

ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeal of -)
)
Trade West Construction, Inc.) ASBCA No. 61068
)
Under Contract No. W912PM-15-C-0024)

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OPINION BY ADMINISTRATIVE JUDGE STINSON

Appellant Trade West Construction, Inc., (Trade West or TWC), appeals a contracting officer's denial of its October 21, 2016, claim, in the amount of \$304,062, for shaping armor stone prior to placing it on top of an existing jetty. Trade West argues that the government wrongfully rejected the armor stone it wished to use, thereby forcing it to spend time and money shaping armor stone to make it acceptable to the government (R4, tab 3).¹ We have jurisdiction pursuant to the Contract Disputes Act of 1978, 41 U.S.C. §§ 7101-7109. We previously denied the parties' cross-motions for summary judgment, finding triable issues of fact which could not be resolved on summary judgment. *Trade West Construction, Inc.*, ASBCA No. 61068, 20-1 BCA ¶ 37,713 at 183,076 (*Trade West I*). The parties agreed to submit this appeal on the record, pursuant to Board Rule 11, for a decision on entitlement only. Each party submitted initial and responsive briefs. For the reasons set forth below, we deny the appeal.

FINDINGS OF FACT

1. On September 25, 2015, the United States Army Corps of Engineers (USACE), South Atlantic Division, Wilmington District (SAW) awarded Trade West Contract No. W912PM-15-C-0024 (the Contract), in the amount of \$3,294,362, for

¹ The government's initial Board Rule 4 file was submitted in paper form and included tabs marked 1 through 5.10. The government's joint supplemental Rule 4 file was submitted electronically and included tabs marked 006 through 090.

South Jetty repairs to the Masonboro Inlet located in New Hanover County, North Carolina (R4, tab 4.1 at 126, 132-133; Joint Statement of Stipulated Facts (JSSF) 1).² The Contract required placement of armor stone, each weighing from 14 to 22 tons, onto an existing jetty, insuring that the armor stone “form a compact mass and interlock with each other and the existing stones” (R4, tab 4.1 at 134, 298; JSSF 1).

Contract Specifications

2. The Contract included specifications for “Exterior Improvements,” Section 32 05 00.38, entitled “Stone.” Contained within that section was Part 1, “General,” Part 2, “Products,” and Part 3, “Execution.” (R4, tab 4.1 at 293; JSSF 2)

3. Part 1.1, entitled “Scope,” provided, “[t]he work under this section shall include all plant, labor, materials, work surface, and equipment required for the furnishing, transportation, storage, and placing of stone as shown on the drawings” (R4, tab 4.1 at 294; JSSF 3).

4. Part 2.1, entitled “Materials,” included Part 2.1.1, “Granite/Gneiss,” which provided, in part, “stone shall be furnished in random sizes ranging in weight as indicated in the subparagraph ‘Stone Size and Gradations’” (R4, tab 4.1 at 296).

5. Part 2.1.2, entitled “Armor Stone,” provided, in part:

Stone shall consist of fresh, sound, hard, dense, durable, crystalline igneous or metamorphic rock which shall be separated from bedrock by quarrying. The stone shall be of such quality that the individual stone integrity and permanence within the jetty is assured under all conditions to which it is subjected.

. . . .

The stone shall be free from open or incipient cracks, joints, seams, fissures and structural planes of weakness which might contribute to spalling or breakdown from; handling and placing, freeze-thaw cycles, wet-dry cycles, or from wave action. The stone shall be furnished in blocky and angular shapes. Flat stones, tabular stones, slabs, boulders and parts of boulders will be rejected. No stone will be

² The parties’ JSSF in large part mirrors the Statement of Facts set forth in our previous decision. *Trade West I* at 183,067-75.

permitted which has a longest dimension that is three times (3X) or greater, than its least dimension.

(R4, tab 4.1 at 296; JSSF 4)

6. Part 2.1.3, entitled “Stone Size and Gradations,” provided “[f]or the granite/granite gneiss armor stone, the specified weight range shall be 14.0 tons to 22.0 tons with 75% weighing more than 18.0 tons” (R4, tab 4.1 at 297; JSSF 5).

7. Part 2.1.4, entitled “Stone Sources,” provided:

The source(s) from which the Contractor proposes to obtain stone materials as required for these specifications shall be selected and identified to the Contracting Officer or his/her designated representative within 15 days of receipt of Notice to Proceed. This source(s) shall be inspected by a Corps of Engineers Geologist. The stone source(s) shall provide test results of ASTM D5312/D5312M and ASTM D5313/D5313M and records of successful use on similar projects. . . . The tests shall include; bulk specific gravity, saturated surface dry (SSD) unit weight, absorption (all three tests as per ASTM C127), abrasion, wetting and drying (ASTM D5313/D5313M), and freeze-thaw (ASTM D5312/D5312M). The results of the testing shall be submitted to the Contracting Officer or his/her designated representative for review and approval at least 30 days prior to being shipped to the construction site.

(R4, tab 4.1 at 297; JSSF 6)³

8. Part 2.1.5, entitled “Stone Not Meeting The Specifications,” provided, in part:

If, during the progress of the work, it is found that the stone being furnished and/or placed by the Contractor does not meet all the requirements of the specifications, the Contractor shall furnish other stone of a quality acceptable

³ ASTM (American Society for Testing and Materials), now known as ASTM International, is a “standards organization that develops and publishes voluntary consensus technical standards for a wide range of materials, products, systems, and services.” *Harry Pepper and Assoc., Inc.*, ASBCA No. 62038, *et al.*, 21-1 BCA ¶ 37,760 at 183,306 n.2.

to the Contracting Officer or his/her designated representative. Any stone rejected at the site of work as not meeting the requirements of these specifications for quality, condition, size, or otherwise, shall be removed from the site by and at the expense of the Contractor.

(R4, tab 4.1 at 297; JSSF 7)

9. Part 3.2, entitled “Placement of Stone,” included Part 3.2.1, “General,” which provided:

Care shall be taken to place the stone so that they will form a compact mass, and form as nearly as practicable a cross-section of the height, width, and slopes as shown on the contract drawings. All stones shall be carefully placed so as to form a compact mass and to minimize the voids between them. Special care shall be taken during placement of stone to avoid damaging the existing sheetpile wall.

(R4, tab 4.1 at 298; JSSF 8)

10. Part 3.2.4, entitled “Armor Stone Placement,” provided:

Armor stone shall be placed in a single layer to achieve the design cross sections and top elevation, as shown on the drawings. Begin placement of the stone at the toe of the placement limits and work upslope to reduce the risk of stone rolling and launching. Dropping of stones onto the structure is strictly prohibited. Each armor stone shall be lowered to rest before being released and shall be placed to the satisfaction of the Contracting Officer or his/her representative. All stones shall be carefully placed so as to minimize the size of voids between them. The armor stones of various sizes and shapes shall be distributed such that they form a compact mass and interlock with each other and the existing stones.

(R4, tab 4.1 at 298; JSSF 9)

11. Part 3.3, entitled “Quality Control,” included part 3.3.1, “General,” which provided:

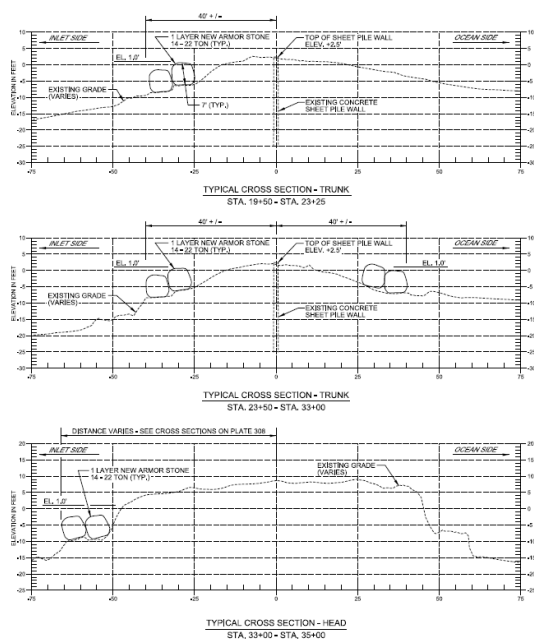
The Contractor shall establish and maintain quality control for the armor stone and all other operations in connection therewith to assure compliance with contract requirements. The Contractor shall inspect for compliance with contract requirement and record the inspection of all operations, including but not limited to the following:

- a. Armor stone complies with the specifications for quality and weight and is placed to the lines and grades shown in the drawings within allowable tolerances.
- b. All stone placed in a dense compact mass.

(R4, tab 4.1 at 298-99; JSSF 10)

12. Note 2 on Contract Drawing CN101 provided, “[t]he intent of the project is to provide one new layer of armor stone within the approximate armor stone placement limits area shown” (R4, tab 8 at 4; JSSF 11).

13. Contract Drawing CN301 included the following drawing/plates:



(R4, tab 8 at 5) Note 4 on Contract Drawing CN301 provided, in part:

Armor stone shall be placed to achieve the design cross sections and top elevation, as shown on plates CN301 thru CN308. Stone shall be placed in a single layer within the horizontal and vertical limits shown. No stone shall be placed so as to exceed the vertical tolerance of plus 2' above elevation 1.0' NAVD 8. Please note, the stones depicted on the typical cross sections, as well as the cross sections themselves, are merely general representations, and do not mandate the size of the stone to be utilized. They are only intended to be a general example of proper stone placement.

(R4, tab 8 at 5; JSSF at 12)

Notice to Proceed/Selection of Armor Stone from Fountain Quarry

14. Modification No. P00001 to the Contract issued the Notice to Proceed, effective November 24, 2015, and established a Contract completion date of May 22, 2016 (R4, tab 4.2 at 440-43; JSSF 15).

15. On November 24, 2015, Andy Leavitt, Trade West's Project Superintendent, requested a site meeting at the Martin Marietta Fountain Quarry (Fountain Quarry) with USACE geotechnical personnel to view armor stone proposed for use on the project (R4, tab 25).

16. On December 28, 2015, the government notified Trade West "that the rock submitted and inspected at the quarry is acceptable for use on the subject project" (R4, tab 27 at 1). Appellant proposed no supplier of armor stones other than Fountain Quarry, although appellant had communicated with other quarries about providing armor stone for the project (R4, tabs 9-13, 15-16, 18-20, 26; JSSF 16).

Appellant's Efforts to Locate Other Available Armor Stone Suppliers

17. By email dated February 10, 2016, Steven Potter, appellant's Quality Control Manager (R4, tab 72 at 2), provided to Rolando Serrano, Project Engineer, USACE SAW (R4, tab 84 at 3), a photograph of stone available from another site:



(R4, tabs 33, 33a1). Mr. Potter asked Mr. Serrano whether the government would be interested in using it “along the Jetty,” and stated, “[i]f there are any concerns with the shape of the stones we can break off sections of the edges to create a less blocky shape, but only if necessary” (R4, tab 33).⁴

18. On February 19, 2016, Mr. Serrano forwarded Mr. Potter’s email to others within the Wilmington District, and, via email dated February 22, was informed by James Hargrove, Civil Engineer, USACE SAW (R4, tab 84 at 5), that “[t]he stone shown in the photos are flat and tabular and would not comply with our spec requirements,” but that “[i]f the contractor is having trouble locating a quarry with suitable stone, can we offer recommendations” (R4, tab 35 at 1).

19. Appellant experienced a slow production rate at Fountain Quarry, and, by email dated February 24, 2016, Trade West requested an on-site meeting with the government to consider armor stone from a second source. Trade West stated it would deliver stone samples to its staging area for the government to review and was gathering test reports for review, which would be forwarded to the government “once they have been found to meet all the specifications of the contract.” (R4, tab 43; JSSF 18)

Stone from Salisbury Quarry

20. Trade West proposed Salisbury Quarry as an alternative source of armor stone. The first stone delivery from Salisbury Quarry to the project staging area arrived

⁴ The photograph attached to the email depicted blocks of stone similar to the unshaped stone appellant ultimately would offer from a new source, Salisbury Quarry (compare photo at R4, tabs 33a1, with photos at 44a1-44a4).

on February 24, 2016, with additional shipments between February 25 and February 29, 2016 (R4, tab 5.9).

21. By email dated February 24, 2016, to Jon Schave, ATS, Inc., Heavy Haul Customer Service, Mr. Leavitt described the stone from Salisbury Quarry, stating “[t]he rock is square so it sits flat” (R4, tab 40). Mr. Leavitt included as an attachment to the email, a photograph of a flatbed truck with a large rectangular-shaped block of stone with a flat face on the four sides pictured:



(R4, tab 40a)

22. The parties met at the project site on February 26, 2016, to discuss the use of stone from Salisbury Quarry. By email dated February 26, 2016, Jason Koenig, USACE SAW, provided Mitch Hall, Chief, Geotechnical and Dam Safety Section, USACE SAW (R4, tab 84 at 5), photographs taken at the meeting of “rock being proposed for a large portion of the project,” stating that “[a]side from it looking completely different, I expressed concerns over whether the rectangular blocks would interlock well with the existing rock and not be susceptible to sliding” (R4, tab 44). Mr. Leavitt acknowledged during the site visit that, prior to its delivery to the site, Trade West had not submitted to the government a request for approval of the stone from Salisbury Quarry (R4, tab 5.9). The four photographs attached to the email depict large, flat-sided, rectangular blocks of granite, some bearing the marking “SALISBURY PINK” (R4, tabs 44a1-44a4). Representative images are reproduced below:



(R4, tab 44a1)



(R4, tab 44a2)

23. In a February 29, 2016, email, Mr. Serrano expressed concerns to Mr. Potter arising from the February 26, 2016, meeting, stating “it was observed that a rather large quantity of rock (flat faced) from the Salisbury quarry had been delivered to your yard for which our representatives have strong concerns about. I strongly suggest that TWC not continue delivery of rock from an un-approved source.” (R4, tab 46; JSSF 19) Attached to Mr. Serrano’s email was a photograph taken on February 24, 2016, which also was an attachment to Mr. Koenig’s February 26th email (R4, tabs 44, 44a1, 46a).

Appellant Claims Stone from Salisbury Quarry Meets Contract Specifications

24. By Serial Letter TWC-0001, dated February 29, 2016, and addressed to Contracting Officer Charlene Figgins, USACE SAW (R4, tab 84 at 3), Mr. Potter,

sought “to clarify Trade West Construction’s interpretation of the contract specification pertaining to Armor Stone, and why we believe that the blocky and angular stone we are proposing to use meets the specification requirements as outlined in the contract” (R4, tab 47a at TWC004086; JSSF 20). As support, Mr. Potter cited Contract specifications relating to both “Materials” (Part 2.1) and “Placement” (Part 3.2):

Specification Section 32 05 00.38 STONE, paragraph 2.1.2 Armor Stone, states that “The stone shall be furnished in blocky and angular shapes.” After extensive digging into what defines a stone as “blocky and angular” we found several credible sources, all of which have similar definitions. You can see all of the definitions we uncovered attached to this letter. We find that “blocky” is best defined as “resembling a block in form,” and “angular” is best defined as “having one or more angles.” Additionally, the USGS interprets “angular” at the granular level as being the “opposite of round.” Further search into a definition where “blocky and angular” were used in conjunction with one another, typically turned up landscaping stones which closely resembled the blocky stones we are proposing to use, but on a much smaller scale.

Specification Section 32 05 00.38 STONE, paragraph 3.2.4 Armor Stone Placement, states that “The armor stones of various sizes and shapes shall be distributed such that they form a compact mass and interlock with each other and the existing stones.” I reference this segment of the specifications due to the verbiage pertaining to various size and shapes. The stone we are proposing to use consistently produces various sizes and shapes with no two stones holding the same dimensions, angles or shapes. On February 26, 2016, while the COE had representatives on-site, we measured several blocks and found that every sample produced its own unique dimensions.

(*Id.*) Mr. Potter’s letter also referenced a “mockup” presentation allegedly demonstrating the interlocking capability of proposed stone from Salisbury Quarry (*id.* at TWC004087). A copy of that document was provided to the government on March 3, 2016 (R4, tabs 55-55a; JSSF 20).

