

Categorical Exclusion
Appendix F
Water Resources

**SR 46 Pavement Improvements Project
 Decatur County, Indiana
 Des. Nos. 1800255 and 1800256
 Prepared by: Brooke Fox, RQAW Corporation
 Completed Date: October 7, 2021**

Dates of Waters Field Investigation:

A field investigation was conducted on June 9, 2021 by RQAW Corporation to evaluate the presence of *Waters of the United States* for the proposed SR 46 Pavement Improvements Project along SR 46 in Decatur County, Indiana.

Location:

SR 46
 Sections 1-3 and 9-12, Township 10 North, Range 9 East
 Forest Hill and Greensburg U.S. Geological Survey (USGS) Quadrangles
 Decatur County, Indiana

West Survey Area: Des. No. 1800255

West		East	
Latitude:	39.33359° N	Latitude:	39.33656° N
Longitude:	-85.5209° W	Longitude:	-85.48865° W

East Survey Area: Des. No. 1800256

West		East	
Latitude:	39.33663° N	Latitude:	39.33633° N
Longitude:	-85.48148° W	Longitude:	-85.4663° W

National Wetlands Inventory (NWI) Wetlands:

According to the U.S. Fish and Wildlife (USFWS) National Wetlands Inventory (NWI) data available through IndianaMap (<http://www.indianamap.org/>), two NWI polygons are located within the survey areas. Within the western survey area (Des. No. 1800255) one NWI polygon transects the survey area and is confined to the channel of Muddy Fork Sand Creek. This polygon was identified as being a R2UBH (Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded) wetland. Within the eastern survey area (Des. No. 1800256) the NWI polygon transects the survey area is confined to the channel of Unnamed Tributary (UNT) 1 to Sand Creek. This polygon was also identified as being a R2UBH wetland. A map showing a half mile radius with the NWI layer turned on is provided in the attachments (Pages A13-A14).

National Geological Survey (USGS) National Hydrography Dataset (NHD):

According to the United States National Geological Survey (USGS) National Hydrography Dataset (NHD), there are 13 NHD lines within the western survey area (Des. No. 1800255). Of these, 7 lines are classified as pipelines, 4 lines are classified as perennial streams, and 2 lines are classified as canal ditches. According to the USGS topographic map one perennial stream flowline is mapped as Muddy Fork Sand Creek and verified as a perennial stream. An additional perennial stream flowline was verified and identified during the field investigation as UNT 1 to Muddy Fork Sand Creek. Within the eastern survey area (Des. No. 1800256) there are two NHD lines. Of these lines, 1 is classified as a perennial stream and 1 is classified as a pipeline. The perennial stream flowline was verified and identified as UNT 1 to Sand Creek during the field investigation. Further information about these streams identified during the field investigation can be found in the streams section of this report. Maps showing the NHD layer turned on is provided in the attachments (Pages A15-A16).

APPROVED: *Stephen C. Sperry*
 Ecology and Waterway Permitting Office
 Indiana Department of Transportation
 3:50 pm, Oct 21 2021

Soils:

According to the Soil Survey Geographic (SSURGO) Database for Decatur County, Indiana, the western survey area (Des. No. 1800255) contains seven soil areas with nationally listed hydric soils.

<u>Map Abbreviation</u>	<u>Soil Name</u>	<u>Hydric Component Range</u>	<u>Classification</u>
Cg	Chagrin loam, frequently flooded	0%	Not Hydric
Cy	Cyclone silt loam, 0 to 2% slopes	66-99%	Hydric
FcA	Fincastle silt loam, 0 to 2% slopes	1-32%	Hydric
MmB2	Miami silt loam, 2 to 6% slopes	1-32%	Hydric
MmC2	Miami silt loam, 6 to 12% slopes	1-32%	Hydric
MoC3	Miami clay loam, 6 to 12% slopes, eroded	0%	Not Hydric
Or	Orville silt loam	1-32%	Hydric
Wmb	Williamstown silt loam, 2 to 6% slopes	1-32%	Hydric
XnA	Xenia silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes	1-32%	Hydric

According to the SSURGO Database for Decatur County, Indiana, the eastern survey area (Des. No. 1800256) contains four soil areas with nationally listed hydric soils.

<u>Map Abbreviation</u>	<u>Soil Name</u>	<u>Hydric Component Range</u>	<u>Classification</u>
Cg	Chagrin loam, frequently flooded	0%	Not Hydric
MeB2	Martinsville loam, 2 to 6% slopes	0%	Not Hydric
MmB2	Miami silt loam, 2 to 6% slopes	1-32%	Hydric
MmC2	Miami silt loam, 6 to 12% slopes	1-32%	Hydric
MoC3	Miami clay loam, 6 to 12% slopes, eroded	0%	Not Hydric
XnA	Xenia silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes	1-32%	Hydric
XnB	Xenia silt loam, 2 to 4 percent slopes	1-32%	Hydric

12 Digit HUC:

Muddy Fork HUC 051202060302

Duplicate project maps have been removed and included in Appendix B. Wetland determination forms have also been omitted to reduce file size.

Attachments:

~~Project Location Maps.....A1 – A4~~
 Natural Resources Conservation Service (NRCS) Soil Survey Maps & Soils Reports.....A5 – A9
 StreamStats, NWI Maps, NHD Maps, & Floodplain Maps.....A10 – A19
 Water Resources Maps.....A20 – A23
~~Photograph Location Maps and Photographs.....A24 – A128~~
~~Wetland Determination Forms.....A129 – A150~~
 Pre-Jurisdictional Determination Form.....A151 – A154

Project Description:

The Federal Highway Administration (FHWA) and Indiana Department of Transportation (INDOT), Seymour District propose to proceed with a pavement improvements project on SR 46 in Decatur County, Indiana. The proposed project is divided into two sections with two separate Des. Numbers (1800255 and 1800256).

Des. No. 1800255: The project limits are from SR 3 to the west junction with United States Highway (US) 421, totaling approximately 1.8 miles in length. From the SR 3 and SR 46 intersection to the Central Railroad Company of Indiana (CIND) railroad crossing, the proposed project will involve milling and Hot Mix Asphalt (HMA) preventative maintenance overlay (including shoulders), with partial and full depth pavement patching at various

locations. From the CIND railroad crossing through the west junction with US 421, the proposed project will involve a full depth pavement replacement. Also included in this section of the project will be the replacement and/or construction of a stormwater sewer system with curb and gutter, sanitary sewer, water main reconstruction, and street lighting. The intersections of West Street, Carver Street, Anderson Street, and US 421 (Ireland Street) will be reconstructed to meet current Americans with Disabilities Act (ADA) and Public Right of Way Accessibility Guidelines (PROWAG) standards. The existing sidewalks along the north side of SR 46 from the railroad crossing to the west junction of US 421 will be reconstructed or constructed if not existing which is approximately 0.5 miles in length. They will be reconstructed or constructed if not existing along the south side from approximately 220 feet west of West Street to the west junction of US 421. Additionally, the turning radii of the northeast quadrant of the west junction of US 421 will be improved by moving the curb back, and associated adjustments to the curb ramps, and signal poles.

Des. No. 1800256: The project limits begin from the east junction of the US 421 and SR 46 intersection to approximately 134 feet beyond Base Road in the eastern direction, totaling approximately 0.8 miles in length. The proposed project will involve full depth pavement replacement, and reconstruction/construction of sidewalks along SR 46 from the east junction of US 421 to the drive to the Greensburg Public Library (which is located approximately 0.09 mile west of the Base Road intersection). Along the north side of SR 46, from Lincoln Street to the Greensburg Public Library (approximately 0.6 miles), the existing sidewalk will be replaced with an up to 10 ft multi-use path. Additionally, the south side of SR 46 will have 5 ft. sidewalks and a 5 ft. grass buffer. The replacement and/or construction of a stormwater sewer system with curb and gutter, water main reconstruction, and street lighting will also be included for this portion of the project. Travel and parking lanes will be modified to one travel lane in each direction with parking along the south side of SR 46, roughly between Lincoln St. and Vine St., and parking on the north side between Stewart St. and Davidson St. Additionally, the traffic signal at the Lincoln Street intersection will be replaced. From the drive to the Greensburg Public Library to the eastern project termini, an HMA preventative maintenance overlay is anticipated, which is approximately 0.12 mile in length.

Field Reconnaissance

Des. No. 1800255: The survey area is located in a mostly rural setting, dominated primarily by agricultural fields, light industry, and scattered woodlots. Land use in the western portion of the survey area (beginning at the intersection of SR 3 and SR 46) is rural commercial with open fields, agricultural crops, and woodlots. Vegetation found within this area primarily consists of woody and herbaceous species which are frequently found in roadside seed mixes and species found in commonly disturbed areas. Species observed in this portion of the survey area include silver maple (*Acer saccharium*), tartan honeysuckle (*Lonicera tatarica*), annual blue grass (*Poa annua*), and tall fescue (*Festuca Arundinacea*). Further east, just after the crossing of Muddy Fork Sand Creek, the survey area transitions to more heavily industrialized section which is mostly dominated by maintained grass lawns which are periodically mowed. Vegetation observed includes annual blue grass (*Poa annua*) and tall fescue (*Festuca Arundinacea*). From the CIND railroad crossing, for approximately 0.25 mile the survey area begins to transition to local commercial businesses and then onto a more residentially dominated area, which is exhibited for the remainder of this survey area. The vegetation observed within this area primarily consists of woody species such as Bradford pear (*Pyrus calleryana*) and herbaceous species that are found within maintained lawns that are periodically mowed such as annual blue grass (*Poa annua*) and tall fescue (*Festuca Arundinacea*). The survey area terminates approximately 230 feet east of the SR 46 and US 421 intersection and approximately 280 feet north of where SR 46 and US 421 intersect. The entire survey area was investigated for potential stream and wetland features using USGS Topo and NWI maps.

Des. No. 1800256: The survey area is located in a mostly residential setting with the occasional scattered woodlot and open field. Land use in the western portion of the survey area (beginning at the intersection of SR 46, East St., and US 421) is commercial and residential with one wood lot on the south side of SR 46 just west before UNT 1 to Sand Creek. Vegetation observed in this portion of the survey area includes annual blue grass (*Poa annua*), tall fescue (*Festuca Arundinacea*), tartan honeysuckle (*Lonicera tatarica*), eastern redbud (*Cercis canadensis*) and silver maple (*Acer saccharium*). The remainder of the land use in this survey area is dominated by residential homes with the occasional commercial business until the Greensburg Public Library. The vegetation observed in this portion of the survey area is similar to the other residential areas within the survey area and includes annual blue grass (*Poa annua*), tall fescue (*Festuca Arundinacea*), tartan honeysuckle (*Lonicera tatarica*), eastern redbud

(*Cercis canadensis*) and silver maple (*Acer saccharium*). Beginning at the Greensburg Public Library there is a transition back to rural agricultural with open fields and scattered wood lots. Vegetation found within this area primarily consists of maintained grass lawns which are periodically mowed and species that along the roadside and agricultural fields including autumn olive (*Elaeagnus umbellata*), annual blue grass (*Poa annua*), and tall fescue (*Festuca Arundinacea*) as well as an abundance of poison ivy (*Toxicodendron Radicans*). The entire survey area was investigated for potential stream and wetland features using USGS Topo and NWI maps.

Species composition described throughout the survey area would be different for vegetation composition existing within water resources such as wetlands and riparian corridors of streams. A detailed description of these resources can be found in the wetlands and streams section of this report.

Streams:

According to the hydrology data available through IndianaMap (<http://www.indianamap.org/>) and the Forest Hill and Greensburg USGS topographic map (1:24,000 scale), two USGS perennial blueline streams, mapped as Muddy Fork Sand Creek (Des. No. 1800255) and UNT 1 to Sand Creek (Des. No. 1800256), are located within the survey area. Upon the field investigation, the presence of these streams was verified. One additional stream, UNT 1 to Muddy Fork Sand Creek was also observed during the field investigation.

UNT 1 to Muddy Fork Sand Creek flows in a northwest to southeast direction and originates at the inlet on the northwest side of SR 46, which is within the western survey area (Des. No. 1800255). According to the Forest Hill USGS topo map, the stream is not a mapped USGS stream. This stream was determined to have intermittent flow as it lacked sinuosity and demonstrated an absence of riffle-pool sequences, however debris deposits on plants outside the stream channel were observed. This stream exhibited ordinary high water mark characteristics (OHWM) of 4.5 feet wide and 4 inches (0.33 feet) deep. The OHWM was taken outside the influence of the structure approximately 15.5 feet away. North of the inlet of the structure, Wetland C is present, therefore only a downstream OHWM was measured.

Approximately 95 linear feet (0.01 acre) of UNT 1 to Muddy Fork Sand Creek is within the survey area. According to the USGS StreamStats Report, UNT 1 to Muddy Fork Sand Creek has a drainage area of 12.399 square miles and a gradient of 10.5 feet per mile. The substrate consisted predominantly of silt which was also observed on vegetation outside the stream channel. This stream exhibited poor quality due to roadway runoff and predominantly silt substrate. UNT 1 Muddy Fork Sand Creek drains into Muddy Fork Sand Creek, which drains into Sand Creek, which drains into East Fork White River which is a Traditional Navigable Waterways (TNW). Based on its contribution of intermittent surface flow into a TNW, UNT 1 to Muddy Fork Sand Creek is likely to be considered a *Waters of the United States*.

Muddy Fork Sand Creek flows in a northeast to southwest direction through the western survey area (Des. No. 1800255). This stream was determined to have perennial flow as it had a continuous bed/bank, presence of riffle-pool sequences, and moderate sinuosity. According to the Forest Hill USGS topo map, the stream is a mapped blueline perennial stream. This stream exhibited an upstream OHWM of 29 feet wide and 9 inches (0.75 feet) deep. The OHWM was taken outside the influence of the structure approximately 25 feet away. The downstream OHWM of 31 feet wide and 18 inches (1.5 feet) deep. The OHWM was taken outside the influence of the structure approximately 25 feet away.

Approximately 157 linear feet (0.112 acre) of Muddy Fork Sand Creek is within the survey area. According to the USGS StreamStats Report, Muddy Fork Sand Creek has a drainage area of 10.1 square miles and a gradient of 12.342 feet per mile. The substrate consisted predominantly of sand and fine gravel however the presence of cobble was also observed near the bridge. This stream exhibited average quality due to moderate sinuosity and overhanging vegetation. Muddy Fork Sand Creek drains into Sand Creek, which drains into East Fork White River which is a TNW. Based on its contribution of perennial surface flow into a TNW, Muddy Fork Sand Creek is likely to be considered a *Waters of the United States*.

UNT 1 to Sand Creek, which is locally known as Gas Creek, flows in a north to south direction through the eastern survey area (Des. No. 1800256). This stream was determined to have perennial flow as it had a continuous bed/bank, presence of riffle-pool sequences, and moderate sinuosity. According to the Forest Hill USGS topo map, the stream is a mapped blueline perennial stream. This stream exhibited an upstream OHWM of 11.2 feet wide and 5 inches (0.42 feet) deep. The OHWM was taken outside the influence of the structure approximately 19 feet away. The

downstream OHWM of 7.9 feet wide and 7 inches (0.58 feet) deep. The OHWM was taken outside the influence of the structure approximately 30 feet away.

Approximately 213 linear feet (0.055 acre) of UNT 1 to Sand Creek is within the survey area. According to the USGS StreamStats Report, UNT 1 to Sand Creek has a drainage area of 3.392 square miles and a gradient of 13.4 feet per mile. The substrate consisted predominantly of sand however the presence of artificial riprap was also observed within the channel. This stream exhibited average quality due to moderate sinuosity and overhanging vegetation. UNT 1 to Sand Creek drains into Sand Creek, which drains into East Fork White River which is a TNW. Based on its contribution of perennially surface flow into a TNW, Muddy Fork Sand Creek is likely to be considered a *Waters of the United States*.

Roadside Ditches:

Four roadside ditches (RSD's) were identified within the survey area: RSD's 1 – 4. All RSD's lacked OHWM's and stream characteristics; therefore, they were not considered to be stream features. RSD's 1-4 were delineated and are shown in the attached maps on pages A21 and A25-A27.

Wetlands:

Wetland A is a palustrine emergent (PEM) wetland located within the western survey area (Des. No. 1800255) at the southeast quadrant of the SR 46 and SR 3 intersection. Wetland A extends outside the survey area; however, 0.041 acre exists within the survey area. This wetland would likely be considered poor quality due to its small size, low species diversity, and disturbance from the roadway. Wetland A is connected hydrologically to Muddy Fork Sand Creek via RSD 1, which connects Wetland B and Wetland C to UNT 1 to Muddy Fork Sand Creek. UNT 1 to Muddy Fork Sand Creek begins at the inlet adjacent to Wetland C, and flows under SR 46, and then drains into Muddy Fork Sand Creek outside the survey area. As mentioned, above in the streams section, Muddy Fork Sand Creek contributes overland perennial flow to the East Fork White River, a TNW. Since Wetland A provides a hydrological connection to a TNW it is likely a *Water of the United States*. This connection is illustrated on Water Resources Map 1 of 3 (Page A21), Photo Location Map 1 of 8 (A25), and Photo Location Map 2 of 8 (A26). Two data points (A1 and A2) were taken to determine the boundaries of Wetland A. A discussion of data points A1 and A2 are provided below.

Data point A1 was taken within Wetland A. The dominant vegetation observed at data point A1 was broadleaf cattail (*Typha latifolia*) and rice cut grass (*Leersia oryzoides*), which are both obligate (OBL) species. One hydric soil indicator, Redox Dark Surface (F6), was observed at this data point. This data point exhibited three primary wetland hydrology indicators including: Surface Water (A1), High Water Table (A2), and Saturation (A3). This data point exhibited all three criteria to be considered within a wetland.

Data point A2 was taken approximately 22 feet southeast of data point A1. The dominant vegetation observed at data point A2 was tall annual blue grass (*Poa annua*) which is a facultative upland (FACU) species. Hydric soil and wetland hydrology indicators were not observed at this data point. This data point failed to meet any of the three criteria to be considered within a wetland.

