



Town of Chino Valley

MEETING NOTICE TOWN COUNCIL

REGULAR MEETING
Tuesday, June 14, 2016
6:00 P.M.

Council Chambers
202 N. State Route 89
Chino Valley, Arizona

A majority of the Councilmembers may attend a private invocation in the Council Conference Room immediately prior to the Council meeting. No Town business will be discussed.

AGENDA

1. **CALL TO ORDER; PLEDGE OF ALLEGIANCE; ROLL CALL**
2. **INTRODUCTIONS, PRESENTATIONS, AND PROCLAMATIONS**
3. **CALL TO THE PUBLIC**

Call to the Public is an opportunity for the public to address the Council on any issue within the jurisdiction of the Council that is not on the agenda. Public comment is encouraged. Individuals are limited to speak for three (3) minutes. The total time for Call to the Public may be up to 30 minutes per meeting. Council action taken as a result of public comment will be limited to directing staff to study the matter, scheduling the matter for further consideration and decision at a later date, or responding to criticism.

4. **RESPONSE TO THE PUBLIC**

Response to the Public is an opportunity for the Mayor to inform the public about how Town officials addressed matters raised during Call to the Public at a previous meeting.

5. **CURRENT EVENT SUMMARIES AND REPORTS**

This item is for information only. The Mayor, any Councilmember, or Town Manager may present a brief summary or report of current events, or ask a staff member to provide the same. Presentation on information requested by the Mayor and Council will be made and questions answered. No action will be taken.

- a. Status reports by Mayor and Council regarding current events.

- b. Status report by Town Manager Robert Smith regarding Town accomplishments, and current or upcoming projects.

6. **CONSENT AGENDA**

All those items listed below are considered to be routine and may be enacted by one motion. Any Councilmember may request to remove an item from the Consent Agenda to be considered and discussed separately.

- a. Consideration and possible action to appoint applicants to fill vacancies on the Parks and Recreation Advisory Board, Senior Center Advisory Board, Roads and Streets Committee, Public Safety Retirement Board, Board of Adjustment, and Planning and Zoning Commission. (Vice-Mayor Croft; Councilmember Best; and Councilmember Turner)

Recommended Action: Appoint applicants to the above public bodies per recommendation of the Appointments Subcommittee and staff.

- b. Consideration and possible action to cancel the November 24, 2015 and December 22, 2015 regular meetings. (Jami Lewis, Town Clerk)
- c. Consideration and possible action to accept the May 4, 2016 study session minutes. (Jami Lewis, Town Clerk)

7. **ACTION ITEMS**

The Council may vote to recess the public meeting and hold an Executive Session on any item on this agenda pursuant to A.R.S. § 38-431.03(A)(3) for the purpose of discussion or consultation for legal advice with the Town Attorney. Executive sessions are not open to the public and no action may be taken in executive session.

- a. Consideration and possible action to:

(i) Hold a public hearing on Ordinance No. 16-816, amending the Unified Development Ordinance (UDO), Chapter 4 General Regulations, Section 4.31 Medical Marijuana Dispensaries, Cultivation, and Infusion Facilities, by amending subsection 4.31.D to require 500 foot separation from the State Route 89 right-of-way; and

(ii) Approve Ordinance No. 16-816, amending UDO Section 4.31 Medical Marijuana Dispensaries, Cultivation, and Infusion Facilities to require a 500 foot separation from the State Route 89 right-of-way. (James Gardner, Associate Planner)

Recommended Action:

(i) Open public hearing on Ordinance No. 16-816, amending the Unified Development Ordinance (UDO), Chapter 4 General Regulations, Section 4.31 Medical Marijuana Dispensaries, Cultivation, and Infusion Facilities to require a 500 foot separation from the State Route 89 Right-of-Way.

(ii) Approve Ordinance No. 16-816, amending UDO Section 4.31 as set forth in the Ordinance.

- b. Consideration and possible action to approve the Stand-By Pay Compensation Policy, which is currently being used for the non-exempt staff within the Utilities Department and which will be used for the Detectives of the Police Department, effective July 1, 2016, per Amendment #4 to the Memorandum of Understanding between the Town of Chino Valley and the Chino Valley Police Officers Association, approved by Council on April 26, 2016. The new policy, projected to increase the Police Department's budget by \$8,000 per year, is included in the 2016/2017 budget. (Laura Kyriakakis, Human Resource Director)

Recommended Action: Approve the Stand-By Pay Compensation Policy as Policy No. 1120 of the Town of Chino Valley Personnel Policy and Administrative Guidelines Manual.

- c. Consideration and possible action to approve the Cooperative Purchasing Contract with Earth Resources Corporation to furnish any and all materials, labor, construction equipment, services, and transportation required in performing all work for the placement of CRS-2P and ADOT 401-1 single coat chip seal on existing Road 4 North from State Route 89 to Road 1 West. Funds to come from Highway User Revenue Funds Road Materials Line Item. (Michael Lopez, Public Works Director/Town Engineer)

Recommended Action: Approve the Cooperative Purchasing Agreement with Earth Resources Corporation in an amount not to exceed \$16,502.00.

- d. Consideration and possible action to approve the Letter of Support and Financial Commitment for design and construction of the Road 1 North traffic signal at State Route 89. Letter commits the Town to budget \$75,000 in a future fiscal year. (Michael Lopez, Public Works Director/Town Engineer)

Recommended Action: Approve the Letter of Support and Financial Commitment for design and construction of the Road 1 North traffic signal at State Route 89.

- e. Consideration and possible action to approve the commencement of design for the Road 1 East improvements between Road 3 South and Kalinich. (Michael Lopez, Public Works Director/Town Engineer)

Recommended Action: Approve the commencement of design for the Road 1 East improvements between Road 3 South and Kalinich.

8. EXECUTIVE SESSION

Council may vote to recess the Regular Meeting and hold an executive session, which will not be open to the public, for the following purposes.

- a. An executive session pursuant to A.R.S. § 38-431.03(A)(3) for discussion or consultation for legal advice with the Town Attorney regarding the acquisition of a portion of the Prescott Water system and pursuant to A.R.S. § 38-431.03(A)(4) for discussion or consultation with the Town Attorney in order to consider the Town's position and instruct the Town Attorney regarding the Town's position regarding a contract with the City of Prescott related to the Town purchasing a portion of its water distribution system that is the subject of negotiations. (Mayor Marley)

9. ACTION ITEMS RESUMED

After the Executive Session, Council will reconvene the Regular Meeting.

10. ADJOURNMENT

Dated this 9th day of June, 2016.

By: **Jami C. Lewis, Town Clerk**

The Town of Chino Valley endeavors to make all public meetings accessible to persons with disabilities. Please call 636-2646 (voice) or 711 (Telecommunications Arizona Relay Service) 48 hours prior to the meeting to request a reasonable accommodation to participate in this meeting.

Supporting documentation and staff reports furnished to the Council with this agenda are available for review on the Town website at <http://www.chinoaz.net/agendacenter> and in the Public Library and Town Clerk's Office.

CERTIFICATION OF POSTING

The undersigned hereby certifies that a copy of this notice was duly posted at Chino Valley South Campus, Chino Valley Post Office, and Chino Valley North Campus in accordance with the statement filed by the Town Council with the Town Clerk.

Date: _____ Time: _____ By: _____
Jami C. Lewis, Town Clerk



TOWN OF CHINO VALLEY COUNCIL AGENDA ITEM STAFF REPORT

Town Council Regular Meeting

Item No. 6. a.

Meeting Date: 06/14/2016
Contact Person: Jami Lewis, Town Clerk
 Phone: 928-636-2646 x-1208
Department: Council
Item Type: Consent
Estimated length of staff presentation: None
Physical location of item: N/A

AGENDA ITEM TITLE:

Consideration and possible action to appoint applicants to fill vacancies on the Parks and Recreation Advisory Board, Senior Center Advisory Board, Roads and Streets Committee, Public Safety Retirement Board, Board of Adjustment, and Planning and Zoning Commission.

RECOMMENDED ACTION:

Appoint applicants to the above public bodies per recommendation of the Appointments Subcommittee and staff.

SITUATION AND ANALYSIS:

The Council Appointments Subcommittee met on June 2 to review applications for several public bodies. See attached minutes for further details of the subcommittee's discussion. They have recommended that Council appoint the following persons to the corresponding public body:

- *Parks and Recreation Advisory Board* - Carrie Barnes, Todd League, and George Cooper to term ending June 30, 2018.
- *Senior Center Advisory Board* - Anita DeMello, Nancy Best, Kathy Farber; and Joyce Easterling to terms ending June 30, 2018.
- *Roads and Streets Committee* - Ron Romley, Dean Echols, Doug Federico, and Vice-Mayor Croft to term ending June 30, 2017; and Robert Johan, James Wise, and Mayor Marley to term ending June 30, 2018. (The Subcommittee's motion inadvertently omitted James Wise. It is still staff's recommendation that he be appointed.)
- *Public Safety Retirement Board* - Darryl Croft, Dean Keller, and Gary Brusco to term ending June 30, 2020.
- *Board of Adjustment* - Lillian Morales and Gary Warren to Regular positions with term ending July 31, 2019; and Gwen Rowitsch to Alternate position with term ending July 31, 2017.
- *Planning and Zoning Commission* - Michael Bacon and Julie Van Wuffen to Regular positions with term ending January 31, 2019; and Gwen Rowitsch to Alternate position with term ending January 31, 2017.

Status of other public bodies:

- *Industrial Development Authority* - This board has 1 vacancy.
- *Municipal Property Corporation* - This board has 2 vacancies.

Other Pertinent Documents Available Upon Request:

Fiscal Impact

Fiscal Impact?: No

If Yes, Budget Code:

Available:

Funding Source:

Attachments

June 2, 2016 minutes

DRAFT

TOWN OF CHINO VALLEY COUNCIL APPOINTMENTS SUBCOMMITTEE MINUTES

**THURSDAY, JUNE 2, 2016
4:00 P.M.**

The Council Appointments Subcommittee of the Town of Chino Valley, Arizona, convened for a public meeting in the Council Conference Room, located at 202 N. State Route 89, Chino Valley, Arizona.

Present: Vice-Mayor Darryl Croft (Chair); Councilmember Mike Best; Councilmember Lon Turner

Staff Present: Town Clerk Jami Lewis (recorder)

1) CALL TO ORDER

Vice-Mayor Croft called the meeting to order at 4:08 p.m.

2) ROLL CALL

3) APPROVAL OF MINUTES

- a) Consideration and possible action to approve the November 9, 2015 minutes.

MOVED by Councilmember Mike Best, seconded by Councilmember Lon Turner to approve the January 29, 2015 minutes.

Vote: 3 - 0 PASSED - Unanimously

4) OLD BUSINESS

5) NEW BUSINESS

- a) Consideration and possible action to appoint applicants to the Parks and Recreation Advisory Board.

Staff Report Summary:

- 3 Expirations
- 3 Applicants: All current members.
- Recommendation: Re-appoint Carrie Barnes, Todd League, and George Cooper to terms ending June 30, 2018.

Members reviewed the staff report and discussed the applicants, whom they believed were doing

a good job.

MOVED by Councilmember Mike Best, seconded by Councilmember Lon Turner accept the applications for Carrie Barnes, Todd League, and George Cooper.

Vote: 3 - 0 PASSED - Unanimously

- b) Consideration and possible action to appoint applicants to the Senior Center Advisory Board.

Staff Report Summary:

- 4 Expirations
- 4 Applicants: 3 current members, 1 new applicant
- Recommendation: Re-appoint Anita DeMello, Nancy Best, and Kathy Farber; and appoint Joyce Easterling to terms ending June 30, 2018.

Members reviewed the staff report and discussed the applicants. New applicant Joyce Easterling came highly recommended, and, as a new Lioness, showed a desire to serve.

MOVED by Councilmember Mike Best, seconded by Councilmember Lon Turner to accept applications of Anita DeMello, Nancy Best, Kathy Farber, and Joyce Easterling.

Vote: 3 - 0 PASSED - Unanimously

- c) Consideration and possible action to appoint applicants to the Roads and Streets Committee.

Staff Report Summary:

- 6 Expirations: 3 from 2015 and 3 in 2016; 1 Vacancy
- 7 Applicants: 5 current members; 1 previous member; 1 new applicant
- Recommendation: (i) Re-appoint Ron Romley and Dean Echols, and appoint Doug Federico to term ending June 30, 2017; (ii) re-appoint Robert Johan and appoint James Wise to term ending June 30, 2018; and (iii) Reduce Council members from 3 to 2 and re-appoint Vice-Mayor Croft to term ending June 30, 2017 and Mayor Marley to term ending June 30, 2018.

Town Clerk Lewis reported that everyone's term on this committee had either expired or would shortly expire. All current members, except for James Miller desired to be re-appointed. Members discussed new applicant Doug Federico, who was highly qualified. Staff Liaison Lopez was recommending that Council appoint the five current members who wanted to be re-appointed, and reduce Councilmembers from three to two in order to bring back James Wise and add Mr. Federico.

Members discussed revisiting this Committee after the election.

MOVED by Councilmember Lon Turner, seconded by Councilmember Mike Best to re-appoint Ron Romley, Dean Echols, and Robert Johan; approve new appointee Doug Federico, and retain the same Councilmembers.

Vote: 3 - 0 PASSED - Unanimously

- d) Consideration and possible action to appoint applicants to the Public Safety Retirement Board.

Staff Report Summary:

- 3 Expirations
- 3 Applicants: All current members
- Recommendation: (i) Re-appoint Dean Keller and Gary Brusco to terms ending June 30, 2020; and (ii) Re-appoint Vice-Mayor Croft to term ending June 30, 2020.

Vice-Mayor Croft reviewed the current members: Himself; Dean Keller, a retired cop and Marine; Vince Schaan and Gary Brusco, current police officers; and Cheri Romley, an original member. Ms. Lewis stated that Vice-Mayor Croft, Mr. Keller, and Officer Brusco were up for re-appointment. Vice-Mayor Croft did not object to being reappointed.

MOVED by Councilmember Mike Best, seconded by Councilmember Lon Turner to accept applications for Darryl Croft, Dean Keller, and Gary Brusco.

Vote: 3 - 0 PASSED - Unanimously

- e) Consideration and possible action to appoint applicants to the Board of Adjustment.

Staff Report Summary:

- 2 Expirations; 1 Vacancy
- 3 Applicants: 2 current members; 1 new applicant
- Recommendation: (i) Re-appoint Lillian Morales and Gary Warren to terms ending July 31, 2019; and (ii) Appoint Gwen Rowitsch as Alternate with term ending July 31, 2017.

Vice-Mayor Croft noted that terms for Gary Warren and Lillian Morales were expiring. Ms. Lewis reported that since the packet was published, she received applications for re-appointment from both of these. The vacancy was for the Alternate position, and Staff Liaison Mayday was recommending that Council appoint Gwen Rowitsch, the former Planning Commission Chair.

MOVED by Councilmember Mike Best, seconded by Councilmember Lon Turner to re-appoint Gary Warren and Lillian Morales to the BOA, and Gwen Rowitsch as Alternate.

Vote: 3 - 0 PASSED - Unanimously

- f) Consideration and possible action to appoint applicants to the Planning and Zoning Commission.

Staff Report Summary:

- 1 Expiration; 1 Vacancy (Regular Positions)
- 2 Applicants: 1 current member, 1 former member
- Recommendation: (i) Re-appoint Michael Bacon to term ending January 31, 2019; (ii) Appoint Julie Van Wuffen, current Alternate, to fill vacant Regular position with term ending January 31, 2019; and (iii) Appoint former Commission Chair Gwen Rowitsch as Alternate Member with term ending January 31, 2017.

Ms. Lewis explained that Michael Bacon was the only one with an expired term, and he turned in his application for re-appointment after the packet was published.

Members discussed Mr. Bacon's qualifications and expertise. They also briefly discussed ways that Council might handle personality conflicts between members of public bodies and/or staff, and the fact that Commissioner Annie Lane was running for Council, would most likely be elected, and would leave another vacancy on the Commission.

MOVED by Councilmember Mike Best, seconded by Councilmember Lon Turner to appoint Gwen [Rowitsch] as the Alternate, Julie [Van Wuffen] to fill the vacancy, and re-appoint Michael [Bacon].

Vote: 3 - 0 PASSED - Unanimously

6) **ADJOURNMENT**

MOVED by Councilmember Lon Turner, seconded by Councilmember Mike Best to adjourn the meeting at 4:20 p.m.

Vote: 3 - 0 PASSED - Unanimously

Dated this 3rd day of June, 2016.

By: *Jami C. Lewis*

Approved: _____



TOWN OF CHINO VALLEY COUNCIL AGENDA ITEM STAFF REPORT

Town Council Regular Meeting

Item No. 6. b.

Meeting Date: 06/14/2016
Contact Person: Jami Lewis, Town Clerk
 Phone: 928-636-2646 x-1208
Department: Town Clerk
Item Type: Consent
Estimated length of staff presentation: None
Physical location of item: N/A

AGENDA ITEM TITLE:

Consideration and possible action to cancel the August 23, 2016, November 22, 2016, and December 27, 2016 regular meetings.

RECOMMENDED ACTION:

Cancel the August 23, 2016, November 22, 2016, and December 27, 2016 regular meetings.

SITUATION AND ANALYSIS:

Issue Statement

Historically, the Council has canceled meetings that conflicted with the annual League Conference, as well as the Thanksgiving and Christmas holidays. If any items arise needing immediate attention, the Mayor is authorized per Town Code to schedule special meetings on other dates.

Per Town Code Section 30.065, Council may cancel or reschedule any regular meeting, except that at least one regular meeting in each month must be held.

Applicable "Policy"

Town Code Section 30.065

Satisfaction of "Policy"

As long as Council holds one regular meeting in August, November, and December, the Town Code requirement will be met.

Summary of Issues and Staff Rationale

N/A

Findings of Fact

N/A

Fiscal Impact

Fiscal Impact?: None

If Yes, Budget Code:

Available:

Funding Source:

Attachments

No file(s) attached.



TOWN OF CHINO VALLEY COUNCIL AGENDA ITEM STAFF REPORT

Town Council Regular Meeting

Item No. 6. c.

Meeting Date: 06/14/2016

Contact Person: Jami Lewis, Town Clerk
Phone: 928-636-2646 x-1208

Department: Town Clerk

Item Type: Consent

AGENDA ITEM TITLE:

Consideration and possible action to accept the May 4, 2016 study session minutes. (Jami Lewis, Town Clerk)

RECOMMENDED ACTION:

Accept the May 4, 2016 study session minutes.

Attachments

May 4, 2016 minutes

DRAFT

MINUTES OF THE STUDY SESSION OF THE TOWN COUNCIL OF THE TOWN OF CHINO VALLEY

**WEDNESDAY, MAY 4, 2016
6:00 P.M.**

The Town Council of the Town of Chino Valley, Arizona, met for a Study Session in the Chino Valley Council Chambers, located at 202 N. State Route 89, Chino Valley, Arizona, on Wednesday, May 4, 2016.

Present: Mayor Chris Marley; Vice-Mayor Darryl Croft; Councilmember Mike Best; Councilmember Susie Cuka; Councilmember Jack Miller; Councilmember Corey Mendoza; Councilmember Lon Turner

Staff Present: Town Manager Robert Smith; Assistant Town Manager Cecilia Grittmann; Finance Director Joe Duffy; Human Resources Director Laura Kyriakakis; Magistrate Catherine Kelley; Court Administrator Ronda Apolinar; Town Clerk Jami Lewis (recorder)

1) CALL TO ORDER; ROLL CALL

Mayor Marley called the meeting to order at 6:04 p.m.

2) Council may recess the study session to hold an executive session pursuant to A.R.S. § 38-481.03(A)(1) for discussion or consideration of employment, assignment, salaries, or disciplining of Town Manager Robert Smith. (Mayor Marley; Vice-Mayor Croft)

MOVED by Vice-Mayor Darryl Croft, seconded by Councilmember Mike Best to recess the study session and hold executive session pursuant to A.R.S. § 38-481.03(A)(1) for discussion or consideration of employment, assignment, salaries, or disciplining of Town Manager Robert Smith at 6:05 p.m.

Vote: 7 - 0 PASSED - Unanimously

Mayor Marley reconvened the study session at 7:04 p.m. and reported that this item will be continued next Tuesday.

3) Presentation and discussion regarding the fiscal year 2016/2017 preliminary budget. (Joe Duffy, Finance Director)

Mr. Duffy presented highlights from the budget.
Overall:

- The budget was balanced.
- Reserves were fully funded, except in the water fund.
- Contingency fund was strong.
- The budget decreased 9% from last year, mainly due decreasing water acquisition funds.

General Fund (GF):

- Staff proposed to roll over an estimated \$600,000: \$200,000 to be used next fiscal year (FY) and \$400,000 to be added to reserves.
- \$400,000 were in Contingency.
- Staff proposed to increase HURF subsidy from \$50,000 to \$75,000.

Highway User Revenue Fund (HURF):

- Revenues and road materials had decreased, but the State may allocate more revenues.
- The fund was to use \$35,500 of carryover.

Water:

- Staff budgeted \$2 million for water system acquisition.
- Staff proposed to reduce Capital Improvement Fund subsidy from \$150,000 to \$75,000.
- Water accounts increased 4%.

Sewer:

- Staff was investing \$600,000 in plant upgrades through next Fiscal Year (FY), funded by Repair and Replacement Fund and Fund Balance.
- Operating costs had decreased due to plant upgrades in the past FY, and staff hoped they will keep decreasing due to next FY's upgrades. Staff also hoped to complete repairs in one year, rather than over several as originally estimated.
- The fund should be profitable next FY.
- There were nine new accounts.

Capital Improvement Fund:

- Staff proposed to roll over \$20,000.
- Staff proposed to transfer \$250,000 to GF for Aquatics and Police, and \$75,000 to HURF.
- \$110,000 was allocated for the Yavapai drainage project.
- \$137,000 was allocated for grant match.
- Staff projected to roll over \$115,000 next FY.

Mr. Duffy added that Council could adjust the budget, if desired, at this time.

Human Resources Director Kyriakakis presented an overview of personnel and benefits items in the budget:

- *Staffing levels and personnel changes:* At the peak of the Town's "boom" time, staffing was around 120-125. Current staffing was 91 full-time equivalents (FTEs). Staff proposed one additional full-time equivalent (FTE).
- *Historical and proposed COLA and merit increases:* Staff proposed a 2% COLA, and merit increases between 0% and 1.5%, for a total increase of \$142,000.
- *Medical benefits; benefit increase history; Yavapai Combined Trust insurance fund, claims, and premiums for employer and employee:* Premiums were increasing 2%. Staff proposed to:
 - Reinstate short-term disability and increase the Town's High Deductible Health Plan contribution and employee credit, for a total increase of \$16,200.
 - Continue to cover employee-only medical, dental, vision, and group term life insurance premiums.
 - Absorb 30% of family medical premium and 25% of family dental and vision premium.
- *Pension:* ASRS increased 0.01% and PSPRS increased 2.15%. These percentages were

mandated by the legislature.

Council expressed some concern about the current staff being overworked.

Assistant Town Manager Grittmann, Mr. Duffy, and Ms. Kyriakakis presented budget highlights in the General Services Department:

- *Prosecutor's office:* As Prescott did not renew its contract with the Town, staff will be issuing an RFQ soon. Staff anticipated no other changes.
- *MIS/GIS:* Increased budget due to upgrades, security enhancements and new server; moving a half-time person into division.
- *Library:* No changes.
- *Senior Center:* Increased budget due to a part-time person becoming benefit eligible and food costs.
- *Customer Service:* Increased budget to remodel front counter, leverage technology, add computers to front; standardize policies and procedures; and move one-half FTE to division.
- *Town Manager:* Decreased budget due to moving personnel to other divisions.
- *Mayor/Council:* Increased budget due to intent to raise councilmembers' salaries, starting with the new Council in December 2016. Compared similar municipalities, the Town's mayor and council salaries were very low. Staff proposed \$400/month for the mayor and \$200/month for councilmembers.
- *Non-Departmental:* Staff proposed to transfer \$75,000 of Contingencies to HURF, and purchase new technology.

Judge Kelly, Court Administrator Apolinar, and Mr. Duffy presented highlights of the Municipal Court budget:

- The Court's workload was dependent upon Police Department activity.
- This FY, the Court used special funds to install new carpet and painting. Next year's budget was decreased and included a financial audit.
- The excess monies found in the last audit had been distributed and the Court's current budget was balanced to the penny.
- Court staff and Human Resources were working on a more formal community service program for public works.

Mr. Duffy reported that the Finance Department's budget next FY was flat.

Town Clerk Lewis reported that the increase in her budget was due to election expenses, and the department's next FY focus will relate to new and upgraded technologies.

Council asked about the Library cell tower and cable expenses. Mr. Duffy and Town Manager Smith stated that the item was still in the budget. Staff was letting the bid out for the third time and was hopeful to have a response.

4) ADJOURNMENT

MOVED by Councilmember Jack Miller, seconded by Councilmember Mike Best to adjourn the meeting at 8:01 p.m.

Vote: 7 - 0 PASSED - Unanimously

Chris Marley, Mayor

ATTEST:

Jami C. Lewis, Town Clerk

CERTIFICATION:

I hereby certify that the foregoing minutes are a true and correct copy of the minutes of the Study Session of the Town Council of the Town of Chino Valley, Arizona held on the 4th day of May, 2016. I further certify that the meeting was duly called and held and that a quorum was present.

Dated this 14th day of June, 2016.

Jami C. Lewis, Town Clerk

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TOWN OF CHINO VALLEY COUNCIL AGENDA ITEM STAFF REPORT

Town Council Regular Meeting

Item No. 7. a.

Meeting Date: 06/14/2016
Contact Person: James Gardner, Associate Planner
 Phone: 928-636-2646 x-1295
Department: Development Services
Item Type: Action Item - Presentation
Estimated length of staff presentation: 20 minutes
Physical location of item: N/A

AGENDA ITEM TITLE:

Consideration and possible action to:

- 1) Hold a public hearing on Ordinance No. 16-816, amending the Unified Development Ordinance (UDO), Chapter 4 General Regulations, Section 4.31 Medical Marijuana Dispensaries, Cultivation, and Infusion Facilities, by amending subsection 4.31.D to require 500 foot separation from the State Route 89 right-of-way; and
- 2) Approve Ordinance No. 16-816, amending UDO Section 4.31 Medical Marijuana Dispensaries, Cultivation, and Infusion Facilities to require a 500 foot separation from the State Route 89 right-of-way.

RECOMMENDED ACTION:

- 1) Open public hearing on Ordinance No. 16-816, amending the Unified Development Ordinance (UDO), Chapter 4 General Regulations, Section 4.31 Medical Marijuana Dispensaries, Cultivation, and Infusion Facilities to require a 500 foot separation from the State Route 89 Right-of-Way.
- 2) Approve Ordinance No. 16-816, amending UDO Section 4.31 as set forth in the Ordinance.

SITUATION AND ANALYSIS:

Issue Statement

Applicable "Policy"

Satisfaction of "Policy"

Summary of Issues and Staff Rationale

The Arizona Medical Marijuana Act (the "Act"), approved by voters in 2010, established the laws for

medical marijuana in Arizona and tasked the Arizona Department of Health Services ("ADHS") with developing regulations to implement the provisions of the Act. Arizona Revised Statutes ("A.R.S.") Section 36-2804 limited the number of medical marijuana dispensaries to no more than one dispensary for every ten registered pharmacies in the state (as registered under Arizona pharmacy statutes). ADHS was required to determine a means to distribute the limited number of dispensaries throughout the state. ADHS established regulations that permitted a single dispensary per Community Health Analysis Area ("CHAA"), the CHAAs are distributed throughout the state, and are nearly equal to the initial number of dispensaries permitted pursuant to A.R.S. § 36-2804.

Arizona Administrative Code § R9-17-306(B)(1)(b) provides that after the first three years that a dispensary has been issued a Dispensary Registration Certificate, the dispensary may change its location to any other location in the state, and the first dispensaries in Arizona were certified in 2013. This means that those dispensaries that were certified in 2013 would now be allowed to move anywhere with the state, including CHAAs where there is an existing dispensary. Currently, within Chino Valley, there is one dispensary. If the Town Council takes no action, other dispensaries could locate within the Town boundaries, as long as they are in compliance with the UDO. The UDO Amendment set forth in Ordinance 16-816 is proposed in anticipation of the possibility that a duly certified dispensary may desire to move to the Town of Chino Valley.

The proposed amendment requires a five hundred foot (500') separation between medical marijuana uses and the edge of the right-of-way of State Route 89. The purpose of this proposed amendment is to prevent a proliferation of dispensaries from locating near highway frontage, thereby limiting the visibility of this use. Ordinance 16-811, which became effective on February 26, 2016, requires that all dispensaries be located within Industrial (I) zoning districts. Currently there are no industrially zoned properties adjacent to State Route 89. Staff recommends approving Ordinance 16-816 to provide added protection for the Town just in case a property located on State Route 89 is rezoned to Industrial for another purpose, and subsequently sold for medical marijuana uses.

This proposed Ordinance was heard at a Citizen Review meeting in front of Planning and Zoning on April 13, 2016, at that time, no citizen comment was offered. On May 3, 2016, a Public Hearing was held on this Ordinance followed by discussion by the Planning and Zoning Commission. There were concerns with the proposed Ordinance, which led to a 3-3 vote, and a request that Town Council hold a public hearing on the matter. Those concerns were as follows:

1. The Town appears to be "picking on" a certain industry.
2. Given a lack of public attendance at the public hearing, it appears the citizenry is not as interested in further regulating these uses as it once seemed.
3. They believed another public hearing was necessary at Town Council to allow for further input.

ARS 9-462.04(D) requires that if a public hearing has been held at the Planning and Zoning Commission, the Town Council is not required to hold a public hearing unless requested by the party aggrieved or any member of the public or of the governing body. The Council is, therefore, required to hold a public hearing. After the Planning Commission meeting, Staff published notice of the Council's public hearing and the matter is now ready for Council's public hearing and consideration.

Findings of Fact

Fiscal Impact

Fiscal Impact?: None

If Yes, Budget Code:

Available:

Funding Source:

Attachments

Ordinance 16-816

ORDINANCE NO. 16-816

AN ORDINANCE OF THE COMMON COUNCIL OF THE TOWN OF CHINO VALLEY, ARIZONA, AMENDING THE UNIFIED DEVELOPMENT ORDINANCE OF THE TOWN OF CHINO VALLEY, ARIZONA, CHAPTER 4 GENERAL REGULATIONS, SECTION 4.31 MEDICAL MARIJUANA DISPENSARIES, CULTIVATION, AND INFUSION FACILITIES, BY AMENDING SUBSECTION 4.31.D TO REQUIRE A 500 FOOT SEPARATION FROM THE STATE ROUTE 89 RIGHT-OF-WAY; PROVIDING FOR REPEAL OF CONFLICTING ORDINANCES; PROVIDING FOR SEVERABILITY; AND PROVIDING PENALTIES.

WHEREAS, after proper notice required by law and in accordance with ARS 9-462.04, the Planning and Zoning Commission held a citizen review meeting on April 13, 2016 and held a public hearing on May 3, 2016; and

WHEREAS, the Commission, after consideration and discussion, requested by a 3-3 vote that the Town Council hold a public hearing on the matter and made no further recommendation to Council; and

WHEREAS, the Town Council finds that the proposed regulation is reasonable and is necessary to protect the public health, safety, and welfare and is consistent with the principles set forth in the Arizona Medical Marijuana Act;

NOW, THEREFORE, BE IT ORDAINED by the Common Council of the Town of Chino Valley, Arizona, as follows:

Section 1. In General.

The Unified Development Ordinance of the Town of Chino Valley, Arizona, Chapter 4 General Regulations, Section 4.31 Medical Marijuana Dispensaries, Cultivation and Infusion Facilities, is hereby amended to read as follows (additions shown in ALL CAPS; deletions shown in ~~strikeout~~):

4.31 Medical Marijuana Dispensaries, Off-Site Cultivation Sites and Infusion Facilities

* * *

D. The following separation requirements shall apply to all medical marijuana facilities:

1. Five hundred feet (500') from any school, public or private.
2. Five hundred feet (500') from any public park, public building, or public community center.
3. Five hundred feet (500') from any drug or alcohol rehabilitation facility or correctional transitional housing facility.
4. Five hundred feet (500') from any residential zoning district.

5. FIVE HUNDRED FEET (500') FROM THE NEAREST EDGE OF THE RIGHT-OF-WAY OF STATE ROUTE 89.

* * *

Section 2. Providing for Repeal of Conflicting Ordinances.

All ordinances and parts of ordinances in conflict with the provisions of this Ordinance or any part of the Code adopted herein by reference, are hereby repealed.

Section 3. Providing for Severability.

If any section, subsection, sentence, clause, phrase or portion of this Ordinance or any part of the Code adopted herein by reference, is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions thereof.

Section 4. Providing for Penalties

Any person found responsible for violating this Ordinance shall be subject to the civil sanctions and habitual offender provisions set forth in Sections 1.10 and 1.11 of the Town of Chino Valley Unified Development Ordinance. Each day a violation continues, or the failure to perform any act or duty required by this zoning ordinance, the Unified Development Ordinance or by the Town of Chino Valley Town Code continues, shall constitute a separate civil offense.

PASSED AND ADOPTED by the Mayor and Common Council of the Town of Chino Valley, Arizona, this 14th day of June, 2016 by the following vote:

AYES:	_____	ABSENT:	_____
NAYS:	_____	ABSTAINED:	_____

APPROVED this 14th day of June, 2016.

Chris Marley, Mayor

ATTEST:

Jami Lewis, Town Clerk

APPROVED AS TO FORM:

Phyllis L.N. Smiley, Town Attorney

I, JAMI LEWIS, TOWN CLERK, DO HEREBY CERTIFY THAT A TRUE AND CORRECT COPY OF THE ORDINANCE NO. 16-816 ADOPTED BY THE COMMON COUNCIL OF THE TOWN OF CHINO VALLEY ON THE 14TH DAY OF JUNE, 2016, WAS POSTED IN THREE PLACES ON THE _____ DAY OF _____, 2016.

Jami Lewis, Town Clerk



TOWN OF CHINO VALLEY COUNCIL AGENDA ITEM STAFF REPORT

Town Council Regular Meeting

Item No. 7. b.

Meeting Date: 06/14/2016
Contact Person: Laura Kyriakakis, Human Resources Director
 Phone: 928-636-2646 x-1204
Department: Human Resources
Item Type: Action Item
Estimated length of staff presentation: 5 minutes
Physical location of item: N/A

AGENDA ITEM TITLE:

Consideration and possible action to approve the Stand-By Pay Compensation Policy, which is currently being used for the non-exempt staff within the Utilities Department and which will be used for the Detectives of the Police Department, effective July 1, 2016, per Amendment #4 to the Memorandum of Understanding between the Town of Chino Valley and the Chino Valley Police Officers Association, approved at the April 26, 2016 Town Council Meeting. (Laura Kyriakakis, Human Resource Director)

RECOMMENDED ACTION:

Approve the Stand-By Pay Compensation Policy to become Policy No. 1120 of the Town of Chino Valley Personnel Policy and Administrative Guidelines Manual.

SITUATION AND ANALYSIS:

Issue Statement

Per Amendment #4 to the Memorandum of Understanding between the Town of Chino Valley and the Chino Valley Police Officers Association, that was approved at the 4/26/2016 Town Council Meeting, a policy is being presented to outline the purpose, scope and guidelines to be administered by the Town. The policy has been utilized for eligible non-exempt staff of the Utilities Department and will be used for eligible non-exempt Detectives, of the Police Department, effective 7/1/2016. The financial impact of this policy has been calculated and included in the 2016/2017 annual budget.

Fiscal Impact

Fiscal Impact?: 6,700
If Yes, Budget Code:
Available:
Funding Source:
 Department 60 - Police Department

Fiscal Impact?: Yes

If Yes, Budget Code:

Available:

Funding Source:

It is projected the new policy will increase the Police Departments budget by \$8,000 per year. The amount is included in the 2016/2017 budget.

Attachments

Stand-By Compensation Policy

Policy No. 1120

June 14, 2016

Page 1 of 2

STAND-BY COMPENSATION POLICY: NON-EXEMPT EMPLOYEES**I. Purpose:**

To provide guidelines to administer the Stand-By Compensation Policy for eligible non-exempt employees to receive payment for being available, at the request of the Town, to respond to call out duties after regularly-scheduled work hours, on weekends, and holidays. Stand-by pay is compensation for employees who are assigned stand-by duty to respond to situations outside of their scheduled work hours. Stand-by assignments will be made at the discretion of the Department Head or designee.

II. Scope:

This program applies to eligible non-exempt employees of the Town of Chino Valley. Eligible non-exempt employees are, specifically, non-exempt employees of the Town's Utility Department and non-exempt Detectives of the Police Department. Other non-exempt employees may be added at the discretion of the Town Manager, based upon the needs of the Town, subject to budgetary consideration.

III. Policy and Guidelines:

- A. An eligible non-exempt employee will receive compensation for scheduled stand-by hours excluding regularly scheduled shifts.
- B. The rate of pay will be \$1.00 per hour.
- C. An employee who has been assigned to stand-by duty must be available for recall for the entire period for which the employee is being compensated. Being available for recall is defined as:
 - a. Being available to respond in a reasonable amount of time; this is defined by each department based on departmental circumstances. A supervisor shall communicate to an employee who has been assigned to stand-by duty the reasonable response time.
 - b. During the time an employee is on assigned stand-by duty, that employee shall not consume substances (including but not limited to alcohol and drugs) that may in any way impair his or her job performance.
 - c. An employee on stand-by time shall engage in such activities and remain in close proximity to the Town so that the employee is able to promptly, effectively and safely perform the duties that would normally be performed if the employee were on regular duty.

Policy No. 1120
June 14, 2016
Page 2 of 2

- D. Supervisors of employees with stand-by duty shall maintain a rotation list of employees to be assigned stand-by duty but, in the discretion of the Department Head, may consider personal needs of individual employees such as scheduled vacations and other personal matters, as well as the needs of the Department and the Town as a whole.
- E. If an employee is physically recalled to work while on stand-by time, the employee shall be paid for a minimum of two hours per call out, at a rate of time and one half, and if the call out is more than two hours the employee will be paid for the actual amount of time of the call out, at a rate of time and one half. An employee will not be paid stand-by pay for the hours actually worked.
- F. Failure to respond to recall or reporting to work unfit for duty while on stand-by duty may result in disciplinary action.
- G. An employee who is on stand-by duty and who is not available when called shall lose stand-by pay for that stand-by period and may be subject to disciplinary action.
- H. Stand-by time does not include situations where an entire work group is placed on notice that pending weather conditions or comparable situations may necessitate being called back to work.
- I. Each hour of stand-by time shall be reported as such on the payroll timesheet and not as regular work hours for purposes of calculating rate of pay. If an employee is physically recalled back to work, those hours shall be reported as special on-call hours, on the payroll timesheet, for purposes of calculating rate of pay.
- J. Stand-by duty may not be used for the sole purpose of increasing an employee's pay or time-off from work.
- K. Stand-by pay cannot be converted to compensatory time.
- L. The supervisor shall only designate an employee for stand-by duty when the employee is sufficiently familiar with operational guidelines and procedures necessary to operate safely within the environment with which the employee will be exposed.



