# FIRST AMENDMENT TO AGREEMENT NO. 2021-41 PROFESSIONAL ENGINEERING SERVICES FOR CRANBERRY BOULEVARD/HILLSBOROUGH BOULEVARD INTERSECTION IMPROVEMENTS DESIGN & PERMITTING FOR DRAINAGE DESIGN MODIFICATIONS TO SCOPE AND PRICE

This *First Amendment* to Agreement No. 2021-41 Professional Engineering Services for Cranberry Boulevard / Hillsborough Boulevard Intersection Improvements Design & Permitting for Addition of Drainage Modification to Scope ("First Amendment"), is made and entered into by and between the City of North Port, Florida, a municipal corporation of the State of Florida ("City") and Kimley-Horn and Associates, Inc., which is registered to conduct business in the State of Florida, and whose address is 1777 Main Street, Suite 200, Sarasota, Florida 34236 ("Consultant").

#### **RECITALS**

WHEREAS, on or around March 22, 2021, the parties entered into Agreement No. 2021-41 Professional Engineering Services for Cranberry Boulevard / Hillsborough Boulevard Intersection Improvements Design & Permitting (the "Original Agreement"); and

WHEREAS, the original intent of the design was to acquire and utilize a nearby parcel for a drainage pond; and

WHEREAS, the City was not able to acquire the parcel and will use an existing City owned drainage pond; and

WHEREAS, the parties mutually desire to amend the Original Agreement to modify the scope and cost for the drainage design related to the proposed roundabout construction project; and

**NOW THEREFORE**, in consideration of the mutual covenants contained herein, the sufficiency and receipt of which are acknowledged, the parties agree that the Original Agreement is amended as follows, with all other terms in the Original Agreement remaining unchanged and in full force and effect:

# 1. EFFECT OF AMENDMENT/EFFECTIVE DATE

- A. The parties ratify the terms and conditions of the Original Agreement not inconsistent with this First Amendment, all of which are incorporated by reference as if set forth fully herein. This First Amendment modifies the sections of the Original Agreement as identified herein. Where a section of the Original Agreement is not identified, the terms as they appear in the Original Agreement remain and apply.
- B. All references to this "Agreement" in the Original Agreement and this First Amendment mean and include both the Original Agreement and this First Amendment.
- C. This First Amendment is effective as of the date the last party signs it as identified below (the "Effective Date") and shall continue as otherwise provided in the Original Agreement.

# 2. ORIGINAL AGREEMENT SECTION 2 - Compensation and Payment for Consultant's Services

Section 2.A.1. of the Original Agreement is amended in its entirety as follows:

CONSULTANT shall receive FOUR HUNDRED FIFTY-FOUR THOUSAND NINE HUNDRED FORTY DOLLARS AND ZERO CENTS (\$454,940.00) as compensation for its services. This compensation shall include all profit, direct and indirect labor costs, personnel related costs, overhead and administrative costs, travel related out-of-pocket expenses and costs, and all other costs which are necessary to provide the services as out lined in this Agreement.

# 3. EXHIBIT A - ORIGINAL AGREEMENT SCOPE OF WORK AND FEE

Exhibit A – Scope of Work and Fee of the Original Agreement as attached, is hereby modified to include the First Amendment Scope of Work and Fee, as attached, and is incorporated as if set forth in the Agreement.

# 4. EXHIBIT B - FIRST AMENDMENT SCOPE OF WORK AND FEE

Exhibit B – First Amendment Scope of Work and Fee is hereby incorporated as if set forth in the Agreement.

IN WITNESS WHEREOF, the parties have executed this First Amendment as follows.

By: Name: Gary J. Nadeau, P.E.
Title: Senior Vice President

# **ACKNOWLEDGEMENT**

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The foregoing instrument was acknowledged before me notarization, this 15 day of September 2023, by Sexior Vice (title) for KIMLEY-	by means of physical presence or onling the second of the physical presence or onling (name), a second of the physical presence or onling (name), a second of the physical presence or onling (name), a second of the physical presence or onling (name), a second of the physical presence or onling (name), a second of the physical presence or onling (name), a second of the physical presence or onling (name), a second of the physical presence or onling (name), a second of the physical presence or onling (name), a second of the physical presence or onling (name), a second of the physical presence or onling (name), a second of the physical presence or onling (name), a second of the physical presence or onling (name), a second of the physical presence or onling (name), a second of the physical presence or onling (name), a second of the physical presence or onling (name), a second of the physical presence or online physical physi
Personally Known OR Produced Identification Type of Identification Produced	SUSAN M. JOHNSON MY COMMISSION # HH 182275 EXPIRES: January 29, 2026 Bonded Thru Notary Public Underwriters

STATE OF Torida

Approved by the City Commission of the City of North Port, Florida on Quy QU, 2023.

CITY OF NORTH PORT, FLORIDA

A. JEROME FLETCHER II, ICMA-CM, MPA

CITY MANAGER

**ATTEST** 

HEATHER FAUST, MMC

CITY CLERK

APPROVED AS TO FORM AND CORRECTNESS

AMBER L. SLAYTON, B.C.S.

