

# LOCAL GOVERNMENT FIVE-YEAR CONSTRUCTION PROGRAM



Project Nomination for

## CITY OF BISBEE ARIZONA STREET PROJECT

Mini Design Concept Report  
Jeff Schwarz, Public Works  
520.432.6004

## B. INTRODUCTION

The Arizona Street Reconstruction project is located in the Warren District of Bisbee. It will encompass 3,345.41 linear feet which is the entire length of Arizona Street from the City Limit near Cole Street to the North, to the City Limit near Hazzard Street to the South. **Arizona Street is functionally classed as *Urban Collector*.** The roadway was dedicated “to the Public” on January 11, 1907 along with other roads in the Warren Townsite **and is considered the main thoroughfare for the Warren district and a vital, major street for traffic and emergency egress.** The current roadway is in serious distress due to age and an extensive amount of recent underground utility replacement. There are residences, businesses, the Boys and Girls Club, City Hall, a Medical Clinic and the Warren Ball Park in the area. Arizona Street also serves as an evacuation route for Warren with two of the three outlet points for the entire area. This project will provide a new travel surface as well as much needed sidewalks and ADA compliant handicap ramps.

The City of Bisbee is requesting funding for this project through the ADOT Transportation Improvement Program. The total project costs is estimated at \$1,779,800 (without an inflation factor). From that total, the city will pay the engineering costs of \$173,518 and an additional match of \$106,282. of 6% of the total costs after the engineering and will absorb any inflationary increases associated with the project. The City will dedicate this match as part of its 2007-2008 budget so as to begin developing preliminary engineering reports and 15% and 25% concept and design drawings.

This project is to start in the 2008-2009 fiscal year using funds borrowed against the approved TIP allocation as well as other funding sources to be applied for through State and Federal sources. The projected start date for construction of this project is July, 2008 contingent upon successful financing of the project.

## C. BACKGROUND DATA

As previously stated, the roadway was dedicated to the Public in January of 1907. A stone masonry drainage channel was constructed along the East side of Arizona Street in the 1930's by the WPA. Traffic control on Arizona Street consists of a *Four Way Stop* at the intersection of Congdon Avenue. All other traffic entering Arizona Street is regulated by stop signs. Utilities within the roadway consist of water, sewer and natural gas. Cable television, telephone and electrical are overhead. This project may require the re-location of 8 utility poles and 5 fire hydrants.

In 2006 a major water and sewer line project was completed along the full length of Arizona Street. The street surface and some sidewalks were destroyed as part of this process and only minimal, short term repair has been conducted. Since then, **Arizona Street improvements have been included as a priority project in Bisbee's transportation planning.**

Peak traffic hours for Arizona Street are the typical rush hours. Morning and evening commuters utilize this road to access City Hall, Copper Queen Hospital, the County Jail and as a route to Douglas and Naco. There is also considerable lunch time traffic. **The average daily traffic (ADT) is estimated to be 2,400 vehicles per day, however use has gone down considerably since the street is in such poor condition.**

The City of Bisbee Police Department reports that from 2003 to 2006, a total of 7 traffic accidents have occurred on Arizona Street. From 1993 to present, a total of 36 traffic accidents have occurred.

An inventory of structures along Arizona Street was developed and includes:

- 30 Single Family Dwellings (SFD)
- 4 Churches
- 12 Commercial Buildings
- 6 infill or paved parking lots
- 2 Community based clubs
- 3 Parks or recreational facilities
- 1 Local Government office
- 1 State Government office
- 1 Health facility

#### **D. PROJECT SCOPE**

Currently, **Arizona Street is paved an average of 60' in width and the condition would be rated "very poor" with considerable roughness, multi layered patches that create significant distortion, no sustained curbs, and sever loss of surface material particularly where sewer and water lines were laid.** The proposed reconstruction project will provide a 38' paved roadway with vertical curb and gutter with 10' landscape strips and 5' pedestrian walks on both sides. The total project length is 3,345.41'. Additional construction items include 32 ADA compliant handicap ramps, 1,190' of concrete valley gutter and 34 spandrels. The proposed pavement section is 4' asphalt concrete over 8" of aggregate base course. (A detailed Project Cost Estimate is provided with this document). **These improvements will provide a positive economic impact in the community. Better parking for business, safe and accessible access for pedestrians and shoppers, and an improved gateway for residents and visitors looking for commercial and residential opportunities will make this the keystone effort in the revitalization of the area.**

