## Appendix L – Landscape Design Report



407 TRANSITWAY – WEST OF HURONTARIO STREET TO EAST OF HIGHWAY 400 MINISTRY OF TRANSPORTATION - CENTRAL REGION

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Landscape Architecture + Urban Design

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# 407 TRANSITWAY FROM WEST OF HURONTARIO STREET TO EAST OF HIGHWAY 400 TRANSPORTATION PROJECT ASSESSMENT PROCESS G.W.P. 14-20001

407 TRANSITWAY (Hurontario Street to Highway 400) LANDSCAPE COMPOSITION

#### **PROJECT DESCRIPTION**

The Ontario Ministry of Transportation (MTO) is undertaking the Transportation Project Assessment Process (TPAP) of the 407 Transitway from west of Hurontario Street in the City of Brampton, Region of Peel to east of Highway 400 in the City of Vaughan, Region of York. The study area is also located directly adjacent to the City of Mississauga and the City of Toronto and extends slightly within the City of Mississauga and City of Toronto boundaries in a few locations. The project limits are presented in Figure 1.

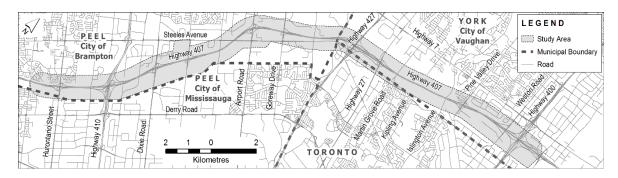


FIGURE 1. KEY PLAN OF STUDY AREA

The study is following the Transit Project Assessment Process (TPAP) prescribed in *Ontario Regulation 231/08, Transit Projects and Metrolinx Undertakings* under the *Environmental Assessment Act.* The 407 transitway will be a two-lane, fully grade separated transit facility on an exclusive right-of-way, running along the Highway 407 Corridor. This section of the transitway facility will consist of 23 km of runningway and seven stations. The station layouts will include vehicular and pedestrian access, park and ride and passenger pick-up/drop off (PPUDO) facilities, bus lay-by facilitates, on street integration with local transit, shelters, buildings and other amenities. Subject to the outcome of the study, the 407 Transitway will be implemented initially as Bus Rapid Transit (BRT) with the opportunity to convert to Light Rail Transit (LRT) in the future.

This 23 km segment forms part of the 150 km long high-speed interregional facility planned to be ultimately constructed on a separate right-of-way that parallels Highway

407 from Brant Street in Burlington to Highway 35/115 in Clarington, with stations, parking and access connections. This transitway is a component within the official plans of the stakeholder municipalities and of the Province's commitment to support transit initiatives in the Greater Golden Horseshoe through the Metrolinx Regional Transportation Plan.

Generally, the 407 Transitway follows the swath of vacant land associated with the 407 ETR corridor.

This report provides an inventory and general evaluation of the existing landscape composition and the aesthetic/visual conditions associated with the proposed 407 Transitway runningway and station sites. The Existing Landscape Composition Analysis drawings are presented in Figures 2 to 18. The Landscape Composition Recommended Planting Layout drawings are presented in Figures 19 to 45 and provide a preliminary landscape planting layout for the runningway and seven station sites.

Field work for this report was carried out in November 2015 and September 2016.

The report has been divided into the following eight (8) segments. These segments have been subdivided into smaller sections that include station sites/runningway sections (heading in an easterly direction):

#### Segment A: Hurontario Street Station to East of Kennedy Road

- Hurontario Street Station (west terminus)
- Hurontario Street Station to east of Kennedy Road

#### Segment B: East of Kennedy Road to West of Tomken Road

East of Kennedy Road to west of Tomken Road

#### Segment C: West of Tomken Road to East of Torbram Road

- West of Tomken Road to Dixie Station
- Dixie Road Station
- Dixie Road Station to Bramalea Road
- Bramalea Road to east of Torbram Road

#### Segment D: East of Torbram Road to East of Goreway Drive

- East of Torbram Road to Airport Road Station
- Airport Road Station
- Airport Road Station to Goreway Drive Station
- Goreway Drive Station

#### Segment E: East of Goreway Drive to East of Highway 427

- East of Goreway Drive to Highway 50 Station
- Highway 50 Station
- Highway 427 Interchange

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#### Segment F: East of Highway 427 to just East of Martin Grove Road

- East of Highway 427 to Highway 27 Station
- Highway 27 Station
- Highway 27 Station to just east of Martin Grove Road

#### Segment G: Just East of Martin Grove Road to West of Islington Avenue

Just East of Martin Grove Road to west of Islington Avenue

#### Segment H: West of Islington Avenue to Immediately East of Highway 400

- Pine Valley Station
- Pine Valley Station to Weston Road
- Weston Road to immediately east of Highway 400 (east terminus)

#### **GENERAL AESTHETICS**

The transitway is to be constructed as a two-lane roadway, dedicated to only BRT traffic and eventually LRT traffic. It will be constructed at/near existing grade except where it crosses over/under cross streets, interchange ramps, rail lines, valley lands and 407 ETR. The transitway crosses over numerous watercourses/valley lands including the topographically significant valley lands associated with Fletchers Creek, Etobicoke Creek (West Branch), West Humber River, Rainbow Creek and the Lower Humber River.

There are very limited views from the corridor to the north and south due to the relatively flat geography of the area and the surrounding development. The most significant views are available to the east and west along the 407 ETR corridor.

One of the most significant visual elements along the transitway is the overhead Hydro transmission lines. Parallel transmission lines extend along the south side of the proposed transitway between the west end of the study area and east of Airport Road and again west of Pine Valley Drive to the easterly study limits. Transmission lines also extend along the north side of 407 ETR in the vicinity of Goreway Drive and again from west of Highway 427 to west of Pine Valley Drive.

The visual character/aesthetics of each site will be discussed in more detail in the following analysis of the individual portions of the proposed transitway.

The following portion of the report focuses on the surrounding land uses and visual elements and includes an analysis of the existing woody vegetation communities along the proposed transitway. As the study progresses through the Preliminary Design stage, the runningway and station sites may change slightly.

#### TRANSITWAY RUNNINGWAY/STATION SITE DESCRIPTIONS

Below is a description of the various components of the transitway (runningway and seven station sites) starting at the west end of the study area. Figures 2 to 18 provide a general map of the study area.

#### Segment A: West of Hurontario Street to east of Kennedy Road

This segment of the Transitway is subdivided into the following two sections:

- Hurontario Street Station
- Hurontario Street Station to east of Kennedy Road

#### **Hurontario Street Station**

General Location and Surrounding Land Uses:

The proposed Hurontario Street Station site is located on the west side of Hurontario Street. This site is currently a combination of cultivated land and vacant land and a portion of the site is located within the hydro corridor lands.

Surrounding land uses include:

- North = 407 ETR corridor and off-ramp (north of the 407 ETR there is a strip of vacant land flanked by a residential subdivision)
- East = Hurontario Street
- South = hydro corridor, vacant lands
- West = hydro corridor, hydro sub-station and vacant lands

Visual Character/Impact of the Site:

The station site is relatively flat.

Visual access to the proposed station is very limited except for the 407 ETR traffic. The residential subdivision to the north is well separated from the site and visual impacts will be minimal.

The station complex will include station buildings and expansive parking lots. As the station is located close to busy collector roads it will be considered to have moderate visual impacts.

**Existing Woody Vegetation:** 

The site does not have any woody vegetation communities.



**Photograph #1:** Looking west from Hurontario Street towards the proposed site of the Hurontario Street Station.

#### Hurontario Street Station to east of Kennedy Road

General Location and Surrounding Land Uses:

This link between the proposed Hurontario Street Station and Kennedy Road is approximately 1.2 kilometres in length. The proposed transitway route follows the south side of 407 ETR. The runnigway crosses over a small stream channel (Tributary of Etobicoke Creek West Branch).

The transitway route along the south side of 407 ETR is located in a swath of vacant land that parallels the highway. This area of vacant land is flanked to the south by a variety of land uses including:

- Vacant and cultivated lands, some associated with the adjacent hydro corridor
- Commercial/industrial land uses (located several hundred metres from the proposed transitway corridor route)

407 ETR is located on the north side of the proposed transitway corridor. The lands along the north side of the highway include:

- Vacant lands
- Residential subdivisions
- Golf course

Visual Character/Impacts of the Corridor:

The landscape through this section of the proposed transitway route is relatively flat. The residential subdivision and golf course, located on the north side of 407 ETR, are well separated from the corridor by vacant lands, a wooded area and the highway.

The commercial/industrial land uses to the south do not 'face' the runningway which will be exposed to the rear of the properties.

**Existing Woody Vegetation:** 

The only woody vegetation located in the vicinity of this section of the transitway corridor is a narrow area of widely scattered trees and shrubs located along the stream channel.



**Photograph #2:** A view looking east from Hurontario Street. The proposed runningway is located in vacant land beyond the hydro transmission corridor.



**Photograph #3:** A view of the proposed runningway corridor looking west from Kennedy Road with vacant/cultivated lands on the south side of 407 ETR.

#### Segment B: East of Kennedy Road to west of Tomken Road

General Location and Surrounding Land Uses:

This link between Kennedy Road and the west side of Tomken Road is approximately 1.8 kilometres in length. The transitway follows the south side of 407 ETR. The proposed corridor crosses the south section of the 407 ETR/Highway 410 interchange. The corridor crosses Etobicoke Creek West and a few small stream channels (Tributaries of Etobicoke Creek West) located to the east of Kennedy Road.

A good portion of this section of the route is occupied by the 407 ETR/Highway 410 interchange. To the east and west of the interchange area the transitway is located in a swath of vacant land that parallels the highway. This area of vacant land is flanked to the south by a variety of land uses including:

- Vacant lands and cultivated lands associated with the hydro corridor
- Tomken Road corridor (along the most easterly portion of this section)
- The Etobicoke Creek West valley lands

407 ETR is located on the north side of the proposed transitway corridor. The lands along the north side of the highway include:

- Vacant lands
- The Brampton Centre for Sports and Entertainment, including outdoor sports fields
- The Etobicoke Creek West valley lands

Visual Character/Impacts of the Corridor:

The landscape through this section of the proposed transitway corridor is relatively flat.

There are no visually sensitive land uses to the north.

The commercial/industrial land uses to the south do not 'face' the runningway which will be exposed to the rear of the properties.

Existing Woody Vegetation:

There are some widely scattered landscape plantings associated with the 407 ETR/Highway 410 interchange.

The only other woody vegetation located in the vicinity of this section of the transitway corridor is the scattered vegetation (pioneer species) located in the Etobicoke Creek West valley lands.



**Photograph #4:** Looking east from Kennedy Road along the proposed transitway corridor with the 407 ETR/Highway 410 interchange in the distance.



**Photograph #5:** Looking west from Farmhouse Court along the proposed transitway corridor with the 407 ETR/Highway 410 interchange in the distance.



**Photograph # 6:** A view from Farmhouse Court looking north-east to the original Highway 410 Station site (now eliminated).



**Photograph #7:** Looking west from Tomken Road along the proposed transitway corridor, with vacant/cultivated lands and the Etobicoke Creek West valley lands in the distance.

#### Segment C: West of Tomken Road to east of Torbram Road

This segment of the transitway corridor is subdivided into the following four sections:

- West of Tomken Road to Dixie Road Station
- Dixie Road Station
- Dixie Road Station to Bramalea Road
- Bramalea Road to east of Torbram Road

#### West of Tomken Road to Dixie Road Station

General Location and Surrounding Land Uses:

This link between Tomken Road and the Dixie Station is approximately 0.5 kilometres in length. The proposed route of the runningway follows the south side of 407 ETR, crossing Tomken Road and Dixie Road. The runningway crosses a small stream (Tributary of Etobicoke Creek West) located to the east of Dixie Road.

The proposed runningway passes through a construction storage site and an area of vacant land.

This proposed runningway is flanked to the south by a variety of land uses including:

- Vacant lands
- Vacant lands associated with the hydro corridor
- Industrial land uses (beyond the hydro corridor)

407 ETR is located on the north side of the proposed runningway. The lands along the north side of the 407 ETR include:

- Vacant lands
- Industrial land uses
- The Etobicoke Creek West valley lands

Visual Character/Impacts of the Corridor:

The landscape through this section of the proposed transitway corridor is relatively flat.

There are no visually sensitive land uses to the north.

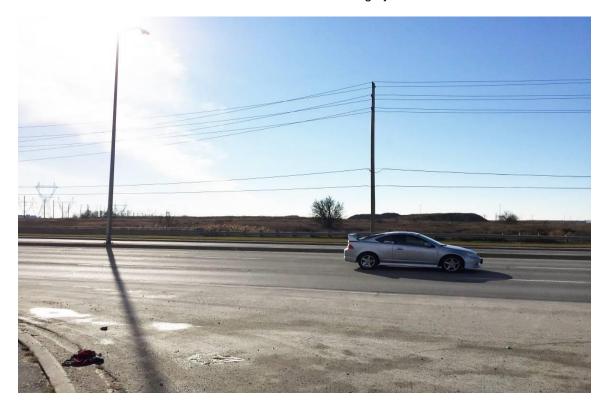
The commercial/industrial land uses to the south do not 'face' the transitway corridor and are well separated from the transitway corridor.

Existing Woody Vegetation:

There are no woody vegetation communities along this section of the transitway corridor.



**Photograph #8:** Looking east from Tomken Road along the proposed transitway corridor where the current land use includes an outdoor construction storage yard.



**Photograph #9:** Looking west from Dixie Road along the proposed transitway corridor showing existing flat vacant lands.

#### Dixie Road Station

General Location and Surrounding Land Uses:

This proposed station site is located on the north and south side of the proposed runningway corridor (south of 407 ETR) on the east side of Dixie Road. This site is flat and is currently occupied by a sports field complex.

Surrounding land uses include:

- North = 407 ETR corridor and on-ramp (beyond the 407 ETR there are vacant lands separating the highway from an industrial/commercial area)
- East = Spring Creek valley lands and sports field complex
- South = vacant lands associated with hydro corridor and industrial/commercial development beyond the hydro corridor
- West = Dixie Road

Visual Character/Impact of the Site:

The station site is relatively flat.

Visual access to the proposed station will be limited to 407 ETR traffic and users of the adjacent sports fields. The industrial/commercial land uses to the south are well separated from the site and are not visually sensitive.

The station complex will include station buildings and expansive parking lots. As the station is located close to busy collector roads it will be considered to have moderate visual impacts.

**Existing Woody Vegetation:** 

The site does not have any woody vegetation communities.



**Photograph #10:** A view looking east, of the proposed Dixie Road Station site from Dixie Road, currently occupied by sports fields.

#### Dixie Road Station to Bramalea Road

General Location and Surrounding Land Uses:

This link between the proposed Dixie Road Station and Bramalea Road is approximately 0.8 kilometres in length. The proposed route follows the south side of 407 ETR.

The transitway corridor crosses over the Spring Creek/Tributary of Spring Creek valley lands, areas of vacant land and beside a waste transfer facility.

This proposed transitway corridor is flanked to the south by a variety of land uses including:

- Vacant lands and valley lands
- Vacant lands associated with the hydro corridor (and a hydro sub-station)
- Industrial land uses (beyond the hydro corridor)

407 ETR is located on the north side of the proposed runningway. The lands along the north side of the highway (and north of the runningway) include:

- Vacant lands
- Sports field complex
- Spring Creek/Tributary of Spring Creek valley lands
- Industrial land uses

The transitway corridor will also pass along the south side of the waste transfer facility.

Visual Character/Impacts of the Corridor:

The landscape through this section of the proposed transitway corridor is relatively flat.

There are no visually sensitive land uses north of the 407 ETR corridor, however the sports fields located adjacent to the runningway will be impacted by the new facility.

The commercial/industrial land uses to the south do not 'face' the runningway and are well separated from the transitway corridor.

**Existing Woody Vegetation:** 

There are some scattered areas of woody vegetation located in the valleyland areas and some existing landscape plantings associated with the waste transfer facility.



**Photograph #11:** Looking west from Bramalea Road where the proposed runningway passes to the south of this waste transfer station.

#### Bramalea Road to east of Torbram Road

General Location and Surrounding Land Uses:

This link between Bramalea Road and Torbram Road is approximately 1.0 kilometre in length and crosses the CN Rail line and small tributaries of Mimico Creek. The proposed route follows the south side of 407 ETR.

The transitway corridor follows a narrow strip of vacant land located from Bramalea Road to 407 ETR on-ramp and an industrial complex before crossing over the CN rail tracks and three small stream channels (Tributaries of Mimico Creek).

The proposed transitway corridor is flanked to the south by the following land uses including:

- A light industrial complex
- Vacant lands associated with the hydro corridor and Tributary of Mimico Creek valley lands
- CN rail corridor

407 ETR is located on the north side of the proposed transitway corridor. The lands along the north side of the highway include:

- Vacant lands and Tributary of Mimico Creek valley lands
- CN rail corridor
- Industrial land uses

Visual Character/Impacts of the Corridor:

The landscape through this section of the proposed transitway corridor is relatively flat.

There are no visually sensitive land uses to the north.

The industrial land uses located along the south side of the corridor do not 'face' the runningway. There is a parking lot associated with the industrial area that will front onto the runningway.

#### Existing Woody Vegetation:

There are no significant areas of existing woody vegetation along this section of the transitway corridor.



**Photograph #12:** A view looking north along the east side of Bramalea Road showing the proposed corridor of the runningway between the street and an industrial complex.



**Photograph #13:** Looking west from Torbram Road overlooking the proposed runningway corridor located adjacent to 407 ETR just north of the hydro transmission corridor.

#### Segment D: East of Torbram Road to east of Goreway Drive

This segment of the Transitway is subdivided into the following four sections:

- East of Torbram Road to Airport Road Station
- Airport Road Station
- Airport Road Station to Goreway Drive Station
- Goreway Drive Station

#### East of Torbram Road to Airport Road Station

General Location and Surrounding Land Uses:

This link between east of Torbram Road and the proposed Airport Road Station is approximately 0.8 kilometres in length. The proposed route of the runningway follows the south side of 407 ETR.

This section of the transitway corridor crosses over a Tributary of Mimico Creek and its associated valley lands, Steeles Avenue and areas of vacant land.

This proposed transitway corridor is flanked to the south by a variety of land uses including:

- Vacant lands and valley lands
- Vacant lands associated with the hydro corridor
- Industrial land uses (beyond the hydro corridor)
- A community facility, Pearson Convention Centre (as it enters the proposed Airport Road Station)

407 ETR is located on the north side of the proposed transitway corridor. The lands along the north side of the highway include:

- Vacant lands and valley lands
- Industrial land uses

Visual Character/Impacts of the Corridor:

The landscape through this section of the proposed transitway corridor is relatively flat.

There are no visually sensitive land uses to the north.

The proposed transitway corridor will have a visual impact on the community facility, the Pearson Convention Centre, located on Steeles Avenue. This impact will be most significant to the parking area and the rear face of the facility. A shared site access agreement is in place for the transitway and Convention Centre at this site.

**Existing Woody Vegetation:** 

There are some scattered areas of woody vegetation located in the tributary of Mimico Creek valleyland areas.



**Photograph #14:** Looking east from Torbram Road along the proposed runningway route, where it will pass between 407 ETR and the hydro transmission corridor.



**Photograph #15:** Looking northeast from Steeles Avenue where the proposed runningway route passes between 407 ETR and the Pearson Convention Centre shown on the left of the photograph.

#### Airport Road Station

General Location and Surrounding Land Uses:

This proposed station site is located on the south side of the proposed runningway route in the north-west quadrant of the Steeles Avenue/Airport Road intersection. This site is flat and is currently vacant land.

Surrounding land uses include:

- North = 407 ETR corridor (beyond the 407 ETR there is an industrial area)
- East = Airport Road (beyond Airport Road is an industrial area)
- South = Steeles Avenue (beyond Steeles Avenue is an area of vacant land associated with the hydro utility corridor)
- West = community facility (Pearson Convention Centre)

Visual Character/Impact of the Site:

The station site is relatively flat.

The site is located in a high visibility area, adjacent to two busy collector roads.

The land use that will be most impacted by the site will be the community facility (Pearson Convention Centre) located immediately to the west of the site. As noted

above, a shared site access agreement is in place for the transitway and Convention Centre at this site.

The station complex will include station buildings and expansive parking lots. As the station is located close to busy collector roads it will be considered to have moderate visual impacts.

#### Existing Woody Vegetation:

The site has a small wooded area that appears to be a remnant of a woodlot combined with an early successional vegetation community.



**Photograph #16:** Looking west from Airport Road over the proposed site of the Airport Road Station located in this area of vacant land on the south side of 407 ETR.

#### Airport Road Station to Goreway Drive Station

General Location and Surrounding Land Uses:

This link between the proposed Airport Road and Goreway Drive Station site is approximately 1.0 kilometre in length. The proposed route follows the south side of 407 ETR. This section of the proposed transitway crosses Airport Road, the CN rail corridor, two Tributaries of Mimico Creek, Mimico Creek and some vacant lands.

This section of the corridor is flanked to the south by a variety of land uses including:

- An industrial subdivision
- CN rail corridor
- Vacant lands associated with the hydro corridor
- Mimico Creek/Tributary of Mimico Creek valley lands

407 ETR is located on the north side of the proposed runningway. The lands along the north side of the highway include:

Vacant lands

- CN rail corridor
- Industrial subdivisions/outdoor industrial storage
- Mimico Creek/Tributary of Mimico Creek valley lands

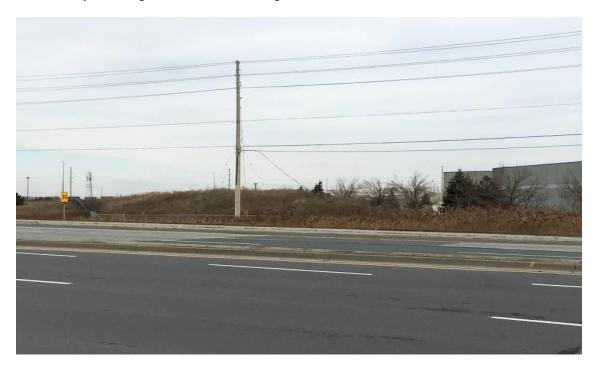
#### Visual Character/Impacts of the Corridor:

The landscape through this section of the proposed transitway corridor is relatively flat. There are no visually sensitive land uses to the north.

The industrial land uses located along the south side of the transitway corridor do not 'face' the runningway. There is a parking lot associated with the industrial area that will front onto the runningway.

#### Existing Woody Vegetation:

The only woody vegetation located in the vicinity of this section of the transitway corridor is the valleyland vegetation located along Mimico Creek/the Tributaries of Mimico Creek.



**Photograph #17:** Looking east from Airport Road along the proposed transitway corridor where it will follow a narrow strip of vacant land between 407 ETR and an industrial subdivision.

#### **Goreway Drive Station**

#### General Location and Surrounding Land Uses:

This proposed station site is located on the south side of the proposed transitway corridor in the north-west quadrant of the Steeles Avenue/Goreway Drive intersection. This site is flat and is currently vacant land.

#### Surrounding land uses include:

- North = 407 ETR corridor (beyond the 407 ETR there is an area of vacant/wooded land)
- East = Goreway Drive (beyond Goreway Drive is an area of vacant land)
- South = Steeles Avenue (on the south side of Steeles Avenue is a strip of industrial/warehouse buildings)
- West = vacant land associated with the hydro utility corridor

Visual Character/Impact of the Site:

The station site is relatively flat.

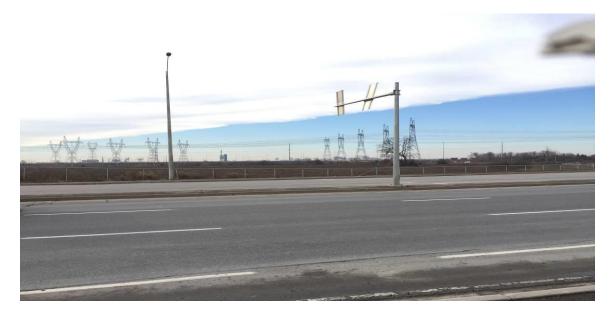
The site is located in a high visibility area, adjacent to two busy collector roads.

There are no visually sensitive land uses in the immediate area of the proposed station site.

The station complex will include station buildings and expansive parking lots. As the station is located close to busy collector roads it is considered to be in keeping with its surroundings.

**Existing Woody Vegetation:** 

The site does not have any existing woody vegetation.



**Photograph #18:** Looking west from Goreway Drive at the site of the proposed Goreway Drive Station.

#### Segment E: East of Goreway Drive to east of Highway 427

This segment of the Transitway is subdivided into the following three sections:

- East of Goreway Drive to Highway 50 Station
- Highway 50 Station
- Highway 50 Station to east of Highway 427

#### East of Goreway Drive to Highway 50 Station

General Location and Surrounding Land Uses:

This link between the east side of Goreway Drive to the proposed Highway 50 Station is approximately 2.0 kilometres in length. The proposed route follows a strip of land between Steeles Avenue and the south side of 407 ETR. This section of the proposed transitway crosses a tributary of Mimico Creek, Gorewood Drive, the West Humber River and its valley lands and Highway 50.

The route passes through generally vacant/cultivated lands, two watercourses, a storage area and some scattered areas of remnant woodlot areas. The significant landscape feature along this section of the transitway corridor is the West Humber River valley lands area. The West Humber River corridor has a recreational trail located along the west bank of the river.

