

**FHWA-Indiana Environmental Document**  
**CATEGORICAL EXCLUSION / ENVIRONMENTAL ASSESSMENT FORM**  
**GENERAL PROJECT INFORMATION**

<b>Road No./County:</b>	State Road (SR) 22 / Grant County
<b>Designation Number(s):</b>	1800168 (Lead*), 1383460, and 1702864
<b>Project Description/Termini:</b>	SR 22 Road Project / from approximately 0.19 mile north of SR 26 to 1.74 miles north of SR 26 (Des. No. 1800168) SR 22 Bridge over Central Railroad of Indianapolis (CERA) Project / from approximately 240 feet north of Michigan Street to Railroad Street (Des. No. 1383460) SR 22 Streetscape Project / from the north approach of the SR 22 bridge over CERA to Urban Street (Des. No. 1702864)

\*Following initial public involvement activities, the lead Des. No. for this contract was changed from 1383460 to 1800168.

	<b>Categorical Exclusion, Level 2</b> – Required Signatories: INDOT DE and/or INDOT ESD
	<b>Categorical Exclusion, Level 3</b> – Required Signatories: INDOT ESD
<b>X</b>	<b>Categorical Exclusion, Level 4</b> – Required Signatories: INDOT ESD and FHWA
	<b>Environmental Assessment (EA)</b> – Required Signatories: INDOT ESD and FHWA
	<b>Additional Investigation (AI)</b> – The proposed action included a design change from the original approved environmental document. Required Signatories must include the appropriate environmental approval authority

**Approval**

_____	_____
INDOT DE Signature and Date	INDOT ESD Signature and Date
_____	
FHWA Signature and Date	

**Release for Public Involvement**

N/A	7-20-2021
_____	_____
INDOT DE Initials and Date	INDOT ESD Initials and Date

**Certification of Public Involvement**

\_\_\_\_\_

INDOT Consultant Services Signature and Date

**INDOT DE/ESD Reviewer Signature and Date:** \_\_\_\_\_

**Name and Organization of CE/EA Preparer:** \_\_\_\_\_

Juliet Port, LPG / Parsons Transportation Group

## Indiana Department of Transportation

County GrantRoute SR 22Des. No. 1800168 (Lead)

### Part I – Public Involvement

Every Federal action requires some level of public involvement, providing for early and continuous opportunities throughout the project development process. **The level of public involvement should be commensurate with the proposed action.**

Does the project have a historic bridge processed under the Historic Bridges PA*?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If No, then: Opportunity for a Public Hearing Required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

\*A public hearing is required for all historic bridges processed under the Historic Bridges Programmatic Agreement between INDOT, FHWA, SHPO, and the ACHP.

*Discuss what public involvement activities (legal notices, letters to affected property owners and residents (i.e. notice of entry), meetings, special purpose meetings, newspaper articles, etc.) have occurred for this project.*

Notice of Entry letters were mailed to potentially affected property owners near the project area on June 5, 2018 (Des. No. 1383460; Bridge Project) and June 28, 2019 (Des. Nos. 1800168; Road Project, and 1702864; Streetscape Project) notifying them about the project and that individuals responsible for land surveying and field activities may be seen in the area. Sample copies of the Notice of Entry letters are included in Appendix G-1 to G-2.

A draft Public Involvement Plan (PIP) was prepared by Parsons early in the project development process, which was approved by Indiana Department of Transportation (INDOT) in June 2020. The purpose of the PIP was to establish goals and strategies for engaging with the public and key stakeholders in accordance with the INDOT *Public Involvement Policies and Procedures Manual* (August 2012). The draft PIP was updated to reflect changes in the project and INDOT policies, which was approved by INDOT Environmental Services on March 19, 2021 (Appendix G-3 to G-12).

A virtual public information meeting (public meeting) was held on February 10, 2021. A Notice of Public Meeting was advertised in the local newspaper with the highest distribution, the *Chronicle Tribune*, on February 4 and February 9, 2021; a copy of the affidavit is in Appendix G-13. Copies of the notice and a map were sent on February 1, 2021 to adjoining property owners, places of worship, civic organizations, and other stakeholders (Appendix G-15 to G-16). Thirty-six people attended the meeting (Appendix G-22 to G-23). During the public meeting, project team members provided a handout (Appendix G-21) and gave a presentation on the project's purpose and need, environmental analyses, and the recommended alternative (Appendix G-24 to G-31). Attendees asked questions about construction impacts, right-of-way (ROW) impacts, emergency access vehicles, landscaping/streetscaping details, and access to Depot Park (Appendix G-33). One verbal comment was received from a resident who does not want the grass buffer strip replaced at the sidewalk in front of their property (Appendix G-32).

On February 4, 2021, a notice was placed in the *Chronicle Tribune* to offer the public an opportunity to comment on the Section 4(f) *de minimis* finding for the Depot Park (Appendix G-14). A copy of the legal notice was sent to adjoining property owners on February 1, 2021 (Appendix G-17). The comment period ended 30 days later on March 5, 2021. No comments were received.

On April 1, 2021, a notice was placed in the *Chronicle Tribune* to offer the public an opportunity to comment on the Section 4(f) *de minimis* finding for the Detamore Trailhead (Appendix G-19 to G-20). A copy of the legal notice was sent to adjoining property owners on March 30, 2021 (Appendix G-18). The comment period ended more than 30 days later on May 3, 2021. No comments were received.

To meet the public involvement requirements of Section 106, a legal notice of Federal Highway Administration's (FHWA's) finding of "No Historic Properties Affected" was published in the *Chronicle Tribune* on March 4, 2021, offering the public an opportunity to submit comment pursuant to 36 CFR 800.2(d), 800.3(e), and 800.6(a)(4). The public comment period closed 30 days later on April 3, 2021. The text of the public notice and the affidavit of publication appear in Appendix D-60. No comments were received.

Following the above-discussed public involvement activities, the project's recommended alternative for the bridge, Des. No. 1383460, was changed from a bridge replacement to a superstructure replacement. Additionally, the lead Des. No. was changed from 1383460 to 1800168. As detailed in the *Engineer's Assessment Report* (Appendix I-4 to I-27), and summarized in the *Other Alternative Considered* section of this CE, the preferred alternative "Alternative 2A" (superstructure replacement with minor grade raise), is very similar to the recommended alternative presented in preliminary public involvement materials, "Alternative 2B" (bridge replacement with minor grade raise). The primary difference in these alternatives is the preferred alternative will reuse the existing bridge piers. The proposed impacts remain the same, including ROW and *de minimis* impacts to the adjoining Depot Park and Detamore Trailhead. Therefore, these changes do not warrant further coordination. Furthermore, in accordance with the PIP, the

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public will have the opportunity to comment on the draft environmental document. Stakeholders will be notified when this document is released for public comment.

The project will meet the minimum requirements described in the current INDOT *Public Involvement Manual*, which requires the project sponsor to offer the public an opportunity to submit comments and/or request a public hearing. Therefore, a legal notice will appear in a local publication contingent upon the release of this document for public involvement. This document will be revised after the public involvement requirements are fulfilled.

### Public Controversy on Environmental Grounds

*Discuss public controversy concerning community and/or natural resource impacts, including what is being done during the project to minimize impacts.*

At this time, there is no substantial public controversy concerning impacts to the community or to natural resources.

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Part II - General Project Identification, Description, and Design Information

Sponsor of the Project: INDOT and the Town of Upland INDOT District: Fort Wayne

Local Name of the Facility: SR 22, also known as Main Street

Funding Source (mark all that apply): Federal [X] State [X] Local [X] Other\* [ ]

\*If other is selected, please identify the funding source:

PURPOSE AND NEED:

The need should describe the specific transportation problem or deficiency that the project will address. The purpose should describe the goal or objective of the project. The solution to the traffic problem should NOT be discussed in this section.

Need: The need for the SR 22 road project, Des. No. 1800168, stems from deteriorating pavement conditions and a lack of American with Disabilities Act (ADA) compliant pedestrian facilities throughout this section of SR 22, from approximately 0.19 mile north of SR 26 to 1.74 miles north of SR 26. According to the July 2020 Abbreviated Engineering Assessment, the existing asphalt pavement was last resurfaced in 2009. The pavement has block cracking, distresses in the longitudinal joints, reflective cracking from underlying layers, transverse cracking, and isolated bottom-up structural cracking (Appendix I-28 to I-31). Much of existing sidewalk widths and curb ramps do not meet current ADA standards. Additionally, the project area lacks sufficient stormwater management, and there are existing grade changes that inhibit positive drainage.

The need for the SR 22 Bridge over Central Railroad of Indianapolis (CERA) project, Des. No. 1383460, stems from the deteriorating condition of the structure, INDOT Structure No. 22-27-02130A, along with several elements that do not meet current standards for this type of facility including substandard sight distance criteria, and substandard shoulder and sidewalk widths. In the July 1, 2019 INDOT Bridge Inspection Report, the bridge superstructure was rated 5 out of 9, fair condition (Appendix I-1 to I-3). Issues included spalling, delamination, and minor section loss. According to the March 2020 Engineer's Assessment Report, other deficiencies include a substandard vertical clearance of 22.4 feet (the minimum standard is 23.0 feet); substandard stopping sight distance and intersection sight distance criteria caused by the severe vertical curve on the existing structure; and substandard shoulder and sidewalk widths (Appendix I-5).

The need for the SR 22 streetscape project, Des. Nos. 1702864, stems from the lack of a consistent streetscape, street parking, and lighting within downtown Upland, from the SR 22 bridge over CERA to Urban Street. This area has a variety of sidewalk widths, curb ramps do not meet current ADA standards, street parking is inconsistent, and street lighting is insufficient.

Purpose: The purpose of the road project is to extend the life of the SR 22 pavement by at least 20 years, and to provide ADA-compliant pedestrian facilities, while meeting drainage standards. The purpose of the bridge project is to provide a crossing of SR 22 over CERA that has an overall condition of at least 7 out of 9, good condition, which meets current federal standards including a minimum vertical clearance of 23.0 feet and stopping sight distance criteria. The purpose of the streetscape project is to provide a consistent streetscape that includes ADA-compliant pedestrian facilities, parking, and lighting amenities in downtown Upland.



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County Grant Route SR 22 Des. No. 1800168 (Lead)

**PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):**

County: Grant Municipality: Town of Upland

Limits of Proposed Work: Des. No. 1800168: SR 22 Road Project / from approximately 0.19 mile north of SR 26 (975 feet south of the entrance to Taylor University) to 1.74 miles north of SR 26 (Urban Street)  
 Des. No. 1383460: SR 22 Bridge over CERA Project / from approximately 240 feet north of Michigan Street to Railroad Street  
 Des. No. 1702864: SR 22 Streetscape Project / from the north approach of the SR 22 bridge over CERA to Urban Street

Total Work Length: 1.56 Mile(s) Total Work Area: 10.92 Acre(s)

Is an Interstate Access Document (IAD)<sup>1</sup> required?  
 If yes, when did the FHWA provide a Determination of Engineering and Operational Acceptability?

Yes <sup>1</sup>	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>
Date: <input style="width: 100%;" type="text"/>	

<sup>1</sup>If an IAD is required; a copy of the approved CE/EA document must be submitted to the FHWA with a request for final approval of the IAD.

*Describe location of project including township, range, city, county, roads, etc. Existing conditions should include current conditions, current deficiencies, roadway description, surrounding features, etc. Preferred alternative should include the scope of work, anticipated impacts, and how the project will meet the Purpose and Need. Logical termini and independent utility also need discussed.*

**Location:** INDOT is planning a road (Des. No. 1800168), bridge (Des. No. 1383460), and streetscape (Des. No. 1702864) project in the Town of Upland, Grant County. The project includes funding from FHWA (Des. Nos. 1800168, 1383460, and 1702865) and the Town of Upland (Des. No. 1702865). The proposed undertaking is located on SR 22 (Main Street), from approximately 0.19 mile north of SR 26 (975 feet south of the entrance to Taylor University), to 1.74 miles north of SR 26 (Urban Street) (Appendix B-1). The project is located in Sections 3 and 10 of Township 23 North, Range 9 East, as shown on the Hartford City West, Indiana United States Geological Survey (USGS) 7.5 minute series topographical map (Appendix B-2). The project setting at the southern terminus is primarily suburban, which becomes increasingly urban towards the north, where it terminates on the north side of downtown Upland. Surrounding properties include Taylor University, agricultural land, residences, commercial properties, and public properties including the town hall, Memorial Park, Detamore Trailhead, and Depot Park.

**Existing Conditions:** SR 22 is classified as a Major Collector and is oriented north to south through the project area. Posted speed limits throughout the corridor vary from 25 miles per hour (mph) to 45 mph. There are a total of 18 intersections through the corridor, 17 classified as Local Streets and one Minor Collector. As described in the Purpose and Need section, the existing conditions along SR 22 include deteriorating pavement, drainage issues, and pedestrian facilities that do not meet current standards for this type of facility. Aerial photographs are provided in Appendix B-4 to B-14, and project photographs are provided in Appendix B-15 to B-17.

This section of SR 22 has one 11- to 12-foot wide travel lane in each direction. Turn lanes are present for the entrance to Taylor University. Shoulders and sidewalks are variable. From the southern project terminus to Jefferson Street, there is zero to two feet of paved shoulder. From the entrance of Taylor University north, there is a 4- to 5-foot wide sidewalk on the west side that is offset by a grassy strip. From Jefferson Street to the SR 22 bridge over CERA, there is five to six feet of additional pavement (shoulder) in each direction, and curb and gutter. Sidewalks are present on both sides, and are generally four to five feet wide and offset. In the downtown area, there are variable parking lanes, and sidewalk locations and widths vary throughout but generally span five to ten feet. Guardrail is only present in one location, along the east side of SR 22 near Jefferson Ditch, from approximately 415 to 1,060 feet north of Berry Street.

The following streets intersect SR 22 within the project area: Reade Avenue, Write Avenue, Joyce Avenue, Taylor Street, Thorburn Street, Bragg Avenue, Spencer Avenue, Payne Avenue, McCabe Avenue, Berry Street/ County Road (CR) 600 South, Montgomery Avenue, Jefferson Street, Indiana Avenue, Michigan Street, Railroad Street, Washington Street, Anson Street, and Urban Street. These streets are classified as Local Roads, except Washington Street which is a Minor Collector. Additionally, there are multiple private drives, including the entrance to Taylor University and a private drive labeled "Hope Drive", as well as several alleyways.

There are a variety of stormwater management systems within the project area, including subgrade storm sewers, curbs, inlets, ditches, and drainage tile, as well as three small structures. Near the southern project terminus, there is a 36-inch reinforced

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concrete pipe (RCP) beneath SR 22, from approximately 220 feet south of the entrance to Taylor University to Wetland 1 (Appendix B-14), which does not have an INDOT structure number. Between Spencer and Payne Avenues, INDOT Structure No. CV 022-027-49.72, triple 24-inch diameter corrugated metal pipes (CMPs), carry a non-jurisdictional drainage beneath SR 22. North of Montgomery Street, INDOT Structure No. CV 022-027-49.42, a 4.5-foot by 2.6-foot pipe arch, carries storm water beneath SR 22 and outfalls on the east side into an unnamed tributary to Jefferson Ditch (UNT-1).

The existing bridge, INDOT Structure No. 22-27-02130A, is the main crossing point over the CERA railroad in Upland, and one of only two track crossings in the town. The bridge was constructed in 1967 and is a three-span, approximately 145-foot long, 52-foot wide, prestressed reinforced concrete box beam bridge with zero skew. The bridge consists of two 11-foot wide travel lanes with variable width paved outside shoulders. There are two 4.5-foot wide sidewalks on the bridge that connect to 5-foot wide sidewalks at both ends of the bridge. The bridge provides 22.4 feet of vertical clearance over the railroad, which is below the minimum criteria of 23.0 feet. Additionally, as described in the Purpose and Need section, the existing conditions include a deteriorating substructure, substandard sight distance criteria, and substandard shoulder and sidewalk widths.

**Preferred Alternative:** Three Des. Nos. are covered under one contract and this CE document. The preferred alternative for this project covers the work under those Des. Nos., as described below. An overview map is provided in Appendix B-3.

**Road Project (Des. No. 1800168):** The preferred alternative will replace the existing pavement from approximately 975 feet south of the entrance to Taylor University to Urban Street. The roadway will be 22 to 24 feet wide, with zero to 12-foot shoulders and a 2-foot curb and gutter. Existing sidewalks will be upgraded and will vary from six to 12 feet wide, and ADA-compliant curb ramps will be installed or upgraded where needed. Existing guardrail will be upgraded. Preliminary roadway plans are provided in Appendix B-22 to B-40.

Street signs will be moved and upgraded as needed, as well as the flashing light at the intersection with Berry Street. In order to promote positive drainage, the reconstructed roadway will have slight grade changes that are generally less than six inches, except within the limits of the bridge work (from approximately 240 feet north of Michigan Street to Railroad Street), described further below. Accordingly, existing drive, alleyway, and local road approaches will be reconstructed as needed.

Stormwater systems will be upgraded and replaced as shown on the preliminary roadway plans (Appendix B-22 to B-40). This includes the replacement of curb, gutter, inlets, manholes, subgrade storm sewer pipes, driveway pipes, and two small structures. The 36-inch RCP located approximately 220 feet south of the entrance to Taylor University to Wetland 1, will be extended. Structure No. CV 022-027-49.72, a triple 24-inch CMP, will be replaced with a 24-inch diameter pipe. Additionally, INDOT Structure No. CV 022-027-49.42, the pipe arch that outfalls into UNT-1, will be replaced with 30-inch and 36-inch diameter RCPs. The hydraulic analysis and design is ongoing. In order to reduce overall impacts, the project will likely combine the roadway's stormwater with municipal stormwater. A meeting was held with officials from the Town of Upland on April 5, 2021 and concerns were raised about the preliminary design, including shared-easement and associated cost-sharing agreements (Appendix I-32 to I-34). Further analysis and coordination with local officials will occur as the design progresses. If the design changes, this document will be re-evaluated in accordance with the 2021 *INDOT Categorical Exclusion Manual*.

Work at the 18 local roadway intersections will include replacing pavement and regrading to tie-into the new SR 22 roadway and promote positive drainage. Furthermore, pedestrian curb-ramps will be upgraded to meet current ADA-standards, and storm water management systems will be upgraded as described above and shown on project plans (Appendix B-22 to B-40).

**Bridge Project (Des. No. 1383460): "Alternative 2A: Three Span Steel Beam Superstructure Replacement with Minor Profile Grade Raise and No Impacts to Downtown Upland":** The existing SR 22 bridge over CERA will be rehabilitated with a three-span continuous composite steel beam superstructure replacement. The existing piers, which are in satisfactory condition, will be patched, and crash walls will be added (Appendix I-3 and I-37). The new superstructure will be approximately 55.5 feet wide (out to out coping) and 152 feet long. It will carry one 11-foot wide travel lane in each direction, with 9-foot wide shoulders and 6.6-foot wide sidewalks. Standard 3.5-foot high concrete bridge railings will be topped by 5-foot high metal protective fencing over the tracks. Preliminary bridge plans are provided in Appendix B-18 to B-21.

The new superstructure will be less than one foot higher than the existing conditions, and it will provide 23 feet of vertical clearance over the railroad. This alternative will meet current design criteria, except it will require a Level 2 design exception for sag curve stopping sight distance. The bridge approaches will be widened and re-graded by as much as four feet higher to accommodate the new superstructure and to correct sight distance issues. This will impact the adjoining Depot Park, located northwest of the bridge, and Detamore Trailhead, located southeast of the bridge. Accordingly, the features and attributes of the parks will be avoided and/or restored; refer to the Section 4(f) Resources/Section 6(f) Resources section of this document for further discussion.

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**Streetscape Project (Des. No. 1702864):** The preferred alternative includes the installation of parking spaces, sidewalk bump-outs, and upgraded lighting in downtown Upland, from the north bridge approach to Urban Street. The sidewalk bump-outs will be added at the four intersections within the streetscape area: Railroad Street, Washington Street, Anson Street, and Urban Street, as well as the unnamed alleyway between Railroad and Washington streets. Preliminary streetscape plans are provided in Appendix B-38 to B-40.

The preferred alternative will require strips of new ROW from both sides of SR 22 to accommodate the construction of upgraded sidewalks and drainage improvements. Temporary ROW is also needed to reconstruct private drives. Approximately 1.94 acres of permanent new ROW, approximately 5.60 acres of re-acquisition of existing apparent ROW, and approximately 0.50 acre of temporary ROW will be acquired for this project.

The maintenance of traffic (MOT) includes a full bridge closure for up to 12 months, and an official detour using SR 22, I-69, and SR 26 will be provided. Phased construction for the roadway work will allow for continued local access. Construction is scheduled to begin in the spring of 2023.

This project will impact 68 linear feet of a stream, 0.006 acre of wetlands, and approximately 3.31 acres of terrestrial habitat that is primarily maintained lawn. Impacts to trees will be limited to less than 0.5 acre of trimming/clearing, most of which are urban street trees. Additionally, there are *de minimis* and temporary occupancy impacts to the abutting public parks, Depot Park, Detamore Trailhead, and Memorial Park.

The preferred alternative will meet the purpose and need of the road project by extending the life of SR 22 pavement for at least 20 years, and providing ADA-compliant pedestrian facilities, while meeting drainage standards. The preferred alternative will meet the purpose and need of the bridge project by providing a crossing of SR 22 over CERA that has an overall condition of at least 7 out of 9, good condition, and that meets current federal standards including a minimum vertical clearance of 23.0 feet and stopping sight distance criteria. Additionally, the preferred alternative will meet the purpose and need of the streetscape project by providing a consistent streetscape with ADA-compliant pedestrian facilities, parking, sidewalk bump-outs, and lighting amenities in downtown Upland.

**Logical Termini/Independent Utility:** The project termini, described in the Limits of Proposed Work section, are based on the project needs summarized in the Purpose and Need section, and includes any areas that would have related environmental impacts. As shown on the Project Overview Map (Appendix B-3), the SR 22 roadway project (Des. 1800168) extends along SR 22 throughout most of the Town of Upland where there are pavement and drainage issues, as well as curb-ramps that don't meet current ADA standards. The SR 22 bridge project (Des. 1383460) includes the bridge and its approaches, which need to be maintained and improved to meet federal standards. The streetscape project (Des. 1702864) is proposed in downtown Upland, which lacks a consistent streetscape. Therefore, the SR 22 road and bridge project has rational end points and is of sufficient length to address any environmental impacts related to its design and construction. This project is a reasonable expenditure even if no additional transportation improvements in the area are made, and it should not restrict consideration of alternatives for other reasonably foreseeable transportation improvements. Therefore, this project meets FHWA criteria for independent utility and logical termini ([www.environment.fhwa.dot.gov/legislation/nepa/guidance\\_project\\_termini.aspx](http://www.environment.fhwa.dot.gov/legislation/nepa/guidance_project_termini.aspx)).

### OTHER ALTERNATIVES CONSIDERED:

*Provide a header for each alternative. Describe all discarded alternatives, including the No Build Alternative. Explain why each discarded alternative was not selected. Make sure to state how each alternative meets or does not meet the Purpose and Need and why.*

Ten alternatives for the SR 22 crossing over CERA were considered, including the preferred alternative, "Alternative 2A: Three Span Steel Beam Superstructure Replacement with Minor Profile Grade Raise and No Impacts to Downtown Upland", described above. The other nine alternatives are summarized below. Impacts are summarized further below in the Alternatives Impacts Matrix. Details are provided in the *Engineer's Assessment Report* (Appendix I-4 to I-27).

#### **Alternative 1: "Alternative 8: No Build"**

This alternative would leave the roadway and bridge in their current deteriorating and substandard conditions. This alternative would incur no costs, need no ROW, and there would be no impacts to resources, including streams and wetlands. However, this alternative would not meet the purpose and need of the project; therefore, it was discarded from further consideration.

#### **Alternative 2: "Alternative 1: Single Span, Prestressed Concrete Bulb-Tee Beam Bridge Replacement with Mechanically Stabilized Earth (MSE) Wall Abutments and Profile Raise with Impacts to Downtown Upland"**

This alternative would replace the current structure with a new single-span, prestressed concrete bulb-tee beam bridge with MSE

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wall abutments. This would raise the existing bridge profile by approximately two to three feet. Approaches would be re-graded to meet current design criteria. Retaining walls would be used to tie-in the grade raise and minimize ROW impacts. Due to the grade raise and sight distance criteria, the intersection of SR 22 and Railroad Street would be removed. Beyond the bridge, SR 22 would have a downtown streetscape, one 12-foot travel lane in each direction, and 6-foot wide sidewalks. This alternative would have greater impacts and had a higher cost estimate compared to the preferred alternative; therefore, it was discarded from further consideration.

### **Alternative 3: “Alternative 2B: Three Span, Steel Beam Bridge Replacement with Minor Profile Raise and No Impacts to Downtown Upland”**

This alternative is very similar to the preferred alternative. It would replace the current bridge with a three span, steel beam bridge and raise the existing bridge profile by less than one foot. It would also meet the purpose and need and require a Level 2 design exception for sag curve stopping sight distance. Beyond the bridge, SR 22 would have a downtown streetscape, one 12-foot travel lane in each direction, and 6-foot wide sidewalks. This alternative would have similar impacts to the preferred alternative, including the adjoining Depot Park and Detamore Trailhead. The primary difference between this alternative (bridge replacement) and the preferred alternative (superstructure replacement) is retention of the existing piers. When compared to the preferred alternative, this alternative had a higher preliminary cost estimate as well as a higher net present value per the Life Cycle Cost Analysis (Appendices I-7 to I-27 and I-33 to I-36). Therefore, this alternative was discarded from further consideration.

### **Alternative 4: “Alternative 3A: Three Span, Steel Beam Superstructure Replacement with Minor Profile Raise and Impacts to Downtown Upland”**

This alternative would replace the current superstructure with a three span, steel beam bridge and raise the existing bridge profile by less than one foot. The new profile of SR 22 would be corrected to match design criteria, which would eliminate the intersection of SR 22 and Railroad Street. Beyond the bridge, SR 22 would have one 12-foot travel lane in each direction with 6-foot wide paved shoulders, and 6-foot wide sidewalks. This alternative would have greater impacts and had a higher cost estimate compared to the preferred alternative; therefore, it was discarded from further consideration.

### **Alternative 5: “Alternative 3B: Three Span, Steel Beam Bridge Replacement with Minor Profile Raise and Impacts to Downtown Upland”**

This alternative would replace the current structure with a three-span, steel beam bridge, and would raise the existing bridge profile by less than one foot. The new profile of SR 22 would be corrected to match design criteria, which would eliminate the intersection of SR 22 and Railroad Street. Beyond the bridge, SR 22 would have a downtown streetscape, one 12-foot travel lane in each direction, and 6-foot wide sidewalks. This alternative would have greater impacts and had a higher cost estimate compared to the preferred alternative; therefore, it was discarded from further consideration.

### **Alternative 6: “Alternative 4: Single Span, Steel Beam Bridge Replacement with MSE Wall Abutments and Lowering of Bridge and Railroad Grade”**

This alternative would replace the current structure with a single-span, steel beam bridge. It would lower the existing bridge profile by less than one foot, and it would lower the railroad profile beneath the bridge by approximately four feet. This would meet the project's purpose and need while correcting perceived crest-curve concerns that were raised by local stakeholders. Beyond the bridge, SR 22 would have a downtown streetscape, one 12-foot travel lane in each direction, and 6-foot wide sidewalks. This alternative would have greater impacts and had a higher cost estimate compared to the preferred alternative; therefore, it was discarded from further consideration.

### **Alternative 7: “Alternative 5: Three Span, Steel Beam Replacement and Lowering of Bridge and Railroad Grade”**

This alternative would replace the current structure with a three span, steel beam bridge. It would lower the existing bridge profile by less than one foot, and it would lower the railroad profile beneath the bridge by approximately four feet. This would meet the project's purpose and need while correcting perceived crest-curve issues that were raised by local stakeholders. Beyond the bridge, SR 22 would have a downtown streetscape, one 12-foot travel lane in each direction, and 6-foot wide sidewalks. This alternative would have greater impacts and had a higher cost estimate compared to the preferred alternative; therefore, it was discarded from further consideration.

### **Alternative 8: “Alternative 6: Three-sided Box and Lowering of Railroad Grade”**

This alternative would replace the current structure with a three-sided concrete box, and lower the profile grade of SR 22 by approximately 10 feet to create better sight distances. The railroad would also be lowered by approximately 10 feet. Existing bridge elements would be removed and replaced with fill and new drainage structures. Beyond the bridge, SR 22 would have a downtown streetscape, one 12-foot travel lane in each direction, and 6-foot wide sidewalks. This alternative would have greater impacts and had a higher cost estimate compared to the preferred alternative; therefore, it was discarded from further consideration.

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**Alternative 9: "Alternative 7: At-Grade Crossing"**

This alternative would raise the profile grade of the railroad and lower the profile grade of SR 22 to create an at-grade crossing. A signal with arms would control traffic. Beyond the bridge, SR 22 would have a downtown streetscape, one 12-foot travel lane in each direction, and 6-foot wide sidewalks. Environmental impacts would include an additional impact to the existing pedestrian bridge at the west end of Depot Park, which would need to be replaced. This alternative would have greater impacts and had a higher cost estimate compared to the preferred alternative; therefore, it was discarded from further consideration.

**Alternatives Impacts Matrix for Bridge Project (Des. 1383460)**

No.	P&N ?	ROW	Railroad Impacts	Parks / Community / Utilities Impacts	Preliminary Cost Estimate
Preferred (2A)	Yes	P: 0.36 acre T: 0.34 acre 6 parcels	None	Public Parks: Minor ( <i>de minimis</i> ) impacts to Deport Park and Detamore Trailhead due to grade change Community: Minimal, removal of up to three parking spaces Utilities: Relocate two light poles and a fiber optic line	\$ 3,000,000
1 (8)	No	None	None	None	None
2 (1)	Yes	P: 0.58 acre T: 0.37 acre 10 parcels	None	Public Parks: Relatively greater impacts to Deport Park and Detamore Trailhead due to grade change; could include access changes Community: Closure of the intersection of SR 22 and Railroad Street. Removal of six parking spaces Utilities: Relocate overhead electric lines, two light poles, and a fiber optic line	\$ 3,900,000
3 (2B)	Yes	P: 0.36 acre T: 0.34 acre 6 parcels	None	Public Parks: Similar impacts to Deport Park and Detamore Trailhead due to minor grade change Community: Minimal, removal of up to three parking spaces Utilities: Relocate two light poles and a fiber optic line	\$ 3,400,000
4 (3A)	Yes	P: 0.58 acre T: 0.37 acre 10 parcels	None	Public Parks: Relatively greater impacts to Deport Park and Detamore Trailhead due to grade change; could include access changes Community: Closure of the intersection of SR 22 and Railroad Street. Removal of three parking spaces. Utilities: Relocate two light poles and a fiber optic line	\$ 3,500,000
5 (3B)	Yes	P: 0.58 acre T: 0.37 acre 10 parcels	None	Public Parks: Relatively greater impacts to Deport Park and Detamore Trailhead due to grade change; could include access changes Community: Closure of the intersection of SR 22 and Railroad Street. Removal of three parking spaces. Utilities: Relocate two light poles and a fiber optic line	\$ 3,800,000
6 (4)	Yes	P: 0.36 acre T: 0.34 acre 6 parcels	2,500 feet Construction and Drainage	Public Parks: Similar impacts to Deport Park and Detamore Trailhead Community: Minimal, removal of up to three parking spaces Utilities: Relocate two light poles and fiber optic line	\$ 5,700,000
7 (5)	Yes	P: 0.36 acre T: 0.34 acre 6 parcels	2,500 feet Construction and Drainage	Public Parks: Similar impacts to Deport Park and Detamore Trailhead Community: Minimal, removal of up to three parking spaces Utilities: Relocate two light poles and a fiber optic line	\$ 5,200,000
8 (6)	Yes	P: 0.36 acre T: 0.34 acre 6 parcels	4,650 feet Construction and Drainage	Public Parks: Similar impacts to Deport Park and Detamore Trailhead Community: Minimal Utilities: Relocate two light poles and a fiber optic line	\$ 6,400,000
9 (7)	Yes	P: 0.58 acre T: 0.37 acre 10 parcels	4,650 feet Construction and Drainage	Public Parks: Relatively greater impacts, including the 2 <sup>nd</sup> Street Pedestrian Bridge crossing at the west end of Depot Park would require replacement. Community: New crossing would have a rail signal with arms Utilities: Relocate two light poles and a fiber optic line	\$ 7,500,000

 Source: *Engineer's Assessment Report* (Appendix I-4 to I-27).

(Table notes continue to next page)

 No. = CE Alternative Number (*Engineer's Assessment Report* Alternative Number)

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P&N? = Does the alternative meet the project's purpose and need? (Table notes continued)  
 P: = Permanent ROW; T: = Temporary ROW  
 Notes: ROW estimates were based on the bridge project limits. Relocations are not applicable because the residence of concern was demolished circa 2019 during the development of the Detamore Trailhead. Impacts to water resources are minimal for all alternatives due to the municipal storm system. Impacts to potential cultural resources are not anticipated for any alternatives based on the "No Historic Properties" effect finding; refer to the Cultural Resources Section for further discussion. Impacts to trees and terrestrial habitat are minimal for all alternatives due to the urban setting.

**The No Build Alternative is not feasible, prudent or practicable because (Mark all that apply):**

- It would not correct existing capacity deficiencies;
- It would not correct existing safety hazards;
- It would not correct the existing roadway geometric deficiencies;
- It would not correct existing deteriorated conditions and maintenance problems; or
- It would result in serious impacts to the motoring public and general welfare of the economy.
- Other (Describe):

**ROADWAY CHARACTER:**

If the proposed action includes multiple roadways, complete and duplicate for each roadway.

Name of Roadway: SR 22  
 Functional Classification: Major Collector  
 Current ADT: 6,365 VPD (2023) Design Year ADT: 7,145 VPD (2043)  
 Design Hour Volume (DHV): 643 Truck Percentage (%): 4.0  
 Designed Speed (mph): 25 to 45 Legal Speed (mph): 25 to 35

	Existing		Proposed	
Number of Lanes:	2		2	
Type of Lanes:	Through		Through	
Pavement Width:	25-36	ft.	26-36	ft.
Shoulder Width:	0-6	ft.	0-6	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	4-10	ft.	5-12	ft.

Setting:  Urban  Suburban  Rural  
 Topography:  Level  Rolling  Hilly

Additionally, as summarized in the Project Description, the preferred alternative includes work at intersection approaches for the following local roadways:

- Reade Avenue
- Berry Street/ CR 600 South
- Write Avenue
- Montgomery Avenue
- Joyce Avenue
- Jefferson Street
- Taylor Street
- Indiana Avenue
- Thorburn Street
- Michigan Street
- Bragg Avenue
- Railroad Street
- Spencer Avenue
- Washington Street
- Payne Avenue
- Anson Street
- McCabe Avenue
- Urban Street

The above-listed streets are two-way roadways that vary in width from approximately 22 to 26 feet. They are classified as Local Roads, except Washington Street which is a Minor Collector. Traffic data such as average daily traffic counts (ADT) are not available. There will be no change to the number lanes or widths of pavement at the subject intersections, except from Railroad Street to Urban Street, where sidewalk bump-outs will be added as part of the streetscape project (Appendix B-38 to B-40).

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### BRIDGES AND/OR SMALL STRUCTURE(S):

If the proposed action includes multiple structures, complete and duplicate for each bridge and/or small structure. Include both existing and proposed bridge(s) and/or small structure(s) in this section.

Structure/NBI Number(s): 022-27-02130 A Sufficiency Rating: 75.8, July 1, 2019 Bridge Inspection Report (Appendix I-4)  
(Rating, Source of Information)

	Existing		Proposed	
Bridge/Structure Type:	Continuous adjacent prestressed reinforced concrete box beam bridge		Continuous composite steel beam bridge	
Number of Spans:	3		3	
Weight Restrictions:	N/A	ton	N/A	ton
Height Restrictions:	N/A	ft.	N/A	ft.
Curb to Curb Width:	40	ft.	40	ft.
Outside to Outside Width:	52	ft.	55.5	ft.
Shoulder Width:	8	ft.	9	ft.

Describe impacts and work involving bridge(s), culvert(s), pipe(s), and small structure(s). Provide details for small structure(s): structure number, type, size (length and dia.), location and impacts to water. Use a table if the number of small structures becomes large. If the table exceeds a complete page, put it in the appendix and summarize the information below with a citation to the table.

The existing SR 22 bridge over CERA, INDOT Structure No. 22-27-02130A, is a three-span, approximately 145-foot long, 52-foot wide, prestressed reinforced concrete box beam bridge with zero skew. The existing piers, which are in satisfactory condition, will be patched, and crash walls will be added (Appendix I-3 and I-37). The superstructure will be replaced with a three-span continuous composite steel beam structure with zero skew. There are no water resources at the bridge; it is connected to the storm sewer system. An NBI number was not identified for this structure. The bridge was constructed in 1967 and is a common type not eligible for the National Register of Historic Places (NRHP) (as defined in Section V. of the *Program Comment Issued for Streamlining Section 106 Review for Actions Affecting Post-1945 Concrete and Steel Bridges* issued by the Advisory Council on Historic Preservation on November 2, 2012).

This project includes numerous storm sewer system upgrades, most of which are curbs, gutter, inlets, manholes, driveway pipes, and subgrade storm piping (Appendix B-22 to B-40). Additionally, there are three small structures within the project area (see Appendix C-52 to C-53 for photographs):

Unnamed 36-inch RCP beneath SR 22, approximately 45 feet long

- Sewer outfall from approximately 220 feet south of the entrance to Taylor University to Wetland 1
- This pipe will be extended with a 36-inch diameter, 56-foot long pipe
- Wetland 1 will be eliminated for a total of 0.006 acre of impacts

CV 022-027-49.72, triple 24-inch CMPs beneath SR 22 between Spencer and Payne Avenues, 46 feet long

- There are no water resources at this location
- This structure will be replaced with Str. No. CB-068A, an 18-inch diameter, 53-foot long pipe, and Str. No. MH-231, a 24-inch diameter, 42-foot long pipe

CV 022-027-49.42, 4.5-foot by 2.6-foot pipe arch beneath SR 22 (215 feet north of Montgomery Street), 44 feet long

- Sewer outfall to UNT 1 to Jefferson Ditch
- This structure will be replaced with a 30-inch and a 36-inch RCP
- Approximately 68 linear feet of UNT 1 to Jefferson Ditch will be impacted

As described previously in the Project Description (Preferred Alternative) section, hydraulic analysis and design is ongoing and further coordination with local officials will occur. Accordingly, this document will be re-evaluated if the design changes.

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### MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

	Yes	No
Is a temporary bridge proposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is a temporary roadway proposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will the project involve the use of a detour or require a ramp closure? (describe below)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Provisions will be made for access by local traffic and so posted.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Provisions will be made for through-traffic dependent businesses.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Provisions will be made to accommodate any local special events or festivals.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will the proposed MOT substantially change the environmental consequences of the action?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there substantial controversy associated with the proposed method for MOT?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*Discuss closures and/or facilities (if any) that will be provided for maintenance of traffic. Any known impacts from these temporary measures should be quantified to the extent possible, particularly with respect to properties such as Section 4(f) resources and wetlands. Any local concerns about access and traffic flow should be detailed as well.*

The MOT for the project will require a full closure of the SR 22 bridge over CERA for up to 12 months, from Michigan Street to Railroad Street. An official detour will be provided using SR 26, I-69, and SR 22 (Appendix B-25). An unofficial detour that uses 8<sup>th</sup> Street is available for local residents and businesses. North and south of the bridge, construction will be phased with one side of the roadway constructed at a time. The remaining width of pavement will be used for one-way, one-directional travel through the construction zone and to provide access for local residences and businesses. Pedestrian detours utilizing signs and barriers to direct foot traffic will be provided.

