BERGMANN
ARCHITECTS ENGINEERS PLANNERS

Proposed Port Huron Station Update

Blue Water Transit Authority

Pre-NEPA Study

Final Report

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1.0 Executive Summary

A *Pre-Feasibility Study* commencing in 2018 reviewed 9 potential options that warranted further review of their viability to serve as options available to replace the existing Amtrak Station in Port Huron, MI. The report that follows, a Pre-NEPA Study, is the next step in the review process of locating and building a new, Amtrak passenger station in Port Huron. This Executive Summary provides a high-level digest of the following:

1. The NEPA process – a summary of the federal, environmental requirements associated with construction projects and what the process entails;
2. Alternative Station Locations and Options – A review of the viability of potential options at the locations discussed in the Pre-Feasibility study and two additional options discovered in the early stages of this Pre-NEPA study. Elimination resulted in two, remaining locations (three options) under consideration which were further analyzed to assess existing conditions;
3. The Pre-NEPA Review – an analysis of which of the 3 classes detailed in Section 2 of this report is most suitable to the subject project
4. Potential NEPA Classification – the findings from an environmental review of the Options identified in Section 3.

A summary of the content and role of each of the sections in this study follows:

Section 2, the NEPA Process, is a federal requirement to review the potential impact of a construction project on the environment of the project area and results in one of three, major classes:

   a. Categorical Exclusion – a project with no significant impact on the environment;
   b. Environmental Assessment – a project in which the environmental impact is unclear and requires further analysis and
   c. Environmental Impact Statement – a project that is deemed a major, federal action that significantly affects the quality of the human environment in the subject area;

Funding for this project is unknown at this time but it is assumed that federal dollars will be needed which warrants following the NEPA process.

The lead federal agency will be determined as well as the Class of Action once funding is identified for the project.

The stakeholders directly engaged as part of this study include:

1. Federal Railroad Administration
2. Federal Transit Administration
3. US Customs and Border Protection
4. City of Port Huron

5. Port Huron Township
6. Blue Water Area Transit
7. Amtrak
8. Michigan Department of Transportation
9. Southeast Michigan Council of Governments
10. Canadian National Railroad (Grand Trunk Western Railroad)
11. CSXT Railroad

Section 3, as part of a prior study, 9 possible options emerged for consideration as a new train station location. Siting criteria were identified which eliminated for alternatives (Options 5, 6, 7 and 9) from further consideration.

This left a total of 5 potentially viable options regarding the siting of a new Amtrak Station. As part of this study, a draft Purpose and Need Statement was developed and further stakeholder outreach was completed. Based on the stakeholder input and draft Purpose and Need, Options 2, 3, 4 and 8 were removed from further consideration due to railroad logistical issues. However, two new options were discovered and considered feasible (Option 10 and 11). This leaves the following options as being feasible and considered for further investigation during the NEPA process:

- Option 1 is a new facility built at the location of the existing Amtrak Station. It is further broken down into 3 sub-options (options 1A, 1B and 1C) that explore expanding the existing facility either east or south of the existing station;
- Option 10 is a new facility built adjacent to a CSX spur located southwest of the existing Amtrak station, near Dove Road. This option also features 3 sub-options (options 10A, 10B and 10C) that reflect various track configurations to accommodate Amtrak, while minimizing freight traffic interference and;
- Option 11 is a new facility on the east side of 16th Street. (The existing Amtrak facility is located just west of 16th Street) with overflow parking on the existing Amtrak Station site.

A no-build option will also be considered as part of the NEPA process.

Section 3 reviews Options 1, 10, 11 in further detail by discussing six considerations in connection with the Existing Conditions at the two sites where these three options may occupy. With respect to both locations and all three options, the study addresses the following existing site conditions:

1. Existing Facility (or Existing Site in the case of Option 10);
2. Land Ownership
3. Ridership
4. Traffic
5. Utilities
6. Border Security

Section 3 then assesses the Alternative Station Locations and Options, providing details of Options 1, 10, 11 by reviewing eleven considerations regarding each option:

1. Facility Layout and Operations
2. Building/Amenities
3. Parking
4. Accessibility
5. Traffic and Safety
6. Rail Operations
7. Sustainability
8. Constructability
9. Border Security
10. Wetlands
11. Bridge(s)

In addition to the text descriptions in Section 3, an Option Comparison Matrix is included in the Appendix to provide a visual comparison of the various site options and how they fared when scrutinized in the context of each relevant consideration.

Section 4, Pre-NEPA Review, summarizes the potential environmental impacts of each option, including making distinctions between Options 1 and 11, where passenger operations are already in place on the one hand and Option 10, where passenger rail operations are not currently in place on the other.

Section 5, Potential NEPA Classification, reviews the extent to which it is possible to seek, and obtain, a Categorical Exclusion in connection with each site location option, followed by a review of similar rail station construction and/or upgrade projects constructed in the past and listed on FRA's website, of which the majority progressed as Environmental Assessments that resulted in findings of No Significant Impact. These two reviews led the team to conclude that a Categorical Exclusion may be approved, however, with multiple site options being considered; an Environmental Assessment is likely.

Section 6, summarizes this study followed by Section 7 which lists applicable references.

2.0 NEPA Process

The National Environmental Policy Act of 1969 (NEPA) requires Federal agencies to consider and disclose the environmental impacts of their proposed actions as part of their decision-making. The Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and Federal Railroad Administration (FRA) follow procedures set forth in their joint NEPA regulations (23 CFR part 771). Although a funding source is unknown at this time, this project is anticipated to be funded through federal aid programs administered by either FRA or FTA or possibly FHWA and one of these agencies will assume the role of federal lead agency, or the agency carrying out the federal action and responsible for the environmental analysis, to ensure compliance with NEPA procedures.

NEPA includes three major classes of environmental reviews that are dependent on the significance of environmental impacts by the project actions. The Categorical Exclusion (CE) or NEPA Class II covers actions that do not individually or cumulatively have a significant impact on the human environment. Most projects progressed by transportation agencies (approximately 90-95%) fall into this category. Each federal agency maintains a list of actions they have determined fall within the CE category of NEPA and these actions are agency specific. An Environmental Assessment (EA) or NEPA Class III is prepared when the significance of environmental impacts is not clearly established and additional analysis is required. The results of the EA indicate either there is no significant impact to the quality of the environment and a Finding of No Significant Impact (FONSI) is issued or it is determined the project is a major Federal action that significantly affects the quality of the human environment and an Environmental Impact Statement (EIS) or NEPA Class I is prepared. An EIS is the most extensive form of documentation to demonstrate compliance with NEPA. Both the EA and EIS processes require extensive forms of documentation and considerable public outreach and input and major milestones must be completed within given timeframes.

NEPA requires agencies to complete an alternatives analysis that describes to the public the options the federal agency has in addressing the problem stated in their original purpose and needs statement. In accordance with the requirements of 23 CFR 771.111(f), project alternatives must connect logical termini, have independent utility, and not restrict the consideration of future transportation alternatives. There is no requirement to consider every potential alternative but a full range of alternatives must be developed and the process used to develop, evaluate, and eliminate potential alternatives must be documented and made public. An initial draft Purpose and Needs statement has been developed for this project and is provided in Appendix A.

Under NEPA, the lead agency is responsible for determining the class of action and that the requirements of NEPA have been satisfied. Since it is undetermined which federal agency would fund the project, the required NEPA classification is unknown as well. However, all likely federal aid sponsors of the project, FTA, FRA and FHWA, follow the same procedures under 23

CFR 771 and a November 2018 agreement allows cross-agency actions listed as categorical exclusions to be used interchangeably amongst the agencies. Therefore, the NEPA requirements and required documentation is very similar amongst the agencies and reasonable assumptions can be made regarding the likelihood of the type of NEPA document required. The following section documents the known significance of environmental impacts required to be studied under NEPA for identified alternatives that meet the Purpose and Need and the likely NEPA documentation requirements. Additional studies, analysis, and documentation would be required to satisfy the NEPA requirements of the designated lead agency.

2.1 STAKEHOLDERS

Several stakeholders were engaged in this Pre-NEPA study and are described below. Additional public outreac and further stakeholder engagement will be required in the NEPA process but those engaged thus far assisted in developing and evaluating the feasible options in this study.

2.1.1 Federal Railroad Administration (FRA)

FRA is a Federal entity who has jurisdiction on railroad freight service, including the CN RR mainline on which Amtrak operates their Blue Water passenger service. Since this passenger services occurs on a freight rail line, FRA will likely be involved with administering funds on this project depending on the funding that is sought and ultimately used. Regardless if they are the lead agency during the NEPA process, they will be a stakeholder on this project.

FRA was formally engaged in three meetings during this study. Their concerns were heard and were incorporated into this study.

Primary Contact: Andrea Green-Armstrong – Program Engineer

2.1.2 Federal Transit Administration (FTA)

FTA is a Federal entity who has jurisdiction on transit modes including light rail and commuter rail. FTA may be involved with administering funds on this project depending on the funding that is sought and ultimately used. Regardless if they are the lead agency during the NEPA process, they will be a stakeholder on this project.

FTA was formally engaged in three meetings during this study. Their concerns were heard and were incorporated into this study.

Primary Contact: Kathleen Russell – Community Planner / Financial Management & Program Oversight

2.1.3 US Customs and Border Protection (CBP)

CBP serves two distinct functions including customs inspections and border protection. CBP has both of these responsibility nearby at the international railroad tunnel crossing with Canada. CBP inspects trains entering the country and patrols the

border crossing. They will need to be informed and consulted with regarding border concerns as this project progresses.

CBP was informally engaged through phone calls and emails during this study. They were briefed on this project and provided input on their concerns but did not have objections to the options being presented as long as their concerns are addressed.

Primary Contact: Javiar Geronimo, Jr. – Patrol Agent in Charge

2.1.4 City of Port Huron

The existing train station is situated within the City of Port Huron limits. The City also owns the land adjacent to the proposed site identified in Option 10 within this study. The City will provide input regarding access to a new site related to local streets and non-motorized routes as well as any local permitting/planning requirements.

The City was formally engaged in two meetings during this study which was supplemented by several emails and phone calls for their input. Their concerns were heard and were incorporated into this study.

Primary Contact: Eric Witter, PE – City Engineer/Director of Public Works

2.1.5 Port Huron Township

The land associated with Option 10 is within the Township's jurisdiction. The Township will provide input regarding access to Option 10 related to local streets and non-motorized routes as well as any local permitting/planning requirements.

The Township was formally engaged in two meetings during this study which was supplemented by several emails and phone calls for their input. Their concerns were heard and were incorporated into this study.

Primary Contacts: Paul Maxwell – DDA Director and Robert Lewandowski - Supervisor

2.1.6 Blue Water Area Transit (BWAT)

BWAT is the sponsor agency administering study funding for this project and the previous Pre-Feasibility study. BWAT provides regional transit services including bus service in and around Port Huron, MI.

BWAT staff coordinated and communicated with all of the various stakeholders on this project including reporting to its Commission members. Their concerns were heard and were incorporated into this study.

Primary Contacts: Dave McElroy – General Manager and Lisa Collins – Procurement Manager

2.1.7 Amtrak

Amtrak is the agency who operates the passenger train service between Port Huron and Chicago. They currently own and maintain the existing train station (building, platform, outbuildings, and parking area) as well as the land it is situated on (CN RR owns the track sidings used for boarding and access to the mainline rail).

Amtrak utilizes this station for minor maintenance as it serves as the turn-around point (end of the line) for the Blue Water service. Primary maintenance is currently conducted in Chicago.

Amtrak was formally engaged in three meetings during this study which was supplemented by several emails and phone calls to obtain their input. Their concerns were heard and were incorporated into this study.

Primary Contact: Sara Benson – Senior Manager Facilities Development

2.1.8 Michigan Department of Transportation (MDOT)

MDOT's Office of Rail as well as MDOT's Office of Passenger Transportation actively participate in promoting passenger rail service throughout the state. The Office of Rail assisted BWAT in obtaining the funding for this study and was involved in several of the recent train station developments in the state.

MDOT was formally engaged in all of the stakeholder meetings during this study which was supplemented by several emails and phone calls to obtain their input. Their concerns were heard and were incorporated into this study.

Primary Contact: Jeff Martin – Office of Rail

2.1.9 Southeast Michigan Council of Governments (SEMCOG)

SEMCOG is an Metropolitan Planning Organization (MPO) concerned with mobility and traffic through southeast Michigan. They provide input and study different modal opportunities for moving people and goods.

SEMCOG was formally engaged in one meeting during this study. Their concerns were heard and were incorporated into this study.

Primary Contact: Alex Bourgeau – Manager Modeling and Mobility Group

2.1.10 Canadian National Railroad (CN RR)/Grand Trunk Western Railroad (GTW RR)

CN RR is the owner of the mainline between Port Huron and Lansing, as well as the mainline between Port Huron and Toledo, OH (through Detroit). CN RR owns and maintains the tracks as well as the sidings used by the Amtrak service as the Port Huron Station. CN RR also owns and maintains the international tunnel crossing under the St. Clair river into Canada as well as a rail yard located west of the existing train station and north of the mainline. In addition, CN RR owns the spur that extends north

towards the Blue Water Bridge crossing, however, the line is operated and maintained by a 3rd party railroad.

As the host railroad, CN RR will be an important stakeholder for this project as new train service or a new location must be coordinated with their freight rail operations.

CN RR was formally engaged in two meetings during this study which was supplemented by several emails and phone calls to obtain their input. Their concerns were heard and were incorporated into this study.

Primary Contact: Thomas Brasseur – Manager of Public Works

2.1.11 CSX Transportation Railroad (CSXT RR)

CSXT RR is the owner of the track between their yard located south of the CN RR mainline and just east of Michigan Road and Marysville, MI. The line is operated and maintained by a 3rd party railroad.

If Option 10 is progressed, CSXT RR would be the host railroad and an important stakeholder for this project as new train service or a new location must be coordinated with their freight rail operations.

CSXT RR' real estate division was informally engaged in by several emails and phone calls to obtain their input. Their concerns were heard and were incorporated into this study.

Primary Contact: Brad Armstrong – Project Manager Public Projects

3.0 Alternative Station Locations and Options

A range of 9 potentially feasible options were developed in the *Pre-Feasibility Study* (dated July 2, 2018) and were evaluated for viability. As part of this pre-NEPA study, a draft Purpose and Need Statement (see Appendix A) was developed and the sites identified as viable for further study were evaluated. The results of the Pre-Feasibility study indicated the following options should be considered for further study:

- Option 1: 2223 16th Street (Existing Station) See section 3.4, 3.5, or 3.6. for a detailed description.
    - Note: Option 1 has been split into Options 1A, 1B, and 1C for this study.
- Option 2: CN Railyard. See previous Pre-Feasibility Study dated July 2, 2018.
- Option 3: Port Huron Township Land site. See previous Pre-Feasibility Study dated July 2, 2018.
- Option 4: Railroad Street Site. See previous Pre-Feasibility Study dated July 2, 2018.
- Option 8: Vantage Point-Pere Marquette Station. See previous Pre-Feasibility Study dated July 2, 2018.

Two additional options have been identified as part of this continuation study that should be investigated further during the NEPA process:

- Option 10: Dove St. See section 3.7, 3.8 or 3.9 for a detailed description.
    - Note: Option 10 has three sub variants defined in this study as Option 10A, 10B, and 10C.
- Option 11: 16th Street (East Side). See section 3.10 for a detailed description.

The no-build option will also need to be considered under the NEPA evaluation, however this alternative does not meet the objectives of the Purpose and Need Statement. The no-build option consists of:

- Retaining the planned level boarding and maintenance platform work proposed by Amtrak under a separate project. This will provide level boarding thus improving accessibility for Amtrak passengers.
- The rail operations will not be impacted and service would continue as it does today.
- No additional parking will be provided which will not meet the Purpose and Need as stated.
- No additional lighting upgrades will be provided which will not improve safety as stated in the Purpose and Need.
- No additional space will be provided in the building for a waiting area or for Amtrak crews which does not meet the Purpose and Need.

3.1 ELIMINATION OF NON-VIABLE OPTIONS

Based on further investigation during this continuation study, Options 2, 3, 4, & 8 were removed from further consideration due to the complexity of rail operations. After more in-

depth discussions with the host railroad (Canadian National Railroad (CN RR)), it became evident that station sites located north of the CN RR mainline would be at risk of long and unpredictable delays to passenger service and would fail to support existing and future ridership by greatly improving the user experience as identified in the Purpose and Need Statement (see Appendix A). The operational conflict stems from US Customs inspections that occur after trains enter the US through the CN RR tunnel. Trains up to a mile in length occupy the north mainline track in order to access CN's railyard on the north side of their main. When US Customs inspects these trains, they sit on the north main from approximately Griswold Street back to the existing station site which would block trains from entering or exiting a station located to the north (see Figure 1). In addition, Options 2 and 3 are almost entirely within forested wetland based on National Wetland Inventory (NWI) mapping and appear to be wetland in aerial photography. Environmental impacts to wetlands and habitat are likely to be significant.

A summary matrix comparing the feasible options (Options 1, 10, and 11) is included in Appendix B.

