



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

4601 N Monroe Street • Spokane, Washington 99205-1295 • (509)329-3400

Feb 12, 2018

Ms. Cindy Kinzer, P.E.  
Senior Design Engineer  
City of Spokane  
808 W Spokane Falls Blvd  
Spokane, WA 99201

**Re: Subsurface Work at the Hamilton Street Bridge Site in Conjunction with the Phase 2B Martin Luther King Jr. Drive and Ben Burr Trail Construction**

Dear Ms. Kinzer:

On January 18, 2018 representatives from the City of Spokane met with representatives from the Washington Department of Ecology (Ecology) Toxics Cleanup Program and Landau Associates, to discuss proposed work associated with the City of Spokane's Phase 2B Martin Luther King (MLK) Jr. Drive and Ben Burr Trail construction. Work associated with the MLK Jr. Drive Phase 2B and the Ben Burr trail will take place partially on the Hamilton Street Bridge Site, Cleanup Site ID No. 3509 (Site), located at 111 North Erie Street on the southern bank of the Spokane River in Spokane, Washington.

The Site soils are impacted with semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), and inorganic compounds. In 2005 a remedial action was implemented at the Site, which consisted of the placement of a soil cap over the exposed contaminated soils, and directing storm water away from known areas of contamination. In addition, the river embankment was stabilized so that erosion or flooding does not cut back into contaminated soil.

Discussions at the January 18, 2018 meeting focused on the existing remedy currently in place, and the suitability of the proposed work with regard to the existing remedy.

The purpose of this letter is to concur with the City of Spokane's proposal as discussed during the January 18, 2018 meeting and as it relates to the existing remedy and covenant at the Site. As proposed, Ecology is of the opinion that the work associated with the Extension Phase 2B will maintain the integrity of the soil cap, will ensure storm water will not collect in known areas of contamination, adversely affect the access and utility of current on-Site groundwater monitoring wells, and is in general agreement with the environmental covenant for the Site.

1. Ecology's concurrence of the MLK stormwater plans and the Ben Burr trail alignment is based upon the preliminary drawings of the Phase 2B that are showing the MLK Jr. Drive stormwater conveyance structures and the planned alignment of the Ben Burr trail. The drawings are dated January, 2018, sealed by Cindy Kinzer, P.E. and enclosed with this letter.



2. The storm basin delineations, stormwater facility location, type and sizes and the Ben Burr trail alignment were identified in these preliminary drawings. It is also Ecology's understanding that no subsurface work is associated with the construction of the Ben Burr trail. Hence, if any Phase 2B subsurface work or the Riverside trail alignment deviate from the attached drawings within the Site footprint, as well as any other groundwater monitoring wells are to be modified, the City will inform Ecology of any changes or deviations within one week. Additionally, the City will notify Ecology of any planned modifications of other groundwater monitoring wells, beyond those wells identified in the attached drawings, before any well modifications are performed.
3. The Plans and project specifications address worker safety and handling of material excavated from the "contamination zones" within the Hamilton Street Bridge site. The Contractor is required to provide a Health and Safety Plan (HASP) to address worker and public safety. The HASP will be forwarded to Ecology prior to the start of construction.
4. The existing contaminated soils are encapsulated with 2 feet of fill. Any excavation that reaches the contaminated fill zones will receive special care and handling. All excavated soils must be handled and disposed of in accordance with all applicable Federal, State and local regulations governing disposal of hazardous and non-hazardous wastes. It is not anticipated that groundwater should be encountered during the Phase 2B construction work. Note however, should groundwater be encountered within the contaminated soil zones during Phase 2B work, the groundwater will require special care and handling. Contaminated groundwater must be handled in accordance with all applicable Federal, State and local regulations governing disposal of hazardous and non-hazardous wastes.
5. If contaminated soils and groundwater are encountered outside the Site footprint as shown in the attached drawing, the City must contact Ecology within a maximum of 90 days from discovery. However, to expedite the construction of Phase 2B as smoothly as possible, Ecology recommends that any discovery of contaminated soils and groundwater outside the Site footprint be reported to Ecology as soon as possible.
6. All excavations requiring backfilling with imported fill within the Site will be over-excavated and backfilled with clean fill material consisting of a naturally-occurring or crushed sand and gravel mixture meeting the general requirements for "ballast," as defined in the WSDOT Standard Specifications [Section 9-03.9(1)].
7. The City must provide Ecology with a report summarizing all materials disposed of from the Site with field observations, chemical analysis, final disposition of the waste, and waste manifests from excavations performed within the Site footprint as shown in the attached MLK Drive Phase 2B storm conveyance system drawings. The report shall also include a description and certification of any fill material brought into the site showing the origin and that the fill conform to the requirements set forth in item No. 7 above.
8. A stormwater pollution prevention plan should be in place for this project. Erosion and sediment control devices and BMP's must be in place to address excavation/re-encapsulation activities within any contaminated soil zones that may be affected by the planned construction work during Phase 2B.
9. The City will forward Ecology a set of final construction plans (pdf) when they become available.
10. The City will send Ecology an invite to the pre-construction meeting and notify the Dept. when construction is scheduled to start.

