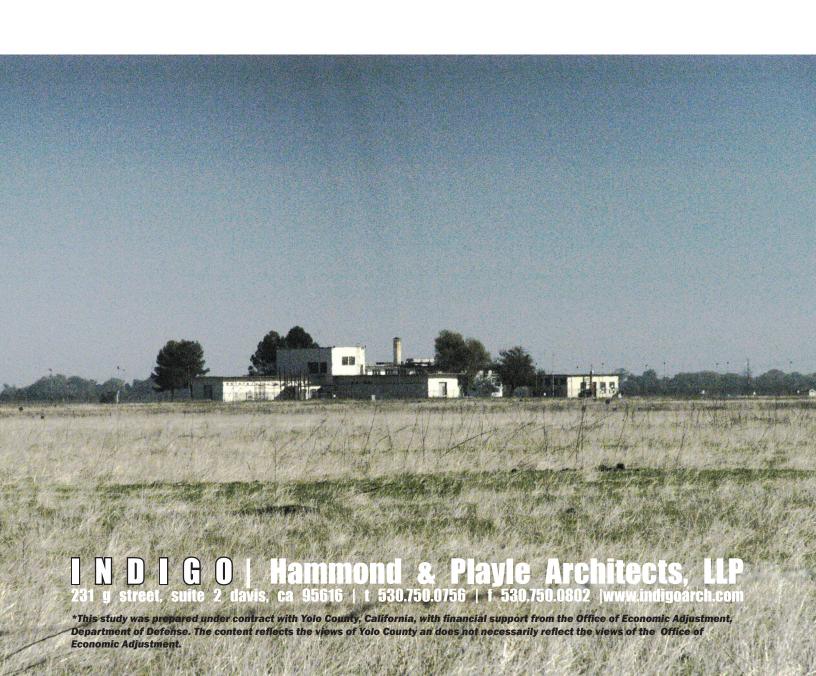
# **Appendix P**

**Property Condition and Code Compliance Assessment** for the Davis Communications Site

# PROPERTY CONDITION & CODE COMPLIANCE ASSESSMENT FOR THE DAVIS COMMUNICATIONS SITE\*

County of Yolo | Parks and Recreation Department January 29, 2008



# PROPERTY CONDITION & CODE COMPLIANCE ASSESSMENT FOR THE DAVIS COMMUNICATIONS SITE

County of Yolo, Parks & Recreation Department

# **BOARD OF SUPERVISORS**

District 1: Mike McGowan

District 2: Helen Thompson

District 3: Matt Rexroad

District 4: Mariko Yamada

District 5: Duane Chamberlain

# PARKS DEPARTMENT DIRECTOR

WARREN WESTRUP

This study was prepared with financial support from the Office of Economic Adjustment, Department of Defense. The following persons have contributed to this report. Their useful and timely input is appreciated.

# PROJECT MANAGER

# **CHRISTINE ALFORD**

Assistant Park Planner County of Yolo, Parks & Resources Department

# REPORT PREPARED BY

# **JONATHAN HAMMOND, AIA**

Prinicipal

INDIGO / Hammond & Playle Architects, LLP

# **PRESCOTT NICHOLS, AIA**

**Project Architect** 

INDIGO / Hammond & Playle Architects, LLP

# **MEGUMI YAMANOHA**

Marketing

INDIGO / Hammond & Playle Architects, LLP

# **BILL LARSON, P.E.**

Principal

Point 2 Structural Engineers

# OTHER CONTRIBUTORS

# **SHAWN BONIFACIO**

Frank's Septic Service, Inc.

# JOHN J. McNAMARA

Lightning Demolition & Hauling

EXECUTIVE S	UMMARY	1
SUMMARY O	F EXISTING CONDITIONS	3
ACCESSIBILI	TY ASSESSMENT	6
	ONDITIONS ASSESSMENT Area Map	8
	und Site Map	
	uilding Description & Assessment Report	
	0 (2,200 SF Emergency Power Bldg) 2 (Picnic Building & BBQ)	
	9 (Water Production Well & Pumphouse)	
	PATIONS & COSTS	
	emolition of the Main Compund Area	20
	Nothballing of the Main Compund Area	21
	hballing, Demolition, Reuse of the Main Compound Area	23
Hazardous N	O COMPLETE REHABILITATION & REUSE  Materials	
-	)	
	bitaton	
	Regulatory Impediments	
•	is	
EXHIBITS		
EXHIBIT A	Structural	
EXHIBIT B	Structural	_
EXHIBIT C EXHIBIT D	Structural Structural	
EXHIBIT E*	Building Inventory and Description	
EXHIBIT F*	Status of Above Ground and Underground Storage Tanks	
EXHIBIT G*	Vernal Pools Map	
EXHIBIT H*	Biological Conservation Easement Map	
EXHIBIT I*	Area of Special Notice	41

<sup>\*</sup>Information provided by Department of the Air Force Former Davis Global Communications Site Finding of Suitability for Early Transfer with CERCLA 120 (h)(3) Covenanat Deferral Final Report.

### **EXECUTIVE SUMMARY**



**Former Davis Global Communications Site** 

The County of Yolo contracted with INDIGO/ Hammond & Playle Architects, LLP to conduct a property condition assessment for the approximately eight fenced acres near the center of the former U.S. Air Force Davis Global Communications Site. The unfenced portion now merges with the surrounding Grasslands Regional Park. INDIGO has evaluated the existing conditions and has provided an assessment of the alterations required and associated costs for three selected reuse options as follows in this report. Finally, a property condition and code compliance assessment of the obstacles to full reuse of the facility is provided.

# **Summary of Existing Conditions**

The Main Compound Area contains Building 4708 – a 26,000 SF Transmitter and Administration building, Building 4710 – a 2,200 SF concrete and steel Emergency Power building, and various site features, including Building 4712, Building 4709, and other site elements including fuel storage tanks and a water well.

Building 4708, the former Transmitter and Administration building can be usefully divided into two portions: a 17,017 SF Concrete and Steel Transmitter Portion and a 8,966 SF Wood Frame Administration Portion. The wood frame portion of building overlaps the concrete portion at the second floor, but, as the concrete portion includes a 5" slab at its ceiling, the two portions are separable.

# **Reuse Option 1: Demolition**

Complete demolition and removal of the main compound area, including all foundation concrete.

- The result will be an unfenced site largely free of non-native materials (ready for re-grading and replanting.)
- The estimated direct demolition cost is approximately \$1,000,000.

# **Reuse Option 2: Mothballing**

Complete mothballing of the entire facility.

- Mothballing site features, like the empty tanks.
- Mothballing the Emergency Power building.
- Mothballing the stick-framed portion of the Transmitter Building.
- Mothballing the concrete portion of the Transmitter Building.
- The result will be a re-fenced main compound area. The stick frame portion of the Transmitter Building will likely succumb to the elements before the rest of the facility.
- The estimated direct mothballing cost is approximately \$250,000.

# Reuse Option 3: Selected Demolition, Mothballing, and Reuse

A partial demolition, mothballing, and reuse scenario for the facility.

- Emergency Power building to be renovated for use as County storage, Grasslands Regional Park Offices, and a Grasslands Visitor Station.
- Stick-framed portion of the Transmitter Building to be demolished and removed, including the smaller footings at that end.
- Concrete portion of the Transmitter Building to be mothballed.
- All hazardous materials are to be removed in this option (rather than encapsulated, as in Option 2).
- The result will be an unfenced site with a dramatic land-formation-like, sandblasted and sealed concrete building next to a cheerfully renovated Visitor Station, featuring bottled water and portable sanitation facilities.
- The estimated direct demolition and construction cost is approximately \$1,200,000.

# **Property Condition and Code Compliance Assessment**

Option 3 investigates a realistic reuse scenario for the facility. However, when we investigate a complete rehabilitation and reuse of the main compound area, whether for residential purposes, light-industrial use, or as offices, the requirements quickly escalate in difficulty and price for a safe, code-compliant and permitted environment, free of hazardous materials, with adequate potable water and septic system for a use that won't threaten the sensitive habitat surrounding the main compound area.

- The estimated direct construction cost is beyond the scope of this report, but assuming all improvement of all 28,000 SF of the main compound area are improved @ \$100/ SF (\$2,800,000) with the prevailing wage, general conditions, and contingency multipliers comes to approximately \$4,700,000 for a typical tenant improvement cost .
- Add the estimated cost required to remedy site issues and code requirements: \$2,000,000. See *Obstacles* section (pgs 25 27) for identification of these added costs.
- Total estimated cost for full renovation and reuse of the former U.S. Air Force Davis Global Communications Site: \$6,700,000 or \$239/SF.

### **SUMMARY OF EXISTING CONDITIONS**

The U.S. Air Force's Davis Global Communications Site is being transferred to the County under the federal surplus process. The Davis Site began operation in the early 1950s as an annex to the former McClellan AFB. The Davis Site occupies approximately 311 acres and is located approximately 2 miles southeast of the City of Davis. The footprint is bounded on the north by County Road 35, on the south by County Road 36, on the west by County Road 104, and on the east by County Road 105. The Davis Site is primarily undeveloped open grassland with interspersed antenna pads, transmitters, and unpaved roads. It is surrounded by agricultural fields and Grasslands Regional Park.

The scope of this report concerns the approximately 8 fenced acres near the center of the parcel containing two main buildings, two above ground storage tanks, and a production water well that is used for non-potable purposes. Known as the "Main Compound Area" this area is located in a 100-year flood zone and has been built on an elevated pad, approximately 2'-0" high, sloping down to surrounding grade at the perimeter fence. There are no signs of flood damage within the observed portions of the facility.

The Main Compound Area contains of Building 4708 – a 26,000 SF transmitter and administration building, Building 4710 – a 2,200 SF concrete and steel emergency power building, and various site features, including Building 4712, Building 4709, and other site elements.

