

March 14, 2025

Ashland Zoning Board of Appeals
Ashland Town Hall
101 Main Street
Ashland, MA 01721

Attn: John Trefethen, Chair

Subject: Transportation Consulting Services
Proposed The Sanctuary at Ashland Mills (40B)
10-60 Main Street, Ashland, MA

Dear Chair and Board Members:

MDM Transportation Consultants, Inc. (MDM) is pleased to provide you with the following supplemental transportation review comments for the above-referenced project. These comments have been prepared based on review of Proponent's response memorandum prepared by VAI dated February 27, 2025, project coordination meeting with the Town of Ashland department heads on Wednesday, March 12, 2025 via Zoom, and a review of updated Site plans prepared by Bohler Engineering dated March 12, 2025 as identified below. To facilitate response by Proponent, review items requiring response are noted in ***Bold Italic***.

MDM finds that the Proponent's submitted materials partially address comments issued in our January 31, 2024 review letter; outstanding issues to be addressed by Proponent are identified herein and include modification of site access improvements to address identified safety concerns; updated swept path analyses; detailed parking management plan to clarify parking policies for the development; and general transportation-related site plan commentary.

Documents Reviewed

MDM has reviewed the following documents to gain an understanding of the project and determine if industry standards have been applied in determining the potential impacts of the project. The following relevant documents were reviewed:

- *Response to Transportation Peer Review, The Sanctuary at Ashland Mills, 10 – 60 Main Street, Ashland, Massachusetts*, prepared by Vanasse & Associates, Inc. dated February 27, 2025.

- *Preliminary Site Plan Documents, 40B Development – “The Sanctuary at Ashland Mills, 50 Main Street, Ashland, Massachusetts, prepared by Bohler Engineering as updated through March 12, 2025.*
- *Truck Turns Exhibits, Fire Truck; SU-30 Movement A, SU-30 Movement B, SU-40 prepared by Bohler Engineering dated March 11, 2025.*
- *Truck Turns Exhibits, SU-30 Movement A, SU-30 Movement B, SU-40 prepared by Bohler Engineering dated February 18, 2025.*

Comment 1: Study Area

Original Comment: MDM concurs that the study locations along Myrtle Street and Main Street are appropriate primary study locations and in context with the likely traffic impacts for the Project. The intersection of Myrtle Street at Pine Hill Road should be considered as a secondary study location given the location of the site driveways and potential for residential traffic to use Pine Hill Road as an alternative travel route to Oak Street via Winter Street. This may also be a route that residents use during the upcoming Cordaville Road bridge replacement project which DPW indicates is to be advertised for 2028 construction.

Proponent Response: The study area has been expanded to include the intersection of Myrtle Street at Pine Hill Road. Turning movement counts were conducted at the intersection during the weekday morning (7:00 – 9:00 AM) and weekday evening (4:00 – 6:00 PM) peak periods on February 11, 2025 (Tuesday) and are attached. Table 4R summarizes the motor vehicle crash data for the Myrtle Street/Pine Hill Road intersection, which was identified to have experienced no (0) reported motor vehicle crashes between 2017 and 2021 based on data researched through the Massachusetts Department of Transportation (MassDOT).

Supplemental Comment: *Acknowledged; these baseline traffic volume and safety characteristics provide a basis for post-occupancy transportation monitoring to determine the need for supplemental mitigative actions at this location by Proponent if warranted per Comment 11.*

Comment 2: Traffic Volumes

Original Comment: MDM concurs that no Covid adjustment is required. However, a review of MassDOT’s statewide traffic data collection, 2019 weekday seasonal factors, Groups U4-7 indicate that all of the months besides December and January are at or above average which is contrary to seasonal data for MassDOT permanent count stations in the area. MDM has independently reviewed MassDOT permanent count station data for seasonal fluctuations; stations 307 and AET09

indicate that February is approximately 8 percent below average. The Proponent should review MassDOT permanent count station data for the area and update the analysis to reflect and appropriate average season condition.

Proponent Response: As requested, the raw traffic volumes were adjusted upward by 8.0%. For consistency with the existing conditions base year that was used in the August 2024 TIA, the 2025 traffic volumes for the Myrtle Street/Pine Hill Road were added to the 2024 Existing conditions traffic volume networks. Figures 3R and 4R depict the revised 2024 Existing weekday morning and evening peak-hour traffic volumes, respectively.

Supplemental Comment: Updated traffic volume networks reasonably represent average traffic volume conditions for purposes of impact analyses; these baseline traffic volumes provide a basis for post-occupancy transportation monitoring to determine the need for supplemental mitigative actions at this location by Proponent if warranted per Comment 11.

Comment 3(b) (Safety Analysis, Myrtle Street)

Original Comment: Left-turns exiting onto Myrtle Street will be severely limited by a proposed retaining wall and fence as well as proposed landscaping. Review of sight lines for the proposed site plan are limited to approximately 170 feet looking south (toward Main Street) by the proposed retaining wall, which has an elevation of more than 4 feet above driveway grade.

Proponent Response: The Site Plans will be revised to relocated the retaining wall outside of the sight triangle area and the updated landscape plan, included with this submission, has also be modified such that no object located within the sight triangle area of the Myrtle Street Project site driveway will exceed 2-feet in height.

Supplemental Comment : Site Plans as updated through March 12, 2025 (Sheet C-301) depict sight line triangles for the Myrtle Street driveway based on adjusted wall location, indicating approaching vehicles will have approximately 200 feet of available stopping sight distance (SSD) – a criteria that only “exactly” meets the absolute minimum intersection sight line criteria for measured (85th percentile) travel speeds. We note the importance of maximizing available sight lines at this driveway as it will serve as the primary site driveway for the development and associated service and emergency response vehicles. We therefore advise Proponent to adjust driveway geometry to properly accommodate vehicle sweeps per Comment 12(e) and further modify wall location to maximize sight lines with the goal of achieving sight lines that are as close to recommended ideal distance as possible. Preliminary assessment by MDM indicates that change in driveway alignment in combination with wall adjustment may

improve intersection distance to 260 feet or more which is more in line with recommended (ideal) intersection sight distance of 290 feet.

Comment 3(b) (Safety Analysis, Main Street Southern Driveway)

Original Comment: Left-turns out of the driveway located south of the Pleasant Street signal will be severely limited by vehicle queues along Main Street that regularly extend to and past the driveway from the Pleasant Street signal, raising concern for conflict with oncoming (southbound) traffic. Likewise, landscaping features (trees) may also impede sight lines at this driveway location unless modified to avoid the driveway sight line triangle.

Proponent Response: Movements entering and exiting the Project site at the Main Street southern Project site driveway will be restricted to right-turn only. The driveway design will be revised accordingly and appropriate signs (“Right Turn Only” and “No Left Turn”) will be installed to regulate the left-turn restriction. The Project-generated trip assignment networks and the corresponding 2031 Build condition peak- hour traffic volume networks have been revised accordingly (see Figures 8R through 16R).

Supplemental Comment: Driveway design as proposed is not likely to be effective at controlling/restricting left-turn movements at the driveway and as described under comments 12(b) and 12(c) would not properly accommodate fire apparatus and service vehicle swept paths without encroaching into opposing travel lanes. A driveway design that incorporates more restrictive turn movements is recommended including a raised delineating island that separates inbound (right-turn only) and outbound (right-turn only) movements with corresponding pavement markings and signs that reinforce turn restrictions.

Comment 3(b) (Safety Analysis, Short Term Parking Driveways)

Original Comment: The landscaping, as currently shown, may significantly limit the sight lines looking north and south from the short-term parking lot; Proponent should re-evaluate specific planting material and location to ensure that sight lines at driveways are unimpeded and meet applicable criteria.

Proponent Response: The landscape plan has been modified to remove objects within the sight triangle areas that would exceed 2-feet in height as measured from the surface elevation of the driveway.

Supplemental Comment : *Acknowledged; final landscaping plan may require adjustment pending redesign of site access per Comment 3(b) and 12(e).*

Comment 3(b) (Safety Analysis, Intersection Sight Triangles)

Original Comment: The Site Layout Plan should clearly indicate intersection sight line triangles for each site driveway including a note citing that “Signs, landscaping and other features located within sight triangle areas shall be designed, installed and maintained so as not to exceed 2.0-feet in height for SSD and 2.5 in height for ISD. Snow windrows located within sight triangle areas that exceed 3.5-feet in height or that would otherwise inhibit sight lines shall be promptly removed.”