25. Mr. Potter’s letter included an attachment entitled “Key Definitions” (R4, tab 47a at TWC004094), as support for his statement that “the USGS [United States Geological Survey] interprets ‘angular’ at the granular level as being the ‘opposite of

round’” (R4, tab 47a at TWC004086). The attachment provided, in part, “[t]he following excerpt applies to the granular level, but still helps us in discovering the many definitions of angular.” Mr. Potter included an excerpt from an USGS website, which stated:

GRAIN SHAPE tells us about the mechanical weathering history when rocks first break apart, they are split into sharp, angular pieces. So most grains start out angular. Over time, they get worn smooth by wind, water, and other rocks. We classify grains based on their "Roundness." Rounded grains have very few sharp edges and comers. **The opposite of "Round" is "Angular."** The process of breaking rocks apart and smoothing them down is called mechanical weathering and usually happens when rocks are moved (transported) by forces like wind, water, glaciers, or in a landslide. Rounded rocks have been exposed to more mechanical weathering; they have traveled further, they have been around for longer, or existed in areas with more rubbing and abrasion.

(*Id.*) (bold typeface in original) The attachment also included the Merriam-Webster Dictionary definition of “angular,” as “having one or more angles” (R4, tab 47a at TWC004094, tab 85 at 82 (attach. to June 7, 2019, aff. of Mr. Leavitt).

26. More than 60 stones from Salisbury Quarry were delivered to, and stockpiled at, the contractor’s staging area prior to appellant’s submitting to the government information required by paragraph 2.1.4 of the specifications and prior to the government’s approval of stone from that quarry (R4, tab 5.3 at 493-94, tab 64 at 2, tab 69 at 5, tab 77 at TWC000456-57; JSSF 21).

27. In an email dated March 1, 2016, and entitled “Still working on the letter,” Mr. Potter informed Mr. Leavitt:

there is one part of the spec that does worry me a bit, and I may need your help when I get to it. It is paragraph 3.2.4 where is [sic] says "The armor stones of various sizes and shapes . . ." COE may try to focus on the "various shapes" verbiage and say that if all, or the majority of, the stone is rectangular/cube like in shape, then the shapes don't vary. We need to have a good response to that argument. I don't know if just saying that the dimensions of the stones vary will be sufficient (i.e. one stone has the dimension of

5'x6'x8' and another has the dimension of 6'x7'x11'). This does cover the various sizes, but not shapes.

(R4, tab 48)

Government Seeks Opinion from Dr. Jeffrey Melby Regarding Stone from Salisbury Quarry

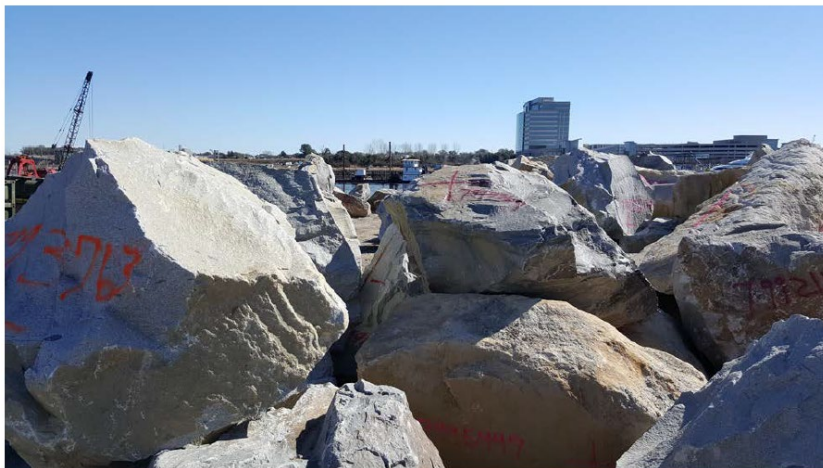
28. By email dated March 1, 2016, Dr. Greg Williams, Chief of Engineering, USACE SAW, contacted Dr. Jeffrey Melby, ERD-MS (Engineer Research and Development Center, Vicksburg, MS), a government “expert on armor stones,” regarding appellant’s request to utilize stone from Salisbury Quarry (R4, tab 49, tab 88 at 6).⁵ Dr. Williams stated that appellant soon would be providing “justification on why this stone meets the spec,” and he attached to his email a copy of the Contract stone specification, section 32 05 00.38 (R4, tab 49 at 1, tab 88 at 6). Dr. Williams also attached photographs depicting the types of stone in place at the South Jetty (one photograph), the stones supplied by appellant from Fountain Quarry (three photographs), the stones appellant requested to supply from Salisbury Quarry (two photographs, and an aerial Google Maps image of the South Jetty’s “current condition”) (R4, tab 49a1 at 1- 5). The photograph of the South Jetty was taken in June 2011, during a site visit for a previous rehabilitation contract, and depicted the South Jetty “to which we are adding one layer of armor stone” (R4, tab 49 at 1):

⁵ The government’s proposed finding of fact no. 10 quotes from the declaration of Dr. Williams, which indicates Dr. Melby is a “USACE expert on armor stones and patent holder for the CORE-LOC armor unit” (gov’t br. at 26). Appellant’s reply brief states in response to the government’s proposed finding of fact no. 10, that “Trade West does not agree with the opinions expressed by Mr. [sic] Williams,” but asserts no objection to Dr. William’s statement regarding Dr. Melby’s status, or his opinion. Appellant’s initial Rule 11 brief likewise makes no mention of Dr. Melby, or his opinion. Mr. Leavitt’s second affidavit, however, suggests that Dr. Melby’s opinion should be discounted because he was somehow “coached” by Dr. Williams (R4, tab 90 (June 8, 2021, aff. of Mr. Leavitt at 10, ¶ 24)).



(R4, tab 49a1 at 1) The stones in this photograph are of differing shapes, sizes, and angles, and do not resemble the rectangular or parallelepiped blocks of stone from Salisbury Quarry.

The three photographs of stone from Fountain Quarry, depicted the “initial batch of stones [the] contractor was receiving but . . . was worried about meeting the gradation requirement” (R4, tab 49a1 at 3). The following photograph is representative of the stones from Fountain Quarry:



(R4, tab 49a1 at 4) These stones more resemble the stones depicted in the June 2011 photograph and do not resemble the rectangular or parallelepiped blocks of stone from Salisbury Quarry.

The two photographs of stone from Salisbury Quarry depict “the latest batch of stones (blocks)” (R4, tab 49a1 at 5).⁶ The following photograph is representative of the stones from Salisbury Quarry:



(R4, tab 49a1 at 5)

29. Dr. William’s March 1, 2016, email to Dr. Melby set forth his opinion regarding whether stone from Salisbury Quarry met the Contract specifications, stating, “our spec allows us to reject this stone because spec Section 2.1.2 (p. 4) says, ‘Flat stones, tabular stones, slab, boulders and parts of boulders will be rejected,’” noting also that “spec Section 3.2.4 (p. 6) says, ‘The armor stones of various sizes and shapes shall be distributed such that they form a compact mass and interlock with each other and the existing stones’” (R4, tab 49 at 1). Dr. Williams asked Dr. Melby, “[w]hat is your opinion of the stability of these types of stones on a structure with what I would call ‘normal’ quarry stone?” (*id.*). Dr. Williams noted that “[t]his contract is a 2nd contract to fill in the template that wasn’t filled in from an earlier repair contract (a whole nother [sic] stone contracting fiasco), so only a single layer is needed,” and stated “[a]ny advice or recommendations you have would be helpful” (*id.*).

30. By email dated March 1, 2016, Dr. Melby responded to Dr. Williams, stating, “I agree. Cubic stones do not interlock well. Out of spec. Sorry for the terse response but I am at sea this week” (R4, tab 50 at 1).

Appellant’s Mockup Comparing Different Types of Armor Stone

31. Appellant prepared a document dated March 1, 2016, entitled “**Mockup of Jetty Conditions** Location: 1408 Point Harbor Road (Staging Area)” (R4, tab 55a) (bold typeface in original). The document included sections entitled “**Mockup of**

⁶ These photographs are different images of the same stones from Salisbury Quarry that appear in the attachments to Mr. Koenig’s February 26, 2016, email (R4, tabs 44a1-44a4) (*see* finding 22).

Jagged Stones Example 1,” “Mockup of Blocky and Angular Stones Example 1,” and **“Mockup of Blocky and Angular Stones Example 2”** (*id.* at TWC004316, TWC004322, TWC004326) (bold typeface in original).

32. The **“Mockup of Jagged Stones Example 1,”** included a photograph depicting placement of one stone on top of two other stones (*id.* at TWC004317), which, according to Mr. Leavitt, were “stones from the Salisbury Quarry that the Corps had previously approved” (R4, tab 85 at 5, June 7, 2019, *aff.* of Mr. Leavitt):



(R4, tab 55a at TWC004317)

Also included were four photographs of those same three stones, purporting to depict the alleged surface area contact between the stones (R4, tab 55a at TWC004318- 21). Based upon this one example depicting a “jagged stone” placed on top of two other stones, the document concluded (1) “the surface area contact between these stones is minimal and the left over voids are greater than those produced when using more blocky and angular stones,” (2) “[o]n average it was found that only 3 to 4 edges of the jagged stones made good contact with the surrounding armor stone,” (3) “of those connections the surface area very seldom exceeded 4 to 6 inches,” and (4) “[t]he jagged stones typically formed a bridge across underlying voids leaving larger gaps in the structure where the constant tidal actions would have access to pushing up on the stones” (*id.* at TWC004316). The document stated also, “[w]hen placing stones at the jetty we will not have the luxury of choosing what stones to place as the majority of the stones will fall beneath the surface and we will be limited to the 8 or 10 stones we have on-hand, which will diminish with each placed stone” (*id.*). Although appellant argues that its mockup establishes that “jagged stones” are inferior in meeting the Contract requirements, the one “jagged stone” depicted in appellant’s mockup photograph appears to cradle down in between the two other stones upon which it was placed (*id.* at TWC004317).

33. The “**Mockup of Blocky and Angular Stones Example 1**,” included a photograph depicting placement of one “blocky” stone on top of two “jagged stones,” as shown below:



(*Id.* at TWC004323)

Also included were two photographs of the same three stones, purporting to depict the alleged surface area contact between the stones (*id.* at TWC004324-25). Regarding Example 1, the mockup presentation included the statement, “[i]t is our belief that the wave actions and currents along the jetty will only strengthen and reinforce the stones tendency to slip and lock into the structure. The dry stones on land limit the stones tendency to slide across one another.” (*Id.* at TWC004322) However, appellant offers no similar statement regarding the “jagged stones” proffered in its “**Mockup of Jagged Stones Example 1**,” or how that might affect the surface contact between stones. The document provided also, “[i]f you look closely at the photographs you will find that not only do the stones lock well into the structure and fill underplaying voids, but the overall surface area contact between the stones is far greater than those produced with more jagged stones” (*id.*). Appellant’s analysis ignored completely what can be seen in the photograph (*id.* at TWC004323), i.e., that the “blocky and angular stone” protrudes or extends out, far beyond the two “jagged stones.” The “blocky and angular stone” appears also on the right side of the photograph that accompanies the “**Mockup of Jagged Stones Example 1**” (*id.* at TWC004317) (*see* finding 32), again indicating the extent to which the “blocky” stone extends out beyond the two base “jagged stones.” Moreover, there appears to be an unexplained, large gap between the two “jagged stones” that make up the base upon which the “blocky and angular stone” is placed.

34. The “**Mockup of Blocky and Angular Stones Example 2**,” included a photograph depicting placement of one blocky stone on top of two “jagged stones”



(*Id.* at TWC004327)

Also included were five photographs of the same three stones, purporting to depict the alleged surface area contact between the stones (*id.* at TWC004328-32). Regarding Example 2, the mockup presentation included the following statement, “[i]t is our belief that the wave actions and currents along the jetty will only strengthen and reinforce the stones tendency to slip and lock into the structure. The dry stones on land limit the stones tendency to slide across one another.” (*Id.* at TWC004326) Again, appellant offered no similar statement regarding the “jagged stones” proffered in its “**Mockup of Jagged Stones Example 1**,” or how that might affect the surface contact between stones. The document also provided “[i]f you look closely at the photographs you will find that not only do the stones lock well into the structure and fill underplaying voids, but the overall surface area contact between the stones is far greater than those produced with more jagged stones” (*id.* at TWC004326). However, as with “**Blocky and Angular Stone Example 1**,” appellant’s analysis ignored what clearly is visible in the photograph (*id.* at TWC004327), i.e., that the “blocky and angular stone” extends out beyond the two “jagged stones.” Moreover, there is an unexplained large gap evident between the two “jagged stones” that make up the base upon which the “blocky and angular stone” is placed (*id.*). The mockup presentation also did not address the effect that “constant tidal actions” would have on the “blocky and angular stone” that protrude out and over the stone base upon which it sits.

35. Appellant provided the following summary for its mockup presentation:

It is our recommendation based on these findings that the blocky and angular stones be the preferred stone for use along the repair sections. The blocky and angular stones produce greater surface to surface contact and easily wedge themselves naturally into the existing stone structure’s composition and voids. These findings prove that this stone

will provide the structure with the best possible results for interlocking, strength and resistance to the tidal forces that they will be exposed to.

(*Id.* at TWC004333)

Continued Discussions Between Parties Regarding Stones from Salisbury Quarry

36. On March 3, 2016, Dr. Williams composed a memorandum for CESAWECP-C [Chief of Construction, USACE Wilmington District] (Mr. Lynch) and CESAWE-PM [Project Manager, USACE Wilmington District] (Mr. Keistler) (R4, tab 84 at 4), addressing appellant's February 29, 2016, Serial Letter TWC-0001, and finding that stones from Salisbury Quarry failed to meet four specification criteria:

A. Section 2.1.2 Armor Stone states that "Flat Stones, tabular stones, slabs, boulders and parts of boulders will be rejected." I consider that the contractor's proposed dimensional, rectangular stones are flat in that they have six flat sides, some of which are saw-cut. Therefore, it is my opinion that they fail to meet specification and should be rejected for use on this project.

B. Section 3.2.4 Armor Stone Placement states "The armor stones of various sizes and shapes shall be distributed such that they form a compact mass and interlock with each other and the existing stones." The contractor's proposed stones are rectangular in shape which prevents them from being placed so that they can interlock with each other and with the existing stone within the structure. These non-interlocked stones if placed on the existing structure would act as individual structures and not as a system of stones to resist wave and current forces that occur in the ocean environment as the design intended. Personal communication with Jeffrey Melby, Chief of the Coastal Structures Group within the Engineer Research and Development Center and USACE expert on armor stones confirmed that square and rectangular stones will not interlock with the existing structure and should be rejected.

C. Section 2.1.4 Stone Sources states "The source(s) from which the Contractor proposes to obtain stone materials as required for these specifications shall be selected and identified to the Contracting Officer or his/her designated

representative within 15 days of receipt of Notice to Proceed." The contractor in this case failed to submit this quarry to the contracting officer in a timely manner and as a result the stone from the quarry was not approved. Had we inspected these stones in the quarry prior to his transporting them to Wilmington, we would have rejected them at the quarry. To my knowledge, this quarry still has not yet been submitted for approval.

D. Section 2.1.4 Stone Sources additionally states "The stone source(s) shall provide test results of ASTM D5312/D5312M and ASTM D5313/D5313M ***and records of successful use on similar projects.***" A similar project would include projects on the east coast in an open ocean environment where dimensional stone of similar shape as that proposed by the contractor has been used to repair a jetty structure consisting of variable shaped interlocking blasted stone such as that found on the subject project. The contractor has failed to submit records of successful use of stone from this quarry on similar projects and as a result the stone from the quarry should be rejected for use on this project.

