TIER 3 CATEGORICAL EXCLUSION

ARDOT JOB 040714

FAP VHFP-9429(15)

I-40/HWY. 59 INTERCHANGE IMPVTS. (VAN BUREN) (S)

ROUTE I-40, SECTION 11

ROUTE 59, SECTION 5

CRAWFORD COUNTY

Submitted Pursuant to 42 U.S.C. 4332(2)

By the

U.S. Department of Transportation

Federal Highway Administration

And the

Arkansas Department of Transportation

November 2022

November 7, 2022

Date of Approval

Randal Looney

Environmental Coordinator

Federal Highway Administration

The Environmental Division reviewed the referenced project and has determined it falls within the definition of the Tier 3 Categorical Exclusion as defined by the ARDOT/FHWA Programmatic Agreement on the processing of Categorical Exclusions. The following information is included for your review and, if acceptable, approval as the environmental documentation for this project.

The purpose of the project is to improve the I-40/Highway 59 Interchange within the city limits of Van Buren, Arkansas in Crawford County. The project length is 0.59 mile. A project location map is attached.

The project will include construction of two button hook ramps for I-40 eastbound traffic that will connect to a new roundabout located slightly east of Elfen Glen Street. This new roundabout will provide access to the new I-40 eastbound on/off ramps, to Highway 59 via the I-40 Service Road, and to Elfen Glen Street. The off-ramp for I-40 westbound to Highway 59 will be widened to provide two lanes for right and left turns each. These intersection improvements will require new right of way acquisition totaling 5.4 acres. In addition, temporary construction easements will total 0.04 acre.

The project will not involve underground storage tanks, relocations, hazardous materials, or any environmental justice issues. The State Historic Preservation Officer's clearance is attached.

Design data for this project is as follows:

Design Year	Average Daily Traffic	Percent Trucks	Design Speed
I-40 Service Road			
2022	13,500	2	40 mph
2042	16,350	2	40 mph
I-40			
2022	33,800	24	70 mph
2042	42,900	24	70 mph

The attached official species lists obtained through the US Fish and Wildlife Service's (USFWS) Information for Planning and Consultation identified the following species as potentially occurring within the project area: Indiana bat (*Myotis sodalis*), gray bat (*Myotis grisescens*), northern long-eared bat (*Myotis septentrionalis*), Ozark big-eared bat (*Corynorhinus townsendii ingens*), Eastern Black Rail (*Laterallus jamaicensis* ssp. *jamaicensis*), Piping Plover (*Charadrius*

melodus), Red Knot (*Calidris canutus rufa*), American burying beetle (*Nicrophorus americanus*), monarch butterfly (*Danaus plexippus*), and Missouri bladderpod (*Physaria filiformis*). This project will have "no effect" on the aforementioned federally species due to the limited scope of the action, lack of suitable habitat, and distance to known species locations. USFWS correspondence is attached.

The monarch butterfly is a candidate species and as such is not federally protected under the Endangered Species Act. However, The U. S. Fish and Wildlife Service recommends agencies implement conservation measures for candidate species in action areas as these are species, by definition, that may warrant future protection under the Act. ARDOT will plant native wildflowers after construction as a conservation measure.

Total stream impacts for the construction at this project are estimated at 733 linear feet, requiring 2,715.5 stream mitigation credits. Compensatory mitigation of to offset the stream impacts will be provided at the closest, approved mitigation bank that services the area. Construction should be covered under the terms of a Nationwide Permit 14 for Categorical Exclusion as defined in Federal Register 86(245): 73522-73583. A preconstruction notification will be required.

Crawford County participates in the National Flood Insurance Program. Louemma Creek is a studied stream and is located in the project area as a Zone AE Special Flood Hazard Area. The final project design will be reviewed to confirm that the design is adequate and that the potential risk to life and property are minimized. Adjacent properties should not be impacted nor have a greater flood risk than existed before construction of the project. None of the encroachments will constitute a substantial floodplain encroachment or risk to property or life.

The attached traffic noise impact analysis was completed for the proposed project in accordance with the ARDOT noise policy. The noise analysis was used to: determine noise impacts under current conditions and predicted conditions if the project is constructed; predict noise impacts resulting from project construction; identify noise sensitive land use locations (receptors); and evaluate potential noise abatement measures.

The FHWA Traffic Noise Model Version 2.5 (TNM) software was used to predict existing and future noise impacts. TNM modeling was completed using existing year 2022 and design year 2042 traffic and roadway information. For residences, the ARDOT noise policy considers A-weighted sound levels in decibels (dBA) of 66 dBA and above as noise impacts.

A total of four receptors at an apartment complex adjacent to the project were predicted to experience noise impacts. According to the ARDOT noise policy, the

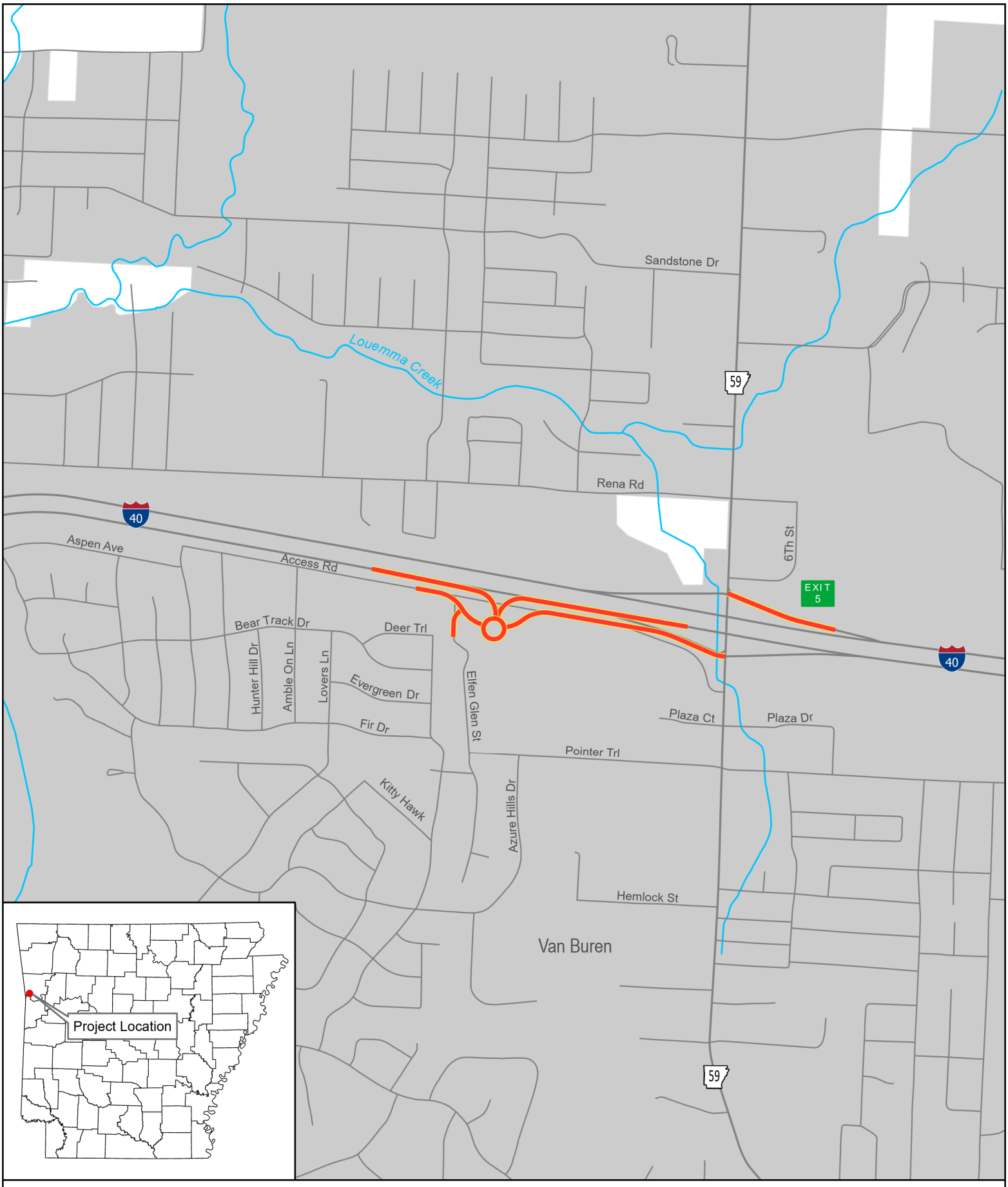
noise level increases would be considered moderate. No substantial noise level increases (≤ 10 dBA) were predicted.

A noise barriers were determined to be the only available potential abatement measure to reduce noise levels for the impacted area. Based on the noise barrier analysis, a preliminary determination was made that a noise barrier would be feasible (e.g., constructible) and reasonable (e.g., cost effective).

Input from the apartment complex owner and residents who would benefit from a noise barrier was solicited. Letters describing the noise barrier decision process and voting ballot/comment forms were provided via certified mail in November 2021. However, a consensus (greater than 50%) of support for or against provision of a noise barrier was not established. Letters and ballot/comment forms were again provided via certified mail in March 2022 in a second attempt to obtain consensus. Since consensus was not reached during the second attempt, efforts to collect viewpoints of the benefited apartment complex owner and residents was discontinued. Construction of a noise barrier will not be included in this job. Any subsequent project design changes may require a re-evaluation of the preliminary noise barrier proposal.

This project has been determined to generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special mobile source air toxic (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 a meaningful increase in MSAT impacts of the project from that of the no-build alternative.

A Phase II Virtual Public Involvement (VPI) meeting was held on Thursday, April 8, 2021. A synopsis of the meeting is attached.


Sandstone Dr
Louemma Creek
59
Rena Rd
40
Aspen Ave
Access Rd
6Th St
EXIT 5
Bear Track Dr
Deer Trl
Hunter Hill Dr
Amble On Ln
Lovers Ln
Evergreen Dr
Fir Dr
Elfen Glen St
Plaza Ct
Plaza Dr
Pointer Trl
Kitty Hawk
Azure Hills Dr
Hemlock St
Van Buren
Project Location
N
0
600
1,200
Feet
ARDOT - Environmental GIS - Strawn
October 4, 2021
Job 040714
I-40/Hwy. 59 Interchange Impvts.
(Van Buren)
Crawford County
Project Location

Brown, Caitlin M.

From: Eric Mills <Eric.Mills@arkansas.gov>
Sent: Saturday, December 5, 2020 2:13 PM
To: Environmental Clearance
Cc: Looney, Randal
Subject: AHPP 107157.01 - FHWA_ARDOT 040714_Crawford County

Mr. John Fleming
Division Head
Environmental Division
Arkansas Department of Transportation
P.O. Box 2261
Little Rock, AR 72203-2261

RE: Crawford County — Van Buren
Section 106 Review — FHWA
1-40/Hwy. 59 Interchange Impvts. (Van Buren) (S)
Route I-40, Section 11
Route 59, Section 5
ARDOT Job Number 040714
AHPP Tracking Number 107157.01

Dear Mr. Fleming:

The staff of the Arkansas Historic Preservation Program reviewed the Project Identification Form (PIF) for the proposed undertaking in Township 9 North, Range 32 West, Section 13, Crawford County, Arkansas. As described, the proposed undertaking entails interchange improvements at the intersection of Interstate 40 and Highway 59. The undertaking will require acquisition of an additional 5.35 acres of right-of-way. Including .04-acres of temporary construction easement, the total survey area for the cultural resource investigation totaled 5.39 acres. Based on the provided information, including the results of the field investigation, the AHPP concurs with a finding of **no historic properties affected pursuant to 36 CFR 800.4(d)(1)** for the undertaking.

Thank you for the opportunity to review the PIF and undertaking. Please contact me if you have any questions.

