

Exhibit A

Service Authorization

Service Authorization No. Fifth Amendment
CORE Project No. 15-036-001

This Service Authorization identifies the Scope of Services, and related Compensation and Schedule, to be provided by CORE Consultants, Inc. (CORE) for the T-88 Outfall Channel Redesign. This Service Authorization, once executed by the Client and CORE, becomes a part of the Professional Services Agreement between CORE and Client, dated September 24, 2015. All terms and conditions of the Professional Services Agreement are incorporated herein by reference.

SCOPE OF SERVICES

The following Scope of Services represents the effort necessary to work with the City of Commerce City and its contractor, Flatiron Construction, to perform a redesign, and prepare revised construction drawings for the T-88 outfall channel from the outlet spillway of Pond 104 to the existing concrete box culvert under E-470. The approved construction plans referenced throughout are titled, T-88 Basin, Storm Drainage Improvements Construction Plans, dated May 2017.

I. Final Design and Revised Construction Drawings

Based upon Client's direction to proceed with its selected vertical drop structure alternative, proceed with the final design of the vertical drop structures and preparation of the revised construction plans. The design will incorporate details for the underdrain as it passes through the vertical drop structures. Also, the hydraulic model previously prepared and contained within the approved Final Drainage Study, T88 Regional Drainage Improvements, Commerce City, Colorado, dated August 25, 2017, will be updated.

I.1. Final Drainage Report, Letter of Amendment

Prepare a new hydraulic model for the client-selected vertical drop structure alternative, incorporating the results of the updated modeling into the final vertical and horizontal location of the vertical drop structures. Prepare a letter report amending the previously approved Final Drainage Study for T88, attaching the updated hydraulic modeling for the outfall channel.

I.2. Underdrain

Perform the final design of the underdrain system, including pipe size, material, typical trench section, and horizontal and vertical design elements. The underdrain pipe will be added to the outfall channel plan and profile drawings, and details provided for its alignment through each of the four (4)/eight (8) vertical drop structures. Details for how the underdrains pass through the vertical drop structures will be included.

1.3. Vertical Drop Structures

Perform the final design of the vertical drop structures based upon the updated hydraulic model for the T-88 outfall channel. Prepare plan, profile and cross-sectional details of each drop structure, including specific elevations at critical locations. A grading plan will be prepared for each drop structure location from which cross-sections will be taken for use in the final, updated hydraulic modeling.

1.4. Review and Approval Process

Submit the Final Drainage Report amendment and revised construction plans for the outfall channel to the City and E-470 for review and approval. Address comments and resubmit for final approval.

2. Project Administration

2.1. Meetings and Coordination

Meetings, presentations, and project coordination with the Client and Flatiron as appropriate during the project.

2.2. Reimbursable Expenses

Reimbursable expenses shall include reproduction, courier services, postage, shipping, mileage, and other applicable items as further identified on CORE's Schedule of Rates.

ASSUMPTIONS AND CLARIFICATIONS

The following Assumptions and Clarifications are provided relative to the Scope of Services and Compensation herein:

- I. All revised designs and hydraulic modeling will be based upon the horizontal control and vertical datum established as a part of the approved construction drawings. No field surveys are included nor anticipated herein.

SPECIFIC EXCLUSIONS

This Agreement specifically excludes the following items, and all items not listed in the Scope of Services presented herein: NA

CLIENT RESPONSIBILITIES

The following items will be provided by Client: NA

COMPENSATION

The Scope of Services provided herein will be provided on a Time and Materials Estimate (TME) not-to-exceed basis pursuant to the Schedule of Rates in affect at the time services are rendered and expenses incurred. A copy of CORE's current Schedule of Rates is incorporated herein as Exhibit B. The estimated fees presented below for each task item would not be exceeded without prior written authorization from Client and executed, amended Service Authorization.

Task	Task Description	Fee	Type
1	Final Design and Revised Construction Drawings	\$23,500.00	TME
2	Project Administration	\$1,880.00	TME
	Total:	\$25,380.00	


SCHEDULE

Design, preliminary hydraulic modeling, and plan revisions will be completed within two weeks of Notice to Proceed. Final hydraulic modeling and amended drainage report to follow.

CORE is hereby authorized by Client to proceed with the Scope of Services as set forth herein.

CORE Consultants, Inc.

Client: City of Commerce City, CO



Name: Leonard R. Wilson

Name: _____

Title: Senior Vice President

Title: _____

Date: March 12, 2018

Date: _____