# **Building 4708 - Former Transmitter and Administration Building**

The former transmitter and administration building can be usefully divided into two portions:

- 17,017 SF Concrete and Steel Transmitter Portion
  - o Structural and building envelope integrity is sound.
  - o Steel beams are encapsulated in lath and stucco.
  - o HVAC and other mechanical and electrical systems are antiquated and should be removed/ replaced.
  - o No functioning code compliant fire and life safety provisions are in place. There are no sprinklers.
  - o Walls are uninsulated 10" cast-in-place concrete, painted, and roof is uninsulated 5" cast-in-place concrete, painted on interior side with asphalt built up roofing on the exterior.
  - o Architectural features:
    - 17'-0" high ceilings in each long wing provide 14,000 SF of high-bay space.
    - Long, regularly spaced rows of transom awning windows (currently painted over) offer a distinctive look.
  - o Exterior walls are covered in lead based paint.
  - o No provision has been made for accessibility.

- 8,966 SF Wood Frame Administration Portion
  - o The wood frame portion of building (E) overlaps the concrete portion at the second floor, but, as the concrete portion includes a 5" slab at its ceiling, the two portions remain separable.
  - o Structural integrity of the wood portion appears sound. The building envelope is a sheathed in vinyl siding which shows flaking, cracking and other signs of wear.
  - o HVAC and other mechanical and electrical systems are antiquated and should be removed/replaced.
- o No functioning fire and life safety provisions are in place. There are no sprinklers.
- o Walls are insulated 3-1/2" wood frame with painted gypsum board on the interior and vinyl over original redwood siding on exterior. Redwood siding was painted with lead-based paint.
- o Ceilings are suspended acoustical type, typically. May contain asbestos.
- o Interior floor finishes include 9x9 asbestos-based floor tile adhered with asbestos-based mastic.
- o Roofs are insulated dimensional lumber frame with built up asphalt roof sheathing.
- o Architectural features:
  - Redwood siding, if restorable, would provide a distinctive look.
- o No provision has been made for accessibility.

# **Building 4710 - Former Emergency Power Building**

The 2,200 SF emergency power building stands alone on the site and is in fair condition:

- Structural and building envelope integrity is sound.
- Steel beams are exposed to the interior spaces.
- HVAC and other mechanical and electrical systems are antiquated and should be removed/ replaced. The two diesel-fired backup generators are potentially salvageable.
- No functioning fire and life safety provisions are in place. There are no sprinklers. There is an emergency eyewash and shower, but without potable water source, this is probably unusable.
- Walls are uninsulated 10" cast-in-place concrete, painted, and roof is uninsulated 5" cast-in-place concrete, painted on interior side, asphalt sheathed on the exterior.
- Architectural features:
  - o 3'-0" man-doors have been cut into the original roll-up doors, making pedestrian access easier. Large equipment removal (e.g., the generators) would require partial disassembly of one of these doors.
  - o Large north- and south-facing windows bring plenty of controllable sunlight into the interior.
- Exterior walls are covered in lead based paint.
  - o No provision has been made for accessibility.

# **Site Features**

- Building 4712 a 730 SF dilapidated picnic building and barbeque structure.
- Building 4709 a non-potable water production well and pump house: The water production well is useful for fire water only. There are no sources of potable water at the site. Nor is it possible to drill for well water within a reasonable pumping distance (1.5 miles) of the site, due to high nitrate levels in the ground water.
- Two potentially salvageable diesel storage tanks one at 7,000 and one at 20,000 gallons that have already been cleaned. These tanks have sit on massive concrete pads.
- Creosote treated logs.
- No provision has been made for accessibility.

### **ACCESSIBILITY ASSESSMENT**

This section focuses on the accessibility requirements for Building 4708, the former transmitter and administration building, and Building 4710, the former emergency power building. The basis of this assessment is the 2003 California Disabled Accessibility Guidebook (CalDAG). In order to analyze accessibility requirements each area has been assigned an assumed use.

# Building 4708, Former Administrative Portion: Assumed Use - Homeless Shelter or Hostel

- The wood frame portion of Building 4708 is approximately 8,966 SF.
- Path of travel to the main entry of the building from parking is interrupted by two 4.5-inch steps due to the building pad sitting approximately 9-inches higher than surrounding grade. This makes the main entry inaccessible without modification to the exterior approach.
- Double door opening width at the main entry is less than 32-inch clear minimum per leaf, making it inaccessible without modification. With the exception of some large 3'-6" service doors, most doors within the wood portion of the transmitter building are less than 32" clear, making them inaccessible without modification.
- Door hardware lacks lever handles and door pull typically exceeds 15 pounds on the exterior and 5 pounds on the interior.
- Interior flooring level changes exceed 1/4", where concrete slabs meet steel floor plates, typically, and are not accessible.
- Accessible amenities, such as toilet rooms and drinking fountains, are not available. See *Code Analysis* section (pgs 27 32) for fixture requirements.

# Building 4708, Former Transmitter Portion: Assumed Use - High-Bay Industrial Space

- The concrete portion of Building 4708 is approximately 17,017 SF.
- Path of travel to the concrete portions of the building from parking is interrupted by grade sloping up to the building, irregular paving, and greater than ½" level changes. This makes all entrances inaccessible without modification to the exterior approach. Loading dock at the west end of the west wing is 2'-4" above grade and is inaccessible without modification to the approach.
- Door openings at concrete building entries is 32-inch clear minimum. Most doors within the concrete portion of the facility have adequate clear opening.
- Door hardware lacks lever handles (sometimes any handle at all) and door pull typically exceeds 15 pounds on the exterior and 5 pounds on the interior.
- Interior flooring level changes exceed 1/4", where concrete slabs meet steel floor plates, typically, and are not accessible.
- Accessible amenities, such as toilet rooms and drinking fountains, are not available.

# Building 4710, Former Emergency Power Building: Assumed Use - Visitor Center, Office, Meeting Space, and Park Storage

- This building is approximately 2,200 SF.
- Path of travel to the building has level grade, but uneven pavement will not comply.
- Door opening widths are 32-inch clear minimum.
- Door hardware lacks lever handles and door pull typically exceeds 15 pounds.
- Interior flooring level changes exceed 1/4", where concrete slabs meet steel floor plates, typically, and are not accessible.
- Accessible amenities, such as toilet rooms and drinking fountains, are not available.

