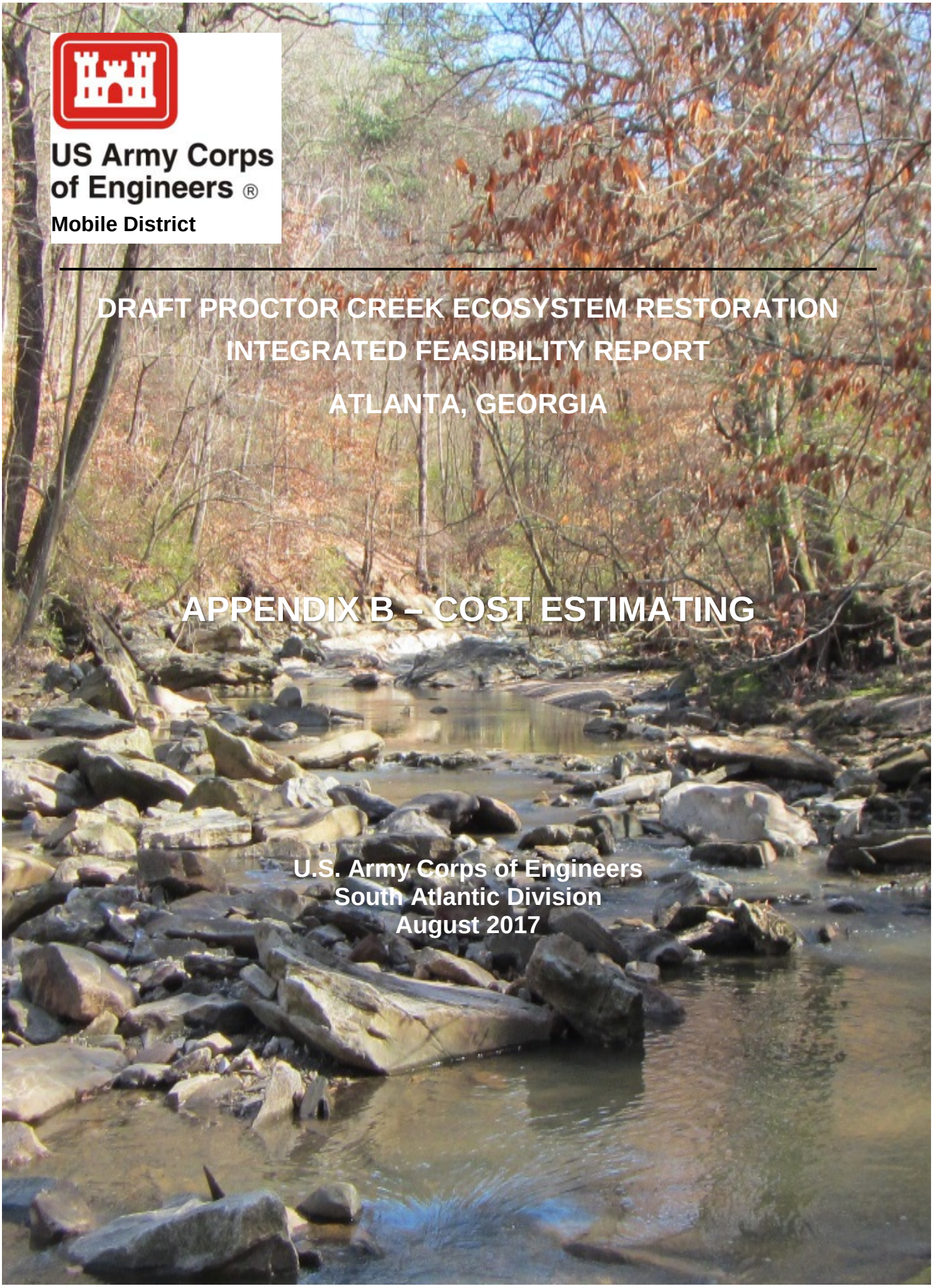

US Army Corps of Engineers ®
Mobile District

DRAFT PROCTOR CREEK ECOSYSTEM RESTORATION INTEGRATED FEASIBILITY REPORT

ATLANTA, GEORGIA

APPENDIX B – COST ESTIMATING

U.S. Army Corps of Engineers
South Atlantic Division
August 2017

1. Introduction
   1.1. The purpose of this appendix is to document and present the detailed cost estimate prepared in support of the Proctor Creek Ecosystem Restoration Feasibility Study. The goal of the estimate is to provide a reliable basis for authorizing and budgeting the recommended plan. The cost estimates included were developed to at least Class 4 based on the level of design for the individual reaches and simply added to determine the estimate for the Tentatively Selected Plan (TSP). The final report cost appendix will contain only a summary of the alternatives estimates and a more refined estimate to at least Class 3 for the selected plan in accordance with ER 1110-2-1302, Civil Works Cost Engineering.
2. Formulation of Alternatives Estimates
   2.1. Price Level
      2.1.1. The Total Project Cost Summary (TPCS) for each reach contains three cost categories, Estimated Cost, Project First Cost, and Total Project Cost. The Estimated Cost, which is the construction cost developed in MCACES (MII) with the Real Estate costs, Planning, Engineering and Design (PED) costs, and Construction Management (CM) costs has a price level of 1st Quarter FY 2017. The Project First Cost has a price level set to 1st Quarter FY 2020 based on anticipated approval and budgeting to start PED and real estate acquisition in 1st Quarter FY 2020. This price level is used in the economic analysis. The Total Project Cost is escalated based on the midpoints of the PED and construction, which varies slightly among the different reaches. The midpoints of construction are either 2nd or 3rd Quarter of FY 2022. Escalation is based on the September 2016 Civil Works Construction Cost Index System (CWCCIS), EM 1110-2-1304. For the construction costs, MII cost book prices were used, except as noted otherwise, as modified by local wage rates(custom Labor Library) and equipment rates (2014 Region III Equipment Library).
   2.2. Cost Estimate Structure
      2.2.1. The cost estimates for the various reaches were prepared by the Mobile District Cost Engineering Section. The overall structure of the cost estimate is dictated by the Civil Works Work Breakdown Structure (CWWBS) and is detailed to at least the sub-feature level. The remainder of the estimate structure is based on expected construction methodology as determined by the cost estimator with input from the Project Delivery Team (PDT). The total cost estimates are only displayed on the TPCS sheets, all other products (MII report, estimated schedule, ARA) are to support the TPCS.
   2.3. Identification of Estimates for the Initial Array of Alternatives
      2.3.1. For the initial array of alternatives, the cost products were developed solely to help determine favorable reaches to include in the final array of alternatives. Generally, a unit price for the various measures that could be applied to all the appropriate reaches was developed. The cost data was included in the Proctor Creek Ecological Model (PCEM) as described in the PCEM Phase 1 Documentation. The

quantities were developed based on large scale assumptions from the PDT members that had surveyed the sites and developed the list of potential measures.

2.3.2. The list of measures developed by the PDT and considered during the initial screening were:

2.3.2.1. Bank Stabilization

This measure included the laying back of the stream banks, planting of willow stakes, and installation of rootwads and diversion structures. The unit cost was a function of the estimated length to be improved and the bank height. The unit cost was developed as an assembly in MII.

2.3.2.2. Riparian Plantings

Riparian plantings included the planting of trees and shrubs out of the creek bed. The unit cost was in acres to be planted and was based on historical estimates for ecosystem restoration.

2.3.2.3. Invasive Species Removal

Invasive Species removal was estimated to be accomplished by manual spraying of herbicides. The unit price was for the area to be sprayed. This price was developed in MII.

2.3.2.4. Channel Shaping

This measure included only the movement of loose material within the stream bed. The price was estimated in MII as a function of the volume to be moved.

2.3.2.5. Detention Sites

The array of 15 potential detention sites was estimated as a function of the excavation volume, footprint area, number of risers, and rip-rap placement. The unit costs for the variables were developed in MII.

2.3.2.6. Daylighting / Dechannelization

This daylighting of the culvert at Grove Park measure included only removing the culvert at Grove Park to provide an exposed stream bed. It was estimated in MII using the Quantity Take Off method.

The dechannelization of Terrell Creek at reach TC-10 is removing the concrete channel lining. This measure was estimated in MII using the Quantity Take Off method.

2.3.3. Initial Array of Alternatives and Costs

Table 1 below shows a summary of the initial measures considered by reach and the associated relative cost.

Table 1 - Initial Array and Costs

Reach ID	Restoration Alternative	Detention	Cost ($K)
PC02	Channel reshaping, bank protection, invasive removal		170.8
PC03	Channel reshaping, bank protection		226.7
PC05	Stabilize right bank, create point bars, woody debris features		143.9
PC06	Move bars to decrease width		0.8
PC07	Move mid-channel bars and stabilize		1.7

PC08	Bank protection, invasive removal		221.8
PC09	Barrier improvement (rock ramp)		0.4
PC10	Bank protection, invasive removal, plantings, bar shaping		244.8
PC12	Cross vanes, channel redesign, invasive removal, plantings		307.2
PC13	Invasive removal, plantings, minor bar reshaping		8.9
PC14	Add woody debris		0.9
PC15	Reshape bars, bank protection		699.8
PC16	Channel reshaping, bank protection, plantings		111.8
PC17	Bar reshaping, bank protection		277.9
PC18	Improve left bank/bar		25.2
PC19	Bank protection, channel reshaping		255.7
PC20	Bank protection, invasive removal	Offline detention (D15) on right bank	94.5
PC20A	Bank protection	Offline detention (D7) on right bank	155.3
PC21	n/a	Offline in Valley of the Hawks (D10), Inline at Mosquito Hole (D11), Offline in English Ave (D16)	1,609.5
PCU02	Left bank wetland area, bank protection (minimal)		58.3
PCU03	n/a	Inline detention (D17) upstream of I-20	38.4
TC01	Invasive removal, trash removal (local)		12.8
TC02	Right bank wetland, channel reshaping, invasive removal, plantings, recreation access	Hollywood Rd right bank wetland (D19)	234.9
TC03	Left bank flood buyout, riparian wetland creation	Left bank flood buyout and wetland at Spring Rd (D20)	78.2
TC05	Barrier improvement (rock ramp) at sewer, left bank wetland, channel reshaping		67.3
TC06	n/a	Tributary detention pond (D4) on Ridge Ave.	17.6
TC07	Bank protection, connect to floodplain, possible wetland detention, dechannelization		140.4
TC08	n/a	Tributary detention pond (D3) upstream of Hollowell Blvd	204.8
TC09	Barrier improvement at Baker Rd		0.2
TC10	Dechannelize and create natural channel		206.5
TC11	Right bank layback, plantings	Tributary detention pond (D1) upstream of cemetery	374.9
GP01	Bank protection, plantings		48.4
GP02	Daylighting with plantings		151.2
GP03	Bank protection		101.6
GPT01	Fish barrier improvement		0.1
GPT02	Bank protection, invasive removal, plantings		36.3
PCT02	n/a	Two inline ponds (D8+D21)	392.7
PCT01	Recreational access	Inline detention (D12) upstream of Perry Rd	54.4

From Proctor_Model_2016-04-20.xlsx

2.3.4. Limitations of Relative Costs

2.3.4.1. The cost data used to screen the initial array of alternatives had some significant limitations. The costs described are not intended to be Total Project costs. The PDT called these "relative costs" and are intended only to be used for the comparison of the various reaches in determining the final array of alternatives. The quantities used for applying the unit prices were based on the notes and approximations made by the PDT members during stream walks and displayed some significant differences to the conceptual level designs prepared for the final screening.

2.3.4.2. The costs omitted preparation work, such as construction of access roads, erosion control measures and dewatering. Although these costs were expected to be significant, no reliable basis for the estimation could be made with the information available. Real estate costs were not included in the initial screening as the data was not available. Any typical cost item that would be applied as a percentage was also not included; since these costs were only to be used as a method for discriminating the alternatives, percentage type markups would only serve to amplify the differences between the alternatives.

2.3.5. The relative costs were used as a factor in the PCEM model for the selection of the final array. Please refer to the PCEM Phase 1 documentation and Plan Formulation appendix for additional discussion of the screening of restoration reaches and possible alternatives. After the completion of the Phase I screening and the selection of the final array of alternatives, because of the limitations listed above, the relative costs were essentially discarded.

2.4. Estimating Scope Methodology for Final Array of Alternatives

2.4.1. The Final Array of Alternatives was comprised of a set of 13 reaches in all their possible combinations. A cost estimate was prepared for each reach and was used in the economic analysis of the alternatives for selection of the TSP. The design of the reaches had progressed enough to provide a reasonable basis for specific quantities to be developed and other cost factors, such as site access and staging areas are included in the estimates for the final array of alternatives.

2.4.2. Features of Work

As described above for the initial screening, the reaches in the final array had a few general features of work that were used to varying degrees. The sizing of the measures differed from reach to reach and each reach had its own quantity take off performed.

2.4.2.1. Mobilization and Preparatory work includes the cost of mobilization, demobilization, construction of access and staging areas, environmental and erosion controls, and restoration after completion. Stream diversion and erosion control measures were estimated to meet Georgia State environmental protection requirements and include bypass pumping, temporary cofferdams, temporary structural erosion controls, and inspection and testing of the measures. Staging areas are estimated to include a chain link fence around them to securely store equipment and materials when workers are not present.

An activity for rainstorm preparation and clean-up has been included based on the anticipated length of in-stream work. Since Proctor Creek displays pronounced "flashiness" with even routine rain events, the estimate includes an amount to account for removal of equipment and materials prior to a storm and clean-up afterword.

2.4.2.2. Channel / Bar Shaping is the measure describing the movement of sandy deposits with in the stream bed. This work was assumed to be performed by a small front end loader, such as a CAT 906H. The productivity for this activity was calculated separately for each location based on haul length.

2.4.2.3. Bank stabilization is the earthwork associated with changing the slope of the banks. The volume of earthwork to be excavated for each reach was calculated from the existing slope at one point and multiplied by the length. Compaction is included for the exposed earthwork. Grass seeding or sodding is not included on the banks as all bank stabilization areas are planned to have other plantings installed. Coir matting is included for the exposed slopes steeper than 1V:3H. The estimate assumes that spoils from excavation will be spread and compacted on the site with grass seeding as appropriate.

2.4.2.4. Stream Barbs are rock structures composed of rip-rap extending part of the stream width on geotech fabric keyed into the bank. Excavation is estimated using a medium backhoe loader similar to a CAT 420. Rip-rap is estimated to be machine placed.

2.4.2.5. Cross Vanes are rock structures extending across the full width of the stream. The vanes are constructed of rip-rap, and rectangular field stones keyed into the stream bank and bottom. The estimated quantities are based on the width of the stream, with identical heights assumed throughout. All spoils form excavation are assumed to be spread on site. Excavation is anticipated with a medium backhoe loader and rip-rap is machine placed.

