From: (b) (6), (b) (7)(C)
To: (b) (6), (b) (7)(C)
Subject: FW: Architecture/Engineering Design Data
Date: Thursday, July 20, 2017 4:44:41 PM
Attachments: Cost Breakout by project.xlsx
HH1_TaskOrderSigned.pdf

(b) (6), (b) (7)(C)
Border Patrol & Air and Marine Program Management Office (BPAM PMO)
Facilities Management & Engineering

Office: (b) (6), (b) (7)(C)
Cell: (b) (6), (b) (7)(C)
[redacted]

Click Here to view the FMB team listed with areas of responsibility.
Click Here to view the PRR tracker.
Click Here to view the IAA Tracker

From: (b) (6), (b) (7)(C)
Sent: Thursday, July 20, 2017 3:42 PM
To: [redacted] (b) (6) [redacted] >
Subject: RE: Architecture/Engineering Design Data

This work?
Just received from USACE

(b) (6), (b) (7)(C)
Border Patrol & Air and Marine Program Management Office (BPAM PMO)
Facilities Management & Engineering

Office: (b) (6), (b) (7)(C)
Cell: (b) (6), (b) (7)(C)
[redacted]

Click Here to view the FMB team listed with areas of responsibility.
Click Here to view the PRR tracker.
Click Here to view the IAA Tracker

From: [redacted] (b) (6) [redacted]
Sent: Thursday, July 20, 2017 3:35 PM
To: [redacted] (b) (6), (b) (7)(C) [redacted]
Subject: RE: Architecture/Engineering Design Data

Regards,

(b) (6), CCEA
Operations Research Analyst
Cost Analysis Division
Dept of Homeland Security
(O) – (b) (6), (b) (7)(C)
(C) – (b) (6), (b) (7)(C)

-----Original Message-----
From: (b) (6), (b) (7)(C)
Sent: Thursday, July 20, 2017 3:29 PM
To: (b) (6) >
Subject: FW: Architecture/Engineering Design Data

FYI- we will have something for you soon.

(b) (6), (b) (7)(C)
Border Patrol & Air and Marine Program Management Office (BPAM PMO) Facilities Management & Engineering

Office: (b) (6), (b) (7)(C)
Cell: (b) (6), (b) (7)(C)

Click Here to view the FMB team listed with areas of responsibility.
Click Here to view the PRR tracker.
Click Here to view the IAA Tracker

-----Original Message-----
From: (b) (6)]
Sent: Thursday, July 20, 2017 3:20 PM
To: (b) (6), (b) (7)(C) (b) (6)
)

(b) (6)
Cc: (b) (6), (b) (7)(C)
>
Subject: RE: Architecture/Engineering Design Data

Working on this now

-----Original Message-----
From: (b) (6), (b) (7)(C)]
Sent: Thursday, July 20, 2017 9:41 AM
To: (b) (6)
>
Cc: (b) (6), (b) (7)(C)
Subject: [Non-DoD Source] FW: Architecture/Engineering Design Data
Importance: High

Gentlemen,

Can one of you provide the requested information?

(b) (6), (b) (7)(C)

Border Patrol & Air and Marine Program Management Office (BPAM PMO)

Facilities Management & Engineering

Office: (b) (6), (b) (7)(C)

Cell: (b) (6), (b) (7)(C)

>

Click Here to view the FMB team listed with areas of responsibility.
(b) (7)(E)

Click Here to view the PRR tracker.
(b) (7)(E)

Click Here to view the IAA Tracker
(b) (7)(E)

From: (b) (6)
Sent: Thursday, July 20, 2017 9:13 AM
To: (b) (6), (b) (7)(C)
Subject: Architecture/Engineering Design Data

(b) (6), (b) (7)(C)

Just wanted to check with you on the status of the A/E data you were hoping to get from USACE. I believe we were hoping to get either actuals from the contracts or the contract award documents themselves with all options listed (1st 3 miles 100% cost, last 25 miles 35% design cost). Were you able to pull these documents?

Thanks!

Regards,

(b) (6), CCEA

Operations Research Analyst

Cost Analysis Division

Dept of Homeland Security

(O) - (b) (6)

(C) - (b) (6)

				PMO	RGV-01	RGV-02	RGV-03	RGV-04	EPT STN RF	EPT EPS RF	ELC CAX RF	SDC IMB RF	
Base	Total	$ 2,661,435.22											
Base	Design RGV-01		$ 1,548,901.00		$ 1,548,901.00								$ 1,548,901.00
Base	Value Engineering		$ 136,034.84		$ 12,027.47	$ 32,764.49	$ 44,791.96	$ 46,450.92					$ 136,034.84
Base	Survey		$ 232,228.29		$ 20,532.38	$ 55,933.03	$ 76,465.41	$ 79,297.46					$ 232,228.29
Base	Geotech		$ 469,305.65		$ 234,652.83	$ 58,663.21	$ 82,128.49	$ 93,861.13					$ 469,305.65
Base	Drainage Study		$ 204,733.12		$ 18,101.40	$ 49,310.72	$ 67,412.12	$ 69,908.87					$ 204,733.12
Base	Engineering Support		$ 70,232.32	$ 70,232.32									$ 70,232.32
Option 1	Total	$ 2,664,306.79											$ -
Option 1	SDC IMB		$ 943,691.30									$ 943,691.30	$ 943,691.30
Option 1	ELC CAX		$ 384,605.64								$ 384,605.64		$ 384,605.64
Option 1	EPT STN		$ 786,551.44						$ 786,551.44				$ 786,551.44
Option 1	EPT EPS		$ 549,458.41							$ 549,458.41			$ 549,458.41
Option 2	TI Toolkit	$ 199,799.95		$ 199,799.95									$ 199,799.95
Option 3	RGV-02 D/B RFP	$ 619,479.31				$ 619,479.31							$ 619,479.31
Option 4	Const Phs Services	$ 78,461.01			$ 78,461.01								$ 78,461.01
	Totals	$ 6,223,482.28		$ 270,032.27	$ 1,912,676.09	$ 816,150.76	$ 270,797.99	$ 289,518.39	$ 786,551.44	$ 549,458.41	$ 384,605.64	$ 943,691.30	$ 6,223,482.28

Name	P2	Miles		
PMO	465132			$ 270,032.27
RGV-01	465841	2.9	8.8%	$ 1,912,676.09
RGV-02	466411	7.9	24.1%	$ 816,150.76
RGV-03	466412	10.8	32.9%	$ 270,797.99
RGV-04	466413	11.2	34.1%	$ 289,518.39
EPT STN RF	466480	20		$ 786,551.44
EPT EPS RF	466481	5		$ 549,458.41
ELC CAX RF	466484	2		$ 384,605.64
SDC IMB RF	466487	14		$ 943,691.30
				$ 6,223,482.28

Base	PR&C LI 1	PMO	$ 70,232.32
Base	PR&C LI 2	RGV-01	$ 1,834,215.08
Base	PR&C LI 3	RGV-02	$ 196,671.45
Base	PR&C LI 4	RGV-03	$ 270,797.99
Base	PR&C LI 5	RGV-04	$ 289,518.39
Option 1	PR&C LI 6	SDC IMB	$ 943,691.30
Option 1	PR&C LI 7	ELC CAX	$ 384,605.64
Option 1	PR&C LI 8	EPT STN	$ 786,551.44
Option 1	PR&C LI 9	EPT EPS	$ 549,458.41
Option 2	PR&C LI 1	PMO	$ 199,799.95
Option 3	PR&C LI 3	RGV-02	$ 619,479.31
Option 4	PR&C LI 2	RGV-01	$ 78,461.01
			$ 6,223,482.28

ORDER FOR SUPPLIES OR SERVICES

PAGE 1 OF 122

1 CONTRACT/PURCH ORDER/ AGREEMENT NO	2 DELIVERY ORDER/ CALL NO	3 DATE OF ORDER/CALL (YYYYMMMDD)	4 REQ / PURCH REQUEST NO	5 PRIORITY
W9126G-15-D-0009	W9126G17F0015	2017 Jun 13	W45XMA71592962	

6 ISSUED BY CODE W9126G
US ARMY CORPS OF ENGINEERS FORT WORTH
819 TAYLOR ST, RM 2A17
FORT WORTH TX 76102-0300

7 ADMINISTERED BY *(if other than 6)* CODE
SEE ITEM 6

8 DELIVERY FOB
[ ] DESTINATION
[X] OTHER
(See Schedule if other)

9 CONTRACTOR CODE 028J5 FACILITY
NAME AND ADDRESS
MICHAEL BAKER INTERNATIONAL, INC.
(b) (6)
2929 N CENTRAL AVE STE 800
PHOENIX AZ 85012-2794

10 DELIVER TO FOB POINT BY (Date) *(YYYYMMMDD)*
SEE SCHEDULE

11 MARK IF BUSINESS IS
[ ] SMALL
[ ] SMALL DISADVANTAGED
[ ] WOMEN-OWNED

12 DISCOUNT TERMS
Net 30 Days

13 MAIL INVOICES TO THE ADDRESS IN BLOCK
See Item 15

14 SHIP TO CODE W9126G
ENGINEERING AND CONSTRUCTION SUPPORT
(b) (6)
USAED, FORT WORTH CESWF-PM-INS 819 TAYLOR ST
FORT WORTH TX 76102-0300

15 PAYMENT WILL BE MADE BY CODE 964145
USACE FINANCE CENTER MILLINGTON
ATTN: CEFC-AO-P
5722 INTEGRITY DRIVE
MILLINGTON TN 38054-5005

MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.

16 TYPE OF ORDER			
	DELIVERY/ CALL	X	This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract
	PURCHASE		Reference your quote dated Furnish the following on terms specified herein REF:

ACCEPTANCE THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME

NAME OF CONTRACTOR | SIGNATURE | TYPED NAME AND TITLE | DATE SIGNED (YYYYMMMDD)

[ ] If this box is marked, supplier must sign Acceptance and return the following number of copies:

17 ACCOUNTING AND APPROPRIATION DATA/ LOCAL USE
See Schedule

18 ITEM NO	19 SCHEDULE OF SUPPLIES/ SERVICES	20 QUANTITY ORDERED/ ACCEPTED*	21 UNIT	22 UNIT PRICE	23 AMOUNT
	SEE SCHEDULE				

** If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.*

24. UNITED STATES OF AMERICA
TEL: 817-886-1085
EMAIL: linda.d.eadie@usace.army.mil
BY: LINDA D. EADIE
Linda D. Eadie
CONTRACTING / ORDERING OFFICER

25 TOTAL $6,145,021.27
26 DIFFERENCES

27a QUANTITY IN COLUMN 20 HAS BEEN
[ ] INSPECTED [ ] RECEIVED [ ] ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

b SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE | c DATE (YYYYMMMDD) | d PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE

e MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE

f TELEPHONE NUMBER | g E-MAIL ADDRESS

36. I certify this account is correct and proper for payment.
a DATE (YYYYMMMDD) | b SIGNATURE AND TITLE OF CERTIFYING OFFICER

28 SHIP NO | 29 DO VOUCHER NO | 30 INITIALS

[ ] PARTIAL [ ] FINAL

31 PAYMENT
[ ] COMPLETE [ ] PARTIAL [ ] FINAL

32 PAID BY

33 AMOUNT VERIFIED CORRECT FOR

34 CHECK NUMBER

35 BILL OF LADING NO

37 RECEIVED AT	38 RECEIVED BY	39 DATE RECEIVED (YYYYMMMDD)	40 TOTAL CONTAINERS	41 S/R ACCOUNT NO	42 S/R VOUCHER NO

Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001					$0.00
				Funded Amt:	,

Base-BW Full Design
The base bid is for the full design of 2.93 miles of floodwall, fence, roads, drainage, & lights that will encompasses new and modifying existing flood risk management features that are interconnected and necessary to exclude flood waters from the floodplain while providing border security. Please, refer to ther attached SOW for further specifications.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001AA		1	Job	$70,232.31	$70,232.31
				Funded Amt:	$70,232.31

CBP SWBBS DSN, BASE, PMO

NAICS CD: 541330
, FSC CD: C211

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001AB		1	Job	$1,834,215.08	$1,834,215.08
				Funded Amt:	$1,834,215.08

CBP SWBBS D/B, BASE, RGV-01 2.9 MI

NAICS CD: 541330
, FSC CD: C211

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001AC		1	Job	$196,671.45	$196,671.45
				Funded Amt:	$196,671.45

CBP SWBBS D/B, BASE, RGV-02 7.9 MI

NAICS CD: 541330
, FSC CD: C211

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001AD		1	Job	$270,797.99	$270,797.99
				Funded Amt:	$270,797.99
	CBP SWBBS D/B, BASE, RGV-03 10.8 MI				NAICS CD: 541330 , FSC CD: C211

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001AE		1	Job	$289,518.39	$289,518.39
				Funded Amt:	$289,518.39
	CBP SWBBS D/B, BASE, RGV-04 11.2 MI				NAICS CD: 541330 , FSC CD: C211

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002					$0.00
EXERCISED OPTION				Funded Amt:	,

Option 1- DB RFP 4 Packages
The A-E Contractor will develop four design-build (D-B) RFPs for the replacement of Primary Boder Fence. D-B RFP 1 is for the replacement of 14 miles of Border Infrastructure System (BIS) primary fence in San Diego Sector, CA. D-B RFP 2 is for the replacement of 2 miles of primary fence in Tecate, CA. D-B RFP 3 is for the replacement of vehicle fence with primary fence for 20 miles between Santa Theresa Port of Entry and Columbus, NM. D-B RFP 4 is for the replacement of 4.16 miles of primary fence in El Paso, TX.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002AA		1	Job	$943,691.30	$943,691.30
				Funded Amt:	$943,691.30
	CBP SWBBS D/B, OPT 1				NAICS CD: 541330 , FSC CD: C211

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002AB		1	Job	$384,605.64	$384,605.64
				Funded Amt:	$384,605.64
	OPT 1 ELC CAX 2-MI				NAICS CD: 541330 , FSC CD: C211

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002AC		1	Job	$786,551.44	$786,551.44
				Funded Amt:	$786,551.44
	OPT 1 ELC CAX 2-MI				NAICS CD: 541330 , FSC CD: C211

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002AD		1	Job	$549,458.41	$549,458.41
				Funded Amt:	$549,458.41
	OPT 1 EPT EPS 5-MI				NAICS CD: 541330 , FSC CD: C211

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003		1	Job	$199,799.95	$199,799.95
EXERCISED OPTION				Funded Amt:	$199,799.95
	Option 2- Update TI Design Toolkit The objective is to update the TI Standard Design Toolkit with levee wall and freestanding wall standard designs to be used throughout the program.				NAICS CD: 541330 , FSC CD: C211

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0004		1	Job	$619,479.31	$619,479.31
EXERCISED OPTION				Funded Amt:	$619,479.31

Option 3- D-B RFP for RGV
The project is approximately 7.9 miles of levee wall construction in Rio Grande Valley (RGV) Zone (b) (7)(E) The project alignment will be on the south toe of the north U.S. IBWC levee along Maintenance Road. This 7.9 miles is within the 32.8 miles in the base bid that the survey, GeoTech and drainage study were completed on.

NAICS CD: 541330
, FSC CD: C211

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0005		1	Job	$78,461.01	$78,461.01
OPTION				Funded Amt:	

Option 4- Construction Phase Services
The objective is to provide Construction Phase Services to the Government in support of the full design completed in the Base Bid.

NAICS CD: 541330
, FSC CD: C211

Section C - Descriptions and Specifications

SCOPE OF WORK

A-E TASK ORDER - STATEMENT OF WORK

Task Order under Contract No. W9126G-15-D-0009 - Michael Baker & Associates Architect and Engineer Services for the Design of Floodwall, Fence, Roads, Drainage, & Lights at Rio Grande Valley & San Diego FY17, P2 465132, ATS: SWF-17-0799
Date: 17 May 2017

1.1 General

This Statement of Work (SOW) sets forth the performance requirements for the Architect-Engineer (A-E) services required for the full design of floodwall, fence, roads, drainage and lights at Rio Grande Valley (RGV) and San Diego Sectors. The A-E shall furnish all labor, management, investigations, studies, travel, facilities, supplies, equipment, and materials to perform the required services. The A-E is responsible for determining what disciplines and skill sets are required for accomplishing the work under this SOW and form a team accordingly. The A-E shall accomplish the required services and furnish to the Government reports and other data together with supporting material developed during the period of service as set forth herein.
During the execution of work, the A-E shall provide adequate supervision and quality control to assure the accuracy, quality, timeliness, and completeness of the work. There is a Base Bid and four Options. The **Base Bid** is for the full design of the floodwall and features 2.93 miles, including a Programmatic Value Engineering (VE) Study of 32.8 miles, a Drainage Study of 32.8 miles identified in Appendix A, a Geotechnical Analysis & Reports of 32.8 miles identified in Appendix A, Topographic Survey & Mapping of 32.8 miles identified in Appendix A, and an Independent Technical Review of five D-B RFPs developed by others. **Option 1**is for the development of four D-B RFPs in California, New Mexico and Texas. **Option 2** is for the revision of the Tactical Infrastructure (TI) Standard Design Toolkit. **Option 3** is for the development of a D-B RFP for Rio Grande Valley, TX. **Option 4** is for Construction Phase Services.

1.2 Objective The Government plans to construct new and modifying existing flood risk management features that are interconnected and necessary to exclude flood waters from the floodplain while providing border security along the Southern Border.

1.3 Period of Performance

The period of performance for the base bid is 365 calendar days from Task Order award date. The period to exercise the Options 1, 2 & 3 will be 180 calendar days from award of the task order.
The period to execute Option 4 will be 120 days from the completion of the base bid. The period of performance for each option exercised will be as follows:

Option 1: 114 Days from award of Option 1

Option 2: 180 Days from award of Option 2
Option 3: 92 Days from award of Option 3
Option 4: 365 Days from award of Option 4

1.4 Project Location

Project sites for this contract are located in Rio Grande Valley, Texas and San Diego, CA. The VE Study Meetings (Workshops) will be conducted concurrently with the required design submittals.

1.5 References

Some applicable Federal, state, and industry standards are referenced in this scope of work. All applicable standards, including those that are not referenced or listed, constitute criteria for the execution of this contract.

1.6 Precedence

This SOW provides specific instructions for the execution of this task order and, in cases of conflict, takes precedence over the basic requirements of IDIQ Contract.

1.7 Government Point(s) of Contact

The Contracting Officer's Representative (COR) will be appointed via a separate letter:

(b) (6), NCARB – Contracting Officer Representative (COR), CESWF
U.S. Army Corps of Engineers, Fort Worth District
CESWF-EC-AM
819 Taylor Street, Room 4A17
Fort Worth, TX 76102
Office: (b) (6)
(b) (6)

The Government's day-to-day point of contact for this task order is:

(b) (6) – Chief, B&F Management Section, CESWF
U.S. Army Corps of Engineers, Fort Worth District
CESWF-RPEC
819 Taylor Street, Room 3A12
Fort Worth, TX 76102
Office: (b) (6)

The Government's Value Engineering point of contact for this task order is:

(b) (6) – Value Engineering Officer (VEO), CESWF
U.S. Army Corps of Engineers, Fort Worth District
CESWF-EC-AC
819 Taylor Street, Room 4A17
Fort Worth, TX 76102
Office: (b) (6)
Cell: (b) (6)

The above POCs will be the A-E firm's primary points of contact with the Government; however, they do not have the authority to modify the SOW. The A-E shall not take direction that deviates from the terms of the SOW until the Contracting Officer (KO) formally modifies the SOW.

Contracting Officer: Linda Eadie, CESWF-CT, phone 817-886-1085, fax 817-886- 6508, Linda.D.Eadie@usace.army.mil.

1.8 Installation/Facility Point(s) of Contact

(b) (6), (b) (7)(C) - Project Manager, Facilities Division
Border Patrol Facilities and Tactical Infrastructure
7940 Jones Branch Drive
McLean, VA 22102
Office: (b) (6), (b) (7)(C)
Mobile: (b) (6), (b) (7)(C)
(b) (6)

1.9 A-E Point(s) of Contact

(b) (6), PE, CFI
Michael Baker Jr. Inc.
Federal Programs
2929 N Central Ave # 800
Phoenix, AZ 85012
Office: (b) (6)
Cell: (b) (6)
(b) (6)

The A-E Project Manager is to serve as a single point of contact and liaison between the A-E and the Government. The A-E's Project Manager shall be responsible for the complete coordination of all work developed under this Task Order. Use of verbal communication is encouraged to the greatest extent possible for discussions and issues resolution. E-mail is encouraged to document guidance and decisions.

2.0 Base Bid Project Description

2.1 Base Bid Overview

The base bid is for the full design of 2.93 miles of floodwall, fence, roads, drainage, & lights that will encompasses new and modifying existing flood risk management features that are interconnected and necessary to exclude flood waters from the floodplain while providing border security. The project's alignment is along 32.8 miles of existing levees. The base bid also includes GeoTech, survey and a drainage study for the entire 32.8 miles. The project's scope consists of design of levees, fencing, floodwalls, and interior drainage features (culverts, gates, and sumps) for construction. This Task Order will include preparation of 100% Design

Documents resulting in a complete and usable project. All work shall conform to the CBP design criteria.

The A-E Contractor will coordinate these items with the CESWF Project Design Team, CBP personnel, and local utility providers. Overall guidance is provided by the CBP and TI Design Guides. See the CESWF AEIM for design deliverable requirements.

The Geotechnical Investigation and design requirements will be provided by the A-E.
The Topographic Survey will be provided by the A-E.
The Value Engineering Study will be provided by the A-E using a third-party firm.

The Construction Cost Estimate/Current Working Estimate will be provided by the A-E. One construction contract will be prepared for this project.

A pre-proposal conference to finalize the project scope of work and aid in the preparation of the A-E proposal is recommended. Labor and travel costs are not reimbursed by the Government.

Separate A-E fee proposals are required for each funded project. Fees must be clearly delineated between design and non-design.

2.1.1 Base Product Scope

The A-E shall develop design documents for construction for 2.93 miles of floodwall (also referenced as "levee wall") along with supportive components (i.e., (b) (7)(E) , all-weather road(s), surveillance system, lighting, communications towers, the (b) (7)(E) swath) comprising an enforcement system is critical to RGV Sector's ability to prevent illegal entries (whether people, narcotics, etc.) and to achieve operational control of the border commensurate with Executive Order 13767. This will be at Weslaco Station's Zone (b) (7) . The project alignment map can be found in Appendix 01 and will be on the south toe of the U.S. IBWC levee along the Maintenance Road.

The enforcement zone will be comprised of an engineered system of critical enforcement components that include the wall, lights, video surveillance system, (b) (7)(E) , vegetation control and an all-weather road (to facilitate proactive and concentrated patrol efforts). This system of capabilities will be arranged within a (b) (7)(E) -wide footprint as measured from the southern toe of the levee to (b) (7)(E) south of that point. The (b) (7)(E) '-wide swath of real-estate will run concurrently with and parallel to the wall throughout the project area. The resulting enforcement zone will facilitate the establishment of a preventative operational profile; which, in turn, creates and conveys to the adversary an immediate certainty of detection and apprehension for any attempted breach.

Submittals will include survey and drainage features. The A-E will need to assess conditions of existing drainage and water crossings. In addition, the A-E shall define performance requirements

for construction to include but not limited to, welding, length, condition, wall thickness. The requirements will ensure the fence is not structurally compromised when it is being transitioned from a horizontal position to the final vertical placement. The A-E must incorporate design review comments from USACE, CBP, USBP, and International Boundary and Water Commission (IBWC).

The project will be awarded as a Design-Bid-Build construction project under an existing unrestricted horizontal MATOC at USACE. The design and completed construction must be approved and certified by FEMA according to their standards for flood protection. FEMA coordination will be an independent approval from IBWC, but will have similar effort to the IBWC approval. This will be a separate hydraulic model than the IBWC model.

The A-E will define top elevation for the fence (b) (7)(E) .

The design is required to include (b) (7)(E) A map of the proposed alignment is included in Appendix A. Mile 0 to 2.93 starts on west end of RGV-010 and moves east.

Floodwall (i.e. Levee Wall):
The wall will be a concrete wall to the design height of the existing earthen levee crest will include a design for (b) (7)(E) tall bollards installed in the top of the levee wall. The floodwall's alignment should be integrated into the existing levee embankment's cross section. (b) (7)(E) For FEMA certification, any deficient areas along the existing levee embankment will need to be repaired in conjunction of floodwall construction since the wall and adjoining levee acts as one structure. The levee floodwall will include automated vehicle gates for access south of the levee wall. The number, size and location of the gates will be determined during the design phase. Floodwalls and associated components shall be design for hydraulic loading, seepage, and slope stability.

(b) (7)(E) :
(b) (7)(E) system will be installed in the enforcement zone. (b) (7)(E)

The design will include (b) (7)(E) The design shall include drawings detailing how this work will be accomplished. The A/E shall design to prevent washouts and include any additional design elements required for other structures.

Lighting:

Enforcement zone LED lighting will be installed as part of this project. Ideally the light fixtures will be mounted on poles located within the approximate center of the enforcement zone but compliance with floodplain restrictions may dictate that they be mounted on the levee wall or bollards. The lights will be designed and constructed in accordance with the lighting design standards developed and confirmed as part of the San Luis lighting retrofit project recently completed in Yuma, AZ. The lights will be made fully functional as part of the construction project, to include the supply of power to the site if not available. The lights shall illuminate the entire enforcement zone and the southern face of the levee wall with the intent of minimizing any dead zones to the extent feasible.

All Weather Road:

An all-weather aggregate patrol road (type FC-2) will be constructed on the south side and parallel to the levee wall and within the (b) (7)(E) enforcement zone and floodplain. The specific location of the road within the enforcement zone will be determined during the design phase of the project. Vegetation removal within the enforcement zone will be included with this task and be covered under an environmental waiver provided by the Government. The floodwall and its earthen embankment crest shall be designed to accommodate vehicle loading. IBWC & USBP shall provide traffic loading conditions.

Value Engineering: The primary objective for the Value Engineering Contractor (VEC) is to conduct a VE Studies focused on the review of the latest design packages to ensure requirements and technical parameters are clearly defined. In addition, the VEC shall evaluate available project information to enhance the value of the project through the identification of appropriate cost saving measures, including life cycle cost savings, and added value improvements without sacrificing project requirements.

Construction Project Phasing:
Due to funding constraints, the Construction Documents will be developed to include a base bid and five options for construction. The Construction Base Bid and Options will be developed as follows:

Construction CLIN Schedule	Length in Miles
Base Bid	1.0
Option 1	0.5
Option 2	0.5
Option 3	0.5
Option 4	0.13
Option 5	0.3
TOTAL Miles	2.93

2.1.2 Base Project Scope

2.1.2.1 This Scope of Work includes all work necessary for the A-E firm to prepare 100% Design documents denoting a complete and usable facility.

a. Design Quality Control Plan

b. Reviews and Conferences

c. Confirmation Notices, Status Reports

d. Design Charrette

e. Drainage Study

f. Parametric Design (35%) Data.

g. Preliminary Design (65%) Data

h. Advance Final Design (95%) Data

i. Corrected Final Design (100%) Data

j. Planimetric, Topographic Survey for the entire 32.8 miles

k. Geotechnical Investigation: Subsurface Investigation Borings, In-Situ and Laboratory Testing, and Geotechnical Report for the entire 32.8 miles

l. Structural Analysis

m. Cost Estimates

n. Value Engineering Study for the entire 32.8 miles

o. Independent Technical Reviews

p. Design Requirements/Disciplines

(1) Site

(2) Landscaping, Fencing

(3) Parking, Roadways, Exterior Lighting

(4) Storm Drainage, Storm Water Pollution Prevention Plan

(5) Site Utilities

(6) Structural

(7) Electrical

(8) CCTV, Intrusion Detection

(9) Lightning Protection, Grounding

(10) Bidder Inquiries

(11) Amendments

2.2 Base Bid Construction Cost Limitation.

Construction Cost Limitation (CCL) $45 000 000
(Maximum available construction contract amount).

The CCL includes all costs of the construction contract (base bid and bid options). It excludes construction contingencies and supervision, inspection, and overhead. The A-E shall keep the facilities within limitations of scope and funding as set herein and above.

Bid Options. The A-E shall prepare design documents clearly delineating Government identified bid options to allow for flexibility in addressing availability of funds. The Government has some limited authority to request authority to award bid options above the CCL provided funding is available. However, the base bid must result in a complete and useable facility and be within the CCL.

The statutory limitation for basic A-E design services is 6% of the Construction Cost Limitation. Non-design services are not subject to this limitation. As such, the proposal will be evaluated per requirements of the Brooks Act and Public Law 92 582.

3.1 Base Bid Services

3.2 Quality Control Plan

The minimum requirements for the quality control plan (QCP) are given in ER 1110-1-12, *Quality Management*, and the project SOW. The QCP is the A-E firm's management plan(s) for execution of the contract. The QCP describes the way in which the A-E will produce the deliverables, the steps that will be taken to control quality, and an assigned point-of-contact within the A-E firm's organization responsible for ensuring compliance with the QCP. The QCP, modified to include any changes to the contract that occur, will be attached as an appendix to the design analysis.

3.3 Base Bid A-E Services (See CESWD-AEIM for full descriptive requirements.)

a. Design Quality Control Plan (See Section 3.1)

b. Reviews and Conferences (See Section 5.2)

c. Confirmation Notices, Status Reports (See Section 3.3.1)

d. Design Charrette - The A-E shall conduct a Design Charrette to determine the customer's functional requirements, budget and schedule. The Charrette Meeting shall include, but not be limited to, gathering and developing requirements concerning User activities, number of personnel, operations requirements, security, Due Diligence studies, and general site requirements. Key discussion items shall include project/design alternatives, key 'show stoppers', and team buy-in for final design requirements. By the end of the Charrette, the A-E shall develop conceptual site plans, and management out-brief. Final deliverables for the Charrette include meeting minutes, site plans and utility plans.

e. Drainage Study - Provide a drainage Study for the area identified in Appendix A to address the impacts of the proposed projects to the existing floodplains and design of drainage crossings due to the proposed improvements. The levee wall/fence shall be protected from erosion due to stormwater run-off and allow the conveyance of stormwater runoff across the site.

The Contractor shall prepare a programmatic drainage report for the impacts of the 32.8 miles of new levee wall in RGV as well as a project specific report for RGV(b) (7)(E) identified in Section 2.1.1 and meet with the appropriate USIBWC personnel to discuss this project and gain a clear understanding of the approval requirements for the design. The Contractor shall coordinate with the USIBWC and respond to any comments or questions. Additionally, the Contractor shall coordinate with the local officials and entities on the design and RFP package. USIBWC shall lead and be responsible for the coordination with the Mexican Section of USIBWC. The Contractor shall complete a Draft Drainage Report and submit this document with the 35%, 65%, 95% and 100% construction drawings.

The programmatic drainage report will outline all hydrologic and hydraulic assumptions, drainage criteria, data, calculations, modeling, results and design recommendations. All drainage analyses and design for this program shall be performed in accordance with the requirements of the Department of Homeland Security's Tactical Infrastructure (TI) Design Standards (DHS, 2012). General drainage design criteria shall be used for sizing erosion protection and conveyance measures along with treaty requirements from the U.S. Section of the International Boundary and Water Commission (USIBWC) as discussed in the TI design standards.

The contractor shall be responsible for gathering all geospatial and hydrologic data necessary for the hydrologic and hydraulic analyses. This data shall include the seamless 30-meter elevation datasets, current aerial imagery, and the new survey data being collected for the project. The U.S. - Mexico Border Environmental Health Initiative (BEHI) created a seamless 30-meter elevation dataset for both sides of the border. The 30 meter 1 arc second USGS National Elevation Dataset (NED) was harmonized with the Instituto Nacional de Estadística, Geografía e Informática (INEGI) 30 meter Continuo de Elevaciones Mexicano (CEM) to create a seamless elevation model for the U.S.-Mexico

Border region. In addition the USGS applied the NED filtering and smoothing algorithms to INEGI′s CEM to improve the dataset. Other geospatial data to be collected may include cities, urban areas, roads, watersheds, streams and rivers, and land cover. Most of the required geospatial data, including the seamless 30-meter elevation data, is available for download from the U.S. - Mexico BEHI website (BEHI, 2015).

