



## MEMO

**To:** Bryan Chodkowski  
**From:** Dan Hoying  
**Date:** August 13, 2015  
**Subject:** Major thoroughfare plan review  
**Project #:** 0100311A.381

LJB has reviewed the project breakdowns that you provided on July 23, 2015. We reviewed the project funding splits and the edits that were made to the original project construction cost estimates. We offer the following comments:


- Springfield Street (East) Street Lighting Improvements – increase to \$540,000 for decorative fixtures.
- Springfield Street (West) Street Lighting Improvements – increase to \$250,000 for decorative fixtures.
- Needmore Road (SR 201 to SR 201) – increase to \$1,425,000.
- Valley Street Phase I – increase to \$1,100,000.
- Valley Street Phase II – increase to \$1,450,000.
- Spinning Road Phase I – increase to \$1,250,000.
- Spinning Road Phase II – increase to \$1,035,000.
- Harshman Road Phase I – increase to \$2,300,000.
- Harshman Road Phase II – decrease to \$1,900,000.

We appreciate the opportunity to provide this review. Please let me know if you have any questions or need additional review of any of these suggested modifications.



## MEMORANDUM

**TO:** Riverside City Council

**FROM :** Bryan RH Chodkowski  
City Manager 

**SUBJECT:** Major Thoroughfare Improvement Plan –  
Final Summary

**DATE:** June 3, 2015

**CC:** Emily M. Christian,  
Assistant City Manager

Mitch Miller,  
Director of Public Services

Over the last several months, staff and Council have worked to identify necessary improvements for all the major thoroughfares located within the City. As part of this project, the City looked at the current conditions of these roadways, potential future project scopes for these streets, and classified these projects as either necessities or opportunities.

As presented to Council, the major thoroughfares were first divided into four separate groups. Next, staff performed a comprehensive review of the roadways in each group and identified all work which could be performed to improve that particular thoroughfare. The information assembled from this staff review was then shared with City Council for additional input. Following this review with Council, all documentation was forwarded to the City's engineer; LJB.

LJB provided project estimates for all those streets considered for the Plan. As part of its estimating process LJB included inflationary adjusted construction costs, engineering fees, and administration expenses. Once received from the Engineer; City staff reviewed the information provided classifying elements from each project as necessary to maintain existing infrastructure, necessary safety improvements, and/or improvements of opportunities.

Using staff's classifications, Council was presented a final series of memoranda for each group of streets. These memoranda provided Council with two types of projects and amended cost estimates. The first type of project, General Thoroughfare Improvement Projects, were those focused on replacing existing infrastructure or providing necessary safety improvements. The second type of project, Projects of Opportunity, were projects ancillary to the proposed General Thoroughfare Improvement Projects, addressed non-motorized transportation improvements, or would be in response to economic development projects.

## MEMORANDUM

As presented to Council, the projects classified as General Thoroughfare Improvement Projects within the Major Thoroughfare Improvement Plan, as well as their anticipated expense, are as follows:

➤ Spaulding Rd.:	\$ 690,000
➤ Springfield St. (Woodman east to City Limit):	\$ 1,521,500
➤ Springfield St. (Woodman west to City Limit):	\$ 1,439,500
➤ Airway Rd. (Woodman west to City Limit):	\$ 1,923,700
➤ Needmore Rd. (SR 201 to SR 202):	\$ 1,361,500
➤ Schwinn Dr. (SR 201 to SR 202):	\$ 820,900
➤ Spinning Rd. – Phase (Linden to Eastman):	\$ 1,135,900
➤ Spinning Rd. – Phase II (Eastman to Burkhardt):	\$ 940,100
➤ Spinning Rd. – Phase III (Burkhardt to Airway):	\$ 1,525,900
➤ <del>Airway Rd. (Woodman east to City Limit):</del>	<del>\$ 1,896,400</del>
➤ Valley St. – Phase I (West City Limit to Rohrer):	\$ 926,800
➤ Valley St. – Phase II (Rohrer to Harshman):	\$ 1,256,600
➤ Valley St. – Phase III (Harshman east to City Limit):	\$ 1,528,500
➤ <del>Union Schoolhouse Rd.:</del>	<del>\$ 800,000</del>
➤ Woodman Dr. (CSX Rail Bridge to Airway Rd.):	\$ 2,114,000
➤ Woodman Dr. (Airway Rd to US 35):	\$ 2,056,000
➤ Beatrice Dr. (SR 201 to Harshman):	\$ 499,000
➤ Community Dr. (SR 202 to SR 201):	\$ 394,000
➤ Eastman Dr. (Woodman Dr. to Spinning Rd):	\$ 560,000
➤ Old Troy Pike (City Limit to City Limit):	\$ 1,634,200
➤ Brandt Pike (City Limit to City Limit):	\$ 1,195,500
➤ Linden Ave. – Phase I (W. City Limit to Quimby):	\$ 1,300,000
➤ Linden Ave. –Phase II (Quimby to E. City Limit):	\$ 1,260,000
➤ Woodman Dr. (US 35 to City Limit):	\$ 954,000
➤ Burkhardt Rd. – Phase I (W. City Limit to Ketchum):	\$ 1,300,000
➤ Burkhardt Rd. – Phase II (Ketchum to E. City Limit):	\$ 1,300,000
➤ Harshman Rd. – Phase I (N City Limit to Transportation):	\$ 2,000,000
➤ <u>Harshman Rd. – Phase II (Transportation to S. City Limit):</u>	<u>\$ 2,000,000</u>
TOTAL	\$36,334,000

Working through the summary of Major Thoroughfare Improvement Projects, Council requested additional information on the streets being reviewed. The request asked staff to present the streets being reviewed in an order of replacement under a generalized timeline. In accordance with that direction, staff reviewed the catalog of City ordinances and resolutions. Staff performed this exercise to find benchmarks for construction projects awarded between January 1995 and present. Based on the legislation enacted by Council, staff was able to assemble a general timeline of when most of the City's major roadways should have been or will need to be scheduled for improvement.



## MEMORANDUM

The following schedule is based on the year in which relevant legislation was enacted with generally accepted construction standards for roadway improvements. Slurry-seal like applications typically extend roadway life by 10 years while mill-n-fill, overlay, and reconstructions have lifespans of 15-20 years before needing to be replaced. For those streets with a replacement year noted as "N/A," there was no legislative record of work previously performed.

Project Name	Estimated Cost	Replacement Year
Spaulding Rd.:	\$ 690,000	N/A
Union Schoolhouse Rd.:	\$ 800,000	N/A
Needmore Rd. (SR 201 to SR 202):	\$ 1,361,500	N/A
Eastman Dr. (Woodman Dr. to Spinning Rd.):	\$ 560,000	N/A
Schwinn Dr. (SR 201 to SR 202):	\$ 820,900	N/A
Airway Rd. (Woodman east to City Limit):	\$ 1,896,400	2015
Airway Rd. (Woodman west to City Limit):	\$ 1,923,700	2015
Springfield St. (Woodman east to City Limit):	\$ 1,521,500	2017 2020
Springfield St. (Woodman west to City Limit):	\$ 1,439,500	2017 2021
Valley St. – Phase II (Rohrer to Harshman):	\$ 1,256,600	2018 2022
Valley St. – Phase III (Harshman east to City Limit):	\$ 1,528,500	2018
Spinning Rd. – Phase II (Eastman to Burkhardt):	\$ 940,100	2019 2023
Spinning Rd. – Phase III (Burkhardt to Airway):	\$ 1,525,900	2019
Spinning Rd. – Phase I (Linden to Eastman):	\$ 1,135,900	2020 2024
Woodman Dr. (CSX Rail Bridge to Airway Rd.):	\$ 2,114,000	2021 2025
Woodman Dr. (Airway Rd to US 35):	\$ 2,056,000	2021
Old Troy Pike (City Limit to City Limit):	\$ 1,634,200	2022 2024
Community Dr. (SR 202 to SR 201):	\$ 394,000	2023 2027
Brandt Pike (City Limit to City Limit):	\$ 1,195,500	2023
Beatrice Dr. (SR 201 to Harshman):	\$ 499,000	2024 2028
Woodman Dr. (US 35 to City Limit):	\$ 954,000	2024
Linden Ave. – Phase I (W. City Limit to Quimby):	\$ 1,300,000	2025 2029
Linden Ave. – Phase II (Quimby to E. City Limit):	\$ 1,260,000	2025
Harshman Rd. – Phase I (N City Limit to Transportation):	\$ 2,000,000	2026 2030
Harshman Rd. – Phase II (Transportation to S. City Limit):	\$ 2,000,000	2026
Valley St. – Phase I (West City Limit to Rohrer):	\$ 926,800	2027 2031
Burkhardt Rd. – Phase II (Ketchum to E. City Limit):	\$ 1,300,000	2027
Burkhardt Rd. – Phase I (W. City Limit to Ketchum):	\$ 1,300,000	2028 2032

Many factors contribute to the rate and manner in which a road will deteriorate to the point of needing resurfacing or reconstruction. And while it is highly likely the above schedule of street reconstruction will change for a variety of reasons, it should provide Council with a general guideline for continued discussion on this matter.

## MEMORANDUM

In addition to the General Thoroughfare Improvement Projects identified through the Major Thoroughfare Improvement Plan process, several Projects of Opportunity were acknowledged. The Projects of Opportunity are those that represent ancillary improvements to the proposed General Thoroughfare Improvement Projects, address non-motorized transportation improvements, or would be in response to or in support of economic development projects. The final list of Projects of Opportunity and their anticipated expense are as follows:

➤ Spaulding/Linden Radii & Stacking Improvements:	\$ 215,000
➤ Springfield St. (East) Street Lighting Improvements:	\$ 484,200
➤ Springfield St. (West) Street Lighting Improvements:	\$ 216,900
➤ Wright Point Office Drive Relocation Project:	\$ 180,000
➤ Norman/Old Harshman Closure & Ramp Extension:	\$ 500,000
➤ Spinning/Burkhardt Radii Improvements:	\$ 225,000
➤ Spinning/Bayside Traffic Signal:	\$ 340,000
➤ Airway Woodman Intersection Safety Improvements:	\$ 500,000
➤ Airway/ASC Drive Traffic Signal:	\$ 350,000
➤ Union Schoolhouse/Forest Ridge Blvd Roundabout:	\$ 600,000
➤ Lily Creek/Woodman Dr. Bridge Improvement:	\$ 252,000
➤ Replace Springfield/Woodman Interchange with At-Grade:	\$ 4,413,000
➤ Woodman Dr. Multi-use Path:	\$ 563,000
➤ Woodman Dr. Replace/Upgrade Guardrail:	\$ 121,000
➤ Beatrice/Harshman Traffic Signal:	\$ 399,000
<b>TOTAL</b>	<b>\$ 9,359,100</b>

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## MEMORANDUM

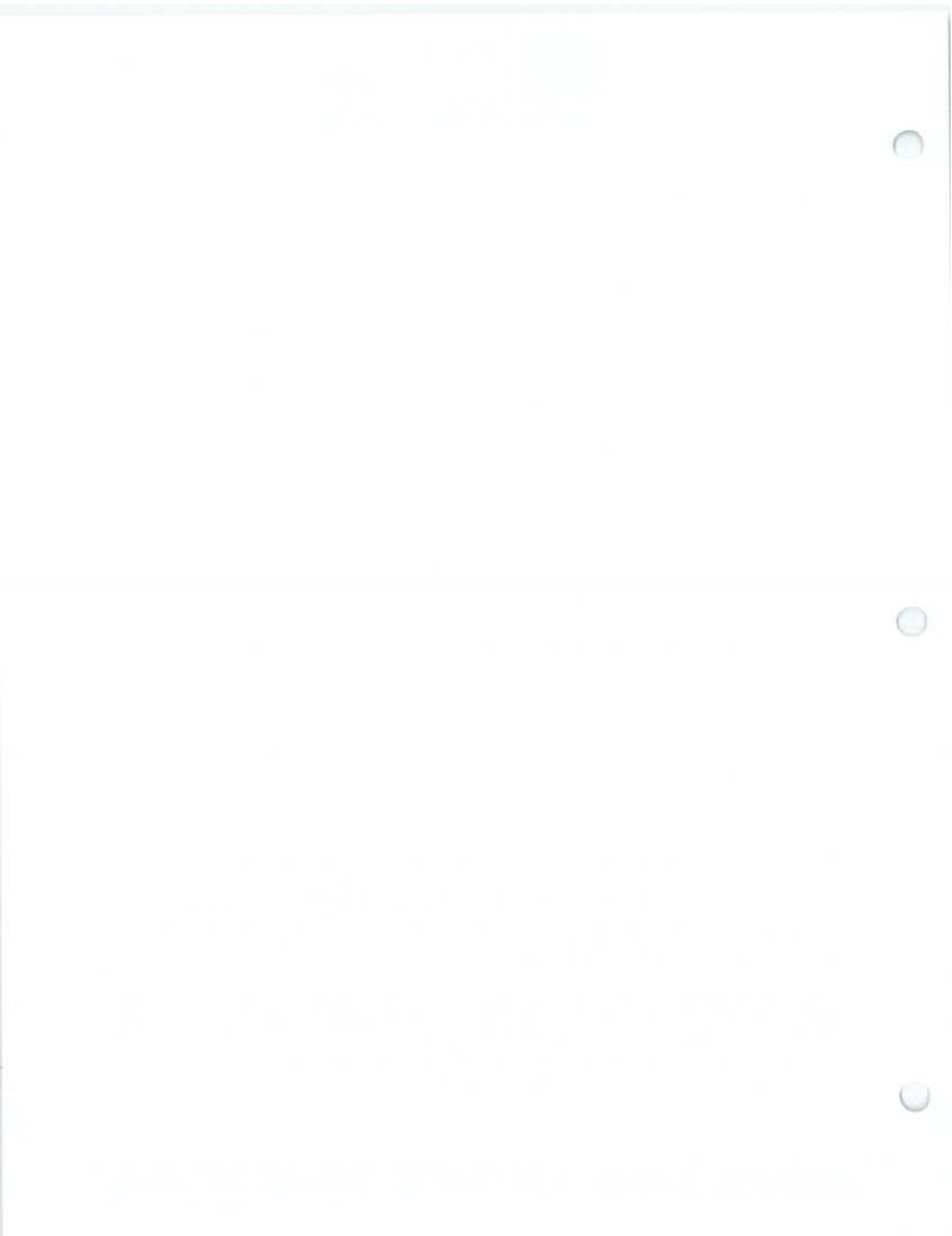
Breaking-down the above Projects of Opportunity by the subcategories of roadway enhancement, non-motorized transportation improvements, or those in response to economic development projects presents a list reorganized as follows:

Project Name	Estimated Cost	Project Year
<u>Roadway Enhancement*</u>		
➤ Union Schoolhouse/Forest Ridge Blvd Roundabout:	\$ 600,000	N/A
➤ Springfield St. (East) Street Lighting Improvements:	\$ 484,200	2017
➤ Springfield St. (West) Street Lighting Improvements:	\$ 216,900	2017
➤ Spinning/Burkhardt Radii Improvements:	\$ 225,000	2019 or 2028
➤ Spinning/Bayside Traffic Signal:	\$ 340,000	2019
➤ Airway/Woodman Intersection Safety Improvements:	\$ 500,000	2021
➤ Lily Creek/Woodman Dr. Bridge Improvement:	\$ 252,000	2021
➤ Woodman Dr. Replace/Upgrade Guardrail:	\$ 121,000	2021
➤ Beatrice/Harshman Traffic Signal:	\$ 399,000	2024 or 2026
➤ Spaulding/Linden Radii & Stacking Improvements:	\$ 215,000	2025
<u>Economic Development Project</u>		
➤ Wright Point Office Drive Relocation Project:	\$ 180,000	N/A
➤ Norman/Old Harshman Closure & Ramp Extension:	\$ 500,000	N/A
➤ Airway/ASC Drive Traffic Signal:	\$ 350,000	N/A
➤ Replace Springfield/Woodman Interchange with At-Grade:	\$ 4,413,000	N/A
<u>Non-Motorized Transportation</u>		
➤ Woodman Dr. Multi-use Path:	\$ 563,000	TBD

\* The project year dates are correlated to the proposed street replacement schedule for the General Thoroughfare Improvement Projects but are not required to be constructed in combination with those projects.

Since beginning the Major Thoroughfare Improvement Project, Council has directed staff to provide additional details on the identified projects. This detail will include the verification of final project estimates by LJB and a breakdown of each project's potential funding sources. The funding breakdown will categorize project expenses eligible for grants or assessments; dates for establishing assessments or making grant applications (if available), and any per-project limitations for those grant funds (if available).

For this second segment of the Major Thoroughfare Improvement Plan, I envision a rough draft of this information provided to Council with one of the later drafts of the 2016 Operating Budget. This timing is intended to help ensure that staff and Council are aware of any additional financial needs which might be incurred. The final document of this segment of the Major Thoroughfare Improvement Plan is scheduled for completion by March 3, 2016.





## MEMORANDUM

**TO:** Riverside City Council

**FROM :** Bryan RH Chodkowski,  
City Manager

**SUBJECT:** Major Thoroughfare Improvement Plan –  
Phase III, Group I

**DATE:** January 27, 2015

**CC:** Emily M. Christian, Assistant City Manager  
Mitch Miller, Director of Public Services

This memorandum represents the start of the final phase of the Major Thoroughfare Improvement Plan undertaken by staff in 2014. In the first phase of this project, staff and Council reviewed the major roadways of the City and brainstormed about all the improvements that could be included as part of a street's reconstruction. In the second phase of this project, the City Engineer quantified the expense of all the project elements identified in the first phase. In this third phase, staff is providing a recommendation on a final project scope for each street which takes into account cost, scale, and practicality.

This memorandum provides a brief summary of the project elements addressed in Phase II and their estimated expenses. For your reference, the Phase II information provided by the Engineer is attached to this memorandum. Following each summary is staff's recommendation for a final project scope and estimated project cost based on the modifications generally described below.

These project summaries are as follows:

### SPAULDING RD.

#### Phase II Elements and Pricing:

• General Road Condition Improvement -	\$ 500,000
• Street Lighting -	\$ 400,000
• Radii and Traffic Stacking Improvements -	\$ 215,000
• Uniform Right-of-way -	\$ 50,000
<b>TOTAL</b>	<b>\$1,165,000</b>



## MEMORANDUM

### SPAULDING RD. (CONT'D)

#### Phase III Staff Project Scope Recommendations:

- General Road Condition Improvements - limit sidewalk to the west side of Spaulding where sufficient right-of-way exists to provide separation from vehicle traffic and pedestrian traffic.
- Street Lighting - reduce scope of lighting to the intersection of Linden/Spaulding (2), the approach to Linden Ave on Spaulding (4), the intersection of Spaulding/Eastmont driveway (2), and the intersection of Spaulding/Leising (2). This reduced lighting scope is recommended for inclusion with General Road Condition Improvements.
- Radii and Traffic Stacking Improvements - considered a stand-alone project best addressed with a change in use or ownership to the property located on the northwest corner of Spaulding/Linden.
- Uniform Right-of-way - this project is not recommended for further consideration.

#### Phase III Cost Estimates Based on Staff Recommendations:

• General Road Condition Improvement -	\$ 461,300
• Street Lighting -	\$ 228,700
• Radii and Traffic Stacking Improvements -	\$ 215,000
• Uniform Right-of-way -	\$ 0
<b>TOTAL</b>	<b>\$ 905,000</b>

### SPRINGFIELD ST. (WOODMAN DR. EAST TO CITY LIMIT)

#### Phase II Elements and Pricing:

• General Road Condition Improvement -	\$1,375,000
• Street Lighting -	\$1,000,000
• Museum Entrance -	\$ 180,000
<b>TOTAL</b>	<b>\$2,555,000</b>

#### Phase III Staff Project Scope Recommendations:

- General Road Condition Improvements - no changes in scope recommended.
- Street Lighting - staff recommends utilizing decorative poles and fixtures similar to those existing in the Center of Flight and extend east to WPAFB Gate B-1. This project should be considered a low-priority project and pursued as a stand-alone improvement.
- Museum Entrance - this project should be incorporated as part of the General Road Condition Improvements.

## MEMORANDUM

### SPRINGFIELD ST. (WOODMAN DR. EAST TO CITY LIMIT – CONT'D)

#### Phase III Cost Estimates Based on Staff Recommendations:

• General Road Condition Improvement -	\$1,375,000
• Street Lighting -	\$ 484,200
• <u>Museum Entrance -</u>	<u>\$ 146,500</u>
TOTAL	\$2,005,700

### SPRINGFIELD ST. (WOODMAN DR. WEST TO CITY LIMIT)

#### Phase II Elements and Pricing:

• General Road Condition Improvement -	\$1,300,000
• Street Lighting -	\$ 650,000
• Relocate Wright Point Office Drive -	\$ 180,000
• Close Norman Blvd at Springfield -	\$ 150,000
• Close Norman & Old Harshman Extending Ramp	\$ 500,000
• Change Pavement Striping	\$ 100,000
• <u>Reconfigure Northcliff Intersection</u>	<u>\$ 325,000</u>
TOTAL	\$3,205,000

#### Phase III Staff Project Scope Recommendations:

- General Road Condition Improvements – *staff recommends no modifications in scope.*
- Street Lighting – *limiting the scope of this project and establishing as a stand-alone or tie-in to the Springfield east lighting project is recommended. Amended scope to include decorative street lighting, similar to that in Center of Flight, extended to Memorial Park with limited replacement of existing poles listing.*
- Relocate Wright Point Office Drive – *this project should be considered a stand-alone project, funded through Wright Point Fund but coordinated with General Road Condition Improvement project.*
- Close Norman Blvd at Springfield – *it is staff's recommendation that this project should be included with the General Road Condition Improvement project.*
- Close Norman & Old Harshman Extending Ramp - *staff considers this a low-priority, stand-alone project which should be pursued only if associated with a special economic development project.*
- Change Pavement Striping – *this project should be included as an element of the General Road Condition Improvement project.*
- Reconfigure Northcliff Intersection - *this project is not recommended for further consideration.*

## MEMORANDUM

### SPRINGFIELD ST. (WOODMAN DR. WEST TO CITY LIMIT – CONT'D)

#### Phase III Cost Estimates Based on Staff Recommendations:

• General Road Condition Improvement -	\$1,300,000
• Street Lighting -	\$ 216,900
• Relocate Wright Point Office Drive -	\$ 180,000
• Close Norman Blvd at Springfield -	\$ 114,400
• Close Norman & Old Harshman Extending Ramp	\$ 500,000
• Change Pavement Striping	\$ 25,100
• <u>Reconfigure Northcliff Intersection</u>	<u>\$ 0</u>
TOTAL	\$2,336,400

### AIRWAY RD. (WOODMAN DR. WEST TO CITY LIMIT)

#### Phase II Elements and Pricing:

• General Road Condition Improvement -	\$1,600,000
• <u>Street Lighting -</u>	<u>\$ 550,000</u>
TOTAL	\$2,150,000

#### Phase III Staff Recommendations:

- General Road Condition Improvements – *staff recommends no modifications in scope.*
- Street Lighting – *this project, under limited scope of lighting side-street intersections with Airway and the approach to Woodman Dr., should be included as part of the General Road Condition Improvement project.*

#### Phase III Cost Estimates Based on Staff Recommendations:

• General Road Condition Improvement -	\$1,600,000
• <u>Street Lighting -</u>	<u>\$ 323,700</u>
TOTAL	\$1,923,700

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### NEEDMORE RD. (SR 201 TO SR 201)

#### Phase II Elements and Pricing:

• General Road Condition Improvements -	\$ 950,000
• Street Lighting -	\$ 650,000
• Landmark Church Turn Lane -	\$ 250,000
• Grass Medians -	\$ 100,000
• Improve Gary Dr. Turn Radii -	\$ N/A
• Improve Llyod Dr. Turn Radii -	\$ 75,000
• <u>Uniform Right-of-way -</u>	<u>\$ 275,000</u>
TOTAL	\$2,300,000

#### Phase III Staff Recommendations:

- General Road Condition Improvements – *limited curb work is recommended for inclusion in the area of Llyod and Interpoint.*
- Street Lighting – *under limited scope of lighting side-street intersections with Needmore as well as the approach to SR 202, this project should be included as part of the General Road Condition Improvement project.*
- Landmark Church Turn Lane – *provided the church is willing to donate the necessary right-of-way; staff recommends including this project with the General Road Condition Improvement projects.*
- Grass median – *reducing the scope to that area in the immediate vicinity of the Landmark Church, the inclusion of this work in the General Road Conditions Improvement project is recommended.*
- Improve Gary Dr. Turn Radii – *the Engineer recommends that this project element is not necessary.*
- Improve Lloyd Dr. Turn Radii – *this project is recommended for inclusion with the General Road Condition Improvement project.*
- Uniform Right-of-way – *this project is not recommended for further consideration.*

#### Phase III Cost Estimates Based on Staff Recommendations:

• General Road Condition Improvements -	\$ 950,000
• Street Lighting -	\$ 205,300
• Landmark Church Turn Lane -	\$ 119,300
• Grass Medians -	\$ 34,100
• Improve Gary Dr. Turn Radii -	\$ N/A
• Improve Llyod Dr. Turn Radii -	\$ 52,800
• <u>Uniform Right-of-way -</u>	<u>\$ 0</u>
TOTAL	\$1,361,500



## MEMORANDUM

### SCHWINN DR. (SR 201 TO SR 201)

#### Phase II Elements and Pricing:

• General Road Condition Improvements -	\$ 450,000
• Street Lighting -	\$ 525,000
• Improve SR 201 Turn Radii -	\$ 370,000
• Improve SR 202 Turn Radii -	\$ 185,000
• Uniform Right-of-way -	\$ N/A
<b>TOTAL</b>	<b>\$1,530,000</b>

#### Phase III Staff Recommendations:

- General Road Condition Improvements – staff has no additions or deletions to recommend for this project element.
- Street Lighting – a limited scope to provide lighting at the approaches/intersections of SR 201, SR 202, and in front of Brantwood Elementary is recommended for inclusion in the General Road Condition Improvement Project.
- Improve SR 201 Turn Radii – with the removal of the traffic signal, this modified element is recommended for inclusion in the General Road Condition Improvement project.
- Improve SR 202 Turn Radii – this project is no longer recommended based on the impacts to adjacent property owners.
- Uniform Right-of-way – the Engineer is recommending that the City not pursue this element.

#### Phase III Cost Estimates Based on Staff Recommendations:

• General Road Condition Improvements -	\$ 450,000
• Street Lighting -	\$ 269,600
• Improve SR 201 Turn Radii -	\$ 101,300
• Improve SR 202 Turn Radii -	\$ 0
• Uniform Right-of-way -	\$ N/A
<b>TOTAL</b>	<b>\$ 820,900</b>



## MEMORANDUM

By way of a more generalized, total summary; when project estimates were prepared through the Phase II process to include all aspects of that work which could be included under a major thoroughfare improvement plan for the Group I streets, the cost estimates were calculated as:

➤ Spaulding Rd.:	\$ 1,165,000
➤ Springfield St.( Woodman east to City Limit):	\$ 2,555,000
➤ Springfield St. (Woodman west to City Limit):	\$ 3,205,000
➤ Airway Rd. (Woodman west to City Limit):	\$ 2,150,000
➤ Needmore Rd. (SR 201 to SR 202):	\$ 2,300,000
➤ <u>Schwinn Dr. (SR 201 to SR 202):</u>	<u>\$ 1,530,000</u>
TOTAL	\$12,905,000

Following the Phase III process performed by staff, the above projects can be separated into one of two categories. The first, *General Thoroughfare Improvements Projects*, represents the scope of work which the City would seek to perform through its long-term plan. These projects would be those the City would actively seek to perform and obtain grant funding to support. *Projects of Opportunity* are those that would be driven through an economic development project, when non-transportation grant dollars might be utilized, or the financial condition of the City allows the project to be undertaken. These two categories now provide project estimates as follows:

### *General Thoroughfare Improvement Projects:*

➤ Spaulding Rd.:	\$ 690,000
➤ Springfield St.( Woodman east to City Limit):	\$ 1,521,500
➤ Springfield St. (Woodman west to City Limit):	\$ 1,439,500
➤ Airway Rd. (Woodman west to City Limit):	\$ 1,923,700
➤ Needmore Rd. (SR 201 to SR 202):	\$ 1,361,500
➤ <u>Schwinn Dr. (SR 201 to SR 202):</u>	<u>\$ 820,900</u>
TOTAL	\$ 7,757,100

### *Projects of Opportunity:*

➤ Spaulding/Linden Radii & Stacking Improvements:	\$ 215,000
➤ Springfield St. (East) Street Lighting Improvements:	\$ 484,200
➤ Springfield St. (West) Street Lighting Improvements:	\$ 216,900
➤ Wright Point Office Drive Relocation Project:	\$ 180,000
➤ <u>Norman/Old Harshman Closure &amp; Ramp Extension:</u>	<u>\$ 500,000</u>
TOTAL	\$ 1,596,100

## M E M O R A N D U M

You will note that there is a significant change in project cost estimates from those calculated in Phase II and those provided in this Phase III memorandum. While certain reductions are obvious because a project element was outright deleted from the overall project scope, other saving measures occurred in reduction of scope and/or the reduction of duplicate expenses. The duplicate activities being removed or reduced from the projects include such items as surveying, mobilization, and clearing & grubbing.

As we proceed through Phase III of this project, the Engineer will be preparing more detailed project cost estimates in a format similar to those provided for Phase II. Once all four street groupings have been through the Phase III process; a final document with comprehensive cost estimates, generalized project summaries, and potential timeline will be provided to Council. This final, Major Thoroughfare Improvement Plan document should assist Council in further discussion on how to best begin reconstructing and improving the main streets of the City.

Should you have any questions or concerns regarding the information contained within this memorandum, please do not hesitate to contact me.

## SPRINGFIELD (WOODMAN WEST)

- 1.) GENERAL ROAD CONDITION IMPROVEMENT
  - ↳ STAND-ALONE PROJECT; HIGH PRIORITY
  - ROUTE FORWARD, ADD #4 AND #6
  - ↳ STP, SMAQ, OR TA
- 2.) STREET LIGHTING
  - ↳ STAND-ALONE PROJECT; LOW PRIORITY
  - ↳ REDUCE / CHANGE SLOPE
    - ↳ INSTALL DECORATIVE BETWEEN WOODMAN AND OLD HANSHMAN (INCLUDE MEMORIAL PARK).
    - ↳ REPAIR EXISTING POLES THAT ARE LISTING
- 3.) RELOCATE WRIGHT-POINT OFFICE DRIVE
  - ↳ STAND-ALONE PROJECT; LOW PRIORITY
  - ↳ OFF-LOAD TO WRIGHT POINT FUND
- 4.) CLOSE NORMAN BLVD & SPRINGFIELD
  - ↳ INCORPORATE INTO #1
- 5.) CLOSE NORMAN + OLD HANSHMAN - EXPAND RAMP
  - ↳ STAND-ALONE PROJECT; LOW PRIORITY
  - ↳ TIE TO FUTURE DEVELOPMENT PROJECT
- 6.) CHANGE PAVEMENT STRIPING
  - ↳ INCORPORATE INTO #1
- 7.) RECONFIGURE NORTHLIFF INTERSECTION
  - ↳ DELETE AS A PROJECT





## CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT PHASE I, GROUPING 1 AUGUST 2014

### SPRINGFIELD STREET, WOODMAN WEST TO CORP LINE

Preliminary project cost estimates have been developed for the six corridors included in Phase I, Grouping 1. These corridors include Spaulding Road, Springfield Street east of Woodman Drive, Springfield Street west of Woodman Drive, Airway Road west of Woodman Drive, Needmore Road between SR 201 and SR 202, and Schwimm Drive. A description of the scope of the improvements planned as well as estimate subtotals for the various improvements recommended by city staff and council following the initial work session are included below. A total construction cost for improvements on each corridor is also included. Details of each construction cost estimate are attached to this report.

### Addition of RTA Bus Pads, Each

Estimated Construction Cost as stand-alone projects - \$50,000.

### Notes

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.