Sincerely,

ERIC R. MILLS
Archeologist / Section 106 Manager

Arkansas Historic Preservation Program
1100 North Street
Little Rock, AR 72201
eric.mills@arkansas.gov
p: 501.324.9784 | f: 501.324.9184

ArkansasPreservation.com

Asa Hutchinson
Governor
Stacy Hurst
Secretary

September 23, 2021

Mr. John Fleming
Division Head
Environmental Division
Arkansas Department of Transportation
P.O. Box 2261
Little Rock, AR 72203-2261

RE: Crawford County: Van Buren
Section 106 Review: FHwA
Proposed Undertaking: I-40/Hwy. 59 Interchange Impvts. (Van Buren) (S)
Route I-40, Section 11
Route 59, Section 5
Geophysical Survey Report: *Archival Research and Geophysical Survey of Approximately 0.08 Hectares in Search of the Miller Cemetery, Van Buren, Crawford County, Arkansas*
Contract Publication Series: 21-209
ARDOT Job Number: 040714
AHPP Tracking Number: 107157.02

Dear Mr. Fleming:

The staff of the Arkansas Historic Preservation Program (AHPP) reviewed the geophysical survey report for the above referenced undertaking in Crawford County, Arkansas in Section 13, Township 9 North, Range 32 West. The proposed undertaking entails interchange improvements at the intersection of Interstate 40 and Highway 59 and will require an additional 5.35 acres of right-of-way and .04-acres of temporary construction easement. Archival research of the area of potential effect (APE) resulted in the discovery of a potential historic cemetery, the Richard J. Miller Burial Plot. Cultural Resource Analysts, Inc. (CRA) conducted further archival research and a geophysical survey to determine where the cemetery was located and its approximate boundaries. Anomalies were found during the survey, some of which appeared to be burials. Ground-truthing excavations are recommended to confirm that these anomalies are in fact cemetery burials.

Based on the provided information, the AHPP would prefer that the cemetery location be avoided. If this is not possible, then mitigation will be needed to discuss possible alternatives, such as ground truthing to confirm that there are in fact burials present.

Tribes that have expressed an interest in the area include the Cherokee Nation, the Choctaw Nation of Oklahoma, the Muscogee (Creek) Nation, the Osage Nation, the Quapaw Nation, the Shawnee Tribe, and the United Keetoowah Band of Cherokee Indians. We recommend consultation in accordance with 36 CFR § 800.2(c)(2).

Thank you for the opportunity to review this undertaking. Please refer to the AHPP Tracking Number listed above in all correspondence. If you have any questions, call Jessica Cogburn at 501-324-9357 or email jessica.cogburn@arkansas.gov.

Sincerely,

for
Scott Kaufman
Director, AHPP

cc: Mr. Randal Looney, Federal Highway Administration
Dr. Melissa Zabecki, Arkansas Archeological Survey

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Arkansas Ecological Services Field Office
110 South Amity Suite 300
Conway, AR 72032-8975
Phone: (501) 513-4470 Fax: (501) 513-4480

In Reply Refer To: October 31, 2022
Project Code: 2023-0010376
Project Name: 040714 - I-40/Hwy. 59 Interchange Impvts. (Van Buren) (S)

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Arkansas Ecological Services Field Office
110 South Amity Suite 300
Conway, AR 72032-8975
(501) 513-4470

Project Summary

Project Code: 2023-0010376
Project Name: 040714 - I-40/Hwy. 59 Interchange Impvts. (Van Buren) (S)
Project Type: Road/Hwy - Maintenance/Modification
Project Description: Interstate interchange improvements.
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@35.46324065,-94.36001038858025,14z

Counties: Crawford County, Arkansas

Endangered Species Act Species

There is a total of 10 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Gray Bat *Myotis grisescens* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6329	Endangered
Indiana Bat *Myotis sodalis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened
Ozark Big-eared Bat *Corynorhinus (=Plecotus) townsendii ingens* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7245	Endangered

Birds

NAME	STATUS
Eastern Black Rail *Laterallus jamaicensis ssp. jamaicensis*	Threatened
No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10477	
Piping Plover *Charadrius melodus*	Threatened
Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039	
Red Knot *Calidris canutus rufa*	Threatened
There is **proposed** critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/1864	

Insects

NAME	STATUS
American Burying Beetle *Nicrophorus americanus*	Threatened
Population: Wherever found, except where listed as an experimental population No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/66	
Monarch Butterfly *Danaus plexippus*	Candidate
No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	

Flowering Plants

NAME	STATUS
Missouri Bladderpod *Physaria filiformis*	Threatened
No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5361	

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC User Contact Information

Agency: Arkansas Department of Transportation
Name: Nicholas Dial
Address: 10324 I-30
City: Little Rock
State: AR
Zip: 72209
Email nicholas.dial@ardot.gov
Phone: 5015692617

United States Department of the Interior

FISH AND WILDLIFE SERVICE
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Phone: (501) 513-4470 Fax: (501) 513-4480
http://www.fws.gov/arkansas-es

IPaC Record Locator: 110-103467797 June 30, 2021

Subject: Consistency letter for the 'I-40/Hwy. 59 Interchange Impvts. (Van Buren) (S)' project (no current TAILS record) under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request to verify that the **I-40/ Hwy. 59 Interchange Impvts. (Van Buren) (S)** (Proposed Action) may rely on the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action will have no effect on the endangered Indiana bat (*Myotis sodalis*) or the threatened Northern long-eared bat (*Myotis septentrionalis*). If the Proposed Action is not modified, **no consultation is required for these two species.**

For Proposed Actions that include bridge/structure removal, replacement, and/or maintenance activities: If your initial bridge/structure assessments failed to detect Indiana bats, but you later detect bats during construction, please submit the Post Assessment Discovery of Bats at Bridge/Structure Form (User Guide Appendix E) to this Service Office. In these instances, potential incidental take of Indiana bats may be exempted provided that the take is reported to the Service.

If the Proposed Action may affect any other federally-listed or proposed species and/or designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please advise the lead Federal action agency accordingly.

Determination Key Result

Based on the information you provided, you have determined that the Proposed Action will have no effect on the endangered Indiana bat and/or the threatened Northern long-eared bat. Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for these two species.

Qualification Interview

1. Is the project within the range of the Indiana bat[1]?

   [1] See Indiana bat species profile

   Automatically answered
   Yes

2. Is the project within the range of the Northern long-eared bat[1]?

   [1] See Northern long-eared bat species profile

   Automatically answered
   Yes

3. Which Federal Agency is the lead for the action?

   A) Federal Highway Administration (FHWA)

4. Are *all* project activities limited to non-construction[1] activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

   [1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

   No

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/rail surfaces[1]?

   [1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

   No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum[1]?

   [1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

   No

7. Is the project located **within** a karst area?

   No

8. Is there *any* suitable[1] summer habitat for Indiana Bat or NLEB **within** the project action area[2]? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

   [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

   [2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the national consultation FAQs.

   No

9. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?

   No

10. Does the project include slash pile burning?

    No

11. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?

    No

12. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)

    Yes

13. Is there *any* suitable habitat[1] for Indiana bat or NLEB **within** 1,000 feet of the structure? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

    [1] See the Service's current summer survey guidance for our current definitions of suitable habitat.

    No

14. Will the project involve the use of **temporary** lighting *during* the active season?

    No

15. Will the project install new or replace existing **permanent** lighting?

    No

16. Does the project include percussives or other activities (**not including tree removal/ trimming or bridge/structure work**) that will increase noise levels above existing traffic/ background levels?

    No

17. Are *all* project activities that are **not associated with** habitat removal, tree removal/ trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

    Examples: lining roadways, unlighted signage , rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.

    Yes

18. Will the project raise the road profile **above the tree canopy**?

    No

19. Is the location of this project consistent with a No Effect determination in this key?

    Automatically answered

    Yes, because the project action area is not within suitable Indiana bat and/or NLEB summer habitat and is outside of 0.5 miles of a hibernaculum.

20. Is the structure removal, replacement, or maintenance activities portion of this project consistent with a No Effect determination in this key?

    Automatically answered

    Yes, because the structure is more than 1,000 feet from the nearest suitable habitat and is therefore considered unsuitable for use by bats

Determination Key Description: FHWA, FRA, FTA Programmatic Consultation For Transportation Projects Affecting NLEB Or Indiana Bat

This key was last updated in IPaC on April 22, 2021. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the threatened **Northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects. The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Arkansas Ecological Services Field Office
110 South Amity Suite 300
Conway, AR 72032-8975
Phone: (501) 513-4470 Fax: (501) 513-4480
http://www.fws.gov/arkansas-es

IPaC Record Locator: 110-103467381 June 30, 2021

Subject: Consistency letter for 'I-40/Hwy. 59 Interchange Impvts. (Van Buren) (S)' project for a No Effect determination for the American burying beetle

Dear Nicholas Dial:

The U.S. Fish and Wildlife Service (Service) received on **June 30, 2021** your effect determination(s) for the 'I-40/Hwy. 59 Interchange Impvts. (Van Buren) (S)' (the Action) using the American burying beetle (*Nicrophorus americanus*) determination key within the Information for Planning and Consultation (IPaC) system.

The Service developed this system in accordance with the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.)
Based on your consideration of the Action and the assistance in the Service's American burying beetle determination key, you have determined that your proposed action will have No Effect on the American burying beetle.

Your agency has met consultation requirements for these species by informing the Service of your "no effect" determination. No further consultation for this project is required for the American burying beetle. This consistency letter confirms you may rely on effect determinations you reached by considering the American burying beetle DKey to satisfy agency consultation requirements under Section 7(a) (2) of the Endangered Species Act of 1973 (87 Stat. 884, as amended 16 U.S.C. 1531 et seq.; ESA).

Coordination with your local Ecological Services Office is complete for the American burying beetle. If your project may affect additional listed species, please contact your local Ecological Services Field Office for assistance with those species. Thank you for considering Federally-listed species during your project planning.

This letter covers only the American burying beetle. It **does not** apply to the following ESA-protected species that also may occur in the Action area:

- Eastern Black Rail *Laterallus jamaicensis ssp. jamaicensis* Threatened
- Gray Bat *Myotis grisescens* Endangered
- Indiana Bat *Myotis sodalis* Endangered

- Missouri Bladderpod *Physaria filiformis* Threatened
- Northern Long-eared Bat *Myotis septentrionalis* Threatened
- Ozark Big-eared Bat *Corynorhinus (=Plecotus) townsendii ingens* Endangered
- Piping Plover *Charadrius melodus* Threatened
- Red Knot *Calidris canutus rufa* Threatened

If your project may affect additional listed species, you must evaluate additional DKeys for other species, or submit a request for consultation for the additional species to your local Ecological Services Field Office.

The Service recommends that your agency contact the Service or re-evaluate the project in IPaC if: 1) the scope or location of the proposed project is changed significantly, 2) new information reveals that the action may affect listed species or designated critical habitat; 3) the action is modified in a manner that causes effects to listed species or designated critical habitat; or 4) a new species is listed or critical habitat designated. If any of the above conditions occurs, additional consultation should take place before project changes are final or resources committed.

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

I-40/Hwy. 59 Interchange Impvts. (Van Buren) (S)

2. Description

The following description was provided for the project 'I-40/Hwy. 59 Interchange Impvts. (Van Buren) (S)':

> Interchange improvements to include two button hook ramps and deceleration and acceleration lanes and two DMS.

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@35.46309925,-94.35727338372365,14z

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

   Yes

2. Have you determined that the proposed action will have “no effect” on the American burying beetle? (If you are unsure select "No")

   Yes

Project Questionnaire

Please select the activity that best matches your proposed action.

8. Soil disturbance related to road construction and maintenance

If you chose 13 above, please describe below. If you did not choose 13 above, please type "0".

0

Noise Study Report

I-40/Hwy. 59 Interchange Impvts. (Van Buren) (S)
ARDOT Job 040714
FAP No. NHFP-9429(15)
Crawford County

U.S. Department of Transportation
Federal Highway
Administration

1. INTRODUCTION

The Federal Highway Administration (FHWA) established a standard for assessing highway traffic-generated noise in compliance with 23 USC Section 109(h) and (i). The standard, published as Part 772 of Title 23 of the Code of Federal Regulations (23 CFR Part 772), provides procedures for assessing noise impacts. A noise impact assessment (assessment) was completed for a proposed Interstate 40 (I-40) and Highway 59 interchange improvement project in accordance with the FHWA standard and the Arkansas Department of Transportation (ARDOT) *Policy on Highway Traffic Noise Abatement*.

This Noise Study Report provides the assessment results and serves to:

- Provide baseline noise levels used to determine noise impacts.
- Predict the effects the project would have on the noise environment.
- Identify noise impact locations and evaluate potential noise abatement measures.
- Update the Draft Noise Study Report (completed November 2021).

