

AGREEMENT NO. _____

**AMENDMENT NO. ONE TO
AGREEMENT NO. 2023-048**

THIS AMENDMENT NO. ONE TO AGREEMENT NO. 2023-048 is made and entered into on _____, by and between the **CITY OF BAKERSFIELD**, a charter city and a municipal corporation (referred to herein as "CITY"), and **TDG ENGINEERING INC.**, a Corporation authorized to do business in California (referred to herein as "DESIGN CONSULTANT").

R E C I T A L S

WHEREAS, on February 22, 2023, CITY and DESIGN CONSULTANT entered into Agreement No. 2023-048 in the amount of **Two Hundred Twenty-Eight Thousand, Nine Hundred Eighty Dollars and Zero Cents (\$228,980.00)** wherein DESIGN CONSULTANT agreed to provide design services for the **Dr. Martin Luther King Jr. Blvd Streetscape Design**; and

WHEREAS, CITY and DESIGN CONSULTANT desire to enter into Amendment No. 1 to expand the scope of work, and increase Compensation in the amount of **Five Hundred, Eighty Eight Thousand, One Hundred Forty Dollars and Zero Cents (\$588,140.00). for a total compensation of Eight Hundred Seventeen Thousand, One Hundred Twenty Dollars and Zero Cents (\$817,120.00).**

NOW, THEREFORE, incorporating the foregoing recitals herein, CITY and DESIGN CONSULTANT mutually agree to amend Agreement No. 2023-048 as follows:

1. Section 1 of Agreement No. 2023-048 entitled "Scope of Work" is hereby amended to read as follows:

1. **SCOPE OF WORK.** In exchange for the Compensation (defined below), DESIGN CONSULTANT must competently and thoroughly design and engineer the Project as more specifically described in the Request, attached as **Exhibit A** and incorporated herein by reference, and in DESIGN CONSULTANT's scope of work, attached hereto as **Exhibit B** and in DESIGN CONSULTANT'S additional scope of work, attached hereto as **Exhibit C** and incorporated herein by this reference (collectively, the project description in the Request and DESIGN CONSULTANT's scope of work are referred to as "Scope of Work"). DESIGN CONSULTANT's services shall include all the procedures necessary to properly complete the Scope of Work, whether specifically included in the Scope of Work or not.

2. Section 2 of Agreement No. 2023-048 entitled "Compensation/Payment Procedure" is hereby amended to read as follows:

2. **COMPENSATION/PAYMENT PROCEDURE.** In exchange for performing the Scope of Work and subject to the terms of this section, CITY will pay DESIGN CONSULTANT as follows ("Compensation/Payment Procedure"):

2.1 **Actual Costs.** CITY will reimburse DESIGN CONSULTANT's actual costs (including labor costs, employee benefits, overhead, and other direct costs) in an amount not to exceed **Eight Hundred Seventeen Thousand, One Hundred Twenty Dollars and Zero Cents (\$817,120.00)** exclusive of any fixed fee. Actual costs shall not exceed the estimated wage rates and other costs set forth in DESIGN CONSULTANT's cost proposal.

CITY will pay DESIGN CONSULTANT within 30 days after DESIGN CONSULTANT submits an itemized invoice for the portions of the Scope of Work completed and that invoice is approved by CITY. The Compensation will be the total amount paid to DESIGN CONSULTANT for performing the Scope of Work and includes, but is not limited to, all out-of-pocket costs and taxes. CITY will pay no other compensation to DESIGN CONSULTANT. In no case will CITY compensate DESIGN CONSULTANT more than **Eight Hundred Seventeen Thousand, One Hundred Twenty Dollars and Zero Cents (\$817,120.00)** for performing the Scope of Work.

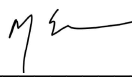
3. Except as amended herein, all other provisions of Agreement No. 2023-048 shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have caused this Amendment No. One to Agreement No. 2023-048 to be executed the day and year first above written.

“CITY”
CITY OF BAKERSFIELD

“DESIGN CONSULTANT”
TDG ENGINEERING INC.

By: _____
KAREN GOH, Mayor

By:  _____
Roswell Eldridge,

Title: Executive Vice President/COO

APPROVED AS TO CONTENT:
PUBLIC WORKS DEPARTMENT

By: _____
GREGG STRAKALUSE
Public Works Director

APPROVED AS TO FORM:
VIRGINIA GENNARO
City Attorney

By: _____
ASHLEY ZAMBRANO
Deputy District Attorney

Insurance: _____

COUNTERSIGNED:

By: _____
RANDY MCKEEGAN
Finance Director

Attachments: **Exhibits A, B, and C**

Amendment No.1 to Agmt 2023-048 TDG

Final Audit Report

2023-08-31

Created:	2023-08-31
By:	Noren Hartman (nhartman@tooledesign.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAWllguAIRZbCcR4GuhztX_eu-V0O-rcUI

"Amendment No.1 to Agmt 2023-048 TDG" History

-  Document created by Noren Hartman (nhartman@tooledesign.com)
2023-08-31 - 6:14:32 PM GMT
-  Document emailed to RJ Eldridge (reldridge@tooledesign.com) for signature
2023-08-31 - 6:14:53 PM GMT
-  Email viewed by RJ Eldridge (reldridge@tooledesign.com)
2023-08-31 - 6:22:59 PM GMT
-  Document e-signed by RJ Eldridge (reldridge@tooledesign.com)
Signature Date: 2023-08-31 - 6:23:05 PM GMT - Time Source: server
-  Agreement completed.
2023-08-31 - 6:23:05 PM GMT



BAKERSFIELD

THE SOUND OF *Something Better*

Revised on December 22, 2022

December 15, 2022

Re: Request for Scope of Work, Fee Proposal, and Schedule for the Dr. Martin Luther King Blvd Traffic Calming project (T3K323)

To Whom It May Concern:

The City of Bakersfield respectfully requests that your firm submit a scope of work, fee proposal, and schedule for providing services on the above referenced project. The City is looking to reach out to approved consultants from The City's Library of Consultants which was approved by the City Council on October 5, 2022. The consultants must have experience planning, designing, conceptual drawing, community feedback / input, and experience with complete streets projects.

The purpose of this project is to implement complete streets (traffic calming, enhanced pedestrian crossings, improved signage and lighting, more resilient pavement markings, ADA modifications, median modification, sidewalk improvements, etc...) improvements on Dr. Martin Luther King Blvd from E. California Ave to SR-58. This will be a long-range improvement program consisting of multiple phases over multiple years. The City anticipates up to four phases with an estimated total construction of up to \$3,000,000.00 per phase.

Phase 1 of the project covers the segment from E. California Ave to SR-58. Phase 2 covers from SR-58 to Panama Lane.

The City requests your firm submit a one-page general description of work to implement complete streets improvements, including traffic calming and pedestrian safety. Your firm will also be required to submit qualifications of work on similar projects, schedule for availability, and a list of qualified personnel that will be working on this project (submittal). Submittals should not be more than 3 pages. Although this project is a multi-phase project, this scope is only for the conceptual drawing stage for phase 1 of the overall project, which is to help the City develop schematics and concept drawings for the preliminary phase. When the City is ready to proceed with the design phase it will request that scope at a future date.

Please submit your written fee proposal, proposed time schedule, and submittal package for this project by ~~December 23, 2022~~ **January 6, 2023**.

If you have any questions regarding this submittal, please call me, Navdip Grewal, at 661-326-3361 or at ngrewal@bakersfieldcity.us.