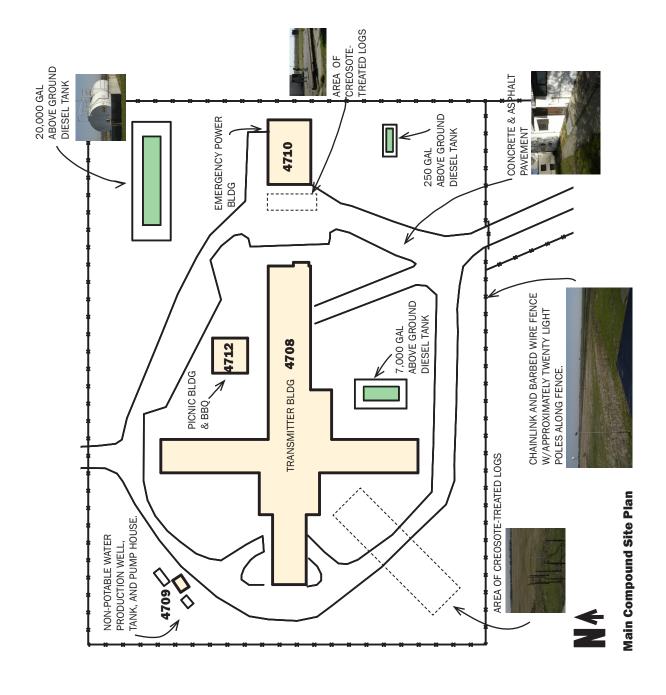
# **PROPERTY CONDITIONS ASSESSMENT**

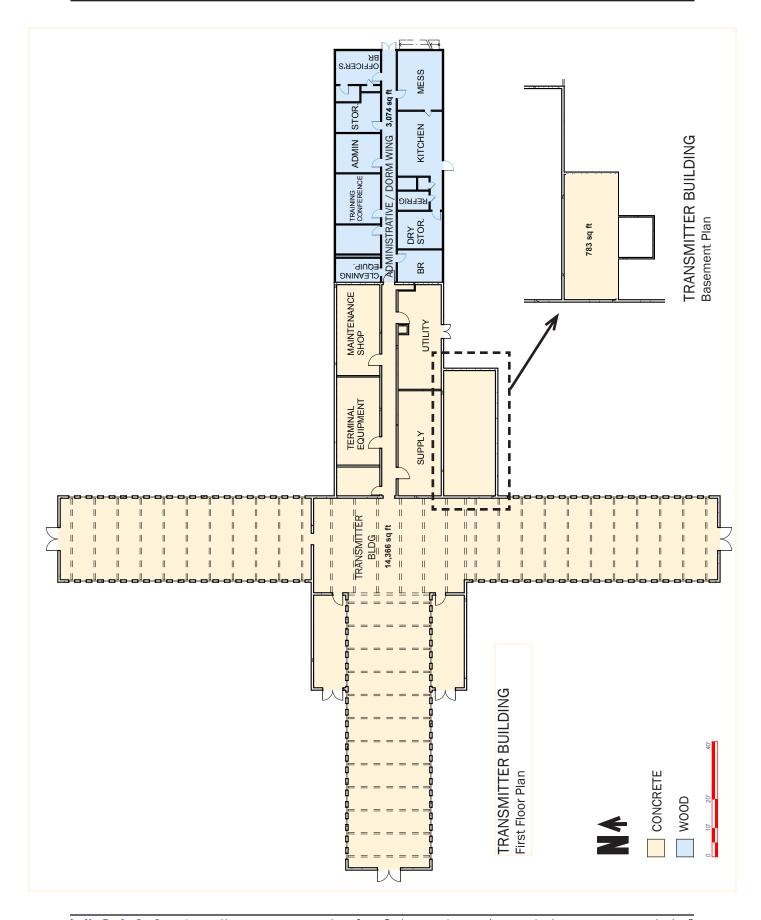


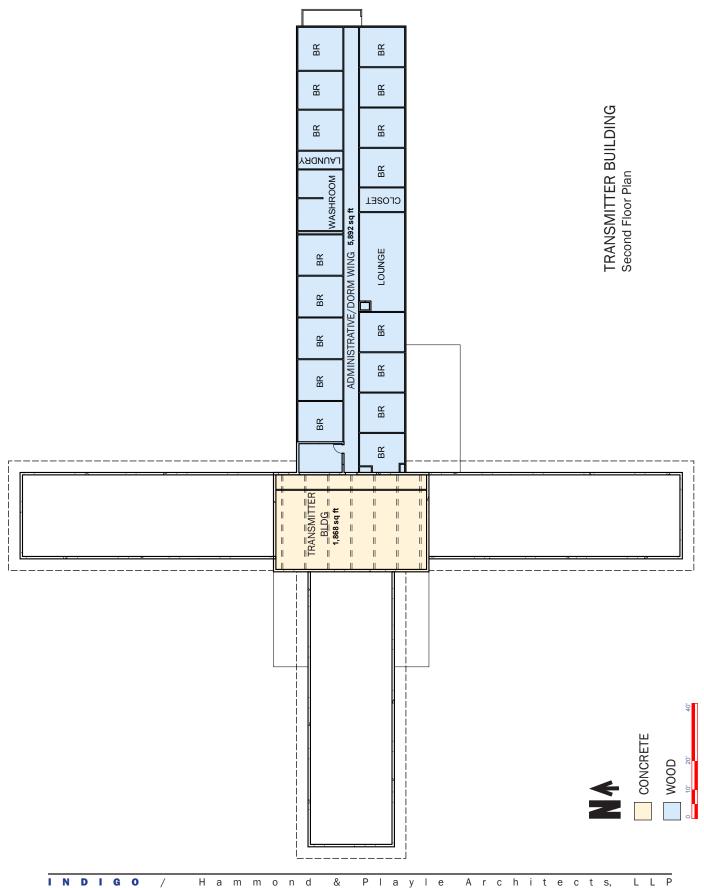
Area Map

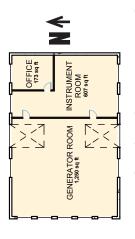


Approaching Davis Communications site via entry road









EMERGENCY POWER BUILDING First Floor Plan

# **Structural Building Description & Assessment Report**

(Provided by Bill Larson, Point 2 Structural Engineers)

# Transmitter Building

- · Roof framing
  - o Cast in place concrete roof slab over W14x30 structural steel beams spaced 8 feet on center.
  - o Built-up roofing over rigid insulation
- Wall Framing
  - o 10" cast in place concrete walls reinforced with 2 layers of reinforcement steel.
    - The concrete walls extend down below grade 5'-9" to the top of the foundations.
- 2nd Floor framing (center portion)
  - o Cast in place concrete slab
- · Ground floor slab and foundations
  - o 5" cast in place concrete slab on grade.
  - o Continuous cast in place concrete walls and footings.
    - The foundations start 5'-9" below the finish floor elevation.
    - The plans note that the foundations shall be a minimum of 4 feet into undisturbed native soil.
    - Combining the 4 foot deep footings with the 5'-9" concrete wall section below grade, puts the bottom of the foundations at almost 10 feet below the finish floor.

# **Dormitory Portion of Transmitter Building**

- · Cast in place concrete
- Wall Framing
  - o 2x4 wood stud frame at 16" on center
  - o 5/8" exterior plywood
- · Second floor framing
  - o 2x12 at 16" on center
  - o 2x10 at 12" on center at second floor bathrooms
  - o 5/8" plywood sheathing
- Roof Framing
  - o Wood framed, but no drawings exist to show sizes or the configuration.

26,000 SF Transmitter Bldg



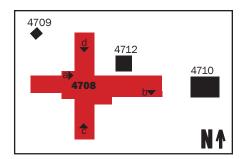
**East Facade** 



(a) Radio Room



(b) Administrative Office





(c) South Bay



(d) North Bay

26,000 SF Transmitter Bldg



4712 4710 C 4708 b 4a

 $(a) \, \textbf{Second Floor Hallway}$ 



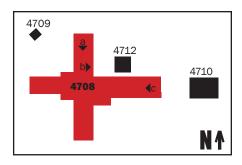
(b) Second Floor Room Typical



(c) West Bay

26,000 SF Transmitter Bldg





(a) On roof of North Bay looking south



(b) On roof of North Bay looking east



 $(c) \ \textbf{On roof of East Bay looking west} \\$ 

2,200 SF Emergency Power Building



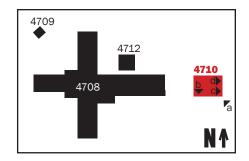
(a) Southeast Corner



(b) Main Generator Room



(c) Instrumentation





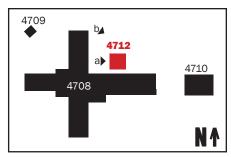
(d) Office



250,000 Gallon Diesel Tank in Generator Room

Picnic Bldg & BBQ



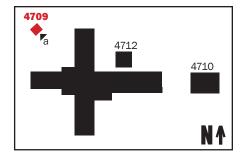


(a) West view



 $\label{eq:continuous} \textbf{(b) North view (East Wing of Transmitter Building beyond)}$ 

Water Production Facility & Pumphouse





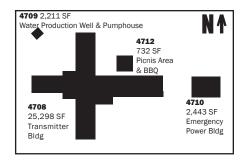
Filtration Shed, Pumphouse and Storage Shed

# **OPTION 1**

Complete Demolition / Return Site To Bare Soil

# Structural Analysis of Proposed Option 1

Demolition of the Transmitter building is a viable option. The wood framed dormitory portion is conventional wood framed structure and has relatively shallow continuous concrete footings. See Exhibits A and B for a partial foundation plan and a detail of a typical footing. Complete removal of the wood framing and concrete foundations is possible for this wing of the building. The remaining three wings and central core are cast in place concrete. The walls of the building extend down 5'-9" below grade to continuous concrete footings. The footings are another 4 feet deep at a minimum. See Exhibits C and D for a partial foundation plan and detail.



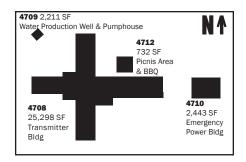
		Item		Unit		
Item #	Cost Item	Quantity	Unit	Cost	Item Cost	Total Cos
	Above ground diesel tanks - one each at 250, 7,000, & 20,000 gal already cleaned -					
(A)	salvage credit of \$10,000 factored in. Incl. conc. pads.	1	EΑ	8,000	8,000	
(A)	Creosote treated logs.	1	EΑ	2,000	2,000	
(A)	Chainlink & barbed wire fence	2,642		2.00	,	
(A)	Pavement, including 4-inch concrete & asphalt	29,984	SF	1.35	,	
(A)	Light poles, incl. conc.	20	PL	100	2,000	
	122 SF non-potable water production well, tank, and pump house. \$500 for building,					
(B)	\$2000 conc., \$20,000 well closure.	1	EΑ	22,500	,	
C)	Picnic building and barbeque removal.		EΑ	5,000		
(D)	Emergency power building concrete removal, including 10-foot deep foundations.	2,211		12.80	,	
(D)	Emergency power building exterior lead paint removal. Est. 2,618 SF of wall surf.	2,618	SF	5.00	,	
(D)	Emergency power building equipment removal & salvage.		EΑ	10,000	,	
D)	Emergency power building roofing & other finish removal.	2,211	SF	0.75	1,658	
	Transmitter building, wood frame administrative portion. Non-hazmat removal. Includes					
E)	concrete foundation.	8,966	SF	4.00	35,864	
	Transmitter building, wood frame administrative portion. Hazmat removal, including					
(E)	lead & asbestos.	1	EΑ	75,000	75,000	
	Transmitter building, concrete portion removal, including 10-foot deep foundations and					
(E)	backfill.	16,332	SF	12.80	209,050	
(E)	Transmitter building, concrete portion lead paint removal. Est. 21,900 SF of wall surf.	21,900	SF	5.00	109,500	
(E)	Transmitter building, concrete portion equipment removal & salvage.	1	EΑ	20,000	20,000	
(E)	Transmitter building, concrete portion roofing & other finish removal.	16,332	SF	0.75	12,249	
	Subtotal A					599,97
		Item		Unit		
tem #	Cost Item	Quantity	Unit	Cost	Item Cost	Total Cos
	Prevailing Wage	25	%	599,974	149,994	
	Subtotal B					749,96
	Overhead & Profit	15	%	749,968	112,495	
	Insurance & Bonds	2.5	%	749,968	18,749	
	Escalation to Bid	2	%	749,968	14,999	
	Contingency	15	%	896,211	134,432	
	SIRECT DEMOLITION COSTS	26,152	-	39		1,030,64

# **OPTION 2**

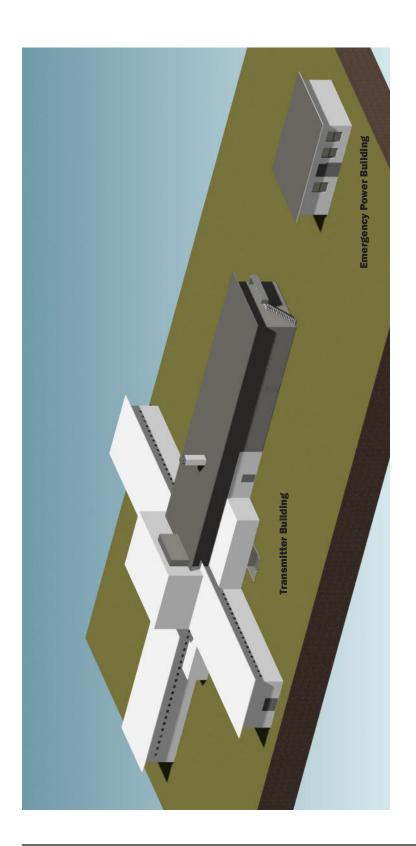
Complete Mothballing of the Main Compund Area

# **Structural Analysis of Proposed Option 2**

The structural aspects of mothballing the Transmitter building are relatively minor. We would recommend that all of the window and door openings be framed in and covered with plywood sheathing. The exterior shell finish materials; siding, roofing, paint, etc. should be replaced as required and maintained over time to avoid further deterioration of the building.



