## (T) <br> Illinois Department of Transportation

| To: | Kensil Garnett, Dist. 4 Attn: Tony Sassine |
| :--- | :--- |
| From: | George A. Tapas, P.E., S.E. |
| Subject: | Approved Project Development Report |
| Date: | January 4, 2022 |
|  |  |
|  |  |
| Marshall County |  |
| Marshall County Highway Department |  |
| Section 99-00080-00-FP |  |
| FAS 372 (CH 6 / Western Ave) |  |

On December 22, 2021, the Federal Highway Administration (FHWA) granted Categorical Exclusion (CE) for the subject project. A copy of the FHWA's e-mail approval has been included in the Project Development Report (PDR). The project design is approved this date. The Approved PDR has been posted to the WMFT database.

If you have any questions, please contact Mark Reitz at (217)785-2798.
Engineer of Local Roads and Streets
Gregory S. Lupton.
By: Gregory S. Lipton, P.E.
Local Project Implementation Engineer
Attachment

| From: | Graham, Susan (FHWA) [susan.graham@dot.gov](mailto:susan.graham@dot.gov) |
| :--- | :--- |
| Sent: | Wednesday, December 22, 2021 10:02 AM |
| To: | Reitz, Mark A |
| Subject: | [External] RE: Marshall County Section 99-00080-00-FP CH 6 (Western Avenue) |
|  | Categorical Exclusion |

Mark,
I concur with of the FHWA Categorical Exclusion for this project.
Have a Merry Christmas,

## Sue Graham, P.E.

Transportation Engineer - Districts 4 \& 5
Federal Highway Administration - Illinois Division
3250 Executive Park Drive
Springfield, Illinois 62703
Phone: 217.492.4282
Fax: 217.492.4621
susan.graham@dot.gov

From: Reitz, Mark A [Mark.Reitz@illinois.gov](mailto:Mark.Reitz@illinois.gov)
Sent: Monday, December 20, 2021 1:19 PM
To: Graham, Susan (FHWA) [susan.graham@dot.gov](mailto:susan.graham@dot.gov)
Subject: [WARNING: UNSCANNABLE EXTRACTION FAILED]Marshall County Section 99-00080-00-FP CH 6 (Western Avenue) Categorical Exclusion

CAUTION: This email originated from outside of the Department of Transportation (DOT). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

## Marshall County

Marshall County Highway Department
Section 99-00080-00-FP
Job No. C-94-012-21
Project No. Pending
Contract No. 89800
BDE SEQ \#14124
CH 6 (CR 1300N / Western Avenue)
Ms. Graham,
Marshall County proposes to reconstruct approximately one mile of County Highway 6 (CR $1300 \mathrm{~N} / \mathrm{Western}$ Avenue) on new alignment to increase safety of the roadway, provide a better driving surface, and increase the pavement design to allow $80,000 \mathrm{lbs}$. trucks. See attached location map. Other portions of this rural area of CH 6 have previously been upgraded.

Approximately 24 acres of right of way are needed for this one mile section of roadway realignment. See attached Aerial View. In addition to the ROW in excess of 3 acres/mile, this project also requires a noise report. These unusual circumstances, as defined in the Programmatic Agreement Regarding the Processing of Actions Classified as Categorical Exclusions for Federal-aid Highway Projects in Illinois (dated October 1, 2020), requires a federal approved Categorical Exclusion. We are requesting FHWA concurrence on the Categorical Exclusion. Below are pertinent items and dates for the subject project:

- Coordination Meetings: LPA/IDOT/FHWA coordination meetings were held on 12/05/2007 and 09/13/2001. Minutes are attached.
- Natural Resources Review: Approved 10/15/2020. Tree clearing restrictions for bats are in place. Trees removed will be mitigated on-site at a 1:1 replacement ratio and protected in perpetuity upon replacement.
- Wetlands: No wetland impacts are anticipated for this project.
- Cultural Resources Review: Approved 09/24/2019.
- Section 404/401: Project is authorized under NWP No. 14 and includes water quality certification conditions for Section 401.
- Noise: A noise analysis was completed on 11/20/2019 and approved by IDOT on 11/17/2021. No sensitive noise receptors approached, met, or exceeded FHWA residential NAC for existing, no build 2040, or build 2040 conditions. Therefore, no traffic-noise abatement measures were considered.
- Section 4(f): This project does not affect any Section 4(f) properties/resources.
- Special Waste: Special Waste Screening was performed and no special waste concerns were identified. A PESA is not required.
- Air Quality: No issues.
- IDOA: Farm land conversions were evaluated with the Illinois Department of Agriculture in 2010 and remains valid (Form AD-1006 completed).
- NPDES: SWPPP required (soil disturbance greater than one acre).
- Proposed ROW: Approximately 24 acres (existing pasture, timer, agricultural land) of proposed ROW is required from 6 parcel owners. Individual property owners were contacted with no known opposition. No relocations are required.
- Public Involvement: In addition to individual property owner contact, a public meeting was held on 12/19/2007. There have been no significant changes in the original scope of work since that meeting that would warrant additional public involvement. There is no known opposition to the project.
- ADA: Given the rural location, no sidewalks are proposed.
- Bicycle Accommodations: Bicycle accommodations are not provided on the adjacent sections of CH 6 nor this proposed section given the rural location with no bicycle generators in the area.
- Maintenance of Traffic: As most of this project is on new alignment, no detours are necessary. Local access will be provided at all times.

