



STAFF REPORT TO THE COMMISSION
September 26, 2016

Special Use Permit Case No. 16-05

REQUEST: A Special Use Permit per Section 601.03(T) of the Yuma County Zoning Ordinance to allow a solar power generating facility and associated equipment on 16 parcels totaling 640 gross acres in size zoned Rural Area-40 acre minimum (RA-40), Assessor's Parcel Numbers 152-35-001, -002, -005 through -008, -013 & -014, 152-34-006 through -013, located south of Palomas Road between the alignments of Avenue 67E and Avenue 68½E, Dateland, Arizona.

APPLICANT: McFarland Solar, LLC, agent for Sage Advice Investments, LLC.

Application is within Supervisor District 3, Supervisor Russ Clark. Planning Commissioners Wayne Briggs and Michael Henry. Staff report prepared by Juan Leal Rubio, Senior Planner.

LOCATION: From the intersection of Interstate 8 and Avenue 64E (Exit 67), turn north (left) on Avenue 64E and travel approximately nine miles until Avenue 64E turns into Palomas Road. Turn east (right) onto Palomas Road and travel approximately four miles to the alignment of Avenue 68E and turn south (right). The project site is on the south side of Palomas Road between the alignments of Avenue 67E and Avenue 68½E.

INTENT:

The applicant intends to develop a 105 Megawatt (MW) photovoltaic (PV) solar power generating facility.

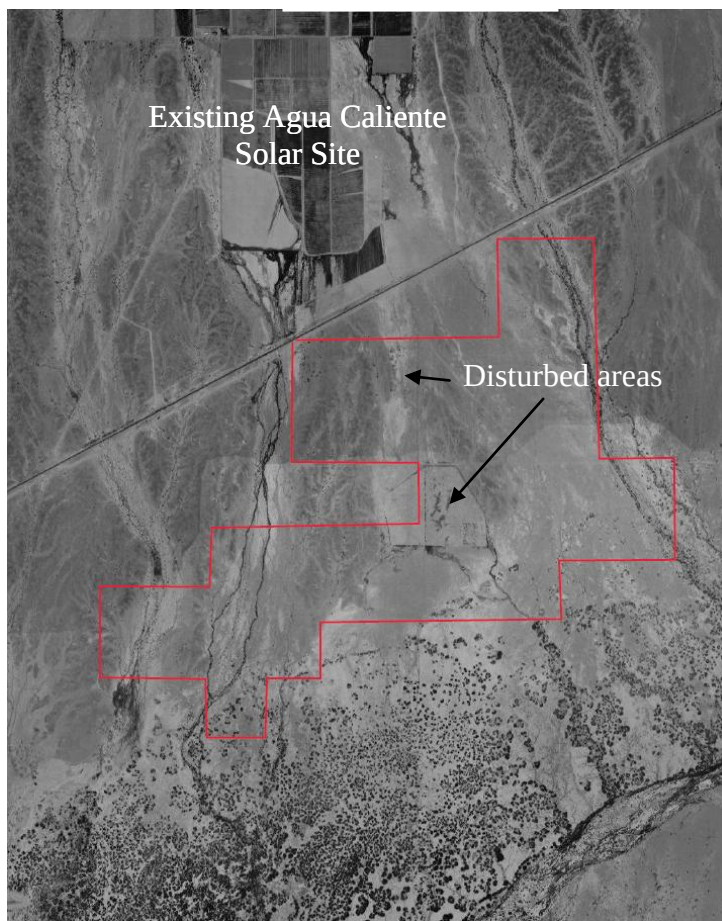
Project Description submitted by the applicant:

This is a planned 640-acre, 105 MW solar energy project using PV technology. PV technology uses modules that are generally non-reflective and convert sunlight into direct current (DC) electricity. The DC output of multiple rows of PV modules is collected through one or more combiner boxes and directed to an inverter that converts the DC electricity to alternating current (AC) electricity. From the inverter, the generated energy flows to a transformer where it is stepped up to distribution level voltage (approximately 34.5 kV). Multiple transformers are connected in parallel via 34.5 kV lines to the project substation, where the power will be stepped up to 500 kV. The project's substation will be located at the northwestern portion of the project

