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FEMA

NOV 10 2008

Mr. Frank McCarton
Governor's Authorized Representative
Governor's Office of Emergency Services
Response and Recovery Division
3650 Schriever Avenue
Mather, California 95655

Reference: First Appeal, City Hall - PW 229-1
FEMA-1505-DR-CA; P.A. ID 079-03064-00
Subgrantee: City of Atascadero
OES Log: 154601; FEMA Log: 1505-208

Dear Mr. McCarton:

This is in response to your March 13, 2008 letter, transmitting the first appeal, dated February 1, 2008, from the City of Atascadero (Subgrantee). The Subgrantee appealed the decision of the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) regarding funding for damages to the Atascadero City Hall (City Hall) resulting from the December 22, 2003, San Simeon earthquake.

On October 22, 2007, \$15,816,218 was approved on Project Worksheet (PW) 229-1, \$4,628,602 was for repairs to restore the City Hall to predisaster condition, \$10,830,863 for hazard mitigation and \$356,753 for architectural and engineering services (A&E). On appeal, the Subgrantee claimed the majority of the approved mitigation should have been categorized as damage repair on the basis the work was required due to earthquake damage or applicable codes. Additional costs were also claimed due to settlement of the building, for wall repairs, painting, guano and mold abatement, A&E, project/construction management (PM/CM), fencing, netting and brick storage, as well as damage to floors, roof drains, lavatories, lighting, landscaping, the heating, ventilation and air conditioning system (HVAC), and mechanical, electrical and plumbing systems (MEP). The Subgrantee requested total funding of \$25,818,914: \$21,076,749 for repairs, \$1,724,783 in mitigation and \$3,017,381 for A&E.

As further explained in the enclosed analysis, FEMA determined the Subgrantee was eligible for additional repair funding totaling \$166,738 (bare cost: \$95,944; mark-ups:¹ \$70,794) for wall repairs, HVAC, MEP, painting and roof drains. \$5,372 (bare cost: \$3,200; mark-ups: \$2,172) that was previously approved for mitigation was recategorized as repair due to the level of damage. Recategorization and additional funding for other work was denied on the basis it was

¹ The mark-ups account for General Conditions, Contractor's Overhead and Profit, Contingency for Development of Design, Escalation to Midpoint of Construction, Owner's Reserve for Change Orders and Project Management.

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not required by code, FEMA eligible, earthquake related and/or adequately documented. It was also determined that other items, including for A&E, PM/CM, guano and mold, fencing and netting, were eligible type costs that FEMA would consider funding at project closeout.

Accordingly, the appeal is partially granted. A version of PW 229 will be written for \$166,738 and an additional \$5,372 will be recategorized as repair. Total eligible funding for the project, following appeal, is \$15,982,956: \$4,800,712 in repairs, \$10,825,491 in mitigation and \$356,753 for A&E.

The Subgrantee may appeal my decision to the Assistant Administrator, Disaster Assistance Directorate, at FEMA Headquarters. If the Subgrantee elects to appeal, the appeal must contain justification: 1) supporting the Subgrantee's position, 2) specifying the monetary figure in dispute, and 3) citing the provisions in federal law, regulation, or policy with which the Subgrantee believes the initial action was inconsistent. A final appeal must be submitted to your office by the Subgrantee within 60 days of the Subgrantee's receipt of this determination. Your evaluation of that appeal is required to be submitted through my office to FEMA's Assistant Administrator, Disaster Assistance Directorate, within 60 days of your receipt of the Subgrantee's letter.

If you have any questions regarding this matter, please contact Robert J. Fenton, Director of our Disaster Assistance Division, at (510) 627-7250.

Sincerely,



Karen E. Armes
Acting Regional Administrator
FEMA Region IX

Enclosure

cc: Rachelle Rickard
Director of Administrative Services
City of Atascadero
6905 El Camino Real, Suite #6
Atascadero, CA 93422

First Appeal Analysis
FEMA DR-1505-CA
City of Atascadero
City Hall
PW # 229-1, PA ID # 079-03064-00

The Atascadero City Hall ("City Hall") was damaged in the December 22, 2003 San Simeon earthquake. The City of Atascadero ("City") was found eligible by the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) for funding to repair the damage to City Hall, to restore it to predisaster condition, and to provide limited mitigation.

The City appealed initial Project Worksheet (PW) 229-1 on February 1, 2008, and the Governor's Office of Emergency Services transmitted it to FEMA on March 13, 2008. The City claims that the PW has incorrect allocation of funds between damage repairs and mitigation, and states that several specific items of repair that were determined ineligible should be found eligible. Each specific claim is addressed in this analysis.

