

Lisa Schwarz, Assistant Director
Town of Andover
36 Bartlett Street
Andover, MA 01810

January 25, 2024

Ref. T1265.09

Re: Town Yard Redevelopment – Andover, Massachusetts
Traffic Engineering Peer Review

Dear Ms. Schwarz:

On behalf of the Town of Andover, TEC, Inc. (TEC) has reviewed documents as part of the traffic engineering peer review for the proposed redevelopment of the former Town Yard property within the Historic Mill Overlay District in Andover, Massachusetts (“the Project”). The Project consists of razing the existing municipal structures on site while maintaining a single-family dwelling designated as #122 North Main Street (referred to as the +1 dwelling in the several documents). The project will construct 164 new multifamily units, a 2,500 square foot (SF) fitness center, a 1,700 SF office, 2,160 SF community center, and an 800 SF coffee shop. Access/egress to the site will be provided via a full-access/egress driveway along Pearson Street immediately east of the Massachusetts Bay Transportation Authority (MBTA) Commuter Rail crossing (driveway is currently designated as Lewis Street) and full-access/egress connectivity to the terminus of the existing Buxton Court. Access/egress to #122 North Main Street will be retained. Parking on-site will be both external and internal to the new buildings on-site with a separate standard residential driveway for the single-family dwelling at #122 North Main Street.

The following materials were considered as part of our review:

- *Site Development Plans – 2-4 Buxton Court, 7-9 & 11 Lewis Street, 35 Pearson Street & 122 North Main Street - Andover, MA*, prepared by The Morin-Cameron Group, Inc., dated November 15, 2023.
- *Traffic Impact Assessment, Proposed Andover Town Yard Redevelopment - Andover, MA*, prepared by Vanasse & Associates, Inc., dated November 2023.
- *Proposed Andover Town Yard Redevelopment Supplemental Traffic Analysis - Andover, MA*, prepared by Vanasse & Associates, Inc., dated January 24, 2024.
- *Andover Town Yard, Special Permit Application*, prepared by Andover Town Yard, LLC; Minco Development Corporation (Minco), dated November 14, 2023

TEC completed a review of these documents for the Town of Andover and provides the following transportation-related comments that we compiled during our review.

Traffic Impact Assessment

1. The *Traffic Impact Assessment* (TIA) included the following intersections within the study area:

- North Main Street (Route 28) / Railroad Street / Private Driveway / Retail Plaza
- North Main Street (Route 28) / Lewis Street
- North Main Street (Route 28) / Pearson Street
- Pearson Street / Lewis Street [Site Driveway] / Depot Pizza Parking Driveway
- Pearson Street / Essex Street / Railroad Street / Dundee Park Drive
- Essex Street / School Street
- Essex Street / Ridge Street / Brook Street
- School Street / Lupine Road / Ridge Street

The North Main Street (Route 28) / Main Street (Route 28) / Elm Street / Central Street intersection, also referred to as Elm Square, was evaluated as part the separate *Supplemental Traffic Analysis* (STA) document discussed at the end of this TIA review section.

TEC believes that the intersection of Lewis Street / Buxton Court should be added to the study area in terms of safety review and, at a minimum, a qualitative analysis of the traffic operations. Note that a qualitative analysis of the operations will not require formal turning movement counts (TMCs) to be conducted; however, the TIA should provide information as to the traffic volume impacts to each approach.

2. The TIA states that a comprehensive field inventory of the study area was conducted in August and September 2023. The inventory consisted of existing roadway geometrics, traffic volumes, operating characteristics, posted speed limits, parking characteristics, access driveways, and the current configuration. Many components of the roadway characteristics are not described as part of the study.

Although the TIA notes that exclusive turn lanes have been provided at some intersections following repaving, please provide more detail as to the location of these turn lanes as the width of Pearson Street (roughly 24 feet curb-to-curb) does not seem to support any additional lanes beyond the two opposing general-purpose lanes. Was the intent to describe the new turn lane along north main Street at its intersection with Pearson Street?

