

ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeal of --)
)
MARCON Engineering, Inc.) ASBCA No. 57471
)
Under Contract No. W912BV-08-D-2026)

APPEARANCES FOR THE APPELLANT: Theodore M. Bailey, Esq.
Kristin E. Zachman, Esq.
Bailey & Bailey, P.C.
San Antonio, TX

APPEARANCES FOR THE GOVERNMENT: Thomas H. Gourlay, Jr., Esq.
Engineer Chief Trial Attorney
John F. Bazan, Esq.
Engineer Trial Attorney
U.S. Army Engineer District, Los Angeles

OPINION BY ADMINISTRATIVE JUDGE PEACOCK

This timely appeal involves three discrete claims by appellant under the captioned contract. The scope of the hearing of the appeal originally encompassed both entitlement and quantum. However, at the hearing, the parties agreed and the Board ordered that the hearing and this decision would address entitlement only. Briefing and finalization of the record in this appeal were completed on 23 November 2014. We sustain the appeal in part and deny it in part.

FINDINGS OF FACT

The Project Generally and Solicitation

1. The United States Army Corps of Engineers (Corps or government) issued a Request for Proposal (RFP) for award of a firm-fixed-price (FFP) task order (TO) to design and construct approximately .97 miles of a fence along the Arizona border with Mexico under the captioned multiple award task order contract (MATOC). The TO solicitation was issued on 6 May 2008 and called for design/construction of a bollard style fence (18 feet high, approximately 6.5 inches in diameter, and spaced approximately 4 inches apart), its foundation, and an immediately-adjacent concrete access road along the fence line. (R4, tab 7 at 154, 802-04, tab 12 at 2512-13; supp. R4, tab 334 at 7096, ex. G-2)¹ The fence was one small section of an extensive project

¹ In general, the government's responses to appellant's proposed findings of fact are not in compliance with the Board's Briefing Order. That order mandated that

along the Mexican border starting in San Diego, California. The government retained the architectural engineering firm of Michael Baker Jr., Inc. (Baker or A-E), as project manager for the overall project. (Tr. 5/87-88, 7/34)

2. The specifications included in the RFP required that all construction activities were to be “contained within the project corridor,” with the exception of work related to installation of two 24 inch corrugated metal pipes (CMPs or culverts) at the western limits of the project (supp. R4, tab 334 at 7093; tr. 3/153, 6/206, 7/63, 204). The “project corridor” was a 60-foot wide strip adjacent to the border also known as the Roosevelt Reservation (RR) (supp. R4, tab 334 at 7093; R4, tab 7 at 196; tr. 1/103).

objections and replies to opposing party proposed findings be specific and detailed, in particular pointing out any inaccuracies in the record citations. For example, appellant’s proposed findings often provide a narrative description of the content of key drawings, supplementing depictions of the actual drawings or reasonably accurate (albeit generally not-to-scale) demonstrative representations of key elements of the drawings. Those findings are also supported by extensive citations to transcript testimony of the witnesses discussing the actual drawings. The government’s responses to these proposed findings generally interpose simplistic, broad, imprecise, general, conclusory and argumentative objections to the findings on the basis that the original drawing “speaks for itself” or the demonstrative is “non-contemporaneous” or not-to-scale without addressing precisely and in detail the accuracy and substance of the proposed findings or why the proposed finding is otherwise unsupported by, contrary to, or in conflict with the evidence. Nevertheless, the Board has undertaken an independent review of key findings to ensure that they, in fact and substance, are supported and/or reasonably depict the underlying drawing. Those findings in material respects have not been shown to be inaccurate as confirmed by our own independent examination of key evidence of record. Moreover, the government considers that because “Marcon cannot prove a cause of action against the Corps regarding drainage....The Corps therefore only provides some objections below due to time constraints.” (Resp.’s master response to APF 101) The Corps conclusory assertion is, of course, the principal grounds for the dispute and appeal. As we discuss in detail herein that government contention lacks merit. Regardless, the Corps was not excused from the directions in the Briefing Order due to time constraints particularly where the briefing of the appeal was extended at the parties’ requests on a number of occasions and was not concluded until approximately eleven months following completion of the trial. The government’s post hearing briefs also frequently cite inaccurately or incompletely to documents, transcripts and page numbers and are generally unreliable. As a consequence of all of the above, we have liberally relied on appellant’s proposed findings and record citations in this decision.

3. The RFP contemplated that the contractor would use the “Appendix 2” drawings, developed by Baker and dated 24 March 2008, including a ditch detail therein, in designing the drainage system for the site (tr. 7/207; R4, tab 7 at 788). In this regard, section 01 00 50 “TASK ORDER REQUIREMENTS,” paragraph 1.9 “SITE DESIGN AND CONSTRUCTION,” subparagraph 1.9.6. “On-Site Construction Access Road” provided as follows:

The Design/Build Contractor shall be responsible for the design and construction of the on-site construction access road and drainage ditch modifications adjacent to the fence. A conceptual typical section has been provided in Appendix II. The Design/Build Contractor shall fully design and construct the on-site construction access road and drainage ditch modifications using the conceptual typical section.

(R4, tab 7 at 196, 198, 200)

4. The pertinent detail on RFP appendix (appx.) II drawing G-2.1 (R4, tab 7 at 790), depicted a typical concrete drainage ditch for essentially the length of the one mile site designed to transport flood waters from the west end to east end of the site through the concrete ditch. The water was to exit the site in a northeasterly direction at its east end. Because of the presence of an existing irregular ditch (as discussed below), the depths of any required excavation/grading and modifications of the ditch varied. The concrete ditch was to be located within the RR between the access road to be constructed immediately adjacent to the fence on the south, and a preexisting road constructed and maintained by the Border Patrol approximately paralleling the future fence line, hereinafter referred to as the Border Patrol Road (BPR), on the north. The BPR was partially within, but for most of its length outside of, the RR to varying degrees at various stations. Although the detail generally showed some filling in of the existing ditch to accommodate the fence access road, the Baker concept did not envision filling in the ditch entirely as would generally be needed to have the water emanating from the south (Mexico) flow more naturally across the site in a north or northeasterly direction. (Supp. R4, tab 304 at 7008-09, tab 342 at 7210-21; tr. 1/89-90, 92, 4/63, 5/89-90, 7/66, 208-10, 213-14, 221)

5. Section 01 33 16 “DESIGN AFTER AWARD,” Part 1 “GENERAL,” noted that the contract consisted of the “Solicitation requirements and the accepted proposal” and further stated in paragraph 1.1:

The information contained in this section applies to the design required after award. The design begins with the pre-contract proposal, which must conform to all

requirements of the Solicitation. After award, the Contractor will develop the accepted proposal into the completed design, as described herein.

The Contractor may elect to fast track the design and construction – that is, proceed with construction of parts of the site work and fence prior to completion of the overall design.

(Supp. R4, tab 336 at 7119)

6. Section 01 00 50 “TASK ORDER REQUIREMENTS,” paragraph 1.9, “SITE DESIGN AND CONSTRUCTION,” subparagraph 1.9.3. discussed the two existing 10-foot culverts (or CMPs) at the east end of the site and the patrol road used by the U.S. Border Patrol (hereinafter the BP) generally paralleling the entire length of the site:

1.9.3. Existing Site Conditions

An aggregate surfaced patrol road exists along the project corridor. The patrol road generally parallels the Border with its offset from the Border varying in distance. The patrol road is approximately 24 feet wide and is considered to be in good condition.

At the eastern end of the project there are two large diameter culverts that convey drainage runoff between the patrol road and the Border. The drainage ditch extends the entire length of the project corridor.

(Supp. R4, tab 334 at 7096)

7. Section 01 00 50 “TASK ORDER REQUIREMENTS,” paragraph 1.9, “SITE DESIGN AND CONSTRUCTION,” subparagraph 1.9.7., “Drainage Report,” provided that the contractor would use the preliminary drainage report in the RFP and would do further investigation and analysis to, among other things, prevent ponding on the site and develop a drainage plan capable of handling a 100-year flood, and further provided:

A preliminary drainage report has been provided in Appendix IV. The preliminary drainage report delineates all basins within the limits of the fence construction.

Discharge values, using the 100-yr storm event, have been determined for major drainage paths within each basin, as identified using USGS mapping, at the point which they cross the fence location. Any assumptions made in determining discharges and fence crossing locations have been stated within the preliminary drainage report.

Prior to start of construction, the Design/Build Contractor shall perform all the following minimum requirements using the 100-yr storm event:

- Review the existing drainage report and field verify existing wash locations. The Design/Build Contractor shall be responsible for determining discharges of additional washes identified in the field as they cross the roadway and/or fence locations.
- Provide final drainage basin delineation maps showing all basins and sub-basins associated with the roadway and/or fence limits of construction.
- Determine local drainage runoff and/or sheet flow conditions as they cross the roadway and/or fence locations.
- Provide the final hydraulic calculations identifying the final discharge velocity and rise in water surface elevation at the roadway crossings and selected fence type at each identified wash crossing. Acceptable rise in water surface elevation shall be six inches for rural locations and three inches for urban locations.
- Provide final calculations showing depth of scour and/or long term degradation.
- Provide details for culvert and/or low water crossings and fence design at each wash crossing which satisfies rise in water surface elevations stated above. When fence is located at the border and where flow is from south to north[,] the fence shall be offset from the International Border 10-feet. At offset locations, the Contractor shall provide gate access for equipment and personnel to remove debris.

- Provide details for protection against scour and/or long term degradation along with preventing ponding of water at the roadway and/or fence locations.
- 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 to the roadway and fence or as otherwise stated in this RFP.

The Design/Build Contractor shall coordinate with all applicable reviewing agencies including, but not limited to Federal Emergency Management Administration (FEMA), U.S. Corps of Engineer (USACOE), and United States Section of the International Boundary and Water Commission (US-IBWC).

(Supp. R4, tab 334 at 7097; R4, tab 7 at 200)

8. Provisions of the MATOC controlled in the case of conflicts with the Task Order. However, the MATOC contained no Order of Precedence clause. (Ex. A-35) The TO contained two such clauses. FAR 52.215-8, ORDER OF PRECEDENCE – UNIFORM CONTRACT FORMAT (OCT 1997) was set forth in specification section 00800, “SPECIAL CONTRACT REQUIREMENTS,” and states:

Any inconsistency in this solicitation or contract shall be resolved by giving precedence to the following items in the following order:

- (a) The Schedule (excluding the specifications).
- (b) Representations and other instructions.
- (c) Contract clauses.
- (d) Other documents, exhibits, and attachments.
- (e) The specifications.

(Supp. R4, tab 333 at 7079)

9. The second Order of Precedence clause in the contract is also in specification section 00800, “SPECIAL CONTRACT REQUIREMENTS,” and states:

**SCR. I DESIGN-BUILD CONTRACT ORDER OF
PRECEDENCE – AUG 1997**

- a. The contract includes the standard contract clauses and schedules current at the time of award. It also entails: (1) the solicitation in its entirety, including all drawings, cuts and illustrations, and any amendments during proposal evaluation and selection, and (2) the successful offerors accepted proposals. The task order constitutes and defines the entire agreement between the Contractor and the Government. No documentation shall be omitted which in any way bears upon the terms of that agreement.