TASK	ESTIMATED COST
<b>General Road Condition Improvement</b> This includes a general rehab including mill and fill, an estimated quantity of full depth pavement repair, some sidewalk replacement and replacement of curb and storm sewer inlets.	Construction = \$1,300,000
<b>Street Lighting</b> This includes continuous ODOT type light poles, underground wiring and new circuits.	Construction = \$650,000
<b>Relocate Wright Point Office Drive</b> This includes moving the drive about 150 feet west and providing an allowance for reconfiguring the existing parking lot to accommodate internal circulation.	Construction = \$180,000
<b>Closing Norman Blvd at Springfield Street</b> This includes closing Norman and reconfiguring the Old Harshman intersection. (The option of closing Old Harshman is not recommended and has not been included.)	Construction = \$150,000



**CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT**  
**PHASE I, GROUPING 1**  
**AUGUST 2014**

<b>Closing both Norman and Old Harshman</b> This includes minor curb addition to close both streets and building a new road opposite the existing Woodman ramp. This option requires significant preliminary engineering and coordination with ODOT, if it is even feasible.	Construction = \$500,000
<b>Change Pavement Striping</b> This includes a typical road diet and results in one lane in each direction, a center two way left turn lane and bike lanes on each side. The scope of this work is primarily removing and replacing pavement markings. Coordination with the City of Dayton is required for the transition at the west end. NOTE: this cost would be greatly reduced if included in a rehab project.	Construction = \$100,000
<b>Reconfigure Northcliff Intersection</b> This includes realignment of Northcliff to make a 90 degree intersection with Springfield Street and realigning North Garden Ave to meet the new configuration.	Construction =- \$250,000 Property Cost = \$75,000
<b>TOTAL SPRINGFIELD STREET, WOODMAN WEST TO CORP LINE IMPROVEMENTS</b>	<b>\$3,205,000</b>





**SPRINGFIELD STREET WOODMAN WEST TO CORP - REHAB**  
**CITY OF RIVERSIDE**  
**PRELIMINARY CONSTRUCTION ESTIMATE - AUGUST 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	WALK REMOVED	15000 SF	\$ 2.00	\$ 30,000.00
202	CURB REMOVED	8500 FT	\$ 4.00	\$ 34,000.00
202	CATCH BASIN OR INLET REMOVED	12 EA	\$ 350.00	\$ 4,200.00
253	PAVEMENT REPAIR, FULL DEPTH	1250 SY	\$ 50.00	\$ 62,500.00
254	PAVEMENT PLANING, ASPHALT CONCRETE	25000 SY	\$ 2.00	\$ 50,000.00
407	TACK COAT	4000 GAL	\$ 3.00	\$ 12,000.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 2"	1400 CY	\$ 175.00	\$ 245,000.00
603	15" CONDUIT, TYPE B	400 FT	\$ 50.00	\$ 20,000.00
604	CATCH BASIN	42 EA	\$ 2,500.00	\$ 105,000.00
604	MANHOLE, NO. 3	6 EA	\$ 3,000.00	\$ 18,000.00
608	4" CONCRETE WALK	25000 SF	\$ 2.50	\$ 62,500.00
608	CURB RAMPS	26 EA	\$ 450.00	\$ 11,700.00
609	CURB	9500 FT	\$ 15.00	\$ 142,500.00
644	PAVEMENT MARKINGS	1 LS	\$ 7,500.00	\$ 7,500.00
Subtotal				\$ 810,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 20,000.00	\$ 20,000.00
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ 9,600.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 3,500.00	\$ 3,500.00
624	MOBILIZATION	1 LS	\$ 20,000.00	\$ 20,000.00
Subtotal				\$ 864,000.00
Design Risk (35%)				\$ 303,000.00
Subtotal				\$ 1,167,000.00
ENGINEERING (10%)				\$ 117,000.00
Total				\$ 1,284,000.00

- APPROX REPLACEMENT AT SEVERAL LOCATIONS
- LIMITED CORE SAMPLING



**SPRINGFIELD STREET WOODMAN WEST TO CORP LIGHTING  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - AUGUST, 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST	
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ <del>5,000.00</del>	
625	LIGHT POLES <sup>①</sup>	<del>60 EA</del> 13	\$ 4,000.00	\$ <del>240,000.00</del>	52,000
625	WIRING	<del>4500 FT</del> 2000	\$ 25.00	\$ 112,500.00	50,000
625	SINGLE CIRCUIT	2 EA	\$ 20,000.00	\$ 40,000.00	
				Subtotal	\$ <del>308,000.00</del> 142,000
614	MAINTAINING TRAFFIC	1 LS	\$ 10,000.00	\$ <del>10,000.00</del>	
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ <del>9,600.00</del>	
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 4,500.00	\$ <del>4,500.00</del>	4,000
624	MOBILIZATION	1 LS	\$ 10,000.00	\$ <del>10,000.00</del>	
				Subtotal	\$ <del>433,000.00</del> 146,000
				Design Risk (35%)	\$ 152,000.00 51,100
				Subtotal	\$ 585,000.00 197,100
				ENGINEERING (10%)	\$ 59,000.00 19,710
				Total	\$ 644,000.00 216,810

Notes:

① 13 DECORATIVE POLES ARE ESTIMATED AS NEEDED BETWEEN WOODMAN DR AND MEMORIAL PARK.





**RELOCATE WRIGHT POINT DRIVE TO THE WEST  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - AUGUST 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	PAVEMENT REMOVED, CONCRETE	70 SY	\$ 30.00	\$ 2,100.00
202	PAVEMENT REMOVED, ASPHALT	70 SY	\$ 30.00	\$ 2,100.00
202	CURB REMOVED	200 FT	\$ 4.00	\$ 800.00
203	EXCAVATION	900 CY	\$ 12.00	\$ 10,800.00
203	EMBANKMENT	100 CY	\$ 20.00	\$ 2,000.00
204	SUBGRADE COMPACTION	200 SY	\$ 2.00	\$ 400.00
206	CEMENT STABILIZED SUBGRADE, 16" DEEP	200 SY	\$ 10.00	\$ 2,000.00
304	AGGREGATE BASE, 10"	60 CY	\$ 60.00	\$ 3,600.00
407	TACK COAT	50 GAL	\$ 3.00	\$ 150.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 3"	15 30	\$ 225.00	\$ 3,375.00
609	CURB	140 FT	\$ 15.00	\$ 2,100.00
SPECIAL	RECONFIGURE PARKING LOT	1 LS	\$ 50,000.00	\$ 50,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 2,500.00	\$ 2,500.00
659	TOPSOIL	25 CY	\$ 25.00	\$ 625.00
659	SEEDING AND MULCHING	100 SY	\$ 2.00	\$ 200.00
832	EROSION CONTROL	2500 EA	\$ 1.00	\$ 2,500.00
Subtotal				\$ 91,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 10,000.00	\$ 10,000.00
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ 9,600.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 4,500.00	\$ 4,500.00
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ 4,000.00
Subtotal				\$ 120,000.00
Design Risk (35%)				\$ 42,000.00
Subtotal				\$ 162,000.00
ENGINEERING (10%)				\$ 17,000.00
Total				\$ 179,000.00

*STAND-ALONE PROJECT  
↳ OFF-BOOK TO WPF (402)*



**CLOSE NORMAN AT SPRINGFIELD ST  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - AUGUST 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	PAVEMENT REMOVED, ASPHALT	1000 SY	\$ 8.00	\$ 8,000.00
202	WALK REMOVED	1200 SF	\$ 1.50	\$ 1,800.00
202	CURB REMOVED	300 FT	\$ 3.00	\$ 900.00
202	CATCH BASIN OR INLET REMOVED	2 EA	\$ 350.00	\$ 700.00
204	SUBGRADE COMPACTION	400 SY	\$ 2.00	\$ 800.00
206	CEMENT STABILIZED SUBGRADE, 16" DEEP	400 SY	\$ 5.50	\$ 2,200.00
301	ASPHALT CONCRETE BASE, PG64-22, 6"	70 CY	\$ 125.00	\$ 8,750.00
304	AGGREGATE BASE, 10"	100 CY	\$ 50.00	\$ 5,000.00
407	TACK COAT	60 GAL	\$ 3.00	\$ 180.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 3"	35 CY	\$ 200.00	\$ 7,000.00
603	15" CONDUIT, TYPE B	100 FT	\$ 50.00	\$ 5,000.00
604	CATCH BASIN, NO. 3	2 EA	\$ 2,500.00	\$ 5,000.00
604	MANHOLE, NO. 3	1 EA	\$ 3,000.00	\$ 3,000.00
608	4" CONCRETE WALK	1200 SF	\$ 5.00	\$ 6,000.00
608	CURB RAMPS	4 EA	\$ 450.00	\$ 1,800.00
609	CURB, TYPE 6	350 FT	\$ 15.00	\$ 5,250.00
630	SIGNAGE	1 LS	\$ 1,500.00	\$ 1,500.00
659	TOPSOIL	80 CY	\$ 40.00	\$ 3,200.00
659	SEEDING AND MULCHING	500 SY	\$ 2.00	\$ 1,000.00
832	SWPPP	1 LS	\$ 2,500.00	\$ 2,500.00
832	EROSION CONTROL	1500 EA	\$ 1.00	\$ 1,500.00
Subtotal				\$ 77,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 10,000.00	\$ <del>10,000.00</del>
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ <del>9,600.00</del>
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 1,000.00	\$ <del>1,000.00</del>
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ <del>4,000.00</del>
Subtotal				\$ 402,000.00
Design Risk (35%)				\$ 36,000.00
Subtotal				\$ 438,000.00
ENGINEERING (10%)				\$ 14,000.00
Total				\$ 452,000.00

77,000

26,950

103,950

10,395

114,345





**SPRINGFIELD ST WOODMAN WEST RESTRIPING  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - AUGUST, 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
643	REMOVAL OF PAVEMENT MARKING	12600 FT	\$ <del>3.00</del>	\$ <del>37,800.00</del>
644	PAVEMENT MARKINGS	0.8 MI	\$ 5,000.00	\$ 4,000.00
604	CATCH BASIN GRATES REPLACED	25 EA	\$ 500.00	\$ 12,500.00
Subtotal				\$ 65,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 10,000.00	\$ <del>10,000.00</del>
619	FIELD OFFICE, TYPE B	2 MN	\$ 1,600.00	\$ 3,200.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ -	\$ -
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ <del>4,000.00</del>
Subtotal				\$ 73,000.00
Design Risk (35%)				\$ 26,000.00
Subtotal				\$ 99,000.00
ENGINEERING (10%)				\$ 40,000.00
Total				\$ 139,000.00

16,500

16,500

5,775  
22,775

2,277  
25,053





**SPRINGFIELD ST RECONFIGURE NORTHCLIFF  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - AUGUST 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	PAVEMENT REMOVED, ASPHALT	1800 SY	\$ 5.00	\$ 9,000.00
202	WALK REMOVED	50 SF	\$ 2.50	\$ 125.00
202	CONCRETE DRIVE APPROACH REMOVED	100 SY	\$ 8.00	\$ 800.00
202	CONCRETE PAVEMENT REMOVED	425 SY	\$ 12.00	\$ 5,100.00
202	CURB REMOVED	450 FT	\$ 3.00	\$ 1,350.00
202	CATCH BASIN OR INLET REMOVED	1 EA	\$ 500.00	\$ 500.00
203	EXCAVATION	500 CY	\$ 10.00	\$ 5,000.00
203	EMBANKMENT	150 CY	\$ 12.00	\$ 1,800.00
204	SUBGRADE COMPACTION	1000 SY	\$ 2.00	\$ 2,000.00
206	CEMENT STABILIZED SUBGRADE, 16" DEEP	1000 SY	\$ 5.50	\$ 5,500.00
301	ASPHALT CONCRETE BASE, PG64-22, 6"	175 CY	\$ 125.00	\$ 21,875.00
304	AGGREGATE BASE, 10"	300 CY	\$ 40.00	\$ 12,000.00
407	TACK COAT	150 GAL	\$ 3.00	\$ 450.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 3"	80 CY	\$ 175.00	\$ 14,000.00
603	15" CONDUIT, TYPE A	200 FT	\$ 50.00	\$ 10,000.00
604	CATCH BASIN, NO. 3	3 EA	\$ 2,500.00	\$ 7,500.00
604	MANHOLE, NO. 3	1 EA	\$ 3,000.00	\$ 3,000.00
605	6" BASE PIPE UNDERDRAIN	500 FT	\$ 8.00	\$ 4,000.00
608	4" CONCRETE WALK	600 SF	\$ 5.00	\$ 3,000.00
608	CURB RAMPS	2 EA	\$ 450.00	\$ 900.00
609	CURB	500 FT	\$ 15.00	\$ 7,500.00
644	PAVEMENT MARKINGS AND SIGNS	1 LS	\$ 1,500.00	\$ 1,500.00
659	TOPSOIL	200 CY	\$ 25.00	\$ 5,000.00
659	SEEDING AND MULCHING	1000 SY	\$ 3.00	\$ 3,000.00
832	SWPPP	1 LS	\$ 5,000.00	\$ 5,000.00
832	EROSION CONTROL	2500 EA	\$ 1.00	\$ 2,500.00
Subtotal				\$ 138,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 10,000.00	\$ 7,500.00
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ 9,600.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 4,500.00	\$ 4,500.00
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ 4,000.00
Subtotal				\$ 164,000.00
Design Risk (35%)				\$ 58,000.00
Subtotal				\$ 222,000.00
ENGINEERING (10%)				\$ 23,000.00
Total				\$ 245,000.00

**Notes:**

- 1 Right of way is estimated separately
- 2 Existing pavement is assumed to be asphalt
- 3 Utility relocation not included

*STAND - ALONE PROJECT  
↳ TIE TO DEVELOPMENT PROJECT*

## SPRINGFIELD (WOODMAN EAST)

- 1.) GENERAL ROAD CONDITION IMPROVEMENT
  - ↳ MOVE FORWARD, ADD MUSEUM ENTRANCE
  - ↳ STAND-ALONE PROJECT
    - ↳ STP
- 2.) STREET LIGHTING
  - ↳ REDUCE SLOPE
    - DECORATIVIZE POSTS MATCHING COF EXISTING
    - EXTEND FROM COF EAST TO AREA B GATE
  - ↳ STAND-ALONE PROJECT; LOW PRIORITY
- 3.) MUSEUM ENTRANCE
  - ↳ INCLUDE AS PART OF GENERAL ROAD CONDITION IMP.



## CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT PHASE I, GROUPING 1 AUGUST 2014

### SPRINGFIELD STREET, WOODMAN EAST TO CORP LINE

Preliminary project cost estimates have been developed for the six corridors included in Phase I, Grouping 1. These corridors include Spaulding Road, Springfield Street east of Woodman Drive, Springfield Street west of Woodman Drive, Airway Road west of Woodman Drive, Needmore Road between SR 201 and SR 202, and Schwinn Drive. A description of the scope of the improvements planned as well as estimate subtotals for the various improvements recommended by city staff and council following the initial work session are included below. A total construction cost for improvements on each corridor is also included. Details of each construction cost estimate are attached to this report.

#### Addition of RTA Bus Pads, Each

Estimated Construction Cost as stand-alone projects - \$50,000.

#### Notes

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.

TASK	ESTIMATED COST
<b>General Road Condition Improvement</b> This includes a general rehab including mill and fill, and estimated quantity of full depth pavement repair and replacement of curb and storm sewer inlets. Sidewalk is not recommended for this section of the corridor and is not included in the project estimate. The existing sidewalk connection under Woodman Drive on the north side of the road is sufficient for future needs and no improvements are included.	Construction= \$1,375,000
<b>Street Lighting</b> This includes continuous ODOT type light poles, underground wiring and new circuits. The existing sidewalk connection under Woodman Drive on the north side of the road is sufficient for future needs and no improvements are included.	Construction = \$1,000,000
<b>Museum Entrance</b> A reconstructed signal is included at the Air Force Museum entrance.	Construction = \$180,000
<b>TOTAL SPRINGFIELD STREET, WOODMAN EAST TO CORP LINE IMPROVEMENTS</b>	<b>\$2,555,000</b>





**SPRINGFIELD STREET WOODMAN TO EAST CORP - REHAB  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - AUGUST 201**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	CURB REMOVED	11400 FT	\$ 4.00	\$ 45,600.00
202	CATCH BASIN OR INLET REMOVED	4 EA	\$ 350.00	\$ 1,400.00
253	PAVEMENT REPAIR, FULL DEPTH	2000 SY	\$ 50.00	\$ 100,000.00
254	PAVEMENT PLANING, ASPHALT CONCRETE	40000 SY	\$ 2.00	\$ 80,000.00
407	TACK COAT	6000 GAL	\$ 2.00	\$ 12,000.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 2"	2500 CY	\$ 125.00	\$ 312,500.00
603	15" CONDUIT, TYPE B	400 FT	\$ 50.00	\$ 20,000.00
604	CATCH BASIN REPLACED	38 EA	\$ 2,500.00	\$ 95,000.00
609	CURB	11400 FT	\$ 15.00	\$ 171,000.00
609	6" CONCRETE TRAFFIC ISLAND REPLACED	100 SY	\$ 50.00	\$ 5,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 7,500.00	\$ 7,500.00
Subtotal				\$ 855,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 15,000.00	\$ 15,000.00
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ 9,600.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 3,500.00	\$ 3,500.00
624	MOBILIZATION	1 LS	\$ 40,000.00	\$ 40,000.00
Subtotal				\$ 924,000.00
Design Risk (35%)				\$ 324,000.00
Subtotal				\$ 1,248,000.00
ENGINEERING (10%)				\$ 125,000.00
Total				\$ 1,373,000.00

• *GRAB SAMPLE TO VERIFY SCOPE OF WORK.*





**SPRINGFIELD STREET WOODMAN EAST TO CORP LIGHTING  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - AUGUST, 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST	
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ <del>5,000.00</del>	
625	LIGHT POLES ①	18 <del>100</del> EA	\$ 4,000.00	\$ <del>360,000.00</del>	72,000
625	WIRING	6800 FT	\$ 25.00	\$ 170,000.00	
625	SINGLE CIRCUIT	4 EA	\$ 20,000.00	\$ 80,000.00	
				Subtotal \$ <del>645,000.00</del>	322,000
614	MAINTAINING TRAFFIC	1 LS	\$ 20,000.00	\$ <del>20,000.00</del>	
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ <del>9,600.00</del>	
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 4,500.00	\$ <del>4,500.00</del>	4000
624	MOBILIZATION	1 LS	\$ 20,000.00	\$ <del>20,000.00</del>	
				Subtotal \$ <del>670,000.00</del>	326,000
				Design Risk (35%) \$ 235,000.00	114,100
				Subtotal \$ 905,000.00	440,100
				ENGINEERING (10%) \$ 94,000.00	44,010
				Total \$ 999,000.00	484,110

Notes:

① 18 DECORATIVE POLES TO REPLACE EXISTING MULT WOOD POLES



**SPRINGFIELD ST WOODMAN WEST NEW SIGNAL AT MUSEUM  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - AUGUST, 2014**

ITEM	DESCRIPTION	QUANTITY	5000	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ <del>5,000.00</del>
644	PAVEMENT MARKINGS	1 LS	\$ 1,500.00	\$ <del>1,500.00</del>
632	TRAFFIC SIGNAL	1 EA	\$ 100,000.00	\$ 100,000.00
Subtotal				\$ 407,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 5,000.00	\$ <del>5,000.00</del>
619	FIELD OFFICE, TYPE B	3 MN	\$ 1,600.00	\$ <del>4,800.00</del>
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 1,000.00	\$ <del>1,000.00</del>
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ <del>4,000.00</del>
Subtotal				\$ 422,000.00
Design Risk (35%)				\$ 49,000.00
Subtotal				\$ 471,000.00
ENGINEERING (10%)				\$ 47,000.00
Total				\$ 518,000.00

100,000

100,000

35,000

176,000

13,506

146,800

## SPRAULDING

### 1) GENERAL ROAD CONDITION IMPROVEMENT

↳ (LIMIT SIDEWALK TO EAST SIDE)

MOVE FORWARD, NO CHAIRS

STAND-ALONE PROJECT

↳ ISSUE II OR STP.

### 2) STREET LIGHTING

↳ REDUCE LIGHTING LOCATIONS

↳ APPROACH TO LINDEN

↳ SCHOOL ENTRANCE

↳ LEBING INTERSECTION

↳ STAND-ALONE PROJECT; LOW PRIORITY

### 3) LINDEN RADIUS IMPROVEMENT

↳ STAND-ALONE PROJECT; LOW PRIORITY

↳ WHEN RV USE / LAND OWNERSHIP CHANGES

### 4) UNIFORM RIGHT-OF-WAY

↳ BELLEVUE AS A PROJECT





## CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT PHASE I, GROUPING 1 AUGUST 2014

### SPAULDING ROAD

Preliminary project cost estimates have been developed for the six corridors included in Phase I, Grouping 1. These corridors include Spaulding Road, Springfield Street east of Woodman Drive, Springfield Street west of Woodman Drive, Airway Road west of Woodman Drive, Needmore Road between SR 201 and SR 202, and Schwinn Drive. A description of the scope of the improvements planned as well as estimate subtotals for the various improvements recommended by city staff and council following the initial work session are included below. A total construction cost for improvements on each corridor is also included. Details of each construction cost estimate are attached to this report.

### Addition of RTA Bus Pads, Each

Estimated Construction Cost as stand-alone projects - \$50,000.

### Notes

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.

TASK	ESTIMATED COST
<b>General Road Condition Improvement</b> This includes a general rehab including mill and fill; estimated quantity of full depth pavement repair and minor drainage rehab and additions. The overlay includes the throat of Leising Drive. We have also included the addition of sidewalk and curb for the length of the project.	Construction = \$500,000
<b>Street Lighting</b> This includes continuous ODOT type light poles, underground wiring and new circuits.	Construction = \$400,000
<b>Radius Improvement and Increased Stacking at Linden Avenue</b> This includes both improving the turning radii and adding storage for turning vehicles.	Construction = \$165,000 Acquisition = \$50,000
<b>Uniform Right of Way</b> Most of the street is a 60 foot wide right of way. It is unbalanced; 20 foot and 40 foot per half. There is a section at the south end near Leising that is 55 foot wide. In order to get a consistent 60 foot wide r/w, property is needed from 2 parcels.	Acquisition = \$50,000
<b>TOTAL SPAULDING ROAD IMPROVEMENTS</b>	<b>\$1,165,000</b>





**SPAULDING ROAD REHAB  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - AUGUST, 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	CURB REMOVED	50 FT	\$ 4.00	\$ 200.00
202	CATCH BASIN OR INLET REMOVED	2 EA	\$ 350.00	\$ 700.00
253	PAVEMENT REPAIR, FULL DEPTH	1200 SY	\$ 50.00	\$ 60,000.00
254	PAVEMENT PLANING, ASPHALT CONCRETE	7000 SY	\$ 2.50	\$ 17,500.00
407	TACK COAT	500 GAL	\$ 3.00	\$ 1,500.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 2"	400 CY	\$ 175.00	\$ 70,000.00
603	15" CONDUIT, TYPE B	900 FT	\$ 50.00	\$ 45,000.00
604	CATCH BASIN, NO. 3	6 EA	\$ 2,500.00	\$ 15,000.00
604	MANHOLE, NO. 3	3 EA	\$ 3,000.00	\$ 9,000.00
608	4" CONCRETE WALK (4) 4000	<del>8000 SF</del>	\$ 5.00	<del>\$ 40,000.00</del> 20,000
608	CURB RAMPS	4 EA	\$ 450.00	\$ 1,800.00
609	CURB	2000 FT	\$ 15.00	\$ 30,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 3,000.00	\$ 3,000.00
Subtotal				\$ <del>299,000.00</del> 279,000
614	MAINTAINING TRAFFIC	1 LS	\$ 10,000.00	\$ 10,000.00
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ 9,600.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 2,000.00	\$ 2,000.00
624	MOBILIZATION	1 LS	\$ 10,000.00	\$ 10,000.00
Subtotal				\$ 331,600.00 310,600
Design Risk (35%)				\$ 116,000.00 108,710
Subtotal				\$ 447,600.00 419,310
ENGINEERING (10%)				\$ 44,760.00 41,931
Total				\$ 492,360.00 461,241

Notes:

- 1 Right of way is estimated separately
- 2 Utility relocation not included
- 3 Sidewalk, curb and storm sewer added entire street
- (4) LIMIT SIDEWALK TO EAST SIDE ONLY



**SPAULDING ROAD STREET LIGHTING  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - AUGUST, 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ <del>5,000.00</del>
625	LIGHT POLES <sup>①</sup>	<del>1025</del> EA	\$ 5,000.00	\$ <del>425,000.00</del>
625	WIRING	2000 FT	\$ 30.00	\$ 60,000.00
625	SINGLE CIRCUIT	2 EA	\$ 20,000.00	\$ 40,000.00
Subtotal				\$ <del>230,000.00</del>
614	MAINTAINING TRAFFIC	1 LS	\$ 10,000.00	\$ <del>10,000.00</del>
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ <del>9,600.00</del>
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 4,500.00	\$ 4,500.00
624	MOBILIZATION	1 LS	\$ 10,000.00	\$ <del>10,000.00</del>
Subtotal				\$ <del>265,000.00</del>
Design Risk (35%)				\$ 92,000.00
Subtotal				\$ <del>358,000.00</del>
ENGINEERING (10%)				\$ 36,000.00
Total				\$ 394,000.00

Notes: ① REDUCE TOTAL FIXTURES TO EIGHT:

- 4 - APPROACHING LINDEN
- 2 - LINDEN/SPAULDING INTERSECTION
- 2 - SPAULDING/EASTMONT DRIVE INTERSECTION
- 2 - SPAULDING/LEISING INTERSECTION
- 10 - TOTAL FIXTURES





**SPAULDING/LINDEN RADIUS IMPROVEMENT AND LEFT TURN STORAGE IMPROVEMENT  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE -AUGUST 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	PAVEMENT REMOVED, ASPHALT	200 SY	\$ 8.00	\$ 1,600.00
202	CATCH BASIN OR INLET REMOVED	2 EA	\$ 350.00	\$ 700.00
203	EXCAVATION	150 CY	\$ 15.00	\$ 2,250.00
203	EMBANKMENT	20 CY	\$ 12.00	\$ 240.00
204	SUBGRADE COMPACTION	300 SY	\$ 2.00	\$ 600.00
206	CEMENT STABILIZED SUBGRADE, 16" DEEP	300 SY	\$ 5.50	\$ 1,650.00
254	PAVEMENT PLANING, ASPHALT CONCRETE	550 SY	\$ 2.50	\$ 1,375.00
301	ASPHALT CONCRETE BASE, PG64-22, 6"	50 CY	\$ 125.00	\$ 6,250.00
304	AGGREGATE BASE, 10"	80 CY	\$ 40.00	\$ 3,200.00
407	TACK COAT	50 GAL	\$ 3.00	\$ 150.00
448	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22, 1.5"	15 CY	\$ 250.00	\$ 3,750.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 1.5"	40 CY	\$ 250.00	\$ 10,000.00
603	15" CONDUIT, TYPE B	250 FT	\$ 50.00	\$ 12,500.00
604	CATCH BASIN	4 EA	\$ 2,500.00	\$ 10,000.00
604	MANHOLE, NO. 3	2 EA	\$ 3,000.00	\$ 6,000.00
608	CURB	120 LF	\$ 20.00	\$ 2,400.00
644	PAVEMENT MARKINGS	1 LS	\$ 4,000.00	\$ 4,000.00
659	TOPSOIL	20 CY	\$ 25.00	\$ 500.00
659	SEEDING AND MULCHING	150 SY	\$ 2.00	\$ 300.00
832	SWPPP	1 LS	\$ 5,000.00	\$ 5,000.00
832	EROSION CONTROL	2500 EA	\$ 1.00	\$ 2,500.00
Subtotal				\$ 80,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 10,000.00	\$ 10,000.00
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ 9,600.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 4,500.00	\$ 4,500.00
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ 4,000.00
Subtotal				\$ 109,000.00
Design Risk (35%)				\$ 39,000.00
Subtotal				\$ 148,000.00
ENGINEERING (10%)				\$ 15,000.00
Total				\$ 163,000.00

**Notes:**

- 1 Right of way is estimated separately
- 2 Existing pavement is assumed to be full depth asphalt
- 3 Pavement widening is assumed to be full depth asphalt
- 4 Utility relocation not included

AIRWAY RD  
(WOODBURN WEST)

1) LOCAL ROAD CONDITIONS IMPROVEMENT

↳ STAND-ALONE PROJECT

MOVE FORWARD; INCLUDE REDUCE SCOPE STREET LIGHTING

2) STREET LIGHTING

↳ REDUCE SCOPE TO 11 LIGHTS @ INTERSECTION,

INCLUDE WITH ITEM #1





**CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT**  
**PHASE I, GROUPING 1**  
**AUGUST 2014**

**AIRWAY ROAD, WOODMAN WEST TO CORP LINE**

Preliminary project cost estimates have been developed for the six corridors included in Phase I, Grouping 1. These corridors include Spaulding Road, Springfield Street east of Woodman Drive, Springfield Street west of Woodman Drive, Airway Road west of Woodman Drive, Needmore Road between SR 201 and SR 202, and Schwinn Drive. A description of the scope of the improvements planned as well as estimate subtotals for the various improvements recommended by city staff and council following the initial work session are included below. A total construction cost for improvements on each corridor is also included. Details of each construction cost estimate are attached to this report.

**Addition of RTA Bus Pads, Each**

Estimated Construction Cost as stand-alone projects - \$50,000.

**Notes**

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.

TASK	ESTIMATED COST
<b>General Road Condition Improvement</b> This includes a general rehab including mill and fill, and estimated quantity of full depth pavement repair, some sidewalk replacement and replacement of curb and storm sewer inlets.	Construction= \$1,600,000
<b>Street Lighting</b> This includes continuous ODOT type light poles, underground wiring and new circuits.	Construction= \$550,000
<b>TOTAL AIRWAY ROAD, WOODMAN WEST TO CORP LINE IMPROVEMENTS</b>	<b>\$2,150,000</b>



**AIRWAY WOODMAN WEST REHAB  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - AUGUST, 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	WALK REMOVED	6000 FT	\$ 4.00	\$ 24,000.00
202	CURB REMOVED	2000 FT	\$ 4.00	\$ 8,000.00
202	CATCH BASIN OR INLET REMOVED	6 EA	\$ 350.00	\$ 2,100.00
253	PAVEMENT REPAIR, FULL DEPTH	8000 SY	\$ 50.00	\$ 400,000.00
254	PAVEMENT PLANING, ASPHALT CONCRETE	32000 SY	\$ 2.50	\$ 80,000.00
407	TACK COAT	5000 GAL	\$ 3.00	\$ 15,000.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 2"	2000 CY	\$ 175.00	\$ 350,000.00
603	15" CONDUIT, TYPE B	300 FT	\$ 50.00	\$ 15,000.00
604	CATCH BASIN, NO. 3	6 EA	\$ 2,500.00	\$ 15,000.00
604	MANHOLE, NO. 3	3 EA	\$ 3,000.00	\$ 9,000.00
608	4" CONCRETE WALK	6000 SF	\$ 5.00	\$ 30,000.00
608	CURB RAMPS	16 EA	\$ 450.00	\$ 7,200.00
609	CURB	2000 FT	\$ 15.00	\$ 30,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 6,000.00	\$ 6,000.00
Subtotal				\$ 997,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 10,000.00	\$ 10,000.00
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ 9,600.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 7,000.00	\$ 7,000.00
624	MOBILIZATION	1 LS	\$ 40,000.00	\$ 40,000.00
Subtotal				\$ 1,064,000.00
Design Risk (35%)				\$ 373,000.00
Subtotal				\$ 1,437,000.00
ENGINEERING (10%)				\$ 144,000.00
Total				\$ 1,581,000.00

- ADD CATCH BASIN REPAIRS AT OVERLOOK IN PARKING
- PEDESTALIAN SAFETY ISLAND: CAN IT STAY OR GO?



