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# Public Notice

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**US ARMY CORPS  
OF ENGINEERS  
St. Louis District  
Gateway to Excellence**

**Reply To:  
U.S. Army Corps of Engineers  
Attn: CEMVS-OD-F  
1222 Spruce Street**

**Public Notice No.  
P-3086  
Public Notice Date  
April 23, 2018  
Expiration Date  
May 15, 2018**

**Postmaster Please Post Conspicuously Until:**

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File Number: MVS-2016-949 Stagecoach Landing

Interested parties are hereby notified that an application has been received for a Department of the Army permit for certain work in waters of the United States, as described below and shown on the attached maps.

**COMMENTS AND ADDITIONAL INFORMATION:** Comments on the described work should reference the U.S. Army Corps of Engineers File Number shown above and must reach this office no later than the above expiration date of the Public Notice to become part of the record and be considered in the decision. Comments should be mailed to the following address:

U.S. Army Corps of Engineers  
Regulatory Branch  
1222 Spruce Street  
St. Louis, Missouri 63103-2833  
ATTN: Mr. Rob Gramke

**APPLICANT:** City of O'Fallon, Missouri – Mr. Jeff Paskiewicz, POC.

**LOCATION:** The Stagecoach Landing project area occurs approximately 0.7 miles east of Highway K; and 400 feet south of Laura Hill Road; between Butternut Stage Drive and Stagecoach Landing Drive (see attached maps). This location is within the city of O'Fallon, St. Charles County, Missouri. The upstream end of the project occurs at geographic coordinates 38.7785°N, -90.6682°W. The downstream end of the project occurs at geographic coordinates 38.7804°N, -90.6867°W.

**PROJECT DESCRIPTION:**

The approximate 1,050-foot project reach occurs within close proximity to existing residential lots and infrastructure. Based upon Google Earth imagery, the residential development was built around 1996. As the area became developed, the channel upstream and downstream of the project reach was enclosed in pipe for road crossings and lot development. The project reach has become significantly incised, with multiple active headcuts. The most severe of the headcuts causes a bed elevation change of approximately 5 feet. The channel incision has resulted in failing, steep to near-vertical banks throughout the project reach. Due to the proximity of the constructed homes to the channel, bank sloughing and lateral channel migration actively threatens residential property. At many lots, the top-of-bank has now reached appurtenances such as fences. At some lots, the top-of-bank occurs within 10 to 15 feet of homes, or attached structures such as patios or decks. Where

pipes discharge into the channel, the pipes have become significantly elevated above the channel bed. Where stormwater pipe discharges are armored, the armoring has separated and fallen into the channel. Further progression of the channel incision and undercutting will likely result in separation of the terminal pipe sections. The existing narrow forested riparian corridor exhibits degraded conditions typical of urban settings, with invasive species such as honeysuckle. Bank undercutting has resulted in the loss of trees along the reach, with some standing trees appearing likely to collapse into the channel. At multiple locations within the project, homeowners have installed their own attempts at bank stabilization. These include stacked concrete bags, plywood staked against the bank, and tie-log walls (see attached photos). The existing stabilization measures have predominantly had little success.

The proximity of residentially-developed property on both sides of the channel, as well as the existing bank height and slopes, limit the bank stabilization options available to the city. For example, backsloping to achieve a stable bank slope may not be possible due to the depth of the channel, and the lateral distance from the bank toe required to achieve stability. Furthermore, any stabilization options employed would likely result in failure without addressing the channel incision and active headcutting. The extent of disturbance required to stabilize the banks throughout the entire project reach; as well as address the ongoing channel incision; generally equates to reconstructing the channel.

The reconstructed channel bed will extend through the project reach at a more uniform slope gradient than the existing conditions. To address the channel incision and headcutting, the city proposes to install a series of 19 rock vanes and Newbury riffles. These structures will provide the grade control necessary to prevent further headcutting, as well as result in a series of riffle/pool sequences. The reconstructed channel will occur in roughly the same configuration as the existing channel, following the same sequence of meanders. However, where some of the existing meanders have acute bends, the reconstructed channel will increase the bend radius, and/or shift the centerline away from developed property. These shifts will cumulatively shorten the reconstructed channel centerline by approximately 60 feet, resulting in a finished length of approximately 990 linear feet. According to the project engineer, the hydrologic modeling for the project does not indicate that the shortened channel will result in increased velocities leaving the reach, due to the riffle/pool structures and other components of the channel design.