Very truly yours,
GREGG STRAKALUSE
Public Works Director

By: _____
Navdip Grewal
Civil Engineer IV- Design Engineering

Enclosures: Aerial Maps
cc: Luis Topete, Aaron McWilliams, Reading File

Public Works Department
1501 Truxtun Avenue, Bakersfield, CA 93301
661-326-3724 FAX: 661-852-2120





527 W. 7TH STREET
SUITE 701
LOS ANGELES, CA 90014

213.257.8680
TOOLEDESIGN.COM

February 2, 2023

To: Paul Archer, PE
Organization: Public Works Department – City of Bakersfield
From: Adam Vest, PE and Sofia Duran, PE
Project: Dr. Martin Luther King Blvd. Traffic Calming Project

RE: DRAFT Scope of Work

Project Approach

Task 1 – Project Kickoff & Ongoing Management (Total: \$11,210)

TDG Engineering will prepare for and participate in a kickoff meeting with City of Bakersfield (COB) staff within two weeks of the Notice to Proceed. At the kickoff meeting, we will clearly identify project expectations and review the project scope, Project Management Plan (PMP), schedule, deliverables, budget, key project assumptions, data availability, and communication protocols. An outline for the basis of design memorandum will be developed after the kickoff meeting to be completed after we evaluate existing conditions in Task 2. Five team coordination meetings will be held as appropriate to provide project status updates and to reflect progress. The Project Manager will document and communicate progress monthly via reports and invoices to the COB.

Task 1 Deliverables

- Project Management Plan (PMP) and Schedule
- Project Kickoff with COB and five (5) team coordination meetings
- Meeting agendas, attendance logs, and notes
- Basis of Design Outline
- Monthly progress reports and invoices

Task 2 – Evaluation (Total: \$43,320)

The TDG Team will hold a stakeholder engagement session to assess tradeoffs and set design parameters, goals, and considerations. This session will serve as a guide for subsequent project development. We will leverage our team's knowledge of policies, planning, design, and experience with complete streets projects to ensure these project goals, objectives, and metrics are effective tools for addressing community concerns. Design criteria and recommendations will be summarized in a Basis of Design Memorandum and submitted to COB for review and acceptance. The memo will be accompanied by hand drawn typical sections and plan-view drawings showing the relevant existing and proposed design features. We will address one round of review comments on the Basis of Design Memorandum for incorporation into Concept Design Development.

Task 2 Assumptions

Community engagement activities will be performed by others

Task 2 Deliverables

- Basis of Design Memorandum
 - One (1) Stakeholder Engagement Session
-

Task 3 – Concept Design (Total: \$43,320)

TDG will work with the City of Bakersfield staff to determine the extent and format of existing GIS inventories, traffic counts, the most recent five years of available crash data, standard plans, and other relevant planning documents to create a comprehensive existing data and analysis framework. To the extent possible, Toole Design will use open-source data and imagery to fill data gaps. This data collection and the Stakeholder Engagement Session from Task 2 will be used to identify opportunities and constraints and develop planning-level concepts that illustrate the future vision for the corridor.

The conceptual drawings will include a mix of cross-sections and full plan view concepts. These plans will include preliminary roadway geometry, pavement marking and signing, traffic calming elements, streetscape enhancements, ADA upgrades, and safer crossing treatments. The typical cross-sections will be developed showing travel lanes, bicycle facilities, and sidewalk widths along the project corridor in up to four key areas where the ROW fluctuates the most. To ensure the constructability of our conceptual design, we will conduct a drainage study and recommend solutions to be included in the concept plans. Additionally, our team will develop cost estimates for the study corridor using City construction bid tabulations that are reflective of similar local projects including other cities in Kern County that are constructing similar projects. We will address one round of review comments on the concept design plans.

Task 3 Assumptions

City of Bakersfield will provide copies of related traffic studies, planning and environmental documents, and information on upcoming projects which may have an impact on the design of the corridor; COB will provide base files such as topographic, R.O.W., curb line, and Quality Level B subsurface utility surveys for the project corridor in AutoCAD format if available; all deliverables will be provided electronically (hard copies will not be required); plans will be prepared using AutoCAD software

Task 3 Deliverables

- Conceptual engineering plans and sections (20 scale)
 - Cost estimates including line-item estimates and construction costs reflective of similar local projects
-

Task 4 – 30% Design (Total: \$68,010)

A final set of construction documents will be submitted at a level of 30% design completion. This shall include:

- Plan sheets, typical sections, non-standard specifications as needed, and general notes
- Limits of any pavement removals and reconstruction
- Limits of modifications to curb and gutter, sidewalk, utilities such as lighting, fire hydrants, utility poles, and additional modifications as needed
- Signing and striping design layout and construction plans with proposed alignment as needed
- Following submission of the plans, and after receipt of City comments, our team will attend one design review meeting to discuss and resolve City comments

TDG will ensure the original Evaluation and Concept Design intent from Tasks 2 and 3 for the proposed bicyclist/pedestrian facilities is preserved throughout the 30% Design plans.

Task 4 Assumptions

All assumptions in Task 3 apply; the design, preparation of plans, specifications and estimates (PS&E) shall conform with design treatments included in the Conceptual Design plans and use relevant City standard plans, the Guide for the Development of Bicycle Facilities (AASHTO, 2023), the Policy on Geometric Design of Highways and Streets (AASHTO, 2018), the latest California Manual of Uniform Traffic Control Devices (MUTCD), the Federal Americans with Disabilities Act (ADA) and the State of California Access Compliance Manual (2003). No Signal Modification Plans will be completed at the 30% submittal level.

Task 4 Deliverables

- 20-scale sheets with relevant limits of modification, removals, and restorations in plan and cross-section views. The expected set of plans will include:
 - o Cover: 1 sheet
 - o General Notes and Legend: 1 sheet
 - o 30% Construction Plans: 11 sheets
 - o 30% Signing and Marking Plans: 11 sheets
 - o Typical Sections: 2 sheets
 - o Technical Specifications: 2 sheets
 - o List of anticipated special provisions: 1 sheet
- One (1) design review meeting with the City of Bakersfield to discuss and resolve City comments
- Table of TDG responses to City comments and resolution

Task 5 – ADA Evaluation (Total: \$20,800)

TDG will determine ADA compliance for all curb ramps along the corridor by conducting a field review and by reviewing topographic survey data collected by a surveying subconsultant. Two TDG Engineers will research and field-verify existing conditions then provide a list of pedestrian ramps that are not ADA compliant. This evaluation would inform the 30% design plans and cost estimate.

Task 4 Assumptions

- No design plans will be developed for Task 5.

Task 4 Deliverables

- Matrix of findings summarizing ramp conditions for each ramp along the corridor.

Task 6 – Survey (Total: \$35,820)

The project team will work with KSI Engineering, Inc. to complete a topographic survey and boundary mapping for the Dr. Martin Luther King, Jr. Phase 1 corridor. Work will include collection of 50-foot cross sections including the intersection of Dr. MLK Jr. Boulevard/California Avenue and Dr. MLK Jr. Boulevard/HWY 58 (50 feet beyond curb returns) within City right-of-way.

Survey data is to include:

- Monuments to establish right-of-way within the project area
- Pavement grade
- Median curbs
- Traffic striping

- Pavement markings
- Manholes with dip and photo of inverts
- Pull boxes
- Utility vaults
- OH utility poles
- Guy wires
- Edge of pavement
- Curb and gutter; Cross gutter (flowline and lip)
- Top of curb
- Gutter lip
- Flowline
- Sidewalk (front and back)
- Drive approaches
- Water valves, water meters, gas valves, gas meters
- Streetlights
- Hydrants
- Signs
- Any obstruction in the project area

Task 6 Assumptions

- Setting of property corners is not included in this cost
- Dipping of manholes is included in this cost
- Services outside of the scope and project area will not commence without an approved change order

Task 6 Deliverables

- CAD base map
 - Surface TIN
 - High resolution orthomosaic
 - Planimetric details
- Signed and stamped, electronic copy
- Google Earth deliverable
 - High resolution photo
 - Survey point data
- Autodesk Recap point cloud
- Online access to point cloud viewer

Task 7 – Alternatives Analysis (Total: \$18,440)

TDG will provide data collection at up to 3 signalized intersections and at key intersections along the corridor (including turning movement counts, pedestrians, and bicycles; signal timing to be provided by City of Bakersfield); daily volumes and speed data at up to 3 locations; and parking occupancy on selected segments of the corridor. The counts would be collected at project initiation to understand the level of multimodal activity on the corridor and intersections. By conducting in-depth, traffic operations analysis using software such as Synchro, reviewing signal timing data, and conducting signal warrant analysis at up to 3 locations (pedestrian-focused and/or traditional), TDG will be able to assess the trade-offs and evaluate the costs, benefits, and impacts of each transportation improvements in the corridor to ensure the best design treatment is selected. This analysis will be used to assess impacts based on a safe systems mitigation approach.