- b. In the event of conflict or inconsistency between any of the provisions of the various portions of the contracts, precedence shall be given in the following order:
 - (1) Betterments: Any portions of the offeror's proposal which both meet and exceed the provisions of the solicitations.

 - (2) The provisions of the solicitation. (See also Contract Clause: Specifications and Drawings for Construction.)

 - (3) All other provisions of the accepted proposal.

 - (4) Any design products, including but not limited to, plans, specifications, engineering studies and analyses, shop drawings, equipment installation drawings, equipment installation drawings, etc. These are "deliverables" under the contract and are not part of the contract itself. Design products must conform to all provisions of the contract, in the order of precedence herein.

(Supp. R4, tab 333 at 7088-89)

10. As noted above, the RR restriction appears in the specifications. The RFP drawings indicate the RR limits but do not themselves expressly restrict the contract work to the RR (supp. R4, tabs 329, 342).

11. Beginning with appx. II, drawing C-1.6 on the western end of the project and proceeding through drawing C-1.1 on the eastern end of the project, the drawing depicted existing conditions and construction to be performed at the site. The following points are notable (R4, tab 7 at 792-97 (appx. II, drawings C-1.1 through C-1.6)):

a. The 24-foot wide BPR running parallel along the site was wholly or at least partially north (outside) of the 60 foot RR or project corridor, with the exception of the far eastern end (appx. II, drawings C-1.1 through C-1.6; tr. 1/76-79, 4/69, 78, 5/114-18, 7/210). Over 90% of the BPR was outside the RR (appx. II, drawings C-1.1 through C-1.6; tr. 2/100, 3/21).

b. On the western end of the site, the land north of the RR was federally-owned by the U.S. Fish and Wildlife Service for approximately the first 1300 feet (Sta. 207 to Sta. 220) of the western end of the site. Thereafter the land north of the site was privately owned by the Union Grandera Regional de Son (aka Cattlemen's Association) and a Mr. John Brava. An existing 60-inch CMP was depicted at approximately the west end extending across the BPR and north of the RR to transport off site water which flowed south from Mexico and in a northeasterly direction. The contractor was to construct two new 24-inch CMPs at the western end with the inlet ends extending from inside the project site across the BPR into the federal land with the outlet ends outside the RR. The note above the end of these two west end CMPs stated: "Contractor to install pipe to maintain positive flow[,] design build contractor to determine culvert location based on actual field conditions." The drainage design concepts shown in the RFP drawings contemplated that installation of these CMPs would require some work north of the RR. (R4, tab 7 at 797-98 (appx. II, drawings C-1.6, D-1.1); supp. R4, tab 342; tr. 2/47, 3/155, 6/226, 7/215, 217)

c. In constructing and maintaining the BPR over the years, the Border Patrol had elevated the BPR and created a ditch of varying depths running parallel to the southern edge of the BPR. The BPR ran along and in varying distances inside or outside (north) of the RR. The slope and depth of the ditch generally increased moving east. (Appx. II, drawings C-1.1 through C-1.6, contour/slope lines; tr. 4/75)

12. The drainage design concepts reflected in the above drawings and the specifications contemplated constructing a concrete drainage channel using the existing ditch running parallel to the southern edge of the BPR. The concrete channel would capture and transport rains west to east down the entire length of the site/fence with the water exiting the site through the two large 10-foot CMPs at the eastern terminus of the site. (Appx. II, drawings C-1.1 through C-1.6, contour/slope lines; tr. 4/75)

13. The RFP package included at appx. IV a “Preliminary Drainage Report 95% Submittal” (the RFP Drainage Report), dated January 2008 that was prepared by Baker. The RFP Drainage Report indicated that peak (100-year flood) flows would be at a rate of approximately 4000 cubic feet per second (cfs.) emanating from the southwest and flowing primarily in a northeasterly direction, with the largest of two drainage basins entering the project site at its west end at about the planned location of the two 24 inch culverts to be installed. (R4, tab 7 at 905, 917; supp. R4, tab 343 at 7222, 7234; tr. 3/46, 4/179, 182, 5/110) The RFP Drainage Report provided in pertinent part:

SECTION 3.0 PROPOSED CONDITIONS

....

Within the limits of the two washes identified herein, fence configurations shall be designed such that minimal upstream and downstream hydraulic impacts are observed. The fence design shall permit the passage of flows with minimal effects upstream of the International Boundary resulting from flows backing up behind the fence. According to the International Boundary and Water Commission (IBWC), a stakeholder on this project, the proposed fence design should show a demonstrated minimal adverse impact to the existing conditions flood hazards in Mexico. The IBWC has indicated that an increase of up to 6-inches in water surface elevations is acceptable. At locations where the fence crosses washes that trend northwards, therefore, the final drainage report shall demonstrate minimal hydraulic backwater impact in Mexico.

SECTION 4.0 HYDROLOGIC ANALYSIS

....

The 100-year storm was used as the base storm for determining the peak discharges in both basins....

....

SECTION 5.0 HYDRAULIC ANALYSIS

No hydraulic analyses have been performed for this report. The final drainage report will include impact analysis of the pedestrian fence on flows, both northbound and southbound, if any, at the International Boundary. Any

adverse impacts to flow as a result of construction of the pedestrian fence (increase of over 6-inches in water surface elevations, increase in 100-year floodplain widths, or flow velocities) will have to be mitigated by design. Energy dissipation and/or erosion control at the fence alignment, if required, will also need to be addressed in the final drainage report.

SECTION 6.0 CONCLUSIONS

Two wash crossings are identified for the aforementioned 1.0-mile stretch of pedestrian fence along the International Border in Douglas, Cochise County. For these crossings, 100-year peak discharges are evaluated. A fence cross section will be proposed in the Final Drainage Report for all washes, including those not identifiable using the presently available data and USGS topographic mapping.

The selected pedestrian fence for the project area will have to be verified through design, so that upstream backwater impacts of fence construction are minimized. The selected pedestrian fence placement should not impede the storm water flow or cause a significant backwater condition.

A final drainage report will need to be provided covering all these issues mentioned herein, especially hydraulics, erosion control, and fence types. It will also include all calculations to demonstrate minimal impacts.

(R4, tab 7 at 908-10; supp. R4, tab 343 at 7225-27)² (Emphasis added)

14. After issuance of the RFP, a pre-bid inquiry was submitted to the government on 26 April 2008 asking:

In the event the existing drainage channel must be widened to the north (encroaching on the existing road) to accommodate the anticipated design flow, should the

² Appellant alleges that Baker knew as of the time of this report and failed to advise offerors that the appx. II drainage conceptual design could not contain 100-year storm flows without encroaching into public and private land north of the RR. Because of our resolution of this appeal on other grounds, it is unnecessary to address in our findings or discuss these related issues.

contractor anticipate moving the road to maintain the existing width or is reduced road width acceptable.

(Supp. R4, tab 350 at 7312)

15. On 1 May 2008, the government responded to the pre-bid inquiry as follows:

It is not anticipated that the existing drainage channel will need to be widened. However, if during design it is determine[d] that the drainage ditch will not accommodate the design flow, then configurations of the ditch and roadway will need to be determined. The existing roadway width will need to be maintained.

(Supp. R4, tab 350 at 7313)

16. Award of the TO was to be made to the lowest-priced, technically acceptable (LPTA) offeror (supp. R4, tab 331; R4, tab 7 at 187).

17. Specification section 00120 "PROPOSAL EVALUATION AND CONTRACT AWARD," paragraph 4.0 "EVALUATION OF TECHNICAL PROPOSAL," stated in part:

The technical proposals will be reviewed for compliance with the technical specifications. Technical proposals are given an overall rating of either "Acceptable" or "Non-acceptable". The evaluation factors will be rated either "acceptable" or "nonacceptable" based upon the standards listed within the RFP. A rating of "non-acceptable" for any evaluation factor will constitute an overall rating of "non-acceptable" and ineligible for award.

(R4, tab 7 at 186, 188)

18. Specification section 00110 "PROPOSAL SUBMISSION REQUIREMENTS, INSTRUCTIONS, CONDITIONS, NOTICE TO OFFERORS, BASIS OF AWARD, AND LOCAL INSTRUCTIONS" states, in part:

TAB A – FACTOR #1 – TECHNICAL APPROACH, METHODS AND PROCEDURES.

Proposals shall demonstrate the offeror's ability to schedule and successfully perform the work and to satisfy

all solicitation requirements, the quality of the offeror's approach, methodology, plan for customer service, quality control procedures, and the feasibility of its approach to successfully complete the work.

(R4, tab 7 at 182, 185)

19. Specification section 00120 "PROPOSAL EVALUATION AND CONTRACT AWARD," paragraph 5.0 "EVALUATION OF PRICE PROPOSAL," stated in part:

The proposed price will be analyzed for reasonableness. It may also be analyzed to determine whether it is realistic for the scope of work to be performed; reflects a clear understanding of the requirements; and is consistent with the offeror's technical proposal....

(R4, tab 7 at 186, 188)

20. Specification section 00120 "PROPOSAL EVALUATION AND CONTRACT AWARD" included the following evaluation factor for the "TECHNICAL APPROACH, METHODS AND PROCEDURES":

FACTOR #1 – TAB A – TECHNICAL APPROACH, METHODS AND PROCEDURES

Proposals shall demonstrate the offeror's ability to successfully perform the work and satisfy all solicitation requirements. Responses to this factor must explain and clearly demonstrate the offeror's technical understanding of the works; its ability to schedule and accomplish all work in accordance with solicitation requirements; its plan for providing customer service; its proposed quality control procedures; as well as its technical approach and methodology and the feasibility of its approach to successfully complete the work.

STANDARD FOR ACCEPTABILITY: This standard is met when the offeror demonstrates the ability to schedule and accomplish the work in accordance with the requirements of the solicitation, and when it demonstrates that the offeror's ability to accomplish all work meets or exceeds the criteria noted above. This standard is met when the offeror demonstrates a clear understanding of the scope of work, a plan to provide good customer service,

and a Quality Control Plan that will ensure successful completion of the work. The standard is met when the offeror demonstrates a technically feasible approach to meet the Government's requirements.

(Supp. R4, tab 332 at 7075-77)

21. Section 01 00 50 "TASK ORDER REQUIREMENTS," paragraph 1.8 "ENVIRONMENTAL DOCUMENTS AND PROVISIONS" provided that the Final Environmental Assessment covered the design and construction activities for this Project:

1.8.1. A Final Environmental Assessment (EA) has been prepared for the International Board corridor in the Naco/Douglas, Arizona area and is provided in Appendix I. Fence alignment F-1 project corridor area is covered by this EA. Specifically design and construction activities for primary fence alignment F-1 is covered under sections 2.2.1 and 2.2.1.1 of the Preferred Alternative.

(Supp. R4, tab 334 at 7093, 7095)

22. The referenced appx. I was the "NOVEMBER 2003 FINAL SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT FOR INFRASTRUCTURE WITHIN THE U.S. BORDER PATROL NACO-DOUGLAS CORRIDOR COCHISE COUNTY, ARIZONA," (Final Supplemental Environmental Assessment) which contained the referenced section 2.0 "ALTERNATIVES" that provided, in part, to level the existing BPR and to provide low water crossings (LWCs) as needed to drain the area (R4, tab 7 at 334-786):

2.2 PREFERRED ALTERNATIVE

....

