



CITY OF FLAGSTAFF

- CONFIRMING CHANGE ORDER NO.
- DESIGN CONTRACT CHANGE ORDER NO.
- CONSTRUCTION CONTRACT CHANGE ORDER NO.
- CONTRACT ALLOWANCE UPDATE NO.

 3

PROJECT NO. ST3047 **PROJECT NAME:** Butler Fourth Improvements

FILE NO. 03-21004 **PROJECT MANAGER:** Trevor Henry

FIRM NAME: Burgess & Niple, Inc.

Purchase Order Number: 23-002304 | Line Number: 1&2 | Amount \$ 1,067,024.21

Change Order originated by: CITY OF FLAGSTAFF CONTRACTOR DESIGN FIRM OTHER: _____

DETAILED DESCRIPTION:

The project consists of widening present-day Butler Avenue from Little America to Sinagua Heights Subdivision and widening present-day Fourth Street from Warm Springs Trail/Sparrow Avenue to the upcoming Canyon Del Rio development south of Butler Avenue. The project is funded by the City of Flagstaff Transportation Tax, Proposition 403, which was approved by voters in May 2000 and Proposition 419, which was approved by voters in November 201

Add Phase B (30% to Final Design) to the initial design services contract for Phase A. Additional work for Phase B will consist of 60%, 90% & 100% Plans, Specifications, Estimates, Special Provisions, Design-Bid-Build Construction Methodology, Final Traffic Analysis, Drainage Reports, CLOMR submittal to FEMA, USACE 404 Permit submittal, ROW Exhibits with Legal Descriptions, and Permit acquisitions. Public outreach and stakeholder engagement is included in Phase B of the Butler-Fourth Improvement Project. If authorized tasks have been identified for work that might be required, these tasks will only be authorized if needed by the City's Project Manager.

Please see the proposal from Burgess & Niple dated July 29, 2025 for detailed information.

JUSTIFICATION:

The Phase A contract was approved on November 1, 2022. The design services contract was split into two phases, Phase A delivered to 30% and Phase B will deliver to design completion. The project is identified in the City's CIP Five-Year Summary for FY26, FY27 and FY28.

TIME ANALYSIS:

There is a 730 calendar day addition through this change order to the Phase A contract to allow for completion of Phase B.

COST ANALYSIS:

Change Order No. 3 will be funded by Proposition 419, Roadway, Pedestrian, Bicycle and Safety Improvement Fund, Street Widening, FY26 budgeted amount of \$2,262,434 (048-10-118-3047-6-4421). Please see the proposal from Burgess & Niple dated July 29, 2025 for detailed information.

CITY OF FLAGSTAFF		PROJECT STATUS FORM		
PROJECT NAME: Butler Fourth Improvements		<input checked="" type="checkbox"/> Design <input type="checkbox"/> Construction <input type="checkbox"/> Other		
PROJECT NO. ST3047		FILE NO. 03-21004		
ACCT. NO. <u>048-10-118-3047-6-4421</u>		100.00	%	
ACCT. NO. _____			%	
COUNCIL APPROVAL DATE: November 1, 2022		ORIGINAL CONTRACT AMOUNT: \$ 716,401.00		
PROJECT BUDGET (FY <u>22</u>)		PROJECT BUDGET (FY <u>22</u>)		
NOTICE TO PROCEED DATE: 11/04/2022		ORIGINAL CONTRACT PERIOD (calendar days): 300		
ORIGINAL COMPLETION DATE: 08/31/2023		ORIGINAL CONTRACT ALLOWANCE: \$ 0.00		
DESIGN FIRM:				
Change Orders	C.O. Amount	C.O. Days	Start Date	REASON FOR CHANGE
Revision Date	New Total	New Total	New Comp. Date	
1				See attached expanded list for summary of all FOs and COs.
2				
3				
4				
5				

COMMENTS: The allocations shown above are inclusive of all Change Orders shown. If there are more than 5 Change Orders, please request a separate form from Purchasing that includes additional spaces. Thank you!

ORIGINAL CONTRACT PERIOD	<u>300</u> Days	END DATES (<u>08/31/2023</u>)	ORIGINAL CONTRACT	\$ <u>\$ 716,401.00</u>
PRIOR TIME CHANGES	<u>670</u> Days	(<u>07/02/2025</u>)	TOTAL PRIOR VALUE CHANGES	\$ <u>\$ 350,623.21</u>
THIS TIME CHANGE	<u>730</u> Days	(<u>07/02/2027</u>)	VALUE OF THIS CHANGE	\$ <u>\$ 2,262,434.00</u>
NEW CONTRACT PERIOD	<u>1700</u> Days	(<u>07/02/2027</u>)	NEW CONTRACT	\$ <u>\$ 3,329,458.21</u>

Change Orders	C.O. Amount	C.O. Days	Council Date	REASON FOR CHANGE
Revision Date	New Total	New Total	New Comp. Date	
1	\$ 97,110.21	430	11/04/2022	Additional work under CO 1 for work applied to Phase A.
07/18/2024	\$ 813,511.21	730	11/03/2024	
2	\$ 234,660.00	150	11/03/2024	Additional work under CO 2 for work applied to Phase A.
03/04/2025	\$ 1,048,171.21	880	04/02/2025	
3	\$ 18,853.00	0	04/02/2025	Increasing PO due to an incorrect invoice applied to PO.
08/12/2024	\$ 1,067,024.21	880	04/02/2025	
4	\$ 0.00	30	04/02/2025	FO 1 - Time extension of 30 days
03/04/2025	\$ 1,067,024.21	910	05/02/2025	
5	\$ 0.00	0	05/02/2025	FO 2 - Use of owner's contingency for AZ Smart Grant.
05/09/2025	\$ 1,067,024.21	910	05/02/2025	
6	\$ 0.00	60	05/20/2025	FO 3 - Time Extension of 60 days
05/20/2025	\$ 1,067,024.21	970	07/02/2025	
7	\$ 2,262,434.00	730	09/02/2025	Phase B as outlined in proposal from B&N to complete the project design.
07/31/2025	\$ 3,329,458.21	1700	07/02/2027	
8				
9				
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FILE NO. 03-21004 **PROJECT MANAGER:** Trevor Henry

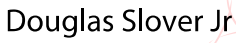
SIGNATURES


SUBMITTER


Project Manager 7/30/25 **Approved Signature** 
Date


Department Head 8/7/2025 **Approved Signature** 
Date Paul Mood
2025.08.07
11:37:04 -07'00'


COMMITTEE


Water Services 2025-08-06 **Approved Signature**  Digitally signed by Douglas Slover Jr
Date: 2025.08.07 16:47:36 -07'00'
Date

Public Works 8-8-2025 **Approved Signature** 
Date

City Engineering 8/8/2025 **Approved Signature** 
Date

City Attorney **Approved Signature**  Digitally signed by Christina A. Kinnear
DN: cn=Christina A. Kinnear, o=City of Flagstaff,
ou=City Attorney,
email=christina.kinnear@flagstaffaz.gov, c=US
Date: 2025.08.11 08:50:08 -07'00'
Date

Finance 08/11/2025 **Approved Signature** 
Date

Purchasing (Chair) **Approved Signature**  Digitally signed by Patrick Brown
Date: 2025.08.12 09:29:04 -07'00'
Date

EXECUTIVE

City Manager **Approved Signature** _____
Date

Council Meeting Date (if required) 09/02/2025 **Council Approved?** Yes No

We have given careful consideration to the proposed and hereby agree, if this proposal is approved, that we will provide all equipment, furnish all materials, and perform all services necessary for the work specified.

FIRM NAME: Burgess & Niple, Inc. **Signature:** 
Date: 7/30/2025 **Print Name and Title:** Edwin J. Muccillo, Chairman

BURGESS & NIPLE

2201 N. Gemini Drive Box#23 | Suite #116 | Flagstaff, AZ 86001 | 928.395.1988

Mr. Trevor Henry
Capital Improvements Engineer
City of Flagstaff, Engineering & Capital Improvements
211 W Aspen Ave
Flagstaff, AZ 86001

Re: ST 3047 Butler-Fourth Improvements
Contract Modification 3 Proposal:
- Final Design and Construction Documents
- Allowances for If Authorized Services

July 29, 2025

Dear Mr. Henry:

Burgess & Niple is submitting the attached proposal for the Butler-Fourth Improvements Project, Contract Modification 3.

The documentation and fee derivation are attached. The fee to complete Phase B, 30% to 100% Construction Documents, is \$1,931,264.00. An allowance of \$331,170.00 is included for additional tasks, if authorized by the City. The total not-to-exceed fee for Phase B and allowances is \$2,262,434.00.

Please do not hesitate to contact us with any questions. We look forward to continuing our partnership with the City of Flagstaff to deliver this important project to the community.

Respectfully,



Jason Pagnard, PE
Vice President
Jason.Pagnard@burgessniple.com



Nick Hall, PE, RSP
Project Manager
Nick.Hall@burgessniple.com



Edwin J. Muccillo, PE
Chairman & Southwest Operations Director
Ed.Muccillo@burgessniple.com

SCOPE OF WORK

City of Flagstaff Butler-Fourth Improvements
Contract Number ST 3047
Contract Modification 3
Phase B: Final Design

Project Understanding

Contract Modification Overview

The City of Flagstaff (CITY) has requested professional engineering services from Burgess & Niple (B&N) to design improvements for the Butler-Fourth Project (PROJECT). This contract modification includes Phase B Final Design services.

The project limits were increased from the 30% deliverable. The PROJECT's western terminus has moved from the eastern edge of the eastern intersection of the traffic interchange (TI) with I-40 to 500' west of the western intersection of the TI. This new area of work will consist of:

- the removal the existing features (east of the western TI intersection):
 - five-lane cross section;
 - curb and gutter;
 - sidewalk;
 - lighting; and
 - related excavation.
- the installation of the following features (east of the western TI intersection):
 - six-lane cross section;
 - curb and gutter;
 - new off-street directional bike lanes and sidewalks;
 - curb ramps;
 - retaining walls;
 - replacement of slope paving;
 - signing;
 - pavement markings (expected to extend west of the western TI intersection); and
 - drainage infrastructure.

SCOPE OF WORK

Phase B Final Design includes preparation of 60%, 90%, and 100% Sealed plans. The deliverables will include plans, estimate, and special provisions at each submittal.

The scope of work necessary to complete Phase B is stated herein and in the following attachments to be performed by subconsultants:

- **Attachment A** – Peak Engineering, Inc. Fee Proposal
- **Attachment B** – JE Fuller Hydrology & Geomorphology, Inc. Fee Proposal
- **Attachment C** – Logan Simpson Fee Proposal
- **Attachment D** – Ninyo & Moore Fee Proposal

Preliminary Milestone Schedule

Description		Date
Phase B	Phase B NTP	TBD
	30% Roll Plot Submittal of TI Improvements	NTP + 3 Months
	Submit 60% PS&E, Final Traffic & Drainage Reports to CITY and ADOT	NTP + 7 Months
	Submit CLOMR to FEMA and respond as needed Submit 404 Permit Application to USACE and respond as needed	
	Complete CITY & ADOT 60% Review	NTP + 8 Months
	Submit Legal Descriptions & Exhibits for ROW Acquisition	NTP + 9 Months
	Submit 90% PS&E	NTP + 11 Months
	Complete CITY & ADOT 90% Review	NTP + 12 Months
	Submit 100% Sealed PS&E & ADOT Encroachment Permit (Encroachment Permit to be prepared and submitted by others)	NTP + 13 Months

SCOPE OF WORK

PROJECT Scope of Work

Contract Modification 3: Phase B Final Design

Task 110: Project Management

- a. **Progress Meetings:** B&N will prepare for and conduct PROJECT progress meetings, which include comment resolution meetings, for the duration of the design portion of the PROJECT. PROJECT progress meetings will take place approximately every other week beginning one week after the KOM through the duration of the project, estimated at 14 months. An estimated thirty meetings, held in-person and virtually, are anticipated. Each meeting will last approximately one hour. B&N will have three representatives in attendance at each meeting. B&N will prepare meeting agendas. B&N will provide meeting summaries via email to the CITY PM within five business days of the meeting occurrence for review.
- b. **Project Manager Meetings:** The CITY PM and B&N PM will meet to discuss administrative aspects of the project to maintain schedule and overall cost. These may be in person or virtual. A budget of 30 hours has been established for this task.
- c. **Internal Team Meetings:** B&N and subconsultants will meet to discuss tasks at hand and resolve design issues as they arise. A budget of 160 hours total for four B&N staff (40 hours each) has been established for this task.
- d. **Project Administration:** B&N will administer and coordinate the work of design team members and interface with the CITY PROJECT team. Project administration encompasses the day-to-day operations of the PROJECT, including organizing and filing project data and communication files, responding to project correspondence including emails, preparation and submittal of monthly invoices and “Design and Progress Reports” to the CITY, and schedule monitoring. B&N will prepare a project schedule that describes the interrelated tasks to be completed for the PROJECT’s proposed improvements, including all major milestone submittals. B&N will update the project schedule regularly over the course of the PROJECT’s design duration. B&N will maintain the CADD workspace and standards established during Phase A. B&N will develop monthly progress reports in accordance with grant requirements for the CITY to submit to FHWA during the design phase of the project. Grant reporting documentation is estimated at two hours per month during the design phase of the project. Grant reporting assistance during the construction phase is included in the Post Design Services of this document.

Deliverables:

- Meeting materials, including agenda and summaries
- Monthly invoices
- Project schedule

Task 210: Land Survey

- a. **Land Survey Incorporation:** B&N will review the provided survey data, and incorporate into the design.

Task 310: PROJECT Coordination

- a. **Developer/Landowner Coordination:** B&N will coordinate with the developers and adjacent landowners, including Conoco, Chevron, Little America, Mobil, Canyon Del Rio, Black Bart’s, etc. to align CITY-built improvements with developer-built improvements. Coordination activities may include formal meetings, phone and email conversations, and electronic transfer of design information. For formal meetings, B&N will prepare meeting agendas. B&N will provide meeting summaries via email to the CITY PM. It is assumed that standalone

SCOPE OF WORK

meetings with Conoco and Chevron on the west side of the ADOT TI will not be needed. A budget of 36 hours has been included for these efforts. B&N activities include:

- Refine entity specific exhibits to solicit input (maximum 1 per parcel);
 - Coordinate, participate in, and document meetings;
 - Document and participate in phone and email conversations;
 - Participate in follow-up conversations;
 - Participate in and facilitate comment resolution between PROJECT Team and Private Parties; and
 - Discuss private parties' input with CITY Staff and resolve conflicts.
- b. **ADOT Coordination:** B&N will coordinate with ADOT for design impacts within the ADOT right-of-way. It is anticipated that the widening of Butler Avenue through the limits of the I-40 interchange and the new off-street directional bike lanes and sidewalks with associated retaining walls will require close coordination with ADOT staff. Coordination activities may include meetings, phone and email conversations, and electronic transfer of design information. Time has been included to assist the CITY in development of an ADOT Right-of-Way Encroachment Permit. For formal meetings, B&N will prepare meeting agendas. A budget of 256 hours has been included for these efforts. It is anticipated that ADOT will participate in other project stakeholder meetings outside of this task.
- c. **ASLD (or current owner) Coordination:** B&N will coordinate with ASLD (or current owner) during design. Coordination activities will take place during formal meetings. An estimated two meetings, held virtually, are anticipated. B&N will prepare meeting agendas. B&N will provide meeting summaries via email to the CITY PM. A budget of 20 hours has been included for these efforts.
- d. **Mountain Line Coordination:** B&N will coordinate with Mountain Line during design. Coordination activities may include formal meetings, phone and email conversations, and electronic transfer of design information. For formal meetings, B&N will prepare meeting agendas. B&N will provide meeting summaries via email to the CITY PM. A budget of 16 hours has been included for these efforts.
- e. **ADEQ Coordination:** B&N will coordinate with ADEQ following design completion to obtain necessary Approval to Construct (ATC) permit for potable water and Construction Authorization (CA) permit for sanitary sewer relocations / upsizing including applications, design reports, and required correspondence. The costs for any necessary permit are excluded as part of this scope of work. A budget of 28 hours has been included for these efforts.
- f. **Public Outreach:** B&N will develop and provide written content and graphics for public distribution. A budget of 20 B&N staff hours have been included for these efforts. Cost under this task includes written project updates messages and the development of up to two exhibits .
- g. **Commission Meetings:** Six CITY Commission meetings are anticipated to occur during the PROJECT. A budget of 44 hours has been included to prepare for and attend. Cost under this task includes graphics and presentation development, presentation, and travel to and from meetings.
- h. **Council Meetings:** Two CITY Council meetings are anticipated to occur during the PROJECT. A budget of 16 hours has been included to prepare for and attend. Cost under this task includes exhibit and presentation development, presentation, and travel to and from meetings.

Deliverables:

- Exhibits
- Meeting materials, including agenda and summaries
- Sign-in sheets

SCOPE OF WORK

- Up to 4 posters
- Comment log and resolution documentation

Task 410: Utilities

- Utility Base Map Update:** Subconsultant will update the utilities base map created in Phase A (*Attachment A*). Data will be obtained from the utility providers, survey and site visits. It will be updated with SUE quality level A data developed with the utility potholing effort.
- Utility Coordination:**
 - B&N will conduct a utility roundtable meeting with all utility companies following the submittal of 60% plans and the submittal of 90% plans. For each utility meeting, all utility owners having facilities present within the project limits will be invited and encouraged to share comments. B&N will conduct up to two one-on-one meetings with utility owners. It is anticipated that six separate utility providers will be involved with the PROJECT, resulting in 12 one-on-one meetings. B&N will prepare agenda, sign-in, and meeting summaries for all meetings.
 - B&N will provide the utility providers with 60% plans for conflict review.
 - B&N will request concurrence from franchise utilities that the respective franchise utility does not have prior rights through the corridor.
 - B&N will revise the utility conflicts matrix created in Phase A.
 - B&N will identify supplemental utility pothole locations.
- Utility Clearance:** B&N will solicit letters for conflict review from all utility providers involved in the project and provide the letters to the CITY.
- Relocation Review:** B&N will perform a review of submitted relocation plans from private utilities (4 companies) within the PROJECT limits to achieve required cover and offsets. A budget of 26 hours has been included for these efforts.