CITY ATTORNEY

# **EXHIBIT A – ORIGINAL AGREEMENT SCOPE OF WORK AND FEE**

# EXHIBIT A — SCOPE OF WORK City of North Port Cranberry Boulevard and Hillsborough Boulevard Intersection Improvements (RFP 2021-41)

# **Background**

The City of North Port intends to construct a modern roundabout at the intersection of Cranberry Boulevard and Hillsborough Boulevard. The purpose of this Scope of Services is to describe the design services and the responsibilities of Kimley-Horn and Associates, Inc., henceforth termed "ENGINEER" and the City of North Port, henceforth termed "CITY" in connection with the design, permitting, preparation of a completed set of construction contract documents and incidental engineering services, as necessary, for the construction of a modern single-lane roundabout at the intersection of Cranberry Boulevard and Hillsborough Boulevard. Hillsborough Boulevard traverses the boundary of the City of North Port / Sarasota County and Charlotte County and terminates at its intersection with Cranberry Boulevard. This intersection currently operates at a Level of Service (LOS) D for the AM Peak Hour traffic and at a LOS F for the PM Peak Hour traffic. It is understood that the project will be constructed through a Interlocal Agreement between the City of North Port and Charlotte County ("COUNTY") and as such CITY and COUNTY review will be required. The proposed improvements will be designed to accommodate future expansion to a multi-lane roundabout configuration.

# Task 1 - Project Administration and Management

The ENGINEER will provide a Project Manager and staff to administer the professional services described in this Scope of Services, consisting of: scheduling, written monthly progress reports describing work completed within that month, work to be completed in the upcoming month, and a description of any issues to be addressed, other status reports, budgeting, and invoicing. The ENGINEER shall have in place an engineering quality control / assurance program that is appropriate for all professional services included in the AGREEMENT. The design phase will be twelve (12) months. The twelve (12) month design schedule does not include the Right-of-way acquisition phase of the project.

#### A. Meetings

The ENGINEER shall meet with CITY personnel to review the work plan at project initiation and schedule at the following intervals:

- Project initiation
- At the 60% and 90% plans submittal phases

# B. Public Meeting

The ENGINEER will not be required to prepare for, present, or facilitate a public meeting under this scope.

# C. Commission Meetings

The ENGINEER will present the 60% complete submittal to both the City of North Port Commission and the Charlotte County Commission. The City Project Engineer will present the 60% complete submittal to the City's Staff Development Review Committee and shall transmit relevant comments to the ENGINEER for written responses. The ENGINEER will not be responsible for presentation materials and will rely on the 60% submittal plans for reference.

#### D. Field Reviews

The ENGINEER shall conduct a visual reconnaissance of the project intersection in order to identify typical, key, and anomalous site features.

# Task 1 - Deliverables

- Minutes of each meeting will be prepared and distributed to each attendee and others, as requested by the City
- · Proposed progress schedule

# Task 2 - Data Collection and Existing Conditions Mapping

# A. Other Project Related Information

The ENGINEER will obtain from City and County record information, data pertinent to the project, such as, but not limited to: aerial photographs, traffic volume data (turning movement counts, tube counts, bicyclist and pedestrian volumes, classification of trucks), drainage maps, tax maps, subdivision plat maps, survey field notes, bench mark information, section corner reports, utility as-built drawings and septic and drain field information.

#### B. Survey

The survey limits of the project are as follows:

- Cornelius Boulevard from approximately 500-LF south of U.S. 41.
- U.S. 41 / Cranberry Boulevard / Cornelius Boulevard intersection. Survey will include
  the area within the FDOT right-of-way from the U.S. 41 southbound stop bar to the
  U.S. 41 northbound stop bar and will also include signal head locations and clearance
  heights.
- Cranberry Boulevard from U.S. 41 to the Cocoplum Waterway for a distance of approximately 800 LF
- Hillsborough Boulevard beginning at the Cranberry Boulevard intersection easterly for a distance of approximately 1,000 LF.

Survey limits will include the area from right-of-way to right-of-way and extend ten (10)

feet beyond the existing right-of-way line except for locations where anticipated right-of-way impacts require additional coverage. Additional survey coverage includes the following:

- Seventy (70) feet beyond the west Right-of-Way of Cranberry Boulevard for parcel
   I.D. 1002001090 located north of the RaceTrac parcel
- Eighty (80) feet beyond the east Right-of-Way of Cranberry Boulevard and eighty (80) feet beyond the north Right-of-Way of Hillsborough Boulevard for parcel I.D. 1004018847 located in the northeast corner of the intersection of Cranberry Boulevard and Hillsborough Boulevard
- Forty (40) feet beyond the northern Right-of-Way of Hillsborough Boulevard for a distance of approximately two hundred fifty (250) feet for parcel I.D. 1004018842.