2.4.2.6. Longitudinal Peaked Stone Toes are essentially a pile of rip- rap. The stone is anticipated to adjust to the scouring conditions it induces after a few high flow events. The rip-rap is estimated according to the size in the design it is estimated to be machine placed, rather than dumped, due to its location in the creek bed.

2.4.2.7. Upland Plantings and Willow Staking is the planting of vegetation, willow stakes are located near the stream edge and upland plantings are further into the riparian zone. The planting density is based off plans for Flat Creek Stream Restoration Project, dated June 2016. Willow stakes will be planted at a density of 1 per S.Y., Upland vegetation will be 0.09 shrubs per S.Y. and .00225 trees per S.Y. Willow stakes will be Black Willow. Trees will be Black Gum, Pignut Hickory, American Holly, Southern Magnolia, and Alternate Leaf Dogwood; shrubs will be Sweet Shrub or Spice Bush. The density is adjusted to 70% of the area indicated on the drawings due to existing acceptable vegetation. An allowance for watering by truck is included at 50% of the planting area.

2.4.2.8. Revetments rock and log structures placed horizontally along a bank. They are estimated to have 1 CY of excavation and backfill and ½ CY of rip-rap per log. Quantity of logs is estimated at 2 logs per 10 LF. The estimate assumes, based on input from the PDT, that half of the necessary logs will be available on site, material costs are not included for those.

2.4.2.9. Rootwads are felled trees with the root ball intact. They are keyed into the bank with the root structure exposed to the stream. The rootwads are assumed to be 15' long. Each log includes 2.67 CY of excavation, 2 CY of backfill, and 3 3' Rebar stakes. Rootwads material is estimated at 3 6"x8" landscape timbers for each LF of log. Each root wad is assumed to have 1/2 CY of rip-rap and gravel with it. Labor Productivity is set 20% lower to account for difficulty of placing the logs and stone.

2.4.2.10. Rootwads with Stream Barbs are a combination of a rootward with a rip-rap stream barb. They are estimated to include excavation, backfill and staking of the logs. Rootwad material is estimated to be purchased. Each rootwad is assumed to be 15 LF. Filter fabric and 15 CY of stone are included. Productivity is set 20% lower to account for difficulty in properly placing stone and rootwads.

2.4.2.11. Engineered Log Jams are a deliberately placed pile of logs. They are estimated to include 5 timber piles driven into the ground, 6 rootwads, wire rope and clips, excavation, backfill, and compaction.

2.4.2.12. Log Stream Barbs, rootless logs keyed into the bank, are estimated as two 24 LF logs with excavation, backfill, compaction, and staking. Suitable material is assumed to be not available on site.

2.4.2.13. Invasive Species Removal for Proctor Creek is the removal of invasive plant species. This is estimated as sprayings of herbicide by hand during the construction phase. Two sprayings of the planned area are included.

2.4.2.14. Wetlands creation includes the excavation and compaction of the area with spreading of the spoils on site. Grading and placement of rip-rap for inlets and outfalls are included as shown on the conceptual plans. Log check dams as shown on the plans are included.

2.4.2.15. Fish passages are engineered rip-rap ramps adjacent to cross stream obstructions. They were estimated as requiring a clean-up and compaction of the site prior to placement of the rock. An average depth of rock of 18” was used for the entire area of the fish passage.

2.4.3. Distribution of Work Among Contractors

2.4.3.1. Since this project is a relatively small construction effort, the estimate assumes that a site work contractor will serve as the prime contractor performing the majority of the work. The work schedule is estimated to be five 10 hour days per week. All work is expected during daylight hours, no light plants are included in the estimate.

2.4.3.2. A landscaper sub is included in the estimate for all of the planting efforts and invasive species removal.

2.4.3.3. A SWPPP and Diversion contractor is included to erect, monitor, and dismantle the erosion control measures and the stream diversion efforts.

2.4.4. Mark-ups

2.4.4.1. Productivity was set at 80% except as noted for specific features of work. Material and equipment inflation are included to bring the cost book items to 1st Quarter FY17 price levels. Sales tax of 7.0% for Fulton County, Georgia is included.

2.4.4.2. Job Office overhead and Home Office overhead are calculated as a running percentage of the construction costs. Profit, Bond and Insurance are also included as running percentages.

2.4.4.3. The markup rates are estimated for small business contractors.

2.4.5. Acquisition Strategy

The project does not have an acquisition strategy yet. The estimate assumes that the project would be awarded as a single small business competed contract. The contractor markups used in MII reflect this assumption. The risk of a more expensive acquisition strategy is included in the ARA.

2.4.6. Planning, Engineering and Design.

The PED will include the detailed surveys, geotechnical investigations, preparation of plans and specifications, and the pre and post construction monitoring. All PED costs except the pre-and post-construction monitoring are calculated as a percentage of the construction costs. Pre- and Post-construction monitoring costs were developed in MII and are based on needing two inspections of the creek for each monitoring event. The two inspections are an inspection for a fish survey and stream evaluation and an inspection for an invertebrate survey. These inspections should occur separately as they have different appropriate seasons. The cost is based on 120 hours of Civil Engineer effort and 40 hours of Surveyor effort as the Prime Contractor would perform them. This anticipates 3 personnel spending 3-4 days performing the surveys per reach, 1-2 days to prepare documentation, and a week of time for an engineer to prepare the reports. Post-construction monitoring will occur at 2, 5, and 10 years after construction

2.4.7. Construction Management

CM is the government's activities during construction. The CM costs are calculated as a percentage of the construction costs.

2.5. Risk Analysis and Contingency

2.5.1. The Abbreviated Risk Analysis was completed with input from the PDT. The ARA was prepared so that each reach could have a different contingency percentage depending on the predominance of work in that reach. The qualitative risk impacts and likelihood are assumed to remain the same throughout the watershed. The Features of Work included in the ARA as agreed upon by the PDT are:

2.5.1.1. Mobilization / Prep Work

2.5.1.2. Plantings

2.5.1.3. Rootwads/Log Stream Barbs/Revetments

2.5.1.4. Rip-Rap

2.5.1.5. Earthwork (Bank Stab., Bar Shaping)
2.5.1.6. Fish Passages
2.5.1.7. The standard ARA categories of Lands and Damages, All Other (Remaining Construction Items), PED, and CM are included.

2.5.2. Development of Risk Impacts and Likelihoods

2.5.2.1. Project Management and Scope Growth

2.5.2.1.1. The project is currently planning for FY 2020 award of construction. Funding shortfalls or delay of approvals would delay the start of the project, increasing the escalation costs. The impact and likelihood would apply equally to all FOW. Other concerns discussed included the selection of a Locally Preferred Plan(LPP), which is not included within the scope of this ARA.

2.5.2.2. Acquisition Strategy

2.5.2.2.1. An acquisition strategy has not been determined for this project. There is a good probability of this project being limited to a small business acquisition and this has been accounted for in the estimate. There is a possibility of this project being eligible for 8(a) award which would have a moderate impact to the cost of the construction FOW. The PED may be partially contracted out, but the impact would be negligible. Construction management may be impacted by the lack of control on staff priorities and potential for inadequate staffing. Recent projects in the Atlanta area have experienced these issues.

2.5.2.3. Construction Elements

2.5.2.3.1. For the construction elements, it is thought that inadequate construction management could lead to claims or changes having a marginal impact on all construction FOW. The possibility of rains impacting the work after mobilization may require more mobilization and prep work at the site.

2.5.2.3.2. Since a large amount of plantings are planned for some of the reaches, shortages from growers may be an issue. Depending on the planting season, plantings may have to be delayed. Either of these concerns could have significant impacts.

2.5.2.3.3. The revetments and some of the rootwads are planned to have limited amounts of material available on site based on the observations from the team's stream walks. Historically, a portion of projects have encountered difficulties actually using the material expected to be on site.

2.5.2.3.4. The earthwork FOW has a possibility of encountering adverse subsurface conditions such as rock, unidentified utilities, cultural resources, or HTRW which would significantly increase the cost. Discovery of any adverse conditions would also moderately increase PED costs.

2.5.2.4. Specialty Construction or Fabrication

2.5.2.4.1. Since the work is relatively standard, minimum risk exists in this element.

2.5.2.5. Technical Design & Quantities

2.5.2.5.1. Although mobilization costs should not change except as affected by weather, the prep work quantities are based off of very limited information. These quantities are likely to change having a marginal impact.

2.5.2.5.2. Planting quantities are based on recent similar projects and discussion within the PDT. Due to the conceptual nature of the design, these quantities may be increased having a marginal impact.

2.5.2.5.3. The technical design of the fish passages and rip-rap carries the most risk. The design, which is very rudimentary now, is likely to change having a moderate impact.

2.5.2.5.4. For the remaining construction FOW, since there is no full design and site conditions may change, all quantities are likely to change having a marginal impact.

2.5.2.5.5. PED and CM are expected to have minimal risk under this element.

2.5.2.6. Cost Estimate Assumptions

2.5.2.6.1. Mobilization and prep work is based on estimator's judgement and preliminary concepts from the design team. This is likely to change having a marginal impact.

2.5.2.6.2. Planting quantities are based on recent similar projects and discussion within the PDT. These quantities may be changed during later project stages having a marginal impact.

2.5.2.6.3. Rootwads/Log Stream Barbs/Revetments pricings are currently estimated without a local quote, these are likely to change with a moderate impact. Additionally, the pricing of suitable material is subject to price fluctuations that would limit the appropriateness of any quotes at this stage of the project.

2.5.2.6.4. Remaining construction FOW are thought to have marginal impact and a possibility of changing due to the conceptual level of design.

2.5.2.6.5. PED and CM costs are based on recent projects in the area and have a possibility of marginal impacts.

2.5.2.7. External Project Risks

2.5.2.7.1. External project risks are thought to be security concerns (e.g. vandalism/theft/destruction of equipment), creek flooding, and community support for the plan. The mobilization and prep work would be most affected by the security concerns, with significant impacts possible. Creek flooding would affect the plantings and earthwork significantly much more than the other FOW.

2.5.3. The overall contingency for each reach in the final array fell between 24.9% and 29.3%. A summary of the ARA results and a copy of the ARA Risk Register are

included in the attachments as well as a copy of the Reach PC-15 inputs and results, as an example. Note that risk elements 7 through 11 were not used and are not shown on the ARA Risk Register.

2.6. Real Estate

2.6.1. Real estate costs and contingency for each reach were provided by the Mobile District Real Estate Division. The contingency is set at 10% for each reach. The estimated real estate cost and contingency are included in the TPCS for each reach.

3. Schedule

3.1. The project schedule was estimated for each reach to facilitate the proper usage of escalation in the TPCS reports. The schedule was calculated using the durations of work calculated in MII. There are no constraints on work, (e.g., ice in winter, migratory bird nesting season) that are included in this schedule. The schedule report is included as an attachment to this appendix. Real estate acquisition is expected to take between 18 and 24 months and is anticipated to be the critical path for pre-construction activities.

4. TPCS Summaries

4.1. A separate TPCS was prepared for each reach in the final array of alternatives. Table 2 shows a summary of the TPCS for each reach in thousands of dollars for the Total Project Cost. The TPCS reports are included as an attachment to this appendix.

Table 2 - TPCS Summary

Total Project Cost, in $K

Reach	Construction	Lands	PED	CM	Contingency	Total
PC08-1	306	82	143	30	147	709
PC08-2	348	73	147	36	161	765
PC09	155	1	119	15	76	365
PC10	378	26	150	37	169	760
PC13	187	36	128	20	102	472
PC14	137	21	117	13	76	364
PC15	592	47	189	60	247	1,134
PC21	664	66	191	65	283	1,270
TC02	365	23	148	37	162	735
TC05	217	22	130	22	105	496
GP01	239	5	132	23	112	512
GP02	433	3	161	43	162	802
D17	147	20	117	15	73	371
Total	4,168	424	1,873	416	1,874	8,756

Not all rows and columns add up to the totals due to rounding in the TPCS worksheets.

5. Operations and Maintenance

5.1. Operations and Maintenance (O&M) costs were estimated for each reach. These costs are not included in the TPCS reports, but are included in the economic analysis. The costs were developed with a mixture of allowances and percentages of construction costs.

5.1.1. Invasive Species Removal is estimated at 75% of the original area sprayed and is expected annually

5.1.2. Replantings are estimated as 5% of the original area for the first 3 years after warranty.

5.1.3. An annual inspection and preparation of a report is included as an O&M cost. This is estimated as 40 hours of labor for two surveyors and 10 hours for a Civil Engineer. This effort is separate from the post construction monitoring included in the PED.

5.1.4. Trash Removal for all reaches is estimated as a crew of 2 laborers with a pick-up truck for 1 hour per 400 feet of creek twice each year. Pond D17 is estimated as if it were 1500 feet long based on the perimeter.

5.1.5. Woody structure repair is estimated as 7.5% of the construction at 5 years and at 10 years.

5.1.6. Rock structure repair is estimated as 7.5% of the construction at 5 years and at 10 years.

5.1.7. Earthwork feature maintenance and reshaping is estimated at 10% of construction cost every 5 years.

5.1.8. Fence O&M at Pond D17 includes annual maintenance and minor repairs with a complete removal and replacement at 25 years.

6. Tentatively Selected Plan

6.1. All measures and reaches from the final array of alternatives are currently included in the Tentatively Selected Plan (TSP). Please refer to the main report or plan formulation appendix for additional discussion of the TSP.

