

**Action Requested/Required:**

- ☐ Vote/Action Requested
☒ Discussion or Presentation Only
☐ Public Hearing
Report Date: _____
Hearing Date: _____
Voting Date: _____

Department: Community Development**Presenter(s) & Title:** Bethany Watson

City Engineer

Agenda Item Title:

Discussion and Possible Action on I-575 Emergency Access Median Opening from Practical Design Partners, LLC in the amount of \$21,700.00.

Summary:

Engineering Staff has been approached by the Police Department to develop permit plans for a median crossing on I-575 to help with emergency access on I-575 in order to decrease accident response time. PDP will dimension the new median opening so that access is provided for emergency vehicles. Due to the minimal number of turning movements at the median opening. The median opening will be located just south of the Brick Mill Road overpass, between Exit 14 and Exit 18 on I-575. The existing guardrail on the east side of the median will remain in place with the median opening just to the south of the existing guardrail anchor. Two new anchors for the cable barrier on the west side of the median will be installed to provide a gap in the cable barrier. PDP will use GDOT's Standard Cable Barrier Special Design Detail. PDP will also develop a driveway profile and evaluate a side drain crossing under the new median access to convey water from the existing median ditch. Erosion control BMPs will also be located to prevent sediment runoff within the median.

Budget Implications:Budgeted? ☐ Yes ☒ No ☐ N/ATotal Cost of Project: \$ 21,700.00 Check if Estimated ☐Fund Source: General Fund ☐ Water & Sewer ☐ Sales Tax ☐ Other: _____**Staff Recommendations:**

Staff recommends approval of I-575 Emergency Access Median Opening from Practical Design Partners, LLC in the amount of \$21,700.00

Reviews:Has this been reviewed by Management and Legal Counsel, if required? ☐ Yes ☐ No**Attachments:**

PDP Proposal for project I-575 Emergency Access Median Opening
GDOT Standard Cable Barrier Special Design Detail

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

DATE: August 17, 2017



FROM: Brent A. Story, P.E., State Design Policy Engineer

TO: Divisions of Engineering, Permits/Operations, Local Grants/Field Districts,
Construction, TIA and P3/Program Delivery

SUBJECT: Cable Barrier Special Design Detail

Effective September 1, 2017, the attached *Cable Barrier Special Design Detail* has been developed for use on all new permanent installations and full replacements of cable barrier inside the median of a divided highway. The detail was prepared with respect to guidelines published in the 2011 AASHTO Roadside Design Guide. The Department will publish this Special Design Detail as a formal GDOT Construction Standard as soon as we receive concurrence from FHWA.

The following procedures shall be followed on all cable barrier installations:

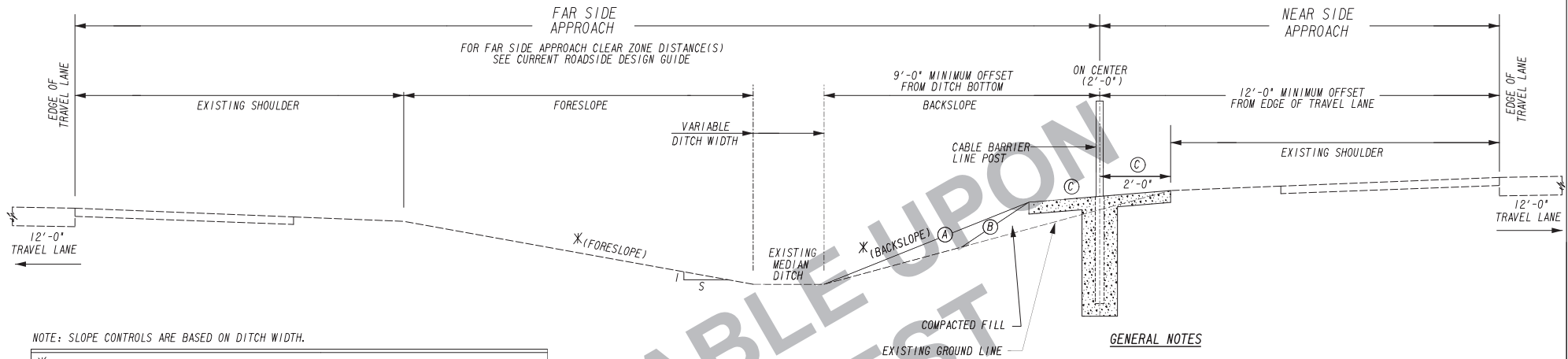
- 1) The Cable Barrier Special Design Detail will be provided in all Plan Submittal Packages where cable barrier is to be installed.
- 2) Cable barrier shall be installed per the manufacturer's instructions and specifications.
- 3) Slope controls inside the median (foreslope and backslope) are based on median ditch width.
- 4) If the far-side approach backslope is WITHIN clear zone it must be graded to applicable slope specifications as shown on the Cable Barrier Special Design Detail.
- 5) If the far-side approach backslope is OUTSIDE clear zone it may vary no steeper than 2:1.