		Item		Unit		
item #	Cost Item	Quantity	Unit	Cost	Item Cost	Total Cos
	Above ground diesel tanks - one each at 250, 7,000, & 20,000 gal already cleaned.					
A)	Salvage tanks and leave concrete pads.		EA	(10,000)		
A)	Remove creosote treated logs.		EA	2,000	2,000	
A)	Repair and replace existing chainlink & barbed wire fence.	2,642		0.50	1,321	
A)	Pavement, including 4-inch concrete & asphalt, to remain.	29,984		0.00	0	
A)	Light poles, incl. conc., to remain.	20	PL	0	0	
	122 SF non-potable water production well, tank and pump house to remain for fire					
В)	water. Note: will require on-going maintenance.	1	EΑ	0	0	
	Picnic building and barbeque removal. Building is visibly damaged and represents a					
C)	hazard.	1	EΑ	5,000	5,000	
(D)	Emergency power building, shuttering of windows & other mothballing.	1,309	SF	4.00	5,236	
D)	Emergency power building lead paint sealing.	2,618	SF	1.00	2,618	
D)	Emergency power building equipment removal & salvage.	1	EΑ	0	0	
D)	Emergency power building roofing repair & replacement.	2,211	SF	5.00	11,055	
-	Transmitter building, wood frame administrative portion, shuttering of windows & other					
E)	mothballing.	3,000	SF	4.00	12,000	
E)	Hazardous materials to remain unabated.	, 1	EΑ	0	, 0	
É)	Transmitter building, concrete portion, shuttering of windows & other mothballing.	2,738	SF	4.00	10,950	
E)	Transmitter building, concrete portion lead paint sealing.	21,900	SF	1.00		
E)	Transmitter building, concrete portion equipment removal & salvage.		ĒΑ	0	•	
(E)	Transmitter building, concrete portion roofing repair & replacement	16,332	SF	5.00	81,660	
,	3,g,	,			,	
	Subtotal A					143,74
		Item		Unit		
tem #	Cost Item	Quantity	Unit	Cost	Item Cost	Total Cos
	Prevailing Wage	25	%	143,740	35,935	
	Subtotal B					179,67
	Overhead & Profit	15	%	179,675	26,951	
	Insurance & Bonds	2.5		179,675	,	
	Escalation to Bid		%	179,675		
	Contingency		%	214,712		
OTAL D	DIRECT MOTHBALLING COSTS	26,152	SF	9		246,91



**OPTION 2**Complete Mothballing of the Main Compund Area

# **OPTION 3**

Partial Mothballing, Demolition, Reuse of the Main Compound Area

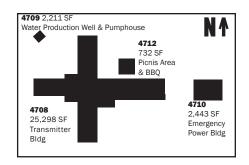
# **Structural Analysis of Proposed Option 3**

**EMERGENCY POWER BLDG** 

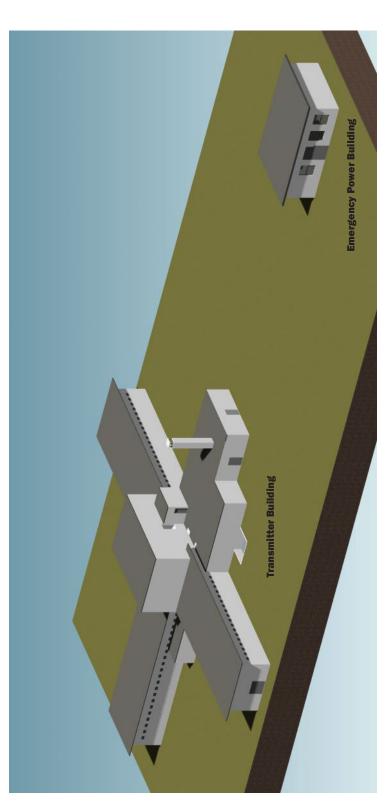
Conversion of the Emergency Power building into a storage/visitors center would require only minor structural changes. Any infill of existing openings could be accomplished using concrete masonry. The existing roof framing will not require any modifications unless additional loads are proposed. The floor grating could be removed and the below grade trenches and depressions backfilled with crushed compacted gravel. A new concrete slab placed over the gravel will provide a level floor surface. The existing generator foundations could remain.

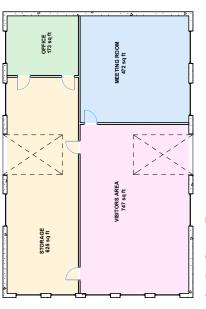
### TRANSMITER BUILDING

The Transmitter building roof framing was designed to support normal roof live loads (20 psf), the existing dead load (approximately 65 psf) and a small supplemental dead load for miscellaneous items. It is not structural feasible to add additional dead and live loads to the roof without strengthening the steel roof beams and concrete roof slab.



. ,		Item			<b>.</b>	T
tem #	Cost Item	Quantity	Unit	Unit Cost	Item Cost	Total Cos
΄Λ\	Salvage above ground diesel tanks - one each at 250, 7,000, & 20,000 gal already	1	ΕΛ	(10.000)	10.000	
A)	cleaned. Leave concrete pads.		EA EA	(10,000) 2,000	-10,000 2,000	
(A)	Remove creosote treated logs. Remove chainlink & barbed wire fence			,	,	
(A)		2,642	LF	2.00	5,284	
· ^ \	Remove pavement, including 4-inch concrete & asphalt except parking lot and area	21 000	CE	4.00	04.000	
(A)	around Building 4710.	21,000 9,000		4.00	84,000	
(A)	Resurface area around Building 4710.	•		1.00	9,000	
(A)	Remove perimeter light poles, incl. concrete bases.	20	PL	100	2,000	
(D)	Remove non-potable water production well, tank, and pump house. \$500 for building,		_^	22 500	22 500	
(B)	\$2000 conc., \$20,000 well closure.		EA	22,500		
(C)	Remove picnic building and barbeque.		EA	5,000		
(D)	Emergency power building, renovate for storage and visitors.	2,211		100.00	,	
(D)	Emergency power building lead paint removal. Est. 2,618 SF of wall surf.	2,618		5.00		
(D)	Emergency power building equipment removal & salvage.		EA	10,000		
(D)	Emergency power building - provide portable toilets and bottled water.		EA	0.00	0	
	Transmitter building, wood frame administrative portion. Non-hazmat removal. Includes					
(E)	concrete foundation.	8,966	SF	4.00	35,864	
	Transmitter building, wood frame administrative portion. Hazmat removal, including					
(E)	lead & asbestos.		EA	75,000		
(E)	Transmitter building, concrete portion, shuttering of windows & other mothballing.	2,738		4.00		
(E)	Transmitter building, concrete portion lead paint removal.	21,900		5.00	,	
(E)	Transmitter building, concrete portion equipment removal & salvage.		EA	20,000		
(E)	Transmitter building, concrete portion roofing & other finish removal.	16,332		0.75	, -	
(E)	Transmitter building, concrete portion - add elastomeric membrane roof.	16,332	SF	5.00	81,660	
	Subtotal A					709,19
		Item				
item #	Cost Item	Quantity	Unit	Unit Cost	Item Cost	Total Cos
						Total Cos
	Prevailing Wage	25	%	709,197	177,299	
	Subtotal B					886,49
	Overhead & Profit		%		132,974	
	Insurance & Bonds	2.5		886,496		
	Escalation to Bid	2	%	886,496	,	
	Contingency	15	%	1,059,363	158,904	
	ONSTRUCTION COSTS	26,152		47		1,218,26





Emergency Power building Re-use First Floor Plan

**OPTION 3**Partial Mothballing, Demolition, Reuse of the Main Compound Area

# **OBSTACLES TO COMPLETE REHABILITATION AND REUSE OF THE MAIN COMPOUND AREA**

Given what is published in the *Air Force Finding of Suitability for Early Transfer (FOSET) 2007* report and what has been discovered during site and plan investigations as part of this property condition assessment, Option 3 investigates a realistic reuse scenario for the facility. When we investigate a complete rehabilitation and reuse of the main compound area, whether for residential purposes, light-industrial use, or as offices, the requirements quickly escalate in difficulty and price for a safe, code-compliant and permitted environment, free of hazardous materials, with adequate potable water and septic system for a use that won't threaten the sensitive habitat surrounding the main compound area. Each of these elements has a cost, particularly the potable water and septic system solutions, and the aggregate of these costs is prohibitive: approximately \$2 million dollars, above and beyond typical tenant improvement costs already listed in the attached cost estimates and not including on-going maintenance costs.

### **HAZARDOUS MATERIALS**

### LEAD PAINT

Lead-based paint is known to be present in the main compound area facilities because the facilities were built prior to 1978 and previous sampling results verified its presence on some painted surfaces. The *Air Force Finding of Suitability for Early Transfer (FOSET) 2007* report found the existing condition of lead based paint on site to be "poor" at the picnic building and "fair" at the Emergency Power and Transmitter buildings, with considerable peeling and flaking observed. Removal and proper disposal of all lead based paint in the main compound area would cost an estimated \$147,500.