7. Attachments

7.1. MII Summary

7.2. ARA & Summary

7.3. TPCS reports

7.4. Schedule Report

Proctor Creek Ecosystem Restoration Feasibility Study

Alternatives Estimates to support decision on a Tentatively Selected Plan

For the Proctor Creek Ecosystem Restoration Feasibility Study, the final array of alternatives includes various reaches of the Proctor Creek Watershed as well as off-channel detention basins.
Estimate Classification: Level 3

Summary		**3,791,027**	**0**	**0**	**0**	**3,791,027**
Reach PC-08-1	**1.0 EA**	**275,924**	**0**	**0**	**0**	**275,924**
Reach PC-08-2	**1.0 EA**	**313,177**	**0**	**0**	**0**	**313,177**
Reach PC-09	**1.0 EA**	**139,519**	**0**	**0**	**0**	**139,519**
Reach PC-10	**1.0 EA**	**340,389**	**0**	**0**	**0**	**340,389**
Reach PC-13	**1.0 EA**	**168,797**	**0**	**0**	**0**	**168,797**
Reach PC-14	**1.0 EA**	**123,748**	**0**	**0**	**0**	**123,748**
Reach PC-15	**1.0 EA**	**556,057**	**0**	**0**	**0**	**556,057**
Reach PC-21	**1.0 EA**	**608,848**	**0**	**0**	**0**	**608,848**
Reach TC-02	**1.0 EA**	**327,510**	**0**	**0**	**0**	**327,510**
Reach TC-05	**1.0 EA**	**196,387**	**0**	**0**	**0**	**196,387**
Reach GP-01	**1.0 EA**	**216,408**	**0**	**0**	**0**	**216,408**
Reach GP-02	**1.0 EA**	**388,818**	**0**	**0**	**0**	**388,818**
Pond D-17	**1.0 EA**	**135,444**	**0**	**0**	**0**	**135,444**

Contract Cost Report		**2,602,936**	**254,510**	**933,581**	**3,791,027**
Reach PC-08-1	**1.0 EA**	**195,306**	**12,669**	**67,949**	**275,924**
0901 Channels	1.0 EA	195,306	12,669	67,949	275,924
Reach PC-08-2	**1.0 EA**	**220,010**	**16,044**	**77,123**	**313,177**
0901 Channels	1.0 EA	220,010	16,044	77,123	313,177
Reach PC-09	**1.0 EA**	**97,334**	**7,827**	**34,358**	**139,519**
0901 Channels	1.0 EA	97,334	7,827	34,358	139,519
Reach PC-10	**1.0 EA**	**224,820**	**31,745**	**83,825**	**340,389**
0901 Channels	1.0 EA	224,820	31,745	83,825	340,389
Reach PC-13	**1.0 EA**	**112,012**	**15,217**	**41,568**	**168,797**
0901 Channels	1.0 EA	112,012	15,217	41,568	168,797
Reach PC-14	**1.0 EA**	**89,065**	**4,209**	**30,474**	**123,748**
0901 Channels	1.0 EA	89,065	4,209	30,474	123,748
Reach PC-15	**1.0 EA**	**389,747**	**29,375**	**136,935**	**556,057**
0203 Cemetery, Utilities, & Structure	1.0 EA	2,830	0	925	3,755
0901 Channels	1.0 EA	386,917	29,375	136,010	552,302
Reach PC-21	**1.0 EA**	**401,843**	**57,069**	**149,935**	**608,848**
0901 Channels	1.0 EA	401,843	57,069	149,935	608,848
Reach TC-02	**1.0 EA**	**213,394**	**33,463**	**80,653**	**327,510**
0901 Channels	1.0 EA	213,394	33,463	80,653	327,510
Reach TC-05	**1.0 EA**	**133,432**	**14,593**	**48,362**	**196,387**
0901 Channels	1.0 EA	133,432	14,593	48,362	196,387
Reach GP-01	**1.0 EA**	**144,452**	**18,664**	**53,293**	**216,408**
0901 Channels	1.0 EA	144,452	18,664	53,293	216,408
Reach GP-02	**1.0 EA**	**281,123**	**11,945**	**95,751**	**388,818**
0901 Channels	1.0 EA	281,123	11,945	95,751	388,818
D-17 Pond D-17	**1.0 EA**	**100,398**	**1,692**	**33,354**	**135,444**
1500 Floodway Control-Diversion Struc	1.0 EA	100,398	1,692	33,354	135,444

ARA Contingency Summary

	PC-08-1	PC-08-2	PC-09	PC-10	PC-13	PC-14	PC-15	PC-21	GP-01	GP-02	TC-02	TC-05	D-17
Changing Cells:													
Total_Cost	$ 275,924	$ 313,177	$ 139,519	$ 340,389	$ 168,797	$ 123,748	$ 556,057	$ 608,848	$ 216,408	$ 388,818	$ 327,510	$ 196,387	$ 135,444
Real_Estate_cost	$ 76,000	$ 67,000	$ 850	$ 24,150	$ 33,000	$ 19,000	$ 43,000	$ 61,000	$ 5,000	$ 3,000	$ 21,000	$ 20,000	$ 18,000
Mob_Prep_Cost	$ 72,413	$ 107,561	$ 124,691	$ 116,512	$ 71,403	$ 72,895	$ 168,960	$ 148,659	$ 85,041	$ 81,633	$ 116,741	$ 81,789	$ 58,496
Plantings_cost	$ 40,182	$ 41,771	$ -	$ 134,324	$ 56,869	$ -	$ 71,602	$ 241,235	$ 71,602	$ 25,225	$ 135,960	$ 43,526	$ -
Logs_cost	$ 17,631	$ -	$ -	$ 52,637	$ 39,250	$ 41,848	$ 144,862	$ 76,152	$ 51,478	$ 29,228	$ 5,477	$ 24,174	$ -
RipRap_cost	$ 134,386	$ 136,228	$ -	$ 30,620	$ -	$ 9,005	$ 149,377	$ 115,093	$ 8,288	$ 34,562	$ 50,692	$ 38,376	$ 22,964
Earthwork_cost	$ 3,004	$ 21,962	$ -	$ 3,004	$ -	$ -	$ 14,889	$ 14,008	$ -	$ -	$ 7,548	$ 2,802	$ -
Fish_passages_cost	$ -	$ -	$ 14,828	$ -	$ -	$ -	$ -	$ 13,700	$ -	$ -	$ -	$ -	$ -
Result Cells:													
Construction	29.2%	29.8%	30.5%	32.4%	32.7%	31.2%	30.7%	31.9%	32.6%	27.1%	31.9%	31.1%	27.5%
PED	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%	21.2%
CM	21.9%	21.9%	21.9%	21.9%	21.9%	21.9%	21.9%	21.9%	21.9%	21.9%	21.9%	21.9%	21.9%
Contingency %	26.7%	27.2%	26.7%	29.2%	28.3%	26.9%	28.3%	29.3%	28.7%	25.5%	28.8%	27.6%	24.9%

Notes: Total_Cost refers only to the construction cost.

Abbreviated Risk Analysis

Project (less than $40M): **Proctor Creek** **Alternative: PC-15**

Project Development Stage/Alternative: **Feasibility (Alternatives)**

Risk Category: **Low Risk: Typical Construction, Simple** **Meeting Date: 1/12/2017**

Total Estimated Construction Contract Cost = **$ 556,057**

	CWWBS	Feature of Work	Contract Cost		% Contingency	$ Contingency	Total
	01 LANDS AND DAMAGES	Real Estate	$ 43,000		25.00%	$ 10,750	$ 53,750
1	09 01 CHANNELS	Mobilization / Prep Work	$ 168,960		31.20%	$ 52,713	$ 221,673
2	09 01 CHANNELS	Plantings	$ 71,602		35.06%	$ 25,103	$ 96,705
3	09 01 CHANNELS	Rootwads/Log Stream Barbs/Revetments	$ 144,862		32.38%	$ 46,910	$ 191,772
4	09 01 CHANNELS	Rip Rap	$ 149,377		26.16%	$ 39,082	$ 188,459
5	09 01 CHANNELS	Earthwork (Bank Stab., Bar Shaping)	$ 14,889		36.55%	$ 5,442	$ 20,331
6	09 01 CHANNELS	Fish Passages	$ -		0.00%	$ -	$ -
7					0.00%	$ -	$ -
8			$ -		0.00%	$ -	$ -
9			$ -		0.00%	$ -	$ -
10			$ -		0.00%	$ -	$ -
11			$ -		0.00%	$ -	$ -
12	All Other	Remaining Construction Items	$ 6,367	1.2%	24.03%	$ 1,530	$ 7,897
13	30 PLANNING, ENGINEERING, AND DESIGN	Planning, Engineering, & Design	$ 140,287		21.23%	$ 29,778	$ 170,065
14	31 CONSTRUCTION MANAGEMENT	Construction Management	$ 50,045		21.95%	$ 10,985	$ 61,030
XX	FIXED DOLLAR RISK ADD (EQUALLY DISPERSED TO ALL, MUST INCLUDE JUSTIFICATION SEE BELOW)					$ -	

Totals					
Real Estate	$ 43,000	25.00%	$ 10,750	$ 53,750.00	
Total Construction Estimate	$ 556,057	30.71%	$ 170,780	$ 726,837	
Total Planning, Engineering & Design	$ 140,287	21.23%	$ 29,778	$ 170,065	
Total Construction Management	$ 50,045	21.95%	$ 10,985	$ 61,030	
Total Excluding Real Estate	**$ 746,390**	**28%**	**$ 211,543**	**$ 957,932**	
			Base	**50%**	**80%**
Confidence Level Range Estimate ($000's)			$746k	$873k	$958k

* 50% based on base is at 5% CL.

Fixed Dollar Risk Add: (Allows for additional risk to be added to the risk analsyis. Must include justification. Does not allocate to Real Estate.	

****** TOTAL PROJECT COST SUMMARY ******

PROJECT: **Proctor Creek Ecosyastem Restoration**
PROJECT NO: **PC08-1**
LOCATION: **Atlanta, GA**

DISTRICT: **Mobile District**
PREPARED: **5/17/2017**
POC: **CHIEF, COST ENGINEERING, GEORGE BROWN**

This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

Civil Works Work Breakdown Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)						TOTAL PROJECT COST (FULLY FUNDED)			
						Program Year (Budget EC): 2020									
						Effective Price Level Date: 1-Oct- 19									
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	REMAINING COST ($K)	Spent Thru: 1-Oct-15 ($K)	TOTAL FIRST COST ($K)	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
09	CHANNELS & CANALS	$276	$81	29%	$357	5.9%	$292	$85	$378		$378	4.6%	$306	$89	$395
	RELOCATIONS (non-Federal)		-			-						-			
	#N/A		-			-						-			
			-			-						-			
	CONSTRUCTION ESTIMATE TOTALS:	$276	$81		$357	5.9%	$292	$85	$378		$378	4.6%	$306	$89	$395
01	LANDS AND DAMAGES	$76	$19	25%	$95	5.9%	$80	$20	$101		$101	2.5%	$82	$21	$103
30	PLANNING, ENGINEERING & DESIGN	$105	$22	21%	$127	11.8%	$117	$25	$142		$142	22.1%	$143	$30	$174
31	CONSTRUCTION MANAGEMENT	$25	$5	22%	$30	11.8%	$28	$6	$34		$34	9.1%	$30	$7	$37
	PROJECT COST TOTALS:	$482	$127	26%	$609		$518	$136	$655		**$655**	8.3%	$562	$147	$709

_____ CHIEF, COST ENGINEERING, GEORGE BROWN

_____ PROJECT MANAGER, CHERYL HRABOVSKY

_____ CHIEF, REAL ESTATE, WILLIE PATTERSON

_____ CHIEF, PLANNING, CURTIS FLAKES

_____ CHIEF, ENGINEERING, DOUGLAS OTTO

_____ CHIEF, OPERATIONS, WILLIAM(WYNNE) FULLER

_____ CHIEF, CONSTRUCTION, GEORGE CONDOYIANNIS

_____ CHIEF, CONTRACTING,JEFFERY BURGESS

_____ CHIEF, PM-PB, xxxx

_____ CHIEF, DPM, PETE TAYLOR

ESTIMATED TOTAL PROJECT COST:		**$709**
ESTIMATED FEDERAL COST:	65%	$461
ESTIMATED NON-FEDERAL COST:	35%	$248
22 - FEASIBILITY STUDY (CAP studies):		
ESTIMATED FEDERAL COST:	50%	
ESTIMATED NON-FEDERAL COST:	50%	
ESTIMATED FEDERAL COST OF PROJECT		**$461**

****** TOTAL PROJECT COST SUMMARY ******

****** CONTRACT COST SUMMARY ******

PROJECT: Proctor Creek Ecosyastem Restoration
LOCATION: Atlanta, GA
This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

DISTRICT: Mobile District
POC: CHIEF, COST ENGINEERING, GEORGE BROWN

PREPARED: 5/17/2017

WBS Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)				TOTAL PROJECT COST (FULLY FUNDED)				
		Estimate Prepared: 17-Jan-17 Estimate Price Level: 1-Oct-16				Program Year (Budget EC): 2020 Effective Price Level Date: 1 -Oct-19								
				RISK BASED										
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
	PHASE 1 or CONTRACT 1													
09	CHANNELS & CANALS	$276	$81	29.2%	$357	5.9%	$292	$85	$378	2022Q2	4.6%	$306	$89	$395
	#N/A													
	#N/A													
	CONSTRUCTION ESTIMATE TOTALS:	$276	$81	29.2%	$357		$292	$85	$378			$306	$89	$395
01	LANDS AND DAMAGES	$76	$19	25.0%	$95	5.9%	$80	$20	$101	2021Q2	2.5%	$82	$21	$103
30	PLANNING, ENGINEERING & DESIGN													
1.0%	Project Management	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2021Q2	4.9%	$4	$1	$4
1.0%	Planning & Environmental Compliance	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2021Q2	4.9%	$4	$1	$4
4.0%	Engineering & Design	$11	$2	21.2%	$13	11.8%	$12	$3	$15	2021Q2	4.9%	$13	$3	$16
1.0%	Engineering Tech Review ITR & VE	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2021Q2	4.9%	$4	$1	$4
1.0%	Contracting & Reprographics	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2021Q2	4.9%	$4	$1	$4
3.0%	Engineering During Construction	$8	$2	21.2%	$10	11.8%	$9	$2	$11	2022Q2	9.1%	$10	$2	$12
1.0%	Planning During Construction	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2022Q2	9.1%	$4	$1	$4
1.0%	Project Operations	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2021Q2	4.9%	$4	$1	$4
6.2%	Pre-Construction Monitoring	$17	$4	21.2%	$21	11.8%	$19	$4	$23	2021Q2	4.9%	$20	$4	$24
18.5%	Post Construction Monitoring	$51	$11	21.2%	$62	11.8%	$57	$12	$69	2028Q2	39.5%	$80	$17	$96
31	CONSTRUCTION MANAGEMENT													
6.0%	Construction Management	$17	$4	21.9%	$21	11.8%	$19	$4	$23	2022Q2	9.1%	$21	$5	$25
1.5%	Project Operation:	$4	$1	21.9%	$5	11.8%	$4	$1	$5	2022Q2	9.1%	$5	$1	$6
1.5%	Project Management	$4	$1	21.9%	$5	11.8%	$4	$1	$5	2022Q2	9.1%	$5	$1	$6
	CONTRACT COST TOTALS:	$482	$127		$609		$518	$136	**$655**			$562	$147	**$709**

****** TOTAL PROJECT COST SUMMARY ******

PROJECT: **Proctor Creek Ecosyastem Restoration**
PROJECT NO: **PC08-2**
LOCATION: **Atlanta, GA**