# Survey will consist of:

- Horizontal Project Control (HPC): Establish or recover HPC, for the purpose of establishing horizontal control on the Florida State Plane Coordinate System or datum approved by the City Surveyor; may include primary or secondary horizontal control points. Includes analysis and processing of all field collected data, and preparation of forms.
- Vertical Project Control (VPC): Establish or recover VPC, for the purpose of establishing vertical control datum approved by the City Surveyor; may include primary or secondary vertical control points. Includes analysis and processing of all field collected data, and preparation of forms.
- Alignment / Existing Right-of-Way (R/W) Lines: Establish, recover or re-establish project alignment. Also includes analysis and processing of all field collected data, existing maps, and/or reports for identifying mainline, offset, or secondary alignments. Depict alignment and/or existing R/W lines (in required format) per City/County R/W maps, platted or dedicated rights-of-way.
- Reference Points: Reference Horizontal Project Network Control (HPNC) points, project alignment, vertical control points, section, ¼ section, center of section corners and General Land Office (G.L.O) corners as required.
- Topography / Digital Terrain Model (3D): Locate all above ground features and improvements for the limits of the project including all required data for creating a Digital Terrain Model (DTM) with sufficient density of shots and consisting of all breaklines, high points, and low points.
- Roadway Cross Sections / Profiles: Perform cross sections or profiles. May include analysis and processing of all field collected data for comparison with DTM.

- Drainage: Locate underground data (XYZ, pipe size, type, condition, and flowline) that relates to above ground data.
- Geotechnical Support: 3-dimensional (XYZ) field location, or stakeout, of boring sites established by geotechnical engineer
- Tree Survey Identify all trees greater than 4" in caliper size within the project limits.
   Tree Survey will consist of identifying diameter at breast height, species, and approximate height.

# C. Mapping

Mapping consists of preparation of control survey maps, and right-of-way maps as required for this project in accordance with all applicable City and FDOT Manuals, Procedures, Handbooks, District specific requirements, and Florida Statutes. All maps and surveys will be prepared under the direction of a Florida PSM to City size and format requirements utilizing City approved software and will be developed to provide a high degree of uniformity and maximum readability.

The ENGINEER will provide the proposed right-of-way requirements. The PSM will be responsible for calculating the final geometry for right-of-way requirements. Notification of Final Right-of-Way Requirements along with the purpose and duration of all easements will be specified in writing. Up to six (6) parcel sketches are anticipated for the project and will consist of all revisions necessary to comply with agency review comments.

Surveyor will be responsible for obtaining title search records in accordance with industry standards for preparation of right-of-way maps.

# Task 2 - Deliverables

All located items will be provided in electronic CAD files utilizing FDOT naming conventions, including a separate subsurface utility file. All text and features will be plotted to a size suitable for 1-inch equals 40 feet plan sheet development. A signed and sealed topographic survey will be provided. A signed and sealed Right-of-Way map along with parcel sketches and descriptions for each impacted parcel will be provided.

# Task 3 – Subsurface Utility Exploration (SUE)

SUE services will consist of 2-dimensional collection of existing utilities and selected 3-dimensional verification as needed for design support will consist of non-destructive excavation to determine size, type and location of existing utilities as necessary for final 3-dimentional verification. Proposed drainage improvements will be designed to utilized existing infrastructure as much as is feasible to mitigate potential impacts and thereby reduce the need for SUE during design. Proposed mast arm installations will require SUE to be completed at each drilled shaft location.

The project limits will begin approximately 100 LF south of U.S. 41 at the Cornelius Boulevard intersection and extend to the Cocoplum Waterway along Cranberry Boulevard for a distance of approximately 900 LF and from Cranberry Boulevard along Hillsborough Boulevard for a distance of approximately 1,000 LF.

It is anticipated that ten (10) utility agency owners (UAO) have facilities within the project limits. Coordination with Comcast, Florida Power & Light, Frontier Communications, Century Link, MCI Communications, Crown Castle, TECO – Peoples Gas, City of North Port, Charlotte County, and Verizon Wireless is anticipated.

The intended scope will generally follow the process described below:

- Call Sunshine One-Call for a design ticket request.
- Contact Utility/Agency Owners (UAO) as identified in the Sunshine One-Call design ticket to request utility record data.
- Convert the Sunshine One-Call ticket to a dig ticket. This is done in case vacuum excavation is required to find a difficult utility.
- Designate existing utilities.
- Dig the test holes on the non-conductive utilities.

# Task 3 - Deliverables

Deliverable will be provided in electronic CAD files utilizing FDOT naming conventions. All text and features will be plotted to a size suitable for 1-inch equals 40 feet plan sheet development. A Test Hole Data Sheet will be provided for every subsurface utility exposed and located feature.

