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Colorado State University
Alternative Transportation Fee Advisory Board
2024-2025 Project Proposal Form

Fill out and return proposal documents via email to ATFAB_CSU@colostate.edu and Aaron.Fodge@colostate.edu. ***Deadline for final submissions — Friday, January 24, 2025***.

If the project involves infrastructure construction, ***CSU Facilities must review cost estimates and proposal schedule. Facilities Deadline — Friday, December 6, 2024.*** Please email to Gargi Duttgupta at gargi.duttgupta@colostate.edu.

Note: If the proposal is accepted for funding consideration, you will be asked to give a 30-minute formal presentation to ATFAB.

Project Overview:

Project Name/Location: Shields & Elizabeth Underpass Safety Improvements/ Shields St & Elizabeth St

Estimated Initial Cost: **$37,852.10**

Estimated Recurring Cost (if applicable): **Replacement of items in case of failure or breakage.**

Funding Request from ATFAB: **$37,852.10**

Matching Funds (if applicable): **$175,000 – This is the project that the proposed signal would be added to.**

Please Attach the Full Budget: Include total cost, amount requested from ATFAB, breakdown of all expenses, funding from other sources, etc. Please be thorough and specific.

Please see attached.

Submitting Unit:

Name: Florian Fiebig

Telephone: 970-732-2472

Email Address: FFiebig@fcgov.com

Department: Engineering – Capital Projects

College or Division: City of Fort Collins

Approvals (Signatures):

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Provost/VP: Click or tap here to enter Provost/VP Name.

Signature: _____ Date: _____

Department Head/Director*

Name: **Dana Hornkohl – City of Fort Collins, Capital Projects Manager**

Signature: _____ Date: January 15, 2025

*Whomever oversees the areas affected by the proposed project. For example, if the proposal was to add covered bike parking near the LSC, you need to contact the Director/Department Head in charge of the LSC. Please contact ATFAB with any questions.

Facilities Management Approval of Estimated Budget/Schedule (If Applicable)

Name: Click or tap here to enter FM Reviewer's Name.

Signature: _____ Date: _____

Full Project Description:

As an attached document, please answer the following:

1. Please describe the project (limit description to 500 words or less).
    a. Purchase & installation of an early detection and warning system to caution approaching underpass users of pedestrians/cyclists/other users in the tunnel. Signage would alert approaching users that others are in the tunnel and to reduce speed. The approach to the underpass from both sides is S-shaped with limited visibility and steep slopes.
2. Approximate timeline for the project (have you contacted Facilities for a bid and proposed schedule, if applicable?).
    a. 2025. We can move forward once funding is awarded. We have a quote from the manufacturer for the system and can utilize on-call contractors for the instillation.
3. Describe how users will be supported by the project (limit to 250 words or less).
    a. The approaches to the underpass are blind approaches with steep slopes. Giving users an early warning, that people are in the tunnel, will allow approaching cyclists to manage their speeds appropriately. This early increased awareness should reduce speeds and decrease stress for all users.
4. Describe the benefits to students in accordance with ATFAB By-Laws (see Article VII Funding Rules on the Website).

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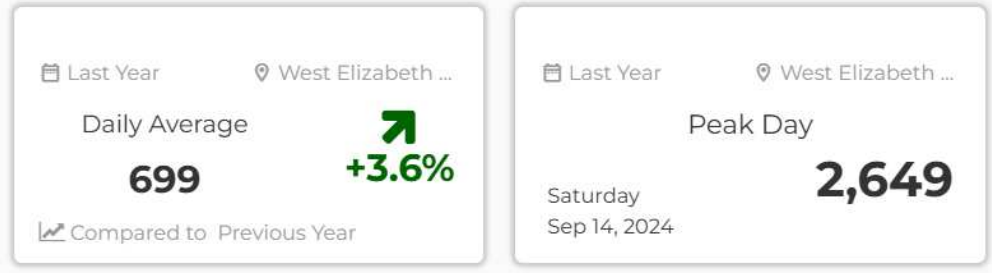
a. Will improve transportation safety of a current facility.

5. Please provide any evidence that there is student support for the proposal (i.e. petitioning, letters of support, requests for proposal by students, ASCSU resolutions, college council approvals, etc.). It is highly recommended that proposers reach out to students; the level of student support for your proposal will likely affect the board's decision to fund it.

   a. CSU staff (Aaron Fodge) shared that this project and location was identified by the Alternative Transportation Fee Advisory Board in September 2024 on the ATFAB infrastructure ride.