Figure 1: Operational RR Conflict North of the CN Mainline

3.2 EXISTING CONDITIONS – EXISTING STATION SITE (OPTIONS 1 & 11)

The existing station was built in 1979 which includes waiting and ticketing areas, restrooms, and back of house service. The existing site is situated on land owned by Amtrak with access from 16th Street. The CN RR owns the platform and the track sidings. It is located along the CN RR mainline approximately ½ mile west of the west end of the CN RR international freight tunnel under the St. Clair river. It is situated within an industrial area surrounded by residential areas north and east.

3.2.1 Existing Facility

The existing site is paved with approximately 62 parking spaces (4 of which are ADA spaces). Vehicles access the site via a single drive from 16th Street into the linear site with no dedicated turn-around area. The station is situated on the south side of the

southern most siding track which is used to access the south CN RR mainline track approximately 1/3 of a mile west of the station. A second siding exists just north of the track currently is used by Amtrak trains. Passengers board from an open concrete platform approximately 435-feet in length. The boarding process requires stepping up or being raised up to the train level via lift (see Figure 4). A maintenance platform extends another 265-feet to the west which provides a total of approximately 700-ft available for maintenance currently. There is lighting along the length of the boarding area. An inactive track bed owned by CSXT RR is located directly south of the site (no tracks with no access to east of 16th Street as the at-grade crossing no longer exists).

In 2016, the station received some ADA upgrades including installation of tactile edging (see Figure 3) and accessible restrooms.

The existing station is classified as a Caretaker Station and is approximately 1764-sft with a waiting area and restrooms (852-sft), locker room, ticket office (closed off and is 72-sft), agent office and baggage room (200-sft), and the rest of the building is used for maintenance supplies and mechanical room (see Figure 6). The station is not staffed but there is a Caretaker who opens and closes the station each day. There is also a 500 sft building just west of the parking area utilized by Amtrak to support minor maintenance operations. Primary maintenance facility is located at the other

Figure 2: Existing Station (South Side)

Figure 3: Existing Station (North Side)

end of this line in Chicago, IL.

Figure 4: Existing Lift for ADA Access

Figure 5: Amtrak Owned Outbuildings West of Station

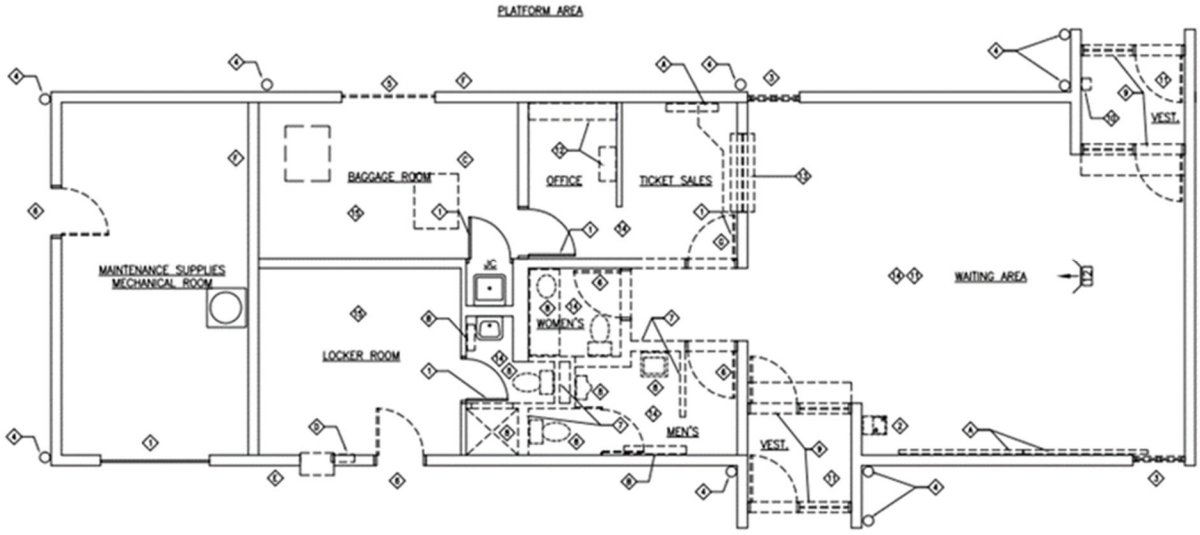

Figure 6: Existing Station Floorplan

3.2.2 Land Ownership

The existing station itself was built by Amtrak and is owned by Amtrak. Amtrak maintains the facility including the facilities, snow removal, cleaning/custodial, etc. The facility is situated on land owned by the Amtrak. CN RR owns the sidings and platform.

The land just east of 16th Street and south of the CN RR mainline is owned by CN RR up to 10th Street (near the west end of the CN RR tunnel).

CSXT RR owns the property immediately south with no active tracks. The rail line used to continue east of 16th Street up towards downtown Port Huron, however, that was sold by CN RR to the City of Port Huron who converted the old track bed to a trail.

Both CN RR and CSXT RR own parcels of land near the St. Clair river where they used to have rail yard facilities but they no longer have rail access to these properties.

See (Figure 7) for delineation of ownership between CN RR and CSXT RR.

Figure 7: Railroad Ownership Map

3.2.3 Ridership

Pre-Covid ridership at this station approached 20,500 in 2016 according to the Amtrak Great American Stations website. Amtrak provided ridership counts at this station for 2019 which totaled 18,500 passengers. Current service includes two trains per day with a train arriving at 11:30 PM and a train departing at 6:20 AM (https://amtrakguide.com/routes/blue-water/). Ridership projections were done in 2014 by Transportation Economics & Management Systems, Inc. (TEMS) as part of a Tier 1 EIS for the Chicago-Detroit/Pontiac Passenger Rail Corridor Program indicating growth to 24,462 trips in Year 2055. Amtrak performed a high-level study of this station (see Pre-Feasibility Study dated July 2018) which had projections of over 43,000 riders in 2033 (it is noted in the report that this is based on a straight-line 2% unrestrained growth rate). With this station being located at the end of the Blue Water service line between Chicago and Port Huron, as well as being situated near an international border, Amtrak noted it operates more like a commuter station. Much heavier passenger use is seen Thursday - Monday.

Post-Covid ridership has not fully recovered to the levels noted above. In 2021, approximately 5,100 passengers used this station and in 2022, 10,177 riders were reported.

3.2.4 Traffic

Regional passengers primarily access the site from the north utilizing I-94 and Business Loop (BL) 69. In the case of travelers to/from Canada, the Blue Water Bridge crossing the St. Clair river is also utilized. From the freeway, travelers have several options to utilize local streets to access the station from the freeway. Regional access from the south would utilize I-94 and local roads (likely Dove St. to 16th Street).

16th Street consists of a 4-lane section (2-lanes in each direction) in the area of the existing station, crossing the CN RR maline tracks with a signalized and gated at-grade crossing. Below are traffic volumes from November 2021. Based on nearby local route volumes pre and post Covid, we anticipate a 5-10% increase which would yield an ADT of 4800.

Time	16th Street	
	Direction	Volume
AM Peak	NB	163
	SB	164
	Total	327
PM Peak	NB	262
	SB	186
	Total	448
ADT	NB	2,417
	SB	1,891
	Total	4,308

Figure 8: 16th Street Traffic Volume

Based on these volumes, a traffic signal would not be warranted at the station entrance.

Reviewing the most recent 5 years of crash data from the Michigan Traffic Crash Facts (MTCF) website (2017-2021), there were 4 total crashes with no discernable crash pattern.

A sidewalk exists along the west side of the road but is gapped out for a distance of approximately 300-feet south of the mainline tracks. A sidewalk exists on the east side of the road but ends at the industrial complex driveway just south of the CSXT RR property.

A considerable amount of rail passengers are of Canadian origin. Based on a survey of vehicle license plates taken in the fall of 2022 (see Figure 9), approximately 40% of vehicles had Canadian plates. There is a passenger train station in Sarnia, Ontario, Canada just across the St. Clair River. International passenger service is not currently permitted so travelers to/from Canada must cross the Blue Water vehicular bridge. These travelers sometimes park at the Port Huron Amtrak station for their travel west towards Chicago.

	Date	Time	United States	Canada	Others	Total
Friday	9/16/2022	6:45:00 AM	8	9	2	19
Sunday	9/18/2022	9:30:00 AM	8	7		15
Monday	9/19/2022	6:45:00 AM	8	3		11
Tuesday	9/20/2022	6:45:00 AM	4	3		7
Wednesday	9/21/2022	6:45:00 AM	7	1		8
Thursday	9/22/2022	6:45:00 AM	9	5		14
Friday	9/23/2022	7:30:00 AM	14	8		22
Saturday	9/24/2022	7:00:00 AM	12	12	1	25
		Totals	70	48	3	121

Figure 9: Vehicle License Plate Origin Survey from Fall 2022

3.2.1 Utilities

There are overhead lines along the west side of 16th Street as well as overhead lines along the south side of the CSXT RR right-of-way that extend west of 16th Street (see Figure 10).

Figure 10: Overhead Lines Along 16th St.

Underground sewer, sanitary, water, and other private facilities exist in the area but were not specifically located during this study. No large or significant facilities were identified below grade that would impact any of the site options identified for further study.

Service lines to the existing station also exist including sanitary, water, electric, etc.

Underground fiber optic cables and other railroad utilities may exist adjacent to the tracks.

3.2.2 Border Security

US Customs and Border Protection (CBP) patrols the CN RR tunnel entrance with access available from both 16th Street and 10th Street (see Figure 11 and Figure 12). There is a two-track drive from 16th Street to 10th Street which connects with a drive that goes over top the tunnel to the north side of the tracks and winds down to the tunnel entrance. The two-track drive is at the 16th Street/10th Street elevation while the CN RR mainline tracks descend down towards the tunnel entrance. There is an abandoned siding track just south of the mainline tracks which also maintains its elevation relative to the descending mainline tracks.

Figure 11: CBD Access from 16th St.

Figure 12: Gated CBD Access from 10th St.

3.3 EXISTING CONDITIONS – DOVE ST. STATION SITE (OPTION 10)

This undeveloped land is situated north of Dove St. and east of the CSXT track to Marysville, MI. A majority of the land in the northeast quadrant is forested wetland. An approximately 300-feet wide swath of land just east of the railroad track is cleared and is not wetland which appears suitable for development (see Figure 19 and Figure 14). Parcels adjacent to Dove St. also appear suitable for development and some of them have been built upon.

Figure 13: Dove St. Site Looking South

Figure 14: Dove St. Site Looking North Along Tree Line of Forested Wetland

The tracks are parallel and immediately adjacent to the east of 32nd St. See (Figure 15)

Figure 15: 32nd St Looking North with CSXT RR Spur Adjacent to Road (sidings to the right)

3.3.1 Existing Site

A business was recently constructed on the parcel abutting Dove St. approximately 600-feet east of the CSXT RR tracks (see Figure 16). Access is from Dove St. There was a clearing south of Dove St. for more development along this corridor noted as well. The site is immediately surrounded by undeveloped land and some industrial/ commercial properties. There is residential housing to the south and north.

Figure 16: Dove St. Recent Development

Figure 17: Dove St. Site Looking South

3.3.2 Land Ownership

CSXT owns the railroad tracks from their rail yard located to the northwest of this site down to Marysville, MI. The parcel adjacent to (and east of) the CSXT tracks runs from Dove St. to Petit Street is owned by Pamar Enterprises. The site then has several parcels divided up with the northeast quadrant (forested wetland) owned by the City of Port Huron as well as two parcels along Dove St. being owned by the City of Port Huron. Another parcel along Dove St. is owned by Dove St. Investments, LLC. This site is entirely within Port Huron Township limits.

3.3.3 Ridership

See section 3.2.3.

3.3.4 Traffic

Dove St. consists of a 4-lane section, crossing the CSXT RR tracks just west of the proposed site. The at-grade rail crossing is un-signalized and is not gated. To the right are traffic volumes from November 2021. Based on pre and post Covid, we anticipate a 5-10% increase which would yield an ADT of 5800. This volume would not likely warrant a new traffic signal.

Time	Dove St.	
	Direction	Volume
AM Peak	EB	270
	WB	148
	Total	418
PM Peak	EB	203
	WB	305
	Total	508
ADT	EB	2,713
	WB	2,555
	Total	5,268

Figure 18: Dove St. Traffic Volume

Along Dove St. between 32nd Street and 28th Street there were three total crashes in the five-year period with no discernable crash pattern. However, there were 11 crashes at the Dove St. & 32nd Street intersection which consisted of 9 angle crashes and two head-on left-turn crashes. All of the angle crashes involved a NB vehicle running through the STOP sign which was placed on the left side of the roadway due to the railroad tracks on the right side. In May, 2019 and November, 2021 flashing beacons were added to the STOP sign. Since that time there were no crashes in 2020 or 2021.

There are no sidewalks along Dove St.

3.3.5 Utilities

There are overhead lines along the north side of Dove St. as well as overhead lines along the west side of the 32nd Street (see Figure 19).

Underground sewer, sanitary, water, and other private facilities exist in the area but were not specifically located during this study. No large or significant facilities were identified below grade that would impact any of the site options identified for further study. Leads to the new development area would be required in any option involving this property.

Underground fiber optic cables and other railroad utilities may exist adjacent to the tracks and should be investigated with the CSXT RR.

Figure 19: Overhead Lines at Dove St. and 32nd St.

3.3.6 Border Security

There are no concerns with this site related to national security and border patrol as this site is located away from sensitive areas related to border patrol.

3.4 BUILD OPTION 1A (EXISTING SITE EXPANDED SOUTH)

Option 1A includes utilizing the existing train station site with the addition of land to the south that is owned by CSXT Railroad. Additional parking would be accommodated with increased site area and a bus turn-around can be provided for drop-off and pick-up near the station. Option 1A and 1B would utilize existing rail infrastructure including the boarding/maintenance platform planned for improvements by Amtrak. Amtrak planned improvements include a level boarding platform approximately 435-feet long and a new maintenance platform to the west. Amtrak's ongoing design is also considering a detention or retention pond in the area of the proposed parking lot in this option. This work will be completed by Amtrak as part of a separate project and is assumed to have been completed prior to design and construction of a new station.

3.4.1 Facility Layout and Operations

The additional land to the south allows for additional parking, a second thoroughfare within the parking area, and a turn-around loop for passenger drop-off by friends, family, ride share service, or public transit (including bus service). The planned Amtrak improvements would be incorporated into this option utilizing the level boarding platform and maintenance platform to be built outside of this project. Figure 20 shows the layout for this option with a full graphic available in Appendix C.

The additional pavement area will require mitigation for the increased impervious area. Potential mitigation may include one or a combination of pervious pavement and retention/detention ponds. The new ponds would accommodate the increase in

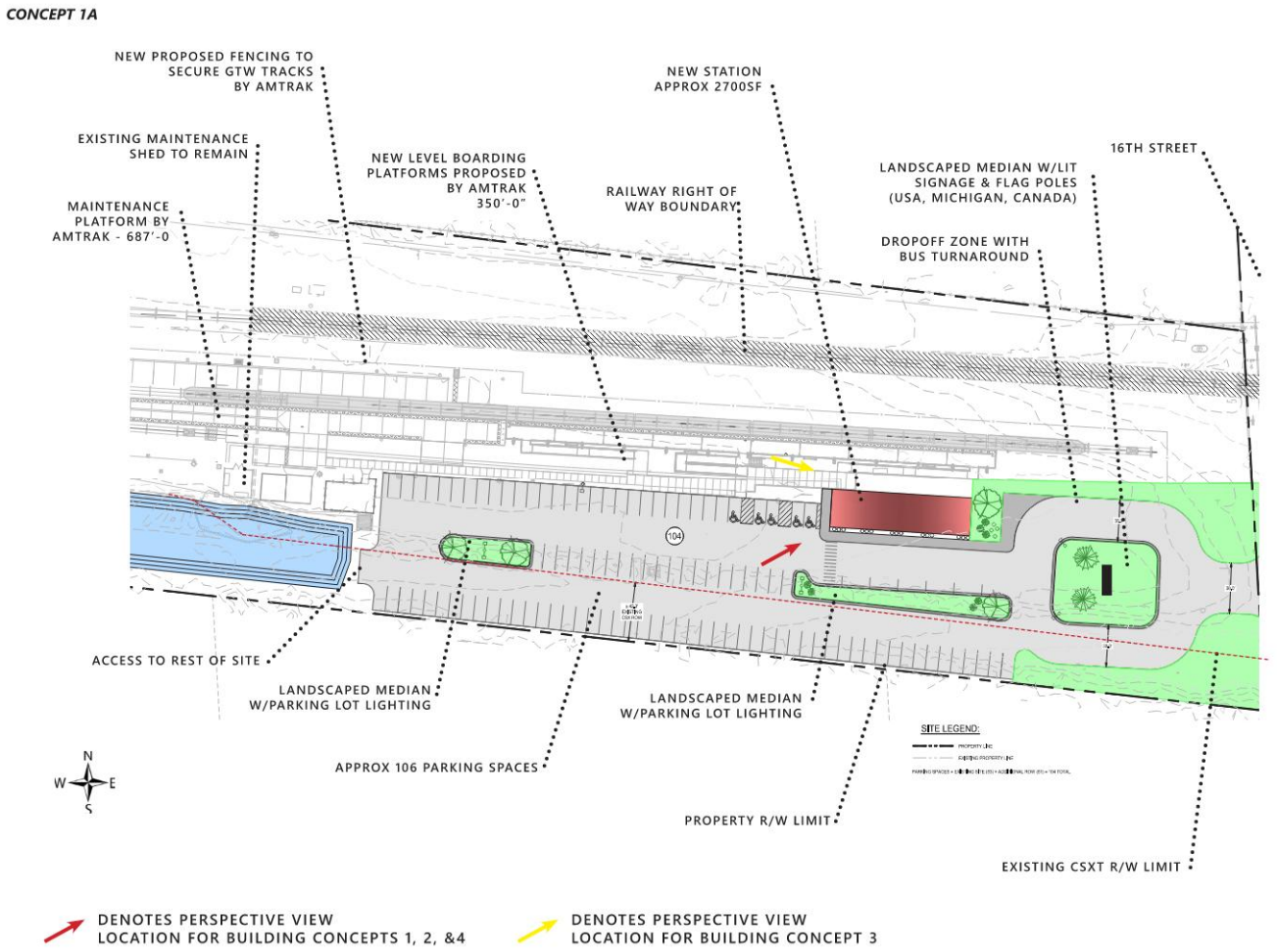

Figure 20: Option 1A Conceptual Plan

impervious area as well as the increase in impervious area to accommodate Amtrak's currently planned upgrades at this site.