Ms. Cindy Kinzer, P.E.

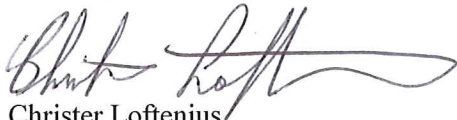
February 14, 2018

Page 3

11. The project specifications provide the Contractor with Landau's contact number to coordinate well monitoring schedules.
12. Five of the monitoring wells need to be adjusted with this project. The standard monitoring well detail sheets and covers must be a part of the Contract bid documents. A copy of the specifications and details were presented at the meeting and found acceptable. Modifications to the groundwater monitoring wells must be performed by a State of Washington licensed well drilling contractor. The affected wells are identified in the attached Site drawing.
13. The top of casing of the new well head will be surveyed to specifications set forth by Landau Associates, please contact Landau prior to the surveying work is performed.
14. All groundwater monitoring well locations must be accessible to van- or pickup-sized vehicles upon completion of the construction project.
15. Site access must be controlled upon completion of the Phase 2B construction project, to prevent unauthorized vehicular access to the Site or illegal dumping of materials.

If you have any questions, please contact me at (509) 329-3543 or via email at [clof461@ecy.wa.gov](mailto:clof461@ecy.wa.gov).

Sincerely,

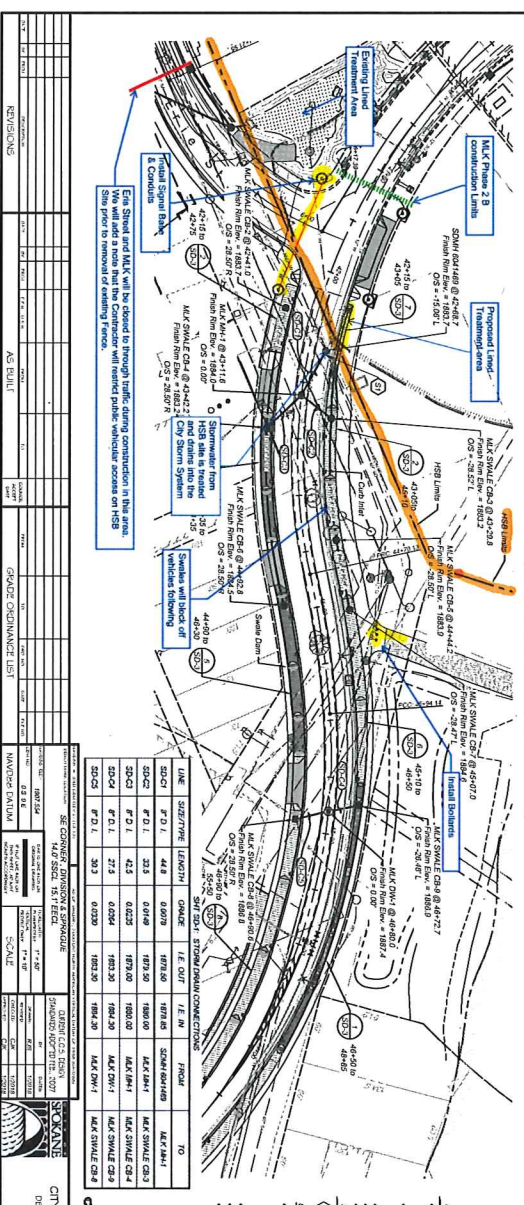
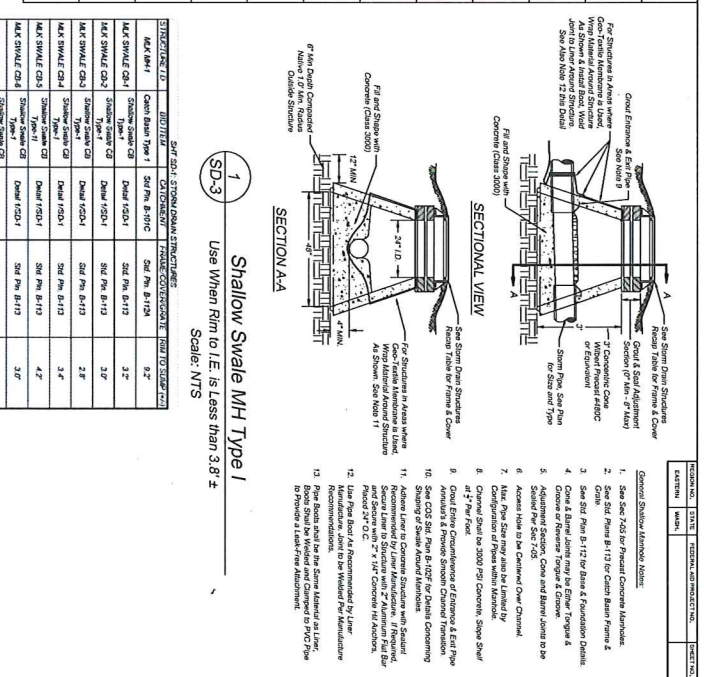
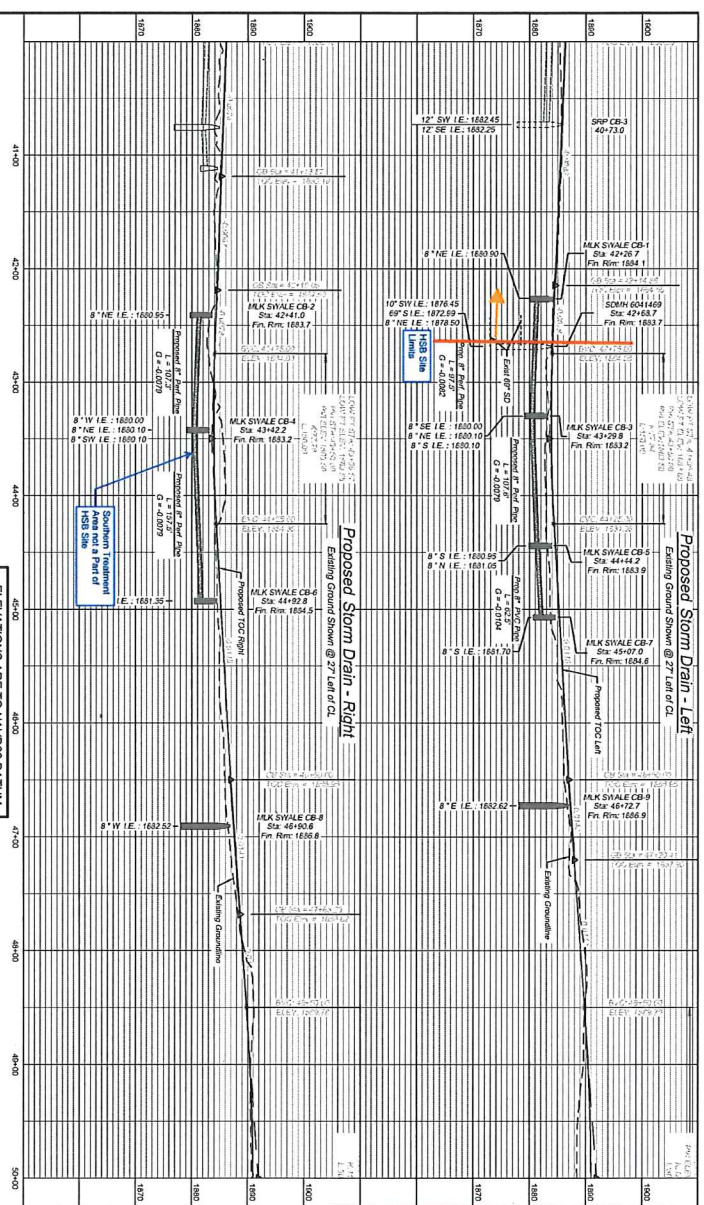


