CITY COUNCIL STAFF REPORT

TO: **Honorable Mayor and City Council** **DATE: June 27, 2022**

FROM: **Matthew Bronson, City Manager**

PREPARED BY: **Greg Ray, Public Works Director/City Engineer**
Erin Wiggin, CIP Manager

SUBJECT: **West Grand Avenue Streetscape 4th-8th Street (CIP 2287): Award of Professional Design Engineering Services**

RECOMMENDATION

Approve a Consulting Services Agreement with BKF Engineers for design phase services, bidding phase services, and post-design services during construction associated with the West Grand Avenue Streetscape Design Project (CIP 2287); authorize the Mayor to execute the agreement on behalf of the City; and authorize the City Manager to approve change orders up to $40,000.

BACKGROUND

A priority for the City is improving the West Grand Avenue corridor which is the primary commercial corridor in Grover Beach. West Grand Avenue enhancements carried out previously have included work from Highway 1 west to the beachfront area at the City limits and from 2nd to 4th Street and 8th to 11th Street. These improvements have included landscaped medians, street trees, corner ramps and streetlights consistent with the West Grand Avenue Master Plan.

On October 12, 2021, Council affirmed the direction to proceed with the Capital Improvement Program Project 2287 (CIP 2287), West Grand Avenue Streetscape Project, in FY 2022-23 given the significant redevelopment opportunities along this section of the street from 4th to 8th Streets. In addition to pavement rehabilitation, this project will involve streetscape design elements using the same concepts developed in previous phases which include landscaped medians, street trees, updated accessible corner ramps, street furniture and pedestrian level lighting with additional focus on bike lanes and safety enhancements.

In April 2022, staff reached out to firms on the City's established short list of on-call consulting firms for Street and Roadway Design consultants. The firms that provided proposals for this design work are BKF Engineers, RICK Engineering and Cannon Corporation. A proposal review committee thoroughly evaluated and ranked the proposals based on the City's reviewing and scoring process. Staff followed up with meetings with the selected design team to discuss items in the proposal. Based on the firm's qualifications presented within their proposal, their experience with similar scope projects, and the quality of the proposal, the proposal review committee selected BKF Engineers as the most qualified and responsive firm for this project.

FISCAL IMPACT

The costs for the design consulting services for this project are estimated to be $236,284. This work is funded in the adopted CIP and budget for FY 2022-23 which allocates $315,000 for design work and a total of $3,015,000 for design and construction. $2,035,000 of this funding is allocated

from the General Fund, however the City subsequently applied for regional grant funds that could offset the General Fund contribution if the City is awarded the grant. San Luis Obispo Council of Governments is administering the grant funds and expects to notify the City in late summer regarding approval and receipt of these potential funds.

ALTERNATIVES

The Council has the following alternatives to consider:

1. Approve a Consulting Services Agreement with BKF Engineers for design phase services, bidding phase services, and post-design services during construction associated with the West Grand Avenue Streetscape Design Project (CIP 2287); authorize the Mayor to execute the agreement on behalf of the City; and authorize the City Manager to approve change orders up to $40,000; or

2. Provide staff with additional direction

PUBLIC NOTIFICATION

The agenda was posted in accordance with the Brown Act.

Attachments

1. BFK Engineers Scope and Cost Proposal

PROJECT TEAM AND RELEVANT EXPERIENCE

We recognize this opportunity comes to BKF based on our prequalification from the on-call process and our statement of qualifications. We would like to highlight experience that specifically relates to this project and supports the particular team we assembled.

Our team includes:

Firma Consultants – Firma is a local design and planning firm that is also on the City's on-call list. Firma was chosen to be a part of the BKF team because of their downtown streetscape experience such as Garden Street in downtown San Luis Obispo, downtown renovations such as the Agrarian Hotel in Arroyo Grande, and history with Grover Beach including the Dune Boardwalk Restoration, Grover Beach Lodge, Mentone Park landscape improvements, and the design of the City of Grover Beach gateway/entrance signage.

Earth Systems Pacific – Earth Systems Pacific has worked on numerous projects with BKF. With this long-standing relationship, and as a preferred local consultant for many, Earth Systems was an easy choice. We know they will work with us to provide the necessary geotechnical information, with the basis of local knowledge.

