12 ALTERNATIVES

12.1 Introduction

As described in the *2020 CEQR Technical Manual,* the State Environmental Quality Review Act (SEQRA) requires that alternatives to the proposed project be identified and evaluated in an Environmental Impact Statement (EIS). An alternatives assessment considers whether reasonable alternatives exist that would minimize or avoid adverse environmental effects. This EIS considers reasonable alternatives to the Proposed Actions that have the potential to feasibly reduce or eliminate impacts while still meeting the Purpose and Need of the project.

The Applicant, Richmond SI Owner LLC, seeks approval of a series of discretionary land use actions including a zoning map amendment, zoning text amendments, and a special permit (the "Proposed Actions") that would facilitate the development of a mixed use project comprising residential (including affordable options) and commercial uses, open space, and accessory parking (the "Proposed Development") in the St. George neighborhood of Staten Island, Community District 1.

The Reasonable Worst Case Development Scenario (RWCDS) for this project established that the Proposed Actions would enable 930,886 gross square feet (gsf) of floor area within four buildings across two development sites. Projected Development Site 1 – the Applicant-owned site – would be developed with three buildings totaling 813,038 gsf. The Applicant also would develop an approximately 7,790 square foot (sf) privately-owned publicly accessible passive open space near the intersection of Stuyvesant Place and Hamilton Avenue. As an open space mitigation, an approximately 1,275 sf privately-owned publicly accessible active open space would also be provided between proposed buildings 2 and 3. Projected Development Site 2 is not under control of the Applicant, and there is no specific development proposal for this site.

This assessment contemplates two alternatives to the Proposed Actions:

1. The No-Action Alternative: An analysis of a No-Action Alternative is mandated by SEQRA, and demonstrates the environmental conditions that would exist if the Proposed Actions were not adopted. This alternative is equivalent to the No-Action Condition, and provides a baseline to evaluate the incremental impacts of the Proposed Actions.

2. The No Unmitigated Significant Adverse Impact Alternative: This alternative identifies ways to eliminate unmitigated significant adverse impacts resulting from the Proposed Actions. The Proposed Actions would result in significant adverse impacts to open space, ~~and~~ transportation, and construction.

These alternatives would result in fewer density-related effects than the Proposed Actions because they would result in a reduced building massing, fewer residential dwelling units (DUs), and less local retail space. The EAS determined the Proposed Actions would not result in significant adverse impacts in the areas of: Land Use, Zoning, and Public Policy; Community Facilities and Services; Shadows; Historic and Cultural Resources; Urban Design and Visual Resources; Natural Resources; Water and Sewer Infrastructure; Solid Waste and Sanitation Services; and Energy. Because the alternatives would contain less development than the Proposed Actions, the alternatives similarly would not result in significant adverse impacts in these areas. Therefore, this alternatives assessment evaluates the potential for the alternatives to result in significant adverse impacts in the CEQR technical areas of: Socioeconomic Conditions; Open Space; Hazardous Materials; Transportation; Air Quality; Greenhouse Gas Emissions; Noise; Public Health; Neighborhood Character; and Construction.

12.2 No-Action Alternative

In the No-Action Alternative, the Site B portion of Projected Development Site 1 would be developed with a 143,030 gsf building comprising 167 market rate DU (128,169 gsf), 8,240 gsf of retail space, and 12,125 gsf of accessory parking (29 spaces). Of the 131 required parking spaces, 103 would be provided off-site and within 600 feet of Site B. The building would be developed pursuant to R6 height factor regulations. The building base would rise five floors to a height of 60 feet along the Richmond Terrace frontage before a 15-foot setback. The building would then rise six stories before a second setback at the 12th floor. The building would have a roof height of 136 feet. Including a 30-foot-tall bulkhead, the building would be 166 feet tall.

Independent of the Proposed Actions, the Applicant would acquire the panhandle portion of the Castleton lot (the area within 185 feet of Stuyvesant Place), otherwise known as "Tentative Lot 95". Tentative Lot 95 could not be incorporated into Sites A and B because it is needed for the Castleton lot's required open space, and a zoning non-compliance would occur if the panhandle were subdivided from the Castleton zoning lot under the existing R6 zoning.