The Contractor shall address the following requirements for the programmatic drainage report and the RGV (b) (7)(E) project hydrologic analyses:

Provide final drainage basin delineation maps showing all basins and sub-basins associated with the limits of construction. The contractor shall determine all locations where existing intermittent streams, rivers, or drainage paths cross the proposed project whose drainage areas are distinguishable in the 30-meter elevation data. For each drainage crossing location, the contractor shall delineate the contributing drainage area using seamless 30 m U.S. NED and Mexico CEM elevation data.
For each drainage crossing location, peak discharges shall be calculated for the watershed runoff hydrographs resulting from the 25-yr, 50-yr and 100-yr storm events. The methodology for calculating hydrologic flows at the project drainage crossings shall use the following three methods as minimum design standards:

a) For watersheds less than 1 square mile, the rational method can be used. This method is not applicable to larger drainage areas.
b) For watersheds between 1 square mile and 10 square miles, the Natural Resources Conservation Service method shall be used.
c) For watersheds larger than 10 square miles, the regression equations for the area shall be used. These equations are provided by the U. S. Geological Survey's (USGS) GLSNet software.

More detailed rainfall-runoff modeling in HEC-HMS may be substituted for any of the above minimum design methods. Since all of the above methods carry a great degree of uncertainty, the contractor shall calculate the 25-yr, 50-yr and 100-yr peak discharges with two or more of the four methods listed above and then adopt the maximum value for design. This approach is intended to improve the long term reliability of the drainage design.

USIBWC is responsible for ensuring that improvements on the U.S. side of the international land border with Mexico comply with treaty provisions as they relate to cross-border drainage. Impact to water surface elevation between the pre and post construction conditions due to any new TI, including border and access roads, being built along the land border between the U.S. and Mexico shall not exceed 6 inches in rural areas and 3 inches in urban areas using the 100-year storm event as required by USIBWC.

To verify the impacts are within the above mentioned limits, hydraulic models shall be developed. The models shall be developed with HEC-RAS software using the 100-yr discharges calculated in the hydrologic analyses of this scope. Existing conditions and proposed conditions models shall be developed at each applicable drainage crossing, and

the difference in water surface elevations shall be compared. The existing conditions cross sections shall be cut from the project survey data in the immediate area of the proposed project and from the 30-meter elevation data outside of the survey area. The proposed condition models shall demonstrate that the impacts of proposed structures to be built within the floodplains of these drainage paths will not exceed the rise in water surface elevation limits stated above. New construction or improvements more than 60 feet north of the border do not need to comply with the drainage treaty provisions mentioned above.

The Contractor shall address the following requirements for hydraulic analyses:

Determine local drainage runoff and/or sheet flow conditions as they cross the fence alignment.
Provide the final hydraulic calculations identifying the final discharge velocity and rise in water surface elevation associated with the selected fence type at each identified wash crossing. Maximum acceptable rise in water surface elevation shall be 6-inches at rural locations and 3-inches at urban locations along the International Boundary.
Provide final calculations showing depth of scour and/or long term degradation.
Provide details for protection against scour and/or long term degradation.
Provide details for culvert and/or low water crossings at each wash crossing which satisfies rise in water surface elevations stated above.
Provide hydrologic/hydraulic design and details showing that any/all cut and/or fill operations conducted within the project site do not adversely affect the natural drainage patterns across the site and satisfies the rise in water surface elevation stated above.
Provide hydraulic design and details for any other site drainage improvements required due to construction of the all-weather road.
Conduct hydraulic analysis using HEC-RAS modeling.

Based on the hydrologic and hydraulic analyses performed for the programmatic drainage report and in accordance with the TI design standards, the contractor shall make project design recommendations related to drainage conveyance through the fence, low water crossings, culverts, drainage gates and erosion control. The recommended types and sizes of these drainage features shall be specified in the final drainage report.

A drainage report will be prepared by the Contractor summarizing all hydrologic and hydraulic assumptions, drainage criteria, data, calculations, modeling, results and design recommendations. The report shall include maps of the locations of the identified drainage crossings and their contributing drainage areas. It shall specify the hydrologic method used at each location and include a summary of the calculations and assumptions used to calculate frequency peak discharges. The report shall also include maps of the hydraulic model cross sections and stream centerlines, summaries of the data and parameters, and assumptions used in the hydraulic models, and tabular summaries of the calculated water surface elevations for existing and proposed conditions. Drainage design recommendations, including types and sizes of drainage features, shall also be included in the report. In addition to the report, the contractor shall provide the government with a

digital copy of all models, hydrologic calculations, and all geospatial data collected or developed as part of this scope.

The Contractor shall deliver the draft drainage report, models, hydrologic calculations, and geospatial data to the USACE Program Manager (PgM) for review and comments. One round of responses to USACE comments shall be prepared by the Contractor for USACE review and concurrence. The Contractor shall be available via telephone to respond to any comments or questions regarding these documents and if required shall prepare a review comment resolution matrix (RCRM) documenting all review comments and corresponding resolution. The contractor shall prepare a draft final (90% design level) drainage report following USACE concurrence to the Contractor's response to comments. The Contractor shall deliver the draft final drainage report to the USACE Program Manager (PgM) for review and comments. One round of responses to USACE comments shall be prepared by the Contractor for USACE review and concurrence. The Contractor shall be available via telephone to respond to any comments or questions regarding these documents and if required shall a RCRM documenting all review comments and corresponding resolution. The Contractor shall prepare the final report (100% design level) following USACE concurrence to the Contractor's response to comments. The final report shall incorporate the resolved USACE comments and Contractor's response to comments, and be delivered in hard copy and electronic format.

Drainage Report References:

1. Department of Homeland Security (DHS) Customs and Border Protection, *Tactical Infrastructure Design Standards*, April 2012.
2. U.S. – Mexico Border Environmental Health Initiative (BEHI), http://borderhealth.cr.usgs.gov/datalayers.html, accessed May 2015.

f. Geotechnical Investigation for all 32.8 Miles - Provide services as set forth in the attached exhibit. The A-E shall conduct drilling operations, conduct limited on-site testing and deliver samples/boring logs to the testing facility. This study will provide site characteristics required to support the foundation design proposal. The A-E shall develop a sealed Geotechnical Report for the following project locations. The A/E shall coordinate with the USACE Levee Safety Officer, or designee, to meet USACE, IBWC & FEMA requirements prior to drilling into any levee.

Table for Geotechnical Investigation Zones

RIO GRANDE VALLEY PROJECTS		
Station	**Zone**	**Miles**
(b) (7)(E)		3.68
		1.71
		5.47
		1.91
		3.06
		0.83
		0.69
		2.46
		2.24
		2.93
		2.44
		1.01
		2.09
		0.37
		1.91
Total		**32.8**

g. Planimetric, Topographic Surveys for all 32.8 Miles - A new topographic survey will need to be accomplished to supplant and update previously captured topographic information. This will ensure accuracy of the design for improvements and the drainage analysis. It is the contractor's responsibility to verify any existing data that is provided. This topographic survey effort should be done at the scale required for the proposed design improvements and drainage analysis (i.e. 1"=30' with 1'contours, etc). The survey data required for this project is not limited to the 150-foot wide project area, additional topographic information will be required for the drainage study, utility connection points, property boundaries, existing drainage features, etc. This documentation will need to be packaged by the following project locations:

Table for Geotechnical Investigation Zones

RIO GRANDE VALLEY PROJECTS		
Station	**Zone**	**Miles**
(b) (7)(E)		3.68
		1.71
		5.47
		1.91
		3.06
		0.83
		0.69
		2.46
		2.24
		2.93
		2.44
		1.01
		2.09
		0.37
		1.91
Total		**32.8**

Additional information is in the attached exhibit.

h. Utility Connection Points - Perform the necessary analysis to identify the characteristics of all required existing utilities. Determine connection points and new infrastructure requirements to service the project.

i. Structural Analysis – Provide a structural analysis as required to support this SOW.

j. Geotechnical Design Requirements – The A-E shall complete the design as denoted in the Geotechnical Investigation.

k. Construction Cost Estimates - A Parametric (PACES) estimate is required for the Parametric Design (35%) Documents. A MII Micro-Computer Aided Cost Estimate is required for the 65%, 95% and 100% Design Data submittals. The requirements of this Task Order override and replace the requirements listed in the AEIM.

l. Value Engineering Study - Provide services as set forth in the attached exhibit.

m. Design Analysis (DA) - Prepare a DA in accordance with the US Army Corps of Engineers Southwest Division Architectural (CESWD) and Engineering Instructions Manual (AEIM), user interviews, functional analysis, and cost analyses. Key requirements may include: DQCP, Project Description, Site Analysis, Site/Grading/Utilities Plans, Utility Connection Points, Storm Water Management Plan, Storm Drainage System, , Life Safety Analysis, Government Furnished Equipment, Required Permits, Design Selection Criteria, Design Assumptions, Major (Discipline Specific) System Requirements (Pavement Sections, Foundation Type, Electrical Distribution Equipment Criteria, Communication Requirements, Sprinkler/Fire Alarm System Criteria), Design/Load Calculations, Economic Analyses, Non-formalized Life Cycle Cost Analysis, Permitting Requirements, Outline Specifications, Materials, Methods of Construction, O&M Provisions, Construction Schedule/Phasing, and Current Working Estimate. The design analysis shall contain seepage and slope stability analysis in accordance to USACE Engineer Manual design criterial.

n. Cost and Scope Limitations - The A-E shall ensure the guidance outlined in the RFP requires the Offerors to provide a usable facility within the limitations of estimated construction contract price and scope. If at any time, the A-E finds that the estimated construction cost and scope of the project is likely to exceed the budget, the A-E shall report this fact to the Contracting Officer Representative. He shall also submit recommendations (associated costs) for reducing the project cost and/or scope to within the established limits.

o. Parametric Design (35%) Data - The A-E shall submit the design data as denoted in the AEIM. This submittal typically consists of a parametric construction cost estimate, Design Analysis, conceptual drawings (or graphic brochure-type presentation) with essential engineering criteria required to complete the project design, and an index of USGS guide specifications. It will allow the Owner to understand the functional and technical approach so they can determine if the proposed design meets their functional/operational requirements. Immediately following submittal of the draft Conceptual Design Data, the A-E shall conduct a Value Engineering Study with an independent review team.

p. Preliminary Design (65%) Data - The A-E shall submit the design data as denoted in the AEIM and following the Government's review of the previous package. This submittal typically consists of a Design Analysis, CADD working drawings, calculations, marked-up USGS guide specifications, working specifications, **MII** construction cost estimate and color boards. The Working Cost Estimate shall capture all updates since the issuance of the parametric cost estimate.

q. Advance Final Design (95%) Data - The A-E shall submit the design data as denoted in the AEIM and following the Government's review of the previous package. The CADD drawings and specifications are complete and ready for advertising except for incorporation of final comments. Edited guide specifications with a bid schedule are required along with the Design Analysis and color boards. A Working Cost Estimate (**MII**) capturing all updates shall be submitted. The documents shall have been given an Independent Technical Review by the A-E per the DQCP.

r. Corrected Final Design (100%) Data - The A-E shall submit the design data as denoted in the AEIM following the Government's Biddability, Constructability, Operability, Environmental, and Sustainability (BCOES) Review of the previous package. The A-E shall perform a compliance check to ensure all review comments have been incorporated prior to submission of the corrected Final Design. A final Working Cost Estimate (**MII**) capturing all corrections/amendments shall be submitted. Final USGS guide specifications are required.

s. Landscaping, Fencing – Specify accepted plants for low maintenance and minimal irrigation.

t. Parking, Roadways, Exterior Lighting - .

u. Storm Drainage, Storm Water Pollution Prevention Plan – Shall be based on the Proposed Site Plan. Must be coordinated with Installation personnel to define local requirements.

v. Site Utilities - Following verification of existing utilities, new infrastructure requirements and points of connection to service the project must be determined by the A-E. Domestic Water, Sanitary Sewer, and Natural Gas lines must be sized to handle project loads and then terminate into existing mains. Electrical conductors shall be sized to handle project loads and then terminated into required electrical transmission equipment. Privatized utility requirements will be denoted.

w. Structural – Based on specific wind, snow, hydraulic and seismic loading.

x. Electrical - Coordinate design of the primary electrical distribution with the local utility provider, Installation personnel and the CESWF Project Design Team. Identify who and how power will be provided to the facility transformer primary and secondary sides.

y. CCTV, Intrusion Detection – Based on specific project requirements.

z. Lightning Protection, Grounding – Based on specific project requirements.

aa. Bidder Inquiries / Amendments - The A-E will respond to Bidder Inquiries via the ProjNet (Dr. Checks) system and provide updated Design Documents. The Government will issue the actual amendment. Contractor response shall be provided to the Contracting Officer no later than two calendar days following receipt of the inquiry.

bb. Current Working Estimate - The current U. S. Army Corps of Engineers' Micro-Computer Aided Cost Estimating System MII (pronounced "M2") Version 4.0 Build III or most recent release, and compatible databases are required for all construction cost estimates produced under this Task Order. Contact CESWF-EC-AC Section Chief for information pertaining to obtaining the software. Each submittal must include an MII estimate based upon the current stage of design. The software database now requires purchase (with the costs subject to change), but current cost is approximately $1,000. This purchase is not made nor controlled through CESWF-EC-AC. The current version of the software program will be provided to the A-E under contract who must then follow the prescribed licensing procedure to make use of the software for the term of this contract. Any other use of the software and the database can be utilized per the terms of the licensing agreement with the manufacturer. That licensing agreement is not under the control of CESWF-EC-AC. A PDF file of the project estimate must be submitted with the reports file. Hard copy requirements are denoted elsewhere. The estimate will not be complete until the bid opening estimate or final proposal estimate which includes all amendments and the completed bid or CLIN schedule in its final advertised format have been submitted to CESWF prior to the construction contractors' final proposal or bid deadline date shown in the solicitation or SF30. All pricing information included with any database or other source can and should be adapted, modified, changed, increased, or decreased as deemed necessary by the estimator to prepare an estimate representative of the project. The information contained in any database or any other cost information provided by the Fort Worth District office, CESWF-EC-AC, or obtained from other sources is not intended to represent fixed prices for ordering supplies, equipment, material, labor, nor any other construction component in the Government estimate. The estimator's professional judgment and decisions should be the definitive factor in determining fair and reasonable costs calculated for submittals and reviews. In MII, when submitting estimates for Military Projects, the Corps' current 20 system Work Breakdown Structure (WBS) will be used to structure the estimate (or PCCost 3086/1391 format when requested) unless CESWF-EC-AC determines that WBS is not applicable. For Civil Works Projects, the current Code of Accounts structure will be used unless the project is of a nature that does not warrant any of these estimate structures but that variance must be requested and then authorized by CESWF-EC-AC. Excel based estimates or other software forms of estimating are not acceptable unless the A-E has been approved by CESWF-EC-AC to provide back-up data or lower level costs in those formats. Final roll-up and mark-ups of those estimates will be entered in MII software for submittals though by utilizing the structure required by CESWF-EC-AC. The A-E shall be aware of and take precautionary measures as necessary to maintain the confidential nature of all cost estimates prepared under this Task Order. All estimate submittals shall be prepared in accordance with USACE instructions, regulations, and manuals for cost estimates as contained in EI 01D010, ER 1110-2-1302, and TM 5-800-4 and in compliance with EFARS 36.2. Costs will be developed using the latest standards and resources as applicable and including but not limited to the Tri-Services Estimating System,

TRACES, MII, the MII Cost Book databases, commercial cost book databases, PAX newsletters 3.2.1 and 3.2.2, Davis-Bacon wage rates utilized as minimum values, commercially available reports, data, and local site specific or otherwise available sources of material, supplies, equipment, labor and other data. Compilation of the Current Working Estimate will incorporate the preceding sources and references utilizing the most recent available software as stated and/or other TRACES software which may include MII, MCACES, PACES, PCCost, risk analysis programs, or any of the other approved systems available to TRACES users. Any applicable software and databases which normally are distributed without cost by CESWF-EC-AC will be made available to the A-E by CESWF-EC-AC under the Task Order. Certain software programs and databases as described above and which also include PACES and RACER but are not limited to these mentioned herein may require purchase by the A-E and cannot be provided without cost to the A-E by CESWF-EC-AC. Construction cost estimates for planning and budgeting purposes and for projects at 0 - 15% stages may be submitted by utilizing parametric software such as PACES and then summarizing the costs in the PCCost software if CESWF-EC-AC deems this acceptable. Also for any planning and budgeting purposes, PCCost software may be used to generate costs by utilizing the category codes and area cost factors in the PCCost database (which also includes Area Cost Factor data and adjustments). Updates to the database are available from CESWF-EC-AC. Electronic copies of all cost estimates in their native formats must be submitted along with any txt, pdf, doc, and rtf type report files generated to produce the hard copies.

cc. Pre-Proposal Conference and Site Visit - A Pre-proposal Conference and Installation Site Visit shall be conducted for potential Offerors after the RFP is advertised. The A-E Project Manager shall be required to make a presentation of the general RFP development concept and project features at the beginning of the review conference. The A-E shall prepare the agenda and organize the conference so that all technical and functional issues can be addressed within the scheduled duration of the conference. The presentation is intended to provide the conference members with a clear understanding of the facility and how it functions. It can be expected that the participants can range up to a large group (up to 50 persons). The COE will chair the Conference and respond to offerors concerns at the conference. This is planned as a one-day meeting requiring travel the previous day and returning the day of the conference. The A-E shall provide detailed meeting minutes.

dd. Independent Technical Reviews – The A-E shall perform five Independent Technical Reviews (ITR) in support of the Border Wall Program. These will be reviewed by a Sr. Civil Engineer and a Principal. The intent is to review the Draft D-B RFP and Final D-B RFP Submittals developed by others. The reviews will be conducted concurrent to the Government two-week review period, there will be a one-day teleconference to discuss unresolved comments and will also include a one-week back-check period.

ee. CADD Final Deliverable - All drawing shall be eTransmitted in order to get all of the associated files (i.e. fonts, plot setting, xref's, images etc.) in a Zip file.

3.4 Administrative Tasks

3.3.1 Confirmation Notices

The A-E firm shall provide a record of all conferences, meeting, discussions, verbal directions, telephone conversations, etc., the A-E firm and/or their subcontractor(s) on matters related to this Task Order. The A-E firm shall identify all participating personnel, subjects discussed, and conclusions reached. The A-E firm shall title these records *Confirmation Notices* and shall number them sequentially. The A-E shall forward each Confirmation Notice via email to the Government POC within three working days. Communication via email is acceptable for minor, day-to-day correspondence.

3.3.2 Periodic Status Reports

The A-E firm shall provide a monthly status report to the Government POC. The report shall include: Current Status, Action Item List, and discussion of major issues.

4.1 Base Bid Schedule and Deliverables

4.2 Schedule

4.1.1 The Table below shows the schedule of services and deliverables covered in this task order. The A-E Contractor shall submit a schedule showing dates for all key submittals.

Base Bid Schedule of Services and Deliverables

KEY SERVICE OR DELIVERABLE	DUE DATE
Design Quality Control Plan	Within 7-days of T.O. Award.
Design Charrette	Within 14-days of T.O. Award.
Parametric Design (35%) Data Submittal	Within 30-days of T.O. Award.
Draft Drainage Study Submittal	Same day as the 35% Submittal
Draft Planimetric, Topographic Survey Submittal	Within 30-days of T.O. Award.
Government review of Parametric Design (35%) Data	Estimated 14-days after 35% Design Submittal.
VE Study Conference	Estimated 21-days after 35% Design Submittal.
Draft Geotechnical Report	First three miles for the D-B-B Portion within 45 days of T.O. Award, all other area within 120-days of T.O. Award
Draft Topo Survey	First three miles for the D-B-B Portion within 45 days of T.O. Award, all other area within 120-days of T.O. Award
Preliminary Design (65%) Data Submittal	Within 61-days of T.O. Award.

KEY SERVICE OR DELIVERABLE	DUE DATE
Draft Programmatic VE Study Submittal	Same day as the 65% Submittal
Interim Drainage Study Submittal	Same day as the 65% Submittal
Final Planimetric, Topographic Survey Submittal	Within 61-days of T.O. Award.
Government review of Parametric Design (65%) Data and VE Study	Estimated 14-days after 65% Design Submittal.
Final Programmatic VE Study Submittal	Within 75-days of T.O. Award.
Final Geotechnical Report	First three miles for the D-B-B Portion within 75 days of T.O. Award, all other area within 210-days of T.O. Award
Final Topo Survey	First three miles for the D-B-B Portion within 75 days of T.O. Award, all other area within 210-days of T.O. Award
Advance Final Design (95%) Data Submittal	Within 91-days of T.O. Award.
Final Drainage Study Submittal	Same day as the 95% Submittal
Government review of Parametric Design (95%) Data	Estimated 14-days after 95% Design Submittal.
Corrected Final Design (100%) Data Submittal	September 22, 2017.
Corrected Final Design Drainage Study	Same day as the 100% Submittal
Dr. Check Bidder Inquiries	Within 2-days of posting in Dr. Checks
Construction RFP Amendment(s)	Within 3-days of notification of need for Amendment.
Construction Contract Award CD	Within 7-days of Construction Contract. Award.
Draft Independent Technical Review of five D-B RFPs (Requirements in 3.2.ee.)	Within 270-days of Task Order Award
Final Independent Technical Review of five D-B RFPs (Requirements in 3.2.ee.)	Within 365-days of Task Order Award
Administrative Tasks	
Confirmation Notices (Email only – Numbered)	Within 3-days receipt of Gov't Initiated correspondence.
Monthly Status Report (pdf attachment via email)	Within 5-days from end of month

4.1.1 The days listed above are calendar days, including Saturdays, Sundays, and Federal holidays. The Government must receive the deliverable by the start of the next business day. If the due date falls on a Saturday, Sunday, or Federal holiday, the Government expects receipt by the start of the next business day. The A-E Contractor should assume 14-days for receipt of Government comments for review of major submittals. On-site review conferences or conference calls can be scheduled no sooner than 7-days following receipt of the submittal.

4.1.2 The Government may accept submittals prior to the due date provided they are complete and have received a quality control check. The Government will not accept partially complete submittals early or otherwise.

4.2 Deliverables

4.2.1 The table below shows the list of deliverables and their required distribution.

Deliverable Distribution Schedule

Deliverables	Number of Copies					
	A	B	C	D	E	F
Electronic Copies Only (Native and/or .pdf formats)						
Design Quality Control Plan	1	1				
Minutes, Confirmation Notices, Status Reports	1	1	1	1	1	1
Design Analysis	1	1	1	1	1	1
Design Data/CADD Drawings, (35%, 65%, 95%, 100%)	1	1	1	1	1	1
Specifications (35%, 65%, 95%)	1	1	1	1	1	1
Specifications (100%)	1	1	1	1	1	1
Value Engineering Report	1	1	1	1	1	1
Cost Estimates in native format and PDF	1	1	1			1
Bid Schedules	1	1	1			1
Contract Award Documents	1	1	1	1	1	1
Drainage Study Draft and Final	1	1	1	1	1	
Topo Survey Draft and Final	1	1	1	1	1	1
Hard Copies (8” x 11 ½”)						
Due Diligence Reports						
Design Analysis						
Specifications (35%, 65%, 95%)						
Specifications (100%)						
Value Engineering Report						
Bid Schedules						
Contract Award Documents						
Drainage Study Draft and Final	1	1	1	2	2	1
Topo Survey Draft and Final						
Full Size Drawings						
Drawings (100% Design)						2

4.2.2 The table below lists the Points of Contact that correspond to the letters (*A, B, C,* etc.) in deliverable distribution schedule above.

Address List

a. CESWF Design Manager (Address Stated Above)

b. CESWF COR (Address Stated Above)

c. CESWF PM ((b) (6)) 819 Taylor Street, CESWF-ECSO-T, Fort Worth TX, 76102

d. CBP Office, (Address Stated Above)

e. BPFTI PMO, (b) (6), (b) (7)(C), 7940 Jones Branch Drive, McLean, VA 22102

f. CESWG Area Office (Name provided after award), 252 Industrial Dr # A, Port Isabel, TX 78578

4.2.3 The A-E form shall coordinate submittal distribution with the POCs. The original transmittal letter will be addressed to the POC and will note that by information copy of that transmittal, appropriate review agencies are being provided copies of the work products and are requested to provide comments electronically to the POCs and to the A-E firm by the due date. The original transmittal letter and all copies will include a schedule showing data distribution.

5.1 Base Bid Reviews and Conferences

5.2 Quality Assurance Reviews

5.2.1 Formal Reviews

5.2.1.1 The Government will perform a formal Quality Assurance (QA) check on the following:

a. The POC will be responsible for providing the comments to the A-E and the A-E shall be responsible for responding to, and incorporating (if appropriate), all comments from reviewers into the deliverables.

b. The A-E maintains professional responsibility and liability for the deliverables. If, in the A-E's professional opinion, a QA comment either does not apply or the A-E disagrees with it, then the A-E shall not incorporate that comment into the deliverables. The A-E shall respond to the comment "Do not concur." and provide the comment submitter with an explanation of the disagreement. The A-E shall also be prepared to discuss the position with the reviewer.

c. CESWF uses USACE's web-based *Design Review and Checking System* (DrChecks) at www.projnet.org as the primary means for recording and tracking resolution of QA comments. The A-E shall use this system. The Government will set up DrChecks for this project.

d. The QA team may not record all QA comments in DrChecks. They may provide comments on other media. If such is the case, the POC will be responsible for providing those comments to the A-E and the A-E shall be responsible for responding (and incorporating, if appropriate) into the final products.

5.2.2 Casual Reviews

The A-E firm is responsible for ensuring compliance with all requirements in this task order. The Government will examine all deliverables submitted by the A-E firm. If the Government finds deficiencies, the A-E firm shall amend and resubmit as necessary.

5.2 Conferences

The conferences scheduled for this task order are listed in the table below. Any additional conferences requiring travel shall be authorized by a Task Order Modification. Expenses will be reimbursed as denoted in the IDIQ Contract and must be based on current Joint Travel Regulations. Airline ticket cost shall be based on a minimum 7-day advance purchase.

Additional A-E discipline team members will be made available to support the on-site meetings via conference call. Limited participation is required. If required to meet expedited schedules, the A-E shall be prepared to accommodate over-the shoulder review comments.

Scheduled Conferences

Scheduled Conferences	Location	Duration	A-E Firm's Role
Kick-Off Meeting	Fort Worth District Office	1 Day	Req'd: PM, Civil, Structural, Electrical, Geotechnical Engineers
Project Site Visit	Weslaco	1 Day	Req'd: PM, Civil, Structural, Electrical, Geotechnical Engineers.
Design Charrette (w/In-Brief; Out-Brief)	RGV Sector HQ	1 Day	Req'd: PM, Civil, Structural, Electrical, Geotechnical Engineers and Cost Estimator.
Value Engineering Workshop	Fort Worth District Office	5 Days	Req'd: PM, Civil, Structural, Electrical, Geotechnical Engineers and Cost Estimator and Independent Civil, Structural, Electrical, Geotechnical Engineers and Cost Estimator and Value Engineering Coordinator.
Parametric Design (35%) Review	Video Teleconference	3 Days	Req'd: PM, Civil, Structural, Electrical, Geotechnical Engineers and Cost Estimator.
Preliminary Design (65%) Review	Video Teleconference	3 Days	Req'd: PM, Civil, Structural, Electrical, Geotechnical Engineers and Cost Estimator.

Scheduled Conferences	Location	Duration	A-E Firm's Role
Final Design (95%) Review	Video Teleconference	1 Day	Req'd: PM, Civil, Structural, Electrical, Geotechnical Engineers and Cost Estimator.
Corrected Final Design (100%) Review	Video Teleconference	1 Day	Req'd: PM, Civil, Structural, Electrical, Geotechnical Engineers and Cost Estimator.
Construction Pre-Proposal Conference	Weslaco Station, RGV	1 Day	Req'd: PM, Civil, Structural, Electrical, Geotechnical Engineers.

6.1 Base Bid Technical Criteria, Standards/Specifications, General Requirements and Government Furnished Information (Use Latest Editions Unless Otherwise Noted)

The A-E or Designer of Record shall use the following standards as applicable for this project.

a. Per DoD Directive Number 4270.5 dated 12 February 2005 paragraph 4.7, the Unified Facilities Criteria (UFC) and the Unified Facilities Guide Specifications (UFGS) shall be used to the greatest extent possible by all DoD Components for planning, design, and construction (restoration and modernization) of facilities, regardless of funding source, except for those facilities constructed by the National Guard on real estate neither owned by the United States nor under long-term lease to the United States, constructed by a State under Chapters 169 and 1803 of Title 10, US Code, and where title to the facility shall not be in the United States.

b. UFC 1-200-01: General Building Requirements.

c. International Building Code (IBC).

d. NFPA Life Safety Codes 13, 90A, 101.

e. ANSI/IEEE C2-2002, National Safety Electric Code.

f. U.S. Army Corps of Engineers Architectural and Engineering Instructions (AEI), (http://www.hnc.usace.army.mil/Missions/Engineering/TECHINFO.aspx)

g. US Army Corps of Engineers, Southwestern Division, Architectural and Engineering Instructions Manual (CESWD-AEIM) available at: http://www.spa.usace.army.mil/portals/16/docs/ec/swd_aeim_2003.pdf

h. U.S. Army Corps of Engineers design criteria available at: http://www.publications.usace.army.mil/USACEPublications/EngineerManuals.aspx

i. U.S. Army Corps of Engineers – Technical Instructions, TI 800-01, 20 July 1998 available at http://www.wbdg.org/ccb/ARMYCOE/COETI/ARCHIVES/ti800_01.pdf

j. Contract Administration Branch guidelines set forth at http://www.publications.usace.army.mil/Portals/76/Publications/EngineerPamphlets/EP_715-1-7.pdf

k. Selection of Methods for the Reduction, Reuse, and Recycling of Demolition Waste.

l. Requirements to collect Geographic Information System (GIS) Data associated with construction projects.

m. All applicable Federal, State and industry standards, including those not referenced constitute design criteria for this project.

n. CBP Design Guide

o. DHS Tactical Infrastructure Standard Design Toolkit, 2012

p. Due to the project requirements, this project shall meet USACE flood risk management design standards utilizing Design and Construction of Levees (EM 1110-2-1913) and, defined as a Flood Wall, thus utilizing Retaining and Flood Walls (EM 1110-2-2502), Slope Stability (EM 1110-2-1902), Strength Design of Concrete Hydraulic Structures (EM 1110-2-2104).

The design of the project shall also meet the USACE hydrologic criteria for levees and floodwalls, as defined in Chapter 7 of Hydrologic Engineering Requirements for Flood Damage Reduction Studies (EM 1110-2-1419), and the performance of the project in terms of flood protection and FEMA certification shall be evaluated according to USACE's risk and uncertainty standards as defined in Risk-Based Analysis for Flood Damage Reduction Studies (EM 1110-2-1619).

q. **Government Reviews (Dr. Checks) -** CESWF uses USACE's web-based comment tracking system, Dr. Checks (located at www.projnet.org), as the primary means for recording and tracking resolution of QA comments. The Government's review will consist primarily of quality assurance (QA) checks and is typically completed in two weeks. It will concentrate on the design's functional aspects with limited technical review. The Government will prepare written comments for evaluation and response by the A-E after each major submittal. The A-E shall annotate and respond to the review comments in the development of data for the next design level. Responses such as "A-E requires additional information." or "A-E does not understand." are unacceptable. Annotations shall address specific corrective actions required. The A-E shall enter responses in advance of review conferences. Final annotation shall be completed within seven days of the conference. Hard copy distribution of final annotated comments is not required except that they shall be included by the A-E in the Design Analysis. The A-E maintains professional responsibility and liability for the deliverables. If, in the A-E's professional opinion, a QA comment either does not apply or the A-E disagrees with it, then the A-E shall not incorporate that comment into the deliverables. The A-E shall respond to the comment "Do not concur." And provide the commentator with an explanation of the disagreement. The A-E shall coordinate with the Government Project Manager to ensure the

Government has set up rights for each pertinent member of the A-E team that needs to evaluate and respond to comments.

r. **Construction Specifications** - The A-E firm shall prepare all construction contract specifications with the following minimum sections: Signature Sheet with the A-E firm's seal, Table of Contents, Bid Schedule, ENG Form 4288, "Submittal Register", All **Division 02 through 48** technical specifications applicable to this project, List(s) of Government-Furnished, Contractor-Installed property, and any attachments the A-E firm determines are necessary to successfully construct this project.

The Government will prepare all Division 00 and Division 01 Specifications listed below and the A-E will assemble the final bid documents.

