Chapter 7
Section 4(f) Evaluation

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7 SECTION 4(F) EVALUATION

Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966 established requirements for USDOT (including Federal Transit Administration [FTA]) consideration of publicly-owned parks/recreational areas that are accessible to the general public, publicly-owned wildlife/waterfowl refuges, and publicly or privately owned historic sites of federal, state, or local significance in developing transportation projects (49 United States Code [USC] § 303). Section 4(f) prohibits use of these resources for transportation projects unless (1) it is proven that there is no feasible and prudent alternative to the use and the action includes all possible planning to minimize harm or (2) the agency determines that the use of the property, including any measure(s) to minimize harm, would have a *de minimis* impact on the property (23 Code of Federal Regulations [CFR] § 774.3(a)).

This law, commonly known as Section 4(f), is now codified in 23 USC § 303 and 23 USC § 138, and is implemented by FTA through the regulations at 23 CFR § 774. Additional guidance on the implementation of Section 4(f) may be found in Federal Highway Administration's (FHWA's) *Section 4(f) Policy Paper* (FHWA 2012). FTA has formally adopted this guidance and this analysis was conducted consistent with the guidance.

In this evaluation, FTA and the Northern Indiana Commuter Transportation District (NICTD) identified two public recreational areas and one historic site within the Study Area that are afforded protection under Section 4(f) and would be used by the National Environmental Policy Act (NEPA) Preferred Alternative (Hammond Alternative Option 2). This Section 4(f) evaluation is a draft document subject to review and finalization during the NEPA process for the West Lake Corridor Project (Project) and as set forth by the regulations of Section 4(f).

7.1 Supporting Information for this Section 4(f) Evaluation

Section 1.2 of this Draft Environmental Impact Statement (DEIS) summarizes the Purpose and Need for the Project. **Chapter 2** contains information on the planning process undertaken to develop alternatives to date and includes a detailed description of the NEPA Preferred Alternative.

7.2 Regulatory Setting

Section 4(f) protects specific resources of federal, state, or local significance that are proposed to be used for a transportation project. The term "use" in the Section 4(f) context is defined in 23 CFR § 774.17 and has very specific meaning. There are three defined potential types of Section 4(f) resource uses:

- **Permanent Incorporation**: A permanent incorporation of a Section 4(f) resource occurs when a resource is permanently removed or integrated into a proposed transportation project. This incorporation may occur as a result of partial or full acquisition, permanent easement, or temporary easement.
- **Temporary Occupancy**: A temporary occupancy of a Section 4(f) resource occurs when there is a short-term use of a resource that is considered adverse in terms of the preservationist purpose of the Section 4(f) statute. Under 23 CFR § 774.13, a temporary occupancy of a resource does not constitute a "use" of a Section 4(f) resource when all of the following conditions are satisfied:
- The duration of use would be temporary (i.e., less than the time needed for construction of the project), and there would be no change in ownership of land. The scope of work would be minor

(i.e., both the nature and magnitude of the changes to the Section 4(f) resource would be minimal).

- There would be no anticipated permanent adverse physical impacts, nor would there be interference with the protected activities, features, or attributes of the resource, on either a temporary or permanent basis. The land being used would be fully restored to a condition that is at least as good as that which existed before the project.
- There is documented agreement among appropriate federal, state, and local official(s) with jurisdiction over the Section 4(f) resource regarding the above conditions.
- **Constructive Use**: A constructive use of a Section 4(f) resource occurs when a transportation project does not permanently incorporate land from the resource, but the proximity of the project results in impacts (e.g., noise, vibration, visual impacts, or property access) that substantially impair the activities, features, or attributes that qualify a resource for Section 4(f) protection. Factors for assessing substantial diminishment are provided in 23 CFR § 774.15.

Section 4(f) identifies specific conditions in which effects to a protected Section 4(f) property are not considered uses. One of these conditions is joint planning, in which two or more governmental agencies with jurisdiction over a property have formally reserved that property for future transportation use before or at the same time as a public recreational facility is established on that property (23 CFR § 774.11(i)). In such a case, the impacts of a transportation facility on the public recreational facility are not considered a use of Section 4(f) property as defined in 23 CFR § 774.17.

Before approving a project that uses Section 4(f) resources, FTA must either determine that the project would have a *de minimis* impact on the property (as defined in 23 CFR § 774.17) or undertake an individual Section 4(f) evaluation to determine that there is no feasible and prudent avoidance alternative to that use, and that all measures to minimize harm to the resource have been undertaken. For parks, a *de minimis* impact means FTA has determined that the use meets the following requirements: (1) the proposed use would not adversely affect the features, attributes, or activities that qualify the park for Section 4(f) protection; (2) the officials with jurisdiction (the park owner or operator) concur; and (3) the public has been given an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource. For historic sites, a *de minimis* impact means FTA has determined (in accordance with 36 CFR § 800) that either no historic resource would be affected by the project or that the project would have "no adverse effect" on the historic resource.

7.3 Organization of this Chapter

The sections within this Section 4(f) evaluation consider potential Section 4(f) uses in accordance with applicable regulations and guidance referenced in the previous sections. The sections are organized to follow the major analysis processes outlined in FHWA's Section 4(f) Policy Paper (FHWA 2012). Each section provides appropriate citations, definitions, and evaluation criteria for each of the steps:

- **Section 7.4** – Identification of Section 4(f) Resources
- **Section 7.5** – Assessment of Use of Section 4(f) Resources
- **Section 7.6** – Avoidance Analysis
- **Section 7.7** – Least Overall Harm Analysis
- **Section 7.8** – All Possible Planning to Minimize Harm

The last section of this chapter provides details on the consultation and coordination process undertaken and summarizes the finding of this Section 4(f) evaluation (**Section 7.9**).

7.4 Identification of Section 4(f) Resources

The Section 4(f) evaluation identifies and assesses two public recreational areas and one historic site within the Study Area that are afforded protection by Section 4(f) and would be impacted by the NEPA Preferred Alternative in a manner that would constitute a "use" as defined by 23 CFR § 774. Two additional public recreational areas are identified within the Study Area that would not be impacted by the NEPA Preferred Alternative in a manner that would constitute a "use" as defined by 23 CFR § 774. The NEPA Preferred Alternative would not impact any other parklands or wildlife or waterfowl refuges in a manner that would constitute a "use" as defined by 23 CFR § 774. The recreational areas were identified during this DEIS and Section 4(f) evaluation and are discussed in **Section 4.5**.

In addition to the one historic site that would be impacted by the NEPA Preferred Alternative in a manner that would constitute a "use" as defined by 23 CFR § 774, an additional historic site was identified within the Project area. Each historic site was determined eligible for listing in the National Register of Historic Places (NRHP) during the Section 106 consultation for the Project. On November 7, 2016, FTA made the determination of eligibility and effects on historic resources in the context of the Section 106 process; however, official concurrence from the State Historic Preservation Officers (SHPOs) has not yet been received. This Section 106 consultation is described in **Section 4.6** of this DEIS and summarized in **Section 7.9** of this Section 4(f) evaluation. The additional historic site would not be impacted by the NEPA Preferred Alternative in a manner that would constitute a "use" as defined by 23 CFR § 774. However, the Commuter Rail Alternative Options would potentially impact the site. For this reason, the consideration of potential effects on historic resources in **Section 4.6.4** of the DEIS also considers the impacts of the Commuter Rail Alternative Options on this additional site in the context of NEPA and Section 106 statutes. **Table 7.4-1** and **Table 7.4-2** describe the public parks, recreational areas, and historic sites that are located within the Study Area and are assessed in this Section 4(f) evaluation. **Figure 7.4-1** shows the locations of these protected properties.

Table 7.4-1: Parks, Recreational Lands and Wildlife Refuges within the Study Area

Property Name	Classification	Address/Location in the Study Area	Official(s) with Jurisdiction	Features/Attributes
West Lakes Park	Park	Margo Lane, Munster	Town of Munster	Trail, ball fields, playground, tennis courts
Pennsy Greenway	Multi-use trail	NICTD right-of-way (ROW) in Munster	Town of Munster	Paved thoroughfare
Monon Trail	Multi-use trail	NICTD ROW in Hammond and Munster	City of Hammond and Town of Munster	Paved thoroughfare
Erie Lackawanna Trail	Multi-use trail	NICTD ROW: Sibley Street to Ogden Street, Hammond	City of Hammond	Paved thoroughfare

SOURCE: AECOM 2016.

Table 7.4-2: NRHP-Eligible or Potentially Eligible Resources within the Study Area

Name/ Description	Address/Location	Date	Style	NRHP Evaluation
O.K. Champion Building	4714 Sheffield Avenue, Hammond	1905 to 1914	Industrial Vernacular	Eligible, Criterion A
Federal Cement Tile Company	24 Marble Street, Hammond	1909	Industrial Vernacular	Eligible, Criterion A

SOURCE: AECOM 2016.

7.4.1 Resources Subject to Section 4(f) Evaluation

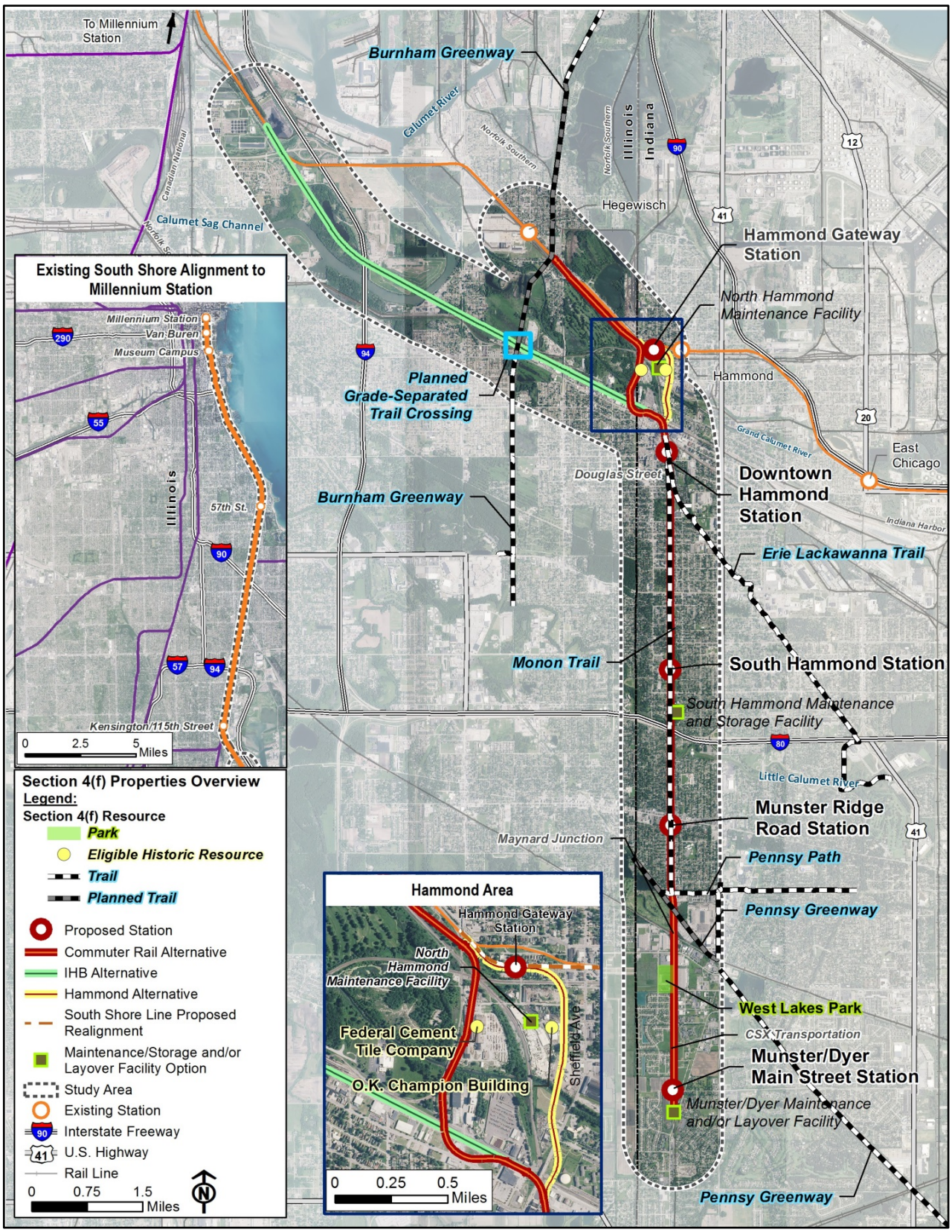
The public recreational areas and historic sites within the Study Area that are subject to Section 4(f) evaluation are described in greater detail below. **Section 7.5** assesses the potential use of these resources by the NEPA Preferred Alternative.