The Cable Barrier Special Design Detail is maintained by the Office of Design Policy and Support and is available upon request. If you have any questions contact Frank Flanders (fflanders@dot.ga.gov) at (404) 631-1663 or Holly Cross (hcross@dot.ga.gov) at (404) 347-0578.

Attachment
BAS:DGP:fbf

Cc: Federal Highway Administration, Georgia Division
American Council of Engineering Companies (ACEC)/Georgia Chapter
Georgia Highway Contractors Association (GHCA)

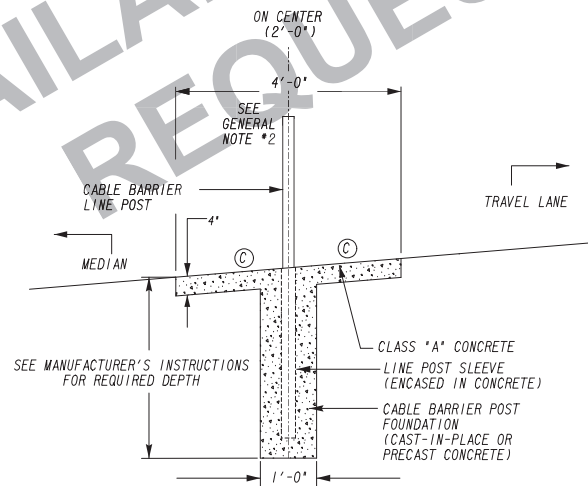
TYPICAL CABLE BARRIER DETAIL ARTERIALS/FREEWAYS



NOTE: SLOPE CONTROLS ARE BASED ON DITCH WIDTH.

X CABLE BARRIER OR BACKSLOPE WITHIN CLEAR ZONE			
EXISTING FORESLOPE (S:1)	EXISTING MEDIAN DITCH WIDTH	REQUIRED BACKSLOPE (A)	TEST LEVEL (TL)
6:1	2'-0"	4:1 OR FLATTER	MEETS TL-3
4:1	4'-0"	4:1 OR FLATTER	MEETS TL-3
4:1	2'-0"	6:1 OR FLATTER	MEETS TL-4
X CABLE BARRIER AND BACKSLOPE OUTSIDE CLEAR ZONE			
EXISTING FORESLOPE (S:1)	EXISTING MEDIAN DITCH WIDTH	REQUIRED BACKSLOPE (B)	TEST LEVEL (TL)
NOT APPLICABLE OUTSIDE CLEAR ZONE	NOT APPLICABLE OUTSIDE CLEAR ZONE	NO STEEPER THAN 2:1	NOT APPLICABLE OUTSIDE CLEAR ZONE

REQUIRED SLOPE FOR CABLE BARRIER CONCRETE PAD		
4'-0" CONCRETE PAD	REQUIRED SLOPE (C)	TEST LEVEL (TL)
	MATCH EXISTING SHOULDER SLOPE (10:1 OR FLATTER PREFERRED)	IF 4:1 MEETS TL-3
	SLOPE SHALL BE NO STEEPER THAN THE FAR SIDE APPROACH BACKSLOPE OR 4:1 (MAX).	IF 6:1 OR FLATTER MEETS TL-4



CABLE BARRIER DETAIL
SEE ABOVE TYPICAL FOR SLOPE REQUIREMENTS

GENERAL NOTES

- 1) SPECIFICATIONS: GEORGIA STANDARD, CURRENT EDITION & SUPPLEMENTS THERETO.
- 2) INSTALL CABLE BARRIER PER MANUFACTURER'S INSTRUCTIONS AND SPECIFICATIONS.

TEST LEVEL (TL-) INFORMATION

TEST LEVEL(S) ARE NUMERICAL TEST DESIGNATIONS BASED ON MASH AND/OR NCHRP 350 TEST SPECIFICATIONS. THESE LEVELS ARE USED TO IDENTIFY CRITERIA AND REQUIREMENTS FOR ROADSIDE SAFETY HARDWARE SUCH AS LONGITUDINAL BARRIERS, END TREATMENTS, ETC.

THESE TEST LEVELS (WHICH ARE ABBREVIATED TL-) SIMULATE VARIOUS ROADSIDE BARRIER IMPACT, CONTAINMENT, DEFLECTION AND/OR REDIRECT CONDITIONS BASED ON VARIABLES SUCH AS VEHICLE TYPE, IMPACT SPEED AND IMPACT ANGLE.

TEST LEVEL (TL-3) - BASED ON IMPACT TESTS OF PASSENGER VEHICLES.

TEST LEVEL (TL-4) - BASED ON IMPACT TESTS OF SINGLE UNIT TRUCKS.

DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA		
	SPECIAL DESIGN CABLE BARRIER DETAIL AND PLACEMENT		
REVISION	NO SCALE		AUGUST 2017
BY	DES. FBF		
	CHK. HBC		
	REV. BAS		

THIS SERVES AS A SUPPLEMENTAL AGREEMENT made as of _____, between the **City of Canton, Georgia, (OWNER)** and **Practical Design Partners (Consultant)**.

Owner and **Consultant** have previously executed a Professional Services Agreement dated April 11, 2022 that defines general terms under which **Consultant** will furnish General Consulting Engineering Services and Project Engineering Services to **Owner**. **Owner** now wishes to engage **Consultant** to provide services in connection with the Project known as Task Order No. 6 – I-575 Emergency Access Median Opening. The Scope of Services is defined in Task II of the attached letter.

The fee for these services will be a Time and Expense Amount as outlined in Exhibit A of the Professional Services Agreement. Payments will be made monthly in accordance with the number of hours worked by personnel of **Consultant**. The amount will be a not to exceed amount of Twenty One Thousand Seven Hundred dollars (\$96,575.00).

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the day and year first above written.

Owner:

City of Canton

Bill Grant
Name

Mayor
Title

Signature

Attest:

Consultant:

Practical Design Partners

By (Typed Name)

Title

Signature

Attest:



November 20, 2024

Bethany Watson, PE, AICP
City Engineer
Engineering Department
City of Canton
110 Academy Street
Canton, GA 30114

Re: I-575 Emergency Access Median Opening

Dear Mrs. Watson,

Practical Design Partners, LLC (PDP) appreciates the opportunity to submit this proposal to complete the construction layout for a median opening on I-575 for emergency vehicle access.

Anticipated Scope of Work:

The median opening will be located just south of the Brick Mill Road overpass, between Exit 14 and Exit 18 on I-575. The existing guardrail on the east side of the median will remain in place with the median opening just to the south of the existing guardrail anchor. Two new anchors for the cable barrier on the west side of the median will be installed to provide a gap in the cable barrier.

PDP will dimension the new median opening so that access is provided for emergency vehicles. Due to the minimal number of turning movements at the median opening, it is assumed that GDOT's standard pavement section for commercial driveways will be adequate. However, if required by GDOT, PDP will use GDOT's Guidelines for Minor Pavement Projects to determine a more robust pavement section. PDP will also develop a driveway profile and evaluate a side drain crossing under the new median access to convey water from the existing median ditch. Erosion control BMPs will also be located to prevent sediment runoff within the median.

PDP will develop a one-sheet construction plan that details the work associated with constructing the median opening. PDP will also provide quantities and a preliminary cost opinion for the associated work. All deliverables will be submitted to the City in PDF format. If desired, PDP can submit through GDOT's Georgia Permit Application System (GPAS).

Proposed Schedule:

PDP will develop the preliminary plan submittal within 4 weeks of NTP. Any comments received from the City of Canton or GDOT will be responded to within 3 weeks of receipt.

PO Box 3111
Tucker, GA 30085
Tel: 770-855-4683
www.practicaldesignpartners.com

Proposed Fee:

Services will be invoiced monthly on an hourly basis up to the maximum amount shown below:

Tasks	Fee Proposal
Access Design	\$16,700
Contingency	\$5,000
Total	\$21,700

The hourly rates will be determined by the consultant's direct costs (base salary rates of consultant personnel), indirect costs rate (per most recent indirect costs audit), and a 10% profit. A contingency amount is shown to cover any unforeseen scope of work not mentioned in this proposal.

Additional Assumptions:

1. All design will be based on the City of Canton's GIS data. No topographic survey is included. Existing and design elevations will be approximate.
2. Typical to GDOT projects, the details for cable barrier components are provided by the manufacturer. PDP will only dimension the opening required and the contractor will coordinate with the manufacturer.
3. Staging plans will not be required. The contractor will develop a Maintenance of Traffic (MOT) Plan detailing the necessary temporary lane closures and barrier locations per GDOT Standards and Details and the MUTCD.
4. No impacts to the existing travel way, signing, or pavement markings will be required.
5. Neither a roadway profile, cross-sections or drainage profile will be required.
6. No utility coordination will be required as all work is occurring in the median of I-575.
7. No traffic analysis, environmental investigations, permitting, geotechnical investigations, or structural design will be required.
8. Neither a bid package, supplemental conditions, or other construction services will be required.
9. This project is 100% locally funded by the City of Canton. No federal and/or state funds are being utilized in any phase of the project.

PDP has developed this scope of services and fee proposal based on our current understanding of the existing project. Any additional services not included or any changes to the scope or assumptions provided in this proposal may require a supplemental request to complete the project.

Thanks again for the opportunity to provide our proposal for this emergency access project! We look forward to continuing our relationship with the City of Canton.

Please let us know if there are any questions.

Sincerely,



Brad Robinson, PE
Vice President