Task 8 – Community Engagement (Total: Time and Materials; up to \$20,000)

TDG will provide community engagement services on a Time and Materials basis as directed by the City of Bakersfield. Potential tasks may include:

- Draft an overall public engagement strategy as part of a Community Engagement Plan (CEP) that outlines the general approach to media messaging. During the process, we will be responsible for crafting all messaging and having the material translated into the necessary languages with live translation services available at the workshop.
- Create visuals that help communicate the design concepts to the public. In addition to the cross-sections, staff will create visualizations by transforming photographs into photo-realistic renderings. We will develop visualizations of the proposed concepts, which will help stakeholders, members of the public, as well as City of Bakersfield staff and project partners to clearly understand the design intent and the safety benefits of the proposed concepts. The technical analysis will be vetted by the community through parallel engagement efforts facilitated by the project team and reference the project engagement process recommendations as appropriate. Additionally, the community's input on near-miss collisions and perception of safety will inform our understanding of the safety on this corridor.
- To update stakeholders on project progress and encourage input, our Team recommends hosting an additional in-person workshop during the 30% Design Task. We will identify the specific content to be shared at the event and ensure it is scheduled at a stage that provides meaningful updates and allows time to incorporate feedback into the technical plans. Our Team will also provide opportunities for stakeholders to learn about project details while engaging in hands-on activities interacting with community leaders and agency staff. Our team will provide incentives to stakeholders to encourage participation and collaborate with local vendors to provide free food and/or drinks at events, to provide a pleasant experience for participants. Additionally, we recommend facilitating online activities that can be self-administered, allowing stakeholders to provide input on their own time, without attending a workshop.

TASKS	BUDGET	Mo. 1	Mo. 2	Mo. 3	Mo. 4	Mo. 5	Mo. 6	Mo. 7
Task 1: Project Kickoff & Ongoing Management	\$11,210							
Task 2: Evaluation	\$11,380							
Task 3: Concept Design	\$43,320							
Task 4: 30% Design	\$68,010							
Task 5: ADA Evaluation	\$20,800							
Task 6: Survey	\$35,820							
Task 7: Alternatives Analysis	\$18,440							
Task 8: Community Engagement	\$20,000							
TOTAL \$228,980								

PROJECT TEAM



Jeremy Chrzan, PE, PTOE, LEED AP® will serve as **Principal-in-Charge**. Jeremy has over 20 years of experience in transportation, municipal, and site engineering projects. He is TDG's Multimodal Design Practice Lead. His project work includes leading a Complete Streets on-call contract for the City of Philadelphia, leading traffic calming efforts in Dallas, and leading numerous design projects in California. Availability: 15%



Adam Vest, PE, PTOE will serve as the **Project Manager**. Adam is a national expert in transportation safety and multimodal planning and engineering. His work incorporates a human-scaled, Complete Streets approach, and he develops innovative solutions that support mobility, safety, and connectivity for all users. Adam has led Complete Streets corridor projects and overseen numerous conceptual designs through to final design. Availability: 25%



Jason Fong, PE, LEED AP® has over two decades of experience. He is overseeing the engineering designs for Berkeley's Southside Complete Streets project and designing traffic calming measures as part of an on-call contract with the City of Alameda. Availability: 30%



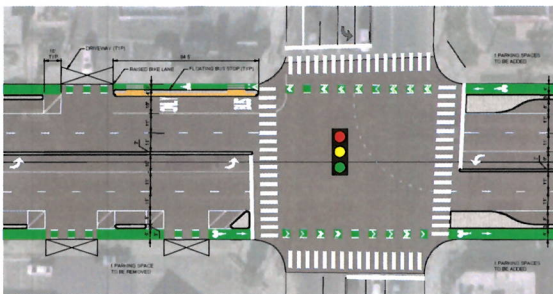
Sofia Duran, PE has experience working on multimodal transportation projects. She specializes in corridor design, safety analysis, and public

engagement. She has developed conceptual, preliminary, and final design plans for multimodal corridors. Availability: 40%



Yasmin Fuseini-Codjoe has experience in analyzing safety and mobility countermeasures for active transportation plans, and design and construction of transportation facilities and transit systems. She has developed designs from concept through 100% for numerous projects.

Availability: 40%



TDG developed conceptual designs for Artesia Boulevard in Long Beach, CA.

FIRM PROFILE

We are known for our ability to turn planning-level concepts into reality, and we have accomplished this on a variety of challenging transportation projects including Complete Street corridors, on-street bike facilities, traffic calming features, and pedestrian safety improvements. Our staff work closely with clients to discuss the advantages and disadvantages of design solutions and to work through the trade-offs associated with reconfiguring street cross-sections to address all users' needs. We also bring experience applying data-driven Vision Zero and safety analyses to the unique contexts of municipal corridors.

PROJECT EXPERIENCE

Artesia Great Boulevard Improvements, Long Beach, CA

TDG led public engagement activities and developed 20% engineering designs for this Complete Streets design project. These plans were to be used to communicate design treatments to community members and also refine the final design plans. The project included parking protected bike lanes and intersections, safety-oriented access control, floating bus islands, and streetscape enhancements.

Westside Mobility Projects, Los Angeles, CA

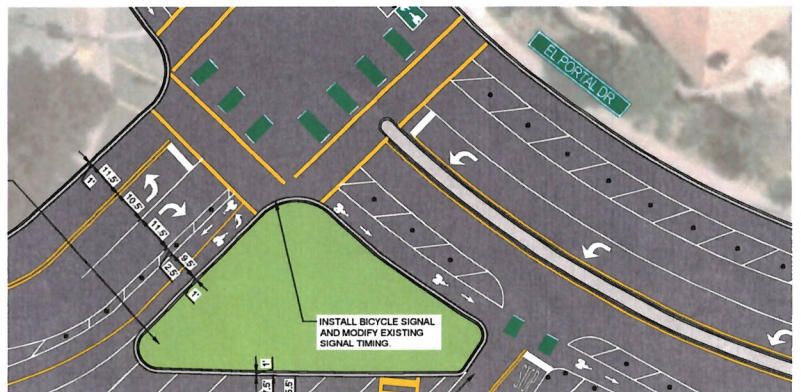
TDG is developing conceptual plans with short-, mid-, and long-term bicycle, pedestrian, and traffic calming infrastructure improvements along four corridors in Los Angeles. Our team is providing planning, data collection and analysis, community engagement, conceptual design, 30% preliminary engineering services, and 100% design plans.

Santa Monica Wilshire Boulevard Safety Analysis, Santa Monica, CA

TDG completed a detailed safety study of the 2.4-mile Wilshire Boulevard in the City of Santa Monica. The study process included an inter-departmental Road Safety Audit, participatory design open-houses, and a 30% conceptual design plan that included options for a phased approach to implementation. The phasing included short-, medium-, and long-term options, with associated costs. Our team developed a final 100% PS&E package for the short-term concept designs.

Burbank Bikeway and Intersection Feasibility and Design, Burbank, CA

TDG developed conceptual design plans for Class IV bikeways on 1st and 3rd Streets in Downtown Burbank. The intent was to improve safety and traffic operations, while putting the comfort and safety of people walking and biking front and center. Having used these concept designs to assess trade-offs, conduct alternatives analysis, and receive feedback from community members and stakeholders, we are now developing 100% PS&E design plans.



TDG developed conceptual design plans and created a Final Corridors Study Report included planning-level cost estimates and an action plan for rapid implementation in San Pablo, CA.

