WILDWOOD

CITY COUNCIL

COUNCIL CHAMBERS

MONDAY, September 12, 2016

6:30 P.M. to 7:20 PM

WORK SESSION AGENDA

I. CALL TO ORDER

II. ROLL CALL

III. MAYOR'S COMMENTS AND ANNOUNCEMENTS

A. Identification Of 'Direct Budgetary Implications' On Future City Council Agenda Items (Wards – All)

IV. FOR INFORMATION

A. Rural Internet Access Committee Update (Wards – All)

Documents:

WS- RIAC UPDATE.PDF

B. Administration/Public Works Committee

1. Proposed Missouri State Route 100 Ramp Widening Design Contract (Ward - One)

Documents:

WS - ROUTE 100 RAMP WIDENING.PDF

C. Construction Project Update

V. FOR ACTION

A. Administration/Public Works Committee

1. Discussion On Missouri State Route 100 Pedestrian Bridge Project (Bill #2206) (Wards - Five And Eight)

DIRECT BUDGETARY IMPLICATION: $1,096,870.00 (Base Bid + Bid Alt. 1) Expense

Documents:

WS - REVIEW OF THE PROPOSED EATHERTON ROAD PEDESTRIAN BRIDGE PROJECT.PDF

2. Proposed Missouri State Route 100 Timber Guard Rail Staining (Wards - One, Five, Seven, And Eight)

DIRECT BUDGETARY IMPLICATION: $5,253.50 Expense

Documents:

WS - PROPOSED ROUTE 100 TIMBER GUARDRAIL STAINING.PDF

VI. OTHER

VII. ADJOURNMENT

City Council will consider and act upon the matters listed above, and such others as may be presented at the meeting and determined to be appropriate for discussion at that time.

Notice is hereby given that the City Council may also hold a closed meeting for the purpose of dealing with matters relating to one or more of the following: Legal Actions, Causes of Action, Litigation or Privileged Communications Between the City's Representatives and its Attorneys [RSMO 610.021(1) 1994]; Lease, Purchase or Sale of Real Estate [RSMO 610.021 (2) 1994]; hiring, firing, disciplining or promoting employees by a public governmental body [RSMO 610.021 (3) 1994]; bidding specification [RSMO 610.021 (11) 1994]; sealed bids and related documents, until the bids are opened' and sealed proposals and related documents or any documents related to a negotiated contract until a contract is executed, or all proposals are rejected [RSMO 610.021 (12) 1994]; and/or individually identifiable personnel records, performance ratings or records pertaining to employees or applicants for employment [RSMO 610.021 (13) 1994];

WILDWOOD

September 12, 2016

The Honorable City Council
City of Wildwood, Missouri
16860 Main Street
Wildwood, Missouri 63040

Re: Update on the City's Rural Internet Access Project

Council Members:

On September 2, 2016, the Department of Planning received authorization from the community college district regarding its consideration of the City's use of the tower on its property by Bays ET and its representative noted the lease agreement between the original two (2) parties (St. Louis Community College and St. Louis County) had allowed St. Louis County sole discretion in regards to other potential users on the structure. As the City Council members are aware, the St. Louis County Council, with support from the Emergency Communications Commission (ECC), had approved the use of the tower by the City of Wildwood in an agreement that, for all intents and purposes, allowed it to assign its rights to the two (2) selected providers – Bays ET and Wisper ISP. Authorization from the Missouri Department of Natural Resources (MDNR) is expected as well. Therefore, the Department believes it is appropriate for the City Council to take action on the postponed bill (#2197), which would approve the agreement between St. Louis County, Missouri and the City of Wildwood, Missouri.

One (1) of the providers (Bays ET) has completed its long-range plan for the expansion of service from current City-owned poles and St. Louis County towers. With the completion of the plan by Bays ET, the Department is planning on presenting it to the Rural Internet Access Committee (RIAC) this month and have its members review and endorse proceeding with the installation of the four (4) planned repeaters poles at the recommended locations by Bays ET. A bid is being prepared by TRE, which was the electrical contractor used by the City for the installation of the sixteen (16) poles in place throughout the rural area of Wildwood at this time. This meeting is planned for September and the Department would note the current composition of the Committee, with the addition of new members over the last several months by the Mayor and City Council:

RURAL INTERNET ACCESS COMMITTEE (as of end of day – September 12, 2016)

Rick Kallaus, Chair, Citizen Member, Ward One
Debbie Trunko, Citizen Member, Ward One
Cheryl Jordan, Citizen Member, Ward Six

David Sewell, Citizen Member, Ward Six
Larry McGowen, City Council Liaison, Ward One
Greg Alexander, City Council Liaison, Ward Six

The Department has not yet received an update from WisperISP on its long-range plan and is expecting a response from this provider at any time. These long-range plans are intended to begin the service push to those households that are considered the most difficult to serve (the last mile). Without adjustments to the network of towers and poles in the rural areas of Wildwood, those households that need service may never be able to access such in the future. Therefore, these smaller, repeater poles are of critical importance to the City and its residents and, without them, service to these last mile locations will continue to be unavailable.

Given the last time the Department reported on income from the poles and associated number of households served by the City's network was a number of months ago, it thought it appropriate to provide an update at this time. Given two (2) quarters of the fiscal year have passed, the Department is reporting the following in this regard: collected fees from the two (2) providers for the first two (2) quarters of 2016 equal $3,769.25. This amount equates to approximately 420 households being served under the payment arrangement contained in the agreements between the two (2) providers and the City.

Again, at the start of this effort, in December 2007, it was anticipated that some 1,200 households were not currently served with reliable high-speed internet access and now almost one-half have access to such, if they have chosen one (1) of the two (2) City's selected providers. Other expansions have occurred by Charter Communications into the underserved and unserved areas of the City, but a calculation of the number of these households served are not available to the City. However, it is conservative to state that over the last nine (9) years more and more households have been able to address the difficult internet access issue that exists in certain parts of Wildwood.

If any of the City Council members should have questions or comments in this regard, please feel free to contact the Department of Planning at (636) 458-0440. Thank you for your continued support of this project and the efforts to address the needs of rural Wildwood residents.

Respectfully submitted,
CITY OF WILDWOOD

Joe Vujnich

Joe Vujnich, Director
Department of Planning

Cc: The Honorable James R. Bowlin, Mayor
Ryan S. Thomas, P.E., City Administrator
John A. Young, City Attorney
Kathy Arnett, Assistant Director of Planning and Parks

Chris Bay, Malinda Heuring, and Nathan Stooke, Service Providers – Bays ET and Wisper ISP

Tower

1 message

Dreith, Michael <mdreith@stlcc.edu> Fri, Sep 2, 2016 at 3:04 PM
To: Joe Vujnich <JVujnich@cityofwildwood.com>

Sir,

Got this response to your inquiry from our legal counsel. Does this help?

We lease the land on which the antenna tower sits to St. Louis County, for the express purpose of their erecting, maintaining, and operating the antenna. We do not own the antenna, and if the City of Wildwood wants to add a transmitter to it, they need to negotiate with St. Louis County, not with STLCC. The lease gives the County the right to "modify" the antenna as they see fit, so as the landlord, we would have no cause to object, so long as the tenant observes the remainder of the lease obligations.

CITY OF WILDWOOD
SEP 2 2016
DEPT OF PLANNING & PARKS

Please advise...

Mike Dreith, Ed.D.

Associate Provost, St. Louis Community College - Wildwood

mdreith@stlcc.edu | www.stlcc.edu | 636.422.2250

STLCC

image001.jpg
7 KB

From: **Chris Bay** chris@bays-et.com
Subject: small pole requests
Date: August 1, 2016 at 12:38 PM
To: Joe Vujnich JVujnich@cityofwildwood.com

Hello,

I've worked out placements for some small poles to clean up our leads list further.

The last areas south that haven't been fully planned is east of hwy 109. A couple small poles will likely be needed, but will need the college tower for uplink. The college tower catches the top of the ridge lines. Planning deployment of the small poles can be tricky, I'd prefer to wait until the college tower is online so the signals can be pre-metered to verify best possible pole links.

pole 1 woodland meadows 38.563267, -90.680841 north side of road, 40' past last drive way before going downhill uplinking to west Melrose pole

fox creek small pole 1 38.51207, -90.71285 near model reality company road sign. Aiming to fox creek pole for uplink

vixon road small pole 38.51826 -90.70182 Vixen road small pole directly south of small walk bridge before covert pipe in rear. Uplinking to hencken pole

Melrose small pole 38.554027, -90.659171 Melrose small pole near weather warning siren uplinking to east Melrose pole.

Thanks,
Chris

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MEMORANDUM

To: Mayor Bowlin and City Council Members

From: Ryan S. Thomas, City Administrator

Date: September 9, 2016

Re: Design Contract Proposal for Route 100 Ramp Widening

Background
Currently, the entrance to the Community Park does not have a dedicated right-turn lane, requiring motorists to quickly decelerate from the 55 mph speeds on Route 100 to make the turn into the park. Additionally, traffic entering Route 100 from the on-ramp at Route 109 is forced to yield into the through lane on Route 100 before making a right-turn into the Community Park. It has been suggested that access to the Community Park could be improved by extending the on-ramp to become a dedicated right-turn lane into the Community Park. I have requested a design fee proposal from Oates Associates, Inc., the consultant involved with the Community Park project, to make this modification.

Recommendation
It is recommended that the City enter into a contract with Oates Associates, Inc. for the total sum of $14,000, to prepare plans and specifications for the widening of Route 100 to accommodate the aforementioned extension of the on-ramp to become a dedicated right-turn lane into the Community Park. The Administration/Public Works Committee approved this recommendation at its September 7, 2016 Meeting.

Reasons for Recommendation

1. The improvements would provide for a safer, more functional access into the Community Park, by:
    a. Providing a dedicated right-turn lane to decelerate from Route 100.
    b. Eliminating the need to enter the through lane of Route 100 for traffic from Route 109.
2. Oates & Associates, Inc., having completed prior design work at this location, is well-suited to modify their prior engineered drawings to accommodate this improvement.
3. $14,000 is a reasonable design fee for this type of work.

I will be available for any comments or questions at the September 12, 2016 City Council Meeting, where Resolution #2016-29 has been placed on the Agenda for final consideration of this design contract.

RST

OATES ASSOCIATES
Engineering + Architecture

100 Lanter Court, Suite 1
Collinsville, IL 62234
tel 618.345.2200

720 Olive, Suite 700
St. Louis, MO 63101
tel 314.588.8381

20 East Main Street
Belleville, IL 62220
tel 618.416.4688

330 North Main, Suite 201
St. Charles, MO 63301
tel 636.493.6277

www.oatesassociates.com

August 17, 2016

Mr. Ryan S. Thomas, PE
City Administrator
City of Wildwood
16860 Main Street
Wildwood, MO 63040

Re: Wildwood Community Park – Westbound Right-Turn Lane on MO Route 100
Wildwood, MO

Dear Mr. Thomas:

We propose to render professional engineering services in connection with adding a westbound right-turn lane on Missouri Route 100, just west of intersection with Missouri Route 109, which will extend the westbound on-ramp from Missouri Route 109 to the new Wildwood Community Park (hereinafter called the "Project"). Improvements will generally consist of widening Missouri Route 100 with new hot-mix asphalt pavement and associated grading and drainage improvements.

Our Basic Services will consist of surveying and preparing construction documents to current Missouri Department of Transportation policy, all as set forth in the attached Scope of Work. Billings for Basic Services are estimated at $14,000. You agree to pay us for our Basic Services and any authorized Additional Services at the Hourly Rates set forth in Exhibit A. We will not provide any Additional Services that increases the contract amount without prior approval from the City.

This proposal and the attachments represent the entire understanding between you and Oates Associates, Inc. with respect to the Project and may only be modified in writing signed by both of us. If it satisfactorily sets forth your understanding of our agreement, please sign the enclosed copy of this letter in the space provided below and return it to us. This proposal will be open for acceptance until October 15, 2016, unless changed by us in writing.

Sincerely,

OATES ASSOCIATES, INC.

Thomas L. Cissell III, PE
Project Manager

David M. Oates, PE
Project Principal

Enclosure

EXHIBIT A
HOURLY RATE SCHEDULE

Principal Engineer	210.00
Senior Professional II	175.00
Senior Professional I	160.00
Professional IV	150.00
Professional III	135.00
Professional II	120.00
Professional I	105.00
Junior Professional	85.00
Technician III	120.00
Technician II	105.00
Technician I	85.00
Technician Intern	50.00

The above hourly rates are effective as of July 1, 2016 and are subject to adjustment annually.

Scope of Work

Task 1: Field Survey (about 1-week).

Task 1.1: Call in utility locates and review the utility marks in the field
Task 1.2: Supplement existing survey by tying in existing topography/ utilities
Task 1.3: Process survey data in the office
Task 1.4: Field review the survey drawing and edit accordingly

Task 2: Preliminary Plans (about 2-weeks + 2 weeks for review time)

Task 2.1: Preliminary coordination with MoDOT and City.
Task 2.2: Prepare typical sections for pavement widening matching existing pavement structure.
Task 2.3: Set roadway alignments – horizontal and vertical.
Task 2.4: Prepare permit applications for MoDOT permit.
Task 2.5: Develop preliminary plans and specifications.
Task 2.6: Develop construction cost estimates
Task 2.7: Submit the preliminary plans for City and MoDOT review and approval.

Task 3: Construction Documents (about 2-weeks + 2 weeks for review time)

Task 3.1: Address preliminary review comments
Task 3.2: Develop construction documents including:
- Cover sheet
- Summary of Quantities
- Typical Sections
- An existing conditions and demo plan
- Roadway plan and profile sheets.
- Details

Task 3.3: Evaluate need for guardrail and prepare design, if required.
Task 3.4: Prepare front end related documents for bidding, including:
- Notice to Contractors
- Proposal
- Schedule of Prices

Task 3.5: Submit the final plans and specifications for City and MoDOT review and approval.

Excluded from the Scope of Services:

- Geotechnical services.
- Bidding assistance (except as noted above).
- Permits and utility fees.
- Lighting design
- Utility locating services.
- Hazardous materials and remediation.
- Landscaping plans.
- Property plats.
- Park monument signage.
- Construction services and administrations.
- Drainage design and BMPs, including coordination with MSD.
- Storm Water Pollution Prevention Plan.
- Interchange design, including intersection design study and highway capacity manual analysis for weaving
- Pavement design (assumed MoDOT will provide existing pavement structure to be matched).

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MEMORANDUM

To: Mayor James R. Bowlin and City Council Members

From: Rick C. Brown, PE, PTOE
Director of Public Works / City Engineer

Date: September 9, 2016

Re: Review of the Proposed Eatherton Road Pedestrian Bridge Project

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Project History and Background

As you know, the Department of Public Works held a bid opening on July 27, 2016 for the project to construct a proposed 2nd pedestrian bridge over State Route 100. The bid opening was the result of over two (2) years of effort on the part of the Departments of Public Works, Parks and Planning, as well as the City Council. Over the course of this two (2) year period, a planning session was held at its start to frame what type of bridge would be constructed and the characteristics it would include in its design, along with incorporating lighting, landscaping, and the development of plaza areas on either end of the proposed span. This design and engineering process resulted in a bridge with many of the characteristics of the City's first pedestrian bridge, but with more focus on its function as a component of the overall trail network along State Route 100. Please refer to **Exhibits 1 and 2** for the location of the proposed bridge. Please see **Exhibit 3 and 4** for plans of the proposed bridge.

This location has been considered by the City for a pedestrian bridge since the inception of the City's trail plan in 1998. After the initial approval of the first segment of trail along State Route 109 and plans for more miles of the same along State Route 100, a living bridge was planned, but postponed due to its design not being accepted by the City Council and the estimated cost being too high. Eventually, the bridge's design and location were changed to address the concerns with the original planned structure.

The currently proposed Eatherton Road Pedestrian Bridge Project was first added to the Five (5) Year Capital Improvement Plan in 2014 through adoption of the City's 2014 Fiscal Year budget (Please refer to **Exhibit 5**). A contract with the engineering firm Intuition and Logic, for design and engineering of the project, was approved by the City Council through Ordinance #2006 on April 28, 2014. (Please refer to **Exhibit 6** for a copy of the ordinance).

Existing Wildwood Pedestrian Bridges/Tunnels

With this project, the City will have constructed a total of six (6) grade separated pedestrian crossing structures – either bridges or tunnels - crossing either State Route 109, State Route 100 or Old State Road. In addition, we are working on the design of a 7th crossing, which will be a tunnel under State

Route 109 immediately south of State Route 100. A summary of existing Wildwood pedestrian structures is shown in the table below:

Existing Wildwood Pedestrian Tunnels or Bridges		
Trail	**Type**	**Crossing**
Wildwood Greenway	Bridge	Route 100 (between Taylor Road and Westglen Farms Drive)
Wildwood Greenway	Bridge	Route 109 (North of Route 100)
Wildwood Greenway	Tunnel	Route 109 (South of Pond-Grover Loop Road)
Hamilton Carr	Tunnel	Route 109 (North of Woods Road)
Hamilton Carr	Tunnel	Old State Road (North of Route 109)

Project Need

As shown on **Exhibits 1-4**, the proposed new pedestrian bridge will provide a safe north / south connection across State Route 100, a high speed, 4-lane urban expressway. State Route 100, which is maintained by the Missouri Department of Transportation (MoDOT), carries about 20,000 vehicles per day and has a posted speed limit of 55 mph. The proposed bridge is located about 1,100 feet (0.2 Mile) east of State Route 109 and about 3,200 feet (0.6 Mile) west of Taylor Road.

In order for pedestrians to cross State Route 100 at this location, the only nearby option is State Route 109. State Route 109, however, does not have sidewalks nor are there any pedestrian facilities through the adjacent roundabout on the north side of the interchange. The existing shoulder on the State Route 109 Bridge is about 4 feet in width and it does not provide a safe, ADA compliant crossing for pedestrians. It should be noted that crossing at Taylor Road is not a feasible option, as the distance to Taylor Road (0.6 Miles) is excessive for pedestrians. For example, a pedestrian utilizing Taylor Road to cross State Route 100 from this location could result in 1.2 miles of additional travel. For an average pedestrian, walking at a speed of 4 feet/second, this equates to over 22 minutes of additional travel time (not accounting for the signal delay incurred waiting to cross State Route 100 on green).

Past Trail Planning Efforts

The proposed Eatherton Road Pedestrian Bridge over State Route 100 will be a vital link in the overall Wildwood Greenway trail system, which has been under construction for many years. The Wildwood Greenway has been planned in conjunction with the Great Rivers Greenway (GRG), the St. Louis Regional Parks & Trails District, and is included with the City's Access & Mobility Plan which has been attached as **Exhibit 7.**

Access & Mobility Plan

The City's Access & Mobility Plan, which was adopted by resolution of the City Council in 2007, envisions "a system of bicycling, pedestrian and equestrian facilities that connect people to their community, promote health and fitness, and showcase Wildwood's natural beauty. City leaders and staff recognize that a strong bicycle/pedestrian/equestrian system is an added amenity that will contribute to making Wildwood an ever better place to live." The Access & Mobility Plan recommended trails along most City rural roadways as well as State Route 100 and 109. A trail system is planned for both sides of State Route 100 from City Limit to City Limit to serve as the major east-west spine of the City's trail system. Along State Route 109, trails were recommended from the southern City Limit to Wild Horse Creek Road. Excerpts of the Access & Mobility Plan have been attached as **Exhibit 8.**

Wildwood Greenway

The Wildwood Greenway includes a system of shared use paths along both the north and south side of State Route 100 and along State Route 109. On State Route 100, the shared use path extends from Pond Road (to the west) to the Wildwood City limit (on the east), a distance of more than 2 1/4 miles. To the east, the path has recently been extended to Old State Road in the City of Ellisville under the Great Streets Project. The City has more immediate plans to extend the Wildwood Greenway further to the west along State Route 100 to Mueller Road in order to link with GRG's Western Greenway. To the north, the trail extends about 2 miles along State Route 109 to Garden Valley Ct. To the south of the proposed bridge, the City plans to extend bike and pedestrian facilities along both Eatherton Road and along State Route 109 to connect with Manchester Road. Manchester Road both east and west of State Route 109 has been improved with bike lanes. The section of Manchester Road to the east of State Route 109 has also been improved with sidewalks, which will be continuous to State Route 100 after construction of our Manchester Road Streetscape Phase 3 Improvement Project.

Western Greenway

The Wildwood Greenway is designed to connect to the Western Greenway, which is being designed and constructed by GRG. The Western Greenway is one of seventeen greenways to be developed by GRG, totaling over 600 miles of new trails within St. Louis County, St. Charles County and the City of St. Louis. The Wildwood Greenway will connect to trails planned along the Missouri and Meramec greenways. (The Hamilton Carr Trail along State Route 109 is part of the Western Greenway.) The Western Greenway is shown on **Exhibit 9.**

Manchester Road Great Streets Master Plan

A more recent planning effort was the development of the Manchester Road Great Streets Master Plan, which was adopted by the City Council in 2012 as an addendum to the City's Master Plan – Town Center Plan. The Manchester Road Great Streets Master Plan provides a comprehensive blueprint for future improvements to State Route 100. The plan includes State Route 100 within Wildwood east of State Route 109. Among other goals, the Manchester Road Great Streets Master Plan promotes safe pedestrian and bicycle facilities through the implementation of new sidewalk connections and multi-use trails along State Route 100 within the Town Center Area. (Please refer to **Exhibit 10**)

Potential Usage

The Eatherton Road Pedestrian Bridge will provide a key linkage to the north and south sides of State Route 100 within the Town Center, and will provide direct and safe access to the nearby Community Park to the north, and Town Center to the south. To provide a graphical illustration of the potential trail users, please refer to **Exhibits 11 and 12**, which show properties located within a 1/2 mile radius of both the existing State Route 100 Pedestrian Bridge and the proposed bridge. It is interesting to see that a comparable number of properties currently lie within this half mile boundary – around 1,075-1,080 for each. However, when considering the proposed bridge, it is important to consider the impact of the proposed nearby residential development projects: the Villages of Bright Leaf and Main Street Crossing. These new subdivisions will add almost 300 new homes in close proximity to the new pedestrian bridge. Furthermore, potential trail users will be increased, assuming that Ackerley Place subdivision is constructed to the southwest of the State Route 100/109 interchange on the Slavik propertly. Ackerley Place, which will also be connected to the trail system by the planned tunnel under State Route 109 south of State Route 100, currently is proposed to include over 150 new single family homes.

To help address the question of trail usage, the Department conducted a count of pedestrian and bicycle users on the existing pedestrian bridge over State Route 100 (between Taylor Road and Westglen Farms Drive). The count covered the period from August 19-22, 2016. The results of the count are included as **Exhibit 13**. It is anticipated that the usage of the Eatherton Road Pedestrian Bridge will exceed the existing bridge. This is based on the fact that more residential properties will ultimately be located within close proximity of the proposed Eatherton Road Bridge and that the bridge will provide a desirable path to both the Community Park and the Wildwood Greenway to the north on Route 109, as well as the Town Center to the south.

Strong Public Support for Trails

A recent example of public support for trail construction in Wildwood is the public engagement and outreach effort completed by GRG prior to the commencement of design work on the Western Greenway in 2013. For this effort, GRG reached out to area residents and trail users to capture public sentiment, including concerns and sensitivities. Using a multi-pronged approach, GRG staffers not only provided information online, but met residents throughout the city to educate them about GRG's Western Greenway project and to encourage their participation. From feedback collected at the two Open Houses and from the over five hundred and sixty (560) surveys collected, public sentiment strongly supports the development of the Western Greenway. Open House attendees, survey responders, and information table visitors **voiced very strong support for the continued development of the trails** and the necessity to create connectivity between existing trails as well as key local amenities, including: Babler State Park, Rockwood's Reservation and the Wildwood Town Center. **Of all responders, the ratio of those fully supportive of trails to those who do not support trails is 85:1. Of Wildwood residents, the ratio between those that fully support trails compared to those who do not support trails at all is 40:1.** (See **Exhibit 14,** GRG Western Greenway Public Engagement and Outreach Summary – Executive Summary)

Public Support for the Eatherton Road Pedestrian Bridge

Letters supporting the project were received from the following organizations and submitted as part of the City of Wildwood's application for federal funding under the Transportation Alternatives Program: (See **Exhibit 15**)

- **Lafayette Trails Subdivision Homeowners Association**, Jack Kramer (President), Mike Foye (Secretary), Alejandro Hernandez (Treasurer)
- **Windsor Crest Board of Trustees**, Burt Squires (President)
- **Towns at Windrush Homeowners Association**, Board of Directors, Jerome Knapp, (President - Board of Directors)
- **West County Chamber of Commerce**, John Sullivan (Chairman)
- **Manchester Road Great Streets Committee**, Craig Larson (Interim Facilitator)
- **City of Ellisville**, Adam Paul (Mayor)
- **Wildwood Business Association,** Michael Garrett (President)

State Route 109 Crossing Option

A question was raised regarding the potential to incorporate a pedestrian crossing within MoDOT's planned improvement project to re-deck and widen the State Route 109 Bridge over State Route 100. While MoDOT's project is currently planned for construction in 2018, the scope of work does not include a separate sidewalk or trail crossing on the widened bridge. In meetings with MoDOT, where the issue of pedestrian facilities has been discussed, MoDOT made two things clear:

1. MoDOT is not funding pedestrian facilities as part of their project. If the City desires them, all additional costs would be the responsibility of Wildwood.
2. MoDOT is not agreeable with crossing pedestrians at-grade over the current ramps adjacent to roundabouts at both the eastbound and westbound ramps. Any trail or path crossing over the ramps would require either a tunnel or a bridge.

To evaluate the feasibility of crossing pedestrians over State Route 100 along State Route 109, the Department of Public Works requested the engineering firm of HR Green to conceptually design such a crossing. The results of that design effort are shown graphically as **Exhibit 16**. The proposed crossing at State Route 109 would include widening the bridge over 109 to add the trail, as well as installing two new tunnels – one for each ramp crossing. In order to address the differential in elevation between the proposed tunnels and the State Route 109 Bridge, the trail would need to be lengthened with a switchback to accommodate the maximum 5% gradient which is required to meet ADA criteria.

Based on the conceptual design, the estimated cost to construct the crossing depicted on **Exhibit 16** is $1,834,000 **(see Exhibit 17)**. It is important to note that this cost is 34% above the low base bid amount of $1,364,859 for the proposed pedestrian bridge at Eatherton Road. Accounting for the federal funds, the City's maximum cost for this project would be just under $1M, further increasing the cost differential between the two locations. Thus, when compared to crossing at State Route 109, the construction of the proposed Eatherton Road Pedestrian Bridge over State Route 100 would be the least expensive crossing.

2004 Pedestrian Bridge Cost vs. 2016 Bridge Cost

A question was raised regarding the cost of the City's first pedestrian bridge over State Route 100, which was constructed twelve years ago in 2004. The low bid from 2004 was from Pace Construction for $1,085,000; however this is very misleading because the project included 8,000 feet of new trail construction.

In an attempt to provide an "apples to apples" comparison of the 2004 bid with the 2016 bid for construction of the Eatherton Road Pedestrian Bridge, the Department compared the cost to construct only the bridge portion of both projects.

A summary of the bridge costs and lengths are as follows:

State Route 100 Pedestrian Bridges			
Year	**Location**	**Length**	**Construction Cost**
2004	1200' west of Westglen Farms Drive (over Route 100)	284'	$409,356
2016	Eatherton Road (over Route 100)	334.75'	$705,365

Bridge Length/Elevation:

The first bridge was a similar truss; however, the bridge was shorter at 284' vs. 334'-9" for the new bridge - an increase of 50.75' or 18%. Also, the first bridge was lower with a minimum vertical clearance of just under 27' vs. 40' for the new bridge. Thus, costs for the substructure and superstructure would be higher. If we assume the bridge should cost 18% more due to the increase in length, the 2004 bridge cost would increase from $409,356 to $483,040. (Note that the Department would argue that the 18%

increase is conservative, as it does not fully consider the implications and extra costs of building the higher structure.)

Construction Cost Index

If we account for 12 years of inflation in the cost of construction, which averaged 3.16% annually over the period of 2004-2015, the 2004 bridge bid amount increases significantly from **$483,040** to about **$700,193** in 2016 dollars. For construction cost inflation, our source is the "Annual Change of Construction Cost Index" as adapted by St. Louis County and the Engineering New Record (ENR). (Please see **Exhibit 18)**

Therefore, when the adjusted amount of $700,193 is compared to our 2016 bid by KCI of $705,365 for the Eatherton Road Pedestrian Bridge, the bid looks reasonable.

Federal Funding

At the City Council meeting of August 22nd, there was much discussion regarding the federal funding that has been approved for construction of the project. The City has a long history of successfully utilizing federal funds on capital improvement projects. To date, we have successfully obtained nearly $26M in federal grants which were required to be matched by City funds.

To secure the funding for the Eatherton Road Pedestrian Bridge Project, the City has entered into a funding agreement with MoDOT (Please see **Exhibit 19**). The federal funds will pay 80% of the cost of the project, up to the amount of $450,000. The federal funds are obligated by Congress through the Federal Highway Administration (FHWA) to MoDOT. MoDOT accordingly distributes these funds statewide as part of the Transportation Alternatives Program (TAP). TAP funds are required to be used only for non-motorized transportation projects, such as bicycle and pedestrian improvements.

With regard to use of TAP funds, two points should be made:

1. Forfeiture of Funds - If the federal TAP funds are not utilized by Wildwood on this project, we will forfeit their use. We can't move them to construct a similar crossing at State Route 109. Forfeited funding will likely be utilized on another project by another municipality within the St. Louis area.
2. Reasonable Progress - Our funding agreement includes provisions that the City must meet certain requirements with regard to "Reasonable Progress" (see **Exhibit 19**, Paragraph 3). Essentially, this means we must meet the original schedule that we proposed when we applied for the funding. It is important to note that the agreement states that Wildwood may not be eligible for future Transportation Alternative funding if we fail to meet the reasonable progress policy.

Funds Expended To Date

The City has already approved and expended funds toward the design and engineering of the project. The total design cost for the project, which was previously approved by the City Council, was for the amount of $92,211.18. This amount has been expended. In addition, the application for federal funds, which was previously approved by the City Council, required us to submit an application fee of $2,250 to the East-West Gateway Council of Governments.

City Capital Improvement Funding

The City portion of the funding for this bridge has been established in the 2016 Capital Improvements Program. The amount the City Council approved for this use was $1,200,000. Of this amount of funding, $450,000.00 is being provided from the federal TAP funding grant.

It should be recognized that this project is funded through the Capital Improvements Sales Tax Fund rather than the General Fund. The Capital Improvements Sales Tax Fund is not affected by the recent changes to the St. Louis County sales tax pool. Those changes will affect the General Fund only.

Although the low bid is more than the budgeted amount, the Capital Improvements Program for 2016 also has funding for trail construction this year as well, which is a component of this pedestrian bridge project. On either end of the proposed bridge, connections are planned to the existing trail system in its vicinity. Therefore, the Department believes that, with some modifications to the budget components associated with the project and trail construction, the low bid cost for this bridge can be met from current line item funding.

Bids Received

As you know, the Department of Public Works opened bids to construct this project on Wednesday, July 27. A total of six (6) bids were opened for the project, with KCI Construction Company, Inc. submitting the low base bid of $1,364,859.00. The second lowest bid is from Gershenson Construction Company, Inc. with a base bid of $1,379,591.75. The low base bid amount is approximately 10.2% over the Engineer's Estimate for the base bid of $1,238,220. This overage could be attributed to a general underestimating of the bid unit prices on the Engineer's Estimate. (See **Exhibit 20** for the complete tabulation of bids.)