Additional Government Furnished Specification Sections		
DIVISION 00		SWF Contracting
01 00 00.00 44	CONSTRUCTION SCHEDULE	SWF Specs Section
01 30 10.00 44	PARTNERING	
01 31 19.00 44	PROJECT MEETINGS	
01 32 01.00 10	PROJECT SCHEDULE	
01 33 00	SUBMITTAL PROCEDURES	
01 35 26	GOVERNMENT SAFETY REQUIREMENTS	
01 45 00.00 10	QUALITY CONTROL	
01 45 00.10 10	QUALITY CONTROL SYSTEM (QCS)	
01 58 00	PROJECT IDENTIFICATION	
01 78 00	CLOSEOUT SUBMITTALS	

Follow the guidance in the AEIM to prepare the specifications. One exception is the 2003 version of the AEIM refers to the old Construction Specifications Institute (CSI) 16-Division system. The A-E shall use the SpecsIntact software and the Unified Facilities Guide Specifications (UFGS) version (Latest Edition) of the SpecsIntact Guide Specifications in Master Format which is consistent with the 44-division format. In addition to guide specifications which must be downloaded from the internet, the A-E must determine if there are Fort Worth District (CESWF) guide specifications and Fort Worth District Supplements which must be considered. The CESWF guide specifications generally cover products and construction topics or processes that are not covered by the UFGS guide specifications. A few cover topics that are covered by the CEGS. For these guides, it is preferred that the FW guides be used as the FW guides contain requirements and procedures tailored to local conditions. The CESWF Supplements to UFGS Guide specifications are local requirements mandated by the Southwestern Division or requested by the Army posts or Air Force bases that the District serves. These requirements must be inserted into the appropriate UFGS guide specification as applicable to the project.

ENG Form 4288 "Submittal Register." The ENG Form 4288 document identifies and classifies all items the construction contractor must submit to the Government to assure

compliance with the contract specifications. These items include: SD-01 Preconstruction Submittals, SD-02 Shop Drawings, SD-03 Product Data, SD-04 Samples, SD-05 Design Data, SD-06 Test Reports, SD-07 Certificates, SD-08 Manufacturer's Instructions, SD-09 Manufacturer's Field Reports, SD-10 Operation and Maintenance Data, and SD-11 Closeout Submittals.

The A-E firm shall identify all required submittals and classify those submittals as Government Approved (GA) or For Information Only (FIO) in the appropriate specification sections and use the SpecsIntact software to generate the submittal register. The A-E firm shall verify the data in the submittal register so generated matches what the design team identifies in the specifications.

The A-E firm shall ensure that the Specifications are free of errors by using the "Process and Print/Publish" function in SpecsIntact. This function uses the tagging and edit features of the software to compile the completed contract specifications. It also provides a report listing technical errors *in the files* themselves (the feature will not catch improper engineering). The A-E firm shall use the report to correct any errors prior to submitting to the Government.

The A-E firm shall prepare the construction specifications utilizing the latest versions of the: SpecsIntact Software, United Facilities Guide Specifications, CESWF Guide Specifications and Supplements, and Guides and help manuals for above.

These are all available free of charge at the following web site:
http://www.wbdg.org/ccb/browse_cat.php
The A-E firm shall not recycle specifications as they may be out of date.

CADD Standards. The A-E shall comply with A/E/C CADD Standards
https://cadbimcenter.erdc.dren.mil/default.aspx?p=a&t=1&i=7
Fort Worth District Sheet/Title Block file can be found at:
https://cadbimcenter.erdc.dren.mil/doccenter.aspx?ID=0

All CADD drawing model file elements shall be produced full scale in CADD and named in compliance to A/E/C Standard.

SYMBOLOGY: All CADD element symbologies including level, weight, style, and color shall be compliant to A/E/C Standard.

The A-E is responsible for ensuring that resulting plots from pdf files are essentially identical to plots from the parent SpecsIntact and CADD files.

s. **Civil / GIS CADD GIS Requirements**
CADD and Electronic (paperless) Bid Process.
CADD Standards. The A-E shall comply with A/E/C CADD Standards
https://cadbimcenter.erdc.dren.mil/default.aspx?p=a&t=1&i=7

Fort Worth District Sheet/Title Block file can be found at:
https://cadbimcenter.erdc.dren.mil/DocCenter.aspx?ID=0

CADD. Critical to the design process is use of Computer-Aided Drafting and Design (CADD). The Government plans to solicit bids for construction of the project via an electronic format without providing printed plans and specifications to perspective bidders. All work to be accomplished, e.g., design work, surveying work, drawings, and details to be provided under this Task Order shall be accomplished and developed using computer-aided design and drafting (CADD) software and procedures conforming to criteria set forth elsewhere. All CADD final design deliverables shall be delivered in AutoCAD File format, version 2016 or newer.

All CADD drawing model file elements shall be produced full scale in CADD and named in compliance to A/E/C Standard.

SYMBOLOGY: All CADD element symbologies including level, weight, style, and color shall be compliant to A/E/C Standard.

Electronic Files/Paperless Solicitation. Electronic files provided to bidders shall be produced by the A-E as described herein and provided to potential bidders by the Government, via a Government Web site.

CAD files shall be converted to Adobe Acrobat "pdf" files by the A-E, which will require the A-E to purchase computer software for this purpose if they do not currently have this capability or alternately satisfy this requirement through a subcontractor (http://www.adobe.com/products/acrobat/readstep.html). These files will be readable utilizing the free Adobe Acrobat Reader.

The A-E is responsible for ensuring that resulting prints from pdf files are essentially identical to prints from the parent SpecsIntact and CADD files.

t. **Amendments to Bid Documents** - During the time that this project is advertised for construction contract bids, it may be necessary for the A-E to provide revisions to the advertised plans and specifications. Drawing revisions shall be provided as reissued or additional drawings. Reissued or additional drawings shall be incorporated into the bid documents, in the form of amendments. All amendments shall be incorporated into project specifications and drawings in accordance with the SWD Architect-Engineer Instructional Manual (AEIM), Chapter VIII. All plan sheets revised to incorporate amendments, along with the CADD and PDF files shall be provided as specified or referenced herein. At the discretion of the Contracting Officer, drawing revisions may be provided in narrative form and sketches. Amendments within the project's scope, including design errors, omissions and conflicts will be done promptly, to prevent or minimize slipping of the proposal due date, with no increase in the A-E Task Order price. In most instances, the final amendment must be available to bidders ten days before the due date for technical and price proposals.

u. **Construction Contract Plans and Specifications (Contract CD) -** After award of the construction contract, the A-E shall incorporate any write-in amendments, put the construction contract number on the drawings, re-generate pdf files and replot a set of drawings on bond (vellums are no longer required) printed from the pdf files. The A-E shall provide two CD's each containing the modified CADD and .pdf drawing files. The Government will incorporate any write-in amendments to the specifications.

Data Standards - Spatial Data Standard for Facilities, Infrastructure and Environment (SDSFIE) current release shall be followed for Geospatial database structure and attributes to allow for data integration. CADD data shall be documented according to the current release of the Architecture, Engineering and Construction (AEC)/CADD standards. All GIS and CADD data will be documented in accordance with the Federal Geographic Data Committee (FGDC) Content Standards for Digital Geospatial Metadata.

Coordinate System Projection and Datum - All GIS data shall use the Universal Transverse Mercator Zone 15 North projection, World Geodetic System of 1984 (WGS84) datum, and the North American Vertical Datum of 1988 (NAVD88) using metric as the working units to ensure data alignment and accuracy.

CADD data shall be geo-referenced in the State Plane Coordinate System 1983, using the North American 1983 Geodetic Datum with Survey Feet as the working units. The projection, datum and coordinate system must be defined and then documented in the metadata for both CADD and GIS and provided whenever the data is distributed.

Deliverables - The CADD documents shall be in compliance with the A/E/C CADD Standards release 3. The A-E shall use the supplied Corps of Engineers title blocks and borders on all drawings with the appropriate firm name included within the title block area.

GIS deliverables shall be delivered in current GeoMedia file format or an ArcView shape file.

6.2 Proprietary Specifications and Requirements.

The A-E firm shall avoid specifying proprietary materials, equipment, systems, or other features of the work unless the A-E firm can demonstrate the use of such proprietary requirements will be advantageous to the Government (e.g. fire alarm transmitters and locksets that must be compatible with other products at the facility). The Government is prohibited from specifying proprietary requirements except in unusual circumstances which requires documentation and approval by the Contracting Agency Head or higher authority. If the A-E firm can show that a proprietary material could be more advantageous to the Government, provide a description that includes the brand name and a general description of those salient physical, functional, or performance characteristics of the item.

6.3 Office Documents.

6.2.1 The table below lists the software products the Government uses for work products produced through general-purpose office software (e.g. VE Study, Design Analysis, Etc.):

Government Software Packages

File Type	Software	Publisher
Portable Document Format (*.pdf)	Acrobat	Adobe
Hypertext transfer protocol (http)	Internet Explorer	Microsoft
Word Processing (*.docx)	WORD	Microsoft
Spreadsheets (*.xlsx)	EXCEL	Microsoft
Slideshow presentations (*.pptx)	POWERPOINT	Microsoft
eMail client (*.msg)	OUTLOOK	Microsoft

6.2.2 The A-E firm shall ensure the documents they produce and submit to the Government are compatible with these software packages. The A-E firm shall be responsible for any file translation necessary to permit Government reading of documentation. The A-E firm shall consult with the Government on the use of software not on this list to ensure the Government can read the files the A-E firm will submit.

6.2.3 The A-E firm shall consider readability and reproducibility in the preparation of documents. This includes (but is not limited to) font sizes, organization and layout of documents, paper sizes, and use of color documentation. Not all stakeholders on this project have access to high-end reproduction equipment.

6.3 Units of Measure.

The A-E shall verify use of U.S. Customary, International, or other units in all work products.

6.4 Government Furnished Information and Materials

The table below lists the Government Furnished information and materials included in this task order. Contact the POC if more data is necessary for preparation of fee proposal or execution of the task order.

Government Furnished Materials

No.	Item	Source
1	Cost engineering database tables and software. Purchase or license may be required at cost to the A-E firm.	See also http://media.swf.usace.army.mil/pubdata/EC/eca/CostSpec.asp
2		

7.0 Option 1 D-B RFP 4 Packages

Project Description

7.1 Overview

The A-E Contractor will develop four design-build (D-B) RFPs for the replacement of Primary Boder Fence. **D-B RFP 1** is for the replacement of 14 miles of Border Infrastructure System (BIS) primary fence in San Diego Sector, CA. **D-B RFP 2** is for the replacement of 2 miles of primary fence in Tecate, CA. **D-B RFP 3** is for the replacement of vehicle fence with primary fence for 20 miles between Santa Theresa Port of Entry and Columbus, NM. **D-B RFP 4** is for the replacement of 4.16 miles of primary fence in El Paso, TX.

The A-E Contractor will coordinate these items with the CESWF Project Design Team, CBP personnel, and local utility providers. Overall guidance is provided by the CBP & TI Design Guides. See the CESWF AEIM for design deliverable requirements. The programmatic VE Study developed in the Base Bid will be applied to these RFPs.

The Construction Cost Estimate/Current Working Estimate will be provided by the A-E. A pre-proposal conference to finalize the project scope of work and aid in the preparation of the A-E proposal is recommended. Labor and travel costs are not reimbursed by the Government.

7.1.1 Product Scope

The Government requires the development of four D-B RFPs. The work includes:

a. SDC BIS – The A/E shall develop a Design-Build (DB) RFP to demolish and construct 14 miles of replacement primary fence and 35% design, in accordance with the SWD AEIM, for the San Diego Sector.

b. SDC Tecate – The A/E shall develop a Design-Build (DB) RFP to demolish and construct 2 miles of replacement primary fence and 35% design, in accordance with the SWD AEIM, for the San Diego Sector.

c. ELP 1 – The A/E shall develop a Design-Build (DB) RFP to demolish and construct 4.16 miles of replacement primary fence and 35% design, in accordance with the SWD AEIM, for the El Paso Sector.

d. ELP 2 – The A/E shall develop a Design-Build (DB) RFP to demolish vehicle fence and construct 20 miles of replacement primary fence and 35% design, in accordance with the SWD AEIM, for the El Paso Sector.

7.1.2 Project Scope

7.1.2.1 This Scope of Work includes all work necessary for the A-E firm to prepare four D-B RFPs, denoting complete and usable projects.

a. Design Quality Control Plan

b. Reviews and Conferences

c. Confirmation Notices, Status Reports

d. Drainage Study

e. Planimetric, Topographic Survey

f. Geotechnical Investigation: Subsurface Investigation Borings, In-Situ and Laboratory Testing, and Geotechnical Report

g. Design Charrette

h. Draft D-B RFP

i. Final D-B RFP

j. Corrected Final D-B RFP

k. Structural Analysis

l. Cost Estimates

(1) Site

(2) Landscaping, Fencing

(3) Parking, Roadways, Exterior Lighting

(4) Storm Drainage, Storm Water Pollution Prevention Plan

(5) Site Utilities

(6) Structural

(7) Electrical

(8) Lightning Protection, Grounding

m. Amendments

7.2 Construction Cost Limitation.

Develop Design-Build RFPs based on the results from the Base Bid Design Charrette. There is no CCL. The A-E is to develop the scope and cost estimate. All services associated with a Study, Project Definition Report or Design-Build RFP are considered non-design and are not subject to the 6% of Construction Cost Limitation statutory limit.

8.1 Option 1 Services

8.2 Quality Control Plan

The minimum requirements for the quality control plan (QCP) are given in ER 1110-1-12, *Quality Management*, and the project SOW. The QCP is the A-E firm's management plan(s) for execution of the contract. The QCP describes the way in which the A-E will produce the deliverables, the steps that will be taken to control quality, and an assigned point-of-contact within the A-E firm's organization responsible for ensuring compliance with the QCP. The QCP, modified to include any changes to the contract that occur, will be attached as an appendix to the design analysis.

8.3 A-E Services (See CESWD-AEIM for full descriptive requirements.)

a. Design Quality Control Plan (See Section 3.1)

b. Reviews and Conferences (See Section 5.2)

c. Confirmation Notices, Status Reports (See Section 3.3.1)

d. Design Charrette - The A-E shall conduct a Design Charrette to determine the customer's functional requirements. The Charrette Meeting shall include, but not be limited to, gathering and developing requirements concerning User activities, number of personnel, operations requirements, equipment requirements, utilities, security, Due Diligence studies, and general site requirements. Key discussion items shall include project/design alternatives, key 'show stoppers', and team buy-in for final design requirements. Minimum full time attendees include the Project Manager and Civil Engineer, By the end of the Charrette, the A-E shall develop conceptual site plans, and management out-brief. Final deliverables for the Charrette include meeting minutes, site plans, utility plans, and ENG Form 3086 Government estimate.

e. Drainage Study - Provide a drainage Study (separate from the Base Bid Drainage Study) for all of the areas identified in Appendix B to address the impacts of the proposed projects to the existing floodplains and design of drainage crossings due to the proposed improvements. The levee wall/fence shall be protected from erosion due to stormwater run-off and allow the conveyance of stormwater runoff across the site.

The Contractor shall prepare a programmatic drainage report for the impacts of the areas identified in Appendix B and meet with the appropriate USIBWC personnel to discuss this project and gain a clear understanding of the approval requirements for the design. The Contractor shall coordinate with the USIBWC and respond to any comments or questions. Additionally, the Contractor shall coordinate with the local officials and entities on the design and RFP package. USIBWC shall lead and be responsible for the coordination with

the Mexican Section of USIBWC. The Contractor shall complete a Draft Drainage Report and submit this document with the RFP Submittals.

The programmatic drainage report will outline all hydrologic and hydraulic assumptions, drainage criteria, data, calculations, modeling, results and design recommendations. All drainage analyses and design for this program shall be performed in accordance with the requirements of the Department of Homeland Security's Tactical Infrastructure (TI) Design Standards (DHS, 2012). General drainage design criteria shall be used for sizing erosion protection and conveyance measures along with treaty requirements from the U.S. Section of the International Boundary and Water Commission (USIBWC) as discussed in the TI design standards.

The contractor shall be responsible for gathering all geospatial and hydrologic data necessary for the hydrologic and hydraulic analyses. This data shall include the seamless 30-meter elevation datasets, current aerial imagery, and the new survey data being collected for the project. The U.S. - Mexico Border Environmental Health Initiative (BEHI) created a seamless 30-meter elevation dataset for both sides of the border. The 30 meter 1 arc second USGS National Elevation Dataset (NED) was harmonized with the Instituto Nacional de Estadística, Geografía e Informática (INEGI) 30 meter Continuo de Elevaciones Mexicano (CEM) to create a seamless elevation model for the U.S.-Mexico Border region. In addition the USGS applied the NED filtering and smoothing algorithms to INEGI′s CEM to improve the dataset. Other geospatial data to be collected may include cities, urban areas, roads, watersheds, streams and rivers, and land cover. Most of the required geospatial data, including the seamless 30-meter elevation data, is available for download from the U.S. - Mexico BEHI website (BEHI, 2015).

The Contractor shall address the following requirements for hydrologic analyses:

Provide final drainage basin delineation maps showing all basins and sub-basins associated with the limits of construction. The contractor shall determine all locations where existing intermittent streams, rivers, or drainage paths cross the proposed project whose drainage areas are distinguishable in the 30-meter elevation data. For each drainage crossing location, the contractor shall delineate the contributing drainage area using seamless 30 m U.S. NED and Mexico CEM elevation data.
For each drainage crossing location, peak discharges shall be calculated for the watershed runoff hydrographs resulting from the 25-yr, 50-yr and 100-yr storm events. The methodology for calculating hydrologic flows at the project drainage crossings shall use the following three methods as minimum design standards:

a) For watersheds less than 1 square mile, the rational method can be used. This method is not applicable to larger drainage areas.
b) For watersheds between 1 square mile and 10 square miles, the Natural Resources Conservation Service method shall be used.
c) For watersheds larger than 10 square miles, the regression equations for the area shall be used. These equations are provided by the U. S. Geological Survey's (USGS) GLSNet software.

More detailed rainfall-runoff modeling in HEC-HMS may be substituted for any of the above minimum design methods. Since all of the above methods carry a great degree of uncertainty, the contractor shall calculate the 25-yr, 50-yr and 100-yr peak discharges with two or more of the four methods listed above and then adopt the maximum value for design. This approach is intended to improve the long term reliability of the drainage design.

USIBWC is responsible for ensuring that improvements on the U.S. side of the international land border with Mexico comply with treaty provisions as they relate to cross-border drainage. Impact to water surface elevation between the pre and post construction conditions due to any new TI, including border and access roads, being built along the land border between the U.S. and Mexico shall not exceed 6 inches in rural areas and 3 inches in urban areas using the 100-year storm event as required by USIBWC.

To verify the impacts are within the above mentioned limits, hydraulic models shall be developed. The models shall be developed with HEC-RAS software using the 100-yr discharges calculated in the hydrologic analyses of this scope. Existing conditions and proposed conditions models shall be developed at each applicable drainage crossing, and the difference in water surface elevations shall be compared. The existing conditions cross sections shall be cut from the project survey data in the immediate area of the proposed project and from the 30-meter elevation data outside of the survey area. The proposed condition models shall demonstrate that the impacts of proposed structures to be built within the floodplains of these drainage paths will not exceed the rise in water surface elevation limits stated above. New construction or improvements more than 60 feet north of the border do not need to comply with the drainage treaty provisions mentioned above.

The Contractor shall address the following requirements for hydraulic analyses:

Determine local drainage runoff and/or sheet flow conditions as they cross the fence alignment.
Provide the final hydraulic calculations identifying the final discharge velocity and rise in water surface elevation associated with the selected fence type at each identified wash crossing. Maximum acceptable rise in water surface elevation shall be 6-inches at rural locations and 3-inches at urban locations along the International Boundary.
Provide final calculations showing depth of scour and/or long term degradation.
Provide details for protection against scour and/or long term degradation.
Provide details for culvert and/or low water crossings at each wash crossing which satisfies rise in water surface elevations stated above.
Provide hydrologic/hydraulic design and details showing that any/all cut and/or fill operations conducted within the project site do not adversely affect the natural drainage patterns across the site and satisfies the rise in water surface elevation stated above.
Provide hydraulic design and details for any other site drainage improvements required due to construction of the all-weather road.
Conduct hydraulic analysis using HEC-RAS modeling.

Based on the hydrologic and hydraulic analyses performed for the programmatic drainage report and in accordance with the TI design standards, the contractor shall make project design recommendations related to drainage conveyance through the fence, low water crossings, culverts, drainage gates and erosion control. The recommended types and sizes of these drainage features shall be specified in the final drainage report.

A drainage report will be prepared by the Contractor summarizing all hydrologic and hydraulic assumptions, drainage criteria, data, calculations, modeling, results and design recommendations. The report shall include maps of the locations of the identified drainage crossings and their contributing drainage areas. It shall specify the hydrologic method used at each location and include a summary of the calculations and assumptions used to calculate frequency peak discharges. The report shall also include maps of the hydraulic model cross sections and stream centerlines, summaries of the data and parameters, and assumptions used in the hydraulic models, and tabular summaries of the calculated water surface elevations for existing and proposed conditions. Drainage design recommendations, including types and sizes of drainage features, shall also be included in the report. In addition to the report, the contractor shall provide the government with a digital copy of all models, hydrologic calculations, and all geospatial data collected or developed as part of this scope.

The Contractor shall deliver the draft drainage report, models, hydrologic calculations, and geospatial data to the USACE Program Manager (PgM) for review and comments. One round of responses to USACE comments shall be prepared by the Contractor for USACE review and concurrence. The Contractor shall be available via telephone to respond to any comments or questions regarding these documents and if required shall prepare a review comment resolution matrix (RCRM) documenting all review comments and corresponding resolution. The contractor shall prepare a draft final (90% design level) drainage report following USACE concurrence to the Contractor's response to comments. The Contractor shall deliver the draft final drainage report to the USACE Program Manager (PgM) for review and comments. One round of responses to USACE comments shall be prepared by the Contractor for USACE review and concurrence. The Contractor shall be available via telephone to respond to any comments or questions regarding these documents and if required shall a RCRM documenting all review comments and corresponding resolution. The Contractor shall prepare the final report (100% design level) following USACE concurrence to the Contractor's response to comments. The final report shall incorporate the resolved USACE comments and Contractor's response to comments, and be delivered in hard copy and electronic format.

Drainage Report References:

1. Department of Homeland Security (DHS) Customs and Border Protection, *Tactical Infrastructure Design Standards*, April 2012.
2. U.S. – Mexico Border Environmental Health Initiative (BEHI), http://borderhealth.cr.usgs.gov/datalayers.html, accessed May 2015.

f. Geotechnical Investigation - Provide services as set forth in the attached exhibit. The A-E shall conduct drilling operations, conduct limited on-site testing and deliver samples/boring logs to the testing facility. This study will provide site characteristics required to support the foundation design proposal. The A-E shall develop a sealed Geotechnical Report for all of the project locations in Appendix B. The A/E shall coordinate with the USACE Levee Safety Officer, or designee, to meet USACE, IBWC & FEMA requirements prior to drilling into any levee.

g. Planimetric, Topographic Surveys - A new topographic survey will need to be accomplished to supplant and update previously captured topographic information. This will ensure accuracy of the design for improvements and the drainage analysis. It is the contractor's responsibility to verify any existing data that is provided. This topographic survey effort should be done at the scale required for the proposed design improvements and drainage analysis (i.e. 1"=30' with 1'contours, etc). The survey data required for this project is not limited to the 150-foot wide project area, additional topographic information will be required for the drainage study, utility connection points, property boundaries, existing drainage features, etc. Surveys will be conducted for all of the locations in Appendix B. Additional information is in the attached exhibit.

h. Utility Connection Points - Perform the necessary analysis to identify the characteristics of all required existing utilities. Determine connection points and new infrastructure requirements to service the project.

i. Structural Analysis – Provide a structural analysis as required to support this SOW.

j. Geotechnical Design Requirements – The A-E shall complete the design as denoted in the Geotechnical Investigation.

k. Construction Cost Estimates - A Parametric (PACES) estimate is required for the Project Definition Report, Parametric Design (35%) Documents or Draft D-B RFP. A MII Micro-Computer Aided Cost Estimate is required for the Final and Corrected Final D-B RFP, as well as, the 65%, 95% and 100% Design Data submittals. The requirements of this Task Order override and replace the requirements listed in the AEIM.

l. Design-Build Request for Proposal (Draft, Final, Corrected Final) - The A-E shall provide all needed information for the project based upon information gathered at the pre-design meeting and the Parametric Design (15%) submittals. Design documents used for advertising shall not be sealed by the A-E. Fully developed site plans showing parking, roadways, pedestrian pathways, building footprints, utility connections, etc. are not required. Only conceptual (35%) plans are required.
RFP Preparation and Source Selection **-** Complete the project through the 35% design. The A-E shall prepare technical sections of a design-build package for the facility and associated utilities as indicated in the project description. The A-E shall prepare the list of technical specifications, technical evaluation criteria, special phasing requirements (as determined), and reference drawings for the RFP. Immediately following the RFP Review conference the A-E

will attend a VE workshop per the above requirements. The Government will prepare all Division 00 and 01 specifications unless otherwise noted.

RFP Content, Organization and Important Criteria - The RFP is to be prepared to meet all requirements for a Task Order Design-Build solicitation. Compliance with the Fort Worth District guidance for preparing documents for solicitation and construction award is required. Include with the Draft and Final RFP, an estimate of the construction time in calendar days to complete the project. The A-E shall incorporate phasing or sequencing requirements based upon user needs and/or design considerations. Derivation of the construction period shall be provided in accordance with SWD AEIM. The A-E shall include necessary information in the RFP to guide the Offerors regarding any phasing requirements for construction of the facility. Construction Cost Limitations (CCL) **-** The estimated construction cost of this project is based upon anticipated funding as stated in this Statement of Work. Each project must be designed to provide a usable facility within the designated limitations of estimated construction contract price and scope. If additive, optional or deductive bid items must be included in the Bid Schedule for cost limitations, the A-E shall properly delineate these items in the drawings and specifications without additional compensation. Modification to plans, specifications, and the construction cost estimate to reflect optional, deductive or additive bid items is included as part of this Contract as necessary to remain within funds available.

m. Cost and Scope Limitations - The A-E shall ensure the guidance outlined in the RFP requires the Offerors to provide a usable facility within the limitations of estimated construction contract price and scope. If at any time, the A-E finds that the estimated construction cost and scope of the project is likely to exceed the budget, the A-E shall report this fact to the Contracting Officer Representative. He shall also submit recommendations (associated costs) for reducing the project cost and/or scope to within the established limits.

n. Landscaping, Fencing – Specify Installation accepted plants for low maintenance and minimal irrigation.

o. Parking, Roadways, Exterior Lighting - .

p. Storm Drainage, Storm Water Pollution Prevention Plan – Shall be based on the Proposed Site Plan. Must be coordinated with Installation personnel to define local requirements.

q. Site Utilities - Following verification of existing utilities, new infrastructure requirements and points of connection to service the project must be determined by the A-E. Domestic Water, Sanitary Sewer, and Natural Gas lines must be sized to handle project loads and then terminate into existing mains. Electrical conductors shall be sized to handle project loads and then terminated into required electrical transmission equipment. Privatized utility requirements will be denoted.

r. Structural – Based on Installation specific wind, snow, and seismic loading.

s. Electrical - Coordinate design of the primary electrical distribution with the local utility provider, Installation personnel and the CESWF Project Design Team. Identify who and how power will be provided to the facility transformer primary and secondary sides.

t. Telephones, Computers, CCTV, Intrusion Detection, Mass Notification – N/A.

u. Lightning Protection, Grounding – N/A.

v. Bidder Inquiries / Amendments - The A-E will respond to Bidder Inquiries via the ProjNet (Dr. Checks) system and provide updated Design Documents. The Government will issue the actual amendment.

w. Current Working Estimate - The current U. S. Army Corps of Engineers' Micro-Computer Aided Cost Estimating System MII (pronounced "M2") Version 4.0 Build III or most recent release, and compatible databases are required for all construction cost estimates produced under this Task Order. Contact CESWF-EC-AC Section Chief for information pertaining to obtaining the software. Each submittal must include an MII estimate based upon the current stage of design. The software database now requires purchase (with the costs subject to change), but current cost is approximately $1,000. This purchase is not made nor controlled through CESWF-EC-AC. The current version of the software program will be provided to the A-E under contract who must then follow the prescribed licensing procedure to make use of the software for the term of this contract. Any other use of the software and the database can be utilized per the terms of the licensing agreement with the manufacturer. That licensing agreement is not under the control of CESWF-EC-AC. A PDF file of the project estimate must be submitted with the reports file. Hard copy requirements are denoted elsewhere. The estimate will not be complete until the bid opening estimate or final proposal estimate which includes all amendments and the completed bid or CLIN schedule in its final advertised format have been submitted to CESWF prior to the construction contractors' final proposal or bid deadline date shown in the solicitation or SF30. All pricing information included with any database or other source can and should be adapted, modified, changed, increased, or decreased as deemed necessary by the estimator to prepare an estimate representative of the project. The information contained in any database or any other cost information provided by the Fort Worth District office, CESWF-EC-AC, or obtained from other sources is not intended to represent fixed prices for ordering supplies, equipment, material, labor, nor any other construction component in the Government estimate. The estimator's professional judgment and decisions should be the definitive factor in determining fair and reasonable costs calculated for submittals and reviews. In MII, when submitting estimates for Military Projects, the Corps' current 20 system Work Breakdown Structure (WBS) will be used to structure the estimate (or PCCost 3086/1391 format when requested) unless CESWF-EC-AC determines that WBS is not applicable. For Civil Works Projects, the current Code of Accounts structure will be used unless the project is of a nature that does not warrant any of these estimate structures but that variance must be requested and then authorized by CESWF-EC-AC. Excel based estimates or other software forms of estimating are not acceptable unless the A-E has been approved by CESWF-EC-AC to provide back-up data or lower level costs in those formats. Final roll-up and mark-ups of those estimates will be entered in MII software for submittals though by utilizing the structure required by

CESWF-EC-AC. The A-E shall be aware of and take precautionary measures as necessary to maintain the confidential nature of all cost estimates prepared under this Task Order. All estimate submittals shall be prepared in accordance with USACE instructions, regulations, and manuals for cost estimates as contained in EI 01D010, ER 1110-2-1302, and TM 5-800-4 and in compliance with EFARS 36.2. Costs will be developed using the latest standards and resources as applicable and including but not limited to the Tri-Services Estimating System, TRACES, MII, the MII Cost Book databases, commercial cost book databases, PAX newsletters 3.2.1 and 3.2.2, Davis-Bacon wage rates utilized as minimum values, commercially available reports, data, and local site specific or otherwise available sources of material, supplies, equipment, labor and other data. Compilation of the Current Working Estimate will incorporate the preceding sources and references utilizing the most recent available software as stated and/or other TRACES software which may include MII, MCACES, PACES, PCCost, risk analysis programs, or any of the other approved systems available to TRACES users. Any applicable software and databases which normally are distributed without cost by CESWF-EC-AC will be made available to the A-E by CESWF-EC-AC under the Task Order. Certain software programs and databases as described above and which also include PACES and RACER but are not limited to these mentioned herein may require purchase by the A-E and cannot be provided without cost to the A-E by CESWF-EC-AC. Construction cost estimates for planning and budgeting purposes and for projects at 0 - 15% stages may be submitted by utilizing parametric software such as PACES and then summarizing the costs in the PCCost software if CESWF-EC-AC deems this acceptable. Also for any planning and budgeting purposes, PCCost software may be used to generate costs by utilizing the category codes and area cost factors in the PCCost database (which also includes Area Cost Factor data and adjustments). Updates to the database are available from CESWF-EC-AC. Electronic copies of all cost estimates in their native formats must be submitted along with any txt, pdf, doc, and rtf type report files generated to produce the hard copies.

x. Pre-Proposal Conference and Site Visit - A Pre-proposal Conference and Installation Site Visit shall be conducted for potential Offerors after the RFP is advertised. The A-E Project Manager shall be required to make a presentation of the general RFP development concept and project features at the beginning of the review conference. The A-E shall prepare the agenda and organize the conference so that all technical and functional issues can be addressed within the scheduled duration of the conference. The presentation is intended to provide the conference members with a clear understanding of the facility and how it functions. It can be expected that the participants can range up to a large group (up to 50 persons). The COE will chair the Conference and respond to offerors concerns at the conference. This is planned as a one-day meeting requiring travel the previous day and returning the day of the conference. The A-E shall provide detailed meeting minutes.

8.4 Administrative Tasks

8.3.1 Confirmation Notices

The A-E firm shall provide a record of all conferences, meeting, discussions, verbal directions, telephone conversations, etc., the A-E firm and/or their subcontractor(s) on matters related to this

Task Order. The A-E firm shall identify all participating personnel, subjects discussed, and conclusions reached. The A-E firm shall title these records *Confirmation Notices* and shall number them sequentially. The A-E shall forward each Confirmation Notice via email to the Government POC within three working days. Communication via email is acceptable for minor, day-to-day correspondence.

8.3.2 Periodic Status Reports

The A-E firm shall provide a monthly status report to the Government POC. The report shall include: Current Status, Action Item List, and discussion of major issues.

