

**SPECIAL PROVISIONS
FOR
PIMA COUNTY DEPARTMENT OF
TRANSPORTATION**



**ELEPHANT HEAD ROAD BRIDGE
PRECAST CONCRETE BOX BEAMS
PROJECT NO. 4RTEHB**

BOARD OF SUPERVISORS

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DIRECTOR**

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GENERAL NOTES

1. Project Location

This project is located within Section 29 of Township 19 South, Range 13 East, Gila and Salt River Meridian, Pima County, Arizona.

2. Scope of Work

The work under this contract consists of fabricating, delivering, and erecting precast concrete box beams for the existing Elephant Head Road Bridge over the Santa Cruz River. The existing bridge, Elephant Head Road Bridge over the Santa Cruz River, (Structure Number #8912) is an eight (8) span precast, prestressed concrete beam bridge that was constructed in 1986. The bridge is approximately 488 feet long measured back-to-back of abutments. The superstructure consists of nine (9), 30" deep x 48" wide x 60' long precast concrete inverted channel beams that are placed side-by-side in each span. The beams were salvaged from the older Swan Road Bridge over the Rillito River, originally constructed in 1962 and demolished in 1985. An asphalt overlay was placed directly on top of the inverted channel beams. The superstructure is supported by 48" diameter reinforced concrete drilled shafts at the piers and abutments. The bridge has a skew of 10 degrees. The original construction plans for the bridge can be obtained from Pima County.

The work includes the fabrication of seventy two (72) precast, prestressed AASHTO BI-48 concrete box beams as shown in the plans, storing the beams at the precast fabrication plant until the County's general contractor (by separate contract) is ready for installation, delivering the beams to the project site and erecting them onto the existing substructure supports. The work also includes providing a total of 288 production bearing pads plus sample bearing pads for testing; grouting the shear keys between adjacent box beams; providing, installing, and tensioning lateral steel tension rods; grouting of the steel anchor dowels at the ends of the box beams that were installed by the County's general contractor (by separate contract); and other incidental items necessary for the complete installation of the precast concrete box beams. The precast concrete box beam Contractor shall coordinate with the County's general contractor (by separate contract) as required to complete the Project on time.

Items not included in this precast concrete box beam contract are site preparation; removal of the existing concrete beams; installation of vertical restrainers and anchor dowels; construction of a composite concrete deck; installation of deck joints and seals; constructing concrete barriers; installing metal railings; repair of existing pier caps; milling and replacing asphaltic concrete pavement; installing bearing pads; construction of a haul/access road and detour through the Santa Cruz River just upstream of the existing bridge; maintenance and protection of traffic; and other related incidental work. These items not included in this contract will be completed by the County's general contractor under a separate contract with Pima County.

For purposes of this contract, the precast girder manufacturer or fabricator is referred to as the Contractor or the precast concrete box beam Contractor.

3. Contract Time

The precast concrete box beam Contractor shall have all box beam production and fabrication completed and ready for shipment and erection no later than December 18, 2015. The Contractor shall be prepared to store the box beams at their facility as needed until the County's general contractor is ready for the box beams to be erected in place. This storage period could be as long as four (4) months from the time all fabrication of the box beams is completed. Storage of the box beams until erection shall be done at no additional cost to Pima County. The Contractor shall be prepared to transport and erect all of the box beams in not more than eight (8) consecutive calendar days as needed by the County's general contractor and as directed by the Engineer. Extension or modification of the delivery schedule may be required to comply with the County's general contractor's schedule. The bearing pads shall be delivered to the County's general contractor no later than 14 days before box beam erection is scheduled. The precast concrete box beam Contractor shall accommodate the County's general contractor's delivery and erection schedule at no additional cost to Pima County.