1.1 What is the Proposed Project?

The purpose of the proposed project is to improve the I-40 and Highway 59 interchange in Van Buren, Crawford County. The project involves relocating the I-40 eastbound on and off ramps, modifying the I-40 westbound off ramp, and constructing a roundabout on the I-40 eastbound access road. The project will also include improvements at ramp and access road intersections with Highway 59.

1.2 Why were Noise Impacts Assessed for this Project?

ARDOT evaluates whether predicted sound levels could result in highway traffic noise impacts during the environmental review process for all federal Type I projects. If noise impacts are identified, reasonable and feasible noise abatement measures must be considered. The project meets FHWA Type I criteria because it includes adding and relocating interchange ramps and substantially altering existing horizontal and vertical alignments and topography.

2. WHAT IS THE EXISTING NOISE ENVIRONMENT?

This section presents background information on sound and noise levels, criteria used to measure noise impacts, and determining noise levels for noise sensitive areas. Vehicular traffic is the principal source of noise in the project area.

2.1 How is Noise Defined?

Noise is defined as unwanted or undesirable sound. The three basic parameters of noise affecting humans are summarized below.

Intensity is determined by the level of sound expressed in units of decibels (dB). A 3 dB change in sound level is barely perceptible to most people in a common outdoor setting. However, a 5 dB increase presents a noticeable change. A 10 dB sound level increase is typically perceived to be twice as loud. Outdoor conversation at normal levels at a distance of 3 feet becomes difficult when the sound level exceeds the mid-60 dBA range.

Frequency is related to the tone or pitch of the sound; the sensitivity of human hearing varies with frequency. The amplification or attenuation of different frequencies of sound to correspond to the way the human ear "hears" these frequencies is referred to as "A-weighting". The A-weighted sound level in decibels is expressed as dBA.

Variation with time occurs because most environmental noise fluctuates from moment to moment. A single level called the equivalent sound level (L_{eq}) is used to compensate for this fluctuation. The L_{eq} is a steady sound level that would contain the same amount of sound energy as the actual time-varying sound evaluated over the same time period. The L_{eq} averages the louder and quieter moments, but gives more weight to the louder moments. For traffic noise assessment purposes, L_{eq} is typically evaluated over the worst 1-hour period and written as $L_{eq(h)}$.

2.2 What Factors Affect Traffic Noise Levels?

Traffic noise levels depend on many factors, including the geometry (distance, land cover, topography, etc.) and traffic characteristics (volume, vehicle type, speed, etc.) of proposed roadways. For example, L_{eq} noise levels along a straight, at-grade roadway decrease with distance. Land cover such as lawn, vegetation, or other sound absorptive materials generally decrease the noise level at a rate of 4.5 dBA per a doubling of distance. Conversely, in urban areas with concrete and

other hard surfaces, the noise level drops off at a much slower rate - typically around 3 dBA per a doubling of distance.

Noise levels from trucks are much greater than from automobiles. Consequently, noise level changes are more sensitive to truck volumes than changes in overall traffic flow. Travel speeds are also an important factor. On a roadway carrying a given volume of traffic, traffic noise levels increase by 5 to 6 dBA as the speed increases from 30 to 45 mph, and by another 3 dBA as the speed increases to 55 mph.

2.3 How are Noise Levels Predicted?

The FHWA Traffic Noise Model Version 2.5 (TNM) software program predicts $L_{eq(h)}$ traffic noise levels and is used to obtain reasonable estimates of traffic noise at discrete locations. The TNM program allows for existing and future roadway conditions to be modeled. Modeling inputs include traffic characteristics such as those described in Section 2.2, and the interactions between different noise sources and the effects of topographical features on predicted noise levels are considered.

A ***receiver*** is a discrete point modeled in the TNM program at areas of frequent human use of a property. A ***receptor*** is defined as a representative location of a noise sensitive area for various land uses. For single-family residences, that could be the front or back yard. In areas with common noise environments, one modeled TNM receiver can be considered representative of many receptors. This occurs in places like apartment buildings where noise level estimates at one modeled TNM receiver on a given floor may be representative of noise conditions for all the receptors on that floor.

2.4 What is a Noise Impact?

Noise impacts are determined by comparing future “design year” project worst hour $L_{eq(h)}$ values to: (1) a set of Noise Abatement Criteria (NAC) for different land use categories; and (2) existing $L_{eq(h)}$ values. Year 2022 is the existing year and Year 2042 is the design year for the proposed project. **Table 1** shows the land uses classified as Activity Categories A through G and the corresponding NAC.

Table 1. Noise Abatement Criteria (NAC) Hourly A-Weighted Sound Level - Decibels (dBA)

Activity Category	$L_{eq(h)}$	Description of Activity Category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose
B	67 (Exterior)	Residential
C	67 (Exterior)	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings
D	52 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios
E	72 (Exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A-D or F
F	-	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing
G	-	Undeveloped lands that are not permitted

Source: FHWA, 23 CFR Part 772

A noise impact occurs when design year build levels approach or exceed the NAC thresholds. ARDOT considers approach levels as 1 dBA less than the NAC thresholds. For example, the approach noise level for Category B - Residential is 66 dBA. As detailed in Section 3.1.2, noise impacts approaching this NAC threshold were identified.

A noise impact also occurs when design year build levels are 10 dBA or greater than existing noise levels. No substantial increases were predicted for this project.

2.5 What if Noise Impacts are Identified?

The FHWA noise standards (23 CFR 772) and ARDOT's noise policy state that noise abatement should be considered when traffic noise impacts have been identified. The abatement consideration process includes evaluating the feasibility and reasonableness of abatement measures.

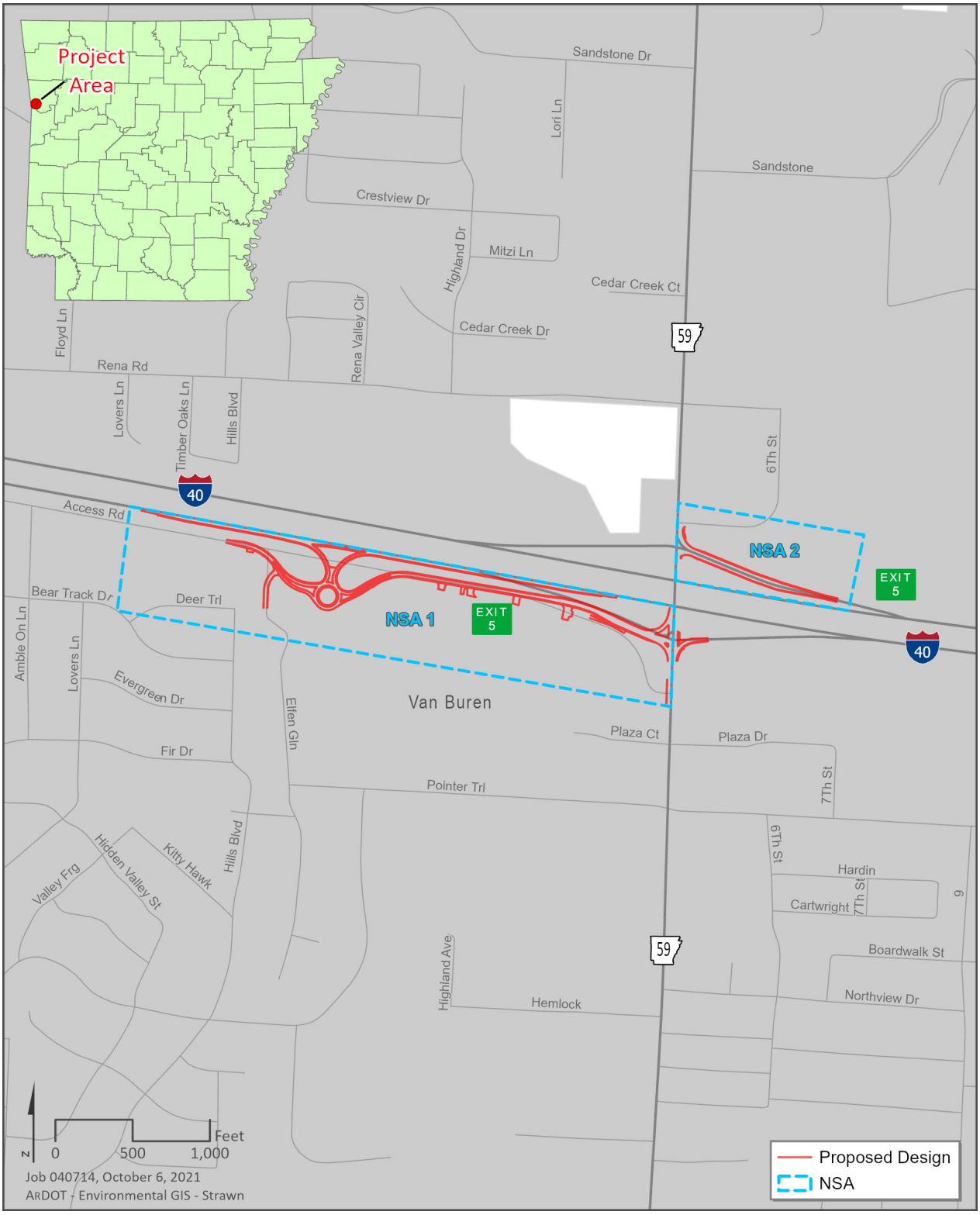
Feasible means that a noise barrier will provide at least a 5 dBA reduction in the $L_{eq(h)}$ for at least one impacted receptor. Additionally, the noise barrier should not pose any major problems related to design, construction, safety, drainage, maintenance, or other factors. However, feasibility alone does not dictate whether a noise barrier will be built. Each noise barrier must also pass a "reasonableness" test.

Reasonableness determinations are based on multiple individual circumstances of a particular project, including the cost of the noise barrier averaged over the number of receptors shown by modeling to benefit from the barrier. To "benefit" means that the barrier would reduce sound levels by 5 or more dBA. ARDOT's noise policy specifies a noise reduction design goal of 8 dBA must be achieved for at least one impacted receptor in order for a noise abatement measure to be considered reasonable. The preferences of property owners and residents identified as benefited are also considered.

2.6 How was the Noise Study Area (NSA) Defined?

Noise Study Areas (NSA) were delineated by reviewing available electronic mapping and identifying noise-sensitive land uses within the project area. Existing and potential noise exposures indicated by traffic data and screening level noise modeling results were also considered. The NSAs include all land uses/receptors within 500 feet of the edge of the outside travel lanes of I-40. As shown on **Figure 1**, two NSAs were initially identified and are briefly described below.

Figure 1. Project Location



NSA 1 – This NSA has Activity Category B, C, and F land uses which include single-family residences, an apartment complex, a day care center, and businesses. NSA 1 is located south of the I-40 eastbound access road between Amble On Lane and Highway 59.

NSA 2 – This NSA is a commercial area north of I-40 westbound and east of Highway 59. It consists of Activity Category F land uses which are not considered noise sensitive. A detailed noise analysis was therefore not conducted for NSA 2.

3. HOW WAS THE PROJECT MODELED AND WHAT WERE THE RESULTS?

This section summarizes the project modeling results. The TNM input and output files used for noise modeling are provided in the following appendices: **Appendix A** – Noise Measurement Results; **Appendix B** – Traffic Data for Noise Modeling; **Appendix C** – TNM Plan Views; **Appendix D** – Noise Modeling and Barrier Evaluation Results; **Appendix E** – Project Design.

A detailed noise analysis was performed for NSA 1 using the TNM program. The analysis was then used to model a free-standing noise barrier. As described in Section 2.3, TNM inputs included traffic characteristics and considered topography and potential receptor shielding effects provided by existing structures and vegetation. Elevations were obtained from a Digital Terrain Model created by ARDOT's Surveys Division. Supplemental elevation data was obtained from a high resolution Digital Elevation Model derived from LiDAR data. The detailed noise analysis results include noise levels for current conditions and predicted conditions if the project is constructed (Build Alternative).