9.1 Option 1 Schedule and Deliverables

9.2 Schedule

9.1.1 The Table below shows the schedule of services and deliverables covered in this task order. The A-E Contractor shall submit a schedule showing dates for all key submittals.

Option 1 Schedule of Services and Deliverables

KEY SERVICE OR DELIVERABLE	DUE DATE
Design Quality Control Plan	Within 7-days of T.O. Award.
Charrette	Within 14-days of T.O. Award.
Draft Drainage Studies	Within 30-days of T.O. Award.
Draft Planimetric, Topographic Surveys	Within 30-days of T.O. Award.
Draft Geotech Reports	Within 30-days of T.O. Award.
Four Draft D-B RFP Submittal	Within 30-days of T.O. Award.
Government review of Draft D-B RFP	Estimated 14-days after Draft Submittal.
Four Final D-B RFP Submittal	Within 60-days of T.O. Award.
Government review of Final D-B RFP	Estimated 14-days after Final Submittal.
Corrected Final D-B RFP Submittal	August 31, 2017
Dr. Check Bidder Inquiries	Within 2-days of posting in Dr. Checks
Construction RFP Amendment(s)	Within 3-days of notification of need for Amendment.
Construction Contract Award CD	Within 5-days of Construction Contract. Award.
Administrative Tasks	
Confirmation Notices (Email only – Numbered)	Within 3-days of Gov't comments

KEY SERVICE OR DELIVERABLE	DUE DATE
Monthly Status Report (pdf attachment via email)	Within 5-days from end of month

9.1.1 The days listed above are calendar days, including Saturdays, Sundays, and Federal holidays. The Government must receive the deliverable by the start of the next business day. If the due date falls on a Saturday, Sunday, or Federal holiday, the Government expects receipt by the start of the next business day. The A-E Contractor should assume 14-days for receipt of Government comments for review of major submittals. On-site review conferences or conference calls can be scheduled no sooner than 7-days following receipt of the submittal.

9.1.2 The Government may accept submittals prior to the due date provided they are complete and have received a quality control check. The Government will not accept partially complete submittals early or otherwise.

9.2 Deliverables

9.2.1 The table below shows the list of deliverables and their required distribution.

Deliverable Distribution Schedule

Deliverables	Number of Copies A	B	C	D	E	F
Electronic Copies Only (Native and/or .pdf formats)						
Design Quality Control Plan	1	1	1	1	1	1
Minutes, Confirmation Notices, Status Reports	1	1	1	1	1	1
Four D-B RFPs (Draft, Final, Corrected Final)	1	1	1	1	1	1
Drainage Study (Draft & Final)	1	1	1	1	1	1
Geotech Report Study (Draft & Final)	1	1	1	1	1	1
Topo Survey (Draft & Final)	1	1	1	1	1	1
Cost Estimate (Draft & Final)	1	1	1			1
Bid Schedules	1	1	1			1
Contract Award Documents	1	1	1	1	1	1

9.2.2 The table below lists the Points of Contact that correspond to the letters (*A, B, C,* etc.) in deliverable distribution schedule above.

Address List

a. CESWF Design Manager (Address Stated Above)

b. CESWF COR (Address Stated Above)

c. CESWF PM ((b) (6)) 819 Taylor Street, CESWF-ECSO-T, Fort Worth TX, 76102

d. CBP Office, (Address Stated Above)

e. BPFTI PMO, (b) (6), (b) (7)(C), (b) (6), (b) (7)(C)

f. CESWG Area Office (Name provided after award), 252 Industrial Dr # A, Port Isabel, TX 78578

9.2.3 The A-E form shall coordinate submittal distribution with the POCs. The original transmittal letter will be addressed to the POC and will note that by information copy of that transmittal, appropriate review agencies are being provided copies of the work products and are requested to provide comments electronically to the POCs and to the A-E firm by the due date. The original transmittal letter and all copies will include a schedule showing data distribution.

10.1 Option 1 Reviews and Conferences

10.2 Quality Assurance Reviews

10.2.1 Formal Reviews

10.1.1.1 The Government will perform a formal Quality Assurance (QA) check on the following:

e. The POC will be responsible for providing the comments to the A-E and the A-E shall be responsible for responding to, and incorporating (if appropriate), all comments from reviewers into the deliverables.

f. The A-E maintains professional responsibility and liability for the deliverables. If, in the A-E's professional opinion, a QA comment either does not apply or the A-E disagrees with it, then the A-E shall not incorporate that comment into the deliverables. The A-E shall respond to the comment "Do not concur." and provide the comment submitter with an explanation of the disagreement. The A-E shall also be prepared to discuss the position with the reviewer.

g. CESWF uses USACE's web-based *Design Review and Checking System* (DrChecks) at www.projnet.org as the primary means for recording and tracking resolution of QA comments. The A-E shall use this system. The Government will set up DrChecks for this project.

h. The QA team may not record all QA comments in DrChecks. They may provide comments on other media. If such is the case, the POC will be responsible for providing those comments to the A-E and the A-E shall be responsible for responding (and incorporating, if appropriate) into the final products.

10.2.2 Casual Reviews

The A-E firm is responsible for ensuring compliance with all requirements in this task order. The Government will examine all deliverables submitted by the A-E firm. If the Government finds deficiencies, the A-E firm shall amend and resubmit as necessary.

10.2 Conferences

The conferences scheduled for this task order are listed in the table below. Any additional conferences requiring travel shall be authorized by a Task Order Modification. Expenses will be reimbursed as denoted in the IDIQ Contract and must be based on current Joint Travel Regulations. Airline ticket cost shall be based on a minimum 7-day advance purchase.

Additional A-E discipline team members will be made available to support the on-site meetings via conference call. Limited participation is required. If required to meet expedited schedules, the A-E shall be prepared to accommodate over-the shoulder review comments.

Scheduled Conferences

Scheduled Conferences	Location	Duration	A-E Firm's Role
Design Charrette (w/In-Brief; Out-Brief)	Fort Worth	5 Days	Req'd: PM, Geotech, Structural, Civil and Cost Estimator.
(4) Draft RFP Review	Video Teleconference	4 Days	Req'd: PM, Geotech, Structural, Civil and Cost Estimator.
(4) Final RFP Review	Video Teleconference	4 Days	Req'd: PM, Geotech, Structural, Civil and Cost Estimator.
(4) Corrected Final RFP Review	Video Teleconference	4 Days	Req'd: PM, Geotech, Structural, Civil and Cost Estimator.
Construction Pre-Proposal Conference	Video Teleconference	1 Day	Req'd: PM, Geotech, Structural, Civil.

11.1 Option 1 Technical Criteria, Standards/Specifications, General Requirements and Government Furnished Information (Use Latest Editions Unless Otherwise Noted)

The A-E or Designer of Record shall use the following standards as applicable for this project.

a. Per DoD Directive Number 4270.5 dated 12 February 2005 paragraph 4.7, the Unified Facilities Criteria (UFC) and the Unified Facilities Guide Specifications (UFGS) shall be used to the greatest extent possible by all DoD Components for planning, design, and construction (restoration and modernization) of facilities, regardless of funding source, except for those facilities constructed by the National Guard on real estate neither owned by the United States nor under long-term lease to the United States, constructed by a State under Chapters 169 and 1803 of Title 10, US Code, and where title to the facility shall not be in the United States.

b. UFC 1-200-01: General Building Requirements.

c. International Building Code (IBC).

d. NFPA Life Safety Codes 13, 90A, 101.

e. ANSI/IEEE C2-2002, National Safety Electric Code.

f. U.S. Army Corps of Engineers Architectural and Engineering Instructions (AEI), (http://www.hnc.usace.army.mil/Missions/Engineering/TECHINFO.aspx)

g. US Army Corps of Engineers, Southwestern Division, Architectural and Engineering Instructions Manual (CESWD-AEIM) available at: http://www.spa.usace.army.mil/portals/16/docs/ec/swd_aeim_2003.pdf

h. U.S. Army Corps of Engineers design criteria available at: http://www.publications.usace.army.mil/USACEPublications/EngineerManuals.aspx

i. U.S. Army Corps of Engineers – Technical Instructions, TI 800-01, 20 July 1998 available at http://www.wbdg.org/ccb/ARMYCOE/COETI/ARCHIVES/ti800_01.pdf

j. Contract Administration Branch guidelines set forth at http://www.publications.usace.army.mil/Portals/76/Publications/EngineerPamphlets/EP_715-1-7.pdf

k. Selection of Methods for the Reduction, Reuse, and Recycling of Demolition Waste.

l. Requirements to collect Geographic Information System (GIS) Data associated with construction projects.

m. All applicable Federal, State and industry standards, including those not referenced constitute design criteria for this project.

n. CBP Design Guide

o. DHS Tactical Infrastructure Standard Design Toolkit, 2012

p. Due to the project requirements, this project shall meet USACE flood risk management design standards utilizing Design and Construction of Levees (EM 1110-2-1913) and, defined as a Flood Wall, thus utilizing Retaining and Flood Walls (EM 1110-2-2502), Slope Stability (EM 1110-2-1902), Strength Design of Concrete Hydraulic Structures (EM 1110-2-2104).

The design of the project shall also meet the USACE hydrologic criteria for levees and floodwalls, as defined in Chapter 7 of Hydrologic Engineering Requirements for Flood Damage Reduction Studies (EM 1110-2-1419), and the performance of the project in terms of flood protection and FEMA certification shall be evaluated according to USACE's risk and uncertainty standards as defined in Risk-Based Analysis for Flood Damage Reduction Studies (EM 1110-2-1619).

q. Requirements to collect Geographic Information System (GIS) Data associated with construction projects.

r. All applicable Federal, State and industry standards, including those not referenced constitute design criteria for this project.

s. **Government Reviews (Dr. Checks) -** CESWF uses USACE's web-based comment tracking system, Dr. Checks (located at www.projnet.org), as the primary means for recording and tracking resolution of QA comments. The Government's review will consist primarily of quality assurance (QA) checks and is typically completed in two weeks. It will concentrate on the design's functional aspects with limited technical review. The Government will prepare written comments for evaluation and response by the A-E after each major submittal. The A-E shall annotate and respond to the review comments in the development of data for the next design level. Responses such as "A-E requires additional information." or "A-E does not understand." are unacceptable. Annotations shall address specific corrective actions required. The A-E shall enter responses in advance of review conferences. Final annotation shall be completed within seven days of the conference. Hard copy distribution of final annotated comments is not required except that they shall be included by the A-E in the Design Analysis. The A-E maintains professional responsibility and liability for the deliverables. If, in the A-E's professional opinion, a QA comment either does not apply or the A-E disagrees with it, then the A-E shall not incorporate that comment into the deliverables. The A-E shall respond to the comment "Do not concur." And provide the commentator with an explanation of the disagreement. The A-E shall coordinate with the Government Project Manager to ensure the Government has set up rights for each pertinent member of the A-E team that needs to evaluate and respond to comments.

t. **Specifications** -

The A-E will prepare all Division 01 Specifications and assemble the final Request for Proposal.

Civil / GIS CADD GIS Requirements
CADD and Electronic (paperless) Bid Process.
CADD Standards. The A-E shall comply with A/E/C CADD Standards
https://cadbimcenter.erdc.dren.mil/default.aspx?p=a&t=1&i=7

Fort Worth District Sheet/Title Block file can be found at:
https://cadbimcenter.erdc.dren.mil/DocCenter.aspx?ID=0

CADD. Critical to the design process is use of Computer-Aided Drafting and Design (CADD). The Government plans to solicit bids for construction of the project via an electronic format without providing printed plans and specifications to perspective bidders. All work to be accomplished, e.g., design work, surveying work, drawings, and details to be provided under this Task Order shall be accomplished and developed using computer-aided design and drafting (CADD) software and procedures conforming to criteria set forth elsewhere. All CADD final design deliverables shall be delivered in AutoCAD File format, version 2016 or newer.

All CADD drawing model file elements shall be produced full scale in CADD and named in compliance to A/E/C Standard.

SYMBOLOGY: All CADD element symbologies including level, weight, style, and color shall be compliant to A/E/C Standard.

Electronic Files/Paperless Solicitation. Electronic files provided to bidders shall be produced by the A-E as described herein and provided to potential bidders by the Government, via a Government Web site.

CAD files shall be converted to Adobe Acrobat "pdf" files by the A-E, which will require the A-E to purchase computer software for this purpose if they do not currently have this capability or alternately satisfy this requirement through a subcontractor (http://www.adobe.com/products/acrobat/readstep.html). These files will be readable utilizing the free Adobe Acrobat Reader.

The A-E is responsible for ensuring that resulting prints from pdf files are essentially identical to prints from the parent SpecsIntact and CADD files.

u. **Amendments to Bid Documents** - During the time that this project is advertised for construction contract bids, it may be necessary for the A-E to provide revisions to the advertised plans and specifications. Drawing revisions shall be provided as reissued or additional drawings. Reissued or additional drawings shall be incorporated into the bid documents, in the form of amendments. All amendments shall be incorporated into project specifications and drawings in accordance with the SWD Architect-Engineer Instructional Manual (AEIM), Chapter VIII. All plan sheets revised to incorporate amendments, along with the CADD and PDF files shall be provided as specified or referenced herein. At the discretion of the Contracting Officer, drawing revisions may be provided in narrative form and sketches. Amendments within the project's scope, including design errors, omissions and conflicts will be done promptly, to prevent or minimize slipping of the proposal due date, with no increase in the A-E Task Order price. In most instances, the final amendment must be available to bidders ten days before the due date for technical and price proposals.

11.2 Proprietary Specifications and Requirements.

The A-E firm shall avoid specifying proprietary materials, equipment, systems, or other features of the work unless the A-E firm can demonstrate the use of such proprietary requirements will be advantageous to the Government (e.g. fire alarm transmitters and locksets that must be compatible with other products at the facility). The Government is prohibited from specifying proprietary requirements except in unusual circumstances which requires documentation and approval by the Contracting Agency Head or higher authority. If the A-E firm can show that a proprietary material could be more advantageous to the Government, provide a description that includes the brand name and a general description of those salient physical, functional, or performance characteristics of the item.

11.3 Office Documents.

11.2.1 The table below lists the software products the Government uses for work products produced through general-purpose office software (e.g. VE Study, Design Analysis, Etc.):

Government Software Packages

File Type	Software	Publisher
Portable Document Format (*.pdf)	Acrobat	Adobe
Hypertext transfer protocol (http)	Internet Explorer	Microsoft
Word Processing (*.docx)	WORD	Microsoft
Spreadsheets (*.xlsx)	EXCEL	Microsoft
Slideshow presentations (*.pptx)	POWERPOINT	Microsoft
eMail client (*.msg)	OUTLOOK	Microsoft

11.2.2 The A-E firm shall ensure the documents they produce and submit to the Government are compatible with these software packages. The A-E firm shall be responsible for any file translation necessary to permit Government reading of documentation. The A-E firm shall consult with the Government on the use of software not on this list to ensure the Government can read the files the A-E firm will submit.

11.2.3 The A-E firm shall consider readability and reproducibility in the preparation of documents. This includes (but is not limited to) font sizes, organization and layout of documents, paper sizes, and use of color documentation. Not all stakeholders on this project have access to high-end reproduction equipment.

11.3 Units of Measure.

The A-E shall verify use of U.S. Customary, International, or other units in all work products.

11.4 Government Furnished Information and Materials

The table below lists the Government Furnished information and materials included in this task order. Contact the POC if more data is necessary for preparation of fee proposal or execution of the task order.

Government Furnished Materials

No.	Item	Source
1	Cost engineering database tables and software. Purchase or license may be required at cost to the A-E firm.	See also http://media.swf.usace.army.mil/pubdata/EC/eca/CostSpec.asp
2	Div 00	SWF Contracting

12. Option 2 Update to the Tactical Infrastructure (TI) Standard Design Toolkit

Project Description

12.1 Overview

The objective is to update the TI Standard Design Toolkit with levee wall and freestanding wall standard designs to be used throughout the program.

12.1.1 Product Scope

The Government requires the TI Standard Design Toolkit to be updated to include levee wall and freestanding wall designs so that they can be used throughout the program as standard designs.

12.1.2 Project Scope

12.1.2.1 This Scope of Work includes all work necessary for the A-E firm to update the TI Standard Design Toolkit.

n. Design Quality Control Plan

o. Reviews and Conferences

p. Confirmation Notices, Status Reports

q. TI Standard Design Toolkit Update Document

r. Cost Estimates

(1) Site

(2) Landscaping, Fencing

(3) Parking, Roadways, Exterior Lighting

(4) Storm Drainage, Storm Water Pollution Prevention Plan

(5) Site Utilities

(6) Structural

12.2 Option 2 Construction Cost Limitation.

All services associated with a Study, Project Definition Report or Design-Build RFP are considered non-design and are not subject to the 6% of Construction Cost Limitation statutory limit.

13.1 Option 2 Services

13.2 Quality Control Plan

The minimum requirements for the quality control plan (QCP) are given in ER 1110-1-12, *Quality Management*, and the project SOW. The QCP is the A-E firm's management plan(s) for execution of the contract. The QCP describes the way in which the A-E will produce the deliverables, the steps that will be taken to control quality, and an assigned point-of-contact within the A-E firm's organization responsible for ensuring compliance with the QCP. The QCP, modified to include any changes to the contract that occur, will be attached as an appendix to the design analysis.

13.3 A-E Services (See CESWD-AEIM for full descriptive requirements.)

a. Design Quality Control Plan (See Section 3.1)

b. Reviews and Conferences (See Section 5.2)

c. Confirmation Notices, Status Reports (See Section 3.3.1)

d. TI Standard Design Toolkit Update Document –

1. Wall Types

The Contractor shall compile and consolidate freestanding and levee floodwall requirements of the Border Patrol-HQ. The Contractor will review the following wall types (reference 3a):

- W-1
- W-2
- LW-1
- LW-2

The Contractor will review available Designs, As-Built Drawings, field inspections, and interviews to update wall types above. The Contractor shall look for design improvements, anti-scale & anti-perch requirements, and make recommendations for areas of value engineering. The details shall include up to two typical foundation types recommended based upon the geotechnical report and engineering analysis. One set of assumed soil parameters will be used. The Contractor will evaluate material coating possibilities that are applicable border wide and in each Sector, analyze the life cycle benefits, provide life cycle cost analysis, and provide any treatment recommendations, if any, to the Government for inclusion in the notes. An interim design comment and review teleconference meeting will be held for this task. A Bill of Materials (BOM) will be provided for each wall/fence

type. This will be used for Maintenance & Repair Planning. The Contractor will document the process and reviews required for levee wall construction.

1. Standard Light Details

The Contractor will compile and consolidate security lighting requirements of the Border Patrol –HQ for the 4 types of wall added as well as the (b) (7)(E) enforcement zone. The Contractor will develop standard lighting details that will at a minimum include: pole height & cross-section, power requirements and light assembly details. Standard lighting details could be difference when enforcement zone is in the floodplain. The Contractor will provide photometric data showing area illuminated and lighting level provided per single pole/fixture combination. Coordination is required to determine if USFWS illumination criteria for the levee wall lighting system will be required to be included as a design consideration to minimize impacts to the wildlife corridor. A Bill of Materials (BOM) will be provided for standard lights, this will be used for Maintenance & Repair Planning. An interim design comment & review telecom meeting will be held for this task. The Contractor will provide standard design & construction specifications related to this task in standard USACE specification format.
LEED Considerations - The Contractor will analyze LEED design criteria and evaluate implementation possibilities. The Contractor will investigate the potential for solar power, LED lamps, and other LEED recommended equipment or practices. The Contractor will provide matrices of recommended LEED items, LEED points, impacts to requirements, and a cost benefit analysis.

2. Road Standards

The Contractor will review road requirements of Border Patrol-HQ for in the floodplain and on top of the crest of the levee. The Contractor will review available As-Built Drawings, field inspection analysis, and interviews to determine if any additional standards are required to be created or revised to accommodate those 2 locations. The current TI Standard Design Toolkit road types are below. The Contractor will update standard road details & cross-sections for each road type as required. The following will be standard road types:

- TI Construction, Maintenance & Repair Road
- All-Weather Patrol Road
- Paved Patrol Road
- Articulated Concrete Mat Low Water Crossing
- Cast in Place Low Water Crossings

The Contractor will consider life cycle costs when developing the standard road designs. The designs shall include consideration & notes for the following:

- Recommended maximum vehicle characteristics to include maintenance & construction equipment, such as gross weight, speed of vehicles, etc,
- Road Width & Turn Outs for Border Patrol & Construction equipment along with shoulders.
- Traffic Volume

- Cross Slopes for all road types
- Site adapt options (e.g. for steep slopes add cement stabilization to all-weather road)
- Switchback requirements
- Typical signage (Task 6.9)
- Guardrail & other safety requirements (Task 6.10)

The Contractor will create Standard Road Specifications & Design Analysis to reflect the road types under this task. On the embankment side of the access road, access ramps to drive from the levee toe, on the embankment, and to the top of the embankment. IBWC and CBP will provide operational requirements for levee access ramps to the south side of the fence/floodwall. A Bill of Materials (BOM) will be provided for each road type, this will be used for Maintenance & Repair Planning. An interim design comment & review telecom meeting will be held for each road type in this task. Meetings can be consolidated if multiple products are available for review.

3. Gates

The Contractor shall develop standard designs for vehicle, pedestrian and drainage gates for the 4 wall types added herein. The Contractor shall compile and review gate requirements for vehicle, pedestrian and drainage gates for levee and freestanding wall types. The Contractor will review available As-Built Drawings, field inspection analysis, and interviews to develop & update the TI Standard Design Toolkit. Government will furnish RGV Phase 1 Gates Standard Design – Design Analysis Report for consideration in developing standard gate designs.

An interim design comment & review telecom meeting will be held for this task. Sliding gate standards shall be developed through performance specifications which will include motorization & power requirements. Non-sliding gate standards shall be developed through details and specifications.

e. Current Working Estimate – PACES Estimates will be provided for each TI Standard Design Toolkit element added as part of the Standard Design

13.4 Administrative Tasks

13.3.1 Confirmation Notices

The A-E firm shall provide a record of all conferences, meeting, discussions, verbal directions, telephone conversations, etc., the A-E firm and/or their subcontractor(s) on matters related to this Task Order. The A-E firm shall identify all participating personnel, subjects discussed, and conclusions reached. The A-E firm shall title these records *Confirmation Notices* and shall number them sequentially. The A-E shall forward each Confirmation Notice via email to the Government POC within three working days. Communication via email is acceptable for minor, day-to-day correspondence.

13.3.2 Periodic Status Reports

The A-E firm shall provide a monthly status report to the Government POC. The report shall include: Current Status, Action Item List, and discussion of major issues.

14.1 Option 2 Schedule and Deliverables

14.2 Schedule

14.1.1 The Table below shows the schedule of services and deliverables covered in this task order. The A-E Contractor shall submit a schedule showing dates for all key submittals.

Option 2 Schedule of Services and Deliverables

KEY SERVICE OR DELIVERABLE	DUE DATE
Design Quality Control Plan	Within 7-days of T.O. Award.
Kick-off meeting	Within 14-days of T.O. Award.
Draft TI Standard Toolkit Document and PACES Estimate	Within 120 days of Option Award
Government review of Draft submittals	Estimated 14-days after Draft Submittal.
Final TI Standard Toolkit Document and PACES Estimate	Within 150 days of Option Award
Government review of Final submittals	Estimated 14-days after Draft Submittal.
Corrected Final TI Standard Toolkit Document and PACES Estimate	Within 180 days of Option Award
Administrative Tasks	
Confirmation Notices (Email only – Numbered)	Within 3-days of Gov't comments
Monthly Status Report (pdf attachment via email)	Within 5-days from end of month

14.1.1 The days listed above are calendar days, including Saturdays, Sundays, and Federal holidays. The Government must receive the deliverable by the start of the next business day. If the due date falls on a Saturday, Sunday, or Federal holiday, the Government expects receipt by the start of the next business day. The A-E Contractor should assume 14-days for receipt of Government comments for review of major submittals. On-site review conferences or conference calls can be scheduled no sooner than 7-days following receipt of the submittal.

14.1.2 The Government may accept submittals prior to the due date provided they are complete and have received a quality control check. The Government will not accept partially complete submittals early or otherwise.

14.2 Deliverables

14.2.1 The table below shows the list of deliverables and their required distribution.

Deliverable Distribution Schedule

Deliverables	Number of Copies A	B	C	D	E
Electronic Copies Only (Native and/or .pdf formats)					
Quality Control Plan	1	1	1	1	1
Minutes, Confirmation Notices, Status Reports	1	1	1	1	1
TI Design Standard Toolkit Document (Draft and Final)	1	1	1	1	1
PACES Cost Estimate (Draft & Final & Corrected Final)	1	1	1	1	1

14.2.2 The table below lists the Points of Contact that correspond to the letters (*A, B, C,* etc.) in deliverable distribution schedule above.

Address List

a. CESWF Design Manager (Address Stated Above)

b. CESWF COR (Address Stated Above)

c. CESWF PM ((b) (6)) 819 Taylor Street, CESWF-ECSO-T, Fort Worth TX, 76102

d. CBP Office, (Address Stated Above)

e. BPFTI PMO, (b) (6), (b) (7)(C), 7940 Jones Branch Drive, McLean, VA 22102

14.2.3 The A-E form shall coordinate submittal distribution with the POCs. The original transmittal letter will be addressed to the POC and will note that by information copy of that transmittal, appropriate review agencies are being provided copies of the work products and are requested to provide comments electronically to the POCs and to the A-E firm by the due date. The original transmittal letter and all copies will include a schedule showing data distribution.

15.1 Option 2 Reviews and Conferences

15.2 Quality Assurance Reviews

15.2.1 Formal Reviews

15.1.1.1 The Government will perform a formal Quality Assurance (QA) check on the following:

a. The POC will be responsible for providing the comments to the A-E and the A-E shall be responsible for responding to, and incorporating (if appropriate), all comments from reviewers into the deliverables.

b. The A-E maintains professional responsibility and liability for the deliverables. If, in the A-E's professional opinion, a QA comment either does not apply or the A-E disagrees with it, then the A-E shall not incorporate that comment into the deliverables. The A-E shall respond to the comment "Do not concur." and provide the comment submitter with an explanation of the disagreement. The A-E shall also be prepared to discuss the position with the reviewer.

c. CESWF uses USACE's web-based *Design Review and Checking System* (DrChecks) at www.projnet.org as the primary means for recording and tracking resolution of QA comments. The A-E shall use this system. The Government will set up DrChecks for this project.

d. The QA team may not record all QA comments in DrChecks. They may provide comments on other media. If such is the case, the POC will be responsible for providing those comments to the A-E and the A-E shall be responsible for responding (and incorporating, if appropriate) into the final products.

15.2.2 Casual Reviews

The A-E firm is responsible for ensuring compliance with all requirements in this task order. The Government will examine all deliverables submitted by the A-E firm. If the Government finds deficiencies, the A-E firm shall amend and resubmit as necessary.

15.2 Conferences

The conferences scheduled for this task order are listed in the table below. Any additional conferences requiring travel shall be authorized by a Task Order Modification. Expenses will be reimbursed as denoted in the IDIQ Contract and must be based on current Joint Travel Regulations. Airline ticket cost shall be based on a minimum 7-day advance purchase.

Additional A-E discipline team members will be made available to support the on-site meetings via conference call. Limited participation is required. If required to meet expedited schedules, the A-E shall be prepared to accommodate over-the shoulder review comments.

Scheduled Conferences

Scheduled Conferences	Location	Duration	A-E Firm's Role
Kick-Off Meeting	Fort Worth	1 Day	Req'd: PM, Geotech, Structural, Civil and Cost Estimator.
Draft Toolkit Review	Teleconference	1 Day	Req'd: PM, Geotech, Structural, Civil and Cost Estimator.
Final Toolkit Review	Teleconference	1 Day	Req'd: PM, Geotech, Structural, Civil and Cost Estimator.

16.1 Option 2 Technical Criteria, Standards/Specifications, General Requirements and Government Furnished Information (Use Latest Editions Unless Otherwise Noted)

The A-E or Designer of Record shall use the following standards as applicable for this project.

a. Per DoD Directive Number 4270.5 dated 12 February 2005 paragraph 4.7, the Unified Facilities Criteria (UFC) and the Unified Facilities Guide Specifications (UFGS) shall be used to the greatest extent possible by all DoD Components for planning, design, and construction (restoration and modernization) of facilities, regardless of funding source, except for those facilities constructed by the National Guard on real estate neither owned by the United States nor under long-term lease to the United States, constructed by a State under Chapters 169 and 1803 of Title 10, US Code, and where title to the facility shall not be in the United States.

b. UFC 1-200-01: General Building Requirements.

c. International Building Code (IBC).

d. NFPA Life Safety Codes 13, 90A, 101.

e. ANSI/IEEE C2-2002, National Safety Electric Code.

f. U.S. Army Corps of Engineers Architectural and Engineering Instructions (AEI), (http://www.hnc.usace.army.mil/Missions/Engineering/TECHINFO.aspx)

g. US Army Corps of Engineers, Southwestern Division, Architectural and Engineering Instructions Manual (CESWD-AEIM) available at: http://www.spa.usace.army.mil/portals/16/docs/ec/swd_aeim_2003.pdf

h. U.S. Army Corps of Engineers design criteria available at: http://www.publications.usace.army.mil/USACEPublications/EngineerManuals.aspx

i. U.S. Army Corps of Engineers – Technical Instructions, TI 800-01, 20 July 1998 available at http://www.wbdg.org/ccb/ARMYCOE/COETI/ARCHIVES/ti800_01.pdf

j. Contract Administration Branch guidelines set forth at http://www.publications.usace.army.mil/Portals/76/Publications/EngineerPamphlets/EP_715-1-7.pdf

k. Selection of Methods for the Reduction, Reuse, and Recycling of Demolition Waste.

l. Requirements to collect Geographic Information System (GIS) Data associated with construction projects.

m. All applicable Federal, State and industry standards, including those not referenced constitute design criteria for this project.

n. CBP Design Guide

o. DHS Tactical Infrastructure Standard Design Toolkit, 2012

p. Due to the project requirements, this project shall meet USACE flood risk management design standards utilizing Design and Construction of Levees (EM 1110-2-1913) and, defined as a Flood Wall, thus utilizing Retaining and Flood Walls (EM 1110-2-2502), Slope Stability (EM 1110-2-1902), Strength Design of Concrete Hydraulic Structures (EM 1110-2-2104).

The design of the project shall also meet the USACE hydrologic criteria for levees and floodwalls, as defined in Chapter 7 of Hydrologic Engineering Requirements for Flood Damage Reduction Studies (EM 1110-2-1419), and the performance of the project in terms of flood protection and FEMA certification shall be evaluated according to USACE's risk and uncertainty standards as defined in Risk-Based Analysis for Flood Damage Reduction Studies (EM 1110-2-1619).

q. Requirements to collect Geographic Information System (GIS) Data associated with construction projects.

r. All applicable Federal, State and industry standards, including those not referenced constitute design criteria for this project.

s. **Government Reviews (Dr. Checks) -** CESWF uses USACE's web-based comment tracking system, Dr. Checks (located at www.projnet.org), as the primary means for recording and tracking resolution of QA comments. The Government's review will consist primarily of quality assurance (QA) checks and is typically completed in two weeks. It will concentrate on the design's functional aspects with limited technical review. The Government will prepare written comments for evaluation and response by the A-E after each major submittal. The A-E shall annotate and respond to the review comments in the development of data for the next design level. Responses such as "A-E requires additional information." or "A-E does not understand." are unacceptable. Annotations shall address specific corrective actions required. The A-E shall enter responses in advance of review conferences. Final annotation shall be completed within seven days of the conference. Hard copy distribution of final annotated comments is not required except that they shall be included by the A-E in the Design Analysis. The A-E maintains professional responsibility and liability for the deliverables. If, in the A-E's professional opinion, a QA comment either does not apply or the A-E disagrees with it, then the A-E shall not incorporate that comment into the deliverables. The A-E shall respond to the comment "Do not concur." And provide the commentator with an explanation of the disagreement. The A-E shall coordinate with the Government Project Manager to ensure the Government has set up rights for each pertinent member of the A-E team that needs to evaluate and respond to comments.

16.2 Proprietary Specifications and Requirements.

The A-E firm shall avoid specifying proprietary materials, equipment, systems, or other features of the work unless the A-E firm can demonstrate the use of such proprietary requirements will be advantageous to the Government (e.g. fire alarm transmitters and locksets that must be compatible with other products at the facility). The Government is prohibited from specifying proprietary

requirements except in unusual circumstances which requires documentation and approval by the Contracting Agency Head or higher authority. If the A-E firm can show that a proprietary material could be more advantageous to the Government, provide a description that includes the brand name and a general description of those salient physical, functional, or performance characteristics of the item.