Deliverables:

- Utility base map (*Attachment A*)
- Relocation Review
- Conflict Review Letters

Task 510: Reports

- FEMA Conditional Letter of Map Revision (CLOMR)** – Subconsultant will provide drainage services (*Attachment B*). B&N will review the CLOMR data and coordinate with subconsultant for drainage needs.
- City of Flagstaff Drainage Report** – Subconsultant will provide drainage services (*Attachment B*). B&N will review the drainage data and coordinate with subconsultant for drainage needs.
- Final Traffic Report** – The Final Traffic Report will build upon the Draft Traffic Report. B&N will update the report per comments received from the CITY on the Draft Traffic Report. B&N will evaluate the final design layout as identified in Phase A of the PROJECT.
- Environmental Services** – Subconsultant (*Attachment C*) will complete a class III survey in order to comply with federal requirements.
- ADA Report** – An ADA Compliance and Feasibility Report shall be prepared for the PROJECT. The ADA Compliance and Feasibility Report shall address all ADA features within the PROJECT right-of-way. B&N will prepare the Compliance and Feasibility Report as well as all associated design plans, at the direction of the PM. As all ADA features within the PROJECT limits will be replaced, field review of existing ADA infrastructure will not be included.
- ADOT Design Decision Report** – B&N will complete the ADOT Design Decision Report as outlined in ADOT guidelines for improvements within ADOT jurisdiction.

SCOPE OF WORK

- g. **AASHTO Controlling Criteria Report** – B&N will complete the AASHTO Controlling Criteria Report as outlined as required by the ADOT Design Decision Report for improvements within ADOT jurisdiction.

Deliverables:

- Drainage Report and calculations (**Attachment B**)
- Final Traffic Report and calculations
- Class III Survey (**Attachment C**)
- ADA Report
- ADOT Design Decision Report
- AASHTO Controlling Criteria Report

Task 610: Right-of-Way

- a. **Right-of-Way Needs Identification** – Right-of-way and easement acquisitions are anticipated. The CITY will perform necessary activities for right-of-way and easement acquisitions, except as follows.

- B&N will identify initial proposed right-of-way and easement needs in CADD.
- B&N will coordinate with the CITY PM.
- B&N will prepare a maximum of 24 exhibits to accompany legal descriptions.

Deliverables:

- CADD file identifying right-of-way and easement needs
- Legal descriptions with exhibits

Task 710: Plans, Specifications, and Estimate

710.a.i 30% Roll Plot Submittal of TI Improvements

- **Roll Plot Exhibit** –
 - B&N will continue the 15% roll plot to a 30% design level to submit to ADOT. The roll plot will be submitted to ADOT once 30% design level has been completed. Design and exhibit will be developed for the following geographic limits:
 - Butler Avenue from the western PROJECT terminus to 500' east of the I-40 eastbound intersection with Butler Avenue.
 - Ramp A from Butler Avenue to gore of I-40
 - Ramp C from Butler Avenue to gore of I-40
 - Ramp G from Butler Avenue to gore of I-40
 - Ramp J from Butler Avenue to gore of I-40
- **Roadway Design** – B&N will maintain the design criteria and provide it to the CITY. Improvements to the TI will be designed using ADOT standards. B&N will perform the required calculations and design checks for the roadway design.
- **Independent Technical Review** – B&N will utilize senior staff that are independent of the Project to perform quality reviews and confirm comments have been addressed on reports, exhibits, and PS&E documents prior to submittal to the CITY.

710.a through 710.c 60%, 90%, and 100% Sealed Submittals

B&N will prepare plans according to the CITY CADD standards. B&N will prepare 60%, 90%, and 100% Sealed plans for the PROJECT. Peak Engineering, Inc. will provide assistance with roadway design (**Attachment A**) and JE Fuller with drainage design (**Attachment B**). It is assumed that proposed pavement structural section within the ADOT TI will be PCC pavement per ADOT Standards.

SCOPE OF WORK

Plans, Specifications, and Estimate Development:

Plan Sheets- The anticipated number of sheets included within each plan sheet type is indicated next to the sheet type:

- **Cover** – 1 Sheet
- **Legend, Notes and Key Map, Quantity Summary** – 1 Sheet
- **Geometric Control** – 4 Sheets
- **Typical Sections** – 3 Sheets (7 typical sections and 4 pavement sections)
- **Details** – 12 Sheets maximum
 - Details may include:
 - Curb ramps
 - Truck aprons
 - Splitter islands
 - Bicycle transitions
 - Driveways
 - Transit stops
- **Roadway Plan and Profiles** – 18 Sheets (20 scale)
 - Design and sheets will be developed for the following geographic limits:
 - Butler Avenue from the western PROJECT terminus to Herold Ranch Road, inclusive of the roundabout (approximately 3,200 linear feet)
 - Fourth Street from the Butler Avenue to Crest Stone, inclusive of the roundabout (approximately 1,100 linear feet)
 - Additional design areas and corresponding sheets are listed in **Attachment A**.
- **Drainage Plan and Profiles** - see **Attachment B**
- **Utilities Plans** – 15 Sheets (20 scale)
 - B&N will show all CITY owned and franchise utilities throughout the corridor, including:
 - Relocation of fire hydrants, air release valves, and service meters within Butler Avenue and Fourth Street within the full limits of roadway improvements.
- **Sanitary Sewer Relocation Plan and Profile** – 4 Sheets (20 scale)
 - B&N will prepare construction plans for the CITY owned utilities identified as needing to be adjusted or relocated during Phase A. These locations are:
 - 21" VCP sewer line within Butler Avenue from manholes 8-011 and 8-006 which is approximately 1,800-ft.
 - The 21" VCP sewer will be upsized in its relocated condition to be a 30" line to increase flow capacity.
- **Potable Water Relocation Plan and Profile** – 6 Sheets (20 scale)
 - B&N will prepare construction plans for the CITY owned utilities identified as needing to be adjusted or relocated during Phase A. These locations are:
 - 18" to 24" DIP water line within Butler Avenue from approximately 1,000-ft west of Fourth Street to 800-ft east of Fourth Street
 - 12" to 20" DIP water line within Fourth Street from approximately 500-ft south of Butler Avenue to 500-ft north of Butler Avenue.
- **Structural Plans** – 14 Sheets
 - It is estimated that approximately 3,300 LF of retaining walls will be required for the PROJECT. The plans will include profiles of each wall. Plan views are assumed to be included in the roadway sheets.
- **Structural Details** - 3 Sheets
 - Some project specific details are expected as part of the structural design. It is assumed the retaining walls will primarily utilize ADOT Standard Details. Project

SCOPE OF WORK

specific structural details are intended to clarify interactions with pedestrian/bicycle facilities, private improvements, and beautification.

- **Signalization Plans** – 12 Sheets
 - General notes – 1 Sheet
 - Removals: Butler and Fourth – 1 Sheet (20 scale)
 - CRFB plan – 8 Sheets (20 scale). 2 sheets for each of the following locations:
 - Herold Ranch Road Roundabout
 - Fourth Street Roundabout
 - Peak Point Intersection
 - Little America Midblock Crossing
 - Details – 2 Sheets
 - Sheets do not include area within current ADOT jurisdiction
- **Signing and Striping Plans** – 16 Sheets (40 scale, double-stacked)
 - General notes – 1 Sheet
 - Signing and striping of same limits described above in roadway plan and profile sheets – 15 Sheets
 - Exclusion: sign summary sheets
- **Lighting & ITS Plans** – 15 Sheets (40 scale, double-stacked)
 - General notes sheet (1)
 - Plan sheets (13)
 - Lighting details sheet (1)
 - Sheets do not include area within current ADOT jurisdiction
- **Landscaping Plans** – see **Attachment C**
- **Cross Sections** – 19 Sheets (50-foot stations, 4 cross sections per page). Additional design areas and corresponding sheets are listed in **Attachment A**.
- **Structural Design** – B&N will design the PROJECT retaining walls. This includes reviewing and incorporating the applicable ADOT standards drawings and specifications. It is anticipated that revisions and adjustments to standards may be required to accommodate the project specific needs.
- **Drainage Design** – see **Attachment B**
- **Roadway Design** – B&N will maintain the design criteria and provide it to the CITY. B&N will perform the required calculations and design checks for the roadway design.
- **Specifications** - B&N will refine the specifications and provide additional special provisions through project development. See **Attachments B, C, and D** for subconsultant portion of work under this task.
- **Estimate** - B&N will develop an engineer's estimate of probable cost for construction of the PROJECT. See **Attachments B, C, and D** for subconsultant portion of work under this task.
- **Corridor Model Development** - B&N will combine subconsultant files into a single corridor model to determine anticipated construction limits.
- **Independent Technical Review** - B&N will utilize senior staff that are independent of the Project to perform quality reviews and confirm comments have been addressed on reports, exhibits, and PS&E documents prior to submittal to the CITY.
- **Design-Bid-Build Constructability Review** – Due to federal funding and procurement requirements, the PROJECT may necessitate utilizing the design-bid-build process in lieu of CMAR. This activity provides level of effort for B&N to perform constructability reviews and optimization in lieu of the CMAR.

SCOPE OF WORK

710.d Additional TI-Related Design Tasks

In addition to the roadway improvements to Butler Avenue within the TI area, additional modernization of infrastructure is anticipated.

1. **Signalization Modifications at TI** – The existing signalization equipment at both intersections of the TI may require full replacement to be compliant to ADOT’s current signal standards. B&N will design intersection signalization improvements for the two intersections at the TI and incorporate into the PS&E submittals. Intersection signalization improvements include design calculations, plan sheet development, cost estimation, and required specifications. Nine additional plan sheets are estimated for this task.
2. **Lighting Modifications at TI** – The existing lighting equipment within the limits of the TI (nine luminaires) may require full replacement. B&N will design lighting improvements within the TI and incorporate into the PS&E submittals. Lighting improvements include design calculations, plan sheet development, cost estimation, and required specifications. Photometric analysis is not included. Four additional plan sheets are estimated for this task.
3. **Roadway Barrier at TI** – Upon widening Bulter Avenue at the TI, concrete barrier may be required to protect roadway users from the I-40 bridge columns. B&N will roadside barrier within the TI and incorporate into the PS&E submittals. Roadside barrier includes design and length of need calculations, plan sheet development, cost estimation, and required specifications. Two additional plan sheets are estimated for this task.
4. **ADOT Geotechnical Documents** – Subconsultant will perform geotechnical services and provide Geotechnical Evaluation Report, Pavement Design Summary, and Materials Design Report (Attachment D). B&N will coordinate with subconsultant and review the provided data.
5. **Submittals to ADOT** – B&N will coordinate each stage submittal to ADOT using the Workfront platform.
6. **Review Coordination with ADOT** – B&N will work directly with ADOT to address submittal comments.

PROJECT Exclusions

- a. Exclusions: The following items are not included within this Scope of Work and will require a contract modification if needed:
 - Appraisals, offers, and negotiation of right-of-way acquisition
 - Paying for permits
 - Utilities
 - Researching utility prior rights documentation (CITY conveyed CITY has prior rights and this task is not needed)
 - Franchise utility relocation design and plan development
 - Franchise utility relocation cost estimates
 - Utility agreements
 - Sanitary sewer or potable water system modeling
 - Sanitary sewer or potable water system capacity analysis
 - Potential ADOT Requests
 - Negotiations and development of Intergovernmental Agreements
 - Load design of retaining walls (already included in ADOT standards if fully applied)
 - MOT Design and Plans – currently to be submitted by the CMAR. ADOT may request these from B&N.
 - Lighting Report and Calculations
 - ADOT Traffic Report including user delay calculations
 - ADOT Drainage Report
 - ADOT owned ITS/FMS Design and Plans within ADOT right-of-way

SCOPE OF WORK

- Additional Public Town Halls, Commission Meetings, Council Meetings, and Individual Councilmember Meetings beyond the number mentioned above
- LOMR
- New traffic counts
- Traffic forecasts beyond those previously mentioned

If Authorized Tasks

The following tasks are offered as additional services for an additional fee that will only be performed if authorized by the CITY. Additional narratives are included in **Attachments A, B and C**.

- a. **Post Design Services** – B&N can provide post design services. Post design services may include:
 - a. Provide personnel and equipment to update the project documents, which may be required due to changes in site conditions between the completion of the plans and the bidding of the project.
 - b. Prepare additional documents for alternate bids for the Work or a portion thereof.
 - c. Determine the acceptability of substitute materials and equipment proposed.
 - d. Assist in evaluating bid protests.
 - e. During the construction phase respond to questions and make site visits as requested by CITY to answer contractor questions regarding the project documents.
 - f. Review and respond to Contractor's RFIs.
 - g. B&N will develop monthly progress reports in accordance with grant requirements for the CITY to submit to FHWA during the construction phase of the project. Grant reporting documentation is estimated at two hours per month during the construction phase of the project.
- b. **Owner's Contingency** – The CITY has requested a contingency amount to be added to this proposal to handle unforeseen situations that may arise over the design phase of the PROJECT.
- c. **CMAR Initiated VE Revisions** – B&N anticipates receiving feedback from the CMAR that may necessitate the modification of the design. This task is to be used at the discretion of the CITY to investigate and design recommended improvements.
- d. **Roundabout Relocation** – The western roundabout may be moved at CITY request. The level of effort scoped assumes the relocation is directed prior to the 60% submittal. Impacts to schedule will be negotiated between the B&N PM and CITY PM. The process to update the new location to be brought up to 30% design will consist of the following:
 - a. Geometric Submittal Generation
 - i. Two rounds of printed exhibits for review, each including fastest path and truck turning movement analyses.
 1. Each submittal will contain:
 - a. Plan view with aerial (1 sheet)
 - b. Plan view with lane widths and radii dimension (1 sheet)
 - c. Fastest speed path analyses (4 sheets)
 - d. Truck turning movements (9 sheets)
 - ii. A third over-the-shoulder review.
 - b. Each submittal will be reviewed by MTJ and with CITY Staff. MTJ will develop a concept exhibit independent of the B&N submittal.
 - c. B&N will complete a comparative analysis between the B&N design team developed roundabout and the MTJ developed concept.
 - d. B&N will conduct a meeting and present the comparative analysis findings to the CITY.

SCOPE OF WORK

- e. B&N and the CITY will identify elements of the designs to move forward.
 - f. Plan and profile sheets will be updated at the previous and new location, including deletion of previous north and south tie-in sheets and addition of new north and south tie-in sheets. The key map will also be updated.
 - g. B&N will facilitate comment resolution through project meetings, phone calls, and emails.
- e. **Phase B Kickoff Meeting with Construction Manager at Risk (CMAR):** B&N will work with the CITY Project Manager (PM) to schedule a kick-off meeting (KOM) with selected CMAR following NTP. B&N will be responsible for preparing the KOM agenda, sign-in sheet, attending and facilitating the KOM, and submitting meeting notes to the PM. The KOM will take place in person with a virtual hybrid option. The meeting is anticipated to last approximately two hours and will include CITY staff, B&N's design team, and CMAR representatives. B&N will send a meeting agenda to the CITY PM a minimum of one week prior to the meeting date for distribution. B&N will prepare a sign-in sheet and mark attendees present at the KOM. This attendance list will be sent to the CITY with the meeting notes. B&N will prepare and send meeting notes to the CITY PM within five business days of the meeting occurrence for review.
- f. **CMAR Coordination:** B&N will coordinate with the CMAR to determine estimated construction costs, optimize the constructability of plans, determine construction phasing, and identify opportunities for efficiencies during construction. Implementation of advised actions is covered under section 710 tasks. A budget of 84 hours has been included for these efforts. B&N activities include:
- Coordinate, participate in, and document meetings;
 - GMP alignment during 90% PS&E development;
 - Document and participate in phone and email conversations;
 - Plan-in-hand project walk after 60% submittal to discuss project optimization; and
 - Participate in follow-up conversations.

