Port Huron Amtrak Station Pre-Feasibility Study

FACILITY NEEDS & POTENTIAL SITES ASSESSMENTS

Pre-NEPA/Pre-Engineering Study

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1.0 Introduction

This study is intended to precede a feasibility investigation regarding possible improvements and/or relocation of the existing Amtrak Station in Port Huron, MI. The scope of this study focuses on identifying possible sites for a new Amtrak Station, gathering public input for what is important in a new station, and summarizing this information in order to better prepare for, and scope, a subsequent feasibility study.

The Port Huron, Michigan, Amtrak passenger station had a reported ridership of 20,504 passengers in 2016 (Amtrak Great American Stations website). Current service consists of two trains per day (arriving 11:38pm and departing 6:20am) and serves as the east terminus of the Blue Water Line connecting to Chicago.

In 2016, the current station received ADA upgrades including installation of tactile edging and accessible restrooms.

There is no sure way to predict future ridership with certainty. Projections were completed by Transportation Economics & Management Systems, Inc. (TEMS) in June 2014 (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. However, assuming that present concerns regarding Port Huron station deficiencies are corrected (parking, waiting room, hotels and restaurants, etc.), it is possible that current ridership may expand much more quickly over the next 20 years. Amtrak performed a high level study of this station (see Appendix F) 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). For the purposes of planning a future station and estimating the needs of such a station, it is assumed here that ridership could double over the next 20 years.

The current station is in need of additional parking spaces, additional space in the waiting room, and nearby hotels/restaurants for customers. A number of Port Huron riders travel from Canada, driving by automobile due to the lack of a cross-border passenger rail connection. The Canadian National Railroad (CN), has a cross-border freight connection between Ontario, Canada, and Port Huron, Michigan, which passes through a tunnel under the St. Clair River and emerges at Port Huron.

2.0 Public and Stakeholder Engagement

As part of the project initiation, a public and stakeholder engagement plan was developed in order to solicit and receive input from various interested groups and individuals. Two public meetings were held a week apart, one in the afternoon and one in the evening. The meetings included a brief presentation followed by Q&A. Notes were taken during the meetings as were written questions. An email address was provided where interested parties could send additional comments for consideration. All of the information received, as well as the brief presentation provided, is included in Appendix A.

The meetings were publicized through media outlets (radio and online newsfeeds) as well as through various groups throughout the Port Huron area. Reporters were in attendance at the meetings and provided coverage of them following the meetings.

Input from these two meetings was incorporated into this study including Siting Criteria listed below as well as potential locations for a new station.

Engagement with entities such as the Michigan Department of Transportation (Office of Rail), Amtrak, and the CN Railroad were limited to information gathering. This study is intended to provide an unbiased assessment of the various options available along with advantages and challenges associated with each option. Significant coordination and engagement with these entities, and many more, will be required in the next phase of this study. Based on input received prior to initiating this study, the following was provided to the team:

MDOT (Office of Rail) – MDOT is aware of this project being initiated but did not have any specific requests or requirements other than that all State, Federal, and Local regulations be adhered to.

CN Railroad – Owner of the line and platform as well as the rail yard located west of the current Amtrak Train Station. There is land (north of its current rail yard location) that may be available for a new station.

Amtrak – Operating the passenger service along the CN Railroad line, owns and maintains the current Amtrak Train Station, land, and the parking lot. Although not specifically requested by Amtrak, the existing station is at the Terminus of the Blue Water line and may be a good candidate at which to locate a maintenance facility.

The **City of Port Huron** and **Port Huron Township** were in attendance at one or both public meetings held.

3.0 Amtrak's Station Program and Planning Guidelines

Amtrak's Station Program and Planning Guidelines, issued in 2013, is intended to assist local governments, transportation agencies, Amtrak and other stakeholders in the planning, design, construction, rehabilitation and redevelopment of Amtrak-served passenger stations. The Guidelines describe four levels of stations: (1) Large Stations, fully staffed; (2) Medium Stations, lower levels of staff; (3) Caretaker Stations, with enclosed waiting spaces but no ticket agents; and (4) Unstaffed Stations, platforms with only shelters.

The Guidelines classifies a station with projected annual ridership of 20,000 to 100,000 as a "Caretaker Station", which, based on Port Huron's current and projected ridership, puts this facility firmly in this size category.

This does not mean that local government cannot build a larger station. The Amtrak Station Program and Planning Guidelines states that Caretaker Stations "are typically supported and maintained by the local community or state agency."

Guidelines also indicate that a Caretaker Station "is maintained by a part-time custodian (who may or may not be an Amtrak employee) or community stakeholder responsible for operating the station a minimum of one hour before train arrival and keeping the station open until one hour after departure." Amtrak confirmed that it contracts with a 3rd party agency to act as a custodian of this facility who opens it before service begins late at night and closes the station and locks the doors after the last train leaves in the morning.

The present passenger station at Port Huron was not constructed based on the Amtrak Station Program and Planning Guidelines. The present station was constructed in 1979, based on earlier criteria and was a demonstration of a prototype that was then in development.

Interest has been expressed in having a larger facility (parking, waiting room) to better accommodate existing passenger numbers as well as to provide for increases in those numbers in the future.

4.0 Station Siting Criteria

In addition to the foregoing, several factors can influence ridership. Based on past experience with station planning and design as well as from input received during the public meetings held during this study phase, the following are the station siting criteria proposed for the Port Huron Amtrak passenger station:

- Support community land use plans (traffic patterns, environmental factors, economic benefits, long range plans);
- Sufficient space (parking, bus turn-around, kiss-n-ride, future expansion and development, Amtrak maintenance or servicing facility);
- Railroad agreement (tangent track, separation from crossovers and turnouts, train servicing facilities);
- Proximity to trip origins and destinations (convenience to passengers);
- Noise impacts;
- Trip time (operations, convenience for track owner/operator);
- Traffic impacts (at-grade crossings, site access / circulation, peak time operations if future service shifts to daytime);
- Convenient transportation connectivity (road network, convenience for park-n-ride, drop offs, bus transit);

- Cater to nighttime service (hotel, restaurants, public transportation options, etc.);
- Cost
- Ability to service future cross border passenger service.

In identifying the facilities needed to support future rail services at Port Huron, consideration will be given to: (1) the station siting criteria, (2) the Amtrak Station Program and Planning Guidelines, and (3) comments from the public and interested stakeholders.

This pre-feasibility study identifies the important factors with regard to each candidate site.

5.0 Facilities Needed

The following facilities are needed at any Port Huron Amtrak station site:

- Access track to the main rail line (owned by Canadian National Railroad);
- Adequate parking;
- Adequate outdoor lighting;
- Station building with waiting room;
- Level boarding platform;
- Side track for temporary train storage and servicing; and
- Road access and connectivity of parking to the station (taxi, bus, kiss-n-ride, and bicycle).

5.1 ACCESS TRACK TO THE MAIN RAIL LINE

Any Amtrak passenger rail station must either be on, or have access to, the main rail line connection to distant stations along the Amtrak route. A Port Huron Amtrak station, at any location, must be connected to the Amtrak route to/from Chicago via the Blue Water Line. The CN railroad owns the mainline which connects into Canada via the St. Clair River tunnel located just east of the existing Amtrak Station. There is also a rail spur which connects to the CN railroad mainline near Michigan Rd. and Griswold Rd. This spur extends northeast towards Thomas Edison Museum where it terminates at a local paper mill approximately a ¼ mile north of the Blue Water International Bridge. The spur crosses the Black River via a single leaf bascule bridge near Water St.

A rail spur used to exist along the St. Clair River, from Court St. (near the original train station location) to the existing US side of the St. Clair River tunnel just east of the current Amtrak station location. A portion of this spur has been converted to a trail system which travels under BL-94 just south of Jenkinson St.

Another CN mainline extends from the existing CN railroad railyard to the southwest towards Detroit.

5.2 PARKING

Parking requirements may be calculated based on assumptions from the methodology used in the California High Speed Rail Program, which recommends construction of parking spaces sufficient for 50 percent of daily riders, for a low density passenger rail station. The Amtrak Station Program and Planning Guidelines, Appendix C, recommends calculation of daily riders by dividing annual ridership by 270. This factor is based upon the assumption that certain days are more traveled than others. As stated earlier, Amtrak's "Great American Stations" website indicates 2016 ridership at Port Huron as 20,504. Using the Guidelines formula, daily riders (origins and destinations) would be 20,504/270, or 76. Parking for 50 percent of daily riders would be 38 spaces.

However, the present parking capacity at Amtrak's Port Huron station, 60 spaces, has been heavily criticized as insufficient. Clearly, niether methodology applies to Port Huron, perhaps because many Canadians drive their cars across the border in order to use the Port Huron Station. In addition, the 2014 Amtrak Study (Appendix F) indicates a spike in ridership on Mondays and Fridays (almost double that of ridership on Tuesday and Wednesday). It is recommended that a doubling of the present parking area, 120 spaces instead of 60, would be sufficient to support today's ridership. Doubling of that area, to 240 spaces, may be needed 20 years in the future. Amtrak recommends

that parking capacities at its stations be based on at least a 20-year projection of ridership growth (Amtrak Station Program and Planning Guidelines, 2013, page 67). This recommendation shall be used in station building size estimates also.

The area required for parking is estimated utilizing Amtrak's Station Program and Planning Guidelines, Appendix B, which states that "surface parking averages 330-350 square feet of surface area" for each parking space which includes maneuver and circulation space, access and parking control, etc. Thus a surface parking area for 240 automobiles would be approximately 350 x 240 = 84,000 square feet.

5.3 OUTDOOR LIGHTING

A common criticism of the existing Amtrak Port Huron station is that there is insufficient outdoor lighting. Given that service is during nighttime and early morning hours, lighting is significant to providing a sense of passenger safety. Outdoor lighting is therefore included as a facility needed at the Port Huron Amtrak station. The current station does have lighting in the parking areas, however, this would need to be improved to better serve Amtrak customers.

5.4 STATION BUILDING WITH WAITING ROOM

The Amtrak Caretaker Station, the station size for the ridership (presently, and in 20 years) at Port Huron, normally includes a station building with waiting room and restrooms. A Caretaker Station does not offer checked baggage or ticketing window, but may be equipped with Quik-Trak self-service ticketing machines. The station is maintained by a custodian who is contracted by Amtrak. Caretaker services includes janitorial and maintenance activities such as cleaning the waiting area and restrooms, and snow removal from walkways and platforms (Amtrak Station Program and Planning Guidelines, 2013, page 32). The Caretakers are on site to open and close the station each day of service and are onsite while the station is unlocked. Snow removal is scheduled upon 1 inch of snowfall. It is noted, however, that snow removal may not occur in a timely manner if it has fallen in the late night hours, given the current times that trains arrive and depart.

The present Amtrak station building at Port Huron, constructed in 1979, contains about twenty seats in the waiting room (Amtrak "Great American Stations" website) and is approximately 1,764 square feet in area. Of this, the passenger waiting space and restrooms are approximately 850 square feet. The ticket office and old baggage area and agent office (now closed) are 72 and 200 square feet; respectively. The remaining space houses mechanical and storage areas. According to the Amtrak "Great American Stations" website, the 1979 modular design, once considered as a prototype, was never replicated. The "Great American Stations" website states, with regard to Port Huron, that "[T]he current space has become inadequate for travel volumes, which includes many Canadian customers who cross the border to travel on Amtrak."

As stated above, daily ridership (originations and destinations) is 76, and for the purposes of this study, projected ridership 20 years in the future is assumed to be twice that, or 152.

With that assumption, future waiting area size may be calculated and half that amount (10 SF) for standing persons (persons who are not seated). The calculations below are based on Appendix C of Amtrak's Station Program and Planning Guidelines.

Calculation: Assumption Daily Ridership = 152 with 2 trains / day:

Peak hr 2 way traffic = 152 / 2 = 76 on/offs
Peak hr 1 way traffic = 0.65 x 76 = 50 ons
Waiting room (75%)(50 ons)(20sf/seat) = 750sf
(25%)(50 ons)(10sf) = 125sf
Total 875sf

This is an end-of-the line station so the formula can be altered:

0.65x152 = 99 ons
(75%) (99) (20sf/seat) = 1,485sf
(25%) (99) (10sf) = 248sf
Total = 1,733sf

Adding approximately 500 square feet of space for rest rooms and a ticketing machine, station building size is estimated as 2,300 square feet. This is similar to sizing estimates developed by Amtrak in its 2014 study (Appendix F). To provide Amtrak crews a space for showers, lounge, and resting; an additional 2,500 square feet is estimated. For preliminary site layout and budgeting purposes, a total area of 5,000 square feet is used in this study.

5.5 BOARDING PLATFORM

Amtrak Guidelines recommends a 700-foot platform for State rail corridors. The existing Port Huron station has two 700-foot platforms adjacent to the two station tracks (one side platform, and one island platform). Platform width is 10 feet. (Amtrak Guidelines recommends a minimum width of 12 feet). The island platform is not currently in use.

The Code of Federal Regulations (CFR) requires that "all new or altered railroad station platforms" must be readily accessible for persons with disabilities. Otherwise, in the case of existing non-level boarding platforms, on-board lifts may be used to move passengers who cannot climb stairs.

In addition, a platform canopy, lighting, public address system and passenger information display system would be required.

For any new station or significant rehabilitation of the existing station, level boarding is required.

5.6 SIDE TRACK FOR TEMPORARY TRAIN STORAGE AND SERVICING

As stated above, the existing Port Huron Amtrak station has two tracks, which allow for a train to be stored and/or serviced while another station track is available for boarding or de-boarding. There is approximately 65-feet from the CN railroad mainline track to the nearest siding. The two sidings are approximately 21-feet on-center. The sidings are approximately 1,500-feet in length.

5.7 ACCESS TO STATION

It is important that the passenger rail station be accessible to taxis, buses, kiss-n-ride automobiles and bicycles. Road access should be adjacent to the station or a turn-around should be considered to allow for transit vehicles to drop-off and load passengers near the building. The current station parking lot configuration does not provide area for drop-off and passenger loading near the building. In addition, access to the station from the parking area should be a consideration. The existing Ann Arbor station (currently under study for replacement) had additional parking which can only be accessed by traversing a vehicular bridge with sidewalks over the tracks requiring several blocks of walking. The new station in Troy, MI required a pedestrian overpass to cross the tracks to access the connecting parking area to the station. Consideration of a new Port Huron station should include easy and convenient access from the parking area to the building if possible.

6.0 Amount of Space Required for Port Huron Station

The station area, including track, platform, side track for train servicing, station building and parking, and room for future expansion, should be approximately 5 acres. A summary of the area required includes:

- Parking – 1.9 acres;
- Platforms (two) including adjacent track (two, one for train servicing) – 1.3 acres;
- Station Building (including road access for bus, taxi, and other drop-off) – 0.3 acres

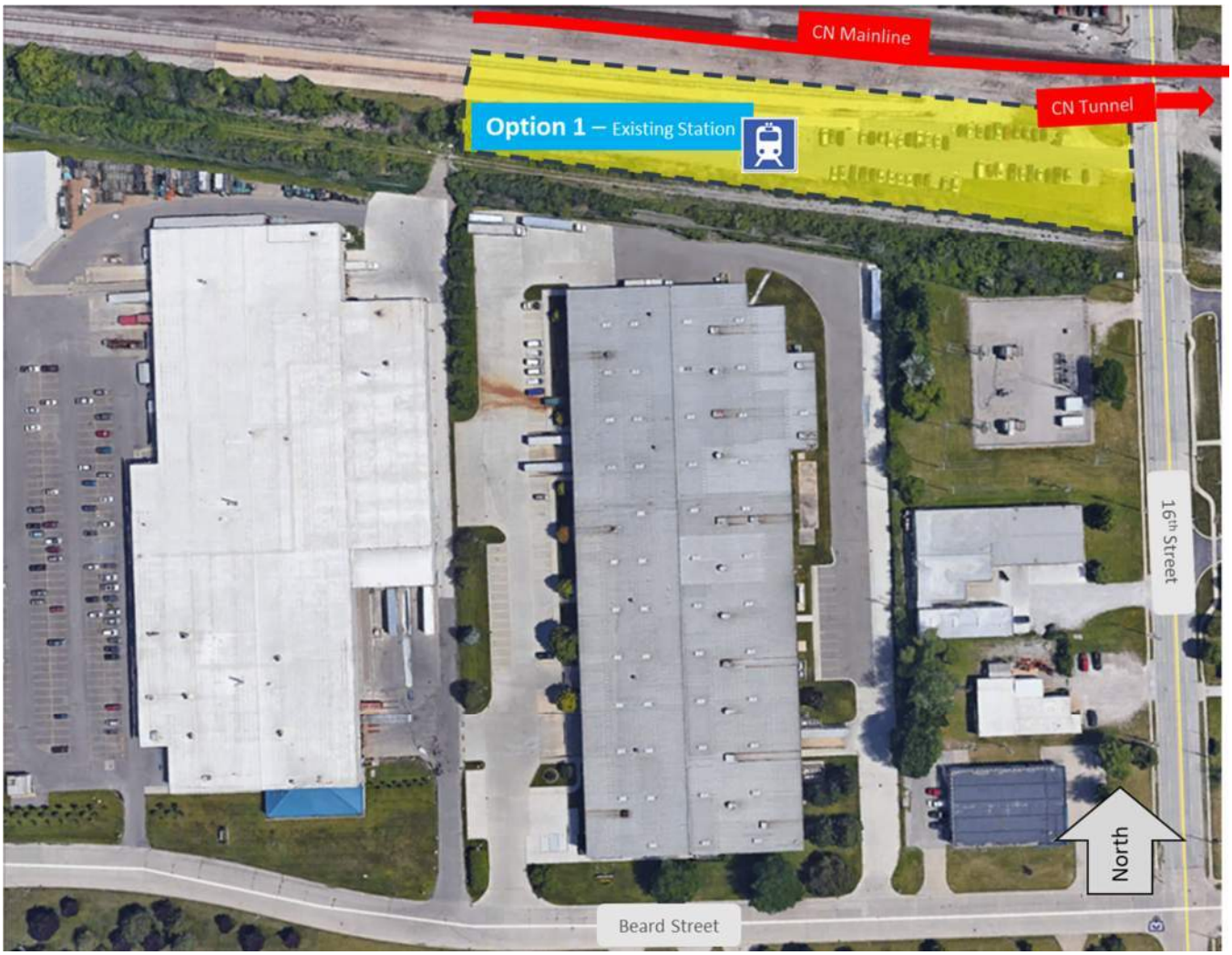
Access track from the mainline to the station is completely dependent upon the station location itself. In most options this will not impact the acreage for individual sites. It should be noted, however, that Options 2 - 7 may require significant track work and infrastructure to connect the station with the CN mainline through the existing CN rail yard and wye connection. Option 8 (Vantage Point - Pere Marquette Station Site) would require construction of track from the station location to approximately the location of the existing station.

7.0 Viable Sites and Siting Criteria Evaluation

7.1 SITES UNDER CONSIDERATION

The following sites were considered as part of this study of the new Port Huron Amtrak Station location. These sites include locations identified by the public, stakeholders and the study team:

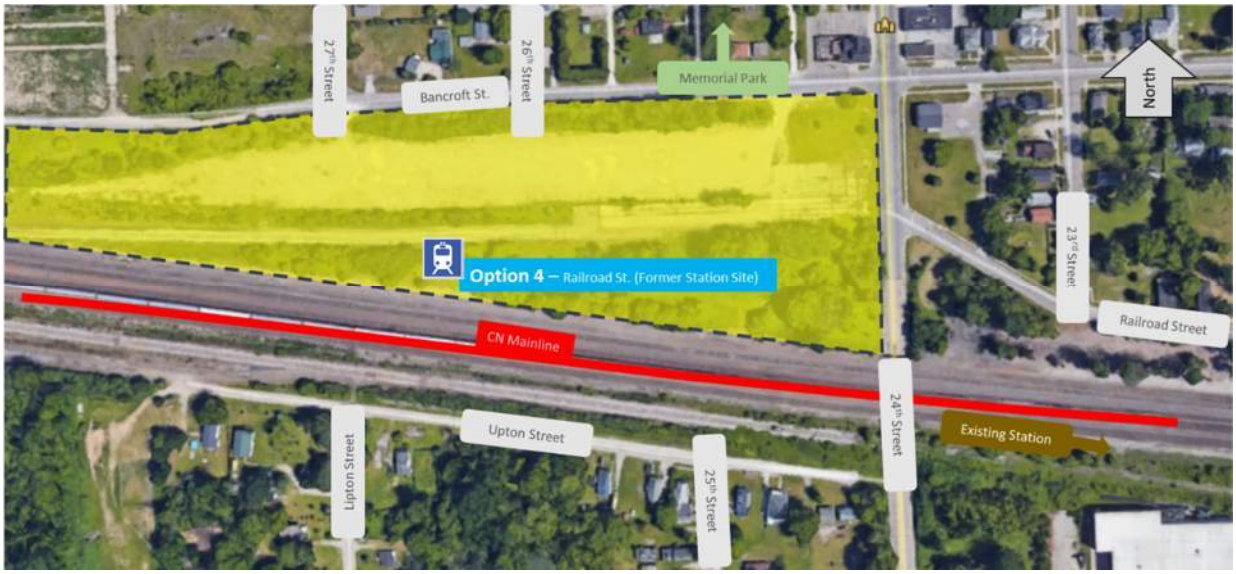
Option 1 - 2223 16th Street (Existing Station)



Option 2 – 3563 Griswold Rd. (CN rail yard site)

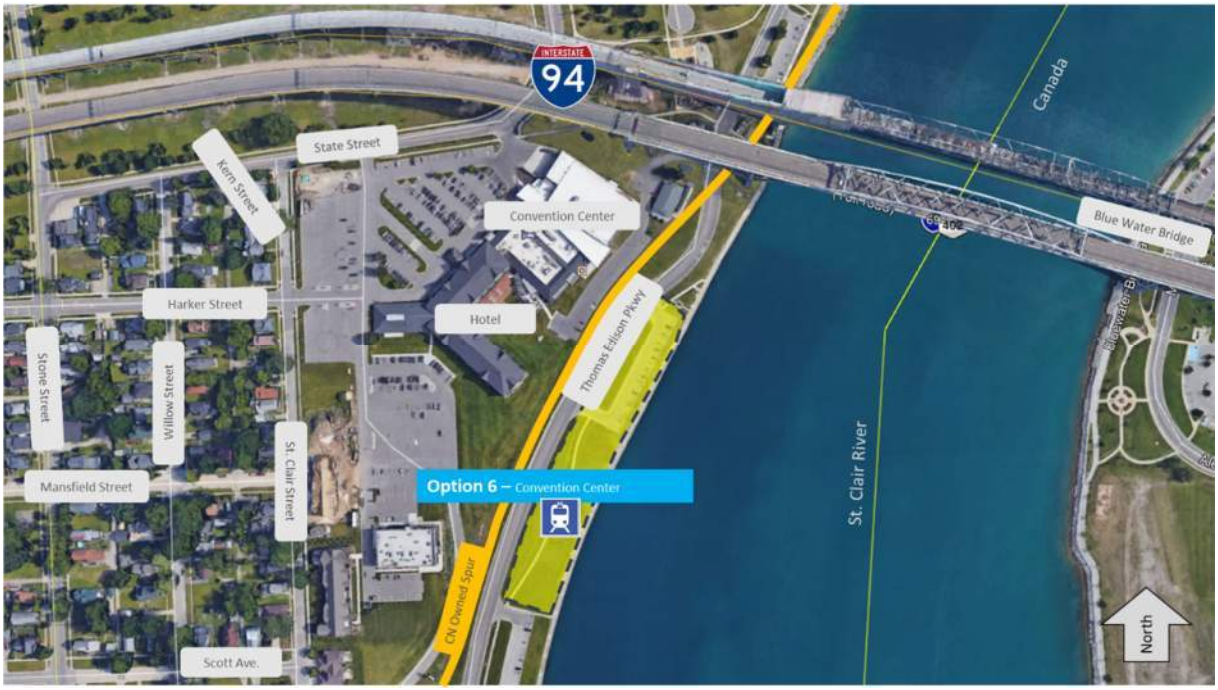
Option 3 – 3750 Griswold Rd. (Port Huron Township - owned land)

