

CALIFORNIA ENVIRONMENTAL QUALITY ACT INITIAL STUDY

The Department of Toxic Substances Control (DTSC) has completed the following document for this project in accordance with the California Environmental Quality Act (CEQA) [Pub. Resources Code, div. 13, § 21000 et seq] and accompanying Guidelines [Cal. Code Regs., tit. 14, § 15000 et seq].

PROJECT INFORMATION

PROJECT TITLE: Beale MMRP Munitions Response Site FR970 NTCRA and 7 MRS Remedial Action		SITE CODING:
PROJECT ADDRESS: The 7 MRS are in the northeastern and eastern portions of the AFB; FR970 Site is southeast of the intersection of Warren Shingle Road and A Street	CITY: Beale Air Force Base	COUNTY: Yuba
PROJECT SPONSOR: Beale AFB, Air Force Civil Engineer Center	CONTACT: John Valett	PHONE: 530-634-3858
APPROVAL ACTION UNDER CONSIDERATION BY DTSC: <div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"><input type="checkbox"/> Initial Permit Issuance</div> <div style="width: 33%;"><input type="checkbox"/> Permit Re-Issuance</div> <div style="width: 33%;"><input type="checkbox"/> Permit Modification</div> <div style="width: 33%;"><input type="checkbox"/> Closure Plan</div> <div style="width: 33%;"><input type="checkbox"/> Removal Action Workplan</div> <div style="width: 33%;"><input type="checkbox"/> Remedial Action Plan</div> <div style="width: 33%;"><input type="checkbox"/> Interim Removal</div> <div style="width: 33%;"><input type="checkbox"/> Regulations</div> <div style="width: 33%;"><input type="checkbox"/> Corrective Measure Study/Statement of Basis</div> <div style="width: 33%;"><input checked="" type="checkbox"/> Other (specify): Action Memorandum</div> </div>		
STATUTORY AUTHORITY: <input type="checkbox"/> California H&SC, Chap. 6.5 <input checked="" type="checkbox"/> California H&SC, Chap. 6.8 <input type="checkbox"/> Other (specify):		
DTSC PROGRAM/ADDRESS: Cleanup / 8800 Cal Center Drive, Sacramento, CA 95826	CONTACT: Kimiye Touchi	PHONE: 916-255-3667

PROJECT DESCRIPTION:

The United States Air Force (USAF) is undertaking a non-time-critical removal action (NTCRA) to expedite the removal of munitions and explosives of concern (MEC) at the Rocket Range (FR970) site (Figure 1). The FR970 site spans portions of the Coyote Run Golf Course, a recently closed public golf course with unrestricted access for surface activities by recreational users and maintenance workers. The remainder of the site is in use for cattle grazing with access by cattle ranchers. While barbed wire fencing is present for cattle management, there is no fencing nor are there natural barriers to prevent on-Base personnel from accessing the site. The NTCRA is primarily focused on removing MEC to reduce the potential for on-site exposure to potential human receptors.

It is anticipated that field activities at FR970 will occur concurrently with a remedial action to remove MEC from an additional seven munitions response sites (7 MRS) located to the north, northeast, and east of FR970 (Figure 2). Although the NTCRA to be implemented for FR970 and the remedial action to be implemented for the 7 MRS have followed separate tracks, the removal/remedial actions that were selected for implementation have similar objectives, are similar in nature, are within the boundary of Beale AFB, and will be performed during a similar time frame. Consequently, the activities are therefore discussed together in this Initial Study to ensure that there are no potentially significant cumulative effects.

The objective for the FR970 site and the 7 MRS is to provide protection of public health, welfare, and the environment from actual or threatened releases of hazardous substances, pollutants, or contaminants from the site/MRS, which may present an imminent and substantial endangerment to public health or welfare. The remedies were therefore selected to address MEC explosive hazards and MC risk.

The FR970 Site history, site description, and removal action selection are described below. A more detailed description is provided in the EE/CA and the Action Memo:

- *Final Engineering Evaluation/Cost Analysis, Military Munitions Response Program, FR970 Site (FR970 EE/CA), Beale Air Force Base (BES-TLI JV, June 2020).*
- *Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base (Beale AFB, January 2021).*

The site history, site descriptions, and remedial action selection for the 7 MRSs are described below. A more detailed description is provided in the *Data Gap Investigation and Feasibility Study (DGI/FS)*, proposed plan, and ROD:

- *Final Data Gap Investigation and Feasibility Study, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS DGI/FS), Beale Air Force Base, California (BES-TLI JV-AECOM, March 2020)*
- *Final Proposed Plan, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS PP), Beale Air Force Base, California (Beale AFB, July 2020)*
- *Draft Final Record of Decision, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS ROD), Beale Air Force Base, California (Beale AFB, November 2020)*

The sites/MRS names, sizes, and current land use are provided in Table 1. The future land use is expected to remain the same as the current land use.

Table 1. Site/MRS Name, Size, and Current Land Use

Site Name	Size (acres)	Current Land Use
FR970 site Rocket Range	69.21	Part of the site overlaps portions of the Coyote Run Golf Course and adjacent undeveloped land used for cattle grazing.
MRS ML595 57 mm Rifle/ 60mm Mortar/ 0.50 Caliber Machine Gun Range	409	Underdeveloped land; no current activities except for seasonal cattle grazing
MRS SR614 Range 6	256.3	Underdeveloped land; no current activities except for seasonal cattle grazing
MRS SR615 Range 10	227.8	Underdeveloped land; no current activities except for seasonal cattle grazing
MRS SR617 Range 9	158.2	Underdeveloped land; no current activities except for seasonal cattle grazing
MRS SR622 Range 6	83.5	Underdeveloped land except for two large water storage tanks and a gravel road for tank access.
MRS ML625 Primary Toss Bomb	35.1	Underdeveloped land; no current activities except for seasonal cattle grazing
MRS ED631 Open Burn/Open Detonation (OB/OD) Disposal Area	35.1	Underdeveloped land; no current activities except for seasonal cattle grazing

FR970 Site and 7 MRS Locations and Site Boundaries

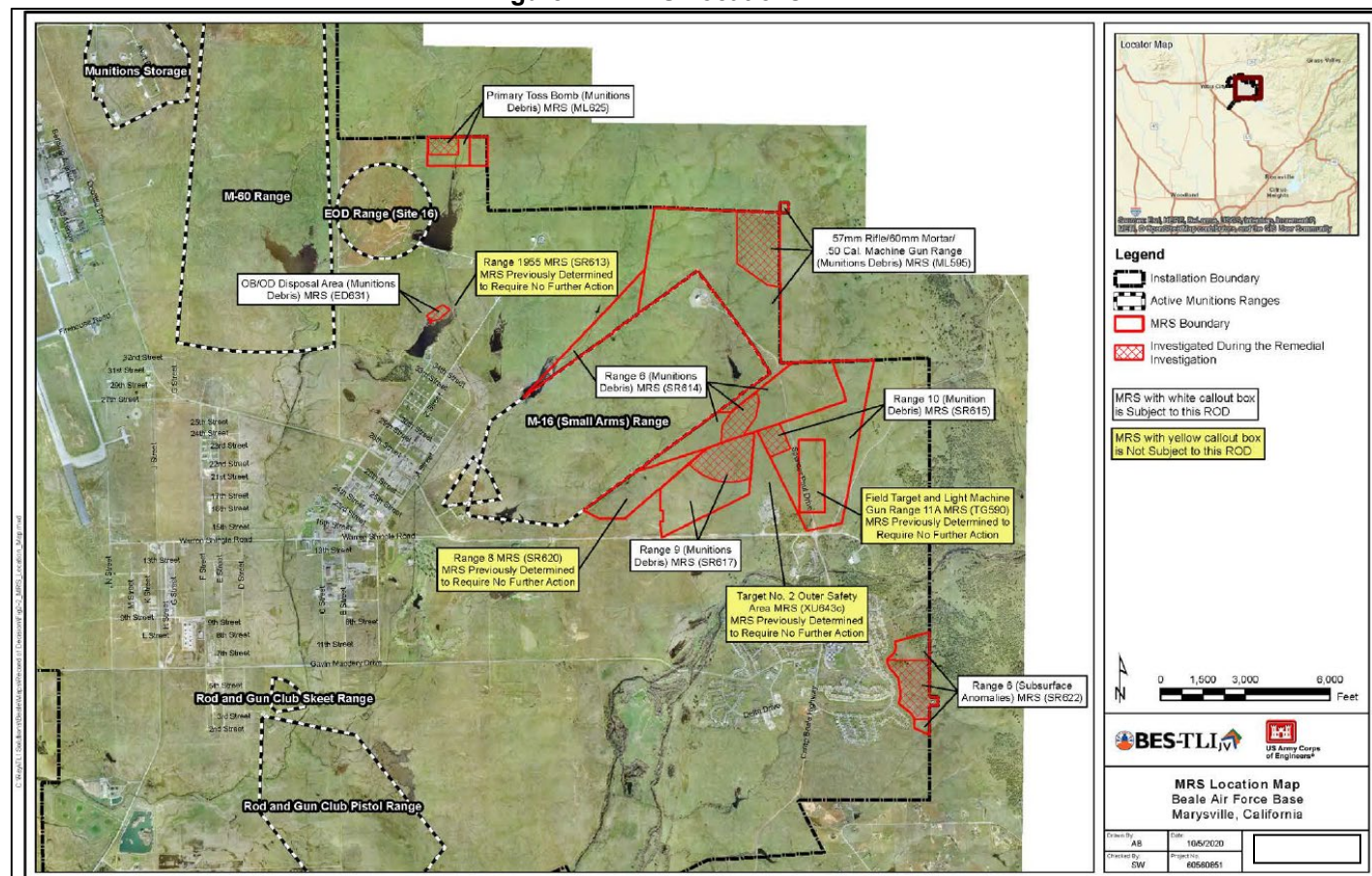
The FR970 MRS (34.9-acre area) and the post-RI expansion area (34.31-acre area) which make up the FR970 Site (69.21 acre) are shown in Figure 2 from the FR970 action memorandum shown below. The FR970 Site is the area that will undergo the NTCRA. This area overlaps portions of the golf course and is in the central portion of the base.

Figure 1: FR970 Site Boundary



Source: Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base (Beale AFB, January 2021).

The locations of the 7 MRS are identified with white labels in Figure 2-2 of the 7 MRS record of decision (ROD), provided below. These MRS range in location from the northern base boundaries, the eastern base boundaries, and into the central portion of the Base. The 7 MRS are located to the north, northeast, and east of the FR970 Site.

Figure 2: 7 MRS Locations

Source: Draft Final Record of Decision, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS ROD), Beale Air Force Base, California (Beale AFB, November 2020)

ENVIRONMENTAL SETTING:

Climate.

The climate at Beale AFB is generally described as interior Mediterranean, with hot summers and cool winters. The year-round average high temperature is 74°F; the year-round average low temperature is 50°F. Summer highs can reach 113 degrees Fahrenheit (°F) and persist above 100 °F for many days at a time.

The mean annual precipitation at Beale AFB is 21.9 inches with most rainfall occurring between October and April. Winds at Beale AFB are channeled by topography of the Sacramento Valley, resulting in a south-southeasterly prevailing wind direction. The average wind speed is 5 knots; the maximum annual gust is 77 knots.

Topography.

The topography of the FR970 Site consists of flat grasslands and portions of the Beale AFB golf course. The topography of the 7 MRS includes flat grasslands to low, rolling hills. Elevations at the base range from 80 to 90 feet above mean sea level (amsl) near the western and southwestern boundaries to approximately 600 feet amsl in the northeast.

Soils.

The soils at Beale AFB can be divided into three general groups:

1. Deep loams formed on alluvium from mixed sources.
2. Shallow to moderately deep gravelly loams formed on alluvium.
3. Shallow to moderately deep fine-grained to loamy soils formed on metavolcanics rock.

Hydrogeology.

Five hydrostratigraphic units (HSUs) define the hydrogeologic systems at Beale AFB; higher numbered HSUs (from HSU-1 to HSU-5) correspond to deeper groundwater. The HSUs are not based on formal geologic units; rather, they are defined according to similarity of texture, general hydraulic characteristics, water quality, and lateral and vertical extent. The HSUs generally thicken to the west and thin or pinch out to the east against other sedimentary units or the Sierran metavolcanics.

Surface Water Features.

Three creeks (Dry, Hutchinson, and Reeds) provide the principal surface drainage for the Beale AFB area. Hutchinson and Reeds Creeks are intermittent; Dry Creek is perennial, receiving natural discharge from the Sugarloaf and Pilot Peak watersheds and supplemental discharges from upstream of Beale AFB. Reed Creek flows southwesterly along the northwestern boundary of the base. Hutchinson Creek flows from the northern base boundary, through the central portion of the base, to the southwestern corner of the base. Dry Creek flows from the eastern base boundary in a southwesterly direction to the southern base boundary. West of the family housing area, Dry Creek divides with part of its flow going into Best Slough. Best Slough collects a portion of the surface runoff from the family housing area and flows south southwesterly to the Beale AFB boundary. Dry Creek and Best Slough eventually drain into the Bear River.

Lakes and reservoirs are present within the base boundary; vernal pools of variable sizes are present seasonally within some of the MRSs. Seeps, where shallow groundwater oozes to the surface, are also seasonally present, but occur primarily in the far eastern portion of the base. Hutchinson Creek has the largest surface drainage within the base; it receives surface water from the undeveloped central base area as well as the Cantonment and Flight Line Areas.

Twenty artificially created impoundments (i.e., lakes and stock ponds) are present at Beale AFB, covering approximately 238 acres. Many of the lakes were created more than 25 years ago by building dams and spillways.

Seasonal wetlands are extensive in the western, central, and southern portions of Beale AFB. These are small, shallow, seasonal bodies of water formed by an impervious claypan, hardpan, or bedrock bottom. Vernal pools are often connected by small drainages known as vernal swales. These pools and swales provide unique habitat for plants that germinate as aquatic or semiaquatic plants but must survive a terrestrial life and a drought environment as the pool dries.

There are no creeks, lakes, or ponds within the FR970 site. Surface water features within the bounds of the FR970 site are limited to vernal pools with the exception of a portion of an unnamed stream that traverses the southeast corner. An unnamed drainage channel runs north to south directly adjacent to the western boundary, and an unnamed pond is located at the southwestern corner, directly outside of the site boundary.

SITE BACKGROUND:

FR970 Site Background.

The FR970 Site is 69.21 acres in size and is located southeast of the Cantonment Area (the administrative area) in the central portion of Beale AFB. The Site spans portions of the Coyote Run Golf Course (a public golf course) and cattle grazing areas. Land use to the south, east, and northeast of the FR970 site is primarily undeveloped open grassland. Land use to the west and northwest of the FR970 site is primarily administrative in nature. The golf course is expected to close in 2021 but the long-term land use for the FR970 site is anticipated to continue to be recreational. The FR970 Site is being referred to as a “site” rather than as an “MRS” because the extent of the NTCRA was expanded beyond the boundaries of the MRS. The MRS classification will be revised after the final extent of the impact and removal action is determined.

In 2014, 2.36-inch rocket munitions debris (MD) was identified during an interim removal action for MRS GR592. This finding was not consistent with the MEC associated with the historical use of GR592 MRS (i.e., hand grenade range) and was evidence of a potential new range to the south and southwest of the GR592 MRS. The 34.9-acre FR970 MRS was established based on the likelihood that the 2.36-inch rockets were fired from the hand grenade range associated with MRS GR592. There is no known historical documentation or personnel knowledge indicating a 2.36-inch rocket range existed at this location. A remedial investigation (RI) of this area was conducted in 2018. Findings during the RI indicated the presence of an unexploded 2.36-inch rocket (MEC); the extent of the area was expanded to the 69.21-acre area classified as the FR970 site. The NTCRA will be implemented within the 69.21-acre FR970 site area.

The FR970 site presents an imminent and substantial risk to site workers (e.g., maintenance staff, cattle ranchers), recreational users, and construction workers, and substantial risk to hypothetical future residents due to suspected presence of unexploded ordnance (UXO). The threats to public health or welfare that include the threat of actual or potential exposure to nearby human populations, animals or the food chain from hazardous substances, pollutants, or contaminants; and the threat of fire or pollution. The Air Force addressed concerns of imminent and substantial risks by expediting cleanup by following the NTCRA path. The selection process used to develop, identify, and screen alternative removal actions to be considered to address these risks is documented in the EE/CA (2020). Alternative 5 – Munitions and Explosives of Concern Surface and Subsurface Removal (Advanced Geophysical Classification (AGC)) was identified as the selected NTCRA in the action memorandum (2021).

Results of Previous Investigations.

The explosive hazard associated with each Site/MRS is based on the number and type of MEC found during the previous investigations. For FR970, the previous investigation is the FR970 RI. For the 7 MRS, the previous investigations include the CSE Phase II, the 7 MRS RI, and the 7 MRS DGI. Table 2 summarizes the number and type of MEC found. It also provides the maximum depth at which MEC, MD, and small arms debris were found.

Table 2. Results of Previous Investigations

Site Name	# MEC Found During Previous Investigations	Type of MEC Found During Previous Investigations	Maximum Depth (MEC, MD, and Small Arms Debris) (inches)
FR970 site Rocket Range	1	2.36-inch rocket	8
MRS ML595 57 mm Rifle/ 60mm Mortar/ 0.50 Caliber Machine Gun Range	8	105mm, 57mm, and 37 mm projectiles	38
MRS SR614 Range 6	10	57mm and 37 mm projectiles, 2.36-inch rockets, and 81 mm mortars	48
MRS SR615 Range 10	1	60mm mortars	14
MRS SR617 Range 9	1	Hand grenades	12
MRS SR622 Range 6	0	155 mm, 105mm, and 37mm projectiles; 60mm and 81mm mortars	24

Site Name	# MEC Found During Previous Investigations	Type of MEC Found During Previous Investigations	Maximum Depth (MEC, MD, and Small Arms Debris) (inches)
MRS ML625 Primary Toss Bomb	4	60mm mortars and fuzes	24
MRS ED631 Open Burn/Open Detonation (OB/OD) Disposal Area	25	20mm projectiles and 60mm mortars	8

Applicable or Relevant and Appropriate Requirements and To Be Considered Criteria (ARARs).