2.2.1 Primary and Secondary Fences and Vehicle Barriers

....

2.2.1.1 Roadways

....

Under the Preferred Alternative, no new road construction would be required in the Douglas AO. The existing road would be upgraded to an all-weather surface and experience some widening and leveling to reduce curves and slope reducing risks to USBP agents' health and safety, erosion problems, and maintenance costs. The existing road would be widened from 24 feet to 38 feet, which would include 2 to 4-foot shoulders on either side of the road. These improvements would be required on 25 miles of existing border roads. In addition, low-water crossings would be installed, as needed, in drainage areas. Low-water crossings would be constructed using concrete, culverts, asphalt, rock gabions, or a combination of these materials.

(R4, tab 7 at 398, 410, 414, 418)

23. The RFP appx. I, Final Supplemental Environmental Assessment also described the use of LWCs as drainage structures:

1.1.4.5 Drainage Structures

Low-water crossings...would reduce erosion and road maintenance without adversely altering existing drainages along the border. Low-water crossings are typically concrete slabs or culverts with gravel, rip-rap, gabions and other erosion control devices placed on the banks in order to control erosion. Many of the current washes in remote areas are not passable for extended periods of time following flood events. In light of this, construction and/or improvement of low-water crossings alone would improve USBP agents response time through reliable access. Engineers typically analyze each drainage and assess whether or not a low-water crossing is needed. Analysis includes the need for low-water crossings, minor culverts, major culverts, bridges or additional improvements.

(R4, tab 7 at 369)

24. The appx. I, environmental report in section 4.0 "ENVIRONMENTAL CONSEQUENCES" further described LWCs as the preferred drainage alternate:

4.12.2 Preferred Alternative

....

Construction of low-water crossings would generally consist of concrete pads placed in the bottom of the drainages at road crossings. Temporary effects would include increased levels of sedimentation and turbidity. The streambed would be permanently impacted by concrete paving, although the flow of water would not be impaired or impeded since streams in the project corridor are mostly intermittent. Impacts associated with sedimentation and turbidity would only occur during periods of water flow. Construction of these crossings would be planned during the dry season and appropriate [best management practices] BMPs would be implemented during construction; therefore, only minimal erosion impacts would occur.

(R4, tab 7 at 502, 533-34)

The Site Visit

25. A pre-proposal site visit commenced on 15 April 2008 at a Border Patrol office near Douglas, Arizona. The Corps representative was Mr. James Aldrich. The BP representative was Mr. Federico Orozco and appellant was represented by Mr. Donald Reynolds. Mr. Aldrich began the meeting and told the participants that he would be unable to attend the site visit. (R4, tab 7 at 180, tab 72 at 3767; tr. 2/12-13)

26. As noted above, two critical specification requirements related to the RFP's drainage plan were that the contractor was to confine its work within the RR and that the design was required to handle a 100-year flood (*see also* tr. 7/206-07).

27. At the time of the site visit, Mr. Reynolds observed the big ditch between the Mexican border and the BPR and the high elevation of the BPR in many areas (tr. 2/16-17, 4/97). Mr. Orozco stated that the BP was maintaining the BPR and wanted to lower the road elevation in certain areas (tr. 2/100). Noting the extensive seasonal flooding of the site, Mr. Orozco also discussed during the site visit (as reported by Mr. Reynolds) how the big ditch next to the BPR had been excavated by the BP and the BP's preferred drainage solution (tr. 2/14-15):

[The BP] had continually brought in owner operators on equipment to come in and excavate, and move dirt, and continue to make a road for them that they could drive their jeeps on to get through that area after it rains. So they had really disturbed the site.

And so, he said, what we really need here, and this was his description. We need to be able to take the water that comes in during these monsoonal events, and we need to let the water go where it's been going for 400 years.

That was the way he said it. If it goes north, it goes north. If it goes south it goes south. And just, we don't want to interrupt it. We've got this 60 foot Roosevelt easement that we're working in.

And we don't have enough land and room to deal with changing the water. The water's coming in. It needs to go where it wants to go. We've interrupted it with all this grading.

And so what we need are solutions. And our solution would be to let the water out easily in what they call Arizona Crossings....

....

...So he said, we need enough crossings, Arizona Crossings down here to let the water flow.

And I don't care where it flows. We only have 60 feet. So if it wants to go that way, let it go. If it wants to go this way, let it go. We just don't want to disturb it. Just let it go where it naturally has been. He said, that's what I think we need right here.

(Id.)

28. An Arizona Crossing (a type of LWC) is typically a concrete swale that has a side that goes down, then level across the bottom, and then back up on the other side, that a vehicle can drive through while they are letting drainage go through the crossing (tr. 2/15).

29. The embankment and excavation on the south side of the BPR acted as a dam to contain water flows and preclude it from flowing naturally in a south to north direction, forcing it to flow west to east (tr. 1/235-36, 3/38, 4/97). Because the BP had not made arrangements for drainage in constructing and maintaining the BPR, the BPR repeatedly washed out (tr. 2/17, 3/26). Mr. Orozco asked the offerors to lower areas of the BPR that were excessively elevated even if it necessitated work outside the RR. He recommended that the offerors remove the BPR's Class II road base, stockpile the

base and reuse it after lowering the sections of the BPR. (Tr. 2/18, 3/25-26) Mr. Orozco also mentioned that the BP was having serious problems with illegal immigrants hiding in the ditch and other depressed areas after crossing the border. For similar reasons, the BP did not prefer enclosed box culverts that could be used by illegal immigrants for concealment. (Tr. 1/93-94, 2/19) The BP was also concerned that adjacent private ranchers were not to be cut off from their natural water source, i.e., rains falling during the short summer “monsoon” season that replenished existing wells and aquifers for the remainder of the year (tr. 2/25-26).

30. Mr. Reynolds walked the length of the site and took preliminary spot elevations during the visit, noting at least eight or nine low areas for MARCON to consider in draining the site (tr. 1/93, 96, 2/20-21, 3/64). MARCON concluded that the best drainage solution would be to backfill the ditch and substantially restore original contours and flow patterns as requested by the BP (tr. 1/94-96).

MARCON’s Proposal, Evaluation and Award

31. Following the site visit, MARCON engaged JB Young & Associates, LTD (JB Young), an A-E firm, as the designer of record to assist in the preparation of the technical proposal (TP). In addition to the RFP, JB Young was supplied with information and elevations from Mr. Reynolds obtained during the site visit. (Tr. 1/61, 2/22-23, 151; supp. R4, tab 392 at 7613)

32. On 6 May 2008, MARCON submitted its proposal. The TP included a narrative description, two cross sections, and a partial plan view developed by JB Young that made it patently obvious that MARCON intended *not* to construct the Baker/RFP west-east concrete drainage ditch or channel the water through CMPs as set forth in RFP appx. II. Instead, the TP plainly manifested MARCON’s intent to: (1) return the area to its original contours, filling in the existing ditch as needed to prevent damming, and allowing the water to flow more naturally across the regraded site in a south to northeasterly direction as channeled through openings in the fence to LWCs; and (2) work north of the RR to the limited extent necessary to lower the BPR and construct as many as eight concrete LWCs (with rip rap erosion protection) to transport the water across and north of the BPR (over 90% of which was outside the BPR). (R4, tab 11 at 2504-11; supp. R4, tab 356 at 7404-24, tab 357 at 7430-32; tr. 1/97, 101, 2/24-25, 28-29, 36-37, 40-41, 45, 130, 3/22, 95, 4/103-05, 5/119, 6/142-43, 192-94) Therefore, we find that appellant’s TP was clear and unambiguous regarding its drainage plan.

33. In its narrative description of its technical approach, the TP stated:

Technical Approach & Methodology

....

In order to control the damage and erosion caused by the expected flooding at this site, Marcon has determined that it is best to take a simplified approach to the required flood control improvements. Our design reduces the collection of water by allowing the drainage to sheet across the terrain the way nature once intended. The installation of eight (8) concrete crossings with energy dissipaters will allow the water to flow in a northerly direction where it will be absorbed by the soil and will help replenish the underground aquifer used by water wells in this region. Allowing water to utilize sheet drainage also eliminates the negative effects that could occur if design allowed for collection of large amounts of water which it is believed would flow in the direction of the City of Douglas and potentially cause flooding there. Marcon is proud to add that this design also reduces the number vertical structures such as culverts, berms, and channels that can and have been used for concealment by intruders, thus helping to increase security measures and Border Patrol efforts so critical to this mission.

....

Marcon understands that the elevation of the existing patrol road is too high in many areas. The Class II Base will be lowered and brought into adjustment with original flow contours. This Base material will be removed and stockpiled in the areas of grade change and will be re-applied over the new grade. The overall road grade will remain higher than the surrounding soils and will have the benefit of concrete crossings that extend continuously from the barrier which provides open water excavation.

....

The concrete crossings and maintenance road will be constructed with down turned, cut-off footings and rip rap energy dissipaters, which will follow closely behind the installation of barriers further reducing the risk associated with inclement weather and/or human events.

(Supp. R4, tab 357 at 7430-31)

34. The proposed LWCs in the TP were designed to be shallow enough that vehicles could drive across them during the rainy season. The LWCs were designed with a 30-foot wide flat bottom with approximately 5% rise on each side to convey water at a rate of 500-600 cubic feet per second (cfs) per LWC with approximately one foot of depth (tr. 4/99).

35. Ms. Maryory Contreras, appellant's president and an engineer, was extremely concerned that Baker's conceptual west-east design and drainage structures envisioned by the RFP and confined to the RR could not meet the 100-year flood requirement. She considered that: the drainage design in its proposal was the optimal solution that could contain and convey peak 100-year flows, was in accordance with the expressed desire of the Border Patrol, and, necessitated only minor infringements of the RR requirement. She also considered that, because the answer to the offeror question (findings 14, 15) permitted some work on the BPR (which was 90% outside the RR) and the west end culverts required limited work outside the RR, the proposal would be technically acceptable. If not, she considered that the government would simply reject MARCON's proposal as unacceptable. (Tr. 1/102, 3/24-25, 27, 64)

36. Following receipt of task order proposals from four approved MATOC contractors including MARCON, the government convened a Source Selection Evaluation Board (SSEB) on 8 May 2008 to evaluate them in accordance with the LPTA criteria detailed above. The SSEB determined that MARCON's proposal was technically acceptable without mention of the patent drainage design deviation (as well as other deviations) proposed by MARCON. The only evaluator to testify was Mr. Aldrich who considered that if he had known that appellant proposed working outside the RR, the SSEB would have rejected the proposal. The SSEB did note that appellant's 115-day schedule for completion of the work "exceeds the RFP." It also clarified that appellant's quality control representative would not also serve as MARCON's site superintendent. After noting that MARCON's proposed firm-fixed price of \$5,444,171 was only 46.4% of the independent government estimate of (\$11,723,000), the SSEB concluded that MARCON "represents the best value to the government by being the lowest technically acceptable offeror." There is no evidence that a price realism analysis was performed. (Supp. R4, tab 358 at 7433-36, 7438-41; tr. 6/139; ex. A-35 at 1, 13, ex. G-41 at 3-19)

37. The Source Selection Authority (SSA) also found that MARCON's TP was technically acceptable and the TO contract was awarded without discussions to MARCON on 16 May 2008 (supp. R4, tab 358 at 7438-41; ex. G-41 at 9, 11). The original contract completion date was 30 September 2008. As extended, the contract completion date was 19 October 2008. The project was "accepted" by the government by the revised completion date. (Supp. R4, tab 506 at 8460, tab 509 at 8565; tr. 6/133)

The Pre-Construction Conference and RFI-0003

38. Following award, a pre-construction conference was conducted on 5 June 2008. At the meeting, the subject of working outside the RR in accordance with MARCON's TP was discussed. (Supp. R4, tab 361 at 7459, tab 362 at 7499; tr. 1/130-32, 3/183) On 6 June 2008, the government emailed appellant stating in part:

2. Yes, all work to be done is within the 60' Roosevelt Easement. If your proposed work extends beyond this parameter, we will have to go through regulatory which will take time. I would recommend that all of your installations [sic] be designed within the 60' easement.