Option 4 – 2300 Railroad Street (former station site)

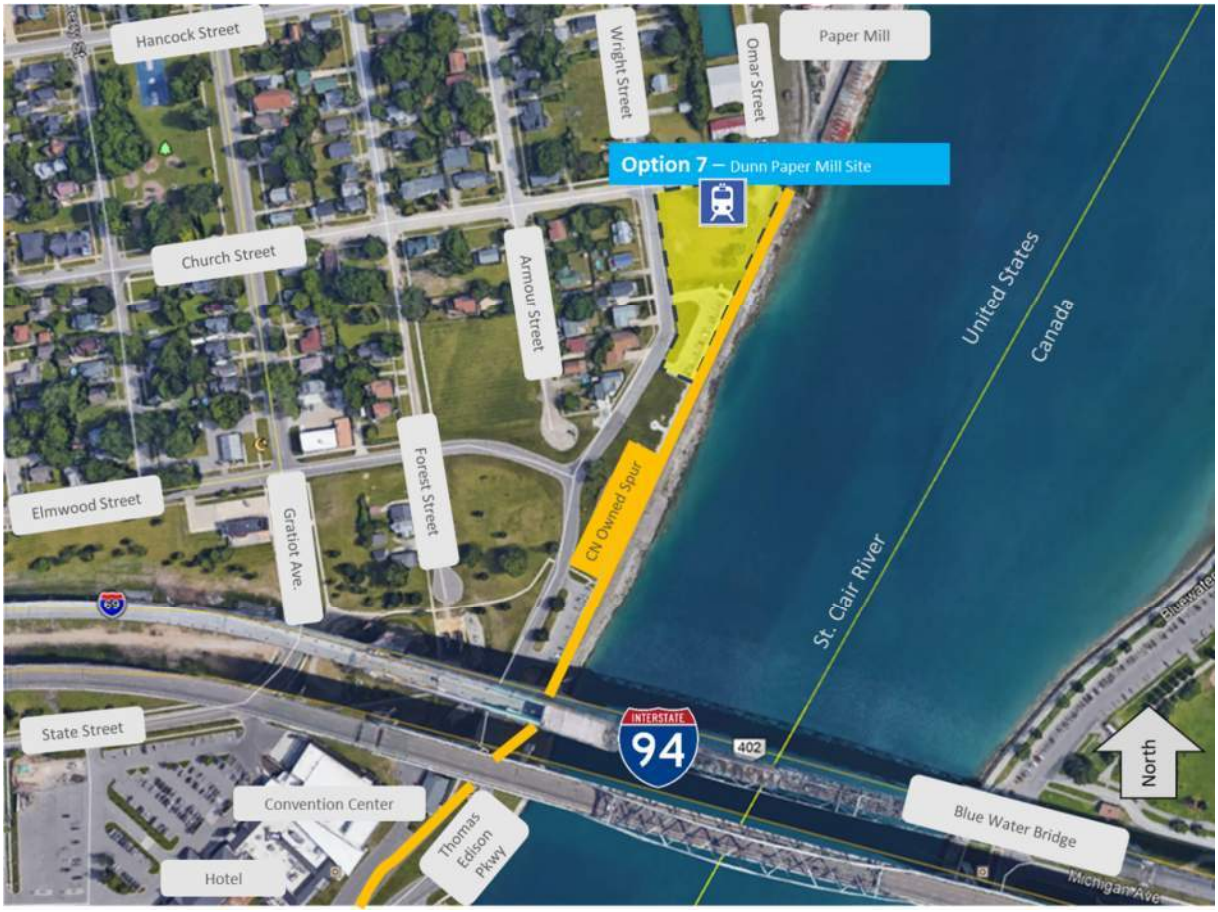


Option 5 – 225 17th Street (industrial site)

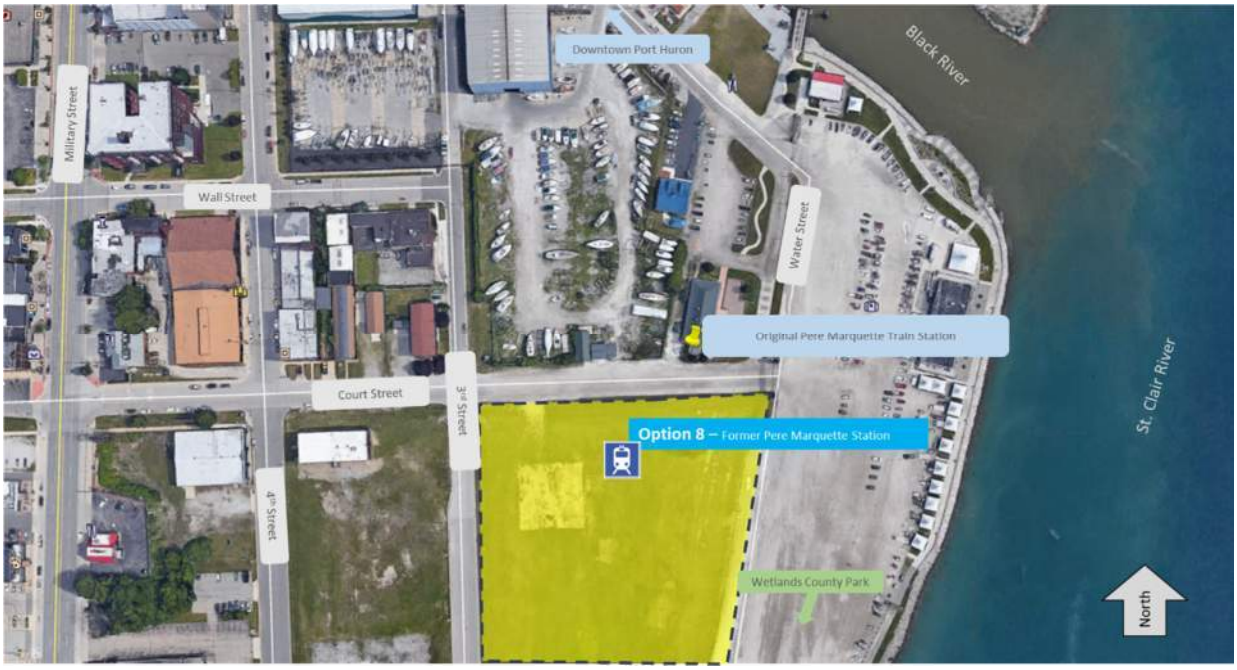
Option 6 – 500 Thomas Edison Parkway (Convention Center)



Option 7 – 100 Riverview St. (Dunn Paper Mill)



Option 8 – 200 Court St. (Vantage Point - former Pere Marquette Station)



Option 9 – 1300-1384 12th Avenue (12th Ave.)

All of the options listed are located along, or near, the existing rail spur or CN railroad mainline with the exception that Option 8 (Vantage Point - Pere Marquette Station Site) would require reconstructing a rail line similar to what existed during the original Pere Marquette service.

A summary of each option's fit with the various siting criteria is included within each discussion below (red indicating the option does not fit the criteria, yellow indicating either neutral or more study is needed, and green indicating

the option fits the criteria). This summary is not intended to be used for determining the preferred site of a station but rather to narrow the number of sites down to a reasonable group that can be investigated further.

7.2 SUPPORT OF COMMUNITY LAND USE PLANS

Option 8 (Vantage Point - former Pere Marquette station) is within the City of Port Huron's Downtown (see Figure 2 in Appendix D) and also supports the criteria of "proximity to trip origins and destinations (convenience to passengers)," convenient transportation connectivity (road network, convenience for park-n-ride, drop offs, bus transit) and cater to nighttime service (hotel, restaurants, public transportation options, etc.). Option 8 (Vantage Point - former Pere Marquette station) is located within ¼ mile of existing downtown businesses as well as areas available for supportive development.

Rail access to this site would require construction of track along the former Pere Marquette rail line (at present a trail) from a point near the existing Amtrak station to the original Pere Marquette passenger station, near the mouth of the Black River. Much of the waterfront land between this site and the connection to the CN Mainline has been cleared and cleaned-up in preparation for potential development. Near the Military Street tunnel, a park with wetlands were constructed recently with trail access through the area. Constructing a new rail line through this area may not be acceptable to the local community and should be vetted during the environmental process. It should also be noted that there are residential properties elevated along the waterfront which could be impacted by train use along this portion of newly constructed track.

Option 1 (current Amtrak Station site) is within the zone labeled as Light Industrial and Research on the City of Port Huron's future land use map. However, this location is close to the CN mainline and fairly accessible from nearby freeways and local arterials. There are no existing supportive land uses in the immediate vicinity, with adjacent industrial uses and limited areas for supportive development.

Options 2 (CN Railyard site) and 3 (Port Huron Township site) are within Port Huron Township's identified development district (see Figure 3 in Appendix D). Option 4 (Railroad Street site) is also within this zone. There are no existing supportive land uses in the immediate vicinity of these sites, and Option 4 (Railroad Street site) is adjacent to existing residential properties.

Option 5 (Industrial site) and Option 9 (12th Ave.) are within a General Industrial zone with no apparent value with respect to supporting community land use plans. Available land for supporting development is limited, as the area is generally occupied by industrial uses and abutted by residential land uses.

Option 6 (Convention Center site) and Option 7 (Dunn Papermill site) are within Parks and Recreation zones. Some commercial areas are nearby, most notably the Convention Center, hotel, and restaurant near the Thomas Edison Museum.

Option								
1	2	3	4	5	6	7	8	9

7.3 STATION AREA REQUIREMENT

The station area, including track, platform, side track for train servicing, station building and parking, and room for future expansion, should be approximately 4 to 5 acres. This requirement is met (or could be) by the following sites:

- Option 1 (current Station site)
- Option 2 (CN rail yard site)
- Option 3 (Port Huron Township owned land)

- Option 4 (former station site)
- Option 5 (industrial site)
- Option 8 (Vantage Point - former Pere Marquette station site)

Option 1 (current Station site) would require property across 16th Street for the additional parking required. An at-grade pedestrian crosswalk could be considered, however, a pedestrian bridge over 16th Street may be desirable. Option 5 (industrial site) has areas on both sides of the rail spur that, in combination, could meet the space requirements but would require a pedestrian crossing over the line to connect them.

Option 9 (12th Ave. site) would provide just over 3 acres and does not have the length on the parcel to provide for a standard platform.

Option 6 (Convention Center site) and Option 7 (Dunn Paper Mill site) do not appear to have the required area without tearing down a number of existing structures, which may not be feasible.

Option								
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7.4 RAILROAD AGREEMENT

Option 1 (current station site) requires no significant changes to the existing railroad conditions. However, reconfiguring the site to better serve Amtrak customers may require use of land and re-alignment of the track sidings which must be reviewed and approved by CN Railroad and Amtrak. Horizontal re-alignment of the CN Railroad mainline is likely not feasible given the close proximity of the existing St. Clair River tunnel, however, it may be possible to shift the existing sidings further north towards the mainline to create additional useable space for the site development. CN prefers that the new station be located on the south side of their mainline which has the least impact on their operations from the tunnel through their rail yard and into the wye just west of the rail yard.

Additional land could be acquired from CSX as there is an abandoned line just south of the existing parking lot and train station. Engagement with CSX was not done as part of this phase of the project. A variation of Option 1 was developed which utilizes this land to provide additional parking adjacent to the proposed station, however, the desired number of parking spaces will still require parking across 16th Street.

Amtrak service during construction will require temporary measures to continue to provide service (bus bridging, phased construction, etc.).

Option 2 (CN Railyard site) would be located just north of the CN Railroad mainline within the area of its railyard. Based on preliminary input from CN, a new station located north of the existing mainline will significantly impact the operations through the wye as well as the CN railyard. Locating a station north of the mainline in this area will increase the potential for being blocked in or out of the rail yard when switching trains. Furthermore, CN has plans for significant modifications to the Tappan interlocking located west of the railyard which would affect any operational changes planned as part of a new station at this location.

Option 3 (Port Huron Township land site) and Options 5 thru 7 (industrial site, convention center site, and Dunn Papermill site) are located along the rail spur and would require review and approval of the CN Railroad for new passenger train service along this line. This would also require significant modifications to the wye connection located just west of the CN railyard. The existing wye connection is on non-signaled track which means that it would not be available for use by Amtrak service. Instead, a new track would be constructed to the south of the existing rail spur which would cross Griswold Road (new at-grade crossing) and traverse through the existing wye connection. Adding at-grade crossings can be very difficult to get approved and generally require eliminating an

at-grade crossing at another location. In addition, Options 5 thru 7 (industrial site, convention center site, and Dunn Papermill site) would require crossing numerous at-grade road crossings, several of which are located at roadway intersections. Furthermore, Option 6 (convention center site), Option 7 (Dunn Papermill site), and Option 9 (12th Ave. site) are located north/east of the Black River bridge which would require opening/closing the bridge each time a passenger train arrives/leaves the train station. This may require significant investment into rehabilitating or replacing this bridge which can be very costly to construct and maintain. Option 9 (12th Ave. site) would also require trains to move by the site when entering and then back into the siding.

Of the options which locate the train station north of the CN mainline, Option 3 (Port Huron Township land site) would be the most desirable by CN. It will require a portion of the wye and the yard lead to be upgraded and signalized with a controlled entrance/exit at the yard lead turnout east of I-94.

Option 4 (Railroad Street site) would be located just north of the CN Railroad mainline. This will require that passenger trains cross over (with a diamond crossing) the northerly siding to access the mainline track. This option is the least desirable for CN given impacts to their operations through this area.

For options 2-7 and 9 described above, additional layout and track design will be necessary to fully understand the impacts associated with traversing through the wye. In any case, CN Railroad will be impacted by these options at a minimum in the following ways:

- Adding complexity to the existing interlocking
- The main yard lead will be blocked for Amtrak train arrivals making it unusable during passenger train drop-off and pick-up times
- Will require transfer of work from a yardmaster directing crew to make a move off of the wye to the yard
- Will add cost and maintenance of a diamond crossing

Option 8 (Vantage Point - former Pere Marquette station site) would require construction of a new rail spur in the footprint of the old Pere Marquette service including crossing under 94-BL (Military Street), over the St. Clair River Tunnel and across 16th Street with a new at-grade crossing. As mentioned previously, new at-grade crossings can be difficult to approve without eliminating other at-grade crossings in the area.

Any option that requires the addition of an at-grade crossing over a public road will require extensive coordination with MDOT and the local governmental jurisdiction. It is generally very difficult to add a new at-grade crossing.

Option								
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7.5 PROXIMITY TO TRIP ORIGINS AND DESTINATIONS

It is recognized both by the number of Canadian license plates and by the strong Canadian presence at both public meetings that this train station has heavy use by our Canadian neighbors. Furthermore, US passengers travel to this station primarily via I-69/I-94 as well as M-routes and main arterials in/out of the City. The proximity of the station means convenience to passengers.

Option 1 (current station site) will have no impact to current access to and from the train station. Travelers from the west primarily exit I-94/I-69 and travel along BL-69, which becomes Griswold St. (WB) and Oak St. (EB), to 16th St. Travelers from the east (including Canada) may exit I-94 at the Lapeer Connector and travel south to Lapeer Rd. and then to 24th St. before accessing 16th St. via Griswold St./Oak St.

Option 2 (CN Railyard site) and Option 3 (Port Huron Township land site) would have similar access as Option 1 (current station site), however, travel would occur west on Griswold St. rather than east. This stretch of Griswold St.

is currently rural with very few driveways and no side streets. These options would reduce trips on residential streets as compared to the existing condition.

Option 4 (Railroad Street site) would be similar to Option 1 (current station site) regarding access with 24th St. being the primary road for access rather than 16th St.

Options 5 thru 7 and 9 (industrial site, convention center site, Dunn Papermill site, and 12th Ave. site) would require significantly modified travel patterns to and from the freeway (not necessarily further distances). Option 5 (industrial site) would be located within an industrial area surrounded by residential streets. A new station at this location would likely have significant local street impacts (primarily along 17th St. from Lapeer Ave. to Nelson St). Options 6 and 7 (convention center site, and Dunn Papermill site) would require additional travel for passengers coming in from the west but would be a closer destination for those coming from Canada (would exit at M-25 (Pine Grove Ave.) and travel south to Thomas Edison Drive. Trips on residential streets would be moderately impacted in the vicinity of Options 6 and 7 (convention center site, and Dunn Papermill site).

Option 8 (Vantage Point - former Pere Marquette station site) is the furthest from freeway access, however, local passenger service trip origin and destinations may be minimized due to its close proximity to downtown (near the mouth of the Black River). Connectivity would be provided without adding trips to local residential streets.

Option								
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7.6 NOISE IMPACTS

Options 1-4 (current station site, CN Railyard site, Port Huron Township land site, and Railroad Street site) would not likely cause significant complications related to noise given the industrial and rural setting of these locations. Furthermore, these locations are already near railroad tracks and experience train noise currently.

Options 5-9 (industrial site, convention center site, Dunn Papermill site, the Vantage Point - former Pere Marquette station site, and 12th Ave. site) would require additional investigation into noise impacts. Options 5-7 and 9 (industrial site, convention center site, Dunn Papermill site, and 12th Ave. site) would likely have the most impact given the amount of travel through residential areas and the fact that trains service is at night and early morning hours. Furthermore, these options include at-grade rail crossings, requiring train engineers to sound horns as they approach. Option 8 (Vantage Point - former Pere Marquette station site) would introduce new tracks along the St. Clair River with residential neighborhoods located to the west, however, new at-grade crossings would be avoided with the exception of 10th St. and there is already an at-grade crossing at 16th St.

Option								
1	2	3	4	5	6	7	8	9

7.7 TRIP TIME

Situating the train station further east will add travel time for the train(s) and some passengers. While the criteria discussed previously regarding trip origin and destinations may add or reduce travel to the station, the overall passenger trip time (door-to-door) will vary when combined with this criteria. Options 1 and 4 (current station site and Railroad Street site) would be similar to existing conditions while Options 2 and 3 (CN Railyard site and Port

Huron Township land site) would slightly reduce travel time of the trains themselves. Options 5-7 and 9 (industrial site, convention center site, Dunn Papermill site, and 12th Ave. site) would add the most time to the current trip while Option 8 (Vantage Point - former Pere Marquette station site) would also add some additional time.

Option								
1	2	3	4	5	6	7	8	9

7.8 TRAFFIC IMPACTS

Evaluation of traffic impacts respective to each option include consideration of at-grade crossings, site access and circulation, and the operations of the roadway network servicing each site. In general, the off-site operational impacts are anticipated to be minimal for all sites due to the off-peak times at which trains currently arrive and depart. However, any schedule changes that would modify travel times to, and from, the station during peak travel times may result in varying degrees of impact that would require further investigation. Design of any option should carefully consider pedestrian safety and potential vehicle/pedestrian crossing conflicts and parking conflicts.

Options 1 and 4 (current station site and Railroad Street site) are expected to have no significant impact on traffic operations as compared to existing conditions. No additional at-grade crossings would be created. At Option 1 (current station site), existing space to circulate pick-up / drop off traffic is not provided, and likely creates conflict with parking maneuvers and traffic on 16th Street. Design of a new layout for Option 4 (Railroad Street site) may provide some ability to improve site access and circulation, although space is limited.

Options 2 and 3 (CN Railyard site and Port Huron Township land site) provide the greatest degree of flexibility to design for site access, circulation, and pedestrian connectivity between parking and the station. These sites would likely require further evaluation of traffic pattern changes between I-69 BL and Griswold / Oak / 32nd Streets, although no significant impacts are anticipated. Necessary roadway improvements would likely be focused on Griswold St. and the site access locations. No additional at-grade crossings would be created.

Options 5-7 and 9 (industrial site, convention center site, Dunn Papermill site, and 12th Ave. site) would likely generate a negative impact on the local road system, specifically with respect to residential streets. Trip ends at these sites would generate additional traffic past residential homes and turning movements at unsignalized residential intersections. Each of these locations have limited space to provide improved circulation, parking, and pedestrian facilities. These sites may require further evaluation of traffic pattern changes between the Lapeer Connector / Lapeer Road and at the M-25 / I-94 / I-69 interchange. Additional at-grade crossings would impact existing traffic on these roadways, although currently limited to off-peak traffic periods. Crossing of the Black River for Options 6 and 7 (convention center site and Dunn Papermill site) would also complicate train travel time and the at-grade crossing at Water Street.

Option 8 (Vantage Point - former Pere Marquette station site) may also require evaluation of traffic pattern changes, as this site is located the furthest from the freeway system. However, direct connectivity is provided via arterial and collector roads that are not likely to be significantly impacted. There appears to be adequate space to provide for appropriate site access, circulation, and pedestrian connectivity. The most significant impacts related to this option would be related to traffic patterns at the Downtown intersections and pedestrian crossings. There may be offset benefits in reducing vehicle demands due to the proximity to supporting land uses and potential pedestrian connectivity. One new at-grade crossing would be generated on 10th Street.

Option								
1	2	3	4	5	6	7	8	9

7.9 CONVENIENT TRANSPORTATION CONNECTIVITY

One of the most important criteria for improving ridership and the user experience is convenient connectivity. For this train station, a significant amount of users coming from Canada are somewhat locked into using vehicles for access, however, other users may wish to bicycle, walk, bus, be dropped off, or use a taxi to be transported to/from the station. Although current service is provided only at nighttime and in early morning, future service could be expanded to day time making access by modes other than passenger cars even more important. Each option would be configured to allow as much connectivity as possible. Options with more land available would allow more site configuration options for drop-offs while options near populated areas would allow for access by bikes, pedestrians, and bus/taxi service. Options 1 thru 4 (current station site, CN Railyard site, Port Huron Township land site, and Railroad Street site) would provide opportunities for good connectivity, however, access by bike, pedestrians and bus is unlikely. Options 5 thru 7 and 9 would provide the least amount of connectivity among all of the options. Option 8 (Vantage Point - former Pere Marquette station site) would provide the best opportunity for alternative modes of access given its proximity to downtown and the local trail system.

Option								
1	2	3	4	5	6	7	8	9

7.10 CATER TO NIGHTTIME SERVICES

The current Amtrak service is limited to nighttime and early morning service. While this may change over time, it is important to consider the current train schedule in planning a new station. Options 1, 4, 5, 7, and 9 (existing Amtrak station site, Railroad Street site, industrial site, Dunn Papermill site, and 12th Ave. site) are in developed areas with no current lodging or restaurant options nearby. Options 2 and 3 (CN Railyard site and Port Huron Township land site) are in undeveloped areas and have the potential for future amenities to be built nearby as a result of a station being constructed. Option 6 (Convention Center site) is near an existing hotel which includes a restaurant. Option 8 (Vantage Point - former Pere Marquette station site) is located near downtown Port Huron with many lodging and restaurant options available.