DISTRICT: **Mobile District**
PREPARED: **5/17/2017**
POC: **CHIEF, COST ENGINEERING, GEORGE BROWN**

This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

Civil Works Work Breakdown Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)						TOTAL PROJECT COST (FULLY FUNDED)			
						Program Year (Budget EC): 2020									
						Effective Price Level Date: 1-Oct- 19									
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	REMAINING COST ($K)	Spent Thru: 1-Oct-15 ($K)	TOTAL FIRST COST ($K)	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
09	CHANNELS & CANALS	$313	$93	30%	$406	5.9%	$331	$99	$430		$430	5.1%	$348	$104	$452
	#N/A		-			-						-			
	#N/A		-			-						-			
			-			-						-			
	CONSTRUCTION ESTIMATE TOTALS:	$313	$93		$406	5.9%	$331	$99	$430		$430	5.1%	$348	$104	$452
01	LANDS AND DAMAGES	$67	$17	25%	$84	5.9%	$71	$18	$89		$89	2.5%	$73	$18	$91
30	PLANNING, ENGINEERING & DESIGN	$108	$23	21%	$131	11.8%	$121	$26	$146		$146	21.8%	$147	$31	$178
31	CONSTRUCTION MANAGEMENT	$29	$6	22%	$35	11.8%	$32	$7	$40		$40	10.2%	$36	$8	$44
	PROJECT COST TOTALS:	$517	$139	27%	$656		$556	$149	$705		**$705**	8.5%	$604	$161	$765

_____ CHIEF, COST ENGINEERING, GEORGE BROWN

_____ PROJECT MANAGER, CHERYL HRABOVSKY

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_____ CHIEF, ENGINEERING, DOUGLAS OTTO

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_____ CHIEF, CONSTRUCTION, GEORGE CONDOYIANNIS

_____ CHIEF, CONTRACTING,JEFFERY BURGESS

_____ CHIEF, PM-PB, xxxx

_____ CHIEF, DPM, PETE TAYLOR

ESTIMATED TOTAL PROJECT COST:		**$765**
ESTIMATED FEDERAL COST:	**65%**	$497
ESTIMATED NON-FEDERAL COST:	**35%**	$268
22 - FEASIBILITY STUDY (CAP studies):		
ESTIMATED FEDERAL COST:	50%	
ESTIMATED NON-FEDERAL COST:	50%	
ESTIMATED FEDERAL COST OF PROJECT		**$497**

****** TOTAL PROJECT COST SUMMARY ******

****** CONTRACT COST SUMMARY ******

PROJECT: Proctor Creek Ecosyastem Restoration
LOCATION: Atlanta, GA
This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

DISTRICT: Mobile District
POC: CHIEF, COST ENGINEERING, GEORGE BROWN

PREPARED: 5/17/2017

WBS Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)				TOTAL PROJECT COST (FULLY FUNDED)				
		Estimate Prepared: 17-Jan-17 Estimate Price Level: 1-Oct-16				Program Year (Budget EC): 2020 Effective Price Level Date: 1 -Oct-19								
				RISK BASED										
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
	PHASE 1 or CONTRACT 1													
09	CHANNELS & CANALS	$313	$93	29.8%	$406	5.9%	$331	$99	$430	2022Q3	5.1%	$348	$104	$452
	#N/A													
	#N/A													
	CONSTRUCTION ESTIMATE TOTALS:	$313	$93	29.8%	$406		$331	$99	$430			$348	$104	$452
01	LANDS AND DAMAGES	$67	$17	25.0%	$84	5.9%	$71	$18	$89	2021Q2	2.5%	$73	$18	$91
30	PLANNING, ENGINEERING & DESIGN													
1.0%	Project Management	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2021Q2	4.9%	$4	$1	$4
1.0%	Planning & Environmental Compliance	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2021Q2	4.9%	$4	$1	$4
4.0%	Engineering & Design	$13	$3	21.2%	$16	11.8%	$15	$3	$18	2021Q2	4.9%	$15	$3	$18
1.0%	Engineering Tech Review ITR & VE	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2021Q2	4.9%	$4	$1	$4
1.0%	Contracting & Reprographics	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2021Q2	4.9%	$4	$1	$4
3.0%	Engineering During Construction	$9	$2	21.2%	$11	11.8%	$10	$2	$12	2022Q3	10.2%	$11	$2	$13
1.0%	Planning During Construction	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2022Q3	10.2%	$4	$1	$4
1.0%	Project Operations	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2021Q2	4.9%	$4	$1	$4
5.4%	Pre-Construction Monitoring	$17	$4	21.2%	$21	11.8%	$19	$4	$23	2021Q2	4.9%	$20	$4	$24
16.3%	Post Construction Monitoring	$51	$11	21.2%	$62	11.8%	$57	$12	$69	2028Q2	39.5%	$80	$17	$96
31	CONSTRUCTION MANAGEMENT													
6.0%	Construction Management	$19	$4	21.9%	$23	11.8%	$21	$5	$26	2022Q3	10.2%	$23	$5	$29
1.5%	Project Operation:	$5	$1	21.9%	$6	11.8%	$6	$1	$7	2022Q3	10.2%	$6	$1	$8
1.5%	Project Management	$5	$1	21.9%	$6	11.8%	$6	$1	$7	2022Q3	10.2%	$6	$1	$8
	CONTRACT COST TOTALS:	$517	$139		$656		$556	$149	**$705**			$604	$161	**$765**

****** TOTAL PROJECT COST SUMMARY ******

PROJECT: **Proctor Creek Ecosyastem Restoration**
PROJECT NO: **PC09**
LOCATION: **Atlanta, GA**

DISTRICT: **Mobile District**
PREPARED: **5/17/2017**
POC: **CHIEF, COST ENGINEERING, GEORGE BROWN**

This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

Civil Works Work Breakdown Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)						TOTAL PROJECT COST (FULLY FUNDED)			
						Program Year (Budget EC): 2020									
						Effective Price Level Date: 1-Oct- 19									
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	REMAINING COST ($K)	Spent Thru: 1-Oct-15 ($K)	TOTAL FIRST COST ($K)	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
09	CHANNELS & CANALS	$140	$43	31%	$183	5.9%	$148	$45	$193		$193	4.6%	$155	$47	$202
	#N/A		-			-						-			
	#N/A		-			-						-			
			-			-						-			
	CONSTRUCTION ESTIMATE TOTALS:	$140	$43		$183	5.9%	$148	$45	$193		$193	4.6%	$155	$47	$202
01	LANDS AND DAMAGES	$1	$0	25%	$1	5.9%	$1	$0	$1		$1	2.5%	$1	$0	$1
30	PLANNING, ENGINEERING & DESIGN	$84	$18	21%	$102	11.8%	$94	$20	$114		$114	26.1%	$119	$25	$144
31	CONSTRUCTION MANAGEMENT	$12	$3	22%	$15	11.8%	$13	$3	$16		$16	9.1%	$15	$3	$18
	PROJECT COST TOTALS:	$237	$63	27%	$300		$257	$68	$325		**$325**	12.3%	$289	$76	$365

_____ CHIEF, COST ENGINEERING, GEORGE BROWN

_____ PROJECT MANAGER, CHERYL HRABOVSKY

_____ CHIEF, REAL ESTATE, WILLIE PATTERSON

_____ CHIEF, PLANNING, CURTIS FLAKES

_____ CHIEF, ENGINEERING, DOUGLAS OTTO

_____ CHIEF, OPERATIONS, WILLIAM(WYNNE) FULLER

_____ CHIEF, CONSTRUCTION, GEORGE CONDOYIANNIS

_____ CHIEF, CONTRACTING,JEFFERY BURGESS

_____ CHIEF, PM-PB, xxxx

_____ CHIEF, DPM, PETE TAYLOR

ESTIMATED TOTAL PROJECT COST:		**$365**
ESTIMATED FEDERAL COST:	**65%**	$237
ESTIMATED NON-FEDERAL COST:	**35%**	$128
22 - FEASIBILITY STUDY (CAP studies):		
ESTIMATED FEDERAL COST:	50%	
ESTIMATED NON-FEDERAL COST:	50%	
ESTIMATED FEDERAL COST OF PROJECT		**$237**

****** TOTAL PROJECT COST SUMMARY ******

****** CONTRACT COST SUMMARY ******

PROJECT: Proctor Creek Ecosyastem Restoration
LOCATION: Atlanta, GA
This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

DISTRICT: Mobile District
POC: CHIEF, COST ENGINEERING, GEORGE BROWN

PREPARED: 5/17/2017

WBS Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)				TOTAL PROJECT COST (FULLY FUNDED)				
		Estimate Prepared: 17-Jan-17 Estimate Price Level: 1-Oct-16				Program Year (Budget EC): 2020 Effective Price Level Date: 1 -Oct-19								
				RISK BASED										
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
	PHASE 1 or CONTRACT 1													
09	CHANNELS & CANALS	$140	$43	30.5%	$183	5.9%	$148	$45	$193	2022Q2	4.6%	$155	$47	$202
	#N/A													
	#N/A													
	CONSTRUCTION ESTIMATE TOTALS:	$140	$43	30.5%	$183		$148	$45	$193			$155	$47	$202
01	LANDS AND DAMAGES	$1	$0	25.0%	$1	5.9%	$1	$0	$1	2021Q2	2.5%	$1	$0	$1
30	PLANNING, ENGINEERING & DESIGN													
1.0%	Project Management	$1	$0	21.2%	$1	11.8%	$1	$0	$1	2021Q2	4.9%	$1	$0	$1
1.0%	Planning & Environmental Compliance	$1	$0	21.2%	$1	11.8%	$1	$0	$1	2021Q2	4.9%	$1	$0	$1
4.0%	Engineering & Design	$6	$1	21.2%	$7	11.8%	$7	$1	$8	2021Q2	4.9%	$7	$1	$9
1.0%	Engineering Tech Review ITR & VE	$1	$0	21.2%	$1	11.8%	$1	$0	$1	2021Q2	4.9%	$1	$0	$1
1.0%	Contracting & Reprographics	$1	$0	21.2%	$1	11.8%	$1	$0	$1	2021Q2	4.9%	$1	$0	$1
3.0%	Engineering During Construction	$4	$1	21.2%	$5	11.8%	$4	$1	$5	2022Q2	9.1%	$5	$1	$6
1.0%	Planning During Construction	$1	$0	21.2%	$1	11.8%	$1	$0	$1	2022Q2	9.1%	$1	$0	$1
1.0%	Project Operations	$1	$0	21.2%	$1	11.8%	$1	$0	$1	2021Q2	4.9%	$1	$0	$1
12.1%	Pre-Construction Monitoring	$17	$4	21.2%	$21	11.8%	$19	$4	$23	2021Q2	4.9%	$20	$4	$24
36.4%	Post Construction Monitoring	$51	$11	21.2%	$62	11.8%	$57	$12	$69	2028Q2	39.5%	$80	$17	$96
31	CONSTRUCTION MANAGEMENT													
6.0%	Construction Management	$8	$2	21.9%	$10	11.8%	$9	$2	$11	2022Q2	9.1%	$10	$2	$12
1.5%	Project Operation:	$2	$0	21.9%	$2	11.8%	$2	$0	$3	2022Q2	9.1%	$2	$1	$3
1.5%	Project Management	$2	$0	21.9%	$2	11.8%	$2	$0	$3	2022Q2	9.1%	$2	$1	$3
	CONTRACT COST TOTALS:	$237	$63		$300		$257	$68	**$325**			$289	$76	**$365**

****** TOTAL PROJECT COST SUMMARY ******

PROJECT: **Proctor Creek Ecosyastem Restoration**
PROJECT NO: **PC10**
LOCATION: **Atlanta, GA**

DISTRICT: **Mobile District**
PREPARED: **5/17/2017**
POC: **CHIEF, COST ENGINEERING, GEORGE BROWN**

This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

Civil Works Work Breakdown Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)						TOTAL PROJECT COST (FULLY FUNDED)			
						Program Year (Budget EC): 2020									
						Effective Price Level Date: 1-Oct- 19									
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	REMAINING COST ($K)	Spent Thru: 1-Oct-15 ($K)	TOTAL FIRST COST ($K)	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
09	CHANNELS & CANALS	$340	$110	32%	$450	5.9%	$360	$117	$477		$477	5.1%	$378	$123	$501
	#N/A		-			-						-			
	#N/A		-			-						-			
			-			-						-			
	CONSTRUCTION ESTIMATE TOTALS:	$340	$110		$450	5.9%	$360	$117	$477		$477	5.1%	$378	$123	$501
01	LANDS AND DAMAGES	$24	$6	25%	$30	5.9%	$26	$6	$32		$32	2.5%	$26	$7	$33
30	PLANNING, ENGINEERING & DESIGN	$110	$23	21%	$133	11.8%	$123	$26	$149		$149	21.6%	$150	$32	$181
31	CONSTRUCTION MANAGEMENT	$30	$7	22%	$37	11.8%	$34	$7	$41		$41	10.2%	$37	$8	$45
	PROJECT COST TOTALS:	$504	$146	29%	$650		$542	$156	$699		**$699**	8.8%	$591	$169	$760

_____ CHIEF, COST ENGINEERING, GEORGE BROWN

_____ PROJECT MANAGER, CHERYL HRABOVSKY

_____ CHIEF, REAL ESTATE, WILLIE PATTERSON

_____ CHIEF, PLANNING, CURTIS FLAKES

_____ CHIEF, ENGINEERING, DOUGLAS OTTO

_____ CHIEF, OPERATIONS, WILLIAM(WYNNE) FULLER

_____ CHIEF, CONSTRUCTION, GEORGE CONDOYIANNIS

_____ CHIEF, CONTRACTING,JEFFERY BURGESS

_____ CHIEF, PM-PB, xxxx

_____ CHIEF, DPM, PETE TAYLOR

ESTIMATED TOTAL PROJECT COST:		**$760**
ESTIMATED FEDERAL COST:	**65%**	$494
ESTIMATED NON-FEDERAL COST:	**35%**	$266
22 - FEASIBILITY STUDY (CAP studies):		
ESTIMATED FEDERAL COST:	50%	
ESTIMATED NON-FEDERAL COST:	50%	
ESTIMATED FEDERAL COST OF PROJECT		**$494**

****** TOTAL PROJECT COST SUMMARY ******

****** CONTRACT COST SUMMARY ******

PROJECT: Proctor Creek Ecosyastem Restoration
LOCATION: Atlanta, GA
This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