### **ASBESTOS**

Asbestos-containing material is present in the main compound area facilities. Asbestos-containing material is likely to be present in the following types of facilities and debris:

- Structures or Buildings: the *Air Force FOSET 2007* report identified potential asbestos-containing material on the floor and in pipe insulation in the HVAC room in the Transmitter building. Ceiling and floor tiles were also dispersed in various locations throughout the Transmitter building.
- Utility Pipelines: Asbestos-containing material, such as transite pipes or pipes wrapped with asbestos insulation, may be found in (or on) utility pipelines within the main compound area. Underground utility pipelines have not been inspected.
- Demolition Debris: Asbestos-containing material, which was commonly used in building materials, may be
  present during building demolition and at former building demolition sites.

Removal and proper disposal of all asbestos-containing material within the main compound area would cost an estimated \$50,000, not including any asbestos that may be found on the buried utility pipelines. That would have to be addressed as an unknown condition in the contract for demolition that could further escalate the cost.

# **CITY SERVICE - POTABLE WATER**

There are no sources of potable water at the Davis Site. A production well at the Davis site provides non-potable water for fire suppression. The well water is chlorinated, and is obtained from the C and D Zone aquifer units. Contaminants have been detected previously in this production well. The Air Force reserves the right to prohibit use of the production well if it appears, as a result of data evaluation, that the ongoing groundwater remedy is being adversely affected. Further, it restricts anyone from installing a "replacement water supply well" without their approval. The adjacent (and slightly uphill) 320 acre Yolo County Grasslands Regional Park has high concentrations of nitrates in its well water, making it non-potable.

One solution might be to obtain water from the City of Davis three miles to the north. Davis requires that a new \$2.5 million well be constructed for any new water service connections. The cost of this new well could be shared with other new applicants. Optimistically estimating that 20 applicants share the cost of the well would put the cost to the main compound area at \$125,000. Add to that three miles of 6-inch pipe at approximately \$50 per linear foot, including trenching and backfill: \$1,320,000. Add another \$50,000 for required system pumps and tanks. The total cost of bringing potable water to the main compound area is approximately \$1.5 million dollars.

# **CITY SERVICE - SEPTIC SYSTEM**

The Davis Communication Site has no septic system and the on-going soil contamination treatment places restrictions against any new in-ground installations. Historically, sewage disposal at the main compound area accomplished via the septic tank and underground leach fields. In the mid 1960s, the leach fields were dug up and destroyed because the soil composition contributed to intermittent failure over the years. After the removal of the leach fields, all sanitary wastewater produced at the Davis Site flowed directly into the septic tank and three wastewater holding ponds. The septic system was abandoned in place on July 8, 2003, and the waste discharge permit was terminated as of September 30, 2003. A septic system is not permitted under current Health & Safety Code regulations.

Budget Level Cost Estimate for Septic System (Provided by Shawn Bonifacio, Frank's Septic Service, Inc.)

Since excavation is not permitted in the Yolo County Regional Grasslands Park and a leach field is not allowed at the existing site due to polluted groundwater, we are anticipating that the septic tank drain field will have to be located in the area of the existing developed park on the west side of the park near the archery range. Preliminary calculations for a facility housing 120 people would generate approx 50gal/person/day or approximately  $120 \times 50 = 6000$  gallons/day. To dispose of this water would require a septic drain field of about 45,000 sf (approximately one acre.) In addition a holding tank would be required. The water would be pumped from a holding tank to the drain field in a forced main. The cost of this system would be approximately \$300,000. Due to the large size of the system the licensing agency would be the Sacramento Regional Water Ouality Control Board.

Alternatively, the water could be treated, anaerobically filtered, and then pumped to a "drip dispersal field." The drip dispersal field could be located among the existing Valley Oak or Eucalyptus trees and could serve to water these trees. The cost for this system is comparable to the conventional system.

Finally, a third alternative would be to create a holding tank where the 6,000 gallons of daily generated sewage would be stored until it could be hauled to an offsite disposal facility. The nearest of these facilities is located in Oakland, California. Approximate cost for this system would be \$800/day. However, it is unlikely that such a system would be permitted.

# **SENSITIVE HABITAT**

As previously discussed in the description of Option 3 and documented in the *Air Force FOSET 2007* report, potential habitats for threatened or endangered species are present on the property. No actions may be taken that would adversely affect the species. The likelihood that any of the 118 occupants of the rehabilitated facility might decide to go for a walk and mistakenly step on an endangered tuft of Solano grass is too high to ignore. A fence would have to remain around the compound, which might be antithetical to the stated program of the facility's use.

# **TRANSPORTATION**

If Building 4708 is to be reused in a way that generates a large number (approximately 100) of car-less occupants, such as a homeless shelter or hostel, its location bears scrutiny. It must either be located within easy walking distance of a grocery or be located next to public transportation. The nearest grocery is approximately three miles away and currently no public transportation services the site. Therefore, the proposed shelter or hostel must anticipate providing for daily private shuttle service to and from the facility. The cost implications of purchasing a shuttle bus: \$67,000. Keeping a bus driver on staff and providing maintenance for the shuttle would, of course, add to the operating cost of the facility.

# **CITY OF DAVIS REGULATORY IMPEDIMENTS**

When dealing with the City of Davis, political and regulatory impediments must be considered.

- Measure J: If 20 applicants are looking to add service, this may trigger the City's Measure J requirement
  that the public vote on any proposals to amend the City of Davis General Plan to convert lands designated
  as agriculture or open space to urban uses. A City-wide vote would include a large public relations cost to
  the project proponents in both time and money.
- If Measure J is not triggered, the pipeline could still be seen as "growth-inducing", which would require approval by the Davis City Council.
- The General Plan designation for the subject property is Agriculture and zoning Agricultural General (A-1). Although the existing facility can continue to operate as allowed under §8-2.2603(c) of the Zoning Code, the existing facility can change uses or expand only upon approval of a Conditional Use Permit.

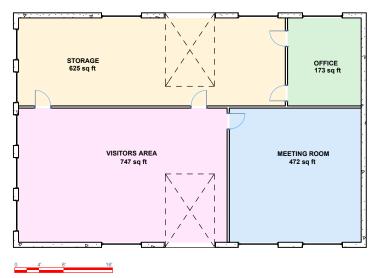
# **CODE ANALYSIS**

This section focuses on the code compliance requirements for Building 4708, the former transmitter and administration building, and Building 4710, the former emergency power building.

- Building 4708, Former Administrative Portion: Given the pervasive need for temporary housing, it is worth considering from a code standpoint the obstacles to reusing the stick frame portion of Building 4708 as a homeless shelter or hostel. The administrative portion is approximately 8,966 SF.
  - o The total estimated cost impact of the required code improvements (below): \$3,700 (Occupancy Separation) + \$35,864 (Sprinklers) + \$61,460 (Plumbing Rough-in & Fixtures) = \$101,024.\*
- Building 4708, Former Transmitter Portion: The concrete portion of Building 4708 is approximately 17,017 SF and faces similar obstacles to its reuse. It is assessed for compliance here as a high-bay industrial space.
  - o The total estimated cost impact of the required code improvements (below): \$3,700 (Occupancy Separation) + \$68,068 (Sprinklers) + \$104,270 (Plumbing Rough-in & Fixtures) = \$176,038.\*



Building 4710, Former Emergency Power Building: The County would make use of Building 4710 to serve
the surrounding Grasslands Regional Park, keeping its 173 SF office and renovating the remaining space
into a 472 SF meeting space, a 625 SF park storage bay and a 747 SF Visitor Center. The Visitor Center
would be used to display informational material about the park and as a meeting place for docent-led
tours.



- o The total estimated cost impact of the required code improvements (below): \$22,609\* (Plumbing Roughin & Fixtures). Note: If drinking water and portable sanitation facilities are used, the construction cost impact of required code improvements is potentially \$0.
- \*Does not include site water or sanitary system costs. See "City Services" elsewhere in this report.
- Note: Building 4712 is in disrepair and cracks throughout its block concrete walls would indicate that it is structurally compromised. For this reason, all reuse scenarios anticipate the demolition and removal of Building 4712.

The basis of this assessment is the 2007 California Building Code and employs the CBC's recommended outline for effective review.

# PER 2007 CALIFORNIA BUILDING CODE/CALIFORNIA CODE OF REGULATIONS, TITLE 24

- 1. THE PROJECTED USES OF EACH BUILDING
  - Building 4708, Former Administrative Portion: Homeless Shelter or Hostel. Per CBC 310, the use is RESIDENTIAL GROUP R-1 OCCUPANCY: Residential occupancies containing sleeping units where the occupants are primarily transient in nature, including boarding houses.
  - Building 4708, Former Transmitter Portion: High-bay light industrial space. Per 306.2, the use is FACTORY INDUSTRIAL F-1 MODERATE-HAZARD OCCUPANCY: includes, among others, the use of a building or structure, or a portion thereof, for assembling, disassembling, fabricating, finishing, manufacturing, packaging, repair or processing operations that are not classified as a Group H hazardous or Group S storage occupancy.

