

Missouri Department of Transportation

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Date: 2016.05.25 15:39:15 -05'00'

DATE: May 16, 2016

SUBJECT: Design, Environmental Studies
I-70 and Route K Interchange to T.R Hughes Boulevard Interchange
City of O'Fallon, St. Charles County
Job No. J6I2418

Enclosed is documentation to support a Categorical Exclusion (CE) classification for the subject project. Congestion and poor traffic flow have been an ongoing issue for the portion of I-70 and the adjacent roadway network through the City of O'Fallon, St. Charles County, Missouri. Modifications to the existing interstate access are proposed in order to provide one-way outer roads to the north and south of the freeway between Route K and TR Hughes Boulevard. No additional freeway access points would be added to the system; however, access between the two interchanges will be reversed. This will allow for the existing weave segments on I-70 in both directions to be relocated to the outer roads, thus improving freeway operations. The project requires 1.0 acres of new right of way, 1.0 acres of permanent easements, and 1.0 acres or temporary easements.

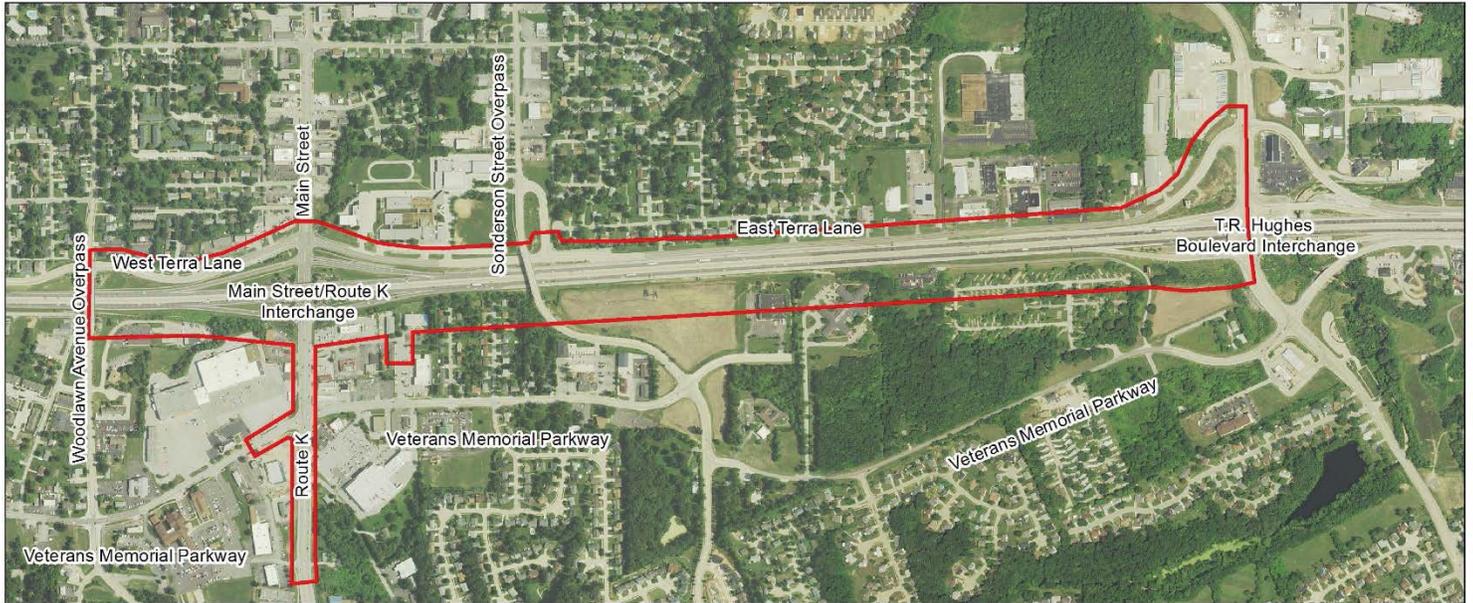
We respectfully request your concurrence in the CE determination for this project.



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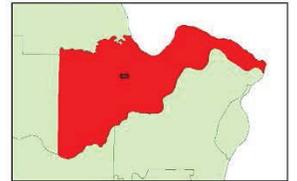
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1 Date: March 22, 2016
 2
 3 CATEGORICAL EXCLUSION DETERMINATION [As per 23CFR771.117(d)]
 4 for I-70 Traffic Flow Improvement Project (T.R. Hughes to Woodlawn)



LEGEND
 Study Area

0 0.1 0.2 0.4 Miles

6 Job Number: J6I2418 Route: I-70 County: St. Charles

7 Project Termini and Length

8 I-70 from the TR Hughes Boulevard interchange to the Woodlawn Avenue overpass – a distance of 1.4
 9 miles.

10

11 Current I-70 AM Peak Hour Traffic: 5,175 Future I-70 AM Peak Hour Traffic: 6,070

12 Current I-70 PM Peak Hour Traffic: 6,095 Future I-70 PM Peak Hour Traffic: 7,340

13

14 Right-of-Way Required (Acres):

15 Existing right of way: 104.5 Acres

16 New right of way: 1.0 Acre

17 Permanent Easements: 1.0 Acre

18 Temporary Easements: 1.0 Acre

19

20 Displacements (Type and Number):

21 Residential: 0

22 Commercial: 0

1 Project Description

2 Congestion and poor traffic flow have been an ongoing issue for the portion of I-70 and the adjacent
3 roadway network through the City of O’Fallon, St. Charles County, Missouri. Modifications to the existing
4 interstate access are proposed in order to provide one-way outer roads to the north and south of the
5 freeway between Route K and TR Hughes Boulevard. No additional freeway access points would be
6 added to the system; however, access between the two interchanges will be reversed. This will allow for
7 the existing weave segments on I-70 in both directions to be relocated to the outer roads, thus improving
8 freeway operations. See **Exhibit 1** for a depiction of the Preferred Alternative. All Exhibits are contained
9 in **Appendix A**. The Preferred Alternative for this project includes:

- 10
- 11 • The conversion of the existing two-way outer roadway north of I-70 from TR Hughes Boulevard to
- 12 Route K to a westbound one-way outer roadway system;
- 13 • The addition of a new one-way eastbound outer road south of I-70 from Route K to TR Hughes
- 14 Boulevard;
- 15 • A new connection from the new north outer roadway to the existing Terra Lane at School Road;
- 16 • A new westbound slip ramp with its gore at the existing westbound on ramp gore point and an
- 17 extended acceleration lane length to 1,200 feet;
- 18 • Improvements along Route K including:
 - 19 ○ The removal of the existing intersection and traffic signal at Terra Lane and Route K;
 - 20 ○ The addition of a 10 foot multi-use path along the west side of Route K from Veterans
 - 21 Memorial Parkway to Mariae Drive;
 - 22 ○ The addition of a 8 foot sidewalk along the east side of Route K from Veterans Memorial
 - 23 Parkway to the new south outer road;
 - 24 ○ The addition of a 10 foot multi-use path along the north side of the north outer road
 - 25 from the west side of Route K to just west of the Sonderen Bridge Overpass;
 - 26 ○ The addition of a 3rd northbound lane on Route K beginning at Bramblett Road and
 - 27 terminating as an exclusive right turn lane at the new south outer roadway;
 - 28 ○ The conversion of the existing southbound right turn lane on Route K from I-70
 - 29 eastbound to Veterans Memorial Parkway to a third southbound lane with shared
 - 30 through right turn lane at Veterans Memorial Parkway and terminating as a right turn at
 - 31 the strip mall driveway approximately 900 feet to the
 - 32 south;
 - 33 ○ The addition of a right turn lane from eastbound Veterans
 - 34 Memorial Parkway to southbound Route K;
 - 35 ○ A new concrete barrier separating north- and south-bound
 - 36 traffic on Route K between the south outer road and
 - 37 Veterans Memorial Parkway;
 - 38 ○ A “Texas Turn-Around” on the east side of the interchange
 - 39 allowing the traffic on the westbound one-way north outer
 - 40 road to avoid the signalized intersections at Route K when
 - 41 traveling from the one-way westbound north outer road to
 - 42 the one-way eastbound south outer road.