#### **E. PROJECT DEVELOPMENT CONSIDERATIONS**

##### **1. Environmental requirements as determined by the project scope.**

###### **a. Potential hazardous waste sites**

A Pre-Phase 1 Assessment for hazardous materials was conducted for the project area. No hazardous materials concerns were identified. No further hazardous materials investigation is required. If suspected hazardous materials are encountered during

construction, work will cease at that location and the City of Bisbee or their contractor will be contacted to arrange for proper treatment or disposal of those materials.

b. 404 Permit requirements

The proposed construction activities will not involve the discharge of dredged or fill material into water of the United States; therefore, no Section 404 or Section 401 Water Quality Certification permits are required.

c. Section 4 (f) Lands

Section 4 (f) of the U.S. Department of Transportation Act of 1966 states that the FHWA “may approve a transportation program or project requiring publicly-owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state or local significance, or land of a historic site of national, state or local significance (as determined by the federal, state or local officials having jurisdiction over the park, area, refuge or site) only if there is no prudent or feasible alternative to using that land and the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use” (49 U.S.C. 303)..

The modifications contained in this project will not adversely impact any current or future land use as defined in Title 23 CFR771.135(p).

d. Floodplain encroachment

A review of the Federal Emergency Management Agency Flood Insurance Rate Maps for the project area indicates that approximately 1,000 feet of the southern portion of the project is located within the 100 year floodplain. Impacts on floodplains typically occur when the topography within a floodplain is substantially modified either by placement or removal of materials within the floodplain. Because this is a re-construction within an existing alignment, the project will not substantially modify the topography in the project area. Therefore, no impacts on the floodplain are anticipated.

e. Wetlands

There are no delineated or definable wetlands within the project limits. It has been determined that no endangered, threatened, proposed and candidate species or designated critical habitat will be affected by the construction of this project because the project area does not support any critical habitat; therefore, no biological survey will be necessary.

There are no existing protected native plants within the project limits; therefore, there will be no impact to any native plants as a result of this project.

f. Scenic or Historic route

The project will not compromise the integrity of the buildings in the project area. There are no Arizona Parkways, or designated historic or scenic roads within the project limits.

There are no wild or scenic rivers in the vicinity of the proposed project; therefore, there will be no impact to any wild or scenic rivers as a result of this project.

g. Archaeological clearance

Because this project involves reconstruction of the existing road, there is little chance of uncovering any undiscovered cultural or historic resources. If previously unidentified cultural resources are encountered during construction, work will cease, and the appropriate agencies will be notified.

h. Social and economic impacts

This project will not be detrimental to the residents or businesses in the project area. When the project is complete, it will allow residents and visitors to travel in the area without risk of damage due to the poor conditions which currently exist. The project will create a more friendly and safe roadway for vehicular and pedestrian traffic. The installation of ADA compliant handicap ramps will benefit those in need of such facilities.

There are no farmlands adjacent to the project area; therefore, there will be no impact or involvement with any prime or unique farmlands.

There are no sole source aquifers in the vicinity of the project; therefore, there will be no impact or involvement with any sole source aquifers as a result of this project.

## **2. Critical Outside Agency Involvement**

Because Arizona Street is a municipal thoroughfare and the City maintains rights-of way on both sides of the street; and because there are no rights of way held by any organization other than utility providers and the City, we anticipate no delays or lengthy clearance procedures prior to construction commencement. Local Utilities include; Arizona Water Company, Southwest Gas Company and Arizona Public Service. Each will be made aware of the proposed project and will be contacted in the event it is found that utilities must be re-located.

## **3. Right of Way Requirements**

The entire project area is within the roadways dedicated to the public per the Warren Townsite Map on January 11, 1907; therefore, no new right of way or temporary construction easements are required for the construction of the proposed project. The roadway dedication depicts a width of 110' by 3,345.41' in length.