- Required Occupancy Separation in Building 4708: The former administrative portion, a proposed Group R-1 Occupancy, and the transmitter portion, a proposed Group F-1 Occupancy, require a 1-HOUR RATED OCCUPANCY SEPARATION per CBC 508.3.3 (and Table 508.3.3). The cast-in-place reinforced concrete envelop of the former transmitter portion of the building will satisfy this requirement, provided that the main doorway between the occupancies is renovated to provide 1-Hour rated separation, and stairwell doorways are upgraded to required ratings. Estimated cost impact: 1-Hour rated automatic door @ \$5,000 and 2 egress door upgrades @ \$1,200 EA = \$7,400.
- Building 4710, Former Emergency Power Building: Park Office & Meeting Room, Storage, and Visitors Center. Per CBC 304, the Park Office and Meeting space is a BUSINESS GROUP B OCCUPANCY: Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions. Per CBC 303.1, the Visitor Center's use is classified as "assembly;" however, per the exception to this section, a space used for assembly purposes with an occupant load of less than 50 persons shall be classified as BUSINESS GROUP B OCCUPANCY. Per CBC 311.3, the storage space is a STORAGE GROUP S-2 OCCUPANCY: the use of a building or, or a portion thereof, for storage that is not classified as a hazardous occupancy; Group S-2 designates low-hazard storage.

### 2. BUILDING SPRINKLER DETERMINATION

- Building 4708, Former Administrative Portion: Homeless Shelter or Hostel. Per CBC 903.2.7, SPRINKLER SYSTEM REQUIRED: An automatic sprinkler system shall be provided throughout all buildings with a Group R Occupancy. Per CBC 903.3.1.2, Group R-1 Occupancies require automatic sprinkler systems installed in accordance with NFPA 13R. Estimated cost impact: \$4/ SF @ 8,966 SF = \$35,864.
- Building 4708, Former Transmitter Portion: High-bay light industrial space. Per CBC 903.2.3, SPRINKLER SYSTEM REQUIRED: An automatic sprinkler system shall be provided throughout all buildings containing a Group F-1 occupancy where fire area exceeds 12,000 square feet. Estimated cost impact: \$4/ SF @ 17,017 SF = \$68,068.
- Building 4710: Park Office & Meeting Room, Storage, and Visitors Center. Per CBC 903, NO SPRINKLER SYSTEM REQUIRED: Does not require Group B occupancies to be sprinklered, nor does it require nonparking garage Group S-2 occupancies. Nor is it necessary to invoke the allowable area increase due to automatic sprinkler system installation per CBC 506.3. (See allowable area determinations below.)

# 3. BUILDING CONSTRUCTION TYPE DETERMINATION & SIZE LIMITATIONS

- Building 4708, Former Administrative Portion: Homeless Shelter or Hostel. Stick frame construction. Per CBC 602.5, the building as currently constructed is TYPE V CONSTRUCTION: Type V construction is that type of construction in which the structural elements, exterior walls and interior walls are of any materials permitted by this code.
  - o Measured Dimensions of Building 4708, Former Administrative Portion: Homeless Shelter or Hostel:
    - Building Height: 24' (grade plane to average height of highest roof surface)
    - Area of First Floor: 3,074 SF
    - Area of Second Floor: 5,892 SF
    - Total Area: 8,966 SF
  - o Allowable Dimensions Based on Type V Construction:
    - Height: 40'
    - Number of stories: 2
    - Area: 7,000 SF
    - Automatic Sprinkler System Increase:
      - \*Height increase: 20'
      - \*Number of stories increase: 1
      - \*Area increase: 200%
    - Allowable Sprinklered Building Height/Story/Area: 60'/3/14,000 SF
  - o Building 4708, Former Administrative Portion: Homeless Shelter or Hostel. Building complies at Type V Construction and 8,966 SF, if fully sprinklered.

- o Note on elevator requirement: If the former administration building can be interpreted as having been an Group R Occupancy, then it is possibly exempted per CBC 1102A.2. However, ADA requirements may still apply. See Accessibility Assessment section (pgs 6 7) in this report for more information.
  - Per CBC 1102A.3.1 At least 10 percent of new dwelling spaces are to be accessible.
- Building 4708, Former Transmitter Portion: High-bay light industrial space. Concrete and steel construction. Per CBC 602.2, the building as currently constructed is TYPE I CONSTRUCTION: those types of construction in which the building elements are of noncombustible materials.
  - o Measured Dimensions of Building 4708, Former Transmitter Portion:
    - Building Height: 35' (grade plane to average height of highest roof surface)
    - Area of First Floor: 14,366 SF
      Area of Second Floor: 1,868 SF
      Area of Basement: 783 SF
      Total Area: 17,017 SF
  - o Allowable Dimensions Based on Type I Construction:
    - Height: 160'
    - Number of stories: 11
    - Area: Unlimited
    - Automatic Sprinkler System Increase:
      - \*Height increase: 20'
      - \*Number of stories increase: 1
      - \*Area increase: 200%
    - -Allowable Sprinklered Building Height/Story/Area: 180'/12/Unlimited
  - Building 4708, Former Transmitter Portion: High-bay light industrial space. Building complies at Type I Construction and current dimensions.
  - Note on elevator requirement: Second floor space of transmitter portion likely to be used solely for mechanical equipment and service access. No elevator required.
- Building 4710: Park Office & Meeting Room, Storage, and Visitors Center. Concrete and steel construction.
   Per CBC 602.3, the building as currently constructed and, presumably, renovated is TYPE III
   CONSTRUCTION: Type III construction is that type of construction in which the exterior walls are of
   noncombustible materials and the interior building elements are of any material permitted by this code.
  - o Measured Dimensions of Building 4710, Former Emergency Power Building:
    - Building Height: 18' (grade plane to average height of highest roof surface)
    - Area of First Floor: 2,200 SF
    - Total Area: 2,200 SF
  - o Allowable Dimensions Based on Type III Construction:
    - Height: 55'
    - Number of stories: 4
    - Area: 19,000 SF
    - Allowable Building Height/Story/Area: 55'/4/19,000 SF
  - o Building 4710, Park Office & Meeting Room, Storage, and Visitors Center. Building complies at Type III Construction and current dimensions.

# 4. BUILDINGS ON THE SITE

- Number of buildings on the site: 2. Per Section 503.1.2, two or more buildings on the same lot shall be regulated as separate buildings.
- Minimum required fire rating of exterior walls per CBC Table 601:
  - o Building 4708, Former Administrative Portion: NON-RATED.
  - o Building 4708, Former Transmitter Portion: 2-HOUR RATED.
  - o Building 4710: Former Emergency Power Building: 2-HOUR RATED.
- Exterior opening protection requirements per CBC Table 704.8:
  - o Fire separation distance is greater than 30 feet in all instances.
  - o Building 4708, Former Administrative Portion: NO LIMIT.
  - o Building 4708, Former Transmitter Portion: NO LIMIT.
  - o Building 4710: Former Emergency Power Building: NO LIMIT.

- Frontage increase for allowable area purposes per CBC 506.2: NOT NEEDED all building areas within allowable limits, calculated using required sprinklering where necessary.
- 5. OCCUPANT LOAD CALCULATIONS OF BUILDING AND INDIVIDUAL SPACES WITHIN BUILDING
- Per CBC 1004.1, in determining means of egress requirements, the number of occupants for whom means
  of egress facilities shall be provided shall be determined in accordance with this section. Where occupants
  from accessory areas egress through a primary space, the calculated occupant load for the primary space
  shall include the total occupant load of the primary space plus the number of occupants egressing through
  it from the accessory area.
- Building 4708, Former Administrative Portion: Homeless Shelter or Hostel
  - o Residential Function: 1 occupant per 200 SF
  - o First Floor: 3,074 SF @ 1 occupant/ 200 SF = 15 occupants.
  - o Second Floor: 5,892 SF @ 1 occupant/ 200 SF = 30 occupants.
  - o Total Occupancy of Building 4708, Former Administrative Portion: 45 OCCUPANTS.
- Building 4708, Former Transmitter Portion: High-bay Light Industrial Space
  - o Industrial Function: 1 occupant per 100 SF
  - o Accessory Storage Areas, Mechanical Equipment Room: 1 occupant per 300 SF
  - o First Floor: 14,366 SF @ 1 occupant/ 100 SF = 144 occupants.
  - o Second Floor: 1,868 SF @ 1 occupant/ 300 SF = 6 occupants.
  - o Basement: 783 SF @ 1 occupant/ 300 SF = 3 occupants.
  - o Total Occupancy of Building 4708, Former Transmitter Portion: 153 OCCUPANTS.
- Building 4710, Former Emergency Power Building: Park Office & Meeting Room, Storage, & Visitors Center
  - o Unconcentrated Assembly Function: 1 occupant per 15 SF
  - o Business Function: 1 occupant per 100 SF
  - o Accessory Storage Areas: 1 occupant per 300 SF
  - o Visitor Center Room: 747 SF @ 1 occupant/ 15 SF = 49 occupants.
  - o Office & Meeting Room: 645 SF @ 1 occupant/ 100 SF = 7 occupants.
  - o Storage Room: 625 SF @ 1 occupant/ 300 SF = 2 occupants.
  - o Total Occupancy of Building 4710, Former Emergency Power Building: 58 OCCUPANTS.