**AIRWAY WOODMAN WEST TO CORP LIGHTING  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - AUGUST, 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
625	LIGHT POLES	<del>18</del> 50 EA	\$ 4,000.00	<del>\$ 200,000.00</del>
625	WIRING	4200 FT	\$ 25.00	\$ 105,000.00
625	SINGLE CIRCUIT	2 EA	\$ 20,000.00	\$ 40,000.00
Subtotal				\$ 350,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 10,000.00	\$ 10,000.00
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ 9,600.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 3,500.00	\$ 3,500.00
624	MOBILIZATION	1 LS	\$ 20,000.00	\$ 20,000.00
Subtotal				\$ 378,000.00
Design Risk (35%)				\$ 132,000.00
Subtotal				\$ 510,000.00
ENGINEERING (10)				\$ 52,000.00
Total				\$ 562,000.00

Notes:

18 POLE ARE ESTIMATED

2 - AIRWAY/BAKSDALE INTERSECTION

2 - HERTLAND/ODOLITTLE/AIRWAY INTERSECTION

2 - AIRWAY/LAPPER INTERSECTION

2 - AIRWAY/LOWE KBLTY INTERSECTION

2 - AIRWAY/LUTIS INTERSECTION

2 - AIRWAY/HAYDEN/EDBANKS INTERSECTION

2 - AIRWAY/MEYER/BIKE PATH INTERSECTION

4 - AIRWAY APPROACHING WOODMAN

18 TOTAL



## NEEDMOLIS

- 1) GENERAL ROAD CONDITION IMPROVEMENTS
  - ↳ STAFF-AWARE PROJECT; INCLUDE:
  - ↳ MODIFIED ITEM # 2, ITEM #3, ITEM #4, ITEM #5
- 2) STREET LIGHTING
  - ↳ MODIFY SCOPE TO LIGHT INTERSECTIONS ONLY
  - ↳ INCORPORATE WITH ITEM #1
- 3) LANDMARK CHURCH TURN LANE
  - ↳ CONDITION ON PROPERTY ROWATION FROM CHURCH
  - ↳ INCORPORATE WITH ITEM #1
- 4) GRASS MEASURES
  - ↳ LIMIT LOCATION TO EAST/WEST OF LANDMARK BAPTIST
  - ↳ INCORPORATE WITH #1
- 5) IMPROVE GRAY TURNING RADIUS
  - ↳ DISCRETE
- 6) IMPROVE LLOYD TURNING RADIUS
  - ↳ INCORPORATE WITH ITEM #1
- 7) VARIABLE RIGHT-OF-WAY
  - ↳ DISCRETE





## CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT PHASE I, GROUPING 1 AUGUST 2014

### NEEDMORE ROAD, BETWEEN SR 201 AND SR 202

Preliminary project cost estimates have been developed for the six corridors included in Phase I, Grouping 1. These corridors include Spaulding Road, Springfield Street east of Woodman Drive, Springfield Street west of Woodman Drive, Airway Road west of Woodman Drive, Needmore Road between SR 201 and SR 202, and Schwinn Drive. A description of the scope of the improvements planned as well as estimate subtotals for the various improvements recommended by city staff and council following the initial work session are included below. A total construction cost for improvements on each corridor is also included. Details of each construction cost estimate are attached to this report.

### Addition of RTA Bus Pads, Each

Estimated Construction Cost as stand-alone projects - \$50,000.

### Notes

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.

TASK	ESTIMATED COST
<b>General Road Condition Improvement</b> This includes a general rehab including mill and fill, an estimated quantity of full depth pavement repair replacement and minor drainage rehab including partial ditch grading.	Construction= \$950,000
<b>Street Lighting</b> This includes continuous ODOT type light poles, underground wiring and new circuits.	Construction= \$650,000
<b>Landmark Church Turn Lane</b> This includes widening the street and re-striping to provide a west bound left turn lane into the church. The estimate includes all widening on the north side.	Construction = \$225,000 Property Cost = \$25,000
<b>Grass Medians</b> Limited locations of construction of grass median are included in the areas of the widened transverse striping median. These locations are limited as a result of impacts to left turn access to driveways on both sides of the road. LJB recommends that a safety study be conducted to evaluate the impact of removing left turn access to these properties prior to construction of the grass medians. For this estimate, 2- 100 foot long sections are included.	Construction= \$100,000



**CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT**  
**PHASE I, GROUPING 1**  
**AUGUST 2014**

<b>Improve Gary Turning RadII</b> Following a site visit and analysis of the existing turning radii at the Gary intersection, no alignment improvements are recommended at this location. Annual maintenance, including trimming trees in the right of way, is recommended to ensure appropriate site distance.	N/A
<b>Improve Lloyd Turning RadII</b> Improvements are necessary west of the Lloyd intersection to improve sight distance for vehicles exiting Lloyd. Recommended improvements include the acquisition of right of way from two parcels on the inside of the Needmore Road curve to allow the city's annual maintenance to clear brush and trim trees to maintain appropriate sight distances.	Acquisition = \$75,000
<b>Variable Right of Way</b> Much of the eastern half is 80 foot. Need property from 11 parcels to make uniform 80 feet.	Acquisition = \$275,000
<b>TOTAL NEEDMORE ROAD, BETWEEN SR 201 AND SR 202 IMPROVEMENTS</b>	<b>\$2,300,000</b>



**NEEDMORE ROAD BETWEEN SR 201 AND SR 202 REHAB  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - AUGUST 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	PAVEMENT REPAIRS FULL DEPTH	3500 SY	\$ 50.00	\$ 175,000.00
202	CATCH BASIN OR INLET REMOVED	4 EA	\$ 350.00	\$ 1,400.00
203	EXCAVATION, DITCH GRADING	1000 CY	\$ 15.00	\$ 15,000.00
203	EMBANKMENT	CY	\$ 12.00	\$ -
254	PAVEMENT PLANING, ASPHALT CONCRETE	40000 SY	\$ 2.00	\$ 80,000.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 2"	2000 CY	\$ 150.00	\$ 300,000.00
604	CATCH BASIN	4 EA	\$ 2,500.00	\$ 10,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 4,500.00	\$ 4,500.00
659	SEEDING AND MULCHING	3500 SY	\$ 2.00	\$ 7,000.00
832	SWPPP	1 LS	\$ 2,500.00	\$ 2,500.00
832	EROSION CONTROL	1500 EA	\$ 1.00	\$ 1,500.00
Subtotal				\$ 602,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 10,000.00	\$ 10,000.00
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ 9,600.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 2,500.00	\$ 2,500.00
624	MOBILIZATION	1 LS	\$ 20,000.00	\$ 20,000.00
Subtotal				\$ 645,000.00
Design Risk (35%)				\$ 226,000.00
Subtotal				\$ 871,000.00
ENGINEERING (10%)				\$ 88,000.00
Total				\$ 959,000.00

- INCLUDE CURB WORK ON SOUTH-SIDE, BETWEEN LLOYD & INTERPOINT
- LIMITED ARROW/DRIVE REPLACEMENT, NORTH SIDE, FROM GATE TO NORTHERN GATE





**NEEDMORE ROAD STREET LIGHTING  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - AUGUST, 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
625	LIGHT POLES ①	12 - 85 EA	\$ 4,000.00	\$ 48,000.00
625	WIRING	2,000 - 4500 FT	\$ 25.00	\$ 50,000.00
625	SINGLE CIRCUIT	2 EA	\$ 20,000.00	\$ 40,000.00
Subtotal				\$ 138,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 10,000.00	\$ 10,000.00
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ 9,600.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 200.00	\$ 200.00
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ 4,000.00
Subtotal				\$ 142,800.00
Design Risk (35%)				\$ 48,180.00
Subtotal				\$ 186,570.00
ENGINEERING(10%)				\$ 18,657.00
Total				\$ 205,227.00

① 12 LIGHTS WILL BE INCLUDED BT!

- 5 - SR202/NEEDMORE INTERSECTION AND APPROACH FROM NEEDMORE
- 2 - NEEDMORE/NORTHERN(WEST) INTERSECTION
- 2 - NEEDMORE/LLOYD INTERSECTION
- 1 - NEEDMORE/GARY INTERSECTION
- 2 - NEEDMORE/NORTHERN(EAST) INTERSECTION

12 TOTAL



**NEEDMORE RD WIDEN FOR LT AT LANDMARK CHURCH  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE -AUGUST 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ <del>5,000.00</del>
202	PAVEMENT REMOVED	30 SY	\$ 15.00	\$ 450.00
203	EXCAVATION	110 CY	\$ 15.00	\$ 1,650.00
203	EMBANKMENT	50 CY	\$ 12.00	\$ 600.00
204	SUBGRADE COMPACTION	225 SY	\$ 2.00	\$ 450.00
206	CEMENT STABILIZED SUBGRADE, 16" DEEP	225 SY	\$ 5.50	\$ 1,237.50
254	PAVEMENT PLANING, ASPHALT CONCRETE	3000 SY	\$ 2.50	\$ 7,500.00
301	ASPHALT CONCRETE BASE, PG64-22, 6"	40 CY	\$ 125.00	\$ 5,000.00
304	AGGREGATE BASE, 10"	65 CY	\$ 40.00	\$ 2,600.00
407	TACK COAT	450 GAL	\$ 3.00	\$ 1,350.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 3"	250 CY	\$ 175.00	\$ 43,750.00
604	MANHOLE ADJUSTED TO GRADE	2 EA	\$ 4,500.00	\$ 9,000.00
605	6" BASE PIPE UNDERDRAIN	500 FT	\$ 8.00	\$ 4,000.00
SPECIAL	ADJUST NORTHERN CIRCLE APPROAC	1 LS	\$ 25,000.00	\$ <del>25,000.00</del>
644	PAVEMENT MARKINGS	1 LS	\$ 2,500.00	\$ <del>2,500.00</del>
659	TOPSOIL	CY	\$ 25.00	\$ -
659	SEEDING AND MULCHING	600 SY	\$ 2.00	\$ <del>1,200.00</del>
832	SWPPP	1 LS	\$ 5,000.00	\$ <del>5,000.00</del>
832	EROSION CONTROL	2500 EA	\$ 1.00	\$ <del>2,500.00</del>
Subtotal				\$ 140,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 10,000.00	\$ <del>10,000.00</del>
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ <del>9,600.00</del>
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 3,500.00	\$ <del>3,500.00</del>
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ <del>4,000.00</del>
Subtotal				\$ 147,000.00
Design Risk (35%)			\$	52,000.00
Subtotal			\$	199,000.00
ENGINEERING (10%)			\$	20,000.00
Total			\$	219,000.00

77,800

3,000

80,300

28,105

108,405

10,841

119,246





**NEEDMORE ROAD BETWEEN SR 201 AND SR 202 GRASS MEDIANS (2- 100' SECTIONS)**  
**CITY OF RIVERSIDE**  
**PRELIMINARY CONSTRUCTION ESTIMATE - AUGUST 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ <del>5,000.00</del>
202	PAVEMENT REMOVED FULL DEPTH	350 SY	\$ 50.00	\$ <del>47,500.00</del>
203	EMBANKMENT (BORROW)	150 CY	\$ 25.00	\$ 3,750.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, PATCHING	10 CY	\$ 350.00	\$ <del>3,500.00</del>
609	CURB	500 LF	\$ 25.00	\$ 12,500.00
644	PAVEMENT MARKINGS	1 LS	\$ 1,500.00	\$ <del>1,500.00</del>
650	TOP SOIL	60 CY	\$ 45.00	\$ 2,700.00
659	SEEDING AND MULCHING	350 SY	\$ 5.00	\$ 1,750.00
832	SWPPP	1 LS	\$ 2,500.00	\$ <del>2,500.00</del>
832	EROSION CONTROL	1500 EA	\$ 1.00	\$ 1,500.00
(500)				
Subtotal				\$ <del>53,000.00</del>
614	MAINTAINING TRAFFIC	1 LS	\$ 5,000.00	\$ <del>5,000.00</del>
619	FIELD OFFICE, TYPE B	1 MN	\$ 1,600.00	\$ <del>1,600.00</del>
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 2,500.00	\$ <del>2,500.00</del>
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ <del>4,000.00</del>
Subtotal				\$ <del>67,000.00</del>
Design Risk (35%)				\$ 24,000.00
Subtotal				\$ <del>91,000.00</del>
ENGINEERING (10%)				\$ 40,000.00
Total				\$ 101,000.00

20,700

2000

20,900

8,015  
30,915

3,092  
34,007





**NEEDMORE ROAD BETWEEN SR 201 AND SR 202 LLOYD SIGHT DISTANCE  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE AUGUST 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 10,000.00	\$ 10,000.00
202	TREES REMOVED	12 EA	\$ 1,500.00	\$ 18,000.00
659	SEEDING AND MULCHING	1000 SY	\$ 5.00	\$ 5,000.00
832	SWPPP	1 LS	\$ 3,500.00	\$ 3,500.00
832	EROSION CONTROL	1500 EA	\$ 1.00	\$ 1,500.00
Subtotal				\$ 98,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 2,500.00	\$ 2,500.00
619	FIELD OFFICE, TYPE B	2 MN	\$ 1,600.00	\$ 3,200.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 2,500.00	\$ 2,500.00
624	MOBILIZATION	1 LS	\$ 2,000.00	\$ 2,000.00
Subtotal				\$ 49,000.00
Design Risk (35%)				\$ 18,000.00
Subtotal				\$ 67,000.00
ENGINEERING (10%)				\$ 7,000.00
Total				\$ 74,000.00

53,000

2,500

35,500

12,425

47,925

4,793

52,718

## SCHWIMM

- 1) GENERAL ROAD CONDITION IMPROVEMENT  
↳ STAMP-ACRUE PROJECT  
INCLUDED MODIFIED ITEM #2, ITEM #3
- 2) STREET LIGHTING  
↳ REDUCE SCOPE TO INTERSECTIONS + SCHOOL  
INCLUDE WITH ITEM #1
- 3) RECONFIGURE 201 (BRADY) INTERSECTION  
↳ REDUCE SCOPE BY ELIMINATING SIGNAL  
INCLUDE WITH ITEM #1
- 4) RECONFIGURE 202 (OTP) INTERSECTION  
↳ BICYCLE
- 5) VARIABLE RIGHT-OF-WAY  
↳ BICYCLE.



## CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT PHASE I, GROUPING 1 AUGUST 2014

### SCHWINN DRIVE

Preliminary project cost estimates have been developed for the six corridors included in Phase I, Grouping 1. These corridors include Spaulding Road, Springfield Street east of Woodman Drive, Springfield Street west of Woodman Drive, Airway Road west of Woodman Drive, Needmore Road between SR 201 and SR 202, and Schwinn Drive. A description of the scope of the improvements planned as well as estimate subtotals for the various improvements recommended by city staff and council following the initial work session are included below. A total construction cost for improvements on each corridor is also included. Details of each construction cost estimate are attached to this report.

### Addition of RTA Bus Pads, Each

Estimated Construction Cost as stand-alone projects - \$50,000.

### Notes

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.

TASK	ESTIMATED COST
<b>General Road Condition Improvement</b> This includes a general rehab including mill and fill, and estimated quantity of full depth pavement repair replacement and minor drainage rehab including partial ditch grading.	Construction= \$450,000
<b>Street Lighting</b> This includes continuous ODOT type light poles, underground wiring and new circuits.	Construction= \$525,000
<b>Reconfigure SR 201 Intersection</b> This includes widening the Schwinn approach to provide a turn lane. Widening is assumed to be on both sides of Schwinn Drive. An estimated cost of extending a culvert has been included.	Construction = \$150,000 Construction with new signal = \$325,000 Property Cost = \$45,000
<b>Reconfigure SR 202 Intersection</b> This includes widening the Schwinn approach to provide a turn lane. Widening is assumed to be on both sides of Schwinn Drive. The relocation of the north driveway on the property at the northeast corner is included.	Construction = \$125,000 Property Cost = \$60,000





**CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT**  
**PHASE I, GROUPING 1**  
**AUGUST 2014**

<b>Variable Right of Way</b> There is one (adjacent to house no. 3810) section for 150 feet that is listed as 59 foot wide but the rest is 50 foot wide according to the tax maps. The 50 foot width shifts across the 59 foot section. Right of way acquisition to address this variation is not recommended at this time.	N/A
<b>TOTAL SCHWINN DRIVE IMPROVEMENTS</b>	<b>\$1,530,000</b>



**SCWHINN DRIVE REHAB  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE -AUGUST 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	CATCH BASIN REMOVED	8 CY	\$ 1,000.00	\$ 8,000.00
203	EXCAVATION DITCH GRADING	1800 CY	\$ 15.00	\$ 27,000.00
253	FULL DEPTH PAVEMENT REPAIR	400 SY	\$ 50.00	\$ 20,000.00
254	PAVEMENT PLANING, ASPHALT CONCRETE	8000 SY	\$ 2.50	\$ 20,000.00
407	TACK COAT	1200 GAL	\$ 3.00	\$ 3,600.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 2"	450 CY	\$ 175.00	\$ 78,750.00
603	15" CONDUIT, TYPE B	1200 FT	\$ 50.00	\$ 60,000.00
604	CATCH BASIN	12 EA	\$ 2,500.00	\$ 30,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 2,500.00	\$ 2,500.00
659	TOPSOIL	40 CY	\$ 25.00	\$ 1,000.00
659	SEEDING AND MULCHING	7500 SY	\$ 2.00	\$ 15,000.00
832	SWPPP	1 LS	\$ 3,500.00	\$ 3,500.00
832	EROSION CONTROL	1500 EA	\$ 1.00	\$ 1,500.00
Subtotal				\$ 276,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 7,500.00	\$ 7,500.00
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ 9,600.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 2,000.00	\$ 2,000.00
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ 4,000.00
Subtotal				\$ 300,000.00
Design Risk (35%)				\$ 105,000.00
Subtotal				\$ 405,000.00
ENGINEERING (10%)				\$ 41,000.00
Total				\$ 446,000.00

• RECONFIGURE BRANTWOOD DRIVEWAY APPROXS



**SCWHINN DRIVE STREET LIGHTING  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - AUGUST, 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ <del>5,000.00</del>
625	LIGHT POLES ①	12 EA	\$ 4,000.00	\$ <del>48,000.00</del>
625	WIRING	3600 FT	\$ 25.00	\$ 90,000.00
625	SINGLE CIRCUIT	2 EA	\$ 20,000.00	\$ 40,000.00
Subtotal				\$ <del>327,000.00</del>
614	MAINTAINING TRAFFIC	1 LS	\$ 10,000.00	\$ <del>10,000.00</del>
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ <del>9,600.00</del>
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 3,500.00	\$ 3,500.00
624	MOBILIZATION	1 LS	\$ 20,000.00	\$ <del>40,000.00</del>
Subtotal				\$ <del>361,000.00</del>
Design Risk (35%)			\$	127,000.00
Subtotal			\$	488,000.00
ENGINEERING (10%)			\$	48,800.00
Total			\$	537,000.00

① 12 LIGHTS ARE ESTIMATED AS NECESSARY FOR:

- 4 - APPROACHING + AT INTERSECTION OF SCWHINN/202
- 4 - AT BRAWNWOOD ELEMENTARY SCHOOL
- 4 - APPROACHING + AT INTERSECTION OF SCWHINN/201





**SCWHINN DRIVE SR 201 INTERSECTION  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - AUGUST 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	PAVEMENT REMOVED, ASPHALT	75 SY	\$ 8.00	\$ 600.00
203	EXCAVATION	145 CY	\$ 15.00	\$ 2,175.00
203	EMBANKMENT	50 CY	\$ 15.00	\$ 750.00
204	SUBGRADE COMPACTION	275 SY	\$ 2.00	\$ 550.00
206	CEMENT STABILIZED SUBGRADE, 16" DEEP	275 SY	\$ 5.50	\$ 1,512.50
254	PAVEMENT PLANING, ASPHALT CONCRETE	700 SY	\$ 2.50	\$ 1,750.00
301	ASPHALT CONCRETE BASE, PG64-22, 6"	60 CY	\$ 175.00	\$ 10,500.00
304	AGGREGATE BASE, 10"	75 CY	\$ 40.00	\$ 3,000.00
407	TACK COAT	40 GAL	\$ 3.00	\$ 120.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 1.5"	30 CY	\$ 250.00	\$ 7,500.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 3"	25 CY	\$ 250.00	\$ 6,250.00
603	CULVERT EXTENSION INCL HEADWALLS	1 LS	\$ 25,000.00	\$ 25,000.00
605	6" BASE PIPE UNDERDRAIN	600 FT	\$ 10.00	\$ 6,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 2,500.00	\$ 2,500.00
659	SEEDING AND MULCHING	600 SY	\$ 2.00	\$ 1,200.00
832	SWPPP	1 LS	\$ 3,500.00	\$ 3,500.00
832	EROSION CONTROL	1500 EA	\$ 1.00	\$ 1,500.00
Subtotal				\$ 80,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 5,000.00	\$ 5,000.00
619	FIELD OFFICE, TYPE B	3 MN	\$ 1,600.00	\$ 4,800.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 2,500.00	\$ 2,500.00
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ 4,000.00
Subtotal				\$ 16,300.00
Design Risk (35%)				\$ 34,000.00
Subtotal				\$ 131,000.00
ENGINEERING (10%)				\$ 44,000.00
Total				\$ 145,000.00

65,700

68,200

23,870

92,070

9,207

104,277

Notes:

1 Right of way is estimated separately



**SCWHINN DRIVE SR 201 INTERSECTION WITH SIGNAL  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - AUGUST 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	PAVEMENT REMOVED, ASPHALT	75 SY	\$ 8.00	\$ 600.00
203	EXCAVATION	145 CY	\$ 15.00	\$ 2,175.00
203	EMBANKMENT	50 CY	\$ 12.00	\$ 600.00
204	SUBGRADE COMPACTION	275 SY	\$ 2.00	\$ 550.00
206	CEMENT STABILIZED SUBGRADE, 16" DEEP	275 SY	\$ 5.50	\$ 1,512.50
254	PAVEMENT PLANING, ASPHALT CONCRETE	700 SY	\$ 2.50	\$ 1,750.00
301	ASPHALT CONCRETE BASE, PG64-22, 6"	50 CY	\$ 150.00	\$ 7,500.00
304	AGGREGATE BASE, 10"	75 CY	\$ 40.00	\$ 3,000.00
407	TACK COAT	40 GAL	\$ 3.00	\$ 120.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 1.5"	30 CY	\$ 250.00	\$ 7,500.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 3"	25 CY	\$ 250.00	\$ 6,250.00
603	CULVERT EXTENSION INCL HEADWALLS	1 LS	\$ 15,000.00	\$ 15,000.00
605	6" BASE PIPE UNDERDRAIN	600 FT	\$ 8.00	\$ 4,800.00
632	TRAFFIC SIGNAL	1 LS	\$ 125,000.00	\$ 125,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 2,500.00	\$ 2,500.00
659	SEEDING AND MULCHING	600 SY	\$ 2.00	\$ 1,200.00
832	SWPPP	1 LS	\$ 3,500.00	\$ 3,500.00
832	EROSION CONTROL	1500 EA	\$ 1.00	\$ 1,500.00
Subtotal				\$ 191,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 10,000.00	\$ 10,000.00
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ 9,600.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 4,500.00	\$ 4,500.00
624	MOBILIZATION	1 LS	\$ 10,000.00	\$ 10,000.00
Subtotal				\$ 226,000.00
Design Risk (35%)				\$ 80,000.00
Subtotal				\$ 306,000.00
ENGINEERING (10%)				\$ 31,000.00
Total				\$ 337,000.00

Notes:

1 Right of way is estimated separately

*← THIS PROJECT DISCONTINUED.*





**SCWHINN DRIVE SR 202 INTERSECTION  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - AUGUST 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	PAVEMENT REMOVED, ASPHALT	150 SY	\$ 8.00	\$ 1,200.00
203	EXCAVATION	200 CY	\$ 15.00	\$ 3,000.00
203	EMBANKMENT	50 CY	\$ 12.00	\$ 600.00
204	SUBGRADE COMPACTION	275 SY	\$ 2.00	\$ 550.00
206	CEMENT STABILIZED SUBGRADE, 16" DEEP	125 SY	\$ 5.50	\$ 687.50
254	PAVEMENT PLANING, ASPHALT CONCRETE	700 SY	\$ 2.50	\$ 1,750.00
301	ASPHALT CONCRETE BASE, PG64-22, 6"	65 CY	\$ 175.00	\$ 11,375.00
304	AGGREGATE BASE, 10"	75 CY	\$ 40.00	\$ 3,000.00
407	TACK COAT	40 GAL	\$ 3.00	\$ 120.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 1.5"	35 CY	\$ 250.00	\$ 8,750.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 3"	30 CY	\$ 250.00	\$ 7,500.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 3", DRIVEWAYS	10 CY	\$ 250.00	\$ 2,500.00
603	15" CONDUIT, TYPE B DRIVE PIPES	45 FT	\$ 50.00	\$ 2,250.00
605	6" BASE PIPE UNDERDRAIN	600 FT	\$ 8.00	\$ 4,800.00
644	PAVEMENT MARKINGS	1 LS	\$ 2,500.00	\$ 2,500.00
659	TOPSOIL	45 CY	\$ 25.00	\$ 1,125.00
659	SEEDING AND MULCHING	900 SY	\$ 2.00	\$ 1,800.00
832	SWPPP	1 LS	\$ 3,500.00	\$ 3,500.00
832	EROSION CONTROL	1500 EA	\$ 1.00	\$ 1,500.00
<b>Subtotal</b>				<b>\$ 64,000.00</b>
614	MAINTAINING TRAFFIC	1 LS	\$ 5,000.00	\$ 5,000.00
619	FIELD OFFICE, TYPE B	3 MN	\$ 1,600.00	\$ 4,800.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 2,500.00	\$ 2,500.00
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ 4,000.00
<b>Subtotal</b>				<b>\$ 81,000.00</b>
Design Risk (35%)				\$ 29,000.00
<b>Subtotal</b>				<b>\$ 110,000.00</b>
ENGINEERING (10%)				\$ 11,000.00
<b>Total</b>				<b>\$ 121,000.00</b>

Notes:

1 Right of way is estimated separately

*L THIS PROJECT DELIVERED*





## MEMORANDUM

**TO:** Riverside City Council

**FROM :** Bryan RH Chodkowski,  
City Manager

**SUBJECT:** Major Thoroughfare Improvement Plan –  
Phase III, Group II

**DATE:** February 9, 2015

**CC:** Emily M. Christian,  
Assistant City Manager

Mitch Miller,  
Director of Public Services

This memorandum represents the start of the final phase of the Major Thoroughfare Improvement Plan undertaken by staff in 2014. In the first phase of this project, staff and Council reviewed the major roadways of the City and brainstormed about all the improvements that could be included as part of a street's reconstruction. In the second phase of this project, the City Engineer quantified the expense of all the project elements identified in the first phase. In this third phase, staff is providing a recommendation on a final project scope for each street which takes into account cost, scale, and practicality.

This memorandum provides a brief summary of the project elements addressed in Phase II and their estimated expenses. For your reference, the Phase II information provided by the Engineer is attached to this memorandum. Following each summary is staff's recommendation for a final project scope and estimated project cost based on the modifications generally described below.

These project summaries are as follows:

### SPINNING RD. (LINDEN AVE. TO BURKHARDT RD.)

#### Phase II Elements and Pricing:

• General Road Condition Improvement -	\$1,500,000
• Street Lighting -	\$ 675,000
• Infill Sidewalk (Linden to Eastman) -	\$ 435,000
• Improve Crosswalk at Penn -	\$ 50,000
• Radii Improvements (at Burkhardt) -	\$ 275,000
• Stormsewer Improvements at US 35 -	\$ 450,000
<b>TOTAL</b>	<b>\$3,385,000</b>

## M E M O R A N D U M

SPINNING RD. (LINDEN AVE. TO BURKHARDT RD. – CONT'D)**Phase III Staff Project Scope Recommendations:**

- General Road Condition Improvements – Staff review finds no modifications are necessary to this project scope.
- Street Lighting – A reduced scope of lighting only intersections and approaches to major intersections is recommended. This modified lighting scope is recommended for inclusion with General Road Condition Improvements.
- Infill Sidewalk (Linden to Eastman) – This work is recommended for inclusion with the General Road Condition Improvements without modifications.
- Improve Crosswalk at Penn – Staff suggests this work be included with the General Road Condition Improvements. No changes are recommended in this project's outlined work.
- Radii Improvements (at Burkhardt) – In review of the complexity of this work, this item is being recommended as a stand-alone project.
- Stormsewer Improvements at US 35 – Recognizing this work item will be addressed under the pending Stormwater Master Plan, staff recommends that this project not be pursued under this project's scope of work.

**Phase III Cost Estimates Based on Staff Recommendations:**

• General Road Condition Improvement -	\$1,500,000
• Street Lighting -	\$ 380,200
• Infill Sidewalk (Linden to Eastman) -	\$ 366,800
• Improve Crosswalk at Penn -	\$ 0
• Radii Improvements (at Burkhardt) -	\$ 225,000
• <u>Stormsewer Improvements at US 35 -</u>	<u>\$ 0</u>
TOTAL	\$2,472,000



## MEMORANDUM

### SPINNING RD. (BURKHARDT RD. TO AIRWAY RD.).

#### Phase II Elements and Pricing:

• General Road Condition Improvement -	\$1,000,000
• Traffic Signal at Bayside Dr. -	\$ 340,000
• Street Lighting -	\$ 850,000
• <u>Improve Signal &amp; Traffic Stacking at Airway -</u>	<u>\$ 275,000</u>
TOTAL	\$2,465,000

#### Phase III Staff Project Scope Recommendations:

- General Road Condition Improvements – *No changes in scope recommended.*
- Traffic Signal at Bayside Dr. – *Staff recommends a traffic study at this intersection prior to including this project in the General Road Condition Improvements. As such, for the purposes of this memorandum, staff recommends this project be considered a stand-alone project*
- Street Lighting – *It is the recommendation of staff, that this element be modified to replace the existing lighting with updated fixtures and be included with the General Road Condition Improvements project.*
- Improve Signal & Traffic Stacking at Airway – *This project should be incorporated as part of the General Road Condition Improvements.*

#### Phase III Cost Estimates Based on Staff Recommendations:

• General Road Condition Improvement -	\$1,000,000
• Traffic Signal at Bayside Dr. -	\$ 340,000
• Street Lighting -	\$ 299,400
• <u>Improve Signal &amp; Traffic Stacking at Airway -</u>	<u>\$ 226,500</u>
TOTAL	\$1,865,900

## MEMORANDUM

### AIRWAY RD. (WOODMAN DR. EAST TO CITY LIMIT)

#### Phase II Elements and Pricing:

• General Road Condition Improvement -	\$1,500,000
• Street Lighting at Woodman -	\$ 200,000
• Improve Signal & Traffic Stacking at Spinning -	\$ 275,000
• Update Striping Plan -	\$ 125,000
• Installation of Grass Medians -	\$ 350,000
• Airway/Woodman Safety Improvements -	\$ 500,000
• Traffic Signal at Airway/ASC Drive -	\$ 350,000
<b>TOTAL</b>	<b>\$3,300,000</b>

#### Phase III Staff Recommendations:

- General Road Condition Improvements – Staff recommends no modifications in scope.
- Street Lighting – This project should be included as part of the General Road Condition Improvement project.
- Improve Signal & Traffic Stacking at Spinning – This element is recommended for improvement under the scope of the Spinning Rd. (Burkhardt to Airway) project and therefore, staff is recommending that it be removed from consideration under this project.
- Update Striping Plan - This item is recommended for inclusion under the General Road Condition Improvement scope.
- Installation of Grass Medians – It is recommended by staff that this item be scheduled as part of the General Road Condition Improvement scope.
- Airway/Woodman Safety Improvements – In consideration of the significant improvements associated with this project, it is recommend this project be considered as a stand-alone improvement.
- Traffic Signal at Airway/ASC Drive – It is recommended that this project be further considered as a stand-alone project tied into future development/improvements at Airway Shopping Center.

#### Phase III Cost Estimates Based on Staff Recommendations:

• General Road Condition Improvement -	\$1,500,000
• Street Lighting at Woodman -	\$ 184,200
• Improve Signal & Traffic Stacking at Spinning -	\$ 0
• Update Striping Plan -	\$ 30,800
• Installation of Grass Medians -	\$ 181,400
• Airway/Woodman Safety Improvements -	\$ 500,000
• Traffic Signal at Airway/ASC Drive -	\$ 350,000
<b>TOTAL</b>	<b>\$2,746,400</b>

## MEMORANDUM

### VALLEY ST. (HARSHMAN RD. WEST TO CITY LIMIT)

#### Phase II Elements and Pricing:

• General Road Condition Improvements -	\$1,425,000
• Street Lighting -	\$ 850,000
• Sidewalk (Northside – Broadmead to Hypathia) -	\$ 280,000
• Uniform Right-of-way -	\$ 120,000
• Sidewalk (Southside – Broadmead to Harshman) -	\$ 460,000
• Improvement at McMahan's -	\$ 175,000
• Improve Traffic Signal at Pleasant Valley -	\$ 800,000
• <u>Update Crosswalk at Valley and Pleasant Valley -</u>	<u>\$ 50,000</u>
TOTAL	\$4,160,000

#### Phase III Staff Recommendations:

- General Road Condition Improvements – No modifications are recommended to the scope of this work as proposed.
- Street Lighting – Staff recommends reducing the elements of this project to include lighting only intersections and the approach to Harshman Rd. This amended scope should be included with work occurring under the General Road Condition Improvements.
- Sidewalk (Northside – Broadmead to Hypathia) – With part of this work planned to occur under a CDBG funded project in 2015-2016; this project's scope should be reduced by half and included with the General Road Condition Improvement project.
- Uniform Right-of-way – This project is not recommended for further consideration.
- Sidewalk (Southside – Broadmead to Harshman) – Part of this work is planned to occur under a CDBG funded project in 2015-2016. Additional sidewalk work between Harshman and Hypathia is planned in 2020 under a Safe Routes to School grant award. Therefore this project's scope should be reduced by two-thirds and included with the General Road Condition Improvement project.
- Improvement at McMahan's – These improvements are not necessary as this work will be addressed under a Safe Routes to School grant award for 2020.
- Improve Traffic Signal at Pleasant Valley – This element is being coordinated with the CDBG funded sidewalk extension scheduled to occur between 2015 and 2016. Therefore, staff is recommending this item be removed from consideration under this scope.
- Update Crosswalk at Valley and Pleasant Valley – This element is being coordinated with the CDBG funded sidewalk extension scheduled to occur between 2015 and 2016. Therefore, staff is recommending this item be removed from consideration under this scope.