The MOT will not impact public parks or facilities except at the driveway to Detamore Trailhead, which will be reconstructed to the south to improve sight distance and accommodate the grade changes. The facility will remain open during construction via a temporary driveway. It is the responsibility of the project sponsor to notify school corporations, Taylor University, and emergency services at least two weeks prior to any construction that would block or limit access. Early coordination letters (ECLs) were sent to local stakeholders, including the school corporation, Taylor University, and emergency management services, on March 17, 2020 and April 4, 2020 (Appendix C-1 to C-7). No responses were received regarding MOT. Refer to the Section 4(f) Resources/ Section 6(f) Resources section for further discussion of the coordination regarding the impacts to the Detamore Trailhead property.

The closure and lane restrictions will pose a temporary inconvenience to traveling motorists (including school buses and emergency services); however, no significant delays are anticipated, and all inconveniences and delays will cease upon project completion.

### ESTIMATED PROJECT COST AND SCHEDULE:

Engineering: \$ 1,277,500 (2020) Right-of-Way: \$ 275,000 (2022) Construction: \$ 7,222,677 (2023)

Anticipated Start Date of Construction: Spring 2023 (Appendix H-1)



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### RIGHT OF WAY:

Land Use Impacts	Approximate Amount (acres)		
	Permanent	Temporary	Reacquisition
Residential	0.45	0.22	2.01
Commercial/Religious	0.84	0.09	1.32
Agricultural	0.37	N/A	0.90
Forest	N/A	N/A	N/A
Wetlands* (included with agricultural, above)	(0.006*)	N/A	N/A
Other: Depot Park	0.06	0.01	0.07
Other: Detamore Trailhead (Town of Upland)	0.07	0.04	0.13
Other: Detamore Trailhead (Upland Area Greenways)	0.01	0.03	0.02
Other: Memorial Park	N/A	0.01	0.09
Other: Taylor University	0.14	0.10	1.06
<b>TOTAL</b>	<b>1.94</b>	<b>0.50</b>	<b>5.60</b>

*Describe both Permanent and Temporary right-of-way and describe their current use. Typical and Maximum right-of-way widths (existing and proposed) should also be discussed. Any advance acquisition, reacquisition or easements, either known or suspected, and their impacts on the environmental analysis should be discussed.*

The project requires approximately 7.54 acres of permanent ROW, 5.60 acres of which is considered reacquisition of existing apparent ROW. The existing apparent ROW consists of the SR 22 roadway and sidewalk, which averages 25 feet wide from the roadway centerline. The project also requires approximately 0.50 acre of temporary ROW. The proposed ROW is shown on the project plans (Appendix B-18 to B-40). The proposed new ROW will average 35 feet wide from the centerline, except at the bridge over CERA where it widens to 55 feet to accommodate the grade changes.

The proposed permanent ROW consists of strips of agricultural, commercial, and residential properties along SR 22. Most of this land consists of maintained lawn, row-crop agriculture, and private drives. The temporary ROW is primarily needed to reconstruct curb ramps at intersections, and to reconstruct existing private drives and tie their elevations to the new roadway.

Due to the widening and grade changes at the bridge, ROW is needed from the adjoining Depot Park, located northwest of the bridge, and Detamore Trailhead, located southeast of the bridge. Furthermore, a strip of temporary ROW is needed from Memorial Park to reconstruct the sidewalk. Accordingly, the features and attributes of the parks will be avoided and/or restored; refer to the Section 4(f) Resources/Section 6(f) Resources section of this document for further discussion.

If the scope of work or permanent or temporary ROW amounts change, the INDOT Environmental Services Division (ESD) and the INDOT District Environmental Section will be contacted immediately.

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### Part III – Identification and Evaluation of Impacts of the Proposed Action

#### **SECTION A - EARLY COORDINATION:**

List the date(s) coordination was sent and all resource agencies that were contacted as a part of the development of this Environmental Study. Also, include the date of their response or indicate that no response was received.

ECLs were sent on March 17, 2020 (Appendix C-1 to C-5) on Parsons letterhead. At the request of INDOT, a second letter was sent on April 4 and 6, 2020 on INDOT letterhead with the same information and mapping (Appendix C-6 to C-7). As previously discussed in the Public Involvement section, the project's recommended alternative for the bridge, Des. No. 1383460, was changed from a bridge replacement to a superstructure replacement. Additionally, the lead Des. No. was changed from 1383460 to 1800168. The primary difference in alternatives is the preferred alternative will reuse the existing bridge piers. The Proposed impacts remain the same, including ROW and impacts to the adjoining parks. Although the ECL describes the initial recommended alternative and states the lead Des. No. was 138460, an updated ECL was not deemed necessary. Stakeholders will be notified when this document is released for public comment.

Agency	Dates Sent	Date Response Received	Appendix
US Army Corps of Engineers (USACE)	March 17 and April 6, 2020	No response received	N/A
FHWA	March 17 and April 6, 2020	No response received	N/A
INDOT Fort Wayne District	March 17 and April 6, 2020	No response received	N/A
INDOT Major Projects	March 17 and April 6, 2020	No response received	N/A
INDOT Office of Public Involvement	March 17 and April 6, 2020	April 6, 2020	C-13 to C-15
Indiana Department of Natural Resources (IDNR) Division of Fish and Wildlife (DFW)	March 17 and April 6, 2020	April 15, 2020	C-8 to C-9
Natural Resources Conservation Service (NRCS)	March 17 and April 6, 2020	April 8, 2020	C-11 to C-12
Indiana Geological and Water Survey (IGWS)	March 17, 2020	March 17, 2020*	C-16 to C-18
National Park Service	March 17 and April 6, 2020	No response received	N/A
US Fish and Wildlife Service (USFWS)	March 17 and April 6, 2020	April 6, 2020	C-10
US Housing and Urban Development	March 17 and April 6, 2020	No response received	N/A
Grant County Highway Department	March 17 and April 6, 2020	No response received	N/A
Grant County Commission	March 17 and April 6, 2020	No response received	N/A
Grant County Emergency Management	March 17 and April 6, 2020	No response received	N/A
Upland Town Council	March 17, and April 4, 2020	No response received	N/A
Parks Board, Town of Upland	March 17 and April 4, 2020	No response received	N/A
Eastbrook Community Schools Corporation	March 17 and April 6, 2020	No response received	N/A
Taylor University	March 17 and April 4, 2020	No response received	N/A
Upland Police Department	March 17 and April 4, 2020	No response received	N/A
Indiana Department of Environmental Management (IDEM)	March 17, 2020	March 17, 2020*	C-19 to C-23
CERA	March 17 and April 6, 2020	No response received	N/A
Grant County Building Department (Local Floodplain Administrator)	March 19, 2021	No response received	N/A
Upland Fire Department	March 17 and April 4, 2020	No response received	N/A
Upland Partner, LLC	December 8, 2020	No response received	N/A
Mr. Leland E. Boren (property owner)	March 17 and April 6, 2020	No response received	N/A

\* Electronic coordination

All applicable recommendations are included in the Environmental Commitments section of this CE document.

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**SECTION B – ECOLOGICAL RESOURCES:**

**Streams, Rivers, Watercourses & Other Jurisdictional Features**

- Federal Wild and Scenic Rivers
- State Natural, Scenic or Recreational Rivers
- Nationwide Rivers Inventory (NRI) listed
- Outstanding Rivers List for Indiana
- Navigable Waterways

**Presence**

<b>X</b>

**Impacts**

Yes	No
<b>X</b>	

Total stream(s) in project area: 158 Linear feet      Total impacted stream(s): 68 Linear feet

Stream Name	Classification	Total Size in Project Area (linear feet)	Impacted linear feet	Comments (i.e. location, flow direction, likely Water of the US, appendix reference)
Jefferson Ditch	Perennial Stream	120	30	East of SR 22 between Jefferson and Montgomery Streets, flows from north to south, likely a Water of the US (Appendix F-3 to F-11)
UNT-1	Intermittent Stream	38	38	East of SR 22 between Jefferson and Montgomery Streets, flows from west to east, likely a Water of the US (Appendix F-3 to F-11)

*Describe all streams, rivers, watercourses and other jurisdictional features adjacent or within the project area. Include whether or not impacts (both permanent and temporary) will occur to the features identified. Include if the streams or rivers are listed on any federal or state lists for Indiana. Include if features are subject to federal or state jurisdiction. Discuss measures to avoid, minimize, and mitigate if impacts will occur.*

Based on the desktop review, the aerial map of the project area (Appendix B-4 to B-14), and the Red Flag Investigation (RFI) report (Appendix E-3), there are 18 streams, rivers, watercourses or other jurisdictional features within the 0.5 mile search radius. That number was updated to 19 by the site visit on June 16, 2020 by Parsons. There are two of the streams, rivers, watercourses, or other jurisdictional features present within or adjacent to the project area.

A *Waters of the U.S. (WOUS) Report* was completed for this project and the INDOT Ecology and Waterway Permitting Office (EWPO) approved it on January 19, 2021 (Appendix F-4). Please refer to Appendix F for the *WOUS Report*. It was determined that two likely jurisdictional streams are within or adjacent to the project area. The USACE makes all final determinations regarding jurisdiction. The streams are shown on the project plans in Appendix B-18 to B-40, and on the Aerial Photo and Water Resources maps in Appendix B-4 to B-14.

**Jefferson Ditch**

This stream originates east of the Town of Upland and flows southwest towards SR 22 before gaining additional drainage from UNT 1 and then continuing southeast. It exhibited a 10-foot wide and 6-inch deep ordinary high watermark (OHWM). Approximately 120 linear feet of this stream lies within the study area. This stream is average quality and likely a Water of the US.

**UNT-1**

UNT-1 originates along the west side of SR 22 at a municipal stormwater outfall. It is encapsulated within a concrete culvert and eventually outfalls into Jefferson Ditch east of SR 22. UNT 1 exhibited a 7-foot wide and 9-inch deep OHWM. Approximately 38 linear feet of this stream lies within the study area. This stream is poor quality and likely a Water of the US.

Jefferson Ditch and UNT-1 are not classified as navigable waterways, as *Federal Wild and Scenic Rivers*, *State Natural, Scenic, Recreational Rivers*, or on the Indiana Register's list of *Outstanding Rivers and Streams*, nor are they located within two miles of any such resources.

Up to approximately 38 linear feet of UNT-1 and 30 linear feet of Jefferson Ditch will be impacted by this project by the replacement of the existing culverts and placement of riprap. Impacts to UNT-1 and Jefferson Ditch cannot be avoided because the stormwater improvements are needed, which have been reduced as much as possible for construction. The project will require a USACE

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Section 404 permit and an IDEM Section 401 Water Quality Certification before impacting these resources. Mitigation for stream impacts is not anticipated.

IDNR-DFW responded to early coordination on April 15, 2020 with standard recommendations to minimize impacts to resources such as revegetating disturbed areas, minimizing disturbance to bank vegetation, and implementing erosion control measures (Appendix C-8 to C-9). IDEM's March 17, 2020 electronic response recommends avoiding impacts to water resources and contacting the USACE before discharging fill materials into such resources (Appendix C-19 to C-23). All applicable recommendations are included in the Environmental Commitments section of this CE document.

Open Water Feature(s)	Presence	Impacts	
		Yes	No
Reservoirs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lakes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Farm Ponds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Retention/Detention Basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storm Water Management Facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Describe all open water feature(s) identified adjacent or within the project area. Include whether or not impacts (both permanent and temporary) will occur to the features identified. Include if features are subject to federal or state jurisdiction. Discuss measures to avoid, minimize, and mitigate if impacts will occur.

Based on the desktop review, the aerial map of the project area (Appendix B-4 to B-14), and the RFI report (Appendix E-3), there are 15 open water features within the 0.5 mile search radius. That number was confirmed by the site visit on June 16, 2020 by Parsons. The *WOUS Report* was approved for the project on January 19, 2021 (Appendix F-4). None of these surface waters are present within or adjacent to the project area (Appendix B-22 to B-40); therefore, no impacts are expected.

As described in the Project Description (Preferred Alternative) section, hydraulic design and utility coordination is ongoing for this project. Responses to ECLs did not contain applicable recommendations regarding other open water features.

Wetlands	Presence	Impacts	
		Yes	No
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Total wetland area: 0.006 Acre(s) Total wetland area impacted: 0.006 Acre(s)

(If a determination has not been made for non-isolated/isolated wetlands, fill in the total wetland area impacted above.)

Wetland No.	Classification	Total Size (Acres)	Impacted Acres	Comments (i.e. location, likely Water of the US, appendix reference)
Wetland 1	Emergent	0.006	0.006	Located east of SR 22, at the outfall of the 36-inch RCP from Taylor University. Likely a Water of the State; however, INDOT is requesting USACE take jurisdiction (Appendix F-3 to F-11)

Wetlands (Mark all that apply)	Documentation	ESD Approval Dates
	Wetland Determination	<input checked="" type="checkbox"/>
Wetland Delineation	<input checked="" type="checkbox"/>	January 19, 2021
USACE Isolated Waters Determination	<input type="checkbox"/>	

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**Improvements that will not result in any wetland impacts are not practicable because such avoidance would result in** (Mark all that apply and explain):

- Substantial adverse impacts to adjacent homes, business or other improved properties;
- Substantially increased project costs;
- Unique engineering, traffic, maintenance, or safety problems;
- Substantial adverse social, economic, or environmental impacts, or
- The project not meeting the identified needs.

X
X

*Describe all wetlands identified adjacent or within the project area. Include whether or not impacts (both permanent and temporary) will occur to the features identified. Include if features are subject to federal or state jurisdiction. Discuss measures to avoid, minimize, and mitigate if impacts will occur.*

Based on the desktop review, the aerial map of the project area (Appendix B-4 to B-14), the USFWS National Wetlands Inventory (NWI) (Appendix F-1), and the RFI report (Appendix E-3), there are 34 wetlands within the 0.5 mile search radius. That number was updated to 35 by the site visit on June 16, 2020 by Parsons. There is one wetland present within or adjacent to the project area.

The *WOUS Report* was approved for this project on January 19, 2021 (Appendix F-4). Please refer to Appendix F for the *WOUS Report*. It was determined that one wetland is within or adjacent to the project area. USACE makes all final determinations regarding jurisdiction. The wetland is shown on the project plans in Appendix B-22 to B-40 and on the Aerial Photo and Water Resources maps in Appendix B-4 to B-14.

**Wetland 1**

Wetland 1 is an emergent wetland that is approximately 0.006 acre (28 linear feet) in size. It is located at the terminus of the 36-inch RCP stormwater outfall within a small depression along the east side of SR 22, just south of the entrance drive for Taylor University. Wetland 1 had low species diversity and is located within INDOT's maintained ROW. Because of this, it was classified as a poor quality wetland. INDOT acknowledges that this wetland is likely a Water of the State. However, INDOT is requesting that USACE takes jurisdiction over it. Impacts to Wetland 1 cannot be avoided because it lies within existing apparent ROW, the roadway needs to be widened in this area, and the drainage issues need to be corrected.

The project will require a USACE Section 404 permit and an IDEM Section 401 Water Quality Certification before impacting this resource. Mitigation for wetlands impacts is not anticipated. There is no practicable alternative to the proposed new construction in wetlands and the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use. FHWA approval of this document will constitute approval of the adverse impacts to wetlands.

IDNR-DFW responded to early coordination on April 15, 2020 with standard recommendations to avoid and minimize impacts to resources, such as revegetating disturbed areas and implementing erosion control measures (Appendix C-8 to C-9). IDEM's March 17, 2020 electronic response recommends avoiding impacts to water resources and contacting USACE before discharging fill materials into such resources (Appendix C-19 to C-23). All applicable recommendations are included in the Environmental Commitments section of this CE document.

	<u>Presence</u>	<u>Impacts</u>	
<b>Terrestrial Habitat</b>	Yes	No	No
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Total terrestrial habitat in project area: 3.31 Acre(s)      Total tree clearing: < 0.50 Acre(s)

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*Describe types of terrestrial habitat (i.e. forested, grassland, farmland, lawn, etc.) adjacent or within the project area. Include whether or not impacts will occur to habitat identified. Include total terrestrial habitat impacted and total tree clearing that will occur. Discuss measure to avoid, minimize, and mitigate if impacts will occur.*

Based on a desktop review, a site visit on June 16, 2020 by Parsons, and the aerial map of the project area (Appendix B-4 to B-14), habitats within the project area mainly consist of maintained grassy roadsides and lawn. Additionally, Jefferson Ditch has a wooded riparian corridor. All work will occur within 100 feet from an existing roadway. Within the project area, most of the trees are urban street trees. Dominant species include silver maple (*Acer saccharinum*), American elm (*Ulmus americana*), ash-leaf maple (*Acer negundo*), and green ash (*Fraxinus pennsylvanica*).

A total of approximately 3.31 acres of terrestrial habitat will be disturbed by this project. Avoiding impacts to terrestrial habitat is not feasible because it is present within existing and proposed ROW; and the bridge, roadway, and sidewalks need to be reconstructed. Some tree trimming and clearing is anticipated, which will total less than 0.50 acre. Clearing will be conducted outside of the restricted period for the Indiana bat (*Myotis sodalis*) and the northern long-eared bat (NLEB) (*Myotis septentrionalis*); refer to the Threatened and Endangered Species and Environmental Commitments sections for further discussion. Mitigation is not anticipated.

Responses to early coordination did not contain applicable recommendations regarding terrestrial habitat, except standard recommendations to revegetate disturbed areas.

### Protected Species

#### Federally Listed Bats

Information for Planning and Consultation (IPaC) determination key completed  
 Section 7 informal consultation completed (IPaC cannot be completed)  
 Section 7 formal consultation Biological Assessment (BA) required

Yes	No
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

Determination Received for Listed Bats from USFWS:            NE             NLAA             LAA

#### Other Species not included in IPaC

Additional federal species found in project area (based on IPaC species list)  
 State species (not bird) found in project area (based upon consultation with IDNR)

Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Migratory Birds

Known usage or presence of birds (i.e. nests)  
 State bird species based upon coordination with IDNR

Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

*Discuss IDNR coordination and species identified. Describe USFWS Section 7 consultation and determination received for Indiana bat and northern long-eared bat impacts. Discuss if other federally listed species were identified. If so, include consultation that has occurred and the determination that was received. Discuss if migratory birds have been observed and any impacts.*

Based on a desktop review and the RFI report (Appendix E-14), completed by Parsons on December 2, 2020, the IDNR Grant County Endangered, Threatened and Rare (ETR) Species List has been checked. According to the IDNR-DFW early coordination response letter dated April 15, 2020 (Appendix C-8 to C-9), the Natural Heritage Program's Database has been checked and no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity.

Project information was submitted through the USFWS's Information for Planning and Consultation (IPaC) portal, and an official species list was generated (Appendix C-24 to C-29). The project is within range of the federally endangered Indiana bat (*Myotis sodalis*) and the federally threatened northern long-eared bat (NLEB) (*Myotis septentrionalis*). No additional species were generated in the IPaC species list other than the Indiana bat and NLEB.

The project qualifies for the Range-wide Programmatic Informal Consultation for the Indiana bat and NLEB, dated May 2016 (revised February 2018), between FHWA, Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and USFWS. Bridge and structure inspections occurred on July 1, 2019, October 1, 2019, April 13, 2020, April 23, 2020, and May 22, 2020, and no evidence for the presence of bats was reported (Appendix C-45 to C-59). An effect determination key was completed on March 22, 2021, and based on the responses provided, the project was found to "Not Likely to Adversely Affect" the Indiana bat and/or the NLEB (Appendix C-30 to C-44). INDOT reviewed and verified the effect finding on March 22, 2021, and requested USFWS's review of the finding. No response was received from USFWS within the 14-day review period; therefore, it was concluded they concur with

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the finding. The Avoidance and Minimization Measures (AMMs) for this project are General AMM 1, Lighting AMMs 1 and 2, and Tree Removal AMMs 1, 2, 3 and 4. These AMMs are included as firm commitments in the Environmental Commitments section of this document.

This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act, as amended. If new information on endangered species at the site becomes available, or if project plans are changed, USFWS will be contacted for consultation.

### Geological and Mineral Resources

Project located within the Potential Karst Features Area of Indiana  
 Karst features identified within or adjacent to the project area  
 Oil/gas or exploration/abandoned wells identified in the project area

Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Date Karst Study/Report reviewed by INDOT EWPO (if applicable): \_\_\_\_\_

*Discuss if project is located in Potential Karst Features Area of Indiana and if any karst features have been identified in the project area (from RFI). Discuss response received from IGWS coordination. Discuss if any mines, oil/gas, or exploration/abandoned wells were identified and if impacts will occur. Describe if any impacts will occur to any karst features. Include discussion of karst study/report was completed and results. (Karst investigation must comply with the current Karst MOU and coordinated and reviewed by INDOT EWPO)*

Based on a desktop review, the project is located outside the designated karst region of Indiana as outlined in the October 13, 1993 Karst Memorandum of Understanding (MOU). According to the topo map of the project area (Appendix B-2), and the RFI report (Appendix E), there are no karst features identified within or adjacent to the project area. In the early coordination response dated March 17, 2021, the IGWS did not indicate that karst features exist in the project area (Appendix C-16 to C-18). The IGWS reported a moderate liquefaction potential, high potential for bedrock resources, low potential for sand and gravel resources, and petroleum exploration wells. Response from IGWS has been communicated with the designer on March 17, 2020. No impacts are expected.

Based on the RFI report, there are 30 wells within the 0.5 mile search radius (Appendix E-4). The nearest petroleum well is located near the southern termini of the project area and is presumed to be plugged. No impacts are expected.

## SECTION C – OTHER RESOURCES

### Drinking Water Resources

Wellhead Protection Area(s)  
 Source Water Protection Area(s)  
 Water Well(s)  
 Urbanized Area Boundary  
 Public Water System(s)

	<u>Presence</u>	<u>Impacts</u>	
		Yes	No
Wellhead Protection Area(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Source Water Protection Area(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water Well(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Urbanized Area Boundary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Water System(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Is the project located in the St. Joseph Sole Source Aquifer (SSA):

If Yes, is the FHWA/EPA SSA MOU Applicable?

If Yes, is a Groundwater Assessment Required?

	Yes	No
Is the project located in the St. Joseph Sole Source Aquifer (SSA):	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If Yes, is the FHWA/EPA SSA MOU Applicable?	<input type="checkbox"/>	<input type="checkbox"/>
If Yes, is a Groundwater Assessment Required?	<input type="checkbox"/>	<input type="checkbox"/>

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*Check the appropriate boxes and discuss each topic below. Provide details about impacts and summarize resource-specific coordination responses and any mitigation commitments. Reference responses in the Appendix.*

The project is located in Grant County, which is not located within the area of the St. Joseph Sole Source Aquifer, the only legally designated sole source aquifer in the state of Indiana. Therefore, the FHWA/Environmental Protection Agency (EPA) Sole Source Aquifer Memorandum of Understanding (MOU) is not applicable to this project, a detailed groundwater assessment is not needed, and no impacts are expected.

IDEM's Wellhead Proximity Determinator website (<http://www.in.gov/idem/cleanwater/pages/wellhead/>) was accessed on March 19, 2021 by Parsons. This project is located within the Town of Upland's Wellhead Protection Area (WHPA). The WHPA can not be avoided because it crosses the project area. Based on the IDEM Ground Water website, community public water systems are responsible for delineating their WHPA, identifying potential sources of contaminants, and creating contingency plans, among other responsibilities (<https://www.in.gov/idem/cleanwater/2456.htm>). This project should not impact the WHPA because any potential sources of contamination will be addressed under a spill control plan as part of the Rule 5 permitting process.

The IDNR Water Well Record Database website (<https://www.in.gov/dnr/water/3595.htm>) was accessed on April 11, 2021 by Parsons. Six wells are mapped within the project area. However, based on the records review and the April 23 and June 16, 2020 site visits by Parsons, there are no wells within or adjacent to the project study area. Therefore, no impacts are expected. Should it be determined during the ROW phase that these wells will be affected, a cost to cure will likely be included in the appraisal to restore the wells.

Based on the RFI report approved on December 2, 2020, this project is not located in an Urban Area Boundary (Appendix E-1 to E-8). No impacts are expected.

Based on a desktop review, site visits on April 23 and June 16, 2020 by Parsons, the aerial map of the project area (Appendix B-4 to B-14), and utility coordination, this project is located where there is a public water system. The public water system will not be affected because utility coordination is occurring and there will be no disruption to service. The Town of Upland did not respond to early coordination (Appendix C-1 to C-8).

### Floodplains

Project located within a regulated floodplain  
 Longitudinal encroachment  
 Transverse encroachment  
 Homes located in floodplain within 1000' up/downstream from project

#### Presence

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

#### Impacts

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

If applicable, indicate the Floodplain Level?

Level 1  Level 2  Level 3  Level 4  Level 5

*Use the IDNR Floodway Information Portal to help determine potential impacts. Include floodplain map in appendix. Discuss impacts according to the classification system. If encroachment on a flood plain will occur, coordinate with the Local Flood Plain Administrator during design to insure consistency with the local flood plain planning.*

The IDNR Indiana Floodway Information Portal website (<http://dnrmmaps.dnr.in.gov/appsphp/fdms/>) was accessed on March 18, 2021 by Parsons. This project is not located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix F-2). Therefore, it does not fall within the guidelines for the implementation of 23 CFR 650, 23 CFR 771, and 44 CFR. No impacts are expected.

### Farmland

Agricultural Lands  
 Prime Farmland (per NRCS)

#### Presence

X
<input type="checkbox"/>

#### Impacts

Yes	No
X	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

Total Points (from Section VII of CPA-106/AD-1006\*) 116  
*\*If 160 or greater, see CE Manual for guidance.*



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*Discuss existing farmland resources in the project area, impacts that will occur to farmland, and mitigation and minimization measures considered.*

Based on a desktop review, site visits on April 23 and June 16, 2020 by Parsons, and the aerial map of the project area (Appendix B-4 to B-14), the project will convert farmland as defined by the Farmland Protection Policy Act. ECLs were sent on March 17, 2020 and April 6, 2020 to NRCS. Coordination with NRCS on April 12, 2021 resulted in a score of 116 on the AD-1006 Form (Appendix C-12). Please note, the reported amount of converted farmland was over-estimated to be 3.0 acres, which exceeds the current estimates of 0.37 acre of permanent ROW, plus 0.90 acre considered reacquisition of existing apparent ROW (the existing roadway, and sidewalk if present). NRCS's threshold score for significant impacts to farmland that result in the consideration of alternatives is 160. Since this project score is less than the threshold, no significant loss of prime, unique, statewide, or local important farmland will result from this project. No alternatives other than those previously discussed in this document will be investigated without reevaluating impacts to prime farmland.

### SECTION D – CULTURAL RESOURCES

Minor Projects PA  Category(ies) and Type(s)  INDOT Approval Date(s)  N/A

**Full 106 Effect Finding**

No Historic Properties Affected  No Adverse Effect  Adverse Effect

**Eligible and/or Listed Resources Present**

NRHP Building/Site/District(s)  Archaeology  NRHP Bridge(s)

**Documentation Prepared** (mark all that apply)

APE, Eligibility and Effect Determination   
 800.11 Documentation   
 Historic Properties Report or Short Report   
 Archaeological Records Check and Assessment   
 Archaeological Phase Ia Survey Report   
 Archaeological Phase Ic Survey Report   
 Other:

**ESD Approval Date(s)**

**SHPO Approval Date(s)**

<input checked="" type="checkbox"/>	February 26, 2021	March 15, 2021
<input checked="" type="checkbox"/>	February 26, 2021	March 15, 2021
<input checked="" type="checkbox"/>	May 29, 2020	June 22, 2020
<input type="checkbox"/>		
<input checked="" type="checkbox"/>	December 18, 2020	January 19, 2021
<input type="checkbox"/>		
<input type="checkbox"/>		

Memorandum of Agreement (MOA)

**MOA Signature Dates** (List all signatories)

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If the project falls under the MPPA, describe the category(ies) that the project falls under and any approval dates. If the project requires full Section 106, use the headings provided. The completion of the Section 106 process requires that a Legal Notice be published in local newspapers. Please indicate the publication date, name of the paper(s) and the comment period deadline. Include any further Section 106 work which must be completed at a later date, such as mitigation from a MOA or avoidance commitments.

**Area of Potential Effect (APE):** Pursuant to 36 CFR 800.16(d), the Area of Potential Effect (APE) for aboveground resources was an irregularly-shaped area determined by sight lines, which included those properties that may experience an auditory, visual, or direct impact (Appendix D-1 to D-13). The APE for archaeology was the project footprint.

**Coordination with Consulting Parties:** Early coordination was initiated on December 9 and December 10, 2019 with a letter inviting organizations and individuals to become consulting parties (Appendix D-30 to D-39). The Indiana State Historic Preservation Officer (SHPO) from IDNR Division of Historic Preservation (DHPA) is a designated consulting party. The following is a list of the organizations formally invited to become a consulting party (those who accepted the invitation to become a consulting party are in bold (Appendix D-38 to D-39):

- Indiana Landmarks, Northeast Regional Office
- Town Council, Town of Upland
- Upland Town Manager
- Taylor University
- Grant County Commissioner, District 1
- Grant County Commissioner, District 2
- Grant County Commissioner, District 3
- Jefferson Township Trustee
- Grant County Highway Department
- Grant County Historian
- Grant County Historical Society
- Upland Area Historical Society
- Grant County Economic Growth Council
- Grant County Area Plan
- Eastern Shawnee Tribe of Oklahoma
- Forest County Potawatomi Community
- **Miami Tribe of Oklahoma**
- Peoria Tribe of Indians of Oklahoma
- Pokagon Band of Potawatomi Indians

The Miami Tribe of Oklahoma responded by letter dated January 6, 2020 accepting the invitation to serve as a consulting party and offering no objections (Appendix D-40). SHPO responded to the early coordination letter stating they were not aware of other consulting parties who should be invited to participate (Appendix D-41). No other consulting party responses were received.

**Archaeology:** Pursuant to 36 CFR § 800.4(b), staff for ASC Group, Inc. (ASC) conducted a *Phase Ia Archaeological Records Check and Field Reconnaissance Report*, which identified nine new sites and elements of two previously inventoried sites (Appendix D-25 to D-26). None of these archaeological sites are recommended eligible for listing on the NRHP. No further work was recommended, unless project limits expand.

The archaeology report was distributed to the consulting parties on December 18, 2020. SHPO responded to the Phase Ia Archaeology Report on January 19, 2021 and agreed that the sites did not appear to be eligible for the NRHP, and that no further work is necessary at those locations (Appendix D-58 to D-59). No other consulting party responses were received.

**Historic Properties:** ASC prepared the *Historic Properties Report* (HPR) on May 29, 2020 (Appendix D-27 to D-28). It was determined that there are no properties listed in the NRHP, and no resources are recommended eligible for listing in the NRHP for the purposes of this project.

The HPR was distributed to consulting parties on May 29, 2020. SHPO responded on June 22, 2020 and agreed with the HPR's conclusions and recommendations (Appendix D-49 to D-50). No other consulting party responses were received.

**Documentation Findings:** INDOT, acting on behalf of FHWA, issued the following finding on February 26, 2021 (Appendix D-1 to D-4):

- No Historic Properties Affected

Pursuant to 800.5(c) the SHPO concurred with this finding on March 15, 2021 (Appendix D-62).

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**Public Involvement:** A public notice of the "No Historic Properties Affected" finding was advertised in the *Chronicle Tribune* on March 4, 2021. As advertised, the public comment period closed 30 days later on April 5, 2021. The text of the public notice and the affidavit of publication appear in Appendix D-60. No comments were received.

The Section 106 process has been completed, and the responsibilities of the FHWA under Section 106 have been fulfilled.

### SECTION E – SECTION 4(f) RESOURCES/ SECTION 6(f) RESOURCES

	<u>Presence</u>	<u>Use</u>	
		<u>Yes</u>	<u>No</u>
<b>Parks and Other Recreational Land</b>			
Publicly owned park	X	X*	X*
Publicly owned recreation area			
Other (school, state/national forest, bikeway, etc.)	X	X	
<b>Wildlife and Waterfowl Refuges</b>			
National Wildlife Refuge			
National Natural Landmark			
State Wildlife Area			
State Nature Preserve			
<b>Historic Properties</b>			
Site eligible and/or listed on the NRHP			

*\*Multiple resources are present*

**Evaluations**  
**Prepared**

Programmatic Section 4(f)	
"De minimis" Impact	X
Individual Section 4(f)	
Any exception included in 23 CFR 774.13	X

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Discuss Programmatic Section 4(f) and “de minimis” Section 4(f) impacts in the discussion below. Individual Section 4(f) documentation must be included in the appendix and summarized below. Discuss proposed alternatives that satisfy the requirements of Section 4(f). FHWA has identified various exceptions to the requirement for Section 4(f) approval. Refer to 23 CFR § 774.13 - Exceptions.

Section 4(f) of the U.S. Department of Transportation Act of 1966 prohibits the use of certain public and historic lands for federally funded transportation facilities unless there is no feasible and prudent alternative. The law applies to significant publicly owned parks, recreation areas, wildlife / waterfowl refuges, and NRHP eligible or listed historic properties regardless of ownership. Lands subject to this law are considered Section 4(f) resources.

Based on a desktop review, the aerial map of the project area (Appendix B-3 to B-10), Section 106 documentation (Appendix D), and the RFI report (Appendix F), there are 11 potential Section 4(f) resources located within the 0.5 mile search radius. According to additional research and by the site visits on April 23 and June 16, 2020 by Parsons, there are three Section 4(f) resources located within or adjacent to the project area: Memorial Park, Detamore Trailhead (and associated trail), and Depot Park, discussed further below. Additionally, a potential future trail segment, a proposed rails-to-trails project along CERA from Gas City east to the county line, crosses the project area. This facility is privately-owned by the railroad, which remains active. The preferred alternative would not prevent this rail from becoming a trail in the future. No response to early coordination was received from the landowner, CERA. Therefore, no use or impacts will occur.

### Memorial Park

Memorial Park, at the southwest corner of SR 22 and Jefferson Street, is owned by Eastbrook Community Schools (Appendix J-1 to J-5). Based on its public ownership and local significance, Memorial Park is a Section 4(f) resource. The existing sidewalk and curb ramps will be reconstructed in this area (Appendices B-36 and J-5), which will require approximately 0.0924 acre of permanent reacquisition of existing ROW, a width of approximately 24 feet west from the centerline of SR 22. This area is considered reacquisition because it is already in a transportation use as roadway and sidewalk. Additionally, a one-foot wide strip of temporary ROW is needed from Memorial Park to allow for the reconstruction of the sidewalk. The temporary ROW will total approximately 0.008 acre and consists mostly of maintained lawn, except at the entrance to the park where pavers and landscaping are present abutting the sidewalk (Appendices B-36 and J-5). Avoiding impacts to this resource is not feasible because it is within the project area, and the sidewalks and crosswalks need to be updated to current standards.

The contractor will be required to restore the temporary ROW to current conditions. All of the features and attributes of the park will remain and access will not change. The requirements to restore the temporary ROW and avoid of all features and attributes of the park, are included in the Environmental Commitments section of this CE document.

Per the FHWA Section 4(f) Policy Paper, dated July 12, 2012 (<https://www.environment.fhwa.dot.gov/legislation/section4f/4fpolicy.pdf>), for public parks, a temporary occupancy will not constitute a Section 4(f) use when all of the conditions listed in 23 CFR 774.13(d) are satisfied:

- 1) Duration must be temporary, i.e., less than the time needed for construction of the project, and there should be no change in ownership of the land;
- 2) Scope of the work must be minor, i.e., both the nature and the magnitude of the changes to the Section 4(f) property are minimal;
- 3) There are no anticipated permanent adverse physical impacts, nor will there be interference with the protected activities, features, or attributes of the property, on either a temporary or permanent basis;
- 4) The land being used must be fully restored, i.e., the property must be returned to a condition which is at least as good as that which existed prior to the project; and
- 5) There must be documented agreement of the official with jurisdiction (OWJ) over the Section 4(f) resource regarding the above conditions.

The above list applies to the project because the occupancy will be temporary with no change in ownership, the scope of work is minor, there will be no permanent impacts, the project will not interfere with the activities, features, or attributes of the park, and the land will be fully restored upon completion. The OWJ, Eastbrook Community Schools, agreed with this finding on March 24, 2021 (Appendix J-1 to J-2). During construction, access to the park will remain open via the northern entrance along Jefferson Street.

### Detamore Trailhead

The Detamore Trailhead is located at the southeast corner of the SR 22 bridge over CERA (Appendix J-8 to J-10). This facility consists of two parcels of land, one owned by the Town of Upland and one owned by Upland Area Greenways, a 501(c)3 non-profit foundation (Appendix J-10). The Town of Upland parcel includes a concrete driveway, parking lot, a bench, and a trail. According to information provided by Upland Area Greenways on July 9, 2021, this previously unnamed trail is now referred to as “Main Street Trail”, but it’s not been officially named (Appendix J-30). The adjoining southern parcel, owned by Upland Area Greenways, has a

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concrete path to a small shade structure. Based on its public ownership and local significance, Detamore Trailhead is a Section 4(f) resource. Photographs are shown in Appendix J-9.

Work in this area will include raising the grade of the bridge approaches and widening the sidewalk (Appendices B-37 and J-10). The proposed ROW from these parcels is summarized in the following table:

Parcel Owner	Permanent acres	Temporary acres	Reacquisition acres
Town of Upland	0.0668	0.0365	0.1339
Upland Area Greenways	0.0057	0.0286	0.0239

The area considered reacquisition of existing apparent ROW consists of the existing SR 22 roadway and sidewalk. The new permanent ROW includes the grassy roadside embankment, land along the railroad, and the driveway entrance for the Detamore Trailhead parking lot (Appendix J-10). The proposed temporary ROW is needed to reconstruct the driveway entrance and tie it into the new bridge approach. This driveway will provide shared access to the Trailhead and Upland Area Greenways parcels, during and following construction. Avoiding the Detamore Trailhead is not feasible because it is located within the project area and the substructure needs to be rehabilitated to meet the project's purpose and need.

The contractor will be required to:

- Reconstruct the driveway to tie it into the reconstructed SR 22 and sidewalk;
- Provide access to the trailhead property during construction; and,
- Restore the temporary ROW.

Additionally,

- All of the features and attributes of the trailhead will remain, and access will not change.
- The nearby features, a bench, shade structure, and trail, are labeled "Do Not Disturb" on project plans.

These minimization measures are included in the Environmental Commitments section of this CE document.

Per the above-referenced FHWA policy paper, for public parks, a *de minimis* impact is one that, after taking into account any measures to minimize harm (such as avoidance, minimization, mitigation or enhancement measures), results in a determination that the project would not adversely affect the activities, features, or attributes qualifying a park, recreation area, or refuge for protection under Section 4(f). The proposed work and associated strip of ROW required to change the grade of the superstructure and SR 22 approaches will not adversely affect the activities, features, or attributes of the trailhead property because,

- 1) The above-listed minimization measures will be required; and
- 2) There will be no change in access.