Wetland B is a PEM wetland located within the western survey area (Des. No. 1800255) at the SR 46 and S. 200 W. intersection. Wetland A is 0.081 acre in size. This wetland would likely be considered poor quality primarily due to its small size, low species diversity, and disturbance from the roadway. Wetland B likely drains into Muddy Fork Sand Creek, as discussed previously in the streams section, Muddy Fork Sand Creek contributes overland perennial flow to the East Fork White River, a TNW. Since Wetland B provides a hydrologic connection to a TNW it is likely a *Water of the United States*. Wetland B is connected hydrologically to Muddy Fork Sand Creek by RSD 1, which connects Wetland B to Wetland C, and then onto UNT 1 to Muddy Fork Sand Creek. UNT 1 to Muddy Fork Sand Creek, begins at the inlet adjacent to Wetland C, and flows under SR 46, and then drains into Muddy Fork Sand Creek outside the survey area. This connection is illustrated on Water Resources Map 1 of 3 (Page A21), Photo Location Map 1 of 8 (A25), and Photo Location Map 2 of 8 (A26). Two data points (B1 and B2) were taken to determine the boundaries of Wetland B. A discussion of data points B1 and B2 are provided below.

Data point B1 was taken within Wetland B. The dominant vegetation observed within the herb stratum was broadleaf cattail (*Typha latifolia*) which is an OBL species. Additionally, white mulberry (*Morus alba*) was the dominant vegetation observed within the sapling/shrub stratum and northern catalpa (*Catalpa speciosa*) was dominant within the tree stratum. White mulberry (*Morus alba*) is a facultative species (FAC) while northern catalpa

(*Catalpa speciosa*) is a FACU species. One hydric soil indicator, Redox Dark Surface (F6), was observed at this data point. This data point exhibited one primary wetland hydrology indicator which was Saturation (A3), and three secondary wetland hydrology indicators including: Drainage Patterns (B10), Crayfish Burrows (C8), and Geomorphic Position (D2). This data point exhibited all three criteria to be considered within a wetland.

Data point B2 was taken approximately 28 feet northwest of data point B1. The dominant vegetation observed within the herb stratum was white clover (*Trifolium repens*) and annual blue grass (*Poa annua*) which are both FACU species. Additionally, northern catalpa (*Catalpa speciosa*) was dominate within the tree stratum which is a FACU species. Hydric soil and wetland hydrology indicators were not observed at this data point. This data point failed to meet any of the three criterions to be considered within a wetland.

Wetland C is a PEM wetland located within the western survey area (Des. No. 1800255) approximately 580 feet east of the SR 46 and S. 200 W. intersection. Wetland C is 0.188 acre in size. Ponding water from agricultural field tile drain was observed within this wetland. This wetland would likely be considered poor quality primarily due to its small size, low species diversity, and disturbance from the roadway. Wetland C provides a hydrologic connection to UNT 1 to Muddy Fork Sand Creek which drains into Muddy Fork Sand Creek. As discussed previously in the streams section, Muddy Fork Sand Creek contributes overland perennial flow to the East Fork White River, a TNW. Since Wetland C provides a hydrologic connection a TNW it is likely *Water of the United States*. Wetland C is connected hydrologically to Muddy Fork Sand Creek by UNT 1 to Muddy Fork Sand Creek, which begins at the inlet adjacent to Wetland C and flows under SR 46 and then drains into Muddy Fork Sand Creek outside the survey area. This connection is illustrated on Water Resources Map 1 of 3 (Page A21), Photo Location Map 1 of 8 (A25), and Photo Location Map 2 of 8 (A26). Three data points (C1, C2, and C3) were taken to determine the boundaries of Wetland C. A discussion of data points C1-C3 are provided below.

Data point C1 was taken within Wetland C and RSD 1. The dominant vegetation observed within the herb stratum was broadleaf cattail (*Typha latifolia*), rice cut grass (*Leeria oryzoides*), and reed canary grass (*Phalaris arundinacea*). Both broadleaf cattail (*Typha latifolia*) and rice cut grass (*Leeria oryzoides*) are OBL species while reed canary grass (*Phalaris arundinacea*) is a facultative wetland (FACW) species. One hydric soil indicator, Loamy Mucky Mineral (F1), was observed at this data point. This data point exhibited three primary wetland hydrology indicators including: Surface Water (A1), High Water Table (A2), and Saturation (A3), and one secondary wetland hydrology indicator of Crayfish Burrows (C8). This data point exhibited all three criteria to be considered within a wetland.

Data point C2 was taken approximately 24 feet northwest of data point C1. The dominant vegetation observed was annual blue grass (*Poa annua*) which is a FACU species. Hydric soil and wetland hydrology indicators were not observed at this data point. This data point failed to meet any of the three criterions to be considered within a wetland.

Data point C3 was taken within Wetland C approximately 230 feet west of data point C1 and within RSD 1. The dominant vegetation observed within the herb stratum was reed canary grass (*Phalaris arundinacea*) which is a FACW species. Additionally, bush honeysuckle (*Lonicera tatarica*) was the dominate vegetation observed within the sapling/shrub stratum which is a FACU species. While Bradford pear (*Pyrus calleryana*), sugar maple (*Acer saccharum*), and eastern red cedar (*Juniperus virginiana*) was dominate within the tree stratum. Bradford pear (*Pyrus calleryana*) is an upland (UPL) species while sugar maple (*Acer saccharum*), and eastern red cedar (*Juniperus virginiana*) are FACU species. One hydric soil indicator, Sandy Redox (S5), was observed at this data point. This data point exhibited three primary wetland hydrology indicators including: Surface Water (A1), High Water Table (A2), and Saturation (A3), and one secondary wetland hydrology indicator of Drainage Patterns (B10). This data point exhibited all three criteria to be considered within a wetland.

Wetland D is a PEM wetland located within the western survey area (Des. No. 1800255) and RSD 3 south of SR 46. Wetland D is 0.012 acre in size. This wetland would likely be considered poor quality primarily due to its small size, low species diversity, and disturbance from the roadway. Wetland D likely drains into Muddy Fork Sand Creek and therefore provides a hydrologic connection to a TNW. As discussed previously in the streams section, Muddy Fork Sand Creek contributes overland perennial flow to the East Fork White River, a TNW. Since Wetland D provides a hydrologic connection a TNW it is likely *Water of the United States*. Wetland D is connected hydrologically to Muddy Fork Sand Creek by RSD 3, which provides a connection via UNT 1 to Muddy Fork Sand Creek. This connection is illustrated on Water Resources Map 1 of 3 (Page A21) and Photo Location Map 2 of 8

(A26). Two data points (D1 and D2) were taken to determine the boundaries of Wetland D. A discussion of data points D1 and D2 are provided below.

Data point D1 was taken within Wetland D. The dominant vegetation observed within the herb stratum was rice cut grass (*Leersia oryzoides*) and reed canary grass (*Phalaris arundinacea*). Rice cut grass (*Leersia oryzoides*) is an OBL species while reed canary grass (*Phalaris arundinacea*) is a FACW species. Additionally, white mulberry (*Morus alba*) and black walnut (*Juglans nigra*) was observed to be the dominate vegetation within the sapling/shrub stratum. White mulberry (*Morus alba*) is a FAC species and black walnut (*Juglans nigra*) is FACU species. Black walnut (*Juglans nigra*) and American sycamore (*Platanus occidentalis*) were observed to be dominate within the tree stratum. Black walnut (*Juglans nigra*) is a FACU species while American sycamore (*Platanus occidentalis*) is a FACW species. One hydric soil indicator, Redox Dark Surface (F6), was observed at this data point. This data point exhibited one primary wetland hydrology indicator which was Saturation (A3), and one secondary wetland hydrology indicators including: FAC-Neutral Test (D5). This data point exhibited all three criteria to be considered within a wetland.

Data point D2 was taken approximately 20 feet northeast of data point D1. The dominant vegetation observed within the herb stratum was annual bluegrass (*Poa annua*) which is a FACU species. Hydric soil and wetland hydrology indicators were not observed at this data point. This data point failed to meet any of the three criterions to be considered within a wetland.

Wetland E is a PEM wetland located within the eastern survey area (Des. No. 1800256) approximately 100 feet east of Central Railroad Company of Indiana. Wetland E is 0.041 acre in size. This wetland would likely be considered poor quality primarily due to its small size, low species diversity, and disturbance from the roadway. Wetland E is connected hydrologically to Muddy Fork Sand Creek by a vegetated ditch outside the survey area located just north of SR 46 at a lower relief. This vegetated ditch is connected to the Greensburg Reservoir via an NHD line (canal ditch). The outlet of Greensburg Reservoir flows into Muddy Fork Sand Creek. Wetland E likely drains into Muddy Fork Sand Creek and therefore provides a hydrological connection to a TNW. As discussed previously in the streams section, Muddy Fork Sand Creek contributes overland perennial flow to the East Fork White River, a TNW. Since Wetland E provides a hydrologic connection to a TNW it is likely *Water of the United States*. This connection is shown via aerial and topographic mapping coupled with the NHD canal ditch line in the attachments on USGS Topo Map (Page A3), NHD Map 1 of 2 (Page A15), Water Resources Map 2 of 3 (Page A22), and Photo Location Map 5 of 8 (Page A29). Two data points (E1 and E2) were taken to determine the boundaries of Wetland E. A discussion of data points E1 and E2 are provided below.

Data point E1 was taken within Wetland E. The dominant vegetation observed at data point E1 was broadleaf cattail (*Typha latifolia*) and Franks sedge (*Carex fankii*) both of which are OBL species One hydric soil indicator, Loamy Mucky Mineral (F1), was observed at this data point. This data point exhibited three primary wetland hydrology indicators including: Surface Water (A1), High Water Table (A2), and Saturation (A3), and one secondary wetland hydrology indicator of Crayfish Burrows (C8). This data point exhibited all three criteria to be considered within a wetland.

Data point E2 was taken approximately 10 feet northeast of data point E1. The dominant vegetation observed within data point E2 was prairie dropseed (*Sporobolus heterolepis*), which is a FACU species, and common chives (*Allium schoenoprasum*), which is a FAC species. Hydric soil and wetland hydrology indicators were not observed at this data point. This data point failed to meet any of the three criterions to be considered within a wetland.

Open Water:

No open water was observed within or adjacent to the survey area.

Conclusions:

A field investigation was conducted on June 9, 2021 by RQAW Corporation to evaluate the presence of *Waters of the United States* for the SR 46 Pavement Improvements Project in Decatur County, Indiana. Field observations identified one intermittent stream (UNT 1 to Muddy Fork Sand Creek) and two perennial streams (Muddy Fork to Sand Creek and UNT 1 to Sand Creek) and five wetlands (Wetland A – E) within the survey areas.

Based on their contribution of perennial or intermittent overland flow to the East Fork White River, a TNW, UNT 1 to Muddy Fork Sand Creek, Muddy Fork to Sand Creek, and UNT 1 to Sand Creek would likely be considered

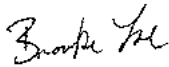
Waters of the United States. Based on their hydrological connection to a TNW, Wetlands A – E, are likely *Waters of the United States.*

Every effort should be taken to avoid and minimize impacts to these waterways. If impacts are necessary, then mitigation may be required. The INDOT Ecology and Waterway Permitting Section should be contacted immediately if impacts will occur. The final determination of jurisdictional waters is ultimately made by the U.S. Army Corps of Engineers. This report is our best judgement based on the guidelines set forth by the Corps.

Acknowledgement:

This waters determination has been prepared based on the best available information, interpreted in the light of the investigator’s training, experience and professional judgement in conformance with the 1987 Corps of Engineers Wetlands Delineation Manual, the appropriate regional supplement, the USACE Jurisdictional Determination Form Instructional Guidebook, and other appropriate agency guidelines.

Prepared by:



October 7, 2021
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**Table 1: Stream Summary
SR 46 Pavement Improvements Project
Decatur County, Indiana
Des. Nos. 1800255 and 1800256**

Stream Name	Photos	Lat/Long	OHWM Width (feet)	OHWM Depth (feet)	USGS Blue-line?	Riffles/ Pools?	Substrate	Total linear ft/acre	Quality	Flow Regime	Likely Water of U.S.?
UNT 1 to Muddy Fork Sand Creek	53, 65-66	39.33415° N -85.51508° W	4.5	0.33	No	No	Silt	95 linear feet (0.01 acre)	Poor	Intermittent	Yes
Muddy Fork Sand Creek	79-81	39.33591° N -85.51215° W	31	1.5	Perennial	Yes	Sand/Fine Gravel/Cobble	157 linear feet (0.112 acre)	Average	Perennial	Yes
UNT 1 to Sand Creek	162-163, 166-167	39.33669° N -85.4792° W	11.2	0.58	Perennial	Yes	Sand	213 linear feet (0.055 acre)	Average	Perennial	Yes

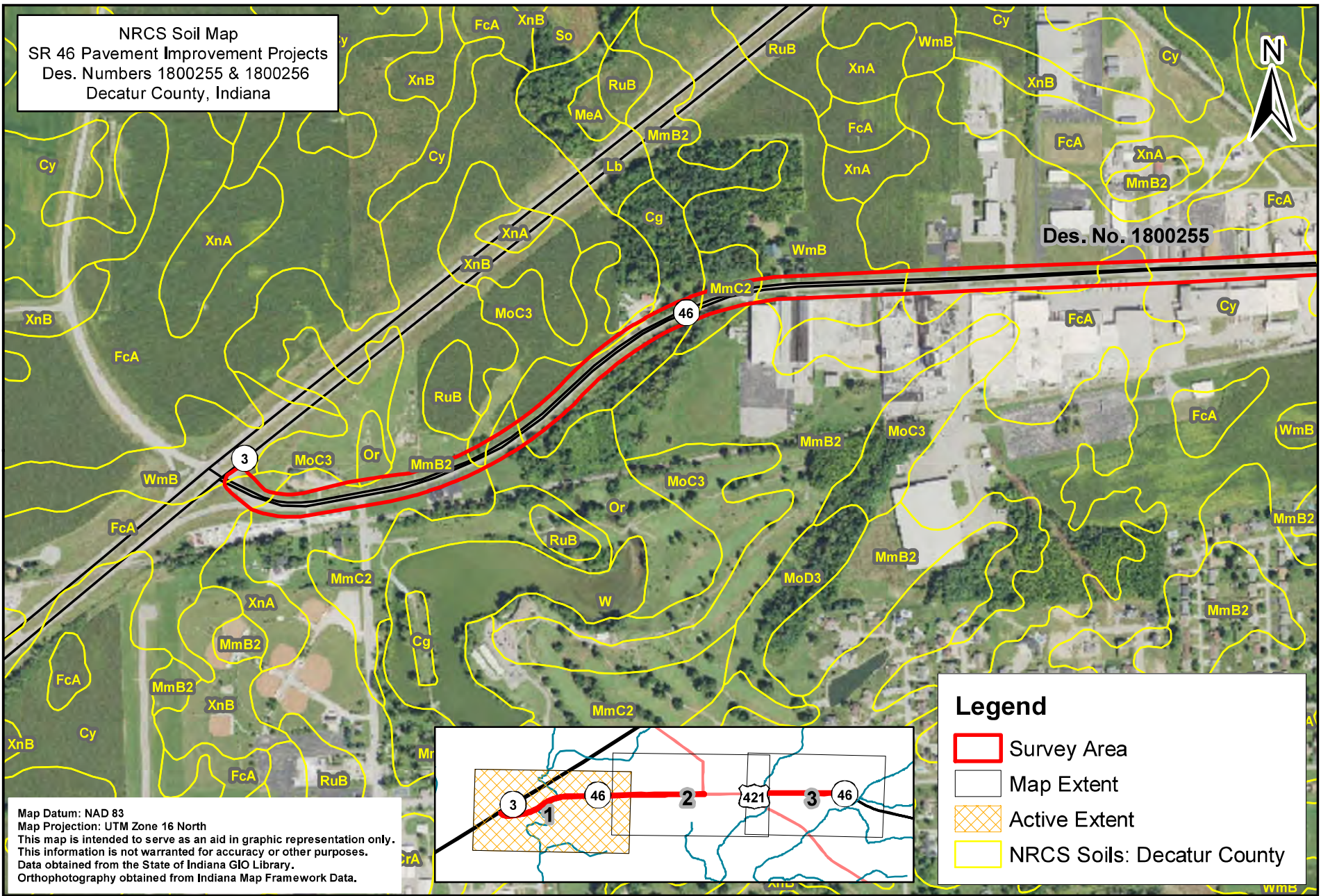
**Table 2: Wetland Summary
SR 46 Pavement Improvements Project
Decatur County, Indiana
Des. Nos. 1800255 and 1800256**

Wetland Name	Photos	Lat/Long	Type	Wetland Quality	Total Area (acres)	Likely Water of U.S.?
Wetland A	3-4, 7	39.33354° N -85.52061° W	PEM	Poor	0.041	Yes
Wetland B	20, 23-25, 27, 29, 31-32	39.33341° N -85.51832° W	PEM	Poor	0.081	Yes
Wetland C	46-47, 51-55	39.33409° N -85.51572° W	PEM	Poor	0.188	Yes
Wetland D	57-60, 64	39.33396° N -85.51548° W	PEM	Poor	0.012	Yes
Wetland E	116-118, 121-124	39.33659° N -85.4981° W	PEM	Poor	0.041	Yes

**Table 3: Data Point Summary
 SR 46 Pavement Improvements Project
 Decatur County, Indiana
 Des. Nos. 1800255 and 1800256**

Data Point	Vegetation?	Hydric Soil?	Wetland Hydrology?	Wetland?
A1	YES	YES	YES	YES
A2	NO	NO	NO	NO
B1	YES	YES	YES	YES
B2	NO	NO	NO	NO
C1	YES	YES	YES	YES
C2	NO	NO	NO	NO
C3	YES	YES	YES	YES
D1	YES	YES	YES	YES
D2	NO	NO	NO	NO
E1	YES	YES	YES	YES
E2	NO	NO	NO	NO

NRCS Soil Map
 SR 46 Pavement Improvement Projects
 Des. Numbers 1800255 & 1800256
 Decatur County, Indiana

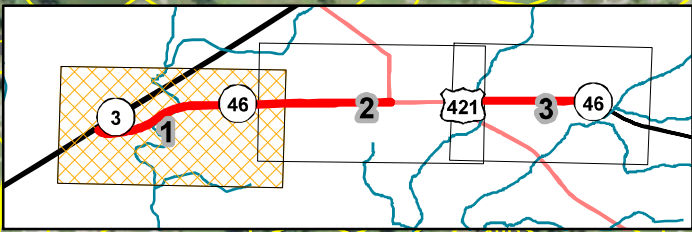


Des. No. 1800255

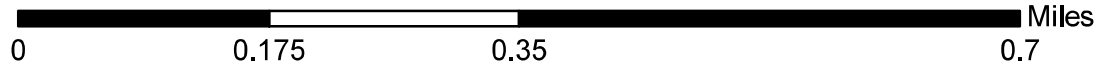
Legend

- Survey Area
- Map Extent
- Active Extent
- NRCS Soils: Decatur County

Map Datum: NAD 83
 Map Projection: UTM Zone 16 North
 This map is intended to serve as an aid in graphic representation only.
 This information is not warranted for accuracy or other purposes.
 Data obtained from the State of Indiana GIO Library.
 Orthophotography obtained from Indiana Map Framework Data.