For the reasons discussed below, certain claims are found to be valid and revised eligible funding is approved, while other claims are found to be invalid and are denied additional funding.

Background

The Atascadero City Hall was constructed between 1914 and 1918 using local resources, including bricks made from local clay. The building was designed and constructed as a Greek Cross in plan and has two separate and distinct rotunda spaces on the first and fourth floors at the center of the building. Below the fourth floor the structural system consists of cast-in-place reinforced concrete floors and columns. Unreinforced brick masonry (URM) walls are infilled between the columns on the exterior walls. On the fourth and fifth floors the structural systems consist primarily of wood floor and roof framing with URM bearing walls and steel columns on the interior. It is reported that the foundations consist of shallow spread footings. The structure was listed on the National Register of Historic Places in 1977 and was made a California Registered Historical Landmark in 1984.

The earthquake caused structural and nonstructural damage to the building. The City claims that the earthquake caused the building's foundations to settle differentially. Since the earthquake the building has not been occupied, unrepaired exterior walls have allowed access by pigeons and moisture resulting in pigeon guano accumulation and mold intrusion. The HVAC system has not been operated nor maintained because the building has been red-tagged or yellow-tagged since the earthquake, which has inhibited the maintenance personnel to service, maintain, or drain the existing equipment. The city water and gas to the building were shut-off. The plumbing systems were drained. The water source heat pump loop was left full with presumably chemical treated water. The condenser water-circulating loop consists of un-insulated copper piping. The air conditioning system consists of water source heat pumps located throughout the City Hall building and a remote central condenser water plant located across the street in a partially enclosed structure that had no reported earthquake damage.

The City and OES/FEMA have expended substantial efforts over four years to reach consensus on the cost to repair the damage to City Hall, to restore it to predisaster condition, and to provide appropriate hazard mitigation. Project Worksheet 229-1 was obligated on October 22, 2007 and provided eligible cost of \$356,753 for architectural and engineering services, \$4,628,602 (a cost estimate) for eligible repairs, and \$10,830,863 for hazard mitigation, a total of \$15,816,218. The City's appeal requests \$3,017,381 for architectural and engineering services, \$21,076,749 for eligible repairs, and \$1,724,783 for hazard mitigation, a total of \$25,819,913. The following appeal analysis discussion is numbered to be consistent with the Appeal.

5.0 The Appeal Issues

5.1 *Applicable Building Code* –

The City's position: The City's building code satisfies FEMA's five criteria regarding codes and standards and therefore is the applicable code for repair of City Hall. The code provides that repairs may be made without requiring the entire building to comply with all the requirements of the code, provided the repair conforms to that required for a new building. As such, work to repair earthquake damage as required by the City's code is eligible for reimbursement for actual cost pursuant to the Stafford Act, FEMA's policies, and implementing regulations.

[From page 18 of the appeal]

Appeal response – The referenced code is the 2001 California Building Code (CBC) and Title 8 Building Regulations of the Atascadero Municipal Code. FEMA agrees that these codes apply to the repair of City Hall, but not that they require upgrades. The sections applicable to this appeal are CBC Chapter 34, Sections 3403.1, and the first part of Section 3403.2 (the second part is addressed in item 5.7 of this appeal analysis). Quoting the significant sections:

“SECTION 3403 – ADDITIONS, ALTERATIONS OR REPAIRS

3403.1. General. Buildings and structures to which additions, alterations or repairs are made shall comply with all the requirements of this code for new facilities except as specifically provided in this section. See Section 310.9 for provisions requiring installation of smoke detectors in existing Group R, Division 3 Occupancies.”

“3403.2. When Allowed. Additions, alterations or repairs may be made to any building or structure without requiring the existing building or structure to comply with all the requirements of this code, provided the addition, alteration or repair conforms to that required for a new building or structure. ...”

Pursuant to Title 44 Code of Federal Regulations (CFR) Section 206.226(d)(1-5), “the Five Criteria”: If a code requires a change to the predisaster construction of a facility when the facility is being repaired (i.e., an upgrade, such as an increase in structural capacity), the code may be used as a basis for determining eligibility of the code required upgrades for FEMA repair

funding only if the code meets the Five Criteria. However, FEMA has consistently interpreted the CBC code language as requiring that all earthquake damage repairs must be done in code compliant manner using code compliant materials. These repairs should be done using good engineering judgment without altering the seismic resistance of the building. FEMA policy also states that while upgrades are not eligible as repairs, they may be considered for hazard mitigation funding. See Disaster Assistance Policies No. 9527.3, Interim Policy on Construction Codes and Standards for the San Simeon Earthquake, and No. 9527.4, Construction Codes and Standards.