TOWN OF CHINO VALLEY COUNCIL AGENDA ITEM STAFF REPORT

Town Council Regular Meeting

Item No. 7. c.

Meeting Date: 06/14/2016
Contact Person: Michael Lopez, Assistant Public Works Director/Town Engineer
 Phone: 928-636-2646 x-1226
Department: Public Works
Item Type: Action Item
Estimated length of staff presentation: 10 minutes
Physical location of item: Road 4 North, State Rout 89 to Road 1 West

AGENDA ITEM TITLE:

Consideration and possible action to approve the Cooperative Purchasing Contract with Earth Resources Corporation to furnish any and all materials, labor, construction equipment, services, and transportation required in performing all work for the placement of CRS-2P and ADOT 401-1 single coat chip seal on existing Road 4 North from State Route 89 to Road 1 West.

RECOMMENDED ACTION:

Approve the Cooperative Purchasing Agreement with Earth Resources Corporation in an amount not to exceed \$16,502.00.

SITUATION AND ANALYSIS:

Issue Statement

As has been previously established, the Town is far behind on the maintenance of its surfaced streets because of significant budget cuts to the Highway User Revenue Fund. As a means of trying to bridge the financial gap between the budget constraints and the needs of the transportation system, the Public Works Department purchased a chip spreading machine in 2013 and developed on call oil and equipment contracts. The intent of these actions is to perform the chip seal program in-house at a reduced cost in order to surface more roadways.

Town staff recently determined through the process of preparing for the 2015-2016 Chip Seal Program that the Cooperative Purchasing Contracts for equipment and materials had expired. The term of these contracts is for five (5) years with an annual renewal requirement. Furthermore, based on the historic scheduling information gathered from previous chip seal programs, these contracts were typically brought before council in the fall of each calendar year for a spring chip seal. Unfortunately, due to the untimely resignation of the previous Public Works Director and the lack of a clear succession plan for his replacement, the contracts were never renewed.

Based on this information, staff determined that utilizing the 'Piggy Back' clause contained within the Yavapai County's Provisions and Specifications for the Chip Seal (Summer) 2015-2016 Project would be a great opportunity to capitalize on the competitive pricing and warranty provided by the awarded

contractor.

Applicable “Policy”

N/A

Satisfaction of “Policy”

N/A

Summary of Issues and Staff Rationale

Town staff proposes to utilize the 'Piggy Back' clause contained within the Yavapai County's Provisions and Specifications for the Chip Seal(Summer) 2015-2016 Project. In accordance with the previously approved five (5) year plan for road resurfacing, Road 4 North from State Route 89 to Road 1 West will be chip sealed. The 2015-2016 budget has \$69,000.00 remaining under Road Materials for the 2015-2016 Resurfacing program. Staff estimates the cost to resurface the proposed street at \$16,502.00. This equates to approximately \$23,549.00 per mile. The remaining budgeted funds will be rolled over to the following fiscal year to be utilized in the Fall 2016-2017 Chip Seal Program.

Findings of Fact

N/A

Fiscal Impact

Fiscal Impact?: YES

If Yes, Budget Code: 02-78-5398

Available: \$16,502

Funding Source:

Funds to come from Highway User Revenue Funds Road Materials Line Item.

Attachments

ERC Coop. Purchasing Contract

AGREEMENT
TO PROVIDE SERVICES/SUPPLIES PURSUANT TO A
COOPERATIVE PURCHASING CONTRACT

Contract No. _____

This Agreement is made and entered into by and between the Town of Chino Valley, Arizona, a municipal corporation, hereinafter designated as "Town" and Earth Resources Corporation hereinafter designated as the "Contractor."

Recitals:

A. Contractor has contracted with Yavapai County, Arizona to provide chip seal services, materials and/or equipment pursuant to that certain contract entitled Chip Seal (Summer, FY 2015-2016) Project In Yavapai County, Arizona; Project #1620882 (the Cooperative Purchasing Contract); and

B. Pursuant to A.R.S. § 41-2631 et seq. and the Chino Valley Code of Ordinances, § 32.08, Town has authority to utilize cooperative purchasing contracts and engage contractors under the terms thereof.

CONTRACTOR AND TOWN, FOR THE CONSIDERATION HEREINAFTER
SET FORTH, PROMISE, COVENANT AND AGREE AS FOLLOWS:

1. Scope of Work.

1.1 Contractor shall provide the following services, materials and/or equipment: **placement of CRS-2P and ADOT 401-1 single coat chip seal on existing Road 4 North from SR89 to Road 1 West within Chino Valley, -Yavapai County, Arizona.**

as described in the Cooperative Purchasing Contract documents attached hereto as **Exhibit A**, which are incorporated herein by reference. As used in this Contract, all references to "Yavapai County, Arizona" shall mean "Town of Chino Valley, Arizona."

1.2 Contractor shall comply with all specific requirements and/or options of Town, as specified in **Exhibit B** attached hereto and incorporated herein by reference.

2. Completion of Work. The Contractor shall complete all work set forth in the Scope of Work on or before July 8, 2016.

3. Payment. The Contract Fee is \$16,502.00. Payment to the Contractor for the services, materials and/or equipment provided, shall be made in accordance with the price list and terms set forth in the Cooperative Purchasing Contract, except that the Town has not established an Electronic Funds Transfer program and therefore, Contractor shall be paid directly by the Town without the requirement for registration with Yavapai County's EFT Program. Final payment will be based on field measured actual in place quantities not to exceed the Contract Fee.

4. Terms of Cooperative Purchasing Contract Apply. All provisions of the Cooperative Purchasing Contract documents are incorporated in and shall apply to this Contract as though fully set forth herein, except as otherwise provided for in this Agreement.

5. Contract Term and Renewal. If funds for this Contract are not appropriated or budgeted by June 30, 2016 Town may terminate this contract by giving written notice to Contractor. Otherwise, the term of this Contract shall commence upon approval and continue through July 8, 2016.

6. Certificates of Insurance. All insurance provisions of the Cooperative Purchasing Contract shall apply, including without limitation, the requirement to name the Town as an additional insured. Prior to commencing work under this Contract, Contractor shall furnish the Town with Certificates of Insurance, or formal endorsements as required by the Contract, issued by the Contractor's insurer(s) as evidence that policies providing the required coverages, conditions and limits required by this Contract are in full force and effect.

IN WITNESS WHEREOF, the parties have hereunto subscribed their names this 7th day of June, 2016.

TOWN OF CHINO VALLEY:

By: _____
Chris Marley, Mayor

CONTRACTOR:

By:  _____
Title: V.P.

ATTEST:

Jami Lewis, Town Clerk

APPROVED AS TO FORM:

Phyllis L.N. Smiley, Town Attorney

EXHIBIT A
CHIP SEAL (SUMMER, FY 2015-2016) PROJECT IN YAVAPAI COUNTY, ARIZONA
PROJECT #1620882

CONTRACT

THIS AGREEMENT, made and entered into this 4th day of **May, 2016**, by and between Yavapai County, Arizona, party of the first part, hereinafter designated the OWNER, and **EARTH RESOURCES CORPORATION** of the City/Town of Dewey, State of Arizona, party of the second part, hereinafter designated the CONTRACTOR.

WITNESSETH: That the said Contractor, for and in consideration of the sum to be paid him by the said Owner, in the manner and at the time hereinafter provided, and of the other covenants and agreements herein contained, and under the penalties expressed in the bond hereto attached, hereby agrees, for himself, his heirs, administrators, successors, and assigns as follows:

ARTICLE I - SCOPE OF WORK: The Contractor shall furnish any and all plant materials, labor, construction equipment, services, and transportation required for performing all work for **CHIP SEAL (SUMMER, FY 2015-2016) PROJECT IN YAVAPAI COUNTY, ARIZONA; PROJECT #1620882**, in accordance with the plans and these specifications, and to completely and totally construct the same and install the material herein for the Owner, in a good and workmanlike and substantial manner and to the satisfaction of the Owner through its Engineers and under the direction and supervision of the Engineer, or his properly authorized agents and strictly pursuant to and in conformity with the Specifications prepared by the Engineers for the Owner, and with such modifications of the same and other documents that may be made by the Owner through the Engineer, or his properly authorized agents, as provided herein.

ARTICLE II - CONTRACT DOCUMENTS: "Project Provisions and Specifications", "Proposal", "Surety Bid Bond", "Affidavit of Non-Collusion", "Subcontracting Certification", "Bid Schedule (Final)", "Labor and Materials Bond", "Performance Bond", plans, and addenda thereto, are by this reference made a part of this contract to the same extent as if set forth herein in full.

ARTICLE III - TIME OF COMPLETION: The Contractor further covenants and agrees, at his own proper cost and expense, to do all work and furnish all materials, labor, construction equipment, services and transportation for performing all of the work for construction of said improvements and to completely construct the same and install the material therein, as called for by this agreement free and clear of all claims, liens, and charges whatsoever, in the manner and under the conditions specified within the time, or times, stated in the Proposal.

Work on this project shall start within ten (10) calendar days after the starting date set forth in the "Notice to Proceed" and shall be completed within the following limits:

SCHEDULE:

For construction in the contract documents, the project shall be completed within **TWENTY-FOUR (24) TEN-HOUR WORKING DAYS FROM THE DATE SPECIFIED IN THE NOTICE TO PROCEED.**

It is expressly understood and agreed that in case of failure on the part of the Contractor, for any reason, except with the written consent of the Owner's Engineer, to complete the work to the satisfaction of the Owner's Engineer and within the aforesaid time limits, the Owner may deduct from any money due, or which may become due the Contractor, as liquidated damages, an amount as fixed by the following schedule:

<u>WORK ITEM</u>	<u>LIQUIDATED DAMAGES</u>
All work not complete within the above specified time.	PER MAG SPECIFICATIONS

If no money shall be due the Contractor, the Owner shall have a cause of action to recover against the Contractor in a court of competent jurisdiction, liquidated damages as fixed by the above schedule; said deduction to be made, or said sum to be recovered, not as a penalty, but as liquidated damages; provided, however, that upon receipt of written notice from the Contractor, of the existence of causes, as herein provided, over which said Contractor has no control and which must delay the completion of the said work or any delay occasioned by the Owner, the Owner's Engineer may extend the period hereinafter specified for the completion of said work in accordance with the specifications and in such case, the Contractor shall become liable for said liquidated damages for delays commencing from date said extension period shall expire.

ARTICLE IV – COMPLIANCE WITH IMMIGRATION LAWS: Contractor hereby warrants that it will at all times during the term of this Contract comply with all federal immigration laws applicable to Contractor's employment of its employees, and with the requirements of A.R.S. §23-214 (A) (together the "State and Federal Immigration Laws"). Contractor shall further ensure that each subcontractor who performs any work for Contractor under this contract likewise complies with the State and Federal Immigration Laws.

Contractor agrees and warrants that Owner shall have the right at any time to inspect the books and records of Contractor and any subcontractor in order to verify such party's compliance with the State and Federal Immigration Laws. Contractor agrees that any act by the Contractor or subcontractor that result in the impediment or denial of access of the books and records of Contractors or subcontractor shall be a material breach of the Contract on the part of the Contractor.

Nothing herein shall make Contractor or subcontractor an agent or employee of the Owner. Nothing herein shall act to establish privity of contract between the Owner and any subcontractor. Any breach of Contractor's or any subcontractor's warranty of compliance with the State and Federal Immigration Laws, or of any other provision of this section, shall be deemed to be a material breach of this Contract subjecting Contractor to penalties up to and including suspension or termination of this Contract. If the breach is by a subcontractor, and the subcontract is suspended or terminated as a result, Contractor shall be required to take such steps as may be necessary to either self-perform the services that would have been provided under the subcontract or retain a replacement subcontractor, subject to Owner approval as soon as possible so as not to delay project completion.

Contractor shall advise each subcontractor of Owner's rights, and the Subcontractor's obligations, under this Article by including a provision in each subcontract substantially in the following form:

"Subcontractor hereby warrants that it will at all times during the term of this contract comply with all federal immigration laws applicable to Subcontractor's employees, and with the requirements of A.R.S. §23-214 (A). Subcontractor further agrees that Owner may inspect the Subcontractor's books and records to ensure that Subcontractor is in compliance with these requirements. Any breach of this paragraph by Subcontractor will be deemed to be a material breach of this contract subjecting Subcontractor to penalties up to and including suspension or termination of this contract."

Any additional costs attributable directly or indirectly to remedial action under this Article shall be the responsibility of Contractor.

ARTICLE V - CANCELLATION: This agreement is subject to cancellation pursuant to A.R.S. §38-511.

ARTICLE VI - PAYMENTS: The Contractor shall make an estimate of the work performed during the preceding month and submit the same to the Engineer for checking. On or before twenty (20) days after the certified and approved estimate of the work is received by the Owner, the Owner shall pay to the Contractor ninety percent (90%) of the value of said work in place, as approved by the Owner's Engineer. The balance of ten percent (10%) of the estimate shall be retained by the Owner until the time of final payment and acceptance of said work, as per A.R.S. §34-221.

In addition, when the contract is fifty percent completed, one half of the amount retained including any securities substituted under paragraph five of A.R.S. §34-221, shall be paid to the Contractor upon the Contractor's written request provided the Contractor is making satisfactory progress on the Contract and there is no specific cause or claim requiring a greater amount to be retained. After the Contract is fifty per cent completed, no more than five percent of the amount of any subsequent progress payments made under the Contract may be retained providing the Contractor is making satisfactory progress on the project, except that if at any time the owner determines satisfactory progress is not made ten percent retention shall be reinstated for all progress payments made under the Contract subsequent to the determination, all in accordance with A.R.S. §34-221.

IN WITNESS WHEREOF, two (2) identical counterparts of this contract, each of which shall for all purposes be deemed an original thereof, have been duly executed by the parties hereinabove named, on the date and year first above written.

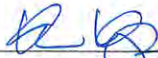
In return for the performance of this Contract by the Contractor, the Owner agrees to pay the amount of **ONE MILLION NINETY-NINE THOUSAND THREE HUNDRED FIFTY-ONE AND 35/100 DOLLARS (\$1,099,351.35)** through a payment schedule as described in the Contract documents and as may be modified and executed by change orders and by final quantities. Contractor understands that Yavapai County has established an Electronic Funds Transfer (EFT) program for all payments to providers of goods and services to the County and agrees to accept EFT payments in full satisfaction of the County's payment obligations pursuant to this Contract.

Contractor further agrees to register for the County's EFT program within one month following the effective date of this Contract and understands that failure to comply with this registration requirement shall result in suspension of payments pursuant to this Contract until such time as the registration process is completed.

The Contractor agrees that this contract, as awarded, is for the following work, and understands that payment for the total work will be made on the basis of the indicated amount(s), as bid in the Proposal and attached Bidding Schedule for **CHIP SEAL (SUMMER, FY 2015-2016) PROJECT IN YAVAPAI COUNTY, ARIZONA; PROJECT #1620882.**

YAVAPAI COUNTY

ATTEST:

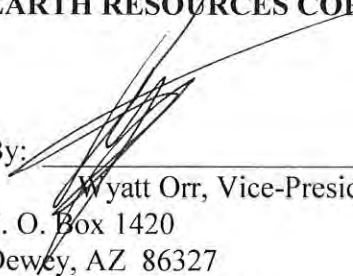


Clerk, Board of Supervisors



Jack R. Smith
Chairman, Board of Supervisors

EARTH RESOURCES CORPORATION

By: 

Wyatt Orr, Vice-President
P. O. Box 1420
Dewey, AZ 86327
Phone: 928.775.2795
Email: ww05th@yahoo.com

BID SCHEDULE – REVISED APRIL 19, 2016

**CHIP SEAL (SUMMER, FY 2015-2016) PROJECT IN YAVAPAI COUNTY, ARIZONA
PROJECT #1620882**

BASE BID:

No.	Description	Quantity/ Unit	Unit Price	Total Amount Bid
1	MOBILIZATION	1 / LS	26,752.00	26,752.00
2	SINGLE CHIP SEAL COAT, CRS-2P	238,904 / SY	1.46	348,799.84
3	RUBBERIZED CHIP SEAL	64,500 / SY	2.92	189,340.00
4	FOG SEAL (0.10 GAL/SY)	30,340 / GAL	1.30	39,442.00
5	MICRO-MILL ACFC PAVEMENT & HAUL	62,500 / SY	1.00	62,500.00
6	DIAMOND GRIND TRANSITIONS	200 / LF	16.00	3,200.00
7	REMOVE AND REPLACE - SURFACE MOUNT FLEXIBLE DELINEATORS	66 / EA	38.00	2,508.00
8	PERMANENT PAVEMENT MARKING - PAVEMENT STRIPING, YELLOW (4" EQUIV.)	128,185 / LF	.08	10,254.80
9	PERMANENT PAVEMENT MARKING - PAVEMENT STRIPING, WHITE (4" EQUIV.)	174,885 / LF	.08	13,990.80
10	TEMPORARY PAVEMENT MARKING - PAVEMENT STRIPING, YELLOW (4" EQUIV)	78,964 / LF	.08	6,317.12
11	TEMPORARY PAVEMENT MARKING - PAVEMENT STRIPING, WHITE (4" EQUIV)	117,796 / LF	.08	9,423.68
12	THERMOPLASTIC PAVEMENT MARKING - WHITE (4" EQUIV.)	1,271 / LF	1.00	1,271.00
13	PREFORMED PLASTIC PAVEMENT MARKING, LEFT ARROW	10 / EA	95.00	950.00
14	PREFORMED PLASTIC PAVEMENT MARKING, RIGHT ARROW	10 / EA	95.00	950.00
15	PREFORMED PLASTIC PAVEMENT MARKING, MERGE LEFT ARROW	8 / EA	80.00	640.00
16	PREFORMED PLASTIC PAVEMENT MARKING, "ONLY"	10 / EA	95.00	950.00
17	QUALITY CONTROL AND TESTING	1 / LS	26,787.00	26,787.00
18	TRAFFIC CONTROL	1 / LS	38,115.00	38,115.00
19	FORCE ACCOUNT	1 / LS	\$45,000.00	\$45,000.00
TOTAL BID AMOUNT OF: BASE BID				826,191.24

ALTERNATE A

No.	Description	Quantity/ Unit	Unit Price	Total Amount Bid
1	MOBILIZATION	1 / LS	1200.00	1200.00
2	SINGLE CHIP SEAL COAT, CRS-2P	104,042 / SY	1.35	140,456.70
3	FOG SEAL COAT (0.10 GAL/SY)	10,404 / GAL	1.30	13,525.20
4	PERMANENT PAVEMENT MARKING - PAVEMENT STRIPING, YELLOW (4" EQUIV.)	10,684 / LF	.07	747.88
5	PERMANENT PAVEMENT MARKING - PAVEMENT STRIPING, WHITE (4" EQUIV.)	1,616 / LF	.07	113.12
6	THERMOPLASTIC PAVEMENT MARKING - WHITE (4" EQUIV.)	1,616 / LF	.65	1050.40
7	QUALITY CONTROL AND TESTING	1 / LS	1200.00	1200.00
8	TRAFFIC CONTROL	1 / LS	6951.00	6951.00
9	FORCE ACCOUNT	1 / LS	\$12,000.00	\$12,000.00
TOTAL BID AMOUNT OF: ALTERNATE A				177,244.30

ALTERNATE B

No.	Description	Quantity/ Unit	Unit Price	Total Amount Bid
1	MOBILIZATION	1 / LS	0	0
2	SINGLE CHIP SEAL COAT, CRS-2P	53,821 / SY	1.45	78,040.45
3	FOG SEAL COAT (0.10 GAL/SY)	5,382 / GAL	1.29	6942.78
4	PERMANENT PAVEMENT MARKING - PAVEMENT STRIPING, YELLOW (4" EQUIV.)	282 / LF	.07	19.74
5	PERMANENT PAVEMENT MARKING - PAVEMENT STRIPING, WHITE (4" EQUIV.)	72 / LF	.07	5.04
6	THERMOPLASTIC PAVEMENT MARKING - WHITE (4" EQUIV.)	72 / LF	.65	46.80
7	QUALITY CONTROL AND TESTING	1 / LS	700.00	700.00
8	TRAFFIC CONTROL	1 / LS	4161.00	4161.00
9	FORCE ACCOUNT	1 / LS	\$6,000.00	\$6,000.00
TOTAL BID AMOUNT OF: ALTERNATE B				95,915.81

TOTAL BID AMOUNT OF: BASE BID (in numbers and words):

\$ 826,191.24 Eight hundred - twenty six thousand - one
hundred - ninety one & 24/100

TOTAL BID AMOUNT OF: BASE BID + ALTERNATE A (in numbers and words):

\$ 1,003,435.54 One million - three thousand - four
hundred - thirty five & 54/100

TOTAL BID AMOUNT OF: BASE BID + ALTERNATE A + ALTERNATE B (in numbers and words):

\$ 1,099,351.35 One million - ninety nine thousand -
three hundred - fifty one & 35/100

FIRM

BY: 

TITLE: V.P.

PROJECT PROVISIONS AND SPECIFICATIONS
FOR
CHIP SEAL (SUMMER, FY 2015-2016) PROJECT IN
YAVAPAI COUNTY, ARIZONA
PROJECT #1620882

Board of Supervisors

Jack R. Smith, Chairman
Thomas Thurman, Vice-Chairman
Rowle P. Simmons, Member
Craig L. Brown, Member
A.G. “Chip”, Davis, Member

Deputy Clerk of the Board of Supervisors

Barbara Fox-Thomas

Public Works Director

Byron Jaspers, P.E.



TABLE OF CONTENTS

CHIP SEAL (SUMMER, FY 2015-2016) PROJECT IN YAVAPAI COUNTY, ARIZONA

PROJECT #1620882

	<u>Page</u>
I. Call for Bids.....	1
II. General Provisions	2
III. Special Provisions	33
1. Scope	
2. Pre-Bid Meeting (MANDATORY)	
3. Base Bid Plus Alternates	
4. Pre-Award Conference	
5. Notice to Proceed	
6. Pre-Construction Meeting	
7. Weekly Construction Meetings	
8. Existing Utilities and Utility Coordination	
9. Protection of Existing Facilities	
10. Quality Control	
11. Dust Control	
12. Construction Water	
13. Clean-Up	
14. Construction Surveys and Staking	
15. Flexible Delineator Removal and Re-installation	
16. Excess Cover Material Removal	
17. Asphalt Distributor Truck Certification	
18. Maintenance of Traffic	
19. Contract Time	
20. Inclement Weather	
21. Order of Work Progression	
22. Work Hours	
23. Inspector's Overtime	
24. Equipment List/Schedule of Manpower/Construction Schedule	
25. Project Superintendent	
26. Construction Delays	
27. Chip Seal Warranty	
28. Final Pay Request	
29. Contractor Participation	
30. Responsibility	
31. Bituminous Pavement Removal by Millings	

- 32. Permits
- 33. Public Notification
- 34. Casting Frames & Covers
- 35. Concrete Structures
- 36. Staging of Materials
- 37. Work Areas
- 38. Additional Equipment Requirements
- 39. Cooperative Use of This Contract (A.K.A. Piggy-back Clause)

IV. Technical Specifications

ADOT Section 202 – Bituminous Pavement Removal	40
ADOT Section 404-1 – Single Chip Seal Coat (CRS-2P)	45
ADOT Section 701/706 – Removal and Installation of Raised Pavement Marker	49
ADOT Section 703 – Removal and Re-installation of Flexible Delineator	50
ADOT Section 704 – Thermoplastic Pavement Markings.....	51
ADOT Section 705 – Preformed Pavement Markings	52
ADOT Section 708 – Permanent Pavement Markings.....	53
ADOT Section 901 – Mobilization	55
 MAG Section 104 – Dust Control.....	56
MAG Section 303 – Fog Seal Coat	57
MAG Section 401 – Traffic Control	58
 ASPHALT RUBBER CHIP SEAL (SITE BLEND)	60
 QUALITY CONTROL AND TESTING	69
 ARIZ. 411.....	71
 CHINO VALLEY YARD MAP	74

V. Sample Documents for Viewing/Awarded Contractor Use (DO NOT SUBMIT WITH BID)

Contract	75
Contract Performance Warranty	79
Labor & Materials Bond.....	80
Performance Bond.....	81
Application and Certificate for Payment.....	82
Change Order Request Form.....	84
Blank Change Order Request Form	85

CALL FOR BIDS

Sealed bids will be received by the Board of Supervisors of Yavapai County, in the office of the Clerk of the Board of Supervisors, Room 310, Yavapai County Administrative Services Building, 1015 Fair Street, Prescott, Arizona until 1:30 p.m. (by the official clock located in the office of the Clerk of the Board of Supervisors), Thursday, April 21, 2016, for **CHIP SEAL (SUMMER, FY 2015-2016) IN YAVAPAI COUNTY, ARIZONA; PROJECT #1620882**. No bids will be accepted after 1:30 p.m. The bids will be publicly opened and read aloud at 2:00 p.m. on Thursday, April 21, 2016.

The scope of work for this project includes furnishing all labor, materials, equipment, fixtures, and services required for the placement of CRS-2P and asphalt-rubber single coat chip seal on existing paved roads within various areas throughout Yavapai County; all in accordance with the plans, specifications, and contract documents. Total estimated quantity of area to receive a CRS-2P chip seal is approximately 396,767 SY. Asphalt-rubber chip seal will be constructed on a portion of Pioneer Parkway (approximately 64,500 SY) following removal of the existing rubberized friction course by micro-milling. A fog seal coat shall be applied to all chip sealed roads. Re-establishing existing paint striping (where applicable) is also included in this contract.

There has been a MANDATORY prebid meeting scheduled for 9:00 a.m., Tuesday, April 12, 2016, in the Yavapai County Public Works Ready Room located at 1100 Commerce Drive, Prescott, AZ 86305. Any questions or concerns about the project will be addressed at that time.

Contract drawings and project manuals will be available by end of day Tuesday, March 29, 2016, at the following website:

<http://www.planroomdirect.com/group/yavapai-county-public-works-department>

All proposals shall be submitted in strict accordance with the **INSTRUCTIONS FOR BIDDING** included on the website and submitted on the documents provided therein. Bids shall include all applicable taxes and must be accompanied by a proposal guaranty in the form of a certified check, cashier's check, or surety bond in the amount of ten percent (10%) of the contract price bid, made payable to the Yavapai County Board of Supervisors.

Each proposal shall be submitted, either by hand, U.S. Postal Service, or other carrier to the Yavapai County Board of Supervisors, 1015 Fair Street, Room 310, Prescott, Arizona 86305. Yavapai County will not be responsible for those bids submitted that are not marked appropriately and/or sent to the wrong address.

Bidders are invited to be present at the opening of bids, but absence will not be considered cause for disqualification.

Bidders shall be responsible for any licenses or permits required by the regulatory agency of the State of Arizona that apply to the performance of this contract.

The Board of Supervisors of Yavapai County reserves the right to reject any or all bids, to waive formalities, and to accept the bid deemed to be in the best interest of Yavapai County.

Dated: March 24, 2016

/s/ Barbara Fox-Thomas, Deputy Clerk
Yavapai County Board of Supervisors

Publish:

Prescott Courier
March 27, 28, 29, 30, 2016
The Verde Independent
March 30, April 1, 2016

GENERAL PROVISIONS

PROPOSAL All standard specifications and details, unless otherwise noted, shall conform to "Uniform Standard Specifications for Public Works Construction", Maricopa Association of Governments (MAG), 1998, and all subsequent revisions thereto and Arizona Department of Transportation (ADOT) Standard Specifications for Road and Bridge Construction, 2008, and all subsequent revisions thereto, which are incorporated herein by reference.

BIDDING REQUIREMENTS AND CONDITIONS MAG Specifications Sections 102.1 through 102.14 are incorporated herein by reference, including:

Each bid submitted, either by hand, U.S. Postal Service, or other carrier, shall be submitted to the Yavapai County Board of Supervisors, 1015 Fair Street, Room 310, Prescott, Arizona, before the day and hour set for the submittal of bids in the Call for Bids. Bids shall be sealed and plainly marked with the title of the work and the name of the bidder. It is the SOLE responsibility of the bidder to see that his bid is received in proper time. Yavapai County will not be responsible for any bid not received in proper time and/or sent to the wrong address. Any bids received after the scheduled closing time for receipt of bids, by the official clock located in the office of the Clerk of the Board of Supervisors, will be returned to the bidder unopened.

BID SECURITY A bid bond in the amount of 10% of the bid shall be required at the time the bid or proposal is submitted, in the form of a certified check, cashiers check or surety bond and shall be in accordance with A.R.S. §34-201(A)(3).

WITHDRAWAL OF BID Any bidder may withdraw his bid, either personally or by telegraphic or written request, inclusive of facsimile, at any time prior to the scheduled closing time for receipt of bids.

PLANS & SPECIFICATIONS Plans, specifications and all other documents required by bidders may be obtained by electronic download from the internet at www.planroomdirect.com. It is the bidder's responsibility to check this website within 48 hours of bid opening to check for addenda and review the final project plans and documents for revisions prior to submitting their bid. No revisions to the project plans and documents will be posted online within 48 hours of the scheduled bid opening. Yavapai County will not be supplying bidders with hard copies of the project plans and documents. It will be the Bidder's responsibility to contract printing services for hard copies of the project plans and documents.

ARIZONA CONTRACTOR'S LICENSE Prior to submission of bids, bidders must have a valid Arizona Contractor's License of a type which meets all criteria and requirements to perform the work as specified in the contract documents in accordance with the Arizona Registrar of Contractors.

CONTRACTOR PARTICIPATION A minimum of 50% of the work must be accomplished directly by the bidding contractor.

INTERPRETATION OF PLANS AND DOCUMENTS MAG Specifications, Section 102.4, are incorporated herein by reference including: If any person contemplating submitting a bid for the proposed Contract is in doubt as to the true meaning of any part of the Plans, Specifications, or other proposed Contract Documents, or finds discrepancies in or omission from the Plans or Specifications, he shall submit to the Yavapai County Public Works Director a written request for an interpretation or correction thereof no later than five working days before the bid opening. The person submitting the request will be responsible for its prompt delivery. Any interpretation or correction of the proposed documents will be made or delivered to each person receiving a set of such documents. Interested bidders may call or visit the office of the Yavapai County Public Works Director.

INFORMATION ON BID OPENING Information regarding the bid opening will not be available until at least 24 hours following the opening.

AWARD AND EXECUTION OF CONTRACT MAG Specifications, Section 103.1 through 103.8, are incorporated herein by reference, except as expressly modified herein, including the following:

Pre-Award Conference - A pre-award conference will be scheduled by the Owner. Attendance of the Contractor is required at the scheduled place and time. Telephone conferences will not be considered.

Equipment List/Schedule of Manpower/Construction Schedule – The Contractor shall provide a list of equipment and a schedule of manpower to be utilized on this project, and a detailed construction schedule. The lists and schedules submitted shall identify manpower and equipment sufficient to demonstrate ability to accomplish the scope of work during the term of the contract, and are subject to review and approval by the Owner prior to award.

Award of Contract paragraph, 103.3 to be revised as follows:

The Contract will be awarded to the lowest qualified bidder complying with these instructions and with the Call for Bids. Past performance on county projects or other public projects will be evaluated in awarding contracts, and Yavapai County may decide to award to a contractor who is not the lowest bidder. Yavapai County, therefore, reserves the right to accept or reject any or all bids if it deems it best for the public good, and to waive any informality in the bids received. Deviations from County (Owner) specifications may result in rejection of bid. The award, if made, will be within sixty (60) calendar days after the opening of bids.

ASSIGNMENT OF PAYMENTS MAG Specifications Section 109.3, including assignment of contract clause in the “Information to Bidders” in this set of specifications are incorporated herein by reference.

NOTICE TO PROCEED The Contractor or subcontractor shall not work on any part of the project or incur any expenses or obligations until a Notice to Proceed has been issued by the County. The County is not responsible for any costs incurred prior to issuance of the Notice to

Proceed. The Notice to Proceed will be sent to the Contractor by first class mail or delivered to him in person.

ASSIGNMENT OF CONTRACT Any attempted partial or full assignment by the Contractor of any contract to be entered into hereunder, or any part thereof, or of funds received there-under by the Contractor, will have no legal effect nor will it be recognized by the County unless such assignment has had prior written approval of the Yavapai County Board of Supervisors and surety has been given due notice of such assignment in writing and has consented thereto in writing.

NON-PERFORMANCE OF WORK TASKS BY THE CONTRACTOR If the Contractor fails, neglects, or refuses to perform work tasks necessary for the completion of the total job; to replace defective work or to repair or resurface, in a manner that is acceptable to the Public Works Director; public rights-of-way disturbed by his work which are a nuisance, hazard, impedes or endangers vehicular traffic and the public; the Public Works Director may serve written notice upon the Contractor if its intention to have the work performed by others. Unless, within three (3) calendar days after the service of such notice, the Contractor has made such arrangement and scheduled the accomplishment of said work tasks to the satisfaction of the Public Works Director, The County will proceed to have the work accomplished by others or by itself and deduct the costs thereof from amounts due to the Contractor.

INDEMNIFICATION OF COUNTY AGAINST LIABILITY The Contractor agrees to indemnify and save harmless Yavapai County, and its employees, officers, agents and representatives from all suits, including attorneys fees and cost of litigation, actions, loss, damage, expense, cost or claims, of any character or any nature arising out of the work done in fulfillment of the construction of the improvement under the terms of this contract or on account of any act, claim or amount whether arising or recovered under Workmen's Compensation law or arising out of the failure of the Contractor or those acting under Contractor to conform to any statutes, ordinance, regulation, law or court decree. It is the intent of the parties to this contract that Yavapai County shall, in all instances, be indemnified against all liability, losses and damages of any nature whatever for or on account of any injuries to or death of persons or damages to or destruction of property arising out of or in any way connected with the performance of this contract, whether the liability, loss or damage is caused by, or alleged to be caused in whole or in part by the negligence or fault of the Contractor or of its officers, agents, employees, or subcontractors. The Contractor shall not be obligated to hold harmless or indemnify Yavapai County for damage caused by Yavapai County, its departments agents or employees.

WAIVER OF JURY TRIAL The parties hereto expressly covenant and agree that in the event of a dispute arising from this contract, each of the parties hereto waive any rights to a trial by jury. In the event of litigation, the parties hereby agree to submit to a trial before the Court. The Contractor further agrees that this provision shall be contained in all subcontracts related to the project which is the subject of this contract.

WAIVER OF ATTORNEYS FEES The parties hereto expressly covenant and agree that in the event of litigation arising from this Contract, neither party shall be entitled to an award of

attorneys fees, except as expressly provided herein, either pursuant to the contract, pursuant to A.R.S. §12-341.01(A) and (B), or pursuant to any other state or federal statute. The Contractor further agrees that this provision shall be contained in all subcontracts related to the project that is the subject of this contract.

DEFINITIONS MAG Specifications Section 101.2 are incorporated herein by reference including:

- A. **AWARD** The formal action of the governing body in accepting a bid.
- B. **BID SECURITY** Refers to the certified check, cashiers check, or surety bond, which is required to be submitted with the bid to ensure execution of the contract and the furnishing of the required bonds and contract documents.
- C. **OWNER** Yavapai County.
- D. **COUNTY** Yavapai County.
- E. **COUNTY'S REPRESENTATIVE** The authorized representative of the County, which may be an individual or a firm, or his assistants assigned to the project work, the project site, or any part thereof during the performance of the work by the Contractor and until final acceptance.
- F. **PUBLIC WORKS DIRECTOR** The Yavapai County Public Works Director or his designee, representative, or assistants.
- G. **DESIGN ENGINEER** The firm or person and his properly authorized assistants designated by the County to prepare Plans and Specifications for the work.
- H. **CALL FOR BIDS** Refers to the standard forms inviting bids.
- I. **ADDENDA** MAG Specifications, Section 102.1 through 102.13 including: Any Addenda issued during the time of bidding, forming a part of the documents issued to the bidder for the preparation of his bid, shall be covered in the bid and shall be made a part of the contract.

INSTRUCTIONS FOR PREPARING PROPOSAL

EXAMINATION BY BIDDERS At its own expense and prior to submitting its bid, each bidder shall (a) examine the Contract Documents, (b) visit the site and determine the local conditions which in any way affect the performance of the work, including prevailing wages and other pertaining cost factors, (c) familiarize himself with all Federal, State, and local laws, ordinances, rules, regulations and codes affecting the performance of the work, including the cost of permits and licenses required for the work, (d) make such surveys and investigation, including investigation of subsurface or latent physical conditions at the site where the work is to be performed, as may be reasonably necessary for performance of the work, at its bid price within

the terms of the Contract Documents, (e) determine the character, quality, and quantities of the work to be performed and the materials and equipment to be provided, and (f) correlate its observations, investigations, and determinations with the requirements of the Contract Documents. The Contract Documents contain the conditions, surveys, and other data used in the design of the work.

Payment for all work performed under this contract shall be based on the units as shown on the Bidding Schedule. Payment of the bid items as stated in the Contractor's bid for the completed work, shall be compensation in full for furnishing of all overhead, labor, materials, devices, equipment and appurtenances included in the work as are necessary to complete the total work under this contract in a good, neat, and satisfactory manner as indicated on the Plans, as described in the Specifications, and as otherwise implied or required to fulfill the objective of the work. It is the intent of the contract that maximum payments shall not exceed the agreed unit price(s) without duly authorized change orders, in the manner specified herein. Each item, fixture, piece of equipment, work, etc., as indicated on the Plans, or specified anywhere in these documents shall be completed with all necessary connections and appurtenances for the satisfactory use and operation of said item, and the total system or systems.

Any and all patents, license fees, permits, insurance premiums, etc., for the right to use equipment or processes included in this contract shall be included in the bid price, and shall include all applicable taxes.

Cost of testing, and other incidental operations, profit and overhead cost, including the cost of supervision, temporary field offices, move-in, move-out, insurance, taxes, equipment not a permanent part of the job, and other incidental items, shall be included in the bid price.

The *Total Amount Bid* must be filled out by the bidder both in numerals and in words. In case of any discrepancy between the price in numerals and price in written words, as written or corrected, the price in written words shall be presumed to be correct unless obviously in error, and shall be considered as the Contractor's correct and intended bid.

Bids shall not contain any recapitulations for the work to be done. Alternative bids will not be considered unless specifically called for. If anyone is in doubt as to the true meaning of any part of the Plans, Specifications, or other Contract Documents, or finds discrepancies in, or omissions from the Plans or Specifications, he must submit to the Public Works Director a written request, a minimum of 72 hours prior to the scheduled bid opening, for an interpretation or correction thereof. The person submitting the request will be responsible for its prompt delivery.

Any interpretation or correction of the Contract Documents will be made only by an Addendum duly issued by the County and posted on www.planroomdirect.com no later than 48 hours prior to the scheduled bid opening. The County will not be responsible for any other explanations or interpretations of the documents.

If the bid is made by an individual, it shall be signed and his full name and address shall be given. If it is made by a partnership, it shall be signed with the partnership name and by a general partner of the firm who shall also sign his own name, and the name and address of each partner

shall be given; and, if it is made by a corporation, the name of the corporation shall be signed by its duly authorized officer or officers.

