#### AMENDATORY AGREEMENT

THIS AMENDATORY AGREEMENT is made and entered into by and between the CITY AND COUNTY OF DENVER, a municipal corporation of the State of Colorado (the "City"), and DAVID EVANS AND ASSOCIATES, INC., (the "Design Consultant"), a foreign corporation with its principal place of business located at 2100 SW River Parkway, Portland, Oregon 97201.

#### WITNESSETH:

**WHEREAS**, the Parties entered into an Agreement dated on or about August 26, 2016, for the performance of certain services set forth in the Agreement and exhibits; and

WHEREAS, the Parties wish to amend the Agreement to add to the scope of services, and add compensation to the Consultant as follows:

**NOW, THEREFORE**, in consideration of the premises and the mutual covenants and obligations herein set forth, the Parties agree as follows:

1. All references to "Exhibit A" shall be amended to read: "Exhibit A and Exhibit A-1, as applicable." Exhibit A-1, scope of services and fee, is attached to this Amendatory Agreement.

**2.** Section 3 of the Agreement entitled "COMPENSATION, PAYMENT, AND FUNDING" is amended to read as follows:

"3.01. <u>Fee for basic services.</u> The City shall pay and the Consultant shall accept as the sole compensation for services rendered and costs incurred under the Agreement the amount of ONE MILLION SIXTY-TWO THOUSAND THREE HUNDRED AND TWENTY ONE DOLLARS AND THIRTY CENTS (\$1,062,321.30) for fees. Amounts billed may not exceed the rates set forth in Exhibit A-1."

**3.** Section 3.03 of the Agreement entitled **Additional Services** is amended to read as follows:

"3.03. <u>Additional Services.</u> If pre-approved additional services are performed by the Design Consultant, the City agrees to pay the Design Consultant for such additional services in accordance with Section 2.08. The maximum amount to be paid by the City for all additional services under this contract is **FIFTEEN THOUSAND DOLLARS AND ZERO CENTS (\$15,000.00).**  4. Section 3.05 of the Agreement entitled "Maximum Contract Amount" is amended to read as follows:

### "a. Maximum Contract Amount:

Notwithstanding any other provision of the Agreement, the City's maximum payment obligation will not exceed **ONE MILLION ONE HUNDRED THIRTY-ONE THOUSAND FIVE HUNDRED AND FIFTY-NINE DOLLARS AND THIRTY CENTS (\$1,131,559.30)** (the "Maximum Contract Amount"). The City is not obligated to execute an Agreement or any amendments for any further services, including any services performed by Consultant beyond that specifically described in Exhibit A and A-1. Any services performed beyond those in Exhibit A and A-1 are performed at Consultant's risk and without authorization under the Agreement."

5. Except as herein amended, the Agreement is affirmed and ratified in each and every particular.

6. This Amendatory Agreement will not be effective or binding on the City until it has been fully executed by all required signatories of the City and County of Denver, and if required by Charter, approved by the City Council.

## REMAINDER OF PAGE INTENTIONALLY LEFT BLANK [SIGNATURE PAGES TO FOLLOW]

Contract Control Number: Contractor Name: PWADM-201950087-01 DAVID EVANS AND ASSOCIATES INC Alfresco 201629357

IN WITNESS WHEREOF, the parties have set their hands and affixed their seals at Denver, Colorado as of:

SEAL

## **CITY AND COUNTY OF DENVER:**

**REGISTERED AND COUNTERSIGNED:** 

ATTEST:

By:

**APPROVED AS TO FORM:** 

Attorney for the City and County of Denver

By:

By:

By:

**Contract Control Number: Contractor Name:** 

PWADM-201950087-01 DAVID EVANS AND ASSOCIATES INC **Alfresco** 201629357

By: \_\_\_\_\_

Title: \_\_\_\_\_

(please print)

ATTEST: [if required]

By: \_\_\_\_\_

Name: \_\_\_\_\_

(please print)

Title: \_\_\_\_\_

(please print)

**Contract Control Number: Contractor Name:** 

PWADM-201950087-01 DAVID EVANS AND ASSOCIATES INC Alfresco 201629357

By: Corry D.

Name: <u>Cody 5. Keraga</u> (please print)

\_\_\_\_\_

Title: Associate (please print)

ATTEST: [if required]

: <u>Anthony R. MarceHo</u> (please print) By:

Name:

Title: \_\_\_\_\_ (please print)



April 9, 2019

John La Sala, PE, PTOE Senior Engineer, City Project Manager City and County of Denver Department of Public Works Infrastructure Project Management 201 West Colfax Avenue, Department 506 Denver, Colorado 80202

## SUBJECT: High Line Canal Trail Change Order PROJECT: High Line Canal Trail Underpasses – Hampden/Colorado (201629357)

Dear John,

As previously discussed, the High Line Canal Trail project has had multiple changes to the project scope and duration. Based on our review of the project, the following items have been revised:

- Relocation of the Hampden Ave Underpass based on coordination with Cherry Hills Village requiring revisions to both our 30% documents and Draft 90% documents including additional topographic survey and geotechnical borings (affected parties: DEA, Yeh, HKS)
- Additional coordination, performed over the past eighteen months, with Cherry Hills Village including Environmental Clearance scope revisions and coordination (affected parties: DEA, Pinyon)
- Revisions to Colorado laws with respect to utility locates during design based on Senate Bill 167 requiring compliance based on an advertisement date in or after 2019. Additionally, a sealed SUE report including plans is required as part of the new legislation. (affected parties: Goodbee, HKS)
- Addition of a new Irrigation Design sub-consultant (Larry Rodgers Design Group) per request from the City Parks Department due to the recently installed irrigation system in Wellshire Golf Course (affected parties: Rodgers)
- Extension of the project duration past the originally anticipated delivery schedule (affected parties: DEA)

The above additional services and scope revisions require additional project funding and are summarized in the table below.



#### **Table 1: Summary of Change Order Fees**

Task	Company	Description	Fee				
1	David Evans and Associates, Inc.	Project Management and Coordination	\$18,130				
2	David Evans and Associates, Inc.	Environmental Clearances Coordination	\$14,160				
3	Pinyon Environmental, Inc.	Environmental Clearances	\$34,758.50				
4	Yeh and Associates, Inc.	Geotechncial Borings and Soil Nail Retaining Wall Design	\$8,820				
5	Harris Kocher Smith	Topographic Survey and SUE Locates	\$29,375				
6	Goodbee and Associates, Inc.	SUE Locate Coordination and Utility Plans	\$5,040				
7	Larry Rodgers Design Group	Irrigation Design	\$8,080				
	Total Fee = \$118,363.50						

Attached is additional documentation on scope revisions and additional fee estimates.

If you have any questions or need additional information, please feel free to call or email me. We appreciate the opportunity to complete this project with you and look forward to it moving forward.

