9.0 COMMITMENTS AND RECOMMENDATIONS

9.1 Commitments

To minimize the impacts of this project, the City of Port St. Lucie (City), with the oversight of the Florida Department of Transportation (FDOT) District 4, is committed to the following measures:

- During the design phase, the City will elicit input from the community at one or more City Council meetings regarding the lighting and visual aspects of the bridge and landscaping for the project. Visual treatments for the bridge design, such as concrete cap shapes, color, surface finishes, or decorative features (e.g., lighting or decorative ironwork) will be finalized or selected during detailed design and after consideration of public input [Section 5.3.2 (Visual and Aesthetic)].
- Several permits and other actions will require coordination with the following agencies during the design phase [Section 5.3.20 (Permits Required)]:
  - U.S. Army Corps of Engineers: Individual Permit under Section 404 of the Clean Water Act;
  - U.S. Coast Guard: Permit for the construction of bridges crossing navigable waters of the United States;
  - Florida Department of Environmental Protection: National Pollutant Discharge Elimination System (NPDES) permit to control and minimize potential water quality impacts generated by construction operations and an authorization for construction or use on, over, or under submerged lands owned by the state;
  - South Florida Water Management District: Individual Environmental Resource Permit (ERP); Water Use Permit for dewatering. An ERP will also provide Water Quality Certification, as required by the Clean Water Act, Section 401;
  - Florida Fish and Wildlife Conservation Commission: Relocation permit for gopher tortoises and their commensal species; and
  - Florida Department of Transportation: A right of way Utilization Permit from FDOT for a connection to U.S. 1 and for utility or drainage work in FDOT rights of way.
- The USCG determined that the clearances for new bridges over the NFSLR and the North Coral Reef Waterway must meet or exceed those of the downstream (and controlling elevation) Port St. Lucie Boulevard Bridge. Those clearances are 18.6 feet vertically and 75.5 feet horizontally [Section 5.3.18 (Navigation)].
- Prior to construction, a site-specific assessment including soil and groundwater testing will be performed to further define the nature and extent of contamination and, if necessary, to evaluate avoidance or remediation options [Section 5.3.9 (Contamination)].
- Bridge piers located in the water will be oriented to avoid restriction of water movement and to maximize the River's hydraulic section [Section 7.2 (Minimization)].

- Maintenance of traffic and sequence of construction will be planned and scheduled to minimize traffic delays throughout the project. In addition, the local news media will be notified in advance of road closings and other construction-related activities. Access to all businesses and residences will be maintained to the extent practicable through controlled construction scheduling [Section 5.3.19 (Construction)].
- The suburban typical section west of Manth Lane will include a wide area of green space with 8-foot meandering sidewalks along both sides of the roadway. The green space will include berms to aid in buffering the adjacent residential areas from the roadway. Bicycles will be accommodated by a 5-foot designated bicycle lane within the outside shoulder on both sides of the roadway. The urban typical section between the bridge and U.S. 1 will accommodate pedestrians with 8-foot sidewalks on both sides of the roadway, and bicycles will be accommodated with a 5-foot designated bicycle lane adjacent to the outside travel lanes along both sides of the roadway. The bridge typical section will accommodate pedestrians with a 6-foot sidewalk and a 5-foot bicycle lane/paved shoulder on each side of the roadway. The bicycle lane/paved shoulder and sidewalk will be separated by a traffic barrier between them [Section 5.3.1(Pedestrian/Bicycle Facilities)].
- Landscaping within the right of way will be incorporated where space and safety allow [Section 5.3.2 (Visual and Aesthetic)].
- To improve traffic and pedestrian safety, a signal at the major intersection of Floresta Drive and a signalized pedestrian control at the major intersection of Floresta Drive will be provided [Section 7.2.2 (Social Environment)].
- An addendum to the EFH Assessment will be prepared during the design phase. The addendum will include detailed impacts to EFH, assurance the compensatory mitigation plan has been completed, and amended responses to the CR, if necessary [Section 5.3.15 (Essential Fish Habitat)].
- Prior to construction, the City in coordination with FDOT will conduct a site-specific survey to determine the presence of bald eagle nests in or near the construction area. Additional coordination will be conducted with USFWS and FWC should any new nests be identified that would be impacted by the project. [Section 5.3.14 (Wildlife and Habitat)].
- Prior to construction, the City in coordination with FDOT will conduct a site-specific survey to determine if gopher tortoises are present within the construction zone/right of way and within 25 feet of any other construction-related activity (i.e., ponds, staging areas, etc.) [Section 5.3.14 (Wildlife and Habitat)]. If active gopher tortoise burrows are identified, the City will coordinate with the FWC to relocate the gopher tortoises and commensal species.
- Prior to construction, the City in coordination with FDOT will conduct a site-specific survey to determine if any gopher frogs are present within the area of the Preferred Alternative [Section 5.3.14 (Wildlife and Habitat)]. The gopher frogs will be relocated as part of the gopher tortoise relocation effort.
- The contractor will be required to follow The National Marine Fisheries Service “Sea Turtle and Smalltooth Sawfish Construction Conditions” during all construction activities [Section 5.3.14 (Wildlife and Habitat)].
- The contractor will be required to follow the “Standard Protection Measures for the Eastern Indigo Snake” during all construction activities [Section 5.3.14 (Wildlife and Habitat)].
- The contractor will be required to follow the standard manatee protection measures during bridge construction [Section 5.3.14 (Wildlife and Habitat)].