In accordance with 23 CFR 774.5(b), a *de minimis* impact determination requires the opportunity for public review and comment. A public notice was published in the *Chronicle Tribune* on April 1, 2021 (Appendix G-19 to G-20), and a copy was mailed to adjacent landowners on March 30, 2021 (Appendix G-17). The comment period ended on May 3, 2021. No public comments were received regarding Detamore Trailhead. The OWJs for Detamore Trailhead, the Town of Upland and Upland Area Greenways, agreed with this finding on May 10 and May 20, 2021 (Appendix J-11 to J-14).

FHWA approval of this document will constitute FHWA-approval of the Section 4(f) *de minimis* finding for the proposed impacts to Detamore Trailhead.

### Depot Park

Depot Park, owned by the Town of Upland, is located adjacent to the northwest of the SR 22 bridge over CERA railroad (Appendix J-15 to J-21). Based on its public ownership and local significance, Depot Park is a Section 4(f) resource. Photographs are shown in Appendix J-19.

The eastern edge of the park is in the area where the bridge approach needs to be raised (Appendix J-20 to J-21). This area consists of maintained lawn and contains a concrete walkway, trees, clock and light fixture (Appendix J-18 and J-19). The work will require approximately 0.0571 acre of new permanent ROW, 0.0706 acre of reacquisition of existing apparent ROW, consisting of the existing SR 22 roadway and sidewalk, and 0.0134 acre of temporary ROW (Appendix B-37). Avoiding Depot Park is not feasible because it is located within the project area and the bridge needs to be rehabilitated to meet the project's purpose and need.

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In order to minimize and mitigate impacts to Depot Park, the following measures are proposed:

- Due to the grade changes, the existing walkway that connects the depot building to the SR 22 sidewalk will be removed and reconstructed. The new walkway will be closer to Railroad Street and will connect to the existing parking area walkway. This will allow for continued pedestrian access from SR 22 to the depot building and park amenities.
- The clock, and if necessary, a light fixture, will be removed from their current location to another location on the Depot Park property, to be determined by the Town of Upland, the OWJ.
- Access to the park will remain open during construction.
- Features and amenities of the park that are outside of the proposed construction area will be labeled "Do Not Disturb" on project plans.

These minimization measures are included in the Environmental Commitments section of this CE document.

Per the referenced FHWA policy paper, for public parks, a *de minimis* impact is one that, after taking into account any measures to minimize harm (such as avoidance, minimization, mitigation or enhancement measures), results in a determination that the project would not adversely affect the activities, features, or attributes qualifying a park, recreation area, or refuge for protection under Section 4(f). The proposed work and associated strip of ROW required to change the grade of the superstructure and SR 22 approaches will not adversely affect the activities, features, or attributes of the park because,

- 1) The above-listed minimization measures will be required; and
- 2) There will be no change in access.

In accordance with 23 CFR 774.5(b), a *de minimis* impact determination requires the opportunity for public review and comment. A public notice was published in the *Chronicle-Tribune* on February 4, 2021 (Appendix G-14), and a copy was mailed to adjacent landowners on February 1, 2021 (Appendix G-17). The comment period ended on March 5, 2021. No public comments were received regarding Depot Park. The OWJ for Depot Park agreed with this finding on May 6, 2021 (Appendix J-22 to J-23).

FHWA approval of this document will constitute FHWA-approval of the Section 4(f) *de minimis* finding for the proposed impacts to Depot Park.

**Section 6(f) Involvement**

**Presence**

**Use**

**Section 6(f) Property**

**Yes**

**No**

*Discuss Section 6(f) resources present or not present. Discuss if any conversion would occur as a result of this project. If conversion will occur, discuss the conversion approval.*

The U.S. Land and Water Conservation Fund Act of 1965 established the Land and Water Conservation Fund (LWCF), which was created to preserve, develop, and assure accessibility to outdoor recreation resources. Section 6(f) of this Act prohibits conversion of lands purchased with LWCF monies to a non-recreation use.

A review of Section 6(f) properties on the INDOT ESD website revealed a total of six properties in Grant County (Appendix J-24). None of these properties are located within or adjacent to the project area. Therefore, there will be no impacts to 6(f) resources.

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### SECTION F – Air Quality

**STIP/TIP and Conformity Status of the Project**

	Yes	No
Is the project in the most current STIP/TIP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is the project located in an MPO Area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is the project in an air quality non-attainment or maintenance area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If Yes, then:		
Is the project in the most current MPO TIP?	<input type="checkbox"/>	<input type="checkbox"/>
Is the project exempt from conformity?	<input type="checkbox"/>	<input type="checkbox"/>
If No, then:		
Is the project in the Transportation Plan (TP)?	<input type="checkbox"/>	<input type="checkbox"/>
Is a hot spot analysis required (CO/PM)?	<input type="checkbox"/>	<input type="checkbox"/>

1800168: 2020-2024 Initial and Amendment 18  
(Appendix H-1)

Location in STIP: \_\_\_\_\_

Name of MPO (if applicable): \_\_\_\_\_

Location in TIP (if applicable): \_\_\_\_\_

Level of MSAT Analysis required?

Level 1a  Level 1b  Level 2  Level 3  Level 4  Level 5

*Describe if the project is listed in the STIP and if it is in a TIP. Describe the attainment status of the county(ies) where the project is located. Indicate whether the project is exempt from a conformity determination. If the project is not exempt, include information about the TP and TIP. Describe if a hot spot analysis is required and the MSAT Level.*

The FY 2020-2024 STIP is listed based on the lead DES number in the contract. The lead DES number for this contract is 1800168. The FY 2020-2024 STIP includes DES number 1800168 by reference with the contract number 41565 (Appendix H-1).

This project is located in Grant County, which is currently in attainment for all criteria pollutants according to IDEM ([www.in.gov/idem/airquality/2339.htm](http://www.in.gov/idem/airquality/2339.htm)). Therefore, the conformity procedures of 40 CFR Part 93 do not apply.

This project is of a type qualifying as a categorical exclusion (Group 1) under 23 CFR 771.117(c), or exempt under the Clean Air Act conformity rule under 40 CFR 93.126, and as such, a Mobile Source Air Toxics analysis is not required.

### SECTION G - NOISE

	Yes	No
Is a noise analysis required in accordance with FHWA regulations and INDOT's traffic noise policy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Date Noise Analysis was approved/technically sufficient by INDOT ESD: \_\_\_\_\_

*Describe if the project is a Type I or Type III project. If it is a Type I project, describe the studies completed to date and if noise impacts were identified. If noise impacts were identified, describe if abatement is feasible and reasonable and include a statement of likelihood.*

This project is a Type III project. In accordance with 23 CFR 772 and the current Indiana Department of Transportation Traffic Noise Analysis Procedure, this action does not require a formal noise analysis.

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### SECTION H – COMMUNITY IMPACTS

**Regional, Community & Neighborhood Factors**

- Will the proposed action comply with the local/regional development patterns for the area?
- Will the proposed action result in substantial impacts to community cohesion?
- Will the proposed action result in substantial impacts to local tax base or property values?
- Will construction activities impact community events (festivals, fairs, etc.)?
- Does the community have an approved transition plan?
- If No, are steps being made to advance the community's transition plan?
- Does the project comply with the transition plan? (explain in the discussion below)

Yes	No
X	
	X
	X
	X
	X
	X

*Discuss how the project complies with the area's local/regional development patterns; whether the project will impact community cohesion; and impact community events. Discuss how the project conforms with the ADA Transition Plan.*

The SR 22 bridge and road project is consistent with local and regional land use and transportation plans. Because the project involves the maintenance of existing pavement with no changes to access, it will not result in substantial impacts to community cohesion. No significant economic or community impacts are expected to develop as a result of the project. Based on on-going coordination with the project's local sponsor, the Town of Upland, the project is not anticipated to impact community events such as fairs or festivals.

The Town of Upland does not have an approved ADA Transition Plan. Based on INDOT's draft *ADA Transition Plan* (<https://www.in.gov/indot/files/2018%20Transition%20Plan%20Draft.pdf>), the Town of Upland is exempt from this requirement because it has less than 50 employees. A request for information regarding a county-wide ADA Transition plan was sent to Grant County on April 14, 2021. No response was received. This project will upgrade the existing pedestrian facilities along this stretch of SR 22 to meet ADA requirements; therefore, it will comply with ADA and applicable transition plans (if any).

**Public Facilities and Services**

*Discuss what public facilities and services are present in the project area and impacts (such as MOT) that will occur to them. Include how the impacts have been minimized and what coordination has occurred. Some examples of public facilities and services include health facilities, educational facilities, public and private utilities, emergency services, religious institutions, airports, transportation or public pedestrian and bicycle facilities.*

Based on a desktop review, the aerial map of the project area (Appendix B-4 to B-14), and the RFI report (Appendix E), there are six religious facilities and two schools located within 0.5 mile of the project. Those numbers were confirmed by the site visits on April 23 and June 16, 2020 by Parsons. Two churches are within or adjacent to the project area. There will be no change in access to these properties. Therefore, no impacts are expected. Access to all properties will be maintained during construction.

Utility coordination is ongoing for this project. As discussed in the Project Description and Bridges/Small Structures sections, the preferred alternative includes upgrades to the municipal storm water system. Additionally, as discussed in the Drinking Water Resources section, the project area has a public water system that will not be impacted because there will be no disruption in service.

An ECL and Notice of Public Meeting were sent to Taylor University (Appendix C-1 to C-7 and Appendix G-15 to G-16). No response was received. The Notice of Public Meeting was also sent to the adjoining churches (Appendix G-15 to G-16). No response was received.

An ECL was sent to Eastbrook Community Schools Corporation (Appendix C-1 to C-7). No response was received. There are no public transportation systems in the Town of Upland. Additionally, no public or private airports were identified within the RFI search distances (Appendix E-2).



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**Environmental Justice (EJ)** (Presidential EO 12898)

During the development of the project were EJ issues identified?

Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Does the project require an EJ analysis?

If YES, then:

Are any EJ populations located within the project area?

<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

Will the project result in adversely high and disproportionate impacts to EJ populations?

*Indicate if EJ issues were identified during project development. If an EJ analysis was not required, discuss why. If an EJ analysis was required, describe how the EJ population was identified. Include if the project has a disproportionately high and adverse effect on EJ populations and explain your reasoning. If yes, describe actions to avoid, minimize and mitigate these effects.*

Under FHWA Order 6640.23A, FHWA and the project sponsor, as a recipient of funding from FHWA, are responsible to ensure that their programs, policies, and activities do not have a disproportionately high and adverse effect on minority or low-income populations. Per the current INDOT *Categorical Exclusion Manual*, an Environmental Justice (EJ) Analysis is required for any project that has two or more relocations or 0.5 acre of additional permanent ROW. The project will require 1.94 acres of permanent new ROW and approximately 0.50 acre of temporary ROW. Therefore, an EJ Analysis is required.

Potential EJ impacts are detected by locating minority and low-income populations relative to a reference population to determine if populations of EJ concern exists and whether there could be disproportionately high and adverse impacts to them. The reference population may be a county, city or town and is called the community of comparison (COC). In this project, the COC is Grant County (Appendix J-26). The community that overlaps the project area is called the affected community (AC). In this project, the AC is the Town of Upland (Appendix J-25). Per coordination with INDOT ESD on April 14, 2021, the Town of Upland was selected as the AC because the entire project area is within the Town of Upland (Appendix J-29). An AC has a population of concern for EJ if the population is more than 50% minority or low-income or if the low-income or minority population is 125% of the COC. Data from the Census.gov 2019 American Community Survey (ACS) 5-year Estimates was obtained from the [census.gov](https://www.census.gov) website on April 13, 2021 (Appendix J-27 to J-28). The data collected for minority and low-income populations within the AC are summarized in the below table.

	COC Grant County	AC-1 Town of Upland
Percent Minority	15.1	11.6
125% of COC	18.9	AC < 125% COC
EJ Population of Concern		<b>No</b>
Percent Low-Income	18	11.3
125% of COC	22.5	AC < 125% of COC
EJ Population of Concern		<b>No</b>

Source: [census.gov](https://www.census.gov) (Appendix J-25 to J-28)

AC-1, Town of Upland, has a percent minority of 11.6, which is below 50% and is below the 125% COC threshold. Therefore, AC-1 does not contain minority populations of EJ concern.

AC-1, Town of Upland, has a percent low-income of 11.3, which is below 50% and is below the 125% COC threshold. Therefore, AC-1 does not contain low-income populations of EJ concern.

The census data sheets, map, and calculations can be found in Appendix J-25 to J-28. No further environmental justice analysis is warranted.

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### Relocation of People, Businesses or Farms

Will the proposed action result in the relocation of people, businesses or farms?  
Is a BIS or CSRS required?

Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

Number of relocations:      Residences:   0        Businesses:   0        Farms:   0        Other:   0  

*Discuss any relocations that will occur due to the project. If a BIS or CSRS is required, discuss the results in the discussion below.*

No relocations of people, businesses, or farms will take place as a result of this project.

## SECTION I – HAZARDOUS MATERIALS & REGULATED SUBSTANCES

### Hazardous Materials & Regulated Substances (Mark all that apply)

- Red Flag Investigation (RFI)
- Phase I Environmental Site Assessment (Phase I ESA)
- Phase II Environmental Site Assessment (Phase II ESA)
- Design/Specifications for Remediation required?

### Documentation

<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

Date RFI concurrence by INDOT SAM (if applicable): \_\_\_\_\_

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*Include a summary of the potential hazardous material concerns found during review. Discuss in depth sites found within, directly adjacent to, or ones that could impact the project area. Refer to current INDOT SAM guidance. If additional documentation (special provisions, pay quantities, etc.) will be needed, include in discussion. Include applicable commitments.*

Based on a review of GIS and available public records, a RFI was approved by INDOT Site Assessment and Management on December 2, 2020 (Appendix E-1 to E-14). Six underground storage tank (UST) sites are located within 0.5 mile of the project area. Five leaking UST (LUST) sites are located within 0.5 mile of the project area. One brownfield site is located within 0.5 mile of the project area. Two institutional controls (IC) sites are located within 0.5 mile of the project area. Additionally, there are five National Pollutant Discharge Elimination System (NPDES) facilities and five NPDES pipes locations within 0.5 mile of the project area. There are four hazmat sites that could affect the project area. Note, two of the facilities, Handy Dandy Upland and Upland Stop & Go, are listed in both the LUST and IC; discussions were combined below.

Pak A Sak 13 (aka McClure Store 162), AID 19245, 162-212 N Main Street, is at the southeast corner of SR 22 and Anson Street. This facility had a suspect spill that was deactivated on January 29, 2020. The UST system was initially installed and registered in 1990. No other suspect releases have been reported. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary.

Handy Andy Upland, AID 20909, 809-863 S Main Street, at the northeast corner of SR 22 and Berry Street, is a LUST and IC site. This facility had a LUST incident that received a No Further Action (NFA) letter on December 17, 2013. The NFA was based on conditional closure for soil and groundwater, an environmental restrictive covenant (ERC) and Notices of Contamination. This included a Notice of Contamination for impacts in the ROW that was sent to the Upland Street Department. Residual contamination extends into the project area. This facility had an ERC that was recorded on November 26, 2013. The ERC restricts residential use, groundwater use, agricultural use, restoration requirements, and maintenance of the asphalt pavement and building.

Coordination was recommended with the IDEM Project Manager identified in the VFC documentation. On April 15, 2021, Parsons contacted the former and current IDEM project managers (Appendix E-15). IDEM responded on April 22, 2021 and stated it is likely the contractor will encounter soil/groundwater contamination at a depth of 4 to 8 feet below grade at Berry and Main Street (SR 22). Furthermore, if contamination is encountered, IDEM should be contacted for follow-up: Mr. Stephen Onochie, (317) 234-3306, [sonochie@idem.IN.gov](mailto:sonochie@idem.IN.gov) (Appendix E-17). If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater will be necessary.

Upland Stop & Go, AID 18678, 314 N Main Street, at the southeast corner of SR 22 and Urban Street, is a LUST and IC site. This facility has a suspect incident that was deactivated on March 20, 2020, and an active LUST release from 1996. This facility had an ERC that was recorded on September 18, 2019. The ERC restricts groundwater use and requires further assessment of risks from vapors if there is construction or a change in use. Coordination was recommended with the IDEM Project Manager identified in the VFC documentation before further site activities occur. On April 16, 2021, Parsons verified that person is no longer listed as a State employee; therefore, the LUST Section Chief was contacted (Appendix E-16). A response has not been received. Residual contamination extends into the project area. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater will be necessary.

Upland Dollar General, located partially within the project area at 815 S Main Street, is northeast of the intersection of SR 22 and E Berry Street. The National Pollutant Discharge Elimination System (NPDES) permit is effective until August 12, 2023. Coordination occurred with Upland Partners LLC, 5282 W Booth Road, Liberty, IN 47353, and no response was received within 30 days (Appendix C-1 to C-8).

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**Part IV – Permits and Commitments**

<b>PERMITS CHECKLIST</b>
--------------------------

**Permits** (mark all that apply)

**Likely Required**

**Army Corps of Engineers (404/Section10 Permit)**

Nationwide Permit (NWP)	<input type="checkbox"/>
Regional General Permit (RGP)	<input checked="" type="checkbox"/>
Individual Permit (IP)	<input type="checkbox"/>
Other	<input type="checkbox"/>

**IN Department of Environmental Management (401/Rule 5)**

Nationwide Permit (NWP)	<input checked="" type="checkbox"/>
Regional General Permit (RGP)	<input type="checkbox"/>
Individual Permit (IP)	<input type="checkbox"/>
Isolated Wetlands	<input type="checkbox"/>
Rule 5	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

**IN Department of Natural Resources**

Construction in a Floodway	<input type="checkbox"/>
Navigable Waterway Permit	<input type="checkbox"/>
Other	<input type="checkbox"/>

**Mitigation Required**

**US Coast Guard Section 9 Bridge Permit**

**Others (Please discuss in the discussion below)**

*List the permits likely required for the project and summarize why the permits are needed, including permits designated as "Other."*

More than one acre of land will be disturbed; therefore, an IDEM Rule 5 permit is required. IDEM's electronic coordination discussed this permit requirement (Appendix C-19 to C-23).

A USACE Section 404 Regional General Permit and an IDEM Section 401 Water Quality Certification are required. Mitigation is not anticipated. IDNR-DFW's response to early coordination, and IDEM's electronic coordination, discussed these permit requirements (Appendix C-8 to C-9, and C-19 to C-23).

Applicable recommendations provided by resource agencies are included in the Environmental Commitments section of this document. If permits are found to be necessary, the conditions of the permit will be requirements of the project and will supersede these recommendations.

Responses to ECLs and ongoing coordination with the Town of Upland did not identify the need for any local permits. It is the responsibility of the project sponsor to identify and obtain all required permits.

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### ENVIRONMENTAL COMMITMENTS

List all commitments and include the name of agency/organization requesting/requiring the commitment(s). Listed commitments should be numbered.

**Firm:**

- 1) If the scope of work or permanent or temporary right-of-way amounts change, the INDOT Environmental Services Division (ESD) and the INDOT District Environmental Section will be contacted immediately. (INDOT ESD and INDOT District)
- 2) It is the responsibility of the project sponsor to notify school corporations, Taylor University, and emergency services at least two weeks prior to any construction that would block or limit access. (INDOT ESD)
- 3) General AMM 1: Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs. (USFWS)
- 4) Lighting AMM 1: Direct temporary lighting away from suitable habitat during the active season. (USFWS)
- 5) Lighting AMM 2: When installing new or replacing existing permanent lights, use downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting); or for those transportation agencies using the BUG system developed by the Illuminating Engineering Society, be as close to 0 for all three ratings with a priority of "uplight" of 0 and "backlight" as low as practicable. (USFWS)
- 7) Tree Removal AMM 1: Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal. (USFWS)
- 8) Tree Removal AMM 2: Apply time of year restrictions for tree removal when bats are not likely to be present (i.e. no clearing April 1 to September 30), or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/ rail surface and outside of documented roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed. (USFWS)
- 9) Tree Removal AMM 3: Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits). (USFWS)
- 10) Tree Removal AMM 4: Do not remove documented Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 mile of roosts, or documented foraging habitat any time of year. (USFWS)
- 11) USFWS Bridge/Structure Assessments shall take place no earlier than two (2) years prior to the start of construction. If construction will begin after April 23, 2022 for the small structures (Structure No. CV 022-027-49.42, Structure No. CV 022-027-49.72, the unnumbered small structure from Taylor University to Wetland 1, as well as the 10- to 16-inch pipes along the west side of SR 22 between Reade Avenue and Montgomery Street), and/or October 1, 2022 for the SR 22 Bridge (Structure No. 022-27-02130 A), inspection of the structures by a qualified individual must be performed. Inspection of the structures should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. (INDOT)
- 12) Memorial Park, at the southwest corner of SR 22 and Jefferson Street, will be fully restored upon project completion. All of the features and attributes of the park will remain, and access will not change. (INDOT)
- 13) Memorial Park, at the southwest corner of SR 22 and Jefferson Street, will have no change in ownership, and any impacts will be temporary. (INDOT)
- 14) Detamore Trailhead, at the southeast corner of SR 22 and the SR 22 bridge over CERA, will remain open to trail users during construction. The contractor will reconstruct the driveway to tie it into the reconstructed SR 22 and sidewalk, and will fully restore the temporary right-of-way upon project completion. Furthermore, all of the features and attributes of the trailhead will remain, access will not change, and the nearby features (a bench, shade structure, and trail) are labeled "Do Not Disturb" on project plans. (INDOT)

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- 15) Depot Park, at the southwest corner of SR 22 and Railroad Street, will remain open to the community during construction. The existing walkway will be replaced to allow for continued pedestrian access from SR 22 to the depot building and park amenities. The clock, and if necessary, a light fixture, will be removed from their current location to another location on the Depot Park property, to be determined by the Town of Upland. Access to the park must remain open during construction. Features and amenities of the park that are outside of the proposed construction area are labeled "Do Not Disturb" on project plans. (INDOT)
- 16) Pak A Sak 13 (aka McClure Store 162), Agency Identification (AID) 19245, 162-212 N Main Street, is at the southeast corner of SR 22 and Anson Street. This facility had a suspect spill that was deactivated on January 29, 2020. The underground storage tank (UST) system was initially installed and registered in 1990. No other suspect releases have been reported. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary. (INDOT)
- 17) Handy Andy Upland, AID 20909, 809-863 S Main Street, at the northeast corner of SR 22 and E Berry Street, is a leaking UST (LUST) and institutional controls (IC) site. This facility had a LUST incident that received a No Further Action (NFA) letter on December 17, 2013. The NFA was based on conditional closure for soil and groundwater, an environmental restrictive covenant (ERC) and Notices of Contamination. This included a Notice of Contamination for impacts in the ROW that was sent to the Upland Street Department. Residual contamination extends into the project area. This facility had an ERC that was recorded on November 26, 2013. The ERC restricts residential use, groundwater use, agricultural use, restoration requirements, and maintenance of the asphalt pavement and building. Coordination occurred with the IDEM project manager. IDEM responded on April 22, 2021 and stated it is likely the contractor will encounter soil/groundwater contamination at a depth of 4 to 8 feet below grade at Berry and Main Street (SR 22). Furthermore, if contamination is encountered, IDEM should be contacted for follow-up: Mr. Stephen Onochie, (317) 234-3306, [sonochie@idem.IN.gov](mailto:sonochie@idem.IN.gov). If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater will be necessary. (INDOT)
- 18) Upland Stop & Go, AID 18678, 314 N Main Street, at the southeast corner of SR 22 and Urban Street, is a LUST and IC site. This facility has a suspect incident that was deactivated on March 20, 2020, and an active LUST release from 1996. This facility had an ERC that was recorded on September 18, 2019. The ERC restricts groundwater use and requires further assessment of risks from vapors if there is construction or a change in use. Residual contamination extends into the project area. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater will be necessary. (INDOT)

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# Appendix A

## INDOT Supporting Documentation

## Categorical Exclusion Level Thresholds

	PCE	Level 1	Level 2	Level 3	Level 4 <sup>1</sup>
<b>Section 106</b>	Falls within guidelines of Minor Projects PA	“No Historic Properties Affected”	“No Adverse Effect”	-	“Adverse Effect” Or Historic Bridge involvement <sup>2</sup>
<b>Stream Impacts<sup>3</sup></b>	No construction in waterways or water bodies	< 300 linear feet of stream impacts	≥ 300 linear feet of stream impacts	-	USACE Individual 404 Permit <sup>4</sup>
<b>Wetland Impacts<sup>3</sup></b>	No adverse impacts to wetlands	< 0.1 acre	-	< 1.0 acre	≥ 1.0 acre
<b>Right-of-way<sup>5</sup></b>	Property acquisition for preservation only or none	< 0.5 acre	≥ 0.5 acre	-	-
<b>Relocations</b>	None	-	-	< 5	≥ 5
<b>Threatened/Endangered Species (Species Specific Programmatic for Indiana bat &amp; northern long eared bat)*</b>	“No Effect”, “Not likely to Adversely Affect” (With select AMMs <sup>6</sup> )	“Not likely to Adversely Affect” (With any AMMs or commitments)	-	“Likely to Adversely Affect”	Project does not fall under Species Specific Programmatic <sup>7</sup>
<b>Threatened/Endangered Species (Any other species)*</b>	Falls within guidelines of USFWS 2013 Interim Policy or “No Effect”	“Not likely to Adversely Affect”	-	-	“Likely to Adversely Affect”
<b>Environmental Justice</b>	No disproportionately high and adverse impacts	-	-	-	Potential <sup>8</sup>
<b>Sole Source Aquifer</b>	No Detailed Groundwater Assessment	-	-	-	Detailed Groundwater Assessment
<b>Floodplain</b>	No Substantial Impacts	-	-	-	Substantial Impacts
<b>Section 4(f) Impacts</b>	None	-	-	-	Any <sup>9</sup>
<b>Section 6(f) Impacts</b>	None	-	-	-	Any
<b>Permanent Traffic Alteration</b>	None	-	-	-	Any
<b>Noise Analysis Required</b>	No	-	-	-	Yes
<b>Air Quality Analysis Required</b>	No	-	-	-	Yes <sup>10</sup>
<b>Approval Level</b>	Concurrence by DE or ESD	DE or ESD	DE or ESD	DE and/or ESD	DE and/or ESD; and FHWA
<ul style="list-style-type: none"> <li>• District Env. (DE)</li> <li>• Env. Serv. Div. (ESD)</li> <li>• FHWA</li> </ul>					

<sup>1</sup> Coordinate with INDOT Environmental Services Division. INDOT will then coordinate with the appropriate FHWA Environmental Specialist.

<sup>2</sup> Any involvement with a bridge processed under the Historic Bridge Programmatic Agreement.

<sup>3</sup> Total permanent impacts to streams (linear feet) and wetlands (acres).

<sup>4</sup> US Army Corps of Engineers Individual 404 Permit

<sup>5</sup> Total permanent and temporary right-of-way. This does not include reacquisition of existing apparent right-of-way.

<sup>6</sup> Avoidance and Mitigation Measures (AMMs) determined by the IPAC determination key to be required that are not tree AMMs, bridge AMMs, or structure AMMs.

<sup>7</sup> Projects that do not fall under a Species Specific Programmatic and results in a “Likely to Adversely Affect”. Other findings can be processed as a lower level CE.

<sup>8</sup> Potential for causing a disproportionately high and adverse impact.

<sup>9</sup> Section 4(f) use resulting in an Individual, Programmatic, or *de minimis* evaluation. The only exception is a *de minimis* evaluation for historic properties (Effective January 2, 2020). If a historic property *de minimis* and no other use, mark the *None* column.

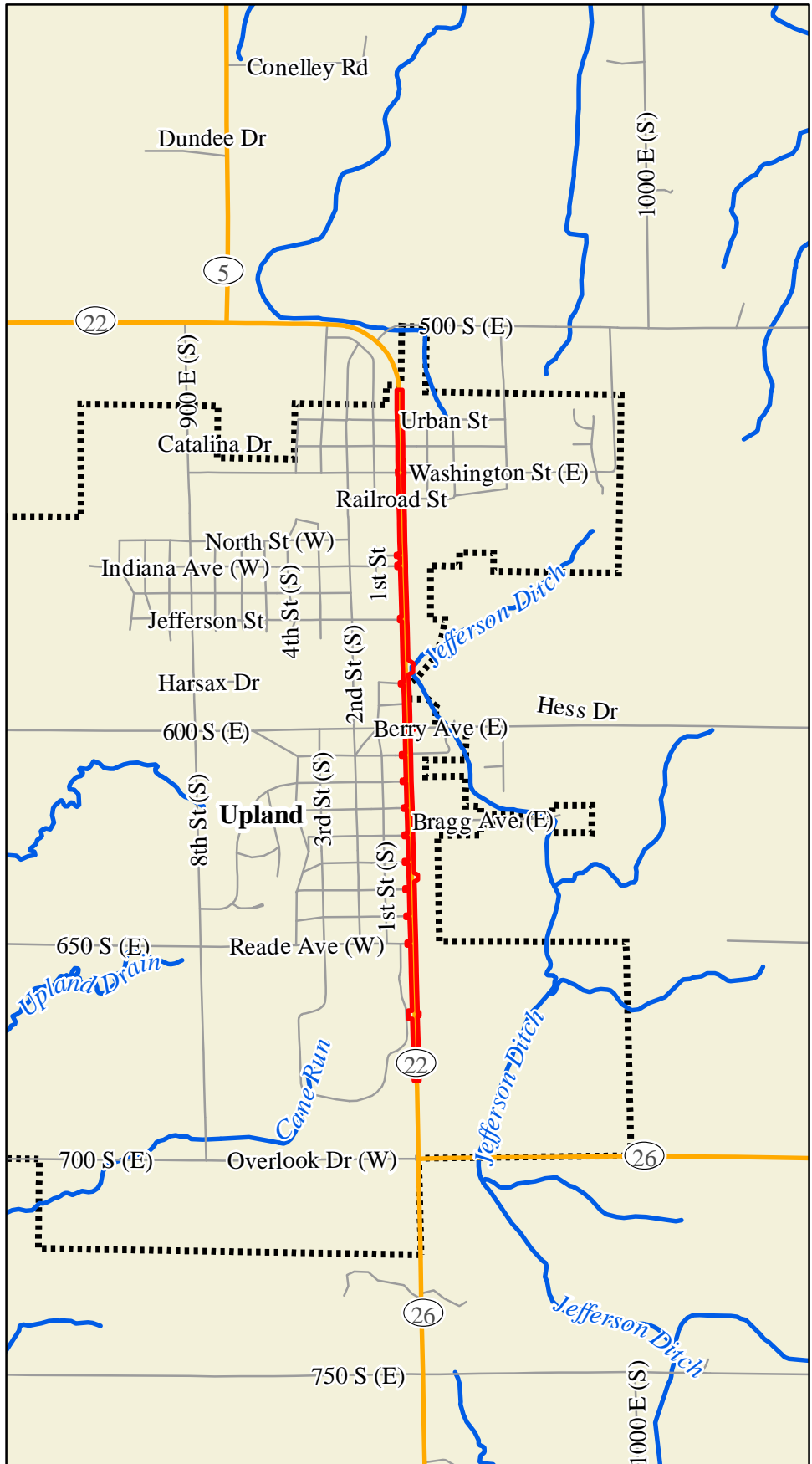
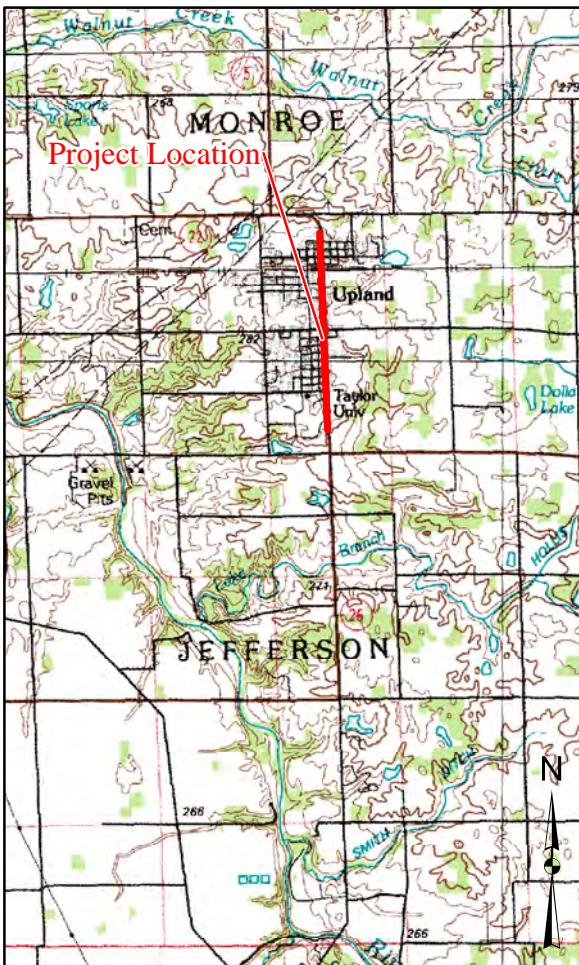
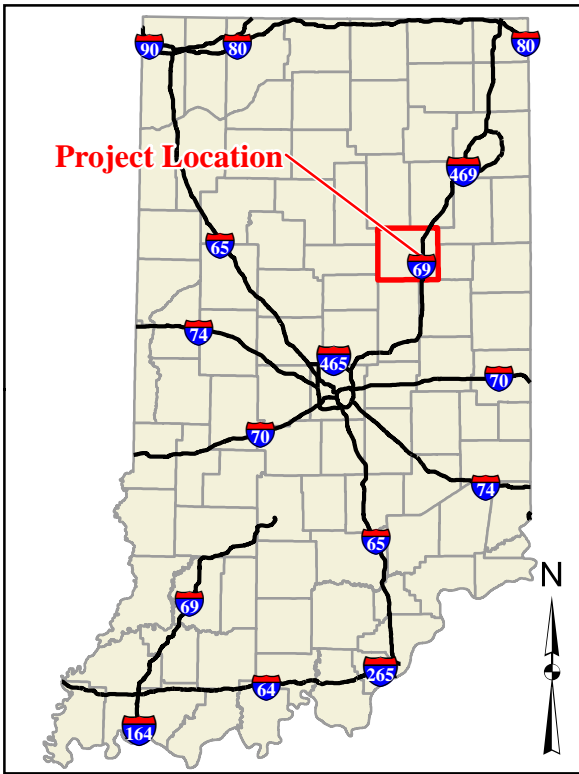
<sup>10</sup> Hot Spot Analysis and/or MSAT Quantitative Emission Analysis.

\* Includes the threatened/endangered species critical habitat

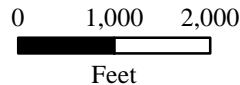
Note: Substantial public or agency controversy may require a higher-level NEPA document.

# Appendix B

## Graphics



- Study Area
- ~ Interstate
- ~ Streams and Rivers
- ~ State Routes
- Incorporated Areas
- ~ Local Roads



Sources:  
 Non Orthophotography Data -  
 Obtained from the State of Indiana  
 Geographical Information Office Library  
 Orthophotography -  
 Obtained from Indiana Map  
 Framework Data ([www.indianamap.org](http://www.indianamap.org))

**SR 22 Bridge & Road Project  
 Grant County, Indiana  
 Project Location**

Des. 1800168

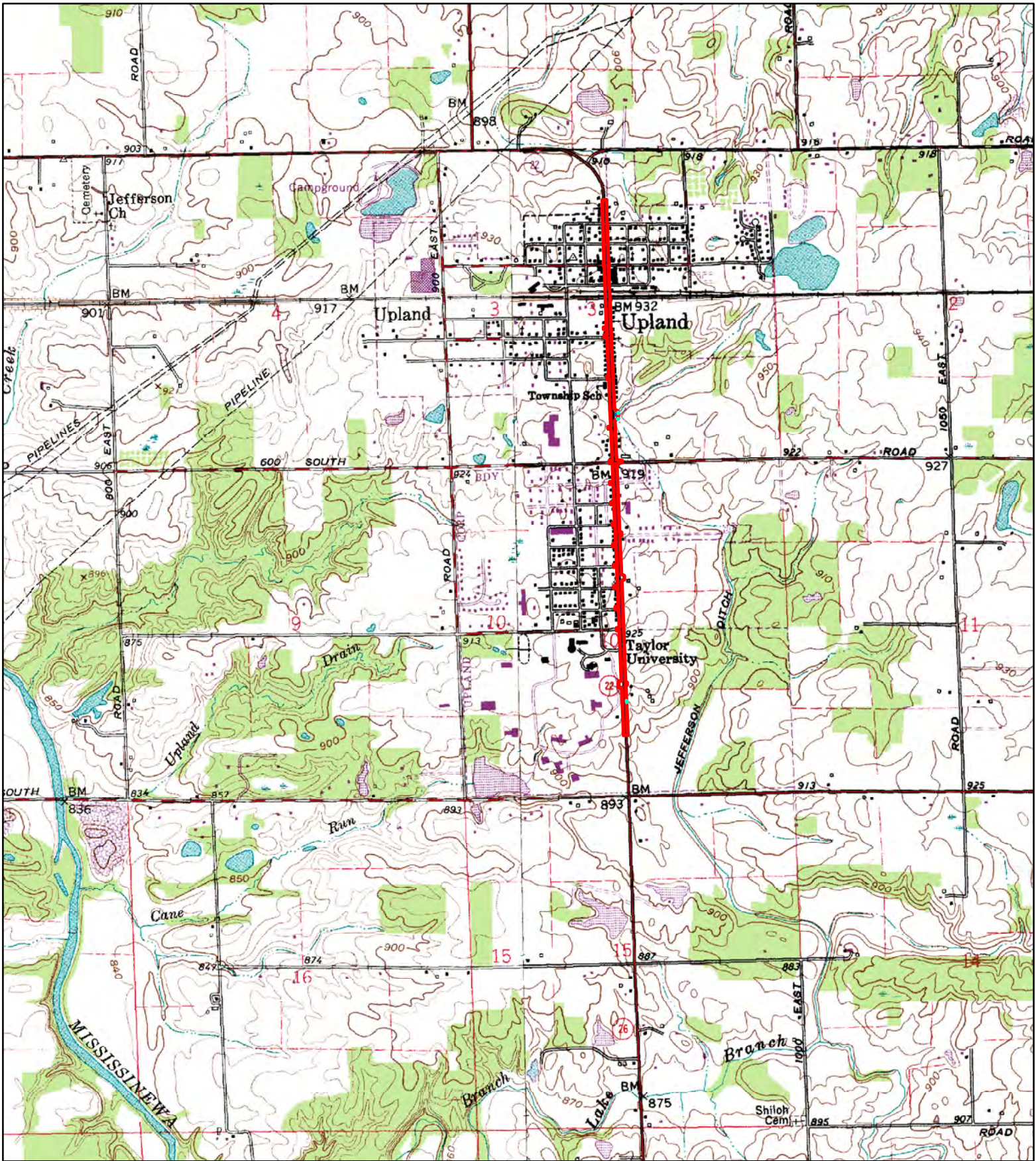
Date: 5/3/2021




**PARSONS**

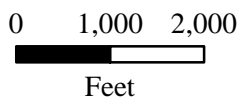
Note: Study area limits are slightly larger than project limits.





 Study Area

Note: Study area limits are slightly larger than project limits.