Based on the above information, it is the opinion of this office that the project will not have any significant impacts on the human environment and we seek your concurrence of the Categorical Exclusion. Let us know if a Categorical Exclusion is approved by FHWA. Additional documentation can be provided upon request.

Let me know if you have any questions. Thanks.

Mark A. Reitz, P.E.<br>Project Development Engineer<br>Illinois Department of Transportation / Bureau of Local Roads \& Streets<br>2300 South Dirksen Parkway / Springfield, IL 62764<br>Office 217.785.2798 / Cell 217.685.0181<br>Mark.Reitz@illinois.gov

## Local Project Development Report for (4) Categorical Exclusions and Design Approval



Project Number: $\qquad$ Project Length: $\quad 5500 \mathrm{ft}(1.042 \mathrm{mi}$.)

Street/Road Name: CH 6, Western Avenue

Termini: Project begins approximately 2.5 miles west of the CH 6 intersection with IL 29, and proceeds in a westwardly direction for 1.042 miles, ending approximately 3.5 mi . east of the intersection of CH 7 with CH 6 .

For Township or Road District bridge projects: The County Engineer certifies that the project design speed exceeds the minimum design speed recommended for this classification of roadway as provided in the BLRS Manual in order to prevent a deficient NBIS rating for approach roadway alignment appraisal. All elements have been designed to the chosen design speed unless noted otherwise in Section 2(e) and/or the attached BLR 22120.

凹 Categorical Exclusion and Design Approval Recommended


Date

This project will not have any significant impacts on the human environment; therefore, the FHWA approves the project as a Categorical Exclusion on $\qquad$
County Engineer
Date
 $2 / 22 / 2021$


## 1. LOCATION AND EXISTING CONDITIONS

a. Location (attach location map to supplement narrative description)

The improvement is located 3.5 miles west of Henry. The project begins approximately 2.5 miles west of the intersection of Western Avenue (CH 6) and IL 29 and proceeds in a westerly direction for 5500 feet (1.042 miles) ending approximately 3.5 miles east of the intersection of Western Avenue (CH 6) and CH 7. See Exhibit E-1 for a Location Map and Exhibit E-2 for a Functional Classification Map.
b. Description of Existing Facility - Give narrative description, including such items as width of travel, parking and turn lanes, sidewalks, alignment, traffic control devices, utilities, jurisdiction, maintenance responsibility, drainage, terrain and current land use (including major public facilities and local landmarks). Attach existing typical sections showing roadway widths, bridge widths, ROW widths, sidewalk widths, guardrail, curb and gutter and surface types.

The existing Western Avenue roadway section from Station 138+98 to Station 206+11.65 is a rural, two-lane roadway connecting Western Avenue (CH 6) with Illinois Rte. 29 on the east and Marshall County CH 7 on the west. The speed limit for this facility is the regulatory (55 MPH) speed limit. This route is under the jurisdiction of and is maintained by Marshall County. The terrain within the project limits is relatively hilly. Roadside ditches, overland flow, field waterways, and streams provide a means of transporting runoff discharges throughout the project. Land use throughout the project is primarily pasture and logged out timber. Intersecting side roads are stop sign controlled. There are existing overhead electric lines on the south side of the existing Western Avenue (on the east end of the project), and on the north side of the existing Western Avenue (on the west end of the project). These electric lines and poles are in conflict with the proposed Western Avenue alignment from approximately $36+50$ to $43+50$. There are also buried telecommunication lines on the south side of the existing Western Avenue at the limits of the project and on the north side at the proposed cul-de-sac location.

From Station $138+98.70$ to 206+11.65, the existing Western Avenue roadway is a 22 ' HMA surface with 2' earth shoulders. The original pavement for this roadway section consisted of a 15" aggregate base with 2.5" HMA Surface and earth shoulders. The existing roadway is striped for no passing through the station limits. The existing right of way is predominately 70' for Western Avenue. There are no parking lanes, turn lanes, sidewalks, or multiuse paths present in this section. See Exhibit E-3 for the existing roadway typical sections.

The existing horizontal alignment consists of a series of eight horizontal curves with a long tangent line at the beginning and end of the project and does not meet the criteria for a 50 mph design speed. Of the eight horizontal curves three have a design speed of 45 mph , two have a design speed of 35 mph and two have a design speed of 25 mph . Exhibit E-7 is a tabulation of the deflection angles between the horizontal line segments and the 8 horizontal curves on the existing alignment. The vertical alignment does not meet the criteria for a 50 MPH speed (See Exhibit E-8).

There are two existing structures within the existing alignment for this project. They are SN 062-3087 and SN 0623088. Both of these structures are less than 20' in length.

## c. Traffic Data

Current ADT: $\qquad$ \% trucks:

Will 80,000 trucks be legally permitted on this route? $\boxtimes$ Yes $\square$ No
Design Year: 2043 DHV: 46 ( 476 \% trucks: $\quad 8 \%$

## See Exhibit E-16 for Traffic Data.

d. Structures - Identify location within the proposed improvement of all structures on attached location map. Attach a copy of the Structure Master Report for all structures within the project limits. Attach a copy of the Bridge Condition Report or the Bridge Deck Resurfacing approval letter for structures to be replaced, rehabilitated, or resurfaced.

SN 062-3087 and SN 062-3088 are located on the existing alignment within the project limits. Both of these structures are less than 20' in length and no Structure Master Reports are available.
e. Railroads - Identify location of all railroad crossings on attached location map and complete the following:

| Railroad Name | No. and Type of Tracks <br> (Main or Switching) | Type of Warning <br> Devices* | No. of Trains Per Day | Railroad Width of <br> Crossing at Rt. Angles |
| :--- | :---: | :---: | :---: | :---: |

*Include a sketch showing location of railroad protective devices from the edge of roadway and to the nearest track.
f. Contiguous Sections - Describe the existing typical sections at each end of the proposed improvement including number of travel lanes, turning lanes and parking lanes, lane widths and roadway width (f-f of curbs or e-e of shoulders), and sidewalk width.