Hours and Budget Estimate

Work Element Description	Classification/Title	Hourly Rate	\$ 270.00	\$ 160.00	\$ 210.00	HOURS	LABOR	EXPENSES	TOTAL
		Principal in Charge	Engineer II	Senior Engineer					
Dr. MLK Jr. Blvd. Phase 1									
Task 1 - PM and Coordination						0			
	Kick-off meeting	4	12	4		20	\$ 3,840.00		
	5 update meetings	5	10	10		25	\$ 5,050.00		
	Project Management		4	8		12	\$ 2,320.00		
	Task 1 Total	9	26	22		57	\$ 11,210.00		\$ 11,210
Task 2 - Evaluation						0			
	Stakeholder Engagement, Goal Setting, Evaluation	4	20	8		32	\$ 5,960.00		
	Basis of Design Memo	2	20	8		30	\$ 5,420.00		
	Task 2 Total	6	40	16		62	\$ 11,380.00		\$ 11,380
Task 3 - Concept Design									
	Set up plan sheets		8	2		10	\$ 1,700.00		
	Bring in reference files		10	2		12	\$ 2,020.00		
	Concept Design (color-blocked)	8	120	16		144	\$ 24,720.00		
	Quantities, Cost Estimate	4	24	12		40	\$ 7,440.00		
	Address comments	4	24	12		40	\$ 7,440.00		
	Task 3 Total	16	186	44		246	\$ 43,320.00		\$ 43,320
Task 4 - 30% Design									
	30% Construction Plans	4	110	40		154	\$ 27,080.00		
	30% S&M Plans and other sheets	5	150	20		175	\$ 29,550.00		
	Meeting to review City comments	2	6	2		10	\$ 1,920.00		
	Address comments	2	24	8		34	\$ 6,060.00		
	Revisions from Concepts QC	4	4	8		16	\$ 3,400.00		
	Task 4 Total	17	294	78		389	\$ 68,010.00		\$ 68,010
Task 5 - ADA Evaluation									
	Pre evaluation	4	16	8		28	\$ 5,320.00		
	Field work		16	16		32	\$ 5,920.00	\$ 500	
	Data Processing and Evaluation	4	16	2		22	\$ 9,060.00		
	Task 5 Total	8	48	26		82	\$ 20,300.00	\$ 500	\$ 20,800
Task 6 - Survey									
	Survey Coordination	2	4	4		10	\$ 2,020.00	\$ 33,800	
	Task 6 Total	2	4	4		10	\$ 2,020.00	\$ 33,800	\$ 35,820
Task 7 - Alternatives Analysis									
	Traffic Analysis	4	40	8		52	\$ 9,160.00		
	Data Collection		8			8	\$ 6,280.00	\$ 3,000	
	Task 7 Total	4	48	8		60	\$ 15,440.00	\$ 3,000	\$ 18,440
Task 8 - Community Engagement (As Needed)									
	Public engagement (Concept Design)	8	16	24		48	\$ 9,760.00	\$ 500	
	Public engagement in-person (30% Design)	8	10	20		38	\$ 7,960.00	\$ 500	
	Translation of Material		8			8	\$ 1,280.00		
	Task 7 Total	16	34	44		94	\$ 19,000.00	\$ 1,000	\$ 20,000
		78	680	242			\$ 190,680.00	\$ 38,300.00	\$ 228,980.00

Tasks 1-7 \$ 208,980
Task 8 \$ 20,000

TOTAL \$ 228,980

July 26, 2023

To: Paul Archer, PE

Organization: Public Works Department – City of Bakersfield

From: Daniel David, PE

Project: Dr. Martin Luther King Blvd Traffic Calming Final Design Project

RE: Draft Scope of Services for Final Design

INTRODUCTION

The overall objective of this project is to prepare the construction bid package for the traffic calming and complete streets improvements to Dr. Martin Luther King Jr. (MLK) Boulevard from California Avenue to South of State Route 58 in coordination with Caltrans District 6 and the local railway owner for the railroad crossing north of Brundage Lane. Elements of this project will include the details and plans for the corridor roadway and intersection improvements, implementing bicycle infrastructure, pedestrian walking and crossing improvements, street lighting, landscaping, community outreach, California Department of Transportation (Caltrans) Local Assistance and railroad stakeholder coordination.

The proposed roadway improvements on MLK Boulevard include implementing traffic calming measures such as reducing MLK from a 12-foot two-lane cross section with 14-foot-wide auxiliary lanes in both directions used for on-street parking and biking, curb, gutter, sidewalk and a raised median to an 11-foot two-lane cross section with striped on-street parking, a signed designated bike facility and walkway, sidewalk, curb, gutter, curb extensions, and upgraded ADA-compliant curb ramps. Other project elements include street illumination, enhanced crossing improvements, Rectangular Rapid Flashing Beacons (RRFB), high-visibility crosswalks, and corridor-wide shading for pedestrians. The enclosed scope assumes mill & overlay with minimal changes to the roadway profile and existing drainage patterns (mill & overlay pavement section to be provided by the City of Bakersfield). Roadway narrowing may necessitate additional design services to address and maintain positive drainage.

A topographic survey was prepared and delivered on April 18, 2023. The survey identified several properties with outdated right-of-way deed documentation that is being resolved in Phase I of the project. TDG Engineering does not expect coordination efforts needed in this Phase II of the project. Right-of-Entry coordination for construction that may encroach with adjacent property owners may also be required and will be determined by the 30% design in Phase I. The City will lead coordination efforts for Right-of-Entry should permits be required during construction. Temporary or permanent right of way coordination needs are not anticipated and therefore excluded. 30% plans are expected to be submitted by TDG Engineering during Phase I of this project in the Summer of 2023. The enclosed scope assumes a single preferred alternative will be selected at the conclusion of the 30% design phase.

The TDG Engineering team assumes the City of Bakersfield (COB), California Department of Transportation (Caltrans) – District 6 Local Assistance, and the local railroad owner agency will be the sole project reviewers/approvers. Additional permits, approvals, or coordination with other agencies/stakeholders are not

included. Utility coordination will be limited to the scope described within. COB will be responsible for routing submissions to the applicable reviewers/departments.

The TDG Engineering team is joined by Rios Design Studio (RDS) who will provide irrigation design support. See the supplemental to this for their applicable scope of services.

TDG Engineering Team's services will be limited to those expressly set forth herein. If the service is not specifically identified herein, it is expressly excluded. The TDG Engineering Team will have no other obligations, duties, or responsibilities associated with the project except as expressly provided in this Agreement.

Transferring Budget within Contract Maximum: The level of effort is specified in the scope of services. The budget may be transferred between discipline tasks at the discretion of TDG Engineering, provided that the total contracted amount is not exceeded. The TDG Engineering Team will have the flexibility to manage budget within a given discipline on a subtask level.

Services provided by the TDG Engineering Team will consist of:

GENERAL SCOPE OF SERVICES

This Scope of Services describes the work elements to be accomplished by the TDG Engineering Team as summarized under each Task. This scope consists of the following elements:

- Task 1 – Project Management and Coordination
- Task 2 – Utility Coordination
- Task 3 – 60% PS&E
- Task 4 – 90% Plans and Specifications
- Task 5 – 100% PS&E
- Task 6 – Final Ad-Ready PS&E Preparation
- Task 7 – Bid Support

With prior written approval by the City of Bakersfield (COB) and written notice-to-proceed, work elements described in this scope of services as optional services (as directed) may be produced by the TDG Engineering team. This Scope of Services is defined in the tasks below.

SCOPE OF SERVICES DEFINED

Task 1 – Project Management and Coordination

Overall project management and coordination work elements include:

1.1 Project Coordination with the City of Bakersfield

The TDG Engineering Team will coordinate with the City to keep the City's project manager informed about project progress, project issues and schedule. The TDG Engineering Team will attend and document monthly meetings (via conference call) with the City throughout the duration of the project to review progress and discuss project action items and next steps.

The TDG Engineering Team will deliver an updated Project Management Plan (PMP) to be distributed at the project kickoff meeting. At a minimum, the PMP will include:

- Detailed project schedule covering key milestones, Quality Assurance/Quality Control and design reviews, deliverables, and tentative meeting dates
- List of lead staff and/or departments responsible for each task

- List of agencies/departments requiring approval for each task and/or deliverable
- Communication protocol
- Document control protocol
- QA/QC Plan that includes details of internal team and City/agency design review process
- Critical decision points and dependencies
- Change management strategy

The TDG Engineering Team will perform and document QA/QC reviews in accordance with the PMP.

To facilitate timely decision-making, this task will also include preparing and maintaining an Action Items Tracking Matrix and a Record of Decision(s) describing key decisions and actions needed to drive the project forward. Each required action item will be assigned to an individual TDG Engineering Team member, and where applicable, will also be assigned to appropriate City, agency, and/or stakeholder personnel. It will be the TDG Engineering Team's responsibility to follow up with appropriate agency or stakeholder staff between meetings to ensure that action items are closed out in a timely manner.