Christer Loftenius  
Project Hydrogeologist, L.G. L.H.G.  
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4601 N. Monroe St.  
Spokane, WA 99205-1295  
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Direct: (509) 329-3543  
Cell: (509) 385-8380  
e-mail: [clof461@ecy.wa.gov](mailto:clof461@ecy.wa.gov)

CL/cka

Attachments: Phase 2B MLK Jr. Drive, preliminary stormwater conveyance system and Ben Burr trail alignment, dated Jan 2018

cc: Bryce Robbert, Avista Corporation  
Ryan Reich, Landau Associates  
Dept. of Ecology project file



LINE	SIZE/TYPE	LENGTH	GRADE	I.E. OUT	I.E. IN	FROM	TO
SD-1	48" RCP	44.8	0.073	1873.50	1873.81	SD-1	SD-1
SD-2	48" RCP	31.5	0.025	1873.50	1880.00	SD-1	SD-2
SD-3	48" RCP	42.5	0.025	1873.50	1880.00	SD-2	SD-3
SD-4	48" RCP	27.5	0.025	1883.25	1883.25	SD-3	SD-4
SD-5	48" RCP	30.3	0.020	1883.25	1884.25	SD-4	SD-5

**GENERAL NOTES:**

- Refer to the General Notes for the Storm Drain Construction.
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REVISIONS: [Table with columns for No., Description, Date, and By/Check]  
 AS BUILT  
 GRADE CHANGE LIST  
 NAVD83 DATUM  
 SCALE: 1" = 40'  
 SHEET NO. 2015078  
 DATE: 1/25/13

**SOAKAWAY**  
 CITY OF SPOKANE, WASHINGTON  
 DEPARTMENT OF ENGINEERING SERVICES  
 900 N. MILWAUKEE AVENUE, SUITE 200  
 SPOKANE, IDAHO 83402-3230  
 PROJECT NAME: RIVERSIDE EXTENSION - PHASE 2B  
 CLIENT: MARTIN LUTHER KING JR. WAY  
 EWS ST to STA 49+00  
 EMP STREET TO TRAIL AVENUE  
 CALL BEFORE YOU DIG: 1-800-424-5555

**PROHIBITED FOR CONSTRUCTION**  
 NOT FOR CONSTRUCTION  
 SD-1  
 1 of 11

**SECTIONAL VIEW**  
 Section A-A  
 Section B-B  
 Section C-C  
 Section D-D  
 Section E-E  
 Section F-F  
 Section G-G  
 Section H-H  
 Section I-I  
 Section J-J  
 Section K-K  
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 Section V-V  
 Section W-W  
 Section X-X  
 Section Y-Y  
 Section Z-Z