Option								
1	2	3	4	5	6	7	8	9

7.11 COST

Costs for each options are discussed in Section 9.0 of this study. A summary of options is not provided for this site criteria as funding has yet to be determined.

7.12 ABILITY TO ACCOMODATE FUTURE CROSS-BORDER PASSENGER SERVICE

Prior to the events of 9/11, cross border passenger train service was more common between the US and Canada. Today, there are two known locations where this still exists (Vancouver CA, between British Columbia and Washington State and New York State with service from Montreal. Michigan priority has centered on a cross-border passenger service between Detroit and Windsor and would likely be the first location to provide this service. However, the ability to provide cross-border service in the future should be considered in the site location as well given the future potential. Options which are not situated along the CN Railroad mainline would likely not accommodate future cross-border passenger service as trains would need to leave the mainline to get to the station. Options 1, 2, and 4 (existing Amtrak Station site, CN Railyard site, and Railroad Street site) meet this criteria while all other options do not.

Option								
1	2	3	4	5	6	7	8	9

7.13 REDUCTION OF SITE OPTIONS

Based on the information assessment above, several options can be dismissed from further consideration.

Option 1 (existing Amtrak Station site) could meet all of the siting criteria and should be considered for further study.

Options 2 and 3 (CN Railyard site and Port Huron Township land site) are very close in proximity and have very similar attributes to one another with the exception that Option 3 (Port Huron Township land site) would not provide for future cross-border service but would be preferred over Option 2 (CN Railyard site) by the CN Railroad. It is recommended that both of these options be maintained for further study and consideration.

Option 4 (Railroad Street site) would require operational changes through the CN Railyard and wye connection. This site could be considered for further study, however, it would have the most impact to CN operations and may be difficult to obtain approval.

Options 5-7 and 9 (industrial site, convention center site, Dunn Papermill site, and 12th Ave. site) have several direct negative impacts to the siting criteria established and are therefore removed from consideration for further study.

Option 8 (Vantage Point - former Pere Marquette station site) could meet all of the siting criteria with the exception of accommodating future cross-border service and should be considered for further study.

How each of the sites considered in this study scored against each of the evaluation criteria is summarized below.

Siting Criteria	Option								
	1	2	3	4	5	6	7	8	9
Support Community Land Use Plans									
Station Area Requirement									
Railroad Agreement									
Trip Origins & Destinations									
Noise									
Trip Time									
Traffic									
Transportation Connectivity									
Cater to Nighttime Services									
Cost									
Cross-Border Passenger Service									

7.14 FURTHER STUDY

7.14.1 Option 1 - 2223 16th Street (Current Station)

The existing site has been criticized due to the lack of sufficient parking. Additional nearby land may be available to supplement parking and the existing site could be reconfigured to add parking spaces. Further investigation into site layout options and viability of securing additional land should be considered. A variation of Option 1 was developed here which utilizes CSX owned land directly south of the existing parking lot and station. This variation accommodates additional parking west of 16th but would still require parking across the street. Additionally, further understanding of user demographics is recommended (i.e. how many passengers are originating from Canada vs. within the USA would help better understanding relationships between ridership numbers and parking needs). This data may be available through further coordination with Amtrak.

There is a desire to have more services available nearby (hotels, restaurants, coffee shop, etc.). Further data could be obtained through rider surveys and public engagement as to whether these facilities would have a significant impact on rider satisfaction. Safety of the existing site could be enhanced through ADA upgrades, better lighting, and site reconfiguration.

Site layout options would need to be investigated further for feasibility of a drop-off area and improved circulation of traffic into, and out of, the station.

Obtaining record plans of the existing facility along with survey and topographic mapping of the site would be helpful in refining site layout options.

Geotechnical information can be obtained from nearby projects such as the CN tunnel, however, a high-level boring plan could be executed to get some site specific data for identifying soil types and evidence of any potential contamination given the proximity to the existing railroad.

A determination as to whether site reconfiguration could be phased in response to future growth can be made by sizing it for today's ridership with a masterplan for addressing anticipated future ridership increases.

7.14.2 Option 2 - 3563 Griswold Rd. (CN rail yard site)

This option would require further investigation into the likelihood of obtaining use of the land from the CN Railroad. Preliminary discussions as to whether this land could be made available and whether it could be purchased outright or leased should be investigated further.

Further study of how the track siding for boarding and deboarding at the station will connect to the CN Mainline through the existing railyard will be required and coordinated with the railroads. Preliminary concepts were developed for budgeting purposes as part of this study which can be further vetted during the evaluation of sites.

Similar to Option 1, a site survey and topographic mapping should be performed as well as a geotechnical investigation of the site. Due to the proximity to the rail yard, a site assessment could be performed to identify whether any contaminants may exist on the site.

A review of environmental impacts (endangered species, wetlands, etc.) would be important since the area does not have current development on it.

Further study of traffic impacts and possible improvements to Griswold Rd. should be identified for access into, and out of, the site.

A determination as to whether the site could be phased in response to future growth can be made by sizing it for today's ridership with a masterplan addressing anticipating future ridership increases.

7.14.3 Option 3 - 3750 Griswold Rd. (Port Huron Township owned land)

Similar to Option 2, a site survey, geotechnical and contamination testing, and environmental review should be conducted. Traffic impacts to Griswold Rd. can be evaluated further as well.

The land is owned by Port Huron Township and coordination with it and how this site fits within its development plans would be necessary.

Similar to Option 2, further evaluation and coordination of the operational improvements associated with the wye connection and CN Railyard is required. If the new station is not located at the existing site, this options would be the most desirable for CN railroad's operations.

A determination as to whether the site could be phased in response to future growth can be made by sizing it for today's ridership with a masterplan addressing anticipated future ridership increases.

7.14.4 Option 4 – 2300 Railroad St. (Railroad Street)

Similar to Option 2, a site survey, geotechnical and contamination testing, and environmental review should be conducted. Traffic impacts to Railroad St. and/or Bancroft St. can be evaluated further as well.

Land ownership of the site can be verified and whether it can be purchased must be evaluated.

Similar to Option 2, further evaluation and coordination of the operational improvements associated with the wye connection and CN Railyard is required. Based on preliminary input, however, this would be the least desirable of the options investigated from CN's perspective.

A determination as to whether the site could be phased in response to future growth can be made by sizing it for today's ridership with a masterplan addressing anticipated future ridership increases.

7.14.5 Option 8 - 200 Court St. (Vantage Point - former Pere Marquette Station)

In addition to areas of further investigation noted above, this option would require study of the existing building to ascertain if it can be repurposed for the new station or if a new station should be constructed in its place or nearby. The historic significance of the existing site and structure would need to be further investigated as well.

Additional data on how a new spur can be constructed within the footprint of the former track is necessary as well as how this would be coordinated with the existing pathway and newly constructed wetland park near the Military Street Tunnel.

A new crossing at 10th St. would be evaluated as well as a new tunnel/bridge under Military St.

An evaluation of the properties along the new track as well as where it ties into the CN mainline west of the CN tunnel entrance (USA side) would be necessary (i.e. identify impacts to existing 16th St. at-grade crossing.

Traffic and development impacts to downtown Port Huron would need to be investigated further as well.

A determination of whether the site could be phased for future growth can be made by sizing it for today's ridership with a masterplan for anticipated future ridership increases.

8.0 Environmental Justice

The United States Environmental Protection Agency (USEPA) defines environmental justice as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. For this project, consideration must be given to ensuring that transportation services are not cut or increased fares result for community residents that are pursuing employment or an adequate living standard.

9.0 Preliminary Estimate of Costs

Anticipated costs of a new station, or of improvements at the existing station, may include parking, station building, outdoor lighting, platforms, track work, drainage, and road access.

The preliminary cost estimates are capital costs for construction, and do not include real estate costs or annual maintenance costs. Furthermore, environmental clean-up may be required at the sites identified, or within the existing rail corridor(s) which cannot be determined until a comprehensive investigation is performed.

In all options, it is assumed for building costs that amenities for Amtrak crews would be provided given that the station is at the end of the service line.

9.1 PARKING

Parking includes costs for preparing subgrade, installing drainage features, curb and gutter, and paving the parking area for each site. It is assumed that all sites will be similar in parking size, however, it is recognized that each site may have slightly different layouts.

9.2 STATION BUILDING

This amount includes a new pad for the proposed building, the building and its finishes, utilities, and miscellaneous improvements. The size of the building included in the estimate is based on projected ridership.

9.3 PLATFORM (LEVEL BOARDING)

This work will require reconstruction of the existing platform for in Option 1 (existing Amtrak station site) or new construction of a platform at all other options. It will include a new canopy, lighting, public address, and information display.

9.4 OUTDOOR LIGHTING

With regard to the present Port Huron Amtrak station, there have been complaints that nighttime lighting is insufficient or lacking. The current Amtrak schedule has a departure from Port Huron at 6:20 AM, and an arrival at

Port Huron at 11:38 PM. New lighting for the options is estimated to be 14 pole locations throughout the parking and walking areas.

9.5 TRACK AND DRAINAGE COST

Track cost is dependent upon station location. Locations near the Blue Water Bridge would require nearly four miles of track improvements to access the site, and the necessary trackage at the station. The present Amtrak Station would require no additional track but relocation of the existing sidings for additional site room would be required. The downtown Port Huron station would require approximately two miles of access track and station trackage.

All of the options except for Options 1 (current station site) and Option 8 (Vantage Point - former Pere Marquette station site) will require modifications to the existing wye connecting the rail spur and the CN rail yard/mainline. Work includes new cross overs and signals.

Track costs would include use of current and former railroad rights-of-way. It is estimated that costs would include any necessary drainage improvements, and replacement of ballast, ties and rail.

Based upon the above, estimated preliminary track work and costs would be as follows:

9.5.1 Option 1 (existing Amtrak Station site)

Track and drainage work will be limited to relocating the existing sidings and tying into mainline. Additional parking is shown across 16th Street to meet capacity concerns and so a pedestrian bridge with elevators is budgeted for crossing the street. Consideration could be given to providing a signaled/lit crosswalk as well.

9.5.2 Option 2 (CN Railyard site)

This option will require operational changes associated with the CN Railyard and the wye connection located just west of the railyard. Since the wye connection is along non-signaled track, it is anticipated that a new track with signals would be required to connect the new Amtrak siding to the CN mainline. This will also require a new diamond crossing. Coordination with the CN Railroad will be necessary to confirm operational requirements and associated costs.

9.5.3 Option 3 (Port Huron Township - owned land site)

Similar to Option 2 above, this will require coordination with the CN Railroad for connecting Amtrak trains to the CN Mainline. This option will likely require a new at-grade crossing (Griswold) to connect the track without impacting existing operations at the wye connection.

9.5.4 Option 4 (Railroad Street site)

This option includes a new track parallel and north of the yard lead to CN's facilities. It will also require improvements to the wye connection as noted above.

9.5.5 Option 5 (Industrial site)

In addition to the track work required in Option 3 (Port Huron Township owned land site), this option requires additional track and drainage work along the spur line. It also has 3 public at-grade crossings that may require improvements due to the train traffic that would traverse this stretch of track.

9.5.6 Option 6 and Option 7 (Convention Center site and Dunn Papermill site)

These options extend the track work described in Option 5 (Industrial Site) and also includes the addition of 8 at-grade crossings for improvement considerations. Furthermore, these option cross over the Black River via an existing bascule span moveable bridge which may require rehabilitation (costs for rehabilitation of the Black River bridge

are highly speculative and would require a detailed inspection and scoping of the structure to better assess any costs for work on this bridge).

9.5.7 Option 8 (Vantage Point - former Pere Marquette station site)

This option requires several miles of new track as well as a new grade separation at Military Street and at-grade crossings at 10th Street and 16th Street.

9.5.8 Option 9 (12th Ave. site)

This option requires similar work as described in Option 5 (Industrial site) but also requires work considerations for the bascule bridge over the Black River.

9.6 ROAD ACCESS

A taxi, bus, kiss-n-ride, and bicycle access beside the station building is planned and included in the parking area estimated costs.

9.7 PRELIMINARY ESTIMATED COST AT EACH SITE

Estimated costs (high level and preliminary in nature) have been prepared for the purposes of comparing individual options and are shown in the table below. A more refined estimate of costs should be prepared for budgeting and planning purposes once a preferred option has been identified.

Summary of Preliminary Costs for Options

Option	Estimated Costs
Option 1 – 2223 16th St. (Current Station)	$6.3M
Option 1a – 2223 16th St. (Current Station Utilizing CSX Property & No Ped Bridge)	$5.6M
Option 2 – 3563 Griswold Rd. (CN Rail yard site)	$9.0M
Option 3 – 3750 Griswold Rd. (Port Huron Township owned land)	$8.3M
Option 4 – 2300 Railroad Street (former station site)	$11.3M
Option 5 – 225 17th St. (industrial site)	$18M
Option 6 – 500 Thomas Edison Parkway (Convention Center)	$23.4M
Option 7 – 100 Riverview St. (Dunn Papermill)	$24.9M
Option 8 – 200 Court St. (Vantage Point - former Pere Marquette Station)	$13.4M
Option 9 – 1300-1384 12th Avenue (12th Ave.)	$21.5M

Appendix A: Public and Stakeholder Engagement

Facility Needs Assessment – Port Huron Amtrak Station

Location: Port Huron – St. Clair County Building (Auditorium)
Purpose: Public Meeting
Date Held: October 19th, 2017 (1:00pm)
Minutes Distributed: November 8th, 2017
Attendees:

Public (Sign In Sheets Attached)

Distribution: S. Wertans (Saratoga), K. Withers (RLB), C. Banks (RLB), R. DeCook, M. Robinson (MRD)

Project File BA 12368.00

Minutes Recorded by: Jeremy Hedden (Bergmann Associates)

The following is a summary of the discussion items and questions during the public meeting.

1. A brief presentation was conducted by Jeremy Hedden (attached) with Ron DeCook taking notes during the Q&A session.
2. News media was in attendance and articles written are available online.
    a. https://www.usatoday.com/story/news/local/port-huron/2017/10/19/stakeholders-seek-answers-train-station-hearing/779730001/
    b. http://www.thetimesherald.com/story/news/2017/10/27/expect-long-fight-over-amtrak-station/792197001/
3. Several areas of note from discussion with the group included:
    a. An international crossing (using the existing tunnel). Consideration of Canadian users and how they would be impacted.
    b. The City of Port Huron is very interested in keeping the station at its current location.
    c. Parking was a common complaint along with existing service meeting nighttime only with nobody working at the station.
4. Questions and comments from the meeting included (paraphrased in some cases):
    Q1. Is a Canadian (Toronto) link in play?
        A1. This is outside the scope of this specific study, however, it should be a consideration in the study process for potential future service across the border (Sarnia to Port Huron).
    Q2. Canada-Rail-Keep in mind the linkage between Sarnia and Port Huron (comment).
    Q3. Who are you representing in the project?
        A3. Bergmann Associates and its teaming partners work for the Blue Water Area Transit (BWAT). The BWAT is facilitating this pre-feasibility study through a grant they were awarded.
    Q4. In this process, you're going to come some recommendations and who is the decider?
        A4. Public input will be extremely important in shaping where the new station is located as well as its look and various amenities. At this point in the process, there is not a single entity that will be the final decision maker for the new station. However, the BWAT is the facilitator of the current pre-feasibility study and will guide this phase of the project.
    Q5. Can you explain how you selected or chose the sites that are on the slide?
        A5. The sites that were identified on the slides of the presentation were based on a very high-level investigation. The existing site is an obvious consideration, the site near 32nd was

identified based on the existing landowner's willingness to consider it as a location, and the Downtown site (not a specific location but an idea/concept) was based on the potential for having a walkable more accessible station. This phase of the project, however, is intended to identify what other locations could be considered as well as where the Public would like to see as possible sites.

Q6. An attendee inquired how the current site works to the benefit of the current neighborhood and did not think keeping the site at its current location was beneficial (comment).

Q7. Rail infrastructure-Location is key to a successful station (comment).

Q8. Will there be information/data regarding who rides the train?

A8. Ridership will be a consideration based on previous data and projections made. A new ridership study is not part of this phase of the project.

Q9. Rail-Need to look at future service for ridership impacts (comment).

Q10. What impact would Amtrak maintenance facility have on this area?

A10. The additional of an Amtrak maintenance facility is secondary to this study and the sites being considered. Given that this station is at the end of the line, makes it a logical/ideal station to have such a facility. This is not a driving factor in the assessment of feasible sites, but it is something that will be a consideration.

Q11. What are the phases for this project?

A11. The slides were revisited and description of each phase was reiterated. It was reinforced that this phase of the project is a pre-feasibility study and would be used to better frame what issues and information will need to be assessed during the environmental review. After the environmental review, preliminary and final design will commence followed by construction should the project be supported and funding is in place. The overall process can be lengthy (5 or more years depending on funding and support).

Q12. How do we get a decision without Amtrak and the City of Port Huron?

A12. The City of Port Huron is one of many stakeholders that need to be engaged throughout the process. The phase of the project is a pre-feasibility study and will not provide a final decision on a site but will rather outline the various advantages and disadvantages of each site. Amtrak will not influence any site selection. They can be involved in terms of the design and specific layout considerations as to how they operate, however, they do not dictate station locations or amenities desired by the local community.

Q13. Current schedule leaves issues like no conveniences, food, security, time of arrival and departure, safety (comment).

Q14. Coordinating VIA and Amtrak to have a border connection for travel between the two countries is preferred (comment).

Q15. Data shows that current location is safe and very little crime in that area. Also, the area around the station is low-income and a social justice issue (comment).

Q16. Need to put more money into mobility like what's done in Europe (comment).

Q17. Downtown offers more options for walkability and downtown amenities (comment).

Q18. Where line crosses Lapeer Ave. near "Flames Grill" should be considered (comment).

Q19. How were stakeholders groups identified?

A19. Several groups were identified through known entities in the area. Each was contacted and asked if additional groups should be considered. The Blue Meets Green group consists of many local area stakeholders and was asked to disseminate as much information to others as possible. More public engagement and stakeholder coordination will be important during the next phase of the project. Any groups that may have been missed can be communicated to the BWAT.

Q20. How do we plan to get a higher level of input as the process moves forward?

A20. An email will be provided to all attendees which can be used for providing input. Additional outreach and communication measures will be available during the environmental review process (next phase). The email that can be used for providing input is contact@bwbus.com.

Q21. Aecheson site on waterfront could be a site for consideration (comment).

Q22. What is the amount of land needed for a station?

A22. There are certain metrics/guidelines for size of the facility based on ridership, however, there is no direct site or station size requirements. The community input that is gathered in addition to other factors such as an Amtrak Maintenance Facility will be a guide in the space that is needed.

Q23. There is a burden of proof on what it is necessary to move the station from its current station (comment).

Q24. Does this process freeze any development/improving the current station?

A24. The existing station could continue to have updates and changes if support and funding are available. This pre-feasibility study, however, will not investigate intermediate areas of improvement to the existing facility. That would need to be initiated as a separate project (i.e. upgraded lighting, boarding area improvements, etc.).

The meeting concluded.

MEETING MINUTES

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Bergmann associates
architects // engineers // planners

These minutes are a summary of items discussed.

Facility Needs and Potential Sites Assessment

(Pre-NEPA/Pre-Engineering Study) – Blue Water Area Transportation Commission

October 12, 2017

What is this Project About?

AMTRAK TRAIN STATION

Parking
Location
Facilities
Aesthetics
Future Service
Amtrak Maintenance

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Options Being Considered

Reconfigure Current Site
New Site on CN Property (32nd St.)
New Site Downtown

Where Are We At?

IDENTIFICATION & EVALUATION OF SITES

Stakeholder Engagement

High Level Assessment of Sites

Summarize Findings

Prepare for NEPA

NEPA – Preliminary Design – Final Design - Construction

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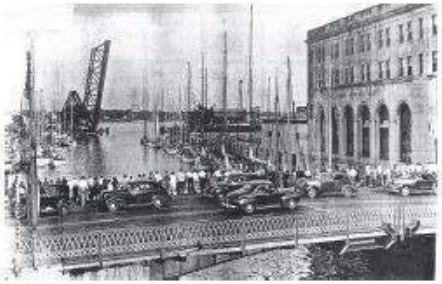
What Do We Need From You?

INPUT

Parking
Location
Facilities
Aesthetics
Future Service
Amtrak Maintenance



The relatively new (less than 15 years old) Pere Marquette railway Bascule Bridge stands high in the air in this 1940s photo taken during Mackinac Race Week in Port Huron. Photo courtesy of the T.J. Gaffney Collection.

BERGMANN ASSOCIATES

What is Important to You?

METRICS

Parking
Location
Facilities
Aesthetics
Future Service
Amtrak Maintenance
Project Cost
Multi-Modal
Accessibility
Development

What are Next Steps?

DOCUMENT FINDINGS

Prepare Report
Summarize Feasible Options
Highlight Advantages/Disadvantages
Identify Risks/Mitigations
Set Course for Next Phase

Thank You!

Pre-Feasibility Study for Port Huron Amtrak Station

Sign In Sheet

~~10/~~19/17 (1:00pm to 4:00pm)

Name	Organization or Residency	Email	Phone
Patrick Phelan	BMJ Engineers & Surveyors	pphelan@bmjinc.com	810.984.5596
Jeff Baker	Port Huron Police	bakerj@porthuron.org	810-984-9710
Michael Bachelor	Duraclean	duracleanmbach@adrnet.net	810-434-8777
Hale Walker	Blue Water Green	Hale@[illegible].com	
Dianna Maxwell	Keller Williams	diannare@aol.com	586-801-6068
Linda Bruckner	Blue Water Area Transit	lrbruck@comcast.net	810-982-2377
Jim Brennan	City of PH.	BrennanJ@PortHuron.org	984 9729

Pre-Feasibility Study for Port Huron Amtrak Station
Sign In Sheet
10/19/17 (1:00pm to 4:00pm)

Name	Organization or Residency	Email	Phone
Marci Fogel	Blue Water CVB	Marci@bluewater.org	987-8687
T.J. GAFFNEY	PORT HURON & DET. ERHS	tjgaffney@gmail.com	810 300 9004
Andy Northrop	MSU Extension	northro5@msu.edu	—
Lou Fletcher	Blue Water Area	FLETCH1903 at AOL.Com	810-434-0284
DAVID STRUCK	SLC METRO PLANNING	dstruck@stclaircounty.org	810-989-6950
JORJA BALDWIN	FORT GRATIOT	jbaldwin@fortgratiottwp.org	8108879853
Gail Carr	BWACC	tcastill@bluewater.net	8109857N
Amy Barker	P.H.	tiredmom@hotmail	810-357-1035
Ruth Habalewsky	P.H.	rhabalewsky@comcast.net	810-982-5371
DOUG WILSON	SARNIA	WDWILSON@EXECULINK.COM	
ED SMITH	CONGRESSMAN PAUL MITCHELL	EDWARD.SMITH@MAIL.HOUSE.GOV	
Janet Tuttle	Fort Gratiot	furmantuttle@gmail.com	810-385-1392
Pat Keller	St Clair County Brockway Township	pattyk64@hotmail.com	810-650-1005
Donna Galbraith	Citizen F.G.	nutcracker@comcast.net	

Pre-Feasibility Study for Port Huron Amtrak Station
Sign In Sheet
10/19/17 (1:00pm to 4:00pm)

Name	Organization or Residency	Email	Phone
Tom McMullen	Keller Williams	TomMcMullen@kw.com	810-300-8965
Dave McElroy	BWATC	dmcelroy@bwbus.com	810.858-3779
Jim Wilson	"	"	"
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Lisa DeLong	BWATC	ldelong@bwbus.com	
Dave Frasier	BWATC	dfrasier@bwbus.com	
Bob Lewandowski	P.H. Twp	rlewandowski@porthurontownship.org	
Paul Maxwell	PH. Twp DDA	Phtwpdda@gmail.com	810-987-2699
Kerry Hepting	St. Clair Cty	khepting@stclaircounty.org	
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Logan Weston	resident Port Huron	Logan.Weston05@gmail.com	
Mike DeLong	Acheson Ventures	mdelong@achesonventures.com	810-966-0500
Jackie Smith	newspaper		
Jason	City of Port Huron	—	—
Dan Casey	EDA	dcasey@edascc.com	
Peter Stonka	Port Huron twp	pstonka@porthurontownship.org	519-982-6600
BOB TISCHBEIN	MARP	RPTISCHBEIN@GMAIL.COM	

Facility Needs Assessment – Port Huron Amtrak Station

Location: Port Huron – St. Clair County Building (Auditorium)
Purpose: Public Meeting
Date Held: October 26th, 2017 (6:00PM)
Minutes Distributed: November 8th, 2017
Attendees:

Public (Sign In Sheets Attached)

Distribution: S. Wertans (Saratoga), K. Withers (RLB), C. Banks (RLB), R. DeCook, M. Robinson (MRD)

Project File BA 12368.00

Minutes Recorded by: Jeremy Hedden (Bergmann Associates)

The following is a summary of the discussion items and questions during the public meeting.