AWARD AND EXECUTION OF CONTRACT

INSURANCE In accordance with MAG Specification Section 103.6, which is incorporated herein by reference, the Contractor shall provide proof of the following types of insurance required under this Contract with minimum limits as described herein:

- A. Comprehensive General Liability insurance for injuries, including accidental death, to any one person in an amount not less than \$1,000,000. Subject to the same limits on account of one accident, in a total amount not less than \$1,000,000.

Such policy shall include coverage for the following:

1. Injury to or destruction of any property arising out of the collapse of or structural injury to any building or structure due to grading of land, excavation, borrowing, filling, backfilling, tunneling, pile driving, cofferdam work or caisson work.
 2. Injury to or destruction of wires, conduits, pipes, mains, sewers, or other similar property or any apparatus in connection therewith, below or above the surface of the ground, if such injury or destruction is caused by and occurs during the use of mechanical equipment for the purpose of grading land, paving, excavating, drilling, or injury to or destruction of any property at any time resulting therefrom.
 3. Injury to or destruction of any property arising out of blasting or explosion.
- B. Automobile Liability and Property Damage insurance to cover each automobile, truck, and other vehicle used in the performance of the contract in an amount of not less than \$1,000,000 for one person, and \$1,000,000 for more than one person, and property damage in the sum of \$1,000,000 resulting from any one accident which may arise from the operations of the Contractor in performing the work provided herein. This coverage shall include all owned, hired and non-owned vehicles.
- C. Builders Risk, including an endorsement for fire and extended coverage, vandalism, malicious mischief, earthquake, landslide, flood, collapse or loss due to the results of faulty workmanship during the contract time and until final acceptance of work by the County in an amount not less than ONE HUNDRED PERCENT (100%) of the contract price. The entire project covered by this Contract will be at the Contractor's risk until final acceptance by the County.

For all policies listed in paragraphs A, B and C above, Yavapai County shall be named as an additional insured on the Certificate of Insurance.

- D. Worker's Compensation and Employer's Liability. Statutory coverage for Workers Compensation and Employer's Liability in an amount not less than \$1,000,000.

For the policies listed in paragraph D, Yavapai County shall be named as a certificate holder. The Contractor is required to provide a letter of certification from the Arizona Industrial Commission or its insurance agent evidencing coverage.

The certificates shall identify the contract number and title and evidence coverage by an insurance company authorized to transact business in the State of Arizona and rated Best A8 or better as currently listed in the most recent Best Key Rating Guide, published by the A.M. Best Company. All required insurance shall be maintained during the life of the contract. No policy shall expire, be canceled or materially changed to affect the coverage available to the County during the life of the contract. If an insurance policy expires during the life of the contract, the Contractor shall provide a renewal certificate to the County not less than thirty (30) days prior to the expiration date.

COMMENCEMENT, PROSECUTION AND PROGRESS

COMMENCEMENT The Contractor shall commence work on or before the tenth (10th) calendar day from the date specified in the Notice to Proceed. All work under the contract shall be completed within the period of time specified in the contract documents. The County reserves the right to issue Notice to Proceed at any time between zero (0) and sixty (60) days after contract award. Notice to Proceed will be issued not later than sixty (60) calendar days after the contract has been awarded, unless otherwise agreed upon in writing, or as may be specified in the contract documents. In addition, the Contractor shall not commence work until all required documents, bonds, plans and schedules have been received and approved by the County. These submittals will not affect the issuance of Notice to Proceed by the County.

PUBLIC NOTICE Contractor shall issue written notification to those residents and businesses affected by the work. This notification shall contain at a minimum, 1) Type Of Work; 2) Contractor; 3) Contractor's Phone Number and Point of Contact; 4) Duration of Project, including days and hours of operations; 5) Date Project Commences; 6) Description of Project Site; 7) Contractor's after hours Point of Contact and phone number. The Contractor shall install a sign at all ends of the project giving a contact number for the contractor where issues and concerns will be addressed. The signs shall be maintained throughout the construction period and shall be of sufficient size and shall be installed at locations acceptable to the Owner.

MITIGATING COMPLAINTS It shall be the responsibility of the Contractor to promptly answer and resolve all complaints from residents and businesses. The Contractor shall take all reasonable actions to mitigate all complaints of residents and businesses resulting from his operation or traffic control to the satisfaction of the Owner at no expense to the Owner.

SUBCONTRACTORS MAG Specifications Section 108.2 are incorporated herein by reference including: All subcontractors and purchase orders for equipment shall state and establish guaranteed delivery dates, at such times as determined by the Contractor, that will allow the Contractor to complete the project within the contract time.

CONTRACTOR'S REPRESENTATIVE AND EMERGENCIES MAG Specifications, Section 105.5, are incorporated herein by reference including: Plans and specifications to successful bidder clause in the "Information to Bidders" in this set of specifications.

CONTRACTOR DOCUMENTS

- A. The Contractor shall keep at the work site a copy of the Contract Documents and shall at all times give the Public Works Director access thereto.
- B. The Call for Bids, Information to Bidders, Special Conditions, Specifications, Plans, and all supplementary documents are intended to be a complete and complementary statement of the contract between the parties, and to prescribe a complete work. If any omissions are made of information necessary to carry out the full intent and meaning of the contract documents, the Contractor shall immediately call the matter to the attention of the Public Works Director for furnishing of detailed instructions. Figured dimensions shall govern over scaled dimensions.
- C. Any drawings or plans listed anywhere in the specifications or Addenda thereto shall be regarded as a part thereof and of the contract. Anything mentioned in these specifications and not indicated on the plans, or anything indicated on the plans and not mentioned in these specifications shall be in the same force and effect as if indicated or mentioned in both.

ADDENDA, REVISIONS AND SUPPLEMENTARY DRAWINGS

- A. The work shall conform to such other drawings relating thereto as may be furnished by the County prior to the opening of bids, and to such drawings in the explanation of details or minor modifications as may be furnished from time to time during construction, including such minor modifications as the Public Works Director may consider necessary during the prosecution of the work.
- B. Scaled dimensions shall not be used in the construction of the work.

ERROR AND OMISSIONS The written dimensions on the plans are presumed to be correct, but the Contractor shall be required to check carefully all dimensions before beginning work. If any errors or omissions are discovered, the Public Works Director shall be so advised in writing and will make the proper corrections. Any adjustments made by the Contractor without prior review and acceptance shall be at his own risk, and the settlement of any complications or disputed expenses arising from such adjustment(s) shall be made by the Contractor, at his own expense.

CHARACTER OF WORKMEN MAG Specifications, Section 108.6 are incorporated herein by reference, including: Yavapai County requires all workmen on the project be a minimum of 18 years of age and have a valid drivers license. Yavapai County reserves the right to spot check for valid drivers licenses.

SUSPENSION OF WORK

- A. The Public Works Director shall have the authority to suspend the work wholly or in part, for such period as he may deem necessary, due to unsuitable weather, or to such other conditions as are considered unfavorable for the suitable prosecution of the work, or for such time as he may deem necessary due to the failure on the part of the Contractor to carry out orders given, or to perform any provisions of the Contract. The Contractor shall immediately comply with the written order of the Public Works Director to suspend work wholly or in part. The suspended work shall be resumed when conditions are favorable and methods are corrected, as reviewed and accepted in writing by the Public Works Director.
- B. In case of suspension of work from any cause whatever, the Contractor shall be responsible for materials and shall properly store them if necessary and shall provide suitable drainage and erect temporary structures where necessary.

DELAYS AND EXTENSION OF TIME MAG Specifications, Section 108.7 are incorporated herein by reference, including:

- A. It is the Contractor's responsibility to establish construction methods and a construction schedule which will facilitate the completion of work required by this Contract within the contract period and with full consideration for the season and known conditions, details, and circumstances surrounding the work required under this contract during which the work is scheduled.
- B. To receive consideration for an extension of time, a request must be made in writing to the Public Works Director stating the reason for said request and such request must be received by the Public Works Director. The extension of time allowed shall be as determined by the Public Works Director. In setting contract time, it has been assumed that up to four (4) ten-hour working days may be lost as a result of weather conditions which will slow down the normal progress of work; therefore no extension in contract time will be allowed for the first four (4) ten-hour working days lost due to bad weather conditions. An extension of time may be granted by the County after the expiration of the time originally fixed in the contract or as previously extended, and the extension so granted shall be deemed to commence and be effective from the date of such expiration.
- C. Any event for which the contractor feels entitled to additional time shall be requested in writing within ten (10) days of occurrence of the event for consideration by the Public Works Director. The decision of the Public Works Director shall be final. If a request for additional contract time is not received within ten (10) days of occurrence of the event, additional time will not be granted.
- D. Any extension of time shall not release the sureties upon any bond required under the contract. Extensions of time in and of themselves will not be a basis for request of additional compensation by the Contractor.

TERMINATION MAG Specifications, Section 108.10 and 108.11 are incorporated herein by reference, including: This agreement is subject to cancellation, including but not limited to, A.R.S. §38-511. The foregoing provisions are in addition to and not in limitation of any other rights or remedies available to the County.

METHODS AND EQUIPMENT MAG Specifications, Section 108.6 are incorporated herein by reference, including:

- A. The methods and equipment adopted by the Contractor shall be such as will secure a satisfactory quality of work and will enable the Contractor to complete the work in the time agreed upon. The selection and use of these methods and equipment is the responsibility of the Contractor.
- B. Where applicable, the Contractor is responsible for all embankment construction and/or subgrade preparation identified in the plans and specifications. Embankment construction and/or subgrade preparation shall be accomplished by utilizing equipment to include but shall not be limited to an 815 Caterpillar Sheepsfoot Roller(s) or an approved equal. This will represent a minimum requirement. Any additional equipment proposed will be subject to review and approval by the County Engineer. All embankment and/or subgrade material shall be within 2% below to 1% above optimum moisture content.
- C. All paving operations identified in the plans and specifications shall be accomplished by the Contractor utilizing equipment to include but shall not be limited to 2 (two) steel wheel rollers and 1 (one) pneumatic roller of a type and size approved by the Owner. The paving equipment shall be on site with operators during all paving operations.
- D. Contractor will be required to use a material transfer device for all mainline paving.

DATE OF ACTUAL COMPLETION The date upon which the project will be considered as complete shall be that date upon which the work is accepted by the County.

FINAL ACCEPTANCE MAG Specifications, Section 105.15 (B) are incorporated herein by reference including: No partial acceptance of any portion of the work will be made and no acceptance other than the final acceptance of the overall completed project shall be construed as final acceptance of any part until the overall final acceptance by the County is made.

SAFETY, HEALTH AND SANITATION PROVISIONS MAG Specifications Section 107.5 are incorporated herein by reference, including:

- A. The Contractor shall provide suitable and adequate sanitary conveniences for the use of all persons employed on the project. All sanitary conveniences shall conform to the regulations of the public authority having jurisdiction over such matters. At the completion of the project, all such sanitary conveniences shall be removed and the premises left in a sanitary condition.

- B. On all projects, with respect to sanitation facilities, for which Federal funds are allocated, the Contractor shall cooperate with and follow direction of representatives of the Health Service and the State and County public health service representatives shall have access to the work wherever it is in preparation or progress and the Contractor shall provide proper facilities for such access and inspection.

TRAFFIC CONTROL Traffic control is the responsibility of the Contractor and shall be in accordance with MAG Specifications, Section 401, referencing MUTCD Part VI which are incorporated herein by reference. The Contractor shall submit to the County, for approval, a traffic control plan for all activities connected with the proposed work.

WATER

- A. The Contractor shall supply adequate, pure cooling drinking water with individual drinking cups for the use of employees on this construction. The quality of drinking water shall meet the Standards for Public Water Supplies specified in the State Health Department Code.
- B. It shall be the responsibility of the Contractor to provide, maintain, at his own expense, an adequate supply of water for his use for construction and to install and maintain necessary supply connections and piping for same. Before final acceptance of the completed project, all temporary connections and piping installed by the Contractor shall be removed.

PROTECTION OF WORK MAG Specifications, Section 107.10 are incorporated herein by reference.

ELECTRIC POWER It shall be the responsibility of the Contractor to supply electrical generators or make arrangements with an electric power company to supply electrical power to the site should the Contractor need electricity.

CONSTRUCTION WATER SOURCE It shall be the responsibility of the Contractor to obtain a water source for his water usage on the site.

REMOVAL OF OBJECTIONABLE MATERIAL MAG Specifications, Section 201, except as modified herein are incorporated herein by reference.

ROCK EXCAVATION Excavation shall include removal of any rock encountered during the construction. Removal of rock encountered during construction shall be considered as included in the unit prices bid and shall not require additional compensation.

MOBILIZATION The work under this section shall be in accordance with Section 901 of ADOT standard specifications are incorporated herein by reference, except as modified herein. No measurement or special payment will be made for this item and costs shall be absorbed within other items in this contract.

CLEANUP AND DUST CONTROL MAG Specifications, Sections 104.1.3 and 104.1.4, including agency landfills are incorporated herein by reference including:

- A. It is the Contractor's responsibility to minimize dust during all phases of this project by taking all precautions necessary. In the event that it is determined by the Public Works Director that control of dust is not sufficient, the work will be terminated until the issue is resolved to the satisfaction of the Public Works Director. Yavapai County will not be responsible for any costs or construction delays incurred for termination or suspension of work due to insufficient dust control measures.
- B. Salvage material shall be stored at areas designated by the Public Works Director.
- C. Materials not salvaged shall be disposed of properly at a location and in a manner acceptable to the Public Works Director.
- D. The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by his operations. At the completion of the work, the Contractor shall remove all equipment, tools, and surplus materials. The Contractor shall completely clean the premises, removing and disposing of all debris and rubbish, and cleaning all stains, spots, marks, dirt, smears, etc. When work premises are turned over to the County, they shall be thoroughly cleaned and ready for immediate use.

GUARANTEE OF WORK MAG Specifications, Section 108.8 are incorporated herein by reference, including: amending guarantee and warrantee period from one year to two years, and including: All portions of the work under this contract shall be guaranteed for workmanship and materials for a period two years from the date of final acceptance of the product by the Owner. During the two (2) year guarantee period, should the Contractor fail to remedy defective material and/or workmanship, or make replacements within five (5) calendar days after written notice by the County, it is agreed that the County may make such repairs and replacements and the actual cost of the required labor and materials shall be chargeable to and payable by the Contractor.

CONTINGENCIES All loss or damage arising from obstruction or difficulties which may be encountered in the prosecution of the work, from the action of the elements, or from any act or omission on the part of the Contractor or any person or agent employed by him shall be borne by the Contractor.

NOTICE AND SERVICE THEREOF Any notice to the Contractor from the County relative to any part of this contract shall be in writing and considered delivered and the service thereof completed when said notice is posted, by first class mail, to the said Contractor at his last given address, or delivered in person or by facsimile to said Contractor or his authorized representative on the work.

PROJECT MEETINGS It shall be the responsibility of the Contractor to conduct meetings weekly, or at such other time(s) as may be determined by the Public Works Director, which shall

be attended by representatives of Subcontractors, utilities, the Owner and other interested parties for the purpose of keeping the project on schedule and to provide necessary coordination of the work of the various parties. The weekly construction meetings must be attended by the Project Superintendent.

CONSTRUCTION SCHEDULE Per MAG Specifications, Section 108.4 and Section 108.5, which are incorporated herein by reference including: The Construction Schedule shall indicate the time to starting and completing each major phase of the project and such intermediate phases as will serve for well defined control points. It shall also indicate the major items of equipment, and all items of equipment receipt and installation of which is critical to the scheduled progress of the project. Updated schedules shall be submitted bi-weekly.

ACCIDENT PREVENTION MAG Specifications, Section 107.5 and 107.6 are incorporated herein by reference including:

- A. Machinery, equipment and other hazards shall be guarded or eliminated in accordance with the safety provisions of the Manual of Accident Prevention in Construction published by the Associated General Contractors of America, and the requirements of the Occupational Safety and Health Administration.
- B. First aid facilities and information posters conforming at least to the minimum requirements of the Occupational Safety and Health Administration shall be provided in a readily accessible location or locations.
- C. The Contractor shall make all reports as are, or may be, required by the Public Works Director or any authority having jurisdiction, and permit all safety inspection of the work being performed under this contract. Before proceeding with any construction work, the Contractor shall take all necessary action to comply with all provisions for safety and accident prevention. In the event the Contractor fails to comply with said safety provisions or directions of the Public Work Director, the Public Works Director without prejudice to any other right of the County, may issue an order stopping all or any part of the work. Thereafter, a start order for resumption of the work may be issued at the discretion of the Public Works Director when in his opinion the defection from safety requirements has been corrected. The Contractor shall make no claim for an extension of time or for compensation or damages by reason of or in connection with such work stoppage.

CONSTRUCTION FACILITIES All construction hoists, elevators, scaffolds, stages, shoring, and similar temporary facilities shall be of ample size and capacity to adequately support and/or move the loads to which they will be subjected. All railings, enclosures, safety devices, and controls required by law or for adequate protection of life and property shall be provided.

TEMPORARY FACILITIES The Contractor shall provide all temporary facilities and utilities required for prosecution of the work; protection of employees and the public; protection of the work from damage by fire, weather or vandalism; and such other facilities as may be specified or required by any legally applicable law, ordinance, rule, or regulation.

WARNING DEVICES AND BARRICADES Per MAG Specifications, Section 107.7 which are incorporated herein by reference

HAZARDS IN PUBLIC RIGHT-OF-WAY Per MAG Specifications, Section 107.7 which are incorporated herein by reference

HAZARDS IN PROTECTED AREAS Excavations on project sites from which the public is to be excluded shall be marked or guarded in a manner appropriate for the hazard.

PROTECTION OF EXISTING ITEMS The Contractor shall protect all existing structures, trees, shrubs, and other items on the project site that are to be preserved, by substantial barricades or other devices commensurate with the hazard, from injury or destruction by vehicles, equipment, workmen, or other agents.

PROJECT SECURITY The Contractor shall make adequate provision, subject to the approval of the Public Works Director, to protect the project and Contractor's facilities from fire, theft, and vandalism, and the public from unnecessary exposure to injury.

FIRE EXTINGUISHER At least one (1) fire extinguisher, rated at least 2A, shall be provided on the job site, and at all times sufficient fire suppression equipment and materials as designated by the U.S. Forest Service and Yavapai County. The Contractor shall perform the work to avoid any possibilities of wildfire.

OFF SITE ROADS Except as otherwise shown or specified, off site access roads shall be adequately maintained, graded-earth roads. Such roads shall be built only in the public right-of-way or easements obtained by the County. If the Contractor elects to build along some other alignment, he shall obtain, without additional cost to the County, necessary rights-of-way or easements.

NOISE ABATEMENT In inhabited areas, particularly residential, operations shall be performed in a manner to minimize unnecessary noise generation. Particular consideration shall be given to noise generated by repair and service activities during night hours in residential areas. No repair or service activities shall be conducted between the hours of 10:00 p.m. and 6:00 a.m, unless otherwise specified.

DRAINAGE CONTROL In excavation, fill, and grading operations, care shall be taken to disturb the pre-existing drainage pattern as little as possible. Particular care shall be taken not to direct drainage water onto private property or into streets or drainage ways inadequate for the increased flow.

PROJECT CLOSE-OUT It is a requirement of these Specifications and Contract Documents that the Contractor shall deliver a complete and operable facility capable of performing its intended functions and ready for use.

WASTE DISPOSAL

- A. The Contractor shall provide for the disposal of all surplus materials, waste products, debris, etc., and shall make necessary arrangements and pay all fees to provide for proper disposal. The Contractor shall obtain written permission from property owner(s) and all applicable agencies prior to disposing of any surplus materials, waste products, debris, etc., on private property, and shall also obtain the approval of the Public Works Director and all applicable agencies prior to such disposal.
- B. The Public Works Director will not approve the filling of ditches, washes, drainage ways, *unless* designated in the plans and specifications.
- C. The Public Works Director will not approve disposal operations which will, in his opinion, create unsightly and/or unsanitary nuisances.
- D. The Contractor shall maintain the disposal site(s) in a reasonable condition of appearance and safety during the construction period as required by the Public Works Director. Prior to final acceptance of the project, the Contractor shall have completed the leveling and cleanup of the disposal site(s) to the satisfaction of the Public Works Director.

PROJECT RECORD DOCUMENTS The Contractor shall maintain at the site, available to the County, one (1) copy of all Drawings, Specifications, Addenda, approved Shop Drawings, Change Orders, and other modifications in good order and marked to record all changes made during construction. Record drawings for all improvements are to be prepared by a Registered Land Surveyor and submitted to the Owner for acceptance prior to final acceptance of the project. The record drawings shall be prepared on a set of reproducible mylar copies of the construction plans. The completed drawings shall be signed and sealed by the Registered Land Surveyor responsible for obtaining the As-Built information and preparing the record drawings. These shall be delivered to the County upon completion of the Project or the earlier termination of the contract.

Contractor shall provide certified As-Built drawings prepared by an Arizona Registrant for all drainage, road and bridge construction.

CONTROL OF WORK

ABBREVIATIONS MAG Specifications, Section 101.1 are incorporated herein by reference, including abbreviations as shown on the Plans.

AUTHORITY AND DUTIES OF INSPECTOR Per MAG Specifications, Section 105.9, which are incorporated herein by reference including: An inspector is to be assigned to the project by the County to monitor the project and to keep the Public Works Director informed as to the progress of the work and the manner in which it is being done. Additionally, the inspector will call the Contractor's attention to any non-conformance with the Plans and Specifications. He will not be authorized to approve or accept any portion of the work or to act as foreman for

the Contractor. The inspector will exercise such additional authority only as may from time to time be delegated to him by the Public Works Director.

INSPECTION MAG Specifications, Section 105.10 are incorporated herein by reference, including: Inspection is to be done by the Public Works Department. The Contractor shall furnish the Public Works Director with every reasonable facility for ascertaining whether or not the work is performed is in accordance with the requirements and intent of the Specifications and Contract. If the Public Works Director requests it, the Contractor at any time before acceptance or the work shall remove or uncover such portion of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standards required by the Specifications. The uncovering or removing and replacing of the covering or making good of the parts removed shall be at the Contractor's expense. Inspection or supervision by the Public Works Director shall not be considered as direct control of the individual workman and his work. The direct control shall be solely the responsibility of the Contractor's foreman and superintendent.

PROJECT SUPERINTENDENT The Contractor's Project Superintendent must be on site at all times during performance of the work.

CONSTRUCTION SCHEDULE

- A. Prior to the commencement of the work the Contractor shall prepare and submit to the Public Works Director for review, a written schedule covering the general sequence of the work to be performed on a weekly basis. The work schedule, after review and acceptance by the Public Works Director, shall not be changed without written consent of the Public Works Director. The Contractor shall assume the full responsibility for performing the work in an orderly procedure under the Contract. In addition the contractor will supply a detailed 2-week schedule updated on a weekly basis detailing all construction activities to be performed during that time period on a daily basis.
- B. The construction schedule shall serve as an index of progress prosecution as contemplated by the Contractor. In the event the actual construction progress varies substantially from the scheduled progress, the Public Works Director will require and the Contractor shall be required, within ten (10) calendar days written notice, to provide a revised construction schedule, giving in detail the particular changes in production as estimated by the Contractor to complete the work within the specified Contract Time. Time is of the essence in this regard.

CONTRACT TIME Completion of work under this contract shall be on a working day schedule. A working day is a calendar day, exclusive of Fridays, Saturdays, Sundays and legal holidays recognized by the Owner. Work hours shall be within the hours of 7:00 a.m. to 7:00 p.m., and not more than 40 hours per week unless otherwise approved by the Public Works Director in writing. The Contractor and all its subcontractors shall work the same hours.

INSPECTOR OVERTIME Any overtime hours accrued by the Owner's inspector due to the scheduling of the Contractor or any of its subcontractors shall be reimbursed to the Owner by the

contractor at a rate of \$90.00 per hour. Reimbursement shall be achieved through deductions for inspector overtime from contractor pay requests.

AUTHORITY OF THE ENGINEER MAG Specifications, Section 105.1 are incorporated herein by reference, with the following exception: References to “the Engineer” shall mean Public Works Director.

FORMAL PROTEST If the Contractor considers any work demanded of him to be outside the requirements of the Contract, or if he considers any instructions, ruling, or decision of the Public Works Director to be unfair, he shall, within ten (10) calendar days after such demand is made, or instruction, ruling or decision is given, file a written protest with the Public Works Director, stating clearly and in detail his objections and the reasons therefore. Except for such protests as are made of record in the manner and within the time above stated, the Contractor shall be deemed to have waived and does hereby waive all claims for extra work, damages, and extensions of time resulting from demands, instructions, rulings and decisions of the Public Works Director. Upon receipt of any such protest from the Contractor, the Public Works Director shall review the demand, instructions, rulings, or decisions objected to and shall promptly advise the Contractor in writing of his final decision, which shall be binding, unless within ten (10) calendar days thereafter the Contractor shall file with the Public Works Director a formal protest against said final decision of the Public Works Director. The Public Works Director shall consider and render a final decision of any protest within thirty (30) calendar days of receipt of same.

PLANS

- A. The Contract Plans consist of general drawings. These indicate such details as are necessary to give a comprehensive idea of the construction contemplated. All authorized alterations affecting the requirements and information given on the Contract Plans shall be in writing. The Contract Plans shall be supplemented by such working or shop drawings prepared by the Contractor as are necessary to adequately perform and control the work. No change shall be made by the Contractor in any working or shop drawing after it has been accepted by the Public Works Director.
- B. The Contractor shall keep a copy of the Plans and Specifications at the job site, and shall at all times give the Public Works Director access thereto. Any drawings or plans listed in the Detailed Specifications shall be regarded as a part thereof and the Public Works Director will furnish from time to time such additional drawings, plans, profiles, and information as he may consider necessary for the Contractor’s guidance.
- C. All authorized alterations affecting the requirements and information given on the accepted plans shall be in writing. No changes shall be made of any plan or drawing after the same has been accepted by the Public Works Director except by consent of the Public Works Director in writing.

CONFORMITY WITH PLANS AND ALLOWABLE DEVIATIONS MAG Specifications, Section 105.3 are incorporated herein by reference.

COORDINATION AND INTERPRETATION OF PLANS AND SPECIFICATIONS

MAG Specifications, Section 105.4 are incorporated herein by reference, including:

- A. In the event of any doubt or question arising regarding the true meaning of these Specifications, the Special Conditions, or the Plans, reference shall be made to the Public Works Director, whose decision thereon shall be final. In the event of any discrepancy between any drawing and the figures written thereon, the figures shall be taken as correct.
- B. In the event of there being a conflict between one contract document and any other contract documents, the document highest in precedence shall control and supersede the document which is contrary to it. The order of precedence of the contract documents is as follows:
 - 1. Supplemental Agreements/Change Orders, the last in time being the first in precedence
 - 2. The formal Contract
 - 3. Call for Bids
 - 4. Instructions for Bidding
 - 5. Special Provisions
 - 6. Technical Specifications
 - 7. Plans
 - 8. General Provisions
 - 9. Contractor Proposal

ORDER OF WORK

- A. When required by the Contract Documents, the Contractor shall follow the sequence of operations as set forth therein.
- B. Full compensation for conforming with such requirements will be considered as included in the prices paid for contract items of work and no additional compensation will be allowed.

REMOVAL OF UNACCEPTABLE OR UNAUTHORIZED WORK MAG Specifications, Section 105.11 are incorporated herein by reference.

CONSTRUCTION STAKES, LINES AND GRADES MAG Specifications, Section 105.8 are incorporated herein by reference.

MAINTENANCE DURING CONSTRUCTION MAG Specifications, Section 105.12 are incorporated herein by reference.

UTILITIES MAG Specifications, Section 107.11 are incorporated herein by reference.

EXISTING UTILITIES AND UTILITY COORDINATION The Contractor is responsible for all Blue Stake notification. The Contractor is responsible for notifying all utility companies and other parties who may have underground utilities for field locations prior to the start of construction. The Contractor must take full responsibility for any damage to any utility line encountered, whether or not located on the plans.

In the event utility relocation or new utility construction is required during the project, it shall be the responsibility of the Contractor to coordinate all relocation or construction activities with the appropriate utility company. In the event of significant delays due to unforeseen utility relocations or construction that results in total project shutdown, the County will consider this grounds for additional contract time. The County will not be responsible for any costs incurred due to utility delays.

WORK BY OTHERS The County, other Contractors, and/or utilities may be working within the project area while this contract is in progress. If so, this Contractor shall schedule his work in conjunction with these other organizations to minimize mutual interference.

COORDINATION OF WORK

- A. Prior to starting construction, the Contractor shall submit their construction schedule to the Public Works Director for approval.
- B. It shall be the responsibility of the Contractor to maintain overall coordination of the project. Based on the general contract construction schedule prepared in accordance with these Specifications, the Contractor shall obtain from each of his subcontractors a similar schedule and shall be responsible for all parties maintaining these schedules or for coordinating changes necessitated by unforeseen difficulties.

LINES AND GRADES All work under this contract shall be built in accordance with the detailed scope of work.

MATERIALS AND WORKMANSHIP

GENERAL MAG Specifications, Section 106.1 are incorporated herein by reference, including:

- A. Where equipment, materials, or articles are referred to in the Specifications as equal to any particular standard, the Public Works Director shall decide the question of equality and acceptability.
- B. Wherever any standard published specification is referred to, the latest edition or revision, including all amendments shall be used unless otherwise specified. The physical characteristics of all materials not particularly specified shall conform to the latest standards published by the American Society for Testing and Materials where applicable. All material shall be new and of the specified quality and equal to the accepted samples, if samples have been submitted.

- C. All work shall be done and completed in a thorough, workmanlike manner, notwithstanding any omission from these Specifications or from the Plans; and it shall be the duty of the Contractor to bring the Public Works Director's attention to apparent errors or omissions and request instructions before proceeding with the work. The Public Works Director may, by appropriate instructions, correct errors and supply omissions, which instructions shall be binding upon the Contractor as though contained in the original Specifications or Plans.

SUBSTITUTION OF MATERIAL OR EQUIPMENT MAG Specifications, Section 106.4 are incorporated herein by reference, including: Requests relative to substitutions for materials or equipment specifically designated on the Plans or in the Specifications shall be made in writing, and such requests shall be accompanied by complete data on which the Public Works Director can make determination on the merits of the proposed substitution. The written request shall state how the product proposed for a substitution compares with or differs from the designated product in composition, size, arrangement, performance, etc. And in addition, the request shall be accompanied by documentary evidence of equality in price and delivery or evidence of difference in price and delivery. Data on price shall be in the form of certified quotations from suppliers of both the designated and proposed items. All items accepted for substitution shall be subject to all applicable provisions of the Specifications. Should substitution be allowed under the foregoing provisions, and should the item subsequently prove to be defective or otherwise unsatisfactory for the service for which it was intended, the Contractor, shall without cost to the County, and without obligation on the part of the Public Works Director, replace the item with the material originally specified.

FABRICATED MATERIALS AND SHOP DRAWINGS Fabricated material and shop drawings shall be handled as set forth in the Special Conditions.

MATERIALS FURNISHED BY THE COUNTY MAG Specifications, Section 106.8 are incorporated herein by reference

STORAGE AND HANDLING OF MATERIALS MAG Specifications, Section 106.5 and 106.6 are incorporated herein by reference, including: Protection of materials and equipment stored on the site shall be the responsibility of the Contractor. The County reserves the right to direct the Contractor to provide proper means of protection for materials if such is deemed advisable by the Public Works Director; however, the exercise of or failure to exercise his right shall not be deemed to relieve the Contractor of his primary responsibility for protecting the material and equipment. The Contractor shall provide suitable warehouses or other adequate means of protection for such if the material and equipment require storage and protection. The Contractor shall store and care for the materials and equipment in the most suitable manner to protect them from distortion, rain, dust, or other damage. The cost of replacing any material or equipment damaged in storage shall be borne by the Contractor, and the fact that material or equipment has been damaged after partial payment has been made shall not relieve the Contractor of his primary responsibility. No motor shall be left uncovered or unprotected.

REJECTED MATERIALS MAG Specifications, Section 106.7 are incorporated herein by reference.

DRIVEWAYS AND WALKS Inconvenience caused by digging across driveways and sidewalks shall be kept to a minimum by restoring the serviceability of the drive or sidewalk as soon as possible. Before blocking driveways, the Contractor shall notify the property owner. The Contractor shall replace or repair any damage done to driveways and walks to not less than the condition existing prior to the Contractor's work. If it is necessary to leave an excavation open across driveways or sidewalks, the Contractor shall provide temporary relief in the form of steel plates over the excavation. Direct access shall be provided at all times to fire engine houses, fire hydrants, hospitals, police stations, and at all other agencies or services where emergencies may require immediate access to same.

ROADS Streets and roads subjected to interference by the prosecution of this work shall be kept open and maintained by the Contractor until the work is completed.

TREES AND SHRUBBERY

- A. All trees and shrubbery contained within the right-of-way or easements shall be protected by the Contractor insofar as practicable.
- B. In the event shrubbery or trees must be trimmed, or removed, the Contractor shall notify the property owner to do so within a reasonable time prior to construction. All shrubbery or trees not removed by the property owner shall be trimmed or removed by the Contractor and hauled from the job at the Contractor's expense.
- C. All trees, shrubs, hedges, brush, etc. designated on the Plans, or by the Public Works Director for removal, shall be completely removed and disposed of as indicated on the Plans or as specified by the Public Works Director.

IRRIGATION DITCHES AND STRUCTURES The Contractor shall contact the owners of any ditches, irrigation lines, and appurtenances which interfere with the work and shall make arrangements for dry-up or scheduling of water deliveries. The Contractor shall be liable for any damage due to irrigation facilities damaged by his operations and shall repair such damaged facilities to an equal or better than original condition.

SUBMITTALS MAG Specifications, Section 105.2 are incorporated herein by reference, including:

- A. In ample time for each to serve its proper purpose and function, the Contractor shall submit to the Public Works Director such schedules, reports, drawings, lists, literature samples, instructions, directions, and guarantees as are specified or reasonably required for construction, operation, and maintenance of the facilities to be built and/or furnished under this Contract.
- B. Shop drawings and data shall be submitted to the Public Works Director in such number of copies as will allow him to retain four (4) copies of each submittal. The submittal shall clearly indicate the specific area of the Specifications or Plans for which the submittal is

made. The additional copies received by him will be returned to the Contractor's representative at the job site. The Public Works Director's notations of the action which he has taken will be noted on one of these returned copies.

- C. The above drawings, lists, prints, samples, and other data shall become a part of the Contract and a copy of the same shall be kept with the job site plans and the fabrications furnished shall be in conformance with the same.

MATERIALS AND EQUIPMENT SCHEDULES Drawings of minor or incidental fabricated materials and/or equipment may not be required at the discretion of the Public Works Director. The Contractor shall furnish the Public Works Director tabulated lists of such fabrications, showing the names of the manufacturers and catalog numbers, together with samples of general data as may be required to permit determination by the Public Works Director as to their acceptability for incorporation in the work.

QUALITY CONTROL

- A. All material shall be of the specified quality and equal to the approved samples, if samples have been submitted. All work shall be done and completed in a thorough, workmanlike manner, notwithstanding any omission from these Specifications or from the Plans. It shall be the duty of the Contractor to call the Public Works Director's attention to apparent errors or omissions and request instructions before proceeding with the work. The Public Works Director may, by appropriate instruction, correct errors and supply omissions, which instructions shall be as binding upon the Contractor as though contained in the original Specifications or Plans.
- B. Materials which will require testing and inspection at the place of origin shall not be shipped prior to such testing and inspection.

SAMPLES AND TESTS MAG Specifications, Sections 106.2 and 106.3 are incorporated herein by reference, including:

- A. At the option of the Public Works Director, the source for supply of each of the materials shall be approved by him before delivery is started and before such material is used in the work. Representative preliminary samples of the character and quality prescribed shall be submitted by the Contractor or producer of all materials to be used in the work for testing or examination as desired by the Public Works Director.
- B. Sieves used in determining the grading of samples of aggregates, select material, and other graded materials, shall conform to ASTM Designation E 11-81 which is incorporated herein by reference.
- C. Copies of all test results shall be submitted to the Owner or its representative within five (5) working days of test and shall be certified by an engineer registered in the State of Arizona in an appropriate discipline.

LEGAL RELATIONS AND RESPONSIBILITY

LAWS TO BE OBSERVED MAG Specifications, Section 107.1 are incorporated herein by reference

ALIEN LABOR

CONTRACTOR hereby warrants that it will at all times during the term of this Contract comply with all federal immigration laws applicable to CONTRACTOR'S employment of its employees, and with the requirements of A.R.S. § 23-214 (A) (together the "State and Federal Immigration Laws"). CONTRACTOR shall further ensure that each subcontractor who performs any work for CONTRACTOR under this contract likewise complies with the State and Federal Immigration Laws.

CONTRACTOR agrees and warrants that COUNTY shall have the right at any time to inspect the books and records of CONTRACTOR and any subcontractor in order to verify such party's compliance with the State and Federal Immigration Laws. CONTRACTOR agrees that any act by the CONTRACTOR or subcontractor that result in the impediment or denial of access of the books and records of CONTRACTORS or subcontractor shall be a material breach of the Contract on the part of the CONTRACTOR.

Nothing herein shall make CONTRACTOR or subcontractor an agent or employee of the COUNTY. Nothing herein shall act to establish privity of contract between the COUNTY and any subcontractor.

Any breach of CONTRACTOR'S or any subcontractor's warranty of compliance with the State and Federal Immigration Laws, or of any other provision of this section, shall be deemed to be a material breach of this Contract subjecting CONTRACTOR to penalties up to and including suspension or termination of this Contract. If the breach is by a subcontractor, and the subcontract is suspended or terminated as a result, CONTRACTOR shall be required to take such steps as may be necessary to either self-perform the services that would have been provided under the subcontract or retain a replacement subcontractor, subject to COUNTY approval as soon as possible so as not to delay project completion.

CONTRACTOR shall advise each subcontractor of COUNTY'S rights, and the subcontractor's obligations, under this Article by including a provision in each subcontract substantially in the following form:

"SUBCONTRACTOR hereby warrants that it will at all times during the term of this contract comply with all federal immigration laws applicable to SUBCONTRACTOR's employees, and with the requirements of A.R.S. § 23-214 (A). SUBCONTRACTOR further agrees that COUNTY may inspect the SUBCONTRACTOR'S books and records to insure that SUBCONTRACTOR is in compliance with these requirements. Any breach of this paragraph by SUBCONTRACTOR will be deemed to be a material breach of this contract subjecting SUBCONTRACTOR to penalties up to and including suspension or termination of this contract."

Any additional costs attributable directly or indirectly to remedial action under this Article shall be the responsibility of CONTRACTOR.

INDEPENDENT CONTRACTOR STATUS It is expressly agreed and understood by and between the parties that the Contractor is being retained by the County as an independent contractor, and as such the Contractor shall not become a County employee, and is not entitled to payment or compensation from the County or to any fringe benefits to which other County employees are entitled. As an independent contractor, the Contractor further acknowledges that he is solely responsible for payment of any and all income taxes, FICA, withholding, unemployment insurance, or other taxes due and owing any governmental entity whatsoever as a result of this Agreement. As an independent contractor, the Contractor further agrees that he will conduct himself in a manner consistent with such status, and that he will neither hold himself out nor claim to be an officer or employee of the County by reason thereof, and that he will not make any claim, demand or application to or for any right or privilege applicable to any officer or employee of the County, including but not limited to workmen's compensation coverage, unemployment insurance benefits, social security coverage, or retirement membership or credit.