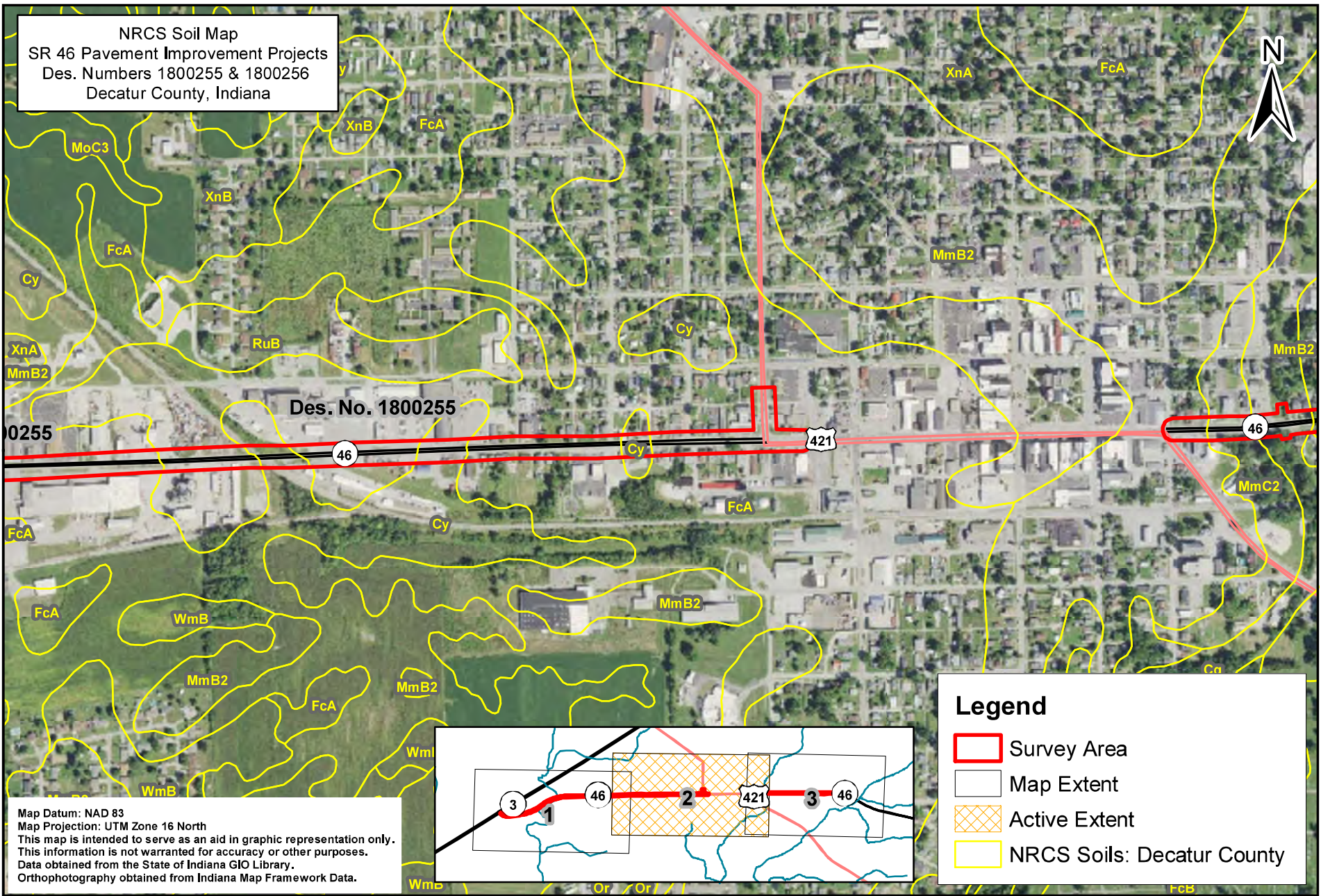


NRCS Soil Map 1 of 3



Location: SR 46
 Township: Washington
 County: Decatur
 Date: 03/02/2021

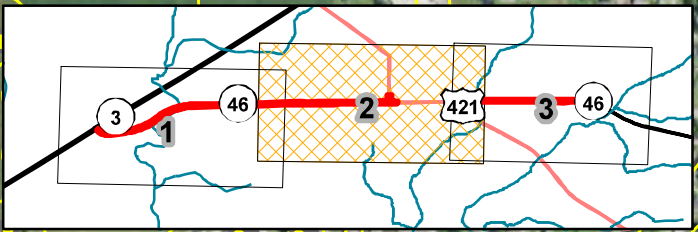
NRCS Soil Map
 SR 46 Pavement Improvement Projects
 Des. Numbers 1800255 & 1800256
 Decatur County, Indiana



Legend

- Survey Area
- Map Extent
- Active Extent
- NRCS Soils: Decatur County

Map Datum: NAD 83
 Map Projection: UTM Zone 16 North
 This map is intended to serve as an aid in graphic representation only.
 This information is not warranted for accuracy or other purposes.
 Data obtained from the State of Indiana GIO Library.
 Orthophotography obtained from Indiana Map Framework Data.

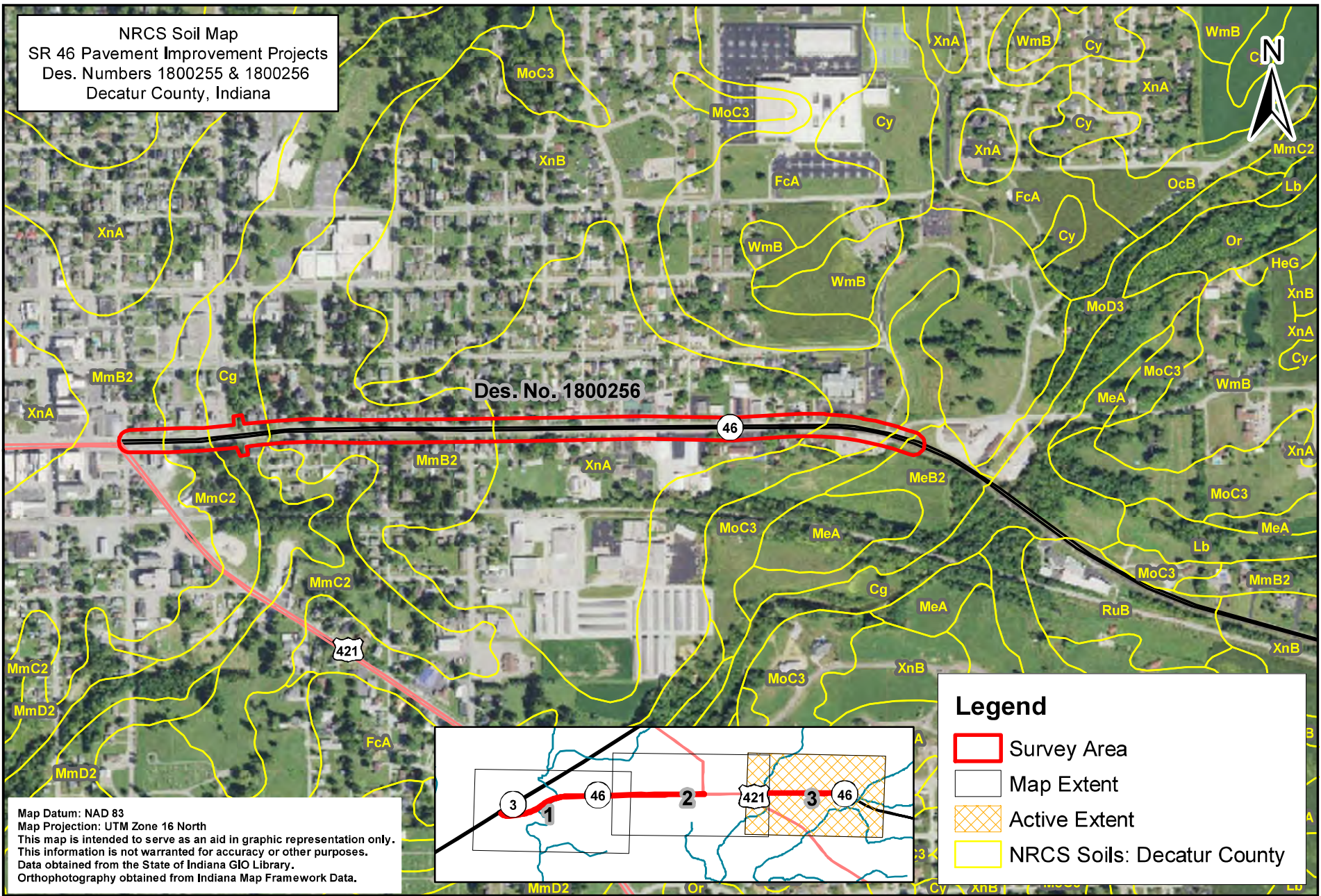


NRCS Soil Map 2 of 3

0 0.175 0.35 0.7 Miles

Location: SR 46
 Township: Washington
 County: Decatur
 Date: 03/02/2021

NRCS Soil Map
 SR 46 Pavement Improvement Projects
 Des. Numbers 1800255 & 1800256
 Decatur County, Indiana



Des. No. 1800256

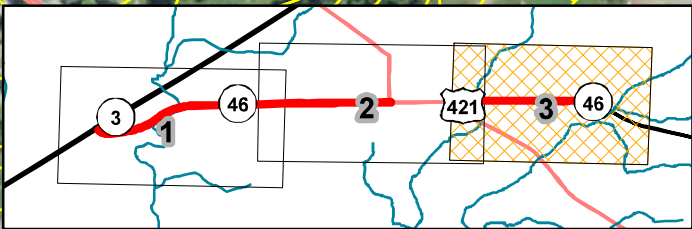
46

421

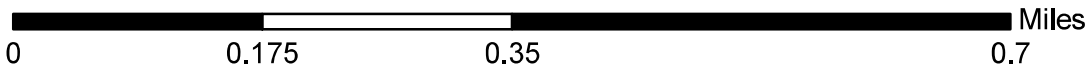
Legend

- Survey Area
- Map Extent
- Active Extent
- NRCS Soils: Decatur County

Map Datum: NAD 83
 Map Projection: UTM Zone 16 North
 This map is intended to serve as an aid in graphic representation only.
 This information is not warranted for accuracy or other purposes.
 Data obtained from the State of Indiana GIO Library.
 Orthophotography obtained from Indiana Map Framework Data.



NRCS Soil Map 3 of 3



Location: SR 46
 Township: Washington
 County: Decatur
 Date: 03/02/2021

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Cg	Chagrin loam, frequently flooded	0	3.1	11.9%
Cy	Cyclone silt loam, 0 to 2 percent slopes	85	7.1	27.1%
FcA	Fincastle silt loam, 0 to 2 percent slopes	10	8.6	32.9%
MmB2	Miami silt loam, 2 to 6 percent slopes, eroded	5	3.2	12.4%
MmC2	Miami silt loam, 6 to 12 percent slopes, eroded	5	0.9	3.4%
MoC3	Miami clay loam, 6 to 12 percent slopes, severely eroded	0	0.4	1.4%
Or	Orrville silt loam, frequently flooded	3	0.6	2.4%
WmB	Williamstown silt loam, 2 to 6 percent slopes, eroded	5	2.2	8.5%
XnA	Xenia silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes	5	0.0	0.0%
Totals for Area of Interest			26.3	100.0%



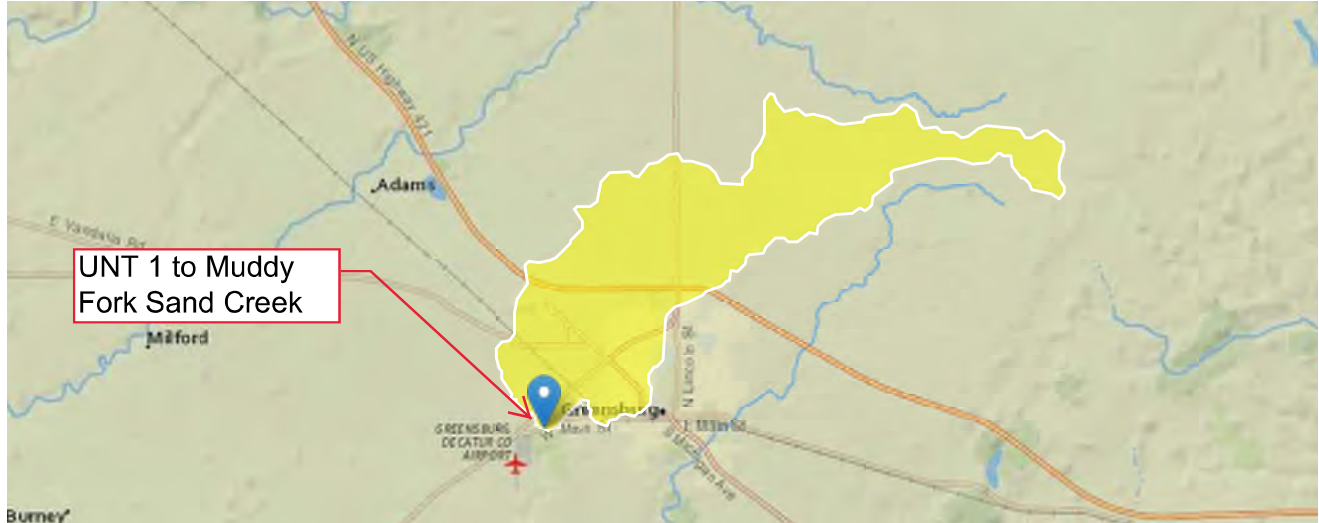
Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Cg	Chagrin loam, frequently flooded	0	1.0	8.1%
MeB2	Martinsville loam, 2 to 6 percent slopes, eroded	0	0.2	1.9%
MmB2	Miami silt loam, 2 to 6 percent slopes, eroded	5	3.9	33.0%
MmC2	Miami silt loam, 6 to 12 percent slopes, eroded	5	0.7	5.8%
MoC3	Miami clay loam, 6 to 12 percent slopes, severely eroded	0	0.3	2.4%
XnA	Xenia silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes	5	4.8	40.2%
XnB	Xenia silt loam, 2 to 4 percent slopes	10	1.0	8.5%
Totals for Area of Interest			12.0	100.0%



StreamStats Report Des No 1800255

Region ID: IN
Workspace ID: IN20210811155729289000
Clicked Point (Latitude, Longitude): 39.33410, -85.51498
Time: 2021-08-11 11:57:54 -0400



Basin Characteristics			
Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	12.399	square miles
T2INDNR	Average transmissivity (ft ² /d) for the full depth of unconsolidated deposits from InDNR well database.	1228	square feet per day
LOWREG	Low Flow Region Number	1729	dimensionless
QSSPERMTHK	Index of the permeability of surficial Quaternary sediments computed as in SIR 2014-5177	47.15	dimensionless
LC01FOREST	Percentage of forest from NLCD 2001 classes 41-43	2.6	percent
K2INDNR	Average hydraulic conductivity (ft/d) for the full depth of unconsolidated deposits from InDNR well database.	16	ft per day
CSL10_85	Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known	10.5	feet per mi

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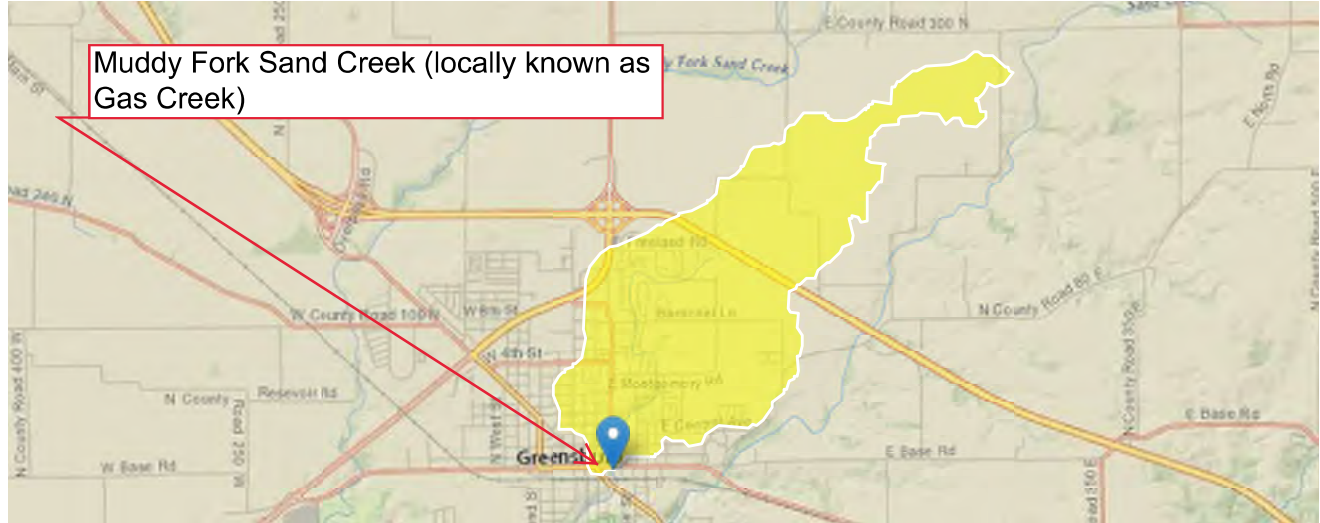
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Application Version: 4.6.2
 StreamStats Services Version: 1.2.22
 NSS Services Version: 2.1.2

StreamStats Report Des. No. 1800256

Region ID: IN
Workspace ID: IN20210811160825946000
Clicked Point (Latitude, Longitude): 39.33634, -85.47921
Time: 2021-08-11 12:08:44 -0400



Basin Characteristics			
Parameter Code	Parameter Description	Value	Unit
CSL10_85	Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known	13.4	feet per mi
DRNAREA	Area that drains to a point on a stream	3.392	square miles
K2INDNR	Average hydraulic conductivity (ft/d) for the full depth of unconsolidated deposits from InDNR well database.	14	ft per day
LC01FOREST	Percentage of forest from NLCD 2001 classes 41-43	1.8	percent
LOWREG	Low Flow Region Number	1729	dimensionless
QSSPERMTHK	Index of the permeability of surficial Quaternary sediments computed as in SIR 2014-5177	43.98	dimensionless
T2INDNR	Average transmissivity (ft ² /d) for the full depth of unconsolidated deposits from InDNR well database.	1083	square feet per day