Proponent Response: The intersection sight triangle areas have been added to the Landscape Plan along with the requested note. This will also be added to updated Site Plans that will be provided as a part of a future submission.

Supplemental Comment: *Acknowledged; no further comment.*

Comment 4 (Traffic Growth)

Original Comment: MDM concurs with the 7-year horizon, the general growth factor applied is consistent and conservative compared to area growth trends; we further note the inclusion of the proposed mixed-use project on Homer Avenue. Traffic from the nearby Chestnut Street apartments development should be considered for inclusion as a background project.

Proponent Response: The 2031 No-Build condition traffic volume networks have been revised to reflect the updated and expanded 2024 Existing condition traffic volumes (8.0% seasonal adjustment and the addition of the Myrtle Street/ Pine Hill Road intersection) and to incorporate traffic volumes associated with the multi-family housing development at 9-49 Homer Avenue and the Chestnut Street apartments development.1 Figures 5R and 6R depicted the revised 2031 No-Build weekday morning and evening peak-hour traffic volumes, respectively.

Supplemental Comment: *Acknowledged; no further comment.*

Comment 6 (Trip Distribution)

Original Comment: MDM generally concurs that the application of the methodology used in the TIA to estimate the trip distribution and assignment of the site generated traffic. Supporting trip distribution calculation sheets for the commercial and residential uses were not included in the Attachments; the Proponent should provide the calculation sheets for review and verification. As per Comment 1, the intersection of Myrtle Street at Pine Hill Road should be considered as a secondary study location given the location of the site driveways and potential for residential traffic to use Pine Hill Road as an alternative travel route to Oak Street via Winter Street.

Proponent Response: The trip distribution pattern has been revised to include trips assigned to/from Pine Hill Road (3% of trips associated with the residential and commercial components of the Project) and to reflect the left-turn restriction at the Main Street southern Project site driveway. Figures 7R and 8R depict the revised trip-distribution patterns for the residential and commercial components of the Project, with Figures 9R and 10R depicting the revised trip assignment for the residential component of the Project for the weekday morning and evening peak hours, respectively, Figures 11R and 12R depicting the corresponding revised trip assignments for the retail component, and Figures 13R and 14R depicting the corresponding revised trip assignments for the restaurant component. Figures 15R and 16R depict the revised 2031 Build condition traffic volumes for the weekday morning and evening peak hours, respectively. The Journey-to-Work data obtained from the U.S. Census and the back-up calculations for the trip distribution pattern are attached.

Supplemental Comment: Acknowledged; these baseline traffic volume and safety characteristics provide a basis for post-occupancy transportation monitoring to determine the need for supplemental mitigative actions at this location by Proponent if warranted per Comment 11.

Comment 7 (Operations Analysis)

Original Comment: MDM further notes that Ashland DPW confirms Main Street traffic signal equipment has been recently updated for “adaptive” operation that is in process of adjustment to optimize traffic flow during peak hour including train crossing activity. Nearby rail crossings on Main Street result in notable queue impacts to the proposed site driveway location. Even under “optimized” signal operation, extensive queues are likely to impact the proposed Main Street driveway on a regular basis during peak hours. Left-turns exiting the site driveway located south of the Pleasant Street signal will be severely limited by vehicle queues that regularly extend to and past the driveway from the Pleasant

Street signal; this condition creates significantly impaired sight lines for oncoming southbound traffic that raises safety concerns. Likewise, Left-turn movements entering this driveway will also often be blocked by the Main Street queues, hindering through traffic and potentially impacting signal operations. Ideally, relocating the Main Street site driveway opposite Pleasant Street for signal control would address these issues. Proponent should therefore evaluate this potential solution as well as driveway alternatives and/or restrictions that address queue blockage and sight line issues including but not limited to relocating the driveway further south, restricting driveway operations to "right-in/right-out only" or "enter only", placement of appropriate signs/markings such as "do not block the box" striping, etc.

Proponent Response: As discussed previously, movements entering and exiting the Project site at the Main Street southern Project site driveway will be restricted to right- turn only.

The traffic operations analysis has been revised to reflect the changes to the peak-hour traffic volumes under all analysis conditions (2024 Existing, 2031 No-Build and 2031 Build conditions), the expansion of the study area to include the Myrtle Street/Pine Hill Road intersection, and the left-turn restriction at the Main Street southern Project site driveway. Tables 10R and 11R summarize the results of the revised traffic operations analysis for the study area intersections with the detailed analysis worksheets attached.

As can be seen in Table 10R and consistent with the findings that were presented in the August 2024 TIA, Project-related impacts at the signalized study area intersections were identified to be relatively minor, with overall intersection operations maintained at a level-of-service (LOS) D or better an Project-related impacts defined as a predicted increase in overall average motorist delay of up to 1.2 seconds that resulted in a corresponding increase in vehicle queuing of up to two (2) vehicles.

As can be seen in Table 11R, all movements exiting Pine Hill Road to Myrtle Street were shown to continue to operate at LOS B during the weekday morning peak-hour and at LOS C during the weekday evening peak-hour with the addition of Project-related traffic. The Sumer Street approach to the Main Street/Homer Avenue/Summer Street intersection was shown to continue to operate at LOS F during the weekday morning peak- hour under all analysis conditions independent of the Project. As shown in Table 13R (Mitigated Signalized Intersection Level-of-Service and Vehicle Queue Summary) opportunities exist to optimize the traffic signal timing to reduce motorist delays on the Summer Street approach.

As would be expected, the restriction of left-turn movements at the Main Street southern Project site driveway was shown to reduce motorist delays and vehicle queuing for the Project site driveway approach, with motorist delays and vehicle queuing internal to the project site increasing at the Myrtle Street

project site driveway due to the corresponding increase in traffic volumes. All movements exiting the Myrtle Street Project site driveway were shown to operate at LOS F during the weekday morning peak-hour with vehicle queues along the driveway of up to 11 vehicles, and at LOS D during the weekday evening peak-hour with vehicle queues of up to five (5) vehicles. To reiterate, all of these additional delays are internal to the project site. All movements approaching the driveway along Myrtle Street are expected to operate at LOS A during both peak hours with negligible vehicle queuing. The predicted vehicle queuing along the Project site driveway can be contained within the Project site without inhibiting access, circulation or the movement of vehicles, pedestrians or bicyclists along Myrtle Street.

Supplemental Comment: MDM concurs with findings of updated capacity analyses, concluding that project-related trip impacts at offsite locations are not anticipated to materially degrade operating conditions relative to “No Build” conditions. This finding is premised on effective left-turn restrictions at the Main Street southerly driveway for which commentary is provided under comment 3(b) which recommends more restrictive driveway design. Longer delays and queues are projected in Proponent’s analysis at the Myrtle Street driveway (up to 11 vehicle queue during weekday AM peak periods). However, actual performance of the driveway is subject to post-occupancy monitoring and based on MDM observation of a similar volume intersection (Raymond Marchetti Way) it is likely that this AM peak hour queue condition is somewhat overstated¹. To the extent long queues do result at this driveway, this represents an on-site issue that will not impact public travel along Myrtle Street. Alternative use of the Main Street driveway to exit the Site as a right-turn (rather than left-turn onto Myrtle Street) provides an option for tenants and visitors to the site if longer delays/queues do occur at Myrtle Street driveway.

Comment 8(a) Parking

Original Comment: MDM anticipates that the proposed parking supply may be “right-sized” to support the proposed uses based on parking ratios commonly provided for similar projects in the Commonwealth and the relatively low bedroom count for the residential building; however, we recommend that Proponent submit calculations of the hourly shared demand for the project based on ITE Parking rates and methodology to validate the proposed shared parking supply. It would be beneficial to identify the primary parking areas for the various uses on-site (residential, commercial, restaurant, public plaza space) to make sure that

¹ Observations by MDM of Raymond Marchetti Way approach to Myrtle Street during AM and PM peak hours on March 11 and March 12, 2025 indicate similar volumes to those projected at the Myrtle Street driveway with observed queues of only 2 vehicle or less).

each use has an appropriate number of spaces in the vicinity of the individual building entryways.