A new station on the existing site will require an agreement with Amtrak and use of land along CSXT RR property (south of Amtrak land) will require a separate agreement or an acquisition.

Maintenance responsibilities for the new station would need to be negotiated at a later date.

3.4.2 Building/Amenities

The new station building is proposed to be located closer to the road than the existing station, and is positioned to maximize reuse of the high level platforms and accessible routes currently in development by Amtrak. The interior layout is designed to locate the waiting areas closest to the platforms to maximize views to the platforms. As a part of this study 3 conceptual plans were developed (see Appendix C).

The proposed building footprint is approximately 2700-sf and includes vestibules, a waiting area, restrooms, a ticket counter and office, an area for vending, space for crew lockers / shower, and a small storage and mechanical space. The maintenance component of the existing building would be relocated out of the new building and consolidated with the other maintenance facilities on the site.

The station can also be expanded if demand increases in the future. This is conceptually shown in the plan footprints. Some parking would be reduced as a result of an expansion. Furthermore, consideration would need to be given to the size of the restrooms, however, the current layout would accommodate a larger seating area than currently shown.

3.4.3 Parking

This option would provide 106 spaces. Amtrak station guidelines recommend less spaces are needed based on ridership (see 2018 Pre-Feasibility Study which indicated the formulaic result is 38 spaces for this station). It is recognized that this station operates differently than typical stations, including being the end of the line, is located near the Canadian border, and is not serviced by buses nor is it in a centrally located or downtown district. In general terms, the Amtrak Guidelines suggest dividing the annual ridership by 270 understanding there is not an equal dispersion of travelers throughout the week. The number is then divided by half to account for daily riders. The existing station provide more parking than this recommended amount which is not sufficient. Accounting for specific conditions at this station, the Pre-Feasibility Study recommended 120 parking spaces. Additional study will be needed to finalize the number of parking spaces, however, this option provides a dramatic improvement to the number of parking spaces at the existing Amtrak Station as stated in Section 1.1.1 as well as ingress and egress into and out of the station parking lot.

3.4.4 Accessibility

The station building and site itself will be designed utilizing ADA guidelines as noted throughout this document. How passengers travel to the station and depart the station will be improved. Travel time to/from the primary routes (I-69/I-94) will be similar to existing conditions with the location being the same as the existing site. This option also provides for parking, station, and boarding area all within the same site.

Multi-modal access will be encouraged during the design phase. Accessibility

Figure 21: Sidewalk Could be Connected over the Tracks at 16th St. Crossing

improvements include a bus turn-around area for curb side drop-off/pickup (kiss & ride) utilizing public transit. Personal and rideshare vehicles can also utilize this turn around for easy drop-off/pickup. In addition, the parking lot has two thoroughfares which allows vehicles to navigate parking and/or turn around at the end of the parking lot.

This site does not have sidewalks currently, however, consideration can be given to connecting the sidewalks to the north across the CN at-grade crossing (see Figure 21). There is a City of Port Huron non-motorized trail located east of 10th Street (which extends to downtown Port Huron) so consideration could be given to extending that trail to the new station.

The new station would utilize the proposed Amtrak level boarding platform to be built ahead of this project. The level boarding platform is proposed to be 350-feet long and will meet all ADA requirements.

3.4.5 Traffic & Safety

Traffic volumes along 16th Street do not reflect the actual traffic during train arrivals and departures with the current train schedule. The new station at the existing site is not anticipated to impact traffic or safety along 16th Street with the current service schedule. However; should an additional round-trip be added during the day time hours, consideration will need to be given to ingress and egress to the site. Nearby industrial buildings may have shift changes that produce peaks in traffic that may coincide with added train service. Introduction of a traffic signal would be studied at that time, however, given the proximity to the at-grade signalized railroad crossing coordination will be needed.

The new station will be well lit with the parking area illuminated for safe travel between passenger vehicles and the building. Additional lighting should not negatively impact nearby properties since they are industrial in nature. Consideration can be given to landscape lighting as well to make the station more welcoming with nighttime/morning service passengers.

To enhance security, cameras can be mounted through the parking area and inside the station. Different technologies are available for saving data to a hard drive as well.

The existing 16th Street 4-lane section is too big for the traffic volumes along this route. Consideration could be given to restriping it to 3 lanes with bike lanes. This would provide safer turning movements and would provide for bicycle access to/from the train station.

Consideration can be given to connecting sidewalks to the station area from the south and from the north. The current gap would not allow for safe travel to the station by non-motorized traffic. The City of Port Huron inquired about the potential to cross the

railroad tracks with a new sidewalk and to make this connection. Coordination with the CN railroad as well as MDOT will be required to ensure the pedestrian crossing is safe and meets state and federal guidelines.

3.4.6 Rail Operations

Rail operations would remain unchanged from current conditions. The trains would arrive via the siding used today (or the siding that will be used after the Amtrak project proposed). Freight traffic primarily occupies the north mainline track for US Customs inspections and access to the CN railyard to the west which leave the south mainline free to accommodate inbound and outbound passenger trains.

While MDOT nor Amtrak are currently planning international service at this location, should international passenger service be introduced in the future, this station could continue to operate as currently proposed. It should be noted that ridership at the station would decrease as well as parking space demand as a result of the loss of Canadian travelers.

While not currently planned, there has been discussion of potential passenger service between Port Huron and Detroit. Should additional passenger service come to fruition, this station could accommodate the trains with similar operations as the current Amtrak service. The Port Huron-Detroit service would operate along the CN RR track which extends to Toledo, OH and connects with the Blue Water line tracks just west of Michigan Road. Trains would access the south CN mainline track and continue on to the station to the east.

This option would have no effect on the CSXT railyard or the CSXT RR line to Marysville, MI.

3.4.7 Sustainability

The construction of a new train station may only occur once every 50 years. During the design process it is important to have open conversations around sustainability, efficiency and resiliency in order to promote a balanced approach between construction costs and operating/maintenance costs compared with environmental impacts. It is also important that material selection, while focused on energy efficiency and sustainability, also consider the durability and maintenance requirements for the end user. The design teams should look at current best practices for sustainable design such as LEED or Green Globe and develop a solution that meets long range goals of enhancing the built environment.

An improved Port Huron station building will enhance the riders' experience and with the expansion of the parking area may encourage more ridership. Passenger rail traffic provides a significant reduction in carbon emissions from personal vehicle travel. Most of the passengers boarding at Port Huron are arriving from Canada and traveling to

Chicago and beyond. Increasing ridership helps to reduce miles driven in the region and assists with “bad air days”, congestion and the need to expand roads.

In addition to the improvements to the building, the site can be developed in a more sustainable way. Rainwater can be captured in detention/retention areas rather than sheet drain across the site and directly into the stormwater pipes. Landscaping around the building and the parking areas could be composed of native vegetation that can help support the eco-system of the area as well as facilitate rainwater capture. And as a new site development the project can be designed to follow Best Management Practices (BMPs) to improve water quality as it discharges to the environment.

3.4.8 Constructability

Construction of this option will require temporary accommodations for riders and maintenance operations during construction. The new station is proposed near/within the footprint of the existing station so there will need to be a temporary waiting area along or on the boarding platform.

This option will also require that all parking be off-site while the new facility is constructed. Consideration can be given to a shuttle service from another location where parking is available.

3.4.9 Border Security

This option maintains the current operations with respect to security near CN’s international tunnel under the St. Clair River.

3.4.10 Wetlands

No desktop reviewed wetlands were identified that would be impacted by this option.

3.4.11 Bridge

No existing bridges were identified that would be impacted by this option and no proposed bridges are associated with this option.

3.5 BUILD OPTION 1B (EXISTING SITE EXPANDED EAST)

Option 1B was developed to utilize the property east of 16th Street for additional parking without acquisition of CSXT RR right-of-way. The additional parking will require consideration for pedestrian crossing safety, especially considering the late night and early morning passenger trains. Consideration can be given to an at-grade crossing with safety enhancement or a pedestrian bridge crossing. This option would also consider a bus turnout along 16th Street to allow for loading and unloading passengers for the public transit network since the existing site would not be wide enough for a bus turnaround area as laid out for Option 1A.

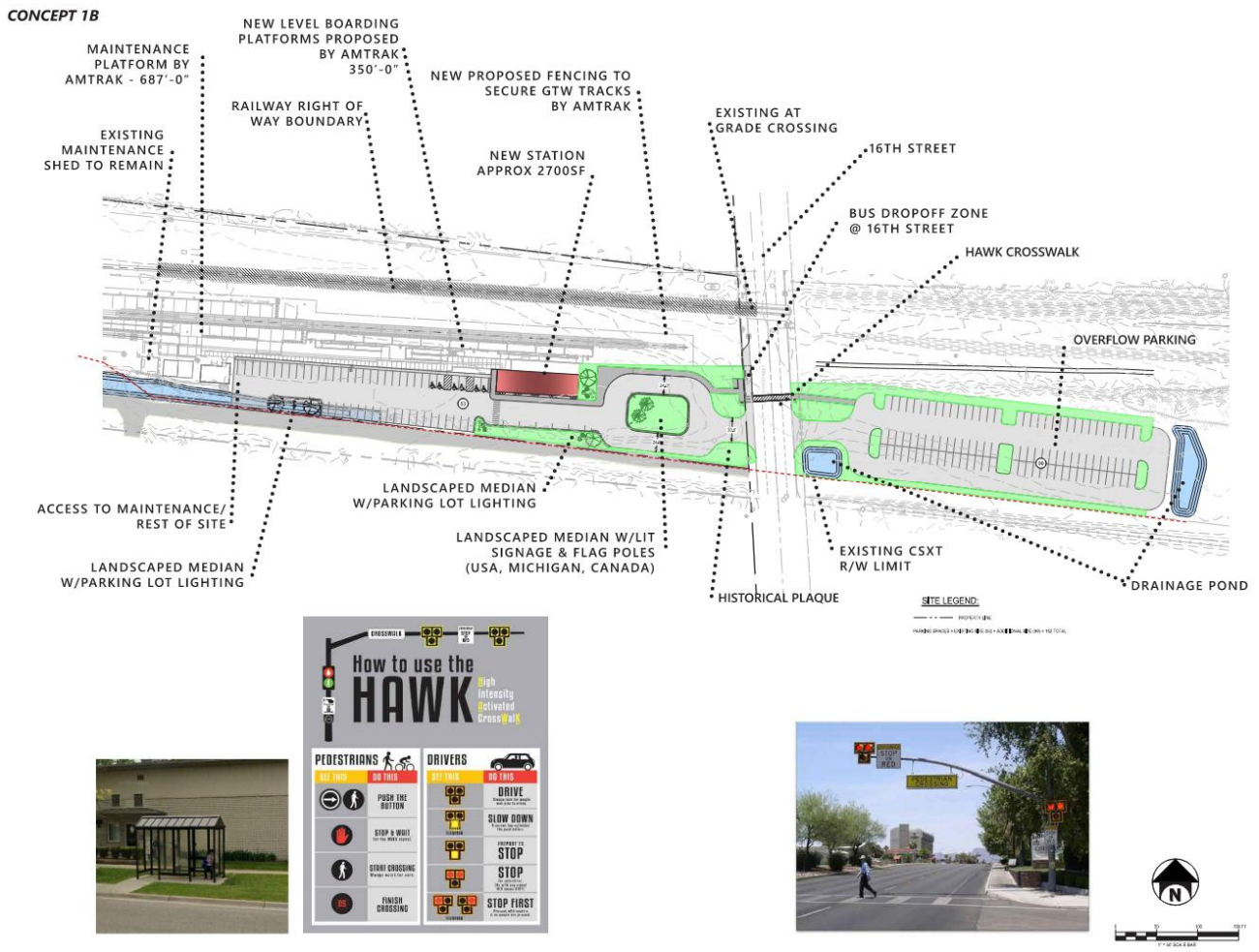

Figure 22: Option 1B Conceptual Plan w/ At-Grade Crossing

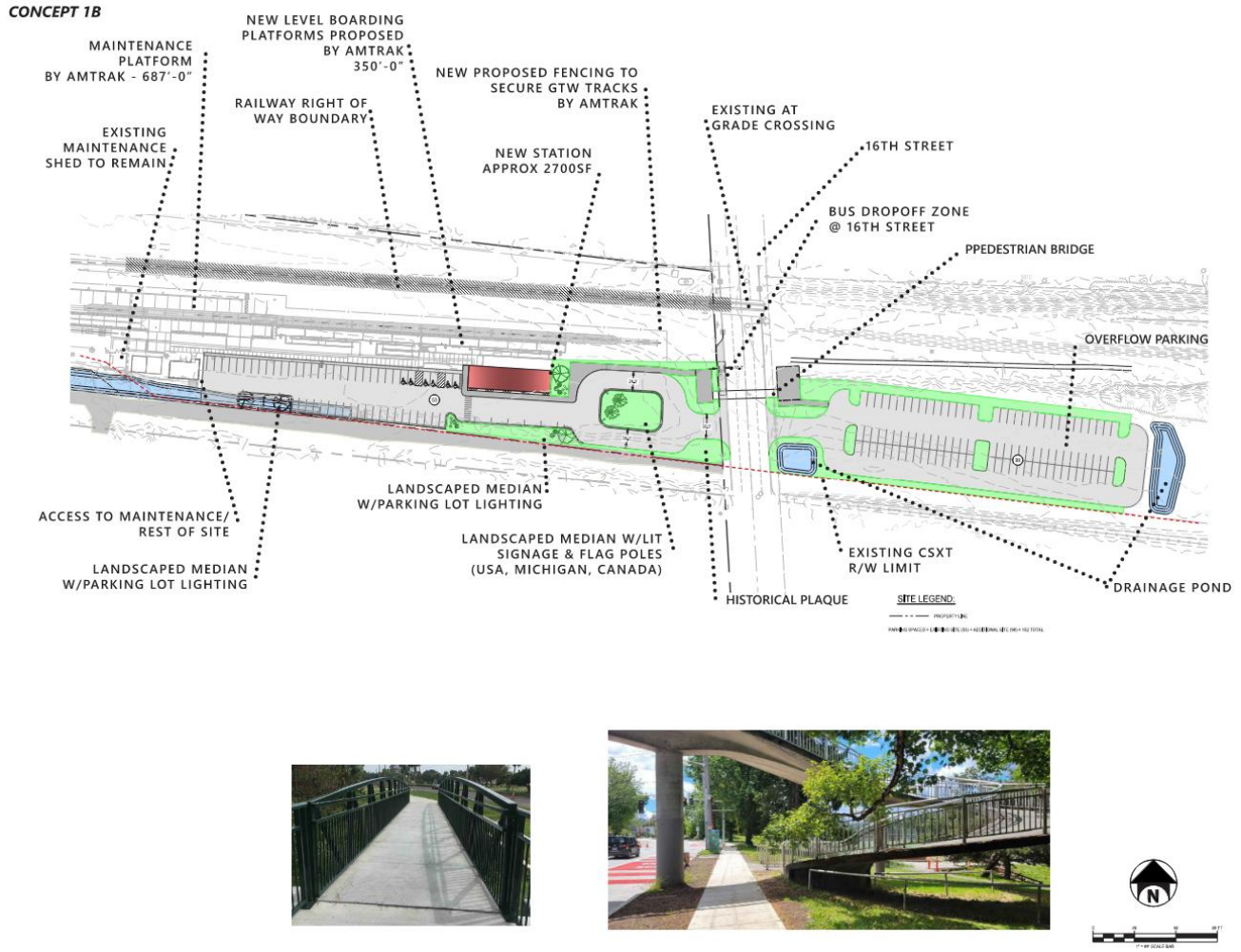

Figure 23: Option 1B Conceptual Plan w/ Pedestrian Bridge Crossing

3.5.1 Facility Layout and Operations

The additional land to the east of 16th Street allows for additional parking. This option maintains a single thoroughfare in and out of the parking area but does provide for an area to complete a three-point-turn for vehicles should all of the parking spaces be filled. A turn-around loop for passenger drop-off by friends, family, and ride share service is provided, however, the width of the site does not allow for buses to navigate the turn-around. Instead, a bus turn-out can be constructed along 16th Street to allow passengers to board and de-board with a short distance to the proposed station via sidewalk area. Figure 22 and Figure 23 shows the layout for this option with a full graphic available in Appendix C.