#### Task 4 - Geotechnical Engineering

Geotechnical Engineering scope of services for this project will consist of the following:

- Perform five (5) Pavement cores within the existing roadway, measure asphalt and base thickness. A hand auger boring will be performed below each pavement core to evaluate sub-base material. Pavement cores will be performed at locations as described below:
  - Cornelius Boulevard approximately 250-feet south of U.S. 41
  - Cranberry Boulevard approximately 250-feet south of Hillsborough Boulevard
  - Cranberry Boulevard approximately 180-feet north of Hillsborough Boulevard
  - Hillsborough Boulevard approximately 200-feet east of Cranberry Boulevard
  - Hillsborough Boulevard approximately 700-feet east of Cranberry Boulevard

- Perform a total of seven (7) hand auger borings within the location of the proposed improvements. The borings will be performed to a depth of five (5) feet below existing grade, and will identify soil type, ground water and seasonal high-water elevations, if present.
- Collect two (2) bulk soil samples from the areas of proposed widening and complete
   Limerock Bearing Ratio (LBR) testing to establish the Design LBR for the project.
- Perform one (1) Standard Penetration Test (SPT) boring to depths of 15 feet and one (1) permeability test to support stormwater pond design.
- Perform laboratory testing consisting of Natural Moisture Content, Grain-Size Analysis,
   Atterberg Limits and Organic Content Tests.
- Perform two (2) SPT borings to a depth of 30-feet; one at each proposed mast arm location.

## Task 4 - Deliverables

Deliverable will be provided in electronic CAD files utilizing FDOT naming conventions. All text and features will be plotted to a size suitable for 1-inch equals 40 feet plan sheet development. A signed and sealed Geotechnical Report and plan sheets in FDOT format will be provided.

# Task 5 - Roadway Design & Analysis

#### A. Roundabout

The ENGINEER will design and prepare construction documents for the reconstruction of the existing stop-controlled intersection of Cranberry Boulevard and Hillsborough Boulevard to a modern single-lane roundabout. Roundabout Design will account for future widening of Hillsborough Boulevard to an ultimate 4-lane divided facility. Roundabout analysis and design will reference the Cranberry Boulevard/Hillsborough Boulevard Intersection Analysis and Improvement Project Traffic Analysis Report dated April 2021. Traffic data as provided in the referenced Traffic Analysis Report will be evaluated and updated to generally establish roundabout geometry and operations for both single-lane and future multi-lane operations.

The ENGINEER will design and submit progress plans to the CITY for review at 30%, 60% & 90% phase review. Preliminary Engineer's Estimate of Probable Construction Costs will be submitted at the 30%, 60% and 90% complete stages. Draft Specifications will be submitted at the 90% completion stage.

Roundabout design will be developed using the National Cooperative Highway Research Program (NCHRP) 672 Report as a basis for criteria including fastest path analysis, swept path analysis, and sight line triangle evaluation. A standard WB-50 design vehicle and City Bus will be utilized all turning movements.

# B. Cranberry Boulevard

Using the Cranberry Boulevard/Hillsborough Boulevard Intersection Analysis and Improvement Project Traffic Analysis Report dated April 2021 as a basis, the ENGINEER will design for widening Cranberry Boulevard from U.S. 41 to Hillsborough Boulevard to provide dual southbound right turn lanes, a single southbound through lane, a single southbound left turn lane, and dual northbound lanes. The typical section north of the roundabout at Hillsborough Boulevard will consist of single northbound and southbound lane. Cranberry Boulevard lane widths outside the influence of the roundabout will be 11-feet wide. Eight (8) foot sidewalk will be included on both sides of Cranberry Boulevard south of Hillsborough Boulevard and along the west right-of-way of Cranberry Boulevard to the proposed pedestrian crossing north of Hillsborough Boulevard. No bicycle facilities exist on Cranberry Boulevard, and therefore no dedicated bicycle lanes will be included.

# C. Hillsborough Boulevard

The typical section for the Hillsborough Boulevard approach will consist of two (2) eastbound lanes which will merge to the existing single eastbound lane configuration at the eastern limits of the project, a single westbound lane, and a median width appropriate to provide future widening to the interior. An eight (8) foot sidewalk along the eastbound lanes will be provided to a proposed pedestrian crossing east of the roundabout. The existing trail along the westbound lane will be relocated north for the extents necessary. Hillsborough Boulevard lane widths outside the influence of the roundabout will be 11-feet wide. No bicycle facilities exist on Hillsborough Boulevard, and therefore no dedicated bicycle lanes will be included.

#### D. Cornelius Boulevard

Cornelius Boulevard will be widened to align the northbound lane with the proposed receiving lane on Cranberry Boulevard north of U.S. 41. Widening will be proposed along the east edge of pavement of Cornelius Boulevard to achieve a maximum six (6) foot horizontal lane shift across the signalized intersection per FDOT Design Manual Chapter 212.7 Table 212.7.1. The typical section of Cornelius Boulevard will consist of earth shoulders, single southbound lane, single northbound left turn lane, and single northbound through-right lane. All lane widths will be 11-foot wide. This scope does not include widening of Cornelius Boulevard to provide a dedicated northbound right turn lane. Any change to the typical section of Cornelius Boulevard beyond those described under this task will be considered additional services.