site. From the project substation, the project will interconnect to the grid via a new 500 kV line constructed from this location to the existing Hoodoo Substation, located adjacent to the project site, along the northern side of Palomas Road. In comparison, the existing Agua Caliente Solar facility that is directly north of the subject property was approved by the Board of Supervisors in September 2009 with Special Use Permit Case Number 09-05 (SUP09-05). The Agua Caliente Solar facility is a 290 MW solar power generating facility developed on 2,400 acres of land that became operational in 2014. Further north of the Agua Caliente Solar facility, Special Use Case Number 15-07 (White Wing Ranch Solar Project) was approved by the Board of Supervisors on March 7, 2016. The White Wing Ranch Solar Project will be a 210 MW solar power generating facility developed on 1,450 acres of land. As of the date when this report was written, no building permits have been applied for the White Wing Ranch Solar Project.

SITE CONDITIONS:

Figure 1 (1967)



The subject property is currently undeveloped desert. There is physical evidence throughout portions of the project site which indicates the property was historically used for some type of agricultural purpose. According to the applicant, "...Physical evidence includes ground disturbance and onsite abandoned wells and concrete irrigation ditches. Historical aerial photos reveal east-west lineaments and clear signs of ground disturbance within the project site (Figure 1). The main access for the property site will be via driveway improvements at West Dateland Road on the northeastern portion of the project site. Access to the project site will be controlled through a security gate

located at either the northwest or northeast portion of the project site.

Surrounding zoning and land uses: The subject properties, as well as the surrounding properties in all directions, are zoned RA-40 and currently remain undeveloped desert. Parcels 152-35-003 and 152-26-001 located directly to the east and north, respectively, are under Federal jurisdiction. Parcel 152-34-001 located on the north side of Palomas Road is the location of the Hoodoo substation. Parcel 152-22-001 also located on the north side of Palomas Road is the location of the Agua Caliente Solar facility. The parcels to the south of the project site, labeled as SUP16-06 & SUP16-07, are Phase 2 and Phase 3, respectively, of the MacFarland Solar Project and are being processed concurrently with this Special Use Permit (Figure 2).