City of Flagstaff Butler-Fourth Improvements ST 3047 Modification 3 Phase B: Final Design		B&N Labor										EXPENSES				COST				
Principal	Project Manager	Senior Engineer	Engineer 5	Engineer 4	Engineer 3	Engineer 2	Designer	Project Administrator	Total Hours	Total Sheets	Hours per Sheet	Miles \$0.70/MI	Peak Engineering	JE Fuller	Ninyo & Moore	Logan Simpson	MISC	Total Expenses	Total Fee	
\$275.00	\$175.00	\$240.00	\$185.00	\$170.00	\$155.00	\$135.00	\$170.00	\$120.00				0.70								
	30	30		30		45			135				26,310.00	24,460.00		890.00		51,760.00	76,605.00	
	30	40		40		40			30				18,750.00					0.00	5,900.00	
	4	54	2		2			60	122				16,070.00	20,510.00		1,411.00		37,891.00	47,850.00	
	4	154	72	0	70	2	85	0	447			0 MI	61,130.00	44,890.00	0.00	2,401.00	0.00	108,521.00	184,736.00	
SUBTOTAL TASK 110																				
	2	2	0	16	0	22	0	0	42				5,895.00					5,895.00	12,505.00	
SUBTOTAL TASK 210																				
	10	4	10	10	16	16			40				1,500.00			810.00		2,310.00	8,800.00	
	32	36	36	52	69	52			276				2,250.00					2,250.00	48,550.00	
	4	4	4	4	4	4			20				390.00					390.00	3,250.00	
	2	6	16	16	4	4			16				1,500.00					1,500.00	4,350.00	
	2	4	4	4	4	14			28				1,500.00	2,860.00		200.00		0.00	5,130.00	
	12	0	8	8	8	16	8		44				5,130.00	10,080.00				4,790.00	7,990.00	
	4	4	4	4	4	4	4		16				1,500.00	1,440.00				2,940.00	22,400.00	
SUBTOTAL TASK 310																				
	0	70	54	36	94	72	122	0	460			600 MI	13,770.00	14,400.00	0.00	810.00	200.00	29,600.00	107,120.00	
Task 410: Utilities																				
			6						6				3,330.00					3,330.00	4,440.00	
	4		20			40			64				1,665.00					1,665.00	11,465.00	
	2		16	8		8			18									0.00	2,930.00	
									26									0.00	4,670.00	
SUBTOTAL TASK 410																				
	0	6	0	52	8	0	48	0	114			0 MI	4,595.00	0.00	0.00	0.00	0.00	4,595.00	23,595.00	
Task 510: Reports																				
	2								2					26,574.00				26,574.00	26,924.00	
	2	4			32	24			60					22,700.00				22,700.00	23,050.00	
	12	8	8						28							88,520.00		88,520.00	94,420.00	
	4	12	18		24	12			70									0.00	12,250.00	
	8	32	36	64	36	64	36		176									0.00	29,980.00	
		12	36	24	52				124									0.00	21,680.00	
SUBTOTAL TASK 510																				
	0	28	68	62	172	72	0	0	462			0.00	0.00	49,274.00	0.00	88,520.00	0.00	138,194.00	217,464.00	

City of Flagstaff Builder-Fourth Improvements ST 3047 Modification 3	B&N Labor											EXPENSES				COST TOTAL FEE				
	Principal \$275.00	Project Manager \$175.00	Senior Engineer \$240.00	Engineer 5 \$185.00	Engineer 4 \$170.00	Engineer 3 \$155.00	Engineer 2 \$135.00	Designer 2 \$170.00	Project Administrator \$120.00	TOTAL HOURS	TOTAL SHEETS	HOURS PER SHEET	MILES \$0.70/MI	Peak Engineering	JE Fuller		Ninyo & Moore	Logan Simpson	MISC	TOTAL EXPENSES
Task 610: Right-of-Way	4				32									5,250.00				5,250.00	24,930.00	
610.a Right-of-Way Needs Identification	4				32									5,250.00				5,250.00	24,930.00	
SUBTOTAL TASK 610	0	4	0	0	32	0	32	0	128	0.00	0.00	0.00	0.00	5,250.00	0.00	0.00	0.00	5,250.00	24,930.00	
Task 710: Plans, Specifications, and Estimate																				
710.a 30% Roll Plot/Submital of TI Improvements	0	0	24	0	16	16	0	0	16	0 MI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10,960.00	
Roll Plot Exhibit			4		8	4			16										2,940.00	
Roadway Design			12		8	12			32										6,100.00	
Independent Technical Review			8		8	8			8										1,920.00	
710.b 60% Submital	0	52	237	218	412	632	1192	120	0	0 MI	101,620.00	73,620.00	0.00	10,257.00	0.00	185,697.00	0.00	185,697.00	641,327.00	
Cover			2		4	2			4										620.00	
Legend, Notes, and Key Map			2		2	2			4										2,000.00	
Geometric Control			6		6	6			14										8,685.00	
Typical Sections			4		4	4			44										1,770.00	
Details			8	32	56	80	24	24	200	12	16.7								34,115.00	
Roadway Plan & Profile	4		8	8	24	54	72	56	220	16	13.6								68,225.00	
Drainage Plan & Profile			2	18	40	72	108	108	240	15	16.0								26,350.00	
Utilities Plans			2	15	60	20	24	24	97	4	24.3								37,210.00	
Sanitary Sewer Relocation Plan & Profile	2		12	12	64	32	24	24	134	6	22.3								17,250.00	
Possible Water Relocation Plan & Profile	2		12	12	64	32	24	24	134	6	22.3								17,250.00	
Structural Plans			12		48	150	150	150	210	14	15.0								31,290.00	
Structural Details			4		8	24	24	24	36	3	12.0								5,580.00	
Signalization Plans			12	6	52	90	120	120	160	12	13.3								24,110.00	
Signaling & Striping Plans			4	4	60	112	112	112	180	16	11.3								31,310.00	
Lighting & ITS Plans			6	6	66	132	132	132	200	15	13.3								28,960.00	
Landscape Plans									92		4.8								10,257.00	
Cross Sections			6	24	48	64	64	64	142										19,595.00	
Structural Design			6	10	52	96	80	80	256										28,570.00	
Drainage Design			6	6	24	24	36	36	66										20,850.00	
Roadway Design			6	6	24	24	36	36	66										61,040.00	
Specifications			6		24	24	36	36	66										8,155.00	
Estimate			6		20	32	32	32	58										8,810.00	
Corridor Model Development			12	12	36	36	36	36	96										7,255.00	
Independent Technical Review			28	68	100	100	100	100	360										6,000.00	
Design-Bid-Build Constructability Review	16		72	92	60	30	30	30	270										23,300.00	
710.b 90% Submital	0	20	80	70	160	222	726	52	0	0 MI	95,050.00	52,610.00	0.00	10,451.00	0.00	158,111.00	0.00	158,111.00	382,221.00	
Cover			2		2	2			2	1	2.0								310.00	
Legend, Notes, and Key Map			4		4	4			4										540.00	
Geometric Control			2		8	8			10										2,755.00	
Typical Sections			4		4	4			20	3	6.7								4,750.00	
Details			34	34	68	68	68	68	102	12	8.5								18,065.00	
Roadway Plan & Profile	2		8	2	8	32	44	40	128	16	8.0								2,555.00	
Drainage Plan & Profile			2	8	16	24	32	32	48										34,015.00	
Utilities Plans			2	10	12	16	32	32	72	15	4.8								27,660.00	
Sanitary Sewer Relocation Plan & Profile	2		6	18	6	6	12	12	32	4	8.0								11,590.00	
Possible Water Relocation Plan & Profile	2		6	20	8	8	12	12	32	6	7.7								5,780.00	
Structural Plans			6	12	12	88	88	88	106	14	7.6								7,700.00	
Structural Details			2	8	8	36	36	36	46	3	15.3								15,360.00	
Signalization Plans			4	4	16	40	100	100	160	12	13.3								6,710.00	
Signaling & Striping Plans			4	4	16	40	100	100	160	12	13.3								23,380.00	
Lighting & ITS Plans			4	4	6	26	64	64	100	16	6.3								5,460.00	
Landscape Plans			4	4	6	40	100	100	150	15	10.0								20,710.00	
Cross Sections			4		4	4			48	19	2.5								21,690.00	
Structural Design	2		6	6	12	24	24	24	44										9,011.00	
Drainage Design			2		8	8			19,400.00										4,740.00	
Roadway Design			2		8	20	28	28	20,070.00										11,780.00	
Specifications	6		2		24	24	24	24	54										28,790.00	
Estimate	6		6		16	34	34	34	56										8,660.00	
																			14,470.00	

City of Flagstaff Bulker Fourth Improvements S1 3047 Modification 3 Corridor Model Development Independent Technical Review	BEN Labor											EXPENSES				COST					
	Principal \$275.00	Project Manager \$175.00	Senior Engineer \$240.00	Engineer B \$180.00	Engineer \$170.00	Engineer \$155.00	Engineer \$135.00	Designer \$170.00	Project Administrator \$70.00	TOTAL HOURS	TOTAL SHEETS	HOURS PER SHEET	MILES \$0.70/MI	Peak Engineering \$7,210.00	J.E Fuller \$9,750.00	Ninyo & Moore \$9,750.00	Logan Simpson	MISC	TOTAL EXPENSES \$7,210.00	TOTAL FEE \$22,350.00	
																					0
			30	28	6	12	16				34			7,210.00					9,750.00	12,255.00	
											58								9,750.00	22,100.00	
710.c-100% Sealed Submittal Cover Legend, Notes, and Key Map Geometric Control Typical Sections Details Roadway Plan & Profile Drainage Plan & Profile Utilities Plans Sanitary Sewer Relocation Plan & Profile Possible Water Relocation Plan & Profile Structural Plans Structural Details Signalization Plans Signaling & Striping Plans Lighting & ITS Plans Landscaping Plans Cross Sections Structural Design Drainage Design Roadway Design Specifications Estimate Corridor Model Development Independent Technical Review	0	26	64	16	110	138	270	18	0	0	2	1	2.0	56,750.00	25,290.00	0.00	10,196.00	0.00	92,236.00	194,706.00	
						2	2				2	1	2.0							0.00	310.00
			2			2	2				2	1	2.0	1,400.00						0.00	270.00
			4			4	4				6	3	2.7	1,985.00						1,400.00	2,050.00
											8	3	2.7	1,985.00						1,400.00	2,050.00
						24	40				64	12	5.3	3,225.00						3,225.00	12,345.00
		6			12	18	26	18			80	16	5.0	16,640.00	17,580.00				16,640.00	29,090.00	
											88	15	5.9							0.00	15,400.00
		2	16		24	46					44	4	11.0							0.00	7,530.00
		8	18		18	6	12				34	6	5.7							0.00	6,140.00
		4	6		6	4	16				26	14	1.9							0.00	4,140.00
		4			6	10	10				20	3	6.7							0.00	3,330.00
		2	2		14	16	16				32	12	2.7							0.00	4,810.00
		4	4		8	8	16				28	16	1.8	2,790.00					2,790.00	7,090.00	
		2			12	12	16				30	15	2.0							0.00	4,500.00
											12	19	0.6	3,180.00		7,721.00				7,721.00	11,270.00
		2	4		4						10				4,280.00					3,180.00	4,800.00
		2	4		6	4	16				32	4		9,810.00						4,280.00	4,280.00
		8			16		42				66			4,410.00	1,815.00		1,125.00			7,550.00	17,140.00
		6					34				40			3,250.00	1,615.00		1,350.00			6,220.00	11,690.00
											18			7,500.00						2,895.00	2,895.00
710.d Additional T-Related Design Tasks	0	10	68	28	236	116	236	24	0	0	12	19	0.6	0	0	34,500	0	0	34,500.00	151,790.00	
710.d.1 Signalization Modifications at TI	4	16	92	92	92	92	136				340	9	37.8							52,800.00	52,800.00
710.d.2 Lighting Modifications at TI											128	4	32.0							19,980.00	19,980.00
710.d.3 Roadway Barrier at TI	2	4	4	12	48		64				106	2	53.0							16,930.00	16,930.00
710.d.4 ADOIT Geotechnical Documents	4	4	4	16		24	36	24			8				34,500.00					34,500.00	36,160.00
710.d.5 Submittals to ADOIT			24								24									0.00	5,760.00
710.d.6 Review Coordination with ADOIT			16		96						112									0.00	20,160.00
SUBTOTAL TASK 710	0	108	473	332	934	1124	2424	214	0	5609	0 MI	253,420.00	151,720.00	34,500.00	30,904.00	0.00	470,544.00	0.00	470,544.00	1,361,004.00	
TOTAL	4	372	689	482	1214	1370	2833	258	60	7252	600 MI	344,550.00	260,384.00	34,500.00	123,035.00	200.00	763,888.00	1,931,254.00			
If Authorized Tasks																					
810.a Post Design Services	98		56	80	64	52	24	24	26	400				25,800.00	20,700.00	7,080.00			53,580.00	118,830.00	
810.b Owner's Contingency	8	16	24		40					88				6,000.00	50,000.00				6,000.00	50,000.00	
810.c CMAR Initiated VE Revisions	12	32	56	164	64	240				568				20,020.00	20,020.00				20,020.00	110,380.00	
810.d Roundabout Rehabilitation	2									6				750.00	1,120.00				1,870.00	2,760.00	
810.f Phase B Kickoff w/ CMAR	20	8	32			24				84				7,500.00	6,900.00				14,400.00	28,500.00	
810.g CMAR Coordination																					
TOTAL IF AUTHORIZED TASKS	0	140	56	112	300	128	360	24	26	1146	0 MI	40,050.00	48,740.00	0.00	7,080.00	50,000.00	0.00	145,870.00	331,170.00		
TOTAL PHASE B	4	512	725	584	1514	1498	3193	282	86	8408	600 MI	384,600.00	309,124.00	34,500.00	130,115.00	50,200.00	908,959.00	2,282,434.00			

SCOPE OF SERVICES – PHASE B (CONSTRUCTION DOCUMENTS)

Date: May 16, 2024 – **Revision 1: August 29, 2024**
Revision 2: October 31, 2024
Revision 3: February 21, 2025 (shown in italics)
Revision 4: March 4, 2025
Revision 5: June 11, 2025
Revision 6: July 21, 2025

Project: **Butler – 4th St. Improvements**

Peak Project No: 22BN01

Prepared For: Burgess & Niple (*Client: City of Flagstaff*)

PROJECT DESCRIPTION

The Butler-4th Street Improvements project is located on Butler Avenue from the I-40 traffic interchange to west of Sinagua Heights Drive. Roundabouts are planned for the intersections at 4th Street and Herold Ranch Road with roadway grading matchup to the north and south at each roundabout. *Widening of Butler Ave. beneath I-40 and sidewalk extensions to the I-40 westbound on/off ramps are now included in the design.*

Phase A developed the project to 30% design. Phase B (this proposal) includes civil engineering design (roadway) for 60% to 100% construction documents. The project will be delivered by the construction manager at risk (CM@R) method. At this time, the CM@R has not been selected and scope items related to CM@R activities are an estimate only.

Peak Engineering is a subconsultant to Burgess & Niple, providing civil engineering (roadway) design for the following portions of the project (hereinafter referred to as our areas of design responsibility):

- Butler Ave. between the Herold Ranch Road roundabout and the 4th Street roundabout;
- Herold Ranch Road connection from the roundabout, south to the City of Flagstaff property line (dirt road);
- 4th Street from the roundabout, north to the connection point. At this time, this segment is primarily striping;
- Butler Ave. east from the 4th Street roundabout to the connection west of Sinagua Heights Drive.
- *Curb ramp design at the eastbound and westbound on/off ramps. Up to 4 curb ramps are included. Curb ramp design on the west side of the westbound off-ramps are excluded.*
- *Sidewalk design on north and south sides of Butler beneath I-40. B&N is responsible for design of roadway widening and structural engineering including retaining walls to accommodate the new sidewalks. JE Fuller is responsible for drainage design associated with these improvements.*

Utility improvements are limited to relocations and adjustments necessitated by the roadway improvements. Water and sewer infrastructure upgrades are not included. Drainage improvements to Spruce Wash and roadway drainage are included in the project with design being prepared by JE Fuller, under contract to Burgess & Niple (B&N).

The following scope of work itemizes Peak Engineering's responsibilities under this phase of the project.

SCOPE & DELIVERABLES

110. PROJECT MANAGEMENT

Project management tasks include the following activities:

- **110.a Progress Meetings.** Preparation for and participation in bi-weekly project meetings for a duration of 70 weeks (*September 2025 – January 2027*). Task includes 2 extra meetings. Total number of meetings: 37 @ 1 hour each with 1 hour preparation for PM & 33 @ 1 hour each with 1 hour preparation for PE.
- **110.b Project Manager Meetings.** Peak has no scope associated with this task.
- **110.c Internal Team Meetings.** Preparation for and participation in weekly internal team meetings. Assume 50 weeks during design phases: 50 @ 1 hour each for PM & PE.
- **110.d Project Administration.** Administration costs are estimated to be 4.6% of the total proposed fee, distributed monthly for the duration of the scope. Administration costs include internal project management (schedule, staffing, quality assurance, budget management) and communications not related to the meetings listed above.

210. LAND SURVEY (Data Collection & Basemap)

- **210.a Land Survey.** Peak has no scope associated with this task.
- **210.b Land Survey Incorporation.** Northland Exploration Surveys is expected to collect additional survey data that was not included in the original survey and compile the data into one basemap file. Peak will process the basemap file for design use and will provide the survey basemap in CAD to the design team. *It is expected that additional topographic survey will be obtained by others for the work within the ADOT I-40 right-of-way.*

310. PROJECT COORDINATION

Peak Engineering will prepare for and attend the meetings noted below. Each meeting noted as Peak participating includes PM and PE.

- **310.a Developer/Landowner Coordination.** Peak has budgeted to prepare for and attend up to 2 meetings.
- **310.b ADOT Coordination.** *Peak will participate in up to 3 design or design-review meetings associated with design of sidewalk and curb ramp (4) improvements in the I-40 right-of-way.*
- **310.c ASLD Coordination.** Peak has budgeted to prepare for and attend 1 meeting.
- **310.d Mountain Line Coordination.** Peak has budgeted to prepare for and attend up to 2 meetings.
- **310.e. ADEQ Coordination.** Peak has no scope associated with this task.
- **310.f. Public Outreach.** Peak has budgeted to prepare for and attend 1 meeting.
- **310.g Commission Meetings.** Peak has budgeted to prepare for and attend 6 commission meetings (PM) and 3 meetings (PE).
- **310.h Council Meetings.** Peak has budgeted to prepare for and attend 2 council meetings.

Peak does not anticipate participating in other meetings. Meeting agendas and minutes will be prepared by B&N.

410. UTILITIES

- **410.a Utility Basemap Update.** Peak will compile additional utility information provided by others into the updated project basemap (see Task 210.b).
- **410.b Utility Coordination.** Burgess & Niple is responsible for design coordination with utility companies including submittal of design documents to the utility companies for acknowledgement. Peak will attend and participate in up to 3 meetings with B&N and utility companies.
- **410.c Utility Clearance.** Peak has no scope associated with this task.
- **410.d Relocation Review.** Peak has no scope associated with this task.

510. REPORTS

- **510.a CLOMR.** Peak has no scope associated with this task.
- **510.b COF Drainage Report.** Peak has no scope associated with this task.
- **510.c Final Traffic Report.** Peak has no scope associated with this task.
- **510.d Environmental Services.** Peak has no scope associated with this task.
- **510.e ADA Report.** Peak has no scope associated with this task.
- **510.f ADOT Design Decision Report.** Peak has no scope associated with this task.
- **510.g AASHTO Controlling Criteria Report.** Peak has no scope associated with this task.

610. RIGHT-OF-WAY

- **610.a Right-of-Way Needs Identification.** Peak will develop exhibits showing right-of-way impacts for our areas of design responsibility. This task includes coordination with the project surveyor regarding the exhibits. Responsibility for preparation of legal descriptions and exhibits lies with the project surveyor.