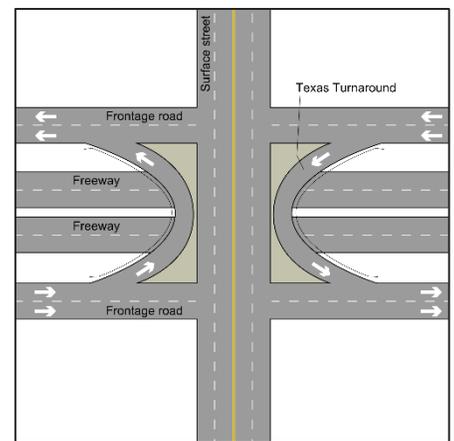


Diagram showing the operation of a Texas Turn-Around

- 1 • The removal of the traffic signal at Terra Lane and Sonderen Loop Road; replaced with
2 channelization for right turn only to and from the one-way westbound north outer road;
- 3 • A new connection from the south outer road to the east side of the commercial area located in
4 the southeast quadrant of the intersection of Route K and I-70 eastbound ramps;
- 5 • The removal of the on ramp to eastbound I-70 from Route K;
- 6 • The addition of a slip ramp from eastbound I-70 to the south outer road located just west of the
7 Sonderen Street overpass;
- 8 • The removal of the off ramp from westbound I-70 to Route K;
- 9 • The addition of a slip ramp from the north outer road to westbound I-70 located to the east of
10 Sonderen Street Loop;
- 11 • The addition of right turn lanes to Harmony Lane and Hilltop Way from the north outer road;
- 12 • The removal of the off ramp from eastbound I-70 to TR Hughes Boulevard;
- 13 • The addition of a slip ramp from the south outer road to eastbound I-70 located west of TR
14 Hughes;
- 15 • The removal of the on ramp to westbound I-70 from TR Hughes Boulevard;
- 16 • The addition of a slip ramp from the north outer road to westbound I-70 located west of TR
17 Hughes; and
- 18 • A connection from the new north outer road to a remaining segment of the existing East Terra
19 Lane just west of TR Hughes Boulevard.
20

21 Project History

22 Congestion, poor traffic flow, and a lack of pedestrian facilities, have been an ongoing issue for the
23 portion of I-70 and the adjacent roadway network through the City of O'Fallon, Missouri.

24 In 1996, Bucher, Willis & Ratliff performed a study that examined improvements to alleviate traffic at the
25 Route K Interchange. The study also investigated outer roads.

26 In 2011, George Butler Associates performed an updated study. It examined numerous interchange types
27 at the Route K interchange. In all, 20 interchange concepts were developed and evaluated. This work
28 formed the basis for both the cost share application and STIP/CMAQ applications.

29 At the end of 2012, St. Charles County and the City of O'Fallon collaborated on the potential conversion
30 from a spot interchange project to a corridor project in order to more comprehensively address system-
31 wide issues. St. Charles County hired Horner & Shifrin to further evaluate the outer roadway system.

32 In 2013, a study focusing on the area between TR Hughes Boulevard interchange and the Woodlawn
33 Avenue overpass was conducted. In addition to interchange configurations at TR Hughes Boulevard and
34 Route K, outer roads were considered. The study concluded that a one-way outer road system, one
35 which would provide slip ramps instead of traditional diamond interchange ramps, would best address
36 the traffic operational issues affecting the area. The one-way outer road system was found to benefit the
37 stretch of I-70 between the TR Hughes Boulevard interchange and the Woodlawn Avenue overpass. This
38 was found to spread out the congestion and put more traffic on the under-utilized outer road.
39 Additionally, it was found that the one-way outer road system would provide improved access to the
40 other side streets.

1 In 2015, this study to detail the interchange configurations, outer roadway systems, access management
2 improvements and pedestrian facilities was conducted, resulting in the selection of the Preferred
3 Alternative.

4 **Purpose and Need**

5 Purpose and Need refers to the transportation-related problems that a study is intended to address. The
6 generation and evaluation of alternatives are conducted to develop the most appropriate solutions to the
7 identified problems. Ultimately, the identification of a preferred alternative is to be based, in part, on
8 how well it satisfies the study's purpose and need.

9 In its very broadest sense, the goals and objectives associated with the I-70 (K) project can be defined as:

- 10 1. Congestion Mitigation - The City of O'Fallon has recognized the importance of maintaining their
11 transportation infrastructure, and satisfying citizens' desire for smooth flowing traffic. Currently,
12 capacity is consistently exceeded during peak commuter periods and on Saturdays. This results in
13 excessive delays and congestion throughout the study corridor. The specific problems causing
14 congestion are intersection delays and undesirable intersection queueing into roadway segments. I-
15 70 traffic is often the primary contributing factor to these conditions.
- 16 2. Improve Local Access - As St. Charles County experienced a population explosion, with major growth
17 centers established in the Cities of O'Fallon, St. Charles, and St. Peters I-70 became a critical element
18 in local access. To account for these conditions, I-70 has been studied and upgraded by MoDOT to
19 provide auxiliary lanes to maximize capacity and maintain access. This project is an extension of that
20 process. Specific local access issues include:
21
 - 22 • Route K (south of I-70) offers minimal access control, with multiple driveways having direct
23 access to Route K, particularly between I-70 and Route N. With limited north/south access
24 and rapid population growth in the region, this facility has been functioning at or near full
25 capacity.
 - 26 • Main Street (north of I-70 at Route K), provides O'Fallon the only direct connection between
27 I-70 and Route 79. The City of O'Fallon has since taken over jurisdiction of the roadway. It is
28 a principal arterial that serves residential and commercial land uses to and from the northern
29 limits of O'Fallon. As Main Street extends north, the posted speed limit drops and it becomes
30 a "downtown" district.
 - 31 • West/East Terra Lane serves as the north outer road between Lake Saint Louis Boulevard and
32 Route 79. West Terra Lane is generally a two and three-lane two-way facility that intersects
33 Route K/Main Street with dedicated eastbound left and right turning movements. Close
34 intersection spacing exacerbates inefficiencies by minimizing the area for vehicular queuing.
 - 35 • Veteran's Memorial Parkway is considered the de facto existing south outer road to I-70, and
36 generally extends from Route 61 to State Route 79. Improved access management near the
37 Route K intersection is warranted based on traffic operation issues.
- 38 3. Improve I-70 Interface between freight and passenger traffic - I-70 is the primary route providing
39 access between St. Charles County and St. Louis County. I-70 is an access controlled freeway
40 constructed in the early 1960's. This facility is one of the primary east/west routes used for the
41 shipment of goods and freight by truck in the United States. As traffic to the major growth centers
42 established in the Cities of O'Fallon, St. Charles, and St. Peters, I-70 became one of the heaviest
43 traveled interstate routes in the St. Louis Metropolitan Region. Maintaining this connectivity is vital
44 to I-70 improvements.
- 45 4. Meet Driver Expectation - One of the objectives of this project is to provide a preferred alternative
46 that better meets "driver expectations." Driver expectancy is typically defined as "a driver's readiness

1 to respond to situations, events, and information in predictable and successful ways". A project that
2 meets driver expectation will improve driver behavior, performance, and decision-making. The
3 existing roadway configuration has many areas amenable to improvement.