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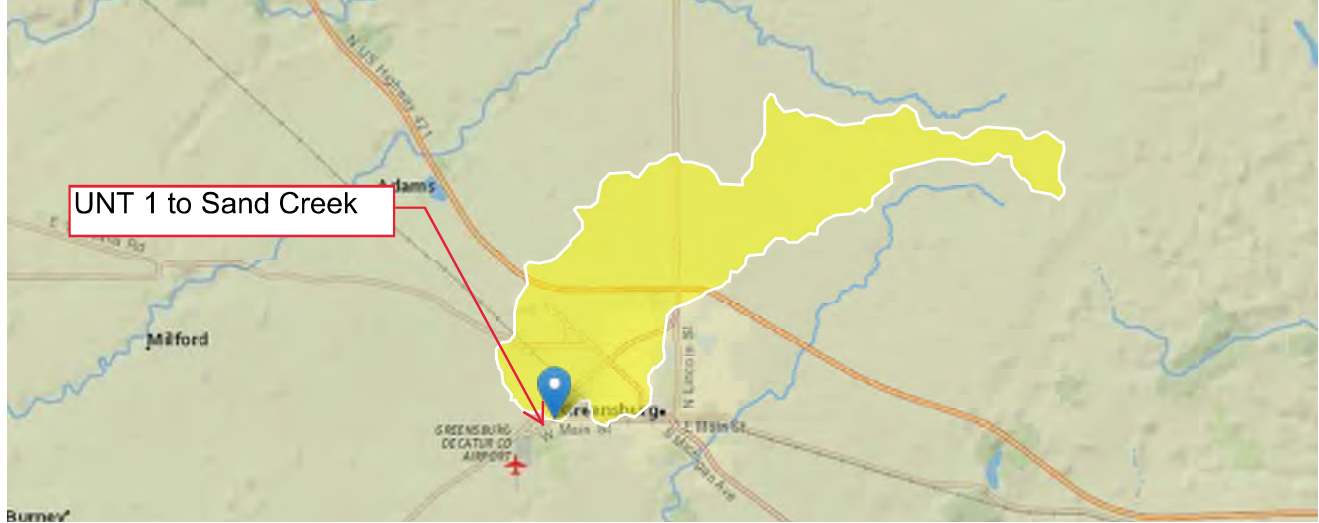
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Application Version: 4.6.2
 StreamStats Services Version: 1.2.22
 NSS Services Version: 2.1.2

StreamStats Report Des. No. 1800255

Region ID: IN
Workspace ID: IN20210811160414257000
Clicked Point (Latitude, Longitude): 39.33594, -85.51217
Time: 2021-08-11 12:04:39 -0400



Basin Characteristics				
Parameter Code	Parameter Description	Value	Unit	
CSL10_85	Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known	10.1	feet per mi	
DRNAREA	Area that drains to a point on a stream	12.342	square miles	
K2INDNR	Average hydraulic conductivity (ft/d) for the full depth of unconsolidated deposits from InDNR well database.	16	ft per day	
LC01FOREST	Percentage of forest from NLCD 2001 classes 41-43	2.5	percent	
LOWREG	Low Flow Region Number	1729	dimensionless	
QSSPERMTHK	Index of the permeability of surficial Quaternary sediments computed as in SIR 2014-5177	47.25	dimensionless	
T2INDNR	Average transmissivity (ft ² /d) for the full depth of unconsolidated deposits from InDNR well database.	1229	square feet per day	

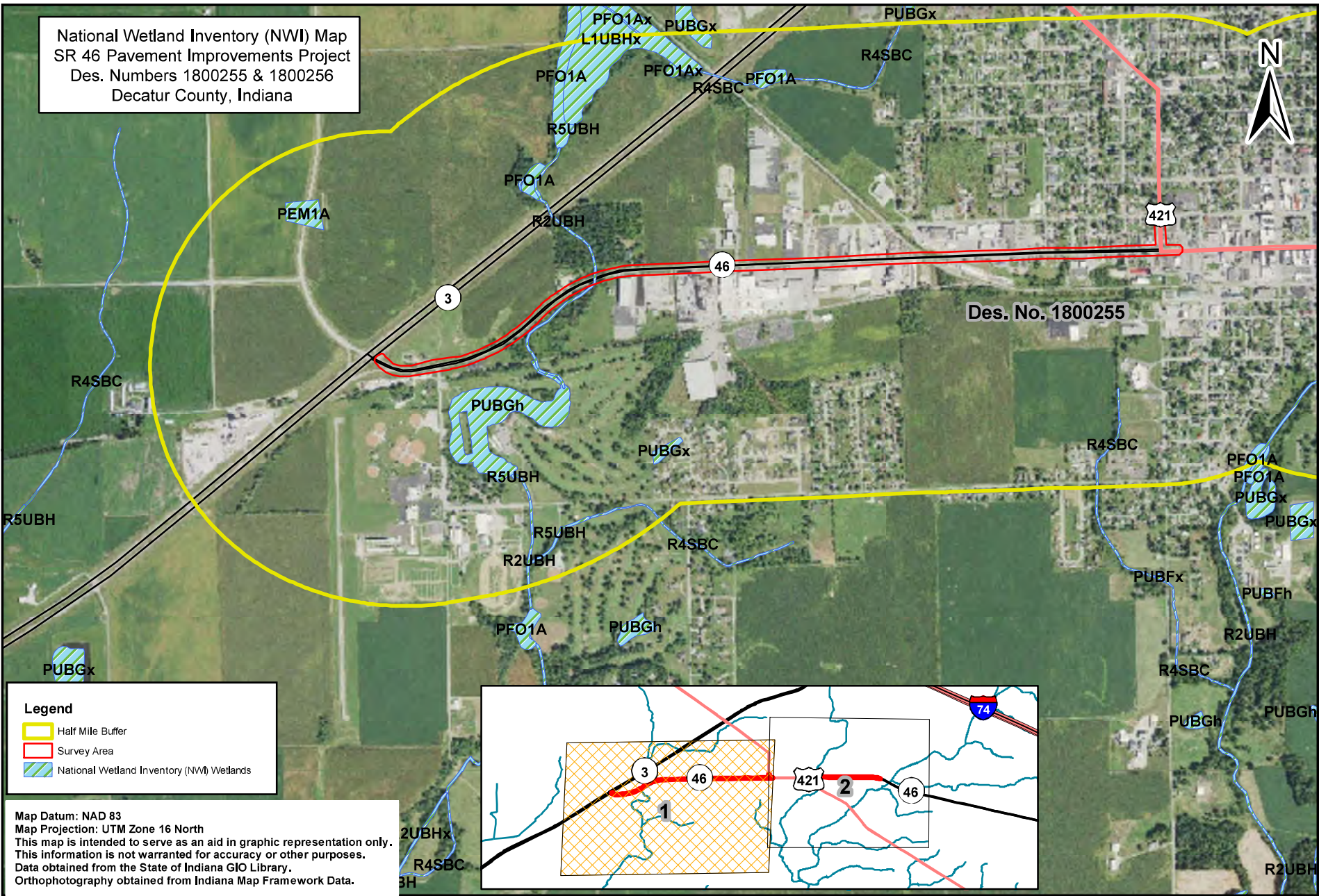
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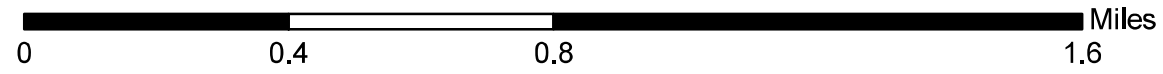
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Application Version: 4.6.2
 StreamStats Services Version: 1.2.22
 NSS Services Version: 2.1.2

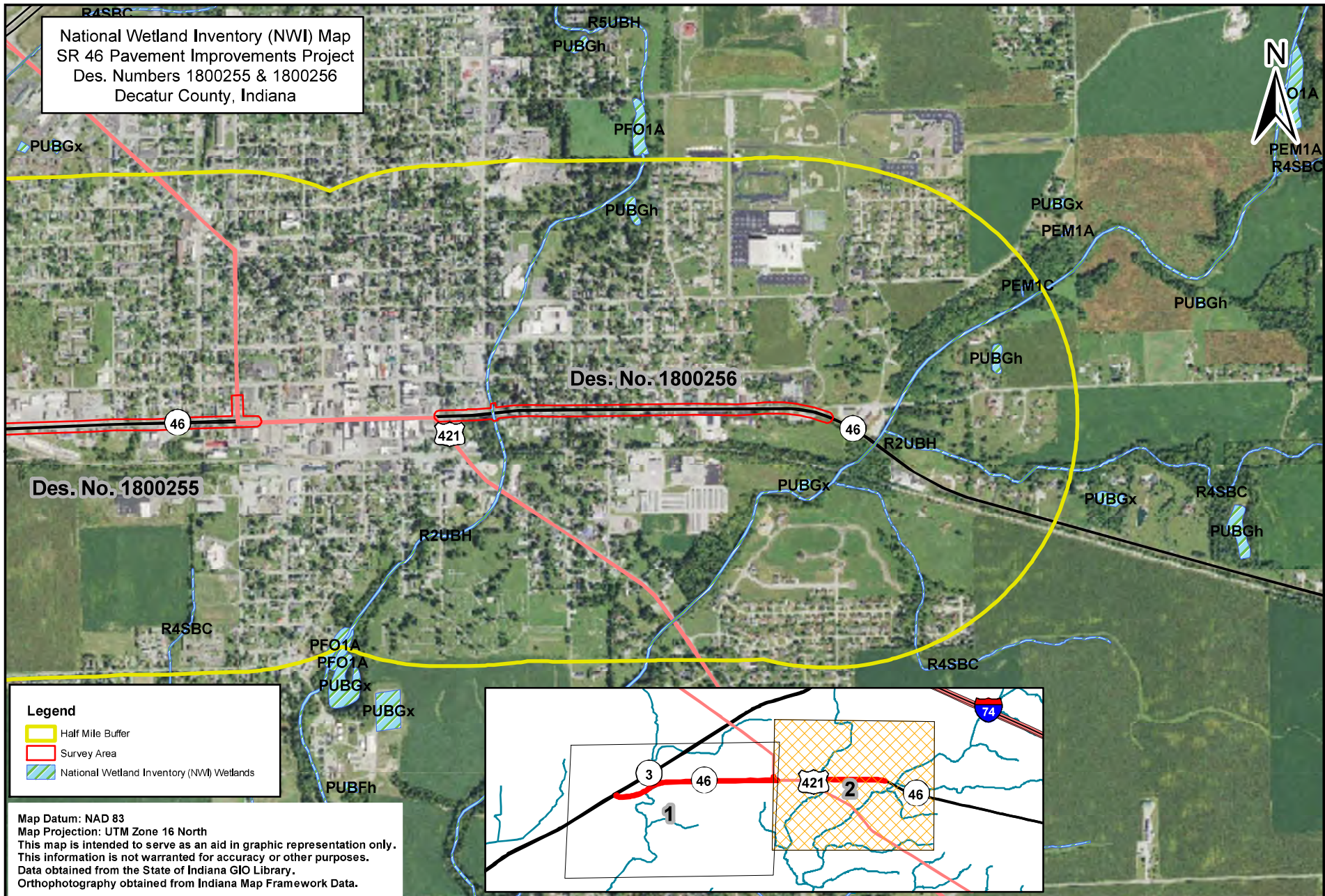
National Wetland Inventory (NWI) Map
 SR 46 Pavement Improvements Project
 Des. Numbers 1800255 & 1800256
 Decatur County, Indiana



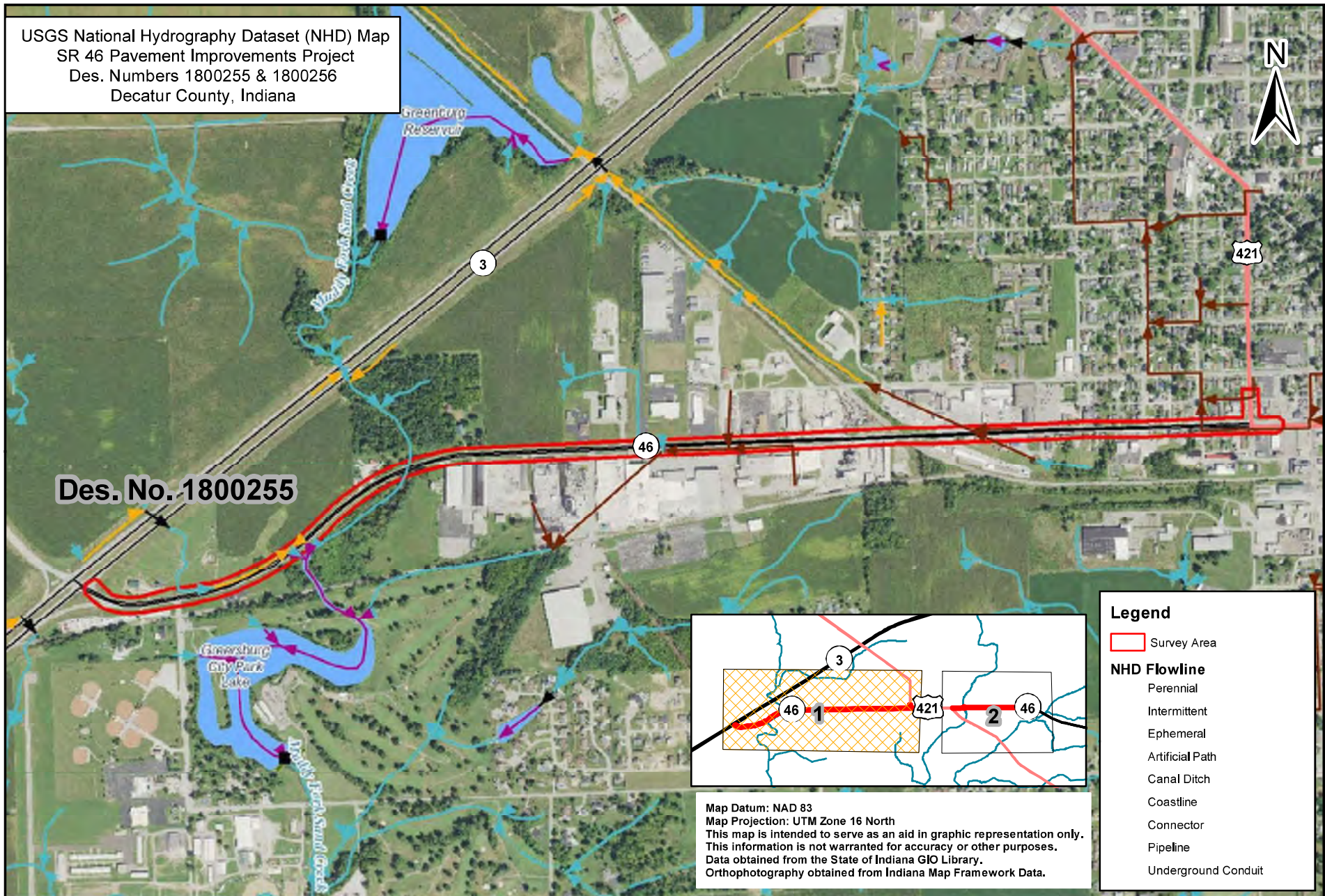
NWI Map 1 of 2



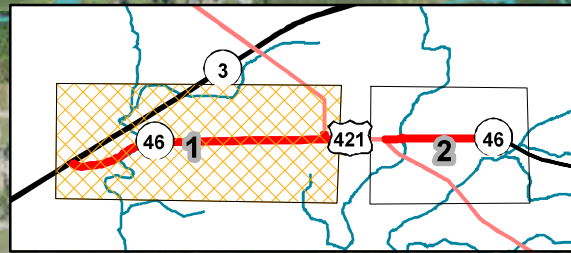
Location: SR 46
 Township: Washington
 County: Decatur
 Date: 03/02/2021



USGS National Hydrography Dataset (NHD) Map
 SR 46 Pavement Improvements Project
 Des. Numbers 1800255 & 1800256
 Decatur County, Indiana



Des. No. 1800255



Map Datum: NAD 83
 Map Projection: UTM Zone 16 North
 This map is intended to serve as an aid in graphic representation only.
 This information is not warranted for accuracy or other purposes.
 Data obtained from the State of Indiana GIO Library.
 Orthophotography obtained from Indiana Map Framework Data.

