



## **Construction Management Plan**

Robins Nest

3272 Furman Avenue East  
Seattle, WA 98102

# Construction Management Plan

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I. *Construction Communication.*

A. *Intent of the Construction Management Plan (CMP)*

This CMP is intended to anticipate and reduce potential noise and vibration impacts from construction activities, minimizing impacts on neighbors, businesses and downtown traffic. Management practices that will help achieve this goal include:

- Coordinating with neighbors before and during construction regarding noise and vibration
- Coordinating with the Seattle Department of Transportation (SDOT) and the Department of Construction and Inspection (SDCI) on street use.
- Incorporating technological and operational noise control measures to reduce the amount of sound generation:
- Reducing the transmission of construction noise to off-site receivers through sound containment measures,
- Coordinating with Department of Construction and Inspection (SDCI) on street use, parking and traffic routing.

Compliance with the tenants of this CMP is condition of the project approval under SEPA. Implementation of this plan is the responsibility of the Contractor, and its subcontractors, working with the SDCI and the affected community.

B. *Construction Contact and Community Liaison*

1. *General Requirements:*

The contractor will provide a contact name and phone number on a project website to fulfill the role of "Construction Contact and Community Liaison" to the local community. Seattle SDCI Noise Abatement will be contacted once this information has been identified.

The website is: <https://www.saco.build>

Superintendent Contact | Steve Austin 425.941.7272

Project Manager Contact | Jeff Austin 425.233.6140 Office inquiries 425-233-6140

2. *Specific Plan/Procedures:*

The Construction Liaison will:

- a. Act as the initial point of contact for general construction information or for non-emergency concerns related to construction.
- b. Produce and distribute general information as well as progress and schedule related information.
- c. Manage construction phone calls, including logging and responding to calls. Phone calls will be answered by a member of the on-site staff during standard working hours and by an answering service after hours.
- d. Assemble contact names for construction Notification List as well as prepare and distribute construction bulletins for distribution to the Construction Notification List.

## *C. Communicating with the Neighbors*

### *1. Monthly Project Updates:*

The Contractor will prepare monthly update bulletins, beginning at the commencement of construction, and continue throughout the completion of the building. These bulletins will cover general construction updates, notices for street and sidewalk closure, noise and work hour variances, and other construction activities that may affect the surrounding neighborhood.

Bulletins will be distributed to central contacts identified on the Construction Notification List for posting with building and/or distributing within internal distribution networks. The Construction Notification List will include anyone who requests to be added.

This construction notification list will also receive email bulletin updates when significant activities are scheduled.

Management complaints need to be addressed within 24 hours and on a case by case basis. Coordination meetings must be held as needed depending on the nature and implications of the complaint. A representative from SDOT Street Use should be invited to each coordination meeting. Thereafter, the contractor shall promptly implement commercially reasonable modifications to the construction practices to eliminate or mitigate the concerns relayed in the complaints.

### *2. Special Project Updates:*

The Contractor will provide to the Construction Notification List special projects updates to describe abnormal construction activity at least 10 business days in advance of such activity. Notices shall state the nature, timing, and expected duration of the activity. Activities that may be subject to notice include street closures and associated detours, concentrated hauling anticipated to generate higher levels of construction noise, and noise and work hour variances. This notification is in addition to the monthly general construction activity updates.

### *3. 24-Hours Emergency Contact:*

The Contractor will promptly respond to all complaints within a 24-hour time period, which will serve as the primary access point to the Construction Contact. The hot line will be answered by a member of the on-site staff during standard working hours. Typically, a response would come within an hour or less. After business hours, the calls will be responded to the following day.

### *4. Neighborhood Meeting:*

In advance of start of construction, the Construction Contact will contact members of the construction notification list to suggest a face-to-face meeting to preview construction plans. Meetings will be scheduled throughout construction with the construction notification list as needed.