Sources:  
 Non Orthophotography Data -  
 Obtained from the State of Indiana Geographical  
 Information Office Library  
 Orthophotography -  
 Obtained from Indiana Map  
 Framework Data ([www.indianamap.org](http://www.indianamap.org))

**SR 22 Bridge & Road Project**  
**Grant County, Indiana**  
**USGS Topographic**

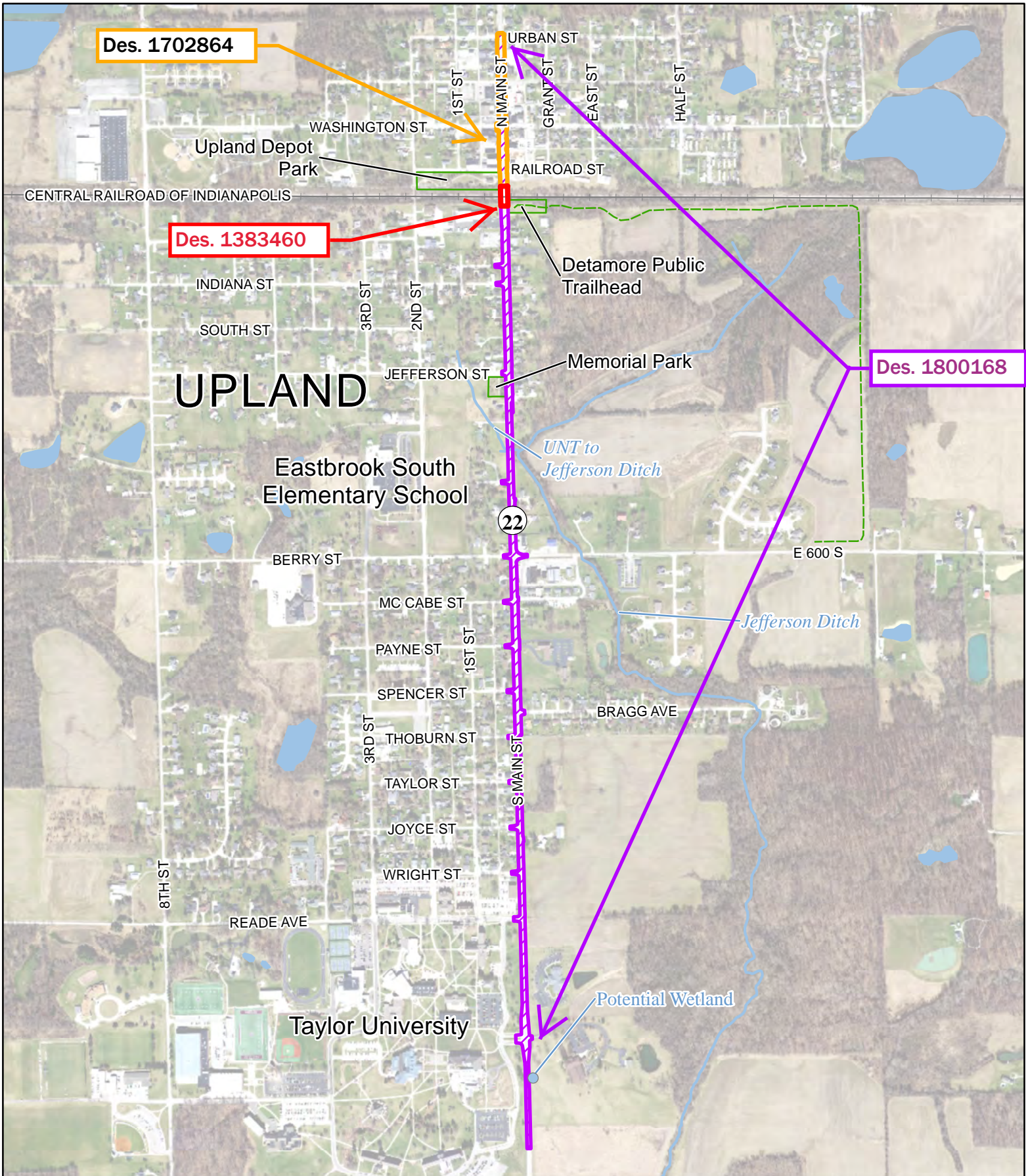
Des. 1800168

Date: 11/9/2020



**PARSONS**





Des. 1702864




Des. 1383460

Des. 1800168

# UPLAND

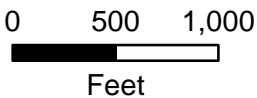
Eastbrook South Elementary School

Taylor University

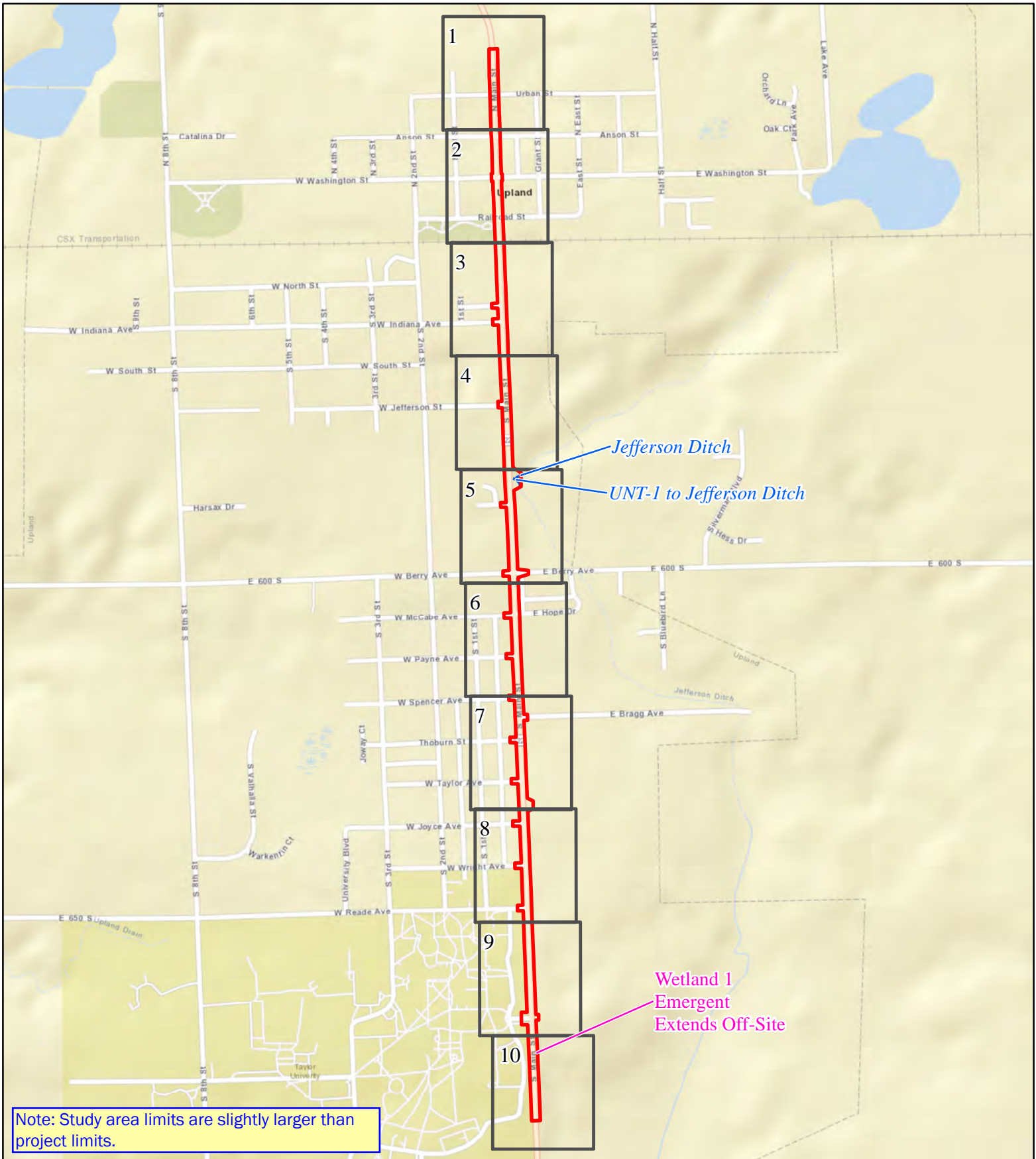
-  Streetscaping
-  Bridge Replacement
-  Road & Sidewalk Reconstruction

SR 22 Bridge & Road Project  
Grant County, Indiana  
Overview

Sources:  
Non Orthophotography Data -  
Obtained from the State of Indiana Geographical  
Information Office Library  
Orthophotography -  
Obtained from Indiana Map  
Framework Data ([www.indianamap.org](http://www.indianamap.org))

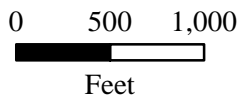






Note: Study area limits are slightly larger than project limits.

- Index Sheet
- Study Area
- Delineated Wetland
- Delineated Stream



Sources:  
 Non Orthophotography Data -  
 Obtained from the State of Indiana Geographical  
 Information Office Library  
 Orthophotography -  
 Obtained from Indiana Map  
 Framework Data ([www.indianamap.org](http://www.indianamap.org))

**SR 22 Bridge & Road Reconstruction  
 Grant County, Indiana  
 Index**

Des. 1800168

Date: 11/9/2020

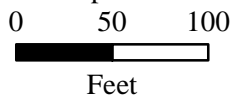


**PARSONS**





- Study Area
- ⊕ Delineated Wetland
- ⚡ Delineated Stream
- Roadside Ditch
- Feature Extends Off-Site
- River\_Stream
- Wetlands
- Floodplain - DFIRM



Sources:  
 Non Orthophotography Data -  
 Obtained from the State of Indiana Geographical  
 Information Office Library  
 Orthophotography -  
 Obtained from Indiana Map  
 Framework Data ([www.indianamap.org](http://www.indianamap.org))

**SR 22 Bridge & Road Reconstruction**  
**Grant County, Indiana**  
**Aerial Photo and Water Resources**  
**Sheet 1 of 10**

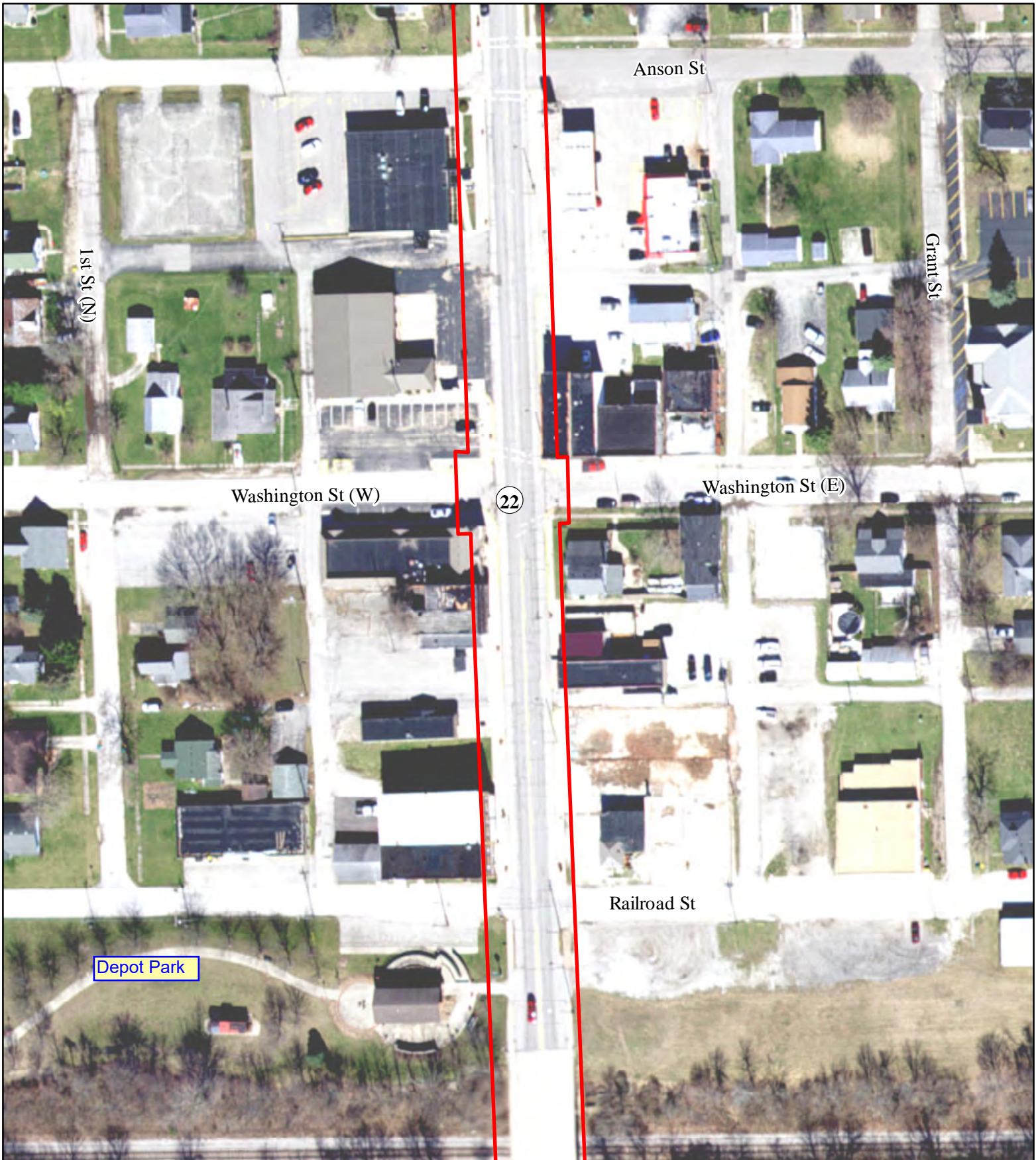
Des. 1800168











Date: 11/9/2020



**PARSONS**







<ul style="list-style-type: none"> <li> Study Area</li> <li> Delineated Wetland</li> <li> Delineated Stream</li> <li> Roadside Ditch</li> <li> Feature Extends Off-Site</li> </ul>	<ul style="list-style-type: none"> <li> River_Stream</li> <li> Wetlands</li> <li> Floodplain - DFIRM</li> </ul> <p>0    50    100</p> <p style="text-align: center;">Feet</p>	 <p>Sources:  <b>Non Orthophotography Data</b> -          Obtained from the State of Indiana Geographical          Information Office Library  <b>Orthophotography</b> -          Obtained from Indiana Map          Framework Data (<a href="http://www.indianamap.org">www.indianamap.org</a>)</p>	<p><b>SR 22 Bridge &amp; Road Reconstruction</b>  <b>Grant County, Indiana</b>  <b>Aerial Photo and Water Resources</b>  <b>Sheet 2 of 10</b></p> <p>Des. 1800168</p> <p>Date: 11/9/2020</p>  <p><b>PARSONS</b></p>
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Created by: KDV





<ul style="list-style-type: none"> <li><span style="color: red;">□</span> Study Area</li> <li><span style="color: magenta;">⊕</span> Delineated Wetland</li> <li><span style="color: blue;">⚡</span> Delineated Stream</li> <li>- - Roadside Ditch</li> <li><span style="color: cyan;">—</span> Feature Extends Off-Site</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: teal;">—</span> River_Stream</li> <li><span style="border: 1px solid blue; display: inline-block; width: 15px; height: 10px;"></span> Wetlands</li> <li><span style="border: 1px dashed gray; display: inline-block; width: 15px; height: 10px;"></span> Floodplain - DFIRM</li> </ul> <p>0    50    100</p> <p style="text-align: center;">Feet</p>	 <p>Sources:          Non Orthophotography Data -          Obtained from the State of Indiana Geographical          Information Office Library          Orthophotography -          Obtained from Indiana Map          Framework Data (<a href="http://www.indianamap.org">www.indianamap.org</a>)</p>	<p><b>SR 22 Bridge &amp; Road Reconstruction</b>  <b>Grant County, Indiana</b>  <b>Aerial Photo and Water Resources</b>  <b>Sheet 3 of 10</b></p> <p>Des. 1800168</p> <p>Date: 11/9/2020</p> 
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Created by: KDV





Study Area	River_Stream
Delineated Wetland	Wetlands
Delineated Stream	Floodplain - DFIRM
Roadside Ditch	0    50    100
Feature Extends Off-Site	
	Feet



Sources:  
 Non Orthophotography Data -  
 Obtained from the State of Indiana Geographical  
 Information Office Library  
 Orthophotography -  
 Obtained from Indiana Map  
 Framework Data ([www.indianamap.org](http://www.indianamap.org))

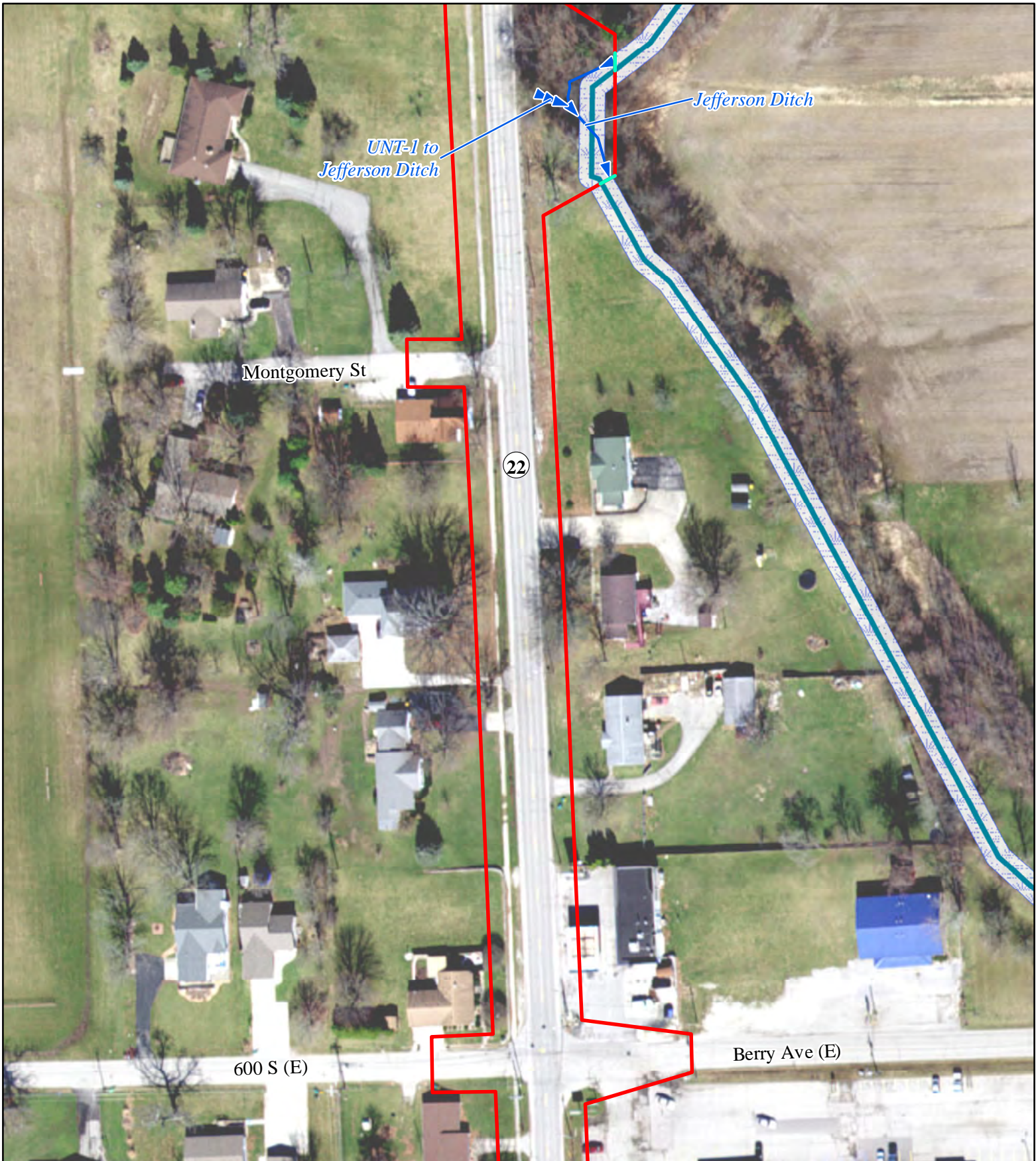
**SR 22 Bridge & Road Reconstruction**  
**Grant County, Indiana**  
**Aerial Photo and Water Resources**  
**Sheet 4 of 10**

Des. 1800168  
 Date: 11/9/2020



Created by: KDV





Study Area	River_Stream
Delineated Wetland	Wetlands
Delineated Stream	Floodplain - DFIRM
Roadside Ditch	0 50 100
Feature Extends Off-Site	Feet



Sources:  
 Non Orthophotography Data -  
 Obtained from the State of Indiana Geographical  
 Information Office Library  
 Orthophotography -  
 Obtained from Indiana Map  
 Framework Data ([www.indianamap.org](http://www.indianamap.org))





**SR 22 Bridge & Road Reconstruction**  
**Grant County, Indiana**  
**Aerial Photo and Water Resources**  
**Sheet 5 of 10**

Des. 1800168  
 Date: 11/9/2020



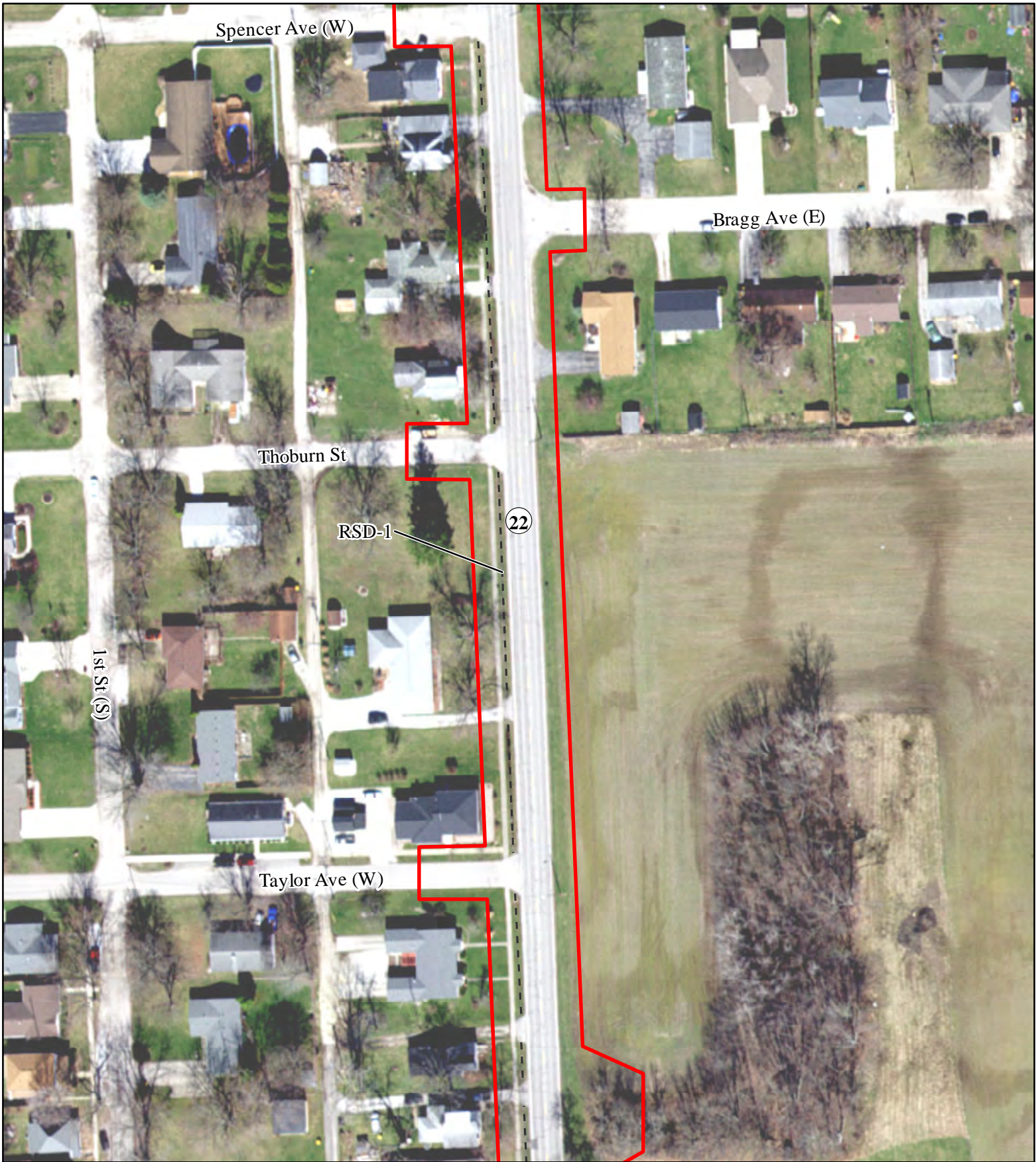




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Des. 1800168	 <b>PARSONS</b>					
Date: 11/9/2020						

Created by: KDV





Study Area	River_Stream
Delineated Wetland	Wetlands
Delineated Stream	Floodplain - DFIRM
Roadside Ditch	0 50 100
Feature Extends Off-Site	Feet



Sources:  
 Non Orthophotography Data -  
 Obtained from the State of Indiana Geographical  
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 Framework Data ([www.indianamap.org](http://www.indianamap.org))



**SR 22 Bridge & Road Reconstruction**  
**Grant County, Indiana**  
**Aerial Photo and Water Resources**  
**Sheet 7 of 10**

Des. 1800168  
 Date: 11/9/2020



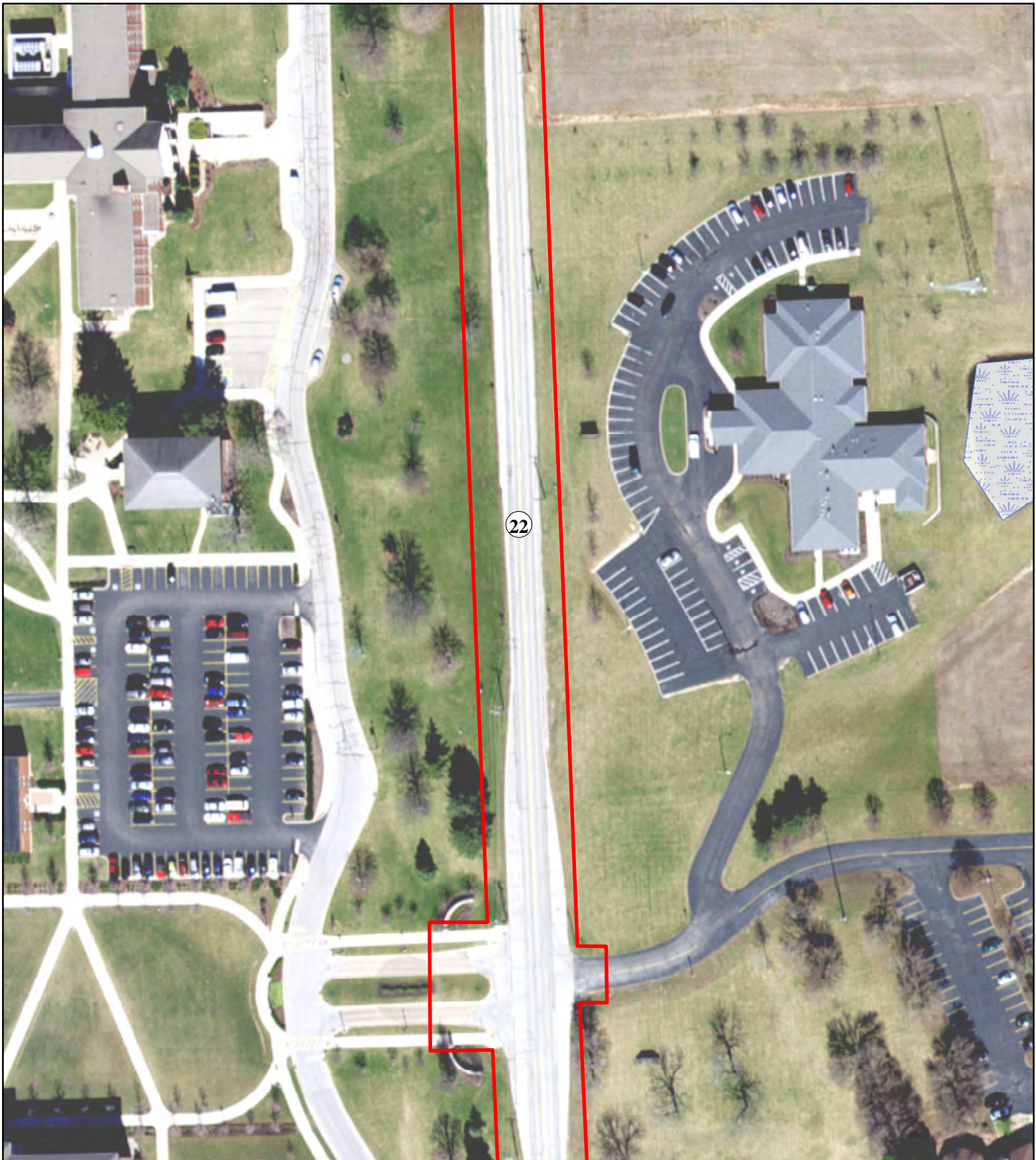
















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Created by: KDV





<ul style="list-style-type: none"> <li> Study Area</li> <li> Delineated Wetland</li> <li> Delineated Stream</li> <li> Roadside Ditch</li> <li> Feature Extends Off-Site</li> </ul>	<ul style="list-style-type: none"> <li> River_Stream</li> <li> Wetlands</li> <li> Floodplain - DFIRM</li> </ul> <p>0    50    100</p> <p style="text-align: center;">Feet</p>	 <p>Sources:  <u>Non Orthophotography Data</u> -          Obtained from the State of Indiana Geographical          Information Office Library  <u>Orthophotography</u> -          Obtained from Indiana Map          Framework Data (<a href="http://www.indianamap.org">www.indianamap.org</a>)</p>	<p style="text-align: center;"><b>SR 22 Bridge &amp; Road Reconstruction</b>  <b>Grant County, Indiana</b>  <b>Aerial Photo and Water Resources</b>  <b>Sheet 9 of 10</b></p> <table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">Des. 1800168</td> <td rowspan="2" style="width: 50%; text-align: center;">  <b>PARSONS</b> </td> </tr> <tr> <td>Date: 11/9/2020</td> </tr> </table>	Des. 1800168	 <b>PARSONS</b>	Date: 11/9/2020
Des. 1800168	 <b>PARSONS</b>					
Date: 11/9/2020						



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Wetland 1  
Emergent  
Extends Off-Site

22

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Created by: KDV





**Photo 1** – View of SR 22 facing south-southeast from the entrance of Taylor University (04-22-20).



**Photo 2** – View of SR 22 facing north. The entrance to Taylor University is on the upper left (04-22-20).

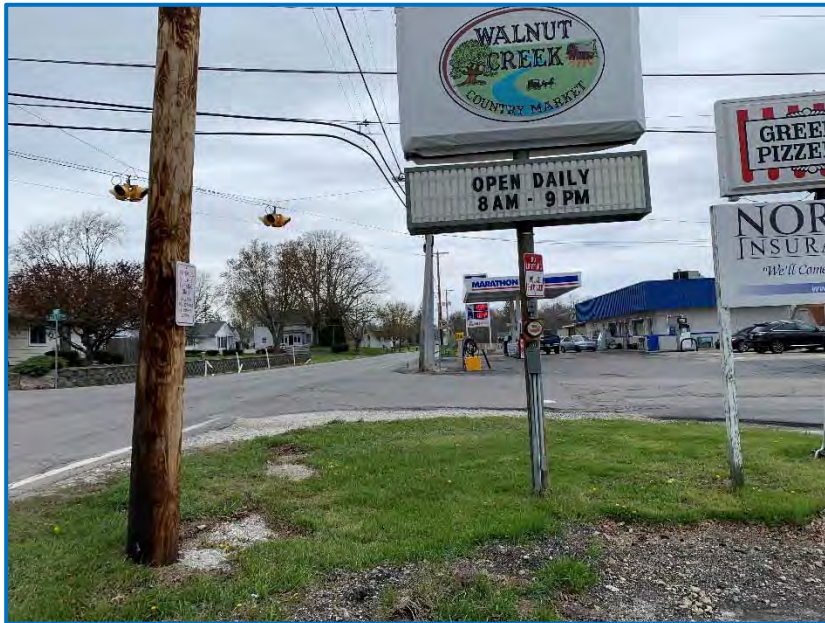


**Photo 3** – View of SR 22 and eastern roadside facing north towards the intersection with Bragg Avenue (04-22-20).



**Photo 4** – View SR 22 and eastern roadside facing north towards the intersection with McCabe Avenue (04-22-20).





**Photo 5** – View of the intersection of SR 22 and Berry Street/ CR 600 South, facing north-northwest (04-22-20).



**Photo 6** – View of SR 22, the outfall of pipe arch culvert Structure CV 022-027-49.42, and UNT 1 to Jefferson Ditch, facing west (04-22-20).



**Photo 7** – View of SR 22 and sidewalk facing north. The entrance to Memorial Park is on the left (04-22-20).



**Photo 8** – View of the intersection of SR 22 and Jefferson Street, facing southwest. Memorial Park is in the background (04-22-20).





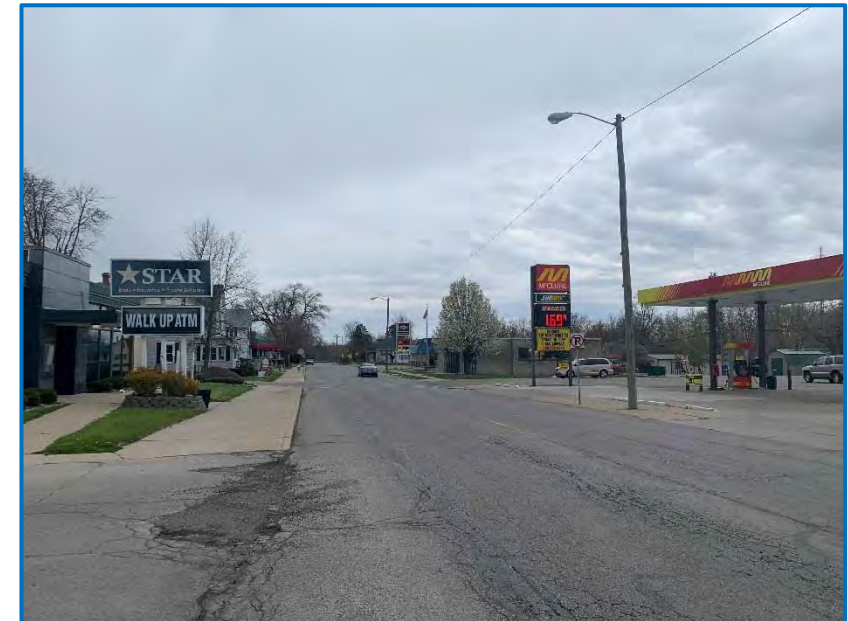
**Photo 9** – View from the east side of the SR 22 Bridge over CERA facing south. The Detamore Trailhead parking lot and entrance are visible (04-22-20).



**Photo 10** – View from Railroad Street facing south towards Depot Park. The SR 22 bridge over CERA is on the left (04-22-20).



**Photo 11**– View of SR 22 and downtown Upland facing south, from the alley between Washington and Anson Streets. The SR 22 bridge over CERA is in the background (04-22-20).



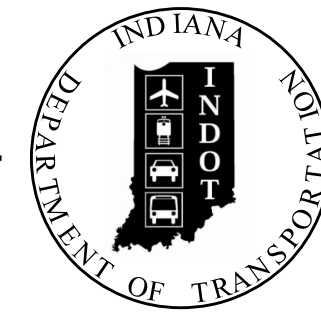
**Photo 12** – View of SR 22 and downtown Upland facing north, from the alley between Washington and Anson Streets. The SR 22 bridge over CERA is in the background (04-22-20).



PROJECT	DESIGNATION
1800168	1383460
CONTRACT	BRIDGE FILE
R-41565	22-27-02130B

# INDIANA DEPARTMENT OF TRANSPORTATION

Excerpts



STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
22-27-02130B	CONTINUOUS COMPOSITE STEEL BEAM BRIDGE	3 Spans: 50'-7", 48'-6", 50'-7" Skew: Square	CERA (Norfolk Southern R.R.)	95+00.00 "A"

KIN PROJECT INFORMATION		
DESIGNATION	PROJECT DESCRIPTION	TYPE
*1800168	SR 22 Small Towns Pavement Replacement	Road
1702864	SR 22 Streetscape Project	Road

\* Indicates Lead Des.