Bess Test Labs – Bess Test Labs has worked on numerous projects with BKF. We appreciate their ability to work on challenging projects in highly trafficked areas. They are able to make decisions in the field to be able to provide us with the information needed. This flexibility is valuable especially when traffic lanes are closed and there is limited time for this field exploration.

Aerotech Mapping – Aerotech Mapping is our aerial company for this project.

BKF Engineers' experience with downtown, urban, streetscape design: With much of our experience in the San Francisco Bay Area, most of our projects are in a downtown or urban setting. Streetscape designs often include the same elements that will be part of the West Grand Avenue project. See attached for a few project highlights for:

East Side Connect – Included bulb-outs, revitalizing an old street with new street furniture, decorative street lights, decorative pavement (stamped thermoplastic on asphalt), and pavement maintenance. We identified areas with older overlays that could be ground down and resurfaced to improve roadway cross slopes. Microsurfacing was used to limit the cost and still provide a very durable pavement surface.

Bay Meadows Development – Included bulb-outs, decorative pavement (stamped colored concrete), decorative street lighting, and street furniture. While this created a new neighborhood, there were also interfaces with adjacent neighborhoods and improvements to high trafficked roadways. Adding decorative concrete through a very busy intersection required multiple stages and temporary plating.

Laurel Street Improvements – Included bulb-outs, decorative pavement (pavers on concrete), decorative street lighting, and street furniture. While this is an older project, it is the quintessential catalyst project as it transformed a non-descript quiet downtown into a bustling jewel of a downtown.

PROJECT UNDERSTANDING

The project limits are within and immediately adjacent to the City right of way on West Grand Avenue between 4th and 8th Street. The project limits include the intersection of 4th and Grand but does not include the intersection of 8th and Grand. See attached Concept Plan for project limits and anticipated elements.

The Concept Plan is extracted from the West Grand Avenue Master Plan. The intent is to be consistent with

the design elements from 8th – 11th and 2nd – 4th, however the City does not want to construct the dyed/colored concrete that is on 8th-11th. Lithocrete (which exists on 2nd – 4th) at the intersections would be the City's preferred option, however this could be cost prohibitive. The City is looking for engineer's recommendations for a material that will hold up well.

PROJECT SCOPE:

- The intent of the design is to closely match the design from 2nd-4th and 8th-11th.
- The project includes pavement rehabilitation.
- Generally, the improvements involve the pavement surface and structure, center medians, landscape, irrigation, decorative street lighting, street trees and site furnishings such as benches or trash receptacles.
- The traffic light pole on the Northeast corner of 4th and Grand was hit by a vehicle and it has been leaning for quite some time. The City would like to include an evaluation of this pole and determine if it needs to be replaced.
- Timing will be critical for this project. The City would like to have project documents ready to bid the project in November.
- Generally consistent with the West Grand Avenue Master Plan.

PROJECT APPROACH

Consistent with industry standard approach to deliver the work plan tasks listed below and our quality assurance and quality control practices, a few technical examples demonstrate BKF's approach to meeting the City's goals of:

- Beautification of the corridor
- Improving safety
- Increasing accessibility
- Maintaining pavement life

BULB-OUT GRADING

Grading of bulb-outs have many critical nuances:

- Maintaining drainage: extending the sidewalk slope which is adverse to the roadway cross slope usually makes drainage along the gutter flowline impossible. Adding curb inlets or drainage through the bulb-out in a trench drain are often pricey and undesirable solutions. Choosing which corners and which streets receive the bulb-outs to locate them at high points avoids this compromise.

- Curb ramp slopes: depending on roadway cross slopes, curb ramps may actually slope back toward the sidewalk, or be too flat to convey surface runoff. Accurately identifying conforms in the street and at the back of walk can better identify conditions that may need creative solutions.

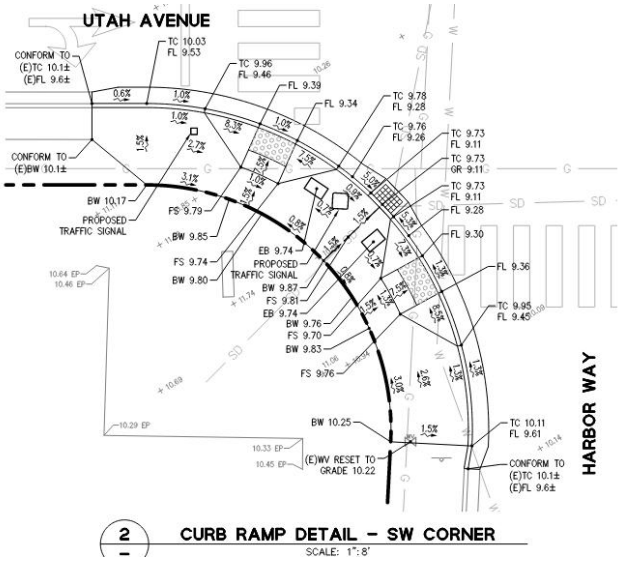
East Side Connect (Old County Road, San Carlos)
Bulb-out with nominal ramp slope and adjacent planter