3. The Roosevelt Easement parallels the borderline and extends North 60'. Some of the existing National Guard all-weather road goes beyond the 60' corridor (easement) however you can still use this road. Your work is limited to the 60' Roosevelt Easement.

(Supp. R4, tab 364 at 7501)

39. On 10 June 2008, MARCON submitted Request for Information Report (RFI) 0003, attaching its TP drainage plan (supp. R4, tab 370 at 7511). RFI-0003 stated in relevant part:

RFI SUBJECT: MarCon Proposed Design

INFORMATION REQUESTED:

[MarCon Proposed Design –] MarCon prepared and submitted with our bid a technical proposal that was based on the RFP documents and discussions with USACE (Dick Aldrich)/USPB (Federico Orozco) during the pre-bid site visit. It is MarCon's understanding that the project was awarded to MarCon based on the pricing and technical proposal...that was discussed at the pre-bid site visit and included in our technical proposal was the concept of restoring the water flows to more closely match the historic flows in the area of our work. The MarCon proposal included small areas of work outside of the 60' Roosevelt Reservation that were necessary to move the water to the north side of the existing access road that was previously installed by the government adjacent to, but outside of, the northern boundary of the Roosevelt Reservation.

Accordingly, MarCon is proceeding with our design efforts based on the concepts shown in our Technical Proposal. If there are known areas of concern with that proposal, we request that they be expressed immediately, to avoid any re-design issues/costs.

(Supp. R4, tab 370 at 7511)

40. On 12 June 2008, Mr. Ron Baker of the government's design firm sent an email to an associate in his firm stating:

Bit of a problem that I think you can help with. MarCon Engineering was awarded the F-1 fence project. I went to the pre-con meeting last week and walked the site. In their technical proposal (which I'm forwarding) they provided sketches that clearly show their disturbance would go outside the 60 [foot] easement. This technical proposal was obviously accepted by the powers that be and nobody mentioned their encroachment on private lands (outside the Roosevelt). Anyway, was there anything in the RFP that stated they had to stay within the easement? They are saying that if they do, it will completely change their design. Please advise ASAP.

(Supp. R4, tab 370 at 7509)

41. On 16 June 2008, MARCON emailed JB Young expressing the view that the Corps was "leaning toward directing us to stay within the 60' easement. This could radically affect our proposed design." The email further indicated that MARCON and JB Young should not put "much effort into the design until we have a final answer to this question." (Supp. R4, tab 371 at 7519)

42. MARCON received the Notice to Proceed from the Corps on 17 June 2008 (R4, tab 13 at 2576).

43. On 19 June 2008, the Corps' Mr. Aldrich responded to appellant's oral inquiry made at the 5 June 2008 pre-construction conference regarding the RR restriction issue stating that MARCON should "proceed per your contract" and, when pressed, stated that the TP was "part of your contract." On 24 June 2008, MARCON gave JB Young the "go-ahead" to proceed with the design. (Supp. R4, tab 382 at 7578)

44. On 23 June 2008, appellant mobilized to the site and on 24 June 2008 began surveying and taking preparatory actions for site grading. On 25 June 2008,

MARCON began building a construction haul road in the existing ditch. (R4, tab 19 at 3188; supp. R4, tab 379 at 7549, 7552, 7554)

45. On 3 July 2008, appellant received the government's response (dated 24 June 2008) to RFI-0003, which stated:

First of all, your RFI states that your proposal indicated and mentioned "small areas of work outside the 60' Roosevelt Reservation" that you will be designing to move water to the north side of the existing roadway....

I have reviewed the site plans included in the RFP and only see one area that work will be required outside the 60' reservation, and that area is the drainage culverts adjacent to Kings Road on the west end of the project site.

The work outside the 60' reservation in this area is on Fish and Wildlife property and has been coordinated by USACE Real Estate Section prior to the award of this contract. Work on federal or state land outside the 60' reservation can occur providing all permits and requirements are met. The Contractor is not to work outside the 60' limit on private property.

If there is more than one area of work other than the area mentioned above, please inform this office.

(Supp. R4, tab 374 at 7524-25)

46. As noted above, there were several clearly-defined "area[s] of work other than [the west end culverts]" that were indicated in the TP outside the RR. There is no evidence that the government considered (in its response to RFI-0003) these other areas or the LWCs shown in the TP, involving work on "private property." Nor were explanations provided regarding the nature and necessity for additional "permits and requirements" that might be needed for appellant to work outside the RR on government-owned land.

Site Flooding Issues, July and August 2008 Performance, and RFIs 0007-0009 and 0011

47. Extensive rains often flooded the site during late June and early July 2008 (R4, tab 415 at 7721-35). The water flowed west to east through the existing ditch and over the BPR at various points. The construction access road that MARCON was constructing in the ditch was repeatedly washed out by rain and MARCON was unable to dispose of the water north without working outside the RR. The existing culverts at

both the east and west ends of the site were not properly conveying the intensive rains experienced in July off site and the rains further eroded the ditch. (Supp. R4, tab 394, tab 396 at 7629; tr. 1/144-46, 150-51, 154-66, 4/84, 87, 89-90, 6/168) After observing the flooding, JB Young prepared a memorandum of the site visit dated 3 July 2008 noting the drainage issues and the inability of the existing culverts to transport the water off site and stating:

On July 03, 2008, the project design engineer travelled to Douglas, Arizona to personally inspect the proposed fence site. The timing of the inspection trip was fortuitous in that conditions also allowed us to observe the results of a significant storm event. The fence site is unimproved with an aggregate surfaced Border Patrol road running the full length of the project, with an overall offset of approximately 40 feet northward of the actual border. The existing terrain along the border is gently undulating with little significant topographic relief. Erosion has created a major ditch parallel to the border where storm run-off has found its path across the patrol road to get back to its natural discharge point in a wash in the United States. The erosion has left the inlets of the existing corrugated metal culverts crossing the patrol road significantly above the actual flow line of the existing ditch. The net result of the erosion is that the existing culverts should be lowered – OR – removed and replaced with low-water crossings – to restore the natural drainage flow through the area. Significant earthwork will be required along the ditch to mitigate the erosion damage and protect the proposed fence improvements. Direct observation of the storm flow aided in locating the two main low water crossings (east and west ends of the project) as well as the three minor internal low water crossings that will discharge to the stabilized longitudinal ditch.

(Supp. R4, tab 441 at 7922)

48. On 11 July 2008, appellant submitted three RFIs (RFI-0007 to RFI-0009). RFI-0007 requested permission to remove the 60" (5 foot) west end culvert:

INFORMATION REQUESTED:

The recent rains have revealed that the drainage in the area of our new fence is obstructed due to an existing culvert (approx. Sta 216+75) having invert elevations

higher than the adjacent terrain. The drainage is not diverted away from our work area as would be expected. Marcon considers this to be a differing site condition that must be addressed immediately.

CONTRACTOR RECOMMENDATION:

Recommendation: USACE approve removal of the culvert and installation of a concrete...low-water crossing at this location—at an elevation that will provide positive drainage from south to north. Due to the ongoing rains, this work needs to be done prior to continued Marcon work in the existing channel. This work was not included in our contract price, however, if approved as recommended, this low-water crossing would be considered as one of our low-water crossing[s].

(Supp. R4, tab 398 at 7635)

49. RFI-0008 requested approval to remove the two 10-foot east end culverts (requiring work north of the RR) because they were not properly draining the site, were causing water to back-up, and were contributing to work site flooding (supp. R4, at 7636). RFI-0008 stated in part:

There are two (2) large CMP culverts at the east end of the project (approx. Sta. 168+00). The invert elevation of these culverts is higher than the adjacent terrain, causing flooding of the work area and water flows across the existing Border Patrol access road. This condition was noted during the pre-proposal job walk and MarCon included in our acceptable/approved Technical Proposal the removal of these culverts and construction of a PCC low-water crossing to reduce problems with water backing up/overflowing the access road. MarCon requests direction from the government regarding removal of the existing culverts and construction of a PCC low-water crossing. We consider this construction work to be included in our contract. If the culverts are not removed MarCon will consider that to be a differing site condition which may impact the cost and/or time of our work.

CONTRACTOR RECOMMENDATION:

USACE approve Marcon proposal to remove culverts and construct PCC low-water crossing at this location.

(Supp. R4, tab 399 at 7636)

50. Also, on 11 July 2008, MARCON submitted RFI-0009 requesting permission to reduce the eight LWCs proposed in its TP to the five determined to be sufficient by JB Young as follows:

MarCon's surveyors have identified at least five (5) natural drainage crossings along the length of the project, and our civil designer is recommending that low water crossings be installed at those drainages to restore flow of run-off to the north side of the existing Border Patrol access road. In MarCon's acceptable/approved Technical Proposal we included eight (8) of these low-water crossings, based on preliminary review of the topographic information included in the FRP. MarCon is requesting a variance from the Technical Proposal to reduce the number of low-water crossings from eight (8) to five (5), per the [advice] of our civil designer. Crossings would be constructed as shown on the acceptable/approved Technical Proposal, terminating at the toe of the northern side of the existing Border Patrol road.

(Supp. R4, tab 400 at 7637)

51. Removal of the west end culvert was orally approved (tr. 6/168). On 17 July 2008, appellant transmitted cost data and the following email to Mr. Aldrich regarding work accomplished to remove the west end culvert and construct a temporary LWC in the area to divert the water:

Please consider this e-mail as Marcon's notification that we are performing the work described below at the existing 60' culvert located at approx. Sta. 217+00. This work is considered to be pursuant to a differing site condition and is being performed outside of the 60' Roosevelt Reservation limit of work with full knowledge and concurrence of USACE project personnel. Costs for this work are being collected as the work is proceeding and will be submitted in a cost proposal once they can be fully assessed. There will also be a request for time extension

and payment of delay impact costs as a result of this differing site condition.

(Supp. R4, tab 405 at 7664)

52. The government responded via email dated 17 July 2008 as follows:

If you would refer to the RFP, these particular culverts are addressed to be dealt with in the Baker design within the RFP. We discussed the situation with going beyond the 60' easement and came to conclusion that if it was specified to be dealt with in the RFP, whether it was within or out of the 60' easement, it would be covered. This particular location is the 1 and only location in the RFP that gives direction to do outside the 60' easement. Therefore there is no justification for the additional funds you are referring to.