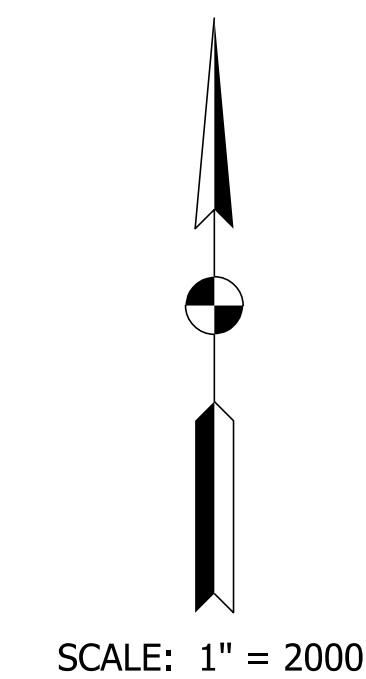
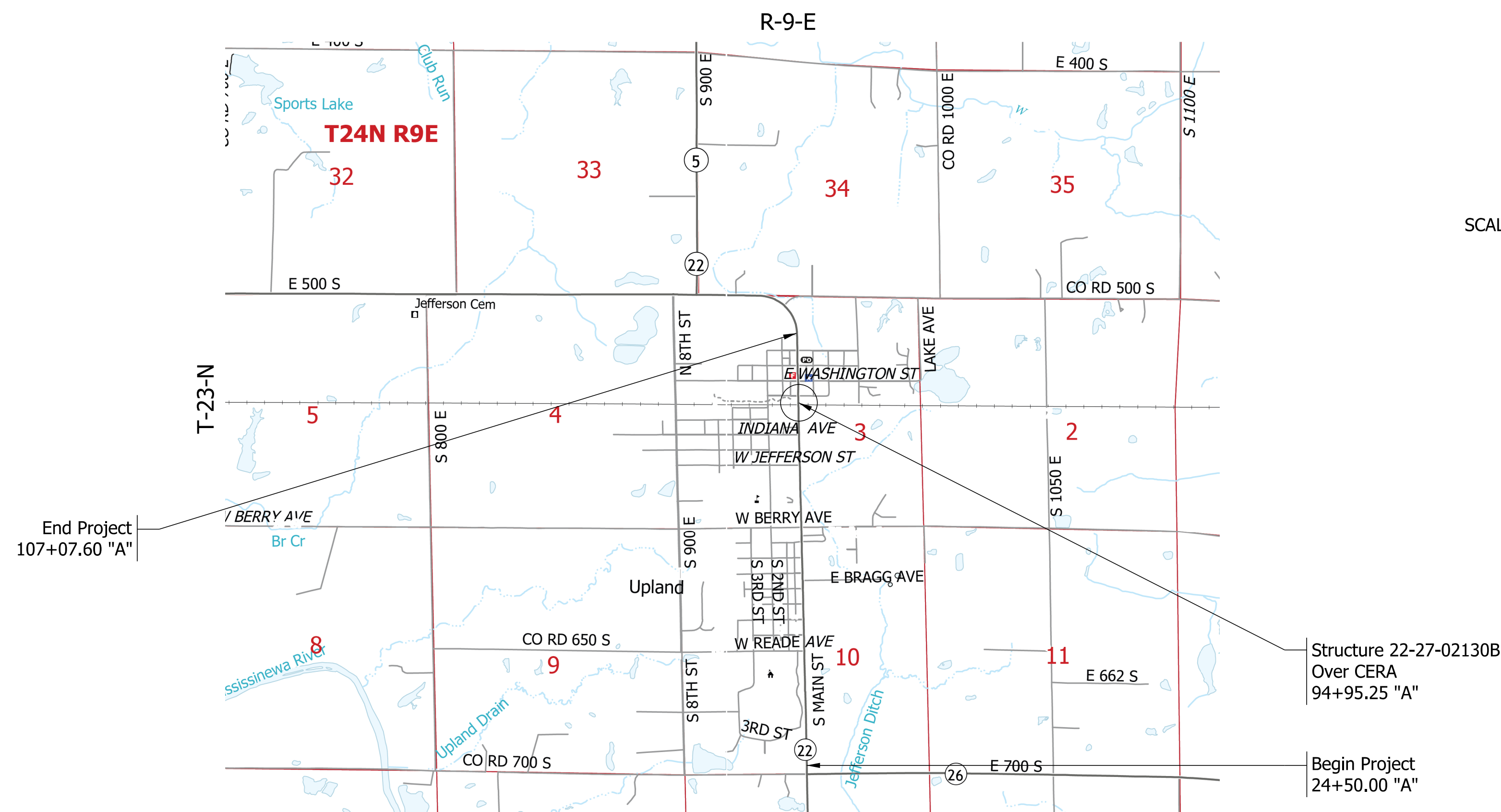
## BRIDGE REHABILITATION PLANS

FOR SPANS OVER 20 FEET

ROUTE: SR 22 AT: RP 49+04

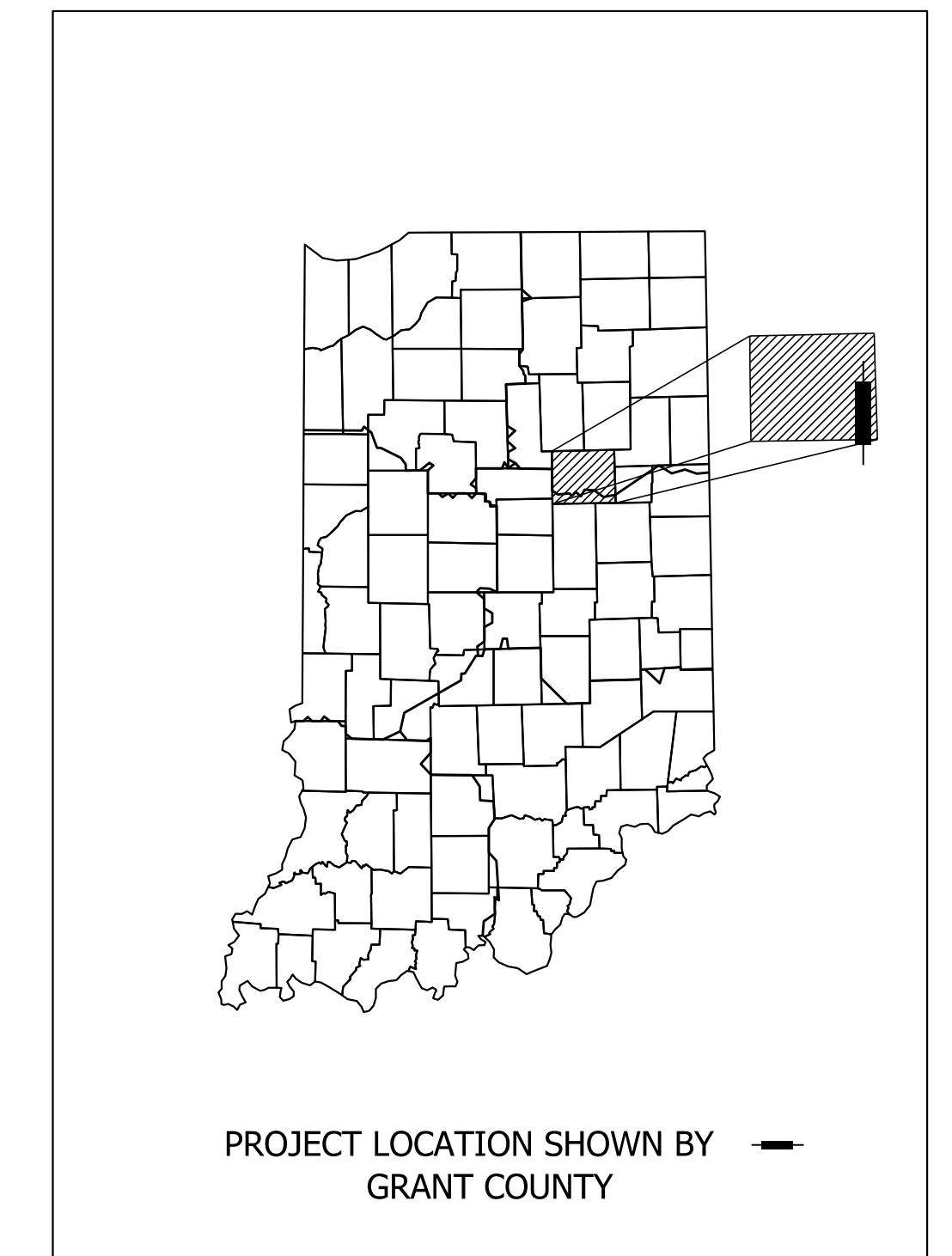
PROJECT NO. 1383460 P.E.  
1800168 R/W  
1800168 CONST.

Bridge Superstructure Replacement on SR 22 over Central Railroad of Indianapolis (Norfolk Southern R.R.)  
Located Approximately 1.53 Miles West of SR 26  
Section 3, T-23-N, R-9-E, Jefferson Township, Grant County, Indiana



TRAFFIC DATA		
A.A.D.T. (2020)		5,500 V.P.D.
A.A.D.T. (2043)		5,500 V.P.D.
D.H.V (2043)		495 V.P.H.
DIRECTIONAL DISTRIBUTION		51.17% EB / 48.83% WB
TRUCKS		3% A.A.D.T. 1% D.H.V.

DESIGN DATA	
DESIGN SPEED	25 M.P.H.
PROJECT DESIGN CRITERIA	3R (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	MAJOR COLLECTOR
RURAL/URBAN	URBAN (BUILT UP)
TERRAIN	LEVEL
ACCESS CONTROL	NONE



LATITUDE: 40° 28' 26" LONGITUDE: 85° 29' 40"

BRIDGE LENGTH:	0.029 MI.
ROADWAY LENGTH:	SEE ROADWAY PLANS MI.
TOTAL LENGTH:	SEE ROADWAY PLANS MI.
MAX. GRADE:	10.51 %

INDIANA DEPARTMENT OF TRANSPORTATION  
STANDARD SPECIFICATIONS DATED 2020  
TO BE USED WITH THESE PLANS.

**PARSONS**

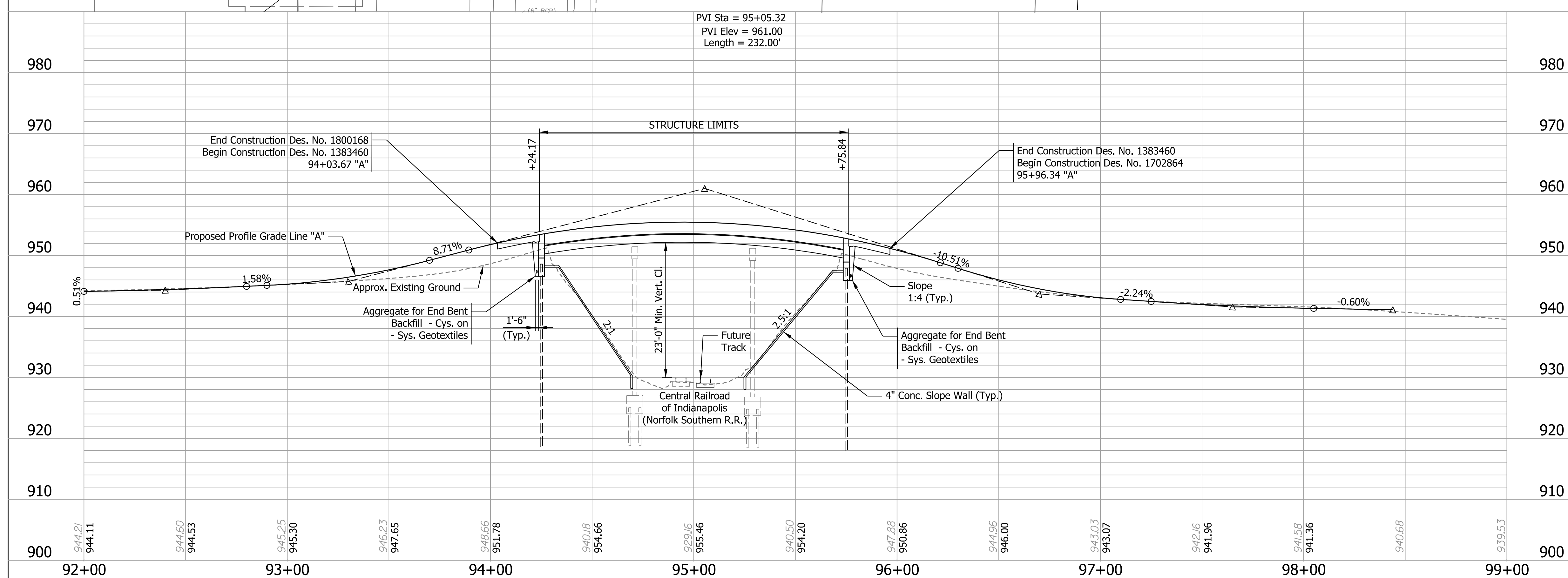
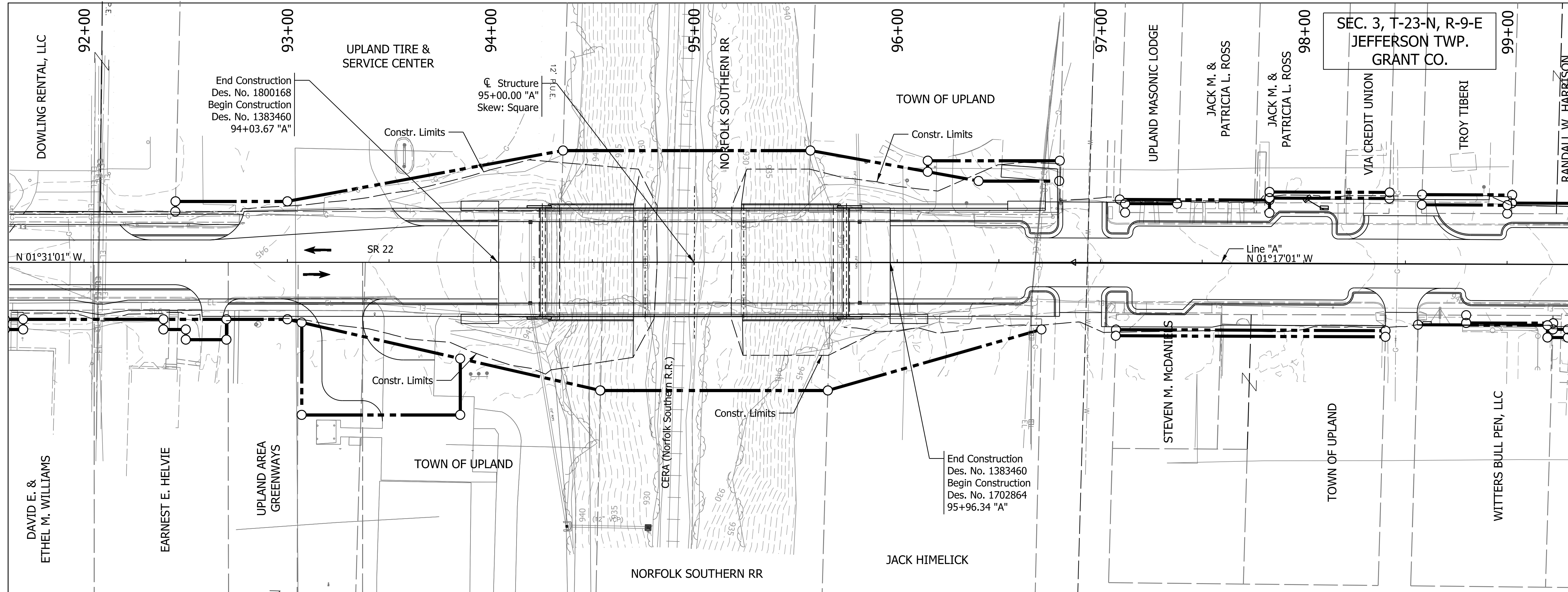
101 W. Ohio St., Suite 2121  
Indianapolis, IN 46204  
Bus (317) 616-1000  
Fax (317) 616-1033

pw://VANVA01PWINT01.parsons.com:Indiana State/Documents/Fort Wayne/SR22 over RR (Upland)/CADD/Bridge/SST Alternate/Sheets/SR22\_SST\_BR\_Title Sheet.dgn  
05-MAY-2021

PLANS PREPARED BY:	PARSONS	317-616-1000 PHONE NUMBER
CERTIFIED BY:		DATE
APPROVED FOR LETTING:	INDIANA DEPARTMENT OF TRANSPORTATION	DATE

BRIDGE FILE	
22-27-02130B	
DESIGNATION	
1383460	
SURVEY BOOK	SHEETS
ELECTRONIC	1 of 12
CONTRACT	PROJECT
R-41565	1800168





**EXISTING STRUCTURE**  
 The existing structure (022-27-02130A) is a 3 span continuous adjacent prestressed reinforced concrete box beam bridge with spans of 47'-7", 48'-6" & 47'-7", a clear roadway of 40'-0", and Out-to-Out width of 52'-0".  
 Existing superstructure to be completely removed.

**EARTHWORK TABULATION**

Fill + 20%	= Cys
Common Excavation	= Cys
Usable Waterway Excavation (70%)	= Cys
Surplus Foundation Excavation (70%)	= Cys
Borrow	= Cys
Total Waterway Excavation	= Cys
Excavation Unclassified	= Cys
Benching (Estimated)	= Cys

No direct payment for Benchng. Benchng will not be paid for as Common Excavation.

**NOTES:**  
 For Utility Contacts see Index Sheet No.2.  
 For R/W, Benchmarks, Earthwork Summary, Reference Points, and additional information, see Road Plans, Des. No. 1800168

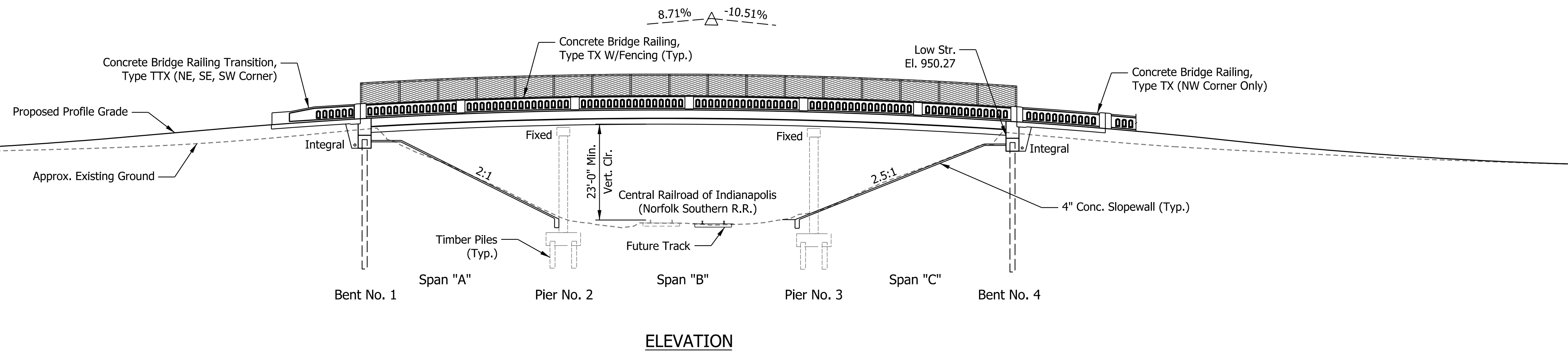
**CONTINUOUS COMPOSITE STEEL BEAM BRIDGE**  
 3 SPANS: 50'-7", 48'-6", & 50'-7"  
 40'-0" CLEAR ROADWAY; SKEW: SQUARE  
 SR 22 OVER CENTRAL RAILROAD OF INDIANAPOLIS (NORFOLK SOUTHERN R.R.)  
 GRANT COUNTY

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER		DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE
	DESIGNED: KCW		DRAWN: JEW		1"=30'-0"	022-27-02130B
CHECKED: KRM	CHECKED: KRM			LAYOUT	VERTICAL SCALE	DESIGNATION
					1"=10'-0"	1383460
					SURVEY BOOK	SHEETS
					ELECTRONIC	7 of 12
					CONTRACT	PROJECT
					R-41565	1800168

pw://VANVA01PWINT01.parsons.com:Indiana State/Documents/Fort Wayne/SR22 over RR (Upland)/CADD/Bridge/SST Alternate/Sheets/SR22\_SST\_BR\_Layout.dgn  
 05-MAY-2021



STRUCTURE TO BE BUILT TO A 232' VERTICAL CURVE



ELEVATION

GENERAL NOTES

Reinforcing steel covering shall be 2 1/2" in Top and 1" min. In bottom of floor slabs, 3" in footing except bottom steel which shall be 4", and 2" in all other parts, unless noted.

DESIGN DATA

Superstructure & Substructure Designed for HL-93 Loading in accordance with AASHTO LRFD Bridge Design Specifications, Eighth Edition, 2018, and its subsequent interims.

DEAD LOAD

Actual weight plus 35 lb/Sft of future wearing surface and 15 psf for SIP Metal deck forms.

FLOOR SLAB

Designed with a 7 1/2" structural depth, and a 1/2" integral wearing surface.

DESIGN STRESSES

CONCRETE

Class "A" Concrete	f <sub>c</sub> = 3,500 p.s.i.
Class "B" Concrete	f <sub>c</sub> = 3,000 p.s.i.
Class "C" Concrete	f <sub>c</sub> = 4,000 p.s.i.
Structural Steel	f <sub>c</sub> = 50,000 p.s.i.

REINFORCING STEEL

Grade 60 f<sub>y</sub> = 60,000 p.s.i.

CONSTRUCTION LOADING

The exterior girder has been checked for strength, deflection, and overturning using the construction loads shown below. Cantilever overhang brackets were assumed for support of the deck overhang past the edge of the exterior girder. The finishing machine was assumed to be supported 6" outside the vertical coping form. The top overhang brackets were assumed to be located 6" past the edge of the vertical coping form. The bottom overhang brackets were assumed to be braced against the intersection of the girder bottom flange and web.

DECK FALSEWORK LOADS

Designed for 15 lb/Sft for permanent metal stay-in-place deck forms, removable deck forms, and 2-ft exterior walkway.

CONSTRUCTION LIVE LOAD

Designed for 20 lb/Sft extending 2-ft past the edge of coping and 75 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30-ft length of the deck centered with the finishing machine.

FINISHING MACHINE LOAD

4500 lb distributed over 10-ft along the coping.

WIND LOAD

Structure Designed for 70 mph horizontal wind loading in accordance with LRFD 3.8.1.

SEISMIC DESIGN DATA

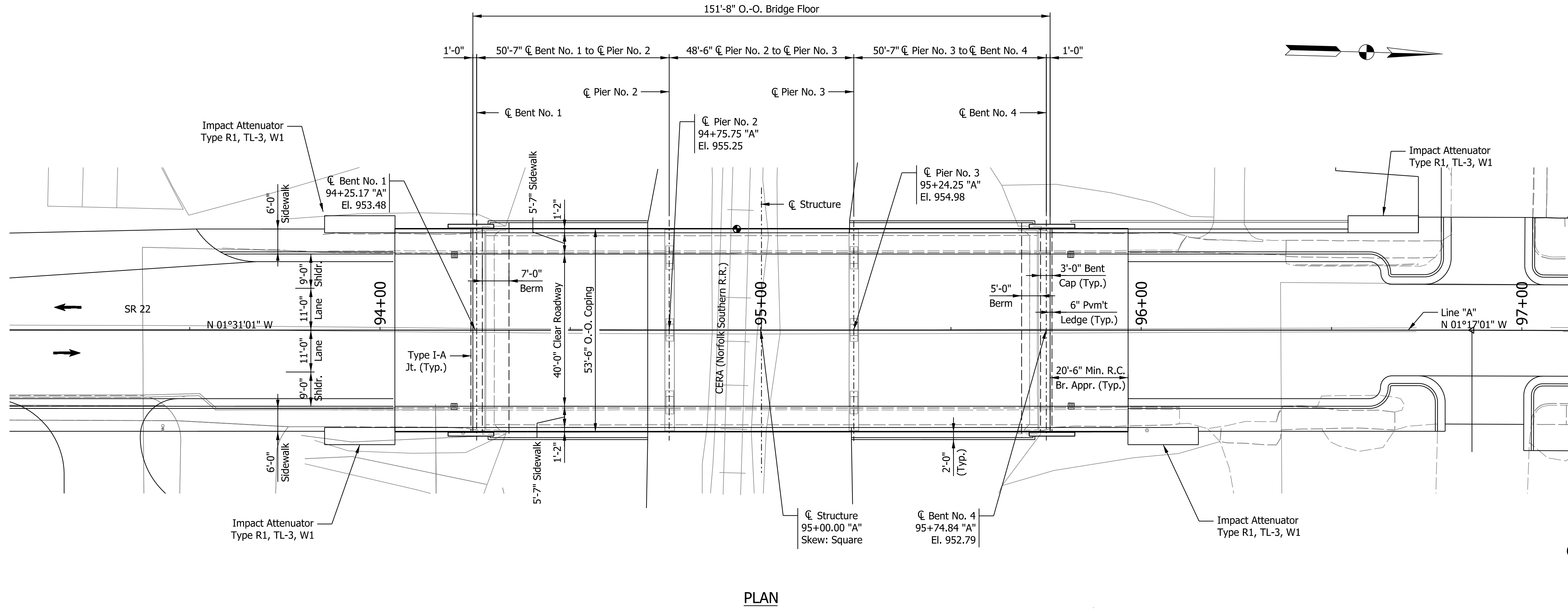
Seismic Performance Zone	Zone 1
Acceleration Coefficient (S <sub>D1</sub> )	TBD
Seismic Soil Profile Type	Site Class 1

NOTE:

See Standard Drawing E 616-SWCO-03 & 04 for Concrete Slopewall Details.

● - Point of Minimum Vertical Clearance

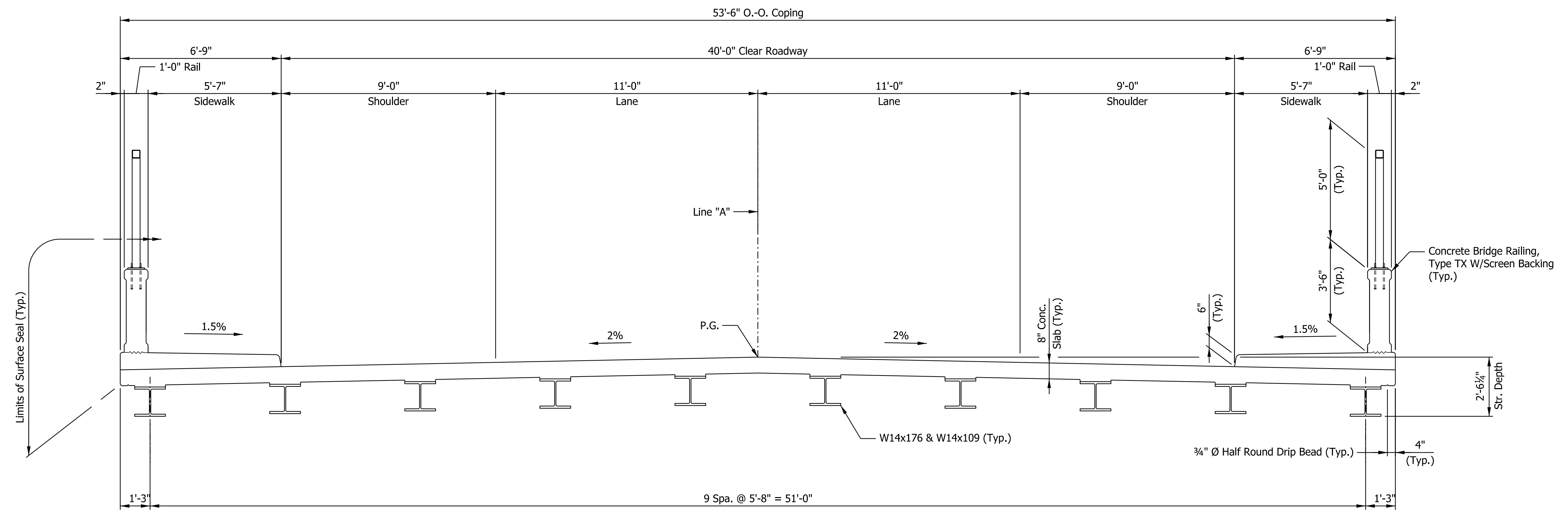
CONTINUOUS COMPOSITE STEEL BEAM BRIDGE  
 3 SPANS: 50'-7", 48'-6", & 50'-7"  
 40'-0" CLEAR ROADWAY; SKEW: SQUARE  
 SR 22 OVER CENTRAL RAILROAD OF INDIANAPOLIS (NORFOLK SOUTHERN R.R.)  
 GRANT COUNTY



PLAN

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE
	DESIGNED: KCW	DRAWN: JEW		VERTICAL SCALE	DESIGNATION
CHECKED: KRM	CHECKED: KRM		GENERAL PLAN	1/16"=1'-0"	022-27-02130B
				1/16"=1'-0"	1383460
				SURVEY BOOK	SHEETS
				ELECTRONIC	8 of 12
				CONTRACT	PROJECT
				R-41565	1800168

pw://VANVA01PWINT01.parsons.com:Indiana State/Documents/Fort Wayne/SR22 over RR (Upland)/CADD/Bridge/SST Alternate/Sheets/SR22\_SST\_BR\_General Plan.01.dgn 05-MAY-2021



TYPICAL SECTION

CONTINUOUS COMPOSITE STEEL BEAM BRIDGE  
 3 SPANS: 50'-7", 48'-6", & 50'-7"  
 40'-0" CLEAR ROADWAY; SKEW: SQUARE  
 SR 22 OVER CENTRAL RAILROAD OF  
 INDIANAPOLIS (NORFOLK SOUTHERN R.R.)  
 GRANT COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE	BRIDGE FILE
			3/8" = 1'-0"	022-27-02130B
			VERTICAL SCALE	DESIGNATION
DESIGNED: _____ KCW _____ DRAWN: _____ JEW _____	GENERAL PLAN		3/8" = 1'-0"	1383460
CHECKED: _____ KRM _____ CHECKED: _____ KRM _____			SURVEY BOOK	SHEETS
			ELECTRONIC	9 of 12
		CONTRACT	PROJECT	
		R-41565	1800168	

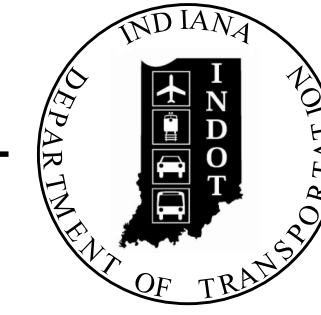
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 05-MAY-2021



PROJECT	DESIGNATION
1800168	1702864 & 1800168
CONTRACT	
R-41565	

# INDIANA DEPARTMENT OF TRANSPORTATION

Exceptrs



KIN PROJECT INFORMATION		
DESIGNATION	PROJECT DESCRIPTION	TYPE
1383460	SR 22 Bridge Replacement over CERA	Bridge
1800168	SR 22 Pavement Replacement - Upland, IN	Roadway
1702864	SR 22 Streetscape - Upland, IN	Roadway

The recommended alternative for Des. 1383460 was revised to a superstructure replacement.

TRAFFIC DATA		
A.A.D.T.	(2023)	6,365 V.P.D.
A.A.D.T.	(2043)	7,145 V.P.D.
D.H.V	(2043)	643 V.P.H.
DIRECTIONAL DISTRIBUTION		49.85% EB / 50.15% WB
TRUCKS		3.7% A.A.D.T. 4.0% D.H.V.

DESIGN DATA	
DESIGN SPEED	Varies 25 M.P.H. to 45 M.P.H.
PROJECT DESIGN CRITERIA	RECONSTRUCTION (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	STATE COLLECTOR
RURAL/URBAN	URBAN (BUILT-UP)
TERRAIN	LEVEL
ACCESS CONTROL	NONE

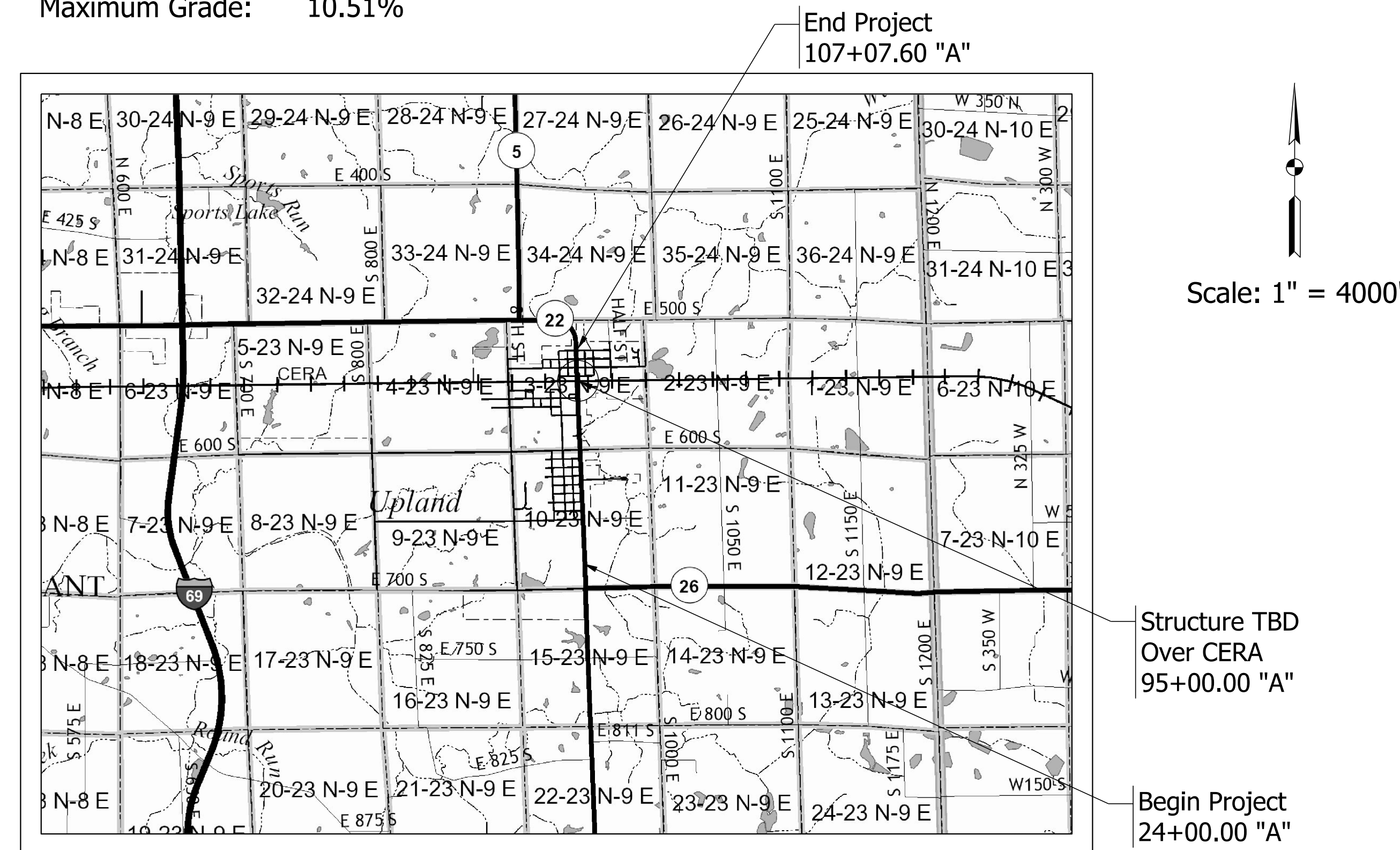
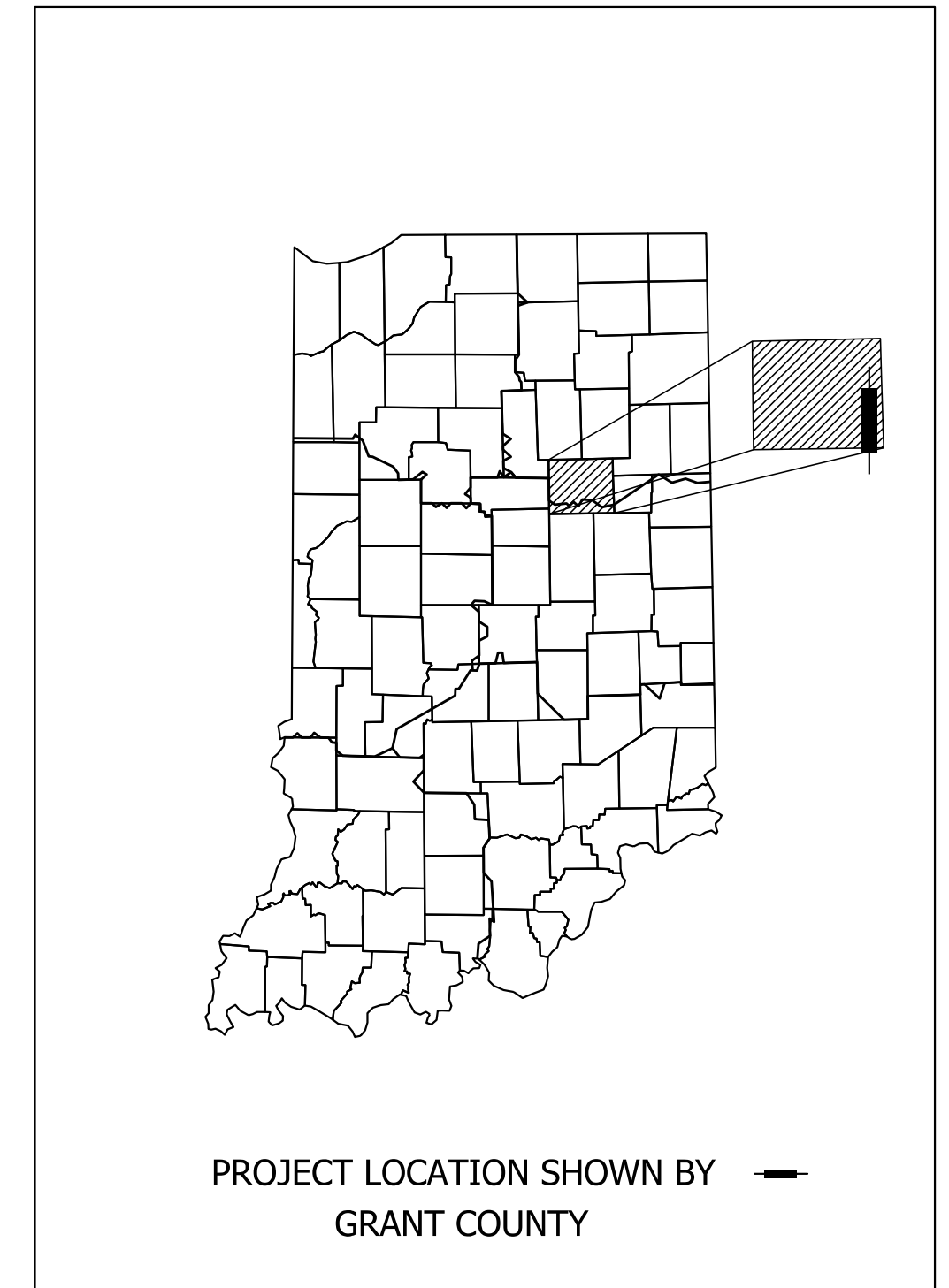
## ROAD PLANS

ROUTE: SR 22 FROM: RP 48+760 TO: RP 50+578  
 PROJECT NO. 1800168 P.E.  
 1800168 R/W  
 1800168 CONST.

SR 22 Reconstruction from 1.74 miles north of SR 26 to 0.19 miles north of SR 26 through the Town of Upland, Indiana, Sections 3 and 10 of T-23N, R-9-E, Jefferson Township, Grant County.

Gross Length: 1.56 MI.  
 Net Length: 1.53 MI.  
 Maximum Grade: 10.51%

Preliminary drainage plans are being updated. Upon design-approval, this CE document will be re-evaluated as needed.



