational standpoint this will consist of requiring various suppliers and subcontractors to ship

specimens directly.

CONTROL OF SPECIAL PROCESSES

I. The QAR shall ensure that all the written qualification procedures required by specification for all special processes such as welding and non-destructive examination are submitted to the Architect for review prior to commencement of work involving the special process.

II. The QAR shall ensure that all personnel involved in special process work are qualified under procedures that have been reviewed by the Architect. Qualification records of all personnel involved in special process work shall be maintained in the QA files.

HANDLING AND STORING MATERIAL AND EQUIPMENT

I. It is the responsibility of the superintendent to ensure that all material is stored in accordance with manufacturers' recommended procedures.

II. Any material or equipment which requires controlled temperature or humidity or protection from exposure to the weather will be stored in an adequate enclosure. Material or equipment which do not require environmental control may be stored in the open.

III. All material and equipment will be properly handled and transported to prevent any damage. Any special handling instructions provider by the supplier will be carefully followed.

A. It will be the responsibility of the QAR to conduct periodic inspections of material and equipment in storage. The coordinator will advise the project manager or superintendent of any items that are not properly stored. It shall be the responsibility of the project manager or superintendent to ensure that the any improper storage is corrected. Any items that are identified as lost shall be brought to the attention of the project manager or superintendent who shall have the responsibility to locate or replace them.

B. As applicable and as much as practical, material and equipment shall be segregated in various storage yards.

COORDINATION WITH SUBCONTRACTORS AND SUPPLIERS

The QAR will review the program on a routine basis and keep close contact with subcontractors and vendors to assure satisfactory handling, shipping, delivery, and storage of their furnished items. The manager will coordinate with subcontractors and suppliers to establish the best method of protecting items in transit. Equipment manufacturer's recommendations on handling, shipping, and storing are to be followed to maintain the quality, cleanliness, and appearance of items delivered to the job site.

MEETINGS

I. HAND-OFF MEETING

When the project is handed over to the project team, a "hand-off" or "start-up" meeting is to be held. The purpose of this meeting is to provide the estimator the opportunity to familiarize the project team with the project prior to construction. The meeting is to be scheduled by the project technician, project manager and operations manager. An outline agenda is included at the end of this section. The meeting will be conducted by the operations manager.

II. FORMAL PARTNERING MEETING

A formal partnering meeting at the start of a project is highly recommended. The meeting would include the project representatives from the owner, architect, engineers, and major subcontractors, as well as the Bradbury Stamm project team. A professional facilitator is to be employed, who will prepare the agenda and conduct the meeting.

III. PRE-CONSTRUCTION MEETING

A pre-construction meeting is to be held with all subcontractors and Bradbury Stamm project team. The meeting will be conducted by the project manager and will generally follow the agenda included at the end of this section.

IV. WEEKLY SUPERINTENDENT MEETING

On a weekly basis at the job site, the superintendent will conduct a meeting with all subcontractors working on the job or about to start. The project manager is responsible for recording the meeting notes and distributing them to appropriate parties.

V. WEEKLY OWNER MEETING

A weekly meeting with the owner's representative and the architect or engineer is encouraged and should be held at the job site. If the owner or architect are located out of town a less frequent interval or alternative location may be appropriate. This meeting may be concurrent or in tandem with the superintendent's coordination meeting, and will be conducted by the project manager. If the meeting is held off the job site, the project manager may deem the superintendent's presence inappropriate. The project manager is responsible for the notes of this meeting to be recorded and distributed. **The note-taking and meeting record preparation by Bradbury Stamm personnel is desirable and emphatically encouraged.** An outline of this meeting is included at the end of this section.

VI. BENCHMARK MEETING

During the course of the project, one or more benchmark meetings shall be held. The purpose of the meeting is to provide a forum to review the status of the project and make adjustments to procedures or methods as determined. The meeting is to be attended by the Bradbury Stamm project team and the operations manager and will follow the outline contained at the end of this section. The number of meetings will be influenced by the project duration and determined by the

project manager and operations manager.

VII. SPECIAL MEETINGS

Special meetings that are called during the project shall be attended by whomever is designated by the person calling the meeting; however, Bradbury Stamm must be represented if subcontractors attend. Generally, the format is determined by the meeting originator, but the Bradbury Stamm project manager is encouraged to provide the record of the meeting.

VIII. CLOSING CONFERENCE

At the end of a project a closing conference is to be held among the project team, estimator and operations manager. The purpose of the conference is to review the project and to learn from the mistakes and excellent performance and to provide the estimator with feedback that may be useful in securing future work. An outline of the closing conference is included at the end of the section.