This section of the transitway corridor is flanked to the south by Steeles Avenue. Beyond Steeles Avenue are a variety of land uses including:

- An industrial subdivision
- Vacant lands
- Wildwater Kingdom outdoor recreation facility
- West Humber River valley lands and Tributary of Mimico Creek

407 ETR is located on the north side of the proposed transitway corridor. The lands along the north side of the highway include:

- Vacant lands
- Single family residences along Gorewood Drive
- Industrial subdivision
- West Humber River valley lands/Tributary of Mimico Creek

Visual Character/Impacts of the Corridor:

The landscape through this section of the proposed transitway corridor is relatively flat except where the transitway crosses over the West Humber River valley lands.

There are no visually sensitive land uses to the north.

The Wildwater Kingdom site is well buffered from the proposed corridor by existing vegetation and topography.

The most significant impact will be to the recreational trail along the West Humber River.

**Existing Woody Vegetation:** 

The only woody vegetation located in the vicinity of this section of the transitway corridor is the valleyland vegetation located along the West Humber River and the upland area to the west of the valley lands.



**Photograph #19:** Looking northwest from Steeles Avenue at the proposed transitway corridor where it passes through an area of vacant land along the south side of 407 ETR.



**Photograph #20:** Looking west along the proposed transitway corridor where it passes through a narrow strip of treed land between Steeles Avenue and 407 ETR.



**Photograph #21:** Looking east along the proposed transitway corridor between 407 ETR and Steeles Avenue where it crosses over the West Humber River.

#### Highway 50 Station

General Location and Surrounding Land Uses:

This proposed station site is located on both the north and south sides of the proposed transitway corridor. The station will be located on the north and south side of Steeles Avenue immediately adjacent to the south side of 407 ETR and east of Highway 50/Albion Road. A portion of the proposed station facility (parking) is located on the south side of Steeles Avenue. This site is flat and is currently vacant land.

Surrounding land uses include:

- North = 407 ETR corridor (beyond the 407 ETR there is an area of vacant land)
- East = 407 ETR/Highway 427 interchange
- South = Codlin Crescent (south of Steeles Avenue including a strip of industrial/warehouse buildings)
- West = Highway 50/Albion Road (beyond Albion Road is an area of vacant land and the West Humber River valley lands)

Visual Character/Impact of the Site:

The station site is relatively flat.

The site is located in a high visibility area as it is adjacent to three busy collector roads.

There are no visually sensitive land uses in the immediate area of the proposed station site.

The station complex will include station buildings and expansive parking lots. As the station is located close to busy collector roads it is considered to be in keeping with the surrounding area.

**Existing Woody Vegetation:** 

The site does not have any existing vegetation.



**Photograph #22**: The site of the proposed Highway 50 Station is located in vacant lands on the north and south side of Steeles Avenue with the 407 ETR/Highway 427 interchange in the background.

#### Highway 50 Station to east of Highway 427

General Location and Surrounding Land Uses:

This section of the transitway corridor passes through the 407 ETR/Highway 427 interchange area on the south side of 407 ETR.

The route passes through generally vacant lands and open space areas associated with the 407 ETR/Highway 427 interchange.

Visual Character/Impacts of the Corridor:

This section of the runningway will be visible from vehicular traffic passing through the interchange area.

**Existing Woody Vegetation:** 

There are some scattered landscape plantings located within the interchange area.

#### Segment F: East of Highway 427 to just east of Martin Grove Road

This segment of the Transitway is subdivided into the following three sections:

- East of Highway 427 to Highway 27 Station
- Highway 27 Station
- Highway 27 Station to just east of Martin Grove Road

#### East of Highway 427 to Highway 27 Station

General Location and Surrounding Land Uses:

This section of the transitway from east of Highway 427 to the proposed Highway 27 Station site is approximately 0.5 kilometres in length. The proposed route passes along a narrow stretch of vacant land adjacent to the south side of the 407 ETR corridor.

The corridor is flanked to the south by vacant lands and the 407 ETR head office and service yard. Beyond these land uses is Steeles Avenue. The area to the south of Steeles Avenue includes a variety of land uses including:

- An industrial subdivision
- Vacant lands

407 ETR is located on the north side of the proposed transitway corridor. The lands along the north side of the 407 ETR include:

- Vacant and cultivated lands
- Queen of Heaven Cemetery

Visual Character/Impacts of the Corridor:

The landscape through this section of the proposed transitway corridor is relatively flat.

There are no visually sensitive land uses in the immediate area of this section of the proposed transitway.

Existing Woody Vegetation:

This section of the transitway corridor does not pass through any areas of existing vegetation.



**Photograph #23**: Looking northeast from Steeles Avenue along the proposed transitway where it passes through vacant lands adjacent to the 407 ETR offices and yard.

#### Highway 27 Station

General Location and Surrounding Land Uses:

This proposed station site is located on the south side of the proposed transitway corridor. The station will be located on the north side of Steeles Avenue immediately adjacent to the south side of 407 ETR and west of Highway 27. This site is flat and is currently vacant land and is located at the site of Albion Creek.

Surrounding land uses include:

- North = 407 ETR corridor (beyond the 407 ETR there is an area of vacant land separating the 407 ETR from the Queen of Heaven Cemetery)
- East = Highway 27 (beyond the Highway 27 is an area of vacant/cultivated land)
- South = Steeles Avenue (on the south side of Steeles Avenue is a strip of industrial/warehouse buildings)
- West = 407 ETR head office and service yard

Visual Character/Impact of the Site:

The station site is relatively flat.

The site is located in a high visibility area, as it is adjacent to three busy collector roads.

There are no visually sensitive land uses in the immediate area of the proposed station site.

The station complex will include station buildings and expansive parking lots. As the station is located close to busy collector roads it is considered to be in keeping with the surrounding areas.

#### **Existing Woody Vegetation:**

The site does not have any existing vegetation.



**Photograph #24:** Looking west from Highway 27 over the proposed site of the Highway 27 Station to be located in these vacant lands on the north side of Steeles Avenue.

#### Highway 27 Station to just east of Martin Grove Road

General Location and Surrounding Land Uses:

This portion of the transitway link between the proposed Highway 27 Station site and just east of Martin Grove Road is approximately 0.75 kilometres in length. The proposed runningway passes along the south side of 407 ETR.

The proposed transitway route passes through generally vacant and cultivated lands as well as a Tributary of the Rainbow Creek. A north/south overhead hydro transmission corridor crosses the transitway.

This section of the proposed transitway route is flanked to the south by a Tributary of Rainbow Creek, Steeles Avenue and a large industrial/warehouse facility. The area to the south of Steeles Avenue includes a variety of land uses including:

- An industrial subdivision
- Vacant lands
- CN rail line

407 ETR is located on the north side of the proposed transitway corridor. The lands along the north side of the 407 ETR include:

- Vacant lands and Tributary of the Rainbow Creek
- An industrial/warehouse facility

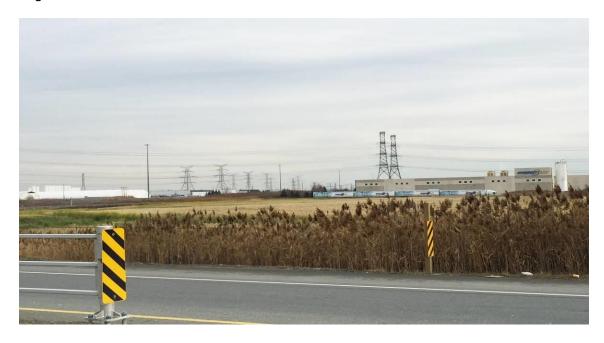
Visual Character/Impacts of the Corridor:

The landscape through this section of the proposed transitway route is relatively flat.

There are no visually sensitive land uses in the immediate area of this section of the proposed runningway.

Existing Woody Vegetation:

This section of the transitway corridor does not pass through any areas of existing vegetation.



**Photograph #25:** Looking east from Highway 27 along the proposed transitway route where it passes through an area of vacant/cultivated land along the south side of 407 ETR before passing behind the industrial complex in the background.



**Photograph #26:** Looking west from Martin Grove Road along the proposed transitway route where it will cross these vacant/cultivated lands along the south side of Highway 427.



Photograph #27: Looking east from Martin Grove Road over vacant lands

#### Segment G: Just east of Martin Grove Road to west of Islington Avenue

General Location and Surrounding Land Uses:

This link, between Martin Grove Road and Islington Avenue, is approximately 2.5 kilometres in length. The proposed route passes along the south side of 407 ETR.

The corridor passes through vacant lands, wooded areas located in the Thackeray Park Lands, and the Lower Humber River/Rainbow Creek valley lands. The corridor crosses the CPR (Mactier) rail line and Islington Avenue.

This section of the corridor is flanked to the south by the CN rail line. The area to the south of the CN Rail line is predominantly vacant and/or wooded.

407 ETR is located on the north side of the proposed transitway corridor. The lands along the north side of 407 ETR include:

Vacant/wooded lands and the Lower Humber River/Rainbow Creek valley lands

#### Visual Character/Impacts of the Corridor:

The landscape through this section of the proposed transitway corridor is dominated by the Humber River/Rainbow Creek valley lands that extend through most of this section of the route.

There are no visually sensitive land uses in the immediate area of this section of the proposed runningway. Any visual access from the south is blocked by the CN rail embankment.

#### Existing Woody Vegetation:

This section of the transitway corridor passes through a predominantly wooded area associated with the Humber River/Rainbow Creek valley lands.



**Photograph #28:** Looking west from Islington Avenue along the proposed transitway route where it passes through an area of vacant land before entering the Lower Humber River/Rainbow Creek valley lands.

#### Segment H: West of Islington Avenue to immediately east of Highway 400

This segment of the Transitway is subdivided into the following three sections:

- Pine Valley Drive Station
- Pine Valley Drive Station to Weston Road
- Weston Road to immediately east of Highway 400

#### Pine Valley Drive Station

General Location and Surrounding Land Uses:

This proposed station site is located on the south side of the proposed transitway corridor. The station is proposed on the north side of the CN rail line immediately adjacent to the south side of 407 ETR between Islington Avenue and Pine Valley Drive. This site is flat and is currently vacant land.

Surrounding land uses include:

- North = 407 ETR corridor (beyond the 407 ETR there is an area of vacant land associated with a hydro transmission corridor)
- East = vacant land associated with a hydro transmission corridor
- South = CN rail line (beyond the rail line is a tributary of the Lower Humber River and an industrial subdivision)
- West = Islington Avenue (beyond the roadway is an area of vacant land)

Visual Character/Impact of the Site:

The station site is relatively flat.

There are no visually sensitive land uses in the immediate area of the station site. The industrial subdivision backs onto the rail line. Visual access to the site is limited due to the grade of the tracks and woody vegetation located along both sides of the rail line.

The station complex will include station buildings and expansive parking lots. As the station is located close to busy collector roads it is considered to be in keeping with the surrounding area.

Existing Woody Vegetation:

The station site has some scattered early successional vegetation located throughout the site.



**Photograph #29:** Looking east from Islington Avenue at the vacant lands on the site of the proposed Pine Valley Drive Station.

#### Pine Valley Drive Station to Weston Road

General Location and Surrounding Land Uses:

This link between the proposed Pine Valley Drive Station site and Weston Road is approximately 2.5 kilometres in length. The proposed corridor passes through an area of vacant land flanked on the south by the CN rail line. The Hydro transmission corridor is located immediately to the north of the proposed transitway route.

The corridor passes through vacant lands, and crosses over Pine Valley Drive and a Tributary of the Lower Humber River.

This section of the runningway is flanked to the south by the CN rail line. An industrial subdivision (Steeles West Industrial Park) occupies the land south of the CN rail line.

The lands on the north side of the proposed runningway are vacant/cultivated lands associated with the hydro transmission corridor. The lands along the north side of the hydro transmission corridor include:

- An industrial/warehouse complex
- An industrial subdivision (Emery Creek Corporate Park)
- Vacant lands and a Tributary of the Lower Humber River

The proposed runningway also passes across an access road and landscaped lands associated with an industrial/warehouse complex located on the east side of Pine Valley Drive.

#### Visual Character/Impacts of the Corridor:

There are no visually sensitive land uses in the immediate area of this section of the proposed transitway. Any visual access from the south is blocked by the CN rail embankment and wooded area located on the south side of the tracks.

The industrial/warehouse complex located on the east side of Pine Valley Drive will be visually impacted by the runningway as it fronts onto the proposed route.

#### **Existing Woody Vegetation:**

This section of the proposed transitway corridor does not pass through any significant areas of woody vegetation.



**Photograph #30:** Looking west from Pine Valley Drive along the proposed transitway corridor where it will pass through these vacant lands.



**Photograph #31:** Looking east from Pine Valley Drive along the proposed transitway corridor where it will pass through these vacant lands along the hydro transmission corridor north of the CN rail line.



**Photograph #32**: Looking west from Weston Road over the proposed transitway corridor to be located in these vacant lands north of the CN rail line.

## Weston Road to immediately east of Highway 400

General Location and Surrounding Land Uses:

This section of the proposed transitway corridor runs between Weston Road and the East Terminus located immediately east of Highway 400. This section of the route is approximately 1.5 kilometres in length. The proposed runningway is flanked on the south by the CN rail line with the hydro transmission line corridor to the north (and to the south in the area east of Highway 400).

The corridor passes through vacant lands.

As noted above, this section of the transitway corridor is flanked to the south by the CN rail line. An industrial subdivision (Steeles West Industrial Park) occupies the land south of the CN rail line in the area between Weston Road and Highway 400.

The runningway passes through a large area of vacant/cultivated lands associated with the Hydro transmission corridor on the east side of Highway 400.

The lands on the north side of the proposed transitway corridor are vacant/cultivated lands associated with the hydro transmission corridor. The lands along the north side of hydro transmission corridor include:

- An industrial/warehouse complex located between Weston Rd and Highway 400
- 407 ETR corridor
- Vacant lands.

Visual Character/Impacts of the Corridor:

There are no visually sensitive land uses in the immediate area of this section of the proposed transitway.

**Existing Woody Vegetation:** 

This section of the proposed transitway corridor does not pass through any significant areas of woody vegetation.



**Photograph #33:** Looking east from Weston Road along the proposed transitway corridor where it will pass through these vacant lands north of the CN rail line. Highway 400 is in the distance.

## CONCLUSIONS

In general, the proposed transitway follows a strip of vacant/cultivated land along the south side of the 407 ETR corridor. Some of the vacant lands have evidence of natural regeneration of pioneer tree species starting to occur. There are a few small remnant wooded areas located along the proposed transitway. The most significant wooded areas are located in the valleyland areas associated with Fletchers Creek (just west of the study limits), Etobicoke Creek West, West Humber River, Rainbow Creek and the Lower Humber River.

The visual impacts of the proposed transitway corridor and station sites are typically low as the land uses in the surrounding area are dominated by industrial development and the 407 ETR corridor.

There are a few residential developments in the vicinity of the transitway. These residential areas are single family unit subdivisions and therefore low rise, having limited views due to noise barrier walls, existing vegetation or their distance from the transitway. The most visually sensitive land uses along the corridor are the open space areas associated with the valley lands that provide recreation activities and trails.

The proposed station sites are the areas of most visual concern as they will include station buildings and extensive parking lots.

Segmen t	Description	Visual Impact*	Impact on Existing Vegetation
Α	West of Hurontario Street to East of Kennedy Road		
	Hurontario Street Station	moderate	low
	Hurontario Street Station to east of Kennedy Road	low	low
В	East of Kennedy Road to West of Tomken Road		
	East of Kennedy Road to west of Tomken Road	low	moderate
С	West of Tomken Road to East of Torbram Road		
	West of Tomken Road to Dixie Road Station	low	low
	Dixie Road Station	moderate	low
	Dixie Road Station to Bramalea Road	low	moderate
	Bramalea Road to east of Torbram Road	low	low
D	East of Torbram Road to east of Goreway Drive		•
	East of Torbram Road to Airport Road Station	moderate	low
	Airport Road Station	moderate	moderate
	Airport Road Station to Goreway Drive Station	low	low
	Goreway Drive Station	moderate	low
E	East of Goreway Drive to east of Highway 427		
	East of Goreway Drive to Highway 50 Station	moderate	high
	Highway 50 Station	moderate	low
	Highway 427 interchange	low	low
F	East of Highway 427 to just east of Martin Grove Ro	ad	•
	East of Highway 427 to Highway 27 Station	moderate	low
	Highway 27 Station	moderate	low
	Highway 27 Station to east of Martin Grove Road	low	low
G	East of Martin Grove Road to west of Islington Aver	nue	
	Martin Grove Road to west of Islington Avenue	moderate	high
Н	West of Islington Avenue to immediately east of Highway 400		
	Pine Valley Station	moderate	low
	Pine Valley Station to Weston Road	low	low
	Weston Station to immediately east of Highway 400	moderate	low

#### EXISTING LANDSCAPE COMPOSITION ANALYSIS DRAWINGS

Figures 2 to 18 provide an analysis of the landscape composition along the Transitway corridor.

### LANDSCAPE COMPOSITION RECOMMENDED PLANTING LAYOUT DRAWINGS

Figures 19 to 45 provide recommended landscape planting treatments for the runningway corridor route.

The Landscape Composition Recommended Planting Layout drawings for the proposed transitway runningway provide landscape plantings to mitigate impacts to the adjacent natural and cultural environment. These landscape plantings will also serve to provide 'greening' to the corridor, add tree canopy cover and add to the overall general aesthetics of the project in the context of the existing and proposed surrounding urban development and the natural landscape features.

It is recommended that an ecological approach to restoration planting is developed. This approach to restoration planting will help to recover natural self-sustaining ecosystems, or ecosystem components that support and contribute to the inherent natural biodiversity of the area. This approach will focus on the use on native species.

The landscape restoration planting will be developed providing for the following functional vegetation communities listed below. The location of the various planting schemes will depend on the local conditions of the site and surrounding land uses. The recommended landscape treatments are illustrated on the Landscape Composition Recommended Planting Layout drawings for the Transitway (Figures 19 to 45).

The Landscape Composition Recommended Planting Layout drawings provide a guide for the detailed landscape planting plans, to be developed prior to construction.

The plans focus on a number of different planting layouts that have been designed for a variety of situations including the following:

**Woodland/Naturalization Planting**: a mix of native deciduous trees, coniferous trees and shrubs

(plantings to be installed in areas where space is available for significant random planting initiatives)

**Visual/Noise Screen without Wall:** a mix of deciduous trees, coniferous trees, and shrubs to be planted in a wide band

(plantings to be installed where space is available to provide a buffer between the transitway and surrounding sensitive land uses)

**Shrub Massing**: a mix of shrubs, perennials and ornamental grasses (plantings to be installed in high profile locations including station site, gateways, high profile sites along the corridor)

**Embankment/Slope Stabilization:** a mix of coniferous trees, shrubs, and live stakes, (plantings to be installed in scattered groups along steep banks beside the transitway corridor and stations)

**Valley Restoration:** a mix of native riparian plantings to meet Conservation Authority requirements (plantings to be installed at valleyland crossings)

Riparian Plantings: a mix of native riparian plantings to meet Conservation Authority requirements (plantings to be installed at stream channel crossings)

Storm Water Management: a mix of native riparian, emergent and submergent vegetation (plantings to be installed around Storm Water Management Ponds)

Forest Edge Management: a mix of locally native tree and shrub species to complement/match the adjacent vegetation communities (plantings to be installed where the transitway passes beside disturbed woodland edge)

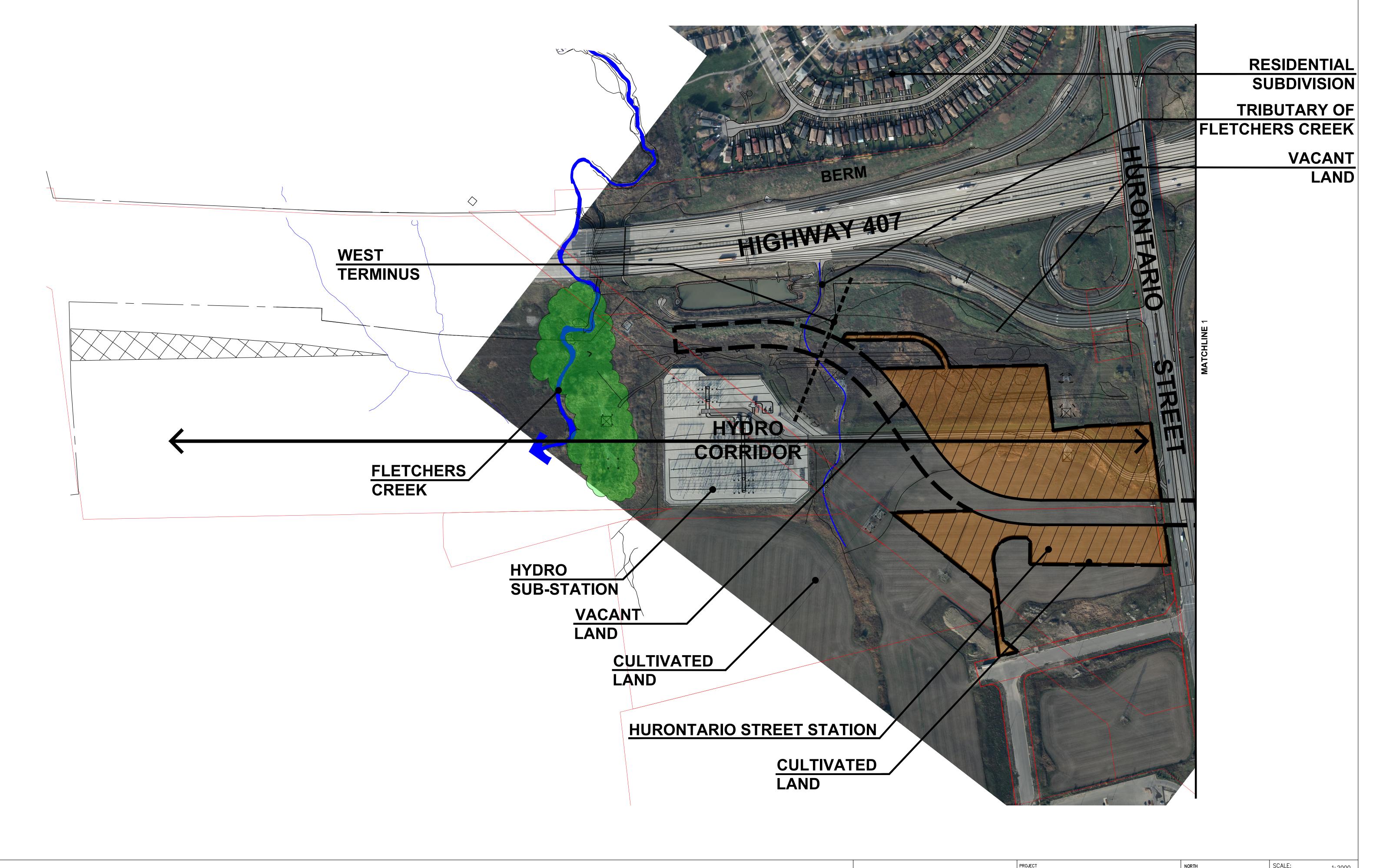
Preliminary planting plans have not been provided for the station sites. Landscape planting plans will be considered and incorporated into the design as necessary at the station sites prior to implementation. Plantings shall be used within the station sites as part of implementation and shall include areas for canopy cover, pedestrian shading, and vegetative buffers through discussions with impacted agencies including municipalities.

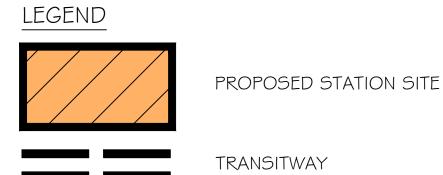
The detailed landscape plans for the station sites can also take on an ecological approach in coordination with more typical landscape design features.