The additional parking provided on the east side of 16th Street will require travelers who use that parking area to cross 16th Street to get to the train station. With nighttime and early morning service, this is a safety concern and is discussed further in section 3.5.5.

Similar to Option 1A, the proposed Amtrak level boarding and maintenance platforms will be utilized.

Consideration will need to be given for a drainage pond on both the east and west side of 16th Street for this option.

With the new parking area east of 16th Street, additional agreements with CN RR will be required.

3.5.2 Building/Amenities

The new building and entry point will be similar to that noted in Option 1A.

3.5.3 Parking

This option provides for somewhat reduced parking (53 spaces) on the west side of 16th Street. Additional parking (99 spaces) is provided on the east side of 16th Street for a total of 152 parking spaces (45% more than Option 1A). The total number of parking spaces could more than satisfy the recommendation from the 2018 Pre-Feasibility study for 120 spaces.

3.5.4 Accessibility

Access from the major interstates and conformance with ADA guidelines is similar to that noted in Option 1A.

Accessibility improvements include a bus turn-out area along 16th Street for public transit. Personal and rideshare vehicles can utilize a turn around for easy curbside drop-off/pickup. The parking lot has two thoroughfares on the east side of 16th Street which allows vehicles to navigate parking and/or turn around at the end of the parking lot. However; the west side parking area only has one thoroughfare but does include an area to complete a three-point-turn at the west end of the parking lot.

3.5.5 Traffic & Safety

Traffic and safety impacts are similar to Option 1A except as discussed below.

This option introduces a left turn movement for southbound 16th Street traffic which may be problematic given the proximity of the at-grade railroad crossing just north of the station. Coordination and planning with MDOT and the CN railroad will be required to ensure vehicles are not stopped on the tracks waiting for left turn movements further upstream.

Safe travel across 16th Street will be very important, especially given the late night/early morning train service. Consideration can be given to an at-grade crossing with enhanced visibility such as High Intensity Activated Crosswalk "HAWK" signal. As pedestrians approach the road crossing a signal can be activated to alert drivers to slow to a stop and allow the pedestrians to safely cross. This approach, similar to the left-turn southbound traffic noted above, could create a situation where vehicles have entered the active railroad track zone but are stopped by the HAWK signal. Pre-emption or signal coordination between the rail signal and the HAWK signal would be needed.

3.5.6 Rail Operations

This will have similar impacts as noted in Option 1A.

3.5.7 Sustainability

This will have similar impacts as noted in Option 1A.

3.5.8 Constructability

Construction of this option will require temporary accommodations for riders and maintenance operations during construction similar to Option 1A.

This option could utilize a staged parking area schedule where the parking area east of 16th Street is constructed while utilizing the existing facility and then once complete, riders would park in the newly built lot and cross 16th Street to the temporary boarding facilities while the main lot and building are constructed.

3.5.9 Border Security

This option proposes additional parking located east of 16th Street which is closer to CN's international border crossing (tunnel under the St. Clair River). Coordination with the United States Customs and Border Protection (CBP) will be required to ensure site security. Based on preliminary discussions with CBP, the development will need to be delineated around the perimeter (fencing, landscaping, etc.). Furthermore, dedicated CBP access to the tunnel entrance from both 16th Street and 10th Street should be provided.

3.5.10 Wetlands

No desktop reviewed wetlands were identified that would be impacted by this option.

3.5.11 Bridge

No existing bridges were identified that would be impacted by this option, however, variants of a crossing over 16th St. include a pedestrian bridge option.

The pedestrian bridge would be designed for pedestrian loading and maintenance loads such as snow removal equipment. It would need to have a minimum vertical

clearance over the roadway of 15’-9” (1’-0” more than a vehicular bridge) and its substructures must be located outside of the roadway clear zone or be protected by guardrail. Consideration can be given to a combination stairway and ADA ramp for access.

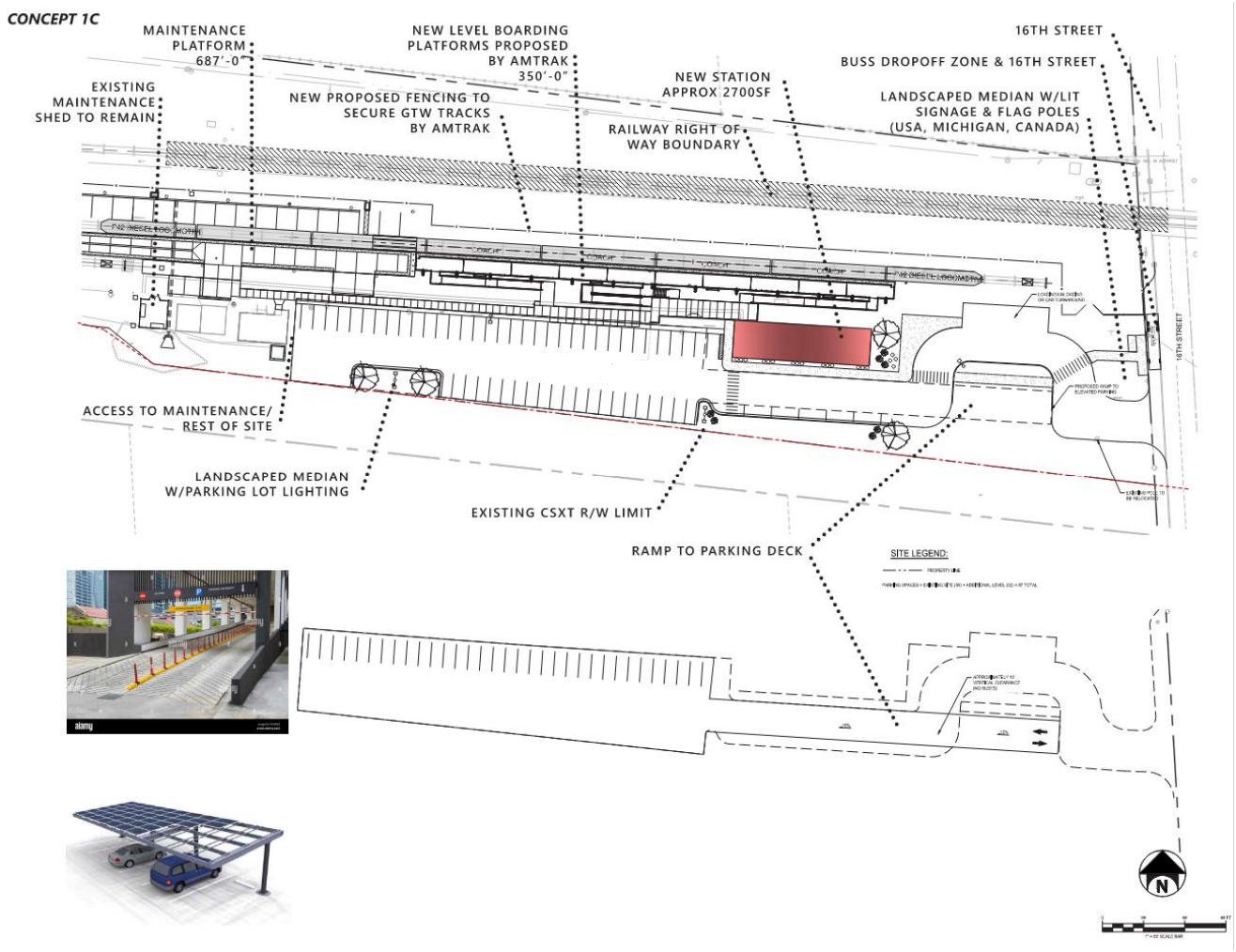

Figure 24: Option 1C Conceptual Plan (Dismissed from Further Consideration)

3.6 BUILD OPTION 1C (EXISTING SITE WITH PARKING DECK)

Option 1C was developed with no new acquired land (either east or south) at the existing site. This option would utilize a parking deck to provide additional parking. This option also utilizes a bus turnout along 16th Street as described in Option 1B. Option 1C is not recommended for further study based on the initial capital costs and long-term maintenance associated with the parking structure and minimal added parking spaces compared with the no-build Option.

3.7 BUILD OPTION 10A (DOVE ST. UTILIZING CSXT RR SPUR TRACK)

Option 10A was identified after the Pre-Feasibility Study was published. The updated Pre-Feasibility Study in Appendix D includes this option. The Dove St. location has considerable undeveloped land available along an existing CSXT RR spur that connects a CSXT rail yard (located off of CN's mainline) with Marysville, MI. The spur primarily served coal deliveries for the Marysville coal power plant prior to its decommissioning. The line continues to serve a handful of customers. On the east side of the spur, north of Dove St., there is an undeveloped private property parcel which could be considered for a new station. The parcel is situated adjacent to forested wetlands owned by the City of Port Huron. This option would require Amtrak passenger trains to "backup" in order to access the CN RR mainline near the existing site location as shown in Figure 26.

3.7.1 Facility Layout and Operations

This option would provide access to the station from Dove St. and would orient the station along the east side of the CSXT tracks. There are existing siding tracks east of the main track which may or may not be repurposed for an Amtrak siding for boarding. There would be ample room for the new station, parking, and potential future development that may be support travelers using the station.

This option would not utilize the Amtrak planned improvements at the existing site. Amtrak could relocate the existing maintenance facilities to the new Dove St. site.

The new boarding platform would be able to accommodate Amtrak's standard 1200-feet length. For this station, Amtrak noted a minimum of 350-feet of boarding length is needed with an additional 687-feet of maintenance platform needed.

The additional pavement area will require mitigation for the increased impervious area. Potential mitigation may include one or a combination of pervious pavement and retention/detention ponds. The new pond would need to accommodate the increase in impervious area.

Dove St. options will require acquisition of land or an agreement for the current owner to lease the land for use of an Amtrak station. Amtrak would prefer to not be responsible for maintenance of the building if it is not owned by Amtrak. Figure 25 shows the site layout for this option and Figure 26 shows the site plan with rail operational layout. A full graphic of each is available in Appendix C.

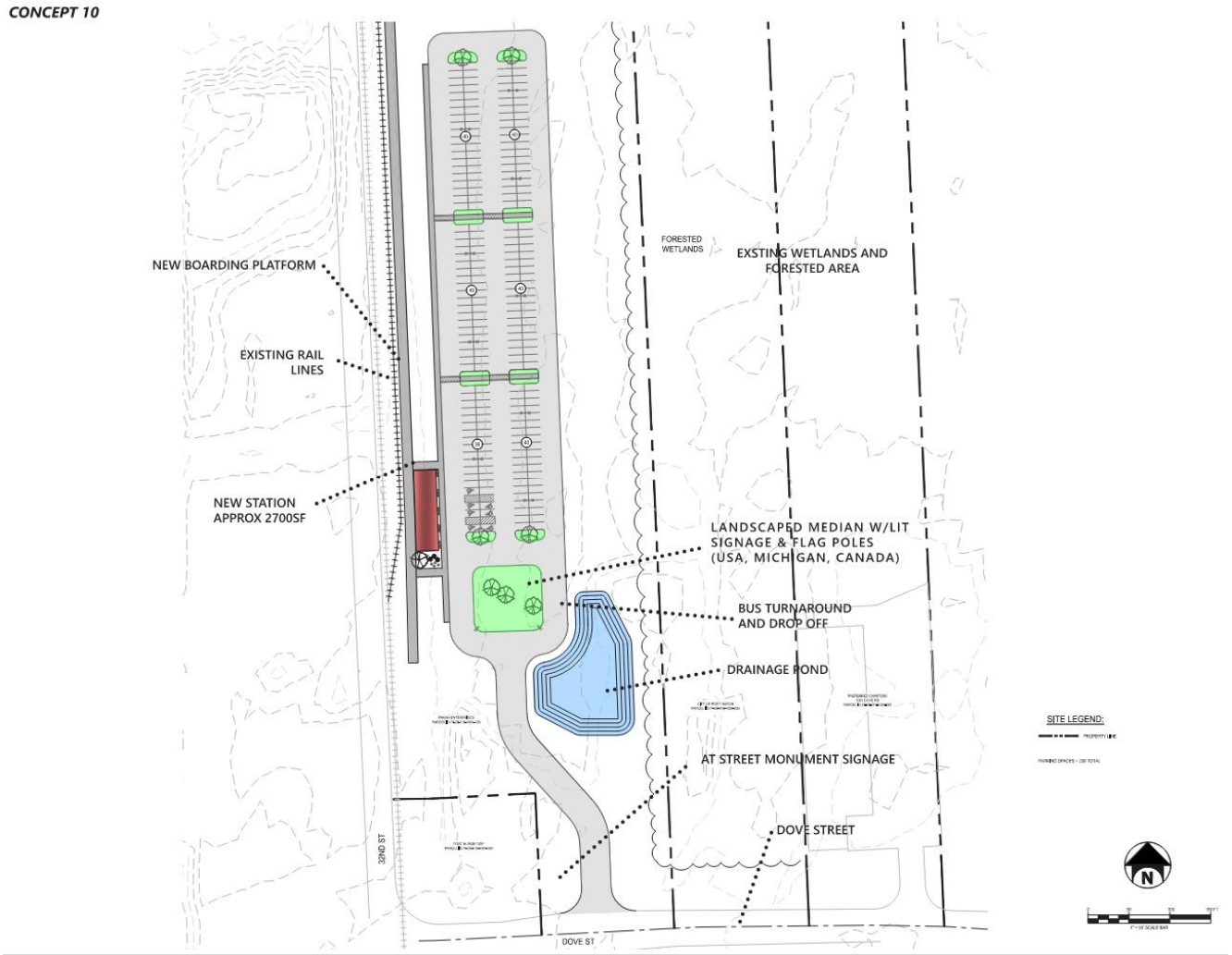

Figure 25: Option 10 Conceptual Plan – Site Layout)

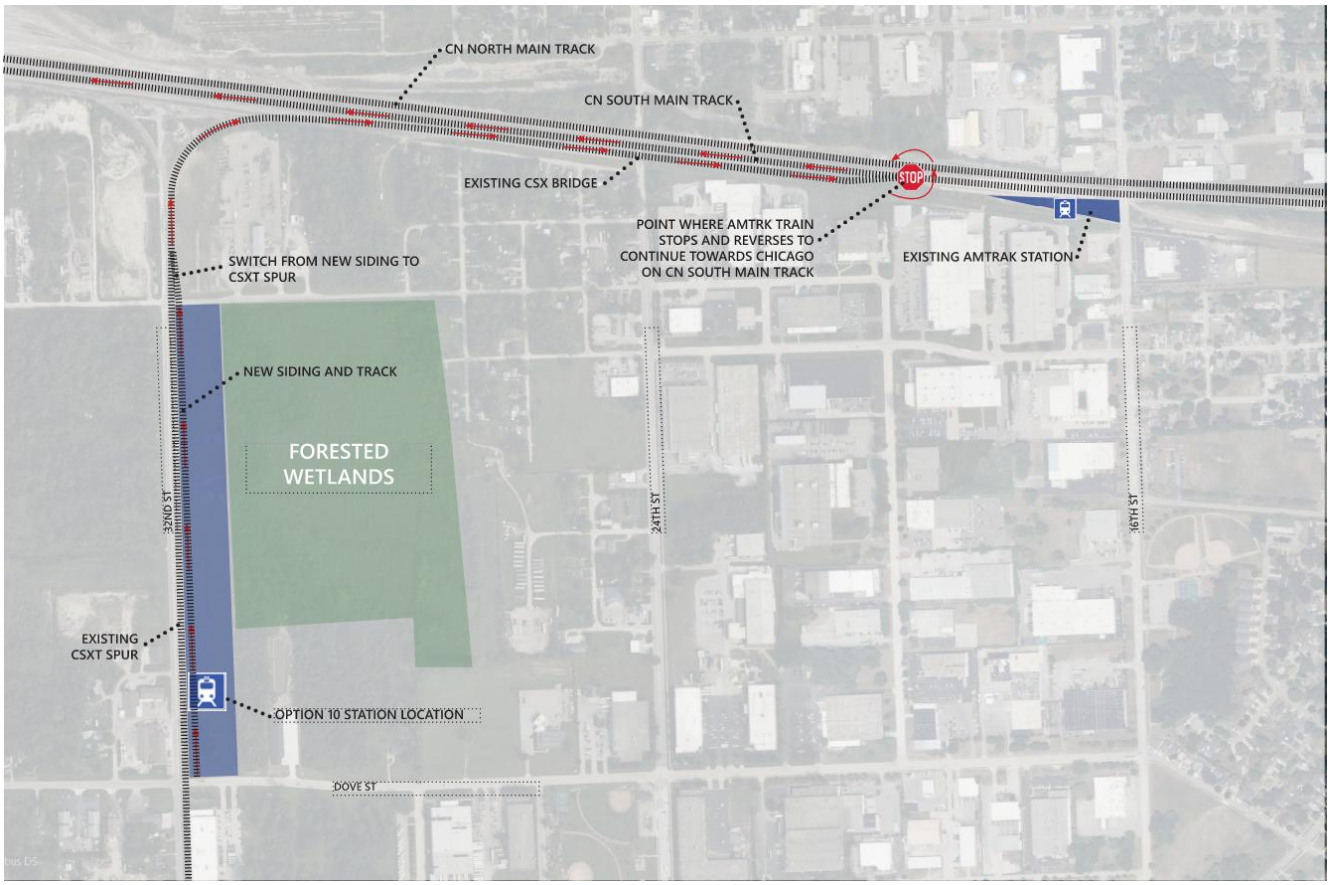

Figure 26: Option 10A Operational Plan)

3.7.2 Building/Amenities

The building and amenities would be similar to that discussed in Option 1A. Some modifications to the floorplan and layout may be necessary to optimize the building concepts and ensure entrance and exit accommodate the parking as well as the waiting area having a view of the arriving/departing trains.