The TDG Engineering Team will attend up to twelve (12) monthly virtual project status meetings with the City. These meetings under this work element will include the following participation by the TDG Engineering Team:

- Up to twelve (12) virtual one hour progress meetings attended by up to two (2) staff from the TDG Engineering team.
- Subconsultant attendance at meetings related to design work will be included under those individual design tasks.
- Other departments within the City such Stormwater and other COB-owned utility departments will be invited to monthly project status meetings as pertinent to design and coordination discussions.
- The TDG Engineering Team will prepare agendas and meeting notes/action items and distribute to attendees.

Coordination for impacts to existing drainage facilities will be captured within this coordination task. It is assumed that the project will not require a newly proposed drainage system and that TDG Engineering will maintain conveyance to the existing systems with the proposed design.

At this time, the TDG Engineering Team assumes the project will not increase impervious area nor disturb over 1 acre of land and therefore is not subject to stormwater permitting requirements. It is expected that any additional stormwater plans or permitting requirements will be prepared by the awarded contractor as designated in the Specification of the final bid package.

Should the City request additional needs addressing drainage and erosion control, a supplemental amendment to this scope and expenses will need to be approved by the City before the TDG Engineering Team can proceed.

Additional documentation may include the following tasks:

- Design Criteria
- Site Assessment
- Water Quality Treatment and Flow Control Calculations
- Conveyance Calculations
- Drainage Report
- Drainage Plans

If the City has a change in project manager, the TDG Engineering Team will meet with the new project manager, provide a summary of design and progress, provide a summary of decisions made, and provide past deliverables to date. This effort is included in this task. If changes to completed design efforts and/or Scope of Services are requested due to the change in City's project manager, this will require a supplement to the Agreement.

1.2 Project Schedule, Budget, and Team Management

The TDG Engineering Team will develop an overall project schedule which will include a schedule by task, through bid advertisement for the full project in Microsoft Excel format. The TDG Engineering Team will prepare a draft and final schedule for the City review, and then the TDG Engineering Team will prepare two (2) schedule updates as the project progresses, when requested by the City. The TDG Engineering Team will also manage the overall project budgets, monitor staff and subconsultants, manage change and prepare amendments, and monitor work progress under this work element.

1.3 Progress Reports and Invoices

As part of the project, the TDG Engineering Team will prepare monthly progress reports that describe the work items and percentage of work items that were accomplished during a given month, as well as a forecast of work to be completed over the following month. Progress report will include a status of budget, spent, and remaining for each individual task. The monthly progress reports will also identify critical issues or concerns that may occur in any given month, if any. The TDG Engineering Team will submit these monthly progress reports to the City's Project Manager with the monthly invoices. The monthly invoices will bill by individual tasks. The TDG Engineering Team's Project Manager will notify City's Project Manager, in writing (memo format), of any out of scope and/or budgetary issues that are inconsistent with this Scope of Services.

1.4 Caltrans Local Assistance and Railroad Stakeholder Coordination

The TDG Engineering Team will lead coordination efforts with Caltrans District 6 Local Assistance and the nearby railroad stakeholder agency. In an effort to keep stakeholders updated with the project, The TDG Engineering Team will send invitations to the stakeholder to join monthly progress meetings and coordinate up to six (6) one-hour virtual focus meetings with the stakeholders throughout the duration of the project with up to two (2) staff from the TDG Engineering Team in attendance. The TDG Engineering Team will coordinate submittals with these stakeholders to ensure the deliverables are in an acceptable format for their comments, comment-responses, and approval.

Assumptions:

- This contract duration shall be no longer than 12 months
- Project kickoff meeting will be held virtually.
- Progress meetings are assumed to be one-hour in duration.
- Focus meetings with stakeholder are assumed to be one hour in duration.
- Meeting budget includes time for agenda and meeting minutes preparation.
- Maximum of two project schedule updates will be prepared.
- Meetings between Subconsultants will be conducted under other scope tasks.

Deliverables:

- Monthly Project Meeting Agendas for up to 12 one-hour virtual meetings and notes/action items
- Caltrans and/or Railroad Stakeholder Focus Meeting Agenda and Meeting Notes/Action Items for up to six (6) one-hour virtual meetings
- Action Items Tracking Matrix
- Updated PMP
- Project Schedule (Microsoft Excel format) and up to two updates
- Monthly Invoices and Progress Reports

Task 2 – Utility Letters and Conflict Map

The TDG Engineering Team will assist the City in preparing utility notification letters to utility franchises (PG&E electric and gas, Verizon, AT&T, Charter Spectrum, HP Communications, LUMEN, Cal Water, Casa Loma Water Company) and COB owned utilities (lighting, water, and sewer) with facilities identified within the project limits. The TDG Engineering Team will use letter templates provided by the City to prepare the notification letters and request as-built information from the franchises and City to digitize the existing utilities facilities. TDG Engineering will not be performing utility coordination with the mentioned franchises and COB-owned utility stakeholders. The City will solely lead coordination efforts with utility stakeholders such as attending coordination meetings, maintaining a log of correspondence and requests, coordinating submittal and approval of 60%, 90%, and 100% PS&E submittals, and retrieving comments or feedback from the respective franchises and stakeholders.

COB has contacted the following utility franchises on the corresponding dates in Phase I of this project and has shared the obtained data from the responses with the TDG Engineering Team. All current utility information that has been received by the TDG Engineering Team has been obtained from COB. The data the TDG Engineering Team has received from COB is assumed to be accurate and current. The date of response from these franchises is also annotated below:

Utility Agency	Date of Contact	Date of Response
AT&T (Pacific Bell)	4/11/2023	4/12/2023
California Water Service	4/11/2023	4/18/2023
COB Utilities	4/21/2023	4/24/2023
PG&E Electric	4/11/2023	4/25/2023
PG&E Gas	4/11/2023	4/25/2023
Charter Spectrum (Brighthouse)	4/11/2023	4/12/2023
Casa Loma Water Company	4/11/2023	No response received.
HP Communications	4/11/2023	No response received.
LUMEN (Level 3 Communications)	4/11/2023	4/13/2023
Verizon (MCI WorldCom)	4/11/2023	4/13/2023

The utility information obtained by COB in Phase I includes surface and GIS level utility data from the responding franchises. It should be noted, the TDG Engineering Team's includes preparing utility notification letters and one (1) utility conflict map based on the utility information provided by COB. Should the project require higher quality level information for the existing subgrade utilities, it would be considered outside the scope for the TDG Engineering Team to perform the coordination with the franchises and potential subconsultants to obtain the additional data. This would require an amendment to the project scope.

The TDG Engineering Team will prepare a utility conflict map on work elements as described below:

2.1 Utility Conflict Map

The TDG Engineering Team will prepare a utility conflict map that references existing utility data received from the City (from applicable utility owner). It is assumed all utility data will be collected by the City and that the data provided accurately represents current existing conditions in the project site. TDG Engineering will review the provided data and digitize the utilities data into a base map to be referenced with the proposed improvements to create the Utility Conflict Map. It is anticipated that GIS and plan view quality level utility information will be provided to the TDG Engineering Team from the City for review and digitization. The Utility Conflict Map will be prepared to identify and display potential utility conflicts through the project corridor from the data provided. The utility conflict map will be submitted to the City for their review, use, and file with the 60% submittal. The CAD utility base map will be submitted with the 90% package. TDG Engineering will attend one (1) one-hour virtual utility conflict resolution meeting as needed through the duration of the project should there be. It is not expected for utility relocations to be within the scope of this project, however, should it be determined that the TDG Engineering Team is required to perform utility relocations to accommodate the proposed design, then a supplemental amendment to this scope of work would be necessary.

Services provided by the TDG Engineering Team under this subtask will include:

- Review record drawings of existing utilities within the project limits provided by COB. The TDG Engineering Team will digitize the utilities into a base map CAD file for the City's use and distribution.
- Prepare a Utility Conflict Map. Display existing utility referenced with the proposed designs and the potential utility conflicts through the entire project corridor on an exhibit map. This will include identification of pothole investigations to be performed as needed should it be concluded that utility relocation is required.
- One (1) round of revisions to the Utility Conflict Map per comments or feedback received from the City.