4. Specifications and Details

The work embraced herein shall be performed in accordance with the requirements of the following separate documents:

Pima Association of Governments Standard Specifications for Public Improvements, 2014 Edition

Pima Association of Governments, Standard Details for Public Improvements, 2014 Edition

U.S. Department of Transportation, Federal Highway Administration, Manual on Uniform Traffic Control Devices for Streets and Highways, 2003 Edition, including Revisions I & II

5. Permits

Before undertaking work at any location covered by this project, the Contractor shall obtain all applicable permits, including but not limited to: air quality permits, water quality permits, oversize/overweight transporting permits, street closure permits and permits for excavation/construction in the public rights-of-way from Pima County or any other governing agency as required or warranted.

6. Contract Administration

Prior to submittal of contract administration documents, examples of which are listed below, the contractor shall review all documentation for accuracy and compliance with the contract. Any variance from the plans and specifications shall be clearly noted and is subject to approval by the Engineer. A contractor's transmittal letter shall accompany all submittals and shall include certification as to accuracy and compliance with the plans and specifications.

Contract administration submittals shall include, but are not limited to, the following examples: escrow agreements, subcontracts, purchase orders, certified payrolls for the contractor and subcontractors, force account billings, equal employment opportunity reports for the contractor and subcontractors, trainee preconstruction information, proof of apprenticeship, weekly individual training reports, rental equipment invoices, material invoices showing all unit prices, pay estimates, affidavit of certification of payments to disadvantaged business enterprise firms, requested lien releases, and consent from surety.

Monthly meetings, if needed, may be scheduled with the Contractor at the discretion of the Engineer to discuss and resolve any problems associated with contract administration submittals. These meetings shall be held at the Field Engineering Building at 1313 South Mission Road. Meetings shall continue on an accelerated basis after project construction completion until all contract administration issues are resolved.

Submittals that are not certified, or are incomplete, will be returned to the Contractor unprocessed for proper resubmittal and may result in payment delays, or partial payment, as deemed appropriate by the Engineer.

7. Work Hours/Noise Abatement Ordinance

Work to transport and erect precast concrete box beams onto the existing bridge supports by the Contractor shall be done between the hours of 6 am and 6 pm local time. Work hours to complete these activities outside these times requires approval by the Engineer and at least 7 calendar days prior to erection activities commencing. Construction noise abatement and start/stop times shall be in accordance with Pima County Ordinance No. 1999-61: Regulating the Excessive, Unnecessary and Annoying Noises in Pima County (see Appendix A).

8. Construction Survey

Construction survey and layout will be provided by Pima County.

9. Hazards Associated With Working in the Proximity of Utilities

The contractor shall familiarize himself/herself with the project hazards associated while working in the proximity of existing underground and overhead utilities and should take extra precautions especially at the bridge construction site due to existence of electric lines.

SECTION 107 – LEGAL RELATIONS AND REPSONSIBILITIES TO PUBLIC

107-21 Contractor's Responsibility for Utility Property and Services of the Standard Specifications is modified to add:

The following utilities may have facilities in the project area:

<u>Owner</u>	<u>Contact</u>	<u>Phone Number</u>
Alltel Communications	Beverly Kinison	(602) 252-8828
AT&T Communications	Joe Forkert	(714) 963-7264
El Paso Natural Gas	Kelly Sims	(520) 663-4223
Comcast Cable Communications	Cliff Salmond	(520) 744-5425
Cox Communications	Jeff Krause	(520) 867-7526
Metropolitan Water	Timothy Dinkel	(520) 575-8100
MCI Communications (Fiber Optics)	Joe Ryan	(520) 882-0797
Pima County Regional Wastewater Reclamation Department	Louis Romero	(520) 724-6466
Centurylink Corporation	Meron Kidane	(520) 838-3042
Southwest Gas Corporation	Melanie Rice	(520) 794-6043
Sprint/Nextel	Diane Adamson	(913) 829-0832
Trico Electric Cooperative	Frank Gonzales	(520) 744-2944 ex:1350
Tucson Electric Power	David Smith	(520) 396-2788
Tucson Water	Ed Lopez	(520) 837-2125
Verizon	Kurt Woodman	(801) 618-4664

It shall be the responsibility of the Contractor to contact the utility companies in order for them to determine if there is a need to brace, shore, support and protect their facilities during the construction of the project.