Proponent Response: In order to determine the parking requirements of the specific land uses that will be located within the Project site, a parking demand analysis was performed using parking demand data published by the Institute of Transportation Engineers (ITE). Table P1 summarizes the average ITE peak parking demand ratios for each of the land uses that will be located within the Project site. Note that the commercial component of the Project has been refined to include 6,500 sf of retail space (vs. 7,782 sf) and 5,000 sf of restaurant space (vs. 7,783 sf).

Table P2 summarizes the peak parking demands for the Project on a weekday applying the average peak parking demand ratios shown in Table P1 to each of the respective land uses that are expected to be located within the Project site. As can be seen in Table P2, using the average observed peak parking demands, the Project is predicted to have a peak parking demand of 369 occupied parking spaces on a weekday.

It is important to note that the peak parking demand periods for the proposed uses do not occur simultaneously. For a residential use, the peak parking demand occurs between 12:00 AM and 4:00 AM on a weekday, with the peak parking demand for retail and restaurant uses occurring at 12:00 PM or 1:00 PM on a weekday. Distributing the peak parking demands for each of the respective land uses over the course of the day results in an overall peak parking demand for the Project of 308 parking spaces (the peak parking demand for the residential uses) that is predicted to occur after 11 PM and before 4:00 AM. During the peak parking demand period for the retail and restaurant uses (between 12:00 PM and 1:00 PM), the peak parking demand is predicted to be 219 parking spaces. Given that the Project will have no less than 365 parking spaces, the available parking supply should be sufficient to accommodate the peak parking demands of the Project. The parking demand calculations for the Project are attached.

A color coded parking location plan will be provided that illustrates the location of parking spaces by use (e.g., residential, retail, guest, etc.).

Supplemental Comment: Parking supply in the aggregate appears to be sufficient to support proposed site programming; however, as elaborated in Comment 8(b) the lack of garage gate/access controls may lead to parking preference in certain areas of the Site to the disbenefit of tenants who chose to lease garage spaces at a premium. A more defined parking management plan indicating controls/assignment of tenant/visitor/commercial use spaces is appropriate to ensure that the distribution and use of parking spaces is well defined and managed. As noted by Planning Board commentary at the February 2025 hearing, wayfinding

signs should also be considered to direct patrons/visitors to appropriate parking areas within the site.

Comment 8(b) Parking

Original Comment: Proponent should consider providing a secondary access/egress point for the garage given the sole garage access is within the flood zone of the property, the number of spaces served and to facilitate emergency egress.

Proponent Response: It is important to emphasize that the proposed garage is an “open” garage designed to allow for the free inflow and outflow of water. There will be no gate nor garage door that could malfunction, nor anything that could potentially block or inhibit the entrance or existing of vehicles. In addition, there will be multiple entrances and exits for residents to safely exit the garage in any situation.

Moreover, flooding events are typically predictable and anticipated and with adequate advance notice, vehicles can be moved to alternate locations out of the flood plain. In addition, the upper level of the garage, which is above the flood plain has an egress stair to street level. And the elevator lobbies and trash room are also above flood plain.

This project will be institutionally managed by a national property management company. There will be communication protocols in place with all residents to provide the appropriate notifications and communications should a possible flood event be on the horizon.

As a condition of an occupancy permit, the Applicant could share the property management plan for flood events for review by the Town.

Supplemental Comment: MDM understands that Proponent is in process of evaluating a secondary garage driveway; details of this second vehicular garage access point will be reviewed when made available.

Regarding “open” garage design, Proponent should clarify how use of garage spaces will be controlled/managed in the absence of gate/access controls. Garage parking represents a premium weather-sheltered facility that in absence of gate/access controls may be used by the general public for retail/restaurant use, tenant visitors or even patrons of other nearby businesses if deemed more convenient than on-street parking. Lack of garage access controls also raises question of whether Proponent intends to “unbundle” parking from tenant leases (a recommended TDM element).

Comment 9 (TDM)

Original Comment: Proponent should consider the following additional TDM measures to facilitate and incentivize use of public transportation use by residents and employees, alternatives to auto use/ownership and alternative fuel vehicles:

- *Transit Pass Subsidy: Offer a fare subsidy for MBTA and MWRTA passes for residents for the first month of residency. This program is intended to promote awareness and use of public transportation options serving the property to be provided at time of lease for new residents.*
- *Given the distance to the Ashland commuter rail station (approximately $\frac{3}{4}$ mile away) the Proponent should also consider “last mile” transportation alternatives including but not limited to a “bike share” program.*
- *Specific commitment to EV charging stations for both the residential and commercial uses with ability to expand EV charging infrastructure over time based on demand.*
- *Preferential Parking and Incentives for Low-Emission Vehicles. Preferential parking locations for residents who use low-emission vehicles.*
- *Unbundled Parking. Unbundling residential parking from tenant leases to provide an option for residents to rent fewer or no parking spaces with their unit, thereby encouraging lower vehicle ownership at time of lease.*

Proponent Response: The Project proponent will expand the elements of the TDM program that were defined in the August 2024 TIA to include the following measures:

- Transit Pass Subsidy – New residents of the Project that sign a one-month lease will be offered a transit pass subsidy for the first month of tenancy limited to \$50 per unit.
- Bicycle Accommodations – Secure, weather protected bicycle parking will be provided for resident bicycles and exterior bicycle parking will be provided for both resident and visitor bicycles. To the extent that the Town of Ashland establishes a bikeshare program, space will be provided within the Project site to locate a bikeshare station.
- EV Charging – Initially five (5) EV charging stations will be provided within the Project site, with infrastructure provided to support future expansion of the EV charging to 63 stations based on tenant demand.

- Parking – Parking will be unbundled from the lease for each residential unit in order to encourage lower automobile ownership.

Supplemental Comment: Acknowledged; no further comment.

Comment 10 (Mitigation)

Original Comment: MDM advises that Proponent conduct post-occupancy monitoring for traffic and operations at study intersections with commitment to modify/adjust Main Street signal operations working in coordination with Ashland DPW.

Proponent Response: The Proponent will undertake a post-occupancy traffic monitoring program pursuant to the schedule defined in Comment 11 that will include performing traffic counts and undertaking a traffic operations analysis at the signalized study area intersections in order to assist the Ashland DPW with adjusting the operations of the Main Street traffic signal system as may be necessary. The specific intersections are as follows:

- Main Street at Pleasant Street
- Main Street at Fron Street
- Main Street at Homer Street and Summer Street

Supplemental Comment: Acknowledged; no further comment.

Comment 11 (Monitoring)

Original Comment: The Proponent should commit to a post occupancy monitoring program with commitment to implement strategic mitigation actions such as driveway modifications or restrictions and traffic management based on actual driveway and study intersection operations and safety characteristics.

An initial traffic monitoring report should be provided within 6 months of achieving initial occupancy of the Project. Subsequent monitoring reports shall be conducted within 6 months of 80% occupancy of residential units and 80% occupancy of the commercial space. Monitoring should include the following elements for site driveways and study intersections included in the TIA:

- *Performing manual turning movement and vehicle classification counts during the weekday morning (7:00 to 9:00 AM) and evening (4:00 to 6:00 PM) peak periods;*

- Evaluate traffic operations (crash history, levels of service, motorist delays and vehicle queuing) for the weekday morning and evening peak hours.
- Provide parking counts by zone to evaluate the effectiveness of the on-site parking to accommodate the site uses.

The results of the monitoring programs will be summarized in reports to be provided to the Town of Ashland for distribution and review/input by Planning, DPW, Police and Fire Departments. To the extent warranted, the reports should include specific recommendations to address identified traffic operational and/or safety issues including but not limited to driveway restrictions or modifications including supplemental signs, markings or traffic controls; signal timing adjustments; parking management practices; and modification/expansion of TDM programming. If directed by the Town, the Proponent should implement recommended improvements subject to receipt of all necessary rights, permits and approvals. Performance criteria for the monitoring report should be expressly identified including crash experience/trends at site driveways, trip generation and patterns for the site based on projections cited in the TIA; and parking demand projections to be determined during the course of local approvals and Proponent responses.