Additional development could be accommodated along Dove St. in support of the station but that would be separate from this project and driven by private development/funding.

3.7.3 Parking

This option would provide 236 spaces far exceeding the minimum recommended during the 2018 Pre-Feasibility Study.

3.7.4 Accessibility

The station building and site itself will be designed utilizing ADA guidelines as noted throughout this document. How passengers travel to the station and depart the station will be improved. Travel time to/from the primary routes (I-69/I-94) will be

similar to existing conditions with travelers from the north having approximately 1.5 miles of additional travel and travelers from the south having 1.5 miles less travel.

The site will be able to accommodate multi-modal access including a bus turnaround and a drop-off/pick-up for “kiss-n-ride” similar to Option 1A.

3.7.5 Traffic & Safety

Traffic volumes along Dove St. do not reflect the actual traffic during train arrivals and departures with the current train schedule. The new station would not significantly impact traffic or safety along Dove St. but could increase other development in the area that would need to be properly coordinated with Dove St. through-traffic. If an additional round-trip is added during the daytime hours, consideration will need to be given to ingress and egress to the site along with any other surrounding development.

This option introduces a left turn movement for eastbound Dove St. traffic which may be problematic given the proximity of the unsignalized at-grade railroad crossing just west of the station site. The history of angle crashes for WB traffic would remain a concern at this location as well with increased traffic. Coordination and planning with MDOT and the CSXT railroad will be required to ensure vehicles are not stopped on the tracks waiting for left turn movements further upstream.

The driveway location on Dove St. would be the vicinity of the Aludyne Drive on the south side of the road. Consideration should be given to lining up with the ingress side of the boulevard driveway to avoid creating a potential left turn interlock situation on Dove St.

The existing Dove St. 4-lane section is too big for the traffic volumes along this route. Consideration could be given to restriping it to 3 lanes with bike lanes. This would provide safer turning movements and would provide for bicycle access to/from the train station.

Similar to Option 1A, lighting will be provided for safety during nighttime service.

3.7.6 Rail Operations

Rail operations would be significantly impacted in this option. The CSXT RR track does not have Positive Train Control (PTC) and would need to be upgraded to coordinate freight and passenger traffic. In addition, Amtrak passenger trains would operate partially on CSXT RR track along the connector to the track which extends east to 24th Street. It is unknown if CSXT RR operates on this connector track currently, or if they utilize the east-west track that connects this siding to their yard located to the west. CSXT RR operations will need to be vetted further during the NEPA process.

The other significant impact to train operations is that the Amtrak trains would need to “back track” in order to access/depart the CN RR south main. Trains leaving the station

would head north along the CSXT RR track and connect to the east with the siding that is currently used by Amtrak trains. At this point, the Amtrak train would stop and reverse course to head west toward the CN RR south main connection (similar to the connection made today). While the trains have engines on both ends of the trains, an Amtrak team member will need to be located at each end of the train and then reposition themselves back to the front once the movement has been made. Inbound trains would follow this route in reverse; passing the CSXT RR track to the east, stopping, reversing course to connect with the CSXT RR track and heading south into the station.

Amtrak noted that they would like to consider having the existing maintenace facility retained at the existing site in this location so access to the existing station site would be desired as well.

Similar to Option 1A, this site would not preclude future international service.

Similar to Option 1A, this site would not preclude future passenger service to Detroit.

3.7.7 Sustainability

See 3.4.7.

3.7.8 Constructability

This site can be constructed while continuing normal operations at the existing site. Once complete, the new facility can be brought online and then the old station can be demolished.

3.7.9 Border Security

This option moves the site away from the international tunnel into Canada. No negative impacts are anticipated to border security.

3.7.10 Wetlands

A large, forested wetland is mapped on this site, but the preliminary site layout indicates these wetlands could be substantially or completely avoided (see Figure 26). A field delineation would need to occur as part of the NEPA process to verify large impacts could be avoided.

3.7.11 Bridge

The existing railroad bridge over 24th Street will need to be evaluated further to determine if it will require rehabilitation or replacement to accommodate Amtrak train traffic (see Figure 27). If major reconstruction is required for the bridge, current standards will dictate that the vertical clearance be improved to 14’-9” or a design exception must be prepared and approved by the federal entity who has jurisdiction. To provide the required vertical clearance, consideration can be given to raising the

Figure 27: Existing CSXT RR Bridge over 24th Street Bridge (CN RR Bridge in Background)

track profile. Raising the track will be limited due to maximum grades for freight rail traffic while lowering the roadway will be limited to the existing CN mainline and CSXT structures to remain. A combination of the above can be considered as well.

3.8 BUILD OPTION 10B (DOVE ST UTILIZING NEW SIDING)

Option 10B is a variation of Option 10A which avoids use of CSXT's spur and potential conflicts with their railyard operations. The updated Pre-Feasibility Study in Appendix D includes this option. This option would avoid the need for PTC on CSXT RR's spur as it would have a dedicated track from the proposed station up to the CN RR south main. This option requires construction of a new track and turnouts, as well as a new rail bridge over 24th Street. This option would also need to assess R/W and utility impacts along the proposed new track. See Figure 28 for rail operational plan.

3.8.1 Facility Layout and Operations

This option is similar to Option 10A except that it would not utilize the existing CSXT RR tracks or existing bridge over 24th Street.

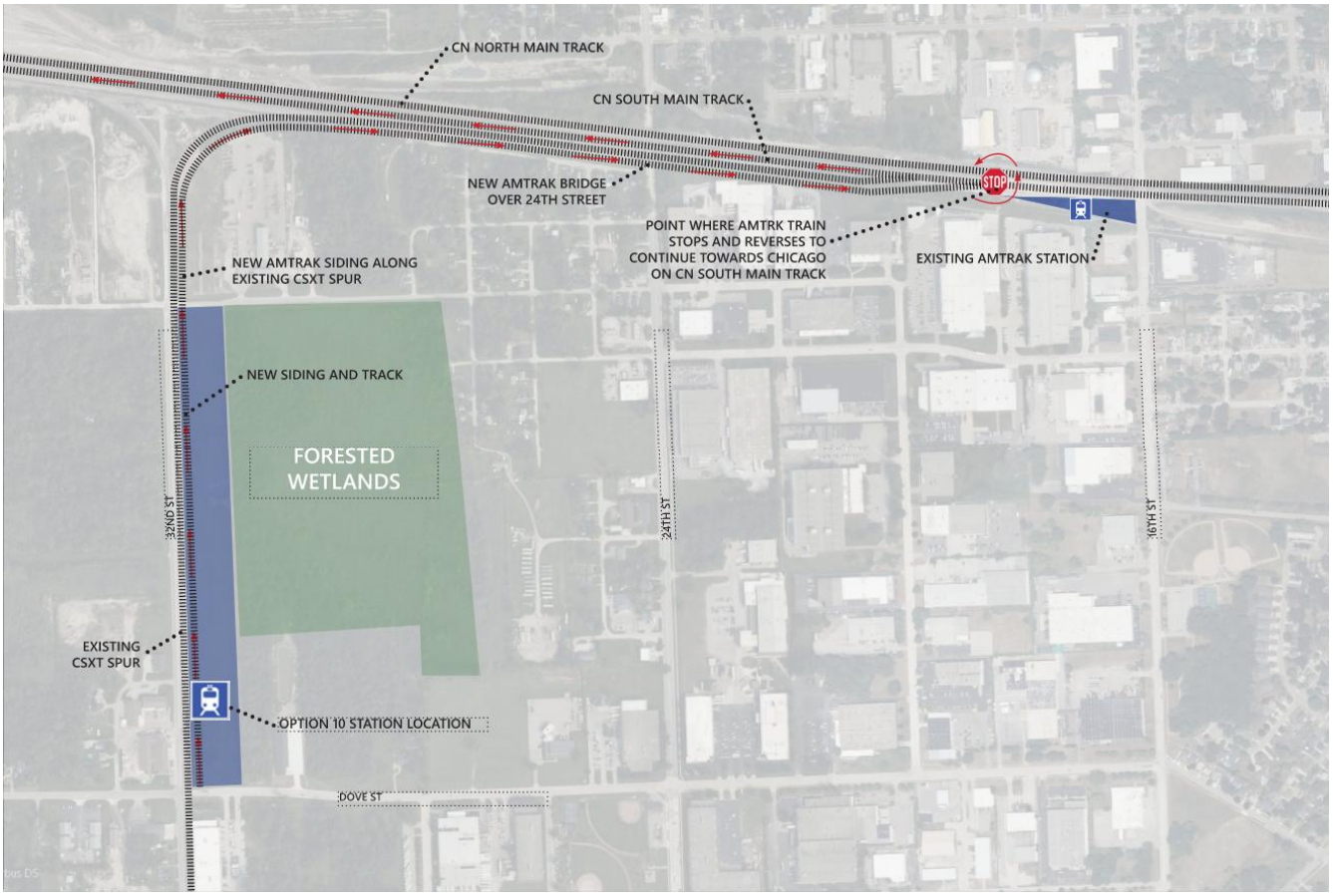

Figure 28: Option 10B Operational Plan

3.8.2 Building/Amenities

This option would provide a similar building and amenities as described in Option 10A.

3.8.3 Parking

This option would provide a similar parking as described in Option 10A.

3.8.4 Accessibility

This option would provide a similar accessibility as described in Option 10A.

3.8.5 Traffic & Safety

This option is similar to Option 10A.

3.8.6 Rail Operations

This option would operate similar to what is discussed above in Option 10A except that a new track would be constructed to the east and south of the current CSXT track. Like Option 10A, the Amtrak trains would need to “back track” in order to

access/depart the CN RR south main, however, the operation can be done without interfacing with CSXT RR freight traffic. No positive train control would be required.

3.8.7 Sustainability

See 3.4.7.

3.8.8 Constructability

This site can be constructed while continuing normal operations at the existing site. Once complete, the new facility can be brought online and then the old station can be demolished.

3.8.9 Border Security

No impacts are anticipated (see 3.7.9).

3.8.10 Wetlands

This option is similar to Option 10A.

3.8.11 Bridge

A new railroad bridge over 24th Street would be constructed to accommodate the new track. The bridge would be constructed to provide 14'-9" minimum vertical clearance and the substructures must be placed outside the roadway clear zone or be protected by guardrail. To provide the required vertical clearance, consideration can be given to raising the track profile above what exists along the current track or consideration can be given to lowering the roadway below. Raising the track may be limited to grading associated with the adjacent CSX line while lowering the roadway will be limited to the existing CN mainline structures to remain. A combination of the above can be considered as well.

3.9 BUILD OPTION 10C (DOVE ST. DIRECT WEST CONNECTION)

Option 10C is another variation of Option 10 which utilizes CSXT's spur and would require modifications to the west end of the existing CSXT rail yard. The train station would be situated on the same site identified in the previous Option 10 layouts, however, the Amtrak train would enter the CSXT RR track briefly and continue on to a new track located south of the CSXT railyard. The new track would have a reverse curve at the west end of the CSXT railyard to connect with the CN RR south main under the existing Michigan Road vehicular overpass. Another variation of this option to be investigated further with CSXT RR is to access the CN RR mainline east of the CSXT RR yard.

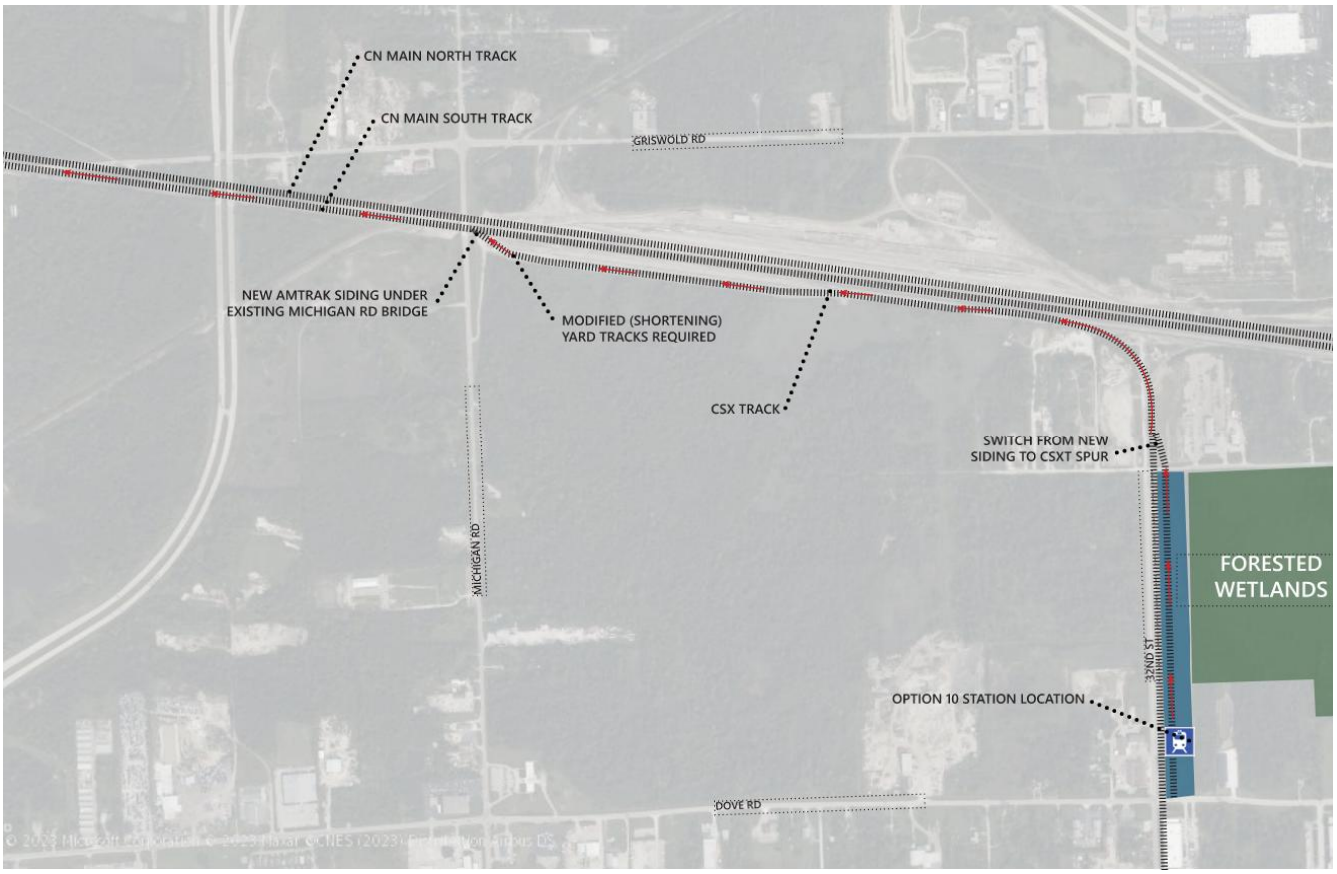

Figure 29: Option 10C Operational Plan

3.9.1 Facility Layout and Operations

This option is similar to Option 10A except that it would utilize a direct connection to the west instead of the reversal of the train described for Option 10A/B. The train would access the CSXT RR track and switch over to the west side of the mainline onto new track which would continue westerly just south of the CSXT rail yard (see Figure 29). The new track would be aligned underneath the existing Michigan Road overpass and connect with the CN RR south main just east of the connection CN has towards Toledo, OH.

3.9.2 Building/Amenities

This option would provide a similar building and amenities as described in Option 10A.

3.9.3 Parking

This option would provide a similar parking as described in Option 10A.

3.9.4 Accessibility

This option would provide a similar accessibility as described in Option 10A.

3.9.5 Traffic & Safety

This option is similar to Option 10A.

3.9.6 Rail Operations

New track would be constructed to the west of the CSXT track to Marysville and south of the current CSXT rail yard. This will require PTC of the CSXT track. In addition, the west end of the CSXT rail yard would need to be modified (shortened) to allow connection of the new track with the CN RR south main under the existing Michigan Road vehicular overpass.

3.9.7 Sustainability

See 3.4.7.

3.9.8 Constructability

This site can be constructed while continuing normal operations at the existing site. Once complete, the new facility can be brought online and then the old station can be demolished.

3.9.9 Border Security

No impacts anticipated (see 3.7.9).

3.9.10 Wetlands

This option is similar to Option 10A.

3.9.11 Bridge

The Michigan Road bridge over the CN RR would not be significantly impacted by this option.