## **4. Utility Relocation Requirements**

The proposed roadway reconstruction may require the relocation of 8 utility poles as well as 5 fire hydrants. It is anticipated that relocation will be performed by the utility companies and is included in the proposed budget

## **5. Seasonal Considerations**

The temperate climate of the Bisbee area allows for year round construction., therefore any survey, mapping or field data collection can occur at any time.

## **6. Traffic Requirements**

A traffic control plan will be required to allow pedestrian and vehicular traffic to flow during the period of construction. Pavement marking and signage will be part of this construction project. There will be no signalization included in this project.

## **7. Design Concept Report Requirements**

It is the goal of the City of Bisbee to provide the best possible finished product when constructing this project. With this goal in mind, a pavement section of 4" asphalt concrete over 8" aggregate base has been selected. An alternative would be to use 2" asphalt concrete over 6" aggregate base but this alternative is not recommended due to the high amount of heavy truck traffic. There are no additional design alternates that the DCR should address and evaluate.

## **8. Design Criteria**

This project will be designed using ADOT and MAG criteria. This design will be in concert with AASHTO standards and specifications

## **F. OTHER REQUIREMENTS**

The City of Bisbee intends to fund this project with an Arizona Department of Transportation grant and local matching funds from the City of Bisbee as needed. The anticipated date for bid advertisement is mid April, 2008. The construction start date will be 2 and 1/2 months after the project has initially been advertised for bid. The City of Bisbee intends to hire an engineering consultant to develop plans and specifications for this project. The size and scope of this project will preclude the City of Bisbee from performing construction administration, therefore, the City requests that ADOT perform this task.