16.3 Office Documents.

16.2.1 The table below lists the software products the Government uses for work products produced through general-purpose office software (e.g. VE Study, Design Analysis, Etc.):

Government Software Packages

File Type	Software	Publisher
Portable Document Format (*.pdf)	Acrobat	Adobe
Hypertext transfer protocol (http)	Internet Explorer	Microsoft
Word Processing (*.docx)	WORD	Microsoft
Spreadsheets (*.xlsx)	EXCEL	Microsoft
Slideshow presentations (*.pptx)	POWERPOINT	Microsoft
eMail client (*.msg)	OUTLOOK	Microsoft

16.2.2 The A-E firm shall ensure the documents they produce and submit to the Government are compatible with these software packages. The A-E firm shall be responsible for any file translation necessary to permit Government reading of documentation. The A-E firm shall consult with the Government on the use of software not on this list to ensure the Government can read the files the A-E firm will submit.

16.2.3 The A-E firm shall consider readability and reproducibility in the preparation of documents. This includes (but is not limited to) font sizes, organization and layout of documents, paper sizes, and use of color documentation. Not all stakeholders on this project have access to high-end reproduction equipment.

16.3 Units of Measure.

The A-E shall verify use of U.S. Customary, International, or other units in all work products.

16.4 Government Furnished Information and Materials

The table below lists the Government Furnished information and materials included in this task order. Contact the POC if more data is necessary for preparation of fee proposal or execution of the task order.

Government Furnished Materials

No.	Item	Source
1	Cost engineering database tables and software. Purchase or license may be required at cost to the A-E firm.	See also http://media.swf.usace.army.mil/pubdata/EC/eca/CostSpec.asp

17.0 Option 3 D-B RFP for RGV (7.9 Miles)

Project Description

17.1 Overview

The project is approximately 7.9 miles of levee wall construction in Rio Grande Valley (RGV) Zone (b) (7)(E) . The project alignment will be on the south toe of the north U.S. IBWC levee along Maintenance Road. This 7.9 miles is within the 32.8 miles in the base bid that the survey, GeoTech and drainage study were completed on.

Table of Zones for D-B RFP

RIO GRANDE VALLEY PROJECTS		
Station	**Zone**	**Miles**
(b) (7)(E)		2.4
		1.1
		2.1
		0.4
		1.9
Total		**7.9**

The project is to be a design build construction project under the utilizing a single phase RFP. The design and completed construction must be approved and certified for the FEMA national database for flood protection.

This Scope of Work includes all work necessary for the A-E firm to prepare a D-B RFP denoting a complete and usable project.

The Value Engineering Study from the Base bid will be used for Option 3.

The Construction Cost Estimate/Current Working Estimate will be provided by the A-E. A pre-proposal conference to finalize the project scope of work and aid in the preparation of the A-E proposal is recommended. Labor and travel costs are not reimbursed by the Government.

17.1.1 Product Scope

The Government requires the development of one D-B RFP. Due to the project funding, the D-B RFP will need to be developed with a Base Bid and Three Options, totaling 7.9 miles as follows:

RGV Pgk 2	PROJECT LENGTH (MILES)
BASE RFP (D-B)	1.1
BASE RFP (D-B)	2.1
OPTION 1 (D-B)	2.4
OPTION 2 (D-B)	0.4
OPTION 3 (D-B)	1.9
TOTAL	7.9

17.1.2 Project Scope

17.1.2.1 This Scope of Work includes all work necessary for the A-E firm to prepare a D-B RFP, denoting a complete and usable project.

s. Design Quality Control Plan

t. Reviews and Conferences

u. Confirmation Notices, Status Reports

v. Drainage Study (Use Drainage Study the Base Bid)

w. Planimetric, Topographic Survey (Use Survey from the Base Bid)

x. Geotechnical Investigation: Subsurface Investigation Borings, In-Situ and Laboratory Testing, and Geotechnical Report (Use Geotechnical Report from the Base Bid)

y. Design Charrette

z. Draft D-B RFP
aa. Final D-B RFP
bb. Corrected Final D-B RFP
cc. Structural Analysis
dd. Cost Estimates

(1) Site

(2) Landscaping, Fencing

(3) Parking, Roadways, Exterior Lighting

(4) Storm Drainage, Storm Water Pollution Prevention Plan

(5) Site Utilities

(6) Structural

(7) Electrical

(8) Lightning Protection, Grounding

ee. Amendments

17.2 Construction Cost Limitation.

All services associated with a Study, Project Definition Report or Design-Build RFP are considered non-design and are not subject to the 6% of Construction Cost Limitation statutory limit.

18.1 Option 3 Services

18.2 Quality Control Plan

The minimum requirements for the quality control plan (QCP) are given in ER 1110-1-12, *Quality Management*, and the project SOW. The QCP is the A-E firm's management plan(s) for execution of the contract. The QCP describes the way in which the A-E will produce the deliverables, the steps that will be taken to control quality, and an assigned point-of-contact within the A-E firm's organization responsible for ensuring compliance with the QCP. The QCP, modified to include any changes to the contract that occur, will be attached as an appendix to the design analysis.

18.3 A-E Services (See CESWD-AEIM for full descriptive requirements.)

a. Design Quality Control Plan (See Section 3.1)

b. Reviews and Conferences (See Section 5.2)

c. Confirmation Notices, Status Reports (See Section 3.3.1)

d. Design Charrette - The A-E shall conduct a Design Charrette to determine the customer's functional requirements. The Charrette Meeting shall include, but not be limited to, gathering and developing requirements concerning User activities, number of personnel, operations requirements, equipment requirements, utilities, security, Due Diligence studies, and general site requirements. Key discussion items shall include project/design alternatives, key 'show stoppers', and team buy-in for final design requirements. Minimum full time attendees include the Project Manager and Civil Engineer. By the end of the Charrette, the A-E shall develop conceptual site plans, and management out-brief. Final deliverables for the Charrette include meeting minutes, site plans, utility plans, and ENG Form 3086 Government estimate.

h. Drainage Study - The Contractor shall review the programmatic drainage report that was prepared in the Base Bid and package the report in the D/B RFP.

i. Geotechnical Investigation - The Contractor shall review the Geotechnical report that was prepared in the Base Bid and package the report in the D/B RFP.

j. Planimetric, Topographic Surveys - The Contractor shall review the Survey that was prepared in the Base Bid and package the report in the D/B RFP.

k. Utility Connection Points - Perform the necessary analysis to identify the characteristics of all required existing utilities. Determine connection points and new infrastructure requirements to service the project.

l. Structural Analysis – Provide a structural analysis as required to support this SOW.

m. Geotechnical Design Requirements – The A-E shall complete the design as denoted in the Geotechnical Investigation from the Base Bid.

n. Construction Cost Estimates - A Parametric (PACES) estimate is required for the Project Definition Report, Parametric Design (35%) Documents or Draft D-B RFP. A MII Micro-Computer Aided Cost Estimate is required for the Final and Corrected Final D-B RFP, as well as, the 65%, 95% and 100% Design Data submittals. The requirements of this Task Order override and replace the requirements listed in the AEIM.

o. Design-Build Request for Proposal (Draft, Final, Corrected Final) - The A-E shall provide all needed information for the project based upon information gathered at the pre-design meeting and the Parametric Design (15%) submittals. Design documents used for advertising shall not be sealed by the A-E. Fully developed site plans showing parking, roadways, pedestrian pathways, building footprints, utility connections, etc. are not required. Only conceptual (35%) plans are required.
RFP Preparation and Source Selection **-** Complete the project through the 35% design. The A-E shall prepare technical sections of a design-build package for the facility and associated utilities as indicated in the project description. The A-E shall prepare the list of technical specifications, technical evaluation criteria, special phasing requirements (as determined), and reference drawings for the RFP. Immediately following the RFP Review conference the A-E will attend a VE workshop per the above requirements. The Government will prepare all Division 00 and 01 specifications unless otherwise noted.

RFP Content, Organization and Important Criteria - The RFP is to be prepared to meet all requirements for a Task Order Design-Build solicitation. Compliance with the Fort Worth District guidance for preparing documents for solicitation and construction award is required. Include with the Draft and Final RFP, an estimate of the construction time in calendar days to complete the project. The A-E shall incorporate phasing or sequencing requirements based upon user needs and/or design considerations. Derivation of the construction period shall be provided in accordance with SWD AEIM. The A-E shall include necessary information in the RFP to guide the Offerors regarding any phasing requirements for construction of the facility.
Construction Cost Limitations (CCL) **-** The estimated construction cost of this project is based

upon anticipated funding as stated in this Statement of Work. Each project must be designed to provide a usable facility within the designated limitations of estimated construction contract price and scope. If additive, optional or deductive bid items must be included in the Bid Schedule for cost limitations, the A-E shall properly delineate these items in the drawings and specifications without additional compensation. Modification to plans, specifications, and the construction cost estimate to reflect optional, deductive or additive bid items is included as part of this Contract as necessary to remain within funds available.

p. Cost and Scope Limitations - The A-E shall ensure the guidance outlined in the RFP requires the Offerors to provide a usable facility within the limitations of estimated construction contract price and scope. If at any time, the A-E finds that the estimated construction cost and scope of the project is likely to exceed the budget, the A-E shall report this fact to the Contracting Officer Representative. He shall also submit recommendations (associated costs) for reducing the project cost and/or scope to within the established limits.

q. Landscaping, Fencing – Specify Installation accepted plants for low maintenance and minimal irrigation.

r. Parking, Roadways, Exterior Lighting - .

s. Storm Drainage, Storm Water Pollution Prevention Plan – Shall be based on the Proposed Site Plan. Must be coordinated with Installation personnel to define local requirements.

t. Site Utilities - Following verification of existing utilities, new infrastructure requirements and points of connection to service the project must be determined by the A-E. Domestic Water, Sanitary Sewer, and Natural Gas lines must be sized to handle project loads and then terminate into existing mains. Electrical conductors shall be sized to handle project loads and then terminated into required electrical transmission equipment. Privatized utility requirements will be denoted.

u. Structural – Based on Installation specific wind, snow, and seismic loading.

v. Electrical - Coordinate design of the primary electrical distribution with the local utility provider, Installation personnel and the CESWF Project Design Team. Identify who and how power will be provided to the facility transformer primary and secondary sides.

w. Telephones, Computers, CCTV, Intrusion Detection, Mass Notification - .

x. Lightning Protection, Grounding -

y. Bidder Inquiries / Amendments - The A-E will respond to Bidder Inquiries via the ProjNet (Dr. Checks) system and provide updated Design Documents. The Government will issue the actual amendment.

z. Current Working Estimate - The current U. S. Army Corps of Engineers' Micro-Computer Aided Cost Estimating System MII (pronounced "M2") Version 4.0 Build III or

most recent release, and compatible databases are required for all construction cost estimates produced under this Task Order. Contact CESWF-EC-AC Section Chief for information pertaining to obtaining the software. Each submittal must include an MII estimate based upon the current stage of design. The software database now requires purchase (with the costs subject to change), but current cost is approximately $1,000. This purchase is not made nor controlled through CESWF-EC-AC. The current version of the software program will be provided to the A-E under contract who must then follow the prescribed licensing procedure to make use of the software for the term of this contract. Any other use of the software and the database can be utilized per the terms of the licensing agreement with the manufacturer. That licensing agreement is not under the control of CESWF-EC-AC. A PDF file of the project estimate must be submitted with the reports file. Hard copy requirements are denoted elsewhere. The estimate will not be complete until the bid opening estimate or final proposal estimate which includes all amendments and the completed bid or CLIN schedule in its final advertised format have been submitted to CESWF prior to the construction contractors' final proposal or bid deadline date shown in the solicitation or SF30. All pricing information included with any database or other source can and should be adapted, modified, changed, increased, or decreased as deemed necessary by the estimator to prepare an estimate representative of the project. The information contained in any database or any other cost information provided by the Fort Worth District office, CESWF-EC-AC, or obtained from other sources is not intended to represent fixed prices for ordering supplies, equipment, material, labor, nor any other construction component in the Government estimate. The estimator's professional judgment and decisions should be the definitive factor in determining fair and reasonable costs calculated for submittals and reviews. In MII, when submitting estimates for Military Projects, the Corps' current 20 system Work Breakdown Structure (WBS) will be used to structure the estimate (or PCCost 3086/1391 format when requested) unless CESWF-EC-AC determines that WBS is not applicable. For Civil Works Projects, the current Code of Accounts structure will be used unless the project is of a nature that does not warrant any of these estimate structures but that variance must be requested and then authorized by CESWF-EC-AC. Excel based estimates or other software forms of estimating are not acceptable unless the A-E has been approved by CESWF-EC-AC to provide back-up data or lower level costs in those formats. Final roll-up and mark-ups of those estimates will be entered in MII software for submittals though by utilizing the structure required by CESWF-EC-AC. The A-E shall be aware of and take precautionary measures as necessary to maintain the confidential nature of all cost estimates prepared under this Task Order. All estimate submittals shall be prepared in accordance with USACE instructions, regulations, and manuals for cost estimates as contained in EI 01D010, ER 1110-2-1302, and TM 5-800-4 and in compliance with EFARS 36.2. Costs will be developed using the latest standards and resources as applicable and including but not limited to the Tri-Services Estimating System, TRACES, MII, the MII Cost Book databases, commercial cost book databases, PAX newsletters 3.2.1 and 3.2.2, Davis-Bacon wage rates utilized as minimum values, commercially available reports, data, and local site specific or otherwise available sources of material, supplies, equipment, labor and other data. Compilation of the Current Working Estimate will incorporate the preceding sources and references utilizing the most recent available software as stated and/or other TRACES software which may include MII, MCACES, PACES, PCCost, risk analysis programs, or any of the other approved systems

available to TRACES users. Any applicable software and databases which normally are distributed without cost by CESWF-EC-AC will be made available to the A-E by CESWF-EC-AC under the Task Order. Certain software programs and databases as described above and which also include PACES and RACER but are not limited to these mentioned herein may require purchase by the A-E and cannot be provided without cost to the A-E by CESWF-EC-AC. Construction cost estimates for planning and budgeting purposes and for projects at 0 - 15% stages may be submitted by utilizing parametric software such as PACES and then summarizing the costs in the PCCost software if CESWF-EC-AC deems this acceptable. Also for any planning and budgeting purposes, PCCost software may be used to generate costs by utilizing the category codes and area cost factors in the PCCost database (which also includes Area Cost Factor data and adjustments). Updates to the database are available from CESWF-EC-AC. Electronic copies of all cost estimates in their native formats must be submitted along with any txt, pdf, doc, and rtf type report files generated to produce the hard copies.

aa. Pre-Proposal Conference and Site Visit - A Pre-proposal Conference and Installation Site Visit shall be conducted for potential Offerors after the RFP is advertised. The A-E Project Manager shall be required to make a presentation of the general RFP development concept and project features at the beginning of the review conference. The A-E shall prepare the agenda and organize the conference so that all technical and functional issues can be addressed within the scheduled duration of the conference. The presentation is intended to provide the conference members with a clear understanding of the facility and how it functions. It can be expected that the participants can range up to a large group (up to 50 persons). The COE will chair the Conference and respond to offerors concerns at the conference. This is planned as a one-day meeting requiring travel the previous day and returning the day of the conference. The A-E shall provide detailed meeting minutes.

18.4 Administrative Tasks

18.3.1 Confirmation Notices

The A-E firm shall provide a record of all conferences, meeting, discussions, verbal directions, telephone conversations, etc., the A-E firm and/or their subcontractor(s) on matters related to this Task Order. The A-E firm shall identify all participating personnel, subjects discussed, and conclusions reached. The A-E firm shall title these records *Confirmation Notices* and shall number them sequentially. The A-E shall forward each Confirmation Notice via email to the Government POC within three working days. Communication via email is acceptable for minor, day-to-day correspondence.

18.3.2 Periodic Status Reports

The A-E firm shall provide a monthly status report to the Government POC. The report shall include: Current Status, Action Item List, and discussion of major issues.

19.1 Option 3 Schedule and Deliverables

19.2 Schedule

19.1.1 The Table below shows the schedule of services and deliverables covered in this task order. The A-E Contractor shall submit a schedule showing dates for all key submittals.

Option 3 Schedule of Services and Deliverables

KEY SERVICE OR DELIVERABLE	DUE DATE
Design Quality Control Plan	Within 7-days of T.O. Award.
Charrette	Within 14-days of T.O. Award.
Draft Planimetric, Topographic Surveys	Within 30-days of T.O. Award.
Draft D-B RFP Submittal	Within 30-days of T.O. Award.
Government review of Draft D-B RFP	Estimated 14-days after Draft Submittal.
Final D-B RFP Submittal	Within 60-days of T.O. Award.
Government review of Final D-B RFP	Estimated 14-days after Final Submittal.
Corrected Final D-B RFP Submittal	August 31, 2017
Dr. Check Bidder Inquiries	Within 2-days of posting in Dr. Checks
Construction RFP Amendment(s)	Within 3-days of notification of need for Amendment.
Construction Contract Award CD	Within 5-days of Construction Contract. Award.
Administrative Tasks	
Confirmation Notices (Email only – Numbered)	Within 3-days of Gov't comments
Monthly Status Report (pdf attachment via email)	Within 5-days from end of month

19.1.1 The days listed above are calendar days, including Saturdays, Sundays, and Federal holidays. The Government must receive the deliverable by the start of the next business day. If the due date falls on a Saturday, Sunday, or Federal holiday, the Government expects receipt by the start of the next business day. The A-E Contractor should assume 14-days for receipt of Government comments for review of major submittals. On-site review conferences or conference calls can be scheduled no sooner than 7-days following receipt of the submittal.

19.1.2 The Government may accept submittals prior to the due date provided they are complete and have received a quality control check. The Government will not accept partially complete submittals early or otherwise.

19.2 Deliverables

19.2.1 The table below shows the list of deliverables and their required distribution.

Deliverable Distribution Schedule

Deliverables	Number of Copies					
	A	B	C	D	E	F
Electronic Copies Only (Native and/or .pdf formats)						
Design Quality Control Plan	1	1	1	1	1	1
Minutes, Confirmation Notices, Status Reports	1	1	1	1	1	1
D-B RFPs (Draft, Final, Corrected Final)	1	1	1	1	1	1
Topo Survey (Draft & Final)	1	1	1	1	1	1
Cost Estimate (Draft & Final)	1	1	1			1
Bid Schedules	1	1	1			1
Contract Award Documents	1	1	1	1	1	1

19.2.2 The table below lists the Points of Contact that correspond to the letters (*A, B, C,* etc.) in deliverable distribution schedule above.

Address List

a. CESWF Design Manager (Address Stated Above)

b. CESWF COR (Address Stated Above)

c. CESWF PM ((b) (6)) 819 Taylor Street, CESWF-ECSO-T, Fort Worth TX, 76102

d. CBP Office, (Address Stated Above)

e. BPFTI PMO, (b) (6), (b) (7)(C), 7940 Jones Branch Drive, McLean, VA 22102

f. CESWG Area Office (Name provided after award), 252 Industrial Dr # A, Port Isabel, TX 78578

19.2.3 The A-E form shall coordinate submittal distribution with the POCs. The original transmittal letter will be addressed to the POC and will note that by information copy of that transmittal, appropriate review agencies are being provided copies of the work products and are requested to provide comments electronically to the POCs and to the A-E firm by the due date. The original transmittal letter and all copies will include a schedule showing data distribution.

20.1 Option 3 Reviews and Conferences

20.2 Quality Assurance Reviews

20.2.1 Formal Reviews

20.1.1.1 The Government will perform a formal Quality Assurance (QA) check on the following:

e. The POC will be responsible for providing the comments to the A-E and the A-E shall be responsible for responding to, and incorporating (if appropriate), all comments from reviewers into the deliverables.

f. The A-E maintains professional responsibility and liability for the deliverables. If, in the A-E's professional opinion, a QA comment either does not apply or the A-E disagrees with it, then the A-E shall not incorporate that comment into the deliverables. The A-E shall respond to the comment "Do not concur." and provide the comment submitter with an explanation of the disagreement. The A-E shall also be prepared to discuss the position with the reviewer.

g. CESWF uses USACE's web-based *Design Review and Checking System* (DrChecks) at www.projnet.org as the primary means for recording and tracking resolution of QA comments. The A-E shall use this system. The Government will set up DrChecks for this project.

h. The QA team may not record all QA comments in DrChecks. They may provide comments on other media. If such is the case, the POC will be responsible for providing those comments to the A-E and the A-E shall be responsible for responding (and incorporating, if appropriate) into the final products.

20.2.2 Casual Reviews

The A-E firm is responsible for ensuring compliance with all requirements in this task order. The Government will examine all deliverables submitted by the A-E firm. If the Government finds deficiencies, the A-E firm shall amend and resubmit as necessary.

20.2 Conferences

The conferences scheduled for this task order are listed in the table below. Any additional conferences requiring travel shall be authorized by a Task Order Modification. Expenses will be reimbursed as denoted in the IDIQ Contract and must be based on current Joint Travel Regulations. Airline ticket cost shall be based on a minimum 7-day advance purchase.

Additional A-E discipline team members will be made available to support the on-site meetings via conference call. Limited participation is required. If required to meet expedited schedules, the A-E shall be prepared to accommodate over-the shoulder review comments.

Scheduled Conferences

Scheduled Conferences	Location	Duration	A-E Firm's Role
Design Charrette (w/In-Brief; Out-Brief)	Fort Worth	2 Days	Req'd: PM, Geotech, Structural, Civil and Cost Estimator.
Draft RFP Review	Video Teleconference	1 Day	Req'd: PM, Geotech, Structural, Civil and Cost Estimator.
Final RFP Review	Video Teleconference	1 Day	Req'd: PM, Geotech, Structural, Civil and Cost Estimator.

Scheduled Conferences	Location	Duration	A-E Firm's Role
Corrected Final RFP Review	Video Teleconference	1 Day	Req'd: PM, Geotech, Structural, Civil and Cost Estimator.
Construction Pre-Proposal Conference	Video Teleconference	1 Day	Req'd: PM, Geotech, Structural, Civil.

21.1 Option 3 Technical Criteria, Standards/Specifications, General Requirements and Government Furnished Information (Use Latest Editions Unless Otherwise Noted)

The A-E or Designer of Record shall use the following standards as applicable for this project.

a. Per DoD Directive Number 4270.5 dated 12 February 2005 paragraph 4.7, the Unified Facilities Criteria (UFC) and the Unified Facilities Guide Specifications (UFGS) shall be used to the greatest extent possible by all DoD Components for planning, design, and construction (restoration and modernization) of facilities, regardless of funding source, except for those facilities constructed by the National Guard on real estate neither owned by the United States nor under long-term lease to the United States, constructed by a State under Chapters 169 and 1803 of Title 10, US Code, and where title to the facility shall not be in the United States.

b. UFC 1-200-01: General Building Requirements.

c. International Building Code (IBC).

d. NFPA Life Safety Codes 13, 90A, 101.

e. ANSI/IEEE C2-2002, National Safety Electric Code.

f. U.S. Army Corps of Engineers Architectural and Engineering Instructions (AEI), (http://www.hnc.usace.army.mil/Missions/Engineering/TECHINFO.aspx)

g. US Army Corps of Engineers, Southwestern Division, Architectural and Engineering Instructions Manual (CESWD-AEIM) available at:
http://www.spa.usace.army.mil/portals/16/docs/ec/swd_aeim_2003.pdf

h. U.S. Army Corps of Engineers design criteria available at:
http://www.publications.usace.army.mil/USACEPublications/EngineerManuals.aspx

i. U.S. Army Corps of Engineers – Technical Instructions, TI 800-01, 20 July 1998 available at http://www.wbdg.org/ccb/ARMYCOE/COETI/ARCHIVES/ti800_01.pdf

j. Contract Administration Branch guidelines set forth at
http://www.publications.usace.army.mil/Portals/76/Publications/EngineerPamphlets/EP_715-1-7.pdf

k. Selection of Methods for the Reduction, Reuse, and Recycling of Demolition Waste.

l. Requirements to collect Geographic Information System (GIS) Data associated with construction projects.

m. All applicable Federal, State and industry standards, including those not referenced constitute design criteria for this project.

n. CBP Design Guide

o. DHS Tactical Infrastructure Standard Design Toolkit, 2012

p. Due to the project requirements, this project shall meet USACE flood risk management design standards utilizing Design and Construction of Levees (EM 1110-2-1913) and, defined as a Flood Wall, thus utilizing Retaining and Flood Walls (EM 1110-2-2502), Slope Stability (EM 1110-2-1902), Strength Design of Concrete Hydraulic Structures (EM 1110-2-2104).

The design of the project shall also meet the USACE hydrologic criteria for levees and floodwalls, as defined in Chapter 7 of Hydrologic Engineering Requirements for Flood Damage Reduction Studies (EM 1110-2-1419), and the performance of the project in terms of flood protection and FEMA certification shall be evaluated according to USACE's risk and uncertainty standards as defined in Risk-Based Analysis for Flood Damage Reduction Studies (EM 1110-2-1619).

q. Requirements to collect Geographic Information System (GIS) Data associated with construction projects.

r. All applicable Federal, State and industry standards, including those not referenced constitute design criteria for this project.

s. **Government Reviews (Dr. Checks) -** CESWF uses USACE's web-based comment tracking system, Dr. Checks (located at www.projnet.org), as the primary means for recording and tracking resolution of QA comments. The Government's review will consist primarily of quality assurance (QA) checks and is typically completed in two weeks. It will concentrate on the design's functional aspects with limited technical review. The Government will prepare written comments for evaluation and response by the A-E after each major submittal. The A-E shall annotate and respond to the review comments in the development of data for the next design level. Responses such as "A-E requires additional information." or "A-E does not understand." are unacceptable. Annotations shall address specific corrective actions required. The A-E shall enter responses in advance of review conferences. Final annotation shall be completed within seven days of the conference. Hard copy distribution of final annotated comments is not required except that they shall be included by the A-E in the Design Analysis. The A-E maintains professional responsibility and liability for the deliverables. If, in the A-E's professional opinion, a QA comment either does not apply or the A-E disagrees with it, then the A-E shall not incorporate that comment into the deliverables. The A-E shall respond to the comment "Do not concur." And provide the commentator with an explanation of the disagreement. The A-E shall coordinate with the Government Project Manager to ensure the

Government has set up rights for each pertinent member of the A-E team that needs to evaluate and respond to comments.

t. **Specifications** -

The A-E will prepare all Division 01 Specifications and assemble the final Request for Proposal.

Civil / GIS CADD GIS Requirements
CADD and Electronic (paperless) Bid Process.
CADD Standards. The A-E shall comply with A/E/C CADD Standards
https://cadbimcenter.erdc.dren.mil/default.aspx?p=a&t=1&i=7

Fort Worth District Sheet/Title Block file can be found at:
https://cadbimcenter.erdc.dren.mil/DocCenter.aspx?ID=0

CADD. Critical to the design process is use of Computer-Aided Drafting and Design (CADD). The Government plans to solicit bids for construction of the project via an electronic format without providing printed plans and specifications to perspective bidders. All work to be accomplished, e.g., design work, surveying work, drawings, and details to be provided under this Task Order shall be accomplished and developed using computer-aided design and drafting (CADD) software and procedures conforming to criteria set forth elsewhere. All CADD final design deliverables shall be delivered in AutoCAD File format, version 2016 or newer.

All CADD drawing model file elements shall be produced full scale in CADD and named in compliance to A/E/C Standard.

SYMBOLOGY: All CADD element symbologies including level, weight, style, and color shall be compliant to A/E/C Standard.

Electronic Files/Paperless Solicitation. Electronic files provided to bidders shall be produced by the A-E as described herein and provided to potential bidders by the Government, via a Government Web site.

CAD files shall be converted to Adobe Acrobat "pdf" files by the A-E, which will require the A-E to purchase computer software for this purpose if they do not currently have this capability or alternately satisfy this requirement through a subcontractor (http://www.adobe.com/products/acrobat/readstep.html). These files will be readable utilizing the free Adobe Acrobat Reader.

The A-E is responsible for ensuring that resulting prints from pdf files are essentially identical to prints from the parent SpecsIntact and CADD files.

u. **Amendments to Bid Documents** - During the time that this project is advertised for construction contract bids, it may be necessary for the A-E to provide revisions to the

advertised plans and specifications. Drawing revisions shall be provided as reissued or additional drawings. Reissued or additional drawings shall be incorporated into the bid documents, in the form of amendments. All amendments shall be incorporated into project specifications and drawings in accordance with the SWD Architect-Engineer Instructional Manual (AEIM), Chapter VIII. All plan sheets revised to incorporate amendments, along with the CADD and PDF files shall be provided as specified or referenced herein. At the discretion of the Contracting Officer, drawing revisions may be provided in narrative form and sketches. Amendments within the project's scope, including design errors, omissions and conflicts will be done promptly, to prevent or minimize slipping of the proposal due date, with no increase in the A-E Task Order price. In most instances, the final amendment must be available to bidders ten days before the due date for technical and price proposals.

21.1 Proprietary Specifications and Requirements.

The A-E firm shall avoid specifying proprietary materials, equipment, systems, or other features of the work unless the A-E firm can demonstrate the use of such proprietary requirements will be advantageous to the Government (e.g. fire alarm transmitters and locksets that must be compatible with other products at the facility). The Government is prohibited from specifying proprietary requirements except in unusual circumstances which requires documentation and approval by the Contracting Agency Head or higher authority. If the A-E firm can show that a proprietary material could be more advantageous to the Government, provide a description that includes the brand name and a general description of those salient physical, functional, or performance characteristics of the item.

21.2 Office Documents.

21.2.1 The table below lists the software products the Government uses for work products produced through general-purpose office software (e.g. VE Study, Design Analysis, Etc.):

Government Software Packages

File Type	Software	Publisher
Portable Document Format (*.pdf)	Acrobat	Adobe
Hypertext transfer protocol (http)	Internet Explorer	Microsoft
Word Processing (*.docx)	WORD	Microsoft
Spreadsheets (*.xlsx)	EXCEL	Microsoft
Slideshow presentations (*.pptx)	POWERPOINT	Microsoft
eMail client (*.msg)	OUTLOOK	Microsoft

21.2.2 The A-E firm shall ensure the documents they produce and submit to the Government are compatible with these software packages. The A-E firm shall be responsible for any file translation necessary to permit Government reading of documentation. The A-E firm shall consult with the Government on the use of software not on this list to ensure the Government can read the files the A-E firm will submit.

21.2.3 The A-E firm shall consider readability and reproducibility in the preparation of documents. This includes (but is not limited to) font sizes, organization and layout of documents, paper sizes, and use of color documentation. Not all stakeholders on this project have access to high-end reproduction equipment.

21.3 Units of Measure.

The A-E shall verify use of U.S. Customary, International, or other units in all work products.

21.4 Government Furnished Information and Materials

The table below lists the Government Furnished information and materials included in this task order. Contact the POC if more data is necessary for preparation of fee proposal or execution of the task order.

Government Furnished Materials

No.	Item	Source
1	Cost engineering database tables and software. Purchase or license may be required at cost to the A-E firm.	See also http://media.swf.usace.army.mil/pubdata/EC/eca/CostSpec.asp
2	Div 00	SWF Contracting

22. Option 4 Construction Phase Services in Support of the Base Bid D-B-B Project for 2.93 Miles

Project Description

22.1 Overview

The objective is to provide Construction Phase Services to the Government in support of the full design completed in the Base Bid.

22.1.1 Product Scope

The Government requires Construction Phase Services in support of the Base Bid.

22.1.2 Project Scope

22.1.2.1 This Scope of Work includes all work necessary for the A-E firm to provide Construction phase Services.

a. Quality Control Plan

b. Reviews and Conferences

c. Confirmation Notices, Status Reports

d. Monthly Report on Construction Status

22.2 Option 4 Construction Cost Limitation.

All services associated with a Study, Project Definition Report or Design-Build RFP are considered non-design and are not subject to the 6% of Construction Cost Limitation statutory limit.

23.1 Option 4 Services

23.2 Quality Control Plan

The minimum requirements for the quality control plan (QCP) are given in ER 1110-1-12, *Quality Management*, and the project SOW. The QCP is the A-E firm's management plan(s) for execution of the contract. The QCP describes the way in which the A-E will produce the deliverables, the steps that will be taken to control quality, and an assigned point-of-contact within the A-E firm's organization responsible for ensuring compliance with the QCP. The QCP, modified to include any changes to the contract that occur, will be attached as an appendix to the design analysis.