1. A brief presentation was conducted by Jeremy Hedden (attached) with Ron DeCook taking notes during the Q&A session.
2. News media was in attendance and articles written are available online.
    a. https://www.usatoday.com/story/news/local/port-huron/2017/10/19/stakeholders-seek-answers-train-station-hearing/779730001/
    b. http://www.thetimesherald.com/story/news/2017/10/27/expect-long-fight-over-amtrak-station/792197001/
3. Several areas of note from discussion with the group included:
    a. An international crossing (using the existing tunnel). Consideration of Canadian users and how they would be impacted.
    b. A strong desire for increased rail passenger service/options in the United States.
    c. Parking was a common complaint along with existing service meeting nighttime only with nobody working at the station.
4. Questions and comments from the meeting included (paraphrased in some cases):
    Q1. If the station were to be downtown, would the city have to pay for the new track or upgrades to existing track.
        A1. Any rail modifications required to link a new station site to the mainline would be borne by the project. Funding sources may vary but local funding is likely one of those funding participants which would need to cover the project costs.
    Q2. We need to expand not only the rail station but the rail line as well. We need to make Port Huron a hub (rail) in order to grow the rail system (comment).
    Q3. What are the other steps needed for the NEPA process? What is the timeline for this process? How long will it take?
        A3. The National Environmental Policy Act (NEPA) process varies greatly in duration depending on the type and significance of impacts. A reasonable expectation would be 2 years but this can be much longer and could be as little as under a year to complete. The funding for the project can also impact the timeline as design and engineering costs are needed along each step and ultimately culminating in finding funding for the actual construction of the facility.

Q4. The current site is not suitable for ADA needs and does not provide adequate cover and comfort during hot and cold seasons (comment).

Q5. The needs of people who have disabilities is very important and needs to be addressed. The next station needs to be capable, accessible for the disabled, and non-disabled (comment).

Q6. Are the logos on the screen examples of groups supporting passenger rail?

A6. The groups identified in the presentation were a sampling of interested stakeholders but are not comprehensive. Additional stakeholders may be uncovered through this phase as well as the NEPA phase of the project.

Q7. We need to get our passenger service improved and a higher priority at the federal level (comment).

Q8. The current facility is not capable of providing adequate shelter and protection from the weather. We need to look at opening up the area to accommodate the US-Canada connection (comment).

Q9. How is BWATC connected to this project?

A9. Bergmann Associates and its teaming partners work for the Blue Water Area Transit (BWAT). The BWAT is facilitating this pre-feasibility study through a grant they were awarded.

Q10. Need to have better service there to keep the building open to serve the customers (comment).

Q11. Need better equipment (rail cars) to better meet the needs of those people who are accessibility challenged (comment).

Q12. What is the future of passenger rail?

A12. The future of passenger rail is dependent on the public and their demand for it. If there is not enough strong interest in expanding and developing passenger rail, then local, state, and federal legislators will not champion it. Consideration of impacts from automated and connected vehicles could also be a major factor in the future passenger rail. Many other factors will play a role as well.

Q13. Canadians don't stay in Port Huron and future station needs to have economic development around the station (comment).

Q14. Need more trains to offer better travel options (comment).

Q15. Need to have a US-Canadian service (comment).

Q16. Need to have better connectivity between US and Canada at Sarnia and Windsor (comment).

Q17. Due to border security issues, would it be possible to have cross border trains (there was further discussion on border security for cross border rail service).

A17. The issue of cross border passenger train service is important at this site. There are some examples of this (Washington/British Columbia), however, security measures in the wake of September 11 have dramatically changed passenger rail at our borders.

Q18. Security in the neighborhood was raised and a local resident responded that the existing station is in a safe location with no know reported widespread crimes (comment).

Q19. A new station should be prepared for future growth and the availability of rail service for millennials (comment).

Q20. Discussion on Amtrak successful service from DC to Florida. Why cant we do that here in Michigan? (rhetorical question/comment).

Q21. We need to get the state more involved in funding infrastructure (comment).

Q22. Due to air travel issues, we need other options like trains (comment).

Q23. How do we get more state funding for passenger rail?

A23. As with many initiatives desired by the public, communication with your local and state legislators is highly important.

Q24. Agricultural interests get more funding because they lobby harder (comment).

Q25. Amtrak should make customers more aware of how to make comments on getting service and facility improvements/comments (comment).

Q26. Current station has few windows and no views plus there are no taxis (comment).

Q27. Question on the current process; where are we at and how does this process work?

A27. The slides were revisited and description of each phase was reiterated. It was reinforced that this phase of the project is a pre-feasibility study and would be used to better frame what issues and information will need to be assessed during the environmental review. After the environmental review, preliminary and final design will commence followed by construction should the project be supported and funding is in place. The overall process can be lengthy (5 or more years depending on funding and support).

Q28. How will this information be used for getting into the new station?

A28. This phase of the project is primarily data gathering and identifying the needs and constraints for the proposed station (existing site or other). By providing more input up front, this will help avoid larger issues during subsequent phases of the project. Information on possible site locations or ideas for improving the existing site will be included in this pre-feasibility study in evaluating the various options.

Q29. A citizen expressed concerns about a downtown station and its impact on the neighborhood. Gave the example of the Bluewater Bridge Plaza issue (where property was purchased and then the plan for the plaza was dramatically reduced leaving unused land that did not need to be acquired as part of the project) (comment).

Q30. Will there be an alternative to the preferred alternative? What is Plan B?

A30. Once the NEPA process concludes, there will be a preferred alternative identified. If, at a later time, certain issues or facts come to light after this phase, other options may need to be revisited which would require reopening the environmental process.

Q31. St. Clair County Trails Commission would like station near Trail Head to promote cyclists and outdoors activities, promote tourism (comment).

Q32. What is Amtrak's role in this process?

A32. Amtrak will not influence any site selection. They can be involved in terms of the design and specific layout considerations as to how they operate, however, they do not dictate station locations or amenities desired by the local community.

Q33. Is there a minimum standard for station development?

A33. There are certain metrics/guidelines for size of the facility based on ridership, however, there is no direct site or station size requirements. The community input that is gathered in addition to other factors such as an Amtrak Maintenance Facility will be a guide in the space that is needed.

Q34. How many people ride the Blue Water annually?

A34. Data from the last several years indicate approximately 20,000 trips annually out of this station.

Q35. How long will this take?

A35. After the environmental review, preliminary and final design will commence followed by construction should the project be supported and funding is in place. The overall process can be lengthy (5 or more years depending on funding and support). This current phase of the project should be completed by March of 2018.

Q36. A station at Griswald Street by the Trail Head should be considered (comment). This site was not physically identified and could not be confirmed on actual location.

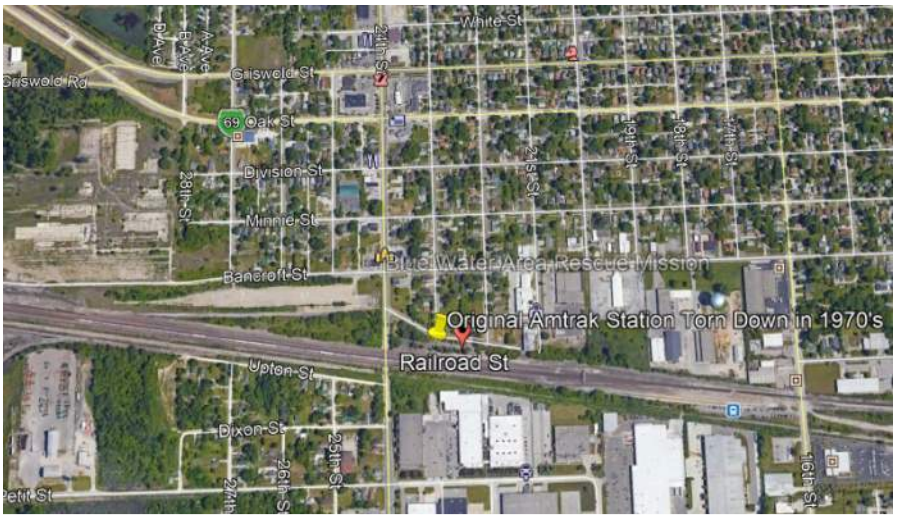
Q37. Are there some short term fixes, like improved lighting, that can be done to the current station?

A37. The existing station could continue to have updates and changes if support and funding are available. This pre-feasibility study, however, will not investigate intermediate areas

of improvement to the existing facility. That would need to be initiated as a separate project (i.e. upgraded lighting, boarding area improvements, etc.).

Q38. If they build it (train station), people will come (comment).
Q39. Train station needs more parking for cars and buses and that will improve ridership (comment).
Q40. Current site needs to be more inviting (comment).
Q41. Who operates the station? Private company? Local government? Who else?
A41. This can vary from site to site. It is up to the local community to determine would own the station. BWAT would likely be an entity to fulfill this role for this area.
Q42. Would like to see something similar in footprint of the Dearborn station including parking area but understand it would not need to be as bid (comment).
Q43. More seating inside the station should be considered (comment).
Q44. Breakfast options should be provided to riders (comment).
Q45. Need to consider first/last mile (comment).
Q46. Reduce parking demand and seek alternative access (comment).
Q47. With local funding issues, prefer to upgrade existing site (comment).
Q48. A site located downtown would increase grade crossings and would be a noise issue (comment).
Q49. New station should be ADA accessible (comment).
Q50. Include multiple transit options (Amtrak, BWAT, MegaBus, Regional Rail, etc.) (comment).
Q51. Need room for restaurants, hotel, and entertainment nearby (comment).
Q52. Would like the station to be attractive (comment).
Q53. Provide train maintenance facilities (comment).
Q54. An alternative site was identified that is already owned by Port Huron Township and is undeveloped. This was proposed as another option to consider. Parcel information was also provided which is attached to these minutes.

Q55. Another alternative that were suggested included the original site that was in use in the 1970's predating the current station on Railroad Road.



The meeting concluded.

These minutes are a summary of items discussed.

Facility Needs and Potential Sites Assessment

(Pre-NEPA/Pre-Engineering Study) – Blue Water Area Transportation Commission

October 26, 2017

What is this Project About?

AMTRAK TRAIN STATION

Parking
Location
Facilities
Aesthetics
Future Service
Amtrak Maintenance

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Options Being Considered

Reconfigure Current Site
Original Station on RR Street
New Site on CN Property (32nd St.)
New Site Downtown
Others?

Where Are We At?

IDENTIFICATION & EVALUATION OF SITES

Stakeholder Engagement

High Level Assessment of Sites

Summarize Findings

Prepare for NEPA

NEPA – Preliminary Design – Final Design - Construction

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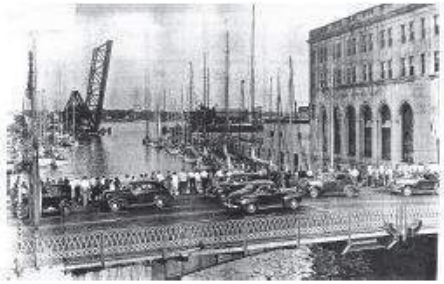
www.**bergmannpc.com**

BERGMANN ASSOCIATES

What Do We Need From You?

INPUT

Parking
Location
Facilities
Aesthetics
Future Service
Amtrak Maintenance



The relatively new (less than 15 years old) Pere Marquette railway Bascule Bridge stands high in the air in this 1940s photo taken during Mackinac Race Week in Port Huron. Photo courtesy of the T.J. Gaffney Collection.

BERGMANN ASSOCIATES

What is Important to You?

METRICS

Safety
Parking
Location
Facilities
Aesthetics
Future Service
Amtrak Maintenance
Project Cost
Multi-Modal
Accessibility
Development

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What are Next Steps?

DOCUMENT FINDINGS

Prepare Report
Summarize Feasible Options
Highlight Advantages/Disadvantages
Identify Risks/Mitigations
Set Course for Next Phase

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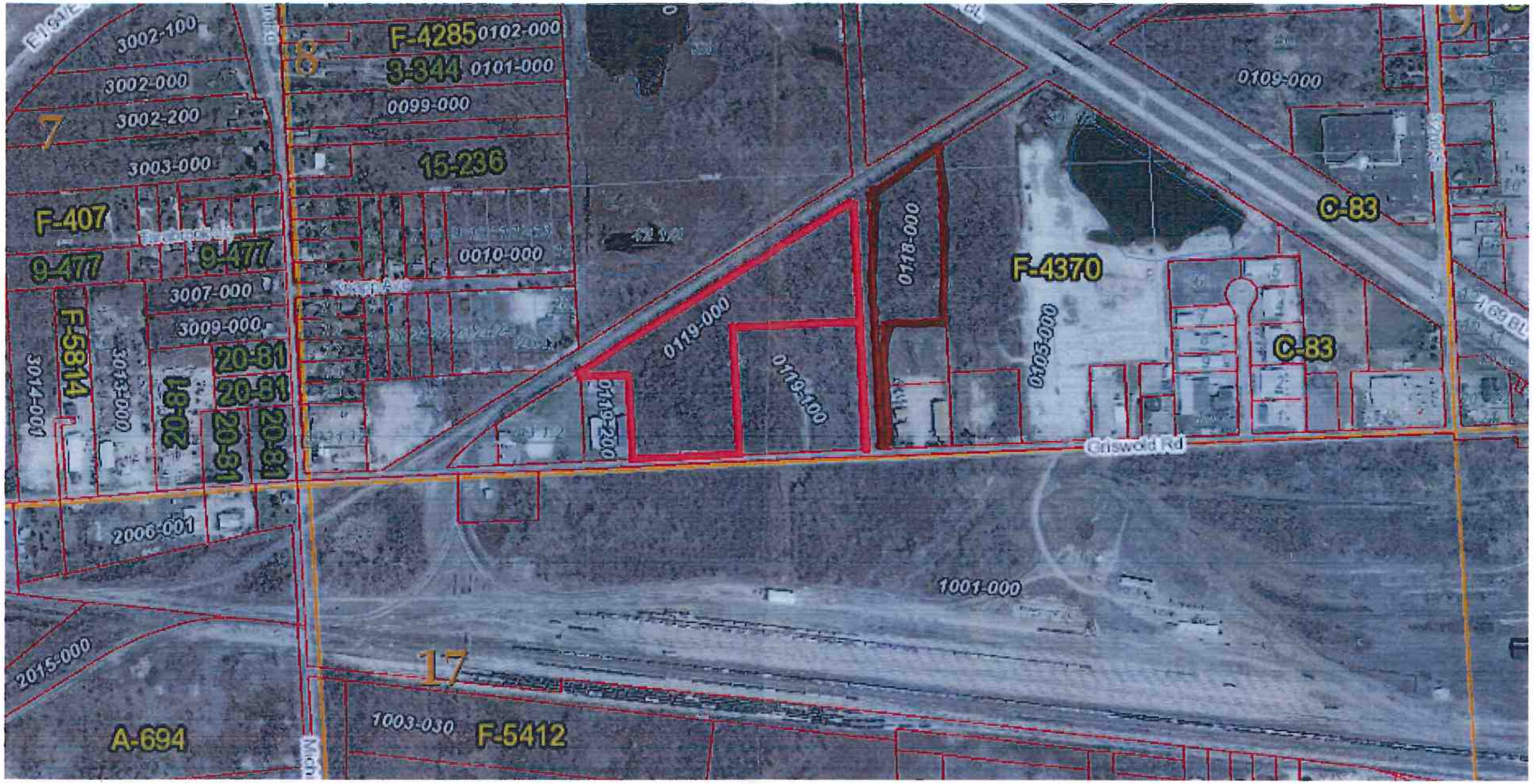
Thank You!

Email questions/comments to:

contact@bwbus.com



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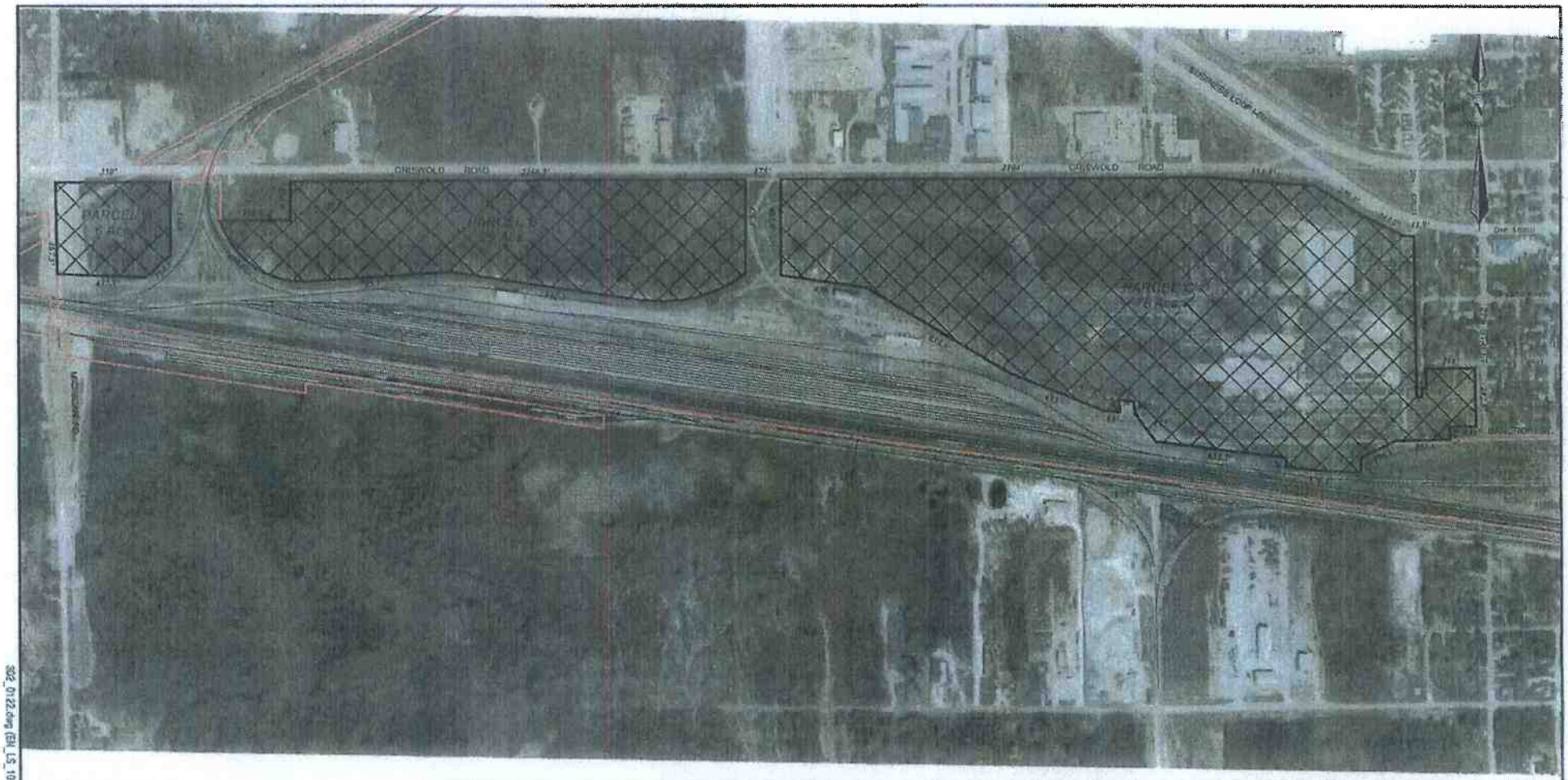

DESCRIPTION:
Port Huron
State of Michigan
United States of America

THIS IS NOT A PLAN OF SURVEY / CECI N'EST PAS UN PLAN D'ARPENTAGE

PROPERTY SKETCH

Subject Lands/Terrain Sujet

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0m 70 140 200m

SUBDIVISION:	Flint (302)
SPUR / ANTENNE:	N/A
MILEAGE / MILLIAIRE:	332.24 - 333.78
DATE:	November 7, 2013
SCALE / ÉCHELLE:	1:7000

