

PARKING AND TRANSPORTATION DEMAND MANAGEMENT

EXPANDED MULTI-TENANT LIFE SCIENCE CENTER

*45, 55, 65, and 75 Hayden Avenue
Lexington, Massachusetts*

Prepared for:
King Street Properties, LLC

Updated January 2, 2018

EXECUTIVE SUMMARY

This report presents an updated Parking and Transportation Demand Management (PTDM) program for the expanded multi-tenant life science center located at 45 – 65 (and in the future to include 75) Hayden Avenue in Lexington, MA (The “Property”). This PTDM supersedes the PTDM established when the Property was occupied by a single occupant (Cubist Pharmaceuticals) and is intended to apply to the overall Property. The PTDM presented herein is developed in accordance with requirements of Planning Board Zoning Regulations Ch. 176 §9.4.2(6) Major Site Plan Review and provides the basis for subsequent PTDM reporting to the Town.

E.1 PROJECT DESCRIPTION

The Property is 37.36-acres with approximately 377,390 gross square feet (gsf) of office/laboratory use in two buildings located along the northern side of Hayden Avenue in Lexington, Massachusetts. **Figure 1** shows the Property location relative to area roadways. The Property is located within a planned commercial (PD-2) zoning district. A total of 1,066 parking spaces (343 garage spaces and 723 surface spaces) are currently provided for the combined 45, 55 and 65 Hayden Avenue properties (PD-2 District).

Access to the Property is provided by two unsignalized driveways along Hayden Avenue. The driveways connect via an internal loop road in the rear portion of the property adjacent to several surface parking lots. A third driveway provides access/egress to loading docks behind the 65 Hayden Avenue building.

Under the planned development program, an additional 219,279± gsf office and research and development building will be constructed upon the Property with an address of 75 Hayden Avenue (75 Hayden Building). After completion of the 75 Hayden Building, the Property will have a total of 1,622 on-site parking spaces (200 surface spaces and 1,422 garage spaces) for the

combined 45, 55, 65, and 75 Hayden Avenue properties (PD-2 District)¹. The parking supply will include 42 total accessible parking spaces, 18 of which will be van accessible and twenty (20) high occupancy vehicle (HOV) parking spaces. The campus will also include 152 total bicycle parking spaces (94 indoor spaces and 58 outdoor spaces near building entrances and patios). Primary access/egress for the Property will remain via the two unsignalized driveways along Hayden Avenue. As part of the 75 Hayden Building project, the eastern driveway approach to Hayden Avenue will be widened to accommodate separate left- and right-turn departure lanes. The third driveway providing access/egress to the loading docks and surface parking spaces behind the 65 Hayden Avenue building will also remain. The 75 Hayden Building will have three (3) loading docks at the northeast corner of the building that are sized to meet the dimensional requirements.

E.2 TRIP GENERATION

The office-based ITE trip standards are deemed to be conservative on the basis that actual site trip activity for the existing buildings on the Property (377,390 gross square feet (gsf) and 600± total employees) at 45, 55, and 65 Hayden Avenue are documented to fall notably below ITE trip rates for office uses. Specifically, the number of observed trips at the Property (45, 55, and 65 Hayden Avenue) buildings are 175 trips (33 percent) lower than ITE projections during the weekday morning peak hour and 156 trips (31 percent) lower during the evening peak hour. On a daily basis the buildings on the Property at full occupancy will generate approximately 210 fewer daily trips (6 percent).

Projected trip generation with expanded employment occupancy up to a theoretical maximum of 1,100 persons would result in 3,392 vehicle-trips daily with 370 vehicle-trips during the weekday AM peak hour and 345 vehicle-trips during the weekday PM peak hour. This scenario would represent operations under a development scenario with an all office use of the buildings on the Property.

¹ A development cap is proposed in the Preliminary Site Development and Use Plan/PSDUP for the PD-2 District that includes up to 51 additional parking spaces (1,675 total) and gross building area of 35,000 gsf above the 219,279 gsf nominal development program cited in this TIAS. These incremental development increases are proposed to allow reasonable flexibility in final design of buildings upon the property and parking structures and are not expected to generate a materially significant change in impact relative to findings of this TIAS. Projected impacts in this TIAS are based on industry standard trip estimates which are shown to be up to 33 percent higher than actual measured performance of the Property and no trip credits are taken for the proposed Transportation Demand Management (TDM) program.