**SHALLOW SWALE MH TYPE 1**  
 Use When Rim to E.I. is Less than 3.8'  
 Scale: NTS

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	PRICE	TOTAL
1	SHALLOW SWALE MH TYPE 1	1	EA	250.00	250.00
2	CONCRETE CURB	1	EA	100.00	100.00
3	CONCRETE SIDEWALK	1	EA	150.00	150.00
4	CONCRETE DRIVEWAY	1	EA	200.00	200.00
5	CONCRETE DRIVEWAY	1	EA	200.00	200.00
6	CONCRETE DRIVEWAY	1	EA	200.00	200.00
7	CONCRETE DRIVEWAY	1	EA	200.00	200.00
8	CONCRETE DRIVEWAY	1	EA	200.00	200.00
9	CONCRETE DRIVEWAY	1	EA	200.00	200.00
10	CONCRETE DRIVEWAY	1	EA	200.00	200.00
11	CONCRETE DRIVEWAY	1	EA	200.00	200.00
12	CONCRETE DRIVEWAY	1	EA	200.00	200.00
13	CONCRETE DRIVEWAY	1	EA	200.00	200.00
14	CONCRETE DRIVEWAY	1	EA	200.00	200.00
15	CONCRETE DRIVEWAY	1	EA	200.00	200.00
16	CONCRETE DRIVEWAY	1	EA	200.00	200.00
17	CONCRETE DRIVEWAY	1	EA	200.00	200.00
18	CONCRETE DRIVEWAY	1	EA	200.00	200.00
19	CONCRETE DRIVEWAY	1	EA	200.00	200.00
20	CONCRETE DRIVEWAY	1	EA	200.00	200.00

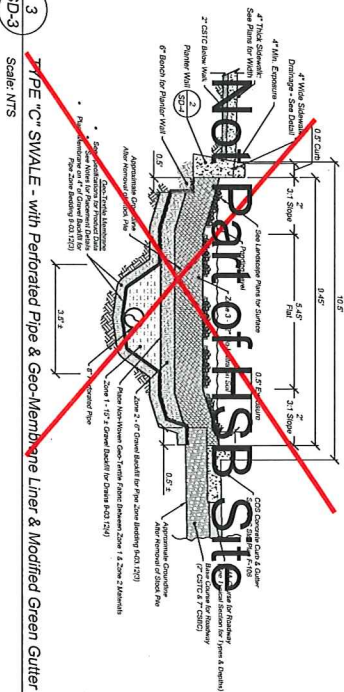
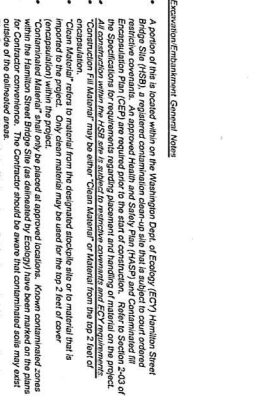
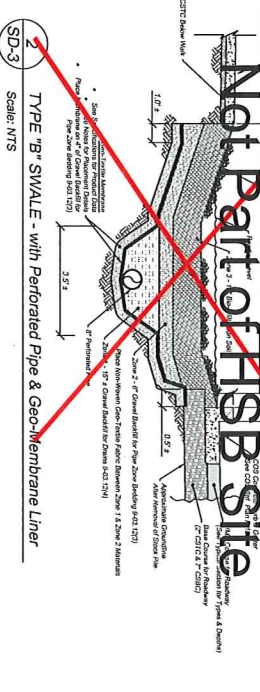
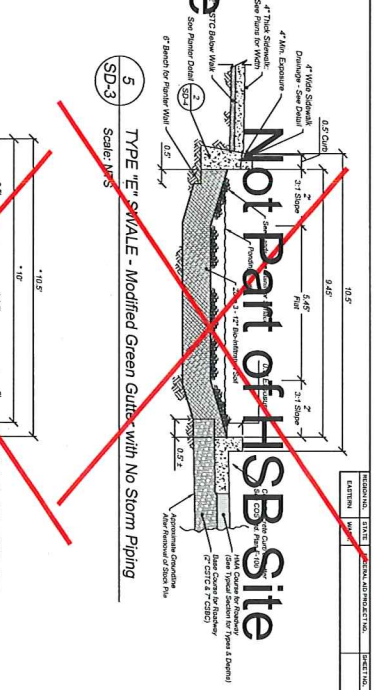
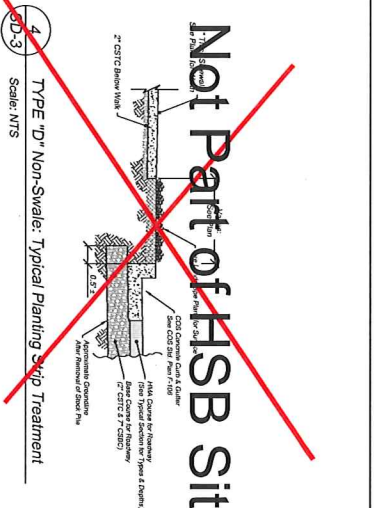
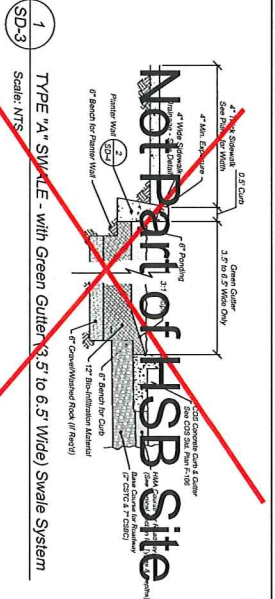
**GENERAL NOTES:**  
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**SECTIONAL VIEW**  
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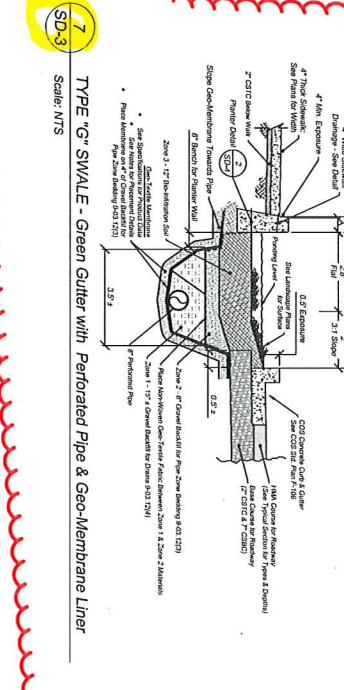
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**Restoration/Reconstruction General Notes**