CERCLA Section 106 requires removal actions to attain ARARs under Federal or State environmental laws or facility siting laws to the extent practicable considering the urgency of the situation and the scope of the removal. As defined in the NCP:

- “Applicable Requirements” are cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under Federal environmental or State environmental or facility siting laws that specifically address a hazardous substance, pollutant, contaminant, response action, location, or other circumstance found at a CERCLA site (40 CFR 300.5).
- “Relevant and Appropriate Requirements” are those cleanup standards, standards of control, and other substantive requirements that, while not “applicable” to a hazardous substance, pollutant, contaminant, response action, location, or other circumstance at a site, address problems or situations sufficiently similar to those encountered at the CERCLA site that their use is well suited to the particular circumstance (40 CFR 300.5).
- ARARs: Section 121(d) of CERCLA requires that response actions be evaluated to determine if they meet laws, standards, requirements, regulations, criteria, or limitations under Federal environmental laws and regulations that are determined to be ARARs. However, only State standards that are promulgated, identified by the State in a timely manner, and are more stringent than Federal requirements may be an ARAR.
- “To Be Considered (TBC) Criteria” are non-promulgated advisories, proposed rules, criteria, or guidance documents issued by the Federal or a State government that are not legally binding and do not have the status of potential ARARs. These items may be TBC when it is determined that ARARs are not sufficiently protective of human health and/or the environment.

The ARARs from the decision documents for the FR970 site and the 7 MRS are found in Attachment B at the end of this document. Avoidance, minimization, and mitigation measures necessary to abide by ARARs are presented in workplans such as the Uniform Federal Policy-Quality Assurance Project Plans (UFP-QAPP) and/or Biological Assessments.

Remedial Action Objectives

The remedial action objectives (RAOs) for each Site/MRS are to remove the unacceptable risk due to the presence of the MEC listed in Table 2 to the associated maximum depths listed in Table 2 to address the likelihood of exposure to site workers, recreational users, residents, and construction workers such that the risk condition is no longer acceptable.

Selected NTCRA and Remedial Actions

The selected FR970 Site NTCRA and the selected 7 MRS remedial actions are documented in the Action Memo for the FR970 Site NTCRA (Beale AFB, January 2021) and the ROD for the 7 MRS remedial action (Beale AFB, November 2020). The process used to select the FR970 NTCRA and the 7 MRS remedial actions was consistent with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). By following these regulations, the U.S. Air Force (Air Force) is also complying with California laws concerning removal and remedial actions, which are contained only in statutes and regulations. DTSC concurs with the selected FR970 Site NTCRA and the 7 MRS remedial actions. The decision process is documented in the AFCEC Administrative Record for Beale AFB.

Based on cultural resource surveys conducted by the Air Force, non-tribal cultural resources have been identified at the ML595, SR614, SR615, and SR622, and ML625 MRS and a possible tribal cultural resource was identified in the ML595 MRS. Locations of known cultural resources will be marked prior to the start of work in the area. Work in those areas will be conducted in a manner that protects the cultural resource. If unknown cultural resources are discovered, all ground disturbing work in the area of the discovery, plus a reasonable buffer exclusionary area will stop until the area is cleared by the Environmental Office. These project control features are described in more detail in Section 5 – Cultural Resources and Section 18 – Tribal Cultural Resources.

The NTCRA selected for FR970 site and the remedial actions selected for the 7 MRS are summarized in Table 3.

Table 3. Summary of the FR970 NTRCA and 7 MRS Remedial Actions

Site Name	RAO Depth (inches bgs)	Selected action
FR970 site Rocket Range	8	NTCRA Alternative 5 – MEC Surface and Subsurface Removal (AGC)
MRS ML595 57 mm Rifle/ 60mm Mortar/ 0.50 Caliber Machine Gun Range	38	Remedial action Alternative 5 - MEC Surface and Subsurface Removal (AGC)
MRS SR614 Range 6	48	Remedial action Alternative 5 - MEC Surface and Subsurface Removal (AGC)
MRS SR615 Range 10	14	Remedial action Alternative 5 - MEC Surface and Subsurface Removal (AGC)
MRS SR617 Range 9	12	Remedial action Alternative 5 - MEC Surface and Subsurface Removal (AGC)
MRS SR622 Range 6	0	Remedial action Alternative 3 - MEC Surface Removal and LUCs
MRS ML625 Primary Toss Bomb	24	Remedial action Alternative 5 - MEC Surface and Subsurface Removal (AGC)
MRS ED631 Open Burn/Open	8	Remedial action Alternative 5 - MEC Surface and Subsurface Removal (AGC). Includes soil/sediment removal to address MC in soil, stream sediment, and

Site Name	RAO Depth (inches bgs)	Selected action
Detonation (OB/OD) Disposal Area		vernal pool sediment. The constituents of concern (COC) include cadmium, copper, lead, zinc, and 2,4-dinitrotoluene at concentrations that exceed remediation goals protective of human health and site-specific ecological receptors.

Notes: bgs: below ground surface
RAO: remedial action objective

The NTCRA Alternative 5 and remedial action Alternative 5 include the following components:

- Site setup, which will include establishing the work site boundaries and grids, and vegetation reduction as needed. Vegetation reduction is conducted in areas where vegetation will interfere with access of geophysical mapping; vegetation reduction will not include the removal of trees.
- Two rounds of special status bird surveys.
- A surface sweep to remove MEC from the surface (excluding areas within the groomed/manicured golf course which are continuously mowed and not known or suspected to contain MEC or other metallic debris).
- DGM survey employing EM61-MK2 technology.
- Complete AGC cued target analysis on target anomalies in sensitive areas (e.g., golf course greens and vernal pools).
- Reacquire targets. Intrusively investigate targets of interest (TOI) and quality control (QC) targets
- Detonate recoverable MEC and remove all material documented as safe (MDAS) to a subcontracted recycler for demilitarization and metals recycling.
- Perform MC sampling and analysis.
- Restore excavated areas by restoring the soil and vegetation.

The AGC will be used in combination with the EM61; the AGC will be most cost effective if used in sensitive areas such as vernal pools and golf course greens as a tool to reduce the rate of intrusive investigations of anomalies (manual digging). It has a slower processing time than the EM61, but its ability to provide reliable identification of MEC without digging up the anomalies to positively identify them offsets the costs to restore or mitigate the wetland areas that are disturbed or restoration of the golf course.

The remedial action Alternative 3 will include the following components:

- MEC Surface Removal (includes Site setup, bird surveys and surface sweeps described in Alternative 5)
- Development and maintenance of LUCs. As such, it also includes implementation of institutional controls, installation of engineering controls, annual inspections, and five-year reviews.

MEC that is found will be destroyed. It will not always be possible to move the MEC for this operation. Therefore, some wetland (vernal pool) destruction may be necessary. Munitions compound (MC) sampling will be performed at all demolition locations and locations where the breached or compromised MEC is recovered to verify that MC has not been released. This is separate and in addition to the soil/sediment removal activities that are required for MC identified at MRS ED631

WORK PLANS / QUALITY CONTROL PLANS

Personnel that perform the field activities will be required to be certified to perform the work to prove that they have adequate training and expertise to lead and conduct the work safely.

The activities that will be conducted to remove/remediate MEC are subject to quality control (QC) requirements imposed by the Department of Defense (DoD), the Corp of Engineers, and the contractor's internal processes to

ensure for the identification and removal of MEC. Descriptions of the field procedures and QC requirements will be provided in the Uniform Federal Policy Quality Assurance Project Plans (UFP-QAPP) for each Site/MRP. Four UFP-QAPP are anticipated: the FR970 Site NTCRA UFP-QAPP, the UFP-QAPP for MRS ML595, SR614, SR615, SR617, and ML625; the UFP-QAPP for MRS SR622, and the UFP-QAPP for ED631.

SCHEDULE

Implementation of the field activities is scheduled for the 2021 and 2022 field seasons.

PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED:

(e.g., State Agencies, Counties, Cities, or Air Quality Districts, granting permits, financing approval, or participation agreement.)

Although State and local approval are not required on this federal property, the Central Valley Regional Water Quality Control Board and the California Department of Fish and Wildlife will be involved with the development of the project.

NATIVE AMERICAN CONSULTATION:

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

The DTSC and Beale AFB are taking a collaborative approach to Native American Consultation. Beale AFB and DTSC will collaborate on Native American Consultation throughout the process. To date, a list of tribes to send initial letters to have been identified. Beale AFB anticipates letters will be sent around mid-March 2021. In compliance with AB 52, DTSC will also be conducting additional outreach to tribes. This document will be updated with the results of this outreach when it is concluded.

Note: Please see the Tribal Cultural Resources Section (Section 18) for additional information.

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Figure 1: FR970 Site Boundary

Figure 2: 7 MRS Locations

LIST OF ATTACHMENTS

Attachment A: Lists of Special Status Plant and Wildlife Species at Beale AFB

Attachment B: Regulatory Requirements

Attachment C: Mitigation Measures

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist beginning on page 6. Please see the checklist beginning on page 6 for additional information.

<input type="checkbox"/>	<u>Aesthetics</u>	<input type="checkbox"/>	<u>Agriculture and Forestry</u>	<input type="checkbox"/>	<u>Air Quality</u>
<input type="checkbox"/>	<u>Biological Resources</u>	<input type="checkbox"/>	<u>Cultural Resources</u>	<input type="checkbox"/>	<u>Energy</u>
<input type="checkbox"/>	<u>Geology/Soils</u>	<input type="checkbox"/>	<u>Greenhouse Gas Emissions</u>	<input type="checkbox"/>	<u>Hazards and Hazardous Materials</u>
<input type="checkbox"/>	<u>Hydrology/Water Quality</u>	<input type="checkbox"/>	<u>Land Use/Planning</u>	<input type="checkbox"/>	<u>Mineral Resources</u>
<input type="checkbox"/>	<u>Noise</u>	<input type="checkbox"/>	<u>Population/Housing</u>	<input type="checkbox"/>	<u>Public Services</u>
<input type="checkbox"/>	<u>Recreation</u>	<input type="checkbox"/>	<u>Transportation</u>	<input type="checkbox"/>	<u>Tribal Cultural Resources</u>
<input type="checkbox"/>	<u>Utilities/Service Systems</u>	<input type="checkbox"/>	<u>Wildfire</u>	<input type="checkbox"/>	<u>Mandatory Findings of Significance</u>

DETERMINATION

On the basis of this initial evaluation:

<input type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

CERTIFICATION

I hereby certify that the statements furnished above and in the attached documentation, present the data and information required for this initial study evaluation to the best of my ability and that the facts, statements and information presented are true and correct to the best of my knowledge and belief.

Luigi Tenechi
Preparer's Signature

4/20/2021
Date

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EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance

ENVIRONMENTAL IMPACT ANALYSIS

1. AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

No laws, ordinances, regulations, or standards protecting aesthetics are applicable to the Proposed Project.

ENVIRONMENTAL SETTING (BASELINE):

Both the FR970 site and the 7MRSs occupy various locations within Beale AFB as depicted on Figures 1 and 2. The western and central portions of Beale AFB consist of relatively flat grasslands, characteristic of the topography of the Central Valley. The eastern portion of the base contains low, rolling hills that gradually merge with the foothills of the Sierra Nevada. The elevation of Beale AFB ranges from 80-90 feet above mean sea level (National Geodetic Vertical Datum of 1929) along the western and southern boundary, toward the Central Valley, to more than 600 feet in the northeastern part of the base towards the Sierra Nevada. This project will have no impact upon the aesthetics of the area. The project areas are located within the boundaries of an active U.S. Air Force base. The sites are isolated from the public and access is restricted to authorized personnel only. There are no scenic vistas or outstanding scenic resources. In addition, the sites are not visible from any public highways, nor will project equipment used at the site be seen from a public highway. Also, the proposed remedial activities will not degrade the visual character of the area.

The project work site consists of relatively flat grasslands and portions of a golf course near the center of Beale AFB. The project is a removal action which will include digging of shallow excavations of limited lateral extents to identify and remove MEC. No structures will be constructed. Therefore, this project will have no impacts on scenic vistas, scenic resources or existing visual character, or quality of the site and its surroundings. For these reasons, no further analysis is deemed necessary.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

N/A

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

No project-specific environmental studies related to aesthetic resources were prepared for the proposed project. The project involves short term, temporary actions that will not alter the current aesthetic resources.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Have a substantial adverse effect on a scenic vista?

Impact Analysis: As stated above, no further analysis is deemed necessary.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☒ No Impact

- b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Impact Analysis: As stated above, no further analysis is deemed necessary.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☒ No Impact.

- c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Impact Analysis: As stated above, no further analysis is deemed necessary.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☒ No Impact

- d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

Impact Analysis: As stated above, no further analysis is deemed necessary

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact

☒ No Impact.

References Used:

Beale AFB, August 2019. *U.S. Air Force Integrated Natural Resources Management Plan, Beale Air Force Base & Lincoln Receiver Site.*

Beale AFB, January 2021. *Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base*

Beale AFB, July 2020. *Final Proposed Plan, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS PP), Beale Air Force Base, California.*

Beale AFB, November 2021. *Draft Final Record of Decision, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS ROD), Beale Air Force Base, California.*

BES-TLI JV-AECOM, March 2020. *Final Data Gap Investigation and Feasibility Study, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS DGI/FS), Beale Air Force Base, California.*

BES-TLV JV, June 2020. *Final Engineering Evaluation/Cost Analysis, Military Munitions Response Program, FR970 Site (FR970 EE/CA), Beale Air Force Base.*

Michael Baker International, August 2015. *Installation Development Plan, Beale Air Force Base, California.*

2. AGRICULTURE AND FORESTRY RESOURCES

<p>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.</p>				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

California Land Conservation Act (Williamson Act)

The California Land Conservation Act (Williamson Act) serves to preserve open spaces and agricultural land. The specific land uses allowed on agricultural lands under Williamson Act contract are regulated by each contract and by state law (Government Code §51200 et seq.).

Farmland Mapping and Monitoring Program

The California Department of Conservation, Division of Land Resources Protection, operates the Farmland Mapping and Monitoring Program (FMMP). Government Code §65570 mandates FMMP to biennially report to the Legislature on the conversion of farmland and grazing land, and to provide maps and data to local government and the public.

FMMP farmland categories are based on local soil characteristics and irrigation status. Farmlands are classified according to soil factors, including available water holding capacity, temperature regime, acidity, depth to the water table, electrical conductivity, flooding potential, erosion hazard, permeability, rock content, and rooting depth. The FMMP categories are comprised of prime farmland, farmland of statewide importance, unique farmland, farmland of local importance, grazing land, urban and built-up land, and other land. Only Prime Farmland, Unique Farmland, or Farmland of Statewide Importance are considered Important Farmland.

Z'berg-Nejedly Forest Practice Act of 1973

The Z'berg-Nejedly Forest Practice Act (FPA) of 1973 is the primary forest regulation statute in California and is generally referred to as the FPA. The FPA provides for a State Board of Forestry to manage forest practices and resources, and the board developed Forest Practice rules to implement the FPA. The California Department of Forestry and Fire Protection (Calfire) enforces the requirements of the FPA, and serves as lead agency for projects which fall within the scope of the FPA. If timber operations (as defined by Public Resources Code [PRC] Section 4527) are part of a project (or affected by a project), these operations must be approved by Calfire.

Public Resources Code §4526

California PRC §4526 defines forest land as “land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.”

California Government Code §51104(g)

California Government Code §51104(g) defines “Timberland production zone” or “TPZ” as “an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h).”

ENVIRONMENTAL SETTING (BASELINE): Beale AFB is an active U.S. Air Force Base. The project areas include portions of a golf course and undeveloped land used for cattle grazing. Portions of the property are designated as important farmland – grazing by the California Department of Conservation. None of the property is designated as forested land. More environmental setting details are described in the Project Description.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The list of agricultural resource effects that may be considered significant contained in Appendix G of the CEQA Guidelines (Environmental Checklist) was used to establish a threshold of significance.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Based on the location and temporary nature of the project, no environmental studies relating to agriculture or forestry resources were prepared for the Proposed Project.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Impact Analysis: Current land use is recreational and undeveloped land used primarily for cattle grazing. These land uses are not expected to change in the future. The entire Site is located within the boundary of Beale AFB.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Impact Analysis: No. Project activities are temporary and will not conflict with the use of the property for grazing. The Site is not part of a Williamson Act contract.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

Impact Analysis: The project work will not cause rezoning of forest land, timberland, or timberland zoned Timberland Production.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

d. Result in the loss of forest land or conversion of forest land to non-forest use?

Impact Analysis: Because none of the sites are designated as forest land, the project work will not result in the loss of forest land or conversion of forest land to non-forest land. Current land use is recreational and undeveloped land used primarily for cattle grazing. These land uses are not expected to change in the future.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural uses?

Impact Analysis: Current land use is recreational and undeveloped land used primarily for cattle grazing. These land uses are not expected to change in the future.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

References Used:

Beale AFB, August 2019. *U.S. Air Force Integrated Natural Resources Management Plan, Beale Air Force Base & Lincoln Receiver Site.*

Beale AFB, January 2021. *Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base*

Beale AFB, July 2020. *Final Proposed Plan, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS PP), Beale Air Force Base, California.*

Beale AFB, November 2020. *Draft Final Record of Decision, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS ROD), Beale Air Force Base, California.*

BES-TLI JV-AECOM, March 2020. *Final Data Gap Investigation and Feasibility Study, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS DGI/FS), Beale Air Force Base, California.*

BES-TLV JV, June 2020. *Final Engineering Evaluation/Cost Analysis, Military Munitions Response Program, FR970 Site (FR970 EE/CA), Beale Air Force Base.*

DOC (California Department of Conservation). 2020. Farmland Mapping and Monitoring Program, California Important Farmland Finder. Available: <https://maps.conservation.ca.gov/DLRP/CIFF/> . Accessed March 2021.

Michael Baker International, August 2015. *Installation Development Plan, Beale Air Force Base, California.*

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Federal Regulations

- Clean Air Act (1970)—The Environmental Protection Agency (EPA) is responsible for implementing most aspects of the Clean Air Act, including setting National Ambient Air Quality Standards (NAAQS) for major air pollutants; setting hazardous air pollutant (HAP) standards; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures, stratospheric O₃ protection measures, and enforcement provisions. Under the Clean Air Act, NAAQS are established for the following criteria pollutants: O₃, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and lead. The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. States with areas that exceed the NAAQS must prepare a state implementation plan that demonstrates how those areas will attain the standards within mandated time frames.
- Hazardous Air Pollutants—The 1977 federal Clean Air Act amendments required EPA to identify national emission standards for hazardous air pollutants to protect public health and welfare. HAPs include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals.

State Regulations

- California Clean Air Act—the Federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to California Air Resources Board (CARB), with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB has established California Ambient Air Quality Standards (CAAQS), which are generally more restrictive than the NAAQS. Air quality is considered “in attainment” if pollutant levels are continuously below

the CAAQS and violate the standards no more than once each year. The NAAQS and CAAQS are presented in Table 4, “Ambient Air Quality Standards.”