3.1 How was the Model Validated?

In accordance with the ARDOT noise policy for verifying modeling accuracy, existing noise levels were measured in the field and compared to TNM predictions using traffic data collected at the same time as the noise measurements. This process is called model validation. The field measurements are sequentially obtained at three 15-minute intervals for each validation point. If the predicted and field measurement levels are within ±3 dBA of each other, the model is within the accepted level of accuracy and considered to have been validated.

3.1.1 What were the Field Measurement Results?

The model validation field measurements obtained at NSA 1 are summarized below.

NSA 1 Field Measurements

Validation field measurements were collected on August 9, 2021 from a single location within the NSA. Copies of the field measurement notes are provided in Appendix F. The field measurements and TNM comparison results are summarized in **Table 2**. All field measurements were within 3 dBA of the TNM calculations; the model was therefore validated.

Table 2. NSA 1 Existing Field Measurements and TNM Results (dBA $L_{eq(h)}$)

Time Range	Field Measurement	TNM Calculation	Difference
10:30 – 10:44 AM	62.5	63.3	0.8
10:44 – 10:59 AM	62.2	63.2	1.0
11:00 – 11:15 AM	61.9	63.2	1.3

3.1.2 NSA 1 Modeling Results

As shown on **Figure 2**, the receptors in NSA 1 are single-family homes and units within the Garden Walk at Elfen Glen apartment complex. A total of 46 receivers representing 60 receptors were modeled for the entire NSA. Existing noise levels range between 47.8 dBA and 61.4 dBA, with no receptors exposed to noise levels equal to or exceeding the residential NAC. However, the predicted Build Alternative noise levels increases would result in a total of four impacted receptors exposed to noise levels equal to or exceeding the residential NAC threshold of 66 dBA. Ranging between 49.8 dBA to 66.8 dBA, the predicted Build Alternative levels represent increases of 4 to 6 dBA above existing levels. These noise level increases would be ranked as minor to moderate according to the ARDOT noise policy.

Figure 2. NSA 1

4. HOW WERE FEASIBILITY AND REASONABLENESS EVALUATED?

Noise barriers are considered feasible when:

- *Constructability* - a noise barrier must be able to be physically constructed using reliable and common engineering practices.
- *Noise reduction* - a calculated noise reduction of at least 5 dBA must be achievable for a minimum of one impacted receptor. Each noise receptor receiving a 5 dbA reduction (whether classified as impacted or not) is considered to be a benefited receptor.
- *Safety and maintenance considerations* – a noise barrier must be accessible to maintenance personnel and not prevent access to other highway components. Severe drainage problems or flood-prone areas may dictate whether or not a noise barrier is feasible.
- *Access and utility requirements* - a noise barrier must allow sufficient access to adjacent properties and utility corridors. If there are existing access points and/or driveways on the roadway, it is typically not feasible to construct effective noise barriers.

In accordance with ARDOT noise policy, noise barriers are considered reasonable when:

- *Noise reduction* – At least one benefited receptor receives a minimum noise level reduction of 8 dB(A) – i.e., the noise reduction design goal.
- *Public input* – The viewpoints of benefited property owners and residents are solicited and consensus (greater than 50%) of support for or against a noise barrier is achieved.
- *Cost effectiveness* – The total cost for the proposed noise barrier does not exceed a $36,000 average allowance per benefited receptor.

ARDOT uses a $35 per square foot cost for a reflective barrier and a $40 per square foot cost for an absorptive barrier to calculate cost effectiveness (also referred to as “cost criteria”). The square foot costs are based on previous ARDOT experience and the average barrier costs used by other state highway agencies. Absorptive rather than reflective barriers are considered when noise sensitive receptors located opposite the modeled barrier do not warrant a noise barrier. This consideration ensures that noise levels are not increased for any receptors for

which noise level increases cannot be abated. A preliminary determination was made that noise barriers would be feasible (e.g., constructible).

Reasonable determinations (e.g., cost-effectiveness) for NSA 1 is summarized in the remainder of this section.

4.1 NSA 1

NSA 1 includes singles-family residences and an apartment complex. The apartment complex has both duplex and two-story units. The 66 dBA approach threshold was therefore applicable for all receptors. The existing right of way boundary is adjacent to the I-40 eastbound access road. The noise barrier was modeled along the proposed right of way boundary adjacent to the apartment complex. A reflective type noise barrier was considered due to the absence of noise sensitive receptors opposite the modeled barrier.

As described in Section 3.1.2, four receptors are predicted to be impacted under the Build Alternative. Each of the impacted receptors are duplex units. As shown in **Figure 3**, a noise barrier would result in a total of eight benefited receptors.

The total cost of the noise barrier divided by the total number of benefited receptors is below the cost criteria of $36,000. The noise barrier therefore meets reasonableness criteria for cost effectiveness and noise reduction design goals. **Table 3** summarizes the modeled noise barrier.

Table 3. NSA 1 Noise Barrier

Average Height (ft)	Total Length (ft)	Total Area (sq/ft)	Total Cost (FY21 $)	# Benefited Receptors	Cost per Benefited Receptor (FY21 $)
10	400	4,000	140,000*	8 / 6**	17,500

* Cost was calculated for a fixed-height reflective wall ($35 per square foot)

** Number of benefited receptors meeting or exceeding ARDOT's 8 dBA noise reduction goal

Figure 3. Noise Barrier for NSA 1

5. HOW IS CONSTRUCTION NOISE HANDLED?

General construction noise impacts for passing traffic and people living or working near the project can be expected from land clearing, earth moving, and paving operations. Motorized equipment will be maintained with appropriate mufflers to minimize construction noise levels. Additionally, nearby structures may have a moderating effect on intrusive construction noise.

6. WHAT ARE THE CONCLUSIONS OF THIS NOISE STUDY REPORT?

The 10 dBA threshold for substantial noise impacts was not approached or exceeded for NSA 1. Project construction in the design year (2042) will result in noise impacts by approaching and/or exceeding the 67 dBA residential NAC as summarized below.

NSA 1 - The proposed project would result in an increase in traffic generated noise. Existing noise levels indicate that no receptors currently experience noise levels equal to or exceeding the residential NAC. The predicted Build Alternative noise levels would result in a total of four receptors experiencing future noise levels equal to or exceeding the residential NAC. The noise barrier modeled for this NSA would result in a total of eight benefited receptors at a cost meeting reasonableness criteria.

Table 4 summarizes the Noise Study Report conclusions.

Table 4. Noise Study Report Conclusions

Impact Area	Property Type	# of Benefited Receptors	Approximate Cost Per Receptor ($)	Noise Barrier Feasible & Reasonable?
NSA 1	Single-family residences and apartment duplexes	8	17,500	Feasible and reasonable

7. WHAT IS THE LIKELIHOOD NOISE BARRIERS WILL BE CONSTRUCTED?

As preliminarily designed, the noise barrier found to be both feasible and reasonable for NSA 1 was approximately 10 feet high and 400 feet long with an area of 4,000 square feet. It would be located at the top of the slope along the right of way line boundary between the impacted receptors and the proposed roundabout.

It would meet ARDOT's noise reduction design goal of at least 8 dBA for six of the eight benefited receptors. The cost per benefited receptor would be $17,500. In accordance with the FHWA noise standard and ARDOT's noise policy, the next step in determining the reasonableness of a noise barrier was soliciting the viewpoints of the benefited property owner and residents. As detailed below, a consensus (greater than 50%) of support either for or against the provision of a noise barrier was not established and is therefore not likely to be constructed.

8. WHAT WERE THE VIEWPOINTS OF BENEFITED OWNER AND RESIDENTS?

Two attempts were made to solicit input from the benefited property owner and residents. A letter describing ARDOT's noise barrier decision process and a voting ballot/comment form was provided to both the property owner representative and each resident via certified mail in November 2021. Due to a low response rate, the consensus needed for a noise barrier determination was not achieved. Letters and ballot/comment forms were again provided via certified mail in March 2022; however, consensus was not established. Efforts to collect viewpoints of the benefited owner and residents were therefore discontinued.

9. COORDINATION WITH LOCAL OFFICIALS OR FUTURE NOISE LEVELS ON UNDEVELOPED LANDS

ARDOT encourages local communities and developers to practice noise compatibility planning in order to avoid future noise impacts. Guidance documents on noise compatible land use planning are available from the FHWA.

Table 5 presents future predicted noise levels based on an assumed at-grade situation for areas along I-40 where vacant and potentially developable lands exist. Noise predictions were made at distances of 100, 200, 300, 400, and 500 feet from I-40 for the design year 2042. The results showed exterior residential activities would generally be impacted with noise levels of 66 dBA or higher within distances

ranging from approximately 300 to 350 feet of the nearest I-40 travel lane. These values do not represent predicted levels at every location at a particular distance back from the roadway. Noise levels will vary with changes in terrain and other site conditions.

This information is being included to make local officials and planners aware of anticipated highway noise levels so that future development will be compatible with these levels.

Table 5. Design Year (2042) Predicted Distances for Undeveloped Areas

Distance from I-40 (ft)*	East of Hwy. 59 (L_{eq} (1h) dBA)	West of Hwy. 59 [L_{eq} (1h) dBA]
100	76.3	74.9
200	71.5	70.1
300	67.7	66.1
400	64.9	63.3
500	62.7	61.1

* Perpendicular distance to the centerline of the nearest travel lane of I-40

APPENDIX A

NOISE MEASUREMENT RESULTS

Appendix B - Field Measurements and Validation

Noise Measurement Data

Date 8/9/2021

Validation 1

Period #	Time Start	Leq	Lmax	Note	Keep?	Energy	Count
1	10:30 AM	60.6	66.5		Y	1145287	1
2	10:31 AM	62.7	66.5		Y	1846283	1
3	10:32 AM	61.7	66.0		Y	1489170	1
4	10:33 AM	62.5	69.5		Y	1789033	1
5	10:34 AM	64.6	69.4		Y	2889746	1
6	10:35 AM	61.4	65.0		Y	1368920	1
7	10:36 AM	62.7	66.1		Y	1843600	1
8	10:37 AM	64.4	70.3		Y	2746459	1
9	10:38 AM	63.3	66.7		Y	2157558	1
10	10:39 AM	59.8	62.9		Y	961190	1
11	10:40 AM	63.7	71.8		Y	2334938	1
12	10:41 AM	59.9	66.3		Y	985981	1
13	10:42 AM	62.8	67.0		Y	1894518	1
14	10:43 AM	63.3	68.4		Y	2132910	1
15	10:44 AM	60.2	66.6		Y	1053209	1
Total				**Energy Sum**		**26638801**	**15**
				Leq of good periods		62.5	
				Modeled Result		63.3	
				Difference		-0.8	

Validation 2

Period #	Time Start	Leq	Lmax	Note	Keep?	Energy	Count
1	10:45 AM	62.8	66.7		Y	1891394	1
2	10:46 AM	62.9	69.5		Y	1939465	1
3	10:47 AM	61.7	67.3		Y	1474215	1
4	10:48 AM	62.1	68.4		Y	1625421	1
5	10:49 AM	62.1	66.1		Y	1604194	1
6	10:50 AM	63.5	70.1		Y	2229790	1
7	10:51 AM	60.6	64.3		Y	1152872	1
8	10:52 AM	63.7	69.2		Y	2370266	1
9	10:53 AM	61.7	65.7		Y	1462201	1
10	10:54 AM	61.4	64.9		Y	1395745	1
11	10:55 AM	60.8	68.6		Y	1195031	1
12	10:56 AM	59.9	64.6		Y	968273	1
13	10:57 AM	61.9	68.1		Y	1532774	1
14	10:58 AM	64.8	75.9		Y	3015602	1
15	10:59 AM	60.6	68.1		Y	1138398	1
Total				**Energy Sum**		**24995640**	**15**
				Leq of good periods		62.2	
				Modeled Result		63.2	
				Difference		-1.0	