It is noted that 2001 CBC Appendix Chapter 34 has not been raised in this appeal while it does address upgrades. FEMA has previously determined that it does not meet the Five Criteria. The basis of this position is well documented in the December 13, 2005 response to First Appeal, PW 224-0, FEMA-1505-DR-CA, City of Paso Robles, Carnegie Library

The City's appeal of FEMA's code interpretation is denied.

5.2 *Wall Repairs* –

The City's position: The City's reinforced concrete overlays at the 1st, 2nd and 3rd floors and the carbon fiber overlays at the 4th and 5th floors meet the requirements of the City's building code, minimize the impact of repair on the historic fabric of the building, and are more effective than reconstruction. The overlays are an eligible code required repair and are not an upgrade. The cost of the overlays, which have already been approved by FEMA as hazard mitigation, should be considered repairs reimbursed for actual cost. The City requests additional funding for repair of the URM walls using the overlays. [From page 22 of the appeal]

Appeal response – From a review of new damage reported in Summary B and Attachment 29 of the appeal, the following re-evaluation was made. The crack numbers are the same as provided in the Summary B document.

Floor levels 1, 2 and 3

First, it must be recognized that the masonry walls in floor levels 1 through 3 are infilled in a reinforced concrete frame that provides gravity load capacity. Of the three wythes, only the two inner wythes provide infill to the reinforced concrete framing. Therefore, the masonry walls could be removed without creating gravity load instability. Second, the observed significant URM wall cracks in the first floor are more likely to be caused by weak pier diagonal tension than by bed joint sliding because the mortar is very strong (See FEMA 306, page 175, rather than page 169 as given in Summary B, page 8).

This is significant because cracks below 1/4 inch going through masonry units without crushing / spalling of the pier corners would be classified as "Moderate damage". The recommended restoration method is "Repoint spalled mortar, Inject cracks".

“Heavy damage” is used for cracks greater than 1/4 inch with some minor crushing / spalling of the pier corners. The recommended restoration method is “Replacement or enhancement”.

Crack #1 is reported to have a maximum crack width of 1/2 inch and Crack #4 is reported to have a maximum crack width of 3/8 inch in the first story. These would be classified as “Heavy damage” requiring replacement or enhancement.

Cracks #2, #3, and #5 in the first story are reported to have maximum crack widths of 3/16 inch in the first story. These would be classified as “Moderate damage” requiring crack injection. This is already authorized in the PW.

The vertical cracks at the reentrant corners do not contribute significantly to the seismic force resistance of the infill, so grout injection is a sufficient repair technique. The exterior brick corners are veneer brick and are not part of the seismic force resisting system because they are not part of the infill. Thus, FEMA previously approved funding to repair them by replacement in-kind or grout injection. No change is made for this work.

It is determined that the damaged URM walls identified in Summary B as #1 and #4 are eligible for funding to repair them using removal and replacement with code minimum reinforcement; and the remaining portions of the URM walls with smaller cracks, even through-the-wall cracks, are eligible for funding to repair them by grout injection. The repair area for these two cracks is estimated to be about 120 SF and the unit cost provided by Davis Langdon on February 2, 2007 was \$130 / SF. The estimated construction cost is \$15,600.

Floor levels 4 and 5

The fourth and fifth floor levels do not have a reinforced concrete moment frame. The strength of the mortar results in the cracks propagating through the brick units rather than bed joint sliding. FEMA previously approved funding to repair the damage to these exterior walls using grout injection and removal and replacement of portions of the exterior wythe of brick. However, in addition to this work, the City requested 3,486 SF of carbon fiber overlay on these walls to repair the damage, which FEMA approved in the PW as hazard mitigation: 3,486 SF of carbon fiber overlay at \$25 per SF, for a total of \$87,150.

Following filing of this appeal, FEMA reinspected the damage and determined that, except at the upper corners of the fifth floor there was limited damage, none of the reported cracks were larger than 1/4 inch, and that using either FEMA 306, page 169 or FEMA 306, page 176 criteria in these areas would result in the same recommendation – repair by grout injection, as well as the removal and replacement of portions of the exterior wythe of brick. This is already authorized in the PW.