The Contractor shall take full responsibility of costs incurred due to damage to utilities as a result of grading or excavation operations. Utility locations shown on the Plans are approximate, and all utilities are not necessarily shown. The possibility of conflicts with existing utilities-in-service exists. If conflicting utilities interfere with the contractor's normal progress towards completion of this project, the Pima County Department of Transportation may, at its option, authorize the contractor to relocate said conflicting utilities by force account in accordance with the provisions of subsection 109-5(B).

SECTION 602 – PRESTRESSING CONCRETE

602-1 DESCRIPTION: of the Standard Specifications is modified to add:

All precast, prestressed structural concrete bridge members shall be transported and erected in place by a contractor certified by the Precast/Prestressed Concrete Institute (PCI) as a Certified Erector.

Appendix A

Pima County Noise Ordinance

Chapter 9.30 - REGULATION OF EXCESSIVE, UNNECESSARY AND ANNOYING NOISES

Sections:

9.30.010 - Applicability.

This chapter shall not apply to any incorporated city, town or Indian reservation. It shall apply only within the unincorporated areas of the county.

9.30.020 - Purpose.

It is hereby declared to be the policy of Pima County to prohibit excessive, unnecessary and annoying noises from all sources. At and above certain level, noises are detrimental to the health and welfare of the citizens of the county, and it is in the best interest of the citizens of Pima County that such noises be systematically eliminated.

(Ord. 1999-61 § 1 (part), 1999)

9.30.030 - Definitions.

The following definitions shall apply throughout this chapter unless a different meaning is clearly indicated by the context:

- A. Commercial property means any property occupied by business which sell, rent, trade or store goods, or which provide a service.
- B. Industrial property means any property occupied by land uses whose primary operation involves manufacturing, assembling, processing or otherwise treating raw materials, semi-finished products, or finished products for packaging and distribution to either wholesale or retail markets.
- C. Property line means the line which represents the legal limits of property (including an apartment, condominium, room or other dwelling unit) owned, leased or otherwise occupied by a person, business, corporation or institution. In cases involving sound from an activity on a public street or other public right-of-way, the property line shall be the nearest boundary of the public right-of-way.
- D. Residential property means any property, the dominant use of which is nontransient occupancy of residential dwelling units.
- E. Motor vehicle means any self-propelled vehicle operated within the county, including but not limited to licensed or unlicensed vehicles, automobiles, minibikes, go-carts, all terrain vehicles, and motorcycles.
- F. Emergency work means any work performed to prevent or alleviate physical trauma or property damage threatened or caused by an emergency which has or may result in a disruption of service and which is necessary to protect the health, safety and welfare of persons or property.
- G. Emergency vehicle means vehicles of the fire, police and public service departments and legally authorized ambulances and emergency vehicles of state departments or any political subdivisions thereof and vehicles of public service corporations.
- H. Person means a human being and, as the context requires, an enterprise, a public or private corporation, an unincorporated association, a partnership, a firm, a society, a government, a

governmental authority or an individual or entity capable of holding a legal or beneficial interest in property.

(Ord. 2001-127 § 1 (part), 2001; Ord. 1999-61 § 1 (part), 1999)

9.30.040 - Impermissible sound levels.

In addition to the prohibited noises described in 9.30.050, 9.30.060 and 9.30.070, it shall be unlawful for any person to make or continue, or cause or permit to be made or continued, any excessive, unnecessary or offensive noise which disturbs the peace or quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitivity residing in the area.

(Ord. 2001-127 § 1 (part), 2001; Ord. 1999-61 § 1 (part), 1999)

9.30.050 - Loud radios, sound sets, etc.

