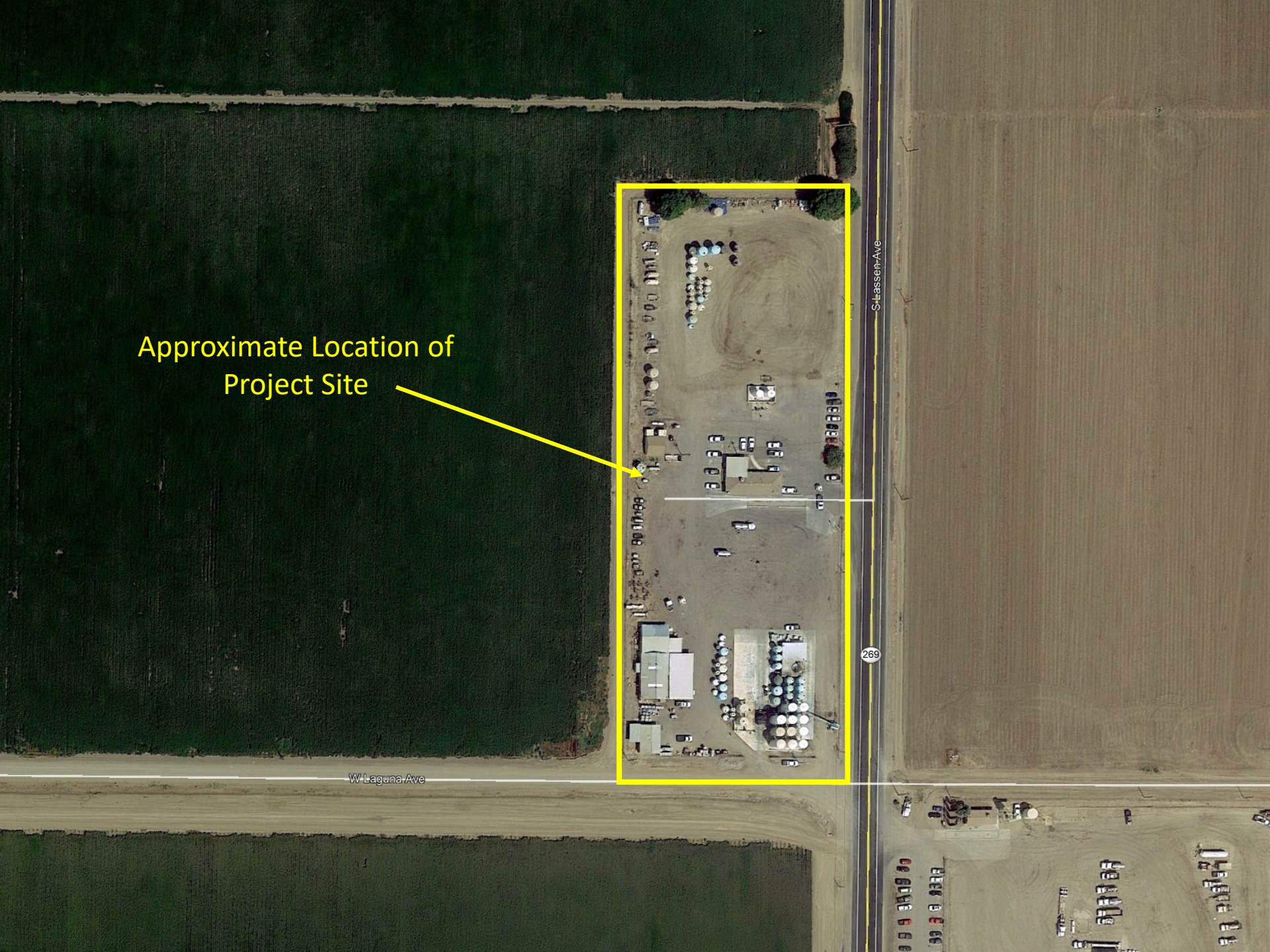
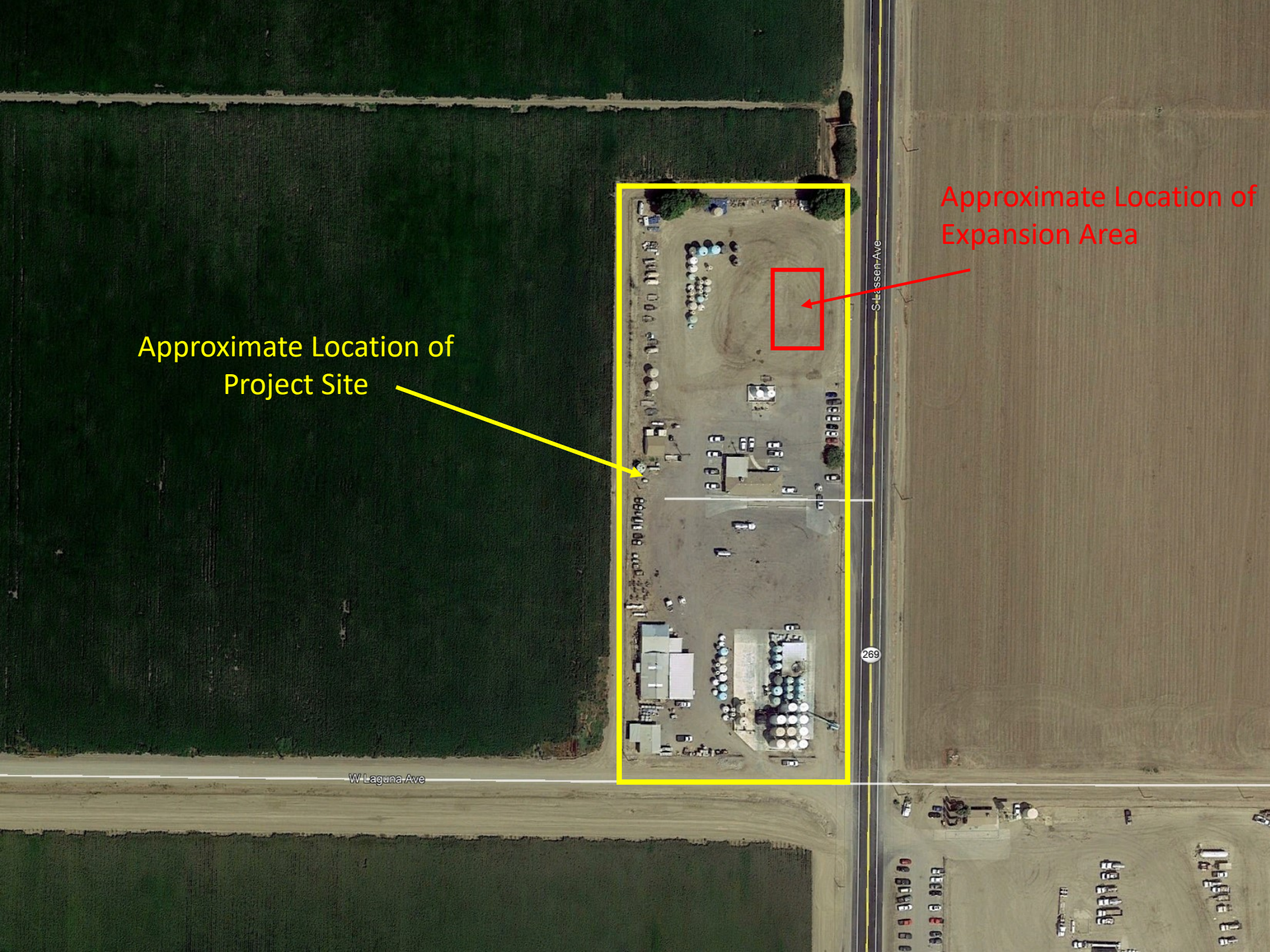