3.10 BUILD OPTION 11 (16TH STREET EAST SIDE)

Option 11 was identified after the Pre-Feasibility Study was published. The updated Pre-Feasibility Study in Appendix D includes this option. This site is located directly across 16th Street from the existing station. The land is owned by the CN RR. There is an additional parcel south (owned by CSXT RR); however, this option does not currently consider acquiring the CSXT RR parcel. This site provides increased area for parking and potential for a longer boarding platform compared with Option 1; however, it moves the station closer to the international rail tunnel. US Customs will need to be consulted regarding potential development of this site as they currently access the tunnel from 16th Street or 10th Street. This option also requires an at-grade crossing approximately 60-feet south of the existing crossing which will likely require mitigation. Mitigation typically consists of removing another at-grade RR crossing or separating an existing at-grade railroad crossing in order to comply with state statutes.

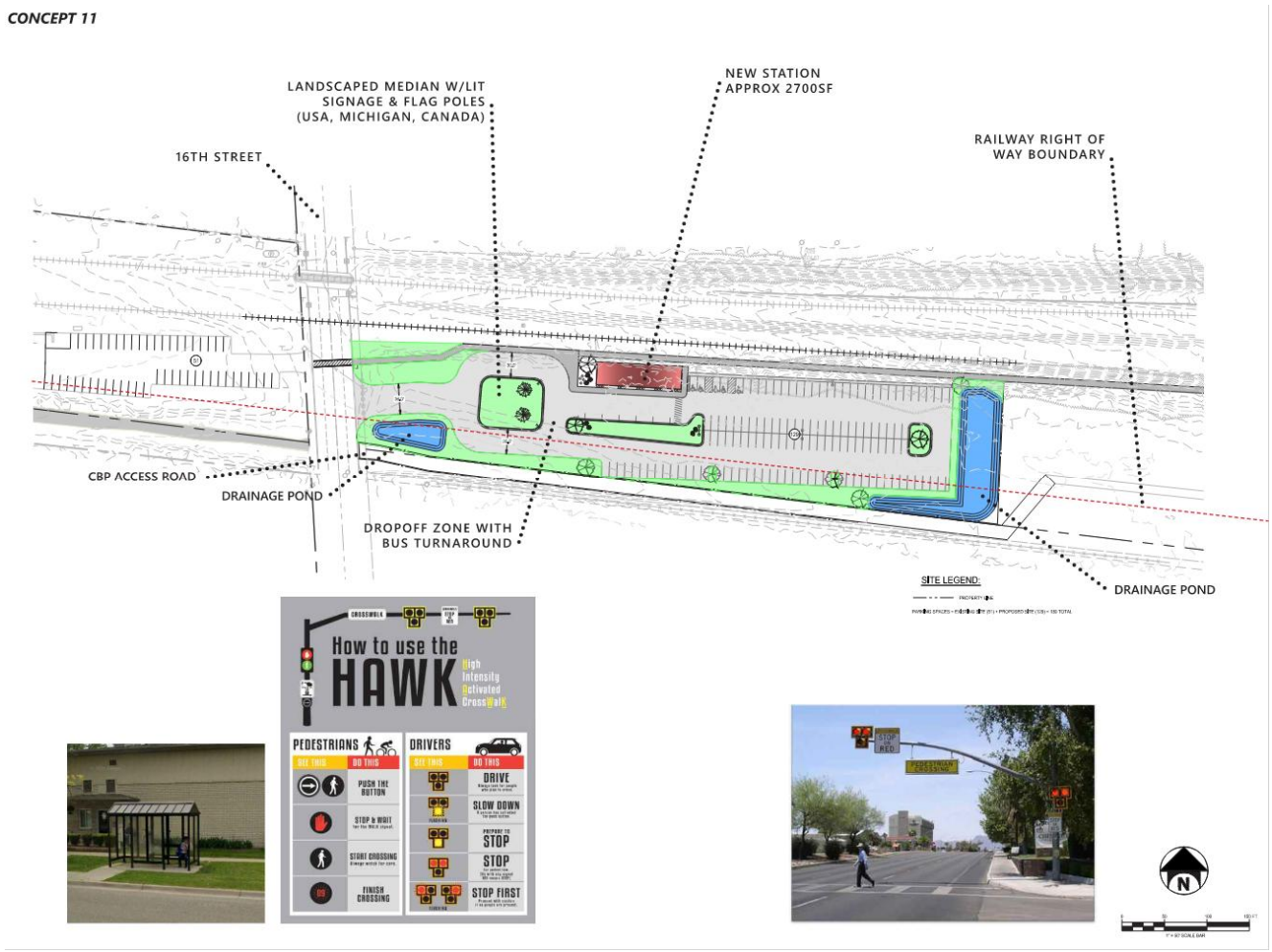

Figure 30: Option 11 Conceptual Plan

3.10.1 Facility Layout and Operations

This option essentially flips the station to the east side of 16th Street from what is shown in Option 10A. Consideration could also be given to having overflow parking west of 16th Street in the old station site as well. The new station would be located just south of the existing deteriorated sidings along the south side of the CN mainline tracks. A new siding including a new at-grade crossing with 16th Street would be constructed to allow Amtrak trains to access this new location.

The new station would be on CN RR property which would require acquisition of the land it is located on or a lease agreement between CN RR and Amtrak for the new station.

3.10.2 Building/Amenities

The buildings and amenities would be similar to that described in Option 1A.

3.10.3 Parking

This option provides for 180 spaces including 51 parking spaces on the west side of 16th Street at the existing site.

3.10.4 Accessibility

This would be similar to that described in Option 10A.

3.10.5 Traffic & Safety

This would be similar to Option 10A except that it introduces a left turn movement for southbound 16th Street traffic into the proposed site. Coordination and planning with MDOT and the CN railroad will be required to ensure vehicles are not stopped on the tracks waiting for left turn movements further upstream.

3.10.6 Rail Operations

Train operations will be similar to Option 10A/B, however, an additional at-grade rail crossing on a public road is required. This additional crossing will require mitigation by eliminating another at-grade crossing somewhere else (462.307 of the Railroad Code of 1993, Act 354 of 1993).

3.10.7 Sustainability

See 3.4.7.

3.10.8 Constructability

This site can be constructed while continuing normal operations at the existing site. Once complete, the new facility can be brought online and then the old station can be demolished.

3.10.9 Border Security

This option proposes the new station and parking east of 16th Street which is closer to CN's international border crossing (tunnel under the St. Clair River). Similar to Option 1B, mitigation of this development will need to be coordinated closely with CBP.

3.10.10 Wetlands

This option is similar to Option 1A and 1B which have no desktop reviewed wetlands identified in the impact area.

3.10.11 Bridge

This option will require consideration for a pedestrian bridge over 16th St. similar to Option 1B. See 3.5.11.

The likely significance of environmental impacts based on a NEPA framework that covers these options is discussed below in Section 4.0. In general, impacts from these options are similar but differences in the environmental impacts are noted in each section, if there are any.

All options are depicted in Appendix C which also includes station layout concepts and building concepts. The additional options introduced after the Pre-Feasibility Report was published (Options 10A, 10B, 10C and 11) are further discussed in Appendix D.

4.0 Pre-NEPA Review

For the purposes of this Pre-NEPA review, environmental impacts for Options 1A, 1B, and 11, which are located in roughly the same location, are discussed separately from Option 10A, 10B, and 10C if impacts to the resources may differ significantly. Key differences in these options are summarized for each NEPA resource topic.

4.1 AFFECTED ENVIRONMENT

4.1.1 Options 1 and 11

The project is located along the existing Canadian National (Grand Trunk Western) Railroad after it crosses the St. Clair River via underground tunnel between Sarnia, Ontario, Canada and Port Huron, Michigan (Figure 31). Existing rail service through the tunnel is limited to freight and does not accommodate passenger trains. Commuters must enter the United States via land travel with the closest crossing, the Blue Water

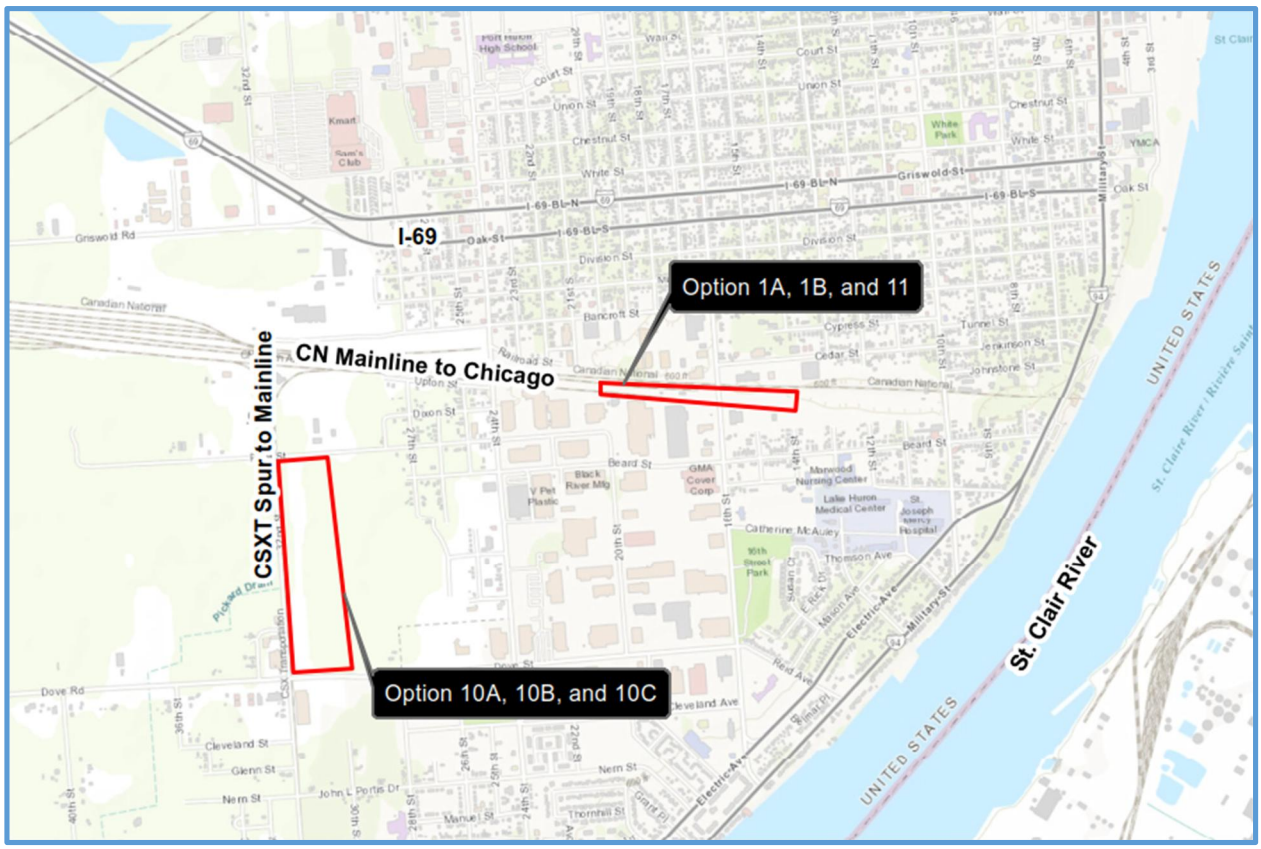

Figure 31: Project Study Areas

Bridge, approximately 2.71 miles to the north of the existing station and is an approximately 15-20 minute drive from Point Edward, Ontario, Canada without consideration for delays/wait times associated with customs and toll payment. An existing parking lot and Caretaker Station was built in 1979 and currently occupies the site but only offers seating for approximately 20 passengers. There are restrooms on

site but the current station has insufficient capacity, lighting, parking, and access. The station is adjacent to the CN RR mainline.

The surrounding area includes Lake Huron a little over 3 miles to the north of the project area and drains into the St. Clair River to the south. The study area is less approximately a mile from the St. Clair River. The study area is predominantly urbanized with residential neighborhoods to the north and Commercial/Industrial along the railroad corridor. The area is primarily prior disturbed and/or vacant land used for the existing rail operations (Appendix E) except for portions of Option 11.

Figure 32: Project Locations and Current Land Use

4.1.2 Option 10

This study area is less than a mile to the west of the existing rail station and currently consists of CSXT RR right-of-way (ROW), undeveloped cleared and forested areas, and a marine engine rebuilding service property that is considered an industrial land use class (Figure 32). The surrounding area at this location is similar to the existing rail station, although it is slightly further removed from the residential neighborhoods to the north and is adjacent to larger wetland complexes to the west (Appendix E).

4.2 LAND USE

4.2.1 Options 1 and 11

The study area currently consists of the existing Port Huron Amtrak Station and Canadian National Railroad Right-of-Way (ROW) (Figure 32). The Existing Land Use in

Port Huron 2021 Map indicates the current land use is designated as industrial and commercial and the surrounding properties consist of commercial and residential developments. According to the Port Huron Zoning Districts Map, the study area is zoned as Light Industrial (M1) and the Future Land Use in Port Huron 2021 Map intends for the study area to remain industrial and commercial (Appendix E). The purpose of the Project is to make necessary improvements to the Port Huron Amtrak Station and therefore the land use will remain consistent with the existing use, Port Huron zoning designations, and future land use plans (Appendix E).

4.2.2 Option 10

This option is located on land situated east of the CSXT RR spur to Marysville and north of Dove Street (Figure 32). The Port Huron Charter Township Official Zoning Map indicates this study area is zoned partially as Light Industrial (I-L) and partially as Heavy Industrial (I-H) (Appendix E). Properties immediately adjacent to the study area are also mapped in designated heavy and light industrial zoning districts (I-H and I-L). A new station at this location is consistent with the current zoning designations (Figure 32).

4.1 ROW ACQUISITION

Property is anticipated to be acquired for all options. For Option 10A, 10B, and 10C property will need to be acquired from a private land owner. Option 1A will require property from CSXT RR and Option 1B will require property from CN RR.

4.2 CULTURAL RESOURCES

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consider the effects of their actions and their potential to affect historic properties. For the purposes of this study, all available databases and resources were accessed to determine the likelihood of major cultural resources concerns. This included a review of historic aerials, Google Earth, and known site history. This study could not access detailed cultural resources information maintained by the Michigan State Historic Preservation Office (SHPO) that includes previously reported or identified historic properties (buildings, districts, objects, archaeological sites, and structures). These files are not available to the public and are accessed by SHPO during formal project consultation (NEPA phase activity) when plans are developed to a level to fully evaluate project impacts.

The findings of this preliminary screening and risk of major Section 106 impacts include:

4.2.1 Past Land Use Review

4.2.1.1 Options 1 and 11

Aerial photographs dated 1937, 1941, 1957, 1967, 1973, 1976, 1983, 1985, 1999, 2006, 2009, 2012, and 2016 were reviewed from the Environmental Data

Resources, Inc. (EDR) (Appendix E). Aerial photographs indicate that the study area was developed with a railroad since at least 1937. The present Amtrak Station building was constructed around 1976. A summary of the photographs is as follows:

- 1937 - 1973: The railroad and 16th Street are visible. There are no buildings within the study area. Adjoining properties appear to be both commercial and residential. A water tower is visible to the north of the railroad (and Study Area) starting in 1957.
- 1976: A small building and parking lot is visible within the study area. Development surrounding the Study Area to the north includes commercial. The properties to the south of the study area include undeveloped, commercial, and residential uses.
- 1983 - 1999: The layout of the study area is similar to the 1976 aerial photograph. There are several commercial/industrial buildings that adjoin the Study Area to the north and south.
- No Sanborn maps indicating historic records of past land use are available in this area.

Although additional archeological studies may be required if there is excavation in previously undisturbed soils, given the past land use history, it is unlikely that there are significant areas of archeological interest that would be disturbed by the grading activities. The rail station itself was built around 1976 and is less than 50 years old and does not appear to be architecturally significant. Adjacent buildings are generally industrial in nature and do not appear historically significant. It is unlikely further architectural reviews would be warranted.

4.2.1.2 Option 10

Aerial photographs dated 1937, 1941, 1957, 1967, 1973, 1976, 1983, 1985, 1999, 2006, 2009, 2012, 2016, and 2020 were reviewed from the Environmental Data Resources, Inc. (EDR). Aerial photographs indicate that the study area was largely wooded, except for the western edge of the study area that was developed with a railroad since at least 1937. A summary of the photographs is as follows:

1937-1941: One (1) structure is visible in the southwestern corner of the study area. One (1) rail line is visible along the western boundary of the study area. An unnamed road appears to bisect the Study Area. The properties adjoining the study area include undeveloped, commercial, and residential uses.

1957: The structure in the southwestern corner of the study area has been removed. The structure in the southeastern corner of the study area remains

visible. The properties adjoining the study area include undeveloped, commercial, and residential uses.

1967-1999: A structure in the southeastern corner is unknown but may be present as imagery is somewhat blurred. One (1) rail line is located along the western boundary of the study area. The properties adjoining the study area include undeveloped, commercial, and residential uses.

2006-2020: The study area is primarily wooded/vacant, except for one (1) rail line along the western boundary of the study area. The properties adjoining the study area include undeveloped, commercial, and residential uses.

Although the initial site footprint indicates likely avoidance of the forested wetland areas, the undeveloped nature of this site may warrant further archeological studies to determine if there are underground resources. It is unknown at this time whether any of these findings would be significant and if impacts would need to be avoided, minimized, or mitigated.