## MEMORANDUM

### VALLEY ST. (HARSHMAN RD. WEST TO CITY LIMIT – CONT'D)

#### Phase III Cost Estimates Based on Staff Recommendations:

• General Road Condition Improvements -	\$1,425,000
• Street Lighting -	\$ 428,500
• Sidewalk (Northside – Broadmead to Hypathia) -	\$ 176,400
• Uniform Right-of-way -	\$ 0
• Sidewalk (Southside – Broadmead to Harshman) -	\$ 153,400
• Improvement at McMahan's -	\$ 0
• Improve Traffic Signal at Pleasant Valley -	\$ 0
• <u>Update Crosswalk at Valley and Pleasant Valley -</u>	<u>\$ 0</u>
TOTAL	\$2,183,300

### VALLEY ST. (HARSHMAN RD. EAST TO CITY LIMIT)

#### Phase II Elements and Pricing:

• General Road Condition Improvements -	\$ 700,000
• New Signal at Stebbins/Spicewood & Improved Vehicle Staking -	\$ 375,000
• Sidewalk (Northside to Country Haven) -	\$ 675,000
• Sidewalk (Southside to Butane) -	\$ 110,000
• Improvements at McMahan's -	\$ 110,000
• <u>Uniform Right-of-way -</u>	<u>\$ 650,000</u>
TOTAL	\$2,620,000

#### Phase III Staff Recommendations:

- General Road Condition Improvements – Staff has no additions or deletions to recommend for this project element.
- New Signal at Stebbins/Spicewood & Improved Vehicle Staking – Staff recommends amending the project scope to account only for additional vehicle stacking and that such work should be included in the General Road Condition Improvement Project.
- Sidewalk on north side to Country Haven – No change is advised for this element of the project and it should be included as part of the General Road Condition Improvement Project
- Sidewalk on south side to Butane – It is the recommendation from staff that this item be included without modification in the General Road Condition Improvement Project
- Improvements at McMahan's – It is staff's opinion that this construction element be included with the General Road Condition Improvement Project.
- Uniform Right-of-way – Staff is recommending that the City not pursue this element.

## MEMORANDUM

### VALLEY ST. (HARSHMAN RD. EAST TO CITY LIMIT – CONT'D)

#### Phase III Cost Estimates Based on Staff Recommendations:

• General Road Condition Improvements -	\$ 700,000
• New Signal at Stebbins/Spicewood & Improved Vehicle Staking -	\$ 87,400
• Sidewalk (Northside to Country Haven) -	\$ 595,300
• Sidewalk (Southside to Butane) -	\$ 74,500
• Improvements at McMahan's -	\$ 71,300
• <u>Uniform Right-of-way -</u>	<u>\$ 0</u>
TOTAL	\$1,528,500

### UNION SCHOOLHOUSE RD.

#### Phase II Elements and Pricing:

• General Road Condition Improvements -	\$ 800,000
• Traffic Signal at Forest Ridge Blvd intersection -	\$ 600,000
• Lane Transition at Coury Lane -	\$ 0
• Improve Radii at Hyland -	\$ 90,000
• <u>Uniform Right-of-way -</u>	<u>\$ 250,000</u>
TOTAL	\$1,740,000

#### Phase III Staff Recommendations:

- General Road Condition Improvements – Staff has no additions or deletions to recommend for this project element.
- Traffic Signal at Forest Ridge Blvd intersection – The Engineer has recommended the use of a roundabout in lieu of a signal. Furthermore, traffic control was addressed with the City of Dayton circa 1996. Therefore, staff recommends this project as a stand-alone measure to be coordinated in conjunction with City of Dayton.
- Lane Transition at Coury Lane – This work will be incorporated with the General Road Condition Improvement Project.
- Improve Radii at Hyland - Staff recommends that this project element not be pursued.
- Uniform Right-of-way – It is advised by the Engineer that this element should not be further considered.

## MEMORANDUM

### UNION SCHOOLHOUSE RD. – CONT'D

#### **Phase III Cost Estimates Based on Staff Recommendations:**

• General Road Condition Improvements -	\$ 800,000
• Traffic Signal at Forest Ridge Blvd intersection -	\$ 600,000
• Lane Transition at Coury Lane -	\$ 0
• Improve Radii at Hyland -	\$ 0
• <u>Uniform Right-of-way -</u>	<u>\$ 0</u>
<b>TOTAL</b>	<b>\$1,400,000</b>

By way of a more generalized, total summary; when project estimates were prepared through the Phase II process to include all aspects of that work which could be included under a major thoroughfare improvement plan for the Group I streets, the cost estimates were calculated as:

➤ Spinning Rd. (Linden Ave to Burkhardt Rd):	\$ 3,385,000
➤ Spinning Rd. (Burkhardt Rd to Airway Rd):	\$ 2,465,000
➤ Airway Rd. (Woodman east to City Limit):	\$ 3,300,000
➤ Valley St. (Harshman west to City Limit):	\$ 4,160,000
➤ Valley St. (Harshman east to City Limit):	\$ 2,620,000
➤ <u>Union Schoolhouse Rd.</u>	<u>\$ 1,740,000</u>
<b>TOTAL</b>	<b>\$17,670,000</b>

Following the Phase III process performed by staff, the above projects can be separated into one of two categories. The first, *General Thoroughfare Improvements Projects*, represents the scope of work which the City would seek to perform through its long-term plan. These projects would be those the City would actively seek to perform and obtain grant funding to support. *Projects of Opportunity* are those that would be driven through an economic development project, when non-transportation grant dollars might be utilized, or the financial condition of the City allows the project to be undertaken. These two categories now provide project estimates as follows:

#### *General Thoroughfare Improvement Projects:*

➤ Spinning Rd. – Phase (Linden to Eastman):	\$ 1,135,900
➤ Spinning Rd. – Phase II (Eastman to Burkhardt):	\$ 940,100
➤ Spinning Rd. – Phase III (Burkhardt to Airway):	\$ 1,525,900
➤ Airway Rd. (Woodman east to City Limit):	\$ 1,896,400
➤ Valley St. – Phase I (West City Limit to Rohrer):	\$ 926,800
➤ Valley St. – Phase II (Rohrer to Harshman):	\$ 1,256,600
➤ Valley St. – Phase III (Harshman east to City Limit):	\$ 1,528,500
➤ <u>Union Schoolhouse Rd.:</u>	<u>\$ 800,000</u>
<b>TOTAL</b>	<b>\$10,010,200</b>



## MEMORANDUM

### *Projects of Opportunity:*

➤ Spinning/Burkhardt Radii Improvements:	\$ 225,000
➤ Spinning/Bayside Traffic Signal:	\$ 340,000
➤ Airway Woodman Intersection Safety Improvements:	\$ 500,000
➤ Airway/ASC Drive Traffic Signal:	\$ 350,000
➤ <u>Union Schoolhouse/Forest Ridge Blvd Roundabout:</u>	<u>\$ 600,000</u>
TOTAL	\$ 2,015,000

You will note that there is a significant change in project cost estimates from those calculated in Phase II and those provided in this Phase III memorandum. While certain reductions are obvious because a project element was outright deleted from the overall project scope, other saving measures occurred in reduction of scope and/or the reduction of duplicate expenses. The duplicate activities being removed or reduced from the projects include such items as surveying, mobilization, and clearing & grubbing.

As we proceed through Phase III of this project, the Engineer will be preparing more detailed project cost estimates in a format similar to those provided for Phase II. Once all four street groupings have been through the Phase III process; a final document with comprehensive cost estimates, generalized project summaries, and potential timeline will be provided to Council. This final, Major Thoroughfare Improvement Plan document should assist Council in further discussion on how to best begin reconstructing and improving the main streets of the City.

Should you have any questions or concerns regarding the information contained within this memorandum, please do not hesitate to contact me.

SPINNINGO RD  
(LINCOLN TO BURKHARDT)

- ① GENERAL ROAD CONDITION IMPROVEMENTS
  - ↳ NO CHANGE TO SLOPE.
- ② STREET LIGHTING
  - ↳ REDUCE SLOPE TO INTERSECTIONS / MAJOR INTERSECTION APPROACH.
  - ↳ APPROX 23 LIGHTS.
  - ↳ INCLUDE W/ ELEMENT #1
- ③ INFILL SIDEWALKS LINCOLN TO EASTMAN
  - ↳ INCLUDE W/ ELEMENT #1
- ④ DEDICATED CROSSWALK AT PENN
  - ↳ INCLUDE W/ ELEMENT #1
- ⑤ IMPROVE ROAD AT SPINNINGO / BURKHARDT
  - ↳ STAND-ALONE PROJECT.
- ⑥ US 35 DRAINAGE IMPROVEMENT
  - ↳ STAND-ALONE (STORMWATER UTILITY).



## CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT PHASE I, GROUPING 2 SEPTEMBER 2014

Preliminary project cost estimates have been developed for the six corridors included in Phase I, Grouping 2. These corridors include Airway Rd. (Woodman East to Corp), Spinning Rd. (Burkhardt to Airway), Spinning Rd.(Linden to Burkhardt), Union Schoolhouse, Valley St. (Harshman East to Corp), and Valley St.(Harshman West to Corp). A description of the scope of the improvements planned as well as estimate subtotals for the various improvements recommended by city staff and council following the initial work session are included below. A total construction cost for improvements on each corridor is also included. Details of each construction cost estimate are attached to this report.

### **Addition of RTA Bus Pads, Each**

Estimated Construction Cost as stand-alone projects - \$50,000.

### **Notes**

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.

### **SPINNING (LINDEN TO BURKHARDT)**

<b>TASK</b>	<b>ESTIMATED COST</b>
<b>General Road Condition Improvement</b> This includes a general rehab including mill and fill, and estimated quantity of full depth pavement repair, some sidewalk replacement and the replacement and addition of curb and storm sewer inlets.	Construction Cost- \$1,500,000
<b>Street Lighting</b> This includes continuous ODOT type light poles, underground wiring and new circuits.	Construction Cost- \$675,000
<b>In-fill connecting sidewalk – Linden Ave. to Eastman Ave.</b> This includes adding new sidewalk in this section and some additional catch basins for drainage.	Construction Cost- \$435,000
<b>Upgrade Spinning/Penn intersection with dedicated crosswalk</b>  This provides a new painted crosswalk on the southern leg of the intersection.	Construction Cost- \$50,000





**CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT  
PHASE I, GROUPING 2  
SEPTEMBER 2014**

<b>Spinning/Burkhardt intersection radius improvement</b> This includes providing an increased radius on the south east corner. Right of way will be needed from one property owner.	Construction Cost- \$200,000 ROW- \$75,000
<b>New storm sewer at the US 35 overpass</b> This includes adding a major storm sewer north from the overpass to the stream outlet.	Construction Cost- \$450,000
<b>TOTAL SPINNING (LINDEN TO BURKHARDT) IMPROVEMENTS</b>	<b>\$5,850,000</b>



**SPINNING LINDEN TO BURKHARDT - REHAB  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	WALK REMOVED	5000 SF	\$ 1.50	\$ 7,500.00
202	CURB REMOVED	10000 FT	\$ 3.00	\$ 30,000.00
202	CATCH BASIN OR INLET REMOVED	12 EA	\$ 350.00	\$ 4,200.00
252	FULL DEPTH PAVEMENT REPAIR	2400 SY	\$ 50.00	\$ 120,000.00
254	PAVEMENT PLANING, ASPHALT CONCRETE	24000 SY	\$ 2.50	\$ 60,000.00
407	TACK COAT	3600 GAL	\$ 3.00	\$ 10,800.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 2"	1500 CY	\$ 175.00	\$ 262,500.00
603	15" CONDUIT, TYPE B	4000 FT	\$ 50.00	\$ 200,000.00
604	CATCH BASIN, NO. 3	12 EA	\$ 2,500.00	\$ 30,000.00
604	MANHOLE, NO. 3	5 EA	\$ 3,000.00	\$ 15,000.00
608	4" CONCRETE WALK	5000 SF	\$ 5.00	\$ 25,000.00
609	CURB, TYPE 6	12000 FT	\$ 15.00	\$ 180,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 10,000.00	\$ 10,000.00
832	SWPPP	1 LS	\$ 3,500.00	\$ 3,500.00
832	EROSION CONTROL	1500 EA	\$ 1.00	\$ 1,500.00
Subtotal				\$ 965,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 20,000.00	\$ 20,000.00
619	FIELD OFFICE, TYPE B	3 MN	\$ 1,600.00	\$ 4,800.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 7,500.00	\$ 7,500.00
624	MOBILIZATION	1 LS	\$ 20,000.00	\$ 20,000.00
Subtotal				\$ 1,018,000.00
Design Risk (35%)				\$ 357,000.00
Subtotal				\$ 1,375,000.00
ENGINEERING (10%)				\$ 138,000.00
Total				\$ 1,513,000.00



**SPINNING LINDEN TO BURKHARDT LIGHTING  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER, 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ <del>5,000.00</del>
625	LIGHT POLES	<del>64</del> EA	\$ 4,000.00	\$ <del>256,000.00</del>
625	WIRING	4800 FT	\$ 25.00	\$ 120,000.00
625	SINGLE CIRCUIT	2 EA	\$ 20,000.00	\$ 40,000.00
Subtotal				\$ <del>421,000.00</del>
614	MAINTAINING TRAFFIC	1 LS	\$ 10,000.00	\$ <del>10,000.00</del>
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ <del>9,600.00</del>
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 4,000.00	\$ 4,000.00
624	MOBILIZATION	1 LS	\$ 10,000.00	\$ <del>10,000.00</del>
Subtotal				\$ <del>455,000.00</del>
Design Risk (35%)				\$ <del>160,000.00</del>
Subtotal				\$ <del>615,000.00</del>
ENGINEERING (10)				\$ 62,000.00
Total				\$ 677,000.00

92,000

252,00

4,000

256,00

89,

345,00

34500

380,00





**SPINNING LINDEN TO BURKHARDT SIDEWALK INFILL  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	<del>\$ 5,000.00</del>
202	WALK REMOVED	500 SF	\$ 1.50	\$ 750.00
203	EMBANKMENT	1000 CY	\$ 12.00	\$ 12,000.00
603	15" CONDUIT, TYPE B	300 FT	\$ 50.00	\$ 15,000.00
604	CATCH BASIN, NO. 3	6 EA	\$ 2,500.00	\$ 15,000.00
604	MANHOLE, NO. 3	3 EA	\$ 3,000.00	\$ 9,000.00
608	4" CONCRETE WALK	35000 SF	\$ 5.00	\$ 175,000.00
608	CURB RAMPS	6 EA	\$ 450.00	\$ 2,700.00
659	TOPSOIL	700 CY	\$ 25.00	\$ 17,500.00
659	SEEDING AND MULCHING	5000 SY	\$ 2.00	<del>\$ 10,000.00</del>
832	SWPPP	1 LS	\$ 3,500.00	<del>\$ 3,500.00</del>
832	EROSION CONTROL	1500 EA	\$ 1.00	<del>\$ 1,500.00</del>
Subtotal				\$ 267,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 5,000.00	<del>\$ 5,000.00</del>
619	FIELD OFFICE, TYPE B	3 MN	\$ 1,600.00	\$ 4,800.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 4,500.00	<del>\$ 4,500.00</del>
624	MOBILIZATION	1 LS	\$ 10,000.00	<del>\$ 10,000.00</del>
Subtotal				\$ 292,000.00
Design Risk (35%)				\$ 102,200.00
Subtotal				\$ 394,200.00
ENGINEERING (10%)				\$ 39,420.00
Total				\$ 433,620.00

247,000

292,000

86,460

333,490

33,345

366,795



**SPINNING LINDEN TO BURKHARDT CROSS WALK AT PENN  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	CURB REMOVED	10 FT	\$ 20.00	\$ 200.00
608	4" CONCRETE WALK	50 SF	\$ 25.00	\$ 1,250.00
608	CURB RAMPS	1 EA	\$ 1,000.00	\$ 1,000.00
641	PAVEMENT MARKINGS REMOVED	1 LS	\$ 5,000.00	\$ 5,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 7,500.00	\$ 7,500.00
832	SWPPP	1 LS	\$ 1,500.00	\$ 1,500.00
832	EROSION CONTROL	800 EA	\$ 1.00	\$ 800.00
Subtotal				\$ 23,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 5,000.00	\$ 5,000.00
619	FIELD OFFICE, TYPE B	1 MN	\$ 1,600.00	\$ 1,600.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 2,500.00	\$ 2,500.00
624	MOBILIZATION	1 LS	\$ 2,000.00	\$ 2,000.00
Subtotal				\$ 35,000.00
Design Risk (35%)				\$ 13,000.00
Subtotal				\$ 48,000.00
ENGINEERING (10%)				\$ 5,000.00
Total				\$ 53,000.00





## PRELIMINARY RIGHT OF WAY ESTIMATE - SEPTEMBER 2014

[illegible]

- Labor Cost Includes the following:  
(per ODOT Cost Estimating Procedures  
For Acquiring Rights of Way)

Titles	Detailed Appraisal	Detailed Appraisal Review	Negotiation	Closings	Project Management
\$400	\$4,500	\$2,000	\$1,100	\$400	\$550



**SPINNING LINDEN TO BURKHARDT DRAINAGE AT US 35  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	PAVEMENT REMOVED, ASPHALT	SY	\$ 8.00	\$ -
202	WALK REMOVED	SF	\$ 1.50	\$ -
202	MEDIAN REMOVED	SY	\$ 5.00	\$ -
202	CURB REMOVED	FT	\$ 3.00	\$ -
202	CATCH BASIN OR INLET REMOVED	2 EA	\$ 350.00	\$ 700.00
203	EXCAVATION	CY	\$ 15.00	\$ -
203	EMBANKMENT	CY	\$ 12.00	\$ -
204	SUBGRADE COMPACTION	SY	\$ 2.00	\$ -
206	CEMENT STABILIZED SUBGRADE, 16" DEEP	SY	\$ 5.50	\$ -
254	PAVEMENT PLANING, ASPHALT CONCRETE	SY	\$ 2.50	\$ -
301	ASPHALT CONCRETE BASE, PG64-22	CY	\$ 125.00	\$ -
304	AGGREGATE BASE	CY	\$ 40.00	\$ -
407	TACK COAT	GAL	\$ 3.00	\$ -
448	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22	CY	\$ 150.00	\$ -
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22	CY	\$ 175.00	\$ -
603	48" CONDUIT, TYPE A	500 FT	\$ 500.00	\$ 250,000.00
604	CATCH BASIN	2 EA	\$ 2,500.00	\$ 5,000.00
604	MANHOLE	2 EA	\$ 4,500.00	\$ 9,000.00
659	SEEDING AND MULCHING	1000 SY	\$ 2.00	\$ 2,000.00
832	SWPPP	1 LS	\$ 3,500.00	\$ 3,500.00
832	EROSION CONTROL	1500 EA	\$ 1.00	\$ 1,500.00
Subtotal				\$ 277,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 5,000.00	\$ 5,000.00
619	FIELD OFFICE, TYPE B	3 MN	\$ 1,600.00	\$ 4,800.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 3,500.00	\$ 3,500.00
624	MOBILIZATION	1 LS	\$ 10,000.00	\$ 10,000.00
Subtotal				\$ 301,000.00
Design Risk (35%)				\$ 106,000.00
Subtotal				\$ 407,000.00
ENGINEERING (10%)				\$ 41,000.00
Total				\$ 448,000.00

SPINNING RD.  
(AIRWAY TO BURKHARDT)

① GENERAL ROAD CONDITION IMPROVEMENTS

↳ NO CHANGE

② TRAFFIC SIGNAL AT BAYSIDE

↳ TRAFFIC STUDY NEEDED

↳ IF "NEEDED", IT'S IN  
IF NOT "NEEDED", STAND-A-POUSE

③ STREET LIGHTING

↳ MODIFY SCOPE TO REPLACE EXISTING POLES  
↳ CONTINGENT ON MULT. TRAFFIC SIGNAL  
SYSTEM OWNERSHIP.

④ UPDATE TRAFFIC SIGNAL AT SPINNING/AIRWAY

↳ INCLUDE WITH ITEM #1





## CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT PHASE I, GROUPING 2 SEPTEMBER 2014

Preliminary project cost estimates have been developed for the six corridors included in Phase I, Grouping 2. These corridors include Airway Rd.(Woodman East to Corp), Spinning Rd.(Burkhardt to Airway), Spinning Rd.(Linden to Burkhardt), Union Schoolhouse, Valley St.(Harshman East to Corp), and Valley St. (Harshman West to Corp). A description of the scope of the improvements planned as well as estimate subtotals for the various improvements recommended by city staff and council following the initial work session are included below. A total construction cost for improvements on each corridor is also included. Details of each construction cost estimate are attached to this report.

### **Addition of RTA Bus Pads, Each**

Estimated Construction Cost as stand-alone projects - \$50,000.

### **Notes**

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.

### **SPINNING (BURKHARDT TO AIRWAY)**

<b>TASK</b>	<b>ESTIMATED COST</b>
<b>General Road Condition Improvement</b> This includes a general rehab including mill and fill, and estimated quantity of full depth pavement repair, some sidewalk replacement and total replacement of curb and some storm sewer inlets.	Construction Cost- \$1,000,000
<b>Bayside Traffic Signal</b> This includes installation of a new mast arm signal at the Bayside/Spinning intersection.	Construction Cost- \$340,000
<b>Street Lighting</b> This includes continuous ODOT type light poles, underground wiring and new circuits.	Construction Cost- \$850,000
<b>Spinning and Airway Intersection</b> This includes restriping to increase the left turn storage and installing a new signal.	Construction Cost- \$275,000



**CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT  
PHASE I, GROUPING 2  
SEPTEMBER 2014**

<b>TOTAL SPINNING (BURKHARDT TO AIRWAY) IMPROVEMENTS</b>	<b>\$2,465,000</b>
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**SPINNING BURKHARDT TO AIRWAY - REHAB  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	WALK REMOVED	2500 SF	\$ 1.50	\$ 3,750.00
202	CURB REMOVED	9600 FT	\$ 3.00	\$ 28,800.00
202	CATCH BASIN OR INLET REMOVED	14 EA	\$ 350.00	\$ 4,900.00
252	FULL DEPTH PAVEMENT REPAIR	2200 SY	\$ 50.00	\$ 110,000.00
254	PAVEMENT PLANING, ASPHALT CONCRETE	22000 SY	\$ 2.50	\$ 55,000.00
407	TACK COAT	3300 GAL	\$ 3.00	\$ 9,900.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 2"	1250 CY	\$ 175.00	\$ 218,750.00
603	15" CONDUIT, TYPE B	200 FT	\$ 50.00	\$ 10,000.00
604	CATCH BASIN, NO. 3	14 EA	\$ 2,500.00	\$ 35,000.00
608	4" CONCRETE WALK	2500 SF	\$ 5.00	\$ 12,500.00
608	CURB RAMPS	4 EA	\$ 450.00	\$ 1,800.00
609	CURB, TYPE 6	9600 FT	\$ 15.00	\$ 144,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 7,500.00	\$ 7,500.00
832	SWPPP	1 LS	\$ 3,500.00	\$ 3,500.00
832	EROSION CONTROL	1500 EA	\$ 1.00	\$ 1,500.00
Subtotal				\$ 652,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 20,000.00	\$ 20,000.00
619	FIELD OFFICE, TYPE B	3 MN	\$ 1,600.00	\$ 4,800.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 5,000.00	\$ 5,000.00
624	MOBILIZATION	1 LS	\$ 20,000.00	\$ 20,000.00
Subtotal				\$ 702,000.00
Design Risk (35%)				\$ 246,000.00
Subtotal				\$ 948,000.00
ENGINEERING (10%)				\$ 95,000.00
Total				\$ 1,043,000.00





**SPINNING BURKHARDT TO AIRWAY BAYSIDE SIGNAL  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
632	TRAFFIC SIGNAL INSTALLATION	1 EA	\$ 200,000.00	\$ 200,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 2,500.00	\$ 2,500.00
832	SWPPP	1 LS	\$ 1,500.00	\$ 1,500.00
832	EROSION CONTROL	800 EA	\$ 1.00	\$ 800.00
Subtotal				\$ 210,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 7,500.00	\$ 7,500.00
619	FIELD OFFICE, TYPE B	3 MN	\$ 1,600.00	\$ 4,800.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 2,500.00	\$ 2,500.00
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ 4,000.00
Subtotal				\$ 229,000.00
Design Risk (35%)				\$ 81,000.00
Subtotal				\$ 310,000.00
ENGINEERING (10%)				\$ 31,000.00
Total				\$ 341,000.00

NEW MAST ARM SIGNAL



**SPINNING BURKHARDT TO AIRWA LIGHTING  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER, 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	<del>\$ 5,000.00</del>
625	LIGHT POLES	<del>38</del> 80 EA	\$ 4,000.00	<del>\$ 320,000.00</del>
625	WIRING	6000 FT	\$ 25.00	<del>\$ 150,000.00</del>
625	SINGLE CIRCUIT	1 3 EA	\$ 20,000.00	<del>\$ 60,000.00</del>
Subtotal				<del>\$ 535,000.00</del>
614	MAINTAINING TRAFFIC	1 LS	\$ 10,000.00	\$ 10,000.00
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ 9,600.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 4,500.00	<del>\$ 4,500.00</del>
624	MOBILIZATION	1 LS	\$ 10,000.00	\$ 10,000.00
Subtotal				<del>\$ 570,000.00</del>
Design Risk (35%)				<del>\$ 200,000.00</del>
Subtotal				<del>\$ 770,000.00</del>
ENGINEERING (10)				<del>\$ 77,000.00</del>
Total				<del>\$ 847,000.00</del>

152,000

20,000

172,000

201,000

70,000

272,000

27,300

279,600



**SPINNING BURKHARDT TO AIRWAY SPINNING INTERSECTION  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
632	TRAFFIC SIGNAL INSTALLATION	1 EA	\$ 150,000.00	\$ 150,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 5,000.00	\$ 5,000.00
832	SWPPP	1 LS	\$ 1,500.00	\$ 1,500.00
832	EROSION CONTROL	800 EA	\$ 1.00	\$ 800.00
Subtotal				\$ 163,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 7,500.00	\$ 7,500.00
619	FIELD OFFICE, TYPE B	3 MN	\$ 1,600.00	\$ 4,800.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 2,500.00	\$ 2,500.00
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ 4,000.00
Subtotal				\$ 182,000.00
Design Risk (35%)				\$ 64,000.00
Subtotal				\$ 246,000.00
ENGINEERING (10%)				\$ 25,000.00
Total				\$ 271,000.00

160,000

152,500

53,000

205,800

20,000

226,500

LENGTHEN NB LT LANE AND ADD NEW MAST ARM SIGNAL





## AIRWAY ROAD (WOODMAN/EAST)

- ① GENERAL ROAD CONDITION IMPROVEMENTS
  - ↳ NO CHANGES RECOMMENDED TO THIS ELEMENT'S ORIGINAL SCOPE.
- ② STREET LIGHTING
  - ↳ RECOMMEND THIS ELEMENT BE INCLUDED WITH ELEMENT #1
- ③ AIRWAY/SPINNING INTERSECTION
  - ↳ ROUTE PAINT PACKAGE TO SPINNING PROTECT
  - ↳ TRAFFIC SIGNAL/REMAINING FITS ITS STAND-ALONE
- ④ RESTRIPING FOR TURN LANE
  - ↳ RECOMMEND THIS ELEMENT BE INCLUDED WITH ELEMENT #1
- ⑤ GRASS MEDIAN PROTECT
  - ↳ RECOMMEND THIS ELEMENT BE INCLUDED WITH ELEMENT #1
- ⑥ AIRWAY/WOODMAN INTERSECTION IMPROVEMENT
  - ↳ STAND-ALONE PROTECT; NO CHANGES
- ⑦ ASL/AIRWAY SIGNAL
  - ↳ STAND-ALONE PROTECT; NO CHANGES



## CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT PHASE I, GROUPING 2 SEPTEMBER 2014

Preliminary project cost estimates have been developed for the six corridors included in Phase I, Grouping 2. These corridors include Airway Rd. (Woodman East to Corp), Spinning Rd. (Burkhardt to Airway), Spinning Rd. (Linden to Burkhardt), Union Schoolhouse, Valley St. (Harshman East to Corp), and Valley St. (Harshman West to Corp). A description of the scope of the improvements planned as well as estimate subtotals for the various improvements recommended by city staff and council following the initial work session are included below. A total construction cost for improvements on each corridor is also included. Details of each construction cost estimate are attached to this report.

### **Addition of RTA Bus Pads, Each**

Estimated Construction Cost as stand-alone projects - \$50,000.

### **Notes**

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.