## *II. Construction Hours and Sensitive Receivers*

### *A. Construction Hours*

#### *1. Standard Hours of Construction:*

The majority of construction activities will be limited to standard construction hours between 7:00 AM and 5:00 PM on non-holiday weekdays. Work outside of normal working hours, 7:00 AM – 5:00 PM Monday through Friday, is considered “off-hours work” and requires a minimum of 3-business days advanced notice to the Street Use Inspection Supervisor before the off-hours work commences. Off-hours work may also require a separately approved traffic control plan. Construction workers and deliveries may arrive at the site prior to standard start times; however, noise set-up activity will be prohibited prior to 7:00 AM on weekdays, 9:00 AM on Saturdays. Truck trips should be scheduled to avoid peak periods of 8:00 – 9:00 AM and 4:00-6:00 PM, Monday through Friday. No deliveries to site if prohibited by SDOOT. Deliveries will require a Noise Variance from SDCI Noise Abatement if scheduled prior to 7:00 AM weekdays, 9:00 AM Saturdays, or after 10:00 PM. Work will not occur on Sundays. Any equipment warm-up prior to standard times will be coordinated to not disturb neighbors. Construction truck trips shall cease between the hours of 4:00 – 6:00 PM on weekdays to limit interference with daily PM peak traffic.

#### *2. Equipment Operation:*

Impact types of equipment, such as pavement breakers, pile drivers, jackhammers, sand-blasting tools and other impulse noise equipment are allowed under the following hour of operations:

- 7:00 AM to 5:00 PM weekdays, and 9:00 AM to 5:00 PM weekends and holidays.
- No Sunday work of this type unless there is an emergency.
- Work outside of normal working hours, 7:00 AM – 5:00 PM Monday through Friday, is considered “off-hours work” and requires a minimum of 3-business days advanced notice to the Street Use Inspection Supervisor and/or SDOOT before the off-hours work commences. Off-hours work may also require a separately-approved traffic control plan.

Saturday work should have a smaller number of construction workers on site.

#### *3. Holidays:*

Work is not expected to occur on construction holidays, which are defined as: New Year’s Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, the day after Thanksgiving and Christmas Day. Any listed holiday that falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular workday.

### *B. Construction Noise Requirements*

Except as may otherwise be approved through the variance process in the Noise Ordinance, construction activities shall be conducted in such a manner as to conform to the permissible noise levels in the Noise Ordinance and to the construction noise and vibration management measures approved as part of this plan.

The Contractor shall limit its applications for and use of the noise variances to the greatest extent practical throughout construction.

*C. Known sensitive receivers, activities, and accommodations to minimize noise impacts:*

- See attachment A

*III. Construction Milestones*

Assuming acquisition of the appropriate permits in a timely manner, pre-demolition activities will begin in August, 2016, including shoring as required by the City of Seattle, and related sidewalk closures. Demolition of the existing concrete slab is expected to begin in August of 2016, at which point shoring wall and excavation will begin. First tenant occupancy is expected by November 2017. Please see attachment B for major construction milestones.

*A. Demolition and Excavation*

The majority of demolition activities, pavement removal and any other demolition that requires impact tools will be conducted within the standard construction hours of 7:00 AM and 5:00 PM. (Non-Holiday weekdays).

Weekend work for demolition and street closures will require additional review and permitting. This work may not occur during weekends of local events, such as running races, parades, or festivals occurring on Eastlake Ave E.

In addition, a series of weekends may be scheduled and specially permitted to close the adjacent streets, drive in protection barriers, drop the exterior walk, and clean up any debris that may fall outside of the construction zone. By using weekend street closures, demolition of the existing building will be performed as quickly as possible to minimize the overall duration of disruption to surrounding properties. No Sunday work of any type unless there is an emergency.

Excavation is required to remove soil in preparation for the structural system. Perimeter walls of the excavation will provide natural barriers from excavating equipment noise.