(R4, tab 68 at 3759)

53. On 21 July 2008, MARCON submitted RFI-0011 stating in part:

INFORMATION REQUESTED:

The government response to RFI No. 0003 reference[s] coordination by USACE Real Estate Section and Fish and Wildlife in order to do the culvert work on the west end of the project. The response also states that "work on federal and state land outside the 60' reservation can occur providing all permits and requirements are met". Has [sic] the permits and all other requirements been met so that this work can take place.

(Supp. R4, tab 389 at 7599, tab 422 at 7828)

54. The government did not respond to this email until 8 August 2008 on which date it indicated that it had the permits, even though it knew that all necessary permits for work on government-owned land were already on hand (supp. R4, tab 422 at 7828; tr. 6/216).

55. Heavy rains continued during early August 2008. On 7 August 2008, the government informed MARCON that proceeding with grading and concrete placement would be at appellant's risk pending design approval. (Supp. R4, tab 464 at 8084, 8086, 8089, 8092, 8095)

56. In an email to the Corps dated 13 August 2008, Mr. Orozco of the BP expressed his concerns regarding, *inter alia*, returning the land to its natural state as reflected in one of MARCON's disapproved design submittals (*see* below) and regarding the potential intensified erosion in the ditch and along the southern slope of the BPR (supp. R4, tab 437; tr. 6/199-201). The email stated in part:

Comments Re: F-1 Project located in Douglas,
Arizona

In reviewing the supposed 100% plan we (Douglas Border Patrol) noted some deficiencies and we would like some clarification.

Comments:

1. What justification does the contractor give for having strayed from the original request of returning the area back to its natural state (i.e. leaving the un-natural AWR [all-weather road] where it is)?
2. It is not difficult to get a ROE [right of entry] beyond the 60' Roosevelt easement, especially in this area where all landowners are adamant about getting water back onto their land. Why then is there no new AWR³ in the current design? The current design only includes a 12' maintenance road adjacent to the fence and will take up all of the 60' and leave us with no recourse if the landowners decide to push the issue of the current AWR and the fact that it is on their land. The design leaves no room for an AWR to be moved onto the 60' at a later date.
3. If left as is the new design will cause water to flow over the existing road and will eventually cause it to erode (more problems for the Border Patrol).
4. The Border Patrol expected this to have been an all inclusive package where at the end of the day we would not be dealing with landowners, ROE's, and extensive maintenance. Somewhere along the line there appears to have been a breakdown in communication where Fence became more important than the project as a whole....

³ The existing AWR is the BPR (tr. 6/199-200).

5. Is the maintenance road going to be concrete or a combination of dirt and concrete?
6. We want to make sure that there is a good transition between the new and existing roads regardless of whether or not they fall within the construction footprint.

(Supp. R4, tab 437)

57. Also on 13 August 2008, Ron Baker emailed the government as follows:

Yesterday during the meeting w/Marcon, Federico Orozco (BP Agent) expressed some concern w/RE [real estate] and stated that he wanted to discuss w/the corps the possibility of purchasing additional land (approximately 120' north of the border) in this area and said that this was brought up during the planning for this project. There is already the 60' easement, but he wants another 60' or so that it will include the existing all weather road they are currently using. Can you contact him and see if you can give him some input? I really don't have much visibility on RE purchases nor on the front-end planning of these projects.

(Supp. R4, tab 435)

58. Appellant's subcontractor placed the first concrete pour for the access road immediately adjacent to the fence line on 15 August 2008 and MARCON began staging 16 foot prefabricated fence panels for erection on 18 August 2008 (supp. R4, tab 464 at 8121, 8126).

59. Beginning with its "50% design submittal" of 7 July through 20 August 2008, appellant submitted various drainage plans as part of its design or other submittals.⁴ These submittals reflected an intent on the part of JB Young to develop a drainage plan melding the RFP concept of placement of a concrete west-to-east drainage channel with the TP approach of placing LWCs that were designed to transport some of the water off the site and north of the RR. Although JB Young attempted to stay within the RR, to a minor extent, the LWCs required work north of the RR.⁵ These submittals were not approved by Baker based, *inter alia*, on indications therein of the minor work outside the RR. (Tr. 1/160-61, 168, 174-75, 180,

⁴ These submittals were transmitted on 7 July, 16 July, 24 July, 27 July, 11 August, and 20 August 2008 (*see* citations to record in above finding).

⁵ As discussed below, it was impossible to satisfy the 100-year flood requirement while staying within the RR.

3/153, 161, 165, 173-76, 240-41, 244-48, 250, 7/162, 273-77; supp. R4, tab 390 at 7603-04, tab 404 at 7652, tab 391 at 7609, tabs 398, 415 at 7762, tab 420 at 7807, 7812, tab 427 at 7844, 7849, 7850, tab 430 at 7866, tab 458 at 8019, tab 459 at 8049; R4, tab 150 at 5899, tab 188 at 6608)

60. On 10 September 2008, an unknown Corps' official issued a response to MARCON's RFI-0008 stating, "[t]his RFI was previously addressed. The contractor is to submit a design for acceptance that addresses all drainage issues." (Supp. R4, tab 399 at 7636)

61. On 10 September 2008, an unknown person in the Corps issued the following identical responses to both RFI-0007 and RFI-0009:

GOVERNMENT RESPONSE TO CONTRACTOR:

This RFI was previously addressed. It is the contractors responsibility to address the flow calculations for the entire project-area and provide a design that creates positive drainage throughout the project. The CMP is shown on the RFP drawings therefore this is not a change/differing site conditions.

The project-design must be approved by the IBWC to ensure compliance with all drainage issues per contract requirements.

(Supp. R4 tab 398 at 7635, tab 478 at 8220)

62. Notwithstanding the oral approval (*see* finding 51), neither Mr. Aldrich nor the government's expert Mr. Blair could identify any document in the record where RFIs 0007-0009 had been "previously addressed" (tr. 7/12, 14, 306-07).

63. On 11 September 2008, Daniel C. Fodrini (USACE) emailed John G. Taylor (USACE) regarding permitting:

In response to your question regarding the Governments right to use Fish and Wildlife property along the border for the F1 Segment, the Government has a special use permit for staging and access in this area. Several months ago there were discussions regarding what would be done when the permit expired on 9-10-09. At that time the decision was made that any further use of the property for staging, access or any other project related need would be

covered by the waiver. If you have questions, give me a call.

(Supp. R4, tab 480 at 8222)

September 2008 Performance and Authorization to Work North of RR

64. As of 29 August 2008, 72 fence panels had been delivered to the site. As of 5 September 2008 final structural drawings had been submitted to Baker and were approved by Baker on 9 September 2008. MARCON began foundation trenching, pouring the concrete foundations and erecting fence panels at the urging of the government even without an approved drainage plan so that fence construction would be complete by 30 September 2008. (Tr. 1/167, 192-93; supp. R4, tab 464 at 8145, 8151, tab 467 at 8165, 8169, tab 509 at 8481-82)

65. On 25 August 2008, MARCON decided to employ another design firm, Urban Engineering (Urban) as a result of the inability to obtain an approved drainage design plan.⁶ On 12 September 2008, Urban submitted "INTERMEDIATE 100% SUBMITTAL" drawings also showing riprap erosion protection work for the south slope of the BPR outside the RR along the western end of the site and continuing east (onto private property) designed to divert the large flows coming from the southwest to the east down the concrete west-east channel. Some of the water flowing down the west-east channel was designed to be discharged north of the RR, across the BPR and private property. (Supp. R4, tab 457 at 8011, tab 485 at 8308, tab 492 at 8416, 8418, 8421-23; tr. 1/177-79, 4/44-45, 119-20, 134-35, 5/124-25, 6/179-81, 226, 7/286, 289-92; ex. G-50 at G0031-32)

66. The 12 September Urban drawings also indicated approximately 50% of the demolition of the non-functional east end culverts would occur outside the RR and that approximately 2/3 of the concrete LWC to be installed at the east end would be north of the RR on private property. Urban's calculations of the flows were incomplete and the submittal did not evince compliance with the 100-year flood requirement. Baker disapproved drainage-related portions of the submittal noting the work outside the RR and requiring resubmittal. (Tr. 1/194-95, 199, 209-12, 4/18-22, 50-51, 131-33, 141-42, 5/123-27, 127-28, 6/177-78, 181-84, 7/297-98; supp. R4, tab 492 at 8418, 8425-29)

67. Drainage issues were discussed extensively at a 16 September 2008 weekly construction meeting attended by the parties, BP and Baker. At this meeting, the Corps authorized appellant to develop a drainage plan based on a variant of MARCON's original TP plan to construct LWCs that extended north of the RR

⁶ MARCON did not formally terminate JB Young's subcontract to provide design services until 18 September 2008 (supp. R4, tab 496 at 8440).

eliminating any need for construction of the west-east channel, provided that it obtain the approval of affected private landowners. The BP representative gave assurances that the adjoining private landowners “would not mind” and offered his assistance in obtaining their approval. (Tr. 1/143, 194-95, 199-201, 2083/128, 4/18-20, 6/245)

68. A meeting with the adjoining private landowners, Union Grandera Regional de Sonora (the Cattlemen’s Association), was scheduled for 16 September 2008 and an agreement granting an easement authorizing MARCON to construct LWCs encroaching onto the private property was reached (supp. R4, tab 491 at 8413, tab 503 at 8452, 8454, tab 505 at 8458, 509 at 8520; tr. 1/215-17).

69. MARCON conducted necessary additional surveys north of the RR impacted by the planned LWCs and began the redesign of the drainage plan (tr. 1/213-14, 4/22, 25-26, 52).

70. Minutes of the 23 September 2008 weekly meeting stated, *inter alia*, that the design had been approved with the exception of the drainage plan and that MARCON had provided documentation substantiating its rain delays and commensurate modification of the completion date (supp. R4, tab 503 at 8448-49).

71. As of 19 September 2008, MARCON had completed installation of the fence and its adjoining access road. On that date, Mr. Aldrich notified the contracting officer of the completion of the fence and further indicated that a modification was in process to extend the contract completion date by 18 weather days to 18 October 2008. Mr. Aldrich also noted that the remaining work involved “punch list” items. Modification No. R00101 granting the time extension for weather delays was issued on 2 October 2008. (Supp. R4, tab 498 at 8442, tab 506 at 8460, tab 508 at 8464, tab 509 at 8561-62)

72. As of the 30 September 2008 weekly meeting, Urban was working on the drainage redesign. However, appellant intended to proceed with some work associated with the LWCs, including demolition of LWC-related concrete previously placed on the fence access road, in anticipation of Urban’s redesign changes and associated regrading/excavation and filling in the ditch between the fence access road and BPR. (Supp. R4, tab 508 at 8466, tab 512 at 8570, tab 522 at 8745; tr. 1/219-20)

Project Completion and Acceptance

73. Urban completed its final drainage redesign on 13 October 2013 reflecting LWCs extending north of the RR as set forth in MARCON’s TP. Two of the LWCs in the plan were designed to deposit water exclusively onto private land. (Supp. R4, tab 515 at 8579; tr. 3/64, 7/303)

74. The 100% complete drawings submittal and design analysis were dated 17 October 2008 and approved on 10 November 2008 (supp. R4, tab 518 at 8736-38, tab 529 at 8891-94, 8897, 8899; tr. 2/222-28).