While the proposed building use is proposed to be 50% general office and 50% R&D, a 100% office scenario was assumed for analysis and permitting purposes for the potential/allowable future use of the Property under the higher impact land use category. Therefore, the analyses presented in the TIAS for the expansion are based on industry-standard trip rates published by the Institute of Transportation Engineers (ITE) for land use code (LUC) 710 – general office based on trip rates for 219,279± gsf. The use of the 75 Hayden Building is estimated to generate approximately 265 additional peak hour vehicle trips during the weekday morning peak hour and 236 additional vehicle trips during the weekday evening peak hour compared to the permitted Property.

E.3 PTDM MITIGATION

PTDM policies are to be implemented by the proponent as outlined below that is consistent with the principles outlined in the Town’s Transportation Management Overlay District plan. These principles include multimodal consideration and PTDM techniques that are reasonably calculated to reduce the number of vehicle trips generated by a development, and that encourages voluntary participation in PTDM programs by those not required to participate. The PTDM comprises physical elements in the form of infrastructure this is inventoried in the attached **Exhibit A** as well as programmatic elements that include programs and policies cited herein.

The PTDM Plan endeavors to provide equitable access to various transportation modes for campus tenants and visitors as well as offer associated incentives to encourage the use of travel modes that reduce dependency on single occupant vehicle (SOV) use. The Plan seeks to achieve this by incorporating design elements and programs that encourage biking, walking, ride sharing and transit use which include a system of sidewalks that integrate with the recently installed pedestrian and bicycle infrastructure along Hayden Avenue; expands on-site bicycle accommodations including indoor and exterior bike parking as well as supporting features such as shower and locker facilities; establishes bike and car share programs; provides a transit subsidy program; and offers a participation incentive program that rewards participation in alternative travel modes including vanpools/carpools.

Parking and Transportation Demand Management (PTDM) Commitments

As the proponent and landlord of all buildings on the Property subject to this PTDM, King Street Properties comes to this Property with a track record and experience managing an existing aggressive and successful PTDM program at its other properties along Hartwell Avenue in Lexington, MA. King Street Properties also currently implements a similar PTDM program for the Property’s employees. As a result of the expansion the PTDM program for the Property will include both existing and additional program elements, all of which are listed below.

- *Route 128 Business Council Membership.* King Street Properties is a paid member of the Route 128 Business Council. This partnership provides 45-65 Hayden Avenue tenants with valuable resources including:
 - Carpool matching Database
 - NuRide
 - Alewife Shuttle
 - Guaranteed Ride Home
 - Individual transportation and route planning assistance
 - Bicycle route maps and route planning assistance
 - On-site commuter benefit events
 - On-line trip planning tools

- *Transportation Coordinator.* King Street Properties will designate a transportation coordinator that communicates with employees through frequent emails, tweets, and building memorandums announcing programs, incentives, reminders, and other useful information intended to decrease single occupancy vehicles (SOV's).

- *Employee Transit Subsidies.* King Street Properties participates at a level three sponsorship of the Alewife Shuttle and shall coordinate with its tenants to reimburse 100% of the cost of monthly T-passes and the Alewife Shuttle to all new tenants at the Property through lease agreements.

- *On-Site Showers/Lockers.* The Property's facilities are outfitted with showers and locker facilities in locations, as shown in **Exhibit A**, to encourage bicycle commuting and employee exercise programs.

- *Bike Share Program.* As part of the Bike Share program, tenants will have the ability to sign out a bicycle to pick-up lunch, do other local errands, or just enjoy a ride. Multiple sized helmets will be made available. The above referenced amenities include the on-site shower and changing facility which are available to support the program.

- *Bicycle Facilities.* Existing and proposed bike storage facilities for the project are identified schematically in **Exhibit A**. These include bike racks within the garage adjoining building 65, exterior bike racks at each of the existing buildings, proposed bike storage within the 75 Hayden Building and proposed bike racks exterior to the 75 Hayden building. The quantity of bikes stored on the racks will be monitored closely on a daily basis to ensure adequate space is available. King Street Properties is committed to provide additional bike storage as storage and rack occupancy levels increase.