6. Is your project mentioned in any of the CSU Campus Master Plan documents? Have any campus advisory committee discussed this project? It is recommended that you consult an applicable planning or advisory committee for letters of support and advice regarding your proposal. Please attach any documents if applicable.

   a. This project and location were identified by the Alternative Transportation Fee Advisory Board in September 2024. This project was also discussed by the CSU Campus Bicycle Advisory Committee at their meeting on December 12, 2024. The committee expressed support for the proposed improvements.
   b. It is worth noting that the CSU-Eco counter showed a 2024 daily average use of the underpass as 699, an increase of 3.6% over 2023. While the Eco-Counter data represents total usage, the underpass is a key connection between high-density student housing along W. Elizabeth and the main campus, is one of the few low-stress bicycle and pedestrian crossings of Shields St. for access to the main campus and is heavily utilized on CSU athletic event days. September 14, 2024, the highest used day of 2024 (2,649 counted) for example correlates to a CSU home field football game.



7. Please include anything else you would like to communicate about your project.

   a. The installation of this system will be incorporated into another project increasing safety of the existing facility. Currently in winter months water cycles through freezing and thawing at both entrances to the tunnel. We will install heated concrete at each tunnel entrance to prevent freezing to allow water to drain keeping the tunnel entrance surface dry. The system is designed to operate outdoors and will be installed on the ceiling so will not be directly affected by the freeze thaw cycles of the water if we are able to install the system earlier than the heated concrete. It will also be installed alongside currently in use electrical equipment (Lights & Camera). The proposed concrete will require additional electrical infrastructure which will allow this system to be hardwired into the grid and thus not affected by inclement weather.
   b. Community outreach will be part of any work performed onsite that affects the community's access to the underpass. Most likely in the form of signage and detour

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routes to direct users to the signalized intersection as an alternative safe crossing point. If ATFAB members have any communications lists/venues that we could use for greater access to the community that would be appreciated.

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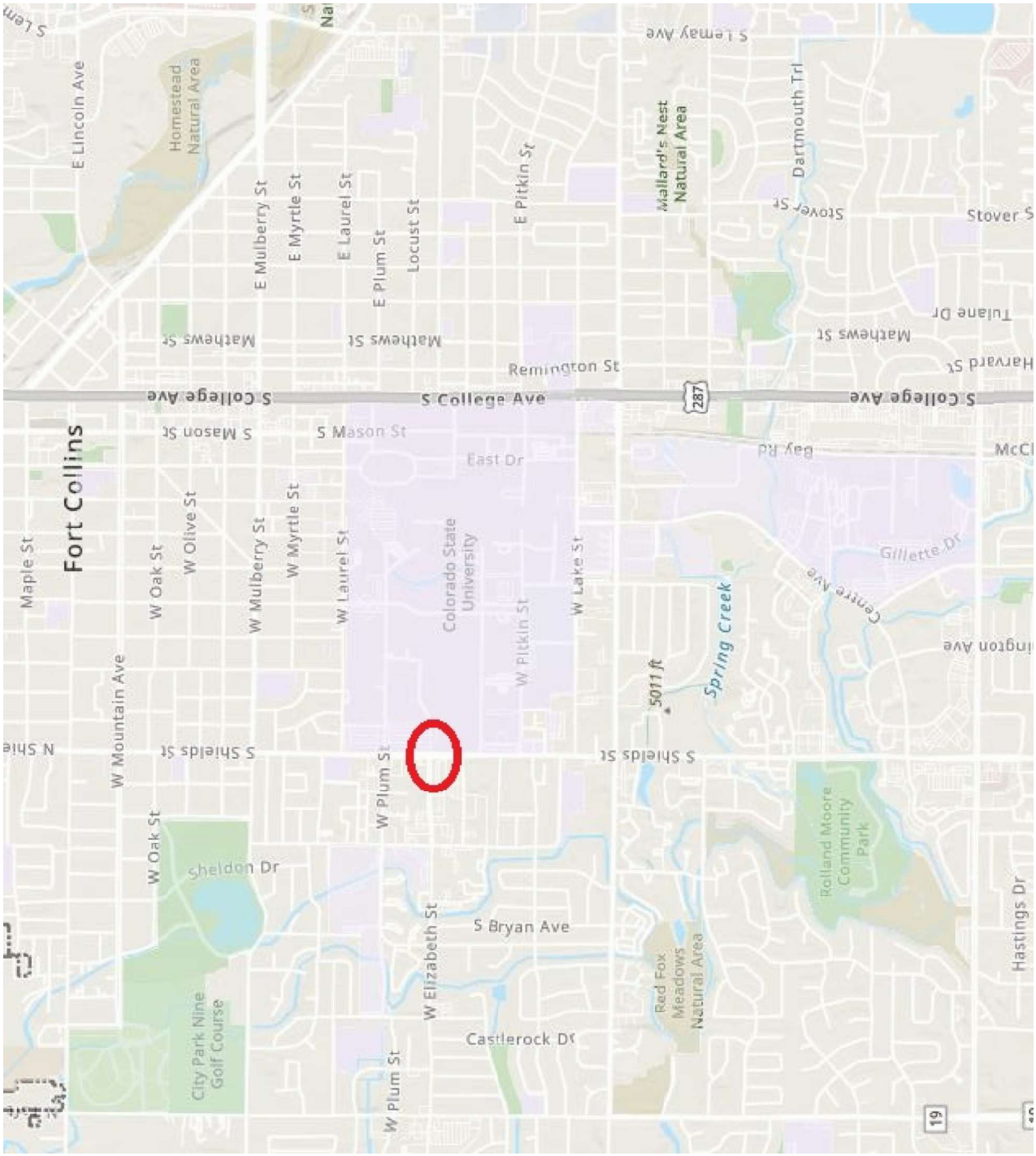