However, the damaged URM walls in the upper corners of the fifth floor level were more seriously damaged than originally determined. It is, therefore, determined that the three wythes of the upper corners of the fifth floor level are eligible for structural repair using removal and replacement with reinforcement, estimated at 16 SF at each of the 8 eight corners (128 SF total) at \$130 SF. However, carbon fiber overlay, which was previously approved as mitigation at

\$25 per SF, is a more cost effective repair alternative for this damage than removal and replacement. Therefore, it is approved as repair, leading to an increase in repair cost of \$3,200. Because this overlay was included in the mitigation funds, the \$3,200 will be added to the repair cost and deducted from the mitigation cost. Consequently, there is no funding adjustment.

The City's appeal of FEMA's allocation of overlays between repair and hazard mitigation for the URM walls is partially granted. Approval of removal and replacement with reinforced brick construction meeting current code requirements at cracks #1 and #4 in the first story, is only a change in the previously approved repair scope. The total construction cost estimate for this item is \$15,600. Use of carbon fiber overlay at the upper corners of the fifth floor level, previously approved as mitigation, is approved as a cost effective repair of the damage and is therefore recategorized as repair, but with no additional funding.

5.3 *Settlement --*

The City's position: The City requests that FEMA include language in the PW scope of work for repairs that will be necessary due to re-leveling of the building. [From page 26 of the appeal]

Appeal response – No new evidence was provided to support the applicant's contention that the differential settlement toward the North was caused by the San Simeon earthquake of 2003. Reviewing the boring logs from the December 13, 2005 Earth Systems Pacific (ESP) report: Foundation Investigation Report -- Lewis Avenue Bridge provides additional deep soil information that is consistent with the geotechnical information on City Hall. Bridge investigation boring 2 is closest to City Hall. In this December 2005 report ESP estimated that liquefaction at the bridge site is likely only for a very large earthquake "(i.e. magnitude 7.0 or greater) occurring on the Rinconada fault"¹. The magnitude of the San Simeon earthquake was 6.5. This conclusion is consistent with the ESP report on City Hall boring #5 dated May 17, 2007 [revised July 27, 2007]² where no statement of potential liquefaction is mentioned [contrary to the claim in the appeal]. Boring #5 encountered several soft layers, one at about 25 feet below the surface and another about 40 feet below the surface. These soft layers could contribute to overall site settlement. However, it has not been demonstrated that the site settlement occurred in whole or in part as a result of the 2003 earthquake, which would make it eligible for funding; as opposed to during the first ninety years after the building was constructed at this site (predisaster damage), which would make it ineligible. It cannot be concluded that the 2003 earthquake caused the measured differential settlement included in this appeal. Thus, this appeal item to include building re-leveling and the subsequent likely building damage caused by re-leveling is denied.

The reported differential settlements included both local floor deflections as well as overall building rigid body rotation. Selecting data associated with column locations, as much as

¹ Foundation Investigation Report, Lewis Avenue Bridge, Lewis Avenue at Atascadero Creek, City of Atascadero, California, Earth Systems Pacific, December 13, 2005, page 8

² Atascadero City Hall Seismic Repair/Retrofit, Atascadero, California, Earth Systems Pacific, May 17, 2007 [revised July 27, 2007], Appeal attachment #28,

possible, the mean overall differential settlement is about 6 inches, not much different than the 7 inches reported in the original damage report. This gives an overall rotation of the building of about [6 inches / 1405 inches] 0.0043 inches / inch. Code allowable local deflections between column lines of L/240, as given in the appeal, is about 0.0042 inches / inch. Although this local deflection limit should not be used for overall rigid body deflection limits, it is interesting to note that allowable code local floor deflections for design loads are not much different than the deflections reported as differential settlement. Usually buildings can be out-of-plane from 1/2 to 1% without remedial action necessary. Clearances within elevator shafts become the primary concern. Since City Hall overall rigid body differential settlement is less than 1/2% it is within tolerable limits. Therefore, the construction associated with releveling the building is denied as repair funding. The need for new pile foundations is open to criticism. Appropriate increase in the width of the proposed wall footings could be sufficient to carry the increased dead weight of the shotcrete overlay walls of about 1,015 kips and increased short-term dynamic earthquake soil pressures during the subsequent earthquakes. No change to the approved mitigation funding is made.

The City's appeal of FEMA's determination of no funding for settlement repair is denied.

5.3.1 *Repair of Façade Due to Re-Leveling*

The City's position: The City requests that FEMA include language in the PW scope of work for repairs that will be necessary due to re-leveling of the building. [From page 26 of the appeal]

Because the City's appeal of FEMA's determination of no funding for settlement repair is denied, any work associated with re-leveling is also denied.