23.3 A-E Services (See CESWD-AEIM for full descriptive requirements.)

a. Design Quality Control Plan (See Section 3.1)

b. Reviews and Conferences (See Section 5.2)

c. Confirmation Notices, Status Reports (See Section 3.3.1)

d. Construction Phase Services –

The Contractor shall provide support to the Contracting Officer during the construction of RGV-010. The Contractor shall allow for a total of 320 hours during construction to assist with issues such as construction inspection, shop drawing reviews, vendor proposal reviews, construction value engineering change proposal reviews, response to information requests, design modification, factory testing observations and construction site visits. Contractor response to RFIs shall be provided to the Contracting Officer expeditiously, but no later than two calendar days following receipt of the inquiry. As part of this task and included in the 320 hours the Contractor shall plan to attend one, 1-day Pre-Construction Meeting with the PM, Civil and Geotechnical Engineer and conduct one construction surveillance trip for five days with the PM, Civil and Geotechnical Engineer. Contractor's participation in the site visit(s) shall be coordinated by the USACE Project manager.

23.4 Administrative Tasks

23.3.1 Confirmation Notices

The A-E firm shall provide a record of all conferences, meeting, discussions, verbal directions, telephone conversations, etc., the A-E firm and/or their subcontractor(s) on matters related to this Task Order. The A-E firm shall identify all participating personnel, subjects discussed, and conclusions reached. The A-E firm shall title these records *Confirmation Notices* and shall number them sequentially. The A-E shall forward each Confirmation Notice via email to the Government POC within three working days. Communication via email is acceptable for minor, day-to-day correspondence.

23.3.2 Periodic Status Reports

The A-E firm shall provide a monthly status report to the Government POC. The report shall include: Current Status, Action Item List, and discussion of major issues.

24.1 Option 4 Schedule and Deliverables

24.2 Schedule

24.1.1 The Table below shows the schedule of services and deliverables covered in this task order. The A-E Contractor shall submit a schedule showing dates for all key submittals.

Option 4 Schedule of Services and Deliverables

KEY SERVICE OR DELIVERABLE	DUE DATE
Quality Control Plan	Within 7-days of T.O. Award.
Monthly Construction Report (pdf via email)	Within 5-days from end of month
Administrative Tasks	
Confirmation Notices (Email only – Numbered)	Within 3-days of Gov't comments

24.1.1 The days listed above are calendar days, including Saturdays, Sundays, and Federal holidays. The Government must receive the deliverable by the start of the next business day. If the due date falls on a Saturday, Sunday, or Federal holiday, the Government expects receipt by the start of the next business day. The A-E Contractor should assume 14-days for receipt of Government comments for review of major submittals. On-site review conferences or conference calls can be scheduled no sooner than 7-days following receipt of the submittal.

24.1.2 The Government may accept submittals prior to the due date provided they are complete and have received a quality control check. The Government will not accept partially complete submittals early or otherwise.

24.2 Deliverables

24.2.1 The table below shows the list of deliverables and their required distribution.

Deliverable Distribution Schedule

Deliverables	Number of Copies A	B	C	D	E
Electronic Copies Only (Native and/or .pdf formats)					
Quality Control Plan	1	1	1	1	1
Minutes, Confirmation Notices, Status Reports	1	1	1	1	1

24.2.2 The table below lists the Points of Contact that correspond to the letters (*A, B, C,* etc.) in deliverable distribution schedule above.

Address List

a. CESWF Design Manager (Address Stated Above)

b. CESWF COR (Address Stated Above)

c. CESWF PM ((b) (6)) 819 Taylor Street, CESWF-ECSO-T, Fort Worth TX, 76102

d. CBP Office, (Address Stated Above)

e. BPFTI PMO, (b) (6), (b) (7)(C), 7940 Jones Branch Drive, McLean, VA 22102

24.2.3 The A-E form shall coordinate submittal distribution with the POCs. The original transmittal letter will be addressed to the POC and will note that by information copy of that transmittal, appropriate review agencies are being provided copies of the work products and are requested to provide comments electronically to the POCs and to the A-E firm by the due date. The original transmittal letter and all copies will include a schedule showing data distribution.

25.1 Option 4 Reviews and Conferences

25.2 Quality Assurance Reviews

25.2.1 Formal Reviews

25.2.1.1 The Government will perform a formal Quality Assurance (QA) check on the following:

i. The POC will be responsible for providing the comments to the A-E and the A-E shall be responsible for responding to, and incorporating (if appropriate), all comments from reviewers into the deliverables.

j. The A-E maintains professional responsibility and liability for the deliverables. If, in the A-E's professional opinion, a QA comment either does not apply or the A-E disagrees with it, then the A-E shall not incorporate that comment into the deliverables. The A-E shall respond

to the comment "Do not concur." and provide the comment submitter with an explanation of the disagreement. The A-E shall also be prepared to discuss the position with the reviewer.

k. CESWF uses USACE's web-based *Design Review and Checking System* (DrChecks) at www.projnet.org as the primary means for recording and tracking resolution of QA comments. The A-E shall use this system. The Government will set up DrChecks for this project.

l. The QA team may not record all QA comments in DrChecks. They may provide comments on other media. If such is the case, the POC will be responsible for providing those comments to the A-E and the A-E shall be responsible for responding (and incorporating, if appropriate) into the final products.

25.2.2 Casual Reviews

The A-E firm is responsible for ensuring compliance with all requirements in this task order. The Government will examine all deliverables submitted by the A-E firm. If the Government finds deficiencies, the A-E firm shall amend and resubmit as necessary.

25.2 Conferences

The conferences scheduled for this task order are listed in the table below. Any additional conferences requiring travel shall be authorized by a Task Order Modification. Expenses will be reimbursed as denoted in the IDIQ Contract and must be based on current Joint Travel Regulations. Airline ticket cost shall be based on a minimum 7-day advance purchase.

Additional A-E discipline team members will be made available to support the on-site meetings via conference call. Limited participation is required. If required to meet expedited schedules, the A-E shall be prepared to accommodate over-the shoulder review comments.

Scheduled Conferences

Scheduled Conferences	Location	Duration	A-E Firm's Role
Pre-Construction Meeting	On-site	1 Day	Req'd: PM, Geotech, Civil
Construction Surveillance	On-site	5 Days	Req'd: PM, Geotech, Civil

26.1 Option 4 Technical Criteria, Standards/Specifications, General Requirements and Government Furnished Information (Use Latest Editions Unless Otherwise Noted)

The A-E or Designer of Record shall use the following standards as applicable for this project.

a. All applicable Federal, State and industry standards, including those not referenced constitute design criteria for this project.

b. CBP Design Guide

c. DHS Tactical Infrastructure Standard Design Toolkit, 2012

d. All applicable Federal, State and industry standards, including those not referenced constitute design criteria for this project.

26.2 Proprietary Specifications and Requirements.

The A-E firm shall avoid specifying proprietary materials, equipment, systems, or other features of the work unless the A-E firm can demonstrate the use of such proprietary requirements will be advantageous to the Government (e.g. fire alarm transmitters and locksets that must be compatible with other products at the facility). The Government is prohibited from specifying proprietary requirements except in unusual circumstances which requires documentation and approval by the Contracting Agency Head or higher authority. If the A-E firm can show that a proprietary material could be more advantageous to the Government, provide a description that includes the brand name and a general description of those salient physical, functional, or performance characteristics of the item.

26.3 Office Documents.

26.2.1 The table below lists the software products the Government uses for work products produced through general-purpose office software (e.g. VE Study, Design Analysis, Etc.):

Government Software Packages

File Type	Software	Publisher
Portable Document Format (*.pdf)	Acrobat	Adobe
Hypertext transfer protocol (http)	Internet Explorer	Microsoft
Word Processing (*.docx)	WORD	Microsoft
Spreadsheets (*.xlsx)	EXCEL	Microsoft
Slideshow presentations (*.pptx)	POWERPOINT	Microsoft
eMail client (*.msg)	OUTLOOK	Microsoft

26.2.2 The A-E firm shall ensure the documents they produce and submit to the Government are compatible with these software packages. The A-E firm shall be responsible for any file translation necessary to permit Government reading of documentation. The A-E firm shall consult with the Government on the use of software not on this list to ensure the Government can read the files the A-E firm will submit.

26.2.3 The A-E firm shall consider readability and reproducibility in the preparation of documents. This includes (but is not limited to) font sizes, organization and layout of documents, paper sizes, and use of color documentation. Not all stakeholders on this project have access to high-end reproduction equipment.

26.3 Units of Measure.

The A-E shall verify use of U.S. Customary, International, or other units in all work products.

26.4 Government Furnished Information and Materials

The table below lists the Government Furnished information and materials included in this task order. Contact the POC if more data is necessary for preparation of fee proposal or execution of the task order.

Government Furnished Materials

No.	Item	Source
1	N/A	

27.0 Administrative Instructions

27.1 The A-E firm's primary point of contact with the Government is the POC. The A-E firm may communicate with other members of the project delivery team (PDT) as necessary to facilitate project delivery. The A-E shall ensure that the POC is included in all such communications – especially when such communications could potentially lead to a modification to this task order.

27.2 The A-E firm may always contact the COR, the KO, or the contract specialist assigned by the KO at any time about any issues involving this task order. See subsection "Work Authorization" below.

28.1 General Provisions

28.2 Ownership

28.2.1. The Government, for itself and such others as it deems appropriate, will have unlimited rights under this Task Order to all information and materials developed under this Task Order and furnished to the Government and documentation thereof, reports, and listings, and all other items pertaining to the work and services pursuant to this agreement including any copyright. Unlimited rights under this Task Order are rights to use, duplicate, or disclose text, data, drawings, and information, in whole or in part in any manner and for any purpose whatsoever without compensation to or approval from the A-E firm.

28.2.2. The Government will have the right to inspect the work and will have access to and the right to make copies of the above-mentioned items. All text, digital files, data, and other products generated under this Task Order shall become the property of the Government.

28.3 Project Location Considerations

The A-E firm shall become acquainted with all available site related information to properly estimate the difficulty and/or cost of successfully executing the work under this task order.

28.4 Work Authorization

The A-E firm shall not accept instructions issued by any person employed by the Government or otherwise, that may affect the terms and conditions of the Task Order substantially, other than the Contracting Officer, or the COR acting within the limits of their authority. Any work done by the A-E firm without being properly directed to do so will be done at the A-E firm's own risk. Furthermore, the Government will not take beneficial use of any work outside this scope of work without properly modifying the task order.

28.5 Subcontractors

The A-E firm shall insert all appropriate provisions in all Subcontracts relating to this Task Order and shall ensure fulfillment of all contractual provisions by subcontractors. If at any time during the process of this Task Order, the Contracting Officer determines that any subcontractor is unsatisfactory or is not performing in accordance with the Task Order, the Government will inform the A-E firm in writing accordingly and the A-E firm shall take immediate steps to obtain acceptable performance or terminate the subcontract. Subletting by subcontractors is subject to the same requirements. The A-E firm shall not construe anything in this Task Order to create any contractual relation between any subcontractor and the Government. The A-E firm's change of subcontractors must be done in accordance with the contract clause, FAR 52.244-4.

28.6 Confidentiality

28.5.1 The A-E firm shall protect the confidentiality of all work accomplished under this SOW. If approached by the media or others not directly involved with the project, the A-E firm shall refer them to the COR for response.

28.5.2 Quantity surveys and construction cost estimates shall remain the sole property of the Government, and shall not be made available to others for any purpose. The release of information concerning quantities and costs to prospective bidders is prohibited. The A-E firm shall be aware of and take such precautionary measures as necessary to maintain the confidential nature of all estimates prepared under this Task Order.

28.6 Inspection and Acceptance

During the progress of work, all work and all the A-E firm's or subcontractor's plant and equipment engaged in the work shall be subject to, and available for, inspection by the COR during normal office hours.

28.7 Inspection of Delivered Work

As soon as practicable after delivery of work in any installment, the Government will spot check for serious errors or an undue number of minor errors indicating mistakes or carelessness on the part of the A-E firm. The COR may forego a thorough inspection and return the entire submittal for rechecking and correction by the A-E firm.

28.8 Preliminary and Final Acceptance

Preliminary acceptance of work delivered at any stage may be the basis for estimating partial payments for completed work but shall not be construed as final acceptance. Preliminary acceptance of work delivered in any stage may be accepted; however, if proven by subsequent inspection to not be acceptable the stage shall be corrected by the A-E firm. Final acceptance of the work will not be made until all work under the Task Order has been delivered and found to be acceptable. Acceptance does not relieve the A-E firm of liability (See FAR52.236-23).

28.9 Deficiencies

The A-E firm shall correct the deficiencies and resubmit the documents or files in the quantities originally required and within a reasonable time as specified by the Contracting Officer. The A-E firm shall bear the cost of correcting and re-submitting deficient work.

28.10 Certification of Computer Media

The A-E firm shall scan all electronic deliverables for known viruses utilizing current virus detection software that is updated weekly for new virus profiles. Transmittal letters transferring files to the Government shall certify if this has or has not been accomplished.

28.11 Progress Payments

28.11.1 The A-E firm shall submit monthly invoices no later than the 15th of each month. The A-E firm shall give the status of the project expressed as a percentage basis for each Task Order work item and accounting work item (See Contract Financial Data for accounting code breakout) of the total amount of work completed. The invoice shall be applicable to only this Task Order.

28.11.2 The A-E firm shall prepare and submit their progress estimates and payment requests electronically on a signed ENG Form 93. The A-E firm shall transmit their invoice to *the A-E Invoice mailbox at* [redacted], as well as, the day-to-day contact (typically the Design Manager or Project Manager). The A-E firm shall include the following data in their invoice transmittal:

a. Contract and Task Order numbers,

b. Name of the A-E firm,

c. Name of the USACE POC and COR, and

d. The signed ENG Form 93.

28.12 Verification of Government Furnished Information

Upon initial delivery of the Task Order and all Government furnished data, the A-E firm shall inspect them and inform the COR if information is missing, no later than seven days after receipt. The A-E firm will thoroughly review the Government furnished data, conference minutes and other communications concerning the project which has transpired prior to the contract date. Should the A-E firm find any conflict between the Government supplied data and applicable codes, Government regulations, above referenced minutes and communications, or if the cost estimate is determined to be in error such that it appears that the construction cost will exceed funds available, the A-E firm shall inform the Government, in writing, within five days of the discovery.

28.13 Architect-Engineer Request for Information (A-E RFI)

When the A-E firm needs additional, or a clarification of, information from the Government to facilitate the services required by this Task Order, the A-E firm shall submit an A-E RFI requesting the needed information. The A-E firm shall use a separate A-E RFI for each unrelated request. Even though the information is requested by other documentation or methods such as, Confirmation notices, letters, memorandums, design analysis, annotated review comments, telephone conversations, conferences, meetings, discussions, oral conversations, etc., the A-E firm shall document the requested information on an A-E RFI. These requests, entitled "A-E Request for Information" shall be numbered sequentially and shall fully explain the requested information and all ancillary information needed. The A-E firm shall forward each A-E RFI to the POC as soon as the need for information is determined.

29.14 Security Requirements

Do to project site restrictions/ operations, all contract personnel must be vetted (background checks) and cleared prior to site access. Final site access approval will be determined via U.S. Department of Homeland Security vetting process. Any person not cleared for site access will not be allowed on site for any reason. All vetting decisions are FINAL. The following information shall be provided to U.S. Department of Homeland Security for vetting purposes (Note: this is a U.S. Department of Homeland Security facility and uses different vetting requirements outside of U.S. Department of Defense):

- FULL NAME
- DATE OF BIRTH
- LAST FOUR SOCIAL SECURITY NUMBER
- HOME ADDRESS
- DRIVERS LICENSE NUMBER AND STATE OF ISSUE
- GENDER
- PLACE OF BIRTH (IF NOT UNITED STATES)

29.14.1 On-Site Security

The contractor will be responsible for providing security for the contractor's personnel when on-site as the project location is within close proximity to an international border. The Government will not provide security services.

Geotechnical Investigation Requirements Exhibit

Applicable to the Base Bid and Option 1

A.1 Description of Work and Service Required

The A-E shall perform site reconnaissance, geotechnical investigations (field and laboratory) in accordance to EM 1110-1-1804 and document findings in the geotechnical engineering report. All work shall be done under the direction and supervision of a Professional Engineer, licensed in the applicable state. All geologic investigation shall be done under the direction and supervision of a Professional Geologist, licensed in the applicable state.

A.2 Site Access Coordination

The A-E shall comply with all landowner requirements regarding access and coordination. In addition, the A-E is expected to use engineering best practices and comply with the environmental, cultural resource restrictions, and will provide the USACE a minimum of two week notice before accessing the site to establish the site access.

A.3 Site Reconnaissance

The A-E shall conduct site reconnaissance of the required areas. General geologic observations shall be noted and photographs documenting the site and geologic conditions shall be taken in the proposed areas of investigation. The site reconnaissance shall identify the location of potential subsurface exploration locations. The A-E shall mark proposed subsurface exploration locations in-field, notify underground service alert (USA), and coordinate any additional permits required by the applicable State. The A-E shall be responsible for all costs encountered for acquiring appropriate permits. The A-E shall prepare a trip report and photo-log in order to document existing site and geologic conditions as part of exploration plan submittal.

A.4 Review of Existing Data and Exploration Plan

The A-E shall review and compile relevant geologic/geotechnical information from existing geotechnical studies, published USGS and the applicable state Geological Survey maps, topographic maps, USDA soil maps, flood maps, groundwater databases, aerial photos, etc. onto regional scaled maps. The A-E shall provide a preliminary summary of existing subsurface conditions, as part of the exploration plan submittal, indicating the road alignment with recommendations for subsurface exploration (borings, test pits, or other). The Exploration Plan shall indicate the location and proposed depth for each exploration point, the type and approximate depth of samples to be collected, and the tentative geotechnical laboratory tests to be conducted. Note that preliminary site visit by CBP personnel and soil survey map review by USACE suggests gravelly sandy loam soils and shallow groundwater with surface water.

A.5 Field Investigation

The A-E shall conduct geologic mapping of the site to define the surficial units in the general vicinity of the proposed river crossing. The A-E shall conduct subsurface field investigations along the proposed alignment of the river crossing. The field investigations shall be performed using methods (soil borings, test pits, or other) best suited to the site conditions and complexity of the proposed design. It is anticipated the field investigation shall consist of, but not be limited to three exploration borings using rotary wash drilling methods or other method suitable for shallow groundwater conditions. Standard penetration tests (ASTM D 1586) shall be conducted and relatively undisturbed samples collected (Shelby tube, Modified California, or similar sampling method) at intervals not exceeding 5-feet and at every change of material to at least 20 feet total depth. Test holes shall be backfilled with cuttings. A Professional Engineer or Professional Geologist, registered in the applicable state shall be present at all times during the field investigations and responsible for characterizing the subsurface condition in accordance with latest ASTM standards.

The A-E shall provide all water necessary for drilling. Groundwater elevations shall be determined at the time of drilling either by bailing the borings or installing temporary standpipe piezometers. Any temporary standpipe piezometers shall be properly abandoned prior to the end of the design phase of the project.

If bedrock is encountered in explorations at the proposed alignment of the river crossing, the distribution of rock types, geologic structure and rock discontinuities (type, spacing, orientation and characteristics) shall be documented in field notes, photographs, geologic maps and geologic cross sections. Field notes shall be presented at scales appropriate for engineering evaluation.

Test holes for the wall foundation design shall each be drilled to a minimum depth of 40.0 feet below existing grade or top of rock, whichever occurs first. The maximum spacing of test holes for the 2.93 miles that is part of the full design in the base bid shall be every 1000 ft. as measured along the wall alignment. The maximum spacing of test holes for the remainder of the 32.8 miles of the base bid and when required in an option shall be every one (1) mile as measured along the wall alignment. Test holes drilled for the patrol road pavement design shall each be drilled to a minimum depth of 10.0 feet below existing grade and shall also be performed at a maximum spacing of every one (1) mile along the patrol road alignment.

Tests on disturbed specimens of overburden soils shall include classification (ASTM D 2488), moisture content (ASTM D 2216), grain size analysis (ASTM D 422), and Atterberg limits (ASTM D 4318). Undisturbed (shelby tube) specimens of the overburden soils shall also be collected using a shelby tube sampler; tests on undisturbed specimens of the overburden soil shall include the tests listed for disturbed specimens, as well as controlled expansion-consolidation testing (ASTM D 2435 and ASTM D 4546 (Method C)), density (Corps of Engineers Engineer Manual (EM) 1110-2-1906, Appendix II, Par. 4, Displacement Method), and strength testing (ASTM D 2850). If coring is performed in the bedrock, core specimens of at least 3.5-inch diameter of the bedrock shall be collected and subjected to testing to include moisture content (ASTM D 2216), density (Corps of Engineers EM 1110-2-1906, Appendix II, Par. 4, Displacement Method), and strength (ASTM D 2464). All geotechnical testing of soil and rock specimens shall be performed at a testing laboratory that possesses a current validation by the U.S.

Army Corps of Engineers Engineer Research and Development Center (ERDC) Geotechnical and Structures Lab (GSL). The contractor shall furnish to the Government a copy of the current ERDC validation memorandum as a condition of approval to use the lab for project laboratory testing services.

A.6 Laboratory Investigation

Laboratory tests shall be performed on soil and/or bedrock samples retrieved during the field exploration program in accordance to latest ASTM standards. The tests shall be conducted at an USACE-accredited laboratory. The purpose of the laboratory testing is to assess the physical and engineering properties of the soil and/or bedrock samples collected in the field. It is anticipated that the laboratory testing program shall include, but not be limited to: 1) determination of moisture content and dry unit weight of undisturbed samples, 2) modified Proctor testing (determination of maximum density/optimum moisture), 3) soil gradation testing, 4) determination of plasticity index, 5) direct shear testing, 6) consolidation and hydroconsolidation testing, 7) determination of expansion indices, 8) determination of R-values or CBR values, and 9) evaluation of corrosivity (resistivity, sulfate and chloride content). If during the course of the investigation, the A-E determines that additional laboratory testing is required to adequately characterize the site conditions, the A-E shall propose a schedule and cost of additional testing for USACE approval.

Soil samples shall remain the property of the Government and be stored and available for Government personnel to view for 90 days after samples are taken. A-E shall notify the Government 14 days prior to when the 90 days have elapsed, and make the samples available to the government at its behest. If the Government does not choose to pick up the samples, then the samples shall become property of the A-E and shall be disposed of properly.

A.7 Geotechnical Report

The A-E shall prepare a draft report, summarizing the geotechnical investigations, engineering analyses, and recommendations as part of the 65% Design submittal. All test results shall be reported in a format and detail consistent with the relevant standard. At a minimum, the report shall include the following:

1. A project description and general site geology and soil conditions;
2. A list of previous reports, geologic references, soil surveys, and other data sources reviewed and a summary of the data obtained from those sources;
3. A description of field and laboratory work performed;
4. A description of the proposed river crossing, culverts, and related improvements;
5. A Geologic Map covering the entire area of work, that includes the locations of subsurface exploration and geologic conditions encountered.
6. Geologic Cross Sections showing the surface and subsurface distribution of soil and/or rock materials at the project site. At least one cross section shall be drawn along the proposed culvert alignment;

7. Logs of the borings and/or test pits completed. Logs shall be in the format provided by the USACE;
8. Results of laboratory tests on soil and/or rock samples presented graphically, in table format, or on the boring logs (as appropriate);
9. Results of corrosivity tests (for site soils to corrode steel, or to adversely react with concrete).
10. A summary of subsurface conditions encountered along the proposed river crossing alignment, including a discussion of existing groundwater conditions as appropriate;
11. A summary of seismic site conditions, including discussion of liquefaction potential along with any necessary seismic design recommendations;
12. A discussion of potential geologic/geotechnical impacts/constraints that includes an evaluation of allowable bearing capacity, settlement, differential settlement, hydro-consolidation, and erosion and scour of fill soils;
13. Evaluation of groundwater conditions and recommendations for construction dewatering:
14. An evaluation of difficult ground conditions such as soft/loose materials and/or caliche and a discussion of suggested remedial measures;
15. Geotechnical recommendations for culvert design at river crossings and mitigation of potentially adverse geologic and geotechnical conditions;
16. Pavement design recommendations based on ground conditions and estimated traffic loads/frequencies provided by the government;
17. General grading recommendations, including recommendations for temporary stability of excavations, site preparation, and soil compaction;
18. Geotechnical recommendations for the development of project specifications.

The completed geotechnical engineering report shall be signed and stamped by a Professional Engineer licensed in the applicable state after the draft report is reviewed and accepted by the USACE. The geotechnical report shall be part of the completed preliminary design (65%) submittal review process. If modifications to the geotechnical engineering report become necessary, the final geotechnical report can be resubmitted for approval as part of 95% and 100% Design Data submittal.

The following criteria shall apply to the development of the project foundation and pavement design recommendations:

TM 5-818-1 – Soils and Geology Procedures for Foundation Design of Buildings and Other Structures (Except Hydraulic Structures)

TM 5-818-7 – Foundations in Expansive Soils

UFC 3-250-01FA – Pavement Design for Roads, Streets, Walks, and Open Storage Areas
UFC 3-250-09FA – Aggregate Surfaced Roads and Airfield Areas
TM 5-822-2 – General Provisions and Geometric Design For Roads, Streets, Walks, and Open Storage Areas

Texas Department of Transportation - Standard Specifications For Construction of Highways, Streets and Bridges

UFGS Guide Specifications will be used for Construction

A.8 Reviews and Submittals

The A-E shall submit three (3) hard copies and a file in PDF format of each submittal. A review conference (teleconference) may be held to resolve comments. The A-E may be required to submit response to written review comments to the Contracting Officer.

The A-E shall forward via overnight delivery the documentation specified to:

U.S. Army Corps of Engineers
Fort Worth District
819 Taylor St, ATTN: CESWF-ECSO
Fort Worth, TX 76102

A.9 Other Considerations

The A-E shall use licensed subcontractors as needed for subsurface explorations. The geotechnical laboratory shall be certified by the USACE. The A-E shall provide to the USACE Project Manager a statement of qualifications for the laboratory and each proposed subcontractor for Government approval at least one week prior to initiating the proposed tasks.

All data, reports, and materials relative to this Scope of Work are the property of the Government and will not be released by the A-E, subcontractors, or employees on temporary duty without written approval of the Project Manager.

The A-E shall support development of the project plans and specifications and review each to ensure compliance with the geotechnical recommendations prior to submittal to the USACE.

Topographic Survey Requirements Exhibit

Applicable to the Base Bid and Option 1

The survey will be accomplished using aerial and/or ground survey methods. Existing easements associated with the property shall also be identified. Up to two benchmarks shall be set to assist staking during construction.

The unit of measure shall be International Feet. All dimensions on the exhibits and records of shall be displayed as ground distances, or appropriate conversion procedures are to be displayed in the event the data is displayed as grid distance; the digital files will be in the true grid system.

All work shall be done in accordance with engineering criteria and project maps that will be furnished to the Surveyor-Engineer, procedures outlined in the Scope of Work and in accordance with the laws of the applicable State.

a. The Surveyor-Engineer shall prepare mapping at a scale of one inch equals fifty feet (1"=50') with a one foot (1.0') contour interval for the area depicted in project maps. The mapping shall extend 100' north and 100' south at each street intersection.

b. The surveyor shall set ground control points for mapping tied to COE and NGS control in the project area. COE project control can be found on the USMART Database. These monuments shall be used as primary project control.

c. Prepare Mapping to meet ASPRS Class 1 Standards and National Map Accuracy Standards at a mapping scale of one inch equals fifty (1"=50'), with a one foot (1.0') contour interval.

(1) Mapping and labeling shall show culture including buildings, bridges, fences, walls, trees, cactus, shrubbery, labeled streets and access roads (including curb, gutters, and sidewalks), dirt roads, cattle guards, railroads, paths, courses and ways of travel, bodies of water, surface evidence of utilities and extensive areas of vegetation. Mapping and labeling shall include all other standard map features.

(2) Locate adjoining fence lines and note changes in ownership and/or materials along the existing fence lines.

(3) Locate all surface evidence of utilities. Using this information, georeference the utility drawings provided by the COE.

d. The Surveyor-Engineer shall perform a boundary survey for the properties that adjoin the project.

(4) Establish the property lines of all adjoining properties.

(5) Locate all easements within project area.

(6) Establish project Right of Way from provided files.

(7) Final signed and stamped Record of Survey shall be delivered.

(8) Boundary and easement information shall be included in the topographic drawings.

e. Each digital file shall immediately reference to another, in its proper orientation (if there is more than one file).

f. The mapping shall be drafted in CAD per the National CAD Standards.

g. The completed planimetric CAD files as well as the contours and DTM should be three-dimensional. All files shall be fully operational and compatible with the Corps of Engineers systems. All drawings for the Corps shall be stored on external hard drive, or DVD depending on size. Each drawing shall have a separate file name and be stored individually on the disk(s). All files should include the sheet layout, title block and legend.

The Surveyor-Engineer shall prepare final digital survey material in accordance with the applicable criteria and standards publications and manuals listed herein. They are hereby made a part of this Scope of Work and may be supplemented with detailed instructions, which shall be issued by the Contracting Officer during the progress of the work. The Surveyor-Engineer shall be responsible for notifying the Contracting Officer of any missing criteria needed for his work.

h. The deliverables part of this task will consist of the following information:

The deliverables will include metadata compliant with the FGDC metadata standard for each data set that is part of the report or that was used in making the report. The FGDC metadata standard is described in documents listed on this page -- http://www.fgdc.gov/metadata/contstan.html -- under "CSDGM Version 2 - FGDC-STD-001-1998."

The survey mapping deliverables to the design team will be provided in electronic format. The formats will consist of: Word, ASCII, Microstation CADD, InRoads DTM, MrSid, and TIFF.

i. The final submittal should consist of five sets of the following digital files:

1. Microstation V8i DGN and Inroads DTM files with contours generated from the DTM.

2. ArcGIS File Geodatabase (the geodatabase shall not be password protected). All elements shall have the coordinate system defined. Each separable element will be stored in the geodatabase as a separate dataset. The geodatabase shall contain the following elements (at a minimum):

a) Topographic features (bench marks, control points, mass points, breaklines, etc)

b) Common geographic features.

c) Structures, buildings, etc.

d) Roads, streets, access roads, dirt roads, railroads, etc.

3. ArcGIS TIN.

4. Drawings in PDF format of topographic and boundary survey.

5. Record of survey in CAD and PDF format.

6. Inroads Breakline (BRK) file.

7. Inroads ASCII export format mass point's file with a data header containing the following information, at a minimum.

*Project =
*Date =
*Surveyor =
*Area =
*Survey Type =
*Unit of measure =
*Vertical =
*Horizontal =
*Data Format=

8. U-SMART control point description forms for the project control points.

9. Project control map with graphical location and positional information.

10. Positional information in excel (xls) format.

11. Quality Assurance/Quality Control Report and metadata file.

12. Photo's of all control points.

e) All CD's, data files and drawings should be labeled with a header or title block showing, at a minimum, the following project info:

*Project =
*Date =
*Surveyor =

*Area =
*Survey Type =
*Unit of measure =
*Vertical =
*Horizontal =

The AE shall name and assign a responsible Engineer/Surveyor as Project Manager. He/she shall maintain a project file to contain all correspondence and criteria pertinent to this project and shall provide the Contracting Officer with the name of the individual responsible for preparation and coordination of the project Record of Survey.

b. During the progress of the work, the AE shall confer with the Project Manager, Fort Worth District, as required, to assure approval of the completed work.

c. The Project Manager from the Fort Worth District, as appropriate, shall visit the Surveyor-Engineer's office at any time during the progress of the work to examine the progress of the work and to resolve any questions the AE may have concerning the preparation of the Record of Survey. Technical specialists shall support the Project Manager as necessary to provide guidance and to assure an adequate submittal.

Programmatic Value Engineering Study Requirements Exhibit Applicable to the Base Bid

This TO will include preparation of an independent Programmatic VE Study Report to include recommended edits. All work shall conform to the UFC and Army design criteria. The A-E will perform a Programmatic VE Study for all task order tasks. Travel for site visits and workshops may be combined for options but Base projects must be started upon award. USACE will provide the AE sufficient notice of option award and when the anticipated Draft RFP or 30% documents are completed.

This Contract will include preparation of Value Engineering Report to include recommended edits. All work shall conform to the UFC and Army design criteria.

The A-E Contractor will coordinate these items with the CESWF Project Design Team, Installation personnel, and local utility providers. Overall guidance is provided by the site specific Installation Design Guide. See the CESWF AEIM for additional design deliverable requirements.

The Construction Cost Estimate/Current Working Estimate will be validated by the A-E. Tasks and Deliverables for the VE Study shall consist of:

1. **VE Study Logistics Coordination**

   The VEC shall coordinate with the Design Manager (DM) and VEO Representative to discuss the project, agenda, roles and responsibilities. The DM will provide the latest Draft RFP package and pertinent project information which will contribute to the success of this effort. The VEC shall provide a list of all VE team members with contact information, including name, e-mail, work/cell numbers.