7.4.1.1 Resource 1 – West Lakes Park

West Lakes Park is a 26-acre public park and recreation facility owned and operated by the Town of Munster, Indiana. The park is located on Margo Lane between 45th and Glastonbury Streets. Access to the park is from Margo Lane. West Lakes Park is in a residential area; its eastern boundary abuts CSX's existing freight line right-of-way (ROW). Park amenities include a perimeter trail, open lawn for ball fields, a playground, and tennis courts.

7.4.1.2 Resource 2 – Pennsy Greenway

The Pennsy Greenway is a multi-use trail that runs from Lansing, Illinois, to Crown Point, Indiana. It is largely aligned within the former Pennsylvania Central Railroad property, although in the Study Area it is alongside existing roadways. The portion parallel to existing roadways is referred to as the Pennsy Path. Specifically, the existing trail follows along Timrick Drive, running under high tension wires south of and alongside Fisher Street, then turning south along the west side of Calumet Avenue to just north of the Canadian National (CN) freight line. The connection to the original Pennsy rail alignment is made at a park east of Calumet Avenue and south of the CN tracks. The original trail corridor crosses NICTD's ROW in the Town of Munster south of Fisher Street and is undeveloped. The existing trail in Munster is operated by the Town of Munster. Munster has a project in the Northwestern Indiana Regional Planning Commission (NIRPC) Transportation Improvement Program (TIP) to construct the Pennsy Greenway from Fisher Avenue at Timrick Drive to Calumet Avenue north of 45th Street on the original trail corridor. The overall length of the Pennsy Greenway, including completed and planned sections, in Indiana and Illinois is 15 miles in length.



SOURCE: ESRI 2014.

Figure 7.4-1: Section 4(f) Resources

7.4.1.3 Resource 3 – Erie Lackawanna Trail

The Erie Lackawanna Trail is a 17-mile-long multi-use trail—the longest continuous trail in Northwest Indiana. In Hammond, the trail is approximately 4.5 miles long. The northern end of the trail begins at Dan Rabin Plaza on Sibley Street in Hammond, and runs south through the communities of Highland, Griffith, Schererville, and Crown Point, where it terminates at Summit Street. In the Study Area, the trail consists of a paved, maintained thoroughfare for use by bicyclists and pedestrians. The portion of the trail in Hammond is within its own ROW, adjacent to NICTD's ROW (see **Figure 7.4-2**).

SOURCE: AECOM 2014.

Figure 7.4-2: Erie Lackawanna Trail in Hammond at Douglas Street

7.4.1.4 Resource 4 – O.K. Champion Building

The Champion Potato Machinery Company, which later became O.K. Champion, was one of the pioneering industries in Hammond. Otto Knoerzer founded the company in 1897 when he invented the Champion Potato Digger. The O.K. Champion Building was constructed in an industrial vernacular style between 1905 and 1914. It is associated with a significant period of industrial growth in Hammond in the early twentieth century. The O.K. Champion Building is significant under NRHP Criterion A for its association with Hammond's manufacturing industry, the role the company played in the development and prosperity of the local community, and as a pioneering Hammond industry. The O.K. Champion Building retains its integrity of location, design, workmanship, materials, association, setting, and feeling (see **Figure 7.4-3**). The property, consisting of 2.3 acres along Sheffield Avenue, is eligible for the NRHP under Criterion A.

SOURCE: AECOM 2015.

Figure 7.4-3: Two-story Section of the O.K. Champion Building (view southeast)

7.4.1.5 Resource 5 – Federal Cement Tile Company

The Federal Cement Tile Company plant is a 20.8-acre, industrial property with numerous buildings and structures constructed in an industrial vernacular style. Federal Cement Tile Company manufactured steel and concrete roof slabs, wall plates, floors, and other construction materials. At least four of the buildings remaining extant on the parcel appear to have been part of the original 1909 plant construction. The Federal Cement Tile Company plant is significant under NRHP Criterion A for its association with Hammond's industrial history and the key role the company played in the development and prosperity of Hammond and the surrounding areas. The property retains most of its original buildings as well as its original footprint, and it retains its location, design, workmanship, materials, association, setting, and feeling (see **Figure 7.4-4**). The property is eligible for the NRHP under Criterion A.

SOURCE: Google Earth 2016.

Figure 7.4-4: Federal Cement Tile Company, Present Day

7.4.1.6 Resource 6 – Burnham Greenway

The Burnham Greenway is an 11-mile multi-use trail that primarily uses a former railroad ROW to link Chicago to Lansing, Illinois (see **Figure 7.4-5**). Within the Study Area, the trail is incomplete, forming what is known locally as the Burnham Greenway gap, a 2-mile section where the existing network of railroads, utility lines, and other development pose challenges to completing the greenway. Closing the gap is one of a number of Green Legacy Projects being pursued by the Burnham Plan Centennial to continue to expand the green vision of the Plan of Chicago, as set in motion 100 years ago by Daniel Burnham. To close the gap, a partnership among the Illinois Department of Natural Resources (IDNR), the Village of Burnham, Openlands and ComEd, with support from the Exelon Foundation is working toward the goal of building an elevated structure over the existing IHB/CSX freight lines. This bridge would carry the trail.

SOURCE: Google Streetview 2015.

Figure 7.4-5: Burnham Greenway at State Street

7.4.2 Resources for Which Joint Planning Applies

7.4.2.1 Resource 7 – Monon Trail

The Monon Trail is a multi-use trail that occupies NICTD's ROW in the City of Hammond from Sibley Street south to the Munster border at the Little Calumet River (see **Figure 7.4-6**). In Munster, the Monon Trail continues south alongside Manor Avenue in the Town of Munster to its terminus at Fisher Street. The Hammond portion of the trail is 3.6 miles long; the Munster portion is approximately 1.6 miles long. The trail consists of a paved, maintained thoroughfare for use by bicyclists and pedestrians. The Hammond portion is operated by the City of Hammond; the portion in Munster is operated by the Town of Munster.

SOURCE: AECOM 2014.

Figure 7.4-6: Monon Trail in Hammond near Conkey Street

The Monon Trail is within NICTD's ROW, a former railroad property first acquired by the City of Hammond through a quit claim deed dated 1981. In 1993, NICTD, the City of Hammond, and the Town of Munster entered a cooperative agreement enabling NICTD to acquire the former railroad property in Hammond and Munster. The agreement allows for NICTD to develop and operate a transit rail line in the ROW. It also enables the City of Hammond and Town of Munster to build and operate multi-use trails within the same ROW. The Monon Trail was developed by Hammond and Munster according to the cooperative agreement.

7.5 Assessment of Use of Section 4(f) Resources

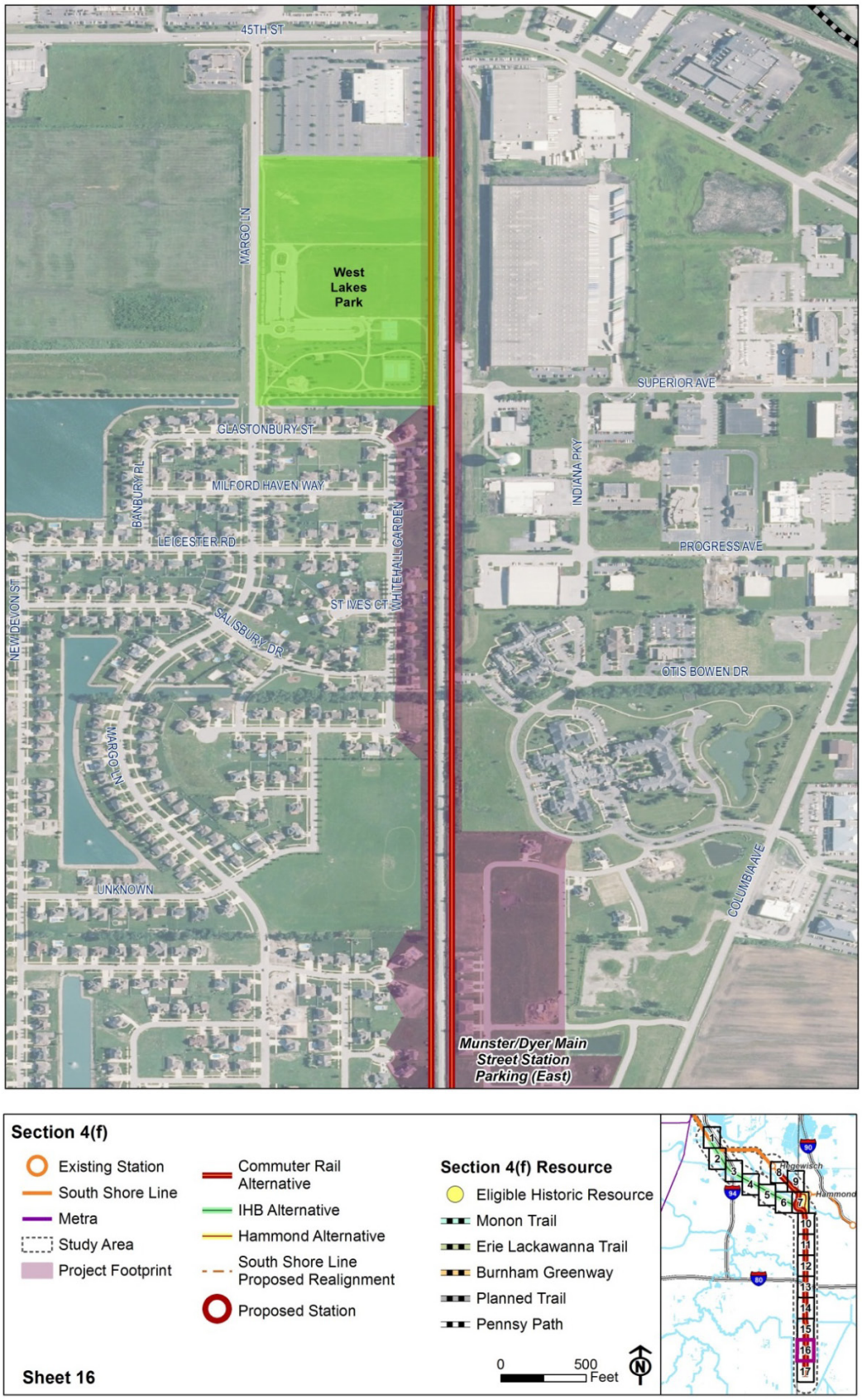
This section provides further details on each Section 4(f) resource and explains the preliminary determinations of the proposed "use" for each resource. **Table 7.5-1** summarizes the assessment of proposed use findings. Alternatives to avoid Section 4(f) use of these resources are described in **Section 7.6**. The locations of Section 4(f) resources are shown on **Figure 7.5-1** through **Figure 7.5-10**.