At Projected Development Site 2, the two existing two-family houses would remain as existing conditions. Lot 68 would remain vacant.

Compared to the Proposed Actions, the No-Action Alternative would contain less development and generate fewer demands for community resources such as schools, open space, transportation, and sewers. However, the No-Action Alternative would not achieve the goals and objectives as described in the "Purpose and Need" section of the Project Description to the extent the Proposed Actions would because:

- New development in the Rezoning Area would not provide affordable housing because the Rezoning Area is outside a Mandatory Inclusionary Housing Area and affordable housing is not currently required in new residential developments. Therefore, the No-Action Alternative would not result in any affordable units, as compared to the 270 permanently affordable units ~~in the Proposed Actions~~ (and 179 affordable units targeted to households earning 80 percent or less of the AMI) that would be created with the Proposed Actions.
- There would be up to 456 fewer market rate units (27.2 percent of the number of market rate units compared to the Proposed Actions), and would not expand the housing supply in St. George to the same extent of the Proposed Actions.

- The development sites would remain underdeveloped relative to the permissible floor area ratio of the existing zoning;
- The Site A portion of the Applicant's site (Projected Development Site 1) would continue to remain a vacant site at the northern edge of St. George because the provisions of the Special Hillsides Preservation District severely limit the ability to develop this site;
- ~~A p~~Privately-owned, publicly accessible passive and active open spaces would not be developed on Projected Development Site 1; and
- Site A would continue to be a vacant site proximate to the existing transit and neighborhood services in Downtown Staten Island. Being a vacant site, Site A would not provide active frontage along Hamilton Avenue or Stuyvesant Place – a key commercial street in St. George – contrary to the Special St. George District's goal "to build upon St. George's existing strengths as a civic center, neighborhood and transit hub by providing rules that will bolster a thriving, pedestrian-friendly business and residence district."

In the No-Action Alternative, an (E)-Designation would not be mapped at the development sites. With no (E)-Designation in the No-Action Alternative, there would be no oversight by the Mayor's Office of Environmental Remediation (OER) for hazardous materials, air quality, or noise. Therefore, the No-Action Alternative has the potential to result in more hazardous materials, air quality, and noise effects than the Proposed Actions because new developments would not have the regulatory oversight provided through the City's (E)-Designation program.

Further analysis is provided below for each CEQR technical area analyzed in this ~~Draft~~ Final Environmental Impact Statement.

Socioeconomic Conditions

The No-Action Alternative would result in 167 market rate DU and 8,240 gsf of retail space. As described in Chapter 2, "Socioeconomic Conditions" (and similar to the Proposed Actions), the No-Action Alternative would not result in significant adverse socioeconomic conditions impacts. Unlike the Proposed Actions, none of the residential units in the No-Action Alternative would be permanently affordable units, and would not increase the supply of affordable housing in the Study Area. There would be up to 270 fewer affordable DUs in the No-Action Condition compared to the Proposed Actions (including up to 179 fewer affordable DUs targeted to households earning 80 percent or less of the AMI).

The No-Action Alternative would directly displace 10 fewer residents than the Proposed Actions because Projected Development Site 2 (which contains two two-family residences) would remain as existing conditions and would not be redeveloped in the No-Action Alternative. However, the No-Action Alternative would not expand the housing supply to the extent of the Proposed Actions; overall, there would be 726 fewer DUs in the No-Action Alternative than the Proposed Actions, and up to 179 fewer DUs that would be targeted to households earning 80 percent or less the AMI. The number of low-income residents in the Socioeconomic Conditions Study Area that are potentially vulnerable to indirect residential displacement would be the same in the No-Action Alternative as with the Proposed Actions.