- A portion of this is located within the Washington Dept. of Ecology (EDU) Hamilton Street Bridge Site (HSB) a registered contamination clean-up site that is subject to court ordered Remedial Action (RA) (RSR) as required prior to the start of construction. Refer to Section 2.0-3 of the Specifications for requirements regarding placement and handling of material on this project.
- Construction materials and methods may be either "Clean Material" or "Material from the top 2 feet of cover" (material) within the project.
- The Contractor shall be notified from the designated fields as to whether this is "material from the top 2 feet of cover" or "Clean Material" for use in the project.
- Clean material may be used for the top 2 feet of cover (excavation) within the project.
- The Contractor shall place all proposed locations. Approximate zones within the Hamilton Street Bridge Site (as delineated by Ecology) have been marked on the plans for Contractor's convenience. The Contractor should be aware that contaminated soils may exist outside of the designated zones shown on the plans. Should the material be excavated as "Material from the top 2 feet of cover", the Contractor shall be responsible for determining the material's suitability for use in the project. Contaminated soils shall not be allowed to remain exposed overnight or during wind and rain.
- Clean material may be placed on NSF property. Fill material placed on NSF property shall be placed in accordance with NSF specifications and shall meet the requirements of Section 2.0-3 of the specifications.
- The Contractor shall conduct stormwater runoff and erosion control measures in accordance with the Hamilton Street Bridge Site Remedial Action Plan (RAP) and the NSF specifications. A minimum of 10% erosion control measures shall be installed within 15 days of the start of construction.
- The Contractor is required to notify BNSF Remediation, 496' Clark at 509.248.2025 a minimum of 48 hours prior to the start of construction.
- The Contractor shall adhere to all project specifications for additional details.
- The Contractor shall adhere to all project specifications for additional details.
- Monitoring plans is required prior to the start of embankment construction.