# E. <u>Drainage</u>

The ENGINEER will review existing stormwater facilities and incorporate sufficient design to assure positive drainage of roadway improvements and preclude any ponding along the roadway. Drainage design will consist of a closed drainage system utilizing curb inlets and

ditch bottom inlets. Low Impact Development (LID) swales with underdrains may be utilized in areas surrounding the roundabout to provide water quality prior to discharge to Cocoplum Waterway. Drainage analysis under this task will consist of assessing throat capacity, spread and pipe sizing utilizing the rational methodology for small basins in accordance with the FDOT Drainage Manual, and the generation of a drainage documentation report to document all engineering calculations. This task assumes that no ICPR routing or modeling will be required for the roadway improvements.

# F. Maintenance of Traffic

The ENGINEER will develop a traffic control plan for the maintenance of traffic during construction. The traffic control plan will provide for access to properties adjoining the project site throughout all phases of construction. It is anticipated that Hillsborough Boulevard west of Dahlgren Avenue will be closed for the duration of construction operations.

The traffic control plan will consist of the following:

- Typical MOT phasing sections
- General and phase construction notes.
- Detour layout
- Advanced signing plan

#### G. Best Management Practices

The ENGINEER shall develop Best Management Practices to be utilized during construction, including temporary provisions to prevent degradation of stormwater quality and erosion control. The plan developed shall be acceptable to regulatory agencies having jurisdiction over the project. The plan shall be designed and noted to coincide with the *Maintenance of Traffic and Progression of Construction Activities*.

# H. Utility Coordination/Adjustments

The ENGINEER will provide the following utility coordination services:

The ENGINEER is to coordinate the proposed improvements with all affected utility companies at 30%, 60% and 90% completion stages. The ENGINEER will submit plans in an effort to obtain existing green-line markups, no conflict letters, or identifying conflicts and relocation schedules, from the respective utilities and submit them to the CITY for inclusion in the Final Bid Documents.

This scope assumes that existing City of North Port and Charlotte County utilities within the project limits will be adjusted and or relocated as necessary by the utility owner. The ENGINEER will collaborate with CITY and COUNTY utility design staff during plans

development to resolve potential conflicts with proposed utility design.

#### Task 6 - Lighting Design & Analysis

The ENGINEER will analyze, design, and develop contract documents for all lighting features in accordance with applicable provisions. Lighting Design and Analysis will include an electrical service to the inside of the roundabout center island for potential water fountain, center island lighting, and irrigation. ENGINEER will consider various alternatives in preparing the most economical solution for the given conditions.

# Task 7 - Signal Design & Analysis

Signalization modifications to the existing signalized intersection of U.S. 41 and Cranberry Boulevard/Cornelius Boulevard will be required to support the proposed roadway improvements.

#### A. Traffic Analysis

The ENGINEER will perform a traffic analysis to analyze the interaction between the proposed roundabout and the existing signalized intersection at U.S. 41. The analysis will utilize 2045 build traffic volumes developed in the Cranberry Boulevard/Hillsborough Boulevard Intersection Analysis and Improvements Project Traffic Analysis Report dated April 2021. Build-out traffic conditions at the study area intersections, and the queuing between the two intersections, will be evaluated in Synchro and SimTraffic to determine the average vehicle delay, level of service (LOS), queue spill back, and turn lane storage capacity performance. If necessary, mitigating measures for any operational deficiencies at the study area intersections will be identified (i.e. modifications to approach lane geometry, signal retiming, etc). Build-out traffic conditions will account for dual southbound right turn movements, a single southbound through movement, a single southbound left movement, and two northbound receiving lanes on Cranberry Boulevard. The addition of a northbound dedicated right turn movement on Cornelius Boulevard will be analyzed for consideration. If an Intersection Control Evaluation (ICE) or modification to coordinated signal timings are warranted based on recommendations, these will be an additional service.

The results of the analyses will be summarized in a traffic analysis memorandum and submitted to the City for review and comment. Kimley-Horn will respond to up to one (1) round of written comments from the reviewing agencies.

# B. Signalization Modification Design

The proposed roadway improvements are anticipated to impact the footprint of the existing mast arm in the southeast corner which will require replacement. With the proposed widening along Cranberry Boulevard, the existing mast arm in the northwest corner is not anticipated to be long enough to support the signal heads required to signalize the Cranberry Boulevard southbound approach. No modifications are anticipated to the mast arms in the

northeast (treating the U.S. 41 northbound approach) or southwest corners (treating the U.S. 41 southbound approach).

The design for the signal modifications will be developed in accordance with the 2009 MUTCD, FDOT's FY 2021-22 Standard Plans for Road and Bridge Construction, FDOT's January 2021 Structures Manual, Volume 3, FDOT's January 2021 Design Manual Chapter 261, and FDOT's Standard Specifications for Road and Bridge Construction dated July 2021.