Open Space

Neither the No-Action Alternative nor the Proposed Actions would physically alter or displace publicly accessible open space. The No-Action Alternative on Projected Development Site 1 would introduce approximately 419 residents over existing conditions and would not introduce a new publicly accessible open space. The No-Action Alternative's open space ratio

(OSR) would be less than the CEQR guideline of 2.5 acres per 1,000 residents. However, for passive open space, the passive OSR would be more than 1.5 times the *CEQR Technical Manual* guideline of 0.5 acres per 1,000 residents. The active OSR of 0.37 acres per 1,000 residents would be 18.5 percent of the active OSR of 2.0 acres per 1,000 residents recommended in the *CEQR Technical Manual*. The Open Space Study Area would continue to be severely lacking in active open space. With no new publicly-accessible open space being provided in the No-Action Alternative, there would continue to be a deficit of active open space and surplus of passive open space in the No-Action Alternative. Relative to the Proposed Actions, the No-Action Alternative would not introduce new active and passive open spaces to the Project Area.

Hazardous Materials

Similar to the Proposed Actions, the No-Action Alternative would entail excavation for the new development. The Phase I Environmental Site Assessment identified several Recognized Environmental Conditions (the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property related to a release) at the Applicant's site. Therefore, excavation activities could increase pathways for human exposure. With the Proposed Actions, significant adverse hazardous materials impacts would be avoided by the placement of an (E)-Designation on the development sites, which would mandate coordination with OER to satisfy the (E)-Designation requirements prior to the issuance of construction permits in the event the Applicant elects to withdraw from the voluntary Brownfield Cleanup Program. For Projected Development Site 1 – the Applicant's site – such requirements of the (E)-Designation would include, as warranted:

- Submitting a Phase I ESA to OER;
- performing a Subsurface (Phase II) Investigation; and
- preparing a Remedial Action Plan (RAP) and Construction Health and Safety Plan (CHASP) to be implemented during the subsurface disturbance;

At Projected Development Site 2 – which is not under the Applicant's control – an (E)-Designation would provide regulatory oversight by OER to preclude significant adverse hazardous materials impacts. Conversely, the No-Action Alternative would not be subject to CEQR, and these measures would not be required, thereby increasing the potential for exposure to hazardous materials.

Transportation

Under the No-Action Alternative, traffic volumes in the study area would be expected to increase as a result of background growth and other planned development in the Study Area. Thus, overall traffic operating conditions would be expected to deteriorate in the No-Action Alternative as compared to existing conditions.

Unlike the Proposed Actions, the No-Action Alternative would not result in significant adverse impacts to ~~four~~three, ~~four~~three, three, and four intersections in the weekday AM, midday, PM, and Saturday peak hours, respectively. Of the 51 total intersection approaches/lane groups in the study area, 13 would operate worse than mid-LOS D in at least one peak hour.

However, in the With-Action Condition, all of the Proposed Actions' potentially significant adverse traffic impacts, with the exception of those during the weekday midday, PM and Saturday midday peak hours at the intersections of (i) Richmond Terrace and Wall Street/Empire Mall Driveway and (ii) Victory Boulevard and Bay Street, could be mitigated with

readily implementable traffic improvement measures, such as modification of traffic signal ~~phasing and/or~~ timing. In addition, as part of the *Bay Street Rezoning and Related Actions FEIS,* the City committed to a Traffic Monitoring Plan which includes the intersection of Bay Street and Victory Boulevard.

Similar to the Proposed Actions, the No-Action Alternative would not result in significant adverse transit or pedestrian impacts, nor would result in a parking shortfall in the Study Area.

Air Quality

The No-Action Alternative would result in fewer passenger-car-equivalent trips and less mobile source emissions than the Proposed Actions. Therefore, because the Proposed Actions would not result in significant adverse mobile source air quality impacts, neither the Proposed Actions nor the No-Action Alternative would result in a significant adverse air quality impact related to mobile sources.