75. The government “accepted” the project on 18 October 2008. However, appellant continued to place concrete and construct the LWCs, conduct associated excavation/regrading operations and restore the BPR as necessary, and complete “Punch List” work through 22 November 2008. Much of this extensive, out-of-sequence, post- “acceptance” work was performed outside the RR on private property. (Supp. R4, tab 521 at 8780-97, 8809-24, tab 522 at 8827, tab 530 at 8907, 8912, 8917-20, 8923, 8926, 8930, 8936, 8944-58, 8961; tr. 1/221-22)

Expert Analyses⁷ Claim and Final Decision

76. Mr. Ivan R. Fox testified as an expert for appellant. Mr. Fox graduated from San Diego State University in 1981 with a Bachelor of Science in Civil Engineering. Mr. Fox is a Professional Engineer and the Managing Principal Engineer at San Dieguito Engineering, Inc. (SDE), where he is responsible, *inter alia*, for civil engineering design, hydrology and hydraulics, and storm water management. He has extensive construction/engineering experience acquired over 30 years regarding drainage issues. (Ex. G-47; tr. 4/57-59)

77. Mr. Kenneth W. Blair testified as an expert for the government. Mr. Blair earned Bachelor of Science (1969) and Master of Science (1971) degrees in Civil Engineering from Rutgers University. He is also a licensed Professional Engineer and has extensive experience in a wide variety of construction/engineering projects and construction management, including structural engineering. He is currently a principal at K.W. Blair Consulting, LLC, and provides consulting services on a wide variety of matters. (Ex. G-42 at 4, 23-24)

78. In addition to the fact that Urban’s 12 September 2008 drainage design was disapproved for failure to stay within the RR, Mr. Fox testified that the Urban design was incomplete with respect to flow volumes and would not have complied with the 100-year flood requirement in any event. We find his testimony persuasive and confirms other evidence that the 12 September design would not have complied. Satisfying the 100-year requirement would have necessitated encroaching to a much more considerable extent on private land north of the RR than shown in the Urban design. (Tr. 1/194-95, 199, 4/20-22, 141-42; supp. R4, tab 518 at 8734)

79. The RFP appx. II conceptual design consisted of the existing 60-inch CMP shown on the west end of the site, two new 24-inch CMPs that were to be installed at

⁷ Certain citations in our findings above also reference and rely on expert analyses by Mr. Fox and Mr. Blair for support.

the west end by MARCON and the two existing 10-foot CMPs for water to exit on the far eastern end after being channeled west to east down the one mile concrete channel. Both Mr. Fox and Mr. Blair agreed that the RFP appx. II drainage concept as a whole could only have handled a maximum of 2000 cfs. flows, i.e., about 50% of the 4,000 cfs 100-year flood flows, assuming that the existing CMPs were fully functional and not too elevated above flow lines to drain the water. (Tr. 3/30, 45-46, 96-97, 4/64-67, 79-83, 89-93, 116-17, 159, 183, 7/217-23, 280)

80. Both appellant's and the government's expert also agreed that the RFP's 100-year flood requirement could not be met without performing additional drainage work extending north of the RR and outside the project limits onto both public and private land (tr. 4/92-93, 112-13, 7/220-23, 282-84).

81. Based on Mr. Fox's persuasive testimony, we find that MARCON's TP drainage conceptual plan, channeling storm water through LWCs spaced along and adapted to the one mile project site and extending north of the RR and BPR, was a reasonable approach and design solution that would satisfy the 100-year flood requirement and satisfied that requirement as refined and built (tr. 4/94-98, 163-64, 7/309-13, 315-16).

82. Government requirements to confine the drainage design to the RR prior to 16 September 2008 caused appellant to incur additional costs, *inter alia*, related to: inefficient, out-of-sequence performance of the drainage work both before and after the "acceptance" of the work through 22 November 2008; additional costs associated with redesigning the work in attempts to comply with the RR requirement as well as after elimination of that requirement after 16 September 2008; additional surveying, excavation/grading, labor and materials costs. (Tr. 1/139-40, 177-79, 203, 236-39, 3/137-38, 196, 4/164-70, 219-20, 7/318; supp. R4, tab 511 at 8568)⁸

83. On 23 March 2009, appellant filed a certified claim in the amount of \$1,993,316 with the contracting officer (R4, tab 6 at 139). As the litigation has evolved, three sub-claims included within the overall claim were identified for resolution, i.e., the drainage claim described above, and the two sub-claims discussed below: the 10-foot east end CMP removal claim and the fence foundation claim (*id.* at 139-53).

84. The claim was denied by final decision dated 6 October 2010 (R4, tab 2 at 16). Appellant timely appealed the final decision on 27 December 2010 (R4, tab 1).

⁸ These costs among others shall be considered in pricing the equitable adjustment due appellant on remand in accordance with our decision below.

The 10-Foot East End CMP Removal Claim

85. During the pre-proposal site visit, appellant observed the existing 10-foot corrugated metal pipes (CMPs or culverts) at the east end of the site under the BPR. The CMPs as noted above under the RFP's appx. II design were intended to transport water under the BPR and off the site at the end of the RFP design's west-to-east concrete channel. At the time of the site visit, there was no exposed concrete foundation or headwall encasing the culverts. Appellant's Mr. Felix W. Lewis who was present during the site visit considered that if the CMP were encased in concrete, it would be abnormal not to see visible evidence of a concrete headwall. (Ex. G-51 at 151-53, ex. A-8-4 at 85; tr. 1/105, 6/119)

86. The RFP's conceptual drainage design with the west-east concrete drainage ditch did not contemplate removal of the 10-foot wide CMPs passing under the BPR. The inlet end and roughly 50% of their approximate 40-foot length were within the RR and the remaining length and outlet end extended beyond the RR onto private property. However, MARCON's TP drainage plan included removing the east end culverts and replacing them with the LWC's. In estimating the culvert removal work, appellant assumed that the CMPs were not partially encased in a concrete foundation. (Supp. R4, tab 353 at 7336-37; tr. 1/10-15, 2/49, 59, 6/177-78)

87. As noted above (finding 49), on 11 July 2008, RFI-0008 requested approval to remove the two 10-foot east end culverts (requiring work north of the RR) because they were not properly draining the site, were causing water to back-up, and were contributing to work site flooding (supp. R4, tab 399 at 7636).

88. MARCON began removing the east end culverts on 23 August 2008 to allow the flows to exit the site. When appellant began to excavate and remove the CMPs, it discovered that there was a concrete foundation under the CMPs with dirt above the culverts between the CMPs and the BPR. (Supp. R4, tab 464 at 8133; tr. 6/121-22)

89. Removal of the CMPs occurred from approximately 23 August through 2 September 2008. On 3 September 2008, appellant brought a concrete breaker to the site and continued to break up and haul off the concrete until mid-September 2008. (Tr. 1/189-90; supp. R4, tab 509 at 8472-522; R4, tab 6 at 2793)

90. On 9 September 2008, appellant received a response to its RFI-0008 submitted to the government on 11 July 2008 (finding 87). The response stated that MARCON needed to submit an acceptable drainage design but neither expressly authorized nor refused to authorize the removal of the culverts (tr.1/165-66). The record does not contain any contemporaneous government objection to MARCON's performance of the culvert demolition/removal work during the 23 August to mid-September 2008 period.

91. The fact that the BPR ran over the culvert would not have been an indication “one way or the other” whether the CMP had a concrete foundation (tr. 6/121-22).

92. However, we find based upon the testimony of Mr. Blair and Mr. Aldrich that the presence of a concrete foundation/partial easement supporting these very large corrugated metal pipes was not unusual and should have been anticipated by appellant. Moreover, given the extremely high flow capacity (800 cfs.) of each pipe, concrete should reasonably have been anticipated to prevent erosion and ensure the stability of the pipes. (Tr. 6/119, 7/112-16; ex. G-42 at 15)

The Fence Foundation Claim

93. Section 01 00 50, “TASK ORDER REQUIREMENTS,” paragraph 1.10, “FENCE DESIGN AND CONSTRUCTION,” subparagraph 1.10.1. “General” stated:

Standard Fence Details provided in Appendix III have been developed so [as] to meet Border Patrol operational needs. The Design/Build Contractor shall provide all design necessary, as out-lined in this RFP, so [as] to be able to site adapt the Standard Fence Details and finalize the Fence design and construction for Fence F-1. The following design criteria provide the Standard Fence Details to be used along with other design criteria.

(Supp. R4, tab 334 at 7093, 7098)

94. Section 01 00 50, “TASK ORDER REQUIREMENTS,” paragraph 1.5 “DESIGN REQUIREMENTS AND PROVISIONS,” states at subparagraph 1.5.4. and 1.5.7., in part:

1.5.4. It shall be the responsibility of the Design/Build Contractor to provide final design for the fence along with all related site and foundation design. From this point forward, the term ‘fence design’ shall include all design required for the fence, all its components and fence foundation. All remaining design and construction required of the Design/Build Contractor to complete the construction of the fence shall be in accordance with the criteria contained herein using industry standard materials and efficient practices.

....

1.5.7. This RFP and its referenced documents define the necessary criteria to plan and design the fence project. The Standard Fence Details (Appendix III) were developed by USACE, Fort Worth District, and a contracted A/E. These details shall be considered typical construction. The Design/Build Contractor shall fully design and construct this fence project and all its components using the Standard Fence Details along with all other design criteria and specifications set forth within this RFP. Deviations from the criteria will not be allowed unless prior approval is obtained from the Contracting Officer's Representative....

(R4, tab 334 at 7093-94)

95. Part of appellant's site adaption responsibilities involved fitting the fence to the contours of the land and allowing for the passage of water (tr. 1/114). The RFP fence design was one of several fence baseline designs developed by Baker that were intended to best suit the terrain where the fence would be installed over its entire 250 mile length (tr. 5/89-92).

96. Under section 32 31 00.00 00, "FENCING" paragraph 3.4 "FENCE SYSTEM – BOLLARD, COLUMN, POST AND BEAM AND PANEL INSTALLATION," described some fence foundation requirements:

The fence system shall be installed as shown to the lines and grades indicated.... If/as shown, the ground surface irregularities along the fence line shall be eliminated to the extent necessary to maintain a 2 inch clearance between the bottom of the fence and finish grade. Structural steel erection shall conform to Section 05 12 00. Except where solid rock is encountered, bollards, columns and posts shall be set in concrete in soil, or grouted into continuous concrete wall, or set in concrete barrier in tubular steel casing to the depth indicated and as shown on the drawings.... Bollards, columns and posts set in concrete in soil shall be set in trenches / holes not less than the dimensions required by sign and shown on the drawings....

(R4, tab 7 at 897, 901)

97. Section 01 00 50, "TASK ORDER REQUIREMENTS," paragraph 1.4.3. stated, "Drawings, details, notes and criteria provided in this Request For Proposal package shall be used by the Design/Build Contractor as part of the development of the final fence design and site design and construction documents" (supp. R4, tab 334 at 7093).