710. PLANS, SPECIFICATIONS AND ESTIMATE

Peak Engineering will prepare 60%, 90%, and 100% Final Sealed Plans and applicable specifications for the project. Construction documents will be developed to generally accepted standards for each level of submittal.

- **Cover.** Peak Engineering has no scope associated with this task.
- **Legend, Notes, and Key Map.** Peak Engineering has no scope associated with this task.
- **Geometric Control.** Burgess & Niple will maintain the roadway centerline control information. Peak will provide updated centerline control information to Burgess & Niple as design develops/changes. Peak does not anticipate preparing any plan sheets under this task. *For the curb ramps and sidewalks within the I-40 right-of-way, Peak will use the Butler Ave. centerline stationing with offset information.*
- **Typical Sections.** Peak will prepare roadway sections for the areas within our design responsibility. This task includes preparation of 1 plan sheet.
- **Details.** Peak will prepare up to two sheets of details necessary to more fully describe the work to be done within our areas of design responsibility. *Peak will prepare applicable details related to the curb ramps and sidewalks in the I-40 right-of-way pertaining to our area of design responsibility. These can be included in the main detail sheets or included on ADOT-specific sheets for permitting.*

- **Roadway Plan & Profiles.** Peak will prepare 11 plan sheets at 20 scale (vertical profile scale to be determined) to depict roadway design of the areas within our design responsibility. It is expected that we will develop 7 plan/profile sheets with 4 additional profile sheets to depict the Butler bifurcated roadway profiles.
Peak will prepare 4 plan and profile sheets at 20 scale (vertical profile scale to be determined) to depict sidewalk design from I-40 eastbound ramps to westbound ramps (approx. 850 LF).
- **Drainage Plan & Profile.** Peak Engineering has no scope associated with this task.
- **Utilities Plans.** At this time, Peak Engineering has no scope associated with this task.
- **Sanitary Sewer Relocation Plan and Profile.** Peak Engineering has no scope associated with this task.
- **Potable Water Relocation Plan and Profile.** Peak Engineering has no scope associated with this task.
- **Structural Plans.** Peak Engineering has no scope associated with this task.
- **Structural Details.** Peak Engineering has no scope associated with this task.
- **Signalization Plans.** Peak Engineering has no scope associated with this task.
- **Signing & Striping Plans.** Peak will prepare 3 preliminary striping & signing sheets for the areas within our design responsibility, assuming 20 scale viewports. *It is assumed that no striping or signing is required for the sidewalks or curb ramps within the I-40 right-of-way.*
- **Lighting & ITS Plans.** Peak Engineering has no scope associated with this task.
- **Landscaping Plans.** Peak Engineering has no scope associated with this task.
- **Cross Sections.** Peak will prepare 3 plan sheets of preliminary cross sections showing the relationship between existing and proposed grades at 50' intervals for the areas within our design responsibility. *It is assumed that no cross sections are required for the sidewalks or curb ramps within the I-40 right-of-way.*
- **Structural Design.** Peak Engineering has no scope associated with this task.
- **Drainage Design.** Peak Engineering has no scope associated with this task.
- **Roadway Design.** Peak will prepare roadway design for the areas within our design responsibility. This task includes design team coordination. *Sidewalk design for the sidewalks and curb ramps within the I-40 right-of-way is included.*
- **Specifications.** Peak will prepare unique special provisions for the areas within our design responsibility. It is assumed Burgess & Niple will maintain the overall project specifications. Project specifications will be based on MAG specifications and City of Flagstaff addendum to the MAG Specifications.
- **Estimate.** Peak will prepare an Engineer's Opinion of Probable Construction Cost for the areas within our design responsibility, based on estimated quantities. We will furnish our estimated quantities to B&N in a spreadsheet for their use in compiling the whole project estimate. This task also includes review of the CM@R cost model for areas within our design responsibility.
- **Corridor Model Development.** Peak will develop the corridor model within our areas of design responsibility and coordinate model development with B&N and other design team members as necessary.
- **Independent Technical Review.** Peak will participate in an independent technical review of the design team documents at each deliverable stage and will revise our plans based on comments received from the ITR. It is assumed the ITR will be completed prior to submittal to the City of Flagstaff.

810. IF AUTHORIZED TASKS

- **Post Design Services.** The construction phase is scheduled to last 12 months beginning in the summer of 2026.

- Scope of services for construction phase support may include participation in regular owner-engineer-contractor (OEC) meetings, response to requests for information, review of material submittals, preparation of design revisions (notice of field design changes), field visits to document conditions and general office support.
Note that the City of Flagstaff requires preparation of record drawings at project completion as part of the Contractor's responsibilities. We have not included a budget amount for this effort. As-built plans and/or Record Drawings, as defined in the City Engineering Standards, can be furnished if sufficient budget remains in Task 810. If insufficient budget remains in Task 810 at the close of the project, Peak Engineering can prepare record drawings after a mutually acceptable scope and fee is negotiated.
- Not all tasks listed above may be needed during construction and some tasks may require more effort. The scope of services is not explicit as it is construction phase support for a variety of tasks and response to unknown or new conditions. Therefore, this scope is presented as a time and materials budget. Authorized work will not exceed the estimated budget without prior authorization. Peak Engineering will stop work when the agreed upon funding limit is reached and will seek authorization for any additional work required to complete the scope outlined herein.
- **Owner's Contingency.** Peak has no scope associated with this task.
- **CMAR Initiated VE Revisions.** Peak will make design/plan revisions based on VE revisions initiated by the CMAR. This is a budget amount only. Changes requiring more significant effort may require additional fees.
- **Roundabout Relocation.** Peak has no scope associated with this task.
- **Design-Bid-Build Constructability Review.** Due to federal funding and procurement requirements, the PROJECT may necessitate utilizing the design-bid-build process in lieu of CMAR. This activity provides level of effort for Peak to perform constructability reviews and optimization in lieu of the CMAR.
- **Phase B Kickoff w/CM@R.** Attendance at the project kickoff meeting with the design team, CM@R, and City staff;
- **CM@R Coordination.** Peak will participate in 10 meetings with the City, design team and CM@R outside of the regularly scheduled bi-weekly progress meetings (Task 110.a).

Assumptions & Exclusions:

Federalization. This scope does not include work associated with preparing, adhering to, documenting or otherwise following federal guidelines, requirements or restrictions associated with funding.

ADA analysis, design and reporting is excluded.

Limited post design services are included as defined in Task 810. Construction inspection is not included.

Preparation of erosion control, BMP, and SWPPP documentation is excluded.

An updated topographic survey including additional areas will be conducted by others and furnished to Peak in AutoCAD format with the surface (DTM). It is expected that the topographic survey will be complete and will not require editing or linework creation by Peak or multiple processing iterations.

Utility locating and potholing are not included. Peak's scope for showing utility information in the project basemap is based on available as-built and GIS data, adjusted for survey field appurtenances.

Burgess & Niple is responsible for design of roundabouts and preparation of the Traffic Reports.

Burgess & Niple will handle the direct coordination with ADOT and ASLD. Peak will attend up to 3 meetings with ADOT and 1 meeting with ASLD.

JE Fuller will perform the drainage analysis and design for the project and furnish information for roadway drainage elements for Peak to include in the concept design, if applicable.

Renderings or preparation of 3D graphics of design is not included.

Peak will not prepare a roadway asset inventory, photo-documentation of street or driveway conditions, or prepare a video of the existing conditions.

Preparation of legal descriptions/exhibits is excluded.

Preparation of traffic control plans is excluded.

FEE SUMMARY

Task	Description	Proposed Fee
110	PROJECT MANAGEMENT	\$60,630
210	LAND SURVEY	\$5,985
310	PROJECT COORDINATION	\$13,770
410	UTILITIES	\$4,995
510	REPORTS	\$0
610	RIGHT-OF-WAY	\$5,250
710	PLANS, SPECIFICATIONS AND ESTIMATE	\$245,170
810	IF-AUTHORIZED TASKS	\$48,300
	PROJECT EXPENSES	\$500
	Subtotal	\$384,600

As required by the City, Phase B will be performed on a time & materials basis. If additional services are required beyond the scope of Phase B presented herein, we will work with B&N to develop a mutually agreeable scope and fee for the additional services.

Peak will invoice B&N monthly for labor and expenses incurred.

SCHEDULE

Peak anticipates work beginning September 1, 2025.

END

Client Name: Burgess & Niple (COF)

Project Name: City of Flagstaff Butler - Fourth Improvements PHASE B

Project Number: 22BN01

REVISION 5

Client Information

Name: Burgess & Niple (Attn: Nick Hall)

Address: 2201 N. Gemini Drive, Suite 116

Flagstaff, AZ 86001

Nick.Hall@burgessniple.com

Project Budget Summary

Task	Task Description	Hourly Rate:		Principal Engineer		Project Manager		Project Engineer		Designer		Engineering Intern		Technical Drafter		Clerical		Total Hours	Labor Cost per Task
		Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars		
1	Task 110: Project Management	-	\$ -	124.00	\$ 24,180	116.00	\$ 20,880	-	\$ -	-	\$ -	-	\$ -	-	\$ -	173.00	\$ 15,570	413.00	\$ 60,630
2	Task 210: Land Survey	-	\$ -	3.00	\$ 585	24.00	\$ 4,320	8.00	\$ 1,080	-	\$ -	-	\$ -	-	\$ -	-	\$ -	35.00	\$ 5,985
3	Task 310: Project Coordination	-	\$ -	42.00	\$ 8,190	31.00	\$ 5,580	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	73.00	\$ 13,770
4	Task 410: Utilities	-	\$ -	6.00	\$ 1,170	13.00	\$ 2,340	11.00	\$ 1,485	-	\$ -	-	\$ -	-	\$ -	-	\$ -	30.00	\$ 4,995
5	Task 510: Reports	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
6	Task 610: Right-of-Way	-	\$ -	2.00	\$ 390	9.00	\$ 1,620	24.00	\$ 3,240	-	\$ -	-	\$ -	-	\$ -	-	\$ -	35.00	\$ 5,250
7	Task 710a: 60% Submittal	1.00	\$ 220	54.00	\$ 10,530	165.00	\$ 29,700	392.00	\$ 52,920	-	\$ -	-	\$ -	-	\$ -	-	\$ -	612.00	\$ 93,370
8	Task 710b: 90% Submittal (Final I)	1.00	\$ 220	61.00	\$ 11,895	163.00	\$ 29,340	397.00	\$ 53,595	-	\$ -	-	\$ -	-	\$ -	-	\$ -	622.00	\$ 95,050
9	Task 710c: 100% Submittal Unsealed (Preliminary Final II)	2.00	\$ 440	55.00	\$ 10,725	122.00	\$ 21,960	175.00	\$ 23,625	-	\$ -	-	\$ -	-	\$ -	-	\$ -	354.00	\$ 56,750
10	Task 710d: Final Sealed (Final II)	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
11	Task 810: If Authorized Tasks	-	\$ -	100.00	\$ 31,200	20.00	\$ 14,400	20.00	\$ 2,700	-	\$ -	-	\$ -	-	\$ -	-	\$ -	140.00	\$ 48,300
LABOR TOTAL:			\$ 880		\$ 67,665		\$ 115,740		\$ 135,945		\$ -		\$ 15,570		\$ -		\$ -		\$ 384,100

Reimbursable Project Expenses

A	Printing & Reprographics	\$ 500	\$ -
B	Mileage	\$ -	\$ -
C	Meals & Lodging	\$ -	\$ -
D	Equipment	\$ -	\$ -
E	Other (Parking)	\$ -	\$ -
RPE TOTAL:		\$ 500	\$ -

Sub-Consultants

Survey	\$ -	
Landscape Architect	\$ -	
Architect	\$ -	
Geotechnical	\$ -	
Other	\$ -	
SUB-CONSULTANT TOTAL:		\$ -

PROJECT TOTAL:
\$ 384,600

July 17, 2025

Nick Hall, PE, RSP
Burgess and Niple, Inc.
2201 N. Gemini Drive | Suite 116
Flagstaff, AZ 86001

Dear Nick,

Thank you for requesting professional engineering services from JE Fuller/ Hydrology & Geomorphology, Inc. (JE Fuller). This letter outlines our proposed Phase B Scope of Services, and fee estimate related to the Butler Avenue Improvement Project.

PROJECT UNDERSTANDING

JE Fuller is a subconsultant to Burgess and Niple, providing drainage analysis and design, LID design, storm drainage and culvert crossing design, drainage report preparation and FEMA Conditional Letter of Map Revision for the proposed Butler Avenue Improvement Project. The following scope is based off the 30% design, including increasing the project limits. COF will be widening the roadway prism from the I-40 westbound on/off ramp to I-40 eastbound on/off ramp as shown in Figure 1. We assume that the main trunkline will remain in place and the laterals and catchbasins in the new reach need to be replaced. JE Fuller will determine if the trunkline is adequately sized (Figure 2) per ADOT and COF requirements. If it is not adequate, the findings will be discussed with the City and a design scope can be provided if requested.

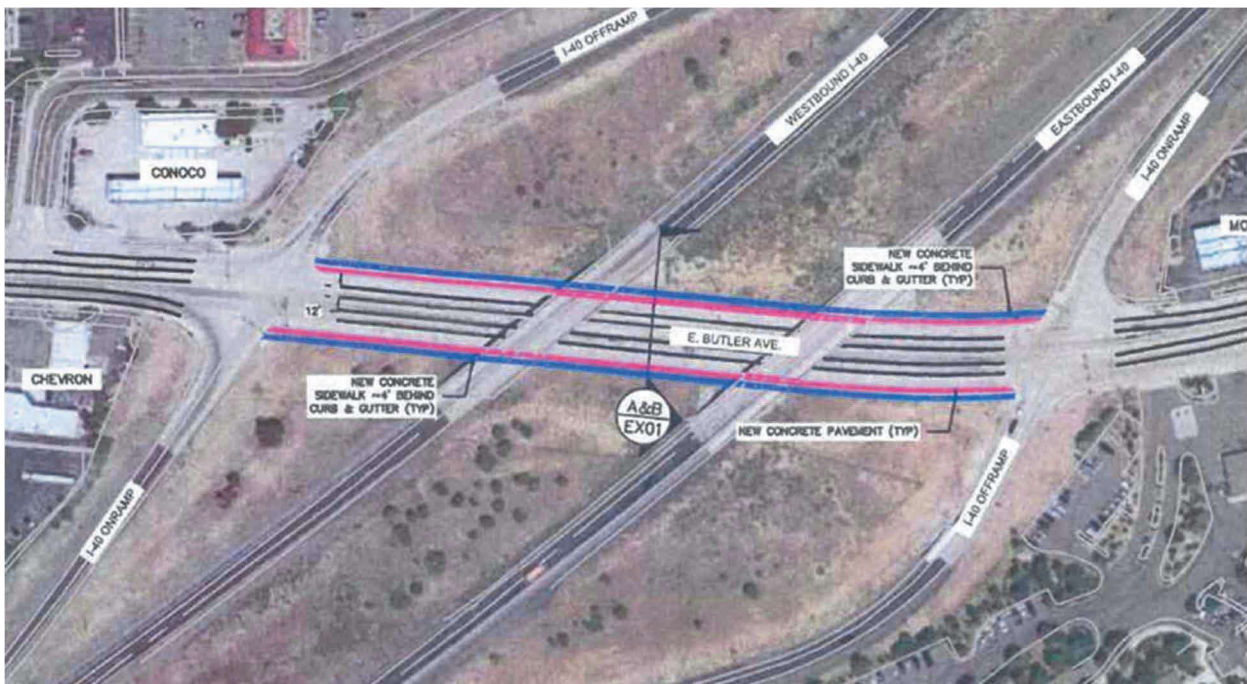


Figure 1 – Project Limits Increase

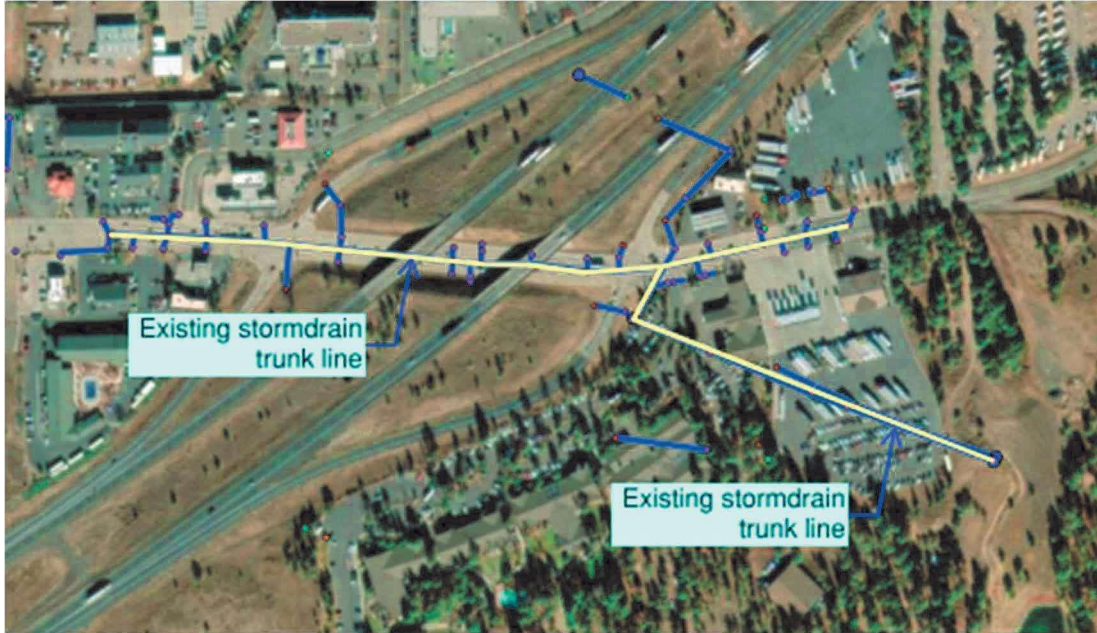


Figure 2 - Stormdrain Network

PROJECT SCOPE (Phase B)

TASK 110 – PROJECT MANAGEMENT

JE Fuller will perform project management and administration tasks to assist B&N in completing the project. The following is included:

- Project Initiation
- Participate in Kickoff Meeting
- Participate in weekly coordination meetings via Teams throughout the design (18 months of Bi-weekly meetings)
- General project administration, contract coordination, and miscellaneous administration tasks

TASK 310 – PROJECT COORDINATION

- COF Commission Meetings (2 meetings and prep are included for one JE Fuller Staff)
- COF Council Meetings (2 meetings and prep are included for two JE Fuller Staff)

TASK 510 – REPORTS

Task 500 A: Conditional Letter of Map Revision (CLOMR) Application

JE Fuller will prepare a Conditional Letter of Map Revision (CLOMR) request and submit it to FEMA based on the designed improvements. This request will include a Technical Support Data Notebook (TSDN) which is a report following FEMA protocol to document the project. The TSDN will include FEMA “MT-2” forms which are required by FEMA for their review. Along with the TSDN, JE Fuller will submit existing and proposed hydraulic models of Switzer Wash. The models will extend far enough upstream and downstream to show the floodplain within the area proposed to be remapped. The

CLOMR request will also include floodplain workmaps, GIS files, and an annotated Flood Insurance Rate Map to show the proposed changes. The CLOMR application will be first submitted to the City of Flagstaff for their review and concurrence. The floodplain administrator from the City will be asked to sign the Overview and Concurrence MT-2 form. With their approval and signature, the CLOMR application will be submitted digitally to FEMA. FEMA fees are \$6,750 and are included in JE Fuller's Fee.