In the No-Action Alternative, the Applicant's site would be redeveloped with new mixed-use residential buildings that do not require any discretionary approvals. Because the Proposed Actions would not result in a significant adverse air quality impact and the No-Action Alternative would result in a smaller building with fewer energy demands generated by new HVAC systems, the No-Action Alternative would also not result in a significant adverse air quality impact. However, the No-Action Alternative would not be required to meet the proposed (E)-Designation requirements regulating fuel type and emission stack locations that would be in place with the Proposed Actions to preclude significant adverse stationary source air quality impacts.

Greenhouse Gas (GHG) Emissions and Climate Change

The No-Action Alternative would result in new development on Projected Development Site 1 that would consume energy during the construction and operational phases. Because the Proposed Actions would not result in a significant adverse GHG Emissions and Climate Change impact and the No-Action Alternative would contain less development than the Proposed Actions, neither the Proposed Actions nor the No-Action Alternative would not result in a significant adverse GHG emissions or climate change impact. Compared to the Proposed Actions, the No-Action Alternative would use fewer construction materials and result in fewer construction and operational emissions; however, the Proposed Actions would allow a greater amount of residential units and retail space in one of Staten Island's most transit-rich areas, and therefore would better align with the City's goal to reduce GHG emissions by 2050.

Noise

Similar to the Proposed Actions, the design of and specifications of mechanical systems (such as HVAC), would adhere to all applicable noise regulations (i.e., Subchapter 5, §24-227 of the New York City Noise Control Code and the New York City Department of Buildings Mechanical Code), ensuring that the equipment would not significantly increase the ambient noise levels. Neither the No-Action Alternative nor the Proposed Actions would generate sufficient traffic to have the potential to result in a significant adverse noise impact from mobile sources (traffic).

Compared to the Proposed Actions, the No-Action Alternative would not be required to meet the *CEQR Technical Manual* interior noise level requirements that would be required, through an (E)-Designation, to provide an interior noise environment of 45 dBA for residential units.

Public Health

Unlike the Proposed Actions, which would map an (E)-Designation for hazardous materials at the development sites, the No-Action Alternative would not be required to perform any investigation or remediation with oversight by OER. Therefore, the No-Action Alternative could potentially increase pathways for human exposure to hazardous materials. Like the Proposed Actions, the No-Action Alternative would not result in substantial effects from operational air quality, noise, or water quality. However, unlike the Proposed Actions, the No-Action Alternative would not receive an (E)-Designation to preclude the potential for significant adverse impacts in the areas of hazardous materials, air quality, and noise. Ground water is not used as a potable water source in Staten Island, and neither the No-Action Alternative nor the Proposed Actions would result in significant adverse ground water impacts.

Neighborhood Character

Similar to the Proposed Actions, the No-Action Alternative would not alter the key elements that define the character of the surrounding neighborhood, such as views along the upland streets towards Manhattan, Brooklyn, and New Jersey. However, under the No-Action Alternative, none of the beneficial effects to neighborhood character resulting from the Proposed Actions would occur. The Site A (Lot 100) portion of Projected Development Site 1 would continue to remain a vacant corner site at the northern edge of St. George in Downtown Staten Island. As a result, the No-Action Alternative would not activate the area to the same extent as the Proposed Actions because the No-Action Alternative would result in less pedestrian activity (and passing trade for businesses in the area), more vacant frontage, and fewer active ground floor uses. The neighborhood has a varied context of residential building types and is proximate to the St. George Ferry Terminal, where transit connections are available to other areas of Staten Island and to Manhattan. Compared to the Proposed Actions, the No-Action Alternative would generate fewer residential units proximate to transit. Further, the No-Action Alternative would not introduce a privately-owned, publicly accessible open spaces to the neighborhood.