NONDISCRIMINATION The Contractor, with regard to the work performed by it after award and during its performance of this contract will not discriminate on the grounds of race, color, national origin, religion, sex, disability or familial status in the selection and retention of employees and subcontractors, including procurement of materials and leases of equipment. The Contractor will not participate either directly or indirectly in the discrimination prohibited by or pursuant to Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Section 109 of the Housing and Community Development Act of 1974, the Age Discrimination Act of 1975, and Executive Order 11246 as amended.

AMERICANS WITH DISABILITIES ACT Contractor shall comply with all federal, state and local nondiscrimination statutes in the operation, implementation and delivery, including state and federal civil rights and disabilities laws. In particular the contractor shall ensure that the County's obligations for program, facility and services accessibility in Title II of the Americans with Disabilities Act are complied with in all activities arising under this contract, and shall hold harmless the County for any and all loss, including but not limited to damages, costs or expenses incurred or arising from any alleged violations or expenses, incurred or arising from any alleged violation of the Americans with Disabilities Act under the auspices of this contract unless resulting from an intentional or actual negligent act of the County and its employees. Failure to comply with the nondiscrimination or accessibility requirements herein shall be construed as nonperformance and may result in termination of funding, civil action or both.

PERMITS, TAXES AND LICENSES MAG Specifications, Section 107.2 are incorporated herein by reference, including: Except as otherwise provided in the Specifications, it is the duty of the Contractor to procure all permits and licenses, pay all charges and fees, and give all notices necessary and incidental to the due and lawful prosecution of the work. Obtaining and complying with all applicable permits, licenses and taxes is the responsibility of the Contractor.

STATUS OF LAND, RIGHT-OF-WAY AND EASEMENTS It shall be the responsibility of the Contractor to secure permission and obtain the necessary permits to work in the public right-of-way. It shall be the responsibility of the Contractor to secure written permission from landowners to work, or trespass on private land owned by someone other than the Owner. Acquisition of easements, construction easements and rights of way will be the responsibility of the Owner.

PATENTED DEVICES, MATERIALS AND PROCESSES MAG Specifications, Section 107.3 are incorporated herein by reference.

SURVEY LAND MONUMENTS Survey land monuments and property marks shall not be moved or otherwise disturbed by the Contractor until an authorized agent of the agency having jurisdiction over the land monuments or property marks setting, has witnessed or otherwise referenced their location, and only then in accordance with the requirements of the agency having jurisdiction. Any monuments displaced by the Contractor shall be replaced at the Contractors expense.

EXISTING FACILITIES The Contractor shall protect all existing facilities during construction.

PROTECTION OF PERSON AND PROPERTY MAG Specifications, Sections 107.5 through 107.10 are incorporated herein by reference.

PROTECTION OF ANTIQUITIES MAG Specifications, Section 107.4 are incorporated herein by reference.

PERSONAL LIABILITY OF PUBLIC OFFICIALS MAG Specifications, Section 107.13 are incorporated herein by reference.

NON-RESPONSIBILITY OF THE COUNTY Indebtedness incurred for any cause in connection with this work must be paid by the Contractor, and the County is hereby relieved at all times from any indebtedness or claim other than payments under terms of the contract.

NO WAIVER OF LEGAL RIGHTS MAG Specifications, Section 107.14 are incorporated herein by reference.

PROPERTY RIGHTS IN MATERIAL Nothing in the contract shall be construed as vesting in the Contractor any right of property in materials used after they have been attached or affixed to the work or the soil and accepted. All such materials shall become the property of the County upon beings so attached or affixed and accepted.

PAYMENT TO CONTRACTORS

GENERAL

- A. Payment for construction of this project shall be based on work actually performed in accordance with the Specifications and Scope of Work, and shall include all labor and materials incorporated in the completed work.
- B. Upon final inspection and acceptance of the work, the County will pay the Contractor the amount earned under the contract as provided herein.
- C. Contractor understands that Yavapai County has established an Electronic Funds Transfer (EFT) program for all payments to providers of goods and services to the County and agrees to accept EFT payments in full satisfaction of the County's payment obligations pursuant to this Contract. Contractor further agrees to register for the County's EFT program within one month following the effective date of this Contract and understands that failure to comply with this registration requirement shall result in suspension of payments pursuant to this Contract until such time as the registration process is completed.

PARTIAL PAYMENT

- A. Once each month the County will make a partial payment to the Contractor on the basis of an estimate prepared by the Contractor and accepted by the Public Works Director for work completed through the last day of the preceding calendar month. The estimate will cover the work performed by the Contractor during the preceding calendar month.
- B. Contractor shall submit partial payment request on Application and Certificate for Payment, or equal, subject to approval by the Public Works Director.
- C. The County will retain ten percent (10%) of the amount of each such estimate to ensure full and faithful compliance with the terms of these contract documents. After fifty percent (50%) of the work on this project has been completed, one half of the amount retained shall be paid to the Contractor provided the Contractor is making satisfactory progress on the contract and there is no specific clause or claim requiring a greater amount to be retained. After the contract is fifty percent (50%) completed, only five percent (5%) of the amount of any subsequent progress payments made under the contract shall be retained provided the Contractor is making satisfactory progress on the project, except that if at any time the County determines satisfactory progress is not being made, ten percent (10%) retention shall be reinstated for all progress payments made under the contract subsequent to the determination.
- D. The Contractor shall furnish a detailed breakdown showing unit prices and quantities for use in preparing the monthly estimate. No partial payment will be made until this breakdown is presented by the Contractor and has been reviewed and accepted by the Public Works Director.

- E. No partial payment for job site-delivered material will be made.

PAYMENT For and in consideration of the faithful performance of the work, the County will pay to the Contractor the amount earned less retention as computed from the actual quantities of work performed under the contract and to make such payment in the manner and at the times specified, as follows:

- A. After final completion under the contract, the Contractor shall render to the County a final estimate which shall show the amount of work performed according to the Contract.
- B. Before the final payment will be made, the Contractor shall satisfy the County by affidavit that all bills for labor and materials incorporated in the work have been paid. Additionally, the Contractor shall furnish lien waivers for all completed labor and materials consumed during the project.
- C. Final payment constituting the entire unpaid balance of the Contract sum (including all retained moneys) shall be paid by the County to the Contractor within sixty (60) days after completion of the work or filing the Notice of Completion of the Contract unless a specific written finding by the County of the reasons justifying the delay in payment is provided to the Contractor, and further provided that all work has been completed, the Contract fully performed, and any final certificate has been issued by the County. The quantities appearing in the Bidding Schedule are approximate only, and are prepared for the comparison of bids. Payment to the Contractor will be made only by actual quantities of work performed and accepted in accordance with the requirements of the Contract. Only the items listed in the Bidding Schedule are pay items. The scheduled quantities of work to be done and materials to be furnished may each be increased, decreased or omitted.

PAYMENT REQUEST SUBMITTALS All payment requests must be submitted on the application and certificate for payment format along with a cost breakdown sheet. The attached samples #1 and #2 show the format required.

- A. Contractor shall submit final payment request on Application and Certificate for Payment, or equal, subject to approval by the Public Works Director.
- B. Request for final payment must be submitted to the Owner within 45 days of project completion as determined by the Owner. No additional pay requests will be considered after the final pay request is submitted.

PAYMENT OF ITEMS IN PROPOSAL

- A. Only those items listed in the Proposal under Bidding Schedule are pay items.
- B. Compensation for all items necessary for the completion of the project or improvement shall be included by the bidder in the price bid for the items shown in the Proposal.

CHANGES IN THE WORK

- A. The County, without invalidating the Contract, may order extra work, make changes by altering, or deleting any portion of the work as specified herein, or as deemed necessary or desirable by the Public Works Director. All such work shall be executed under the conditions of the original contract except that any claim for extension of time and additional cost caused thereby shall be adjusted at the time of ordering such change or extra work.
- B. Extra work shall be that work not indicated or detailed on the Plans and not specified. Such work shall be governed by all applicable provisions of the Contract Document.
- C. In giving instructions, the Public Works Director shall have authority to make minor changes in the work, not involving extra cost, and not inconsistent with the purposes of the work, but otherwise, except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order by the Public Works Director, and no claim for an addition to the total amount of the contract shall be valid unless so ordered. It is mutually understood that it is inherent in the nature of municipal construction that some changes in the Plans and Specifications may be necessary during the course of construction to adjust them to field conditions, and that it is of the essence of the contract to recognize a normal and expected margin of change. The Public Works Director shall have the right to make such changes, from time to time, in the Plans, in the character of the work, and in the termination of the completion of the work in the most satisfactory manner without invalidating or otherwise violating the Contract.
- D. Any change ordered by the Public Works Director which involves installation of work essential to complete the Contract, but for which no basis of payment is provided for herein, said payment therefore shall be subject to agreement prior to said work being performed.
- E. The prices agreed upon and any agreed upon adjustment in Contract time shall be incorporated in the written order issued by the Public Works Director, which shall be written so as to indicate acceptance on the part of the Contractor as evidenced by his signature. In the event prices cannot be agreed upon, the County reserves the right to terminate the contract as it applies to the items in question and make such arrangements as it may deem necessary to complete the work, or it may direct the Contractor to proceed with the items in question to be reimbursed pursuant to the unit prices in the Contractor's bid or on a force account basis as provided hereinafter, at the option of the County.

CHANGE ORDER SUBMITTALS All change order requests must be submitted on the format shown on the attached sample #3.

FORCE ACCOUNT The compensation for force account work performed by the Contractor shall be approved by the Public Works Director in the following manner:

- A. **LABOR** The Contractor shall provide monthly certified payroll reports for all labor and for foremen in direct charge of the specific operations. The Contractor will be compensated as follows:
 - 1. The actual cost of wages paid by him but at rates not to exceed those for comparable labor currently employed on the project as determined by the Public Works Director.
 - 2. The actual cost of social security taxes and unemployment compensation insurance.
 - 3. An amount equal to ten percent (10%) of the actual cost of wages and other costs listed above to cover the Contractor's profit and overhead.
 - 4. In case work is performed by a subcontractor, the said ten percent (10%) will be added only once to the actual cost of the work, however, the Contractor may add ten percent (10%) to the Subcontractor's price to cover his own overhead.
- B. **TOOLS AND EQUIPMENT** For any special or heavy equipment used, the Contractor shall be reimbursed his actual cost of rental, not to exceed the latest Schedule of Equipment Rental Rates published by the Arizona Department of Transportation incorporated herein by reference. In the event that any of the equipment to be used is not shown in said schedule, the rental rate for such equipment shall be as agreed upon in writing before the work is started. No percentage shall be added to equipment rental rates. In the event said special or heavy equipment is owned by the Contractor, he shall be compensated only for the actual hours said equipment is required to be on the job site, at a rate not to exceed the latest ADOT Schedule of Equipment Rental Rates.
- C. **MATERIALS** For all materials accepted by the Public Works Director and used in the work, the Contractor shall be paid the actual cost of such material including transportation charges, to which cost shall be added a sum equal to ten percent (10%) thereof.
- D. **SUPERVISION AND OVERHEAD.** No allowance shall be made for general superintendence. The cost of supervision and overhead presumed to be included in the ten percent (10%) added in accordance with the above.
- E. **RECORDS** The Contractor's representative and the Public Works Director shall compare the records of the work performed as ordered on a force account basis at the end of each day on which such work is performed. Copies of these records shall be made on suitable forms provided for this purpose and signed by both the Public Works Director and the Contractor's representative. All claims for work done on a force account basis shall be certified and submitted to the Public Works Director by the Contractor, and such

statements shall be filed with the Public Works Director not later than the fifth (5th) day of the month following that in which the work was actually performed.

EXTRA WORK New or additional work will be classed as extra work when determined by the Public Works Director that such work is not covered by the Contract.

CHANGE ORDER The value of such work or change shall be determined and paid for with a Change Order in one of the following ways unless paid for by force account according to the Change Order Procedure set down by the Yavapai County Public Works Department.

- A. By unit prices in accordance with the Contractor's bid as mutually agreed upon by the County and Contractor.
- B. By unit prices for additional items not previously bid, as mutually agreed upon by the County and the Contractor.
- C. By a lump sum based upon the Contractor's estimate and the Public Works Director's review and acceptance of the estimate.

The Contractor shall do such extra work and furnish material and equipment therefore upon receipt of an accepted Change Order or other written order of the Public Works Director. In the absence of such Contract Change Order or other written order of the Public Works Director, the Contractor shall not be entitled to payment for such extra work. Payment for extra work required to be performed pursuant to the provisions of this section, in the absence of an executed Change Order, will be made by force account as provided herein, in accordance with the Contractor's unit prices bid or as agreed to by the Contractor and the Public Works Director. However, in no case shall work be undertaken without written notice from the Public Works Director to proceed with the work. All change orders must be approved by the Public Works Director.

CLAIMS FOR EXTRA WORK If the Contractor claims that any instructions involve extra cost under this contract, he shall give the Public Works Director written notice thereof within forty-eight (48) hours after receipt of such instructions, and in any event before proceeding to execute the work, except in an emergency endangering life or property, and the procedure shall then be as provided for under CHANGE IN THE WORK. No claim shall be valid unless so made.

PARTIAL ACCEPTANCE OF WORK

- A. After completion of certain units of work under this contract, including all testing and other preparation necessary for operation of the unit by the County as herein specified, but prior to final project completion, provision may be made for partial acceptance in writing by the County for these certain units only. The units to be included for partial acceptance prior to final project completion will be noted at the time of the pre-construction conference in accordance with the Contractor's schedule, or by written notice to the Contractor at the earliest possible time.

- B. The guarantee period for these units shall commence with the date of final acceptance of the entire project by the County. Full payment for these units will not be made until final acceptance of the total work is made.
- C. Acceptance of any portion of the project prior to acceptance of the whole shall not be construed as absolving the Contractor's responsibility for any item of construction or incidental work included in the original Contract.

SPECIAL PROVISIONS

These Special Provisions shall supersede the General Provisions and the working specifications where there is a conflict.

1. **Scope –Chip Seal (Summer, FY 2015-2016) in Yavapai County, AZ; Project #1620882.**
The scope of work for this project includes furnishing all labor, materials, equipment, fixtures and services required for the placement of CRS-2P and Asphalt-rubber single coat chip seal on existing paved roads within various areas throughout Yavapai County; all in accordance with the plans, specifications and contract documents. Total estimated quantity of area to receive a CRS-2P chip seal is approximately 396,767 SY. Asphalt-rubber chip seal will be constructed on a portion of Pioneer Parkway (approximately 64,500 SY) following removal of the existing rubberized friction course by micro-milling. A fog seal coat shall be applied to all chip sealed roads. Re-establishing existing paint striping (where applicable) is also included in this contract.
2. **Pre-Bid Meeting:** - A Pre-Bid Meeting (MANDATORY) is scheduled for 9:00 a.m. on April 12, 2016, in the Yavapai County Public Works Department Ready Room in Prescott, located at 1100 Commerce Drive, Prescott, AZ 86305.
3. **Base bid plus Alternates:** Contractors will be bidding on a Base bid with Alternates and will be awarded per one of the three following scenarios: Base bid only, Base bid plus Alternate A, or Base bid plus Alternate A and Alternate B. Of the three scenarios, the County will select one of the three and award to the lowest bidder.
4. **Pre-Award Conference** - A pre-award conference shall be scheduled by the Owner. Attendance of the Contractor's construction superintendent, project manager and foremen is required at the scheduled place and time. Telephone conferences will not be considered. If requested, at the pre-award meeting the Contractor shall present the following: (1) past performance references on projects that have occurred within the prior two years, (2) a list of equipment to be utilized on this project, (3) a schedule of manpower to be utilized on this project, (4) a detailed construction schedule including all construction phasing, and (5) any other special documentation requested by the Owner to ensure the contract requirements for workmanship and materials can be met. Pre-award submittals shall be subject to approval by the Owner prior to award of this contract. If the apparent low bidder's pre-award submittals do not meet the standards set forth in the contract documents, then the apparent low bidder will be notified in writing with an explanation why their submittal and bid are being rejected. If this occurs the Owner shall exercise their rights to award to the next lower bidder that can meet the contract requirements for workmanship and materials.
5. **Notice to Proceed** – The contract time shall begin on the notice to proceed date which shall be on May 16, 2016. All bidding contractors shall be fully prepared to commence work on this notice to proceed date.

6. **Pre-Construction Meeting** – A pre-construction meeting will be scheduled by the Owner. Attendance of the Contractor is required at the scheduled place and time.
7. **Weekly Construction Meetings** - The Contractor will schedule weekly construction meetings that shall be attended by representatives of subcontractors, utilities, the Owner, and other interested parties for the purpose of keeping the project on schedule and to provide necessary coordination of the work.
8. **Existing Utilities and Utility Coordination** – The Contractor shall contact Arizona Blue Stake (1-800-STAKE-IT OR 811 in Arizona) at least 48 hours prior to construction for marking of underground utilities. Locations of utilities indicated in the field are subject to verification by the Contractor via potholing or other acceptable methods. Utilities damaged by the Contractor shall be repaired at the Contractor's expense.
9. **Protection of Existing Facilities** - The Contractor shall protect all existing facilities during construction, including any and all cast valve boxes, manholes, survey markers, sidewalks, curb and gutters, or other in-pavement amenities using an approved method—***placing oil or dirt on these objects and amenities is not an acceptable method of protection.*** The Contractor shall notify the appropriate utility company, agency or property owner of any construction that may affect their facilities.
10. **Quality Control** – The Contractor's Materials Engineer shall be required to provide all quality control as specified in the plans and specifications. The bidding contractor shall anticipate that the materials sampling and testing shall be per the ADOT Materials Quality Assurance Program (Revision January, 17, 2004), per the Quality Control and Testing Supplement here within, and have a minimum of the following testing: five(5) samples of CRS-2P asphalt emulsion, five(5) samples of asphalt-rubber chip seal binder, five(5) samples of cover material, five(5) samples of fog seal. For requirements above the minimum in the ADOT Materials Quality Assurance Program, the Owner shall provide the Contractor with a testing schedule for these additional samples. All quality control results shall be submitted sealed to the Owner as soon as they are readily available to the Contractor and prior to final acceptance.
11. **Dust Control** - The Contractor shall provide a water truck to maintain dust control on the streets that are either designated detour routes or are used by construction delivery equipment. See attached MAG Section 104.1.3 - Dust Control.
12. **Construction Water** – It shall be the responsibility of the Contractor to obtain a water source for water usage.
13. **Clean-Up** – The Contractor shall, at all times, keep the premises free from accumulation of waste materials and/or rubbish caused by his operations. At the completion of the work, the Contractor shall completely clean the premises, removing and disposing of all rubbish and debris; and cleaning all stains, spots, marks, dirt, smear, etc.

- 14. Construction Surveys and Staking** – The project will follow existing alignments and roadways. The construction plans and County forces will dictate exact beginning and ending points for each roadway. Some survey and staking will likely be required for the Contractor to re-establish the roadway striping center lines, edge lines, markings and for quantity tracking purposes.
- 15. Flexible Delineator Removal and Re-installation** – Flexible delineators shall be removed and re-installed at current locations as per ADOT 703. Delineators will be surface mounted to new rubberized chip seal surface and will be adhered using two-part pavement marker epoxy or alternative adhesives approved by the delineator manufacturer.
- 16. Excess Cover Material Removal - *No kick-brooms*** will be allowed on this project. The Contractor shall plan on using a pick-up broom for removal of excess cover material unless otherwise agreed to by the Engineer. All excess cover material shall not be re-used on this or other County projects and disposal of the excess cover material shall be at the expense of the Contractor. All loose cover material shall be removed prior to each phase of striping and the fog seal coat application to the satisfaction of the Engineer.
- 17. Asphalt Distributor Truck Certification:** all asphalt distributor trucks used on this project shall have an ADOT certification that is current within six (6) months prior to project commencement. Testing for the certification shall be performed by ADOT or other acceptable certification firm per Arizona Test Method 411 (copy of ARIZ 411 is attached).
- 18. Maintenance of Traffic** – Full closure of any roadways within the project areas will ***not*** be permitted, and at least one lane for traffic shall remain open at all times. Contractor shall provide proper signing and delineators at all approaches to each construction zone and shall provide detailed road schematics as necessary. During the Contractor's working hours, sufficient staffing and traffic control around the active construction zone shall be provided to insure safe conditions, should two cars wish to travel through the construction zone in opposing directions. A comprehensive traffic control plan shall be submitted to the Engineer a minimum of one (1) week prior to construction for acceptance and approval. Any project areas that will result in queuing of traffic into the roadways of other jurisdictions (ADOT, other local governments) may require that the Contractor secure a permit from that agency.

Permit fees shall be included within the bid costs of the traffic control line item.

Vehicular access shall be maintained to developed properties at all possible times. When access must be restricted for construction, the Contractor shall give written notice to each affected resident/business not less than 48 hours in advance.

The Contractor shall be responsible for providing all traffic control devices including, but not limited to signs, lights, barricades, flaggers, etc., necessary to provide for safe movement of traffic through the construction area. All maintenance of traffic shall be in accordance with the **Manual on Uniform Traffic Control Devices, 2009 Edition (MUTCD)**, U.S. Department of Transportation, Federal Highway Administration, and all subsequent revisions thereto, and as modified herein, for movement of traffic through construction zones.

19. **Contract Time** - Completion of work *on roadways* under this contract shall be on a working day schedule. A working day corresponds with a County working day of ten (10) hours a day four (4) days a week, exclusive of Fridays, Saturdays, Sundays and legal holidays recognized by the Owner. **Contract time shall be twenty-four (24) ten-hour working days.**
20. **Inclement Weather** – The Contractor is ultimately responsible for determining weather days. Should the Contractor decide to proceed with construction despite the potential for adverse weather, any deficiencies in the resulting final product or damages resulting from proceeding forward with the work remain as the responsibility of the Contractor. The owner reserves the right to issue a stop work order if the County’s inspector deems there is a risk of weather based on visual or actual forecasted predictions.
21. **Order of Work Progression** – The Contractor will be required to complete the work under this contract in the following progression of work: Starting in the Lake Montezuma area, then progressing to the Prescott area. Big Chino Road and Pioneer Parkway shall be completed last.
22. **Work Hours** - Work hours shall be within the hours of 7:00 a.m. to 5:30 p.m., and not more than 40 hours per week unless otherwise approved by the Public Works Director in writing. The contractor and all its subcontractors shall work the same hours.
23. **Inspector’s Overtime** - Any overtime hours accrued by the Owner’s inspector due to the scheduling of the contractor or any of its subcontractors shall be reimbursed to the Owner by the Contractor. Reimbursement shall be achieved through deductions for inspector overtime from Contractor pay requests. Overtime rate is \$90.00 per hour.
24. **Equipment List/Schedule of Manpower/Construction Schedule** - The contractor shall provide a list of equipment to be utilized on this project, a schedule of manpower to be utilized on this project, and a detailed construction schedule, for review and approval by the Owner prior to award.
25. **Project Superintendent** - The Project Superintendent must be on site at all times during performance of work and must attend the weekly construction meetings.
26. **Construction Delays** - Any event for which the Contractor feels entitled to additional time shall be requested per MAG specifications to the Public Works Director. The decision of the Public Works Director shall be final. If a request for additional contract time is not received within 10 days of occurrence of the event, additional time will not be granted.
27. **Chip Seal Warranty**- All portions of the work under this contract shall be guaranteed for workmanship and materials for a period of two years from the date of final acceptance of the product by the Owner. Guarantee does not include workmanship or materials for subgrade work performed by others.

Stripping of cover material and/or bleeding of the asphalt membrane on any portion of the chip seal area, as determined by the Owner, shall be defined as chip seal failure. Failure of the chip seal area and the severity of the failure shall direct the extent of the warranty repairs. Repair requirements for chip seal failure due to workmanship and/or materials shall be defined as follows:

- a) If random or strip area(s) of chip seal failure occur(s) less than 20% by area, the Contractor shall fully repair the specific failure area(s) via reapplication of CRS-2P and aggregate per the technical specifications followed by a fog seal application over the repair areas.
- b) If random or strip area(s) of chip seal failure occur(s) over 20%, but less than 50%, by area, the Contractor shall fully repair the specific travel lane(s) where the failure exists via reapplication of CRS-2P and aggregate per the technical specifications followed by a fog seal application over the repair areas.
- c) If random or strip area(s) of chip seal failure occur(s) over 50%, by area, the Contractor shall fully repair all travel lane(s) where the failure exists via reapplication of CRS-2P and aggregate per the technical specifications followed by a fog seal application over the repair areas.

If part of the contract work, all repaired failure areas shall receive a fog seal coat and paint striping application per the contract documents.

Random failure is characterized by irregular patterns of missing cover chips and/or irregular patterns of bleeding areas. Random chip seal failure shall be weighted as the percent of chip seal failure spots within a given 1' by 1' area, either by stripping of cover material and/or bleeding of the emulsified asphalt. In the area of this failure, several random failure areas would be measured and the average would be calculated to assess the proportion of failure.

Strip failure is characterized by regular patterns of missing cover chips and/or regular patterns of bleeding areas. Strip chip seal failure shall be weighted as the percent of chip seal failure spots within the width of the travel lane, by stripping of cover material and/or bleeding of the emulsified asphalt. In the area of the failure, several strip failure areas would be measured and the average would be calculated to assess the proportion of failure.

All warranty period repairs by the Contractor shall be considered a non-pay item. Failure of the Contractor to coordinate warranty repairs within 45 days of written notice shall warrant the County to move forward with a formal complaint with the Arizona Registrar of Contractors. Furthermore, no future construction contracts shall be awarded to the Contractor if warranty repairs are unresolved.

- 28. Final Pay Request** - Request for final payment must be submitted to the Owner within 45 days of project completion as determined by the Owner. No additional pay requests will be considered after the final pay request is submitted.

29. **Contractor Participation** - A minimum of 50% of the work must be accomplished directly by the bidding contractor.
30. **Responsibility** – Contractor shall be fully responsible for the project until the date of final acceptance.
31. **Bituminous Pavement Removal by Millings** – The millings obtained from the asphalt removal on Pioneer Parkway will become the property of Yavapai County and hauled to the Chino Valley Maintenance Yard located at 1287 E. Road 1 South, Chino Valley AZ. The respective mileages and haul routes are detailed in the Appendix.
32. **Permits** – The Contractor shall be responsible for obtaining any and all necessary permits through federal, state or local agencies prior to construction commencement. This includes any cases where traffic control elements extend outside of County-owned right of way.
33. **Public Notification** – A minimum of two (2) electronic message boards shall be erected by the Contractor at least one (1) week prior to the commencement of construction in each area to notify the public of this impending project. The location of the message boards shall be determined by the Engineer. The message boards shall convey a simple project title, window of anticipated construction dates, and anticipated hours of restricted traffic flow. Minimum allowable message board size shall be approximately 10’W by 6’H. Message boards shall remain in place throughout project term and may be updated during the course of the project to provide any additional pertinent information to the public. If other jurisdictions require additional message boards for traffic control measures within right-of-way outside the project areas, these additional message boards shall be considered incidental to the traffic control plan for the overall project and payment for these additional traffic control measures shall be included in the lump sum cost for the traffic control bid item.
34. **Casting Frames & Covers** – All existing frames and casting covers (such as manholes, monumentation, clean outs, water valves, etc.) and all other street hardware items shall be protected from the application of the chip seal by some approved method such as the application of stickum-type paper template placed on each casting prior to the chip seal operations. ***Diesel fuel application or aggregate/dirt on the above-mentioned covers and hardware is not an acceptable method.*** Aforementioned casting covers must be cleaned up to existing conditions after chip seal installation. Utility covers damaged by the Contractor shall be repaired or replaced at the Contractor’s expense. Any utility or benchmark covers discovered during the chip seal process but not identified on the construction plans shall be protected in similar fashion.
35. **Concrete Structures** – The lines of termination of chip seal at the driveways shall be neat and straight. In cases of concrete structures—including, but not limited to gutters, curbs, sidewalks, concrete driveways, low-water crossings, and noted box culverts, bridge decks, bridge deck joints and cattle guards—adjacent to the pavement to be chip sealed, the Contractor shall provide and install tar paper, or other approved method, at all limits of work. The concrete structures shall be cleaned of excess chip seal to the satisfaction of the County

Inspector—this includes curb and gutter. Excessive chip seal will not be permitted onto concrete structures.

36. **Staging of Materials** – The contractor shall be responsible for locating and securing a suitable staging area for materials and equipment. The County is not responsible for loss or damage of any materials stored during the project.
37. **Work Areas** – All work shall be performed from within the right-of-way limits, as approximated on the plans. The Contractor shall not trespass on private or public lands outside or adjacent to the right-of-way without written permission from each individual property owner.
38. **Additional Equipment Requirements** – For roads receiving chip seal that are greater than one (1) mile in total length and in cases that will allow for rapid placement of the chip seal, the Contractor shall provide an additional pneumatic tire roller and an additional broom over and above the standard requirement of two (2) each. This will allow for less back-tracking of equipment during the chip seal process and insure that the rollers and sweepers can maintain a constant distance to the spreading equipment and not fall behind.
39. **Cooperative Use of this Contract (A.K.A. Piggy-back Clause)** - This agreement may be extended for use by other governmental agencies and political subdivisions of the State including members of SAVE (Strategic Alliance for Volume Expenditures). Any such usage by other entities must be in accordance with the laws, ordinances, rules and regulations applicable to such entity, and the approval of the Contractor and the County. The provision of goods or services to other agencies under this contract does not absolve the Contractor from fully complying with the requirements set forth within the contract for materials and services to be provided to the County under this contract. Any attempt to represent any material and or service as being under this contract with Yavapai County which is not a subject of, or an addition to this contract, is a violation of the contract. Any such action is subject to legal and contractual remedies available to Yavapai County including, but not limited to, cancellation or suspension of the contract.

In the event that another governmental agency or subdivision chooses to use this agreement for procurement purposes, the procuring party shall be solely responsible for the ordering of materials, services or construction under this agreement. Payment, inspection and acceptance of goods or services ordered by the procuring party shall be the exclusive obligation of the procuring party. County shall not be liable in any way for alleged or actual violations by the procuring party or Contractor, and the procuring party shall hold County harmless from any liability which may arise from the action or inaction of the procuring party. Contractor agrees to look solely to the procuring party in pursuing all legal remedies that may be available to Contractor for acts or inaction of the procuring party.

The procuring party shall not use this agreement as a method for obtaining additional concessions or reduced prices for similar products or services.

ADOT SECTION 202 (MODIFIED) - BITUMINOUS PAVEMENT REMOVAL BY MILLING & HAUL

Description:

The work under this section shall be in accordance with Section 202-3.03 of ADOT Standard Specifications, as designated on the project drawings, and as modified herein.

Construction Requirements:

All of the existing asphaltic concrete friction course (ACFC) shall be removed by milling in accordance with the details shown on the project plans and as specified herein. The specified removal depth of the existing bituminous pavement shall be the full depth of the existing friction course, which was designed as 5/8" but the actual thickness may vary.

The milled/planed surface shall provide a texture suitable for use as a temporary riding surface and allow application of an asphalt-rubber chip seal to the milled surface. The use of the micro-milled pavement as a temporary riding surface shall be for a maximum of seven calendar days.

The Milling machine shall conform to the ADOT Standard Specifications and include the following:

- a) The milling equipment shall be specifically designed to remove material to a controlled line and grade by means of grinding or chipping. The equipment used shall be capable of removing the existing asphaltic concrete uniformly throughout the milled area at the required cross-slope and with 1/16 inch accuracy.
- b) Be equipped with a micro-milling drum, a minimum width of 7' with tungsten-carbide-tipped cutting teeth spaced no greater than 0.250 inch apart laterally on center. The configuration of the teeth shall be such that the deviation in elevation between any 2 teeth does not exceed 1/16 inch.
- c) Be equipped with an automatic grade control system operating in "profile" mode. The system shall be either:
 - i) A 30-foot-long paving machine ski with spring-loaded feet attached to the bottom on not more than 1.5-foot increments, such that the feet rise and fall over small irregularities on the pavement surface. The upper part of the ski shall be one piece and of such construction that it will not flex or bend by more than 1/8 inch at either end when supported off the grade by a fixture located at its center of gravity. The grade control system shall be referenced off the center of the ski, with skis mounted on each side of the milling machine such that the ski's longitudinal center is even with the center of the milling machine's cutting drum; or,
 - ii) A sonic averaging system with automated controls. Each corner of the milling machine shall be equipped with sonic grade averaging and slope sensors. The system shall feature plug-in connections, internal cable routing, 2 dual control boxes for

ground personnel each capable of controlling each side of the milling machine, and a separate control box for the operator.

- d) Be equipped with a Tier III or higher engine compliant with the Arizona Department of Environmental Quality regulations.

The removal shall be accomplished in a manner which does not destroy the integrity of any pavement that remains.

During production milling, the contractor shall verify the actual depth of milling required to remove the ACFC to the existing underlying asphalt concrete pavement surface. If it is determined that the required milling depth is greater than the specified milling depth, the additional material shall be completely removed to the desired underlying pavement surface, as approved by the Engineer, at no additional cost to the County. The milled material shall be removed and disposed of as specified by the County.

Quality Acceptance:

Ensure that the micro-milling operation produces a uniform pavement texture that is true to line, grade, and cross section.

Micro-milled pavement surface acceptance testing will be performed using the Laser Road Profiler method per ADOT Section 109, as modified in the contract documents. Micro-milled pavement will be evaluated on individual test sections, normally 0.10 mile long. Indices must target 55 inches/mile and not exceed the correction index of 60 inches/mile.

Micro-milled pavement surfaces are subject to visual and straightedge inspections. Keep a 10' straightedge near the micro-milling operation to measure surface irregularities of the milled pavement surface. Any areas exceeding 1/8 in (3.2 mm) between the ridge and valley of the mat surface or fail to meet pavement surface acceptance testing using the Laser road Profiler shall require that the underlying layer be removed and replace with material as directed by the Engineer at no additional cost to the Department. All corrective work shall be performed in a minimum 500 ft section.

Ensure that the cross slope is uniform and that no depressions or slope misalignments greater than 1/4 in per 12 ft (6 mm in 3.6 m) exist when the slope is tested with a straightedge placed perpendicular to the center line. The final pavement surface shall have a transverse pattern of 0.250 inch, center to center, of each strike area. The difference between the ridge and valley of the mat surface shall not exceed 1/8 inch.

Test Section:

Prior to commencement of the work, construct a test section that is 1000' in length with a uniformly textured surface and cross section as approved by the Engineer.

Surface acceptance testing will be performed using the Laser Road Profiler and the measured indices must meet the parameters set forth in the Quality Assurance section of this specification.

If any of these requirements are exceeded in the test section, work shall be halted and the contractor shall submit a written plan of action detailing what steps will be taken to improve operations. If approved by the Engineer, the contractor will construct another 1000' test section. This test section shall be located in a different area than the initial section using the approved corrective action. This designated section shall be micro-milled to conform to the same requirements as those required in the initial test section. The contractor shall not be allowed to start continual micro-milling until an acceptable test section is planed, tested and approved.

Milling Operation:

During production milling operation, if the Engineer determines that the desired surface finish is not being achieved, the contractor shall stop milling. Milling shall not resume until the Engineer is satisfied that the requirement can be met or until successful completion of another test section. The forward speed of the milling machine during production milling shall not exceed the speed used for the test section, or shall be at the discretion of the Engineer. The forward speed of the milling machine shall be checked throughout each production day, or at the discretion of the engineer. If the desired surface finish is not met, the contractor shall reduce the forward mill speed as specified by the engineer.

The profile of the milled surface, in both the longitudinal and transverse directions, shall not vary by more than 1/8 inch over a distance of ten feet, verified by a 10' straight edge test.

Milling operations shall progress from the low side of each roadway barrel or lane and progress towards the high side. Each successive pass of the milling machine shall meet the line and grade of the previous pass. All mainline milling shall be completed first before side streets and driveways are milled. The speed of the milling machine shall be maintained at a rate which results in a uniform pavement texture, as approved by the engineer.

Micro-milling shall result in a grid-patterned textured pavement surface with longitudinal ridges approximately the same distance apart as the cutting teeth. The ridges shall be consistent in depth, width, and profile. The distance between the top of each ridge and the adjacent valleys shall not exceed 1/8 inch.

Milled pavement surfaces which do not conform to the requirements above shall be corrected by the Contractor. The Contractor shall prepare and submit to the Engineer for approval a correction plan prior to initiating corrective action.

During milling operations, the cutter teeth shall be regularly checked and replaced as necessary to maintain the tolerances and desired surface finish.

Micro-milling methods that will produce a uniform finished surface and maintain a constant cross slope between extremities in each lane shall be required. The contractor shall maintain the existing pavement profile cross-slopes & provide positive drainage in all existing directions.

Positive drainage shall be provided to prevent water accumulation on the micro-milled pavement, as shown on the plans or directed by the Engineer.

Pavement to be removed by milling adjacent to manholes, valve boxes, small radius curbs and other fixed objects that produce confined areas shall be removed with milling equipment specifically designed to operate in restricted areas and capable of removing asphaltic concrete of the specified thickness without damage or displacement of the adjacent object. At the discretion of the Engineer, such areas may be excluded from smoothness testing.

On projects with existing curb and gutter, the milling depth shall be held at the curb and gutter pan lip, or down to 0.25" below the pan lip. The objective is to remove the full ACFC depth, but at no time should the milling machine plane material below 0.25" lower than the lip of the curb and gutter pan. The equipment and methods used shall be capable of removing the asphaltic concrete without causing damage to the curb and gutter. Any damage to the existing infrastructure—including but not limited to the valve risers, manholes, survey monuments, concrete collars, curb ramps, sidewalks, and concrete curb & gutter—shall be repaired and/or replaced to the satisfaction of the Engineer.

Under no circumstances shall the removal of existing asphaltic concrete begin until the mix design for replacement surface treatment has been approved by the Engineer.

Work Site Maintenance:

Remove dust, milling slurry & residue, and loose milled material from the micro-milled surface. Do not allow traffic on the milled surface and do not place the new surface treatment on the milled surface until removal is complete.

A self-loading motorized street sweeper equipped with both brooms and a vacuum system, and a functional water spray system shall immediately follow the milling machine. Sweeping shall continue until loose millings, silt, slurry and residual ACFC materials have been completely removed and as requested by the Engineer. The Contractor shall maintain the micro-milled surface for cleanliness until the surface treatment is applied.

Hauling of Millings:

Millings shall be hauled and stockpiled as designated in the Special Provisions. The cost of hauling and stockpiling millings shall be included in the 'Micro-mill ACFC Pavement & Haul' line item.

Diamond Grinding:

At both ends of the project a small bump will be created between the milled surface and the adjacent pavement surface that the chip seal is not likely to fill-in. As directed by the Engineer, the contractor will be required to remove the "bump" by diamond grinding 2-3 feet of the existing un-milled pavement surface adjacent to the chip seal.

Measurement:

Micro-milling existing ACFC pavement shall be measured by the square yard as described in ADOT Section 109.01, Measurement and Quantities. Diamond grinding shall be measured by the linear foot.

