



Landscape Services

Safety Standard Operating Procedure

(Revised 1/2023)

Campus Sign installation

This Standard operating procedure is for installing signage on campus. As with any equipment or tools, the most basic premise for safe operation is reading and adhering to the manufacturer's instructions and warnings. This SSOP is not a substitute for the owner's manual produced by the manufacturer.

Schedule- TBD upon needs of the campus and project scheduling.

PPE Required- Safety Glasses, ear plugs, long pants, closed toed shoes, high vis safety vest, barricades/ cones, warning signage.

Safety Requirements- Follow all Silica control guidelines, Setup barricades around work site with signage indicating area is closed off. Make sure to not block ADA access points. Silica protocols must be followed. Make sure all trip hazards are addressed in and around work site.

Safety Hazards: Vehicle and pedestrian traffic, Underground and overhead Utilities, lifting, bending, overhead objects, dust, noise, sharp objects, blind spots, Silica exposure, equipment malfunction, pinch points, hot or cold temperatures, and inclement weather.

Tools/ materials- Core drill with 12" bit, Concrete saw, two 5 gallon buckets, post hole diggers, Hex wrench set, ½" drive SAE socket set, 2lb shop hammer, concrete anchor set, hand tamper, torpedo level, concrete trowel, rebar packing rod, Ready mix concrete.

We have 3 different types of signs on campus that Landscape Shop Support installs. In ground sleeve base, bolt down sign base, and in ground wayfinding signs. In this SOP we will cover safety, PPE, and proper installation techniques.

PPE- Safety glasses, High vis vest, gloves, ear protection, silica control.

Safety- Lifting techniques, pedestrian, and vehicular traffic.

In ground sleeve base

1. Area and sign location identified. Dig permit submitted and good before digging.
2. Sign should not impede ADA path, walk path, vision from drivers. All these must be looked at when identifying the locations.
3. Sign base picked up from sign shop.
4. 1-60lb bag concrete ready mixed from supply billed out to the appropriate work order.
5. Tools- Post hole digger, 5-gallon bucket, caution signs/ barricades for vehicle and work area.

6. When arriving set cones/ barricades around truck and work site. (Do not block ADA access)
7. Setup bucket next to dig site. Use post hole diggers, hold handles firmly together with both hands. Jab into the soil and rotate, jab again. Repeat process until soil is loosened. Jab in to soil and pull handles apart. Hold that way while pulling up soil using your knees. Put spoils into 5-gallon bucket.
8. Continue this process until reaching required depth of 2'. Once finished digging hole, put post hole diggers away in the work vehicle. Do not leave them laying on the ground. Prevent having trip hazards.
9. Set sign base in hole. Use a torpedo level and check all sides for vertical level on the base.
10. Add 1 cup water to bottom of hole. Then add ¼ of the 60 lb bag of concrete in the hole even around the post. Use a small piece of rebar to pack in the concrete around the post.
11. Check level and add another cup of water. Continue to check level through out the process.
12. Add more concrete until full 3" below surface grade. Compact concrete wettened concrete until post is firm.
13. Add soil from bucket to finish surface grade.
14. Cleanup area- put away all tools, wipe of sign base with a wet rag. Remove barricades.
15. Contact Sign shop so they can install the sign.
16. Put away all tools and take soil to spoils pile at the driving range.
17. Make notes on work order and charge appropriately.

Bolt down sleeve sign base

1. PPE- High vis vest, safety glasses, ear plugs, gloves,
2. Cone off and put-up signage blocking the work area. Make sure to leave and indicate a safe path for pedestrians to still move freely.
3. Working along a roadway, cone off around work area leaving room for vehicles to get by. If needed a flagger will be needed to direct traffic.
4. Set Sign base in place to mark holes for drilling (use knees and not the back to bend down)
5. Use a 5/8" concrete drill bit on a drill equipped with hammer action.
6. Measure the inground anchor length.
7. Measure that length from tip of drill bit up and mark with tape. This gives you the exact depth the hole needs to be.
8. (Follow all Silica protocols when drilling concrete) Use vacuum equipped with proper Hepa Filter indicated for concrete or use continuous water if drill is equipped. Using water with a drill that is not water equipped can lead to electrical shock causing injury or death. Follow manufactures guidelines with each tool.
9. Drill hole to depth. Then use vacuum to clean out any dust from bottom of hole
10. Push anchor into the hole and use a small punch with hammer and insert into the anchor. Tap down softly to set anchor.
11. Set sign base and use bolts with washers to mount base. Washers may need to be used under the base to make level.
12. Contact sign shop when base is set so they can install the sign.
13. Cleanup area and put tools away properly. Remove all cones and barricades.
14. Put notes on work order and charge appropriately.

Wayfinding signage- Two post round top sign indicating a particular location such as a building.

1. PPE- High vis vest, safety glasses, ear plugs, gloves,
2. Cone off and put-up signage blocking the work area. Make sure to leave and indicate a safe path for pedestrians to still move freely.
3. Working along a roadway, cone off around work area leaving room for vehicles to get by. If needed a flagger will be needed to direct traffic.
4. Signs in turf grass areas require a paver pad. Standard size is 4' wide by 6' long.
5. Paver pad. Using a backhoe/ mini excavator- dig 4'6" wide by 6' 6"long 8".
6. Two-person task- Signs are odd shaped and making lifting difficult. Get help.
7. Loading the sign- Put a moving blanket down in the pickup to prevent scratching the sign.
8. Transport sign to location. Measure from center to center of the legs. Mark center of 4' x 6' pad. Then use center marking and center post holes from that running longways with the 6' long area.
9. Use post hole digger and dig down 2' below finished grade.
10. Set sign using concrete following in ground post method. Keeping sign level. Base of sign between post should be 2' above finished paver grade.
11. Once sign is set, compact 4" crusher run gravel.
12. ½" fill sand leveled. Set bricks running with matching existing connecting pavers or by project design. Pavers are Autumn blend face mix.
13. Mark pavers that need to be cut. Use brick saw or concrete saw following Silica protocols must use water.
14. Mortar around the pavers with a 45-degree angle onto gravel. Mix sacked mortar mix from supply in a 5-gallon bucket. This helps keep pavers in place.
15. Backfill with clean soil around paver pad.
16. Use masonry or sweeping sand- dump on pavers and use a broom to push the sand around on top of the pavers. This will help fill in the brick seams.
17. Sweep and clean up remaining sand.
18. Using soft cotton rags and water, clean sign, and post. Wash off paver pad.
19. Pickup all barricades/ cones. Put away tools in proper locations