Recommendation

The Department of Public Works recommends authorizing a contract with KCI Construction for the Eatherton Road Pedestrian Bridge Project, in the amount of $1,461,870.00, which includes Bid Alternate 1, plus an $85,000 contingency for additional work as identified by the Department. Accounting for the federal funds, the City's maximum cost for this project would be $1,096,870.

Reasons for Recommendation

- As six bids were submitted, the Department is satisfied that competitive bids were received.
- KCI Construction submitted the lowest bid. While they have not completed a project for Wildwood, they have successfully completed numerous large projects around the St. Louis area.
- While the low bid was about 10% over the Engineer's Estimate, there are funds in the 2016 Capital Improvement Program for "Future Trail Development – Construction" which can be used to address the increase.
- A failure to award this project would result in the loss of the federal funds.

This item was discussed at the September 7th meeting of the Admin / Public Works Committee, where award of the contract was recommended by a vote of 6-1.

I will be available for any questions or comments at the September 12, 2016 meeting of the City Council

RCB

Exhibit 1

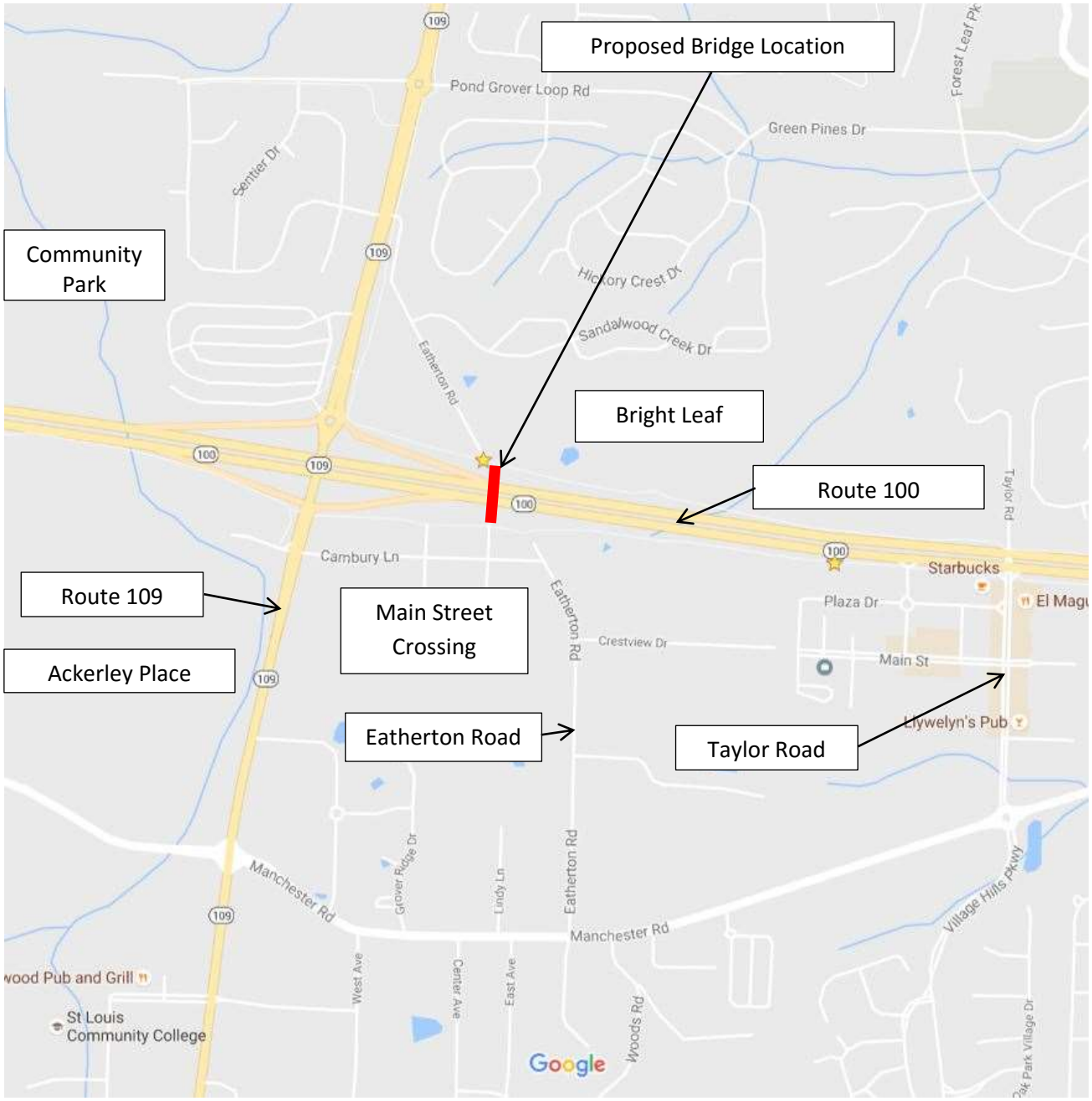


Exhibit 1
Project Location

ROUTE 100 PEDESTRIAN BRIDGE
Aerial Map of Project Vicinity

Exhibit 2

Exhibit 3

COMMON GROUND AREA "B", UTILITY EASEMENT AND INGRESS/EGRESS EASEMENT

EX 35'W MULTIPLE-USE TRAIL ESMT TO THE CITY OF WILDWOOD PB 351 PGS 206-208

POSSIBLE ITS CAMERA

SAN MH T: 780.28 FL: 774.78

SAN MH T: 784.19 FL: 778.97

8" PVC

LIMITS OF DISTURBANCE (TYP)

CLEANOUT

BOUNDARY ADJUSTMENT PLAT OF "CAMBURY" AND "CAMBURY PLAT TWO" PB 351, PGS 206-208

FUTURE LOTS

EX 8'W UTIL ESMT PB 351 PGS 206-208

6" WATER LINE SCALED FROM MAW BASE MAP

KILARE (45' WIDE) LANE NORTH

2' DIAM CONCRETE BASE FOR LIGHT STANDARD (LIGHT AND POLE MISSING)

EX 8'W UTIL ESMT PB 351 PGS 206-208

LOT 34

LOT 33

6" BOLLARD ON CONC. PAD (TYP.)

EX 10'W SEWER ESMT PB 351 PGS 206-208

8" PVC

MH 82.85 776.30

SAN MH T: 785.03 FL: 779.63

COMMON GROUND AREA "E", UTILITY EASEMENT AND INGRESS/EGRESS EASEMENT

EX 24'W MULTIPLE-USE TRAIL ESMT TO THE CITY OF WILDWOOD PB 351 PGS 206-208

EX 8'W UTIL ESMT PB 351 PGS 206-208

SOUTH PLAZA C3

END BENT S3.3

190.00'

SOUTH SPAN S3.1

SOUTH WALL S2.1

LIMITS OF CLEARING AND GRUBBING

MO STATE ROUTE 100 (WIDTH VARIES)

CENTERLINE OF MO STATE ROUTE 100 PER MO STATE HWY COMMISSION PLANS PROJECT NO. RS-432(2)

INTERMEDIATE BENT NO. 2 S3.4

370+00

EASTBOUND MO STATE ROUTE 100

WESTBOUND MO STATE ROUTE 100

LIMITS OF DISTURBANCE (TYP)

TYPE "E" MEDIAN PEIR PROTECTION C6

CENTERLINE STATION 372+00.00

190.00'

24 SM FIBER OPTIC CABLE AND CONDUIT. LOCATION APPROXIMATE. VERIFY IN FIELD.

DND ITS REPEATER. FINAL ACCEPTANCE OF THE CONSTRUCTION WILL NOT BE ALLOWED UNTIL IT IS VERIFIED THAT THE OPERATION OF THE SENSYS SYSTEM WAS NOT DISRUPTED BY THE INSTALLATION OF THE PEDESTRIAN BRIDGE.

NORTH SPAN S3.1

NORTH WALL S1.1

EX FENCE (TBR)

NORTH PLAZA C2

END BENT S3.3

HATCHED AREA EXISTING BITUMINOUS TRAIL (TBR)

LIMITS OF CLEARING AND GRUBBING

45" ALUMINUM RAIL FENCE

16" GAS LINE SCALED FROM LACLEDE BASE MAP

N/F ST LUKE'S EPISCOPAL-PRESBYTERIAN HOSPITAL DB 10770 PG 466

EATHERTON ROAD

6" BOLLARD ON CONC. PAD (TYP.)

LIMITS OF DISTURBANCE (TYP)

TEMPORARY BYPASS ACCES

N/F JONES, ROSEMARY DB 7352 PG 1976 (PARCEL 1)

ANY IMPACT TO THE MODOT ITS SHALL BE AT THE COST OF THE CONTRACTOR. ALL CONCERNS RELATED TO THE ITS SHALL BE COORDINATED WITH DAVAR DIVANBEIGI AT 314-275-1562

20 10 0 20 40

MSD BASE MAP 23V4 MSD P-0030446-00

004_Wildwood Eatherton Road Ped Bridge_PP

4/5/16

Path: P:\1405 - WILDWOOD - Eatherton Road Ped Bridge\CAD\Plan
Plotted on: 4/5/16 @ 8:47:34 AM by DANIEL

WILDWOOD

INTUITION LOGIC

ILNC Engineering Incorporated
MO Certificate of Authority
A-2012-0027
16253 Swingley Ridge Rd.
Suite 100
Chesterfield, MO 63017
Phone: (314) 432-5812
Fax: (314) 432-5812

Eatherton Road Pedestrian Bridge Wildwood, Missouri

THE PROFESSIONAL WHOSE SIGNATURE AND PERSONAL SEAL APPEAR HEREON, ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE AND DISCLAIMS, PURSUANT TO SECTION 327.411 (2)(b)(c) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS, OR OTHER DOCUMENTS OR INSTRUMENTS OF SERVICE, WRITTEN OR ELECTRONIC, RELATING TO OR ALTERABLE TO BE USED FOR ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

Professional Engineer Seal
Mark Edward Meyer
E-2000150043

STATE OF MISSOURI
MARK EDWARD MEYER
NUMBER PE-2000150043
PROFESSIONAL ENGINEER

Expiration Date: Dec. 31, 2016

Rev	Date	Description
-	-	-
-	-	-
-	-	-

Date:	JANUARY 2016
Design/Drawn by:	JDF
Checked by:	MEM
Approved by:	MEM

PROJECT NO. 1405

SHEET TITLE:

PLAN

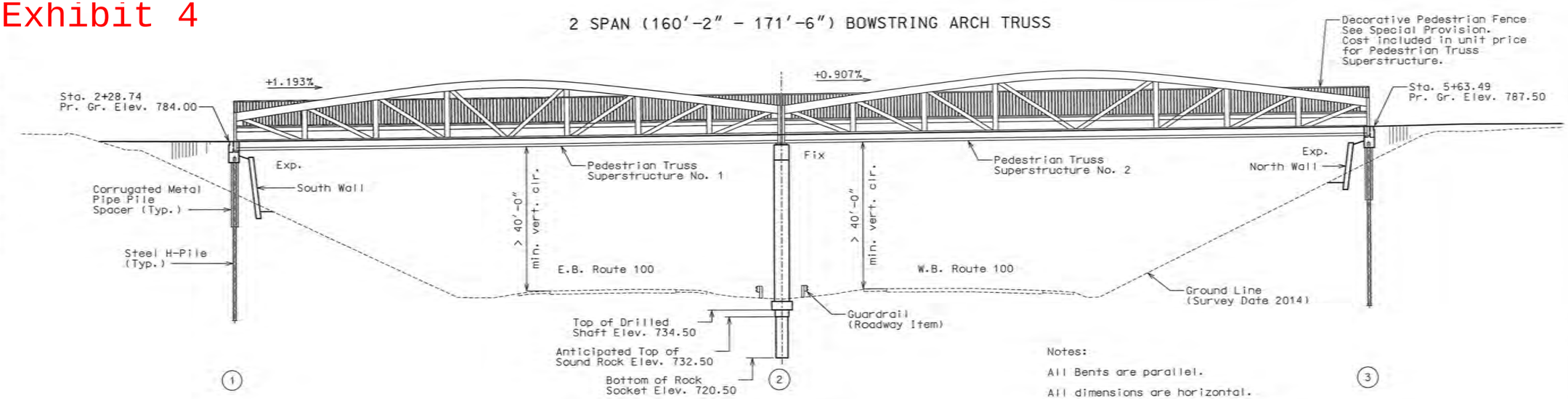
Exhibit 3

SHEET NUMBER:

C1

Exhibit 4

2 SPAN (160'-2" - 171'-6") BOWSTRING ARCH TRUSS



GENERAL ELEVATION

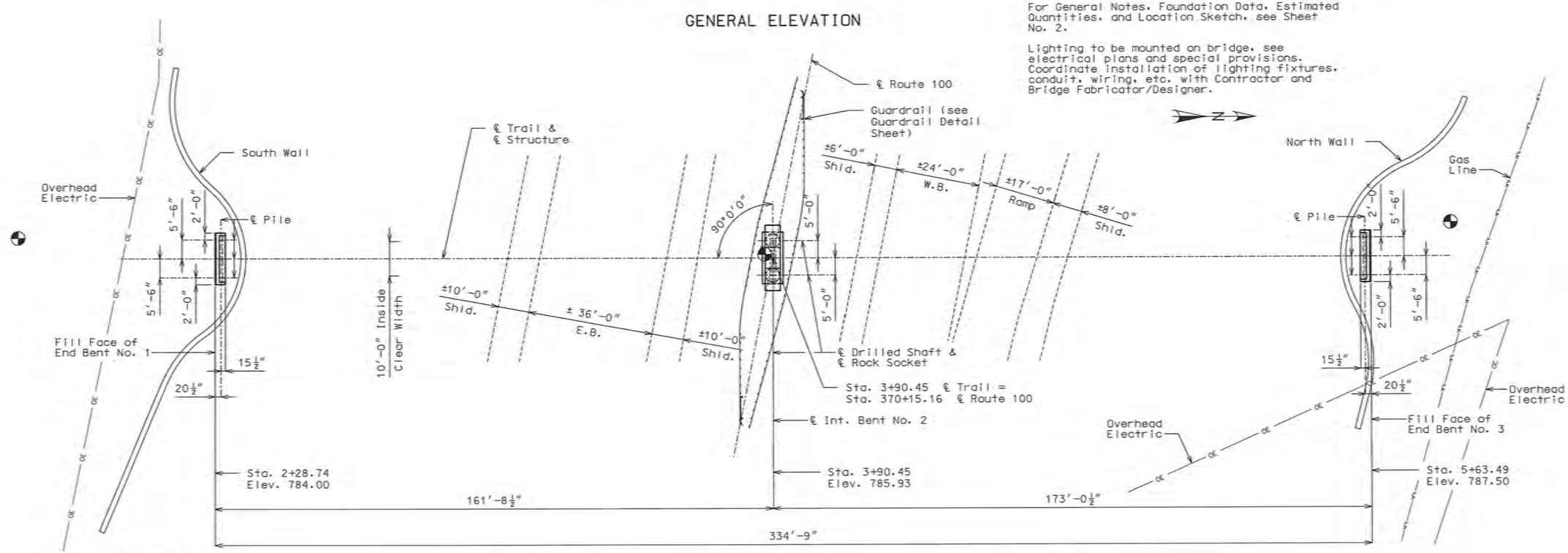
Notes:

All Bents are parallel.

All dimensions are horizontal.

For General Notes, Foundation Data, Estimated Quantities, and Location Sketch, see Sheet No. 2.

Lighting to be mounted on bridge, see electrical plans and special provisions. Coordinate installation of lighting fixtures, conduit, wiring, etc. with Contractor and Bridge Fabricator/Designer.



"⊕" Indicates location of borings.

SPAN (1-2)

SPAN (2-3)

PLAN

Notice and Disclaimer Regarding Boring Log Data

The locations of all subsurface borings for this structure are shown on the plan sheet(s) for this structure. The boring data for all locations indicated, as well as any other boring logs or other factual records of subsurface data and investigations performed by the City for the design of the project, are shown on Sheet(s) No. S3.XX or will be available from the Project Contact upon written request. No greater significance or weight should be given to the boring data depicted on the plan sheets than is given to the subsurface data available from the City or elsewhere.

The City does not represent or warrant that any such boring data accurately depicts the conditions to be encountered in constructing this project. A contractor assumes all risks it may encounter in basing its bid prices, time or schedule of performance on the boring data depicted here or those available from the City, or on any other documentation not expressly warranted, which the contractor may obtain from the City.

BENCHMARK

TBM (ELEVATION: 787.94)

CUT "L" ON NORTHWEST CORNER OF CONCRETE PAD FOR TRANSFORMER 30 FEET EAST OF CENTERLINE OF KILARE DRIVE AND 120 FEET NORTH OF CENTERLINE OF CAMBURY LANE.

BRIDGE: OLD EATHERTON ROAD (TRAIL) OVER ROUTE 100

STATE ROAD FROM ROUTE 109 TO ROUTE 141

ABOUT 0.2 MILES EAST OF ROUTE 109

STA. 370+15.16± ℄ RTE 100

EFK•Moen, LLC
Civil Engineering Design
13523 Barrett Parkway Dr
Suite 250
St. Louis, MO 63021
Phone 314-394-3100
Missouri Certificate of Authority: 001578

WILDWOOD

Eatherton Road Pedestrian Bridge Wildwood, Missouri

THE PROFESSIONAL WHOSE SIGNATURE AND PERSONAL SEAL APPEAR HEREON, ASSUMES RESPONSIBILITY ONLY FOR WORK APPEARING ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411 RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS, OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED AND PERTAINING, RELATING TO OR INTENDED TO BE USED FOR ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS

Professional Engineer Seal

STATE OF MISSOURI
CHRIS LINNEMAN
NUMBER PE-2002016690
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

Rev	Date	Description
-	-	-
-	-	-
-	-	-
-	-	-

Date:	NOVEMBER 25, 2015
Design/Drawn by:	JAA
Checked by:	CTW
Approved by:	CDL

PROJECT NO. 1405

SHEET TITLE:

GENERAL PLAN AND ELEVATION

Exhibit 4

SHEET NUMBER:

S3.1

1405_Wildwood Eatherton Road Ped Bridge _Border_v2010
Path: Y:\14021 Wildwood Ped Bridge\DGN\Bridge\Final\Refs\
Plotted on: ⊕ by CDLINNEMAN

Exhibit 5

WILDWOOD

December 2, 2013

The Honorable City Council
City of Wildwood, Missouri
16860 Main Street
Wildwood, Missouri 63040

Re: Review and Action on the City of Wildwood's ***Five (5) Year Capital Improvements Plan***, per the Requirements of State Statute and the Master Plan

Council Members:

Each year, as members of the City Council are aware, it updates and adopts a ***Five (5) Year Capital Improvements Plan***[1] for Wildwood. This plan allocates certain City revenue resources for future use throughout the community. These uses can include roadway, bridge, park, trail, and government building projects. Along with these uses of revenues that are set aside in the Capital Improvements Budget, acquisition of property, and other assorted considerations, are often established for the future herein as well. The ***Five (5) Year Capital Improvements Plan*** is a very important planning tool available to City Council and staff, when setting priorities, addressing emerging issues or problems within the community, while seeking to meet resident needs, and complying with adopted plans.

Under State Statute, **Chapter 89, Section 89.380**, the Planning and Zoning Commission is required to complete the following:

> "Whenever the commission adopts the plan of the municipality or any part thereof, no street or other public facilities, or no public utility, whether publicly or privately owned, and, the location, extent and character thereof having been included in the recommendations and proposals of the plan or portions thereof, shall be constructed or authorized in the municipality until the location, extent and character thereof has been submitted to and approved by the planning commission. In case of disapproval the commission shall communicate its reasons to the council, and the council, by vote of not less than two-thirds of its entire membership, may overrule the disapproval and, upon the overruling, the council or the appropriate board or officer may proceed, except that if the public facility or utility is one the authorization or financing of which does not fall within the province of the council, then the submission to the planning commission shall be by the board having jurisdiction, and the planning commission's disapproval may be overruled by that board by a vote of not less than two-thirds of its entire membership. The acceptance, widening, removal, extension, relocation, narrowing, vacation, abandonment, change of use, acquisition of land for, sale or lease of any street or other public facility is subject to similar submission and approval, and the failure to approve may be similarly overruled. The failure of the commission to act within sixty days after the date of official submission to it shall be deemed approval."

[1] The 2014 version of the Five (5) Year Capital Improvements Program indicates the how certain sources of capital revenues can only be used for road and bridge type of improvements, per State Statute, and not others, such as park and trail facilities. Two (2) separate funding accounts were established in Fiscal Year 2010 to address this matter and continue forward in 2014.

It is clear from this statute that a requirement for Planning and Zoning Commission's review of the ***Five (5) Year Capital Improvements Plan*** exists and intended to ensure a high level of compliance with Wildwood's Master Plan in terms of its outcome. The Master Plan contains Transportation and Open Space/Recreation Elements and a number of related objectives and policies specific to infrastructure, parks, trails, and other similar items, which provide guidance to the City in this regard.

The ***Five (5) Year Capital Improvements Plan*** contains a number of major projects associated with the City's long-term development needs, including their respective planning, design, engineering, and/or construction in 2014, and are summarized below:

- Road and Bridge Projects -

		Source Funds	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Planned Project Expenditures							
Roadway Improvements							
70-460-07	Other Roadway Improvement Projects	Local	25,000	25,000	25,000	25,000	25,000
70-460-13	Pond-Grover Loop Rd. / Route 109 Improvements	Local/Grant					
70-460-14	Traffic Calming Improvements	Local	15,000	15,000	15,000	15,000	15,000
70-460-15	Manchester Road Bike Lanes	Local/Grant		1,200,000			
	Waterfront Way Extension – Construction	Local/Escrow			125,000		
	Sub Total - Roadway Improvements		40,000	1,240,000	165,000	40,000	40,000
Bridge Reconstruction							
70-470-51	Wild Horse Creek Bridge #386 – Construction	Local			525,000		
70-470-57	Ossenfort Bridge #385 – Construction	Local			325,000		
70-470-61	Woods Road Bridge #348 Replacement – Design	Local/Grant					
	Woods Road Bridge #348 Replacement - Construction	Local/Grant		700,000			
70-470-60	Fox Creek Road Bridge #336 Replacement – Design	Local/Grant					
	Fox Creek Road Bridge #336 Replacement - Construction	Local/Grant		610,000			
	Wild Horse Creek Bridge #392 - Design	Local/Grant		100,000			
	Wild Horse Creek Bridge #392 - Right-of-way	Local/Grant			20,000		
	Wild Horse Creek Bridge #392 - Construction	Local/Grant				880,000	
	Bouquet Road Bridge #353 - Design	Local/Grant		80,000			
	Bouquet Road Bridge #353 - Construction	Local/Grant				720,000	
	Sub Total - Bridge Reconstruction		-	1,490,000	870,000	1,600,000	-
Capital Maintenance							
70-490-01	Asphalt Pavement Resurfacing	Local	950,000	500,000	500,000	500,000	500,000
70-490-02	Concrete Pavement Replacement	Local	900,000	900,000	900,000	900,000	900,000
70-490-05	Storm Drainage Structure Replacement	Local	50,000	50,000	50,000	50,000	50,000
70-490-06	Sidewalk Replacement	Local	150,000	150,000	150,000	150,000	150,000
	Sub Total - Capital Maintenance		2,050,000	1,600,000	1,600,000	1,600,000	1,600,000
Other Capital Investment							
70-480-09	Manchester Rd. Streetscape Construction Phase 2 (East Ave to 109)	Local					

		Source Funds	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
70-480-11	Salt Storage Facility	Local					
70-480-21	Other Engineering Services	Local	25,000	25,000	25,000	25,000	25,000
70-480-12	Ossenfort / Route T Interactive Warning Beacons	Local	30,000	-	-	-	
	Municipal Building Driveway and Parking Lot - Mill and Overlay	Local	40,000				
	Manchester Road Streetscape Phase 3 Design	Local	300,000				
	Manchester Road Streetscape Phase 3 Construction	Local			TBD		
	Manchester Road Streetscape, Schnucks Area, Construction	Local	200,000				
	Sub Total - Other Capital Investment		595,000	25,000	25,000	25,000	25,000
Total Expenditures			2,685,000	4,355,000	2,660,000	3,265,000	1,665,000

- Parks and Trail Facilities -

		Source Funds	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
	Planned Project Expenditures						
Park and Trail Development							
40-480-07	Property Acquisitions	Local		1,000,000		1,000,000	
40-480-11	Al Foster Trailhead Improvements - Construction	Local	450,000				
40-480-19	State Route 100 Pedestrian Trail Protection - Construction	Local/Grant	320,000				
40-480-21	Homestead Trail Design/Engineering and Improvements	Local		50,000	600,000		
40-480-25	Community Park Construction	Local	2,800,000	TBD	TBD	TBD	
40-480-28	Packwood Park Nature Trek - Construction	Local/Grant	500,000				
40-480-32	Wildwood Greenway Phase 6 Construction - Trail + Bridge	Local	700,000				
40-480-33	Pedestrian Bridge Over Route 100, at Eatherton Road - Design/Engineer	Local	86,000	900,000			
40-480-34	Kohn Park Repairs	Local		200,000	50,000		
40-480-35	Old Pond School Repairs	Local	10,000	5,000	5,000	5,000	50,000
40-480-37	Ward Five Neighborhood Park - Construction	Local	700,000				
40-480-38	Capital Projects - Replacements of Major Structures	Local	50,000	50,000		100,000	
40-480-	Community Park - Phase II - Design and Engineering	Local		150,000			
40-480-	Community Park - Phase II - Construction	Local			1,000,000		
40-480-	Community Park - Phase III - Design and Engineering	Local				150,000	
40-480-	Community Park - Phase III - Construction	Local					1,250,000
40-480-	To Town Center Park Development (Neighborhood Type)	Local		75,000			
40-480-	Boardwalk Trail Between Mobil-On-The-Run and Pedestrian Bridge	Local		30,000	300,000		

		Source Funds	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
40-480-12	Woodcliff Heights Park - Construction	Local					400,000
40-480-	Future Trail Development - Design	Local		150,000		150,000	
40-480-	Future Trail Development - Construction	Local			1,000,000		1,000,000
40-480	Anniversary and Glencoe City Parks - Renovations	Local				100,000	
40-480	Restroom Facilities - Old Pond School	Local			120,000		
	Sub Total - Park Development		5,616,000	2,610,000	3,075,000	1,505,000	2,700,000
Other Capital Investment							
40-490-05	Great Streets Project(s)	Local	50,000		50,000		
70-480-20	Vehicle Replacement / Purchase	Local	32,500		25,000		
70-480-34	Rural Internet Access Project	Local	100,000	TBD			
70-480-	Eatherton Road Trail/Sidewalk - Design and Engineering	Local			12,000		
70-480-	Eatherton Road Trail/Sidewalk - Construction					85,000	
	Sub Total - Other Capital Investment		182,500	-	87,000	85,000	-
Total Expenditures			5,798,500	2,610,000	3,162,000	1,590,000	2,700,000

One of the more important, and visible, projects for the upcoming fiscal year will be the community park's first construction phase. This project represents Phase One of a multiple-phased project due to the property's large size and the anticipated cost of all planned improvements. As represented in the upcoming budget year, the community park project is allocated two point eight million dollars for Phase One improvements. This amount fully represents almost fifty (50) percent of this year's budget. Although a substantial amount of money, the first phase of the community park includes infrastructure improvements and utility connections that will serve all phases of the park in the future.

Also this year, the Al Foster Memorial Trailhead project is moving from discussion, design, and engineering to construction, while the Department of Public Works will begin the preliminary and detailed studies for Phase Three of the Manchester Road Streetscape. Both of these projects have been discussed and identified over the years and also have broad support throughout the community. The completion of Phase Three of the streetscape project will also represents the final segment of this historic roadway's upgrade to the City's Town Center Streetscape Requirements.

It is important to note the Road and Bridge Component of the Capital Improvements Program includes many of the standard items that continue to ensure that Wildwood's roads and bridges are some of the safest and well maintained in the region, and State. These items include the concrete slab replacement program, the asphalt resurfacing effort for rural roadways, and sidewalk repairs in the City's traditional subdivision areas. This effort in 2014 is substantial, but consistent with past programs in this same regard.

Also, over the last several years, the City has undertaken more long-term issues relating to the provision of internet to the rural areas of the City, while seeking to develop another neighborhood park to be located in Ward Five, a second pedestrian bridge over State Route 100, and over two (2) miles of new trails. Along with this long list of projects, the City is also working on creating effective multi-modal transportation systems and providing many opportunities for service expansions in the future, i.e. design, engineering, and acquisition efforts for future projects.

Further, the Planning and Zoning Commission would note these projects are consistent with certain applicable objectives and policies of the Master Plan. Some of the more applicable and pertinent objectives and policies include the following:

Community Services – Policy #6 - Develop opportunities, foster partnerships with providers, and create incentives for the provision of Internet service to all households and businesses in the City of Wildwood. (2006)

Transportation Element – Objective #1 – The existing and proposed roadway network in the City of Wildwood should be designed and maintained so that it is safe and efficient, but also consistent with the community's long-standing, historic rural character. Roadway modifications in designated Town Center and Suburban Residential Areas shall be commensurate with expected traffic volumes and City standards established for these specific land use categories.

Transportation Element - Policy #1 – Promote a policy for the City of Wildwood's traffic needs, which supports the primary creation of a network of safe and ecologically responsible, two-lane, local arterial roadways. Make only improvements required for traffic safety, such as adding shoulders, improving the configuration of intersections, replacing substandard bridges, installing traffic signals, and other topical measures.

Transportation Element - Policy #6 – Identify safety improvements necessary to all City-maintained roadways, as part of Wildwood's Capital Improvements Program. Such improvements may include the following: replacing antiquated bridges that are too narrow and subject to flooding; improving road alignments in places where there have been accidents; widening roads where necessary and feasible to provide shoulders; correcting unsafe intersections; and providing a network of multiple links, so there is always more than a single way of going from one destination to another.

Transportation Element - Policy #10 - Continue to promote safe roadways for pedestrians, bicyclists, and motorists (Safe Streets Initiative).

Open Space and Recreation Element - Objective #6. - Partnerships with federal, state, and local park and recreation agencies, other municipalities, and public and private not-for-profit groups to implement the goals and objectives of this effort and regional actions of the greater community should be promoted and established. (2006)

Open Space and Recreation Element - Policy #4. - Encourage diversity in the type of facilities to be funded and built, so that they complement other facilities in the City and within surrounding communities. The design of these facilities should allow for expansion, as growth occurs or user demands change. (2006)

In reviewing the proposed list of future capital improvements, along with those specific projects programmed for Fiscal Year 2014, the Planning and Zoning Commission believes them to be appropriate and necessary to the planned growth of the community and the needed investment in public infrastructure to protect the residents of the City of Wildwood[2]. Further, the balance and number of different initiatives is in keeping with a well-planned community that appreciates fiscal responsibility, but not at the expense of essential infrastructure improvements and quality of life items, while maintaining substantial reserves at the conclusion of each year of the five (5) year planning window.[3] Therefore, acting at its December 2, 2013 Executive Meeting, and by a vote of --- to---, the Planning and Zoning Commission hereby approves the ***Five (5) Year Capital Improvements Plan*** for the City of Wildwood. This report is being forwarded to the City Council to memorialize said consideration and action.

---

[2] The City Council is scheduled to adopt the Five (5) Year Capital Improvements Plan at its December 9, 2013 meeting, as part of the City's 2014 Fiscal Year budget process.