Table 7.5-1: Section 4(f) Assessment of Resources' Use - NEPA Preferred Alternative

Section 4(f) Resource	Permanent Use, not *de minimis*	Permanent Use, *de minimis*	No Use[1]	Existing Resource Dimension	Permanent Use Dimension	Percentage of Resource Permanently Used
West Lakes Park			●	26 acres (Munster)	0 acres	0%
Pennsy Greenway		●		15 miles (overall); 0.6 mile (Munster)	0.30 acre	<1% (Munster)
Erie Lackawanna Trail		●		17 miles (overall); 4.5 miles (Hammond)	0.06 mile	1%
O.K. Champion Building	●			2.3 acres (Hammond)	2.3 acres	100%
Federal Cement Tile Company			●	20.8 acres (Hammond)	0 acres	0%
Burnham Greenway			●	11 miles (overall)	0 miles	0%
Monon Trail			●	3.6 miles (Hammond); 1.6 miles (Munster)	0 feet	0%

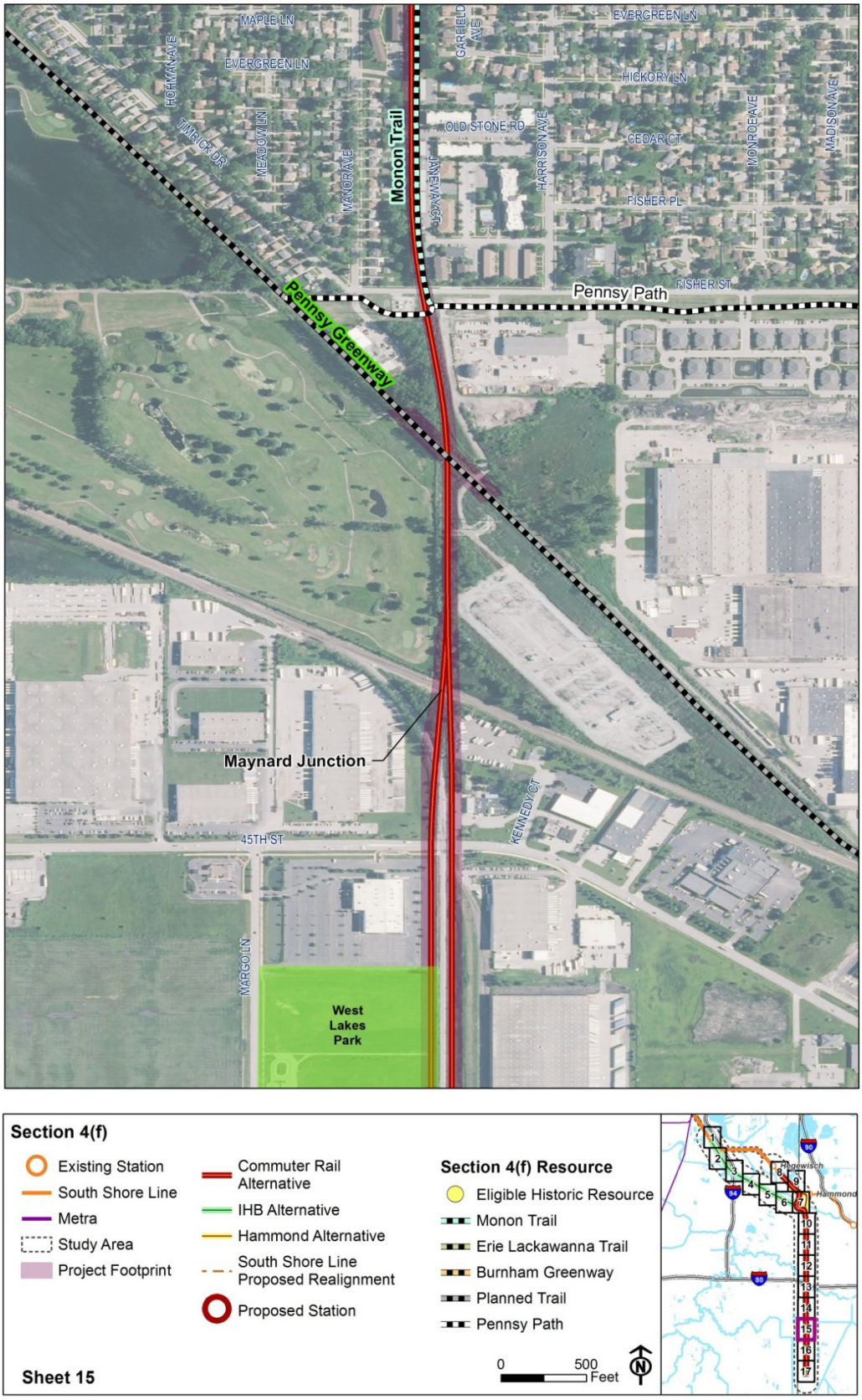
SOURCE: AECOM 2016.

Notes: [1]Joint planning applies to the Monon Trail.



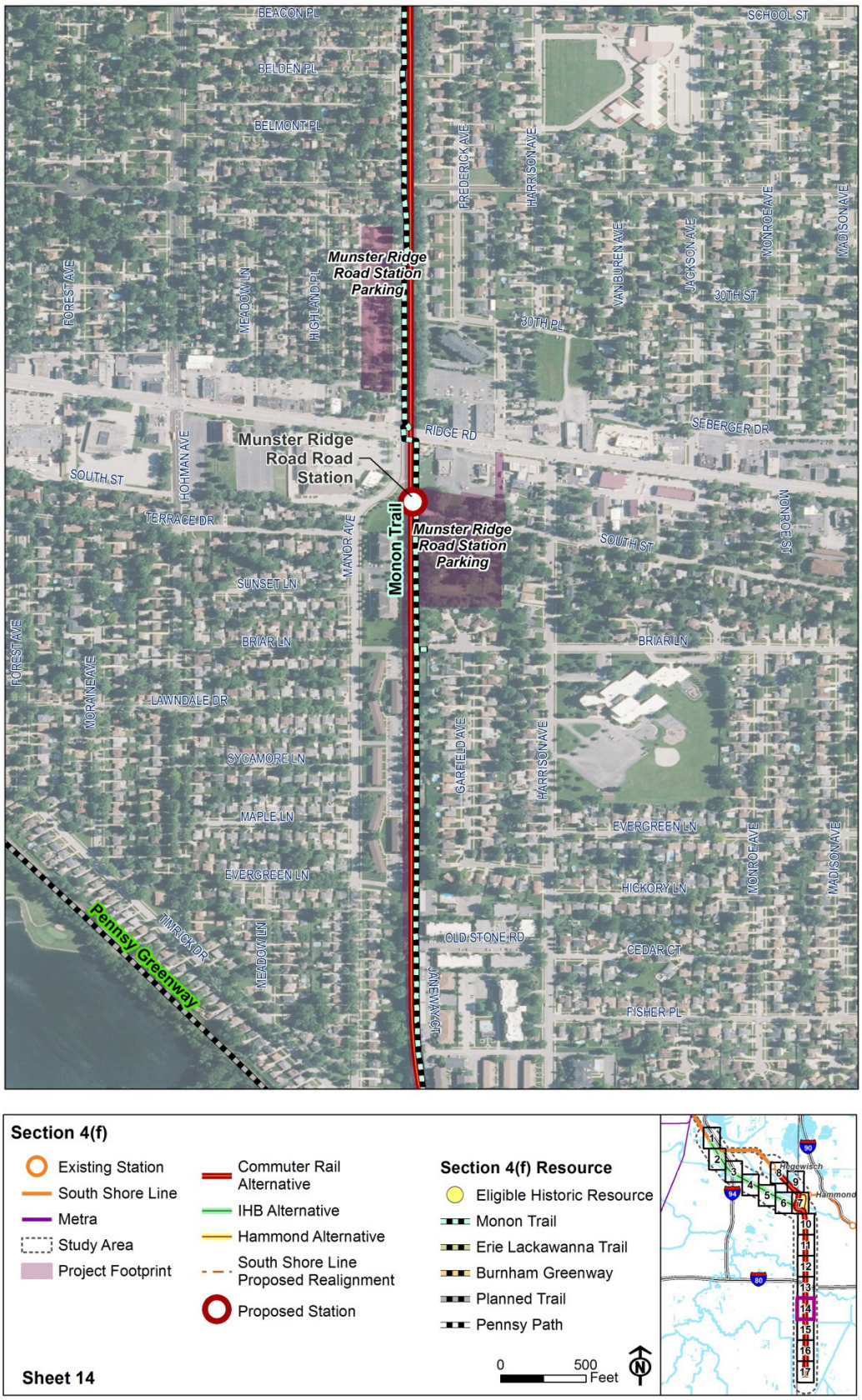
SOURCE: INDNR Indiana Trails Inventory 2016.

Figure 7.5-1: Location of West Lakes Park



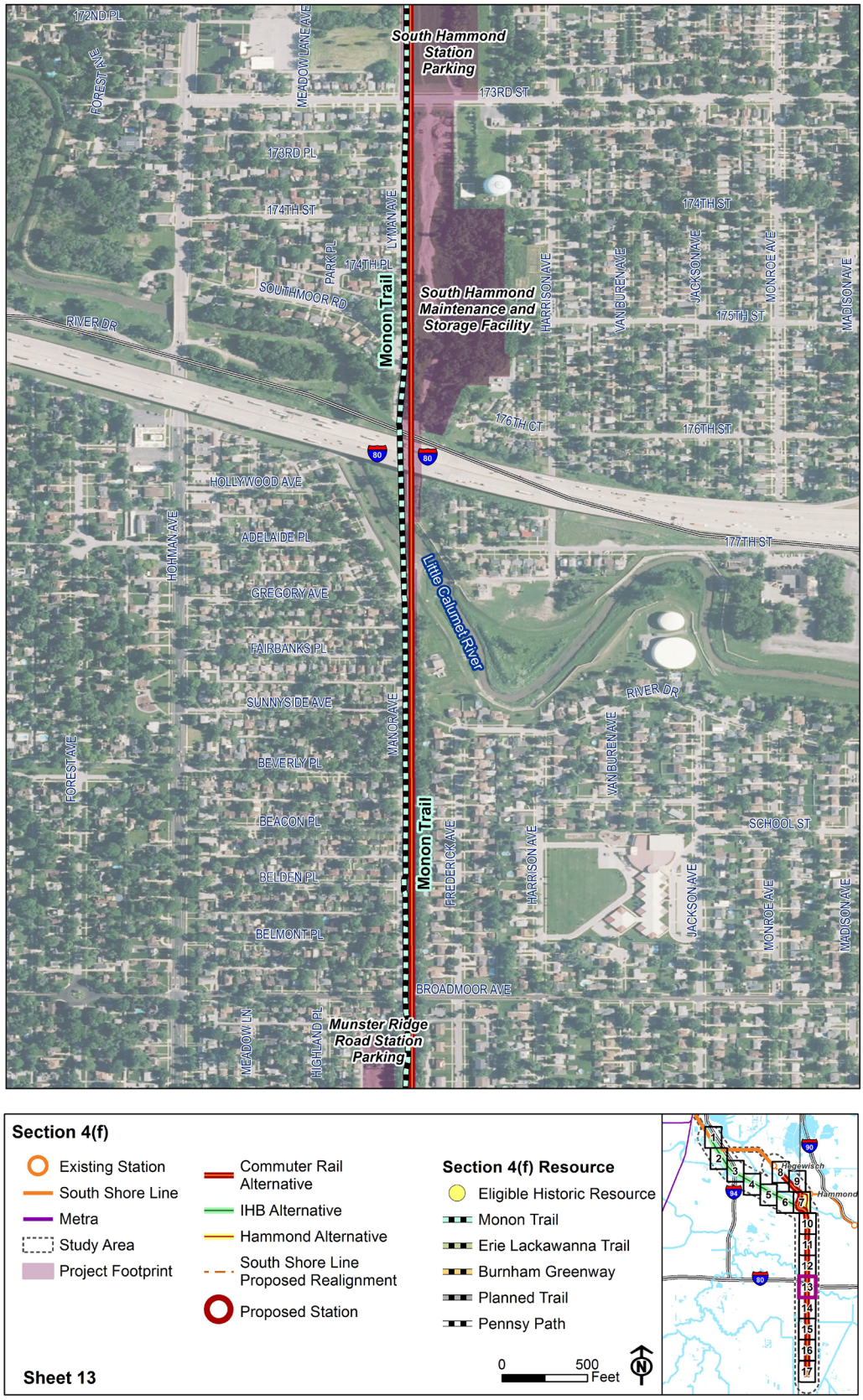
SOURCE: INDNR Indiana Trails Inventory 2016.