Construction

Unlike the Proposed Actions, construction of the No-Action Alternative would occur over one phase that would not exceed 24 months. The effects of construction would be short-term and typical of new construction in New York City. The No-Action Alternative would contain less ~~development~~ floor area than the Proposed Actions, and therefore would have fewer construction-related transportation, air quality, and noise construction effects. The relatively low ambient noise levels make the area surrounding Projected Development Site 1 more sensitive than noisier areas because sound levels increase on a logarithmic scale. In the No-Action Condition, construction-generated noise may also exceed the CEQR impact noise criteria because the Applicant would not be required to implement pathway or source controls such as 15-foot-tall construction barrier or using auger drills in lieu of pile drivers. Without these commitments that would be provided in the With-Action Condition, No-Action Construction may have the potential to generate construction noise at a sound level similar to the Proposed Actions at certain locations.

Compared to the Proposed Actions, the No-Action Alternative would not be required to adhere to an (E)-Designation for hazardous materials. With implementation of the (E)-Designation, the potential for construction on the development sites to increase exposure to hazardous materials would be reduced.

12.3 No Unmitigated Significant Adverse Impact Alternative

The purpose of this alternative to consider measures to avoid significant adverse impacts. The Proposed Actions would result in significant adverse open space and transportation impacts. With the measures identified in Chapter 13, "Mitigation," the significant adverse open space impacts could be partially mitigated.

Open Space

The Open Space Study Area is ~~deficient of~~extremely lacking in active open space and is well below the City's planning goal of 2.0 acres of active open space per 1,000 residents. The Proposed Actions would decrease the residential active OSR by more than ~~five~~ one percent. Similar to the Proposed Actions, in the No Unmitigated Significant Adverse Impact Alternative, there would be no significant adverse open space impact to passive space because a new passive open space would be introduced on Projected Development Site 1 and the passive space OSR would remain more than 1.5 times the City's planning goal of 0.5 acres of passive space per 1,000 residents.

To reduce the residential active OSR by less than ~~five~~ one percent to avoid a significant adverse impact to active open space, the Proposed Actions' residential component would have to be reduced by ~~50~~ 75 percent (by ~~453~~ 673 DU, from 897 DU to ~~444~~ 224 DU). This reduction would substantially reduce the project so that it would no longer meet the Purpose and Need of the Proposed Actions.

Alternatively, ~~0.40~~ 0.63 acres of active open space would have to be provided to reduce the active OSR by less than five percent. Projected Development Site 1, the Applicant's Site, is steeply sloped, and the Applicant believes the site is not suitable for ~~0.4~~0.63 acres of active recreation, a use ~~which~~ that typically requires a larger flat footprint for amenities such as basketball courts, tennis courts, or soccer fields. Projected Development Site 2 is a privately-owned site not under the Applicant's control, but has similar topography that reasonably precludes larger active recreation uses. Similar to the Proposed Actions, the No-Unmitigated Significant Adverse Impact Alternative could not feasibly provide the acreage of active recreational space needed to mitigate the open space impact due to the limited availability of land and the topography of the development sites. In the No Unmitigated Significant Adverse Impacts Alternative, measures similar to the mitigations for the Proposed Actions would be necessary to avoid a significant adverse open space impact.

Transportation

The proposed mitigation measures are typical improvement measures, such as modification of traffic signal timing. These improvements are routinely identified by the City and considered feasible for implementation. According to *CEQR Technical Manual* criteria, an impact is considered fully mitigated when the resulting degradation in the average control delay per vehicle under the Action-with-Mitigation Condition compared to the No-Action Condition is no longer deemed significant, following the impact criteria described in Chapter 16, "Transportation" of the *CEQR Technical Manual*. With implementation of the recommended traffic engineering improvements, the potentially significant adverse impacts at ~~10~~ 8 of the ~~24~~ 20 impacted intersection approaches/lane groups (combined across all peak hours) would be fully mitigated. ~~At the impacted intersection approaches/lane groups where no readily available measures have been identified to mitigate the potentially significant adverse traffic impacts, such measures will be explored between the DEIS and FEIS. These additional~~

~~mitigation measures would be subject to review and approval by NYCDOT. In the event NYCDOT determines such mitigation measures to be feasible, the FEIS will be updated to reflect that previously identified unmitigated significant adverse impacts could be mitigated. In the absence of such determination by NYCDOT, the impacts would continue to remain unmitigated. Furthermore, implementation of the proposed traffic engineering improvements outlined in Chapter 13, "Mitigation," is subject to review and approval by the NYCDOT. In the absence of the proposed mitigation measures, the impacts would remain unmitigated and would constitute significant adverse unavoidable traffic impacts.~~

To avoid a potentially significant adverse traffic impact, the Proposed Actions' residential and retail components would have to be reduced by approximately 70 percent, resulting in 269 DU and 8,422 gsf of retail. This potential reduction would substantially reduce the project's development to a point where it would no longer meet the Purpose and Need of the Proposed Actions.