- The mitigation measures and other provisions described in the Memorandum of Understanding dated April 26, 2010, and the Memorandum of Agreement dated July 27, 2010 will be followed [Sections 6.7(Compensatory Mitigation for Section 4(f) Uses) and 7.3 (Compensatory Mitigation for Unavoidable Impacts)]. Details of the compensatory mitigation plan are contained in Appendix L and Appendix M.
- The City has committed to build a bridge over the AP and the SPSP using a top down construction method, or construction from temporary platforms, trestles or other similar methods to avoid impacts to the maximum extent practicable. The top down construction method constructs a bridge span from the previously completed span. Construction from temporary platforms, trestles or other similar methods constructs a temporary work platform known as a "trestle." One of these methods will be employed to avoid and minimize potential impacts to environmentally-sensitive resources [Section 5.19 (Construction)].
- On the east side of the NFSLR, construction staging and construction site access areas will be limited to the footprint of the bridge approach roadway [Section 7.2 (Minimization)].
- Residences were identified as the only land use potentially sensitive to vibration during construction. During final design, vibration sensitive sites will be confirmed and if it is determined that provisions to control vibration are necessary, the project's construction provisions will be modified as needed [Section 5.3.19 (Construction)].
- Retaining walls and/or MSE walls will be used to minimize the amount of right of way needed; sloped bridge approaches will not be used [Section 7.2 (Minimization)].
- To mitigate for noise impacts, noise barriers will be constructed for the Preferred Alternative at the noise-impacted locations contingent upon the following conditions [Section 5.3.4 (Noise)]:
  - Subsequent to any significant design changes, the noise analysis conducted during final design continues to support the need, feasibility, and reasonableness for providing abatement;
  - Community input during the design phase supporting the types, height and locations of the noise barriers is provided to the District office; and
  - An assessment of the impact of noise barriers on billboards that may be affected has already been made and no billboards were found to be blocked by noise barriers. A final determination of impacted billboards will be made based on the final design vertical and horizontal alignments. Public involvement related to billboards will occur in accordance with Section 479.25, F.S.
- To reduce the impacts of the Preferred Alternative to wetlands, listed species habitats, and essential fish habitat, the bridge typical section was reduced from 143 feet to 103 feet. Wetland impacts were reduced from 10.1 acres to 6.83 acres, a reduction of 3.27 acres. The reduced typical section also resulted in a reduction in wetland functional loss from 11.26 to 8.34 functional loss units (includes direct and indirect impacts). Upland impacts were reduced from 6.45 acres to 2.96 acres [Section 7.1.1 (Additional Avoidance and Minimization Measures for the Preferred Alternative)].
- No haul roads within the bridge easement will be used [Section 5.3.19 (Construction)].
- The top down construction method, or construction methods from temporary platform, trestles, or other similar methods will use driven precast concrete pile-supported bent foundations (versus drilled or other types of excavated foundations) to reduce benthic impacts within the NFSLR. No water jetting will be allowed [Section 7.2 (Minimization)].
- Stormwater management systems (ponds) have been located within the right of way or within already developed areas to avoid additional impacts to wetlands or other sensitive habitats [Section 7.2 (Minimization)].

- Scuppers[1] will not be used. All stormwater runoff will be directed to a drainpipe mounted below the bridge, which will convey runoff to the stormwater management system [Section 7.2 (Minimization)].
- Contractors will use noise attenuation techniques during in-water construction (e.g. bubble curtains[2]) [Section 7.2 (Minimization)].
- Construction activities will be limited to timeframes that minimize disruption to wildlife [Section 7.2 (Minimization)].
- In response to concerns expressed by USACE about geotechnical investigation in the natural habitats, the City will use specialized equipment, such as, rubber tire mounted equipment, amphibious track rigs, rigs mounted on all-terrain vehicles, and tripod drill rigs, during geotechnical/soil investigations in sensitive habitats to minimize the impacts of drilling rigs [Section 7.2 (Minimization)].
- Specialized lighting fixtures will be used to direct light onto the pavement (rather than lighting mounted on poles) to reduce light trespass into natural habitats and surrounding areas to the maximum extent practicable [Section 7.2 (Minimization)].
- The St. Lucie County Transportation Planning Organization will amend the Long Range Transportation Plan to reflect current funding commitments prior to authorization of construction of the project, and prior to approval of the next State Transportation Improvement Plan.

9.2 Recommendations

As a result of the alternatives evaluation data, extensive agency coordination, the project's Public Hearing and full consideration of all comments, the alternative recommended for Location and Design Concept Approval is Alternative 1C. Based on the data and analysis conducted for the EIS, Alternative 1C has been determined to be the preferred alternative for meeting the purpose and need and the best overall alternative for the Crosstown Parkway Extension project. The Preferred Alternative begins at Manth Lane and travels northeast along West Virginia Drive. It then crosses Savannas Preserve State Park and the NFSLR, bending southward to its eventual eastern terminus with U.S. 1 and its intersection with Village Green Drive.

[1] Scuppers are openings at the edge of the bridge deck to allow water to drain directly into the receiving waters.

[2] A confined bubble curtain is a circular- or square-shaped device made of rubber, plastic, or steel tubing that is placed completely around a pile and extends to the bottom of the water column. The bubbles produced within the curtain absorb the generated sound wave and limit its dissipation. An unconfined bubble curtain can also be used (bubbles only) if currents do not carry the bubbles downstream.