The existing typical roadway sections at the beginning and end of the project consist of a two-way, 22' pavement, with 2' earth shoulders and a V' bottom ditch with 1:3 H:V foreslopes and back slopes to collect and transport runoff and drainage patterns. There are no turn lanes, parking lanes, or sidewalks at either end of the improvement.

## 2. Proposed Improvement

a. Discuss the purpose and need of the project:

The purpose of the project is to increase the overall safety of the roadway section, reduce accidents, and provide a better driving surface for the motoring public. The proposed design will also allow for the use of $80,000 \mathrm{lbs} . \operatorname{trucks}$. This improvement will upgrade the last remaining section of Western Avenue (CH 6) to an 80,000 lbs. truck route that is used for transporting grain, aggregate, and other materials to the Illinois River port in Henry Illinois. The new alignment will eliminate the steep, sharp curves and poor sight distance that is present along the entire existing alignment section, and reduce the number of severe crashes, typically from roadway departure type accidents.
b. What design guidelines will be used for the proposed improvement? (Check One)
® Rural (BLRS Manual Chapter 32)
$\square$ Urban (BLRS Manual Chapter 32)
$\square$ Suburban (BLRS Manual Chapter 32)
$\square$ 3R Guidelines (BLRS Manual Chapter 33)
$\square$ Bicycle Guidelines (BLRS Manual Chapter 42)
$\square$ Pedestrian Guidelines
$\square$ Other:

| Functional Classification: $\square$ Arteria |  | $\square$ Local Roa |  |
| :---: | :---: | :---: | :---: |
| Terrain: $\square$ Level |  |  |  |
| Regulatory or Posted Speed Limit: | 55 | Design Speed: | 50 |

c. Describe type of work to be accomplished by the improvement. Discussion should include width of proposed travel, parking, bicycle and turning lanes, sidewalks, shared-use paths, guardrail, traffic control devices, drainage items (including storm sewer outfalls), alignment changes, railroad work, utility adjustments, intersection improvements, side slopes and clear zones. Specify the emax for horizontal curves. Attach typical sections, plan and profile sheets, and intersection design studies when applicable.

The proposed improvement consists of the new construction of 1.042 miles of Western Avenue on a new horizontal and vertical alignment, thus eliminating a winding and steep portion of the existing roadway. The design speed for the new construction is 50 MPH . The project is in a rural location and an open roadway section will be used. The new pavement will be designed for $80,000 \mathrm{lbs}$. trucks. The proposed roadway for Western Ave will consist of a 24' wide, HMA pavement (striped for 22', one 11' lane in each direction) with 5' aggregate shoulders (6' total shoulder width). There will be no parking, bicycle or turn lanes, sidewalks, or multiuse paths present along the proposed improvement. The roadway foreslopes will be $3: 1 \mathrm{H}: \mathrm{V}$, with $3: 1 \mathrm{H}: \mathrm{V}$ back slopes and a two-foot bottom ditch. There are two small sections at the beginning and ending limits of the
project, where the roadway will transition into existing conditions, and the back slopes will be $2: 1 \mathrm{H}: \mathrm{V}$ to meet existing Right-of-Way. The clear zone is 12 ' for this improvement per the BLRS manual section 35-2.03(b) and the clear recoverable area will extend to a point 10' beyond the toe of the slope where sufficient right-of-way exists. The proposed horizontal alignment consists of extending the existing tangent line of Western Avenue to the west, followed by a slight curve to the left with a radius of 2864.79', a curve back to the right with a radius of 3819.72', and a final transitional curve to the left with a radius of 2864.79' that ties back into the tangent line of the existing alignment. The emax for these curves is $8.0 \%$ per BLRS manual section 29-3.01(a). The proposed vertical alignment begins with tying into the existing upgrade of $1.57 \%$, an upgrade of $2.35 \%$, an upgrade of $1.10 \%$, an upgrade of $6.00 \%$, a downgrade of $2.00 \%$, an upgrade of $3.00 \%$, a downgrade of $0.29 \%$, and an upgrade of $1.44 \%$ which ties into the existing grade at the end of the project. See Exhibit E-7 and Exhibit E-8 for a summary of the proposed horizontal and vertical alignments.

TR 1130 is a gravel access road, providing access to and from Western Avenue to only three (3) residences and their farming operations. It is functionally classified as a local road and is approximately 0.7 miles in total length. TR 1130 will be realigned to provide a perpendicular intersection with the proposed Western Avenue alignment and to connect to the existing portion of Western Avenue which is to remain open. The TR 1130 legs of the intersection with proposed Western Avenue will be stop controlled. The design speed for this roadway is 30 MPH. TR 1130 will consist of a two-way, 20' HMA surface (one 10' lane in each direction) with 4' earth shoulders north of the proposed Western Avenue alignment and a two-way, 20' aggregate surface (one 10' lane in each direction) with 4' earth shoulders south of the proposed Western Avenue alignment. There will be no parking, bicycle or turn lanes, sidewalks, or multi-use paths present along the proposed improvement. The roadway foreslopes will be $3: 1 \mathrm{H}: \mathrm{V}$, with $3: 1 \mathrm{H}: \mathrm{V}$ back slopes and a two-foot bottom ditch. The clear zone is 6 ' for this low volume local road per the BLRS manual section 35-2.02(d). The proposed horizontal alignment begins south of Western Avenue at the existing TR 1130 E alignment and consists of a curve to the left with a radius of 380', followed by a tangent alignment which intersects with the proposed Western Avenue alignment, and concludes with a curve to the left with a radius of 380' connecting to the existing Western Avenue alignment to remain in place, north of the proposed Western Avenue alignment. The emax for the curve south of the proposed Western Avenue is $4.0 \%$ and the emax for the curve north of the proposed Western Avenue alignment is $6.0 \%$ per BLRS manual section 29-3.01(a).