Sincerely,

## DAVID EVANS AND ASSOCIATES, INC.

Lody S. Ken

Cody Keraga, P.E. Project Manager, Associate

Copies: Project File DEA Project Number: CCDN0000.0054 File Path: P:\C\CCDN00000054\0000CON\C0030Contract\CO 1 – Relocated Underpass\HLC CO Letter 04-9-19.docx



#### DAVID EVANS AND ASSOCIATES, INC. ADDITIONAL FEE ESTIMATE

		PROJE	CT MANAGE	CMENT	ENVIRON	IMENTAL	ADMINIS	TRATION		
		Vice President	Eng. Task Leader	Sen. Proj. Engineer	Planning Task Leader	Graph. Spec.	Sen. Project Admin.	Admin. Assistant		
		Tony M.	Cody K.	Josh W.	Kara S.	Colleen S	Terri O.	Gina S.		
TASK NO.	TASK Labor rates:	\$ 275.00	\$ 160.00	\$ 165.00	\$ 180.00	\$ 90.00	\$ 110.00	\$ 80.00	Hours	Fee
Task 1	Project Management and Coordination									
1) A)	Project Management and Coordination									
1) A) i)	Project Schedule, Invoicing, Monthly Status Updates (6 months)	2	16	4			6	12	40	\$ 5,390.00
1) A) ii)	Manage and coordinatie work efforts		28						28	\$ 4,480.00
1) A) iii)	Coordinate project tasks with City Project Manager		16						16	\$ 2,560.00
1) A) iv)	Quality Control / Quality Assurance		1	12					13	\$ 2,140.00
1) B)	Project Meetings									
1) B) i)	Team Coord. Meetings (6)		6	1					7	\$ 1,125.00
1) B) ii)	Agendas, exhibits, handouts, and minutes		8					3	11	\$ 1,520.00
1) B) iii)	Stakeholder/Other Meetings (2)	1	4						5	\$ 915.00
	Hours	3	79	17	0	0	6	15	120	\$ 18,130
Task B	Environmental Permitting/Clearances Coordination									
2) A)	Clearance Review and Coordination						1			
2) A) i)	Environmental Coordination				40				40	\$ 7,200.00
2) A) ii)	Permitting Clearance Review				10				10	\$ 1,800.00
2) A) iii)	Visualizations				8	18			26	\$ 3,060.00
2) A) iii)	Obtain Environmental Permits and Clearances				8				8	\$ 1,440.00
2) A) iv)	Quality Control / Quality Assurance			4					4	\$ 660.00
	Hours	0	0	4	66	18	0	0	88	\$ 14,160
	Total Hours	3	79	21	66	18	6	15	208	
	Total Labor Fee	\$ 825	\$ 12,640	\$ 3,465	\$ 11,880	\$ 1,620	\$ 660	\$ 1,200		\$ 32,290



April 8, 2018

Kara Swanson David Evans and Associates, Inc. 1600 Broadway, Suite 800 Denver, CO 80202

#### Subject: Change Order to Complete Environmental Support Services for the additional work for the High Line Canal Trail Project, City and County of Denver, Colorado

Dear Ms. Swanson:

Pinyon Environmental, Inc. (Pinyon) respectfully submits this Change Order for additional work to complete the environmental studies for the High Line Canal Trail Underpass Project, located at the Hampden Avenue and Colorado Boulevard intersection in Denver County, Colorado. This Change Order includes additional work related to Wellshire Golf Course, recent design changes, as well as incorporating requested reporting updates and requirements from City and County of Denver (CCD), and Colorado Department of Transportation (CDOT).

The scope of services and schedule details included in this Change Order are outlined below. The current approved project fee is \$41,516.00. Pinyon has approximately \$2,500 remaining budget which will be allocated to all resources, mostly historic, biological, and general project management. Pinyon estimates the cost to complete the additional services, in accordance with the outlined services, will be **\$34,758.50** (See Table I) for an overall project total of **\$76,274.50**.

Pinyon will invoice in accordance with our 2016 CCD standard rates per the original contract. The authorized amount will not be exceeded without prior approval. To authorize the outlined scope of services, please sign and return one full copy of the attached Change Order Authorization. Should you have any questions or require additional information, please do not hesitate to call. Thank you for considering Pinyon for your environmental consulting needs.

Sincerely,

**PINYON** ENVIRONMENTAL, INC.

Kate Turner

NEPA Specialist

Cc: File

File Location: Z:\PROJECTS\2016\11666504 Highline Canal Trail Underpass\PM\Proposal Contract\

Based on Pinyon's understanding of the project changes, the following are the additional environmental evaluations that Pinyon will complete to meet CCD, CDOT, and Federal Highway Administration protocols:

**Task I: Project Management:** This task includes time for the kick off meeting and either the FIR or FOR meeting, coordination with DEA and individual resource specialists regarding project updates and schedules. This also includes time for invoicing and progress reports. The duration of the project has been extended; the project is now expected to be seven months. If this time is extended a change order may be necessary to allow for additional coordination and management time.

**Task 2: Biological Resources:** Pinyon biologist completed a site visit in 2017; the study area has shifted, and a Pinyon biologist will conduct an additional field visit to delineate potential wetlands in the area that was not previously surveyed.(assumes one biologist in the field for one day). A Pinyon biologist will write a Biological Technical Memorandum, including: fish and wildlife; vegetation and noxious weeds; and federally and state-listed threatened and endangered species. Species-specific surveys, noxious weed management plans, and/or mitigation plans may also be necessary but are not anticipated and are not included in this proposal. The project area is in the Preble's meadow jumping mouse, Ute ladies' tresses orchid, and Colorado butterfly plant block clearance zones. Based on the context of the project area, Pinyon anticipates that the project will have no effect on federally listed species. Pinyon will document *no effects* finding in the Biological Technical Memorandum and submit to DEA/CCD/CDOT. The High Line Canal is not jurisdictional for Senate Bill (SB) 40; therefore, no SB 40 certification is anticipated to be required for this project. Project Management time for this task includes QA/QC of deliverables.

Waters of the US (WUS), including Wetlands: The current design plans show no impacts to WUS features delineated in the 2017 site visit; however, based on aerial imagery, it is likely that WUS features will be found in the additional study area. Any WUS features found in the additional site visit will be delineated to US Army Corps of Engineers (Corps) protocols. A summary of findings will be included in the Biological Technical Memorandum. Pinyon assumes a Preconstruction Notification (PCN) to the Corps will be required and the impacts will be minimal and fall under a nationwide permit. Pinyon assumes impacts will be less than 500 square feet and a CDOT Wetlands Finding report will not be necessary.

**Bird Nesting Habitat Survey:** A Pinyon biologist will evaluate the study area for bird nesting habitat. Pinyon will include information on migratory bird nesting habitat as well as raptor nests that are observed during the site visit, if any, in the Biological Resources Report. Pinyon will also provide modified project specials and/or general notes to be included with the plan set and the bid documents. Pinyon will provide a standalone technical memorandum documenting the results of this additional bird nesting habitat survey. Preconstruction bird nest surveys are typically performed within seven days of clearing and grubbing activities because these surveys look for active nests (nests with eggs or young), and many migratory birds do not re-use the same nest or nesting site from year to year. This bird nesting habitat survey would not constitute a preconstruction nest survey; a preconstruction nest survey is not included in the current scope and fee. Project Management time for this task includes QA/QC of deliverables.

Deliverable: Biological Technical Memorandum

GIS Data for Impact Calculations for Section 404 Permit PCN to the Corps Bird Nesting Habitat Survey Technical Memorandum

#### **Cultural Resources:**

The following tasks outline work needed to meet Section 106 and Section 4(f) compliance for additional and anticipated project elements. The project intersects two potentially historic roads (SH-2 and SH-285); based on past project meeting with the CDOT specialist, it is assumed that these resources will be addressed in the Eligibility and Effects Letter - Methodology section and no additional survey work will be required. If project parameters change and additional OAHP Survey forms are required for these resources, this scope will need to be revisited.

#### Task 5 – Additional Survey Forms

Wellshire Golf Course Additional Research and Historic Cultural Landscape Evaluation Form (Form 1404): While SHPO accepts 1403 evaluations for this type of resource, at the direction of CDOT, Pinyon will perform additional research and convert the existing 1403 evaluation into the 1404 Form. Pinyon will conduct a site visit and take photos of the Wellshire Golf Course for documentation (assumes one person in the field for one day). Project Management time for this task includes QA/QC of deliverables.