4.2.2 National Register of Historic Places Review

The original St. Clair Tunnel was opened in 1891 and was the first sub-aqueous tunnel built in North America. It was later replaced in 1994 with a larger tunnel which could accommodate larger intermodal rail cars and the original tunnel was sealed. The tunnel was designated a National Historic Landmark in 1993 and is located adjacent to the project limits with a placard located at the existing Port Huron Rail Station. According to the National Historic Landmark Nomination Form:

Figure 33: Placard for the first international rail tunnel at the existing site

This proposed NHL is comprised of three contributing elements: the tunnel proper (which includes the cast iron lining and both portals) and the two approach ramps (including retaining walls).

and

The underground portion of this property begins at the western (Port Huron) portal which is located at a point 200' west of the center line of 10th Street and equidistant between Cedar and Beard Streets.

The tunnel entrance is located approximately 0.4-0.5 miles from the existing rail station but is approximately 0.3 miles from overflow parking for options 1A and 1B and option 11. Direct impacts to the tunnel entrance are not anticipated but indirect impacts may need to be fully evaluated under NEPA. No other listed properties were identified for any of the site locations based on publicly available information, but a detailed historical review in coordination with the Michigan SHPO records is required to confirm there are no additional resources.

4.2.2.1 Anticipated Section 106 Review

Under the 2015 Fixing America's Surface Transportation Act, FRA in coordination with FTA, USDOT, and FHWA developed a program comment, which is a type of Section 106 program alternative to cover many of the common actions for both rail and rail transit ROW. Any federal agency may use the program comment to satisfy the requirements of section 106. Under the Program Comment, the proposed project would not meet the criteria of the activities-based approach which includes a comprehensive list of maintenance, repair, and upgrade activities. The Program Comment also includes a provision to identify "excluded historic rail properties" but this provision is most beneficial for project sponsors who frequently carry out federally assisted projects in the same ROW locations and benefits repeated, future projects. The Program Comment likely will not apply to this project.

Since the program comment will not apply, the federal lead agency will likely require formal coordination with consulting agencies/parties including SHPO and any interested Federally Recognized Indian Tribes. Plans will need to be fully developed to indicate ground disturbing activities and building or landscape alterations.

4.2.3 Cultural Resources Conclusion

Although formal section 106 consultation will likely be required, given the past land use history and site context, it is unlikely detailed studies, if required, will find significant areas of archeological or architectural interest for Options 1 and 11. Potential impacts to the NHL listed tunnel may need to be evaluated but it is unlikely

the project would significantly impact this resource, especially for options 1A and 1B. Option 10 may require further archeological investigation before potential impacts to any resources can be evaluated.

4.3 PARKS AND RECREATIONAL FACILITIES

Per the U.S. Department of Transportation Act of 1966 section 4(f), consideration of impacts to park and recreation lands, and wildlife and waterfowl refuges must be considered on all projects involving USDOT agencies. Federal agencies are also required to comply with Section 6(f) of the Land and Water Conservation Act requires that the conversion of lands or facilities acquired with Land and Water Conservation funds for recreation purposes be coordinated with the National Park Service.

All identified public parks are located at least 0.25 miles away from any of the potential sites. There are no anticipated 4(f) or 6(f) concerns for this project (Appendix E).

4.4 TRANSPORTATION

The project will increase the amount of parking, make it more accessible, improve safety, and potentially increase ridership through the upgrade of station amenities. Option 1 and 11 would not change the travel time to the station, however, Option 11 would introduce left turns just south of the CN RR at-grade crossing. Option 10 is located ½ mile south and 1 mile west of the existing station. Travelers reaching the train station from I-69 or Canada could expect a minimal increase in travel time to the Dove Street location.

Consistent with the Purpose and Need, the options would accommodate persons with disabilities and be ADAAG compliant, be readily accessible by buses, bicycles, pedestrians and rideshare vehicles, and include sufficient parking to encourage ridership. The waiting room would be upgraded to be of sufficient size and include amenities to encourage and support future ridership.

This station location would not preclude the potential for future passenger ridership from Canada. Nor would it preclude additional passenger service between Detroit and Port Huron if that materializes in the future.

Option 1B would require modification to 16th Street to provide a bus turnout by removing existing curb and installing new curb and pavement. During construction, this would have minimal impacts to 16th Street through-traffic.

Option 1B variations could require a pedestrian crossing at 16th Street. Alternatively, this could be an at-grade crossing with signals to alert drivers that pedestrians are crossing. Either of these crossing options would need to be ADA compliant.

See section 3.0 for more information.Alternative Station Locations and Options

4.5 NOISE AND VIBRATION

The initial Pre-Feasibility Study determined the existing rail station location and adjacent properties would likely not cause significant complications related to noise given the industrial/commercial settings of these locations, consistent with the guidance found in the FTA Transit Noise and Vibration Impact Assessment Manual (2018) which is also used by the FRA. These sites are currently operating as a rail facility and experiences noise and vibration from rail operations on a daily basis. The site development would improve internal circulation when compared with the existing conditions, allowing for efficient pick up/drop off of passengers and reduce conflict with vehicular traffic on 16th Street. Option 10 currently also has rail service and aside from concerns with the adjacent vacant land, there are few sensitive noise receptors. Option 10 may increase noise in the area of Dove St. over existing conditions with two train moves per day vs. much lighter rail traffic volumes today. The current rail traffic volumes are not scheduled and vary from week to week. This site would need to be screened according to current guidance but major efforts to mitigate noise and vibration are not anticipated at this time.

4.6 AIR QUALITY

Section 176(c) of the Clean Air Act Amendment 1990 requires the EPA to set National Air Quality Standards (NAAQS) for six common air pollutants: carbon monoxide, ozone, particulate matter, nitrogen dioxide, sulfur dioxide, and lead. Proposed federal actions must be in conformity, or in other words do not interfere with a state's plan to attain and maintain national standards for air quality. Projects must be reviewed to determine if they are in an area that is designated as nonattainment or maintenance for pollutants of concern. Additionally, projects that are in areas designated as attainment must not cause an area to be re-designated as in non-attainment for any transportation related pollutant of concern.

The EPA website was reviewed on December 30, 2022 for designated NAAQS Non-Attainment or Maintenance areas within the project study site. No areas within the project study site are listed. An area in St. Clair, Michigan, approximately 3-4 miles to the south of the project sites, is listed starting in 2010 as in non-attainment for Sulfur Dioxide (SO_2).

The project is not anticipated to result in an increase in rail line capacity and may reduce vehicle miles traveled in the region. Short term effects on air quality in terms of construction are anticipated as well as long term effects of operating a larger rail station. Air quality will need to be fully evaluated as part of the NEPA process, but this project is not likely to be a large generator of pollutants of concern for any of the Options studied.

4.7 HAZARDOUS MATERIALS AND WASTE

A preliminary desktop review of hazardous waste and contaminated materials was conducted for Options 1, 10, and 11 and is included in Appendix F. This review is limited to the availability of current and historic records and included identification of Recognized Environmental Concerns (RECs), Historic RECs (HRECs), and Controlled RECs (CRECs). No site

visit or additional testing was conducted and this review is not a full Phase I or Phase II ESA investigation.

4.7.1 Options 1 and 11

Based on this review, these project sites have the potential to encounter:

- Due to the presence of the railroad, surface soils may be impacted with Polyaromatic Hydrocarbons (PAHs), Polychlorinated Biphenyls (PCBs), and heavy metals from any of the options being considered. Soil characterization to determine appropriate disposition is required if construction plans involve soil disturbance and off-site disposal of removed soils.
- Aerial imagery and environmental databases indicate manufacturing and industrial property uses adjoining the Study Area for Options 1 and 11. Subsurface environmental impacts, including but not limited to petroleum-related constituents, Volatile and Semi-Volatile Organic Compounds (VOCs/SVOCs), per- and polyfluoroalkyl substances (PFAS), and heavy metals, may be present as a result of these former uses.
- Based on the age of the existing building, the potential for Asbestos-Containing Material (ACM), Lead-Based Paint (LBP), and Polychlorinated Biphenyl (PCB)-caulk exists. Asbestos, LBP, and PCB-Caulk may also be present in underground utilities at the Study Area. Transite pipe and conduit, bituminous pipe coatings, and other buried utility coatings may be found in association with underground utilities.

  The results of this preliminary investigation indicate a full Phase I and Phase II assessment would likely need to be completed prior to redevelopment/construction. If hazardous waste and/or contaminated materials are identified, mitigation and remediation measures would need to be developed and added to the construction contract. Industry standard practices should address any concerns and the local community will be protected from contamination during construction and operation of the project.

  It is noted that a Geotechnical Investigation was conducted by Somat Engineering, Inc. on July 11 and 12, 2022 for the Option 1 and 11 sites. The investigation did not include any environmental assessment or investigation for the presence or absence of wetlands or hazardous or toxic materials in the soil, surface water, groundwater or air, on, below or around this site. However, no obvious surface contamination or buried debris were observed during drilling. The Geotechnical Investigation Report, dated July 13, 2023, is provided as Appendix G.

4.7.2 Option 10

Similar to Options 1 and 11, this study area adjoins existing railroad ROW and there is potential to encounter PAH's, PCBs, and other heavy metals. The land use history of

the site indicates it has predominately been undeveloped and it is unlikely there is major hazardous or contaminated material contamination. A full Phase I assessment is recommended for this site as well to verify this preliminary assessment.

4.8 COMMUNITIES AND ENVIRONMENTAL JUSTICE

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, directs Federal agencies to address disproportionately high and adverse effects on the health or environment of minority and/or low-income populations. In accordance with Executive Order 12898, the White House Council on Environmental Quality (CEQ) issued guidance that includes six principles for environmental justice analyses. The principles are:

1. Consider the composition of the affected area to determine whether low-income, minority or tribal populations are present and whether there may be disproportionately high and adverse human health or environmental effects on these populations.
2. Consider relevant public health and industry data concerning the potential for multiple exposures or cumulative exposure to human health or environmental hazards in the affected population, as well as historical patterns of exposure to environmental hazards.
3. Recognize the interrelated cultural, social, occupational, historical, or economic factors that may amplify the natural and physical environmental effects of the proposed action.
4. Develop effective public participation strategies.
5. Assure meaningful community representation in the process, beginning at the earliest possible time.
6. Seek tribal representation in the process.

To determine potential community and environmental justice concerns, preliminary desktop reviews of tribal interest and Environmental Justice screening were completed.

The US Department of the Interior Bureau of Indian Affairs website was reviewed, and the project site does not include any lands that are considered US Domestic Sovereign Nations. Potential tribal interest in the project area would need to be coordinated as part of the NEPA process.

The Environmental Protection Agency's (EPA) Environmental Justice Screening and Mapping Tool (Version 2.1) (EJScreen) and the Michigan EJScreen were used to provide insight on potential environmental justice concerns associated with the project. Full reports from each database are provided in Appendix E. Both indices indicated higher than the 50th percentile for almost all EJ indexes for both state and national percentiles at both locations. According

to the EPA's Environmental Justice (EJ) website, EJ Indexes combine demographic factors with a single environmental factor and there are 12 EJ indexes:

- Particulate Matter 2.5
- Ozone
- Diesel Particulate Matter
- Air Toxics Cancer Risk
- Air Toxics Respiratory Hazard Index
- Traffic Proximity
- Lead Paint
- RMP Facility Proximity
- Hazardous Waste Proximity
- Superfund Proximity
- Underground Storage Tanks
- Wastewater Discharge

Various environmental factors are not combined into a cumulative score and a higher score indicates a block group with a large number of mainly low-income and/or people of color residents which also have a higher environmental indicator value for a given index. Supplemental indexes use the same methodology but incorporate a five-factor supplemental demographic index (% low income, % unemployed, % limited English speaking, % less than High School education, low life expectancy) in addition to the standard two factor (low-income population and people of color populations) and provides additional information on potential disproportional environmental impacts to sensitive populations. However, according to the Michigan EJ Screen, which was developed at a smaller statewide level scale, the project is located in one of the higher Michigan EJ Screen Overall Score percentiles (>80-90) for disproportionally higher pollution burden and vulnerability than census tracts with lower scores for Options 1, and 11. Specifically, this tract has a highly sensitive population (85th percentile) with high socioeconomic risk factors (83rd percentile) and a higher environmental exposure (58th percentile) and environmental effects (93rd percentile). This tract is surrounded by areas with higher than statewide average overall scores and the tract to the north in Port Huron is designated the highest level in the state (>90-100) (Appendix E). Option 10 is still above average, but scores lower on the Michigan EJ indices, (>70-80). This site is also further removed from the higher scoring residential areas in Port Huron. Land use is characterized as primarily open space/industrial and the area includes two block groups with zero population.

Although the project land use will not be changing for Options 1 and 11 and is consistent with adjacent land use for Option 10, additional information on Environmental Justice and community outreach will need to be conducted as the project progresses and potential project impacts are evaluated and documented for all potential site locations. Anticipated positive effects of the project include:

- Train station upgrades will provide a more cost-efficient alternative route to existing transportation infrastructure;
- The visual appearance of the Study Area is proposed to improve;
- Potential increased ridership may create business opportunities.

As discussed in Sections 4.5, 4.6, and 4.7, Hazardous Materials/Contaminated Waste, Air Quality and Noise, the project impacts are not anticipated to significantly alter existing conditions and/or potential pollutants will be handled using industry standards to protect the public and there are no anticipated secondary impacts from traffic anticipated within the residential neighborhoods. Further public outreach and verification of these traffic and environmental assumptions will be required to verify the project will not cause disproportionately high and adverse effects on the health or environment of minority and/or low-income populations

4.9 IMPACTS TO WATERWAYS

4.9.1 Waters of the U.S.

Federal agencies are required under Executive Order 11990 to avoid to the extent practicable short and long-term impacts associated with the destruction or modification of wetlands. If wetlands cannot be avoided, the proposed action must include all practical measures to minimize harm to wetlands. In Michigan, both Federal and State agencies have jurisdiction over wetlands as authorized by Sections 404 of the Clean Water Act and Part 303 of the Michigan Natural Resources and Environmental Protection Act (NREPA). Both programs have similar requirements for avoiding or minimizing wetland impacts and mitigating wetland impacts that cannot be avoided.

To determine the likely presence of wetlands at this study site, a desktop review of the available USFWS NWI Map indicated the Study Area is located within the St. Clair watershed (HUC 04090001).

4.9.1.1 Options 1 and 11

There are no mapped NWI features located within the study area (Appendix E) for these options. The NRCS Hydric Soil Survey Map for St. Clair County, Michigan was reviewed, and it was determined hydric soils are mapped within the project area but given the past land uses, these soils may not currently exist on the site.

There are no navigable or mapped waterways within or immediately adjacent to the Study Area. The St. Clair River is approximately 0.65-miles east of the Study Area. The Project is not anticipated to impact the St. Clair River.

Google Earth was also reviewed for evidence of unmapped wetlands potentially under the jurisdiction of the Michigan Department of Environment, Great Lakes,

and Energy (EGLE) and/or the U.S. Army Corps of Engineers (USACE). Areas of *Phragmites australis*, which is listed as a NWI wetland plant indicator (FACW), were noted along the southern property line border and in the rail yard to the east of 16th street. The presence of *Phragmites* might indicate federal/state jurisdictional wetlands exist on the site or given the invasive nature of *Phragmites,* it's presence may simply indicate an upland disturbed area. No evidence of hydrology (dark areas) was seen in the historic aerial imagery. The aerial imagery review indicates unmapped wetlands, if present, likely do not constitute a large wetland complex that would be impacted by the project and require extensive agency review and coordination.

No major temporary or permanent impacts to wetlands, streams, or waterways are anticipated for Options 1 or 11. The NEPA process will require a wetland and watercourse delineation to confirm the absence or presence of regulated wetlands or other aquatic resources. Project impacts, if any, would likely require a minimal permitting effort and required compensatory mitigation, if required, would also be minimal.

4.9.1.2 Option 10

A desktop review of the available USFWS NWI Map indicated the Study Area is located within the St. Clair watershed (HUC 04090001). Approximately half of the Study Area is mapped as a Freshwater Forested/Shrub Wetland NWI feature (PFO1C).

There are no navigable waterways within or immediately adjacent to the Study Area. The St. Clair River is approximately 0.90-mile east of the Study Area. The Project is not anticipated to impact the St. Clair River.

Based on desktop review of resources, a potential palustrine forested wetland comprises approximately half of the study area. Review of available mapping and Google Earth imagery, indicates the wetland boundary is likely on the eastern portion of the study area and at a minimum, follows the woodland edge. A wetland and watercourse delineation should be performed within the Study Area to confirm the boundaries of wetlands or other aquatic resources.

Initial site layout of the proposed station indicates all of the Option 10 sub options would not impact the large, mapped wetlands. A field delineation would need to be completed to verify this assumption, but based on site photographs and Desktop imagery, the proposed station impacts would likely only be to small areas of wetlands or could be avoided entirely. Like Options 1 and 11, project impacts, if any, would likely require minimal permitting effort and required compensatory mitigation, if required, would also be minimal.

4.9.2 Floodplains

The FEMA Flood Hazard Layer for St. Clair County, Michigan was reviewed in accordance with Executive Order 11988: Floodplain Management. The Flood Insurance Rate Maps (FIRMs)) indicated that all study areas are entirely located within Zone X – "Areas of Minimal Flood Hazard" (Appendix E). Impacts to floodplains are not anticipated for this alternative.