DISTRICT: Mobile District
POC: CHIEF, COST ENGINEERING, GEORGE BROWN

PREPARED: 5/17/2017

WBS Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)				TOTAL PROJECT COST (FULLY FUNDED)				
		Estimate Prepared: 17-Jan-17 Estimate Price Level: 1-Oct-16				Program Year (Budget EC): 2020 Effective Price Level Date: 1 -Oct-19								
				RISK BASED										
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
	PHASE 1 or CONTRACT 1													
09	CHANNELS & CANALS	$340	$110	32.4%	$450	5.9%	$360	$117	$477	2022Q3	5.1%	$378	$123	$501
	#N/A													
	#N/A													
	CONSTRUCTION ESTIMATE TOTALS:	$340	$110	32.4%	$450		$360	$117	$477			$378	$123	$501
01	LANDS AND DAMAGES	$24	$6	25.0%	$30	5.9%	$26	$6	$32	2021Q2	2.5%	$26	$7	$33
30	PLANNING, ENGINEERING & DESIGN													
1.0%	Project Management	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2021Q2	4.9%	$4	$1	$4
1.0%	Planning & Environmental Compliance	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2021Q2	4.9%	$4	$1	$4
4.0%	Engineering & Design	$14	$3	21.2%	$17	11.8%	$16	$3	$19	2021Q2	4.9%	$16	$3	$20
1.0%	Engineering Tech Review ITR & VE	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2021Q2	4.9%	$4	$1	$4
1.0%	Contracting & Reprographics	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2021Q2	4.9%	$4	$1	$4
3.0%	Engineering During Construction	$10	$2	21.2%	$12	11.8%	$11	$2	$14	2022Q3	10.2%	$12	$3	$15
1.0%	Planning During Construction	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2022Q3	10.2%	$4	$1	$4
1.0%	Project Operations	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2021Q2	4.9%	$4	$1	$4
5.0%	Pre-Construction Monitoring	$17	$4	21.2%	$21	11.8%	$19	$4	$23	2021Q2	4.9%	$20	$4	$24
15.0%	Post Construction Monitoring	$51	$11	21.2%	$62	11.8%	$57	$12	$69	2028Q2	39.5%	$80	$17	$96
31	CONSTRUCTION MANAGEMENT													
6.0%	Construction Management	$20	$4	21.9%	$24	11.8%	$22	$5	$27	2022Q3	10.2%	$25	$5	$30
1.5%	Project Operation:	$5	$1	21.9%	$6	11.8%	$6	$1	$7	2022Q3	10.2%	$6	$1	$8
1.5%	Project Management	$5	$1	21.9%	$6	11.8%	$6	$1	$7	2022Q3	10.2%	$6	$1	$8
	CONTRACT COST TOTALS:	$504	$146		$650		$542	$156	**$699**			$591	$169	**$760**

****** TOTAL PROJECT COST SUMMARY ******

PROJECT: **Proctor Creek Ecosyastem Restoration**
PROJECT NO: **PC13**
LOCATION: **Atlanta, GA**

DISTRICT: **Mobile District**
PREPARED: **5/17/2017**
POC: **CHIEF, COST ENGINEERING, GEORGE BROWN**

This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

Civil Works Work Breakdown Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)						TOTAL PROJECT COST (FULLY FUNDED)			
						Program Year (Budget EC): 2020									
						Effective Price Level Date: 1-Oct- 19									
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	REMAINING COST ($K)	Spent Thru: 1-Oct-15 ($K)	TOTAL FIRST COST ($K)	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
09	CHANNELS & CANALS	$169	$55	33%	$224	5.9%	$179	$59	$237		$237	4.6%	$187	$61	$248
	#N/A		-			-						-			
	#N/A		-			-						-			
			-			-						-			
	CONSTRUCTION ESTIMATE TOTALS:	$169	$55		$224	5.9%	$179	$59	$237		$237	4.6%	$187	$61	$248
01	LANDS AND DAMAGES	$33	$8	25%	$41	5.9%	$35	$9	$44		$44	2.5%	$36	$9	$45
30	PLANNING, ENGINEERING & DESIGN	$92	$20	21%	$112	11.8%	$103	$22	$125		$125	24.4%	$128	$27	$155
31	CONSTRUCTION MANAGEMENT	$16	$4	22%	$20	11.8%	$18	$4	$22		$22	9.1%	$20	$4	$24
	PROJECT COST TOTALS:	$310	$87	28%	$397		$335	$93	$428		**$428**	10.4%	$370	$102	$472

_____ CHIEF, COST ENGINEERING, GEORGE BROWN

_____ PROJECT MANAGER, CHERYL HRABOVSKY

_____ CHIEF, REAL ESTATE, WILLIE PATTERSON

_____ CHIEF, PLANNING, CURTIS FLAKES

_____ CHIEF, ENGINEERING, DOUGLAS OTTO

_____ CHIEF, OPERATIONS, WILLIAM(WYNNE) FULLER

_____ CHIEF, CONSTRUCTION, GEORGE CONDOYIANNIS

_____ CHIEF, CONTRACTING,JEFFERY BURGESS

_____ CHIEF, PM-PB, xxxx

_____ CHIEF, DPM, PETE TAYLOR

ESTIMATED TOTAL PROJECT COST:		**$472**
ESTIMATED FEDERAL COST:	**65%**	$307
ESTIMATED NON-FEDERAL COST:	**35%**	$165
22 - FEASIBILITY STUDY (CAP studies):		
ESTIMATED FEDERAL COST:	50%	
ESTIMATED NON-FEDERAL COST:	50%	
ESTIMATED FEDERAL COST OF PROJECT		**$307**

****** TOTAL PROJECT COST SUMMARY ******

****** CONTRACT COST SUMMARY ******

PROJECT: Proctor Creek Ecosyastem Restoration
LOCATION: Atlanta, GA
This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

DISTRICT: Mobile District
POC: CHIEF, COST ENGINEERING, GEORGE BROWN

PREPARED: 5/17/2017

WBS Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)				TOTAL PROJECT COST (FULLY FUNDED)				
		Estimate Prepared: 17-Jan-17 Estimate Price Level: 1-Oct-16				Program Year (Budget EC): 2020 Effective Price Level Date: 1 -Oct-19								
				RISK BASED										
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
	PHASE 1 or CONTRACT 1													
09	CHANNELS & CANALS	$169	$55	32.7%	$224	5.9%	$179	$59	$237	2022Q2	4.6%	$187	$61	$248
	#N/A													
	#N/A													
	CONSTRUCTION ESTIMATE TOTALS:	$169	$55	32.7%	$224		$179	$59	$237			$187	$61	$248
01	LANDS AND DAMAGES	$33	$8	25.0%	$41	5.9%	$35	$9	$44	2021Q2	2.5%	$36	$9	$45
30	PLANNING, ENGINEERING & DESIGN													
1.0%	Project Management	$2	$0	21.2%	$2	11.8%	$2	$0	$3	2021Q2	4.9%	$2	$0	$3
1.0%	Planning & Environmental Compliance	$2	$0	21.2%	$2	11.8%	$2	$0	$3	2021Q2	4.9%	$2	$0	$3
4.0%	Engineering & Design	$7	$1	21.2%	$8	11.8%	$8	$2	$9	2021Q2	4.9%	$8	$2	$10
1.0%	Engineering Tech Review ITR & VE	$2	$0	21.2%	$2	11.8%	$2	$0	$3	2021Q2	4.9%	$2	$0	$3
1.0%	Contracting & Reprographics	$2	$0	21.2%	$2	11.8%	$2	$0	$3	2021Q2	4.9%	$2	$0	$3
3.0%	Engineering During Construction	$5	$1	21.2%	$6	11.8%	$6	$1	$7	2022Q2	9.1%	$6	$1	$7
1.0%	Planning During Construction	$2	$0	21.2%	$2	11.8%	$2	$0	$3	2022Q2	9.1%	$2	$1	$3
1.0%	Project Operations	$2	$0	21.2%	$2	11.8%	$2	$0	$3	2021Q2	4.9%	$2	$0	$3
10.1%	Pre-Construction Monitoring	$17	$4	21.2%	$21	11.8%	$19	$4	$23	2021Q2	4.9%	$20	$4	$24
30.2%	Post Construction Monitoring	$51	$11	21.2%	$62	11.8%	$57	$12	$69	2028Q2	39.5%	$80	$17	$96
31	CONSTRUCTION MANAGEMENT													
6.0%	Construction Management	$10	$2	21.9%	$12	11.8%	$11	$2	$14	2022Q2	9.1%	$12	$3	$15
1.5%	Project Operation:	$3	$1	21.9%	$4	11.8%	$3	$1	$4	2022Q2	9.1%	$4	$1	$4
1.5%	Project Management	$3	$1	21.9%	$4	11.8%	$3	$1	$4	2022Q2	9.1%	$4	$1	$4
	CONTRACT COST TOTALS:	$310	$87		$397		$335	$93	**$428**			$370	$102	**$472**

****** TOTAL PROJECT COST SUMMARY ******

PROJECT: **Proctor Creek Ecosyastem Restoration**
PROJECT NO: **PC14**
LOCATION: **Atlanta, GA**

DISTRICT: **Mobile District**
PREPARED: **5/17/2017**
POC: **CHIEF, COST ENGINEERING, GEORGE BROWN**

This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

Civil Works Work Breakdown Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)						TOTAL PROJECT COST (FULLY FUNDED)			
						Program Year (Budget EC): 2020									
						Effective Price Level Date: 1-Oct- 19									
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	REMAINING COST ($K)	Spent Thru: 1-Oct-15 ($K)	TOTAL FIRST COST ($K)	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
09	CHANNELS & CANALS	$124	$39	31%	$163	5.9%	$131	$41	$172		$172	4.6%	$137	$43	$180
	#N/A		-			-						-			
	#N/A		-			-						-			
			-			-						-			
	CONSTRUCTION ESTIMATE TOTALS:	$124	$39		$163	5.9%	$131	$41	$172		$172	4.6%	$137	$43	$180
01	LANDS AND DAMAGES	$19	$5	25%	$24	5.9%	$20	$5	$25		$25	2.5%	$21	$5	$26
30	PLANNING, ENGINEERING & DESIGN	$83	$18	21%	$101	11.8%	$93	$20	$113		$113	26.4%	$117	$25	$142
31	CONSTRUCTION MANAGEMENT	$11	$2	22%	$13	11.8%	$12	$3	$15		$15	9.1%	$13	$3	$16
	PROJECT COST TOTALS:	$237	$63	27%	$300		$257	$68	$325		**$325**	12.2%	$289	$76	$364

CHIEF, COST ENGINEERING, GEORGE BROWN

PROJECT MANAGER, CHERYL HRABOVSKY

CHIEF, REAL ESTATE, WILLIE PATTERSON

CHIEF, PLANNING, CURTIS FLAKES

CHIEF, ENGINEERING, DOUGLAS OTTO

CHIEF, OPERATIONS, WILLIAM(WYNNE) FULLER

CHIEF, CONSTRUCTION, GEORGE CONDOYIANNIS

CHIEF, CONTRACTING,JEFFERY BURGESS

CHIEF, PM-PB, xxxx

CHIEF, DPM, PETE TAYLOR

ESTIMATED TOTAL PROJECT COST:		**$364**
ESTIMATED FEDERAL COST:	**65%**	$237
ESTIMATED NON-FEDERAL COST:	**35%**	$128
22 - FEASIBILITY STUDY (CAP studies):		
ESTIMATED FEDERAL COST:	50%	
ESTIMATED NON-FEDERAL COST:	50%	
ESTIMATED FEDERAL COST OF PROJECT		**$237**

****** TOTAL PROJECT COST SUMMARY ******

****** CONTRACT COST SUMMARY ******

PROJECT: Proctor Creek Ecosyastem Restoration
LOCATION: Atlanta, GA
This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

DISTRICT: Mobile District
POC: CHIEF, COST ENGINEERING, GEORGE BROWN

PREPARED: 5/17/2017

WBS Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)				TOTAL PROJECT COST (FULLY FUNDED)				
		Estimate Prepared: 17-Jan-17 Estimate Price Level: 1-Oct-16				Program Year (Budget EC): 2020 Effective Price Level Date: 1 -Oct-19								
				RISK BASED										
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
	PHASE 1 or CONTRACT 1													
09	CHANNELS & CANALS	$124	$39	31.2%	$163	5.9%	$131	$41	$172	2022Q2	4.6%	$137	$43	$180
	#N/A													
	#N/A													
	CONSTRUCTION ESTIMATE TOTALS:	$124	$39	31.2%	$163		$131	$41	$172			$137	$43	$180
01	LANDS AND DAMAGES	$19	$5	25.0%	$24	5.9%	$20	$5	$25	2021Q2	2.5%	$21	$5	$26
30	PLANNING, ENGINEERING & DESIGN													
1.0%	Project Management	$1	$0	21.2%	$1	11.8%	$1	$0	$1	2021Q2	4.9%	$1	$0	$1
1.0%	Planning & Environmental Compliance	$1	$0	21.2%	$1	11.8%	$1	$0	$1	2021Q2	4.9%	$1	$0	$1
4.0%	Engineering & Design	$5	$1	21.2%	$6	11.8%	$6	$1	$7	2021Q2	4.9%	$6	$1	$7
1.0%	Engineering Tech Review ITR & VE	$1	$0	21.2%	$1	11.8%	$1	$0	$1	2021Q2	4.9%	$1	$0	$1
1.0%	Contracting & Reprographics	$1	$0	21.2%	$1	11.8%	$1	$0	$1	2021Q2	4.9%	$1	$0	$1
3.0%	Engineering During Construction	$4	$1	21.2%	$5	11.8%	$4	$1	$5	2022Q2	9.1%	$5	$1	$6
1.0%	Planning During Construction	$1	$0	21.2%	$1	11.8%	$1	$0	$1	2022Q2	9.1%	$1	$0	$1
1.0%	Project Operations	$1	$0	21.2%	$1	11.8%	$1	$0	$1	2021Q2	4.9%	$1	$0	$1
13.7%	Pre-Construction Monitoring	$17	$4	21.2%	$21	11.8%	$19	$4	$23	2021Q2	4.9%	$20	$4	$24
41.1%	Post Construction Monitoring	$51	$11	21.2%	$62	11.8%	$57	$12	$69	2028Q2	39.5%	$80	$17	$96
31	CONSTRUCTION MANAGEMENT													
6.0%	Construction Management	$7	$2	21.9%	$9	11.8%	$8	$2	$10	2022Q2	9.1%	$9	$2	$10
1.5%	Project Operation:	$2	$0	21.9%	$2	11.8%	$2	$0	$3	2022Q2	9.1%	$2	$1	$3
1.5%	Project Management	$2	$0	21.9%	$2	11.8%	$2	$0	$3	2022Q2	9.1%	$2	$1	$3
	CONTRACT COST TOTALS:	$237	$63		$300		$257	$68	**$325**			$289	$76	**$364**

****** TOTAL PROJECT COST SUMMARY ******

PROJECT: **Proctor Creek Ecosyastem Restoration**
PROJECT NO: **PC15**
LOCATION: **Atlanta, GA**