- Air Toxics Program—the California TAC list identifies more than 700 pollutants, of which carcinogenic and noncarcinogenic toxicity criteria have been established. In 1987, the Legislature enacted the Air Toxics “Hot Spots” Information and Assessment Act of 1987 (AB 2588) to address public concern over the release of TACs into the atmosphere. AB 2588 law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years.

TABLE 4. AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards ^a	National Standards ^b	
		Concentration ^c	Primary ^{c,d}	Secondary ^{c,e}
O ₃	1 hour	0.09 ppm (180 µg/m ³)	—	Same as primary standard ^f
	8 hours	0.070 ppm (137 µg/m ³)	0.070 ppm (137 µg/m ³) ^f	
NO ₂ ^g	1 hour	0.18 ppm (339 µg/m ³)	0.100 ppm (188 µg/m ³)	Same as primary standard
	Annual arithmetic mean	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	
CO	1 hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	None
	8 hours	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	
SO ₂ ^h	1 hour	0.25 ppm (655 µg/m ³)	0.075 ppm (196 µg/m ³)	—
	3 hours	—	—	0.5 ppm (1,300 µg/m ³)
	24 hours	0.04 ppm (105 µg/m ³)	0.14 ppm (for certain areas) ^g	—
	Annual	—	0.030 ppm (for certain areas) ^g	—
PM ₁₀ ⁱ	24 hours	50 µg/m ³	150 µg/m ³	Same as primary standard
	Annual arithmetic mean	20 µg/m ³	—	
PM _{2.5} ⁱ	24 hours	—	35 µg/m ³	Same as primary standard
	Annual arithmetic mean	12 µg/m ³	12.0 µg/m ³	15.0 µg/m ³
Lead ^{j,k}	30-day average	1.5 µg/m ³	—	—
	Calendar quarter	—	1.5 µg/m ³ (for certain areas) ^k	Same as primary standard
	Rolling 3-month average	—	0.15 µg/m ³	
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m ³)	—	—
Vinyl chloride ^j	24 hours	0.01 ppm (26 µg/m ³)	—	—
Sulfates	24- hours	25 µg/m ³	—	—
Visibility Reducing Particles	8 hour (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to the number of particles when the relative humidity is less than 70%	--	--

Source: CARB 2016.

Notes: O₃ = ozone; ppm = parts per million by volume; µg/m³ = micrograms per cubic meter; NO₂ = nitrogen dioxide; CO = carbon monoxide; mg/m³ = milligrams per cubic meter; SO₂ = sulfur dioxide; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; PST = Pacific Standard Time.

- California standards for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, suspended particulate matter (PM₁₀, PM_{2.5}), and visibility- reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- National standards (other than O₃, NO₂, SO₂, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O₃ standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the

expected number of days per calendar year with a 24-hour average concentration above $150 \mu\text{g}/\text{m}^3$ is equal to or less than 1. For PM 2.5, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

- Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- National primary standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
- National secondary standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- On October 1, 2015, the national 8-hour O₃ primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- To attain the national 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- On June 2, 2010, a new 1-hour SO₂ standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the national 1-hour standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
- On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from $15 \mu\text{g}/\text{m}^3$ to $12.0 \mu\text{g}/\text{m}^3$. The existing national 24-hour PM 2.5 standards (primary and secondary) were retained at $35 \mu\text{g}/\text{m}^3$, as was the annual secondary standard of $15 \mu\text{g}/\text{m}^3$. The existing 24-hour PM₁₀ standards (primary and secondary) of $150 \mu\text{g}/\text{m}^3$ were also retained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.
- CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard ($1.5 \mu\text{g}/\text{m}^3$ as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

Local Regulations

Feather River Air Quality Management District (FRAQMD)

- All excavation and grading activities must include dust control measures to minimize fugitive dust emission. FRAQMD Regulations 3.0 and 3.16 specify restrictions on visible and fugitive dust emission, respectively. FRAQMD guidance also requires that a “Dust Control Plan” be submitted for construction projects and that fugitive dust control mitigation measures are implemented at the job site. It is not anticipated that the project will produce visible or fugitive dust emissions exceeding regulatory levels. In addition, project controls will be implemented at the site equivalent to those requirements contained in the “Dust Control Plan” specified in FRAQMD guidance. FRAQMD Regulation 3.16 specifically addresses visible particulate emissions (fugitive) at the property line. Project control measures will include use of water tanks, when necessary, to keep the construction area moist during construction. Also, erosion control measures will be used to protect all habitat. These erosion control measures can include the use of short-term ground cover such as annual grasses and erosion control fabric.
- FRAQMD Regulations 4.1 and 4.3 require attainment of permits for machines, equipment or other contrivance with uncontrolled emissions of a criteria pollutant (e.g., lead and particulate matter) at or above 2 pounds in any 24-hour period. Although the CERCLA cleanup process exempts facilities from obtaining permits, project controls will ensure that in the event that excavation activities at the site exceed the regulation threshold, the substantive requirements of a permit will be met. As stated previously, project controls will be implemented to achieve or exceed the regulatory thresholds specified in Regulations 4.1 and 4.3. Expected equipment for less than 5 months of construction activities include:

ENVIRONMENTAL SETTING (BASELINE): Beale AFB is an active U.S. Air Force Base. The project area is located toward the south-central area of the base and is not located adjacent to any base boundaries. The project area is 69.21 acres in size and overlaps portions of the Coyote Run Golf Course and cattle range lands.

Beale AFB is within the Sacramento Valley Air Basin (SVAB) which includes Butte, Colusa, Glen, Tehama, Shasta, Yolo, Sacramento, Yuba, Sutter, and parts of Placer, El Dorado, and Solano counties. The regional climate around Beale AFB is characterized by two seasons: a dry season lasting from May through October and a wet season lasting from November through April. The dry season is characterized by very low precipitation and warm temperatures. The wet season is characterized by sometimes piercing northern winds and gusting southern winds, moderate precipitation, and cool temperatures. Summer high temperatures can be extreme, reaching as high as 113 degrees Fahrenheit (°F) and persisting above 100°F for many days at a time. The year-round average high temperature is 74°F, whereas the year-round average low temperature is 50°F. The mean annual precipitation at Beale AFB is 22.16 inches, with almost 95 % of all rainfall occurring from October through April (Beale AFB 2019).

The portion of SVAB that regulates air quality at Beale AFB is the Feather River Air Quality Management District (FRAQMD). The FRAQMD has a non-attainment status for the following:

Ozone 1-hour: California - Nonattainment (12/12/19)
Ozone 8-hour: California - Nonattainment 12/12/19; National - Attainment in Yuba County
PM10: California - Nonattainment (12/12/19); National - Attainment

Regional air quality varies from excellent to poor depending on the seasonal and climatic conditions. Wildfires in surrounding areas have resulted in poor air quality in recent years. Beale AFB has the potential to generate approximately 1,200 tons of combined air pollutants per year and therefore is classified as a major emission source by the FRAQMD. Sources of air pollutants at Beale AFB include emissions from maintenance operations, generators and boilers, and motor vehicle and aircraft emissions.

FRAQMD Regulations 3.0 and 3.16 specify restrictions on visible and fugitive dust emissions, respectively. FRAQMD guidance also requires a Dust Control Plan for construction projects and that fugitive dust control mitigation measures are implemented at the job site. The project work is not expected to produce visible or fugitive dust emissions exceeding regulatory levels.

The field work will include surface and subsurface MEC removal activities. This work is expected to require a team of personnel that will engage in walking across the sites and/or driving of equipment across the sites to conduct the surface and subsurface surveys. Some excavation work will be required for intrusive investigative work (uncovering of anomalies to determine if MEC is present), however, the majority of this work is expected to be less than one foot in depth and to be performed manually with shovels. Demolition of the MEC is expected, but the MEC will be sand bagged to contain to blast to the extent possible.

APPLICABLE THRESHOLDS OF SIGNIFICANCE: Compliance with FRAQMD requirements.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Based on the less than significant impacts to air quality in or near the Proposed Project Site, no environmental studies relating to air quality resources were prepared for the Proposed Project.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Conflict with or obstruct implementation of the applicable air quality plan?

Impact Analysis: Project controls (e.g., construction best management practices) will be identified in the site work plans (or similar work plan documents) for the control of particulate matter and ozone. These controls will be consistent with the requirements of the FRAQMD and will not conflict with or obstruct the implementation of the Northern SVAB Air Quality Attainment Plan.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☒ Less Than Significant Impact
- ☐ No Impact

- b. Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

Impact Analysis: Project controls (e.g., construction best management practices) will be identified in the site work plans (or similar work plan documents) for the control of particulate matter and ozone. These controls will be consistent with the requirements of the FRAQMD, and these will also not conflict with or obstruct the implementation of the Northern SVAB Air Quality Attainment Plan.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

- c. Expose sensitive receptors to substantial pollutant concentrations?

Impact Analysis: The FRAQMD is in non-attainment for both ozone and particulate matter (PM10) standards. Ozone is generated by vehicle emissions of ozone precursors. Programs designed to reduce PM10 include emission reduction measures from cleaner-burning fuel, emission control devices for motor vehicles, and dust control measures. Due to the short-term nature of the project and the relatively minor role motorized vehicles, heavy equipment and transport vehicles will play in completing the work, no significant impacts of ozone or particulate matter are expected. FRAQMD dust control requirements such as tarping loads, wetting stockpiles, and cleaning trucks prior to egress will be followed.

Most of the field work will be conducted by field personnel walking the site or manually excavating MEC items. Although potential emissions may occur during MEC detonation, the controlled nature of the detonations, including the use of sand bags and other project controls will be used to contain the blasts. Even if contaminants are emitted, they would be short-lived and directed, to the extent possible, into the surrounding soil. The contaminants would not affect a substantial number of people because authorized personnel will ensure that all personnel are evacuated a safe distance from the blast area before detonation.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☒ Less Than Significant Impact
- ☐ No Impact

- d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact Analysis: Project activities (geophysical surveys, manual excavation, and detonation) will not create objectionable odors. Project controls will be used to contain blasts to protect personnel and the project sites are isolated and remote.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

References Used:

Beale AFB, August 2019. *U.S. Air Force Integrated Natural Resources Management Plan, Beale Air Force Base & Lincoln Receiver Site.*

Beale AFB, January 2021. *Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base*

Beale AFB, July 2020. *Final Proposed Plan, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS PP), Beale Air Force Base, California.*

Beale AFB, November 2020. *Draft Final Record of Decision, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS ROD), Beale Air Force Base, California.*

BES-TLI JV-AECOM, March 2020. *Final Data Gap Investigation and Feasibility Study, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS DGI/FS), Beale Air Force Base, California.*

BES-TLV JV, June 2020. *Final Engineering Evaluation/Cost Analysis, Military Munitions Response Program, FR970 Site (FR970 EE/CA), Beale Air Force Base.*

Michael Baker International, August 2015. *Installation Development Plan, Beale Air Force Base, California.*

Feather River Air Quality Management website:

<https://www.fraqmd.org/files/47a6e1833/Area+Designations.pdf>

4. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS)

Applicable statutes and regulations that apply to the cleanup include:

- Federal Endangered Species Act (ESA): (16 United States Code (USC) § 1531-1544, 50 Code of Federal Regulations (CFR) Part 17). The Federal ESA provides a program for the conservation of threatened and endangered plants and animals and the habitats in which they are found.
- Federal Migratory Bird Treaty Act (MBTA): (16 USC § 703-712, 50 CFR Part 21). The MBTA makes it illegal to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid Federal permit.

- California Endangered Species Act (CESA): (Fish and Game Code (FGC) chapter 1.5, sections 2050-2115.5, California Code of Regulations (CCR), title 14, chapter 6, § 783.0-787.9). CESA protects or preserves all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation.

CESA states that all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved.

Additionally, the California FGC § 3503 prohibits the take, possession, or needless destruction of the nest or eggs of any bird; and § 3513 prohibits the take or possession of any migratory nongame bird or part thereof as designated in the MBTA. Any birds in the orders Falconiformes or Strigiformes (birds of prey, such as hawks and owls) are protected under FGC 3503.5, which makes it unlawful to take, possess, or destroy their nest or eggs.

Potential impacts on threatened and endangered species must be considered during remedial activities. The USAF must consult with the USFWS under Section 7 of the federal ESA regarding actions that may affect federally listed endangered or threatened species and must ensure that these actions do not jeopardize the continued existence of these species or result in the destruction or adverse modification of the habitat of these species. While not required for federal agencies, coordination with CDFW typically occurs regarding species listed under the California Endangered Species Act.

The Beale AFB Environmental Management Plan (EMP) is based on the USAF standardized Integrated Natural Resources Management Plan (INRMP). The most recent update to the INRMP was signed by the Base in September 2019. The INRMP was developed in cooperation with applicable stakeholders, which may include Sikes Act cooperating agencies and/or local equivalents to document how natural resources will be managed.

ENVIRONMENTAL SETTING (BASELINE):

Beale AFB is within the Sacramento Valley Region of the California Floristic Province. Major features of the region that influence the distribution of plants and animals, both historically and currently, include the Sierra Nevada foothills, trending to the Sierra Nevada in the east; the Sacramento Valley to the west; and major rivers including the Feather, Yuba, and Sacramento rivers (Beale AFB 2019).

Annual Grasslands

The most common type of vegetation at Beale AFB is annual grassland, which covers approximately 18,835 acres of the base. As is the case throughout most of California, the majority of grassland species at Beale AFB are naturalized species; although a few species of perennial bunch grasses, including purple needlegrass, California melic, giant squirrel tail, and one native annual grass, oldfield three-awn, are found in varying densities in pastures and roadsides throughout the base. Non-native annual grass species include ripgut brome, Italian ryegrass, soft chess, medusahead, annual fescue, and foxtail barley. Intermixed with these dominant grasses is a diverse assemblage of native and introduced forb species, including dove weed, sheep sorrel, clover, fiddleneck, field owl's-clover, popcorn flower, poppy, brodiaea, navarretia, mariposal lily, lupine, vetch, blue-eyed grass, field pink, filaree, field mustard, and spikeweed (Beale AFB 2019).

Areas of annual grassland that undergo frequent or severe disturbance (e.g., corrals, staging areas, and some roadsides) may be dominated by ruderal vegetation. This vegetation type typically grows within or adjacent to annual grassland and is characterized by a low absolute plant cover dominated by introduced weedy species. Common plants encountered in the ruderal vegetation type include buffalo berry bush, yellow star-thistle, cheeseweed, milk thistle, chicory, and field bindweed (Beale AFB 2019).

Annual grasslands provide a nesting and breeding habitat for a variety of grassland birds, as well as foraging habitats for many bird species that breed in other habitats. The proximity of riparian areas, oak woodlands, and wetlands thus enhances the value of annual grasslands. Annual grasslands at Beale AFB also provide foraging habitat for several bird species that are present in the regions only during winter. Open annual grasslands are particularly important for wintering raptors such as the rough-legged hawk, which has been

observed at the base. Bird species observed in the annual grassland during field surveys include the western kingbird, western meadowlark, lark sparrow, savannah sparrow, horned lark, and Brewer's blackbird. Wild turkeys have also been reported using the annual grasslands at Beale AFB. Birds of special interest that have been observed foraging in the annual grasslands at Beale AFB are the red-tailed hawk and American kestrel. Nocturnal raptors (great horned owl, barn owl) will also forage in the grasslands.

Annual grasslands provide an important habitat for many mammals, particularly for small rodents and their larger predators. Mammals observed (or of which signs were detected) in the annual grasslands at Beale AFB include black-tailed hare, Botta's pocket gopher, deer mouse, California vole, California ground squirrel, western gray squirrel, and coyote. Gray fox, striped skunk, raccoon, and Virginia opossum are also likely to be found in the grasslands.

Annual grasslands also provide habitat for several species of reptiles, including gopher snake, western yellow-bellied racer, western rattlesnake, common king snake, and southern alligator lizard. Western fence lizard and western skink also are present at Beale AFB.

Annual grasslands have been identified at the FR970 Site and the seven MRSs.

Oak Woodlands

Oak woodland is a relatively minor vegetative component at Beale AFB. Oak woodlands occur in small, isolated groves scattered throughout the dominant grassland community, as well as in larger areas on the hilly terrain around the family housing area, in the foothills east of the family housing area, and as a component of the Dry Creek/Best Slough bottomlands (Beale AFB 2019).

Oak woodlands are typically dominated by an overstory of one or more species of oak, with a total cover of at least 50 percent, and an herbaceous understory that is composed of species commonly occurring in annual grassland habitat. Several species of shrubs, such as poison oak, manzanita, and ceanothus, also may be present in the understory. In the eastern portion of the base, grey pine is often found growing in the blue oak woodland.

Lack of oak regeneration is currently an issue of great concern in California. The two primary oak species on the base, blue oak and valley oak, are successfully regenerating in many areas of Beale AFB. This success is believed to be attributable to the low use of these areas, particularly the lack of livestock grazing in most of the oak woodlands on the base (Beale AFB 2019).

Oak woodlands provide important nesting, roosting, and perching habitat for a variety of bird species. They also provide shade in the summer and cover in the winter for many bird and mammal species. Acorns produced in the oak woodlands are an important food resource for many species of wildlife, including wild turkey, California quail, acorn woodpecker, western scrub-jay, deer, and California ground squirrel. Oak foliage and bark support insect populations that provide food for insectivorous birds, including bushtit, yellow-rumped warbler, and Hutton's vireo. Oaks also provide nest sites for cavity-nesting birds, including the acorn woodpecker, Nuttall's woodpecker, ash-throated flycatcher, western bluebird, tree swallow, oak titmouse, and white-breasted nuthatch (Beale AFB 2019). Special status species associated with Beale AFB oak woodland include depauperate milk-vetch, Mosquin's clarkia, stinkbells, Butte County fritillary, adobe lily, Red Bluff dwarf rush, delta tule pea, veiny monardella, Hartweg's golden sunburst, valley elderberry longhorn beetle, California horned lizard, Cooper's hawk, sharpshinned hawk, golden eagle, white-tailed kite, purple martin, pallid bat, Townsend's big-eared bat, long-legged myotis, western small-footed myotis, western red bat, and ringtail.

Oak Woodlands have been identified in the northeastern portion of SR622.

Riparian Habitat

Riparian vegetation is associated with lakes and streams. Riparian systems are found in transition zones between aquatic and upland ecosystems. In their undisturbed condition, these areas are characterized by dominant vegetation that is tolerant of, and adapted to, periodic flooding or soil saturation. Riparian systems occur entirely within the 100-year floodplain of streams and rivers. Most riparian plant species; however, require flooding more frequently than once every 100 years.