[3] Estimated Ending Fund Balances (combined) – FY 2014 - $5,855,605; FY 2015 - $5,314,480; FY 2016 - $3,835,100; FY 2017 - $4,635,515; and FY 2018 - $4,695,916.

If any of the City Council members should have any questions or comments in regards to the action of the Planning and Zoning Commission on this matter, please feel free to contact the Department of Planning at (636) 458-0440. Thank you for the opportunity to provide input on this very important matter.

Respectfully submitted,
CITY OF WILDWOOD PLANNING AND ZONING COMMISSION

R. Jon Bopp, Chair

ATTEST:

Joe Vujnich, Director
Department of Planning

Cc: The Honorable Timothy Woerther, Mayor
Daniel E. Dubruiel, City Administrator
Rob Golterman, City Attorney
Ryan S. Thomas, P.E., Director of Public Works
Joanna Browning, Senior Planner
Liz Weiss, Planner

City of Wildwood
Fiscal Year 2014

5-Year Capital Improvement Sales Tax Fund Capital Improvement Plan
FY 2014-2018

		Source Funds	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Planned Project Expenditures							
Park and Trail Development							
40-480-07	Property Acquisitions	Local		1,000,000		1,000,000	
40-480-11	Al Foster Trailhead Improvements - Construction	Local	450,000				
40-480-19	State Route 100 Pedestrian Trail Protection - Construction	Local/Grant	320,000				
40-480-21	Homestead Trail Design/Engineering and Improvements	Local		50,000	600,000		
40-480-25	Community Park Construction	Local	2,800,000	TBD	TBD	TBD	
40-480-28	Packwood Park Nature Trek - Construction	Local/Grant	500,000				
40-480-32	Wildwood Greenway Phase 6 Construction - Trail + Bridge	Local	700,000				
40-480-33	Pedestrian Bridge Over Route 100, at Eatherton Road - Design/Engineer	Local	86,000	900,000			
40-480-34	Kohn Park Repairs	Local		200,000	50,000		
40-480-35	Old Pond School Repairs	Local	10,000	5,000	5,000	5,000	50,000
40-480-37	Ward Five Neighborhood Park - Construction	Local	700,000				
40-480-38	Capital Projects - Replacements of Major Structures	Local	50,000	50,000		100,000	
40-480-	Community Park - Phase II - Design and Engineering	Local		150,000			
40-480-	Community Park - Phase II - Construction	Local			1,000,000		
40-480-	Community Park - Phase III - Design and Engineering	Local				150,000	
40-480-	Community Park - Phase III - Construction	Local					1,250,000
40-480-	Town Center Park Development (Neighborhood Type)	Local		75,000			
40-480-	Boardwalk Trail Between Mobil-On-The-Run and Pedestrian Bridge	Local		30,000	300,000		
40-480-12	Woodcliff Heights Park - Construction	Local					400,000
40-480-	Future Trail Development - Design	Local		150,000		150,000	
40-480-	Future Trail Development - Construction	Local			1,000,000		1,000,000
40-480-	Anniversary and Glencoe City Parks - Renovations	Local				100,000	
40-480-	Restroom Facilities - Old Pond School	Local			120,000		
	Sub Total - Park Development		5,616,000	2,610,000	3,075,000	1,505,000	2,700,000
Other Capital Investment							
40-490-05	Great Streets Project(s)	Local	50,000		50,000		
70-480-20	Vehicle Replacement / Purchase	Local	32,500		25,000		
70-480-34	Rural Internet Access Project	Local	100,000	TBD			
70-480-	Eatherton Road Trail/Sidewalk - Design and Engineering	Local			12,000		
70-480-	Eatherton Road Trail/Sidewalk - Construction					85,000	
	Sub Total - Other Capital Investment		182,500	-	87,000	85,000	-
Total Expenditures			5,798,500	2,610,000	3,162,000	1,590,000	2,700,000

Exhibit 6

BILL #2006 ORDINANCE #2006

AN ORDINANCE BY THE CITY COUNCIL OF THE CITY OF WILDWOOD, MISSOURI AUTHORIZING THE MAYOR OF THE CITY OF WILDWOOD, MISSOURI TO EXECUTE A CONTRACT ON ITS BEHALF WITH INTUITION AND LOGIC FOR THE DESIGN AND ENGINEERING SERVICES NECESSARY FOR THE DEVELOPMENT OF PLANS AND BID SPECIFICATIONS FOR A SECOND PEDESTRIAN BRIDGE OVER STATE ROUTE 100 IN THE WILDWOOD TOWN CENTER. (Wards Five and Eight)

WHEREAS, the City of Wildwood has developed a trail system that is intended to link as many of the areas of it to the Town Center and the major public holdings of the City, St. Louis County, and the State of Missouri that are located within its boundaries; and

WHEREAS, with State Route 100 bisecting the community into two (2) parts, the design of this trail system must take into account this barrier and provide safe access between the two (2) sides of Wildwood, which was first addressed by a pedestrian bridge on the easternmost end of the Town Center, near Village Plaza and Schnucks Wildwood Crossing; and

WHEREAS, this crossing has allowed residents to safely cross this State highway and enjoy the trail system that parallels it, and Town Center itself; and

WHEREAS, the desire to provide another safe crossing over State Route 100 led the City Council to agree to begin the design and engineering process for a second pedestrian bridge in 2013, which was slowed by other priorities relating to other projects that were underway; and

WHEREAS, the Planning/Economic Development/Parks Committee, which oversaw the initial discussion of this consultant process, also sought more bids to obtain a competitive cost for the design, engineering, and related bid items for this planned major landmark over the City's busiest roadway; and

WHEREAS, after the City issued a Request for Proposals (RFP) and received six (6) responses, interviews were held with three (3) finalists and a selection was made from them by the City Administrator, the Director of Public Works, and the Department of Planning and Parks; and

WHEREAS, that selection was presented to the Planning/Economic Development/Parks Committee at its February 2014 meeting and its members agreed with the recommendation of utilizing Intuition and Logic for this purpose; and

WHEREAS, Intuition and Logic has submitted a proposal for these services that totals $86,737.50, which will provide for the design, engineering, plans, and bid specifications for a second pedestrian bridge over State Route 100, near State Route 109; and

WHEREAS, this total is within the budgeted amount set forth in the 2014 Capital Improvements Program for the Department of Planning and Parks and can proceed with City Council support and action.

THEREFORE, BE IT ORDAINED, BY THE COUNCIL OF THE CITY OF WILDWOOD, MISSOURI, AS FOLLOWS:

Section 1.

The Mayor of the City of Wildwood, Missouri is hereby authorized to execute on behalf of the City of Wildwood, Missouri a contract with Intuition and Logic for the design and engineering services necessary for the development of plans and bid specifications for a second pedestrian bridge over State Route 100, within Wildwood Town Center, and near State Route 109. A copy of the contract shall be substantially in this form attached hereto and incorporated herein.

Section 2.

The total expenses and liability of the City of Wildwood under the contract shall not exceed the contract sum of eighty-six thousand seven hundred thirty-seven dollars and fifty cents ($86,737.50).

Section 3.

This Ordinance shall be in full force and effect from and after its passage and approval.

This Bill was passed and approved this 28 day of APRIL, 2014, by the Council of the City of Wildwood, Missouri, after having been read by title or in full two times prior to passage.

Presiding Officer

The Honorable Timothy Woerther, Mayor

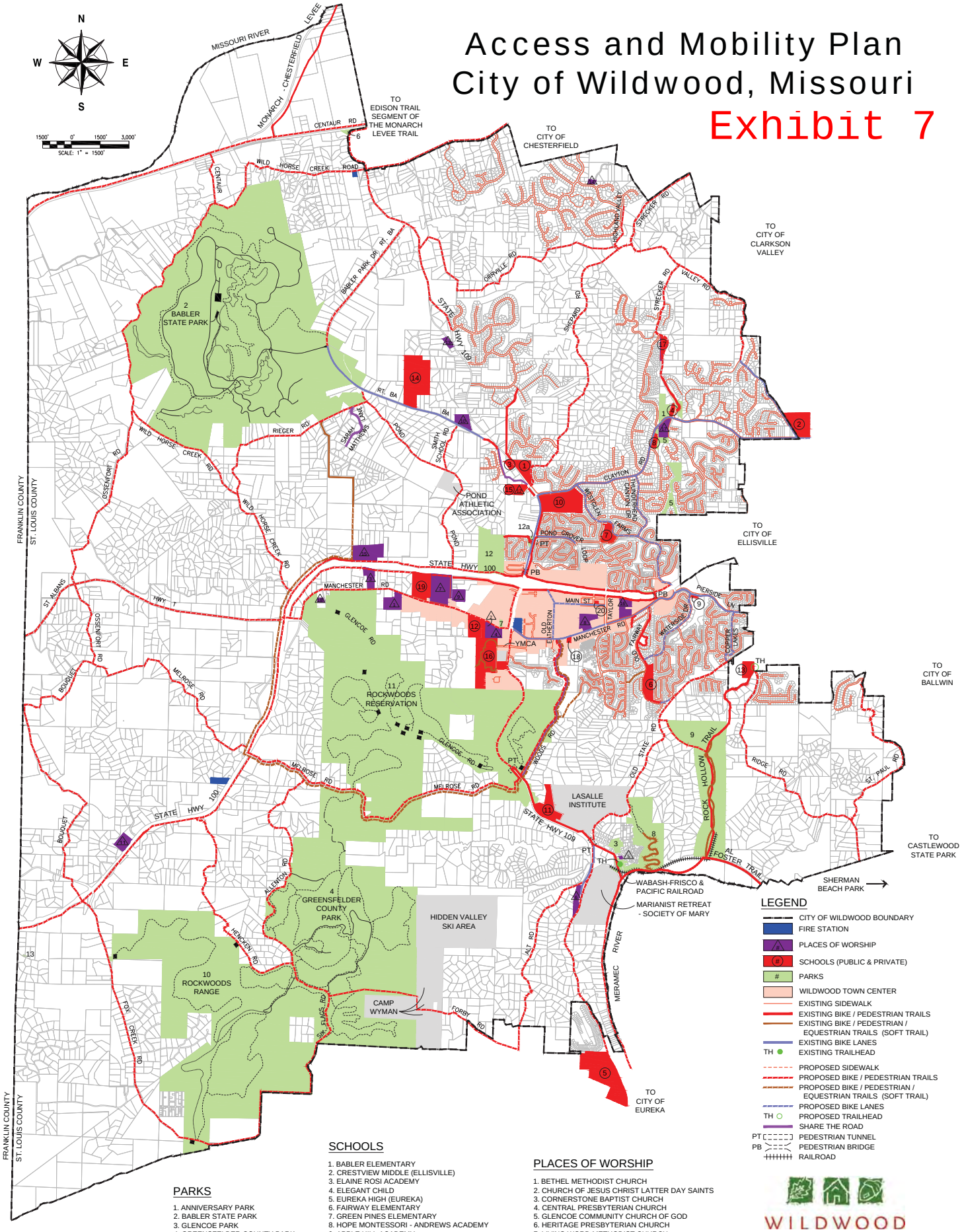
ATTEST:

City Clerk

ATTEST:

City Clerk

Access and Mobility Plan
City of Wildwood, Missouri
Exhibit 7



LEGEND

- CITY OF WILDWOOD BOUNDARY
- FIRE STATION
- PLACES OF WORSHIP
- SCHOOLS (PUBLIC & PRIVATE)
- PARKS
- WILDWOOD TOWN CENTER
- EXISTING SIDEWALK
- EXISTING BIKE / PEDESTRIAN TRAILS
- EXISTING BIKE / PEDESTRIAN / EQUESTRIAN TRAILS (SOFT TRAIL)
- EXISTING BIKE LANES
- TH EXISTING TRAILHEAD
- PROPOSED SIDEWALK
- PROPOSED BIKE / PEDESTRIAN TRAILS
- PROPOSED BIKE / PEDESTRIAN / EQUESTRIAN TRAILS (SOFT TRAIL)
- PROPOSED BIKE LANES
- TH PROPOSED TRAILHEAD
- SHARE THE ROAD
- PT PEDESTRIAN TUNNEL
- PB PEDESTRIAN BRIDGE
- RAILROAD

PARK LEGEND

- ROADS
- PARKING / BUILDING
- BIKING TRAILS
- HIKING / EQUESTRIAN TRAILS (SOFT TRAILS)

PARKS

1. ANNIVERSARY PARK
2. BABLER STATE PARK
3. GLENCOE PARK
4. GREENSFELDER COUNTY PARK
5. GREEN PINES - WINDING TRAILS
6. KOHN PARK
7. OLD POND SCHOOL
8. PACKWOOD PARK
9. QUAIL HOLLOW
10. ROCKWOODS RANGE
11. ROCKWOODS RESERVATION
12. COMMUNITY PARK
12a. FUTURE TRAILHEAD & PARK MONUMENT
13. MEADOW FOREST MANORS

SCHOOLS

1. BABLER ELEMENTARY
2. CRESTVIEW MIDDLE (ELLISVILLE)
3. ELAINE ROSI ACADEMY
4. ELEGANT CHILD
5. EUREKA HIGH (EUREKA)
6. FAIRWAY ELEMENTARY
7. GREEN PINES ELEMENTARY
8. HOPE MONTESSORI - ANDREWS ACADEMY
9. APPLE HILL ACADEMY
10. LAFAYETTE HIGH
11. LASALLE SPRINGS MIDDLE
12. POND ELEMENTARY
13. RIDGE MEADOWS ELEMENTARY (ELLISVILLE)
14. ROCKWOOD VALLEY MIDDLE
15. ST. ALBAN ROE CATHOLIC
16. ST LOUIS COMMUNITY COLLEGE
17. SHIA ISLAMIC EDUCATION CENTER & MOSQUE
18. TODAY'S CHILDREN
19. WILDWOOD MIDDLE
20. LINDENWOOD UNIVERSITY

PLACES OF WORSHIP

1. BETHEL METHODIST CHURCH
2. CHURCH OF JESUS CHRIST LATTER DAY SAINTS
3. CORNERSTONE BAPTIST CHURCH
4. CENTRAL PRESBYTERIAN CHURCH
5. GLENCOE COMMUNITY CHURCH OF GOD
6. HERITAGE PRESBYTERIAN CHURCH
7. LIVING WORD METHODIST CHURCH
8. NEW COMMUNITY CHURCH
9. FIRST BAPTIST CHURCH
10. LIFEPOINTE CHURCH
11. LAFAYETTE BIBLE BAPTIST CHURCH
12. ST. ALBAN ROE CATHOLIC CHURCH
13. ST. PAUL EVANGELICAL LUTHERAN CHURCH
14. UNION BAPTIST CHURCH OF CHESTERFIELD
15. WEST COUNTY COMMUNITY CHURCH
16. WILDWOOD CHRISTIAN CHURCH
17. WOODLAWN PRESBYTERIAN CHURCH
18. ROCKWOOD BIBLE CHURCH

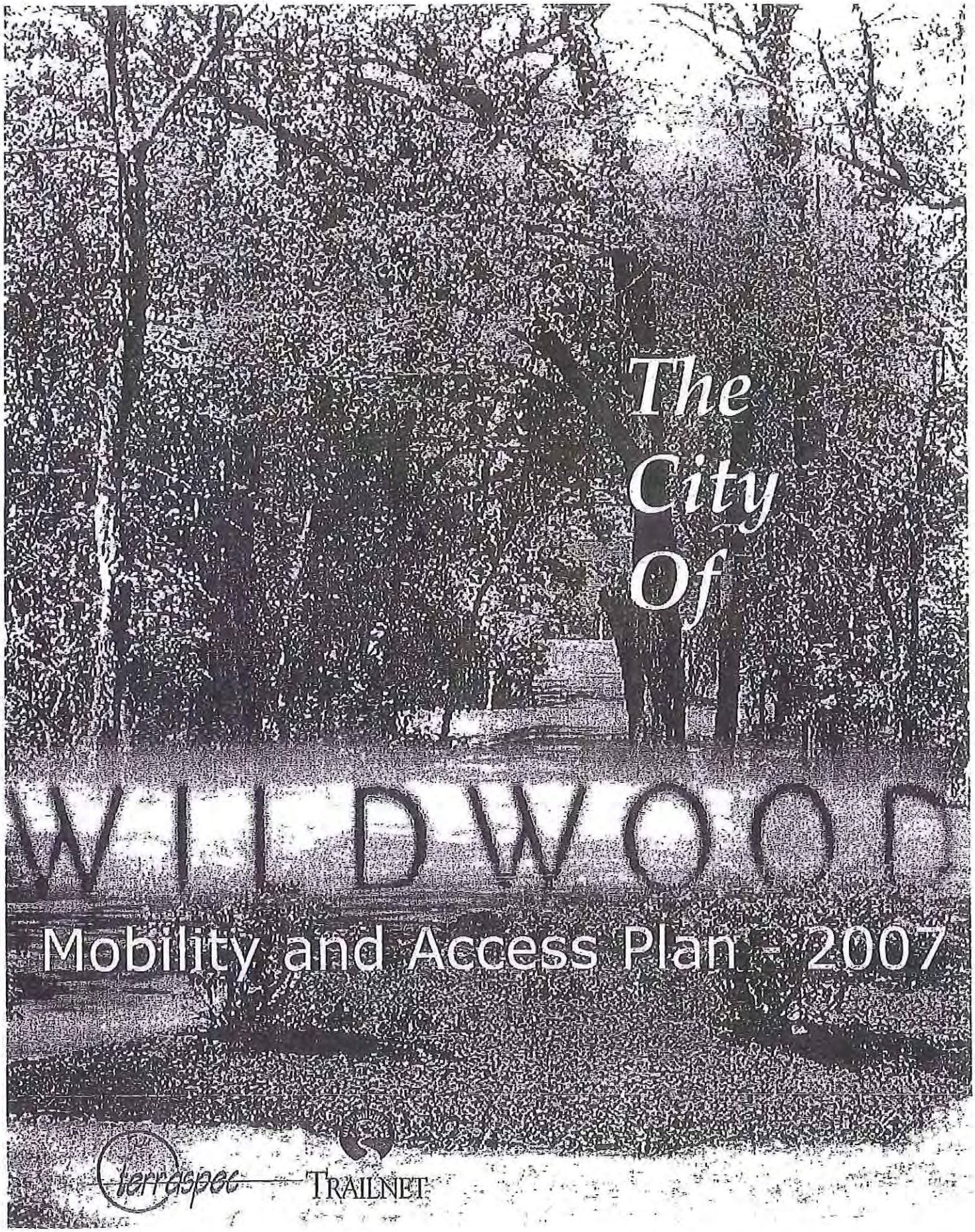
WILDWOOD

TRAILNET
Promoting Active Living

PREPARED BY:
terraspec
LAND PLANNING
RECREATION PLANNING AND DESIGN
LANDSCAPE ARCHITECTURE
5630 GRIFFIN ROAD
ST. LOUIS, MO 63129
(314)894-8211 FAX(314)843-1718

MAY 2007,
JULY 2010 REV.,
JULY 2014 REV.

Exhibit 8


The City Of
WILDWOOD
Mobility and Access Plan - 2007
terraspec
TRAILNET

		School and to Eatherton Road(Chesterfield). At the north end, the trail would also connect to Monarch-Chesterfield Levee Trail System at Centaur Road. Priority: 1
Glencoe Road	State Route 109 to Manchester Road	Connects Al Foster, Hamilton-Carr Trails, Rockwoods Reservation, and proposed central trail system along Manchester Road. Priority: 1
Meramec Greenway	City limit to proposed extension	Work with Great Rivers Greenway to extend this regional trail facility. Connects communities. Priority 1
Glencoe/Packwood Estates Park Connector Trail	Hamilton Carr Greenway to Old State Road	Connects to Hamilton-Carr Greenway and provides possible loop options for Glencoe Area and surrounding neighborhoods. Priority: 1
Manchester Road	Western State Route 100 to Eastern State Route 100	Main spine through Town Center Area could feature expanded sidewalks and bike route through shopping district. Some easements have already been established. Priority: 1
Great Rivers Greenway property (Rock Hollow)	Al Foster Memorial Trail to Old State Road and also Meadow Ridge Drive (Mac Acres subdivision)	Rock Hollow Trail could link Al Foster Memorial Trail, Ridge Meadows Elementary School, and the City of Ellisville. Priority: 1
Ridge Road	Old State Road/Ridge Meadow Elementary School to St. Paul Road	Potential connections to Wolf Trail, Ridge Meadow Elementary School, Sherman Beach County Park, and the Al Foster Trail/Meramec Greenway. Priority: 1
St. Paul Road	Southern City Limits to Ridge Road	Connects to Sherman Beach County Park and into the City of Ballwin. Priority: 1
Eatherton Road	Just south of State Route 100 to Manchester Road	Main connector through Town Center. Priority: 1
Crestview Drive	Eatherton Road to Taylor Road	Main east-west connector in Town Center. Priority: 1
Copper Lakes Boulevard/Copperwood Lane/Harbor Pointe Drive	Old State Road to Pierside Lane	Connects Old State Road to Pierside. Priority: 1
Waterside Drive	Pierside Lane to Old Fairway Drive	Connects neighborhoods to Fairway Elementary School. Priority: 1
Old Fairway/Old State Spur	Old State Road to Old Fairway Drive	Connects existing trail, Fairway Elementary School, and Old State Road. Priority: 1
West Glen Farms Road	State Route 100 to Clayton Road	Provides route through neighborhoods and access to Clayton Road and Lafayette High School. Priority: 1
Clayton Road	State Route 109 to eastern City Limits	Popular bike route has lanes in some sections. Priority: 1
Shepard Road	State Route 109 to Orrville Road	Main north-south connector in this area. Priority: 1

The result of this study is a summary of findings, a map of existing bicycle/pedestrian/equestrian facilities within Wildwood, and an inventory of desirable destinations and proposed facilities. That information is the basis for recommendations for facilities that will interconnect the community and further Wildwood's aspirations in this regard. Also included are recommendations, such as cross sections of proposed facilities and recommendations for design standards. It assigns priorities to the development of the proposed facilities and provides the City of Wildwood with information on trail design, and funding/partnership opportunities. This study is intended to provide Wildwood with the tools it needs to create a first-rate bicycle/pedestrian/equestrian system.

This plan also describes different levels of bicycle, pedestrian, and equestrian facilities to help city leaders, staff and citizens to discuss and understand bike lanes vs. bike routes, bike accommodations, sidewalks and multiple use trails. For the purpose of this Phase 1 report: 1) Planned trails are any facilities that are currently in the planning, design or construction phase, have established easements or land acquired for the purpose of building facilities. 2) Proposed trails are those locations that have yet to acquire easements, but do make a logical connection to another trail or destination point, such as a park, school, business district, government or employment center or area of interest.

Funding for this study was provided by the City of Wildwood and through funds provided by the Municipal Parks Grant Commission.

Segment Gaps, Destinations and Priorities

Draft - 5/24/07

This table identifies segment gaps in an overall trail (pedestrian and/or equestrian), bikeway and sidewalk system. Public and staff input will verify the destinations and segments that should be developed first. Please note priority 1 is the highest level, with 2 being next highest priority, etc.

Segment Name	Limits	Destinations & Priority
State Route 100	From City Limit to City Limit	There exists multiple use trails on both sides of portions of State Route 100. Recommend construction of additional trails both east and west to the city limits. These trails will serve as the major east-west spine for the City's system. Priority: 1
Wild Horse Creek Road	State Route 100 to Rieger Road	Popular bike route that connects Babler State Park to State Route 100. Priority: 1
Wild Horse Creek Road	Rieger Road to Ossenfort Road	Popular bike route. Priority: 1
Wild Horse Creek Road	Ossenfort Road to North City Limit	Popular bike route. Priority: 1
State Route 109	Southern City Limits to Wild Horse Creek Road	Includes sections of multiple use trails. Serves as main north-south spine through the center of City. Connects Eureka High School, Hamilton-Carr & Meramec Greenways (major regional trail system), LaSalle Springs Middle School, LaSalle Institute, Rockwoods Reservation, Town Center, Lafayette High

Wildwood Community Trail, Bikeway and Sidewalk Study

Executive Summary

With scenery as wild as the Ozarks, but proximity to one of America's largest metropolitan areas, the City of Wildwood is a highly desirable place to live. In just over a decade since its incorporation, Wildwood has become noted for its nice neighborhoods, proximity to parks and recreation opportunities - including Rockwoods Reservation and Babler State Park, as well as good schools, and a growing business community. As a young community, Wildwood has active and engaged municipal leaders who are well-positioned to take stock of the aspirations of the City's residents and act to make their vision a reality.

One aspect of that vision is a system of bicycling, pedestrian, and equestrian facilities that connect people to their community, promote health and fitness, and showcase Wildwood's natural beauty. City leaders and staff recognize a strong bicycle/pedestrian/equestrian system is an added amenity that will contribute to making Wildwood an even better place to live.

Trailnet and terraspec were selected in January 2007 to conduct a study of the City of Wildwood's existing network of trails, sidewalks, and bikeways. The City of Wildwood has already partnered with regional agencies, including Great Rivers Greenway and the Missouri Department of Transportation, to develop a growing network of bicycle, pedestrian, and equestrian facilities. These facilities have proven to be quite popular in Wildwood and throughout the metropolitan area. Windshield surveys have shown numerous residents taking advantage of existing facilities for biking and walking, both for recreation and wellness. It should also be noted that events, like the Tour de Wildwood and Walk to School Day are becoming part of the programming fabric of Wildwood residents of all ages. Over 300 people took part in the Tour last year and over 500 students participated in the most recent Walk to School Day at Fairway Elementary School (Rockwood School District).

The study focused on four (4) objectives:

1) An inventory of existing trails, bike facilities and sidewalks was to be completed. Any trails or sidewalks that were under development or planned were also included for the purpose of this inventory;

2) Gaps in the system within the City and possible links to systems outside the City were identified. Opportunities to link neighborhoods, schools, parks, businesses, and other destinations were highlighted;

3) High-priority destinations within Wildwood that attract pedestrians, bicyclists, and recreational users were targeted on the map; and

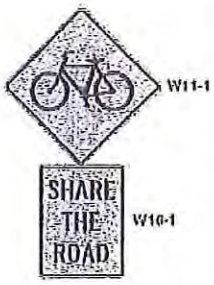
4) Priorities for developing the system facilities were established;

It should be noted that several additional steps should take place in the next phase of the study, including gathering public and additional staff input in regards to recommended facilities and project development priorities, best locations for facilities (especially regarding ownership and terrain issues), and further discussion on what type of facilities will work best in each situation.

Allenton Road	Hencken Road to Melrose Road	Links Rockwoods Range, Greensfelder County Park and Rockwoods Reservation. Popular bike route currently. Priority: 2
Wolf Trail	Quail Hollow Park to Ridge Road	Popular bike connector. Priority: 2
Melrose Road	From State Route 100 to State Route 109	Links western portion of the City to Rockwoods Reservation, State Route 109 trail and LaSalle Springs Middle School. Priority: 2
Rieger Road	Wild Horse Creek Road to Pond Road	Babler State Park connector and popular bike route. Priority: 2
Forby Road	Greensfelder County Park to Alt Road	Connection to future trail, Greensfelder County Park, Camp Wyman, and the City of Eureka. Priority: 2
Old State Road	State Route 109 to City Limits at Ellisville	Connects to Glencoe Park, Hamilton-Carr Trail, Ridge Meadows Elementary School, into the City of Ellisville. Priority: 2
Thunderhead Canyon Drive	West Glen Farms Road to Clayton Road	North-south connector through neighborhoods. Priority: 2
Strecker Road	Manchester Road to Northern City Limits	Connects to Anniversary Park, City of Clarkson Valley, and Manchester Road. Priority: 2
Valley Road	Strecker Road to Clayton Road	Connects Crestview Junior High School, nearby neighborhoods, and is a good north-south connector in this area. Priority: 2
Orrville Road	Shepard Road to State Route 109	Main east-west connector in northeast quadrant of city. Priority: 2
Route BA (Babler Park Drive)	State Route 109 on north side and State Route 109 on south side	Connects to Babler State Park/ Priority: 2
State Highway T	Western City Limits to State Route 100	East-west connector in west-central area of the City and could feature bike lanes. Priority: 3
Ossenfort Road	State Highway T to Wild Horse Creek Road	North-south connecter for northwest quadrant of City. Priority: 3. Popular bike route.
Fox Creek Road	State Route 100 to Allenton Road	Possible links to Rockwoods Range and existing paths, Greensfelder County Park, Six Flags, and into the City of Eureka. Priority: 3
Allenton Road	Fox Creek to Hencken Road	Connection between Rockwoods Range and Greensfelder County Park. Priority: 3
Hencken Road	Allenton Road to State Route 100	Links State Route 100 to Greensfelder County Park and Rockwoods Range. Priority: 3
Bouquet Road	State Route 100 to State Highway T	Serves as north-south connector for west side of City. Priority: 4
Melrose Road	State Route 100 to Bouquet Road	Connects west end of the City. Priority: 4.
Alt Road	Forby Road to State Route 109	Provides connections to neighborhoods in south City. Priority: 4

Bike/Pedestrian Facilities Development Costs

Bike Accommodations

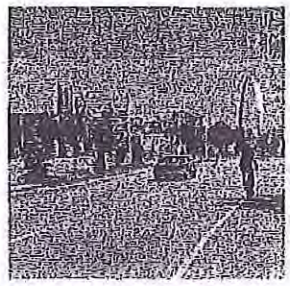


Recommended improvements are "Share the Road" signs every ¼th to 1/5th of a mile. Missouri Department of Transportation (MODOT) policy calls for use as a warning sign: "The Share the Road (W16-1) sign may be used with other appropriate warning signs to advise the motorists that other modes of transportation may be present on the same facility. This can include, but is not limited to, pedestrians, bicycles, horse drawn vehicles, etc. The (W16-1) sign shall not be used alone but always as a supplementary plaque under a W11 series sign." The W-11 sign may be used on its own to designate bike routes. - 8-10 signs per mile and installation labor: $2,250/mile

Bike Routes

Recommended improvements for bike routes include installing "identification/directional" signs every 1/4-mile and at turns/intersections and installing new drainage grates. The improvements do not include bike stencils or striping. A system of bike routes may lend itself to community maps and guidance to areas of interests, as is used by Bike St. Louis, shown here. - Average of 10 signs per mile and installation labor: $2,500/mile
Allowance for grate improvements (lump sum): $1,000/mile
Budget cost per mile: $3,500/mile

Bike Lanes on existing pavement



Recommended improvements include signage, drainage grate improvements, striping and bike route stencils (note: stencils will not be used on streets that will be chip and sealed). Where roads cannot be widened, but there is adequate lane width, some agencies are creating bike lanes without stripes, as shown at right. Some agencies narrow the inner lanes to provide additional outer lane width, for example creating a four lane road of 14' 10' 10' 14' rather than four 12' lanes.
Average of 10-12 signs per mile & installation: $2,500/mile
Thermoplastic striping (both sides of street, approximately - $2/lf): $10,500/mile
Allowance for grate improvements (lump sum): $1,000/mile
Allowance for bike stencils (bike and lettering at intersections, 10/mile x $100): $1,000/mile
Allowance for intersection striping (400' of bike slot striping and 8 stencils and "yield to bikes" signs): $2500/intersection

Budget cost for bike lanes on existing pavement: $17,500/mile

Bike Lanes on pavement widened by five (5) feet

Includes all of the above improvements and adds in new 5' wide bike lane construction. The 5' wide bike lane should meet AASHTO standards.