Proponent Response: The Project proponent will undertake a post-occupancy traffic and parking monitoring program as defined above to include an initial monitoring report to be issued within 6-months of initial occupancy and a subsequent report to be issued within 6 months of achieving 80% occupancy of residential units and 80% occupancy of the commercial space.

If and to the extent that one or more of the following conditions are documented as a part of the post-occupancy traffic and parking monitoring program:

- a) The volume of traffic that is associated with the Project as measured at the Project site driveways exceeds the predicted volume of traffic for the Project as defined in the August 2024 TIA by more than 10% (110% of the projected traffic volume);
- b) There is an increase in the frequency of occurrence of motor vehicle crashes at the monitored intersections that is directly attributable to the Project; and/or
- c) The peak parking demand exceeds 90 percent occupancy;

The Project proponent will undertake corrective actions in conjunction with the appropriate party(ies) and subject to receipt of all necessary rights, permits and approvals limited to the following:

- Traffic signal timing improvements
- Sign and pavement marking installation
- Expansion of the elements of the TDM program
- Parking management strategies

Supplemental Comment: Updated traffic volume networks and analyses as documented in the Proponent response of February 27, 2025 to include the Myrtle Street/Pine Hill Road intersection should also be referenced as controlling documents that establish an appropriate basis for post-occupancy monitoring.

GENERAL SITE PLAN COMMENTS - TRANSPORTATION

Comment 12(a): Sidewalk Design at Driveways

Original Comment: The driveways on Main Street should be designed to be consistent with recently built infrastructure in the downtown; specifically, this design eliminates the traditional ADA ramp designs and marked crossing with a continuous sidewalk with “tip-down” driveway to provide a continuous pedestrian sidewalk elevation through the driveway – therefore favoring pedestrian movements.

Proponent Response: The Site Plans will be revised to reflect the use of “pan-type” driveways where the sidewalk is flush across the driveway.

Supplemental Comment: Acknowledged; no further comment.

Comment 12(b): Swept Path Modeling – Fire Apparatus

Original Comment: Provide swept path analysis/modeling for the site using the current Fire Department tower vehicle/template dimensions. Modeling should include movements to/from each of the site driveways and circulation aisles as well as the front parking lot along Main Street that provides short-term parking as this is likely the main point of entry for emergency calls.

Proponent Response: A vehicle turning (swept path) analysis has been performed for the Project and will be provided for the following design vehicles: SU-30, SU-40 and Ashland Fire Department design vehicle.

Supplemental Comment: Swept path exhibit for Fire truck dated March 11, 2025 indicates wide sweeps requiring entire driveway width for Site access or egress; no modeling is provided for Myrtle Street right-turn egress (a movement required if concurrent/subsequent response is required to points north of the Site). Encroachment into opposing driveway travel lanes is not consistent with requirements under the NFPA 1 and the Massachusetts Amendments (527 CMR 1.0 Chapter 18) for travel in opposing lanes. Modification of driveway design per Comment 3b and Comment 12e is recommended to properly accommodate fire apparatus vehicle sweeps, reinforce turn restrictions (Main Street driveway) and maximize available intersection sight lines (Myrtle Street).

Comment 12(c): Swept Path Modeling – Service Vehicles

Original Comment: Provide swept path analysis/modeling for refuse vehicles to/from designated dumpster areas and for service/delivery vehicles for the commercial building.

Proponent Response: A vehicle turning analysis for an SU-30 and an SU-40 design vehicle for the proposed dumpster areas and the location of service/delivery for the commercial building. This will be provided as part of the updated Site Plans under separate cover.

Supplemental Comment: Driveway designs must be modified at the Myrtle Street and Main Street south driveway to eliminate opposing lane encroachments including (in the case of Myrtle Street) encroachment into Myrtle Street southbound lane for right-turn exiting movements.

Vehicles used for move-in/move-out are assumed as SU-30 design vehicles which Proponent should expressly acknowledge with tenants before reserving loading area space prior to move-in/move-out; as per comment 12d, additional expanded loading areas are recommended to properly accommodate these vehicle types.

Comment 12(d): Move-In Vehicle Staging

Original Comment: Provide clarification of where tenant move-in/move-out trucks (typically SU-30 design vehicles or equivalent) can be staged/parked within the Site in a manner that does not impair circulation or impact parking spaces.

Proponent Response: Tenant moves will be coordinated with the property manager and scheduled in advance. Tenants will be informed of the location for moving vehicle staging. In addition to the use of parking spaces for smaller moving vehicles, a loading area is located adjacent to the garage driveway to the rear of the building.

Supplemental Comment: Submitted Parking/Loading/Bike Storage Exhibit identifies a small loading area near the garage entrance for move-in vehicle staging. This limited area (approximately 26 feet in length) would only nominally accommodate a single "box truck" vehicle with no provision for truck ramp. The lack of reasonable working area could impact site circulation lanes; likewise, there is no accommodation of more than a single move-in/move-out at any given time. MDM recommends that Proponent consider an expanded loading zone/locations for move-in/move-out use that can accommodate up to two (2) concurrently parked "box truck" type vehicles with adequate area for ramps and circulation. This may be achieved by designating the formal loading bay (by advance tenant reservation) as one move-in vehicle location in combination with an expanded surface loading area near the garage entrance, or expanded loading area near the garage entrance. Management of tenant move-in/move-out should be subject to prior notice/reservation of loading area by tenants so as to avoid potential circulation impacts at the property which would present a safety concern.

Comment 12(e): Myrtle Street Driveway Design

Original Comment: Skewed alignment of the proposed driveway at Myrtle Street may require adjustment to curb radii to accommodate delivery, move-in or service vehicles so as to avoid encroachment into southbound Myrtle Street traffic. Proponent to confirm or consider restriction on the use of this driveway by non-passenger vehicle types with appropriate signs and markings.

Proponent Response: The Myrtle Street Project site driveway has been designed to accommodate the turning and maneuvering requirements of delivery vehicles and the Ashland Fire Department design vehicle. Delivery vehicles will service the Project during non-peak hours and, as such, conflicts with vehicles exiting the driveway will be limited if any.

Supplemental Comment: MDM does not concur that the driveway as proposed meets applicable design requirements for service, delivery, move-in or fire apparatus maneuvering whether these movements occur peak or non-peak. The skewed driveway alignment requires for each of these vehicle types a wide sweep into the opposing travel lane of Myrtle Street or (for entering movements) a wide sweep into the exiting lane of the driveway. This presents a significant safety concern that must be addressed by modifying the driveway alignment and/or adjusting curb radii so that movements do not impact opposing travel. See attached swept path exhibits which illustrate swept paths for various vehicle types based on currently proposed driveway design.

The Myrtle Street driveway will serve as a primary driveway for the Site given the left-turn restrictions at the Main Street driveway. Based on discussion with the Ashland Fire Department, this driveway will also serve as the sole means of egress for fire apparatus that would need to return to the downtown station after a response or, alternatively, would need to use the driveway for concurrent/subsequent response for other neighborhood locations north of the Site. Accordingly, it is imperative that the design of the driveway properly accommodate vehicle swept paths and maximize sight lines/driveway visibility to ensure safe and efficient maneuvering by fire apparatus at this location.

Comment 12(f): Bicycle Parking

Original Comment: Bicycle parking locations should be identified on the site plan to include covered and protected areas for residents and loop racks for visitors near the building entrances.

Proponent Response: The location of interior and exterior bicycle parking is shown on the attached exhibit from Embarc and will be added to the revised Site Plans.

Supplemental Comment: Acknowledged; no further comment.

Comment 12(g): Myrtle Street Driveway Sight Lines

Original Comment: The proposed retaining wall and fence to be situated proximate to the proposed public plaza will require modification and possible relocation within the Project site ensure sight line criteria are achieved.

Proponent Response: The proposed retaining wall has been relocated outside of the sight triangle area of the Myrtle Street Project site driveway. This is shown on updated Landscape Plan that is included as an attachment.