2. **VE Study Review and Baseline Cost Estimate**

   The VEC shall evaluate the Draft RFP package, the Statement of Project Intent and Current Working Estimate to identify potential funding shortfalls and any other issues prior to the VE Study during the Information and Function Analysis. Cost estimates are to be in the MII format.

3. **Conduct VE Study and Produce Draft VE Report**

   (1) The VEC shall conduct each Value Engineering Study consistent with the following six phases sequentially conducted and developed by S.A.V.E. International: Information phase, Function Analysis (including FAST Diagram) phase, Creative phase, Evaluation phase, Development phase and the Presentation phase. This is later referred to as I.F.C.E.D.P. The VEC shall produce a Draft VE Study information with the following content (at a minimum):

(2) Value Matrix comprised of;

(a) Baseline Concept and VE Strategies

(3) VE Alternative proposal write-ups and recommendations for each award type by discipline; and

(4) Appendix of all background documents.

(5) Note: Executive Summary shall be two pages or less.

(6) Document the accepted and rejected evaluated proposed alternatives and confirm the results with the Government.

4. Produce Final VE Report

The VEC shall produce a Final VE Report, including the PDT recommended edits:

FINAL VE REPORT	
1) Cover (P2 Number, Project Number, Official Project Title)	7) VE Study Statistics
2) Table of Contents	8) Design Comments
3) Location Map And Project Site Plan	9) Cost Estimate & Comments
4) Executive Summary	10) Attendance Roster
5) Summary of VE Proposal Cost Savings & Implementation Sheets	11) Workshop Agenda (Draft & Final)
6) Project Analysis (I.F.C.E.D.P)	12) Presentation

The workshop results shall include a differentiation of the Quantitative & Qualitative Alternative proposals developed as "VE Study Statistics". This is information shall correlate to project linear costs estimate in the following format;

(1) Total Alternatives:
(a) Number of Alternatives Developed
(b) Number of Accepted Alternatives

(c) Total Number of Implemented Alternatives

(2) Quantitative Alternatives
(a) Number of Quantitative Alternative
(b) Number of Accepted Alternatives

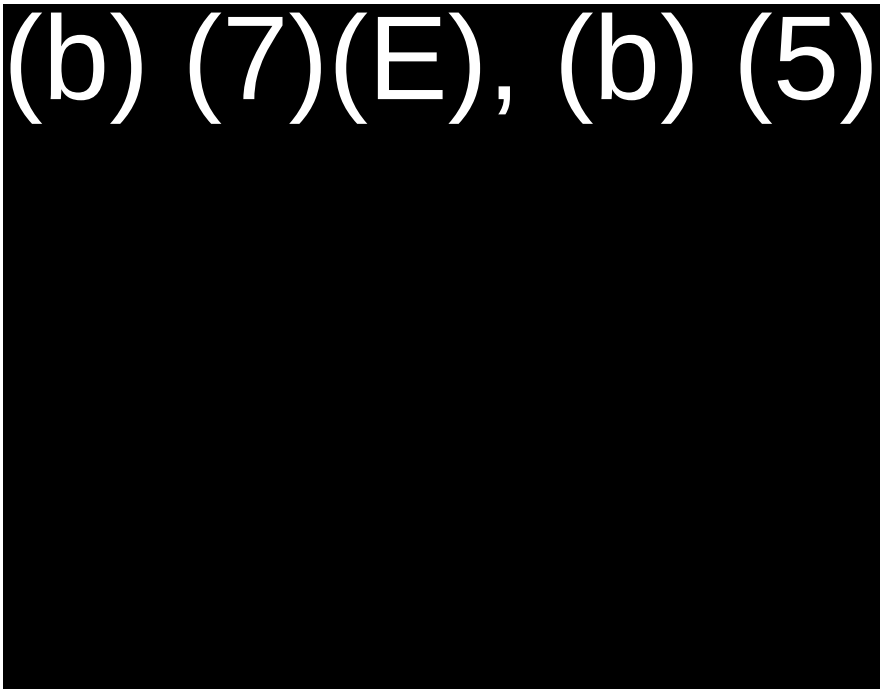
(3) Qualitative Alternatives
(a) Number of Qualitative Alternative
(b) Number of Accepted Alternatives

(4) Cost Avoidance (Gross)
(a) Potential /Projected Cost Avoidance (Gross)
(b) Accepted Cost Avoidance

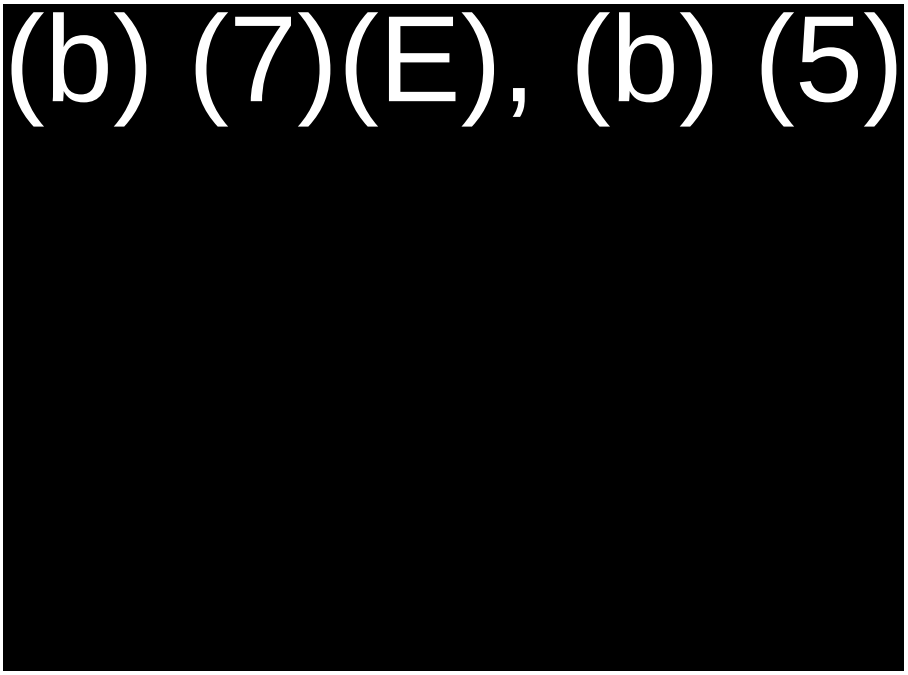
(5) Life Cycle Cost
(a) Maximum Life Cycle Cost
(b) Accepted Life Cycle Cost

(6) VE Activity Contract Number:
(7) A-E Contract Award Amount:

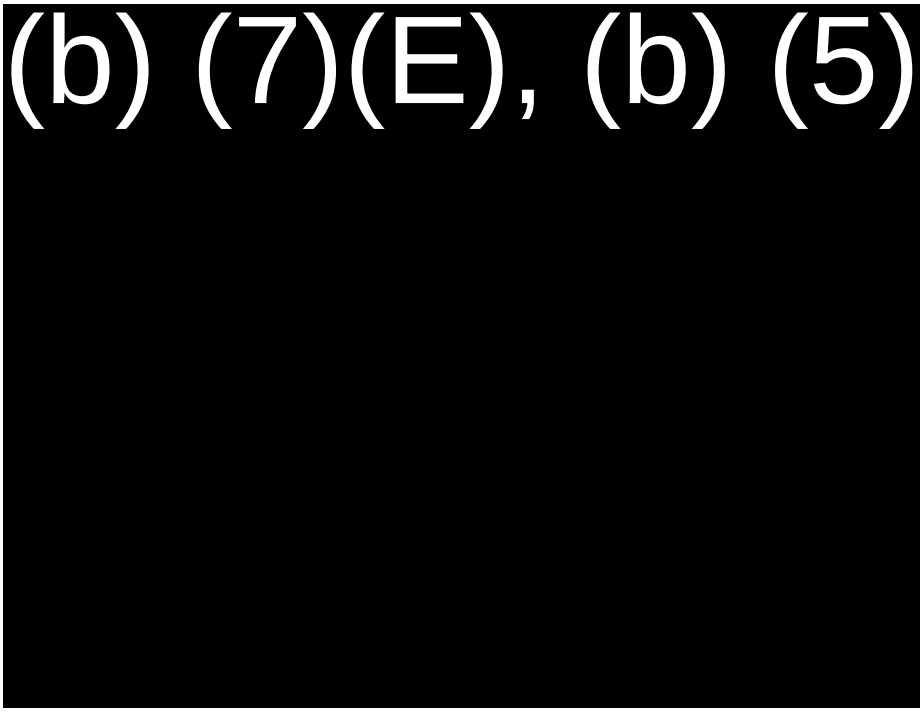
Appendix A – Base Bid



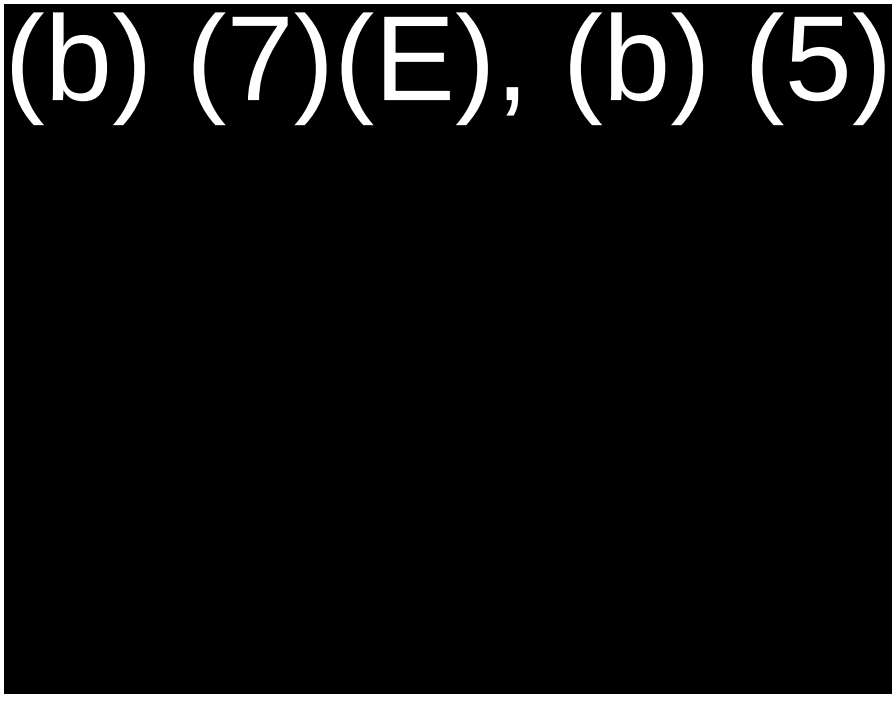
Base Bid Zone Map



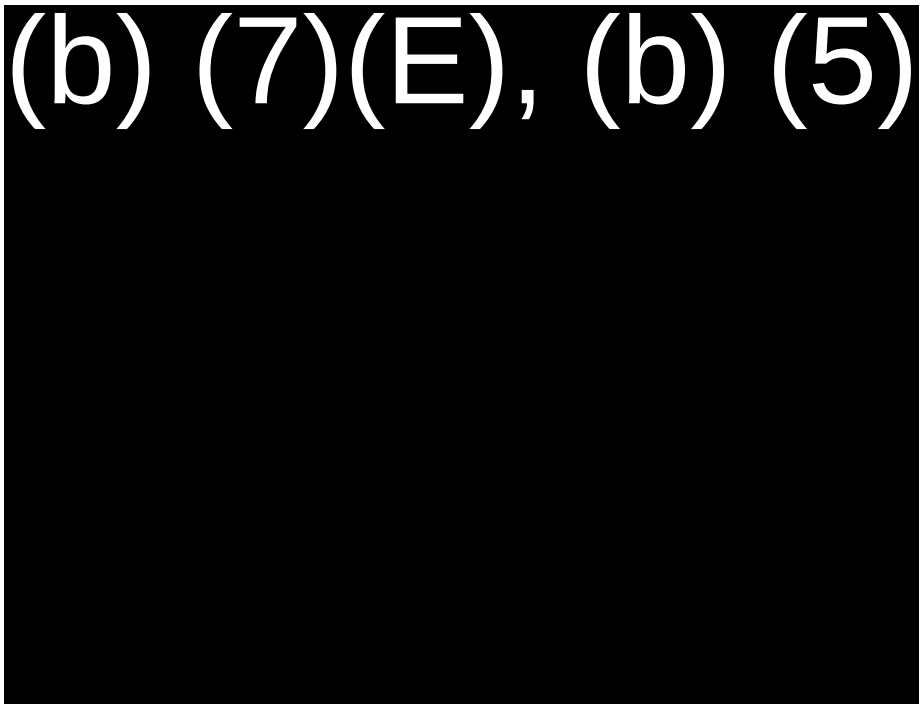
Base Bid Zone Map



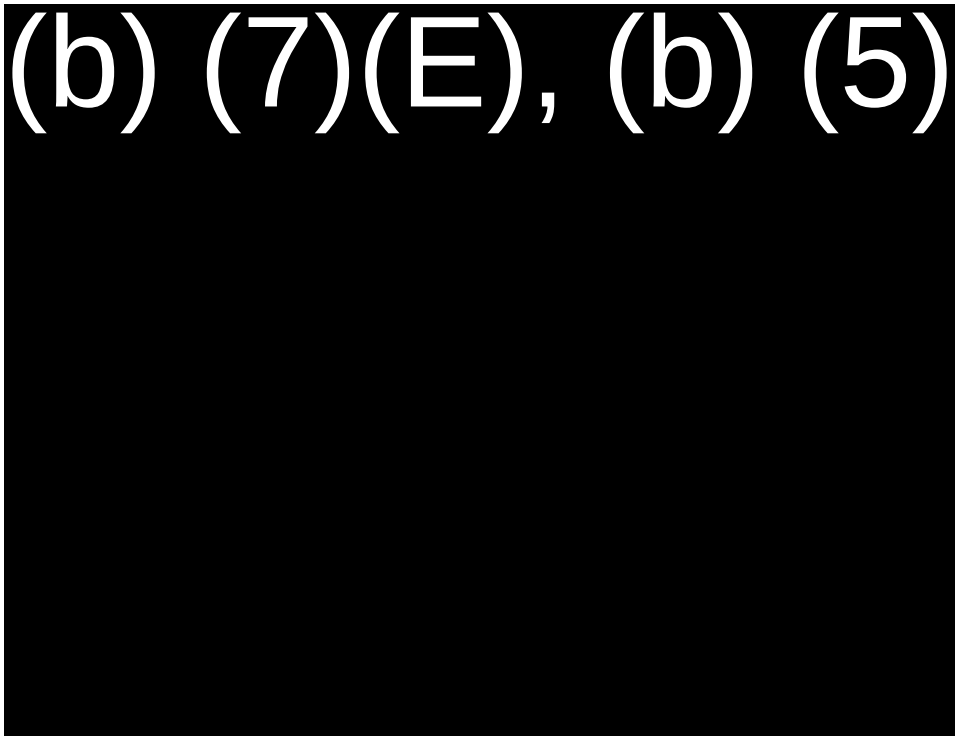
Base Bid Zone Map



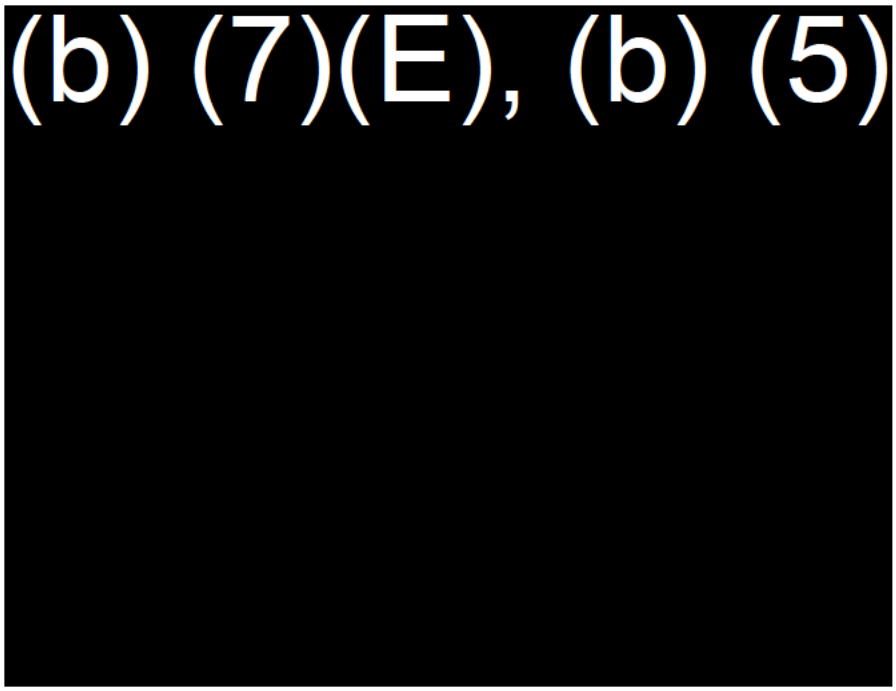
Base Bid Zone Map



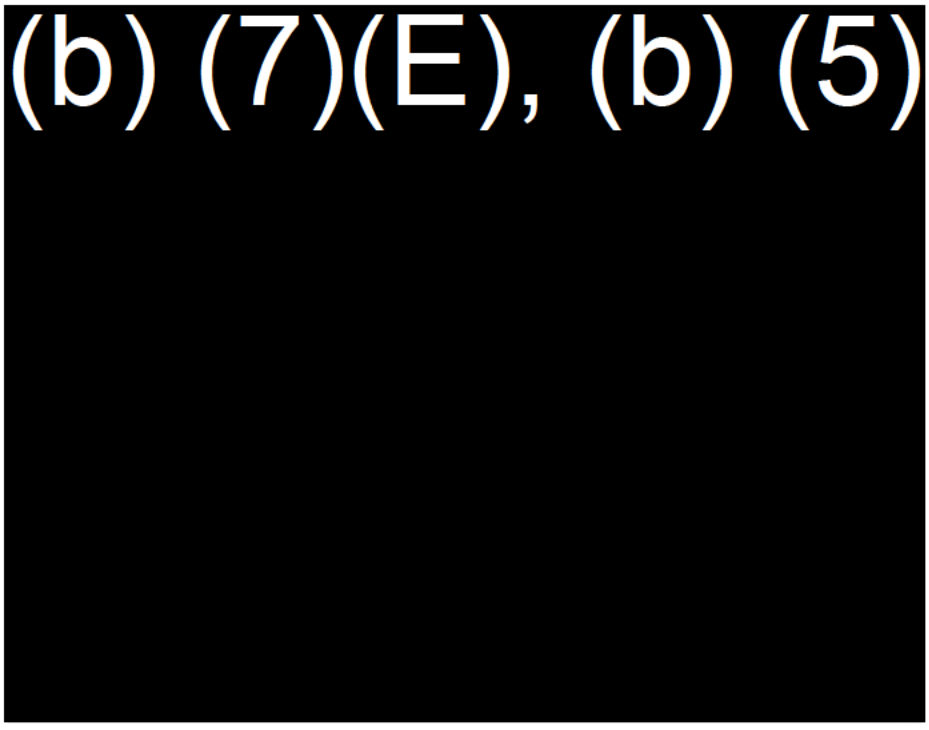
Base Bid Zone Map



Base Bid Zone Map



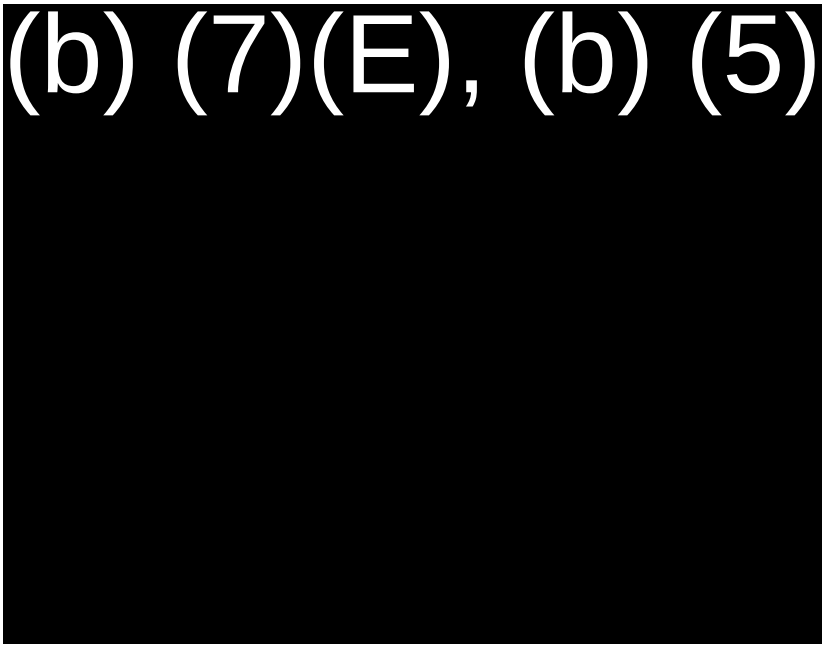
Base Bid Zone Map



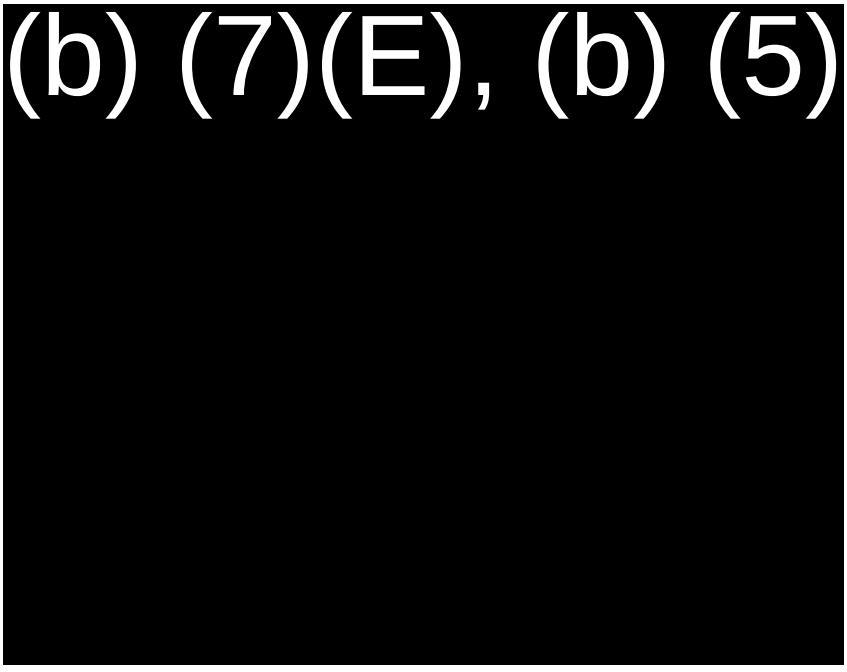
Base Bid Zone Map

Appendix B

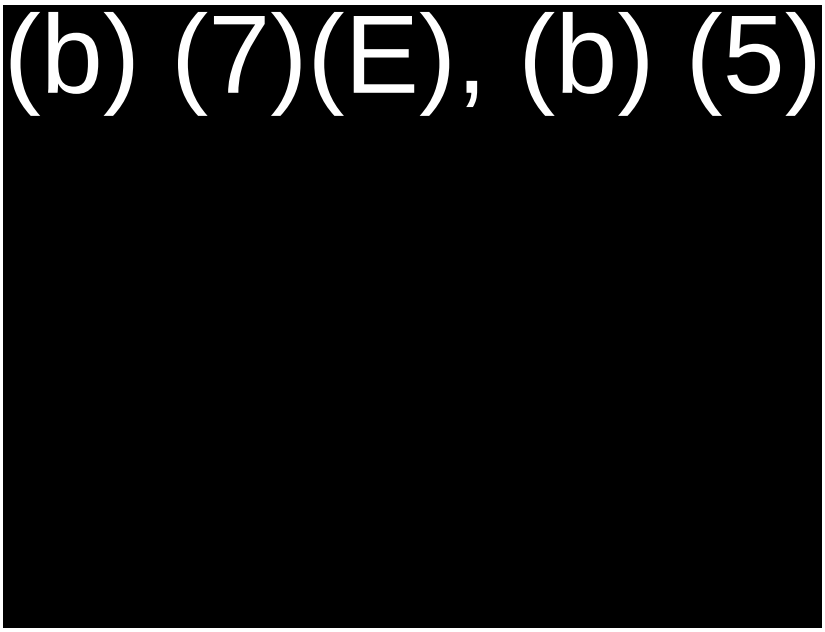
SDC BIS Primary Fence Replacement Map (~14 miles)



Option 1 Zone Map

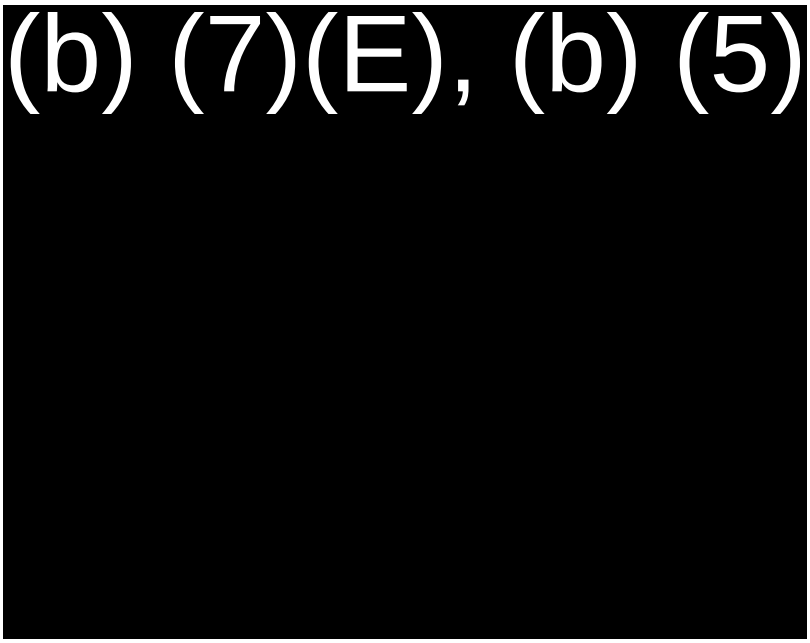


Option 1 Zone Map

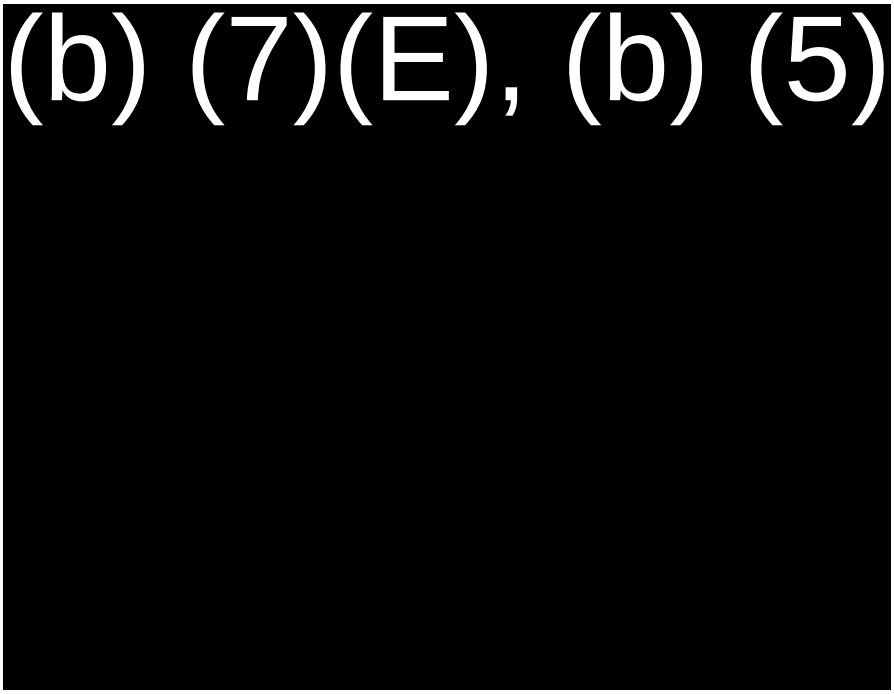


Option 1 Zone Map

SDC Tecate Primary Fence Replacement Map (~2 miles)

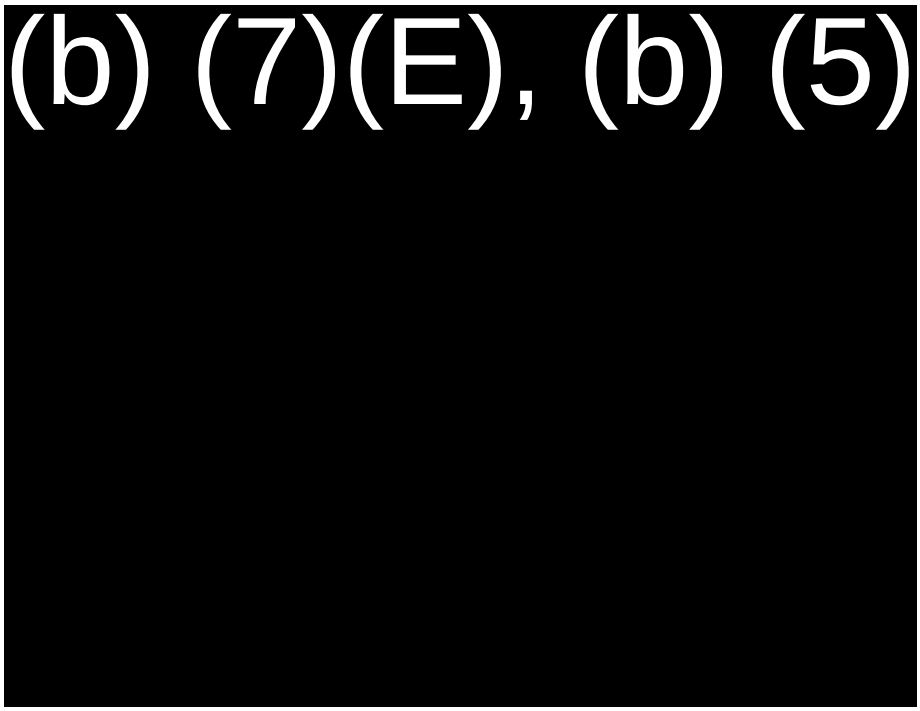


Option 1 Zone Map



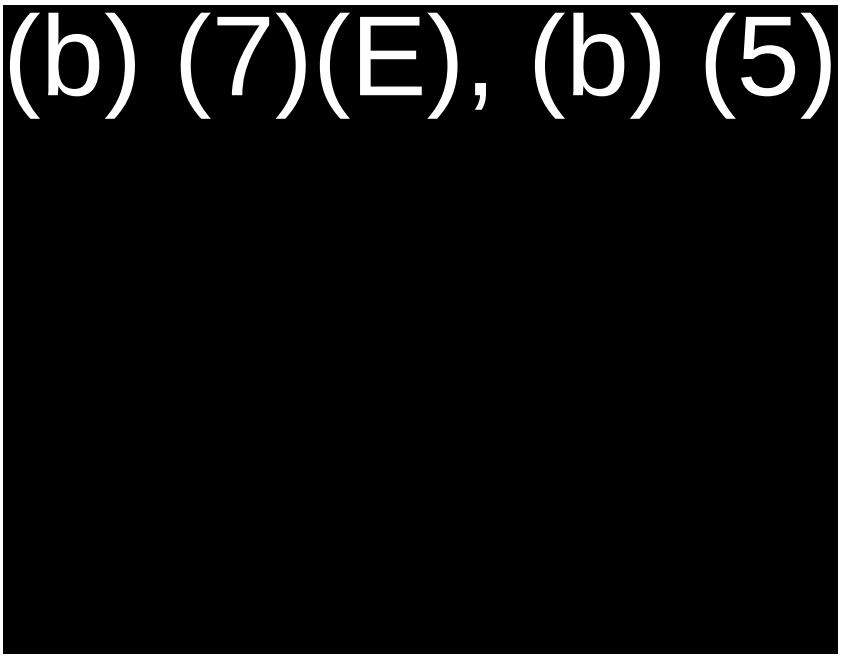
Option 1 Zone Map

ELP "Tortilla Curtain" Primary Fence Replacement Map (~4.16 miles)