The general noise and vibration control measures outlined in the Construction Noise and Vibration Management section of this plan apply to demolition and excavation efforts. Additional methods specific to these phases of construction include:

1. Off-site recycling. When the rubble from the existing structure is at street level, the demolition contractor will break up the concrete into pieces small enough to be loaded onto trucks and moved off-site for recycling.
2. Restricted use of pneumatic equipment related to demolition. This will be restricted to 8:00 AM to 4:00 PM. Monday through Friday and between 9:00 AM and 5:00 PM on Saturdays.
3. A truck routing plan will be approved by the City of Seattle SDDOT to minimize the truck traffic added to the neighborhood throughout the excavation stage of the project. This approved truck routing plan will be in place for the duration of the excavation and shoring portion of the work. The approved truck routing plan will likely follow the existing trucking requirements of SDDOT which allows trucking within the approved hours of the plan.

## *B. Other Major Construction Phases*

The general noise and vibration control measures outline in the Construction Noise and Vibration Management section of this plan apply to the following major construction phases. Additional methods specific to these phases of construction are included in the descriptions of the work.

### *1. Shoring:*

Shoring is expected to occur in August 2016. Tieback installation may occur between the hours of 8:00 AM to 5:00 PM, Monday through Friday and 9:00 AM to 5:00 PM on Saturday. As the shoring progresses downward with the excavation, tiebacks will be drilled, grouted, and stressed into the earth wall. The equipment required for this process uses compressed air for drilling and will generate more noticeable noise than the excavation equipment or support pile drill rig, but will not cause any noticeable vibration. The work hours for the tieback drilling will be limited to 8:00 AM to 5:00 PM, Monday through Friday and 9:00 AM to 5:00 PM on Saturday.

### *2. Foundation pours and general concrete work:*

Miscellaneous concrete work for footings, slab on grade, shotcrete walls, and post tensioned concrete deck floors will be constructed during October of 2016 through February of 2017. Truck deliveries will be dispatched by radio for just-in-time deliveries.

## *IV. Construction Noise and Vibration Management*

### *A. Noise Control Measures*

The Contractor will use the following techniques to minimize construction noise and vibration.

#### *1. Timing Restrictions:*

- a. Most activities will be limited to standard construction hours, which are 7:00 AM to 5:00 PM on non-holiday weekdays.
- b. Impact types of equipment like pavement breakers and jackhammers and other impulse noise sources will only be used between 9:00 AM and 5:00 PM weekdays and 9:00 AM and 5:00 PM on Saturdays.
- c. Staging of truck routing and early arrival of deliveries will occur intermittently throughout the duration of the construction. These deliveries will be staged within the approved truck routing plan by SDDOT. Queuing of trucks is not allowed.

#### *2. Noise Reduction Construction Technologies:*

Mandatory use of electric welders, electric tower cranes, and electric hydraulic pumps will be required by the Contractor.

#### *3. Process Modifications:*

- a. Loud talking or other miscellaneous noisy activities are prohibited before 7:00 AM and after 5:00 PM on weekdays and before 9:00 MA and after 5:00 pm on Saturdays.
- b. Concrete truck staging will be done at the plant. Deliveries will be scheduled for proper spacing to continue the flow and ensure continuity with the pour. No queuing of trucks will be allowed on City Streets. Trucking routes will be coordinated with SDDOT.

- c. Pre-fabrication of construction assemblies at off-site locations will minimize on-site manpower and noisy activity.
  - d. Similarly, pre-fabrication of reinforcing steel for some areas of the foundation.
  - e. A compliance statement for this Construction Management Plan will be included in all subcontracts for this project.
4. *Noise Barriers near On-Site Sources:*
- a. Use of portable sound barriers around generators, compressors, and other noise – production machinery.
  - b. Temporary barriers such as those described in (a) above will be constructed with materials equal to the double thickness of three-quarter inch plywood, and will be solid from the ground to a minimum height of eight feet on all side oriented towards a sensitive receiver. Neighbors will have notified 10 business days in advance of work requiring a noise variances and street closures beyond those described elsewhere in this plan.