Supplemental Comment: Site Plans as updated through March 12, 2025 (Sheet C-301) depict sight line triangles for the Myrtle Street driveway based on adjusted wall location, indicating approaching vehicles will have approximately 200 feet of available stopping sight distance (SSD) – a criteria that only “exactly” meets the absolute minimum intersection sight line criteria for measured (85th percentile) travel speeds. We note the importance of maximizing available sight lines at this driveway as it will serve as the primary site driveway for the development and associated service and emergency response vehicles. We therefore advise Proponent to adjust driveway geometry to properly accommodate vehicle sweeps per Comment 12(e) and further modify wall location to maximize sight lines with the goal of achieving sight lines that are as close to recommended ideal distance as possible. Preliminary assessment by

MDM indicates that change in driveway alignment in combination with wall adjustment may improve intersection distance to 260 feet or more which is more in line with recommended (ideal) intersection sight distance of 290 feet.

Comment 12(h): Landscaping Adjustments for Sight Line

Original Comment: Landscaping and canopy trees should be modified were appropriate within the Project site so that sight line triangle areas for all driveways are not impacted. The current plan includes canopy trees set in a line that may impair sight lines.

Proponent Response: The landscape plan has been modified to adjust the location of the canopy trees and to remove objects located within the sight triangle area of the Project site driveways that would exceed 2-feet in height.

Supplemental Comment: Acknowledged; final site plans may require minor adjustment of proposed landscaping pending further adjustment of driveway design by Proponent.

Comment 12(i): Sight Line Triangles and Notes

Original Comment: The Site Design Plan should clearly indicate intersection sight triangles and include a note citing that "Signs, landscaping and other features located within sight triangle areas shall be designed, installed and maintained so as not to exceed 2.0-feet in height. Snow windrows located within sight triangle areas that exceed 3.5-feet in height or that would otherwise inhibit sight lines shall be promptly removed."

Proponent Response: The sight triangle areas have been added to the Landscape Plan along with the requested note. This will also be provided on the Site Plan as part of the future submittal.

Supplemental Comment: Acknowledged, no further comment.

Comment 12(j): Myrtle Street Driveway Sidewalk

Original Comment: The Project is proposing to extend the sidewalk on the eastern side of Myrtle Street between Water Street and the proposed site driveway. As there is no sidewalk on the eastern side of Myrtle Street to the north of the project, the sidewalk should likely continue into the site and not extend to the site driveway

at this time. The proponent should coordinate with the DPW if a replacement existing guardrail is required in this area.

Proponent Response: The proposed sidewalk will continue into the Project site as shown on the revised Landscape Plans. The Project proponent will coordinate with the Ashland DPW if a replacement of the existing guardrail is required in conjunction with the construction of the new sidewalk.

Supplemental Comment: Acknowledged, no further comment.

MDM appreciates the opportunity to provide Transportation Planning & Engineering Services to the Town of Ashland and look forward to discussing our findings at an upcoming Zoning Board of Appeals hearing. If you have any questions or concerns, please feel free to contact this office.

Sincerely,

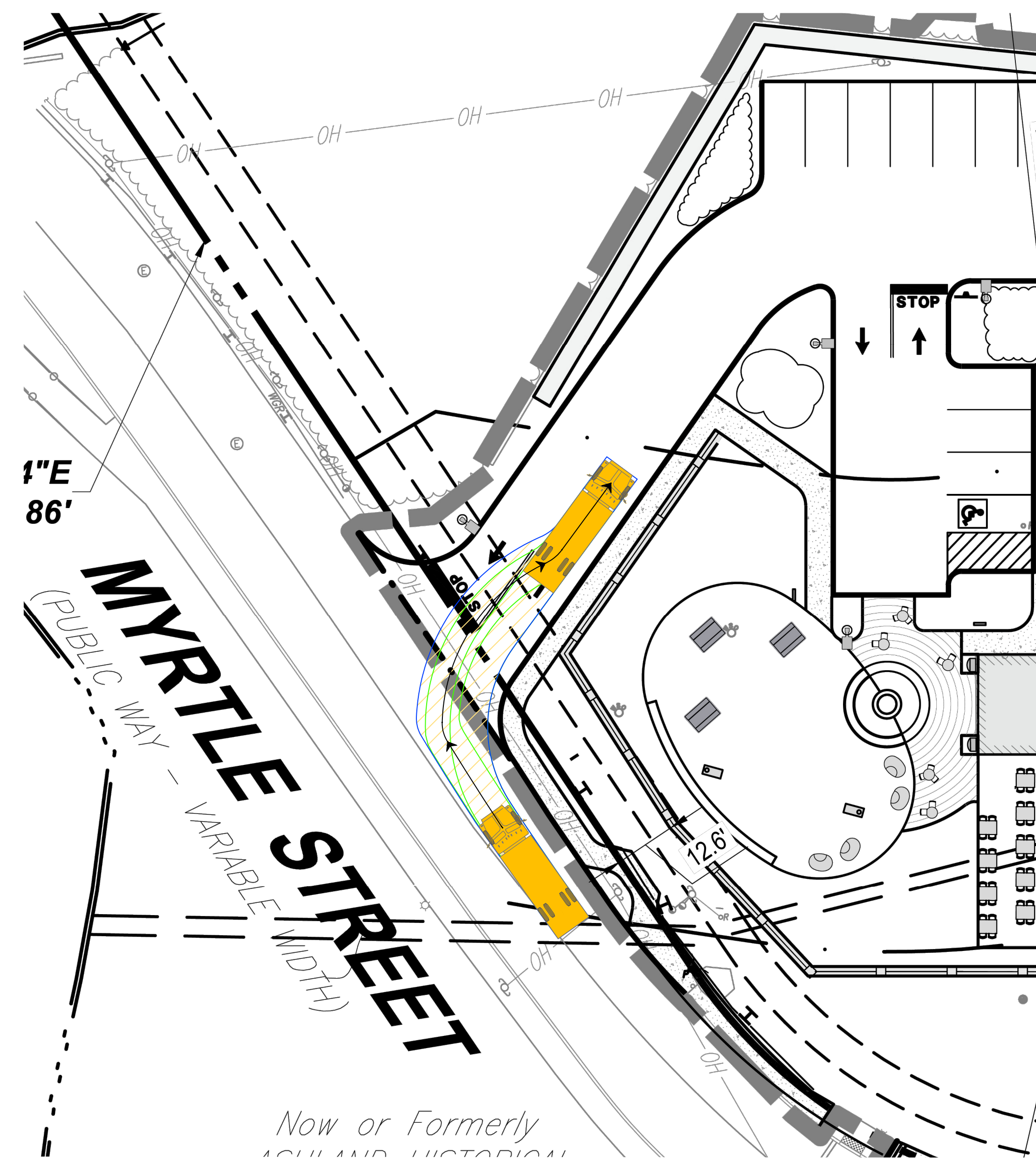
A handwritten signature in blue ink that reads "Robert J. Michaud". The signature is fluid and cursive, with a large loop at the end of the last name.