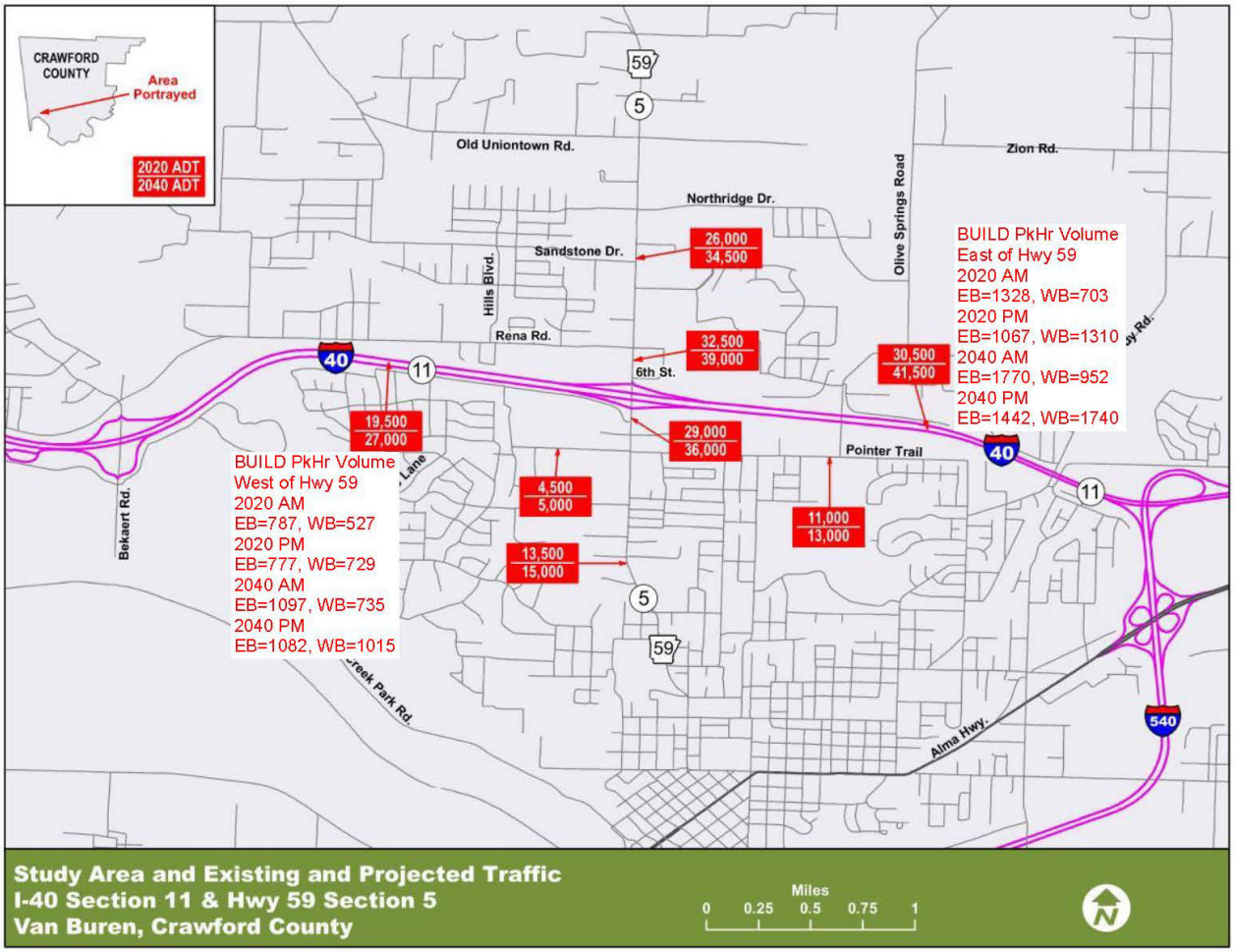
Validation 3

Period #	Time Start	Leq	Lmax	Note	Keep?	Energy	Count
1	11:00:20	59.7	66.9		Y	925608	1
2	11:01:20	61.5	64.6		Y	1420542	1
3	11:02:20	62.9	70.4		Y	1956848	1
4	11:03:20	59.9	66.2		Y	983803	1
5	11:04:20	60.9	67.5		Y	1231836	1
6	11:05:20	57.6	64.0		Y	577952	1
7	11:06:20	62.1	70.4		Y	1636839	1
8	11:07:20	62.9	69.2		Y	1946099	1
9	11:08:20	62.9	66.6		Y	1958430	1
10	11:09:20	63.4	68.1		Y	2178367	1
11	11:10:20	63.6	73.4		Y	2294077	1
12	11:11:20	63.4	72.3		Y	2166097	1
13	11:12:20	60.2	65.8		Y	1035533	1
14	11:13:20	61.4	66.9		Y	1394514	1
15	11:14:20	61.2	65.5		Y	1317061	1
16	11:15:20	61.8	66.5		Y	1512220	1
Total				**Energy Sum**		**24535827**	**16**
				Leq of good periods		61.9	
				Modeled Result		63.2	
				Difference		-1.3	

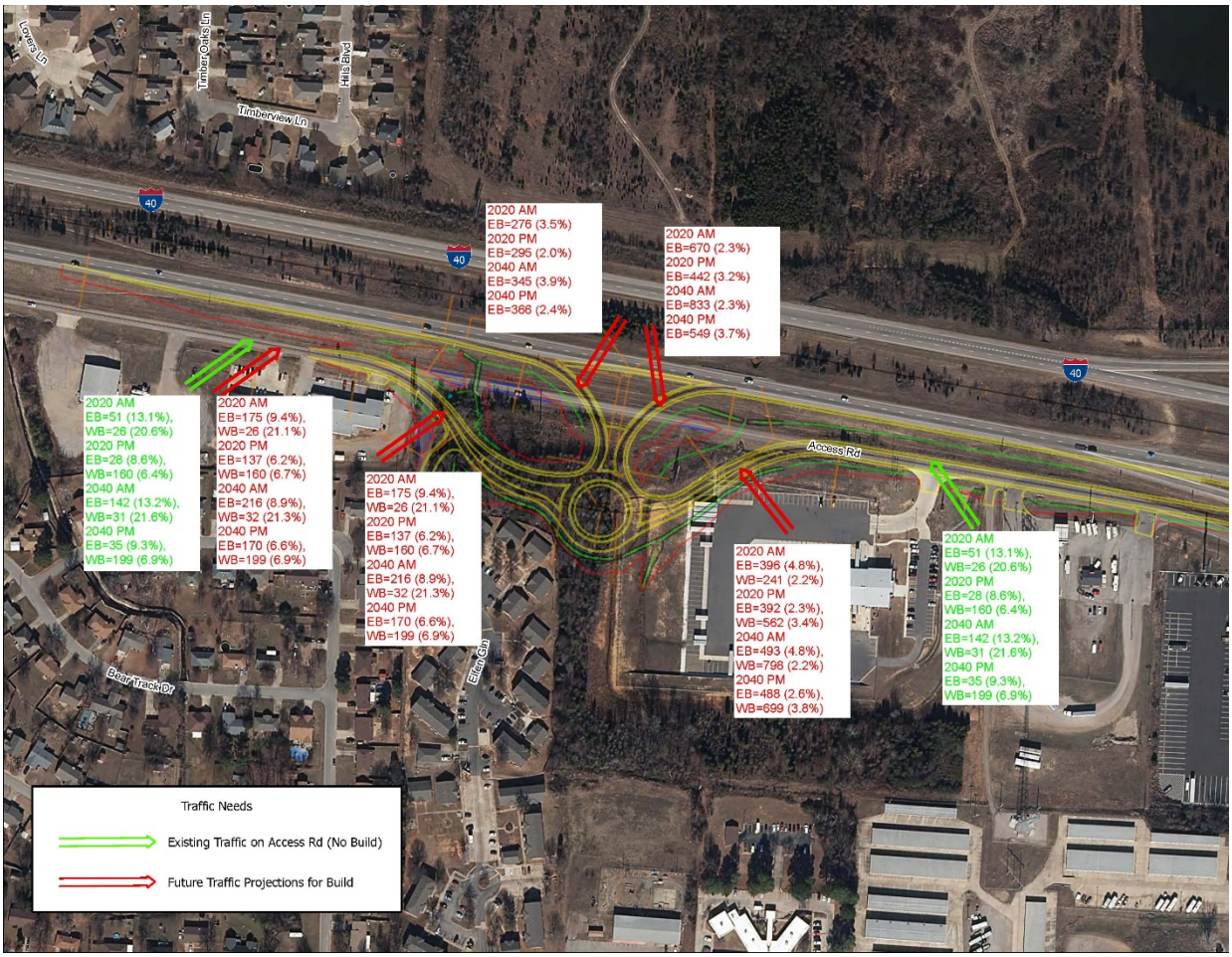
APPENDIX B

TRAFFIC DATA FOR NOISE MODELING

Traffic Data for Noise Modeling



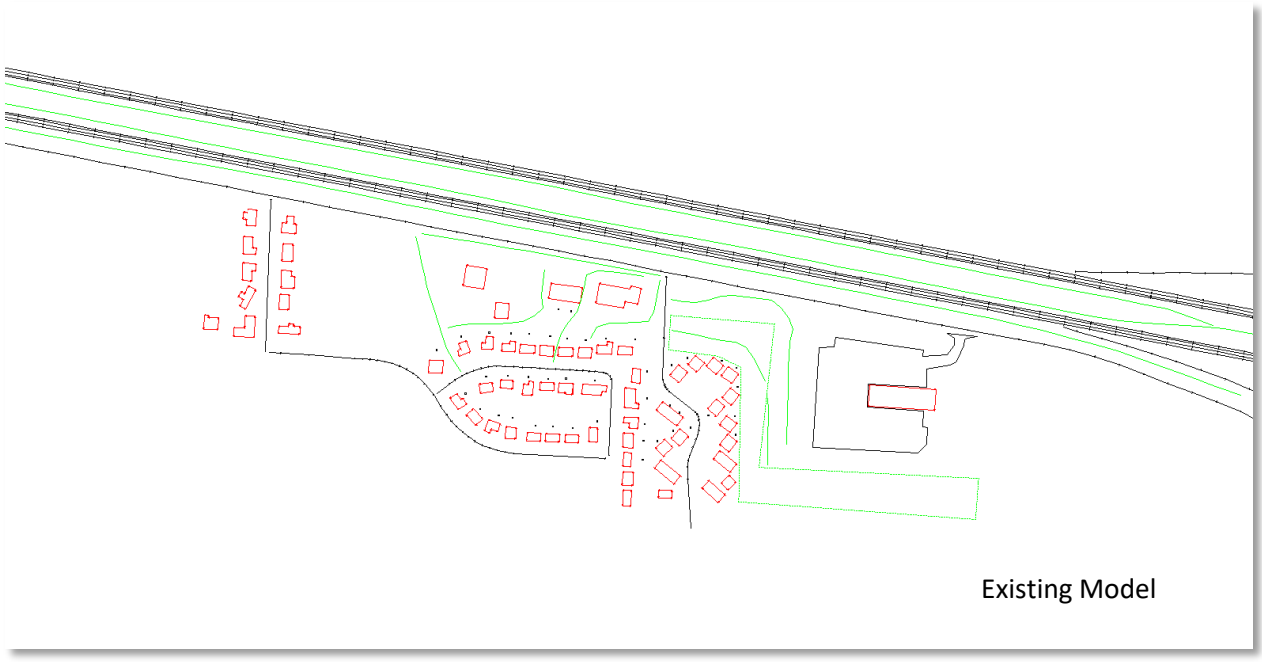
Source: Interchange Justification Report - Job 040714 – I-40 / Highway 59 Interchange (S)
29% HT, 2% Medium Truck percentages used for I-40, provided by ARDOT Traffic Services, Miovision PM data used for TNM modeling to represent highest volumes