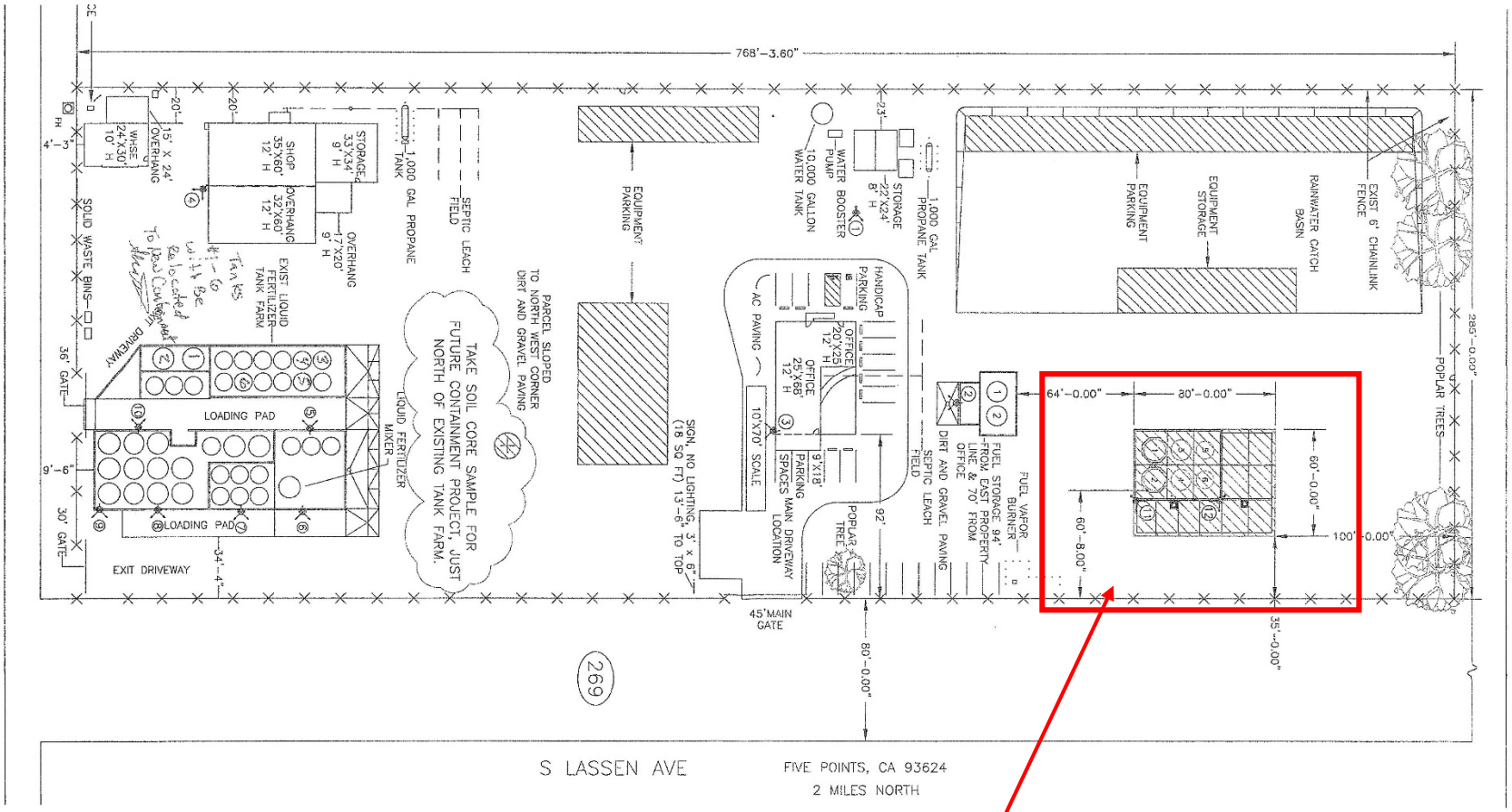
DEPARTMENT of PUBLIC WORKS and PLANNING