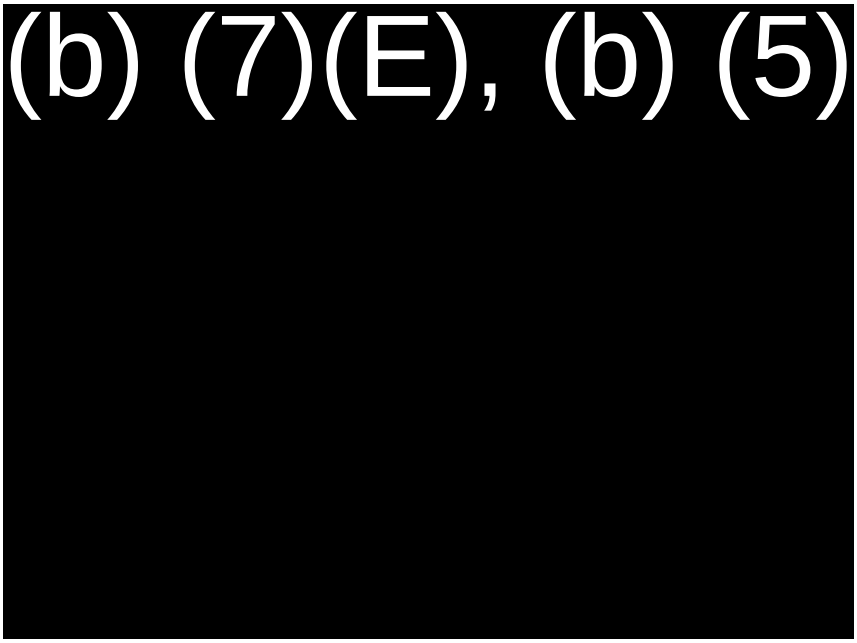


Option 1 Zone Map

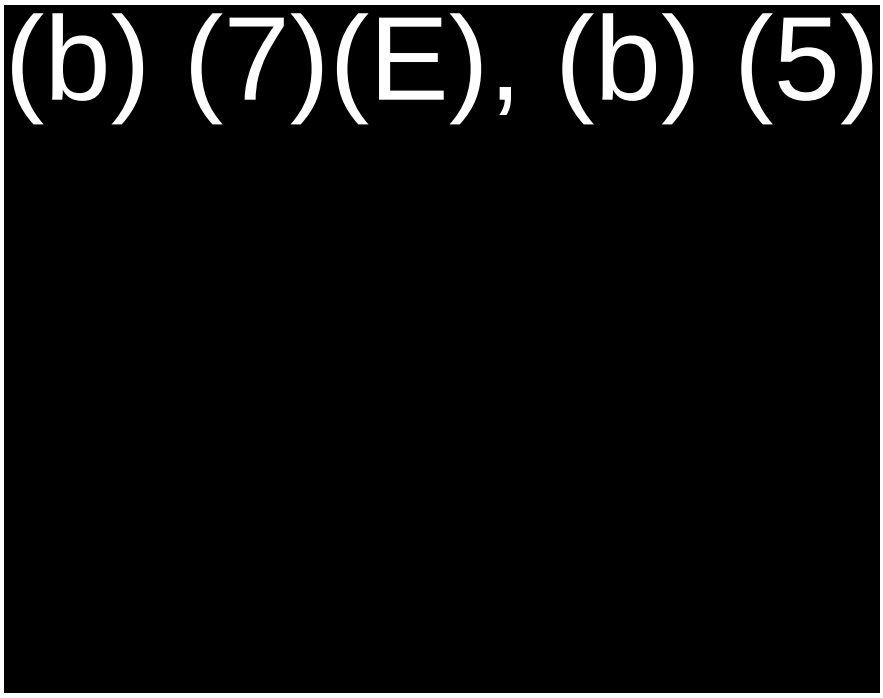
ELP Vehicle Fence to Primary Fence Replacement Map (~20 miles)



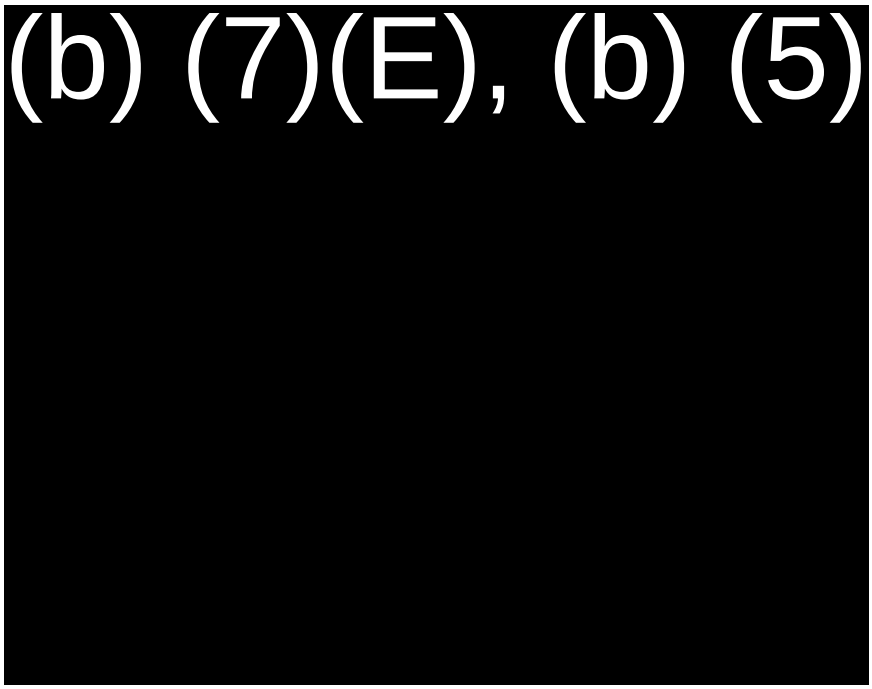
Option 1 Zone Map



Option 1 Zone Map



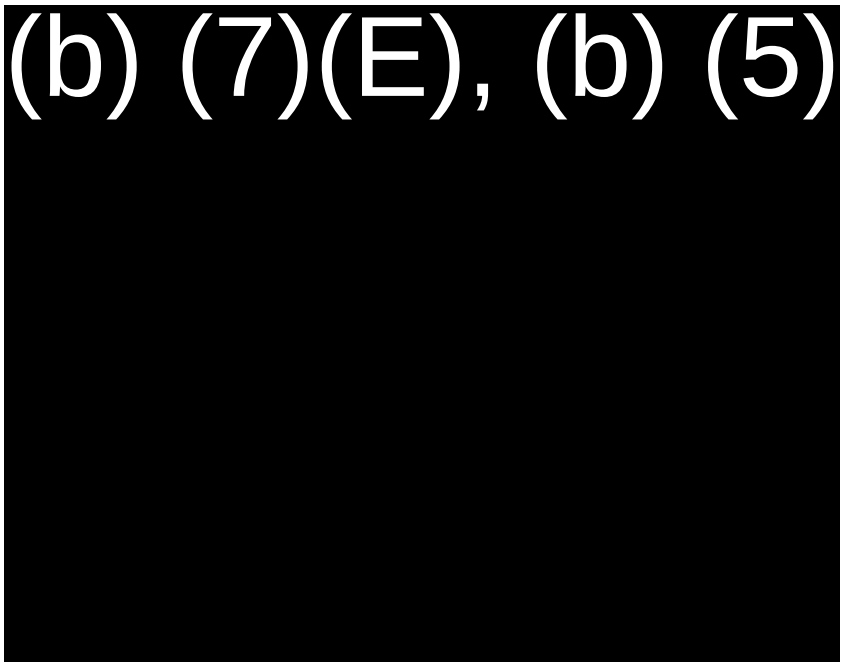
Option 1 Zone Map



Option 1 Zone Map

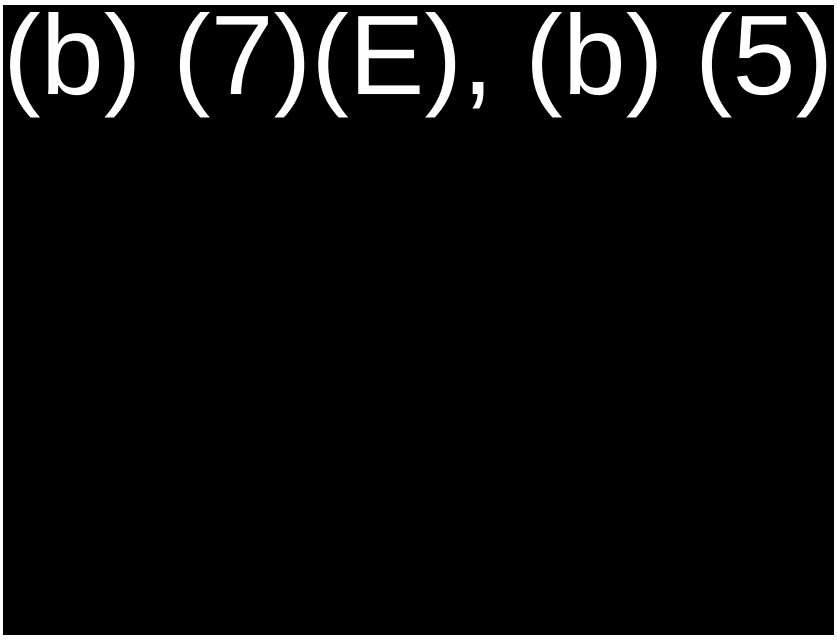
Appendix C

RGV-001 & RGV-006 Map



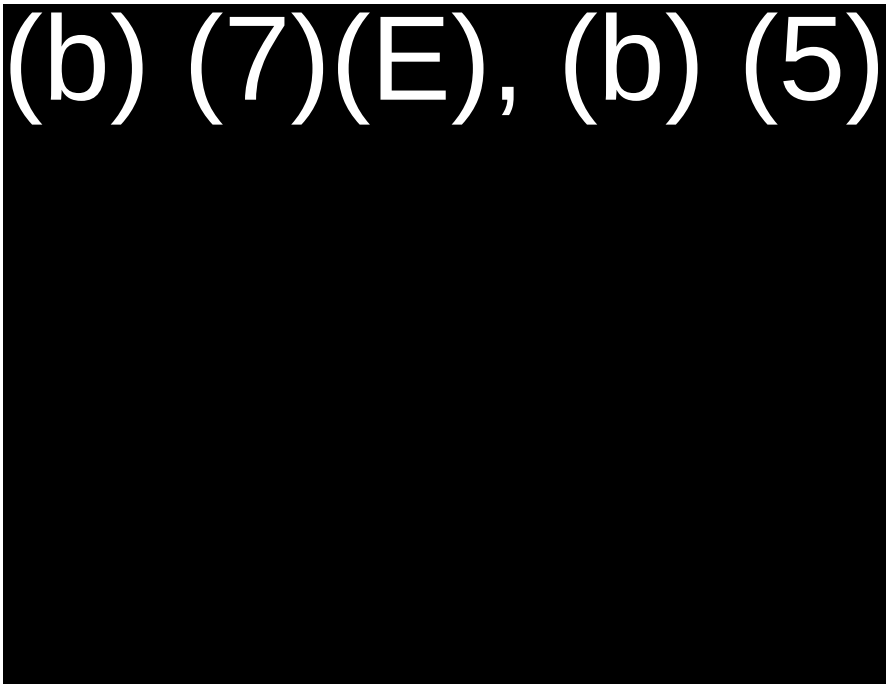
RGV-012 MAP

Option 3 Zone Map



Option 3 Zone Map

RGV-014 MAP



Option 3 Zone Map

QASP

QUALITY ASSURANCE SURVEILLANCE PLAN (QASP)
Task Order under Contract No. W9126G-15-D-0009
Architect and Engineer Services for the Development of Design-Build RFP, Design of RGV-010, and Programmatic Engineering Support
FY17, P2 # 465132

1 INTRODUCTION
This quality assurance surveillance plan (QASP) is pursuant to the requirements listed in the Statement of Work (SOW) entitled *Architect and Engineer Services* to develop a design-build RFP, Design of RGV(b) (7)(E), and programmatic engineering support. This plan sets forth the procedures and guidelines the Fort Worth District will use in ensuring the required performance standards or services levels are achieved by the contractor.

1.1 Purpose

1.1.1 The purpose of the QASP is to describe the systematic methods used to monitor performance and to identify the required documentation and the resources to be employed. The QASP provides a means for evaluating whether the contractor is meeting the performance standards/quality levels identified in the SOW and the contractor's quality control plan (QCP), and to ensure that the government pays only for the level of services received.

1.1.2 This QASP defines the roles and responsibilities of all members of the integrated project team (IPT), identifies the performance objectives, defines the methodologies used to monitor and evaluate the contractor's performance, describes quality assurance documentation requirements, and describes the analysis of quality assurance monitoring results.

1.2 Performance Management Approach

1.2.1 TheSOW structures the acquisition around "what" service or quality level is required, as opposed to "how" the contractor should perform the work (i.e., results, not compliance). This QASP will define the performance management approach taken by the COR to monitor and manage the contractor's performance to ensure the expected outcomes or performance objectives communicated in the SOW are achieved. Performance management rests on developing a capability to review and analyze information generated through performance assessment. The ability to make decisions based on the analysis of performance data is the cornerstone of performance management; this analysis yields information that indicates whether expected outcomes for the project are being achieved by the contractor.

1.2.2 Performance management represents a significant shift from the more traditional quality assurance (QA) concepts in several ways. Performance management focuses on assessing whether outcomes are being achieved and to what extent. This approach migrates away from scrutiny of compliance with the processes and practices used to achieve the outcome. A performance-based approach enables the contractor to play a large role in how the work is performed, as long as the proposed processes are within the stated constraints. The only exceptions to process reviews are those required by law (federal, state, and local) and compelling business situations, such as safety and health. A "results" focus provides the contractor flexibility to continuously improve and innovate over the course of the contract as long as the critical outcomes expected are being achieved and/or the desired performance levels are being met.

1.3 Performance Management Strategy

1.3.1 The contractor is responsible for the quality of all work performed. The contractor measures that quality through the contractor's own quality control (QC) program. QC is work output, not workers, and therefore includes all work performed under this contract regardless of whether the work is performed by contractor employees or by subcontractors. The contractor's QCP will set forth the staffing and procedures for self-inspecting the quality, timeliness, responsiveness, customer satisfaction, and other performance requirements in the PWS. The contractor will develop and implement a performance management system with processes to assess and report its performance to the designated government representative. The contractor's QCP will set forth the staffing and procedures for self-inspecting the quality, timeliness, responsiveness, customer satisfaction, and other performance requirements in the PWS. This QASP enables the government to take advantage of the contractor's QC program.

1.3.2 The Government representative(s) will monitor performance and review performance reports furnished by the contractor to determine how the contractor is performing against communicated performance objectives. The government will make determination regarding incentives based on performance measurement metric data and notify the contractor of those decisions. The contractor will be responsible for making required changes in processes and practices to ensure performance is managed effectively.

2 ROLES AND RESPONSIBILITIES

2.1 The Contracting Officer (KO)

The Contracting Officer (KO) is responsible for monitoring contract compliance, contract administration, and cost control and for resolving any differences between the observations documented by the Contracting Officer's Representative (COR) and the contractor. The KO will designate one full-time COR as the Government authority for performance management. The number of additional representatives serving as technical inspectors depends on the complexity of the services measured, as well as the contractor's performance, and must be identified and designated by the KO.

2.2 The Contracting Officer's Representative (COR)

The COR is designated in writing by the KO to act as his or her authorized representative to assist in administering a contract. COR limitations are contained in the written appointment letter. The COR is responsible for technical administration of the project and ensures proper Government surveillance of the contractor's performance. The COR is not empowered to make any contractual commitments or to authorize any contractual changes on the Government's behalf. Any changes that the contractor deems may affect contract price, terms, or conditions shall be referred to the KO for action. The COR will have the responsibility for completing QA monitoring forms used to document the inspection and evaluation of the contractor's work performance. Government surveillance may occur under the inspection of services clause for any service relating to the contract.

2.3 IDENTIFICATION OF REQUIRED PERFORMANCE STANDARDS/QUALITY LEVELS

The required performance standards and/or quality levels are included in the PWS and in Attachment 1, "Performance Requirements Summary". If the contractor meets the required service or performance level, it will be paid the invoiced amount.

3 METHODOLOGIES TO MONITOR PERFORMANCE

3.1 Surveillance Techniques

In an effort to minimize the performance management burden, simplified surveillance methods shall be used by the Government to evaluate contractor performance when appropriate. The primary methods of surveillance are

- Random monitoring, which shall be performed by the COR designated inspector.
- Periodic Inspection – COR typically performs the periodic inspection on a monthly basis.

3.2 Customer Feedback

The contractor is expected to establish and maintain professional communication between its employees and customers. The primary objective of this communication is customer satisfaction. Customer satisfaction is the most significant external indicator of the success and effectiveness of all services provided and can be measured through customer complaints.

Performance management drives the contractor to be customer focused through initially and internally addressing customer complaints and investigating the issues and/or problems but the customer always has the option to communicate complaints to the COR or KO as opposed to the contractor.

Customer complaints, to be considered valid, must set forth clearly and in writing the detailed nature of the complaint, must be signed, and must be forwarded to the COR or KO.

Customer feedback may also be obtained either from the results of formal customer satisfaction surveys or from random customer complaints.

3.3 Acceptable Quality Levels

The acceptable quality levels (AQLs) included in Attachment 1, Performance Requirements Summary Table, for contractor performance are structured to allow the contractor to manage how the work is performed.

3.4 The Performance Management Feedback Loop

The performance management feedback loop begins with the communication of expected outcomes. Performance standards are expressed in the SOW and are assessed using the performance monitoring techniques shown in Attachment 1.

3.5 Monitoring Forms

The Government's QA surveillance, accomplished by the COR, will be reported using the monitoring form in Attachment 2. The forms, when completed, will document the Government's assessment of the contractor's performance under the contract to ensure that the required results of Advisory and Assistance support are being achieved.

3.5.1 The COR will retain a copy of all completed QA surveillance forms for review.

4 ANALYSIS OF QUALITY ASSURANCE ASSESSMENT

4.1 Determining Performance

4.1.1 Government shall use the monitoring methods cited to determine whether the performance standards/service levels/AQLs have been met. If the contractor has not met the minimum requirements, it may be asked to develop a corrective action plan to show how and by what date it intends to bring performance up to the required levels.

4.2 Reporting

4.2.1 At the end of each month, the COR will prepare a written report for summarizing the overall results of the quality assurance surveillance of the contractor's performance. This written report, which includes the contractor's submitted monthly report and the completed quality assurance monitoring forms (Attachment 2), will become part of the QA documentation. It will enable the Government to demonstrate whether the contractor is meeting the stated objectives and/or performance standards, including cost/technical/scheduling objectives.

4.3 Reviews and Resolution

4.3.1 The COR may require the contractor's project manager, or a designated alternate, to meet with the KO and other Government personnel monthly to discuss performance evaluation. The agenda of the reviews may include:

- Monthly performance assessment data and trend analysis
- Issues and concerns of both parties
- Projected outlook for upcoming months and progress against expected trends, including a corrective action plan analysis
- Recommendations for improved efficiency and/or effectiveness

4.3.2 The COR must coordinate and communicate with the contractor and the KO to resolve issues and concerns regarding marginal or unacceptable performance.

The COR and contractor should jointly formulate tactical and long-term courses of action. Decisions regarding changes to metrics, thresholds, or service levels should be clearly documented. Changes to service levels, procedures, and metrics will be incorporated as a contract modification issued by the KO/ACO.

ATTACHMENT 1: PERFORMANCE REQUIREMENTS SUMMARY

The contractor service requirements are summarized into performance objectives that relate directly to mission essential items outline in the scope of work (SOW). The performance threshold briefly describes the minimum acceptable levels of service required for each requirement. These thresholds are critical to mission success.

WE	KEY SERVICE OR DELIVERABLE	Standard	Performance Threshold	Method of Surveillance
0.0	Quality Control Plan	Submitted timely	Zero deviation from requirements	100% Inspection
1.1	Project Kick-Off Meeting Notes	Submitted timely	Zero deviation from requirements	100% Inspection
1.2	Site Reconnaissance & Data Collection	Submitted timely	Zero deviation from requirements	100% Inspection
1.3	Survey & Aerial Mapping	Submitted timely	Zero deviation from requirements	100% Inspection
1.4	Geotechnical Report Final	Submitted timely	Zero deviation from requirements	100% Inspection
1.5	Draft Drainage Report	Submitted timely	Zero deviation from requirements	100% Inspection
1.5	Draft Final Drainage Report	Submitted timely	Zero deviation from requirements	100% Inspection
1.5	Final Drainage Report	Submitted timely	Zero deviation from requirements	100% Inspection
1.6	30% Design Submittal	Submitted timely	Zero deviation from requirements	100% Inspection
1.6	90% Design Submittal	Submitted timely	Zero deviation from requirements	100% Inspection
1.6	100% Design Submittal	Submitted timely	Zero deviation from requirements	100% Inspection
1.6	Design Analysis Final	Submitted timely	Zero deviation from requirements	100% Inspection
1.7	Draft RFP Package	Submitted timely	Zero deviation from requirements	100% Inspection
1.7	Draft Final RFP Package	Submitted timely	Zero deviation from requirements	100% Inspection
1.7	Final RFP Package	Submitted timely	Zero deviation from requirements	100% Inspection
1.8	Bidder Inquiry Support	Submitted timely	Zero deviation from requirements	100% Inspection

WE	KEY SERVICE OR DELIVERABLE	Standard	Performance Threshold	Method of Surveillance
1.9	Design Support during Construction	Submitted timely	Zero deviation from requirements	100% Inspection
1.10	Parametric Cost Estimate	Submitted timely	Zero deviation from requirements	100% Inspection
1.10	MII Cost Estimate	Submitted timely	Zero deviation from requirements	100% Inspection
2.1	VE Study Logistics Coordination	Submitted timely	Zero deviation from requirements	100% Inspection
2.2	VE Study Review and Baseline Cost Estimate	Submitted timely	Zero deviation from requirements	100% Inspection
2.3	Conduct VE Study & Draft VE Report	Submitted timely	Zero deviation from requirements	100% Inspection
2.4	Produce Final VE Report	Submitted timely	Zero deviation from requirements	100% Inspection
3.1	Draft Drainage Report	Submitted timely	Zero deviation from requirements	100% Inspection
3.2	Draft Final Drainage Report	Submitted timely	Zero deviation from requirements	100% Inspection
3.3	Final Drainage Report	Submitted timely	Zero deviation from requirements	100% Inspection
4.1	Engineering/Technical Support	Submitted timely	Zero deviation from requirements	100% Inspection
5.1	Reporting	Submitted timely	Zero deviation from requirements	100% Inspection
6.1	Project Kick-Off Meeting Notes	Submitted timely	Zero deviation from requirements	100% Inspection
6.2	Site Reconnaissance & Data Collection	Submitted timely	Zero deviation from requirements	100% Inspection
6.3	Final Drainage Report	Submitted timely	Zero deviation from requirements	100% Inspection
6.4	30% Design Submittal	Submitted timely	Zero deviation from requirements	100% Inspection
6.5	Design Analysis Final	Submitted timely	Zero deviation from requirements	100% Inspection
6.6	Draft RFP Package	Submitted timely	Zero deviation from requirements	100% Inspection
6.6	Draft Final RFP Package	Submitted timely	Zero deviation from requirements	100% Inspection
6.6	Final RFP Package	Submitted timely	Zero deviation from requirements	100% Inspection
6.7	Bidder Inquiry Support	Submitted timely	Zero deviation from requirements	100% Inspection
6.8	Parametric Cost Estimate	Submitted timely	Zero deviation from requirements	100% Inspection
6.8	MII Cost Estimate	Submitted timely	Zero deviation from requirements	100% Inspection
WE	OPTION - KEY SERVICE OR DELIVERABLE			
0.0	Revise Quality Control Plan	Submitted timely	Zero deviation from requirements	100% Inspection
7.1	Draft TI Standard Design Toolkit Revisions	Submitted timely	Zero deviation from requirements	100% Inspection
7.2	Draft Final TI Standard Design Toolkit Revisions	Submitted timely	Zero deviation from requirements	100% Inspection
7.3	Final TI Standard Design Toolkit Revisions	Submitted timely	Zero deviation from requirements	100% Inspection
8.1	Geotechnical Report Final (3 projects)	Submitted timely	Zero deviation from requirements	100% Inspection
8.2	Geotechnical Report Final (3 projects)	Submitted timely	Zero deviation from requirements	100% Inspection
8.3	Geotechnical Report Final (3 projects)	Submitted timely	Zero deviation from requirements	100% Inspection
8.4	Geotechnical Report Final (3 projects)	Submitted timely	Zero deviation from requirements	100% Inspection

WE	KEY SERVICE OR DELIVERABLE	Standard	Performance Threshold	Method of Surveillance
8.5	Geotechnical Report Final (2 projects)	Submitted timely	Zero deviation from requirements	Zero deviation from requirements
9.1	Survey & Aerial Mapping	Submitted timely	Zero deviation from requirements	100% Inspection
10.1	Project Kick-Off Meeting Notes	Submitted timely	Zero deviation from requirements	100% Inspection
10.2	Site Reconnaissance & Data Collection	Submitted timely	Zero deviation from requirements	100% Inspection
10.3	Final Drainage Report	Submitted timely	Zero deviation from requirements	100% Inspection
10.4	30% Design Submittal	Submitted timely	Zero deviation from requirements	100% Inspection
10.5	Design Analysis Final	Submitted timely	Zero deviation from requirements	100% Inspection
10.6	Draft RFP Package	Submitted timely	Zero deviation from requirements	100% Inspection
10.6	Draft Final RFP Package	Submitted timely	Zero deviation from requirements	100% Inspection
10.6	Final RFP Package	Submitted timely	Zero deviation from requirements	100% Inspection
10.7	Bidder Inquiry Support	Submitted timely	Zero deviation from requirements	100% Inspection
10.8	Design Support during Construction	Submitted timely	Zero deviation from requirements	100% Inspection
10.9	Parametric Cost Estimate	Submitted timely	Zero deviation from requirements	100% Inspection
10.9	MII Cost Estimate	Submitted timely	Zero deviation from requirements	100% Inspection
11.0	Construction Phase Services	Submitted timely	Zero deviation from requirements	100% Inspection
12.0	Reporting	Submitted timely	Zero deviation from requirements	100% Inspection

ATTACHMENT 2: SAMPLE QUALITY ASSURANCE MONITORING FORM

SERVICE or STANDARD: _____

_____

_____

_____

_____

SURVEY PERIOD: _____

SURVEILLANCE METHOD (Check):

❒ Random Sampling ❒ 100% Inspection ❒ Periodic Inspection ❒ Customer Complaint

LEVEL OF SURVEILLANCE (Check):

❒ Monthly ❒ Quarterly ❒ As needed

PERCENTAGE OF ITEMS SAMPLED DURING SURVEY PERIOD: _____ %

ANALYSIS OF RESULTS:

Observed Service Provider Performance Measurement Rate: _____%

Service Provider's Performance (Check):
❒ Meets Standards
❒ Does Not Meet Standards

Narrative of Performance During Survey Period: _____

_____

_____

_____

_____

COR SIGNATURE: _____ **DATE:** _____

COR NAME (PLEASE PRINT): _____

CONTRACTING OFFICER AUTHORITY

Only a warranted Contracting Officer (either PCO or ACO) acting within their delegated limits has the authority to issue modifications or otherwise change the terms and conditions of this contract. If an individual other than the Contracting Officer attempts to make changes to the terms and

conditions of this contract you shall not proceed with the change and shall immediately notify the Contracting Officer.

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0001	N/A	N/A	N/A	N/A
0001AA	Destination	Government	Destination	Government
0001AB	Destination	Government	Destination	Government
0001AC	Destination	Government	Destination	Government
0001AD	Destination	Government	Destination	Government
0001AE	Destination	Government	Destination	Government
0002	N/A	N/A	N/A	N/A
0002AA	Destination	Government	Destination	Government
0002AB	Destination	Government	Destination	Government
0002AC	Destination	Government	Destination	Government
0002AD	Destination	Government	Destination	Government
0003	Destination	Government	Destination	Government
0004	Destination	Government	Destination	Government
0005	Destination	Government	Destination	Government

Section F - Deliveries or Performance

DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	DODAAC / CAGE
0001	N/A	N/A	N/A	N/A
0001AA	POP 14-JUN-2017 TO 13-JUN-2018	N/A	ENGINEERING AND CONSTRUCTION SUPPORT (b) (6) USAED, FORT WORTH CESWF-PM-INS 819 TAYLOR ST FORT WORTH TX 76102-0300 (b) (6) FOB: Destination	W9126G
0001AB	POP 14-JUN-2017 TO 13-JUN-2018	N/A	(SAME AS PREVIOUS LOCATION) FOB: Destination	W9126G
0001AC	POP 14-JUN-2017 TO 13-JUN-2018	N/A	(SAME AS PREVIOUS LOCATION) FOB: Destination	W9126G
0001AD	POP 14-JUN-2017 TO 13-JUN-2018	N/A	(SAME AS PREVIOUS LOCATION) FOB: Destination	W9126G
0001AE	POP 14-JUN-2017 TO 13-JUN-2018	N/A	(SAME AS PREVIOUS LOCATION) FOB: Destination	W9126G
0002	N/A	N/A	N/A	N/A
0002AA	POP 14-JUN-2017 TO 06-OCT-2017	N/A	ENGINEERING AND CONSTRUCTION SUPPORT (b) (6) USAED, FORT WORTH CESWF-PM-INS 819 TAYLOR ST FORT WORTH TX 76102-0300 (b) (6) FOB: Destination	W9126G
0002AB	POP 14-JUN-2017 TO 06-OCT-2017	N/A	(SAME AS PREVIOUS LOCATION) FOB: Destination	W9126G
0002AC	POP 14-JUN-2017 TO 06-OCT-2017	N/A	(SAME AS PREVIOUS LOCATION) FOB: Destination	W9126G
0002AD	POP 14-JUN-2017 TO 06-OCT-2017	N/A	(SAME AS PREVIOUS LOCATION) FOB: Destination	W9126G

0003	POP 14-JUN-2017 TO 11-DEC-2017	N/A	(SAME AS PREVIOUS LOCATION) FOB: Destination	W9126G
0004	POP 14-JUN-2017 TO 14-SEP-2017	N/A	(SAME AS PREVIOUS LOCATION) FOB: Destination	W9126G
0005	N/A	N/A	N/A	N/A

Section G - Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

AA: 096 NA X 2017 3122 000 0000 CCS: 999 M2 2017 08 2455 0WDDHS 96412 3230 26CJ86
AMOUNT: $270,032.26

AB: 096 NA X 2017 3122 000 0000 CCS: 999 M2 2017 08 2455 0WDDHS 96412 3230 22KL84
AMOUNT: $1,834,215.08

AC: 096 NA X 2017 3122 000 0000 CCS: 999 M2 2017 08 2455 0WDDHS 96412 3230 26BK9D
AMOUNT: $816,150.76

AD: 096 NA X 2017 3122 000 0000 CCS: 999 M2 2017 08 2455 0WDDHS 96412 3230 2F409B
AMOUNT: $270,797.99

AE: 096 NA X 2017 3122 000 0000 CCS: 999 M2 2017 08 2455 0WDDHS 96412 3230 214H4J
AMOUNT: $289,518.39

AF: 096 NA X 2017 3122 000 0000 CCS: 999 M2 2017 08 2455 0WDDHS 96412 3230 2K2F26
AMOUNT: $943,691.30

AG: 096 NA X 2017 3122 000 0000 CCS: 999 M2 2017 08 2455 0WDDHS 96412 3230 26B196
AMOUNT: $384,605.64

AH: 096 NA X 2017 3122 000 0000 CCS: 999 M2 2017 08 2455 0WDDHS 96412 3230 2BKKKF
AMOUNT: $786,551.44

AJ: 096 NA X 2017 3122 000 0000 CCS: 999 M2 2017 08 2455 0WDDHS 96412 3230 264F4J
AMOUNT: $549,458.41

ACRN	CLIN/SLIN	CIN	AMOUNT
AA	0001AA	W45XMA715929620001	$70,232.31
	0003	W45XMA715929620010	$199,799.95
AB	0001AB	W45XMA715929620002	$1,834,215.08
AC	0001AC	W45XMA715929620003	$196,671.45
	0004	W45XMA715929620011	$619,479.31
AD	0001AD	W45XMA715929620004	$270,797.99
AE	0001AE	W45XMA715929620005	$289,518.39
AF	0002AA	W45XMA715929620006	$943,691.30
AG	0002AB	W45XMA715929620007	$384,605.64
AH	0002AC	W45XMA715929620008	$786,551.44
AJ	0002AD	W45XMA715929620009	$549,458.41