- A. It shall be unlawful for any person, including the owner or manager of a restaurant, bar, inn, or resort of any kind, to operate or permit to be operated any radio receiving set, phonograph, musical instrument, or sound producing or sound reproducing mechanism, at any time in such a manner as to permit the same to be heard at a distance of more than one hundred twenty-five (125) feet from the property line or motor vehicle where such radio receiving set, phonograph, or sound producing or sound reproducing mechanism is located, when the sound of such radio receiving set, phonograph, musical instrument, or sound producing or sound reproducing mechanism is operated in such a manner as to create an excessive, unnecessary or offensive noise that a reasonable person of normal sensitivity residing in the area is caused discomfort or annoyance.
- B. It shall be unlawful for any person, including the owner or manager of a restaurant, bar, inn, or resort of any kind, to operate or permit to be operated any radio receiving set, phonograph, musical instrument, or sound producing or sound reproducing mechanism, between the hours of 10:00 P.M. and 7:00 A.M. in such a manner that the sound from such radio set, phonograph, musical instrument, sound producing or sound reproducing mechanism may be heard beyond the property line from which it is operated or outside the motor vehicle in which it is operated in such a manner as to create an excessive, unnecessary or offensive noise that a reasonable person of normal sensitivity residing in the area is caused discomfort or annoyance.

(Ord. 2001-127 § 1 (part), 2001; Ord. 1999-61 § 1 (part), 1999)

9.30.060 - Vehicular noise.

- A. It shall be unlawful for any person within any residential area of this county to repair, rebuild or test any motor vehicle between the hours of 10:00 p.m. of one day and 7:00 a.m. of the next day in such a manner as to create an excessive, unnecessary or offensive noise that a reasonable person of normal sensitivity residing in the area is caused discomfort or annoyance.
- B. No person shall operate or cause to operate any motor vehicle unless the exhaust system of such vehicle:
 - 1. Is free from defects which may cause sound level magnification,
 - 2. Is equipped with a muffler,
 - 3. Has not been modified in such a manner which will amplify or increase the sound level emitted by the motor of such vehicle above that emitted by a muffler originally installed on the vehicle as manufactured for initial sale.
- C. No person shall operate a motor vehicle in such a manner which creates the squealing of tires in the roadway.

(Ord. 1999-61 § 1 (part), 1999)

9.30.070 - Construction of buildings and other projects.

- A. Noise limitations: Subject to the provisions of section 9.30.040, it shall be unlawful for any person to operate equipment or perform any outside construction or repair work on buildings, structures or projects, or to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist or any other construction type device except within the time periods specified below unless an appropriate permit has been obtained beforehand from the county.
- B. Construction start/stop times:
1. Concrete work: From April fifteenth to October fifteenth, inclusive, concrete may be poured each day between the hours of 5:00 a.m. and 7:00 p.m. or at such other times as authorized by permit. From October sixteenth to April Fourteenth, inclusive, concrete may be poured each day between the hours of 6:00 a.m. to 7:00 p.m. or at such times as authorized by permit.
 2. Other type construction (residential zones): From April fifteenth to October fifteenth, inclusive, all other construction or repair work shall not begin prior to 6:00 a.m. and must stop by 7:00 p.m. each day in, or within five hundred (500) feet of, a residential zone or at such other times as authorized by permit. From October sixteenth to April fourteenth, inclusive, all other construction or repair work shall not begin prior to 7:00 a.m. and must be stopped by 7:00 p.m. each day in, or within five hundred (500) feet of, a residential property or at such other times as authorized by permit.
 3. Other type construction (commercial and industrial zones): Construction and repair work in commercial and industrial zones, not within five hundred (500) feet of a residential property, shall not begin prior to 5:00 a.m. and must stop by 7:00 p.m. or at such other times as authorized by permit.
 4. Weekends and holidays excluded: Notwithstanding anything to the contrary herein, construction or repair work shall not begin prior to 7:00 a.m. and must stop by 7:00 p.m., and concrete pouring should not begin prior to 6:00 a.m. and must stop by 7:00 p.m. on any Saturday, Sunday or state or federal holiday, unless such other times are authorized by permit.
- C. Permits: Construction and repair work may be conducted at different times and at higher noise levels than otherwise permitted, if upon written application, a permit is obtained beforehand from the county administrator or his designee. The permit shall be kept on the work site and shown to county officials on request. In granting such permit, the county administrator or his designee shall consider if construction noise in the vicinity of the proposed work site would be less objectionable at night than during the daytime because of different population levels or different neighboring activities; if obstruction and interference with traffic, particularly on streets of major importance, would be less objectionable at night than during the daytime; if the kind of work to be performed emits noises at such a low level as to not cause significant disturbance in the vicinity of the work site; if the neighborhood of the proposed work site is of such a character wherein sleep could be disturbed; if great economic hardship would occur if the work was spread over a longer time; if the work will abate or prevent hazards to life or property; if proposed early morning or night work is in the general public interest; and, he shall prescribe such conditions, working times, types of construction equipment to be used, and permissible noise emissions as he deems to be required in the public interest. No permit shall be required to perform emergency work as defined in section 9.30.030.
- D. Revocation of permits: The county administrator or his designee may revoke any permit granted hereunder upon complaint based upon substantial evidence that the construction activity caused significant disturbance in the vicinity of the work site.