It is anticipated that two (2) proposed mast arms will be designed to replace the existing mast arms impacted by the proposed improvements. Poles, mast arms, and foundations will be designed in accordance with FDOT Standard Specification and Plans.

Included in this Task will be one (1) field inventory of existing visible (above-ground) intersection features, including the existing mast arms and associated attachments (bolts, plate, etc). The results of the field inventory will be documented in a Condition Assessment and the signalization modification plans. The ENGINEER will summarize the results in a structural analysis report suitable for submission to FDOT, including the Condition Assessment.

The signalization modification plans, for the intersection of U.S. 41 and Cranberry Boulevard/Cornelius Boulevard, will include existing and proposed signal head display and locations, detectors, conduit, pull boxes, and pertinent notes required for construction.

## Task 8 - Landscape Design

The ENGINEER will provide a landscape plan for the roundabout center island in accordance with City of North Port code requirements and standard of practice associated with roundabout landscaping. The ENGINEER shall prepare and include landscape design plans, prepared by a State of Florida Registered Landscape Architect. The landscape plan will consist of a detailed layout of proposed plantings with a plant list identifying species, quantities, sizes, locations, spacing, details, installation notes, and long-term maintenance plans. The landscape plan will also identify trees to be preserved and replaced as determined by code, as well as tree protection measures for those trees identified to remain. Landscaping beyond the roundabout center island is specifically excluded in this scope of services and will be considered additional services.

The ENGINEER will provide an irrigation plan for the roundabout center island landscaping area in accordance with City of North Port code requirements. The irrigation plan will consist of head layout, water source information, lateral line layout, valve sizes and locations, controller type and location, sleeve locations, identify and label point of connection, detailed drawings and installation notes.

# Task 9 - Construction Documents

Construction Documents will be produced per FDOT guidelines.

- A. Roadway Plans will consist of the following:
  - 1. Key Sheet
  - 2. Summary of Pay Items
  - 3. Typical Sections
  - 4. Pavement Design
  - 5. Summary of Drainage Structures
  - 6. Project Layout
  - 7. Project Control
  - 8. General Notes
  - 9. Plan Sheets
  - 10. PGL Profile Sheets
  - 11. Roundabout Profile Sheets
  - 12. Intersection Grading Detail
  - 13. Special Details
  - 14. Drainage Structure Sections
  - 15. Drainage Structure Details
  - 16. Cross Section Pattern Sheet
  - 17. Roadway Soil Survey
  - 18. Cross Sections
  - 19. Stormwater Pollution Prevention Plans
  - 20. Temporary Traffic Control Plans
  - 21. Utility Adjustment Sheets
- B. Signing and Pavement Marking Plans will consist of:
  - 1. Key Sheet
  - 2. Tabulation of Quantities
  - 3. General Notes
  - 4. Signing and Pavement Marking Plan Sheets

# C. Signalization Plans – will consist of:

- 1. Key Sheet
- 2. Tabulation of Quantities
- 3. General Notes
- 4. Signalization Plan Sheets
- 5. Pedestrian Detail Sheets
- 6. Mast Arm Tabulation Sheet
- 7. Standard Mast Arm Assemblies Data Table
- 8. Guidesign Worksheet

# D. <u>Lighting Plans</u> – will consist of:

- 1. Key Sheet
- 2. Tabulation of Quantities
- 3. General Notes
- 4. Pole Data Sheet
- 5. Lighting Plan Sheets
- 6. Service Point Details
- 7. Special Details
- 8. Spread Footer Details

# E. Landscape / Irrigation Plans - will consist of:

- 1. Key Sheet
- 2. Landscape Plans
- 3. Landscape Schedule
- 4. Landscape Details
- 5. Landscape Notes
- 6. Irrigation Plans
- 7. Irrigation Schedule
- 8. Irrigation Details
- 9. Irrigation Notes

#### 10. Hardscape Details

#### Task 9 - Deliverables

Plans will be formatted for 11"x17" printing at a scale of 1" = 40'. Electronic (PDF format) progress plans will be submitted to the City at the 30%, 60%, and 90% review phases. Electronic files (PDF format) of the FINAL construction plans will be furnished to the City at the 100% complete stage. Project CAD files will be provided at the 100% complete stage in DWG format.

# Task 10 - Permitting

# A. Southwest Florida Water Management District (SWFWMD)

The ENGINEER will prepare an application for Environmental Resource Permit (ERP) and submit to the Southwest Florida Water Management District (SWFWMD). This task should be scheduled so permit processing will run concurrently with other tasks. Preparation of permit applications shall include a pre-application meeting, up to one (1) field review and sufficiency responses. Follow-up will be provided during SWFWMD review, including responses to typical requests for additional information. DEP permitting is not anticipated for this project.

Upon review and approval by the CITY staff, the required copies of final applications shall be delivered for the CITY Engineer's signature, together with a permit fee schedule. The permit fee will be paid for by the CITY.