Report prepared by:

James McWilliam, BES, BLA, OALA, CSLA McWilliam & Associates

Hewill











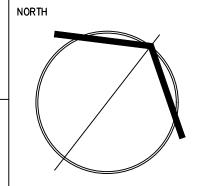


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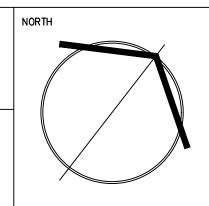




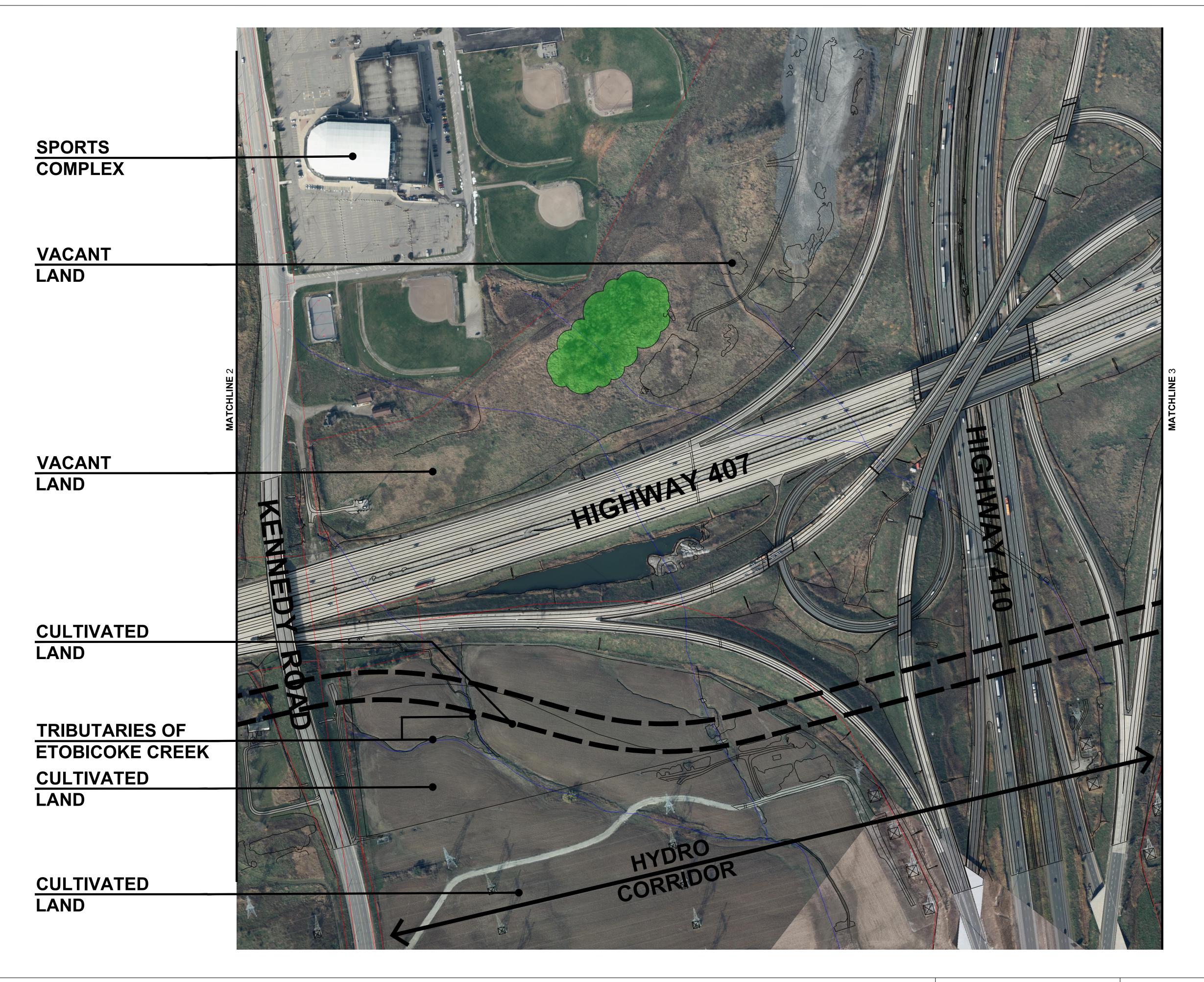


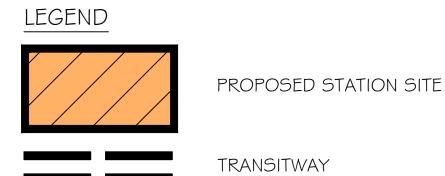






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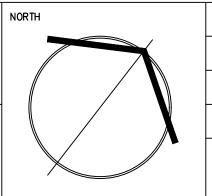




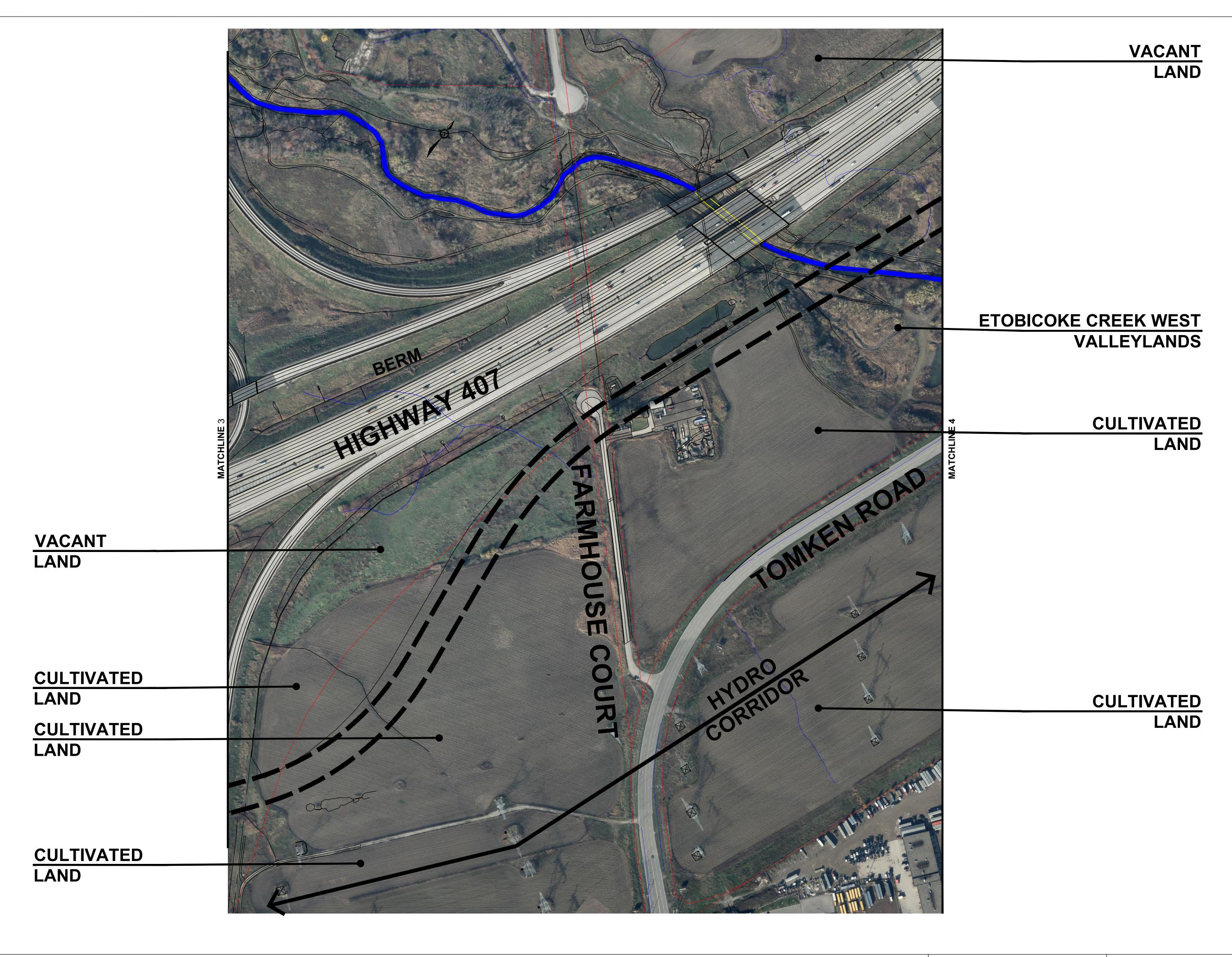


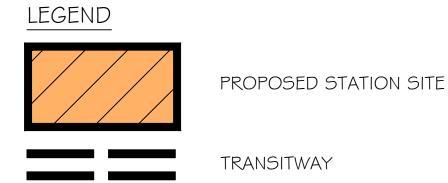






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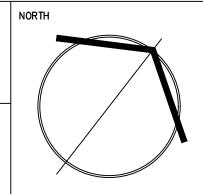
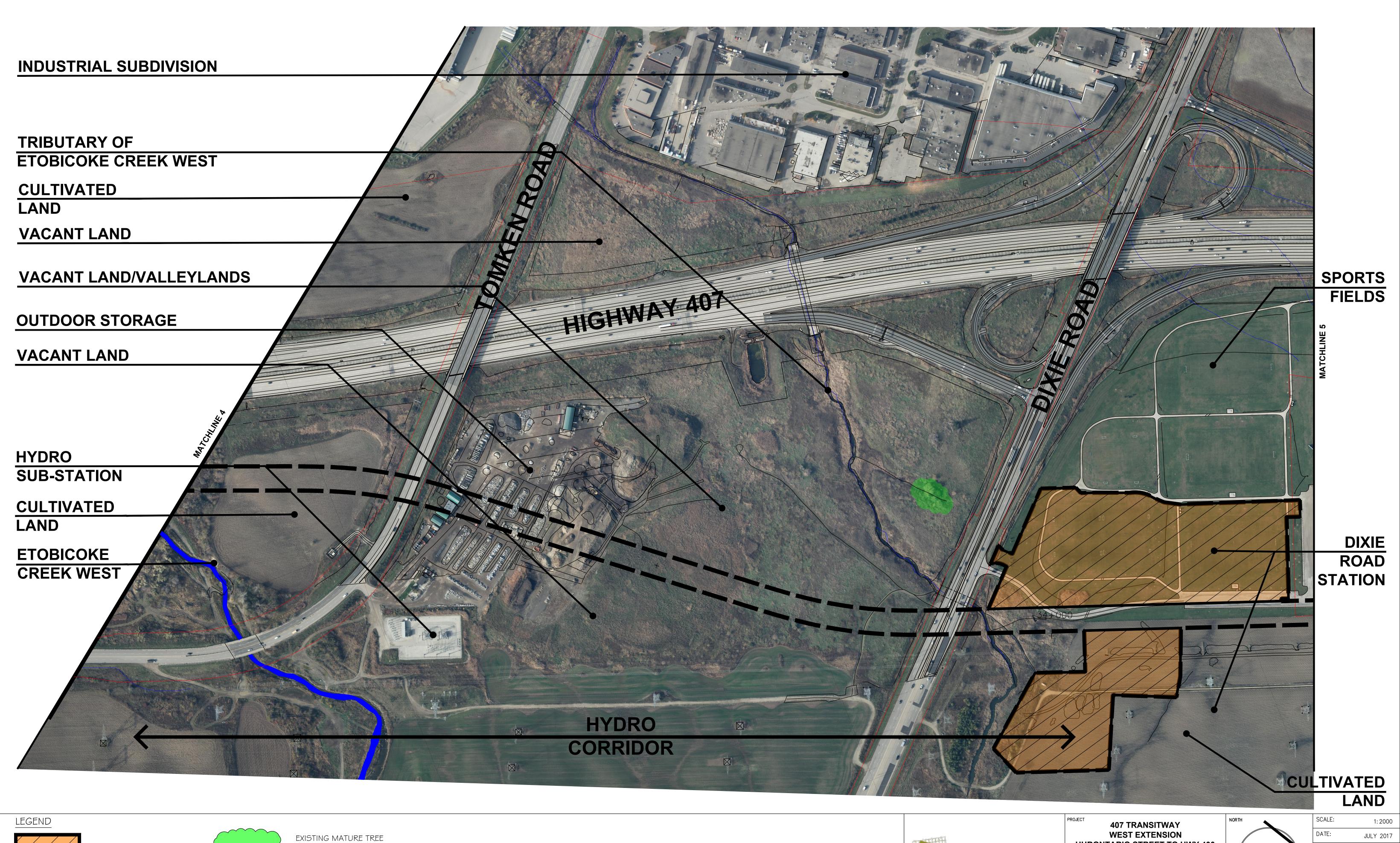
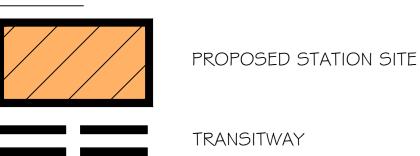


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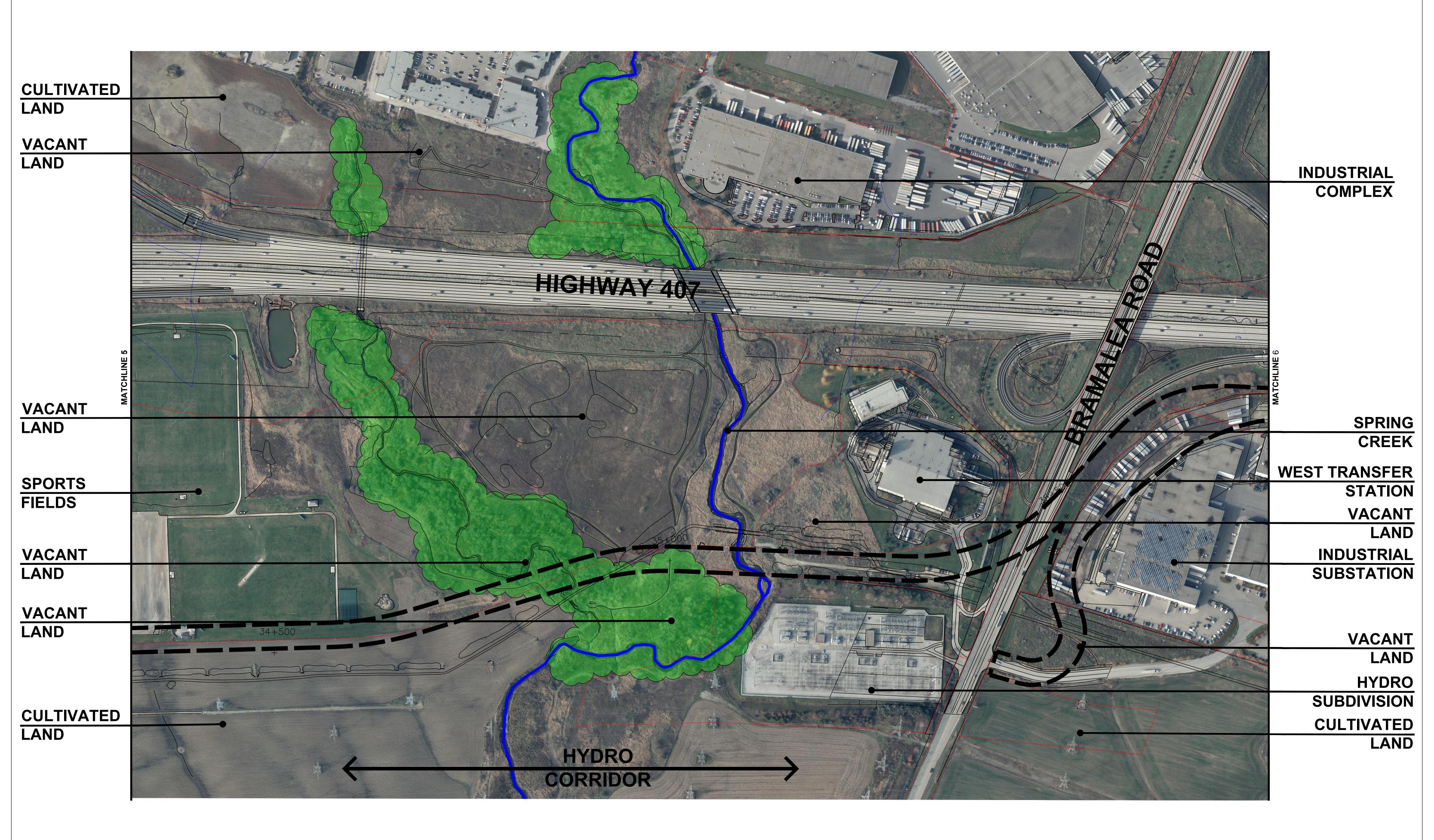


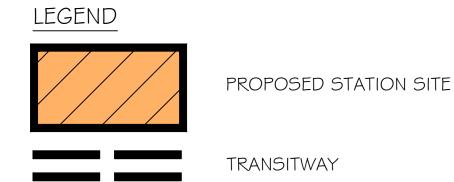
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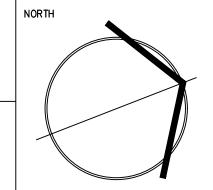
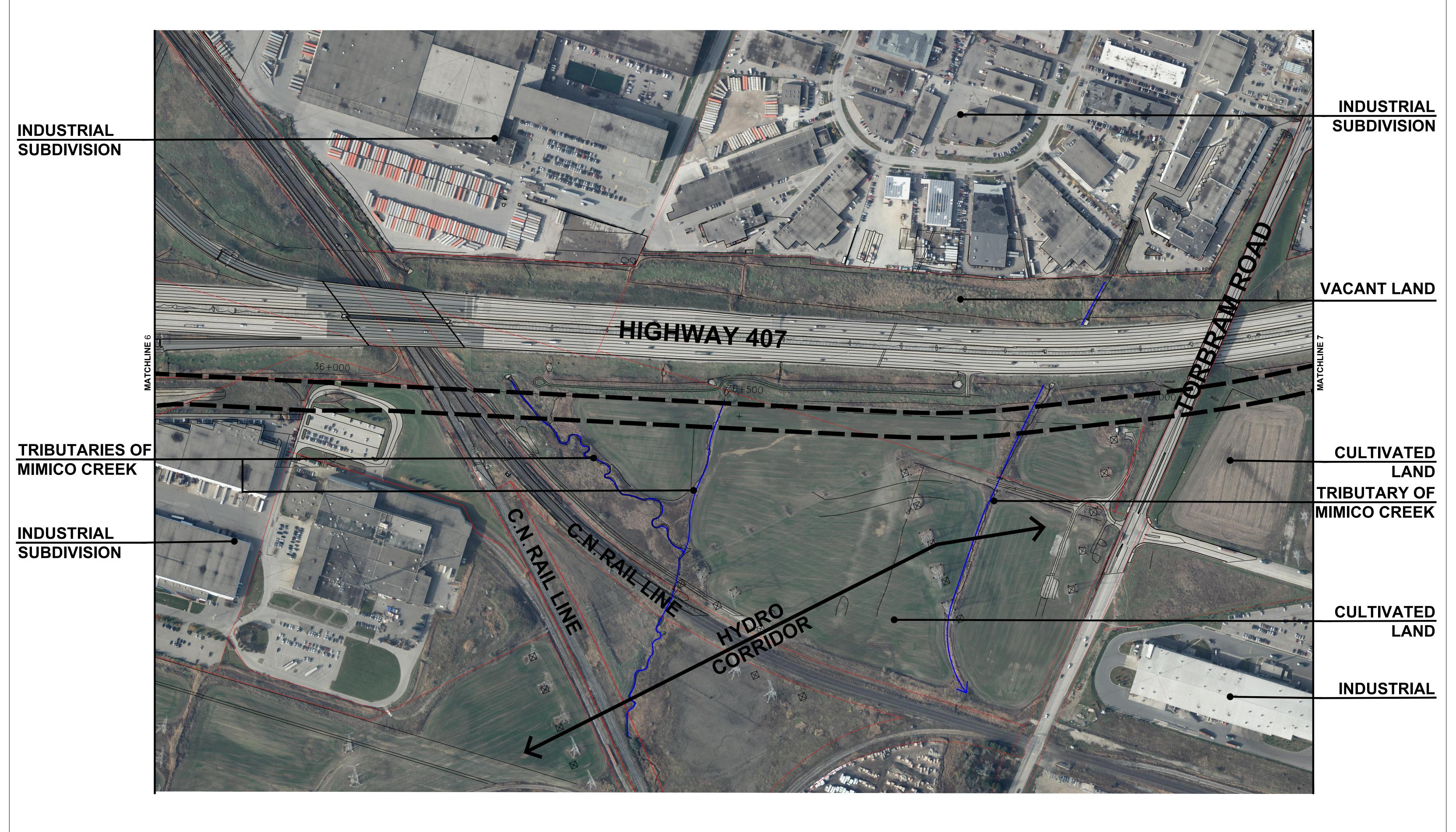
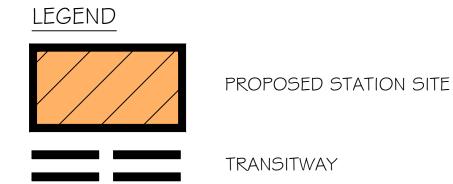


FIG	URE 7
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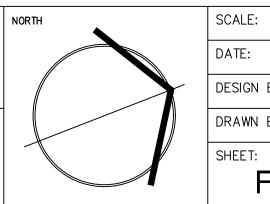




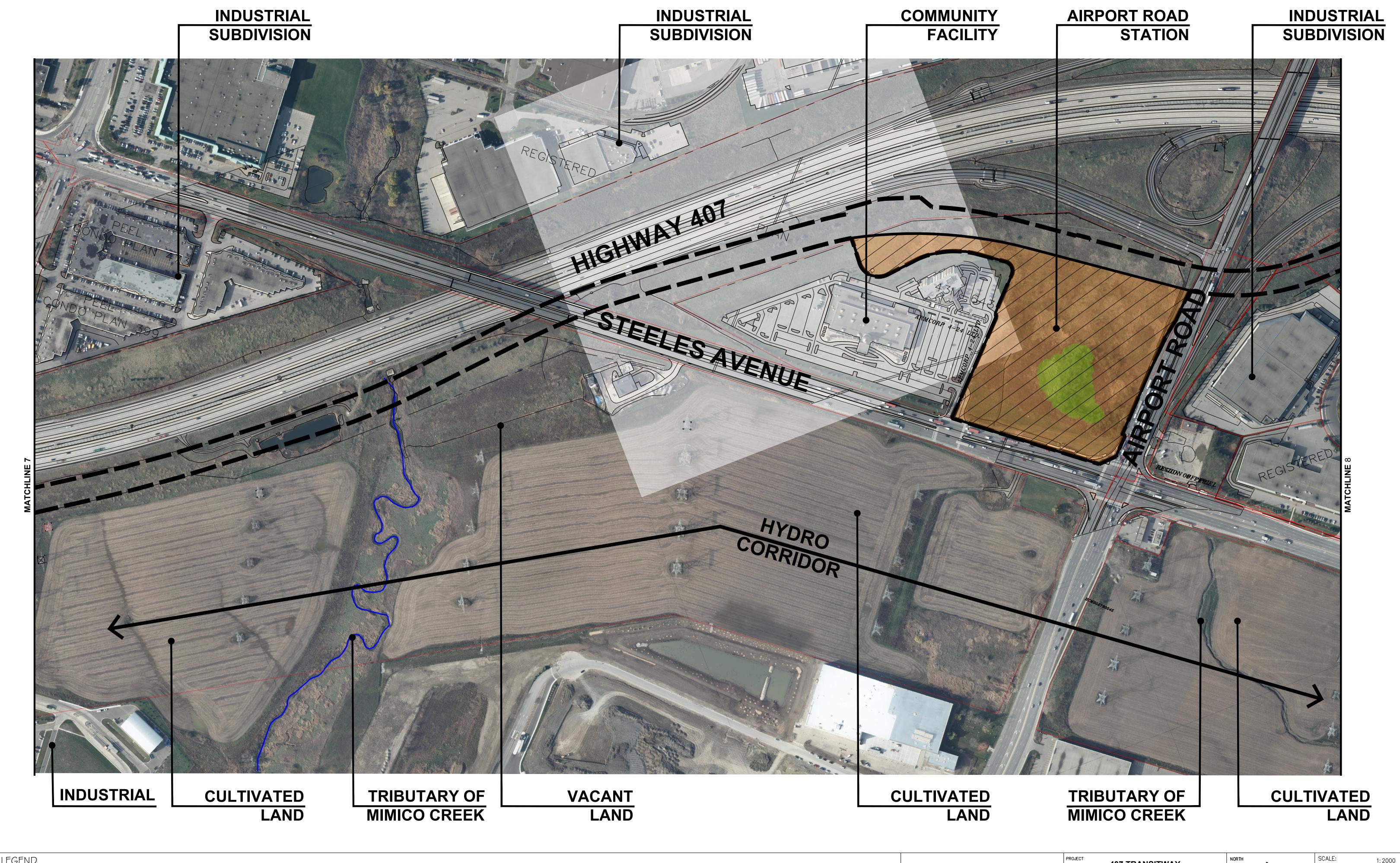


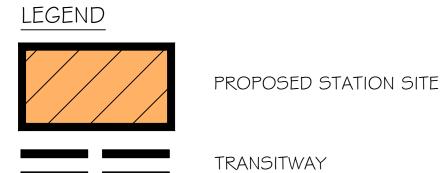






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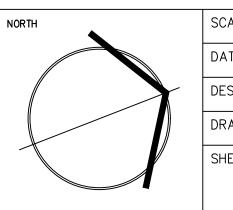










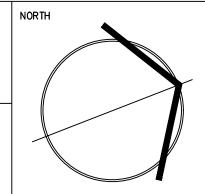


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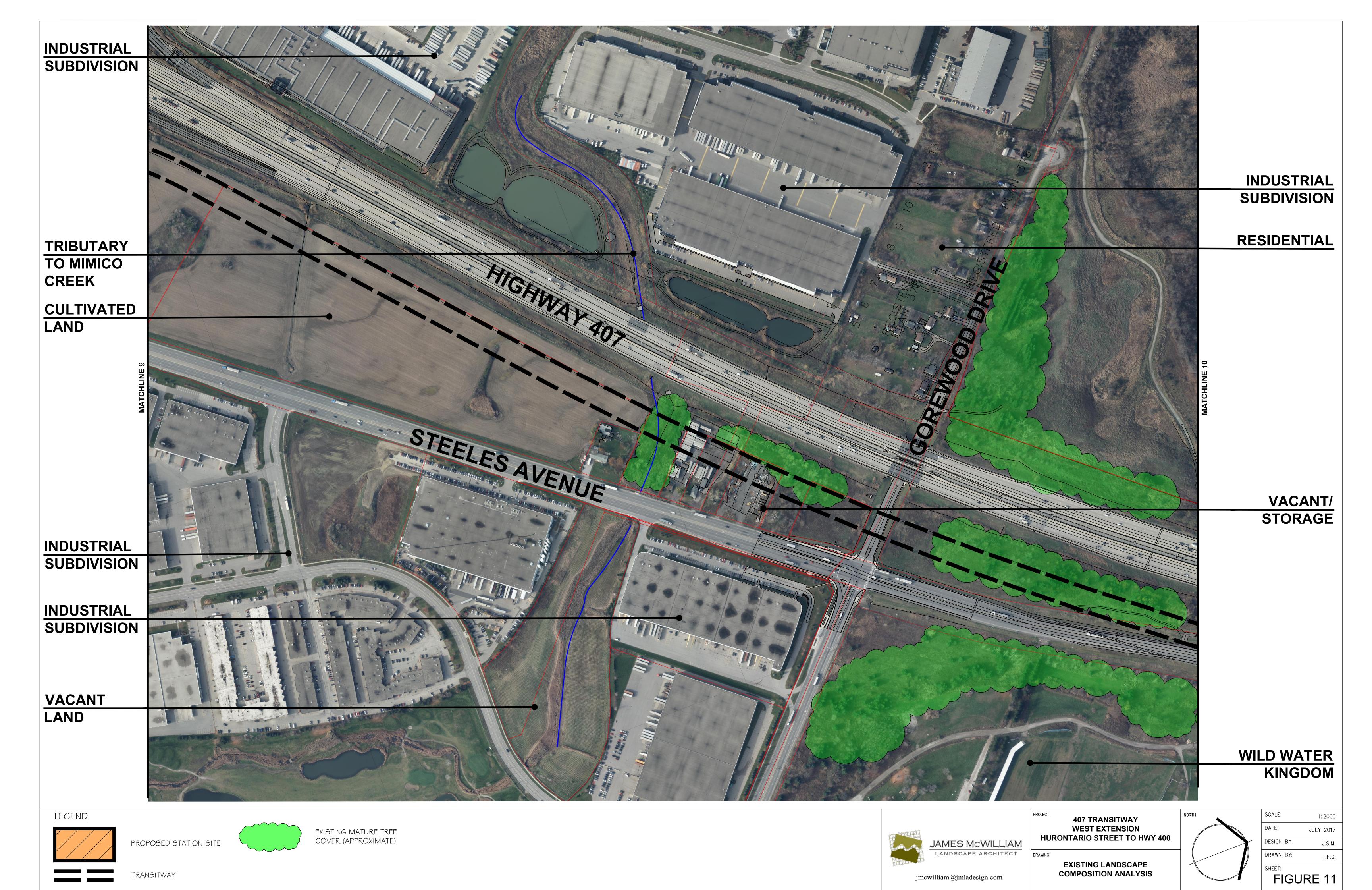