Deliverables: JE Fuller will provide the TSDN, model, and workmaps to the City of Flagstaff and FEMA. One set of revisions are included to both the City and FEMA. If additional submittals are required that are outside of JE Fuller's control it will be an additional service.

Task 510 B: Final Drainage Report

JE Fuller will prepare a final drainage report per the City of Flagstaff Stormwater Management Design Manual which will include the following:

- Summary of Switzer Wash Modeling and analysis completed for the CLOMR.
- Hydrologic calculations for roadway improvements and stormdrain and catchbasin sizing
- LID Calculations
- Report Preparation

Previous discussions in Phase A noted that detention would not be required since the project drains directly into a regional wash. Our scope assumes that detention is not required and will not be designed.

Deliverables: Final Drainage Report (A preliminary draft will be submitted with the 60% plans, final draft with the Final I plans and final sealed report with the Sealed Final II plans)

TASK 710 – PLANS, SPECIFICATIONS, AND ESTIMATE

Task 710 A: 60% submittal

JE Fuller will prepare 60% design plans based on comments received from the 30% plan submittal and the additional scope as referenced in the understanding. Prior to proceeding with the 60% design and plan preparation. JE Fuller will meet with the COF and project team to discuss the 30% plan review comments and potential VE options that should be analyzed during the 60% design. The plans will include call-out text and construction notes but will not be fully keynoted or detailed. Estimated quantities will be shown per sheet and we will include an overall spreadsheet for the team's use. We anticipate the following design sheets:

- Detail sheets
- Construction control
- Onsite stormdrain plan and profile
- LID system design
- Regional channel and culvert plan and profile

Project specifications will be presented in the plans, the preparation of a standalone special provisions document is excluded.

JE Fuller will also prepare erosion control plan sheets to cover the full project area.

Deliverables:

- *60% Drainage Plans and Erosion Control Plans*
- *Drainage-related quantities and EOPCC*
- *Comment response from 30% comments.*

Task 710 B: 90% submittal (Final I)

JE Fuller will prepare Final I plans based on comments received from the 60% plan submittal. Prior to proceeding with the Final 1 plan preparation, JE Fuller will meet with the COF and project team to discuss the 60% plan review comments and potential VE options that should be analyzed during the Final I Plans. The sheet index listed in the 60% design documents will be maintained in this phase. The plans will be fully developed and detailed for submission to the COF. The improvement plans will be construction ready but marked “Preliminary, Not For Construction” for COF review.

JE Fuller will update the quantities per sheet and in the overall spreadsheet. An engineer’s opinion of probable construction costs will be prepared in coordination with the engineering team.

Deliverables:

- *Final I Drainage Plans and Erosion Control Plans*
- *Drainage and erosion control related quantities and EOPCC*
- *Comment response from 60% plan comments*

Task 710 C: 100% Submittal (Final II)

JE Fuller will prepare Final II plans based on comments received from the Final I submittal. The plans will be fully developed and detailed for submittal to the COF. The improvement plans will be submitted to the City in draft format for final comments prior to being sealed.

JE Fuller will update the quantities per sheet and in the overall spreadsheet. An engineer’s opinion of probable construction costs will be prepared in coordination with the engineering team.

Deliverables:

- *Final II Drainage Plans and Erosion Control Plans*
- *Drainage and erosion control related quantities and EOPCC*
- *Comment response from Final I plan comments*

END OF BASIC SERVICES

SERVICES AS NEEDED & AUTHORIZED BY COF

Task 810 A: Post Design Services

Following approval of the plans, JE Fuller will provide post-design services within the designated budget to support the City to successfully complete the construction of the improvements. This may include the following items:

1. Construction meetings as requested
3. Site visits and field observation reports for unforeseen conditions if needed
5. Response to RFI during construction

6. Create ESI's for change in design or possible additions

Task 810 D: Roundabout Relocation

COF is currently coordinating with Little America regarding the redesign & relocation of the proposed roundabout at Herald Ranch. If the COF determines to relocate the roundabout the current drainage design and associated stormdrain system will need to be reconfigured to accommodate the revised location and design. The design work and coordination will be incorporated into the above tasks.

Task 810 E: Design-Bid-Build Constructability Review

Design-Bid-Build Constructability Review – Due to federal funding and procurement requirements, the PROJECT may necessitate utilizing the design-bid-build process in lieu of CMAR. This activity provides level of effort for JEF to perform constructability reviews and optimization in lieu of the CMAR.

Task 810 F: Phase B Kickoff w/ CMAR

JEF will participate in a kick-off meeting (KOM) with selected CMAR following NTP.

Task 810 G: CMAR Coordination

JEF will coordinate with the B&N and the CMAR (to the extent of JEF's design scope) to determine estimated construction costs, optimize the constructability of plans, determine construction phasing, and identify opportunities for efficiencies during construction. Implementation of advised actions is covered under section 710 tasks. A budget of 36 hours has been included for these efforts. JEF activities include:

- Participate in meetings;
- Plan-in-hand project walk after 60% submittal to discuss project optimization; and
- Participate in follow-up conversations.

FEE ESTIMATE

JE Fuller’s time and materials fee is defined below per the hourly rates in Table 2. The detailed hourly backup is attached.

Table 1 - Fee Estimate

Task	Fee
TASK 110 - Project Management and Administration	\$44,990
Project Administration	\$20,510
Project Meetings	\$24,480
TASK 310 - Partnering and Public Involvement	\$20,940
310 G and H - Council/Commission/Public Meetings	\$14,400
TASK 510 – REPORTS	\$49,274
500 A - CLOMR Application	\$26,574
500 B - Drainage Report	\$22,700
TASK 710 – PLANS, SPECIFICATIONS, AND ESTIMATE	\$146,460
710 A - 60% submittal	\$65,470
710 B - 90% submittal (Final I)	\$54,350
710 C - 100% Submittal Sealed (Final II)	\$26,640
END OF BASIC SERVICES	
If Authorized Services	
Task 810 A - Post Design Services	\$20,700
Task 810 D - Roundabout Relocation	\$20,020
Task 810 E - Design-Bid-Build Constructability Review	\$10,350
Task 810 F - Phase B Kickoff w/ CMAR	\$1,120
Task 810 G - CMAR Coordination	\$6,900
TOTAL	\$309,124

Table 2 - Billing Rates

Category	Rate
Master Engineer	\$200
Senior Engineer IV	\$185
Senior Engineer III	\$175
Project Engineer IV	\$168
Project Engineer III	\$152
Designer	\$130
Administrator	\$125

SCHEDULE

JE Fuller will work with the project team to complete this phase of the project design.

ASSUMPTIONS

- Meetings or additional field visits not specified herein are not included in this cost estimate. If additional meetings, coordination, or field visits are required, a cost and scope modification will be negotiated on a time-and-materials basis.
- Survey is not included. JE Fuller is assuming that sufficient survey data will be provided by B&N.
- No regional hydrologic modeling is included in this scope.
- Design of new detention structures are not included but can be provided as an additional service.
- Design of new stormdrain trunkline to replace the existing stormdrain within the ADOT ROW is not included but can be provided as an additional service.
- LOMR application can be provided under a separate scope of services.
- Design of the new franchise utility lines (gas, electric, communication) is not included.
- Design of the waterline and sewer line along with the associated ADEQ submittals are not included.
- Structural design, if needed will be provided by B&N.
- Design of pedestrian access through the culvert is not included.
- Services not specifically included in the above Project Scope are excluded but can be provided as additional services.
- Record Drawings/As-built preparation and/or review is not included and will be the responsibility of the Contractor during construction.
- No additional Clean Water Act Section 404, Endangered Species Act, or National Historic Preservation Act compliance is required – an Approved Jurisdictional Determination was received in March of 2024.
- This estimate is valid for a period not exceeding 90 days.
- Any task not expressly described herein is not included in the proposed cost.

We greatly appreciate the opportunity to work on this project. If you have any questions regarding this proposal, please do not hesitate to contact me.

Sincerely,

JE Fuller/Hydrology & Geomorphology, Inc.



Joseph Loverich, P.E., CFM
Vice President

FEE PROPOSAL WORKSHEET - Butler and Fourth Improvements

CLIENT: B & N

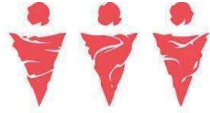
7/17/2025

TASK	Master Engineer III \$200	Senior Engineer IV \$185	Senior Engineer III \$175	Project Engineer III \$152	Designer IV \$130	Admin \$125	Intern \$50	Labor Cost Subtotal	Direct Cost (Expenses)	Direct Cost Description	TOTALS
TASK 110 - Project Management and Administration											
110 B - Project Administration	2	60	40		2			\$ 19,510.00	\$ 1,000.00	Mileage	\$ 20,510.00
110 C - Project Meetings		68	68					\$ 24,480.00			\$ 24,480.00
TASK 310 - Partnering and Public Involvement											
310 G and H - Council/Commission/Public Meetings		40	40					\$ 14,400.00			\$ 14,400.00
TASK 510 - REPORTS											
500 A - CLOMR Application	4	20	120	112				\$ 42,524.00	\$ 6,750.00		\$ 49,274.00
500 B - Drainage Report	2	8	40	72				\$ 19,824.00	\$ 6,750.00		\$ 26,574.00
	2	12	80	40				\$ 22,700.00			\$ 22,700.00
TASK 710 - PLANS, SPECIFICATIONS, AND ESTIMATE											
710 A - 60% submittal*	18	248	804	-	712			\$ 141,370.00			\$ 141,370.00
Drainage Design	4	50	176	0	174			\$ 63,470.00			\$ 63,470.00
Plan Preparation	2	20	70		80			\$ 26,350.00			\$ 26,350.00
Specifications	2	20	70		94			\$ 28,570.00			\$ 28,570.00
Estimate	2	5	20					\$ 4,825.00			\$ 4,825.00
		5	16					\$ 3,725.00			\$ 3,725.00
710 B - 90% submittal (Final I)*											
Drainage Design	2	50	140	0	142			\$ 52,610.00			\$ 52,610.00
Plan Preparation	1	20	60		40			\$ 19,400.00			\$ 19,400.00
Specifications	1	5	10		102			\$ 27,660.00			\$ 27,660.00
Estimate		5	10					\$ 2,875.00			\$ 2,875.00
710 C - 100% Submittal Sealed (Final II)*											
Drainage Design	3	24	86	0	40			\$ 25,290.00			\$ 25,290.00
Plan Preparation	2	8	16					\$ 4,280.00			\$ 4,280.00
Specifications	1	4	5		40			\$ 17,580.00			\$ 17,580.00
Estimate		4	5					\$ 1,815.00			\$ 1,815.00
If Authorized Tasks											
Task 810.a - Post Design Services	72	58	168	30				\$ 59,090.00			\$ 59,090.00
Task 810.d. Roundabout Relocation	6	24	60	30				\$ 20,700.00			\$ 20,700.00
Task 810.e. Design-Bid-Build Constructability Review	4	32	76					\$ 20,020.00			\$ 20,020.00
Task 810.f. Phase B Kickoff w/ CMAR	36		18					\$ 10,350.00			\$ 10,350.00
Task 810.g. CMAR Coordination	2	2	2					\$ 1,120.00			\$ 1,120.00
	24		12					\$ 6,900.00			\$ 6,900.00

*Sum of subtasks

TOTAL CONTRACT AMOUNT \$ 309,124.00

Attachment C



L O G A N S I M P S O N

October 29, 2024

Nick Hall, P.E., RSP
Flagstaff Engineering Leader
Burgess & Niple, Inc.
2201 North Gemini Drive | Suite 116
Flagstaff, Arizona 86001

Subject: Flagstaff Butler – Fourth Improvements
Proposal for Landscape Architecture Services – Contract Modification #2
Logan Simpson Project No. 225349

Dear Mr. Hall,

Logan Simpson is pleased to submit this Scope of Work and Fee Estimate (Mod#2) to provide Landscape Architectural Services, including drawings, details, and specifications for the above-referenced project located in Flagstaff, AZ. As this is an existing project, this Scope and Fee will be considered Contract Modification #2.

I have been assigned this project as the Landscape Architect out of our Tempe office. Should you have any questions please do not hesitate to contact me at (480) 435-0742 or via e-mail at Bremme@logansimpson.com. We look forward to collaborating with Burgess & Niple on this project.

Sincerely,

A handwritten signature in black ink, appearing to read "Brad Remme".

Brad Remme
Senior Associate Landscape Architect

Attachments: (1) Scope of Work; (2) Fee Proposal

INTRODUCTION

The City of Flagstaff is planning a roadway improvement project along Butler Avenue, within the City of Flagstaff, Coconino County, Arizona. The Butler-Fourth Improvements Project is a combined project formerly shown as the Butler Avenue Widening and Butler-4th Intersection Reconstruction projects. The project is in the vicinity of Butler Avenue and Fourth Street in Flagstaff, Arizona, and can be described as a roadway, stormwater, and utility improvements project. The project consists of widening Butler Avenue from the Interstate 40 (I-40) to Sinagua Heights Subdivision (approximately 1.1 mi) and widening Fourth Street from Warm Springs Trail/Sparrow Avenue to the upcoming Canyon Del Rio development south of Butler Avenue (approximately 0.5 mi).

Several intersections, new and existing, will be impacted along Butler Avenue. The Herold Ranch Road intersection will be re-aligned and converted to a roundabout. The Butler Avenue and Fourth Street intersection will be converted to a roundabout and will be raised to reduce flooding impacts from Spruce Avenue Wash. The project will include enhanced bicycle and pedestrian treatments, including off-street bike lanes and sidewalks within project limits. Landscape improvements will take place within designated roadway medians and select parkway areas. Landscape work will include irrigation, inert ground surfacing, and wooden rail fences in specified locations. Finally, this project will have several utility relocations, possible pipe upsizing, and significant stormwater infrastructure improvements.

The project will be constructed within the existing City of Flagstaff right-of-way (ROW) and City of Flagstaff easement on Arizona State lands. Additionally, temporary construction easements may be needed from private and Arizona State lands. Logan Simpson assumes a contractor use area for parking, staging, and stockpiling would be within the project area and that no separate staging areas would be needed. Temporary lane closures and the use of flaggers to direct traffic may be needed. No detours are anticipated to be needed. Temporary embedded traffic control signage is anticipated to be needed throughout the project area.

SCOPE OF SERVICES BY TASKS AND PROJECT DOCUMENTATION

Logan Simpson will be responsible for the landscape architectural design (landscape, and irrigation) from Schematic Design (SD), Design Development (DD), and Construction Documents (CDs – City Permit). Logan Simpson will prepare plans per the most current version of the City Engineering Procedures Manual, City Standard Specifications and Details, and other standards such as CPTED, ADA Accessibility.

Design Team/City Progress/Coordination Meetings (12) - Logan Simpson will participate in project coordination meetings to review the Project's status, collaborate on the design, coordinate with other project disciplines, and discuss project action items and schedule. It is anticipated that there will be 12 total meetings throughout the Project's design, and all meetings will be held via Video Conference Calls.

Project Due Diligence - Logan Simpson will review the City's requirements and standards applicable to this type of Project. Logan Simpson will also review any applicable County or ADOT requirements.

Landscape Design and Construction Documents - The landscape palette will include plant material contextual to the surrounding environment, aesthetically pleasing, seasonally colorful, and sustainable in the Flagstaff area. All plant material will be designed to provide clearance for vehicular through the project site. The landscape will not extend into sidewalks, trails, bike lanes, or travel lanes.

The landscape plan will identify the final locations of inert ground cover and vegetation, including contractor-supplied plant materials. The Project will include a complete plant key, materials schedule, and quantities. Logan Simpson will provide installation details for all landscape components.

Irrigation Design and Construction Documents - Logan Simpson will prepare an irrigation plan for all landscape improvements. The irrigation system will be designed to meet the Project's overall water management goals. The irrigation plans will identify all piping and equipment required for a fully functioning drip irrigation system. The irrigation plans will include all essential electrical wiring details and the system's operation diagrams. The irrigation system (i.e., water meter, backflow device, and valves) will be sized, and the irrigation piping will be broken down by schedule and size. Logan Simpson will provide installation details for all irrigation components. The new power and water sources will be coordinated with the design team's electrical engineer and civil engineer who will be responsible for providing a J-Box and a backflow prevention device (minimum) at the requested locations.

Technical Specifications, Cost Estimate, and Quality Control Review - Logan Simpson will prepare technical specifications for the landscape and irrigation components shown on their plans. The technical specifications will be provided in MS Word, using the design team's standard format. Logan Simpson will develop a Cost Estimate at the 90% and 100% Submittals. The Cost Estimate will include material quantities and unit values. At each submittal phase, Logan Simpson will complete the Project's quality control review and document all internal comments from the Principal and Project Manager.