### **AIRWAY (WOODMAN EAST TO CORP)**

<b>TASK</b>	<b>ESTIMATED COST</b>
<b>General Road Condition Improvement</b> This includes a general rehab including mill and overlay using fabric matting, and estimated quantity of full depth pavement repair; some sidewalk replacement and some replacement of curb and storm sewer inlets.	Construction Cost- \$1,500,000
<b>Street Lighting at Woodman</b> This includes updating and adding ODOT type light poles, new underground wiring and new circuits in the vicinity of Woodman.	Construction Cost- \$200,000
<b>Airway and Spinning Intersection</b> This includes restriping to increase the left turn storage and installing a new signal. No new right of way is anticipated.	Construction Cost- \$275,000
<b>Striping Review</b> This includes a typical road diet and includes the cost to restripe the roadway for one through lane in each direction, a center left turn lane and bike lanes in each direction. Cross walks would be added to facilitate access to bus stops. Note	Construction Cost- \$125,000



**CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT  
PHASE I, GROUPING 2  
SEPTEMBER 2014**

this cost would be greatly reduced if included in the rehab.	
<b>Grass Medians, Cobb to Corp Line</b> This includes providing curbed medians in this section where they can be provided without widening the pavement. The medians would be landscaped with top soil and grass.	Construction Cost- \$350,000
<b>Airway Woodman Intersection</b> This intersection would be improved as outlined in the safety study completed in 2013. No new right of way is needed.	Construction Cost- \$500,000
<b>Signal at ASC drive</b> This includes a new mast arm signal at the primary shopping center driveway.	Construction Cost- \$350,000
<b>TOTAL AIRWAY (WOODMAN EAST TO CORP) IMPROVEMENTS</b>	<b>\$3,300,000</b>





**AIRWAY WOODMAN EAST TO CORP  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	CATCH BASIN OR INLET REMOVED	10 EA	\$ 350.00	\$ 3,500.00
SPECIAL	FABRIC	45000 SY	\$ 4.00	\$ 180,000.00
252	FULL DEPTH PAVEMENT REPAIR	2000 SY	\$ 50.00	\$ 100,000.00
254	PAVEMENT PLANING, ASPHALT CONCRETE	45000 SY	\$ 2.50	\$ 112,500.00
407	TACK COAT	12000 GAL	\$ 3.00	\$ 36,000.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 2"	2500 CY	\$ 175.00	\$ 437,500.00
603	15" CONDUIT, TYPE B	150 FT	\$ 50.00	\$ 7,500.00
604	CATCH BASIN, NO. 3	10 EA	\$ 2,500.00	\$ 25,000.00
608	4" CONCRETE WALK	2500 SF	\$ 5.00	\$ 12,500.00
644	PAVEMENT MARKINGS	1 LS	\$ 10,000.00	\$ 10,000.00
832	SWPPP	1 LS	\$ 3,500.00	\$ 3,500.00
832	EROSION CONTROL	1500 EA	\$ 1.00	\$ 1,500.00
Subtotal				\$ 935,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 20,000.00	\$ 20,000.00
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ 9,600.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 4,500.00	\$ 4,500.00
624	MOBILIZATION	1 LS	\$ 20,000.00	\$ 20,000.00
Subtotal				\$ 990,000.00
Design Risk (35%)				\$ 347,000.00
Subtotal				\$ 1,337,000.00
ENGINEERING (10%)				\$ 134,000.00
Total				\$ 1,471,000.00



**AIRWAY WOODMAN EAST LIGHTING AT WOODMAN  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER, 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	<del>\$ 5,000.00</del>
625	LIGHT POLES	12 EA	\$ 4,500.00	\$ 54,000.00
625	WIRING	1000 FT	\$ 30.00	\$ 30,000.00
625	SINGLE CIRCUIT	2 EA	\$ 20,000.00	\$ 40,000.00
Subtotal				\$ 129,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 5,000.00	<del>\$ 5,000.00</del>
619	FIELD OFFICE, TYPE B	3 MN	\$ 1,600.00	<del>\$ 4,800.00</del>
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 2,500.00	<del>\$ 2,500.00</del>
624	MOBILIZATION	1 LS	\$ 4,000.00	<del>\$ 4,000.00</del>
Subtotal				\$ 146,000.00
Design Risk (35%)				\$ 52,000.00
Subtotal				\$ 198,000.00
ENGINEERING (10)				\$ 20,000.00
Total				\$ 218,000.00

129,000

43,400

167,400

16,740

184,140



**AIRWAY WOODMAND EAST TO CORP SPINNING INTERSECTION  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
632	TRAFFIC SIGNAL INSTALLATION	1 EA	\$ 150,000.00	\$ 150,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 5,000.00	\$ 5,000.00
832	SWPPP	1 LS	\$ 1,500.00	\$ 1,500.00
832	EROSION CONTROL	800 EA	\$ 1.00	\$ 800.00
Subtotal				\$ 163,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 7,500.00	\$ 7,500.00
619	FIELD OFFICE, TYPE B	3 MN	\$ 1,600.00	\$ 4,800.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 2,500.00	\$ 2,500.00
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ 4,000.00
Subtotal				\$ 182,000.00
Design Risk (35%)				\$ 64,000.00
Subtotal				\$ 246,000.00
ENGINEERING (10%)				\$ 25,000.00
Total				\$ 271,000.00

**LENGTHEN NB LT LANE AND ADD NEW MAST ARM SIGNAL**





**AIRWAY WOODMAN EAST RESTRIPIING  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - AUGUST, 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
643	REMOVAL OF PAVEMENT MARKING	14000 FT	\$ 3.00	\$ <del>42,000.00</del>
644	PAVEMENT MARKINGS	1.34 MI	\$ 5,000.00	\$ <del>6,700.00</del>
604	CATCH BASIN GRATES REPLACED	28 EA	\$ 500.00	\$ 14,000.00
Subtotal				\$ <del>63,000.00</del>
614	MAINTAINING TRAFFIC	1 LS	\$ 10,000.00	\$ <del>10,000.00</del>
619	FIELD OFFICE, TYPE B	2 MN	\$ 1,600.00	\$ <del>3,200.00</del>
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 2,500.00	\$ <del>2,500.00</del>
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ <del>4,000.00</del>
Subtotal				\$ <del>83,000.00</del>
Design Risk (35%)				\$ <del>30,000.00</del>
Subtotal				\$ <del>113,000.00</del>
ENGINEERING (10%)				\$ 42,000.00
Total				\$ <del>125,000.00</del>

5,000

19,000

19,000

6,050

25,650

2,565

30,780



**AIRWAY WOODMAND EAST TO CORP GRASS MEDIAN ISLANDS  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	<del>\$ 5,000.00</del>
202	PAVEMENT REMOVED	2500 SY	\$ 10.00	<del>\$ 25,000.00</del>
203	EMBANKMENT	800 CY	\$ 12.00	\$ 9,600.00
252	PAVEMENT SAWING	4500 LF	\$ 3.00	<del>\$ 13,500.00</del>
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22	100 CY	\$ 250.00	<del>\$ 25,000.00</del>
609	CURB, TYPE 6	4500 FT	\$ 20.00	\$ 90,000.00
659	TOPSOIL	500 CY	\$ 25.00	\$ 12,500.00
659	SEEDING AND MULCHING	2500 SY	\$ 3.00	\$ 7,500.00
832	SWPPP	1 LS	\$ 3,500.00	<del>\$ 3,500.00</del>
832	EROSION CONTROL	2500 EA	\$ 1.00	\$ 2,500.00
Subtotal				<del>\$ 196,000.00</del>
614	MAINTAINING TRAFFIC	1 LS	\$ 20,000.00	<del>\$ 20,000.00</del>
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	<del>\$ 9,600.00</del>
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 7,500.00	<del>\$ 7,500.00</del>
624	MOBILIZATION	1 LS	\$ 10,000.00	<del>\$ 10,000.00</del>
Subtotal				<del>\$ 243,000.00</del>
Design Risk (35%)				\$ 86,000.00
Subtotal				<del>\$ 329,000.00</del>
ENGINEERING (10%)				\$ 98,000.00
Total				<del>\$ 362,000.00</del>

122,100

122,100

42,738

164,838

16,488

181,318







**AIRWAY WOODMAN EAST TO CORP SIGNAL AT ASC  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
632	TRAFFIC SIGNAL INSTALLATION	1 EA	\$ 200,000.00	\$ 200,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 2,500.00	\$ 2,500.00
832	SWPPP	1 LS	\$ 1,500.00	\$ 1,500.00
832	EROSION CONTROL	800 EA	\$ 1.00	\$ 800.00
Subtotal				\$ 210,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 7,500.00	\$ 7,500.00
619	FIELD OFFICE, TYPE B	3 MN	\$ 1,600.00	\$ 4,800.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 2,500.00	\$ 2,500.00
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ 4,000.00
Subtotal				\$ 229,000.00
Design Risk (35%)				\$ 81,000.00
Subtotal				\$ 310,000.00
ENGINEERING (10%)				\$ 31,000.00
Total				\$ 341,000.00

NEW MAST ARM SIGNAL



**Furniture  
Solutions**  
FOR THE WORKPLACE

VALLEY

HARSHMAN ROAD

- ① CONTRACTOR ROAD CONDITIONS  
↳ NO CHANGES IN SCOPE
- ② ADDITIONAL SIGNAL + STOPPING  
↳ ADJUST SCOPE TO REMOVE LIGHT AWAY  
INCLUDE WITH ITEM #1
- ③ SIDEWALK TO COUNTRY HOUSE  
↳ NO CHANGES IN SCOPE  
INCLUDE W/ ITEM #1
- ④ SIDEWALK TO BUTTAUTS  
↳ NO CHANGE IN SCOPE  
INCLUDE W/ ITEM #1
- ⑤ VARIABLE RIGHT-OF-WAY  
↳ NOT WORTH PURSUING



## CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT PHASE I, GROUPING 2 SEPTEMBER 2014

Preliminary project cost estimates have been developed for the six corridors included in Phase I, Grouping 2. These corridors include Airway Rd. (Woodman East to Corp), Spinning Rd.(Burkhardt to Airway), Spinning Rd.(Linden to Burkhardt), Union Schoolhouse, Valley St. (Harshman East to Corp), and Valley St. (Harshman West to Corp). A description of the scope of the improvements planned as well as estimate subtotals for the various improvements recommended by city staff and council following the initial work session are included below. A total construction cost for improvements on each corridor is also included. Details of each construction cost estimate are attached to this report.

### **Addition of RTA Bus Pads, Each**

Estimated Construction Cost as stand-alone projects - \$50,000.

### **Notes**

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.

### **VALLEY (HARSHMAN EAST TO CORP)**

<b>TASK</b>	<b>ESTIMATED COST</b>
<b>General</b> This includes a general rehab including mill and fill, and estimated quantity of full depth pavement repair, damaged curb replacement and the replacement of damaged catch basins.	Construction Cost- \$700,000
<b>Traffic signal at Stebbins access and widening Valley for added left turn stacking</b> This includes the addition of a new signal at the high school drive onto Valley, and widening Valley for a distance of about 500 feet to the north to provide left turn lanes and additional storage for left turns at Harshman.	Construction Cost- \$375,000
<b>Sidewalk on north side to Country Haven</b> This includes the addition of about 2,800 feet of new sidewalk. New curb is also included adjacent to the new walk.	Construction Cost- \$675,000





**CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT  
PHASE I, GROUPING 2  
SEPTEMBER 2014**

<b>Sidewalk on south side to Butane Drive</b> This includes the addition of about 600 feet of new sidewalk.	Construction Cost- \$110,000
<b>Improvements at McMahan's Mobile Home Park</b> This includes adding curb and sidewalk along the east right of way line, a distance of about 600 feet, adjacent to the property line. Also includes drainage improvements to accommodate the new walk.	Construction Cost- \$110,000
<b>Variable right of way</b> This cost is estimated assuming a value of \$25,000 per acre and a taking of 0.023 acres from each of 34 parcels. It is assumed that each acquisition is an individual transaction and include the associated fees.	ROW Cost- \$650,000
<b>TOTAL VALLEY (HARSHMAN EAST TO CORP) IMPROVEMENTS</b>	<b>\$2,620,000</b>



**VALLEY EAST REHAB  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
252	FULL DEPTH PAVEMENT REPAIR	1200 SY	\$ 50.00	\$ 60,000.00
254	PAVEMENT PLANING, ASPHALT CONCRETE	25000 SY	\$ 2.50	\$ 62,500.00
407	TACK COAT	4000 GAL	\$ 3.00	\$ 12,000.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 2"	1500 CY	\$ 175.00	\$ 262,500.00
603	15" CONDUIT, TYPE B	200 FT	\$ 50.00	\$ 10,000.00
604	CATCH BASIN, NO. 3	4 EA	\$ 2,500.00	\$ 10,000.00
604	MANHOLE, NO. 3	2 EA	\$ 3,000.00	\$ 6,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 8,000.00	\$ 8,000.00
832	SWPPP	1 LS	\$ 2,500.00	\$ 2,500.00
832	EROSION CONTROL	1500 EA	\$ 1.00	\$ 1,500.00
Subtotal				\$ 440,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 5,000.00	\$ 5,000.00
619	FIELD OFFICE, TYPE B	3 MN	\$ 1,600.00	\$ 4,800.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 1,500.00	\$ 1,500.00
624	MOBILIZATION	1 LS	\$ 10,000.00	\$ 10,000.00
Subtotal				\$ 462,000.00
Design Risk (35%)				\$ 162,000.00
Subtotal				\$ 624,000.00
ENGINEERING (10%)				\$ 63,000.00
Total				\$ 687,000.00



**VALLEY EAST STEBBINS SIGNAL AND HARSHMAN TURN LANE  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	CONCRETE MEDIAN REMOVED	25 SY	\$ 15.00	\$ 375.00
202	PAVEMENT REMOVED, ASPHALT	100 SY	\$ 8.00	\$ 800.00
203	EXCAVATION	300 CY	\$ 25.00	\$ 7,500.00
203	EMBANKMENT	100 CY	\$ 20.00	\$ 2,000.00
204	SUBGRADE COMPACTION	450 SY	\$ 4.00	\$ 1,800.00
206	CEMENT STABILIZED SUBGRADE, 16" DEEP	450 SY	\$ 5.50	\$ 2,475.00
301	ASPHALT CONCRETE BASE, PG64-22, 6"	80 CY	\$ 150.00	\$ 12,000.00
304	AGGREGATE BASE, 10"	135 CY	\$ 60.00	\$ 8,100.00
407	TACK COAT	75 GAL	\$ 5.00	\$ 375.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 3"	50 CY	\$ 200.00	\$ 10,000.00
603	15" CONDUIT, TYPE B	100 FT	\$ 50.00	\$ 5,000.00
604	CATCH BASIN, NO. 3	2 EA	\$ 2,500.00	\$ 5,000.00
630	SIGNAGE	1 LS	\$ 3,000.00	\$ 3,000.00
632	TRAFFIC SIGNAL	1 LS	\$ 150,000.00	\$ 150,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 5,000.00	\$ 5,000.00
659	TOPSOIL	50 CY	\$ 25.00	\$ 1,250.00
659	SEEDING AND MULCHING	500 SY	\$ 2.00	\$ 1,000.00
832	SWPPP	1 LS	\$ 4,000.00	\$ 4,000.00
832	EROSION CONTROL	2000 EA	\$ 1.00	\$ 2,000.00
Subtotal				\$ 227,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 7,500.00	\$ 7,500.00
619	FIELD OFFICE, TYPE B	4 MN	\$ 1,600.00	\$ 6,400.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 3,500.00	\$ 3,500.00
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ 4,000.00
Subtotal				\$ 248,000.00
Design Risk (35%)				\$ 86,800.00
Subtotal				\$ 337,000.00
ENGINEERING (10%)				\$ 34,000.00
Total				\$ 371,000.00

58,800

58,800

20,600

79,400

8,000

87,400

WIDEN 500' ON NORTH SIDE





**VALLEY EAST SIDEWALK TO COUNTRY HAVEN  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ <del>5,000.00</del>
202	CATCH BASIN OR INLET REMOVED	2 EA	\$ 350.00	\$ 700.00
203	EXCAVATION	2000 CY	\$ 15.00	\$ 30,000.00
203	EMBANKMENT	1000 CY	\$ 12.00	\$ 12,000.00
204	SUBGRADE COMPACTION	3000 SY	\$ 2.00	\$ 6,000.00
301	ASPHALT CONCRETE BASE, PG64-22, 6"	500 CY	\$ 125.00	\$ 62,500.00
304	AGGREGATE BASE, 10"	800 CY	\$ 40.00	\$ 32,000.00
407	TACK COAT	500 GAL	\$ 3.00	\$ 1,500.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 3"	250 CY	\$ 175.00	\$ 43,750.00
603	15" CONDUIT, TYPE B	400 FT	\$ 50.00	\$ 20,000.00
604	CATCH BASIN, NO. 3	20 EA	\$ 2,500.00	\$ 50,000.00
605	6" BASE PIPE UNDERDRAIN	3000 FT	\$ 8.00	\$ 24,000.00
608	4" CONCRETE WALK	14000 SF	\$ 5.00	\$ 70,000.00
608	CURB RAMPS	7 EA	\$ 450.00	\$ 3,150.00
609	CURB	3000 FT	\$ 15.00	\$ 45,000.00
659	TOPSOIL	250 CY	\$ 25.00	\$ <del>6,250.00</del>
659	SEEDING AND MULCHING	1500 SY	\$ 2.00	\$ <del>3,000.00</del>
832	SWPPP	1 LS	\$ 4,500.00	\$ <del>4,500.00</del>
832	EROSION CONTROL	2500 EA	\$ 1.00	\$ <del>2,500.00</del>
Subtotal				\$ 422,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 7,500.00	\$ 7,500.00
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ 9,600.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 4,500.00	\$ 4,500.00
624	MOBILIZATION	1 LS	\$ 10,000.00	\$ 10,000.00
Subtotal				\$ 454,000.00
Design Risk (35%)				\$ 158,900.00
Subtotal				\$ 612,900.00
ENGINEERING (10%)				\$ 62,000.00
Total				\$ 675,000.00

400,800

400,800

140,300  
541,100

54,200  
595,300

NEW SIDEWALK, CURB AND DRAINAGE



VALLEY EAST SIDEWALK AT MCMAHAN'S  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014

600 FEET NEW SIDEWALK



## PRELIMINARY RIGHT OF WAY ESTIMATE - SETEMBER 2014

Administrative Costs  
 $[(\text{sub-total}) \times 0.15] \times 1.20$   
 Jury trial Costs  
 $[(\text{sub-total}) \times 0.10] \times 1.50$   
 Incidental transfer Costs  
 $[(\text{sub-total}) \times 0.90] \times 0.025$   
 All areas are in acres.

\* Labor Cost Includes the following:  
(per ODOT Cost Estimating Procedures  
For Acquiring Rights of Way)

- 1 Existing RAW estimated using GIS parcel lines, where available
- 2 Where RAW cannot be easily estimated from GIS parcels, existing
- 3 Proposed permanent RAW is assumed to be 1' behind proposed
- 4 Railroad property estimated at 10 times the per acre land value

TOTAL COST		Project Management	
Titles	Detailed Appraisal	Detailed Appraisal Review	Project Management
\$400	\$4,500	\$2,050	\$550
		\$1,700	\$400

VALLLEY  
(HARSHMAN WEST).

① GENERAL ROAD CONDITION IMPROVEMENTS.

↳ NO CHANGES IN SCOPE

② STREET LIGHTING.

↳ MODIFY SCOPE TO ADJUST LIGHT DENSITY ON WEST END. INCLUDE WITH ITEM # 1

↳ MODIFY SCOPE TO LIGHT ONLY INTERSECTIONS OR APPROXIMATELY 18 LIGHTS.

③ SIDEWALK ON N. SIDE FROM BROADWAY TO HYATTIMA.

↳ MODIFY SCOPE TO P. VALLEY TO HYATTIMA.

↳ INCLUDE WITH ITEM # 1

④ ROW UNIFORMITY BETWEEN ROANOKA + P. VALLEY.

↳ RECOMMEND NOT TO PROCEED.

⑤ SIDEWALK ON S. SIDE TO HARSHMAN.

↳ MODIFY SCOPE TO P. VALLEY TO HARSHMAN. INCLUDE w/ ITEM # 1

⑥ SIDEWALK AT McMANOW'S.

↳ INCLUDE w/ ITEM # 1.

⑦ TRAFFIC SIGNAL AT VALLEY / P. VALLEY.

↳ BRING COORDINATOR w/ 2015/2016 CDBG PROJECT. (OUT)



**Furniture  
Solutions**  
FOR THE WORKPLACE

VALLEY  
(HANSBROW WEST)

- (2) P. VALLEY GROSS WALK  
↳ BRING COORDINATED W/ 2015/2016 COTR PROJECT  
↳ OUT





## CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT PHASE I, GROUPING 2 SEPTEMBER 2014

Preliminary project cost estimates have been developed for the six corridors included in Phase I, Grouping 2. These corridors include Airway Rd. (Woodman East to Corp), Spinning Rd. (Burkhardt to Airway), Spinning Rd. (Linden to Burkhardt), Union Schoolhouse, Valley St. (Harshman East to Corp), and Valley St. (Harshman West to Corp). A description of the scope of the improvements planned as well as estimate subtotals for the various improvements recommended by city staff and council following the initial work session are included below. A total construction cost for improvements on each corridor is also included. Details of each construction cost estimate are attached to this report.

### **Addition of RTA Bus Pads, Each**

Estimated Construction Cost as stand-alone projects - \$50,000.

### **Notes**

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.

### **VALLEY, HARSHMAN WEST TO CORP**

TASK	ESTIMATED COST
<b>General</b> This includes a general rehab including mill and fill, and estimated quantity of full depth pavement repair, damaged sidewalk replacement and the replacement and addition of new curb and storm sewer and catch basins.	Construction Cost- \$1,425,000
<b>Street Lighting</b> This includes continuous ODOT type light poles, underground wiring and new circuits.	Construction Cost- \$850,000
<b>Sidewalk north side between Broadmead and Hypathia</b> This includes the addition of about 2,000 feet of new sidewalk and miscellaneous drainage improvements.	Construction Cost- \$280,000
<b>Right of Way between Rohrer and Pleasant Valley</b> Make the right of way a uniform width by buying a 15 foot wide strip from 4 owners. Estimate using \$30,000 per parcel.	ROW Cost- \$120,000



**CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT**  
**PHASE I, GROUPING 2**  
**SEPTEMBER 2014**

<b>Sidewalk south side between Broadmead and Harshman</b> This includes the addition of about 3,200 feet of new sidewalk and miscellaneous drainage improvements.	Construction Cost- \$460,000
<b>Improvements at McMahan's Mobile Home Park</b> This includes adding curb and sidewalk along the east right of way line, a distance of about 600 feet, adjacent to the property line. Also includes drainage improvements to accommodate the new walk.	Construction Costs- \$175,000
<b>Traffic signal and intersection improvements at Pleasant Valley</b> This includes upgrading the signal and lowering the profile of Valley Street through the intersection. Also included is overlaying the approach on the north leg of Pleasant Valley.	Construction Costs- \$800,000
<b>Crosswalk at Prince Albert</b> This includes providing pavement markings for a crosswalk at the intersection.	Construction Costs- \$50,000
<b>TOTAL VALLEY ( HARSHMAN WEST TO CORP) IMPROVEMENTS</b>	<b>\$4,160,000</b>



**VALLEY HARSHAMAN WEST REHAB  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	WALK REMOVED	750 SF	\$ 1.50	\$ 1,125.00
202	CURB REMOVED	200 FT	\$ 3.00	\$ 600.00
202	CATCH BASIN OR INLET REMOVED	6 EA	\$ 350.00	\$ 2,100.00
252	FULL DEPTH PAVEMENT REPAIR	2200 SY	\$ 50.00	\$ 110,000.00
254	PAVEMENT PLANING, ASPHALT CONCRETE	22000 SY	\$ 2.50	\$ 55,000.00
407	TACK COAT	3300 GAL	\$ 3.00	\$ 9,900.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 2"	1250 CY	\$ 175.00	\$ 218,750.00
603	15" CONDUIT, TYPE B	4000 FT	\$ 50.00	\$ 200,000.00
603	36" CONDUIT, TYPE B	1000 FT	\$ 125.00	\$ 125,000.00
604	CATCH BASIN, NO. 3	24 EA	\$ 2,500.00	\$ 60,000.00
608	4" CONCRETE WALK	2500 SF	\$ 3.00	\$ 7,500.00
608	CURB RAMPS	8 EA	\$ 450.00	\$ 3,600.00
609	CURB	6500 FT	\$ 15.00	\$ 97,500.00
644	PAVEMENT MARKINGS	1 LS	\$ 7,500.00	\$ 7,500.00
832	SWPPP	1 LS	\$ 3,500.00	\$ 3,500.00
832	EROSION CONTROL	1500 EA	\$ 1.00	\$ 1,500.00
Subtotal				\$ 909,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 20,000.00	\$ 20,000.00
619	FIELD OFFICE, TYPE B	3 MN	\$ 1,600.00	\$ 4,800.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 7,500.00	\$ 7,500.00
624	MOBILIZATION	1 LS	\$ 20,000.00	\$ 20,000.00
Subtotal				\$ 962,000.00
Design Risk (35%)				\$ 337,000.00
Subtotal				\$ 1,299,000.00
ENGINEERING (10%)				\$ 130,000.00
Total				\$ 1,429,000.00





**VALLEY HARSHMAN WEST LIGHTING  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER, 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
625	LIGHT POLES	<del>18</del> <del>70 EA</del>	\$ 4,500.00	<del>\$ 315,000.00</del> 91,000
625	WIRING	5300 FT	\$ 30.00	\$ 159,000.00
625	SINGLE CIRCUIT	<del>2</del> <del>3 EA</del>	\$ 20,000.00	<del>\$ 60,000.00</del> 40,000
Subtotal				\$ -630,000.00 285,000
614	MAINTAINING TRAFFIC	1 LS	\$ 7,500.00	\$ -7,500.00
619	FIELD OFFICE, TYPE B	4 MN	\$ 1,800.00	\$ -6,400.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 3,500.00	\$ 3,500.00
624	MOBILIZATION	1 LS	\$ 20,000.00	\$ 20,000.00
Subtotal				\$ -577,000.00 200,500
Design Risk (35%)				\$ 202,000.00 101,000
Subtotal				\$ -779,000.00 389,500
ENGINEERING (10)				\$ 78,000.00 39,500
Total				\$ 857,000.00 428,450



VALLEY HARSHMAN WEST SW NORTH SIDE  
BROADMEAD TO HYPATHIA  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ <del>5,000.00</del>
202	WALK REMOVED	100 SF	\$ 3.00	\$ 300.00
203	EMBANKMENT	500 CY	\$ 12.00	\$ 6,000.00
603	15" CONDUIT, TYPE B	250 FT	\$ 50.00	\$ 12,500.00
604	CATCH BASIN	12 EA	\$ 2,500.00	\$ 30,000.00
604	MANHOLE, NO. 3	6 EA	\$ 3,000.00	\$ 18,000.00
608	4" CONCRETE WALK	<del>11000 SF</del> 5500	\$ 7.00	\$ <del>77,000.00</del>
608	CURB RAMPS	8 EA	\$ 450.00	\$ 3,600.00
644	PAVEMENT MARKINGS	1 LS	\$ 2,500.00	\$ <del>2,500.00</del>
659	TOPSOIL	250 CY	\$ 25.00	\$ 6,250.00
659	SEEDING AND MULCHING	2000 SY	\$ 2.00	\$ 4,000.00
832	SWPPP	1 LS	\$ 4,500.00	\$ <del>4,500.00</del>
832	EROSION CONTROL	2000 EA	\$ 1.00	\$ <del>2,000.00</del>
Subtotal				\$ <del>172,000.00</del>
614	MAINTAINING TRAFFIC	1 LS	\$ 3,500.00	\$ <del>3,500.00</del>
619	FIELD OFFICE, TYPE B	3 MN	\$ 1,600.00	\$ <del>4,800.00</del>
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 3,500.00	\$ 3,500.00
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ <del>4,000.00</del>
Subtotal				\$ <del>188,000.00</del>
Design Risk (35%)				\$ <del>66,000.00</del>
Subtotal				\$ <del>254,000.00</del>
ENGINEERING (10%)				\$ <del>26,000.00</del>
Total				\$ <del>280,000.00</del>

38,500

115,000

118,700

41,600

110,300

116,000

176,400



**VALLEY HARSHMAN WEST SW SOUTH SIDE  
BROADMEAD TO HARSHMAN  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ <del>5,000.00</del>
202	WALK REMOVED	100 SF	\$ 3.00	\$ 300.00
203	EMBANKMENT	1000 CY	\$ 12.00	\$ 12,000.00
603	15" CONDUIT, TYPE B	500 FT	\$ 50.00	\$ 25,000.00
604	CATCH BASIN	20 EA	\$ 2,500.00	\$ 50,000.00
604	MANHOLE, NO. 3	10 EA	\$ 3,000.00	\$ 30,000.00
608	4" CONCRETE WALK	20000 SF	\$ 7.00	\$ <del>140,000.00</del>
608	CURB RAMPS	8 EA	\$ 450.00	\$ 3,600.00
644	PAVEMENT MARKINGS	1 LS	\$ 2,500.00	\$ <del>2,500.00</del>
659	TOPSOIL	450 CY	\$ 25.00	\$ 11,250.00
659	SEEDING AND MULCHING	3500 SY	\$ 2.00	\$ 7,000.00
832	SWPPP	1 LS	\$ 4,500.00	\$ <del>4,500.00</del>
832	EROSION CONTROL	2000 EA	\$ 1.00	\$ <del>2,000.00</del>
Subtotal				\$ <del>294,000.00</del>
614	MAINTAINING TRAFFIC	1 LS	\$ 3,500.00	\$ <del>3,500.00</del>
619	FIELD OFFICE, TYPE B	5 MN	\$ 1,600.00	\$ <del>8,000.00</del>
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 3,500.00	\$ 3,500.00
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ <del>4,000.00</del>
Subtotal				\$ 313,000.00
Design Risk (35%)				\$ 110,000.00
Subtotal				\$ 423,000.00
ENGINEERING (10%)				\$ 42,300.00
Total				\$ 465,300.00

92,400

231,600

235,100

82,300  
317,400

31,000  
348,200





**VALLEY EAST SIDEWALK AT MCMAHAN'S  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 7,500.00	\$ <del>7,500.00</del>
202	TREES REMOVED	10 EA	\$ 200.00	\$ 2,000.00
203	EXCAVATION	10 CY	\$ 15.00	\$ 150.00
203	EMBANKMENT	15 CY	\$ 12.00	\$ 180.00
603	15" CONDUIT	500 FT	\$ 50.00	\$ 25,000.00
604	MAN HOLE	2 EA	\$ 4,500.00	\$ 9,000.00
604	CATCH BASIN	4 EA	\$ 2,500.00	\$ 10,000.00
608	4" CONCRETE WALK	3000 SF	\$ 15.00	\$ 45,000.00
659	TOPSOIL	20 CY	\$ 25.00	\$ 500.00
659	SEEDING AND MULCHING	250 SY	\$ 2.00	\$ 500.00
832	SWPPP	1 LS	\$ 2,500.00	\$ <del>2,500.00</del>
832	EROSION CONTROL	1500 EA	\$ 1.00	\$ 1,500.00
Subtotal				\$ <del>104,000.00</del>
614	MAINTAINING TRAFFIC	1 LS	\$ 3,000.00	\$ <del>3,000.00</del>
619	FIELD OFFICE, TYPE B	3 MN	\$ 1,600.00	\$ <del>4,800.00</del>
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 2,500.00	\$ 2,500.00
624	MOBILIZATION	1 LS	\$ 2,000.00	\$ <del>2,000.00</del>
Subtotal				\$ 147,000.00
Design Risk (35%)				\$ <del>41,000.00</del>
Subtotal				\$ 158,000.00
ENGINEERING (10%)				\$ <del>16,000.00</del>
Total				\$ 474,000.00

92,500  
96,000  
33,300  
128,300  
12,900  
141,200

600 FEET NEW SIDEWALK



NEW MAST ARM SIGNAL  
LOWER PROFILE ON VALLEY  
OVERLAY PLEASANT VALLEY



**VALLEY HARSHMAN WEST PRINCE ALBERT CROSSWALK  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	CURB REMOVED	10 FT	\$ 20.00	\$ 200.00
608	4" CONCRETE WALK	50 SF	\$ 25.00	\$ 1,250.00
608	CURB RAMPS	1 EA	\$ 1,000.00	\$ 1,000.00
641	PAVEMENT MARKINGS REMOVED	1 LS	\$ 5,000.00	\$ 5,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 7,500.00	\$ 7,500.00
832	SWPPP	1 LS	\$ 1,500.00	\$ 1,500.00
832	EROSION CONTROL	800 EA	\$ 1.00	\$ 800.00
Subtotal				\$ 23,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 5,000.00	\$ 5,000.00
619	FIELD OFFICE, TYPE B	1 MN	\$ 1,600.00	\$ 1,600.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 2,500.00	\$ 2,500.00
624	MOBILIZATION	1 LS	\$ 2,000.00	\$ 2,000.00
Subtotal				\$ 35,000.00
Design Risk (35%)				\$ 13,000.00
Subtotal				\$ 48,000.00
ENGINEERING (10%)				\$ 5,000.00
Total				\$ 53,000.00





**Furniture  
Solutions**  
FOR THE WORKPLACE

## UNION SCHOOLHOUSE

- ① CORNERAL ROAD CONDITION IMPROVEMENTS
  - ↳ NO CHANGES TO PROPOSED SCOPE
- ② TRAFFIC SIGNAL AT USH
  - ↳ STAND - BLOWIE PROTECT
  - ↳ POSSIBLE ROUNDABOUT
  - ↳ OFF. ROAD ALL OR MOST EXPENSES TO DATOW PER AGREEMENT LIRLA 95-96
- ③ LAKE TRANSITION AT COURSE
  - ↳ ~~STILL~~ LIMITED WORK NECESSARY, INCLUDE WITH ELEMENT #1
- ④ ROAD AT HYLAND
  - ↳ STATE RECOMMEND NO FURTHER WORK OF THIS ITEM.
- ⑤ ADDRESS VARIABLE RIGHT-OF-WAY
  - ↳ DITD



## CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT PHASE I, GROUPING 2 SEPTEMBER 2014

Preliminary project cost estimates have been developed for the six corridors included in Phase I, Grouping 2. These corridors include Airway Rd. (Woodman East to Corp), Spinning Rd. (Burkhardt to Airway), Spinning Rd. (Linden to Burkhardt), Union Schoolhouse, Valley St. (Harshman East to Corp), and Valley St. (Harshman West to Corp). A description of the scope of the improvements planned as well as estimate subtotals for the various improvements recommended by city staff and council following the initial work session are included below. A total construction cost for improvements on each corridor is also included. Details of each construction cost estimate are attached to this report.

### **Addition of RTA Bus Pads, Each**

Estimated Construction Cost as stand-alone projects - \$50,000.

### **Notes**

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.

