

Exhibit E: Construction Management Plan



SUNDT

**Water Treatment Plant_1.0
Updated 60% Draft Construction
Management Plan (CMP)
March 2020**

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Requirements

Construction Management Plan

The CM/GC Contractor shall prepare a Construction Management Plan for Owner's and Engineers review and comment identifying, at a minimum, the CM/GC Contractor's use of the site (material and equipment storage areas, lay-down areas, disposal site(s) for excavated materials, storage sites for excavated materials to be used as backfill, and CM/GC Contractor's and the Owners' construction trailer locations), description of construction methods, construction sequencing and phasing, site circulation and construction traffic management, construction noise and vibration sources and mitigation measures, general work times, and measures proposed to avoid and minimize impacts to sensitive natural resources. The CM/GC Contractor shall coordinate with the Engineer to optimize rock excavation required at the site including issues such as quantity, quality, and marketability (or disposal cost).

Deliverables:

- Draft Construction Management Plan after the Preliminary Design Phase submittal, updated Construction Management Plan after the 60% Design Phase submittal, and final Construction Management Plan after the 90% Design Phase submittal, all per Table 1. Revised Construction Management Plans shall be submitted within ten (10) business days of receipt of the Owners' and the Engineer's comments on each submittal.

Construction Management Plan Overview

Within this draft Construction Management Plan, Sundt (CM/GC Contractor) will identify at a minimum the following items for the WWSP and CDM to review and comment:

- Sundt's planned use of the site
 - Material and equipment storage areas (lay-down areas)
 - Disposal and storage sites for excavated materials
 - Sundt's and the Owners' construction trailer locations
- Description of construction methods
- Construction sequencing and phasing
- Site circulation and construction traffic management
- Construction noise and vibration sources and mitigation measures
- General work times
- Proposed measures to avoid and minimize impacts to sensitive natural resources
- Emergency Response and Procedures
- Site Hazards

Sundt's Planned Use of Site

The site for the WTP_1.0 Project is compact, but very functional due to the layout of the new areas and future areas. This will require our team to focus on any open areas that are not sensitive natural

resources to be used temporarily for construction operations. Based on the current site plan that was provided by CDM, Sundt has developed a preliminary site layout that will include the following items: material and equipment storage areas, storage sites for excavated material to ultimately be disposed of offsite, and the location of the construction field office trailers for both the Owner's team and all construction teams. Please see Figure 1a and 1b – Site Security and Construction Roads for Construction Activities for the preliminary location of perimeter fencing, site access gate, temporary construction roads, temporary construction parking, and temporary construction trailers for GMP1 and GMP2. Deliveries will be required to check-in at Sundt's CM/GC office trailer complex. Sundt's CM/GC staff will radio to the subcontractor that the delivery belongs to. It will be a requirement that all delivery trucks are guided onsite to the proper location to be unloaded in one of the lay-down areas.

Material and Equipment Storage Areas (Lay-Down Areas)

Due to the size of this project, there will be a need for a considerably large area of a material and equipment storage (a.k.a lay-down areas). Sundt considers lay-down areas as anything that could provide an area for temporary construction activities (tying rebar cages, building wall forms, prefabricating pipe runs, etc.), provide an area for material storage (aggregate stockpiles, rebar, piping and appurtenances, electrical materials, gear, equipment, etc.) and store and/or use construction equipment to assistance in the install of permeant materials.

Our team has two large areas that will be utilized as lay-down areas. The first area will be in the south of the PGE high voltage lines, or in the SW corner on the property. This area will provide enough area for the initial phase of the project. It will be critical to protect the power lines with construction traffic going under them multiple times per day. Sundt's CM/GC team will work with PGE to establish a plan and protective measures to ensure the safety of our workforce, as well as their high voltage power lines. Sundt will have signs on each side of each crossing, and Sundt is currently looking at constructing a maximum height apparatus that will be on both sides of each crossing to ensure heights of loads are within regulation/agreement.

The second area will be in the location of the future expansion of the treatment plant. This second area will be extremely beneficial after the yard piping is installed in the initial project phase and will provide a close location for all above grade mechanical, architectural, and structural steel materials.

Lay-down areas will be sloped to ensure excess water does not accumulate in these areas. Best management practices (BMPs) will be addressed in our site SWPPP. Construction materials will be protected and covered per the material manufacturer's requirements, and maintained (if required) per the equipment, valves, or gear manufacturer's storage requirements. Sundt will also be installing a temporary storage building to store environmental sensitive instruments, process equipment, and electrical gear. The final location of this structure is undermined at this point in design, but the final location is likely south of the PGE high voltage lines.