A portion of existing Western Avenue will remain open thus providing access for all of the property owners. Access to existing Western Avenue will be limited to one location at the intersection of TR 1130 with the proposed alignment of Western Avenue. There is no connection proposed at the western end of the project to tie the existing roadway into the relocated proposed roadway. A cul-de-sac will be constructed at a location on the western end of the project to allow for vehicles to turn around. Appropriate signage will be posted along $T R$ 1130 regarding access provisions. Public agencies, emergency services, and school districts will be made aware of the proposed access revisions. Jurisdiction of the portion of existing Western Avenue to remain open will be transferred from Marshall County to Whitefield Township at the completion of this improvement. This Jurisdictional Transfer has been agreed to by Whitefield Township.

Existing drainage patterns will be retained through the use of roadside ditches with existing cross drainage maintained through the use of pipe culverts, a proposed $5^{\prime} X 5^{\prime}$ precast box culvert, and a proposed double $10^{\prime} X$ $6.5^{\prime}$ box culvert. The proposed $10^{\prime} \times 6.5$ ' box culvert will be an NBIS structure with a Proposed Structure Number of 062-3095. The structure will have a clear roadway width of 34 ' and will have side mounted Type SM railing. Approach and departure guardrail will be provided at the location of the $10^{\prime} \times 6.5^{\prime}$ box culvert. One existing structure will be removed in conjunction with the relocation of TR 1130. The IDOT approval of the Preliminary Bridge Design and Hydraulic Report is included as Exhibit E-22.

Local traffic will be maintained at all times through the use of stage construction. All local utility companies have previously been notified and will be notified once again after PDR approval during Phase 2 design. Any required utility adjustments will be made prior to construction. All areas disturbed by construction will control erosion by the use of erosion control blanket and / or erosion control seeding, fertilizer and mulch with the completed surfaces being fertilized / seeded or mulched. All erosion and seeding activities/products will be meet IDOT Standard Specifications. See Exhibits E-3 for proposed typical sections and Exhibits E-4 for the plan and profile sheets.
d. Discuss items affecting improvement such as hazardous mailbox supports, parking and truck restrictions, mail delivery from traffic lanes, justification (including warrants) for multi-way stop signs, traffic signals and other traffic control and railroad protective devices, stage construction, nearby airports, and additional lighting:

No potentially hazardous mailbox supports exist within the project limits. Mailbox turnouts will be provided at the
existing mailbox locations. Parking areas are not designated along this section. There are no traffic signals in this section. The existing stop conditions will be retained at the side road intersections. Staged construction will be implemented for the construction of this improvement, with local traffic being maintained on existing and proposed roadways at all times. There are no nearby airports and no additional lighting is proposed.
e. Identify each aspect to be constructed at less than the design guidelines and provide a clear description of required design variances and appropriate justification. (BLRS Manual Section 27-7). If a design variance is required, include a copy of the approved BLR 22120 form as an attachment.

2:1 back slopes will be constructed from Station $32+00 R T$ to $33+50 R T$ and from $82+00 R T$ to $84+00 R T$. These slopes match the existing back slopes and are located at the beginning and ending limits of the project where proposed Right-of-Way is not being purchased.

The design variance request is attached as Exhibit E-23 and is pending IDOT approval.
f. Current estimated cost of proposed improvement? \$5,752,200 (Exhibit E-19)
g. Analyze the need for accommodating pedestrians, bicyclists and the handicapped. When applicable, describe the facilities to be provided for pedestrians and bicyclists. Discuss the ADA accessibility and maximum Iongitudinal grade of these facilities. (BLRS Manual Chapter 41)

The project is rural in nature and no provisions for special facilities to accommodate pedestrians, bicyclists, or the handicapped are planned. The 1.042 mile relocated section of CH 6 will still connect with existing CH 6 which has no sidewalks or bike bath accommodations. The 1.042 mile relocated section should be able to accommodate the occasional non-motorized user traveling on existing CH 6 , because of the low traffic volumes, the elimination of the sharp curves and provides a better site distance.

Sidewalks/Shared-Use Paths:
Maximum 2\% crosslope: $\quad$ Yes $\square$ No $\boxtimes$ Not Applicable
ADA ramps with detectable warnings at street intersections: $\square$ Yes $\square$ No $\quad$ Not Applicable
If no, provide justification.
h. Discuss any proposed improvements being considered in adjacent segments including the anticipated construction startup date of these improvements.

There are no improvements being considered in adjacent segments.

## 3. Crash Analysis (BLRS Manual Section 22-2.11(b)(9))

a. Summarize crash data for the past five years, including a spot map or a location map showing crash locations when possible. Detail the types of crashes and include collision diagrams, if possible, especially at cluster sites. Give the source of this data.