### **UNION SCHOOLHOUSE**

<b>TASK</b>	<b>ESTIMATED COST</b>
<b>General</b> This includes a general rehab including mill and fill, and estimated quantity of full depth pavement repair, damaged curb and sidewalk replacement and re-establishing the existing ditch lines.	Construction Cost- \$800,000
<b>Traffic signal at Forest Ridge</b> In lieu of a signal, this estimate includes the cost of constructing a roundabout at this intersection. It is assumed that no new right of way would be needed.	Construction Cost- \$600,000
<b>Lane transition at Coury Lane</b> An immediate construction solution is not in order here. Future development to widen the pavement to a consistent width throughout the area is anticipated.	\$0
<b>Radii at Hyland</b> This includes improving the turning radius at all four corners. Right of way is needed from two properties.	Construction Cost- \$90,000



**UNION SCHOOLHOUSE REHAB  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	CURB REMOVED	200 FT	\$ 3.00	\$ 600.00
202	CATCH BASIN OR INLET REMOVED	4 EA	\$ 350.00	\$ 1,400.00
203	EXCAVATION, DITCH REHAB	500 CY	\$ 20.00	\$ 10,000.00
252	FULL DEPTH PAVEMENT REPAIR	1500 SY	\$ 50.00	\$ 75,000.00
254	PAVEMENT PLANING, ASPHALT CONCRETE	30000 SY	\$ 2.50	\$ 75,000.00
407	TACK COAT	4500 GAL	\$ 3.00	\$ 13,500.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 2"	1800 CY	\$ 175.00	\$ 315,000.00
603	15" CONDUIT, TYPE B	100 FT	\$ 50.00	\$ 5,000.00
604	CATCH BASIN, NO. 3	4 EA	\$ 2,500.00	\$ 10,000.00
609	CURB, TYPE 6	200 FT	\$ 15.00	\$ 3,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 7,500.00	\$ 7,500.00
832	SWPPP	1 LS	\$ 3,500.00	\$ 3,500.00
832	EROSION CONTROL	1500 EA	\$ 1.00	\$ 1,500.00
Subtotal				\$ 526,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 7,500.00	\$ 7,500.00
619	FIELD OFFICE, TYPE B	3 MN	\$ 1,600.00	\$ 4,800.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 1,500.00	\$ 1,500.00
624	MOBILIZATION	1 LS	\$ 10,000.00	\$ 10,000.00
Subtotal				\$ 550,000.00
Design Risk (35%)				\$ 193,000.00
Subtotal				\$ 743,000.00
ENGINEERING (10%)				\$ 75,000.00
Total				\$ 818,000.00





**UNION SCHOOLHOUSE FOREST RIDGE INTERSECTION  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	PAVEMENT REMOVED, ASPHALT	1500 SY	\$ 8.00	\$ 12,000.00
202	WALK REMOVED	2000 SF	\$ 1.50	\$ 3,000.00
202	CURB REMOVED	1000 FT	\$ 3.00	\$ 3,000.00
202	CATCH BASIN OR INLET REMOVED	2 EA	\$ 350.00	\$ 700.00
203	EXCAVATION	2000 CY	\$ 15.00	\$ 30,000.00
203	EMBANKMENT	500 CY	\$ 12.00	\$ 6,000.00
204	SUBGRADE COMPACTION	3000 SY	\$ 2.00	\$ 6,000.00
206	CEMENT STABILIZED SUBGRADE, 16" DEEP	3000 SY	\$ 5.50	\$ 16,500.00
301	ASPHALT CONCRETE BASE, PG64-22, 6"	500 CY	\$ 125.00	\$ 62,500.00
304	AGGREGATE BASE, 10"	800 CY	\$ 40.00	\$ 32,000.00
407	TACK COAT	500 GAL	\$ 3.00	\$ 1,500.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 3"	300 CY	\$ 175.00	\$ 52,500.00
603	15" CONDUIT, TYPE B	500 FT	\$ 50.00	\$ 25,000.00
604	CATCH BASIN, NO. 3	4 EA	\$ 2,500.00	\$ 10,000.00
604	MANHOLE, NO. 3	2 EA	\$ 3,000.00	\$ 6,000.00
605	6" BASE PIPE UNDERDRAIN	800 FT	\$ 8.00	\$ 6,400.00
608	4" CONCRETE WALK	4000 SF	\$ 5.00	\$ 20,000.00
608	CURB RAMPS	8 EA	\$ 450.00	\$ 3,600.00
609	CURB, TYPE 6	2000 FT	\$ 15.00	\$ 30,000.00
630	SIGNAGE, INCLUDING RELOCATION OF MAST ARM	1 LS	\$ 3,500.00	\$ 3,500.00
SPECIAL	LANDSCAPING MOUND	1 LS	\$ 15,000.00	\$ 15,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 5,000.00	\$ 5,000.00
659	TOPSOIL	200 CY	\$ 25.00	\$ 5,000.00
659	SEEDING AND MULCHING	1000 SY	\$ 2.00	\$ 2,000.00
832	SWPPP	1 LS	\$ 5,000.00	\$ 5,000.00
832	EROSION CONTROL	3500 EA	\$ 1.00	\$ 3,500.00
<b>Subtotal</b>				<b>\$ 371,000.00</b>
614	MAINTAINING TRAFFIC	1 LS	\$ 8,000.00	\$ 8,000.00
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ 9,600.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 4,500.00	\$ 4,500.00
624	MOBILIZATION	LS	\$ 10,000.00	\$ -
<b>Subtotal</b>				<b>\$ 394,000.00</b>
Design Risk (35%)				\$ 138,000.00
<b>Subtotal</b>				<b>\$ 532,000.00</b>
ENGINEERING (10%)				\$ 54,000.00
<b>Total</b>				<b>\$ 586,000.00</b>

ASSUME 100' RADIUS



**VALLEY EAST HYLAND RADIUS  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	PAVEMENT REMOVED, ASPHALT	50 SY	\$ 8.00	\$ 400.00
203	EXCAVATION	115 CY	\$ 30.00	\$ 3,450.00
204	SUBGRADE COMPACTION	175 SY	\$ 4.00	\$ 700.00
301	ASPHALT CONCRETE BASE, PG64-22, 6"	30 CY	\$ 175.00	\$ 5,250.00
304	AGGREGATE BASE, 10"	50 CY	\$ 75.00	\$ 3,750.00
407	TACK COAT	40 GAL	\$ 5.00	\$ 200.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 3"	20 CY	\$ 250.00	\$ 5,000.00
603	CULVERT EXTENDED	25 FT	\$ 150.00	\$ 3,750.00
630	SIGNAGE	1 LS	\$ 2,000.00	\$ 2,000.00
659	TOPSOIL	50 CY	\$ 100.00	\$ 5,000.00
659	SEEDING AND MULCHING	150 SY	\$ 5.00	\$ 750.00
832	SWPPP	1 LS	\$ 3,500.00	\$ 3,500.00
832	EROSION CONTROL	2000 EA	\$ 1.00	\$ 2,000.00
Subtotal				\$ 41,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 5,000.00	\$ 5,000.00
619	FIELD OFFICE, TYPE B	3 MN	\$ 1,600.00	\$ 4,800.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 3,500.00	\$ 3,500.00
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ 4,000.00
Subtotal				\$ 59,000.00
Design Risk (35%)				\$ 21,000.00
Subtotal				\$ 80,000.00
ENGINEERING (10%)				\$ 8,000.00
Total				\$ 88,000.00

USE 40' RADIUS ALL FOUR CORNERS

## PRELIMINARY RIGHT OF WAY ESTIMATE - SETEMBER 2014

\$126,913
\$22,844
\$19,037
\$2,856
<b>\$171,650</b>
\$85,025
<b>\$257,475</b>



## MEMORANDUM

**TO:** Riverside City Council

**FROM :** Bryan RH Chodkowski,  
City Manager

**SUBJECT:** Major Thoroughfare Improvement Plan –  
Phase III, Group III

**DATE:** March 11, 2015

**CC:** Emily M. Christian, Assistant City Manager  
Mitch Miller, Director of Public Services

This memorandum represents the start of the final phase of the Major Thoroughfare Improvement Plan undertaken by staff in 2014. In the first phase of this project, staff and Council reviewed the major roadways of the City and brainstormed about all the improvements that could be included as part of a street's reconstruction. In the second phase of this project, the City Engineer quantified the expense of all the project elements identified in the first phase. In this third phase, staff is providing a recommendation on a final project scope for each street which takes into account cost, scale, and practicality.

This memorandum provides a brief summary of the project elements addressed in Phase II and their estimated expenses. For your reference, the Phase II information provided by the Engineer is attached to this memorandum. Following each summary is staff's recommendation for a final project scope and estimated project cost based on the modifications generally described below.

These project summaries are as follows:

### WOODMAN DR. (CSX RAIL BRIDGE TO AIRWAY RD.)

#### Phase II Elements and Pricing:

• General Road Condition Improvement -	\$2,010,000
• Lily Creek Bridge Improvement -	\$ 252,000
• Replace Springfield/Woodman Interchange with At-Grade -	\$4,413,000
• Multi-use Path -	\$ 793,000
• <u>Replace/Upgrade Guardrail -</u>	<u>\$ 301,000</u>
TOTAL	\$7,769,000

## MEMORANDUM

### WOODMAN DR. (CSX RAIL BRIDGE TO AIRWAY RD. – CONT'D)

#### Phase III Staff Project Scope Recommendations:

- General Road Condition Improvements – Staff review finds modifications to this project scope are limited to improved guardrail material.
- Lily Creek Bridge Improvement – After review, staff is recommending this project as a stand-alone project with no change in scope other than improving guardrail materials.
- Replace Springfield/Woodman Interchange with At-Grade – This work is recommended only as a stand-alone Project of Opportunity.
- Multi-use Path – It is the opinion of staff that this project be considered a stand-alone project with no changes in scope. This opinion is predicated on necessary right-of-way provided gratis by the Department of Defense and Montgomery County.
- Replace/Upgrade Guardrail – with most work from this element addressed in previous as a stand-alone project.

#### Phase III Cost Estimates Based on Staff Recommendations:

• General Road Condition Improvement -	\$2,114,000
• Lily Creek Bridge Improvement -	\$ 252,000
• Replace Springfield/Woodman Interchange with At-Grade -	\$4,413,000
• Multi-use Path -	\$ 563,000
• <u>Replace/Upgrade Guardrail -</u>	<u>\$ 121,000</u>
TOTAL	\$7,463,000

### WOODMAN DR. (AIRWAY RD. TO US 35)

#### Phase II Elements and Pricing:

• General Road Condition Improvement -	\$1,848,000
• <u>Replace/Upgrade Guardrail -</u>	<u>\$ 338,000</u>
TOTAL	\$2,186,000

#### Phase III Staff Project Scope Recommendations:

- General Road Condition Improvements – Staff recommends modifications to this project scope to include the use of improved guardrail material and the extension of the safety barrier/concrete median in the 200 block of Woodman Dr.
- Replace/Upgrade Guardrail – This project should be incorporated as part of the General Road Condition Improvements.

## MEMORANDUM

### WOODMAN DR. (AIRWAY RD. TO US 35- CONT'D)

#### Phase II Elements and Pricing:

• General Road Condition Improvement -	\$2,056,000
• <u>Replace/Upgrade Guardrail -</u>	\$ 0
TOTAL	\$2,056,000

### BEATRICE DR. (SR 201 TO HARSHMAN RD.)

#### Phase II Elements and Pricing:

• General Road Condition Improvement -	\$ 499,000
• South Side Sidewalk. -	\$ 967,000
• Traffic Signal at Harshman Rd. -	\$ 366,000
• <u>Traffic Signal at SR 201 -</u>	\$ 387,000
TOTAL	\$2,219,000

#### Phase III Staff Project Scope Recommendations:

- General Road Condition Improvements – No changes in scope are recommended.
- South Side Sidewalk – It is staff's opinion that this construction element not be pursued any further.
- Traffic Signal at Harshman Rd. - A traffic study at this intersection is currently being schedule to determine the need for this improvement. As such, for the purposes of this memorandum, staff recommends this project be considered a stand-alone project
- Traffic Signal at SR 201 – With consideration already being given to the installation of traffic signal at two possible locations on SR 201 in close proximity to this intersection, staff recommends not pursuing this element.

#### Phase III Cost Estimates Based on Staff Recommendations:

• General Road Condition Improvement -	\$ 499,000
• South Side Sidewalk. -	\$ 0
• Traffic Signal at Harshman Rd. -	\$ 366,000
• <u>Traffic Signal at SR 201 -</u>	\$ 0
TOTAL	\$ 865,000



## MEMORANDUM

### COMMUNITY DR. (SR 202 TO SR 201)

#### Phase II Elements and Pricing:

• General Road Condition Improvement -	\$ 394,000
• Traffic Signal & Improved Radii at SR 201 -	\$ 496,000
TOTAL	\$ 890,000

#### Phase III Staff Recommendations:

- General Road Condition Improvements – Staff recommends no modifications in scope.
- Traffic Signal & Improved Radii at SR 201 – In lieu of new signal installation being considered at the intersections of SR 201 and Pleasant Valley as well SR 201 and Brantwood, it staff's opinion that this project element should not be considered at this time.

#### Phase III Cost Estimates Based on Staff Recommendations:

• General Road Condition Improvement -	\$ 394,000
• Traffic Signal & Improved Radii at SR 201 -	\$ 0
TOTAL	\$ 394,000

### EASTMAN AVE. (WOODMAN DR. TO SPINNING RD.)

#### Phase II Elements and Pricing:

• General Road Condition Improvements -	\$ 560,000
• Improve On-Street Parking from Vinton to Spinning -	\$ 742,000
TOTAL	\$1,302,000

#### Phase III Staff Recommendations:

- General Road Condition Improvements – No modifications are recommended to the scope of this work as proposed.
- Improve On-Street Parking from Vinton to Spinning - In consideration of this element's total expense relative to its impact on the community, staff is recommending to not pursue this project element.

#### Phase III Cost Estimates Based on Staff Recommendations:

• General Road Condition Improvements -	\$ 560,000
• Improve On-Street Parking from Vinton to Spinning -	\$ 0
TOTAL	\$ 560,000

## MEMORANDUM

By way of a more generalized, total summary; when project estimates were prepared through the Phase II process to include all aspects of that work which could be included under a major thoroughfare improvement plan for the Group III streets, the cost estimates were calculated as:

➤ Woodman Dr. (CSX Rail Bridge to Airway Rd.):	\$ 7,769,000
➤ Woodman Dr. (Airway Rd to US 35):	\$ 2,186,000
➤ Beatrice Dr. (SR 201 to Harshman):	\$ 2,219,000
➤ Community Dr. (SR 202 to SR 201):	\$ 890,000
➤ <u>Eastman Dr. (Woodman Dr. to Spinning Rd):</u>	<u>\$ 1,302,000</u>
TOTAL	\$14,366,000

Following the Phase III process performed by staff, the above projects can be separated into one of two categories. The first, *General Thoroughfare Improvements Projects*, represents the scope of work which the City would seek to perform through its long-term plan. These projects would be those the City would actively seek to perform and obtain grant funding to support. *Projects of Opportunity* are those that would be driven through an economic development project, when non-transportation grant dollars might be utilized, or when the financial condition of the City allows the project to be undertaken. These two categories now provide project estimates as follows:

### *General Thoroughfare Improvement Projects:*

➤ Woodman Dr. (CSX Rail Bridge to Airway Rd.):	\$ 2,114,000
➤ Woodman Dr. (Airway Rd to US 35):	\$ 2,056,000
➤ Beatrice Dr. (SR 201 to Harshman):	\$ 499,000
➤ Community Dr. (SR 202 to SR 201):	\$ 394,000
➤ <u>Eastman Dr. (Woodman Dr. to Spinning Rd):</u>	<u>\$ 560,000</u>
TOTAL	\$ 5,623,000

### *Projects of Opportunity:*

➤ Lily Creek/Woodman Dr. Bridge Improvement:	\$ 252,000
➤ Replace Springfield/Woodman Interchange with At-Grade:	\$ 4,413,000
➤ Woodman Dr. Multi-use Path:	\$ 563,000
➤ Woodman Dr. Replace/Upgrade Guardrail:	\$ 121,000
➤ <u>Beatrice/Harshman Traffic Signal:</u>	<u>\$ 399,000</u>
TOTAL	\$ 5,748,000

You will note that there is a significant change in project cost estimates from those calculated in Phase II and those provided in this Phase III memorandum. While certain reductions are obvious because a project element was outright deleted from the overall project scope, other saving measures occurred in reduction of scope and/or the reduction of duplicate expenses. The duplicate activities being removed or reduced from the projects include such items as surveying, mobilization, and clearing & grubbing.

## MEMORANDUM

As we proceed through Phase III of this project, the Engineer will be preparing more detailed project cost estimates in a format similar to those provided for Phase II. Once all four street groupings have been through the Phase III process; a final document with comprehensive cost estimates, generalized project summaries, and potential timeline will be provided to Council. This final, Major Thoroughfare Improvement Plan document should assist Council in further discussion on how to best begin reconstructing and improving the main streets of the City.

Should you have any questions or concerns regarding the information contained within this memorandum, please do not hesitate to contact me.





**Furniture  
Solutions**  
FOR THE WORKPLACE

Woodman  
(LSX TO AIRWAY)

- ① GENERAL ROAD CONDITION IMPROVEMENTS ✓
  - ↳ NO CHANGE IN PROPOSED SCOPE ✓
  - ↳ ADD IN WOODEN GUARDRAIL SYSTEM ✓
- ② LILT CREEK BRIDGE REPAIRS ✓
  - ↳ NO CHANGE IN SCOPE ✓
  - ↳ ADD IN WOODEN GUARDRAIL SYSTEM ✓
  - ↳ SEPARATE, STAND-ALONE PROTECT ✓
- ③ SPRINGFIELD INTERCHANGE - TO - GRADE ✓
  - ↳ NO CHANGE IN SCOPE ✓
  - ↳ SEPARATE, STAND-ALONE PROTECT ✓
- ④ BIRKENWAY CONNECTION FROM HARTSMAN TO AIRWAY ✓
  - ↳ NO CHANGE IN SCOPE ✓
  - ↳ SEPARATE, STAND-ALONE PROTECT ✓
- ⑤ WOODEN GUARD RAIL ✓
  - ↳ SIGNIFICANT SLOPE REDUCTION ✓
  - ↳ REDUCED SLOPE AS STAND-ALONE PROTECT ✓



## CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT PHASE I, GROUPING 3 NOVEMBER 2014

Preliminary project cost estimates have been developed for the five corridors included in Phase I, Grouping 3. These corridors include Woodman Drive (CSX Rail Bridge to Airway Road), Woodman Drive (Airway Road to U.S. 35), Beatrice Drive (State Route 201 to Harshman Road), Community Drive (State Route 202 to State Route 201) and Eastman Avenue (Woodman Drive to Spinning Road). A description of the scope of the improvements planned as well as estimate subtotals for the various improvements recommended by city staff and council following the initial work session are included below. A total construction cost for improvements on each corridor is also included. Details of each construction cost estimate are attached to this report.

### WOODMAN DRIVE (CSX RAIL BRIDGE TO AIRWAY ROAD)

TASK	ESTIMATED COST
<b>General Road Condition Improvement</b> This includes a general rehab including mill and overlay, an estimated quantity of full depth pavement repair, limited storm sewer replacement and catch basin repair and replacement of the median concrete barrier.	Construction Cost-\$2,010,000
<b>Improve Lily Creek Bridge</b> This includes rehabilitation of the superstructure and replacement of guardrail and anchor assemblies.	Construction Cost- \$252,000
<b>Replacement of the Interchange with At-Grade Intersection</b> This includes the removal of the grade separated interchange with Springfield Street and construction of an at-grade intersection.	Construction Cost- \$4,413,000
<b>Multi-use path</b> This includes the construction of a multi-use path connecting Old Harshman Road with Airway Road.	Construction Cost- \$563,000 R/W Acquisition - \$230,000
<b>Replace Guardrail with Alternate Materials</b> Replacement of guardrail with a more aesthetic materials	Construction Cost- \$301,000
<b>TOTAL WOODMAN DRIVE (CSX RAIL BRIDGE TO AIRWAY ROAD)</b>	<b>\$7,769,000</b>

#### Notes

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.





**WOODMAN CSX BRIDGE TO AIRWAY REHAB  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
203	DITCH GRADING	10000 LF	\$ 6.00	\$ 60,000.00
252	FULL DEPTH PAVEMENT REPAIR	3000 SY	\$ 50.00	\$ 150,000.00
254	PAVEMENT PLANING, ASPHALT CONCRETE	54000 SY	\$ 2.50	\$ 135,000.00
407	TACK COAT	8000 GAL	\$ 3.00	\$ 24,000.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 2"	3000 CY	\$ 175.00	\$ 525,000.00
603	15" CONDUIT, TYPE B	1000 FT	\$ 50.00	\$ 50,000.00
604	CATCH BASIN REBUILT	15 EA	\$ 3,000.00	\$ 45,000.00
606	GUARDRAIL	2000 LF	\$ 15.00	\$ 30,000.00
606	ANCHOR ASSEMBLY	2 EA	\$ 1,500.00	\$ 3,000.00
622	CONCRETE BARRIER 6"	3000 FT	\$ 25.00	\$ 75,000.00
622	CONCRETE BARRIER, 50"	3800 FT	\$ 40.00	\$ 152,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 8,000.00	\$ 8,000.00
832	SWPPP	1 LS	\$ 3,500.00	\$ 3,500.00
832	EROSION CONTROL	3500 EA	\$ 1.00	\$ 3,500.00
Subtotal				\$ 1,269,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 30,000.00	\$ 30,000.00
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,500.00	\$ 9,000.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 4,500.00	\$ 4,500.00
624	MOBILIZATION	1 LS	\$ 40,000.00	\$ 40,000.00
Subtotal				\$ 1,352,500.00
Design Risk (35%)			\$	474,000.00
Subtotal			\$	1,826,500.00
ENGINEERING (10%)			\$	182,650.00
Total			\$	2,009,150.00

100,000

1,339,000

1,423,000

498,100

1,921,100

192,700

2,113,800





**WOODMAN CSX TO AIRWAY STRUCTURE REHAB  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
606	GUARDRAIL	300 FT	\$ 40.00	\$ 12,000.00
606	ANCHOR ASSEMBLY	1 EA	\$ 3,000.00	\$ 3,000.00
606	GUARDRAIL DOUBLE RAILS — <i>WOODMAN RAILS</i>	100 LF	\$ 80.00	\$ 8,000.00
SPECIAL	REHAB STRUCTURE	1 LS	\$ 100,000.00	\$ 100,000.00
832	SWPPP	1 LS	\$ 4,500.00	\$ 4,500.00
832	EROSION CONTROL	3500 EA	\$ 1.00	\$ 3,500.00
Subtotal				\$ 136,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 15,000.00	\$ 15,000.00
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ 9,600.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 3,500.00	\$ 3,500.00
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ 4,000.00
Subtotal				\$ 166,100.00
Design Risk (35%)			\$	60,000.00
Subtotal			\$	226,100.00
ENGINEERING (10%)			\$	22,610.00
Total			\$	248,710.00

5,000

133,000

166,100

58,200

224,100

22,500

246,600

*MARKET  
WASH.*



**WOODMAN CSX TO AIRWAY INTERCHANGE REMOVAL  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE -NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$10,000	\$10,000
202	PAVEMENT REMOVED, ASPHALT	16000 SY	\$10	\$160,000
202	CATCH BASIN OR INLET REMOVED	5 EA	\$350	\$1,750
203	EXCAVATION	25000 CY	\$15	\$375,000
203	EMBANKMENT	5000 CY	\$12	\$60,000
204	SUBGRADE COMPACTION	8000 SY	\$2	\$16,000
254	PAVEMENT PLANING, ASPHALT CONCRETE	250 SY	\$3	\$625
301	ASPHALT CONCRETE BASE, PG64-22, 6"	1500 CY	\$125	\$187,500
304	AGGREGATE BASE, 10"	2500 CY	\$40	\$100,000
407	TACK COAT	1200 GAL	\$3	\$3,600
448	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22, 1.5"	400 CY	\$200	\$80,000
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 1.5"	400 CY	\$200	\$80,000
603	15" CONDUIT, TYPE B	2000 FT	\$50	\$100,000
604	CATCH BASIN	8 EA	\$2,500	\$20,000
604	MANHOLE, NO. 3	4 EA	\$3,000	\$12,000
608	CURB	2000 LF	\$20	\$40,000
SPECIAL	STRUCTURE REMOVED	1 LS	\$750,000	\$750,000
632	TRAFFIC SIGNAL	1 LS	\$250,000	\$250,000
632	TRAFFIC SIGNAL REMOVED	2 LS	\$25,000	\$50,000
644	PAVEMENT MARKINGS	1 LS	\$10,000	\$10,000
659	TOPSOIL	500 CY	\$25	\$12,500
659	SEEDING AND MULCHING	5000 SY	\$2	\$10,000
832	SWPPP	1 LS	\$5,000	\$5,000
832	EROSION CONTROL	7500 EA	\$1	\$7,500
Subtotal				\$2,342,000
614	MAINTAINING TRAFFIC	1 LS	\$500,000	\$500,000
619	FIELD OFFICE, TYPE B	12 MN	\$1,600	\$19,200
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$9,000	\$9,000
624	MOBILIZATION	1 LS	\$100,000	\$100,000
Subtotal				\$2,971,000
Design Risk (35%)				\$1,040,000
Subtotal				\$4,011,000
ENGINEERING (10%)				\$402,000
Total				\$4,413,000

**Notes:**

- 1 Existing pavement is assumed to be full depth asphalt
- 2 Pavement widening is assumed to be full depth asphalt
- 3 Utility relocation not included





**WOODMAN CSX TO AIRWAY BIKEWAY  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE -NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$5,000	\$5,000
202	PAVEMENT REMOVED, ASPHALT	100 SY	\$8	\$800
203	EXCAVATION	1000 CY	\$15	\$15,000
203	EMBANKMENT	1000 CY	\$12	\$12,000
204	SUBGRADE COMPACTION	3000 SY	\$2	\$6,000
304	AGGREGATE BASE, 10"	500 CY	\$40	\$20,000
448	ASPHALT CONCRETE , TYPE 1, PG64-22, 3"	300 CY	\$250	\$75,000
603	15" CONDUIT, TYPE B	200 FT	\$50	\$10,000
604	CATCH BASIN	5 EA	\$2,500	\$12,500
604	MANHOLE, NO. 3	2 EA	\$3,000	\$6,000
608	CURB	300 LF	\$20	\$6,000
609	CONCRETE BARRIER	100 LF	\$20	\$2,000
SPECIAL	STRUCTURE WIDENING	1 LS	\$150,000	\$150,000
644	PAVEMENT MARKINGS	1 LS	\$2,000	\$2,000
659	TOPSOIL	500 CY	\$25	\$12,500
659	SEEDING AND MULCHING	2000 SY	\$2	\$4,000
832	SWPPP	1 LS	\$5,000	\$5,000
832	EROSION CONTROL	4500 EA	\$1	\$4,500
			Subtotal	\$349,000
614	MAINTAINING TRAFFIC	1 LS	\$10,000	\$10,000
619	FIELD OFFICE, TYPE B	6 MN	\$1,600	\$9,600
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$4,500	\$4,500
624	MOBILIZATION	1 LS	\$4,000	\$4,000
			Subtotal	\$378,000
			Design Risk (35%)	\$133,000
			Subtotal	\$511,000
			ENGINEERING (10%)	\$52,000
			Total	\$563,000





**WOODMAN CSX BRIDGE TO AIRWAY GUARDRAIL UPGRADE TO WOOD  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST	
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00	
606	GUARDRAIL, WOODEN <i>1100</i>	<del>3500</del> LF	\$ 50.00	<del>\$ 175,000.00</del>	<i>55,000</i>
832	SWPPP	1 LS	\$ 2,500.00	\$ 2,500.00	
832	EROSION CONTROL	1500 EA	\$ 1.00	\$ 1,500.00	
				Subtotal	<i>64,000</i>
				\$ 184,000.00	
614	MAINTAINING TRAFFIC	1 LS	\$ 7,500.00	\$ 7,500.00	
619	FIELD OFFICE, TYPE B	3 MN	\$ 1,500.00	\$ 4,500.00	
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 1,200.00	\$ 1,200.00	
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ 4,000.00	
				Subtotal	<i>81,200</i>
				\$ 202,000.00	
				Design Risk (35%)	<i>22,500</i>
				\$ 74,000.00	
				Subtotal	<i>109,700</i>
				\$ 273,000.00	
				ENGINEERING (10%)	<i>19,000</i>
				\$ 28,000.00	
				Total	<i>120,700</i>
				\$ 301,000.00	

WOODMAN  
(AIRWAY TO US 35)

① GENERAL ROAD CONDITION IMPROVEMENT ✓

↳ NO CHANGE IN SLOPE; ADD SAFETY BARRIER AT AIRWAY S.C. ✓

↳ ADD IN WOODMAN GRAVORAIL SYSTEM ✓

② WOODMAN GRAVORAIL SYSTEM ✓

↳ ADD IN TO GRLI PROTECT. ✓



**CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT  
PHASE I, GROUPING 3  
NOVEMBER 2014**

**WOODMAN DRIVE (AIRWAY ROAD TO U.S. 35)**

TASK	ESTIMATED COST
<b>General Road Condition Improvement</b> This includes pavement surface rehabilitation, drainage and storm sewer improvements as well as upgrades in the right of way at the northeast corner of the Woodman / U.S. 35 interchange. Street trees are included in the median. This work may be coordinated with the ODOT SPUI project, but that coordination has little effect on the cost.	Construction Cost- \$1,848,000
<b>Replace Guardrail with Alternate Materials</b> Replacement of guardrail with a more aesthetic materials	Construction Cost- \$338,000
<b>TOTAL WOODMAN DRIVE (AIRWAY ROAD TO U.S. 35)</b>	<b>\$2,186,000</b>

**Notes**

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.





**WOODMAN AIRWAY TO 35 REHAB  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	CURB REMOVED	1000 LF	\$ 6.00	\$ 6,000.00
203	MEDIAN REMOVED	1200 SY	\$ 6.00	\$ 7,200.00
203	DITCH GRADING	8000 LF	\$ 6.00	\$ 48,000.00
252	FULL DEPTH PAVEMENT REPAIR	3000 SY	\$ 50.00	\$ 150,000.00
254	PAVEMENT PLANING, ASPHALT CONCRETE	55000 SY	\$ 2.50	\$ 137,500.00
407	TACK COAT	8000 GAL	\$ 3.00	\$ 24,000.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 2"	3000 CY	\$ 175.00	\$ 525,000.00
603	15" CONDUIT, TYPE B	1000 FT	\$ 50.00	\$ 50,000.00
609	CONCRETE CURB	1000 LF	\$ 15.00	\$ 15,000.00
609	CONCRETE MEDIAN	1200 SY	\$ 25.00	\$ 30,000.00
604	CATCH BASIN REBUILT	20 EA	\$ 3,000.00	\$ 60,000.00
606	GUARDRAIL <i>WOODEN</i>	4000 LF	<del>\$ 15.00</del> 45.00	<del>\$ 60,000.00</del>
606	ANCHOR ASSEMBLY	8 EA	\$ 1,500.00	\$ 12,000.00
622	CONCRETE BARRIER 6"	FT	\$ 25.00	\$ -
622	CONCRETE BARRIER, 50"	FT	\$ 40.00	\$ -
SPECIAL	STREET TREES	125 EA	\$ 120.00	\$ 15,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 8,000.00	\$ 8,000.00
832	SWPPP	1 LS	\$ 3,500.00	\$ 3,500.00
832	EROSION CONTROL	3500 EA	\$ 1.00	\$ 3,500.00
Subtotal				\$ 1,460,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 30,000.00	\$ 30,000.00
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,500.00	\$ 9,000.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 4,500.00	\$ 4,500.00
624	MOBILIZATION	1 LS	\$ 40,000.00	\$ 40,000.00
Subtotal				\$ 1,244,000.00
Design Risk (35%)				\$ 435,400.00
Subtotal				\$ 1,689,400.00
ENGINEERING (10%)				\$ 168,940.00
Total				\$ 1,858,340.00

200,000

1,300,00

1,383,50

484,30

1,867,8

186,80

2,054,6

2,058,0



**WOODMAN AIRWAY TO 35 GUARDRAIL UPGRADE TO WOOD  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
606	GUARDRAIL, WOODEN	4000 LF	\$ 50.00	\$ 200,000.00
832	SWPPP	1 LS	\$ 2,500.00	\$ 2,500.00
832	EROSION CONTROL	1500 EA	\$ 1.00	\$ 1,500.00
Subtotal				\$ 209,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 7,500.00	\$ 7,500.00
619	FIELD OFFICE, TYPE B	3 MN	\$ 1,500.00	\$ 4,500.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 1,200.00	\$ 1,200.00
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ 4,000.00
Subtotal				\$ 227,000.00
Design Risk (35%)				\$ 80,000.00
Subtotal				\$ 307,000.00
ENGINEERING (10%)				\$ 31,000.00
Total				\$ 338,000.00



BEATRICE

① GENERAL ROAD CONDITION IMPROVEMENTS. ✓

↳ NO CHANGES IN SLOPE ✓

② SOUTH SIDE SIDEWALK. (STRIKE)

↳ ~~NO CHANGES IN SLOPE~~

↳ ~~STAND-ALONE PROJECT~~

③ HARSHMAN RD TRAFFIC SIGNAL ✓

↳ PROJECT NECESSITY ✓ BASED ON PENDING STUDY ✓

↳ IF URGENT; INCLUDE WITH GRCI PROJECT ✓

④ SR 201 TRAFFIC SIGNAL ✓

↳ PROJECT NOT TO BE PURSUED AT THIS TIME. ✓





**CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT**  
**PHASE I, GROUPING 3**  
**NOVEMBER 2014**

**BEATRICE DRIVE (STATE ROUTE 201 TO HARSHMAN ROAD)**

<b>TASK</b>	<b>ESTIMATED COST</b>
<b>General Road Condition Improvement</b> This includes the mill and resurface of the length of Beatrice Drive. Some full depth pavement repair is included to address failing locations. Storm infrastructure is included at the intersections with State Route 201 and Harshman Road. Establishing a defined ditchline was not included in the estimate due to the high costs and impacts on driveways including the construction of culverts and private property.	Construction Cost - \$499,000
<b>South Side Sidewalk</b> This includes the construction of a five foot wide sidewalk on the south side of the road to connect bus stops at SR 201 and Harshman Road.	Construction Cost- \$377,000 R/W Acquisition - \$590,000
<b>Harshman Road Traffic Signal</b> This includes the construction of a mast arm traffic signal at the intersection of Beatrice and Harshman.	Construction Cost- \$341,000 R/W Acquisition - \$25,000
<b>State Route 201 Traffic Signal</b> This includes the construction of a mast arm traffic signal at the intersection of Beatrice and State Route 201. No new right of way is anticipated.	Construction Cost- \$387,000
<b>TOTAL BEATRICE DRIVE (S.R. 201 TO HARSHMAN ROAD)</b>	<b>\$2,219,000</b>

**Notes**

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.