Robert J. Michaud, P.E.
Managing Principal

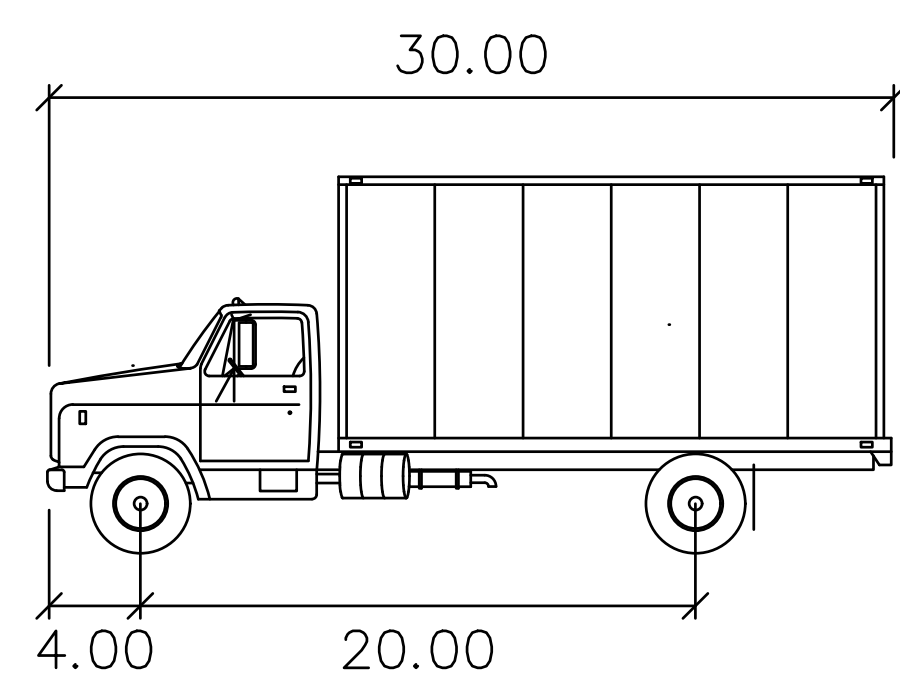
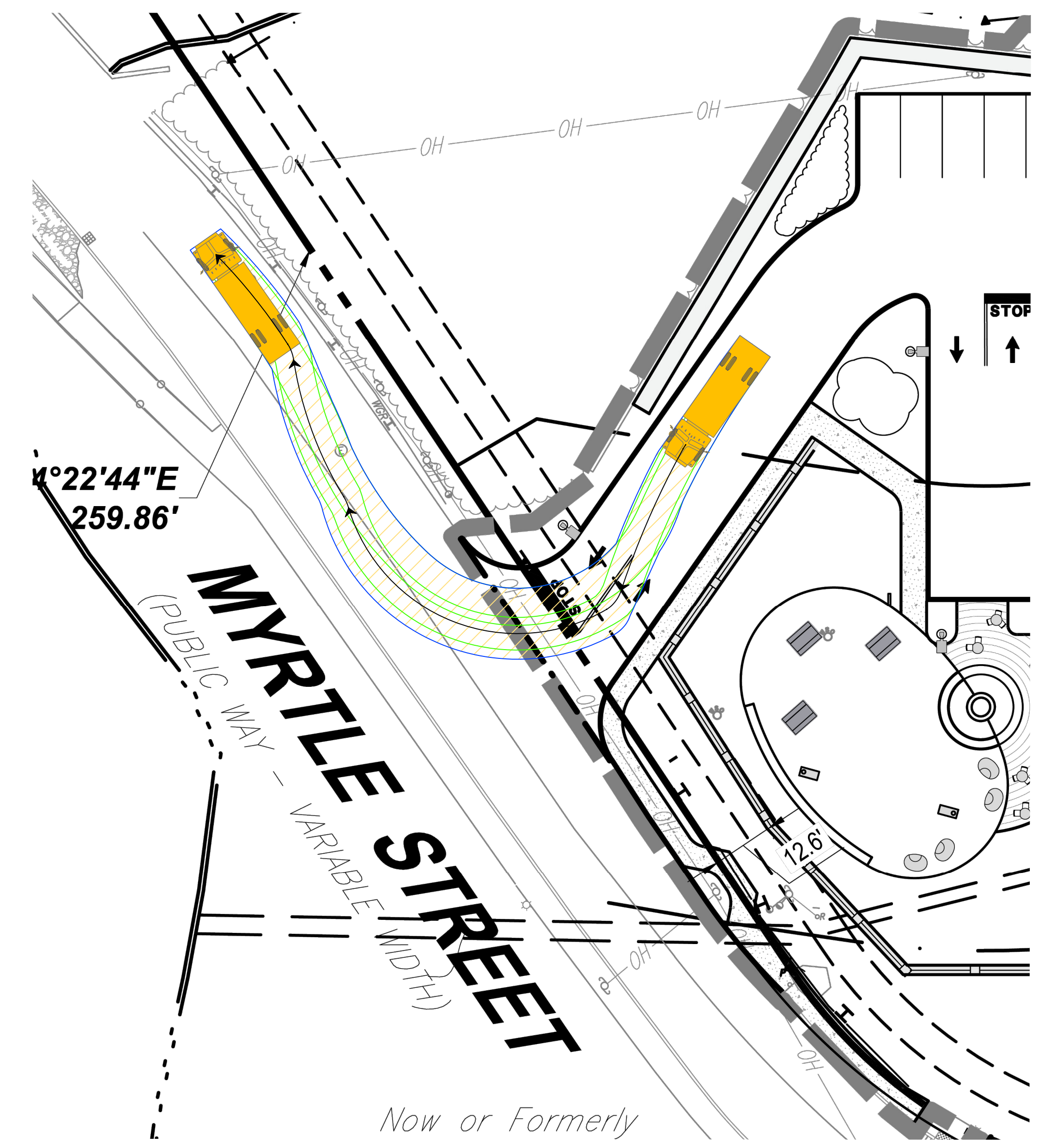
Attachments

- AutoTurn Swept path Modeling – Myrtle Street Driveway
(Exhibits 1-3)