The city proposes to reconstruct the channel banks using a combination of vertical, stacked stone bank toe; and regraded and vegetated banks. The stone toe will have a height of approximately three feet. The plans originally proposed for the stone toe to primarily occur only on the erosional side of the meanders, alternating from one side of the channel to the other. However, the extent of grading required on the depositional sides, where no wall had been proposed, would have resulted in the loss of significant numbers of trees. This configuration also placed the graded slopes into close proximity to some structures. The applicant therefore modified the plans to include toe walls on both banks in the majority of the project reach, to minimize disturbance of the project corridor. Above the stone toe, the reconstructed bank will consist of vegetated and livestaked reinforced soil lifts. Where sufficient distance occurs between the reconstructed channel and residential property, the city will utilize native trees, shrubs, and herbaceous vegetation.

**LOCATION MAPS AND DRAWINGS:** See the attached aerial depicting the location of the project reach. The applicant has submitted numerous construction drawings for the proposed stabilization. In the interest of reducing paper use and limiting electronic file sizes, the USACE has not included construction drawings with this Public Notice. However, the USACE will provide these drawings upon request.

**ADDITIONAL INFORMATION:** Additional information may be obtained by contacting Rob Gramke, Missouri Section Chief, U.S. Army Corps of Engineers Regulatory Branch, at (314) 331-8187. Your inquiries may also be sent by electronic facsimile to (314) 331-8741 or by e-mail to robert.s.gramke@usace.army.mil.

**AUTHORITY:** This permit will be processed under Section 404 of the Clean Water Act (33 U.S.C. 1344).

**WATER QUALITY CERTIFICATION:** The project plans have been submitted to the Missouri Department of Natural Resources, Water Protection Program for state certification of the proposed work in accordance with Section 401 of the Clean Water Act. The certification is requested as of the date of this Public Notice, and if issued, will express the Agency's opinion that the proposed activities will not violate applicable water quality standards. Written comments concerning possible impacts to waters of Missouri should be addressed to: Water Protection Program, Post Office Box 176, Jefferson City, Missouri 65102-0176, with a copy provided to the Corps of Engineers.

**SECTION 404 (b)(1) EVALUATION:** The impact of the activity on the public interest will be evaluated in accordance with the Environmental Protection Agency guidelines pursuant to Section 404 (b)(1) of the Clean Water Act.

**PUBLIC HEARING:** Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the applicant's proposal. Any request for a public hearing shall state, with particularity, the reason for the hearing, and must be based on issues that would warrant additional public review.

**ENDANGERED SPECIES:** According to the U.S. Fish & Wildlife Service (USFWS) Information, Planning and Conservation database, the project site is within the range of federally-listed bat species. The project will require tree clearing, which could affect arboreal bat species, if present. The Corps will therefore require the city to submit information regarding the potential for bat habitat at the project site, and/or whether bat species occur on site. Based upon this information, the Corps will make a determination as to whether the project will affect listed bat species. Prior to making a permit decision, the Corps will coordinate with the USFWS to obtain concurrence with this determination, develop recommendations or permit requirements to minimize potential impacts to endangered species, or other actions as necessary. The IPaC database also indicates that the project site is within the range of running buffalo clover (*Trifolium stoloniferum*), an endangered plant. Based upon the existing site conditions and the known habitat requirements for *T. stoloniferum*, the Corps has preliminarily determined that the project will have no effect on this species. However, we request the USFWS' comments on the potential for this project to affect listed species or critical habitats.

**CULTURAL RESOURCES:** The St. Louis District has done a preliminary evaluation based on information provided by the State Historic Preservation Officer. Based on this evaluation and the fact that the project is located within an existing residential subdivision with a previously modified tributary channel, a reconnaissance survey may not be required. However, if substantial information from the response to public notice indicates that further investigation is necessary the USACE will re-consider its decision.

**EVALUATION:** The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the described activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit that may reasonably be expected to accrue from the described activity must be balanced against its

be considered including the cumulative effects. Among factors considered are: conservation; economics; aesthetics; general environmental concerns; wetlands; historic properties; fish and wildlife values; flood hazards; flood plain values; land use; navigation; shoreline erosion and accretion; recreation; water supply and conservation; water quality; energy needs; safety; food and fiber production; mineral needs; consideration of property ownership; and in general the needs and welfare of the people.