- *Car Share Service.* As part of this PTDM, King Street Properties commits to reserving up to three (3) parking spaces for a car sharing service such as ZipCar should a provider opt to place such vehicles on the Property. Car share parking spaces will be located within the Property at a mutually acceptable location to be determined in consultation with the

car share provider, recognizing that such vehicles must be accessible by all car share subscribers (whether or not employees of the Property).

- *On-Site Support Services/Amenities.* The Property's facilities include existing and proposed services and physical amenities in locations, as shown in **Exhibit A**, that encourage employees from throughout the Property to remain on-site for essential services and internalize trip making to the Property including:
 - A full cafeteria with catering options in each building
 - Employee fitness facilities (existing or proposed in each building)
 - On-site mailboxes
 - On-site FedEx and/or UPS boxes
 - Showers and changing rooms in each of the buildings
 - Outdoor park space with an enhanced connection to the Hayden Woods trail system
 - A bike share program with bicycles available to sign-out by employees

- *Shire Shuttle.* Shire, a current tenant at the Property, operates a shuttle service between the Property and its other buildings in the area including its main campus located at 300 Shire Way in Lexington. This shuttle augments the Alewife Shuttle that operates under the auspices of the Route 128 Business Council TMA to facilitate employee trips between these two Shire-occupied campuses.

- *Shuttle/Bus Stops.* Current shuttle stops at the Property include a location between the 55 and 65 Hayden Avenue main lobbies and at the 45 Hayden Avenue main lobby that accommodate the Alewife Shuttle and Shire shuttle (45 Hayden Avenue). An additional shuttle stop will be located at the main building lobby for the 75 Hayden Building to accommodate the Alewife Shuttle that coincides with a pedestrian drop-off zone to be located in that portion of the Property. Existing and proposed locations for shuttle stops are identified in **Exhibit A**.

- *Central Listing of Alternative Transportation Services.* As an integral part of this PTDM, King Street Properties will develop a website to post information regarding area transportation and local businesses. The proponent will also post information regarding its Bike Share programs. Alewife shuttles and other public transportation routes/schedules are also posted in the break room areas at the Property.

- *Transportation Management Events.* To incentivize employee participation in all programs, King Street Properties is committed to promoting multiple transportation management events (e.g. meetings, promotional events, email bulletins, etc.) throughout the year. Administration of transportation management events for the Property will be the responsibility of the Transportation Coordinator in coordination with the Route 128 Business Council TMA.

- *Alternative Transportation Incentives.* Employees working at the Property who choose a bicycle over a car and those that sign out bicycles will be entered into drawings throughout the year to win various gift certificates or incentives. These incentives may include bike-related items like sneakers and/or fitness attire, as well as services such as bike tune-ups and other special events. The tenants may be offered discounts at a local bicycle shop for helmets, free bicycle maintenance; classes may also be offered a couple times per year. Additional incentives to encourage and reward carpooling are also proposed. The incentives may include “Gas Bucks for Groups” and “Car Wash for Carpoolers” or similar programs to encourage and reward carpool participants. Such programs are successfully implemented at the King Street Properties’ Hartwell Avenue locations in Lexington. Administration of the transportation incentives program for the Property will be the responsibility of the Transportation Coordinator.

- *Vehicle Charging Stations.* Electric vehicle charging outlets are located within the garage adjacent to 65 Hayden Avenue. King Street Properties will provide additional electric vehicle charging stations for use of employees at the 75 Hayden Avenue garage. Existing and proposed electric vehicle charging locations are identified in **Exhibit A**.

- *HOV Parking Spaces.* To incentivize carpooling at the Property, twenty (20) high occupancy vehicle/carpooling spaces will be located in close proximity to the buildings as indicated on **Exhibit A**. These spaces will be reserved for registered carpool groups and will be administered by the Transportation Coordinator for the Property.