Deliverables: Form 1404 (1) for the Wellshire Golf Course, site photos

**Highline Canal Segment (Hampden to Colorado) Architectural Site Form (Form 1400/1418):** At the request of CDOT Historian, Pinyon will conduct a site visit, take photos of the Highline Canal Segment (Hamden to Colorado) for documentation on survey Forms 1400/1418, the Management Data and Linear Component Forms.

Deliverables: Forms 1400/1418 (1 set) for the Highline Canal Segment from Hampden to Colorado, site photos

**Task 6 – Meetings and Coordination:** The project manager and technical specialist will attend meetings with CCD, CDOT, and SHPO as necessary. Pinyon recommends that at least two project team members be present at these meetings or conference calls (Either from DEA or Pinyon). The meeting schedule outlined below is an estimate based on past project experience:

• Project status meetings, comment resolution meetings and/or conference calls with DEA, CCD, and CDOT (up to 2 meetings for Historian and 1 meeting for Project Manager)

**Task 7 – Eligibility and Effects Letter Updates:** Pinyon's staff historian will update the Area of Potential Effect (APE) in coordination with CDOT and DEA. Pinyon's historians will provide google earth visualizations for up to three locations within the park to aid decision making for CDOT and SHPO. As a result of information collected and project updates reflected in Tasks 5 and 6, Pinyon's historian will update the Eligibility and Effects letter containing appropriate Section 4(f) determination notifications for the Official with Jurisdiction (OVJ) for submittal to the CDOT historian for delivery to the State Historic Preservation Office (SHPO). The Section 4(f) findings within this task are anticipated to be *de minimis, provided no Section 106 adverse effects are identified. Should adverse effects be identified to any resources; the Section 4(f) findings will not be de minimis and a change order will be necessary.* Project Management time for this task includes QA/QC of deliverables. Pinyon assumes a no adverse effects.

Deliverables: Updated APE Map, Updated Eligibility and Effects Letter (may include Section 4(f) de minimis finding, if applicable).

Task 8 - Water Quality and Erosion Control Analysis & Design: Pinyon will provide revised SWMP plans and narrative to reflect the design changes including the new Hampden Avenue underpass and drainage modifications east of Colorado Boulevard. In addition to accommodating the design changes, Pinyon will provide SWMP plans and narrative for an additional FIR and FOR submittal. The following is assumed:

- Initial, Interim, and Final Best Management Practice (BMP) phasing for construction activities will be depicted on a single sheet for each design segment.
- Four submittals are anticipated: FIR, FOR, final review, and bid plans
- CCD's SWMP Narrative will be acceptable to CDOT.
- CCD's specifications will be used.
- No meeting attendance is included in this task.

**Task 9 – Address CCD and CDOT Comments:** Pinyon assumes that additional time will be necessary to address comments by CCD and CDOT for all resources. CDOT historian will likely require two separate reviews; the rest of the resources are assumed to be one review.

• <u>Reallocated Scope and Fee:</u> Pinyon assumes that CDOT will be able to clear the Archeology and Paleontology tasks internally. Pinyon will reallocate that remaining scope and fee (approximately \$4,500) to cover past project meetings and coordination that were not included in the original scope.

	CHANGE ORDER	AUTHORIZATION				
Client: Address: Phone: Email: Client Contact:	David Evans and Associates, Inc. 1600 Broadway, Suite 800 Denver, CO 80202 720.225.4678 Kara Swanson					
	PROJECT D	ESCRIPTION				
Site Name: Site Location: Pinyon Project No. Scope of Work:	Wellshire Golf Cou					
Current Approved Fee		\$41,516.00				
Change Order Fee -High	Line Canal (Table I)	\$34,758.50				
Revised Total Project F	ee	\$76,274.50				
The following attachment	s are hereby made a par	t of this AGREEMENT:				
[X] Summary of	onmental, Inc. Change C Estimated Costs A – Scope of Work	Order dated February 25, 2019				
David Evans and As	sociates, Inc.	Pinyon Environmental, Inc.				
By: Title: Date:		By: Title: Date:				

Task - Project Management (includes two	o project meetings, gen	eral proje	ct coordinati	on)
Description	Quantity	Unit	Rate	Extension
Labor Rates				
Project Manager	32.0	hours	\$155.00	\$4,960.00
Field Technician/Project Assistant	4.5	hours	\$74.00	\$333.00
	·	Ta	sk Subtotal	\$5,293.00
Task - Biological Resources - Update Bio TM	logical Technical Memo	orandum,	Site Visit, PC	N, Bird Nesting
Description	Quantity	Unit	Rate	Extension
Labor Rates	·			
Project Manager	3.0	hours	\$155.00	\$465.00
Project Engineer	45.0	hours	\$110.00	\$4,950.00
Project Engineer (GIS)	9.0	hours	\$105.00	\$945.00
Equipment/Material Unit Rates				
Field Visit	1.0	day	\$40.00	\$40.00
GPS Mapper - day	1.0	each	\$225.00	\$225.00
	·	Ta	sk Subtotal	\$6,625.00
Task - Cultural Resources - (Wellshire Go	lf Course Form 1404 an	d Highline	e Canal Segm	ent form 1403)
Description	Quantity	Unit	Rate	Extension
Labor Rates				
Project Manager	3.0	hours	\$155.00	\$465.00
Project Specialist	22.5	hours	\$114.00	\$2,565.00
Project Engineer (GIS)	2.0	hours	\$105.00	\$210.00
		Τα	sk Subtotal	\$3,240.00
Task - Cultural Resources - Meetings and	l Coordination			
Description	Quantity	Unit	Rate	Extension
Labor Rates				
Project Manager	12.0	hours	\$155.00	\$1,860.00
Project Specialist	25.8	hours	\$114.00	\$2,935.50
		Ta	sk Subtotal	\$4,795.50
Task - Cultural Resources - Eligibility and	l Effects Letter, APE, Vi	sualizatio	ns	
Description	Quantity	Unit	Rate	Extension
Labor Rates				
Project Manager	7.0	hours	\$155.00	\$1,085.00
Project Specialist	48.0	hours	\$114.00	\$5,472.00
Project Engineer (GIS)	6.0	hours	\$105.00	\$630.00
		Ta	sk Subtotal	\$7,187.00

#### Table I - Summary of Estimated Costs

Task - SWMP Updates				
Description	Quantity	Unit	Rate	Extension
Labor Rates	· · · · · ·		·	
Project Manager	5.0	hours	\$155.00	\$775.00
Project Specialist	10.0	hours	\$114.00	\$1,140.00
Graphics	13.0	hours	\$81.00	\$1,053.00
Senior Engineer	5.0	hours	\$174.00	\$870.00
	· · · · · ·	Та	sk Subtotal	\$3,838.00
Task - Address CCD and CDOT Co	omments			
Description	Quantity	Unit	Rate	Extension
Labor Rates				
Project Manager	6.0	hours	\$155.00	\$930.00
Project Specialist	25.0	hours	\$114.00	\$2,850.00
		Ta	sk Subtotal	\$3,780.00
		Change O	rder Total	\$34,758.50
		Pro	oject Total	\$76,274.50



2000 Clay Street, Suite 200 Denver, CO 80211 (303) 781-9590 www.yeh-eng.com

February 15, 2019

Cody Keraga, P.E. David Evans and Associates, Inc. 1600 Broadway, Suite 800 Denver, Colorado 80202

Subject: Scope of Services Geotechnical Investigation Additional Borings – Box Culvert High Line Canal Trail at Hampden Avenue

Dear Mr. Keraga

This letter presents Yeh and Associates, Inc. proposed scope of work and estimated project costs for providing additional geotechnical services. We understand the location of the proposed box culvert has moved to the east approximately 150 to 200 feet of the previous design location. As a result, two additional geotechnical borings are needed. The following additional services are proposed.