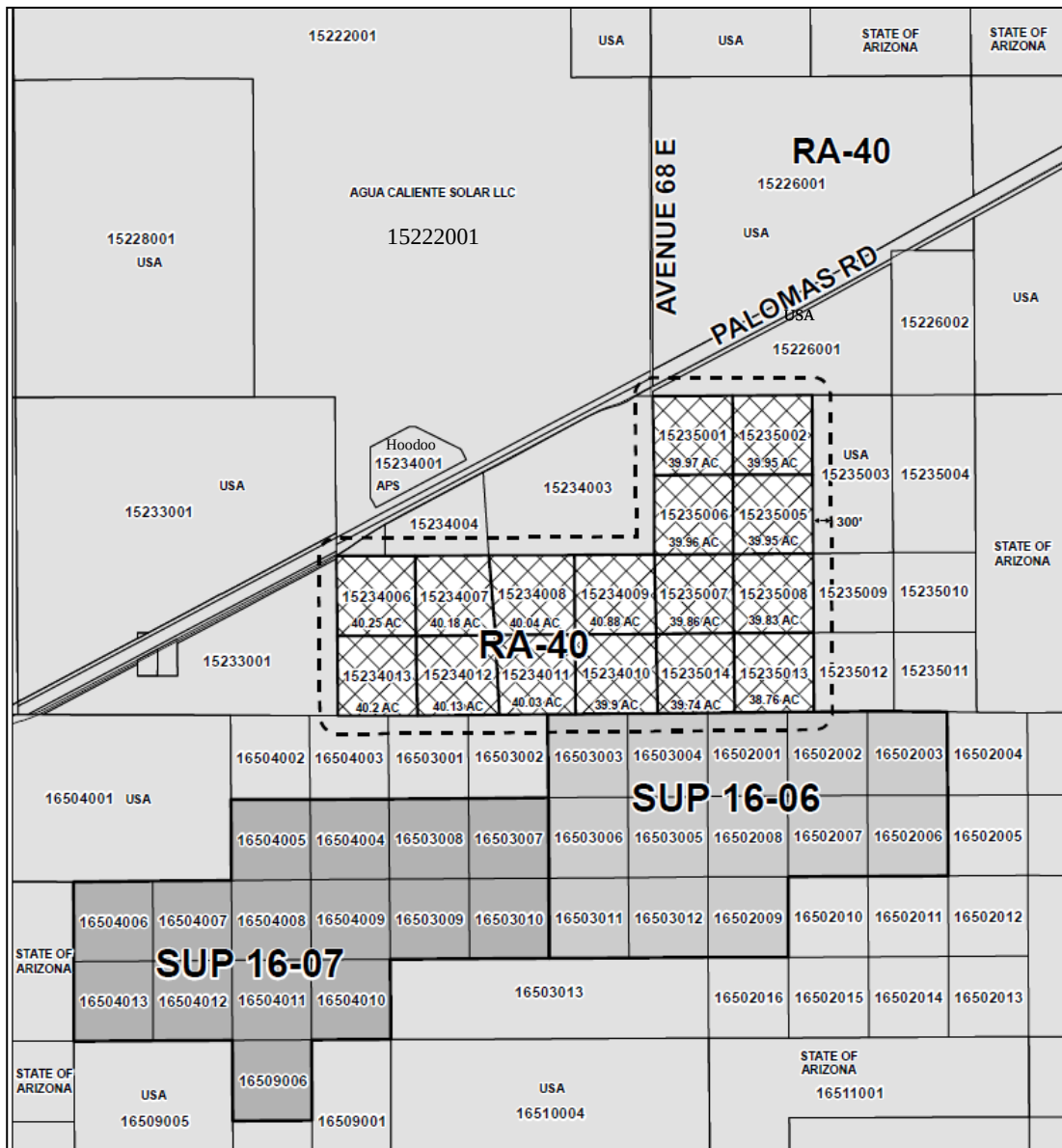


Figure 2

The purpose of the RA zoning district is to conserve and preserve farms, agriculturally related resources, continued agricultural use and other open space land uses for fostering orderly growth in rural area, preventing urban and agricultural land use conflicts, and allowing rural lot development with an emphasis on preserving the character of farming communities. Permitted uses in this zoning district include residential uses on large parcel sizes, farms, agriculturally related land uses, and open space or recreational uses.

The subject parcel is located in the Dateland/East County Planning Area of the 2020 Comprehensive Plan. The land use designation is Agricultural/Rural Preservation (A-RP) which allows a residential density of one dwelling unit per 40 acres. A change to the land use designation is not triggered via the Special Use Permit process.

The subject property is within Hyder School District No. 16 and Antelope Union High School District No. 50. The nearest elementary school is Dateland Elementary School, located at 1300 South Avenue 64E and teaches grades Kindergarten through 8th. It is approximately 15 miles from the subject site. The nearest high school is Antelope High School located at 9168 South Avenue 36E near Tacna, Arizona. It is approximately 48 miles from the subject property.

The subject property is not located within a six-minute fire/emergency response time radius. The nearest fire response would be from volunteers located in Dateland, then from Tacna and lastly, from the Town of Wellton.

The subject property is not located within the ten-minute response time radius by the Yuma County Sheriff's Department. The Sheriff's response would be from the Town of Wellton Sheriff's substation which is located approximately 60 driving miles away from the subject property.

The subject property is not located within three miles of the Barry M. Goldwater Range (BMGR) and is not located within the High Noise or Accident Potential Zone. According to Paula Backs, MCAS-Yuma, this project is in the vicinity of Visual Route (VR)-1267/1267A. Aviation activities within this route enter and exit the Barry M. Goldwater Range (BMGR). It is requested that a range disclosure statement be recorded that recognizes the noise, interference, and vibrations that may be caused by military aviation over flight. It is also requested that any towers associated with this project be lit in accordance with Federal Aviation Administration (FAA) guidelines.

CRITICAL ISSUES:

Required Conclusions from Yuma County Zoning Ordinance: (Section 402.01)

- 1. The proposed development will not materially affect or endanger the public health, safety or welfare.**

The proposed solar electric generating facility (MacFarland Solar) is not seen as materially affecting or endangering the public health, safety and welfare for the following reasons: 1) The proposed use will not create a significant increase in traffic after it is built, and 2) The proposed use will not create negative externalities and will be seen as augmenting an identical land use located to the north.

2. The proposed development complies with all regulations and standards applicable within the zoning district, specifically applicable to the particular type of special use or class of special uses.

The proposed development will be required to comply with all applicable regulations and standards associated with the RA-40 zoning district including, but not limited to, height, screening and setbacks. From the proposed site plan, it appears the applicable sections of the Zoning Ordinance will be met.