3. In conjunction with Comment #2 above, please provide detailed description of each study area intersection beyond the data / information provided in Figure 2 such as on-street parking, approach-by-approach control, control signage and pavement markings, directional separation, etc. Please include any other descriptive measures that may be pertinent to the analysis and recommendations further described alter in the TIA.
4. TMCs were conducted at the study area intersections in September 2023 between the hours of 7:00 AM and 9:00 AM for the weekday morning peak period and between the hours of 4:00 PM and 6:00 PM for the weekday evening peak period. Peak hours analyzed within these periods have not been specifically mentioned in the body of the TIA. In reviewing the TMCs in the Appendix, the AM and PM peak hours appear to begin at 8:00 AM and 4:45 PM, respectively, at most locations. This should be clarified so to note locations that may be different, leading to unbalanced traffic volumes intersection-to-intersection.
5. Traffic volumes were reviewed for weekday seasonal adjustments based on historical traffic-volume data from Massachusetts Department of Transportation (MassDOT). Traffic

- counts for September reflect above average conditions, so they were not seasonally adjusted. TEC concurs with this methodology.
6. Bicycle and pedestrian counts were evaluated during the same periods noted in Comment #4. A comprehensive field inventory of existing sidewalks, pedestrian crossing locations, and bicycle facilities was conducted as well, and is described on page 7 of the TIA. Figure 2 also shows pedestrian facilities graphically. In a field review, TEC determined that there is one additional pedestrian crossing on Railroad Street at the MBTA Commuter Rail Station. This should be stated in the TIA.
 7. Public transportation consists of the MBTA Haverhill Line via Andover Station to/from North Station in Boston as well as MVRTA bus service on Routes 21 and 2. Description of the proximity for each public transportation use is provided in Table 2 and scheduling information has been provided in the Appendix. No response required.
 8. MassDOT crash records were evaluated for the years 2016-2020, the latest available 5-year period of complete data and have been described in the TIA. Of the eight (8) study area intersections studied, three (3) were shown to have crash rates above 0.57 crashes per million entering vehicles (MEV) for unsignalized intersections (MassDOT District 4 rate). These intersections include Pearson Street / Lewis Street [Site Driveway] / Depot Pizza Parking Driveway (0.86 crashes per MEV), Essex Street / School Street (0.64 crashes per MEV), and Essex Street / Brook Street / Ridge Street (1.25 crashes per MEV). The TIA does not describe direct off-site mitigation by the Applicant to reduce these crash rates or directly address safety at these locations. Although off-site mitigation is further described in subsequent comments, the Applicant should work with the Town to evaluate and implement, at a minimum, short-term / low-cost safety improvement countermeasures at these key locations.
 9. To obtain future year volumes (2030), the September counts were adjusted at a rate of 1% per year compounded, based on area growth between 2009 and 2019. This growth rate accounts for background traffic as well as for a specific development by others (#305 North Main Redevelopment). TEC finds this acceptable. Another project described is located at the Draper Block – #27 Main Street. The TIA states that based on a special permit for this project site-generated trips were included in the Town Yard Redevelopment; however, the trip generation for Draper Block, which would be applied to the 2030 No-Build volumes, has not been provided in the TIA, and therefore, cannot be confirmed.
 10. The TIA describes roadway improvement work conceptually planned under a Mass Works Infrastructure Grant along the Essex Street Corridor. The \$3.3 million grant was obtained by the town in October 2023 to directly support the Town Yard site. These improvements include, but are not limited to:
 - Removal of the Pearson Street connection to the existing Pearson Street / Essex Street / Railroad Street / Dundee Park Drive intersection.
 - Essex Street and Brook Street will be reconstructed to provide one-way and two-way bike lanes. At certain locations, there will be on-street parking provided along one or both sides of the roadway.
 - A marked crosswalk will be provided for crossing the approach of School Street for the intersection of Essex Street / School Street.

- At the Depot Pizza location along Pearson Street is where Pearson Street will be turned into a small roundabout and cut back from the five-way intersection with Essex Street.

The timing of this Mass Works project construction would generally coincide with the redevelopment of the Town Yard based on redevelopment-specific supporting nature of the public infrastructure improvements defined in the grant application. It is possible the Town Yard redevelopment could occur with or without the Mass Works project. Additional comments regarding operational analyses and off-site mitigation for these possibilities are subsequently identified in this peer review letter.