DEVELOPMENT SERVICES DIVISION

CUP 3668


Approximate Location of Project Site
S Lassen Ave
269
W Laguna Ave

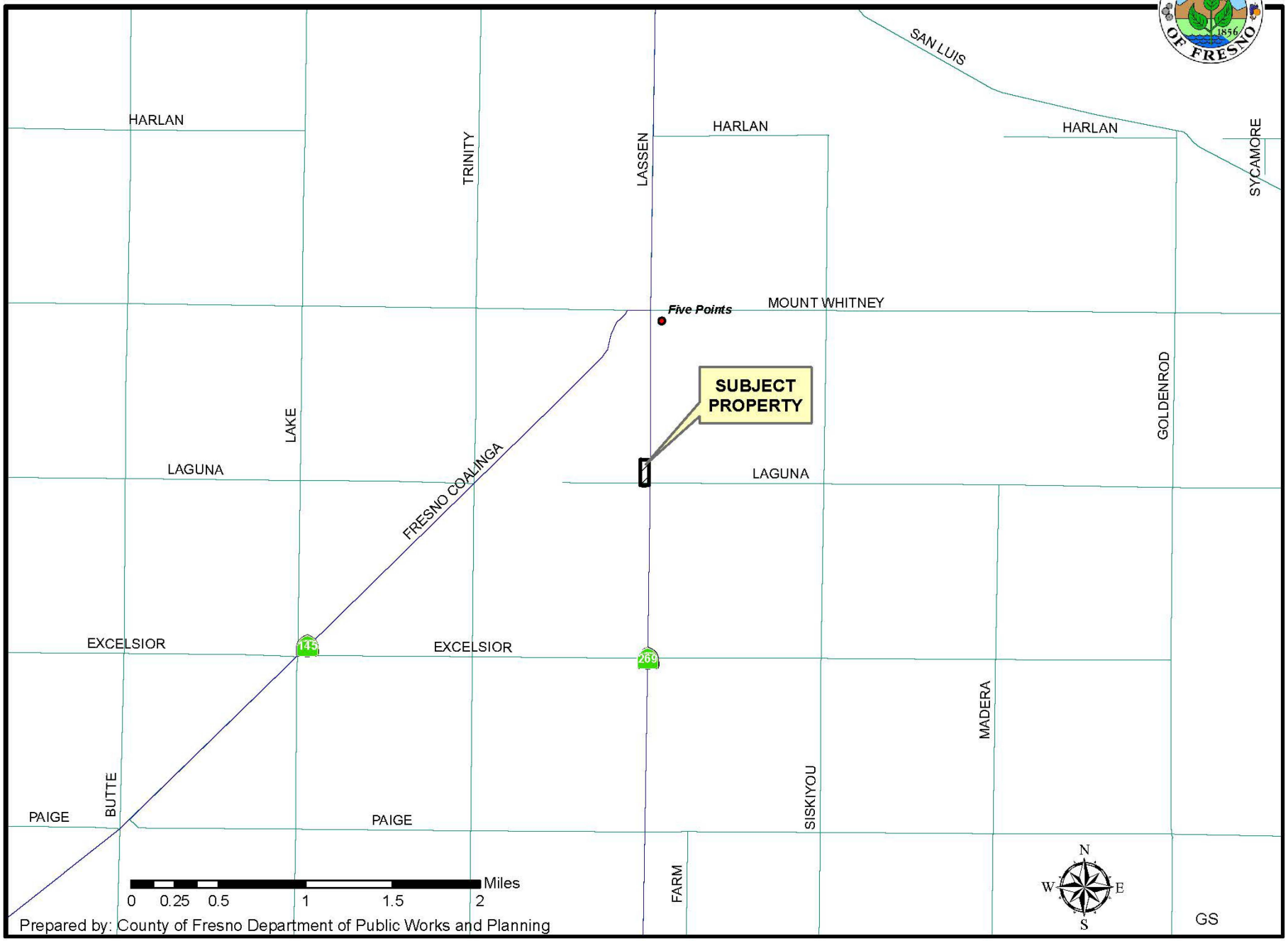

Approximate Location of Expansion Area
Approximate Location of Project Site
S Lassen Ave
269
W Laguna Ave