The proposed development will encompass 16 individual parcels. These parcels are within the Dateland Ranch Subdivision. Staff will recommend all sixteen parcels be combined into one Yuma County Tax Assessor parcel to eliminate encroachment upon property lines.

3. The proposed development will not substantially change or materially affect the adjoining property or the surrounding area.

The construction of a 105 MW solar electric generating facility will not substantially change and will not materially affect the surrounding area. It helps that the existing 290 MW Agua Caliente Solar facility is already operational, since the MacFarland Solar facility is of comparable scale and has the same compatible use for the area.

The Arizona Game and Fish Department (Department) noted four washes crossing the overall project site. Since washes are critical wildlife habitat, the Department is recommending avoiding washes and allowing water to flow through the overall project site. The Department is recommending if maintaining current water flow is not possible, rerouting the flow back to the wash downstream of the overall project facility to minimize impacts to downstream wash habitats. The Department anticipates the MacFarland Solar facility will not significantly impact wildlife movement to and from the Gila River, since this facility will be directly south of the existing Agua Caliente Solar facility. The Department is recommending reporting the location of any sighting of listed special status species and Species of Greatest Conservation Need to the Heritage Database Management System at <https://www.azgfd.com/wildlife.heritagefund>.

The Department is recommending the implementation of various surveys, permits (as needed), and limited project activities during wildlife breeding

seasons. These recommendations can be found on the attached memo dated July 25, 2016 from the Arizona Game and Fish Department addressed to Juan Leal Rubio, Senior Planner.

The Department is also recommending "using only the minimum amount of light needed for safety. Narrow spectrum bulbs should be used as often as possible to lower the range of species (wildlife) affected by lighting. All lighting should be shielded, cantered, or cut to ensure that light reaches only areas needing illumination." According to the applicant, "...the Project's lighting system will provide operation and maintenance personnel with illumination for both normal and emergency conditions. Lighting will be designed to provide the minimum illumination needed to achieve safety and security objectives and will be downward facing and shielded to focus illumination on the desired areas only. There will be no lighting in the solar field, so light trespass on surrounding properties will be minimal. If lighting at individual solar panels or other equipment is needed for night maintenance, portable lighting will be used."

4. The proposed development will be in harmony with the area in which it is located.

The proposed development will be in harmony with the area in which it is located. In accordance with the Yuma County 2020 Comprehensive Plan, one of the policies and priorities specific for the Dateland/East County Planning Area is to "Promote the construction of solar or wind power plants." The proposed project would help meet this goal.

ORDINANCES, CODES AND REGULATIONS THAT PERTAIN TO THE APPLICATION:

- Yuma County 2020 Comprehensive Plan
- Yuma County Zoning Ordinance
- Yuma County Comprehensive Building Code
- 2003 International Fire Code
- Environmental Health Laws (ARS Titles 36 and 49)
- Yuma County Flood Control District
- Yuma County Public Works Standards Volumes I, II and III

SUMMARY NOTES:

Support Staff Summary: The application is on file along with the comments from Yuma County staff. The Building Safety Division and the Department of Public Works provided a no comment response. The Yuma County Assessor's office stated the project is ok.

The Environmental Programs Division offered the following comments:

1. Applicant must submit Storm water Pollution Prevention Plan (SWPPP) for entire project;
2. Must submit Notice of Intent to ADEQ and provide approved copy to Environmental Programs; and,
3. If project is expected to exceed one year, a septic permit/application will need to be submitted and septic system(s) must be installed."

The Engineering Division offered the following comments:

1. The Engineering Division supports ADOT's request for a Traffic Impact Study. All improvements will be constructed in accordance with the recommendations of the Traffic Impact Study; and
2. In addition to the traffic counts, the "Traffic Impact Study" will also evaluate the existing road conditions and will provide "Pavement Rehabilitation" recommendations based on the projected increase in traffic (to include construction traffic) along Avenue 64E and Palomas Road caused from this project."
3. The Yuma County Flood Control District offered the following comments:
SUP16-05, SUP16-06, & SUP16-07 are all partially located within the Special Flood Hazard Area (SFHA) of Yuma County. The Flood Hazard Designation is Zone A which does not have base flood elevations determined. In accordance with Floodplain Regulations for Yuma County, Arizona, Section 3.3; compliance with the Floodplain Regulations will be required for all development within the floodplain. Section 4.3A requires that a Floodplain Use Permit be obtained before construction or development begins. The provisions of Section 5.9 are applicable. In accordance with Section 4.4.E.1, if the rate of flow during the flood or the configuration of the floodplain upstream or downstream from or adjacent to the project, the Special Flood Hazard Area mapping will need to be remapped and submitted to FEMA for acceptance and the provisions of ARS§ 48-3609 (I) met. All state and federal approvals will also be required."; and "*United States Army Corps of Engineers* is the agency that enforces the Clean Water Act Section 404 – Waters of the U.S. As tributaries to the Gila River, these washes may be considered *Waters of the United States* (WOUS). If WOUS, alteration would require their permits. Ultimately, the applicant has the obligation to be knowledgeable and make application if necessary."

LETTERS OF SUPPORT, OPPOSITION, AGENCY, MILITARY, SPECIAL INTEREST, etc: Various agencies responded with a "no comment" or "satisfactory" response. The following agencies provided more specific comments:

1. In an email dated August 15, 2016, Vanessa Briceño, representing the Bureau of Land Management-Yuma Field Office, offered the following comment: "The MacFarland Solar Project appears to be on private land and on this respect the BLM would have no comment. Should any of the facilities or proposed access roads cross Federal land then authorization from BLM would be required. For example, if it is determined that the proposed access road to be located off of

Palomas Road within sec. 26, T. 5 S., R. 12 W., G&SRM, crosses Federal land then authorization would be required."

2. In an email dated July 14, 2016, Isabell Garcia, representing the Arizona Department of Transportation (ADOT) Southwest (Yuma) District, stated that ADOT requests a traffic study, and offered the following comments (excerpt):

"...ADOT requests that the applicant complete a traffic study. Such a study would provide both ADOT and the County an opportunity to review and comment on the project's effects on traffic along the state highway system and local roads. This study would not need to be a full-blown traffic impact analysis meeting all the criteria in Section 240 of the Department's traffic engineering guidelines and processes (TGP). All we need for this study are projected daily average traffic volumes, peak morning and afternoon hourly traffic volumes for privately-owned vehicles during construction along with any variations anticipated during the construction period; volumes, weights, and maximum lengths for trucks; directional analysis of the traffic; a queuing analysis according to the TGP; and recommendations for mitigations measures, if any.

The traffic study would allow ADOT and the county to identify any road improvements needed to maintain safe and efficient traffic flow during the construction period."

3. In an email dated July 18, 2016, Scott Kerns, representing Arizona Public Service, offered the following comment: "The project submittals identify a 100 foot wide assumed easement at this location and should be amended to accurately reflect the correct width. Additionally the project submittals depict some encroachments within the APS easement and will require an encroachment agreement to be executed with APS to proceed with the proposed infrastructure. Any development or installation would need to be outside of the easement and the developer/contractor would be required to maintain NESC and OSHA mandated clearances from the energized electrical facilities during and after construction..."
4. In a memo dated July 12, 2016, Paula Backs, representing MCAS-Yuma, offered the following comment: "This project is in the vicinity of Visual Route (VR)-1267/1267A. Aviation activities within this route enter and exit the Barry M. Goldwater Range (BMGR). It is requested that a range disclosure statement be recorded that recognizes the noise, interference, and vibrations that may be caused by military aviation over flight. It is also requested that any towers associated with this project be lit in accordance with Federal Aviation Administration (FAA) guidelines..."
5. In a letter dated July 25, 2016, William Knowles, representing the Arizona Game and Fish Department, offered recommendations on the implementation of various surveys, permits (as needed), and limited project activities during wildlife breeding seasons. These recommendations can be found on the attached

memo dated, July 25, 2016 from the Arizona Game and Fish Department addressed to Juan Leal Rubio, Senior Planner.

Citizen Comments: As of September 16, 2016, planning staff has received no comments about the request from the general public.