Disposal and Storage Sites for Excavated Materials

The disposal and storage sites for excavated materials during the initial phase of construction will be shifting throughout the duration of the blasting, excavating, and crushing of the bedrock material on the site. The initial plan is to drill, blast, and excavate SW Blake Street and the north area of the project (where the overflow/equalization basins will be located). However, the 6" of topsoil will be removed

and stockpile onsite prior to the drill and blast activities. The stockpile locations is undetermined at this point in design, but Sundt's initial thought is to stockpile this material south of the PGE high voltage power lines.

Please see Figure 1a - GMP1 Site Security and Construction Roads for Construction Activities, the excavated material will be placed/stockpiled where the current equalization overflow basin is located along with the crusher operation. The material will then be crushed and used as fill material for SW Blake Street. The fill for SW Blake Street will be per CDM's specification requirements. The top will be aggregate base with 2-4" layer a ½" clean rock. This will make for a great temporary road surface and will help to minimize track out. Track out BMPs will be placed at the site entrance on SW Blake Street approximately 200 feet from SW 124th Ave. This plan is currently being finalized with the development of the 60% baseline CPM schedule. Once this is finalized, sequence drawings and approximate dates can be added.

The storage location/stockpile for backfill material will be located south of the PGE high voltage power lines , and out of the way during new construction since the backfill of the structures will be 12-18 months from when the aggregate is produced/crushed. All excess material will be hauled offsite to a local site needing fill or a local material supplier. At 60% design, the site has approximately 100,000 - 150,000 tons of excess material.

The material needed for backfill around our water bearing structures will be stockpiled at the most SW area on the project property or just west of the new overflow/equalization basins. Sundt's team is currently evaluating both options, along with the location of trailers, onsite warehouse facility, parking for both craft and admin personnel. Using the location SW of PGE powerlines will keep the material out of the way from construction activities and will eliminate the risk of any material entering any unwanted areas. With the site being smaller in area, the location of the stockpile doesn't have a significant cost impact to the project.

Construction Trailer Locations

The temporary construction trailers for the Owner, Engineer, CM/GC staff and construction staff will be located off SW Blake Street and just north west of the new solids dewatering building. As other trades come onsite, their trailers will be located over the future thickener that had previously been blasted, excavated and backfilled. Parking for the office admin staffs will be adjacent, or just north of the construction trailers. Sundt's current trailer plan includes two 6-wide trailer complexes next to one another with three additional subcontractor trailers just south. Please see Figures 1a and 1b.

Craft parking will be at the south end of the project site, south of the PGE high voltage power lines. There will be approximately 280 cars onsite at peak construction activities, assuming one car per person (40 admin and 240 craft). Typically, there are several employees that carpool, and this will help reduce the number of vehicles onsite. There is enough space on site for 280 vehicles (as a worst-case scenario).

Description of Construction Methods

The most important item is protecting the natural resources onsite, including the Kolk Pond and large trees producing significant canopies. Stormwater runoff is of the utmost importance to our team. The

Site Circulation and Construction Traffic Management

Site Circulation Traffic Plan

All construction site traffic will enter the site via SW Blake Street from SW 124th Ave. All vehicles will be required to check-in at the gate security guard and then advised to proceed to the CM/GC construction trailer complex. The entrance way from SW 124th Ave to the site gate will be 50' wide to allow for any vehicle to do a u-turn if it is not allowed onsite or made a wrong turn. Please see Figure 1a and 1b that show the temporary construction roads. This will provide great site access to all areas of the project. A temporary road will be installed off the south end of SW Blake St to the large area south of PGE's overhead power line easement. These site roads will also provide accessibility to the lay-down areas. As discussed above, there is no need for overflow parking there will be 280 parking spaces to accommodate peak craft manpower (Jan through April 2024).

Construction Traffic Management

All construction site traffic, admin and craft workforce, will arrive onsite between 6am and 7am every morning. . Departure time from the site for most of the site personnel will be between 5:30pm and 6:30pm every evening. Craft will be working five days a week (Monday thru Friday) with a 10-hour workday from 7am to 5:30pm. Admin craft work hours will be 6:30am to 6pm Monday thru Friday.

When large concrete placements occur, it is common for our placements to begin at 3am due to large quantities of redi-mix concrete that will be placed during these activities. There will also typically be 25-30 craft personnel required for these early morning activities, but they will be the same craft on normal working day just simply starting at 3am on large concrete placement days. Depending on the redi-mix supplier that is selected, local neighborhoods may be affected. However, the noise produced by redi-mix trucks are like other trucks. No special permit will be need if drivers stay on major thoroughfares, however a noise permit may be needed if noise is greater than 80 dB at the fence line onsite.