Figure 7.5-2: Location of West Lakes Park, Pennsy Greenway, and Monon Trail



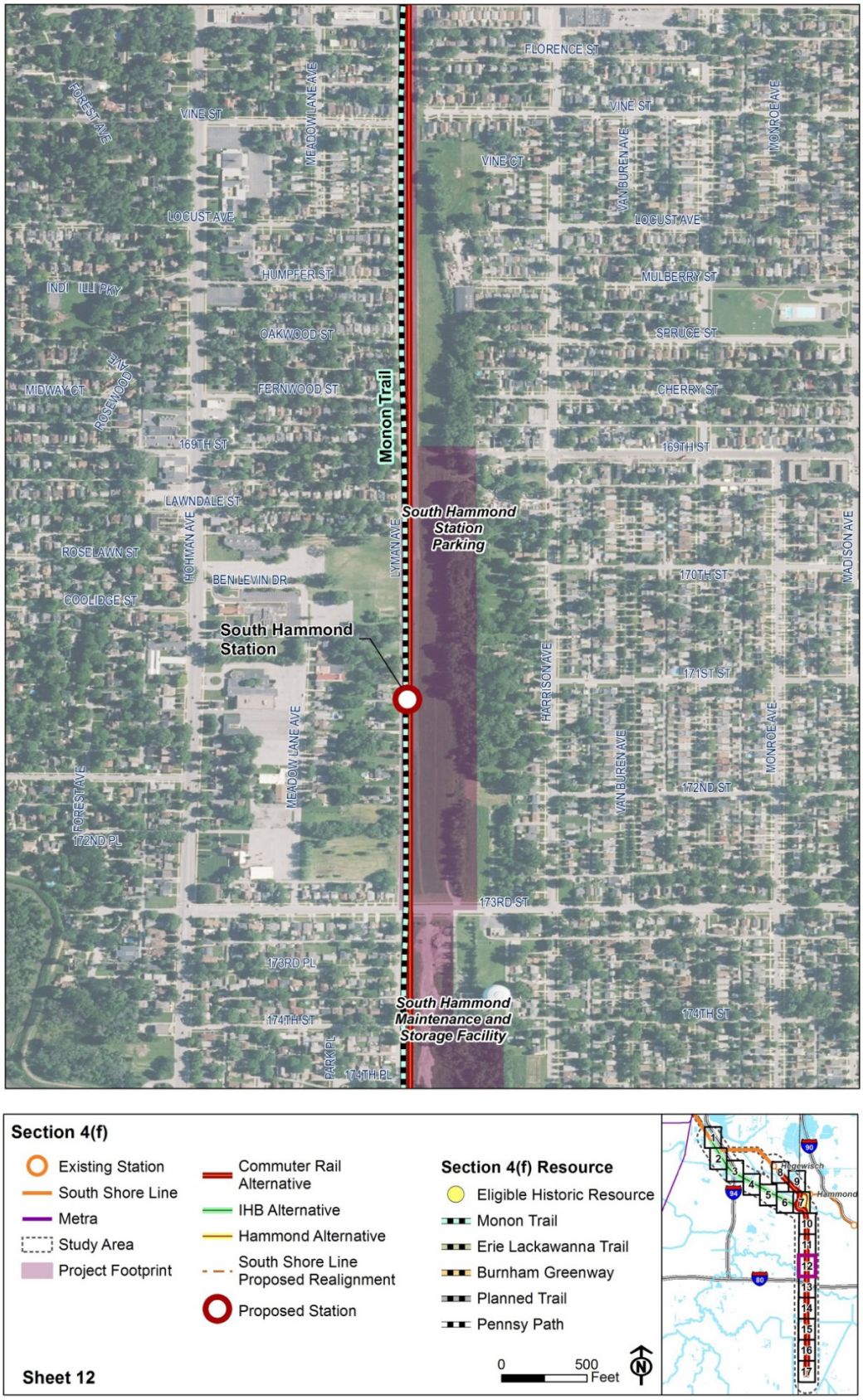
SOURCE: INDNR Indiana Trails Inventory 2016.

Figure 7.5-3: Location of the Monon Trail



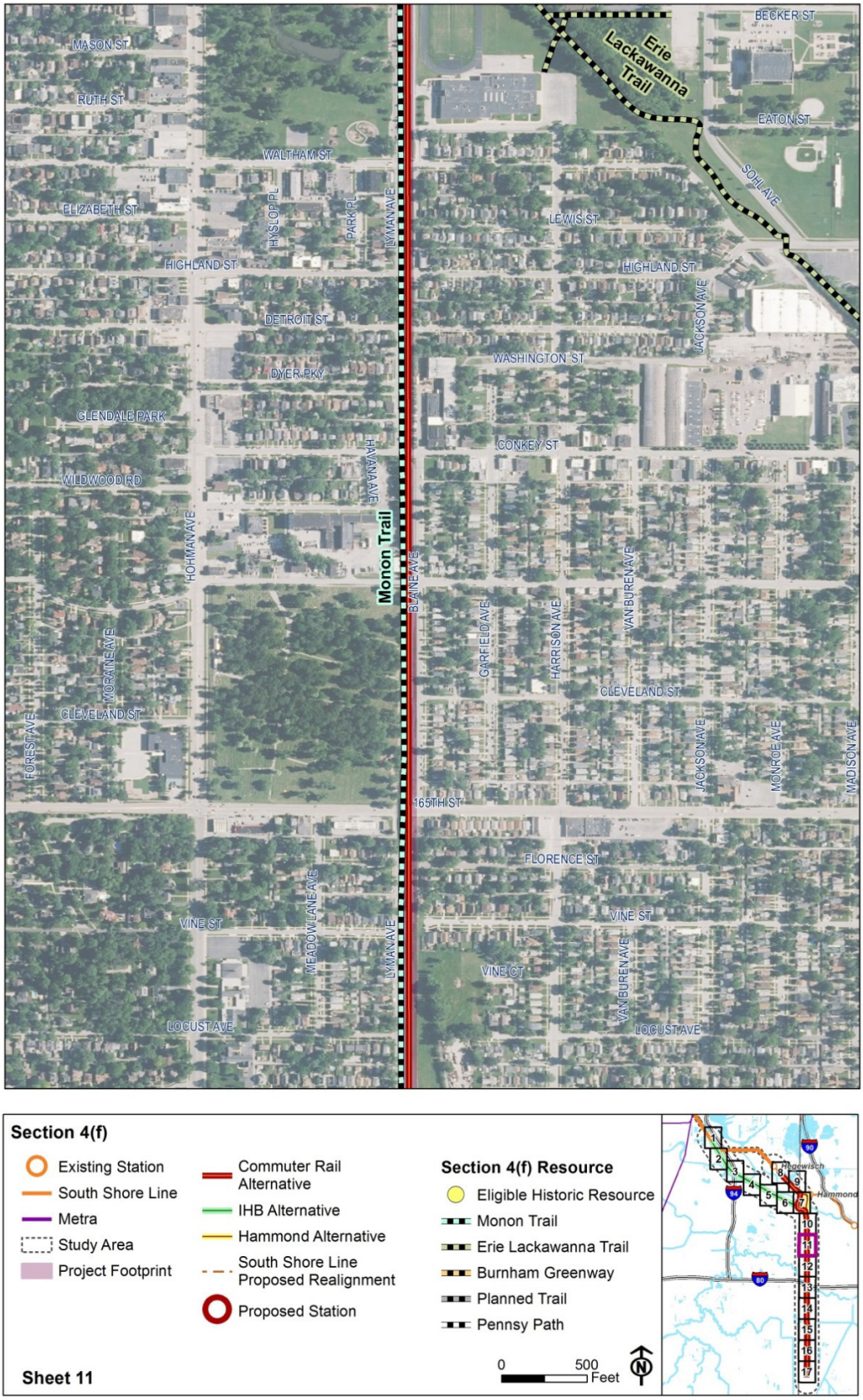
SOURCE: INDNR Indiana Trails Inventory 2016.

Figure 7.5-4: Location of the Monon Trail (cont.)



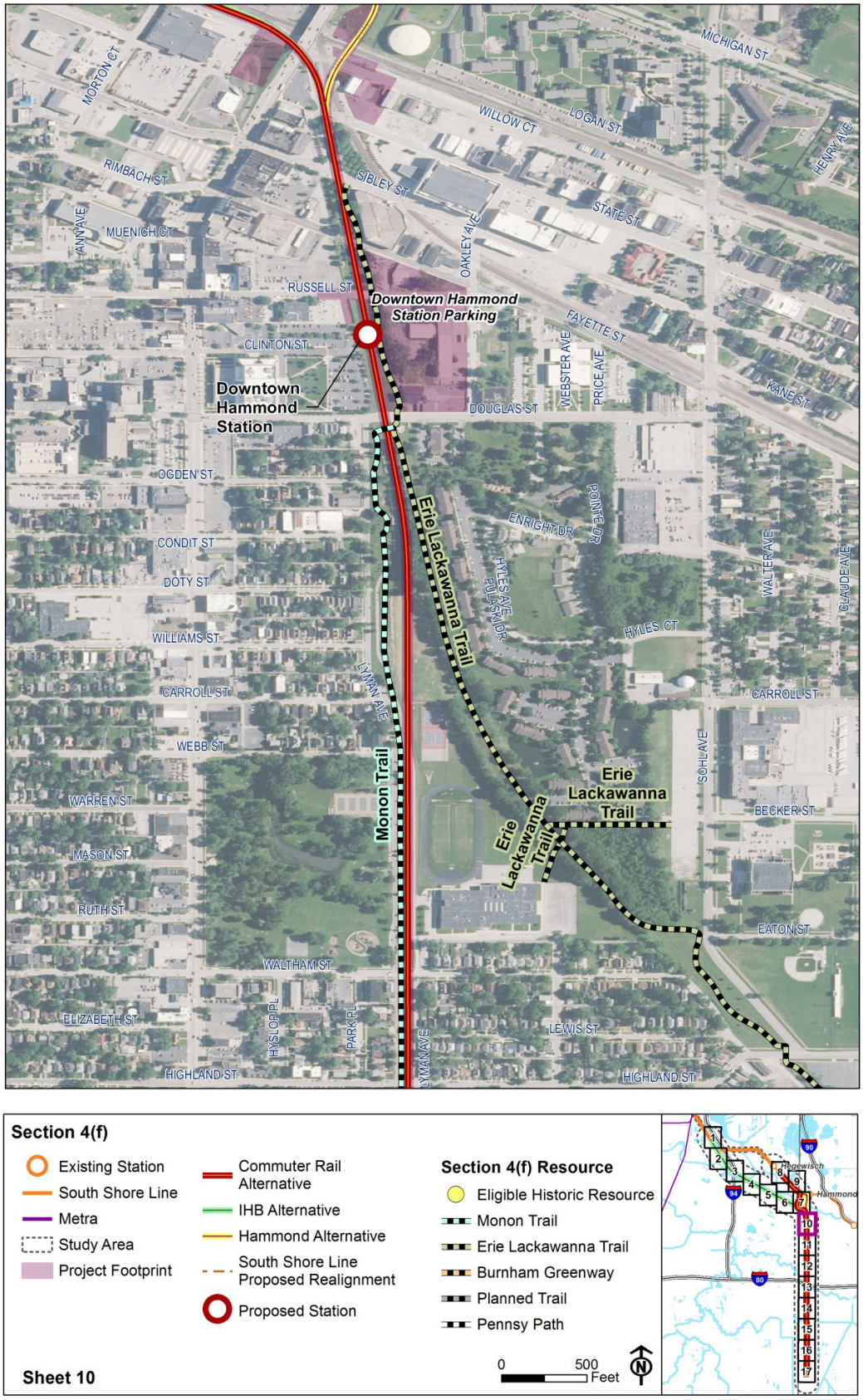
SOURCE: INDNR Indiana Trails Inventory 2016.