(R4, tab 58 at 1-2) (bold typeface in original)

37. By email dated March 6, 2016, Mr. Leavitt requested a telephone conference with the contracting officer "to discuss the Salisbury rock before any official response is made" (R4, tab 59 at 1). Mr. Leavitt stated several reasons why he believed the government should accept stone from Salisbury Quarry, including (1) "[t]he USACE has completed various studies using dimensional cut stone and found it to be desirable for breakwater use including single layer breakwater repairs," (2) "[t]he way that the Salisbury rock is quarried makes it superior to most other quarried rock," and "more durable to the effects of weathering," (3) "Trade West needs between 720 and 750 large armor stone to complete the Masonboro project," and Salisbury Quarry "has an estimated 4,000 large armor stone available," and (4) transportation of stones from Salisbury Quarry is "safer and easier" (R4, tab 59 at TWC004238-39). Regarding the mockup presentation, Mr. Leavitt stated, "Trade West found that the Salisbury rock made double the amount of surface contact with the existing breakwater mock up as compared to the Fountain quarry rock. This test concludes that the Salisbury rock is superior to the Fountain rock with respect to interlocking with existing breakwater rock." (R4, tab 59 at TWC004238)

38. By Serial Letter C-0001 dated March 7, 2016, the contracting officer responded to appellant's previous letter, rejecting the stones from Salisbury Quarry that appellant delivered to the site as not meeting specification requirements and being unacceptable for placement (R4, tab 5.3; JSSF 22). The contracting officer stated that "[t]he specifications and contract documents presented in their entirety clearly indicate the intent of the Corps to have random, irregularly shaped stone that will provide the maximum potential for interlocking of various shaped stones" (R4, tab 5.3 at 493; JSSF 22). The government made an "[e]ngineering determination that rectangular stones will not sufficiently interlock with the existing stones, as mandated by the specifications, and therefore will not provide the requisite stability over the functional life of this structure" (R4, tab 5.3 at 492; JSSF 22). The contracting officer stated also that the "non-interlocking stones if placed on the existing structure would act as individual structures and not as a system of stones to resist wave and current forces that occur in the ocean environment as the design intended" (*id.*). The contracting officer relied upon paragraph 3.2.4 of the Contract, which requires "[t]he armor stones of various sizes and shapes . . . be distributed such that they form a compact mass and interlock with each other and the existing stones," stating "[b]ecause the existing stones in the jetty are of varying sizes and shapes, it is unlikely that a significant number of rectangular stones can be placed in a manner to be satisfactorily interlocked with the existing stones" (*id.*).

39. As to the issue of "blocky stone" referenced in appellant's letter, the contracting officer stated that "the surface area contact of rectangular stones with relatively flat sides does not equate to the specifications' intent of interlocking, and does not provide sufficient stability during settling of the structure" (R4, tab 5.3 at 493; JSSF 22). The contracting officer stated also:

In your correspondence, you focus your justification on two words in the specification – "blocky" and "angular". However, that sentence must be read in the context of the surrounding sentences and the specification as a whole. Per specification section 32 05 00.38, paragraph 2.1.2, ". . . stone shall be furnished in blocky and angular shapes. Flat stones, tabular stones, slabs, boulders and parts of boulders will be rejected." The samples presented in your documentation are rectangular, and are considered to be unacceptable, as they share the seminal characteristic of several of the specified types of stones that will be rejected – flat surfaces. Stones that are flat, tabular and slabs, with their flat sides, are not able to satisfy the interlocking requirement.

(*Id.*)

40. By Serial Letter TWC-0002, dated March 8, 2016, Mr. Potter responded to the contracting officer's letter, acknowledging the government's position that it "does not like the shape of the stone" and informing the government that it had ceased hauling materials from the Salisbury Quarry (R4, tab 5.4; JSSF 23). Appellant requested a meeting "to inspect materials available at the quarry that are of more various shapes and not so rectangular" and stated it had "discovered on [the] ground at the quarry there are multiple various stone shapes we would like, as a team effort, to get approved" (*id.*).

41. By email dated March 10, 2016, to Ms. Figgins, Mr. Leavitt requested that Ms. Figgins attend an upcoming visit to Salisbury Quarry, stating, in part, "I believe that as a team we can solve this issue and can move forward, but as always on projects of this nature time is of the essence. I know that between the two of us that we have the authority to make a decision tomorrow and set ourselves on a clear path, with a clear direction." (R4, tab 61)

42. Ms. Figgins responded to Mr. Leavitt's request by email also dated March 10, 2016, stating that although she is unable to attend the quarry visit, she has "full confidence in my technical team's ability to give me full and accurate details on the site visit. Shannon [Geoly, Resident Engineer, USACE SAW] will provide me with all of the details of the meeting, at that time I will sit down with the team and they will lay everything out for me so that we can make a decision moving forward." (R4, tab 61, tab 84 at 3)

Salisbury Quarry Site Visit

43. The parties visited Salisbury Quarry on March 11, 2016 (R4, tab 62). The record includes handwritten notes of that visit which appear from the context of the document to have been written by a government employee (*id.*). Notes from that visit state, in part: (1) "[w]ants to shape the rock and leave one "flat" side for safety in shipping & handling," (2) "[b]rought us up here b/c thought the problem was color not the shape of the rock and knew he had not properly "shaped" the rock, (3) "[a]lways knew this was in his back pocket because felt it met the spec but more expensive," (4) "this is exactly what's going to happen, [y]ou have to accept it," that "if I go and find another rock you will pay for my expense to find the other source if you are right then I will be responsible for the costs," and "[w]e need to see the final proposed 'shaped' rock to make a decision" (*id.*).

44. In a March 16, 2016, government "Memorandum For: Contracting," Ms. Geoly documented the March 11, 2016, visit to Salisbury Quarry, stating, in part:

4. Mr. Leavitt proposed cutting the stone to shape it to meet the satisfaction of the Government. It was determined the sample available was not a final product. When questioned why the product was not finalized for review, he indicated he requested we visit the quarry to show us the color of the stone once it had weathered. It was noted the color of the stone was not an issue and that none of the documentation thus far had referenced the color of the stone but the shape of the stone.

5. Mr. Leavitt continued discussions regarding cutting the stone to alter the shape and stated multiple times that he, “was bending over backwards,” offering this course of action because the Government had no choice but to approve this stone. I responded that was the opinion of Trade West Construction and not the Government.

6. Mr. Leavitt stated he wanted to know what the Government wanted. I responded that we already indicated our desired stone based upon the original stone that was submitted for acceptance and that had already been delivered to the storage area from Fountain Quarry

. . . .

7. During discussions, Mr. Leavitt repeatedly voiced his opinion the stone he was offering to use from Salisbury Quarry was a superior stone to that offered from Fountain Quarry. He maintained the stone was of better quality and would better interlock with the existing stone and with each other. He indicated that purchasing the stone from Salisbury Quarry would be 30-35% more expensive than purchasing from Fountain Quarry but that he could transport it to the storage yard much faster and mitigated concerns regarding obtaining stones of the proper tonnage.

. . . .

9. Mr. Leavitt spoke adamantly that he felt the Government had no choice but to accept the rectangular stone from the Salisbury Quarry because it fully met the project specifications. However, he offered to shape the rectangular stones to keep things moving forward. He

stated that he would shape one of the already delivered stones and request the Government inspect the shaped stone upon completion at the Wilmington area storage yard. The Government agreed to inspect the proposed shaped stone upon completion but cautioned him that agreeing to inspect the stone did not guarantee approval of the process or the resultant shaped stone.

(R4, tab 64; JSSF 24)

45. On March 11, 2016, following the site visit at the Salisbury Quarry, Mr. Leavitt emailed the contracting officer a copy of a letter authored by appellant's counsel, Karl Dix, Jr., stating his opinion that stone from Salisbury Quarry met the specification requirements (R4, tab 63; JSSF 25).

46. The record includes a document entitled "QUARRY MATERIALS INSPECTION REPORT <DRAFT>," prepared by Kelley Kaltenbach, Engineering Geologist, USACE SAW (R4, tab 84 at 3), summarizing "the pertinent facts regarding the quarry inspection that took place on Friday, March 11, 2016, at the Rock of Ages, Salisbury Quarry" (R4, tab 69 at 1; JSSF 26). The report stated, in part:

The quarry produces high grade granite dimension stone and cut block for high-end countertops. The stone proposed to supply the project is dimension stone that was rejected for high end commercial use. While the stone appears to be of high strength and quality, the smooth, saw cut faces are considered by USACE to be a cause for concern due to the possibility of stone slippage and movement within high energy coastal environment. The smooth-cut dimension stone was inspected at the quarry and found to be [sic] not to be acceptable for use on [the] project, primarily due to the presence of the smooth cut face surfaces. The Contractor proffered to roughen the faces by use of a hoe ram in order to utilize the stone at the quarry, primarily due to the quantities available to him. USACE agreed to the demonstration, which was scheduled for the week of 14 MAR16.

....

The only detractor of this stone to use in the project is the presence of flat, smooth, saw cut faces that could prove to become unstable in a coastal environment, bordered by

rocks having more irregular shapes. In addition, the presence of flat smooth faces may allow significant sliding to occur, which could result in undesirable movement and losses over time. If the Contractor were to utilize a hoe-ram to break the stone down into more randomized shapes, it may be deemed acceptable by USACE from a coastal engineering perspective for use as jetty stone.

(R4, tab 69 at 1, 5)

Trade West's Decision to Shape Stone from Salisbury Quarry

47. The parties met for a site visit at the project staging area on March 18, 2016 (R4, tab 5.6 at 515, tab 67 at 1-2). By email dated March 21, 2016, Mr. Leavitt provided the contracting officer with a copy of a March 20, 2016, Serial Letter TWC-0003, from Mr. Potter, addressed to the USACE Wilmington District, regarding the March 18, 2016, site visit (R4, tab 67; JSSF 28). Mr. Leavitt's email to the contracting officer stated, in part:

The reason that I am shaping the rock coming from Salisbury to meet the direction of the USACE is that the current stockpile of rock meeting the COE requirements is over 4,000 stones. I need approximately 350 to finish this project. It is my intention to produce a rock shape that the COE will approve and then shape each rock that will be hauled from Salisbury and use the Salisbury quarry for the balance of the needed rock to complete the Masonboro project.

(R4, tab 67 at 1; JSSF 28)

48. Mr. Potter's Serial Letter TWC-0003 stated that Fountain Quarry was depleted, and the rate of production could not provide the needed quantity of stones to successfully complete the Contract (R4, tab 5.6 at 515-17). Mr. Potter included with his letter attachments of several photographs representing the "shaped stone that was produced and shipped from the Rock of Ages, Salisbury Quarry" (R4, tab 5.6 at 526-27), and shaped stones "that the COE still feels will not properly interlock when placed along the jetty" (R4, tab 5.6 at 528-34).

49. Regarding the shaping of stone from Salisbury Quarry, Mr. Potter's letter stated:

At this time we understand that the stone and source are still under review by the government and that the government would like the following concerns to be addressed. Of the samples that were provided on the morning of March 17, 2016 COE saw 3 that were close to the desired shapes. The main concerns with the best stones were related to the amount of smooth surfaces still present along the saw cut of each stone. The remaining unsatisfactory shaped stone samples had both excessive smooth surfaces and were still too blocky in form. Just over 1 hour after the conclusion of the onsite meeting four more pictures were provided of stone via email that are still on ground at the Salisbury Quarry. These were provided for COE comments and further analysis to ensure the next set of samples meet all the physical properties desired. These stones, while closer to the desired shape, still had qualities that were found to be blocky in form. One stone had two sides opposite one another that appeared mostly flat with one of the sides being of a smooth surface. We have taken all of these concerns into consideration and are working to develop an adequate sample to satisfy the governments [sic] directed requirements. Once we have developed a satisfactory shape we will keep the initially accepted samples on-site to be used as reference guides when inspecting new shaped stones that are delivered to the staging area. These reference stones will be left on ground until the end of the job and will be the last to be placed on the jetty structure.

....

The benefit of the Salisbury Quarry is the [sic] that the quantity already exists. We need only retrieve it from the near limitless stockpiles. Using the Salisbury stone provides a guarantee that the required amount can be harvested in time for an on-time completion. Shaping of the stone takes approximately 15-20 minutes per stone and we are capable of shaping and shipping upwards of 14 stones per day with a certain level of control to the weight of the stones. The quality of the stone is also greatly increased as there are little to no concerns with the fracturing that can occur during blasting.

(R4, tab 5.6 at 515-16; JSSF 27)

50. On March 21, 2016, the parties met for a site visit at the Wilmington Storage yard to review three additional shaped armor stone samples (R4, tab 70). By email dated March 22, 2016, Kevin Conner, P.E., Chief, Water Resources Division, USACE SAW (R4, tab 84 at 4), informed Ms. Geoly and other SAW employees, that “we are willing to accept the rock from the Salisbury quarry for use on the Masonboro Jetty based on the shaped samples provided yesterday (R4, tab 70). Mr. Conner also stated that:

The stones were much improved over the original six side flat stones. Some recommendations to include in the acceptance letter would be 1) Try to start with larger dimensional stone so that the contractor can make some acute cuts which will provide more variability in the final product. The samples provided were improved, but were still basically rectangular. 2) We feel it is imperative that the Salisbury stone be intermingled with the blasted stone from the Benson and Fountain quarries to improve interlocking throughout the jetty. 3) I would recommend stating in the acceptance letter that his cutting and shaping of the rock from the Salisbury quarry is at no additional cost to the government. I know he has stated he will do it at his cost, but it would be nice to have this in writing.

(Id.)

51. On March 22, 2016, the government issued a Quality Assurance Report (QAR) regarding approval of stone from Salisbury Quarry, stating “[a]ll submittals now in and approved . . . stone to be shaped will follow 3 examples in the yard . . . ok to start work” (R4, tab 78a1 at 25; JSSF 30) (ellipses in original).

52. By email dated March 24, 2016, Mr. Potter contacted Jack Cox, an engineer and adjunct professor at the University of Wisconsin, concerning the interlock capability of stone from Salisbury Quarry. Mr. Potter stated in his email:

My name is Steven Potter and I am the Quality Control Manager for Trade West Construction. I am seeking information on the feasibility of stones interlocking along a jetty structure that is primarily comprised of jagged angular boulders weighing between 14 and 22 tons. The stones we are looking to place on top of this structure are of a blocky granite also weighing between 14 and 22 tons. The question in a nutshell is will blocky stones interlock with

jagged boulders? It is our belief that the blocky stone will work, but I'd like to obtain your council [sic] and discuss whether or not the stone we want to use will work. You can reach me anytime at the number below here [or] at this email. I can provide you with pictures and any other information you may need. Please let me know if your services are available and if this is something you can help us with.

(R4, tab 72 at 2-3; JSSF 31)

53. In an email also dated March 24, 2016, Mr. Cox responded:

I will call you Monday to discuss, but that is a tough question. If you are placing the blocks on top of the existing armor of the jetty, I would say no, not a good idea. There will be a slip plane between them. You did not say how thick or how many layers you plan so I'm assuming this is placing a repair veneer over the old so likely just one layer. Likely you will not get much interlock. Square cubes of concrete have been used for armor, but they are still placed randomly at least two units thick, and care is taken so that they don't just stack on another giving a flat surface.

I only know of one example where Bedford cut stone was used to cap some breakwaters. In that case they were more square log shaped so that the long axis spanned across the crest. It did seem to work but was so ugly that the owner ultimately rejected it[.]

If you can send me a picture showing how blocky these are, maybe I can make a better call and get it approved for you. In the end, it will be how skilled your crane operator is that will matter, and that may require onsite inspection and control to assure a satisfactory product.

(R4, tab 72 at 1-2; JSSF 32)

54. In an email from Mr. Potter to Mr. Leavitt, also dated March 24, 2016, Mr. Potter stated:

Here is a response from one Engineer I reached out to. My email was short with little detail trying simply to open a dialogue. His response sounds great, but not in our favor. I'll put a packet of all we know together along with some photographs and see what he thinks.

(R4, tab 72 at 1; JSSF 33) Mr. Cox “did not have any other email exchanges with Trade West until [he] was contacted by their counsel on July 17, 2019” (R4, tab 87 (July 31, 2019, aff. of Mr. Cox at 2, ¶ 4); JSSF 34).

55. The differences between stone quarried by blasting from Fountain Quarry and stone quarried by cutting from Salisbury Quarry are evident in the numerous photographs of the two types of stone offered by appellant (findings 21-22, 28, 32-34). Unshaped, cut stones from Salisbury Quarry were parallelepiped blocks of stone (findings 21-23, 28, 33-34). Blasted stone from Fountain Quarry were jagged, with multiple faces, and were randomly shaped (findings 28, 32).

Contract Completion, Claim Submission, and Contracting Officer's Final Decision

56. A total of 702 armor stones were placed at the project, 277 from Fountain Quarry and 425 from Salisbury Quarry (R4, tab 77 at TWC000514; JSSF 35). Contract work was completed on or about April 29, 2016, and Trade West began to demobilize from the site on April 30, 2016 (R4, tab 2 at 31, tab 78a2 at 119; JSSF 35).