The traffic accident information for the years 2015-2019 along existing Western Avenue (CH 6) was provided by the Marshall County Sheriff's Office, with 2019 data being the most recent year approved and available. There were ten (10) accidents reported within the project limits during the 5 -year period. Most of the crashes were roadway departure type accidents resulting in a fixed object or rollover crash. The Marshall County Sheriff's information indicated that there were two (2) B-Injury crashes from the fixed object and rollover crashes. Although there were no fatal crashes reported between 2015-2019, there was one fatal crash in 2002 along this same winding, narrow section of existing Western Avenue, and it should not be overlooked because it has already occurred under the current conditions of Western Avenue. See Exhibit E-5 for the Marshall County Sheriff's documentation and the traffic accident location diagram; See Exhibit E-6 for a summary of the traffic accidents between 2015-2019.
b. Analyze available crash data including results of field check. Discussion should include high crash locations, critical wet weather sites, and other crash patterns. If the data is inconclusive, make a statement to that effect.

The Sherriff's crash data showed that roadway departure type crashes were the predominant crash type, causing the errant vehicle to leave the roadway and either overturn or hit a fixed object. This is a pretty common occurrence on the local road system due to inadequate roadway width, no shoulders present, very sharp curves and distracted driving. Field checks verified sharp curves and limited visibility. Vehicles traveling at high rates of speed do not slow down, and often cannot negotiate these roadway factors and safely keep their vehicle on the road.
c. Describe how the proposed project will address any crash issues.

This improvement will reduce the potential for roadway departure crashes by eliminating high levels of truck traffic on the steep, sharp curves and poor sight distance of the existing alignment. The project will improve the pavement drainage by providing a uniform pavement cross slope and reduce hydroplaning due to existing wheel rutting in the existing section of Western Avenue. These features provide for a safer driving section of relocated roadway.

## 4. Right-of-Way

a. Describe the right-of-way taking, including the total acreage required for each of the following categories: ROW, permanent easements, temporary easements and temporary land use permits. Include the width of taking, number of property owners, acreage of right-of-way and/or easements, character of land; i.e., farm, residential, commercial or publicly owned properties, anticipated impacts to properties that remain, and location of any improvements with respect to required right-of-way. Discuss any impacts on setbacks required by zoning.

Right-of-way will be required from 6 parcels owners. Each parcel is an acquisition required for the construction of the proposed roadway cross section. The property to be acquired is open pasture, timber, or agricultural. The total area of acquisition for Right-of-Way purposes is approximately 23.96 acres. Each of the acquisitions will have a negligible effect on the remaining properties. The acquisitions will not adversely affect any setback requirements due to zoning. See Exhibit E-10 for a summary of the Right-of-Way requirements.

The proposed right-of-way areas are shown on the Plan and Profile sheets in Exhibit 4.
The property owners were notified of the project by certified mail. See Exhibits E-14 and E-15 for the correspondence.
b. Are any residents, businesses or farms to be displaced?
$\square$ Yes $\boxtimes$ No
If yes, describe the number and type of displacements anticipated and mitigation that will be taken to provide relief for this impact on an attached sheet.

## 5. Prime Farmland (BLRS Manual Section 20-10)

a. If the project requires more than 3 acres/mile ( 0.75 hectares/kilometers), 10 acres (4 hectares) for a non-linear improvement, or the project ROW is not contiguous to the existing ROW, contact the Illinois Department of Agriculture and attach results of the coordination and summarize the results below.

This project requires 23.04 acres per mile which is beyond the limit of 3 acres per mile thus coordination with the Illinois Department of Agriculture is required. A total of 23.96 acres of Right-of-Way will be acquired for this project. Of the acreage required for Right-of-Way purposes 0.645 acres are presently cultivated, 0.253 acres are pasture, and 23.062 acres are pasture that was cleared from timber and has the tree stumps still remaining. Exhibit E-12 contains the May 18, 2010 correspondence from Illinois Department of Agriculture stating the project complied with IDOT's Agricultural Land Preservation Policy and Illinois Farmland Preservations Act. HLR contacted IDOA in October 2019 to see if it was still valid and in effect. IDOA's John Lohse (author of the 2010 IDOA acceptance letter) stated that as far as IDOA was concerned, the acceptance was still valid since the project never began, and it would not be issuing another letter unless IDOT required it.
b. $\boxtimes$ The project requires consultation with the Natural Resource Conservation Service., Form AD-1006 has been completed and submitted to the local office of NRCS. The completed AD-1006 form is attached. See Exhibit E-11 for compliance.
$\square$ The impact of this project on farmland conversion has been evaluated in accordance with the requirements of the US Natural Resources (NRCS). The project will cover 3 acres or less of farmland per mile ( 0.75 hectares or less of farmland per kilometer) and the conversion will not result in more than minor impacts. Accordingly, the project conforms to the general form AD-1006 prepared by NRCS. Therefore, further coordination with NRCS on this project will not be necessary.

## 6. Floodplain Encroachment (BLRS Manual Section 20-7)

Does the proposed work cross or encroach upon a 100-year floodplain, including a regulatory floodway?
$\boxtimes$ YesNo

If yes, summarize the location hydraulics study, regulatory floodway restrictions, the effect of any encroachment (including a comparison between existing and proposed conditions) and the effect of over-the-road flow on the proposed transportation facility. Attach any available floodplain maps.

This project encroaches on the 100 year high water level of an unnamed tributary to Crow Creek, which is within the boundaries of Zone C on the FEMA FIRM. Areas within Zone C are areas of minimal flooding and have no determined base flood elevations. See Exhibit E-9 for FIRM Flood Insurance Rate Map.