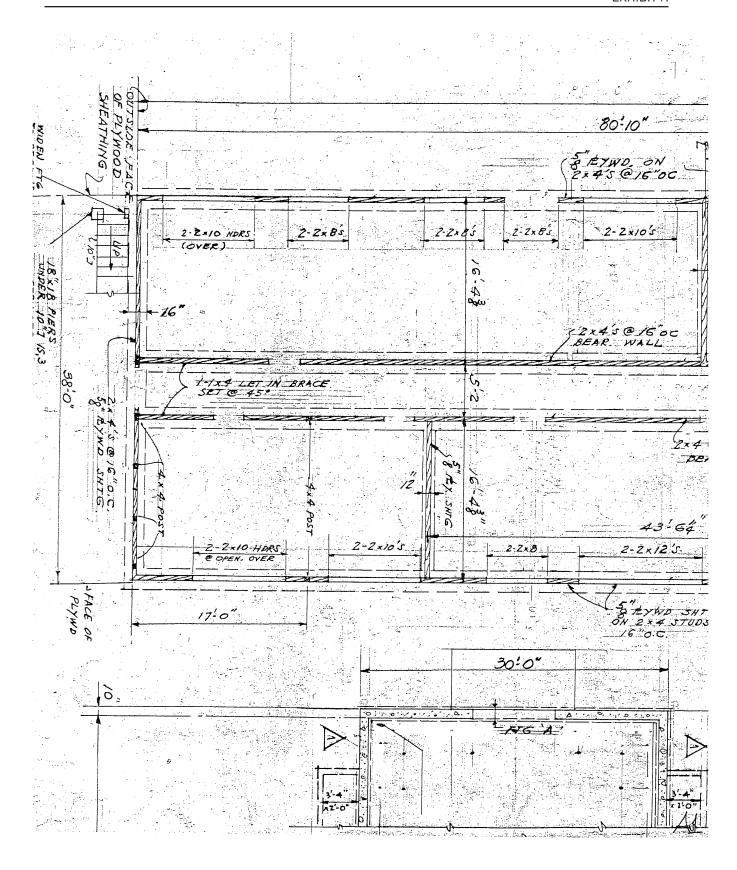
# 6. MINIMUM PLUMBING FIXTURES

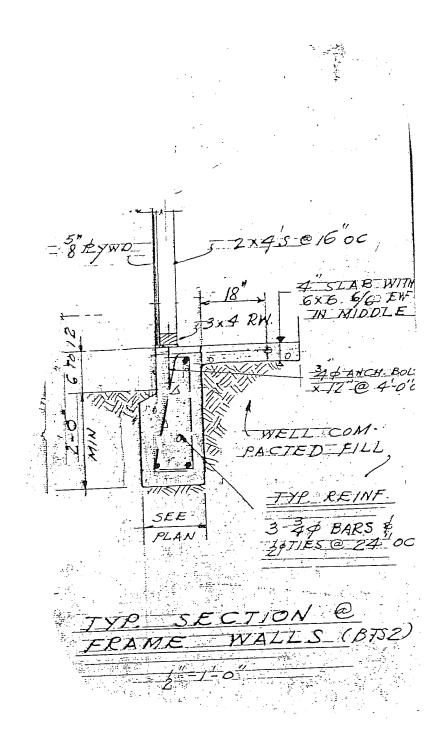
- Per CBC California Plumbing Code Table 4-1, each building shall be provided with sanitary facilities based on occupant load and use of the building or space under consideration.
- Building 4708, Former Administrative Portion: Homeless Shelter or Hostel
  - o Dormitory Function:
    - 1 drinking fountain per 150.
    - Male: 1 toilet per 10 occupants; 1 urinal per 25; 1 lavatory per 12; 1 shower per 16.
    - Female: 1 toilet per 8; 1 lavatory per 12; 1 bathtub per 30; 1 shower per 16.
  - o Office Administrative Function:
    - Male: 1 toilet per 15; 1 lavatory per 40.
    - Female: 1 toilet per 15; 1 lavatory per 40.
  - o First Floor (Office Administrative Function):
    - Male: 7 occupants @ 1 toilet per 15 = 1 toilet; @ 1 lavatory per 40 = 1 lavatory.
    - Female: 8 occupants @ 1 toilet per 15 = 1 toilet; @ 1 lavatory per 40 = 1 lavatory.
  - o Second Floor (Dormitory Function):
    - 1 drinking fountain.
    - Male: 15 occupants @ 1 toilet per 10 = 2 toilets; @ 1 urinal per 25 = 1 urinal; @ 1 lavatory per 12 = 2 lavatories; @ 1 shower per 16 = 1 shower.
    - Female: 15 occupants @ 1 toilet per 8 = 2 toilets; @ 1 lavatory per 12 = 2 lavatories; @ 1 shower per 16 = 1 shower; 1 bathtub per 30 = 1 bathtub.

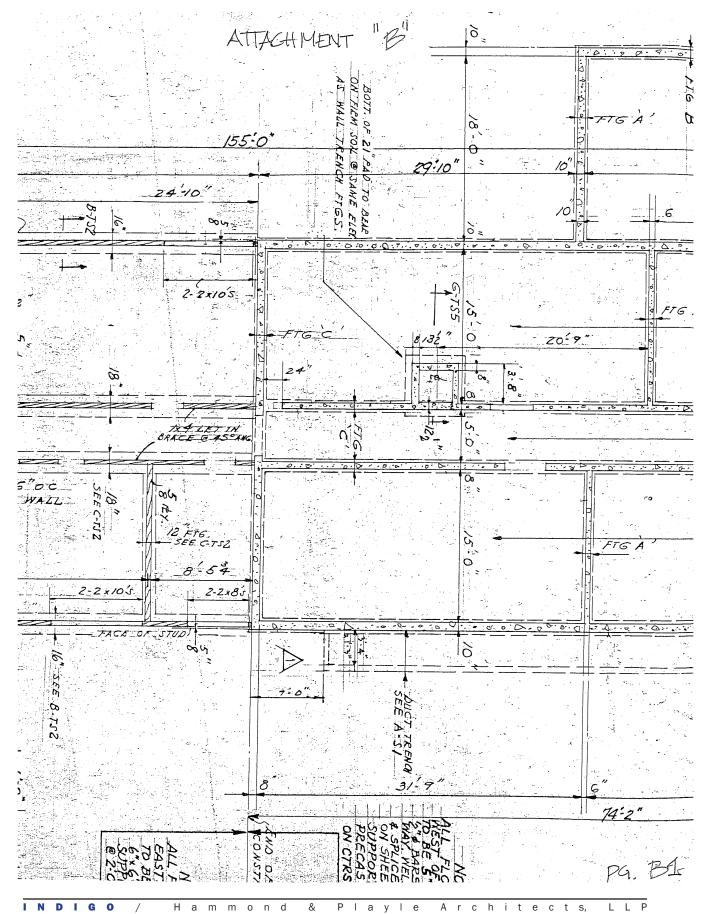
- o Total Fixtures Required for Building 4708, Former Administrative Portion:
  - Drinking Fountains: 1 @ \$3,969 = \$3,969.
  - Toilets: 6 @ \$3,854 = \$23,124.
  - Urinals: 1 @ \$3.969 = \$3.969.
  - Lavatories: 6 @ \$3,612 = \$21,672.
  - Showers: 2 @ \$4,062 = \$8,124.
  - Bathtub: 1 @ \$4,571 = \$4,571.
  - Total Estimate Cost impact: \$61,460\*
  - \*Does not include site water or sanitary system costs. This per-fixture estimated cost impact (shown above) includes cost of rough-in for fixtures for all piping and valving from fixture to 5' beyond building perimeter. See "City Services" discussion elsewhere in this report.
- Building 4708, Former Transmitter Portion: High-bay Light Industrial Space

# o Industrial Function:

- 1 drinking fountain per 150.
- Male: 5 toilets per 76-100; 1 lavatory per 10.
- Female: 5 toilets per 76-100; 1 lavatory per 10.
- o Required Fixtures:
  - 1 drinking fountain per 150 @ 153 = 2 drinking fountains.
  - Male: 76 occupants @ 5 toilets per 76 = 5 toilets; @ 1 lavatory per 10 = 8 lavatories.
  - Female: 77 occupants @ 5 toilets per 77 = 5 toilets; @ 1 lavatory per 40 = 8 lavatories.
- o Total Fixtures Required for Building 4708, Former Administrative Portion:
  - Drinking Fountains: 2 @ \$3,969 = \$7,938.
  - Toilets: 10 @ \$3,854 = \$38,540.
  - Lavatories: 16 @ \$3,612 = \$57,792.
  - Total Estimate Cost impact: \$104,270\*
  - Does not include site water or sanitary system costs. This per-fixture estimated cost impact (shown above) includes cost of rough-in for fixtures for all piping and valving from fixture to 5' beyond building perimeter. See "City Services" discussion elsewhere in this report.
- Building 4710, Former Emergency Power Building: Park Office & Meeting Room, Storage, & Visitors Center o Assembly/ Office Function:
  - 1 drinking fountain per 150.
  - Male: 1 toilet per 100; 1 urinal per 100; 1 lavatory per 200.
  - Female: 3 toilets per 50; 1 lavatory per 200.
  - o Required Fixtures:
    - 1 drinking fountain per 150 @ 58 = 1 drinking fountain.
    - Male: 29 occupants @ 1 toilet per 100 = 1 toilet; @ 1 lavatory per 200 = 1 lavatory.
    - Female: 29 occupants @ 3 toilets per 50 = 3 toilets; @ 1 lavatory per 200 = 1 lavatory.
  - o Total Fixtures Required for Building 4708, Former Administrative Portion:
    - Drinking Fountains: 1 @ \$3,969 = \$3,969.
    - Toilets: 4 @ \$3,854 = \$15,416.
    - Lavatories: 2 @ \$3,612 = \$7,224.
    - Total Estimate Cost impact: \$22,609\*
    - \*Does not include site water or sanitary system costs. This per-fixture estimated cost impact (shown above) includes cost of rough-in for fixtures for all piping and valving from fixture to 5' beyond building perimeter. See "City Services" discussion elsewhere in this report.
    - Reuse Option 3 Note: To avoid all the associate costs of providing potable water and sanitary service, Option 3 would substitute the following for the fixtures listed above:
    - \* Drinking Fountain -> Bottled Water @ \$0 construction cost.
    - \* Toilets: 4 Portable Units @ \$0 construction cost.
    - \* Lavatories: 1 Portable 2-sink hand-wash station @ \$0 construction cost.