Average of 10-12 signs per mile & installation: $2,500/mile
Thermoplastic striping
(Both sides of street, approx. $2/lf): $10,500/mile
Allowance for grate improvements (lump sum): $1,000/mile
Allowance for bike stencils at intersection
(Bike and lettering, 10/mile x $100): $1,000/mile
Allowance for intersection striping (bike slot, 400' of striping and 8 stencils and "yield to bikes" sign): $2,500/intersection

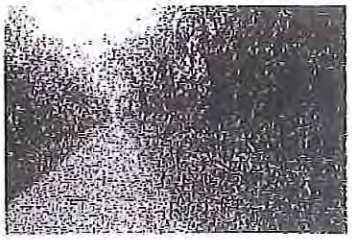
Add $300,000-360,000/ mile for 5' wide lanes, both sides: $330,000/mile
Budget cost per mile of widened pavement: $347,500/mile

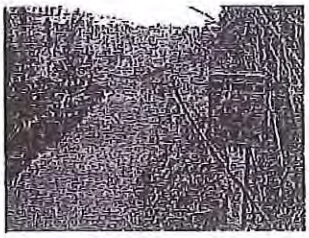
Shared Use Paths/Trails

Recommended improvements call for 10-12' wide asphalt trail, bollards, grading/clearing, signage and landscaping. $65/lf x 5280= $316,800/mile.

Trail only-10-12 feet wide, 8" of base rock and 4" of asphalt, no signs, landscaping or bridges. Trail on grade w/ minimum excavation—basically for the trail bed only, 2' shoulders on each side. $45/lf X 5,280=$237,600/mile

Crushed rock-8-10' wide, trail on grade, minimum excavation—basically for the trail bed only, no signs, landscaping or bridges. Contracted price of $15/lf or $79,200/mile.





Nature/Foot Path - Often times a scout or local community group can install wood chips as a service project at no charge to the community. For our purposes allow for $1.20 per lf or $6,350/mile.

- Recommended improvements feature 8' wide concrete walks. 8' x $5/sf= $40/lf or $211,200/mile.
Sidewalks along new subdivisions are recommended to be at least 5' wide.
5' wide x $5 sf = $25/lf or $132,000/mile.
Note: Does not include land acquisition, engineering, design, construction management, inflation or maintenance in any development costs.

Photo Credits* Dan Burden & Bob Foster

RESOLUTION #2007-22

A RESOLUTION BY THE CITY COUNCIL OF THE CITY OF WILDWOOD ADOPTING THE ACCESS AND MOBILITY PLAN THAT HAS BEEN PREPARED AS A PLANNING TOOL TO PROVIDE A COMPREHENSIVE INVENTORY OF ALL TRAIL AND PEDESTRIAN/BICYCLE FACILITIES IN THIS COMMUNITY, DEFINE GAPS IN THIS SYSTEM, AND PRIORITIZE FUTURE EXPENDITURES BASED UPON NEED AND SERVICE TO THE LARGEST NUMBER OF RESIDENTS, WHENEVER POSSIBLE.

WHEREAS, the City of Wildwood has embark on an aggressive plan of providing trails and pedestrian/bicycle facilities to residents and visitors over the last eleven (11) years, which has led to over ten (10) miles of multiple-use trails being constructed and others planned and sidewalks being added as part of any new residential, commercial, and institutional development that has been approved within the community over this same time span; and

WHEREAS, this effort has focused on the Town Center Area and the major arterials of State Route 109, State Route 100 and, more recently, the Meramec River Greenway Area, along with all new residential and institutional uses in all quarters of Wildwood; and

WHEREAS, as this network of trails and pedestrian/bicycle facilities has grown, the need for better planning of future extensions and connections has become more necessary, particularly when seeking grant funding from a myriad of sources within the State of Missouri and St. Louis County; and

WHEREAS, a key component in this planning process was the creation of an Access and Mobility Plan that would inventory all existing facilities, whether trails, sidewalks, or other items, define existing gaps in this system, and prioritize these areas for future spending in terms of capital improvements for the City Council; and

WHEREAS, a consultant team was selected to assist in the development of this plan, which included the firms of Terraspec and Trailnet, both acknowledged experts in the area of design for trails, sidewalks, and other multi-modal means of transportation; and

WHEREAS, the plan was completed with the assistance of a grant from the St. Louis County Municipal Parks Grant Commission; and

WHEREAS, the Planning/Economic Development/Parks Committee reviewed the concept of this plan, assisted in the selection of the consultant, reviewed the preliminary draft of it and, on July 17, 2007, recommended its adoption by the City Council for implementation and use by the Departments of Public Works and Planning for future enhancements to the Wildwood Area; and

WHEREAS, the determination and provision of these types of facilities is consistent with the City's theme of "Planning Tomorrow Today" and supported by the City Council of the City of Wildwood, Missouri.

BE IT RESOLVED, by the City Council of the City of Wildwood, as follows:

1. The City Council of the City of Wildwood hereby endorses and adopts the Access and Mobility Plan that has been prepared by the Department of Planning and Parks, with assistance from Terraspec and Trailnet.
2. The City Council of the City of Wildwood further supports the findings of this plan and encourages future members of this body to continue to provide these types of facilities for future generations that will reside and play within this great community.
3. The City Council of the City of Wildwood also recognizes the benefits of trails, sidewalks, and other facilities for pedestrians and bicyclists as a means to address health and fitness needs of all age groups of residents and visitors within and to this community.
4. The City Council recommends this plan also be updated by the Departments of Public Works and Planning on an annual basis to ensure the new facilities are added on the attached set of maps and

said priorities listed in the document are reviewed, so as to determine their progress in terms of their completions.

Passed and approved this 23rd day of July 2007.

Edward L. Marshall

Edward L. Marshall, Mayor

ATTEST:

Lynne Greene-Beldner

City Clerk

Exhibit 9

THE WESTERN GREENWAY

Exhibit 10

DESIGNWORKSHOP

MANCHESTER ROAD GREAT STREETS MASTER PLAN

St. Louis County, Missouri

MASTER PLAN DOCUMENT SUMMARY

APPENDIX A: ADOPTED APRIL 13, 2011

Manchester Road Great Streets Initiative

Cities of Ballwin, Ellisville, Wildwood and the West St. Louis County Chamber of Commerce (with the help of MoDot and East West Gateway) are defining the way for a better tomorrow by empowering our communities with the tools to secure economic sustainability, create interesting and memorable places and provide winning strategies for the future of our businesses.

Manchester Road: The great street got its start as a major thoroughfare 50 years ago...today we are still working to make our community a better place to live, work and play.

The Plan

Improve access management and safety.
Accommodate increased traffic flow.
Promote pedestrian infusion (traffic medians/islands, sidewalks, way-finding signage, crosswalks etc.)
Give the corridor identity.
Consistent design themes within each city.
New block numbering, way-finding, and identification signs.
New sidewalk connections and multi-use trails.
Re-surfaced roadway.
Enhanced landscaping.
Improved street lighting.
Provide for multi-modal use with various transportation opportunities.
Create people places.
Provide high service roadway functionality, decreasing commute times and accidents.
Create roadway character.
Provide aesthetic upgrades that encourages investment by private and public sectors.
Revitalize and repurpose under utilized areas.
Create purpose.
Create synergy.
Create a destination.
Create economic activity.
Create identities, vision and branding.
Create sustainably for the next 25 – 50 years.

Create tangible assets to market west St. Louis County
Create business retention and recruitment.

The History

In 2007 the West St. Louis County Chamber of Commerce, in collaboration with the cities of Manchester, Winchester, Ballwin, Ellisville, and Wildwood submitted a joint application to the East-West Gateway Council of Governments (EWG) to be included as a demonstration project for the Great Streets Initiative that EWG had undertaken. The project would entail the portion of Manchester Road between State Route 141 and State Route 109. Later that year, this project was selected as one of four demonstration projects across the St. Louis region to provide case studies for the Great Streets Initiative, which aims to solve one of the region's toughest transportation challenges.

What is the Great Streets Initiative?

The St. Louis Great Streets Initiative is a project that encourages community leaders to use their streets to create connections and centers of economic and social activity. Great streets in St. Louis emphasize the safe coexistence of all modes of travel, including vehicular, pedestrian, public transit and bicycling. This requires planners, designers, and developers to think differently about our streets. The Great Streets Initiative calls us all to address the auto-centric approach that has dominated our thinking over the years in order to transform these streets into great community resources.

What is a Great Street?

There are several characteristics of a "great street", including:

Great Streets are representative of their places. A Great Street reflects the neighborhood through which it passes and has a scale and design appropriate to the character of the abutting properties and land uses.

Great Streets allow people to walk comfortably and safely. The pedestrian environment on, along and near the street is well-designed and well-furnished. The relationship between the street and its adjacent buildings is organic, conducive to walking, and inviting to people.

Great Streets contribute to the economic vitality of the city. Great Streets facilitate the interaction of people and the promotion of commerce. They serve as destinations, not just transportation channels. They are good commercial addresses and provide location value to businesses that power the local economy.

Great Streets are functionally complete. Great Streets support balanced mobility with appropriate provision for safe and convenient travel by all of the ground transportation modes: transit, walking, bicycling, personal motor vehicles and freight movement.

Great Streets provide mobility. Great Streets strike an appropriate balance among the three elements of modern mobility: through travel, local circulation and access. The right balance varies with the function of the street and the character of its neighborhoods and abutting properties.

Great Streets facilitate placemaking. Great Streets incorporate within them places that are memorable and interesting. These may include plazas, pocket parks, attractive intersections and corners, or simply wide sidewalks fostering an active street life.

Great Streets are green. Great Streets provide an attractive and refreshing environment by working with natural systems. They incorporate environmentally sensitive design standards and green development techniques, including generous provision of street trees and other plantings and application of modern storm water management practices.

Planning our Future

For the initial phase of the project, the municipalities and the EWG project team worked together to craft some ideas to improve the way that the corridor functions both for transportation uses and as a community and economic asset. A series of stakeholder meetings presented a range of strategic choices to begin the process of change along the corridor. "The Manchester Road Forum" in December 2007, was a six-hour event that included 40 representatives from the five communities and the Missouri Department of Transportation along with the project team.

Following an additional meeting on May 15, 2008 to discuss possible future solutions on Manchester Road the project team developed different concepts along the corridor. These concepts represented potential forms for future improvements along the corridor and include land use and transportation improvements that work together to create pulse nodes and to change feel and function of the roadway between major intersections.

Executing a scope of work like this for a corridor with so many different stakeholders will require careful attention to consensus building, communication, and a genuine desire to work together for the betterment of the entire corridor. Special effort will be made to involve the business, real estate, developer and property owner elements of the corridor, to ensure that any plan meets their needs and is attractive to the development community. In addition, significant public input from residents of all the communities will be encouraged.

The next phase of the project was to develop a comprehensive concept plan for the corridor. The majority of the funding was be provided via a grant from EWG; the local communities committed to a 20% matching share.
In 2009 the team hired the consultant team Design Workshop to do public visioning sessions around the cities for one year. Each session was designed to provide participants the opportunity to visit informational stations staffed by planners and engineers who would provide information on the project, address key issues, and accept comments from the community. They would also have the opportunity to participate in a polling exercise.
The consultant team retained by East West Gateway was charged with developing a Master Plan for an approximately 5-mile stretch of Manchester Road between Missouri Routes 141 and 109. Ultimately the municipalities involved (Manchester, Winchester, Ballwin, Ellisville, and Wildwood), as well as MoDOT and the West County Chamber of Commerce, can use the document as a blueprint for considering roadway and other infrastructure improvements and economic development strategies along the corridor. The consultant team, led by the urban design firm, Design Workshop, looked at ways to improve infrastructure, manage traffic and parking, increase the potential for economic development, make the corridor safer for pedestrians, and enhance aesthetics in an environmentally responsible manner. All comments received would be reviewed and considered as the design team begins developing alternatives for the Manchester Road Master Plan. Currently the cities of Ballwin, Ellisville and Wildwood have adopted the master plan.

Today the cities of Ballwin, Ellisville and Wildwood(Manchester and Winchester are not involved in this section of the project) are working in conjunction with a MoDOT $7.5 million resurfacing project from just west of Hwy. 141 in Manchester to Westglen Farms Drive in Wildwood. Both the resurfacing and the Great Streets project work will be put out to bid together in the spring of 2014, with work starting on both in mid summer '14 and being completed up to a year and a half afterward.

The goal is to make Manchester Road a Great Street and a great destination in West County.

The communities should consider requiring investment in design, landscaping, and multi-modal improvements associated with surface lots that will likely not attract redevelopment prospects for some time. Potential investments may include:

- Adding green space and porosity to pavement surfaces in order to improve aesthetics and reduce rainwater runoff from existing lots. These strategies may also include the installation of perimeter landscaping, pocket parks and gardens, and bioswales.
- Improving pedestrian connectivity between destinations in order to generate foot traffic and support the sharing of parking between properties. Quality pedestrian through-paths across parking lots would shorten walking distances, provide direct connections between multiple uses, and improve overall safety.
- Adding bicycle parking facilities to existing parking lots to encourage non-motorized commuting and local travel.
- Removal of reserved spots for employee parking from key locations for bus stations and bicycle facilities in order to encourage use of these alternative modes of travel.
- General design and aesthetic improvements along the corridor, including: creation of improved transition zones between Manchester Road and existing parking lots, including places to rest; the installation of improved wayfinding and information systems; and, the creation of opportunities for shade and shelter for pedestrians.

These improvements can improve the overall performance and appearance of the corridor in the near term, prior to the redevelopment or conversion of existing land uses along the corridor. In addition, in the near term, the cities can work with groups of landowners to coordinate shared parking arrangements along the corridor. For example, a city could work with the owner of an auto parts store that closes by 5PM to arrange for neighboring restaurants to use his or her parking spaces after hours. The communities should also work with individual property owners to arrange for users of bus services along the corridor to use vacant parking spaces along the corridor during commuting hours.

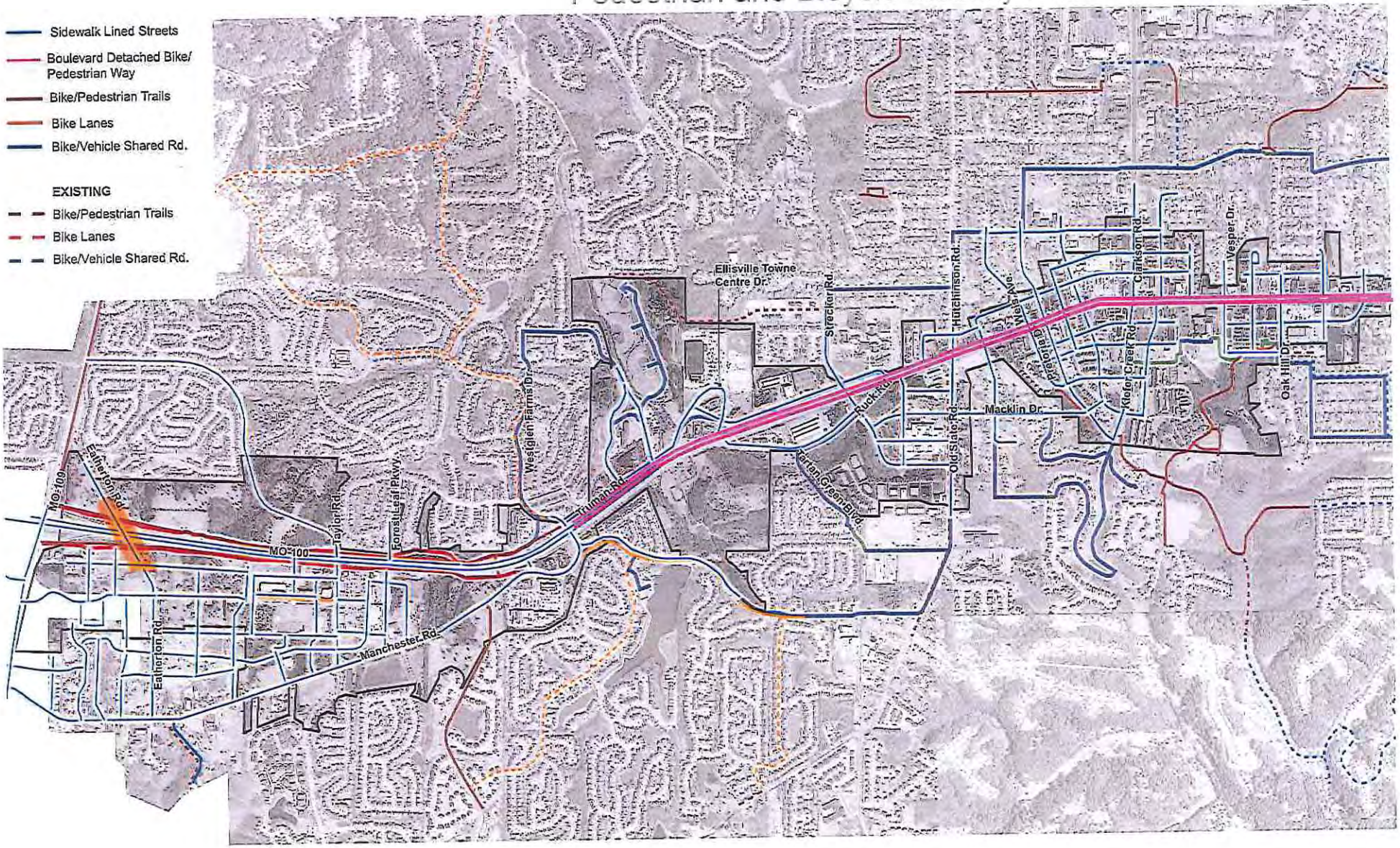
Creation of a Transportation Management Association - The five communities over time should consider establishing a Transportation Management Association (TMA), a member-controlled organization that encourages the efficient use of transportation and parking resources in a finite area. For example, the TMA could organize parking strategies for each of the five town center nodes along the Manchester Road corridor. Potential projects the TMA may pursue include improvements for sidewalks, bicycle storage, transit, and potentially district-wide parking garages.

Sidewalks – The master plan recommends that the streetscape along Manchester Road and nearby side streets and backstreets include sidewalks of a width of five feet or greater. The communities and developers should plan for wider sidewalks whenever possible, and in particular in town center areas, along "Main Streets", to facilitate shopping and outdoor dining. The communities should provide for a planted landscape buffer of at least three feet between the travel lanes of Manchester Road and the combined sidewalk / bike lanes running parallel to the street, from Old State Road east to Route 141. Setting the sidewalk back from Manchester Road with a landscaped buffer will reduce the impact of vehicular noise on pedestrians and provide for enhanced safety. In addition, the five communities and MoDOT shall design the corners at major cross streets with Manchester Road to be handicap accessible, in accordance with ADA standards. Depending on the slope and corner radii, the communities should modify many of the existing east-west intersection crossings to create safer areas for walking. In general, MoDOT and the communities should design for a driveway radii of 15 feet, and the width of two-way driveways intersecting with Manchester Road should not exceed 30 feet. The

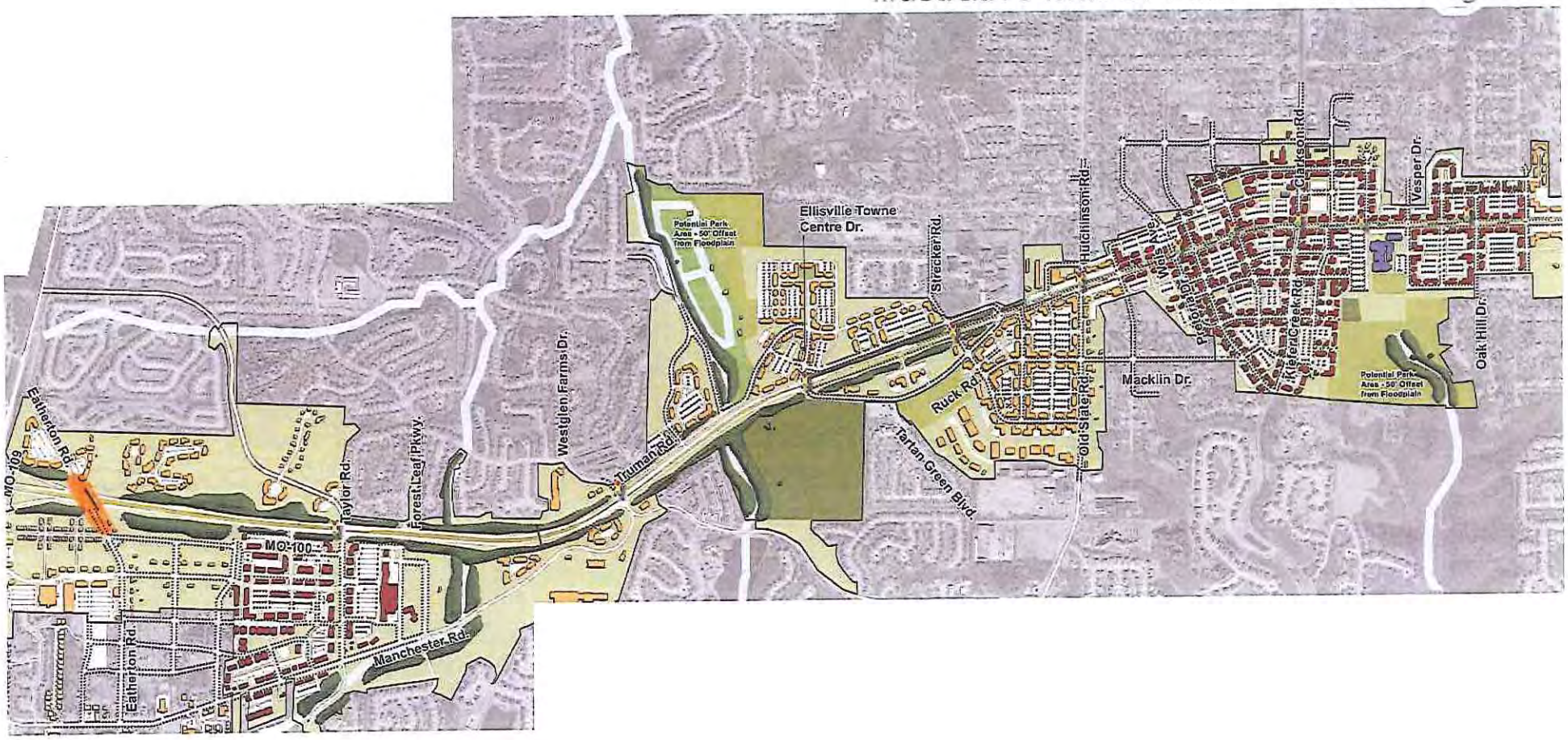
local communities will need to work with MoDOT and private landowners to coordinate and implement recommended streetscape improvements along the corridor over the next few decades.

Bicyclists – As illustrated in the Pedestrian and Bicycle Mobility Plan on the next page, the master plan recommends that the communities work to provide bike lanes attached to sidewalks along Manchester Road from Old State Road to Route 141. A landscape buffer should separate this combined bike / sidewalk lane from the vehicular travel lanes of Manchester Road. In addition, the communities should provide additional bike trails, running either parallel to Manchester Road or following the natural open spaces such as creeks, in order to connect different areas of the community and to provide additional recreational amenities for residents. These bike trails would feature asphalt or gravel surfaces and would traverse through more natural spaces along and near the Manchester Road corridor in West County.

Pedestrian and Bicycle Mobility Plan - Western Segment

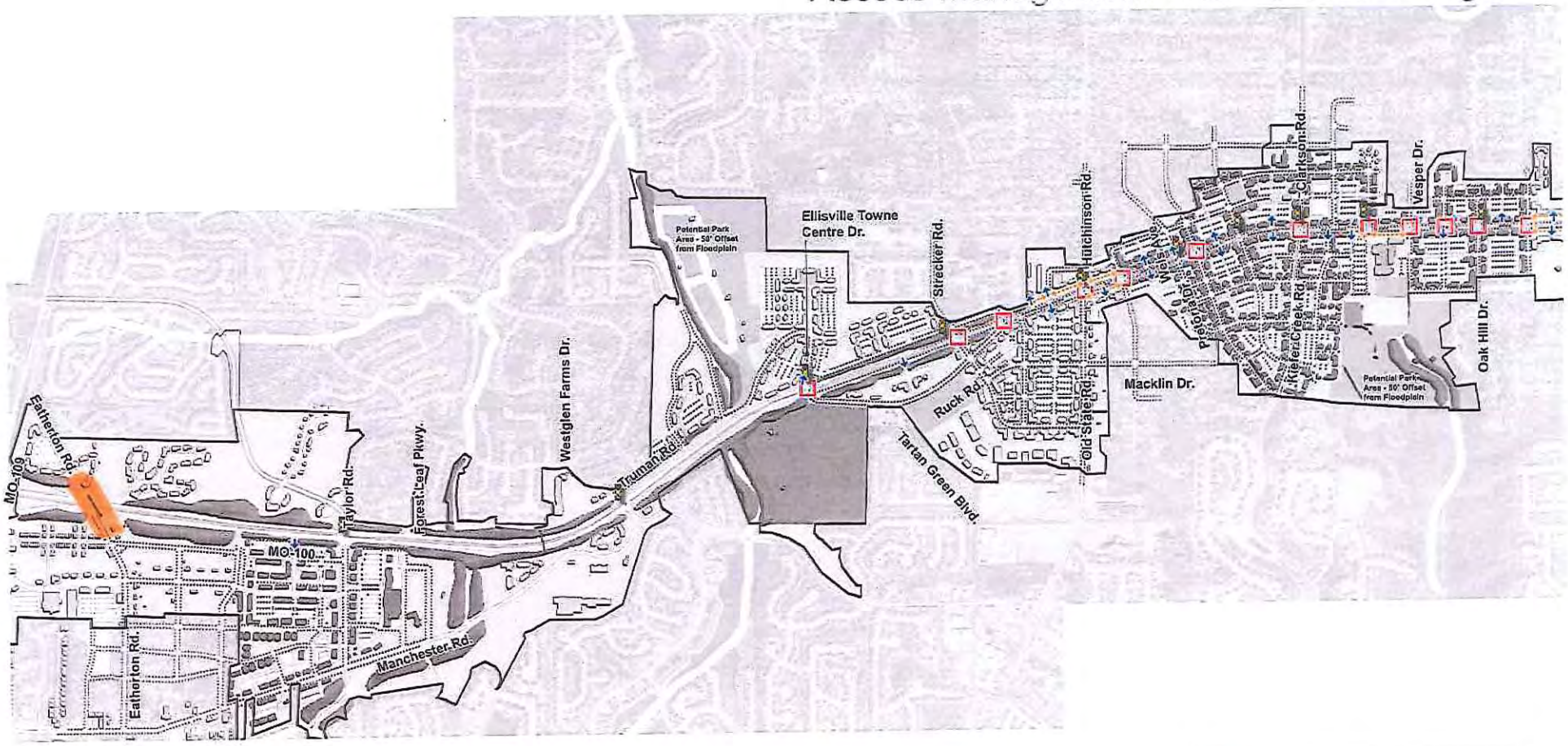


Illustrative Master Plan - Western Segment



- Civic Building
- Sub Urban and Neighborhood District Area Buildings
- Town Center Area Buildings
- Parks/Open Space

Access Management Plan - Western Segment



Proposed or Existing Traffic Signal

Driveway

Crosswalks with Pedestrian Signal

Connected Parking Lots

Exhibit 11

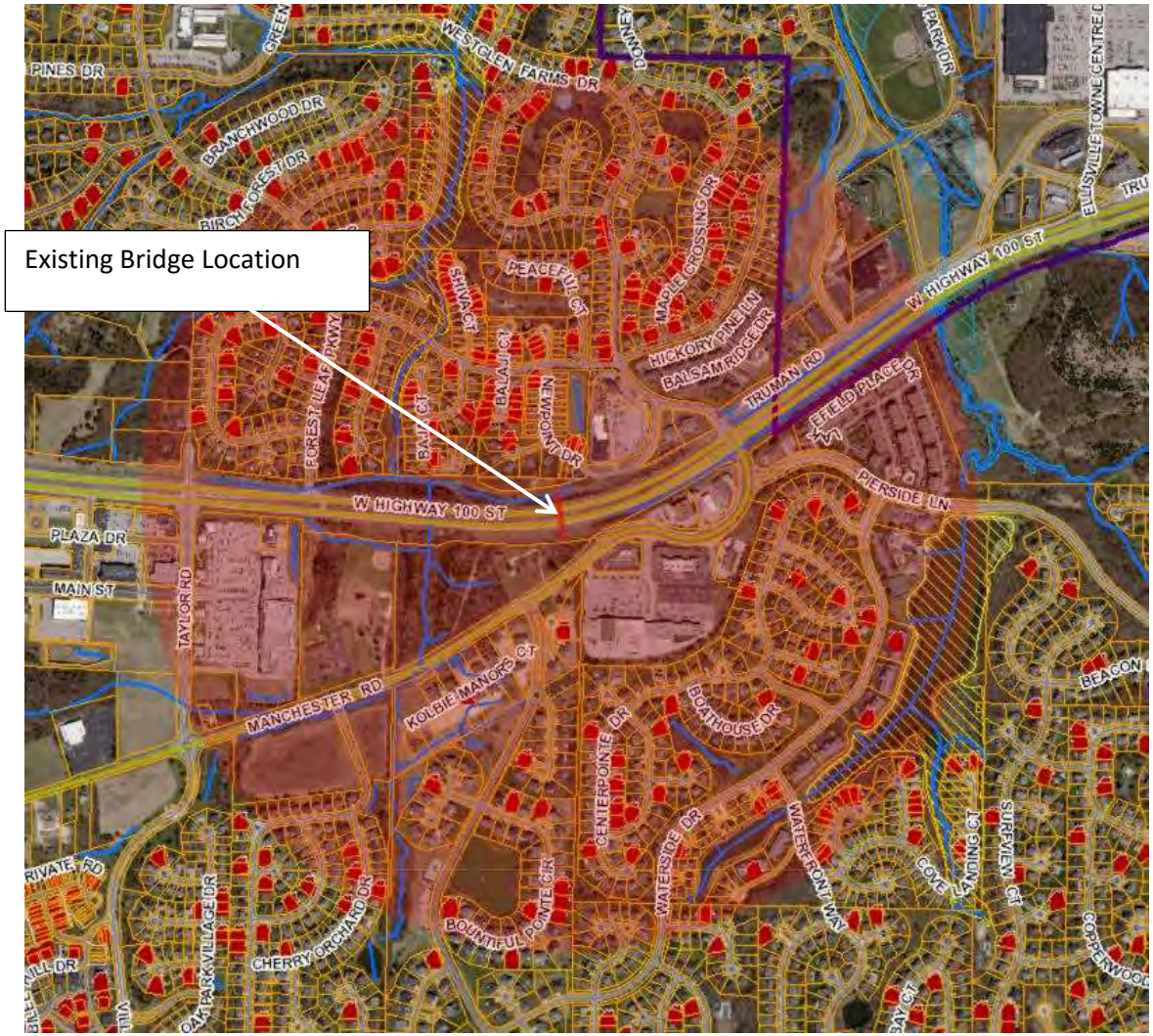


Exhibit 3

I/2 Mile Radius from Existing Pedestrian Bridge = 1080 Properties

Exhibit 12

Exhibit 4

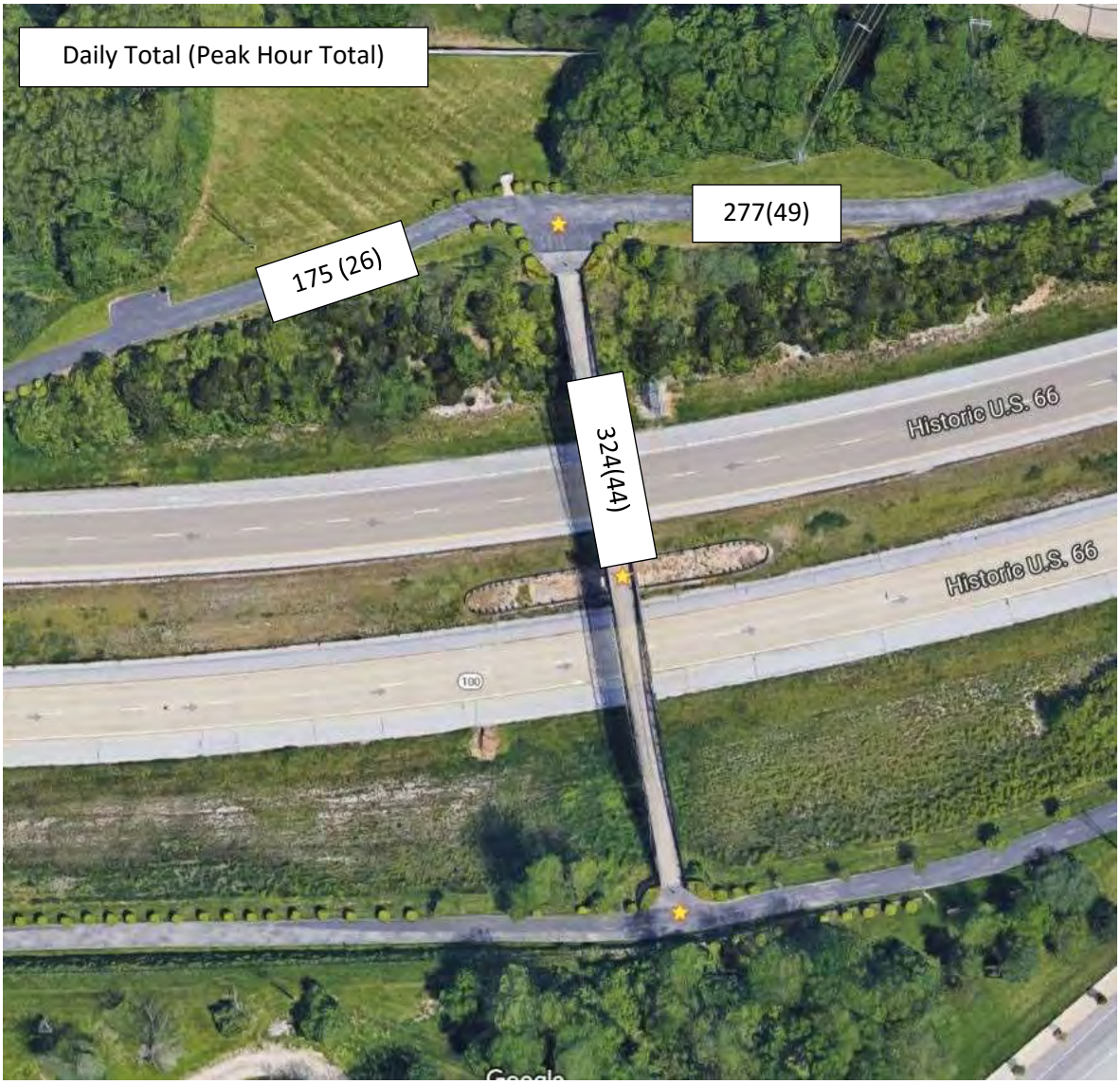
I/2 Mile Radius from Proposed Bridge = 1075 Existing Properties