SCOPE OF DESIGN SERVICES BY STAGES

Logan Simpson will participate in the following design phases and provide submittals in line with the percentage of completion anticipated for each step. At each design phase, Logan Simpson will submit documents electronically (PDFs) to Burgess & Niple for issuance to the design team and for City reviews. Logan Simpson will incorporate and address all received review comments accordingly.

Task 1.0 60% Design Documents

- Participate in (1) coordination meeting with Stakeholders
- Participate in (2) virtual internal design coordination meetings
- Project Due Diligence
- Prepare SD Landscape Plan (tree layout with proposed plant schedule)
- Prepare SD Irrigation Plan (mainline layout)
- Provide Project Quality Control Review on Documents

Task 2.0 90% Design Documents

- Participate in (2) coordination meetings with Architect/Team
- Participate in one (1) Stakeholder coordination meeting
- Prepare DD Landscape and Irrigation (per City's Landscape Plan Comments)
- Prepare Technical Specifications
- Prepare Cost Estimate
- Provide Project Quality Control Review on Documents

Task 3.0 Design Documents - Sealed

- Participate in (1) Stakeholder coordination meeting
- Participate in (2) virtual internal design coordination meetings
- Prepare 100% CD Plans with Technical Specifications and Details for Permit Review Approval
- Prepare Cost Estimate
- Provide Project Quality Control Review on Documents

Task 4.0 – Construction Administration Services

Pre-Construction Meeting - Logan Simpson will attend a pre-construction meeting with Owner/City, General Contractor (GC), its subcontractors, and the development team before construction. The goal of the pre-construction meeting will be to discuss Administrative procedures, establish field communication protocol, and review contractual and technical requirements. It is anticipated that this meeting will be held virtually.

In-office Services during Construction - Logan Simpson will review and approve the Contractor's landscape and irrigation submittals. Logan Simpson will also respond to RFI's/ASI's regarding landscape and irrigation issues. Construction documentation is anticipated to be processed through the City Software (City online, web-based Construction Software system) and the City PM.

Substantial Completion Walkthrough - At the end of landscape construction, Logan Simpson will coordinate with the Contractor to schedule a compliance completion walkthrough of the landscape and irrigation. During this walkthrough, a punch list of items that need to be corrected will be created. Finally, a meeting will be scheduled via Teams to discuss any outstanding items.

Final Completion Walkthrough - After completing substantial punch list items (usually 90 days), Logan Simpson will coordinate with the Contractor to schedule a compliance walkthrough of the landscape and irrigation. Logan Simpson will verify if items from the substantial completion walkthrough have been corrected and add any corrections to the final punch list. Lastly, an OAC meeting will be scheduled via Teams to discuss any outstanding items.

PROPOSED FEE:

Logan Simpson proposes to complete the work described above for a total hourly, not-to-exceed fee of **\$41,195.00**. Direct reimbursement is part of the fee. See Exhibit 'B' for the fee breakdown showing personnel, rates, and hours associated with each task.

ASSUMPTIONS:

Specifically excluded from Logan Simpson's scope of services are any professional design services required by statute or regulation to be performed by other professionals such as architect, civil, electrical, and structural or geotechnical engineer (e.g., buildings, earthwork, piped drainage systems). Also excluded is the generation of any special studies, reports, calculations, or documents, and other items as listed below:

The following services are specifically excluded from this Scope of Work:

- ▶ Coordination of Materials Testing and Special Inspections
- ▶ Public meetings, Public outreach
- ▶ Structural Engineering and other Work not related to Logan Simpson's Core Competences
- ▶ Demolition Plans and Temporary Irrigation Plans
- ▶ Monument Sign or Wayfinding Signage
- ▶ 3D Graphics and Illustrations
- ▶ Irrigation Pump or Well Design
- ▶ Artist Collaboration
- ▶ Hardscape Design
- ▶ SWPPP

- ▶ Low-Voltage Lighting Design
- ▶ Bid Assistance
- ▶ As-Builts and O&M Manuals
- ▶ Native Plant Inventory/Salvage Plans, Resource Protection Plans

ACCEPTANCE

Dear Mr. Hall, please acknowledge your acceptance of this proposal/contract modification by signing the below and returning it to me at the address on the above letterhead or via email. We look forward to collaborating with you on this Project.

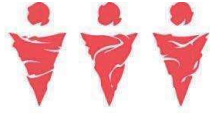


Brad Remme, Logan Simpson

10/29/2024
Date

Nick Hall, Burgess & Niple

Date



L O G A N S I M P S O N

April 3, 2025

David C. Lenzer, P.E.
Director, Transportation Scoping & Design
Burgess & Niple, Inc.
1500 N. Priest Drive, Suite 102
Tempe, AZ 85288

Subject: Federal Highway Administration No. pending
Butler-Fourth Improvements
Logan Simpson Project No. 225349

Dear Mr. Lenzer,

Logan Simpson is pleased to submit this Scope of Work and Fee Estimate for the anticipated work to complete the environmental clearance and associated technical resources reports for the above-referenced project. This Scope of Work and Fee Estimate were revised with the understanding that the Arizona Department of Transportation (ADOT) will not be involved in this project and that funding would be issued directly by the Federal Highway Administration (FHWA).

The Environmental Planner in our office that has been assigned to this project is Marshall Hayes. Should you have any questions please do not hesitate to contact Marshall at (480) 967-1343 or via e-mail at mhayes@logansimpson.com. We look forward to working with Burgess & Niple on this project.

Sincerely,

Patricia R. McCabe
Principal Environmental Planner

Attachments: (1) Scope of Work; (2) Task Order Worksheet; (3) Terracon Scope and Fee; and (4) Newton Scope and Fee

INTRODUCTION

The City of Flagstaff, in coordination with the Federal Highway Administration (FHWA), is planning a roadway improvement project along Butler Avenue, within the City of Flagstaff, Coconino County, Arizona. The Butler-Fourth Improvements Project is a combined project formerly shown as the Butler Avenue Widening and Butler-Fourth Intersection Reconstruction projects. The project is in the vicinity of Butler Avenue and Fourth Street in Flagstaff, Arizona, and can be generally described as a roadway, stormwater, and utility improvements project. The project consists of widening Butler Avenue from the Interstate 40 (I-40) to Sinagua Heights Subdivision (approximately 1.1 mi) and widening Fourth Street from Warm Springs Trail/Sparrow Avenue to the upcoming Canyon Del Rio development south of Butler Avenue (approximately 0.5 mi) (refer to Exhibits A and B).

Several intersections, new and existing, will be impacted along Butler Avenue. The Herold Ranch Road intersection will be re-aligned and converted to a roundabout. The Butler Avenue and Fourth Street intersection will be converted to a roundabout and will be raised to reduce flooding impacts from Spruce Avenue Wash. The project will include ITS (Fiber Optic Conduit) facilities and enhanced bicycle and pedestrian treatments, including off-street bike lanes and sidewalks within project limits. Finally, this project will likely have several utility relocations, possible pipe upsizing, and significant stormwater infrastructure improvements. This project will be delivered through the Construction Manager At Risk (CMAR) project delivery process.

The project will be constructed within the existing City of Flagstaff right-of-way (ROW) and City of Flagstaff easement on Arizona State lands (refer to Exhibit C). However, new ROW and permanent easements may be needed from private and Arizona State lands. Additionally, temporary construction easements may be needed from private and Arizona State lands. Some work will occur within the ADOT ROW near I-40. Therefore, an ADOT encroachment permit will be needed. ADOT requires some level of environmental documentation associated with issuing encroachment permits. However, the environmental level of effort outlined in this Scope of Work is expected to be adequate to meet ADOT's environmental requirements for the encroachment permit. Logan Simpson assumes a contractor use area for parking, staging, and stockpiling would be within the project area and that no separate staging areas would be needed. Temporary lane closures and the use of flaggers to direct traffic may be needed. No detours are anticipated to be needed. Temporary embedded traffic control signage is anticipated to be needed throughout the project area. Logan Simpson understands that the City of Flagstaff has development planned throughout the general area including a new subdivision which would be adjacent to the project.

The project is expected to use federal transportation funds (Raise Grant). Therefore, it will require compliance with the National Environmental Policy Act (NEPA). The federal funding will be distributed by the Federal Highway Administration (FHWA). Project construction will be administered by the City of Flagstaff. Logan Simpson will conduct the environmental investigations and prepare technical resource documentation to support the National Environmental Policy Act (NEPA) compliance for the project. The project is expected to meet the requirements of a Categorical Exclusion for federally funded projects involving the modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes.

The following services are excluded from this Scope of Work:

- ▶ Preparation of a Project Data and Field Review Form
- ▶ Public meetings
- ▶ Preparation of environmental considerations
- ▶ Preparation of a Biological Assessment or Biological Evaluation
- ▶ Preparation of the CE Checklist or Environmental Commitments, or associated coordination
- ▶ Evaluation of the built environment; inventory of traditional cultural properties; ethnographic interviews; archival research; Historic American Engineering Record or Historic American Building Survey documentation; separate historic road documentation; preparation of Section 106 agreement documents; archaeological site flagging or marking; preparation of a historic properties treatment plan; archaeological testing and/or data recovery; and archaeological construction or pre-construction (e.g., geotechnical and/or utility potholing) monitoring.
- ▶ Wild and scenic river coordination
- ▶ Sole source aquifer coordination with the U.S. Environmental Protection Agency
- ▶ Separate geotechnical clearance
- ▶ Natural Resources Conservation Service Farmland Conversion Impact Rating Corridors form
- ▶ Section 4(f) consultation letters, or Individual Section 4(f) evaluation document
- ▶ Phase I Environmental Site Assessment and hazardous materials monitoring
- ▶ Quantitative air analyses
- ▶ Separate technical visual analyses, report, or simulations
- ▶ Environmental Justice Evaluations
- ▶ ADOT Encroachment Permit

If, at any time, FHWA determines that an Environmental Assessment or Environmental Impact Statement is required, Logan Simpson will submit a Task Order Revision to this Scope of Work. If any work is necessary outside of the project area, a Task Order Revision will be needed.

TASK 1.0 KICK-OFF MEETING

One Logan Simpson staff member will prepare for and attend one virtual project kick-off meeting. It is assumed that the meeting will be 2 hours in duration. Logan Simpson will provide B&N with an environmental summary from the meeting for incorporation into the overall meeting notes prepared by B&N or City of Flagstaff.

TASK 2.0 BIOLOGICAL RESOURCES

A detailed Biological Technical Memorandum is anticipated to be necessary for this project based on its location, proposed scope, and anticipated impacts to the surrounding vegetation. Logan Simpson will conduct an on-site reconnaissance-level survey of the project area; utilize the Arizona Game and Fish Department's (AGFD) Online Review Tool Report and USFWS Information for Planning and Consultation

(IPaC) species list; conduct a literature review and access GIS-based natural resource data to obtain current information regarding threatened, endangered, and sensitive (TES) species occurrences in the project area; and document the absence of suitable or occupied habitat for TES species in the document.

One (1) species evaluation is anticipated for the monarch butterfly. The biological technical memorandum will include an analysis of the project activities and a description of the species' status in the project area. The analysis of potential project-related impacts will include an assessment of direct and indirect effects. Appropriate conservation strategies and mitigation measures will be developed for each species in relation to impacts associated with the proposed action.

Upon completion of the technical memorandum, an electronic copy of the draft report will be provided to FHWA for review. Following incorporation of review comments, an electronic copy of the final report will be provided to FHWA. The attached fee estimate is predicated on the following assumptions. A task order revision or cost modification may be necessary if any of the following assumptions are determined to not apply.

BIOLOGICAL ASSUMPTIONS:

- Biological fieldwork cannot be conducted until spring when the ground is clear of snow.
- No species-specific surveys will be required.
- The site visit will take one (1) day to complete and will be conducted concurrently with the Clean Water Act on-site investigation for a total of two (2) people.
- No informal or formal Section 7 consultation with the USFWS will be required. **It should be noted that the monarch butterfly was recently proposed for listing as a "threatened" species and a listing decision could be made by the end of 2025. If the monarch butterfly is listed under the ESA by the USFWS and the project is not approved/completed prior to the species' listing, additional documentation and consultation may be needed for this project and a revision to this scope of work would be required to assist with this effort.**
- The monarch butterfly is the only species that will be evaluated in detail in the biological technical memorandum. If detailed analysis of any additional species is necessary for this project, a Task Order Revision to this Scope of Work will be required.
- No Management Indicator Species Report or Migratory Bird Analysis Report will be required.
- A separate biological clearance for the geotechnical investigation will not be required (any geotechnical investigations needed will be addressed in the technical memorandum for the overall project).

TASK 3.0 CLEAN WATER ACT

Preliminary Jurisdictional Determination

A review of aerial imagery suggests that the proposed project crosses an intermittent feature, Spruce Avenue Wash, which is likely a waters of the US (Waters). Logan Simpson will conduct an on-site investigation to determine the limits of potential Waters in the project area. Logan Simpson will conduct a field survey of the project area to evaluate the jurisdictional limits of the potential Waters under the jurisdiction of the US Army Corps of Engineers (Corps). The survey protocol will be in accordance with the

Corps' March 2017 *Minimum Standards for Acceptance of Aquatic Resources Delineation Reports*. Photographs of the potential Waters will be taken, notes will be taken of the current condition, and the Ordinary High-Water Mark will be mapped using a hand-held GPS-capable device.

Following the field review, Logan Simpson will prepare a Preliminary Jurisdictional Determination (PJD) that evaluates potential Waters. The report will include a cover letter to the Corps summarizing the findings of the field reconnaissance, an evaluation of potential Waters, aerial photographs depicting the presumed jurisdictional limits of Waters, ground photographs, a Physical Characteristics and Other Information table, Regulatory Guidance Letter (RGL) 16-01 Appendix 1 and 2, and the Corps ORM upload sheet, and standard map figures including state, vicinity, topographic, and floodplain. An electronic copy of the PJD will be provided to FHWA for review. Following incorporation of review comments, an electronic copy of the final report will be provided to FHWA to submit to the Corps.

Nationwide Permit 14 Pre-Construction Notification

Based on the scope of work for the proposed project, it is anticipated that permanent impacts within potential Waters will exceed 0.10 acre and thereby be qualified under Nationwide Permit 14 Pre-Construction Notification (PCN) for Linear Transportation Projects. Logan Simpson will prepare a PCN that includes ENG Form 6082, graphics overlaying design plans with potential waters and proposed impacts. An electronic copy of the PCN will be provided to FHWA for review. Following incorporation of review comments, an electronic copy of the final report will be provided to FHWA to submit to the Corps.

CLEAN WATER ACT ASSUMPTIONS:

- The site visit will take one (1) day to complete and will be conducted concurrently with the biological reconnaissance field visit for a total of two (2) people.
- Wetlands are not present in the project area. If wetlands are observed, a modification to this scope of work will be required.
- The project will be authorized under Nationwide Permit 14, Preconstruction Notification for Linear Transportation Projects.
- An Individual Permit will not be necessary. If more than 1 acre of permanent impact to Waters occurs as the result of the proposed project, a modification to this scope of work will be required.

TASK 4.0 PUBLIC AND AGENCY SCOPING

Logan Simpson will prepare and submit draft public and agency scoping letters and distribution lists to B&N, City of Flagstaff, and FHWA for review and approval. The scoping letters will be prepared on City of Flagstaff letterhead with City of Flagstaff signature. Preparation of the scoping letters will occur following approval of the project description and bulleted scope of work by B&N, City of Flagstaff, and FHWA.

Electronic copies of the draft scoping letters and distribution lists will be provided to FHWA for their review and approval. Following incorporation of up to two rounds of review comments, Logan Simpson will email (or mail if email contact information is not available) the approved agency scoping letters and assumes no more than 30 letters will be mailed. Logan Simpson will coordinate with the project team regarding comments received from agencies and will provide up to 3 comment responses via phone or email. Logan Simpson will provide a record of all scoping materials to FHWA for the project record.

TASK 5.0 CULTURAL RESOURCES

The planned road improvement project is subject to compliance with Section 106 (54 USC § 306108) of the National Historic Preservation Act (NHPA; 54 USC § 300101 *et seq.*) and its implementing regulations (36 CFR Part 800), the Archaeological Resources Protection Act of 1979 (ARPA), the Native American Graves Protection and Repatriation Act, as amended (NAGPRA; 16 USC § 470aa-mm), the Arizona State Historic Preservation Act (SHPA; A.R.S. § 41-861 *et seq.*), the Arizona Antiquities Act (AAA; A.R.S. § 15-1631 and § 41-841 *et seq.*), and Flagstaff Zoning Code Section 10-30.30; as well as the state laws concerning the treatment of human remains on municipal and state lands (A.R.S. § 41 844) and private lands (A.R.S. § 41 865). As the lead federal agency, FHWA is responsible for managing Section 106 consultation. Consulting parties will include the Arizona State Historic Preservation Office (SHPO), Arizona State Land Department (ASLD), the City of Flagstaff, and Native American Tribes (Tribes) that claim a traditional association with the land. The area of potential effects (APE) for this undertaking encompasses approximately 88.7 acres within Sections 13, 23, and 24 of Township 21 North (T21N), Range 7 East (R7E) (Flagstaff East [1986] and Flagstaff West [1983] USGS 7.5' topographic quadrangles) and passes through City of Flagstaff-owned land, privately owned land, and ASLD owned land.