**SOLICITATION OF COMMENTS:** The U.S. Army Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Native American Tribes; and other interested parties in order to consider and evaluate the impacts of the proposed activity. Any comments received will be considered by the U.S. Army Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

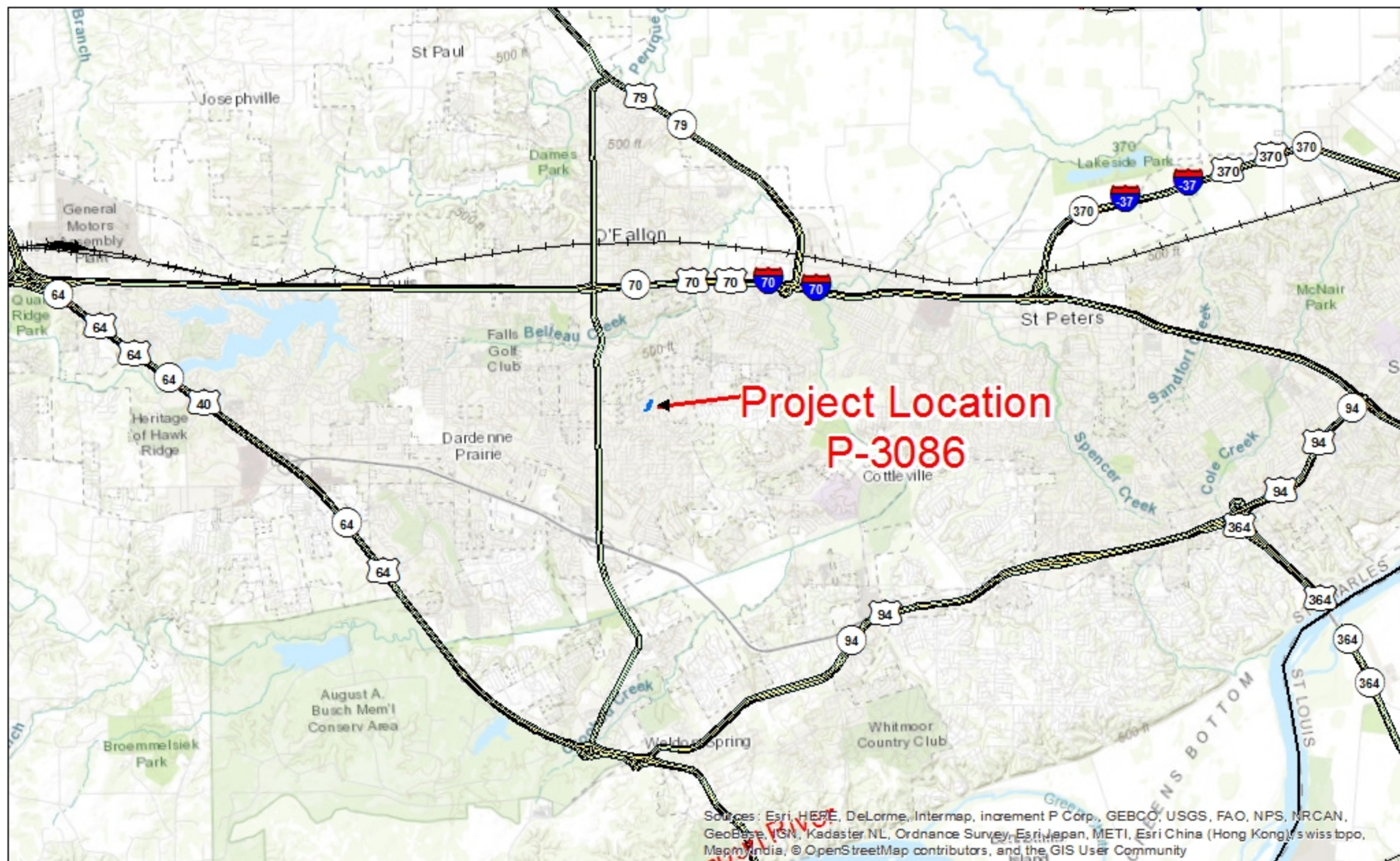
  
DANNY D. MCCLENDON  
Chief, Regulatory Branch

Attachments

**NOTICE TO POSTMASTERS:**

The Corps requests that this notice be conspicuously and continually placed for 21 days from the date of this issuance of this notice.