5.3.2 *Floor Cracks and Spalls*

The City's position: The City requests that FEMA include language in the PW scope indicating that work to repair the floor cracks and spalls on the 2nd and 3rd floor levels is an eligible repair. (The worksheet currently states that this is an ineligible item. The City will work with FEMA regarding quantities and dollar amount as the extent of damage is revealed during construction.) [From page 27 of the appeal]

Appeal response – This appeal item is included as a subset of the Settlement appeal issue. It is assumed that the City anticipates additional floor cracking if the building is to be re-leveled. Although the documented floor cracks shown on sheet SR2.2 [Volume III] have been accepted by FEMA as earthquake damage repair, they do not seem to be related to earthquake building response. Therefore, the creation of new cracks or opening of existing floor cracks while re-leveling is highly likely. Floor cracks on floors 2 and 3 that may be discovered when floor coverings are removed, before any re-leveling and where it can be demonstrated they are related directly to building earthquake response will be eligible for epoxy injection.

The City's appeal for FEMA to include floor crack epoxy injection on floors 2 and 3 corresponding to the floor cracks on floor 1 that are discovered upon removal of the second and

third floor covers but before building re-leveling, if re-leveling is done, is eligible. However, any work associated with damage caused while re-leveling is not eligible.

5.4 *Mold and Pigeon Guano Abatement*

The City's position: The City requests that FEMA include language in the PW scope of work for cleanup of pigeon guano, mold and mildew. (The support documentation for the PW states that these items are "Ineligible".) Quantities of work to be estimated immediately prior to the start of construction. The cost of abatement work and any testing that FEMA requests to establish eligible quantities will be reimbursed for actual cost. [From page 28 of the appeal]

Appeal response – It is clear that pigeon guano, mold, and mildew are significant problems at the present time in City Hall. The City claims that it made a serious attempt to seal the exterior finishes to keep pigeons and water from infiltrating the building. They were not successful, and further attempts were considered to be cost prohibitive.

The PW did not determine that guano and mold abatement were ineligible. The PW stated, for guano, "As presented, FEMA can only recognize the potential eligibility of the requested scope of work. The existence of pigeon guano is evident and it is reasonable to consider its existence a direct consequence of the disaster and therefore the cost of its removal potentially eligible. However, the scope of the pigeon guano damage and the necessary work to remediate the damage are not well documented or developed. Consequently, the advance approval of \$466,883 for pigeon guano abatement is not justified." A similar comment was included in the PW for mold. The actual reasonable costs for mold and guano abatement related to earthquake damage is an eligible cost, however, the City still has not supplied sufficient documentation supporting a scope of work that justifies the requested costs for mold and guano abatement.

Once the necessary information is provided, additional funding for these items may be provided at closeout; but only if the City can provide documentation that clearly shows that actual project costs for these items of work are linked to a scope of work that is quantitative in relation to the work performed. In order to be eligible the items, and the cost for the items, consistent with Title 44 Code of Federal Regulations (CFR) § 13.20 (5) and Office of Management and Budgets Circular A-87 (OMB A-87), must also be reasonable.

The City's appeal of FEMA's determination of "ineligible" for pigeon guano, mold, and mildew abatement is found to be unnecessary. The general scope and future actual costs, if reasonable and well documented, have been previously recognized as eligible. No adjustment in funding for these items is justified at this time.

5.5 *Heating, Ventilation, and Air Conditioning System*

The City's position: The cost for replacement of the HVAC system is cost effective when compared to repair and should be included in the eligible scope of work. The

estimated replacement cost is eligible for reimbursement for actual cost. [From page 30 of the appeal]

Appeal response - The building has been closed since the December 22, 2003 earthquake. It was red tagged immediately after the earthquake and yellow tagged on December 26, 2005 over two years after the earthquake. This 24-month restricted access inhibited the maintenance personnel to service, maintain, or drain the equipment in the City Hall. The city water and gas to the building have been shut-off. The plumbing systems have been drained. The water source heat pump loop was left full with presumably chemical treated water. The condenser water-circulating loop consists of un-insulated copper piping. The air conditioning system consists of water source heat pumps located throughout the building and a remote central condenser water plant located across the street in a partially enclosed structure. A site visit was made on August 28, 2008 to evaluate the current status.

Although the equipment and controls at the remote central plant across the street from City Hall [it had no earthquake damage and was not tagged after the earthquake] are in poor condition and highly corroded, the deterioration could have been avoided. It would have been possible to service, clean and protect the equipment at the central plant since it was accessible and safe after the earthquake. The system modifications required to maintain and exercise this equipment (cooling tower, boiler, pumps, and appurtenances) would have been the addition of two valves for main building isolation, drain valves, and a by-pass piping loop for fluid circulation. Funding to repair the remote central plant is denied.