Logan Simpson previously completed a Class I inventory (records search) to identify the nature and scope of previous archaeological investigations and documented cultural resources that intersect the APE and a surrounding 1/2-mile buffer area (the “study area”, collectively) (Tsouras to Hall, 15 March 2023). The Class I inventory concluded that no previously identified historic properties—including archaeological sites or historic structures—are within the APE. Most of the APE has been subjected to previous cultural resources survey, small portions of the APE have not, and some of the previous surveys were conducted decades ago. The previous surveys are no longer considered valid in accordance with SHPO Guidance Point No. 5 as well as ASM’s recent guidance that surveys over 10 years old will not be accepted as adequate and require resurvey (Policy and Procedures Regarding the Use of Previous Archaeological Survey Data [Policy 8-201 and 8-203], AAA Administrator, effective July 1, 2024). Based on the above, Logan Simpson has identified 64.2 acres encompassing areas of the APE that either have not undergone survey, or were surveyed more than 10 years ago, and require Class III survey. The updated Class III pedestrian cultural resources survey will be undertaken to identify any historic properties that are or could be eligible for inclusion in the Arizona and National Registers of Historic Places (A/NRHP), in order to ensure compliance with the NHPA, Flagstaff Zoning Code Section 10-30.30, the AAA, and state laws concerning the treatment of human remains on municipal and state lands and private lands within Arizona.

Prior to Class III survey, the boundaries of previous projects, as well as features depicted on historic maps, will be uploaded into Trimble GPS units to provide useful data for archaeologists during survey. Since the APE is located on City of Flagstaff and state land, Logan Simpson will obtain a project specific Arizona Antiquities Act permit to conduct archaeological surveys on state and municipal lands. Our permitted archaeologists, walking parallel transects spaced no greater than 20 m apart, will carefully and systematically inspect the ground surface within the APE. If any archaeological resources are identified, Logan Simpson will use Arizona State Museum (ASM) forms to document the finding. Scaled site maps will be drawn of each site illustrating the site boundary, a mapping datum, features, artifact concentrations, diagnostic artifacts, contour lines, drainages, impacts to the site, and landmarks. All GPS and GIS data for this project will be recorded in Zone 12 using the North American 1983 (NAD 83 CONUS)

datum. Logan Simpson will collect accurate polygons for all site boundaries and a point file will be collected for each feature or possible feature that is identified. We will also compile a detailed photographic record using cultural resources photographic logs. Site overview photos will be taken as will photos depicting all features and diagnostic artifacts at each site.

All previously undocumented cultural resources identified during the pedestrian survey will be evaluated according to the ASM site criteria, as defined in the 1995 Revised Site Definition Policy. Logan Simpson will begin report production immediately following the background research and concurrently with survey fieldwork. The report will summarize the project and the APE's environmental and cultural setting, organize and synthesize the results of the literature review, present the methods and results of the Class III cultural resources survey, offer (A/NRHP)-eligibility evaluations and management recommendations for each cultural property identified in the project area. The results of the Class III survey will be presented in a single report along with the results of the literature review. The report will include graphic and descriptive justifications for all A/NRHP -eligibility and management recommendations.

CULTURAL ASSUMPTIONS:

- No more than three (3) cultural resources will be identified and documented. If more than one (1) cultural resource is identified and documented, then a modification to this scope and fee will be necessary.
- Logan Simpson will draft up to six (6) Section 106 Consultation letters, on behalf of the FHWA, and prepare for mailings and postage. If more than six (6) Section 106 Consultation letters are required to be drafted and mailed, then a modification to this scope and fee will be necessary.
- No more than one round of revisions from ADOT HPT is anticipated due the action within ADOT ROW at I-40.
- Historic building/structure/district inventory and evaluation is not included. This also excludes evaluation of a potential historic commercial district or historic streetscape for which sidewalks and other features may be contributors.
- No archival research is scoped for this effort, including research at local historical societies and/or repositories.
- Site avoidance marking (e.g., site flagging) may be required for the project. However, the extent of the site marking will only be known following consultation with consulting agencies and Native American Tribes. An accurate scope of work and fee estimate for site avoidance marking may be provided at the time, if required.
- Class III surveys must be conducted when the ground surface is visible and no snow is present.

TASK 6.0 HAZARDOUS MATERIALS

Terracon, as a subconsultant to Logan Simpson, will complete a Preliminary Initial Site Assessment (PISA) (refer to attached Terracon Scope of Work). The PISA will consist of a records search and site visit to determine if hazardous materials concerns are located within the project area. A lead-based paint and asbestos survey report will also be completed to test suspect materials for the presence of lead-based

paint and asbestos (refer to attached Terracon Scope of Work). Any mitigation measures for the project identified in the PISA will be included in the project's mitigation, as needed.

TASK 7.0 PROJECT COORDINATION, MANAGEMENT, AND MEETINGS

In addition to the project kick-off meeting addressed in Task 1.0 of this Scope of Work, one Logan Simpson staff member will attend up to four, 1-hour project meetings via teleconference (no meeting attendance at FHWA, B&N, or City of Flagstaff offices has been included). In addition, Logan Simpson will provide B&N, City of Flagstaff, and FHWA with schedule updates, project status summaries, and project coordination efforts during the anticipated 6-month NEPA approval processes. Coordination efforts will also include review of design plans for environmental compliance and coordination with B&N and FHWA on ground disturbance estimates to determine if a stormwater pollution prevention plan (SWPPP) is needed.

If project coordination efforts for the project exceed this estimation, a Task Order Revision will be necessary. At the completion of the project, Logan Simpson will complete project close out and submit records to B&N, City of Flagstaff, and FHWA.

TASK 8.0 SECTION 4(F)/6(F) RESOURCES

Logan Simpson will identify potential Section 4(f) resources within the project vicinity and prepare summary table that will be sent to FHWA via email for the project record.

Assumptions

- No Section 4(f) impacts are anticipated. Therefore, this scope and fee does not include completion of Section 4(f) consultation.

TASK 9.0 NOISE STUDY

Logan Simpson understands that the City of Flagstaff has development planned throughout the general area including a new subdivision which would be adjacent to the project. Other potential sensitive noise receptors (i.e., RVs) are present in the vicinity. Newton Environmental Consulting, LLC, as a subconsultant to Logan Simpson, will conduct a traffic noise study for the project. The noise study will be prepared based on one design configuration and one proposed alignment. Vehicle traffic will be counted during the noise measurements for input into the noise model. Logan Simpson will review the noise study once completed for overall environmental compliance before submitting to the City of Flagstaff and B&N.

NOISE ASSUMPTIONS

- Analysis of design alternatives is not included.
- Noise level measurements will be conducted at no more than two (2) locations.
- Public and agency meetings related to noise are not included.
- The noise study will require the project designer to provide CAD files, roadway geometry files, terrain data, and traffic volume data.

TASK 10.0 FHWA CATEGORICAL EXCLUSION

Logan Simpson will prepare the draft FHWA CE and submit to B&N, the City, and FHWA for review. Logan Simpson will address revisions to the draft CE and then submit the Final CE to the City and FHWA for review and approval. The previous tasks outlined in this Scope of Work are expected to be the sufficient technical documents to support the CE. However, in addition, Logan Simpson will conduct a review of various environmental resources that are standard items to address in the FHWA CE. This includes air and noise, environmental justice/Title V (census data), and sole source aquifers.

Assumptions

- The City will provide Logan Simpson with information on the project's listing in the appropriate State Transportation Improvement Plan (STIP)/Transportation Improvement Plan (TIP).
- An encroachment permit will be needed from ADOT District for any work occurring within the ADOT ROW near I-40. B&N will prepare the necessary ADOT encroachment permit application and provide the necessary supporting documentation including traffic control plans and insurance requirements.

Exhibit A



Exhibit B

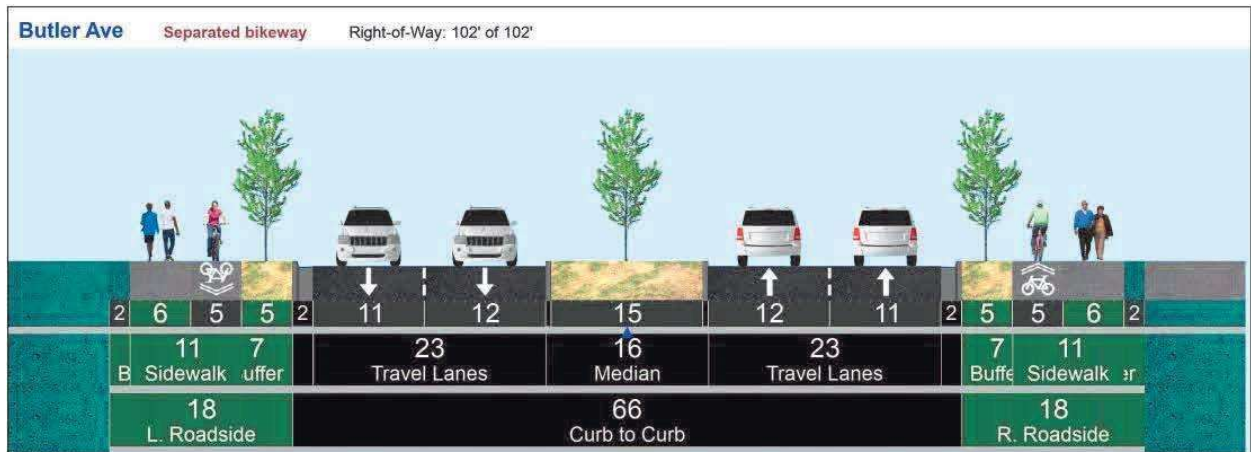
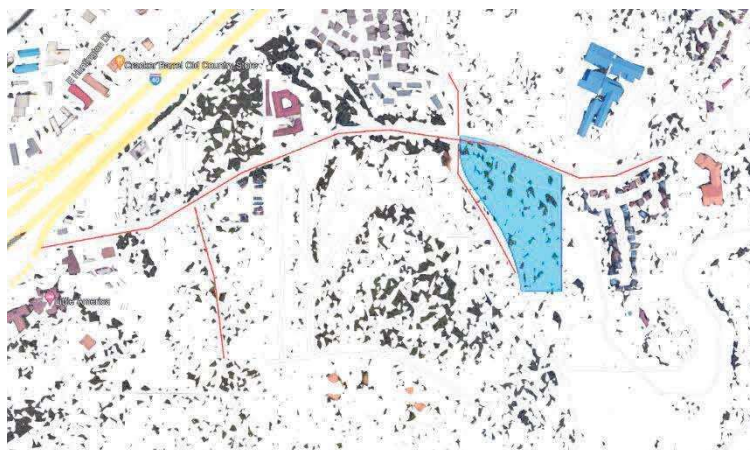


Exhibit C





4685 S Ash Ave, Ste H-4
Tempe, AZ 85282-6767
P 480-897-8200
F 480-897-1133
Terracon.com

March 4, 2025

Mr. Marshall Hayes, Environmental Planner
Logan Simpson
51 West Third Street, Suite 450
Tempe, Arizona 85281

Re: Scope & Cost Proposal
Preliminary Initial Site Assessment and Limited Asbestos and Lead Paint Sampling
Butler Avenue and Fourth Street
Flagstaff, Arizona
Logan Simpson Project No. TBD
Federal No. ST3047
Terracon Proposal No. P65237823-revised

Dear Mr. Hayes:

Terracon is pleased to submit this cost proposal for providing environmental services for the subject project. The proposed services include a Preliminary Initial Site Assessment (PISA) and limited asbestos containing material (ACM) and lead paint sampling. This proposal includes an outline of the project information provided to us, the proposed scope of services, our fee, and the proposed schedule.

A. PROJECT INFORMATION

As we understand, Logan Simpson is undertaking environmental services for the City of Flagstaff and Federal Highway Administration (FHWA) for the Butler-Fourth Improvements Project (project). The following description of the project has been provided to Terracon by Logan Simpson:

The Butler-Fourth Improvements Project is a combined project formerly shown as the Butler Avenue Widening and Butler-4th Intersection Reconstruction projects. The project is in the vicinity of Butler Avenue and Fourth Street in Flagstaff, Arizona, and can be generally described as a roadway, stormwater, and utility improvements project. The project consists of widening Butler Avenue from the I-40 to Sinagua Heights Subdivision (approximately 1.1 mi) and widening Fourth Street from Warm Springs Trail/Sparrow Avenue to the upcoming Canyon Del Rio development south of Butler Avenue (approximately 0.5 mi).

Several intersections, new and existing, will be impacted along Butler Avenue. The Herold Ranch Road intersection will be re-aligned and converted to a roundabout. The Butler Avenue and Fourth Street intersection will be converted to a roundabout

and will be raised to reduce flooding impacts from Spruce Avenue Wash. The project will include ITS (Fiber Optic Conduit) facilities and enhanced bicycle and pedestrian treatments, including off-street bike lanes and sidewalks within project limits. This project will likely have several utility relocations, possible pipe upsizing, and significant stormwater infrastructure improvements. This project will be delivered through the Construction Manager At Risk (CMAR) project delivery process.

We understand that FHWA will require a PISA and limited ACM and lead paint sampling for the project.

B. SCOPE OF SERVICES

Terracon estimates that the field studies for the PISA site reconnaissance and limited ACM and lead paint sampling may be conducted during one site visit over a period of one working day utilizing one field professional. We assume that ADOT will provide necessary site access and traffic control for assessment activities performed by Terracon. The PISA and the limited ACM and lead paint sampling will be submitted under separate covers.

Preliminary Initial Site Assessment

Terracon will prepare a PISA for the areas identified within the project. The PISA will include site reconnaissance, site photographs, and review of a regulatory database report. Field work for the PISA will be performed by staff that is 40-hour OSHA HAZWOPER certified, and that meet the definition of an Environmental Professional by the ASTM E1527-21 standard. We anticipate that the draft PISA will be issued within approximately five weeks after receiving written authorization to proceed and access to the site.

Limited ACM Sampling

Terracon proposes to conduct limited ACM sampling within the project limits for materials identified for disturbance during construction. Terracon understands that improvements will potentially impact suspect ACM such as concrete and other materials associated within the project area. Terracon will conduct a visual assessment of the readily accessible portions of the proposed project area to identify homogeneous materials suspected of being ACM. Suspect ACM will be physically assessed for friability and evidence of damage or degradation. Terracon does not intend to sample concrete features which will not be disturbed by the project.

Samples of suspect ACM will be collected for laboratory analysis by an United States Environmental Protection Agency (USEPA) Asbestos Hazard Emergency Response Act (AHERA)-accredited asbestos Building Inspector. A copy of the inspector's AHERA accreditation will be included in the report. Bulk sample collection will be conducted in general accordance with the sampling protocols outlined in USEPA 40 CFR 763.86, Subpart E. At least three samples of each homogeneous material will be collected, per AHERA protocols. We estimate collection of up to **30** samples. If the actual number of samples collected exceeds



the estimate, additional samples will be invoiced at unit rate of \$6.14 per sample. If the number of additional samples exceeds 10% of the original estimate, Terracon will notify the client and request a change order.

Sample collection will result in some isolated damage. Terracon will not be responsible for repair or touch-up of sample locations. Reasonable efforts to access suspect materials within known areas of restricted access (e.g., crawl spaces) will be made provided these areas are not determined to be permit-required confined spaces, or to pose a health or safety risk to Terracon personnel.

A laboratory accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) will analyze bulk material samples by visual estimation using polarized light microscopy (PLM). If PLM results merit re-analysis by the more quantitative point counting technique, Terracon will contact the client to discuss and receive authorization. Copies of the laboratory analysis report, the chain of custody, and the laboratory's accreditation certificates will be appended to the report.

Limited Lead Paint Sampling

The limited lead paint sampling will be performed by an EPA certified lead-based paint Inspector or Risk Assessor per 40 CFR part 745 following HUD Guidelines. Terracon will collect bulk paint chip samples of paint layers down to but not including the substrate. The paint chip samples will be submitted to a laboratory recognized by the EPA's National Lead Laboratory Accreditation Program (NLLAP) program for Flame Atomic Absorption (FLAA) analysis. Terracon estimates up to **6** paint chip samples may be required for laboratory analysis as part of the proposed scope of work. If the actual number of samples collected exceeds the estimate, additional samples will be invoiced at unit rate of \$10.23 per sample. If the number of additional samples exceeds 10% of the original estimate, Terracon will notify the client and request a change order.

Results of the limited lead paint sampling will be reported with the limited ACM sampling and copies of the laboratory analysis report, the chain of custody, and the laboratory's accreditation certificates will be appended to the report.

C. COMPENSATION

The cost for our services, including field work, database reports, and report preparations have been based on the scope of work outlined above and estimates of time required to complete the various services. The total cost estimate is **\$5,093.28** and a derivation of the cost proposal summary is attached.

Site Access and Safety

Client shall secure all necessary site related approvals, permits, licenses, and consents necessary to commence and complete the Services and will execute any necessary site access agreement. Consultant will be responsible for supervision and site safety measures for its own



employees, including following applicable state and local COVID related requirements, but shall not be responsible for the supervision or health and safety precautions for any third parties, including Client's contractors, subcontractors, or other parties present at the site. In addition, Consultant retains the right to stop work without penalty at any time Consultant believes it is in the best interests of Consultant's employees or subcontractors to do so in order to reduce the risk of exposure to the coronavirus. Client agrees it will respond quickly to all requests for information made by Consultant related to Consultant's pre-task planning and risk assessment processes. Client acknowledges its responsibility for notifying Consultant of any circumstances that present a risk of exposure to the coronavirus or individuals who have tested positive for COVID-19 or are self-quarantining due to exhibiting symptoms associated with the coronavirus.

The fee is valid for 90 days from the date of this proposal and is based on the assumption that all field services will be performed under safety Level D personal protective procedures and that only one site visit will be made by Terracon personnel. The lump sum fee is based on the assumptions and conditions provided at the time of this proposal.

We appreciate your consideration of Terracon for this work and look forward to working as your environmental consultant on this and future projects.

Sincerely,

Terracon Consultants, Inc.

Handwritten signature of Eric Lyding in black ink.

Eric Lyding, P.E.
Project Environmental Engineer

Handwritten signature of Jennifer C. Thies in black ink.