Payment:

Payment for micro milling will be made at the Contract Unit Price per square yard. Micro-milling asphaltic concrete pavement, measured as specified, will be paid for at the Contract Unit Price bid per square yard. No adjustment in the unit price for this item or other items will be considered for variations in the amount of RAP actually recovered.

Payment is full compensation for furnishing equipment, micro-milling, hauling, stockpiling milled material, diamond grinding and satisfactorily performing the work.

Pay Item:**Pay Unit:**

Micro-mill ACFC Pavement & Haul

Square Yard (SY)

Diamond Grind Transitions

Linear Foot (LF)

ADOT SECTION 404-1 - SINGLE CHIP SEAL COAT (CRS-2P)

Description:

The work under this section shall be in accordance with Section 404 of ADOT Standard Specifications, as designated on the construction plans, and as modified herein.

The single chip seal coat shall consist of emulsified asphalt, type Polymerized Cationic Rapid Set (**CRS-2P**) per ADOT Section 1005, applied at the rate in the range of **0.38 - 0.43** gallons per square yard (with a target value of **0.40** gal/SY), unless otherwise directed by the County Engineer, and chip cover aggregate as specified below at a rate of **22-25 LBS/SY minimum**. Emulsified asphalt shall be applied to the surface of the road in accordance with Section 404-3.05 of the ADOT standard specifications. The County recognizes that older roads may require more emulsified asphalt oil and more recently paved roads may have reduced oil application rates, thus the stated range of oil application rate.

Prior to placing the chip seal, the Contractor shall install temporary raised pavement markers, Type Y-2 STD, on existing centerline striping at 50 foot intervals on tangents and 25 foot intervals on curves and turn lanes, stop bars, fog lines (edge marking) and any thermoplastic or preformed markings, and as instructed by the Engineer. The Contractor shall also remove all thermoplastic pavement markings (preformed or not) with a method and grinding device approved by the Engineer. No extra payment will be made for temporary raised pavement markers or removals of the pre-existing pavement thermoplastic markings. The cost for the markers shall be included in the unit price bid for chip seal. Temporary raised pavement markers will not be required for portions of roads without existing striping or thermoplastic markings.

Cover Material:

The cover material shall conform to Section 404-2.02 of ADOT standard specifications for the following gradation, and shall be an aggregate mix of *mechanically crushed rock* and shall be free from lumps or balls of clay, contain no calcareous or clay coatings, caliche, synthetic materials, decomposed granite, volcanic cinders, organic matter or foreign substances. If a clean cover material cannot be achieved using conventional crushing and screening methods, then the cover material will have to be washed in water. The cover material shall be applied at a rate determined by the Contractor and certified by the Contractor's Engineer. The Contractor shall ensure complete coverage of the emulsified asphalt and shall be responsible for any bleeding, stripping, or failure of the chip seal.

The crushed aggregate for the applications shall meet the requirements for gradation given in Table 1 when tested in accordance with ASTM C 136.

Table 1. Aggregate Gradation Requirements	
<u>Sieve Size</u>	<u>Percent Passing</u>
3/8"	100
No. 4	0 - 25
No. 8	0 - 5
No. 200	0 - 2.0

The Contractor is responsible for all laboratory tests and certifications to assure that the chip material is in conformance to the requirements set forth in these specifications. Representative samples of the aggregate cover material shall be taken daily, and the laboratory test results and certificates of compliance shall all be submitted to the Owner's Engineer. The Owner may reject delivered chip material if, in his opinion, the delivered material differs significantly from the representative sample or appearing to be excessively dirty. In all cases, the Contractor shall be responsible for the successful placement of the single chip seal coat regardless of temperatures or material compliance, and shall guarantee the success of the single chip seal coat.

Weather:

Bituminous material used in the chip seal process shall be applied only when the existing bituminous surface is dry and when the surface temperature is at least 85 degrees F and the ambient temperature in the shade is 70 degrees F.

Despite the required minimum ambient and surface temperature and condition, the Engineer may at any time require that work cease or that the work be reduced in the event of weather conditions either existing or expected which would have an adverse effect upon the bituminous treatment.

Cleaning and Removals:

Prior to the chip seal operation the Contractor shall remove any and all vegetation within the limits of the chip seal. At the present there are portions of the project that are expected to have an accumulation of material buildup, weed growth, and shoulder overgrowth along the edges of the pavement. This material will interfere with the project chip seal coat and thus the Contractor shall remove and dispose of all debris, aggregate and deleterious material on existing pavement and under the guardrail, if applicable, for the length of the project roadways.

Prior to the chip seal operation, the Contractor shall remove all existing thermoplastic striping, thermoplastic legends and permanent raised pavement markers within the chip seal limits. When

removing the permanent raised pavement markers the Contractor shall remove excessive adhesive left on pavement caused from the removal of raised pavement markers. Removal shall be done to the satisfaction of the Engineer.

All cleaning and removal work shall be considered incidental to this line item.

Removals & Sweeping:

Prior to applying chip seal, the entire pavement surface shall be thoroughly cleaned by the Contractor to remove any dirt, vegetation, weeds, dust, leaves, water, or other foreign material to the satisfaction of the Engineer. County forces may install pavement patches to designated roads prior to chip seal installation, if deemed necessary by the Owner.

The unit price bid shall include a sweeping of the road chip sealed no sooner than 12 hours after the completion of the chip sealing, but within 24 hours after chip seal, or as approved by the Owner's Engineer. Please note that early sweeping shall not void any of the warranties associated with this project. The secondary sweeping shall occur between 3 and 5 days after the initial chip seal installation. The sweeping of the chip sealed road shall occur as often as necessary to remove loose chips from the roadway. The Contractor shall be required to perform an additional sweeping immediately prior to the fog seal coat and each striping application.

Loose gravel signs shall remain on the roadway after chip sealing until such time as all sweeping has occurred, and the owner has approved their removal.

The use of any sweeper that causes damage to the chip seal coat shall not be permitted. The sweepers shall be self-propelled vacuum, regenerative air, or rear broom pick-up, with water spray bars to reduce dust. ***Please see any notes in the Special Provisions that may restrict the use of specific sweeping equipment.*** The Engineer shall determine which type of sweeper shall be used. If necessary, more than one type of sweeper shall be used. Sidewinder sweepers or brooms that windrow material and do not remove it shall not be used. A minimum of two (2) sweepers shall be used at all times. However, for roads receiving chip seal that are greater than 1 mile in total length, the Contractor shall provide at least one (1) additional pneumatic tire roller and one (1) additional broom over and above the standard minimum requirement of two (2) each. This will allow for less back-tracking of equipment during the chip seal process and insure that the rollers and sweepers can maintain a constant distance to the spreading equipment and not fall behind.

Completion of sweeping shall be evidenced by the absence of loose chips in gutters and driveways, and against extruded curbing. Special attention shall be required in sweeping driveways and under and around parked vehicles clear of loose chips. The Contractor shall be responsible for removal of all chips from sidewalks and other affected areas. The Contractor shall provide a sufficient number of sweepers (minimum two) to sweep all streets within 36 hours after spreading screenings (chips) for chip seal coat.

Method of Measurement:

Measurement for work under this section shall be made on a per square yard basis.

Basis for Payment:

The accepted quantity of single chip seal coat, measured as provided above, will be paid for at the contract unit price per square yard, and such price shall be full compensation for the work as prescribed and specified herein, complete and in place.

Pay Item:

Single Chip Seal Coat , CRS-2P

Pay Unit:

Square Yard (SY)

ADOT SECTIONS 701 & 706 – REMOVAL AND INSTALLATION OF RAISED PAVEMENT MARKER

Description:

The work under this section shall be in accordance with Section 701 & 706 of ADOT Standard Specifications, as designated on the construction plans, and as modified herein.

Construction Requirements:

The work under this section shall be in accordance with Section 701 & 706 of ADOT Standard Specifications, as designated on the construction plans, and as modified herein for both the removal of the pre-existing raised pavement markers and installation of the new raised pavement markers.

The raised pavement markers shall be per ADOT Signing and Marking Standard Detail M-19, Type “BB”, and 3-M brand. The adhesive shall be a Flexible Marker Adhesive (FMA). The location of the raised pavement markers shall be within the travel lane, immediately adjacent to the edge stripe. The spacing on the markers shall be at existing hydrant marking locations on both main and side-streets.

Method of Measurement:

Measurements for this item shall be made in accordance with Section 706-4 of the ADOT Standard Specifications.

Basis of Payment:

No separate payment shall be made for this item.

ADOT SECTION 703 – REMOVAL AND RE-INSTALLATION OF FLEXIBLE DELINEATOR

Description:

The work under this section shall consist of removing and re-installing flexible delineator and new base in accordance with the manufacturer's recommendations and the requirements of these specifications.

General:

The contractor shall remove and salvage the flexible delineator for reuse. Contractor shall provide and install new surface-mounted delineator base with hardware. In cases where there is a missing delineator identified by Engineer, the contractor shall install a new base and Yavapai County will provide the flexible delineator. The new base shall be FG 300 Black Lite Base manufactured by PEXCO part # 800BASE100. Contractor shall use a two part epoxy as recommended by manufacturer and approved by Engineer.

Construction Requirements:

Salvaged flexible delineator post shall be re-installed on new bases at the existing delineator locations in conjunction with final striping. Surface-mounted foundation units shall be installed only on sound, tight, unbroken pavement. Should installation of the surface-mounted foundation unit damage the new rubberized chip seal, the contractor shall repair the damaged portion, as directed by the County Engineer, at no additional cost to the County.

Method of Measurement:

Flexible delineator installation and base will be measured by the complete unit for each device installed.

Basis of Payment:

The accepted quantities of flexible delineator assemblies, measured as provided above, will be paid for at the contract unit price each, which price shall be full compensation for the work, complete in-place, as specified herein. No payment will be made for rubberized chip seal repair, the cost being considered as included in contract items.

Payment for this item shall be made in accordance with Section 703-5 of the ADOT Standard Specifications.

Pay Item:

Remove and Re-install Delineator

Pay Unit:

Each (EA)

ADOT SECTION 704 - THERMOPLASTIC PAVEMENT MARKINGS**Description:**

The work under this section shall be in accordance with Section 704 of ADOT Standard Specifications, as designated on the construction plans, and as modified herein.

Construction Requirements:

The work under this section shall be in accordance with Section 704-3 of ADOT Standard Specifications, as designated on the construction plans, and as modified herein.

Method of Measurement:

Measurement for this section shall be made in accordance with Section 704-4 of the ADOT Standard Specifications.

Basis of Payment:

Payment for this item shall be made in accordance with Section 704-5 of the ADOT Standard Specifications.

Pay Item:

Thermoplastic Pavement Marking, White (4" Equiv.)

Pay Unit:

Linear Foot (LF)

ADOT SECTION 705 – PREFORMED PAVEMENT MARKINGS

Description:

The work under this section shall be in accordance with Section 705 of ADOT Standard Specifications, as designated on the construction plans, and as modified herein.

Construction Requirements:

The work under this section shall be in accordance with Section 705-3 of ADOT Standard Specifications, as designated on the construction plans, and as modified herein. Preformed pavement markings shall be Type I, as specified in Section 705-1, and shall not be applied until the final striping and marking application (see Section 708).

Method of Measurement:

Measurements for this item shall be made in accordance with Section 705-4 of the ADOT Standard Specifications.

Basis of Payment:

Payment for this item shall be made on a per EACH basis which shall be full compensation for the item, complete and in place, including necessary pavement cleaning.

Pay Item:

Pay Unit:

Preformed Plastic Pavement Marking, Left Arrow	Each (EA)
Preformed Plastic Pavement Marking, Right Arrow	Each (EA)
Preformed Plastic Pavement Marking, Merge Left Arrow	Each (EA)
Preformed Plastic Pavement Marking, 'ONLY'	Each (EA)

ADOT SECTION 708 - PERMANENT PAVEMENT MARKINGS

Description:

The work under this section shall be in accordance with Section 708 of ADOT Standard Specifications, as designated on the construction plans, and as modified herein.

Construction Requirements:

The construction requirements for this section shall be in accordance with Section 708 of ADOT Standard Specifications and as described herein:

Centerline striping shall be 4" wide lines with 4" spacing down the center, when applicable.

The Contractor will be responsible for re-establishment of all striping and pavement markings for the chip seal pavement limits. Prior to placing the chip seal, the Contractor shall install temporary raised pavement markers, Type Y-2 STD on existing roadway centerline striping at 25 foot intervals on curves and 50 foot intervals on tangents, or as instructed by the Special Provisions and Engineer for the roads to be chip sealed. No extra payment will be made for temporary pavement markings and cost for the markers shall be included in the unit price bid for the chip seal.

At no time shall traffic be allowed to traverse unmarked and undelineated portions of currently striped roadways without temporary traffic control, reflective tabbing, or striping and marking in place as approved by the Engineer. Contractor will be required to sweep to remove loose cover material immediately prior to striping for both centerline and edge lines. Sweeping to remove loose cover material from the roadway shall be done prior to both the initial and final striping and marking. Striping and marking of the new surface shall be completed in two separate mobilizations as follows:

Initial - As soon as possible after all new surface application (not to exceed 48 hours) the Contractor shall re-establish the existing centerline and white edge stripe per project plans. Contractor shall maintain "No Centerline Marking" signage to meet the satisfaction of the Engineer until permanent striping can be completed.

Final - Contractor will be required to return within 10 to 20 calendar days after the initial striping application to repaint all striping and markings. Waiting 10 to 20 calendar days will cover over tracking of initial striping.

Method of Measurement:

Measurements for this item shall be made in accordance with Section 708-4 of the ADOT Standard Specifications.

Basis of Payment:

Payment for this item shall be made in accordance with Section 708-5 of the ADOT Standard Specifications.

Pay Item:

Pavement Striping, White (4" Equiv.)

Pavement Striping, Yellow (4" Equiv.)

Pay Unit:

Linear Foot (LF)

Linear Foot (LF)

ADOT SECTION 901 – MOBILIZATION**Description:**

The work under this section shall be in accordance with Section 901 of ADOT Standard Specifications, and as modified herein.

Construction Requirements:

The Construction requirements for this section shall be in accordance with Section 901 of ADOT standard specifications, and as modified herein.

Method of Measurement:

Measurement for work under this section shall be in accordance with Section 901-4 of the ADOT Standard Specifications.

Basis of Payment:

Payment for work under this section shall be in accordance with Section 901-5 of the ADOT Standard Specifications.

Pay Item:

Mobilization

Pay Unit:

Lump Sum (LS)

MAG SECTION 104 – WATERING & DUST CONTROL

Description:

The work under this section shall be in accordance with MAG Section 104 and as modified herein.

Construction Requirements:

The construction requirements for this section shall be in accordance with MAG Section 104 and as modified herein.

If in the opinion of the Owner's Engineer, the Contractor fails to keep the dust from his operation under control, the Owner's Engineer, by written order, may suspend construction operations until the situation is remedied. No time extension or additional costs will be allowed for this suspension.

Method of Measurement:

No measurement will be made for this item, as per MAG 104.

Basis of Payment:

No special payment will be made for this item and costs shall be absorbed within other bid items in this contract as per MAG 104.

MAG SECTION 333 - FOG SEAL COAT

Description:

The work under this section shall be in accordance with Section 333 of MAG Standard Specifications, as designated on the construction plans, and as modified herein.

Fog seal coats on bituminous paved surfaces shall consist of the application of emulsified asphalt and a sand blotter when necessary.

Construction Requirements:

The material to be used for Fog Seal Coat shall be CQS-1H, or CSS-1H, diluted at a 1:1 ratio, and shall be applied at a rate of approximately 0.10 gallons per square yard, or as directed by the Owner's Engineer.

Contractor shall wait a minimum of 24 hours after chip seal placement before fog seal is applied, and ensure the application is installed the day after garbage /recycling pick-up days. Any areas that remain excessively tacky after 24 hours shall require a sand blotter at no additional cost to the county.

Method of Measurement:

Measurements for work under this section shall be per gallon.

Basis of Payment:

Payment for this section, measured as provided above, shall be paid for at the unit price per gallon of diluted material, which shall be full compensation for all costs of material, labor, tools and equipment necessary for Fog Seal Coat.

Pay Item:

Fog Seal Coat

Pay Unit:

Gallon (GAL)

MAG SECTION 401 - TRAFFIC CONTROL

Description:

The work under this section shall be in accordance with Section 401 of MAG Standard Specifications, as designated on the construction plans, and as modified herein

All Traffic Control shall be in accordance with MAG Section 401 and the **Manual on Uniform Traffic Control Devices, 2009 Edition (MUTCD)**, U.S. Department of Transportation, Federal Highway Administration, and all subsequent revisions thereto and as modified herein shall consist of furnishing, installing, maintaining, moving and removing barricades, warning signs, lights, signals, cones, and other traffic control devices, including construction of detour routes, flagging services and pilot trucks, to provide safe and efficient passage through and/or around the work for movement of traffic through construction zones and to protect workmen in or adjacent to the work zone. The requirements of the MUTCD shall be considered as the minimum standards for the protection of workmen and the traveling public. **Pilot cars or flagmen with radio communication will be required to maintain at least one lane of traffic at all times, and distance between staging areas for pilot vehicle construction zone shall not be greater than 3 miles or not to exceed a maximum 15 minute delay.**

Full closure of any of the affected roadways **will not** be permitted, and one lane for traffic shall remain open at all times.

It is important to note that flagging stations shall be required at all roadway access points entering the work zone (whether pilot vehicles are being utilized, or not), including but not limited to mainline roads, side roads, high volume forest service roads and commercial driveways. Furthermore, when pilot vehicles are utilized multi-use residential driveways shall have 'wait for pilot truck' signage.

Prior to the commencement of any construction operations by the Contractor, a Traffic Control Plan shall be submitted to the Owner's Engineer for approval. The Traffic Control Plan shall be submitted prior to the Notice to Proceed with construction; and shall specifically and graphically identify a proposed sequence of operations and a compatible method of maintaining traffic. Detailed plans of proposed detour routes shall be submitted to the Owner's Engineer as part of the Traffic Control Plan; and no detours shall be opened to traffic until approved by the Owner's Engineer. Additional site specific adjustments to traffic control will be required if deemed necessary by the Engineer.

This traffic control work shall include individual residential and/or commercial notifications on this project. All residences and commercial businesses directly accessing the roadways included in this project, and including all the cul-de-sacs directly abutting project roadway segments, shall have individual flyers delivered by the Contractor, either by hand or to the doorknobs. The Contractor shall be responsible for additional notification of individual property occupants who are expected to experience interruptions in the use of their driveways or parking limitations on the shoulder of the affected roadways. The Contractor shall provide such occupants with specific details as to the nature and remedies for these driveway and/or parking disruptions. The Engineer shall approve all public notification flyer/handouts. Flyers/handouts shall be distributed to affected

occupants a minimum of seven (7) calendar days prior to the commencement of work in that specific area. At no time shall a resident's driveway access be restricted for more than four (4) hours on any occasion without prior written advance notice by the Contractor to both the County and the occupant. Vehicular access shall be maintained to developed properties at all possible times. During non-working hours, two lanes of traffic, one for each direction, shall be maintained. Costs for this work shall be included within the Traffic Control bid item.

Please see the Special provisions for any additions or modifications to this technical spec.

Method of Measurement:

MAG Section 401 shall be modified as follows:

Traffic control shall be measured as a lump sum item and shall include all items, materials, equipment, workmen, devices, facilities and work necessary to provide adequate traffic control and detours as specified in the Traffic Control Plan and as directed by the Owner's Engineer.

Basis of Payment:

No payment will be made under Traffic Control for each calendar day during which there are substantial deficiencies in compliance with the specification requirements of this section, as determined by the Owner's Engineer. The daily non-payment for deficiencies would be prorated over the contract time.

Traffic control, measured as provided above, will be paid for at the contract lump sum price, which shall be full compensation for furnishing, installing, maintaining and removing all devices and the labor, tools, equipment and incidentals necessary to complete the work.

Pay Item:

Traffic Control

Pay Unit:

Lump Sum (LS)

ASPHALT RUBBER CHIP SEAL CHIP SEAL (SITE BLEND)

1. DESCRIPTION

1.1 General

This item shall consist of a bituminous surface composed of a single application of asphalt-rubber chip seal and pre-coated cover aggregate in accordance with these specifications.

1.2 Qualification of Asphalt rubber chip seal Applicator

The Contractor will be required to obtain qualification of the asphalt rubber chip seal. The submittal data required for qualification approval will include experience record, equipment list, indication of compliance with specification, and complete mix design.

The asphalt rubber chip seal applicator must have placed a minimum of three asphalt rubber chip seals on pavements, which have been in place at least two years under traffic.

The mix design for the asphalt rubber chip seal must be included in the qualification data. The mix design shall be completed and certified by a registered professional engineer licensed in the State of Arizona with at least 2 years of successful experience with asphalt rubber chip seal design and approval with public entities. Submittals must include all tests and product certifications specified in this section.

The Contractor is required to submit the data required for qualification of the asphalt rubber chip seal applicator to the Project Engineer within 15 days of the date of the Letter of Award.

2. MATERIAL

2.1 Asphalt

The grade of asphalt cement for the asphalt rubber chip seal mixture shall be PG 64-16.

2.2 Granulated Reclaimed rubber (CRM)

The CRM used shall be produced primarily from the processing of automobile and truck tires. The rubber shall be produced by ambient temperature grinding processes only.

The gradation of the CRM when tested in accordance with ASTM C-136 (dry sieve only) and using a 50 gram sample, shall meet the following requirements:

<u>Sieve Sizes</u>	<u>Percent Passing</u>
#8	100
#10	95 – 100
#16	40 – 60
#30	0 – 20
#50	0 – 10

The use of rubber from multiple sources is acceptable provided that the overall blend of rubber meets the gradation requirements.

The individual CRM particles, irrespective of diameter, shall not be greater in length than 3/16 inch (5 mm).

The CRM shall have a specific gravity of 1.15 ± 0.05 and shall be free of loose fabric, wire, and other contaminants except that up to 4 percent (by weight of rubber) calcium carbonate or talc may be added to prevent rubber particles from sticking together. The rubber shall be sufficiently dry so as to be free flowing and not produce a foaming problem when blended with the hot asphalt cement.

The CRM reclaim rubber stockpile(s) to be used on the project shall be certified to meet the requirements specified herein by the rubber supplier and forwarded to the Project Engineer at least 10 days prior to the start of construction.

2.3 Asphalt Rubber Chip seal Binder

The asphalt rubber chip seal binder shall meet the following criteria when reacted with asphalt cement at $350^{\circ} \pm 10^{\circ}\text{F}$ for 60 minutes.

Specifications for Asphalt Rubber Chip seal Binder

<u>Test Property</u>		<u>Test Value</u>
Brookfield viscosity, Haake type viscosimeter, 350°F; CP	Min Max	1,500 6,000
Penetration, 77°F, 100 gm 5 sec.: 1/10 mm (ASTM D5)	Min Max	25 75
Penetration, 39.2°F, 200g, 60 sec.: 1/10 mm (ASTM D5)	Min	10

Softening Point: °F (ASTM D36)	Min	130
Resilience, 77°F; % (ASTM D5329)	Min	20
TFOT Residue (ASTM D1754)		
Penetration Retention, 39.2°F: %	Min	75
Ductility Retention, 39.2°F: %	Min	50

2.4 Asphalt Rubber Chip Seal Binder Formulation

The asphalt rubber chip seal supplier shall furnish to the Project Engineer within 15 days of the Letter to Award, the asphalt rubber chip seal mix formulation that shall contain the following information:

Asphalt Cement

Source of Asphalt Cement

Grade of Asphalt Cement

Percentage of Asphalt Cement by total weight of asphalt rubber chip seal mixture.

Crumb Rubber Modifier (CRM)

Source of CRM

Grade of CRM

Percentage of CRM by total weight of the asphalt rubber chip seal mixture.

If CRM from more than one source are to be utilized, the above information will be required for each CRM used.

2.5 Aggregate Cover Material

Aggregate shall be composed of a clean and durable crushed rock or crushed gravel conforming to the following requirements:

Proposed aggregate samples shall be submitted to the asphalt rubber chip seal supplier prior to preparation of the mix design to test for aggregate stripping characteristics. The results shall be certified and submitted to the Project Engineer as noted above.

If the aggregate material is to be crushed stone, it shall be manufactured from sound, hard, durable rock of accepted quality and crushed to specification size. All strata, streaks and pockets of clay, dirt, sandstone, soft rock or other unsuitable material accompanying the sound rock shall be discarded and not allowed to enter the crusher.

If the aggregate material is to be crushed gravel, it shall consist of hard, durable fragments of stone or gravel of accepted quality and crushed to specification size.

All strata, streaks, and pockets of sand, excessively fine gravel, clay or other unsuitable material including all stones, rocks, and boulders of inferior quality shall be discarded and not allowed to enter the crusher. The crushing of the gravel shall separate No. 4, 3/8 inch and 1/2-inch (4.75 mm, 9 mm, and 12 mm). Sieves shall have at least 75% of particles with at least one fractured face.

The crushed aggregate shall not contain more than 8% by weight of elongated or flat pieces and shall be free from wood, roots, vegetable, organic or other extraneous matter. The crushed coarse aggregate shall have a percentage of wear not more than 7 at 100 revolutions and 30 at 500 revolutions, as determined by ASTM C 131. The aggregate shall show no evidence of disintegration nor show a total loss greater than 12% when subjected to five cycles of the sodium sulphate accelerated soundness test specified in ASTM C 88.

The crushed aggregate for the applications shall meet the requirements for gradation given in Table 1 when tested in accordance with ASTM C 136.

Table 1. Aggregate Gradation Requirements

<u>Sieve Size</u>	<u>Percent Passing</u>
1/2"	100
3/8"	55 – 85
1/4"	0 – 10
#200	0 – 1.0

The gradation in the table represents the limits, which shall determine suitability of aggregate for use for the specified application from the sources of supply.

The Bulk Oven Dry Specific Gravity of the aggregate shall range from 2.30 to 2.85 when tested in accordance with the requirements of Arizona Test Method 210. Data indicating the loose and dry-rodded unit weight for the aggregate material in pounds per cubic yard shall be included in the test results submittal.

The aggregate stockpile(s) to be used on the project shall be certified to meet the requirements specified herein by the aggregate supplier and forwarded to the Project Engineer at least 10 days prior to the start of construction.

The aggregate shall be pre-coated with 0.50 to 0.75 percent paving grade asphalt cement. The Contractor shall determine the amount of pre-coat. The pre-coated aggregate should have a "salt and pepper" appearance.

3. EQUIPMENT

3.1 General

The equipment used by the contractor shall include a self-propelled rotary power broom or mobile pickup broom for pavement cleaning and excess cover material removal.

3.2 Asphalt Rubber Chip Seal Equipment

All equipment utilized in the production and application of the asphalt rubber chip seal shall be described as follows:

- A. An asphalt heating tank with a hot oil heat transfer system or retort heating system capable of heating asphalt cement to the necessary temperature for blending with CRM. This unit shall be capable of heating a minimum of 2,500 gallons of asphalt cement.
- B. Blender: The asphalt rubber chip seal mechanical blender shall have a two stage continuous mixing process capable of producing a homogenous mixture of asphalt cement and granulated rubber, at the mix design specified ratios, as directed by the engineer. This unit shall be equipped with a granulated rubber feed system capable of supplying the asphalt cement feed system, as not to interrupt the continuity of the blending process. The maximum capacity of the primary blending vessel shall be 500 gallons. The blending unit shall be capable of fully blending the individual rubber particles with the asphalt cement. A separate asphalt cement feed pump and finished product pump are required. This unit shall have both an asphalt cement totalizing meter in gallons and a flow rate meter in gallons per minute.
- C. A truck or trailer mounted self-powered distributor truck equipped with a heating unit, and an internal mixing device capable of maintaining a uniform mixture of asphalt cement and CRM. It shall be equipped with a full circulating spreader bar and pumping system capable of applying asphalt rubber chip seal material within ± 0.05 gallons per square yard tolerance of the specified application rate and must give a uniform covering of the surface to be treated. The distributor shall have a boot board on the rear of the vehicle and a bootman shall accompany the distributor. The bootman shall ride in a position so that all spray bar tips are in full view and readily accessible for unplugging if a plugged tip should occur. The distributor shall also include a tachometer, pressure gauge, and volume measuring device and thermometer.

3.3 Aggregate Cover Material Spreader

The cover material (chip) spreader shall be a self-propelled machine with an aggregate receiving hopper in the rear, belt conveyors to carry the aggregate to the front, and a spreading hopper equipped with a full width distribution auger and spread roll. The spreader shall be in good mechanical condition and be capable of applying the cover material uniformly across the spread at the specified rate.

3.4 Rolling Equipment

A minimum of three operational self-propelled pneumatic-tired rollers shall be used for the required rolling of the cover material. The pneumatic-tired rollers shall carry a minimum loading of 5,000 pounds on each wheel and tire air pressure as per manufacturer's specifications.

3.5 Hauling Equipment

Trucks for hauling cover material shall be tailgate discharge and shall be equipped with a device to lock onto the hitch at the rear of the cover material spreader. Haul trucks shall also be compatible with the cover aggregate spreader so that the dump bed will not push down on the spreader when fully raised or have too short a bed, which results in aggregate spillage while dumping into the receiving hopper.

4. **CONSTRUCTION METHODS**

4.1 Surface Preparation and Post Application Sweeping

Immediately prior to the application of the asphalt rubber chip seal membrane, the surface shall be thoroughly cleaned to the satisfaction of the Project Engineer in order to insure adequate adhesion of the asphalt rubber chip seal to the pavement. The cleaning operation shall include a pre-application sweeping of the road with a power broom to remove all dirt and foreign materials. Post-chip application sweeping of the roadway shall remove all excess chips from the chip sealed area, intersections, paved shoulders and turn bays of the road prior to fog seal no sooner than 6 hours after the completion of the chip application, but within 24 hours after each chip application to the satisfaction of the Project Engineer. Upon approval by the Engineer, through traffic may immediately use freshly-applied chip seal if vehicle speeds are restricted to no greater than 15 mph by use of flagmen, if necessary. Loose gravel signs shall remain on the roadway after chip sealing until such time as the Project Engineer approves their removal.

4.2 Weather Limitations

Bituminous material shall be applied only when the existing surface is dry, the pavement temperature is at least 85°F, and the ambient temperature in the shade is at least 70°F. No material shall be applied when rain is imminent or when the wind is excessive.

4.3 Asphalt-Rubber Mixing and Reaction

The percentage of CRM shall be 18 – 22 percent by weight of total asphalt rubber chip seal mixture; the exact CRM content shall be as determined by the mix design submitted by the asphalt rubber chip seal supplier. During membrane placement the CRM percentage shall not fluctuate by more than 1 percent by weight of total asphalt-rubber mixture.

The temperature of the asphalt cement shall be between 375°F and 450°F at the addition of the CRM. The asphalt and rubber shall be combined and mixed together in the asphalt-rubber blending unit and reacted from the time the granulated rubber is added to the asphalt cement in the distributor for a minimum period of time as specified in the mix design specifications but no less than 30 minutes. The temperature of the asphalt rubber chip seal mixture shall be above 350°F during the reaction period, but shall not exceed 450°F at any time. Exceeding the 450°F limit will be grounds for rejection of affected mixture.

When a job delay occurs after full reaction, the asphalt rubber chip seal may be allowed to cool. The asphalt rubber chip seal shall be reheated slowly just prior to application to a temperature between 350°F and 400°F. An additional quantity of asphalt cement and/or CRM may be added as required to produce a material with the appropriate viscosity.

4.4 Application of Asphalt rubber chip seal Material

Placement of the asphalt rubber chip seal membrane shall be made only under the following conditions:

1. The pavement surface temperature shall be 85°F and rising.
2. The pavement surface is clean and absolutely dry.
3. The wind conditions are not excessive.
4. All construction equipment such as asphalt rubber chip seal distributor, cover material spreader, haul trucks with cover material, and rollers are in position and ready to commence membrane placement operation.
5. Rain is not imminent.

The asphalt rubber chip seal mixture shall be applied at a temperature of 325°F to 400°F at a rate of 0.60 to 0.70 gallons per square yard. Transverse joints shall be constructed by placing building paper across and over the end of the previous

asphalt rubber chip seal application. Once the spraying has progressed beyond the paper, the paper shall be removed immediately and disposed of as directed by the engineer. All longitudinal joints shall not exceed a four-inch overlap.

4.5 Application of Cover Material

Cover material shall be applied immediately to the asphalt rubber chip seal after spreading at a rate of 26 to 32 pounds per square yard. The actual amount selected within this range will be determined in the field and based on the appearance of the asphalt rubber chip seal after initial rolling. The application rate shall be kept to a minimum.

During construction the cover material shall be sampled at the stockpile and tested for gradation in accordance with ASTM C 136 at every 300 tons applied or once a day if the amount applied that day is less than required by the 300 ton sampling. The test results shall be certified and submitted to the Project Engineer within 48 hours of sampling. No additional payment will be made for quality assurance testing, and shall be included in cost for chip seal unit item.

The cover material shall be placed at a temperature of 250-325°F. In rural areas where the production or delivery of heated cover material would significantly impact production rates the contractor may request a waiver of the heated chip requirement. Should the Engineer grant an exception to the heated cover material requirement it does in no way absolve the responsibility of the contractor to construct a fully functional seal coat and friction course, free of defects, for the specified section of roadway. Stripping of aggregate from the membrane or excessive bleeding will be considered a defect in the work. Furthermore, if the heated cover material requirement is waived, the cover material must not be wet at the time of application. If the cover material is stockpiled after precoating great care must be exercised to insure that the cover material does not become contaminated with soil or other deleterious material and is not allowed to get wet.

4.6 Rolling

At least three operational pneumatic-tired rollers shall be provided to accomplish the required embedment of the cover material. At some project locations or where production rates dictate, fewer rollers may be utilized as directed by the Project Engineer. At no time shall there be less than two operational pneumatic tired rollers on a project.

Sufficient rollers shall be used for the initial rolling to cover the width of the aggregate spread with one pass. The first pass shall be made immediately behind the cover material spreader, and if the spreading is stopped for an extended period, the cover material spreader shall be moved ahead or off the side so that all cover material may be immediately rolled. Four complete passes with rollers shall

be made with all rolling completed within one hour after the application of the cover material.

4.7 Traffic Control

Except when it is necessary that hauling equipment must travel on the newly applied membrane, traffic of all types shall be kept off the membrane until it has had time to set properly. The speed of all hauling equipment shall not exceed 15 miles per hour when traveling over a membrane which is not adequately set. The minimum traffic free period shall not be less than one hour.

5. **METHOD OF MEASUREMENT**

Measurement shall be for square yard of finished, in place product as specified herein and as shown on the project plans.

6. **BASIS OF PAYMENT**

Payment shall be made at the contract unit price per square yard of finished in place product as specified herein. These prices shall be full compensation for furnishing all materials and testing and for all preparation, hauling, and application of the materials including labor, equipment, tools, and incidentals necessary to complete the item.

TECHNICAL SPECIFICATION - QUALITY CONTROL AND TESTING SUPPLEMENT

Description:

It shall be the responsibility of the Contractor to administer a Quality Control Plan, hereinafter referred to as "QCP", sufficient to assure a product meeting the requirements of these specifications. The QCP may be operated wholly or in part by a subcontractor or an independent organization, however, the administration of the QCP, including compliance with the QCP and its modifications, shall remain the responsibility of the Contractor. All quality control testing and certification shall be performed under the guidance of a Professional Engineer licensed in the State of Arizona. This Engineer must also be a bona fide employee of an ADOT approved materials testing laboratory.

The Contractor is required to provide and maintain a QCP, along with all personnel, equipment, supplies and facilities as necessary to obtain samples, perform tests, and otherwise assure the quality of the product.

The Contractor's Quality Control Engineer shall submit the QCP, to the Owner's Engineer for approval, a minimum of ten working days prior to the start of work.

The Contractor shall perform process control sampling, testing and inspection during all phases of the work and shall perform the process control sampling, testing and inspection at a rate sufficient to assure that the work conforms to the contract requirements and published technical specifications. Additional testing may be required in the technical specification for an item. The Contractor's Quality Control Engineer shall provide the Owner's Engineer a certification stating that all of the testing equipment to be used is properly calibrated and will meet the specifications applicable for the specified test procedures and random sampling. The Contractor's Quality Control Engineer shall certify the results of all tests performed and provide copies of the test results to the Owner's Engineer.

Elements of the Quality Control Plan:

The QCP shall address all elements which affect the quality of any material or aspect of the project, and includes, but is not limited to the quality of the subgrade, backfill materials aggregate base, cover material, asphalt products, asphalt emulsions, concrete, and asphaltic concrete, and shall include, but not be limited to the following:

- A) Seal Coat
- B) Asphalt Emulsion
- C) Cover Material

Testing Requirements:

All required testing shall be performed by the Contractor's Quality Control testing laboratory on materials and end products as required by the respective specification (MAG, ADOT, or

otherwise specified) that is utilized for the material required in these contract documents. In instances when additional testing is required by the Owner, or when that testing requirement is not covered under the applicable specification referenced, modifications are included within these Contract Documents.

Testing frequencies, random sampling procedures, and testing methodologies shall be per the standard testing procedures within each respective specification or applicable testing manual or methods.

Acceptance:

Specifications are hereby modified to state that the tests used to determine acceptance will be performed by the materials testing laboratory employed by the Contractor under subcontract to perform the quality control testing for the project. All random sampling procedures and frequencies shall follow the most recent standard published specifications, and as modified by these contract documents.

Method of Measurement:

Measurement for work under this section shall be on a lump sum basis.

Basis of Payment:

Payment for work under this section, measured as provided above shall be paid for on a lump sum basis.

Pay Item:

Quality Control and Testing

Pay Unit:

Lump Sum (LS)

DETERMINATION OF TRANSVERSE DISTRIBUTOR SPREAD RATE (A modification of Tentative Test Calif. 339 - A)

Scope

1. This description covers the field test procedure for determining the transverse spread rate in gallons per square yard of bituminous distributors.

Apparatus

2. The apparatus shall consist of the following:

(a) Balance. The balance shall conform to AASHTO M 213, Class D.

(b) Suitable weighing box or shield for balance.

(c) Metal sheets 7-7/8 x 84, 20 gauge galvanized.

(d) Balance table and work table. Light metal camp tables have been found very convenient.

(e) 1 x 6 x 8 boards. (For alternate sampling procedure)

Materials

3. (a) Cotton gauze pads 4 x 8, 12 ply.

(b) 5" x 12" strips cut from heavy wrapping paper.

(c) Masking tape, 1/2" width.

(d) Scotch tape, 3/4" width

(e) Rubber cement for fastening cotton pads to paper strips.

Preparation of Test Plates

4. (a) Attach a cotton pad to each paper strip with rubber cement, then secure each corner of the cotton pad with a staple. Pads are to be placed on the paper strips as shown in Figure 1.

NOTE: Normally one cotton pad will be adequate, but when testing with heavy spread rates or rubberized asphalt it may be necessary to staple an additional pad to each paper strip. In fastening cotton pads to the paper strips the application of rubber cement should be heavy enough to hold the pad to the paper, but not so heavy that it blocks the absorption of the pad.