Figure 7.5-5: Location of the Monon Trail (cont.)



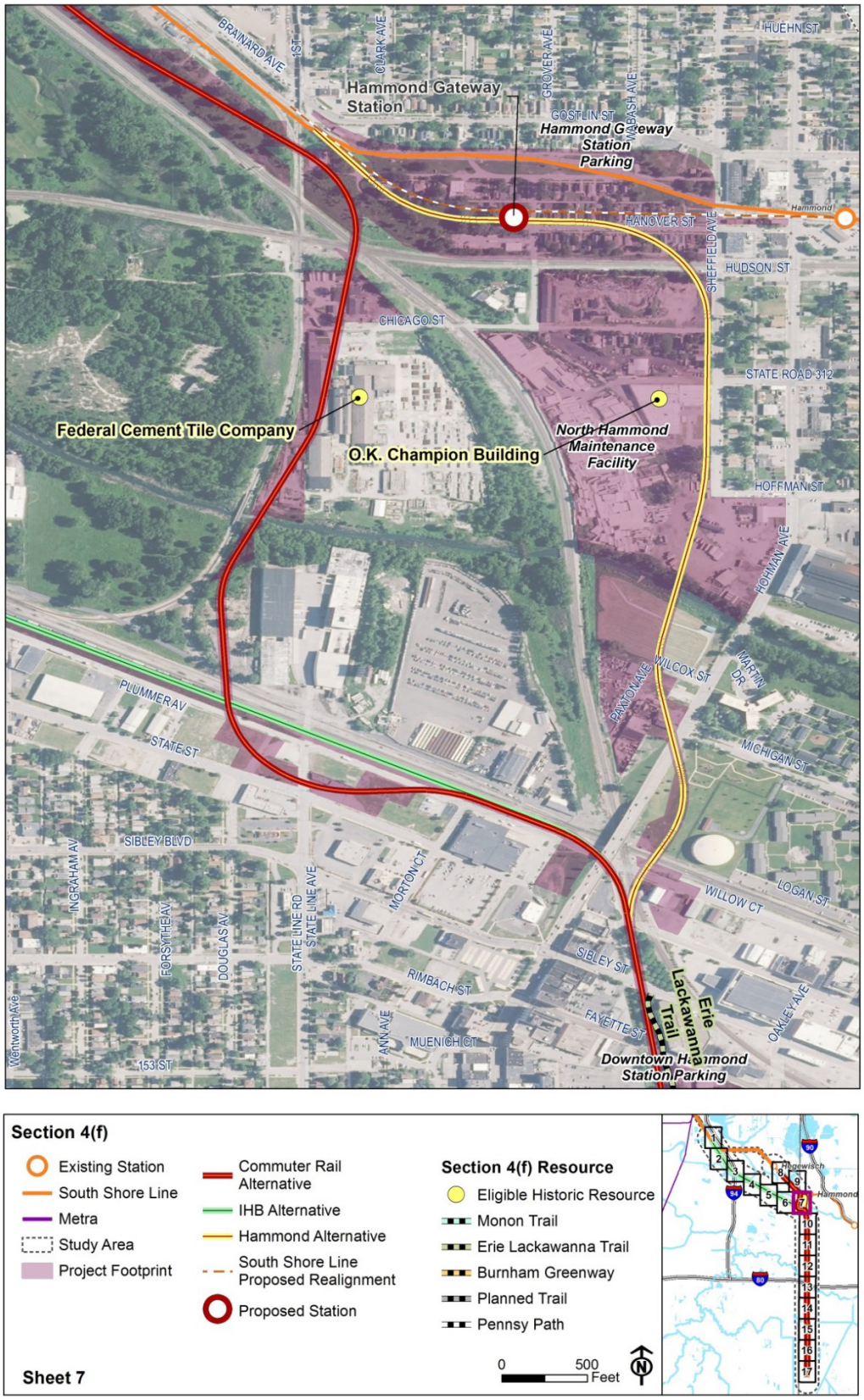
SOURCE: INDNR Indiana Trails Inventory 2016.

Figure 7.5-6: Location of the Monon and Erie Lackawanna Trails



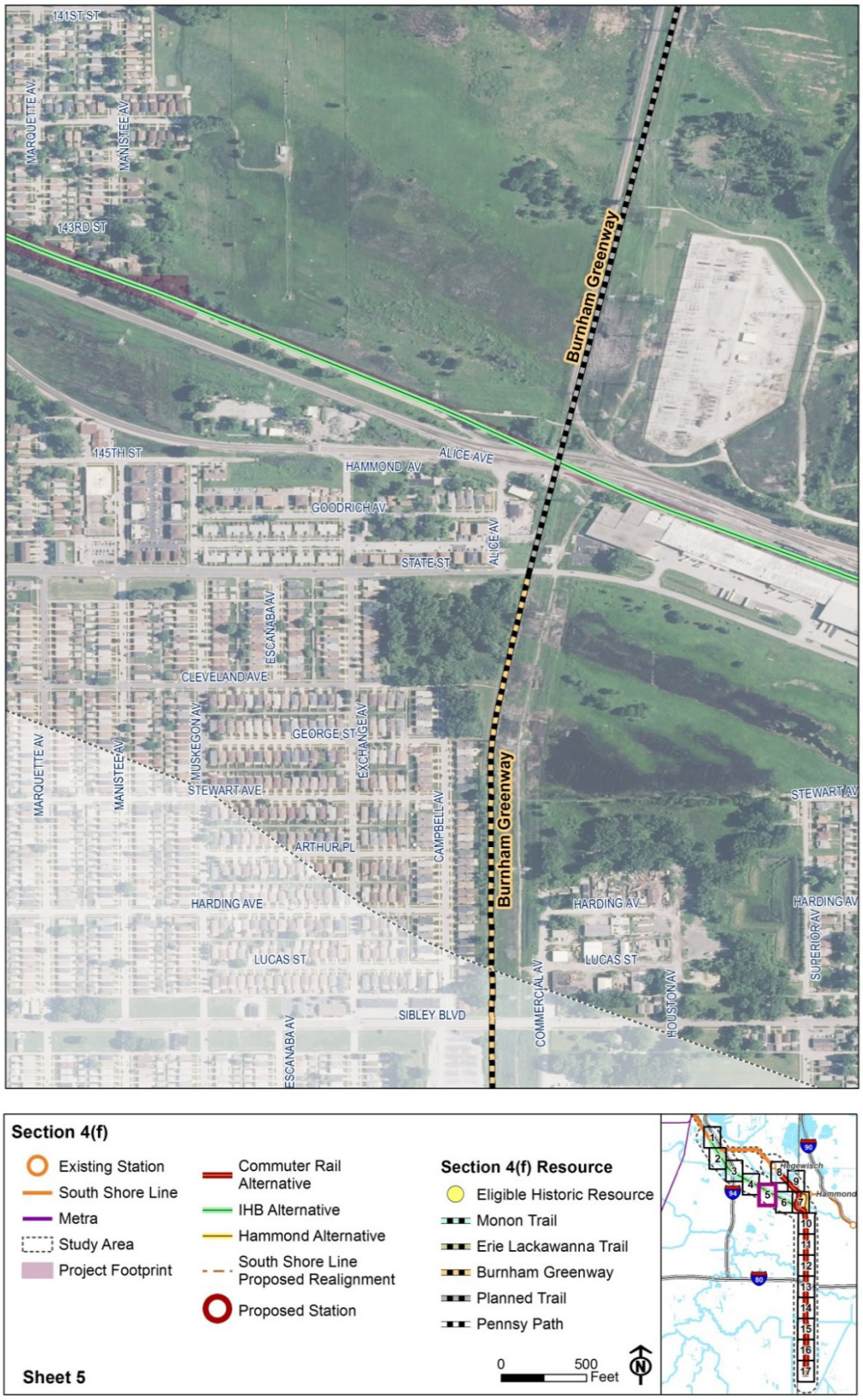
SOURCE: INDNR Indiana Trails Inventory 2016.

Figure 7.5-7: Location of the Monon and Erie Lackawanna Trails (cont.)



SOURCE: INDNR Indiana Trails Inventory 2016.

Figure 7.5-8: Location of the Federal Cement Tile Company and O.K. Champion Building



SOURCE: INDNR Indiana Trails Inventory 2016.

Figure 7.5-9: Location of the Burnham Greenway and the IHB Alternative Options

SOURCE: INDNR Indiana Trails Inventory 2016.

Figure 7.5-10: Location of the Burnham Greenway and the SSL

7.5.1 West Lakes Park

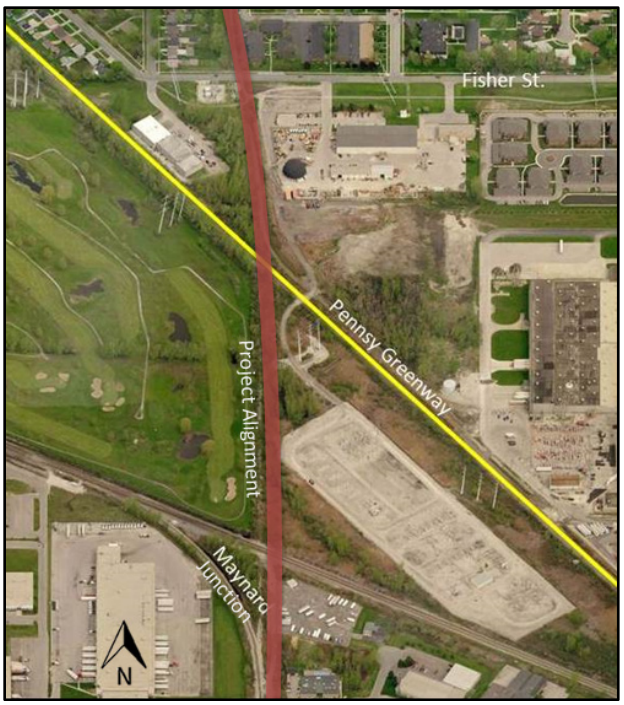
The NEPA Preferred Alternative would be aligned within the to-be-acquired ROW adjacent to and on the east side of the existing CSX freight line ROW in the area of West Lakes Park in Munster (the park is on the west side of the CSX freight line as shown on **Figure 7.5-1**). No ROW would be required from West Lakes Park to implement the NEPA Preferred Alternative. The **Chapter 5** assessment of effects indicates that the NEPA Preferred Alternative would not cause noise, vibration, or visual effects on West Lakes Park that would constitute a constructive use.

Preliminary Section 4(f) Use Determination: The Project would result in **no use** of West Lakes Park. No substantial impairment of the activities, features, or attributes—the park and its recreational amenities—that qualify West Lakes Park for protection under Section 4(f) would occur.

7.5.2 Pennsy Greenway

The NEPA Preferred Alternative would be aligned within NICTD's ROW at the point where the latter crosses the undeveloped portion of the Pennsy Greenway corridor south of Fisher Street (see **Figure 7.5-11**). At this location, the NEPA Preferred Alternative would be elevated and the trail would be at grade, or slightly depressed. NICTD proposes to construct an underpass or culvert as part of the guideway structure to enable the trail to pass under the rail line. Due to the width of the Pennsy Greenway ROW, NICTD anticipates the need to use approximately 0.30 acre of Pennsy Greenway ROW to provide supports for the guideway structure in the ROW and a permanent easement for access and maintenance. However, the guideway structure would be designed to allow space for the future trail development. NICTD would restore portions of the ROW it temporarily disturbs during construction of the Project to as good or better condition than it was prior to construction start. It is expected to require the temporary closure of the crossing within its ROW while the underpass or culvert and guideway are constructed. Closure is necessary for construction work and access, as well as worker and public safety. The crossing would be closed only for as long as it takes to build and open the underpass or culvert to allow safe, future public access.