- 4 • Reducing the number of missed exits
- 5 • Increasing decision sight distances
- 6 • Eliminating signs that systematically cause drivers to make incorrect decisions
- 7 • Improving network comprehension

8 5. Improvements in accordance with long-range planning – The City of O’Fallon is actively evaluating the
9 future of their community. It is vital that the improvement of I-70 is consistent with the goals,
10 standards and intensions of the community’s planning process.

11 Project Involvement

12 Public involvement is essential to the development of a successful project. This section summarizes the
13 activities and methods used for the I-70 (K) project.

14
15 On March 3, 2011 a public meeting was held to discuss the interchange concepts developed during the
16 George Butler Associates study. Specifically, it examined numerous interchange types at the Route K
17 interchange. In all, 20 interchange concepts were developed and evaluated. This work formed the basis
18 for both the cost share application and STIP/CMAQ applications. Using an "open house" format, design
19 options were displayed at the meeting. A video screen was also used to present project information and
20 traffic operation simulations. This was done in an effort to better educate the public on the details of the
21 alternatives being investigated. Comment sheets were also provided to each of the public meeting
22 participants so that they could provide input about the project, and their opinion of each of the
23 presented design options. The comment sheet included questions to gauge public sentiment. Attendees
24 were asked to rank (on a scale of 1 to 10) the importance of project goals and impacts. A total of 27
25 people attended the meeting. Much of the reaction at the public meeting and review of the comments
26 sheets conclude this project is important to the local residents and business owners, and the DDI was the
27 most favorable option. **Table 1** summarizes the feedback provided by the participants of the public
28 meeting:

29 TABLE 1
30 **Summary of Public Responses during March 3, 2011 Public Meeting**

Question	Average Score*
1. Importance of Project	8.6
2. Pedestrian Accommodations	5.1
3. Opinion of Option 11 (Modified)	4.1
4. Opinion of Option 14	8.5
5. Experience and opinion of DDI's	8.2
6. Opinion of Option 21	4.7
7. Opinion of Option 22	3.0
9. Opinion of Open House Meeting	9.1

31 * Average ranking based on a highest possible response of 10

32 The Project Handout from this meeting is contained in **Appendix B**. This outreach was used in the
33 scoping of subsequent phases of the project (see 2013 and 2015 studies listed above in the *Project*
34 *History*).

35 After the tentative identification of the Preferred Alternative, a series of outreach events were
36 implemented. On October 13, 2015, an open house was held for the public. A formal presentation was
37 not made. Instead, displays will be posted showing the purpose and need, some history, and the
38 proposed improvements. City of O’Fallon staff and representatives from engineering firm EFK Moen and

1 CH2M were on hand to answer questions, and discuss the project. To advertise and/or supplement the
2 open house, the following activities were undertaken:

- 3 • A Press Release was issued
- 4 • Notifications were posted on O’Fallon’s front website
- 5 • Notifications were posted on O’Fallon’s news site - <http://www.ofallon.mo.us/News/Latest>
- 6 • E-newsletter was issued to approximately 13,000 subscribers
- 7 • Roadside message boards, announcing the open house, were put out at south main street for
8 northbound traffic (across from Taco Bell) and at TR Hughes, for northbound traffic (near East
9 Terra Lane)
- 10 • The City Administrator’s weekly report (October 2nd 2015 and October 9th 2015) discussed the
11 project - <http://www.ofallon.mo.us/city-administrator>

12 Materials related to the open house are contained in **Appendix B**. All public involvement events were
13 conducted in accordance with O’Fallon’s Municipal Code (Chapter 140 - Open Meetings and Records).
14 Every reasonable effort was made to attract and grant access to all citizens; including minorities,
15 disadvantage communities and handicapped individuals.

16
17 It’s difficult to summarize the proceedings of an entire Public Involvement meeting, but in a very broad
18 sense, the Texas Turn-Around was generally well received and the one-way outer road configuration was
19 not generally well received, mostly by individuals working/living along I-70 who will experience longer
20 trip lengths.

21 22 **Community Impacts**

23 This project is will not impact community cohesion or hamper community services. Based on the current
24 description of the project, socioeconomic impacts will be limited. This section will summarize the various
25 community-related impacts.

26 Construction Traffic Disruptions

27 No significant detours and no total closures are planned during construction of the project. Through lanes
28 on I-70 shall be open at all times. The public shall be notified of travel disruptions using MoDOT’s
29 standard methods including press releases and changeable message boards. A Traffic Management Plan
30 shall be included in the construction contract to respond to temporary disruptions in travel patterns and
31 travel time.

32 Environmental Justice

33 Executive Order 12898, enacted by President Clinton in 1993, requires each federal agency to make
34 achieving environmental justice part of its mission by identifying and addressing, as appropriate,
35 disproportionately high and adverse human health or environmental effects on minority and low- income
36 populations. Construction of this project is not expected to require the relocation of any residences or
37 businesses, nor will the proposed improvements have disproportionate impacts on protected
38 populations. Examination of available census data concluded that protected populations do not exist in
39 the vicinity of the project area.

40 Right-of-Way Acquisition

41 With the exception of four small areas, all work associated within the Preferred Alternative will occur
42 within the existing right-of-way. Each of these four areas are approximately 0.25 acres in size. No
43 structures will be acquired. See **Exhibit 2**. The acquisition of affected properties in accordance with the
44 procedures established in the Uniform Relocation Assistance and Real Property Acquisition Policies Act
45 (referred to as the Uniform Act) of 1970, as amended. The Uniform Act and Missouri state laws require

1 that just compensation be paid to the owner(s) of private property taken for public use. The Uniform Act
2 is carried out without discrimination and in compliance with Title VI (the Civil Rights Act of 1964), the
3 President's Executive Order on Environmental Justice, and the Americans with Disabilities Act. MoDOT
4 will provide services to all impacted households without discrimination under guidance of the Uniform
5 Act.

6 An appraisal of fair market value is the basis for determining just compensation to be offered to the
7 owner for property to be acquired. The Uniform Act defines an appraisal as a written statement
8 independently and impartially prepared by a qualified appraiser setting forth an opinion of defined value
9 of an adequately described property as of a specific date, supported by the presentation and analysis of
10 relevant market information.

11 Land Use/Zoning

12 This project is in accordance with local transportation planning goals. The City of O'Fallon (in conjunction
13 with St. Charles County, MoDOT and the East-West Gateway Council of Governments) studied traffic flow
14 improvements for the portion of I-70 between Mid Rivers Mall Drive on the east, and Bryan Road on the
15 west. Based on the study results and the project's public involvement plan the plan to improve the area
16 between TR Hughes Boulevard to Woodlawn Avenue emerged.

17 As of April 2015, this project is fully funded with a combination of O'Fallon, County Road Board, MoDOT,
18 and federal dollars (from East-West Gateway).

19 Operational Traffic Alterations

20 As discussed in the project's Purpose and Need, the improvement of this section I-70 will reduce
21 congestion, improve local road access, alleviate impediments to access to I-70, make the roadways
22 conform to driver's expectations while also advancing the long-range goals of O'Fallon and St. Charles
23 County. However, the proposed changes will make some changes in traffic patterns. The most substantial
24 being out of direction travel as a result of the new one-way outer roads. With the conversion of the
25 existing two-way Terra Lane to a one-way north outer road, there will be instances where travel distance
26 will increase for some trips. The majority of these trips will likely be between the Hilltop Manor
27 subdivision (and other properties with access from Terra Lane) and I-70. For instance, when traveling to
28 eastbound I-70 these vehicles will be required to travel to the west toward Route K before utilizing the
29 Texas Turn-Around to head eastbound. Conversely, vehicles traveling eastbound on I-70 will be forced to
30 go past their destination before making a U-turn at TR Hughes Boulevard and heading west on the new
31 north outer road.