(b) Place a strip of scotch tape along each end of the paper strip as shown in Fig. 1. This will allow the masking tape to be easily removed from the paper strip during the removal process in 5 (c) or 6(e).

(c) Place an identification number on the back of each assembled paper strip and cotton pad.

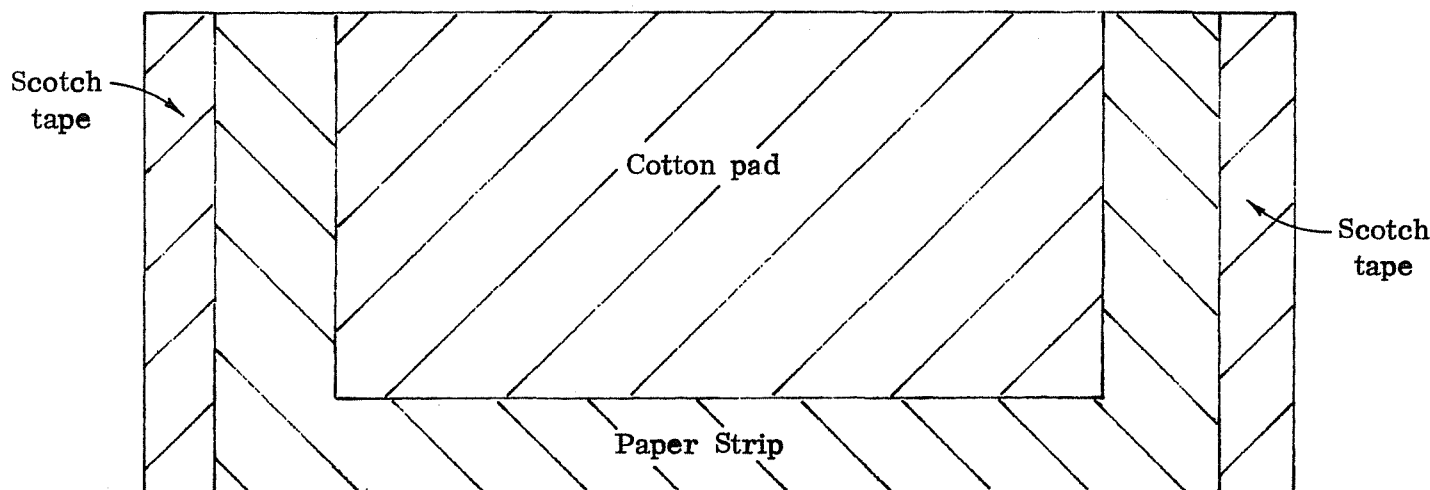


Figure 1.

(d) Weigh the pads with the paper backing attached after they are thoroughly dry to determine the average tare weight. Record to the nearest 0.1 gram.

(e) Attach the paper strips to the metal sheet so that the cotton pads are snug against each other by overlapping the adjacent strips 1 inch, and securing to metal sheet with masking tape on reverse side. (21 paper strips with pads attached will be required to fabricate one test place.)

(f) Wrap assembled test plates in heavy wrapping paper to keep them clean while being stored or transported to test site.

Sampling

5. (a) As the distributor approaches, place the test plates across the roadway, with pad no. 1 being toward the centerline of the roadway and numbering increasing towards the shoulder of the road.

NOTE: Do not allow traffic to drive over the sample pads (the relatively slow moving distributor does not disturb the test plates).

(b) When the distributor has passed leave the test plates in place a short time to allow the bituminous material to harden slightly and prevent running on the pads, then remove test plates from the pavement.

(c) Place the test plate assembly on the work table, then remove and fold each pad and paper strip, starting with the highest number and proceeding to the lowest number, stacking folded pads on the top of each other. (Care should be taken not to remove any of the paper when removing the masking tape.)

(d) As soon as the removal operation is completed place the pads in the weigh box, and then weigh in order to the nearest 0.1 gram. Record the weight of each pad, starting the recording with pad no. 1, the pad nearest the centerline of the pavement. If a tare is used during weighing, record the net weight of the bitumen, otherwise the previously determined average weight of the individual pads must be subtracted from the total weight of pad + bitumen.

NOTE: In very hot weather, remove and weigh the sample pads in the shade and with as little delay as possible. If substantial delay occurs, prepare a control sample with a known weight of binder and weigh at intervals to determine the evaporation loss rate and a correction.

Alternate Sampling Procedure

6. *NOTE: This procedure allows for sampling distributor trucks in restricted areas where normal applications are not possible.*

(a) Place 1" x 6" x 8' boards in a suitable location and then lay test plates on top of the boards, with pad no. 1 being on the drivers side of the truck.

NOTE: Boards should be protected from bituminous material by wrapping them in heavy paper.

(b) Back distributor truck up to test plates so that the back wheels of the truck are a few inches from the test plates.

(c) Drive the distributor truck forward at a constant rate and apply bituminous material across test plates.

(d) After spraying operation leave the test plates in place a short time to allow the bituminous material to harden slightly and prevent running on the pads, then remove the test plates and boards.

(e) Place the test plate assembly on the work table, then remove and fold each pad and paper strip starting with the highest number and proceeding to the lowest number, stacking folded pads on the top of each other. (Care should be taken not to remove any of the paper when removing the masking tape.)

(f) When the removal operation is completed weigh the pads in order, to the nearest 0.1 gram. Record the weight of each pad, starting the recording with pad no. 1, the pad nearest the drivers side of the truck. If a tare is used during weighing, record the net weight of the bitumen, otherwise the previously determined average weight of the individual pads must be subtracted from the total weight of pad + bitumen.

Calculations

7. (a) Multiply the net weight of binder on each pad by 0.0107, or use the table found in Figure 2 to obtain the spread rate in gal./sq. yd. to the nearest .001 gal.

(b) Determine the average spread rate in gal./sq. yd. by dividing the total quantity of binder collected on the pads by the number of pads. Omit end pads that show very low spread rates due to feathering and also end pads showing a heavy rate due to the use of shields. Normally those to be eliminated can be determined by inspection but if a more uniform method is desired the following

procedure may be used: Calculate the average spread rate using all pads having a binder content of over 0.050 gal/sq. yd. Omit all end pads varying by more than the specified limits from the above calculated average spread rate, then recalculate the average spread rate.

Report

8. Report the following:

(a) The spread rate in gal./sq. yd. for each test pad, to the nearest .001 gal.

(b) The average spread rate in gal./sq. yd. to the nearest .001 gal.

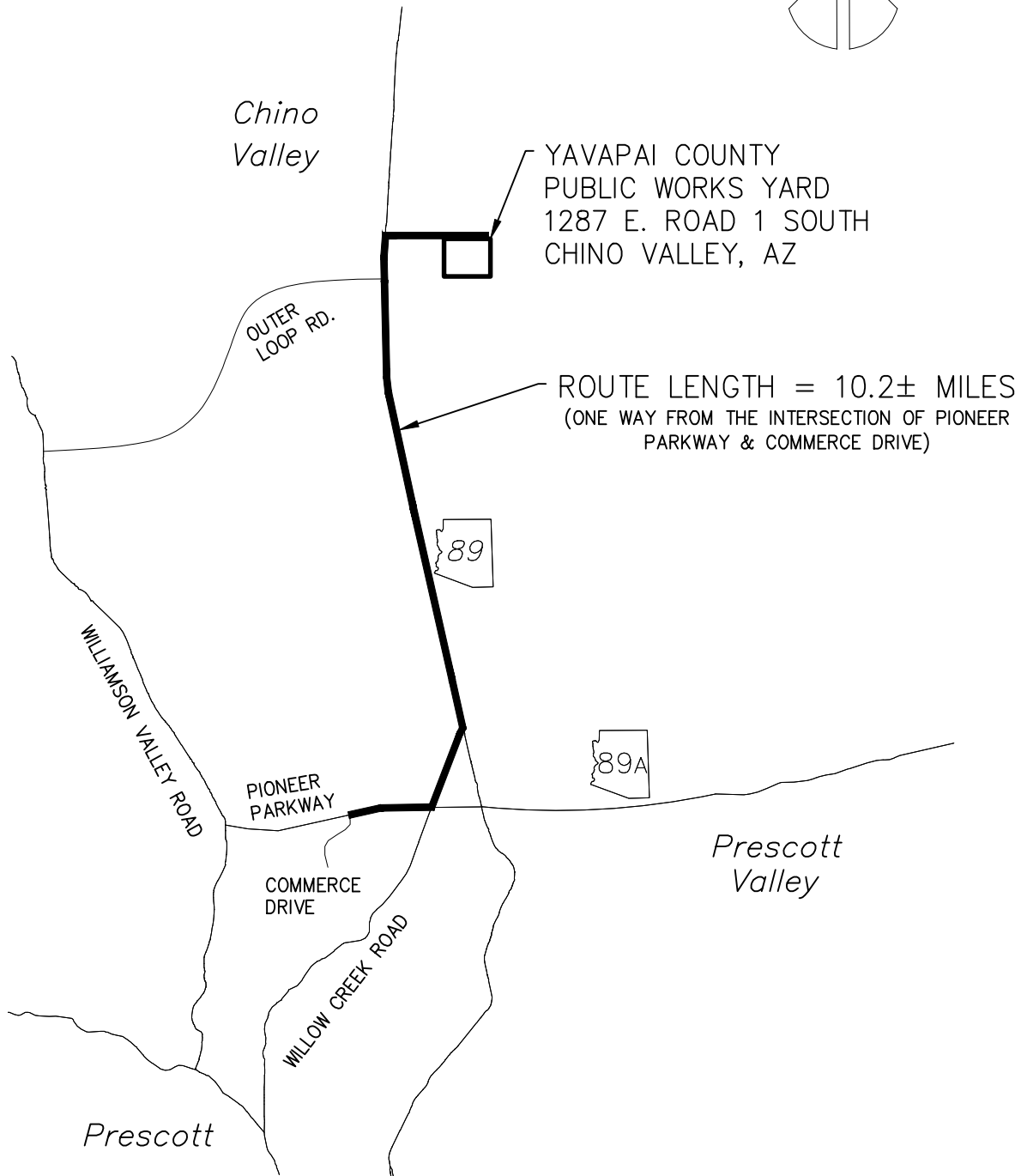
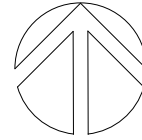
(c) Any test pads varying by more than the specified limits from the average spread rate.

(d) For further study the spread rate in gal./sq. yd. for each test pad, the average spread rate, and the specified limits may be plotted on graph paper.

CONVERSION TABLE										
Net weight of binder on 4" x 8" pads to gals./sq. yd.										
grams	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
8	.086	.087	.088	.089	.090	.091	.092	.093	.094	.095
9	.096	.097	.098	.099	.100	.102	.103	.104	.105	.106
10	.107	.108	.109	.110	.111	.112	.113	.114	.116	.117
11	.118	.119	.120	.121	.122	.123	.124	.125	.126	.127
12	.128	.129	.131	.132	.133	.134	.135	.136	.137	.138
13	.139	.140	.141	.142	.143	.144	.146	.147	.148	.149
14	.150	.151	.152	.153	.154	.155	.156	.157	.158	.159
15	.160	.162	.163	.164	.165	.166	.167	.168	.169	.170
16	.171	.172	.173	.174	.175	.177	.178	.179	.180	.181
17	.182	.183	.184	.185	.186	.187	.188	.189	.190	.192
18	.193	.194	.195	.196	.197	.198	.199	.200	.201	.202
19	.203	.204	.205	.206	.208	.209	.210	.211	.212	.213
20	.214	.215	.216	.217	.218	.219	.220	.221	.223	.224
21	.225	.226	.227	.228	.229	.230	.231	.232	.233	.234
22	.235	.236	.237	.239	.240	.241	.242	.243	.244	.245
23	.246	.247	.248	.249	.250	.251	.252	.254	.255	.256
24	.257	.258	.259	.260	.261	.262	.263	.264	.265	.266
25	.267	.269	.270	.271	.272	.273	.274	.275	.276	.277
26	.278	.279	.280	.281	.282	.284	.285	.286	.287	.288
27	.289	.290	.291	.292	.293	.294	.295	.296	.297	.298
28	.300	.301	.302	.303	.304	.305	.306	.307	.308	.309
29	.310	.311	.312	.313	.315	.316	.317	.318	.319	.320
30	.321	.322	.323	.324	.325	.326	.327	.328	.330	.331
31	.332	.333	.334	.335	.336	.337	.338	.339	.340	.341
32	.342	.343	.344	.346	.347	.348	.349	.350	.351	.352
33	.353	.354	.355	.356	.357	.358	.359	.361	.362	.363
34	.364	.365	.366	.367	.368	.369	.370	.371	.372	.373
35	.374	.376	.377	.378	.379	.380	.381	.382	.383	.384

Figure 2

YAVAPAI COUNTY
'CHINO VALLEY YARD' MAP
(NO SCALE)



CONTRACT

THIS AGREEMENT, made and entered into this ____ day of _____ by and between Yavapai County, Arizona, party of the first part, hereinafter designated the OWNER, and _____ of the City/Town of _____ State of Arizona, party of the second part, hereinafter designated the CONTRACTOR.

WITNESSETH: That the said Contractor, for and in consideration of the sum to be paid him by the said Owner, in the manner and at the time hereinafter provided, and of the other covenants and agreements herein contained, and under the penalties expressed in the bond hereto attached, hereby agrees, for himself, his heirs, administrators, successors, and assigns as follows:

ARTICLE I - SCOPE OF WORK: The Contractor shall furnish any and all plant materials, labor, construction equipment, services, and transportation required for performing all work for **CHIP SEAL (SUMMER, FY 2015-2016) PROJECT IN YAVAPAI COUNTY, ARIZONA; PROJECT #1620882**, in accordance with the plans and these specifications, and to completely and totally construct the same and install the material herein for the Owner, in a good and workmanlike and substantial manner and to the satisfaction of the Owner through its Engineers and under the direction and supervision of the Engineer, or his properly authorized agents and strictly pursuant to and in conformity with the Specifications prepared by the Engineers for the Owner, and with such modifications of the same and other documents that may be made by the Owner through the Engineer, or his properly authorized agents, as provided herein.

ARTICLE II - CONTRACT DOCUMENTS: "Project Provisions and Specifications", "Proposal", "Surety Bid Bond", "Affidavit of Non-Collusion", "Subcontracting Certification", "Bid Schedule (Final)", "Labor and Materials Bond", "Performance Bond", plans, and addenda thereto, are by this reference made a part of this contract to the same extent as if set forth herein in full.

ARTICLE III - TIME OF COMPLETION: The Contractor further covenants and agrees, at his own proper cost and expense, to do all work and furnish all materials, labor, construction equipment, services and transportation for performing all of the work for construction of said improvements and to completely construct the same and install the material therein, as called for by this agreement free and clear of all claims, liens, and charges whatsoever, in the manner and under the conditions specified within the time, or times, stated in the Proposal.

Work on this project shall start within ten (10) calendar days after the starting date set forth in the "Notice to Proceed" and shall be completed within the following limits:

SCHEDULE:

For construction in the contract documents, the project shall be completed within **TWENTY-FOUR (24) TEN-HOUR WORKING DAYS FROM THE DATE SPECIFIED IN THE NOTICE TO PROCEED.**

It is expressly understood and agreed that in case of failure on the part of the Contractor, for any reason, except with the written consent of the Owner's Engineer, to complete the work to the satisfaction of the Owner's Engineer and within the aforesaid time limits, the Owner may deduct from any money due, or which may become due the Contractor, as liquidated damages, an amount as fixed by the following schedule:

<u>WORK ITEM</u>	<u>LIQUIDATED DAMAGES</u>
All work not complete within the above specified time.	PER MAG SPECIFICATIONS

If no money shall be due the Contractor, the Owner shall have a cause of action to recover against the Contractor in a court of competent jurisdiction, liquidated damages as fixed by the above schedule; said deduction to be made, or said sum to be recovered, not as a penalty, but as liquidated damages; provided, however, that upon receipt of written notice from the Contractor, of the existence of causes, as herein provided, over which said Contractor has no control and which must delay the completion of the said work or any delay occasioned by the Owner, the Owner's Engineer may extend the period hereinafter specified for the completion of said work in accordance with the specifications and in such case, the Contractor shall become liable for said liquidated damages for delays commencing from date said extension period shall expire.

ARTICLE IV – COMPLIANCE WITH IMMIGRATION LAWS: Contractor hereby warrants that it will at all times during the term of this Contract comply with all federal immigration laws applicable to Contractor's employment of its employees, and with the requirements of A.R.S. §23-214 (A) (together the "State and Federal Immigration Laws"). Contractor shall further ensure that each subcontractor who performs any work for Contractor under this contract likewise complies with the State and Federal Immigration Laws.

Contractor agrees and warrants that Owner shall have the right at any time to inspect the books and records of Contractor and any subcontractor in order to verify such party's compliance with the State and Federal Immigration Laws. Contractor agrees that any act by the Contractor or subcontractor that result in the impediment or denial of access of the books and records of Contractors or subcontractor shall be a material breach of the Contract on the part of the Contractor.

Nothing herein shall make Contractor or subcontractor an agent or employee of the Owner. Nothing herein shall act to establish privity of contract between the Owner and any subcontractor. Any breach of Contractor's or any subcontractor's warranty of compliance with the State and Federal Immigration Laws, or of any other provision of this section, shall be deemed to be a material breach of this Contract subjecting Contractor to penalties up to and including suspension or termination of this Contract. If the breach is by a subcontractor, and the subcontract is suspended or terminated as a result, Contractor shall be required to take such steps as may be necessary to either self-perform the services that would have been provided under the subcontract or retain a replacement subcontractor, subject to Owner approval as soon as possible so as not to delay project completion.

Contractor shall advise each subcontractor of Owner's rights, and the Subcontractor's obligations, under this Article by including a provision in each subcontract substantially in the following form:

"Subcontractor hereby warrants that it will at all times during the term of this contract comply with all federal immigration laws applicable to Subcontractor's employees, and with the requirements of A.R.S. §23-214 (A). Subcontractor further agrees that Owner may inspect the Subcontractor's books and records to ensure that Subcontractor is in compliance with these requirements. Any breach of this paragraph by Subcontractor will be deemed to be a material breach of this contract subjecting Subcontractor to penalties up to and including suspension or termination of this contract."

Any additional costs attributable directly or indirectly to remedial action under this Article shall be the responsibility of Contractor.

ARTICLE V - CANCELLATION: This agreement is subject to cancellation pursuant to A.R.S. §38-511.

ARTICLE VI - PAYMENTS: The Contractor shall make an estimate of the work performed during the preceding month and submit the same to the Engineer for checking. On or before twenty (20) days after the certified and approved estimate of the work is received by the Owner, the Owner shall pay to the Contractor ninety percent (90%) of the value of said work in place, as approved by the Owner's Engineer. The balance of ten percent (10%) of the estimate shall be retained by the Owner until the time of final payment and acceptance of said work, as per A.R.S. §34-221.

In addition, when the contract is fifty percent completed, one half of the amount retained including any securities substituted under paragraph five of A.R.S. §34-221, shall be paid to the Contractor upon the Contractor's written request provided the Contractor is making satisfactory progress on the Contract and there is no specific cause or claim requiring a greater amount to be retained. After the Contract is fifty per cent completed, no more than five percent of the amount of any subsequent progress payments made under the Contract may be retained providing the Contractor is making satisfactory progress on the project, except that if at any time the owner determines satisfactory progress is not made ten percent retention shall be reinstated for all progress payments made under the Contract subsequent to the determination, all in accordance with A.R.S. §34-221.

IN WITNESS WHEREOF, two (2) identical counterparts of this contract, each of which shall for all purposes be deemed an original thereof, have been duly executed by the parties hereinabove named, on the date and year first above written.

In return for the performance of this Contract by the Contractor, the Owner agrees to pay the amount of _____ through a payment schedule as described in the Contract documents and as may be modified and executed by change orders and by final quantities. Contractor understands that Yavapai County has established an Electronic Funds Transfer (EFT) program for all payments to providers of goods and services to the County and agrees to accept EFT payments in full satisfaction of the County's payment obligations pursuant to this Contract. Contractor further agrees to register for the County's EFT program within one month

following the effective date of this Contract and understands that failure to comply with this registration requirement shall result in suspension of payments pursuant to this Contract until such time as the registration process is completed.

The Contractor agrees that this contract, as awarded, is for the following work, and understands that payment for the total work will be made on the basis of the indicated amount(s), as bid in the Proposal and attached Bidding Schedule for **CHIP SEAL (SUMMER, FY 2015-2016) PROJECT IN YAVAPAI COUNTY, ARIZONA; PROJECT #1620882.**

YAVAPAI COUNTY

ATTEST:

Clerk, Board of Supervisors

Jack R. Smith
Chairman, Board of Supervisors

CONTRACTOR (Company Name)

ATTEST:

By:_____
Signature and Title

WITNESS: If Contractor is
an Individual

Full Address and Telephone

CONTRACT PERFORMANCE WARRANTY

I, _____, representing
_____ (company name)

do hereby warranty the work performed for **CHIP SEAL (SUMMER, FY 2015-2016) IN YAVAPAI COUNTY, ARIZONA; PROJECT #1620882**, for a period of two years from completion of said work.

Said work shall be free from defects which would cause the work not to perform in its intended manner.

(Officer, Partner, Owner)

Date



STATUTORY LABOR AND MATERIALS BOND
PURSUANT TO TITLE 34, CHAPTER 2, ARTICLE 2 OF
THE ARIZONA REVISED STATUTES
 (PENALTY OF THIS BOND MUST BE 100% OF CONTRACT AMOUNT)

KNOW ALL MEN BY THESE PRESENTS:

That, _____,
 _____, (hereinafter called the Principal), as Principal,
 and _____
 (hereinafter called Surety), a corporation duly organized and existing the laws of the State of _____ with its
 principal office in the city of _____ holding a certificate of authority to transact surety business in Arizona
 issued by the Director of the Department of Insurance, as Surety, are held and firmly bound unto Yavapai County (hereinafter called the
 Obligee) in the amount of (100% of Contract Amount) _____ dollars
 (\$ _____), for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrator,
 executors, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has agreed to enter into a certain contract with the Obligee for **CHIP SEAL (SUMMER, FY 2015-2016)**
PROJECT IN YAVAPAI COUNTY, ARIZONA; PROJECT #1620882, which contract is hereby referred to and made a part hereof as
 fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal promptly pays all monies due
 to all persons supplying labor or materials to the principal or the principal's subcontractors in the prosecution of the work provided for in
 the contract, this obligation is void. Otherwise it remains in full force and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2, of the Arizona
 Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions, conditions and limitations of Title
 34, Chapter 2, Article 2, to the same extent as if they were copied at length in this agreement.

The prevailing party in a suit on this bond shall recover as a part of the judgment such reasonable attorney fees that may be fixed
 by a judge of the court.

Witness our hands this _____ day of _____, 20 _____.

 Principal Seal

 Surety Seal

 Agency of Record

 Arizona Countersignature

 Address

 Phone Number

 By:

 By:

 Agency Address



STATUTORY PERFORMANCE BOND
**PURSUANT TO TITLE 34, CHAPTER 2, ARTICLE 2 OF
THE ARIZONA REVISED STATUTES**
(PENALTY OF THIS BOND MUST BE 100% OF CONTRACT AMOUNT)

KNOW ALL MEN BY THESE PRESENTS:

That, _____,
_____, (hereinafter called the Principal), as Principal,
and _____
(hereinafter called Surety), a corporation duly organized and existing the laws of the State of _____
with its principal office in the city of _____ holding a certificate of authority to transact surety business in
Arizona issued by the Director of the Department of Insurance, as Surety, are held and firmly bound unto Yavapai County (hereinafter
called the Obligee) in the amount of (100% OF CONTRACT AMOUNT) _____
dollars (\$ _____), for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrator,
executors, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has agreed to enter into a certain contract with the Obligee for **CHIP SEAL (SUMMER, FY 2015-2016)
PROJECT IN YAVAPAI COUNTY, ARIZONA; PROJECT #1620882**, which contract is hereby referred to and made a part hereof as
fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall faithfully perform
and fulfill all the undertakings, covenants, terms, conditions and agreements of said contract during the original term of said contract and
any extension thereof, with or without notice to the Surety, and during the life of any guaranty required under the contract, and shall also
perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said
contract that may hereafter be made, notice of which modifications to the Surety being hereby waived; then the above obligation shall be
void, otherwise to remain in full force and effect;

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2, of the Arizona
Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions of Title 34, Chapter 2, Article 2, to
the same extent as if they were copied at length in this agreement.

The prevailing party in a suit on this bond shall recover as a part of the judgment such reasonable attorney fees as may be fixed by
a judge of the court.

Witness our hands this _____ day of _____, 20 _____.

Principal Seal

Surety Seal

Agency of Record

Arizona Countersignature

Address

Phone Number

By:

Agency Address

By:

TO: (OWNER)
YAVAPAI COUNTY
BOARD OF SUPERVISORS
1100 Commerce Drive
Prescott, Arizona 86305

FROM: (CONTRACTOR)

PROJECT # & LOCATION:

APPLICATION / INVOICE #:

DATE:

CONTRACT DATE:

BILLING PERIOD:

CHANGE ORDER SUMMARY		
Change Orders approved in previous months by Owner TOTAL		DEDUCTIONS
Approved this month		
C.O. #	Date	
TOTALS		
Net Change By Change Orders : \$		

The undersigned Contractor certifies that to the best of the Contractor=s knowledge, information and belief the work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for sub-contractors for work which previous Certificates for Payment were issued and payments received from the Owner, and that the current payment shown herein is now due.

Application is made for Payment, as shown, in connection with the Contract.
(Continuation sheet is attached)

1. ORIGINAL CONTRACT AMOUNT
2. Net change by Change Orders
3. CONTRACT AMOUNT TO DATE
(Line 1 ∨ 2)
4. TOTAL COMPLETED AND STORED TO DATE
5. RETAINAGE 10%
5%
- 5A. ADD RETAINAGE RELEASE @50% COMPLETION
- TOTAL RETAINAGE
- Securities in Lieu of Retention to be Posted
6. TOTAL EARNED LESS RETAINAGE
(Line 4 less Line 5 Total)
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT
(Line 6 from prior Certificate)
8. CURRENT PAYMENT DUE
9. BALANCE TO FINISH, PLUS RETAINAGE
(Line 3 less Line 6)

AUTHORIZATION FOR PAYMENT

Public Works Director:

Date:

Project Engineer:

Date:

Project Manager

Date:

Processed By:

Date:

Contractor

Date

State of : Arizona County of: Yavapai

Subscribed and sworn to before me this day of 20

Notary Public:

My commission expires:

SEAL

YAVAPAI COUNTY
 PROGRESS PAYMENT # _____

SAMPLE

PROJECT:

CONTRACTOR:

Item #	Description	Bid Qty	Type	Unit Bid Price	Contract Amount	Approved Change Order Qty (**Note)	Approved Change Order Amount	Total Prior Quantity	Quantities Current	Quantities to Date	Cost Current	Cost to Date	% Complete
101	Excavation	394	CY	10.00	3,940.00			97.0	100.	197.0	\$1,000.00	\$1,970.00	50%
102	Removals	1	LS	5,000.00	5,000.00				1.0	1.0	\$5,000.00	\$5,100.00	100%
	Totals				\$8,940.00						\$6,000.00	\$7,070.00	79%

**** Any overages/reductions in quantities must be submitted on official change order request document for approval from the Project Management Director. Change Orders will not be processed for payment until approval from the Yavapai County Project Manager followed by official approval from the Yavapai County Board of Supervisors is obtained.**

Project Name/Description (Contractor Name)					SAMPLE							
Change Order Request Form												
					Contract	Qty		Qty		Total Qty	Total	Revised
Item	Description	Qty	Type	Unit	Amount	CO #1	CO #1(\$)	CO #2	CO #2 (\$)	CO	CO (\$)	Contract
1	Traffic Control	1	LS	4,000.00	4,000.00		0.00		0.00	0.0	0.00	4,000.00
2	Excavation	394	CY	10.00	3,940.00		0.00	200.0	2,000.00	200.0	2,000.00	5,940.00
3	Removals	1	LS	5,000.00	5,000.00		0.00		0.00	0.0	0.00	5,000.00
4	Relocate Valve Boxes	3	Ea	800.00	2,400.00		0.00		0.00	0.0	0.00	2,400.00
5	Install New Curb/Gutter	432	LF	15.00	6,480.00	279.5	4,192.50		0.00	279.5	4,192.50	10,672.50
6	Install New Embankment/Spill	2	Ea	1,500.00	3,000.00		0.00		0.00	0.0	0.00	3,000.00
7	Rip Rap D50=4"	11	CY	150.00	1,650.00		0.00		0.00	0.0	0.00	1,650.00
8	Filter Fabric	70	SY	1.50	105.00		0.00		0.00	0.0	0.00	105.00
9	Aggreagte Base 7"	474	CY	22.00	10,428.00		0.00		0.00	0.0	0.00	10,428.00
10	Install New Catch Basin	1	Ea	3,500.00	3,500.00		0.00		0.00	0.0	0.00	3,500.00
11	Asphalt Concrete 61/2"	450	TN	45.00	20,250.00	123.0	5,532.75		0.00	123.0	5,532.75	25,782.75
12	Sawcut	590	LF	2.00	1,180.00		0.00	-590.0	-1,180.00	-590.0	-1,180.00	0.00
13	Signing	1	LS	2,500.00	2,500.00		0.00		0.00	0.0	0.00	2,500.00
14	Pvmt Stripe (4" Yellow)	1125	LF	0.30	337.50		0.00		0.00	0.0	0.00	337.50
15	Pvmt Stripe (4" White)	1225	LF	0.30	367.50		0.00	-100.0	-30.00	-100.0	-30.00	337.50
16	New 4" PVC Conduit	80	LF	16.00	1,280.00		0.00		0.00	0.0	0.00	1,280.00
17	New Pull Box No.7	2	Ea	350.00	700.00		0.00		0.00	0.0	0.00	700.00
18	Pavement Marking	8	Ea	350.00	2,800.00		0.00		0.00	0.0	0.00	2,800.00
19	Quality Control/Testing	1	LS	2,300.00	2,300.00		0.00		0.00	0.0	0.00	2,300.00
20	24" CMP (Plus Elbows)	24	LF	75.00	1,800.00		0.00		0.00	0.0	0.00	1,800.00
21	Construction Staking	1	LS	2,500.00	2,500.00		0.00		0.00	0.0	0.00	2,500.00
22	Fog Seal	150	Gal	8.00	1,200.00		0.00		0.00	0.0	0.00	1,200.00
												88,233.25
	Total Contract Amount				77,718.00							
	Total Change Orders						9,725.25		790.00		10,515.25	
	Total Revised Contract						87,443.25		88,233.25		88,233.25	
	Submitted By / Date: _____											
	Reason for Increase/Decrease: _____											
	(Use Separate Page if Necessary)											
	Approved By / Date: _____											

ATTENTION**Addendum #1**

Bid Opening: April 21, 2016

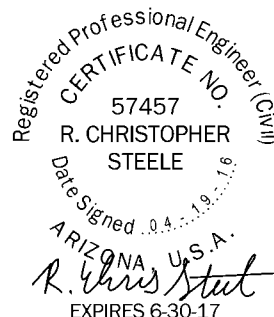
**BID: CHIP SEAL (SUMMER, FY 2015-2016) PROJECT IN YAVAPAI COUNTY, ARIZONA
PROJECT #1620882**

1. **REVISION AND REPLACEMENT: ADOT SECTION 202 – BITUMINOUS PAVEMENT REMOVAL.** Specification has been revised to add a temporary striping and eliminate the laser road profile testing under the quality acceptance portion of the specification.
2. **REPLACEMENT: ASPHALT RUBBERIZED CHIP SEAL (Site Blend).** Specification has been replaced with a new ASPHALT RUBBER STRESS ABSORBING MEMBRANE CHIP SEAL Specification. The new specification is replacing the out-dated spec and is more current to today's standards.
3. **REVISION AND REPLACEMENT: PLAN SHEET 3 of 18.** Plan Sheet 3 has been revised to include the temporary pavement marking quantities.
4. **REVISION AND REPLACEMENT: ADOT SECTION 404 SINGLE CHIP SEAL CRS-2P** has been revised to include as part of the warranty a post sweeping of all chip sealed roads 45 days after final acceptance.
5. **REVISION AND REPLACEMENT: BID TAB.** The bid tab has been revised to include temporary striping line items on the base bid. Contractor should complete and submit *Bid Schedule – Revised April 19, 2016*.

This addendum cover sheet shall be signed and included in the bid package as acknowledgment of receipt of ADDENDUM #1.

Bidder's Signature and Title

Company Name



ADOT SECTION 202 (MODIFIED) - BITUMINOUS PAVEMENT REMOVAL BY MILLING & HAUL

Description:

The work under this section shall be in accordance with Section 202-3.03 of ADOT Standard Specifications, as designated on the project drawings, and as modified herein. Existing pavement markings survey and re-establishment with temporary markings is included.

Construction Requirements:

Existing pavement marking survey

Prior to commencing milling of the existing pavement surface, the contractor is required to survey the existing pavement striping/markings so temporary pavement markings can be applied in the same location as the existing striping/markings after the micro-milling is completed. Traffic will not be allowed on a milled section of roadway unless some form of delineation or pavement markings is provided.

Micro-milling

All of the existing asphaltic concrete friction course (ACFC) shall be completely removed by micro-milling in accordance with the details shown on the project plans and as specified herein. The specified removal depth of the existing bituminous pavement shall be the full depth of the existing friction course, which was designed as 5/8" but the actual thickness may vary.

The milled/planed surface shall provide a texture suitable for use as a temporary riding surface and allow application of an asphalt-rubber chip seal to the milled surface. The use of the micro-milled pavement as a temporary riding surface shall be for a maximum of seven calendar days.

The Milling machine shall conform to the ADOT Standard Specifications and include the following:

- a) The milling equipment shall be specifically designed to remove material to a controlled line and grade by means of grinding or chipping. The equipment used shall be capable of removing the existing asphaltic concrete uniformly throughout the milled area at the required cross-slope and with 1/16 inch accuracy.
- b) Be equipped with a micro-milling drum, a minimum width of 7' with tungsten-carbide-tipped cutting teeth spaced no greater than 0.250 inch apart laterally on center. The configuration of the teeth shall be such that the deviation in elevation between any 2 teeth does not exceed 1/16 inch.
- c) Be equipped with an automatic grade control system operating in "profile" mode. The system shall be either:

- i) A 30-foot-long paving machine ski with spring-loaded feet attached to the bottom on not more than 1.5-foot increments, such that the feet rise and fall over small irregularities on the pavement surface. The upper part of the ski shall be one piece and of such construction that it will not flex or bend by more than 1/8 inch at either end when supported off the grade by a fixture located at its center of gravity. The grade control system shall be referenced off the center of the ski, with skis mounted on each side of the milling machine such that the ski's longitudinal center is even with the center of the milling machine's cutting drum; or,
 - ii) A sonic averaging system with automated controls. Each corner of the milling machine shall be equipped with sonic grade averaging and slope sensors. The system shall feature plug-in connections, internal cable routing, 2 dual control boxes for ground personnel each capable of controlling each side of the milling machine, and a separate control box for the operator.
- d) Be equipped with a Tier III or higher engine compliant with the Arizona Department of Environmental Quality regulations.

The removal shall be accomplished in a manner which does not destroy the integrity of any pavement that remains.

During production milling, the contractor shall verify the actual depth of milling required to remove the ACFC to the existing underlying asphalt concrete pavement surface. If it is determined that the required milling depth is greater than the specified milling depth, the additional material shall be completely removed to the desired underlying pavement surface, as approved by the Engineer, at no additional cost to the County. The milled material shall be removed and disposed of as specified in the contract special provisions.

Quality Acceptance:

Ensure that the micro-milling operation produces a uniform pavement texture that is true to line, grade, and cross section.

Micro-milled pavement surfaces are subject to visual and straightedge inspections. Keep a 10' straightedge near the micro-milling operation to measure surface irregularities of the milled pavement surface. Any areas exceeding 1/8 in (3.2 mm) between the ridge and valley of the mat surface require the surface to be re-micro-milled or diamond ground to bring the surface texture into compliance.

Ensure that the cross slope is uniform and that no depressions or slope misalignments greater than 1/4 in per 12 ft (6 mm in 3.6 m) exist when the slope is tested with a straightedge placed perpendicular to the center line. The final pavement surface shall have a transverse pattern of 0.250 inch, center to center, of each strike area. The difference between the ridge and valley of the mat surface shall not exceed 1/8 inch.

Test Section:

Prior to commencement of the work, the contractor will be required to mill a test section that is 100' in length with a uniformly textured surface and cross section as approved by the Engineer. Surface acceptance testing will be performed using a straightedge. The measured texture must meet the parameters set forth in the Quality Assurance section of this specification.

If any of the required surface texture is not achieved in the test section, work shall be halted and the contractor shall submit a written plan of action detailing what steps will be taken to improve operations. If approved by the Engineer, the contractor will construct another 100' test section. This test section shall be located in a different area than the initial section using the approved corrective action. This designated section shall be micro-milled to conform to the same requirements as those required in the initial test section. The contractor shall not be allowed to start continual micro-milling until an acceptable test section is planed, tested and approved.

Milling Operation:

During production milling operation, if the Engineer determines that the desired surface finish is not being achieved, the contractor shall stop milling. Milling shall not resume until the Engineer is satisfied that the requirement can be met or until successful completion of another test section. The forward speed of the milling machine during production milling shall not exceed the speed used for the test section, or shall be at the discretion of the Engineer. The forward speed of the milling machine shall be checked throughout each production day, or at the discretion of the engineer. If the desired surface finish is not met, the contractor shall reduce the forward mill speed as specified by the engineer.

The profile of the milled surface, in both the longitudinal and transverse directions, shall not vary by more than 1/8 inch over a distance of ten feet, verified by a 10' straight edge test.

Milling operations shall progress from the low side of each roadway barrel or lane and progress towards the high side. Each successive pass of the milling machine shall meet the line and grade of the previous pass. All mainline milling shall be completed first before side streets and driveways are milled. The speed of the milling machine shall be maintained at a rate which results in a uniform pavement texture, as approved by the engineer.

Micro-milling shall result in a grid-patterned textured pavement surface with longitudinal ridges approximately the same distance apart as the cutting teeth. The ridges shall be consistent in depth, width, and profile. The distance between the top of each ridge and the adjacent valleys shall not exceed 1/8 inch.

Milled pavement surfaces which do not conform to the requirements above shall be corrected by the Contractor. The Contractor shall prepare and submit to the Engineer for approval a correction plan prior to initiating corrective action.

During milling operations, the cutter teeth shall be regularly checked and replaced as necessary to maintain the tolerances and desired surface finish.

Micro-milling methods that will produce a uniform finished surface and maintain a constant cross slope between extremities in each lane shall be required. The contractor shall maintain the existing pavement profile cross-slopes & provide positive drainage in all existing directions.

Positive drainage shall be provided to prevent water accumulation on the micro-milled pavement, as shown on the plans or directed by the Engineer.

Pavement to be removed by milling adjacent to manholes, valve boxes, small radius curbs and other fixed objects that produce confined areas shall be removed with milling equipment specifically designed to operate in restricted areas and capable of removing asphaltic concrete of the specified thickness without damage or displacement of the adjacent object. At the discretion of the Engineer, such areas may be excluded from smoothness testing.