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About

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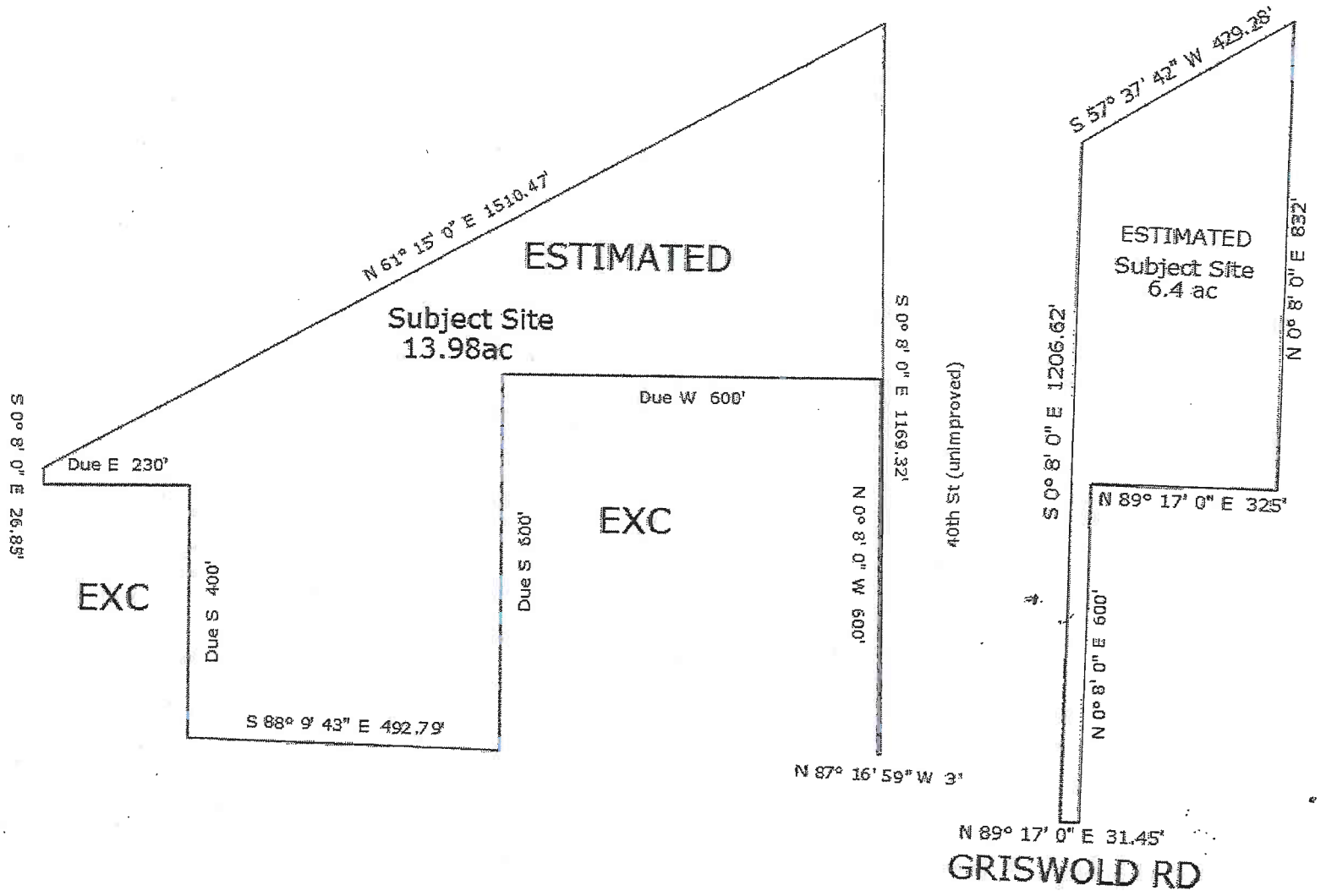

Sketch by Apex Sketch

*** Information herein deemed reliable but not guaranteed***

Pre-Feasibility Study for Port Huron Amtrak Station

Sign In Sheet

10/31 ~~10/19~~/17 (4:00pm to 7:00pm)

Name	Organization or Residency	Email	Phone
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Dave McElroy	BWATC	dmcelroy@bwbus.com	
PAUL MAXWELL	PHTWPDDA	PHTWPDDA@gmail.com	
Jeff Phillips	Rep. Shane Hernandez	JPhillips@house.mi.gov	
BOB HINES	CLGOR	RHINES375@COMCAST.NET	
Teri Lamb	City Council	TLamb@PortHuronHospital.org	
Bea Castillo	BWCIL	beancastillo@yahoo.com	
Sharon Bender	Port Huron	bendersharon@yahoo.com	
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KEN HARRIS	PORT HURON	kharris@porthuron.org	
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JUDY LINDBERG	StClair County Trails.com	jul99dy@attnet	
Joe Ann Burgett	PH+DRR Hist BoD	joeannburgett@gmail.com	

Pre-Feasibility Study for Port Huron Amtrak Station
Sign In Sheet
10/26 ~~10/19~~/17 (6:00pm to 9:00pm)

Name	Organization of Residency	Email	Phone
Anita Ashford	P.H City Council	ashfordar@aol.com	—

Pre-Feasibility Study for Port Huron Amtrak Station

Sign In Sheet

10/21 ~~10/19~~/17 (6:00pm to 9:00pm)

Name	Organization or Residency	Email	Phone
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Bob Lewandowski	Port Huron Twp	rlewandowski@porthurontownship.org	
Doug WILSON	SARNIA	WDWILSON@EXECULINK.COM	226-784-8642
PETER PATON	SARNIA	patonsplace@sympatico.ca	519-845-0532

Pre-Feasibility Study for Port Huron Amtrak Station

Sign In Sheet

10/26 ~~10/19~~/17 (4:00pm to 6:00pm)

Name	Organization or Residency	Email	Phone
STEVE RIEHL	PORT HURON TWP 3103 STH TRUSTEE, BOARD	STEVE.FIREFIGHTER@GMAIL.COM	810824[illegible]842

Michigan Association of Railroad Passengers, Inc.
P.O. Box 1368 · Okemos, MI 48805-1368 · www.marp.org

19 November 2017

Jeremy Hedden
Project Leader
Port Huron Station Evaluation
7050 W. Saginaw Highway
Lansing, Michigan 48917

Dear Mr. Hedden,

The Michigan Association of Railroad Passengers (MARP) applauds the proposal to replace the current Port Huron Amtrak Station. Whether the ultimate decision is to build a new station on the current site or relocate it to another site along the existing rail line, the need for a facility designed to better serve passengers, now and in the future, is clear.

A primary aspiration of MARP is that the U.S.—Canada border crossings at Detroit and Port Huron will be, in the foreseeable future, once again open to passenger trains. While a resolution of issues made more challenging by the attacks of 9-11 is not imminent, the pre-clearance agreement ratified by the U.S. Senate in 2016 gives hope for eventual restoration of this service. For that reason, MARP urges that development of the new Amtrak station not foreclose on the potential for restoration of cross-border passenger rail service at some future date.

Attention to the total passenger experience is of paramount importance. Train passengers are made to feel like second-class citizens when stations are drab, uncomfortable and uninviting. Attractive design, good lighting, comfortable seating, Wi-Fi, and accessible restrooms are essential elements.

In the world of the smart phone, ticket agents may well be obsolete. However, to provide the safety and security that encourages people to use the station, it is highly desirable that the station be open and **attended** prior to train departure in the morning and essential that it be open and **attended** when the train arrives in the late evening. Thus a quasi-ticket booth should be part of the design, along with an information board showing the train schedule as well as how to connect with local transit and taxi services.

Lack of adequate parking is an often-heard complaint that must be addressed in the new station. Related to that is adequate lighting, clear signage and attention to accessibility for the mobility- and sight-impaired travelers who depend on trains. The station must be located so as to be conveniently accessed by pedestrians and bicyclists as well as to those who use public transit.

Port Huron is currently served by only one daily round trip, departing early in the day and returning late in the evening. This makes it unrealistic to expect local transit to serve the train station. However, MARP has long advocated for a second daily round trip, likely departing in the afternoon and returning late morning. It is not unlikely that this second frequency will become a reality as millennials and seniors demand greater access to public transportation. Thus plans for the station should include a bus bay to allow direct access to and from local transit as well as the possibility of intercity bus service.

The Port Huron area has three major bike trails that draw visitors from other areas of the state and from Canada. The *Blue Water* train serving Port Huron allows bikes to be rolled on and off the train. MARP has talked with Canadian residents who have crossed the bridge to enjoy biking in the area and have then boarded the train to continue on to destinations on the west side of the state. New equipment coming to Michigan within three or four years is designed to accommodate bicycles. At a minimum, the station should have sturdy, secure bike racks. Bike lockers would be ideal.

MARP will continue to follow, with great interest, progress in the planning and development of the Port Huron station.

Sincerely,

Steve Vagnozzi

Steve Vagnozzi
Chair
Michigan Association of Railroad Passengers
P.O. Box 1368
Okemos MI 48805-1368
marprail@yahoo.com
www.marp.org

COUNTY OF ST. CLAIR
Metropolitan Planning Commission
DAVID STRUCK, DIRECTOR

December 12, 2013

Ms. Therese Cody
Rail Operating Programs Manager
MDOT/Office of Rail
425 West Ottawa Street
PO Box 30050
Lansing, MI 48909

Dear Ms. Cody:

On behalf of the St. Clair County Metropolitan Planning Commission, we support MDOT facilitating a "Facility Needs Assessment" for the development of a new Amtrak Station to serve the Port Huron/St. Clair County area. Local government and community leaders have discussed this potential project and agree that developing a new Amtrak Station is a critical piece of the economic development strategy for St. Clair County.

At an October meeting on this topic, community stakeholders and political leaders supported a proposal to build an intermodal station on existing CN property currently for sale on 32nd Street within the Port Huron Township Downtown Development Authority District. This site is part of a 115-acre tract of industrially-zoned land between Michigan Road and 24th Street. It is optimally located one block north of the I-69 business loop, less than one mile away from an I-94 interchange, and a short distance away from the Port Huron and Detroit Railroad Historical Society.

The current Amtrak Station located on 16th Street in Port Huron is not compliant with the Americans with Disabilities Act and does not have adequate parking for an increasing number of rail passengers. A new station location has the added benefit of offering the opportunity for a serviceable intermodal center, with potential for associated industrial and commercial development.

We are confident that you and your colleagues will give this facility needs assessment the highest level of careful consideration. The importance of a new Amtrak station for the Port Huron/St. Clair County area cannot be overstated.

Sincerely,

Marsden M. Murphy

Marsden M. Murphy, P.E.
Chairman
St. Clair County Metropolitan Planning Commission

cc: Paul Maxwell, Port Huron Township Downtown Development Authority
Robert Lewandowski, Port Huron Township
Bruce Brown, City of Port Huron
Bill Kauffman, St. Clair County
John Langdon, Michigan Association of Rail Passengers
Sandy Duffy, Port Huron and Detroit Historical Society

200 Grand River Avenue, Suite 202, Port Huron, MI 48060
Phone: 810-989-6950 Fax: 810-987-5931

COUNTY OF ST. CLAIR

St. Clair County Transportation Study
David Struck, Director

SCCOTS

December 2, 2013

Therese Cody, Rail Operating Programs Manager
MDOT/Office of Rail
425 West Ottawa Street
PO Box 30050
Lansing, MI 48909

Dear Ms. Cody:

The St. Clair County Transportation Study (SCCOTS) overwhelmingly supports MDOT working in concert with Amtrak and CN Rail to develop a facility needs assessment for a new Amtrak station in Port Huron Township. This project has come up in discussions amongst local government agencies and it has been determined that this new Amtrak station is a critical piece in improving passenger rail service in St. Clair County.

At an October meeting on this topic, community stakeholders and political leaders supported a proposal to build an intermodal station on existing CN property currently for sale on 32nd Street within the Port Huron Township Downtown Development Authority District. This site is part of a 115-acre tract of industrially-zoned land between Michigan Road and 24th Street. It is optimally located one block south of the I-69 business loop, less than one mile away from an I-94 interchange, and a short distance away from the Port Huron and Detroit Railroad Historical Society.

The current Amtrak station located on 16th Street in Port Huron is not compliant with the Americans with Disabilities Act and does not have adequate parking for an increasing number of rail passengers. Moreover, a new, modernized Amtrak station would help bolster the improved public transportation system in the region, including expanding Blue Water Area Transit service and non-motorized transportation facilities. The opportunity for the train station to become part of a larger intermodal center, as well as the potential for transit-oriented development, would have significant positive impacts on the local economy.

I know you and your colleagues will give this facility needs assessment the highest level of careful consideration. The importance of a new Amtrak station for the Port Huron/St. Clair County area cannot be overstated.

Sincerely,

Lindsay R Wallace

Lindsay Wallace
Chairperson

cc: Paul Maxwell, Port Huron Township Downtown Development Authority
Robert Lewandowski, Port Huron Township
Bruce Brown, City of Port Huron
Bill Kauffman, St. Clair County
John Langdon, Michigan Association of Rail Passengers
Sandy Duffy, Port Huron and Detroit Historical Society

c/o St. Clair County Metropolitan Planning Commission
200 Grand River Avenue, Suite 202 ▫ Port Huron, MI 48060-4017
Phone: (810) 989-6950 ▫ Fax: (810) 987-5931

COUNTY OF ST. CLAIR

St. Clair County Transportation Study
David Struck, Director

SCCOTS

December 2, 2013

Therese Cody, Rail Operating Programs Manager
MDOT/Office of Rail
425 West Ottawa Street
PO Box 30050
Lansing, MI 48909

Dear Ms. Cody:

The St. Clair County Transportation Study (SCCOTS) overwhelmingly supports MDOT working in concert with Amtrak and CN Rail to develop a facility needs assessment for a new Amtrak station in Port Huron Township. This project has come up in discussions amongst local government agencies and it has been determined that this new Amtrak station is a critical piece in improving passenger rail service in St. Clair County.

At an October meeting on this topic, community stakeholders and political leaders supported a proposal to build an intermodal station on existing CN property currently for sale on 32nd Street within the Port Huron Township Downtown Development Authority District. This site is part of a 115-acre tract of industrially-zoned land between Michigan Road and 24th Street. It is optimally located one block north of the I-69 business loop, less than one mile away from an I-94 interchange, and a short distance away from the Port Huron and Detroit Railroad Historical Society.

The current Amtrak station located on 16th Street in Port Huron is not compliant with the Americans with Disabilities Act and does not have adequate parking for an increasing number of rail passengers. Moreover, a new, modernized Amtrak station would help bolster the improved public transportation system in the region, including expanding Blue Water Area Transit service and non-motorized transportation facilities. The opportunity for the train station to become part of a larger intermodal center, as well as the potential for transit-oriented development, would have significant positive impacts on the local economy.

I know you and your colleagues will give this facility needs assessment the highest level of careful consideration. The importance of a new Amtrak station for the Port Huron/St. Clair County area cannot be overstated.

Sincerely,

Lindsay Wallace
Chairperson

cc: Paul Maxwell, Port Huron Township Downtown Development Authority
Robert Lewandowski, Port Huron Township
Bruce Brown, City of Port Huron
Bill Kauffman, St. Clair County
John Langdon, Michigan Association of Rail Passengers
Sandy Duffy, Port Huron and Detroit Historical Society

PHIL PAVLOV
25TH DISTRICT
P.O. BOX 30036
LANSING, MI 48909-7536
PHONE: (517) 373-7708
FAX: (517) 373-1450
senppavlov@senate.michigan.gov

THE SENATE
STATE OF MICHIGAN

COMMITTEES:
EDUCATION, CHAIR
NATURAL RESOURCES, ENVIRONMENT AND GREAT LAKES, VICE CHAIR
REGULATORY REFORM
TRANSPORTATION

February 25, 2014

Ms. Therese Cody
Rail Operating Programs Manager
MDOT/Office of Rail
425 West Ottawa Street
P.O. Box 30050
Lansing, MI 48909

Dear Ms. Cody:

Please accept this letter in support of the development of a new Amtrak Station to better serve the Port Huron and St. Clair County areas.

The current station does not meet the needs of the community, nor does it meet the needs of some users. There is limited parking, freeway access is difficult and parts of the facility are not ADA compliant.

A new facility located in Port Huron Township, on current CN property, would be a better location offering more parking, better freeway access, and ADA compliance. Presently, 80-85% of the users are Canadian customers who come across the Blue Water Bridge for a 6 a.m. train and return back to the station at midnight. Many of these customers stay over night either before or after the train trip, providing an important economic impact to the area. With the new location, there would be more space available, opening the area for more economic development, retail space, and multimodal transportation.

While studies show that the Grand Rapids to Chicago and Detroit to Chicago trains have grown at a rate of about 5%, the Port Huron to Chicago train has shown a 35% growth, making it one of the busiest lines in the State.

Please consider my support along with those of other community leaders from the Port Huron and St. Clair County areas while taking up this important proposal.

Sincerely,

Phil Pavlov
State Senator
25th District

PHIL PAVLOV
25TH DISTRICT
P.O. BOX 30036
LANSING, MI 48909-7536
PHONE: (517) 373-7708
FAX: (517) 373-1450
senppavlov@senate.michigan.gov

THE SENATE
STATE OF MICHIGAN

COMMITTEES:
EDUCATION, CHAIR
NATURAL RESOURCES, ENVIRONMENT AND GREAT LAKES, VICE CHAIR
REGULATORY REFORM
TRANSPORTATION

Cc: Paul Maxwell, Port Huron TWP DDA
Bruce Brown, City of Port Huron
Sandy Duffy, PH & Dtr Historical Society
Jorja Baldwin, Fort Gratiot Township
Bob Lewandowski, Port Huron Township
Randy Fernandez, City of Marysville
John Langdon, Michigan Association of Rail Passengers
Bill Kauffman, St. Clair County

81ST DISTRICT
STATE CAPITOL
P.O. BOX 30014
LANSING, MI 48909-7514

MICHIGAN HOUSE OF REPRESENTATIVES

DAN LAUWERS
STATE REPRESENTATIVE

PHONE: (517) 373-1790
FAX: (517) 373-9983
E-MAIL: danlauwers@house.mi.gov

February 25, 2014

Therese Cody, Rail Operating Programs Manager
MDOT/Office of Rail
425 W. Ottawa Street
PO Box 30050
Lansing, MI 48909

Dear Ms. Cody:

I would like to take this time to convey my utmost support for the development of a new Amtrak Station to serve the Port Huron/St. Clair County area.

Knowing the benefits this initiative would have on the surrounding community, I am enthusiastic in supporting the Blue Water Area Transit's efforts. The proposal seeks to build an Intermodal Station on existing CN property within the Downtown Development District of the Charter Township of Port Huron. The site is part of a 115-acre tract, zoned industrial, and nearby both I-69 and the I-94 Interchange.

The current station has struggled to meet the parking needs of a growing ridership and it is my understanding that there are certain compliance issues with the Americans with Disabilities Act.

Port Huron Township has been and continues to be aggressive and proactive, continually looking for ways to make its Downtown Development District an even greater area than what it has grown to be. I fully support the Township and County in their efforts.

Thank you for your time and consideration of my support.

Sincerely,

Dan Lauwers
State Representative
81st House District

cc: Jim Wilson, BWAT

CHARTER TOWNSHIP OF PORT HURON

3800 Lapeer Road
Port Huron Twp., Michigan 48060

Phone: (810) 987-6600
Fax: (810) 987-6712

January 19, 2015

RE: Site Assessment and Facilities Needs Study for Replacement and Relocation of Port Huron Township Amtrak Station

Dear Sir/Madame:

I am writing on behalf of the Charter Township of Port Huron Board of Trustees to express our support of the Blue Water Area Transportation Commission's efforts to secure funding to complete the Site Assessment and Facilities Needs Study for Replacement and Relocation of Port Huron Township Amtrak Station.

We are aware that the existing station is unable to accommodate the increase in riders it has experienced, and projections for future ridership increases will present an even bigger challenge. The parking at the existing facility is inadequate and does not allow for intermodal connections with Blue Water Area Transportation Commission public transit. The existing facility is also unable to meet the needs of riders who have disabilities.

The proposed site in Port Huron Township will allow for expanded parking areas, thereby facilitating the necessary intermodal connections. The facility can be replaced and relocated to a site within the Township that will accommodate a larger, modern structure that will be fully ADA compliant. The site is also large enough to accommodate expansion to meet the ever increasing ridership.

We believe that the Site Assessment and Facilities Needs Study for Replacement and Relocation of Port Huron Township Amtrak Station will show just how great the need is for this project, and we fully support the Blue Water Area Transportation Commission's efforts to secure funding in this regard.

Sincerely,

Robert G. Lewandowski, Jr.
Supervisor

RGL/ps

CHARTER TOWNSHIP OF PORT HURON
DOWNTOWN DEVELOPMENT AUTHORITY
"We Make A Difference"
2929 Lapeer Road, Suite C
Port Huron, Michigan 48060

January 15, 2015

RE: Site Assessment and Facilities Needs Study for Replacement and Relocation of Port Huron Township Amtrak Station

Dear Sir/Madame:

On behalf of the Port Huron Charter Township Downtown Development Authority, I strongly support Blue Water Area Transportation Commission's endeavor to secure funding to complete the Site Assessment and Facilities Needs Study for Replacement and Relocation of Port Huron Township Amtrak Station.

Ridership at the existing station has continued to increase. Existing station parking is inadequate, and the facility is outdated. The current location does not allow for facility or parking expansions. The existing station is not, nor can it be made, ADA compliant.

Replacement and relocation are an absolute necessity to service the increase in ridership, as well as provide for the safety and security of passengers. The proposed relocation will also better service riders by allowing for intermodal connections with Blue Water Area Transportation Commission public transit, a service that is severely limited due to location and space constraints at the existing facility.

The Site Assessment and Facilities Needs Study is the all important first step to replacing and relocating the Amtrak Station to a site that better serves the needs of its riders. We look forward to working together to accomplish this goal.