Riparian areas on Beale AFB have historically been present along Dry Creek and Best Slough as a corridor of well-developed riparian forest. The area between these two watercourses (currently annual grassland) was likely also vegetated with a mixture of valley oak woodland and mixed riparian forest. This area was likely cleared for agricultural uses.

Along other drainages, riparian vegetation is patchy and sparse, such as along Hutchinson Creek, or nonexistent, such as along Reeds Creek. Types of riparian habitat on the base include riparian scrub, composed primarily of dense growths of various willow species, and riparian forest, composed of a multilayered complex of cottonwoods with occasional valley oaks, box elder, sycamore, ash, alder, and willows. Wild grape vines are typically found draping the overstory and midstory trees of the riparian forest. Thickets of wild rose, blackberry, and other shrubs can also be found in the understory. Groundcover is usually dense and comprised of grasses and herbs. Three specific types of riparian forest have been identified at Beale AFB: cottonwood willow riparian forest, valley oak riparian forest, and mixed riparian forest (Beale AFB 2019). Drainages associated with riparian habitats may also support freshwater marsh habitat (described below) and open water vegetation. Open water vegetation may include free-floating and submerged rooted obligate aquatic plants, including pondweeds, lesser duckweed, and mosquito fern (Beale AFB 2019).

The riparian forest, especially mixed riparian forest, is the most structurally diverse habitat on Beale AFB and one of the most important habitats for wildlife on the base. The riparian forest provides a source of water and cover and can function as a travel or migration corridor for many species; the structural diversity provides many habitat niches in a small area (e.g., canopy, brushy understory, tree cavities, leaf litter). The yellow-rumped warbler, Hutton's vireo, and ashthroated flycatcher forage on insects in the trees and shrubs. This habitat provides nesting and rearing cover for California quail, western scrubjays, song sparrows, house wrens, Bewick's wren, and other birds. Many mammals, amphibians, and reptiles occupy mixed riparian forests, including several species of bats, the western gray squirrel, dusky-footed woodrat, gray fox, raccoon, striped skunk, Virginia opossum, black-tailed deer, California slender salamander, western fence lizard, southern alligator lizard, and western rattlesnake (Beale AFB 2019). Special status species associated with riparian habitat at Beale AFB include depauperate milkvetch, stinkbells, adobe lily, Boggs Lake hedge-hyssop, rose-mallow, delta tule pea, Ahart's paronychia, American white pelican, Cooper's hawk, sharp-shinned hawk, Swainson's hawk, bald eagle, American peregrine falcon, purple martin, yellow warbler, yellow-breasted chat, tricolored blackbird, Townsend's big-eared bat, long-legged myotis, western small-footed myotis, western red bat, and ringtail.

The northern parcel of SR614 includes riparian habitat in the southwestern portion.

Freshwater Marsh

Freshwater marsh vegetation is found in ponds and drainages that have a relatively permanent water supply. Freshwater marsh vegetation also intermingles with riparian woodland vegetation along drainageways at Beale AFB, such as Hutchinson Creek and Dry Creek. Base marshlands contain perennial plants such as cattails and tules, arrowheads, rushes, and sedges, as well as scattered trees and shrubs such as willows, cottonwoods, and buttonwillows (Beale AFB 2019).

Permanent wetlands are important habitats because of their high biological value and scarcity in the immediate region and the Sacramento Valley relative to their historical distribution. Freshwater marshes within Beale AFB provide important foraging habitat for fish-eating birds such as American bittern, great blue heron, great egret, and belted kingfisher. These aquatic habitats also attract mallard, American coot, common moorhen, northern pintail, American widgeon, and other water birds. Concentrations of northern shoveler, gadwall, and tundra swan have also been observed. Other water birds that use permanent wetlands at Beale AFB include American avocet, black-necked stilt, longbilled curlew, greater yellowlegs, long-billed dowitcher, common snipe, snowy egret, black-crowned night-heron, and green heron. Several species, such as marsh wren and song sparrow, nest in cattails and other emergent vegetation. Several mammals, such as raccoon, striped skunk, beaver, river otter, and muskrat, probably live in freshwater marsh habitats at Beale AFB. Amphibians such as Pacific treefrog and bullfrog have been observed in this habitat. The bullfrog is an invasive nuisance species.

Freshwater marshes along Dry Creek and Best Slough function as one component of the overall aquatic system in these perennial drainages. The varying types of aquatic habitats along Dry Creek and Best Slough support wildlife species very similar to those described above, as well as both native and nonnative fisheries. Although perennial drainages at Beale AFB provide habitat primarily for year-round resident fish species, fall-run chinook salmon and Central Valley steelhead have been known to use Dry Creek. Common native fish species that may occur in Dry Creek and Best Slough include speckled dace, California roach, hardhead, Sacramento squawfish, Sacramento sucker, and tule perch. Common nonnatives include mosquitofish, smallmouth bass, green sunfish, bluegill, and redear sunfish (Beale AFB 2019). Special status species associated with freshwater marshes at Beale AFB include rose-mallow, delta tule pea, Sanford's sagittaria, Central Valley steelhead, fall-run chinook salmon, western spadefoot, foothill yellow-legged frog, American white pelican, northwestern pond turtle, giant garter snake, western least bittern, white-faced ibis, Cooper's hawk, sharp-shinned hawk, Swainson's hawk, northern harrier, white-tailed kite, bald eagle, osprey, American peregrine falcon, California black rail, greater sandhill crane, short-eared owl, bank swallow, purple martin, yellow-breasted chat, tricolored blackbird, Townsend's big-eared bat, and western red bat.

Lower Blackwelder lake at ED631 and Frisky Lake at SR614 include freshwater marshes. Work in the lakes will occur toward the end of the field season when water level in both lakes will be low or the lakes will be dry.

Ponds, Lakes, and Reservoirs

Stock ponds, lakes, and reservoirs at Beale AFB have been created by artificial impoundments of drainages. Lakes and reservoirs are usually perennial bodies of water that may support riparian, marsh, or other wetland vegetation along their fringes, while stock ponds generally dry completely by the end of summer and are typically vegetated with plant species common in intermittent drainages or swales.

Some areas within the ponds, lakes, and reservoirs at Beale AFB (as well as some open water areas along Dry Creek and Best Slough) are vegetated with free-floating and submerged rooted obligate aquatic plants, including pondweeds, lesser duckweed, and mosquito fern (Beale AFB 2019).

Ponds, lakes, and reservoirs provide habitat for many of the same wetland-and open water associated wildlife species described above for freshwater marsh. The open water provides suitable foraging and resting habitat for dabbling ducks (such as mallard, gadwall, and northern pintail) and other waterbirds, including American coots and pied-billed grebe. Great blue heron, great egret, double-crested cormorant, and other fish-eating birds forage in this habitat. Ponds, lakes, and reservoirs provide foraging habitat and drinking water sources for bats. Common amphibians such as Pacific treefrog and bullfrog also are likely to occur in this habitat. Ponds, lakes, and reservoirs at Beale AFB support a variety of warmwater fish species, including sunfish, bass, carp, and catfish. Beale Lake (an impoundment on Dry Creek) may also support some of the native fish species mentioned above. Water temperatures in most stock ponds and lakes at Beale AFB are likely too warm to sustain trout fisheries (Beale AFB 2019).

Special status species associated with ponds, lakes, and reservoirs at Beale AFB include rosemallow, delta tule pea, Sanford's sagittaria, Central Valley steelhead, fall-run chinook salmon, western spadefoot, foothill yellow-legged frog, northwestern pond turtle, giant garter snake, American white pelican, western least bittern, white-faced ibis, Cooper's hawk, sharp-shinned hawk, Swainson's hawk, northern harrier, white-tailed kite, bald eagle, osprey, American peregrine falcon, California black rail, greater sandhill crane, short-eared owl, bank swallow, purple martin, yellow warbler, yellow-breasted chat, tricolored blackbird, Townsend's big-eared bat, and western red bat.

The northern parcel of SR614 includes a portion of Frisky Lake. The northwestern pond turtle which is identified as a Species of Special Concern has been reported in Frisky Lake.

Vernal Pools

Vernal pools, which are small, shallow, seasonal bodies of water formed by an impervious claypan or bedrock bottom, are extensive in the western, central, and southern portions of the base. Vernal pool plants are annuals that complete their life cycle and produce seed for the following year within the pool as it dries. Dominant plants of the vernal pools on the base include coyote thistle, California goldfields, Fremont goldfields, white flowered navarretia, bractless hedge-hyssop, vernal buttercup, annual hairgrass, field owl's clover, Sacramento mesa mint, and dwarf woolly marbles (Beale AFB 2019).

During the dry season, vernal pools are similar in their wildlife species composition to annual grasslands. During the wet season; however, from late fall to early spring, this habitat supports a higher diversity of bird species. Concentrations of several hundred ducks have been observed using seasonal wetlands in the northwestern corner of Beale AFB. Mallard, northern pintail, and American widgeon are the most common species. Concentrations of northern shoveler, gadwall, and tundra swan have also been observed. Other water birds that use seasonal wetlands include American avocet, blacknecked stilt, long-billed curlew, greater yellowlegs, long-billed dowitcher, common snipe, great egret, snowy egret, great blue heron, green-winged teal, cinnamon teal, Canada goose, and killdeer. Amphibians such as the Pacific treefrog and western toad also use vernal pools and other seasonal wetlands while they are inundated. Garter snakes, raccoons, and other predators feed on these amphibians. Vernal pools also contain crustaceans including tadpole and fairy shrimp. These are important prey for other species. Applicable federal and state environmental laws and regulations with regards to vernal pool protection are detailed in the Beale AFB Integrated Natural Resources Management Plan (Beale AFB 2019).

Vernal pools are considered sensitive natural resources and are protected by federal and state environmental laws and regulations designed to protect these resources including the Endangered Species Act (ESA), the California ESA, and the Federal Clean Water Act (CWA). Wildlife species listed as threatened or endangered under the Federal and California ESAs are known to occur within vernal pools at Beale AFB. Special status plant species associated with Beale AFB vernal pools include Hoover's spurge, dwarf downingia, Boggs Lake hedge-hyssop, Ahart's dwarf rush, Red Bluff dwarf rush, Greene's legenere, Tehama navarretia, California adder's tongue, hairy Orcutt grass, slender Orcutt grass, Sacramento Orcutt grass, and Greene's tuctoria. Special status animal species associated with Beale AFB vernal pools include vernal pool fairy shrimp, longhorn fairy shrimp, conservancy fairy shrimp, vernal pool tadpole shrimp, and western spadefoot.

Vernal pools have been identified at the FR970 site and the seven MRSs.

Special Status Species

Five protected species of plants (dwarf downingia, stink bells, Greene's legenere, Tehama navarretia, and dwarf dwarf-cudweed.), three protected species of invertebrates (vernal pool fairy shrimp, vernal pool tadpole shrimp, and valley elderberry longhorn beetle), two protected species of fish (central valley steelhead and spring-run chinook salmon), one protected species of reptile (northwestern pond turtle), 20 protected species of birds (American white pelican, Cooper's hawk, sharp-shinned hawk, golden eagle, ferruginous hawk, Swainson's hawk, northern harrier, White-tailed kite, bald eagle, osprey, prairie falcon, American peregrine falcon, California black rail, greater sandhill crane, short-eared owl, western burrowing owl, loggerhead shrike, yellow warbler, yellow-breasted chat, and tricolored blackbird), and six protected species of mammals (pallid bat, Townsend's big-eared bat, western red bat, long-legged myotis, western small-footed myotis, and ringtail) are known to occur at Beale AFB. Tables 2-3 and 2-4 from the 7 MRS ROD list the special status plant and wildlife species that are known to occur or have the potential to occur at Beale AFB. These tables are found in Attachment A at the end of this document.

The five protected plant species have not been reported at the seven MRSs, but these plants are associated with vernal pools which are present in all seven MRSs. Vernal pools, which are habitat for the protected vernal pool fairy shrimp and vernal pool tadpole shrimp, have been identified at the FR970 site and all seven MRSs. Both special status fish species have been reported in Dry Creek on Beale AFB but none of the MRSs include Dry Creek. None of the special status bird species were reported nesting in the any of the seven MRSs. However, Swainson's hawk nests were observed nesting in trees adjacent to the FR970 site and just beyond the quarter mile avian buffer zone for SR614. In addition, none of the seven MRSs have suitable roosting habitat for protected bats and none have been reported in the MRSs. The ringtail has been observed at Beale AFB but not within or near any of the MRSs.

Project Considerations:

Several sensitive natural resource and special-status species are found at FR970, the 7 MRSs, and Beale AFB. Beale AFB conducts base activities in accordance with their Integrated Natural Resources Management Plan (INRMP) and AF Form 103 to ensure that their projects are conducted in a manner that complies with federal and state environmental laws and regulations designed to protect these resources including the ESA, the

California Endangered Species Act, and the federal Clean Water Act. Beale AFB contains an extensive system of seasonal and permanent wetlands which are found within the boundaries of the FR970 site and the 7 MRSSs.

Project controls that ensure that biological resources will not be impacted.

Potential impacts on threatened and endangered species will be considered during remedial activities. The USAF must consult with the U.S. Fish and Wildlife Service (USFWS) under Section 7 of the federal ESA prior to remedial actions that may affect federally listed endangered or threatened species. The USFWS will provide a Biological Opinion which will be followed to ensure that remedial activities do not jeopardize the continued existence of these species or result in the destruction or adverse modification of the habitat of these species. While not required for federal agencies, CDFW provided State input regarding species listed under the California Endangered Species Act.

The Biological Opinion will include project specific avoidance and minimization measures (AMMs) that USFWS imposes on project activities to protect threatened and endangered species and habitat. These requirements will be included in the work plan (UFP-QAPP) and implemented in the field and will be updated as needed. The initial mitigation measures are provided in Attachment C at the end of this document.

- Construction activities will only be allowed from approximately May 1 to October 1 unless an exemption which is based on the absence of rainfall is granted.
- All vehicle operators will observe the posted speed limit on paved roads and a 20-mile per hour speed limit on unpaved roads.
- Off-road travel by vehicles or construction equipment will be prohibited outside of designated work areas.
- No non-military firearms or pets will not be allowed at the sites during removal activities.
- Motor vehicles and equipment will be fueled and serviced in designated service areas.
- Any worker that inadvertently kills or injures a special status species, or finds one injured or trapped, will immediately report the incident to the biological monitor. The biological monitor will inform AFCEC. AFCEC will verbally notify the U.S. Fish and Wildlife Service (USFWS) Sacramento Endangered Species Office within three days and will provide written notification of the incident within five days.

Further, the Beale AFB environmental review process implemented by 9th Civil Engineering Squadron Environmental Element (9CES/CEIE) has multiple levels of review that includes environmental impact analysis (AF 813). AF 813 is used to ensure compliance with environmental policies and mitigating the potential for environmental impacts.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

A biological assessment was conducted in Spring 2020 to assess the extents of vernal pools/wetland in the expanded portion of FR970. The extents are shown in the UFP-QAPP and considered by the Biological Opinion.

MITIGATION MEASURES: The following Mitigation Measures will ensure that all impacts are reduced to less than significant.

Monitoring:

AMM-1: A Service-approved biologist will conduct preconstruction surveys of all ground disturbance areas in sensitive habitats to determine whether any Federally protected species may be present prior to the start of construction. These surveys will be conducted two weeks prior to the start of construction activities. If any Federally protected species are found during the preconstruction surveys, the Service-approved biologist will contact the Beale AFB Natural Resource Manager (NRM) who will then contact the Service's Sacramento Fish and Wildlife Office to determine how to proceed. At least 15 working days prior to the onset of survey activities, Beale AFB will submit the name (s) and credentials of biologists who will conduct these preconstruction surveys. No project activities will begin until proponents have received written approval from the Service that the biologist(s) is qualified to conduct the work.

AMM-2: A Service-approved biologist will monitor construction activities in or adjacent to sensitive habitats. The biological monitor will ensure compliance with these conservation measures, required to protect Federally-protected species and their habitats. If Federally protected species are found that are likely to be affected by work activities, the Service-approved biologist will have the authority to stop any aspect of the Proposed Action that could result in unauthorized take of a Federally protected species. If the biological monitor exercises this authority, the monitor will notify the Beale AFB NRM who will then contact the USFWS Beale AFB POC by telephone and letter within one working day.

Environmental Awareness Training

AMM-3: A Service-approved biologist will conduct environmental awareness training for all field personnel working within and near sensitive habitat on Beale AFB. Training will be provided at the start of work and upon arrival for any new workers on the project site. The program will consist of a briefing on environmental issues relative to the planned project. The training program will include an overview of the legal status, biology, distribution, habitat needs, and compliance requirements for each Federally-listed species that may occur in or have the potential to occur within the Action Area. The presentation will also include a discussion of the legal protection for endangered species under the ESA, including penalties for violations. A fact sheet conveying this information will be distributed to all personnel who enter the project site. Upon completion of the orientation, employees will sign a form stating that they attended the program and understand all avoidance and minimization measures. These forms will be maintained at Beale AFB and will be accessible to the appropriate resource agencies.

Additional Measures

AMM-4: Prior to initiation of the Proposed Action, sensitive areas, such as vernal pools, wetlands, watercourses, and potential habitat for Federally protected branchiopod species, will be staked, flagged, or fenced as exclusion zones where construction activities may not occur. Access routes will be maintained outside of staked or flagged areas. Orange construction barrier fencing (or an appropriate alternative method) will designate exclusion zones where construction activities cannot occur. The contractor will remove all fencing, stakes and flagging within 60 calendar days of project completion.

AMM-5: Motor vehicles and equipment will only be fueled and serviced in designated service areas. All fueling and maintenance of vehicles and other equipment will occur at least 250 ft. from any wetland/drainage habitat or water body. Prior to the onset of work, Beale AFB or its contractors will prepare a plan to allow a prompt and effective response to any accidental spills. Workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

AMM-6: The number of access routes, number and size of staging areas, and the total area of the activity will be limited to the minimum necessary to achieve the project goal. Off-pavement access routes can only be used if the soil is dry.

AMM-7: Access routes will be established in upland areas, when feasible. Where it is necessary for access routes to go through a wetland feature, the work will be completed in the dry season and weight dispersing mats will be placed to avoid any potential effects to species and/or sensitive habitats. Off-road access routes will not be used during the Limited Operations Period (Nov 1-May 1) unless approved by the Beale AFB NRM.