It is anticipated that the volume of concrete trucks for first 18-24 months will be approximately 5-10 trucks per day (with some days having 20-30 trucks and others not having any trucks), aggregate trucks will also leave the site to take the 'extra' excavated material (approx. 3700 trucks – 6 to 10 month duration) to the market, and material delivery trucks will be assumed at 1-5 per day for first year, and 15 for 2nd and 3rd year. Delivery trucks and aggregate rock trucks will be stipulated to a 7am to 4pm timeframe of coming to and leaving the project site.

Material delivery trucks will be required to provide at minimum 24-hour notice prior to their delivery per their Subcontract Agreement or Purchase Order Agreement. This ensures the proper equipment and laydown space is available and stops unexpected deliveries from occurring. Unexpected deliveries will not be accepted. First offense is a warning and every offense after that is \$1500 fine to the company via a back charge.

Water trucks will be used during all hours of vehicle traffic on the temporary construction roads. To ensure Sundt meets the requirements of the SWPPP and Dust Control Plan, water trucks will operate 1 hour prior and 1 hour after craft work force is to arrive onsite and leave offsite. A street sweeper will also be implemented during high volumes of construction delivery trucks, such as concrete redimix trucks, sand aggregate trucks, trucks carrying export materials, etc. During these days, the street sweeper will operate constantly through out the day to ensure Sundt and its subcontractors remain in compliance with the SWPPP.

Construction Noise and Vibration Sources and Mitigation Measures

The only noise and vibration mitigation measures that will be needed is during blasting operations to excavate the bed rock material. The CM/GC team will work with the local agencies and communities to ensure everyone's awareness of these construction activities. It will be imperative that the drill, blast, excavate and crush subcontractor is very familiar with the County and City regulations/requirements when it comes to these activities. This will help provide a huge advantage to the project team when it comes to these critical construction activities to ensure there is no delay due to noncompliance.

General Work Times

This is outlined above under subsection Construction Traffic Management.

Proposed Measures to Avoid and Minimize Impacts to Sensitive Natural Resources

Temporary fencing will be installed on the north and west sides of the Kolk Pond area as well as around the large trees in the SW corner of the site to ensure no construction traffic or activities are within this restricted boundary with large signs stating the area is off limits to all construction activities. These areas will be discussed and shown on a plan view of the project during site-specific safety training. All personnel being onsite greater than one day will be required to attend this training. This training is called out in our Site Specific Safety Plan.

Additional Sections Add (via comments)

Construction Water Supply

Determining a reliable construction water supply is crucial for both GMP work packages. For GMP1, it will be critical due to dust control, ensuring proper compaction of crushed aggregate, and a water supply for the crusher and temporary construction trailers. With Trammell Crow developing the property adjacent to the north, it will be imperative to understand their construction schedule to know when the potable water lines will be installed in the cul-de-sac and be operational. This location would be most cost affective and most beneficial due to the short distance. However, it appears that Sundt will need to establish a potable water connect near the enter section of SW Tualatin-Sherwood Rd and SW 124th Ave. Please see Figure 3 – Temporary Construction Utilities for the proposed routing. Determining the final location will be critical during the 90% design phase or prior to the 90% OPCC and Schedule revision.

Wastewater Off-Haul

Due to the lack of utilities near the site, the sanitary waste generated from the temporary construction trailers will utilize temporary storage tanks near the trailers. These storage tanks will be pumped out and maintained 1-3 times a week depending on the number of personnel in the trailers. During GMP1 when admin personnel is lower, than Sundt will have it pumped out twice a week. However, during peak construction activities, these tanks will need to be pumped out and maintained 3 times a week. It

will be up the Provider to dump the waste responsibly. The same company that Sundt uses for the temporary toilets for craft workforce will be utilized for this application.

Excavation Dewatering Management and Discharge

Sundt does not anticipate a significant amount of ground water during excavation activities. After visiting the two open cut mines that are within a mile radius to the project, the local rock formations do not appear to transmit groundwater. This will be further confirmed once Sundt has the final geotechnical report for project. The bigger concern is rainwater and stormwater runoff with the large excavations the project construction team will have open during the first 18-24 months of the project while excavation, underslab piping, and cast-in-place concrete activities are being performed prior to being able to backfill the structures. This water will be pumped into stormwater ponds (excavated pits) and the water will then be allowed to settle. The settled water will then be pumped offsite to the nearest stormwater sewer line if ponds become full. The full plan will be developed by a certified and registered SWPPP company.