The contractor will make every effort to manage the work to avoid noise variances, and any street closures beyond those described in other sections of this plan. However, as is typical for urban construction project projects, there will be times when such variances and additional street closures will be required. Neighbors will be notified at least 72 hours in advance of any work requiring a noise variance and street closures beyond those described elsewhere in this plan.

Contractor Responsibility Clause:

The General Contractor is responsible for behavior of all sub-contractors and vendors for this project. If any of the sub-contractors or vendors violates the City of Seattle noise ordinance, the General Contractor will be issued the violation document.

V. *Construction Parking and Material/Equipment Staging*

A. *Worker Parking*

Construction workers will be discouraged from parking in the residential neighborhood of the project site. There is a pay parking lot in the immediate vicinity that the owners have access to 19 stalls, the use of which will be encouraged with all workers. Construction generally is complete by 4:00 PM weekdays, making the parking available for residents and general public during the busy evening hours in the neighborhood. Use of transit and carpooling is encouraged with all workers. See attachment C for map of pay parking.

B. *Material/Equipment Staging*

As a condition of MUP approval, the owner and/or responsible party shall assure that construction vehicles and equipment are parked on the subject site or on a dedicated site within 800 feet for the term of the construction. Most staging will be accommodated on-site or immediately adjacent to the site in the permitted Right of Way.

### 3272 Fuhrman Ave East

#### VI. *Construction Traffic Control Plan and Site Setup*

A. Pedestrian mobility: Identify where pedestrian mobility is being maintained for each phase of construction per the requirements outlined in the SDDT 1-2011 Pedestrian Mobility in and around Work Zones Director's Rule. Include the following on a schematic: Sidewalk closures and pedestrian mobility per frontage for working hours. Sidewalk closures and pedestrian mobility per frontage for non-working hours. Transit stop closures and/or relocation locations. Street closures: Identify parking and travel lane closures for each phase of construction. Include the following on a schematic and include estimated hours (24/7, peak, or off-peak hours, etc.): Parking lane closures. Bike lane closures (re-routes and/or detour locations). Travel lane closures.

B. One option may be incorporated into the haul route plans per below.

- Option 1

- Ingress route to load site

- Exit 520 West and take Roanoke Exit
- Head straight through light onto Harvard Ave E
- Turn right onto Franklin and left onto Fuhrman Ave E to load site

- Egress route to freeway

- From load site head North on Eastlake Ave E
- Exit onto I5 North or South depending on dump site
- See attachment D for map

- Note: Any deviation from the haul routes shall obtain prior approval from SDDT
- Anticipated Earthwork Contractor to be Ponderosa Pacific – Tim Albers 360.793.2160
- See Page 3 (B.1) for site super and PM information

- ❖ Flaggers will be used to facilitate traffic and pedestrian flow
- ❖ Sidewalk, curb crossing and any other SDDT/DOD permits will be obtained prior to construction start
- ❖ Site will use solo trucks and/or truck and trailer for export of approximately 3000 cy and import of 400 cy. Any oversized loads shall obtain separate approval for each movement.
- ❖ Trucks will be coordinated to achieve just-in-time arrival to avoid unnecessary staging. Site is set up for 2 trucks running 30 minutes apart from each other.
- ❖ Drivers will sweep/brush off trucks after loading
- ❖ Loading will occur in staged areas with use of sidewalk and private property with hard surfaces to avoid tracking of materials onto City streets.
- ❖ Work Trucks from Fuhrman. Although construction work may be done from Portage Bay Place East, vehicles utilizing Portage Bay Place East for construction purpose will be limited to only those necessary for construction, and vehicles will be moved as soon as possible during the construction process.

## Site Setup

The site will procure the services of mobile craning on a limited basis. Tower cranes are currently not incorporated into the construction of this site. Best practices will be used to load the structure and minimize the traffic flows for deliveries. At no time will queuing or staging be allowed at or near the vicinity of the site, including I5. Site deliveries and mobile crane use will follow haul routes listed above.