Proposed Expansion Area

CUP 3668

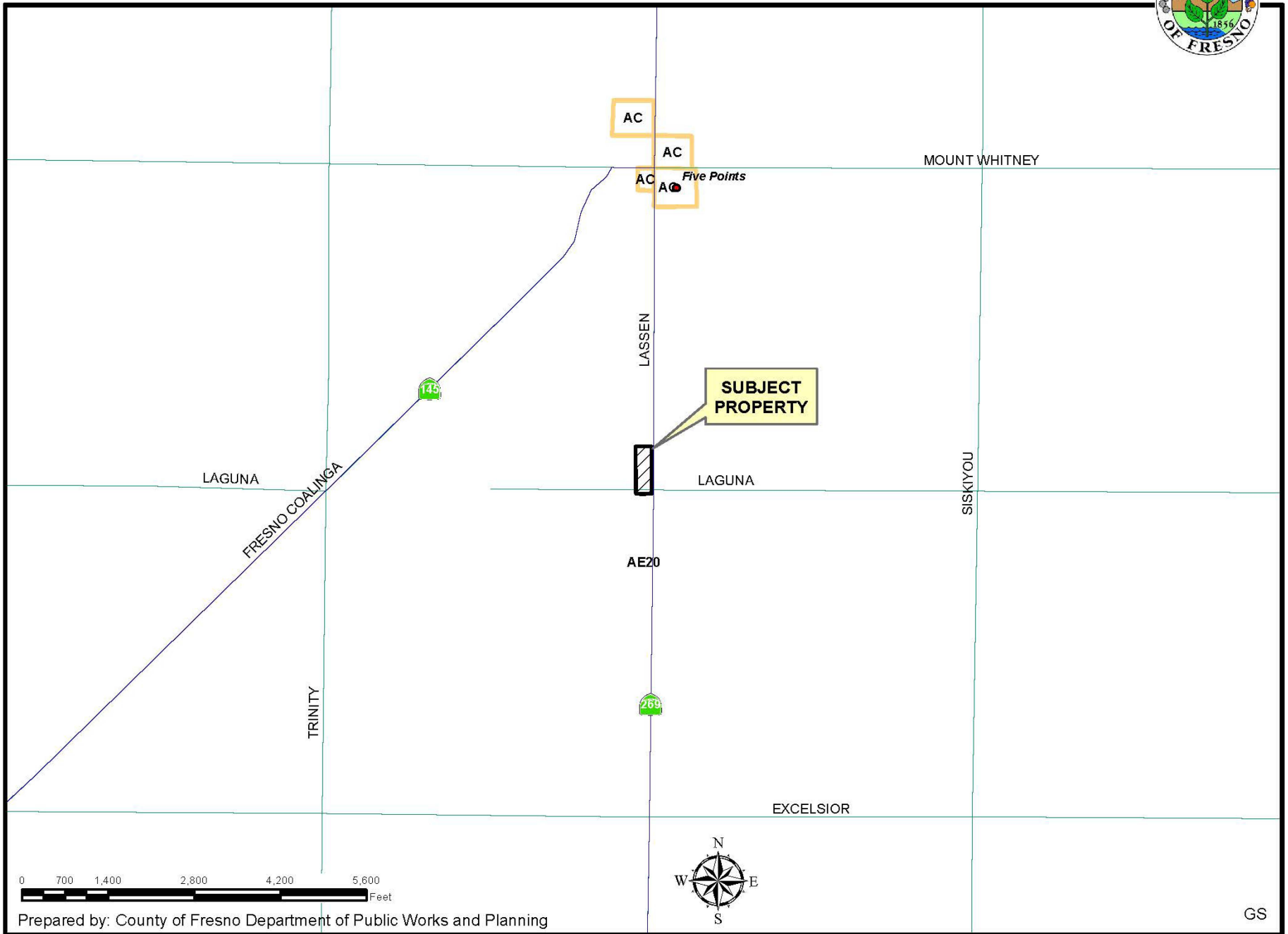
LOCATION MAP



Prepared by: County of Fresno Department of Public Works and Planning

CUP 3668
STR 27-17/17

EXISTING ZONING MAP

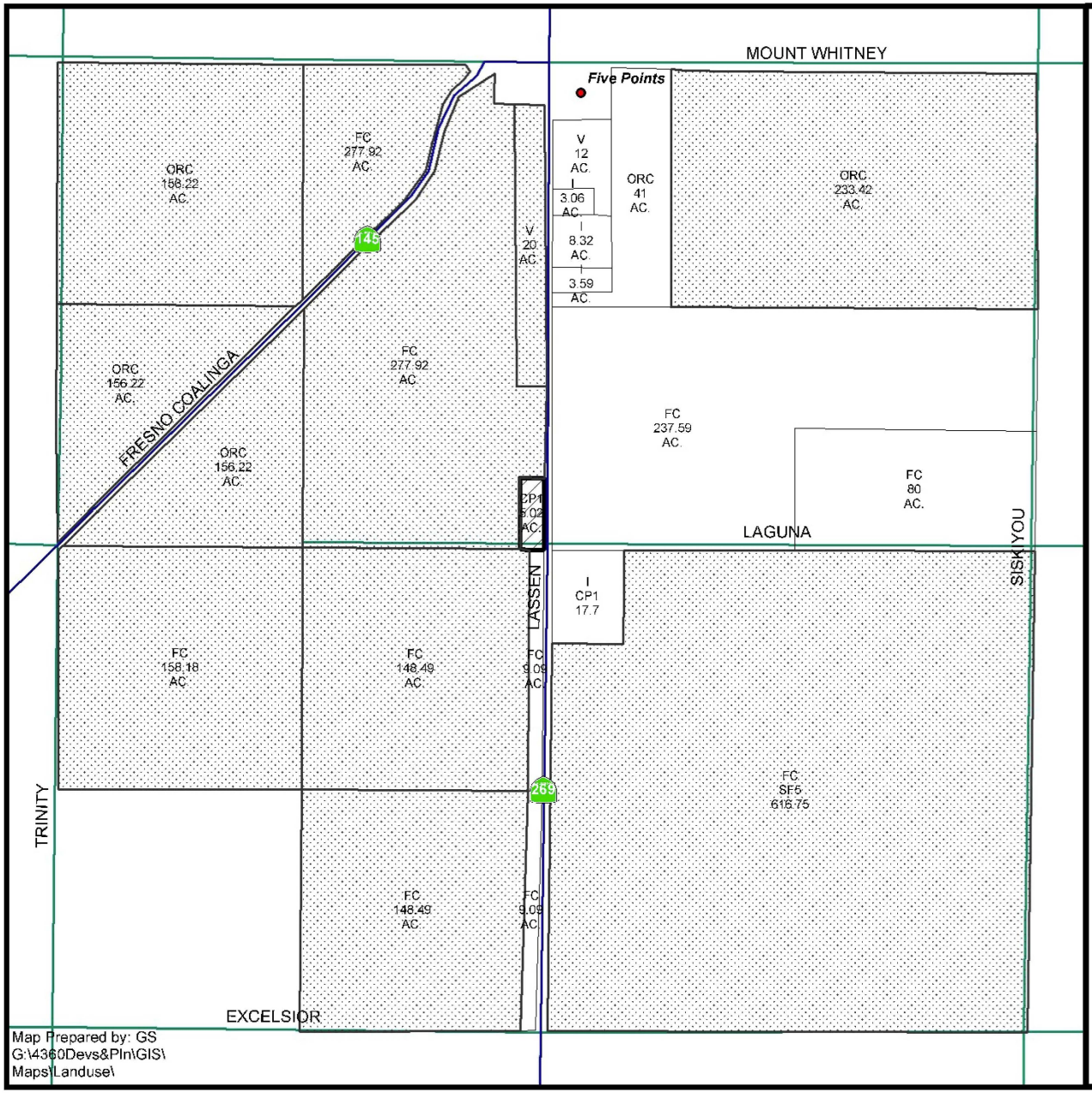


Prepared by: County of Fresno Department of Public Works and Planning

GS

CUP 3668

EXISTING LAND USE MAP



Map Prepared by: GS
G:\4360Devs&Pln\GIS\Maps\Landuse\

LEGEND
CP# - OFFICE COMM./PROF
FC - FIELD CROP
I - INDUSTRIAL
ORC - ORCHARD
SF#- SINGLE FAMILY RESIDENCE
V - VACANT

LEGEND:

- Subject Property
- Ag Contract Land

N
W E
S

0 412.5 825 1,650 2,475 3,300 Feet

Department of Public Works and Planning
Development Sevices Division

Five Findings for a Conditional Use Permit

1. The site for the proposed use is adequate in size and shape to accommodate said use and all yards, spaces, walls, and fences, parking, loading, landscaping, and other features required by this Division, to adjust said use with land and uses in the neighborhood.
2. The site for the proposed use relates to streets and highways adequate in width and pavement type to carry the quantity and kind of traffic generated by the proposed use.
3. The proposed use will have no adverse impact on abutting property and surrounding neighborhood or permitted use.
4. The proposed development is consistent with the General Plan.
5. That the conditions stated in the resolution are deemed necessary to protect the public health, safety, and general welfare