AMM-8: In the event that a new vehicle access route is required in special status species habitat, the route would be pre-surveyed by a USFWS-approved biologist to minimize impacts, and the NRM and the Service will be notified to determine actions required to minimize impacts. If routes will be reused over multiple years, they would be assessed annually to ensure that they are clear of special status species.

AMM-9: Access roads must be constructed so that the length of the road minimizes any adverse effects on wetlands and must be restored as closely as possible to preconstruction contours and elevations (e.g., at grade, corduroy roads, or geotextile/ gravel roads).

AMM-10: All vehicle operators will follow the posted speed limit on paved and unpaved golf cart paths in the Action Area. These pathways aren't likely to be subject to erosion by repeated use of heavy equipment traffic resulting from this project. Per the Fugitive Dust Emissions rule, a person shall take every reasonable precaution to not cause or allow the emissions of fugitive dust from being airborne past the Action Area especially near threatened or endangered species or their habitats.

AMM-11: All road areas will be watered, or alternative dust control measures will be used, during project construction to prevent excessive dust erosion from silting nearby vernal pools.

AMM-12: Routes and boundaries will be clearly demarcated. Off-road travel outside the demarcated construction boundaries is strictly prohibited.

AMM-13: All materials, vehicle parking and staging areas will be designated by the Beale Environmental Office and located at least 50 ft. away from drainages and other wetlands. Storage of all construction material/debris will be kept to the designated storage/ staging area.

AMM-14: No pets or nonmilitary firearms will be allowed in the Action Area during Proposed Action implementation.

AMM-15: A Service-approved biologist will monitor and ensure that the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible. When practicable, invasive plants found in the Action Area will be removed using non-chemical methods.

AMM-16: No trenches or holes greater than 6 inches deep will be left open at the end of the day and may be covered with plywood or cone markers; trenched areas and holes will be compacted and restored to normal grade.

AMM-17: All upland vegetated areas disturbed by construction greater than 100 square ft. will be revegetated with a Beale AFB approved native seed mix. Exposed soil must be hydro-seeded and depending on slope, covered with a biodegradable geotextile to prevent sediments from entering waterways. Any straw used for erosion control materials will be "certified weed free."

AMM 18: Reseeded areas will be monitored and maintained by Beale AFB as needed until there is 70% perennial vegetation cover in the seeded area.

AMM-19: All erosion control materials will be certified weed free to prevent the spread of invasive species.

AMM-20: Site-specific erosion control measures (i.e., hay bales, silt fencing) will be implemented and in place at all times during construction. Proper erosion and sediment control measures will be installed. The contractor will install and maintain erosion control systems such as gravel/sand bags, silt fence, straw bale barriers, erosion control/stabilization blankets, straw wattles, etc. as needed to protect drainage ditches, storm drains, seasonal wetlands and water bodies from sedimentation resulting from construction activity. Erosion control devices will not contain plastic netting and will be "certified weed free."

AMM-21: All wetlands/drainages/vernal pools will have erosion control measures (straw wattles, hay bales, silt fencing) installed when mechanical work is within 50 ft. of a wetland or where hydrological continuity exists between the construction activities and the wetland. Soil erosion and sediment controls will be used and maintained in effective operating condition during construction, and all exposed soil and other fills must be permanently stabilized at the earliest practicable date.

AMM-22: Any authorized structure or fill will be properly maintained, including maintenance to ensure public safety.

AMM-23: During construction activities, all trash will be properly contained, removed from the work site daily, and disposed of properly. Following construction, all refuse and construction debris will be removed from work areas. All garbage and construction-related materials in construction areas will be removed immediately following project completion.

AMM-24: No activity may use unsuitable material (e.g., trash, debris, car bodies asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts.

AMM-25: A Fire Prevention and Suppression Plan will be prepared prior to the planned project.

AMM-26: A Spill Prevention Control and Countermeasure Plan will be prepared prior to the project implementation. All machinery will be properly maintained and cleaned to prevent spills and leaks. Any spills or leaks from the equipment will be reported and cleaned up in accordance with applicable local, State and Federal regulations.

AMM-27: Any worker who inadvertently kills or injures a Federally protected species, or finds one injured or trapped, will immediately report the incident to the biological monitor. The biological monitor will notify Beale AFB NRM who will then verbally notify the Service within three working days and will provide written notification of the incident within five working days.

Vernal Pool Branchiopods

AMM 28: No work will be conducted within 100 ft. of streams or wetlands between November 1 and May 1, unless specifically approved by the Beale AFB Natural Resources Manager and the Service.

AMM 29: For project intrusive work utilizing a mini excavator or requiring MEC detonation adjacent to (within 10 meters) vernal pool species' habitat, silt fencing or other appropriate best management practices (BMPs) will be implemented to prevent sediment from entering vernal pool branchiopod habitat, as appropriate. A USFWS-approved Biologist will flag areas for installation of silt fencing or BMPs prior to initiation of intrusive work utilizing a mini excavator or requiring detonation, as appropriate. BMPs may include silt fencing, sandbags and weed-free straw bales, or straw wattles.

AMM 30: For intrusive actions/investigations in branchiopod habitat, the topsoil to a depth of approximately 1 inch will be saved and set aside/containerized to be placed back on top of the excavated site to minimize the number of vernal pool crustacean cysts damaged. All material below the topsoil that is excavated will be removed from the habitat feature and retained/containerized, once work is completed holes will be backfilled with the same soil to the original grade and compacted once removal is complete. These locations will not be seeded. Stockpiled soils will be covered and surrounded by straw wattles at all times.

AMM 31: All upland excavations will be refilled, compacted, and returned to pre-project conditions. Disturbed area larger than 10 square ft. will be seeded with a native seed mix approved by Beale AFB.

AMM 32: If possible, intrusive work adjacent to or within branchiopod habitat shall have protection (plastic tarps) covering the aquatic feature to ensure the soil being removed and backfilled during the excavation process does not adversely impact habitat. Soil erosion and sediment controls must be used and maintained in effective operating condition during construction process. These materials shall be removed at the earliest practicable date after the construction process is complete at the pit location.

Monarch Butterfly

It should be noted that these Mitigation Measures will not be fully implemented unless the species is listed under the ESA. Project-specific requirements may be added or amended as necessary by NRM staff to meet requirements under the ESA and *Integrate Natural Resources Management Plan for Beale AFB and the Lincoln Receiver Site* (Beale AFB 2019). Conservation measures are in accordance with the Monarch Conservation on Department of Defense Lands in the West: Best Management Practices-2018.

All fieldwork that occurs within 100 ft. of milkweed plants or 250 ft. from occupied habitat (roosting and breeding sites) will implement the following measures to avoid or minimize disturbances and adverse effects to the species. Where surveys for milkweed have not been conducted, either pre-project surveys or during-project surveys will be completed by Beale AFB to identify milkweed stands. Additionally, if milkweeds are identified within the project area, then surveys for adult and larval monarchs will be conducted both before and after the project.

AMM 33: No herbicides or pre-emergents will be used for this project.

AMM 34: All individuals conducting weed/vegetation control activities within the buffer area (100 or 250 ft. as defined above) will receive training on the identification of milkweed plants and a description of both adult and larval monarchs in order to identify and avoid milkweed and monarchs during all activities.

AMM 35: Milkweed numbers and species would be assessed by Beale AFB in project areas where impacts to milkweed may occur due to activities such as ATV access and Beale AFB would implement the following restoration measures:

- The impacts of milkweed removal in known monarch breeding areas would be minimized by planting equivalent milkweed species at a 3: 1 ratio. The impacts of milkweed removal in habitat not known to be used by monarchs will be minimized by planting milkweed at a 2: 1 ratio.
- All newly planted milkweed will be regionally native and preferably of the same species removed. Milkweed species selection and replanting location will be at the discretion of the NRM.

AMM 36: A 2-ft. buffer would be maintained around extant milkweed plants during off-road vehicle access, restoration and habitat enhancement planting, and other ground-disturbing activities to protect breeding habitat.

AMM 37: Within occupied habitat, willows and other trees suitable for roosting that are known to be or with the potential to be (within occupied habitat) used as roosting sites will be preserved.

AMM 38: No trimming of trees used by monarchs as roosting sites will occur during the active season (March 15 through October 31).

AMM 39: Any areas within 250 ft. of known monarch breeding habitat requiring reseeding will include species beneficial to monarchs, including native milkweed. All seed mixes must be approved by the NRM.

AMM 40: Mowing projects during the summer will be conducted during the morning to avoid injuring resting monarchs.

AMM 41: Generally, mowing will not be conducted within 100 ft. of areas with suitable monarch habitat during the active season (March 15 through October 31).

- If mowing must be conducted (i.e., for habitat restoration projects benefiting Monarchs or other listed species) and vehicle access must be allowed, all milkweed plants would be identified and avoided.

AMM 42: Conservation measures will be adjusted if additional guidelines are released by the USFWS.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Impact Analysis: This is a short-term, temporary project. Vegetation removal will be limited and performed in accordance with the mitigation measures listed above to reduce any potential impacts to less than significant. As stated above, Beale AFB implements the Beale AFB Integrated Natural Resources Management Plan and AF 813 which addresses the preservation and restoration of sensitive habitats to ensure ecological and biological receptors or communities are not impacted by proposed remedial actions. In addition, the mitigation measures listed above and required by the Biological Opinion (Attachment C) at the end of this document will be protective of.

Conclusion:

- ☐ Potentially Significant Impact
☒ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☐ No Impact

- b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

Impact Analysis: The northern parcel of SR614 includes riparian habitat in the southwestern portion. As stated above, Beale AFB implements the Beale AFB Integrated Natural Resources Management Plan and AF 813 which addresses the preservation and restoration of sensitive habitats to ensure ecological and biological receptors or communities are not impacted by proposed remedial actions. In addition, the mitigation measures listed above and required by the Biological Opinion (Attachment C) at the end of this document will be protective of riparian habitat and all of the natural communities present.

Conclusion:

- ☐ Potentially Significant Impact
☒ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☐ No Impact

- c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Impact Analysis: As stated above, Beale AFB implements the Beale AFB Integrated Natural Resources Management Plan and AF 813 which addresses the preservation and restoration of sensitive habitats to ensure ecological and biological receptors or communities are not impacted by proposed remedial actions. In addition, the mitigation measures listed above and required by the Biological Opinion (Attachment C) at the end of this document will be protective of vernal pool habitat.

Conclusion:

Conclusion:

- ☐ Potentially Significant Impact
☒ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☐ No Impact

- d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Impact Analysis: The work will be temporary in nature and will not impede wildlife migration or use of nursery sites. As stated above, Beale AFB implements the Beale AFB Integrated Natural Resources Management Plan and AF 813 which addresses the preservation and restoration of sensitive habitats to ensure ecological and biological receptors or communities are not impacted by proposed remedial actions. In addition, the mitigation measures listed above and required by the Biological Opinion (Attachment C) at the end of this document will be protective of all fish and wildlife.

Conclusion:

- ☐ Potentially Significant Impact
☒ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☐ No Impact

- e. Conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Impact Analysis: As stated above, site work will be conducted in conformance with applicable federal and state regulations. In addition, Beale AFB has implemented a biological resources conservation program to protect possible impacted species or habitats found on base. No local policies or ordinances relating to biological resources are applicable to these remedial actions undertaken solely within the boundaries of Beale AFB.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☒ Less Than Significant Impact
☐ No Impact

- f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Impact Analysis: As stated above, site work will be conducted in conformance with applicable federal and state regulations. In addition, Beale AFB has implemented a biological resources conservation program to protect possible impacted species or habitats found on base. No local policies or ordinances relating to biological resources are applicable to these remedial actions undertaken solely within the boundaries of Beale AFB.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☒ Less Than Significant Impact
☐ No Impact

References Used:

Beale AFB, August 2019. *U.S. Air Force Integrated Natural Resources Management Plan, Beale Air Force Base & Lincoln Receiver Site.*

Beale AFB, January 2021. *Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base*

Beale AFB, July 2020. *Final Proposed Plan, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS PP)*, Beale Air Force Base, California.

Beale AFB, November 2020. *Draft Final Record of Decision, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS ROD)*, Beale Air Force Base, California.

BES-TLI JV-AECOM, March 2020. *Final Data Gap Investigation and Feasibility Study, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS DGI/FS)*, Beale Air Force Base, California.

BES-TLV JV, June 2020. *Final Engineering Evaluation/Cost Analysis, Military Munitions Response Program, FR970 Site (FR970 EE/CA)*, Beale Air Force Base.

Michael Baker International, August 2015. *Installation Development Plan*, Beale Air Force Base, California.

5. CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):***National Historic Preservation Act***

Any project that is considered a federal undertaking is subject to compliance with Section 106 of National Historic Preservation Act (NHPA) (Section 106). Section 106 requires that, before beginning any undertaking, a federal agency must take into account the effects of the undertaking on *historic properties* and afford the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on these actions (16 U.S.C. 470f).

California Environmental Quality Act

CEQA requires public agencies to evaluate the implications of their projects on the environment and includes *historical resources* and Tribal Cultural Resources as part of the environment. If a project results in significant adverse impacts on *historical resources* or Tribal Cultural Resources, the impact should be disclosed, and mitigation measures must be considered.

ENVIRONMENTAL SETTING (BASELINE):

Three types of Cultural Resource sites have been recorded on Beale AFB: 1) prehistoric and Native American, 2) prehistoric, and 3) military. Archaeological surveys have been conducted over 91 percent of BAFB. During these surveys, approximately 127 prehistoric and historic era archaeological sites have been recorded. There are no known areas of archaeological sensitivity at the FR970 site. There are known historical or archaeological sites within the ML595 and ML625 MRSs.

To protect these resources and to integrate cultural resources management into the planning and implementation of construction, training, and land use management at Beale AFB, an ICRMP (Integrated Cultural Resources Plan) has been prepared and is updated every year with a major revision required every five years; 2016 was the last 5-year update. It is implemented by the Cultural Resources Manager (CRM) located at the Environmental Section, 9 CES/CEIE.

In support of the Air Force mission at Beale AFB and to assist in compliance with the National Historic Preservation Act (NHPA), the ICRMP cites the relevant historic preservation laws, which the Air Force must comply with, presents useful information for determining the significance of the installation's cultural resources, summarizes the base's inventory of known cultural resources, identifies the base's inventory of known cultural resources, identifies the potential for discovery of additional significant resources, describes present and anticipated near-term land uses, identifies potential threats to cultural resources and activities regulated by or exempted from regulation by the ICRMP, and provides standard operating procedures for cultural resources management.

As with any site at Beale AFB, undocumented cultural resource sites may be present at the FR970 site and 7 MRSs. However, should an unknown cultural resource site be discovered during the removal action, work in that area will cease. The Beale AFB CRM will be consulted on methods to avoid and preserve the cultural resource site. Based on these findings, this project will have no significant impacts to cultural resources.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

Under Section 106 of NHPA, an adverse effect is found when an undertaking alters, directly or indirectly, any of the characteristics of a historic property (i.e., architectural, historic, or archaeological) that qualify the property for inclusion in NRHP in a manner that diminishes the integrity of the property's location, design, setting, materials, workmanship, feeling, association, or its physical integrity.

Under CEQA, a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired. The significance of a historical resource is materially impaired when a project:

- a) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources;
- b) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- c) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?

Impact Analysis: Cultural resource areas will be marked prior to the start of work so that avoidance and preservation of the cultural resource can occur. As with any site at Beale AFB, undocumented cultural resources sites may be present. Should an unknown cultural resource site be discovered during removal action activities, work in that area will cease. The Beale AFB Environmental Flight Cultural Resources Manager will be consulted on methods to avoid and preserve the cultural resource site.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

Conclusion: Less than significant with mitigation.

- b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Impact Analysis: Cultural resource areas will be marked prior to the start of work so that avoidance and preservation of the cultural resource can occur. As with any site at Beale AFB, undocumented cultural resources sites may be present. Should an unknown cultural resource site be discovered during removal action activities,

work in that area will cease. The Beale AFB Environmental Flight Cultural Resources Manager will be consulted on methods to avoid and preserve the cultural resource site.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

Conclusion: Less than significant with mitigation.

c. Disturb any human remains, including those interred outside of dedicated cemeteries?

Impact Analysis: No human remains areas have been identified in the project areas. However, if during field operations, historic or prehistoric items of potential significance are discovered such as fossils, human remains, or any associated grave goods, a paleontologist or archaeologist designated by the CRM will be contacted. In addition, if human remains are unearthed, field work in that area will stop and the Yuba County Sheriff-Coroner will be contacted and requested to be present during removal of human remains pursuant to Section 2050.5 of the California Health and Safety Code. If the remains are determined to be prehistoric, the Native American Heritage Commission will be notified. Further, if Native American human remains or any associated grave goods are found, as described in the Native American Graves Protection and Repatriation Act, section 2(3), work will be stopped in the area of the discovery, and the U.S. Army Corp of Engineers Project Manager and the Beale AFB CRM will be notified immediately.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

Conclusion: No Impact.

References Used:

Beale AFB, August 2019. *U.S. Air Force Integrated Natural Resources Management Plan, Beale Air Force Base & Lincoln Receiver Site.*

Beale AFB, January 2021. *Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base*

Beale AFB, July 2020. *Final Proposed Plan, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS PP), Beale Air Force Base, California.*

Beale AFB, November 2020. *Draft Final Record of Decision, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS ROD), Beale Air Force Base, California.*

BES-TLI JV-AECOM, March 2020. *Final Data Gap Investigation and Feasibility Study, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS DGI/FS), Beale Air Force Base, California.*

BES-TLV JV, June 2020. *Final Engineering Evaluation/Cost Analysis, Military Munitions Response Program, FR970 Site (FR970 EE/CA), Beale Air Force Base.*

Michael Baker International, August 2015. *Installation Development Plan, Beale Air Force Base, California.*

6. ENERGY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

In 2015, Governor Brown signed Senate Bill 350 to codify climate, clean energy, and energy efficiency goals. The regulations focus on generating energy through renewable sources and increasing the energy efficiency of buildings.

ENVIRONMENTAL SETTING (BASELINE): The project site does not currently support uses utilizing energy resources including renewable energy.