Sincerely,

Paul G. Maxwell

Paul G. Maxwell
Director

Appendix B: Option Location

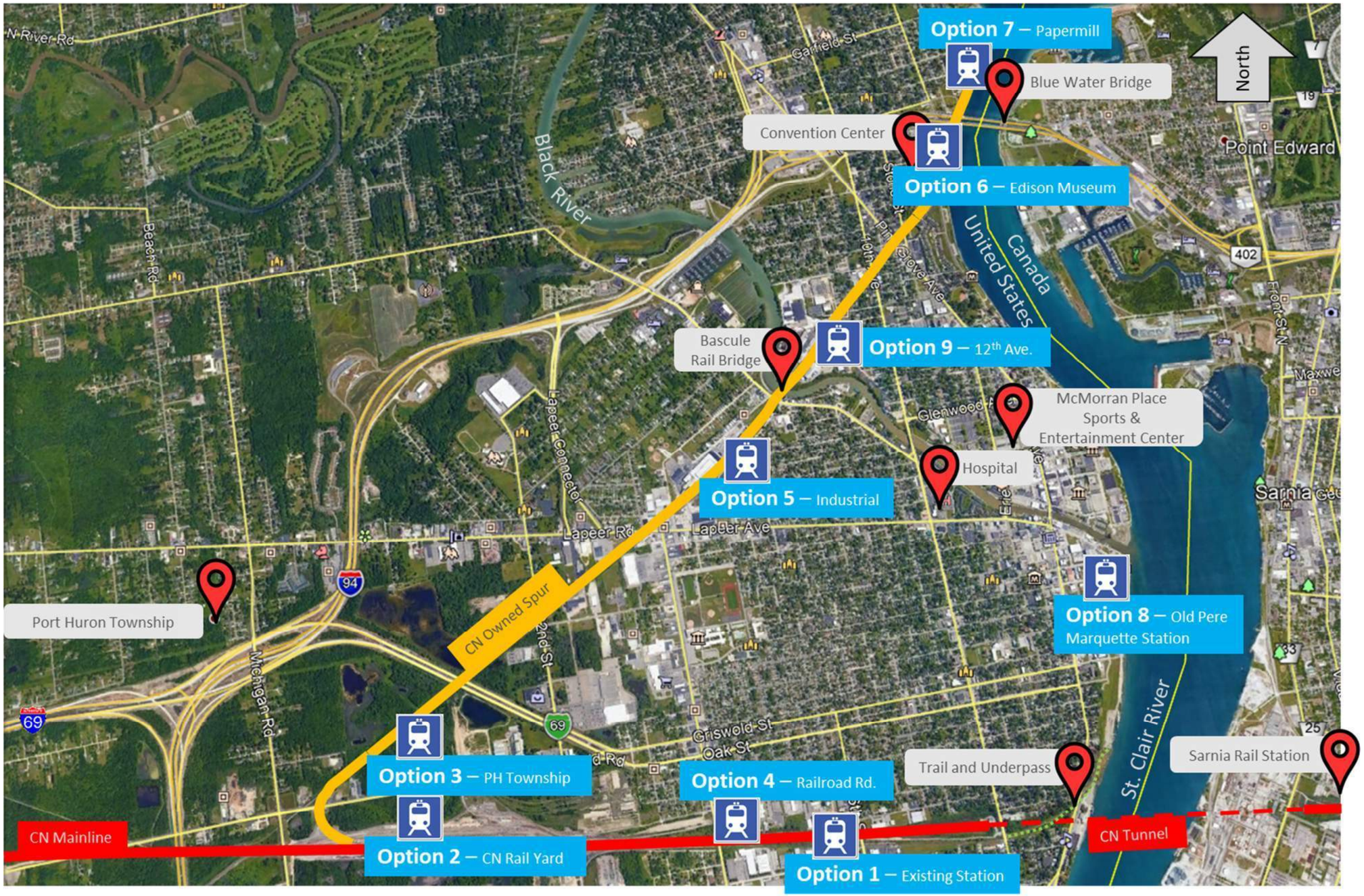

Figure 1: Site Option Map Showing Option Locations and Points of Interest

Appendix C: Site Layout Concepts for Feasible Options

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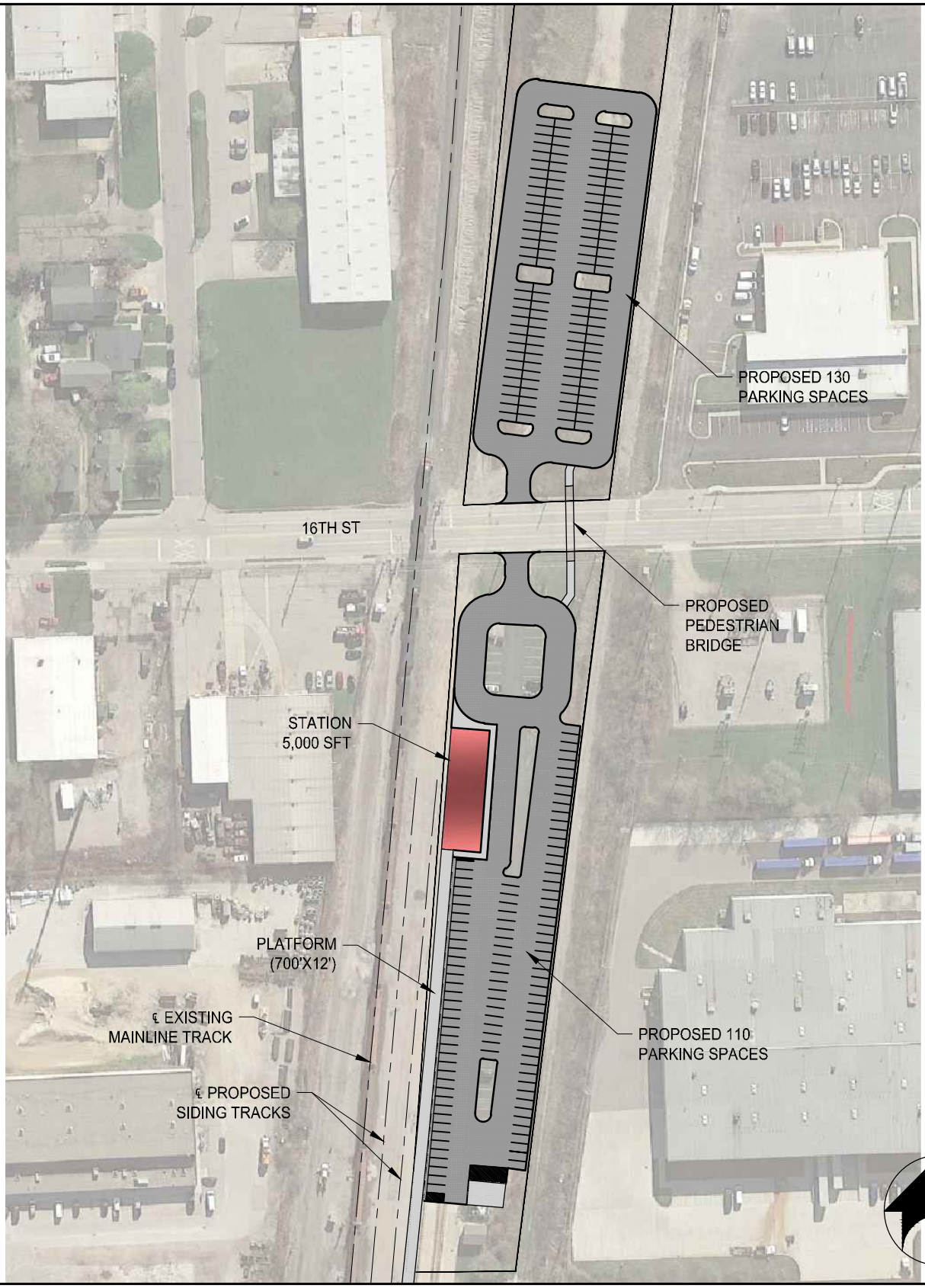
PORT HURON AMTRAK STATION
PRE-FEASIBILITY STUDY

DRAWING TITLE:
OPTION 1 - 2223 16th St

BY:	CHK'D BY:	DATE:	SCALE:
J. SMITH	J. HEDDEN	03/13/2018	1"=150'



7050 West Saginaw Hwy. // Suite 200 // Lansing, MI 48917 // 517.272.9835

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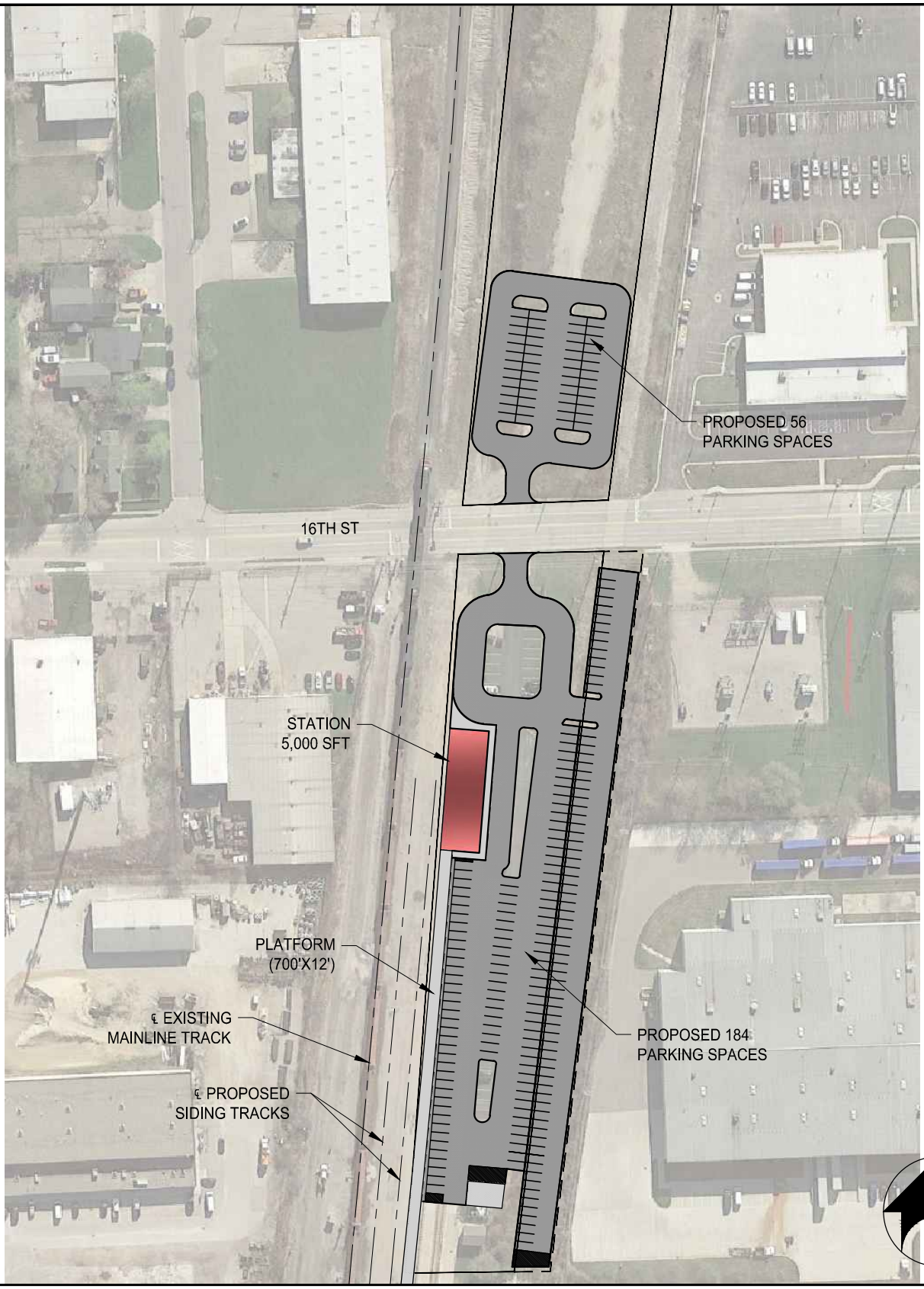
PORT HURON AMTRAK STATION
PRE-FEASIBILITY STUDY

DRAWING TITLE:
OPTION 1A - 2223 16th St

BY:	CHK'D BY:	DATE:	SCALE:
J. SMITH	J. HEDDEN	06/25/2018	1"=150'



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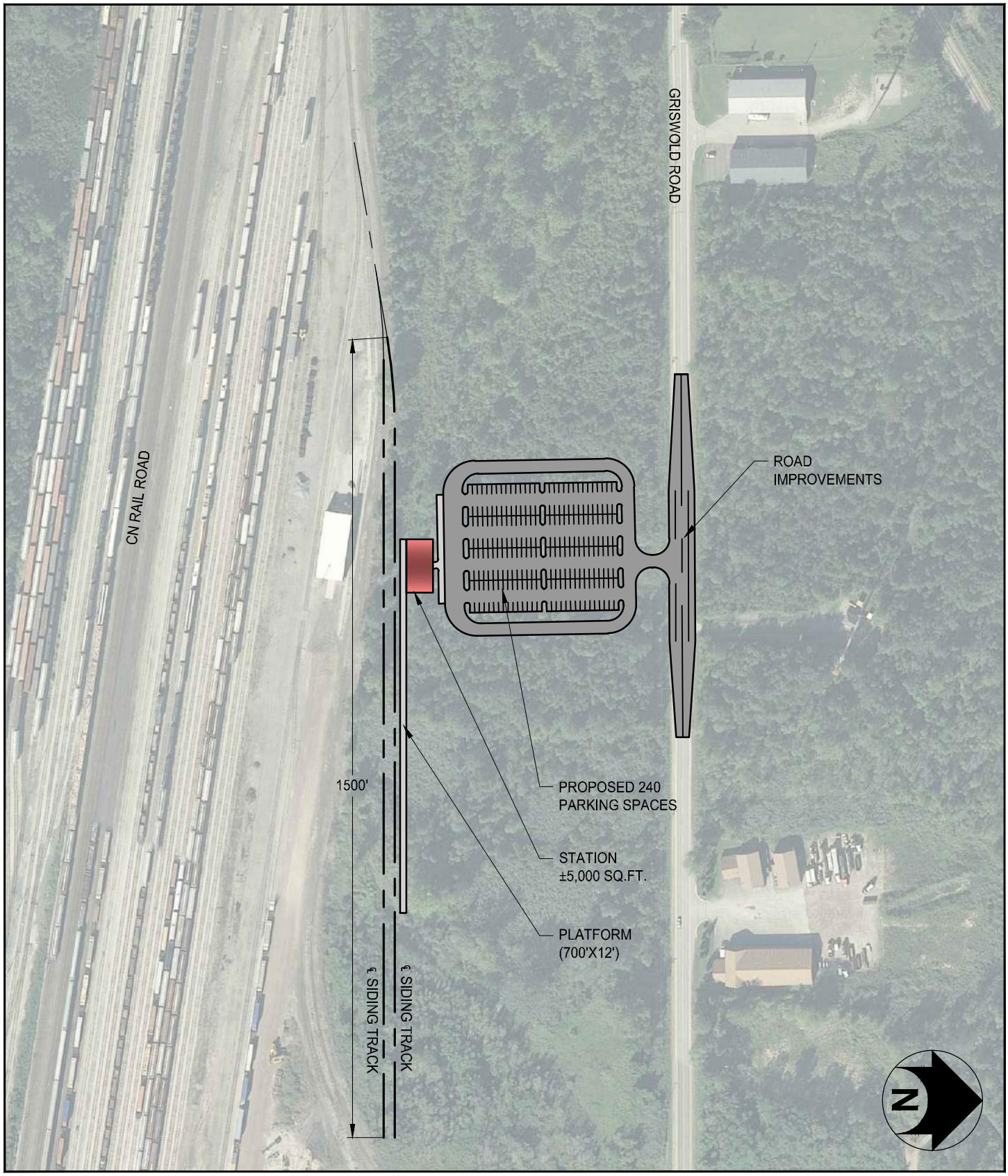
PORT HURON AMTRAK STATION
PRE-FEASIBILITY STUDY

DRAWING TITLE:
OPTION 2 - 3563 GRISWOLD ROAD - EXHIBIT A

BY:	CHK'D BY:	DATE:	SCALE:
A. NODARSE	J. HEDDEN	3/13/2017	1"=250'



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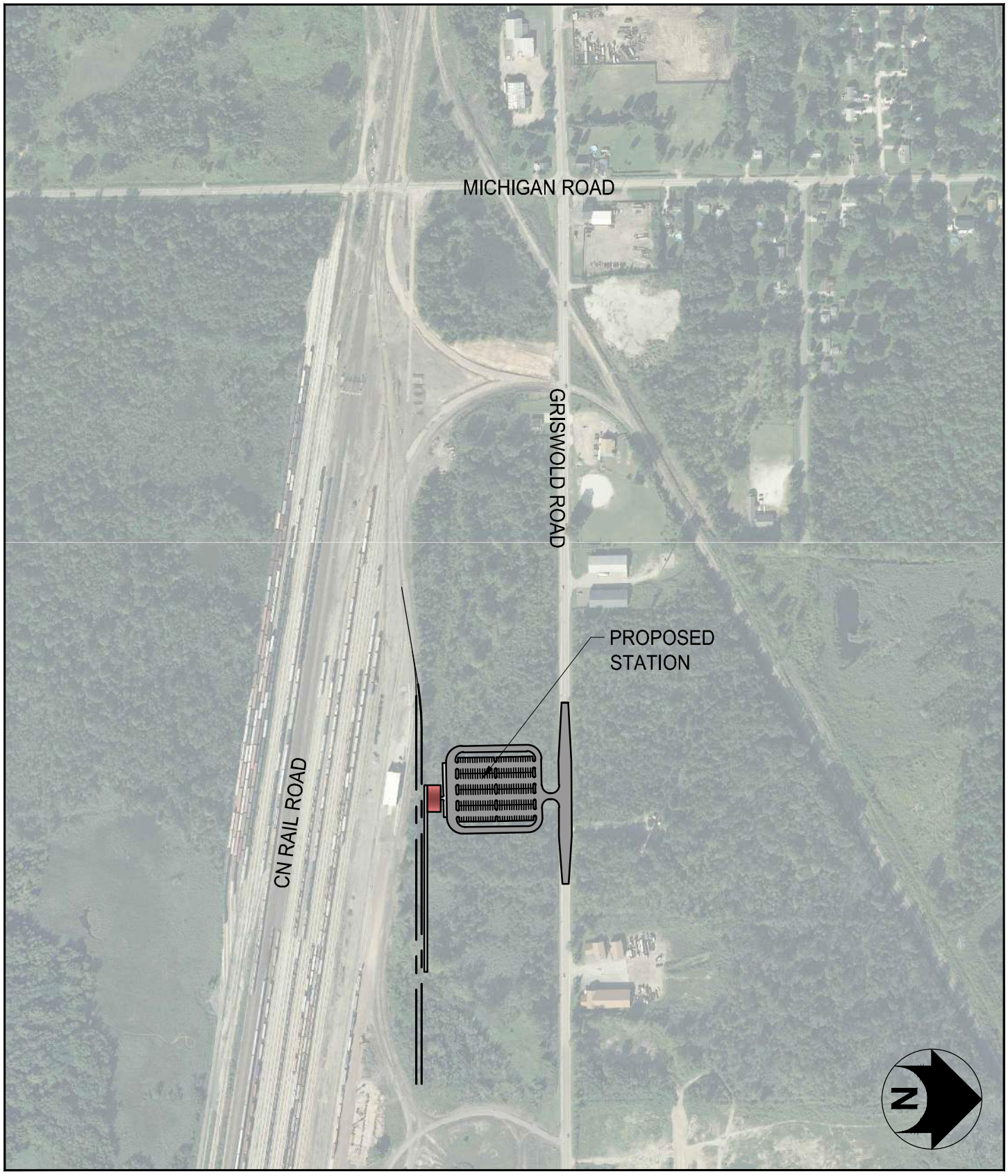
PORT HURON AMTRAK STATION
PRE-FEASIBILITY STUDY

DRAWING TITLE:
OPTION 2 - 3563 GRISWOLD ROAD - EXHIBIT B

BY:	CHK'D BY:	DATE:	SCALE:
A. NODARSE	J. HEDDEN	3/13/2017	1"=500'



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PORT HURON AMTRAK STATION
PRE-FEASIBILITY STUDY

DRAWING TITLE:
OPTION 3 - 3750 GRISWOLD RD

BY:	CHK'D BY:	DATE:	SCALE:
J. SMITH	J. HEDDEN	03/13/2018	1"=250'

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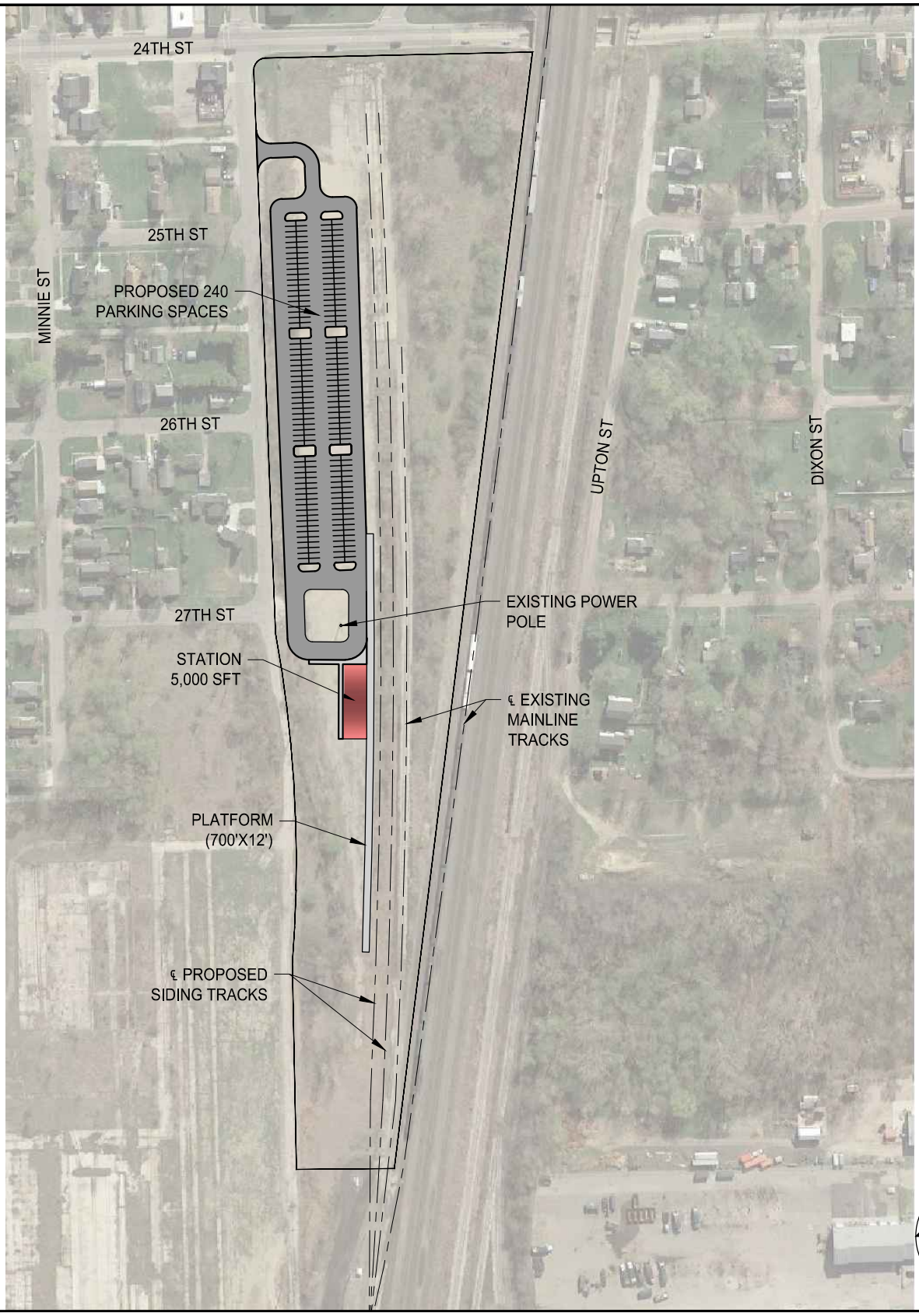
PORT HURON AMTRAK STATION
PRE-FEASIBILITY STUDY

DRAWING TITLE:
OPTION 4 - 2300 Railroad St

BY:	CHK'D BY:	DATE:	SCALE:
J. SMITH	J. HEDDEN	04/23/2018	1"=250'



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PORT HURON AMTRAK STATION
PRE-FEASIBILITY STUDY

DRAWING TITLE:
OPTION 8 - 200 COURT STREET - EXHIBIT A

BY:	CHK'D BY:	DATE:	SCALE:
A. NODARSE	J. HEDDEN	3/13/2017	1"=200'