## Stage 2 Plans

INDIANA DEPARTMENT OF TRANSPORTATION  
 STANDARD SPECIFICATIONS DATED 2020  
 TO BE USED WITH THESE PLANS

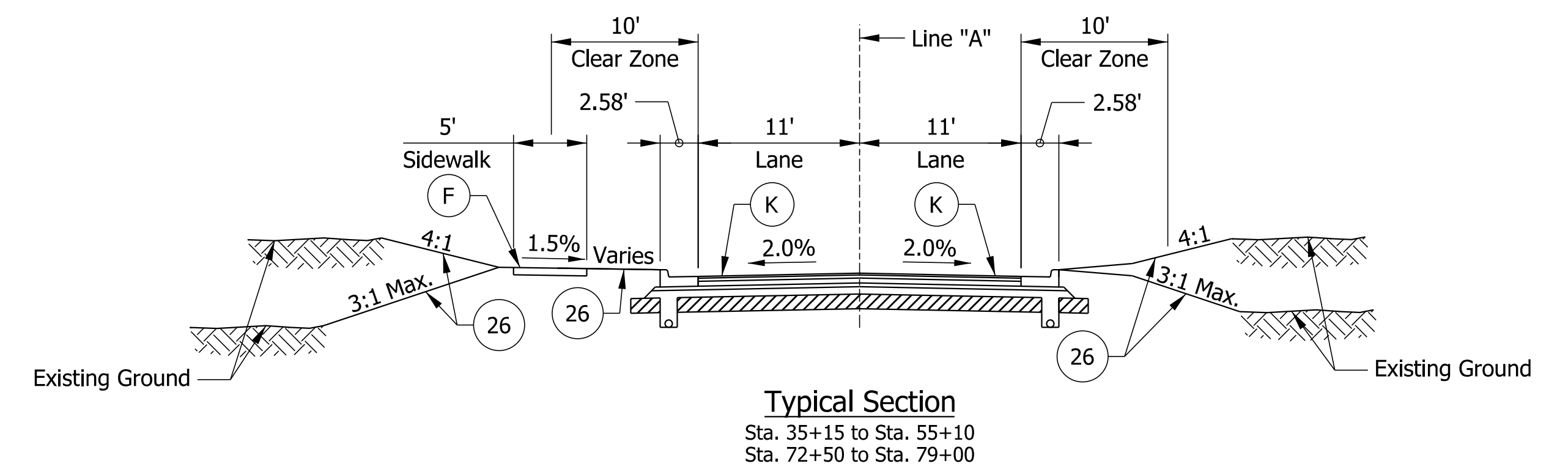
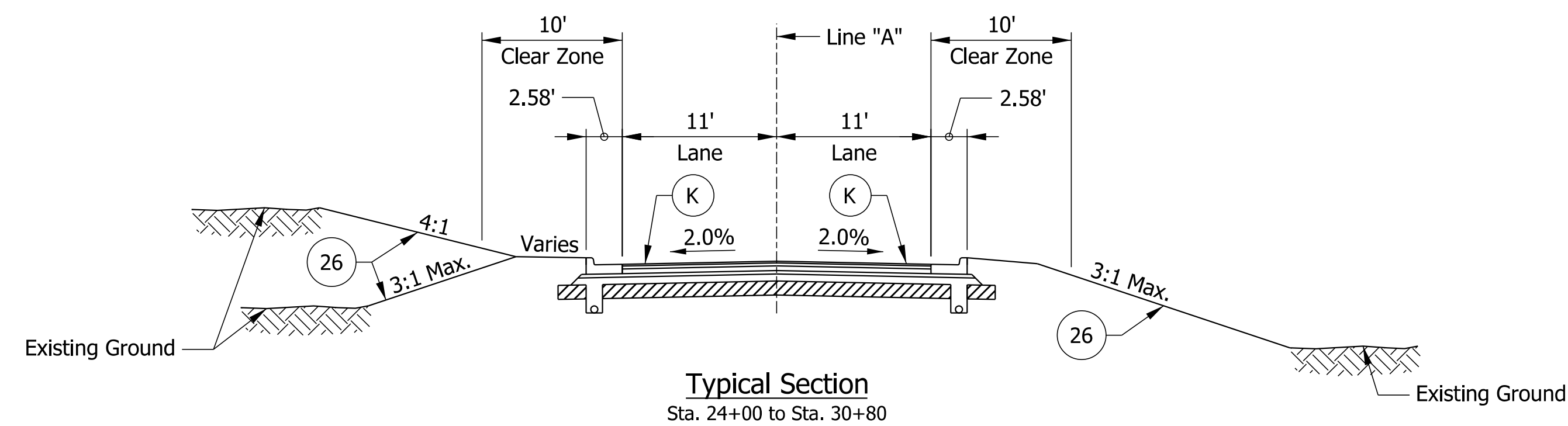
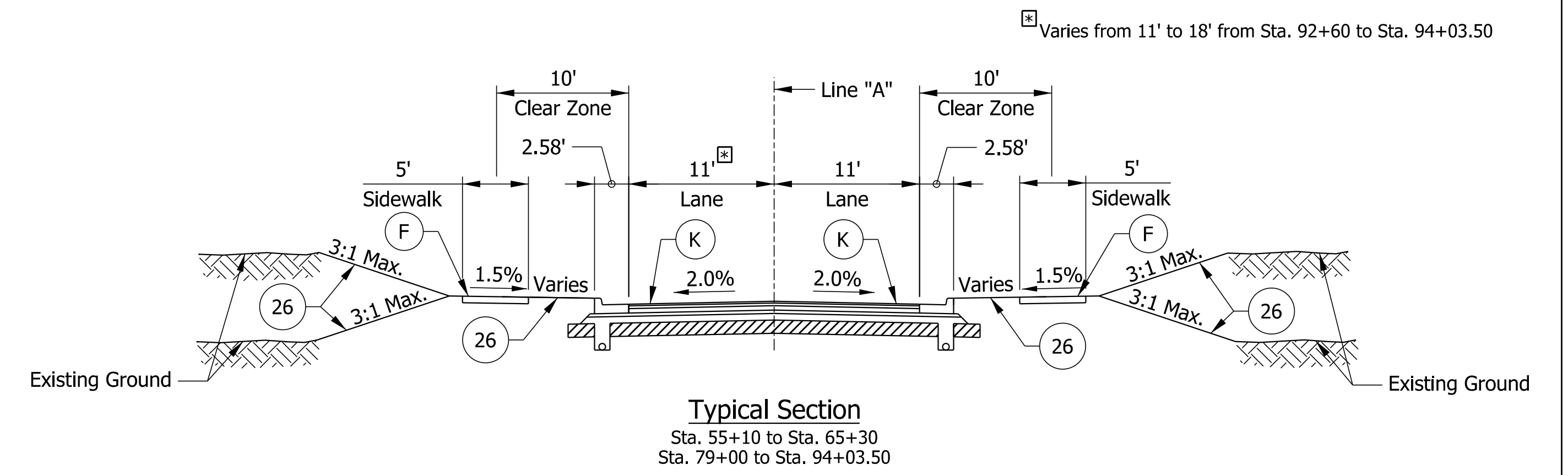
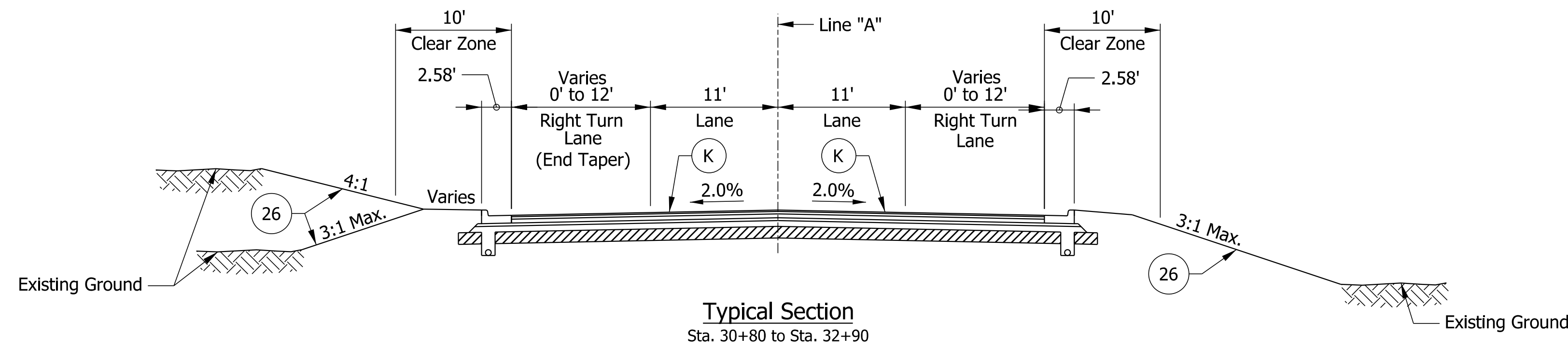
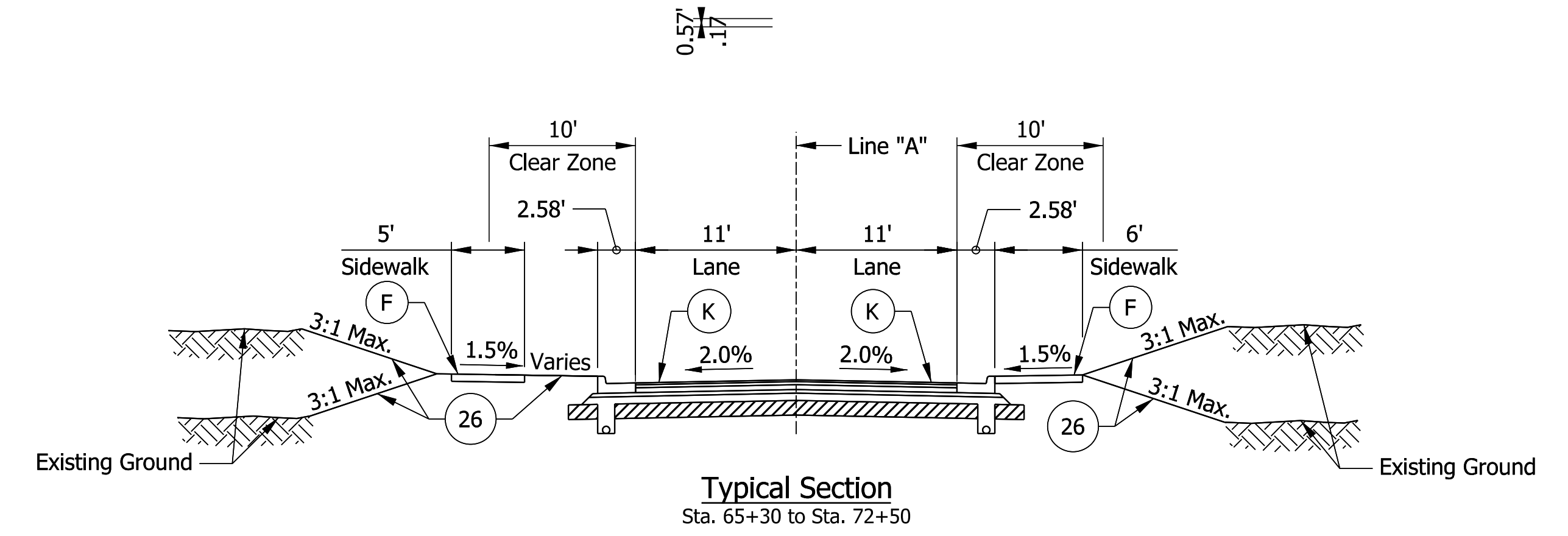
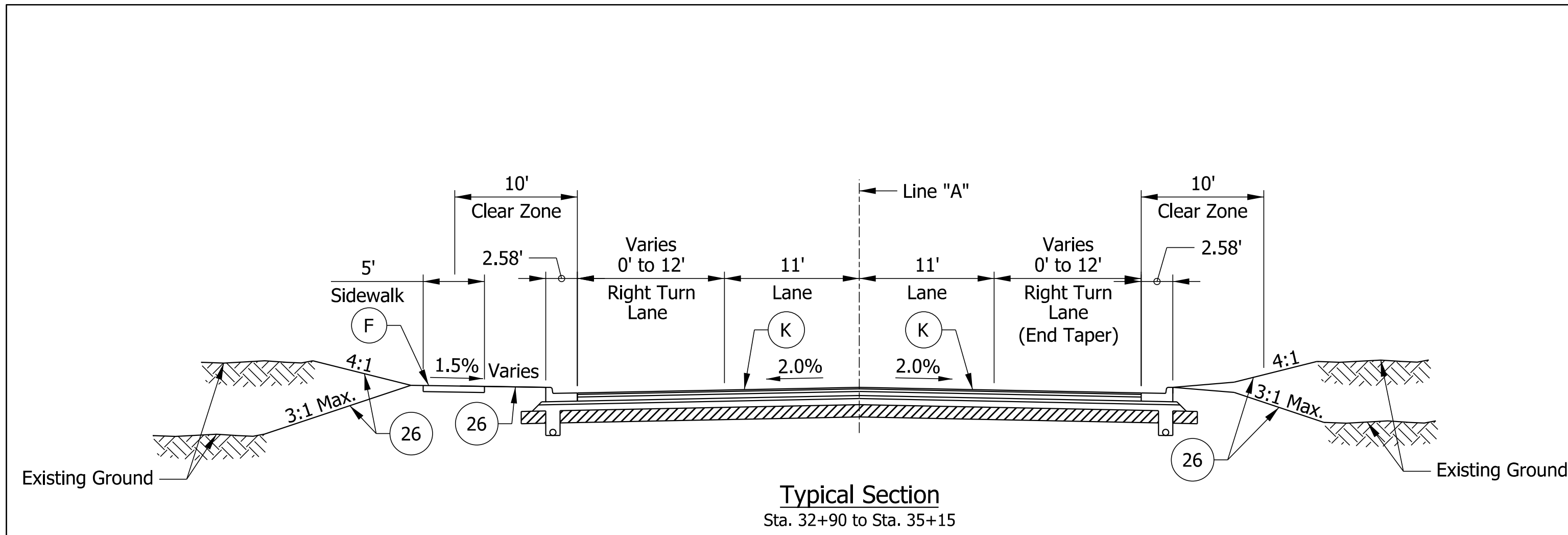
**PARSONS**  
 101 W. Ohio St., Suite 2121  
 Indianapolis, IN 46204  
 Bus (317) 616-1000  
 Fax (317) 616-1033

PLANS PREPARED BY:	PARSONS	317-616-1000
		PHONE NUMBER
CERTIFIED BY:		DATE
APPROVED FOR LETTING:	INDIANA DEPARTMENT OF TRANSPORTATION	DATE

DESIGNATION	
1702864 & 1800168	
SURVEY BOOK	SHEETS
ELECTRONIC	1 of 172
CONTRACT	PROJECT
R-41565	1800168

\$FILES  
 \$DATES





- (K) - Full Depth Replacement on Subgrade Treatment Type - TBD
- (F) - Sidewalk, Concrete, 4"
- (26) - Sodding
- (K1) - Milling Asphalt 1.5" then 165 #SYS QC/QA-HMA, 2, 64, Surface 9.5 mm on Existing Pavement

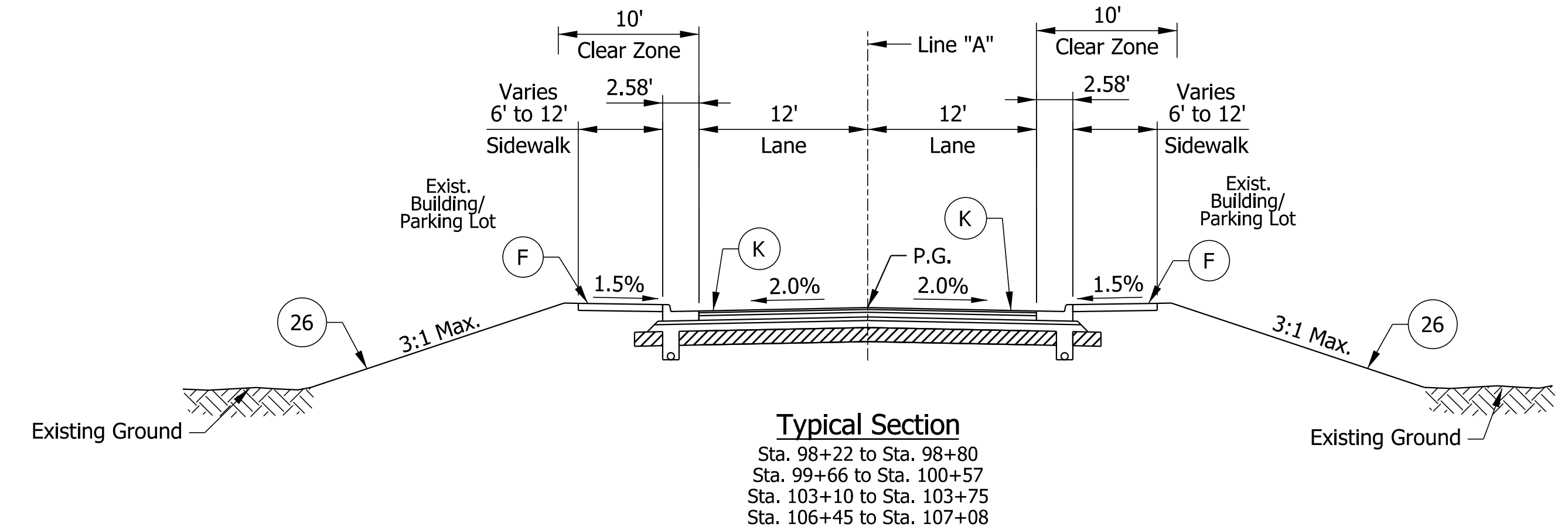
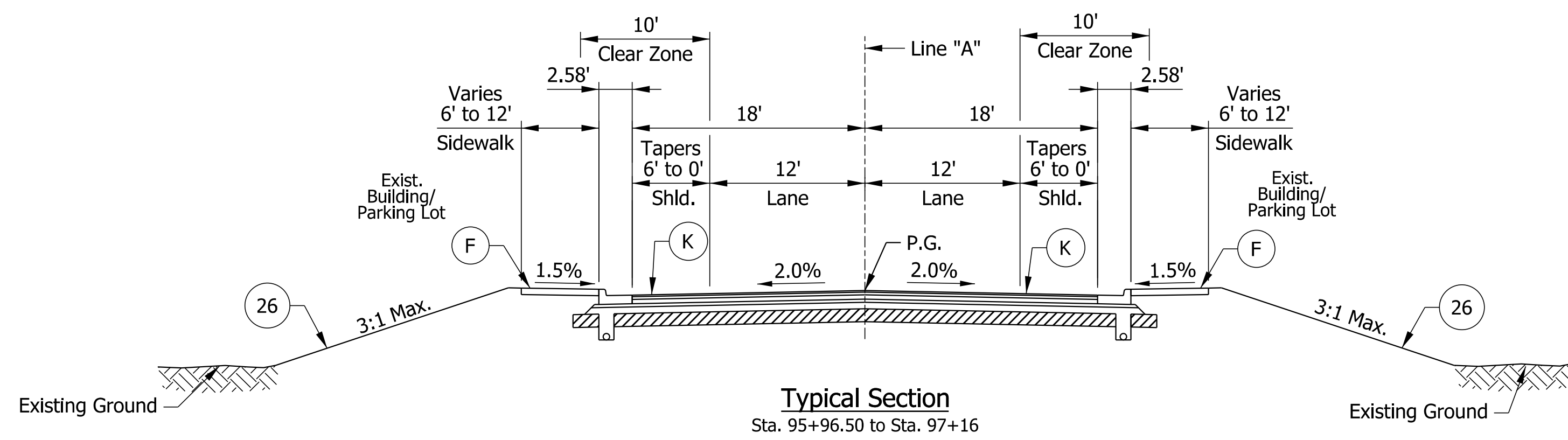
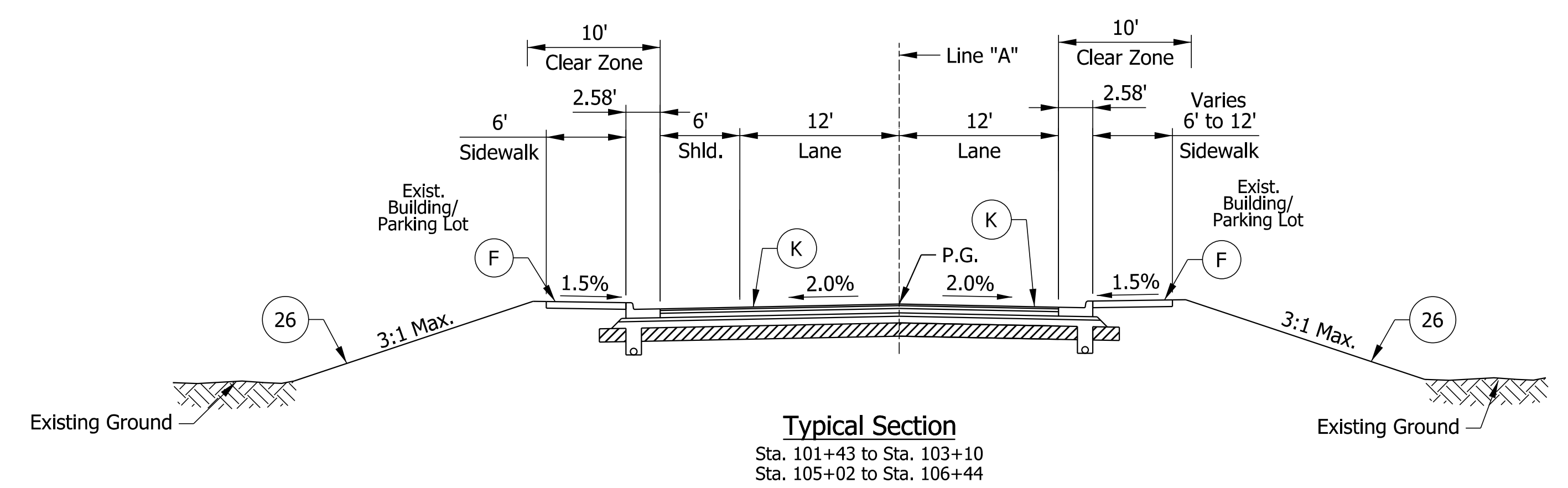
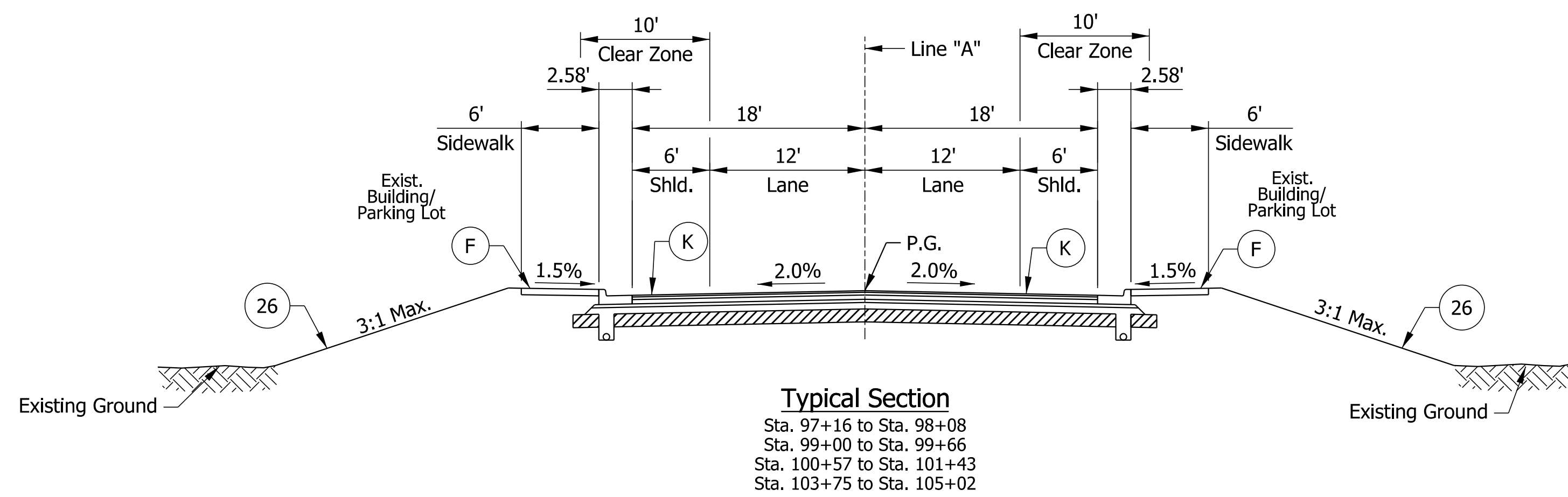
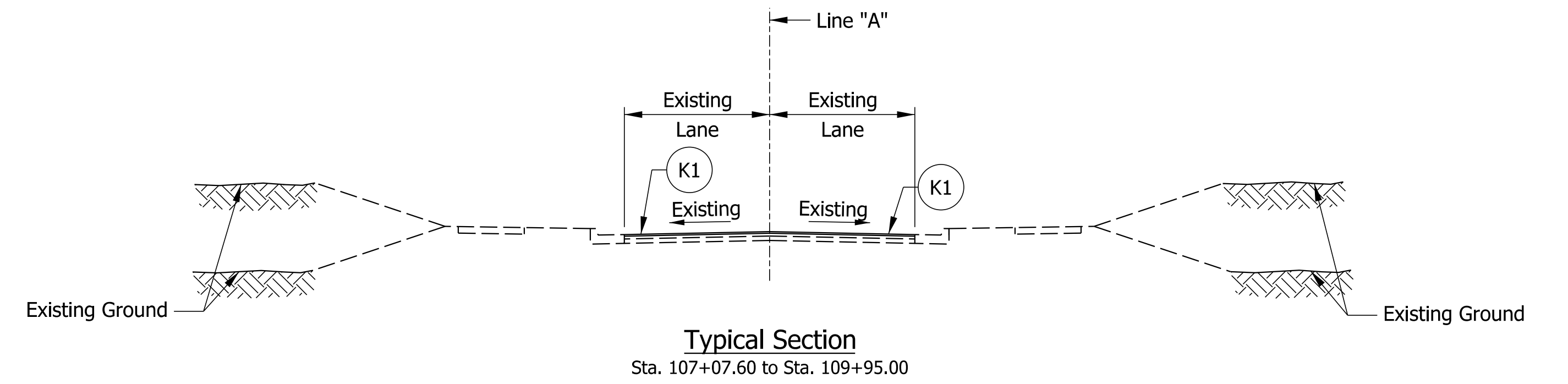
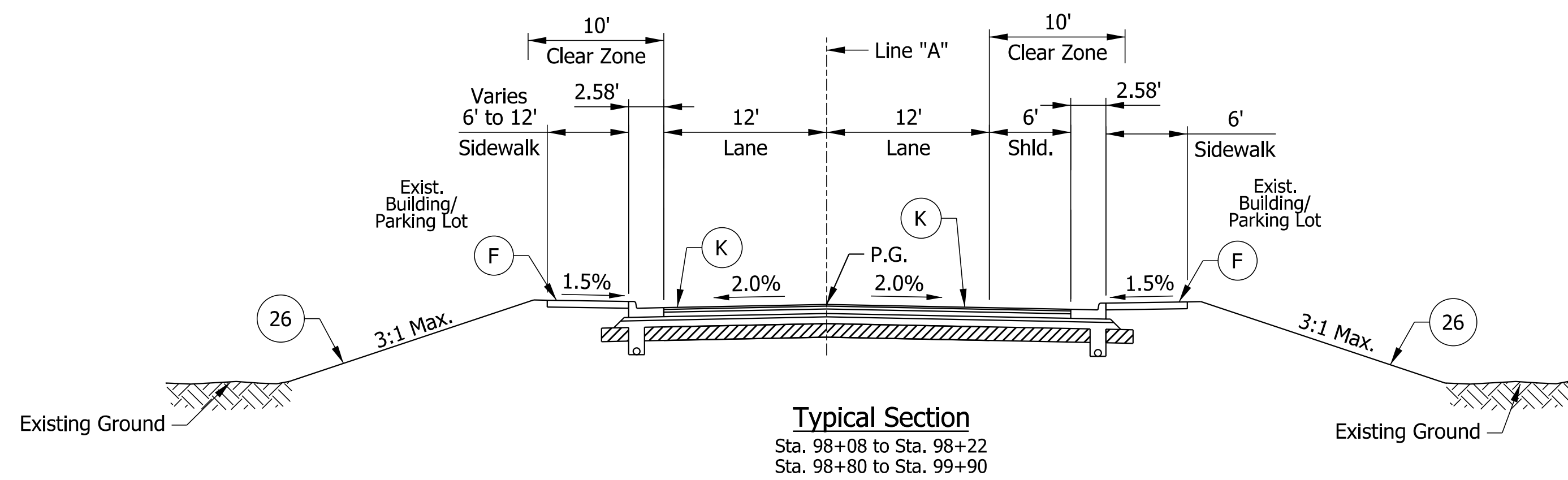
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: TJH	DRAWN: SJC	
CHECKED: MTH	CHECKED: TJH	

INDIANA  
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION  
LINE "A" - SR 22

HORIZONTAL SCALE	BRIDGE FILE
1" = 8'	TBD
VERTICAL SCALE	DESIGNATION
N/A	1702864 & 1800168
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 172
CONTRACT	PROJECT
R-41565	1800168

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\$DATES\$



**PAVING EXCEPTION**  
Sta. 94+03.50 to Sta. 95+96.50

- (K) - Full Depth Replacement on Subgrade Treatment Type - TBD
- (K1) - Milling Asphalt 1.5" then 165 #SYS QC/QA-HMA, 2, 64, Surface 9.5 mm on Existing Pavement
- (F) - Sidewalk, Concrete, 4"
- (26) - Sodding

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: TJH	DRAWN: SJC	
CHECKED: MTH	CHECKED: TJH	

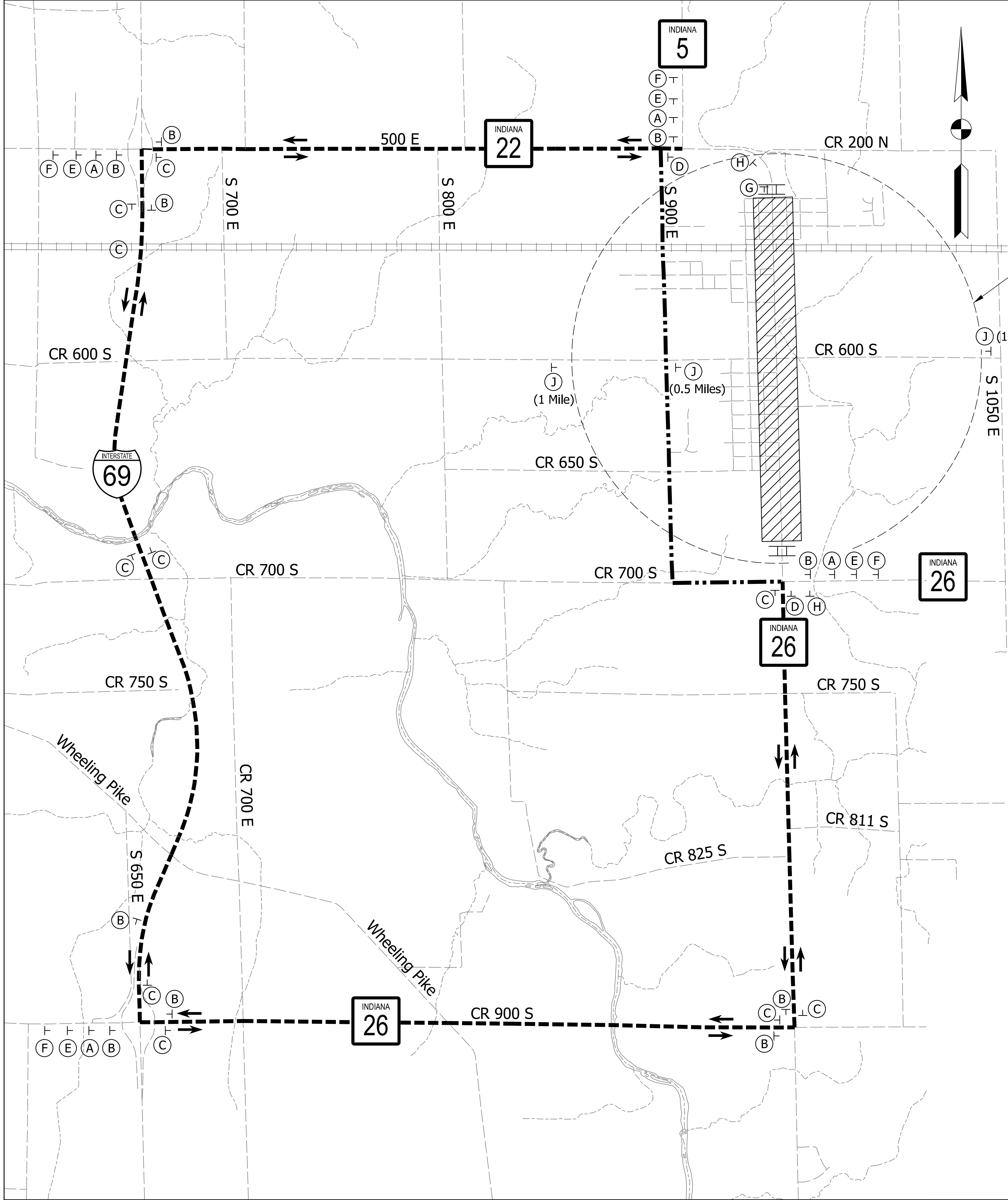
INDIANA  
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION  
LINE "A" - SR 22

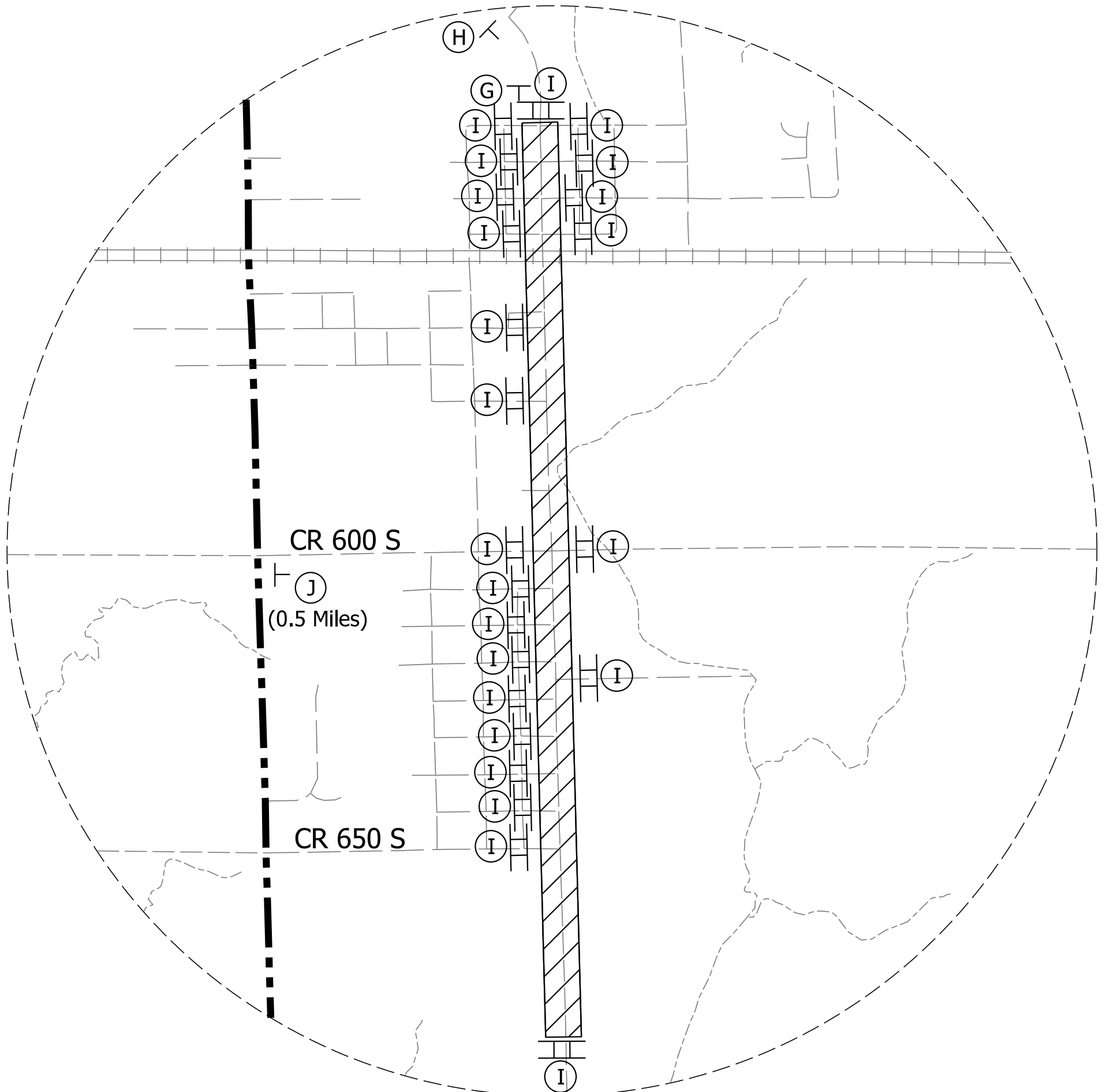
HORIZONTAL SCALE	BRIDGE FILE
1" = 8'	TBD
VERTICAL SCALE	DESIGNATION
N/A	1702864 & 1800168
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 172
CONTRACT	PROJECT
R-41565	1800168

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\$DATES\$





See Detail "A"



Detail "A"

<p>(A)</p>	<p>(B)</p>	<p>(C)</p>	<p>(D)</p>	<p>(E)</p>
<p>(F)</p>	<p>(G)</p>	<p>(H)</p>	<p>(I)</p>	<p>(J)</p>

**Legend**

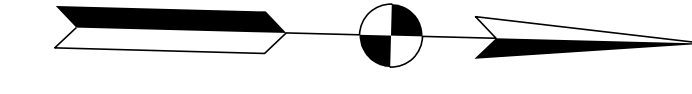
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- Unofficial Detour Route
- ▤ Barricade III-B

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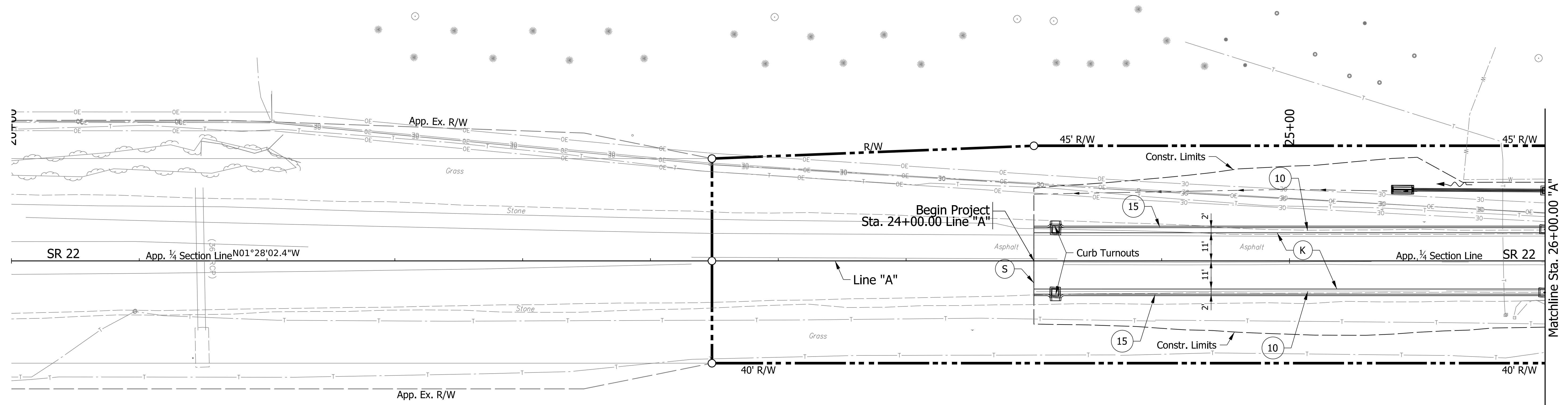
RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: MTH	DRAWN: SJC	
CHECKED: TJH	CHECKED: TJH	

<b>INDIANA DEPARTMENT OF TRANSPORTATION</b>
<b>DETOUR ROUTE</b>

HORIZONTAL SCALE N.T.S.	BRIDGE FILE TBD
VERTICAL SCALE N/A	DESIGNATION 1702864 & 1800168
SURVEY BOOK ELECTRONIC	SHEETS 12 of 172
CONTRACT R-41565	PROJECT 1800168



TAYLOR UNIVERSITY



LELAND E. BOREN

Notes to Reviewer:  
1. Legend Pavement design assumed for Estimate purposes. Final Pavement Design not yet available.