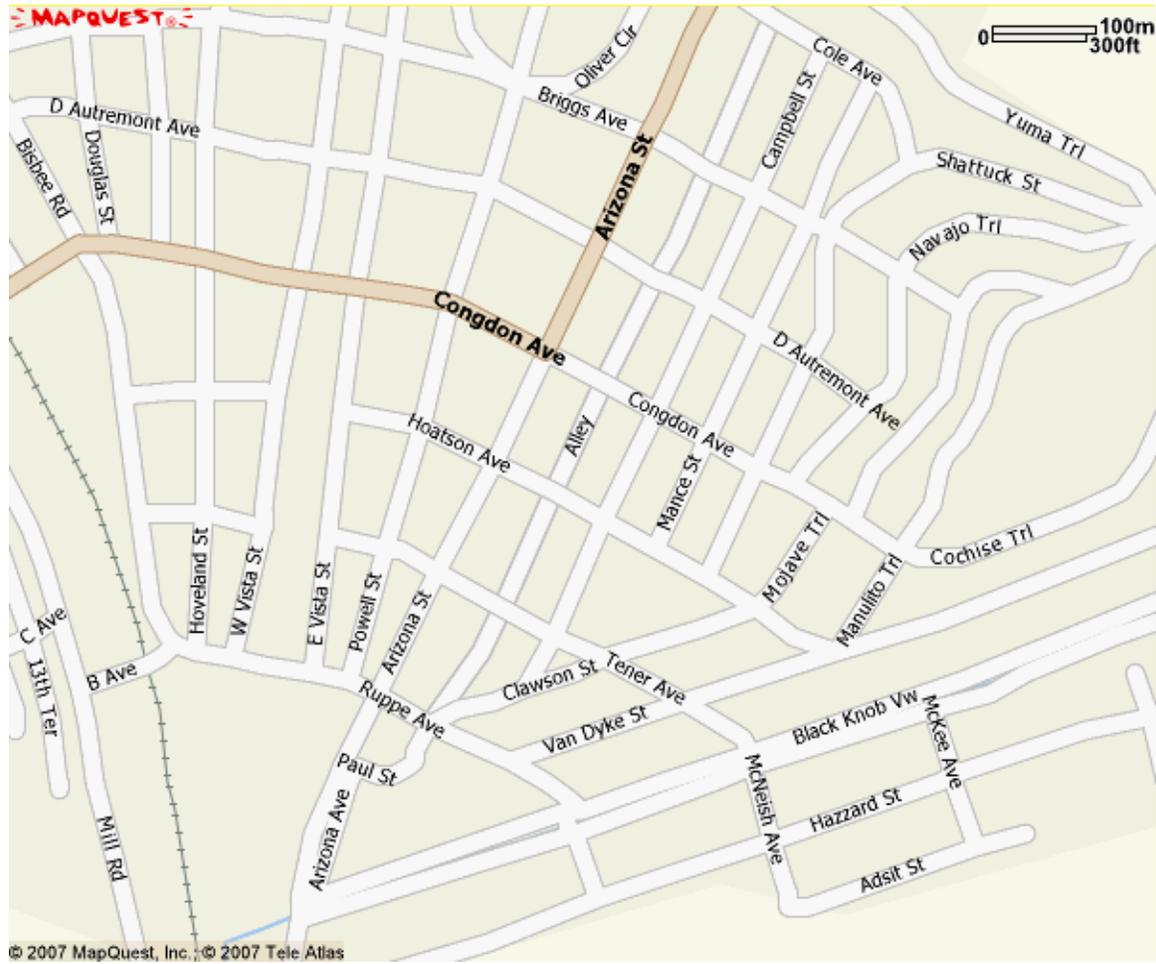
## **G. ESTIMATED COST**

- a. Design costs will be funded by the City of Bisbee: \$173,518.00
- b. There will be no right of way acquisition on the project.
- c. No utility relocation costs are anticipated at this time, however, if utility relocation is found to be necessary on this project, the City will request federal reimbursement.
- d. \$1,500,000 in Federal funds and \$279,800 in City funds (representing a contribution of 15.7% of the total construction costs). Of that \$279,800 in City funds; \$173,518 will be for engineering and \$106,282 will be the City's additional match. This represents a 6% match after engineering costs are paid.
- e. Total project cost: \$1,779,800

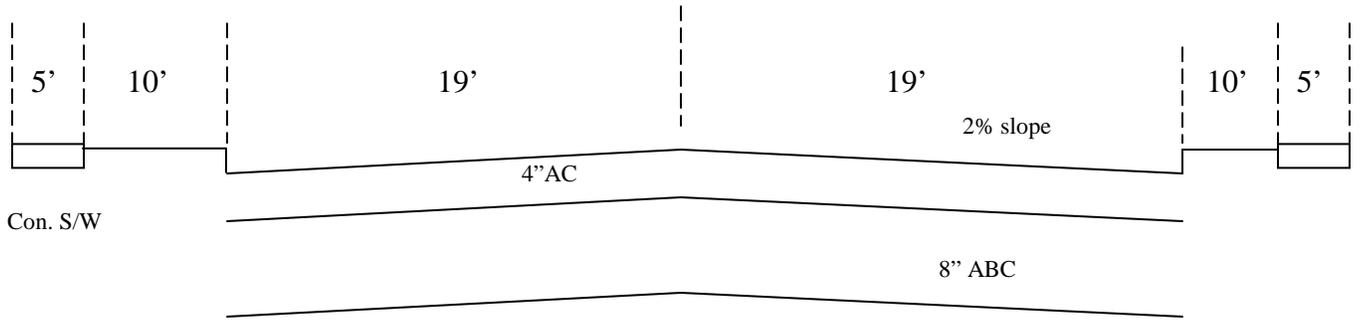
**H. ITEMIZED COST**

<b>ITEM</b>	<b>UNIT</b>	<b>QTY</b>	<b>UNIT PRICE</b>	<b>TOTAL PRICE</b>
DEMOLITION	CY	2000	\$12.00	\$24,000.00
ROADWAY EXCAVATION	CY	2000	\$7.75	\$15,500.00
SUB-GRADE PREPARATION	SY	17,650	\$1.50	\$26,475.00
AGGREGATE BASE COURSE	CY	3,500	\$65.56	\$229,460.00
4" ASPHALT CONCRETE	TON	4,000	\$123.55	\$494,200.00
VERTICAL CURB AND GUTTER	LF	5,960	\$19.00	\$113,240.00
5' SIDEWALK	SF	29,800	\$4.50	\$134,100.00
VALLEY GUTTER	SF	1,190	\$6.10	\$7,259.00
SPANDREL	EA	34	\$1,500.00	\$51,000.00
HANDICAP RAMP	EA	32	\$1,500.00	\$48,000.00
ADJUST MANHOLE	EA	12	\$750.00	\$9,000.00
ADJUST VALVE COVER	EA	14	\$325.00	\$4,550.00
<b>SUB-TOTAL ROADWAY</b>				\$1,156,784.00
CONSTRUCTION SURVEY	L.SUM	1	2%	\$23,135.68
FURNISH WATER SUPPLY	L.SUM	1	2%	\$23,135.68
TRAFFIC CONTROL	L.SUM	1	8%	\$92,542.72
MOBILIZATION	L.SUM	1	5%	\$57,839.20
QUALITY CONTROL	L.SUM	1	1%	\$11,567.84
CONTINGENCIES	L.SUM	1	5%	\$57,839.20
CONSTRUCTION ENGINEERING	L.SUM	1	15%	\$173,517.60
CHANGE ORDERS	L.SUM	1	5%	\$57,839.20
OVERHEAD AND ADMIN	L.SUM	1		\$125,599.00
<b>CONSTRUCTION TOTAL</b>				\$1,779,800.12
INFLATION FACTOR (____%) X Const. Total= Future Year Cost				