DISTRICT: **Mobile District**
PREPARED: **5/17/2017**
POC: **CHIEF, COST ENGINEERING, GEORGE BROWN**

This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

Civil Works Work Breakdown Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)						TOTAL PROJECT COST (FULLY FUNDED)			
						Program Year (Budget EC): 2020									
						Effective Price Level Date: 1-Oct- 19									
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	REMAINING COST ($K)	Spent Thru: 1-Oct-15 ($K)	TOTAL FIRST COST ($K)	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
02	RELOCATIONS	$4	$1	31%	$5	5.9%	$4	$1	$6		$6	5.1%	$4	$1	$6
09	CHANNELS & CANALS	$552	$169	31%	$721	5.9%	$584	$179	$764		$764	0.5%	$587	$180	$768
	#N/A		-			-						-			
			-			-						-			
	CONSTRUCTION ESTIMATE TOTALS:	$556	$171		$727	5.9%	$589	$181	$769		$769	0.5%	$592	$182	$774
01	LANDS AND DAMAGES	$43	$11	25%	$54	5.9%	$46	$11	$57		$57	2.5%	$47	$12	$58
30	PLANNING, ENGINEERING & DESIGN	$143	$30	21%	$173	11.8%	$160	$34	$194		$194	18.1%	$189	$40	$229
31	CONSTRUCTION MANAGEMENT	$49	$11	22%	$60	11.8%	$55	$12	$67		$67	10.2%	$60	$13	$74
	PROJECT COST TOTALS:	$791	$222	28%	$1,013		$849	$238	$1,087		**$1,087**	4.4%	$888	$247	$1,134

_____ CHIEF, COST ENGINEERING, GEORGE BROWN

_____ PROJECT MANAGER, CHERYL HRABOVSKY

_____ CHIEF, REAL ESTATE, WILLIE PATTERSON

_____ CHIEF, PLANNING, CURTIS FLAKES

_____ CHIEF, ENGINEERING, DOUGLAS OTTO

_____ CHIEF, OPERATIONS, WILLIAM(WYNNE) FULLER

_____ CHIEF, CONSTRUCTION, GEORGE CONDOYIANNIS

_____ CHIEF, CONTRACTING,JEFFERY BURGESS

_____ CHIEF, PM-PB, xxxx

_____ CHIEF, DPM, PETE TAYLOR

ESTIMATED TOTAL PROJECT COST:		**$1,134**
ESTIMATED FEDERAL COST:	**65%**	$737
ESTIMATED NON-FEDERAL COST:	**35%**	$397
22 - FEASIBILITY STUDY (CAP studies):		
ESTIMATED FEDERAL COST:	50%	
ESTIMATED NON-FEDERAL COST:	50%	
ESTIMATED FEDERAL COST OF PROJECT		**$737**

****** TOTAL PROJECT COST SUMMARY ******

****** CONTRACT COST SUMMARY ******

PROJECT: Proctor Creek Ecosyastem Restoration
LOCATION: Atlanta, GA
This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

DISTRICT: Mobile District
POC: CHIEF, COST ENGINEERING, GEORGE BROWN

PREPARED: 5/17/2017

WBS Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)				TOTAL PROJECT COST (FULLY FUNDED)				
		Estimate Prepared: 17-Jan-17 Estimate Price Level: 1-Oct-16				Program Year (Budget EC): 2020 Effective Price Level Date: 1 -Oct-19								
				RISK BASED										
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
	PHASE 1 or CONTRACT 1													
02	RELOCATIONS	$4	$1	30.7%	$5	5.9%	$4	$1	$6	2022Q3	5.1%	$4	$1	$6
09	CHANNELS & CANALS	$552	$169	30.7%	$721	5.9%	$584	$179	$764	2020Q2	0.5%	$587	$180	$768
	#N/A													
	CONSTRUCTION ESTIMATE TOTALS:	$556	$171	30.7%	$727		$589	$181	$769			$592	$182	$774
01	LANDS AND DAMAGES	$43	$11	25.0%	$54	5.9%	$46	$11	$57	2021Q2	2.5%	$47	$12	$58
30	PLANNING, ENGINEERING & DESIGN													
1.0%	Project Management	$6	$1	21.2%	$7	11.8%	$7	$1	$8	2021Q2	4.9%	$7	$1	$9
1.0%	Planning & Environmental Compliance	$6	$1	21.2%	$7	11.8%	$7	$1	$8	2021Q2	4.9%	$7	$1	$9
4.0%	Engineering & Design	$22	$5	21.2%	$27	11.8%	$25	$5	$30	2021Q2	4.9%	$26	$5	$31
1.0%	Engineering Tech Review ITR & VE	$6	$1	21.2%	$7	11.8%	$7	$1	$8	2021Q2	4.9%	$7	$1	$9
1.0%	Contracting & Reprographics	$6	$1	21.2%	$7	11.8%	$7	$1	$8	2021Q2	4.9%	$7	$1	$9
3.0%	Engineering During Construction	$17	$4	21.2%	$21	11.8%	$19	$4	$23	2022Q3	10.2%	$21	$4	$25
1.0%	Planning During Construction	$6	$1	21.2%	$7	11.8%	$7	$1	$8	2022Q3	10.2%	$7	$2	$9
1.0%	Project Operations	$6	$1	21.2%	$7	11.8%	$7	$1	$8	2021Q2	4.9%	$7	$1	$9
3.1%	Pre-Construction Monitoring	$17	$4	21.2%	$21	11.8%	$19	$4	$23	2021Q2	4.9%	$20	$4	$24
9.2%	Post Construction Monitoring	$51	$11	21.2%	$62	11.8%	$57	$12	$69	2028Q2	39.5%	$80	$17	$96
31	CONSTRUCTION MANAGEMENT													
6.0%	Construction Management	$33	$7	21.9%	$40	11.8%	$37	$8	$45	2022Q3	10.2%	$41	$9	$50
1.5%	Project Operation:	$8	$2	21.9%	$10	11.8%	$9	$2	$11	2022Q3	10.2%	$10	$2	$12
1.5%	Project Management	$8	$2	21.9%	$10	11.8%	$9	$2	$11	2022Q3	10.2%	$10	$2	$12
	CONTRACT COST TOTALS:	$791	$222		$1,013		$849	$238	**$1,087**			$888	$247	**$1,134**

****** TOTAL PROJECT COST SUMMARY ******

PROJECT: **Proctor Creek Ecosyastem Restoration**
PROJECT NO: **PC21**
LOCATION: **Atlanta, GA**

DISTRICT: **Mobile District**
PREPARED: **5/17/2017**
POC: **CHIEF, COST ENGINEERING, GEORGE BROWN**

This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

Civil Works Work Breakdown Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)						TOTAL PROJECT COST (FULLY FUNDED)			
						Program Year (Budget EC): 2020									
						Effective Price Level Date: 1-Oct- 19									
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	REMAINING COST ($K)	Spent Thru: 1-Oct-15 ($K)	TOTAL FIRST COST ($K)	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
09	CHANNELS & CANALS	$609	$194	32%	$803	5.9%	$645	$206	$851		$851	3.0%	$664	$212	$876
	#N/A		-			-						-			
	#N/A		-			-						-			
			-			-						-			
	CONSTRUCTION ESTIMATE TOTALS:	$609	$194		$803	5.9%	$645	$206	$851		$851	3.0%	$664	$212	$876
01	LANDS AND DAMAGES	$61	$15	25%	$76	5.9%	$65	$16	$81		$81	2.5%	$66	$17	$83
30	PLANNING, ENGINEERING & DESIGN	$146	$31	21%	$177	11.8%	$163	$35	$198		$198	17.1%	$191	$41	$232
31	CONSTRUCTION MANAGEMENT	$55	$12	22%	$67	11.8%	$62	$13	$75		$75	5.9%	$65	$14	$79
	PROJECT COST TOTALS:	$871	$253	29%	$1,124		$934	$270	$1,204		**$1,204**	5.5%	$987	$283	$1,270

_____ CHIEF, COST ENGINEERING, GEORGE BROWN

_____ PROJECT MANAGER, CHERYL HRABOVSKY

_____ CHIEF, REAL ESTATE, WILLIE PATTERSON

_____ CHIEF, PLANNING, CURTIS FLAKES

_____ CHIEF, ENGINEERING, DOUGLAS OTTO

_____ CHIEF, OPERATIONS, WILLIAM(WYNNE) FULLER

_____ CHIEF, CONSTRUCTION, GEORGE CONDOYIANNIS

_____ CHIEF, CONTRACTING,JEFFERY BURGESS

_____ CHIEF, PM-PB, xxxx

_____ CHIEF, DPM, PETE TAYLOR

ESTIMATED TOTAL PROJECT COST:		**$1,270**
ESTIMATED FEDERAL COST:	**65%**	$826
ESTIMATED NON-FEDERAL COST:	**35%**	$445
22 - FEASIBILITY STUDY (CAP studies):		
ESTIMATED FEDERAL COST:	50%	
ESTIMATED NON-FEDERAL COST:	50%	
ESTIMATED FEDERAL COST OF PROJECT		**$826**

****** TOTAL PROJECT COST SUMMARY ******

****** CONTRACT COST SUMMARY ******

PROJECT: Proctor Creek Ecosyastem Restoration
LOCATION: Atlanta, GA
This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

DISTRICT: Mobile District
POC: CHIEF, COST ENGINEERING, GEORGE BROWN

PREPARED: 5/17/2017

WBS Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)				TOTAL PROJECT COST (FULLY FUNDED)				
		Estimate Prepared: 17-Jan-17 Estimate Price Level: 1-Oct-16				Program Year (Budget EC): 2020 Effective Price Level Date: 1 -Oct-19								
				RISK BASED										
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
	PHASE 1 or CONTRACT 1													
09	CHANNELS & CANALS	$609	$194	31.9%	$803	5.9%	$645	$206	$851	2021Q3	3.0%	$664	$212	$876
	#N/A													
	#N/A													
	CONSTRUCTION ESTIMATE TOTALS:	$609	$194	31.9%	$803		$645	$206	$851			$664	$212	$876
01	LANDS AND DAMAGES	$61	$15	25.0%	$76	5.9%	$65	$16	$81	2021Q2	2.5%	$66	$17	$83
30	PLANNING, ENGINEERING & DESIGN													
1.0%	Project Management	$6	$1	21.2%	$7	11.8%	$7	$1	$8	2021Q2	4.9%	$7	$1	$9
1.0%	Planning & Environmental Compliance	$6	$1	21.2%	$7	11.8%	$7	$1	$8	2021Q2	4.9%	$7	$1	$9
4.0%	Engineering & Design	$24	$5	21.2%	$29	11.8%	$27	$6	$33	2021Q2	4.9%	$28	$6	$34
1.0%	Engineering Tech Review ITR & VE	$6	$1	21.2%	$7	11.8%	$7	$1	$8	2021Q2	4.9%	$7	$1	$9
1.0%	Contracting & Reprographics	$6	$1	21.2%	$7	11.8%	$7	$1	$8	2021Q2	4.9%	$7	$1	$9
3.0%	Engineering During Construction	$18	$4	21.2%	$22	11.8%	$20	$4	$24	2021Q3	5.9%	$21	$5	$26
1.0%	Planning During Construction	$6	$1	21.2%	$7	11.8%	$7	$1	$8	2021Q3	5.9%	$7	$2	$9
1.0%	Project Operations	$6	$1	21.2%	$7	11.8%	$7	$1	$8	2021Q2	4.9%	$7	$1	$9
2.8%	Pre-Construction Monitoring	$17	$4	21.2%	$21	11.8%	$19	$4	$23	2021Q2	4.9%	$20	$4	$24
8.4%	Post Construction Monitoring	$51	$11	21.2%	$62	11.8%	$57	$12	$69	2028Q2	39.5%	$80	$17	$96
31	CONSTRUCTION MANAGEMENT													
6.0%	Construction Management	$37	$8	21.9%	$45	11.8%	$41	$9	$50	2021Q3	5.9%	$44	$10	$53
1.5%	Project Operation:	$9	$2	21.9%	$11	11.8%	$10	$2	$12	2021Q3	5.9%	$11	$2	$13
1.5%	Project Management	$9	$2	21.9%	$11	11.8%	$10	$2	$12	2021Q3	5.9%	$11	$2	$13
	CONTRACT COST TOTALS:	$871	$253		$1,124		$934	$270	**$1,204**			$987	$283	**$1,270**

****** TOTAL PROJECT COST SUMMARY ******

PROJECT: **Proctor Creek Ecosyastem Restoration**
PROJECT NO: **TC02**
LOCATION: **Atlanta, GA**

DISTRICT: **Mobile District**
PREPARED: **5/17/2017**
POC: **CHIEF, COST ENGINEERING, GEORGE BROWN**

This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

Civil Works Work Breakdown Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)						TOTAL PROJECT COST (FULLY FUNDED)			
						Program Year (Budget EC): 2020									
						Effective Price Level Date: 1-Oct- 19									
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	REMAINING COST ($K)	Spent Thru: 1-Oct-15 ($K)	TOTAL FIRST COST ($K)	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
09	CHANNELS & CANALS	$328	$105	32%	$433	5.9%	$347	$111	$458		$458	5.1%	$365	$116	$481
	#N/A		-			-						-			
	#N/A		-			-						-			
			-			-						-			
	CONSTRUCTION ESTIMATE TOTALS:	$328	$105		$433	5.9%	$347	$111	$458		$458	5.1%	$365	$116	$481
01	LANDS AND DAMAGES	$21	$5	25%	$26	5.9%	$22	$6	$28		$28	2.5%	$23	$6	$28
30	PLANNING, ENGINEERING & DESIGN	$109	$23	21%	$132	11.8%	$122	$26	$148		$148	21.7%	$148	$31	$180
31	CONSTRUCTION MANAGEMENT	$30	$7	22%	$37	11.8%	$34	$7	$41		$41	10.2%	$37	$8	$45
	PROJECT COST TOTALS:	$488	$140	29%	$628		$525	$150	$675		**$675**	8.9%	$573	$162	$735

_____ CHIEF, COST ENGINEERING, GEORGE BROWN

_____ PROJECT MANAGER, CHERYL HRABOVSKY

_____ CHIEF, REAL ESTATE, WILLIE PATTERSON

_____ CHIEF, PLANNING, CURTIS FLAKES

_____ CHIEF, ENGINEERING, DOUGLAS OTTO

_____ CHIEF, OPERATIONS, WILLIAM(WYNNE) FULLER

_____ CHIEF, CONSTRUCTION, GEORGE CONDOYIANNIS

_____ CHIEF, CONTRACTING,JEFFERY BURGESS

_____ CHIEF, PM-PB, xxxx

_____ CHIEF, DPM, PETE TAYLOR

ESTIMATED TOTAL PROJECT COST:		**$735**
ESTIMATED FEDERAL COST:	**65%**	$478
ESTIMATED NON-FEDERAL COST:	**35%**	$257
22 - FEASIBILITY STUDY (CAP studies):		
ESTIMATED FEDERAL COST:	50%	
ESTIMATED NON-FEDERAL COST:	50%	
ESTIMATED FEDERAL COST OF PROJECT		**$478**