**Backfill/Stone Bed Construction Notes**

- Stone and Sharp Construction West of Station 43+00 will occur within the Contaminated Soil zone on the Hamilton Street Bridge Site. Refer to the Excavation/Restoration General Notes and Section 2.0-3 of the specifications for details regarding the Backfill/Stone Bed Construction.
- Refer to the Section 8.02 of the specifications and Appendix A for performance liner type and requirements. A minimum of 24 inches of stone shall be installed on top of the liner to provide a minimum of 24 inches of stone from existing. The Contractor shall adhere to all project specifications for additional details.
- Refer to the Section 8.02 of the specifications.

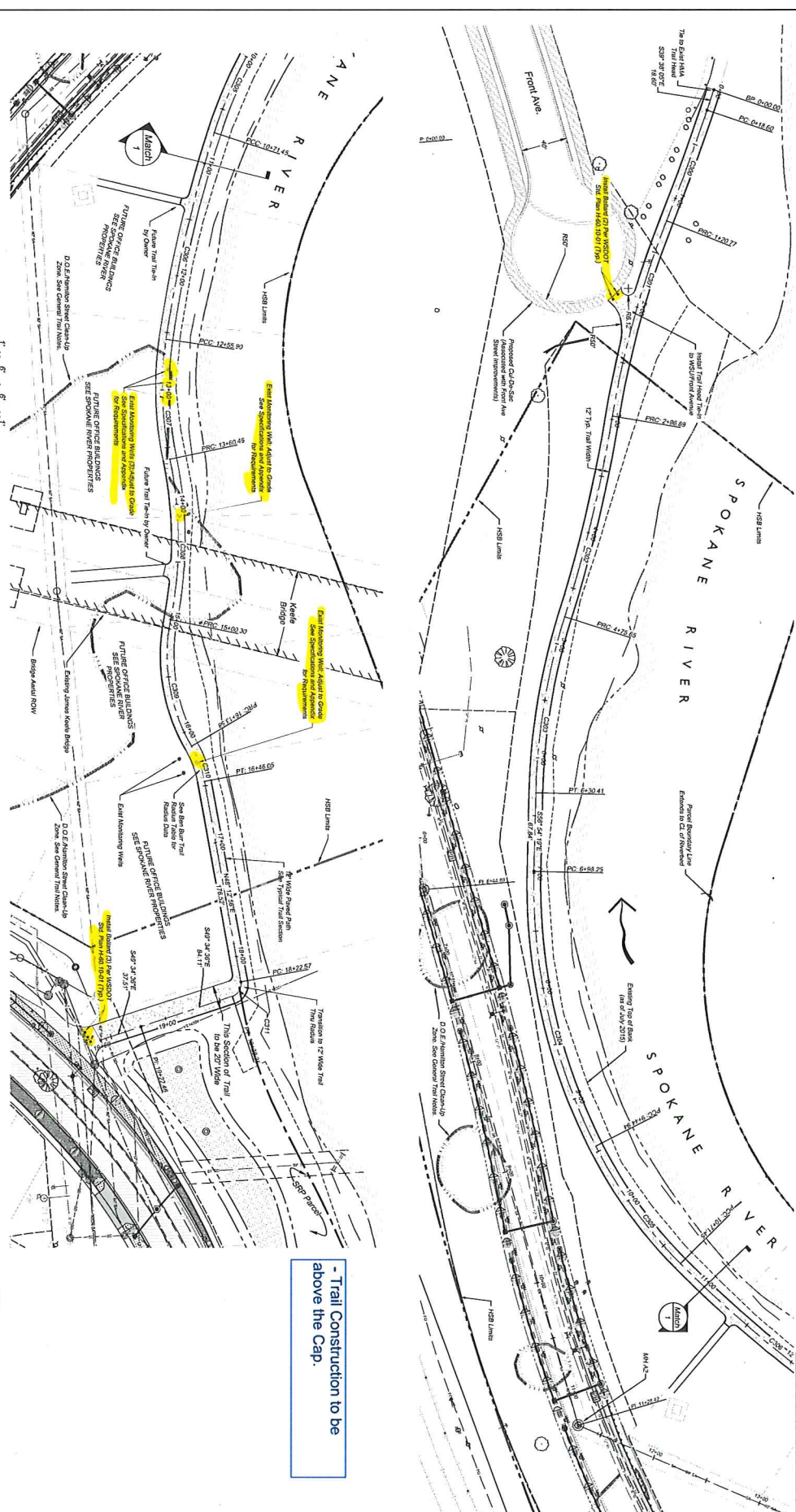
Lined  
Trench  
on  
HSB Site

SD-3.7  
Scale: NTS

**PREPARED BY THE CITY OF SPOKANE  
CONSTRUCTION DIVISION  
FOR THE  
RIVERSIDE EXTENSION - PHASE 2B  
SWALE CONSTRUCTION DETAILS**

DATE: 11/13/2018		DRAWN BY: JEFFREY B. SMITH		CHECKED BY: JEFFREY B. SMITH		SCALE: AS SHOWN	
PROJECT NAME: RIVERSIDE EXTENSION - PHASE 2B		PROJECT NO: 2015078		DATE: 11/13/2018		SCALE: AS SHOWN	
CITY OF SPOKANE, WASHINGTON		DEPARTMENT OF ENGINEERING SERVICES		PROJECT LOCATION: 4700 N. RIVERSIDE AVENUE, SPOKANE, WA 99208		SCALE: AS SHOWN	
CONTRACT NO: 1600000000		CONTRACT NAME: SWALE CONSTRUCTION DETAILS		CONTRACT DATE: 2015078		SCALE: AS SHOWN	
PROJECT NUMBER: 2015078		PROJECT NAME: RIVERSIDE EXTENSION - PHASE 2B		DATE: 11/13/2018		SCALE: AS SHOWN	