32 Overall, the distance increases due to out of direction trips associated with the Preferred Alternative are
33 generally between 0.5 and 1.5 miles, while the opposite direction remains constant. Travel times vary
34 throughout the network based on the network. There are no substantial differences between AM and
35 PM peak periods. The only movements that are expected to require additional travel over 3 minutes are:

- 36 • Hilltop Manor from Sonderen Street (south of Veterans Memorial Parkway)
- 37 • Hilltop Manor from Terra Lane (west of Woodlawn Avenue)
- 38 • Hilltop Manor from Woodlawn Avenue (north of Terra Lane)
- 39 • Fort Zumwalt School from Terra Lane (west of Woodlawn Avenue)

40
41 While out of direction travel is required for some trips overall travel times will improve. Based on the
42 total model network for the no-build versus the build scenario, the overall network average speed will
43 improve from 45.0 mph to 46.7 mph in the AM peak hour and from 34.9 mph to 45.8 mph in the PM peak
44 hour. This indicates major improvements in overall operations, especially in the PM peak hour. A more
45 detailed discussion of travel disruptions is contained in **Appendix C**.

1 Community Impact Summary

2 In summary, negative community impacts are limited. The primary impacts are expected to be
3 temporary travel disruptions during construction and some out of direction travel associated with the
4 conversion to one-way outer roads.

5 **Farmland Impacts**

6 Recognizing the importance of protecting farmland from conversion to non-agricultural use, Congress
7 passed the Farmland Protection Policy Act (FPPA) in 1981. Before a federal project or federally-funded
8 program can use farmland, the farmland that would be affected must be assessed in a collaborative
9 process with the Natural Resources Conservation Service (NRCS).

10 All non-urban land uses within the study area are within the limits of the City of O’Fallon; therefore, it
11 meets the Farmland Protection Policy Act (FPPA) definition of “land committed to other uses”, and
12 farmland impacts will not be evaluated.

13 **Wetland Impacts**

14 Wetlands are defined (Federal Register, 1982) as “Those areas that are inundated or saturated by surface
15 or groundwater at a frequency and duration to support, and that under normal circumstances do
16 support, a prevalence of vegetation typically adapted for life in saturated soil condition.” Recognizing the
17 variety of beneficial functions performed by wetlands, Executive Order 11990 (Wetlands Protection)
18 mandates consideration of wetland impacts, as does Missouri’s Executive Order 96-03. Furthermore,
19 Executive Order 11990 mandates a no-net-loss-of-national-wetlands policy. Section 404 of the Clean
20 Water Act of 1977 authorizes the U.S. Army Corps of Engineers (COE) to regulate the discharge of
21 dredged or fill material in all waters of the United States, including wetlands.

22 According to US Fish and Wildlife Services National Wetlands Inventory (NWI) map, there are no wetlands
23 located within the project limits. Additionally, the NWI map and current aerial photographs indicate no
24 presence of ponds. On-site reviews identified a small wetland complex between the eastbound off-ramp
25 of the TR Hughes Boulevard interchange and Nicola Lane. The complex is formed in a low-lying area
26 adjacent to a headwaters portions of an unnamed tributary to the Belleau Creek. The Nicola Lane culvert
27 appears to have altered hydrology enough to create these wetlands. Upstream and downstream
28 components exist. No impacts to these areas are expected. See **Exhibit 3**.

29 A review of USGS quadrangle maps shows there are streams in the study area. Both streams are
30 perennial, unnamed tributaries to Belleau Creek. One of the streams is located south of the I-70 and TR
31 Hughes Boulevard; this stream flows from southeast of the intersection, runs parallel to the I-70
32 eastbound off-ramp, and drains to Belleau Creek just east of the intersection. The other stream flows
33 from south of the I-70 and Route K interchange to Belleau Creek at a confluence north of where the other
34 tributary converges with Belleau.

35 A field visit by MoDOT (03/31/2016) confirmed the location of these tributaries. Starting in the northeast
36 quadrant of the I-70/Route K interchange, The unnamed tributary at the I-70/Route K interchange is
37 concrete-lined, both south of the intersection, where it flows from the south and east along the roadway,
38 and at the northeast quadrant of the intersection, where it flows north-northeast (eventually draining to
39 Belleau Creek).

40 Other drainages not mapped on the USGS map were identified within the project area during the field
41 visit. These were concrete-lined ditches parallel to the roadway; most of these are visible in the project
42 area in aerial imagery.

43 404 Permit Required (Yes/No)

44 A Section 404 permit may be required for this project. Although no impacts to the wetland complex near
45 Nicola Lane are expected, the project may impact jurisdictional streams. Preliminary project plans

1 include new pavement, drainage ditch removal/relocation, new drainage ditches, new inlets, and
2 construction of two underground detention facilities; construction of new and/or extension of existing
3 culverts may be required. Should impacts to streams occur with this project, it is likely that a Nationwide
4 Permit No. 14 for Linear Transportation Projects would be appropriate. It is an environmental
5 commitment of this project to confirm and acquire any necessary permits.

6 Water Quality Impacts

7 MoDOT's Storm Water Pollution Prevention Plan (SWPPP) shall be implemented to prevent or minimize
8 adverse impacts to streams, water courses, lakes, ponds, or other impoundments within and adjacent to
9 the project area. This plan describes best management practices and procedures designed to reduce
10 suspended solids, turbidity, and downstream sedimentation that may degrade water quality and
11 adversely impact aquatic life. The plan provides for temporary erosion and sediment control measures
12 that will be included within construction contract specifications.

13 Floodplain Impacts

14 Executive Order 11988, Floodplain Management, and subsequent federal floodplain management
15 guidelines mandate an evaluation of impacts to floodplains. When available, flood hazard boundary maps
16 (National Flood Insurance Program) and flood insurance studies for projects are used to determine limits
17 of the base (1%) floodplain and the extent of encroachment.