On projects with existing curb and gutter, the milling depth shall be held at the curb and gutter pan lip, or down to 0.25" below the pan lip. The objective is to remove the full ACFC depth, but at no time should the milling machine plane material below 0.25" lower than the lip of the curb and gutter pan. The equipment and methods used shall be capable of removing the asphaltic concrete without causing damage to the curb and gutter. Any damage to the existing infrastructure—including but not limited to the valve risers, manholes, survey monuments, concrete collars, curb ramps, sidewalks, and concrete curb & gutter—shall be repaired and/or replaced to the satisfaction of the Engineer.

Under no circumstances shall the removal of existing asphaltic concrete begin until the mix design for replacement surface treatment has been approved by the Engineer.

Work Site Maintenance:

Remove dust, milling slurry & residue, and loose milled material from the micro-milled surface. Do not allow traffic on the milled surface and do not place the new surface treatment on the milled surface until removal is complete.

A self-loading motorized street sweeper equipped with both brooms and a vacuum system, and a functional water spray system shall immediately follow the milling machine. Sweeping shall continue until loose millings, silt, slurry and residual ACFC materials have been completely removed and as requested by the Engineer. The Contractor shall maintain the micro-milled surface for cleanliness until the surface treatment is applied.

Hauling of Millings:

Millings shall be hauled and stockpiled as designated in the Special Provisions. The cost of hauling and stockpiling millings shall be included in the 'Micro-mill ACFC Pavement & Haul' line item.

Diamond Grinding:

At both ends of the project a small bump will be created between the milled surface and the adjacent pavement surface that the chip seal is not likely to fill-in. As directed by the Engineer, the contractor will be required to remove the “bump” by diamond grinding 2-3 feet of the existing un-milled pavement surface adjacent to the chip seal.

Temporary pavement markings:

Prior to commencing milling of the existing pavement surface, the contractor is required to survey the existing pavement striping/markings so temporary pavement markings can be applied in the same location as the existing striping/markings after the micro-milling is completed. Traffic will not be allowed on a milled section of roadway unless some form of delineation or pavement markings is provided.

Before applying temporary pavement markings, the milled surface shall be thoroughly cleaned and dry. Temporary pavement markings shall be paint per ADOT Standard Specification section 701 and includes all striping except for gore hatching. Temporary markings shall include arrows and “only” pavement markings in their existing locations.

Measurement:

Micro-milling existing ACFC pavement shall be measured by the square yard as described in ADOT Section 109.01, Measurement and Quantities. Diamond grinding shall be measured by the linear foot. Survey of existing pavement markings shall be lump sum. Installation of temporary pavement markings shall be measured by linear foot (4” equivalent) per ADOT Section 708-4.

Payment:

Payment for micro milling will be made at the Contract Unit Price per square yard. Micro-milling asphaltic concrete pavement, measured as specified, will be paid for at the Contract Unit Price bid per square yard. No adjustment in the unit price for this item or other items will be considered for variations in the amount of RAP actually recovered. Payment is full compensation for existing marking survey, furnishing equipment, micro-milling, hauling, stockpiling milled material, diamond grinding and temporary pavement markings and satisfactorily performing the work.

Pay Item:**Pay Unit:**

Micro-mill ACFC Pavement & Haul

Square Yard (SY)

Diamond Grind Transitions

Linear Foot (LF)

Survey to re-establish pavement markings

Lump Sum (LF)

Temporary pavement markings

Linear Foot (LF)

ADOT SECTION 404-1 - SINGLE CHIP SEAL COAT (CRS-2P)

Description:

The work under this section shall be in accordance with Section 404 of ADOT Standard Specifications, as designated on the construction plans, and as modified herein.

The single chip seal coat shall consist of emulsified asphalt, type Polymerized Cationic Rapid Set (**CRS-2P**) per ADOT Section 1005, applied at the rate in the range of **0.38 - 0.43** gallons per square yard (with a target value of **0.40** gal/SY), unless otherwise directed by the County Engineer, and chip cover aggregate as specified below at a rate of **22-25 LBS/SY minimum**. Emulsified asphalt shall be applied to the surface of the road in accordance with Section 404-3.05 of the ADOT standard specifications. The County recognizes that older roads may require more emulsified asphalt oil and more recently paved roads may have reduced oil application rates, thus the stated range of oil application rate.

Prior to placing the chip seal, the Contractor shall install temporary raised pavement markers, Type Y-2 STD, on existing centerline striping at 50 foot intervals on tangents and 25 foot intervals on curves and turn lanes, stop bars, fog lines (edge marking) and any thermoplastic or preformed markings, and as instructed by the Engineer. The Contractor shall also remove all thermoplastic pavement markings (preformed or not) with a method and grinding device approved by the Engineer. No extra payment will be made for temporary raised pavement markers or removals of the pre-existing pavement thermoplastic markings. The cost for the markers shall be included in the unit price bid for chip seal. Temporary raised pavement markers will not be required for portions of roads without existing striping or thermoplastic markings.

Cover Material:

The cover material shall conform to Section 404-2.02 of ADOT standard specifications for the following gradation, and shall be an aggregate mix of *mechanically crushed rock* and shall be free from lumps or balls of clay, contain no calcareous or clay coatings, caliche, synthetic materials, decomposed granite, volcanic cinders, organic matter or foreign substances. If a clean cover material cannot be achieved using conventional crushing and screening methods, then the cover material will have to be washed in water. The cover material shall be applied at a rate determined by the Contractor and certified by the Contractor's Engineer. The Contractor shall ensure complete coverage of the emulsified asphalt and shall be responsible for any bleeding, stripping, or failure of the chip seal.

The crushed aggregate for the applications shall meet the requirements for gradation given in Table 1 when tested in accordance with ASTM C 136.

Table 1. Aggregate Gradation Requirements	
<u>Sieve Size</u>	<u>Percent Passing</u>
3/8"	100
No. 4	0 - 25
No. 8	0 - 5
No. 200	0 - 2.0

The Contractor is responsible for all laboratory tests and certifications to assure that the chip material is in conformance to the requirements set forth in these specifications. Representative samples of the aggregate cover material shall be taken daily, and the laboratory test results and certificates of compliance shall all be submitted to the Owner's Engineer. The Owner may reject delivered chip material if, in his opinion, the delivered material differs significantly from the representative sample or appearing to be excessively dirty. In all cases, the Contractor shall be responsible for the successful placement of the single chip seal coat regardless of temperatures or material compliance, and shall guarantee the success of the single chip seal coat.

Weather:

Bituminous material used in the chip seal process shall be applied only when the existing bituminous surface is dry and when the surface temperature is at least 85 degrees F and the ambient temperature in the shade is 70 degrees F.

Despite the required minimum ambient and surface temperature and condition, the Engineer may at any time require that work cease or that the work be reduced in the event of weather conditions either existing or expected which would have an adverse effect upon the bituminous treatment.

Cleaning and Removals:

Prior to the chip seal operation the Contractor shall remove any and all vegetation within the limits of the chip seal. At the present there are portions of the project that are expected to have an accumulation of material buildup, weed growth, and shoulder overgrowth along the edges of the pavement. This material will interfere with the project chip seal coat and thus the Contractor shall remove and dispose of all debris, aggregate and deleterious material on existing pavement and under the guardrail, if applicable, for the length of the project roadways.

Prior to the chip seal operation, the Contractor shall remove all existing thermoplastic striping, thermoplastic legends and permanent raised pavement markers within the chip seal limits. When

removing the permanent raised pavement markers the Contractor shall remove excessive adhesive left on pavement caused from the removal of raised pavement markers. Removal shall be done to the satisfaction of the Engineer.

All cleaning and removal work shall be considered incidental to this line item.

Removals & Sweeping:

Prior to applying chip seal, the entire pavement surface shall be thoroughly cleaned by the Contractor to remove any dirt, vegetation, weeds, dust, leaves, water, or other foreign material to the satisfaction of the Engineer. County forces may install pavement patches to designated roads prior to chip seal installation, if deemed necessary by the Owner.

The unit price bid shall include a sweeping of the road chip sealed no sooner than 12 hours after the completion of the chip sealing, but within 24 hours after chip seal, or as approved by the Owner's Engineer. Please note that early sweeping shall not void any of the warranties associated with this project. The secondary sweeping shall occur between 3 and 5 days after the initial chip seal installation. The sweeping of the chip sealed road shall occur as often as necessary to remove loose chips from the roadway. The Contractor shall be required to perform additional sweeping prior to the fog seal coat and each striping application to the satisfaction of the Engineer.

As part of the contractors warranty a post sweeping of all chip sealed roads will be required 45 days after final acceptance. The contractor will need to provide traffic control for the post sweeping operation. See Special Provisions for specific sweeping equipment. No funds will be withheld for this work.

Loose gravel signs shall remain on the roadway after chip sealing until such time as all sweeping has occurred, and the owner has approved their removal.

The use of any sweeper that causes damage to the chip seal coat shall not be permitted. The sweepers shall be self-propelled vacuum, regenerative air, or rear broom pick-up, with water spray bars to reduce dust. ***Please see any notes in the Special Provisions that may restrict the use of specific sweeping equipment.*** The Engineer shall determine which type of sweeper shall be used. If necessary, more than one type of sweeper shall be used. Sidewinder sweepers or brooms that windrow material and do not remove it shall not be used. A minimum of two (2) sweepers shall be used at all times. However, for roads receiving chip seal that are greater than 1 mile in total length, the Contractor shall provide at least one (1) additional pneumatic tire roller and one (1) additional broom over and above the standard minimum requirement of two (2) each. This will allow for less back-tracking of equipment during the chip seal process and insure that the rollers and sweepers can maintain a constant distance to the spreading equipment and not fall behind.

Completion of sweeping shall be evidenced by the absence of loose chips in gutters and driveways, and against extruded curbing. Special attention shall be required in sweeping driveways and under and around parked vehicles clear of loose chips. The Contractor shall be responsible for removal of all chips from sidewalks and other affected areas. The Contractor shall

provide a sufficient number of sweepers (minimum two) to sweep all streets within 36 hours after spreading screenings (chips) for chip seal coat.

Method of Measurement:

Measurement for work under this section shall be made on a per square yard basis.

Basis for Payment:

The accepted quantity of single chip seal coat, measured as provided above, will be paid for at the contract unit price per square yard, and such price shall be full compensation for the work as prescribed and specified herein, complete and in place.

Pay Item:

Single Chip Seal Coat , CRS-2P

Pay Unit:

Square Yard (SY)

ASPHALT RUBBER STRESS ABSORBING MEMBRANE CHIP SEAL

Qualification of Asphalt Rubber Manufacturer/Applicator

The contractor will be required to pre-qualify with this specifying agency the Asphalt Rubber manufacturer/applicator process and/or subcontractor or supplier. The data required to be submitted for qualification approval will include experience records and equipment list indicating ability to comply with the specification. The Asphalt Rubber applicator must have constructed a minimum of three Asphalt Rubber Chip Seal Applications over existing pavements that have been in place at least three years under traffic.

The mix design for the asphalt rubber chip seal must be included in the qualification data. The mix design shall be completed and certified by a registered professional engineer licensed in the State of Arizona with at least 2 years of successful experience with asphalt rubber chip seal design and approval with public entities. Submittals must include all tests and product certifications specified in this section.

The Contractor is required to submit the data required for qualification of the asphalt rubber chip seal applicator to the Project Engineer within 10 days of the date of the Letter of Award.

1. DESCRIPTION

This item shall consist of constructing an Asphalt-Rubber Chip Seal composed of a single application of Asphalt Rubber binder material to an existing pavement surface and pre-coated aggregate in accordance with these specifications.

2. MATERIAL COMPONENTS

PG Asphalt Cement

The type and grade of PG asphalt cement utilized to manufacture the Asphalt Rubber binder shall be PG 64-16, PG 58-22 or PG 52-28, which shall comply with requirements of the Table #1.

Table #1
*** PG Asphalt Cement Grading Requirements**

Climate	PG Grading
Cold	PG 52-28
Moderate	PG 58-22
Hot	PG 64-16

**The exact grade of PG asphalt cement shall be determined by the Asphalt Rubber binder supplier based on the specific project requirements and conditions (climate and traffic).*

Reclaimed Tire Rubber (RTR)

The RTR shall be produced primarily from the processing of automobile and truck tires. The rubber shall be produced by ambient temperature grinding processes only. The gradation of RTR when tested in accordance with ASTM C-136 (dry sieve only) and using a 100 gram sample, shall meet the requirements in Table #2.

Table #2
RTR Grading Requirements

Sieve Size	Reclaimed Tire RTR Percent Passing
#8 (2.36 mm)	100
#10 (2 mm)	100
#16 (1.18 mm)	75 - 95
#30 (600 μ m)	30 - 60
#50 (300 μ m)	5 - 30
#200 (75 μ m)	0 - 5

The individual RTR particles, irrespective of diameter, shall not be greater in length than 3/16 of an inch (5mm).

The use of RTR from multiple sources is acceptable provided that the overall blend of rubber meets the gradation requirements.

The RTR shall have a specific gravity of 1.15 ± 0.05 , and shall be free of loose fabric, wire and other contaminants except that up to 4 percent (by weight of rubber) calcium carbonate or talc may be added to prevent the rubber particles from sticking together. The rubber shall be sufficiently dry so as to be free flowing and not produce a foaming problem when blended with the hot asphalt cement. The RTR shall be accepted by certification from the rubber supplier.

2.4 Asphalt Rubber Binder

The temperature of the blended PG asphalt cement shall not be less than 375° F (190° C) nor more than 425° F (219° C) when the RTR is homogenously blended. The combined materials shall be reacted while being agitated for a minimum of 60 minutes after the complete incorporation of all the RTR. The Asphalt Rubber binder shall meet the following criteria in Table #3, when the reaction is complete.

Table #3
Specification Limits for Asphalt Rubber Binder

		Hot Climate	Moderate Climate	Cold Climate
Apparent viscosity, 347° F (175° C) Spindle 3 @ 12 RPM: cps (ASTM D7741)	Min Max	1500 3500	1500 3500	1500 3500
Penetration, 77° F (25° C), 100g, 5 sec; 1/10 dm (ASTM D5)	Min Max	20 75	50 100	75 150
Penetration, 39.2° F (4° C), 200g, 60 sec; 1/10 dm (ASTM D5)	Min	10	15	25
Softening Point, °F (° C) (ASTM D36)	Min	140° F (60° C)	135° F (57° C)	130° F (54° C)
Resilience, 77° F (25° C), % (ASTM D5329)	Min	35	30	25

Climate Definitions

Hot Climate	Average July Max @ 110° F (43° C) Average January Low @ 30° F (-1° C) or above
Moderate Climate	Average July Max @ 100° F (38° C) Average January Low @ 15 – 30° F (-9 to -1° C)
Cold Climate	Average July Max @ 80° F (27° C) Average January Low @ 15° F (-9° C) or lower

Note: Certain climates may overlap the above, defined areas. When in doubt of the type of PG asphalt cement to utilize, always look to the lower penetration materials in the hot temperature range and the higher penetration materials in the low temperature range.

The viscosity testing shall be conducted by using a hand held RION VISCOMETER (VT-04 or VT-06), with rotor 1, 24mm in depth x 53mm in height, or equivalent.

If material in a batch of Asphalt Rubber binder is not used with-in ten hours after the reaction period is complete, heating of the material shall be discontinued. When the Asphalt Rubber binder temperature cools below 375° F (190° C) and is then reheated, it shall be considered a reheat cycle. The total number of reheat cycles shall not exceed one (1). The binder material shall be uniformly reheated to a temperature of not less than 375° F (190° C). Additional scrap tire RTR may be added to the reheated Asphalt Rubber binder and reacted for a minimum of 30 minutes and shall not exceed 10 percent of the total binder weight. Reheated Asphalt Rubber binder shall conform to the requirements for blended Asphalt Rubber binder.

2.5 Asphalt Rubber Binder Blend Design Profile (BDP)

The Asphalt Rubber supplier, shall furnish to the Engineer within 10 days of the notice to proceed, the Asphalt Rubber binder BDP, which shall contain the following information:

PG Asphalt Cement
 Source of PG Asphalt Cement
 Grade of PG Asphalt Cement
 Percentage of PG Asphalt Cement by total weight of Asphalt Rubber mixture

Reclaimed Tire Rubber (RTR)
 Source of RTR
 Grade of RTR
 Percentage of RTR by total weight of the Asphalt Rubber mixture

Note: If RTR from more than one source is to be utilized, then the above information will be required for each type of RTR used.

2.6 Asphalt Rubber Binder Quality Control Plan

The Asphalt Rubber binder supplier shall furnish to the Engineer within 10 days of the notice to proceed the Asphalt Rubber binder Quality Control Plan. The Plan shall provide for the following minimum amount of information:

- A Blend Design Profile (BDP) confirming compliance of the Asphalt Rubber binder properties at 6 hours and at a 24 hour period (See Section 2.5).
- Test for aggregate retention by the Vialit test (see following sections).
- Testing of the PG Asphalt Cement for specified properties once per 250 tons of Asphalt Rubber binder production.
- Testing of RTR for specified properties once per lot (truck load) of material utilized on the project.
- Testing of Asphalt Rubber binder for specified properties once per 250 tons of production.

Testing shall be performed by a laboratory accredited in the applicable methods by the AASHTO Materials Reference Laboratory. Results of testing shall be reported to the Engineer within 7 working days of the time the sample was taken. All testing shall be at the expense of the Asphalt Rubber binder supplier.

2.7 Aggregate Cover Material

The cover material shall be manufactured from sound, hard, durable material of accepted quality and crushed to specification size conform to Section 404-2.02 of

ADOT standard specifications as modified herein for the gradation shown in Table 4 below. The material shall be an aggregate mix of *mechanically crushed rock* and shall be free from lumps or balls of clay, contain no calcareous or clay coatings, caliche, synthetic materials, decomposed granite, volcanic cinders, organic matter or foreign substances. If a clean cover material cannot be achieved using conventional crushing and screening methods, then the cover material will have to be washed in water.

Proposed aggregate samples shall be submitted to the Asphalt Rubber supplier for the execution of the Vialit Test (see test description below) to test the aggregate for stripping characteristics. This testing shall be done as part of the quality control plan. All testing results shall be submitted to the project engineer within 10 days of the Notice to Proceed.

The crushed aggregate shall not contain more than 8% by weight of flat or elongated pieces and shall be free from wood, roots and vegetable or other organic extraneous matter. The crushed coarse aggregate shall have a percentage of wear not more than 7 percent at 100 revolutions and not more than 30 percent at 500 revolutions, as determined by ASTM C131.

The aggregate shall show no evidence of disintegration nor show a total loss greater than 12% when subjected to 5 cycles of the sodium sulfate accelerated soundness test specified in ASTM C88.

The crushed aggregate for Asphalt Rubber Chip Seal applications shall meet the requirements for gradation given in Table 4, when tested in accordance with ASTM C136.

Table 4
Aggregate Gradation Requirements

Sieve Size	Percent Passing
3/4 inch (15 mm)	100
1/2 inch (12 mm)	97 - 100
3/8 inch (9mm)	70 - 100
1/4 inch (4.75 mm)	0 - 10
#8 (2.36 mm)	0 - 5
#200 (75 µm)	0 - 1

The aggregate shall be pre-coated or hot pre-coated with 0.5 to 1.0 percent asphalt cement resulting in a salt-and-pepper appearance. The Engineer may determine the appropriate amount of pre-coat. The pre-coated aggregate shall be applied hot and be supplied to the project site at 250° F to 325° F (121° C to 162° C).

Method for Vialit Test Concerning Aggregate Retention for Chip Seal Applications

European Standard EN12272-3, as modified for hot spray applied polymer/rubberized binders.

Scope

This method is an indicator of aggregate retention for hot applied chip seal, pavement preservation surface treatments and is performed as part of the BDP.

Summary of Method

Hot applied, Asphalt Rubber and other modified binder materials are applied at 79 grams (.42 gal/sy) to standard size, clean and dry, stainless steel plates. Exactly one hundred (100) washed and graded aggregate particles are embedded into the required binder type. The sample is allowed to cure under specified conditions. Following this cure, the individual plates are conditioned at three different temperatures for 30 minutes. Then a 500 gram steel ball is dropped three (3) times from a distance of 50 cm (20 inches) onto the inverted stainless steel plates. The results are recorded at percent aggregate retention with 90% retention being the minimum allowable value.

Steps for Modified Test Method

- 1) Hot asphalt cement, Asphalt Rubber or modified binder is pre-heated to approximate application temperature (330° F (165° C) to 375° F (190° C).
- 2a) Tare weight of plate is recorded.
- 2b) Individual plates are pre-heated in an oven to a minimum of 330° F (165° C).
- 2c) 79 grams of asphalt cement/modified binder applied to each plate.
- 2d) Plates are returned to the 330° F (165° C) minimum temperature oven for 15 minutes.
- 2e) Plates are removed from the oven and placed on a warm hotplate and the binder is spread and smoothed with a hot blade.
- 2f) Application weight is verified and adjusted as needed.
- 2g) 100 particles of washed and graded aggregate, meeting the project specification requirements, are applied in a 10 x 10 matrix, with the plate still on the warm hotplate.
- 2h) Three (3) plates are prepared for each combination of binder and aggregate.
- 3) Plates are again returned to the 330° F (165° C) minimum temperature oven for 15 minutes.
- 4a) Plates are removed from the oven and allowed to cool at room temperature for four to six hours.
- 4b) Once the room temperature cure is complete, individual plates are conditioned for 30 minutes at each of the following temperatures: 41° F (5° C), 14° F (-10° C) and -8° F (-22° C).
- 5) After the 500 gram steel ball has been dropped three times on each of the three samples, report the number of stones attached as percent aggregate retention at test temperature.

Purpose of Vialit Aggregate Retention Test

It should be the contractor/agencies responsibility as partners to construct a quality pavement preservation chip seal project. There needs to be insurance that good adhesion occurs between binder and aggregate, at the time of placement. The Vialit Retention Test provides a method to assess the active adhesivity of the binder and the aggregate being utilized in conditions, which are very close to the actual project variables and environment.

3. EQUIPMENT

3.1 General

The equipment used by the contractor for pavement cleaning and excess aggregate removal shall be a self-propelled pick-up broom or top dumping mobile pick-up broom.

3.2 Asphalt Rubber Equipment

All equipment utilized in the production and application of Asphalt Rubber binder materials shall be described as follows:

- a) A PG asphalt cement heating tank with a hot oil heat transfer system or a retort heating system capable of heating the PG asphalt cement to the proper temperature for blending with the RTR.
- b) An Asphalt Rubber mechanical blender shall have a two stage continuous mixing process capable of producing a homogenous blend of PG asphalt cement and RTR, at the BDP specified ratios, as directed by the engineer. This unit shall be equipped with a granulated rubber feed system capable of supplying the PG asphalt cement feed system, as not to interrupt the continuity of the blending process. The maximum capacity of the primary blending vessel shall be 500 gallons (1900 liters). Both the primary and secondary blenders shall be equipped with an agitation device orientated horizontally in the blending vessel. The blending unit shall be capable of fully blending the individual rubber particles with the asphalt cement. A separate PG asphalt cement feed pump and finished product pump are required. This unit shall have a PG asphalt cement totalizing meter in gallons and a flow rate meter in gallons per minute.
- c) A self-powered distributor truck equipped with a heating unit, and an internal mixing device capable of maintaining a uniform mixture of asphalt cement and RTR. It shall be equipped with a full circulating spreader bar and pumping system capable of applying Asphalt Rubber binder within ± 0.05 gallons per square yard tolerance of the specified application rate, and must achieve a uniform covering of the surface to be treated. The distributor truck shall also require a thermometer and shall also have a computer rate control (CRC).

3.3 Aggregate Cover Material Spreader

The cover material (chip) spreader shall be a self-propelled machine with an aggregate receiving hopper in the rear, belt conveyors to carry the pre-coated aggregate to the front, and a full width spreading hopper. The spreader shall be in good mechanical condition and shall be capable of applying the cover aggregate uniformly across the spread width and at the specified application rate. *Note: When utilizing hot pre-coated aggregate, heat-treated belts will be required to be installed on the chip spreader.*

3.4 Rolling Equipment

A minimum of three continually operated self-propelled pneumatic-tired rollers (and one steel wheel roller, **if required**, based on the hardness of the aggregate) shall be used for the required rolling of the cover material. The pneumatic-tired rollers' shall carry a minimum loading of 3,000 pounds (1,361 kg) on each wheel and a minimum pressure of 90 pounds per square inch in each tire, unless foam filled.

3.5 Hauling Equipment

Trucks for hauling the cover aggregate shall be tailgate discharge and shall be equipped with a device to lock onto the hitch of the cover material spreader. Haul trucks shall also be compatible with the cover aggregate spreader so that the dump bed will not push down on the spreader when fully raised, or have too short of a bed which results in aggregate spillage while dumping into the receiving hopper.

3.5 Sweepers

Sweepers shall be self-propelled vacuum, regenerative air, or rear broom pick-up, with water spray bars to reduce dust. ***Please see any notes in the Special Provisions that may restrict the use of specific sweeping equipment.***

4. CONSTRUCTION METHODS

4.1 General

Immediately prior to the application of the Asphalt Rubber binder, the surface shall be thoroughly cleaned in order to insure adequate adhesion of the Asphalt Rubber to the existing pavement surface. Prior to placing the chip seal, the Contractor shall install temporary raised pavement markers, Type Y-2 STD, on existing centerline striping at 50 foot intervals on tangents and 25 foot intervals on curves and turn lanes, stop bars, fog lines (edge marking) and any thermoplastic or preformed markings, and as instructed by the Engineer. No

extra payment will be made for temporary raised pavement markers or removals of the pre-existing pavement thermoplastic markings. The cost for the markers shall be included in the unit price bid for chip seal.

4.2 Weather Conditions

Asphalt Rubber binder material shall be applied only when the existing surface is dry and the atmospheric temperature is above 55° F (13° C) and rising. No material shall be applied when the predicted chance of rain is higher than 75% or when the wind is in excess of 20 mph, as directed by the Engineer.

4.3 Asphalt Rubber Mixing and Reaction

The percentage of Reclaimed Tire Rubber RTR shall be 15 – 20 percent by weight of the total Asphalt Rubber mixture; the exact RTR content shall be determined by the BDP submitted by the Asphalt Rubber manufacturer/supplier. During the Asphalt Rubber binder placement the RTR percentage shall not fluctuate by more than 1 (one) percent by weight of total Asphalt Rubber mixture. .

The temperature of the PG Asphalt Cement shall be between 375° F and 425° F (190° C and 220° C) at the addition of the RTR. The PG Asphalt Cement and the RTR shall be combined and mixed together in the Asphalt Rubber blending unit and reacted in an agitated distributor or reaction vessel for a minimum period of 60 minutes from the time the RTR is completely added to the PG Asphalt Cement. The temperature of the Asphalt Rubber binder shall be above 350° F (176° C) during the reaction period, but shall not exceed 450° F (231° C) at any time. Exceeding 450° F (231° C) will be grounds for rejection of the affected binder material.

When a job delay occurs after full reaction, the Asphalt Rubber may be allowed to cool. The Asphalt Rubber binder shall be re-heated slowly just prior to application to a temperature between 350° F and 400° F (176°C and 231° C) An additional quantity of PG asphalt cement and / or RTR may be added as required to produce a material with the appropriate viscosity. See re-heat cycle (page 3).

4.4 Application of Asphalt Rubber Binder

Placement of the Asphalt Rubber binder shall be made only under the following conditions:

- a) The pavement surface temperature shall be 50° F (10° C) and rising.
- b) The pavement surface is clean and dry. Note that if the pavement is milled prior to applying the chip seal the milling process will leave a wet residue on the milled surface. This residue must be allowed to dry

and the dry residue fully removed by sweeping prior to applying the rubberized binder.

- c) The wind conditions do not exceed 20 miles per hour.
- d) All of the construction equipment such as the asphalt-rubber distributor, aggregate spreader, haul trucks loaded with cover material, rollers and brooms are in position and ready to commence placement operations.
- e) Chance of rain does not exceed 75%.

The Asphalt Rubber mixture shall be applied to the roadway immediately following mixing and reaction at a temperature of 350° F to 400° F (176°C to 231° C) at a minimum rate of 0.60 gallons per square yard (2.86 liters per square meter). Transverse joints shall be constructed by placing building paper across and over the end of the previous Asphalt Rubber application. Once the application has progressed beyond the paper, the paper shall be removed immediately and disposed of as directed by the engineer. The use of paper may be discontinued if the contractor chooses to squeegee the excess Asphalt Rubber binder material at the transverse joints prior to the placement of the cover aggregate. All longitudinal joints shall not exceed a 12-inches (30 cm) overlap.

Distributor bar height, distribution, speed and shielding materials shall be utilized to reduce the effects of excess wind upon the spray distribution (fan). The Engineer shall delay or reschedule work when high gusting or dirty winds in excess of 20 miles per hour adversely affect binder or aggregate application.

The application of Asphalt Rubber binder to areas not accessible with the distributor bar on the distributor truck, shall be accomplished by hand squeegee or other means approved by the engineer.

The contractor shall comply with all Federal, State and Local environmental laws, regulations and ordinances.

4.5 Application of Aggregate Cover Material (chips)

Prior to applying the chips, loose gravel signs shall be placed as approved by the County.

Cover material shall be applied immediately onto the Asphalt Rubber membrane, after application, at a rate of 26 to 34 pounds per square yard (11.79 to 15.42 kilograms per square meter). The actual amount selected within this range will be determined in the field based on the appearance of the Asphalt Rubber chip seal after initial rolling. At all times the aggregate application rate shall be kept to a minimum.

At the time of application, the temperature of the hot pre-coated aggregate shall range from 250° F to 325° F (121° C to 162° C).

4.6 Rolling

At least three operational pneumatic-tired rollers (and one steel wheel roller, **if required**, based on the hardness of the aggregate) shall be provided to accomplish the required embedment of the aggregate cover material. At some project locations, or when production rates dictate, additional or fewer rollers may be utilized as directed by the engineer. At no time shall there be less than 3 (three) operational pneumatic-tired rollers and 1 (one) 12 to 14 ton operational steel wheel roller on a project.

Sufficient rollers shall be used for the initial rolling to cover the width of the aggregate spread with one pass. The first pass shall be made immediately behind the cover material spreader as the aggregate is being placed. If the spreading is stopped for an extended period, the cover material spreader shall be moved ahead or off the side so that all cover material may be immediately rolled. Three complete passes with rollers shall be made with the pneumatic rollers and one pass with the steel wheel roller.

4.7 Sweeping

The unit price bid shall include a sweeping of the chip sealed road to remove excess and loose chips after the chips are applied to the rubberized binder. Excess chips are to be removed by sweeping only after the rubberized binder has cooled and cured sufficiently to prevent chips imbedded into the binder from dislodging or otherwise damaging the chip seal. A minimum of two (2) sweepers shall be used at all times. Initial sweeping shall be completed within 24 hours of the application of chips to the binder.

Loose gravel signs shall remain on the roadway after chip sealing until such time as all sweeping has occurred, and the owner has approved their removal.

4.8 Flush Coat

Unless the Asphalt Rubber Chip Seal is being directly used as a Stress Absorbing Membrane Interlayer (SAMI), a fog seal or flush coat shall be applied within one day of the placement of the Asphalt Rubber Chip Seal. The surface shall be dry and free of loose material at the time of application. This timeframe may be extended by the Engineer when weather and / or traffic conditions are not favorable. The flush coat shall not be applied when the surface is wet or when there is threat of rain. The ambient temperature shall be a minimum of 70° F (21° C) and rising, with constant sunshine.

Asphaltic emulsion shall be grade CSS1, CSS1H or CQS1H diluted 50/50 with water shall be used for the flush coat. Immediately before applying the emulsion, the area to be flushed shall be cleaned of all loose aggregate and

foreign material. This will be accomplished by pick-up brooms and supplemented by hand brooms when necessary.

The diluted asphalt emulsion shall be well mixed before application and shall be applied by a distributor truck, in sound mechanical condition, at a rate of 0.10 to 0.20 gallons per square yard (0.44 to 0.88 liters per square meter), allowing for a residual after the emulsion “breaks” of 0.03 to 0.06 gallons per square yard (0.11 to 0.23 liters per square meter).

4.9 Sand Cover

Sand cover material, **if required**, shall conform shall conform to the fine aggregate grading requirements of the specifying agency.

Sand shall be spread by means of a self propelled chip spreader equipped with a computerized device that will allow for application of the sand at a uniform rate over the full width of a traffic lane in a single application. Sand shall be spread at a rate of 2 to 4 pounds per square yard (0.91 to 1.81 kilograms per square meter). The exact rate will be determined by the Engineer. If approved by the Engineer other equipment may be used to spread the sand.

4.10 Traffic Control

Except when it is necessary that hauling equipment must travel on the newly applied Asphalt-Rubber SAM, traffic of all types shall be kept off the Asphalt-Rubber membrane until it has had time to set properly. The speed of the hauling equipment shall not exceed 15 miles per hour when traveling over an Asphalt-Rubber membrane that has not had sufficient time to properly set. All barricades, signage and traffic control procedures for the traveling public shall follow current MUTCD (Manual on Uniform Traffic Control Devices) standards.

5. **METHOD OF MEASUREMENT**

Measurement shall be for square yard of finished, in place product as specified herein and as shown on the project plans.

6. **BASIS OF PAYMENT**

Payment shall be made at the contract unit price per square yard of finished in place product as specified herein. These prices shall be full compensation for furnishing all materials and testing and for all preparation, hauling, and application of the materials including labor, equipment, tools, and incidentals necessary to complete the item.