11. The project's trip generation calculations were generated based on the industry standard Institute of Transportation Engineers (ITE) publication, *Trip Generation, 11th Edition* for Land Use Code (LUC) 221 *Multifamily Housing (Mid-Rise)*, LUC 492 *Health/Fitness Club*, LUC 712 *Small Office Building*, LUC 495 *Recreation Community Center*, and LUC 937 *Coffee/Donut Shop with Drive-Through Window*. TEC notes the following concurrence and notations:

- As the gym, office, and coffee shop uses on the site would almost exclusively be utilized by the residents of the development, separate trip generation calculations for these uses would generally be seen as conservative in nature. TEC would concur that the overall reporting of total trip generation to/from the site is likely higher than the real-life scenario expected following occupancy.
- Since the site will have multiple land uses, not all trips will originate from external traffic. An internal trip capture of 10 percent was assumed for all site land uses except the recreational community center. The Applicant should provide a more detailed breakdown of the results and the specific justification of the 10 percent internal capture rate. Note that from a macroscopic review level, TEC does agree that a 10 percent internal capture for these uses; considering the trip generation calculations were not necessarily required (see above bullet), is generally conservative in nature.
- In Table 4 of the TIA, the mode split by land use has been provided. The Appendix includes a table showing the derivation of these mode splits based on area census percentages; however, no details of the derivation of the results have been provided for review. TEC is unable to determine their validity.

The Applicant should provide a more detailed step-by-step breakdown of both internal capture, person trips, and mode share credits, as well as documentation to the justification of each credit value. This includes looking into the trip generation calculation results shown in Table 5, which effectively shows that the coffee shop, almost exclusively used by the residents, as the primary use in the AM and an extensive use throughout the day. For instance, the 'walk' and 'other' mode share for coffee shop are 30% while they are only 13% and 21%, respectively for residential land use. If the credits applied forces the resulting 'residential' trip levels down in favor of coffee shop, the higher mode split credits for coffee shop as compared to residential result in less overall trips projected; even when the residential units are the primary use.

12. The trip distribution provided in the TIA appears to match the Journey to Work US Census data provided in the Appendix. TEC would note that the overall percentage to/from the

- west on Essex Street appears high and may be skewed by the Boston-metro portion of the distribution. TEC suggests that the Applicant reevaluate the trip distribution in conjunction with the public transportation credit taken as much of the site trips utilizing the MBTA Commuter Rail next door will be travelling to/from Boston (2nd highest worker destination) and Cambridge (5th highest worker destination) representing 17% of the overall workforce breakdown. Some communities will not utilize public transportation at all based on the ability to provide continuous service to/from the origin / destination of the trip.
13. The Applicant has provided stopping sight distance (SSD) and intersection sight distance (ISD) measurements for the Site Driveway along Pearson Street. The results are shown in Table 8 of the TIA and have been compared to recommended values obtained from *A Policy on Geometric Design of Highways and Streets*, 7th Edition, American Association of State Highway and Transportation Officials (AASHTO), 2018. The measured distances have been shown in the TIA to exceed these values, except for the ISD for vehicles looking west while exiting the site (111 feet). However, Table 8 contains notes stating that three of the four measured distances have been determined if parked cars to the east were removed and if a hedge to the west were cut. The fourth measured distance of 241 feet (SSD approaching from the west) is questionable since Pearson Street is roughly 100 feet from its intersection with Essex Street to the site driveway. A distance of 241 feet could only be attained by measuring further west along Essex Street, which places the limit about 150 feet from the railroad tracks. At this point, the sight distance is further affected by a concrete retaining wall in the parking area of Ann's Cleaners at #2 Railroad Street, as well as a railroad signal gate and utility poles on Pearson Street near the proposed site driveway. The Applicant should provide a graphical depiction, preferably in the form of a sight triangle sheet in the site plans, of the sight lines for this driveway. Sight lines to the east along Pearson Street should not cross over the head-in parking stalls proposed along the northerly side of the roadway.
 14. The Applicant should provide sight distance measurements for the intersection of Lewis Street / Buxton Court as a primary access/egress point to/from the site. The Applicant should provide a graphical depiction, preferably in the form of a sight triangle sheet in the site plans, of the sight lines at this location.
 15. TEC reviewed the results of the traffic operational analysis provided as part of the TIA. Signalized and unsignalized intersections were analyzed using Synchro 10TM software, except for the intersection of Essex Street / Pearson Street / Railroad Street / Dundee Park Drive, which was analyzed using SIDRA software since the intersection contains five approach roadways. The methodology utilized was discussed in the TIA and is compatible with MassDOT guidelines and is appropriate. For signalized intersections, the *Highway Capacity Manual (HCM) 2010* percentile delay method was used. For unsignalized intersections, the HCM 2000 delay method was used. For the SIDRA model, the delays were calculated using the SIDRA Intersection 9.0TM user Guide, which produces results based on the HCM. TEC concurs with the use of these analysis tools; however, the TIA should be clarified as Table 9 depicts the threshold from the incorrect corresponding HCM used for signalized intersections.
 16. Narratives on the traffic operational analysis results for all study locations have been provided in the TIA as well as summary tables for 2023 Existing, 2030 No-Build, and 2030 Build conditions. Overall, the signalized results show levels of service (LOS) C or better for the subject signalized intersections; however, there are individual movements