(With the Villages of Bright Leaf and Main Street Crossing this will increase to about 1375 properties)

Trail Count Data										
Peak Hour Data	West Leg			Bridge (South Leg)			East Leg			
Friday, August 26, 2016 (4PM-5PM)	To South	To West	To East	To West	To East	To South	To East	To South	To West	Total
Pedestrians	16	1	0	1	19	0	1	2	0	40
Bicycles	1	0	0	0	0	0	0	0	0	1
Sub-Total	17	1	0	1	19	0	1	2	0	41
Total	18			20			3			41
Saturday, August 27, 2016 (8:45AM-9:45AM)	To South	To West	To East	To West	To East	To South	To East	To South	To West	Total
Pedestrians	22	3	1	7	16	0	2	6	0	57
Bicycles	2	0	0	5	4	0	0	3	0	14
Sub-Total	24	3	1	12	20	0	2	9	0	71
Total	28			32			11			71
Sunday, August 28, 2016 (9AM-10AM)	To South	To West	To East	To West	To East	To South	To East	To South	To West	Total
Pedestrians	3	4	0	6	4	2	6	10	0	35
Bicycles	1	2	0	2	2	0	1	1	2	11
Sub-Total	4	6	0	8	6	2	7	11	2	46
Total	10			16			20			46
Monday, August 29, 2016 (7PM-8PM)	To South	To West	To East	To West	To East	To South	To East	To South	To West	Total
Pedestrians	5	3	0	4	5	0	1	1	0	19
Bicycles	0	1	0	2	2	0	5	0	0	10
Sub-Total	5	4	0	6	7	0	6	1	0	29
Total	9			13			7			29

Exhibit 13

Total Daily Users (6AM – 8:15PM)	West Leg			Bridge (South Leg)			East Leg			
Friday, August 26, 2016	To South	To West	To East	To West	To East	To South	To East	To South	To West	Total
Pedestrians	31	29	0	14	43	2	17	15	2	153
Bicycles	12	4	0	13	9	0	8	12	0	58
Sub-Total	43	33	0	27	52	2	25	27	2	211
Total	76			81			54			
Saturday, August 27, 2016	To South	To West	To East	To West	To East	To South	To East	To South	To West	Total
Pedestrians	73	32	1	31	81	2	25	34	2	281
Bicycles	30	3	0	29	29	0	4	17	0	112
Sub-Total	103	35	1	60	110	2	29	51	2	393
Total	139			172			82			393
Sunday, August 28, 2016	To South	To West	To East	To West	To East	To South	To East	To South	To West	Total
Pedestrians	31	30	0	33	38	6	25	33	0	196
Bicycles	19	6	0	22	26	0	12	10	2	97
Sub-Total	50	36	0	55	64	6	37	43	2	293
Total	86			125			82			293
Monday, August 29, 2016	To South	To West	To East	To West	To East	To South	To East	To South	To West	Total
Pedestrians	25	24	1	20	20	2	15	17	1	125
Bicycles	12	6	0	8	17	0	9	9	0	61
Sub-Total	37	30	1	28	37	2	24	26	1	186
Total	68			67			51			186



Trail Count

Date: Saturday August 26, 2016

Peak Hour: 8:45 – 9:45 AM

GRG Great Rivers Greenway

CLEAN | GREEN | CONNECTED | TRAILS

THE WESTERN GREENWAY

Public Engagement and Outreach Summary

Exhibit 14

WILDWOOD

EXECUTIVE SUMMARY

The City of Wildwood and Great Rivers Greenway share a common goal, preserving nature while creating opportunities for people to experience the natural environment. Since the inception of Great Rivers Greenway (GRG) in 2000, the organization has enjoyed a strong and positive relationship with the City of Wildwood. This relationship continues today with the planning for a connective trail that ties some of Wildwood's most cherished amenities together and improves their accessibility.

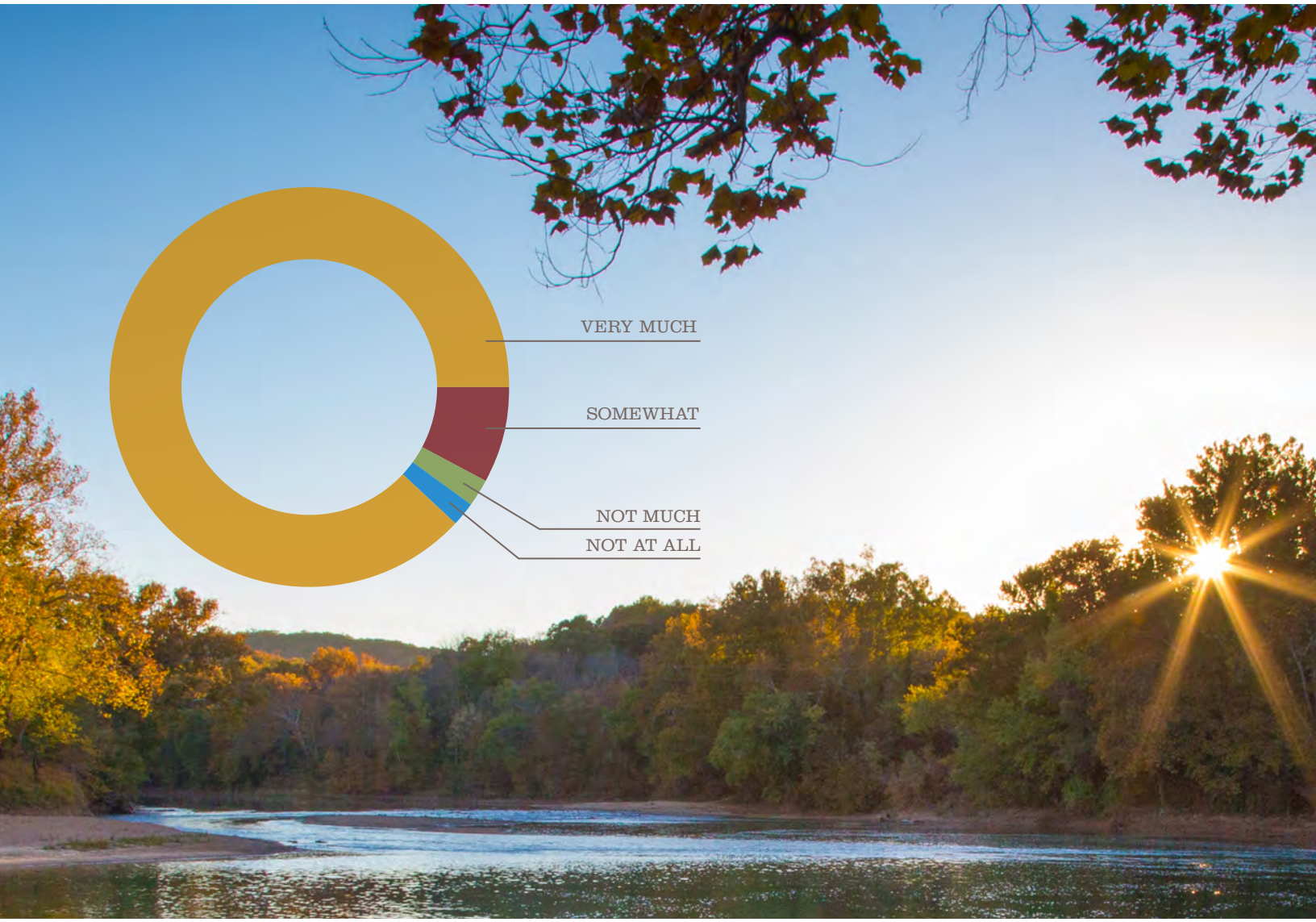
Since Spring of 2013, in partnership with the City of Wildwood, GRG has worked to reach out to area residents and trail users to capture public sentiment, including concerns and sensitivities. Using a multi-pronged approach, GRG staffers not only provided information online, but met residents throughout the city to educate them about the project and to encourage their participation.

From feedback collected at the two Open Houses and from the over five hundred and sixty surveys collected, public sentiment strongly supports the development of the Western Greenway. Open House attendees, survey responders and information table visitors voiced very strong support for the continued development of the trails and the necessity to create connectivity between existing trails as well as key local amenities, including: Babler State Park, Rockwoods Reservation and the Wildwood Town Center. Of all responders, the ration to fully supportive of trails to those who do not support trails is 85:1. Of Wildwood residents the ratio between those that fully support trails compared to those who do not support trails at all is 40:1.

Survey and Open House attendees were also asked to document concerns relating to the development of the Western Greenway. Concerns were limited and varied. Less than 40% of those polled had concerns Connectivity to other trails and amenities, maintenance and safety were some of the primary concerns identified. Of all the responses, most residents value long trails connected to key amenities and destinations.

The overwhelming majority of residents surveyed value the development and connectivity of trails. Residents surveyed strongly believe that trails not only improve their quality of life and indicated trails provide an economic benefit to the community.

DO TRAILS IMPROVE QUALITY OF LIFE



The Western Greenway design and implementation will be a challenge given the topography of the area as well as some local private property owners. Overall, public sentiment has been clear. The development of the Western Greenway is strongly supported by the general public, with both local residents and non-resident trail users.

Exhibit 15

Ryan Thomas

From: Marion Squires <bandmsquires@att.net>
Sent: Wednesday, July 16, 2014 11:31 AM
To: Ryan Thomas
Subject: pedestrian bridge

July 16, 2014

To Whom It May Concern:

The Windsor Crest Subdivision at the intersection of Hwy. 100 and Hwy 109 would benefit from the proposed pedestrian bridge over Hwy 100. It would allow our residents access to the Town Center without having to cross a very busy roadway, Hwy 100, and the danger that is always present when pedestrians and traffic mix. It would also allow our residents ready access to the walking trails on the south side of Hwy 100 without the necessity of negotiating a crossing in traffic on Hwy 100. As a community, we would support this project.

Thanks for your consideration in the matter.

Burt Squires
President
Windsor Crest Board of Trustees

Ryan Thomas

From:	Jack Kramer <jack.kramer@charter.net>
Sent:	Wednesday, July 02, 2014 8:35 AM
To:	Ryan Thomas
Cc:	Mike Foye; Alex Hernandez; Jack Kramer
Subject:	Pedestrian Bridge

Dear Mr. Thomas:

The Lafayette Trails Subdivision Homeowners Association is very excited to hear that the City of Wildwood is planning to develop a new pedestrian bridge over MO Route 100 near Eatherton Road. This facility will greatly improve bicycle and pedestrian access to the Town Center, City Trail System and other destinations throughout the City.

The Lafayette Trails Subdivision Homeowners Association fully supports the City's efforts in implementing this public improvement and its efforts in securing Federal funding for the project.

Sincerely,

Lafayette Trails Subdivision Trustees
Jack Kramer - President
Mike Foye – Secretary
Alejandro Hernandez - Treasurer

Jack Kramer
636.489.9666

TOWNS AT WINDRUSH

Homeowners Association, Inc.
2568 Viola Gill Lane
Wildwood, Missouri 63040

Board of Directors
Jerome Knapp, President
David Beattie, VP/Treasure
Sharon Dugan, Secretary

June 25, 2014

To whom it may concern,

The Board of Directors and Homeowners of The Towns at Windrush recommend approval for the new proposed bridge system which will improve access between neighborhoods and businesses within the City of Wildwood Town Center.

Further, the overall existing City of Wildwood paved trail system, which is used by young and senior residents, will benefit from this improvement.

For these reasons, we respectfully request and support funding for this new bridge system.

Thank you for your consideration and approval.

Sincerely,

Jerome Knapp
President

JK/sd

Saint Louis
Great Streets INITIATIVE
LEARN · SHARE · PLAN · BUILD

June 23, 2014

Mr. Ryan S. Thomas, P.E.
Director of Public Works/City Engineer
City of Wildwood
16860 Main Street
Wildwood, MO 63040

Re: Planned Bicycle/Pedestrian Bridge over MO Route 100 at Eatherton Road

Dear Mr. Thomas:

Please be advised that the Manchester Road Great Streets Committee has reviewed the proposal by the City of Wildwood to construct a new bicycle/pedestrian bridge over MO Route 100 near Eatherton Road. At its June 2, 2014 Meeting, the Committee voted unanimously to endorse this project, as it is consistent with the Manchester Road Great Streets Master Plan and will better serve bicycle and pedestrian traffic within the corridor. It is the Committee's understanding that the City of Wildwood will be providing the required local matching funds in its application for Transportation Alternatives Program (TAP) funding.

Sincerely,
Manchester Road Great Streets Committee

Craig Larson

Craig Larson, Ed.D.
Interim Facilitator

WEST ST. LOUIS COUNTY
Chamber of Commerce

15965 Manchester Road
Suite 102
Ellisville, MO 63011
Phone: 636-230-9900
Fax: 636-230-9912
www.westcountychamber.com

July 28, 2014

Mr. Ryan S. Thomas, P.E.
Director of Public Works/City Engineer
City of Wildwood
16860 Main Street
Wildwood, MO 63040

Re: Planned Bicycle/Pedestrian Bridge over MO Route 100 at Eatherton Road

Dear Mr. Thomas:

Please be advised that the West St. Louis County Chamber of Commerce is very supportive of the planned bicycle/pedestrian bridge over MO Route 100 near Eatherton Road in the City of Wildwood, as it will continue the vision of the Manchester Road Great Streets Initiative and benefit our membership.

Sincerely,
West St. Louis County Chamber of Commerce

John Sullivan, Chairman

Proudly serving Ballwin, Clarkson Valley, Ellisville, Manchester, Valley Park, Twin Oaks, Wildwood and Winchester for over 52 years. The West St. Louis County Chamber of Commerce represents members, supports business, advances community interests and enhances the quality of life

City of Ellisville

July 15, 2014

Mr. Ryan S. Thomas, P.E.
Director of Public Works/City Engineer
City of Wildwood
16860 Main Street
Wildwood, MO 63040

Re: Planned Bicycle/Pedestrian Bridge over MO Route 100 at Eatherton Road

Dear Mr. Thomas:

Please be advised that the City of Ellisville is very supportive of the planned bicycle/pedestrian bridge over MO Route 100 near Eatherton Road in the City of Wildwood, as it will also benefit nearby residents of Ellisville and will continue the vision of the Manchester Road Great Streets Initiative shared by both cities.

Sincerely,
City of Ellisville

Adam Paul, Mayor

1 Weis Avenue • Ellisville, Missouri • 63011
636/227-9660 V/TDD • FAX: 636/227-9486

June 27, 2014

Ryan S. Thomas, P.E.
Director of Public Works/City Engineer
City of Wildwood
16860 Main St
Wildwood, MO 63040

RE: Proposed Route 100 Pedestrian Bridge

Dear Mr. Thomas:

We understand there is an opportunity for a new pedestrian bridge across Route 100 east of Route 109. The Wildwood Business Association (WBA) and our 82 members wholly support this proposed bridge.

A new bridge, linking the residential areas north of Route 100 to the business area of Wildwood, Town Center, will be a major plus for those businesses. Currently, it is a hazard for anyone to attempt to cross Route 109 to get to Town Center. With this new bridge, residents will be able to safely come to Town Center.

The WBA is in strong support of this bridge and look forward to the construction occurring soon.

Sincerely,

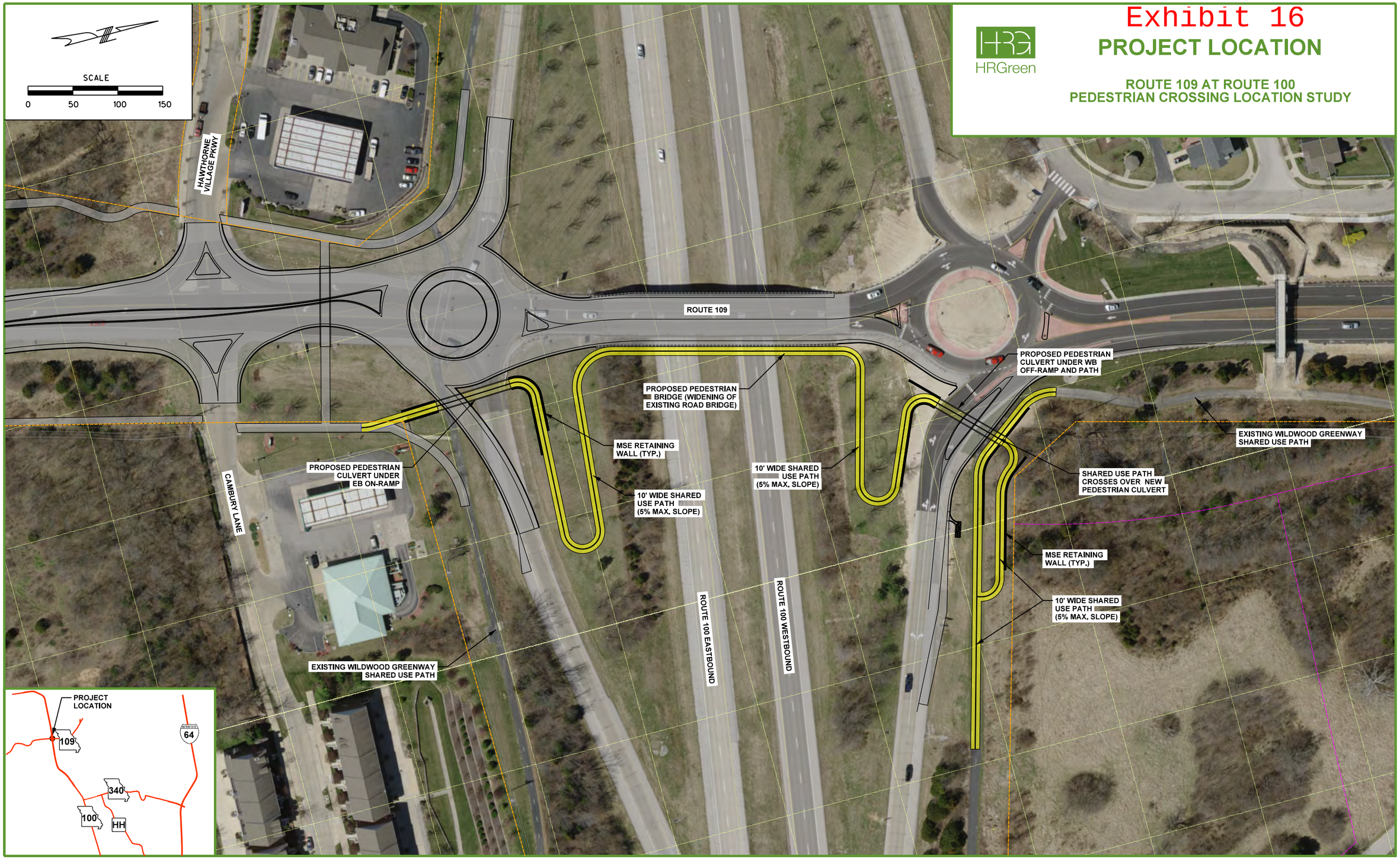
Mikel D. Garrett
President, Wildwood Business Association
16437 Village Plaza View Dr
Wildwood, MO 63011
636-458-5055
636-458-5055 (fax)

Exhibit 16

PROJECT LOCATION

HRGreen

ROUTE 109 AT ROUTE 100
PEDESTRIAN CROSSING LOCATION STUDY



PLANNING LEVEL

OPINION OF PROBABLE PROJECT COST

ROUTE 109 IMPROVEMENTS

Pedestrian Crossing Location Study

September 1, 2016

Exhibit 17

Prepared by HR Green

ITEM NO.	ITEM	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL
1.1 Demolilt ion					
1.1.1	Pavement Removal	SY	489	$ 5.00	$2,444
1.1.2	Clearing and Grubbing	AC	1.00	$ 5,000.00	$5,000
1.2 Excavation and Grading					
1.2.1	Excavation and Grading, Unknown	% of 1.1.1,2 & 1.4.1, 2 & 1.7.1	20%		$93,088
1.3 Drainage					
1.3.1	Drainage, Unknown	% 1.4.1, 2 & 1.7.1	30%		$137,398
1.4 Structures					
1.4.1	Retaining Wall	SF	5768.0	$ 45.00	$259,560
1.4.2	Box Culvert for Shared Use Path - 9' x 12'	LF	170.0	$ 1,075.00	$182,750
1.4.3	Bridge, Widening	SF	3,124	$ 150.00	$468,600
1.4.4	Bridge, Aesthetics (includes lighting)	% of 1.4.3	10%		$46,860
1.4.5	Lighting for Culverts	% of 1.4.2	5%		$9,138
1.5 Special Construction					
1.5.1	Erosion Control	% 1.4.1, 2 & 1.7.1	2%		$9,160
1.5.2	Typical Utilities	% 1.4.1, 2 & 1.7.1	5%		$22,900
1.6 Traffic Control					
1.6.1	Traffic Control	% 1.4.1, 2 & 1.7.1	6%		$27,480
1.7 Pedestrian and Bicycle Facilities					
1.7.1	Shared Use Path (Asphalt)	TONS	285	$ 55.00	$15,684
1.7.2	6" Type 1 Aggregate Base	SY	1722	$ 30.00	$51,667
1.8 Miscellaneous					
1.8.1	Incidentals	% 1.4.1, 2 & 1.7.1	20%		$91,599
1.8.2	Mobilization	% of Above	8%		$116,065
1.8.3	Contingency	% of Above	10%		$145,081
Subtotal Construction (Current Year)					**$1,711,952**
Years until Construction			*2*		
Total Construction (Construction Year)		Assuming 3.5% Inflation			**$1,834,000**

HRGreen

Exhibit 18

74.00 Annual Change of Construction Cost Index (CCI) [1]

Year	Percent Change [2]
1971	10.6%
1972	12.7%
1973	8.0%
1974	6.2%
1975	9.8%
1976	8.7%
1977	8.5%
1978	6.8%
1979	5.3%
1980	7.7%
1981	7.0%
1982	7.2%
1983	7.1%
1984	5.3%
1985	4.3%
1986	4.9%
1987	2.0%
1988	4.7%
1989	0.1%
1990	1.4%
1991	(- 0.8%)
1992	1.6%
1993	2.8%
1994	8.5%
1995	3.2%
1996	1.8%
1997	4.1%
1998	2.7%
1999	1.9%

Year	Percent Change [2]
2000	3.1%
2001	0.7%
2002	2.9%
2003	2.1%
2004	3.0%
2005	6.3%
2006	7.2%
2007	1.0%
2008	2.5%
2009	3.4%
2010	1.5%
2011	3.9%
2012	0.9%
2013	2.4%
2014	2.9%
2015	2.9%
2016 [3]	11.7%

(1) Adapted from the yearly Construction Cost Index (CCI) published in "Engineering News-Record" (ENR) magazine, published during December of the previous year.

(2) CCI percentage change is positive unless noted as negative (i.e. 1991).

(3) 2016 CCI published on the "Engineering News-Record" magazine website (ENR.com).

Exhibit 19

CCO Form: FS25
Approved: 04/95 (MGB)
Revised: 01/15 (MWH)
Modified:

Wildwood
MO 100 Pedestrian Bridge

CFDA Number:
CFDA Title: Highway Planning and Construction
Award name/number: TAP 5500 - (680)
Award Year: (2015)
Federal Agency: Federal Highway Administration, Department of Transportation

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
TRANSPORTATION ALTERNATIVES FUNDS
PROGRAM AGREEMENT

THIS AGREEMENT is entered into by the Missouri Highways and Transportation Commission (hereinafter, "Commission") and the City of Wildwood (hereinafter, "City").

WITNESSETH:

NOW, THEREFORE, in consideration of the mutual covenants, promises and representations in this Agreement, the parties agree as follows:

(1) PURPOSE: The United States Congress has authorized, in 23 U.S.C. MAP-21 §1122, §101, §106 and §213, SAFETEA-LU §1404 funds to be used for transportation alternatives activities. The purpose of this Agreement is to grant the use of such transportation enhancement funds to the City.

(2) LOCATION: The transportation alternatives funds which are the subject of this Agreement are for the project at the following location: MO Route 100 Pedestrian Bridge.

The general location of the project is shown on attachment marked "Exhibit A" and incorporated herein by reference.

(3) REASONABLE PROGRESS POLICY: The project as described in this agreement is subject to the reasonable progress policy set forth in the Local Public Agency (LPA) Manual and the final deadline specified in Exhibit B attached hereto and incorporated herein by reference. In the event, the LPA Manual and the final deadline within Exhibit B conflict, the final deadline within Exhibit B controls. If the project is within a Transportation Management Area that has a reasonable progress policy in place, the project is subject to that policy. If the project is withdrawn for not meeting reasonable progress, the City agrees to repay the Commission for any progress payments made to the City for the project and agrees that the Commission may deduct

progress payments made to the City from future payments to the City. The City may not be eligible for future Transportation Alternatives Funds if the City does not meet the reasonable progress policy.

(4) INDEMNIFICATION:

(A) To the extent allowed or imposed by law, the City shall defend, indemnify and hold harmless the Commission, including its members and the Missouri Department of Transportation (MoDOT or Department) employees, from any claim or liability whether based on a claim for damages to real or personal property or to a person for any matter relating to or arising out of the City's wrongful or negligent performance of its obligations under this Agreement.

(B) The City will require any contractor procured by the City to work under this Agreement:

1. To obtain a no cost permit from the Commission's district engineer prior to working on the Commission's right-of-way, which shall be signed by an authorized contractor representative (a permit from the Commission's district engineer will not be required for work outside of the Commission's right-of-way); and

2. To carry commercial general liability insurance and commercial automobile liability insurance from a company authorized to issue insurance in Missouri, and to name the Commission, and MoDOT and its employees, as additional named insureds in amounts sufficient to cover the sovereign immunity limits for Missouri public entities as calculated by the Missouri Department of Insurance, Financial Institutions and Professional Registration, and published annually in the Missouri Register pursuant to Section 537.610, RSMo. The City shall cause insurer to increase the insurance amounts in accordance with those published annually in the Missouri Register pursuant to Section 537.610, RSMo.

(C) In no event shall the language of this Agreement constitute or be construed as a waiver or limitation for either party's rights or defenses with regard to each party's applicable sovereign, governmental, or official immunities and protections as provided by federal and state constitution or law.

(5) AMENDMENTS: Any change in this Agreement, whether by modification or supplementation, must be accomplished by a formal contract amendment signed and approved by the duly authorized representatives of the City and the Commission.

(6) COMMISSION REPRESENTATIVE: The Commission's District Engineer is designated as the Commission's representative for the purpose of administering the provisions of this Agreement. The Commission's representative may designate by written notice other persons having the authority to act on behalf of the Commission in furtherance of the performance of this Agreement.

(7) NONDISCRIMINATION ASSURANCE: With regard to work under this Agreement, the City agrees as follows:

(A) Civil Rights Statutes: The City shall comply with all state and federal statutes relating to nondiscrimination, including but not limited to Title VI and Title VII of the Civil Rights Act of 1964, as amended (42 U.S.C. §2000d and §2000e, *et seq.*), as well as any applicable titles of the "Americans with Disabilities Act" (42 U.S.C. §12101, *et seq.*). In addition, if the City is providing services or operating programs on behalf of the Department or the Commission, it shall comply with all applicable provisions of Title II of the "Americans with Disabilities Act".

(B) Administrative Rules: The City shall comply with the administrative rules of the United States Department of Transportation relative to nondiscrimination in federally-assisted programs of the United States Department of Transportation (49 C.F.R. Part 21) which are herein incorporated by reference and made part of this Agreement.

(C) Nondiscrimination: The City shall not discriminate on grounds of the race, color, religion, creed, sex, disability, national origin, age or ancestry of any individual in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The City shall not participate either directly or indirectly in the discrimination prohibited by 49 C.F.R. §21.5, including employment practices.

(D) Solicitations for Subcontracts, Including Procurements of Material and Equipment: These assurances concerning nondiscrimination also apply to subcontractors and suppliers of the City. These apply to all solicitations either by competitive bidding or negotiation made by the City for work to be performed under a subcontract including procurement of materials or equipment. Each potential subcontractor or supplier shall be notified by the City of the requirements of this Agreement relative to nondiscrimination on grounds of the race, color, religion, creed, sex, disability or national origin, age or ancestry of any individual.