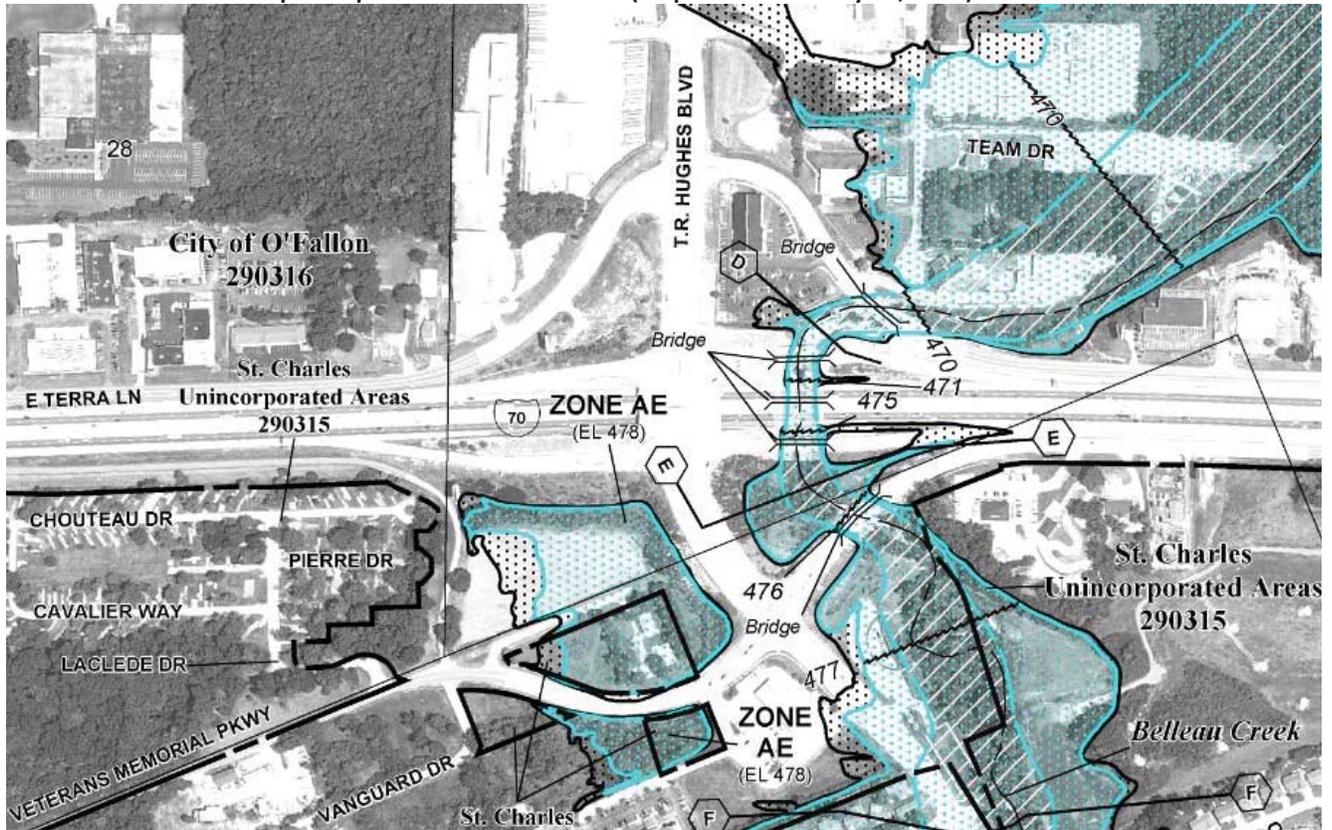
18 The Federal Emergency Management Agency (FEMA) and Federal Highway Administration (FHWA)
19 guidelines 23 CFR 650 have identified the base (1%) flood as the flood having a one-percent probability of
20 being equaled or exceeded in any given year. The base floodplain is the area of 1% flood hazard within a
21 county or community. The regulatory floodway is the channel of a stream plus any adjacent floodplain
22 areas that must be kept free of encroachment so that the 1% flood discharge can be conveyed without
23 increasing the base flood elevation more than a specified amount. FEMA has mandated that projects can
24 cause no rise in the regulatory floodway and a maximum of one-foot cumulative rise for all projects in the
25 base (1%) floodplain. The State Emergency Management Agency (SEMA) issues floodplain development
26 permits for projects involving the state of Missouri. In the case of projects proposed within regulatory
27 floodways, a “no-rise” certificate, if applicable, should be obtained prior to issuance of a permit. See
28 **Figure 1.**

29 Based on the current FEMA floodplain maps, the proposed project will not encroach upon floodplain
30 resources. A no-rise certificate is not needed. However, there is an area of flood zone AE—floodway
31 fringe—to the south of I-70 and just west of T.R. Hughes Boulevard. It has been confirmed that the
32 project will not encroach upon this area of floodplain. If project changes occur and encroachment is
33 necessary, a floodplain development permit would be required, but a no-rise certificate would not be
34 required because it is not the actual floodway; rather, the floodway fringe. It is an environmental
35 commitment to confirm that the final construction plans will not encroach upon this area of floodplain.

36 Federal Emergency Management Agency (FEMA) Buyout Lands - The Flood Disaster Protection Act of
37 1973, as amended by the Disaster Relief and Emergency Assistance Act of 1988 (The Stafford Act),
38 identified the use of disaster relief funds under Section 404 for the Hazard Mitigation Grant Program
39 (HMGP), including the acquisition and relocation of flood-damaged property. The Volkmer Bill further
40 expanded the use of HMGP funds under Section 404 to “buy out” flood-damaged property that had been
41 affected by the Great Flood of 1993. There are numerous restrictions on these FEMA buyout properties
42 and processing an exemption from FEMA to use a parcel can require two to three years. According to
43 the TMS FEMA buyout layer, there are no FEMA buyout properties located within the project study area.

44
45
46

1 FIGURE 1
2 Flood Insurance Rate Map – Map Number 29183C0241G (map revised January 20, 2016)



3
4
5 **Air Quality Impacts**

6 This section will address Air Quality Conformity, Mobile Source Air Toxics and Project-Level Particulate
7 Matter Hot-Spot Conformity.

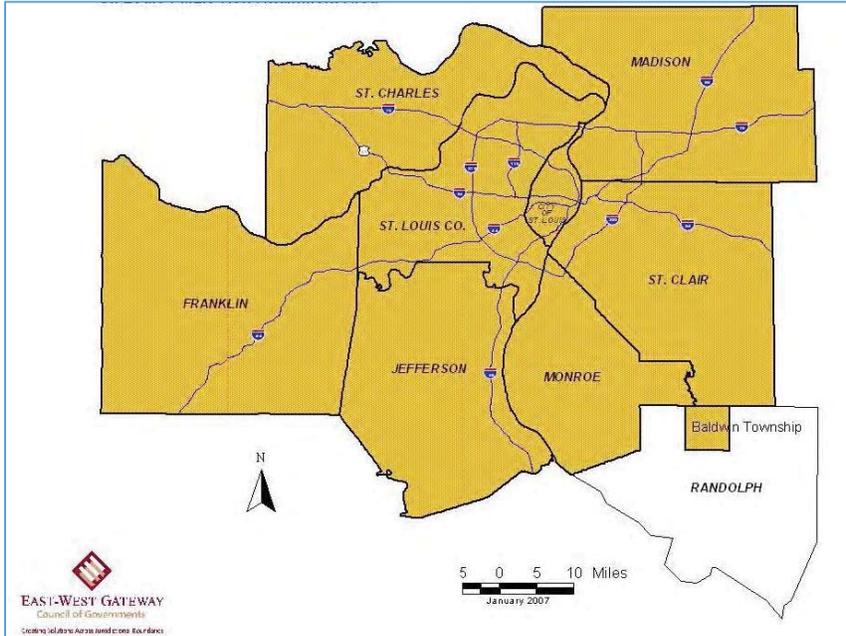
8 *Air Quality Conformity*

9 The Clean Air Act (CAA) requires the adoption of air quality standards, quality control regions, and state
10 implementation plans. The federal government established the National Ambient Air Quality Standards
11 (NAAQS), to protect public health, safety, and welfare from known or anticipated effects of sulfur
12 dioxide, particulate matter, carbon monoxide, nitrogen dioxide, ozone, and lead. The State of Missouri
13 established additional criteria for hydrogen sulfide and sulfuric acid. Transportation can contribute to
14 four of the six NAAQS pollutants: ozone, carbon monoxide, particulate matter, and nitrogen dioxide.
15 Transportation conformity with the NAAQS, as required by the CAA, ensures that federally funded or
16 approved transportation plans, programs, and projects conform to the air quality objectives established
17 in State Implementation Plans. MoDOT is responsible for implementing the conformity regulation in
18 nonattainment and maintenance areas.

19 EPA uses the term attainment area to describe those areas where air quality meets health standards for
20 particular airborne pollutants. Areas in which air pollution levels persistently exceed the NAAQS may be
21 designated “nonattainment areas.” The entire eight-county Saint Louis region is now classified as a non-
22 attainment area for the 8-hour ozone (O₃) standard and has been given a marginal non-attainment
23 classification for O₃. Saint Charles County is part of the eight-county Saint Louis region. See **Figure 2**.

1 Currently, the entire eight-county Saint Louis region is also classified as an unclassifiable area for the fine
2 particle material (PM_{2.5})¹.