98. Section 01 00 50, "TASK ORDER REQUIREMENTS," paragraph 1.10 "FENCE DESIGN AND CONSTRUCTION," in subparagraph 1.10.2. "FENCE DESIGN CRITERIA" stated in part:

- i. Standard fence detail PV-1 and all applicable notes and specifications located in Appendix III of this RFP shall be carried forward to final design of the fence constructions.
- ii. All material and general requirements outlined in the details and specifications shall be maintained. Any deviation shall require written acceptance for the Contracting Officer.
- ii. [sic] Vehicular impact shall be applied to the fence design as a static 10-kip load per AASHTO 17th Edition, Chapter 2.7.1.
- iii. Vehicular impact shall be combined with all other applicable loads, such as but not limited to dead load, soil pressure, wind load, hydrostatic pressure and seismic forces for development of the critical load combination for final fence design. Loading and load combinations shall be developed as specified in the International Building Code (latest edition).
- iv. Minimum compressive concrete strength for foundations shall be 3,000 PSI.

....

The Design/Build Contractor shall provide construction plans, details, and specifications along with calculations and design analysis, per requirements outlined by this RFP, that clearly demonstrate that the fence design and site design address the criteria stated above.

(Supp. R4, tab 334 at 7093, 7098-99)

99. RFP appx. III set forth a standard fence detail for the type of fence (PV-1) (hereinafter the appx. III fence detail) specified for this project. With respect to site

adaptation, note 2 on the detail told offerors to refer to the RFP design criteria “FOR ADDITIONAL INFORMATION” and note 1 stated, “FOUNDATION DETAILS SHOWN REPRESENT MINIMAL DIMENSIONAL REQUIREMENTS AND MAY NEED TO BE INCREASED BASED ON FINAL DESIGN.” (Supp. R4, tab 329 at 7063; tr. 5/140)

100. Similarly, note 3 of the appx. III fence detail provided: “THIS DRAWING PROVIDES GENERAL DESIGN AND CONSTRUCTION DETAILS. FINAL PLANS SHALL SHOW SPECIAL NOTES AND DETAILS WHERE NECESSARY FOR CONDITIONS OTHER THAN THOSE INDICATED HEREIN.” (Supp. R4, tab 329 at 7063; tr. 5/140)

101. The appx. III fence detail showed a foundation concrete width/thickness of one foot, four inches “min[imum]” and the below ground portion of the fence (to a depth of 3 feet (minimum 2 feet) installed in the concrete foundation between “W4 x W4” wire mesh on the north and south sides of the fence with the mesh extending down the full height of the approximately six feet concrete foundation. (Supp. R4, tab 329 at 7063)

102. MARCON considered that the fence had been fully tested and was capable of meeting the extensive criteria set forth above in the RFP. In preparing its proposal, MARCON assumed that it could use the appx. III fence detail without extensive rebar/strengthening. In addition to the wire mesh and to account for actual soils and soil pressures encountered over the one-mile site, MARCON added four #5 rebar (5/8-inch thick) horizontal to the length of the fence. (Tr. 1/43, 111, 113-14, 116-20, 125-26, 232-33, 2/56, 3/68-75, 85-88, 91-92; supp. R4, tab 353 at 7336-37, 7340)

103. Structural calculations for the fence and the fence foundations were submitted on 4 August, 14 August and 28 August 2008 (supp. R4, tabs 420, 445, 460). On 28 August 2008, appellant submitted revised details and final structural calculations (supp. R4, tab 460 at 8062). As revised, the structural design called for the concrete trench to be 18 inches wide with more rebar than originally incorporated in its proposal (*id.*).

104. The Corps determined that the fence foundation required that the concrete trench be 20 to 22 inches wide to insure proper placement of the mesh and added rebar. On 4 September 2008, the Corps agreed to increase the size of the trench to that extent. To match the size of its excavator bucket, the concrete trench was 24 inches wide as actually placed by MARCON. (Ex. G-70 at 135; tr. 1/229-32, 4/54-55)

105. MARCON’s final design included more reinforcement and concrete than included in its proposal. There is no dispute that the additional rebar and concrete

were required to satisfy all of the above contractual criteria. (Tr. 1/232-33, 3/80, 7/242)

106. MARCON claimed that it is entitled to compensation for the additional reinforced concrete required to place the fence foundation (tr. 1/237).

DECISION

This appeal requires consideration and resolution of three claims: the drainage claim; the CMP claim, and the fence foundation claim.

I. The Drainage Claim

The parties have extensively briefed numerous issues associated with the drainage claim, some relevant and some less so. We have considered but need not address them all. This portion of the appeal must be sustained on either of two grounds.

First, appellant's technical proposal, including its conceptual drainage plan, was incorporated into the contract and effectively relaxed the RR restriction to the extent necessary to implement appellant's proposed drainage solution. Subsequent enforcement of the RR restriction by the government during performance prior to 16 September 2008 changed the parties' agreement and entitled appellant to an equitable adjustment.

Second, any variant of the government's drainage concept set forth in the RFP (incorporating, *inter alia*, CMPs and a west-east drainage channel) could not satisfy the 100-year flood design parameter without relaxation of the RR constraint. Accordingly, appellant's attempts to develop drainage solutions based on the government west-east channel while satisfying the 100-year flood requirement and confining the work to the RR entitle it to an equitable adjustment compensating it for its efforts to overcome the defective specifications.

In essence, the specifications' RR constraint was modified and relaxed by MARCON's accepted TP. If the original RFP RR constraint is considered not to have been thus relaxed, the 100-year flood design requirement nevertheless was impossible to meet. For purposes of interpreting the contract, the government maintains that the RR constraint was a strictly enforceable requirement. For purposes of maintaining that the specifications were possible of performance and not defective, the government contends that the RR constraint was never strictly enforced during performance. The government is legally incorrect regarding the proper interpretation of the contract and misstates the facts with respect to its enforcement of the RR constraint.

1. The Accepted TP Effectively Relaxed the RR Restriction as a Constraint on the Drainage Design

The TP unambiguously included a design narrative, details, and a plan view that indicated MARCON would work north of and outside the RR. The first few sentences of the design narrative clearly informed the government of appellant's intended drainage plans. The TP was evaluated, implicitly determined to be technically acceptable, and became part of the contract. Whatever the reason for the acceptance of appellant's design concept, it materially changed or relaxed any inconsistent specification requirements based on the original design concept, as well as compliance with the RR.

Appellant considers that government technical evaluation and the acceptance of MARCON's proposal reasonably implies that the government accepted appellant's drainage plan. Appellant argues that there were already minor relaxations of the RR restriction reflected in the RFP drawings with respect to work associated with two small west end existing CMPs requiring encroachment north of the RR. In this regard, MARCON emphasizes that its proposed LWCs extended only 8 feet into the RR. In addition, appellant notes the government answer to the pre-proposal question (incorporated into the contract) permitting the lowering the BPR for drainage purposes reasonably implied that some work could occur outside the RR limits. Moreover, MARCON argues that surface drainage of the water approximating its normal flows along the perimeter of the site was the plan preferred by adjacent landowners north of the RR as well as the end-user agency the Border Patrol. This preference was conveyed by the Border Patrol agent conducting the site visit. In fact, a Border Patrol representative was one of the members of SSEB.

Moreover, according to appellant, given the limited extent to which MARCON's design indicated drainage work outside the RR (extending approx. 8 feet to its north) and the acceptance of that design, the parties could be viewed to have jointly interpreted the TP to be compliant with the contract, or at least a minor waivable deviation from strict compliance with the RR restriction. In other words, appellant considers that such a joint interpretation of compliance at the time of the technical evaluation prior to the advent of the dispute eliminates the need to resolve the issue through resort to the Order of Precedence clause.

We do not base our decision on the reasonableness of appellant's interpretation or its alleged "acceptance" by the government. The evaluators failed to give appellant's drainage design and proposal due consideration and were negligent. Even the most rudimentary review of the RFP requirements would have disclosed the RR constraint and the 100-year flood design parameter. Moreover, even the most cursory perusal of the TP reveals that the TP's proposed drainage plan involved work outside the RR and the absence of the west-east channel central to the RFP's drainage concept. Despite its obviousness, the sole evaluator to testify basically admitted that there was

no meaningful discussion of the RR issue by the technical evaluators. At least in his view, the contractor had the responsibility to design the project, apparently rendering meaningless any duty on the evaluator's part to analyze the technical proposal's drainage design for technical acceptability as required by numerous solicitation provisions. He failed to consider that the RFP imposed constraints and parameters that appellant's design relaxed. Had the evaluators properly performed their functions, the contractor's intent would have been obvious and the matter would have been discussed and resolved and/or MARCON's proposal would have been determined to be technically unacceptable. Nor did the government perform a price realism analysis despite the fact that appellant's proposal was only approximately 50% of the government estimate for the work. In short, the government: failed to adequately evaluate appellant's proposal, failed to conduct discussions or amend the solicitation to reflect relaxation of the RR constraint and reopen the competition, and/or declined to cancel/terminate the contract once the conflict became clearly apparent no later than the pre-construction conference and before commencement of the work. We need not discuss in detail theoretical legal consequences flowing from government acceptance of appellant's nonconforming proposal. The parties have not addressed them in their briefs even though requested by the Board. Moreover, in this case involving a completed contract, possible remedies such as terminating the contract for convenience are impracticable. Instead, assuming that there was any ambiguity following the government's acceptance of the TP, we consider that the conflict between the specification's RR constraint and appellant's proposed drainage plan may be resolved by applying the governing Order of Precedence clause in the context of this post-completion claim and appeal.

The government attempts to circumvent the consequences of incorporating appellant's TP drainage solution and its relaxation of the RR by resort to application of what it considers to be the appropriate contractual Order of Precedence clause.

Order of Precedence clauses address potential conflicts and inconsistencies among the various components of the contract. Both parties recognize that appellant's technical proposal was incorporated into the contract. The parties dispute which order of precedence clause is applicable. They further dispute the appropriate hierarchical "tier" in which the proposal and/or its constituent design elements should be placed for purposes of applying the clauses in this case.

There were two Order of Precedence clauses set forth in the RFP and contract. Under FAR 52.215-8 (Clause I) set forth in Specification § 00800 "SPECIAL CONTRACT REQUIREMENTS" (finding 8), there is no dispute that appellant's TP fell within the ambit of ¶ (d) thus taking precedence over possibly conflicting requirements in the ¶ (e) "specifications," including the RR restriction in those specifications.

However, the government contends that the second clause SCR.I DESIGN-BUILD CONTRACT ORDER OF PRECEDENCE-AUG 1997 (finding 9) (Clause II) controls. According to the government, the drainage plan in appellant's TP fell under ¶ b.(3) of that clause which was lower in precedence than the provisions of the solicitation in ¶ b.(2). Accordingly, the government argues that, since the RFP specifications at § 01 00 50, ¶ 1.3 set forth the RR restriction, that contract specification was higher in order of precedence than MARCON's TP.

The government order-of-precedence-based arguments are without merit. First, regardless of how "order of precedence" tiers established in these clauses should be applied in resolving a hypothetical conflict between the original design concept and RR restriction set forth in the RFP, that conceptual drainage design and the RR restriction were modified by appellant's plain and unambiguous technical proposal which the government accepted. The TP drainage plan was not a subtle, latent, nuanced conflict that understandably remained undetected in the proposal evaluation process. The "conflict" here was a patent, obvious change to the RFP's technical approach and overall drainage concept. Instead of the RFP's contemplated west/east concrete ditch concept that did not intrude beyond the RR and project site, the contractor proposed a south-north regrading approach that sheeted water outside the RR collecting and transporting the water through LWCs across lowered sections of the BPR onto public and private land adjoining the site. There was no conflict between the technical proposal and the specifications, as thus changed and relaxed. Viewed from the standpoint of contract formation, the offer of a differing drainage design was accepted by the government's award of the contract. The government thereafter could not insist on compliance with original specifications.