Development Evaluation Checklist (DEC): The Development Evaluation Checklist identifies the following Impact Categories: Conformance to Existing Plans; Land Use Compatibility; Natural Resources; Public Infrastructure; Natural Environmental Conditions; Manmade Environmental Conditions; and Health, Safety and Welfare. A point system is used to score whether a proposal should likely be approved or denied. Of a possible maximum score of 300, the total score for this proposal is **280**. A score of 275 to 300 represents a high score and a score in this range represents a proposal that should likely be approved. The proposal is likely to be in compliance with adopted land use plans, policies and objectives and is compatible with surrounding development. A score from 250 to 274 is a moderate score and a score falling within this range represents a proposal that likely contains some redeeming values, but is lacking in one or more areas. A low score is 249 or less and a represents a proposal that likely should not be approved.

The Development Evaluation Checklist score is less than 300 due primarily to the project site's remote location, and such not being located within either a 6-minutes emergency response radius or a 10-minute sheriff department response radius.

CHRONOLOGY:

06-29-16	Application received
09-06-16	Property posted for Planning Commission public hearing
09-07-16	Legal ad appears in the Yuma Sun for the Planning Commission's public hearing
09-09-16	Public notice mailed to properties within 300 feet of the request, the City of Yuma and all relevant agencies/stakeholders
09-16-16	Staff report and letter mailed informing applicant of item being placed on the Planning Commission's public hearing agenda
09-26-16	Planning Commission's public hearing

RECOMMENDATION:

Staff recommends approval of this request for the following reasons: 1) The proposed development will not materially affect or endanger the public health, safety or welfare; 2) The proposed development will not substantially change or materially affect the adjoining property or the surrounding area; 3) The proposed development will be in harmony with the area in which it is located. Staff suggests attaching the following Operational and Performance Conditions.

Operational Conditions.

- 1) The owner/operator shall maintain and make copies available to Yuma County, current copies of all permits and notices from submissions to any federal, state, or local regulatory authority.
- 2) The owner/operator shall employ a chief safety professional and provide a 24 hour emergency contact phone number.
- 3) The approval of the Special Use Permit is based on the site plan submitted by the applicant. Any change from the site plan will require approval by the Planning Director pursuant to the Yuma County Zoning Ordinance.

Performance Conditions.

- 1) All owners, or their agents, must provide an A.R.S. §12-1134 waiver within 60 days of the Board of Supervisors approval.
- 2) The applicant shall combine the existing sixteen parcels into one Yuma County Tax Assessor parcel within 60 days of the Board of Supervisors approval.
- 3) The applicant shall provide a range disclosure statement within 60 days of the Board of Supervisors approval.
- 4) The applicant must install a security fence six feet in height along the perimeter of the area of the installation of solar panel modules.
- 5) The applicant must install a sign warning of the high voltage associated with the solar farm at the entrance to the facility. The sign must also provide the emergency contact information.
- 6) Post project construction, dust palliative shall be applied to the soil for dust control mitigation.
- 7) Prior to construction, applicant must provide to the Planning Director evidence of a valid decommissioning bond; if not verifiable to the County's satisfaction, then the applicant/SUP holder shall maintain a bond in the amount of the full decommissioning cost at the end of the anticipated life of the project, net of salvage value, as estimated by a Professional Engineer registered in the State of Arizona. Said bond shall be reviewed and approved as to form, substance and amount by the Yuma County Engineer. The engineer's estimate of decommissioning cost shall be renewed no less than every five years by a Professional Engineer registered in the State of Arizona, and a copy of each renewed estimate shall be provided to the County Engineer for review and

- approval. The decommissioning bond shall be adjusted in accordance with the renewed cost estimate within 30 days after approval by the County Engineer.
- 8) Prior to construction, a Traffic Impact Study, covering expected construction period, shall be completed in accordance with Section 204 of the Arizona Department of Transportation's traffic engineering guidelines and processes (TGP), which analysis shall address: A) projected daily average traffic volumes, peak morning, and afternoon hourly traffic volumes for privately-owned vehicles during construction along with any variations anticipated during construction; B) volumes, weights, and maximum lengths for trucks; C) directional analysis of the traffic; D) a queuing analysis according to the TGP; and, E) any recommendations for mitigations measures.
 - 9) The applicant/owner must abide by procedures and requirements adopted by the Arizona Game and Fish Department regarding the finding of any sensitive, threatened or endangered species found on the subject parcels.
 - 10) All required permits must be issued to the applicant within two years of Board of Supervisors' approval and finalized as per appropriate code requirements or the Special Use Permit shall expire pursuant to the Yuma County Zoning Ordinance.