The backwater generated by any proposed structure is within the policy limits for a new structure. As a result, there will be no significant adverse impacts on natural and beneficial floodplain values. There will be no significant changes in flood risks.

## 7. Phase I \& II NPDES Storm Water Permit Requirements (BLRS Manual Section 7-4.01)

Will the project involve soil disturbance of 1 acre ( 0.4 hectares) or more?
$\boxtimes$ YesNo

If yes, the project must comply with the Phase II NPDES Storm Water Permit Requirements.

## 8. "404" Permit (BLRS Manual Section 7-4.02)

Does this project involve waters regulated by Section 404?
区 YesNo

Disturbance to waters of the US is 0.4426 acres (See Appendix A-4 for 404 Permit Areas).
If yes, what type of 404 permit is required? $\boxtimes$ Nationwide $\square$ Individual $\square$ Regional $\square$ None

Attach a copy of any 404 permit authorization and/or coordination letters with the Corps of Engineers.
If an individual Section 404 permit is required, please notify the Illinois Department of Transportation district office before submitting the application.
9. Special Waste (BLRS Manual Section 20-12)
a. Following the special waste assessment screening criteria shown on Figure 20-12A of the BLRS Manual, is Preliminary Environmental Site Assessment (PESA) required?
$\square$ Yes $\triangle$ No
b. Is work being done on property in the name of the state or are contract plans being prepared by the state?
$\square$ Yes
V No
c. If a PESA is required for either state or local ROW, did the PESA results determine that the project has Recognized Environmental Conditions (REC's) for special waste?
$\square$ YesNo

If the PESA results determine that the project contains REC's, describe how the special waste is proposed to be handled (including if a Preliminary Site Investigation (PSI) is required).

## 10. Environmental Survey (BLRS Manual Section 20-2)

Whenever a project involves land acquisition (including easements), any in-stream work (including drainage structure run-around), is located within or adjacent to historic properties listed in (or eligible for) the National Register of Historic Places, a bridge on the historic list, is near wetlands, or known locations of threatened or endangered species, the Environmental Survey Request Form should be submitted early in the project development phase.
a. Wild and Scenic Rivers - If this project crosses or affects a river on the National Wild and Scenic Rivers System or a river listed in the Nationwide Inventory of Rivers with potential for inclusion on the system, include coordination between the National Park Service and the Bureau of Design and Environment (BDE).
$\square$ Involvement $\quad$ No Involvement

## A copy of the Natural Resources Review is included in Exhibit E-13.

b. Wetlands - Does the proposed work impact the use of regulatory wetlands?$\boxtimes$ No

If yes, indicate how the wetlands will be migrated. $\qquad$ Banking $\square$ Accumulation $\qquad$ On-siteOther
c. Archaeological and Historical Preservation Include results of coordination. Does the project impact an archaeological or historic preservation site?
YesNo

If yes, describe any required documents.

A copy of the Cultural Resources Review is included in Exhibit E-13.
d. Threatened or Endangered Species - Does the project impact any endangered species or plants?
$\square$ Involvement
$\boxtimes$ No Involvement
Include copy of biological resources memorandum or signoff by BDE and/or IDNR.
A copy of the Natural Resources Review is included in Exhibit E-13.
e. Stream Modification and Wildlife Impacts - Include copies of any correspondence between BDE and IDNR or U.S. Fish and Wildlife Service. Attach copies of any additional coordination between local agency and IDNR or U.S. Fish and Wildlife Service whenever required as a result of biological review by BDE. Address any proposed mitigation measures.
$\square$ Involvement
$\boxtimes$ No Involvement

## 11. Section 4(f) Lands (BLRS Manual Section 20-3)

a. Does this project require any right-of-way, including temporary construction easements, from a publicly owned park, recreational area, wildlife and waterfowl, or any historic site in or eligible for the National Register of Historic Places?
$\square$ Yes $\boxtimes$ No
b. If yes, what type of of the Section $4(\mathrm{f})$ involvement has been completed?Section 4(f) deminimisStandard Section 4(f)Temporary Occupancy

## 12. Air Quality (BLRS Manual Section 20-11) Check One:

a. $\boxtimes$ This project is in an attainment area.

Projects within a portion of a nonattainment area for which the Chicago Metropolitan Agency for Planning (CMAP) is the MPO.

This project is included in the
(transportation plan) and in the Transportation
Improvement Program (TIP), endorsed by the $\qquad$ , the region's Metropolitan Planning Organization. The (transportation plan) was found to conform by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) on $\qquad$ . and by FTA on
The TIP was found to conform by FHWA on $\qquad$
Projects within a nonattainment area served by a Metropolitan Planning Organization other than CMAP.
This project is included in the Long-Range Transportation Plan and in the Improvement Program (TIP) endorsed by
the Metropolitan Planning Organization (MPO) for the region in which the project is located.

On
the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) determined that the Long-Range Transportation Plan conforms with the transportation-related provisions of the Clean Air Act Amendments of 1990. The FHWA and the FTA determined on that the TIP conforms with the Clean Air Act Amendments. These finding were in accordance with 40 CFR Part 93, "Criteria and Procedures for Determining Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and projects Funded or Approved Under Title 23 USC or the Federal Transit Act."

The project's design concept and scope are consistent with the project information used for the TIP conformity analysis. Therefore, this project conforms to the existing State Implementation Plan and the transportationrelated requirements of the 1990 Clean Air Act Amendments.