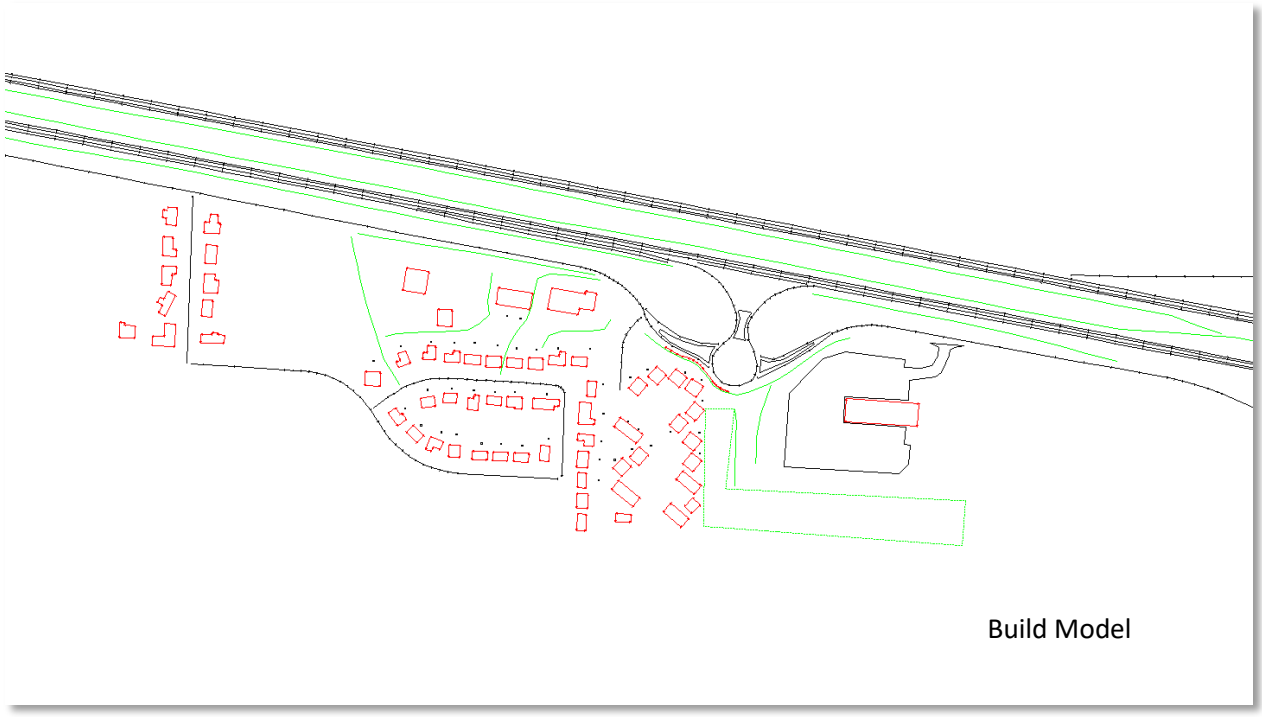
Source: Garver

APPENDIX C

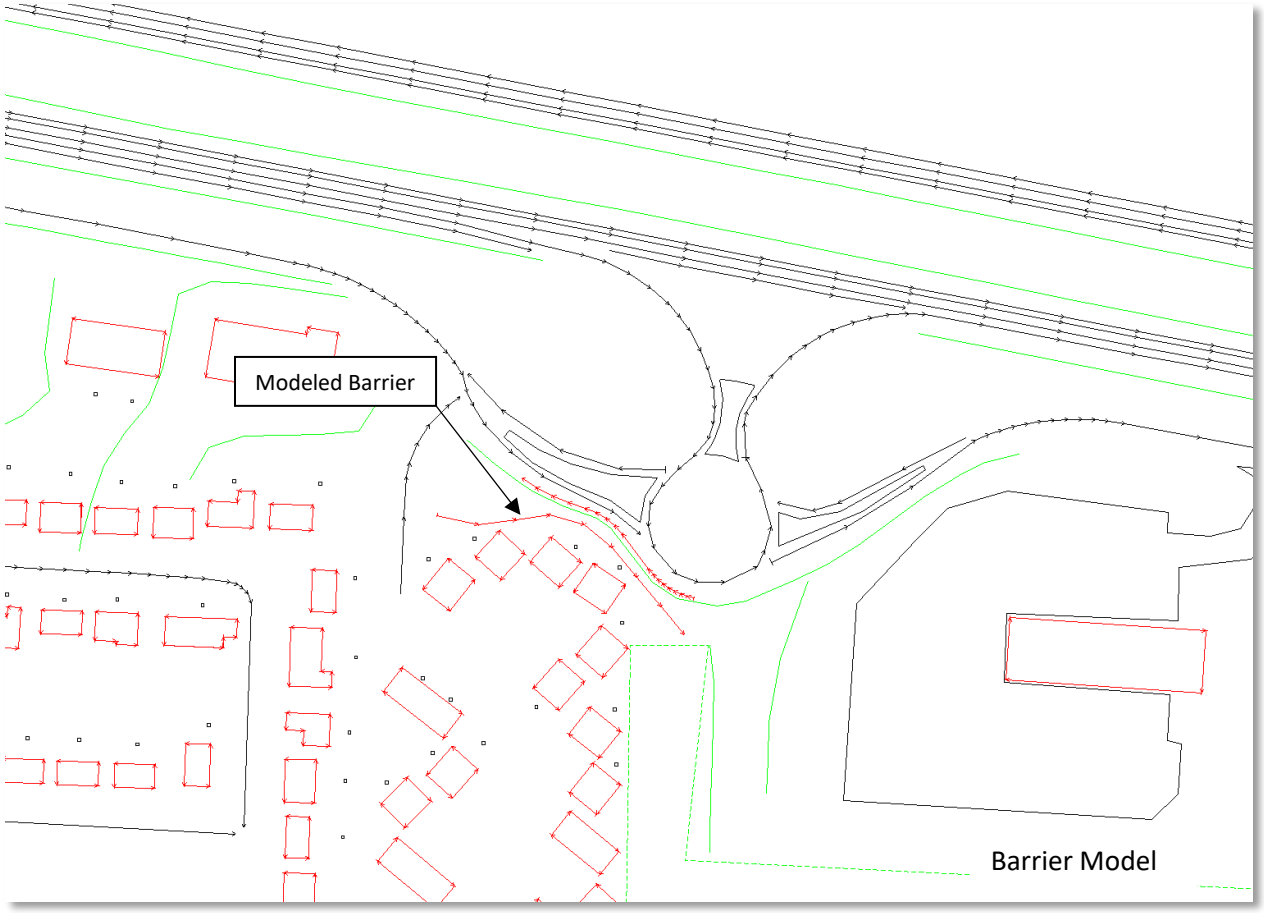
TRAFFIC NOISE MODEL 2.5 PLAN VIEWS



Existing Model



Build Model


Modeled Barrier
Barrier Model

APPENDIX D

NOISE MODELING AND BARRIER ANALYSIS RESULTS

NSA 1

			No Barrier			With Barrier				
Receiver	Category	Number of Receptors	Existing	Future Build (dBA)	Increase	Future Build (dBA)2	Reduction	Design Goal Above/Below	Meet Design Goal of 8dB	Benefit of 5dB
1706 N Hills Blvd	B	1	48.8	51.4	2.6	51.4	0.0	-8.0	0	0
1707 Elfen Gln	B	1	52.3	54.7	2.4	54.3	0.4	-7.6	0	0
1708 Elfen Gln	B	2	55.7	60.0	4.3	59.0	1.0	-7.0	0	0
1708 N Hills Blvd	B	1	50.0	53.3	3.3	52.8	0.5	-7.5	0	0
1709 Elfen Gln	B	1	51.3	54.8	3.5	53.7	1.1	-6.9	0	0
1709 North Hills Blvd	B	1	49.6	51.6	2.0	51.6	0.0	-8.0	0	0
1710 Elfen Gln	B	2	56.6	61.1	4.5	59.5	1.6	-6.4	0	0
1710 N Hills Blvd	B	1	51.1	54.6	3.5	53.7	0.9	-7.1	0	0
1711 Elfen Gln Apts E	B	2	53.0	57.6	4.6	56.1	1.5	-6.5	0	0
1711 Elfen Gln Apts E - 2nd	B	2	59.6	62.6	3.0	62.0	0.6	-7.4	0	0
1711 Elfen Gln Apts W	B	2	54.8	58.5	3.7	57.7	0.8	-7.2	0	0
1711 Elfen Gln Apts W - 2nd	B	2	60.2	63.0	2.8	62.7	0.3	-7.7	0	0
1712 Elfen Gln	B	2	47.8	51.8	4.0	51.4	0.4	-7.6	0	0
1712 N Hills Blvd	B	1	55.4	59.1	3.7	57.9	1.2	-6.8	0	0
1714 Elfen Gln	B	2	57.9	63.3	5.4	55.4	7.9	-0.1	0	2
1714 N Hills Blvd	B	1	57.8	61.6	3.8	60.8	0.8	-7.2	0	0
1716 Elfen Gln	B	2	60.9	66.7	5.8	55.4	**11.3**	3.3	2	2
1716 N Hills Blvd	B	1	60.2	63.9	3.7	63.9	0.0	-8.0	0	0
1718 Elfen Gln	B	2	61.4	66.8	5.4	57.6	**9.2**	1.2	2	2
1720 Elfen Gln	B	2	60.4	65.2	4.8	56.2	**9.0**	1.0	2	2
1722 Elfen Gln	B	2	59.4	63.8	4.4	60.3	3.5	-4.5	0	0
500 Deer Trl	B	1	58.4	61.7	3.3	61.7	0.0	-8.0	0	0
501 Deer Trl	B	1	53.1	55.6	2.5	55.5	0.1	-7.9	0	0
502 Deer Trl	B	1	57.3	59.9	2.6	59.9	0.0	-8.0	0	0
503 Deer Trl	B	1	48.7	50.9	2.2	50.9	0.0	-8.0	0	0
504 Bear Track Dr	B	1	49.7	51.6	1.9	51.6	0.0	-8.0	0	0
504 Deer Trl	B	1	57.6	59.8	2.2	59.8	0.0	-8.0	0	0
505 Deer Trl	B	1	49.9	51.8	1.9	51.9	(0.1)	-8.1	0	0
506 Bear Track Dr	B	1	48.1	50.1	2.0	50.1	0.0	-8.0	0	0
506 Deer Trl	B	1	57.5	60.0	2.5	60.0	0.0	-8.0	0	0
507 Deer Trl	B	1	48.1	50.0	1.9	50.1	(0.1)	-8.1	0	0
508 Bear Track Dr	B	1	48.0	50.0	2.0	50.0	0.0	-8.0	0	0
508 Deer Trl	B	1	58.2	60.2	2.0	60.2	0.0	-8.0	0	0
509 Deer Trl	B	1	49.0	50.9	1.9	50.9	0.0	-8.0	0	0
510 Bear Track Dr	B	1	49.0	51.0	2.0	51.0	0.0	-8.0	0	0
510 Deer Trl	B	1	56.5	58.5	2.0	58.5	0.0	-8.0	0	0
511 Deer Trl	B	1	51.7	53.6	1.9	53.6	0.0	-8.0	0	0
512 Bear Track Dr	B	1	47.8	49.8	2.0	49.9	(0.1)	-8.1	0	0
512 Deer Trl	B	1	55.2	57.6	2.4	57.6	0.0	-8.0	0	0
514 Bear Track Dr	B	1	51.7	53.8	2.1	53.8	0.0	-8.0	0	0
514 Deer Trl	B	1	57.6	59.1	1.5	59.1	0.0	-8.0	0	0
516 Bear Track Dr	B	1	53.1	55.1	2.0	55.1	0.0	-8.0	0	0
602 Bear Track Dr	B	1	57.6	59.5	1.9	59.5	0.0	-8.0	0	0
Head Start Play/Picknic Area	C	2	50.1	52.3	2.2	52.3	0.0	-8.0	0	0
Head Start Playground/Picnic Area	C	2	55.7	57.9	2.2	57.9	0.0	-8.0	0	0
Playground at Elfen Glen Apts	C	1	53.3	57.4	4.1	56.2	1.2	-6.8	0	0
Total		**60**							**6**	**8**