3 FIGURE 2
4 **The Eight-County Saint Louis Region**



5
6 In accordance with the Clean Air Act Amendments of 1990, the Transportation Conformity process is
7 intended to ensure that the programs and activities proposed in the long-range transportation plans
8 conform to the purpose of the State Implementation Plans for Air Quality. The State Implementation
9 Plans contain the benchmarks against which progress is measured in meeting national goals for cleaner
10 and healthier air is set out. A responsibility of the East-West Gateway Council of Governments
11 transportation planning process is to ensure that the projects and policies set out in the area's long-range
12 transportation plans (Connected 2045) help to reduce and minimize air quality impacts of transportation
13 projects in accordance with federal, state, and local air quality standards, regulations, and priorities. The
14 specific procedures for reaching this objective are established under Federal law for ensuring conformity
15 between transportation plans and air quality improvement plans.

16 In short, projects included in the region's long-range transportation plans/Transportation Improvement
17 Program (TIP) and Missouri's State Transportation Improvement Program (STIP) are included in the area's
18 conformity analysis. The improvement of the O'Fallon interchanges along I-70 are obliquely addressed in
19 the current versions of the TIP and STIP:

- 20 • TIP Project #6076-40 is the revision of the Route K interchange
- 21 • STIP Project # 6P3027-B is the rehabilitation of the I-70 bridges in St. Charles County

22 It is an Environmental Commitment of this project to confirm that these TIP/STIP projects are adequate
23 to demonstrate conformity with the requirements of the Clean Air Act Amendments of 1990.

24

¹ As of April 15, 2015, USEPA found that it could not determine, based on available data, whether the eight county St. Louis region, met the 2012 annual standard or was contributing to a nearby violation. USEPA has identified this area as "unclassifiable." Missouri and Illinois will collect and use three calendar years of monitoring data (2015-2017) so that they can make a recommendation to USEPA about attainment or nonattainment.

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Mobile Source Air Toxics

EPA also regulates air toxics. Mobile source air toxics (MSATs) are a subset of the 188 air toxics defined by the Clean Air Act. The MSATs are compounds emitted from highway vehicles and non-road equipment. Some toxic compounds are present in fuel and are emitted into the air when the fuel evaporates or passes through the engine unburned. Other toxics are emitted from the incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or from impurities in oil or gasoline.

An investigation for MSATs is required for any project that has sensitive land uses within 500 feet of the project area and the project involves adding capacity, adding a new interchange, constructing a new road on new alignment, or expanding an intermodal center. Pursuant FHWA’s Interim Guidance Update on MSAT analysis in the National Environmental Policy Act (NEPA) (December 6, 2012) the following projects have no meaningful potential MSAT effects and are exempt from further evaluation:

- Projects qualifying as a categorical exclusion under 23 CFR 771.117(c);
- Projects exempt under the Clean Air Act conformity rule under 40 CFR 93.126; or
- Other projects with no meaningful impacts on traffic volumes or vehicle mix.

For projects that are categorically excluded under 23 CFR 771.117(c), or are exempt from conformity requirements under the Clean Air Act pursuant to 40 CFR 93.126, no analysis or discussion of MSATs is necessary. Documentation sufficient to demonstrate that the project qualifies as a categorical exclusion and/or exempt project will suffice. For other projects with no or negligible traffic impacts, regardless of the class of NEPA environmental document, no MSAT analysis is recommended. However, the project record should document the basis for the determination of "no meaningful potential impacts" with a brief description of the factors considered.

The purpose of this project is congestion mitigation by reconfiguring the existing interchanges and connectors. This project has been determined to generate minimal air quality impacts for CAAA criteria pollutants and has not been linked with any special MSAT concerns. As such, this project will not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause an increase in MSAT impacts of the project from that of the no-build alternative.

Moreover, EPA regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends forecasts a combined reduction of over 80 percent in the total annual emission rate for the priority MSATs from 2010 to 2050 while vehicle-miles of travel are projected to increase by over 100 percent. This will both reduce the background level of MSATs as well as the possibility of even minor MSAT emissions from this project.

Project-Level Particulate Matter Hot-Spot Conformity Determination

Within PM non-attainment or maintenance areas, as part of the NEPA process, a transportation project sponsor has to determine if proposed major transportation project would be considered a “project of air quality concern.” A project of air quality concern usually involves either large traffic volumes and/or significant diesel traffic (i.e., bridge, bus, or rail terminals). If a project were deemed a project of concern, such a major transportation facility would require a project-level PM hot-spot conformity determination.

The I-70 (K) project is not a project of concern. Without the I-70 through traffic, which is not affected by the proposed improvements, the project does not approach the threshold design year ADTs of 125,000 (10,000 of which must be diesel trucks). Consequently, a project-level PM hot-spot conformity determination is not necessary.

1 **Noise Impacts**

2 A noise analysis was conducted pursuant to MoDOT Noise Policy. The complete Noise Study is contained
3 in **Appendix D. Exhibit 4** depicts the Noise Study Areas, monitoring locations and modeling receiver
4 locations.

5 Ten Noise Study Areas (NSAs) were identified along the project, listed below roughly from east to west:

- 6 1. The Veterans Memorial Walk.
- 7 2. The Evelyn Homestead is a single home located at 8105 Veterans Memorial Parkway.
- 8 3. The Hilltop Manor Subdivision is a large collection of single-family residences on East Terra Lane.
- 9 4. The Gardenview Senior Center is located at 700 Garden Path. It is a residence facility for senior
10 citizens, including Alzheimer’s patients.
- 11 5. Behind the Garden Senior Center, is a Salvation Army complex. Daycare and other support
12 services are also provided at this location.
- 13 6. Ball fields at the Fort Zumwalt North Middle School are located south of the Sonderen Street
14 overpass.
- 15 7. The Highland Terrace Subdivision is two streets of single-family residences, perpendicular to I-70.
- 16 8. The Preferred Alternative proposes access management improvements along Route K. While
17 mostly commercial, two isolated Main Street residences are present.
- 18 9. Located between Route K and Woodlawn Avenue, the Terra Mariae subdivision, is a combination
19 of single-family and mult-family residences north of I-70.
- 20 10. The Falloncrest Townhouses are located in the southeastern quadrant of the I-70/Woodlawn
21 Overpass.

22 Traffic noise level measurements were conducted at seven locations. The monitoring locations are
23 representative of the sensitive receptors. The purpose of this data collection is primarily for model
24 validation purposes. Existing measured noise levels adjacent to I-70 vary between 59.6 and 81.2 dBA.

25 The TNM input files were developed using the existing and proposed roadway geometry, surrounding
26 terrain and building zones. Traffic counts, vehicle distribution and speeds were obtained from the design
27 plans. Using the noise monitoring data, the accuracy of the TNM files were validated.

28 Due to their close proximity to I-70, many locations approach or exceed the Noise Abatement Criteria.
29 The noise levels predicted during the existing condition and the Preferred Alternative are very similar.
30 Based on the modeled traffic noise conditions, a traffic noise impact was identified for the following
31 Noise Study Areas:

- 32 • Hilltop Manor Subdivision
- 33 • Garden View Senior Center
- 34 • Fort Zumwalt North Middle School
- 35 • Highland Terrace Subdivision
- 36 • Terra Mariae Subdivision

37 For the Noise Study Areas that would experience a traffic noise impact, a barrier analysis was conducted.
38 To be recommended for further consideration, a barrier must be both feasible and reasonable.

39 MoDOT requires at least a 5 dBA insertion loss for a minimum of 67 percent of first-row, impacted
40 receivers for noise abatement to be considered feasible. All of the Noise Study Areas were able to
41 achieve the minimum feasibility requirements.

1 For the Noise Study Areas that could achieve the feasibility standard, barrier analysis was conducted to
2 investigate reasonability. MoDOT defines reasonability the ability for noise barriers to achieve a
3 maximum of 1,300 square feet per benefitted receptor and must provide a benefit of a minimum of 7
4 dBA for 67 percent of first-row receptors.

5 The only noise barrier that is both feasible and reasonable exists in the Hilltop Manor subdivision. Several
6 barrier iterations were considered. Noise Barrier Version 1 is a one piece I-70 barrier with partial
7 coverage, Noise Barrier Version 2 is a three piece barrier along outer road and Noise Barrier Version 3 is
8 two piece I-70 barrier with full coverage.