57. By letter dated October 21, 2016, appellant submitted a certified claim to the contracting officer in the amount of \$304,062, and requested a final decision (R4, tab 3; JSSF 36).

58. By letter dated January 20, 2017, the contracting officer issued a final decision denying appellant's claim (R4, tab 3; JSSF 37).

59. Appellant filed a notice of appeal on February 21, 2017.

Declaration of Dr. Gregory Williams

60. The government proffered the declaration of Dr. Williams, dated May 10, 2021, as the government's “expert report on this issue of whether the Salisbury Quarry Stone met the Contract requirements” (gov't br. at 25 (citing R4, tab 88 (May 10,

2021, decl. of Dr. Williams))).⁷ As Chief of Engineering, USACE SAW, “Dr. Williams oversees all engineering and design aspects of the Wilmington District” (R4, tab 88 at 11). He “has over 30 years of experience working in coastal and civil engineering, as a researcher, private consulting practice and with the Corps of Engineers,” holds a Professional Engineering license and a BS in Civil Engineering from NC State University, an ME in civil/coastal engineering from Old Dominion University and a Ph.D. in ocean engineering from Texas A&M (*id.*).

61. During Contract performance, Dr. Williams authored a technical opinion concluding that the stone from Salisbury Quarry did not meet Contract requirements (R4, tab 88 (May 10, 2021, decl. of Dr. Williams at 2, ¶ 4); R4, tab 58).

62. Dr. William’s declaration states, in part:

5. ... The requirement for the stone to be furnished in “blocky and angular shapes” has specific meaning with regard to coastal engineering erosion control structures and is commonly understood to mean blasted rock with sharp, random, angular shapes.

6. That terminology would not be used to describe uniformly shaped cubes or parallelepiped shaped stone like that produced by the Salisbury Quarry. USACE Engineer Manual EM 1110-2-1100 (“Coastal Engineering Manual” or “CEM”) CEM Part IV, Chapter 2 includes the following figure describing manufactured concrete armor units characterizing parallelepiped blocks and cubes, similar to the Salisbury Stone, as “massive” compared to other types of armor units (USACE 2002):

⁷ Board Rule 11 allows for the submission and inclusion of declarations and affidavits as part of the Rule 4 file; *Raytheon Missile Sys. Co.*, ASBCA No. 59258, 15-1 BCA ¶ 36,102 at 176,260 (“By agreeing to a Board Rule 11 submission, each party is entitled to submit affidavits/declarations in place of the live testimony that would have been available had the parties elected a hearing”).

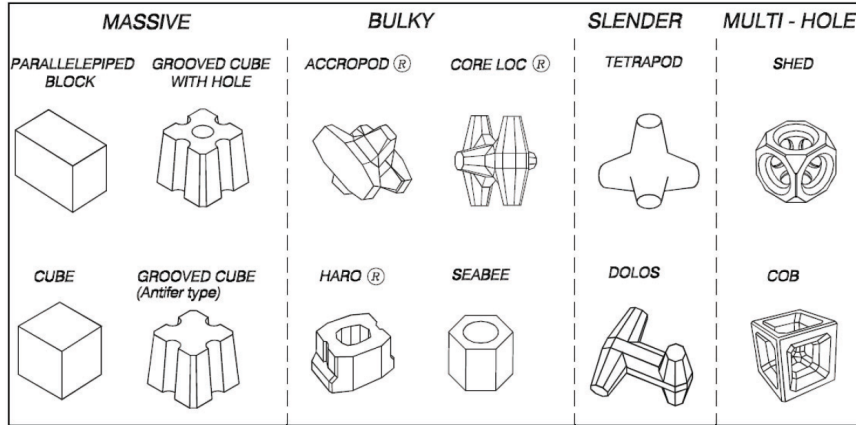


Figure VI-2-24. Examples of concrete armor units

Chapter 2 of this EM goes on to say, “The units can be divided into the following categories related to the structural strength:

- (1) Massive or blocky (e.g., cubes incl. grooved types, parallelepiped block)
- (2) Bulky (e.g. Accropode, Core Loc, Haro, Seabee)
- (3) Slender (e.g., Tetrapod, Dolos)
- (4) Multi-hole cubes (e.g., Shed, Cob)

Based on this language, the Salisbury Quarry Stone could meet the definition of “blocky”, in isolation, but the EM does not specifically address the definition of “angular”, either alone or in the combined context of “blocky and angular”.

7. ... While the stones provided by Trade West Construction originating from the Salisbury Quarry fit the definition of “massive/blocky” shown in the above figure from CEM, these stones would not be considered “angular” because their corners are at or close to 90-degree angles. Angular stones have either acute (angles less than 90-degrees) or obtuse (angles greater than 90-degrees) angles, but no flat sides with 90-degree angles. The term “angular” is not used to describe cubic or parallelepiped shaped stone.

8. While the CEM is not instructive on the issue of what is considered “angular”, other guidance is instructive. Table 2 of ASTM D2488-17 ‘Standard Practice for Description and Identification of Soils (Visual-Manual Procedures)’ gives the criteria for describing angularity of coarse-grained particles. Specifically, it describes angular as ‘particles have sharp edges and relatively plane sides with unpolished surfaces.’ This ASTM also includes the below Figure 3 to describe the angularity of bulky grains. Note part ‘(b) Angular’ which shows examples of particles with sharp angles, none of which include cubic- or parallelepiped-shaped stones.



FIG. 3 Typical Angularity of Bulky Grains

9. Cubes and parallelepiped stones like that from the Salisbury Quarry do not interlock well with adjacent stones that are of different types and shapes. Cubes and parallelepiped stones can interlock well with other cubes and parallelepiped stones when they can fit into a structure like bricks in a building. However, they are not compatible for interlocking when placed with a different type of stone that already exists, such as the blocky and jagged, angular stone found at the Masonboro Inlet South prior to this project. The intent of the requirement for stone of” blocky

and angular shapes” was for stone that was similar to the existing stone.

....

11. . . . The last sentence in this section [32 05 00.38, Subpart 2.1.4 of the contract] references forming “a compact mass and interlock with each other and the existing stones” and is directly related to the previously cite specification [32 05 00.38, Subpart 2.1.2] regarding blocky and angular shaped stone. Various sizes and shapes refers to the gradation range of the replacement stone being between 14.0 tons to 22.0 tones [sic] with 75% weighing more than 18.0 tons as described in Specification 2.1.3. The shapes of the stones should be irregular so they can interlock with each other and the existing stones. Cubes and parallelepiped stones cannot interlock with the existing angular stones. Dr. Jeff Melby (USACE expert on armor stones and patent holder for the CORE-LOC armor unit) said “Cubic stones do not interlock well (Melby 2016).” Cubic-shaped/parallelepiped-shaped stones do not have enough acute angles to effectively interlock with the existing angular stones already on the jetty.

....

15. . . . Interlocking is not achieved only by mass and making a certain number of contacts, but by placement of stones where some angles of stone are fit in and around other stones so they interlock. Such interlocking cannot be achieved when the replacement stone has 90-degree angles because those sides and corners would require an exact 90- degree angle “hole” or “notch” for that portion of the stone to fit into. There are seldom if ever exact 90-degree angle holes or notches in an existing rubble mound. Shaving off of these 90-degree angles through shaping to create more acute angles provided more opportunity to find slots or notches in the existing structure into which the Salisbury Quarry stone can settle.

(R4, tab 88 (May 10, 2021, decl. of Dr. Williams at 2-8))

Affidavit of Mr. Jack Cox

63. Appellant relies upon an affidavit of Mr. Cox, which appellant originally included with its motion for summary judgment (R4, tab 87 (July 31, 2019, aff. of Mr. Cox)). Attached to his affidavit are several documents that set forth Mr. Cox's experience and expertise in coastal engineering (R4, tab 87 at 7-46)). "Mr. Cox is a Senior Principal and Coastal Engineer for Edgewater Resources, where he directs the planning and design of large and complex waterfront and harborworks projects worldwide," with 40 plus years of experience in marine engineering (*id.* at 7)). He is a registered professional engineer, and holds a Bachelor's and Master's degree in Engineering Science from Purdue University (*id.*).

64. Mr. Cox states:

6. My email did not advise Trade West that the "Salisbury Quarry stone would not provide better interlocking capability". What my email did state was that if the stone was installed as a veneer over the current stone, that the interlocking between the veneer and the current structure may not provide for proper interlocking. In my original email to Trade West, I was concerned about "slip planes" which could occur if two flat sides of a stone came in contact and then was infiltrated by liquid to cause the planes to slide in opposite directions. Some stone movement is acceptable if the slip or slide causes the stone to wedge itself into the slope to fill a void. A slip or slide of a stone is not favored if it causes the stone, and/or adjacent stones to fracture, slump or simply displace from its intended location, thus compromising the integrity of the slope. A veneer of stone could produce unfavorable sliding between the veneer and original structure.

7. I have since learned that each stone for this Project was individually selected and placed into the jetty to fill voids then existing in the jetty and to build the jetty to a specified elevation. The interlocking is achieved by the skillful placement of the stone in the jetty. Maximizing surface contact between the stones to nestle the majority of the stone weight between the other stones when filling the voids and, thereby reducing the size of the voids, would provide for better interlocking especially since the stone is quite heavy weighing 14 to 22 tons.

8. Interlocking of stone in a jetty and other coastal structures does not involve simply filling voids in the armor face with appropriately sized rocks. Interlocking is required and achieved by the use of heavy stone and placing it to fill voids in such a way so as to provide a compact, i.e. tightly bound and restrained mass or structure. Effective interlocking is not a characteristic of purely the stone geometry, but rather primarily a result of proper placement of angular and blocky stone (not rounded stone) such that multiple contacts between adjacent rocks is achieved. That is why “interlocking” is required under the specification section (3.2.4) entitled “Armor Stone Placement” and not the section (2.1.2) generally titled “Armor Stone” which provides the characteristics of acceptable stone.

9. Requiring Trade West to hammer and chisel the stone to make it less angular and less blocky would not necessarily assure interlocking since interlocking is largely determined by the then existing state of the jetty as well as the placement of the rock into the jetty. Interlocking means that once in place, the stones are pinned in place and do not move (are locked into one another) once the stones are placed against each other.

10. The stone specification for this project, that I have reviewed, requires the contractor to place the stone so that it interlocks to form a compact mass in the jetty and reduce voids. The requirement for each individual stone's characteristics does not specify or define "interlocking stone", as the interlocking is an aspect of the placement technique, not the stone itself. The specification requires simply that blocky and angular stones of various shapes and sizes be used. . . . Depending on the size and configuration of the void and the method of placement, different shaped stones would interlock better than other stones.

11. Blocks of stone, such as proposed by Trade West for this project could interlock into the structure if the properly sized stone for the void was chosen and the stone was properly placed to eliminate the void and lock the stone in place so it did not rock. Proper placement is accomplished by moving adjacent stone (if necessary and which may occur by wedging the heavy stone in place) and placing the

stone in contact with and against the adjacent stones so the stone is pinned in place and does not move or rock.

12. The blocks of stone proposed by Trade West are certainly blocky and they are angular. The specifications do not state the type of angularity required, but angularity should be juxtaposed with roundness — round stones generally do not interlock while angular stones can interlock when properly placed. The blocks of stone, if properly selected and placed, should be able to achieve interlock.

(*Id.* at 2-4; JSSF 34)

65. Mr. Cox states that he reviewed appellant’s “presentation of mockup of jetty,” but his affidavit contains no other comments about the presentation (R4, tab 87 at 1).

Report of Dr. Gary Griggs

66. Appellant submitted an expert report authored by Dr. Gary Griggs, a “Consulting Coastal Geologist” (R4, tab 89 (May 24, 2021, report of Dr. Griggs at 8)). His report includes a statement of his education and experience in geology, oceanography, and engineering, a brief summary of his academic written work, and acknowledgment of his coastal consulting practice (*id.* at 2)). Dr. Griggs is a distinguished professor of Earth and Planetary Sciences at the University of California Santa Cruz, where he has been on the faculty for 53 years (*id.*). He is a registered geologist and certified engineering geologist, with a degree in Geological Sciences from the University of California Santa Barbara, and a Ph.D. degree in Oceanography with minors in Civil Engineering and Geology from Oregon State University (1968) (*id.*).

67. Dr. Griggs prepared his report at the request of appellant’s counsel, “to assess the appropriateness of the stone from the Salisbury Quarry used in the repair of the south jetty of the Masonboro Inlet” (*id.* at 2). According to appellant, Dr. Griggs “opinion provides a peer review of Mr. Cox’s opinion,” that he “agrees with the analysis and opinions provided by Mr. Cox and disagrees with many of the opinions provided by the Corps’ proffered expert, Mr. [sic] Williams” (app. br. at 22-23).

68. Dr. Griggs states that the Contract’s design plans “form the basis of the work to be completed, in contrast to more general or less specific terms like *blocky or angular*” (R4, tab 89 (May 24, 2021, report of Dr. Griggs at 3-4) (emphasis in original)). Dr. Griggs’s report quotes note 4 of Contract Drawing CN301, regarding

proper placement of the armor stone, and reproduces a portion of the design plans that appear on Contract Drawing CN304 (R4, tab 8 at 8) (*see* finding 13), which he labels: “Figure 1. Cross-sections of the south jetty with proposed stone placement from contract documents” (*id.* at 4). Dr. Griggs then states:

While the stone descriptions state that the rock to be used should be *angular*, the stones depicted on each of the 68 cross-sections are not angular but more spherical, which would not be stable on a jetty exposed to high wave energy, and in fact, would not be stable on any stone structure. This is immediately evident in looking at the cross-sections, yet these are the approved engineering plans.

(*Id.*) (Italic typeface in original) Although Dr. Griggs’s report quotes Note 4 on Contract Drawing CN301, Dr. Griggs does not discuss the import of that note, which states that “the stones depicted on the typical cross sections, as well as the cross sections themselves, are merely general representations, and do not mandate the size of the stone to be utilized. They are only intended to be a general example of proper stone placement.” (R4, tab 8 at 8) Dr. Griggs does not affirmatively discuss or substantively establish how stone from Salisbury Quarry met the requirement that the armor stone be of “varying shapes and sizes.”

69. With regard to Dr. William’s statement whether stone from Salisbury Quarry was blocky and angular, Dr. Griggs states:

While Mr. [sic] Williams, Chief of the Engineering Division Branch of the USACE Wilmington District, states in his Declaration (page 2): The requirement for the stone to be furnished in “blocky and angular shapes” has specific meaning with regard to coastal engineering control structures and is commonly understood to mean blasted rock with sharp, random, angular shapes. Mr. [sic] Williams does not cite a document where this specific meaning is explained or defined, or by where it is “commonly understood to mean blasted rock with sharp, random, angular shapes”.

(R4, tab 89 (May 24, 2021, report of Dr. Griggs at 4)) Dr. Griggs criticizes Dr. Williams’s statement because he “does not cite a document where this specific meaning is explained,” or “where it is ‘commonly understood,’” yet, Dr. Griggs does not state any disagreement with the premise of Dr. Williams’s statement (*id.*).

70. Dr. Griggs states also:

On page 3, Mr. [sic] Williams states that the stones from the Salisbury Quarry do fit the definition of “massive/blocky”, but would not be considered “angular” because their corners are at or close to 90-degree angles, and angular stones have either acute (angles less than 90-degrees) or obtuse (angles greater than 90-degrees) angles . . . While he calls the corner of the Salisbury stones 90-degree *angles*, he concludes in the same sentence that they are not angular. Any angle, whether 5, 60, 90 or 145 degrees is an angle. It seems that Mr. [sic] Williams has made up a definition of angular stones to have only acute (less than 90-degrees) or obtuse (greater than 90-degrees) angles. What about an angle or corner at 85 or 95 degrees? Would these stones be considered angular? He also states that the CEM is not instructive on the issue of what is considered “angular”, but then goes on to compare small natural pebbles weighing less than an ounce with quarried or blasted stones weighing 14-22 tons. This is an unsatisfactory and inappropriate comparison.

(*Id.* at 4-5) (emphasis in original)

71. Dr. Griggs quotes, with approval, a portion of Mr. Cox’s affidavit, stating:

The careful placement of the stones on the jetty in order to achieve a compact, tightly bound and restrained mass or structure, is one of the most important components of this repair process. The “interlocking” of the stone is not simply a characteristic of [“]the stone geometry, but rather primarily a result of the proper placement of angular and blocky stone (not rounded stone) such that multiple contacts between adjacent rocks is achieved” (Declaration [sic] of Jack Cox, page 3).