# I. VICINITY MAP



**J. TYPICAL SECTION SKETCH**



# ARIZONA STREET INVENTORY

## Hazzard to Black Knob

Transition to County Road; possible connection to Rails to Trails; no sidewalks

Boy Scout Building  
Trailer with SFD  
Culvert  
SFD

SFD  
One commercial warehouse (Bus Barn)



## Black Knob to Paul

Open culvert; frontage street exists; no sidewalks

Ball Field (owned by School)

SFD on side street  
SFD on side street  
SFD on side street  
SFD on side street



**Paul to Rupee**

No existing sidewalks; open culvert on park side

Ball Field

Paul Park Playground



**Rupee to Tener**

Need Bike Rack; existing bus stop; need cross walk; no sidewalks on east side; significant intersection; could be location for large circle inlay in pavement

One Story Commercial (Gas Station)  
Skate Park (City owned)  
One Story Commercial (Restaurant)

Health Clinic  
SFD  
City Hall



**Tener to Hoatson**

No sidewalks

Church	SFD
Two story commercial building (for sale)	SFD
One story commercial (Auto Garage)	SFD – Church parsonage
Bureau of Motor Vehicles	Church



**Hoatson to Congdon**

High curb on west side; parking and right of way issues on east side, open culvert

Infill parking	Infill parking
One story commercial (B.G. Design)	One story commercial (clinic offices)
Infill parking	Infill parking
Two story commercial (art studio, post office, barber, Research Institute)	One story commercial duplex (Handyman & Precision Machine)



**Congdon to D'autremont**

No curb; no sidewalks; Open culvert on east side; Congdon/AZ major intersection; could be location for large circle inlay in pavement; four way stop on Congdon – only stop on AZ

Boys & Girls Club  
Paved parking

One story commercial duplex (unoccupied)  
Infill lot  
One story commercial (restaurant)  
One story commercial duplex (unoccupied)



**D'autremont to Briggs**

No sidewalks, open culvert  
Church  
SFD  
SFD  
SFD

Church  
SFD  
SFD  
SFD  
SFD



### Briggs to Cole

No sidewalks, open culvert; Cole could be location for large circle inlay in pavement

SFD  
SFD  
SFD  
SFD  
SFD  
SFD (Mr. Summers 615 AZ- 20 yr.  
resident)

SFD  
SFD  
SFD  
SFD  
SFD



City of Bisbee  
118 Arizona St.  
Bisbee AZ 85603

### ADMINISTRATION

Stephen J. Pauken, City Manager                      520-432-6271 [spauken@cityofbisbee.com](mailto:spauken@cityofbisbee.com)

### PUBLIC WORKS

Russ McConnell, Public Works Director                      520-432-6262 [mconnell@cityofbisbee.com](mailto:mconnell@cityofbisbee.com)

Jeff Schwarz, Public Works Superintendent                      520-432-6004 [jschwarz@cityofbisbee.com](mailto:jschwarz@cityofbisbee.com)

### COMMUNITY DEVELOPMENT

John Charley, Comm. Dev. Director                      520-432-6269 [jcharley@cityofbisbee.com](mailto:jcharley@cityofbisbee.com)

Melanie Greene, Planning Assistant                      520-432-6016 [mgreene@cityofbisbee.com](mailto:mgreene@cityofbisbee.com)