(Railroad Street eastbound) at the intersection of North Main Street / Railroad Street / Private Driveway / Retail Plaza that are shown to operate at LOS E for 2030 No-Build and Build conditions. The Applicant should coordinate with the Town on opportunities at 75% occupancy to reevaluate the operations at this location in the field to adjust traffic signal timings as necessary.

17. Most of the individual movements at unsignalized intersections are at LOS D or better; however, some of the approaches at the Essex Street / Pearson Street / Railroad Street / Dundee Park Drive intersection are shown to operate at LOS D, E, or F, depending on the condition analyzed. A LOS of “D” or better is generally defined as “acceptable” operating conditions. Additional off-site mitigation should be explored and considered to improve the LOS E and F conditions noted. At a minimum, the Applicant should evaluate opportunities to modify the traffic control at this location. These enhancements may be an expansion of Mass Works improvements proposed at the location.

A Traffic Signal Warrant Analysis (TSWA) was conducted for the Essex Street / Pearson Street / Railroad Street / Dundee Park Drive intersection. A design speed of 25 MPH was used, and traffic volumes were adjusted downward to average month conditions for 2023 Existing and 2030 Build. The TIA indicates that a traffic signal is not warranted under 2023 Existing or 2030 Build conditions. TEC generally concurs with the analysis parameters and results. The Applicant should provide supporting documentation showing the traffic volume adjustments in the Appendix.

18. An alternative analysis has been described in the TIA involving the removal of the Pearson Street approach at the Essex Street / Pearson Street / Railroad Street / Dundee Park Drive intersection, which has been proposed as part of the Mass Works Project. It is stated in the TIA that the traffic volumes were redistributed for the 2030 No-Build and Build conditions with analysis results shown in Table 14; however, the redistribution has not been shown in the Appendix, as stated, nor has it been described in any detail. TEC is, therefore, unable to verify the alternative analysis results.
19. To further expound on Comment #18, all the study area intersections should be analyzed for 2030 No-Build and Build conditions, with and without the Mass Works project when directly affected by traffic redistribution of the project’s improvements.
20. In a field review conducted with the Town on January 18, 2024, TEC noted that the railroad gates at the Essex Street / Pearson Street track crossing are in the down position when a commuter rail train is present at the MBTA station located further to the north on Railroad Street. Queueing and delays occur, not only on Essex Street and Pearson Street, but also on Railroad Street, Dundee Park Drive, and School Street, as a result. A separate sensitivity analysis should be provided for this location based on the gate closure timeframe and frequency during the peak hour periods for this location.
21. TEC suggests the following additional off-site mitigation that the Applicant should evaluate in conjunction with the Town of Andover:
 - Several unsignalized intersections have crash rates higher than the MassDOT District 4 average (0.57 per MEV). The Applicant has not offered any mitigation to address short-term / low-cost safety issues at these locations. The Applicant should work with the Town to evaluate and implement, at a minimum, short-term / low-cost safety improvement countermeasures at these key locations.