(E) Information and Reports: The City shall provide all information and reports required by this Agreement, or orders and instructions issued pursuant thereto, and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Commission or the United States Department of Transportation to be necessary to ascertain compliance with other contracts, orders and instructions. Where any information required of the City is in the exclusive possession of another who fails or refuses to furnish this information, the City shall so certify to the Commission or the United States Department of Transportation as appropriate and shall set forth what efforts it has made to obtain the information.

(F) Sanctions for Noncompliance: In the event the City fails to comply with the nondiscrimination provisions of this Agreement, the Commission shall impose such contract sanctions as it or the United States Department of Transportation may

determine to be appropriate, including but not limited to:

1. Withholding of payments under this Agreement until the City complies; and/or

2. Cancellation, termination or suspension of this Agreement, in whole or in part, or both.

(G) Incorporation of Provisions: The City shall include the provisions of paragraph (7) of this Agreement in every subcontract, including procurements of materials and leases of equipment, unless exempted by the statutes, executive order, administrative rules or instructions issued by the Commission or the United States Department of Transportation. The City will take such action with respect to any subcontract or procurement as the Commission or the United States Department of Transportation may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided that in the event the City becomes involved or is threatened with litigation with a subcontractor or supplier as a result of such direction, the City may request the United States to enter into such litigation to protect the interests of the United States.

(8) ASSIGNMENT: The City shall not assign, transfer or delegate any interest in this Agreement without the prior written consent of the Commission.

(9) LAW OF MISSOURI TO GOVERN: This Agreement shall be construed according to the laws of the State of Missouri. The City shall comply with all local, state and federal laws and regulations relating to the performance of this Agreement.

(10) CANCELLATION: The Commission may cancel this Agreement at any time for a material breach of contractual obligations by providing the City with written notice of cancellation. Should the Commission exercise its right to cancel this Agreement for such reasons, cancellation will become effective upon the date specified in the notice of cancellation sent to the City.

(11) ACCESS TO RECORDS: The City and its contractors must maintain all records relating to this Agreement, including but not limited to invoices, payrolls, etc. These records must be available at no charge to the Federal Highway Administration (FHWA) and the Commission and/or their designees or representatives during the period of this Agreement and any extension, and for a period of three (3) years after the date on which the City receives reimbursement of their final invoice from the Commission.

(12) FEDERAL-AID PROVISIONS: Because responsibility for the performance of all functions or work contemplated as part of this project is assumed by the City, and the City may elect to construct part of the improvement contemplated by this Agreement with its own forces, a copy of Section II and Section III, as contained in the United States Department of Transportation Form Federal Highway Administration (FHWA)

1273 "Required Contract Provisions, Federal-Aid Construction Contracts," is attached and made a part of this Agreement as Exhibit C. Wherever the term "the contractor" or words of similar import appear in these sections, the term "the City"is to be substituted. The City agrees to abide by and carry out the condition and obligations of "the contractor" as stated in Section II, Equal Opportunity, and Section III, Nonsegregated Facilities, as set out in Form FHWA 1273.

(13) ACQUISITION OF RIGHT OF WAY: No acquisition of additional right of way is anticipated in connection with Project TAP-5500(680) or contemplated by this Agreement.

(14) MAINTENANCE OF DEVELOPMENT: The City shall maintain the herein contemplated improvements without any cost or expense to the Commission. All maintenance by the City shall be done for the safety of the general public and the esthetics of the area. In addition, if any sidewalk or bike trails are constructed on the Commission's right-of-way pursuant to this Agreement, the City shall inspect and maintain the sidewalk or bike trails constructed by this project in a condition reasonably safe to the public and, to the extent allowed by law, shall indemnify and hold the Commission harmless from any claims arising from the construction and maintenance of said sidewalk or bike trails. If the City fails to maintain the herein contemplated improvements, the Commission or its representatives, at the Commission's sole discretion shall notify the City in writing of the City's failure to maintain the improvement. If the City continues to fail in maintaining the improvement, the Commission may remove the herein contemplated improvement whether or not the improvement is located on the Commission's right of way. Any removal by the Commission shall be at the sole cost and expense of the City. Maintenance includes but is not limited to mowing and trimming between shrubs and other plantings that are part of the improvement.

(15) PLANS: The City shall prepare preliminary and final plans and specifications for the herein improvements. The plans and specifications shall be submitted to the Commission for the Commission's review and approval. The Commission has the discretion to require changes to any plans and specification prior to any approval by the Commission.

(16) REIMBURSEMENT: The cost of the contemplated improvements will be borne by the United States Government and by the City as follows:

(A) Any federal funds for project activities shall only be available for reimbursement of eligible costs which have been incurred by City. Any costs incurred by City prior to authorization from FHWA and notification to proceed from the Commission are **not** reimbursable costs. The federal share for this project will be 80 percent not to exceed $450,000. The calculated federal share for seeking federal reimbursement of participating costs for the herein improvements will be determined by dividing the total federal funds applied to the project by the total participating costs. Any costs for the herein improvements which exceed any federal reimbursement or are

not eligible for federal reimbursement shall be the sole responsibility of City. The Commission shall not be responsible for any costs associated with the herein improvement unless specifically identified in this Agreement or subsequent written amendments.

(17) PROGRESS PAYMENTS: The City may request progress payments be made for the herein improvements as work progresses but not more than once every two weeks. Progress payments must be submitted monthly. The City shall repay any progress payments which involve ineligible costs.

(18) PROMPT PAYMENTS: Progress invoices submitted to MoDOT for reimbursement more than thirty (30) calendar days after the date of the vendor invoice shall also include documentation that the vendor was paid in full for the work identified in the progress invoice. Examples of proof of payment may include a letter or e-mail from the vendor, lien waiver or copies of cancelled checks. Reimbursement will not be made on these submittals until proof of payment is provided. Progress invoices submitted to MoDOT for reimbursement within thirty (30) calendar days of the date on the vendor invoice will be processed for reimbursement without proof of payment to the vendor. If the City has not paid the vendor prior to receiving reimbursement, the City must pay the vendor within two (2) business days of receipt of funds from MoDOT.

(19) PERMITS: The City shall secure any necessary approvals or permits from any federal or state agency as required for the completion of the herein improvements. If this improvement is on the right of way of the Commission, the City must secure a permit from the Commission prior to the start of any work on the right of way. The permits which may be required include, but are not limited to, environmental, architectural, historical or cultural requirements of federal or state law or regulation.

(20) INSPECTION OF IMPROVEMENTS AND RECORDS: The City shall assure that representatives of the Commission and FHWA shall have the privilege of inspecting and reviewing the work being done by the City's contractor and subcontractor on the herein project. The City shall also assure that its contractor, and all subcontractors, if any, maintain all books, documents, papers and other evidence pertaining to costs incurred in connection with the Transportation Enhancement Program Agreement, and make such materials available at such contractor's office at all reasonable times at no charge during this Agreement period, and for three (3) years from the date of final payment under this Agreement, for inspection by the Commission, FHWA or any authorized representatives of the Federal Government and the State of Missouri, and copies shall be furnished, upon request, to authorized representatives of the Commission, State, FHWA, or other Federal agencies.

(21) CREDIT FOR DONATIONS OF FUNDS, MATERIALS, OR SERVICES: A person may offer to donate funds, materials or services in connection with this project. Any donated funds, or the fair market value of any donated materials or services that are accepted and incorporated into this project shall be credited according to 23 U.S.C. §323.

(22) DISADVANTAGED BUSINESS ENTERPRISES (DBE): The Commission will advise the City of any required goals for participation by disadvantaged business enterprises (DBEs) to be included in the City's proposal for the work to be performed. The City shall submit for Commission approval a DBE goal or plan. The City shall comply with the plan or goal that is approved by the Commission and all requirements of 49 C.F.R. Part 26, as amended.

(23) VENUE: It is agreed by the parties that any action at law, suit in equity, or other judicial proceeding to enforce or construe this Agreement, or regarding its alleged breach, shall be instituted only in the Circuit Court of Cole County, Missouri.

(24) NOTICE TO BIDDERS: The City shall notify the prospective bidders that disadvantaged business enterprises shall be afforded full and affirmative opportunity to submit bids in response to the invitation and will not be discriminated against on grounds of race, color, sex, or national origin in consideration for an award.

(25) FINAL AUDIT: The Commission may, in its sole discretion, perform a final audit of project costs. The United States Government shall reimburse the City, through the Commission, any monies due. The City shall refund any overpayments as determined by the final audit.

(26) OMB AUDIT: If the City expend(s) five hundred thousand dollars ($500,000) or more in a year in federal financial assistance it is required to have an independent annual audit conducted in accordance with OMB Circular A-133. A copy of the audit report shall be submitted to MoDOT within the earlier of thirty (30) days after receipt of the auditor's report(s), or nine (9) months after the end of the audit period. Subject to the requirements of OMB Circular A-133, if the City expend(s) less than five hundred thousand dollars ($500,000) a year, the City may be exempt from auditing requirements for that year but records must be available for review or audit by applicable state and federal authorities.

(27) FEDERAL FUNDING ACCOUNTABILITY AND TRANSPARENCY ACT OF 2006: The City shall comply with all reporting requirements of the Federal Funding Accountability and Transparency Act (FFATA) of 2006, as amended. This Agreement is subject to the award terms within 2 C.F.R. Part 170.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have entered into this Agreement on the date last written below.

Executed by the City this 9th day of March, 2015

Executed by the Commission this 28 day of May, 2015.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

Title ~~Assistant Chief Engineer~~

ATTEST:

Secretary to the Commission

Approved as to Form:

Commission Counsel

CITY OF WILDWOOD

By

Title Mayor

ATTEST:

By

Title City Clerk

Approved as to Form:

Title City Attorney

Ordinance No 2090

Exhibit A

ROUTE 100 PEDESTRIAN BRIDGE
Aerial Map of Project Vicinity

Exhibit B – Project Schedule

Project Description: TAP-5500(680) MO Route 100 Pedestrian Bridge

Task	**Date**
Date funding is made available or allocated to recipient	2/2015
Solicitation for Professional Engineering Services (advertised)	n/a
Engineering Services Contract Approved	n/a
Conceptual Study (if applicable)	n/a
Preliminary and Right-of-Way Plans Submittal (if Applicable)	2/2015
Plans, Specifications & Estimate (PS&E) Submittal	4/2015
Plans, Specifications & Estimate (PS&E) Approval	4/2015
Advertisement for Letting	5/2015
Bid Opening	6/2015
Construction Contract Award or Planning Study completed **(REQUIRED)**	7/2015

*Note: the dates established in the schedule above will be used in the applicable ESC between the sponsor agency and consultant firm.

**Schedule dates are approximate as the project schedule will be actively managed and issues mitigated through the project delivery process. The Award Date or Planning Study Date deliverable is not approximate and a Supplemental Agreement is required to modify this date.

Exhibit C

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

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ATTACHMENTS

A. Employment Preference for Appalachian Contracts (included in Appalachian contracts only)

I. GENERAL

1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2;
Section IV, paragraphs 1, 2, 3, 4, and 7;
Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.

6. **Selection of Labor:** During the performance of this contract, the contractor shall not:

a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or

b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of $10,000 or more.)

1. **Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.

b. The contractor will accept as his operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training."

2. **EEO Officer:** The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

3. **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. **Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed

in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

5. **Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

6. **Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

7. **Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.

8. **Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. **Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA

each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the job training is being required by special provision, the contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of $10,000 or more.)

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of $10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding $2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

(1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of $10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding $2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;

(2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;

(3) that each laborer or mechanic has been paid not less that the applicable wage rate and fringe benefits or cash equivalent for the classification of worked performed, as specified in the applicable wage determination incorporated into the contract.

e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.

f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than $1,000,000 (23 CFR 635) the contractor shall:

a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.

b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.

c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635).

a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of

a subcontractor, assignee, or agent of the prime contractor.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined not more that $10,000 or imprisoned not more than 5 years or both."

X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of $100,000 or more.)

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.

3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this

transaction for cause of default.

d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

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Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and

d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of $25,000 or more - 49 CFR 29)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and

frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

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Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transactions:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

*****

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000 - 49 CFR 20)

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

ATTACHMENT A - EMPLOYMENT PREFERENCE FOR APPALACHIAN CONTRACTS

(Applicable to Appalachian contracts only.)

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph 1c shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph 4 below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which he estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, he shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within 1 week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph 1c above.

5. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

Exhibit 20

WILDWOOD

Eatherton Road Pedestrian Bridge - TAP-5500(680)

ITEMIZED BID ITEMS - BID OPENING AT 10:00 AM ON JULY 27, 2016					KCI CONSTRUCTION CO., INC.		GERSHENSON CONSTUCTION CO., INC.		KOZENY-WAGNER, INC.		R.V. WAGNER, INC.		KRUPP CONSTRUCTION		PHILLIPS HARDY, INC.	
LINE NUMBER	ITEM NUMBER	ITEM DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE
		BIKE/PEDESTRIAN FACILITIES ITEMS														
1	201-99.01	Clearing and Grubbing	LS	1	$10,000.00	$10,000.00	$10,130.00	$10,130.00	$55,000.00	$55,000.00	$27,500.00	$27,500.00	$12,700.00	$12,700.00	$21,300.00	$21,300.00
2	202-20.10	Removal of Improvements	LS	1	$5,500.00	$5,500.00	$44,830.00	$44,830.00	$15,000.00	$15,000.00	$8,000.00	$8,000.00	$15,000.00	$15,000.00	$5,930.00	$5,930.00
3	206-10.00	Class 1 Excavation	CY	19	$40.00	$760.00	$63.00	$1,197.00	$55.00	$1,045.00	$82.00	$1,558.00	$150.00	$2,850.00	$82.00	$1,558.00
4	207-10.00	Linear Grading Class 1	STA	4	$1,550.00	$6,200.00	$2,780.00	$11,120.00	$1,450.00	$5,800.00	$8,400.00	$33,600.00	$2,300.00	$9,200.00	$1,110.00	$4,440.00
5	304-05.04	Type 5 Aggregate for Base (4 Inches Thick)	SY	690	$12.00	$8,280.00	$7.90	$5,451.00	$13.50	$9,315.00	$8.00	$5,520.00	$12.50	$8,625.00	$10.50	$7,245.00
6	401-99.05	Bituminous Pavement (6 Inches Thick)	SY	300	$60.00	$18,000.00	$39.30	$11,790.00	$57.00	$17,100.00	$78.00	$23,400.00	$55.50	$16,650.00	$82.50	$24,750.00
7	502-99.05	6 Inch P.C. Concrete	SY	280	$90.00	$25,200.00	$59.60	$16,688.00	$68.00	$19,040.00	$62.00	$17,360.00	$78.00	$21,840.00	$170.00	$47,600.00
8	606-99.01	Type E Median Pier Protection	LS	1	$18,000.00	$18,000.00	$18,900.00	$18,900.00	$18,000.00	$18,000.00	$21,000.00	$21,000.00	$21,000.00	$21,000.00	$56,900.00	$56,900.00
9	607-11.02	Modified Concrete Gutter Type B	LF	263	$45.00	$11,835.00	$34.60	$9,099.80	$66.00	$17,358.00	$61.00	$16,043.00	$42.00	$11,046.00	$82.00	$21,566.00
10	612-20.14	Impact Attenuator (14 Sand Barrels)	EA	2	$3,000.00	$6,000.00	$3,990.00	$7,980.00	$3,800.00	$7,600.00	$4,400.00	$8,800.00	$4,300.00	$8,600.00	$4,320.00	$8,640.00
11	612-20.20	Replacement Sand Barrel	EA	8	$250.00	$2,000.00	$472.00	$3,776.00	$450.00	$3,600.00	$525.00	$4,200.00	$500.00	$4,000.00	$512.00	$4,096.00
12	616-10.05	Construction Signs	SF	340	$7.00	$2,380.00	$7.35	$2,499.00	$7.00	$2,380.00	$11.50	$3,910.00	$10.00	$3,400.00	$11.50	$3,910.00
13	616-10.08	Advanced Warning Rail System	EA	6	$35.00	$210.00	$36.80	$220.80	$35.00	$210.00	$64.00	$384.00	$55.00	$330.00	$62.50	$375.00
14	616-10.09	Flag Assembly	EA	16	$25.00	$400.00	$26.30	$420.80	$25.00	$400.00	$30.00	$480.00	$25.00	$400.00	$28.50	$456.00
15	616-10.25	Channelizer (Trim Line)	EA	400	$22.00	$8,800.00	$23.10	$9,240.00	$22.00	$8,800.00	$25.00	$10,000.00	$22.00	$8,800.00	$25.00	$10,000.00
16	616-10.30	Type III Moveable Barricade	EA	5	$125.00	$625.00	$131.00	$655.00	$125.00	$625.00	$145.00	$725.00	$125.00	$625.00	$142.00	$710.00
17	616-10.40	Flashing Arrow Panel	EA	2	$850.00	$1,700.00	$892.00	$1,784.00	$850.00	$1,700.00	$1,200.00	$2,400.00	$1,000.00	$2,000.00	$1,140.00	$2,280.00
18	616-10.98	Changeable Message Sign, Contractor Furnished, Contractor Retained	EA	4	$2,000.00	$8,000.00	$3,150.00	$12,600.00	$3,000.00	$12,000.00	$3,750.00	$15,000.00	$3,200.00	$12,800.00	$3,640.00	$14,560.00
19	617-36.00D	Temporary Traffic Barrier, Contractor Furnished/Retained	LF	600	$23.00	$13,800.00	$27.20	$16,320.00	$25.90	$15,540.00	$32.00	$19,200.00	$26.00	$15,600.00	$29.50	$17,700.00
20	618-10.00	Mobilization	LS	1	$180,000.00	$180,000.00	$85,000.00	$85,000.00	$107,000.35	$107,000.35	$147,000.00	$147,000.00	$150,000.00	$150,000.00	$101,000.00	$101,000.00
21	627-40.00	Contractor Furnished Surveying and Staking	LS	1	$5,000.00	$5,000.00	$6,825.00	$6,825.00	$4,813.00	$4,813.00	$8,700.00	$8,700.00	$11,000.00	$11,000.00	$4,730.00	$4,730.00
22	701-11.07	Drilled Shafts (4 Ft. 6 In. Diameter)	LF	3	$1,000.00	$3,000.00	$1,065.00	$3,195.00	$525.00	$1,575.00	$1.00	$3.00	$450.00	$1,350.00	$1,590.00	$4,770.00
23	701-12.06	Rock Sockets (4 Ft. 0 In. Diameter)	LF	24	$650.00	$15,600.00	$676.00	$16,224.00	$705.00	$16,920.00	$1,550.00	$37,200.00	$400.00	$9,600.00	$1,670.00	$40,080.00
24	701-13.00	Supplementary Television Camera Inspection	EA	1	$2,500.00	$2,500.00	$630.00	$630.00	$2,000.00	$2,000.00	$875.00	$875.00	$1,300.00	$1,300.00	$569.00	$569.00
25	701-14.00	Foundation Inspection Holes	LF	28	$35.00	$980.00	$84.00	$2,352.00	$150.00	$4,200.00	$370.00	$10,360.00	$50.00	$1,400.00	$171.00	$4,788.00
26	701-16.00	Sonic Logging Testing	EA	2.00	$2,000.00	$4,000.00	$2,194.00	$4,388.00	$1,820.00	$3,640.00	$3,500.00	$7,000.00	$1,900.00	$3,800.00	$1,710.00	$3,420.00
27	702-10.10	Structural Steel Piles (10 In.)	LF	315	$60.00	$18,900.00	$119.00	$37,485.00	$62.00	$19,530.00	$130.00	$40,950.00	$88.00	$27,720.00	$80.00	$25,200.00
28	702-60.00	Pre-Bore For Piling	LF	112	$150.00	$16,800.00	$105.00	$11,760.00	$120.00	$13,440.00	$150.00	$16,800.00	$138.00	$15,456.00	$69.50	$7,784.00
29	702-70.00	Pile Point Reinforcement	EA	6	$115.00	$690.00	$118.00	$708.00	$85.00	$510.00	$130.00	$780.00	$115.00	$690.00	$127.00	$762.00
30	703-20.03	Class B Concrete (Substructure)	CY	92	$1,250.00	$115,000.00	$1,575.00	$144,900.00	$1,150.00	$105,800.00	$1,430.00	$131,560.00	$1,344.00	$123,648.00	$2,240.00	$206,080.00
31	703-42.12	Slab on Steel	SY	369	$90.00	$33,210.00	$65.60	$24,206.40	$123.00	$45,387.00	$77.50	$28,597.50	$195.00	$71,955.00	$125.00	$46,125.00
32	706-10.60	Reinforcing Steel (Bridges)	LBS	28,730	$0.85	$24,420.50	$1.30	$37,349.00	$1.20	$34,476.00	$1.25	$35,912.50	$1.50	$43,095.00	$1.25	$35,912.50
33	710-10.00	Reinforcing Steel (Epoxy Coated)	LBS	1,870	$1.50	$2,805.00	$1.25	$2,337.50	$1.75	$3,272.50	$1.50	$2,805.00	$3.00	$5,610.00	$1.60	$2,992.00
34	711-03.00	Concrete Masonry Protection System	LS	1	$4,125.00	$4,125.00	$4,331.00	$4,331.00	$4,125.00	$4,125.00	$4,800.00	$4,800.00	$4,700.00	$4,700.00	$4,690.00	$4,690.00
35	711-04.00	Sacrificial Graffiti Protection System	LS	1	$4,125.00	$4,125.00	$4,331.00	$4,331.00	$4,125.00	$4,125.00	$4,800.00	$4,800.00	$4,700.00	$4,700.00	$4,690.00	$4,690.00
36	711-06.00	Aesthetic Concrete Stain	LS	1	$8,250.00	$8,250.00	$8,662.00	$8,662.00	$8,250.00	$8,250.00	$9,650.00	$9,650.00	$9,500.00	$9,500.00	$9,380.00	$9,380.00
37	712-99.02	Anchor Bolts	EA	16	$60.00	$960.00	$167.00	$2,672.00	$165.00	$2,640.00	$186.00	$2,976.00	$278.00	$4,448.00	$211.00	$3,376.00
38	718-99.02	Pedestrian Truss Superstructure No. 1	EA	1	$225,000.00	$225,000.00	$235,940.00	$235,940.00	$270,000.00	$270,000.00	$246,000.00	$246,000.00	$265,000.00	$265,000.00	$276,000.00	$276,000.00
39	718-99.02(1)	Pedestrian Truss Superstructure No. 2	EA	1	$225,000.00	$225,000.00	$249,850.00	$249,850.00	$270,000.00	$270,000.00	$265,000.00	$265,000.00	$265,000.00	$265,000.00	$276,000.00	$276,000.00
40	720-10.00	Mechanically Stabilized Earth Wall Systems	SF	1,104	$54.50	$60,168.00	$65.00	$71,760.00	$71.00	$78,384.00	$61.50	$67,896.00	$98.00	$108,192.00	$62.00	$68,448.00
41	720-10.00(1)	Mechanically Stabilized Earth Wall Systems	SF	1,708	$54.50	$93,086.00	$65.00	$111,020.00	$71.00	$121,268.00	$61.50	$105,042.00	$98.00	$167,384.00	$62.00	$105,896.00
42	720-11.00	Form Liners for MSE Wall System	SY	312	$9.00	$2,808.00	$1.00	$312.00	$1.00	$312.00	$1.00	$312.00	$7.50	$2,340.00	$10.00	$3,120.00
43	725-10.00	Corrugated Metal Pipe Pile Spacers	EA	6	$400.00	$2,400.00	$1.00	$6.00	$550.00	$3,300.00	$1,500.00	$9,000.00	$900.00	$5,400.00	$681.00	$4,086.00
44	806-10.05	Rock Ditch Check	LF	120	$15.00	$1,800.00	$20.50	$2,460.00	$19.50	$2,340.00	$23.00	$2,760.00	$22.00	$2,640.00	$17.00	$2,040.00
45	806-10.19	Silt Fence	LF	530	$2.60	$1,378.00	$5.75	$3,047.50	$5.00	$2,650.00	$7.50	$3,975.00	$6.00	$3,180.00	$2.95	$1,563.50
46		Temporary Pedestrian Access	SY	110	$40.00	$4,400.00	$10.80	$1,188.00	$30.00	$3,300.00	$17.00	$1,870.00	$25.00	$2,750.00	$25.00	$2,750.00
47		Seat Wall	LF	67	$375.00	$25,125.00	$264.00	$17,688.00	$350.00	$23,450.00	$350.00	$23,450.00	$150.00	$10,050.00	$424.00	$28,408.00
48		Fence	LF	270	$125.00	$33,750.00	$131.00	$35,370.00	$125.00	$33,750.00	$145.00	$39,150.00	$135.00	$36,450.00	$173.00	$46,710.00
49		Shade Structure	LS	1	$17,500.00	$17,500.00	$11,870.00	$11,870.00	$18,000.00	$18,000.00	$19,000.00	$19,000.00	$17,000.00	$17,000.00	$14,200.00	$14,200.00
50		Scour Protection	SF	560	$12.00	$6,720.00	$19.40	$10,864.00	$18.50	$10,360.00	$21.50	$12,040.00	$21.00	$11,760.00	$13.50	$7,560.00
51		Black Powder Coating for Guardrail	LS	1	$7,500.00	$7,500.00	$7,875.00	$7,875.00	$7,500.00	$7,500.00	$8,700.00	$8,700.00	$8,000.00	$8,000.00	$49,000.00	$49,000.00
		Total Bike/Pedestrian Facility Items =				**$1,294,690.50**		**$1,341,307.80**		**$1,436,830.85**		**$1,514,044.00**		**$1,570,584.00**		**$1,646,146.00**
		LANDSCAPING ITEMS														
53	803-40.00	Kentucky Bluegrass Sodding	SY	1,527	$10.50	$16,033.50	$8.85	$13,513.95	$8.45	$12,903.15	$10.00	$15,270.00	$10.00	$15,270.00	$12.00	$18,324.00
54	808-99.01	Landscaping	LS	1	$49,135.00	$49,135.00	$23,720.00	$23,720.00	$49,630.00	$49,630.00	$58,000.00	$58,000.00	$55,000.00	$55,000.00	$55,900.00	$55,900.00
		Total Landscaping Items =				**$65,168.50**		**$37,233.95**		**$62,533.15**		**$73,270.00**		**$70,270.00**		**$74,224.00**
		SIGNALS/LIGHTING/SIGNING/STRIPING ITEMS														
55	903-99.01	Remove and Relocated Existing Signs	LS	1	$5,000.00	$5,000.00	$1,050.00	$1,050.00	$1,000.00	$1,000.00	$2,300.00	$2,300.00	$5,200.00	$5,200.00	$5,690.00	$5,690.00
		Total Signals/Lighting/Signing/Striping Items =				**$5,000.00**		**$1,050.00**		**$1,000.00**		**$2,300.00**		**$5,200.00**		**$5,690.00**
		BID ALTERNATIVE 1: PLAZAS AND DECK LIGHTING														
56	901-99.01	Electric Meter and Lighting Control Panel	LS	1	$25,774.00	$25,774.00	$9,450.00	$9,450.00	$6,877.50	$6,877.50	$10,500.00	$10,500.00	$7,600.00	$7,600.00	$10,200.00	$10,200.00
57	901-99.01(1)	Plazas and Deck Lighting	LS	1	$71,237.00	$71,237.00	$163,237.20	$163,237.20	$95,005.05	$95,005.05	$182,000.00	$182,000.00	$75,000.00	$75,000.00	$177,000.00	$177,000.00
		Total Bid Alternative 1 =				**$97,011.00**		**$172,687.20**		**$101,882.55**		**$192,500.00**		**$82,600.00**		**$187,200.00**
		BID ALTERNATIVE 2: TRUSS AND STRUCTURE LIGHTING														
58	901-99.01(2)	Truss and Structure Lighting	LS	1	$164,260.00	$164,260.00	$61,509.00	$61,509.00	$172,473.00	$172,473.00	$68,500.00	$68,500.00	$170,000.00	$170,000.00	$66,600.00	$66,600.00
		Total Bid Alternative 2 =				**$164,260.00**		**$61,509.00**		**$172,473.00**		**$68,500.00**		**$170,000.00**		**$66,600.00**
		TOTAL BASE BID =				**$1,364,859.00**		**$1,379,591.75**		**$1,500,364.00**		**$1,589,614.00**		**$1,646,054.00**		**$1,726,060.00**
		TOTAL BASE BID + ALT. 1 =				**$1,461,870.00**		**$1,552,278.95**		**$1,602,246.55**		**$1,782,114.00**		**$1,728,654.00**		**$1,913,260.00**
		TOTAL BASE BID + ALT. 1 + ALT. 2 =				**$1,626,130.00**		**$1,613,787.95**		**$1,774,719.55**		**$1,850,614.00**		**$1,898,654.00**		**$1,979,860.00**

BID IRREGULARITIES: 1. Kozeny-Wagner had $17,250.00 as their Extended Price on Line No. 6. Their actual extended price is $17,100.00. This change lowers their sub-total for Bike/Pedestrian Facilities Items to $1,436,830.85 instead of the total as read at the bid opening of $1,436,980.

WILDWOOD

Department of Public Works

MEMORANDUM

To: Mayor James R. Bowlin and City Council Members

From: Rick C. Brown, Director of Public Works / City Engineer

Date: September 9, 2016

Re: Timber Guardrail Staining Bids

Background:

In 2014, Steel-Backed Timber Guardrail was installed along Route 100, between Taylor Road and the Pedestrian Bridge as part of a safety project with partial funding (80% Grant, 20% Local Match) by the Surface Transportation Program. In 2015, an additional section of Steel-Backed Timber Guardrail was installed on the southeast corner of the Route 100 and Manchester Road Intersection as part of the Great Streets Project.

As the timber guardrail weathers, the color fades and it is aesthetically less pleasing than it was when initially installed. Staining of the wood will restore the aesthetics of the timber and also seal the surface to protect the wood from additional decay and extend the life of the timber.

The City requested bids from three contractors to power wash and stain the existing timber guardrails with Sherwin Williams SuperDeck Exterior Oil-Based Transparent Stain. The bids received for the project are as follows:

Contractor	Amount
T. Hill Construction	$5,253.50
Kelpe Contracting	$15,030.00
Thomas Industrial Coatings	$15,750.00

Recommendation

The Department is recommending that the City award the work to the low bidder, T. Hill Construction, to power wash and stain the existing Steel-Backed Timber Guardrail along Route 100.

Reasons for Recommendation

- The staining of the timber guardrail will improve the aesthetic appearance.
- The staining of the timber guardrail will also seal the timber to protect against decay and increase the life of the timber.

This item was discussed and received approval by the Admin / Public Works Committee at their September 7th, 2016 meeting.

If approved, payment to the contractor for this work will be made under our existing 2016 maintenance agreement with T. Hill Construction.

I will be available for any questions or comments at the September 12th, 2016, meeting of the City Council.

RCB

Michael Hartwig

From:	Michael Hartwig
Sent:	Friday, August 19, 2016 7:59 AM
To:	jhancock@kelpe.com; TREVor Hill (trevor@thillconstruction.com); 'swelker@thomasindcoatings.com'
Cc:	Ryan Thomas; Rick Brown
Subject:	Request for bid to stain timber guardrail on Route 100
Attachments:	STP-5500(675) Route 100 Safety Barriers - Asbuilts.pdf; Merritt Pkwy SBTGR Prints - D&S proposed steel post wooden rail.pdf

Gentlemen,

Please submit a price to stain the steel-backed timber guardrail along Route 100, between Taylor Road and the Pedestrian Bridge. There is approximately 3000 linear feet of timber guardrail as shown on the attached as-built plans from the guardrail project. Also attached are the details of the guardrail system for your information. We would like all of the exposed timber rail to be stained with Sherwin Williams SuperDeck Exterior Oil-Based Transparent Stain from their SD2-Series in a color to be selected by the City.