Temporary Power Plan

Sundt has been working with WWSP to determine the best location for the temp gear and routing to the temp gear. Ideally, the temp gear would be located close to the temporary construction trailers and where the crushing operation is taking place. Please see Figure 3 – Temporary Construction Utilities for the proposed location and routing. Once the locations and routing have been finalized, this will be updated and finalized in this document.

Site Lighting

Sundt will utilize diesel powered light plants to provide site lighting, particularly during the winter months when daylight is at a premium. One area that will be lit up 24 hours a day is the security guard shack at the site access gate location. With security being required during off hours as well as on hours, the site entrance will have at a minimum two light plants during hours of operation and one running during off hours. Light plants will also be provided at both parking areas to provide lighting for security and safety reasons. Sundt will also utilize lighting on the jib of the tower cranes. These lights have been used on several Sundt projects and they provide excellent lighting for the crane during picks but also lights up the site very well too. Light plants will also be utilized where work is being put into place and their locations will change daily with the crews. These light plants are the foremans' responsibility to ensure they are setup in the correct, proper locations to support their crews.

Trash Diversion/Dumpster

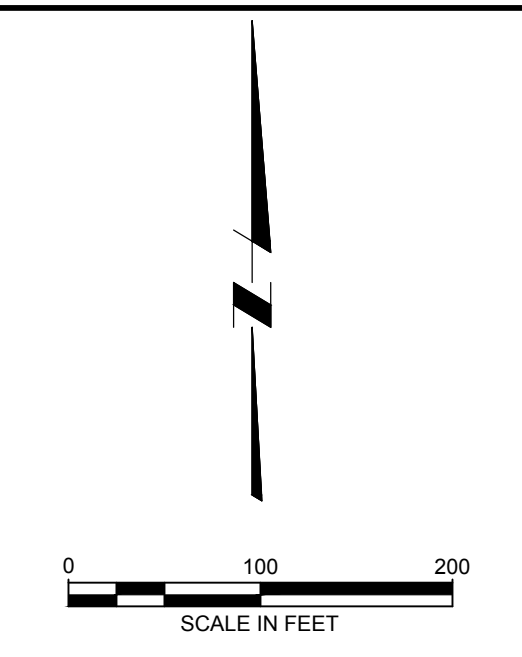
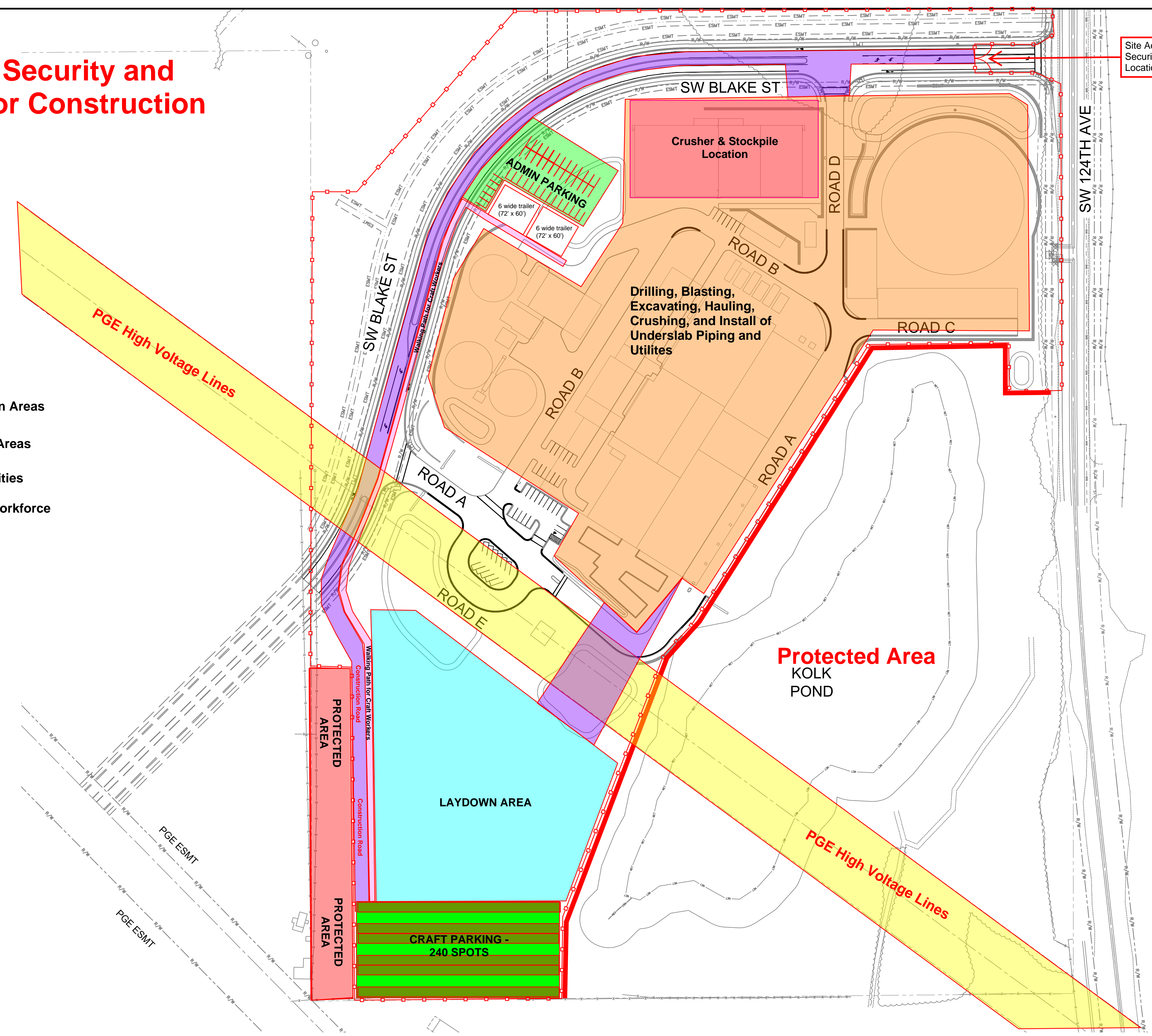
Sundt believes in sustainability practices and procedures, and this includes diverting as much trash as possible to be recycled in lieu of ending up in the local landfill. Sundt will use five dumpster types to divert waste, and these types include concrete, steel, plastic, wood, and general trash. The location of the five 10-ton roll off dumpsters will be located near the trailer complex to allow policing and enforcing of our policies.