Second, assuming they are relevant to resolving this dispute, the question of which of the two Order of Precedence clauses takes precedence over the other is simply and best determined in this case by straightforward contract interpretation principles. Here, the ambiguity is resolved against the government drafter under the *contra proferentum* doctrine. Applying that principle, Clause I prevails over Clause II and the TP controls over inconsistent specifications, including the unrelaxed RR restriction.⁹ Accordingly and given the primacy of the TP, the contract permitted

⁹ Even assuming that interpretation of the contract requires resort to the Order of Precedence clause (Clause II) advocated by the government, in the unique circumstances and context of this case, appellant's drainage plan constituted a "betterment" because it replaced an impossible design (discussed further below) with one which was capable of achievement. There is perhaps no more significant "betterment" than one which replaces an impossible design with one that is possible of performance. Appellant's conceptual TP drainage plan also constituted a "betterment" in the sense that appellant's basic drainage solution was the plan preferred by adjacent landowners north of the RR as well as the

limited relaxation of the RR constraint as proposed in appellant's TP drainage plan. To the extent that the government insisted on full compliance with the RR constraint during performance, it constructively changed the contract.

2. The Original RFP Specification Requirement was Defective

We further conclude that it was impossible for any design to satisfy both the RR restriction and the 100-year flood requirement. The government's west-east drainage concept solution could not contain a 100-year flood and also comply with the RR constraint. The new and existing CMP in the government's west-east design were grossly inadequate and would have been capable of handling only approximately 50% of the 100-year flows. There is no persuasive evidence demonstrating that any variant of, or adjustments to, the original government design concept could have possibly worked. The only feasible and practical solution was some variant of appellant's TP plan to use LWCs that extended north of the RR. Moreover, appellant's plan was preferable from the perspective of the surrounding landowners and end-user Border Patrol.

The government contends that appellant never attempted to fully execute the government's conceptual design and has, therefore, failed to prove that performance was impossible without relaxation of the RR constraint. We agree that the contractor bears the burden of proving that performance was impossible absent relaxation of the government-imposed RR design constraint. However, it is not required to wastefully and futilely attempt to perform the impossible and fail in order to sustain its burden of proof. Whether the elements of impossibility are sufficiently established involves weighing the adequacy, quality and persuasiveness of the proof in each case. In many instances it is difficult to prove impossibility unless it is established through failed performance. That is not the case on this record. Here the evidence is clear and essentially unrefuted. First, this was a design-build contract. In that context, it is not surprising that MARCON determined satisfying the RR constraint was impossible at the design stage prior to executing a drainage plan. None of the cases cited by the government involved analogous design-build contract issues. Moreover, experts from both parties agreed that no drainage design could comply with the RR requirement and also handle 100-year flood flows. There is no evidence theorizing how appellant could have performed the work while complying with all RFP design constraints and parameters.

Moreover, significant costs were incurred as a consequence of trying to comply with the RR constraint. Appellant unsuccessfully developed various designs in an attempt to satisfy that constraint. Flow calculations associated with these Young and Urban drainage design iterations and submissions demonstrated the futility of

end-user agency the Border Patrol. LWCs were also the "preferred alternative" method of handling the water in the environmental specifications.

attempting to perform. MARCON incurred additional design/redesign costs charged by Urban as well as Young in attempting to develop a design that would adequately drain the site while complying with the RR. It was only after repeated failures that the government relented and authorized appellant to seek requisite approvals to perform the work on the adjacent, privately-owned property north of the RR. Impossibility was obvious at the drainage design stage. To that extent, appellant did attempt to perform and failed.

In addition, the parties extensively communicated concerning the issue. In fact the government argues inconsistently that it actually gave appellant permission to proceed with a variant of its proposed drainage plan by virtue of its response to RFI 3. This misrepresents the scope of RFI 3 as well as the government's contemporaneous actions as discussed below.

Government permission was not granted until the 16 September 2008 meeting. The record is replete with adverse Baker comments on appellant's drainage design submissions prior to that date. However, the salient point here is that the matter was addressed and resolved to the benefit of all concerned before appellant improvidently incurred substantially greater costs chargeable to the government. Appellant mitigated its damages.

The government also repeatedly contends that appellant was not required to follow the Appendix II drawings contained in the RFP and MARCON's Technical Proposal did not follow these drawings. This contention is patently inconsistent with its conduct during performance. On the one hand, the post-performance government position is that appellant was not required to use the drainage concepts shown in the drawings because the drainage design was appellant's responsibility as a design-build contractor. On the other hand, during performance, the government inconsistently insisted that MARCON could not implement its own design because it violated certain select parameters and the RR constraint reflected in the solicitation specifications.

The government also incorrectly maintains that the Urban 12 September 2008 design could have complied with the 100-year flood requirement. In fact on this record, any variant of Baker's Appendix II west-east ditch design concept would not have satisfied that performance requirement without encroaching substantially on both government and private property north of the RR. The government implies that, once the RR constraint was relaxed on 16 September 2008, appellant should have incurred the costs of constructing the concrete channel in accordance with Urban's 12 September 2008 design and merely extended the LWCs in that design so as to encroach more extensively into areas north of the RR. Of course, any such implied argument would violate the essential thrust of the government's briefs that appellant as a design-build contractor was not required to comply with the Appendix II conceptual design. However, here as a practical matter and for the reasons emphasized above, appellant's accepted proposal eliminated the concrete west-east channel and relaxed

the RR requirement to the extent needed to construct LWC's that could adequately satisfy the 100-year flow requirements. The fact that appellant preferred and opted for a variant of the less expensive TP drainage solution rather than install the RFP's one mile long concrete west-to-east channel (with modified LWCs to handle 100-year flows) is hardly surprising. Once the RR was relaxed, the *raison d'etre* for the west-east channel disappeared. There was no reason to channel the water contrary to its natural flow pattern. There was no longer any reason to find other solutions, much less one that retained and supplemented the costly Appendix II west-to-east concrete channel. Appellant's basic TP drainage design satisfied the 100 year flood requirement as tailored and adapted to the site. Moreover, the government made no attempt contemporaneously to insist on the west-to-east concrete channel once the RR constraint was relaxed or to construe Appendix II to impose such a continuing design requirement. MARCON's chosen solution further mitigated its damages.

The government also inconsistently contends that appellant was not required strictly to comply with the RR. This contention is refuted by the evidence. Appellant's attempts to implement its drainage design relying on the use of LWCs extending beyond the RR were repeatedly rejected by the government.

The government's primary basis for its position that it never strictly enforced the RR constraint is RFI 3. First, the government response to RFI 3 did not represent a change in position. Its contemporaneous and subsequent design reviews of the drainage plan continued to reject appellant's drainage design submittals for violating the RR constraint. In addition, RFI 3 is not construable as permission for appellant to work outside the RR, particularly on private lands as required for MARCON's design to be effective. To the extent that RFI 3 may be interpreted as a partial grant of permission to encroach on public lands north of the RR, approval was conditioned on obtaining the requisite permits. That condition was imposed even though the government had the permits in hand unbeknownst to appellant.

The government argues and the parties have extensively briefed whether the specifications fall into the category of "design" or "performance" requirements. The government considers that appellant failed to satisfy "performance" requirements, emphasizing the design-build character of the contract and arguing that it was incumbent on appellant to adequately provide for site drainage.

It is unnecessary to elaborate extensively on the nuanced distinctions separating "performance" versus "design" specifications. The design constraints and parameters in dispute here were imposed by the government not separately developed by appellant as designer. Until the RR constraint was relaxed by the government, the contractor's design was required to satisfy it. No discretion was involved and it is that restriction that could not be met. Although the requirement to design for a 100-year flood alone might properly be labeled a "performance" specification, the RR constraint represented an express limitation on appellant's design options and proved impossible

to satisfy. Moreover, the lack of “design” discretion was evidenced and emphasized contemporaneously by the government’s repeated insistence on compliance with the RR constraint.

The drainage claim portion of the appeal is sustained.

II. Defective Fence Foundation Design and CMP Claims

Both of these claims are without merit.

With regard to the fence foundation, the contract, read as a whole and giving meaning to all its provisions, clearly provided for on-site adjustment and tailoring the fence foundation to the conditions encountered. The myopic focus of appellant’s interpretation on the foundation detail failed to sufficiently consider other pertinent provisions detailed in our findings that clearly emphasized the potential for adjustments necessitated by the site. Even the detail set forth cautionary notes reflecting that it depicted only “minimal dimensional requirements” that “may need to be increased.” Appellant’s interpretation essentially ignored or unreasonably discounted the importance of these warnings, as well as the requirements expressly set forth in the specification. There is no dispute that the additional rebar and concrete were required to satisfy all of the RFP drawing and specification criteria.

Equally unconvincing are appellant’s allegations that the concrete foundation it encountered during its removal of the east end culverts constituted a Type II differing site condition. Removal of these large CMPs was not required by the original specifications but was a feature of appellant’s planned TP drainage design. The foundation underneath the CMPs was not visible during the site investigation.¹⁰ Most fundamentally, establishing entitlement to recovery for a Type II differing site condition required that the contractor prove, *inter alia*, that the conditions encountered were of an “unusual” nature. *See, e.g., Kos Kam Inc., ASBCA No. 34037, 88-3 BCA ¶ 21,100 at 106,524.* Although appellant has offered the testimony of its owner and initial project superintendent that the encountering of the concrete foundation was unusual, we have found that the more persuasive evidence in the record is that offered by the government’s expert, Mr. Blair, as well as that of Mr. Aldrich. Based on that finding, we conclude that the presence of a concrete foundation/partial easement supporting these large (ten feet in diameter) corrugated metal pipes was not unusual and should have been anticipated by appellant. Given the extremely high flow capacity (800 cfs.) of each pipe, concrete should reasonably have been anticipated to

¹⁰ As a result of our conclusion that the concrete foundation was not unusual, we need not discuss other possible issues associated with the fact that the removal was not originally contemplated by the contract but instead was an element of appellant’s TP drainage plan.

prevent erosion and ensure the stability of the pipes. Accordingly, the basic prerequisite for a Type II differing site condition has not been established.

CONCLUSION

We conclude that MARCON is entitled to an equitable adjustment for the drainage claim. We remand to the parties for negotiation of that adjustment in accordance with our findings in this decision. To that extent, the appeal is sustained.

The appeal is otherwise denied. Neither the defective fence foundation design claim nor the CMP claim have merit.

Dated: 1 May 2015



ROBERT T. PEACOCK
Administrative Judge
Armed Services Board
of Contract Appeals

I concur



MARK N. STEMLER
Administrative Judge
Acting Chairman
Armed Services Board
of Contract Appeals

I concur



RICHARD SHACKLEFORD
Administrative Judge
Vice Chairman
Armed Services Board
of Contract Appeals

I certify that the foregoing is a true copy of the Opinion and Decision of the Armed Services Board of Contract Appeals in ASBCA No. 57471, Appeal of MARCON Engineering, Inc., rendered in conformance with the Board's Charter.

Dated:

JEFFREY D. GARDIN
Recorder, Armed Services
Board of Contract Appeals