APPLICABLE THRESHOLDS OF SIGNIFICANCE: N/A

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY: N/A

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Result in potentially significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Impact Analysis: The project involves the activities required to identify and remove surface and subsurface MEC and constituents associated with detonation. The field activities will not include construction of permanent structures. The techniques used for identification and removal of MEC will be accomplished using a combination of mechanical machinery and manual labor. The project is not expected to result in wasteful, inefficient, or unnecessary consumption of energy resources.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☒ No Impact

- b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Impact Analysis: No. The project will be short term and will not impact any state or local plans.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☒ No Impact

References Used:

Beale AFB, August 2019. *U.S. Air Force Integrated Natural Resources Management Plan, Beale Air Force Base & Lincoln Receiver Site.*

Beale AFB, January 2021. *Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base*

Beale AFB, July 2020. *Final Proposed Plan, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS PP), Beale Air Force Base, California.*

Beale AFB, November 2020. *Draft Final Record of Decision, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS ROD), Beale Air Force Base, California.*

BES-TLI JV-AECOM, March 2020. *Final Data Gap Investigation and Feasibility Study, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS DGI/FS), Beale Air Force Base, California.*

BES-TLV JV, June 2020. *Final Engineering Evaluation/Cost Analysis, Military Munitions Response Program, FR970 Site (FR970 EE/CA), Beale Air Force Base.*

Michael Baker International, August 2015. *Installation Development Plan, Beale Air Force Base, California.*

7. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

The field activities proposed at the FR970 site and the 7 MRS will be performed by the USAF under CERCLA. The work will be conducted as part of a cleanup effort to remove surface and/or subsurface MEC from the FR970 site and the 7 MRS. No permanent structures will be constructed.

No laws, ordinances, regulations, or standards protecting geological or soil resources are applicable to the Proposed Project.

ENVIRONMENTAL SETTING (BASELINE):

While subsurface geology is variable across the entirety of Beale AFB, surface soil at most sites is part of the Laguna Formation consisting of a heterogeneous assemblage of silt, clay, sand, and minor gravel beds. Minor amounts of volcanic detritus from the Mehrten Formation and other volcanic formations are present in the Laguna Formation. Beneath the Laguna Formation is the Neroly Formation, which is largely derived from the weathering and erosion of volcanic rocks. Underlying the unconsolidated sediments of the Laguna and Neroly Formations is a marine claystone formation that includes deposits of the Capay Formation and is composed of claystones, siltstones, and mudstones.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The list of geological and soils resource effects that may be considered significant contained in Appendix G of the CEQA Guidelines (Environmental Checklist) was used to establish a threshold of significance.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:**IMPACT ANALYSES AND CONCLUSIONS:**

Analysis as to whether or not project activities would:

- a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Impact Analysis: Beale AFB is not in an area with known earthquake faults. Also, in the rare event that an earthquake could cause ground shaking, ground failure, or landslides at Beale AF, activities proposed under the document do not pose a risk to people or structures as no structures for human occupancy will be constructed. Shallow excavations less than 12 inches in depth with limited lateral extent are expected but will be dug by hand with shovels to investigate anomalies and recover MEC. Heavy equipment may be used to remove overburden if excavations will extend beyond one foot. The maximum anticipated excavation depth will be 4-feet.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

- ii) Strong seismic ground shaking?

Impact Analysis: Beale AFB is not in an area with known earthquake faults. No structures for human occupancy will be constructed.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

iii) Seismic-related ground failure, including liquefaction?

Impact Analysis: The project site was not evaluated for liquefaction, but Beale AFB is not in an area with known earthquake faults and no structures for human occupancy will be constructed.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

iv) Landslides?

Impact Analysis: The project site was not evaluated for landslides, but the topography includes topography that ranges from flat to rolling hills and no structures for human occupancy will be constructed.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact.

b. Result in substantial soil erosion or the loss of topsoil?

Impact Analysis: The soil excavation activities will result in minimal soil erosion or loss of topsoil at FR970 and most of the MRSs because the excavations are expected to be less than 12 inches deep and limited in number and lateral extent. AGC will be used to limit the number of excavations required to retrieve MEC in sensitive areas such as vernal pools or in the golf course. The work at ED631 MRS will include the excavation and removal of soil due to the presence of constituents of concern above cleanup goals. The ED631 MRS activities has a greater potential to result in the soil erosion and/or loss of topsoil, however, best management practices (BMPs) to control erosion will be employed and work will not be conducted during the rainy season. BMPs may include:

- Water trucks will periodically spray water onto disturbed soils during soil excavation and slurry wall section construction operations to keep dust to a minimum.
- If soil is to be stockpiled onsite, it will be bermed and covered with 6-millimeter plastic that is securely anchored at the end of each day.
- Run-on controls will be installed if stormwater is expected to potentially run onto the site.
- The damaged areas will be revegetated to minimize wind and water erosion after the site has been backfilled to match existing grade.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Impact Analysis: This project will not be conducted on unstable ground and the project will not cause instability. No structures for human occupancy will be constructed.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☒ No Impact

Conclusion: No impact.

- d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Impact Analysis: Not applicable. No structures will be constructed.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☒ No Impact

Conclusion: No impact.

- e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Impact Analysis: Not applicable. The project is a removal action. No structures will be constructed. The use of a septic tank or alternative wastewater disposal system will not be needed.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☒ No Impact

Conclusion: No impact.

- f. Directly or indirectly destroy a unique paleontological resources or site unique feature?

Impact Analysis:

No paleontological resources are known to exist at the FR970 site or the 7 MRS. If potential paleontological resources are encountered, personnel are required protect the area and wait until the area is cleared by an archaeologist. All work will follow this following standard protocols.

Should an unanticipated discovery be made, avoidance is the preferred treatment (State CEQA Guidelines, Section 15126.4[b][3][A]), but if the site cannot be avoided in place, then the site shall be further evaluated. Immediately upon discovery of a find, a qualified archaeologist shall evaluate the significance of the newly discovered site or unanticipated discovery along with consultation with designated Native American representatives in order to provide proper management recommendations. A qualified archaeologist shall follow accepted professional standards in recording any find including submittal of the standard California Department of Parks and Recreation Primary Record forms (Form DPR 523) and location information to the CHRIS-NIC. The consulting archaeologist shall also evaluate such resources for significance per CRHR eligibility criteria (PRC Section 5024.1; Title 14 CCR Section 4852). If the archaeologist determines that the find does contain temporally diagnostic materials and does not meet the CRHR standards of significance for cultural resources, construction may proceed. If the archaeologist determines that further information is needed to evaluate significance, the lead agency shall be notified, and a data recovery plan shall be prepared.

If during field operations, historic or prehistoric items of potential significance are discovered such as fossils, human remains, or any associated grave goods, a paleontologist or archaeologist designated by the CRM will be contacted. In addition, if human remains are unearthed, field work in that area will stop and the Yuba

County Sheriff-Coroner will be contacted and requested to be present during removal of human remains pursuant to Section 2050.5 of the California Health and Safety Code. If the remains are determined to be prehistoric, the Native American Heritage Commission will be notified. Further, if Native American human remains or any associated grave goods are found, as described in the Native American Graves Protection and Repatriation Act, section 2(3), work will be stopped in the area of the discovery, and the U.S. Army Corp of Engineers Project Manager and the Beale AFB CRM will be notified immediately.

Conclusion:

- ☐ Potentially Significant Impact
- ☒ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

References Used:

Beale AFB, August 2019. *U.S. Air Force Integrated Natural Resources Management Plan, Beale Air Force Base & Lincoln Receiver Site.*

Beale AFB, January 2021. *Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base*

Beale AFB, July 2020. *Final Proposed Plan, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS PP), Beale Air Force Base, California.*

Beale AFB, November 2020. *Draft Final Record of Decision, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS ROD), Beale Air Force Base, California.*

BES-TLI JV-AECOM, March 2020. *Final Data Gap Investigation and Feasibility Study, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS DGI/FS), Beale Air Force Base, California.*

BES-TLV JV, June 2020. *Final Engineering Evaluation/Cost Analysis, Military Munitions Response Program, FR970 Site (FR970 EE/CA), Beale Air Force Base.*

Michael Baker International, August 2015. *Installation Development Plan, Beale Air Force Base, California.*

8. GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

The following provides a list of various federal, state, and local laws and policies guiding greenhouse gas regulation and reductions.

Federal

- Energy Independence and Security Act of 2007
- Federal Vehicle Standards

State

- Executive Orders S-3-05, B-18-12, B-30-15, B-55-18, and ES-1-07
- Assembly Bill 32, 197, 1493
- Senate Bill 32, 375, 605, and 1383
- California Air Resources Board Climate Change Scoping Plan
- California Air Resources Board Regulations for the Mandatory Reporting of Greenhouse Gas Emissions
- California Air Resources Board Heavy Duty Truck and Bus Regulation, Title 13, Division 3, Chapter 1, Section 2025

Local

- The FRAQMD has not adopted specific guidance or thresholds applicable to the analysis of a project's contribution to greenhouse gas (GHG) emissions or associated climate change effects.

ENVIRONMENTAL SETTING (BASELINE):

Beale is an active Air Force base. Criteria pollutant, hazardous air pollutant (HAP) and greenhouse gas (GHG) annual air emission inventories (AEIs) for stationary and mobile sources were performed for Beale AFB for the calendar year of 2016. The criteria pollutants consist of particulate matter less than 10 micrometers in aerodynamic diameter (PM10), particulate matter less than 2.5 micrometers in aerodynamic diameter (PM2.5), oxides of sulfur (SOX), oxides of nitrogen (NOX), carbon monoxide (CO), lead and volatile organic compounds (VOC). GHG emissions were calculated in carbon dioxide equivalents (CO2e). The AEI was prepared using the Air Force's Air Program Information Management System (APIMS) with data provided by base points of contact (POCs) and gathered during an on-site field survey conducted March 15 and 16, 2017 along with material usage information from the Enterprise Environmental, Safety and Occupational Health – Management Information System (EESOH-MIS). The AEI was prepared in accordance with guidance, methodologies and emission factors (EF) from the Air Force Civil Engineer Center (AFCEC) *Air Emissions Factor Guide for Air Force Stationary Sources* (July 2016) and *Air Emissions Guide for Air Force Mobile Sources* (July 2016).

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The *2019 Annual Criteria Pollutant, Hazardous Air Pollutant, and Greenhouse Gas Emissions Inventory for Stationary and Mobile Sources, Beale Air AFB Force Base (Jacobs, 2020)* estimated Beale's mobile source greenhouse gas carbon dioxide emissions for 2019 at 24,268 tons.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Nominal mobile sources are expected to be associated with the field effort. An estimate of the number of gallons of fuel that will be used over the period of the field activities was performed using the cost estimate for Alternative 5, provided in the FR970 EECA and the cost estimates for Alternatives 3 and 5 in the 7 MRS ROD.

For FR970: A project team of 2 to 30 people will be on base for less than 3 months. Personnel will likely mobilize from out of State using some mode of air travel and then on-road vehicles on a daily basis to reach the project site. Surface and subsurface survey work for the 69.21-acre site will be performed by a combination of personnel that traverse the survey areas on foot and towed survey equipment using a motorized vehicle. Anomalies would be uncovered during intrusive investigations, where personnel use shovels to excavate the anomalies for depths less than one foot. For depths greater than one-foot, mechanical equipment may be used to remove overburden followed by hand digging with shovels to remove the anomaly. If MEC is discovered, an assessment will be made of whether to detonate the item in place or to move it to a more remote area to be detonated.

Use of approximately 2,680 gallons of gasoline is estimated for FR970 work; 18,800 gallons of gasoline is estimated for the 7 MRS work.

The EPA factor of 8.89E-03 metric tons per CO₂ per gallon of gasoline is used.

An estimated 26.5 metric tons of greenhouse gas emissions is estimated for the FR970 site work. An additional 185 metric tons is estimated for the 7 MRS work which will occur over two years.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The 7 MRS work will be broken up into two seasons. The greenhouse gas emissions is estimated at 75 metric tons for the 2021 work and 139 metric tons for 2022. This makes up 0.3 percent and 0.6 percent, respectively of the 2019 Beale AFB mobile sources greenhouse gas carbon dioxide equivalent estimate of 24,268 tons. This is a negligible impact.

Impact Analysis:

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☒ Less Than Significant Impact
☐ No Impact

- b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact Analysis: The project is a removal action that will be implemented during the field season in 2021 and 2022. No structures will be constructed for human occupancy. Feather River AQMD does not appear to have adopted greenhouse gas emission criteria.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

References Used:

Beale AFB, August 2019. *U.S. Air Force Integrated Natural Resources Management Plan, Beale Air Force Base & Lincoln Receiver Site.*

Beale AFB, January 2021. *Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base*

Beale AFB, July 2020. *Final Proposed Plan, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS PP), Beale Air Force Base, California.*

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BES-TLV JV, June 2020. *Final Engineering Evaluation/Cost Analysis, Military Munitions Response Program, FR970 Site (FR970 EE/CA), Beale Air Force Base.*

Michael Baker International, August 2015. *Installation Development Plan, Beale Air Force Base, California.*

Jacobs, April 2020. *2019 Annual Criteria Pollutant, Hazardous Air Pollutant, and Greenhouse Gas Emissions Inventory for Stationary and Mobile Sources, Beale Air AFB Force Base, Final.*

EPA greenhouse gas calculator: <https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references>

Feather River Air Quality Management District, July 2010, *Indirect Source Review Guidelines.*

9. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

The field activities proposed at the FR970 site and the 7 MRS will be performed by the USAF under CERCLA. The work will be conducted as part of a cleanup effort to remove surface and/or subsurface MEC from the FR970 site and the 7 MRS. No permanent structures will be constructed.

Federal laws and regulations: Resource Conservation and Recovery Act (RCRA) Title 42 United States Code and 40 Code Federal Regulations (CFR) Parts 260-279. More specifically, hazardous waste generators are governed by 40 CFR part 262, subpart E and transporters of hazardous waste governed by 40 CFR part 263. RCRA gives EPA the authority to control hazardous waste from the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid waste. The U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration regulates the transport of hazardous materials through Title 49 of the Code of Federal Regulations, Subchapter C.

State laws and regulations: Hazardous Waste Control Law (Health and Safety Code (HSC) Chapter 6.5) and 22 California Code of Regulations (CCR). The law establishes regulations and incentives which ensure that the generators of hazardous waste employ technology and management practices for the safe handling, treatment, recycling, and destruction of their hazardous wastes prior to disposal. Article 6 of HSC Chapter 6.5 discusses the transportation of hazardous waste. California Vehicle Code: Divisions 2, 6, 12, 13, 14, 15 also apply to transportation of hazardous materials.

ENVIRONMENTAL SETTING (BASELINE):

The objective of the project is to remove MEC from surface and subsurface soils. MEC (as defined in 32 CVR 179.3) distinguishes specific categories of military munitions that may pose unique explosives safety risks, such as unexploded ordnance (UXO), discarded military munitions (DMM), or MC present in high enough concentrations to pose an explosive hazard. UXO, DMM, and MC are further defined at 10 U.S.C. 101(e) as follows:

- UXO means military munitions that (1) have been primed, fuzed, armed, or otherwise prepared for action; (2) have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material; and (3) remain unexploded, whether by malfunction, design, or any other cause.
- DMM means military munitions that have been abandoned without proper disposal or removed from storage in a military magazine or other storage area for the purpose of disposal.
- MC means any materials originating from UXO, DMM, or other military munitions, including explosive (e.g., RDX, TNT, and HMX) and nonexplosive materials, and emission degradation or breakdown elements of such ordnance or munitions.

The previous RI performed for the 34.9-acre FR970 Rocket Range MRS resulted in the recovery of one UXO item (U.S. Rocket, 2.36-inch, M6A1, HEAT). The number and type of additional MEC is not known; however, the RI geophysical survey results indicate that an average of 32 subsurface anomalies per acre potentially representing MEC are present.

Sampling conducted as part of investigative activities indicated that munitions constituent (MC) contaminants, which included explosive compounds and project-specific metals, were not expected at concentrations exceeding screening and/or background levels for the FR970 and six of the 7 MRS. ED631 is the only MRS where soil removal and offsite transport and disposal is anticipated for MCs in soil. The concentrations of metals found are relatively low and the waste stream is expected to be classified as a non-hazardous waste. State and federal ARARs will be followed in the handling, transport, and offsite disposal of the waste.

MEC is expected to be the primary hazardous substance found at the site. Material potentially presenting an explosive hazard (MPPEH) will be assessed and its explosives safety status determined. During the removal action, detonation of MEC is anticipated. Following detonation, the surrounding soil would be tested for MC contaminants. Based on concentrations found during investigative activities, MCs in soil are not expected to exceed screening and/or background levels. If detected, the affected soil will be excavated and handled as described above.

Other waste streams that may require offsite disposal include materials classified as safe from an explosives safety perspective. These will be classified as material documented as safe (MDAS) and released as non-munitions debris (NMRD). NMRD will be disposed of at a local landfill or recycler, as appropriate.

APPLICABLE THRESHOLDS OF SIGNIFICANCE: N/A

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Create a significant hazard to the public or the environment throughout the routine transport, use, or disposal of hazardous materials?

Impact Analysis: Only non-hazardous materials are anticipated for offsite disposal. Standard shipping procedures required for offsite transport and disposal such as the use of transport containers that are lined and covered to prevent the loss of material. The waste streams will be documented using manifests or bill of lading forms.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☒ Less Than Significant Impact
- ☐ No Impact

- b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Impact Analysis: Demolition of MEC will follow standard operating procedures (SOPs) and safety protocols to prevent the release of hazardous materials to the environment. Materials that are shipped offbase will include soils transported to an offbase landfill for disposal that are expected to be nonhazardous in nature. In addition, after MEC is detonated, materials documented as safe will be taken to a subcontracted recycler. Standard shipping procedures required for offsite transport and disposal will be followed.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

- c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?

Impact Analysis: No existing or proposed schools are within one-quarter mile of the work areas.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

- d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Impact Analysis: Beale AFB is a site listed pursuant to California Government Code Section 65962.5 because it is a site identified under California Health and Safety Code, division 20, section 25356 (Cortese List), but hazardous materials would not be expected to be distributed across the entire base.

The FR970 site overlaps portions of a golf course and cattle range. No hazardous materials would be expected at the project site. In addition, the removal action will result in a lowering in the hazards posed by MEC. Therefore, this action will not create a new or significant hazard to the public or the environment.

The 7 MRS are located on undeveloped land occasionally used for cattle. No hazardous materials would be expected at the project site. In addition, the removal action will result in a lowering in the hazards posed by MEC. Therefore, this action will not create a new or significant hazard to the public or the environment.

Disposal of MEC will be handled in a controlled manner and would not create any hazards to the public or the environment.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☒ Less Than Significant Impact
- ☐ No Impact

- e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Impact Analysis: The Beale AFB airfield is approximately 2 miles northwest of the project site. The project is a removal action. There are no people residing in the work area and no unauthorized personnel would be allowed into the work area. No structures will be constructed for human occupancy. The project would not result in a safety hazard or excessive noise.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

- f. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?