The NEPA Preferred Alternative would also cross Munster's developed portion of the Pennsy Path where it is aligned along the south side of Fisher Street on Northern Indiana Public Service Company (NIPSCO) ROW. At this location, the NEPA Preferred Alternative and the Pennsy Greenway would be at-grade. NICTD proposes to install an at-grade crossing and warning system at Fisher Street to enable motor vehicles and trail users to cross the railroad. NICTD would re-align approximately 350 feet of the existing Pennsy Greenway between Manor Avenue and the Monon Trail to direct trail users to this proposed crossing (see **Figure 7.5-12**). NICTD would coordinate with Munster on the design of this realignment and crossing. NICTD expects to require temporary closure of the trail between Manor Avenue and the crossing while the realignment and crossing are constructed. Closure is necessary for construction work and access, as well as worker and trail user safety. The crossing would be closed only for as long as it takes to build and open the realignment and crossing to safe public access.



SOURCE: Google Earth 2015.

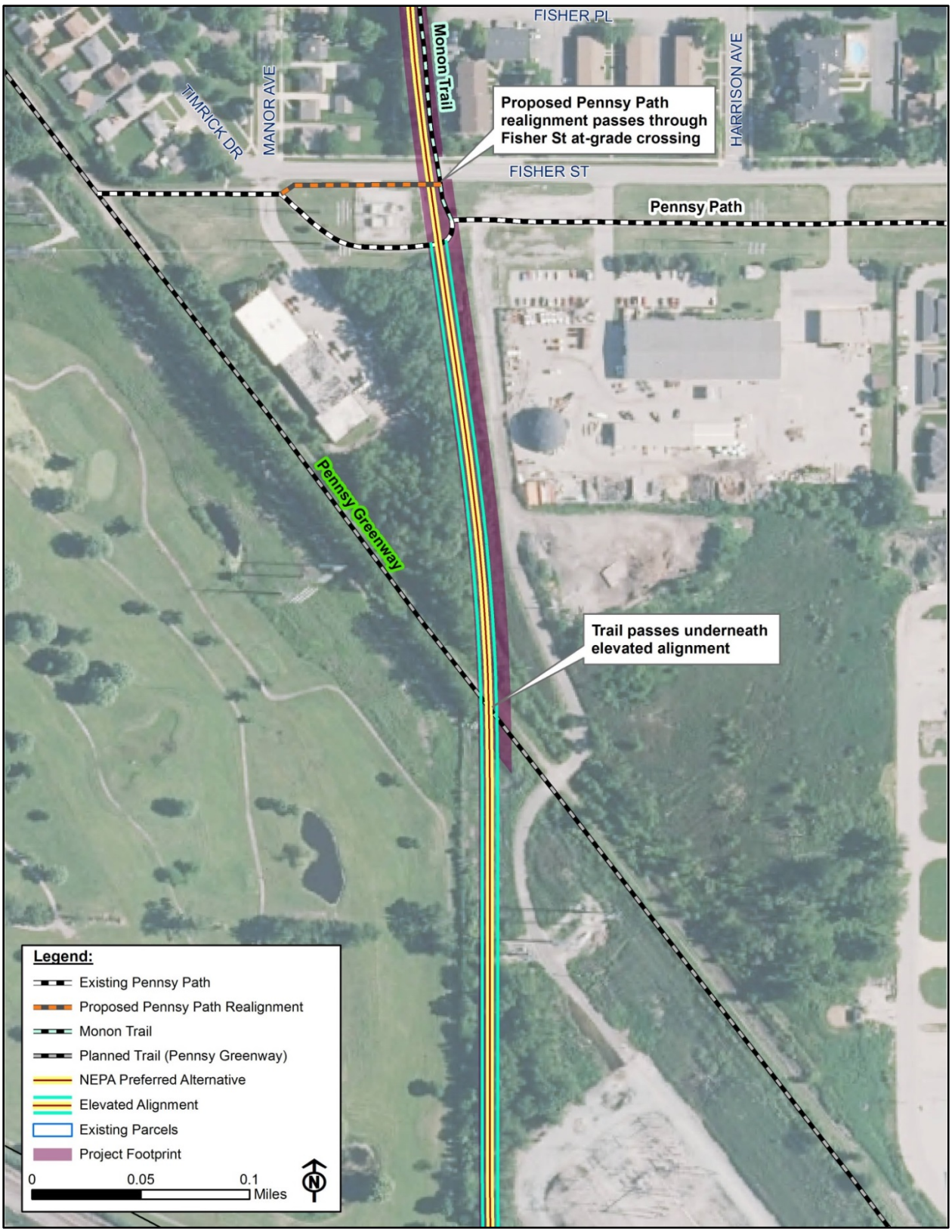
Figure 7.5-11: Pennsy Greenway

The **Chapter 5** assessment of effects indicates that the NEPA Preferred Alternative would not cause noise, vibration, or visual effects on the Pennsy Greenway that would constitute a constructive use; no substantial impairment of the activities, features, or attributes—the paved thoroughfare—that qualify the trail for protection under Section 4(f) would occur.

Preliminary Section 4(f) Use Determination: FTA has made a preliminary determination of ***de minimis* use** for the proposed crossings of the original Pennsy Greenway corridor and the existing path at Fisher Street, including temporary closure of the path during Project construction, provided that coordination between NICTD and Hammond, the official with jurisdiction, results in NICTD's commitment to cross the ROW, temporarily close the path during Project construction, and adjust the Fisher Street crossing, and Hammond's agreement with the criteria of *de minimis* use described in **Section 7.2**. By meeting these criteria, the NEPA Preferred Alternative would have no adverse impact on the features, attributes, or activities that qualify the Pennsy Greenway for protection by Section 4(f).

7.5.3 Monon Trail

The NEPA Preferred Alternative would be aligned within NICTD's existing ROW (formerly the Monon railroad corridor), which is partly occupied by the Monon Trail between Sibley Street in Hammond and Fisher Street in Munster. NICTD proposes to relocate approximately 0.95 mile (5,000 feet) of the paved trail where necessary within the existing ROW connecting the Hammond and Munster sections on a relocated trail bridge at the Little Calumet River (see **Figure 7.5-2** through **Figure 7.5-6** and **Appendix G**, Plan View Drawings, Sheets 5 through 9). NICTD would work with the City of Hammond and Town of Munster to relocate the trail where required.



SOURCE: INDNR Indiana Trails Inventory 2016.

Figure 7.5-12: Pennsy Greenway and the Project

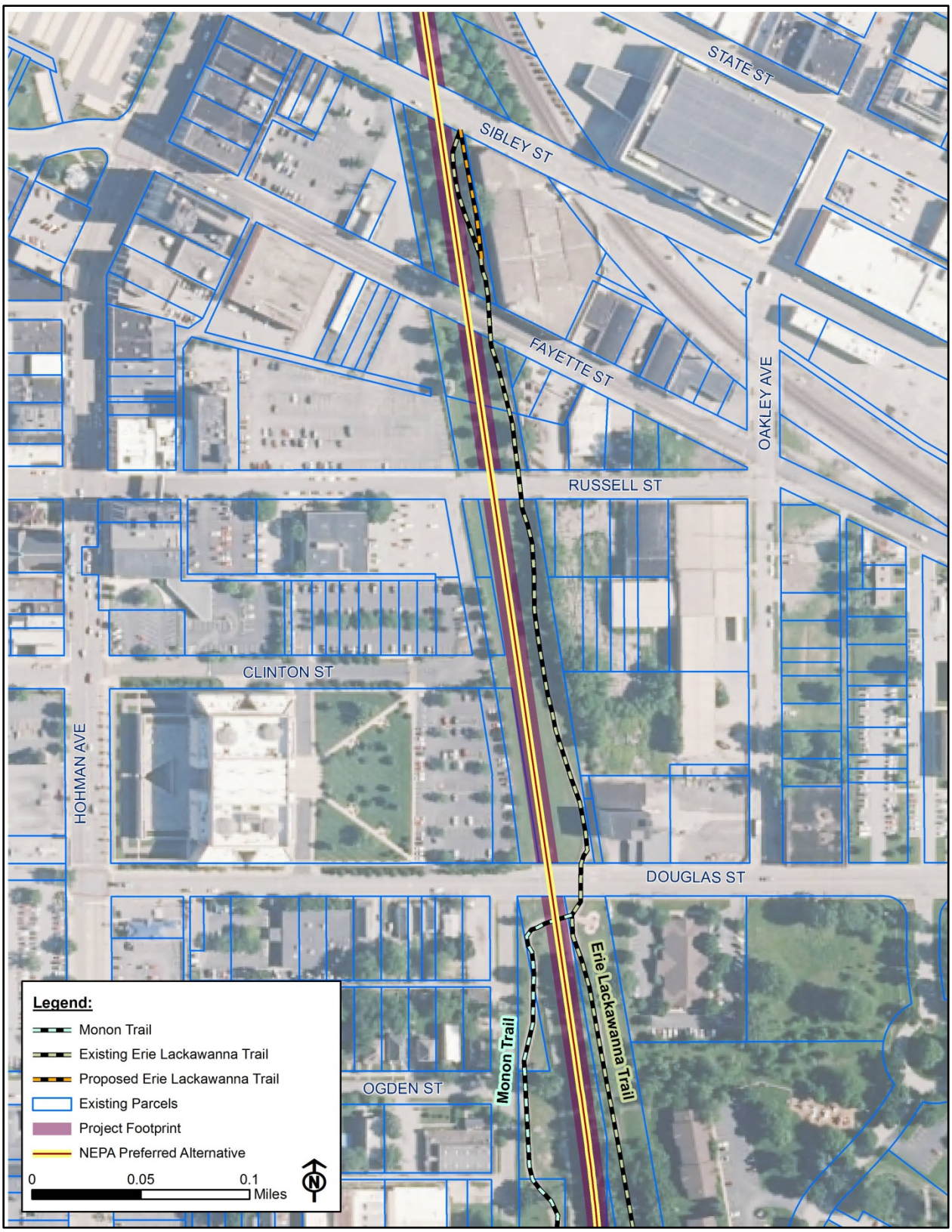
Temporary closure of the parts of the trail to be relocated would occur during Project construction. NICTD would work with the City of Hammond and Town of Munster to relocate the trail where required and to plan temporary trail closures in the Study Area during construction. In planning for temporary trail closures, the parties will consider the ability to provide temporary detours where reasonably feasible. The duration of temporary closures will only be as long as required to construct the portion of the Project in the trail area; the duration will be less than the construction duration of the overall project.

NICTD, the City of Hammond, and the Town of Munster have a cooperative agreement for the jointly-owned ROW, the same property the Monon Trail occupies. The agreement formally reserves the property for NICTD's future transportation use, but allows co-alignment of trails and other infrastructure (**Appendix F**). The Monon Trail was developed subsequent to the agreement being executed. By having the agreement and subsequently developing the Monon Trail within the property that is the subject of the agreement, the Section 4(f) definition of joint planning is met. Specifically, the property was formally reserved by three governmental agencies in consultation with one another and with jurisdiction over the transportation facility as well as the Section 4(f) property for a future transportation facility before the trail was established. As a result, impacts of the Project on the Monon Trail are not considered a use as defined by 23 CFR §§ 774.11(i) and 774.17. The Monon Trail is therefore not considered further in this Section 4(f) evaluation.