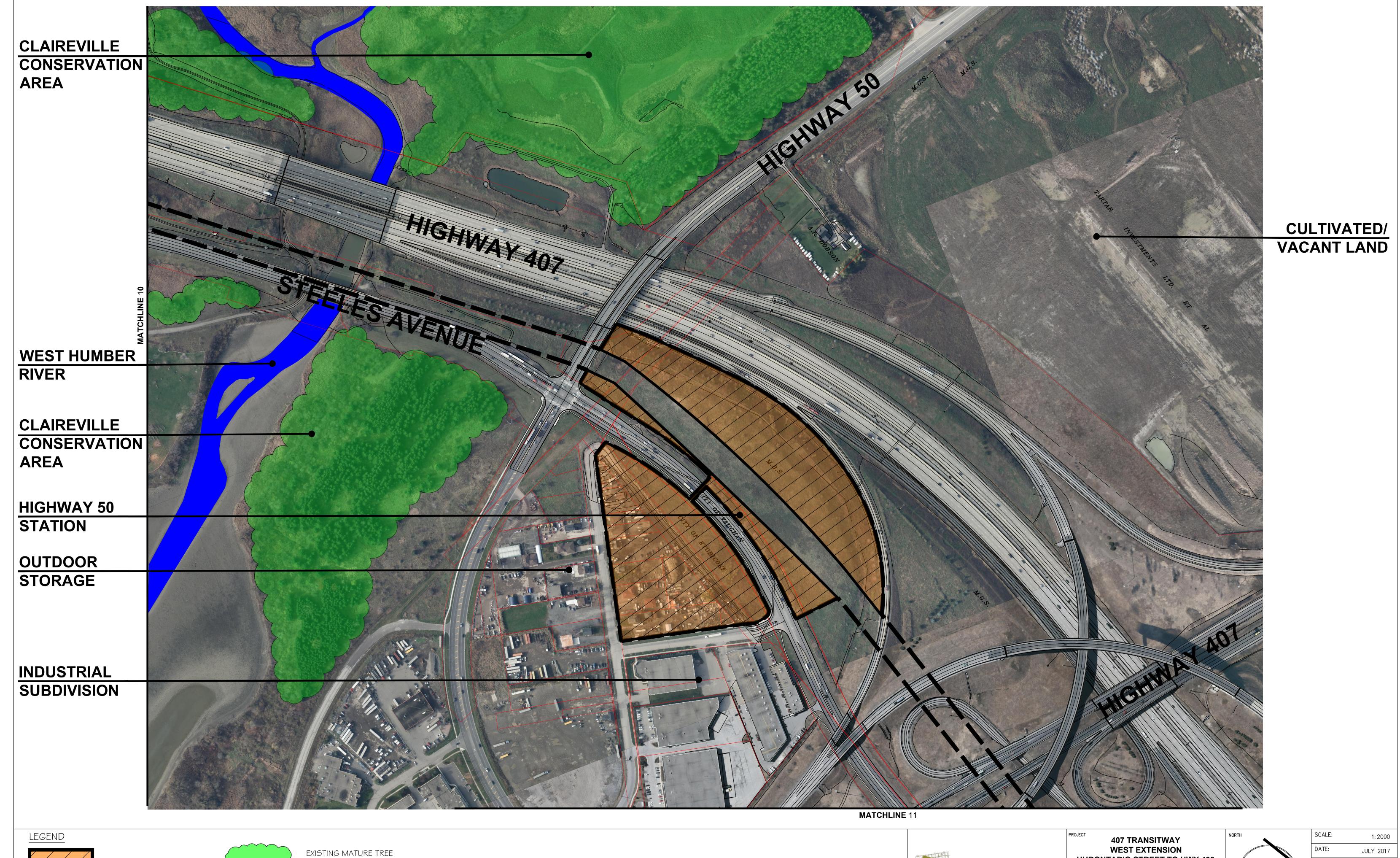






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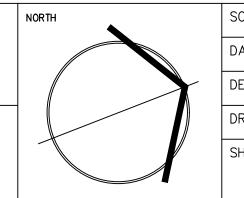




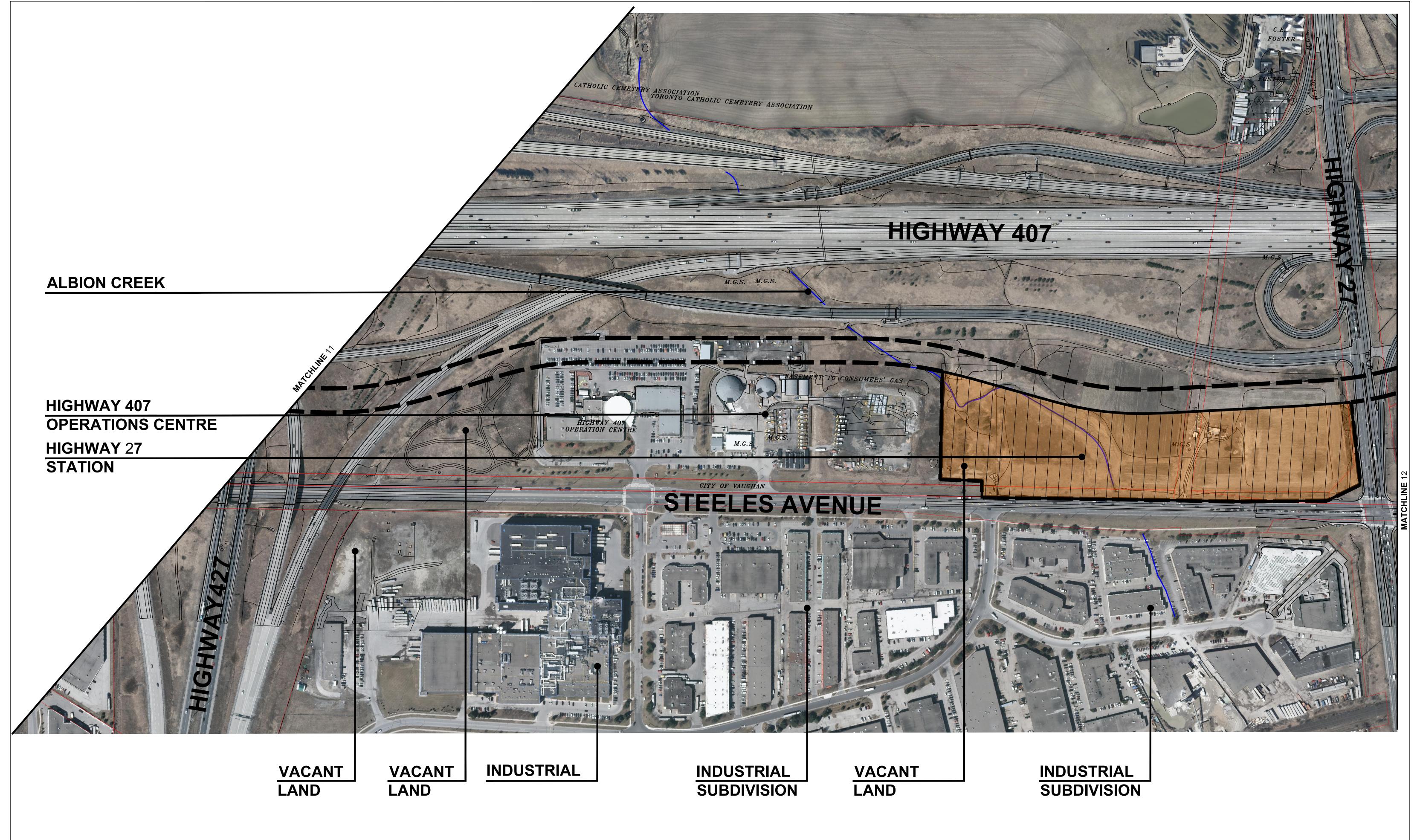


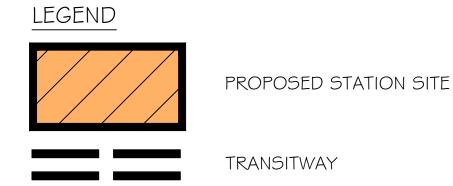






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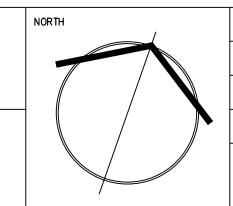






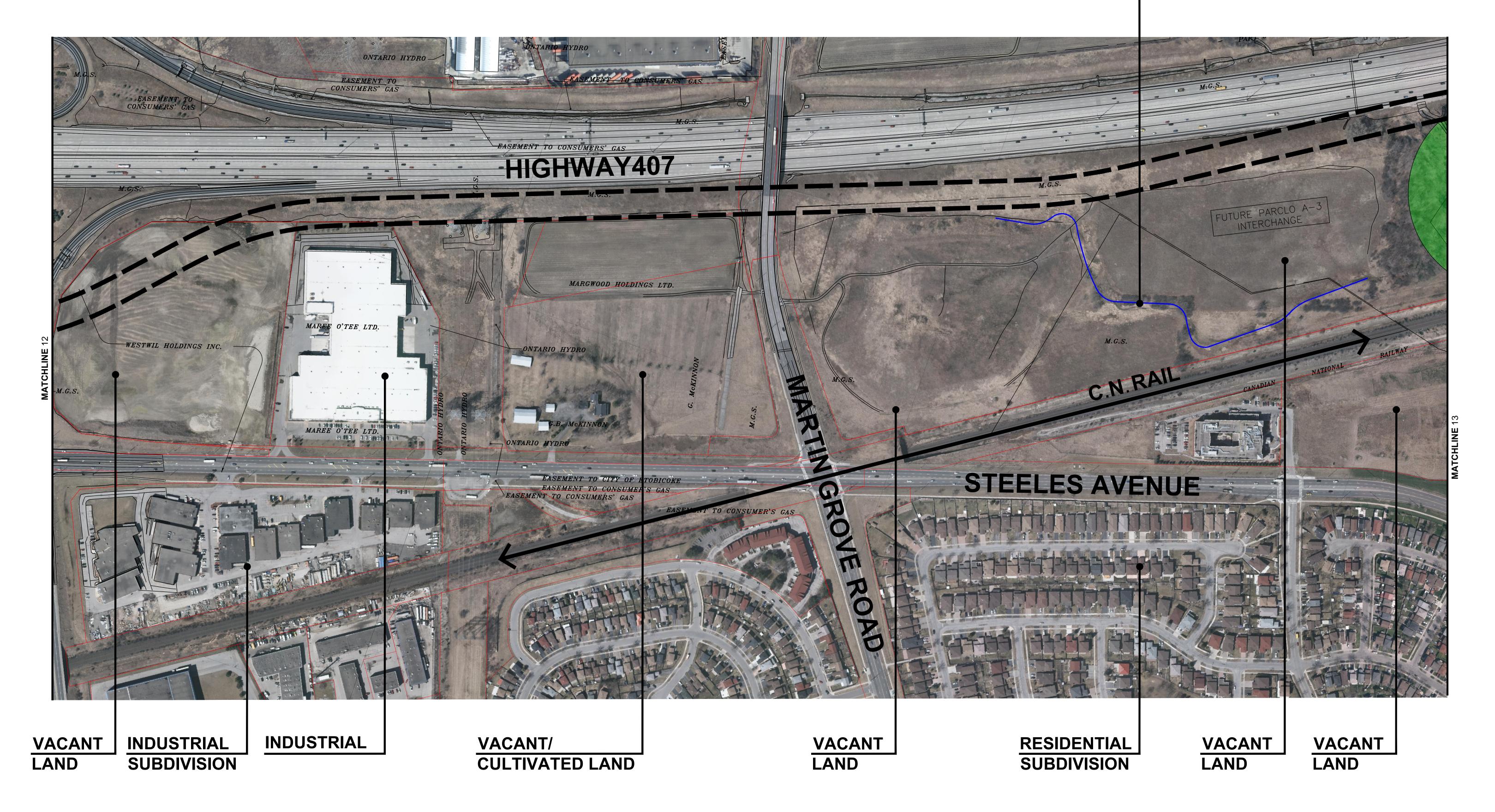


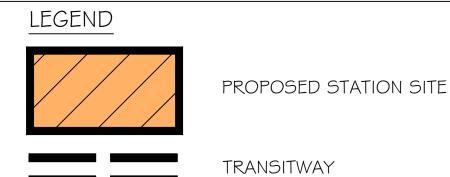




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# TRIBUTARY OF **RAINBOW CREEK**

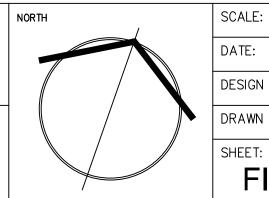


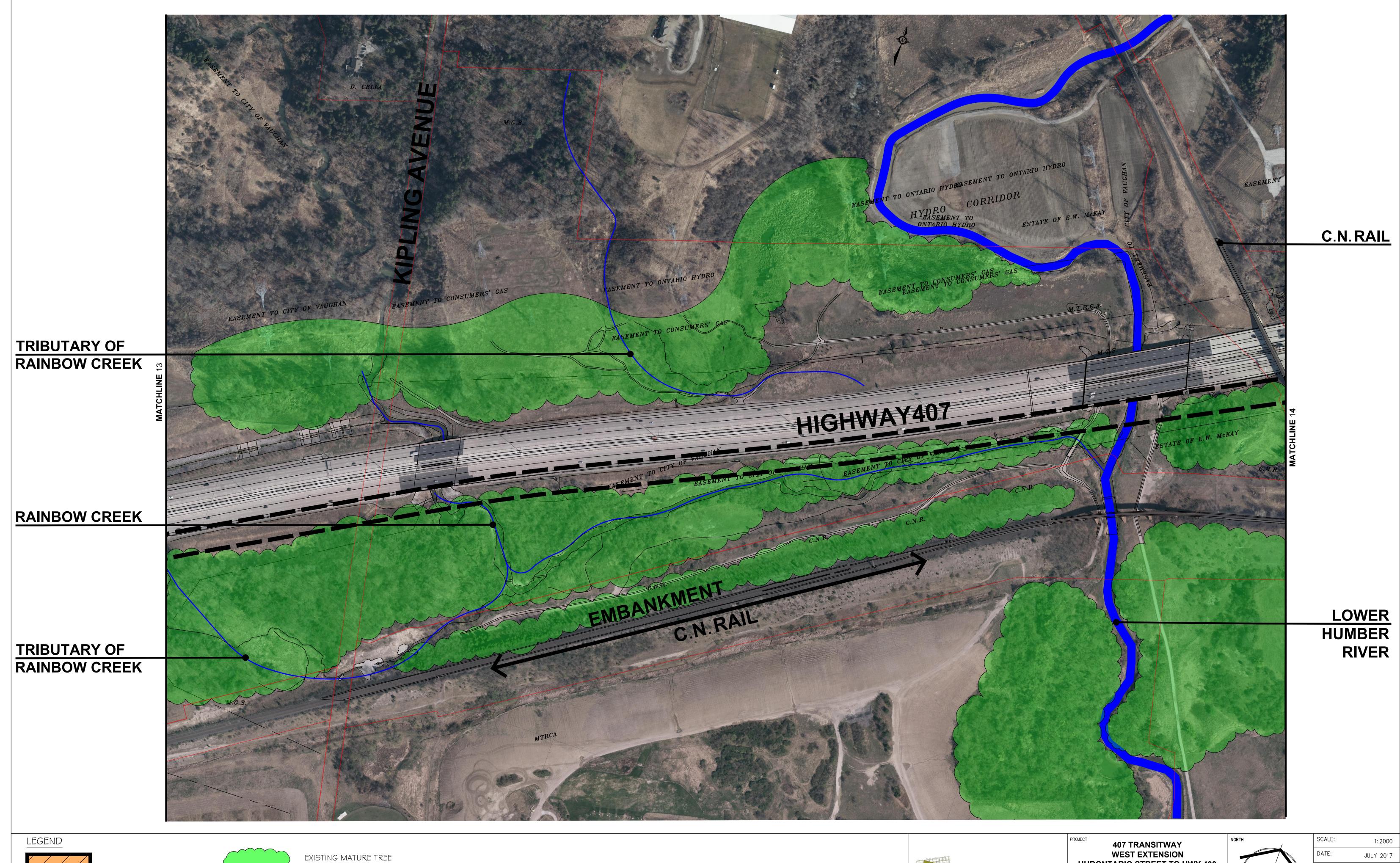








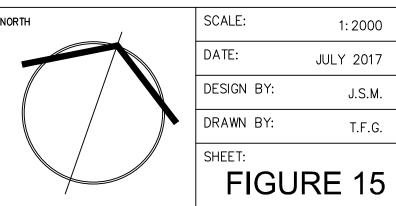


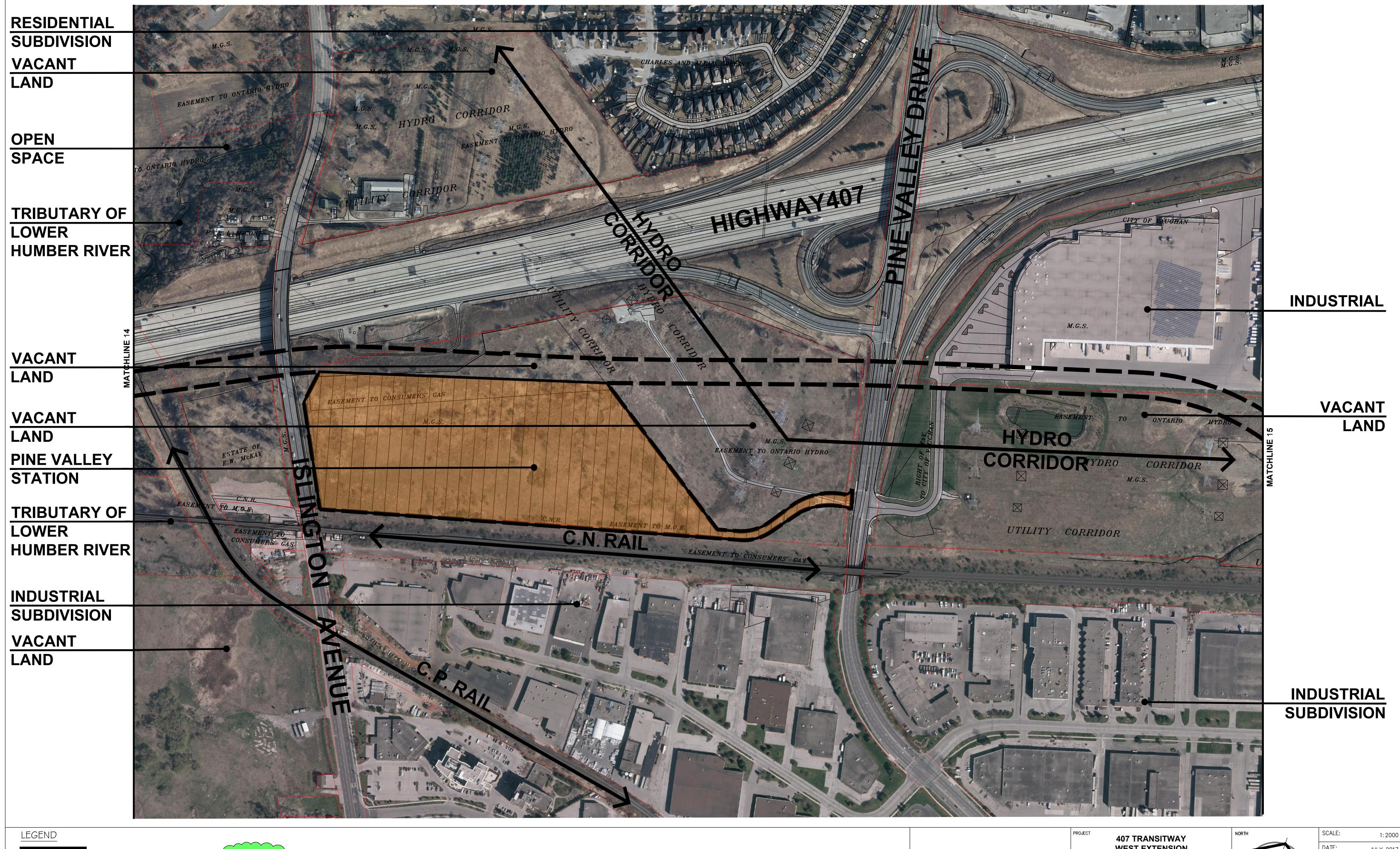










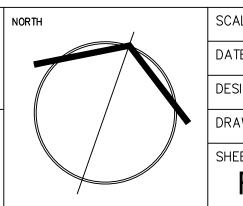






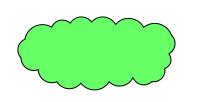






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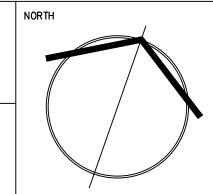




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JAMES MCWILLIAM
LANDSCAPE ARCHITECT jmcwilliam@jmladesign.com

**EXISTING LANDSCAPE COMPOSITION ANALYSIS** 



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TRANSITWAY



LEGEND

PROPOSED STATION SITE

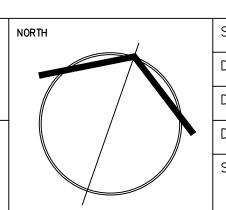
TRANSITWAY







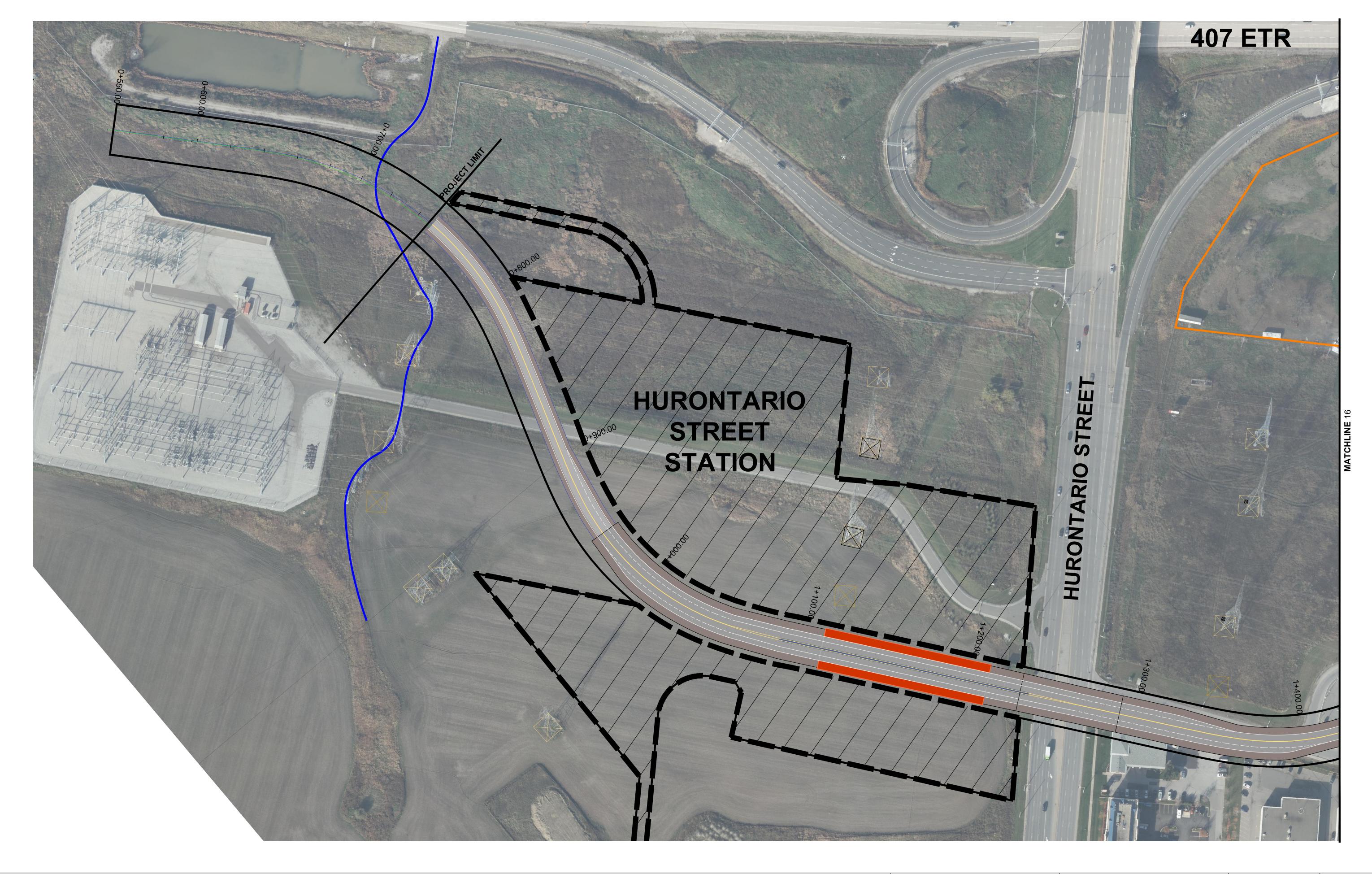
**EXISTING LANDSCAPE COMPOSITION ANALYSIS** 