Jack Cox continues (page 4): “The stone specifications for this project that I have reviewed requires the contractor to place the stone so that it interlocks to form a compact mass inthe jetty and reduce voids. The requirement for each

individual stone’s characteristics does not specify or define ‘interlocking stone’, as the interlocking is an aspect of the placement technique, not the stone itself...The specification requires simply that blocky and angular stones of various shapes and sizes be used”. I am in complete agreement with these statements. Placement of the stone is of critical importance in achieving stability.

(*Id.* at 5)

72. Dr. Griggs references in his report appellant’s “mockup of the Salisbury Quarry stones in order to show the degree of interlocking (TWC Mockup of Jetty Construction, 1 March 2016) of the jagged blasted stone compared to the blocky angular stone from the Salisbury Quarry (Figures 2 and 3).” Regarding that mockup, Dr. Griggs concludes, “[w]hile it is difficult with just two photographs to compare the fit or embedment of the two different stone types, it appears that the cut stone from Salisbury Quarry, if well positioned, can achieve the compact and ‘interlocking’ requirement.” (*Id.* at 5)

73. Dr. Griggs notes also that “there is also a very short 46-second video of the crane placing two blocks of Salisbury stone that had been hammered and chiseled to make it less angular and less blocky (Figures 4 and 5). Watching this video makes it clear how important the skill of crane operator in placing the stones is in achieving the goals of creating a compact mass and interlocking.” (*Id.*) Dr. Griggs’s reliance upon this video is misplaced as it does not demonstrate the interlocking capability of unshaped stone. As noted by Dr. Griggs, this video demonstrates the placement of shaped stone from Salisbury Quarry (R4, tab 80).

74. Dr. Griggs states: “[t]o be clear, even with randomly shaped and angular blasted zone [sic] as was used in the original construction of the jetty, the term “interlocking” is somewhat misleading as a criterion for stone placement. The use of manufactured concrete armor units such as tetrapods, were developed specifically to provide true interlocking for stability in very high wave energy environments.” (R4, tab 89 (May 24, 2021, report of Dr. Griggs at 8)) Dr. Griggs observation does not establish that unshaped stone from Salisbury Quarry would “provide true interlocking.”

First Affidavit of Mr. Andy Leavitt

75. Appellant submitted two affidavits of Mr. Leavitt, whom appellant “offered as an expert in the field of Construction Engineering and performance of construction building maritime erosion control structures” (app. br. at 25). Mr. Leavitt was project superintendent at Trade West, where he was responsible for “preparation and negotiation of bids and proposals, review of contract specifications and drawings,

performance of the work and administration of the contracts” (R4, tab 85 (June 7, 2019, aff. of Mr. Leavitt at 1)). Mr. Leavitt has “over 30-years’ experience in the performance of heavy civil construction and earthmoving projects,” and was “solely responsible for the operation of the construction activities of Trade West . . .” (*id.*).

76. Mr. Leavitt’s first affidavit, dated June 7, 2019, was submitted with appellant’s motion for summary judgment and states, in part:

7. The contract in this Appeal required the Contractor to provide and place one layer of Armor Stone on the Masonboro Inlet Jetty

8. When initially performing this contract, I planned to use large stones produced as a byproduct from blasting operations to produce aggregate. Blocks of stone produced sawing the stones from [sic] the quarry are preferable because blasting may weaken the structural integrity of the stone (micro fractures) and the stone blocks fit together more tightly to eliminate voids between the stone and increase the contact surface area between stone and stones. Typically, block stone is more expensive.

9. Blasted rock is often used for those projects because it is cheaper to produce. In placing the large stones, it is my experience that better "interlocking" is achieved by using the blocks of stone rather than the jagged blasted stone. Interlocking is better because the large stone blocks reduce voids between the stones and increase the surface contact between stones, thereby consolidating and compacting the mass of stone in the Armor layer.

10. The drawings for this contract showed stone which were blocks and "blocky" and "angular" and not the jagged stones produced by blasting (though the blasted stone meets the contract requirements). See Tab No. 2 for Drawing No. CN301 which is representative of the placement requirements depicted by the other drawings. Note 4 on the Drawing requires the blocks of Armor Stone to be placed in a single layer not to exceed two feet above Elevation 1.0' NA VD 88. Using blocky, angular blocks of stone minimizes the voids between the stones as the maximum surface area of the blocks rest against each other to "interlock". Using jagged stones produced by blasting

approximates the stone blocks when "angular" and "blocky" stones are used. However, blasted jagged stone will create more voids when placed, be less compact as a mass and interlock to a lesser degree.

11. We did not initially use stone from the Salisbury Quarry when starting performance of the work since the blasted stone from the Fountain Quarry was much closer to the project site thereby greatly minimizing the transportation costs. The Fountain Quarry was not able to produce enough rock within the timeframe of the contract to permit our timely placing of the quarry stone. . . .

. . . .

15. Trade West Construction located an alternative quarry named the Salisbury Quarry. Though located further away, that quarry produced stone which was more blocky and more angular than the stone produced by the Fountain Quarry since this stone was sawn rather than blasted from the quarry. The blocks of stone were more "blocky" and "angular" than the Fountain Quarry blasted stone. As the stone was to be laid in a single layer on top of the current jetty, the blocks would better interlock.

16. Interlocking is a mechanical concept whereby placing stone in contact with each other will form a better and more compact mass when voids are eliminated and the contact between the stone is maximized. Stone interlocking is best exemplified in history by the pyramids and castles whereby stone blocks are laid together in full contact with virtually no voids. The blocks are not jagged, and the interlocking occurs from the contact of the flat surfaces such that movement of a stone would disturb the other stones.

17. To demonstrate these concepts, Trade West Construction provided a "mock-up of jetty conditions" whereby we demonstrated these concepts to the Corps by comparing the stacked, blasted jagged stones from [sic] the Fountain Quarry to the angular and blocky stone from the Salisbury Quarry. The blocky and angular quarry's stone better interlocked than the blasted, jagged stone from the quarry.

....

28. After the Masonboro project, we performed another Armor Stone project for the Corps of Engineers in the State of Washington near Rialto Beach. We showed them the Salisbury stone blocks (before shaping) that we had proposed for the contract at issue in this appeal and the Corps confirmed that this was the preferred stone and superior to the cheaper jagged stone produced by blasting. *See* Tab No. 9 (note that the Salisbury stone (before any shaping) was proposed). The Corps' Seattle District accepted this proposal and preferred stone blocks to the blasted rock since the stone block interlocks better.

(R4, tab 85 (June 7, 2019, aff. of Mr. Leavitt at 1-8)) Mr. Leavitt's affidavit does not discuss the Contract's requirement that stone be of varying sizes and shapes (*id.*).

77. Attached to Mr. Leavitt's affidavit (tab No. 9) is a memorandum dated October 24, 2018, from Mr. Leavitt to the Seattle District "Design Team for Quillayute Revetment Repair" (*id.* at 94). In that document, Mr. Leavitt suggests the use of "rectangular shaped stones that can interlock and have extremely large surface contact area with surrounding stones when compared to irregular shaped stones which are produced by blasting" (*id.*) (underlining in original). Mr. Leavitt included pictures of Salisbury Stone, "provided solely for the purpose of seeing approximate shapes and dimension ratios of stones that can be produced," and that "[t]he size of stones listed in the pictures do not reflect the actual size of the stones that would be produced for this project" (*id.*) (underlining in original). Mr. Leavitt concluded, "[p]lease let us know if there would be a problem using stones in this likeness described above and pictured below" (*id.*). The copy of Specification 3.3, Stone Placement, provided by Mr. Leavitt, allowed for use of slab-like stone, stating that "[n]o slab-like stone shall be placed with its broadest dimension facing upward, parallel to the finish grade line" (*id.* at 95-96). Tab No. 9 contains no explicit statement by the government to the effect that "the Corps confirmed that this was the preferred stone and superior to the cheaper jagged stone produced by blasting" (*id.* at 94) (*see* finding 76, ¶ 28).

Second Affidavit of Mr. Leavitt

78. Mr. Leavitt's second affidavit, dated June 8, 2021, provides, in part:

5.a. Our firm performed the Rialto Beach Revetment Repair at LaPush for the Corps of Engineers in 2019. That contract required us to provide large 14-24 ton armor stone

for the project. Originally sawn quarry blocks were approved by the Corps for the project but we switched to blasted stone since the blasted stone was less expensive. Our firm quarried the stone and produced and placed Armor Stones approximating the quantities of armor the [sic] stone used for the Masonboro Project.

....

11. Mr. [sic] Williams' Declaration also equivocates "cubes" with parallelepiped shaped stones. No stone produced from the Salisbury Quarry was in the shape of a cube. A cube is a solid object bounded by 6 square faces. I personally viewed all the stones provided by the Salisbury Quarry and none were cubes. Each were of different sizes and shapes with differing angles and weights.

12. Mr. [sic] Williams also states that the specification prohibits stones which have flat surface when, in actuality, the specification prohibits "flat stones" and has a specific requirement that the "longest dimension" cannot exceed three times greater than the least dimensions. This requirement is common in coastal protection contracts (and Corps projects) since such flat stones are more susceptible to fracture and could bridge large voids. The blocky and angular Salisbury Quarry stones were not flat stones and do not fracture like flat stones or bridge voids. Additionally, since blasted stone, such as the stone from the Fountain Quarry stone, have multiple faces, many of them would have had a least dimension which was less than one-third the longest dimension on the stone. The intent of the specification was to prohibit "flat stones". Corps guidance regarding coastal structures cautions against the use of flat stones. See Attachment No.2, excerpt pf EM 1110-2-1100 (Part VI) at VI-4-19b(3)(a) ("The largest stone dimension on an individual stone should be no more than three times the shortest dimension.") and VI-4-3a (28 Sep 2011) ("Quarrystones are larger rock pieces that are 'blocky' in shape rather than elongated or 'slabby'").

13. Mr. [sic] Williams also implies that the stone supplied from the Salisbury Quarry were "uniformly shaped", which in fact, is not true since all the stones greatly varied in shape

and size and no two stones were identical. In my experience, the purpose of this requirement is to provide a varied stock of stone of various shapes and sizes to allow the operator placing the stone the choice of stone to fill a void or to build out the slope to the design elevation. Mr. [sic] Williams was careful and accurate not to describe the stone as rectangular, but rather as "parallelepipeds" which are defined as blocks with six parallelogram faces. These stones vary in size and shape to provide a sufficient stockpile, in my experience, for the operator to place in the jetty structure to interlock the stone and form a compact mass.

14. Mr. [sic] Williams cites CEM Part VI, Chapter 4 which states that angular and blocky stones are preferred to wedge and interlock with adjacent stones "when placed randomly". That differs greatly from this project since each stone was not placed randomly, but was carefully selected by Trade West and placed in the jetty to fill a void or build the layer to the design elevations to minimize any gaps between stones and pin them against adjoining stones thereby promoting its interlock. Interlocking is a function of placement for blocky and angular stone and not an inherent characteristic - any stone can be placed and not interlock due to improper placement. The distinction drawn by the specifications was to prevent the use of rounded boulders (not blocky and angular) which would not interlock despite careful placement. Drawing CN301, note 4 cautioned that the depicted rounded stones were provided for guiding placement and not specify inherent characteristics of the stone.

....

18. Paragraph 9 of Mr. Williams' Declaration is conclusory and mistaken since none of the Salisbury Quarry stones were cubes. Mr. [sic] Williams' "bricks in a building" analogy is not applicable since the shapes and sizes of the Salisbury stone varied greatly. However, they do share a similarity in that the Salisbury blocks could be placed with far less void space than a jagged stone produced by blasting. I was at the Masonboro Inlet South Jetty and observed the onsite conditions and I know that, through

careful placement, Trade West would have been able to wedge in the blocks with far less void space than the jagged stones produced by blasting or chipping of the sawn stone. In fact, we showed that precise fact in our mockup demonstration. Reducing void space produces a "compact mass". Wedging stones into an existing structure and pinning them against each other to lock them into place is a form of interlocking.

19. Mr. [sic] Williams' statement that the intent of the requirement for stone of 'blocky and angular shapes' was for stone that was similar to the existing stone" has no support in the specifications and cannot be fairly read from those specifications. Any such "intent" was not mutual and was not directly or indirectly expressed in the specifications or drawings. Besides, the blocky and angular Salisbury quarry unshaped stone is similar to the existing jagged blasted stone when juxtaposed against rounded boulders and rounded field stone. "Quarry-produced stones are typically angular, whereas stones from glacial deposits and alluvial sources are usually rounded." EM 1110-2-1100 (Part VI VI-4-20 at (4). The Salisbury stone is more durable than the existing stone in the jetty since its structure has not been weakened by blasting. *See, for example*, ERDC/CHL TR-05-1, Monitoring Stone Degradation on Coastal Structures in the Great Lakes [n.2], Table 8, p.210 (June 2005) (attached is an excerpt of the Corps of Engineers Report at Attachment No. 3 which contains pp. 207-219 regarding methods of Armor Stone extraction)

[n.2] While the Great Lakes are not the same as ocean conditions (which vary widely between locations), conditions in the Great Lakes affecting the durability of the stone are more severe than the Masonboro Inlet due to the extreme temperatures (Freeze thaw) as well as large waves that may exceed 20 feet in height.

. . . .

24. The email from Jeffrey Melby quoted in Paragraph 11 is unremarkable. Attached at Exhibit No.4 is a copy of that email in which he states that "Cubic stones do not interlock well. Out of Spec." Again, these were not cubes, but were

blocky and angular stones of varying sizes and shapes which were clearly complied with the specification armor stone requirements. Interlocking is largely a function of placement as provided in the specifications which included the interlock requirement in the Placement section of the specification and not the section relating to the requirements for the stone itself. Furthermore, Mr. [sic] Melby's knowledge of the project was limited by the coaching provided by Mr. [sic] Williams in his email thread as Mr. [sic] Melby apparently did not look at any of the materials supplied by Trade West, consider the specifications as a whole, or visit the site.

(R4, tab 90 (June 8, 2021, aff. of Mr. Leavitt at 2-10))

DECISION

I. Contentions of the Parties

The parties agree that the issues to be decided in this Rule 11 proceeding are whether stone from Salisbury Quarry, without shaping, met the Contract specifications requiring that the armor stone be (1) blocky and angular in shape, (2) of various sizes and shapes, and (3) capable of forming a compact mass and interlocking with each other and the existing jetty stone (app. br. at 2; gov't br. at 33). Appellant argues that the unshaped stone from Salisbury Quarry satisfied the Contract "requirements and the direction to shape the existing stone by the Corps was a change to the contract . . ." (app. br. at 1-2). The government argues that unshaped stone from Salisbury Quarry "was uniformly shaped as parallelepiped with relatively minor differences in size," which "would not adequately interlock with the existing jetty stone to which it was being placed" (gov't br. at 4). The government also argues that "[a] reasonable contractor familiar with the terms of the solicitation and the existing site conditions would have understood that the intent of the contract was to repair the [jetty] with stone similar to what was currently in place," noting that "[t]he initial armor stone selected, ordered, delivered, and placed by Appellant closely matched the existing jetty stone because it was randomly shaped with rough, uneven sides and sharp edges" (*id.*).

II. Burden of Proof

"Unlike a motion for summary judgment, which must be adjudicated on the basis of a set of undisputed facts, pursuant to Board Rule 11, the Board 'may make findings of fact on disputed facts.'" *U.S. Coating Specialties & Supplies, LLC*, ASBCA No. 58245, 20-1 BCA ¶ 37,702 at 183,031 (quoting *Grumman Aerospace Corp.*, ASBCA No. 35185, 92-3 BCA ¶ 25,059 at 124,886 n.13). Although our decision on

the parties' cross-motions for summary judgment narrowed the issues in this appeal, we now are called upon to resolve disputed facts which bear upon whether armor stone offered by Trade West met the Contract's requirement that the stones be blocky and angular in shape, of various sizes and shapes, and able to interlock and form a compact mass with each other and the existing stone with each other and the existing stone. *Trade West I* at 183,076.