Assumptions:

- The current project scope does not include full depth pavement reconstruction. The project assumes reprofiling will be needed to construct the improvements while maintaining the existing cross section.
- It is anticipated that the City will determine what pavement section option the graded pavement will be replaced with after reprofiling. Providing pavement section recommendations for this work will require including a geotechnical consultant on the TDG Engineering Team and an amendment to the scope.
- City provided Utility log from Phase I will be maintained and updated by the City.
- The City will send utility notification letters to the affected utility franchise companies.
- The City will obtain all pertinent utility as-built plans and data from franchises and affected stakeholders.
- Discrepancies with the existing utility base map will be coordinated by the City with each utility, and changes to the base map will be updated by the TDG Engineering Team.
- The City will distribute internally the plans sets for City owned utilities for review.
- The City will distribute to the respective franchises the plan sets from 60%, 90%, 100% PS&E submittals/
- The City will seek and obtain comments from utility franchises and COB-owned utility stakeholders on the submitted PS&E packages.
- Incorporation of utility franchise design, such as new or upgraded waterlines, into the contract documents is not included in this Scope of Services but could be provided as an additional service, to be performed under a Supplement to this Agreement.
- The City will prepare inter-local agency agreements between the City and the utility franchises for incorporation of relocations required by the proposed improvements. Examples of the services that could be included are: the adjustment of utilities, removal of abandoned structures and facilities, trenching, and traffic control.

- City will be responsible for determining the terms of all franchise agreements, including the responsibilities for potholing and relocations of franchise owned utilities.

Deliverables:

- One (1) Compiled log of received comments with responses
- Attendance at one (1) one-hour virtual utility conflict resolution
- DRAFT Utility Conflict Map exhibit for City comment
- FINAL Half size Utility Conflict Map exhibits noting conflicts provided to COB at 60% PS&E submittal – PDF
- CAD base map of existing utilities for COB use and distribution to franchises for preparing relocation design (at 90%, as needed)

Task 3 – 60% Plans, Specifications, and Opinion of Costs

The TDG Engineering Team will prepare 60% plans, specifications including special provisions, and opinion of costs for the construction contract and incorporate applicable comments received from the City based on the 30%/Conceptual Plan Phase I submittal deliverables. The 60% plans, specifications and special provisions, opinion of cost, and response to comments/log of decisions from Phase I of the project will be submitted to the City for their review and comment.

3.1 Response to 30%/Conceptual Plans Comments

The Toole Design Team will reference the documentation that logged the comments and responses that were resolved with the City in Phase I - 30%/Concept Plans and Cost Opinion of the project. This documentation will be used as a basis to prepare the 60% plans, specifications, and cost opinion. The Team is not expecting the project team to hold a comment review meeting to begin the 60% PS&E submittal preparation. Comment resolution from 30%/Concept Plans and the Cost Opinion, and approval to begin work for the 60% PS&E is anticipated to be completed in Phase I of this project.

Assumptions:

- The City will provide all the resolved pertinent comments and responses regarding the 30%/Conceptual Plans and Cost Opinion in Phase I of the project.
- 30%/Concept plan review comments from City staff in Phase I of the project will be referenced and inform the design in Phase II of the project.
- As noted above, the enclosed scope assumes a single preferred alternative will be selected at the conclusion of the 30% design phase.

Deliverables:

- Final comments and responses to 30%/Conceptual Plans

3.2 60% Plans

It is anticipated that the 60% plans will be approximately 125 sheets in total consisting of the following sheets:

- Cover Sheet w/ Vicinity Map and Index
- Legend, Abbreviations, and General Notes
- Key Plan
- Typical Roadway Sections
- Survey Control
- Horizontal Alignment Plan
- Construction Plan
- Roadway Profile Sheets

- Construction Details
- Intersection and Curb Ramp Detail Sheets
- Pavement Marking and Signage Plans
- RRFB Signal Plans and Details (if needed)
- Lighting Plan ⁽¹⁾
- Lighting Details and Schedules ⁽¹⁾
- Landscape Plans
- Landscape Details and Schedule
- Irrigation Plans ⁽²⁾
- Irrigation Details and Schedule ⁽²⁾
- Traffic Control Plans, Notes, and Details

⁽¹⁾ Plans Details, and Schedule to be prepared by COB.

⁽²⁾ See Supplemental for full scope of subconsultant services, including applicable assumptions and exclusions.

Assumptions:

- Note that 60% Plans will not include curb return elevations, curb ramp details. These will be provided at 90% level.
- The TDG Engineering does not anticipate that traffic detours will be required to construct the project and will utilize standard traffic control figures and a traffic control narrative to address the maintenance and protection of traffic (including pedestrians).
- Roadway Plans will show existing utilities and potential conflicts within project limits, as feasible based on available data.
- Summary of Quantities sheets will be included in the 90% Plan sheets.
- Major revisions to the cross-section, pavement section, and/or geometric design elements from Phase I are not anticipated.
- TDG Engineering will model the project corridor using AutoCAD Civil3D.
- TDG Engineering deliverables will rely on Toole Design AutoCAD Standards
- Construction cross-section sheets are not included.

Deliverables:

- Electronic copy of the 60% plan set in PDF format via e-mail

3.3 60% Opinion of Costs

The TDG Engineering Team will calculate 60% level quantities and opinion of construction costs based upon the approved 60% construction plans and current unit bid prices. The TDG Engineering Team will address applicable 30% review comments.

Deliverables:

- Electronic copy of the 60% opinion of cost summary submitted in PDF format via e-mail

3.4 60% Special Provisions

The TDG Engineering Team will prepare 60% level special provisions for inclusion within the technical portion, also known as Part “C”, of the City of Bakersfield’s specifications boiler plate for the 60% design.. These will include detailed descriptions for the items of work that are not covered by the current City Standard Specifications or Caltrans 2010 Standard Specifications. The TDG Engineering Team will address applicable 30% review comments and make revisions as necessary. Bid forms will not be completed at the 60% submittal.

Deliverables:

- Electronic copy of the 60% special provisions in Microsoft Word format via e-mail

3.5 Preliminary Curb Ramp Layout

The TDG Engineering Team will propose and design ADA compliant solutions for each of the identified curb ramps within the project limits. From the ADA evaluation performed in Phase I of the project, it anticipated that there will be approximately eighty (80) curb ramps requiring reconstruction or installation. The Team will update the ADA Evaluation Matrix prepared in Phase I of the project with the comments received from the 30%/Conceptual Plans and use this matrix to determine locations of curb ramps within the corridor. The curb ramp locations will be identified prior to the 60% plan set and agreed upon before any curb ramp design work is performed. The work for this task includes the design and layout for the proposed curb ramps to be reconstructed or relocated within the corridor.

The Toole Design Team will prepare exhibits (1-in = 10-ft scale) showing existing conditions and proposed improvements for discussion. The Toole Design Team will attend up to two (2) one-hour virtual ADA coordination meetings with the City regarding the curb ramps.

The purpose of the exhibits is to have a review of the horizontal curb ramp layouts and gain concurrence by the City of the ramp types, locations, and alignment of the curb ramps prior to the final design phase. The Toole Design Team will perform minimal design needed to propose ADA compliant solutions for the curb ramps and approximate the footprint of each non-standard curb ramp. The exhibit will be submitted with the 60% PS&E design package for review and comments. Comments on the exhibit will be responded to via a comment matrix and addressed within the 90% PS&E design package submittal.

The preliminary curb ramp will address existing utility impacts as well, and how to avoid them, if possible. Dimensions and details will not be provided at this level. The exhibits will be to scale so that the extent of the impacts can be approximated at the time of review.

Deliverables:

- Draft and Final Curb Ramp Exhibits (PDF)
- Updated ADA Evaluation Matrix
- Up to two (2) one hour ADA coordination meeting with COB

Assumptions:

- Variance application and/or maximum extent feasible document (MEF) is not included in the event ADA compliance cannot be achieved.