Entering



Exiting



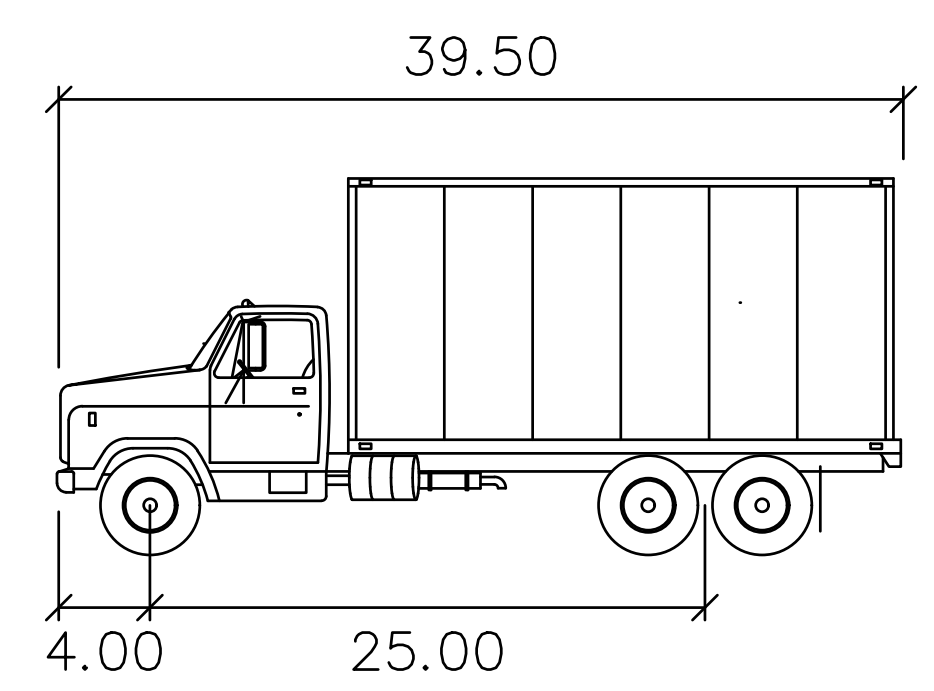
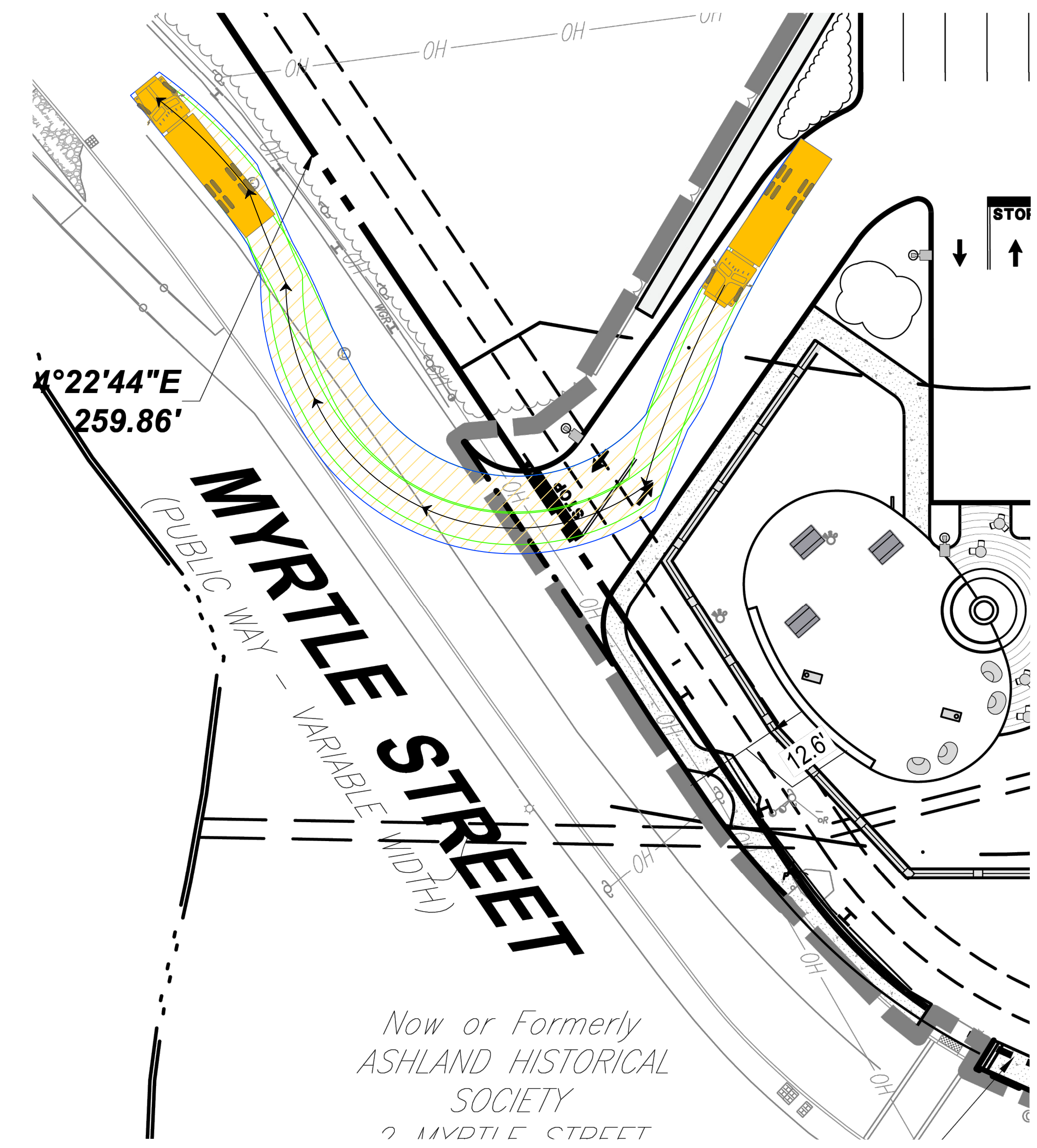
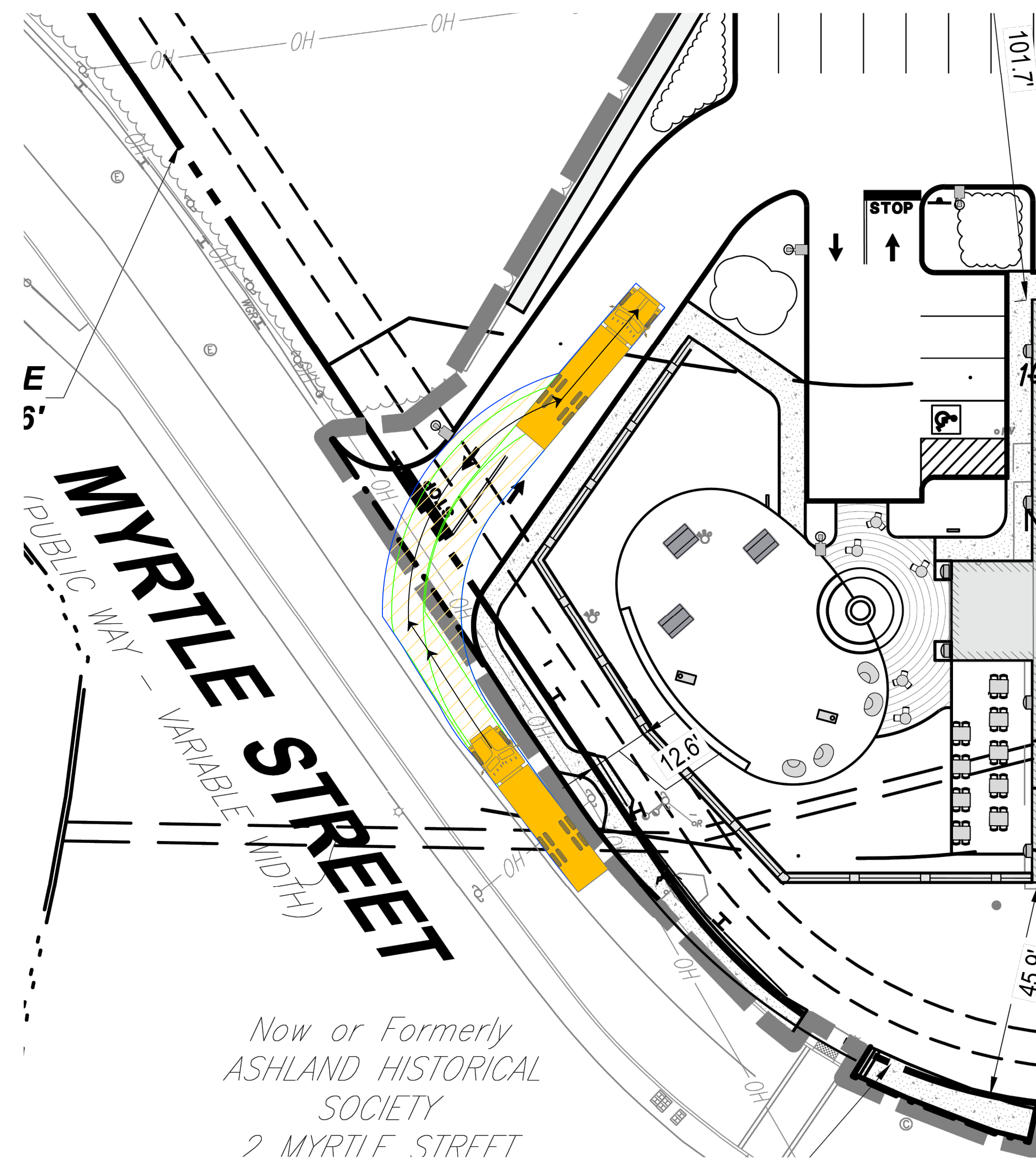
SU-30

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Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8