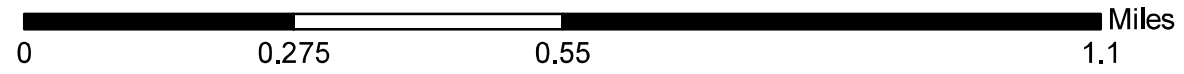
Legend

- Survey Area
- NHD Flowline**

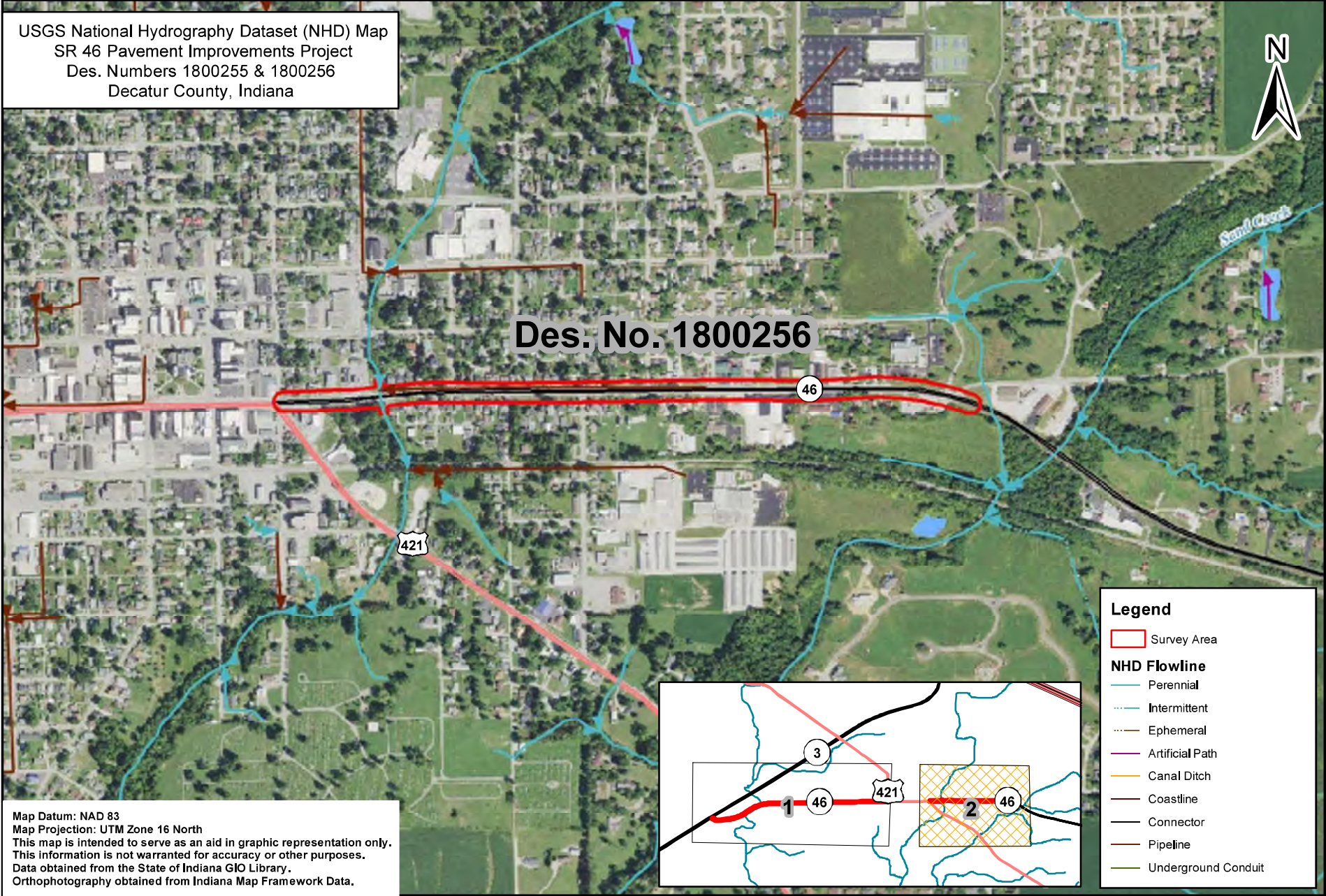
 - Perennial
 - Intermittent
 - Ephemeral
 - Artificial Path
 - Canal Ditch
 - Coastline
 - Connector
 - Pipeline
 - Underground Conduit



NHD Map 1 of 2



Location: SR 46
Township: Washington
County: Decatur
Date: 03/02/2021



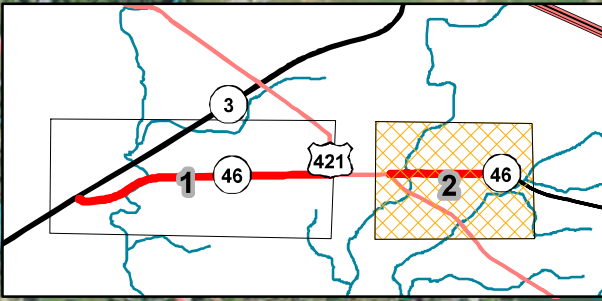
USGS National Hydrography Dataset (NHD) Map
 SR 46 Pavement Improvements Project
 Des. Numbers 1800255 & 1800256
 Decatur County, Indiana

Des. No. 1800256

Map Datum: NAD 83
 Map Projection: UTM Zone 16 North
 This map is intended to serve as an aid in graphic representation only.
 This information is not warranted for accuracy or other purposes.
 Data obtained from the State of Indiana GIO Library.
 Orthophotography obtained from Indiana Map Framework Data.

Legend

- Survey Area
- NHD Flowline**
- Perennial
- - - Intermittent
- - - Ephemeral
- Artificial Path
- Canal Ditch
- Coastline
- Connector
- Pipeline
- Underground Conduit



NHD Map 2 of 2

0 0.2 0.4 0.8 Miles

Location: SR 46
Township: Washington
County: Decatur
Date: 03/02/2021



FLOOD HAZARD INFORMATION
SEE FB REPORT FOR DETAILED LEGEND AND INDEX MAP FOR DRAFT FB PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) Zone X, Zone D	With BFE or Depth Zone AE, AO, AH, VE, AR
Regulatory Floodway	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X	Future Continuity 1% Annual Chance Flood Hazard Zone X
Other Areas of Flood Hazard	Area with Reduced Flood Risk due to Levee See Note Zone X	Area with Flood Risk due to Levee Zone D
Other Areas	NO SCREEN Area of Minimal Flood Hazard Zone X	Effective LOMbs
General Structures	Area of Undetermined Flood Hazard Zone D	Channel, Culvert, or Storm Sewer
Other Features	Levee, Dike, or Floodwall	Levee, Dike, or Floodwall
	Cross Sections with 1% Annual Chance Water Surface Elevation	Coastal Transect
	Coastal Transect	Coastal Transect
	Public Roadway	Public Roadway
	Hydrographic Feature	Hydrographic Feature
	Base Flood Elevation Line (BFE)	Base Flood Elevation Line (BFE)
	Limit of Study	Limit of Study
	Jurisdiction Boundary	Jurisdiction Boundary

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), including products associated with the FIRM, including policies and rates, the current map date for each FIRM panel, the geographic coordinates, the National Flood Insurance Program (NFIP) is generally shown on the FIRM map. Information on change of status of the NFIP is available on the FEMA website. For more information on the NFIP, please visit the FEMA website. The map products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or special provisions. Many of these products can be ordered or obtained directly from the website. Community actions and an adjacent FIRM panel must obtain a current copy of the adjacent panel as well as the current FIRM data. These may be accessed directly from the Flood Map Service Center at the number listed above.

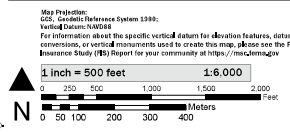
For community and countywide map dates, refer to the Flood Insurance Study Report for this jurisdiction. To determine flood insurance availability in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-425-6842.

Baseline information shown on this FIRM was prepared in digital format by the United States Geological Survey (USGS). The baseline shown is the USGS National Water Information System (NWIS) data.

This map was prepared from FEMA National Flood Hazard Layer (NFHL) 090201 141 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change subsequent to this date and time. For additional information, please see the Flood Hazard Mapping System Online Fact Sheet at <http://www.fema.gov/nfhl>.

The map products with FIRM's containing the use of digital flood data are not valid as described below. The baseline shown on this FIRM is based on the best available data. This map represents only the information shown on the map. It does not represent the actual ground conditions. The map includes the following map symbols for reference: Flood Hazard, Flood Hazard, Flood Hazard, map creation date, community identifier, FIRM panel number, and FIRM effective date.

SCALE



NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

PANEL 134 of 265

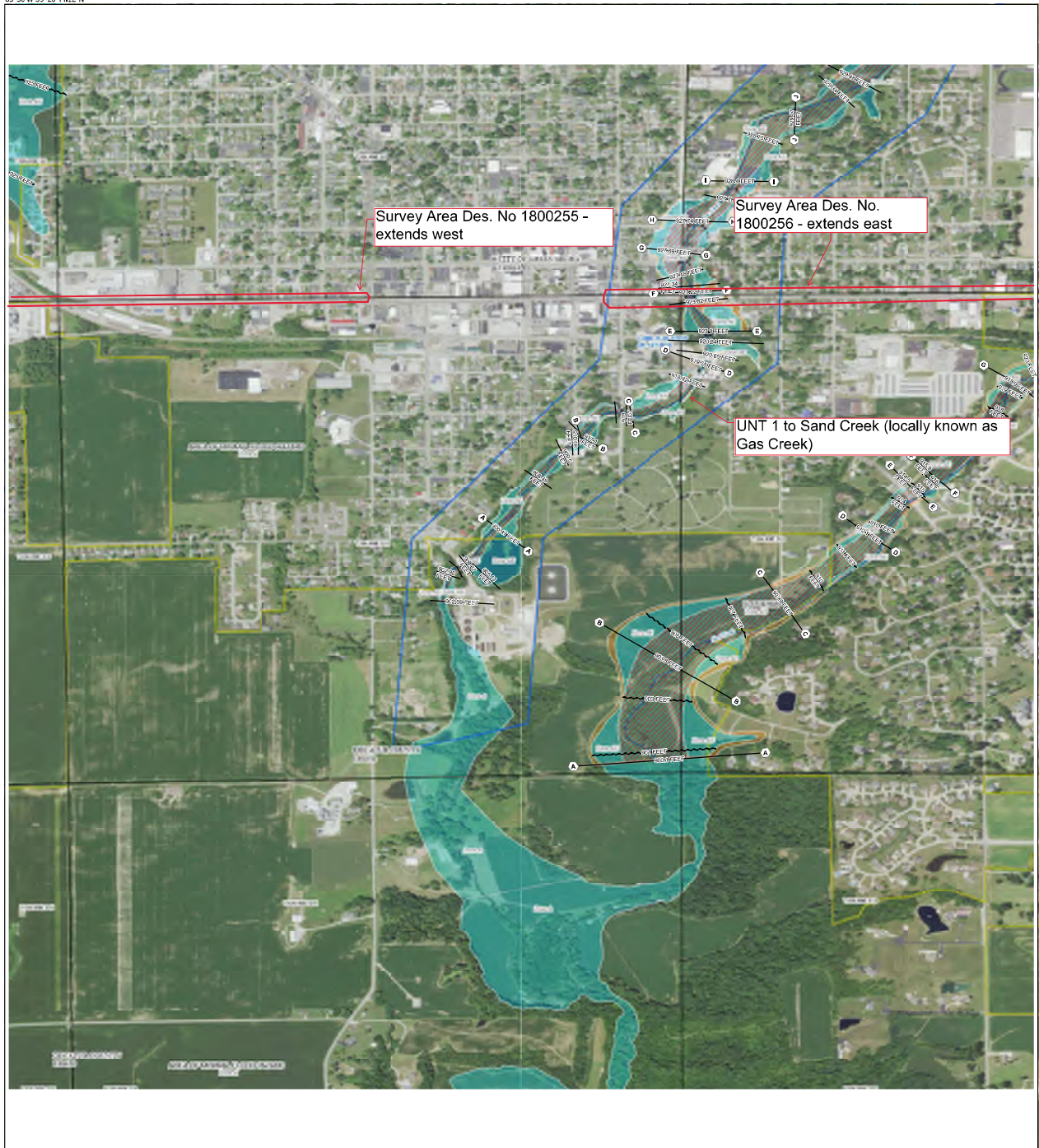
Panel Contains:

COMMUNITY	NUMBER	PANEL
CITY OF GREENSBURG	180430	0134
DECATUR COUNTY	180430	0134

FEMA National Flood Insurance Program

MAP NUMBER 18031C0134D
EFFECTIVE DATE October 16, 2013

apprvd 10/21/2021,27



FLOOD HAZARD INFORMATION
SEE FB REPORT FOR DETAILED LEGEND AND INDEX MAP FOR DRAFT FB PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE)
		With BFE or Depth (Zone AE, AO, AH, VE, AR)
OTHER AREAS OF FLOOD HAZARD		Regulatory Floodway
		0.2% Annual Chance Flood Hazard, Areas of 1% Annual Chance Flood with average depth less than one foot or with drainage areas of less than one square mile (Zone X)
		Future Continuum, 1% Annual Chance Flood Hazard (Zone 2)
OTHER AREAS		Area with Reduced Flood Risk due to Levee (Zone D)
		Area with Flood Risk due to Levee (Zone C)
GENERAL STRUCTURES		NO SCREEN Area of Minimal Flood Hazard (Zone X)
		Effective LOMBs
OTHER FEATURES		Area of Undetermined Flood Hazard (Zone D)
		Channel, Culvert, or Storm Sewer
OTHER FEATURES		Levee, Dike, or Floodwall
		Cross Sections with 1% Annual Chance Water Surface Elevation
OTHER FEATURES		Coastal Tract
		Coastal Tract
OTHER FEATURES		Public Shoreline
		Public Shoreline
OTHER FEATURES		Hydrographic Feature
		Base Flood Elevation Line (BFE)
OTHER FEATURES		Limit of Study
		Jurisdiction Boundary

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), including products associated with the FIRM, including policies and rates, the current map date for each FIRM panel, the map's production date, the National Flood Insurance Program (NFIP) is generally shown on the FIRM Map Information or Change of Status (CMIS) page (https://www.fema.gov/nfip) or on the Flood Hazard Service Center website at https://www.fema.gov/nfip. FIRM products may include previously issued Letters of Map Change, a Flood Insurance Study Flood, and/or special provisions areas. Many of these products can be ordered or obtained directly from the website. Community actions in an adjacent FIRM panel must obtain a current copy of the adjacent panel as well as the current FIRM data. These may be accessed directly from the Flood Map Service Center at the internet listed above.

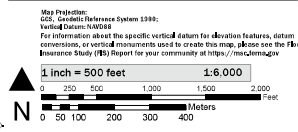
For community and countywide map dates, refer to the Flood Insurance Study Report for this jurisdiction. To determine flood insurance availability in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-425-6842.

Baseline information shown on this FIRM was processed in digital form by the United States Geological Survey (USGS). The baseline shown is the USGS National Flood Information System (NFIS) data from 2005.

This map was prepared from FEMA's National Flood Hazard Layer (NFHL) 8/2021 1:1 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change subsequent to this date and time. For additional information, please see the Flood Hazard Mapping System Overview Fact Sheet at https://www.fema.gov/nfip/assessments/assessments/181818.

The map symbols with FIRM's symbols for the use of digital flood data. This map is not to be used as a substitute for the baseline shown on the FEMA's National Flood Hazard Layer. This map is not to be used as a substitute for the baseline shown on the FEMA's National Flood Hazard Layer. This map is not to be used as a substitute for the baseline shown on the FEMA's National Flood Hazard Layer.

SCALE



NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

PANEL 153 of 265

Panel Contains:
COMMUNITY NUMBER 180043
CITY OF GREENSBURG
DECATUR COUNTY

COMMUNITY NUMBER 180043
PANEL 153 of 265

MSP NUMBER 18031C01E3D
EFFECTIVE DATE October 16, 2013

approved 10/21/2021,28



89°20'14.29"W 39°19'35.14"N

FLOOD HAZARD INFORMATION
SEE FB REPORT FOR DETAILED LEGEND AND INDEX MAP FOR DRAFT FB PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone X, Zone D
		With BFE or Depth Zone AE, AO, AH, VE, AR
OTHER AREAS OF FLOOD HAZARD		Regulatory Floodway
		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Continuity 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee See Notes Zone D
OTHER AREAS		Area with Flood Risk due to Levee Zone D
		NO SCREEN Area of Minimal Flood Hazard Zone X
GENERAL STRUCTURES		Effective LOMbs
		Area of Undetermined Flood Hazard Zone D
OTHER FEATURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		Cross Sections with 1% Annual Chance
		Water Surface Elevation
		Coastal Transect
		Coastal Transect baseline
		Public Shoreline
		Hydrographic Feature
OTHER FEATURES		Base Flood Elevation Line (BFE)
		Limit of Study
OTHER FEATURES		50' Contour
		Jurisdiction Boundary

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), a public product associated with the Flood Insurance Information System, the current map data for each FIRM panel may be made available on the National Flood Insurance Program (NFIP) website. Users can find the FEMA Map Information Exchange at <http://www.fema.gov/nfip> or call the FEMA Map Information Exchange at 1-800-358-6242. For information about the specific vertical datum for elevation features, datum conversions, or vertical monuments used to create this map, please see the Flood Insurance Study (FIS) Report for your community at <http://mhcimagery.fema.gov>.

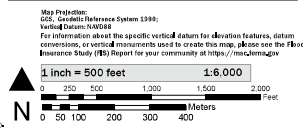
Community and countywide map dates, refer to the Flood Insurance Study Report for this jurisdiction. For information about insurance availability in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-358-6242.

Baseline information shown on this FIRM was prepared in digital form by the United States Geological Survey (USGS). The baseline shown is the USGS National Water Information System (NWIS) data.

This map was prepared from FEMA's National Flood Hazard Layer (NFHL) on 8/20/2013 1:17 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or be updated by FEMA. For the latest information, please see the Flood Hazard Mapping System's Online Fact Sheet at <http://www.fema.gov/nfhl>.

The map symbols with FIRM's identifying the use of digital flood data are not valid as described below. The baseline shown on this FIRM is based on the accuracy standards. This map represents the use of the data from the National Flood Hazard Layer (NFHL) and is not a substitute for the original data. The map creation date, community identifier, FIRM panel number, and FIRM effective date.