## b. Mobile Source Air Toxics (See BDE PM 52-06)

This project will not result in any meaningful changes in traffic volumes, vehicle mix, location of the exiting facility, or any other factor that would cause an increase in emissions relative to the no-build alternative. As such, FHWA has determined that this project will generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special Mobile Source Air Toxic concerns. Consequently, this effort is exempt from analysis for MSATs.

Moreover, EPA regulations for vehicle engines and fuels will cause overall MSATs to decline significantly over the next 20 years. Even after accounting for a 64 percent increase in VMT, FHWA predicts MSATs will decline in the range of 57 to 87 percent, from 2000 to 2020, based on regulations now in effect, even with a projected 64 percent increase in VMT. This will both reduce the background level of MSATs as well as the possibility of even minor MSAT emissions from this project.

## c. Construction-related Particulate Matter

Demolition and construction activities can result in short-term increases in fugitive dust and equipment-related particulate emissions in and around the project area. (Equipment-related particulate emissions are usually insignificant when equipment is well maintained.) The potential air quality impacts will be short-term, occurring only when demolition and construction work is in progress and local conditions are appropriate.

The potential for fugitive dust emissions typically is associated with building demolition, ground clearing, site preparation, grading, stockpiling of materials, on-site movement of equipment, and transportation of materials. The potential is greatest during dry periods, periods of intense construction activity, and during high wind conditions.

The Department's Standard Specifications for Road and Bridge Construction include provisions on dust control. Under these provisions, dust and airborne dirt generated by construction activities will be controlled through dust control procedures or a specific dust control plan, when warranted. The contractor and the Department will meet to
review the nature and extent of dust-generating activities and will cooperatively develop specific types of control techniques appropriate to the specific situation. Techniques that may warrant consideration include measures such as minimizing track-out of soil onto nearby publicly-traveled roads, reducing speed on unpaved roads, covering haul vehicles, and applying chemical dust suppressants or water to exposed surfaces, particularly those on which construction vehicles travel. With the application of appropriate measures to limit dust emissions during construction, this project will not cause any significant, short-term particulate matter air quality impacts.

## d. Project-level Hot Spot Analysis. Check One:

$\boxtimes$ This project is in an attainment area and does not require a hot spot analysis.
This project does not meet the definition of a project of air quality concern as defined in 40 CFR 93.123(b)(1). Due to
it has been determined that the project will not cause or contribute to any new localized PM2.5 or PM10 violations or increase the frequency or severity of any PM2.5 or PM10 violations. USEPA has determined that such projects meet the Clean Air Act's requirements without any further Hot-Spot analysis.This project is in a non-attainment or maintenance area and is a project of air quality concern. Therefore, a qualitative hot spot analysis is required. See Attachment $\qquad$ -
e. COSIM

Are through lanes or auxiliary turn lanes being added with this project?Yes $\boxtimes$ No
If yes, has a COSIM pre-screen analysis been completed?Yes $\square$ No

If yes, pre-screen analysis is attached as Attachment $\qquad$ .

If no, explain why an analysis has not been performed.

If yes, did the COSIM pre-screen analysis pass or fail? $\quad \square$ Pass $\quad \square$ Fail
If the COSIM pre-screen analysis failed, a full COSIM analysis would be required.

## 13. Noise (BLRS Manual Section 20-6)

$\square$ The referenced project meets the criteria for a Type III project established in 23 CFR Part 772. Therefore, the proposed project requires no traffic noise analysis or abatement evaluation. Type III projects do not involve added capacity, construction of new through lanes, changes in the horizontal or vertical alignment of the roadway, or exposure of noise sensitive land uses to a new or existing highway noise source.
$\square$ Based on the traffic noise analysis and noise abatement evaluation conducted, highway traffic noise abatement measures are likely to be implemented based on preliminary design. The noise barriers determined to meet the feasible and reasonable criteria are identified on the attachment. If it subsequently develops during final design that constraints not foreseen in the preliminary design or public input substantially change, the abatement measures may need to be modified or removed from the project plans. A final decision of the installation of the abatement measure(s) will be made upon completion of the project's final design and the public involvement process.

If this project involves a new alignment, additional lanes, or involves a significant alignment change, attach a traffic noise analysis.

See Appendix A-5 for Noise Analysis Report.

## 14. Work Zone Transportation Management Plans

Does the project intersect or follow a state route?
$\square$ Yes $\boxtimes$ No
Is the state or local route considered a significant route?$\boxtimes$ NoNot Applicable
If yes, describe how the Work Zone Transportation Management Plan is being implemented.

## 15. Complete Streets (BLRS Manual Chapter 10)

Does the project include the addition of a travel, turning, or bi-directional turn lane on a state highway?
$\square$ Yes
இNo

If yes, describe how the Complete Streets Law requiring accommodating bicyclists on a state route apply.

## 16. Maintenance of Traffic (BLRS Manual Section 22-2.11(b)(9))

Discuss how vehicle traffic and pedestrians will be accommodated during construction, including the impacts of any road and/or sidewalk closure. If the road will be closed, include information concerning location of alternate routes, their ability to handle the additional traffic (street width, number of traffic lanes, structural adequacy, etc.), and the amount of adverse travel. When a marked detour route will be provided, include coordination with appropriate agencies, a description of the adverse travel, and include a map showing the alternate routes or marked detour in the report.