- The Applicant should coordinate with the Town on opportunities at 75% occupancy to reevaluate the operations at this location in the field to adjust traffic signal timings as necessary.
 - Additional off-site mitigation should be explored and considered to improve the LOS E and F conditions noted at the several intersection locations within the study area. At a minimum, the Applicant should evaluate opportunities to modify the traffic control at this location. These enhancements may be an expansion of Mass Works improvements proposed at the location.
 - The Applicant should explore opportunities to extend sight lines as necessary from each key driveway location, including the intersection of Lewis Street / Buxton Court, based on the resulting sight triangle described in Comments #13 and #14.
 - The analysis indicates that the Project will result in minimal impacts to traffic at the study intersection. Is the Applicant referring only to the site driveway or to all the intersections in the TIA? As noted in Comment #17 above, there are individual movements that will experience LOS “E” and “F”. The Applicant has not offered any mitigation to address these issues.
22. The Applicant should define Transportation Demand Management (TDM) to be utilized on the site. At a minimum, the Applicant should provide the following TDM considerations:
- Seek to provide MBTA and MVRTA maps and schedules to all tenants as part of welcome packets and to locate such documents in all lobbies and entryways.
 - Provide electric vehicle and EV-ready parking spaces within the site.
 - Consider providing transit subsidies to tenants to encourage use of the neighboring public transportation uses.
 - Provide weather-protected and secure bicycle parking on-site.
 - Provide on-site laundry services if not internal to each residential unit.
 - Provide parking for ride-hailing services on-site.
23. Note that the Mass Works Infrastructure Project is in a conceptual stage and has been programmed in direct support of the subject redevelopment project. Whereas the funding and construction of the project is not guaranteed at this time, The Applicant should discuss with the Town and commit to other off-site mitigation within the limits of the Mass Works project should the infrastructure not be completed.
24. TEC reviewed the supplemental traffic analysis for the project’s effect on Elm Square. Generally, TEC concurs that the development will have negligible to limited impacts on the traffic conditions at Elm Square as much of the trip distribution to/from the site will be focused towards the high-capacity routes of I-495 and I-93 which is accessed without going through Elm Square. TEC will note that prior comments have noted modifications to be made on both the trip generation and trip distribution of the project which may result in additional operational and safety impacts to Elm Square. As part of TIA revisions noted from these comments, the Applicant should similarly evaluate the change in impacts at Elm Square.

25. TEC notes that the Supplemental Traffic Analysis document for Elm Square refers to North Main Street and Main Street at Route 38 as opposed to Route 28. Further revisions to the analysis based on the above comments should update references accordingly.

Initial Site Plan Comments

26. The Off-Street Parking Requirements (Town of Andover Zoning Bylaw, Section 8.5.9 - Off-Street Parking and Loading Areas [Historic Mill Overlay District]) require that residential uses provide one (1) space per dwelling unit minimum and two (2) spaces per 1,000 SF of non-residential uses minimum. The site will therefore require 165 off-street parking spaces for the site's residential component with an additional 7 parking spaces for the non-residential uses (800 SF of coffee shop, 2,730 SF of recreational community center, and 3,400 SF dog park). The calculations in the parking Table on Sheet C4.0 do not denote parking spaces for the gym or office uses as they are direct amenities to the residents.

The site provides 255 off-street parking spaces (76 surface spaces and 177 garage spaces) in excess of the Bylaw minimum requirements. The residential component is effectively a 1.4 spaces per dwelling ratio. Considering the direct proximity to the MBTA commuter rail and the short distance to the Downtown Andover amenities, this level of parking could be considered excessive although compliant. The Applicant should consider the reduction of parking where possible, especially in relation to the head-in parking along Pearson Street. Alternatively, the Applicant should consider the relocation of these head-in parking to another location internal to the site as to remove the head-in parking spaces along Pearson Street.

27. The garage parking layout sheet of the plans should be enhanced with the location of columns and other internal obstructions which may impact parking space locations and the ability for vehicles to access/egress individual parking spaces.
28. The garage layout sheet of the plan should be enhanced to show the location of internal access points such as elevators and stairwells to determine proximity to/from accessible parking spaces and preferential parking spaces.
29. The overall parking layout internal and external to the building should define the locations of preferential parking spaces and other parking amenities, such as electric vehicle charging stations and spaces that will be designated as EV-ready.
30. The two (2) accessible parking spaces at the northwest corner of the site are located at the far end of the lot approximately 200-feet from the nearest building entryway. The Applicant should relocate accessible spaces to close proximity to building entryways and provide all necessary infrastructure, such as accessible ramps, along the path of travel as needed.
31. Whereas the Applicant has noted that the head-in parking along Pearson Street is generally for the use of the recreation center, there are no specific accessible spaces provided for this head-in parking area, if retained.
32. The Applicant has provided an Auto Turn Exhibit showing the Andover Fire Ladder Truck currently housed at the Central Fire Station. The exhibit shows the apparatus entering, circulating the site, and exiting through both driveways. The vehicle can enter and exit both access points and circulate the internal roadway; however, there would be