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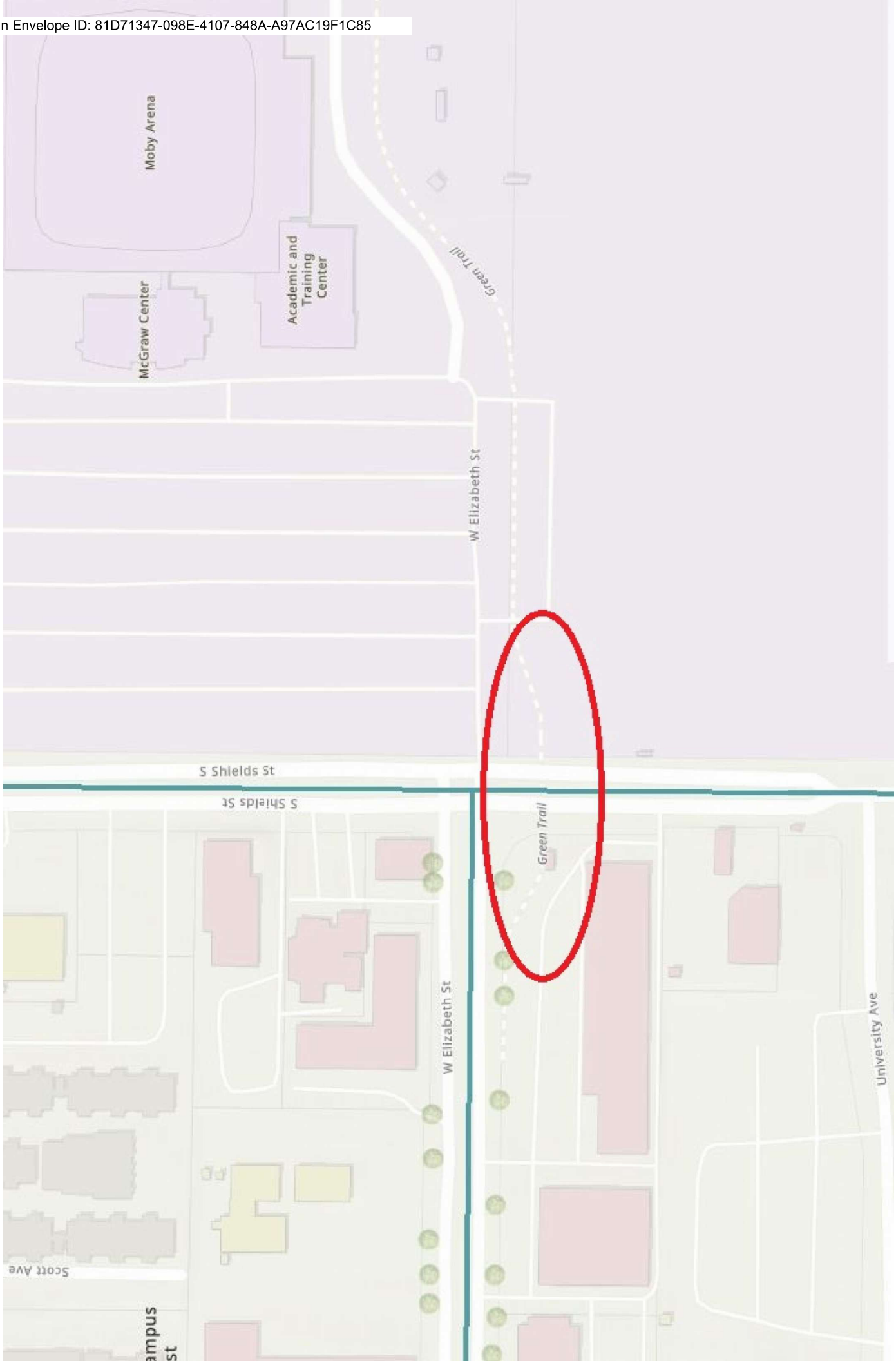