**Legend**

- (K) Full Depth Replacement, Consisting of:  
165 #/SYS OC/QA-HMA, 2, 64, Surface, 9.5 mm on  
275 #/SYS OC/QA-HMA, 2, 64, Intermediate, 19.0 mm on  
600 #/SYS OC/QA-HMA, 2, 64, Base, 25.0 mm on  
300 #/SYS OC/QA-HMA, 4, 76, Intermediate, OG, 19.0 mm on  
6" Compacted Aggregate No. 53 on  
Subgrade Treatment, Type IC
- (K1) Milling, Asphalt, 1.5", then  
165 #/SYS QC/QA-HMA, 2, 64, Surface, 9.5 mm on  
Existing Pavement
- (K2) Class I Drive, Consisting of:  
PCCP for Approaches, 6 IN. on  
6" Dense Graded Subbase on  
Subgrade Treatment, Type II
- (K3) Class III Drive, Consisting of:  
PCCP for Approaches, 9 IN. with  
Geogrid, Type IB on  
6" Dense Graded Subbase on  
Subgrade Treatment, Type II
- (R) Public Road Approach, Consisting of:  
1100 #/SYS HMA for Approaches, Type B on  
Subgrade Treatment, Type IC
- (F) Sidewalk, Concrete
- (S) Saw Cut
- (10) Curb and Gutter, Concrete

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: MTH	DRAWN: SJC	
CHECKED: TJH	CHECKED: TJH	

INDIANA  
DEPARTMENT OF TRANSPORTATION

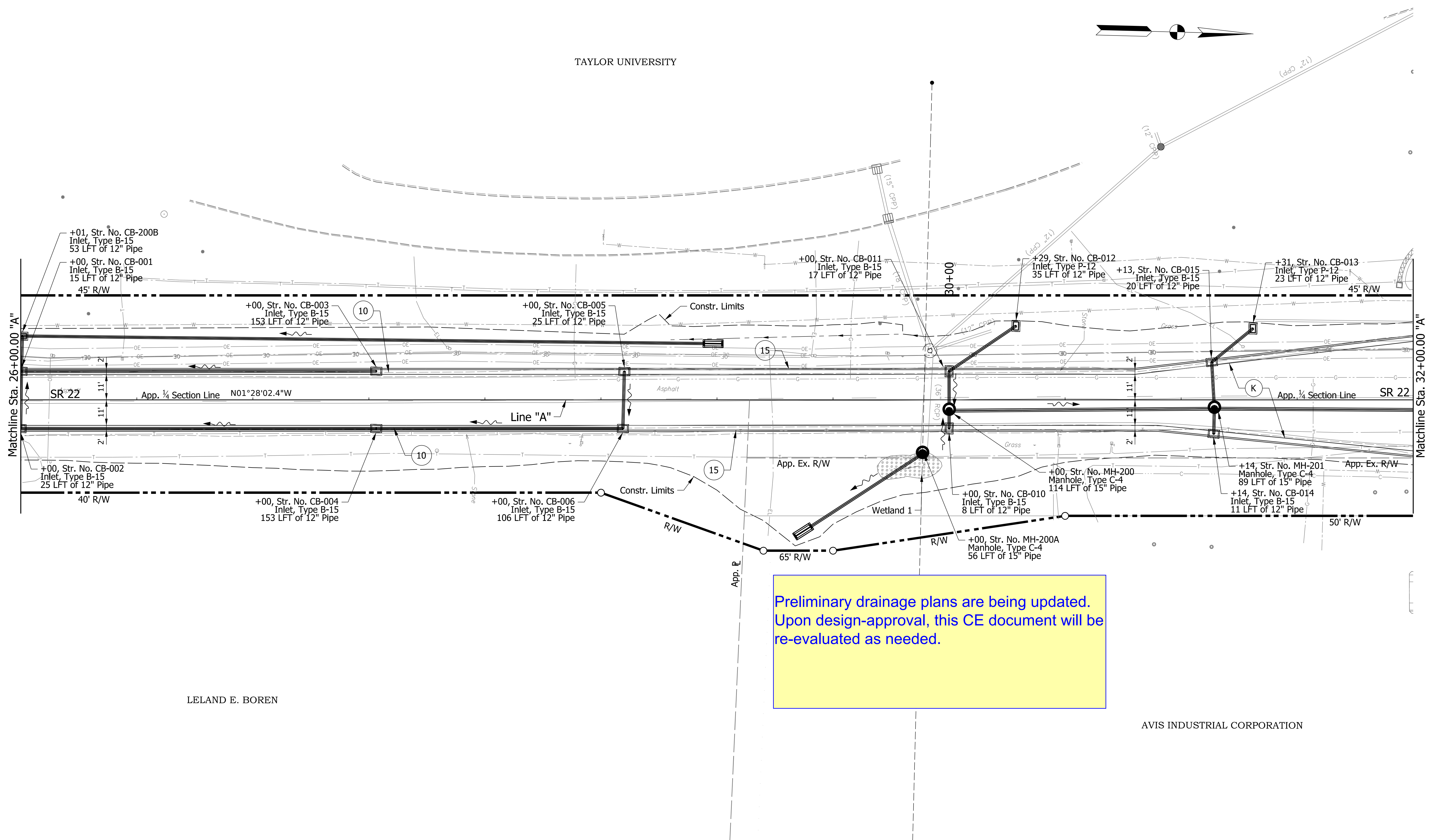
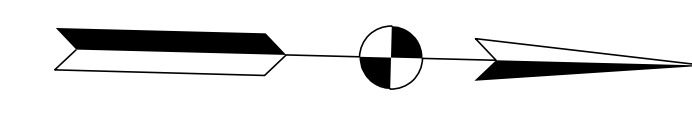
**PLAN SHEET  
LINE "A" - SR 22**

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	TBD
VERTICAL SCALE	DESIGNATION
N/A	1702864 & 1800168
SURVEY BOOK	SHEETS
ELECTRONIC	13 of 172
CONTRACT	PROJECT
R-41565	1800168

\$FILES\$  
\$DATES\$



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Preliminary drainage plans are being updated.  
Upon design-approval, this CE document will be  
re-evaluated as needed.

LELAND E. BOREN

AVIS INDUSTRIAL CORPORATION

**Legend**

- (K) Full Depth Replacement, Consisting of:  
165 #/SYS OC/QA-HMA, 2, 64, Surface, 9.5 mm on  
275 #/SYS OC/QA-HMA, 2, 64, Intermediate, 19.0 mm on  
660 #/SYS OC/QA-HMA, 2, 64, Base, 25.0 mm on  
300 #/SYS OC/QA-HMA, 4, 76, Intermediate, OG, 19.0 mm on  
6" Compacted Aggregate No. 53 on  
Subgrade Treatment, Type IC
- (K1) Milling, Asphalt, 1.5", then  
165 #/SYS QC/QA-HMA, 2, 64, Surface, 9.5 mm on  
Existing Pavement
- (K2) Class I Drive, Consisting of:  
PCCP for Approaches, 6 IN. on  
6" Dense Graded Subbase on  
Subgrade Treatment, Type II
- (K3) Class III Drive, Consisting of:  
PCCP for Approaches, 9 IN. with  
Geogrid, Type IB on  
6" Dense Graded Subbase on  
Subgrade Treatment, Type II
- (R) Public Road Approach, Consisting of:  
1100 #/SYS HMA for Approaches, Type B on  
Subgrade Treatment, Type IC
- (F) Sidewalk, Concrete
- (S) Saw Cut
- (10) Curb and Gutter, Concrete

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: MTH	DRAWN: SJC	
CHECKED: TJH	CHECKED: TJH	

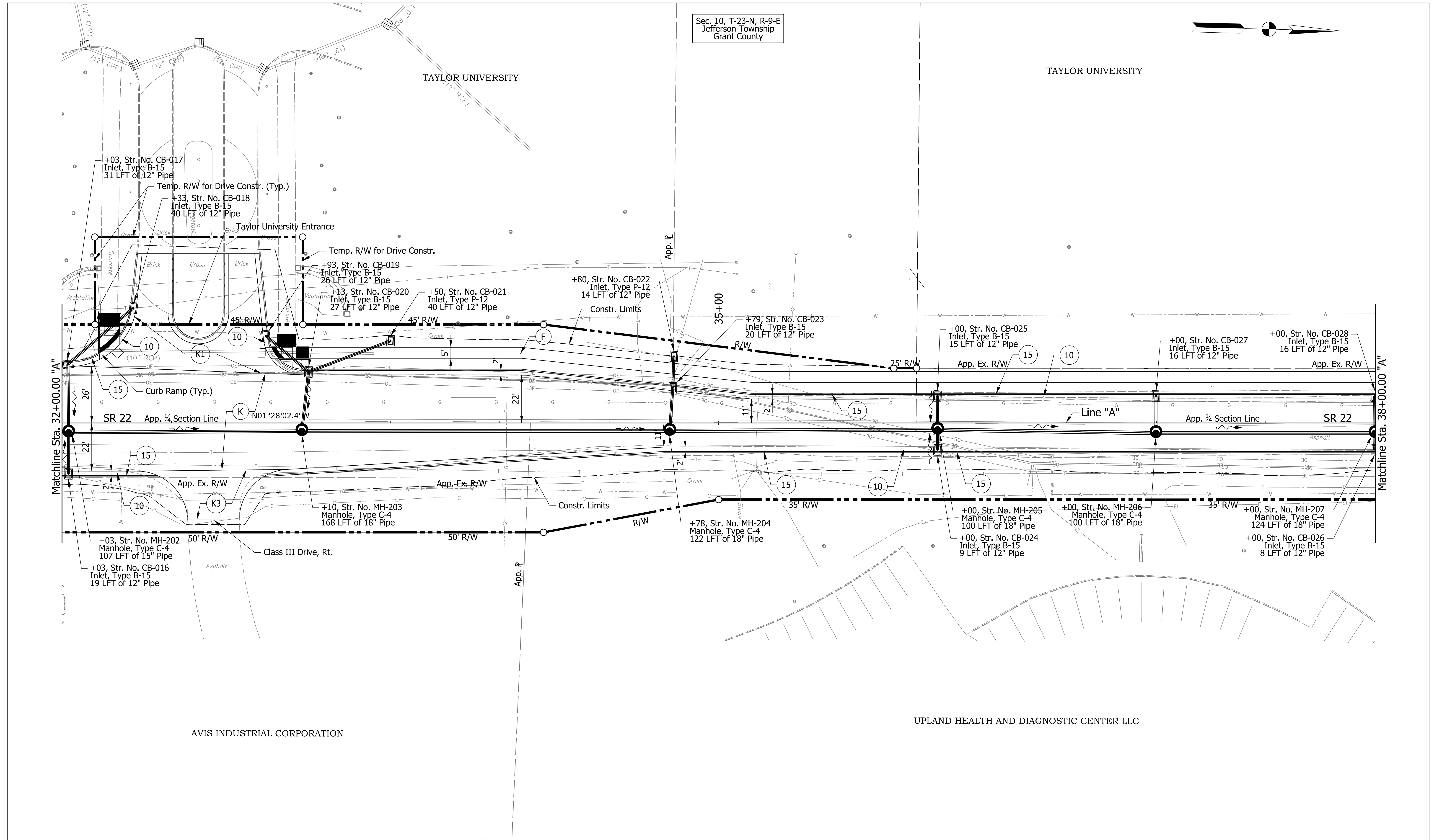
INDIANA  
DEPARTMENT OF TRANSPORTATION

PLAN SHEET  
LINE "A" - SR 22

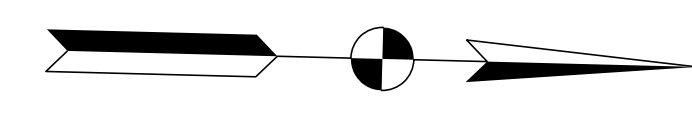
HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	TBD
VERTICAL SCALE	DESIGNATION
N/A	1702864 & 1800168
SURVEY BOOK	SHEETS
ELECTRONIC	15 of 172
CONTRACT	PROJECT
R-41565	1800168

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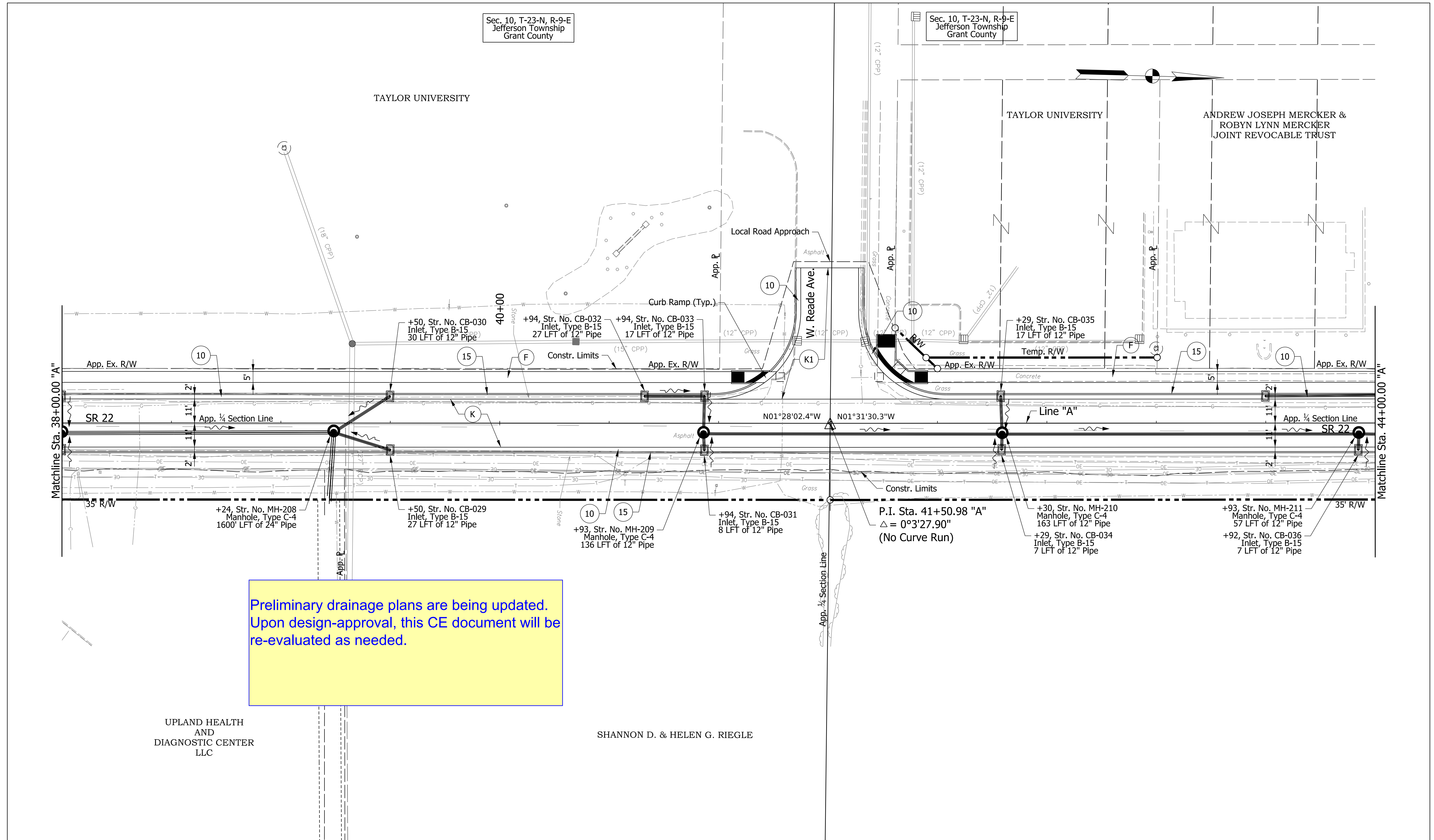
Sec. 10, T-23-N, R-9-E  
Jefferson Township  
Grant County



<b>Legend</b> (K) Full Depth Replacement, Consisting of: 165 #/SYS OC/QA-HMA, 2, 64, Surface, 9.5 mm on 275 #/SYS OC/QA-HMA, 2, 64, Intermediate, 19.0 mm on 650 #/SYS OC/QA-HMA, 2, 64, Base, 25.0 mm on 300 #/SYS OC/QA-HMA, 4, 76, Intermediate, OG, 19.0 mm on 6" Compacted Aggregate No. 53 on Subgrade Treatment, Type IC  (K1) Milling, Asphalt, 1.5", then 165 #/SYS QC/QA-HMA, 2, 64, Surface, 9.5 mm on Existing Pavement  (K2) Class I Drive, Consisting of: PCCP for Approaches, 6 IN. on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (K3) Class III Drive, Consisting of: PCCP for Approaches, 9 IN. with Geogrid, Type IB on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (R) Public Road Approach, Consisting of: 1100 #/SYS HMA for Approaches, Type B on Subgrade Treatment, Type IC  (F) Sidewalk, Concrete  (S) Saw Cut  (10) Curb and Gutter, Concrete	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____  DESIGNED: MTH DRAWN: SJC  CHECKED: TJH CHECKED: TJH	INDIANA DEPARTMENT OF TRANSPORTATION  PLAN SHEET LINE "A" - SR 22	HORIZONTAL SCALE 1" = 20' VERTICAL SCALE N/A SURVEY BOOK ELECTRONIC CONTRACT R-41565	BRIDGE FILE TBD DESIGNATION 1702864 & 1800168 SHEETS 17 of 172 PROJECT 1800168
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\$DATES\$



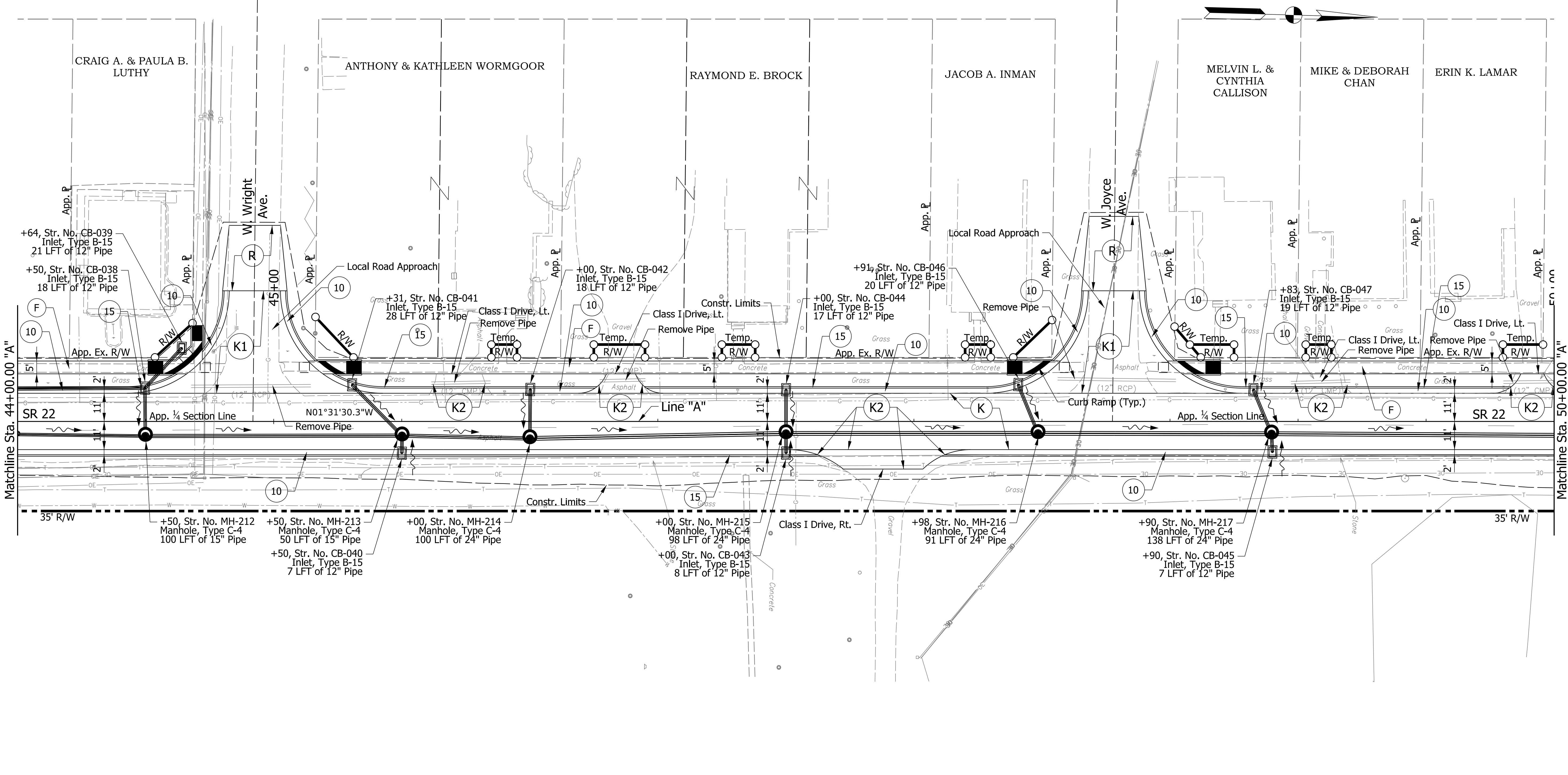


Preliminary drainage plans are being updated. Upon design-approval, this CE document will be re-evaluated as needed.

<b>Legend</b> (K) Full Depth Replacement, Consisting of: 165 #/SYS OC/QA-HMA, 2, 64, Surface, 9.5 mm on 275 #/SYS OC/QA-HMA, 2, 64, Intermediate, 19.0 mm on 650 #/SYS OC/QA-HMA, 2, 64, Base, 25.0 mm on 300 #/SYS OC/QA-HMA, 4, 76, Intermediate, OG, 19.0 mm on 6" Compacted Aggregate No. 53 on Subgrade Treatment, Type IC  (K1) Milling, Asphalt, 1.5", then 165 #/SYS QC/QA-HMA, 2, 64, Surface, 9.5 mm on Existing Pavement  (K2) Class I Drive, Consisting of: PCPP for Approaches, 6 IN. on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (K3) Class III Drive, Consisting of: PCPP for Approaches, 9 IN. with Geogrid, Type IB on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (R) Public Road Approach, Consisting of: 1100 #/SYS HMA for Approaches, Type B on Subgrade Treatment, Type IC  (F) Sidewalk, Concrete  (S) Saw Cut  (10) Curb and Gutter, Concrete	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____  DESIGNED: MTH DRAWN: SJC CHECKED: TJH CHECKED: TJH	INDIANA DEPARTMENT OF TRANSPORTATION  PLAN SHEET LINE "A" - SR 22	HORIZONTAL SCALE 1" = 20' VERTICAL SCALE N/A  SURVEY BOOK ELECTRONIC CONTRACT R-41565 BRIDGE FILE TBD DESIGNATION 1702864 & 1800168 SHEETS 19 of 172 PROJECT 1800168
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\$DATES\$





CLARENCE J. PORTER AND DORIS A. PORTER FAMILY TRUST

**Legend**

- (K) Full Depth Replacement, Consisting of:  
165 #/SYS OC/QA-HMA, 2, 64, Surface, 9.5 mm on  
275 #/SYS OC/QA-HMA, 2, 64, Intermediate, 19.0 mm on  
600 #/SYS OC/QA-HMA, 2, 64, Base, 25.0 mm on  
300 #/SYS OC/QA-HMA, 4, 76, Intermediate, OG, 19.0 mm on  
6" Compacted Aggregate No. 53 on  
Subgrade Treatment, Type IC
- (K1) Milling, Asphalt, 1.5", then  
165 #/SYS OC/QA-HMA, 2, 64, Surface, 9.5 mm on  
Existing Pavement
- (K2) Class I Drive, Consisting of:  
PCCP for Approaches, 6 IN. on  
6" Dense Graded Subbase on  
Subgrade Treatment, Type II
- (K3) Class III Drive, Consisting of:  
PCCP for Approaches, 9 IN. with  
Geogrid, Type IB on  
6" Dense Graded Subbase on  
Subgrade Treatment, Type II
- (R) Public Road Approach, Consisting of:  
1100 #/SYS HMA for Approaches, Type B on  
Subgrade Treatment, Type IC
- (F) Sidewalk, Concrete
- (S) Saw Cut
- (10) Curb and Gutter, Concrete

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: MTH	DRAWN: SJC	
CHECKED: TJH	CHECKED: TJH	

INDIANA  
DEPARTMENT OF TRANSPORTATION

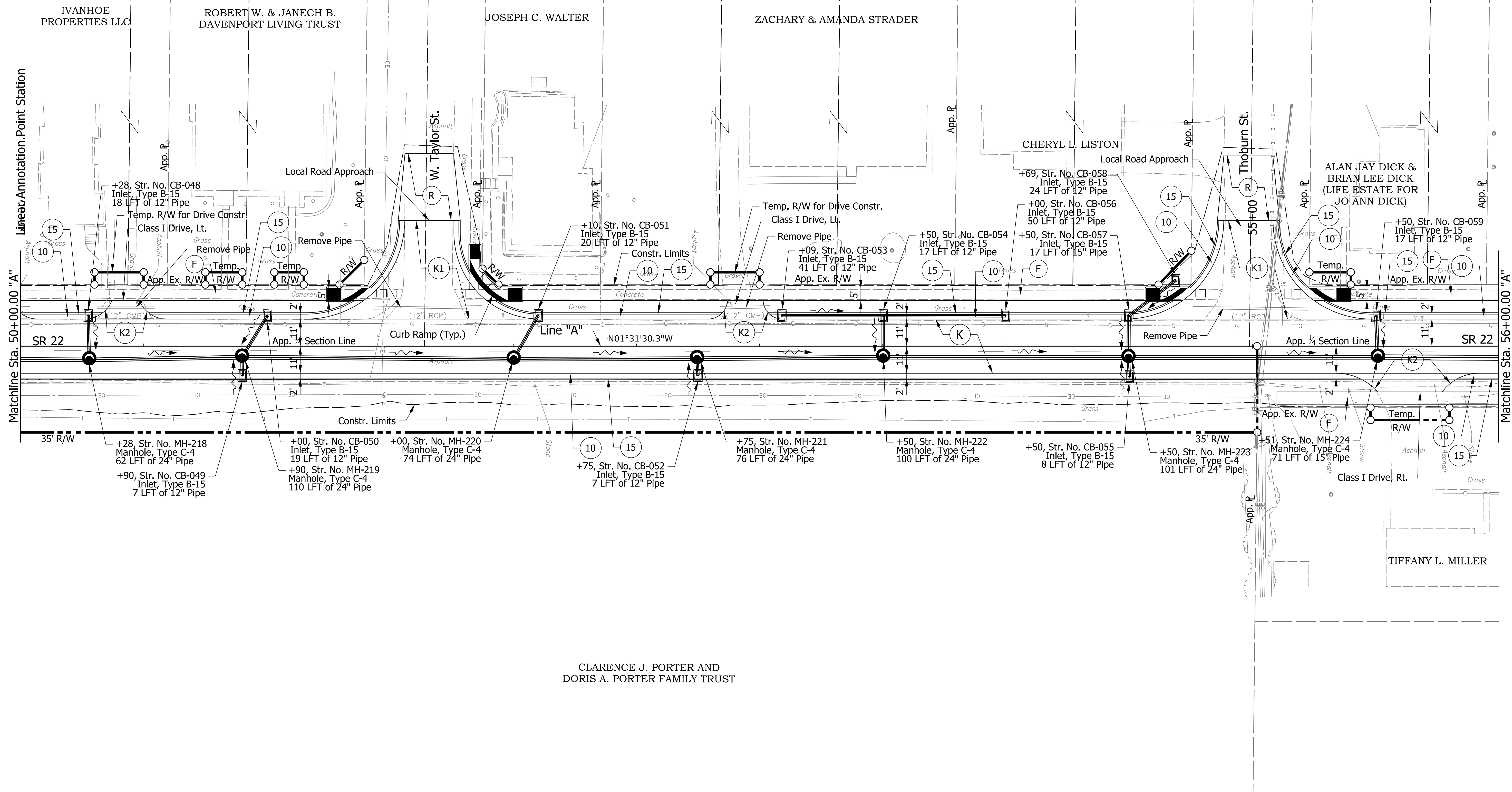
PLAN SHEET  
LINE "A" - SR 22

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	TBD
VERTICAL SCALE	DESIGNATION
N/A	1702864 & 1800168
SURVEY BOOK	SHEETS
ELECTRONIC	21 of 172
CONTRACT	PROJECT
R-41565	1800168

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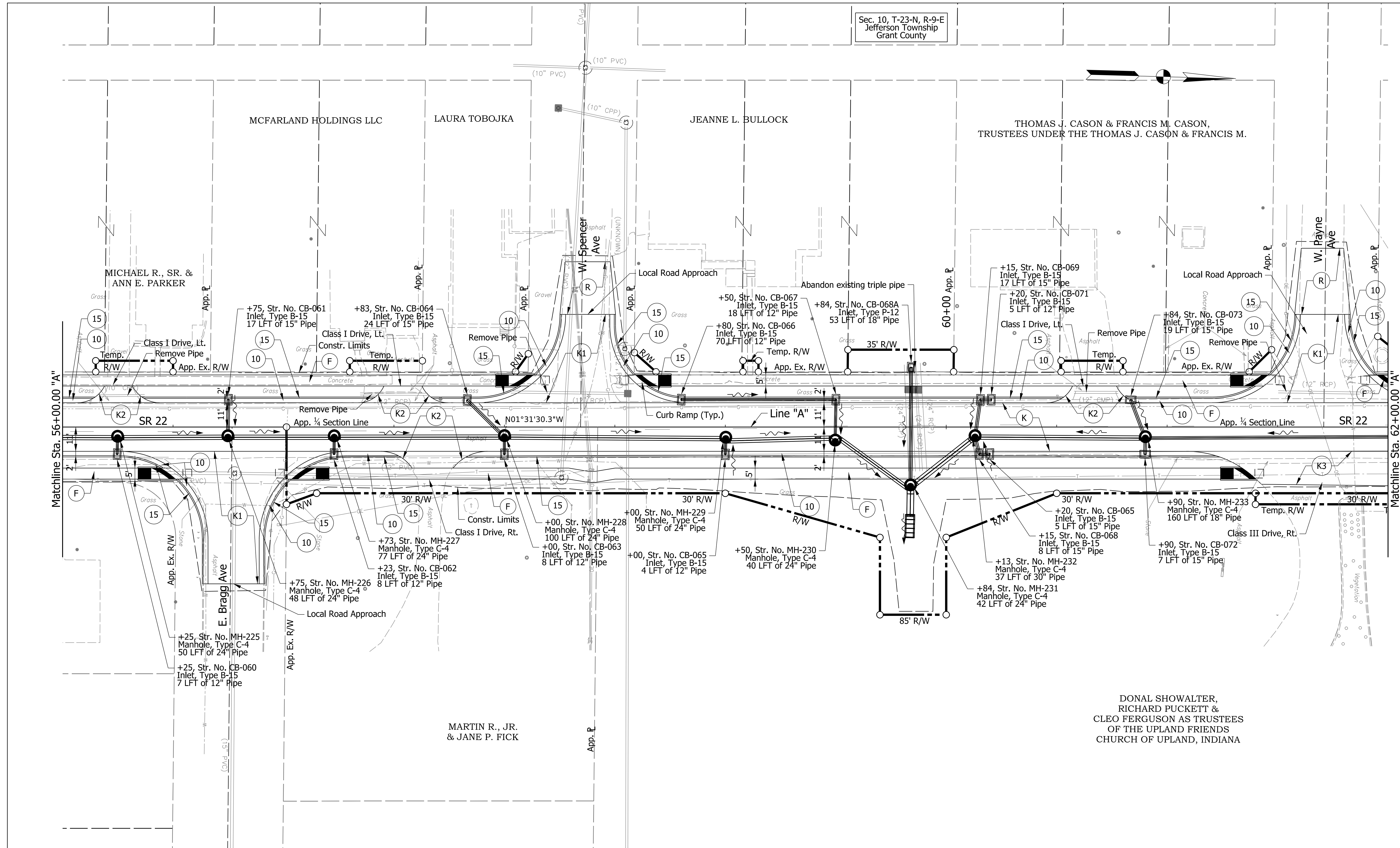


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Jefferson Township  
Grant County



<b>Legend</b> (K) Full Depth Replacement, Consisting of: 165 #/SYS OC/QA-HMA, 2, 64, Surface, 9.5 mm on 275 #/SYS OC/QA-HMA, 2, 64, Intermediate, 19.0 mm on 650 #/SYS OC/QA-HMA, 2, 64, Base, 25.0 mm on 300 #/SYS OC/QA-HMA, 4, 76, Intermediate, OG, 19.0 mm on 6" Compacted Aggregate No. 53 on Subgrade Treatment, Type IC  (K1) Milling, Asphalt, 1.5", then 165 #/SYS QC/QA-HMA, 2, 64, Surface, 9.5 mm on Existing Pavement  (K2) Class I Drive, Consisting of: PCCP for Approaches, 6 IN. on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (K3) Class III Drive, Consisting of: PCCP for Approaches, 9 IN. with Geogrid, Type IB on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (R) Public Road Approach, Consisting of: 1100 #/SYS HMA for Approaches, Type B on Subgrade Treatment, Type IC  (F) Sidewalk, Concrete  (S) Saw Cut  (10) Curb and Gutter, Concrete	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____		HORIZONTAL SCALE 1" = 20' VERTICAL SCALE N/A SURVEY BOOK ELECTRONIC CONTRACT R-41565		BRIDGE FILE TBD DESIGNATION 1702864 & 1800168 SHEETS 23 of 172 PROJECT 1800168			
	DESIGNED: MTH DRAWN: SJC CHECKED: TJH CHECKED: TJH						INDIANA DEPARTMENT OF TRANSPORTATION  PLAN SHEET LINE "A" - SR 22	
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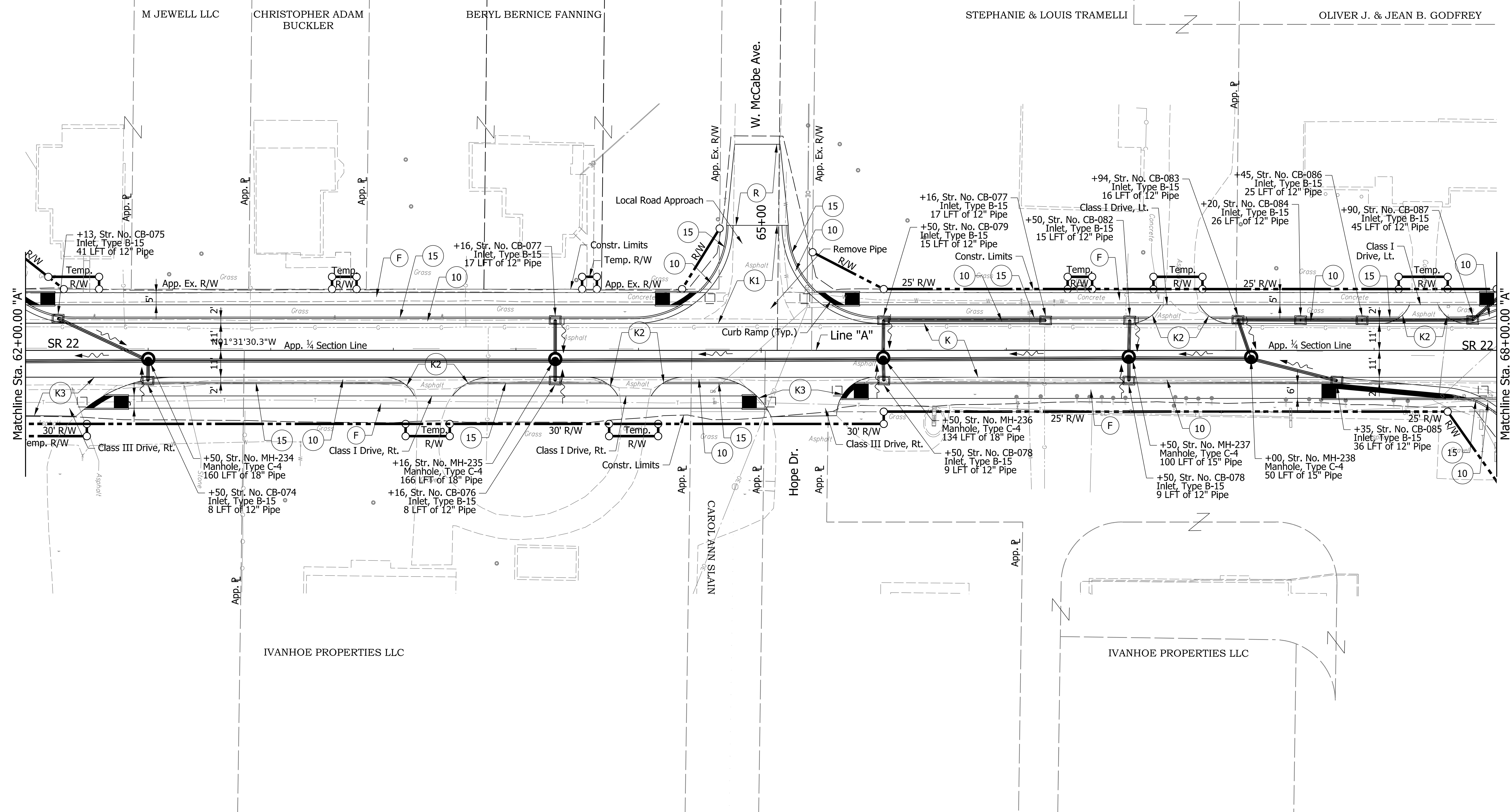
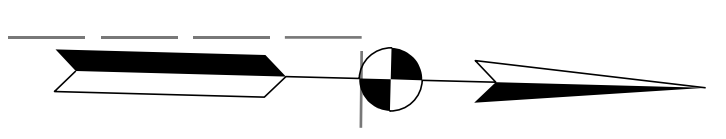
DONAL SHOWALTER,  
RICHARD PUCKETT &  
CLEO FERGUSON AS TRUSTEES  
OF THE UPLAND FRIENDS  
CHURCH OF UPLAND, INDIANA

<b>Legend</b> (K) Full Depth Replacement, Consisting of: 165 #/SYS OC/QA-HMA, 2, 64, Surface, 9.5 mm on 275 #/SYS OC/QA-HMA, 2, 64, Intermediate, 19.0 mm on 650 #/SYS OC/QA-HMA, 2, 64, Base, 25.0 mm on 300 #/SYS OC/QA-HMA, 4, 76, Intermediate, OG, 19.0 mm on Subgrade Treatment, Type IC  (K1) Milling, Asphalt, 1.5", then 165 #/SYS OC/QA-HMA, 2, 64, Surface, 9.5 mm on Existing Pavement  (K2) Class I Drive, Consisting of: PCCP for Approaches, 6 IN. on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (K3) Class III Drive, Consisting of: PCCP for Approaches, 9 IN. with Geogrid, Type IB on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (R) Public Road Approach, Consisting of: 1100 #/SYS HMA for Approaches, Type B on Subgrade Treatment, Type IC  (F) Sidewalk, Concrete  (S) Saw Cut  (10) Curb and Gutter, Concrete	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____  DESIGNED: MTH DRAWN: SJG  CHECKED: TJH CHECKED: TJH	INDIANA DEPARTMENT OF TRANSPORTATION  PLAN SHEET LINE "A" - SR 22	HORIZONTAL SCALE 1" = 20' VERTICAL SCALE N/A SURVEY BOOK ELECTRONIC CONTRACT R-41565	BRIDGE FILE TBD DESIGNATION 1702864 & 1800168 SHEETS 25 of 172 PROJECT 1800168
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Grant County