DEPARTMENT of PUBLIC WORKS and PLANNING

DEVELOPMENT SERVICES DIVISION

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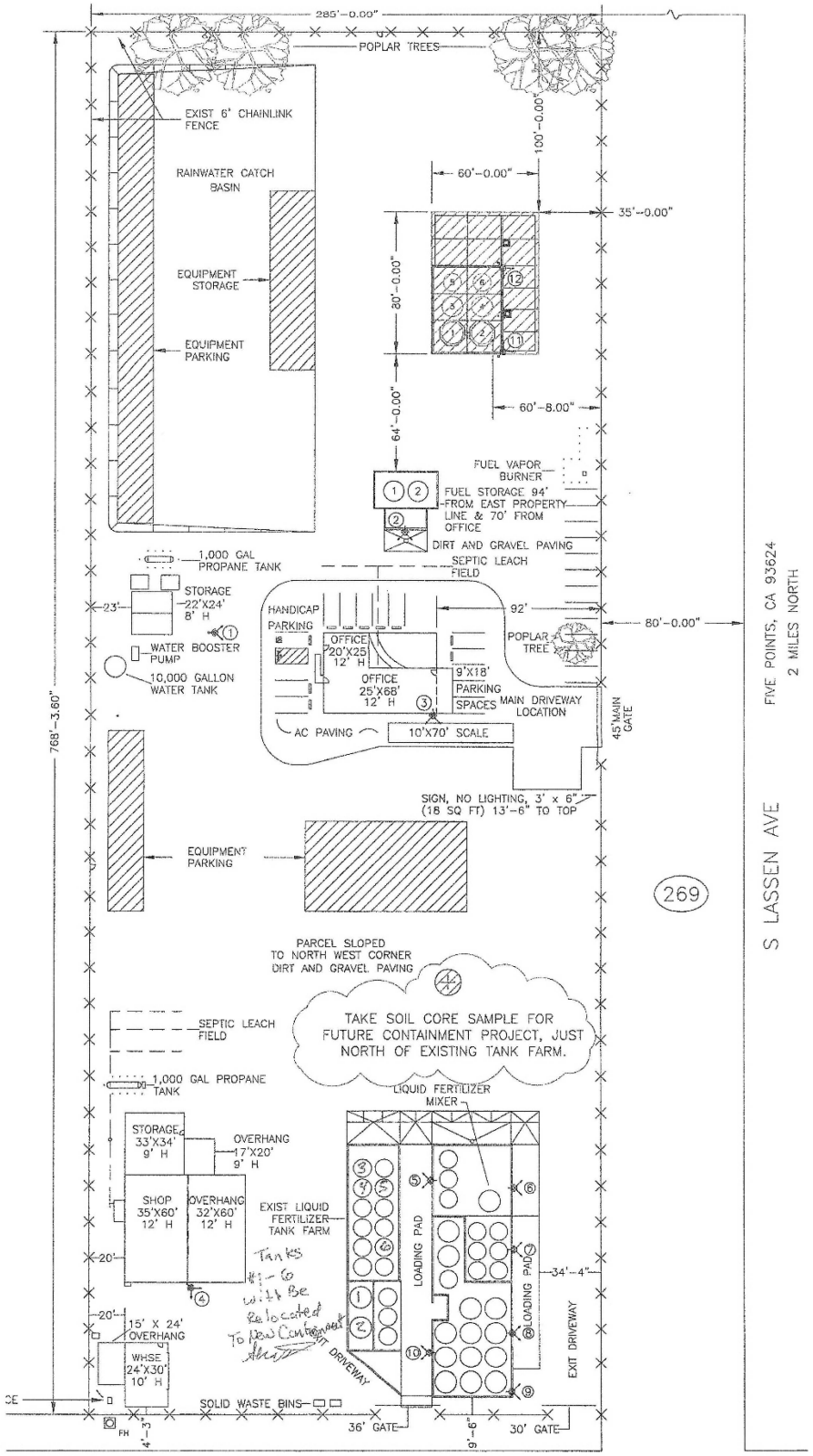


1.0 Site Preparation

Based on Geotechnical Report by BSK ASSOCIATES, Date 12/27/18, Project Number G18-318-10F

1.1 It is recommended that the containment structure be over-excavated to at least 12 inches below preconstruction site grades, to a minimum depth of 1 foot below proposed foundations, to at least 12 inches below existing improvements to be removed, or to the depth required to remove any fill soils (if any), whichever is greater. The zone of over-excavation should include the entire footprint of the containment structure and a minimum of five (5) feet beyond the containment structure. Upon approval of the bottom of the over-excavation by a representative of BSK Associates, the exposed bottom should be scarified to a depth of 8 inches, moisture conditioned to 4% above optimum moisture content and compacted to a minimum of 90 percent relative compaction prior to fill placement.

1.2 It is recommended that the concrete drive area planned adjacent to the containment structure be over-excavated to at least 12 inches below preconstruction site grades, to at least 12 inches below improvements to be removed, 12 inches below the bottom of the proposed aggregate bases, or to the depth required to remove fill soil (if any), whichever is greater. The zone of over-excavation should include the entire footprint of the planned drive area and a minimum of three (3) feet beyond the drive area. The upper 12 inches of subgrade below the aggregate base for the drive area should be compacted to at least 95 percent relative compaction. Upon approval of the bottom of the over-excavation by a representative of BSK Associates, the exposed bottom should be scarified to a depth of 8 inches, moisture conditioned to slightly above 4% moisture content and compacted to a minimum of 90 percent relative compaction prior to fill placement.