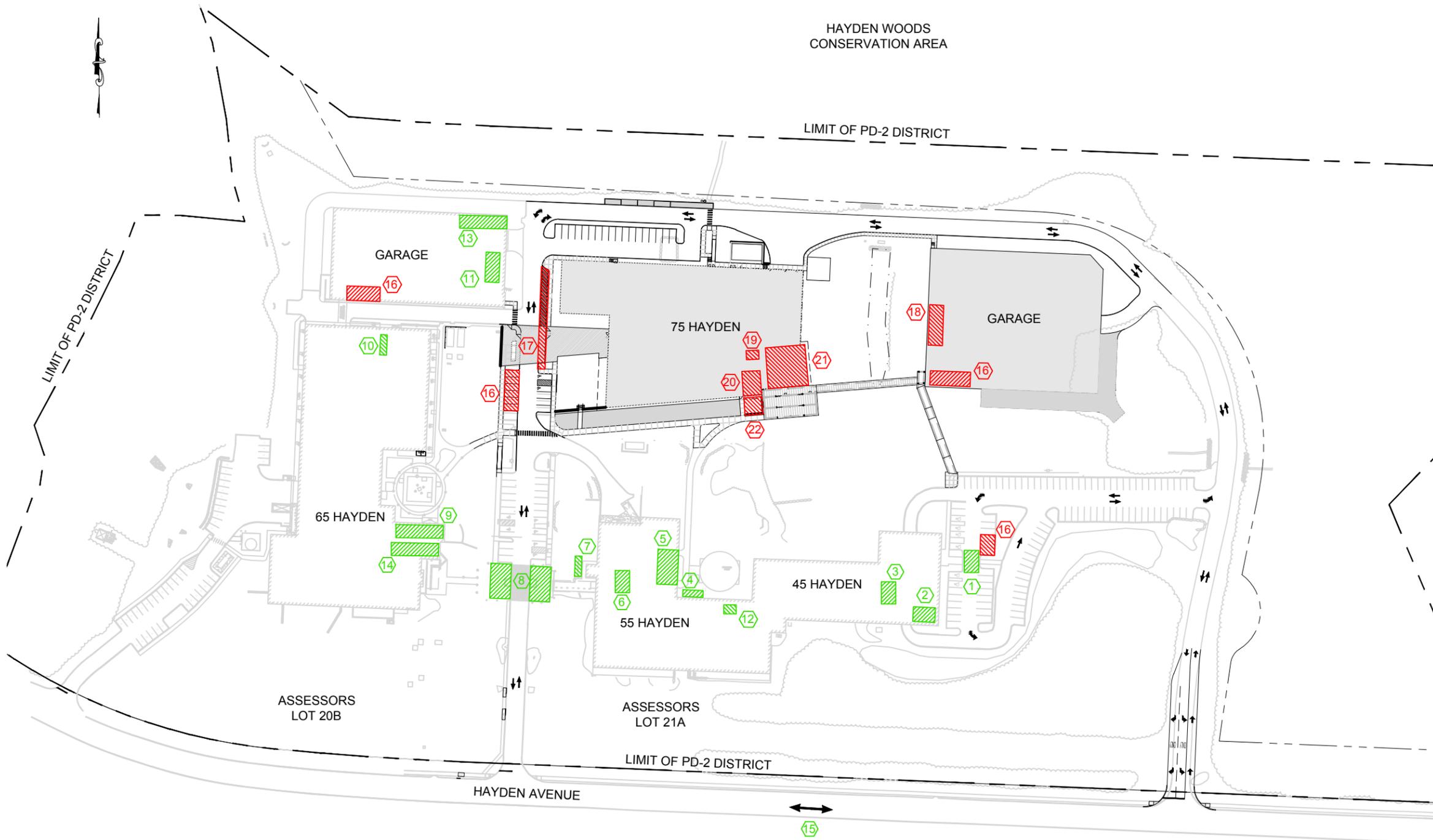
- *Hayden Woods Trailhead Promotion and Enhancements.* King Street Properties will encourage employee awareness and use of the adjoining Hayden Woods trail system through its tenant outreach program to be administered by the Transportation Coordinator and will provide enhanced trailhead access with appropriate signs and wayfinding signs for the Property.