Legend
Impacted
Benefitted
Meets Reduction Goal

NB 1 - Modeled Free Standing Reflective Barrier

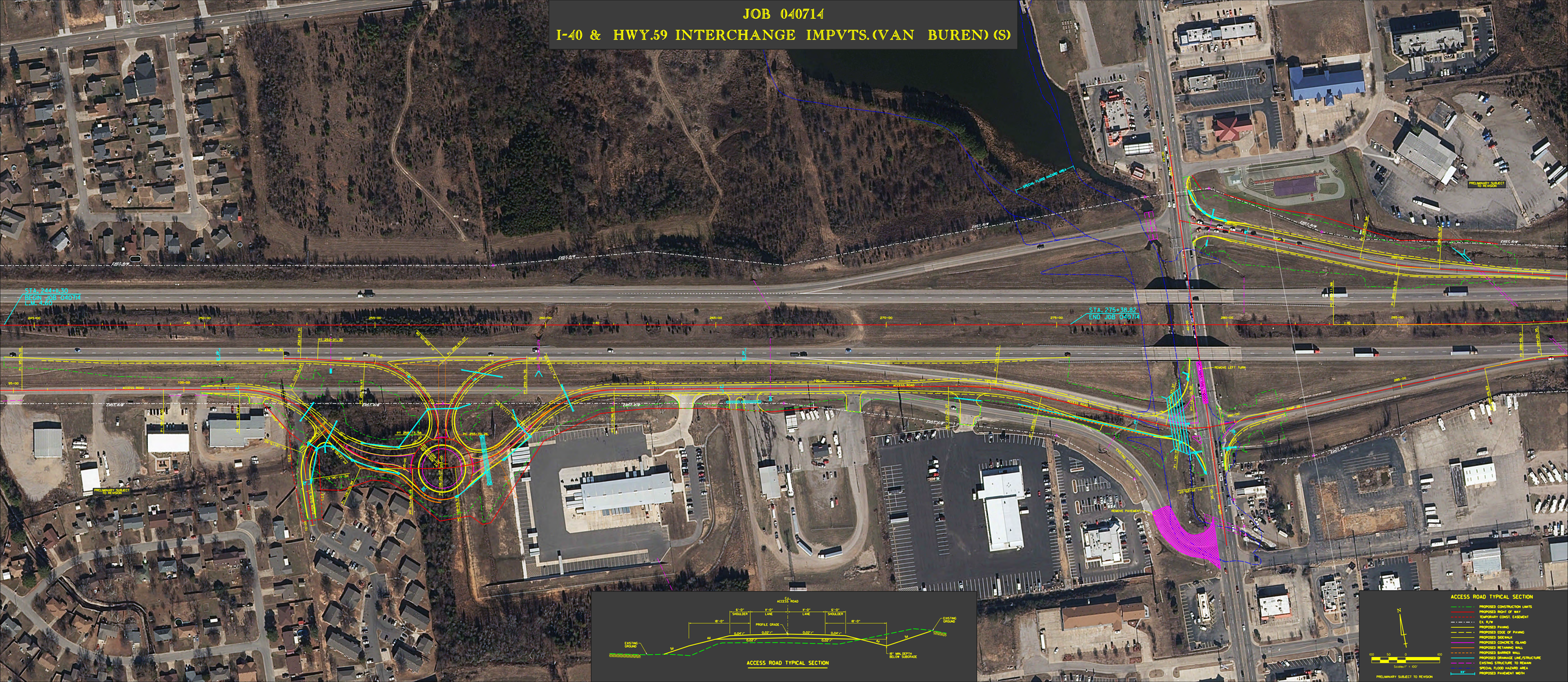
Segments	Approx. Segment Lengths	Height	Approx. Length	Approx. SqFt	Wall Price ($35/SqFt)	Crash Barrier (if required)	Total Price
8	50	10	400	4000	$ 140,000		$ 140,000

Cost/Receptor	Cost Reasonable
$ 17,500.00	Yes

APPENDIX E

PROJECT DESIGN

JOB 040714
I-40 & HWY.59 INTERCHANGE IMPVTS.(VAN BUREN) (S)



VIRTUAL PUBLIC INVOLVEMENT SYNOPSIS

Job 040714
I-40/Hwy. 59 Interchange Impvts. (Van Buren) (S)
Crawford County
April 2, 2021 through April 23, 2021

A Phase II "Live" Virtual Public Involvement (VPI) meeting for the proposed intersection improvement project at Interstate 40 and Highway 59 was held on Thursday, April 8, 2021. Project information was made available on ARDOT's website from April 2, 2021 through April 23, 2021. Efforts to involve minorities and the public in the meeting included:

- Display advertisement in *Press Argus*.
- Letters mailed to Public Officials.
- Flyers mailed to citizens.

Table 1 describes the results of the public participation at the meeting.

TABLE 1	
Public Participation	**Totals**
Online registration of attendance at Phase II VPI	78
Number of website viewers (English/Spanish)	1,475/88
Online comments received	17
Comments mailed in	1
e-mail comments received	1
Total comments received	**19**

ARDOT staff reviewed all comments received and evaluated their contents. The summary of comments listed below reflects the personal perception or opinion of the person or organization making the statement. The sequencing of the comments is random and is not intended to reflect importance or numerical values. Some of the comments were combined and/or paraphrased to simplify the synopsis process.

An analysis of the responses received as a result of the public survey is shown in Table 2.

TABLE 2

Survey Results	Totals
Feel there is a need for the project	13
Do not feel there is a need for the project	5
Beneficial impacts due to the proposed project	11
Adverse impacts due to the proposed project	6
Had a suggestion to better serve the needs of the community	14
Know of historical sites in the project area	0
Know of environmental constraints to the project	1
Know of home or property limitations to the project	1

The following is an assemblage of comments concerning issues associated with the project.

- Four individuals wanted to have a new intersection built providing access to Oliver Springs Road and I-40.
- Two individuals were concerned about the free flow of north and southbound traffic on Hwy. 59 without dedicated right turn lanes.
- Two individuals were concerned about the increase in noise levels in their residential areas.

A listing of general comments concerning the proposed project follows:

- It's going to be more aesthetically pleasing.
- I think simple on/off ramps at the 16th Street overpass behind the high school would be beneficial as well.
- There needs to be another interchange built down on Pointer Trail (east) at the corner where the tennis courts are. Even if the tennis courts have to go away.
- Consider moving the roundabout 0.3 of a mile west.
- I think Hwy. 59 needs an expansion from Pointer Trail to the Police Headquarters as well, the traffic is so congested.
- What about an exit by the high school?
- My biggest concern is routing traffic so close to homes and businesses.
- At the present location, for the roundabout, it will be a major impact on the trucking company.

- I live just off of Elfen Glen and I do not want to see the 6,000 cars per hour go by my house.
- The food industry is going to lose a lot of business due to this proposal!
- Replicate something similar to Rogers Ave. in Fort Smith, AR.
- Consider a true roundabout, where everyone can get on and off 40, but continue to use the access road.
- We strongly believe that there are alternatives that will be less intrusive and would allow the existing business and operations of Southeastern Freight Lines to continue.

Attachments:
Meeting Announcement
Project Location Exhibit
Blank comment form

DN:TT:sw

You're invited!

WEBEX "LIVE" VIRTUAL PUBLIC INVOLVEMENT MEETING

WHAT: "Live" Virtual Public Involvement Meeting to discuss the proposed interchange improvements to I-40/Hwy. 59, to include the construction of a roundabout on the eastbound service road in Van Buren, AR (Crawford County).

WHEN: **Thursday, April 8, 2021 from 5:30 to 6:30 p.m. Citizens will have an opportunity to ask questions and make comments.**

Due to the COVID-19 restrictions, we are unable to conduct a public Involvement meeting in the traditional sense (no in-person meeting).

Purpose

The Arkansas Department of Transportation (ARDOT) will conduct a "Live" WebEx virtual public involvement meeting to discuss the proposed interchange improvements to I-40/Hwy. 59, to include the construction of a roundabout on the eastbound service road in Van Buren, AR.

Project staff will give a brief presentation regarding the project. The public is invited to listen, view meeting materials and participate by asking questions and making comments with the appropriate ARDOT staff. The online website will be available for viewing from Friday, April 2, 2021 through Friday, April 23, 2021. Comments will be accepted until 4:30 p.m. on Friday, April 23, 2021.

Link To Virtual Meeting: https://www.ardot.gov/publicmeetings

In order to access the virtual public meeting, visit the link above. At the website location, simply scroll down to view the virtual public meeting of your interest. Once the Public Meeting is selected, you will be able to view the virtual public meeting website. This website will provide project materials and handouts that would have been shown at the in-person meeting. A separate link will provide a Spanish version of the presentation. There will also be an option to send online comment forms to ARDOT's staff, or you can print the form and mail it to, P.O. Box 2261, Little Rock, AR 72203-2261. If you do not have internet access, please contact Karla Sims at 501-569-2000 to ask questions about the project and how to access project information or email at karla.sims@ardot.gov.

Job 040714

Virtual Web Link:

Visit: https://www.ardot.gov/publicmeetings

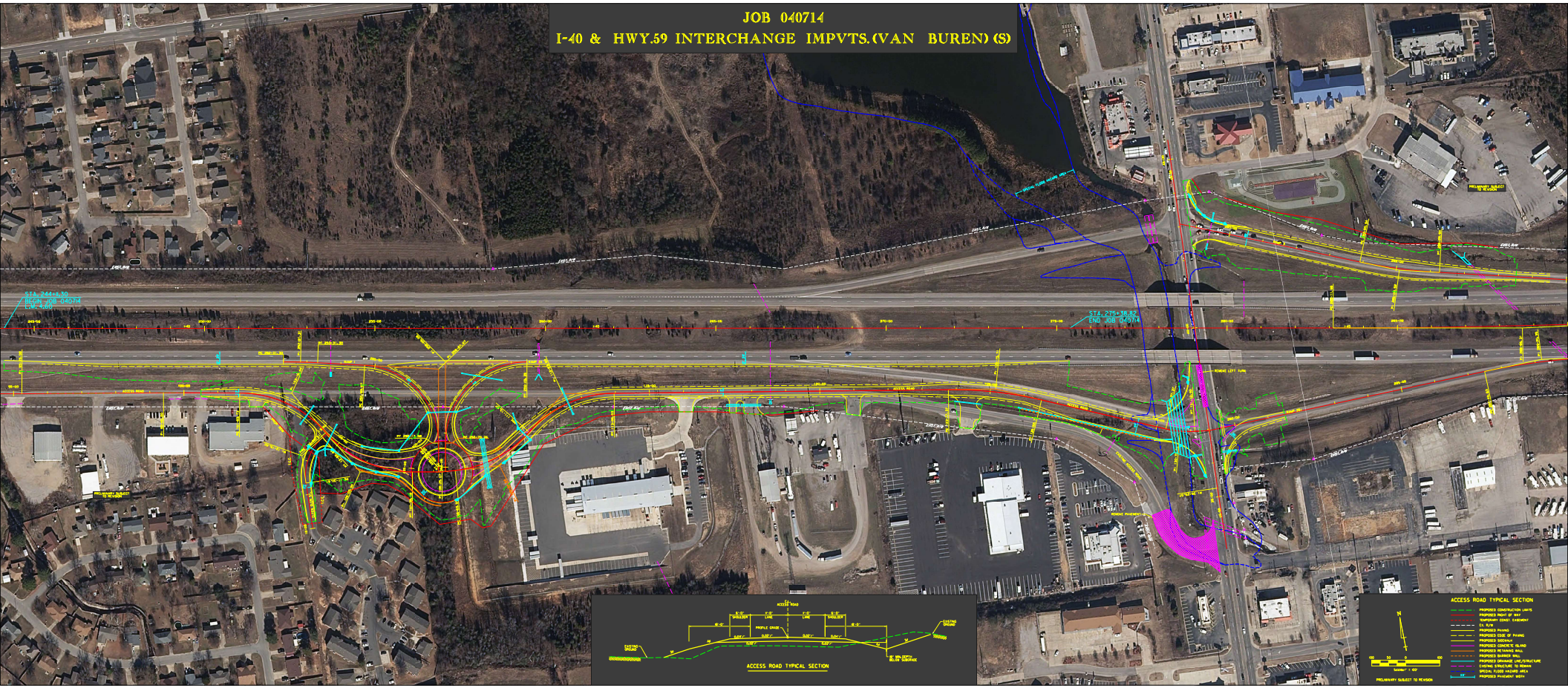
- **At the website location, select the public meeting of your interest.**

Thursday, April 8, 2021
5:30 p.m. to 6:30 p.m.

Special Accommodations: Anyone needing project information or special accommodations under the Americans with Disabilities Act (ADA) is encouraged to write to Ruby Jordan-Johnson, P.O. Box 2261, Little Rock, AR 72203-2261, call (501)569-2379, fax (501) 569-2009 or email environmentalpimeetings@ardot.gov. Hearing or speech impaired, please contact the Arkansas Relay System at (Voice/TTY 711). Requests should be made at least four days prior to the public meeting.