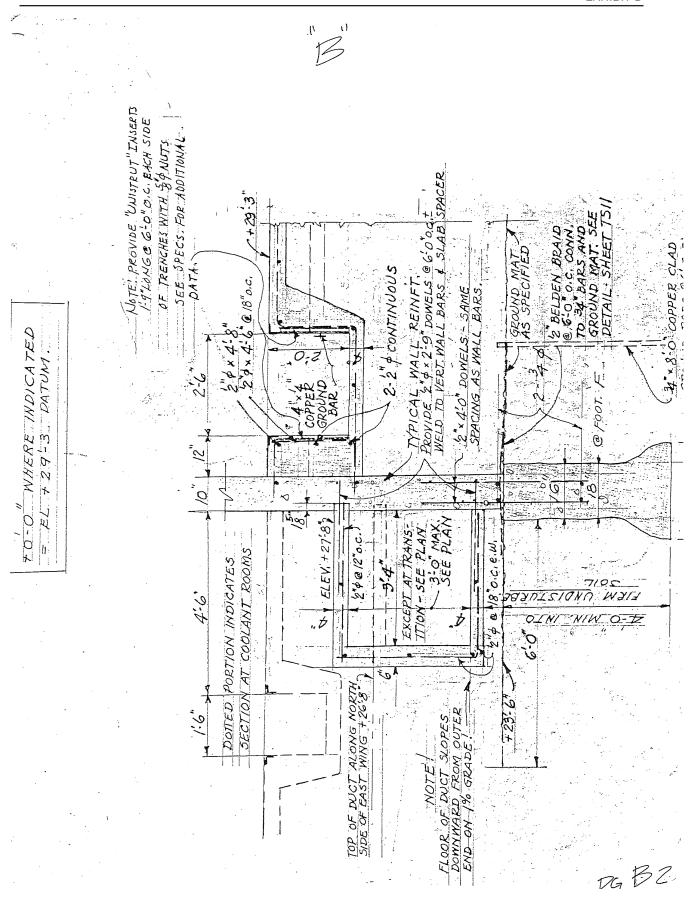


TABLE 2-1
Building Inventory and Description
Davis Site FOSET, Davis, California

Building No.	Former Air Force Use	Square Footage
4708	Administrative offices; transmitter and communications equipment maintenance area	21,111 <b>25,298</b> *
4709	Water production well and pumphouse	122 <b>122**</b>
4710	Backup power production facility	2,443 <b>2,211**</b>
4712	Recreational purposes	732 <b>732**</b>

Note: Building 4711 is the former location of an automobile rack or steel connex storage locker. The exact location could not be verified from property records. The facility was removed in 1988, and the location was subsequently used for the storage of excess antenna maintenance hardware and supplies.

<sup>\*</sup>Information provided by Department of the Air Force Former Davis Global Communications Site Finding of Suitability for Early Transfer with CERCLA 120 (h)(3) Covenanat Deferral Final Report.

<sup>\*\*</sup>Numbers from INDIGO.

Table 5-1 summarizes the status of the USTs and ASTs.

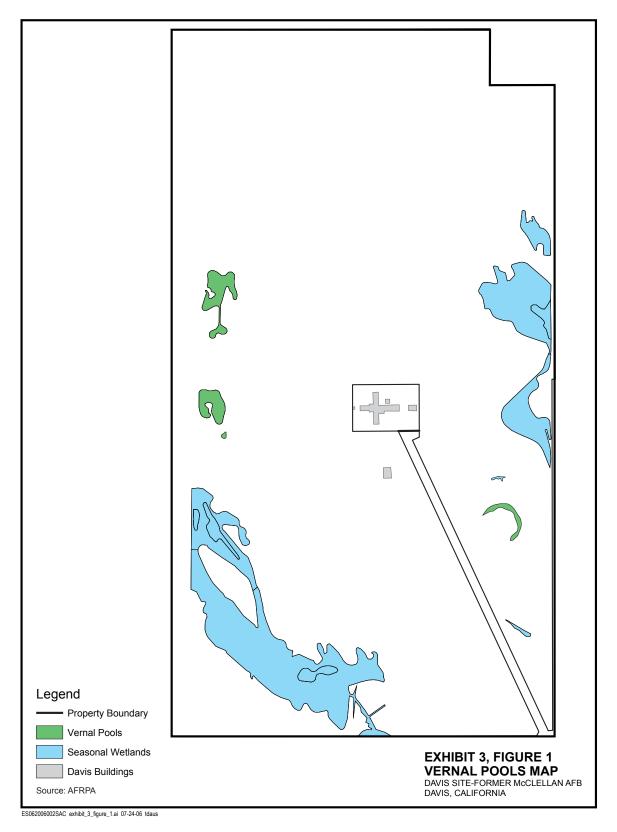
TABLE 5-1 Closure Status for USTs and ASTs Davis Site FOSET, Davis, California

Tank	Contents	Tank Capacity (gallons)	Location	Site, Releases, and/or Spill Number	Tank Status	Tank Closure Date
AST 4708-C	Diesel	250	Inside Building 4710	None	Cleaned; left in place 2000	Not Applicable
AST 4708-B	Diesel	7,000	South of Building 4708	Fuel spill; contaminated soil removed	Cleaned; left in place 2000	Not Applicable
AST 4708-A	Diesel	20,000	North of Building 4710	None	Cleaned; left in place 2000	Not Applicable
UST 4708	Diesel	7,000	South of Building 4708	Contaminated soil removed	Removed 1995	1996/2000 <sup>a</sup>
UST A	Diesel	20,000	Southwest of Building 4710	Fuel release; contaminated soil removed	Removed 1988	Pending <sup>b</sup>
UST B	Diesel	20,000	Southwest of Building 4710	Fuel release; contaminated soil removed	Removed 1988	Pending <sup>b</sup>
UST C	Diesel	20,000	Southwest of Building 4710	Fuel release; contaminated soil removed	Removed 1988	Pending⁵

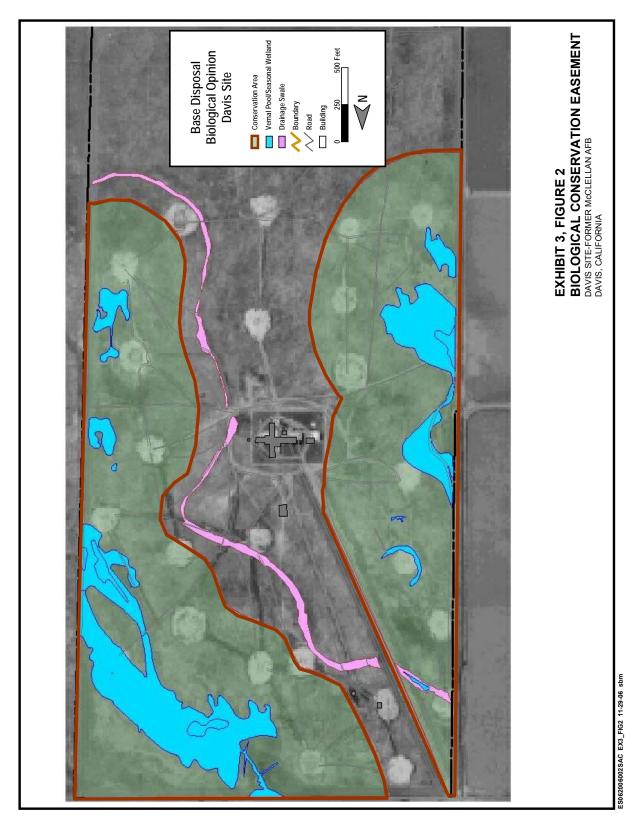
<sup>&</sup>lt;sup>a</sup> This UST was approved for NFA by Yolo County in 1996 and by the Regional Water Board in 2000.

b The UST site has not been closed.

<sup>\*</sup>Information provided by Department of the Air Force Former Davis Global Communications Site Finding of Suitability for Early Transfer with CERCLA 120 (h)(3) Covenanat Deferral Final Report.

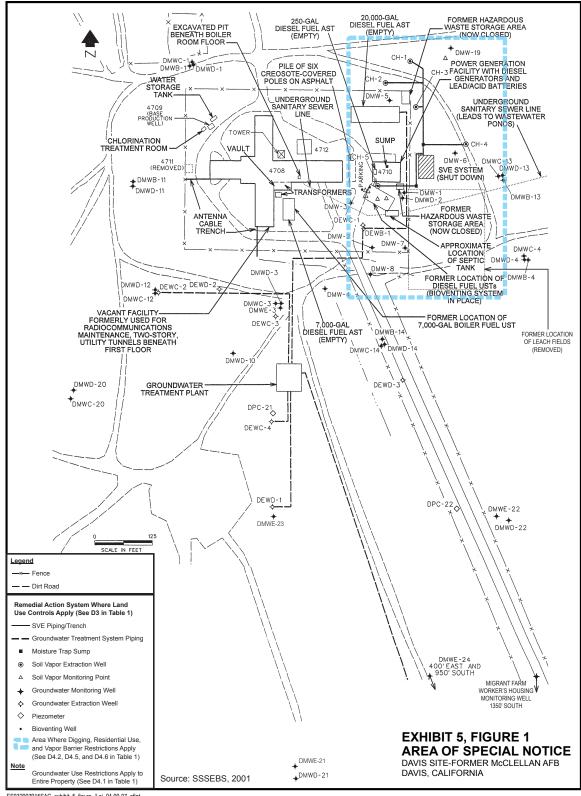


\*Information provided by Department of the Air Force Former Davis Global Communications Site Finding of Suitability for Early Transfer with CERCLA 120 (h)(3) Covenanat Deferral Final Report.



<sup>\*</sup>Information provided by Department of the Air Force Former Davis Global Communications Site Finding of Suitability for Early Transfer with CERCLA 120 (h)(3) Covenanat Deferral Final Report.

INDIGO / Hammond & Playle Architects, LLP



ES032007015SAC exhibit\_5\_figure\_1.ai 04-09-07 afint

<sup>\*</sup>Information provided by Department of the Air Force Former Davis Global Communications Site Finding of Suitability for Early Transfer with CERCLA 120 (h)(3) Covenanat Deferral Final Report.