CURB RAMP GRADING

Using the detailed topographic survey as a base, we will advance the design of the curb ramps, including spot grades and slopes. This will better identify dimensions which helps provide a better bid and reduces risk for change orders. It will also confirm drainage and accessibility.

Generalized:

Detailed (example from another project):



2 CURB RAMP DETAIL – SW CORNER
SCALE: 1": 8'

DECORATIVE CONCRETE PAVEMENT

We understand the priorities for the decorative pavement at the intersections include:

- Don't show tire marks
- Does not fade
- No obvious cracking
- Affordable
- Ability for patch repairs

The Lithocrete treatment meets the performance criteria, however it may not be an affordable option. Also, because of the proprietary nature, patching repairs or trenching may be challenging. In fact, we attempted to contact the "owners" of Lithocrete twice during the preparation of this proposal and did not receive any response. We would expect a single consistent aggregate and mix would be much less expensive than the creative "wave" design further west of the current project. However, the lack of responsiveness is still concerning. Further research of options may be required to achieve similar performance.

Based on information from the Lithocrete website, and the Caltrans Concrete Technology Manual, it is likely the admixture providing the resistance to the alkali-aggregate reaction is also providing the abrasion resistance and does not show tire marks. This may be a lithium mixture, a silica fume, rice hull ash, or a combination. Discussing these potential admixtures and experiences with local concrete suppliers may provide good options that would also allow for the ability to patch repairs and trenching.

TASKS

A strength of BKF Engineers' approach is flexibility. The following tasks are anticipated as part of delivering a successful project for the City of Grover Beach. We recognize that during project development, slight changes to priorities or tasks are needed. We will continually evaluate and communicate needed changes to the tasks. The following tasks provide a basis for setting expectations for fees and schedule. We are happy to discuss changes to these tasks, particularly considering optional additional services. We have also included an exhibit showing the project limits and general summary of the project scope. Changes to these assumptions may also affect fees and schedule, which we anticipate discussing to ensure the City's objectives are met within the funding and schedule constraints.

A. PROJECT MANAGEMENT AND COORDINATION

- Record keeping and file management.
- Project accounting and monitoring the budget.
- Meet with City staff to review and refine the work program and schedule,identify critical milestones, and determine appropriate paths of communication prior to beginning work.
- Prepare a baseline schedule. An updated schedule will be prepared as needed.
- Conduct periodic project meeting (virtual and/or in-person coordinationmeetings) with the City to discuss progress. Meeting agenda and minutes will be prepared, as needed.
- Quality assurance and quality control will be managed throughout the project.

B. PRELIMINARY INVESTIGATION

- Meet with City staff to review project requirements, existing information needed, and any utility improvement plans.
- Prepare a topographic survey. The topographic survey will serve as the basemap for design and will start with an aerial survey to provide overall context.

  Conventional field work will supplement the aerial to provide detailed ground elevations for conforms at intersection corners and one large driveway replacement. Surface utilities, trees, tree wells, and other roadway elements will be captured and field checked with aerial topography. Storm drain inlet inverts will be captured during the field check.

  A record boundary based on recorded maps will be drafted as part of the basemap.

  The basemap will be drawn at 1"=20' scale. Vertical datum will be NAVD88 or City Datum, if available. Horizontal control will be NAD83 or local control.

  Utilities will be drafted in based on as-built and record information provided by the utility companies, along with any historic USA markings and surface features captured during the topographic survey and site walk.

  Pothole locations with GPS and ties to aerial topography will allow for this existing utility information to be located on the basemap.
- Visit project site and investigate existing site conditions to identify opportunities,

constraints, verify the presence of existing utilities and other conditions, and confirm items shown on topographic survey.