Scope of Additional Services:

- 1. Obtain appropriate access permits and notify UNCC.
- 2. Conduct a subsurface investigation that will consist of drilling 2 borings with a truckmounted, auger drilling rig. Borings will be completed by placing drill cuttings in the boring and patching with a CDOT approved grout. The borings will be drilled to a maximum of 30 feet in depth, or 10 feet into bedrock (whichever occurs first). Traffic control will be required.
- 3. Perform limited laboratory testing of samples.
- 4. Prepare a memo summarizing subsurface conditions encountered in the borings.
- 5. Provide revised engineering geology sheets and soil nail wall plans.

Exclusions: We have assumed that geotechnical conditions encountered in the additional borings will be similar to the borings previously drilled. Supplemental design recommendations for the box culvert or soil nail walls are not included but can be provided should conditions vary. Survey of the boring locations will be provided by others, if needed.

Fee: The client will be invoiced on a time and material basis, not to exceed \$8,820 for the work described above and shown on the attached cost worksheet.

Please contact me if you have any questions or need more information.

Sincerely, YEH AND ASSOCIATES, INC.

Name Apwood

Samantha C. Sherwood, P.E. Project Manager

Reviewed by: Todd Schlittenhart, P.E. Project Manager

Attachment: Cost Estimate Worksheet



			PROJECT	COST WORKSH	EET						
FIRM NAME: Yeh and Associates	PREPARED B	Y:	S. Sherwood			DATE:		February 15, 20	)19		
CONTRACT NUMBER:	PROJECT NAM	ME:	HLC Trail			TASK ORDEF	R:	-			
				1		Γ		1			
WORK ACTIVITY	Principal	Project Manager	Senior Engineer	Geotech Engineer	Senior Geologist	Project Engineer	Technician (Field)	Technician (Lab)	CAD Designer	TOTAL HOURS	TOTAL COST
1.0 Project Management											
1.1 Attend project meetings	-	2								2	
1.2 Contract Administration		1								1	
1.3 Prepare and submit invoices for payment		1								1	
SUBTOTALS	0	4	0	0	0	0	0	0	0	4	
2.0 Geotechnical Investigation											
2.1 Layout, Permitting and Utility Locates				8						8	
2.2 Conduct Subsurface Exploration				10						10	
2.4 Perform laboratory tests								10		10	
SUBTOTALS	0	0	0	18	0	0	0	10	0	28	
3.0 Geotechnical Investigation - Pavements										0	
3.1 Layout, Permitting and Utility Locates										0	
3.2 Conduct Subsurface Exploration-Pavements										0	
3.3 Perform laboratory tests										0	
SUBTOTALS	0	0	0	0	0	0	0	0	0	0	
4.0 Geotechnical Design										0	
4.1 Compile boring logs, test result and geotechnical analysis				4						4	
4.2 Develop foundation recommendations										0	
4.3 Provide excavation and construction recommendations										0	
SUBTOTALS	0	0	0	4	0	0	0	0	0	4	
5.0 Geotechnical Reports and PS&E	_										
5.1 Prepare and issue revised plans and estimates									4	4	
5.2 Prepare and issue Investigation Summary Memo				4						4	
5.3 Prepare and issue Draft Geotechnical Investigation Reports		4								4	
5.4 Prepare and issue Final Geotechnical Investigation Reports	-	4								4	
SUBTOTALS	0	8	0	4	0	0	0	0	4	16	
SUBTOTALS - HOURS	0	12	0	26	0	0	0	10	4	52	
SALARY RATE, \$ PER HOUR	\$185.00	\$135.00	\$115.00	\$85.00	\$115.00	\$100.00	\$68.00	\$62.00	\$105.00		
SUBTOTALS - LABOR COSTS, \$	\$-	\$ 1,620.00	\$-	\$ 2,210.00	\$-	\$-		\$ 620.00	\$ 420.00		\$ 4,870.00
TOTAL LABOR COST, \$	\$4,	,870.00									

FIXED FEE (9.75%), \$	\$0.00

TRAVEL & PER DIEM COST	Estimated Units	Unit Rate	Units	TOTAL CO	ST
Vehicle Mileage	0	\$ 0.50	mile	\$	-
Lodging	0	\$ 91.00	night	\$	-
Per Diem	0	\$ 56.00	day	\$	-

			PROJECT	COST WORKSH	IEET						
FIRM NAME: Yeh and Associates CONTRACT NUMBER:	PREPARED B		S. Sherwood HLC Trail			DATE: TASK ORDEF		February 15, 20	)19		
WORK ACTIVITY	Principal	Project Manager	Senior Engineer	Geotech Engineer	Senior Geologist	Project Engineer	Technician (Field)	Technician (Lab)	CAD Designer	TOTAL HOURS	TOTAL COST
Airfare			each								\$-
TOTAL TRAVEL AND PER DIEM COST, \$		60.00									

DRILLING & OTHER SUBSURFACE INVESTIGATION COST	Estimated Units	Unit Rate	Units	тот	AL COST
Traffic Control	1	\$ 1,100.00	day	\$	1,100.00
Exploration (CME 75, ODEX/CORE)	1	\$ 2,450.00	LS	\$	2,450.00
Permits	2	\$ 200.00	LS	\$	400.00
	0		LS	\$	-
TOTAL EXPLORATION COSTS, \$	\$3,	950.00			

LABORATORY & FIELD TEST COST	Estimated Units	Unit Rate	Units	TOTAL CO	ST
Atterberg Limits			each	\$	-
Washed Sieve			each	\$	-
#200 Wash			each	\$	-
Moisture Content			each	\$	-
Dry Density			each	\$	-
рН			each	\$	-
Sulfate Content			each	\$	-
Chloride Content			each	\$	-
Resistivity (laboratory)			each	\$	-
Laboratory Moisture-Density			each	\$	-
Modified Proctor			each	\$	-
Swell-Consolidation			each	\$	-
R Value			each	\$	-
TOTAL OUTSIDE LAB COST, \$	\$	0.00			

TOTAL PROJECT COST, \$	\$8,820.00



February 22, 2019

Mr. Cody Keraga David Evans and Associates, Inc 1600 Broadway, Suite 800 Denver, CO 80202

## Re: HLC Trail, Hampden/Colorado Supplemental Survey and SUE QLB Proposal

Dear Cody,

Thank you for the opportunity to provide additional land surveying and engineering services to you with regard to the above referenced project. Attached please find exhibit "A", our proposed scope of services for the Supplemental Survey QLB locates and exhibit "B" our proposed fee estimate. This scope of services is based upon your request and the information provided by Elissa Roselyn with Goodbee and Associates.

Should you have questions or concerns regarding this proposed scope of services please do not hesitate to contact us. Again, thank you and we look forward to working with you.

Sincerely, Harris Kocher Smith

Aaron Murphy Associate Principal

## EXHIBIT "A" SCOPE OF SURVEYING SERVICES HLC TRAIL – HAMPDEN/COLORADO DENVER, COLORADO

## I. Supplemental Topographic Survey

Provide supplemental topographic surveying for the area shown on the attached survey limits map to suitable for design purposes. Map will be a 1-foot contour map supplemented with spot elevations where necessary and will be appended to map previously prepared for the project. Sprinkler heads and other visible irrigation appurtenances locations, as indicated on maps provided, will be surveyed within the utility locating limits, outlined in blue and depicted on the attached map.