**BEATRICE DRIVE REHAB  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$5,000	\$5,000
203	DITCH GRADING	7000 LF	\$8	\$56,000
252	FULL DEPTH PAVEMENT REPAIR	500 SY	\$50	\$25,000
254	PAVEMENT PLANING, ASPHALT CONCRETE	9500 SY	\$3	\$23,750
407	TACK COAT	1500 GAL	\$3	\$4,500
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 2"	550 CY	\$175	\$96,250
603	15" CONDUIT, TYPE B	800 FT	\$75	\$60,000
604	CATCH BASIN	6 EA	\$3,000	\$18,000
604	MANHOLE	3 LF	\$3,500	\$10,500
644	PAVEMENT MARKINGS	1 LS	\$2,500	\$2,500
832	SWPPP	1 LS	\$2,500	\$2,500
832	EROSION CONTROL	1500 EA	\$1	\$1,500
Subtotal				\$306,000
614	MAINTAINING TRAFFIC	1 LS	\$10,000	\$10,000
619	FIELD OFFICE, TYPE B	4 MN	\$1,500	\$6,000
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$2,500	\$2,500
624	MOBILIZATION	1 LS	\$10,000	\$10,000
Subtotal				\$335,000
Design Risk (35%)				\$118,000
Subtotal				\$453,000
ENGINEERING (10%)				\$46,000
Total				\$499,000



**BEATRICE DRIVE SIDEWALK  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE -NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$10,000	\$10,000
203	EXCAVATION	650 CY	\$15	\$9,750
203	EMBANKMENT	500 CY	\$20	\$10,000
204	SUBGRADE COMPACTION	5000 SY	\$2	\$10,000
304	AGGREGATE BASE, 6"	800 CY	\$60	\$48,000
603	15" CONDUIT, TYPE B	100 FT	\$75	\$7,500
608	SIDEWALK	18000 SF	\$6	\$108,000
659	TOPSOIL	200 CY	\$35	\$7,000
659	SEEDING AND MULCHING	3000 SY	\$2	\$6,000
832	SWPPP	1 LS	\$5,000	\$5,000
832	EROSION CONTROL	2500 EA	\$1	\$2,500
Subtotal				\$224,000
614	MAINTAINING TRAFFIC	1 LS	\$10,000	\$10,000
619	FIELD OFFICE, TYPE B	6 MN	\$1,600	\$9,600
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$4,500	\$4,500
624	MOBILIZATION	1 LS	\$4,000	\$4,000
Subtotal				\$253,000
Design Risk (35%)				\$89,000
Subtotal				\$342,000
ENGINEERING (10%)				\$35,000
Total				\$377,000



## PRELIMINARY RIGHT OF WAY ESTIMATE - NOVEMBER 2014

Administrative Costs  
 $[(\text{sub-total}) \times 0.15] \times 1.20$   
 Jury trial Costs  
 $[(\text{sub-total}) \times 0.10] \times 1.50$   
 Incidental transfer Costs  
 $[(\text{sub-total}) \times 0.90] \times 0.025$   
 All areas are in acres.

Abstract

- 1 Existing RW estimated using GIS parcel lines, where available
- 2 Where RW cannot be easily estimated from GIS parcels, existing
- 3 Proposed permanent RW is assumed to be 1' behind proposed
- 4 Railroad property estimated at 10 times the per acre land value

Estimated Cost	
Contingency (50%)	
<b>TOTAL COST</b>	

\* Labor Cost Includes the following:  
(per ODOT Cost Estimating Procedures  
For Acquiring Rights of Way)



**BEATRICE DRIVE SIGNAL AT HARSHMAN  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
632	TRAFFIC SIGNAL INSTALLATION	1 EA	\$ 200,000.00	\$ 200,000.00
644	PAVEMENT MARKINGS	1 LS	\$ 2,500.00	\$ 2,500.00
832	SWPPP	1 LS	\$ 1,500.00	\$ 1,500.00
832	EROSION CONTROL	800 EA	\$ 1.00	\$ 800.00
Subtotal				\$ 210,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 7,500.00	\$ 7,500.00
619	FIELD OFFICE, TYPE B	3 MN	\$ 1,600.00	\$ 4,800.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 2,500.00	\$ 2,500.00
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ 4,000.00
Subtotal				\$ 229,000.00
Design Risk (35%)				\$ 81,000.00
Subtotal				\$ 310,000.00
ENGINEERING (10%)				\$ 31,000.00
Total				\$ 341,000.00

NEW MAST ARM SIGNAL

## PRELIMINARY RIGHT OF WAY ESTIMATE - NOVEMBER 2014

Administrative Costs  
Jury trial Costs  
Incidental transfer Costs  
All areas are in acres.

Notes:

Estimated Cost  
Contingency (50%)  
TOTAL COST

- 1 Existing *R/W* estimated using GIS parcel lines, where available
- 2 Where *R/W* cannot be easily estimated from GIS parcels, existing *R/W* is assumed to be 1' behind walk
- 3 Proposed permanent *R/W* is assumed to be 1' behind proposed walk
- 4 Railroad property estimated at 10 times the per acre land value





**BEATRICE DRIVE SIGNAL AT 201  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$5,000	\$5,000
202	PAVEMENT REMOVED, ASPHALT	150 SY	\$15	\$2,250
202	CATCH BASIN OR INLET REMOVED	1 EA	\$750	\$750
203	EXCAVATION	50 CY	\$15	\$750
203	EMBANKMENT	10 CY	\$12	\$120
204	SUBGRADE COMPACTION	25 SY	\$5	\$125
206	CEMENT STABILIZED SUBGRADE, 16" DEEP	SY	\$6	\$0
301	ASPHALT CONCRETE BASE, PG64-22, 6"	10 CY	\$200	\$2,000
304	AGGREGATE BASE, 10"	10 CY	\$80	\$800
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 3"	5 CY	\$250	\$1,250
603	15" CONDUIT, TYPE B	50 FT	\$50	\$2,500
604	CATCH BASIN	1 EA	\$4,000	\$4,000
604	MANHOLE, NO. 3	1 EA	\$5,000	\$5,000
630	SIGNAGE	1 LS	\$2,500	\$2,500
632	SIGNAL	1 LS	\$200,000	\$200,000
644	PAVEMENT MARKINGS	1 LS	\$5,000	\$5,000
659	TOPSOIL	10 CY	\$25	\$250
659	SEEDING AND MULCHING	50 SY	\$2	\$100
832	SWPPP	1 LS	\$2,500	\$2,500
832	EROSION CONTROL	1500 EA	\$1	\$1,500
Subtotal				\$237,000
614	MAINTAINING TRAFFIC	1 LS	\$8,000	\$8,000
619	FIELD OFFICE, TYPE B	6 MN	\$1,600	\$9,600
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$4,500	\$4,500
624	MOBILIZATION	LS	\$10,000	\$0
Subtotal				\$260,000
Design Risk (35%)				\$91,000
Subtotal				\$351,000
ENGINEERING (10%)				\$36,000
Total				\$387,000

## COMMUNITY

- ① GENERAL ROAD CONDITION IMPROVEMENT ✓  
↳ NO CHANGE OF PROPOSED SCORE ✓
- ② SF 201 TRAFFIC SIGNALS ✓  
↳ IN LIGHT OF POTENTIAL SIGNALS AT  
P. VALLEY OR/AND BRIGHTWOOD; FT  
IS RECOMMENDED NOT PURSUE THIS PROJECT. }



**CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT**  
**PHASE I, GROUPING 3**  
**NOVEMBER 2014**

**COMMUNITY DRIVE (STATE ROUTE 201 TO STATE ROUTE 202)**

<b>TASK</b>	<b>ESTIMATED COST</b>
<b>General Road Condition Improvement</b> This includes the mill and resurface of the Community Drive pavement. Some full depth pavement repair is included to address failing locations. Limited storm sewer replacements are included. Establishing a defined ditchline was not included in the estimate due to the high costs and impacts on driveways including the construction of culverts and private property.	Construction Cost- \$394,000
<b>State Route 201 Traffic Signal and Radius Upgrade</b> A traffic signal, dependent on the necessity of a signal at the Pleasant Valley / SR 201 intersection, is included along with turning radius upgrades.	Construction Cost- \$469,000 R/W Acquisition - \$27,000
<b>TOTAL COMMUNITY DRIVE (SR 201 TO SR 202)</b>	<b>\$890,000</b>

**Notes**

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.







**COMMUNITY DRIVE SIGNAL AND RADIUS AT 201  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE -NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$5,000	\$5,000
202	PAVEMENT REMOVED, ASPHALT	150 SY	\$10	\$1,500
202	CATCH BASIN OR INLET REMOVED	EA	\$350	\$0
203	EXCAVATION	60 CY	\$20	\$1,200
203	EMBANKMENT	10 CY	\$30	\$300
204	SUBGRADE COMPACTION	125 SY	\$4	\$500
254	PAVEMENT PLANING, ASPHALT CONCRETE	600 SY	\$5	\$3,000
301	ASPHALT CONCRETE BASE, PG64-22, 6"	30 CY	\$250	\$7,500
304	AGGREGATE BASE, 10"	40 CY	\$80	\$3,200
407	TACK COAT	100 GAL	\$5	\$500
448	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22, 1.5"	30 CY	\$350	\$10,500
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 1.5"	30 CY	\$350	\$10,500
632	TRAFFIC SIGNAL	1 EA	\$225,000	\$225,000
644	PAVEMENT MARKINGS	1 LS	\$3,500	\$3,500
659	TOPSOIL	25 CY	\$25	\$625
659	SEEDING AND MULCHING	225 SY	\$2	\$450
832	SWPPP	1 LS	\$3,500	\$3,500
832	EROSION CONTROL	2500 EA	\$1	\$2,500
Subtotal				\$280,000
614	MAINTAINING TRAFFIC	1 LS	\$10,000	\$10,000
619	FIELD OFFICE, TYPE B	6 MN	\$1,600	\$9,600
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$4,500	\$4,500
624	MOBILIZATION	1 LS	\$4,000	\$10,000
Subtotal				\$315,000
Design Risk (35%)				\$111,000
Subtotal				\$426,000
ENGINEERING (10%)				\$43,000
Total				\$469,000

COMMUNITY SIGNAL  
CITY OF RIVERSIDE  
PRELIMINARY RIGHT OF WAY ESTIMATE - NOVEMBER 2014

Number of Parcels	Land Use	Land Value	Structure Value	Total	TOTAL ACREAGE (ACRES)	Structure Impact	Area of Take (SF)	Area: Fee Simple	Area: Temporary	Labor costs	Cost: Fee Simple	Cost: Temporary	Relocation	Sub-Total Cost	Cost to Cure	Comments
1	VARIOUS	\$125,000		\$125,000	1.000	NO	1500	0.034		\$8,950	\$13,254	\$0		\$13,254		
														\$0		
														\$0		
														\$0		
														\$0		
														\$0		TEMPORARY RW & COST TO CURE NOT CONSIDERED
														\$0		

Administrative Costs  
Jury trial Costs  
Incidental transfer Costs  
All areas are in acres.

Sub-Totals

Estimated Cost  
Contingency (50%)  
TOTAL COST

Sub-Totals

Estimated Cost  
Contingency (50%)  
TOTAL COST

Titles	Detailed Appraisal	Detailed Appraisal Review	Negotiation	Closings	Project Management
\$400	\$4,500	\$2,000	\$1,100	\$400	\$550

Notes:

- Existing RW estimated using GIS parcel lines, where available
- Where RW cannot be easily estimated from GIS parcels, existing RW is assumed to be 1' behind walk
- Proposed permanent RW is assumed to be 1' behind proposed walk
- Railroad property estimated at 10 times the per acre land value





EASTMAN

**Furniture  
Solutions**  
FOR THE WORKPLACE

① GENERAL ROAD CONDITION IMPROVEMENT

↳ NO CHANGES IN PROPOSED SLOPES

② ADDRESS ON-STREET PARKING

↳ IN REVIEW OF COST/IMPACT, THIS PROJECT  
SHOULD NOT BE PURSUED.



**CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT**  
**PHASE I, GROUPING 3**  
**NOVEMBER 2014**

**EASTMAN DRIVE (WOODMAN DRIVE TO SPINNING ROAD)**

TASK	ESTIMATED COST
<b>General Road Condition Improvement</b> This includes the mill and resurface of the Eastman Drive pavement. Replacement of portions of the curb and gutter and concrete walk on the north side is included. Some full depth pavement repair is included to address failing locations. Storm sewer infrastructure improvements are also included. Establishing a defined ditchline was not included in the estimate due to the high costs and impacts on driveways including the construction of culverts and private property.	Construction Cost- \$560,000
<b>Address On-Street Parking from Vinton to Spinning</b> This includes widening the pavement section to allow for additional parking on the south side of the road. The preferred alternative is to re-stripe and prohibit parking on either side. This alternative can be completed for a fraction of the cost.	Construction Cost- \$339,000 R/W Acquisition - \$403,000
<b>TOTAL EASTMAN DRIVE (WOODMAN DRIVE TO SPINNING RD)</b>	<b>\$1,302,000</b>

**Notes**

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.



**EASTMAN AVE REHAB  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$5,000	\$5,000
202	WALK REMOVED	6500 SF	\$2	\$13,000
202	CURB REMOVED	1500 FT	\$3	\$4,500
202	CATCH BASIN OR INLET REMOVED	12 EA	\$350	\$4,200
203	DITCH GRADING	2500 LF	\$12	\$30,000
252	FULL DEPTH PAVEMENT REPAIR	350 SY	\$60	\$21,000
254	PAVEMENT PLANING, ASPHALT CONCRETE	7500 SY	\$3	\$18,750
407	TACK COAT	1200 GAL	\$3	\$3,600
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 2"	450 CY	\$175	\$78,750
603	15" CONDUIT, TYPE B	1000 FT	\$ 50.00	\$ 50,000.00
604	CATCH BASIN	12 EA	\$2,500	\$30,000
608	4" CONCRETE WALK	6500 SF	\$5	\$32,500
609	CURB	1500 FT	\$18	\$27,000
644	PAVEMENT MARKINGS AND SIGNAGE	1 LS	\$4,500	\$4,500
832	SWPPP	1 LS	\$3,500	\$3,500
832	EROSION CONTROL	2500 EA	\$1	\$2,500
Subtotal				\$329,000
614	MAINTAINING TRAFFIC	1 LS	\$20,000	\$20,000
619	FIELD OFFICE, TYPE B	6 MN	\$1,600	\$9,600
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$7,500	\$7,500
624	MOBILIZATION	1 LS	\$10,000	\$10,000
Subtotal				\$377,000
Design Risk (35%)				\$132,000
Subtotal				\$509,000
ENGINEERING (10%)				\$51,000
Total				\$560,000





**EASTMAN AVE WIDEN FOR PARKING  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - SEPTEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$10,000	\$10,000
202	PAVEMENT REMOVED, ASPHALT	150 SY	\$8	\$1,200
203	EXCAVATION	500 CY	\$20	\$10,000
203	EMBANKMENT	75 CY	\$20	\$1,500
204	SUBGRADE COMPACTION	1000 SY	\$5	\$5,000
301	ASPHALT CONCRETE BASE, PG64-22, 6"	170 CY	\$175	\$29,750
304	AGGREGATE BASE, 10"	275 CY	\$60	\$16,500
407	TACK COAT	150 GAL	\$5	\$750
409	SAWING PAVEMENT	1350 FT	\$5	\$6,750
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 3"	100 CY	\$250	\$25,000
603	15" CONDUIT, TYPE B	100 FT	\$100	\$10,000
604	MAH HOLE	2 EA	\$5,000	\$10,000
604	CATCH BASIN, NO. 3	4 EA	\$4,500	\$18,000
609	CURB	1350 EA	\$20	\$27,000
630	SIGNAGE	1 LS	\$3,000	\$3,000
644	PAVEMENT MARKINGS	1 LS	\$5,000	\$5,000
659	TOPSOIL	100 CY	\$35	\$3,500
659	SEEDING AND MULCHING	300 SY	\$3	\$900
832	SWPPP	1 LS	\$4,000	\$4,000
832	EROSION CONTROL	3500 EA	\$1	\$3,500
Subtotal				\$192,000
614	MAINTAINING TRAFFIC	1 LS	\$10,000	\$10,000
619	FIELD OFFICE, TYPE B	6 MN	\$1,600	\$9,600
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$5,500	\$5,500
624	MOBILIZATION	1 LS	\$10,000	\$10,000
Subtotal				\$228,000
Design Risk (35%)				\$80,000
Subtotal				\$308,000
ENGINEERING (10%)				\$31,000
Total				\$339,000

## FEBRUARY 2014 OF MAY ESTIMATE - NOVEMBER 2014

Administrative Costs	15p	\$0	\$0
Jury trial Costs	0.15p	\$0	\$0
Sub-Totals		\$198,513	\$0
[(sub-total) x 0.15] x 1.20		\$0	\$198,513

3

\* Labor Cost Includes the following:  
per QDOT Cost Estimating Procedure  
For Acquiring Rights of Way)

- 1 Existing R/W estimated using GIS parcel lines, where available
- 2 Where R/W cannot be easily estimated from GIS parcels, existing
- 3 Proposed permanent R/W is assumed to be 1' behind proposed
- 4 Railroad property estimated at 10 times the per acre land value

tees, where available in GIS parcels, existing R/W is assumed to be 1' behind walk e 1' behind proposed walk per acre land value





## MEMORANDUM

**TO:** Riverside City Council

**FROM :** Bryan RH Chodkowski,  
City Manager

**SUBJECT:** Major Thoroughfare Improvement Plan –  
Phase III, Group IV

**DATE:** March 26, 2015

**CC:** Emily M. Christian, Assistant City Manager  
Mitch Miller, Director of Public Services

This memorandum represents the start of the final phase of the Major Thoroughfare Improvement Plan undertaken by staff in 2014. In the first phase of this project, staff and Council reviewed the major roadways of the City and brainstormed about all the improvements that could be included as part of a street's reconstruction. In the second phase of this project, the City Engineer quantified the expense of all the project elements identified in the first phase. In this third phase, staff is providing a recommendation on a final project scope for each street which takes into account cost, scale, and practicality.

This memorandum provides a brief summary of the project elements addressed in Phase II and their estimated expenses. For your reference, the Phase II information provided by the Engineer is attached to this memorandum. Following each summary is staff's recommendation for a final project scope and estimated project cost based on the modifications generally described below.

These project summaries are as follows:

### OLD TROY PIKE (CITY LIMIT TO CITY LIMIT)

#### Phase II Elements and Pricing:

• General Road Condition Improvements -	\$1,700,000
• <u>Replace/Upgrade Guardrail -</u>	<u>\$ 125,000</u>
TOTAL	\$1,825,000

#### Phase III Staff Project Scope Recommendations:

- General Road Condition Improvements – Staff review finds modifications to this project scope are limited to improved guardrail material.
- Replace/Upgrade Guardrail – It is recommended that the full scope of this project should be included with General Road Condition Improvements.

## MEMORANDUM

### OLD TROY PIKE (CITY LIMIT TO CITY LIMIT – CONT'D)

#### Phase III Cost Estimates Based on Staff Recommendations:

• General Road Condition Improvements -	\$1,634,200
• <u>Replace/Upgrade Guardrail -</u>	\$ 0
TOTAL	\$1,634,200

### BRANDT PIKE (CITY LIMIT TO CITY LIMIT)

#### Phase II Elements and Pricing:

• General Road Condition Improvements -	\$1,157,000
• Replace/Upgrade Guardrail -	\$ 93,000
• <u>Increase radii at Pleasant Valley -</u>	\$ 200,000
TOTAL	\$1,450,000

#### Phase III Staff Project Scope Recommendations:

- General Road Condition Improvements – Staff recommends modifications to this project scope to include the use of improved guardrail material.
- Replace/Upgrade Guardrail – This project should be incorporated as part of the General Road Condition Improvements.
- Increase radii at Pleasant Valley – Review of this improvement's impact on adjacent properties leads staff to recommend that this project no longer be considered.

#### Phase III Cost Estimates Based on Staff Recommendations:

• General Road Condition Improvements -	\$1,195,500
• Replace/Upgrade Guardrail -	\$ 0
• <u>Increase radii at Pleasant Valley -</u>	\$ 0
TOTAL	\$1,195,500

### LINDEN AVE. (CITY LIMIT TO CITY LIMIT)

#### Phase II Elements and Pricing:

• General Road Condition Improvements -	\$2,330,000
• Increase radii at Spinning Rd. -	\$ 199,000
• <u>Increase radii at Wenrick Rd. -</u>	\$ 161,000
TOTAL	\$2,690,000

## MEMORANDUM

### LINDEN AVE. (CITY LIMIT TO CITY LIMIT – CONT'D)

#### Phase III Staff Project Scope Recommendations:

- General Road Condition Improvements – No changes in scope are recommended. In consideration of the full project scope with additional elements, this project should be separated into two phases.
- Increase radii at Spinning Rd. – It is recommended that this project be incorporated with the General Road Condition Improvement scope as noted above.
- Increase radii at Wenrick Rd. – Reviewing this project element's impact to traffic patterns on Linden, staff recommends not pursuing this project any further.

#### Phase III Cost Estimates Based on Staff Recommendations:

• General Road Condition Improvements -	\$2,330,000
• Increase radii at Spinning Rd. -	\$ 199,000
• <u>Increase radii at Wenrick Rd. -</u>	<u>\$ 0</u>
TOTAL	\$2,529,000

### WOODMAN DR. (US 35 TO CITY LIMIT)

#### Phase II Elements and Pricing:

• <u>General Road Condition Improvements -</u>	<u>\$ 954,000</u>
TOTAL	\$ 954,000

#### Phase III Staff Recommendations:

- General Road Condition Improvements – Staff recommends no modifications in construction scope but does recommend pursuing efforts to provide for a uniform right-of-way.

#### Phase III Cost Estimates Based on Staff Recommendations:

• <u>General Road Condition Improvements-</u>	<u>\$ 868,000</u>
TOTAL	\$ 868,000

### BURKHARDT RD. (CITY LIMIT TO CITY LIMIT)

#### Phase II Elements and Pricing:

• <u>General Road Condition Improvements -</u>	<u>\$2,558,000</u>
TOTAL	\$2,558,000



## MEMORANDUM

### BURKHARDT RD. (CITY LIMIT TO CITY LIMIT – CONT'D)

#### Phase III Staff Recommendations:

- General Road Condition Improvements – *No modifications are recommended to the scope of this work as proposed other than to subdivide this project into two phases.*

#### Phase III Cost Estimates Based on Staff Recommendations:

• <u>General Road Condition Improvements -</u>	<u>\$2,558,000</u>
TOTAL	\$2,558,000

### HARSHMAN RD. (CITY LIMIT TO CITY LIMIT)

#### Phase II Elements and Pricing:

• <u>General Road Condition Improvements -</u>	<u>\$3,957,000</u>
TOTAL	\$3,957,000

#### Phase III Staff Recommendations:

- General Road Condition Improvements – *No modifications are recommended to the scope of this work as proposed other than to subdivide this project into two phases.*

#### Phase III Cost Estimates Based on Staff Recommendations:

• <u>General Road Condition Improvements -</u>	<u>\$3,957,000</u>
TOTAL	\$3,957,000

By way of a more generalized, total summary; when project estimates were prepared through the Phase II process to include all aspects of that work which could be included under a major thoroughfare improvement plan for the Group III streets, the cost estimates were calculated as:

➤ Old Troy Pike (City Limit to City Limit):	\$ 1,825,000
➤ Brandt Pike (City Limit to City Limit):	\$ 1,450,000
➤ Linden Ave. (City Limit to City Limit):	\$ 2,690,000
➤ Woodman Dr. (US 35 to City Limit):	\$ 954,000
➤ Burkhardt Rd. (City Limit to City Limit):	\$ 2,558,000
➤ Harshman Rd. (City Limit to City Limit):	\$ 3,957,000
TOTAL	<u>\$13,434,000</u>

## MEMORANDUM

Following the Phase III process performed by staff, the above projects can be separated into one of two categories. The first, *General Thoroughfare Improvements Projects*, represents the scope of work which the City would seek to perform through its long-term plan. These projects would be those the City would actively seek to perform and obtain grant funding to support. *Projects of Opportunity* are those that would be driven through an economic development project, when non-transportation grant dollars might be utilized, or when the financial condition of the City allows the project to be undertaken. These two categories now provide project estimates as follows:

### *General Thoroughfare Improvement Projects:*

➤ Old Troy Pike (City Limit to City Limit):	\$ 1,634,200
➤ Brandt Pike (City Limit to City Limit):	\$ 1,195,500
➤ Linden Ave. – Phase I (W. City Limit to Quimby):	\$ 1,300,000
➤ Linden Ave. –Phase II (Quimby to E. City Limit):	\$ 1,260,000
➤ Woodman Dr. (US 35 to City Limit):	\$ 954,000
➤ Burkhardt Rd. – Phase I (W. City Limit to Ketchum):	\$ 1,300,000
➤ Burkhardt Rd. – Phase II (Ketchum to E. City Limit):	\$ 1,300,000
➤ Harshman Rd. – Phase I (N City Limit to Transportation):	\$ 2,000,000
➤ Harshman Rd. – Phase II (Transportation to S. City Limit):	\$ 2,000,000
<b>TOTAL</b>	<b>\$12,943,500</b>

### *Projects of Opportunity:*

- No Projects of Opportunity were identified in this grouping.

You will note that there is a significant change in project cost estimates from those calculated in Phase II and those provided in this Phase III memorandum. While certain reductions are obvious because a project element was outright deleted from the overall project scope, other saving measures occurred in reduction of scope and/or duplicate expenses. The duplicate activities being removed or reduced from the projects include such items as surveying, mobilization, and clearing & grubbing.

As we proceed through Phase III of this project, the Engineer will be preparing more detailed project cost estimates in a format similar to those provided for Phase II. Once all four street groupings have been through the Phase III process; a final document with comprehensive cost estimates, generalized project summaries, and potential timeline will be provided to Council. This final, Major Thoroughfare Improvement Plan document should assist Council in further discussion on how to best begin reconstructing and improving the main streets of the City.

Should you have any questions or concerns regarding the information contained within this memorandum, please do not hesitate to contact me.



## CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT PHASE I, GROUPING 4 NOVEMBER 2014

Preliminary project cost estimates have been developed for the five corridors included in Phase I, Grouping 4. These corridors include Old Troy Pike (city limit to city limit), Brandt Pike (city limit to city limit), Linden Avenue (city limit to city limit), Woodman Drive (US 35 south to city limit), Burkhardt Road (city limit to city limit), and Harshman Road (city limit to city limit less the Valley Street intersection that was rebuilt in 2013). A description of the scope of the improvements planned as well as estimate subtotals for the various improvements recommended by city staff and council following the initial work session are included below. A total construction cost for improvements on each corridor is also included. Details of each construction cost estimate are attached to this report.

### OLD TROY PIKE (CITY LIMIT TO CITY LIMIT)

TASK	ESTIMATED COST
<b>General Road Condition Improvement</b> This includes mill/fill, ditch grading, estimated quantity of full depth repair, some curb replacement, minor drainage repairs	Construction Cost-\$1,700,000
<b>Replace/Update Guardrail with Alternate Materials</b> This includes a separate estimate for wood guard rail	Construction Cost- \$125,000
<b>TOTAL OLD TROY PIKE (CITY LIMIT TO CITY LIMIT)</b>	<b>\$1,825,000</b>

### Notes

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.





**OLD TROY PIKE REHAB  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$5,000	\$5,000
202	CURB REMOVED	1000 LF	\$6	\$6,000
203	DITCH GRADING	15000 LF	\$6	\$90,000
252	FULL DEPTH PAVEMENT REPAIR	3500 SY	\$50	\$175,000
254	PAVEMENT PLANING, ASPHALT CONCRETE	55000 SY	\$3	\$137,500
407	TACK COAT	8000 GAL	\$3	\$24,000
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 2"	3100 CY	\$175	\$542,500
609	CONCRETE CURB	1000 LF	\$15	\$15,000
604	CATCH BASIN REBUILT	6 EA	\$3,000	\$18,000
606	GUARDRAIL	<del>10 LF</del>	<del>\$15</del>	<del>\$150</del>
832	SWPPP	1 LS	\$1,500	\$1,500
832	EROSION CONTROL	1500 EA	\$1	\$1,500
Subtotal				\$1,017,000
614	MAINTAINING TRAFFIC	1 LS	\$15,000	\$15,000
619	FIELD OFFICE, TYPE B	6 MN	\$1,500	\$9,000
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$2,500	\$2,500
624	MOBILIZATION	1 LS	\$100,000	\$100,000
Subtotal				\$1,144,000
Design Risk (35%)				<del>-\$401,000</del>
Subtotal				\$1,545,000
ENGINEERING (10%)				\$155,000
Total				\$1,700,000

56,000

1,072,8

10,000

110,000

385,2

1,485

148,600

1,634,2



**OLD TROY PIKE WOOD GUARD RAIL  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$5,000	\$5,000
606	GUARDRAIL, WOODEN	800 LF	\$70	\$56,000
832	SWPPP	1 LS	\$2,500	\$2,500
832	EROSION CONTROL	1500 EA	\$1	\$1,500
Subtotal				\$ 65,000.00
614	MAINTAINING TRAFFIC	1 LS	\$7,500	\$7,500
619	FIELD OFFICE, TYPE B	3 MN	\$1,500	\$4,500
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$1,200	\$1,200
624	MOBILIZATION	1 LS	\$4,000	\$4,000
Subtotal				\$83,000
Design Risk (35%)				\$30,000
Subtotal				\$113,000
ENGINEERING (10%)				\$12,000
Total				\$125,000



**CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT  
PHASE I, GROUPING 4  
NOVEMBER 2014**

**BRANDT PIKE (CITY LIMIT TO CITY LIMIT)**

<b>TASK</b>	<b>ESTIMATED COST</b>
<b>General Road Condition Improvement</b> This includes mill/fill, ditch grading, estimate quantity of full depth repair, some curb replacement, minor drainage repairs	Construction Cost- \$1,157,000
<b>Replace Guardrail with Alternate Materials</b> This includes a separate estimate for wood guard rail	Construction Cost- \$93,000
<b>Increase Intersection radius at Pleasant Valley</b> This includes a separate estimate for improving radius at Pleasant Valley- (some R/W required)	Construction Cost- \$163,000 R/W- \$37,000
<b>TOTAL BRANDT PIKE (CITY LIMIT TO CITY LIMIT)</b>	<b>\$1,450,000</b>

**Notes**

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.