9 The barriers along I-70 (versions 1 and 3) were not reasonable (with the maximum 20-foot barrier). Both
10 Versions were able to achieve a 5 dBA insertion loss at 3 of the 21 first row impacts receivers (14%).
11 Version 2 was able to achieve a 5 dBA insertion loss at 21 of the 21 first row impacts receivers (100%).

12 Using an optimized Version 2 barrier, 19 of 21 first row dwelling units receive at least 7 dBA of insertion
13 loss (86%). The optimized barrier is 2,053 feet long, averaging 12 feet tall. This results in a barrier with
14 1,232 square foot of barrier per benefitted receiver. Consequently, a reasonable barrier can be created.
15 Final recommendations will be made after final design and the public involvement are complete.

16 Construction noise is not expected to be a substantial issue.

17 The complete Noise Study is contained in **Appendix D**.

18 Cultural Resources/Section 4(f) Historic Sites

19 Efforts to identify historic properties and assess potential adverse effects pursuant to 36 CFR Part 800,
20 Protection of Historic Properties, regulations implementing Section 106 of the National Historic
21 Preservation Act (16 U.S.C. 470) have been implemented.

22 Archaeological Research Center of St. Louis, Inc. was engaged to identify historic properties and assess
23 potential adverse effects. The work plan was developed in coordination with MoDOT historic
24 preservation staff. The cultural resources survey of the project area was conducted evidencing no
25 significant cultural resources. Consequently, there will be no historic properties affected by project
26 activities. Coordination of these results are underway with MoDOT and the State Historic Preservation
27 Office (SHPO). The complete cultural resources survey is contained in **Appendix E**.

28 Parkland/Section 4(f)/6(f) Involvement

29 Section 4(f) is part of the Department of Transportation Act of 1966 that was designed to preserve the
30 natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges,
31 and historic sites. To be Section 4(f) eligible, the property must be publicly owned, except for historic
32 sites, which could be either public or privately owned. Federally funded actions cannot impact Section
33 4(f) eligible sites unless there is no feasible and prudent alternative.

34 Section 6(f) is part of the Land and Water Conservation Fund (LWCF) Act, which was designed to provide
35 restrictions for public recreation facilities funded with LWCF money. The LWCF Act provides funds for the
36 acquisition and development of public outdoor recreation facilities that include, but are not limited to,
37 community parks, county parks, and state parks, trails, fairgrounds, conservation areas, boat ramps, and
38 shooting ranges. Facilities that are LWCF-assisted must be maintained for outdoor recreation in
39 perpetuity and therefore require mitigation that includes replacement land of at least equal value and
40 recreation utility.

41 Within the study area, 2 areas are worthy of discussion relative to potential Parkland/Section 4(f)/6(f)
42 Involvement:

- 43 1. The ballfields associated with Fort Zumwalt North Middle School are located along Terra Lane in
44 the northwestern quadrant of the I-70/Sonderen Street overpass. Access comes from a long
45 driveway adjacent to Terra Lane. The project will not require right of way from the School

1 District. None of the recreational facilities will be impacted. Consequently, there are no 4(f) or
2 6(f) impacts.



3
4 *Typical view from the ballfields at the Fort Zumwalt North Middle School.*
5 *I-70 is in the background. The Sonderen Street overpass is in the left.*
6 *The termini of the private access road and the backstop of the nearest*
7 *ballfield are visible in the foreground.*
8

9 2. The Veterans Memorial Walk is located in the southeastern quadrant of the Belleau Creek
10 Road/Veterans Memorial Parkway. The Veterans Memorial Walk was dedicated in 2001 as a
11 place to honor all U.S. soldiers, past and present. Owned by the city of O'Fallon, it is open to the
12 public 24/7. All are welcome, and parking is available. Vehicular access to the memorial is
13 located 400 feet from the nearest intersection. The site consists of an array of cast bronze boots
14 positioned as though marching. A solitary pair of boots is stationed at the foot of the POW/MIA
15 flag, and an eternal flame burns continuously. The Preferred Alternative will result in no property
16 acquisition, no alteration to access and no direct or indirect impacts. Consequently, there are no
17 4(f) or 6(f) impacts.

18 These resources are visible on **Exhibit 2** (Appendix A). There are no other Section 4(f) or Section 6(f)
19 resources in or around the project study area that would be impacted by the project.



Typical view of Veterans Memorial Walk. The intersection of Belleau Creek Road and Veterans Memorial Parkway is visible in the background.

Threatened and Endangered Species

The Endangered Species Act (ESA) provides for the protection of threatened and endangered species, both plants and animals, and the habitats that are considered critical to the survival of these species, e.g., breeding, nesting, roosting, and foraging areas. The ESA additionally requires FHWA and MoDOT to consult with the U.S. Fish and Wildlife Services (USFWS) regarding their projects and measures that can be implemented to minimize or eliminate project impacts to these species.

MoDOT projects must also address potential impacts to state listed species. The State of Missouri also maintains endangered species legislation that protects these species. The state Endangered Species Act and the Missouri Wildlife Code protect state listed species.

The Missouri Cave Resources Act protects caves from trespass, vandalism, contamination, and destruction. The Missouri Department of Conservation is the administrative, regulatory, and enforcement agency for state sensitive species.

The Preferred Alternative is the improvement of an existing facility, in an urbanized area, almost entirely within the existing right-of-way. Most of

28 the study area is roadway, structures and other permanent roadway elements. Non-hardscaped areas to
 29 be affected will be the grass and scrub that typically lie within the transition from roadways to adjacent
 30 private landowners. **Exhibit 5** shows the expected construction limits over the aerial. This shows the
 31 limited nature of vegetation alteration that the project will cause. No Mature trees are expected to be
 32 removed as a result of the project. If the project changes in this regard it is an environmental
 33 commitment to re-evaluate the NEPA document to ensure the endangered species determinations
 34 remain valid.

35 The Missouri Department of Conservation Heritage Database and the Missouri Speleological Society Cave
 36 Database were reviewed for the potential to impact sensitive natural communities and protected species.
 37 There are no permanent streams to be crossed, and no sensitive aquatic resource concerns. There are no
 38 listed plants, amphibian, reptile, or avian species noted in the construction zone of the project area and
 39 no habitat which would support endangered species. There are no caves known to occur in or adjacent to
 40 the project area. There are no sensitive community or natural area types or protected species concerns
 41 for this project.

42 Hazardous Waste Sites

43 A hazardous material assessment was completed for the I-70 (K) project. This assessment focused on
 44 information regarding properties that pose a potential for environmental concern and possible
 45 contamination within, adjacent, or near the project area.

46 To facilitate the assessment, a database and records search report was obtained from Environmental
 47 Data Services (EDR). This report searched 54 federal, 22 state, five tribal and six EDR proprietary

1 databases, including historic dry cleaners and gas station/filling station/service stations. Using the EDR
2 report, sites of potential interest (within 1/8 of a mile of the project area) were identified. A windshield
3 reconnaissance survey to document current land use and conditions at the sites of potential interest.
4 Photographs were taken of the sites to document current conditions, these were included in a technical
5 memorandum. The complete hazardous material assessment is contained in **Appendix F**.