SCALE



FEDERAL EMERGENCY MANAGEMENT AGENCY
NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

PANEL 154 of 265

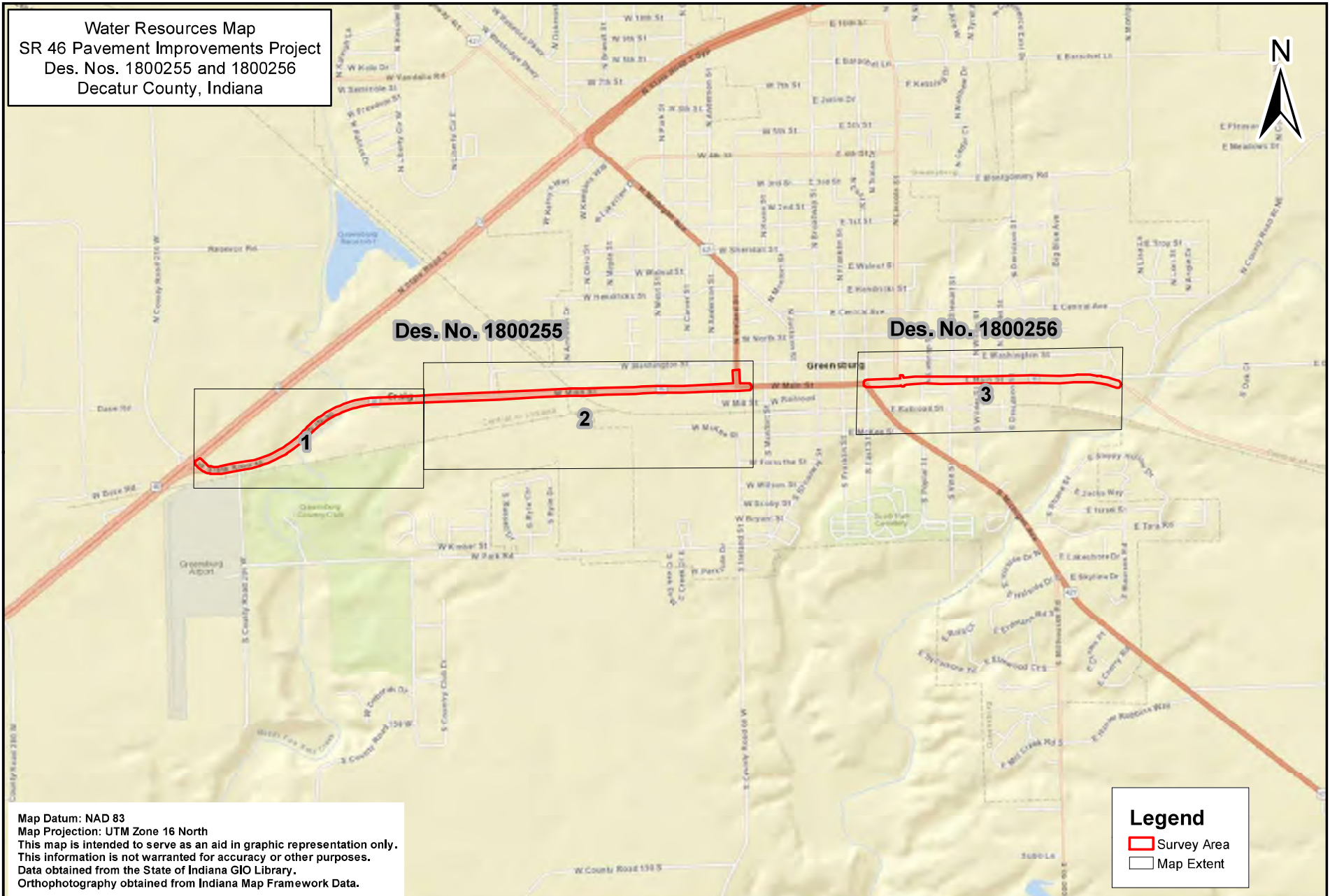
Panel Contains:
COMMUNITY CITY OF GREENSBURG
COUNTY DECATUR COUNTY

NUMBER	PANEL
180043	0154
180430	0154

MAP NUMBER 18031C01E4D
EFFECTIVE DATE October 16, 2013

approved 10/21/2021,29


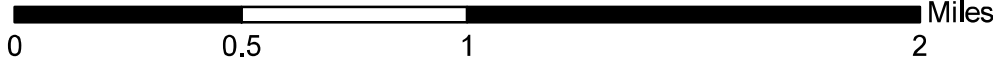
Water Resources Map
 SR 46 Pavement Improvements Project
 Des. Nos. 1800255 and 1800256
 Decatur County, Indiana



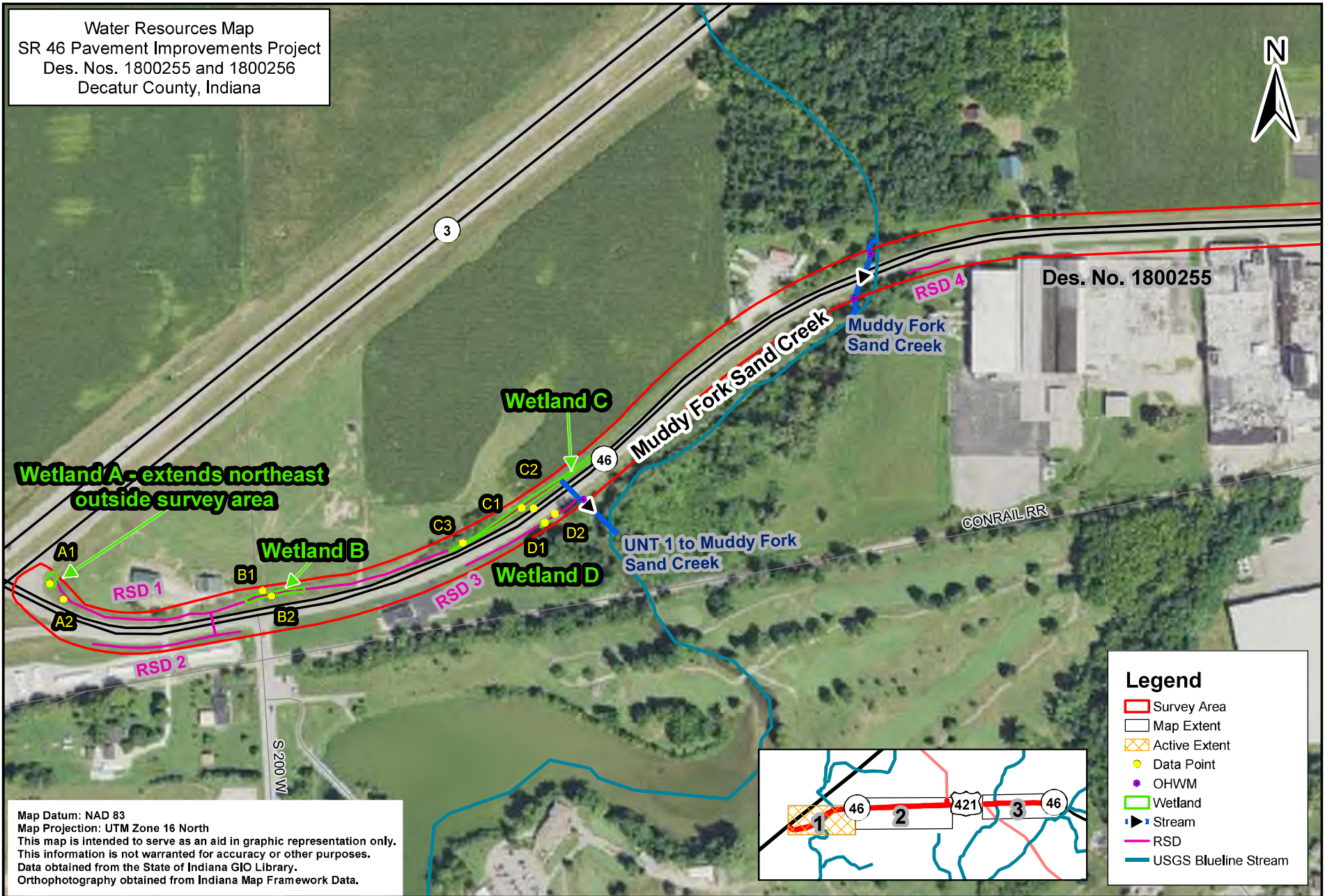
Map Datum: NAD 83
 Map Projection: UTM Zone 16 North
 This map is intended to serve as an aid in graphic representation only.
 This information is not warranted for accuracy or other purposes.
 Data obtained from the State of Indiana GIO Library.
 Orthophotography obtained from Indiana Map Framework Data.

Legend

- Survey Area
- Map Extent

	Water Resources Index Map	Location: SR 46 Township: Washington County: Decatur Date: 03/02/2021
		

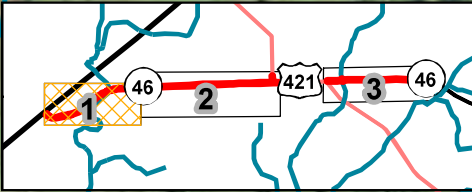
Water Resources Map
 SR 46 Pavement Improvements Project
 Des. Nos. 1800255 and 1800256
 Decatur County, Indiana




Map Datum: NAD 83
 Map Projection: UTM Zone 16 North
 This map is intended to serve as an aid in graphic representation only.
 This information is not warranted for accuracy or other purposes.
 Data obtained from the State of Indiana GIO Library.
 Orthophotography obtained from Indiana Map Framework Data.

Legend

- Survey Area
- Map Extent
- Active Extent
- Data Point
- OHWM
- Wetland
- ▶ Stream
- RSD
- USGS Blueline Stream

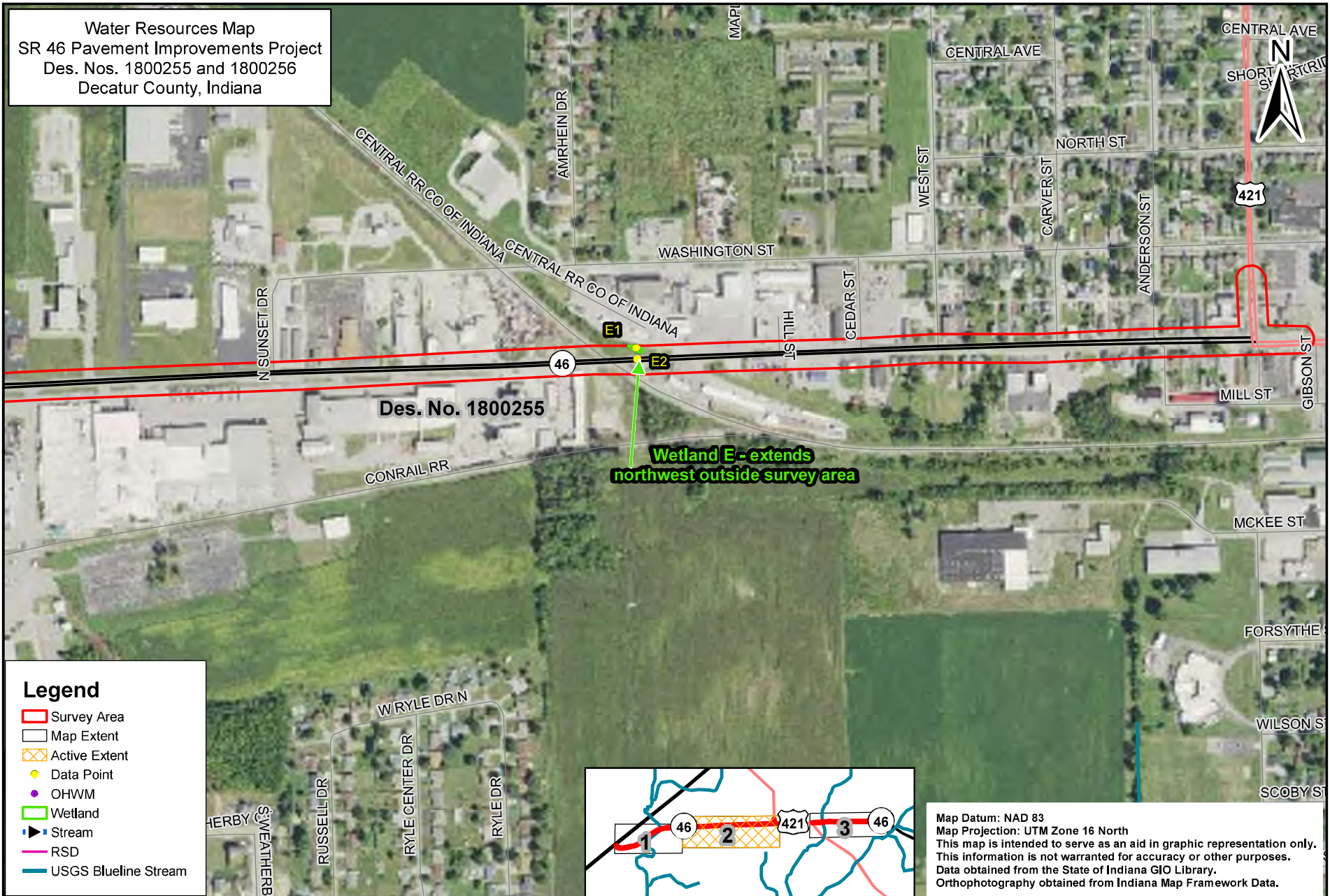




Water Resources Map 1 of 3

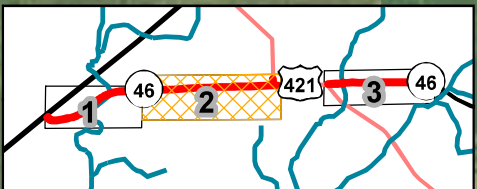
Location: SR 46
 Township: Washington
 County: Decatur
 Date: 03/02/2021

Water Resources Map
 SR 46 Pavement Improvements Project
 Des. Nos. 1800255 and 1800256
 Decatur County, Indiana



Legend

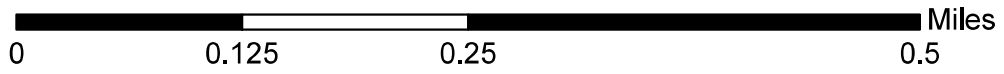
- Survey Area
- Map Extent
- Active Extent
- Data Point
- OHWM
- Wetland
- ▶ Stream
- RSD
- USGS Blueline Stream



Map Datum: NAD 83
 Map Projection: UTM Zone 16 North
 This map is intended to serve as an aid in graphic representation only.
 This information is not warranted for accuracy or other purposes.
 Data obtained from the State of Indiana GIO Library.
 Orthophotography obtained from Indiana Map Framework Data.

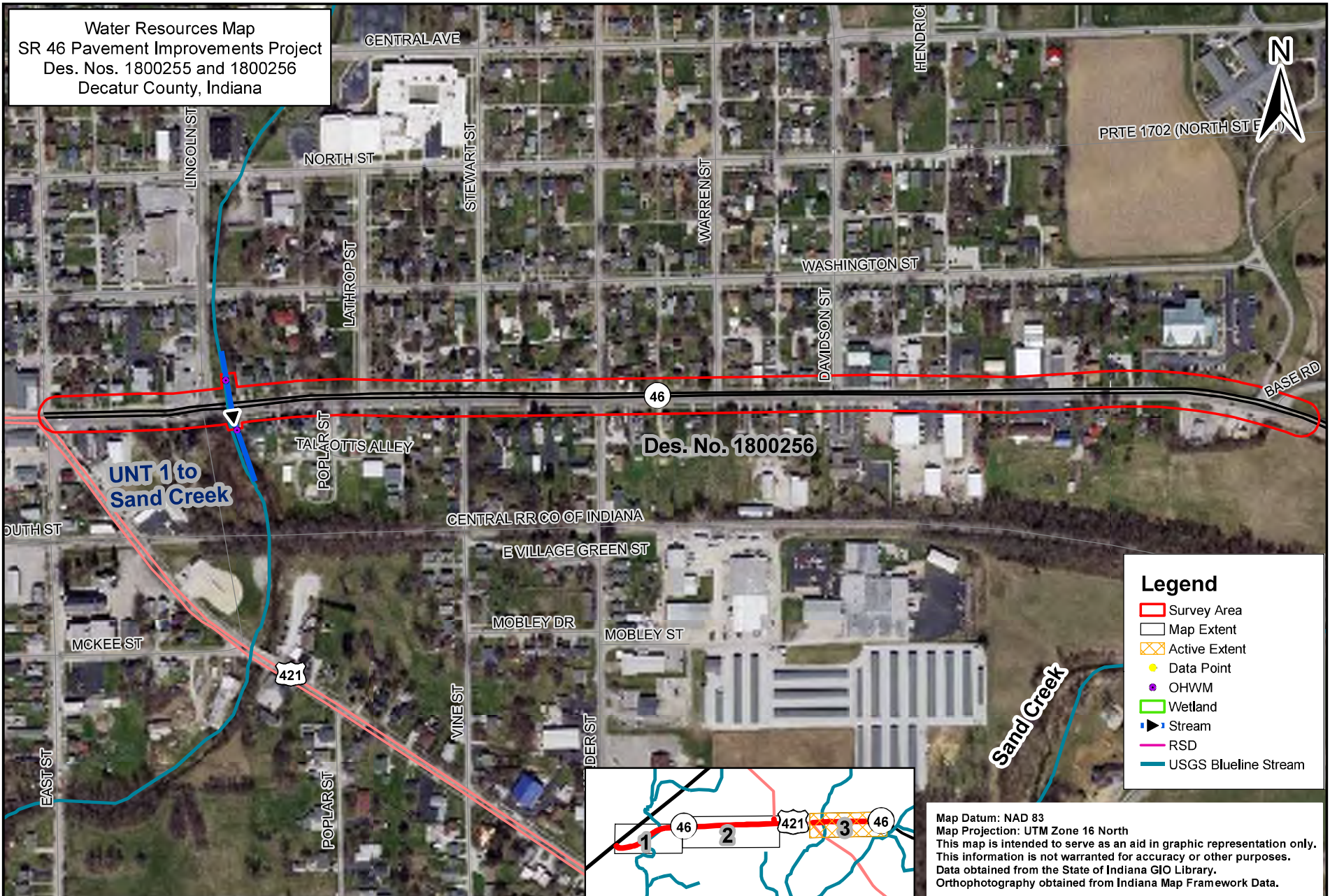


Water Resources Map 2 of 3



Location: SR 46
Township: Washington
County: Decatur
Date: 03/02/2021

Water Resources Map
 SR 46 Pavement Improvements Project
 Des. Nos. 1800255 and 1800256
 Decatur County, Indiana



Legend

- Survey Area
- Map Extent
- Active Extent
- Data Point
- OHWM
- Wetland
- ▶ Stream
- RSD
- USGS Blueline Stream

Map Datum: NAD 83
 Map Projection: UTM Zone 16 North
 This map is intended to serve as an aid in graphic representation only.
 This information is not warranted for accuracy or other purposes.
 Data obtained from the State of Indiana GIO Library.
 Orthophotography obtained from Indiana Map Framework Data.



Water Resources Map 3 of 3

0 0.1 0.2 0.4 Miles

Location: SR 46
Township: Washington
County: Decatur
Date: 03/02/2021

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: October 7, 2021

B. NAME AND ADDRESS OF PERSON REQUESTING PJD: Brooke Fox, RQAW Corporation
8770 North Street, Suite 110, Fishers, IN. 46038

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

Project Description:

The Federal Highway Administration (FHWA) and Indiana Department of Transportation (INDOT), Seymour District propose to proceed with a pavement improvements project on SR 46 in Decatur County, Indiana. The proposed project is divided into two sections with two separate Des. Numbers (1800255 and 1800256).