Please reply to me by August 31, 2016 with your price to complete this work. You can contact me at the below number if you have any questions.

Thanks,

Michael R. Hartwig, PE
Assistant City Engineer
City of Wildwood
16860 Main Street
Wildwood, MO 63040
(636) 405-2040
mike@cityofwildwood.com

Please Subscribe to the City's Weekly e-News:
http://www.cityofwildwood.com/list.aspx

DESIGN DESIGNATION

A.A.D.T. - 2010 = 20,008
A.A.D.T. - 2030 = 29,730

DESIGN V = 60 M.P.H.
POSTED V = 55 M.P.H.

FUNCTIONAL CLASSIFICATION- PRINCIPAL ARTERIAL

NO RIGHT OF WAY TO BE ACQUIRED.

DESIGN CRITERIA:
MODOT ENGINEERING POLICY GUIDE

SPECIFICATIONS:
MODOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2011 EDITION

CONVENTIONAL SYMBOLS
(USED IN PLANS)

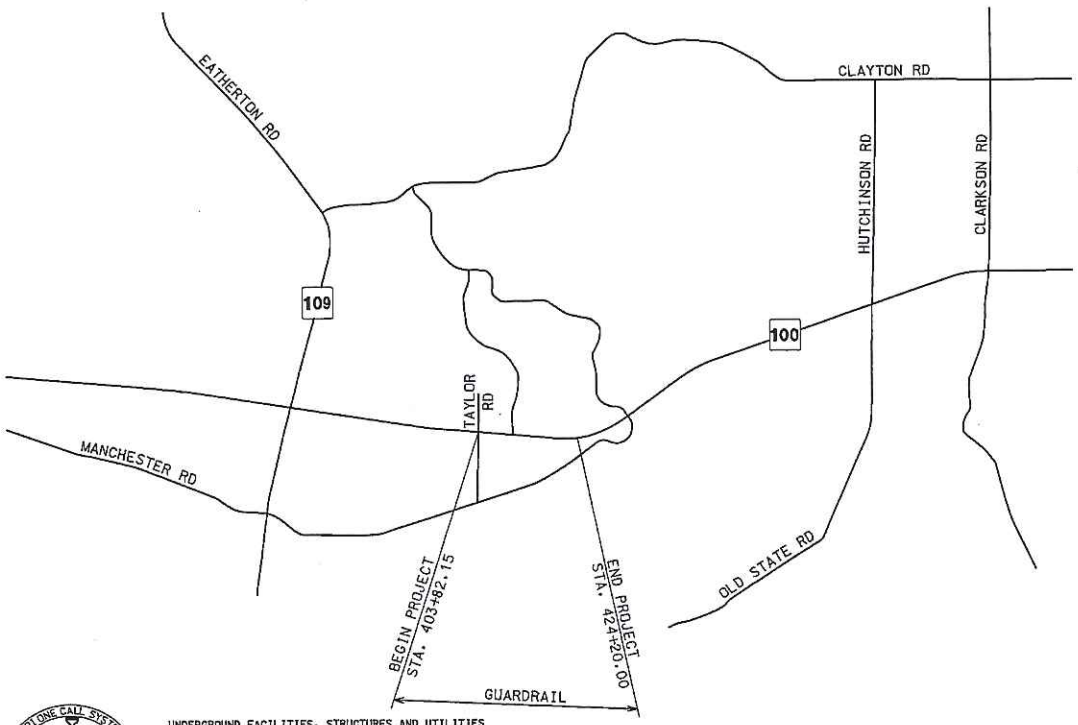
	EXISTING	NEW
BUILDINGS AND STRUCTURES		
GUARD RAIL		
CONCRETE RIGHT-OF-WAY MARKER		
STEEL RIGHT-OF-WAY MARKER		
LOCATION SURVEY MARKER		
UTILITIES		
FIBER OPTICS	FO	FO
OVERHEAD TELEPHONE		
UNDERGROUND TELEPHONE	T	T
OVERHEAD POWER		
UNDERGROUND POWER	P	P
GAS	G	G
WATER	W	W
SANITARY	S	S
MANHOLE	SAN	
FIRE HYDRANT	HYD	
WATER VALVE	WV	
WATER METER	WM	
DROP INLET		
DITCH BLOCK		
GROUND MOUNTED SIGN	SIGN	
NEW LIGHT POLE (BY OTHERS)		
EXISTING LIGHT POLE		
H-FRAME POWER POLE		
TELEPHONE PEDESTAL	TEL	
FENCE		
CHAIN LINK	V	
ORNAMENTAL ALUMINUM	X	
GATE POST		
BENCHMARK	BM	

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES

CITY OF WILDWOOD, MO
CONSTRUCTION PLANS
ROUTE 100 SAFETY BARRIERS
STP-5500(675)

AS-BUILT
12-15-14

NOT TO SCALE



MISSOURI ONE CALL SYSTEM, INC. 1-800-344-7483 STOP-CALL BEFORE YOU DIG!!

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LOCAL AGENCY APPROVAL:

MR. BRYAN THOMAS
CITY OF WILDWOOD, MO

INDEX OF SHEETS

DESCRIPTION	SHEET NUMBER
TITLE SHEET	1
TYPICAL SECTIONS (TS)	2
~~QUANTITIES (QU)~~	~~3~~
PLAN (P)	3-7 ~~4-6~~
~~CONTROL POINTS (CP)~~	~~8~~
~~TRAFFIC CONTROL (TC)~~	~~10-11~~
~~SPECIAL SHEETS (SS)~~	~~12-18~~

LENGTH OF PROJECT

BEGINNING OF PROJECT STA. 403 + 82.15
END OF PROJECT STA. 424 + 20.00

APPARENT LENGTH 2037.85 FEET

EQUATIONS AND EXCEPTIONS:

TOTAL CORRECTIONS 0.00 FEET
NET LENGTH OF PROJECT 2037.85 FEET
STATE LENGTH 0.386 MILES

STATE OF MISSOURI — CHRIS LINNEMAN NUMBER PE-2002019609 — REGISTERED PROFESSIONAL ENGINEER

DATE PREPARED 1/23/2014
SHEET NO. 1 TOTAL SHEETS 7 ~~18~~
FEDERAL PROJECT NO. STP-5500(675)
COUNTY ST. LOUIS
JOB NO. -
CONTRACT ID. -
PROJECT NO. -
BRIDGE NO. -

DATE	DESCRIPTION
-	-

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED

Route 100 Safety Barriers
City of Wildwood
183 Plaza Drive
Wildwood, MO 63040

alta Engineering + Design
16141 Swingley Ridge Rd
Suite 350
Chesterfield, MO 63017
Phone 314-952-4570

EFK·Moen, LLC
Civil Engineering Design
13532 Barrett Parkway Dr Phone 314-394-3100
Suite 150 Fax 314-394-3109
St. Louis, MO 63021
Missouri Certificate of Authority: 001578

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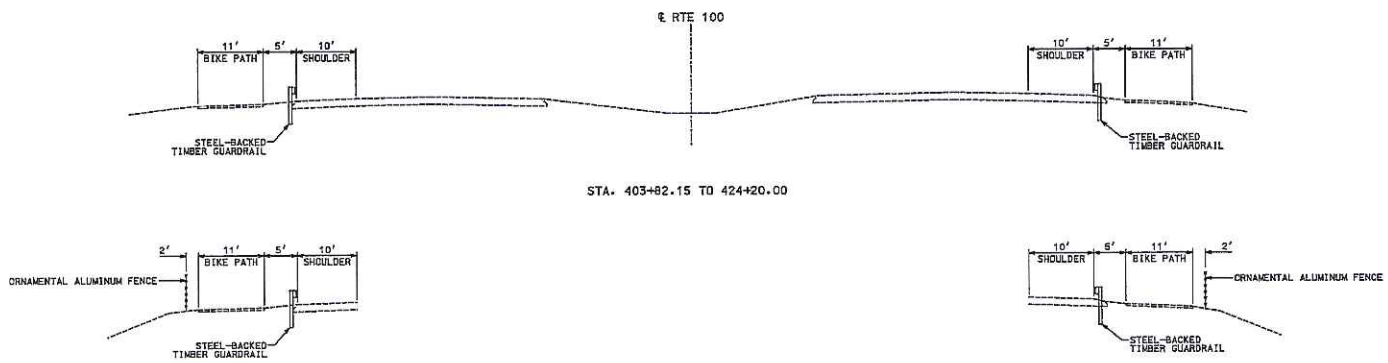

12-15-14
AS-BUILT

TYPICAL SECTION SHEET
SHEET 1 OF 1

STATE OF MISSOURI
CHRIS LINNEMAN
NUMBER PE-2002016650
REGISTERED PROFESSIONAL ENGINEER

DATE PREPARED 1/23/2014
SHEET NO. 2 TOTAL SHEETS ~~748~~
FEDERAL PROJECT NO. STP-5500(675)
COUNTY ST. LOUIS
JOB NO.
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED

Route 100
Safety Barriers
City of Wildwood
183 Plaza Drive
Wildwood, MO 63040

alta
PLANNING + DESIGN
16141 Swingley Ridge Rd
Suite 300
Chesterfield, MO 63017
Phone 314-952-8570

EFK•Moen, LLC
Civil Engineering Design
13523 Barrett Parkway Dr
Suite 250
St. Louis, MO 63021
Phone 314-394-3100
Fax 314-394-3199
Missouri Certificate of Authority: 001578

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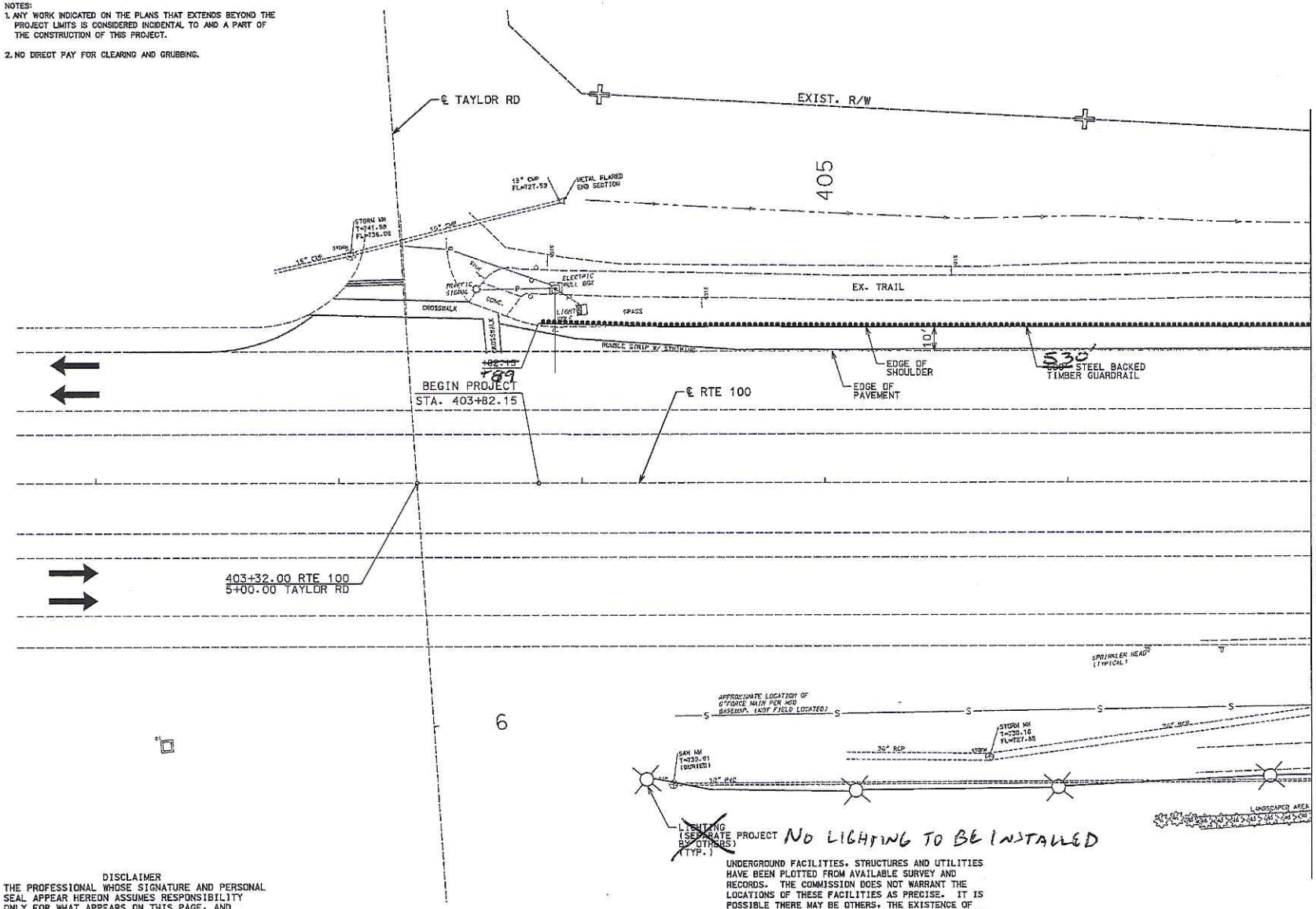
Y:\13027 Wildwood Guardrail\DGN\Design\Prelim\Plotsheets\002_TS_15.dgn 9:39:14 AM 1/23/2014

NOTES:
1. ANY WORK INDICATED ON THE PLANS THAT EXTENDS BEYOND THE PROJECT LIMITS IS CONSIDERED INCIDENTAL TO AND A PART OF THE CONSTRUCTION OF THIS PROJECT.
2. NO DIRECT PAY FOR CLEARING AND GRUBBING.



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SCALE
0 20 40 60

PLAN SHEET
SHEET 1 OF 5

STATE OF MISSOURI
CHRIS LINNEMAN
NUMBER PE-2001014470
PROFESSIONAL ENGINEER

DATE PREPARED 1/23/2014
SHEET NO. 4 TOTAL SHEETS 7
FEDERAL PROJECT NO. STP-5500(675)
COUNTY ST. LOUIS
JOB NO.
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DATE	DESCRIPTION

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Route 100 Safety Barriers
City of Wildwood
183 Plaza Drive
Wildwood, MO 63040

alta PLANNING + DESIGN
1654 Spring Ridge Rd
Suite 300
Chesterfield, MO 63017
Phone 314-952-8570

EFK·Moen, LLC
Civil Engineering Design
13523 Barrett Parkway Dr. Suite 220
St. Louis, MO 63021
Phone 314-394-3100
Fax 314-394-3109
Missouri Certificate of Authority: 001578

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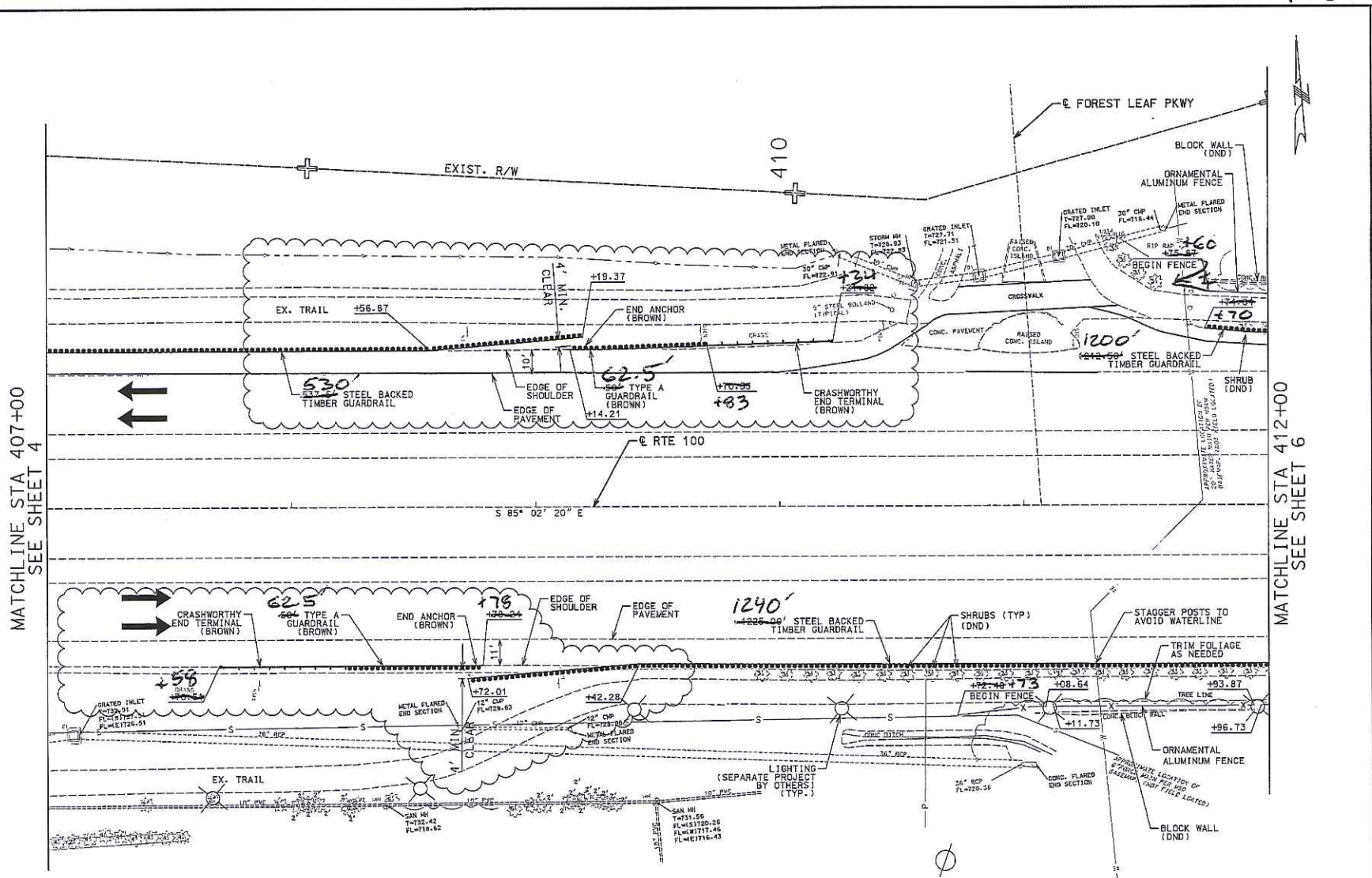

PLAN SHEET
SHEET 2 OF 5

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PRELIMINARY PLANS NOT FOR CONSTRUCTION

DATE PREPARED 9/27/2014
SHEET NO. 4 TOTAL SHEETS 7
FEDERAL PROJECT NO. STP-5500(675)
COUNTY ST. LOUIS
JOB NO.
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DATE	DESCRIPTION

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Route 100 Safety Barriers

City of Wildwood
183 Plaza Drive
Wildwood, MO 63040

alta PLANNING • DESIGN
16141 Swingley Ridge Rd
Suite 300
Chesterfield, MO 63017
Phone 314-952-8570

EFK•Moen, LLC
Civil Engineering Design
13523 Barrett Parkway Dr
Suite 250
St. Louis, MO 63021
Phone 314-394-3100
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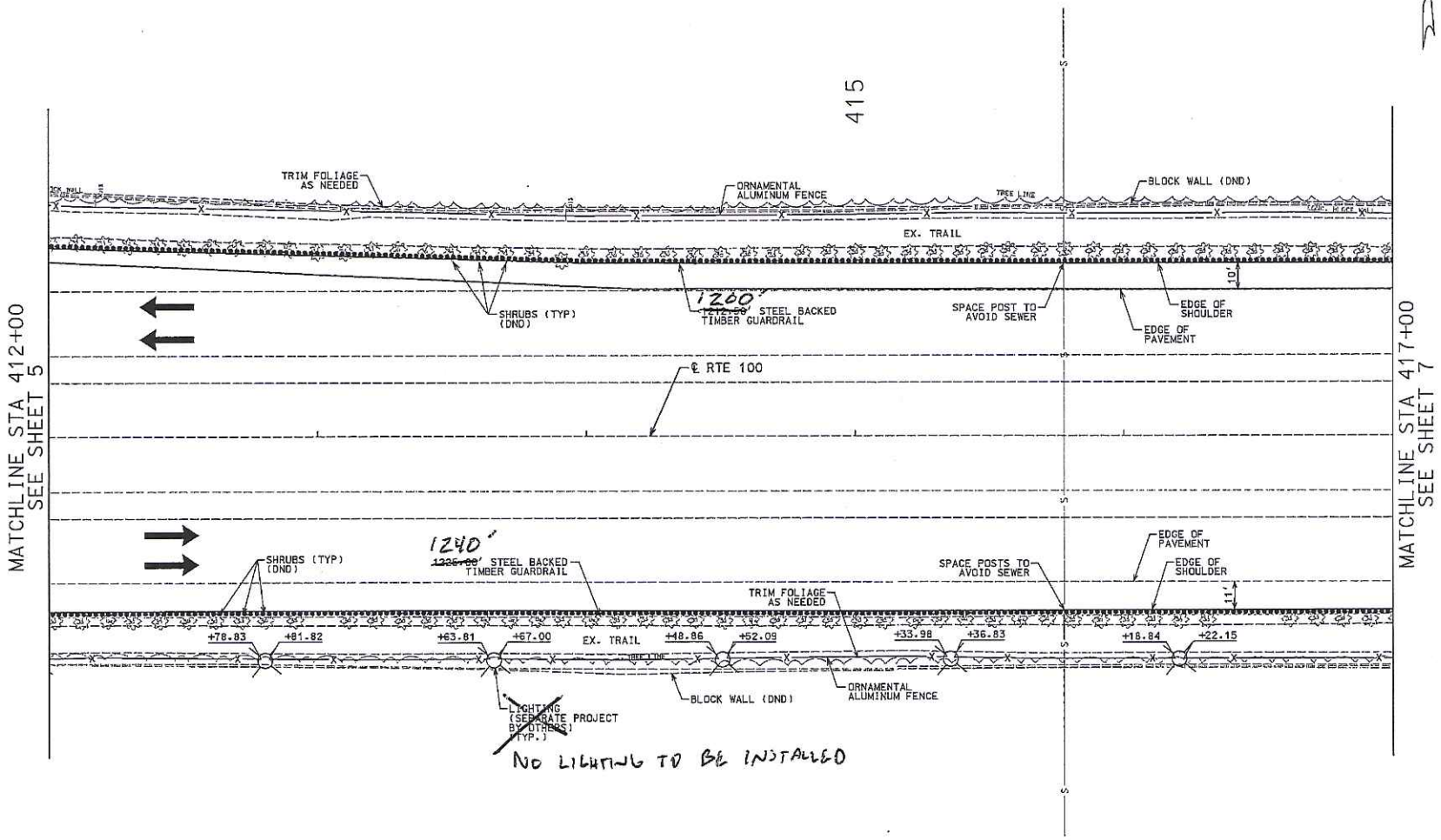

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SCALE
0 20 40 60

PLAN SHEET
SHEET 3 OF 5

STATE OF MISSOURI
CHRIS LINNEMAN
NUMBER PE-2003016690
PROFESSIONAL ENGINEER

DATE PREPARED 1/23/2014
SHEET NO. 5-6 TOTAL SHEETS 7-8
FEDERAL PROJECT NO. STP-5500(675)
COUNTY ST. LOUIS
JOB NO. -
CONTRACT ID. -
PROJECT NO. -
BRIDGE NO. -

DATE	DESCRIPTION
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-	-
-	-

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Route 100 Safety Barriers
City of Wildwood
183 Plaza Drive
Wildwood, MO 63040

alta PLANNING + DESIGN
16141 Swingley Ridge Rd
Suite 300
Chesterfield, MO 63017
Phone 314-953-8578

EFK·Moen, LLC
Civil Engineering Design
13523 Barrett Parkway Dr
Suite 250
St. Louis, MO 63021
Phone 314-394-3100
Fax 314-394-3199
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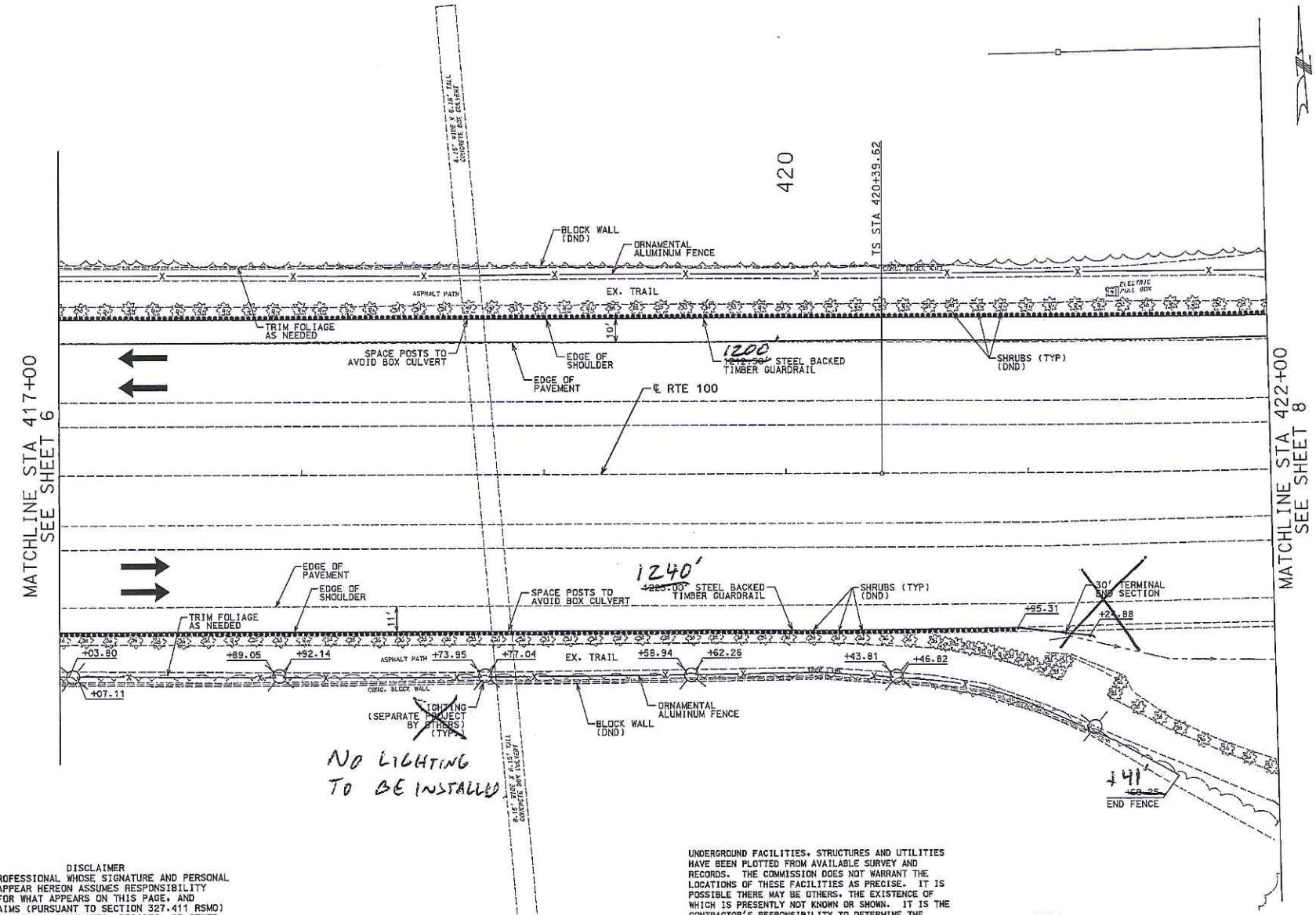

PLAN SHEET
SHEET 4 OF 5

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STATE OF MISSOURI
CHRIS LINNEMAN
NUMBER PE-2002016690
REGISTERED PROFESSIONAL ENGINEER

DATE PREPARED 1/23/2014
SHEET NO. 67 TOTAL SHEETS 718
FEDERAL PROJECT NO. STP-5500(675)
COUNTY ST. LOUIS
JOB NO. -
CONTRACT ID. -
PROJECT NO. -
BRIDGE NO. -

DATE	DESCRIPTION
-	-
-	-
-	-
-	-
-	-
-	-

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Route 100 Safety Barriers

City of Wildwood
283 Plaza Drive
Wildwood, MO 63040

alta PLANNING + DESIGN
16141 Swingley Ridge Rd
Suite 300
Chesterfield, MO 63017
Phone 314-392-4570

EFK·Moen, LLC
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13523 Barrett Parkway Dr
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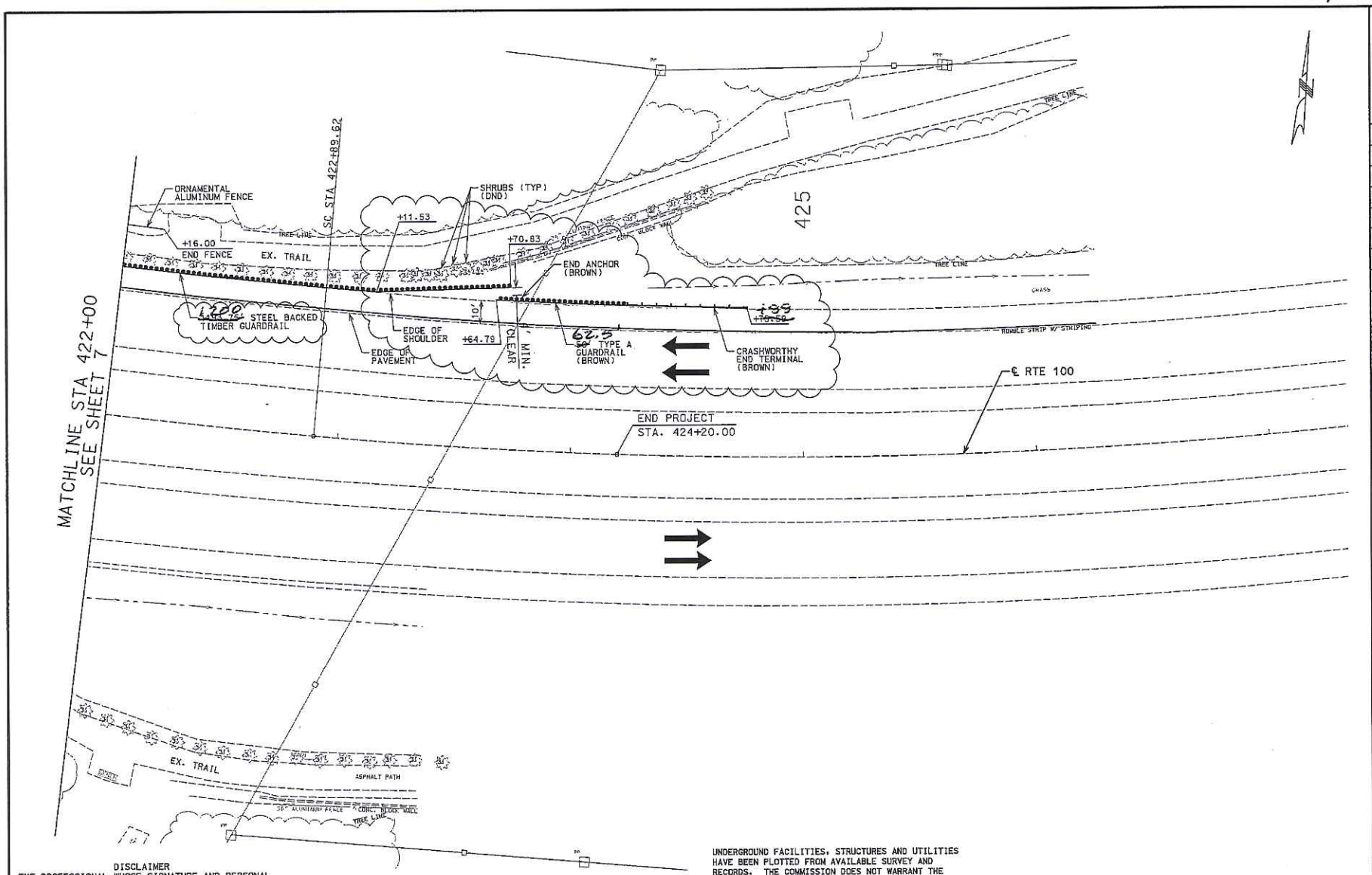