## **II.** SUE Compliant QLB Utility Investigation:

#### A. ASCE Standard 38-02 Quality Level B Utility Locates

Provide ASCE 38-02 Quality Level B Utility Locates for the utility locating limits, outlined in blue and depicted on the attached map. The utility locates will include the following elements and tasks:

- 1. Contact UNCC with a subsurface utility engineering notification to acquire all utility information and existing mapping/ schematics relative to the project limits.
- 2. Perform ASCE Standard 38-02 Quality Level B Utility Locates utilizing the appropriate geophysical method to search for utilities within the QLB project limits.
- 3. Interpret the surface geophysics and note all determinable attributes such as size, material type, age, condition, ownership, number of conduits, etc.
- 4. Mark the indication of utilities on the ground surface for subsequent survey.
- 5. Resolve difference between designated utilities and utility records and surveyed appurtenances.
- 6. Provide recommendation for additional measure to help resolve differences if they still exist. Such recommendations may include additional surface geophysical methods, exploratory excavation, or and upgrade to Quality Level A locates. ASCE Standard 38-02 Quality Level A locates are not included in this scope of services.

## **B.** Subsequent Utility Survey

Provide a utility survey for the area delineated on the attached extents map and outlined in blue. The survey will include the following elements and tasks:

1. Utility Survey – Utilities marked within the QLB area will

be field surveyed by HKS field crews and subsequently shown on the overall design survey. HKS will provide invert elevations, size, and material for all storm and sanitary sewer appurtenances that are easily accessible and not within the traveled lanes within the project extents. HKS field employees are restricted from entering confined spaces. Invert elevations, pipe size and material will be acquired to the best of our ability from the roadway surface and checked to City and County of Denver sewer maps.

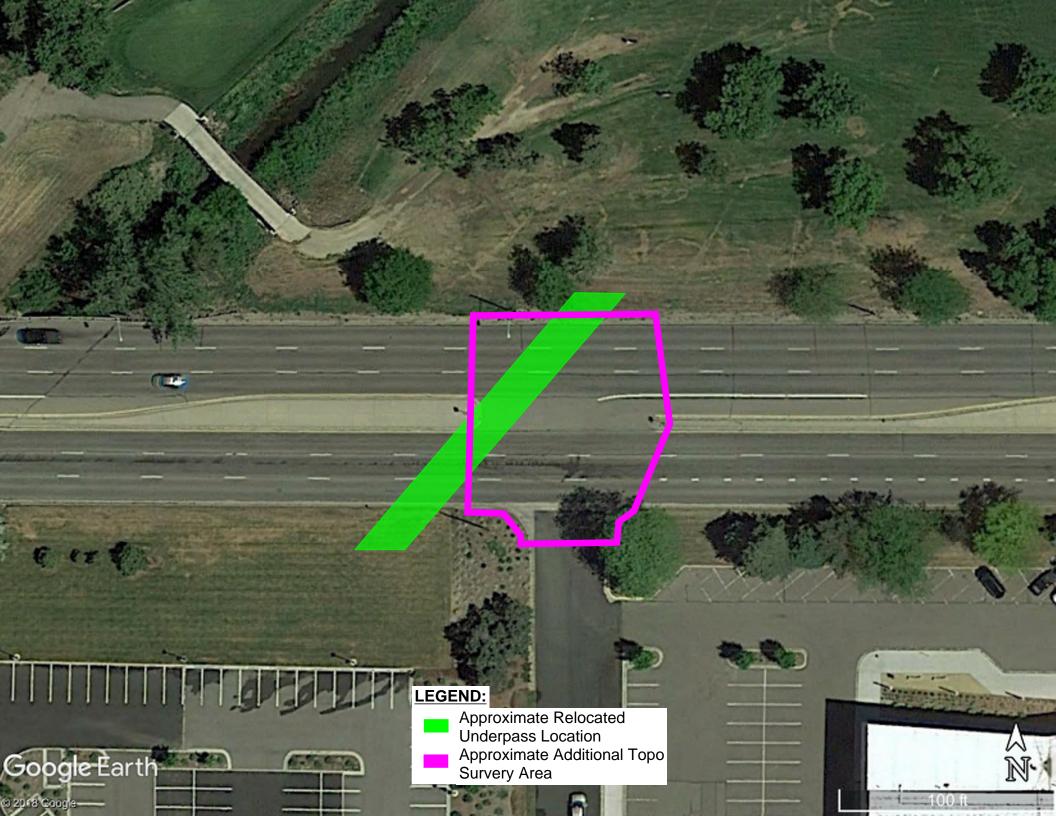
#### C. ASCE Standard 38-02 Quality Level B Utility Locate Deliverable w/ P.E. Certification

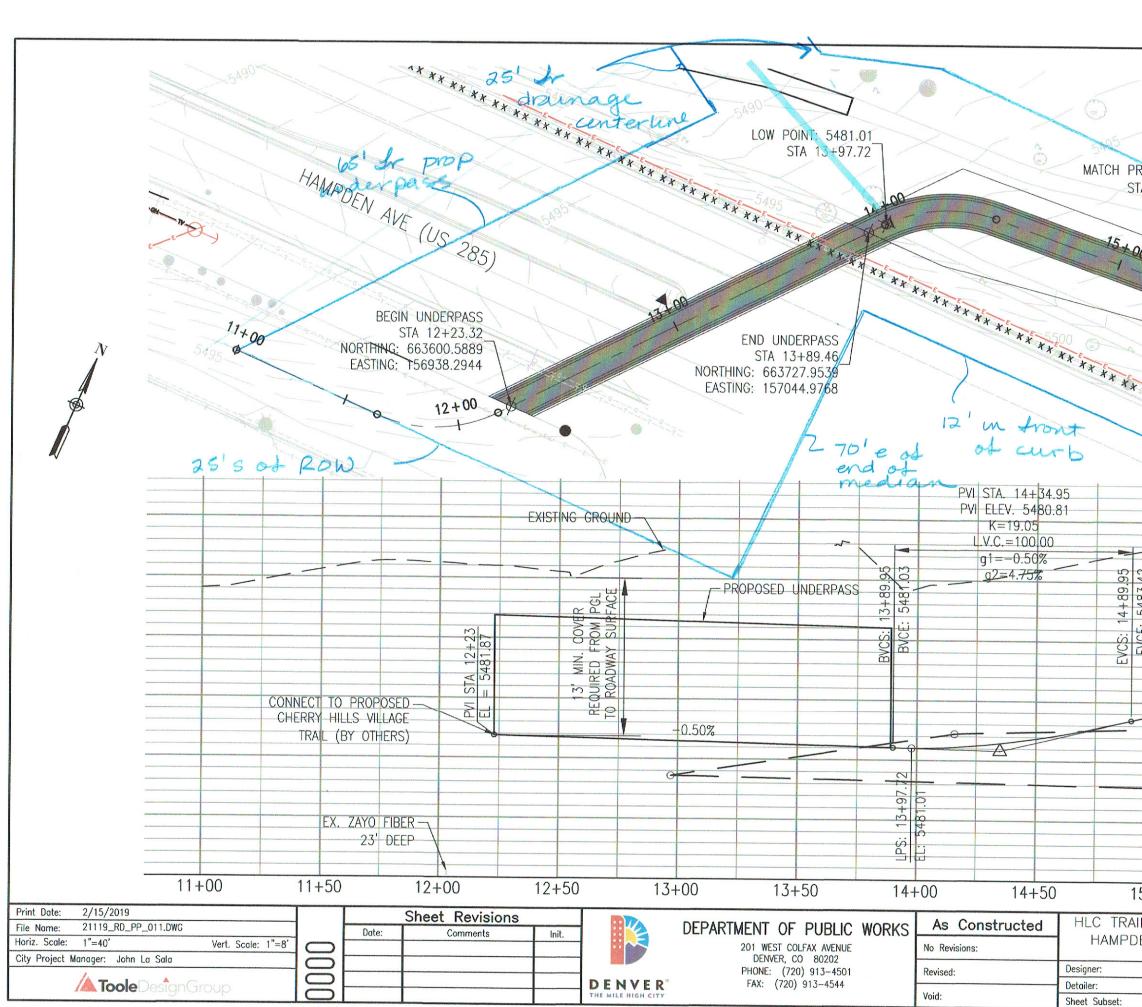
Provide a PE certified CADD deliverable plan sheet in conformance with ASCE 38-02 standards for Quality Level B locate requirements depicting the horizontal only location of all utilities located within P.E. certified plan limits as depicted within the attached map. The certified deliverable is limited to the certified plan limits only and will include the following elements and tasks:

- 1. Data & plan review
- 2. Quality level attributes, color, line style, line weight
- 3. Labeling and notes
- 4. Utility depiction legend
- 5. P.E. certification
- 6. Corresponding notes & documentation

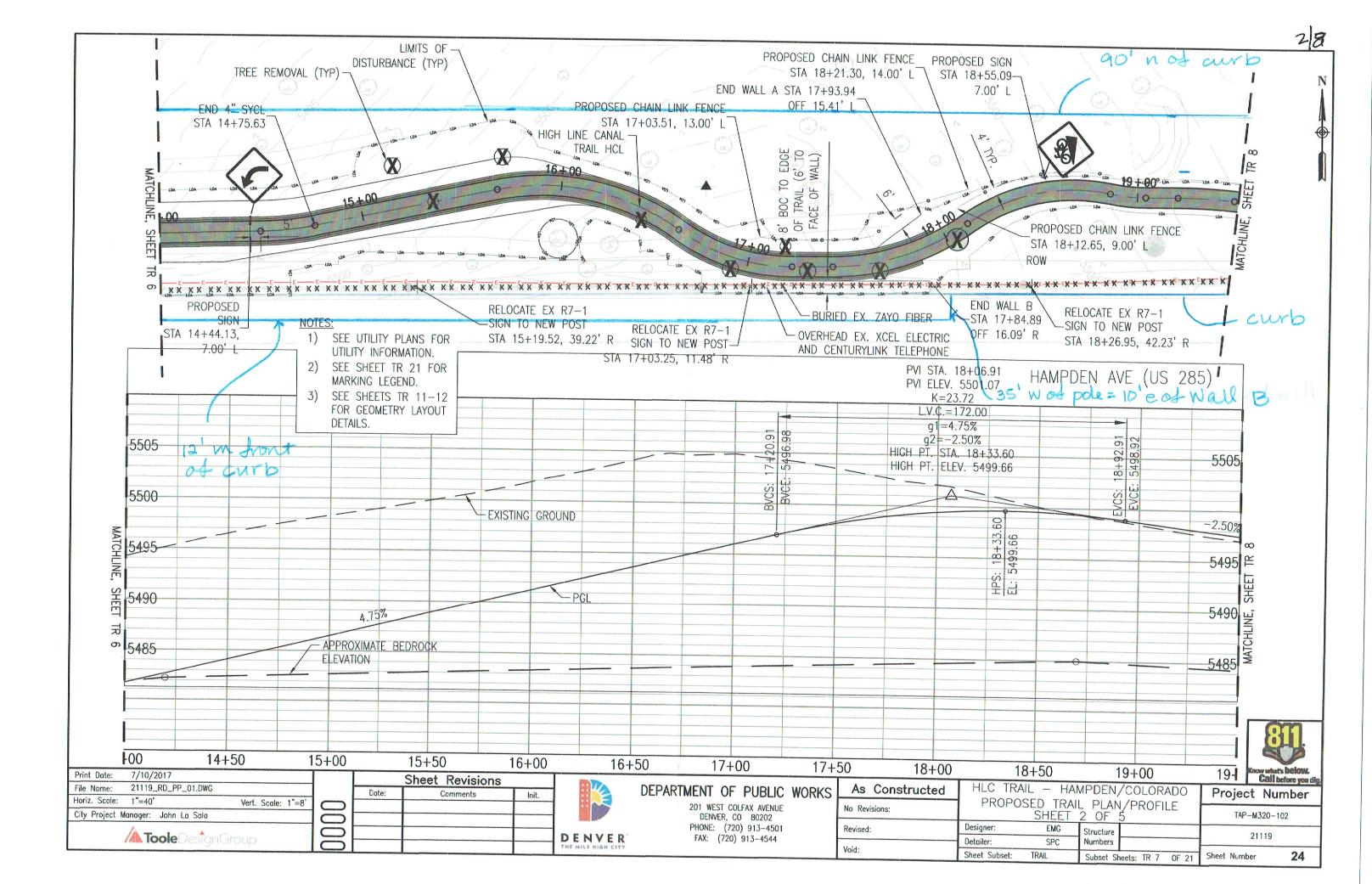
## EXHIBIT "B" FEE SCHEDULE HLC TRAIL – HAMPDEN/COLORADO DENVER, COLORADO

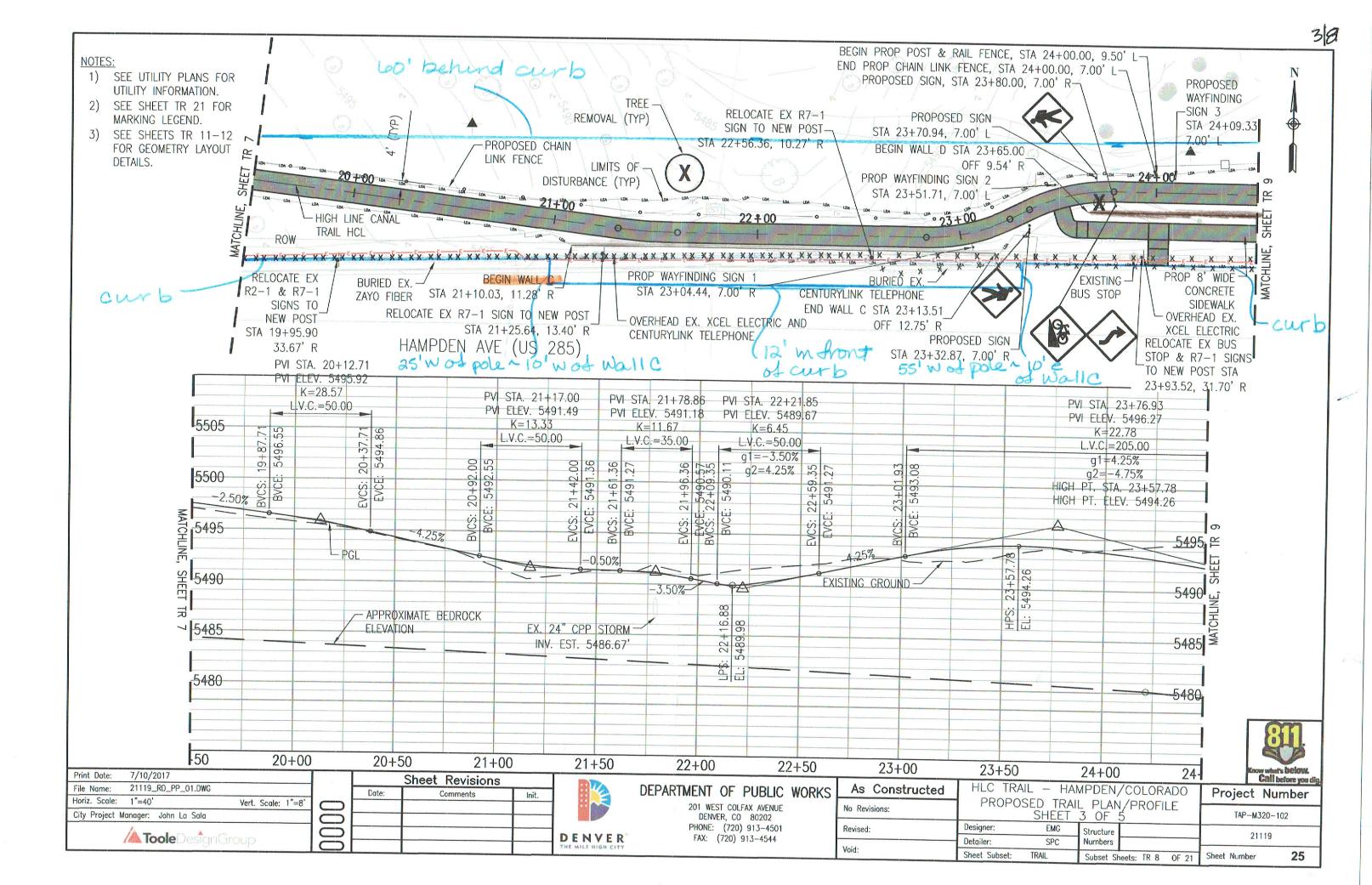
I.		Supplemental Topographic Survey	\$ 7,500.00
II.		SUE Compliant QLB Utility Investigation	
	A.	ASCE Standard 38-02 Quality Level B Utility Locates	\$ 10,795.00
	B.	Subsequent Utility Survey	\$ 5,080.00
	C.	ASCE 38-02 Quality Level B Deliverable w/ P.E. Certification	<u>\$ 6,000.00</u>
		TOTAL	\$29,375.00