Des. No. 1800255: The project limits are from SR 3 to the west junction with United States Highway (US) 421, totaling approximately 1.8 miles in length. From the SR 3 and SR 46 intersection to the Central Railroad Company of Indiana (CIND) railroad crossing, the proposed project will involve milling and Hot Mix Asphalt (HMA) preventative maintenance overlay (including shoulders), with partial and full depth pavement patching at various locations. From the CIND railroad crossing through the west junction with US 421, the proposed project will involve a full depth pavement replacement. Also included in this section of the project will be the replacement and/or construction of a stormwater sewer system with curb and gutter, sanitary sewer, water main reconstruction, and street lighting. The intersections of West Street, Carver Street, Anderson Street, and US 421 (Ireland Street) will be reconstructed to meet current Americans with Disabilities Act (ADA) and Public Right of Way Accessibility Guidelines (PROWAG) standards. The existing sidewalks along the north side of SR 46 from the railroad crossing to the west junction of US 421 will be reconstructed or constructed if not existing which is approximately 0.5 miles in length. They will be reconstructed or constructed if not existing along the south side from approximately 220 feet west of West Street to the west junction of US 421. Additionally, the turning radii of the northeast quadrant of the west junction of US 421 will be improved by moving the curb back, and associated adjustments to the curb ramps, and signal poles.

Des. No. 1800256: The project limits begin from the east junction of the US 421 and SR 46 intersection to approximately 134 feet beyond Base Road in the eastern direction, totaling approximately 0.8 miles in length. The proposed project will involve full depth pavement replacement, and reconstruction/construction of sidewalks along SR 46 from the east junction of US 421 to the drive to the Greensburg Public Library (which is located approximately 0.09 mile west of the Base Road intersection). Along the north side of SR 46, from Lincoln Street to the Greensburg Public Library (approximately 0.6 miles), the existing sidewalk will be replaced with an up to 10 ft multi-use path. Additionally, the south side of SR 46 will have 5 ft. sidewalks and a 5 ft. grass buffer. The replacement and/or construction of a stormwater sewer system with curb and gutter, water main reconstruction, and street lighting will also be included for this portion of the project. Travel and parking lanes will be modified to one travel lane in each direction with parking along the south side of SR 46, roughly between Lincoln St. and Vine St., and parking on the north side between Stewart St. and Davidson St. Additionally, the traffic signal at the Lincoln Street intersection will be replaced. From the drive to the Greensburg Public Library to the eastern project termini, an HMA preventative maintenance overlay is anticipated, which is approximately 0.12 mile in length.

(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: Indiana

County/parish/borough: Decatur

City: Greensburg, IN

Center coordinates of site (lat/long in degree decimal format):

Des. No. 1800255:

Lat.: 39.33637° N

Long.: -85.50148° W

Universal Transverse Mercator: 16S 629145 4355175

Des. No. 1800256:

Lat.: 39.33666° N

Long.: -85.47290° W

Universal Transverse Mercator: 16S 631608 4355249

Name of nearest waterbody: Greensburg City Park Lake

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date:

Field Determination. Date(s):

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH “MAY BE” SUBJECT TO REGULATORY JURISDICTION.

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource “may be” subject (i.e., Section 404 or Section 10/404)
UNT 1 to Muddy Fork Sand Creek	39.33415° N	-85.51508° W	95 linear feet (0.01 acre)	Non-wetland	Non Section 10/Section404
Muddy Fork Sand Creek	39.33591° N	-85.51215° W	157 linear feet (0.112 acre)	Non-wetland	Non Section 10/Section404
UNT 1 to Sand Creek	39.33669° N	-85.4792° W	213 linear feet (0.055 acre)	Non-wetland	Non Section 10/Section404
Wetland A	39.33354° N	-85.52061° W	0.041 acre	Wetland	Non Section 10/Section404

Wetland B	39.33341° N	-85.51832° W	0.081 acre	Wetland	Non Section 10/Section404
Wetland C	39.33409° N	-85.51572° W	0.188 acre	Wetland	Non Section 10/Section404
Wetland D	39.33396° N	-85.51548° W	0.012 acre	Wetland	Non Section 10/Section404
Wetland E	39.33659° N	-85.4981° W	0.041 acre	Wetland	Non Section 10/Section404

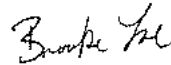
- 1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
- 2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring “pre- construction notification” (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant’s acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there “*may be*” waters of the U.S. and/or that there “*may be*” navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for PJD (check all that apply)

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

- Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
Maps: Indiana GIO Library, IndianaMap, USGS, NWI
- Data sheets prepared/submitted by or on behalf of the PJD requestor.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report. Rationale: _____.
- Data sheets prepared by the Corps: _____.
- Corps navigable waters' study: _____.
- U.S. Geological Survey Hydrologic Atlas: USGS TNM-NHD: Data Refreshed October, 2020.
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Forest Hill and Greensburg / 1:24,000.
- Natural Resources Conservation Service Soil Survey. Citation: NRCS Web Soil Survey: Decatur County.
- National wetlands inventory map(s). Cite name: USFWS NWI data: Decatur County.
- State/local wetland inventory map(s): _____.
- FEMA/FIRM maps: FEMA/FIRM Decatur County, Indiana.
- 100-year Floodplain Elevation is: _____.(National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): Decatur County / NAIP Imagery 2016
or Other (Name & Date): Photos taken: June 9, 2021.
- Previous determination(s). File no. and date of response letter: _____.
- Other information (please specify): _____.

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.



10/07/2021

Signature and date of
Regulatory staff member
completing PJD

Signature and date of
person requesting PJD
(REQUIRED, unless obtaining
the signature is impracticable)¹

¹ Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.

Brooke Fox

From: Sperry, Steve <SSPERRY@indot.IN.gov>
Sent: Thursday, October 21, 2021 4:44 PM
To: Brooke Fox; Summers, Terry
Cc: Curry, Jennifer; Curtis, William
Subject: [EXT] Waters Report Approval, 1800256/255, SR 46,, Decatur Co
Attachments: PD Questionnaire.docx

**** Please use caution this is an externally originating email. ****

Do not click on links or open attachments unless you recognize the sender and know the contents is safe.

Brooke,

Thank you for submitting the waters report for the above referenced project.

Terry,

The 10/7/2021 WOTUS report has been stamped approved. It has been posted to ProjectWise in the following two locations, EWPO's Ecology folder, [1800256 255 Waters Report Approved 10.21.2021.pdf](#) and Michael Baker International's Shared folder, [1800256 255 Waters Report Approved 10.21.2021.pdf](#)

The approved copy is the only report recognized by this Office. Copies that do not contain our approval stamp will not be accepted for permitting or any other use.

The information in this report should be used by the Project Designer to determine if Waters of the U.S. will be impacted by the project. If it appears that impacts will occur, then action will need to be taken to avoid them to the maximum practical extent. If avoidance is not feasible then impacts will need to be minimized to the maximum practicable extent. These steps must be taken before any mitigation can be considered. If it is determined that mitigation will be required, the Project Manager or Project Designer will need to coordinate with the Ecology and Waterway Permitting Office to discuss how this will be provided.

The Project Manager or designer should notify the Ecology and Waterway Permitting Office if there is any change to the project footprint presented in the approved report. Changes may require additional fieldwork and a new report to cover areas not previously investigated.

The report is valid for a period of five years from the date of the earliest fieldwork. If this approved report expires prior to submittal of the waterway permit applications a new report will need to be generated.

This e-mail serves as notice that the Project Designer is to complete the attached Permit Determination questionnaire. Once completed please have them submit it to [Steve Sperry](#).

If you have any questions or need additional information please contact me.

Thanks

Steve Sperry,

Ecology and Permits Coordinator, Multi-district East Team

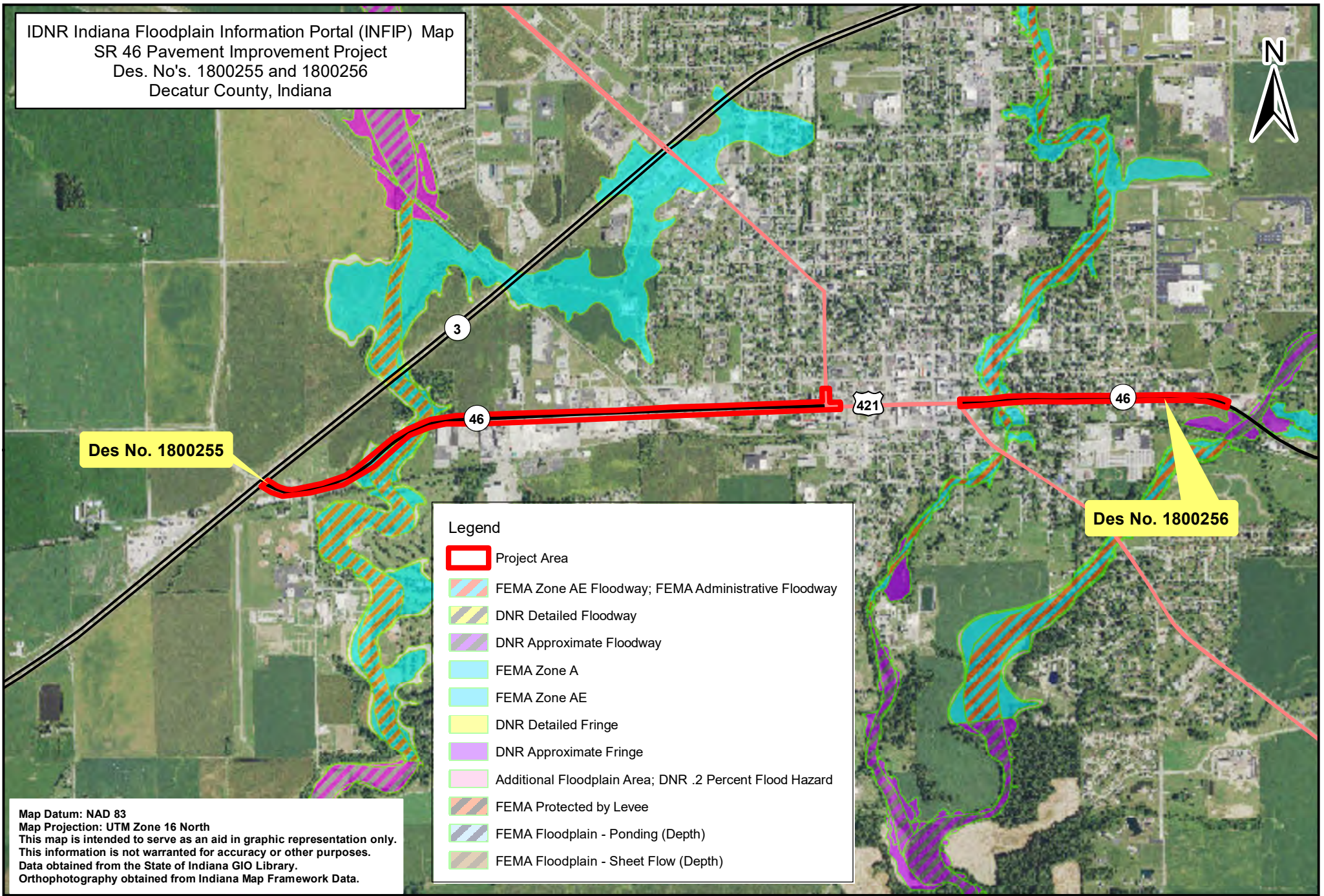
INDOT, Office of Ecology and Waterway Permitting

100 N. Senate Ave., N758-ES

Indianapolis, IN 46204

Phone: (317)-417-3623

IDNR Indiana Floodplain Information Portal (INFIP) Map
 SR 46 Pavement Improvement Project
 Des. No's. 1800255 and 1800256
 Decatur County, Indiana



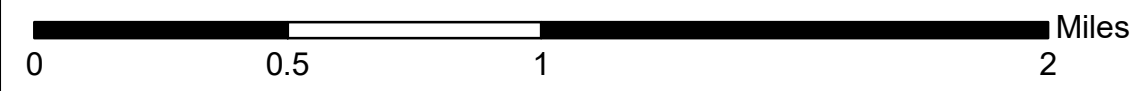
Legend

- Project Area
- FEMA Zone AE Floodway; FEMA Administrative Floodway
- DNR Detailed Floodway
- DNR Approximate Floodway
- FEMA Zone A
- FEMA Zone AE
- DNR Detailed Fringe
- DNR Approximate Fringe
- Additional Floodplain Area; DNR .2 Percent Flood Hazard
- FEMA Protected by Levee
- FEMA Floodplain - Ponding (Depth)
- FEMA Floodplain - Sheet Flow (Depth)

Map Datum: NAD 83
 Map Projection: UTM Zone 16 North
 This map is intended to serve as an aid in graphic representation only.
 This information is not warranted for accuracy or other purposes.
 Data obtained from the State of Indiana GIO Library.
 Orthophotography obtained from Indiana Map Framework Data.



IDNR INFIP Map



Location: SR 46
Township: Washington
County: Decatur

Categorical Exclusion
Appendix G
Public Involvement

November 4, 2019

EXAMPLE NOTICE OF SURVEY LETTER

RE: S.R. 46 Project, Des. Nos.: 1800255 & 1800256

Dear Property Owner,

Certified Engineering, Inc. has been selected by INDOT for field survey of the above referenced project. Our information indicates that you own property near the above proposed roadway project. Certified Engineering, Inc. will be performing a survey of the project area in the near future. It may be necessary for representatives from Certified Engineering, Inc. to enter your property to complete this work. This is permitted by law per Indiana Code (IC) 8-23-7-26. Anyone performing this type of work has been instructed to identify him or herself, if you are available, before they enter your property. If you no longer own this property or it is currently occupied by someone else, please let us know the name of the new owner or occupant so that we can contact them about the survey.

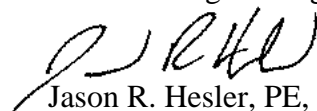
At this stage, we generally do not know what effect, if any, the project may eventually have on your property. If we later determine that your property is involved, you will be contacted with additional information.

The survey is needed for this roadway project. Please be assured of our sincere desire to cause you as little inconvenience as possible during this survey.

If any problems do occur, please contact Jason Hesler of Certified Engineering, Inc. at (317) 546-1599 or at 3939 Millersville Road, Indianapolis, Indiana 46205. Thank you in advance for your cooperation.

Sincerely,

Certified Engineering, Inc.



Jason R. Hesler, PE, PLS



INDIANA DEPARTMENT OF TRANSPORTATION

Seymour District
185 Agrico Lane
Seymour, Indiana 47274

PHONE: (855) 463-6848
FAX: (812) 522-7658

Eric Holcomb, Governor
Michael Smith, Commissioner

April 29, 2022

Re: Notice of Public Information Meeting
SR 46: Roadway Project in City of Greensburg, Decatur County, Indiana
Des. Number(s): 1800255 & 1800256

To whom it may concern:

The Indiana Department of Transportation (INDOT), Seymour District will host a public information meeting regarding the proposed SR 46 Roadway Project in Decatur County, Indiana. The meeting will be held on Tuesday, May 10, 2022, from 6:00 pm to 8:00 pm (doors open to public at 5:30 pm) at the Greensburg City Hall, 314 W. Washington Street Greensburg, IN 47240. The meeting will inform the community of the project scope, schedule, preliminary design plans. The meeting will feature a brief presentation followed by an informal discussion time. INDOT and their representatives will be available to discuss the project with the public and project plans and exhibits will be available.

This project is divided into two sections with two separate Des Nos. Des No. 1800255 encompasses the western portion of the project area, while Des No. 1800256 encompasses the eastern portion of the project area. The project limits for Des No. 1800255 are from SR 3 to the west junction with United States Highway (US) 421, totaling approximately 1.8 miles in length. The project limits of Des. No. 1800256 are from the east junction with US 421 to Base Road, totaling approximately 0.8 miles in length.

The scope of work for Des No. 1800255 would include milling and applying a Hot Mix Asphalt (HMA) with partial and full depth patching at various locations from SR 3 to the railroad crossing belonging to the Central Railroad of Indiana (CIND) railroad. From the CIND railroad to the west junction with US 421 the proposed project recommends full depth pavement replacement along with replacement and/or construction of a stormwater sewer system, sanitary sewer system, water main installation, and curb and gutter. In addition, new street lighting would be installed along this portion of the project. The intersections of West Street, Carver Street, Anderson Street, and US 421 (Ireland St.) are proposed to be reconstructed to meet current Americans with Disabilities Act (ADA) and Public Right of Way Accessibility Guidelines (PROWAG) standards. Sidewalk construction /reconstruction would occur from the Needler's (736 W. Main St.) parking lot to the SR 46 and Ireland St. intersection on both the north and south sides. In addition, from the Needler's parking lot, west to the CIND railroad crossing, there would be a sidewalk added to the north side only. The project would include reconstructing the intersection at the west junction of US 421 and SR 46 (locally known as Main Street and Ireland Street). In addition to the pavement reconstruction at this location the scope of work includes new storm sewer and inlets, improved turning radii in the northeast quadrant (moving the new curb to roughly the back of the existing sidewalk), adjusting the signal pole locations, and replacing curb ramps to meet current ADA standards.

The scope of work for Des No. 1800256 would include full depth pavement replacement, and reconstruction/construction of sidewalks along SR 46 from the east junction of US 421 to the drive to the Greensburg Public Library (approximately 0.09 mile west of the Base Road intersection). Along the north side of SR 46, it is proposed that the existing sidewalk would be replaced with a 8-10 foot-wide multi-use path. Additionally, the south side of SR 46 would have 5 foot wide sidewalks and a 5 foot wide grass buffer. The

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An Equal Opportunity Employer



replacement and/or construction of a stormwater sewer system, water main installation, street lighting, and curb and gutter is proposed for this portion of the project. The existing travel lane and parking configuration would change, but one travel lane in each direction would remain. On street parking areas along the south side of SR 46 would be from Lincoln St. to Vine St. and parking on the north side between Stewart St. and Davidson St. As part of the proposed sidewalk reconstruction, the intersection at Wilder St. would include “bump outs” at the west side of the intersection to improve pedestrian access and promote decreased traffic speed. As part of the proposed pavement replacement, the intersection at N. Lincoln St. would include 12-foot lane widths for both eastbound and westbound SR 46 travel lanes at the intersection (sidewalk buffer widths would be reduced to 5 feet to allow the wider lanes to be provided within the existing right-of-way) and the pavement markings for the eastbound left turn lane should be extended an additional 200 feet (currently 110 feet) to provide for some additional deceleration time. The traffic signals would also be replaced at this location. From the Greensburg Public Library drive to the eastern project limits (0.01 mile east of Base Road intersection), an HMA preventative maintenance overlay is anticipated.

The maintenance of traffic plan for both Des Nos (1800255 and 1800256) is anticipated to consist of a road closure with a detour route combined with phased construction. The detour route would vary for each Des No. The official state detour route for Des No. 1800255 would utilize US 421 and SR 3. The official state detour route for Des No. 1800256 would utilize I-74 (New Point Exit), SR 3, and US 421. Traffic flow would be maintained to the east at all times during construction to maintain access to properties and businesses for both Des No’s 1800255 and 1800256. Project stakeholders, including local school corporations and emergency services, will be notified at least two weeks in advance of any construction that would block or limit access. Construction of the project will require additional permanent and temporary right-of-way. The estimated construction cost is approximately \$13M with federal, state, and local funds to be used.