6 Based on the hazardous material assessment, the following conclusions and recommendations emerged:

- 7 1. There are several sites that have a medium to high potential for impacts to soil or groundwater:
 - 8 • O’Fallon Collision Center: This is an active auto repair shop located at 30 Sanders Drive.
9 According to the EDR report, there was also another auto repair shop at or near this
10 property, Midwest Dent Repair. O’Fallon Collision is a small quantity generator (SQG),
11 defined as a handler that generates more than 100 and less than 1,000 kilograms (kg) of
12 hazardous waste during any calendar month. Several notices of violation (NOVs) were noted
13 in the EDR, the last three in August 2014. Details of the NOV were not included in the EDR
14 report. Additional information should be requested from the lead agency, the State of
15 Missouri Department of Natural Resources (MDNR). Historic waste reported at this site
16 include barium, cadmium, methyl ethyl ketone, spent non-halogenated solvents, and lead.
 - 17 • American Cleaners, K-Mart #7324 and Betty Brite Cleaners/Coin Laundry: These former
18 businesses are located within the O’Fallon Square shopping center (southwestern quadrant
19 of the Route K/Veterans Memorial Parkway intersection). The exact location of American
20 Cleaner is unclear, the former Betty Brite Cleaners is now a restaurant (Number 1 Chinese
21 Restaurant) and the K-Mart is empty but appears to be in the process of being remodeled.
22 The former K-Mart is listed in the EDR report as a conditionally exempt SQG and a large
23 quantity generator. The former K-Mart also has at least one underground storage tank (UST)
24 closed in place. There is no record in the EDR of a No Further Action (NFA) letter from MDNR
25 or any investigations conducted. While the dry cleaners are no longer present, there is a
26 potential of chlorinated solvents that are used in dry cleaning.
 - 27 • The Body Shop: This is an active auto repair shop located at 114 McDonald Lane. This
28 business is a SQG, handling spent non-halogenated solvents. The EDR notes several violations
29 in 2009 and that a compliance evaluation was conducted and compliance was reached. The
30 nature of the violations are unknown. Additional information should be requested from
31 MDNR regarding this site. Based on current and historic activities at this site, there is a
32 medium to high potential for a release to site soil or groundwater.

33 The location of these sites are shown on **Exhibit 6**. For these sites, Phase 1 Environmental Site
34 Assessments should be conducted.

- 35 2. There is a low to medium potential that the remainder of the identified facilities have adversely
36 impacted the project area. They have a potential for soil or groundwater impacts from past or
37 current site activities. However, in conjunction with the Phase 1 Environmental Site Assessments
38 recommended above, those portions where planned construction will occur should be included
39 in the study area to evaluate whether contamination is present.
- 40 3. If regulated solid or hazardous wastes are found during construction activities, the MoDOT
41 construction inspector shall direct the contractor to cease work at the suspect site. The
42 construction inspector shall contact the appropriate environmental specialist to discuss options
43 for remediation. The environmental specialist, the construction office and the contractor shall
44 develop a plan for sampling, remediation and continuation of project construction. Independent
45 consulting, analytical and remediation services shall be contracted, if necessary. The Missouri

1 Department of Natural Resources and U.S. Environmental Protection Agency shall be contacted
2 for coordination and approval of required activities.

3 Environmental Commitments

4 MoDOT shall implement all project and regulatory commitments, whether or not specifically delineated
5 herein, after construction limits are determined. Federal authorization for construction shall not be
6 granted until the necessary regulatory obligations have been satisfactorily completed.

- 7 1) All acquisitions shall be in accordance with the Uniform Relocation Assistance and Real
8 Property Acquisition Policies Act (referred to as the Uniform Act) of 1970, as amended.
9 Based on current plans, with the exception of four small areas, all work associated within the
10 Preferred Alternative will occur within the existing right-of-way. Each of these four areas are
11 approximately 0.25 acres in size. No structures will be acquired. If these acquisitions
12 increase materially, a reevaluation maybe warranted and coordination with MoDOT will be
13 conducted.
- 14 2) The construction contract shall include a Traffic Management Plan to provide response to
15 temporary disruptions in travel patterns and travel time.
- 16 3) MoDOT's Storm Water Pollution Prevention Plan (SWPPP) shall be implemented to prevent
17 or minimize adverse impacts to streams, water courses, lakes, ponds, or other
18 impoundments within and adjacent to the project area.
- 19 4) A Section 404 permit may be required for this project. Although no impacts to the wetland
20 complex near Nicola Lane are expected, the project may impact jurisdictional streams.
21 Preliminary project plans include new pavement, drainage ditch removal/relocation, new
22 drainage ditches, new inlets, and construction of two underground detention facilities;
23 construction of new and/or extension of existing culverts may be required. Should impacts
24 to streams occur with this project, it is likely that a Nationwide Permit No. 14 for Linear
25 Transportation Projects would be appropriate. It is an environmental commitment of this
26 project to confirm and acquire any necessary permits. Further, it is an environment
27 commitment to follow the Section 404 Nationwide Permit No. 14 conditions and the Section
28 404 Nationwide Permit General Conditions within the General Provisions. Additionally, it is
29 an environment commitment to follow the conditions specified in the Section 401 Water
30 Quality Conditions.
- 31 5) A noise study was conducted and preliminary indications are that noise barriers are likely at
32 the following locations.

Likely Barrier Location	Average Barrier Height	Estimated Insertion Loss	Estimated Cost Effectiveness
Hilltop Manor (version 2)	12 feet	19 of 21 first row dwelling units receive at least 7 dBA of insertion loss	1,232 square foot of barrier per benefited receiver.

33
34 The final decision on the implementation of noise barriers will be made during final design. If,
35 during final design, conditions substantially change that impact the implementation of likely
36 barriers, the viewpoints of those affected will be solicited as part of the reevaluation of
37 reasonableness. Only barriers determined to be both reasonable and feasible will be

1 constructed. Barriers that are no longer reasonable and feasible will be removed from the
2 project.

3 Federal authorization for construction shall not be approved until the study and feasible and
4 reasonable abatement analysis is complete. Construction noise shall be addressed in
5 construction plans and specification for determining measures to minimize or eliminate
6 adverse construction noise impacts to the community.

7 6) Prior to construction, Phase 1 Environmental Site Assessments are recommended for the
8 O’Fallon Collision Center (30 Sanders Drive), the O’Fallon Square shopping center (American
9 Cleaners, K-Mart #7324 and Betty Brite Cleaners/Coin Laundry) and the Body Shop (114
10 McDonald Lane). Additionally, those portions where planned construction will occur should
11 be included in the Phase 1 Environmental Site Assessment study area.

12 7) During construction, if regulated solid or hazardous wastes are found, the MoDOT
13 construction inspector shall direct the contractor to cease work at the suspect site. The
14 construction inspector shall contact the appropriate environmental specialist to discuss
15 options for remediation. The environmental specialist, the construction office, and the
16 contractor shall develop a plan for sampling, remediation, and continuation of project
17 construction. Independent consulting, analytical, and remediation services will be contracted
18 if necessary. The Missouri Department of Natural Resources and U.S. Environmental
19 Protection Agency shall be contacted for coordination and approval of required activities.

20 8) If changes in the project footprint or scope occur that were not evaluated in this document,
21 MoDOT shall re-evaluate the NEPA document to ensure the determinations remain valid. This
22 includes any mature tree removal.

23 9) Based on the current FEMA floodplain maps, the proposed project will not encroach upon
24 floodplain resources. However, there is an area of flood zone AE—floodway fringe—to the
25 south of I-70 and just west of T.R. Hughes Boulevard. During the preliminary development
26 process it has been confirmed that the project will not encroach upon this area of floodplain.
27 If encroachment occurs, a floodplain development permit would be required. It is an
28 environmental commitment to confirm that the final construction plans will not encroach
29 upon this area of floodplain.

30 10) It is an Environmental Commitment to confirm that the following TIP/STIP projects are
31 adequate to demonstrate conformity with the requirements of the Clean Air Act
32 Amendments of 1990:

- 33 1. TIP Project #6076-40 is the revision of the Route K interchange
- 34 2. STIP Project # 6P3027-B is the rehabilitation of the I-70 bridges in St. Charles County

35