4.9.3 Water Quality

Section 1424(e) of the Safe Drinking Water Act of 1974 authorizes the US Environmental Protection Agency (USEPA) to review proposals that overlay a Sole Source Aquifer. According to EPA's EJScreen, the project sites are not located in the vicinity of a Sole Source Aquifer and therefore no review by the USEPA is required (Appendix E).

4.9.4 Section 402-NPDES

Under Section 402 of the Clean Water Act, activities in Michigan that disturb at least one acre of land and have a point source discharge of storm water to waters of the state are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit from EGLE. It is anticipated a NPDES permit will be required for this project and construction activities are anticipated to be able to comply with the terms of coverage of the permit. Permanent stormwater treatment features will need to be incorporated onsite. Options at the existing rail station for further stormwater treatment are limited and may require underground storage or offsite mitigation.

4.9.5 Coastal Zones

Federal consistency is granted under 15 CFR Part 930 Section 307 of the Coastal Zone Management Act (CMZA), which ensures that federal actions with reasonably foreseeable effects on coastal uses and resources must be consistent with the enforceable policies of a state's approved coastal management program.

According to the Bureau of Energy Management (BOEM) Marine Cadastre national Viewer, none of the study areas are located within a Coastal Barrier Resource Area (Appendix E). The Michigan Department of Environment, Great Lakes, and Energy Coastal Zone Boundary Maps indicate none of the study areas are located within a Coastal Zone Management Boundary or a Coastal Zone Management Area (Appendix E).

4.10 FARMLAND

4.10.1 Options 1 and 11

The NRCS Hydric Soil Survey Map for St. Clair County, Michigan was reviewed to determine the soil types present within the Study Area (Appendix E). Two (2) soil types were mapped within the Study Area:

- Allendale-Hoytville complex, 0 to 6% slopes (AhB). Rated 45% hydric.
- Wainola-Deford fine sands, 0 to 2% slopes (WdA). Rated 35% hydric.

The study area is located on farmland classifications of “Not prime farmland” and “Farmland of local importance” (Appendix E). Although mapping indicates the area may contain farmland, the project area has been dedicated to use as a train station by Amtrak since 1979 and dedicated to use as a railroad since the mid to late 1800s. This area is not historically or currently used for farming practices.

4.10.2 Option 10

The NRCS Hydric Soil Survey Map for St. Clair County, Michigan was reviewed to determine the soil types present within this project area. Three (3) soil types were mapped within the Study Area:

- Allendale-Hoytville complex, 0 to 6% slopes (AhB). Rated 45% hydric.
- Rousseau fine sand, 0 to 6% slopes (RuB). Rated 2% hydric.
- Wainola-Deford fine sands, 0 to 2% slopes (WdA). Rated 35% hydric.

The study area is located on farmland classifications of “Not prime farmland”, and “Farmland of local importance” ((Appendix E). Aerial imagery dating back to 1985 indicates the area has remained undeveloped since at least 1985. Between 2019-2020 a building was constructed within the project area and is considered an industrial use class. This area is not historically or currently used for farming practices.

4.11 THREATENED AND ENDANGERED SPECIES

Section 7 of the Endangered Species Act requires federal agencies to ensure federally funded or authorized projects will not jeopardize the existence of any protected species or result in the loss of critical habitat. The study areas were reviewed using the USFWS online Information, Planning and Consultation (IPaC) tool to determine if there were any federally listed species or critical habitat. Due to the close proximity of all options, the USFWS Official Species List returned the same results including 8 federally listed species and no designated critical habitat (Appendix E).

Additionally, the USFWS Official Species List indicated three (3) migratory birds. These species are of particular concern because they occur on the USFWS Birds of Conservation Concern

(BCC) list or warrant special attention because of the Project location. The table below (Table 1) summarizes the likely potential habitat at each site.

Table 1: Species Suitable Habitat Assessment

Common Name	Scientific Name	Suitable Habitat	Federal Listing Status	Suitable Habitat Present (Options 1 and 11)?	Suitable Habitat Present (Option 10)?
Indiana Bat	*Myotis sodalis*	Trees >3" dbh, caves abandoned mines, wooded areas with loose tree bark or dead or dying trees	Endangered	Potentially-limited to a few small areas of woody growth	Extremely Likely-Large areas of forested area present
Northern Long-eared Bat	*Myotis septentrionalis*	Roost in cavities or in crevices of both live trees and snags; Hibernate in caves and mines with constant temperatures, high humidity, and no air currents.	Endangered	Potentially-limited to a few small areas of woody growth	Extremely Likely-Large areas of forested area present
Tricolored Bat	*Perimyotis subflavus*	Winter roosts: caves, abandoned mines, road-associated culverts Summer roosts: forested areas in both live trees and snags.	Proposed Endangered	Potentially-limited to a few small areas of woody growth	Extremely Likely-Large areas of forested area present
Piping Plover	*Charadrius melodus*	Sand pits, small islands, tidal flats, shoals, sandbars with and without inlets, mud flats, ephemeral pools, and seasonally emergent seagrass beds.	Endangered	No	No
Eastern Massasauga Rattlesnake	*Sistrurus catenatus*	Wet areas including wet prairies, marshes, fens, sedge meadows, peatlands, and low areas along rivers and lakes. Adjacent upland shrublands, open woodlands, and prairies.	Threatened	Unlikely	Somewhat Likely-Further review of known occurrences and habitat value is required
Monarch Butterfly	*Danaus plexippus*	Prairies, meadows, grasslands and along roadsides with milkweed.	Candidate	Potentially-limited to a few small areas of herbaceous growth	Potentially-limited to a few small areas of woody growth

Eastern Prairie Fringed Orchid	*Platanthera leucophaea*	Mesic prairie, sedge meadows, marsh edges, bogs. Requires full sun, grassy habitat, with little to no woody encroachment.	Threatened	No	Somewhat Likely-Further review of known occurrences and habitat value is required
Bald Eagle	*Haliaeetus leucocephalus*	Within 2.5 miles of the coast, bays, river, lakes or other bodies of water. Typically nest in large, mature trees, cliffs, or man made structures.	Migratory Bird/Bald and Golden Eagle Protection Act	Unlikely	Likely-Further review of known occurrences and habitat value is required
Chimney Swift	*Chaetura pelagica*	Historically nested in caves, cliff faces, and hollow trees. Now nest in artificial sites including air vents, garages, etc.	Migratory Bird	Potentially	Potentially
Golden Eagle	*Aquila chrysaetos*	Grasslands, intermittent forested habitat and woodland-brushlands. Typically found in open country in the vicinity of hills, cliffs and bluffs	Migratory Bird/Bald and Golden Eagle Protection Act	Unlikely	Somewhat Likely-Further review of known occurrences and habitat value is required

Potential impacts to all of these species will need to be fully evaluated during the NEPA process and state specific records will need to be evaluated to fully determine impacts to federally protected species and if there are any additional species under state protection.

4.11.1 Options 1 and 11

Given the site currently operates as rail infrastructure and does not support large, undisturbed areas of natural habitat and the rail yard is primarily compacted earth with a few sparse trees, it is unlikely detailed studies would be required. Project activities would most likely result in a “No Effect” or similar determination for listed species including: Piping Plover, Red Knot, Eastern Massasauga, Eastern Prairie Fringed Orchid, or the 3 migratory birds. Project impacts to listed bat species may be found to “May Affect, Not Likely to Adversely Affect” due to potential tree removal or changes to lighting patterns and coordination and minimization such as tree removal restriction dates or specialized lighting will need to occur with the lead NEPA agency. Formal

consultation and/or a determination of “Likely to Adversely Affect” with the USFWS under Section 7 for any currently listed species is not anticipated.

4.11.2 Option 10

This site includes a large, forested wetland area that may be suitable habitat for a number of protected species, including all bat species and the Eastern Massasauga Rattlesnake. Known records of occurrences for each species will need to be reviewed. For bat species, removal of trees within proximity to a hibernaculum or known roost tree, outside of winter cutting windows, and/or greater than 100 feet from the pavement edge may result in a “Likely to Adversely Affect” and trigger formal consultation with USFWS and potential mitigation.

Initial site layout of the proposed station indicates all of the Option 10 sub options would not impact the large, mapped forested wetlands and it is likely that impacts to these species could be avoided.

4.12 PUBLIC SAFETY

This project is anticipated to increase public safety by providing additional parking with adequate lighting, creating a designated dropoff/pickup area, increasing station amenities, and building a new fully ADA compliant facility. With late night/early morning train service at this station, the public expressed a strong desire for a well-lit, safer facility with improved parking (input received during the Pre-Feasibility study).

Lighting in the parking areas is proposed. A bus shelter can be considered near the bus turnout proposed in Option 1B for travelers waiting for bus arrival. The new facility will be ADA compliant including crossing 16th Street. (Option 1B). With option 1B, pedestrian traffic across 16th Street would need to be evaluated to determine the likelihood of vehicular conflict with pedestrians crossing during peak departure and arrival times. Option 11 also includes pedestrians crossing 16th street but directs all traffic. This option also makes the predominant travel route, to make a left turn lane into the site. This may result in traffic backing up and potentially stopping on the existing railroad tracks. Further traffic analysis would be warranted with this option to evaluate if and how traffic could be safely accommodated. Option 10 would need to be further analyzed to determine the impacts of increased traffic on Dove Street. Left turn movements in the proximity of the unsignalized at grade railroad crossing and the history of crashes on Dove Street would need to be fully assessed as well as impacts to local traffic patterns.

4.13 MITIGATION

The project will seek to avoid and minimize impacts to all identified resources. Mitigation outside of typical agency coordination is not anticipated for Options 1 and 11. Option 10 may include mitigation for federally protected species and for unavoidable impacts to

wetlands but major mitigation/agency coordination is unlikely if the site is developed consistent with the preliminary developed footprint.

4.14 PUBLIC NOTIFICATION

Initial public and stakeholder outreach was completed during the July 2018 *Port Huron Amtrak Station Pre-Feasibility Study* that focused on identifying possible sites for a new Amtrak Station, gathering public input on a potential new station, and summarizing this information for the pre-feasibility study. Although this initial public outreach does not satisfy all requirements under NEPA, it indicates the likely significance of concerns likely to be encountered during a full NEPA review. Two public meetings were held a week apart and included a brief presentation followed by a question-and-answer period. The meetings were publicized through media outlets and through various groups throughout the Port Huron area. Reporters attended the meetings and provided coverage of the study efforts.

Initial public input demonstrated general support for the project and common input from these meetings included:

- The City of Port Huron indicated interest in keeping the station at its current location
- Lack of parking was indicated and concerns with lack of amenities and agents for late night/early morning rail service
- An International crossing for passengers via the tunnel under the St. Clair was desired
- A strong desire for increased rail passenger service/options, here and abroad throughout the United States

Local stakeholders provided letters indicating general support of the project and are included in the *Pre-Feasibility Study*. Although there was a lot of local support from Port Huron Township for the relocation of the rail station to the property on 32nd street, this location was deemed infeasible due to railroad operational challenges. Additional outreach to local stakeholders will be required during the NEPA process.

4.15 OTHER RESOURCES/LOCAL ACTIONS

Coordination with local officials and the public would need to occur throughout the process.

5.0 Potential NEPA Classification

The 2018 Cross Agency Categorical Exclusions allows certain FHWA, FRA, or FTA categorical exclusions to apply to a project, regardless of which agency is the lead. Potential CE's considered and their applicability for this project is shown in below (Table 2).

Table 2: Potential Cat. Ex. Considerations

Agency CE Number	Description	Conditions	Applicability for Options 1 and 11	Applicability for Option 10
FRA 21	Assembly or construction of facilities or stations	Must be consistent with existing land use and zoning and do not result in a major change in traffic density and are less than 10 acres of disturbance	Likely applies	May not apply
FHWA (d)(9)	Rehabilitation or Reconstruction of Rail and Bus buildings and Ancillary Facilities	No substantial increase in the number of users	May not apply	Does not apply
FTA (c)(8)	Maintenance, rehabilitation, and reconstruction of facilities	Must occupy substantially the same geographic footprint and do not result in a change in functional use. Includes stations.	Likely applies	Does not apply
FTA (c)(9)	Assembly or construction of facilities that is consistent with existing land use and zoning	Must primarily use land disturbed for transportation use	Likely applies	May not apply
FTA (c)(10)	Development of facilities for transit and non-transit purposes	Cannot substantially enlarge facilities	May not apply	Does not apply
FTA (c)(12)	Projects that would take place entirely in the ROW	Must take place entirely within the Operational ROW of the existing transportation facility	Likely applies	Does not apply

Most of the CE categories would not apply to Option 10 and the consideration of multiple alternatives at different locations likely warrants the preparation of an EA to fully evaluate the proposed alternatives and fully document the NEPA process. An EA may also be a beneficial process for the project by ensuring the project's timeline adheres to a one year start to finish date and limiting the size of the document.

If Option 10 is removed from further consideration prior to the NEPA process and only options in the location of the existing rail station are considered, a number of CE categories may apply to this project and it may be possible to progress the project as a CE. Ultimately it is up to the lead federal agency to confirm the project meets the requirements of the CE or if the project could involve unusual circumstances including: significant environmental impacts, substantial controversy on environmental grounds, significant impact on properties protected by 4(f) or section 106, or any inconsistencies with Federal, State, or local law that need to be further developed in an EA or EIS.

6.0 Summary

Based on preliminary discussions with FTA and FRA, it is likely that an EA will be required if Options 1, 10, and 11 are carried forward through the NEPA process. A CE may be feasible if only Option 1 and/or 11 is carried forward. The determination on further investigation would be at the discretion of the NEPA lead agency which will be determined once construction funding is identified. Identification of unusual circumstances in the NEPA process may also warrant further study of options initially dropped from consideration in this pre-NEPA study.

Additional studies and discussion for the social, economic, and environmental concerns discussed in this document would be required to satisfy the requirements of NEPA regardless of the NEPA classification.

Below is a summary of concept level estimates of probable costs.

Table 3: Summary of Concept Level Costs

	Concept Level Capital Cost Estimate	Concept Level Support Costs (Engineering, Permits Fees)	Contingency & Inflation	Total Costs	Real Estate Costs	Maintenance Costs
Option 1a	$3,647,650	$1,752,000	$2,322,000	**$7,721,650**	TBD	TBD
Option 1b	$4,012,150	$1,927,000	$2,554,000	**$8,493,150**	TBD	TBD
Option 1c	$5,717,450	$2,175,000	$3,394,000	$11,286,450	TBD	TBD
Option 2	$6,441,950	$3,094,000	$4,102,000	$13,637,950	TBD	TBD
Option 3	$5,984,950	$2,875,000	$3,810,000	$12,669,950	TBD	TBD
Option 4	$8,178,750	$3,928,000	$5,207,000	$17,313,750	TBD	TBD
Option 5	$13,073,350	$6,277,000	$8,322,000	$27,672,350	TBD	TBD
Option 6	$17,061,750	$8,191,000	$10,859,000	$36,111,750	TBD	TBD
Option 7	$18,220,150	$8,748,000	$11,598,000	$38,566,150	TBD	TBD
Option 8	$9,713,150	$4,664,000	$6,183,000	$20,560,150	TBD	TBD
Option 9	$15,193,350	$7,295,000	$9,671,000	$32,159,350	TBD	TBD
Option 10a	$5,003,850	$2,405,000	$3,187,000	**$10,595,850**	TBD	TBD
Option 10b	$8,431,050	$4,049,000	$5,368,000	**$17,848,050**	TBD	TBD
Option 10c	$6,061,850	$2,911,000	$3,859,000	**$12,831,850**	TBD	TBD
Option 11	$4,254,550	$2,045,000	$2,709,000	**$9,008,550**	TBD	TBD

Lighter shade options were deemed not feasible and are not recommended for further study.

7.0 References

American Association of State Highway and Transportation Officials Center for Environmental Excellence. “NEPA Process.” Accessed December 19, 2022. https://environment.transportation.org/education/practical-applications/nepa-process/

Council on Environmental Quality. “Environmental Justice.” Accessed January 16, 2023. https://ceq.doe.gov/nepa-practice/justice.html

U.S. Department of Transportation Federal Highway Administration. “NEPA and Project Development.” Accessed December 20, 2022. https://www.environment.fhwa.dot.gov/nepa/nepa_projDev.aspx

U.S. Department of Transportation Federal Rail Administration. “Environmental Reviews.” Accessed January 24, 2023. https://railroads.dot.gov/rail-network-development/environment/environmental-reviews

U.S. Department of Transportation Federal Rail Administration. “FRA & NEPA Documentation” Accessed December 21, 2022. https://railroads.dot.gov/rail-network-development/environment/fra-nepa-documentation

U.S. Department of Transportation Federal Transit Administration. “Preparing Environmental Documents” Accessed December 21, 2022. https://www.transit.dot.gov/regulations-and-programs/environmental-programs/preparing-environmental-documents

Appendix A: Project Draft Purpose and Need Statement

Appendix B: Option Comparison Matrix

Appendix C: Preliminary Project Building/Site Concepts

Appendix D: Port Huron Amtrak Station Pre-Feasibility Study – UPDATE

Appendix E: Desktop Environmental Research Technical Memo

Appendix F: Desktop Hazardous Waste/Contaminated Materials Screening Technical Memo

Appendix G: Geotechnical Investigation