Impact Analysis: The project is a removal action. The work will not interfere with an adopted emergency response plan or emergency evacuation plan.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

- g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Impact Analysis: The project is a removal action. No structures are present, and none will be constructed for human occupancy. Standard operating procedures and safety protocols will be followed when working in areas where dry brush is found to prevent fires. These include requiring fire extinguishers in vehicles used for field activities.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

References Used:

Beale AFB, August 2019. *U.S. Air Force Integrated Natural Resources Management Plan, Beale Air Force Base & Lincoln Receiver Site.*

Beale AFB, January 2021. *Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base*

Beale AFB, July 2020. *Final Proposed Plan, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS PP)*, Beale Air Force Base, California.

Beale AFB, November 2020. *Draft Final Record of Decision, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS ROD)*, Beale Air Force Base, California.

BES-TLI JV-AECOM, March 2020. *Final Data Gap Investigation and Feasibility Study, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS DGI/FS)*, Beale Air Force Base, California.

BES-TLV JV, June 2020. *Final Engineering Evaluation/Cost Analysis, Military Munitions Response Program, FR970 Site (FR970 EE/CA)*, Beale Air Force Base.

Michael Baker International, August 2015. *Installation Development Plan*, Beale Air Force Base, California.

10. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(i) result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

The field activities proposed at the FR970 site and the 7 MRS will be performed by the USAF under CERCLA. The work will be conducted as part of a cleanup effort to remove surface and/or subsurface MEC from the FR970 site and the 7 MRS. No permanent structures will be constructed.

The State Water Resources Control Board and the Regional Water Quality Control Boards (collectively Water Boards) share authority to implement the Federal Clean Water Act (CWA, 33 U.S.C. §1251 et seq.) and California's Porter-Cologne Water Quality Control Act (California Water Code, Section 7). The CWA establishes the basic

structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters.

The Water Boards enforce waste discharge requirements through National Pollutant Discharge Elimination System (NPDES) permits. The Porter-Cologne Act mandates the Regional Water Board to develop, adopt and implement a Basin Plan for the Region. The Water Quality Control Plan for the San Francisco Bay Basin (SFB Basin Plan) is the master policy document that contains descriptions of the legal, technical, and programmatic bases of water quality regulation in the Region.

The following are also applicable:

- The State Board published a resolution (SWRCB Resolution No. 88-63, as revised by Resolution No. 2006-0008) adopting policy regarding sources of drinking water where exceptions are provided for waters meeting certain criteria.
- The U.S. Environmental Protection Agency promulgated numeric water quality criteria for priority toxic pollutants and other water quality standards provisions to be applied to inland surface waters, enclosed bays and estuaries in California (California Toxics Rule, CTRs).
- A California Stormwater Construction General Permit is required for construction projects disturbing more than 1 acre. The legally responsible person is required to electronically file permit registration documents consisting of a notice of intent, risk assessment, site map, SWPPP, annual fee, and signed certification statement through the State Water Board's Storm Water Multi-Application and Report Tracking System.

ENVIRONMENTAL SETTING (BASELINE):

Beale AFB is located along the eastern margin of the Sacramento Basin Hydrologic Area as designated by the California Department of Water Resources. Regional recharge sources include the Yuba, Bear, and Feather Rivers and mountain front recharge from the east.

Beale AFB contains the largest contiguous area of vernal pools remaining in the region from Chico to Sacramento. Vernal pools exist in low lying topographic depressions that become inundated during the wet season. Pools are characterized by shallow cemented soils adapted to ephemeral wet conditions. In the spring, concentric rings of blooming wildflowers signal a vernal pool plant community. A discussion of the potential impacts to these areas and the conservation program already in effect at Beale AFB is provided under the Biological Resources section, above.

The general stratigraphy at Beale AFB consists of unconsolidated sedimentary deposits, underlain by consolidated sedimentary bedrock, which is, in turn, underlain by crystalline metamorphic bedrock of the Sierra Nevada basement complex. Groundwater occurs primarily in the unconsolidated sedimentary deposits. The unconsolidated sedimentary deposits and the consolidated sedimentary bedrock are thickest in the western part of the Base, but thin and pinch out in the eastern part of the Base, where the crystalline metamorphic bedrock of the Sierra Nevada is exposed at the surface. Hence, depth to bedrock ranges from surface exposures in the eastern part of the Base to greater than 500 feet in the southwestern part of the Base (Law Environmental, Inc.

The unconsolidated sedimentary deposits described in the previous paragraph were deposited under alluvial conditions and consist of the Riverbank, Laguna, Mehrten, and Neroly Formations. These formations are difficult to distinguish in the subsurface and consist of variable thicknesses of silt, sand, and low-permeability fine-grained material. Pyroclastic mudflow deposits are present within the Mehrten Formation. The underlying sedimentary rocks were deposited under marine conditions and include the Wheatland, Lone, and Capay Formations. These formations consist of sandstone, shale, claystone, and conglomerate. The crystalline metamorphic bedrock consists of the Smartville Complex, a sequence of marine volcanic and subjacent intrusive rocks that have been recrystallized under greenschist facies metamorphic conditions.

Groundwater beneath Beale AFB flows mainly through the unconsolidated sedimentary deposits of the Riverbank, Laguna, Neroly, and Mehrten Formations. The base of the freshwater aquifer at Beale AFB is the top of the marine sedimentary rocks or the crystalline metamorphic rocks where the sedimentary rock is absent. The depth to the base of the aquifer ranges from 0 foot on the eastern edge of the Base to more than 500 feet in the southwestern

corner of the Base. The marine sedimentary rocks were observed at a depth of approximately 300 feet in borings on North Beale Road.

The general groundwater flow direction at Beale AFB is southwesterly but varies at the individual sites. Because of the complexity of the alluvial deposits, local aquifers are not clearly defined but display a strong horizontal versus vertical anisotropy. The alluvial deposits are characterized by extreme heterogeneity of particle size and distribution resulting in highly variable hydraulic properties. Aquifer characteristics, such as hydraulic conductivity, may vary by several orders of magnitude within a few feet in any given direction.

In addition to the complex nature of the hydrogeology at Beale AFB, the groundwater is also affected by significant irrigation pumping demands in the agricultural regions west of the Base. These effects are felt significantly more during drought years when the water table at the Base is lowered by tens of feet in some areas.

Site specific information is provided below:

- Vernal pools are found within the bounds of the FR970 site and 7 MRSs.
- According to the 100-year and 500-year Floodplains map for Beale AFB provided in the INRMP, portions of the FR970 Site, ML625 MRS, and SR613MRS lie within the 100-year or 500-year floodplains.
- Local groundwater in the vicinity of the FR970 site is expected to be encountered at depths of 30 to 40 feet bgs. Depth to groundwater at ED631 is expected at 40 to 50 feet bgs. Groundwater was not identified as a potential receptor.
- Little to no rain fall is expected at Beale from May 1 to October 1. November 1 is the start of the limited operations period. No project work is allowed during the limited operations period without permission from the Natural Resources Manager (9 CES/CEIEC) which will be assessed based on weather conditions and soil conditions.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Impact Analysis: The NTCRA activities at the FR970 site and the remedial activities at the 7 MRS have the potential to impact surface water found within the boundaries of the work areas. Soil disturbance is anticipated as part of investigative work to uncover MEC and demolition activities, but the impact is expected to be minimal because mitigation measures (See Biological Resources Section above) required by the USFWS and AF Form 103 will be implemented. For example, disturbed areas will be backfilled and restored as the work progresses and work during the rainy season is not allowed.

Conclusion:

- ☐ Potentially Significant Impact
- ☒ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☐ No Impact

- b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Impact Analysis: Project activities will not require the use of groundwater or alter the site in such a way as to impact groundwater recharge. Consequently, NTCRA and remedial action activities will not affect groundwater supply or recharge.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☒ No Impact

- c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

(i) result in substantial erosion or siltation on or off-site;

Impact Analysis: The drainage patterns will not be modified, and no permanent structures will be constructed. Due to the minimal amount of soil disturbance, substantial erosion or siltation is not anticipated.

Typical Best Management Practices Used to Control Erosion and Runoff include:

- Open excavation areas will be protected from run-on using a system of berms derived from the excavation materials and complimented by silt fencing and straw bales.
- Stockpiles of soil materials and aggregates not intended for immediate use will be protected as necessary using silt fence and bales to prevent sediment migration from the stockpiles.
- In the event of severe storm warning or occurrence, field staff will check all barriers for integrity and perform maintenance as necessary. In addition, work will be stopped in the event of unusually heavy precipitation.
- All control devices will be maintained throughout remedial activity operations.
- All disturbed areas will be reseeded using a seed mixture approved by Beale AFB. Seeded areas will be raked and/or mulched to allow rapid and consistent germination.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☒ No Impact

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

Impact Analysis: Geophysical surveys and intrusive investigation excavations will not change the topography or result in a change to the amount of surface runoff.

Work is expected to conclude before October 15, which will be before the rainy season. Disturbed areas will be restored.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☒ No Impact

(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Impact Analysis: Project activities will not create or contribute runoff water that would affect planned stormwater drainage systems.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

(iv) impede or redirect flood flows?

Impact Analysis: Intrusive investigation may result in excavations that are limited in size, resulting in minimal surface disturbance, but disturbed areas will be restored before October 15. None of these activities will change the topography in such a way as to impact water flow.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Impact Analysis: Beale AFB is located in an interior portion of California and contains no significant bodies of water (oceans or large lakes). Sieches or tsunamis would not occur. Parts of the project site are within the 500-year flood plain and there may be overlap with the 100-year floodplain in the southeastern part of the site. Flooding is not expected to occur because the project work will conclude before the start of the rainy season, October 15. No pollutants are expected to be associated with the project activities which include intrusive investigation activities or blow-in-place detonation of MEC.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact Analysis: No permanent structures will be constructed. Intrusive investigation excavations would not affect water quality or groundwater management plans.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

References Used:

Beale AFB, August 2019. *U.S. Air Force Integrated Natural Resources Management Plan, Beale Air Force Base & Lincoln Receiver Site.*

Beale AFB, January 2021. *Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base*

Beale AFB, July 2020. *Final Proposed Plan, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS PP), Beale Air Force Base, California.*

Beale AFB, November 2020. *Draft Final Record of Decision, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS ROD), Beale Air Force Base, California.*

BES-TLI JV-AECOM, March 2020. *Final Data Gap Investigation and Feasibility Study, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS DGI/FS), Beale Air Force Base, California.*

BES-TLV JV, June 2020. *Final Engineering Evaluation/Cost Analysis, Military Munitions Response Program, FR970 Site (FR970 EE/CA), Beale Air Force Base.*

Michael Baker International, August 2015. *Installation Development Plan, Beale Air Force Base, California.*

11. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

This project is a short-term remedial action that will not change the use of the property. No additional analysis is required.

ENVIRONMENTAL SETTING (BASELINE): This area is undeveloped land. Portions are used as a golf course and the rest is used for cattle grazing.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

N/A

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

None

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

a. Physically divide an established community?

Impact Analysis:

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☒ No Impact

b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Impact Analysis:

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☒ No Impact

References Used:

Beale AFB, August 2019. *U.S. Air Force Integrated Natural Resources Management Plan, Beale Air Force Base & Lincoln Receiver Site.*

Beale AFB, January 2021. *Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base*

Beale AFB, July 2020. *Final Proposed Plan, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS PP), Beale Air Force Base, California.*

Beale AFB, November 2020. *Draft Final Record of Decision, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS ROD), Beale Air Force Base, California.*

BES-TLI JV-AECOM, March 2020. *Final Data Gap Investigation and Feasibility Study, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS DGI/FS), Beale Air Force Base, California.*

BES-TLV JV, June 2020. *Final Engineering Evaluation/Cost Analysis, Military Munitions Response Program, FR970 Site (FR970 EE/CA), Beale Air Force Base.*

Michael Baker International, August 2015. *Installation Development Plan, Beale Air Force Base, California.*

12. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

None

ENVIRONMENTAL SETTING (BASELINE):

The project sites are located within an active U.S. Air Force installation. No mineral resources are mined or excavated on base property. This project will not have any adverse impacts upon the mineral resources of the area. No known natural mineral resources in the project areas are utilized. Therefore, no further analysis is deemed necessary.

APPLICABLE THRESHOLDS OF SIGNIFICANCE: N/A**ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY: N/A****IMPACT ANALYSES AND CONCLUSIONS:**

Analysis as to whether or not project activities would:

- a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Impact Analysis: As stated above, no further analysis is deemed necessary.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☒ No Impact

- b. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Impact Analysis: As stated above, no further analysis is deemed necessary.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact

☒ No Impact

References Used:

Beale AFB, August 2019. *U.S. Air Force Integrated Natural Resources Management Plan, Beale Air Force Base & Lincoln Receiver Site.*

Beale AFB, January 2021. *Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base*

Beale AFB, July 2020. *Final Proposed Plan, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS PP), Beale Air Force Base, California.*

Beale AFB, November 2020. *Draft Final Record of Decision, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS ROD), Beale Air Force Base, California.*

BES-TLI JV-AECOM, March 2020. *Final Data Gap Investigation and Feasibility Study, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS DGI/FS), Beale Air Force Base, California.*

BES-TLV JV, June 2020. *Final Engineering Evaluation/Cost Analysis, Military Munitions Response Program, FR970 Site (FR970 EE/CA), Beale Air Force Base.*

Michael Baker International, August 2015. *Installation Development Plan, Beale Air Force Base, California.*

13. NOISE

Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

CEQA contains noise impact assessment guidelines.

ENVIRONMENTAL SETTING (BASELINE):

Project activities expected to generate noise levels associated with motorized vehicles and heavy equipment. Typical equipment noise is not expected to exceed OSHA safety levels and are not expected to be noticeable beyond the work areas. MEC demolition activities are also not expected to affect personnel as health and safety protocols will be adhered to that establish a safety zone for all personnel. Unauthorized personnel will not be allowed site access.

Work conducted at the site will be executed under approved Health and Safety Plans (approved by the Contractor's industrial hygienist). These plans will provide for hearing conservation programs for both site workers and visitors as well as provide a means of communicating adherence to these measures through activities such as "daily tailgate safety meetings".

No permanent structures will be constructed and no permanent increases in ambient noise will occur.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY: None

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would result in:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Impact Analysis: As described above, no permanent increases in ambient noise are expected. Some temporary increases in noise are expected but due to distance from the project activities, they are not expected to be noticed by people outside of the work areas.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

Conclusion: Less than significant impact.

b. Generation of excessive groundborne vibration or groundborne noise levels?

Impact Analysis: The detonation activities may result in groundborne vibration or groundborne noise, but they are not expected to be noticed by personnel outside of the safe distance established around the detonation point.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

Conclusion: Less than significant impact.

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Impact Analysis: The project is a removal action and the airfield is located approximately 2 miles away. Site workers are not expected to be exposed to excessive noise levels from the airfield. Personnel will adhere to safety protocols established in their Health and Safety Plan should noise levels exceed safe limits.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

Conclusion: Less than significant impact.

References Used:

Beale AFB, August 2019. *U.S. Air Force Integrated Natural Resources Management Plan, Beale Air Force Base & Lincoln Receiver Site.*

Beale AFB, January 2021. *Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base*

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Beale AFB, November 2020. *Draft Final Record of Decision, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS ROD), Beale Air Force Base, California.*

BES-TLI JV-AECOM, March 2020. *Final Data Gap Investigation and Feasibility Study, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS DGI/FS), Beale Air Force Base, California.*

BES-TLV JV, June 2020. *Final Engineering Evaluation/Cost Analysis, Military Munitions Response Program, FR970 Site (FR970 EE/CA), Beale Air Force Base.*

Michael Baker International, August 2015. *Installation Development Plan, Beale Air Force Base, California.*

14. POPULATION AND HOUSING

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

The field activities proposed at the FR970 site and the 7 MRS will be performed by the USAF under CERCLA. The work will be conducted as part of a cleanup effort to remove surface and/or subsurface MEC from the FR970 site and the 7 MRS. No permanent structures will be constructed.

ENVIRONMENTAL SETTING (BASELINE):

The project does not include nor affect changes in population or housing because it is limited to the FR970 Site NTCRA and the 7 MRS remedial actions which include the investigation and removal of MEC and MC. No new housing will be constructed and there will be no new permanent employees requiring housing.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:**ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:****IMPACT ANALYSES AND CONCLUSIONS:**

Analysis as to whether or not project activities would:

- a. Induce substantial unplanned population growth in area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Impact Analysis: As stated above, no permanent structures will be constructed. The project does not include construction of new infrastructure; consequently, there would be no indirect impacts

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☒ No Impact

- b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Impact Analysis: No buildings are present and the work will not require the displacement of any people.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

Conclusion: No impact.

References Used:

Beale AFB, August 2019. *U.S. Air Force Integrated Natural Resources Management Plan, Beale Air Force Base & Lincoln Receiver Site.*

Beale AFB, January 2021. *Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base*

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BES-TLI JV-AECOM, March 2020. *Final Data Gap Investigation and Feasibility Study, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS DGI/FS), Beale Air Force Base, California.*

BES-TLV JV, June 2020. *Final Engineering Evaluation/Cost Analysis, Military Munitions Response Program, FR970 Site (FR970 EE/CA), Beale Air Force Base.*

Michael Baker International, August 2015. *Installation Development Plan, Beale Air Force Base, California.*

15. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
i. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

The field activities proposed at the FR970 site and the 7 MRS will be performed by the USAF under CERCLA. The work will be conducted as part of a cleanup effort to remove surface and/or subsurface MEC from the FR970 site and the 7 MRS. No permanent structures will be constructed.

ENVIRONMENTAL SETTING (BASELINE):

Beale AFB is an active U.S. Air Force Base that is responsible for providing fire and police protection services on base. Beale personnel are responsible for providing these on-site security and fire protection services. No new facilities or residences will be constructed; consequently, no schools, parks, or other public facilities would be impacted by the project. The construction activities proposed under this project are not likely to cause any adverse impacts upon available public services, therefore, no further analysis is deemed necessary.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:**ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:****IMPACT ANALYSES AND CONCLUSIONS:**

Analysis as to whether or not project activities would:

Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

- i. Fire protection?
- ii. Police protection?
- iii. Schools?
- iv. Parks?
- v. Other public facilities?

Impact Analysis:

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

References Used:

Beale AFB, August 2019. *U.S. Air Force Integrated Natural Resources Management Plan, Beale Air Force Base & Lincoln Receiver Site.*

Beale AFB, January 2021. *Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base*

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BES-TLV JV, June 2020. *Final Engineering Evaluation/Cost Analysis, Military Munitions Response Program, FR970 Site (FR970 EE/CA), Beale Air Force Base.*

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16. RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

The field activities proposed at the FR970 site and the 7 MRS will be performed by the USAF under CERCLA. The work will be conducted as part of a cleanup effort to remove surface and/or subsurface MEC from the FR970 site and the 7 MRS. No permanent structures will be constructed.