Trade West has the burden of establishing by a preponderance of the evidence that the government's alleged direction to shape the stone was a constructive change to the contract.⁸ *CDM Constructors, Inc.*, ASBCA No. 60454 *et al.*, 18-1 BCA ¶ 37,190 at 181,011 (citing *Amos & Andrews Plumbing, Inc.*, ASBCA No. 29142, 86-2 BCA ¶ 18,960 at 95,738 (citing *Teledyne McCormick-Selph v. United States*, 218 Ct. Cl. 513, 517, 588 F.2d 808, 810 (1978))). To meet that burden, appellant must establish by preponderant evidence that stones from Salisbury Quarry, without shaping, met the specifications.

Appellant properly recognizes the burden it must meet. Quoting our decision in *Jack Heller, Inc.*, ASBCA Nos. 14300, 14376, 72-2 BCA ¶ 9,477 at 44,147, appellant notes that a preponderance of the evidence "rests with that evidence which, when fairly considered, produces the stronger impressions, and has the greater weight, and, even though not free of doubt, is more persuasive as to its truth when weighed against evidence in opposition thereto" (app. br. at 31). Accordingly, "a balancing, or weighing, of the conflicting evidence must be performed by any fact finding tribunal before it can properly arrive at what constitutes the 'preponderance of the evidence'" (*id.*). As we discuss below, after balancing and weighing the totality of the evidence presented by both parties, we find that appellant has failed to establish by a

⁸ Our previous decision held that "[a]lthough the record suggests that the contractor volunteered to shape the stone in the first instance [,] . . . to resolve the issue ultimately we must determine whether the government's refusal to accept Salisbury Quarry stone without shaping amounted to an informal order to shape the stone," an issue we could not decide on motions for summary judgment. *Trade West I* at 183,078. In its Rule 11 briefing, the government does not present legal argument challenging this aspect of appellant's constructive change claim. Appellant's proposed finding of fact no. 5 alleges that "[t]he Corps directed Trade West" (app. br. at 19), which the government simply denies, stating, "[a]ppellant offered to mechanically shape the stone, and USACE agreed to consider whether the shaped stone was acceptable" (gov't reply br. at 6). The government also "admits that it would not accept the Salisbury Quarry stone without further shaping . . ." (gov't reply br. at 24). Because the government's Rule 11 briefs do not posit this as a legal issue in need of resolution, we deem it waived.

preponderance of the evidence that stone from Salisbury Quarry, without shaping, met the Contract requirements.

III. Expert Testimony

A. Both Parties Proffer Expert Testimony

Appellant correctly states that the extent to which this tribunal relies upon “expert testimony is an evidentiary determination left to the sound discretion of the Board” (app. reply br. at 16 (quoting *Lebolo-Watts Constructors 01 JV, LLC*, ASBCA No. 59740 *et al.*, 21-1 BCA ¶ 37,789 at 183,427)). Appellant proffers three individuals, Mr. Cox, Dr. Griggs, and Mr. Leavitt, as “experts to provide opinions regarding the acceptability of the unmodified Salisbury blocky stone which was cut stone rather than blasted stone” (app. br. at 21). The government does not challenge their designations as experts (gov’t reply br. at 10-11, 16). The government offered one expert, Dr. Williams, on the “issue of whether the Salisbury Quarry Stone met the Contract requirements” (gov’t br. at 26). Appellant does not argue that Dr. Williams is not qualified as an expert; rather, appellant argues that Dr. Williams is less credible than Trade West’s experts (app. reply br. at 15). We find that all four individuals possess varying degrees of expertise regarding the placement of stone along coastal waterways (findings 60, 63, 66, 75) and neither party has challenged the admission of the other parties’ expert submissions into evidence.

Although appellant established the education and experience of Mr. Cox, Dr. Griggs, and Mr. Leavitt, and we have considered their collective statements, as we set forth below, we do not regard their expressed opinions to be of sufficient weight to establish by preponderant evidence that the unshaped stone from Salisbury Quarry met the Contract requirements. Our decision discusses, in detail, statements and positions proffered by each individual, and, in so doing, we have exercised our sound discretion in deciding which statements and positions to accept and which to reject. *S.W. Marine, Inc., San Pedro Div.*, ASBCA No. 28196, 86-2 BCA ¶ 19,005 at 86,241 (“trier of fact is not bound by expert testimony and may substitute his common sense judgment for that of the expert”). We also have considered the parties’ proffered expert testimony, not as a means by which to interpretate the contract, but rather as a means to interpret various terms of art and to assist us in the factual (not legal) determination whether stones from Salisbury Quarry complied with the Contract’s unambiguous requirement that they form a compact mass and interlock with each other and the existing stones. *Parsons-UXB Joint Venture*, ASBCA No. 56481, 12-1 BCA ¶ 34,919 at 171,695 (“[e]fforts by experts to apply the facts to specialized legal terminology to attempt to establish whether a particular legal standard has been satisfied should be excluded” (citation omitted)).

B. Trade West's Attempt to "Discount" Dr. Williams's Testimony is Misplaced

We note that Mr. Leavitt and Dr. Williams both were involved in various aspects of the South Jetty repair project. Appellant suggests that we should “discount” Dr. Williams’s statements because he was involved “in the preparation of the plans and specifications out of which this appeal arises” (app. reply br. at 17).⁹ Appellant argues, however, that Mr. Leavitt’s statements should not suffer the same fate (*id.* n.8), even though, as Mr. Leavitt’s affidavits make abundantly clear, Mr. Leavitt was extensively involved in preparing appellant’s proposal, prosecuting the work, and requesting that the government accept stone from Salisbury Quarry (findings 15, 21-22, 27, 37, 41, 44-45, 47, 75-78). In support of its position, appellant states, “[w]hile the proffered expert testimony of Andy Leavitt also is from an employee of one of the parties, Mr. Leavitt’s opinions were independently peer reviewed and validated by Mr. Cox and Mr. [sic] Griggs who both are truly independent and not employed by Trade West” (app. reply br. at 17 n.8). However, a review of Mr. Cox’s affidavit and Dr. Griggs’s report establishes that neither individual referenced Mr. Leavitt’s affidavits nor “peer reviewed and validated” his specific opinions. Indeed, in its reply brief, appellant argues just the opposite, i.e., that “Mr. Leavitt Validates Mr. Cox’s and Mr. [sic] Griggs’ Opinions” (app. br. at 25).

Citing *Ryan Co.*, ASBCA Nos. 41235, 42095, 94-1 BCA ¶ 26,539, appellant argues that Dr. Williams’s alleged bias as a government employee is greater than any alleged bias that Mr. Leavitt had as appellant’s employee because Dr. Williams approved the project drawings as the Chief of the Design and General Engineering Section (app. reply br. at 15 n.6, 18). In *Ryan*, the government expert was a principal of the architectural/engineering firm that prepared the drawings and specifications in question, and the Board expressed its concern that this created a bias “greater than any bias of appellant’s expert” (*id.* at 17 (quoting *Ryan*, 94-1 BCA ¶ 26,539 at 132,096)). Obviously, the facts in that appeal are readily distinguishable. Dr. Williams is a government employee who approved drawings in the course of his employment; he was not the principal of an outside company that prepared contract drawings and

⁹ Appellant argues that “the Corps would have us believe that Mr. [sic] Williams’ work and approval resulted in a defective specification[,] but that we should now believe his supposed clear and unambiguous opinions” (app. reply br. at 16 n.7). However, neither party argues that the Contract specifications were “defective.” Indeed, appellant specifically states that it “does not argue that [Dr. William’s] work in drafting the specifications and drawings was defective or resulted in an ambiguity” (*id.* at 15). To the extent that appellant now is suggesting that the specifications were defective, it could be argued that this created an ambiguity, thus allowing the consideration of pre-dispute extrinsic evidence such as the parties’ agreement at the outset of the Contract to utilize blasted, jagged stone from Fountain Quarry, which met the Contract specifications.

specifications for the government, and who's company's reputation potentially was put at issue because of various problems caused by possible design deficiencies. Considering Dr. William's declaration as a whole, even though he approved the drawings prepared by the Design and General Engineering Section, we do not perceive a bias that we believe renders his opinion unreliable.¹⁰

IV. Appellant Has Not Established by Preponderant Evidence that Unshaped Stone from Salisbury Quarry Met the Contract's Requirement that Stones Be Angular in Shape

In our previous decision, we found that Contract specification 2.1.2 required armor stone "be furnished in blocky and angular shapes." *Trade West I* at 183,075. In its Rule 11 brief, appellant contends, and the government does not dispute, that stone from Salisbury Quarry was "blocky" (app. br. at 19; gov't br. at 33). The parties disagree, however, as to whether the unshaped stone from Salisbury Quarry was angular. Trade West argues that all three of its "proffered experts provided credible and logical explanations and opinions that the unmodified blocky stone was, in fact, 'angular'" (app. reply br. at 10). The government argues that "[t]he supplemental stone proposed was not 'angular' in shape" (gov't reply br. at 1).

In essence, appellant argues that the unshaped stone from Salisbury Quarry is "angular" because the stone had angles and was not round (app. br. at 18). As support, appellant cites an attachment to Mr. Leavitt's affidavit, setting forth the Merriam-Webster definition of that word as "having one or more angles" (*id.*; finding 25), and references the opinion of Dr. Griggs, which states, "[a]ny angle, whether 5, 60, 90 or 145 degrees is an angle" (app. br. at 23; finding 70).

In contrast, Dr. Williams states in his declaration that "[t]he requirement for the stone to be furnished in 'blocky and angular shapes' has specific meaning with regard to coastal engineering erosion control structures and is commonly understood to mean blasted rock with sharp, random, angular shapes" (finding 62). We find this is consistent with Contract specifications requiring that "stone shall be furnished in blocky and angular shapes" and "stone shall be furnished in random sizes" (findings 4-5). This also is consistent with Mr. Leavitt's statements in his affidavit that "[w]hen initially performing this contract, I planned to use large stones produced as a byproduct from

¹⁰ Appellant also relies upon two Board decisions wherein we questioned the credibility of former government employees who testified as experts and who were engaged on a contingent fee basis (app. reply br. at 16) (citing *Cosmic Constr. Co.*, ASBCA Nos. 24014, 24036, 88-2 BCA ¶ 20,623; *Melville Energy Sys., Inc.*, ASBCA No. 33890, 87-3 BCA ¶ 19,992). Regarding Dr. Williams's credibility, the facts presented in those appeals obviously are in no way similar to those presented here.

blasting operations to produce aggregate” and that “[b]lasted rock is often used for those projects because it is cheaper to produce” (finding 76).

Dr. Griggs challenges Dr. Williams’s opinion, stating, “Mr. [sic] Williams does not cite a document where this specific meaning is explained or defined, or by where it is ‘commonly understood to mean blasted rock with sharp, random, angular shapes’” (finding 69). Although Dr. Griggs criticizes Dr. Williams because he “does not cite a document where this specific meaning is explained,” or “where it is ‘commonly understood,’” Dr. Griggs does not disagree with the premise of Dr. Williams’s statement (*id.*).

As support, Dr. Williams cites CEM Part IV, Chapter 2, which includes images of manufactured concrete armor units and categorizes such units as either massive or blocky, bulky, slender, or multi-hole cubes. Massive or blocky units are then described as “cubes incl[uding] grooved types, parallelepiped block.” (Finding 62) Dr. Williams concludes that “[w]hile the stones provided by Trade West Construction originating from the Salisbury Quarry fit the definition of ‘massive/blocky’” because they are functionally identical to the armor units shown in . . . the CEM, these stones would not be considered ‘angular’ because their corners are at or close to 90-degree angles,” that “[a]ngular stones have either acute (angles less than 90-degrees) or obtuse (angles greater than 90-degrees) angles, but no flat sides with 90-degree angles,” and “[t]he term ‘angular’ is not used to describe cubic or parallelepiped-shaped stone” (*id.*). We find that Dr. Williams’ reliance upon extrinsic evidence of trade practice and custom is appropriate under these circumstances. *TEG-Paradigm Envtl., Inc. v. United States*, 465 F.3d 1329, 1339 (Fed. Cir. 2006) (even where a contract is unambiguous, “evidence of trade practice may be useful in interpreting a contract term having an accepted industry meaning different from its ordinary meaning”) (quoting *Hunt Constr. Group, Inc. v. United States*, 281 F.3d 1369, 1373 (Fed. Cir. 2002)).

Dr. Griggs also criticizes Dr. Williams’s opinion, stating, “[w]hile he calls the corner of the Salisbury stones 90-degree angles, he concludes in the same sentence that they are not angular,” and “[i]t seems that Mr. [sic] Williams has made up a definition of angular stones to have only acute (less than 90-degrees) or obtuse (greater than 90-degrees) angles. What about an angle or corner at 85 or 95 degrees? Would these stones be considered angular?” (Finding 70) As noted by the government, both Dr. Griggs (and Mr. Leavitt, in his second affidavit) “take issue with that statement[,], arguing 90 degrees is still an angle” (gov’t br. at 34). We agree with the government that “both miss Dr. Williams’ point that ‘angular’ would not be used to describe a cubic or parallelepiped shaped stone, implying such description would be redundant” (*id.*).

As additional support for his position, Dr. Williams relies upon other industry publications discussing stones, examined at the granular level, such as ASTM D2488-17, Table 2, entitled “Standard Practice for Description and Identification of

Soils (Visual-Manual Procedures)” (finding 62). According to Dr. Williams, that document provides “criteria for describing angularity of coarse-grained particles” and describing “angular as ‘particles hav[ing] sharp edges and relatively plane sides with unpolished surfaces’” (*id.*). Dr. Williams also notes that Figure 3 of ASTM D2488-17, Table 2, includes photographs of different stone shapes, under the heading “Typical Angularity of Bulky Grains,” and that none of the stones pictured “include cubic- or parallelepiped-shaped stones” (*id.*).

In response, appellant argues that “Mr. [sic] Williams resorted to reliance upon a soil specification, concrete armor units as well as other errors in methodology demonstrating the flaws forming the basis of Mr. [sic] Williams’ opinions” (app. br. at 25). Dr. Griggs criticizes Dr. Williams’s comparison of “small natural pebbles weighing less than an ounce with quarried or blasted stones weighing 14 – 22 tons,” which Dr. Griggs labels “an unsatisfactory and inappropriate comparison” (finding 70).

However, appellant’s argument is disingenuous given that at the outset of this dispute, appellant likewise offered and relied upon a similar “granular level” example in its attempts to define the meaning of “angular.” In a letter to the contracting officer requesting approval of stone from Salisbury Quarry, Mr. Potter, appellant’s quality control manager, stated that “[a]fter extensive digging into what defines a stone as ‘blocky and angular’ we found several credible sources, all of which have similar definitions. . .” (finding 24). As support for appellant’s position regarding the definition of angular “as ‘having one or more angles,’” Mr. Potter, like Dr. Williams, examined comparisons of stones at the granular level, noting that “the USGS interprets ‘angular’ at the granular level as being the ‘opposite of round’” (*id.*). An attachment to Mr. Potter’s letter stated, in part, “[t]he following excerpt applies to the granular level, but still helps us in discovering the many definitions of angular” (finding 25). In a section discussing grain shape is the statement, “**When rocks first break apart, they are split into sharp, angular pieces . . .**” (*id.*) (bold typeface in original). The USGS definition of angular offered by appellant supports Dr. Williams’s statement, wherein he “describes angular as ‘particles [that] have sharp edges and relatively plane sides with unpolished surfaces,’” as opposed to “cubic- or parallelepiped-shaped stones” (finding 62).

Appellant’s “extensive digging” in search of definitions for blocky and angular indicates an after-the-fact effort to find support for its proposition that unshaped stone from Salisbury Quarry complied with Contract specifications. It also reflects an attempt by appellant to read the specifications in a manner different than how appellant interpreted the specifications when it proposed the use of Fountain Quarry stone; all for the purpose of requiring the government to accept armor stone that admittedly was different in shape than the type previously agreed upon by the parties. *Trade West I* at 183,077 (“Trade West’s prior performance reflected its belief (and confirmation) that

Fountain Quarry stone met Contract requirements,” and “that Fountain Quarry and Salisbury Quarry produced different types of armor stone”).¹¹

Appellant argues that the “typical cross sections in the contract drawings and the existing jetty cross sections . . . are consistent with the use of interlocking sawn stone” (app. br. at 37). Indeed, both Mr. Leavitt and Dr. Griggs cite Contract Drawing CN301, which depicts design cross-sections, as support for their positions regarding the proper shape of armor stone, yet they come to opposite conclusions (finding 13). Mr. Leavitt states that Drawing CN301 “showed stone which were blocks and ‘blocky’ and ‘angular’ and not the jagged stones produced by blasting (though the blasted stone meets the contract requirements)” (finding 76). In contrast, Dr. Griggs states, regarding Drawing CN301, that “[w]hile the stone descriptions state that the rock to be used should be angular, the stones depicted on each of the 68 cross-sections are not angular but more spherical, which would not be stable on a jetty exposed to high wave energy, and in fact, would not be stable on any stone structure” (finding 68). Note 4 to Drawing CN301 stated that the stones depicted provide an example of proper stone placement and are merely general representations, not a mandate as to the size to be utilized (finding 13). Although Mr. Leavitt and Dr. Griggs both reference Note 4, they seem also to ignore its import (findings 68, 76).