1.3 It is recommended that extra care be taken by the contractor to ensure that the horizontal and vertical extent of the over-excavation and compaction conform to the site preparation recommendations presented in this report. BSK Associates is not responsible for measuring and verifying the horizontal and vertical extent of over-excavation and compaction. The contractor should verify in writing to the owner and BSK Associates that the horizontal and vertical over-excavation limits were completed in conformance with the recommendations of the report, the project plans, and the specifications (the most stringent applies). It is recommended that this verification be performed by a licensed surveyor. The verification should be provided prior to requesting pad certification from BSK Associates or excavating for foundations.

1.4 If soil or unstable soils are encountered during excavation or compaction operations, BSK Associates should be notified so these soil conditions can be examined and additional recommendations provided, as considered appropriate.

1.5 Final grading shall produce a pad ready a stab on grade which is smooth, planar, and resistant to rutting. Both the finished pad (before the aggregate base is placed) and the aggregate base shall be proof rolled and shall not depress more than one-half (1/2) inch under the wheels of a fully loaded concrete truck or equivalent. If depressions more than one-half (1/2) inch occur, the contractor shall perform remedial grading to achieve this requirement.

1.6 The containment structure and concrete drive area should be underlain by a minimum of 6 inches of Caltrans Class 2 aggregate base. The aggregate base should be compacted to a dry density of at least 95 percent of the maximum dry density as determined by ASTM Test Method D1557.

1.7 All fill required to bring the site to final grade should be placed as engineered fill. In addition, all native soils over-excavated should be compacted as engineered fill.

1.8 The contractor is responsible for the disposal of concrete, asphaltic concrete, soil, spoils, etc. that must be exported from the site. Individuals, facilities, agencies, etc. may require analytical testing and other assessments of these materials to determine if these materials are acceptable for the intended use by the receiving party. The Contractor is responsible to perform the tests, assessments, etc. necessary to determine the appropriate method of disposal. In addition, the Contractor is responsible for all costs to dispose of these materials in a legal manner.

2.0 Engineered Fill

2.1 Silty sand, Expansion Index (EI) <20, will be suitable for use as fill material below the recommended aggregate bases to support the structural loads, provided they are free of organics (less than 3 percent by weight), roots, debris, and particles larger than 3 inches in any dimensions, moisture conditioned to slightly above optimum, and compacted to 90% relative compaction. The existing asphalt pavement materials are not suitable for use as engineered fill. If soils other than those considered in this report are encountered, BSK Associates should be notified to provide alternate recommendations.

2.2 The compatibility of the native soils is dependant upon the moisture contents, subgrade conditions, degree of mixing, type of equipment, as well as other factors. The evaluation of such factors was beyond the scope of this report, therefore, we recommend that they be evaluated by the Contractor, during preparation of bids and construction of the project.

2.3 Imported fill soil, if required for the project, should be non-corrosive, non-expansive and granular in nature and contain enough fine grained material (blinder) to allow cutting "neat" footing trenches with the following acceptance criteria recommendations:

Percent Passing 3-inch Sieve	100
Percent Passing No. 4 Sieve	55 – 100
Percent Passing No. 200 Sieve	30 – 45
Expansion Index (ASTM D4829)	Less than 20
Organics	Maximum 3% by dry weight
Soil Resistivity	Greater than 2,000 ohm-cm
Sulfates	Less than 1,500 mg/kg
Chlorides	Less than 300 mg/kg

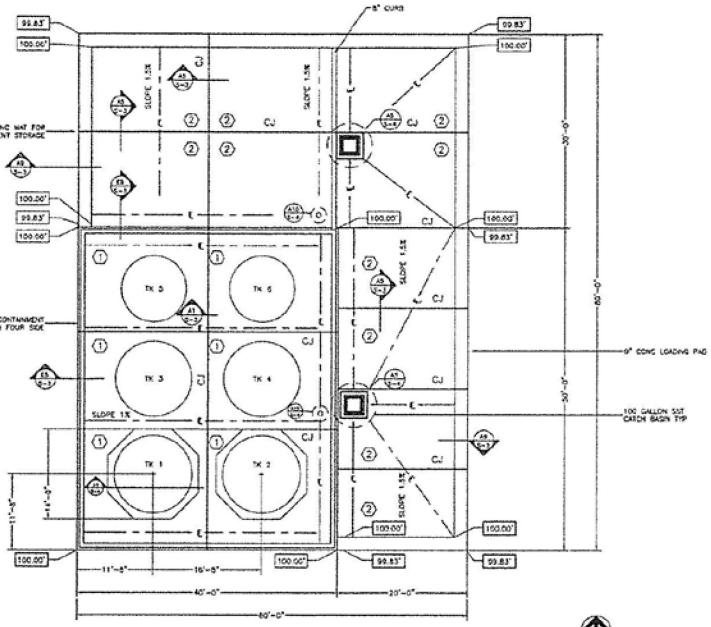
Prior to being transported to the site, the imported material shall be certified by the Contractor and the supplier (to the satisfaction of the Owner and BSK Associates) that the soils do not contain any environmental contaminates regulated by local, state or federal agencies have jurisdiction. In addition, BSK Associates should be requested to sample and test the material to determine compliance with the above geotechnical criteria. Contractors should provide a minimum of 7 working days to complete the testing.