Emergency Response and Emergency Action Plan

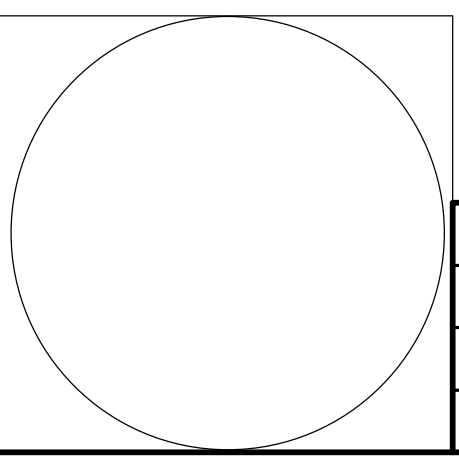
Sundt's Emergency Response and Action Plan is located in subsection 8.35 of our Safety Plan that was submitted during 30% design.

Figure 1a - GMP1 Site Security and Construction Roads for Construction Activities

- LEGEND**
- Temporary Perimeter Fencing
 - Temporary Construction Roads
 - Temporary Construction Lay-Down Areas
 - Temporary Construction Parking Areas
 - Rock Removal Construction Activities
 - Construction Walkway for Craft Workforce
 - Temporary Stockpile for GMP1



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SITE CIVIL
SIGNING AND STRIPING PLAN OVERALL PLAN
AREA A

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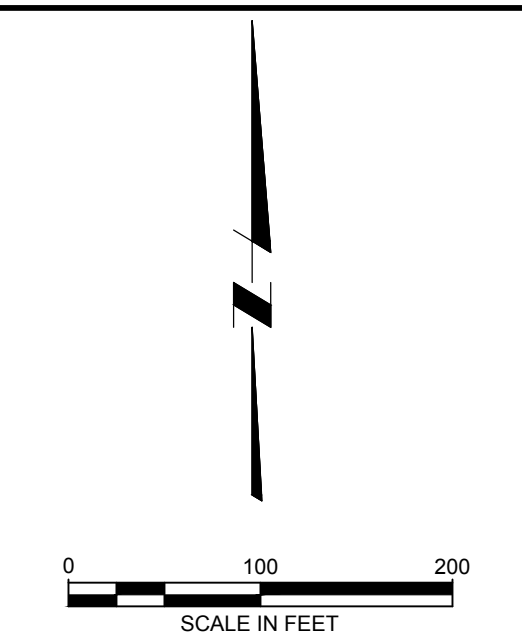
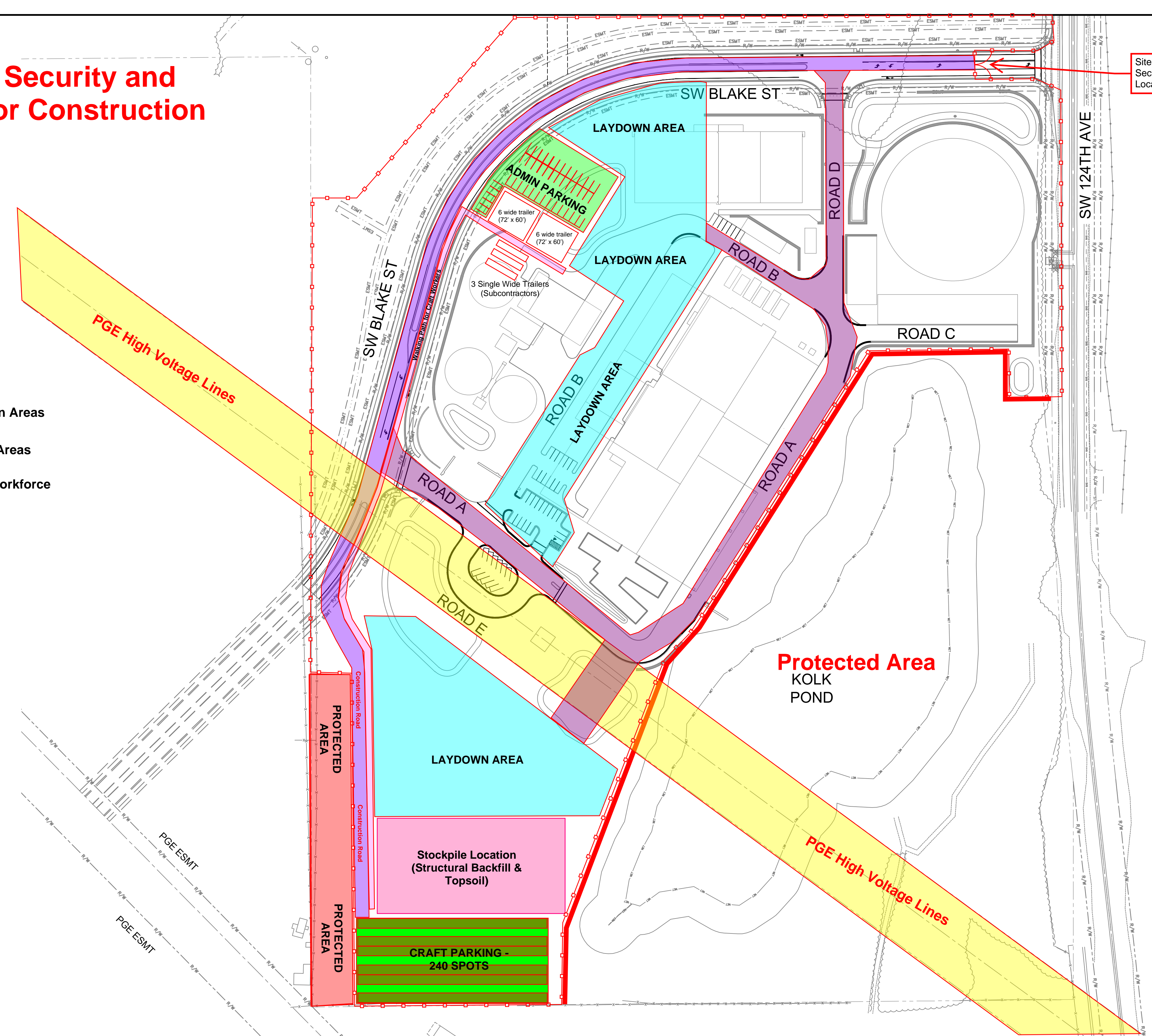
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Figure 1b - GMP2 Site Security and Construction Roads for Construction Activities

- LEGEND**
- Temporary Perimeter Fencing
 - Temporary Construction Roads
 - Temporary Construction Lay-Down Areas
 - Temporary Construction Parking Areas
 - Construction Walkway for Craft Workforce
 - Temporary Stockpile for GMP2