# B. Florida Department of Transportation (FDOT)

The ENGINEER will prepare construction plans in accordance with the guidelines set forth in the FDOT Design Manual and prepare a Driveway Connection Permit in support of the signal timing adjustments to the signalized intersection of U.S. 41 and Cranberry Boulevard and proposed improvements within FDOT Right-of-Way. The ENGINEER will respond in writing, make the required revisions, and resubmit updated plans and comment responses to FDOT. No more than two (2) Requests for Additional Information (RAI) are anticipated during the permitting process. In support of the permitting efforts the ENGINEER will attend one (1) FDOT pre-application meeting. Additional meetings with FDOT or responses to RAI's will be considered additional services.

No Design Exceptions or Design Variations are anticipated for this project and, if required by FDOT, will be considered additional services.

# Task 11 - Quantity Take-Offs and Construction Cost Estimate

# A. Quantity Take-Offs

The ENGINEER will perform quantity take-offs calculations for all items required to construct the proposed improvements. The results of the quantity take-offs shall be submitted on a MS Excel Bid Form spreadsheet. All bid item descriptions and units shall be obtained from and match the list of items as shown in the FDOT Basis of Estimates.

# B. Opinion of Probable Cost of Construction

The ENGINEER will submit an opinion of probable construction costs at the 30%, 60%, 90%, and final construction plan stages. The opinion of probable construction costs will include an itemized list of each bid item with a bid number, bid item description, unit of measurement and unit price on the MS Excel Bid Form spreadsheet. The ENGINEER will request from the City bid tabulations showing actual bid amounts for each bid item for recent improvement projects. Unit prices will be based on the FDOT twelve (12) month historic cost averages and recent bid tabulations provided by the City.

#### Task 11 - Deliverables

An electronic (PDF format) Opinion of Probable Construction Costs will be submitted to the City at the 30%, 60%, and 90% review phases. An electronic file (PDF format) of the FINAL Opinion of Probable Construction Costs and one electronic MS Excel Bid Form spreadsheet will be furnished to the City at the 100% complete stage.

# Task 12 - Limited Construction Phase Services

# A. Bid (Construction Contract) Plans

The ENGINEER will prepare and assemble construction bidding documents, including specifications for the subject work and the construction contract. Project specific "Technical Specifications" will be included as necessary for items not appearing in the standard specifications document but are specifically necessary for this project. As described in Task 9 above, the ENGINEER will provide an estimate of quantities in the form of an MS Excel Bid Form or "Price Schedule", and a final Opinion of Probable Construction using estimated unit prices or unit prices provided by the CITY. The Bid Documents will generally follow the City's preferred process for Bid document development, however, will utilize the FDOT's pay item structure for project elements.

# B. Limited Services During Bidding

The CITY will perform bidding advertisement and administration of the bidding and contract award process. ENGINEER will attend one (1) pre-bid conference. ENGINEER will not discuss the project directly with potential bidders. As requested by the CITY, ENGINEER will receive and provide responses to written questions from CITY Procurement regarding interpretation and clarification of the Bid Documents, responding only in compliance with CITY policy and procedures through written addendums. CITY will supply to ENGINEER a tabulation of Bids. Engineer will issue and opinion about the appropriateness of bid prices of the low bidder and provide ENGINEER'S explanation of significant discrepancies between the low bid and ENGINEER'S final Opinion of Probable Construction Costs.

#### C. Shop Drawings Review

The ENGINEER will review and approve or take other appropriate action in respect to Shop Drawings and Samples and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents. Such review and approvals or other action will not extend to means, methods, techniques, equipment choice or usage, schedules, or procedures of construction or related safety programs.

# D. Clarifications and Interpretations

The ENGINEER will respond to up to ten (10) reasonable and appropriate Contractor requests for information and issue necessary clarifications and interpretations of Contract Documents. Any orders authorizing variations from the Contract Documents will be made by the CITY.

# Task 12 - Deliverables

Deliverables under this task will be:

- One (1) electronic copy of construction plans in DWG and PDF formats on CD or DVD
- One (1) electronic file of bid documents (Project Manual) in Word format
- Responses to bidder's questions
- One (1) signed and sealed set of conformed construction plans in PDF format, estimate of quantities/price schedule, and technical specifications as necessary for the Contract Documents
- Engineer's opinion of appropriateness of the Contractor bids.

#### **Additional Services**

Any services not specifically provided for in the scope above, as well as any changes in the scope, will be considered additional services. These services will be performed at the hourly rates agreed upon prior to their performance. Services which can be provided are listed below, but are not limited to:

- Structural analysis of existing mast arms
- Structural design of proposed mast arms, not already covered in scope
- Intersection Control Evaluation (ICE)
- Coordinated Signal Timings
- Interconnect Design & Plans

# **EXHIBIT B**

# **ENGINEERING AND DESIGN FEE**

City of North Port - Cranberry Boulevard and Hillsborough Boulevard Intersection Improvements (RFP 2021-41)