INITIAL INSPECTION CHECKLIST

Job Name:

SPEC SECTION	DATE

CONTRACT NO	DEFINABLE FEATURE OF WORK	SCHEDULE ACT NO.	DRWNG #	INDEX #

PERSONNEL PRESENT

OWNER'S REP NOTIFIED _____ HOURS IN ADVANCE: YES ☐ NO ☐

NAME	POSITION	COMPANY/GOVERNMENT

PROCEDURE COMPLIANCE

IDENTIFIY FULL COMPLIANCE WITH PROCEDURES IDENTIFIED AT PREPARATORY. COORDINATE PLANS, SPECIFICATIONS, AND SUBMITTALS.

COMMENTS:

PRELIMINARY WORK

ENSURE PRELIMINARY WORK IS COMPLETE AND CORRECT. IF NOT, WHAT ACTION IS TAKEN?

WORKMANSHIP

ESTABLISH LEVEL OF WORKMANSHIP.

WHERE IS WORK LOCATED?

WILL THE INIITAL WORK BE CONSIDERED AS A SAMPLE? YES ☐ NO ☐

IS A MOCK-UP REQUIRED? YES ☐ NO ☐

(IF YES, MAINTAIN IN PRESENT CONDITION AS LONG AS POSSIBLE AND DESCRIBE LOCATION OF SAMPLE)

RESOLUTION

RESOLVE ANY DIFFERENCES.

COMMENTS:

CHECK SAFETY

ARE BSC SAFETY PASSPORT GUIDELINES FOLLOWED?

COMMENTS:

OTHER

OTHER ITEMS OR REMARKS

Project Signature:

SUPERINTENDENT or Project Quality Rep DATE

Reviewed By:

PROJECT MANAGER DATE

PRE-INSTALLATION MEETING CHECKLIST

Job Name: (CONTINUED ON SECOND PAGE)	SPEC SECTION	DATE
CONTRACT NO / DEFINABLE FEATURE OF WORK	SCHEDULE ACT NO.	DRWNG # / INDEX #

PERSONNEL PRESENT

OWNER'S REP NOTIFIED ____ HOURS IN ADVANCE: YES ☐ NO ☐

NAME	POSITION	COMPANY/GOVERNMENT

SUBMITTALS

REVIEW SUBMITTALS AND/OR SUBMITTAL REGISTER. HAVE ALL SUBMITTALS BEEN APPROVED? YES ☐ NO ☐

IF NO, WHAT ITEMS HAVE NOT BEEN SUBMITTED?

ARE ALL MATERIALS ON HAND? YES ☐ NO ☐

IF NO, WHAT ITEMS ARE MISSING?

CHECK APPROVED SUBMITTALS AGAINST DELIVERED MATERIAL. (THIS SHOULD BE DONE AS MATERIAL ARRIVES.)

COMMENTS:

MATERIAL STORAGE

ARE MATERIALS STORED PROPERLY? YES ☐ NO ☐

IF NO, WHAT ACTION IS TAKEN?

SPECIFICATIONS

REVIEW EACH PARAGRAPH OF SPECIFICATIONS AND DISCUSS SPECIFIED TOLERANCES.

IS A MOCK-UP REQUIRED? YES ☐ NO ☐

DISCUSS PROCEDURE FOR ACCOMPLISHING THE WORK.

CLARIFY ANY DIFFERENCES.

PRELIMINARY WORK & PERMITS

ENSURE PRELIMINARY WORK IS CORRECT AND PERMITS ARE ON FILE.

IF NOT, WHAT ACTION IS TAKEN?

PRE-INSTALLATION MEETING CHECKLIST

Job Name:

(CONTINUED FROM FIRST PAGE)

SPEC SECTION	DATE

CONTRACT NO	DEFINABLE FEATURE OF WORK	SCHEDULE ACT NO.	DRWNG #	INDEX #

TESTING

IDENTIFY TESTING AGENCY AND PROCEDURE.

FREQUENCY?

WHERE REQUIRED?

REVIEW TESTING PLAN.

HAS TEST FACILITIES BEEN APPROVED? YES ☐ NO ☐

SAFETY

HAS SAFETY DIRECTOR BEEN NOTIFIED? YES ☐ NO ☐

ACTIVITY HAZARD ANALYSIS APPROVED? YES ☐ NO ☐

REVIEW APPLICABLE PORTION OF BSC SAFETY PASSPORT

SUPERVISION, MANPOWER and EQUIP.

IS THERE COMPETENT SUPERVISION? IS THE JOB PROPERLY MANNED?

OTHER ITEMS OR REMARKS

OTHER ITEMS OR REMARKS:

Project Signature:

SUPERINTENDENT and/or QC Manager DATE

Reviewed By:

PROJECT MANAGER DATE