

QUESTIONS AND ANSWERS NO. 7

ISSUED ON FEBRUARY 19, 2019

Q1	I received couple more questions from one of our electrical subs
	1. He is looking for the physical location of Unit Heater No. 1 (UH-1), see attached Electrical Dwg.
A1	See A28 on QA#5
Q2	Also the equipment list shows the water heater as being provided by Electrical. Is this so?
A2	The water heater is specified under division 15 so it probably makes sense for this to be supplied by the mechanical trade. However, Coordination of supply is the responsibility of the Contractor, do not rely on the working equipment list that was provided during tender.
Q3	1. The environmental report recommends groundwater from dewatering to be discharged to the sanitary sewer.
	a. What is the expected dewatering flow?
	b. Will the City of Vancouver cover all fees related to disposal of contaminated groundwater and soil (the contractor just needs to cover trucking of soil to the Vancouver landfill and groundwater pumping to a sanitary manhole)
А3	a) Dewatering flow during excavation is unknown. The top ~4 m of excavation are in relatively porous material and expected to have a significant groundwater flow while the lower portion of excavation will be in relatively impermeable dense sand/sandstone but may include some areas of perched water. As shotcrete progresses the groundwater seepage will be eliminated.
	b) The City of Vancouver will cover fees related to disposal of soil and groundwater. The contractor will be responsible for the costs for hauling soil and conveying ground water. The Contractor will provide a unit rate for trucking of soil to the Vancouver landfill and a unit rate for groundwater pumping.
Q4	Q&A5 Q/A 23 Indicates Contractor will Have to Apply for A Waste Discharge Permit. Please confirm who will be responsible for the Costs associated with the



	permit - Owner or Contractor.
A4	The contractor will be responsible for the preparation, submittal, and application fee for the Waste Discharge Permit.
Q5	As per City of Vancouver Soil Removal and Deposit Regulation - Bylaw No. 3786, 1992 Permits Not Required 3 (a) Work on Public Lands - Please confirm Soil Removal Permit is not required by Contractor for this Project. If Soil Removal Permit is Required who will be responsible for Application and All costs associated with permit application / documentation / drawings.
A 5	Contractor is responsible for determining if a Soil Removal Permit is required. If required, the contractor is responsible for the preparation, submittal, and application fee for the permit.
Q6	As there are 3 trees that have to be removed for this project - can the Owner confirm if a Tree Removal Permit has been acquired for this project. If No, who is responsible for the Tree Removal Application and Permit Fees.
A6	The City of Vancouver will remove the trees and perform duties related to the tree removal permits.
Q7	5. Section Section 01561 Sub Section 1.6.2 Indicates the removal of any excavated soils from the Project Site requires a Government of Canada Movement Certificate. Can the Owner clarify:
	a. what requirements are expected from the Contractor with regards to a Movement Certificate Application,
	b. who is responsible for Movement Certificate Application Costs - owner or contractor and
	c. how much time allowance is anticipated for issuance of the Movement Certificate
A7	 Contractor will provide full name, phone number, email address of a designated person who will be in care and control of the movement of the regulated material
	b. The City will be responsible for the application cost
	c. The City will ensure the issuance of the Movement Certificate
Q8	Can the Owner confirm if they have obtained all the necessary British Columbia Ministry of Environment Clearance and / or permits to allow for removal of excavated soils from the project site.
A8	As per Section 02315, the Contractor shall engage an environmental consultant to oversee handling, transport and disposal of the contaminated soil along with

	the required notifications, in compliance with the BC Ministry of Environment (MoE).
Q9	Can the Owner confirm if they have obtained all the necessary Archaeological Clearance and / or permits to allow for removal of excavated soils from the project site?
A9	Yes. All required permits are in process.
Q10	Can the Owner confirm status of BC Hydro Temporary Service Application - in lieu of the extremely tight schedule timelines will the Owner submit temporary power application in advance to BC Hydro.
A10	There are provisions in the contract for utilizing generators to provide power in the event that there is any delays in getting the temporary Hydro servicing .
Q11	A5-Q&A-2: You mentioned that the Contractor to use the area of China Creek North Park between Great Northern Way and 7th Avenue west of the softball diamond dugout fence and space for temporary jogging track.
	Do you mean the attached noted area?
A11	No. Sorry, that was an error. The answer should have read "area of China Creek North Park between Great Northern Way and 7th Avenue <u>east</u> of the softball diamond dugout fence and space for temporary jogging track.
Q12	The Geotechnical design of the shoring system indicates the beraing capacity of the shoring system is 500kpa. Is this just for the basis of design? Can the bearing capacity for temporary loading during construction be increased to permit excavation and shoring equipment to work within the zone of influence on the shoring system? Or are temporary works required to temporarily increase the bearing capacity of the shoring system to permit construction loading adjacent to the shoring and excavation?
A12	The bearing resistance of 500 kPa is representative of the very dense soil or sandstone expected to be encountered in the lower portion of the excavation. It is not representative of the upper portion of the planned excavation where loose fill is present, nor of the ground surface that surrounds the shored excavation.
	If question Q12 pertains to crane outrigger loads, then we would need to review the planned outrigger dimensions, setback, and loading prior to approving crane mobilization. That being said, crane loads can usually be accommodated proximate to the shoring.
Q13	With the sequential method prescribed to conduct the various tie ins and with the majority of the pipe work for the sanitary system installed during tie ins, can you please confirm pressure testing/CCTV/mandrilling of the various sanitary sewer

	and forcemain will not be required?
A13	Pressure testing is required as per the specifications.
	Note that the suggested bypass installation method presented in the bypass memo is not prescribed but merely presents one option and was developed to limit the construction of new infrastructure. It is the responsibility of the Contractor to submit a bypass plan detailing how the bypass will be constructed and to propose any additional temporary infrastructure that may be required as part of the bypass works.
Q14	The specifications call for ½ hour response time for the bypass system. With the location of the work and logistical practicality of ½ hr response time, it effectively would be required to have fulltime electrician and pump technician onsite to comply with this. To provide fulltime electrician and pump technician would add excessive costs to the project and to the City. Accordingly, can the response time be revised to a more practical onsite response time?
A14	The Contractor is responsible for being available for 24/7 to respond to issues. It is expected that the contractor attend the site within 2 hours. The system should be set up to spill into the Storm Sewer before any overland spills or backups occur.
Q15	The sanitary Bypass Plan Part 2 "recommends discharging the dewatering flow into the sanitary system." Will a waste water discharge permit be provided?
A15	The contractor will be responsible for the preparation, submittal, and application fee for the Waste Discharge Permit.
Q16	Drawing G-1 4.7 lists boiled absorption, volume of permeable voids and toughness testing is required for each day of Shotcrete testing. The requirements for these tests are not listed in Specification Section 03713 - Shotcrete. Please confirm whether this testing is required? and if so to the acceptance criteria?
A16	Boiled Absorption to not exceed 9%.
	Volume of Permeable of Air Voids to not exceed 18%.
	Toughness testing not required.
Q17	The Notes on Drawing G-3 and G-4 state that "active dewatering to be maintained until concrete work to elev 6.40m is complete." What is intended by the term active dewatering? Is the system required to be in place till all structural concrete is completed?
A17	The WSP geotechnical report provides commentary on soil conditions and groundwater. However, the Contractor shall determine means and methods needed for dewatering.