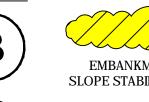
**EAST** 

**TERMINUS** 

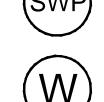
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FOREST EDGE RESTORATION







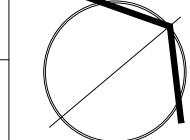






LANDSCAPE COMPOSITION

RECOMMENDED PLANTING LAYOUT



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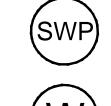
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FOREST EDGE RESTORATION



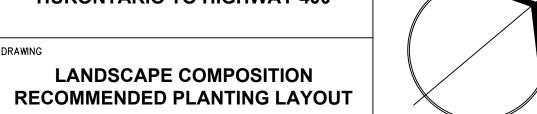








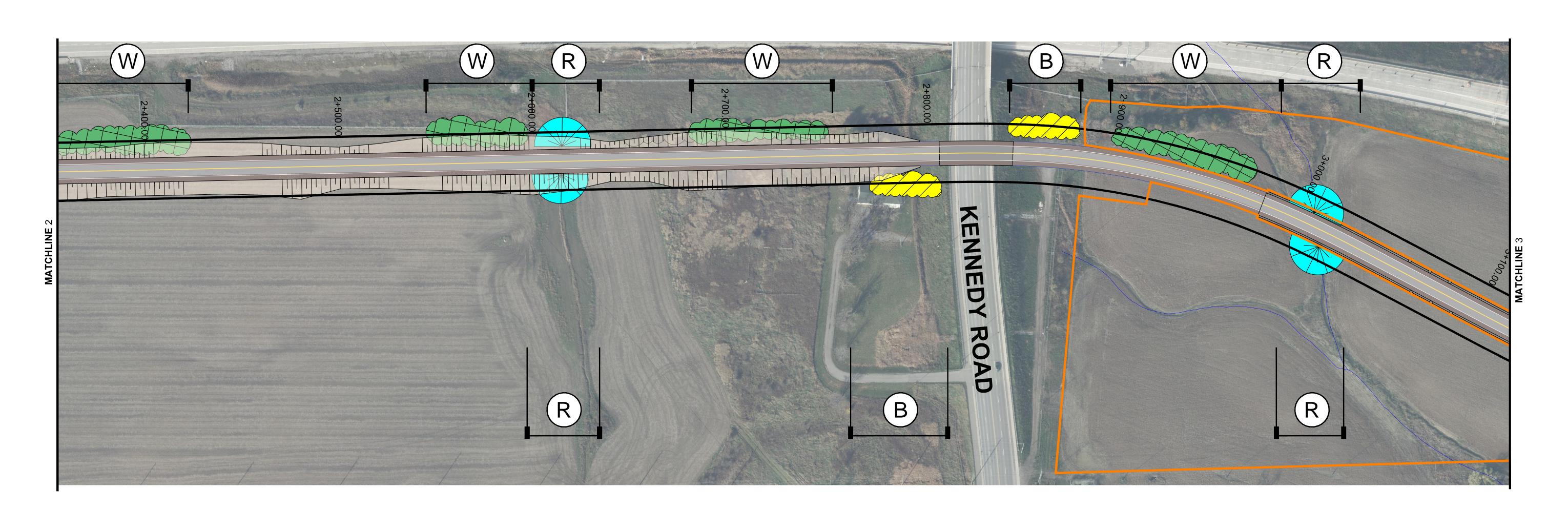


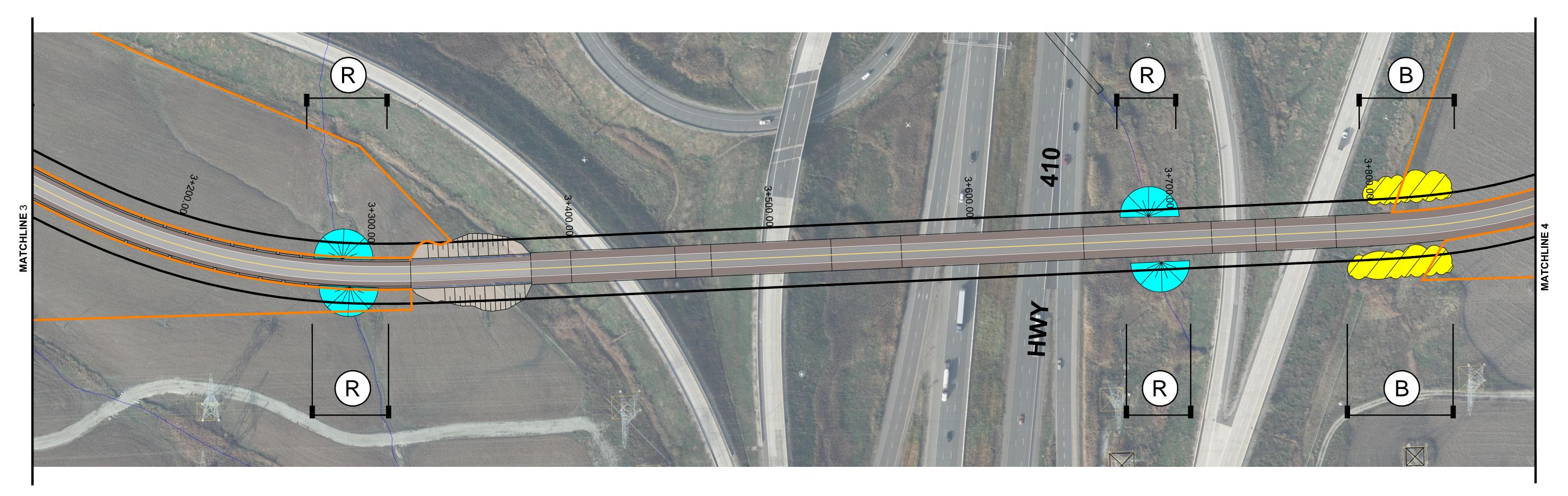


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DRAWN BY:	T.F.G.
DESIGN BY:	J.S.M.
DATE: 0	CTOBER 2017

1:1000

NOTE: SEE FIGURE 45 FOR PLANTING LAYOUTS







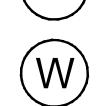


(R)



RIPARIAN PLANTING













FOREST EDGE RESTORATION







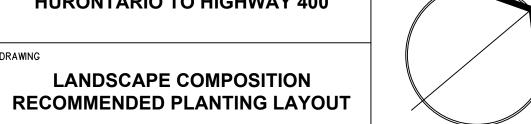






jmcwilliam@jmladesign.com





SHEET: FIGU	JRE 21
DRAWN BY:	T.F.G.
DESIGN BY:	J.S.M.
DATE:	OCTOBER 2017
SCALE:	1:1000

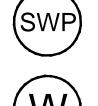
NOTE: SEE FIGURE 45 FOR PLANTING LAYOUTS



















FOREST EDGE RESTORATION









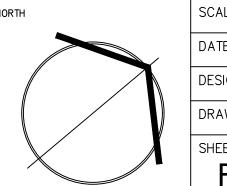




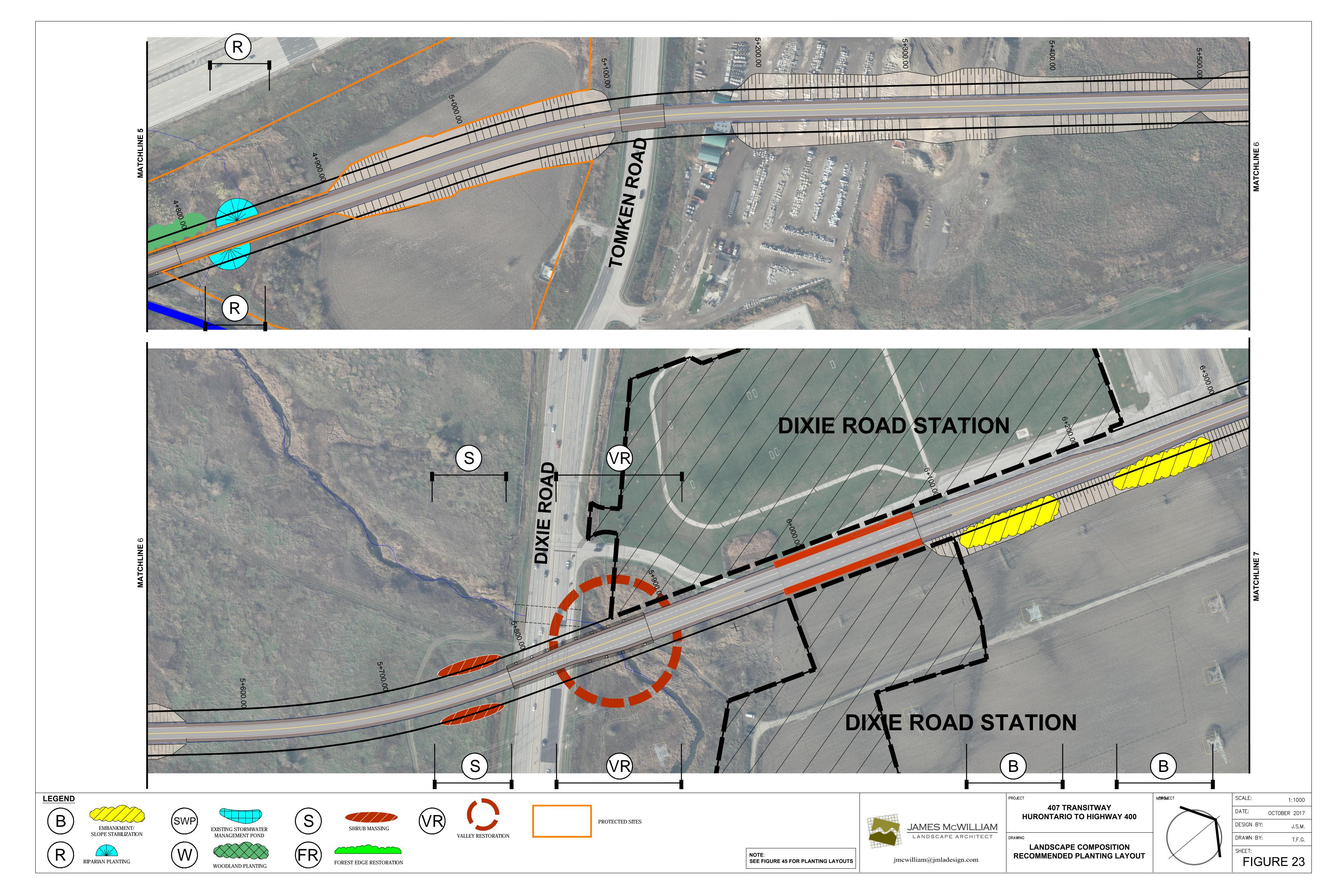
jmcwilliam@jmladesign.com

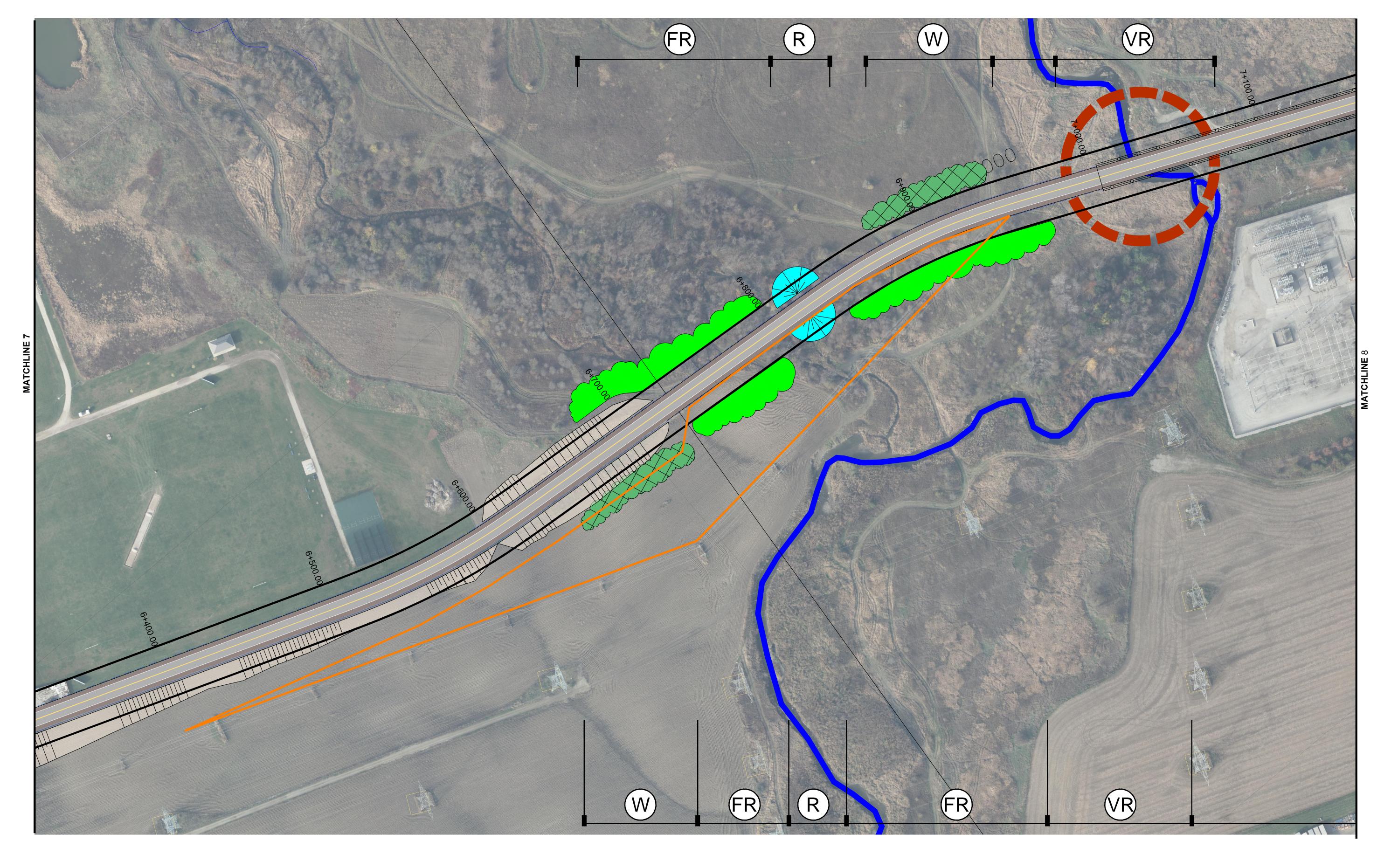






OCTOBER 2017

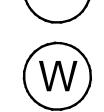




















FOREST EDGE RESTORATION











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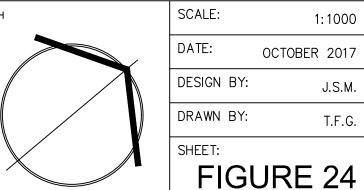
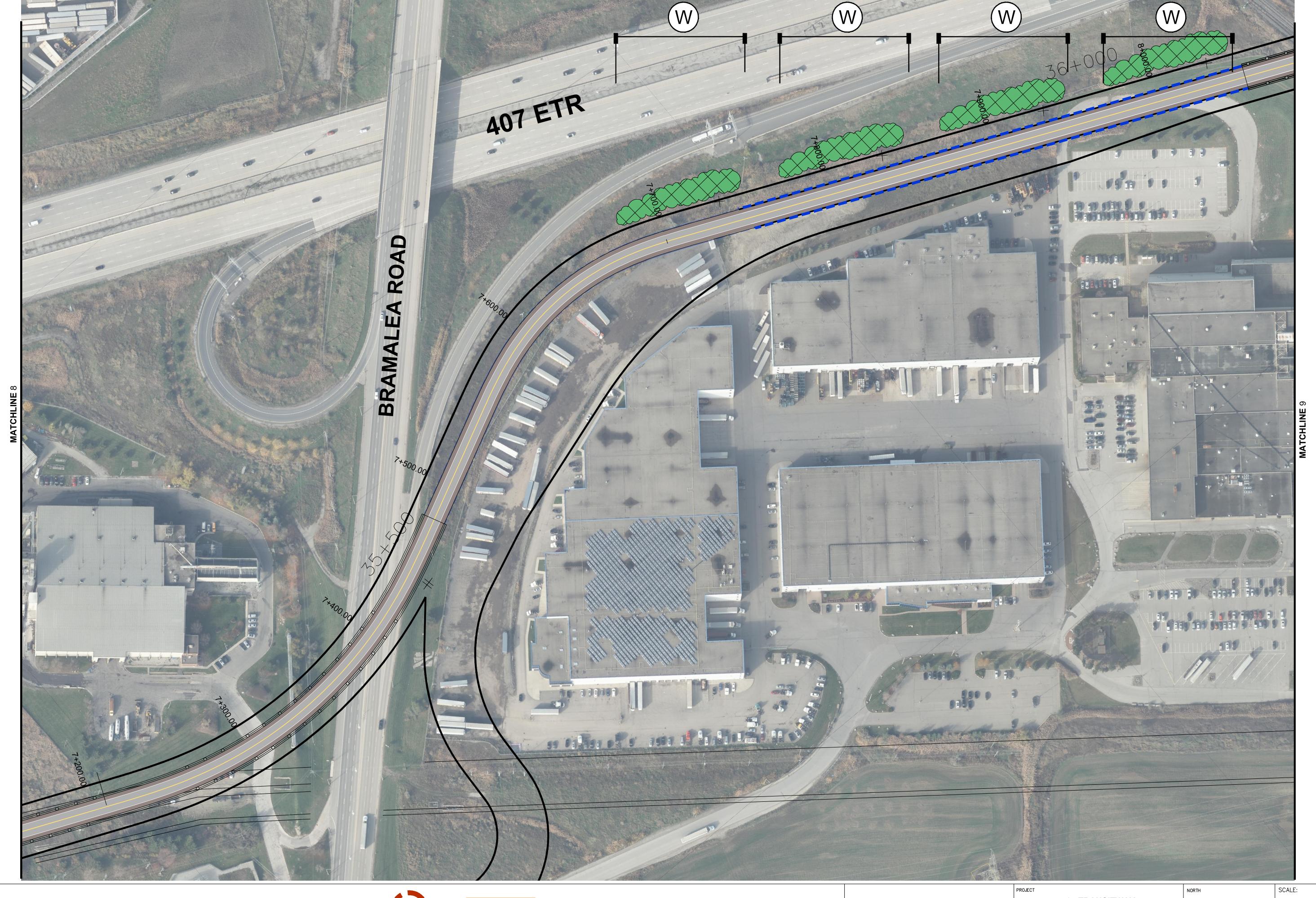


FIGURE 24

NOTE: SEE FIGURE 45 FOR PLANTING LAYOUTS

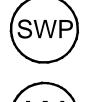




(R)













FOREST EDGE RESTORATION







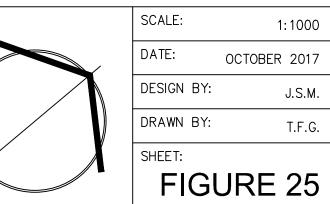


PROTECTED SITES





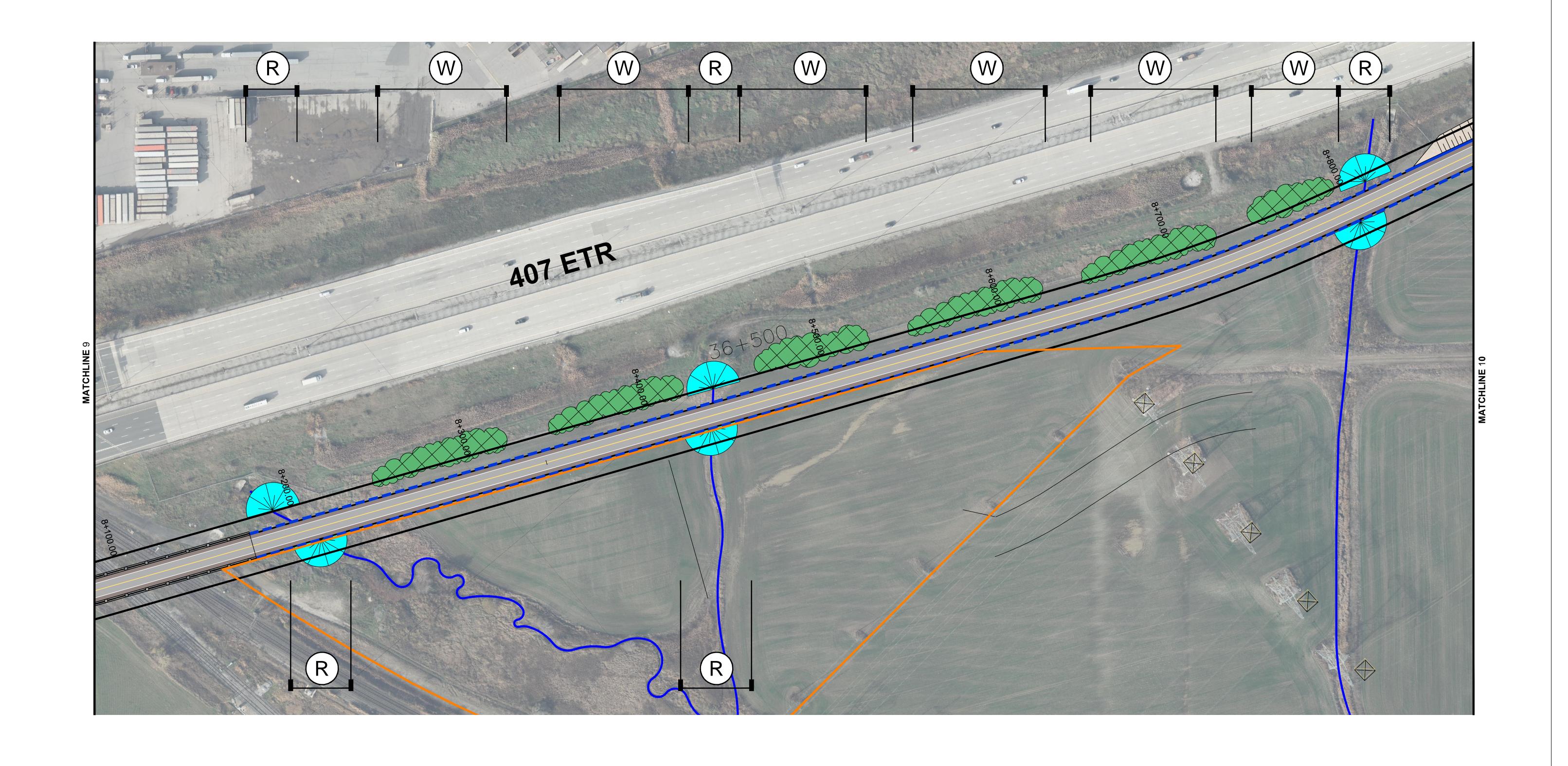
LANDSCAPE COMPOSITION





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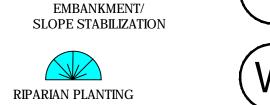
RECOMMENDED PLANTING LAYOUT



