Construction

Transportation

The Proposed Actions would result in significant adverse construction transportation impacts. As described in Chapter 11, "Construction," five intersections (seven intersection approaches/lane groups) in the study area could experience potentially significant adverse traffic impacts in at least one peak hour as a result of construction activities associated with the Proposed Project. With implementation of the recommended traffic engineering improvements, the potentially significant adverse impacts at five of the eight impacted intersection approaches/lane groups (combined for the weekday AM and PM construction peak hours) would be fully mitigated. ~~At the intersection approaches/lane groups where no readily available measures have been identified to mitigate the potentially significant adverse traffic impacts, such measures will be explored between the DEIS and FEIS. These additional mitigation measures would be subject to review and approval by NYCDOT. In the event NYCDOT determines such mitigation measures to be feasible, the FEIS will be updated to reflect that previously identified unmitigated significant adverse impacts could be mitigated. In the absence of such determination by NYCDOT, the impacts would continue to remain unmitigated. Furthermore, implementation of the proposed traffic engineering improvements outlined in Chapter 13, "Mitigation," is subject to review and approval by the NYCDOT. In the absence of the proposed mitigation measures, the impacts would remain unmitigated and would constitute significant adverse unavoidable traffic impacts.~~

To avoid a potentially significant adverse traffic impact during construction of the Proposed Project, the number of average daily workers and truck deliveries in the peak quarter of construction would have to be reduced by approximately 95 percent, resulting in a total of 23 average daily workers and 2 truck deliveries. This potential reduction would require substantially reducing the project to a point where it would no longer meet the Purpose and Need of the Proposed Actions.

Noise

The Proposed Actions would result in temporary significant adverse construction noise impacts. As described in Chapter 11, "Construction," project-generated construction would result in noise level increases at sensitive receptors that would exceed the 20-dBA impact threshold over one quarter, 15-dBA over 12 or more months, and the 3-dBA screening threshold over 24 or more months.

To reduce the construction-generated noise at nearby receptors, the Applicant would commit to constructing a 15-foot-tall construction barrier that would extend along the full perimeter of the site except along Projected Development Site 1's frontage to Richmond Terrace, where an 8-foot-tall construction barrier would be placed. The Applicant would also commit to using auger drills in lieu of impact pile drivers and ventilation fans that would not exceed a noise level of 91-dBA. ~~Additional mitigations may be identified between the draft and final EIS, which may reduce or eliminate the significant adverse construction noise impact.~~ In the absence of feasible mitigation measures to fully mitigation the construction noise impact, the impact would remain unmitigated.

To avoid construction noise impacts, the Proposed Actions would have to be reduced by approximately 84 percent to the No-Action Alternative. Due to the relatively low ambient noise levels and proximity of sensitive noise receptors such as Castleton Park Apartments and 36 Hamilton Avenue, any construction noise increment above the No-Action Alternative would result in significant adverse construction noise impacts. The No Unmitigated Construction Noise Impact Alternative would result in 726 fewer dwelling units – including 270 fewer affordable dwelling units – less commercial space, and eliminate the proposed publicly accessible private open space. While the No Unmitigated Significant Adverse Impacts Alternative would avoid the potential for unmitigated significant adverse construction noise impacts, it would not achieve the purpose and need for the Proposed Actions. Therefore, no reasonable alternative could be developed to avoid temporary construction noise impacts without compromising the purpose and need for the Proposed Actions.