3.6 60% Rectangular Rapid Flashing Beacon Evaluation

Rectangular Rapid Flashing Beacons (RRFB) will be evaluated at unsignalized midblock crossings throughout the corridor. After analysis, if it is determined that a crossing warrants the installation of an RRFB, we will prepare the RRFB Signal Plans and Details for the proposed location and installation. Per the Basis of Design in Phase I of the project, only hardwired RRFBs will be evaluated for installation within the corridor. Coordination with the power company (including location/coordination of power source) is not included. Solar-powered RRFBs will not be evaluated or proposed for installation.

Assumptions:

- Modifications (hardware, timing and/or phasing, etc.) to any existing signals is not included.
- A Temporary Signal Plan will be prepared by the Contractor during construction and will be a requirement in the Special Provisions. If it is determined during design that the Contract Plans will need to include temporary

signal Plans, the TDG Engineering Team can prepare these plans as an additional service, under a Supplement to the Agreement.

Deliverables:

- 60% RRFB Signal Plans and Details included with Task 3.2.

3.7 60% Lighting Design (Not included, to be performed by COB)

The City of Bakersfield will design and prepare 60% lighting plans, details, and schedule. The TDG Engineering Team will coordinate with COB in regards to the 60% lighting design as it relates to the remainder of the 60% design throughout the corridor. Coordination will be done within the progress status meetings, along with up to six (6) focused team meetings for the duration of the project to coordinate submittals and finalizing construction documents. TDG Engineering will share the necessary CAD files with the City to reference in preparing the mentioned lighting plans, details, and schedule..

Assumptions:

- Existing lights will be relocated and replaced with decorative lights posts and fixtures.

Deliverables:

- Attendance, agenda, and meeting notes for up to six (6) Lighting Design Focus Meeting for the duration of the project.
- CAD design and reference files, as needed, for preparation of construction documents.

3.8 60% Landscaping Design

The TDG Engineering Team will incorporate 30%/Conceptual Plan comments into the 60% design. Landscape plans and details will be prepared by the TDG Engineering Team. The landscape plans will include the locations of permeable and impermeable pavers, median pavers, tree protections and site furnishings. The plans will identify shrubs and trees to be planted in landscaping areas through the corridor. Planting schedule will be provided on the plan including quantities, botanical name, common name, size, mature height, mature spread, and water use level for each type of tree. Details will include tree well and planter, shrub planting, root barrier, and other site furnishings. The TDG Engineering Team will review the plans for constructability.

Deliverables:

- 60% Landscape Plans, Details, and Schedule included with Task 3.2.

3.9 60% Irrigation Design

RDS, a subconsultant teaming with the TDG Engineering Team, will design and prepare the 60% irrigation plans, details, and schedule. The scope of services, assumptions, and deliverables for the 60% Irrigation Design is detailed by RDS in the supplemental of this scope.

Assumptions:

- It is not anticipated that booster pumps will need to be designed and is therefore not a part of the scope of this proposal.

Deliverables:

- 60% Irrigation Plans, Details, and Schedule per attached RDS scope.

3.10 60% QA/QC and Constructability Review

An internal TDG Engineering Team quality assurance/quality control review of deliverables will be conducted, as well as confirmation that 30% City comments and internal 60% comments received have been addressed. A record of comments received will be maintained. Response to each comment received will be tracked to confirm that they have been addressed.

Prior to submission, the TDG Engineering Team will also perform an internal constructability review of the 60% progress plans under this task, including a site visit.

Deliverables:

- Constructability site walk (assume four (4) hours for up to two (2) TDG staff)

Task 4 – 90% Plans, Specifications, and Opinion of Costs

The TDG Engineering Team will prepare 90% plans, specifications including special provisions, and opinion of costs for the construction contract, and incorporate applicable comments received from the City based on the 60% submittal deliverables in the previous project phase. The plans, specifications and special provisions, and opinion of cost will be submitted to the City for review and comment.

4.1 Response to 60% Comments

Within ten (10) days of receipt of the 60% comments, the Toole Design Team will review and provide written responses to the City's comments. Any comments requiring discussion will be flagged. Approximately, one week later, the Toole Design Team will attend one (1) virtual one-hour comment review meeting with the City staff to review all responses, paying close attention to those requiring additional input/clarification. Responses will be provided on the comment documents provided by the City.

Assumptions:

- 60% plan review comments from City staff will be consolidated by the City and conflicting comments will be resolved by City staff prior to transmitting to the TDG Engineering Team.
- The TDG Engineering Team's responses will be provided on the original comment document the City provided to the TDG Engineering Team
- The TDG Engineering Team will attend one (1) one-hour virtual comment review meeting with the City.

Deliverables:

- Draft Written responses to 60% comments (PDF)
- Final written responses to 60% comments/Decision of Record (PDF)

4.2 90% Plans

It is anticipated that the 90% plans will be a total of approximately 102 sheets consisting of the following sheets:

- Cover Sheet w/ Vicinity Map and Index
- Legend, Abbreviations, and General Notes
- Key Plan
- Typical Roadway Sections
- Summary of Quantities
- Survey Control
- Horizontal Alignment Plan
- Construction Plan
- Roadway Profile Sheets

- Construction Details
- Intersection and Curb Ramp Detail Sheets
- Pavement Marking and Signage Plans
- RRFB Signal Plans and Details (if needed)
- Lighting Plan⁽¹⁾
- Lighting Details and Schedules⁽¹⁾
- Landscape Plans
- Landscape Details and Schedule
- Irrigation Plans⁽²⁾
- Irrigation Details and Schedule⁽²⁾
- Traffic Control Plans, Notes, and Details

⁽¹⁾ Plans, Details, and Schedule to be prepared by COB.

⁽²⁾ See Attachment for full scope of subconsultant services, including applicable assumptions and exclusions.

Deliverables:

- Electronic copy of the 90% plan set in PDF format via e-mail

4.3 Opinion of Costs for Additional Construction Bid Items in 90%

In this 90% design phase, the TDG Engineering Team will provide quantities and opinion of costs only on the additional construction bid items that may be included in the 90% design since the 60% design. All quantities and costs that were previously calculated and submitted in the 60% PS&E package will remain the same. Based on the City's direction, TDG Engineering will defer calculating 90% level quantities and opinion of construction costs based upon the approved 90% construction plans and current unit bid prices to the 100% PS&E submittal.

Deliverables:

- Electronic copy of the opinion of cost summarizing only the additional construction bid items in the 90% design submitted in PDF format via e-mail

4.4 90% Specifications and Special Provisions

The TDG Engineering Team will prepare 90% level Specifications and Special Provisions based upon the 90% design. These will include detailed descriptions for the items of work that are not covered by the current City Standard Specifications. The TDG Engineering Team will address applicable 30% review comments and make revisions as necessary. Bid forms will not be completed at the 90% submittal.

Deliverables:

- Electronic copy of the 90% special provisions in Microsoft Word format via e-mail

4.5 90% Curb Ramp Details

For the 90% design, the level of detail and information shown in the plans for curb ramp will be as follows:

- Anticipated lengths of the curb ramps based on the site-specific surveys.
- Ramp details and notes pertaining to the lengths, slopes, elevations, and dimensions of the curb ramps.

Deliverables:

- Curb ramp and pedestrian signal locations included in the 90% Plans in Task 4.2

4.6 90% PS&E QA/QC and Constructability Review of Deliverables

An internal TDG Engineering Team quality assurance/quality control review of deliverables will be conducted, as well as confirmation that comments received have been addressed. A record of comments received will be maintained. Response to each comment received will be tracked to confirm that they have been addressed.

The TDG Engineering Team will also perform a preliminary constructability review of the 90% plans, estimate and special provisions under this task, including a site visit.

Deliverables:

- Constructability site walk (assume four (4) hours for up to two (2) TDG staff)

Task 5 – 100% Plans, Special Provisions, and Opinion of Costs

The TDG Engineering Team will revise the 90% plans, special provisions, and opinion of cost estimate based on the City's comments and prepare a 100% PS&E package. This submittal will include the preparation of the Bid Schedule to be included in the Contract Book.