- *Tenant Manual.* King Street Properties will provide a tenant manual which will outline information to tenants and employees with respect to the available PTDM programs and to provide contact information for the Transportation Coordinator.

Annual PTDM Monitoring Report

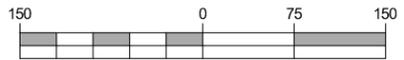
King Street Properties will prepare an annual PTDM monitoring report that identifies the status, participation level and/or inventory of each component of the PTDM program to include the following:

- Summary of property building sizes, building occupancy/vacancies and employment levels.
- Parking inventory that quantifies the garage and surface parking supply by category including HOV/carpool, handicap accessible, car share spaces, EV charging spaces, and visitor spaces.
- Property tenant employee commuter survey results that summarizes commuting methods and preferences. The tenant employee survey shall be administered on a biennial basis by the Transportation Coordinator to provide an inventory of employee commute distances and methods (drive alone, public transit, carpool, walk/bike and other).
- Status reporting on PTDM mitigation elements:
 - Route 128 Business Council Membership
 - Transportation Coordinator contact information
 - Participation level in transit subsidy program
 - Bike Share program inventory and participation level
 - Bike space inventory
 - Car Share inventory and coordination efforts
 - Property Website link
 - Summary of transportation management events held at the Property
 - Summary of alternative transportation incentives program at the Property
 - Summary of registered carpool groups at the Property
 - Copy of tenant manual



KEYED NOTES	
EXISTING	
①	SHUTTLE STOP AT 45 HAYDEN
②	(10) INDOOR BICYCLE PARKING SPACES IN 45 HAYDEN GARAGE (FIRST FLOOR)
③	SHOWERS IN 45 HAYDEN (SECOND FLOOR)
④	(10) OUTDOOR BICYCLE PARKING SPACES AT 55 HAYDEN OUTDOOR PATIO
⑤	55 HAYDEN CAFE (PRIVATE)
⑥	SHOWERS IN 55 HAYDEN (THIRD FLOOR)
⑦	(20) OUTDOOR BICYCLE PARKING SPACES AT 55 HAYDEN MAIN ENTRANCE
⑧	SHUTTLE STOP AT 55 & 65 HAYDEN MAIN ENTRANCE
⑨	65 HAYDEN CAFE (FIRST FLOOR)
⑩	SHOWERS IN 65 HAYDEN (FIRST FLOOR)
⑪	(20) INDOOR BICYCLE PARKING SPACES IN 65 HAYDEN GARAGE (FIRST FLOOR)
⑫	SHOWERS IN 45 HAYDEN (FIRST FLOOR)
⑬	TEMPORARY ELECTRIC VEHICLE CHARGING STATIONS
⑭	65 HAYDEN FITNESS CENTER AND SHOWERS
⑮	PUBLIC TRANSIT ROUTES PASSING SITE ON HAYDEN AVE
PROPOSED	
⑯	(20) HIGH OCCUPANCY VEHICLE SPACES (HOV) (3) AT 45 HAYDEN ENTRANCE (6) ON WEST SIDE OF MAIN DRIVEWAY BETWEEN 55 & 65 (5) ON SECOND LEVEL OF 65 HAYDEN PARKING GARAGE (6) ON SECOND LEVEL OF 75 HAYDEN PARKING GARAGE
⑰	SHUTTLE STOP AT 75 HAYDEN MAIN ENTRANCE
⑱	ELECTRIC VEHICLE CHARGING STATION
⑲	SHOWER STALLS IN 75 HAYDEN (FIRST FLOOR)
⑳	(64) INDOOR BICYCLE PARKING SPACES IN 75 HAYDEN (FIRST FLOOR)
㉑	75 HAYDEN CAFE (FIRST FLOOR)
㉒	(28) OUTDOOR BICYCLE PARKING SPACES AT 75 HAYDEN PATIO

NOTE: SHARE VEHICLE SPACE LOCATIONS TO BE ESTABLISHED WITH SELECTED VENDOR.



JANUARY 2, 2018

EXHIBIT A - PTDM INFRASTRUCTURE PLAN
75 HAYDEN AVENUE | LEXINGTON, MA