- Review and research data/reference material pertinent to the project, including, but not limited to, record drawings, right-of-way documents, City Pavement Management Report, Standard Provisions, Standard Details, Design Criteria, and codes, ordinances, and policies pertaining tothe proposed project design.
- Geotechnical exploration will include drilling in ten locations to a maximum depth of 5 feet, measure asphalt and base sections at each location, identify subgrade material, and take subgrade samples in 4 locations for R-value testing. Traffic control in the form of lane closures will also be provided. It is expected that the subgrade soils in Grover Beach are fairly consistent. Therefore, two of the four subgrade samples will be tested for R-values. Laboratory data will then be analyzed, and a report will be prepared with pavement and minor grading recommendations.

  A site walk will be performed to identify dig-outs due to likely base failures, and other observations for overall pavement maintenance.

C. UTILITY COORDINATION

Detailed coordination, research, and presentation on the construction documents of all utilities (including City-owned water, wastewater, electrical street lights, and traffic control signals) with all utility companies (above and below ground), including:

- Potholing as necessary (assume budget for 10 potholes). Pothole exhibits will be provided to the potholing contractor to provide clear direction.
- Field investigation of each valve box to measure the distance from street grade to the top of the operating nut, and then computing an estimate for the crown of the pipe below existing street grade (recently the City has discovered AC pipe at shallow depths, i.e., depths significantly less than 36-inches).
- Utility relocation coordination conducted in advance of the construction to accommodate the construction.
- Full and complete coordination with utility companies to have them relocate their utilities that are interfering with the features of the design before construction bids are opened. Coordination would also new meter(s) for the proposed irrigation point(s) of connection.

D. DESIGN DEVELOPMENT AND CONSTRUCTION DOCUMENTS

- Through an engineer's alternatives analysis, prepare concept design plans to establish basis of design. This will identify roadway improvements including pavement structural design, limits and type of improvements, quantity of street furniture, and street lighting. The concept design plan will be used to estimate construction cost within the project budget.
- Prepare design development/construction documents that shall include:
  - Title Sheet, Legend, and Abbreviation
  - Civil Notes and Construction Details

- Demolition Plans
- Street Improvement Plans
- Curb Ramp Detail Plans
- Signing & Striping Plans
- Street Lighting Plans
- Planting Plans
- Irrigation Plans
- Landscape Detail Plans
- Landscape Documentation in compliance with Title 23 Chapter 2.7
- Erosion and Sediment Control Plans and Details
- Engineer's Opinion of Probable Construction Cost, including strategies for base bid and bid alternatives, if necessary
- Project Technical Specifications
- Documentation of design exceptions
- Documentation of post construction stormwater mitigation measures
- Miscellaneous administrative support of City staff (e.g. production of exhibits to support Council agenda items)

- Submit PDF versions of the PS&E at 50% and 100% design stages.
- Meet with City staff to review comments on the submittals, as needed. Revise plans, specifications, and cost estimates as necessary to reflect stakeholders' and City comments and directions, with responses to comments.

Design exceptions shall be submitted to the City by the Engineer for curb ramps that cannot accommodate ADA requirements,

Water and/or sewer utility improvements as provided to the Engineer (these improvements will be developed by the Public Works Department and made available to the Engineer after award of this work),

Implementation of the City's Post Construction process into the design evaluation, including submittal of the Post Construction supporting documentation to the City for their compliance with Regional Board requirements.

Implementation into the design any Post Construction stormwater mitigation measures to comply with City and/or Regional Board requirements.

Technical specifications that incorporate the City Standards and the 2010 Caltrans Standard Specifications and that are incorporated into the City's standard front-end construction document (front-end documents will be provided to the Engineer in Microsoft Word format);

Plans that incorporate the City Standards and the 2010 Caltrans Standards.

E. BID PHASE SERVICES

- Assist the City, as necessary, in responding to bidder's inquiries, requestsfor clarification, and addenda.

F. CONSTRUCTION PHASE SERVICES

- Attend a preconstruction meeting conducted by the City.
- Review submittals and respond to Requests for Information (RFI), asnecessary, in a timely manner.
- Assist the City to resolve issues during construction, as necessary.
- Site visits to resolve issues during construction.

G. POSTCONSTRUCTION

- Prepare record drawings based on contractor markups.

H. ADDITIONAL SERVICES

We can provide additional services, if required. We can modify the base scope and fee to include these services or provide as an amendment at a later date.