**BRANDT PIKE REHAB  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$5,000	\$5,000
202	CURB REMOVED	1000 LF	\$6	\$6,000
203	DITCH GRADING	14000 LF	\$6	\$84,000
252	FULL DEPTH PAVEMENT REPAIR	2000 SY	\$50	\$100,000
254	PAVEMENT PLANING, ASPHALT CONCRETE	35000 SY	\$3	\$87,500
407	TACK COAT	5000 GAL	\$3	\$15,000
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 2"	2000 CY	\$175	\$350,000
603	15" CONDUIT, TYPE B	500 FT	\$50	\$25,000
609	CONCRETE CURB	1000 LF	\$15	\$15,000
604	CATCH BASIN REBUILT	6 EA	\$3,000	\$18,000
606	GUARDRAIL	500 LF	\$15	\$7,500
644	PAVEMENT MARKINGS	1 LS	\$8,000	\$8,000
832	SWPPP	1 LS	\$2,500	\$2,500
832	EROSION CONTROL	1500 EA	\$1	\$1,500
Subtotal				\$725,000
614	MAINTAINING TRAFFIC	LS	\$ 15,000.00	\$0
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,500.00	\$9,000
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 3,500.00	\$3,500
624	MOBILIZATION	1 LS	\$ 40,000.00	\$40,000
Subtotal				\$78,000
Design Risk (35%)				\$273,000
Subtotal				\$1,051,000
ENGINEERING (10%)				\$106,000
Total				\$1,157,000

35,000

752,500

805,000

281,000

108,000

108,700

1,195,000



**BRANDT PIKE GUARD RAIL  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$5,000	\$5,000
606	GUARDRAIL, WOODEN	500 LF	\$70	\$35,000
832	SWPPP	1 LS	\$2,500	\$2,500
832	EROSION CONTROL	1500 EA	\$1	\$1,500
Subtotal				\$ 44,000.00
614	MAINTAINING TRAFFIC	1 LS	\$7,500	\$7,500
619	FIELD OFFICE, TYPE B	3 MN	\$1,500	\$4,500
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$1,200	\$1,200
624	MOBILIZATION	1 LS	\$4,000	\$4,000
Subtotal				\$62,000
Design Risk (35%)				\$22,000
Subtotal				\$84,000
ENGINEERING (10%)				\$9,000
Total				\$93,000



**BRANDT PIKE PLEASANT VALLEY RADIUS  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE -NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$10,000	\$10,000
202	PAVEMENT REMOVED, ASPHALT	20 SY	\$25	\$500
202	CATCH BASIN OR INLET REMOVED	2 EA	\$500	\$1,000
203	EXCAVATION	75 CY	\$20	\$1,500
203	EMBANKMENT	10 CY	\$30	\$300
204	SUBGRADE COMPACTION	150 SY	\$4	\$600
252	PAVEMENT SAWING	100 LF	\$4	\$400
301	ASPHALT CONCRETE BASE 6"	30 CY	\$300	\$9,000
304	AGGREGATE BASE 10"	50 CY	\$75	\$3,750
407	TACK COAT	30 GAL	\$5	\$150
448	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22, 1.5"	10 CY	\$500	\$5,000
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 1.5"	10 CY	\$500	\$5,000
603	15" CONDUIT, TYPE B	100 LF	\$60	\$6,000
604	CATCH BASIN, NO. 3	2 EA	\$2,500	\$5,000
604	MANHOLE, NO. 3	1 EA	\$3,000	\$3,000
605	6" BASE PIPE UNDERDRAIN	100 LF	\$12	\$1,200
630	SIGNAGE	1 LS	\$1,500	\$1,500
SPECIAL	UTILITY POLE RELOCATED	1 LS	\$3,500	\$3,500
644	PAVEMENT MARKINGS	1 LS	\$3,000	\$3,000
659	TOPSOIL	20 CY	\$50	\$1,000
659	SEEDING AND MULCHING	100 SY	\$4	\$400
832	SWPPP	1 LS	\$3,500	\$3,500
832	EROSION CONTROL	2500 EA	\$1	\$2,500
Subtotal				\$ 68,000.00
614	MAINTAINING TRAFFIC	1 LS	\$12,000	\$12,000
619	FIELD OFFICE, TYPE B	3 MN	\$1,600	\$4,800
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$3,500	\$3,500
624	MOBILIZATION	1 LS	\$20,000	\$20,000
Subtotal				\$109,000
Design Risk (35%)				\$39,000
Subtotal				\$148,000
Engineering Cost (10%)				\$15,000
Total				\$163,000



BRANDT PIKE PLEASANT VALLEY RADIUS

Administrative Costs  
Jury trial Costs  
Incidental transfer Costs  
All areas are in acres.

Estimated Cost	
Contingency (50%)	
<b>TOTAL COST</b>	

Titles	Detailed Appraisal	Detailed Appraisal Review	Negotiation	Closing	Project Management
\$400	\$4,500	\$2,000	\$1,100	\$400	\$550



**CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT  
PHASE I, GROUPING 4  
NOVEMBER 2014**

**LINDEN AVENUE (CITY LIMIT TO CITY LIMIT)**

TASK	ESTIMATED COST
<b>General Road Condition Improvement</b> This includes mill/fill, minor drainage improvements, partial curb repair, new curb to fill gap (not along north side between RR and Key Bank), new side walk, (not along north side between RR and Woodman), estimated quantity of full depth pavement repair	Construction Cost - \$2,090,000 R/W - \$240,000
<b>Increase intersection radius at Spinning Road</b> This includes a separate estimate for 2 radius improvements for Spinning and Wenrick Road	Construction Cost - \$161,000 R/W - \$38,000
<b>Increase intersection radius at Wenrick Road</b> This includes a separate estimate for 2 radius improvements for Spinning and Wenrick Road	Construction Cost - \$142,000 R/W - \$19,000
<b>TOTAL LINDEN AVENUE (CITY LIMIT TO CITY LIMIT)</b>	<b>\$2,690,000</b>

**Notes**

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.

1,045,000

QUIMBY

1,045,000



**LINDEN REHAB  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE -NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$5,000	\$5,000
202	CURB REMOVED	1000 LF	\$3	\$3,000
252	FULL DEPTH PAVEMENT REPAIR	5000 SY	\$50	\$250,000
254	PAVEMENT PLANING, ASPHALT CONCRETE	46000 SY	\$3	\$115,000
301	ASPHALT CONCRETE BASE, PG64-22	CY	\$125	\$0
304	AGGREGATE BASE	CY	\$40	\$0
407	TACK COAT	7000 GAL	\$3	\$21,000
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 2"	2600 CY	\$175	\$455,000
603	15" CONDUIT, TYPE B	500 LF	\$50	\$25,000
604	CATCH BASIN, NO. 3	12 EA	\$2,500	\$30,000
604	MANHOLE, NO. 3	6 EA	\$3,000	\$18,000
608	4" CONCRETE WALK	43000 SF	\$3	\$129,000
608	CURB RAMPS	15 EA	\$450	\$6,750
609	CURB, TYPE 6	9500 LF	\$17	\$161,500
609	CONCRETE DRIVE APPROACH	35 EA	\$2,500	\$87,500
644	PAVEMENT MARKINGS	1 LS	\$8,000	\$8,000
659	TOPSOIL	300 CY	\$25	\$7,500
659	SEEDING AND MULCHING	3000 SY	\$2	\$6,000
832	SWPPP	1 LS	\$4,500	\$4,500
832	EROSION CONTROL	3500 EA	\$1	\$3,500
Subtotal				\$ 1,337,000.00
614	MAINTAINING TRAFFIC	1 LS	\$15,000	\$15,000
619	FIELD OFFICE, TYPE B	6 MN	\$1,600	\$9,600
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$5,000	\$5,000
624	MOBILIZATION	1 LS	\$40,000	\$40,000
Subtotal				\$1,407,000
Design Risk (35%)				\$493,000
Subtotal				\$1,900,000
Engineering Cost (10%)				\$190,000
Total				\$2,090,000

1,379,400

689,700

2600

5360



LINDEN VARIABLE  
CITY OF RIVERSIDE  
PRELIMINARY RIGHT OF WAY ESTIMATE - NOVEMBER 2014

[illegible]

	\$118,196
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Estimated Cost	
Contingency (50%)	
TOTAL COST	

Administrative Costs	$[(\text{sub-total}) \times 0.15] \times 1.20$
Jury trial Costs	$[(\text{sub-total}) \times 0.10] \times 1.50$
Incidental transfer Costs	$[(\text{sub-total}) \times 0.90] \times 0.025$

\* Labor Cost Includes the following:  
(per ODOT Cost Estimating Procedures  
For Acquiring Rights of Way)

Titles	Detailed Appraisal	Detailed Appraisal Review	Negotiation	Closings	Project Management
\$400	\$4,500	\$2,000	\$1,100	\$400	\$550



**LINDEN AVE SPINNING RADIUS  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE -AUGUST 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$ 5,000.00	\$ 5,000.00
202	PAVEMENT REMOVED, ASPHALT	200 SY	\$ 8.00	\$ 1,600.00
202	CATCH BASIN OR INLET REMOVED	2 EA	\$ 350.00	\$ 700.00
203	EXCAVATION	150 CY	\$ 15.00	\$ 2,250.00
203	EMBANKMENT	20 CY	\$ 12.00	\$ 240.00
204	SUBGRADE COMPACTION	300 SY	\$ 2.00	\$ 600.00
206	CEMENT STABILIZED SUBGRADE, 16" DEEP	300 SY	\$ 5.50	\$ 1,650.00
254	PAVEMENT PLANING, ASPHALT CONCRETE	550 SY	\$ 2.50	\$ 1,375.00
301	ASPHALT CONCRETE BASE, PG64-22, 6"	50 CY	\$ 125.00	\$ 6,250.00
304	AGGREGATE BASE, 10"	80 CY	\$ 40.00	\$ 3,200.00
407	TACK COAT	50 GAL	\$ 3.00	\$ 150.00
448	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22, 1.5"	15 CY	\$ 250.00	\$ 3,750.00
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 1.5"	40 CY	\$ 250.00	\$ 10,000.00
603	15" CONDUIT, TYPE B	250 FT	\$ 50.00	\$ 12,500.00
604	CATCH BASIN	4 EA	\$ 2,500.00	\$ 10,000.00
604	MANHOLE, NO. 3	2 EA	\$ 3,000.00	\$ 6,000.00
608	CURB RAMPS	2 EA	\$ 1,000.00	\$ 2,000.00
608	CURB	120 LF	\$ 20.00	\$ 2,400.00
644	PAVEMENT MARKINGS	1 LS	\$ 4,000.00	\$ 4,000.00
659	TOPSOIL	20 CY	\$ 25.00	\$ 500.00
659	SEEDING AND MULCHING	150 SY	\$ 2.00	\$ 300.00
832	SWPPP	1 LS	\$ 5,000.00	\$ 5,000.00
832	EROSION CONTROL	2500 EA	\$ 1.00	\$ 2,500.00
Subtotal				\$ 82,000.00
614	MAINTAINING TRAFFIC	1 LS	\$ 7,500.00	\$ 7,500.00
619	FIELD OFFICE, TYPE B	6 MN	\$ 1,600.00	\$ 9,600.00
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$ 4,500.00	\$ 4,500.00
624	MOBILIZATION	1 LS	\$ 4,000.00	\$ 4,000.00
Subtotal				\$ 108,000.00
Design Risk (35%)				\$ 38,000.00
Subtotal				\$ 146,000.00
ENGINEERING (10%)				\$ 15,000.00
Total				\$ 161,000.00

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POC

## LINDEN SPINNING RADIUS

Administrative Costs  
 Jury trial Costs  
 Incidental transfer Costs  
 All areas are in acres.

\* Labor Cost Includes the following:  
(per ODOT Cost Estimating Procedures  
For Acquiring Rights of Way)

Sub-Totals

Estimated Cost  
Contingency (50%)

TOTAL COST





**LINDEN AVE WENFICK RADIUS  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE -NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$10,000	\$10,000
202	PAVEMENT REMOVED, ASPHALT	20 SY	\$25	\$500
202	CATCH BASIN OR INLET REMOVED	2 EA	\$500	\$1,000
203	EXCAVATION	75 CY	\$20	\$1,500
203	EMBANKMENT	10 CY	\$30	\$300
204	SUBGRADE COMPACTION	150 SY	\$4	\$600
252	PAVEMENT SAWING	100 LF	\$4	\$400
301	ASPHALT CONCRETE BASE 6"	30 CY	\$300	\$9,000
304	AGGREGATE BASE 10"	50 CY	\$75	\$3,750
407	TACK COAT	30 GAL	\$5	\$150
448	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22, 1.5"	10 CY	\$500	\$5,000
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 1.5"	10 CY	\$500	\$5,000
605	6" BASE PIPE UNDERDRAIN	100 LF	\$12	\$1,200
630	SIGNAGE	1 LS	\$1,500	\$1,500
SPECIAL	UTILITY POLE RELOCATED	1 LS	\$3,500	\$3,500
644	PAVEMENT MARKINGS	1 LS	\$3,000	\$3,000
659	TOPSOIL	20 CY	\$50	\$1,000
659	SEEDING AND MULCHING	100 SY	\$4	\$400
832	SWPPP	1 LS	\$3,500	\$3,500
832	EROSION CONTROL	2500 EA	\$1	\$2,500
Subtotal				\$ 54,000.00
614	MAINTAINING TRAFFIC	1 LS	\$12,000	\$12,000
619	FIELD OFFICE, TYPE B	3 MN	\$1,600	\$4,800
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$3,500	\$3,500
624	MOBILIZATION	1 LS	\$20,000	\$20,000
Subtotal				\$95,000
Design Risk (35%)				\$34,000
Subtotal				\$129,000
Engineering Cost (10%)				\$13,000
Total				\$142,000

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## PRELIMINARY RIGHT OF WAY ESTIMATE - NOVEMBER 2014

\* Labor Cost Includes the following:  
(per ODOT Cost Estimating Procedures  
For Acquiring Rights of Way)



**CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT**  
**PHASE I, GROUPING 4**  
**NOVEMBER 2014**

**WOODMAN DRIVE (US 35 SOUTH TO CITY LIMIT)**

<b>TASK</b>	<b>ESTIMATED COST</b>
<b>General Road Condition Improvement</b> This includes mill/fill, minor drainage, estimate full depth, some curb and sidewalk replacement	Construction Cost- \$868,000 R/W- \$86,000
<b>TOTAL WOODMAN DRIVE (US 35 SOUTH TO CITY LIMIT)</b>	<b>\$954,000</b>

**Notes**

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.





**WOODMAN 35 SOUTH REHAB  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 EA	\$5,000	\$5,000
202	WALK REMOVED	5000 SF	\$2	\$7,500
202	CURB REMOVED	3000 LF	\$3	\$9,000
252	FULL DEPTH PAVEMENT REPAIRS	2000 SY	\$50	\$100,000
254	PAVEMENT PLANING, ASPHALT CONCRETE	23000 SY	\$3	\$57,500
407	TACK COAT	3500 GAL	\$3	\$10,500
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 2"	1500 CY	\$175	\$262,500
604	CATCH BASIN REPAIRED	6 EA	\$2,500	\$15,000
608	4" CONCRETE WALK	5000 SF	\$5	\$25,000
608	CURB RAMPS	4 EA	\$450	\$1,800
609	CURB, TYPE 6	3000 LF	\$15	\$45,000
644	PAVEMENT MARKINGS	1 LS	\$6,000	\$6,000
832	SWPPP	1 LS	\$2,500	\$2,500
832	EROSION CONTROL	1500 EA	\$1	\$1,500
Subtotal				\$ 549,000.00
614	MAINTAINING TRAFFIC	1 LS	\$7,500	\$7,500
619	FIELD OFFICE, TYPE B	3 MN	\$1,600	\$4,800
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$2,500	\$2,500
624	MOBILIZATION	1 LS	\$20,000	\$20,000
Subtotal				\$584,000
Design Risk (35%)				\$205,000
Subtotal				\$789,000
Engineering Cost (10%)				\$79,000
Total				\$868,000

## CITY OF RIVERSIDE

Estimated Cost Contingency (50%)

TOTAL COST

\* Labor Cost Includes the following:  
(per ODOT Cost Estimating Procedures  
For Acquiring Rights of Way)

Tasks	Detailed Appraisal	Detailed Appraisal Review	Negotiation	Closings	Project Management
\$400	\$4,500	\$2,000	\$1,100	\$400	\$550



**CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT**  
**PHASE I, GROUPING 4**  
**NOVEMBER 2014**

**BURKHARDT ROAD (CITY LIMIT TO CITY LIMIT)**

TASK	ESTIMATED COST
<b>General Road Condition Improvement</b> This includes total reconstruction of pavement asphalt/aggregate, salvaging half of the curb, salvage some sidewalk and add new in gaps, minor drainage improvements	Construction Cost- \$2,218,000 R/W- \$340,000
<b>TOTAL BURKHARDT ROAD (CITY LIMIT TO CITY LIMIT)</b>	<b>\$2,558,000</b>

**Notes**

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.





**BURKHARDT REHAB  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
202	PAVEMENT REMOVED	22000 SY	\$8	\$176,000
201	CLEARING AND GRUBBING	1 LS	\$5,000	\$5,000
202	WALK REMOVED	25000 SF	\$2	\$37,500
202	CURB REMOVED	1000 LF	\$3	\$3,000
202	CATCH BASIN OR INLET REMOVED	4 EA	\$350	\$1,400
203	SUBGRADE COMPACTION	22000 SY	\$2	\$44,000
254	PAVEMENT PLANING, ASPHALT CONCRETE	1000 SY	\$2	\$2,000
301	ASPHALT CONCRETE BASE COURSE, 6"	3700 CY	\$125	\$462,500
304	AGGREGATE BASE, 10"	6000 CY	\$40	\$240,000
407	TACK COAT	3000 GAL	\$2	\$6,000
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 1.5"	900 CY	\$175	\$157,500
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 1.5"	900 CY	\$175	\$157,500
603	15" CONDUIT, TYPE B	1000 LF	\$50	\$50,000
604	CATCH BASIN, NO. 3	10 EA	\$2,500	\$25,000
604	MANHOLE, NO. 3	6 EA	\$3,000	\$18,000
608	4" CONCRETE WALK	40000 SF	\$2	\$90,000
609	CURB	3000 LF	\$17	\$51,000
609	DRIVE APPROACH	30 EA	\$1,200	\$36,000
630	SIGNAGE	1 LS	\$1,500	\$1,500
644	PAVEMENT MARKINGS	1 LS	\$7,500	\$7,500
659	TOPSOIL	100 CY	\$25	\$2,500
659	SEEDING AND MULCHING	4000 SY	\$2	\$8,000
832	SWPPP	1 LS	\$4,500	\$4,500
832	EROSION CONTROL	2500 EA	\$1	\$2,500
Subtotal				\$ 1,413,000.00
614	MAINTAINING TRAFFIC	1 LS	\$20,000	\$20,000
619	FIELD OFFICE, TYPE B	6 MN	\$1,600	\$9,600
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$10,000	\$10,000
624	MOBILIZATION	1 LS	\$40,000	\$40,000
Subtotal				\$1,493,000
Design Risk (35%)				\$523,000
Subtotal				\$2,016,000
Engineering Cost (10%)				\$202,000
Total				\$2,218,000

## BURKHARDT VARIABLE RW

Administrative Costs  
 Jury trial Costs  
 Incidental transfer Costs  
 All areas are in acres.

\* Labor Cost Includes the following:  
(per ODOT Cost Estimating Procedures  
For Acquiring Rights of Way)

Titles	Detailed Appraisal	Detailed Appraisal Review	Project Closings	Project Management
\$400	\$4,500	\$2,000	\$1,100	\$550



**CITY OF RIVERSIDE MAJOR THOROUGHFARE ASSESSMENT**  
**PHASE I, GROUPING 4**  
**NOVEMBER 2014**

**HARSHMAN ROAD (CITY LIMIT TO CITY LIMIT)**

<b>TASK</b>	<b>ESTIMATED COST</b>
<b>General Road Condition Improvement</b> SR4- N. Corp, less new pavement at Valley. Total reconstruction of asphalt and aggregate, fill in gaps for sidewalks, skip section rebuilt in 2012, some curb replacement, minor drainage repairs	Construction Cost- \$3,957,000
<b>TOTAL HARSHMAN ROAD (CITY LIMIT TO CITY LIMIT)</b>	<b>\$3,957,000</b>

**Notes**

All cost estimates are based upon 2014 dollars.

For normalizing right of way widths, note that property acquisition not needed for a construction project would need to be pursued via normal property negotiations. While this can be more expensive and difficult than right of way acquisition during construction projects, the lack of the need for additional right of way does make projects more attractive to certain funding agencies.





**HARSHMAN REHAB  
CITY OF RIVERSIDE  
PRELIMINARY CONSTRUCTION ESTIMATE - NOVEMBER 2014**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
201	CLEARING AND GRUBBING	1 LS	\$5,000	\$5,000
202	PAVEMENT REMOVED	45000 SY	\$8	\$360,000
202	WALK REMOVED	500 SF	\$2	\$750
202	CURB REMOVED	1500 LF	\$3	\$4,500
204	SUBGRADE COMPACTION	45000 SY	\$2	\$90,000
254	PAVEMENT PLANING, ASPHALT CONCRETE	1000 SY	\$3	\$2,500
301	ASPHALT CONCRETE BASE, PG64-22, 6"	7500 CY	\$110	\$825,000
304	AGGREGATE BASE, 10"	12500 CY	\$40	\$500,000
407	TACK COAT	7000 GAL	\$3	\$21,000
448	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22M, 1.5"	1800 CY	\$150	\$270,000
448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, 1.5"	1800 CY	\$150	\$270,000
608	4" CONCRETE WALK	22500 SF	\$5	\$112,500
609	CURB, TYPE 6	1500 LF	\$15	\$22,500
609	CONCRETE DRIVE APPROACH	30 EA	\$2,500	\$75,000
644	PAVEMENT MARKINGS	1 LS	\$10,000	\$10,000
832	SWPPP	1 LS	\$3,500	\$3,500
832	EROSION CONTROL	1500 EA	\$1	\$1,500
Subtotal				\$ 2,574,000.00
614	MAINTAINING TRAFFIC	1 LS	\$20,000	\$20,000
619	FIELD OFFICE, TYPE B	9 MN	\$1,600	\$14,400
623	CONSTRUCTION LAYOUT STAKES	1 LS	\$15,000	\$15,000
624	MOBILIZATION	1 LS	\$40,000	\$40,000
Subtotal				\$2,664,000
Design Risk (35%)				\$933,000
Subtotal				\$3,597,000
Engineering Cost (10%)				\$360,000
Total				\$3,957,000

BRIDGE: Olentangy Road over stream  
SFN: 5770742

### BRIDGE LOAD RATING REPORT

Bridge Description	Two cell cast-in-place four-sided concrete culvert		
Work Details	Load rate existing structure in compliance with FHWA and ODOT requirements.		
Spans (C/C Bearings)	10'-0" each		
Bridge Plan Information	None available.		
Material Strengths	Steel strength estimated = 36 ksi. Concrete strength estimated = 3,500 psi.		
Live Load Distribution	Calculated by the program per AASHTO 3.30 and AASHTO 6.4	0.108 lanes/ft	
Rating Method	Load Factor		
Rating Software	BRASS Culvert		
Special Assumptions	Year of Construction used = 1950. No future wearing surface used in analysis, extra 10 lb/ft used in superimposed dead load to be conservative.		
Structure Rating Summary		<b>Rating</b>	<b>Member</b>
	Inventory HS	20.7	2
	Operating HS	34.4	2
	Ohio Legal Loads (%)	202.2%	2
	2F1 (Tons)	39.2	2
	3F1 (Tons)	46.5	2
	4F1 (Tons)	59.4	4
	5C1 (Tons)	83.5	2
			Location
			At middle support
			At middle support
			At middle support
			At middle support
			At middle support
			At middle support
			At middle support
Rated by	Daniel W. Springer, P.E.		
Company	LJB Inc. 3100 Research Boulevard, P.O. Box 20246 Dayton, OH 45420-0246 Phone: (937)259-5000 E-mail: dspringer@ljbinc.com Fax: (937)259-5100		
Date	September 16, 2010		







Structure File Number (SFN) 5770742

View Report

BRIDGE INVENTORY AND APPRAISAL		Report Date: 11/1/2018
Inventory Bridge Number: MO-102645 00130		Bridge Status: Active
STREET		
(2) District: 07	(3) County: 07-MONTGOMERY	(9) Location: 1.4 Mi. South Of Br35
(4) FIPS Code: MOT-M-67488-RIVERSIDE	Owner: MUNICIPAL/TOWNSHIP	(308) Route On Bridge: Municipal
(102) Direction of Traffic: 2-2-Way	(103) Temporary Structure:	(110) Designated National Network: Not National Network
		(42A) Type Serv. (On): Highway
		(7) Facility Carried: Orlentangy Dr
		(207) Route Under Bridge: Non Highway Traffic On Bridge (I.E.
		(101) Parallel: N
		(42B) Type Serv (Under): Waterway
INVENTORY ROUTE DATA		
(5A) Route On/Under: 1 - Route Carried "On" The Structure	(45) Main Spans Number: 2	(43) Type: Concrete
(5B) Hwy Sys: 5 - Municipal Street (I.E. Village, Town, Ct)	(46) Approach Spans Nbr: 0	(44) Type: None
(5D) Route No: M2640	(307) Total Spans: 2	(48) Max Span: 10.0 Ft
(5E) Dir: Not		(49) Overall Leng: 24.0 Ft
(5C) Des: Mainline		
(8) Feature Int: Stream	SUBSTRUCTURE	
(200) CL: 00000	(201) Spec Des:	(200) Interstate Mile
(206) Avg. Daily Traffic(ADT): 419	(20) ADT Year: 2012	(53) End: None (Such As Meet Culverts)
(235) Truck Traf: 100	(210) Corridor: N	(528) End: None (Such As Meet Culverts)
(20) Functional Class: urban--	(104) NHS route is not on the	(534) Type:
	(100) Strahnt: Route is Not A Strahnt	(536) End: None (Such As Meet Culverts)
INTERSECTION ROUTE DATA		
(370A) Record Type:	(370B) Hwy Sys:	(531) Type:
(370D) Route No:	(370C) Des:	(533) End: None (Such As Meet Culverts)
(373) Feature Int:		(528) Type:
(362) CL: 0000	(371) Interstate Mile	(534) Type:
(370) Avg. Daily Traffic(ADT): 0	(380) ADT Year: 0	(536) End: None (Such As Meet Culverts)
(361) Truck Traf: 0	(378) nHSE: -	(113) Scour: Action Is Required To Protect Exposed Fo
(375) Functional Class:	(388) Strahnt:	(926) Underwater Inspection: N
CLEARANCE ON THE BRIDGE		
Min. Ht. On Bridge: (325) NC: 0.0 Ft	(47) Card: 26.0 Ft	(926) Underwater Inspection: N
(53) Prec Max Vht On Brg: 9999.9 Ft		(926) Underwater Inspection: N
Min Vht Clr On Brg: (336) NC: 0.0 Ft	(10) Card: 9999.9 Ft	(926) Underwater Inspection: N
Min Lat Clr: (338) Right NC: 0.0 Ft	(337) Right Card: 0.0 Ft	(926) Underwater Inspection: N
		(926) Underwater Inspection: N
(340) Left NC: 0.0 Ft	(339) Left Card: 0.0 Ft	(926) Underwater Inspection: N
CLEARANCE UNDER THE BRIDGE		
Min. Ht. Under Clear:	(326) NC: 0.0 Ft	(326) NC: 0.0 Ft
(326) Prec Max Vht Under Clear: 0.0 Ft		(326) NC: 0.0 Ft
Min Vht Under Clear:	(327) NC: 0.0 Ft	(327) NC: 0.0 Ft
Min Lat Under Clear:	(329) Right NC: 0.0 Ft	(329) Right NC: 0.0 Ft
	(330) Left NC: 0.0 Ft	(330) Left NC: 0.0 Ft
		(330) Left NC: 0.0 Ft
STRUCTURE INFORMATION		
(19) Bypass Length: 1.0 Miles	(31) Design Load: H820	(71) Waterway Adequacy: 6 Equal to present minimum criteria
(16) Latitude: 39 Deg 45 Min 50.60 Sec	(64) Cpr Rat Fact/Ten: 1.720	(72) Approach Alignment: 6 Equal to present minimum criteria
(17) Longitude: 84 Deg 06 Min 58.38 Sec	(65) Inv Rat Fact/Ten: 1.045	(67) Calc Str Appraisal: 4 - Meets minimum tolerable limits
(20) Toll: On Free Road, The Structure Is Toll Free	(734) Ohio Percent of Legal Load: 150	(68) Calc Deck Geometry: N - Not Applicable
(263) Date Built: 7/1/1950	(704) Year of Rating: 2010	(69) Calc Underclearance: N - Not Applicable
(284) Major Reconstruction Date:	(708) Rate Set: Brass	
(284A) No. Lanes On: 2	(82) Cpr Rat Method: Load Factor Rating (Lfr) Reported By RI	
(284B) No. Lanes Under: 0	(85) Inv Rat Method: Load Factor Rating (Lfr) Reported By RI	
(30) Horiz Curve:	Load Rating: (705) Daniel (706) Springer (707) PE# 69027	
(34) Skew: 0 Deg		
(51) Brg. Rdw Width: 0.0 Ft		
(52) Deck Width: 0.0 Ft		
(424) Deck Area: 624 Sq. Ft		
(408) Median Type: Non Barrier		
(No Joint)		
(33) Bridge Median: No Median		
(50A) Left 4.0 Ft		
(50B) Right 4.0 Ft		
Type Curb or Sidewalk:		
(427) Left Matt:		
(428) Type: Sidewalk (Greater Than 2' In Width)		
(429) Right Matt:		
(430) Type: Sidewalk (Greater Than 2' In Width)		
(35) Flare: 0		
(408) Composite: X - Not Applicable		
(407) Rating: None		
(409) Deck Drainage: None		
(107) Deck Type: None		
Deck Protection: (108B) External: Not Applicable (Only For Bridges With No		
(108C) Internal: Not Applicable (Applies Only To Bridges		
(108A) Wearing Surface: Not Applicable (Culvert Under Fill Etc.)		
(423) Thickness: in		
(422) Date of Wearing Surface:		
(947) Slope Protection: None		
LOAD RATING INFORMATION		
(31) Design Load: H820	(71) Waterway Adequacy: 6 Equal to present minimum criteria	
(64) Cpr Rat Fact/Ten: 1.720	(72) Approach Alignment: 6 Equal to present minimum criteria	
(65) Inv Rat Fact/Ten: 1.045	(67) Calc Str Appraisal: 4 - Meets minimum tolerable limits	
(734) Ohio Percent of Legal Load: 150	(68) Calc Deck Geometry: N - Not Applicable	
(704) Year of Rating: 2010	(69) Calc Underclearance: N - Not Applicable	
(708) Rate Set: Brass		
(82) Cpr Rat Method: Load Factor Rating (Lfr) Reported By RI		
(85) Inv Rat Method: Load Factor Rating (Lfr) Reported By RI		
Load Rating: (705) Daniel (706) Springer (707) PE# 69027		
APPROACH INFORMATION		
(401) Approach Guardrail: None	(402) Grade: Good	
(403) Approach Pavement: Bituminous		
CULVERT INFORMATION		
(575) Culvert Type: 4-Sided Box (Concrete Cast-In-Place), 81	(576) Length: 82.0 Ft	
(580) Depth of Fill: 2.5 Ft	(582) Headwalls: Concrete	
GENERAL INFORMATION		
(475) Main Member: Not Applicable (Culverts, Trusses, Arches)	(477) Moment Plate: Not Applicable	
(414) Expansion Joint: None		
(453) Bearing Devices: None		
(38) Navigation: 0	(39) Nav Vht Clr: 0.0 Ft	
(92C) Spec Insp: N	Freq: 0	
(92A) Fracture Critical Insp: N	Freq: 0	
(474) Main Structure System: Not Applicable (I.E. Culvert, Beam, Slab		
(487) Structural Steel Membr: None		
(482) Paint: None Or Not Applicable		
(483) PCS Date:		
(40) Nav Ht. Clear: 0.0 Ft		
(93C) Special Inspection Date:		
(93A) Fracture Critical Feature Inspection Date:		
(468) Hinges: Not Applicable (Structures With No Hinge		
(465) Framing: None Or Not Applicable		
(426) Bridge Rating Steel: N		



Funding				
STP	Safety	Local	OPWC Grant	Total Funding
\$1,610,400		\$1,268,600		\$2,879,000
	\$639,000	\$242,900		\$881,900
\$1,610,400	\$639,000	\$1,511,500		\$3,760,900
\$1,610,400	\$639,000	\$288,852		\$2,538,252
		\$979,748		
		\$315,062	\$315,062	\$630,123
\$1,610,400	\$639,000	-\$26,210	\$315,062	\$2,538,252

	\$315,062
TOTAL CITY LOCAL MATCH	-\$26,210
TOTAL OUTSIDE FUNDING	\$2,564,462
TOTAL CITY LOCAL MATCH %	-1%