(Ord. 1999-61 § 1 (part), 1999)

9.30.080 - Exemptions.

The following uses and activities shall be exempt from the provisions contained in this article:

- A. Heating and cooling equipment when it is functioning in accordance with manufacturer's specifications and is in proper operating condition provided that no unit may create an excessive, unnecessary or offensive noise causing annoyance or discomfort to a reasonable person of normal sensitivity within any sleeping or living area inside any dwelling unit;
- B. Landscape maintenance equipment when it is functioning in accordance with the manufacturer's specifications and with all mufflers and noise-reducing equipment in use and in proper operating condition;
- C. Nonamplified crowd noises resulting from activities such as those planned by school, governmental or community groups, or organized sports except for such noises generated at restaurants, bars, inns, or resorts of any kind;
- D. Noises of safety signals, warning devices and emergency pressure relief valves;
- E. Noises resulting from any authorized emergency vehicle when responding to an emergency call or acting in time of emergency;
- F. Noises resulting from emergency work as defined in section 9.30.030;
- G. Noises from the normal operation of railroad trains;
- H. Noises from church chimes;
- I. Power plant equipment during normal operation;
- J. Noise created by any county vehicle, equipment or facility while being operated for official use;
- K. Operation of agricultural equipment in connection with farming operations;
- L. Any aircraft operated in conformity with, or pursuant to, federal law, federal air regulations or air traffic control instructions issued pursuant to or within duly adopted federal air regulations, together with any noise created by aircraft operated under, or pursuant to, declaration of an emergency under federal air regulations.

(Ord. 2001-127 § 1 (part), 2001; Ord. 1999-61 § 1 (part), 1999)

9.30.090 - Penalty.

A violation of any provision of this article shall be deemed and is declared to be a public nuisance and any person who violates any of the provisions of this article shall be guilty of a class 1 misdemeanor. Each day a violation continues or exists shall be a separate offense subject to punishment as a separate class 1 misdemeanor.

(Ord. 1999-61 § 1 (part), 1999)

9.30.100 - Severability.

If any provisions of this ordinance, or the application thereof to any person or circumstance, is invalid, that invalidity shall not effect other provisions or applications of this ordinance which can be given effect without the invalid provisions or applications, and to this end the provisions of this ordinance are severable.

(Ord. 1999-61 § 1 (part), 1999)

9.30.110 - Effective date.

This ordinance will be in full force and effective after thirty days from the date of enactment.

(Ord. 1999-61 § 1 (part), 1999)