****** TOTAL PROJECT COST SUMMARY ******

****** CONTRACT COST SUMMARY ******

PROJECT: Proctor Creek Ecosyastem Restoration
LOCATION: Atlanta, GA
This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

DISTRICT: Mobile District
POC: CHIEF, COST ENGINEERING, GEORGE BROWN

PREPARED: 5/17/2017

WBS Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)				TOTAL PROJECT COST (FULLY FUNDED)				
		Estimate Prepared: 17-Jan-17 Estimate Price Level: 1-Oct-16				Program Year (Budget EC): 2020 Effective Price Level Date: 1 -Oct-19								
				RISK BASED										
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
	PHASE 1 or CONTRACT 1													
09	CHANNELS & CANALS	$328	$105	31.9%	$433	5.9%	$347	$111	$458	2022Q3	5.1%	$365	$116	$481
	#N/A													
	#N/A													
	CONSTRUCTION ESTIMATE TOTALS:	$328	$105	31.9%	$433		$347	$111	$458			$365	$116	$481
01	LANDS AND DAMAGES	$21	$5	25.0%	$26	5.9%	$22	$6	$28	2021Q2	2.5%	$23	$6	$28
30	PLANNING, ENGINEERING & DESIGN													
1.0%	Project Management	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2021Q2	4.9%	$4	$1	$4
1.0%	Planning & Environmental Compliance	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2021Q2	4.9%	$4	$1	$4
4.0%	Engineering & Design	$13	$3	21.2%	$16	11.8%	$15	$3	$18	2021Q2	4.9%	$15	$3	$18
1.0%	Engineering Tech Review ITR & VE	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2021Q2	4.9%	$4	$1	$4
1.0%	Contracting & Reprographics	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2021Q2	4.9%	$4	$1	$4
3.0%	Engineering During Construction	$10	$2	21.2%	$12	11.8%	$11	$2	$14	2022Q3	10.2%	$12	$3	$15
1.0%	Planning During Construction	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2022Q3	10.2%	$4	$1	$4
1.0%	Project Operations	$3	$1	21.2%	$4	11.8%	$3	$1	$4	2021Q2	4.9%	$4	$1	$4
5.2%	Pre-Construction Monitoring	$17	$4	21.2%	$21	11.8%	$19	$4	$23	2021Q2	4.9%	$20	$4	$24
15.5%	Post Construction Monitoring	$51	$11	21.2%	$62	11.8%	$57	$12	$69	2028Q2	39.5%	$80	$17	$96
31	CONSTRUCTION MANAGEMENT													
6.0%	Construction Management	$20	$4	21.9%	$24	11.8%	$22	$5	$27	2022Q3	10.2%	$25	$5	$30
1.5%	Project Operation:	$5	$1	21.9%	$6	11.8%	$6	$1	$7	2022Q3	10.2%	$6	$1	$8
1.5%	Project Management	$5	$1	21.9%	$6	11.8%	$6	$1	$7	2022Q3	10.2%	$6	$1	$8
	CONTRACT COST TOTALS:	$488	$140		$628		$525	$150	**$675**			$573	$162	**$735**

****** TOTAL PROJECT COST SUMMARY ******

PROJECT: **Proctor Creek Ecosyastem Restoration**
PROJECT NO: **TC05**
LOCATION: **Atlanta, GA**

DISTRICT: **Mobile District**
PREPARED: **5/17/2017**
POC: **CHIEF, COST ENGINEERING, GEORGE BROWN**

This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

Civil Works Work Breakdown Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)						TOTAL PROJECT COST (FULLY FUNDED)			
						Program Year (Budget EC): 2020									
						Effective Price Level Date: 1-Oct- 19									
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	REMAINING COST ($K)	Spent Thru: 1-Oct-15 ($K)	TOTAL FIRST COST ($K)	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
09	CHANNELS & CANALS	$196	$61	31%	$257	5.9%	$208	$65	$272		$272	4.6%	$217	$67	$284
	#N/A		-			-						-			
	#N/A		-			-						-			
			-			-						-			
	CONSTRUCTION ESTIMATE TOTALS:	$196	$61		$257	5.9%	$208	$65	$272		$272	4.6%	$217	$67	$284
01	LANDS AND DAMAGES	$20	$5	25%	$25	5.9%	$21	$5	$26		$26	2.5%	$22	$5	$27
30	PLANNING, ENGINEERING & DESIGN	$94	$20	21%	$114	11.8%	$105	$22	$127		$127	24.0%	$130	$28	$158
31	CONSTRUCTION MANAGEMENT	$18	$4	22%	$22	11.8%	$20	$4	$25		$25	9.1%	$22	$5	$27
	PROJECT COST TOTALS:	$328	$90	27%	$418		$354	$97	$451		**$451**	10.2%	$391	$105	$496

_____ CHIEF, COST ENGINEERING, GEORGE BROWN

_____ PROJECT MANAGER, CHERYL HRABOVSKY

_____ CHIEF, REAL ESTATE, WILLIE PATTERSON

_____ CHIEF, PLANNING, CURTIS FLAKES

_____ CHIEF, ENGINEERING, DOUGLAS OTTO

_____ CHIEF, OPERATIONS, WILLIAM(WYNNE) FULLER

_____ CHIEF, CONSTRUCTION, GEORGE CONDOYIANNIS

_____ CHIEF, CONTRACTING,JEFFERY BURGESS

_____ CHIEF, PM-PB, xxxx

_____ CHIEF, DPM, PETE TAYLOR

ESTIMATED TOTAL PROJECT COST:		**$496**
ESTIMATED FEDERAL COST:	**65%**	$323
ESTIMATED NON-FEDERAL COST:	**35%**	$174
22 - FEASIBILITY STUDY (CAP studies):		
ESTIMATED FEDERAL COST:	50%	
ESTIMATED NON-FEDERAL COST:	50%	
ESTIMATED FEDERAL COST OF PROJECT		**$323**

****** TOTAL PROJECT COST SUMMARY ******

****** CONTRACT COST SUMMARY ******

PROJECT: Proctor Creek Ecosyastem Restoration
LOCATION: Atlanta, GA
This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

DISTRICT: Mobile District
POC: CHIEF, COST ENGINEERING, GEORGE BROWN

PREPARED: 5/17/2017

WBS Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)				TOTAL PROJECT COST (FULLY FUNDED)				
		Estimate Prepared: 17-Jan-17 Estimate Price Level: 1-Oct-16				Program Year (Budget EC): 2020 Effective Price Level Date: 1 -Oct-19								
				RISK BASED										
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
	PHASE 1 or CONTRACT 1													
09	CHANNELS & CANALS	$196	$61	31.1%	$257	5.9%	$208	$65	$272	2022Q2	4.6%	$217	$67	$284
	#N/A													
	#N/A													
	CONSTRUCTION ESTIMATE TOTALS:	$196	$61	31.1%	$257		$208	$65	$272			$217	$67	$284
01	LANDS AND DAMAGES	$20	$5	25.0%	$25	5.9%	$21	$5	$26	2021Q2	2.5%	$22	$5	$27
30	PLANNING, ENGINEERING & DESIGN													
1.0%	Project Management	$2	$0	21.2%	$2	11.8%	$2	$0	$3	2021Q2	4.9%	$2	$0	$3
1.0%	Planning & Environmental Compliance	$2	$0	21.2%	$2	11.8%	$2	$0	$3	2021Q2	4.9%	$2	$0	$3
4.0%	Engineering & Design	$8	$2	21.2%	$10	11.8%	$9	$2	$11	2021Q2	4.9%	$9	$2	$11
1.0%	Engineering Tech Review ITR & VE	$2	$0	21.2%	$2	11.8%	$2	$0	$3	2021Q2	4.9%	$2	$0	$3
1.0%	Contracting & Reprographics	$2	$0	21.2%	$2	11.8%	$2	$0	$3	2021Q2	4.9%	$2	$0	$3
3.0%	Engineering During Construction	$6	$1	21.2%	$7	11.8%	$7	$1	$8	2022Q2	9.1%	$7	$2	$9
1.0%	Planning During Construction	$2	$0	21.2%	$2	11.8%	$2	$0	$3	2022Q2	9.1%	$2	$1	$3
1.0%	Project Operations	$2	$0	21.2%	$2	11.8%	$2	$0	$3	2021Q2	4.9%	$2	$0	$3
8.7%	Pre-Construction Monitoring	$17	$4	21.2%	$21	11.8%	$19	$4	$23	2021Q2	4.9%	$20	$4	$24
26.0%	Post Construction Monitoring	$51	$11	21.2%	$62	11.8%	$57	$12	$69	2028Q2	39.5%	$80	$17	$96
31	CONSTRUCTION MANAGEMENT													
6.0%	Construction Management	$12	$3	21.9%	$15	11.8%	$13	$3	$16	2022Q2	9.1%	$15	$3	$18
1.5%	Project Operation:	$3	$1	21.9%	$4	11.8%	$3	$1	$4	2022Q2	9.1%	$4	$1	$4
1.5%	Project Management	$3	$1	21.9%	$4	11.8%	$3	$1	$4	2022Q2	9.1%	$4	$1	$4
	CONTRACT COST TOTALS:	$328	$90		$418		$354	$97	**$451**			$391	$105	**$496**

****** TOTAL PROJECT COST SUMMARY ******

PROJECT: **Proctor Creek Ecosyastem Restoration**
PROJECT NO: **GP01**
LOCATION: **Atlanta, GA**

DISTRICT: **Mobile District**
PREPARED: **5/17/2017**
POC: **CHIEF, COST ENGINEERING, GEORGE BROWN**

This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

Civil Works Work Breakdown Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)						TOTAL PROJECT COST (FULLY FUNDED)			
						Program Year (Budget EC): 2020									
						Effective Price Level Date: 1-Oct- 19									
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	REMAINING COST ($K)	Spent Thru: 1-Oct-15 ($K)	TOTAL FIRST COST ($K)	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
09	CHANNELS & CANALS	$216	$70	33%	$286	5.9%	$229	$75	$303		$303	4.6%	$239	$78	$317
	#N/A		-			-						-			
	#N/A		-			-						-			
			-			-						-			
	CONSTRUCTION ESTIMATE TOTALS:	$216	$70		$286	5.9%	$229	$75	$303		$303	4.6%	$239	$78	$317
01	LANDS AND DAMAGES	$5	$1	25%	$6	5.9%	$5	$1	$7		$7	2.5%	$5	$1	$7
30	PLANNING, ENGINEERING & DESIGN	$95	$20	21%	$115	11.8%	$106	$23	$129		$129	23.8%	$132	$28	$159
31	CONSTRUCTION MANAGEMENT	$19	$4	22%	$23	11.8%	$21	$5	$26		$26	9.1%	$23	$5	$28
	PROJECT COST TOTALS:	$335	$96	29%	$431		$362	$103	$465		**$465**	10.1%	$399	$112	$512

_____ CHIEF, COST ENGINEERING, GEORGE BROWN

_____ PROJECT MANAGER, CHERYL HRABOVSKY

_____ CHIEF, REAL ESTATE, WILLIE PATTERSON

_____ CHIEF, PLANNING, CURTIS FLAKES

_____ CHIEF, ENGINEERING, DOUGLAS OTTO

_____ CHIEF, OPERATIONS, WILLIAM(WYNNE) FULLER

_____ CHIEF, CONSTRUCTION, GEORGE CONDOYIANNIS

_____ CHIEF, CONTRACTING,JEFFERY BURGESS

_____ CHIEF, PM-PB, xxxx

_____ CHIEF, DPM, PETE TAYLOR

ESTIMATED TOTAL PROJECT COST:		**$512**
ESTIMATED FEDERAL COST:	**65%**	$333
ESTIMATED NON-FEDERAL COST:	**35%**	$179
22 - FEASIBILITY STUDY (CAP studies):		
ESTIMATED FEDERAL COST:	50%	
ESTIMATED NON-FEDERAL COST:	50%	
ESTIMATED FEDERAL COST OF PROJECT		**$333**

****** TOTAL PROJECT COST SUMMARY ******

****** CONTRACT COST SUMMARY ******

PROJECT: Proctor Creek Ecosyastem Restoration
LOCATION: Atlanta, GA
This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

DISTRICT: Mobile District
POC: CHIEF, COST ENGINEERING, GEORGE BROWN

PREPARED: 5/17/2017

WBS Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)				TOTAL PROJECT COST (FULLY FUNDED)				
		Estimate Prepared: 17-Jan-17 Estimate Price Level: 1-Oct-16				Program Year (Budget EC): 2020 Effective Price Level Date: 1 -Oct-19								
				RISK BASED										
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
	PHASE 1 or CONTRACT 1													
09	CHANNELS & CANALS	$216	$70	32.6%	$286	5.9%	$229	$75	$303	2022Q2	4.6%	$239	$78	$317
	#N/A													
	#N/A													
	CONSTRUCTION ESTIMATE TOTALS:	$216	$70	32.6%	$286		$229	$75	$303			$239	$78	$317
01	LANDS AND DAMAGES	$5	$1	25.0%	$6	5.9%	$5	$1	$7	2021Q2	2.5%	$5	$1	$7
30	PLANNING, ENGINEERING & DESIGN													
1.0%	Project Management	$2	$0	21.2%	$2	11.8%	$2	$0	$3	2021Q2	4.9%	$2	$0	$3
1.0%	Planning & Environmental Compliance	$2	$0	21.2%	$2	11.8%	$2	$0	$3	2021Q2	4.9%	$2	$0	$3
4.0%	Engineering & Design	$9	$2	21.2%	$11	11.8%	$10	$2	$12	2021Q2	4.9%	$11	$2	$13
1.0%	Engineering Tech Review ITR & VE	$2	$0	21.2%	$2	11.8%	$2	$0	$3	2021Q2	4.9%	$2	$0	$3
1.0%	Contracting & Reprographics	$2	$0	21.2%	$2	11.8%	$2	$0	$3	2021Q2	4.9%	$2	$0	$3
3.0%	Engineering During Construction	$6	$1	21.2%	$7	11.8%	$7	$1	$8	2022Q2	9.1%	$7	$2	$9
1.0%	Planning During Construction	$2	$0	21.2%	$2	11.8%	$2	$0	$3	2022Q2	9.1%	$2	$1	$3
1.0%	Project Operations	$2	$0	21.2%	$2	11.8%	$2	$0	$3	2021Q2	4.9%	$2	$0	$3
7.9%	Pre-Construction Monitoring	$17	$4	21.2%	$21	11.8%	$19	$4	$23	2021Q2	4.9%	$20	$4	$24
23.6%	Post Construction Monitoring	$51	$11	21.2%	$62	11.8%	$57	$12	$69	2028Q2	39.5%	$80	$17	$96
31	CONSTRUCTION MANAGEMENT													
6.0%	Construction Management	$13	$3	21.9%	$16	11.8%	$15	$3	$18	2022Q2	9.1%	$16	$3	$19
1.5%	Project Operation:	$3	$1	21.9%	$4	11.8%	$3	$1	$4	2022Q2	9.1%	$4	$1	$4
1.5%	Project Management	$3	$1	21.9%	$4	11.8%	$3	$1	$4	2022Q2	9.1%	$4	$1	$4
	CONTRACT COST TOTALS:	$335	$96		$431		$362	$103	**$465**			$399	$112	**$512**