The TDG Engineering Team will submit the 100% plans, estimate and special provisions package the City for a 100% check print before assembling the contract documents. 100% comments will be delivered electronically and incorporated into the 100% bid documents. It is assumed that the 100% review comments will be minor in nature and not reflect any significant changes to design. If there are significant changes to the design or Plans, this would be considered an additional service, and a supplement to the Agreement would be required.

Assumptions:

- It is assumed that the 100% review comments will be minor in nature and not reflect any significant changes to design.

5.1 Response to 90% Comments

Within seven (7) days of receipt of the 90% comments, the TDG Engineering Team will review and provide written responses to the City's comments. Any comments requiring discussion will be flagged. Approximately, one week later, the TDG Engineering Team will attend one (1) comment review meeting with the City staff to review all responses, paying close attention to those requiring additional input/clarification. Responses will be provided on the comment documents provided by the City.

Assumptions:

- 90% plan review comments from City staff will be consolidated by the City and conflicting comments will be resolved by City staff prior to transmitting to the TDG Engineering Team.
- The TDG Engineering Team's responses will be provided on the original comment document the City provided to the TDG Engineering Team
- The TDG Engineering Team will attend one (1) comment review meeting at the City offices

Deliverables:

- One (1) comment review meeting (virtual) (assume two (2) hours for up to two (2) TDG staff)
- Draft Written responses to 90% comments (PDF)
- Final written responses to 90% comments/Decision of Record (PDF)

5.2 100% Plans

The Plan sheets will be the same as those identified under the 90% design phase.

Deliverables:

- Electronic copy of the 100% plans; half size and full size, in PDF format via e-mail

5.3 100% Opinion of Costs

The TDG Engineering Team will update the project quantities and prepare a 100% opinion of construction costs based upon the approved 100% construction plans and current unit bid prices. The TDG Engineering Team will address applicable 90% review comments and make revisions as necessary.

Deliverables:

- Electronic copy of the opinion of cost summary submitted in PDF format via electronic e-mail

5.4 100% Specifications and Special Provisions

The TDG Engineering Team will prepare the 100% Specifications and Special Provisions based upon the 100% design. These will include detailed descriptions for the items of work that are not covered by the current City Standard Specifications. The TDG Engineering Team will address applicable 90% review comments and make revisions as necessary. One bid schedule will be prepared with the project quantities with this submittal.

Deliverables:

- Electronic copy of the 100% bid documents Contract Special Provisions, including the Bid Schedule, submitted in PDF format via electronic e-mail

Task 6 – Ad-Ready Contract Documents

The TDG Engineering Team will finalize the 100% plans, specifications and opinion of cost estimate based on the City review comments and prepare final, ad ready, Bid Documents. It is assumed that 100% review comments will be minor in nature and not reflect any changes to the design.

The TDG Engineering Team will provide the City with a final set of bid documents for approval.

Assumptions:

- The fee effort for this task assumes the City will provide one (1) set of compiled and consolidated comments reflective of all City comments from the final check set submittal. It is assumed that pre-final review comments will be minor in nature and not reflect any changes to design. If additional comments are made, or if any comments are made that alter the design, and it is determined that addressing them would cause significant changes to the plans, this may be considered additional work to be included in a supplement.
- Prior to bid advertisement, the TDG Engineering Team may make minor revisions to the Plans, Special Provisions, and Opinion of Costs. It is assumed that the drainage and ADA standards applying to this project will not be changed.
- Comments that are to be incorporated into the contract documents that are a significant change to the design or finalization of the ad-ready contract documents will be considered an additional service and may need a supplement to this Agreement.

Deliverables:

- Electronic copy of the final plans; half size and full-size signed plans, in PDF format via e-mail
- Electronic copy of the opinion of cost summary submitted in PDF format via e-mail
- Electronic copy of the final bid documents Contract Specifications, including the Bid Schedule, submitted in PDF format via e-mail
- Written responses to the Final review comments

Task 7 – Bid Support

The TDG Engineering Team will support the City during the bidding phase of the project. The TDG Engineering Team will respond to requests for clarifications and prepare Addendums as described below.

The budget assigned for this work element will be limited to the amount designated for this work element.

7.1 Provide Bid Clarifications

The TDG Engineering Team will respond to Contractor questions as requested by the City during the bidding process. The TDG Engineering Team will provide clarifications to the City, which may include Plan sheet revisions, Special Provision language, or information clarification. The TDG Engineering Team will provide clarification for up to five (5) questions requested by the Contractor.

Deliverables:

- Up to five (5) Written clarifications to bid questions, including text and plan sheet revisions if applicable (email format).

7.2 Addenda

The TDG Engineering Team will assist the City with preparing materials to be included with up to two (2) Addenda, as required.

Assumptions:

- The City will prepare addendums for distribution during the bidding process.
- The City will prepare the bid tabulation.
- The City will determine if the bids are responsive or not.
- The City will track bid questions and communicate with bidders.
- The City will produce bid sets.
- The City will review bid tabulations against the opinion of cost (engineer's estimate).
- The budget assigned for this work element will be limited to the amount designated for this work element.

Deliverables:

- Materials to be included with addenda, as requested, for up to two (2) Addenda

Additional (Optional) Services

The TDG Engineering Team may provide additional services as directed by the City which are not identified in this Scope of Services. Additional services shall not commence without written authorization and approval from the City and a supplement to the contract.

Services Not Included in this Scope of Services

1. Topographic Survey
2. Utility Relocation Plans
3. Geotechnical Investigation and Analysis
4. Pavement design
5. Gutter flow calculations and inlet capacity calculations in accordance with FHWA protocols.
6. Right of Way Services including plan preparation, coordination, etc.
7. Level 1 to Level 3 downstream analysis.
8. Backwater conveyance analysis for downstream pipe systems.
9. Summary of average annual pollutant loadings anticipated for the project.
10. Drainage design above what is described in this scope of services.

11. Environmental Documentation and permitting
12. Preparation of discipline reports or memos to support the NEPA process.
13. Prepare a Notice of Intent application and supporting documentation for the construction NPDES permitting process.
14. Construction management/support services.

Items to be furnished by Others

The City shall furnish the following:

1. All available “As-Built” information, including for traffic signals and the existing illumination systems.
2. Updated underground utility information relative to the City owned utilities.
3. Any applicable preliminary design reports, geotechnical reports, environmental reports, and identified up and downstream problems.
4. Updated City General Provisions.
5. Proposed pavement section.
6. Street Lighting Plans, Specifications, and Estimate

Engineer and its consultants may reasonably use and rely upon information and design elements furnished by Owner or customarily furnished by others including, but not limited to, other design professionals, specialty contractors, manufacturers, suppliers and publishers of technical standards.

The City shall furnish, at the City’s expense, all information, requirements, reports, data, surveys and instructions required by this Agreement. The TDG Engineering Team may use such information, requirements, reports, data, surveys, and instructions in performing its services and is entitled to rely upon the accuracy and completeness thereof. Further, the City agrees that the TDG Engineering Team shall have no responsibility for any portion of the Project designed by other consultants engaged by the City.

Design Criteria

As of the date this Agreement is signed, design file, reports, documents, and plans prepared as part of this Scope of Services, to the extent feasible, will be developed in accordance with the latest edition and amendments to the following documents:

1. National Association of City Transportation Officials’ (NACTO) Urban Street Design Guide
2. NACTO Designing for All Ages and Abilities
3. NACTO Urban Bikeway Design Guide
4. American Association of State Highway Transportation Officials’ (AASHTO) Guide for the Development of Bicycle Facilities (AASHTO Bike Guide) *
5. AASHTO Policy on Geometric Design of Highways and Streets (AASHTO Green Book)
6. Federal Highway Administration (FHWA) Separated Bike Lane Planning and Design Guide
7. American with Disabilities Act (ADA)
8. Manual on Uniform Traffic Control Devices (MUTCD)
9. Caltrans Highway Design Manual (HDM)
10. City of Los Angeles Supplemental Street Design Guide
11. Bakersfield Subdivision & Engineering Design Manual (2021)
12. Neighborhood Traffic Calming Toolbox (Bakersfield)

Changes in any design standards or requirements after services have begun may result in extra work, and require a supplement to the Agreement.