7.5.4 Erie Lackawanna Trail

The NEPA Preferred Alternative would be aligned partially within NICTD's existing ROW and partially within the Erie Lackawanna Trail ROW (formerly the CSX ROW) (see **Figure 7.5-13**) between Sibley Street and Ogden Street in Hammond. South of Ogden Street the trail gradually turns southeasterly, away from NICTD's ROW. NICTD proposes to permanently use a portion of its ROW for the NEPA Preferred Alternative. NICTD would have to shift approximately 0.06 mile (320 feet) of the physical Erie Lackawanna Trail between Sibley Street and Ogden Street to provide adequate separation distance between the rail and trail alignments. The impacted element of the trail would be its paved thoroughfare. NICTD would relocate the trail within its existing ROW as part of the NEPA Preferred Alternative, forming a new terminus point at the north and connecting to the remaining portion of the trail to the south. NICTD would work with the City of Hammond to develop the plan for the relocated trail.

Preliminary Section 4(f) Use Determination: FTA has made a preliminary determination of ***de minimis* use** for the Erie Lackawanna Trail in Hammond, provided that coordination between NICTD and Hammond, the official with jurisdiction, results in NICTD's commitment to relocate the trail, and Hammond's agreement with the criteria of *de minimis* use described in **Section 7.2**. By meeting these criteria, the NEPA Preferred Alternative would have no adverse impact on the features, attributes, or activities that qualify the Erie Lackawanna Trail for protection by Section 4(f).



SOURCE: INDNR Indiana Trails Inventory 2016.

Figure 7.5-13: Erie Lackawanna Trail and the Project

7.5.5 O.K. Champion Building

As part of the NEPA Preferred Alternative, NICTD proposes to locate portions of the proposed alignment and North Hammond Maintenance Facility on properties west of Sheffield Avenue, including the O.K. Champion Building property (see **Figure 7.5-14**). Specifically, the proposed alignment would occupy the property along its frontage with Sheffield Avenue. In this location, the alignment would be rising in elevation in a northbound direction. However, the proposed alignment structure would block the only access to the O.K. Champion Building property, which is from Sheffield Avenue, making the building inaccessible. NICTD proposes to remove the building and use the remainder of the property for a portion of the proposed North Hammond Maintenance Facility. NICTD would acquire the 2.3-acre O.K. Champion Building property and demolish the building, resulting in removal of the historic property. Although the Commuter Rail Alternative Options would avoid the taking of the O.K. Champion Building site, the NEPA Preferred Alternative alignment along Sheffield Avenue offers several important advantages, including:

- The NEPA Preferred Alternative would connect to the South Shore Line (SSL) before reaching the state line, thereby avoiding the approximately 3,000-foot long Chicago South Shore & South Bend (CSS) yard. The more roundabout routing that would be required to connect the Commuter Rail Alternative Options to the SSL near the Hegewisch Station would also involve use of Norfolk Southern (NS) freight line ROW, which the railroad has not indicated a willingness to sell or share.
- The NEPA Preferred Alternative would allow development of the joint West Lake Corridor/SSL Hammond Gateway Station. In the Commuter Rail Alternative Options, developing a combined station west of the proposed Hammond Gateway Station site would only be feasible at the existing SSL Hegewisch Station due to the CSS freight yard separating the two rail lines. However, this operation would conflict with the CSS's desire to minimize commuter rail traffic during the off-peak when freight traffic is heavier.

Preliminary Section 4(f) Use Determination: The NEPA Preferred Alternative would result in a **permanent incorporation** of the O.K. Champion Building into a transportation facility. The NEPA Preferred Alternative would permanently remove the historic O.K. Champion Building. FTA determined this would result in an "adverse effect" on the historic property under Section 106, although concurrence from the Indiana State Historic Preservation Officer (SHPO), Indiana Department of Natural Resources' (INDNR's) Division of Historic Preservation and Archaeology (DHPA) has not yet been received.

SOURCE: AECOM 2015.

Figure 7.5-14: O.K. Champion Building and the Project

7.5.6 Federal Cement Tile Company Building

The Federal Cement Tile Company Building is adjacent to the Commuter Rail Alternative Operations alignment, near the Indiana-Illinois state line between the Grand Calumet River and Marble Street in Hammond. It is approximately 1/3-mile west of the NEPA Preferred Alternative (see **Figure 7.5-8**). No use of this property would be required to implement the NEPA Preferred Alternative. The **Chapter 5** assessment of effects indicates that the NEPA Preferred Alternative would not cause noise, vibration, or visual effects on the Federal Cement Tile Company building that would constitute a constructive use.

Preliminary Section 4(f) Use Determination: The Project would result in **no use** of the Federal Cement Tile Company building. No substantial impairment of the activities, features, or attributes that qualify the Federal Cement Tile Company Building for protection under Section 4(f) would occur.

7.5.7 Burnham Greenway

The Burnham Greenway is a trail between Chicago and Lansing, Illinois, with two distinct segments. Plans to connect the north and south segments involve a project known as the Burnham Greenway Gap, which would involve a proposed at-grade crossing of the SSL near Burnham Avenue (see **Figure 7.5-10**). The NEPA Preferred Alternative would operate additional train service on the existing SSL at this location. No use of the Burnham Greenway Gap project property would be required to implement the NEPA Preferred Alternative. The **Chapter 5** assessment of effects indicates that the NEPA Preferred Alternative would not cause noise, vibration, or visual effects on the Burnham Greenway that would constitute a constructive use.

Preliminary Section 4(f) Use Determination: The Project would result in **no use** of the Burnham Greenway. No substantial impairment of the activities, features, or attributes that qualify the Burnham Greenway for protection under Section 4(f) would occur.

7.6 Avoidance Analysis

Once preliminary Section 4(f) uses have been determined, it is necessary to consider any avoidance alternatives that would eliminate individual use of Section 4(f) resources. Feasible and prudent avoidance alternatives are those that would avoid using any Section 4(f) resource and would not cause other problems of a magnitude that would substantially outweigh the importance of protecting the Section 4(f) resource (23 CFR § 774.17). Alternatives evaluated to avoid use of the O.K. Champion Building and other Section 4(f) properties include the No Build Alternative and the following types of alternatives as identified in FHWA's *Section 4(f) Policy Paper* (FHWA 2012):

- **Location Alternatives**: A location alternative refers to the rerouting of the entire Project along a different alignment.
- **Alternative Actions**: An alternative action involves actions that do not require construction or that consist of a different transit mode.
- **Alignment Shifts**: An alignment shift is the rerouting of a portion of the Project to a different alignment to avoid the use of a specific resource.
- **Design Changes**: A design change is a modification of the proposed design in a manner that would avoid impacts.

7.6.1 Avoidance Alternative Feasibility and Prudence Standards

Definitions of feasible and prudent alternatives under 23 CFR § 774.17 note that an alternative that would use any Section 4(f) resource is not an avoidance alternative for further prudence evaluation. All of the Build Alternatives would affect at least one Section 4(f) resource and are not considered avoidance alternatives. Based on the identification of potential avoidance alternatives described above, only one alternative option was identified that could avoid use of Section 4(f) resources: the No Build Alternative. This avoidance alternative is further evaluated using the feasible and prudent standards of Section 4(f).

As defined in 23 CFR § 774.17, an alternative is determined infeasible if it cannot be built as a matter of sound engineering judgment. Also in 23 CFR § 774.17, factors are defined for determining alternatives to be not prudent. An alternative could be not prudent for any of the following reasons:

- **Factor 1**: It would compromise the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need.
- **Factor 2**: It would result in unacceptable safety or operational problems.
- **Factor 3**: After reasonable mitigation, it would still cause one or more of the following:
- Severe social, economic, or environmental impacts
- Severe disruption to established communities
- Severe, disproportionate impacts on low-income or minority populations
- Severe impacts on environmental resources protected under other federal statutes
- **Factor 4**: It would result in additional construction, maintenance, or operational costs of an extraordinary magnitude.
- **Factor 5**: It would cause other unique problems or unusual factors.
- **Factor 6**: It would involve multiple factors in one through five above, that while individually minor, could cumulatively cause unique problems or impacts of extraordinary magnitude.

The following narrative evaluates the No Build Alternative and other potential location alternatives, alternative actions, alignment shifts, and design changes using these feasible and prudent factors. As indicated in this narrative, none of the potential actions is a feasible and prudent avoidance alternative.

7.6.1.1 Avoidance Alternative #1: No Build Alternative

The No Build Alternative is defined as the existing transportation system, plus any committed transportation improvements included in the NIRPC *2040 Comprehensive Regional Plan* (CRP) (NIRPC 2011) and Chicago Metropolitan Agency for Planning's (CMAP) *GO TO 2040 Comprehensive Regional Plan* (CMAP 2014) through the planning horizon year 2040. It also includes capacity improvements to the existing Metra Electric District's (MED) line and Millennium Station as documented in NICTD's *20-Year Strategic Business Plan* (NICTD and RDA 2014).

The No Build Alternative would avoid the use of any Section 4(f) resource by making no alterations to the existing infrastructure; however, it is not a prudent avoidance alternative under Factor 1: it would compromise the Project to a degree that it is unreasonable to proceed with the Project in light of its stated Purpose and Need. Specifically, the No Build Alternative would not meet the Purpose and Need for the Project. The Project Purpose is to increase transportation options for central and southern Lake County residents traveling to downtown Chicago, reduce travel time and travel costs, and promote economic development opportunities for Lake County. The No Build Alternative would

not establish the infrastructure and service needed to change the existing transportation options for central and southern Lake County residents traveling to downtown Chicago, or reduce travel times and costs. In the absence of these benefits, the No Build Alternative would not promote economic development opportunities for Lake County beyond what can be achieved under existing transportation conditions.

7.6.1.2 Location Alternatives

Use existing Railroad Corridors: NICTD examined the feasibility of using existing Study Area freight railroad corridors, either by sharing track with freight operators or using a portion of private railroad ROW. Each Build Alternative Option, presented in this DEIS, proposes to use portions of existing railroad ROW including CSS (SSL), IHB, and/or CSX. In some locations, such as along the SSL, sufficient track capacity is available and additional ROW is not needed to accommodate the Project. However, in most cases, NICTD would need to acquire additional ROW for their own track needs. As presented in **Section 7.5**, none of the Build Alternative Options completely avoids the use of property protected by Section 4(f).

In the North Hammond area, the NS freight line is aligned west of the O.K. Champion Building and was examined early in Project planning as a potential location for the Project. However, NICTD's conversations with the NS about possibly using their ROW were not favorable. NS is not interested in sharing their ROW with the Project. As a result, NICTD determined that while use of the NS ROW may be potentially feasible, it is not prudent (Factor 5). Acquiring a separate ROW adjacent to the NS was also considered, but it would have the same issues as the Commuter Rail Alternative Options, including a more distant connection to the SSL to avoid the CSS freight yard and would also require the use of NS ROW to complete the connection to the SSL. As a result, this is not prudent (Factor 5).

Use existing Roadway Corridors: NICTD examined the potential to align the Project within existing Study Area roadways as an alternative to using existing railroad corridors. Aligning a commuter rail corridor along a roadway requires a dedicated guideway that is separated from roadway operations for safety. This can be accomplished with physical barriers or grade separation. In either case, additional ROW would be needed. Also, the configuration of the roadway network between the SSL and Munster/Dyer is such that forming a continuous, generally straight commuter rail alignment would require linking multiple roadway corridors across properties and neighborhoods. Property impacts and neighborhood fragmentation would be likely. Construction phase impacts related to traffic and roadways could be substantial in duration and magnitude. For these reason, while using existing roadway corridors may be potentially feasible, it is not prudent (Factor 6).