The heat pumps and piping within City Hall had no sign of corrosion or moisture. The system is presumably filled with chemically treated fluid. This would indicate that any damage to the heat pumps due to lack of service would be negligible to none. Funding to repair the heat pumps is denied.

The domestic hot water for City Hall is provided by two 40-gallon gas fired water heaters, two 2-gallon electric water heaters, and 6 instantaneous electric water heaters. These heaters have not been used for the past 4½ years, and could not be serviced. Even after two years out of service these heaters would have had sediment and corrosion inside and their reutilization would not have been feasible. New water heaters are required and found eligible for funding.

One roof top air conditioner on City Hall was damaged by falling bricks. Replacement is estimated at \$9,000.

The City's appeal of FEMA's determination of "ineligible" for HVAC is partially granted. Funding is approved for the following scopes of work: Replace the existing domestic water heaters in City Hall and a roof air conditioner. The construction cost estimate for the above items are: two 40-gallon gas fired water heaters for \$4,500; two 2-gallon electric water heaters for \$2,000; six instantaneous water heaters for \$25,000; and one roof air conditioner for \$9,000. The total construction estimate is \$40,500.

5.6 *Re-Start of Mechanical, Electrical and Plumbing Systems*

The City's position: The City requests that FEMA evaluate this newly identified damage and include funding in the scope of work in order to repair these damaged items. [From page 31 of the appeal]

Appeal response – The piping loop within the building appears to be in good condition. Internal conditions could not be observed; however, if the system has been full of chemically treated water, there should be minimum deposits that could and should be removed via system flushing with a detergent solution. The domestic water supply has been shut-off and the distribution piping has been drained. This piping system could and should be flushed, disinfected and placed back into operation.

The City's appeal of FEMA's determination of "ineligible" for mechanical, electrical and plumbing re-starting is partially granted. FEMA approves the following: Pressure test and flush existing condenser water piping with detergent solution, and refill the system with chemically treated water for \$7,000 and pressure test, flush, and disinfect the domestic water piping system for \$3,500. The total construction cost estimate of \$10,500 is based on estimates provided by the City.

5.7 *Code Requirements*

The City's position: These code requirements include the minimum amount of work to be done to be allowed to re-occupy the building and must be funded by FEMA. [From page 32 of the appeal]

Appeal response – The CBC Section 3403.2 second paragraph quote in the appeal is:

"Additions or alterations shall not be made to an existing building or structure that will cause the building or structure to be in violation of any of the provisions of this code and such additions or alterations shall not cause the existing building or structure to become unsafe."

This paragraph addresses "Additions or alterations" and not repairs. Therefore, it does not apply to repair decisions.

In addition, FEMA is not required to fund all work required by the local jurisdiction in order to be able to re-occupy the facility. Please bear in mind that this determination regarding the City's code, as addressed here and in Section 5.1 above, is only made with respect to eligibility for FEMA funding and is entirely separate from any determination that the local jurisdiction may make regarding requirements of the code and the appropriate repair and upgrade requirements it may impose upon facilities subject to its jurisdiction. FEMA is not the building official, and the decisions of each are separate and distinct.

The City's appeal of FEMA's determination of code requirements for disaster funding is denied.

5.8 *Painting*

5.8.1 *Lower Rotunda Painting*

The City's position: The City requests that FEMA re-evaluate the scope of work so that the entire wall in the lower rotunda can be painted and the room restored to its predisaster condition. [From page 34 of the appeal]

Appeal response – FEMA concurs. The construction cost estimate is \$4,739 as provided by the City is approved.

5.8.2 *Upper Rotunda Painting*

The City's position: The City requests that FEMA re-evaluate the scope of work so that the entire wall in the upper rotunda can be painted and the room restored to its predisaster condition. [From page 35 of the appeal]

Appeal response – FEMA concurs. The construction cost estimate is \$13,405 as provided by the City is approved.

5.8.3 *Paint Balance of Building*

The City's position: The City requests that FEMA re-evaluate the current funding so all rooms that have plaster cracking in the walls can be repainted in their entirety to restore them to their predisaster condition. [From page 37 of the appeal]

Appeal response – FEMA policy continues to be that only walls that have had damage repairs are eligible for repainting.

The City's appeal of FEMA to change its painting policy is denied.