Entering

Exiting

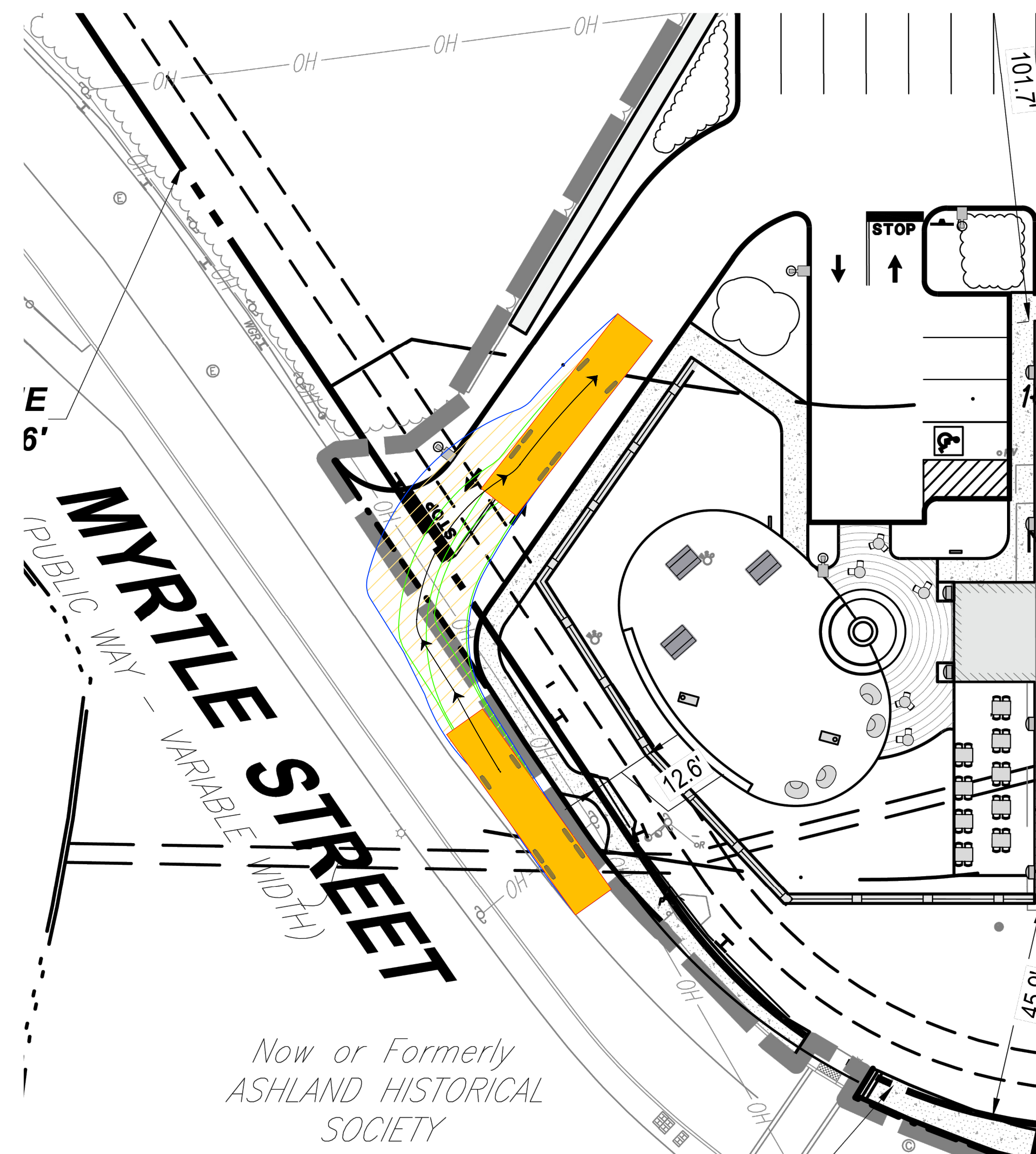


SU-40

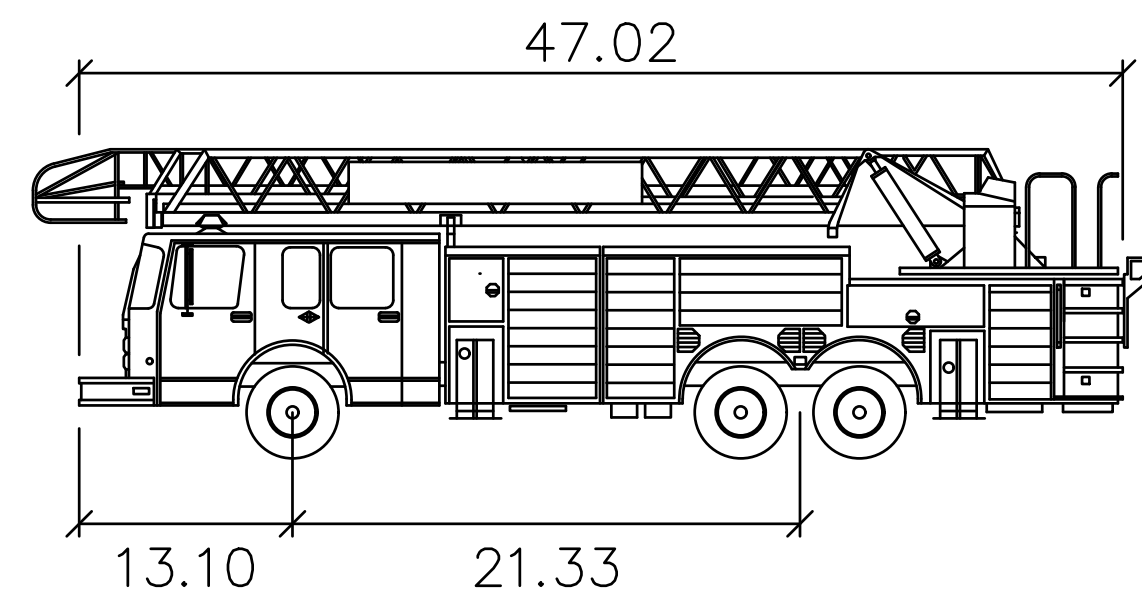
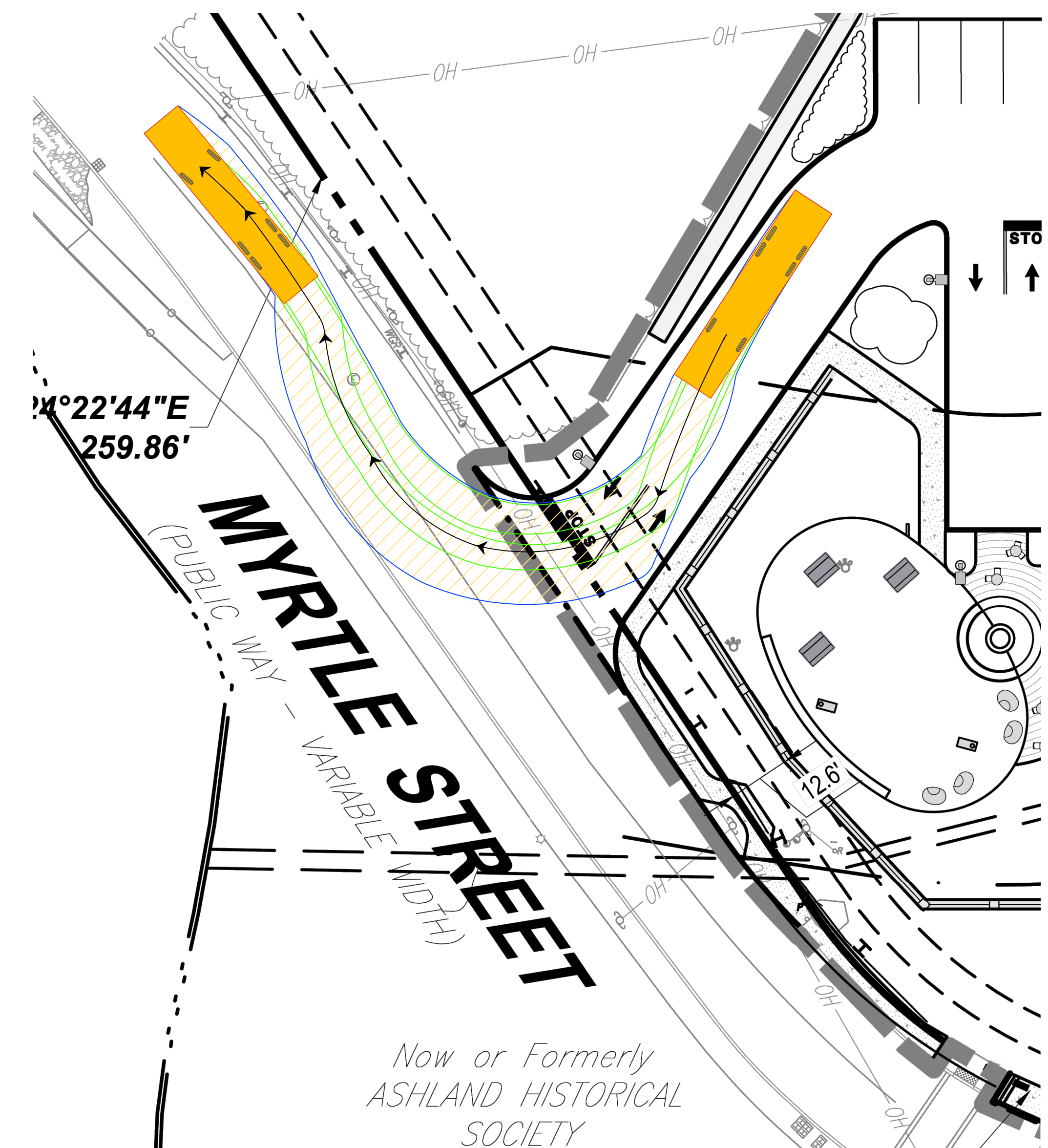
	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8



Entering



Exiting



Ashland Tower 1 – HME 104' RMA

feet

Width : 9.33

Track : 8.50

Lock to Lock Time : 6.0

Steering Angle : 33.2