Preliminary design plans, comment sheet, and a pre-recorded meeting are available for a review at the INDOT, Seymour District website (Seymour.indot.in.gov) if you prefer or are unable to attend in person.

All interested persons may express their questions or concerns by submitting comments to the attention of Mitchell Wilcox at 3815 River Crossing Parkway, Suite 20, Indianapolis, IN 46240, at 317-663-8265, or at mitchell.wilcox@mbakerintl.com.

Sincerely,



Mitchell Wilcox
Michael Baker International | Project Manager

AFFIDAVIT OF PUBLICATION

STATE OF INDIANA
County of Decatur

City of Greensburg

ISSUED:


The subscriber, being duly sworn, deposes and says that
he (she) is the said Jennifer Hensley of GREENSBURG DAILY NEWS
and that the foregoing notice for

INDOT DES NO. 1800255

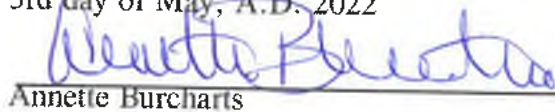
was published in said newspaper in one editions

of said newspaper issued between 05/03/2022 and 05/03/2022

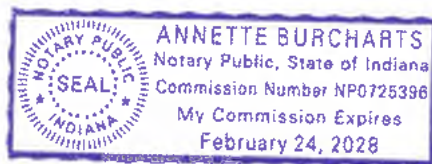
Cost: 99.08



SUBSCRIBED AND SWORN BEFORE ME THIS
3rd day of May, A.D. 2022


Annette Burcharts

Notary Public Seal, State of Indiana



Legal Notice of Public Informational Meeting

The Indiana Department of Transportation (INDOT), Seymour District will host a public information meeting regarding the proposed SR 46 Roadway Project in Decatur County, Indiana. The meeting will be held on Tuesday, May 10, 2022, from 8:00 pm to 8:00 pm (doors open to public at 5:30 pm) at the Greensburg City Hall, 314 W. Washington Street Greensburg, IN 47240. The meeting will inform the community of the project scope, schedule, preliminary design plans. The meeting will feature a brief presentation followed by an informal discussion time. INDOT and their representatives will be available to discuss the project with the public and project plans and exhibits will be available.

This project is divided into two sections with two separate Des Nos. Des No. 1800255 encompasses the western portion of the project area, while Des No. 1800256 encompasses the eastern portion of the project area. The project limits for Des No. 1800255 are from SR 3 to the west junction with United States Highway (US) 421, totaling approximately 1.8 miles in length. The project limits of Des. No. 1800256 are from the east junction with US 421 to Base Road, totaling approximately 0.8 miles in length.

The scope of work for Des No. 1800255 would include milling and applying a Hot Mix Asphalt (HMA) with partial and full depth patching at various locations from SR 3 to the railroad crossing belonging to the Central Railroad of Indiana (CIND) railroad. From the CIND railroad to the west junction with US 421 the proposed project recommends full depth pavement replacement along with replacement and/or construction of a stormwater sewer system, sanitary sewer system, water main installation, and curb and gutter. In addition, new street lighting would be installed along this portion of the project. The intersections of West Street, Carver Street, Anderson Street, and US 421 (Ireland St.) are proposed to be reconstructed to meet current Americans with Disabilities Act (ADA) and Public Right of Way Accessibility Guidelines (PROWAG) standards. Sidewalk construction / reconstruction would occur from the Needler's (736 W. Main St.) parking lot to the SR 46 and Ireland St. intersection on both the north and south sides. In addition, from the Needler's parking lot, west to the CIND railroad crossing, there would be a sidewalk added to the north side only. The project would include reconstructing the intersection at the west junction of US 421 and SR 46 (locally known as Main Street and Ireland Street). In addition to the pavement reconstruction at this location the scope of work includes new storm sewer and inlets, improved turning radii in the northeast quadrant (moving the new curb to roughly the back of the existing sidewalk), adjusting the signal pole locations, and replacing curb ramps to meet current ADA standards.

The scope of work for Des No. 1800256 would include full depth pavement replacement, and reconstruction/construction of sidewalks along SR 46 from the east junction of US 421 to the drive to the Greensburg Public Library

(approximately 0.09 mile west of the Base Road intersection). Along the north side of SR 46, it is proposed that the existing sidewalk would be replaced with a 8-10 foot-wide multi-use path. Additionally, the south side of SR 46 would have 5 foot wide sidewalks and a 5 foot wide grass buffer. The replacement and/or construction of a stormwater sewer system, water main installation, street lighting, and curb and gutter is proposed for this portion of the project. The existing travel lane and parking configuration would change, but one travel lane in each direction would remain. On street parking areas along the south side of SR 46 would be from Lincoln St. to Vine St. and parking on the north side between Stewart St. and Davidson St. As part of the proposed sidewalk reconstruction, the intersection at Wilder St. would include "bump outs" at the west side of the intersection to improve pedestrian access and promote decreased traffic speed. As part of the proposed pavement replacement, the intersection at N. Lincoln St. would include 12-foot lane widths for both eastbound and westbound SR 46 travel lanes at the intersection (sidewalk buffer widths would be reduced to 5 feet to allow the wider lanes to be provided within the existing right-of-way) and the pavement markings for the eastbound left turn lane should be extended an additional 200 feet (currently 110 feet) to provide for some additional deceleration time. The traffic signals would also be replaced at this location. From the Greensburg Public Library drive to the eastern project limits (0.01 mile east of Base Road intersection), an HMA preventative maintenance overlay is anticipated.

The maintenance of traffic plan for both Des Nos (1800255 and 1800256) is anticipated to consist of a road closure with a detour route combined with phased construction. The detour route would vary for each Des No. The official state detour route for Des No. 1800255 would utilize US 421 and SR 3. The official state detour route for Des No. 1800256 would utilize I-74 (New Point Exit), SR 3, and US 421. Traffic flow would be maintained to the east at all times during construction to maintain access to properties and businesses for both Des No's 1800255 and 1800256. Project stakeholders, including local school corporations and emergency services, will be notified at least two weeks in advance of any construction that would block or limit access. Construction of the project will require additional permanent and temporary right-of-way. The estimated construction cost is approximately \$13M with federal, state, and local funds to be used.

Preliminary design plans, comment sheet, and a pre-recorded meeting are available for a review at the INDOT, Seymour District website (Seymour.indot.in.gov) if you prefer or are unable to attend in person.

All interested persons may express their questions or concerns by submitting comments to the attention of Mitchell Wilcox at 3815 River Crossing Parkway, Suite 20, Indianapolis, IN 46240, at 317-663-8265, or at Mitchell.Wilcox@mbakerintl.com. G-279 5/3 hspaxlp 1771187



Email Address

e.g. name@example.com

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Share Bulletin



INDOT to host public information meeting May 10 for pavement reconstruction project in Greensburg

Indiana Department of Transportation sent this bulletin at 05/03/2022 08:30 AM EDT

Having trouble viewing this email? [View it as a Web page.](#)



May 3, 2022

INDOT to host public information meeting May 10 for pavement reconstruction project in Greensburg

Des. 1800255 and 1800256

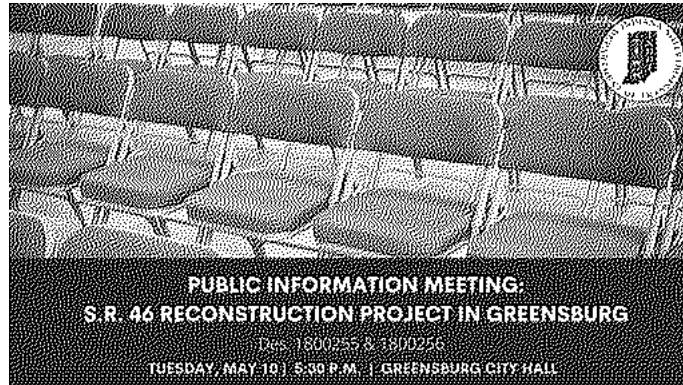
Doors open at 5:30 p.m., presentation at 6 p.m. at Greensburg City Hall

GREENSBURG, Ind.— In partnership with Michael Baker International, the Indiana Department of Transportation will host a public information meeting for a roadway reconstruction project on S.R. 46 in Greensburg on Tuesday, May 10, at Greensburg City Hall (314 W. Washington Street, Greensburg, IN). The meeting will provide an opportunity for the public to learn more about the project, ask questions, and provide feedback.

As proposed, the nearly \$13 million project includes pavement replacement and asphalt resurfacing along two sections of S.R. 46; between the east junction of S.R. 3 and the west junction of U.S. 421, and the east junction of U.S. 421 and Base Road. Additionally, the project includes sidewalk replacement, ADA curb ramp upgrades, construction of a multi-use path, drainage work and additional lighting. The project aims to reset the service life of the roadway and update transportation facilities to current standards. The contract is currently scheduled to let to contractors in early 2024.

Doors will open at 5:30 p.m. to allow the public time to view displays and interact with the project team. A formal presentation will begin at 6 p.m. Project information will also be posted on the [INDOT Seymour District webpage](#) prior to May 10 and can be viewed any time.

Questions and comments may be submitted in-person at the information meeting or via email to Mitchell Wilcox (mitchell.wilcox@mbakerintl.com) with Michael Baker International.



Stay Informed

Motorists in Southeast Indiana can monitor road closures, road conditions, and traffic alerts any time via:

- Facebook: facebook.com/INDOTSoutheast
- Twitter: [@INDOTSoutheast](https://twitter.com/INDOTSoutheast)
- CARS 511: indot.carsprogram.org
- Mobile App: [iTunes App Store](#) and the [Google Play store for Android](#)



About Next Level Roads

"With a sustainable, data-driven plan in place to fund roads and bridges, Hoosiers can rest assured that Indiana will remain the Crossroads of America for generations to come." – Governor Eric J. Holcomb

Governor Holcomb's Next Level Roads plan is a fully-funded, data-driven investment in Indiana's transportation infrastructure. Implemented in 2017, Next Level Roads dedicates more than \$60 billion to construction and maintenance projects for at least the next 20 years to improve and maintain

Indiana's state highways, finish major projects, and plan for the future. The plan fosters partnerships between the state and Hoosier cities, towns, and counties to deliver high-priority local road projects. Next Level Roads is enhancing Indiana's economic edge and the quality of life for all Hoosiers. View our interactive Next Level Roads construction map at www.nextlevelroads.com.

About the Indiana Department of Transportation

Over the past 100 years, INDOT has transformed the state of Indiana into the Crossroads of America we know today. With six district offices and 3,500 employees, the agency is responsible for constructing and maintaining more than 29,000 lane miles of highways, more than 5,700 bridges, and supporting 4,500 rail miles and 117 airports across the state. Indiana once again ranked #1 in the U.S. for infrastructure in CNBC's 2019 "America's Top States for Business" ranking. Learn more about INDOT at in.gov/indot.

Customer Service

1-855-463-6848

www.indot4u.com

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Kyle J. Boot

From: Garrett, Natalie R <NaGarrett@indot.IN.gov>
Sent: Wednesday, May 4, 2022 12:43 PM
To: Wilcox, Mitchell; Walker, Annie
Cc: Summers, Terry
Subject: RE: EXTERNAL: Des1800255 & 1800256 - SR 46 Greensburg_ Templates, presentations, etc

The news release also went out yesterday and information has been shared on our social media pages today.

Natalie

SR 46 Greensburg

Pavement Overlay & Reconstruction Project

DES. 1800255 & 1822256

R-41463

East Junction of SR 3 to West Junction of US 421
East Junction of US 421 to .83 miles East of East Junction US 421
in Greensburg
Decatur County

Indiana Department of Transportation

Tuesday, May 10th
6:00pm
Greensburg City Hall



Welcome: SR 46 Pavement Overlay & Reconstruction

Project Manager:

Mitchell Wilcox, PE, Michael Baker International Inc.



Michael Baker
INTERNATIONAL



Welcome

- Purpose/explanation of public information meeting
- Public information meeting format
- Purpose and Need Overview
- Proposed Project Improvements
- Environmental Process
- Anticipated Project Schedule
- Open House/Project display area



Project Resource Locations

- Project Information can be found online at: Seymour.indot.in.gov

Transportation Services Call Center

Provides citizens and business customers with a single point of contact to request transportation services, obtain information, or provide feedback through multiple channels of communication.

855-463-6848 • INDOT4U.com • INDOT@indot.in.gov



Project Stakeholders

- Indiana Department of Transportation
- Indiana Division Federal Highway Administration
- City of Greensburg and Decatur County
- Elected and local officials
- Residents and citizens
- Commuters
- Businesses
- Emergency services
- Schools
- Churches
- Community organizations



SR 46 Pavement Overlay & Reconstruction Project

- Introduction of INDOT project team
 - Project management
 - Public Information
 - Seymour District – INDOT Regional Office
 - Environmental services
 - Michael Baker International
 - Engineering, design, and environmental analysis team
- Recognition of elected and local public officials



DES. 1800255 – West Project

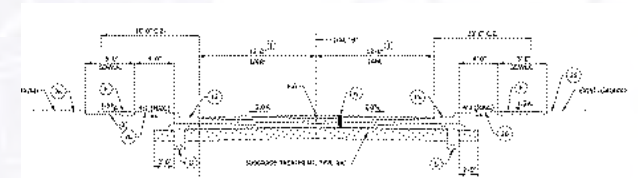
- East Junction of SR 3 to West Junction of US 421

- **Overlay** - East Junction of SR 3 to Railroad
- **Reconstruction** – Railroad to West Junction of US 421



DES. 1800255 – West Project

- Reconstruction Details
- Sidewalk and ADA facilities
- Stormwater additions
- Ireland St. Intersection Reconstruction



DES. 1800255 – West Project

- HMA Overlay – Preventative Maintenance (1.5" mill and overlay assumed) w/ Patching from SR 3 approach to west side of railroad tracks
- Full Depth Reconstruction from east side of railroad tracks to US 421/Ireland Street – generally matching the existing grade
- Typical Section is 2-12' lanes with curb and gutter
- Drive approaches on the west end have been reduced to control access locations and improve drainage
- Sidewalk will be replaced. Additional sidewalk was added in front of West Main Laundromat. ADA curb ramps throughout
- Signal – reestablishment of the traffic loops (west and north approach)
- Drainage
- Lighting



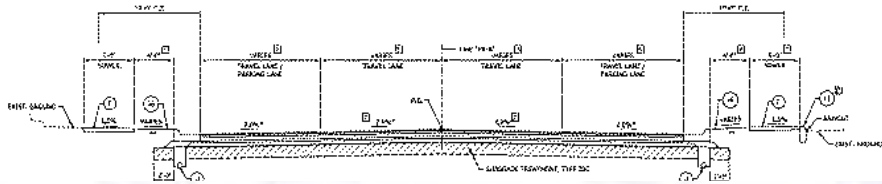
DES. 1800256 – East Project

- East Junction of US 421 to .83 miles East of East Junction US 421
- **Reconstruction** – East Junction of US 421 to Greensburg Library
- **Overlay** – Greensburg Library to .83 miles East of US 421 (Base Rd.)



DES. 1800256 – East Project

- Reconstruction Details
- Pedestrian facilities (shared use path)
 - Historic District Details
- Stormwater additions
- Lighting



DES. 1800256 – East Project

- Full Depth Reconstruction from just east of East St to Greensburg Public Library
- HMA overlay for 500' to tie into existing superelevation
- Typical section with 2-12' lanes with curb and gutter. Parking lanes will be provided from Lincoln to Davidson
- Drive approaches on the west end have been reduced to control access locations and improve drainage
- Pedestrian Facilities: South side – sidewalk, North Side – 8' to 10' multi-use path. ADA curb ramps throughout.
- US421 - Reestablishment of the traffic loops and detector housing (east approach only)
- Lincoln Street – reestablish all underground signal equipment (east and west approaches only)
- Drainage
- Lighting

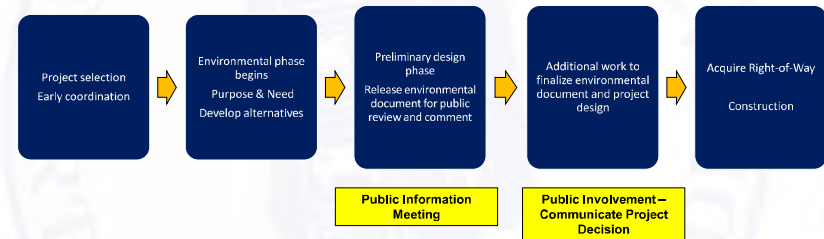


Maintenance of Traffic Plan

- SR 46 East
 - Eastbound Traffic along SR 46 will remain open during construction
- SR 46 West
 - Westbound Traffic will be detoured during construction
 - US 421 and SR 3



Project Development



Environmental Document

National Environmental Policy Act (NEPA)

- Requires INDOT to analyze and evaluate the impacts of a proposed project to the natural and socio-economic environments
- NEPA is a decision-making process
 - Purpose and Need
 - Alternatives Screening
 - Preferred Alternative
- **Impacts are analyzed, evaluated, and described in an environmental document**
 - What are the impacts this project might have on the community?
 - How can impacts be avoided?
 - Can impacts be minimized?
 - Mitigation for impacts?
- **Environmental document anticipated to be completed**
 - Fall 2022
 - Available for review via public repositories



Examples of Items Evaluated

• Environmental Process

- Establish purpose and need
 - Develop possible alternatives
 - The "Do Nothing" alternative is a baseline for comparison
 - Evaluate and screen alternatives
 - Identify a preferred alternative
 - Inform the public on environmental document and preliminary design plan
-
- Right-of-way
 - Streams, wetlands, and other waters
 - Floodplains
 - Endangered species
 - Farmland
 - * Cultural resources (historic/archaeological)
 - Parks and recreational lands (trails)
 - Air quality
 - Noise
 - Community impacts
 - Environmental justice
 - Hazardous materials
 - Permits
 - Mitigation
 - Public involvement
 - Commercial development



Project Schedule

- Stage 3 Submittal 7/23/2023
- Final Tracings 10/06/2023
- RFC 11/6/2023
- Letting 1/18/2024
- Construction Summer 2024/2025

Questions?



Project Schedule

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Questions?