Notice of Nondiscrimination
The Arkansas Department of Transportation (ARDOT) complies with all civil rights provisions of federal statutes and related authorities that prohibit discrimination in programs and activities receiving federal financial assistance. Therefore, the Department does not discriminate on the basis of race, sex, color, age, national origin, religion (not applicable as a protected group under the Federal Motor Carrier Safety Administration Title VI Program), disability, Limited English Proficiency (LEP), or low-income status in the admission, access to and treatment in the Department's programs and activities, as well as the Department's hiring or employment practices. Complaints of alleged discrimination and inquiries regarding the Department's nondiscrimination policies may be directed to Joanna P. McFadden EEO/DBE Officer (ADA/504/Title VI Coordinator), P. 0. Box 2261, Little Rock, AR 72203, (501) 569-2298, (Voice/TTY 711), or the following email address: joanna.mcfadden@ardot.gov **Free language assistance for Limited English Proficient individuals is available upon request.**

This notice is available from the ADA/504/Title VI Coordinator in large print, on audiotape and in Braille.


JOB 040714
I-40 & HWY.59 INTERCHANGE IMPVTS.(VAN BUREN) (S)
STA. 244+43.30
BEGIN JOB 040714
STA. 275+18.82
END JOB 040714
ACCESS ROAD TYPICAL SECTION
ACCESS ROAD TYPICAL SECTION
PROPOSED CONSTRUCTION LIMITS
PROPOSED RIGHT OF WAY
TEMPORARY DRIVE EASEMENT
EX. R/W
PROPOSED PAVING
PROPOSED EDGE OF PAVING
PROPOSED SIDEWALK
PROPOSED CONCRETE ISLAND
PROPOSED RETAINING WALL
PROPOSED BARRIER WALL
PROPOSED DRAINAGE LINE/STRUCTURE
EXISTING STRUCTURE TO REMAIN
SPECIAL FLOOD HAZARD AREA
PROPOSED PAVEMENT WIDTH
PRELIMINARY SUBJECT TO REVISION

ARKANSAS DEPARTMENT OF TRANSPORTATION (ARDOT)
CITIZEN COMMENT FORM

ARDOT JOB 040714
I-40/Hwy. 59 Interchange Impvts. (Van Buren)
CRAWFORD COUNTY

LOCATION:
ONLINE "LIVE" WEBEX VIRTUAL PUBLIC INVOLVEMENT MEETING
THURSDAY, APRIL 8, 2021 @ 5:30 P.M.

Make your comments on this form and mail it by 4:30 p.m. on Friday, April 23, 2021 to: Arkansas Department of Transportation, Environmental Division, P.O. Box 2261, Little Rock, AR, 72203-2261. Email: **environmentalpimeetings@ardot.gov**.

Yes No

☐ ☐ Do you feel there is a need for the proposed interchange improvements to I-40/Hwy. 59, to include the construction of a roundabout on the eastbound service road in Van Buren, AR? Comment (optional)_____

_____

_____

_____

Do you feel that the proposed project will have any impacts?

(☐ Beneficial or ☐ Adverse) on your property and/or community (economic, environmental, social, etc.)? Please explain. _____

_____

_____

_____

☐ ☐ Do you have a suggestion that would make this proposed project better serve the needs of the community?_____

_____

_____

_____

_____

☐ ☐ Does your home or property offer any limitations to the project, such as septic systems, that the Department needs to consider in its design?

_____

_____

(Continue on Back)

Yes No

☐ ☐ Do you know of any historical sites, family cemeteries, or archaeological sites in the project area? Please note and discuss with staff. _____

_____

_____

☐ ☐ Do you know of any environmental constraints, such as endangered species, hazardous waste sites, existing or former landfills, or parks and public lands in the vicinity of the project? Please note and discuss with ARDOT staff. _____

_____

_____

It is often necessary for the ARDOT to contact property owners along potential routes. If you are a property owner along or adjacent to the route under consideration, please provide information below. Thank you.

Name: _____ (*Please Print*)

Address: _____ Phone: (_____) _____--

_____

E-mail:_____

Please make additional comments here._____

_____

_____

_____

_____

_____

For additional information, please visit our website at https://www.ardot.gov/publicmeetings

At the website location, select the public meeting of your interest.

ARDOT ARKANSAS DEPARTMENT OF TRANSPORTATION

I DRIVE ARKANSAS

ARDOT ENVIRONMENTAL VERIFICATION CHECKLIST FOR CONSIDERATION OF POTENTIAL IMPACTS

ARDOT Job 040714 **FAP** VHFP-9429(15)

Job Title I-40/Hwy. 59 Interchange Impvts. (Van Buren) (S)

Environmental Resource	None	Minimal	Major	Comments-required for each item
Air Quality	X			No impacts anticipated
Cultural Resources	X			SHPO clearance attached
Economic	X			No impacts anticipated
Endangered Species	X			"No Effect" determination
Environmental Justice/Title VI	X			No EJ issues expected
Fish and Wildlife		X		Temporary – during construction
Floodplains		X		Zone AE Special Flood Hazard Area
Forest Service Property	X			None in project area
Hazardous Materials/Landfills	X			No impacts anticipated
Land Use		X		5.4 acres of new ROW
Migratory Birds		X		Migratory Bird SP included
Navigation/Coast Guard	X			None in project area
Noise Levels		X		Noise barrier evaluated
Prime Farmland	X			No farmland impacts
Protected Waters	X			None in project area
Public Recreation Lands	X			No impacts anticipated
Public Water Supply/WHPA	X			None in project area
Relocatees	X			No relocatees expected
Section 4(f)/6(f)	X			No impacts anticipated
Social	X			No impacts anticipated
Underground Storage Tanks	X			No UST's anticipated
Visual	X			No impacts anticipated
Streams		X		733 linear feet impacts
Water Quality		X		Temporary decrease during construction
Wetlands	X			None in project area
Wildlife Refuges	X			None in project area

Section 401 Water Quality Certification Required? No

Short-term Activity Authorization Required? Yes

Section 404 Permit Required? Yes Type NW14

Remarks:

Signature of Evaluator  Date October 1, 2021

Date Sent: Rev. October 1, 2021

ROADWAY DESIGN REQUEST

Job Number 040714 FAP No. _____ County Crawford

Job Name I-40/Hwy. 59 Interchange Impvts. (Van Buren) (S)

Design Engineer Garver Environmental Staff TT/SL/ND

Detailed Project Description This project involves interchange improvements at the I-40/Highway 59 Interchange in Van Buren, including the relocation of the I-40 eastbound on and off ramps and Improvements to the I-40 westbound off ramp, as well as the construction of a roundabout on the eastbound service road. This project will also include some improvements at the Highway 59 intersections with the ramps and access roads as a result of the afore mentioned improvements.

A. Existing Conditions:

Roadway Width: (1)22’ / (2)25’ Shoulder Type/Width: (1)1’ Unpaved / (2)4’ Inside & 6’ Outside

Number of Lanes and Width: (1)2 @ 10’ / (2)1 @ 15’ Existing Right-of-Way: (3) Var. (400’-840’)

Sidewalks? No Location: N/A Width: N/A

Bike Lanes? No Location: N/A Width: N/A

B. Proposed Conditions:

Roadway Width: (1)34’ / (2)25’-64’ Shoulder Type/Width: (1)6’ Paved / (2)4’ Inside & 6’ Outside to 8’ (Inside & Outside)

Number of Lanes and Width: (1)2 @ 11’ / (2)1 @ 15’ to 4 @ 12’ Proposed Right-of-Way: (3) Var. (400’-840’)

Sidewalks? No Location: N/A Width: N/A

Bike Lanes? No Location: N/A Width: N/A

C. Construction Information:

If detour: Where: N/A Length: N/A

D. Design Traffic Data: I-40 Eastbound Access Road

2022 ADT: 13,500 2042 ADT: 16,350 % Trucks: 2

Design Speed: 40 m.p.h.

E. Approximate total length of project: 0.59 mile(s)

F. Justification for proposed improvements: Improve traffic operations

G. Total Relocatees: 0 Residences: 0 Businesses: 0

H. Have you coordinated with any outside agencies (e.g., FHWA, City, County, etc.)? Yes

Agency/Official	Person Contacted	Date
City of Van Buren	Office of the Mayor	1-5-21
Crawford County	Office of County Judge	1-5-21

(1) I-40 Eastbound Access Road
(2) I-40 Eastbound and Westbound Ramps
(3) Right of Way footprint for interchange includes the Access Road and Ramps.

Nationwide Permit No. 14

Linear Transportation Projects. Activities required for crossings of waters of the United States associated with the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, driveways, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge of dredged or fill material cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge of dredged or fill material cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge of dredged or fill material in a special aquatic site, including wetlands. (See general condition 32.) (Authorities: Sections 10 and 404)

Note 1: For linear transportation projects crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. Linear transportation projects must comply with 33 CFR 330.6(d).

Note 2: Some discharges of dredged or fill material for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

Note 3: For NWP 14 activities that require pre-construction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require pre-construction notification (see paragraph (b)(4) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, "District Engineer's Decision." The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23)

2021 Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's

expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48 or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Structures and Fills. Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-

construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov/.

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of "effects of the action" for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding "activities that are reasonably certain to occur" and "consequences caused by the proposed action."

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such

designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.

(e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa/ respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate

documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.

(d) Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. Permittees that discover any previously unknown historic, cultural, or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate, or the adverse environmental effects of the proposed activity are no more than minimal and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate, or the adverse environmental effects of the proposed activity are no more than minimal and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian

areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that

will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. (a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.

(b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.

(c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:

(a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1⁄3-acre.

(b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the

nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

_____

(Transferee)

_____

(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30-day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN, and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the

potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) (i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

(ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project and does not change those non-PCN NWP activities into NWP PCNs.

(iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of

the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and

(10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.

(c) Form of Pre-Construction Notification: The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so, contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life, or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or

revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the single and complete crossings of waters of the United States that require PCNs to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings of waters of the United States authorized by an NWP. If an applicant requests a waiver of an applicable limit, as provided for in NWPs 13, 36, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects.

2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by an NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters. The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45

calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure that the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

Further Information

1. District engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

Nationwide Permit Definitions

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

Discharge: The term "discharge" means any discharge of dredged or fill material into waters of the United States.

Ecological reference: A model used to plan and design an aquatic habitat and riparian area restoration, enhancement, or establishment activity under NWP 27. An ecological reference may be based on the structure, functions, and dynamics of an aquatic habitat type or a riparian area type that currently exists in the region where the proposed NWP 27 activity is located. Alternatively, an ecological reference may be based on a conceptual model for the aquatic habitat type or riparian area type to be restored, enhanced, or established as a result of the proposed NWP 27 activity. An ecological reference takes into account the range of variation of the aquatic habitat type or riparian area type in the region.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic

resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s) but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps Regulatory Program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance but are still reasonably foreseeable.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. The loss of stream bed includes the acres of stream bed that are permanently adversely affected by filling or excavation because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters or wetlands for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities that do not require Department of the Army authorization, such as activities eligible for exemptions under section 404(f) of the Clean Water Act, are not considered when calculating the loss of waters of the United States.

Navigable waters: Waters subject to section 10 of the Rivers and Harbors Act of 1899. These waters are defined at 33 CFR part 329.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of flowing or standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of "open waters" include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed

on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Perennial stream: A perennial stream has surface water flowing continuously year-round during a typical year.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required, and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a course substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands next to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and

crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of "independent utility"). Single and complete non-linear projects may not be "piecemealed" to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized jurisdictional stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a jurisdictional wetland that is inundated by tidal waters. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line.

Tribal lands: Any lands title to which is either: 1) held in trust by the United States for the benefit of any Indian tribe or individual; or 2) held by any Indian tribe or individual subject to restrictions by the United States against alienation.
Tribal rights: Those rights legally accruing to a tribe or tribes by virtue of inherent sovereign authority, unextinguished aboriginal title, treaty, statute, judicial decisions, executive order or agreement, and that give rise to legally enforceable remedies.

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWPs, a waterbody is a "water of the United States." If a wetland is adjacent to a waterbody determined to be a water of the United States, that waterbody and any adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)).