Task Listing				
Scope Reference	Description		Fixed Fee	
1	PROJECT ADMINISTRATION AND MANAGEMENT	\$	11,545	
2	DATA COLLECTION AND EXISTING CONDITIONS MAPPING	\$	42,720	
3	SUBSURFACE UTILITY EXPLORATION (SUE)	\$	20,780	
4	GEOTECHNICAL ENGINEERING	\$	15,895	
5	ROADWAY DESIGN & ANALYSIS	\$	135,720	
6	LIGHTING DESIGN & ANALYSIS	\$	11,325	
7	SIGNAL DESIGN & ANALYSIS	\$	34,425	
8	LANDSCAPE DESIGN	\$	20,450	
9	CONSTRUCTION DOCUMENTS	\$	68,440	
10	PERMITTING	\$	16,860	
11	QUANTITY TAKE-OFFS AND CONSTRUCTION COST ESTIMATE	\$	6,000	
12	LIMITED CONSTRUCTION PHASE SERVICES	\$	5,000	
	TOTAL FIXED FEE AMOUNT: \$ 389,			

# **EXHIBIT B - FIRST AMENDMENT SCOPE OF WORK AND FEE**



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Exhibit B to Agreement #2021-41
First Amendment
Dated May 9, 2023

Kimley-Horn shall perform the following Additional Services:

#### Task 13 – Drainage Redesign

At the Client's request, Kimley-Horn will redesign the project stormwater drainage conveyance system to outfall to an existing pond on the north side of Hillsborough Boulevard approximately 1,000 feet east of the Cranberry Boulevard and Hillsborough Boulevard intersection and as depicted in the graphic image below.



Drainage redesign will consist of the following:

# A. Data Collection and Existing Conditions Mapping

Existing conditions survey and mapping services, consistent with the terms and conditions set forth in the Agreement, will be amended to extend approximately 750 LF easterly along Hillsborough Boulevard from right-of-way to right-of-way and will include the existing pond / Floodplain Compensation Site (FPC) site north of Hillsborough Boulevard.

# B. Geotechnical

Geotechnical services, consistent with the terms and conditions set forth in the Agreement, will be amended to provide the following additional services: one (1) Standard Penetration Test (SPT) boring to a depth of 15 feet below the pond / FPC site bottom elevation, one hand auger boring, one (1) double-ring infiltrometer test and two down-hole permeability tests to support stormwater pond design.



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# C. Subsurface Utility Exploration (SUE)

SUE services, consistent with the terms and conditions set forth in the Agreement, will be extended to incorporate the additional 750 LF of existing road right-of-way. Up to 12 additional test holes are anticipated.

#### D. Drainage Design

Kimley-Horn will revise the roadway stormwater design to route on-site drainage to the existing pond / Floodplain Compensation Site (FPC) north of Hillsborough Boulevard approximately 1,000 feet east of Cranberry Boulevard.

# E. Construction Documents

Kimley-Horn will revise and update the construction documents to reflect the new onsite drainage design. It is anticipated that the following construction documents will need to be revised:

# Roadway Plans:

- Key Sheet
- o Summary of Pay Items
- Summary of Drainage Structures
- Project Layout due to extension of the BL of Construction of Hillsborough Boulevard
- o Plan Sheets
- o PGL Profile Sheets
- Roundabout Profile Sheets
- Intersection Grading Detail
- Drainage Structure Sections
- Drainage Structure Details
- o Roadway Soil Survey
- o Cross Sections
- o Stormwater Pollution Prevention Plans
- Temporary Traffic Control Plans
- o Utility Adjustment Sheets

# Signing and Pavement Marking Plans:

No revision anticipated. Should revisions to the Signing and Pavement Marking Plans be required, this will be considered additional services.



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# Signalization Plans:

No revision anticipated. Should revisions to the Signalization Plans be required, this will be considered additional services.

# Lighting Plans:

No revision anticipated. Should revisions to the Lighting Plans be required, this will be considered additional services.

# Landscape / Irrigation Plans:

No revision anticipated. Should revisions to the Landscape / Irrigation Plans be required, this will be considered additional services.

# F. Permitting

Kimley-Horn will revise and update the permit application and stormwater management report including all exhibits and calculations for the new on-site stormwater design and pond location.

# Fee and Billing

For the Additional Services set forth above, Client shall pay Kimley-Horn the following additional compensation:

Kimley-Horn will provide the services described in Tasks 13 (as requested) for the Lump Sum fee listed below. Individual sub-task amounts are informational only. All permitting, application, and similar project fees will be paid directly by the Client.

Task	Description	Fee
13	Drainage Redesign	
13.A	Data Collection and Existing Conditions Mapping	\$ 9,400
13.B	Geotechnical	\$ 5,030
13.C	Subsurface Utility Exploration (SUE)	\$11,25 <mark>0</mark>
13.D	Drainage Design	\$18,100
13.E	Construction Documents	\$ 8,600
13.F	Permitting	\$13,400
	TOTAL LUMP SUM FEE	\$ 65,780

Original Approved Contract Fee: \$389,160

Total Contract Fee with Amendment One: \$454,940