- Modified Traffic Signal Plans: We assume the replaced detector loops can be located and identified in the signing and striping plans. If more significant changes are needed such as adding pedestrian push button posts, relocating traffic signal poles, changing signal phasing or adding bicycle detection that require a modified traffic signal plan, we can provide this additional service.
- Storm Water Pollution Prevention Plan: We assume a SWPPP, if needed, will be prepared by the contractor. This can be provided as an additional service.
- Landscaped Median, Corridor, and Intersection Improvements: Prepare color rendered concept plans. Concepts may illustrate different design themes and/or mixture of planting and pavements. Concepts to be accompanied by image boards with photos of proposed plant material and examples of similar treatments. Additionally, visual simulations can be superimposed over a photo to accompany each plan.
- Changes to the construction documents beyond our control, whether during design or during construction.
- Resolved boundary, including review of title reports, surveying existing monuments, setting new monuments, and preparing a record of survey.

West Grand Ave, Grover Beach
BKF Engineers 4/20/2022 (rev. 5/23/2022)

		BKF Engineers' Personnel and Rates											
		Principal		Associate		Project Manager		Project Engineer		Survey Crew			
		@ $272		@ $237		@ $231		@ $174		@ $325		BKF Fees	
Task	Description	hrs	$'s	hrs	$'s	hrs	$'s	hrs	$'s	hrs	$'s	hrs	$'s
1	*Project Management and Coordination*												
	Kick-off Site Meeting, Agenda, Minutes		$0	6	$1,422		$0		$0		$0	6	$1,422
	Project Schedule, Records, Management		$0	24	$5,688		$0	8	$1,392		$0	32	$7,080
	Project Meetings		$0	32	$7,584		$0	8	$1,392		$0	40	$8,976
Subtotal		0	$0	62	$14,694	0	$0	16	$2,784	0	$0	78	$17,478
2	*Preliminary Investigation and Design*												
	Request Existing Documentation		$0	2	$474		$0	8	$1,392		$0	10	$1,866
	Review Reference Documents		$0	2	$474		$0	8	$1,392		$0	10	$1,866
	Topographic Survey and Base Map		$0	16	$3,792	12	$2,772	48	$8,352	32	$10,400	108	$25,316
	Site Review		$0	8	$1,896		$0		$0		$0	8	$1,896
Subtotal		0	$0	28	$6,636	12	$2,772	64	$11,136	32	$10,400	136	$30,944
3	*Utility Coordination*												
	Potholing Coordination (assume 20 potholes)		$0	2	$474		$0	8	$1,392		$0	10	$1,866
	Measure Water Valves		$0	2	$474		$0	8	$1,392		$0	10	$1,866
	Utility Coordination		$0	16	$3,792		$0	16	$2,784		$0	32	$6,576
Subtotal		0	$0	20	$4,740	0	$0	32	$5,568	0	$0	52	$10,308
4	*Design Development & PS&E*												
	Concept Plan	2	$544	16	$3,792		$0	24	$4,176		$0	42	$8,512
	50% PS&E	2	$544	48	$11,376	8	$1,848	160	$27,840		$0	218	$41,608
	100% PS&E	2	$474	40	$9,480	12	$2,844	180	$31,320		$0	234	$44,118
Subtotal		6	$1,562	104	$24,648	20	$4,692	364	$63,336	0	$0	494	$94,238
5	*Post-Design Services*												
	Bid Phase Services		$0	4	$948	2	$462	8	$1,392		$0	14	$2,802
	Construction Phase Services		$0	24	$5,688	4	$924	32	$5,568		$0	60	$12,180
	Record Drawings		$0	2	$474		$0	16	$2,784		$0	18	$3,258
Subtotal		0	$0	30	$7,110	6	$1,386	56	$9,744	0	$0	92	$18,240
Reimbursable Expenses													$2,200
SUBTOTALS		6	$1,562	244	$57,828	38	$8,850	532	$92,568	32	$10,400	852	$173,408

Subconsultants (including 10% markup)	
Firma Consultants (Landscape)	$14,520
Earth Systems Pacific (Geotechnical)	$12,925
Aerotech Mapping (Aerial Topography)	$3,696
Bess Test Labs (Potholing)	$29,535

GRAND TOTAL	$236,284

Notes: Titles and hours are estimates. We expect to provide resources as needed while the project develops. Office survey staff hours may be interchangeable with engineering staff hours.