7050 West Saginaw Hwy. // Suite 200 // Lansing, MI 48917 // 517.272.9835

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PORT HURON AMTRAK STATION
PRE-FEASIBILITY STUDY

DRAWING TITLE:
OPTION 8 - 200 COURT STREET - EXHIBIT B

BY:	CHK'D BY:	DATE:	SCALE:
A. NODARSE	J. HEDDEN	3/13/2017	NOT TO SCALE

7050 West Saginaw Hwy. // Suite 200 // Lansing, MI 48917 // 517.272.9835

Appendix D: Land Use Maps

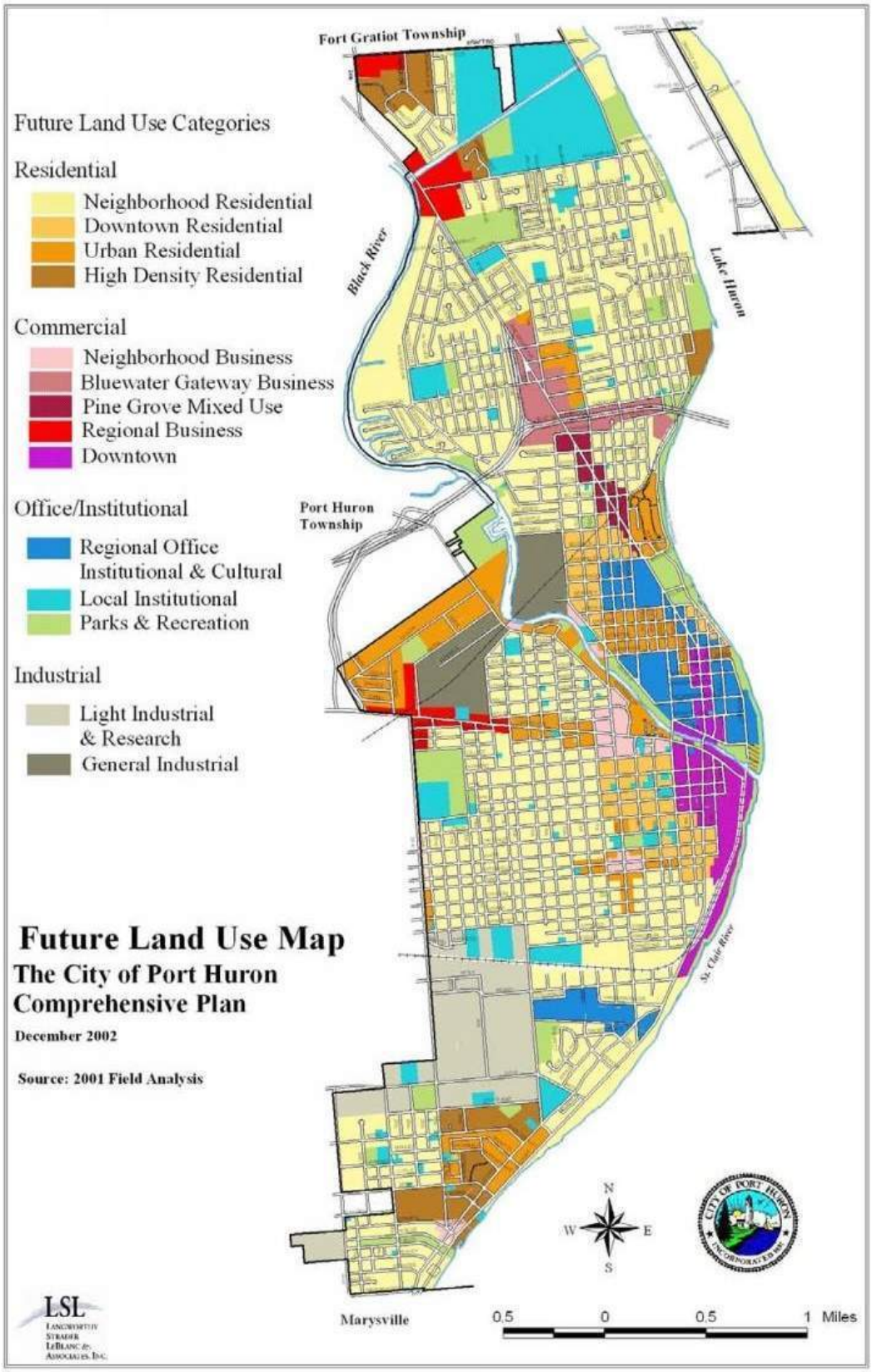

Figure 2: City of Port Huron Future Land Use Map (circa 2002)

DDA DEVELOPMENT DISTRICT

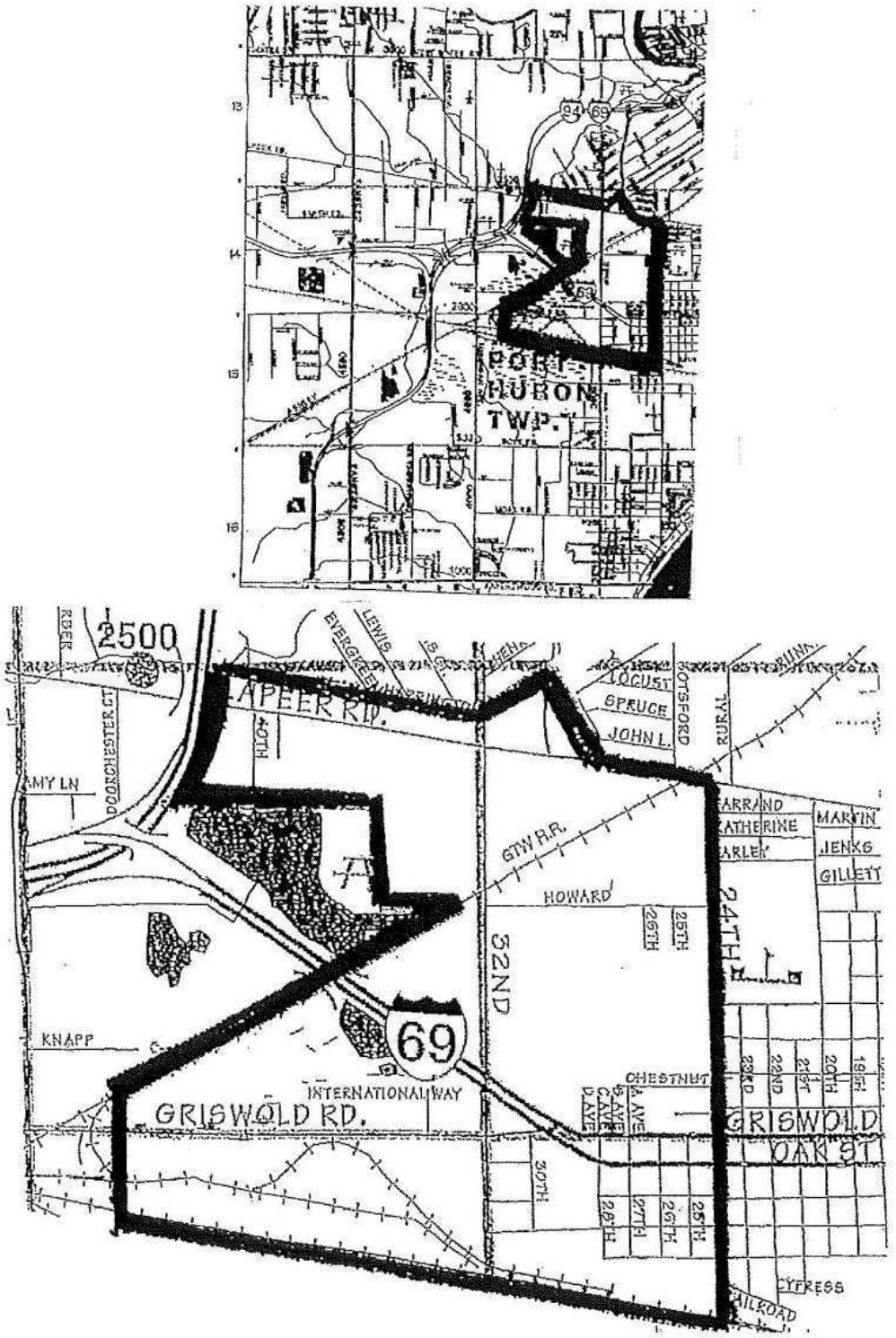

Figure 3: Port Huron Township Development District Map

Appendix E: Cost Estimate Information

Option 1 - Existing Station Site
July 2, 2018

Description	Quantity	Unit	Unit Cost	Cost
Utilities for New Station	1	LS	$25,000.00	$25,000.00
Building Pad for New Station	5000	Sft	$1.65	$8,250.00
Misc. Site Improvements at Station	1	LS	$10,000.00	$10,000.00
Directional Signing for Parking	1	LS	$2,500.00	$2,500.00
Parking Lot Pavement (10"&4") 240 Spac	84000	Sft	$3.33	$279,720.00
New Station Building	5000	Sft	$150.00	$750,000.00
Parking Lot Drainage	84000	Sft	$1.00	$84,000.00
Parking Lot Curb and Gutter	2600	Ft	$15.00	$39,000.00
Parking Lot Lighting	14	Ea	$5,000.00	$70,000.00
Site Landscaping	1	LS	$50,000.00	$50,000.00
Platform Canopy (700'x12')	8400	Sft	$55.00	$462,000.00
Platform Lighting & Security	8400	Sft	$7.50	$63,000.00
Platform Public Address and Info Display	1	LS	$20,000.00	$20,000.00
Platform Reconstruction (Level Boarding)	8400	Sft	$11.00	$92,400.00
Road Improvements (16th Street)	1	Ea	$20,000.00	$20,000.00
Siding Relocation	2000	Ft	$220.00	$440,000.00
Pedestrian Bridge (across 16th Street)	1200	Sft	$200.00	$240,000.00
Elevators for Pedestrian Crossing	2	Ea	$55,000.00	$110,000.00
Demolition of Existing Building	1800	Sft	$6.00	$10,800.00
Remove Existing Pavement	3800	Syd	$6.00	$22,800.00
Temporary Maintenance of Existing Service	1	Ea	$100,000.00	$100,000.00
Railroad Permit to Enter and Insurance Fees	1	Ea	$20,000.00	$20,000.00
Railroad Review Fees	1	Ea	$100,000.00	$100,000.00
Railroad Flagging & Inspection	180	Days	$2,000.00	$360,000.00
Direct Cost of Work Subtotal:				**$3,379,470.00**
Construction General Conditions & Requirements			6%	$203,000.00
Contractor Staff, Insurance, Fees			8%	$271,000.00
Project Soft Costs (Permits, Fees, Legal, Etc.)			4%	$136,000.00
Design and Construction Engineering Costs:			20%	$676,000.00
Support Costs:				**$1,286,000.00**
Contingency:			15%	$700,000.00
Inflation (5 years at 4%):			20%	$934,000.00
Contingency and Inflation Subtotal:				**$1,634,000.00**

Total Cost (in Year 2023 Dollars): $6,299,470.00

Does not include real estate costs.
Does not include maintenance costs.
Does not include environmental costs.
Does not include BWAT costs.

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Option 1A - Existing Station Site Using CSX Property & No Ped Bridge
July 2, 2018

Description	Quantity	Unit	Unit Cost	Cost
Utilities for New Station	1	LS	$25,000.00	$25,000.00
Building Pad for New Station	5000	Sft	$1.65	$8,250.00
Misc. Site Improvements at Station	1	LS	$10,000.00	$10,000.00
Directional Signing for Parking	1	LS	$2,500.00	$2,500.00
Parking Lot Pavement (10"&4") 240 Spac	84000	Sft	$3.33	$279,720.00
New Station Building	5000	Sft	$150.00	$750,000.00
Parking Lot Drainage	84000	Sft	$1.00	$84,000.00
Parking Lot Curb and Gutter	2600	Ft	$15.00	$39,000.00
Parking Lot Lighting	14	Ea	$5,000.00	$70,000.00
Site Landscaping	1	LS	$50,000.00	$50,000.00
Platform Canopy (700'x12')	8400	Sft	$55.00	$462,000.00
Platform Lighting & Security	8400	Sft	$7.50	$63,000.00
Platform Public Address and Info Display	1	LS	$20,000.00	$20,000.00
Platform Reconstruction (Level Boarding)	8400	Sft	$11.00	$92,400.00
Road Improvements (16th Street)	1	Ea	$20,000.00	$20,000.00
Siding Relocation	2000	Ft	$220.00	$440,000.00
Pedestrian Bridge (across 16th Street)	0	Sft	$200.00	$0.00
Elevators for Pedestrian Crossing	0	Ea	$55,000.00	$0.00
Demolition of Existing Building	1800	Sft	$6.00	$10,800.00
Remove Existing Pavement	3800	Syd	$6.00	$22,800.00
Temporary Maintenance of Existing Service	1	Ea	$100,000.00	$100,000.00
Railroad Permit to Enter and Insurance Fees	1	Ea	$20,000.00	$20,000.00
Railroad Review Fees	1	Ea	$100,000.00	$100,000.00
Railroad Flagging & Inspection	180	Days	$2,000.00	$360,000.00
Direct Cost of Work Subtotal:				**$3,029,470.00**
Construction General Conditions & Requirements			6%	$182,000.00
Contractor Staff, Insurance, Fees			8%	$243,000.00
Project Soft Costs (Permits, Fees, Legal, Etc.)			4%	$122,000.00
Design and Construction Engineering Costs:			20%	$606,000.00
Support Costs:				**$1,153,000.00**
Contingency:			15%	$628,000.00
Inflation (5 years at 4%):			20%	$837,000.00
Contingency and Inflation Subtotal:				**$1,465,000.00**

Total Cost (in Year 2023 Dollars): $5,647,470.00

Does not include real estate costs.
Does not include maintenance costs.
Does not include environmental costs.
Does not include BWAT costs.

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Option 2 - CN Railyard Site
July 2, 2018

Description	Quantity	Unit	Unit Cost	Cost
Utilities for New Station	1	LS	$50,000.00	$50,000.00
Building Pad for New Station	5000	Sft	$1.65	$8,250.00
Misc. Site Improvements at Station	1	LS	$10,000.00	$10,000.00
Directional Signing for Parking	1	LS	$2,500.00	$2,500.00
Parking Lot Pavement (10"&4") 240 Spaces	84000	Sft	$3.33	$279,720.00
New Station Building	5000	Sft	$150.00	$750,000.00
Parking Lot Drainage	84000	Sft	$1.00	$84,000.00
Parking Lot Curb and Gutter	2600	Ft	$15.00	$39,000.00
Parking Lot Lighting	14	Ea	$5,000.00	$70,000.00
Site Landscaping	1	LS	$50,000.00	$50,000.00
Platform Canopy (700'x12')	8400	Sft	$55.00	$462,000.00
Platform Lighting & Security	8400	Sft	$7.50	$63,000.00
Platform Public Address and Info Display	1	LS	$20,000.00	$20,000.00
Platform Construction (Level Boarding)	8400	Sft	$20.00	$168,000.00
Road Improvements (Griswold Rd.)	1	LS	$50,000.00	$50,000.00
Clearing and Tree Removal	5	Acre	$10,000.00	$50,000.00
Crossover in Wye (including signal work)	1	LS	$320,000.00	$320,000.00
New Siding & Track	4200	Ft	$220.00	$924,000.00
#10 Turnout	4	Ea	$100,000.00	$400,000.00
#8 Turnout	1	Ea	$75,000.00	$75,000.00
Relocate Track, Track Rem, and Turnout Rem	1	LS	$165,000.00	$165,000.00
Railroad Permit to Enter and Insurance Fees	1	Ea	$10,000.00	$10,000.00
Railroad Review Fees	1	Ea	$50,000.00	$50,000.00
Railroad Flagging & Inspection	180	Days	$4,000.00	$720,000.00
Direct Cost of Work Subtotal:				**$4,820,470.00**
Construction General Conditions & Requirements			6%	$290,000.00
Contractor Staff, Insurance, Fees			8%	$386,000.00
Project Soft Costs (Permits, Fees, Legal, Etc.)			4%	$193,000.00
Design and Construction Engineering Costs:			20%	$965,000.00
Support Costs:				**$1,834,000.00**
Contingency:			15%	$999,000.00
Inflation (5 years at 4%):			20%	$1,331,000.00
Contingency and Inflation Subtotal:				**$2,330,000.00**

Total Cost (in Year 2023 Dollars): $8,984,470.00

Does not include real estate costs.
Does not include maintenance costs.
Does not include environmental costs.
Does not include BWAT costs.

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ARCHITECTS ENGINEERS PLANNERS

Option 3 - Port Huron Township Owned Land
July 2, 2018

Description	Quantity	Unit	Unit Cost	Cost
Utilities for New Station	1	LS	$50,000.00	$50,000.00
Building Pad for New Station	5000	Sft	$1.65	$8,250.00
Misc. Site Improvements at Station	1	LS	$10,000.00	$10,000.00
Directional Signing for Parking	1	LS	$2,500.00	$2,500.00
Parking Lot Pavement (10"&4") 240 Spaces	84000	Sft	$3.33	$279,720.00
New Station Building	5000	Sft	$150.00	$750,000.00
Parking Lot Drainage	84000	Sft	$1.00	$84,000.00
Parking Lot Curb and Gutter	2600	Ft	$15.00	$39,000.00
Parking Lot Lighting	14	Ea	$5,000.00	$70,000.00
Site Landscaping	1	LS	$50,000.00	$50,000.00
Platform Canopy (700'x12')	8400	Sft	$55.00	$462,000.00
Platform Lighting & Security	8400	Sft	$7.50	$63,000.00
Platform Public Address and Info Display	1	LS	$20,000.00	$20,000.00
Platform Construction (Level Boarding)	8400	Sft	$20.00	$168,000.00
Road Improvements (Griswold Rd.)	1	LS	$50,000.00	$50,000.00
Clearing and Tree Removal	5	Acre	$10,000.00	$50,000.00
New Siding & Track	3200	Ft	$220.00	$704,000.00
Crossover in Wye (including signal work)	1	LS	$320,000.00	$320,000.00
#12 Turnout	2	Ea	$125,000.00	$250,000.00
Track Removal	1	LS	$5,000.00	$5,000.00
At Grade X-ing (Griswold)	1	LS	$250,000.00	$250,000.00
Railroad Permit to Enter and Insurance Fees	1	Ea	$10,000.00	$10,000.00
Railroad Review Fees	1	Ea	$50,000.00	$50,000.00
Railroad Flagging & Inspection	180	Days	$4,000.00	$720,000.00
Direct Cost of Work Subtotal:				**$4,465,470.00**
Construction General Conditions & Requirements			6%	$268,000.00
Contractor Staff, Insurance, Fees			8%	$358,000.00
Project Soft Costs (Permits, Fees, Legal, Etc.)			4%	$179,000.00
Design and Construction Engineering Costs:			20%	$894,000.00
Support Costs:				**$1,699,000.00**
Contingency:			15%	$925,000.00
Inflation (5 years at 4%):			20%	$1,233,000.00
Contingency and Inflation Subtotal:				**$2,158,000.00**

Total Cost (in Year 2023 Dollars): $8,322,470.00

Does not include real estate costs.
Does not include maintenance costs.
Does not include environmental costs.
Does not include BWAT costs.

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Option 4 - Railroad Street Site
July 2, 2018

Description	Quantity	Unit	Unit Cost	Cost
Utilities for New Station	1	LS	$50,000.00	$50,000.00
Building Pad for New Station	5000	Sft	$1.65	$8,250.00
Misc. Site Improvements at Station	1	LS	$10,000.00	$10,000.00
Directional Signing for Parking	1	LS	$2,500.00	$2,500.00
Parking Lot Pavement (10"&4") 240 Spaces	84000	Sft	$3.33	$279,720.00
New Station Building	5000	Sft	$150.00	$750,000.00
Parking Lot Drainage	84000	Sft	$1.00	$84,000.00
Parking Lot Curb and Gutter	2600	Ft	$15.00	$39,000.00
Parking Lot Lighting	14	Ea	$5,000.00	$70,000.00
Site Landscaping	1	LS	$50,000.00	$50,000.00
Platform Canopy (700'x12')	8400	Sft	$55.00	$462,000.00
Platform Lighting & Security	8400	Sft	$7.50	$63,000.00
Platform Public Address and Info Display	1	LS	$20,000.00	$20,000.00
Platform Construction (Level Boarding)	8400	Sft	$20.00	$168,000.00
Road Improvements (24th and Bancroft)	1	LS	$50,000.00	$50,000.00
Clearing and Tree Removal	1	Acre	$10,000.00	$10,000.00
Crossover in Wye (including signal work)	1	LS	$320,000.00	$320,000.00
New Siding & Track	8800	Ft	$220.00	$1,936,000.00
#10 Turnout	4	Ea	$100,000.00	$400,000.00
#8 Turnout	1	Ea	$75,000.00	$75,000.00
Relocate Track, Track Rem, and Turnout Rem	1	LS	$165,000.00	$165,000.00
At Grade X-ing (Griswold)	1	LS	$250,000.00	$250,000.00
Railroad Permit to Enter and Insurance Fees	1	Ea	$10,000.00	$10,000.00
Railroad Review Fees	1	Ea	$50,000.00	$50,000.00
Railroad Flagging & Inspection	180	Days	$4,000.00	$720,000.00
Direct Cost of Work Subtotal:				**$6,042,470.00**
Construction General Conditions & Requirements			6%	$363,000.00
Contractor Staff, Insurance, Fees			8%	$484,000.00
Project Soft Costs (Permits, Fees, Legal, Etc.)			4%	$242,000.00
Design and Construction Engineering Costs:			20%	$1,209,000.00
Support Costs:				**$2,298,000.00**
Contingency:			15%	$1,252,000.00
Inflation (5 years at 4%):			20%	$1,669,000.00
Contingency and Inflation Subtotal:				**$2,921,000.00**

Total Cost (in Year 2023 Dollars): $11,261,470.00

Does not include real estate costs.
Does not include maintenance costs.
Does not include environmental costs.
Does not include BWAT costs.

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Option 5 - Industrial Site
July 2, 2018

Description	Quantity	Unit	Unit Cost	Cost
Utilities for New Station	1	LS	$50,000.00	$50,000.00
Building Pad for New Station	5000	Sft	$1.65	$8,250.00
Misc. Site Improvements at Station	1	LS	$10,000.00	$10,000.00
Directional Signing for Parking	1	LS	$2,500.00	$2,500.00
Parking Lot Pavement (10"&4") 240 Spaces	84000	Sft	$3.33	$279,720.00
New Station Building	5000	Sft	$150.00	$750,000.00
Parking Lot Drainage	84000	Sft	$1.00	$84,000.00
Parking Lot Curb and Gutter	2600	Ft	$15.00	$39,000.00
Parking Lot Lighting	14	Ea	$5,000.00	$70,000.00
Site Landscaping	1	LS	$50,000.00	$50,000.00
Platform Canopy (700'x12')	8400	Sft	$55.00	$462,000.00
Platform Lighting & Security	8400	Sft	$7.50	$63,000.00
Platform Public Address and Info Display	1	LS	$20,000.00	$20,000.00
Platform Construction (Level Boarding)	8400	Sft	$20.00	$168,000.00
Road Improvements (Runnels/Water St.)	1	LS	$50,000.00	$50,000.00
New Siding & Track	12000	Ft	$220.00	$2,640,000.00
Crossover in Wye (including signal work)	1	LS	$320,000.00	$320,000.00
#12 Turnout	2	Ea	$125,000.00	$250,000.00
Track Removal	1	LS	$5,000.00	$5,000.00
Track Drainage	2.3	Miles	$500,000.00	$1,150,000.00
At Grade X-ing Improvement (3 locations)	3	Ea	$50,000.00	$150,000.00
Rail Operational Modifications at Wye	1	LS	$2,000,000.00	$2,000,000.00
At Grade X-ing (Griswold)	1	LS	$250,000.00	$250,000.00
Railroad Permit to Enter and Insurance Fees	1	Ea	$10,000.00	$10,000.00
Railroad Review Fees	1	Ea	$50,000.00	$50,000.00
Railroad Flagging & Inspection	180	Days	$4,000.00	$720,000.00
Direct Cost of Work Subtotal:				**$9,651,470.00**
Construction General Conditions & Requirements			6%	$580,000.00
Contractor Staff, Insurance, Fees			8%	$773,000.00
Project Soft Costs (Permits, Fees, Legal, Etc.)			4%	$387,000.00
Design and Construction Engineering Costs:			20%	$1,931,000.00
Support Costs:				**$3,671,000.00**
Contingency:			15%	$1,999,000.00
Inflation (5 years at 4%):			20%	$2,665,000.00
Contingency and Inflation Subtotal:				**$4,664,000.00**

Total Cost (in Year 2023 Dollars): $17,986,470.00

Does not include real estate costs.
Does not include maintenance costs.
Does not include environmental costs.
Does not include BWAT costs.