Majority of project is new roadway construction on a new horizontal alignment which will not affect the existing traffic patterns using existing Western Avenue. The construction of the tie in locations at the beginning and end of the project will be completed under traffic but to shorten the construction time of the tie-ins a temporary detour could be used. Access to TR1130 will be maintained at all times. Access for local residents, emergency vehicles, and school buses will be maintained at all times. Exhibit E-21 contains an Alternate Route Map, and is described below:

## Stage 1

While maintaining traffic on existing FAS 372 / (CH6) / Western Avenue, construct proposed double 10’X6.5' box culvert at Station 35+68. Construct proposed mainline pavement and crossroad structures from Station 35+00 to Station 74+00. Construct Relocated SR 1130E while providing access at all times for local traffic on existing SR 1130E.

## Stage 2

Close FAS 372 /(CH6) / Western Ave to all through traffic. Through traffic will be detoured one mile to the north. A marked detour route will not be provided. The effect of this road closure will be minimal due to the low traffic volume. The rerouted traffic can use Co Rd 950 E, Co Rd 1400 N, and Co Rd 1250 E, which have adequate capacity for the additional traffic.
Complete construction from Station 74+00 to Station 85+00 with all local traffic being maintained on existing FAS 372 / (CH6) / Western Ave to the east.
Complete construction from Station 30+00 to Station 35+00. Maintain local traffic on newly constructed FAS 372 / (CH6) / Western Ave to the west.

## Stage 3

Complete final grading, paving, shoulder construction and the construction of the proposed cul-de-sac.

## 17. Public Involvement (BLRS Manual Chapter 21)

a. Summarize public informational meetings, formal public hearings, property owner signoffs, council or board meetings, media coverage, and personal contact with public. Include copies of newspaper advertisements, letter to property owners, public comments, and documents showing all public comments have been addressed.
-The project was discussed publicly at the County Board meetings, which are covered by the media.
-Representatives from the Marshall County Highway department have discussed the project with the property owners throughout the project limits.
-A public informational meeting was held on December 19, 2007. All of the property owners throughout the project limits were notified by certified letter of the information meeting. See Exhibit E-14 for Notice of Information Meeting, Certificate of Publication, attendance list, comments received from the public, and responses to comments from the public hearing. All property owners' comments have been addressed and incorporated in the proposed plans.
-An article was published in the Peoria Journal Star regarding the project on 12/21/2007. See Exhibit E-18 for a copy of the article.
-Updated notifications were prepared and sent to property owners throughout the project limits. See Exhibit E15 for the 2020 notifications and correspondence.
b. Has any opposition been expressed toward the improvement?
$\square$ Yes $\boxtimes$ No
If yes, briefly discuss the type and extent of opposition.
c.

If yes, discuss how the opposition has been addressed with the property owners?

## 18. Coordination: LA-IDOT-FHWA (BLRS Manual Section 22-1.02)

Have there been any coordination meetings for this project? $\boxtimes$ Yes $\square$ No
If yes, list the date(s) of the coordination meeting(s) below and attach coordination meeting minutes in the report.
Project has been discussed at two Coordination Meetings. At the Coordination Meeting held in District 3 on September 13, 2001 the project limits and horizontal alignment were established. At the Coordination Meeting held in District 4 on December 5, 2007 the project scope was updated. See Exhibit E-17 for both meetings documentation.

## 19. Other Coordination

Local utilities have been notified of the proposed construction. See Exhibit E-20 for utility correspondence. Final plans will be provided to the affected utilities prior to construction.
See Appendix Section for further coordination.

## 20. Summary of Commitments

1. Trees three inches or greater in diameter shall not be cleared from April $1^{\text {st }}$ through September $30^{\text {th }}$.
2. All trees removed shall be mitigated on site at a 1:1 replacement ratio and protected in perpetuity.
3. The Bridge Bat Assessment expires 9/23/2022. If construction is not started prior to this date, an updated assessment is required prior to any work below the existing bridge deck surface.
4. An updated 404 Nationwide Permit is required prior to letting.

## EXHIBITS

## EXHIBITS

| E-1 | Location Map |
| :--- | :--- |
| E-2 | Functional Classification Map |
| E-3 | Existing and Proposed Typical Sections |
| E-4 | Plan and Profile Sheets |
| E-5 | Traffic Accident Location Diagram |
| E-6 | Summary of Traffic Accidents |
| E-7 | Existing and Proposed Horizontal Alignment Tabulation |
| E-8 | Existing and Proposed Vertical Alignment Tabulation |
| E-9 | FIRM Flood Insurance Rate Map |
| E-10 | Right-of-Way Requirement Summary |
| E-11 | Natural Resource Conservation Service Coordination |
| E-12 | Illinois Department of Agriculture Coordination |
| E-13 | Environmental Bio and Cultural Survey Request |
| E-14 | 2007 Public Information Meeting Documentation and Property Owner Notices |
| E-15 | 2020 Property Owner Coordination Letters |
| E-16 | Traffic Data |
| E-17 | Coordination Meeting Minutes |
| E-18 | Peoria Journal Star Article |
| E-19 | Project Cost Estimate |
| E-20 | Utility Coordination |
| E-21 | Desernate Route Map |
| E-22 | Preliminary Bridge Design and Hydraulic Report Approval |
| E-23 |  |

## LOCATION MAP

 MARSHALL COUNTY

## FUNCTIONAL CLASSIFICATION MAP MARSHALL COUNTY

Project Location
RNG 9 E, 4TH P.M.
Sec. 99-00080-00-FP



q Proposed alignment


## EEGEND

(1) FULL DEPTH hot-mix ASphalt
(2) AGGREGATE bASE COURSE, TYPE A
(3) AGGREGATE SHOULDER
(4) Existing pavement
(5) hot-mix ASPHALT RESURFACING
(6) AGGregate base course, TYPE A
edge striping

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Exhibit E-4