Jennifer C. Thies, CEM
Senior Associate

Enclosure: Derivation of Cost Proposal Summary



**DERIVATION OF COST PROPOSAL
SUMMARY**

DIRECT LABOR:

Classification	Estimated Man-hours	Labor Rate	Cost	
Environmental Coordinator	4	\$61.78	\$247.12	
Engineer	20	\$45.67	\$913.40	
CADD Technician	3	\$27.30	\$81.90	
Administrative	1	\$21.00	\$21.00	

		Total Labor Rate Cost:	\$1,263.42	
		PAO 23.13 Negotiated Overhead Cost (199.72%):	\$2,523.30	
		Labor Cost:	\$3,786.72	
		Fee (10%):	\$378.67	
		Negotiated FCCM (0.85%):	\$10.74	
Total Labor	28.0			\$4,176.13

DIRECT EXPENSES:

Mileage - (314 miles at (\$0.67 per mile))	\$210.38	
Total Direct Expenses		\$210.38

OUTSIDE SERVICES:

Total Outside Services	-----	\$706.77
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TOTAL COST: **\$5,093.28**



 Jennifer C. Thies, Principal

 3/4/2025
 Date



Federal Aid No.: ST3047
 LS Project No.: TRACS No: TBD
 Project Name: Task Name: Butler-Fourth Roadway

	Environmental Coordinator	Engineer	CADD Technician	Administrative	Total
Mobilization/ Demobilization					
Travel to and from site	-	5	-	-	5
Mobilization/ Demobilization Total	0	5	0	0	5
Utility Coordination, Permitting and Right of Entry Coordination					
Traffic Safety Coordination	1	1	-	-	2
Bluestake Clearance Coordination	-	-	-	-	0
Miscellaneous Permits (ADWR, Local Government, Flood Control, Railroad, etc.)	-	-	-	-	0
Utility Coordination, Permitting and Right of Entry Coordination Total	1	1	0	0	2
Field Study					
General Data Review	-	2	-	-	2
Site Reconnaissance	-	2	-	-	2
General Test Pit Sampling & Logging	-	-	-	-	0
Fissure Data Review, Trench Logging & Mapping	-	-	-	-	0
Fissure Reconnaissance	-	-	-	-	0
Field Study Total	0	4	0	0	4
Project Management, Meetings, & Scheduling					
Project & Miscellaneous Management	1	1	-	-	2
ADEQ Records Review	-	-	-	-	0
Coordinate Field Study	-	1	-	-	1
Miscellaneous Design Meetings	-	-	-	-	0
Project Management, Meetings, Scheduling, & Site Visits Total	1	2	0	0	3
Design & Reporting					
Preliminary Initial Site Assessment & Asbestos/Lead Paint Survey Reports	-	8	3	1	12
QC/ QA Review	2	-	-	-	2
Design & Reporting Total:	2	8	3	1	14
Grand Total	4	20	3	1	28
Percent of Total	14%	71%	11%	4%	100%

Federal ID No.: ST3047
 TRACS No.: TBD
 Task Name: Butler-Fourth Roadway



Lab Testing

TEST	ASTM DESIGNATION	PROPOSED UNITS	UNIT RATE	TOTAL PROJECT
Database Report (EDR)		1	\$ 112.77 /ea	\$112.77
Lead Based Paint (Flame AA Analysis)		6	\$ 16.50 /ea	\$99.00
Asbestos Analysis		30	\$ 16.50 /ea	\$495.00
SUBTOTAL COSTS FOR LAB TESTING				\$706.77
TOTAL COSTS FOR LAB TESTING				\$706.77



March 5, 2025

Marshall Hayes
Logan Simpson
51 West Third Street, Suite 450
Tempe, AZ 85281

Project: Butler-Fourth Improvements Project
Categorical Exclusion

Re: Scope-of-Services and Cost-Estimate for Traffic Noise Analysis

Dear Mr. Hayes:

Newton Environmental Consulting, LLC (NEC) is pleased to submit for your consideration our Scope-of-Services and Cost-Estimate for the Traffic Noise Analysis in support of the Categorical Exclusion (CE) for the Butler-Fourth Improvements Project for the City of Flagstaff (COF) within Coconino County, Arizona.

We hope that you will find this Scope-of-Services and lump sum Cost-Estimate complete. Please call me directly at 602.332.9642, should you have any questions or require additional information.

Sincerely,

A handwritten signature in black ink that reads "Angela Newton". The signature is written in a cursive, flowing style.

Angela Newton Principal

Attachments: Cost Derivation Sheets

NEC SCOPE-OF-SERVICES Butler-Fourth Improvements

PROJECT UNDERSTANDING

The Butler-Fourth Improvements Project is a combined project formerly shown as the Butler Avenue Widening and Butler-4th Intersection Reconstruction projects. The project is in the vicinity of Butler Avenue and Fourth Street in Flagstaff, Arizona, and can be generally described as a roadway, stormwater, and utility improvements project. The project consists of widening Butler Avenue from the I-40 to Sinagua Heights Subdivision (approximately 1.1 mi) and widening Fourth Street from Warm Springs Trail/Sparrow Avenue to the upcoming Canyon Del Rio development south of Butler Avenue (approximately 0.5 mi). The project is located within Coconino County in Flagstaff, Arizona.

NOISE STUDY & AIR QUALITY ANALYSIS ASSUMPTIONS

NEC assumes one (1) design configuration and one (1) proposed alignment for Butler-Fourth Improvements Project. Noise level measurements will be conducted with a 2-person team at no more than two (2) locations. Traffic will be counted during the noise measurements for input into the TNM 2.5 noise model for validation purposes and also to establish existing noise levels at locations near noise sensitive receivers north and south of Butler Road. Public and agency meetings to discuss noise impacts for the Butler-Fourth Improvements Project are not included in this cost estimate.

Additional tasks, analysis of additional design alternatives and/or analysis due to design modifications, per your authorization, are considered out of scope and are subject to a cost-modification.

LIST OF REQUIRED ITEMS

The items listed in the table on the following page are required to complete the Traffic Noise Analysis. NEC anticipates the first draft noise and will be available for internal project team review within twelve (12) weeks after receiving all of the requested items.

REQUIRED ITEMS City of Flagstaff Butler-Fourth Improvements Project		
Items	Description	Notes
1. CAD Files	Roadway design files, land use data/Base Files, Aerial files	Microstation compatible, SID, HMR, TIFF formats or GIS to be provided by Logan Simpson.
2. Roadway Geometry Files	Stage II (30%) or when horizontal and vertical roadway alignment files will not change by more than 2 feet.	Microstation compatible or GIS to be provided by Logan Simpson.
3. Terrain Data	Survey and topographical data, Digital Terrain Model (DTM)	Microstation compatible or GIS to be provided by Logan Simpson.
4. Traffic Volume Data	ADT & AM/PM peak hour traffic volumes, Vehicle mix (medium & heavy truck %'s).	To be provided by Logan Simpson.

TASKS DESCRIPTIONS**1. Project Management**

- Scoping, scheduling, budgeting, and billing services.

2. Meetings

- Coordination with Logan Simpson and The City of Flagstaff.

3. Field Assessment

- Conduct site-assessment and evaluate land use adjacent to the project limits and identify noise sensitive receptors.
- Conduct noise level measurements with concurrent traffic counts using 2-person team at no more than two (2) locations.

4. Data Assessment

- Review as-built plans, traffic data, and electronic design files.
- Prepare/extract data from plans and design files for noise model use from traffic studies and design plans for use in the Federal Highway Administration (FHWA) approved Traffic Noise Model version 2.5 (TNM 2.5).

5. Noise Analysis & Air Quality Assessment

- Prepare noise model using TNM 2.5.
- Prepare noise mitigation to comply with the *ADOT Noise Abatement Requirements, May 2017*.

6. Reports

- Prepare and submit a draft noise analysis technical report for the internal team to review in electronic PDF format.
- Address comments per internal team review and revise the noise analysis technical report for final submittal in electronic PDF format.

Butler-Fourth Improvements Project

March 5, 2025

City of Flagstaff Project No.: TBD
NEC Project No.: 2025_LS_Butler

DERIVATION OF COST PROPOSAL SUMMARY

ESTIMATED DIRECT LABOR

<u>Classification</u>	<u>Estimated Hours</u>	<u>Average Hourly Rate</u>	<u>Labor Cost</u>
Project Manager	16	\$186.64	\$2,986.24
Noise Specialist	130	\$142.43	\$18,515.90
CADD/GIS Specialist	24	\$135.00	\$3,240.00
Administrative Professional	14	\$76.38	\$1,069.32
Total Hours:	184	Total Estimated Labor Cost:	\$25,811.46

OTHER DIRECT COSTS

(Listed by item at estimated actual cost - NO MARKUP)

Travel	\$260.03
Total Estimated Other Direct Costs:	\$260.03

TOTAL ESTIMATED COST: \$26,071.49



Angela Newton
Principal

3/5/25

Date

Butler-Fourth Improvements Project

March 5, 2025

City of Flagstaff Project No.: TBD
 NEC Project No.: 2025_LS_Butler

TASK NO.	TASK DESCRIPTION	Project Manager	Noise Specialist	CADD/GIS Specialist	Administrative Professional	Task Hour
		\$186.64	\$142.43	\$135.00	\$76.38	
100- PROJECT MANAGEMENT						
1	Scoping, scheduling, budgeting, and billing services.	6	8		8	22
200- COORDINATION						
2	Coordination with Logan Simpson and City of Flagstaff.	8	12			20
300- FIELD ASSESSMENT						
3	Site Assessment- prepare mapping, evaluate land use adjacent to the project limits and identify noise sensitive receptors (2-person team)		8			8
	Noise Level Measurements with traffic counts (2-person team, 2 locations).		16			16
400- DATA ASSESSMENT						
4	Review as-builts (or GIS) and design files.		8	4		12
	Extract data from as-builts (or GIS) and design files for noise model.		8	4		12
500- NOISE ANALYSIS						
5	Build and run TNM 2.5 noise model for existing and build scenario. Validate model with field noise measurements.		40	4		44
	Identify noise impacts and evaluate noise mitigation as needed per ADOT's 2017 Noise Abatement Requirements (NAR). Create noise report figures.		12	4		16
600- NOISE REPORT						
6	Prepare and submit draft noise analysis technical report (electronic copy, PDF format, draft version) for internal team and COF review.	2	16	6	4	28
	Address comments per internal team and COF review; revise the noise technical report for final submittal (electronic PDF format) along with pertinent FHWA TNM 2.5 runs for all scenarios, in electronic form.		2	2	2	6
Total Hours		16	130	24	14	184

Butler-Fourth Improvements Project

March 5, 2025

City of Flagstaff Project No.: TBD
NEC Project No.: 2025_LS_Butler

OTHER DIRECT COSTS BREAKDOWN

Travel

Auto Rental (Mid-Size SUV)	1	days @	\$132.55 per day =		\$132.55
Auto Rental Fuel	290	miles @	31 mpg @	\$3.15 per gal. =	\$29.48
Meals (full days)	2	person @	\$49.00 per day for	1 day =	\$98.00
				Subtotal Travel:	\$260.03

TOTAL OTHER DIRECT COSTS: \$260.03

Rental Details

Dates & Times

Tue, Mar 12, 2024 @ 12:00 PM
Wed, Mar 13, 2024 @ 12:00 PM

Edit

Pick-up & Return Location

Scottsdale Greenway Loop
16275 N Greenway Hayden Loop
Scottsdale, AZ 85260

Edit

Additional Details

Corporate Account Number: -

Edit

Midsize SUV AWD

Nissan Rogue AWD or similar
Automatic



Vehicle

Time & Distance 1 Day(s) @ \$ 119.98 / Day
Unlimited Mileage

Edit

\$ 119.98*

Included

Extras

-

Add

Adjustments

ENTERPRISE PLUS (5.0%)

\$ -6.00*

Taxes & Fees

\$ 18.57*

Estimated Total

\$132.55*

*Rates, taxes and fees do not reflect rates, taxes and fees applicable to non-included optional coverages or extras added later.

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- Pay at Pickup
- Unlimited Mileage

Rental Policies

[Rental Contract Additional Terms and Conditions](#)



[Renter Requirements](#)



[Driver's License Information](#)





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the official U.S. government source for fuel economy information

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Trip Calculator

Trip Vehicles



2023 Nissan Rogue AWD
1.5 L, 3 cyl, Automatic (AV-S8), Turbo, Regular



Comb. MPG: **31.0**

Trip fuel cost: **\$29.50**

[+ Add a Vehicle](#)

Trip Plan

[^ v](#) 9859 East Winchcomb Drive, Sc [x](#)

[^ v](#) 35.1947240, -111.6003575 [x](#)

[^ v](#) 9859 Est Winchcomb Drive, Sco [x](#)

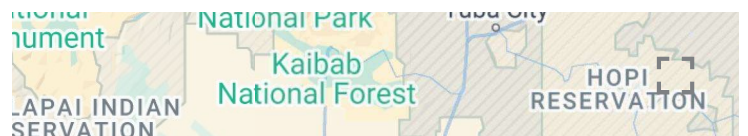
[+ Add a Stop](#)

55 % city driving

[A Calculate the Trip](#)

Directions and Map

9859 E Winchcomb Dr, Scottsdale, AZ 85260, USA



May 29, 2025
Project No. 607495001

Mr. Nick Hall, PE, RSP
Transportation Project Manager
Burgess & Niple, Inc.
2201 Gemini Drive, Suite 116
Flagstaff, Arizona 86001

Subject: Proposal to Provide Supplemental Geotechnical Engineering Services
City of Flagstaff
Butler-Fourth Improvements Project – ADOT Pavement
Flagstaff, Arizona

Dear Mr. Hall:

Ninyo & Moore is pleased to submit this proposal to provide supplemental geotechnical engineering services for the above-mentioned project. This proposal is based on the information that we received from your office and our subsequent conversation. It outlines our scope of services, project assumptions, anticipated schedule, and fee for this phase of work.

SITE/PROJECT DESCRIPTION

Ninyo & Moore previously submitted a geotechnical report for the Butler-Fourth Improvements Project which includes the design and construction of roadway, stormwater and utility improvements located east of the intersection Butler Avenue and Interstate 40 (I-40) in Flagstaff, Arizona. The limits of the project have been extended to the west and include approximately 900 feet of roadway along Butler Avenue that will pass beneath I-40. The extension will be within the Arizona Department of Transportation (ADOT) Right-of Way and will require a supplement geotechnical evaluation. The existing roadway is five lanes across and is paved with 10 inches of Portland cement concrete (PCC) pavement over 6 inches of aggregate base. The roadway will be reconstructed and consist of PCC pavement designed to the current loading conditions. The proposed roadway will also add an additional lane for a total of six lanes across. In order to accommodate the additional lane, the sidewalks will be relocated closer to the existing bridge abutments. The existing roadway embankments that protect the abutments will be cut to create room for the sidewalks. The cut embankment slopes supported with small retaining walls less than 5 feet tall.

SCOPE OF SERVICES

The geotechnical scope of services we will perform for the phase of the project are summarized below:

- Review available published and in-house geotechnical reports, topographic information, soil surveys, geologic literature, and aerial photographs of the project area.
- Obtain an ADOT permit to conduct the field work.
- Conduct a site visit to select and mark out the proposed boring locations.
- Contact Arizona 811 to evaluate utility locations at our boring locations prior to drilling.
- Arrange for appropriate traffic control services to be implemented during our field work activities.
- Core the existing pavement within Butler Avenue in up to two locations with an electronic core machine.
- Perform a geotechnical exploration, which will include the excavating of six soil borings extended up to 20 feet below the ground surface. Two borings will be drilled to depths of 10 feet along the existing roadway alignment to support pavement design. Four borings will be drilled to depths of 20 feet to support retaining wall design. These borings will be advanced with a truck mounted drill rig using hollow-stem augers.
- Collect soil samples in the borings for laboratory testing and analysis. The boreholes will be backfilled with soil spoils. Ninyo & Moore personnel will log the borings in general accordance with the Unified Soil Classification System and ASTM D2488 by observing cuttings and split-spoon samples. The soil samples will be transported to a Ninyo & Moore laboratory for testing.
- Perform laboratory testing that will evaluate the on-site soil's index, strength and chemical characteristics.
- Prepare a Draft Geotechnical Evaluation Report that will present our field procedures and provide a discussion on the geologic setting and potential geologic hazards as well as recommendations for construction. In addition, the report will contain vicinity maps depicting the project limits, plans showing the boring locations, narrative descriptions of the surface and subsurface conditions, laboratory test results and geotechnical recommendations related to excavation characteristics, earthwork factors, subgrade support for embankments and new pavements, backfill criteria, the re-use of on-site soils for engineered fill, lateral earth pressures for retaining walls and bearing capacity for shallow footings.
- Prepare a Draft Pavement Design Summary and Materials Design Report that will include pavement recommendations for ADOT-based special provisions and construction procedures.
- Collect comments from one round of reviews of the aforementioned reports and incorporate these changes for the final report submittal.
- Prepare and submit final versions of the aforementioned reports which address the received comments.

ASSUMPTIONS

We have made the following assumptions in the preparation of this proposal:

- No environmental or cultural permits will be required for the ADOT permit. All additional clearance will be obtained by others.
- The field work will be performed during daytime hours, between about 9AM and 3PM.
- No off-duty police officer presence is needed.
- Borings will be backfilled with drill cuttings mixed with cement.
- Pavement will be patched by epoxying the core back into place. If the core is damaged a quick set grout will be used to patch the pavement.
- The site is accessible to normal, two-wheel drive, truck-mounted drilling equipment, and site access will be granted.
- If auger refusal is encountered, we will terminate the drilling and notify your office.
- Groundwater will not be encountered.
- Some ground disturbance should be expected as a result of our field work.

SCHEDULE

The fieldwork will begin within about four weeks after we receive our ADOT permit. Field work will take approximately five days to complete. We anticipate issuing our report within about six weeks from the completion of field work.

FEE

We propose to perform the above tasks for a lump sum fee of \$34,500. Any additional services, not included in the aforementioned scope, will be charged on a time-and-materials basis in accordance with our current Schedule of Fees. To authorize our services, please sign and return the attached Work Authorization and Agreement.

We look forward to working with you.

Respectfully submitted,
NINYO & MOORE

A handwritten signature in blue ink that reads "Stephen V. Hargus". The signature is fluid and cursive, with the first name being the most prominent.

Stephen V. Hargus, PE
Senior Engineer

SVH/tp

Attachment: Work Authorization and Agreement