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Option 6 - Convention Center Site
July 2, 2018

Description	Quantity	Unit	Unit Cost	Cost
Utilities for New Station	1	LS	$50,000.00	$50,000.00
Building Pad for New Station	5000	Sft	$1.65	$8,250.00
Misc. Site Improvements at Station	1	LS	$10,000.00	$10,000.00
Directional Signing for Parking	1	LS	$2,500.00	$2,500.00
Parking Lot Pavement (10"&4") 240 Spaces	84000	Sft	$3.33	$279,720.00
New Station Building	5000	Sft	$150.00	$750,000.00
Parking Lot Drainage	84000	Sft	$1.00	$84,000.00
Parking Lot Curb and Gutter	2600	Ft	$15.00	$39,000.00
Parking Lot Lighting	14	Ea	$5,000.00	$70,000.00
Site Landscaping	1	LS	$50,000.00	$50,000.00
Platform Canopy (700'x12')	8400	Sft	$55.00	$462,000.00
Platform Lighting & Security	8400	Sft	$7.50	$63,000.00
Platform Public Address and Info Display	1	LS	$20,000.00	$20,000.00
Platform Construction (Level Boarding)	8400	Sft	$20.00	$168,000.00
Road Improvements (Thomas Edison Parkway	1	LS	$50,000.00	$50,000.00
New Siding & Track	19300	Ft	$220.00	$4,246,000.00
Crossover in Wye (including signal work)	1	LS	$320,000.00	$320,000.00
#12 Turnout	2	Ea	$125,000.00	$250,000.00
Track Removal	1	LS	$5,000.00	$5,000.00
Track Drainage	3.7	Miles	$500,000.00	$1,850,000.00
At Grade X-ing Improvement (11 locations)	11	Ea	$50,000.00	$550,000.00
Bascule Bridge Rehab over Black River	1	LS	$2,000,000.00	$2,000,000.00
At Grade X-ing (Griswold)	1	LS	$250,000.00	$250,000.00
Railroad Permit to Enter and Insurance Fees	1	Ea	$10,000.00	$10,000.00
Railroad Review Fees	1	Ea	$50,000.00	$50,000.00
Railroad Flagging & Inspection	230	Days	$4,000.00	$920,000.00
Direct Cost of Work Subtotal:				**$12,557,470.00**
Construction General Conditions & Requirements			6%	$754,000.00
Contractor Staff, Insurance, Fees			8%	$1,005,000.00
Project Soft Costs (Permits, Fees, Legal, Etc.)			4%	$503,000.00
Design and Construction Engineering Costs:			20%	$2,512,000.00
Support Costs:				**$4,774,000.00**
Contingency:			15%	$2,600,000.00
Inflation (5 years at 4%):			20%	$3,467,000.00
Contingency and Inflation Subtotal:				**$6,067,000.00**

Total Cost (in Year 2023 Dollars): $23,398,470.00

Does not include real estate costs.
Does not include maintenance costs.
Does not include environmental costs.
Does not include BWAT costs.

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Option 7 - Dunn Paper Mill Site
July 2, 2018

Description	Quantity	Unit	Unit Cost	Cost
Utilities for New Station	1	LS	$50,000.00	$50,000.00
Building Pad for New Station	5000	Sft	$1.65	$8,250.00
Misc. Site Improvements at Station	1	LS	$10,000.00	$10,000.00
Directional Signing for Parking	1	LS	$2,500.00	$2,500.00
Parking Lot Pavement (10"&4") 240 Spaces	84000	Sft	$3.33	$279,720.00
New Station Building	5000	Sft	$150.00	$750,000.00
Parking Lot Drainage	84000	Sft	$1.00	$84,000.00
Parking Lot Curb and Gutter	2600	Ft	$15.00	$39,000.00
Parking Lot Lighting	14	Ea	$5,000.00	$70,000.00
Site Landscaping	1	LS	$50,000.00	$50,000.00
Platform Canopy (700'x12')	8400	Sft	$55.00	$462,000.00
Platform Lighting & Security	8400	Sft	$7.50	$63,000.00
Platform Public Address and Info Display	1	LS	$20,000.00	$20,000.00
Platform Construction (Level Boarding)	8400	Sft	$20.00	$168,000.00
Road Improvements (Church/Wright/Omar)	1	LS	$50,000.00	$50,000.00
New Siding & Track	21600	Ft	$220.00	$4,752,000.00
Crossover in Wye (including signal work)	1	LS	$320,000.00	$320,000.00
#12 Turnout	2	Ea	$125,000.00	$250,000.00
Track Removal	1	LS	$5,000.00	$5,000.00
Track Drainage	4.3	Miles	$500,000.00	$2,150,000.00
At Grade X-ing Improvement (11 locations)	11	Ea	$50,000.00	$550,000.00
Bascule Bridge Rehab over Black River	1	LS	$2,000,000.00	$2,000,000.00
At Grade X-ing (Griswold)	1	LS	$250,000.00	$250,000.00
Railroad Permit to Enter and Insurance Fees	1	Ea	$10,000.00	$10,000.00
Railroad Review Fees	1	Ea	$50,000.00	$50,000.00
Railroad Flagging & Inspection	230	Days	$4,000.00	$920,000.00
Direct Cost of Work Subtotal:				**$13,363,470.00**
Construction General Conditions & Requirements			6%	$802,000.00
Contractor Staff, Insurance, Fees			8%	$1,070,000.00
Project Soft Costs (Permits, Fees, Legal, Etc.)			4%	$535,000.00
Design and Construction Engineering Costs:			20%	$2,673,000.00
Support Costs:				**$5,080,000.00**
Contingency:			15%	$2,767,000.00
Inflation (5 years at 4%):			20%	$3,689,000.00
Contingency and Inflation Subtotal:				**$6,456,000.00**

Total Cost (in Year 2023 Dollars): $24,899,470.00

Does not include real estate costs.
Does not include maintenance costs.
Does not include environmental costs.
Does not include BWAT costs.

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Option 8 - Vantage Point (Pere Marquette Station Site)
July 2, 2018

Description	Quantity	Unit	Unit Cost	Cost
Utilities for New Station	1	LS	$50,000.00	$50,000.00
Building Pad for New Station	5000	Sft	$1.65	$8,250.00
Misc. Site Improvements at Station	1	LS	$10,000.00	$10,000.00
Directional Signing for Parking	1	LS	$2,500.00	$2,500.00
Parking Lot Pavement (10"&4") 240 Spaces	84000	Sft	$3.33	$279,720.00
New Station Building	5000	Sft	$150.00	$750,000.00
Parking Lot Drainage	84000	Sft	$1.00	$84,000.00
Parking Lot Curb and Gutter	2600	Ft	$15.00	$39,000.00
Parking Lot Lighting	14	Ea	$5,000.00	$70,000.00
Site Landscaping	1	LS	$50,000.00	$50,000.00
Platform Canopy (700'x12')	8400	Sft	$55.00	$462,000.00
Platform Lighting & Security	8400	Sft	$7.50	$63,000.00
Platform Public Address and Info Display	1	LS	$20,000.00	$20,000.00
Platform Construction (Level Boarding)	8400	Sft	$20.00	$168,000.00
Road Improvements (Court Street)	1	LS	$100,000.00	$100,000.00
New Siding & Track	11000	Ft	$220.00	$2,420,000.00
Track Drainage	2	Miles	$500,000.00	$1,000,000.00
Clearing and Tree Removal	5	Acre	$10,000.00	$50,000.00
Grade Separation @ Military Street	1	LS	$1,000,000.00	$1,000,000.00
At Grade X-ing (10th Street & 16th Street)	1	LS	$350,000.00	$350,000.00
Railroad Permit to Enter and Insurance Fees	1	Ea	$10,000.00	$10,000.00
Railroad Review Fees	1	Ea	$50,000.00	$50,000.00
Railroad Flagging & Inspection	40	Days	$4,000.00	$160,000.00
Direct Cost of Work Subtotal:				**$7,196,470.00**
Construction General Conditions & Requirements			6%	$432,000.00
Contractor Staff, Insurance, Fees			8%	$576,000.00
Project Soft Costs (Permits, Fees, Legal, Etc.)			4%	$288,000.00
Design and Construction Engineering Costs:			20%	$1,440,000.00
Support Costs:				**$2,736,000.00**
Contingency:			15%	$1,490,000.00
Inflation (5 years at 4%):			20%	$1,987,000.00
Contingency and Inflation Subtotal:				**$3,477,000.00**

Total Cost (in Year 2023 Dollars): $13,409,470.00

Does not include real estate costs.
Does not include maintenance costs.
Does not include environmental costs.
Does not include BWAT costs.

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Option 9 - 12th Ave.
July 2, 2018

Description	Quantity	Unit	Unit Cost	Cost
Utilities for New Station	1	LS	$50,000.00	$50,000.00
Building Pad for New Station	5000	Sft	$1.65	$8,250.00
Misc. Site Improvements at Station	1	LS	$10,000.00	$10,000.00
Directional Signing for Parking	1	LS	$2,500.00	$2,500.00
Parking Lot Pavement (10"&4") 240 Spaces	84000	Sft	$3.33	$279,720.00
New Station Building	5000	Sft	$150.00	$750,000.00
Parking Lot Drainage	84000	Sft	$1.00	$84,000.00
Parking Lot Curb and Gutter	2600	Ft	$15.00	$39,000.00
Parking Lot Lighting	14	Ea	$5,000.00	$70,000.00
Site Landscaping	1	LS	$50,000.00	$50,000.00
Platform Canopy (700'x12')	8400	Sft	$55.00	$462,000.00
Platform Lighting & Security	8400	Sft	$7.50	$63,000.00
Platform Public Address and Info Display	1	LS	$20,000.00	$20,000.00
Platform Construction (Level Boarding)	8400	Sft	$20.00	$168,000.00
Road Improvements (12th Ave.)	1	LS	$50,000.00	$50,000.00
Bascule Bridge Rehab over Black River	1	LS	$2,000,000.00	$2,000,000.00
New Siding & Track	12000	Ft	$220.00	$2,640,000.00
Crossover in Wye (including signal work)	1	LS	$320,000.00	$320,000.00
#12 Turnout	2	Ea	$125,000.00	$250,000.00
Track Removal	1	LS	$5,000.00	$5,000.00
Track Drainage	2.3	Miles	$500,000.00	$1,150,000.00
At Grade X-ing Improvement (1 locations)	1	Ea	$50,000.00	$50,000.00
Rail Operational Modifications at Wye	1	LS	$2,000,000.00	$2,000,000.00
At Grade X-ing (Griswold)	1	LS	$250,000.00	$250,000.00
Railroad Permit to Enter and Insurance Fees	1	Ea	$10,000.00	$10,000.00
Railroad Review Fees	1	Ea	$50,000.00	$50,000.00
Railroad Flagging & Inspection	180	Days	$4,000.00	$720,000.00
Direct Cost of Work Subtotal:				**$11,551,470.00**
Construction General Conditions & Requirements			6%	$694,000.00
Contractor Staff, Insurance, Fees			8%	$925,000.00
Project Soft Costs (Permits, Fees, Legal, Etc.)			4%	$463,000.00
Design and Construction Engineering Costs:			20%	$2,311,000.00
Support Costs:				**$4,393,000.00**
Contingency:			15%	$2,392,000.00
Inflation (5 years at 4%):			20%	$3,189,000.00
Contingency and Inflation Subtotal:				**$5,581,000.00**

Total Cost (in Year 2023 Dollars): $21,525,470.00

Does not include real estate costs.
Does not include maintenance costs.
Does not include environmental costs.
Does not include BWAT costs.

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Appendix F: Previous Amtrak Study Information

Port Huron Station Analysis

Purpose

This analysis examines the needs related to a potential relocation of the Port Huron, MI Amtrak station. Included are discussions of the passenger services facility and operations requirements.

Anecdotes

Conversations with the Port Huron district manager and others have uniformly agreed that the existing passenger waiting facility is undersized and the available parking is inadequate. This has caused problems with riders parking haphazardly in non-approved locations and passengers waiting outside the waiting facility on the platform and in surrounding train yard.

Ridership

FY2013 ridership at Port Huron was 29,461. The Port Huron station is considered a corridor station by Amtrak. Corridor stations are generally associated with passengers taking shorter trips and daily commuting. As such, the space requirements for these stations are often less than those stations that handle long distance passengers in part due to the lack of checked baggage.

Amtrak uses a straight 2% unconstrained growth rate for determining future ridership and associated passenger needs. Using this methodology, an estimated future 2033 ridership would be 43,800.

However, examining the daily ridership reveals some interesting traits for the Port Huron station. The average ridership by day varies greatly with Monday and Friday being the peak days reflecting a pattern of riders leaving Port Huron early in the week and returning at the end of the week. This is a pattern of weekly commuters instead of daily commuters and mirrors the demand on the station of long-distance passengers who park for several nights.

Average by Day	Ons	Offs	Total
Monday	51	54	105
Tuesday	35	27	62
Wednesday	30	35	65
Thursday	42	44	87
Friday	52	43	94
Saturday	49	34	82
Sunday	38	47	84

Additionally, the future one-way peak of 55 riders and peak two-way of 85 riders was forecast. Interestingly, these estimated future thresholds were already exceeded in FY13 in 167 and 127 occurrences respectively.

Number of FY13 Occurrences Exceeding Estimated Future Peaks	
Predicted 2 way peak: 85	127 occurrences
Predicted 1 way peak: 55	167 occurrences

Of the 167 occurrences that exceeded the estimated one-way peak of 55 riders, 38 of these exceeded 100 peak one-way riders and 9 exceeded 120 riders. The highest one-way peak in FY13 occurred on October 11th with 178 riders heading from Port Huron!

With such a dramatic range in peak one-way riders, sizing a facility is a challenge since it is not practical to build a facility for such rare October 11-style occurrences.

Looking again at the 167 occurrences, of those, the average number of one-way riders was 84.

Since the existing peaks already exceed those estimated to occur in 20 years, it was necessary to estimate the future peaks using the observed current peak riders. This was completed by determining the percent increase of the future peak riders over the existing peak. This percent increase was then applied to the observed peak riders. The result was a future estimate of 130 peak one-way riders which corresponds to 200 peak two-way riders, 412 daily riders, and an annual ridership of 108,000!

Now, 108,000 is not the future ridership for Port Huron. It means that when the station experiences peak loads, it is acting like a station with that ridership.

The below sections will examine the implications of the behavior on station facilities.

Parking

Parking at the current station is insufficient. Using the future ridership estimate and the corridor station parking formula, the result is a need for 9 parking spaces which clearly will not work today let alone in 20 years.

We know from the above that the station demand at peak times is much greater than the day to day. We also know that rider behavior is that of a weekly commuter. Understanding that and using 108,000 riders as a planning guide and the long-distance parking formula to match rider behavior, we have a future need of 129 parking spaces.

Station / Passenger Facility

Port Huron is a staffed station currently without checked baggage. The result is a need for minimal ticket office and back office space to support one agent.

Passenger waiting space, on the other hand, is more in flux. Since the amount of space is estimated on ridership, whatever calculation is used would have a great impact on the space requirement. The straight-line growth calculation results in a passenger waiting space of 800 square feet, but the 108,000

planning number to better plan for the 167 peak occurrences results is a need of 1,950 square feet for passengers.

The platform should be planned as a full length level boarding platform, with bi-level equipment that would be 15" ATR.

Additional space requirements, also noted in the attached program, include space for crew facilities.

Maintenance

The current facility has roughly 280 square feet of interior storage space used for service vehicles and 150 square feet for a locker room for maintenance crews. There are also the following:

- Conex Box – 20x30 used for storage
- Conex Box – 8x20 used as an office
- Storage for bottled water, sand, and fuel and oil drums

Other service activities needed as part of a station relocation are:

- *Service Platform.* Separating the train servicing operation from the passenger operations would allow for level boarding at the passenger platform and a safer, more purpose built servicing area for the layover, service, and maintenance of the train sets. The service platform should be 20' wide and at top of rail for the full length of the train set. Ideally, the service platform would be located as a center platform between two layover storage tracks.
- *Train refueling.* Access to the platform and a turn-a-round location for a fuel truck would be required.
- *Waste disposal servicing.* Similar to the need for train refueling, access along the platform for a waste disposal servicing truck should be provided.
- *Water*. The layover service platform would need potable and non-potable water stations every 100 ft.
- *480v power.* 480v power locations would be required at both ends of the service platform.
- *Main line Connection.* A connection from the from the station to the main line on both ends of the station

The above maintenance requirements are for existing services. Additional requirements for Enhanced Service under consideration would move more service work from Chicago to Port Huron. Under this scenario, the following would be needed:

- *Two track service yard.* Trackage for two layover trains would be needed.
- *Service Pit.* At least one of the layover tracks would needed a service pit with drainage.
- *Additional Storage.* An additional 250 sf would be needed for the storage of equipment and parts.
- *Run-around track.* Trackage to relocate locomotives from one end of the train to the other.

Port Huron, MI Station nctional and Space Requirements

Exhibit 1

	Functional Requirements[1]	2033 Requirements		Notes
1	**Station (Public/Shared)**			
	a. Waiting Room	2,000	sf	Based on estimate project peak ridership on Monday and Fridays
	Open Station hours			open from 10:45 p.m. to 6:30 a.m.
	Mens Restroom	50		
	Water Closets - Male		1 min.	As required for facility
	Urinal - Male			As required for facility
	Lavatories - Male		1 min.	As required for facility
	Changing Table - Male *		1 min.	As required for facility
	Womens Restroom	50		
	Water Closets - Female		1 min.	Provide one more stall than required by code
	Lavatories - Female		1 min.	As required for facility
	Changing Table - Female *		1 min.	As required for facility
	Custodial Closet	20	sf	As required for facility
	Service Sink		1 min.	As required for facility
	Drinking Fountain		1 min.	As required for facility
	e. Vending Area	50	sf	May be included in public area
	f. Passenger Communications			
	Public Pay Phones	Not required		Provide emergency communication device on platform
	Information Kiosk	10	sf	Public information including hotels, car rental, etc.; may have direct-connect phone(s)
	Public Address System	Required		Required at new staffed stations
	Passenger Information Display System (PIDS)			Required at all stations with audio annoucements
	Fire, Burglary & Holdup Alarms			Per code
	i. Mechanical/Electrical Room	50	sf	As required by facility
	j. Entrance Vestibules (ADA)			Per code; double-door airlock with automatic openers
	k. Corridor (Main Circulation)			As required by facility
	Sub-total	**2,230**	**sf**	
2.	**Station (Amtrak Exclusive Occupancy)**			
	Ticket Counter			
	a.1. Ticket Office (counters)	60	sf	6 lf per workstation
	Ticket Sales Support			
	b.2 Agent Office	120	sf	Lead clerk, includes safe
	b.3 Agent's Office Closet	10	sf	
	b.4 Records Storage Room	30	sf	
	b.5 Safe/Storage Room	-	sf	included in office
	b.6 Storage	30	sf	
	b.11 Quik-Trak Machines	40	sf	1 units
	Equipment Room (Ticketing/C&S)	60	sf	Locked room with 24 hour access; Severs and PIDS with security cage or
	b.12			two 30 sf rooms
	Sub-total	**350**	**sf**	

Port Huron, MI Station nctional and Space Requirements

Exhibit 1

	Functional Requirements[1]	2033 Requirements		Notes
3.	**Track & Platform**			
	a.1 Passenger Platforms	400	lin. ft.	Full length level boarding platform is the primary design.
	Platform (Main)			
	Platform (Center)			
	a.2 Platform Canopy	Required		Covering 2/3 of the platform
	Canopy			
	a.3 Express Aprons			Not required
	a.4 Lighting	Required		Full length of passenger platform
	a.5 ADA Tactile Edge	Required		Full length of passenger platform
	a.6 Public Address System	Required		Amtrak national-network PIDS
	a.7 Passenger Information Display System (PID	Required		Amtrak national-network PIDS
4.	**Crew Base (Amtrak Exclusive Occupancy)**			
	Operations Support/T&E			
	a.1 Reception	-	sf	
	Crew Sign Up Area	300	sf	Reception/sign-up area, clerk workstation, and crew lounge/meeting/seating area
	a.2			
	a.8 Clerks Office	80	sf	
	a.9 Restrooms			Adjacent to Locker area
	Male	50	sf	
	Female	50	sf	
	a.11 File Room/Copier	60	sf	copier/fax/time ticket machine, host RR computer and printer
	a.12 Communications Room (Operations)	30	sf	Server closet
	a.13 Locker Room			
	Men's Locker Room & Shower	180	sf	12 lockers
	Women's Locker Room & Shower	150	sf	6 lockers
	a.15 Custodial Closet	30	sf	
	Sub-total	**930**	**sf**	
5.	**Mechanical (Amtrak Exclusive Occupancy)**			
	Mechanical Support			
	a.1 Offices	160	sf	
	a.4 Closet	30	sf	
	a.5 Storage	600	sf	Conex acceptable
	a.6 Parts Storage	280	sf	
	a.7 Unheated Storage	150	sf	
	a.8 Vehicle Storage	225	sf	
	a.9 Restroom	0	sf	
	a.10 Restrooms/Showers	0	sf	
	a.11 Shop	0	sf	
	a.12 Locker Room (12 lockers)	200	sf	
	a.13 Circulation	0	sf	

Port Huron, MI Station nctional and Space Requirements

Exhibit 1

	Functional Requirements[1]	2033 Requirements		Notes
	a.14 FDA Approved Watering System	5	units	Potable and non-potable water at 5 point along the service platform
	a.15 480V 800A AC Standby	2	units	System to be sized to support platform configuration (Exhibit 3)
	a,16 480 Volt Standby Power	0		
	a.17 Train Septic service	tbd		
	a.18 Collection System	tbd		
	a.19 Train Fueling	tbd		
	Sub-total	**1,652**	**sf**	Included in items 2d and 2g above
6.	**Parking**			
	a.1 Taxi Stand	3		
	a.2 Motorcoach Access	2		Or curb access in lieu of spaces
	a.3 Customer	129		Reserved for Amtrak customers
	a.4 Employee	2		Reserved for Amtrak employees
	a.5 Passenger Drop-off	2		
	a.6 Parking for service vehicle	1		Space for fuel truck at access road
		139	spaces	
7.	**Fencing**			
	a.1 Perimeter Fencing			Not required
	a.2 Pedestrian Safety Fencing			Station side of platform
8.	**Mail and Carload Express Area**			
	a.1 Mail & Express	n/a		
	a.2 Roadrailer Grounding Pad	n/a		
	a.3 Road Railer	n/a		
	a.4 Transfer/Loading Dock	n/a		
	a.5 Storage Tracks	n/a		
	a.6 Trailer Storage	n/a		
	a.7 Lighting	n/a		
9.	**Pedestrian Walkways**			
	a.1 Canopy Link to Platforms			As needed.
	a.2 Pedestrian path of travel from parking			Must be ADA-compliant
	a.3 Emergency egree from platform			Must be ADA-compliant to area of refuge or city row
10.	**Typical Signage**			
	a. 2001 Graphic Standards			
	b. Platform and Add'l Special Signag			
Total Station Area - Interior and Exterior[5]		**5,162**	**sf**	

NOTES:

Port Huron, MI Station nctional and Space Requirements

Exhibit 1

	Functional Requirements[1]	2033 Requirements	Notes
1	See Station Design Guidelines for functional area and amenities required		
2	Total square footage per [cite lease documentation or other baasis]		