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Elizabeth Underpass Early Warning System

ITEM	UNIT	TOTAL ESTIMATED QUANTITY	UNIT COST	TOTAL COST
Construction				
Two - 2 Inch Electrical Conduit for Power & Signal (Bored PVC)	LS	1	$ 3,000.00	$ 3,000.00
2 Inch Electrical Conduit - Power Source	LS	1	$ 3,000.00	$ 3,000.00
MX 400 120 vac Beacon System	LS	1	$ 11,470.00	$ 11,470.00
MX LED SIGN Module "In Tunnel When Flashing "				
z bar sign mounting				
Bike Sensors VRP-27				
Push Button Kit				
MX 400 - AC Cabinet				
MX "PLUS" Cloud Subscription 10 year				
Labor (Electrician, Install Crew)	LS	1	$ 7,500.00	$ 7,500.00
Traffic Control Manage Trail Closure	DAY	3	$ 500.00	$ 1,500.00
			Construction:	**$ 26,470.00**
2025 inflation as per current CDOT predictions for construction	%	8%		**$ 2,117.60**
City Staff Time	%	15%		**$ 3,970.50**
Contingency	%	20%		**$ 5,294.00**

Total:	**$ 37,852.10**
Funding Request from ATFAB:	**$ 37,852.10**

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Heated Concrete
2024

ITEM	UNIT	TOTAL ESTIMATED QUANTITY	UNIT COST	TOTAL COST
Design Engineering				
Design/ Construction Drawings	LS	1	$ 15,000.00	$ 15,000.00
			Design Engineering:	**$ 15,000.00**
Construction				
Removal of Concrete	SY	40	$ 22.00	$ 880.00
Aggregate Bag (Storm Drain Protection)	LF	30	$ 11.00	$ 330.00
Concrete Washout Structure	EACH	1	$ 4,938.64	$ 4,938.64
Erosion Control Management	DAY	15	$ 310.00	$ 4,650.00
Concrete Sidewalk (8")	SY	40	$ 100.00	$ 4,000.00
Structural Fill	SY	40	$ 75.00	$ 3,000.00
Heating Element	SF	350	$ 60.00	$ 21,000.00
2 Inch Electrical Conduit for Power	LF	150	$ 40.36	$ 6,054.00
2 Inch Electrical Conduit for Signal	LF	150	$ 58.53	$ 8,779.50
New Electrical Service	LS	1	$ 15,000.00	$ 15,000.00
Transformer	LS	1	$ 6,000.00	$ 6,000.00
Electrical Panel	LS	1	$ 3,000.00	$ 3,000.00
Traffic Control Inspection (TCI)	DAY	2	$ 257.00	$ 514.00
Traffic Control Management	DAY	2	$ 975.00	$ 1,950.00
Sanitary Facility	EACH	1	$ 2,000.00	$ 2,000.00
Mobilization	LS	1	$ 10,000.00	$ 10,000.00
COFC - Signal & Pavement Markings	LS	1	$ 3,000.00	$ 3,000.00
			Construction:	**$ 95,096.14**
City Staff Time	%	15%		**$ 16,514.42**
Materials Testing	%	1%		**$ 1,100.96**
Contingency	%	30%		**$ 33,028.84**
APP	%	1%	-	**$ 1,100.96**

Total: 2024	**$ 161,841.33**
Total: 2025, 8% Inflation	**$ 174,788.63**