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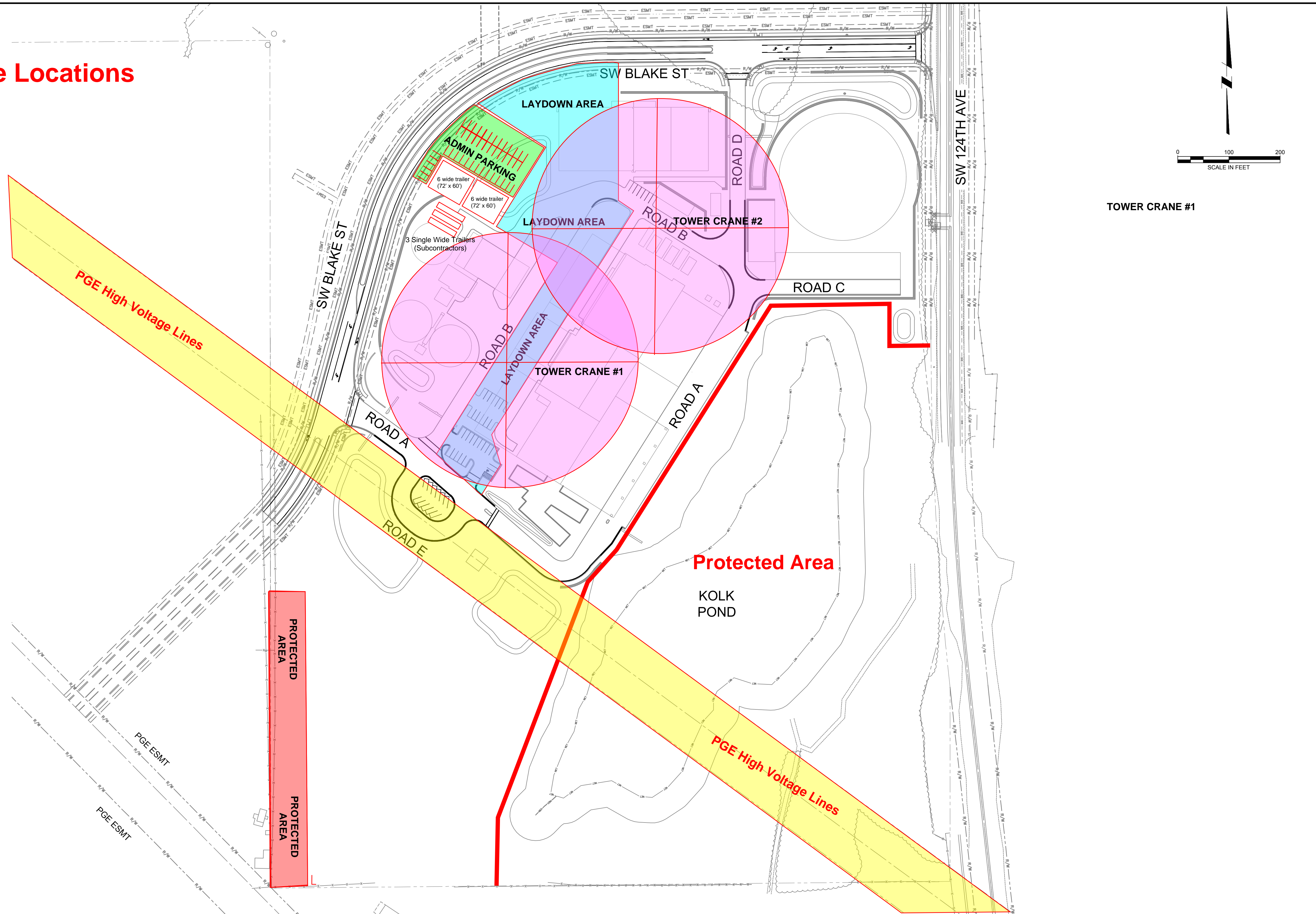
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Figure 2 - Tower Crane Locations



