

VandenBerghe, Alissa (Consultant)

From: Page, Heather (Consultant)
Sent: Wednesday, February 11, 2009 12:12 PM
To: Gavin Patterson; 'joy.kenistonlongrie@seattle.gov'; 'pat.lee@seattle.gov'; 'John Baggs'; Preedy, Matt; Greco, Theresa; Amiri, Ali; Anderson, Mark - UCO; 'Rick.Schaefer@ghd.us.com'
Cc: Johnson, Mike ; Kling, Joyce; 'sandra.gurkewitz@seattle.gov'; 'Kathy Laughlin'; Visconty, Sasha (Consultant); Schutt, Jeff (Consultant); Smith, Matthew (Consultant); Mandadi, Asvin (Consultant); Stagner, Karen (Consultant); Hein, Rachele (Consultant)
Subject: Feb. 9 Meeting Notes: Gravity System and Cathodic Protection
Importance: High

Thanks to all for attending the meeting on Monday, February 9, to discuss gravity systems and cathodic protection. Attendees are in the "To" line of this email. This email provides a meeting summary and agreements made for moving forward. Please provide any clarifications where necessary.

Gravity System

Gavin discussed SPU's concern regarding the potential for conflicts between utilities installed in Holgate to King Stage 1 and utilities installed in subsequent stages. The current designs anticipate a gravity flow system, which complies with SPU desires.

The following major points were raised:

1. For Stage 2 and Central Waterfront, SPU wants a commitment that the utilities would function as a gravity system. Matt stated that a gravity system would be installed where feasible, but WSDOT cannot commit to ensuring a gravity system given the unknowns with the bored tunnel option. The design of the bored tunnel may preclude gravity systems. *SPU agreed with WSDOT's approach to install a gravity system where feasible in subsequent stages of the Holgate to King Project.* There was no discussion about the measure of when a gravity system is "achievable" or "feasible."
2. In addition, SPU wants WSDOT to commit to modifying or relocating utilities built through the Stage 1 contract as necessary to accommodate gravity systems where a gravity system design is possible. *WSDOT agreed that the primary goal of the future design(s) is to maintain gravity systems designed in Stage 1. However, potential design changes while Stage 1 is in construction would need to be a mutually agreeable solution and WSDOT cannot commit to modifying or relocating utilities in all instances of utility conflicts. The entire system and cost would need to be taken into account.*
3. SPU wants a commitment from WSDOT that the State would accept full responsibility for any additional costs incurred as a result of conflicts. If conflicts are created that necessitate installing a pumped system against SPU wishes, WSDOT would either own and operate the system, or would reimburse SPU the additional operations and maintenance costs. Matt and Theresa stated that they do not have the authority to agree to operation and maintenance costs. Executive management is discussing operations and maintenance costs as part of the bored tunnel evaluation. *Therefore, WSDOT would like to ensure this language is removed from any permit or agreement.*

SDOT, SPU, and WSDOT agreed that gravity system commitment(s) are not within the realm of the Street Use Permit and would therefore be removed from the permit. Except for operations and maintenance, gravity system commitment(s) would be further defined as necessary within the SPU agreement.

Cathodic Protection

The current design of the Stage 1 watermains provides a life expectancy of 50 years. The design policy for SPU watermains is 100-plus years, not 50 years. As such, SPU has adopted commensurate expectations for corrosion protection.

After further discussion among WSDOT project staff and SPU, SPU and WSDOT agreed to the following:

1. SPU will provide written documentation of their policy and examples of how SPU is implementing this policy on other portions of their water system either through private development contracts or on their own capital projects.
2. Rick will provide written concurrence by today (Wednesday) that the conditions in the soil warrant cathodic protection for the 100 year life expectancy standard.
3. If #1 and #2 demonstrate that cathodic protection would be standard practice, WSDOT will provide directive to Rick to modify the design to meet the 100 year standard. This change would not constitute a betterment.
4. By Monday (February 16) Rick will determine appropriate spacing of anodes within each area along the alignment based on soil conditions. This may require anode spacing of 18 feet, 36 feet, or greater depending on the conditions. In addition, the pipe will be installed in noncorrosive backfill, which is already standard practice.
5. If WSDOT demonstrates that the watermain design will meet the 100-year design life policy, then SDOT will take the cathodic protection condition out of the Street Use Permit.

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