FOREST EDGE RESTORATION



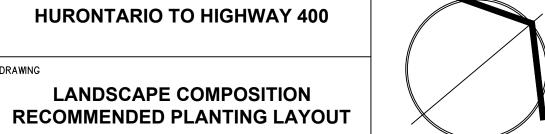


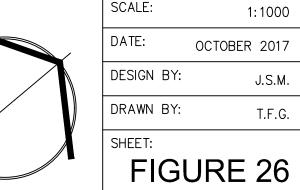




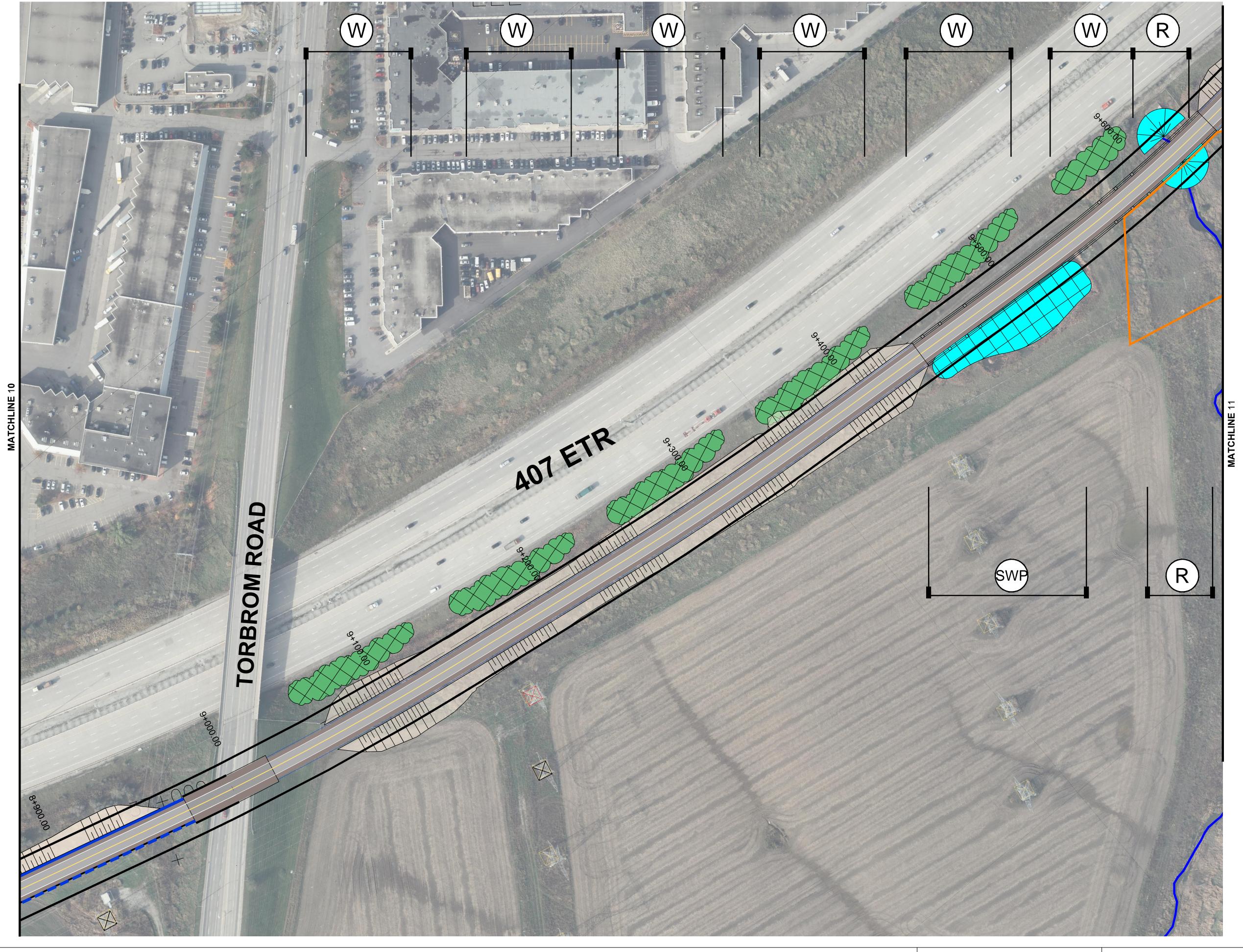




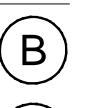




NOTE: SEE FIGURE 45 FOR PLANTING LAYOUTS













WOODLAND PLANTING





FOREST EDGE RESTORATION









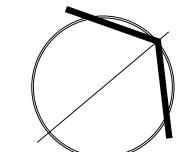






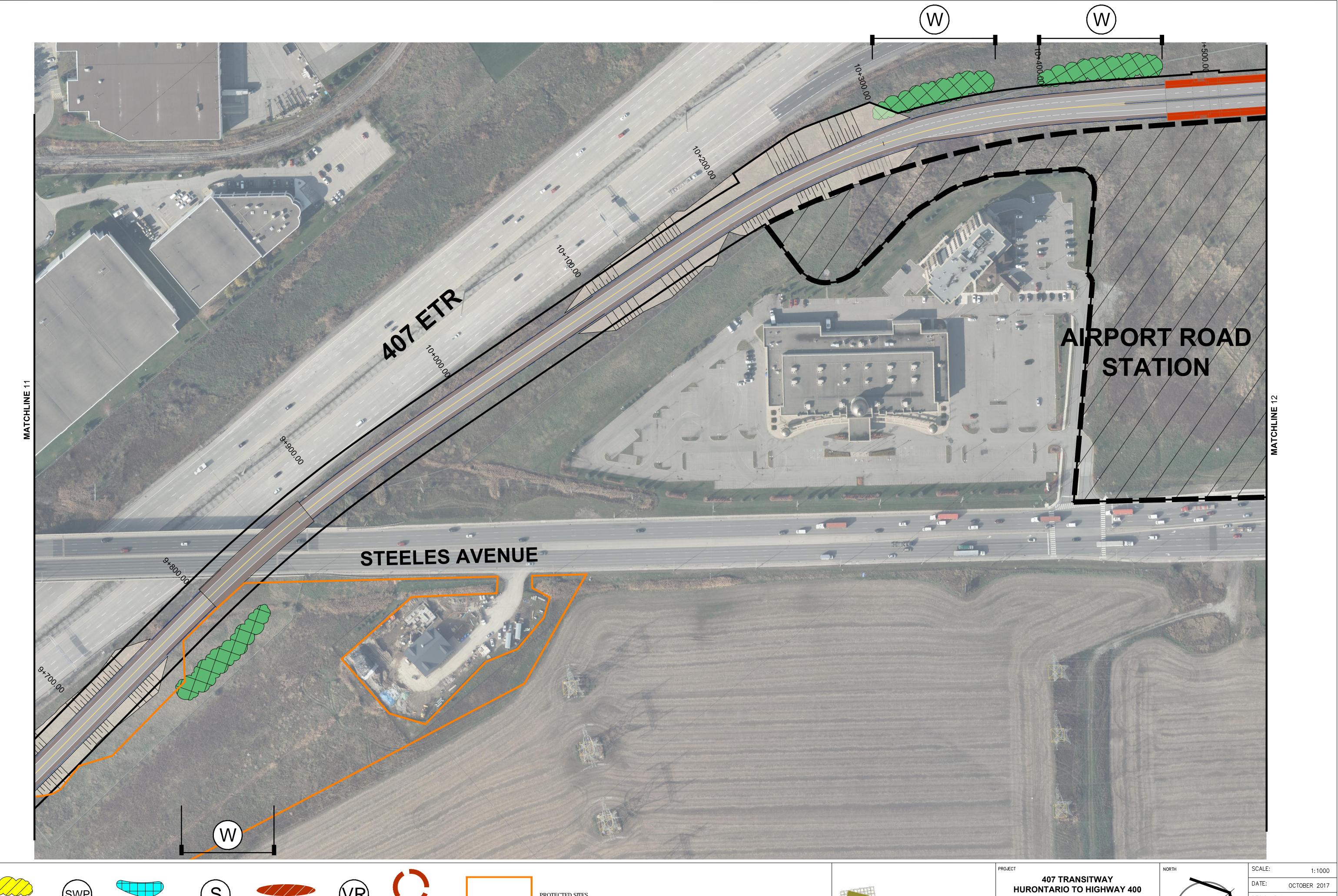
LANDSCAPE COMPOSITION

RECOMMENDED PLANTING LAYOUT



SCALE: DATE: OCTOBER 2017 DESIGN BY: J.S.M. FIGURE 27

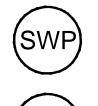
NOTE: SEE FIGURE 45 FOR PLANTING LAYOUTS



















FOREST EDGE RESTORATION













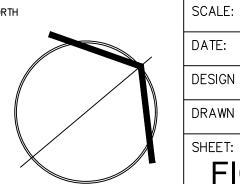
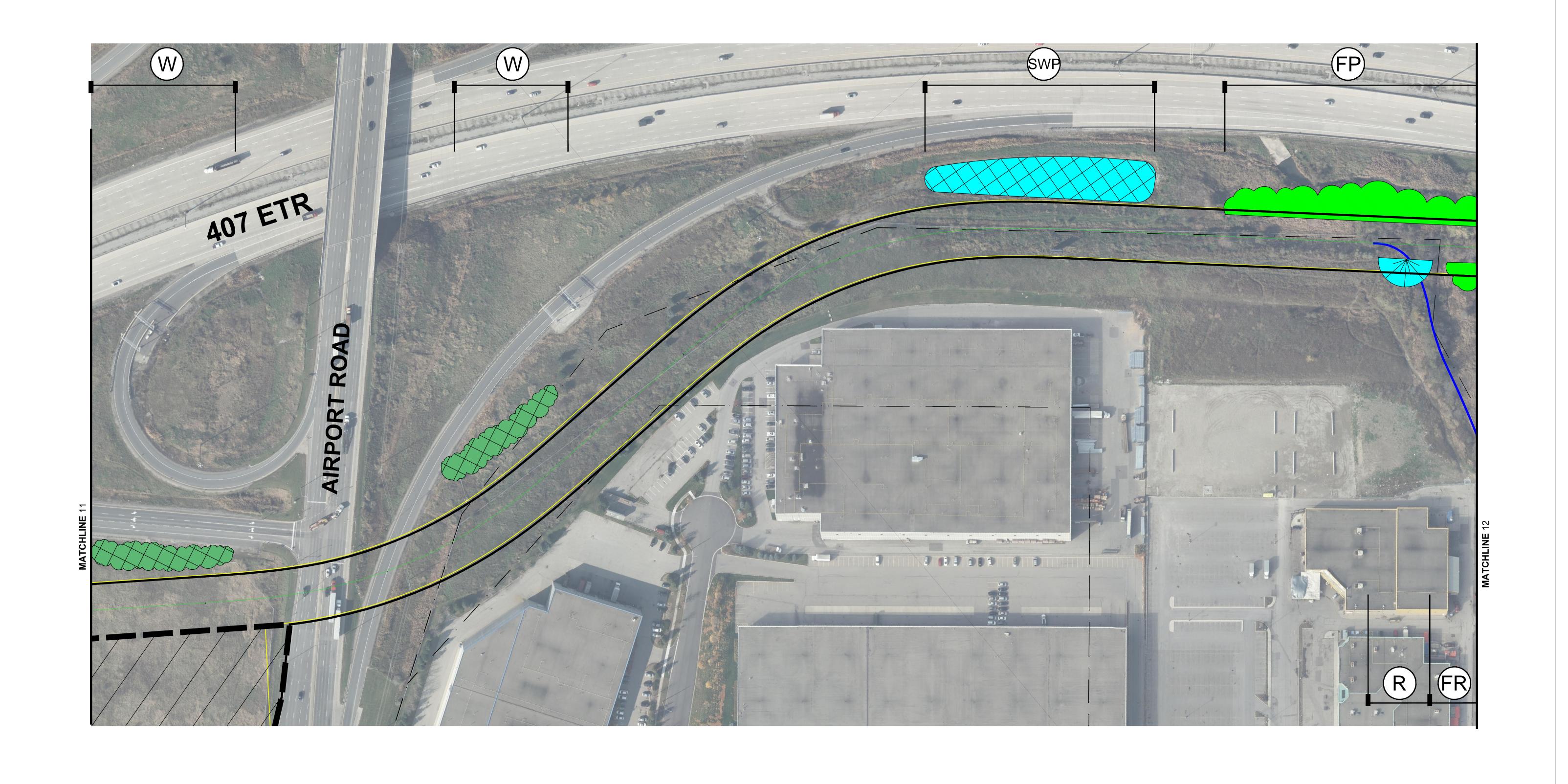
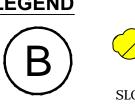


FIGURE 28

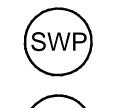
NOTE: SEE FIGURE 45 FOR PLANTING LAYOUTS



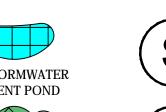
















FOREST EDGE RESTORATION







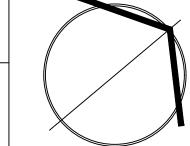




407 TRANSITWAY HURONTARIO TO HIGHWAY 400

LANDSCAPE COMPOSITION

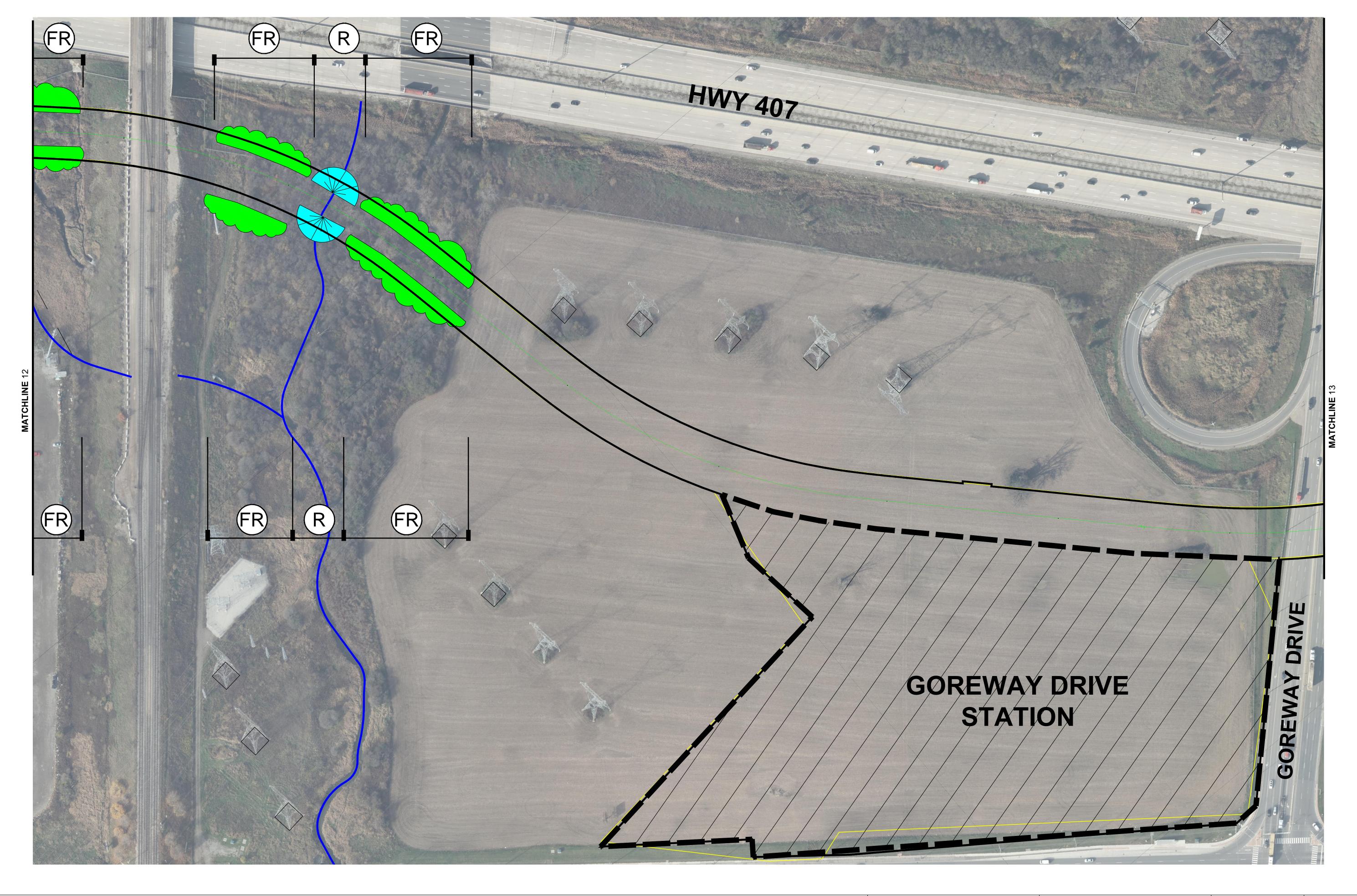
RECOMMENDED PLANTING LAYOUT



1:1000 DATE: OCTOBER 2017 DESIGN BY: J.S.M. DRAWN BY: FIGRUE 29

SCALE:

NOTE: SEE FIGURE 45 FOR PLANTING LAYOUTS







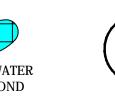
(R)



RIPARIAN PLANTING











FOREST EDGE RESTORATION



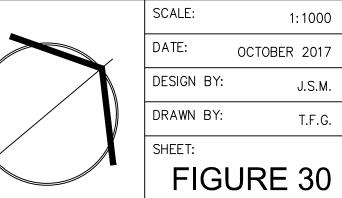




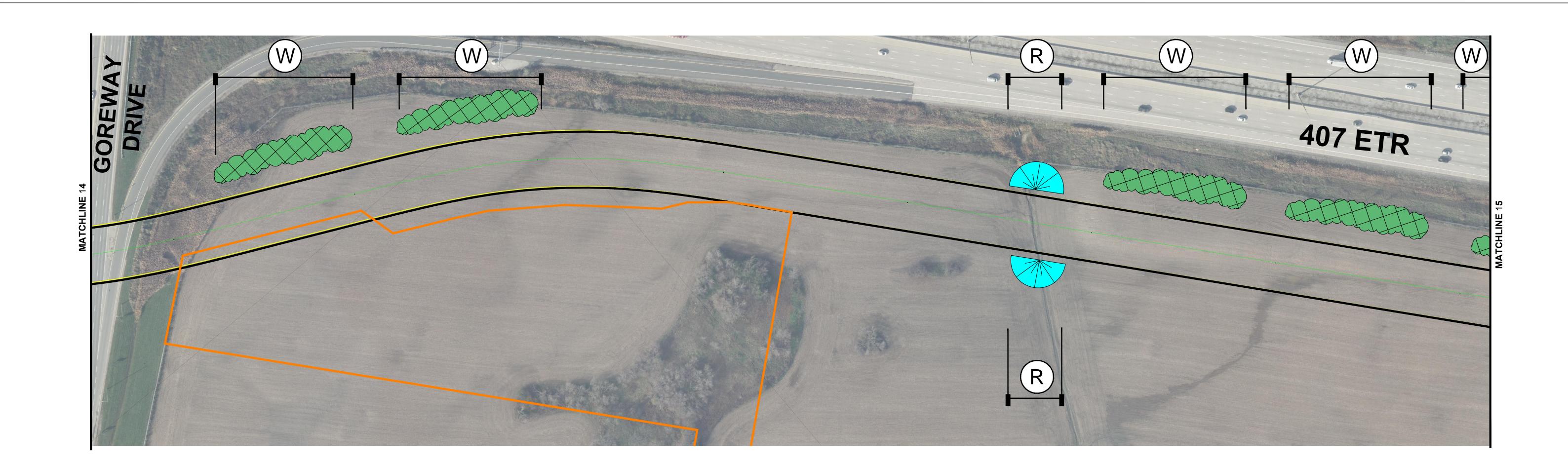


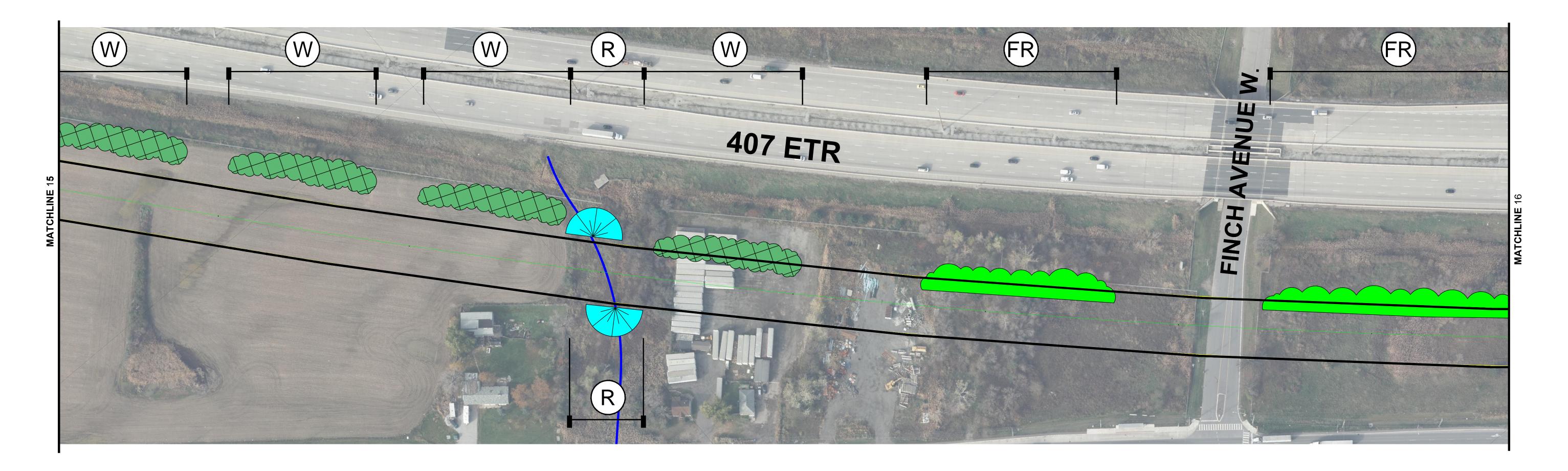


LANDSCAPE COMPOSITION
RECOMMENDED PLANTING LAYOUT



NOTE: SEE FIGURE 45 FOR PLANTING LAYOUTS

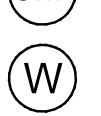




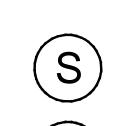














FOREST EDGE RESTORATION



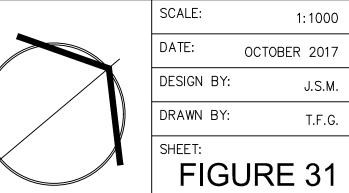




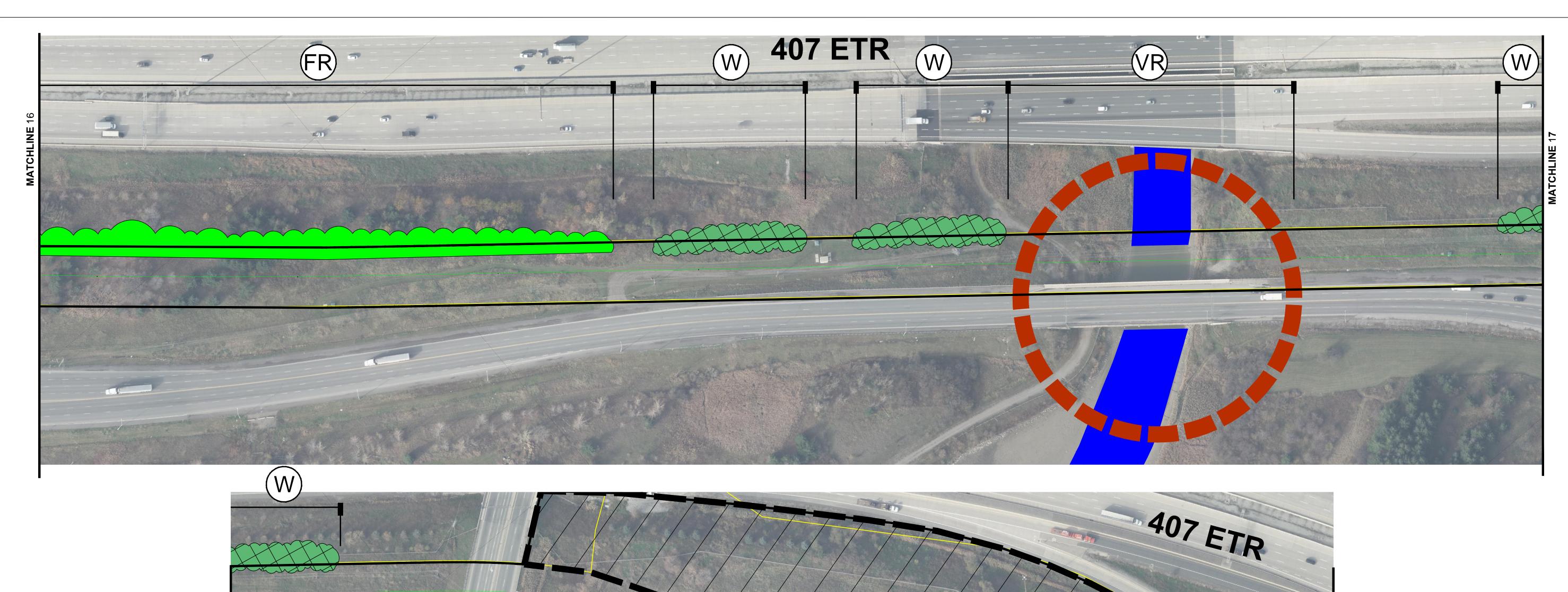


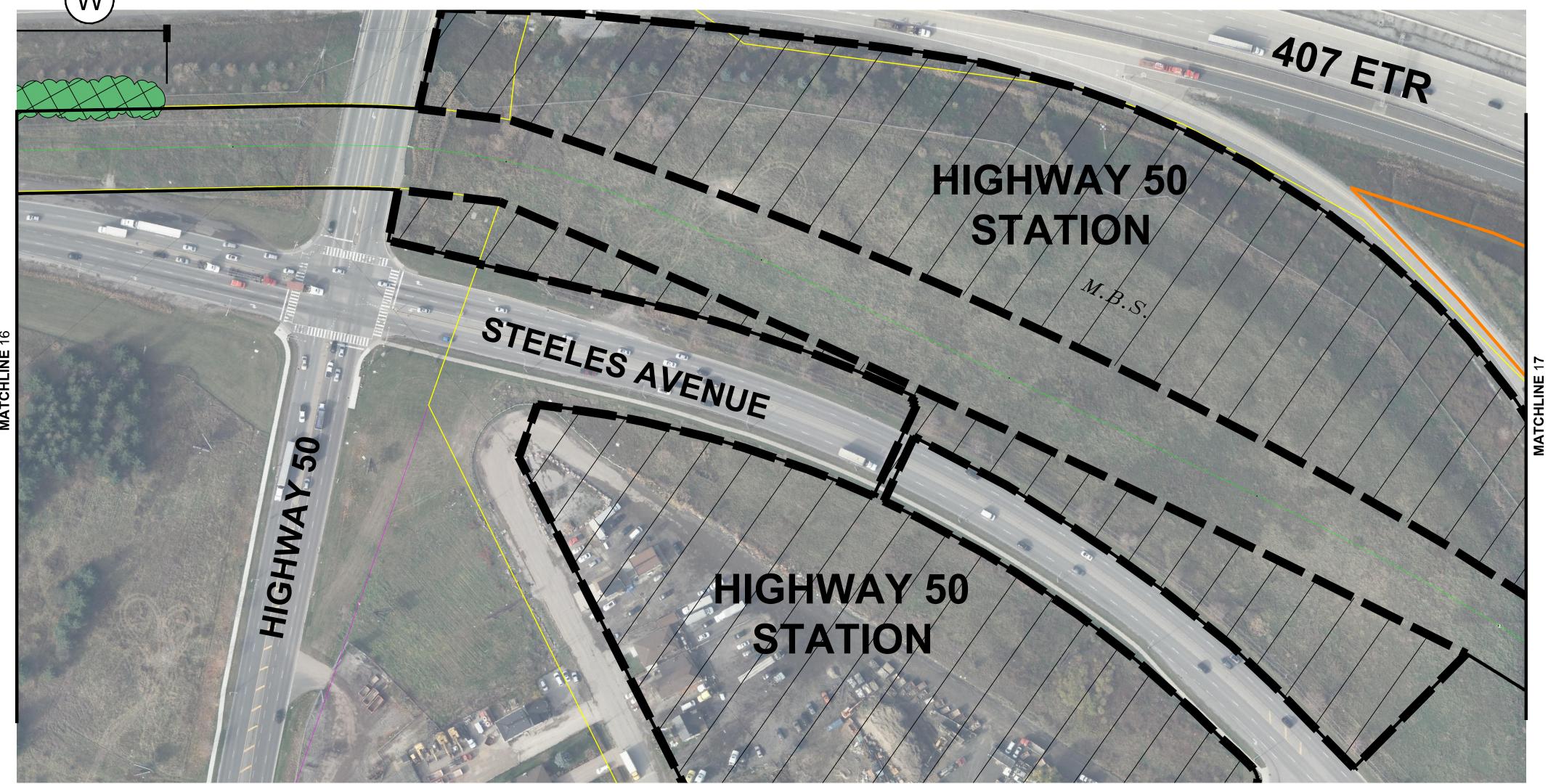








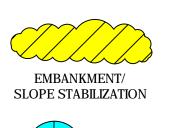




LEGEND



(R)