That appellant’s quality control manager, Mr. Potter, recognized the difference between the different types of stone is evident in his correspondence with Mr. Cox, wherein he stated that the jetty structure “is primarily comprised of jagged angular boulders,” while “[t]he stones we are looking to place on top of this structure are of a blocky granite” (finding 52). Mr. Potter then asks, “[t]he question in a nutshell is will blocky stones interlock with jagged boulders?” (*id.*). Additional evidence of Mr. Potter’s concern regarding the use of blocky stone is reflected in a February 10, 2016, email, in which Mr. Potter provided to the government a photograph of stone available from another site (finding 17). The stone from the alternative site resembles the blocky, unshaped stone from Salisbury Quarry (*id.*). Mr. Potter asked Mr. Serrano

¹¹ Our previous decision held that, “although ‘extrinsic evidence may not be used to interpret an unambiguous contract provision,’ tribunals ‘have looked to it to confirm that the parties intended for the term to have its plain and ordinary meaning.’” *Trade West I* at 183,076. We also held that the “pre-dispute extrinsic evidence of the parties’ intent and contract interpretation ultimately may be entitled to ‘great weight,’ [but] the factual dispute regarding whether Salisbury Quarry stone met the contract requirements first must be addressed” (*id.* at 183,077). Because we now hold that appellant has failed to establish by a preponderance of the evidence that the unshaped stone from Salisbury Quarry met the Contract specifications, we need not reach the issue of whether the parties’ pre-dispute Contract interpretation “is entitled to ‘great, if not controlling, weight.’” *Trade West I* at 183,076 (citations omitted).

whether the government would be interested in using it “along the Jetty,” stating, “[i]f there are any concerns with the shape of the stones we can break off sections of the edges to create a less blocky shape, but only if necessary” (*id.*). Mr. Potter raised his concerns prior to appellant’s request that the government accept stone from Salisbury Quarry (findings 17, 19-21).

Considering the record evidence offered by the parties and the statements of the parties’ experts, we find that appellant has failed to establish by a preponderance of the evidence that stone from Salisbury Quarry met the Contract requirement that the stone be angular in shape.

V. Appellant Has Not Established by Preponderant Evidence that the Armor Stone Offered by Trade West Met the Contract’s Requirement that Stones be of Varying Sizes and Shapes

In our previous decision, we found there was no dispute that “the Contract specifications, taken together, required ‘blocky and angular’ stones, as well as stones of varying sizes and shapes.” *Trade West I* at 183,075. The government argues that the unshaped stone from Salisbury Quarry was not “of varying shape as required by the contract, but rather was parallelepiped or rectangular block shaped with flat sides,” and that the government “reasonably concluded initially the supplemental stone would fail to form a compact, interlocking mass of stone” (gov’t reply br. at 1). Appellant argues that “[w]hile the stones were blocky, they were not rectangular,” and that “the specifications do not prohibit rectangular parallelogram shapes” (app. br. at 29).¹²

The parties do not now directly challenge our finding that the Contract required blocky and angular stones, as well as stones of varying sizes and shapes. Appellant argues, however, that “[a]s related to placement of the stone, the stone was required to be of varying shapes and sizes to assist in the placement of the stone” (app. reply br. at 11) and that “[i]t is disingenuous to state that ‘varying shapes’ in the placement section of the specifications should override the ‘blocky’ requirement in the actual armor stone specification” (*id.* at 12). Notwithstanding appellant’s assertion to the contrary, our interpretation of the Contract does not result in one specification “overriding” another. Rather, in finding that the specifications required ‘blocky and angular’ stones, as well as stones of varying sizes and shapes,” our interpretation of the Contract reads the two specifications together, giving harmony to both provisions. *Hometown Fin., Inc. v. United States*, 409 F.3d 1360, 1369 (Fed. Cir. 2005). Indeed, appellant acknowledged previously that the intent of the specifications was “to provide

¹² “A parallelogram is a four-sided plane figure having opposite sides parallel and includes a square, a rectangle (oblong), a rhombus, or a rhomboid.” *Application of Gewiss*, 435 F.2d 904, 905–06, 58 C.C.P.A. 824, 825-826 (1971).

blocky and angular stones of various sizes and shapes” *Trade West I* at 183,075 (citing app. mot. at 4).

In its initial Rule 11 brief, appellant argues that “[t]he sample block sizes were of various sizes and shapes (different parallelepiped sizes),” (app. br. at 19), and that “[s]ince the angles are different for each blocky stone (and for many of planes on the blocky stone), the shapes are not uniform” (*id.* at 29). In its reply brief, appellant argues that the unshaped stone from Salisbury Quarry met that requirement, stating that “[t]he stones clearly were of different sizes as shown by Trade West,” because “[t]he stones varied in shape within the context of remaining blocky since the various shapes were of blocky stones and not stones in general” (app. reply br. at 12).

In his February 29, 2016, letter to the government, Mr. Potter stated that, because no two stones are exactly the same, they, therefore, meet the requirement of being of various sizes and shapes, noting, “[t]he stone we are proposing to use consistently produces various sizes and shapes with no two stones holding the same dimensions, angles or shapes,” and that “we measured several blocks and found that every sample produced its own unique dimensions” (finding 24). However, Mr. Potter, in an internal email to Mr. Leavitt sent one day later, on March 1, 2016, expressed his concern regarding whether unshaped stone from Salisbury Quarry met the requirements of the specification, paragraph 3.2.4 (finding 27). Mr. Potter states that the government “may try to focus on the ‘various shapes’ verbiage and say that if all, or the majority of, the stone is rectangular/cube like in shape, then the shapes don’t vary” (*id.*). Mr. Potter observed, “[w]e need to have a good response to that argument. I don’t know if just saying that the dimensions of the stones vary will be sufficient (i.e. one stone has the dimension of 5’x6’x8’ and another has the dimension of 6’x7’x11’). This does cover the various sizes, but not shapes.” (*Id.*)

Appellant argues in its reply brief that Mr. Potter’s March 1, 2016, email “constitutes inadmissible hearsay,” is “of little probative value,” and “was merely a preliminary discussion and Mr. Potter, prior to these discussions, officially issued TWC001 at **R4, Tab 047a** [appellant’s Serial Letter TWC-0001, dated February 29, 2016] which fully supports Trade West’s position” (app. reply br. at 21 (bold typeface in original)). Although appellant casts the letter as “merely a preliminary discussion,” appellant recognizes that Mr. Potter’s March 1, 2016, email, was issued after his February 29th email. The March 1, 2016, email is part of the official record in this appeal. The document was submitted on June 30, 2021, “[i]n accordance with the Board’s Order dated April 1, 2021,” as tab 48 to the parties’ “Joint Supplemental Rule 4 Submission.” The parties’ June 30, 2021, Rule 4 submission, contained no objection by either party to any of the documents included in the Joint

Supplemental Rule 4 Submission.¹³ As to the document’s probative value, as the finder of fact, we have considered the document’s contents and evaluated the weight, persuasiveness, and credibility it should be given. *CANVS Corp.*, ASBCA Nos. 57784, 57987, 18-1 BCA ¶ 37,156 at 180,894 (“[a]s the finder of fact, the Board is responsible for evaluating the credibility, persuasiveness, and weight accorded to conflicting evidence in the record”). We find that the contemporaneous, internal email of appellant’s quality control manager is evidence relevant to the Board’s factual determination of whether appellant has met its burden of proof by a preponderance of the evidence. *ECC Int’l, LLC*, ASBCA No. 58875, 20-1 BCA ¶ 37,683 at 182,961 n.12 (considering contemporaneous, internal contractor emails that established subcontractor was responsible for the decision to perform work not in accordance with contract).

Regarding the issue of whether the armor stone met the Contract’s varying shapes and sizes requirement, the statements of appellant’s experts fail to provide the “good response” sought by Mr. Potter. Although Mr. Cox summarily states that the specification requires “stones of various shapes and sizes be used,” his affidavit is devoid of any discussion regarding whether the stone from Salisbury Quarry met that specification requirement (finding 64). Indeed, we note that Mr. Cox recognized the importance of different shaped stones, stating that “[d]epending on the size and configuration of the void and the method of placement, different shaped stones would interlock better than other stones” (*id.*). The report provided by Dr. Griggs, offered by appellant as a peer review and validation of Mr. Cox’s opinion (app. br. at 21), likewise does not substantively address the requirement that the armor stone be of “varying shapes and sizes” (finding 68). Instead, Dr. Griggs simply quotes Mr. Cox’s statement that the specification required “stones of various shapes and sizes be used,” concluding, “I am in complete agreement with these statements. Placement of the stone is of critical importance in achieving stability” (finding 71).

Mr. Leavitt’s first affidavit does not mention the Contract’s varying sizes and shapes requirement (finding 76). Mr. Leavitt’s second affidavit makes several references to the specification requirement. Still, it does so only summarily, stating, “[e]ach were of different sizes and shapes with differing angles and weights,” “the shapes and sizes of the Salisbury stone varied greatly,” and “these were not cubes, but were blocky and angular stones of varying sizes and shapes[,] which were clearly

¹³ Our April 1, 2021 Order, required the parties to meet, confer, and submit to the Board their joint Rule 4 supplement, “with any unresolved objections to the joint Rule 4 supplement (and the basis for those objections) noted in the filing.” Appellant having failed to lodge any objection to this document as required by our April 1, 2021 Order, has waived its right to object to its inclusion in the record at this stage in the proceedings. *X-Tyal Intern. Corp.*, ASBCA No. 24353, 84-2 BCA ¶ 17,251 at 85,919 (appellant waived right to object to documents by failing to raise objections in a timely manner).

complied with the specification armor stone requirements” (finding 78). It is well established that “[g]eneralized conclusory, unsupported opinion type statements do not demand weight when such statements are little more than self-serving conclusions.” *L.B. Samford, Inc.*, ASBCA No. 32645, 93-1 BCA ¶ 25,228 at 125,660 (citing *Newell Clothing Co.*, ASBCA No. 28306, 86-3 BCA ¶ 19,093, *aff’d*, *Newell Clothing Company, Inc. v. United States*, 818 F.2d 876 (1987)). This especially is true where the conclusory opinions concern “fact[s] we are called upon to decide.” *Universal Yacht Servs., Inc.*, ASBCA No. 53951, 04-2 BCA ¶ 32,648 at 161,579.

Mr. Leavitt challenges Dr. Williams’s statement that “blocky and angular shapes . . . would not be used to describe uniformly shaped cubes or parallelepiped shaped stone like that produced by the Salisbury Quarry” (finding 62), stating that Dr. Williams “implies that the stone supplied from the Salisbury Quarry were ‘uniformly shaped’, which in fact, is not true since all the stones greatly varied in shape and size and no two stones were identical” (finding 78).¹⁴ However, Mr. Leavitt’s conclusory statement in no way establishes that the parallelepiped stone offered by appellant met the varying sizes and shapes requirement of the Contract specification. As noted by Mr. Potter, “I don't know if just saying that the dimensions of the stones vary will be sufficient (i.e. one stone has the dimension of 5'x6'x8' and another has the dimension of 6'x7'x11'). This does cover the various sizes, but not shapes.” (Finding 27)

Considering the record evidence offered by the parties and the statements of the parties’ experts, we find that appellant has failed to establish by a preponderance of the evidence that stone from Salisbury Quarry met the Contract requirement that it be of varying sizes and shapes.

VI. Appellant Has Not Established by Preponderant Evidence that Armor Stone Offered by Trade West Met the Contract’s Compact Mass and Interlock Requirements

As we found previously, “Specification 3.2.4 required that ‘armor stones of various sizes and shapes shall be distributed such that they form a compact mass and interlock with each other and the existing stones.’” *Trade West I* at 183,075. Appellant correctly states that the purpose of the Contract was “to provide a durable and long-standing repair to the Masonboro Inlet Jetty through the placement of heavy 14-20 ton armor stone into the structure” (app. br. at 32). Indeed, the Contract specifications required that armor stone “be placed in a single layer” and the Contract drawings provided that “[t]he intent of the project is to provide one new layer of armor stone . . .”

¹⁴ Mr. Leavitt also states, “[i]n my experience, the purpose of this requirement is to provide a varied stock of stone of various shapes and sizes to allow the operator placing the stone the choice of stone to fill a void or to build out the slope to the design elevation) (*id.*).

(findings 10, 12). Mr. Leavitt recognized that Contract “required the Contractor to provide and place one layer of Armor Stone on the Masonboro Inlet Jetty” (finding 76).

The government notes, correctly, that relevant to this inquiry is the type of stone that was in place on the existing jetty prior to commencement of work and upon which a new layer of armor stone was to be placed (gov’t br. at 32). Dr. Griggs’s report recognizes that the jetty originally was constructed of “randomly shaped and angular blasted” stone (finding 74). There is no dispute that appellant chose, and initially provided, blasted, jagged stone from Fountain Quarry, and that the stone met the Contract specifications. *Trade West I* at 183,069.

It also is undisputed that the armor stone from Fountain Quarry initially provided by appellant is a different shape than the armor stone from Salisbury Quarry that appellant offered as a replacement and that stones from the two sources were quarried differently (blasted versus cut), which resulted in different-shaped stone. *Trade West I* at 183,076-77. Indeed, Mr. Leavitt states in his affidavit that “blasted rock is often used for those projects because it is cheaper to produce” (finding 76). The record contains numerous photographs of the two different types of stone, which establish the marked difference between blasted versus cut quarry stone and that unshaped stone from Salisbury Quarry was of one basic shape – parallelepiped (finding 55). Mr. Leavitt suggested as much, stating that stone from Salisbury Quarry was “‘parallelepipeds’ which are defined as blocks with six parallelogram faces” (finding 78).