7.6.1.3 Alternative Actions

Upgrade Existing Facilities: The Study Area is currently served by the following existing facilities:

- **Amtrak (Dyer and Hammond/Whiting):** As described in **Section 3.2.3** of this DEIS, service to and from Chicago is limited to one round trip daily at Dyer and two round trips daily at Hammond/Whiting.
- **SSL**: NICTD provides commuter rail service to Chicago via the SSL and MED seven days per week, with the Hammond and Hegewisch Stations in the Study Area.
- **Pace**: Bus service to Morton Court/Willow Court in Hammond from points in Illinois is provided.
- **GPTC**: Bus service between Gary and Hammond is provided, including connections with Pace and the Chicago Transit Authority (CTA).

Expansion of bus services within the Study Area, while potentially feasible, does not address the problems regarding travel time delays due to traffic congestion on the way to downtown Chicago (**Section 1.2.2.2**). Amtrak is an intercity and long distance passenger rail service that is not designed or intended to serve the growing Study Area commuter needs. NICTD's SSL service is remote from the southern portions of the Study Area, requiring Study Area SSL users to travel across the Study Area to the nearest station. In the existing condition as well as the future without the Project, travelers would add to roadway congestion, which is contrary to the Project Purpose and Need. In summary, while upgrading existing bus, Amtrak or SSL facilities is potentially feasible, none is prudent because none of these changes would achieve the Project Purpose and Need (Factor 1).

Alternative Modes: Potential alternative modes considered include bus and light rail as these are commuter-oriented transit modes that could potentially serve a similar function to commuter rail service. Bus service in shared lanes, while potentially feasible, would not achieve the Project Purpose and Need because it would be subject to roadway congestion and delays (Factor 1). Bus rapid transit and light rail transit in dedicated lanes would have the same issues as the Project in terms of alignment and ROW needs. In addition, bus rapid transit and light rail transit could require more ROW adjacent to freight railroad corridors in order to meet safety requirements for horizontal separation. More ROW needs would increase Project costs and cause more property and community impacts than the Project, including potential impacts on properties protected by Section 4(f), including the O.K. Champion Building. Thus, while potentially feasible, bus rapid transit and light rail transit are not prudent because of a combination of cost and impact issues (Factor 6).

7.6.1.4 Alternative Shifts

Tunnel: Placement of the NEPA Preferred Alternative in a tunnel for the entirety of the alignment south of the SSL connection would be cost-prohibitive. NICTD considered whether the portion of the Project in North Hammond could be placed in a tunnel to avoid impacting the O.K. Champion Building. In concept, a tunnel from north of Douglas Street in downtown Hammond to the proposed connection with SSL near the state line would be approximately 1.4 miles long. This distance would be required to enable the track to daylight and meet the proposed at-grade section south of Douglas Street.

The tunnel would have to be deep enough to pass under the Grand Calumet River near the tunnel midpoint. The underlying geology is unconsolidated sands, which would be challenging for tunnel construction in the Study Area and would require special stabilization techniques for safe and efficient construction activities as well as long-term operations. Due to the combination of geologic conditions, the developed character of the area under which the tunnel would pass, and the numerous railroads and roadways to be crossed, a bored tunnel construction methodology would be required. While bored construction would minimize surface disturbance, a higher cost is inherent in this type of construction. The cost for tunneling would be approximately $325 million. By comparison, the Project cost for this section of the NEPA Preferred Alternative is approximately $134 million for ROW improvements only, or 59 percent less than a tunnel. The substantially greater cost and the construction challenges in the Study Area result in this alternative being not prudent (Factor 4).

Use Existing NS Railroad in north Hammond: Early in the Project study, NICTD considered aligning the Project along or on the NS freight line in north Hammond, which would provide the most direct route through the north Hammond area. However, as described above, NS did not support shared use of the alignment. As a result, this alternative is not prudent (Factor 5).

Alignment on Sheffield Avenue: NICTD considered aligning the NEPA Preferred Alternative within the Sheffield Avenue ROW, either alongside the travel lanes or elevated on an aerial structure. However, the portion of Sheffield Avenue being considered is part of Hammond's Chicago Street Widening and Reconstruction Project (http://gochicagostreet.com/). The focus of this project along

Sheffield Avenue is to improve safety, reduce congestion, enhance mobility, and address deteriorating infrastructure. This project intent is especially important for the well-being of the residents in the neighborhood east of Sheffield Avenue who bear the brunt of traffic and deteriorating physical conditions on Sheffield Avenue. Placement of NICTD's guideway structure on top of the roadway would complicate the intent of the Chicago Street project and create an undesirable urban elevated track condition having a substantial, negative visual impact on the adjacent residential community. For this reason, while using the alignment of Sheffield Avenue is potentially feasible, it is not prudent (Factor 3).

Alignment East of Sheffield Avenue: NICTD considered aligning the NEPA Preferred Alternative east of Sheffield Avenue. The extra distance between the CSX freight line crossing and proposed Hammond Gateway Station would have been favorable for NICTD in terms of bringing the elevated guideway down to meet the SSL grade at the station. However, an existing, high density residential neighborhood is east of Sheffield Avenue. The impact that would occur to this community makes this alternative not prudent (Factor 3).

Span Property: NICTD considered whether it might be feasible to span the O.K. Champion Building property with the proposed elevated guideway. Typically, a distance of this length would require a truss bridge with an estimated cost of approximately $48,000 per track foot in 2016 dollars. The proposed structure through this area includes aerial bridge structures (at $9,300 per track foot) and retained fill (at $4,500 per track foot). The use of a longer span truss bridge would increase construction costs between 4 and 10 times. Thus, a clear span of the property is not prudent from a cost perspective (Factor 4).

7.7 Least Overall Harm Analysis

Since there is no feasible and prudent avoidance alternative, FTA is required to select the alternative that causes the least overall harm in light of the preservation purpose of Section 4(f). Selection is accomplished by balancing the factors at 23 CFR § 774.3(c)(1).

The alternatives to be considered in the least overall harm analysis include the Build Alternatives as described in **Section 2.3**. These include:

- NEPA Preferred Alternative
- Commuter Rail Alternative (Options 1 to 4)
- IHB Alternative (Options 1 to 4)
- Hammond Alternative (Options 1 and 3)
- Maynard Junction Rail Profile Option

In addition to the Build Alternatives, the least overall harm analysis will consider the avoidance alternatives described in **Section 7.6.1**, which include:

- No Build Alternative
- Alignment Location Alternatives
    - use existing railroad corridors
    - use existing roadway corridors
- Alternative Actions
    - Upgrade existing transit facilities

  - Use alternative modes (bus or light rail)
- Alignment Shift Alternatives
  - Place the alignment in a tunnel south of the SSL connection
  - Use existing NS Railroad in north Hammond
  - Place the alignment within the Sheffield Avenue ROW
  - Place alignment east of Sheffield Avenue
  - Span the Section 4(f) property

The Section 4(f) regulations require a balancing of the following seven factors when determining which alternative would cause the least overall harm (23 CFR § 774.3(c)(1)):

- Ability to mitigate adverse impacts on each Section 4(f) resource (including any measures that would result in benefits for the resource)
- Relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) resource for protection
- Relative significance of each Section 4(f) resource
- Views of the officials with jurisdiction over each Section 4(f) resource
- Degree to which each alternative meets the Purpose and Need for the Project
- After reasonable mitigation, the magnitude of any adverse impacts on resources not protected by Section 4(f)
- Substantial differences in costs among the alternatives

On November 7, 2016, FTA made the determination of eligibility and effects on historic resources in the context of the Section 106 process (see **Section 4.6** of this DEIS); however, official concurrence from the State Historic Preservation Officers (SHPOs) has not yet been received. Since the SHPOs are the officials with jurisdiction (per 23 CFR § 774.3(c)(1)) for the historic resources considered in this Section 4(f) evaluation, FTA cannot complete the analysis of least overall harm at this time. FTA's complete least overall harm analysis will be presented in the combined FEIS/ROD.

7.8 All Possible Planning to Minimize Harm

Section 4(f) requires a finding that the selected alternative includes all possible planning to minimize harm to Section 4(f) resources. "All possible planning" is defined in 23 CFR § 774.17, and states that a project must include documented consideration of all reasonable measures identified for minimizing and mitigating effects on Section 4(f) resources that would be used by the Project. In evaluating the reasonableness of measures to minimize harm, FTA will consider the following as defined in 23 CFR § 774.17:

- The preservation purpose of the statute
- The views of the official(s) with jurisdiction over the Section 4(f) resource
- The cost of the measures as a reasonable public expenditure in light of the adverse effects of the project on the Section 4(f) resource and the benefits of the measure to the resource
- Impacts or benefits of the measures for communities or environmental resources outside of the Section 4(f) resource

NICTD will continue to coordinate with the City of Hammond and the Town of Munster in regard to the Erie Lackawanna Trail. In this coordination, NICTD will address commitments it makes in the *de minimis* impact agreements anticipated to be reached with the municipalities. Likewise, through the Section 106 review process, FTA and participating consulting parties reached an agreement on appropriate mitigation measures to resolve adverse effects on historic properties. The agreed upon measures are detailed in the draft Memorandum of Agreement (MOA) between FTA and the Indiana State Historic Preservation Officer (SHPO), represented by the Indiana Department of Natural Resources' (INDNR) Division of Historic Preservation and Archaeology (DHPA) (see **Appendix E**). The MOA will be executed prior to completion of the combined FEIS/ROD. FTA is responsible for implementation of the mitigation measures on the schedule established in the MOA.

Recommended mitigation to resolve adverse effects on cultural resources includes the following measures as described in the draft MOA:

- **Archival Documentation**: A full recording of the historic properties selected for demolition, consistent with the standards of the NPS HABS/HAER documentation will be prepared.
- **Educational Materials**: In concert with HABS/HAER documentation, display and/or interpretive material for public exhibition concerning the historic properties affected by the Project will be prepared.
- **NRHP Amendment**: The NRHP-listed State Street Commercial Historic District, partially located within the APE, has undergone substantial alteration since it was listed in 1999. The nomination for the District will be amended to reflect its current condition.
- **NRHP Nomination**: To offset the unavoidable demolition of a historic property representative of Hammond's significant industrial history, i.e., either the O.K. Champion Building or the Federal Cement Tile Company, an NRHP nomination for a similar historic property in the vicinity of the demolished property will be prepared.

While no adverse impacts to archaeological resources are anticipated from the Project, the draft MOA also identifies measures required to mitigate impacts to archaeological historic properties, if any are identified during future archaeological Phase I or Phase II studies. The draft MOA (see **Appendix E**) states that an unanticipated discovery or unanticipated effect would be addressed in accordance with 36 CFR § 800.13(b)(3) if such a discovery were to occur.

On November 7, 2016, FTA made the determination of eligibility and effects on historic resources in the context of the Section 106 process (see **Section 4.6** of this DEIS); however, official concurrence from the SHPOs has not yet been received. Since the SHPOs are the officials with jurisdiction (per 23 CFR § 774.17) for the historic resources considered in this Section 4(f) evaluation, this discussion on all possible planning to minimize harm cannot be finalized at this time. FTA's assessment of all possible planning to minimize harm will be presented in the combined FEIS/ROD.

7.9 Consultation and Coordination

The Section 4(f) evaluation involved consultation and coordination with agencies and the public. Within the NEPA process and as described in **Chapter 9** of the DEIS, NICTD and FTA conducted outreach efforts with area residents, property owners, and key stakeholders with respect to development and selection of the NEPA Preferred Alternative and its effects on recreational areas and historic properties. This effort included coordination with the Indiana SHPO, the Illinois SHPO, and other consulting parties as part of the Section 106 process for historic properties, as well as with the City of Hammond and the Town of Munster for recreational areas. On September 29, 2014, FTA initiated Section 106 consultation with both the Indiana and Illinois SHPOs. Coordination and consultation with the two SHPOs, consulting parties, and the public will continue in the NEPA process.

In addition, to meet Section 4(f) coordination and review requirements (23 CFR § 774.5(a)), this evaluation will be made available to the Department of Interior for a 45-day review and comment period prior to finalization.

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