****** TOTAL PROJECT COST SUMMARY ******

PROJECT: **Proctor Creek Ecosyastem Restoration**
PROJECT NO: **GP02**
LOCATION: **Atlanta, GA**

DISTRICT: **Mobile District**
PREPARED: **5/17/2017**
POC: **CHIEF, COST ENGINEERING, GEORGE BROWN**

This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

Civil Works Work Breakdown Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)						TOTAL PROJECT COST (FULLY FUNDED)			
						Program Year (Budget EC): 2020									
						Effective Price Level Date: 1-Oct- 19									
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	REMAINING COST ($K)	Spent Thru: 1-Oct-15 ($K)	TOTAL FIRST COST ($K)	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
09	CHANNELS & CANALS	$389	$105	27%	$494	5.9%	$412	$112	$524		$524	5.1%	$433	$117	$550
	#N/A		-			-						-			
	#N/A		-			-						-			
			-			-						-			
	CONSTRUCTION ESTIMATE TOTALS:	$389	$105		$494	5.9%	$412	$112	$524		$524	5.1%	$433	$117	$550
01	LANDS AND DAMAGES	$3	$1	25%	$4	5.9%	$3	$1	$4		$4	2.5%	$3	$1	$4
30	PLANNING, ENGINEERING & DESIGN	$120	$25	21%	$145	11.8%	$134	$28	$163		$163	20.3%	$161	$34	$196
31	CONSTRUCTION MANAGEMENT	$35	$8	22%	$43	11.8%	$39	$9	$48		$48	10.2%	$43	$9	$53
	PROJECT COST TOTALS:	$547	$139	25%	$686		$588	$149	$738		**$738**	8.8%	$641	$162	$802

_____ CHIEF, COST ENGINEERING, GEORGE BROWN

_____ PROJECT MANAGER, CHERYL HRABOVSKY

_____ CHIEF, REAL ESTATE, WILLIE PATTERSON

_____ CHIEF, PLANNING, CURTIS FLAKES

_____ CHIEF, ENGINEERING, DOUGLAS OTTO

_____ CHIEF, OPERATIONS, WILLIAM(WYNNE) FULLER

_____ CHIEF, CONSTRUCTION, GEORGE CONDOYIANNIS

_____ CHIEF, CONTRACTING,JEFFERY BURGESS

_____ CHIEF, PM-PB, xxxx

_____ CHIEF, DPM, PETE TAYLOR

ESTIMATED TOTAL PROJECT COST:		**$802**
ESTIMATED FEDERAL COST:	**65%**	$522
ESTIMATED NON-FEDERAL COST:	**35%**	$281
22 - FEASIBILITY STUDY (CAP studies):		
ESTIMATED FEDERAL COST:	50%	
ESTIMATED NON-FEDERAL COST:	50%	
ESTIMATED FEDERAL COST OF PROJECT		**$522**

****** TOTAL PROJECT COST SUMMARY ******

****** CONTRACT COST SUMMARY ******

PROJECT: Proctor Creek Ecosyastem Restoration
LOCATION: Atlanta, GA
This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

DISTRICT: Mobile District
POC: CHIEF, COST ENGINEERING, GEORGE BROWN

PREPARED: 5/17/2017

WBS Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)				TOTAL PROJECT COST (FULLY FUNDED)				
		Estimate Prepared: 17-Jan-17 Estimate Price Level: 1-Oct-16				Program Year (Budget EC): 2020 Effective Price Level Date: 1 -Oct-19								
				RISK BASED										
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
	PHASE 1 or CONTRACT 1													
09	CHANNELS & CANALS	$389	$105	27.1%	$494	5.9%	$412	$112	$524	2022Q3	5.1%	$433	$117	$550
	#N/A													
	#N/A													
	CONSTRUCTION ESTIMATE TOTALS:	$389	$105	27.1%	$494		$412	$112	$524			$433	$117	$550
01	LANDS AND DAMAGES	$3	$1	25.0%	$4	5.9%	$3	$1	$4	2021Q2	2.5%	$3	$1	$4
30	PLANNING, ENGINEERING & DESIGN													
1.0%	Project Management	$4	$1	21.2%	$5	11.8%	$4	$1	$5	2021Q2	4.9%	$5	$1	$6
1.0%	Planning & Environmental Compliance	$4	$1	21.2%	$5	11.8%	$4	$1	$5	2021Q2	4.9%	$5	$1	$6
4.0%	Engineering & Design	$16	$3	21.2%	$19	11.8%	$18	$4	$22	2021Q2	4.9%	$19	$4	$23
1.0%	Engineering Tech Review ITR & VE	$4	$1	21.2%	$5	11.8%	$4	$1	$5	2021Q2	4.9%	$5	$1	$6
1.0%	Contracting & Reprographics	$4	$1	21.2%	$5	11.8%	$4	$1	$5	2021Q2	4.9%	$5	$1	$6
3.0%	Engineering During Construction	$12	$3	21.2%	$15	11.8%	$13	$3	$16	2022Q3	10.2%	$15	$3	$18
1.0%	Planning During Construction	$4	$1	21.2%	$5	11.8%	$4	$1	$5	2022Q3	10.2%	$5	$1	$6
1.0%	Project Operations	$4	$1	21.2%	$5	11.8%	$4	$1	$5	2021Q2	4.9%	$5	$1	$6
4.4%	Pre-Construction Monitoring	$17	$4	21.2%	$21	11.8%	$19	$4	$23	2021Q2	4.9%	$20	$4	$24
13.1%	Post Construction Monitoring	$51	$11	21.2%	$62	11.8%	$57	$12	$69	2028Q2	39.5%	$80	$17	$96
31	CONSTRUCTION MANAGEMENT													
6.0%	Construction Management	$23	$5	21.9%	$28	11.8%	$26	$6	$31	2022Q3	10.2%	$28	$6	$35
1.5%	Project Operation:	$6	$1	21.9%	$7	11.8%	$7	$1	$8	2022Q3	10.2%	$7	$2	$9
1.5%	Project Management	$6	$1	21.9%	$7	11.8%	$7	$1	$8	2022Q3	10.2%	$7	$2	$9
	CONTRACT COST TOTALS:	$547	$139		$686		$588	$149	**$738**			$641	$162	**$802**

****** TOTAL PROJECT COST SUMMARY ******

PROJECT: **Proctor Creek Ecosyastem Restoration**
PROJECT NO: **D17**
LOCATION: **Atlanta, GA**

DISTRICT: **Mobile District**
PREPARED: **5/17/2017**
POC: **CHIEF, COST ENGINEERING, GEORGE BROWN**

This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

Civil Works Work Breakdown Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)						TOTAL PROJECT COST (FULLY FUNDED)			
						Program Year (Budget EC):				2020					
						Effective Price Level Date:				1-Oct- 19					
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	REMAINING COST ($K)	Spent Thru: 1-Oct-15 ($K)	TOTAL FIRST COST ($K)	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
15	FLOODWAY CONTROL & DIVERSION STR	$135	$37	28%	$172	5.9%	$143	$39	$182		$182	2.5%	$147	$40	$187
	#N/A		-			-						-			
	#N/A		-			-						-			
			-			-						-			
	CONSTRUCTION ESTIMATE TOTALS:	$135	$37		$172	5.9%	$143	$39	$182		$182	2.5%	$147	$40	$187
01	LANDS AND DAMAGES	$18	$5	25%	$23	5.9%	$19	$5	$24		$24	2.5%	$20	$5	$24
30	PLANNING, ENGINEERING & DESIGN	$83	$18	21%	$101	11.8%	$93	$20	$113		$113	26.4%	$117	$25	$142
31	CONSTRUCTION MANAGEMENT	$12	$3	22%	$15	11.8%	$13	$3	$16		$16	9.1%	$15	$3	$18
	PROJECT COST TOTALS:	$248	$62	25%	$310		$268	$67	$335		**$335**	10.9%	$298	$73	$371

ESTIMATED TOTAL PROJECT COST: **$371**
ESTIMATED FEDERAL COST: **65%** $241
ESTIMATED NON-FEDERAL COST: **35%** $130

22 - FEASIBILITY STUDY (CAP studies):
ESTIMATED FEDERAL COST: 50%
ESTIMATED NON-FEDERAL COST: 50%

ESTIMATED FEDERAL COST OF PROJECT **$241**

****** TOTAL PROJECT COST SUMMARY ******

****** CONTRACT COST SUMMARY ******

PROJECT: Proctor Creek Ecosyastem Restoration
LOCATION: Atlanta, GA
This Estimate reflects the scope and schedule in report; Proctor Creek Ecosystem Restoration Alternatives Analysis

DISTRICT: Mobile District
POC: CHIEF, COST ENGINEERING, GEORGE BROWN

PREPARED: 5/17/2017

WBS Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)				TOTAL PROJECT COST (FULLY FUNDED)				
		Estimate Prepared: 17-Jan-17 Estimate Price Level: 1-Oct-16				Program Year (Budget EC): 2020 Effective Price Level Date: 1 -Oct-19								
				RISK BASED										
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
	PHASE 1 or CONTRACT 1													
15	FLOODWAY CONTROL & DIVERSION STR	$135	$37	27.5%	$172	5.9%	$143	$39	$182	2021Q2	2.5%	$147	$40	$187
	#N/A													
	#N/A													
	CONSTRUCTION ESTIMATE TOTALS:	$135	$37	27.5%	$172		$143	$39	$182			$147	$40	$187
01	LANDS AND DAMAGES	$18	$5	25.0%	$23	5.9%	$19	$5	$24	2021Q2	2.5%	$20	$5	$24
30	PLANNING, ENGINEERING & DESIGN													
1.0%	Project Management	$1	$0	21.2%	$1	11.8%	$1	$0	$1	2021Q2	4.9%	$1	$0	$1
1.0%	Planning & Environmental Compliance	$1	$0	21.2%	$1	11.8%	$1	$0	$1	2021Q2	4.9%	$1	$0	$1
4.0%	Engineering & Design	$5	$1	21.2%	$6	11.8%	$6	$1	$7	2021Q2	4.9%	$6	$1	$7
1.0%	Engineering Tech Review ITR & VE	$1	$0	21.2%	$1	11.8%	$1	$0	$1	2021Q2	4.9%	$1	$0	$1
1.0%	Contracting & Reprographics	$1	$0	21.2%	$1	11.8%	$1	$0	$1	2021Q2	4.9%	$1	$0	$1
3.0%	Engineering During Construction	$4	$1	21.2%	$5	11.8%	$4	$1	$5	2022Q2	9.1%	$5	$1	$6
1.0%	Planning During Construction	$1	$0	21.2%	$1	11.8%	$1	$0	$1	2022Q2	9.1%	$1	$0	$1
1.0%	Project Operations	$1	$0	21.2%	$1	11.8%	$1	$0	$1	2021Q2	4.9%	$1	$0	$1
12.6%	Pre-Construction Monitoring	$17	$4	21.2%	$21	11.8%	$19	$4	$23	2021Q2	4.9%	$20	$4	$24
37.8%	Post Construction Monitoring	$51	$11	21.2%	$62	11.8%	$57	$12	$69	2028Q2	39.5%	$80	$17	$96
31	CONSTRUCTION MANAGEMENT													
6.0%	Construction Management	$8	$2	21.9%	$10	11.8%	$9	$2	$11	2022Q2	9.1%	$10	$2	$12
1.5%	Project Operation:	$2	$0	21.9%	$2	11.8%	$2	$0	$3	2022Q2	9.1%	$2	$1	$3
1.5%	Project Management	$2	$0	21.9%	$2	11.8%	$2	$0	$3	2022Q2	9.1%	$2	$1	$3
	CONTRACT COST TOTALS:	$248	$62		$310		$268	$67	**$335**			$298	$73	**$371**

Proctor Creek Estimated Schedule

Reach	TPCS Dates		Schedule Dates							
	Midpoint of Construction	Midpoint of Post Construction Monitoring	Chief's Report	Start of PED/RE Acquistion	Start of Construction	End Of Construction	End of Warranty	Post-Construction Monitoring		
PC08-1	Mar-22	Jan-28	Aug-18	Jan-20	Feb-22	May-22	May-23	Jun-24	Jun-27	Jun-32
PC08-2	Apr-22	Jan-28	Aug-18	Jan-20	Feb-22	Jun-22	Jun-23	Jun-24	Jun-27	Jun-32
PC09	Mar-22	Jan-28	Aug-18	Jan-20	Feb-22	Apr-22	Apr-23	Jun-24	Jun-27	Jun-32
PC10	Apr-22	Jan-28	Aug-18	Jan-20	Feb-22	Jul-22	Jul-23	Jun-24	Jun-27	Jun-32
PC13	Mar-22	Jan-28	Aug-18	Jan-20	Feb-22	Apr-22	Apr-23	Jun-24	Jun-27	Jun-32
PC14	Mar-22	Jan-28	Aug-18	Jan-20	Feb-22	Apr-22	Apr-23	Jun-24	Jun-27	Jun-32
PC15	May-22	Jan-28	Aug-18	Jan-20	Feb-22	Sep-22	Sep-23	Jun-24	Jun-27	Jun-32
PC21	Jun-22	Jan-28	Aug-18	Jan-20	Feb-22	Oct-22	Oct-23	Jun-24	Jun-27	Jun-32
TC02	Apr-22	Jan-28	Aug-18	Jan-20	Feb-22	Jun-22	Jun-23	Jun-24	Jun-27	Jun-32
TC05	Mar-22	Jan-28	Aug-18	Jan-20	Feb-22	May-22	May-23	Jun-24	Jun-27	Jun-32
GP01	Mar-22	Jan-28	Aug-18	Jan-20	Feb-22	May-22	May-23	Jun-24	Jun-27	Jun-32
GP02	Jun-22	Jan-28	Aug-18	Jan-20	Feb-22	Nov-22	Nov-23	Jun-24	Jun-27	Jun-32
D17	Mar-22	Jan-28	Aug-18	Jan-20	Feb-22	Apr-22	Apr-23	Jun-24	Jun-27	Jun-32

Pre-construction Monitoring occurs during PED
Real Estate Acquistion is expected to last 18-24 months.