5.9 *Damage to Roof Drains and Second Floor Lavatories*

The City's position: The City requests that FEMA evaluate this newly identified damage and include funding in the scope of work in order to repair these damaged items. [From page 37 of the appeal]

Appeal response – The roof drains were damaged by falling bricks and brick mortar. It has been reported that the loose bricks, and mortar cement has entered the roof drainage system and plugged the piping. Any roof drain replacement should use code compliant overflow drains. The second floor lavatories are included in the ADA approved repairs.

The City's appeal to FEMA for additional funds for roof drain replacement with code compliant overflow drains is approved. The construction cost estimate for eight roof drains is \$7,200 and repair existing roof for the new drains is \$4,000. The total estimated construction cost is \$11,200 as provided by the City.

5.10 *Lighting*

The City's position: The City requests that FEMA pay to replace the fixture elements listed, in order to restore the lighting to pre-disaster condition. In addition, the City requests that FEMA add language to the scope of work indicating that costs to remove, store and re-install existing lighting as necessary for structural, mechanical and architectural work is eligible cost and that if the contractor can show that replacement of the existing light fixtures is more cost effective than the removal-storage-reinstallation process, that replacement will be an eligible cost. [From page 38 of the appeal]

Appeal response – The items listed in the Gayner Engineers report [Attachment 27, page 5, item A.12] and the subsequent discussion does not show that these missing items are a result of the earthquake.

The City's appeal to FEMA for additional funds for these items is denied.

5.11 *Grounds/Sitescape*

The City's position: The City requests that FEMA support the restoration of the historical fabric of the landmark by funding the cost to return the landscaping to its original pre-disaster condition. [From page 40 of the appeal]

Appeal response – The loss of landscaping is generally ineligible for funding, pursuant to Disaster Assistance Policy 9524.5, Trees, Shrubs, and Other Plantings Associated with Facilities. As stated in the PW reseeding is eligible – in order to reestablish the area that is being used as a staging area for construction activities – and was included in the initial PW authorization.

The City's appeal to FEMA for additional funds for these items is denied.

5.12 *City Costs Incurred to Date*

The City's position: Each of these City's costs incurred to date for City Hall are documented in Attachment 35, Listing and Copies of Invoices for City Hall Incurred Costs, prepared by City of Atascadero. The costs for fence rental and upper rotunda netting serve to protect the public and City Hall. The cost for brick storage is required to protect the historic fabric of City Hall. Mold testing was required by

FEMA in order to include the mold abatement scope of work. The City requests that FEMA fund these costs in the City Hall PW. [From page 42 of the appeal]

Appeal response – The types of items mentioned are generally eligible as associated work necessary to perform the approved scope of work. As such, reasonable actual eligible costs for these types of work are typically approved and funded. In fact, *Part B* of FEMA's Cost Estimating Format (CEF) provides factors to cover jobsite costs associated with temporary storage of materials and equipment, including jobsite fencing and off site space or storage trailer rental.

Funding on the initial PW (which is what is the subject of this appeal) is based on an estimate of expected costs. The cost estimate approved in PW 229-1 was based on a cost estimate developed by Davis Langdon, the City's construction project and cost management consultant. That cost estimate was reviewed by FEMA to insure that all factors incorporated into FEMA's Cost Estimating Format (CEF) were also included in the final cost estimate that was prepared by the consultant. As part of its review, FEMA asked Davis Langdon to confirm which FEMA factors were covered by the estimate. They confirmed, by electronic mail sent August 21, 2006, that the "*total estimated construction cost (\$27,584,392) [did] include FEMA factors B through E.*"

Additional funding for already approved scopes of work (as opposed to newly approved scopes) may be provided subsequent to approval of the initial PW and prior to or at closeout; but only if the City can provide documentation that shows that actual project costs – for the total project and not individual items - exceed the PW estimate. In order to be eligible the items, and the cost for the items, consistent with Title 44 Code of Federal Regulations (CFR) § 13.20 (5) and Office of Management and Budgets Circular A-87 (OMB A-87), must also be reasonable

Regarding the specific items requested, we have determined that the fence rental, rotunda netting and mold testing are reasonable items associated with the approved scope of work. Therefore, their cost, if reasonable, would be considered eligible. However, as stated above, additional funds will only be provided if it is shown that actual reasonable eligible costs for the total project exceed the estimated costs in PW 229-1.