In support of its argument that stone from Salisbury Quarry did not meet the Contract’s interlocking requirement, the government relies upon statements made by Dr. Melby (gov’t br. at 37), a USACE expert on armor stones (finding 28). During Contract performance, Dr. Williams sought Dr. Melby’s “advice or recommendation” regarding appellant’s request to utilize stone from Salisbury Quarry. Dr. Melby responded by email, stating that he agreed with Dr. Williams and that “[c]ubic stones do not interlock well,” and are “[o]ut of spec” (finding 30). Mr. Leavitt alleges in his affidavit that Dr. Williams somehow “coached” Dr. Melby with respect to his opinion that stones from Salisbury Quarry would not properly interlock with the stones in place at the South Jetty (finding 78). We reject Mr. Leavitt’s allegation that Dr. Williams “coached” Dr. Melby simply by inquiring, during Contract performance, whether a government expert on armor stone, concurred with Dr. Williams’s belief that the stone offered by appellant would not properly interlock with existing Jetty stone. Dr. Williams’s interaction with Dr. Melby on that issue was completely proper.¹⁵

¹⁵ We note that appellant’s counsel did not proffer the same argument in appellant’s Rule 11 briefs. We also note that Mr. Leavitt’s affidavits sometimes read more like a legal argument than a witness simply stating the facts or proffering an opinion regarding the import of certain facts, thereby diminishing his

Dr. Williams explained in his declaration that “[c]ubes and parallelepiped stones . . . do not interlock well with adjacent stones that are of different types and shapes,” noting that “[c]ubes and parallelepiped stones can interlock well with other cubes and parallelepiped stones when they can fit into a structure like bricks in a building,” but “they are not compatible for interlocking when placed with a different type of stone that already exists, such as the blocky and jagged, angular stone found at the Masonboro Inlet South Jetty prior to this project” (finding 62). Mr. Leavitt again criticizes Dr. Williams’s opinion, stating, “Paragraph 9 of Mr. [sic] Williams’ Declaration is conclusory and mistaken since none of the Salisbury Quarry stones were cubes” (finding 78). What Mr. Leavitt leaves out of his criticism is that Dr. Williams specifically referred to stone produced by Salisbury Quarry as “uniformly shaped cubes or parallelepiped shaped” (finding 62). Indeed, in his affidavit, Mr. Leavitt subsequently agrees with Dr. Williams, stating that Dr. “Williams was careful and accurate not to describe the stone as rectangular, but rather as “parallelepiped” which are defined as blocks with six parallelogram faces” (finding 78).¹⁶

As discussed previously, appellant’s quality control manager, Mr. Potter, recognized the distinction between the armor stone already in place at the jetty and the unshaped stone from Salisbury Quarry (finding 52). In his email, he informed Mr. Cox that the existing jetty structure “is primarily comprised of jagged angular boulders weighing between 14 and 22 tons,” and he expressed his concern about whether stones Trade West proposed to use from Salisbury Quarry would interlock with the jetty as constructed, stating “[t]he stones we are looking to place on top of this structure are of a blocky granite also weighing between 14 and 22 tons” (*id.*). Mr. Cox responded, expressing concern about the blocky stones interlocking and stating, “[y]ou did not say how thick or how many layers you plan so I’m assuming this is placing a repair veneer over the old so likely just one layer. Likely you will not get much interlock.” (Finding 53) Mr. Cox acknowledged the problem with interlocking, stating, “[i]f you are placing the blocks on top of the existing armor of the jetty, I would say no, not a good idea” (*id.*), and “if the stone was installed as a veneer over the current stone, that the interlocking between the veneer and the current structure may not provide for

persuasiveness. *Mega Constr. Co. v. United States*, 29 Fed. Cl. 396, 433-34 (1993) (noting “a strong partisan position by [expert] in favor of plaintiff, in conflict with one of his duties as an expert witness to objectively assist the court to understand the facts and issues”).

¹⁶ Mr. Leavitt also challenges Dr. “Williams’s “bricks in a building” analogy as inapplicable “since the shapes and sizes of the Salisbury stone varied greatly” (finding 78). Yet, Mr. Leavitt offers a similar analogy in his first affidavit, stating that “[s]tone interlocking is best exemplified in history by the pyramids and castles whereby stone blocks are laid together in full contact with virtually no voids” (finding 76).

proper interlocking (finding 64). Mr. Cox’s question regarding the installation of armor stone as a veneer over the current stone was on point, as the Contract specified that armor stone “shall be placed in a single layer” (findings 10, 13).

In his affidavit, Mr. Cox attempts unsuccessfully to reconcile his earlier, contrary email statements with appellant’s position in this appeal, stating, “I have since learned that each stone for this Project was individually selected and placed into the jetty to fill voids then existing in the jetty and to build the jetty to a specified elevation,” that “[t]he interlocking is achieved by the skillful placement of the stone in the jetty”, and that effective interlocking is “primarily a result of proper placement of angular and blocky stone” (finding 64). Yet Mr. Potter’s initial question to Mr. Cox explicitly concerned the issue of “interlocking,” asking, “in a nutshell is will blocky stones interlock with jagged boulders?” (finding 52). Assuming that effective interlocking is, as Mr. Cox states in his affidavit, “primarily a result of proper placement of angular and blocky stone” (finding 64), it is unclear why Mr. Cox’s initial answer to Mr. Potter did not set forth this alleged primary tenant of proper stone placement.

In his affidavit, Mr. Cox speculates that “[b]locks of stone, such as proposed by Trade West for this project[,] *could* interlock into the structure if the properly sized stone for the void was chosen and the stone was properly placed to eliminate the void and lock the stone in place so it did not rock”, and “[t]he blocks of stone, if properly selected and placed, *should be able* to achieve interlock” (*id.*) (emphasis added). However, such mere speculation does not equate to sufficient proof of appellant’s position. We find unpersuasive Mr. Cox’s attempts to walk back his earlier statements regarding the interlocking capability of a single layer of blocky stone installed on top of the jetty. *ASCT Grp., Inc.*, ASBCA No. 61955, 22-1 BCA ¶ 38,124 at 185,199 (concluding that “contemporaneous statements and actions of the parties to be of greater weight than the declarations submitted eight years after the fact”).

Dr. Griggs states his general agreement with Mr. Cox that proper interlocking is a characteristic not simply of geometry but “primarily a result of the proper placement of angular and blocky stone,” and concludes that “[p]lacement of the stone is of critical importance in achieving stability” (finding 71). However, Dr. Griggs, like Mr. Cox, proffers only general statements that do not specifically establish that unshaped stone from Salisbury Quarry would meet the Contract’s compact mass and interlock requirements (findings 71, 74). Therefore, simply restating and agreeing with Mr. Cox’s conclusory opinions is insufficient to establish their efficacy and “is insufficient for appellant to carry its burden.” *Matcon Diamond, Inc.*, ASBCA No. 59637, 20-1 BCA ¶ 37,532 at 182,260.

As support for its argument that unshaped stone from Salisbury Quarry meets the Contract’s compact mass and interlocking requirement, appellant also cites a

document produced during Contract performance entitled “**Mockup of Jetty Conditions** Location: 1408 Point Harbor Road (Staging Area)” (app. br. at 9, 19, 22, 27-29, 34, 36-37; (finding 31)). Appellant suggests that “the Salisbury stone enjoyed greater contact with adjoining stones than the Fountain Quarry stones,” and that “[t]he Salisbury stone blocks interlocked better” (app. br. at 19). Appellant argues also “[t]he mockup of the jetty conditions as well as the expert opinions demonstrate that had the unshaped sawn quarried stones been used, Trade West had the sufficient skill to place the stone to interlock into the current structure forming a compact mass while repairing the voids and other jetty deficiencies of various sizes” (*id.* at 36).

Appellant’s mockup offered only one staging of the “jagged stone,” and two stagings or mockups of the “blocky and angular stone” (finding 32). Although appellant states that “jagged stones *typically* formed a bridge across underlying voids leaving larger gaps in the structure where the constant tidal actions would have access to pushing up on the stones,” we find that appellant’s singular example of the “jagged stone” is an insufficient basis upon which to conclude that “jagged stones typically” form a bridge (*id.*) (Italic typeface added).¹⁷ Regarding the photographs depicting “blocky and angular stone,” we note that those stones extend considerably over and above the jetty stone upon which they are placed (finding 33). Yet, appellant’s analysis makes no mention of the effect that “constant tidal actions” would have on those “blocky and angular stone” that protrude out and over the stone base (finding 34).

Ultimately, the mockup and photographs do not establish under the preponderance standard that stone from Salisbury Quarry would have met the Contract’s compact mass and interlock requirements. This fact is brought home by appellant’s expert, Dr. Griggs, who observes in his report regarding Trade West’s “mockup of Salisbury Quarry stones,” that “it is difficult with just two photographs to compare the fit or embedment of the two different stone types” (finding 72). Nevertheless, Dr. Griggs concludes that “it appears that the cut stone from Salisbury Quarry, if well positioned, can achieve the compact and ‘interlocking’ requirement” (*id.*). We find that Dr. Griggs’s recognition that it is “difficult” to conclude from the mockup the “the fit or embedment of the two different stone types” based upon just two photographs is an express recognition of the limitation of the mockup and the inadequate number of samples upon which appellant has based its conclusions. Dr. Grigg’s suggestion, based upon that mockup, that “it appears” stone from Salisbury Quarry “can achieve the compact and ‘interlocking’ requirement,” is not preponderant evidence necessary to support appellant’s argument that the mockup established

¹⁷ Appellant placed at the South Jetty 277 stones from Fountain Quarry (finding 56). Yet appellant offered no examination of the interlocking capability of those 277 jagged, blasted, stone they placed on top of the jagged, blasted, stone already in place on the South Jetty, or the extent to which those stones formed a “bridge.”

“Salisbury stone blocks interlocked better” (app. br. at 19). *Universal Yacht Servs., Inc.*, 04-2 BCA ¶ 32,648 at 161,579 (“Expert opinion evidence is not entitled to weight when ‘there is simply too great an analytical gap between the data and the opinion proffered.’”) (citation omitted). We find that appellant’s mockup, and accompanying photographs, fail to establish that the stone from Salisbury Quarry meets the Contract’s requirement that the stone “form a compact mass and interlock with each other and the existing stones” (finding 1), let alone that it would “provide the structure with the best possible results for interlocking” (finding 35).¹⁸

Mr. Leavitt states in his second affidavit that “through careful placement, Trade West would have been able to wedge in the blocks with far less void space than the jagged stones produced by blasting or chipping of the sawn stone” (finding 78). As support, Mr. Leavitt cites appellant’s mockup, stating, “[i]n fact, we showed that precise fact in our mockup demonstration” (*id.*). However, as we have held, the mockup relied upon by appellant fails to establish this fact. Although Mr. Leavitt asserts that he observed the onsite conditions and believes appellant “would have been able to wedge in the blocks with far less void space than the jagged stone,” even the mockup relied upon by Mr. Leavitt cautions that “[w]hen placing stones at the jetty we will not have the luxury of choosing what stones to place as the majority of the stones will fall beneath the surface and we will be limited to the 8 or 10 stones we have on-hand, which will diminish with each placed stone” (finding 32).

Regarding appellant’s attempts to bolster its argument that the government should have accepted the unshaped stone from Salisbury Quarry because of its alleged superior durability (app. br. at 36-37), appellant’s argument carries no legal significance. Even assuming that stone from Salisbury Quarry offered “superior durability,” such durability was not the government’s only priority, moreover, it is well established that “[t]he Government is entitled to insist on strict compliance with its contract specifications, and has no obligation to accept substitutes, even if the substitutes are equivalent or superior to that which is specified.” *Carothers Constr. Co., Inc.*, ASBCA No. 41268, 93-2 BCA ¶ 25,628 at 127,545-46.

Ultimately, appellant’s argument fails because appellant has not established by a preponderance of the evidence that the stone it proposed to utilize, unshaped, would have successfully interlocked as required by the Contract. This is true even if we were to find that both parties’ expert statements were evenly balanced, which they were not. *Marine Indus. Northwest, Inc.*, ASBCA No. 51942, 01-1 ¶ BCA 31,201 at 154,044 (appellant failed to meet its burden of proof where evidence was evenly balanced based on the conflicting affidavits, and appellant failed to establish its position was more

¹⁸ The government correctly notes that Mr. Cox also reviewed appellant’s “mockup of jetty,” but offered no opinion about the presentation in his affidavit (gov’t reply br. at 22, 28; finding 65).

probable than not); *Parsons Main, Inc.*, ASBCA Nos. 51355, 51717, 02-2 BCA ¶ 31,886 at 157,539 (“Board assesses the probative weight of the two experts' opinions to be equal. Thus, the preponderance of evidence does not support the COE's contention”).

VII. Alleged Use of Sawn Stone by Other USACE Districts for Other Projects Does Not Mean That It Was Appropriate Here

Appellant argues “that while the specifications permit the use of jagged stone, it also permits the use of sawn quarried stone which is superior to the jagged stone for providing a stable and long-lasting jetty repair,” and that “[n]o provision in the specification prohibits the use of sawn armor stone and Corps guidance typically includes sawn stone” (app. br. at 30). In support of its argument appellant’s cites what appears to be portions of a presentation by the USACE Chicago District, entitled “Armor Stone Durability In the Great Lakes Environment,” which depicts cut limestone blocks, wherein blocks were “[u]sed initially in ‘Laid Up’ structures,” and “[l]ater used in rubble mound and as capstone” (app. br. at 30 (citing R4, tab 85 (attachment to June 7, 2019, aff. of Mr. Leavitt at 84-85))). Appellant also cites paragraph 19 of Mr. Leavitt’s second affidavit as support, wherein Mr. Leavitt referenced another study concerning the Great Lakes, entitled “Monitoring Stone Degradation on Coastal Structures in the Great Lakes,” and made a distinction between rounded stone and blocky/angular stone, as well as the durability of sawn versus, blasted stone (app. br. at 30 (citing R4, tab 90 (June 8, 2021, aff. of Mr. Leavitt at 8, ¶ 19); finding 78)). This allegation has no bearing on the interpretation of the particular contract before us.

The fact that a different USACE district recognized and discussed the existence and use of sawn stone in presentations concerning the Great Lakes region does not establish that the use of unshaped stone from Salisbury Quarry was appropriate for use in repairing the South Jetty, which is located along the Atlantic seaboard and previously was constructed with jagged, irregularly shaped stone. Indeed, Mr. Leavitt admits in his affidavit that “the Great Lakes *are not the same as ocean conditions* (which vary widely between locations) . . .” (finding 78) (emphasis added).

Appellant’s similar argument, that “another Corps district approved the use of the Salisbury stone (same sizes) for coastal protection when proposed by Trade West in a subsequent contract” (app. br. at 33 (citing Leavitt Affidavit, Rule 4, tab 85 at ¶ 28 and Leavitt Supplemental Affidavit at Rule 4, tab 90 at ¶ 5(a))), fares no better. The referenced project concerned a USACE revetment repair in Washington State “near Rialto Beach” (finding 76). As support, appellant cites “Tab No. 9” to his affidavit, which is a memorandum from Mr. Leavitt to the Seattle District “Design Team for Quillayute Revetment Repair” (findings 76-77).

Although Mr. Leavitt apparently inquired from the USACE Seattle District whether the use of these stones “would be a problem,” nowhere in Tab No. 9 is there a statement by the Corps, or any other government official, wherein “the Corps confirmed that this was the preferred stone and superior to the cheaper jagged stone produced by blasting” (finding 76). Indeed, although Mr. Leavitt alleges in his initial affidavit that the Seattle District accepted Trade West’s proposal to utilize sawn quarry blocks (finding 76), in his supplemental affidavit, Mr. Leavitt states that Trade West decided to utilize “blasted stone since the blasted stone was less expensive” (finding 78). Other than to state that “sawn quarry blocks were approved,” appellant offers no details about the Seattle District project and provides no comparison between the *revetment repair* being performed on the Pacific Coast of Washington State and the placement of armor stone on an Atlantic Coast *jetty* composed of jagged, irregularly shaped stone, or any description of the type of stone currently in place at the revetment (*id.*).

What is apparent, however, is the difference in specifications. Specification 3.3, Stone Placement, cited by Mr. Leavitt regarding the Seattle District project, apparently allowed for the placement of slab-like stone on the revetment, stating that “[n]o slab-like stone shall be placed with its broadest dimension facing upward, parallel to the finish grade line” (finding 77). In contrast, the South Jetty repair expressly forbade the use of slab-like stone, “[f]lat stones, tabular stones, slabs, . . . will be rejected” (finding 5). Even assuming we had sufficient detail to make a proper comparison of the two projects, such evidence has no bearing upon interpretation of the Contract provisions here. *Intram Co.*, ASBCA No. 44159, 94-1 BCA ¶ 26,375 at 131,180 (“fact that the Government clarified the contract requirements in the follow-on contract has no bearing on interpretation of this contract”); *ECC Int’l, LLC*, 20-1 BCA ¶ 37,683 at 182,969 (“fact that the parties agreed to a variation on other task orders has no bearing on this Task Order”).¹⁹ And, as noted above, Mr. Leavitt readily admits that “ocean conditions . . . vary widely between locations . . .” (finding 78).

¹⁹ Indeed, the case advanced by appellant here is far more tenuous than that in *Intram* and *ECC Int’l*. As described above in the text, those contracts were between the same parties and involved the same work. Here, we have different parts of the Corps and greatly different locations. There is no legal basis to tie them to the contract in dispute here.

CONCLUSION

We have considered appellant's remaining arguments and find they have no merit. The appeal is denied.

Dated: October 5, 2022



DAVID B. STINSON
Administrative Judge
Armed Services Board
of Contract Appeals

I concur



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

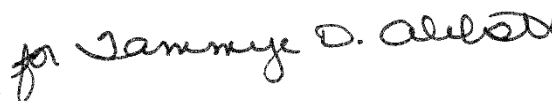
I concur



J. REID PROUTY
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. 61068, Appeal of Trade West Construction, Inc., rendered in conformance with the Board's Charter.

Dated: October 6, 2022



PAULLA K. GATES-LEWIS
Recorder, Armed Services
Board of Contract Appeals