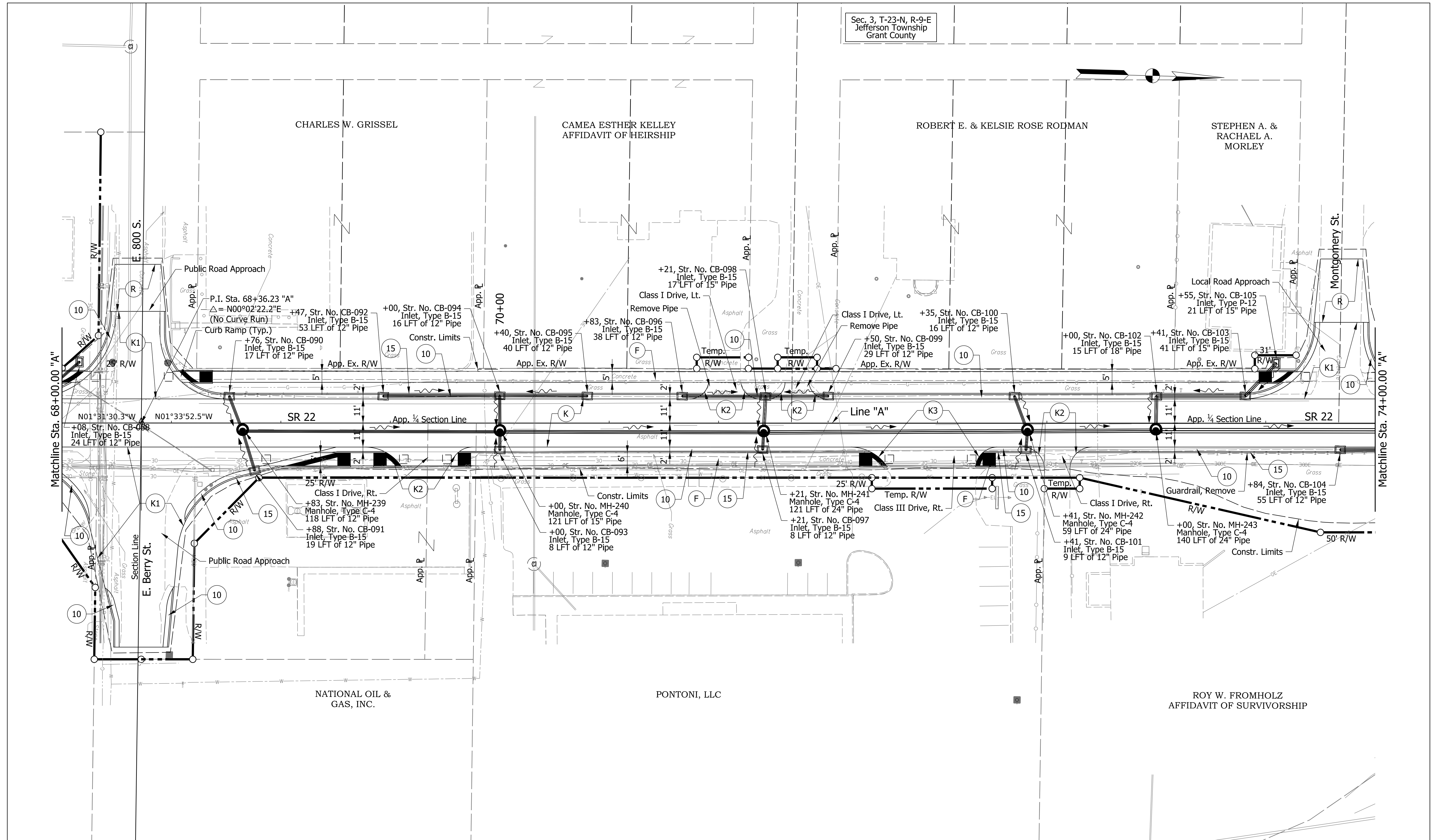
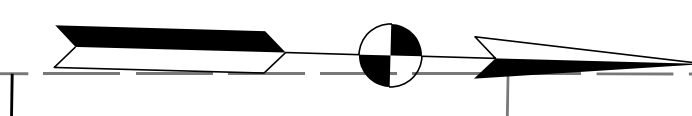


<b>Legend</b> (K) Full Depth Replacement, Consisting of: 165 #/SYS OC/QA-HMA, 2, 64, Surface, 9.5 mm on 275 #/SYS OC/QA-HMA, 2, 64, Intermediate, 19.0 mm on 660 #/SYS OC/QA-HMA, 2, 64, Base, 25.0 mm on 300 #/SYS OC/QA-HMA, 4, 76, Intermediate, OG, 19.0 mm on 6" Compacted Aggregate No. 53 on Subgrade Treatment, Type IC  (K1) Milling, Asphalt, 1.5", then 165 #/SYS QC/QA-HMA, 2, 64, Surface, 9.5 mm on Existing Pavement  (K2) Class I Drive, Consisting of: PCCP for Approaches, 6 IN. on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (K3) Class III Drive, Consisting of: PCCP for Approaches, 9 IN. with Geogrid, Type IB on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (R) Public Road Approach, Consisting of: 1100 #/SYS HMA for Approaches, Type B on Subgrade Treatment, Type IC  (F) Sidewalk, Concrete  (S) Saw Cut  (10) Curb and Gutter, Concrete	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____  DESIGNED: MTH DRAWN: SJC  CHECKED: TJH CHECKED: TJH	INDIANA DEPARTMENT OF TRANSPORTATION  PLAN SHEET LINE "A" - SR 22	HORIZONTAL SCALE 1" = 20' VERTICAL SCALE N/A SURVEY BOOK ELECTRONIC CONTRACT R-41565	BRIDGE FILE TBD DESIGNATION 1702864 & 1800168 SHEETS 27 of 172 PROJECT 1800168
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Grant County

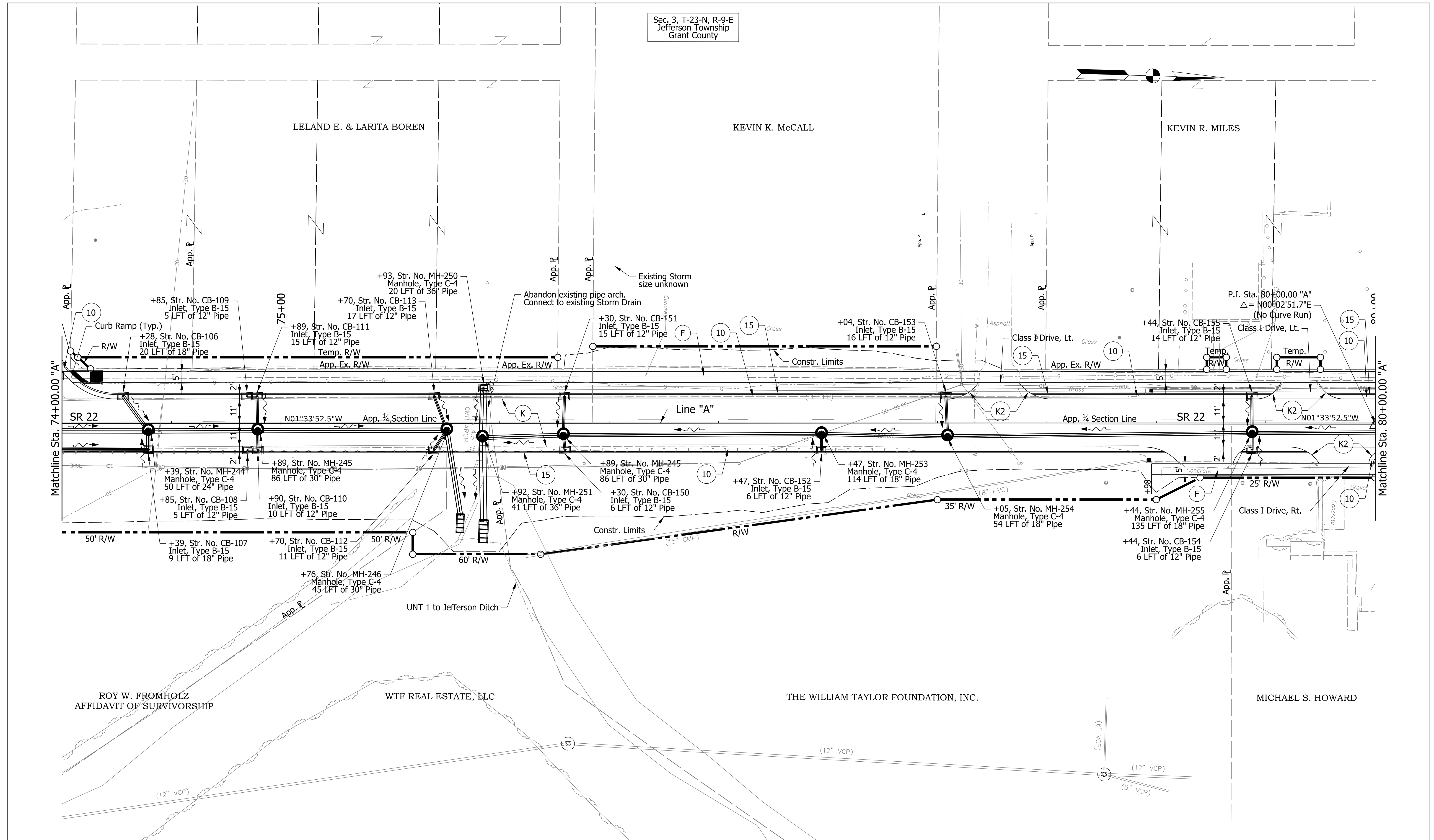


<b>Legend</b> (K) Full Depth Replacement, Consisting of: 165 #/SYS OC/OA-HMA, 2, 64, Surface, 9.5 mm on 275 #/SYS OC/OA-HMA, 2, 64, Intermediate, 19.0 mm on 660 #/SYS OC/OA-HMA, 2, 64, Base, 25.0 mm on 300 #/SYS OC/OA-HMA, 4, 76, Intermediate, OG, 19.0 mm on 6" Compacted Aggregate No. 53 on Subgrade Treatment, Type IC  (K1) Milling, Asphalt, 1.5", then 165 #/SYS QC/OA-HMA, 2, 64, Surface, 9.5 mm on Existing Pavement  (K2) Class I Drive, Consisting of: PCCP for Approaches, 6 IN. on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (K3) Class III Drive, Consisting of: PCCP for Approaches, 9 IN. with Geogrid, Type IB on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (R) Public Road Approach, Consisting of: 1100 #/SYS HMA for Approaches, Type B on Subgrade Treatment, Type IC  (F) Sidewalk, Concrete  (S) Saw Cut  (10) Curb and Gutter, Concrete	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____  DESIGNED: MTH DRAWN: SJC  CHECKED: TJH CHECKED: TJH	INDIANA DEPARTMENT OF TRANSPORTATION  PLAN SHEET LINE "A" - SR 22	HORIZONTAL SCALE 1" = 20' VERTICAL SCALE N/A SURVEY BOOK ELECTRONIC CONTRACT R-41565	BRIDGE FILE TBD DESIGNATION 1702864 & 1800168 SHEETS 29 of 172 PROJECT 1800168
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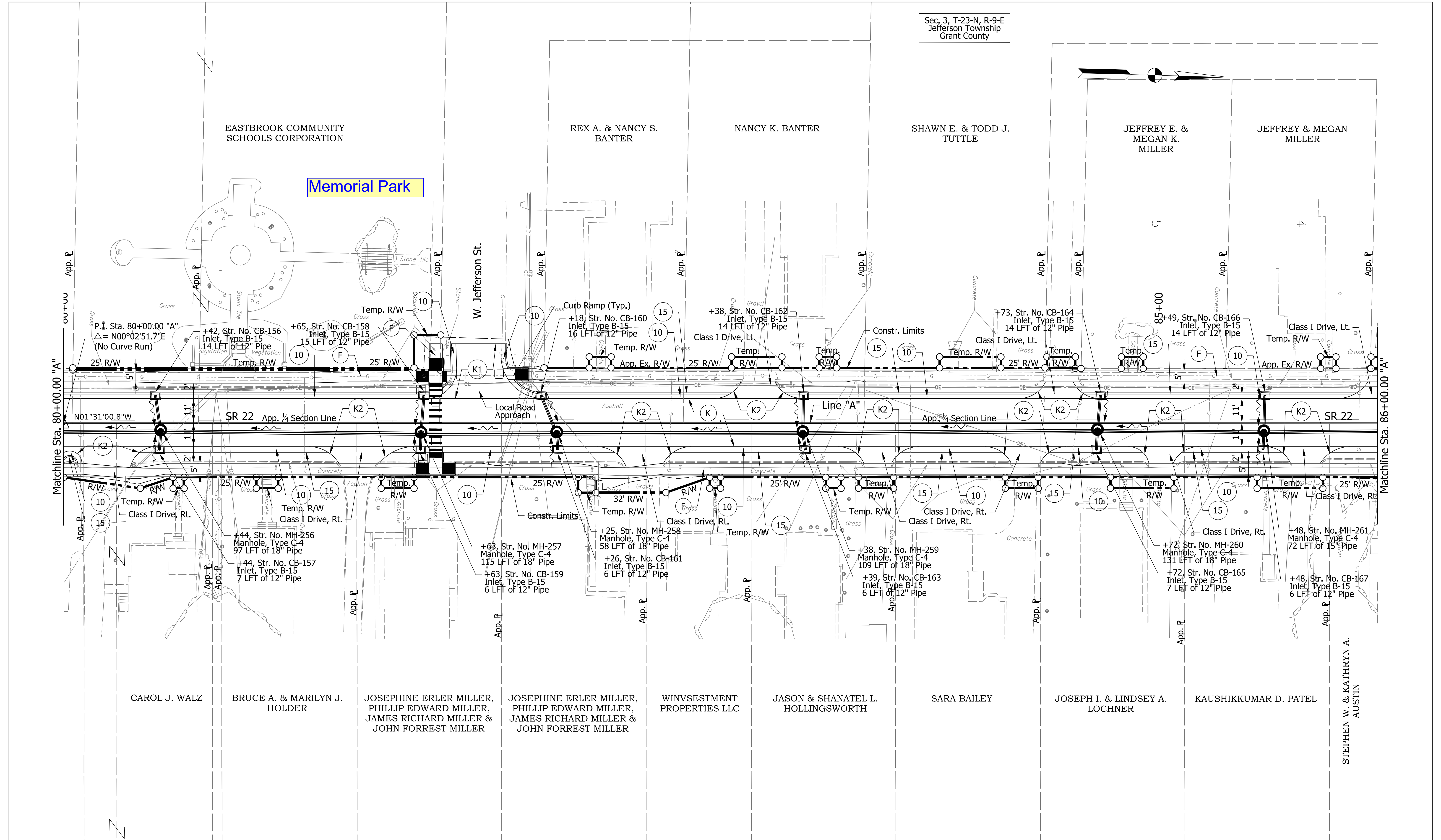
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Jefferson Township  
Grant County



<b>Legend</b> (K) Full Depth Replacement, Consisting of: 165 #/SYS OC/QA-HMA, 2, 64, Surface, 9.5 mm on 275 #/SYS OC/QA-HMA, 2, 64, Intermediate, 19.0 mm on 660 #/SYS OC/QA-HMA, 2, 64, Base, 25.0 mm on 300 #/SYS OC/QA-HMA, 4, 76, Intermediate, OG, 19.0 mm on 6" Compacted Aggregate No. 53 on Subgrade Treatment, Type IC  (K1) Milling, Asphalt, 1.5", then 165 #/SYS OC/QA-HMA, 2, 64, Surface, 9.5 mm on Existing Pavement  (K2) Class I Drive, Consisting of: PCCP for Approaches, 6 IN. on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (K3) Class III Drive, Consisting of: PCCP for Approaches, 9 IN. with Geogrid, Type IB on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (R) Public Road Approach, Consisting of: 1100 #/SYS HMA for Approaches, Type B on Subgrade Treatment, Type IC  (F) Sidewalk, Concrete  (S) Saw Cut  (10) Curb and Gutter, Concrete	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____  DESIGNED: MTH DRAWN: SJC CHECKED: TJH CHECKED: TJH	HORIZONTAL SCALE 1" = 20' VERTICAL SCALE N/A  SURVEY BOOK ELECTRONIC CONTRACT R-41565	BRIDGE FILE TBD DESIGNATION 1702864 & 1800168  SHEETS of 172 PROJECT 1800168
	<b>INDIANA DEPARTMENT OF TRANSPORTATION</b>  <b>PLAN SHEET LINE "A" - SR 22</b>		

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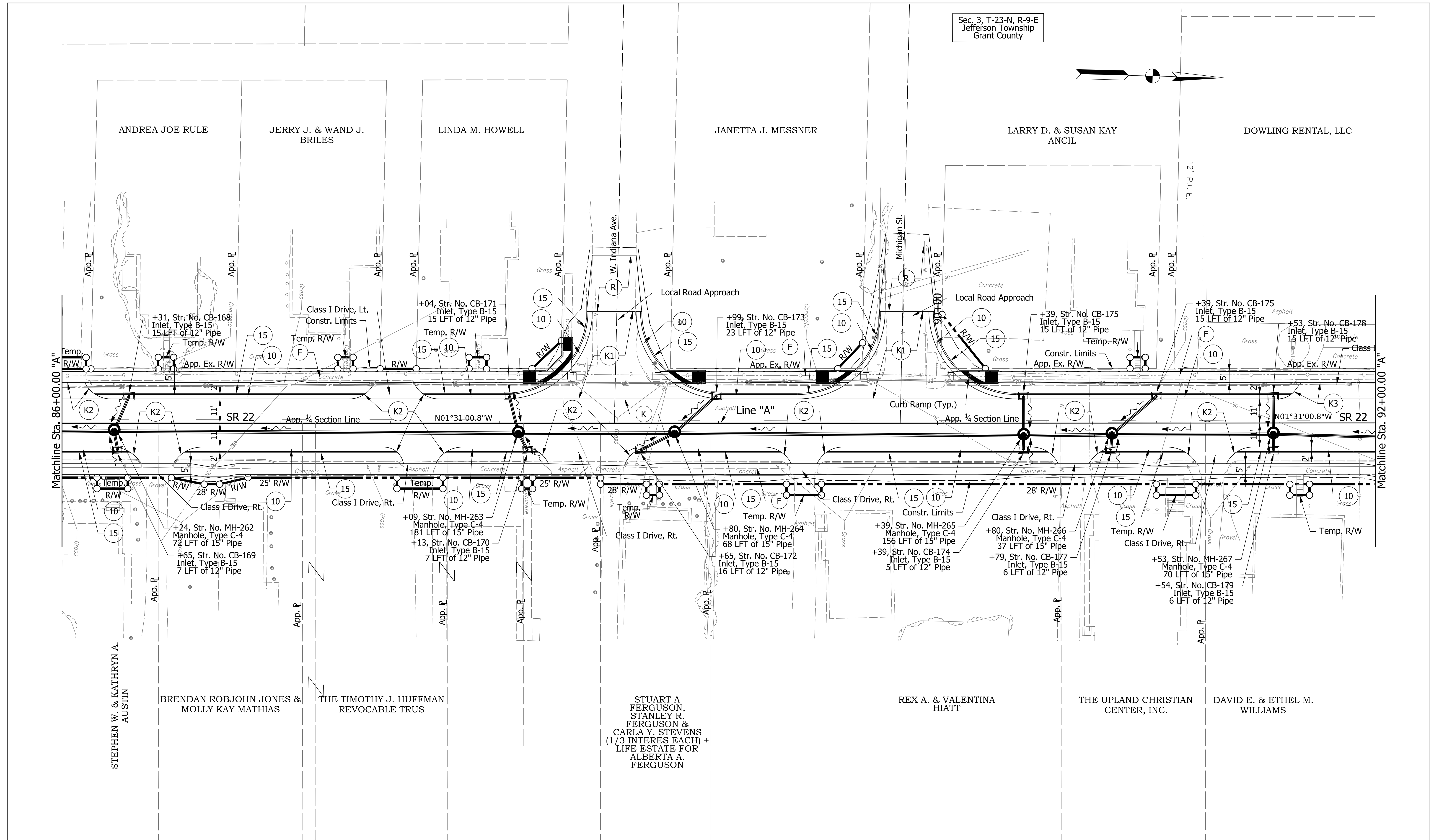
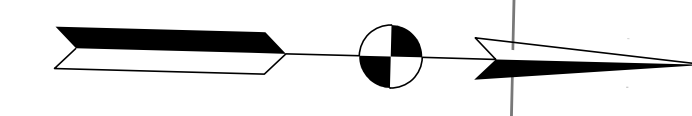


<b>Legend</b> (K) Full Depth Replacement, Consisting of: 165 #/SYS OC/QA-HMA, 2, 64, Surface, 9.5 mm on 275 #/SYS OC/QA-HMA, 2, 64, Intermediate, 19.0 mm on 660 #/SYS OC/QA-HMA, 2, 64, Base, 25.0 mm on 300 #/SYS OC/QA-HMA, 4, 76, Intermediate, OG, 19.0 mm on 6" Compacted Aggregate No. 53 on Subgrade Treatment, Type IC  (K1) Milling, Asphalt, 1.5", then 165 #/SYS OC/QA-HMA, 2, 64, Surface, 9.5 mm on Existing Pavement  (K2) Class I Drive, Consisting of: PCCP for Approaches, 6 IN. on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (K3) Class III Drive, Consisting of: PCCP for Approaches, 9 IN. with Geogrid, Type IB on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (R) Public Road Approach, Consisting of: 1100 #/SYS HMA for Approaches, Type B on Subgrade Treatment, Type IC  (F) Sidewalk, Concrete  (S) Saw Cut  (10) Curb and Gutter, Concrete	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____ DESIGNED: MTH DRAWN: SJG CHECKED: TJH CHECKED: TJH	INDIANA DEPARTMENT OF TRANSPORTATION  PLAN SHEET LINE "A" - SR 22	HORIZONTAL SCALE 1" = 20' VERTICAL SCALE N/A SURVEY BOOK ELECTRONIC CONTRACT R-41565	BRIDGE FILE TBD DESIGNATION 1702864 & 1800168 SHEETS 33 of 172 PROJECT 1800168
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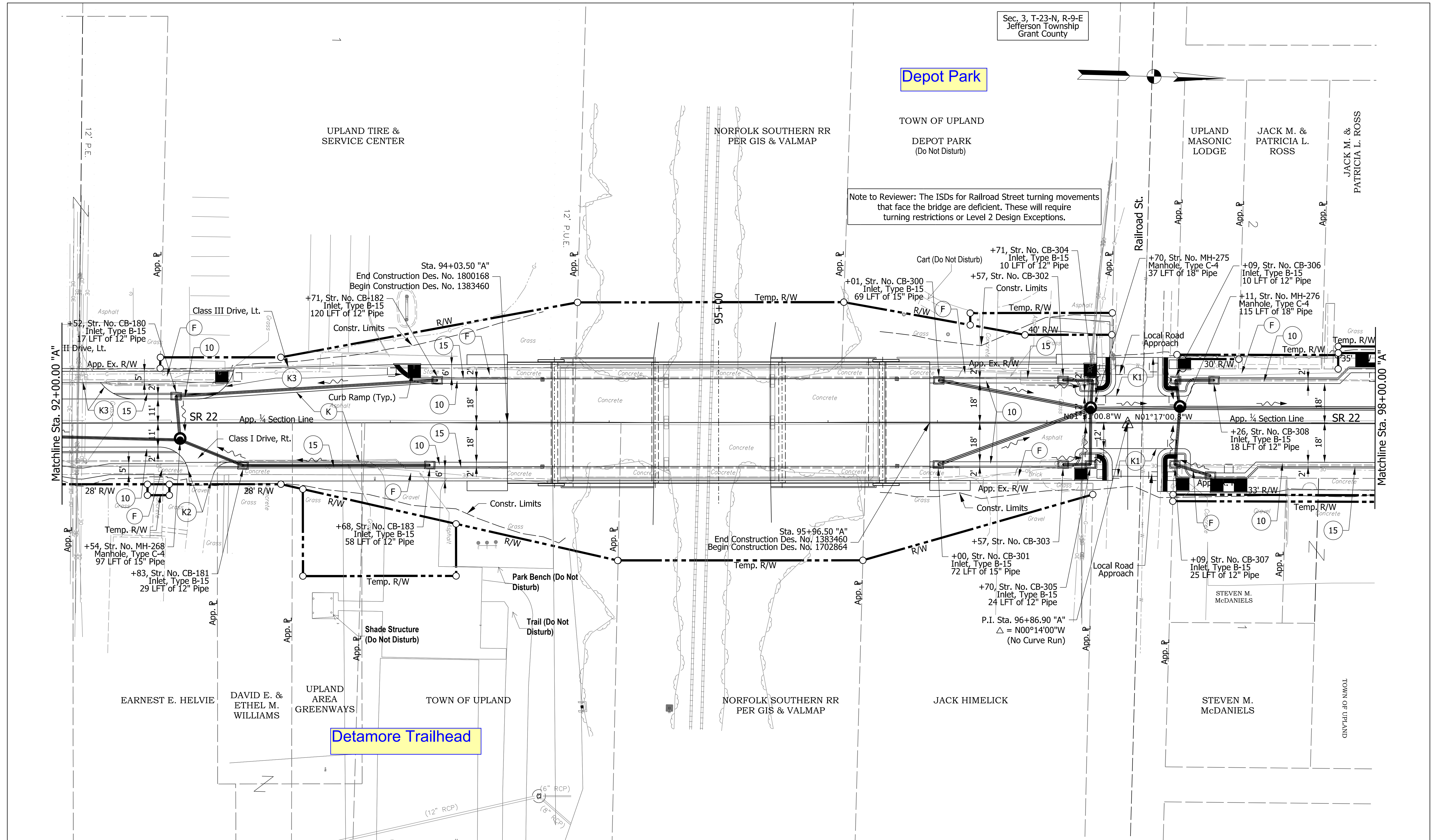
<b>Legend</b> (K) Full Depth Replacement, Consisting of: 165 #/SYS OC/QA-HMA, 2, 64, Surface, 9.5 mm on 275 #/SYS OC/QA-HMA, 2, 64, Intermediate, 19.0 mm on 650 #/SYS OC/QA-HMA, 2, 64, Base, 25.0 mm on 300 #/SYS OC/QA-HMA, 4, 76, Intermediate, OG, 19.0 mm on 6" Compacted Aggregate No. 53 on Subgrade Treatment, Type IC  (K1) Milling, Asphalt, 1.5", then 165 #/SYS QC/QA-HMA, 2, 64, Surface, 9.5 mm on Existing Pavement  (K2) Class I Drive, Consisting of: PCCP for Approaches, 6 IN. on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (K3) Class III Drive, Consisting of: PCCP for Approaches, 9 IN. with Geogrid, Type IB on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (R) Public Road Approach, Consisting of: 1100 #/SYS HMA for Approaches, Type B on Subgrade Treatment, Type IC  (F) Sidewalk, Concrete  (S) Saw Cut  (10) Curb and Gutter, Concrete	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____  DESIGNED: MTH DRAWN: SJC CHECKED: TJH CHECKED: TJH	INDIANA DEPARTMENT OF TRANSPORTATION  PLAN SHEET LINE "A" - SR 22	HORIZONTAL SCALE 1" = 20' VERTICAL SCALE N/A SURVEY BOOK ELECTRONIC CONTRACT R-41565	BRIDGE FILE TBD DESIGNATION 1702864 & 1800168 SHEETS 35 of 172 PROJECT 1800168
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Grant County

**Depot Park**



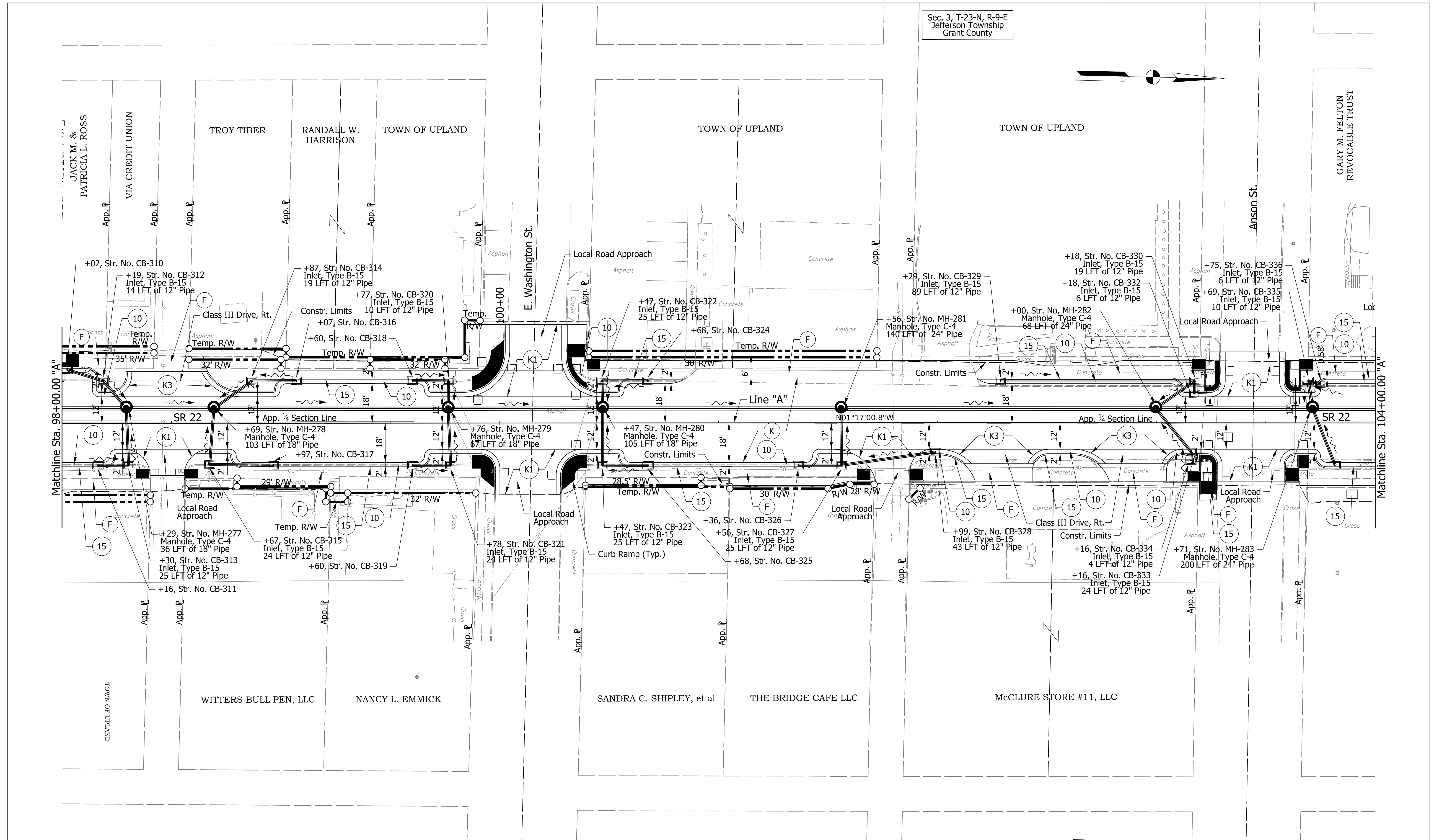
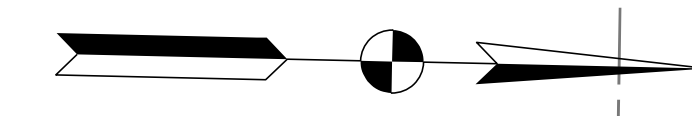
Note to Reviewer: The ISDs for Railroad Street turning movements that face the bridge are deficient. These will require turning restrictions or Level 2 Design Exceptions.

<b>Legend</b> (K) Full Depth Replacement, Consisting of: 165 #/SYS OC/QA-HMA, 2, 64, Surface, 9.5 mm on 275 #/SYS OC/QA-HMA, 2, 64, Intermediate, 19.0 mm on 600 #/SYS OC/QA-HMA, 2, 64, Base, 25.0 mm on 300 #/SYS OC/QA-HMA, 4, 76, Intermediate, OG, 19.0 mm on 6" Compacted Aggregate No. 53 on Subgrade Treatment, Type IC  (K1) Milling, Asphalt, 1.5", then 165 #/SYS QC/QA-HMA, 2, 64, Surface, 9.5 mm on Existing Pavement  (K2) Class I Drive, Consisting of: PCPP for Approaches, 6 IN. on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (K3) Class III Drive, Consisting of: PCPP for Approaches, 9 IN. with Geogrid, Type IB on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (R) Public Road Approach, Consisting of: 1100 #/SYS HMA for Approaches, Type B on Subgrade Treatment, Type IC  (F) Sidewalk, Concrete  (S) Saw Cut  (10) Curb and Gutter, Concrete	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____  DESIGNED: MTH DRAWN: SJC  CHECKED: TJH CHECKED: TJH	INDIANA DEPARTMENT OF TRANSPORTATION  PLAN SHEET LINE "A" - SR 22	HORIZONTAL SCALE 1" = 20' VERTICAL SCALE N/A SURVEY BOOK ELECTRONIC CONTRACT R-41565	BRIDGE FILE TBD DESIGNATION 1702864 & 1800168 SHEETS 37 of 172 PROJECT 1800168
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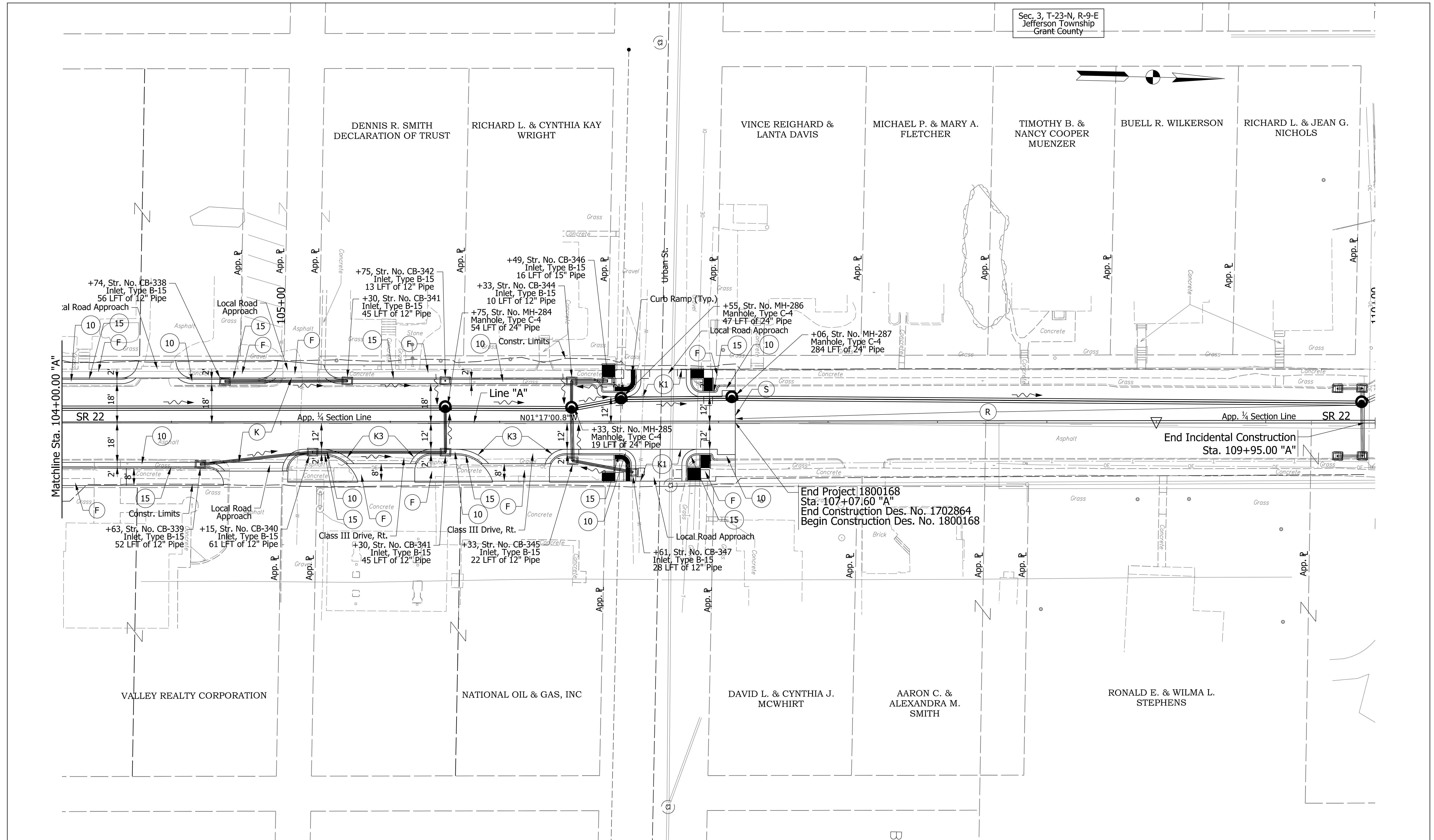
Sec. 3, T-23-N, R-9-E  
Jefferson Township  
Grant County



<b>Legend</b> (K) Full Depth Replacement, Consisting of: 165 #/SYS OC/QA-HMA, 2, 64, Surface, 9.5 mm on 275 #/SYS OC/QA-HMA, 2, 64, Intermediate, 19.0 mm on 660 #/SYS OC/QA-HMA, 2, 64, Base, 25.0 mm on 300 #/SYS OC/QA-HMA, 4, 76, Intermediate, OG, 19.0 mm on Subgrade Treatment, Type IC  (K1) Milling, Asphalt, 1.5", then 165 #/SYS QC/QA-HMA, 2, 64, Surface, 9.5 mm on Existing Pavement  (K2) Class I Drive, Consisting of: PCCP for Approaches, 6 IN. on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (K3) Class III Drive, Consisting of: PCCP for Approaches, 9 IN. with Geogrid, Type IB on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (R) Public Road Approach, Consisting of: 1100 #/SYS HMA for Approaches, Type B on Subgrade Treatment, Type IC  (F) Sidewalk, Concrete  (S) Saw Cut  (10) Curb and Gutter, Concrete	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____ DESIGNED: MTH DRAWN: SJC CHECKED: TJH CHECKED: TJH	INDIANA DEPARTMENT OF TRANSPORTATION  PLAN SHEET LINE "A" - SR 22	HORIZONTAL SCALE 1" = 20' VERTICAL SCALE N/A SURVEY BOOK ELECTRONIC CONTRACT R-41565	BRIDGE FILE TBD DESIGNATION 1702864 & 1800168 SHEETS 39 of 172 PROJECT 1800168
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<b>Legend</b> (K) Full Depth Replacement, Consisting of: 165 #/SYS OC/QA-HMA, 2, 64, Surface, 9.5 mm on 275 #/SYS OC/QA-HMA, 2, 64, Intermediate, 19.0 mm on 650 #/SYS OC/QA-HMA, 2, 64, Base, 25.0 mm on 300 #/SYS OC/QA-HMA, 4, 76, Intermediate, OG, 19.0 mm on 6" Compacted Aggregate No. 53 on Subgrade Treatment, Type IC  (K1) Milling, Asphalt, 1.5", then 165 #/SYS OC/QA-HMA, 2, 64, Surface, 9.5 mm on Existing Pavement  (K2) Class I Drive, Consisting of: PCCP for Approaches, 6 IN. on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (K3) Class III Drive, Consisting of: PCCP for Approaches, 9 IN. with Geogrid, Type IB on 6" Dense Graded Subbase on Subgrade Treatment, Type II  (R) Public Road Approach, Consisting of: 1100 #/SYS HMA for Approaches, Type B on Subgrade Treatment, Type IC  (F) Sidewalk, Concrete (S) Saw Cut (10) Curb and Gutter, Concrete	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____ DESIGNED: MTH DRAWN: SJG CHECKED: TJH CHECKED: TJH	INDIANA DEPARTMENT OF TRANSPORTATION  PLAN SHEET LINE "A" - SR 22	HORIZONTAL SCALE 1" = 20' VERTICAL SCALE N/A SURVEY BOOK ELECTRONIC CONTRACT R-41565	BRIDGE FILE TBD DESIGNATION 1702864 & 1800168 SHEETS 41 of 172 PROJECT 1800168
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