**MVS-2016-949 P-3086**  
**Stagecoach Landing**  
**O'Fallon, St. Charles County, MO**

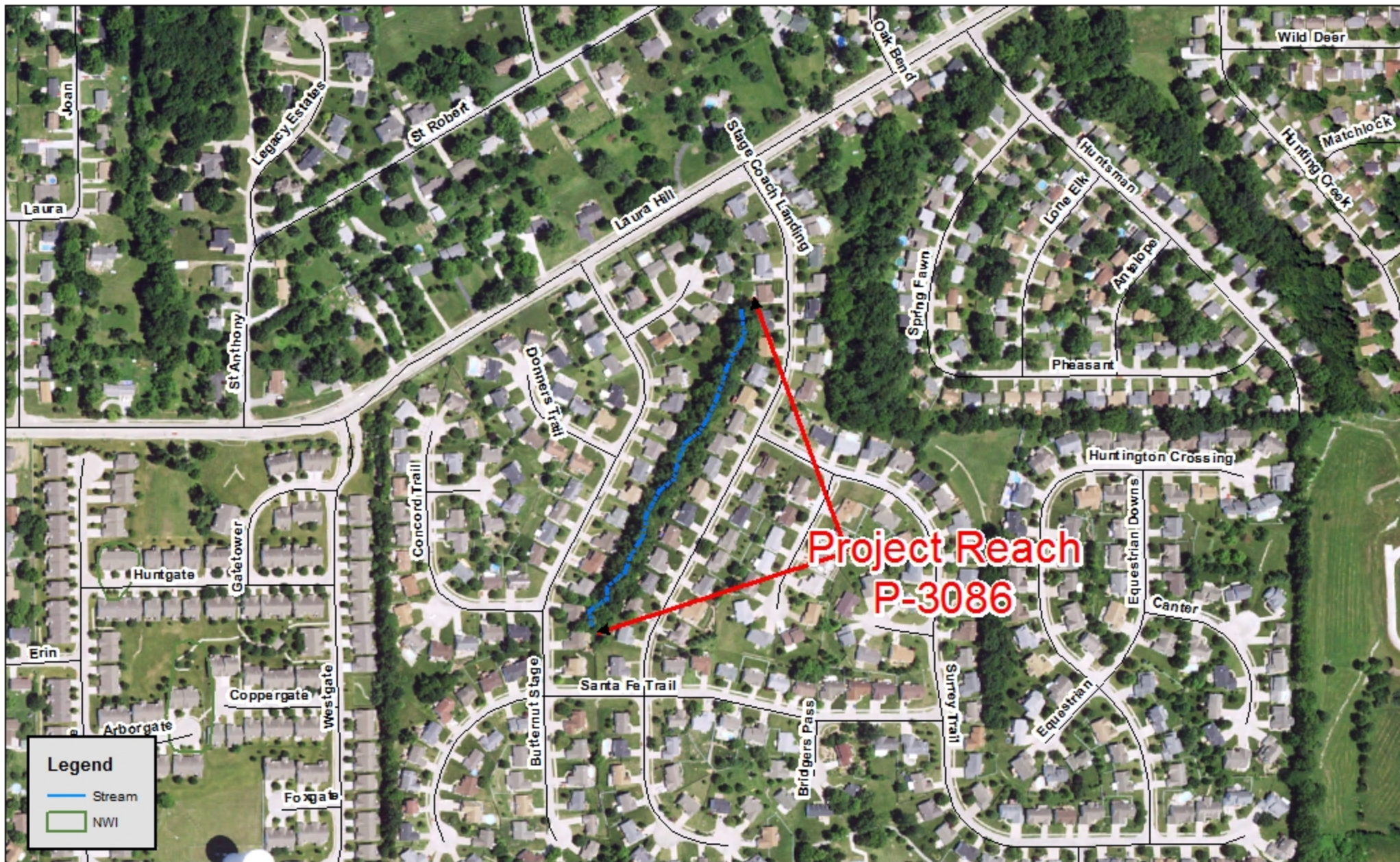


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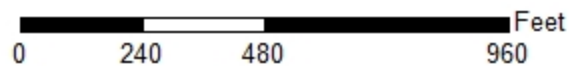


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**Stagecoach Landing**  
**O'Fallon, St. Charles County, MO**



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St Louis District





1- Upstream enclosure.



2- Facing upstream to headcut.



3- Residential patio at top-of-bank



4- Residential fence at top of vertical, eroding bank.





5- Stabilization attempted from plywood.



6- Stabilization attempted from plywood and sections of shower stall.





7- More plywood attempt at bank stabilization.



8- Separated energy dissipater at stormwater outfall.





9- Failed concrete bag revetment.



10- Gully scoured into bank from a roof drain discharge.





11- Failing stormwater outfall.



12- Active headcut.





13- Conditions upstream of prominent meander.



14- Erosion along residential property





15- Unusual recreation area occurring within the channel bed.



16- Failing retaining wall, energy dissipater at project end.