RIPARIAN PLANTING





WOODLAND PLANTING





FOREST EDGE RESTORATION





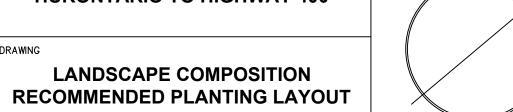






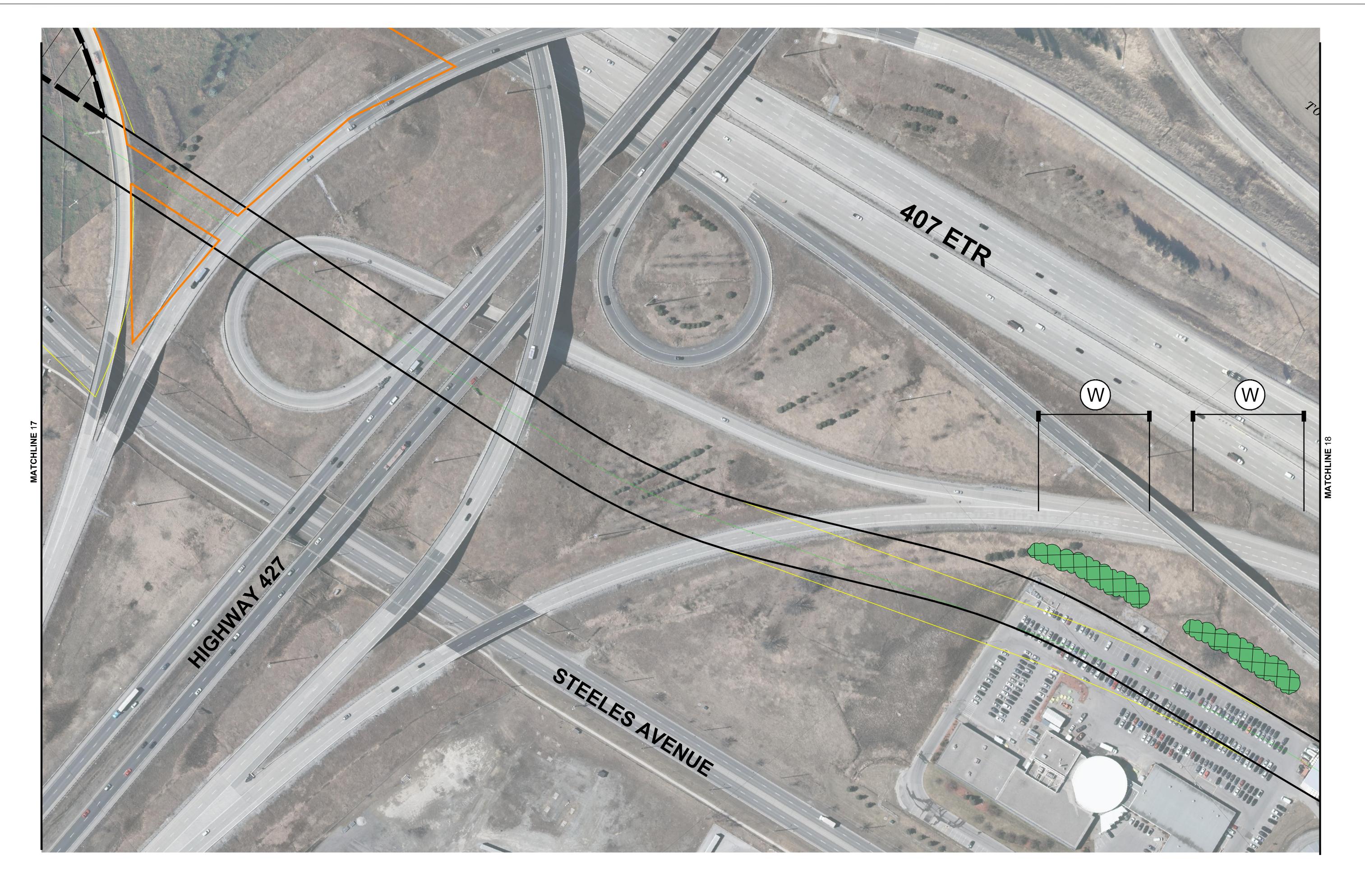






J.S.M T.F.G
J.S.M
2017
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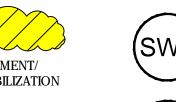
NOTE: SEE FIGURE 45 FOR PLANTING LAYOUTS







RIPARIAN PLANTING











FOREST EDGE RESTORATION



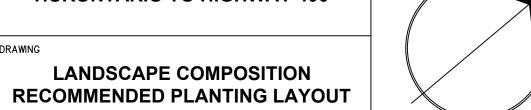


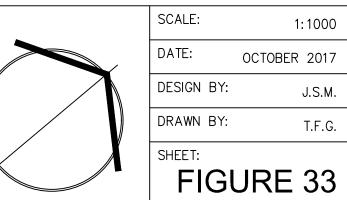






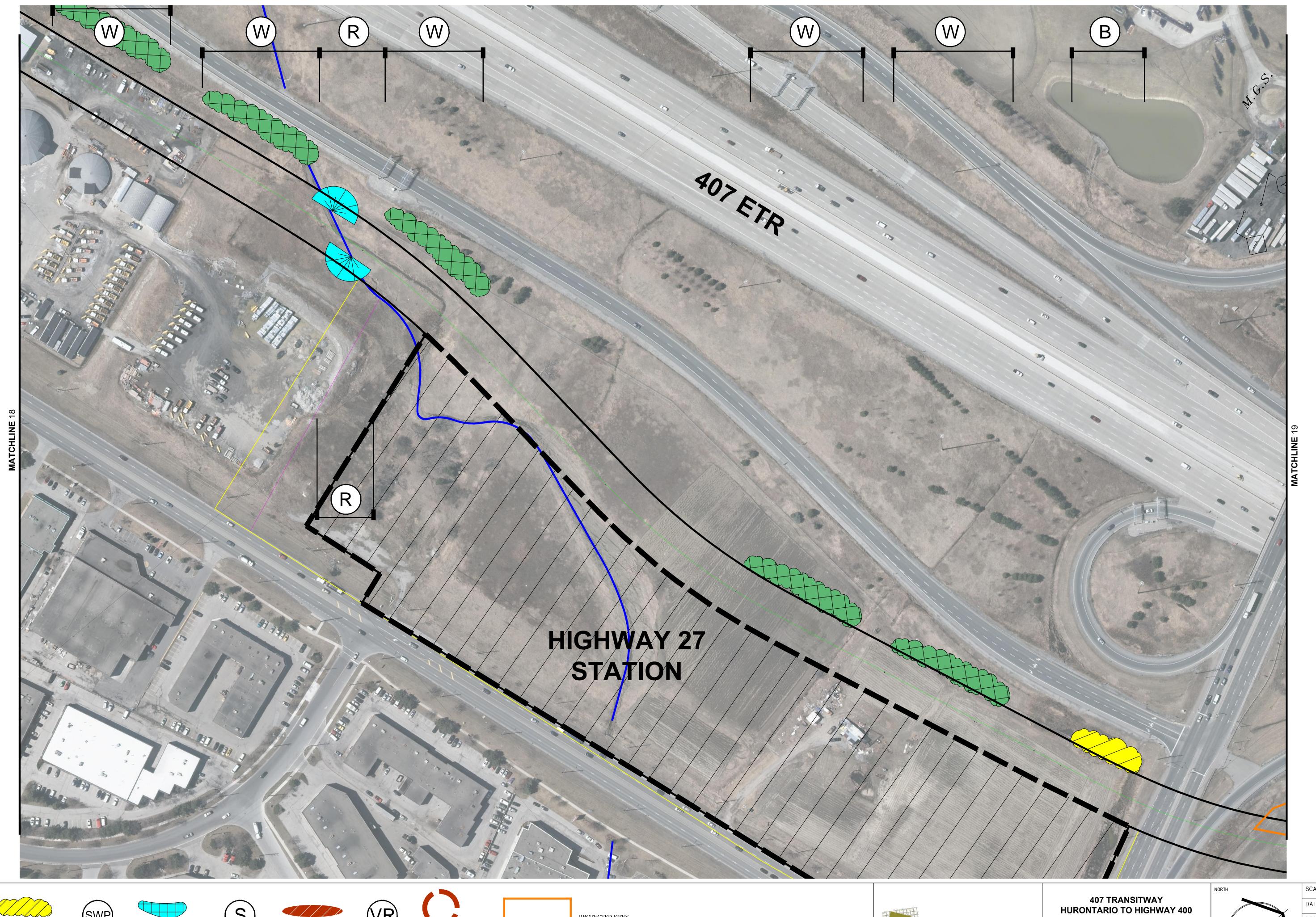






NOTE: SEE FIGURE 45 FOR PLANTING LAYOUTS

RE 45 FOR PLANTING LAYOUTS jmcwilliam@jmladesign.com







RIPARIAN PLANTING











FOREST EDGE RESTORATION

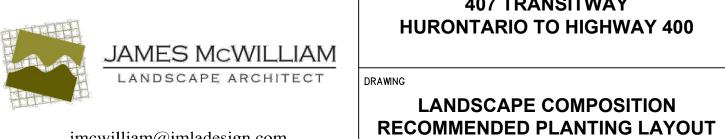






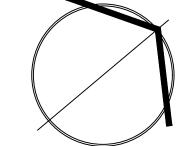


PROTECTED SITES





LANDSCAPE COMPOSITION



SHEET: FIGI	JRE 34	
DRAWN BY:	T.F.G.	
DESIGN BY:	J.S.M.	
 DATE:	OCTOBER 2017	
SCALE:	1:1000	

NOTE: SEE FIGURE 45 FOR PLANTING LAYOUTS



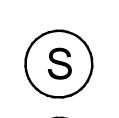














FOREST EDGE RESTORATION





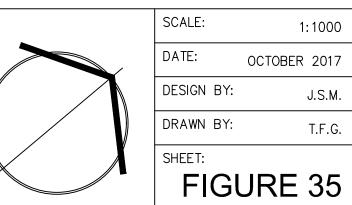




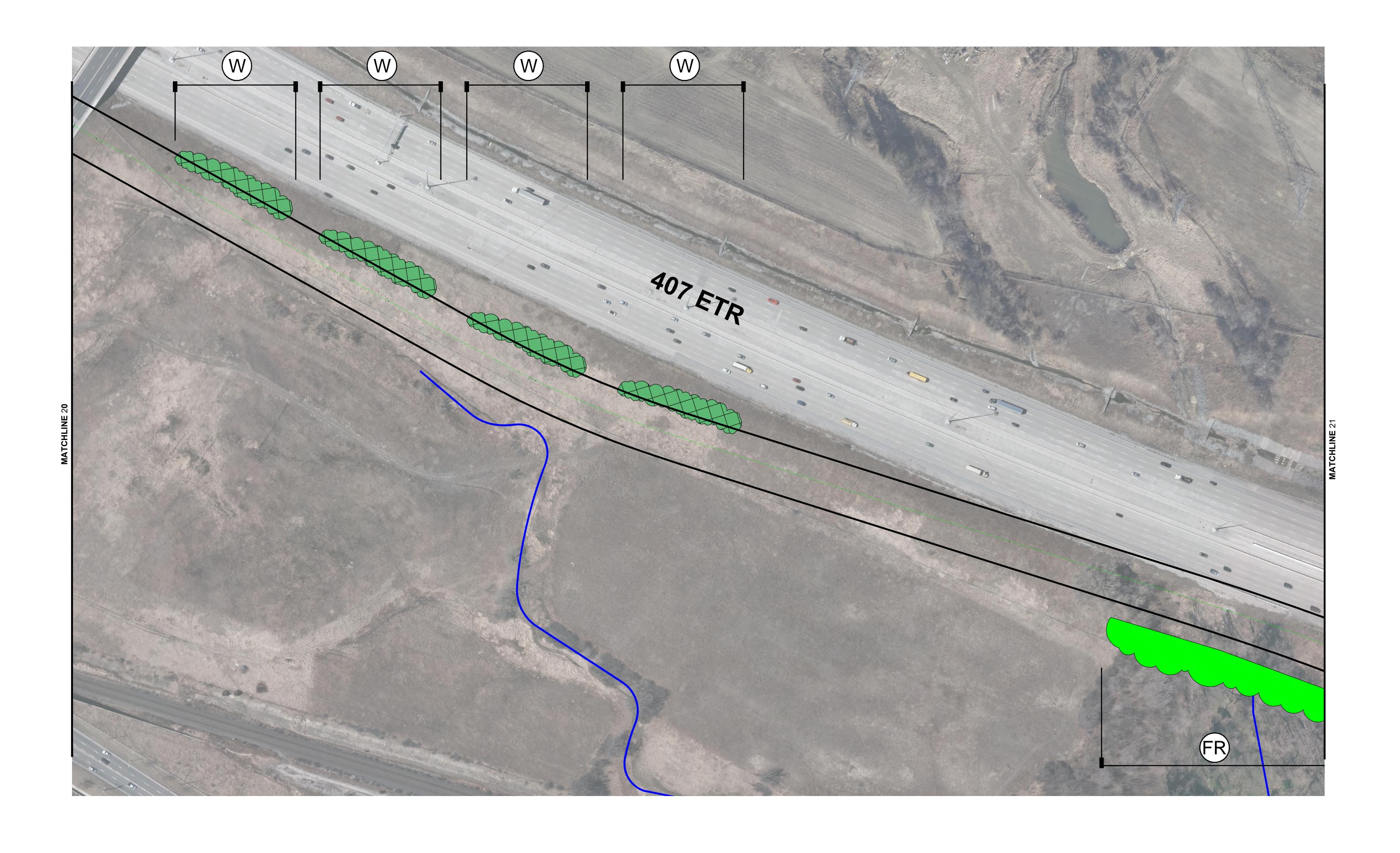
jmcwilliam@jmladesign.com





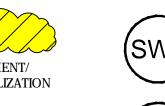


NOTE: SEE FIGURE 45 FOR PLANTING LAYOUTS



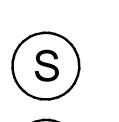














FOREST EDGE RESTORATION

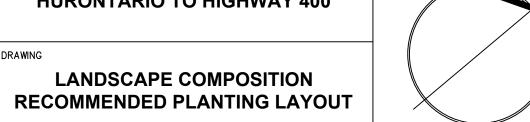


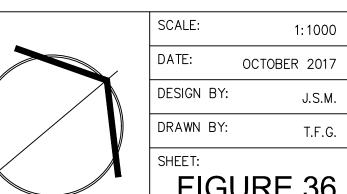




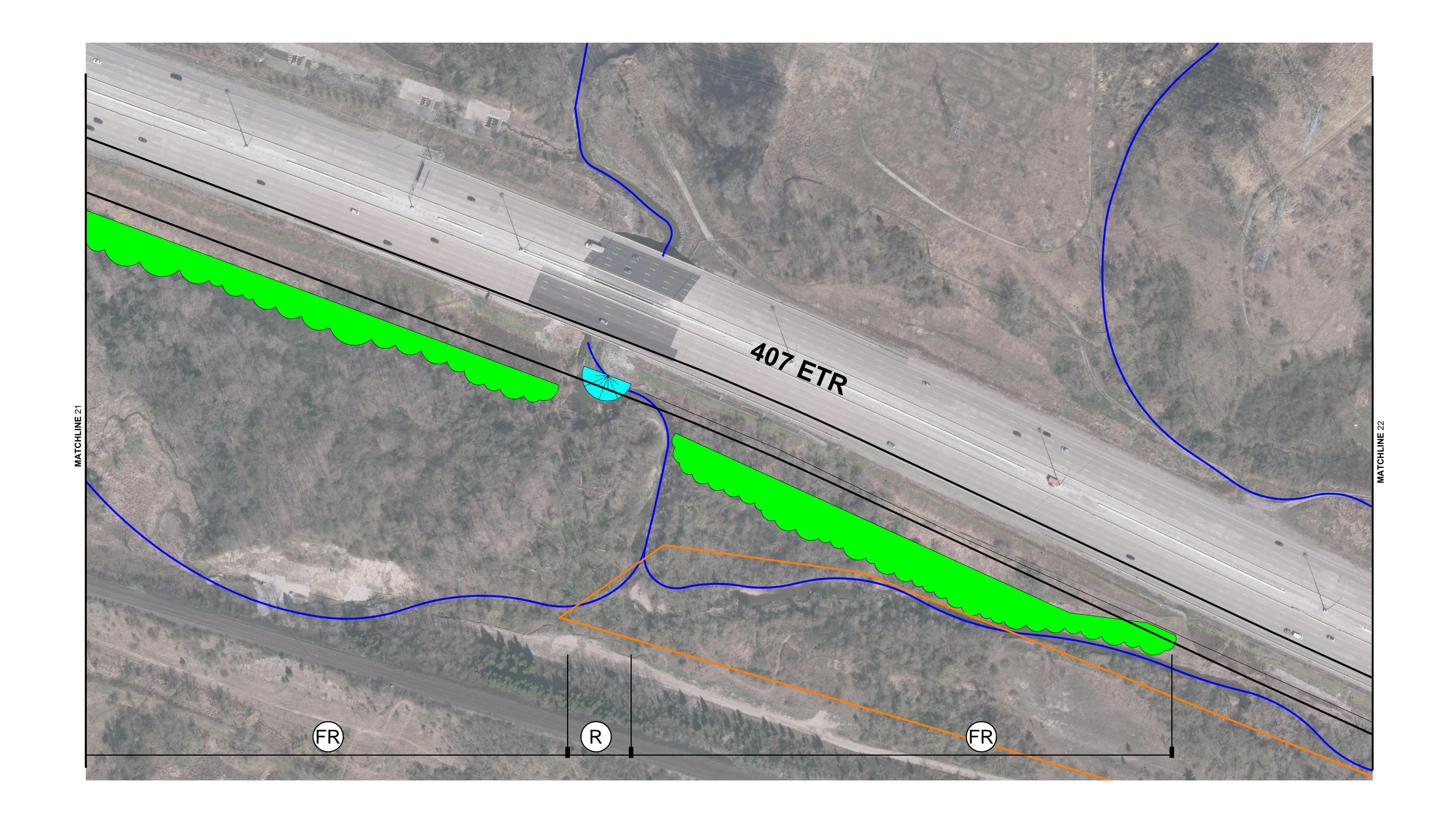








NOTE: SEE FIGURE 45 FOR PLANTING LAYOUTS

















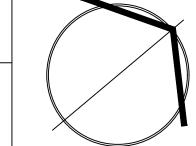












DESIGN BY: FIGURE 37

SCALE:

DATE:

1:1000

J.S.M.

OCTOBER 2017

LANDSCAPE COMPOSITION RECOMMENDED PLANTING LAYOUT jmcwilliam@jmladesign.com

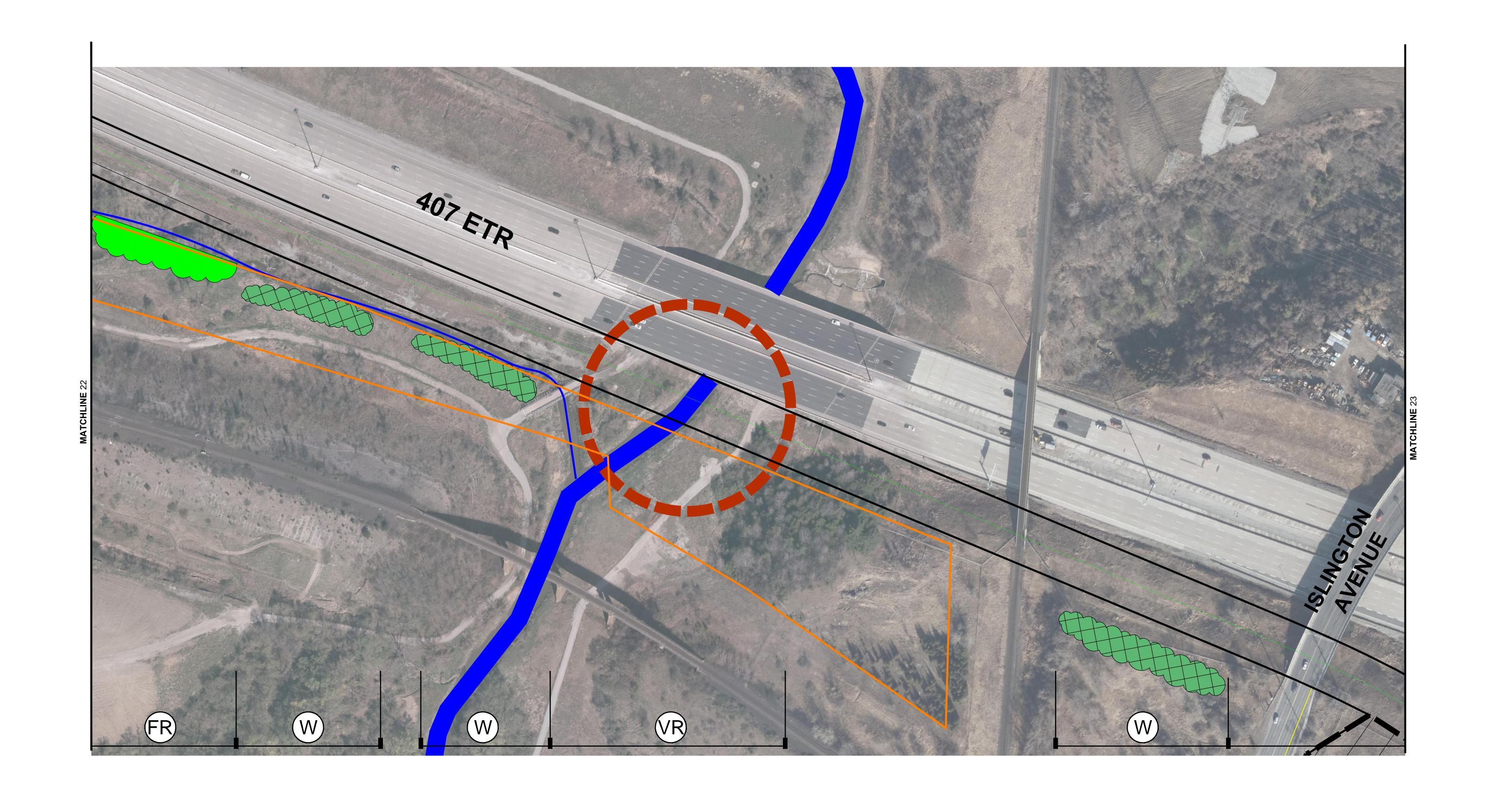












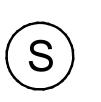














FOREST EDGE RESTORATION



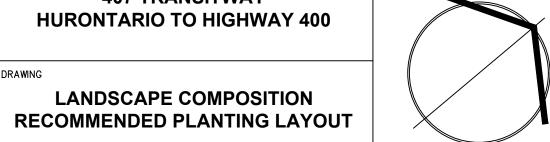


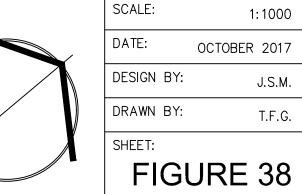






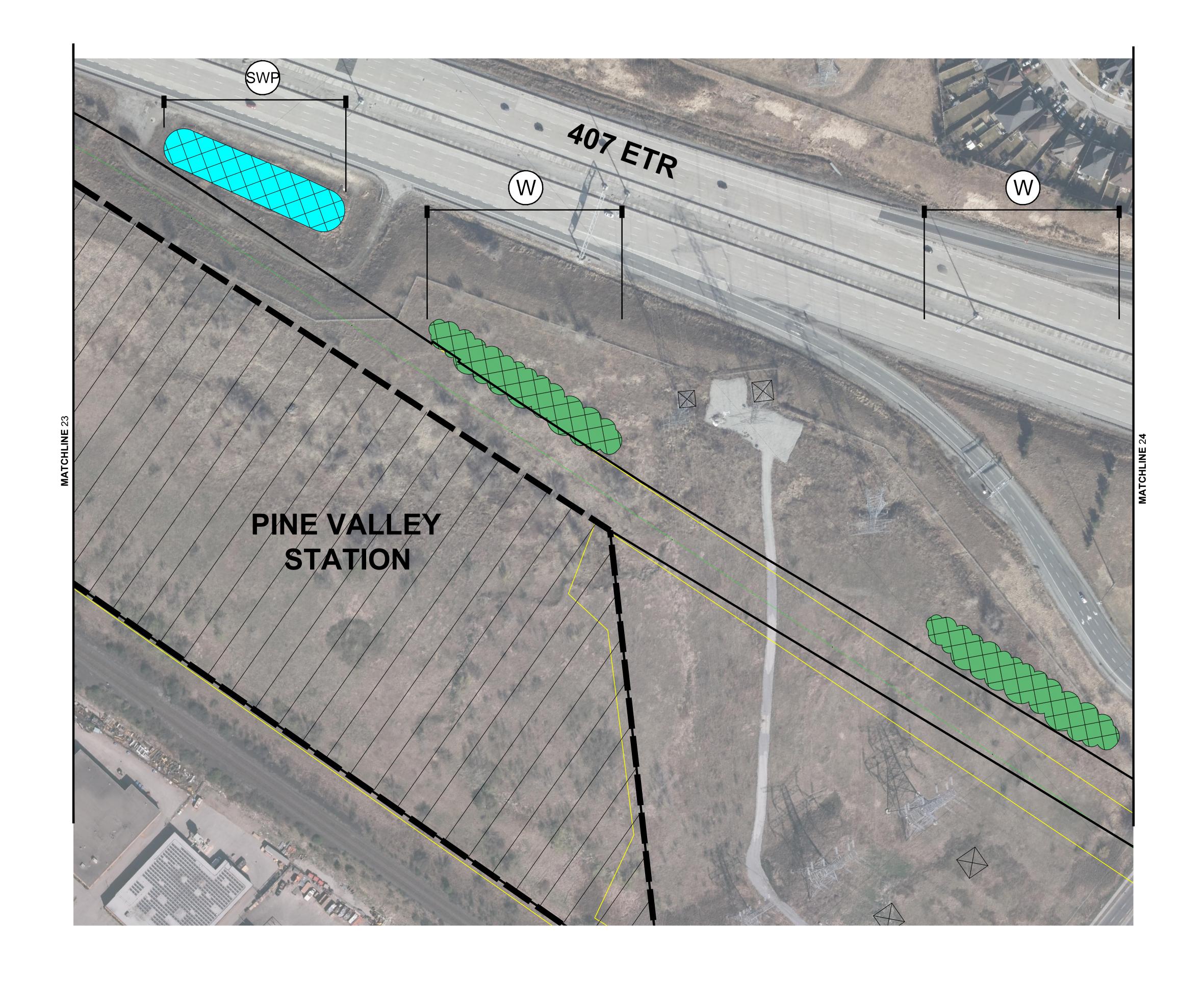






SCALE:

NOTE: SEE FIGURE 45 FOR PLANTING LAYOUTS



















FOREST EDGE RESTORATION

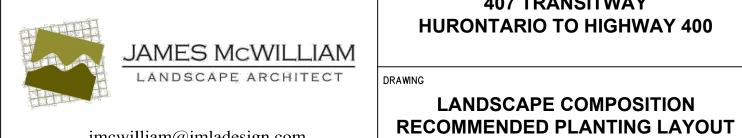






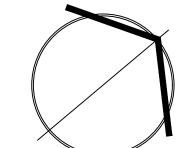






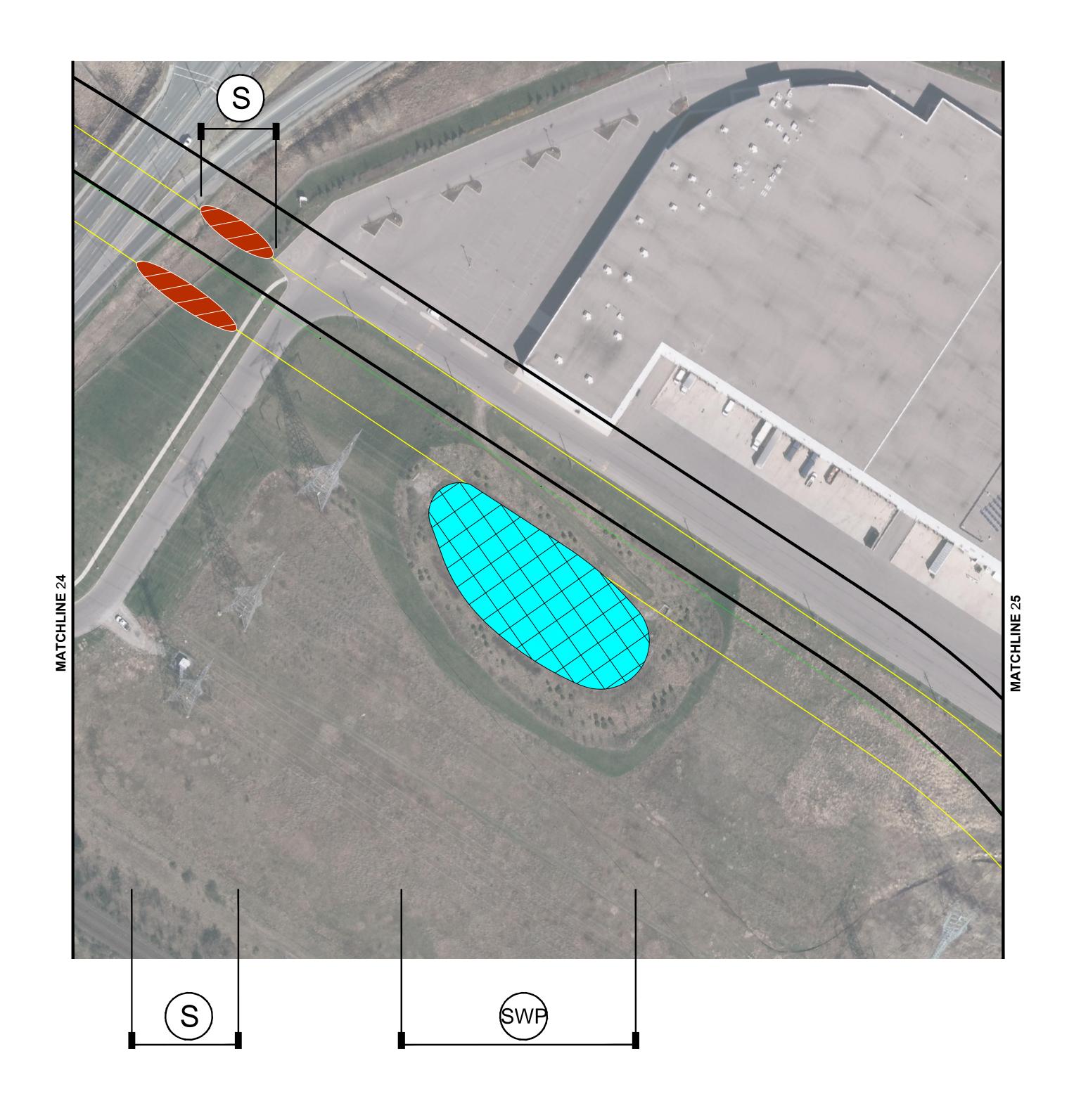


LANDSCAPE COMPOSITION

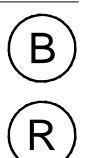


SCALE: 1:1000 DATE: OCTOBER 2017 DESIGN BY: J.S.M. FIGURE 39

NOTE: SEE FIGURE 45 FOR PLANTING LAYOUTS



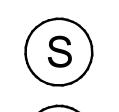














FOREST EDGE RESTORATION





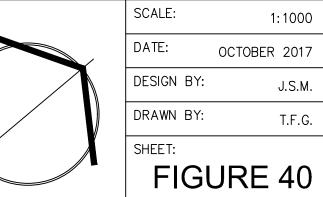




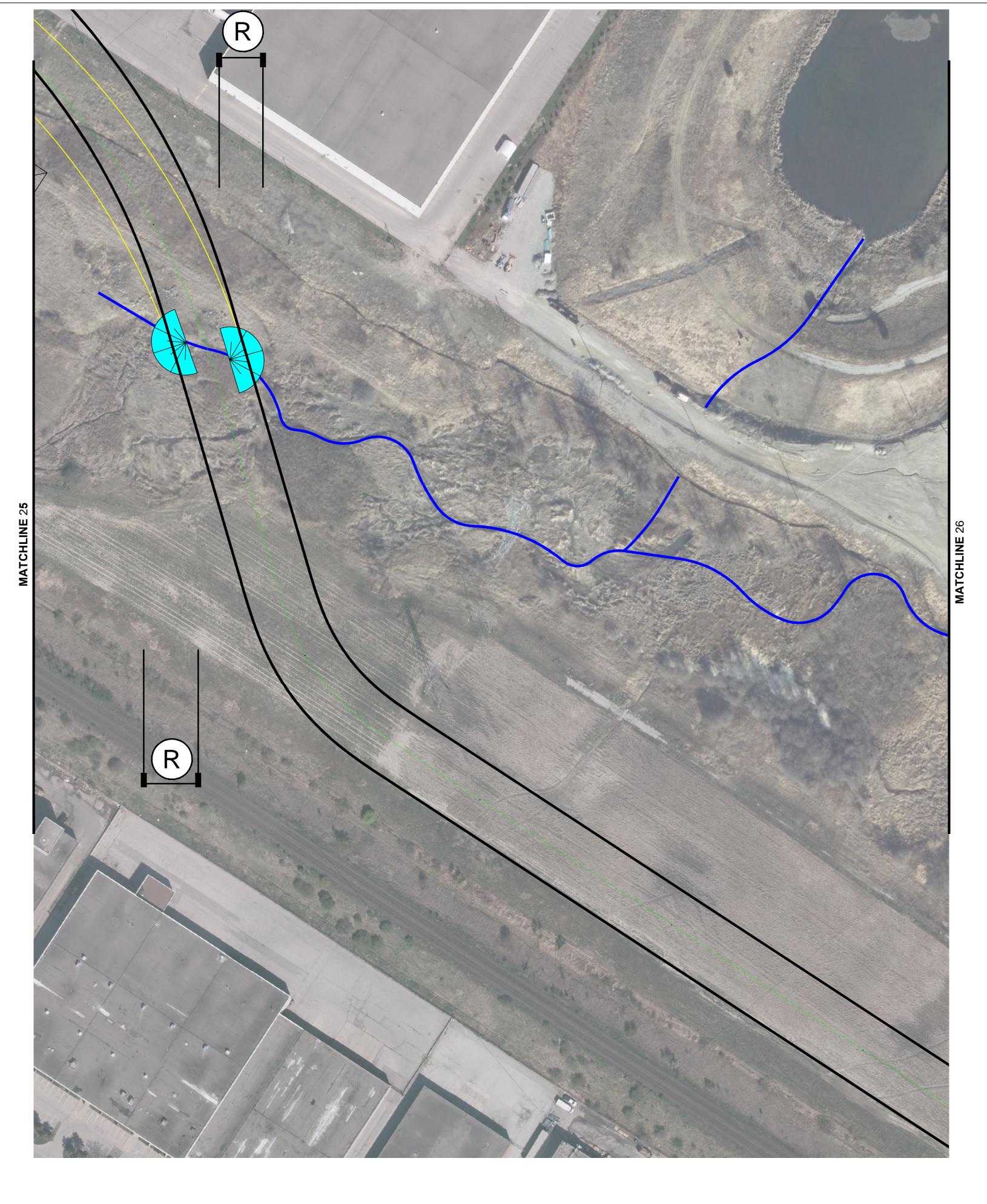




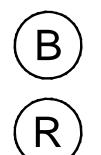




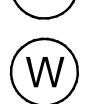
NOTE: SEE FIGURE 45 FOR PLANTING LAYOUTS



LEGEND

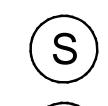








WOODLAND PLANTING





FOREST EDGE RESTORATION

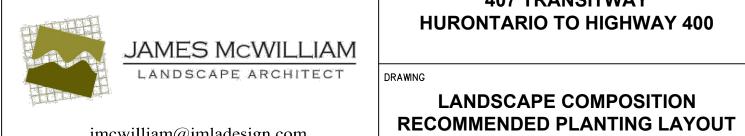




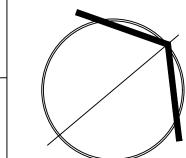










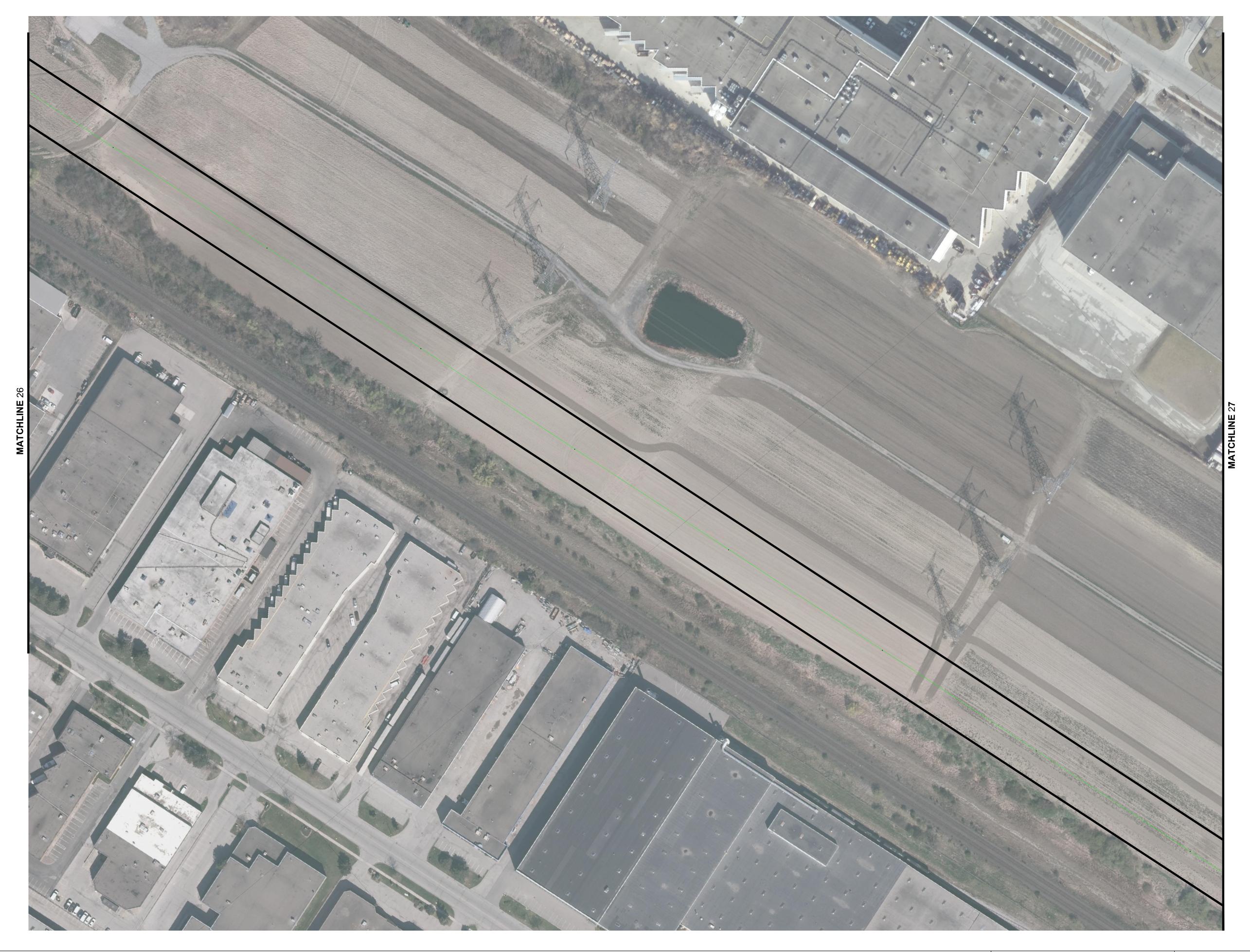


DATE: OCTOBER 2017 DESIGN BY: J.S.M. FIGURE 41

SCALE:

1:1000

NOTE: SEE FIGURE 45 FOR PLANTING LAYOUTS



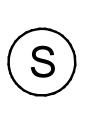














FOREST EDGE RESTORATION





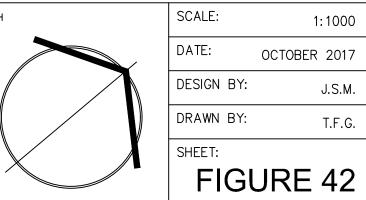












1:1000

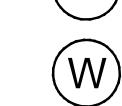
J.S.M.







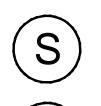








WOODLAND PLANTING





FOREST EDGE RESTORATION







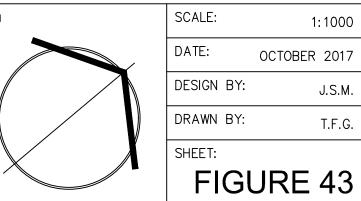


PROTECTED SITES

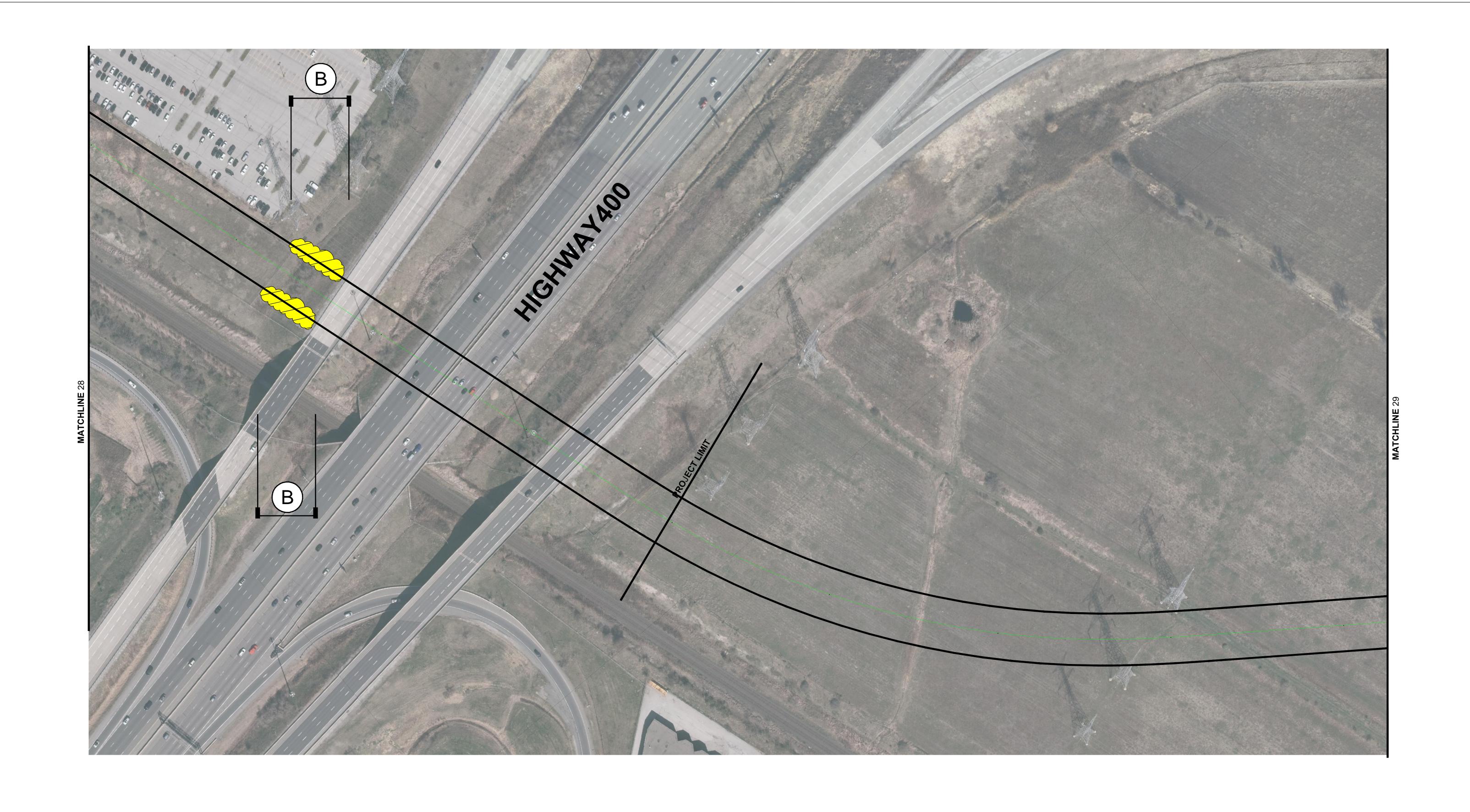








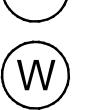
NOTE: SEE FIGURE 45 FOR PLANTING LAYOUTS



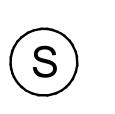














FOREST EDGE RESTORATION





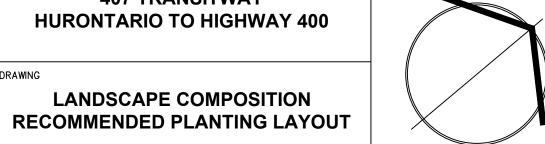








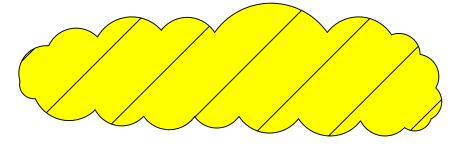
LANDSCAPE COMPOSITION



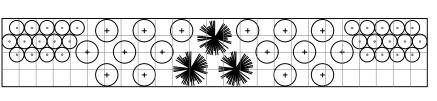
SCALE: 1:1000 DATE: OCTOBER 2017 DESIGN BY: J.S.M. FIGURE 44

NOTE: SEE FIGURE 45 FOR PLANTING LAYOUTS





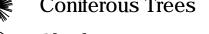
## EMBANKMENT/ SLOPE STABILIZATION

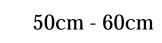


Coniferous Trees

(+) Shrubs

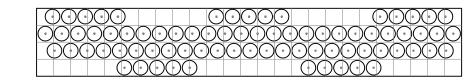
80cm - 100cm







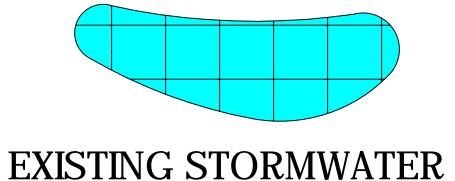




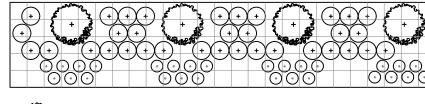
⊙ Shrubs

60-100cm HT.





MANAGEMENT POND



Deciduous Trees 200 - 250cm HT.

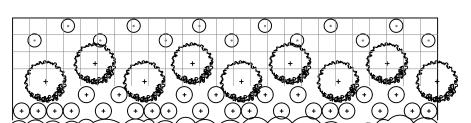
• Deciduous Shrubs 60cm HT.

Aquatic Plants Plugs





FOREST EDGE RESTORATION

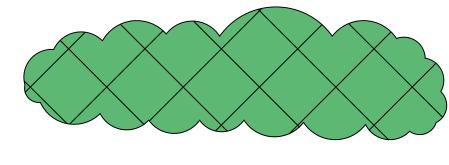


Pioneer Shrubs/Tree Whips

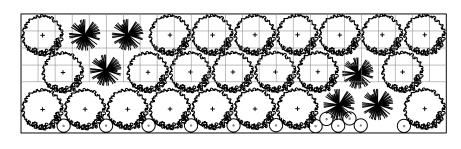
Understory Shrubs & Tree Seedlings

Deciduous Trees 200-250cm HT.



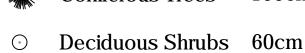


WOODLAND PLANTING



Deciduous Trees 200 - 250cm HT.

Coniferous Trees 100cm HT.







## VALLEY RESTORATION

MEASURES INCLUDE TREE PROTECTION, EROSION CONTROL, RIPARIAN PLANTINGS, RESTORATION OF AREAS DISTURBED BY CONSTRUCTION ACTIVITIES.

TO INCLUDE: DECIDUOUS TREES, CONIFEROUS TREES, DECIDUOUS SHRUBS, LIVE STAKES



PROTECTED SITES (PROTECTED FOR FUTURE ENVIRONMENTAL COMPENSATION





## RIPARIAN PLANTING

STREAM CHANNEL BANK STABILIZATION & STREAM SHADING PLANTINGS TO BE DETERMINED BY SITE CONDITIONS. TO INCLUDE: DECIDUOUS TREES, DECIDUOUS SHRUBS, LIVE STAKES

## NOTES:

- PLANTING GRIDS ARE COMPRISED OF 1m x 1m SQUARES
- PLANTING LAYOUTS ARE CONCEPTUAL SPECIFIC SITE CONDITIONS TO BE DETERMINED/RESPONDED TO PRIOR TO CONSTRUCTION



PROJECT	
40	7 TRANSITWAY
HURONT	ARIO TO HIGHWAY 400

LANDSCAPE COMPOSITION RECOMMENDED PLANTING LAYOUT

SCALE:	1:1000		
DATE:	OCTOBER 2017		
DESIGN BY:	J.S.M.		
DRAWN BY:	T.F.G.		
SHEET:			
FIGURE 45			