Pay Item:

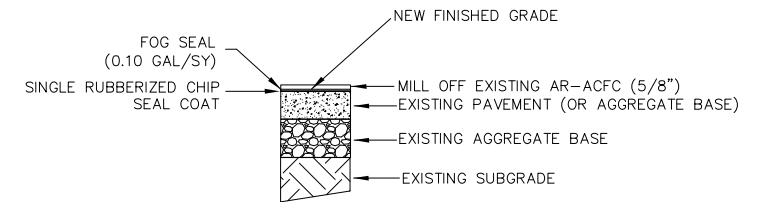
Rubberized Chip Seal

Pay Unit:

Square Yard (SY)

ENGINEER'S ESTIMATE SUMMER CHIP SEAL PROJECT FY 2015/16 (BASE BID)

NAME	UNIT	QUANTITY
MOBILIZATION	LS	1
SINGLE CHIP SEAL COAT, CRS-2P	SY	238,904
RUBBERIZED CHIP SEAL	SY	64,500
FOG SEAL COAT (0.10 GAL/SY)	GAL	30,340
MICRO-MILL ACFC PAVEMENT & HAUL	SY	62,500
DIAMOND GRIND TRANSITIONS	LF	200
REMOVE AND REPLACE - SURFACE MOUNT FLEXIBLE DELINEATORS	EA	66
PERMANENT PAVEMENT MARKING - PAVEMENT STRIPING, YELLOW (4" EQUIV.)	LF	128,185
PERMANENT PAVEMENT MARKING - PAVEMENT STRIPING, WHITE (4" EQUIV.)	LF	174,885
TEMPORARY PAVEMENT MARKING - PAVEMENT STRIPING, YELLOW (4" EQUIV.)	LF	78,964
TEMPORARY PAVEMENT MARKING - PAVEMENT STRIPING, WHITE (4" EQUIV.)	LF	117,796
THERMOPLASTIC PAVEMENT MARKING - WHITE (4" EQUIV.)	LF	1,271
PREFORMED PLASTIC PAVEMENT MARKING, LEFT ARROW	EA	10
PREFORMED PLASTIC PAVEMENT MARKING, RIGHT ARROW	EA	10
PREFORMED PLASTIC PAVEMENT MARKING, MERGE LEFT ARROW	EA	8
PREFORMED PLASTIC PAVEMENT MARKING, "ONLY"	EA	10
QUALITY CONTROL AND TESTING	LS	1
TRAFFIC CONTROL	LS	1



SINGLE COAT RUBBERIZED CHIP SEAL
PAVEMENT STRUCTURAL SECTION
NOT TO SCALE

RUBBERIZED CHIPSEAL NOTES

1. MILL EXISTING ASPHALT PER THE CONTRACT DOCUMENTS. THE MILLING AREA EXTENDS TO ALL LIMITS SHOWN ON PLAN SHEETS, AS IDENTIFIED BY START OF MILLING AND END OF MILLING, WITH THE EXCEPTION OF THE PAVED DITCHES.
2. DIAMOND GRIND TRANSITIONS FROM MICRO-MILL PROCESS
3. INSTALL SINGLE COAT RUBBERIZED CHIP SEAL AS PER PLANS
4. INSTALL FOG SEAL COAT
5. SEE PLAN SHEETS FOR OTHER STRIPING DETAILS

ENGINEER'S ESTIMATE SUMMER CHIP SEAL PROJECT FY 2015/16 (ALT A)

NAME	UNIT	QUANTITY
MOBILIZATION	LS	1
SINGLE CHIP SEAL COAT, CRS-2P	SY	104,042
FOG SEAL COAT (0.10 GAL/SY)	GAL	10,404
PERMANENT PAVEMENT MARKING - PAVEMENT STRIPING, YELLOW (4" EQUIV.)	LF	10,684
PERMANENT PAVEMENT MARKING - PAVEMENT STRIPING, WHITE (4" EQUIV.)	LF	1,616
THERMOPLASTIC PAVEMENT MARKING - WHITE (4" EQUIV.)	LF	1,616
QUALITY CONTROL AND TESTING	LS	1
TRAFFIC CONTROL	LS	1

ENGINEER'S ESTIMATE SUMMER CHIP SEAL PROJECT FY 2015/16 (ALT B)

NAME	UNIT	QUANTITY
MOBILIZATION	LS	1
SINGLE CHIP SEAL COAT, CRS-2P	SY	53,821
FOG SEAL COAT (0.10 GAL/SY)	GAL	5,382
PERMANENT PAVEMENT MARKING - PAVEMENT STRIPING, YELLOW (4" EQUIV.)	LF	282
PERMANENT PAVEMENT MARKING - PAVEMENT STRIPING, WHITE (4" EQUIV.)	LF	72
THERMOPLASTIC PAVEMENT MARKING - WHITE (4" EQUIV.)	LF	72
QUALITY CONTROL AND TESTING	LS	1
TRAFFIC CONTROL	LS	1

**YAVAPAI COUNTY
PUBLIC WORKS DEPARTMENT**

1100 COMMERCE DR. PRESCOTT, ARIZONA 86305
(928) 771-3183

BYRON JASPERS, P.E. - PUBLIC WORKS DIRECTOR

PROJECT NAME:	PROJECT #:
SUMMER CHIP SEAL	16-2016
SHEET NAME:	DESIGN: CS
QUANTITIES AND ADDITIONAL NOTES	DRAWN: CS
	CHECKED: BM
	DATE: 3/29/16
	3 OF 18

**PRE-BID MEETING (MANDATORY): April 12, 2016, at 9:00 a.m.
YAVAPAI COUNTY PUBLIC WORKS –PRESCOTT READY ROOM**

CHIP SEAL (SUMMER, FY 2015-2016) PROJECT IN YAVAPAI COUNTY, ARIZONA; PROJECT #1620882

NAME	ORGANIZATION	PHONE	FAX	E-MAIL ADDRESS
MARYAN SALA	YCPW	928 771.3183	928 771.3167	maryan.sala@yavapai.us
CHRISTIAN M. DELLONE	Ycpw	928.777.7507		CHRISTIAN.DELLONE@YAVAPAI.US
BERT MILLER	YCPW	928.771.3183		bert.miller@yavapai.us
Chris Steele	YCPW	928 771 3183		chris.steeler@yavapai.us
TIM STOTLER	"	"	"	tim-stotler@yavapai.us
Greg Erks	USST	602-725-3037	480-941-0766	greg-erksechipseal.com
JEFF SMITH	CACTUS ASPHALT	(602) 218-7405		jsmith@cactusasphalt.com jeff.smith
GARY MOONRAY	CHOLLA PAVEMENT	480-893-1044	480-893-1068	gary@chollapavement.com
Wyatt Orr	ERC	713-0215	928-268-3487	wyo5th@yahoo.com
Michael Lopez	Town of Chino Valley	636-7140	636-7141	mlopez@chinoaz.net

BID TABULATION

CHIP SEAL (SUMMER, FY 2015-2016) PROJECT IN YAVAPAI COUNTY, ARIZONA - PROJECT #1620882

BASE BID				Engineer's Estimate		Earth Resources Corporation		VSS International, Inc.	
Item No.	Description	Quantity	Unit	Unit	Total	Unit	Total	Unit	Total
1	MOBILIZATION	1	LS	\$ 25,000.00	\$ 25,000.00	\$ 26,752.00	\$ 26,752.00	\$ 12,078.37	\$ 12,078.37
2	SINGLE CHIP SEAL COAT, CRS-2P	238,904	SY	\$ 1.75	\$ 418,082.00	\$ 1.46	\$ 348,799.84	\$ 1.74	\$ 415,692.96
3	RUBBERIZED CHIP SEAL	64,500	SY	\$ 3.50	\$ 225,750.00	\$ 2.92	\$ 188,340.00	\$ 3.18	\$ 205,110.00
4	FOG SEAL COAT (0.10 GAL/SY)	30,340	GAL	\$ 2.00	\$ 60,680.00	\$ 1.30	\$ 39,442.00	\$ 0.79	\$ 23,968.60
5	MICRO-MILL ACFC PAVEMENT & HAUL	62,500	SY	\$ 1.50	\$ 93,750.00	\$ 1.00	\$ 62,500.00	\$ 1.43	\$ 89,375.00
6	DIAMOND GRIND TRANSITIONS	200	LF	\$ 5.00	\$ 1,000.00	\$ 16.00	\$ 3,200.00	\$ 37.80	\$ 7,560.00
7	REMOVE AND REPLACE - SURFACE MOUNT FLEXIBLE DELINEATORS	66	EA	\$ 40.00	\$ 2,640.00	\$ 38.00	\$ 2,508.00	\$ 36.75	\$ 2,425.50
8	PERMANENT PAVEMENT MARKING - PAVEMENT STRIPING, YELLOW (4" EQUIV.)	128,185	LF	\$ 0.10	\$ 12,818.50	\$ 0.08	\$ 10,254.80	\$ 0.07	\$ 8,972.95
9	PERMANENT PAVEMENT MARKING - PAVEMENT STRIPING, WHITE (4" EQUIV.)	174,885	LF	\$ 0.10	\$ 17,488.50	\$ 0.08	\$ 13,990.80	\$ 0.07	\$ 12,241.95
10	TEMPORARY PAVEMENT MARKING - PAVEMENT STRIPING, YELLOW (4" EQUIV)	78,964	LF	\$ 0.05	\$ 3,948.20	\$ 0.08	\$ 6,317.12	\$ 0.07	\$ 5,527.48
11	TEMPORARY PAVEMENT MARKING - PAVEMENT STRIPING, WHITE (4" EQUIV)	117,796	LF	\$ 0.05	\$ 5,889.80	\$ 0.08	\$ 9,423.68	\$ 0.07	\$ 8,245.72
12	THERMOPLASTIC PAVEMENT MARKING - WHITE (4" EQUIV.)	1,271	LF	\$ 1.00	\$ 1,271.00	\$ 1.00	\$ 1,271.00	\$ 0.07	\$ 88.97
13	PREFORMED PLASTIC PAVEMENT MARKING, LEFT ARROW	10	EA	\$ 105.00	\$ 1,050.00	\$ 95.00	\$ 950.00	\$ 92.40	\$ 924.00
14	PREFORMED PLASTIC PAVEMENT MARKING, RIGHT ARROW	10	EA	\$ 105.00	\$ 1,050.00	\$ 95.00	\$ 950.00	\$ 92.40	\$ 924.00
15	PREFORMED PLASTIC PAVEMENT MARKING, MERGE LEFT ARROW	8	EA	\$ 105.00	\$ 840.00	\$ 80.00	\$ 640.00	\$ 78.75	\$ 630.00
16	PREFORMED PLASTIC PAVEMENT MARKING, "ONLY"	10	EA	\$ 105.00	\$ 1,050.00	\$ 95.00	\$ 950.00	\$ 93.45	\$ 934.50
17	QUALITY CONTROL AND TESTING	1	LS	\$ 15,000.00	\$ 15,000.00	\$ 26,787.00	\$ 26,787.00	\$ 22,000.00	\$ 22,000.00
18	TRAFFIC CONTROL	1	LS	\$ 40,000.00	\$ 40,000.00	\$ 38,115.00	\$ 38,115.00	\$ 46,300.00	\$ 46,300.00
19	FORCE ACCOUNT	1	LS	\$ 45,000.00	\$ 45,000.00	\$ 45,000.00	\$ 45,000.00	\$ 45,000.00	\$ 45,000.00
TOTAL BID AMOUNT OF: BASE BID				\$ 972,308.00		\$ 826,191.24		\$ 908,000.00	

ALTERNATE A				Engineer's Estimate					
Item No.	Description	Quantity	Unit	Unit	Total	Unit	Total	Unit	Total
1	MOBILIZATION	1	LS	\$ 10,000.00	\$ 10,000.00	\$ 1,200.00	\$ 1,200.00	\$ 648.32	\$ 648.32
2	SINGLE CHIP SEAL COAT, CRS-2P	104,042	SY	\$ 1.75	\$ 182,073.50	\$ 1.35	\$ 140,456.70	\$ 1.84	\$ 191,437.28
3	FOG SEAL COAT (0.10 GAL/SY)	10,404	GAL	\$ 2.50	\$ 26,010.00	\$ 1.30	\$ 13,525.20	\$ 0.83	\$ 8,635.32
4	PERMANENT PAVEMENT MARKING - PAVEMENT STRIPING, YELLOW (4" EQUIV.)	10,684	LF	\$ 0.10	\$ 1,068.40	\$ 0.07	\$ 747.88	\$ 0.07	\$ 747.88
5	PERMANENT PAVEMENT MARKING - PAVEMENT STRIPING, WHITE (4" EQUIV.)	1,616	LF	\$ 0.10	\$ 161.60	\$ 0.07	\$ 113.12	\$ 0.07	\$ 113.12
6	THERMOPLASTIC PAVEMENT MARKING - WHITE (4" EQUIV.)	1,616	LF	\$ 1.00	\$ 1,616.00	\$ 0.65	\$ 1,050.40	\$ 0.63	\$ 1,018.08
7	QUALITY CONTROL AND TESTING	1	LS	\$ 5,000.00	\$ 5,000.00	\$ 1,200.00	\$ 1,200.00	\$ 2,900.00	\$ 2,900.00
8	TRAFFIC CONTROL	1	LS	\$ 10,000.00	\$ 10,000.00	\$ 6,951.00	\$ 6,951.00	\$ 2,500.00	\$ 2,500.00
9	FORCE ACCOUNT	1	LS	\$ 12,000.00	\$ 12,000.00	\$ 12,000.00	\$ 12,000.00	\$ 12,000.00	\$ 12,000.00
TOTAL BID AMOUNT OF: ALTERNATE A				\$ 247,929.50		\$ 177,244.30		\$ 220,000.00	

ALTERNATE B				Engineer's Estimate					
Item No.	Description	Quantity	Unit	Unit	Total	Unit	Total	Unit	Total
1	MOBILIZATION	1	LS	\$ 10,000.00	\$ 10,000.00	\$ -	\$ -	\$ 1,532.16	\$ 1,532.16
2	SINGLE CHIP SEAL COAT, CRS-2P	53,821	SY	\$ 1.75	\$ 94,186.75	\$ 1.45	\$ 78,040.45	\$ 1.84	\$ 99,030.64
3	FOG SEAL COAT (0.10 GAL/SY)	5,382	GAL	\$ 2.50	\$ 13,455.00	\$ 1.29	\$ 6,942.78	\$ 0.83	\$ 4,467.06
4	PERMANENT PAVEMENT MARKING - PAVEMENT STRIPING, YELLOW (4" EQUIV.)	282	LF	\$ 0.10	\$ 28.20	\$ 0.07	\$ 19.74	\$ 0.07	\$ 19.74
5	PERMANENT PAVEMENT MARKING - PAVEMENT STRIPING, WHITE (4" EQUIV.)	72	LF	\$ 0.10	\$ 7.20	\$ 0.07	\$ 5.04	\$ 0.07	\$ 5.04
6	THERMOPLASTIC PAVEMENT MARKING - WHITE (4" EQUIV.)	72	LF	\$ 1.00	\$ 72.00	\$ 0.65	\$ 46.80	\$ 0.63	\$ 45.36
7	QUALITY CONTROL AND TESTING	1	LS	\$ 3,000.00	\$ 3,000.00	\$ 700.00	\$ 700.00	\$ 2,900.00	\$ 2,900.00
8	TRAFFIC CONTROL	1	LS	\$ 7,500.00	\$ 7,500.00	\$ 4,161.00	\$ 4,161.00	\$ 2,000.00	\$ 2,000.00
9	FORCE ACCOUNT	1	LS	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00
TOTAL BID AMOUNT OF: ALTERNATE B				\$ 134,249.15		\$ 95,915.81		\$ 116,000.00	

GRAND TOTALS:				Engineer's Estimate					
TOTAL BID AMOUNT OF: BASE BID				\$ 972,308.00		\$ 826,191.24		\$ 908,000.00	
TOTAL BID AMOUNT OF: BASE BID + ALTERNATE A				\$ 1,220,237.50		\$ 1,003,435.54		\$ 1,128,000.00	
TOTAL BID AMOUNT OF: BASE BID + ALTERNATE A + ALTERNATE B				\$ 1,354,486.65		\$ 1,099,351.35		\$ 1,244,000.00	



Byron Jaspers
Director

OFFICE OF THE
PUBLIC WORKS DEPARTMENT
Road Division Engineering Division Solid Waste Division Emergency Management
1100 Commerce Drive
Prescott, Arizona 86305
Phone (928) 771-3183
FAX (928) 771-3167

Page 154 of 169

May 11, 2016

Earth Resources Corporation
P. O. Box 1420
Dewey, AZ 86327

HAND DELIVERED

RE: Chip Seal (Summer, FY 2015-2016) Project in Yavapai County, AZ
 Project #1620882

Dear Sirs:

Pending receipt of bonds and certificate of insurance, please consider this your notice to proceed on the above-referenced project effective Monday, May 16, 2016. As indicated in the contract documents and at the pre-construction meeting, the contract time is twenty-four (24) ten-hour working days. Therefore, this project is due to be completed on or before Monday, June 27, 2016.

Please contact me if you have any questions.

Sincerely,

YAVAPAI COUNTY PUBLIC WORKS

A handwritten signature in cursive script, appearing to read "Bert Miller".

Bert Miller
Construction Division Manager

BM/ms

c: Christian DeLeone
 Laura Bunn
 Lehua Compson

EXHIBIT B
SPECIFIC REQUIREMENTS/OPTIONS OF TOWN

Attached: Quote and Specifications.

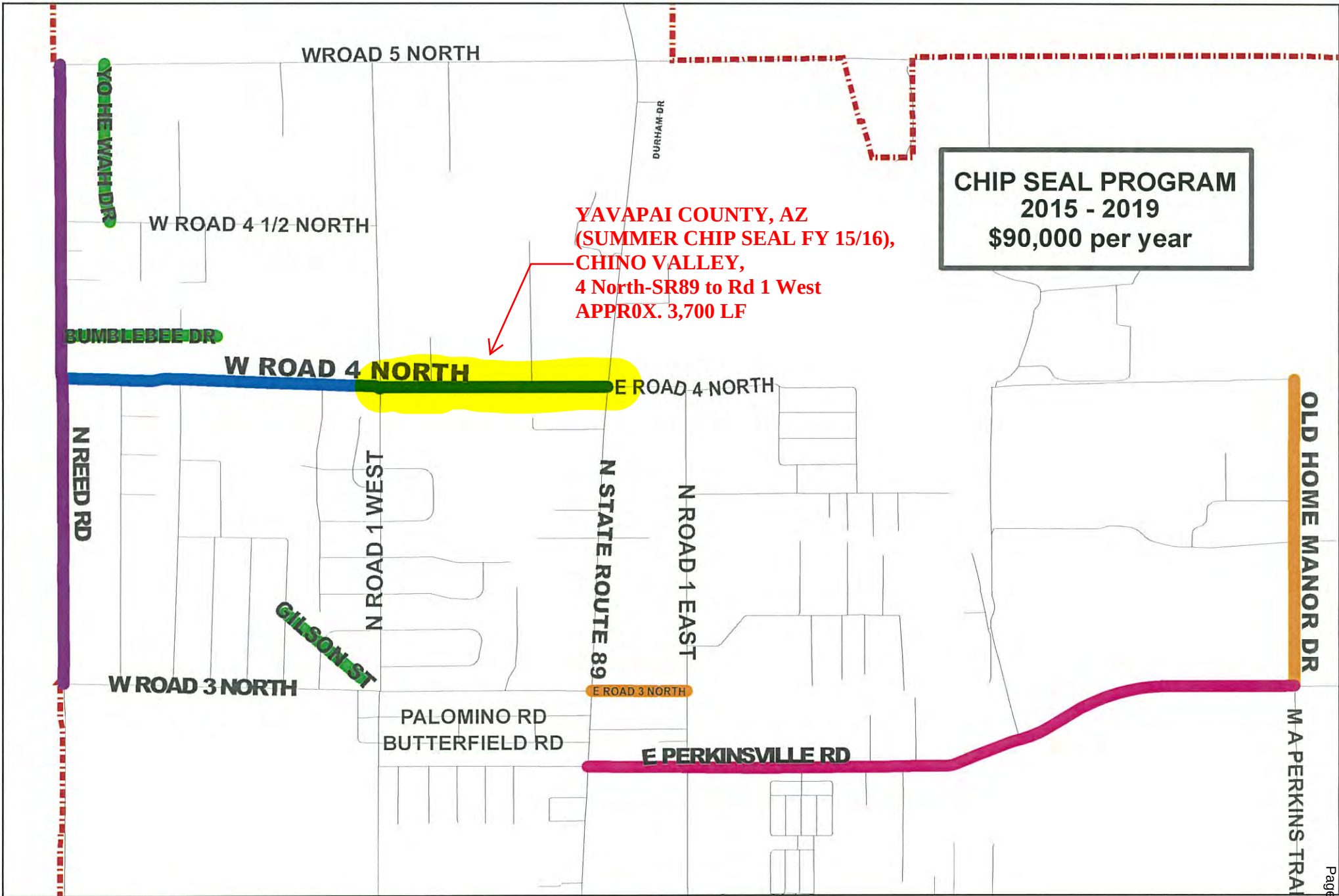
Notices: All notices required under the Contract shall be sent to:

Town Manager
 Town of Chino Valley
 202 N. State Route 89
 Chino Valley, Arizona 86323-0406

Delivery Location: ***Road 4 North, SR 89 to Road 1 West***

Immigration Law Compliance Warranty: As required by A.R.S. § 41-4401, Contractor hereby warrants its compliance with all federal immigration laws and regulations that relate to its employees and A.R.S. § 23-214(A). Contractor further warrants that after hiring an employee, Contractor verifies the employment eligibility of the employee through the E-Verify program. If Contractor uses any subcontractors in performance of the Work, subcontractors shall warrant their compliance with all federal immigration laws and regulations that relate to its employees and A.R.S. § 23-214(A), and subcontractors shall further warrant that after hiring an employee, such subcontractor verifies the employment eligibility of the employee through the E-Verify program. A breach of this warranty shall be deemed a material breach of the Contract that is subject to penalties up to and including termination of the Contract. Contractor is subject to a penalty of \$100 per day for the first violation, \$500 per day for the second violation, and \$1,000 per day for the third violation. Town at its option may terminate the Contract after the third violation. Contractor shall not be deemed in material breach of this Contract if the Contractor and/or subcontractors establish compliance with the employment verification provisions of Sections 274A and 274B of the federal Immigration and Nationality Act and the E-Verify requirements contained in A.R.S. § 23-214(A). Town retains the legal right to inspect the papers of any Contractor or subcontractor employee who works on the Contract to ensure that the Contractor or subcontractor is complying with the warranty. Any inspection will be conducted after reasonable notice and at reasonable times. If state law is amended, the parties may modify this paragraph consistent with state law.

Equal Treatment of Workers: Contractor shall keep fully informed of all federal and state laws, county and local ordinances, regulations, codes and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any way affect the conduct of performance under the Agreement. Contractor shall at all times observe and comply with all such laws, ordinances, regulations, codes, orders and decrees; this includes, but is not limited to laws and regulations ensuring equal treatment for all employees and against unfair employment practices, including the Occupational Safety and Health Administration ("OSHA") and the Fair Labor Standards Act ("FLSA"). Contractor shall protect and indemnify Town and its representatives against any claim or liability arising from or based on the violation of such, whether by Contractor or its employees.



YAVAPAI COUNTY, AZ
(SUMMER CHIP SEAL FY 15/16),
CHINO VALLEY,
4 North-SR89 to Rd 1 West
APPROX. 3,700 LF

CHIP SEAL PROGRAM
2015 - 2019
\$90,000 per year



Chip Seal 2015-2016 Town of Chino Valley				
Piggy backing of the County Single Chip Seal				
Description	Unit Cost	Units	Quantitys	Total
Single Chip Seal (3,700'x24')	\$1.46	SY	9,867	\$14,405.82
Fog Seal (0.1gal/sy)	\$1.30	Gal	987	\$1,282.71
Traffic Control	\$813.00	LS	1	\$813.00
				\$16,502

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TOWN OF CHINO VALLEY COUNCIL AGENDA ITEM STAFF REPORT

Town Council Regular Meeting

Item No. 7. d.

Meeting Date: 06/14/2016

Contact Person: Michael Lopez, Assistant Public Works Director/Town Engineer
Phone: 928-636-2646 x-1226

Department: Public Works

Item Type: Action Item

Estimated length 5 minutes

of staff presentation:

Physical location of item: Road 1 North and State Route 89

AGENDA ITEM TITLE:

Consideration and possible action to approve the Letter of Support and Financial Commitment for design and construction of the Road 1 North traffic signal at State Route 89.

RECOMMENDED ACTION:

Approve the Letter of Support and Financial Commitment for design and construction of the Road 1 North traffic signal at State Route 89.

SITUATION AND ANALYSIS:

Issue Statement

Applicable "Policy"

Satisfaction of "Policy"

Summary of Issues and Staff Rationale

Findings of Fact

Fiscal Impact

Fiscal Impact?: Yes

If Yes, Budget Code:

Available: 75,000

Funding Source:

Letter commits Town to budget \$75,000 in a future fiscal year.

Attachments

Road 1 North Letter of Support and Financial Commitment



Development Services Department
1982 N. Voss Drive #203
Chino Valley, AZ 86323

928-636-4427
928-636-6937
www.chinoaz.net

Date 6/14/16

Town of Chino Valley
202 N. State Route 89
Chino Valley, Arizona 86323

Alvin Stump
District Engineer
1109 E. Commerce Dr.
Prescott, AZ 86305
Arizona Department of Transportation Northwest District

Re: Support and Financial Commitment for the Design and Construction of the Road 1 North Traffic Signal at State Route 89

Dear Mr. Stump:

This letter is written to express the Town of Chino Valley's support and financial commitment for the proposed signal project at Road 1 North and State Route 89 in Chino Valley, Arizona.

Currently, the intersection at Road 1 North and State Route 89 experiences a high volume of traffic, approximately 24,000 vehicles per day (VPD), creating unsafe ingress and egress movements at State Route 89. Historical accident stats obtained from the Town of Chino Valley Police Department indicate 31 accidents occurred at this intersection, 11 injury related, 20 property damages, one fatality in 2007 and one fatality at the adjacent Medical Center driveway. The construction of a signal at this location would benefit travelers on State Route 89, as well as local traffic. The location will also serve residents of Yavapai County in the greater Chino Valley and Paulden areas.

According to ADOT Design Department, the estimated construction cost for this project is approximately \$1.5 to \$2.0 million dollars. Based on industry standards of 10% for design cost, this equates to approximately \$150,000 to \$200,000 for the design. The Town, in cooperation with Yavapai County, supports and financially commits \$75,000 to the associated design cost.

If you have any questions or concerns, please contact Michael Lopez at 928-636-2646, ext. 1226.

Sincerely,

Chris Marley, Town of Chino Valley Mayor

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TOWN OF CHINO VALLEY COUNCIL AGENDA ITEM STAFF REPORT

Town Council Regular Meeting

Item No. 7. e.

Meeting Date: 06/14/2016

Contact Person: Michael Lopez, Assistant Public Works Director/Town Engineer
Phone: 928-636-2646 x-1226

Department: Public Works

Item Type: Action Item

Estimated length 10 minutes

of staff presentation:

Physical location of item: Road 1 East Between Road 3 South and Kalinich

AGENDA ITEM TITLE:

Consideration and possible action to approve the commencement of design for the Road 1 East improvements between Road 3 South and Kalinich.

RECOMMENDED ACTION:

Approve the commencement of design for the Road 1 East improvements between Road 3 South and Kalinich.

SITUATION AND ANALYSIS:

Issue Statement

In November of 2013 the Town of Chino Valley entered into an Intergovernmental Agreement with The State of Arizona obligating the Town to complete the the connections to State Route (SR) 89 at Road 4 1/2 and Kalinich Road to Road 1 East and extend Road 1 East from 3 South to Kalinich. Subsequent to this agreement, the process of negotiations and acquisition of the Right-of -Way (ROW) required to complete the above mentioned sections of roadway commenced.

In September of 2014, Council accepted the the dedication of ROW along Road 1 East adjacent to the Karcic parcel South from Road 4 South, Brownlow Avenue between Road 1 East and SR 89, Road 4 1/2 South between Road 1 East and SR 89, and Kalinch Avenue between Road 1 East and Highway 89.

In July of 2015 council adopted Resolution No. 15-1064 to authorize the acquisition of certain real property (Glenarm parcel) for right-of-way and easement purposes through donation, eminent domain or purchase for an amount not to exceed fair market value of the property, plus acquisition and closing costs and authorizing the Mayor, Town Manager and Town Attorney to acquire title to the property as stated in the resolution. Around this same time, Town staff began the preparations of the design plans for the construction of the above mentioned roadways. The plans are currently at the 30% stage. Design production was put on hold after failed attempts to facilitate the acquisition of ROW with Glenarm's Engineer. To date, the courts have given the Town possession of the property adjacent to the Glenarm parcel but the actual valuation of this ROW has yet to be determined. The Fund available to construct this project includes the cost associated with the final courts ruling on valuation. The Town's

Attorney estimates that the final ruling will occur in November of 2016.

Applicable “Policy”

Satisfaction of “Policy”

Summary of Issues and Staff Rationale

Findings of Fact

Fiscal Impact

Fiscal Impact?: yes

If Yes, Budget Code:

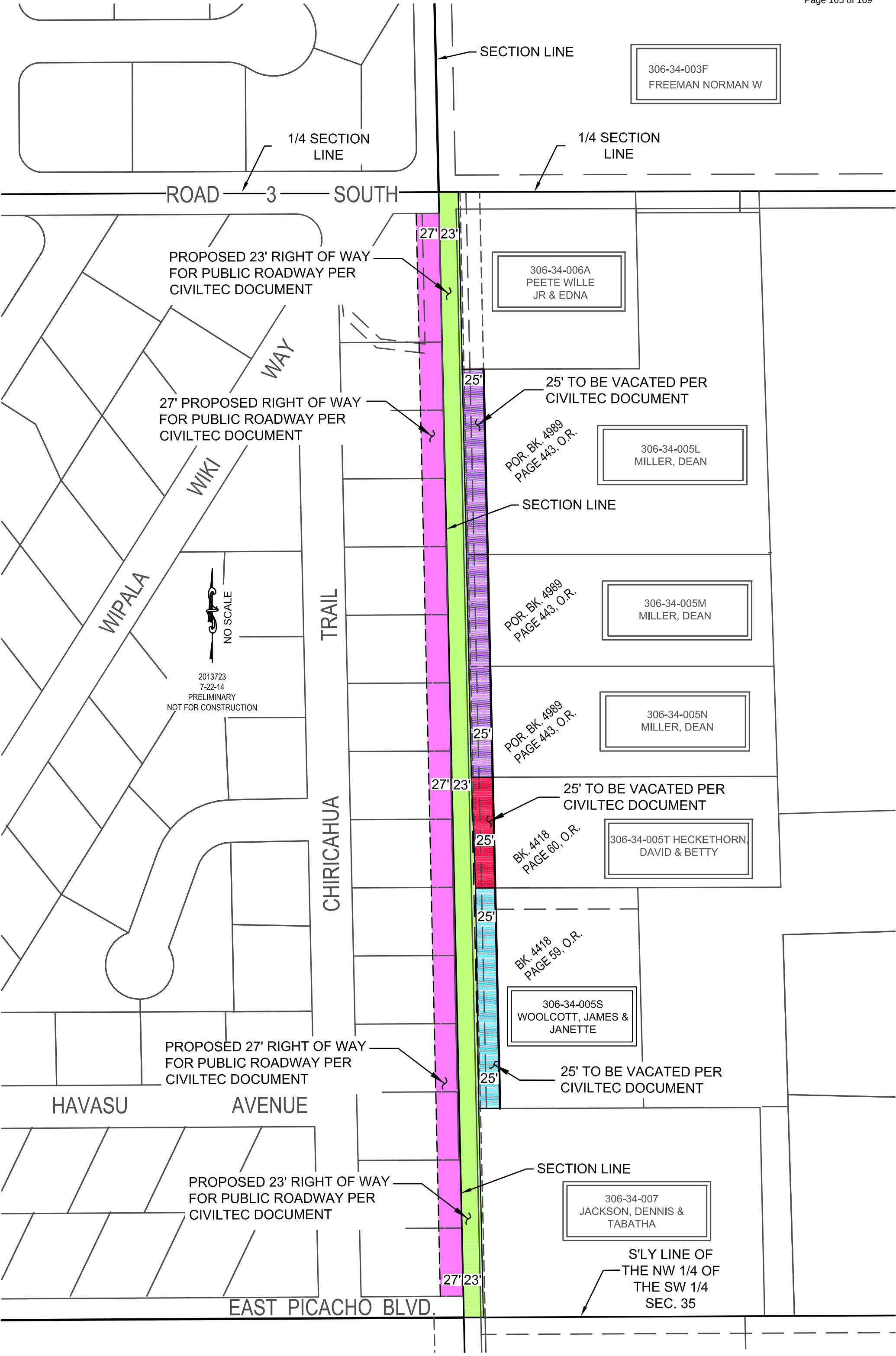
Available:

Funding Source:

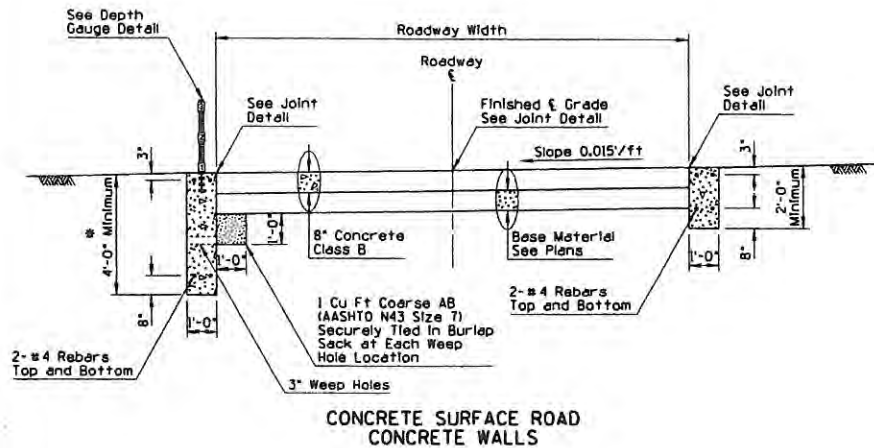
Attachments

Road 1 East ROW Exhibit

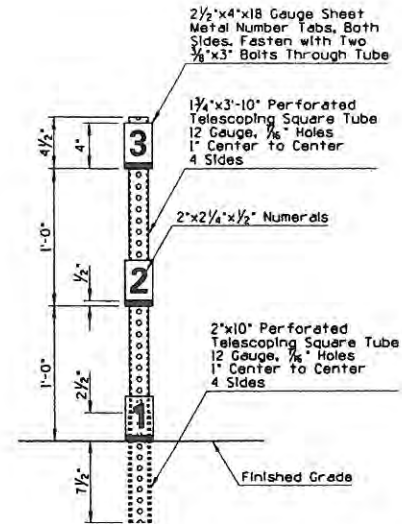
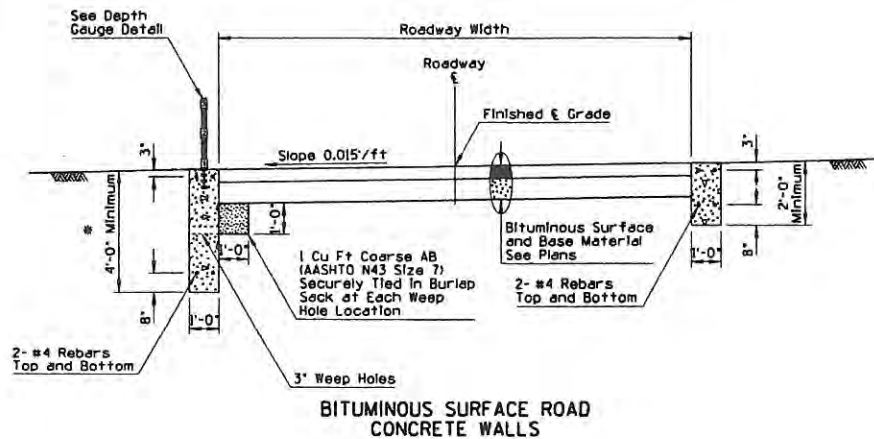
Road 1 East Overall Exhibit



NO.	DESCRIPTION OF REVISIONS	MADE BY	DATE
1	REISSUED STD AS C-19.10, SHEET 1 OF 2	RLF	9/04
2	ADDED GENERAL NOTE 4	RLF	9/04
3			
4			

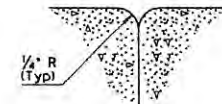


* Min Distance Below Stream Bed



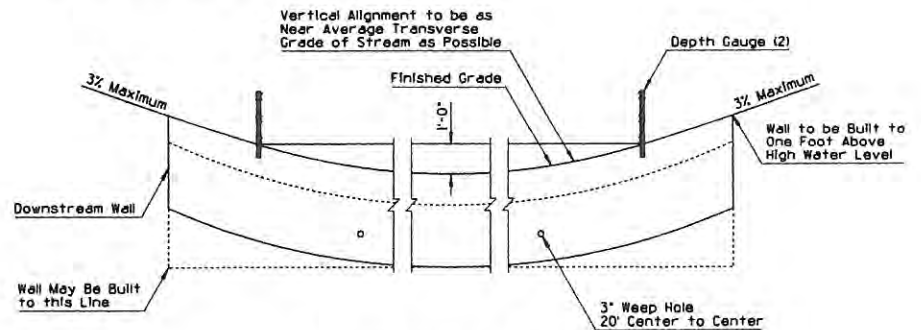
GENERAL NOTES

1. Ford walls shall be Class B concrete.
2. Depth gauge tubing shall be protected against concrete entering through bottom or perforations.
3. Depth gauge tubing and both sides of numeral tabs shall be painted with two coats of white enamel. Numerals and markers shall be painted with one coat of gloss black enamel.
- ② 4. Depth gauge foundation may be utility concrete.



JOINT DETAIL

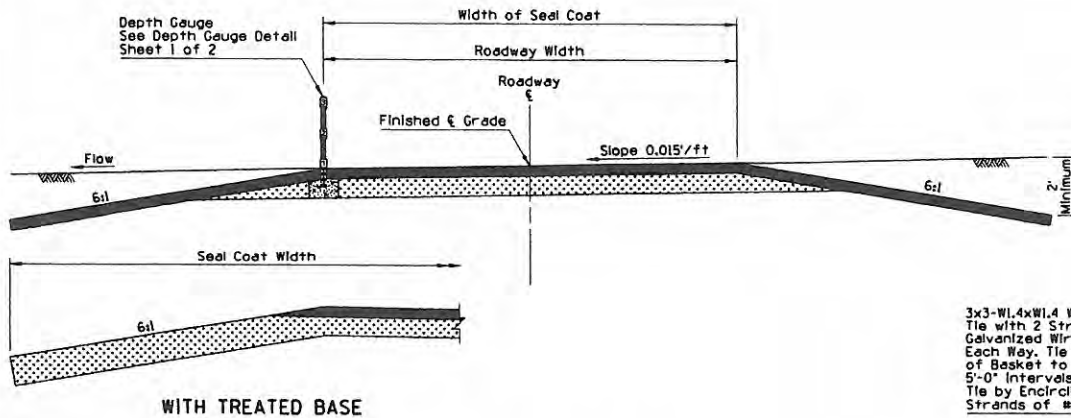
DEPTH GAUGE DETAIL



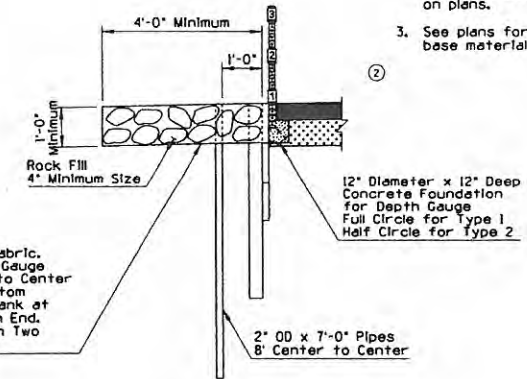
ELEVATION LOOKING UPSTREAM

APPROVED FOR DESIGN <i>May V. Pappas</i>	STATE OF ARIZONA DEPARTMENT OF TRANSPORTATION ROADWAY STANDARD DRAWINGS	REV. 9/04
APPROVED FOR DISTRIBUTION <i>[Signature]</i>	FORD CONCRETE WALLS	DRAWING NO. C-19.10 Sheet 1 of 2

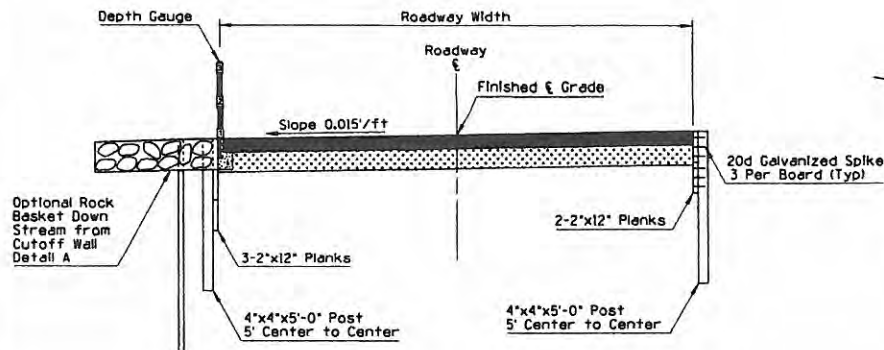
NO.	DESCRIPTION OF REVISIONS	MADE BY	DATE
1	REISSUED STD AS C-19.10, SHEET 2 OF 2	RLF	9/04
2	DELETED ORIGINAL GENERAL NOTE 4	RLF	9/04
3			
4			



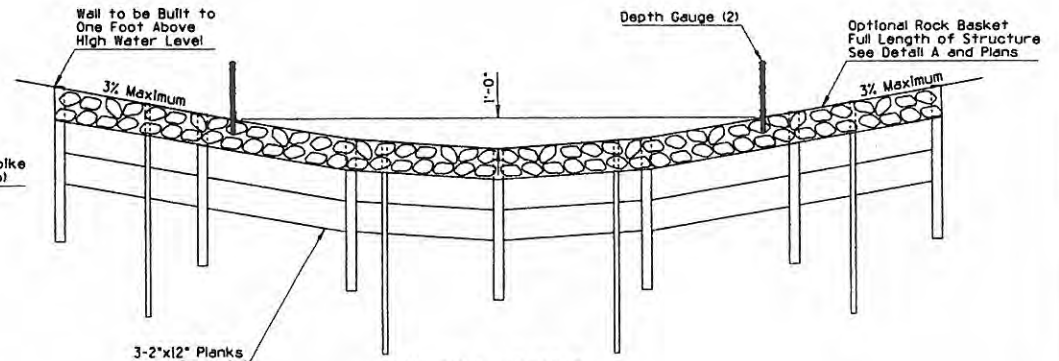
TYPE 1
BITUMINOUS SURFACE ROAD



DETAIL A



TYPE 2
BITUMINOUS SURFACE FORD
TIMBER CUTOFF WALLS



ELEVATION - TYPE 2

GENERAL NOTES

1. All timber shall be rough, pressure treated and unpainted.
2. Rock basket, full length of structure, shall be included only when called for on plans.
3. See plans for bituminous surface and base material details.

APPROVED FOR DESIGN <i>Mary Vipawala</i>	STATE OF ARIZONA DEPARTMENT OF TRANSPORTATION ROADWAY STANDARD DRAWINGS	REV. 9/04
APPROVED FOR DISTRIBUTION <i>[Signature]</i>	FORD TYPES 1 AND 2	DRAWING NO. C-19.10 Sheet 2 of 2

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TOWN OF CHINO VALLEY COUNCIL AGENDA ITEM STAFF REPORT

Town Council Regular Meeting

Item No. 8. a.

Meeting Date: 06/14/2016
Contact Person: Jami Lewis, Town Clerk
Phone: 928-636-2646 x-1208
Department: Council
Estimated length None
of Staff Presentation:
Physical location of item: N/A

AGENDA ITEM TITLE:

An executive session pursuant to A.R.S. § 38-431.03(A)(3) for discussion or consultation for legal advice with the Town Attorney regarding the acquisition of a portion of the Prescott Water system and pursuant to A.R.S. § 38-431.03(A)(4) for discussion or consultation with the Town Attorney in order to consider the Town's position and instruct the Town Attorney regarding the Town's position regarding a contract with the City of Prescott related to the Town purchasing a portion of its water distribution system that is the subject of negotiations. (Mayor Marley)

Attachments

No file(s) attached.