CONTRACTOR: SPOKANE CONSTRUCTION		CONTRACTOR NUMBER: 1600000000		DATE: 11/13/2018		SCALE: AS SHOWN	
PROJECT NAME: RIVERSIDE EXTENSION - PHASE 2B		PROJECT NO: 2015078		DATE: 11/13/2018		SCALE: AS SHOWN	

SD-3  
3 of ##



- Trail Construction to be above the Cap.

TS  
Typical Section: Ben Burr Trail  
Looking East

<b>GENERAL NOTES</b> Note: Trail is to be constructed on Existing Ground. 47' Right-of-Way (ROW) shall be maintained. All construction shall be in accordance with the City of Spokane Engineering Department Specifications for Additional Documentation and Working Requirements.	
<b>GENERAL TRAIL CONSTRUCTION NOTES</b> A portion of this project is under the jurisdiction of Bridge, Culverts & Structures. For additional documentation and working requirements, refer to the City of Spokane Engineering Department Specifications for Additional Documentation and Working Requirements.	
<b>PROJECT INFORMATION</b> PROJECT NAME: RIVERSIDE EXTENSION - PHASE 2B PROJECT LOCATION: BEN BURR TRAIL FRONT AVENUE TO 12TH STREET 12TH STREET TO FRONT AVENUE DRAWING NUMBER: 2015078 DATE: MARCH 19, 2015	
<b>DESIGNER INFORMATION</b> DESIGNER: SPokane Engineering Department PROJECT ENGINEER: [Name] CHECKED BY: [Name] SCALE: AS BUILT	
<b>APPROVALS</b> [Signatures and stamps of project officials]	
<b>CONTACT INFORMATION</b> CALL BEFORE YOU DIG: 1-800-425-5555	



REVISION	DATE	DESCRIPTION