- encroachment into opposing travel lanes at the access points and internally at the northwest corner of the site. TEC defers to the Town of Andover Fire Department to verify whether the dimensions of their fire trucks match the dimensions used in the turning analysis.
33. The Applicant should coordinate with the Town of Andover Fire Department for preferred locations of fire lanes (if needed), confirmation of on-site hydrant locations (if needed), and sign requirements for fire lanes within the site.
 34. The Applicant should provide turning templates showing the ability of refuse trucks to access, circulate, and egress the site through the circulation pattern without leaving the paved surface while providing access to the dumpster enclosures on the site.
 35. The Applicant should provide turning templates showing the ability of the standard delivery vehicle or service vehicle to be utilized on-site to access, circulate, and egress the site through the circulation pattern without leaving the paved surface and while providing access to the secured receiving area. The Applicant should confirm that this is or is separate from the 'drop-off' area at the southwest end of the building.
 36. The Applicant should provide a dedicated area for package deliveries to the mail room or individual units (U.S. Mail, Amazon, FedEx, etc.) and confirm there is sufficient room for bypassing resident traffic.
 37. Concrete sidewalks are provided along Pearson Street at the site frontage. The site plans should denote the limits of all off-site pedestrian and bicycle accommodation work off-site.
 38. The Applicant should denote the designated locations of secure and weather protected bicycle storage within the building and/or as part of the courtyard area.
 39. The two-way drive aisle along the westerly property line ranges from 20-feet to 24-feet whereas the Bylaw denotes a 24-foot minimum width for two-way drive aisles. This is especially important at the proposed garage bays on the west side of the building. The Applicant should rectify or provide justification for a variance.
 40. The bottom of all traffic signs on-site should be a minimum of 7 feet above the ground surface per the *Manual on Uniform Traffic Control Devices* (MUTCD) when directly impeding sidewalks or travel paths.
 41. The site plans should provide a plan sheet depicting the sight triangles to and from the site driveway and identify areas to restrict vegetation, signage, and off-street parking to maintain AASHTO minimum recommendations. Notes should indicate: "Signs, landscaping and other features located within sight triangle areas shall be designed, installed, and maintained so as not to exceed 2.5 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." All permanent and temporary (such as unit/tenant advertisements) signs should be located outside the sight line triangles.
 42. There may be changes to the Pearson Street access/egress depending on the Mass Works Project and alternate plans to remove the Pearson Street approach from its intersection with Essex Street. TEC will comment on this further if plan changes are submitted for review.
 43. There are discrepancies between the TIA and Plan Sheet C4.2 for the sight distance measurements shown at the Pearson Street access driveway.

44. The parking area on Pearson Street adjacent to the proposed community building will limit sight distance to the east. The Applicant should eliminate or limit the amount of parking to address this issue. Note that the sight line triangles must not cross through these parking spaces. What opportunities exist to relocate to the site? Note that the overall amount of parking spaces does exceed zoning minimums.
45. The Applicant proposes modifications to their site drive access to Pearson Street consisting of sidewalk reconstruction and pedestrian ramps. The Applicant should provide roadway/driveway profiles and confirm ADA/AAB compliance for these elements and internal sidewalks around the building or seek a variance for the project, if necessary, as the slope for the corridor exceeds typical ADA/AAB compliance. The plans and the construction details show that all new sidewalks are to be a minimum of 5 feet wide, excluding the width of any curbing, which is acceptable to TEC.
46. It appears that guardrail (type unspecified) is proposed on site at the parking areas adjacent to the MBTA property. Details have not been provided in the plan set.
47. Although snow storage areas are shown on the plan, the Applicant should provide a snow removal and parking management plan for Town staff review.

Please do not hesitate to contact me or John Gregg if you have any questions concerning this peer review at 978-794-1792. Thank you for your consideration.

Sincerely,
TEC, Inc.
“*The Engineering Corporation*”



Samuel W. Gregorio, PE, PTOE, RSP1
Project Manager – Transportation Planning & ITS