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SCALE
0 20 40 60

PLAN SHEET
SHEET 5 OF 5

PRELIMINARY PLANS NOT FOR CONSTRUCTION

DATE PREPARED 10/1/2014
SHEET NO. ~~7.8~~ TOTAL SHEETS ~~7.8~~
FEDERAL PROJECT NO. STP-5500(675)
COUNTY ST. LOUIS
JOB NO.
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DATE	DESCRIPTION

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Route 100 Safety Barriers
City of Wildwood
183 Plaza Drive
Wildwood, MO 63040

alta PLANNING + DESIGN
16141 Swingley Ridge Rd
Suite 300
Chesterfield, MO 63017
Phone 314-932-8570

EFK·Moen, LLC
Civil Engineering Design
13523 Barrett Parkway Dr
Suite 250
St. Louis, MO 63021
Phone 314-394-3100
Fax 314-394-3199
Missouri Certificate of Authority: 001578

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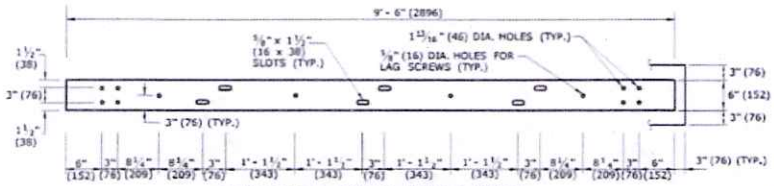
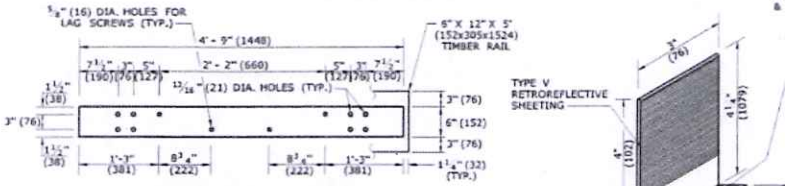
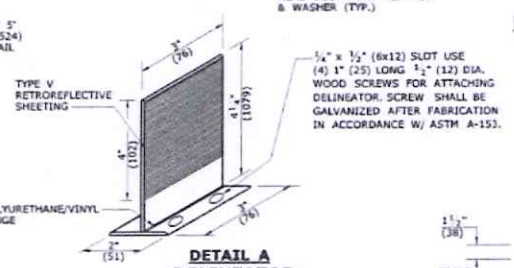


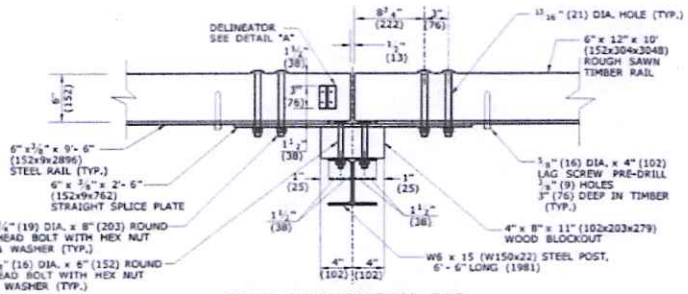
STANDARD STEEL RAIL DETAIL
6" x 3/8" x 9'-6"
(152x9x2896)



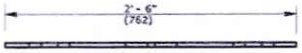
STEEL RAIL DETAIL
6' x 3/8" x 4'-9"
(1829 x 9 x 1448)
FOR CURVES WITH R ≤ 70' (21.3m)



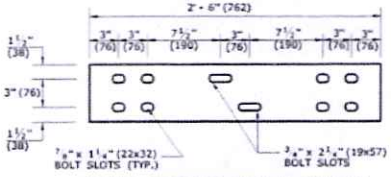
DETAIL A
DELINEATOR



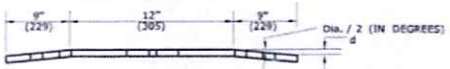
POST CONNECTION FOR
STRAIGHT SECTIONS



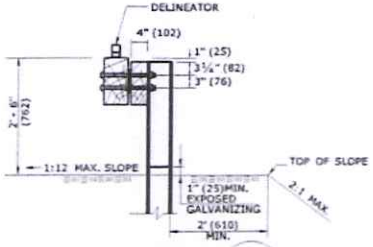
ELEVATION
STRAIGHT SPLICE PLATE



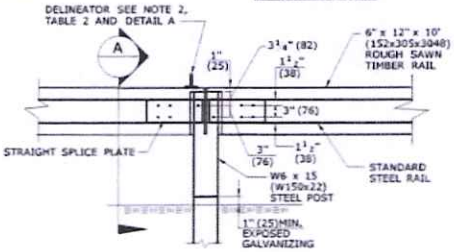
STEEL SPLICE PLATE DETAIL
6" x 3/8" x 2'- 6"
(152x9x762)



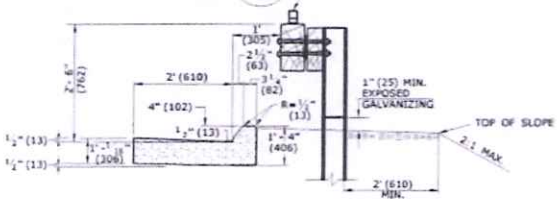
ELEVATION
BENT SPLICE PLATE



SECTION A
(NO CURB)



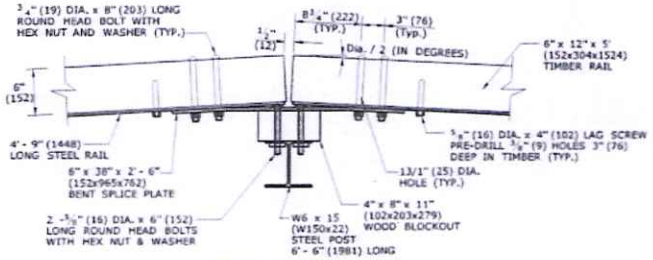
REAR VIEW ELEVATION
POST CONNECTION



STANDARD SECTION WITH MOUNTABLE CURB

TABLE 1

DELINEATOR SPACING	
CURVE RADIUS	SPACE
< 300' (91.4m)	20' (6.10m)
≥ 300' (91.4m)	50' (15.2m)



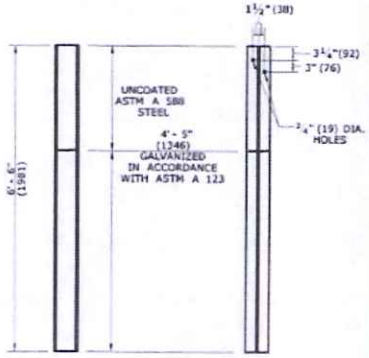
POST CONNECTION
FOR CURVES WITH R ≤ 70' (21.3m)

GENERAL NOTES:

1. MATERIALS AND CONSTRUCTION OF THE MERRITT PARKWAY GUIDERAIL SHALL CONFORM TO SPECIAL PROVISION PROVIDED WITH THE PROJECT.
2. DELINEATORS SHALL BE PLASTIC INVERTED T-SECTIONS IN ACCORDANCE WITH DETAIL "A".REFLECTORS SHALL BE SPACED IN ACCORDANCE WITH THE TABLE AND POSITIONED PERPENDICULAR TO THE ADJACENT EDGE OF LANE. DO NOT ATTACH REFLECTORS ON FLAIR ORTERMINAL SECTIONS. REFLECTIVE SHEETING SHALL BE SILVER-WHITE ON ALL RAIL SECTIONS ADJACENT TO THE RIGHT SHOULDER, AND YELLOW ON RAIL SECTIONS ADJACENT TO THE LEFT SHOULDER OF TRAVEL LANES.
3. TWO ADDITIONAL 5/8" (16) DIA. X 4"(102) LONG LAG SCREWS AND WASHERS SHALL BE INSTALLED AT ALL MID-SPAN POINTS FOR STANDARD SYSTEMS.
4. ALL CONNECTION HARDWARE SHALL BE SUFFICIENTLY TIGHTENED TO ACCOMODATE FOR SHRINKAGE OF THE WOOD ELEMENTS.
5. WHEN FURNISHING THE SHOP BENT SPLICE PLATES, USE THE MINIMUM BEND ANGLE AS SHOWN IN TABLE 2.
6. FOR RAILING SET ON A CURVE WITH RADII < 70' (21.3m) SPACE POSTS AT 5' (1524).

TABLE 2

Radius R (ft.)(m)	Dia. / 2 (Degrees)	d (in.)(mm)
35 (10.7)Min.	4.10	5/8(16)
40 (12.2)	3.58	9/16 (14)
45 (13.7)	3.18	1/2(13)
50 (15.2)	2.86	7/16 (11)
55 (16.8)	2.60	7/16 (11)
60 (18.3)	2.40	3/8(9)
65 (19.8)	2.20	3/8(9)
70 (21.3)	2.05	5/16 (8)
Over 70 (21.3)	Flat	0



SIDE VIEW **FRONT VIEW**

POST DETAIL
W6 X 15
(W150x22)

ALL METRIC DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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DESIGNED BY: CHECKED BY:

NTS

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

DRAWING BLOCK: OFFICE OF ENGINEERING

APPROVED BY: DATE:

PROJECT TITLE:

TOWN:

DRAWING TITLE: MERRITT PARKWAY GUIDERAIL

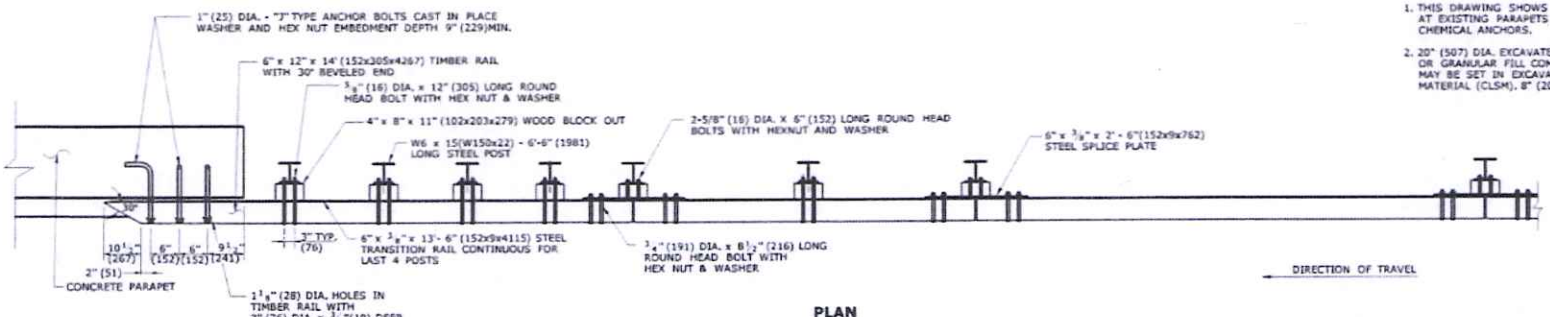
PROJECT NO.

DRAWING NO.

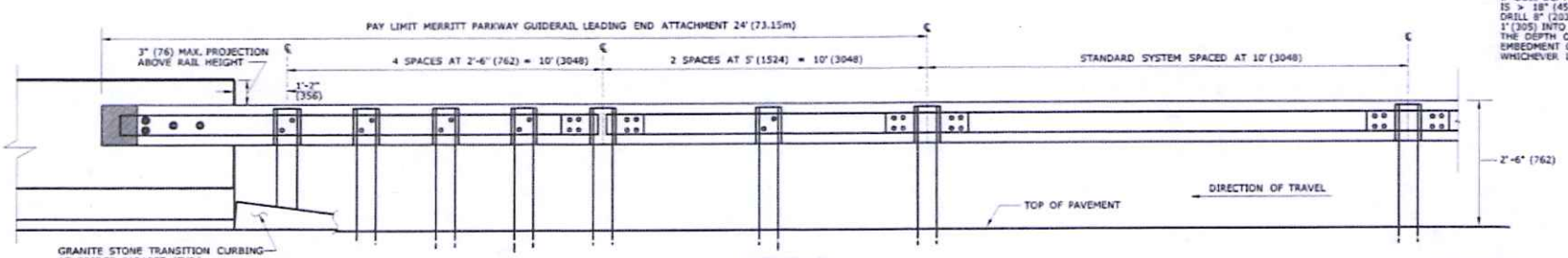
SHEET NO.

GENERAL NOTE:

1. THIS DRAWING SHOWS LEADING END ATTACHMENT TO PROPOSED PARAPETS. AT EXISTING PARAPETS ATTACH GUIDERAIL USING D.O.T. APPROVED CHEMICAL ANCHORS.
2. 20" (507) DIA. EXCAVATED HOLE SHALL BE BACKFILLED WITH SUITABLE MATERIAL, OR GRANULAR FILL COMPACTED IN 6" (150) LIFTS BEFORE DRIVING POST OR POSTS MAY BE SET IN EXCAVATED HOLE AND BACKFILLED WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM). 8" (203) DIA. HOLE SHALL BE BACKFILLED WITH SUITABLE MATERIAL.



PLAN



ELEVATION

ATTACHMENT AT LEADING END

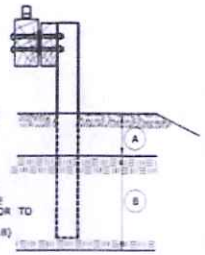
(JERSEY SHAPE BARRIER SHOWN)

CONDITION 1 :

IF SOIL DEPTH IS ≤ 18" (457) DEEP (A) DRILL 20" (507) DIA. HOLE 24" (610) INTO LEDGE. (B)

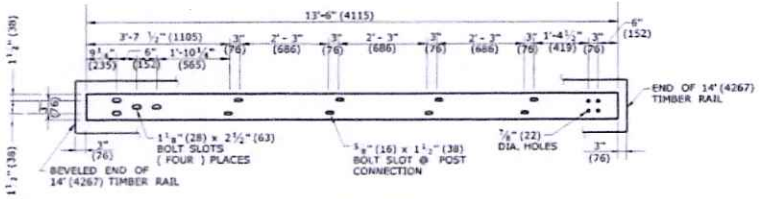
CONDITION 2 :

IF SOIL DEPTH IS > 18" (457) DEEP (A) DRILL 8" (203) DIA. HOLE 1' (305) INTO LEDGE (B) OR TO THE DEPTH OF FULL EMBEDMENT OF 44" (1118) WHICHEVER IS LESS.



ELEVATION

(SEE NOTE 2)

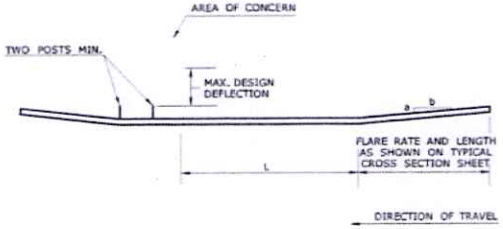


REAR VIEW

STEEL TRANSITION RAIL

6" x 3/8" x 13'-6" (152x9x4115)

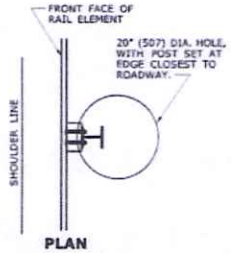
FOR LEADING END ATTACHMENT



PLAN

APPROACH TO FIXED OBJECTS

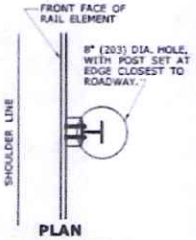
SYSTEM 2 AND 3



PLAN

CONDITION 1

(SEE NOTE 2)



PLAN

CONDITION 2

(SEE NOTE 2)

DRILLING IN ROCK FOR GUIDERAIL POSTS

Maximum Design Deflection (ft) (mm)	Area Of Concern Plus 2 Posts (see sketch)	SYSTEM 3	SYSTEM 2	Standard System	L
		W6x15 (W150x22) Posts Spaced at 2'- 6" (762)	W6x15 (W150x22) Posts Spaced at 5' (1524)	W6x15 (W150x22) Posts Spaced at 10' (3048)	Min. Length Needed
1' (305)	System 3	10' (3048)	10' (3048)	50' (16.40m)	70' (21.34m)
2' - 6" (762)	System 2	–	10' (3048)	60' (19.68m)	70' (21.34m)
4' (1219)	Standard System	–	–	70' (21.34m)	70' (21.34m)

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REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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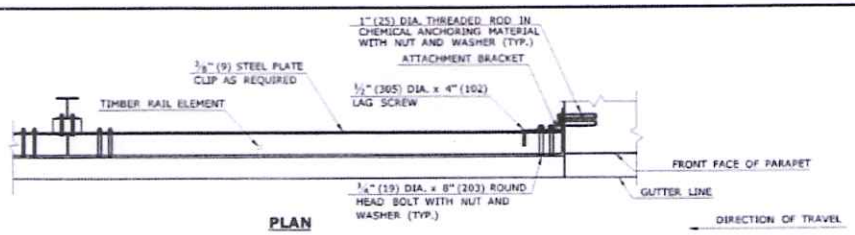
NTS

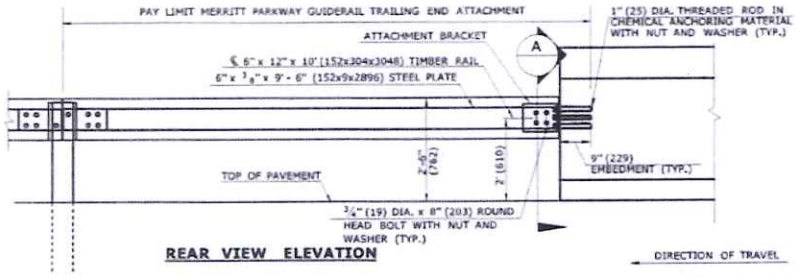
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

OFFICE OF ENGINEERING

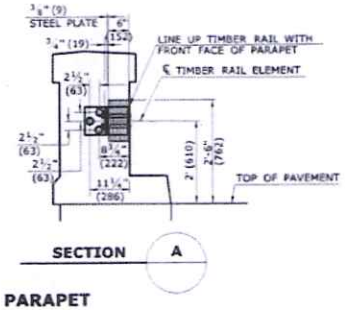
MERRITT PARKWAY GUIDERAIL ATTACHMENT- SYSTEM 2 & 3



PLAN



REAR VIEW ELEVATION

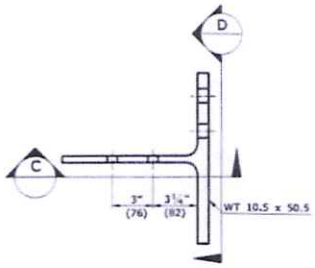


SECTION A

TRAILING END ATTACHMENT AT EXISTING BRIDGE PARAPET

GENERAL NOTES:

1. THREADED RODS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A325. WITH NUTS CONFORMING TO ASTM A563, GRADE C. CIRCULAR HARDENED WASHERS SHALL CONFORM TO ASTM F436. THREADED NUTS AND WASHERS IN CONTACT WITH CONCRETE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153. ROUND HEAD BOLTS SHALL CONFORM TO THE SPECIAL PROVISIONS PROVIDED WITH THE PROJECT.
2. CHEMICAL ANCHORING MATERIAL SHALL CONFORM TO SECTION M.03, SUBARTICLE M.03.01-15
3. ATTACHMENTS BRACKETS SHALL CONFORM TO ASTM A36 AND BE GALVANIZED IN ACCORDANCE WITH ASTM A123.
4. THE PAYLIMIT FOR TRAILING END ATTACHMENT INCLUDES ALL HARDWARE AND RAIL ELEMENTS TO AND INCLUDING THE FIRST POST.



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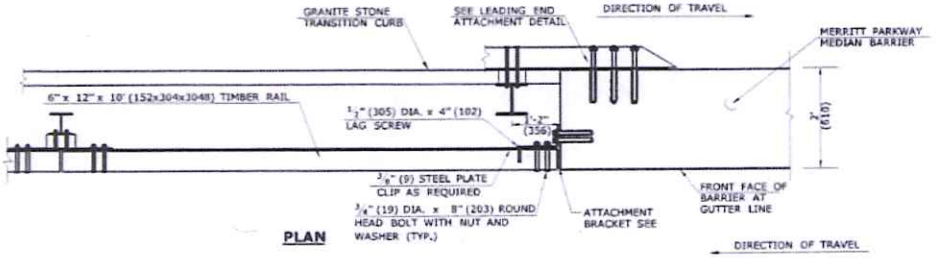

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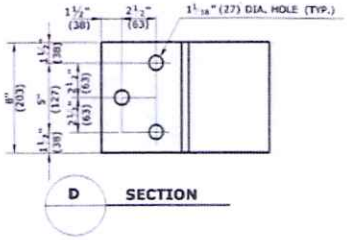
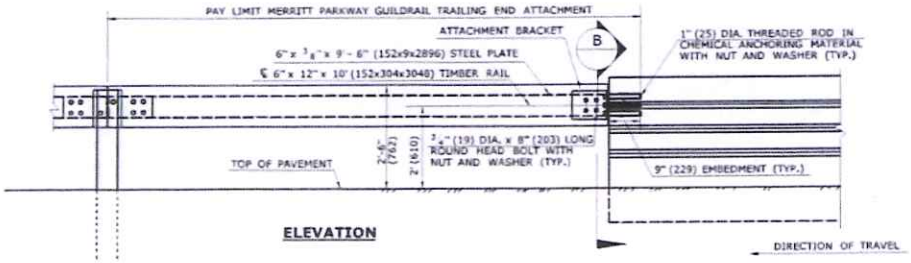
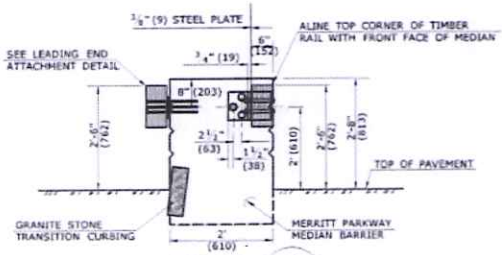


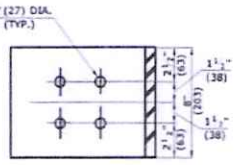


ELEVATION

TRAILING END ATTACHMENT AT MEDIAN BARRIER



SECTION B



SECTION C

ATTACHMENT BRACKET

ALL METRIC DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED.

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Revised Date: 3/11/2015

DESIGNED/DRAFTED:
CHECKED BY:
NTS

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: CTDOT_HIGHWAY_GD.dgn

SIGNATURE BLOCK:
OFFICE OF ENGINEERING
APPROVED BY: DATE:

PROJECT TITLE:

TOWN:

DRAWING TITLE:
MERRITT PARKWAY GR
TRAILING END ATTACH

PROJECT NO.
DRAWING NO.
SHEET NO.

DUCKBACK.

SHERWIN WILLIAMS.

114.20

SUPERDECK®
Exterior Oil-Based Transparent Stain SD2-Series

As of 2/2/2015, Complies with:			
OTC	Yes	LEED® 09 CI	N/A
SCAQMD	No	LEED® 09 NC	N/A
CARB	No	LEED® 09 CS	N/A
CARB SCM 2007	No	LEED® H	N/A
MPI		NGBS	N/A

DESCRIPTION

- A high solids penetrating exterior formula that protects the beauty of wood with a rich transparent stain
- One coat coverage with a transparent finish that highlights the wood grain
- 3-Oil formula contains deep penetrating tung oil for lasting protection
- Quality iron oxide pigments to create lasting colors and inhibit UV damage caused by the sun
- Excellent water repellency
- Formulated to resist growth of mildew and algae on the coating's surface

Use on wood:
- Decks
- Doors
- Siding
- Fences
- Shutters
- Shakes
- Outdoor wood Furniture

Use on:
- Pressure treated wood
- Cedar
- Redwood
- Pine
- Plywood
- Oak

Tips: Stains tend to lap (dark lines where two freshly coated areas overlap). These tips will help avoid lap marks and keep the appearance uniform:
- Do not stain in direct sun or on a hot surface
- Stain from a dry area into the adjoining wet stain area
- Keep the leading edge wet and distribute the finish evenly
- Quickly remove puddles and excess material by redistributing to dry areas or wiping up. Excess product allowed to sit on surface will result in a tacky finish
- Use natural breaks as boundaries to divide large areas into smaller, more manageable ones
- Stain a board from end to end
- Different wood species, textures and natural color will affect finished shade Always test a small area first for color satisfaction before coating the entire project

CHARACTERISTICS

Color: Transparent Stain colors
A sample brushout is recommended to ensure color satisfaction.

Heart Redwood	**SD2R00005**
Canyon Brown	**SD2N00007**
Redwood	**SD2R00003**
Cedar Tone	**SD2Y00001**
Natural	**SD2C00004**

Coverage:

Smooth Wood	250-350 sq ft/gal
Rough Sawn Lumber	150-250 sq ft/gal

Depending on porosity and texture
Note: New wood normally requires less product than old, weathered wood. This is due to older wood being more porous than newer wood.

Drying Time, @ 77°F, 50% RH

To touch:	8 hours
To use:	24 hours

Drying and recoat times are temperature, humidity, and film thickness dependent

Due to the composition of **SuperDeck Oil-Based Transparent**, only one coat is necessary. Excessive film build may create a glossy/tacky finish.

Flash Point: 111°F, PMCC
Finish: no sheen
Tinting: Ready mix colors. Do Not Tint

Vehicle Type: alkyd

Cedar Tone SD2Y00001
(may vary by color)
VOC (less exempt solvents):
240 g/L; 2.00 lb/gal
As per 40 CFR 59.406 and SOR/2009-264, s.12
Volume Solids: 66 ± 2%
Weight Solids: 68 ± 2%
Weight per Gallon: 7.39 lb

SURFACE PREPARATION

WARNING! Removal of old coatings by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (**NIOSH** approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Clean all surfaces completely with the appropriate cleaner based on the conditions.

SuperDeck Deck Wash
Mildew stain
Algae stain
Weathered wood (bleaches wood)
Gray wood (bleaches wood)

SuperDeck Revive™
Tannin Bleed
Nail stain
Weathered wood (restores color)
Gray wood (restores color)
Mill Glaze

SuperDeck Stain & Sealer Remover
Weathered, gray wood
Old Paint & Stain

Carefully follow all label instructions. Thoroughly rinse the surface to remove all residue and allow to thoroughly dry before coating.

Test the absorbency of the wood by sprinkling water on the surface. If the water penetrates into the wood quickly, the wood is ready to finish. If the water beads up or does not penetrate, allow the wood to weather 1 to 2 weeks and test for absorbency again.

continued on back

DUCKBACK.

SHERWIN WILLIAMS.

114.20

SUPERDECK®

Exterior Oil-Based Transparent Stain SD2-Series

SURFACE PREPARATION

All surfaces must be clean, dry, and free from dirt, mildew stains, dust and other foreign matter. Do not apply over sealed surfaces. Remove surface stains, dirt and failed oxidized stains with Superdeck® Deck Wash. Remove solid stains or paints with Superdeck® Stain & Sealer Remover. For redwood and cedar, follow cleaning or stripping with Superdeck® Revive® to remove tannin stains and brighten wood to its original color. For new wood remove mill glaze with Superdeck® Revive®

APPLICATION

Thoroughly stir contents before and occasionally during use. For uniformity, mix all cans together before use. Do not thin or mix with any other stains or coatings.

Apply without thinning by brush, roller, or spray. If sprayed, use the lowest possible pressure needed for a reasonable spray pattern. Also, when spraying be sure to "back brush/roll". Back brushing/rolling is suggested when spraying, working the product smoothly and evenly into the wood. This will decrease the possibility of pools or puddles on the surface and ensure a properly penetrated finish. Penetration will vary depending on porosity and water content of the surface. Thoroughly coat cut ends and joints.

For best results apply in shade with surface temperatures between 40°F and 95°F. Do not apply if temperatures will fall below 40°F or if rain is expected within 24 hours after application. Cooler temperatures require longer drying times.

CLEAN UP INFORMATION

Clean spills, spatters and tools immediately after use with compliant cleanup solvent. Follow manufacturer's safety recommendations when using solvents.

DANGER: Rags, steel wool, other waste soaked with this product, and sanding residue may spontaneously catch fire if improperly discarded. Immediately place rags, steel wool, other waste soaked with this product, and sanding residue in a sealed, water-filled, metal container. Dispose of in accordance with local fire regulations.

COATING SOLUTION

Which product is the best for my project:

SuperDeck Exterior Waterborne Clear Sealer

- Protects wood from sun while allowing the wood to gray naturally
- Water repellents make water bead up, protecting against cracking, splitting, and warping of wood
- Leaves a protective coating that resists discoloration caused by mildew

SuperDeck Exterior Oil-Based Transparent

- Lasting, penetrating, oil-based formula
- Enriches wood appearance with a light tone
- UV protection resists graying
- Repels water to prevent moisture damage

SuperDeck Exterior Waterborne Semi-Transparent Deck Stain

- Provides a lasting, mildew-resistant film
- Excellent penetration for protecting horizontal exterior wood surfaces
- Can be applied to damp surfaces, allowing surfaces to be prepared and stained in one day

SuperDeck Exterior Oil-Based Semi-Transparent Stain

- A lasting penetrating formula that protects the wood with a rich semi-transparent stain.
- One coat coverage on most woods
- Scuff-resistant formula with UV protection that resists fading
- Repels water to prevent moisture damage

SuperDeck Waterborne Solid Color Deck Stain

- Waterborne, 100% acrylic resin
- Provides mildew resistant coating
- Use over existing paint or stain
- Can be applied to damp surfaces, allowing surfaces to be prepped and stained in one day

For more stain information and choices visit www.sherwin-williams.com.

For Vertical surfaces - walls, siding, etc, use WoodScapes® Exterior Acrylic Solid Color Stain or WoodScapes® Exterior Polyurethane Semi-Transparent Stain.

CAUTIONS

This product must be applied outdoors to wood intended for exterior use only.
Not for interior use.
Do not use on roofs.
Do not varnish or use a clear overcoat.
Not for use on garage floors, driveways, or automobile traffic areas.

LABEL CAUTIONS

CAUTION contains **ALIPHATIC HYDROCARBONS.** Contents are **COMBUSTIBLE.** Keep away from heat and open flame. **VAPOR HARMFUL.** Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (**NIOSH** approved) or leave the area. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. **FIRST AID:** In case of eye contact, flush thoroughly with large amounts of water for 15 minutes and get medical attention. For skin contact, wash thoroughly with soap and water. In case of respiratory difficulty, provide fresh air and call physician. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. **DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE.** Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. **WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.**

HOTW 2/2/2015 SD2Y00001 02 240
FRC, SP

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative or visit www.paintdocs.com to obtain the most current version of the PDS and/or an SDS.