2.4 Native and imported engineered fill soil should be placed in loose lifts approximately 6 inches thick or less. Moisture-conditioned to slightly above optimum moisture content, and compacted to a dry density of at least 90 percent of the maximum dry density as determined by ASTM Test Method D1557. The upper 12 inches of engineered fill below aggregate base in the area of the proposed concrete pavements should be compacted to a dry density of at least 90 percent of the maximum dry density as determined by ASTM Test Method D1557. Additional lifts should not be placed if the previous lift did not meet the required dry density or if soil conditions are not stable.

(continued on DWG S-2)

TANK SCHEDULE

NO	STATUS	TYPE	DIA INCHES	HEIGHT INCHES	MATERIAL STORED	VOLUME GALLONS	LIQ UNIT WT LBS/GAL	LIQ TOTAL WT LBS	TANK DEAD WT LBS	TOTAL TANK WT LBS	PART NO
1	NEW	FC CONE	144"	238"	KAPAM	15,843	11.7	186,767	5,000	191,767	-
2	NEW	FC CONE	144"	238"	KAPAM	15,843	11.7	186,767	5,000	191,767	-
3	NEW	POLY	141"	243"	OIL	15,500	7.11	110,205	4,000	114,205	-
4	NEW	POLY	141"	243"	OIL	15,500	7.11	110,205	4,000	114,205	-
5	NEW	POLY	120"	149"	OIL	6,500	7.11	46,215	2,500	48,715	-
6	NEW	POLY	120"	149"	OIL	6,500	7.11	46,215	2,500	48,715	-



FOUNDATION SCHEDULE

(1) 15" THICK MIN CONCRETE MAT FOUNDATION W/ #5 @ 9" OC EW @ BTM & #4 @ 12" OC EW @ TOP.

(2) 9" THICK CONCRETE MAT FOUNDATION W/ #4 @ 12" OC EW CTR'D IN MAT.

CJ CONTROL JOINT – SEE A1 & A5/S-3

NOTE. 1. COORDINATE FINISHED ELEV AND STRUCTURE LOCATION WITH OWNER BEFORE CONSTRUCTION.

2. SEE DWG S-4 FOR TANK PEDESTAL LOCATION AND ELEV.

TABLE 1 – SOILS

DESCRIPTION OF VERIFICATION AND INSPECTION WORK	INSPECTION	FREQUENCY
1. VERIFY MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	–	PERIODIC
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	–	PERIODIC
3. PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS.	–	PERIODIC
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL.	–	CONTINUOUS
5. PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT THE SITE HAS BEEN PREPARED PROPERLY.	–	PERIODIC

TABLE 2 – CONCRETE

DESCRIPTION OF VERIFICATION AND INSPECTION WORK	INSPECTION FREQUENCY	REFERENCE STANDARD
1. INSPECTION OF REINFORCING STEEL AND PLACEMENT.	PERIODIC	ACI 318: CH 20, 25.2, 25.3, 26.6.1-26.6.3
2. INSPECT BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE.	PERIODIC	ACI 318: CH 17.8.2
3. VERIFYING USE OF APPROVED DESIGN MIX.	PERIODIC	ACI 318: CH 19, 26.4.3, 26.4.4
4. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENTS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE AIR TEMPERATURE OF THE CONCRETE.	CONTINUOUS	ASTM C 172 ASTM C31, ACI 318: CH 26.4,26.12
5. INSPECTION OF CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	CONTINUOUS	ACI 318: CH 26.5.3-26.5.5

BASIS OF DESIGN:
CBC 2016 OR PER LOCAL JURISDICTION AND AMENDMENTS

1. DESIGN LOADS:
   A. LIVE LOADS:
      (1) ROOF LOAD.....NA
   B. DEAD LOAD.....WEIGHT OF TANKS
   C. CONCENTRATED LOADS.....NONE
   D. WIND LOAD:
      (1) CATEGORY =.....
      (2) WIND EXPOSURE CATEGORY =.....C
      (3) WIND SPEED =.....110 MPH
   E. SEISMIC LOAD:
      (1) RISK CATEGORY = II (CBC TABLE 1604.5)
      Ss = 1.175
      S1 = 0.399
      SDs = 0.807
      SD1 = 0.426
      (2) SITE CLASS = D
      (4) BASIC SEISMIC-FORCE-RESISTING SYSTEM
      FLAT BOTTOM TANKS

RECEIVED
COUNTY OF FRESNO
JAN 23 2020
DEPARTMENT OF PUBLIC WORKS AND PLANNING
DEVELOPMENT SERVICES DIVISION

Drawings Prepared by
S & R SPECIALTY EQUIPMENT CO INC
P.O. BOX 505 – 830 JEPSEN AVE
CORCORAN, CA 93212
(559) 992-4191 FAX (559) 992-8341

Drawing title: NUTRIEN AG SOLUTIONS, FIVE POINTS, CA
CONTAINMENT STRUCTURE AND TANK FOUNDATION

Seal	Designed	Project No 1662
	Drawn T.C.	Scale 1/8" = 1'-0"
	Checked	Drawing No S-1
	Reviewed	
	Date 2/14/19	


T-27
T-28


Nutrien
Ag Solutions
STOP
4x4