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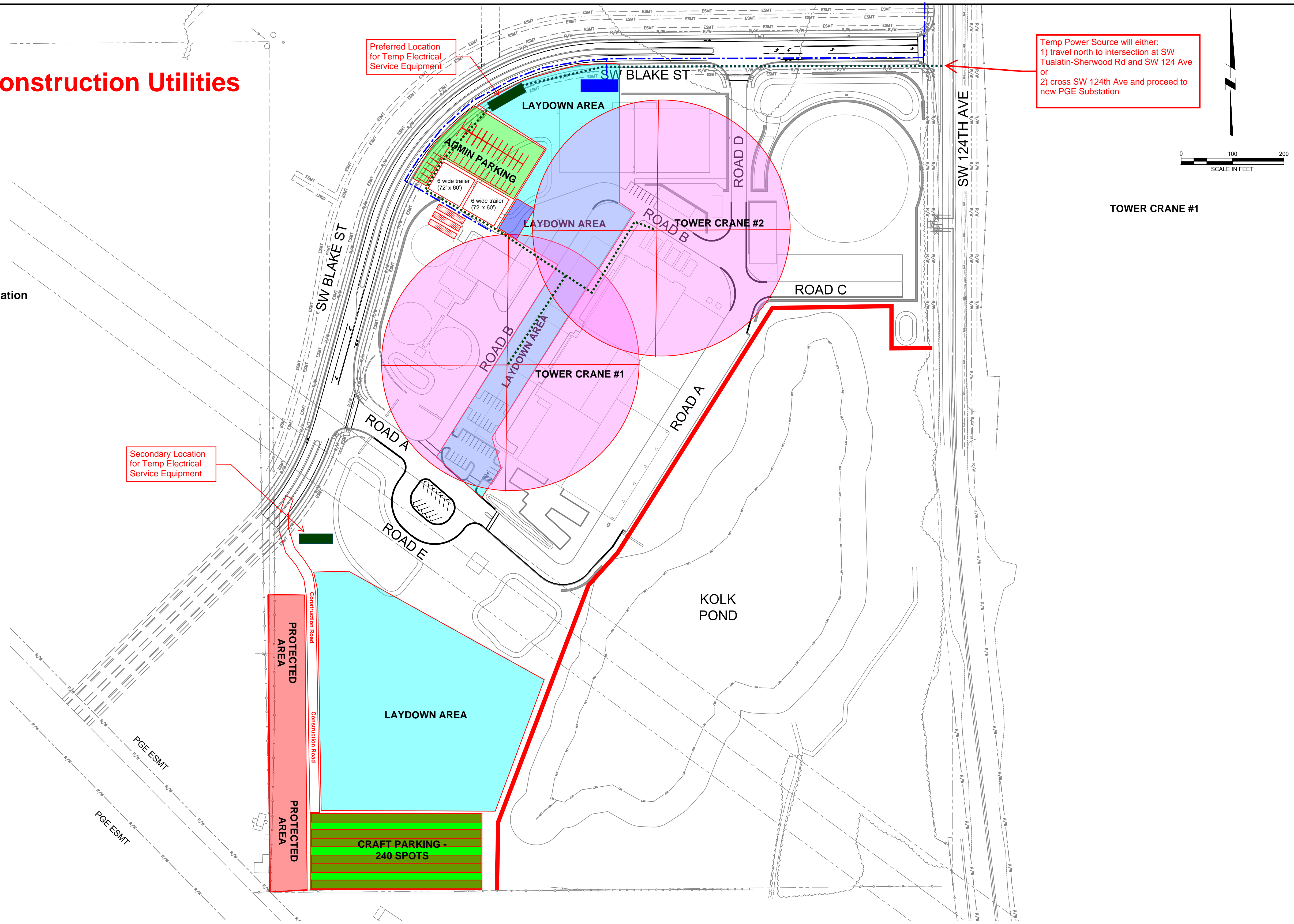
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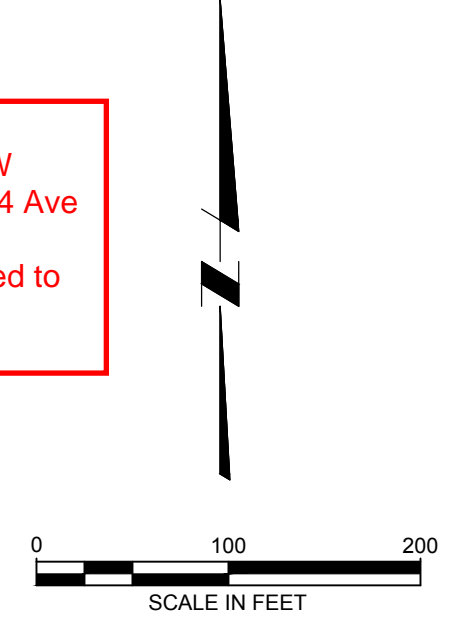
Figure 3 - Temporary Construction Utilities and Routing

LEGEND

- Temporary Electrical Gear
- Temporary Electrical Conduit/Ductbank
- Temporary Construction Klein Tank Location
- Temporary Construction Water
- Location of Diversion Dumpsters



Temp Power Source will either:
 1) travel north to intersection at SW Tualatin-Sherwood Rd and SW 124 Ave
 or
 2) cross SW 124th Ave and proceed to new PGE Substation



TOWER CRANE #1

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