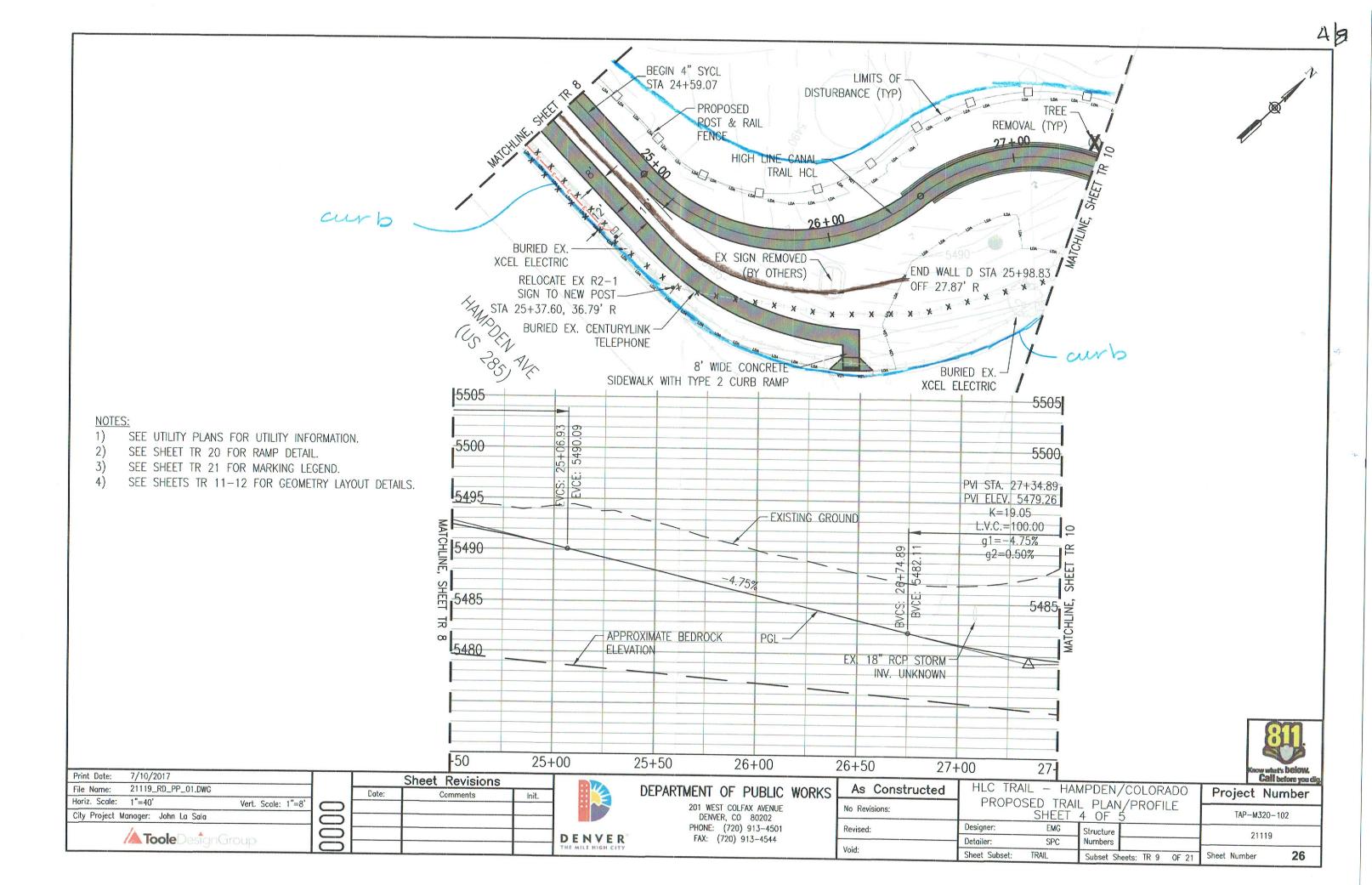


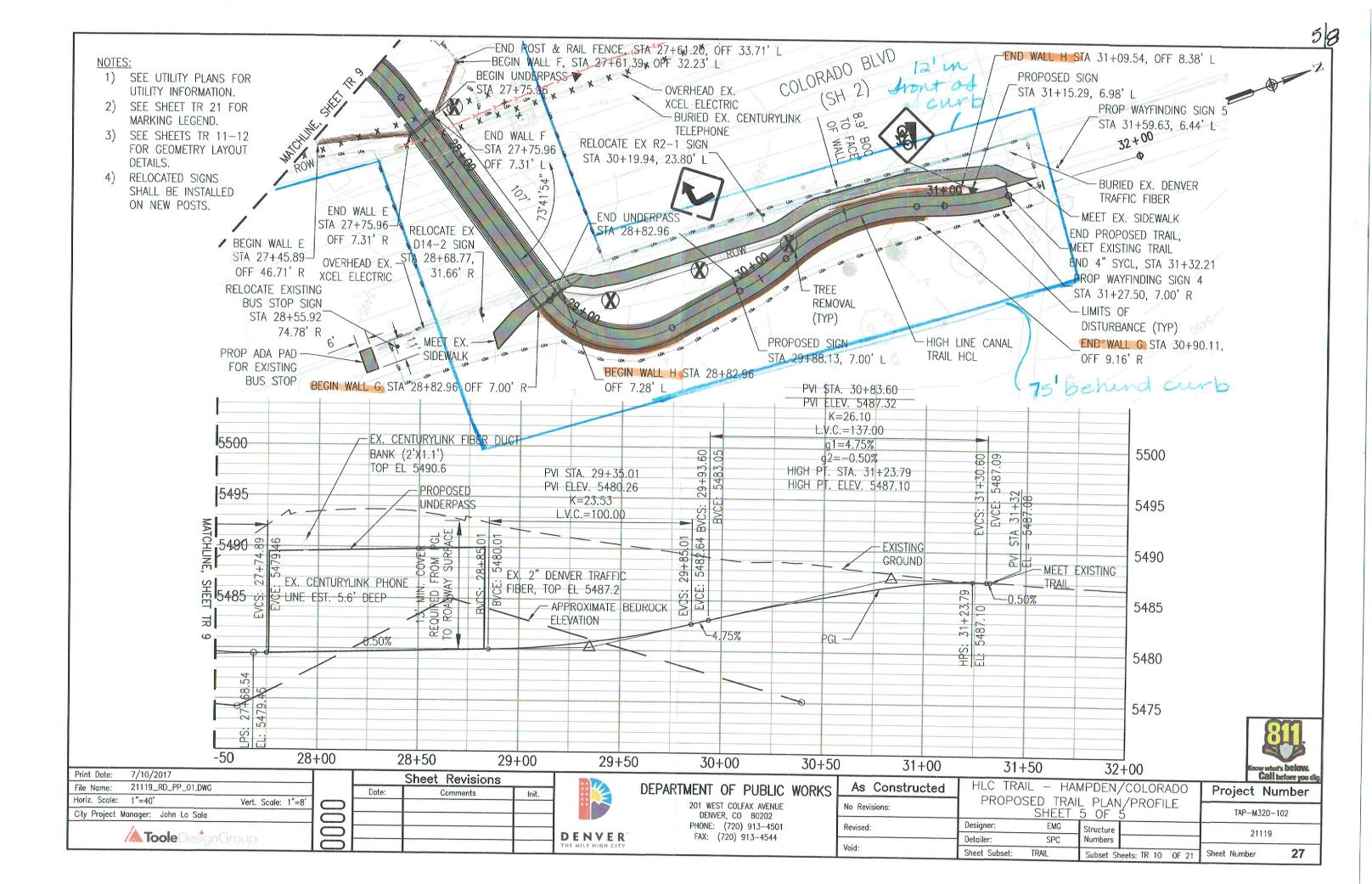


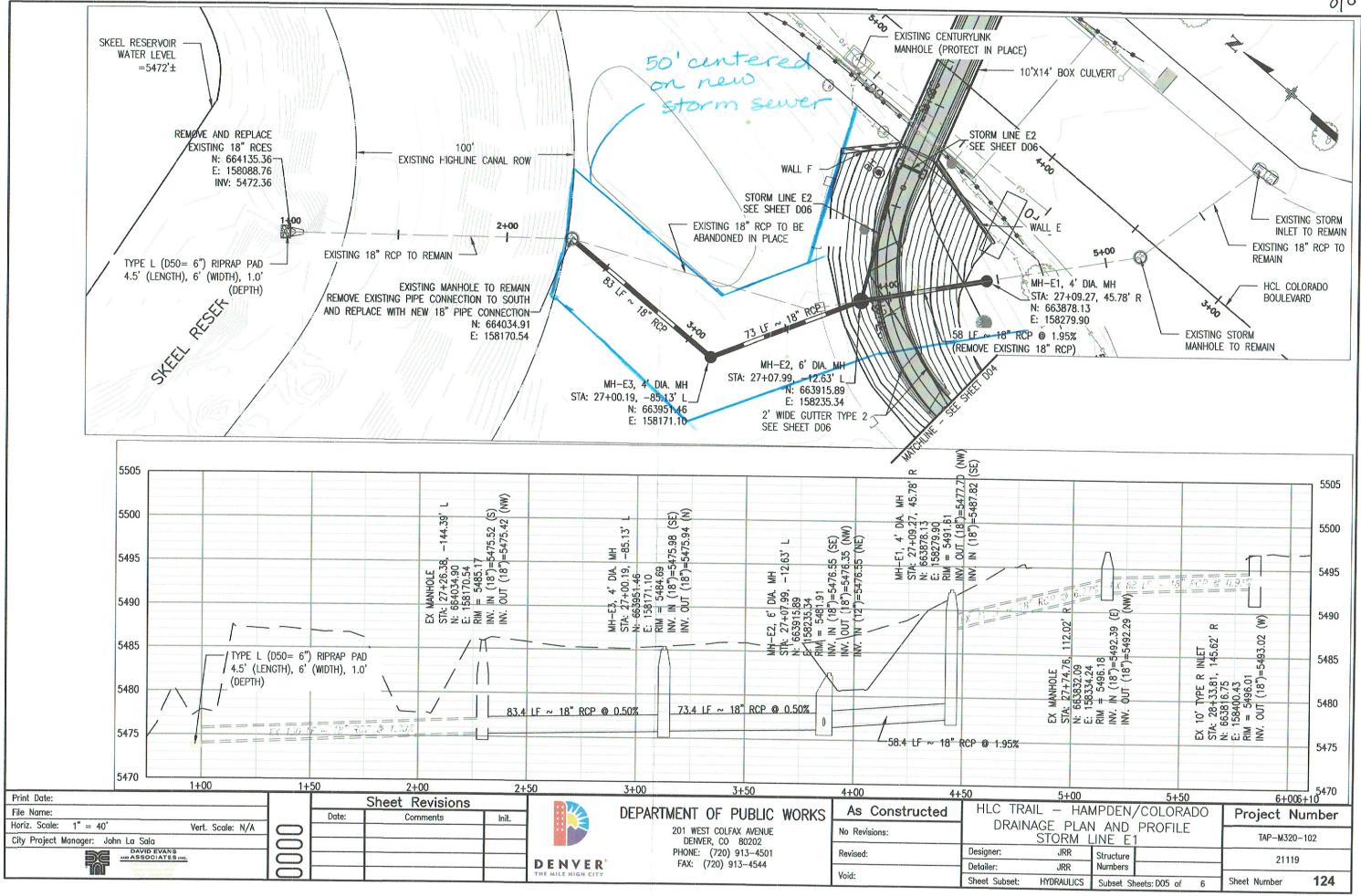
rev \$ 18/19	
PREVIOUS ALIGNMENT STA 15+81.58, 0.00' 90' not co curb	
Contraction of the second seco	
15+00 15+50 16-I   RAIL - HAMPDEN/COLORADO Project Number   DEN UNDERPASS EXHIBIT TAP-M320-102   EMG Structure 21119   SPC Numbers Sheet Number   TRAIL Subset Sheets: TR 6 OF 21	













#### Goodbee and Associates, Inc. City and County of Denver - High Line Canal Trail Underpasses Project QLB Evaluation Scope and Fee Estimate 04/08/19

Task	Description of Activities /Assumptions	PM III	Designer	CAD I	Total Hrs.	Total C (2019 Con Rates	ntract
		\$140/hr	\$100/hr	\$75/hr			
Utility Coordination	<b>Private Utility Designating (QL B):</b> Identify areas meeting criteria requiring QLB. Coordinate with SUE provider to designate utilities and provide sealed SUE plans/report. Coordinate with project surveyor to survey utility markings. Field check QLB report/plans and utility survey. Update existing utility base file per new survey file.	26	8	8	42	\$5,04	0
TOTAL LAB	26	8	8	42	\$5,04	10	

#### **Assumptions and Exclusions:**

1. Scope of work consists of bringing project into compliance with SB-167 requirements.

- 2. Assume no additional billing periods.
- 3. CAD work in AutoCAD.
- 4. SUE provider and surveyor under HKS' contract.

# Larry Rodgers Design Group



February 25, 2019

David Evans & Associates Attn: Cody Keraga PE 1600 Broadway, Suite 800 Denver, CO 80202 Re: Wellshire golf course irrigation

Thank you for the call last week I would think we will need to complete the following for The Highline canal improvements at Wellshire golf course:

1) Initial planning and meeting 4 hours: LR at \$95/hr	\$	380
2) preparation of bid documents 48 hours	\$	4,560
3) review of bids and attend pre-bid meetings 12 hours	\$	1,140
4) (2) site review meetings and irrigation staking 16 hours Surveyor @\$65/hr	\$	1,040
5) update existing irrigation system plans 16 hours draftsman \$60/hr	<u>\$</u>	960
Sub Total	\$	8,080

Summary of Scope Required:

- Irrigation Removal Plans
- Proposed Irrigation Plans
- Irrigation System quantities and approximate estimated unit costs (tabulation in plans and excel)
- Any special provisions (word document) required for the irrigation system removal and construction, including Contractor qualifications requirements, if required