However, regarding the costs for the brick storage - which include the rental of temporary storage bins, purchase of permanent storage bins and the labor to transfer the bricks from the temporary to permanent bins - they would not be eligible. FEMA previously notified OES, in an April 19, 2006 letter, that the storage of bricks in metal storage containers did not appear reasonable or necessary. The building site is secured by a tall wrought iron fence with locking gates and the 100 year old bricks do not require protection from environmental impacts.

The City has not provided evidence that actual project costs exceed the estimated project costs. Additionally, it has been determined that the cost to rent and subsequently purchase storage bins to store bricks exceed reasonable measures required in order to safeguard the bricks for future use in the building's reconstruction. Therefore, no additional funding for any of these items of work will be provided at this time and the cost of the brick storage bins are determined ineligible.

The City's appeal to FEMA for additional funds for fence rental, rotunda netting and mold testing are not warranted at this time as it has not been determined that actual reasonable eligible costs for the project exceed the total PW 299-1 estimates, however the cost for brick storage bins is denied.

6.1 *Architectural and Engineering (A & E) Services*

The City's position: The City requests that additional funding for A & E services be approved and included in the PW version. [From page 43 of the appeal]

Appeal Response - Architectural and engineering (A & E) work and project/construction management (PM/CM) services are generally eligible as associated work necessary to perform the approved scope of work. A & E and PM/CM associated with the Atascadero City Hall approved scope of work was approved in the PW. Funding for the A & E services included in the PW was based on the actual costs performed to a specific date, while funding for the PM/CM services was estimated using FEMA's CEF.

The City's appeal to FEMA for additional funding is not warranted at this time. Reasonable actual eligible costs for A & E and PM/CM services will be reconciled and funded at project closeout, to the extent they are not capped as part of the approved hazard mitigation scope of work.

Conclusion

Therefore, based upon the foregoing, as summarized in the Table on the following page, the appeal is partially granted. A version of PW 229 will be written for \$95,944 plus the PW mark-ups (for General Conditions, Contractor's Overhead and Profit, Contingency for Development of Design, Escalation to Midpoint, Owner's Reserve (for Change Orders), and Project Management) to fund the increase in approved eligible costs. Also, \$3,200 plus PW mark-ups will be recategorized as repair, instead of hazard mitigation. The Table does not address all eligible costs for the project; only those items that were funded based upon estimates and were the subject of this appeal.

Appeal Response Summary

Adjustments by PW Categories (Column I) and by Appeal Number (Column II)

Column I By PW Categories			Column II By Appeal Number		
PW-229-1 categories	Analysis \$	Appeal adjustment \$	Appeal Items ³	Net Appeal ⁴ \$	Appeal adjustment \$
1	Foundation	\$4,596,360			
			5.2	Wall repairs – Floor Levels 1st - 3rd	\$15,600
2	Vertical structure	447,000			
			5.2	Wall repairs – Floor Levels 4th – 5th	0 ⁵
3	Floors roof	202,445			
4	Exterior clad	203,510			
5	Roofing	8,000			
6	Interior	54,455			
7	Finishes	611,218			
8	Cabinets, etc	3,750			
9	Stairs, etc	0			
10	Plumbing	509,933			
11	HVAC	1,599,500			
12	Lighting, etc	433,416			
13	Fire protect	217,760			
14	Site	778,138			
15	Landscaping	45,000			
	Fence, etc	36,417			
	A+E services	2,660,628			
	Total	12,407,530			
			5.3	Settlement	4,700,940
			5.3.1	Repair due to re-leveling	151,225
			5.3.2	Floor cracks & spalls	54,615
			5.4	Mold & Guano	819,374
			5.5	HVAC	1,905,467
			5.6	Restart MEP	565,012
			5.7	Codes	575,045
			5.8.1	Painting	4,739
			5.8.2	Painting	13,405
			5.8.3	Painting	100,628
			5.9	Roof drains & lavatories	30,400
			5.10	Lighting	6,000
			5.11	Grounds/ Sitescape	45,000
			5.12	Costs incurred	36,417
			6.1	A+E Studies ⁶	2,660,628
			Total		12,407,530

³ Appeal items 5.3.2, 5.4, 5.12 and 6.1 do not have specific \$ allocations.

⁴ Net Appeal amount is the Subgrantee's bare cost of repairs as indicated in the "Table of Appealed Items, Scope of Work and Repair or Hazard Mitigation," Volume I of VIII of the "First Appeal Atascadero City Hall," dated February 1, 2008.

⁵ Appeal item 5.2 for the carbon fiber overlay does not generate additional funding; but results in a reclassification from hazard mitigation to repair in the amount of \$3,200. See the text.

⁶ Architecture, Engineering, Special Services, and Studies