ENVIRONMENTAL SETTING (BASELINE):

Future land use for the FR970 Site will continue as recreational and cattle grazing. Future land use for the 7 MRS will continue current uses which are described in the Site Description and mostly include cattle grazing.

The project is a removal action and would not affect the use of the existing parks and recreational facilities. The golf course facility will be closed and will continue to be used for other recreational purposes.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:**ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:****IMPACT ANALYSES AND CONCLUSIONS:**

- a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Impact Analysis: As described above, the project includes a removal action and remedial actions that will be conducted in recreational and primarily cattle grazing areas. The land use of these areas is not expected to change in the foreseeable future.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☒ No Impact

- b. Does the project include recreational facilities or require construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Impact Analysis: As described above, the land use of these areas is not expected to change in the foreseeable future.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

References Used:

Beale AFB, August 2019. *U.S. Air Force Integrated Natural Resources Management Plan, Beale Air Force Base & Lincoln Receiver Site.*

Beale AFB, January 2021. *Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base*

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Michael Baker International, August 2015. *Installation Development Plan, Beale Air Force Base, California.*

17. TRANSPORTATION

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Federal laws and regulations: Resource Conservation and Recovery Act (RCRA) Title 42 United States Code Subtitle C and 40 Code Federal Regulations (CFR) Parts 260-279. More specifically, transporters of hazardous waste are governed by 40 CFR part 263. RCRA gives EPA the authority to control hazardous waste from the generation, transportation, treatment, storage, and disposal of hazardous waste.

State laws and regulations: Hazardous Waste Control Law (Health and Safety Code Chapter 6.5) and 22 California Code of Regulations (CCR). The law establishes regulations and incentives which ensure that the generators of hazardous waste employ technology and management practices for the safe handling, treatment, recycling, and destruction of their hazardous wastes prior to disposal.

ENVIRONMENTAL SETTING (BASELINE):

The project areas are accessible by paved roads; however, there are no other improvements related to transportation.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The list of transportation resource effects that may be considered significant contained in Appendix G of the CEQA Guidelines (Environmental Checklist) was used to establish a threshold of significance.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Based on the less than significant impact to transportation resources in or near the Proposed Project Site, no environmental studies relating to transportation resources were prepared for the Proposed Project.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?

Impact Analysis: The project work would require a minor, short-term increase in vehicle traffic to allow personnel to access the sites. This period is expected to occur from May to November in 2021 and 2022.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Impact Analysis:

VMT is a metric of the total miles travel by vehicles in a defined area over a defined period of time and is often used to estimate the environmental impacts of driving, such as GHG and air pollutant emissions. Implementation of project activities would not generate additional long-term vehicle trips or change circulation patterns in the project area.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Impact Analysis: No roads will be constructed, altered or blocked; consequently, there will be no impacts to the design of the roads.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

Conclusion: No impact.

d. Result in inadequate emergency access?

Impact Analysis: No roads will be constructed, altered or blocked; consequently, there will be no impacts to emergency access. The sites are located in an undeveloped portion of Beale AFB, with the exception of the golf course, and activities will not impact access by emergency vehicles.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

References Used:

Beale AFB, August 2019. *U.S. Air Force Integrated Natural Resources Management Plan, Beale Air Force Base & Lincoln Receiver Site.*

Beale AFB, January 2021. *Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base*

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18. TRIBAL CULTURAL RESOURCES

<p>Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.</p>				
<p>Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</p>	<p>Potentially Significant Impact</p>	<p>Less Than Significant with Mitigation</p>	<p>Less Than Significant Impact</p>	<p>No Impact</p>
<p>a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):**CEQA: Assembly Bill 52**

On September 25, 2014, Governor Jerry Brown signed into law Assembly Bill (AB) 52. The intent of AB 52 is to “set forth a process and scope that clarifies California tribal government involvement in the CEQA process, including specific requirements and timing for lead agencies to consult with tribes on avoiding or mitigating impacts to tribal cultural resources.” It applies to projects with Notice of Preparations or Notice of Negative Declaration/Mitigated Negative Declarations released on or after July 1, 2015.

AB 52 defines tribal cultural resources, amends Appendix G of CEQA Guidelines to include a separate section for tribal cultural resources, and created a formal requirement for consultation with California Native American Tribes in the CEQA process. Pursuant to Public Resources Code (PRC) Section 21080.3.2, Tribal Governments can request consultation with a lead agency and give input regarding potential impacts to tribal cultural resources before the agency decides what type of environmental review is necessary for a project. The PRC further requires avoiding damage to tribal cultural resources, if feasible. If not, lead agencies must mitigate impacts to tribal cultural resources to the extent feasible.

Section 21074 of the PRC defines “tribal cultural resources” as a resource that is either of the following:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- a) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
 - b) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
- a) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
 - b) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “nonunique archaeological resource” as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

Under the guidance of the DTSC’s Tribal Consultation Policy and Cal EPA’s Tribal Consultation Protocol, additional outreach and Consultation may occur when AB 52 does not apply.

The field activities proposed at the FR970 site and the 7 MRS will be performed by the USAF under CERCLA. The work will be conducted as part of a cleanup effort to remove surface and/or subsurface MEC from the FR970 site and the 7 MRS. No permanent structures will be constructed.

National Historic Preservation Act (NHPA) Section 106

Federal agencies generally conduct Tribal Consultation under Section 106 of the NHPA. The United States Air Force (USAF) conducts Section 106 reviews for a wide variety of projects on its installations, such as repair, maintenance, and construction of infrastructure. The USAF also has Section 106 responsibilities off installation when, for example, noise levels or frequency are increased within a military operation area. NHPA Section 106 approach, requirements, and analysis will be the responsibility of Beale AFB. It is important to note that by having DTSC and Beale AFB collaborate, we will be achieving at least the minimum requirements of each regulation.

ENVIRONMENTAL SETTING (BASELINE):

Previously Recorded Cultural Resources

According to Beale AFB Cultural Resources Surveys, non-tribal cultural resources have been identified on the ML595, SR614, SR615, and SR622, and ML625 MRS and a possible tribal cultural resource was identified in the ML595 MRS. Locations of known cultural resources will be marked prior to the start of work in the area. Work in those areas will be conducted in a manner that protects the cultural resource. If unknown cultural resources are discovered, all ground disturbing work in the area of the discovery, plus a reasonable buffer exclusionary area will stop until the area is cleared by the Environmental Office.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

No additional thresholds of significance are available other than the CEQA thresholds listed in the table above.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Cultural Surveys

A cultural resource survey was completed prior to the start of field activities for a 2.48-acre area within the 57mm Rifle/60mm Mortar/.50 Cal. Machine Gun Range (Munitions Debris) (ML595) MRS. This survey was completed to comply with the Beale AFB Integrated Cultural Resources Management Plan and Section 106 of the National Historic Preservation Act. A cultural survey was previously completed and identified cultural resources for the remainder of this MRS which is located outside the Beale AFB fence line. Because the 2.48-acre area is located outside the Beale AFB fence line, no previous surveys had been completed. The survey and recording of archaeological features were conducted between June 26 and 28, 2018 by AECOM archaeologist Chad Perkins,

who meets the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (National Park Service 1983). To ensure compliance of project-specific safety requirements established in the Accident Prevention Plan (APP), the archaeologist was accompanied by a UXO technician for MEC and anomaly avoidance support.

The objective of the preliminary cultural survey was to examine materials on the surface to determine if unidentified, non-munition related, historic or prehistoric-era archaeological buildings, structures, objects, sites or artifacts are present within the site and to assess their eligibility for listing in the National Register of Historic Places. This information was used to avoid potential cultural resources during subsequent DGI activities. Results of the cultural survey at 57mm Rifle/60mm Mortar/.50 Cal. Machine Gun Range (Munitions Debris) (ML595) are discussed in further detail in Section 5. A copy of the final cultural survey report (with site specific data removed) is included in Appendix O of the MMRP.

Tribal Engagement

On October 26, 2020 the DTSC received a negative Sacred Lands File (SLF) search from the Native American Heritage Commission with a list of California Native American Tribes to contact for this project. The DTSC and Beale AFB collaborated on the list of tribes that will be contacted for this project. These letters are expected to be sent by Beale AFB, as, around mid-March 2021. This document will be updated based on the results of that outreach. In addition to the referenced outreach, DTSC will complete consultation in compliance with AB 52. The DTSC and/or Beale AFB will conduct meaningful engagement and consultation if interests arise, prior to approving this project or adopting this document.

Project Control Measures

Should an unanticipated discovery be made, avoidance is the preferred treatment (State CEQA Guidelines, Section 15126.4[b][3][A]), but if the site cannot be avoided in place, then the site shall be further evaluated by a qualified archaeologist or tribal representative. Immediately upon discovery of a find, a qualified archaeologist shall evaluate the significance of the newly discovered site or unanticipated discovery along with consultation with designated Native American representatives in order to provide proper management recommendations. A qualified archaeologist shall follow accepted professional standards in recording any find including submittal of the standard California Department of Parks and Recreation Primary Record forms (Form DPR 523) and location information to the CHRIS-NIC. The consulting archaeologist shall also evaluate such resources for significance per CRHR eligibility criteria (PRC Section 5024.1; Title 14 CCR Section 4852).

If the archaeologist determines that the find does contain temporally diagnostic materials and does not meet the CRHR standards of significance for cultural resources, construction may proceed. If the archaeologist determines that further information is needed to evaluate significance, the lead agency shall be notified, and a data recovery plan shall be prepared. If during field operations, historic or prehistoric items of potential significance are discovered such as fossils, human remains, or any associated grave goods, a paleontologist or archaeologist designated by the CRM will be contacted.

In addition, if human remains are unearthed, field work in that area will stop and the Yuba County Sheriff-Coroner will be contacted and requested to be present during removal of human remains pursuant to Section 2050.5 of the California Health and Safety Code. If the remains are determined to be prehistoric, the Native American Heritage Commission will be notified. Further, if Native American human remains or any associated grave goods are found, as described in the Native American Graves Protection and Repatriation Act, section 2(3), work will be stopped in the area of the discovery, and the U.S. Army Corp of Engineers Project Manager and the Beale AFB CRM will be notified immediately.

IMPACT ANALYSES AND CONCLUSIONS:

- a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

Impact Analysis: Implementation of the propose project would include earth-disturbing activities that has the potential to impact Tribal Cultural Resources that are known to exist on the site and potential to impact resources that are unknown. The implementation of Project Control Measures (listed above) would reduce potential impacts related to Tribal Cultural Resources. These Project Control Measures are incorporated as part of the project activities as well as Mitigation Measures in Section 5 – Cultural Resources. As such, impacts related to Tribal Cultural Resources that are a significant resource determined by the lead agency would be less than significant.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

Conclusion: Less than significant impact.

- ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resource Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Impact Analysis: Implementation of the proposed project would include earth-disturbing activities. However, apart from the resources referred to in the previous question (Item a. i.) of this Impact Analyses, no other resources are known. The NAHC Sacred Lands File search yielded a negative result. Outreach to California Native Americans is still on-going and all interest expressed from tribes will be consulted on and considered in this analysis. At this time, impacts as described in a. ii. of this analysis would be less than significant.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

Conclusion: Less than significant impact.

References Used:

Beale AFB, August 2019. *U.S. Air Force Integrated Natural Resources Management Plan, Beale Air Force Base & Lincoln Receiver Site.*

Beale AFB, January 2021. *Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base*

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Michael Baker International, August 2015. *Installation Development Plan, Beale Air Force Base, California.*

19. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

No laws, ordinances, regulations, or standards protecting utilities and service systems resources are applicable to the Proposed Project.

ENVIRONMENTAL SETTING (BASELINE): There are no utilities serving this open site.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The list of utilities and service systems resource effects that may be considered significant contained in Appendix G of the CEQA Guidelines (Environmental Checklist) was used to establish a threshold of significance.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Based on the less than significant impacts to utilities and service systems resources in or near the Proposed Project Site, no environmental studies relating to utilities and service systems resources were prepared for the Proposed Project.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities the construction or relocation of which could cause significant environmental effects?

Impact Analysis: No new water or expanded utilities are required to support the project.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☒ No Impact

- b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Impact Analysis: The project is a removal action of short duration with low water requirements. Any water required will be provided by existing sources that are in sufficient supply.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☒ No Impact

- c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Impact Analysis: The project is a removal action of short duration. No permanent structures for human occupancy will be constructed and the project will not result in a long-term increase in population on the base. Portable toilets will provide sanitary services for most of the work force for the duration of the project. The project will therefore not result in a significant increase in load on the wastewater treatment system on base.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☒ No Impact

- d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Impact Analysis: The project is not expected to excessive amounts of solids that would be sent to a landfill and will recycle wastes whenever possible.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☒ No Impact

- e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Impact Analysis: Any waste associated with the project would be minimal and its handling would be conducted in compliance with applicable statutes and regulations.

Conclusion:

- ☐ Potentially Significant Impact
- ☐ Less Than Significant With Mitigation Incorporated
- ☐ Less Than Significant Impact
- ☒ No Impact

References Used:

Beale AFB, August 2019. *U.S. Air Force Integrated Natural Resources Management Plan, Beale Air Force Base & Lincoln Receiver Site.*

Beale AFB, January 2021. *Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base*

Beale AFB, July 2020. *Final Proposed Plan, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS PP), Beale Air Force Base, California.*

Beale AFB, February 2020. *Draft Final Record of Decision, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS ROD), Beale Air Force Base, California.*

BES-TLI JV-AECOM, March 2020. *Final Data Gap Investigation and Feasibility Study, Munitions Response Sites ML595, SR614, SR615, SR617, SR622, ML625, and ED631 (7 MRS DGI/FS), Beale Air Force Base, California.*

BES-TLV JV, June 2020. *Final Engineering Evaluation/Cost Analysis, Military Munitions Response Program, FR970 Site (FR970 EE/CA), Beale Air Force Base.*

Michael Baker International, August 2015. *Installation Development Plan, Beale Air Force Base, California.*

20. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

No laws, ordinances, regulations, or standards protecting wildfire resources are applicable to the Proposed Project.

ENVIRONMENTAL SETTING (BASELINE):

Beale AFB is an active U.S. Air Force Base. The project area is located toward the south-central area of the base and is not located adjacent to any base boundaries. The project area is 69.21 acres in size and overlaps portions of the Coyote Run Golf Course and cattle range lands.

Wildfires are a regular occurrence at Beale AFB, typically occurring between May and September of each year. The Base has implemented a Wildland Fire Management Plan for the purposes of reducing the abundance of undesirable species basewide, promoting desirable and native forage species in rangelands, improving range conditions for cattle, and reducing the fuel load for wildfires.

The potential for wildfire is low on the golf course which is watered regularly. The cattle grazing areas associated with part of FR970 and the 7 MRS are included in the Base program of prescribed burn and wildfire rehabilitation and are prone to wildfires.

The Natural Resources division at Beale (9 CES/CEIEC) has standard management measures in place to help reduce the potential for wildfires that might be started by field activities. The use of off-road vehicles (ORV) is restricted in areas prone to wildfire. The project team will be required to undergo training by 9 CES/CEIEC to minimize the potential for fire when using motorized vehicles that will tow survey equipment across the site. The Contractor will also be required to have a source of water onsite to be able to put out any small fires that may start during field activities. One method that has been used in the past is a tow-behind trailer with a fire pumper. The Contractor will also be required to follow emergency evacuation procedures that will be included in their health and safety plan.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The list of wildfires resource effects that may be considered significant contained in Appendix G of the CEQA Guidelines (Environmental Checklist) was used to establish a threshold of significance.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Based on the less than significant impacts to wildfire resources in or near the Proposed Project Site, no environmental studies relating to wildfire resources were prepared for the Proposed Project.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

Impact Analysis: The project is a removal action of short duration. It will not affect the Base emergency response plan or emergency evacuation plan.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☒ Less Than Significant Impact
☐ No Impact

- b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Impact Analysis: As discussed above, wildfires are a normal occurrence at Beale and dangers associated with wildfire exist. The risk of uncontrolled spread is minimal at FR970 because of the Base wildfire management program and the watering of the golf course greens. The 7 MRS are cattle ranges and are more susceptible to wildfire. The contractor will attend training provided by Beale AFB and will follow their health and safety plan to minimize the risk of wildfires. They will also have a ready supply of water so that small fires can easily be extinguished before they grow out of control.

As of October 2020, California wildfires have burned more than 4 million acres of land. Even though the fires were more than 50 miles from Beale, air quality at the Base was at times classified in the unhealthy range. Wildfires at Beale or in neighboring areas may therefore result in short-term exposure of project personnel to pollutant concentrations, but exposure levels can be controlled through avoidance techniques (evacuating the project site and delaying field work or working short days) and the use of proper personal protective equipment (PPE).

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☒ Less Than Significant Impact
☐ No Impact

- c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Impact Analysis: The project is a removal action. No infrastructure will be installed.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact

☒ No Impact

- d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Impact Analysis: The project is a removal action. No structures will be constructed as part of this project and no work will be conducted after the start of the limited operations period, November 1, unless given permission to proceed from the Natural Resources Manager. Work after November 1 is determined based on weather conditions and soil conditions.

Conclusion:

- ☐ Potentially Significant Impact
☐ Less Than Significant With Mitigation Incorporated
☐ Less Than Significant Impact
☒ No Impact

References Used:

Beale AFB, August 2019. *U.S. Air Force Integrated Natural Resources Management Plan, Beale Air Force Base & Lincoln Receiver Site.*

Beale AFB, January 2021. *Final Action Memorandum, Non-Time-Critical Removal Action Military Munitions Response Program, FR970 Site (FR970 NTCRA Action Memo), Beale Air Force Base*

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BES-TLV JV, June 2020. *Final Engineering Evaluation/Cost Analysis, Military Munitions Response Program, FR970 Site (FR970 EE/CA), Beale Air Force Base.*

Michael Baker International, August 2015. *Installation Development Plan, Beale Air Force Base, California.*

21. MANDATORY FINDINGS OF SIGNIFICANCE

Based on evidence provided in this Initial Study, DTSC makes the following findings:

- a. The project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.
- b. The project does not have impacts that are individually limited but cumulatively considerable. (“Cumulatively considerable” means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)
- c. The project does not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

Authority: Public Resources Code 21083, 21094.5.5

Reference: Public Resources Code Sections 21094.5 and 21094.5.5